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Filing date: **05/09/2013**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

Notice of Opposition

Notice is hereby given that the following party opposes registration of the indicated application.

Opposer Information

Name	SAE International		
Entity	Corporation	Citizenship	Pennsylvania
Address	400 Commonwealth Drive Warrendale, PA 15096-0001 UNITED STATES		

Attorney information	Jonathan C. Parks Pietragallo Gordon Alfano Bosick & Raspanti, LLP 301 Grant Street One Oxford Centre, 38th Floor Pittsburgh, PA 15219 UNITED STATES ipgroup@pietragallo.com Phone:412-263-1846

Applicant Information

Application No	85767587	Publication date	04/09/2013
Opposition Filing Date	05/09/2013	Opposition Period Ends	05/09/2013
Applicant	FOSHAN SUNWAY AUTO ELECTRICAL CO., LTD. 8# Junye South Rd, C Block Shishan Industry Zone, Nanhai Foshan City, Guangdong, 528225 CHINA		

Goods/Services Affected by Opposition

Class 011. First Use: 2012/08/25 First Use In Commerce: 2012/09/03 All goods and services in the class are opposed, namely: Electric torches for lighting; Headlights for vehicles; Lamps; Lighting apparatus for vehicles; Lights for vehicles; Outdoor portable lighting products, namely, headlamps; Searchlights

Grounds for Opposition

Priority and likelihood of confusion	Trademark Act section 2(d)

Marks Cited by Opposer as Basis for Opposition

U.S. Registration No.	1212771	Application Date	07/30/1981
Registration Date	10/12/1982	Foreign Priority Date	NONE
Word Mark	SAE		
Design Mark			
Description of Mark	NONE		

Goods/Services	Class 041. First use: First Use: 1981/04/01 First Use In Commerce: 1981/04/01 Educational Services-Namely, Conducting Seminars and Conferences Concerned with the Technology and Engineering of Self-Propelled Mechanisms, Prime Movers and Components Therefor, and Related Equipment and Materials

U.S. Registration No.	1212825	Application Date	07/30/1981
Registration Date	10/12/1982	Foreign Priority Date	NONE
Word Mark	SAE		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 042. First use: First Use: 1981/04/01 First Use In Commerce: 1981/04/01 Promoting Advancement and Interest in Science and Engineering Practices in the Design, Construction, and Utilization of Self-Propelled Mechanisms, Prime Movers, Components Therefor, and Related Equipment and Materials		

U.S. Registration No.	1212826	Application Date	07/30/1981
Registration Date	10/12/1982	Foreign Priority Date	NONE
Word Mark	SAE		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 042. First use: First Use: 1909/06/12 First Use In Commerce: 1909/06/12 Promoting Advancement and Interest in Science and Engineering Practices in the Design, Construction, and Utilization of Self-Propelled Mechanisms, Prime Movers, Components Therefor, and Related Equipment and Materials		

U.S. Registration No.	1203242	Application Date	07/31/1981
Registration Date	07/27/1982	Foreign Priority Date	NONE
Word Mark	SAE		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 200. First use: First Use: 1981/04/01 First Use In Commerce: 1981/04/01 Indicating Membership in an Organization of Engineers and Scientists		

U.S. Registration No.	1296121	Application Date	10/31/1983
Registration Date	09/18/1984	Foreign Priority Date	NONE
Word Mark	SAE		
Design Mark			
Description of Mark	NONE		

Goods/Services	Class 016. First use: First Use: 1941/01/00 First Use In Commerce: 1941/01/00 Publications Consisting of Books, Technical Reports, and Technical Papers Related to the Field of Engineering and Science

U.S. Registration No.	1263434	Application Date	07/30/1981
Registration Date	01/10/1984	Foreign Priority Date	NONE
Word Mark	SAE		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 009. First use: First Use: 1981/07/29 First Use In Commerce: 1981/07/29 Microform Consisting of Microfiche and Microfilm Containing Information Related to the Field of Engineering and Science Including Recommended Practices, Standards and Compilations in These Fields Class 016. First use: First Use: 1981/04/01 First Use In Commerce: 1981/04/01 Publications Related to the Field of Engineering and Science Including Recommended Practices, Standards and Compilations in These Fields-Namely, Monthly and Yearly Technical Journals, Newsletters, Pamphlets, Magazines, Indexes, Handbooks, Technical Papers, Information Reports and Technical Books		

U.S. Registration No.	3759716	Application Date	09/14/2007
Registration Date	03/16/2010	Foreign Priority Date	NONE
Word Mark	SAE INTERNATIONAL		
Design Mark			
Description of Mark	The mark consists of a horizontally centered line in the letters "SAE", which are to the left of the word "INTERNATIONAL".		
Goods/Services	Class 016. First use: First Use: 2002/07/31 First Use In Commerce: 2002/07/31 Publications related to the field of engineering and science including informational reports, recommended practices, standards and compilations in these fields, namely, monthly and yearly technical journals, newsletters, pamphlets, magazines, indexes, handbooks, technical papers, technical documents and technical books Class 035. First use: First Use: 2002/07/31 First Use In Commerce: 2002/07/31 Arranging and conducting trade shows and expositions relating to the design, construction and utilization of self-propelled mechanisms, and components thereof, and related equipment and materials; promoting advancement and interest in science and engineering practices in the design, construction, and utilization of self-propelled mechanisms, prime movers, components therefor, and related equipment and materials Class 041. First use: First Use: 2002/07/31 First Use In Commerce: 2002/07/31 Education services, namely, conducting seminars and conferences, concerned with the technology and engineering of self-propelled mechanisms, and components thereof, and related equipment and materials Class 042. First use: First Use: 2002/07/31 First Use In Commerce: 2002/07/31 Providing online computer databases in the field of engineering technology		

U.S. Registration	1624795	Application Date	11/16/1989

No.			
Registration Date	11/27/1990	Foreign Priority Date	NONE
Word Mark	SAE INTERNATIONAL		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 016. First use: First Use: 1989/07/01 First Use In Commerce: 1989/07/01 PUBLICATIONS RELATED TO THE FIELD OF ENGINEERING AND SCIENCE INCLUDING INFORMATIONAL REPORTS, RECOMMENDED PRACTICES, STANDARDS AND COMPILATIONS IN THESE FIELDS - NAMELY, MONTHLY AND YEARLY TECHNICAL JOURNALS, NEWSLETTERS, PAMPHLETS, MAGAZINES, INDEXES, HANDBOOKS, TECHNICAL PAPERS, TECHNICAL DOCUMENTS AND TECHNICAL BOOKS Class 035. First use: First Use: 1989/07/01 First Use In Commerce: 1989/07/01 PROMOTING ADVANCEMENT AND INTEREST IN SCIENCE AND ENGINEERING PRACTICES THROUGH ARRANGING AND CONDUCTING TRADE SHOWS AND EXPOSITIONS RELATING TO THE DESIGN, CONSTRUCTION, AND UTILIZATION OF SELF-PROPELLED MECHANISMS, AND COMPONENTS THEREOF, AND RELATED EQUIPMENT AND MATERIALS Class 041. First use: First Use: 1989/07/01 First Use In Commerce: 1989/07/01 EDUCATIONAL SERVICES - NAMELY, CONDUCTING SEMINARS AND CONFERENCES, CONCERNED WITH THE TECHNOLOGY AND ENGINEERING OF SELF-PROPELLED MECHANISMS, AND COMPONENTS THEREOF, AND RELATED EQUIPEMNT AND MATERIALS Class 042. First use: First Use: 1989/07/01 First Use In Commerce: 1989/07/01 COMPUTER AND INFORMATION SERVICES, NAMELY LEASING ACCESS TO ENGINEERING TECHNOLOGY DATABASES		

U.S. Registration No.	1431541	Application Date	07/09/1986
Registration Date	03/03/1987	Foreign Priority Date	NONE
Word Mark	FORMULA SAE		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 041. First use: First Use: 1977/09/00 First Use In Commerce: 1977/09/00 EDUCATIONAL STUDENT DESIGN COMPETITION		

U.S. Registration No.	1628262	Application Date	11/13/1989
Registration Date	12/18/1990	Foreign Priority Date	NONE
Word Mark	SAE INTERNATIONAL THE ENGINEERING SOCIETY FOR ADVANCING MOBILITY LAND SEA AIR AND SPACE		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 016. First use: First Use: 1989/07/01 First Use In Commerce: 1989/07/01		

	PUBLICATIONS RELATED TO THE FIELD OF ENGINEERING AND SCIENCE INCLUDING INFORMATIONAL REPORTS, RECOMMENDED PRACTICES, STANDARDS AND COMPILATIONS IN THESE FIELDS - NAMELY, MONTHLY AND YEARLY TECHNICAL JOURNALS, NEWSLETTERS, PAMPHLETS, MAGAZINES, INDEXES, HANDBOOKS, TECHNICAL PAPERS, TECHNICAL DOCUMENTS AND TECHNICAL BOOKS Class 035. First use: First Use: 1989/07/01 First Use In Commerce: 1989/07/01 ARRANGING AND CONDUCTING TRADE SHOWS AND EXPOSITIONS RELATING TO THE DESIGN, CONSTRUCTION, AND UTILIZATION OF SELF-PROPELLED MECHANISMS, AND COMPONENTS THEREOF, AND RELATED EQUIPMENT AND MATERIALS Class 041. First use: First Use: 1989/07/01 First Use In Commerce: 1989/07/01 EDUCATIONAL SERVICES - NAMELY, CONDUCTING SEMINARS AND CONFERENCES CONCERNED WITH THE TECHNOLOGY AND ENGINEERING OF SELF-PROPELLED MECHANISMS, AND COMPONENTS THEREOF, AND RELATED EQUIPMENT AND MATERIALS Class 042. First use: First Use: 1989/07/01 First Use In Commerce: 1989/07/01 COMPUTER AND INFORMATION SERVICES, NAMELY LEASING ACCESS TO ENGINEERING TECHNOLOGY DATABASES

U.S. Registration No.	3174066	Application Date	01/10/2006
Registration Date	11/21/2006	Foreign Priority Date	NONE
Word Mark	SAE J1349 CERTIFIED POWER		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 035. First use: First Use: 2005/07/31 First Use In Commerce: 2005/07/31 Providing consumer product information, namely, providing an online computer database detailing certification data for engine performance for use by customers, researchers and media Class 042. First use: First Use: 2005/07/31 First Use In Commerce: 2005/07/31 Testing, analysis and evaluation of the goods and services of others for the purpose of certification, namely, providing a certification program for engine performance for the mobility industry		

U.S. Registration No.	3336850	Application Date	02/22/2006
Registration Date	11/13/2007	Foreign Priority Date	NONE
Word Mark	SAE J1349 CERTIFIED POWER		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class B. First use: First Use: 2005/04/30 First Use In Commerce: 2005/04/30 Testing of the power and torque rating of production engines		

U.S. Registration No.	4285665	Application Date	06/07/2012
Registration Date	02/05/2013	Foreign Priority Date	NONE

Word Mark	SAE J1995 CERTIFIED POWER
Design Mark	
Description of Mark	The mark consists of the term "SAE" next to the term "J1995" inside a rectangle, both centered above the phrase "Certified Power".
Goods/Services	Class B. First use: First Use: 2011/05/11 First Use In Commerce: 2011/05/11 Testing of the power and torque rating of production engines

U.S. Registration No.	4285654	Application Date	06/07/2012
Registration Date	02/05/2013	Foreign Priority Date	NONE
Word Mark	SAE J1995 CERTIFIED POWER		
Design Mark			
Description of Mark	The mark consists of the term "SAE" next to the term "J1995" inside a rectangle, both centered above the phrase "Certified Power".		
Goods/Services	Class 035. First use: First Use: 2011/10/21 First Use In Commerce: 2011/10/21 Providing consumer product information, namely, providing an online computer database detailing certification data for engine performance for use by customers, researchers, and media Class 042. First use: First Use: 2011/10/21 First Use In Commerce: 2011/10/21 Testing, analysis, and evaluation of the goods and services of others for the purpose of certification, namely, providing a certification program for engine performance for the mobility industry		

U.S. Application No.	85644794	Application Date	06/06/2012
Registration Date	NONE	Foreign Priority Date	NONE
Word Mark	SAE INTERNATIONAL ELECTRONICS + CONNECTIVITY		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 041. First use: Providing on-line publications in the nature of magazines in the field of engineering and science		

U.S. Application No.	85644942	Application Date	06/06/2012
Registration Date	NONE	Foreign Priority Date	NONE
Word Mark	SAE INTERNATIONAL POWERTRAIN & ENERGY		
Design Mark			
Description of Mark	The mark consists of the phrase "SAE INTERNATIONAL" above the term "POWERTRAIN" above the phrase "& ENERGY".		
Goods/Services	Class 041. First use: Providing on-line publications in the nature of magazines in the field of engineering and science		

U.S. Application No.	85644914	Application Date	06/06/2012

Registration Date	NONE	Foreign Priority Date	NONE
Word Mark	SAE INTERNATIONAL POWERTRAIN & ENERGY		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 041. First use: Providing on-line publications in the nature of magazines in the field of engineering and science		

U.S. Registration No.	4002151	Application Date	12/13/2010
Registration Date	07/26/2011	Foreign Priority Date	NONE
Word Mark	SAE INTERNATIONAL VEHICLE ELECTRIFICATION		
Design Mark			
Description of Mark	The mark consists of the stylized phrase "SAE INTERNATIONAL" in the top left corner of a rectangle and above the term "VEHICLE." To the right of the term "VEHICLE" is the term "ELECTRIFICATION". In the top right corner of the rectangle is the wording "evsae.com".		
Goods/Services	Class 009. First use: First Use: 2010/11/04 First Use In Commerce: 2010/11/04 Electronic publications, namely, magazines in the fields of engineering and science		

U.S. Registration No.	4002150	Application Date	12/13/2010
Registration Date	07/26/2011	Foreign Priority Date	NONE
Word Mark	SAE INTERNATIONAL VEHICLE ELECTRIFICATION		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 009. First use: First Use: 2010/11/04 First Use In Commerce: 2010/11/04 Electronic publications, namely, magazines in the fields of engineering and science		

U.S. Registration No.	3252483	Application Date	08/29/2005
Registration Date	06/12/2007	Foreign Priority Date	NONE
Word Mark	BAJA SAE		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 041. First use: First Use: 2006/06/01 First Use In Commerce: 2006/06/01 Entertainment services, namely, conducting a student car design and racing competition		

U.S. Registration No.	3174174	Application Date	01/25/2006

Registration Date	11/21/2006	Foreign Priority Date	NONE
Word Mark	SAE TECHKNOWLEDGE CENTER		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 042. First use: First Use: 2003/02/20 First Use In Commerce: 2003/02/20 Providing an online computer database in the field of engineering and technology for the automotive and aerospace industries		

U.S. Registration No.	3916053	Application Date	03/18/2010
Registration Date	02/08/2011	Foreign Priority Date	NONE
Word Mark	SAE ITC		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 035. First use: First Use: 2010/03/11 First Use In Commerce: 2010/03/11 Providing start-up support for businesses of others in the automotive and aerospace industries concerning specifications and standards, requirements, documents and guidelines Class 041. First use: First Use: 2010/03/11 First Use In Commerce: 2010/03/11 Educational services, namely, developing educational programs concerning certification and conformance in the automotive and aerospace industry Class 042. First use: First Use: 2010/03/11 First Use In Commerce: 2010/03/11 Accreditation services, namely, evaluating organizations to determine whether the organizations conform to an established standard; development of technology for automotive and aerospace		

U.S. Registration No.	3916052	Application Date	03/18/2010
Registration Date	02/08/2011	Foreign Priority Date	NONE
Word Mark	SAE INDUSTRY TECHNOLOGIES CONSORTIA		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 035. First use: First Use: 2010/03/11 First Use In Commerce: 2010/03/11 Providing start-up support for businesses of others in the automotive and aerospace industries concerning specifications and standards, requirements, documents and guidelines Class 041. First use: First Use: 2010/03/11 First Use In Commerce: 2010/03/11 Educational services, namely, developing educational programs concerning certification and conformance in the automotive and aerospace industry Class 042. First use: First Use: 2010/03/11 First Use In Commerce: 2010/03/11 Accreditation services, namely, evaluating organizations to determine whether the organizations conform to an established standard; development of technology for automotive and aerospace		

U.S. Registration	3711347	Application Date	12/31/2008

No.			
Registration Date	11/17/2009	Foreign Priority Date	NONE
Word Mark	SAE VEHICLE ENGINEERING ONLINE		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 041. First use: First Use: 2008/01/31 First Use In Commerce: 2008/01/31 Providing online non-downloadable electronic publications in the nature of magazines in the field of engineering and science		

U.S. Application No.	85644875	Application Date	06/06/2012
Registration Date	NONE	Foreign Priority Date	NONE
Word Mark	SAEINTERNATIONAL ELECTRONICS + CONNECTIVITY		
Design Mark			
Description of Mark	The mark consists of the phrase "SAE INTERNATIONAL" in a rectangle centered above the term "ELECTRONICS" inside a rectangle, above a "+" and the term "CONNECTIVITY" below the term "ELECTRONICS."		
Goods/Services	Class 041. First use: Providing on-line publications in the nature of magazines in the field of engineering and science		

U.S. Registration No.	3711348	Application Date	12/31/2008
Registration Date	11/17/2009	Foreign Priority Date	NONE
Word Mark	SAE VEHICLE ENGINEERING ONLINE		
Design Mark			
Description of Mark	The mark consists of the words "SAE Vehicle" above the words "Engineering Online".		
Goods/Services	Class 041. First use: First Use: 2008/01/31 First Use In Commerce: 2008/01/31 Providing online non-downloadable electronic publications in the nature of magazines in the field of engineering and science		

Attachments	SAEI-102673_Notice_of_Opposition.pdf(4209193 bytes)

Certificate of Service

The undersigned hereby certifies that a copy of this paper has been served upon all parties, at their address record by First Class Mail on this date.

Signature	/Jonathan C. Parks/
Name	Jonathan C. Parks
Date	05/09/2013

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

In re Application of:

Applicant	:	**Foshan Sunway Auto Electrical, Co., Ltd.**
Application Number	:	**85/767,587**
Mark	:	**SAE and Design**
Application Date	:	**October 31, 2012**
Publication Date	:	**April 9, 2013**

SAE International, Opposer, v. Foshan Sunway Auto Electrical Co., Ltd., Applicant.	)	Opposition No. _____

NOTICE OF OPPOSITION

1. Opposer SAE International ("Opposer"), a Pennsylvania Non-Profit Corporation having a principal place of business at 400 Commonwealth Drive, Warrendale, Pennsylvania, 15096-0001 believes that it will be damaged by Application No. 85/767,587 for the mark SAE and Design and hereby opposes said Application.

2. To the best of Opposer's knowledge, the name and address of the Applicant of the SAE and Design Application is Foshan Sunway Auto Electrical, Co., Ltd., ("Applicant"), a foreign corporation with a principal place of business at 8# Junye South Rd, C Block, Shinshan Industry Zone, Nanhai, Foshan City, Guangdong, China, 528225.

3. On October 31, 2013, Applicant filed a use application, Serial No. 85/767,587, to register the mark SAE and Design  ("Applicant's SAE Mark")

which is described as consisting of the words SAE in black and a curved red streak to the left of and above the S, with an orange and yellow ball at the head of the red streak. Applicant's SAE Mark is applied for in International Class 11 for: Electric torches for lighting; Headlights for vehicles; Lamps; Lighting apparatus for vehicles; Lights for vehicles; Outdoor portable lighting products, namely, headlamps; Searchlights.

4. Applicant alleges a date of first use of the mark of August 25, 2012, and a date of first use of the mark in commerce of September 3, 2012.

6. Upon information and belief, beginning in September of 2012, Applicant began offering for sale and selling automotive lighting products under the SAE and Design Mark both nationally and internationally.

OPPOSER'S PRIORITY

12. Opposer is the owner of the following U.S. trademark registrations in the USPTO (hereinafter referred to as "Opposer's SAE Marks"):

Trademark	Registration No.	Filing Date	Registration Date	Date of First Use	International Class/Goods
SAE	1212771	07/30/1981	10/12/1982	04/01/1981	IC 041
SAE	1212825	07/30/1981	10/12/1982	04/01/1981	IC 042
SAE	1212826	07/30/1981	10/12/1982	06/12/1909	IC 042
SAE	1203242	07/31/1981	07/27/1982	04/01/1981	IC 200
SAE	1296121	10/31/1983	09/18/1984	01/1941	IC 016
SAE	1263434	07/30/1981	01/10/1984	04/01/1981	IC 009; IC 016
SAE International	3759716	09/14/2007	03/16/2010	07/31/2002	IC 016; IC 035; IC 041; IC 042
SAE International	1624795	11/16/1989	11/27/1990	07/01/1989	IC 016; IC 035; IC 041; IC 042
Formula SAE	1431541	07/09/1986	03/03/1987	09/1977	IC 041
SAE International The Engineering Society For Advancing Mobility Land Sea Air And Space	1628262	11/13/1989	12/18/1990	07/01/1989	IC 016; IC 035; IC 041; IC 042
SAE J 1349 Certified Power	3174066	01/10/2006	11/21/2006	07/31/2005	IC 035; IC 042

SAE J 1349 Certified Power	3336850	11/22/2006	11/13/2007	04/30/2005	IC B
SAE J 1995 Certified Power	4285665	06/07/2012	02/05/2013	05/11/2011	IC B
SAE J 1995 Certified Power	4285654	06/07/2012	02/05/2013	10/21/2011	IC 035; IC 042
SAE International Electronics + Connectivity	Serial No. 85/644,794	06/06/2012	Pub. Date: 11/27/2012	n/a	IC 041
SAE International Powertrain & Energy	Serial No. 85/644,942	06/06/2012	Pub. Date: 11/20/2012	n/a	IC 041
SAE International Powertrain & Energy	Serial No. 85/644,914	06/06/2012	Pub. Date: 11/20/2012	n/a	IC 041
SAE International Electronics + Connectivity	Serial No. 85/644,875	06/06/2012	Pub. Date: 11/20/2012	n/a	IC 041
SAE International Vehicle Electrification	4002151	12/13/2010	07/26/2011	11/04/2010	IC 009
SAE International Vehicle Electrification	4002150	12/13/2010	07/26/2011	11/04/2010	IC 009
Baja SAE	3252483	08/29/2005	06/12/2007	06/01/2006	IC 041
SAE TechKnowledge Center	3174174	01/25/2006	11/21/2006	02/20/2003	IC 042
SAE ITC	3916053	03/18/2010	02/08/2011	03/11/2010	IC 035; IC 041; IC 042
SAE Industry Technologies Consortia	3916052	03/18/2010	02/08/2011	03/11/2010	IC 035; IC 041; IC 042
SAE Vehicle Engineering Online	3711348	12/31/2008	11/17/2009	01/31/2008	IC 041
SAE Vehicle Engineering Online	3711347	12/31/2008	11/17/2009	01/31/2008	IC 041

13. A number of Opposer's SAE Marks have become incontestable as a matter of law under 15 U.S.C. §1065.

14. Since at least as early as June 12, 1909, Opposer has been, and is now, using one or more of the family of SAE Marks in commerce in connection with electrical standards and certification materials for the automotive industry.

15. Opposer's use of the family of SAE Marks has been valid and continuous since its date of first use.

16. Opposer's use of its family of SAE Marks and Opposer's filing of the applications for the family of SAE Marks pre-date both Applicant's first use of, and application for registration of, Applicant's SAE Mark, and establishes the priority of Opposer's family of SAE Marks. In addition, SAE holds various Chinese trademark registrations, and SAE is an international organization with significant operations in China as a wholly-owned foreign entity (WOFE).

17. Opposer's family of SAE Marks are symbolic of extensive goodwill established by Opposer, have acquired a high degree of recognition through continued use and expenditures of time, effort and money in advertising and promotion, and serve as a unique identifier of the goods offered by Opposer. In particular, Opposer uses its family of SAE Marks in conjunction with providing at least one-hundred ninety eight (198) aircraft and motor vehicle lighting standards, specifications, and certification documents. *See* attached Exhibit A. Aircraft and motor vehicle lighting products that adhere to these standards are designated as "SAE Certified."

18. Applicant's SAE Mark is similar to Opposer's family of SAE Marks in that all the marks incorporate the "SAE" element as the dominant element of the Mark.

19. The goods which bear Applicant's and Opposer's marks, namely, vehicle lighting fixtures, and standards for vehicle lighting fixtures, are substantially identical.

20. Upon information and belief, Applicant's goods with which it uses the

Mark, and the products with which Opposer uses its family of SAE Marks are offered for sale and are sold through the same channels of trade and offered and sold to the same class of purchasers.

COUNT I
LIKELIHOOD OF CONFUSION

21. Opposer hereby incorporates by reference and re-alleges each and every allegation set forth in Paragraphs 1 through 20.

22. Opposer's dates of use of Opposer's SAE Marks are prior to the date of filing of Applicant's SAE Application and the date of Applicant's claimed date of first use of its SAE Mark.

23. Opposer's family of SAE Registrations are valid and subsisting and are prima facie evidence of Opposer's exclusive right to use its family of SAE Marks in commerce on the goods specified in such registrations.

24. In view of the similarity of the respective marks, the substantially identical channels of trade and goods offered for sale by the respective parties, Applicant's

Mark so resembles Opposer's family of SAE Marks, previously used in the United States, and not abandoned, as to be likely to cause confusion, or to cause mistake, or to

deceive as to source by suggesting that Applicant's goods are associated with or approved, endorsed, affiliated, authorized or sponsored by Opposer.

WHEREFORE, Applicant's  Mark, Application No. 85/767,587, is damaging to SAE International and, accordingly, SAE International requests that the instant Notice of Opposition be granted and that the aforesaid registration be cancelled.

Please charge Deposit Account No. 500859 in the amount of $300 for the filing fee required by 2.6(a)(17) for this Notice of Opposition. Please charge any underpayment or credit any overpayment to Deposit Account No. 500859.

Respectfully submitted,

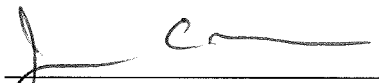
JONATHAN C. PARKS, ESQ.
USPTO Reg. No. 40,120
Pietragallo Gordon Alfano Bosick
& Raspanti, LLP
One Oxford Centre, 38th Floor,
Pittsburgh, PA 15219
Telephone: 412-263-2000
Fax: 412-261-0915
Email: ipgroup@pietragallo.com
Attorney for Opposer

Dated: May 9, 2013

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on the 9th day of May, 2013, I served a true and correct copy of the foregoing NOTICE OF OPPOSITION via First Class Mail, postage prepaid, upon the attorney of record for Applicant addressed as follows:

Clifford D. Hyra, Esq.
Symbus Law Group, LLC
11710 Plaza America Drive, Suite 2000
Reston, VA 20190



Jonathan C. Parks

EXHIBIT A

Title	Item Number	Version	Publish Date (YYYY-MM-DD)	Content Type	Abstract/Scope/Description
Some Factors Affecting Visibility of Aircraft Navigation and Anticollision Lights	AIR1106A	A	1991-02-27	Aerospace Standard	The scope of this Aerospace Information Report (AIR) is to discuss factors affecting visibility of aircraft navigation and anticollision lights, enabling those concerned with their use to have a better technical understanding of such factors, and to aid in exercising appropriate judgement in the many possible flight eventualities.
Aircraft Flashtube Anticollision Lighting Systems	AIR1276A	A	1989-02-01	Aerospace Standard	This aerospace information report discusses various factors to be considered in the use of flashtubes in anticollision light systems for aircraft. This document covers red and white anticollision lights using flashtubes as the light source.
Animal Environment in Cargo Compartments	AIR1600A	A	1997-10-01	Aerospace Standard	The environmental factors of prime importance in the transport of animals in aircraft are air temperature, humidity and carbon dioxide concentration, and of course space (or volume) limitations. Secondary factors are air velocity, noise, lighting, etc. Pressure isnot addressed herein as pressure levels and rates of change are totally dictated by human occupancy requirements
Aerospace Fly-by-Light Actuation Systems	AIR4982		1999-03-01	Aerospace Standard	This SAE Aerospace Information Report (AIR) has been prepared to provide information regarding options for optical control of fluid power actuation devices. It is not intended to establish standards for optical fluid power control, but rather is intended to provide a baseline or foundation from which standards can be developed. It presents and discusses approaches for command and communication with the actuation device via electro-optic means.
Aircraft Cabin Illumination	AIR512E	E	2012-03-14	Aerospace Standard	This document covers the general recommendations for cabin lighting in order to provide satisfactory illumination for, but not limited to: 2. Boarding and deplaning
Light Transmitting Glass Covers for Exterior Aircraft Lighting	AIR5689A	A	2009-11-04	Aerospace Standard	This SAE Aerospace Information Report (AIR) provides definitions of and inspection criteria for defects commonly encountered in molded and finished glass covers for exterior aircraft lighting. This document covers, but is not limited to, visual inspection and evaluation recommendations for molded glass covers used in exterior aircraft lighting applications. The included definitions are for those defects most commonly encountered. The goal is to provide specific evaluation criteria in the following areas: a. color; b. internal quality; c. external (surface) quality; d. dimension; and e. coatings.Inspection of glass covers shall be made at a typical reading distance with normal or corrected 20-20 vision under adequate lighting. Covers shall be free from defects which will prevent meeting intensity and beam distribution, strength, thermal shock,
Tape, Adhesive, Pressure-Sensitive, Thermal Radiation Resistant, Aluminum Foil/Glass Cloth	AMS3779/1A	A	1990-07-01	Aerospace Material Specification	This specification covers thermal radiation resistant material in the form of tape with pressure-sensitive adhesive. Primarily for use on radiation screens where weight and flexibility are not critical factors. See AMS 3779/2 for lighter weight and more flexibility.
Instrument and Cockpit Illumination for General Aviation Aircraft	ARP1048B	B	2006-08-10	Aerospace Standard	This document establishes acceptable design criteria for instrument and cockpit illumination for general aviation aircraft.

Aircraft Indicating Systems	ARP1088B	B	2010-11-15	Aerospace Standard	This ARP is intended to cover the warning, caution and advisory indicating system required for commercial and military aerospace vehicles. The purpose of this ARP is to recommend certain basic considerations which the design engineer should observe when designing a visual warning indicating system. It is recognized that many types of warning indicators and systems are available for the
Crew Station Lighting - Commercial Aircraft	ARP1161A	A	2002-11-26	Aerospace Standard	The purpose of this ARP is to present a practical set of requirements for the lighting systems which provide illumination for crew station areas and displays and for the characteristics of displays which affect their readability. It is intended that it be used as a guide by those involved with the design, use, or procurement of lighting systems for commercial and non-military aircraft or aerospace vehicles. The ARP covers the recommended requirements for the lighting and characteristics of instruments; information plates and displays;
Cargo Compartment Lighting for Transport Category Aircraft and	ARP1283A	A	1992-06-01	Aerospace Standard	This Aerospace Recommended Practice (ARP) establishes design guidance for adequate and safe cargo compartment and cargo access lighting systems. The adoption of a standard set of
Photometric and Colorimetric Measurement Procedures for Airborne Direct View CRT Displays (STABILIZED Sep 2012)	ARP1782B	B	2012-09-12	Aerospace Standard	This ARP describes methods for measuring the visual performance of direct view cathode ray tube displays used in aircraft flight decks and cockpits. Procedures may vary depending upon the type of display (for example, monochrome, color shadowmask, beam index, etc.), but all types are considered This ARP describes the methods
Portable Emergency Lighting Systems for Flight Crew Members	ARP1798A	A	2012-03-01	Aerospace Standard	The purpose of this SAE Aerospace Recommended Practice (ARP) is to recommend general design and performance characteristics for hand-held Portable, Emergency Lighting Systems (note: the portable portion of this system that contains the lamp and reflector will be identified throughout the remainder of this document simply as a
Passenger Reading Lights	ARP378C	C	2006-08-10	Aerospace Standard	This document presents criteria for design and location of passenger reading lights in commercial aircraft.
Wing Inspection Lights - Design Criteria	ARP4087C	C	2011-11-16	Aerospace Standard	This SAE Aerospace Recommend Practice (ARP) is intended to cover the external lights on fixed wing aircraft for illuminating the wing leading edge and engine nacelles and the upper surfaces of the wing. The addition of an ice detection system should be implemented when the areas to inspect are not visible from the aircraft cockpit. It is not intended that this Recommended Practice require the use of any particular light source such as Halogen, LED or other specific design of lamp.

Flight Deck Lighting for Commercial Transport Aircraft	ARP4103		1989-02-27	Aerospace Standard	This document recommends criteria for the lighting systems and visual interface required of flight deck areas, controls and displays. This document defines the recommended design and performance requirements for: integrally lighted instruments, integrally lighted information panels (lightplates), circuit breaker panel lighting, warning, caution and advisory indicator lights, and general and utility lighting.
Color-Coded Incandescent Flange Base T-1 and T-1 3/4 Lamps for Voltage Identification	ARP4156B	B	2006-11-07	Aerospace Standard	This document defines the method for voltage identification by the use of color-coded insulators at the base of the lamps. Table 1 shows the design volts and corresponding insulator colors. The part numbers shown are for example purposes only, as an option. Insulator colors are to be easily distinguishable as green, yellow, red, and white. Additional colors may be added by a revision process as required.
Night Vision Goggle (Nvg) Compatible Light Sources	ARP4168A	A	2004-01-30	Aerospace Standard	This ARP covers three common lamp light sources, incandescent, electroluminescent and light emitting diode that, when NVG filtered, can be used to illuminate NVG compatible aerospace crew stations
Night Vision Goggle (Nvg) Filters	ARP4169A	A	2006-02-28	Aerospace Standard	This SAE Aerospace Recommended Practice (ARP) discusses the desired characteristics of night vision goggle (NVG) filters that can be used with incandescent, electroluminescent (EL) and light emitting diode (LED) light sources to achieve NVG compatible lighting of aerospace crew stations. This document also discusses the parameters that need to be considered when selecting a night vision goggle/daylight viewing (NVG/DV) filter for proper contrast enhancement to achieve readability in daylight
Photometric and Colorimetric Measurement Procedures for Airborne Electronic Flat Panel Displays	ARP4260A	A	2009-04-22	Aerospace Standard	This SAE Aerospace Recommended Practice (ARP) contains methods used to measure the optical performance of airborne electronic flat panel display (FPD) systems. The methods described are specific to the direct view, liquid crystal matrix (x-y addressable) display technology used in aircraft flight decks. The focus of this
Lighting, Aircraft Exterior, Night Vision Imaging System (Nvis) Compatible	ARP4392		1993-06-18	Aerospace Standard	This SAE Aerospace Recommended Practice (ARP) describes the recommended performance levels for equipment located on the aircraft exterior which produces radiant energy which will provide desired information when viewed with NVIS goggles. These performance intensities, normally stated in candelas for visible light, are modified to consider the goggle spectral response range. Where necessary, location of the equipment on the airplane is specified
Night Vision Imaging System (NVIS) Compatible Illuminated Pushbutton Switches and Indicators	ARP4822		2006-06-19	Aerospace Standard	This SAE Aerospace Recommended Practice (ARP) reviews the basics of NVIS compatibility and discusses the specific illuminated pushbutton switch and indicator requirements for sunlight readability, color, luminance, and NVIS radiance when used in NVIS compatible cockpits. The recommendations and special considerations set forth in this document are made to give the design engineer a better understanding of MIL-L-85762A NVIS compatibility requirements and to provide information on the visual characteristics of NVIS compatible pushbutton switch and indicator displays.
Knobs, Control Aircraft, Recommended Design	ARP493A	A	2002-01-06	Aerospace Standard	The purpose of this document is to recommend shapes and sizes of knobs which will guide the design of these components toward eventual uniformity. This recommended practice is intended to recommend the basic shapes and dimensions for knobs used in aircraft. Two basic types of knobs, the bar shape and the round shape, are described, as well as several widely used variations of these two basic shapes.

Night Vision Imaging Systems (NVIS) Integrally Illuminated Information Panels	ARP4967A	A	2007-03-12	Aerospace Standard	This document is intended to highlight critical design issues that a panel designer should understand when designing panels for NVIS applications. It is not intended to be a discussion of the benefits of one lighting technology versus another. See ARP 4168 for a more complete discussion of these lighting technologies.
Design, Layout, Criteria - Plastic Integrally Lighted Panels (STABILIZED Apr 2012)	ARP498C	C	2012-04-04	Aerospace Standard	This document is intended to cover the design of plastic lighted panels, mounting plates, and their installation.
Measurement Procedures for Strobe Anticollision Lights	ARP5029		1998-12-01	Aerospace Standard	This SAE Recommended Practice (ARP) provides the user with standardized guidelines for the measurement of effective intensity of strobe anticollision lights for aircraft in the laboratory, in maintenance facilities, and in the field. A common source of traceability for calibration of the measurement systems,
Emergency Evacuation Illumination	ARP503F	F	2004-07-12	Aerospace Standard	This Aerospace Recommended Practice (ARP) provides criteria for design and location of power supplies, controls, light fixtures, and associated equipment which are used to provide emergency illumination in transport aircraft, designed to comply with FAR 25 (Ref. 1) for operation under FAR 91 (Ref. 11) and FAR 121 (Ref. 2), and also in compliance with FAA Advisory Circulars AC25.812-1A (Ref. 3) and AC25.812-2 (Ref. 10). It is not the purpose of an ARP to specify design methods to be followed in the accomplishment of the stated objectives.
Recommended Qualification Tests for Halogen Miniature Lamps Less Than 35 Watts for Aircraft Applications	ARP5297A	A	2011-10-11	Aerospace Standard	This SAE Aerospace Recommended Practice (ARP) provides the qualification test procedure requirements for low wattage halogen lamps (less than 35 Watts) intended for use primarily in aircraft applications. The purpose of these tests is to provide a laboratory means of determining the performance characteristics of lamps in airplane power and environmental conditions and to verify the integrity of the lamp design and production process.
Safety Considerations for High-Intensity Lights (HIL) Directed into the Navigable Airspace	ARP5560		2008-11-06	Aerospace Standard	This document applies to regulatory/approving authorities involved with decisions regarding the use of HIL directed into the navigable airspace. For the purpose of this document, lights greater than 0.25 million candlepower meet the minimum threshold of an HIL. Lights not directed or reflected into the navigable airspace are not usually considered to interfere with aircraft operations. Laser systems are beyond the scope of this document.
Design and Maintenance Considerations for Aircraft Exterior Lighting Plastic Lenses	ARP5637		2005-03-08	Aerospace Standard	The information in this document is intented to apply to commercial jet transport category airplanes that incorporate plastic (polycarbonate or acrylic) lenses on exterior light assemblies, or are being considered for such an application. Exterior lighting applications include position light assemblies, anticollision light asemblies, and landing light assemblies. However, much of the material provided herein is general in nature and is directly applicable to many aircraft categories including, but not limited to, helicopters, general aviation aircraft, and military aircraft.

High Intensity Discharge Light Sources	ARP5647		2006-02-17	Aerospace Standard	This SAE Aerospace Recommend Practice (ARP) is intended to recommend safety related best practices when using metal halides high intensity discharge (HID) lamps and power supplies in aircraft applications.
Pilot Training Recommendations for Unmanned Aircraft Systems (UAS) Civil Operations	ARP5707		2010-11-04	Aerospace Standard	This document provides an approach to the development of training topics for pilots of Unmanned Aircraft Systems (UAS) for use by operators, manufacturers, and regulators. The identification of training topics is based initially on Practical Test Standard (PTS) topics for manned aircraft pilots. The topics identified could be used for the construction of a PTS for UAS commercial pilot operations and a PTS for a UAS pilot instrument rating. The UAS commercial pilot rating would contain restrictions on the types of operations that could be flown that would be dependent on the type of UAS used. The UAS type would also influence the specific training topics that would be covered. This document is not intended to outline the
Design Requirements and Test Procedures for Dual Mode Exterior Lights	ARP5825		2005-07-13	Aerospace Standard	This SAE Aerospace Recommended Practice (ARP) contains the general requirements and test procedures for Dual Mode (NVIS Friendly visible and Covert) exterior lighting for most rotorcraft and fixed wing aircraft and could be applicable to ground vehicles that desire a Dual Mode lighting system.
Lighting, Integral, For Aircraft Instruments: Criteria for Design of Red Incandescent Lighted	ARP582D	D	2012-04-04	Aerospace Standard	This SAE Aerospace Recommended Practice (ARP) covers the general requirements and test procedures for illuminating systems for integrally lighted aircraft instruments in order to provide (a) uniformity of illumination within each instrument, (b) legibility of instrument
LED Passenger Reading Light Assembly	ARP5873		2007-03-07	Aerospace Standard	This document presents minimum criteria for the design and installation of LED passenger reading light assemblies in commercial aircraft. The use of "shall" in this specification expresses provisions that are binding. Non-mandatory provisions use the term "should."
Flight Compartment Glare	ARP6161		2011-07-29	Aerospace Standard	This document is a tool for the certifying authority, cockpit designers, instrument suppliers, lighting suppliers, and component suppliers. It is an aid to understanding and meeting relavant regulatory requirements, particularly those relating to pilot compartment view {CFR 25.773(a)(2)} and instrument lights {25.1381(a)(2)} for glare arising from visible eletromagnetic radiation.
LEDs and Aircraft Applications	ARP6253		2011-04-27	Aerospace Standard	This document presents minimum criteria for the design and installation of LED assemblies in aircraft. The use of "shall" in this specification expresses provisions that are binding. Non-mandatory provisions use the term "should."
LED Landing, Taxiing, Runway Turnoff, and	ARP6402A	A	2011-11-21	Aerospace Standard	The purpose of this document is to provide certain basic considerations and design criteria for installation of LED landing,
Landing and Taxiing Lights - Design Criteria for Installation	ARP693D	D	2012-03-01	Aerospace Standard	This document includes requirements of installations of adequate landing and taxiing lighting systems in aircraft of the following categories: a. Single engine personal and/or liaison type b. Light twin engine

Aerial Refueling Lights - Design Criteria	ARP694B	B	2004-01-30	Aerospace Standard	This ARP is intended to cover all external lights on the tanker and fixed wing receiver airplanes used to accomplish serial refueling.This ARP is intended to cover all external lights on the tanker and fixed wing receiver airplanes used to accomplish aerial refueling. This ARP describes lights used for two basic types of aerial refueling: The Probe and Drogue, and the Boom/Receptacle method.The purpose of this ARP is to set forth the basic considerations and criteria which the design engineer should observe when designing an Aerial Refueling Lighting System. In case of conflict between this ARP and existing military specifications the military specification will take precedence, unless waiver is obtained.
Illuminated Signs	ARP711B	B	2011-10-18	Aerospace Standard	This Aerospace Recommended Practice (ARP) covers the general design and performance characteristics of illuminated information signs for service in the passenger compartment of passenger transport aircraft. "Illuminated information signs" are lighted signs used to inform occupants of the passenger compartment. Signs may use symbols or letters to convey messages. This ARP does not apply to "EXIT" signs which are the subject of ARP503.
Galley Lighting	ARP712B	B	2004-03-05	Aerospace Standard	This SAE Aerospace Recommended Practice (ARP) provides minimum standards and environmental design requirement recommendations for lighting and control in galley areas. It also addresses electrical shock hazard in galley areas.The purpose of this recommended practice is to provide minimum standards for the illumination of galleys (buffets) and for the location of lighting controls within the galley area of passenger transport aircraft.
Design Criteria for White Incandescent Lighted Aerospace Instruments	ARP798A	A	2007-03-21	Aerospace Standard	This SAE Aerospace Recommended Practice (ARP) covers the general requirements and test procedures recommended for use with white incandescent integrally lighted instruments. Its use should
Lamps for Aircraft Lighting	ARP881E	E	2007-07-09	Aerospace Standard	This SAE Aerospace Recommended Practice (ARP) lists the lamps in Table 1 that are recommended for the type of service indicated. This list is not intended as a catalog and does not include many types that are now in use. This specification is not applicable to Solid State Lighting Lamp Assemblies (Based LED lamps). It does, however, reflect current practice.
Electroluminescence, Design Criteria and Recommendations for Use in Aerospace Vehicle Crew Station Areas (STABILIZED Feb 2012)	ARP922B	B	2012-02-09	Aerospace Standard	The scope of this ARP is to provide general requirements for application of electroluminescence to Aerospace Vehicle Crew Station Area instruments and control panels. The design brightness and color recommendations stated in this ARP are intended to apply where a crew station has multiple usage of electroluminescence in both instruments and control panels and when different manufacturers may be involved. These recommendations may also be helpful for the design of individually used displays incorporating electroluminescence, however, this light source has extensive design versatility through variance of manufacturing and operating parameters and the numerous acceptable design recommendations will not be stated herein. Electroluminescence will herein be referred
Specification and Inspection of Glass for Integrally Lighted Aerospace Instruments	ARP924A	A	2000-03-01	Aerospace Standard	This SAE Aerospace Recommended Practice (ARP) covers the requirements for the types of glass to be utilized in the fabrication of cover glasses and lighting wedges used in aerospace instruments. It defines the maximum extent of physical defects and recommends standard methods of inspection and evaluation. Definitions of terminology used in this document are covered in 2.2.

Position and Anticollision Lights - Turbine Powered Fixed-Wing Aircraft	ARP991B	B	1996-04-01	Aerospace Standard	This document recommends design objectives for navigation, position, and anticollisionlight systems for visual detection and collision avoidance between airplanes in flight and on the ground. Customers for new airplanes or lighting components, and designers or manufacturers may take advantage of this document in specifying the initial requirements that, in most cases, significantly exceed the applicable minimum intensities as shown in the Federal Aviation Regulations as well provide better stability, longer life and lower operating costs.
Lighting, Aircraft Interior, Installation of	AS18276A	A	2008-07-15	Aerospace Standard	This specification covers the installation of aircraft interior lighting for military aircraft.
Indicator, Pressure, 1 1/2-Inch, Integrally Lighted (STABILIZED Aug 2012)	AS23479A	A	2012-08-22	Aerospace Standard	This specification covers design requirements and all performance requirements for the procurement of single and dual hermetically sealed, integrally lighted, remote indicating, pressure indicators.
Light Assembly, Cockpit, Fixed	AS25027A	A	2013-03-05	Aerospace Standard	Scope is unavailable.

Colors, Aeronautical Lights and Lighting Equipment, General Requirements For	AS25050A	A	2010-01-06	Aerospace Standard	This specification covers the chromaticity and transmission requirements of equipment light transmitting ware in the descending order of transmission. It is intended for use in military aircraft lighting.
Instrument and Cockpit Lighting for Commercial Transport Aircraft	AS264E	E	2002-01-06	Aerospace Standard	The desired system for aircraft instrument panel and cockpit lighting is one that will furnishlight of adequate intensity and distribution under all conditions of external lighting so that the crew may read instrumentation, placards, check lists, manuals, maps, instrument color coding, distinguish controls, etc., without undue interference with their vision outside of the aircraft.
Cargo Compartment Fire Detection Instruments (Reciprocating Engine Powered Aircraft)	AS400B	B	2001-07-01	Aerospace Standard	This Aerospace Standard covers three basic types of cargo compartment fire detector instruments. Basic Types - Definition of: Type I: Carbon Monoxide, an instrument which will actuate an alarm signal when the concentration of carbon monoxide in air exceeds a specified value. Type II: Smoke Detector, Electronic, an instrument operating on the principle of smoke particles modifying the relationship between a light beam and electronic light sensor which will actuate an alarm signal when the concentration of smoke in air exceeds a specified value. Type III: Smoke Detector, Visual, an instrument which, by visual
Color-Coded Incandescent Flange Base T-1 and T-1 3/4 Lamps for Voltage	AS4156B	B	2012-12-06	Aerospace Standard	This document defines the method for voltage identification by use of color coded insulators at the base of the lamp. Table 1 shows the design volts and corresponding insulator colors. The part numbers
Survivor Locator Lights	AS4492		1995-01-01	Aerospace Standard	This document covers steady type lights (Type I) and flashing-type lights (Type II).This document provides minimum performance and design standards to be applied to battery-powered emergency lights intended to be fitting to individual and multiplace flotation devices to mark the location and aid in the marshalling of aviation accident
Aircraft Fluorescent Lighting Ballast/Fixture Safety Design Standard	AS4914C	C	2011-08-12	Aerospace Standard	The purpose of this standard is to recommend minimum performance requirements to assist the specification writer in establishing a failsafe airplane interior Fluorescent light assembly
Lights, Instrument, Individual, General	AS50571A	A	2010-01-08	Aerospace Standard	This specification covers the general requirements for red and white individual instrument lights. This document has been streamlined.
Aviation Distress Signal	AS5134A	A	2001-12-20	Aerospace Standard	This SAE Aerospace Standard (AS) provides minimum performance and design standards to be applied to an Aviation Distress Signal, a handheld, high- intensity, stroboscopic light source designed to facilitate location and rescue of aviation accident/ditching survivors

Night Vision Goggles (NVG) Compatible Lighting for Civil Aircraft	AS5452A	A	2006-06-21	Aerospace Standard	This SAE Aerospace Standard (AS) will specify what type night vision goggles are required, minimumm requirements for compatible crew station lighting, aircraft exterior lighting such as anticollision lights and position/navigation lights that are "NVG compatible." Also, this document is intended to set standards for NVG utilization for aircraft so that special use aircraft such as the Coast Guard, Border Patrol, Air Rescue, Police Department, Medivacs, etc., will be better equipped to chase drug smugglers and catch illegal immigrants, rescue people in distress, reduce high-speed chases through city streets by police, etc. Test programs and pilot operator programs are required.
Light, Desk, Aircraft	AS7768		1998-08-01	Aerospace Standard	This specification covers the requirements for a light assembly for use on aircraft cabin desks.
Light, Desk, Aircraft	AS7768/1		1998-08-01	Aerospace Standard	No scope available.
Minimum Performance Standard, Stall Warning Equipment	AS8014		1986-09-08	Aerospace Standard	This aerospace standard establishes the minimum performance requirements for Stall Warning Equipment. This aerospace standard covers two basic Stall Warning Systems; one measures air flow and pressure distribution on the airfoil and the other measures the angle of airflow with respect to an arbitrary reference line. Each type of system includes, as a minimum, a sensor and the means for activating a device which warns the pilot of an impending stall.
Minimum Performance Standard for Anticollision Light Systems	AS8017C	C	2011-06-20	Aerospace Standard	This SAE Aerospace Standard (AS) establishes minimum performance standards for new equipment anticollision light systems.

Minimum Performance Standard for Airborne Multipurpose Electronic Displays	AS8034B	B	2011-06-27	Aerospace Standard	This SAE Aerospace Standard (AS) specifies minimum performance standards for all types of Electronic Displays and Electronic Display Systems that are intended for use in the flight deck by the flightcrew in all 14 CFR Part 23, 25, 27, and 29 aircraft. The requirements and recommendations in this document are intended to apply to all installed electronic displays and electronic display systems within the flight deck, regardless of intended function, criticality, or location within the flight deck, but may also be used for non-installed electronic displays. This document provides baseline requirements and recommendations (see section 2.3 for definitions of "shall" and "should"). This document primarily addresses hardware requirements, such as electrical, mechanical, optical, and environmental. It does not address system specific functions. It does not contain an exhaustive or comprehensive list of requirements for specific systems or functions, such as TCAS, ADS-B, GPS, weather, or shared display considerations (e.g., when should alerts be inhibited on a display system that simultaneously depicts navigation data integrated with terrain data or traffic alerting). This
Minimum Performance Standard for Aircraft Position Lights	AS8037B	B	2011-03-17	Aerospace Standard	This SAE Aerospace Standard (AS) establishes minimum performance standards for new equipment position lights. This Aerospace Standard defines minimum light intensity in terms of candelas in vertical and horizontal directions about the longitudinal, vertical, and lateral axes of the aircraft. It also defines color tolerances in terms of limiting chromaticities for the light emitted from the position lights. It is not intended that this standard require the use of any particular light source such as quartz-halogen, incandescent, or any other specific design of lamp.
Minimum Performance Standard General Aviation Flight Recorder	AS8039A	A	2002-02-13	Aerospace Standard	The standards contained herein apply to recording equipment intended primarily for installation in multi-engine, turbine powered aircraft (fixed and rotary wing) for automatically recording flight data parameters and audio information. This standard is not intended for large aircraft operating under Code of Federal Regulations Title 14, Aeronautics & Space, part 121. This Aerospace Standard (AS) specifies minimum performance standards for recording automatically aircraft flight par ammeters and (or) aural communication between flight crew members, aural warning sounds, and communications to and from aircraft necessary for flight operations. It is the intent of this standard to allow for the use of individual Cockpit Voice Recorder (CVR) or Flight Data Recorder (FDR) equipment, or a combination CVR/FDR.
Minimum Performance Standard for Automatic Pressure Altitude Digitizer Equipment (NONCURRENT Oct 1996)	AS855		1996-10-01	Aerospace Standard	This document specifies minimum performance standards and test procedures for 100 foot increment automatic altitude reporting digitizer equipment. It is intended that this equipment be operated by a pressure altitude device whose accuracy requirements are the same as those applicable to the pilot's altimeter. The digitizer equipment is defined as the combination of components needed for conversion of an input equivalent to pressure altitude into parallel digital code set forth in the International (ICAO) Code for SSR Pressure Altitude Transmission. All automatic altitude reporting digitizer equipment manufactured under this standard shall comply with the requirements as specified up to its maximum range as indicated on the equipment nameplate. The digitized altitude output shall be in accordance with "U.S. National Standard for Common System Component Characteristics for the IFF Mark X (SIF)/Air Traffic Control Radar Beacon System SIF/ATCRBS and the International (ICAO) Standard Code for SSR Pressure Altitude Transmission.

Gasket, Fuselage Light - Cover Screw	AS8991		1999-07-01	Aerospace Standard	No scope available.
Connector, Receptacles, Plugs, Adaptor, El, Embedded, Printed Circuit Board Lamp Lighting Panels (STABILIZED Aug 2012)	AS90335A	A	2012-08-27	Aerospace Standard	Scope is unavailable.
Class A Vehicle Glazing Shade Bands	J100_200501		2005-01-05	Ground Vehicle Standard	This SAE Recommended Practice establishes boundaries for shade bands on glazed surfaces in class "A" vehicles. These boundaries are located so that the shade band will provide driver vision protection from glare, and occupant comfort with respect to solar radiation. Since shade bands transmit less visible light than
Lighting and Marking of Construction, Earthmoving Machinery	J1029_201210	A	2012-10-09	Ground Vehicle Standard	This SAE Standard establishes minimum requirements for lighting and marking earthmoving construction machinery as defined in SAE J1116, 1.1 Self-Propelled Construction Machines - Earthmoving (excluding excavators). (Construction machinery is normally operated off-highway, and therefore this SAE document is not intended to be used as a basis for regulations by those having authority over on-highway motor vehicles.)
Speedometer Test Procedure (STABILIZED Aug 2011)	J1059_201108		2011-08-05	Ground Vehicle Standard	This SAE Recommended Practice provides a test procedure for eddy current speedometers, including the odometer if an integral portion of the speedometer, for passenger car service.
Sound Measurement - Construction Site	J1075_201303	A	2013-03-19	Ground Vehicle Standard	This SAE Standard sets forth measurement procedures and instrumentation to be used for determining a "representative" sound level during a representative time period at selected measurement locations on a construction site boundary. The document is not
Backup Lamp Switch	J1076_199003		1990-03-16	Ground Vehicle Standard	This standard defines the test conditions, procedures and performance specification for 6, 12, and 24 V backup lamp switches which are intended for use in motor vehicles.
School Bus Stop Arm Lamp	J1133_201106		2011-06-10	Ground Vehicle Standard	This document provides design guidelines, test procedure references, and performance requirements for stop arm lamp devices on school bus vehicles which are used to alert traffic to stop when passengers are loading and unloading

Towability Design Criteria and Equipment Use-Passenger Cars, Vans, and Light-Duty Trucks	J1142_199402		1994-02-02	Ground Vehicle Standard	This SAE Recommended Practice describes the type of equipment commonly used with towing equipment, provides information to calculate safe steering loads, and outlines design criteria.
Motorcycle Stop Lamp Switch	J1167_200805		2008-05-20	Ground Vehicle Standard	This SAE Recommended Practice establishes test procedures and performance requirements for stop lamp switches intended for use in an AC or a DC circuit on motorcycles. In service use may impose specific conditions on the switch which can affect its functional life. Those conditions should be replicated, as necessary, during the
Four-, Five-, and Eight-Conductor Electrical Connectors for Automotive Type Trailers	J1239_201009	A	2010-09-07	Ground Vehicle Standard	This SAE Recommended Practice covers the wiring and rectangularly shaped connector standards for all types of trailers whose gross weight does not exceed 4540 kg (10 000 lb). These trailers are grouped in SAE J684 with running light circuit loads not
Motorcycle Auxiliary Front Lamps	J1306_201209	B	2012-09-11	Ground Vehicle Standard	This engineering design specification provides parameters and general requirements for auxiliary front lamps to be used on motorcycles.
Motorcycle Turn Signal Lamps	J131_201006	A	2010-06-16	Ground Vehicle Standard	This SAE Standard provides design parameters and general requirements for motorcycle turn signal lamps. It does not apply to mopeds.
Rear Fog Lamp Systems	J1319_201008		2010-08-18	Ground Vehicle Standard	This SAE Recommended Practice provides test procedures, requirements, and guidelines for fog tail lamp systems.
Photometry Laboratory Accuracy Guidelines	J1330_200712		2007-12-06	Ground Vehicle Standard	The purpose of this SAE Information Report is to list and explain major equipment, instrumentation, and procedure variables which can affect inter-laboratory differences and repeatability of photometric measurements of various lighting devices listed in SAE Technical Reports. The accuracy guidelines listed in the report are for the purpose of controlling variables that are not a direct function of the lighting device being measured. The control of these individual variables is necessary to control the overall accuracy of photometric measurements. These accuracy guidelines apply to the
Rear Cornering Lamps for Use on Motor Vehicles Less than 9.1 m in Overall Length	J1373_201009		2010-09-07	Ground Vehicle Standard	This SAE Recommended Practice provides test procedures, requirements, and guidelines for rear cornering lamps for use on vehicles less than 9.1 m in overall length.

Performance Requirements for Motor Vehicle Headlamps	J1383_201005		2010-05-26	Ground Vehicle Standard	This SAE Recommended Practice is intended as a guide toward standard practice and is subject to change to keep pace with experience and technical advances. This document establishes performance requirements for headlamps.
Stop Lamps for Use on Motor Vehicles 2032 mm or More in Overall Width (Cancelled Aug 1996)	J1398_199608		1996-08-01	Ground Vehicle Standard	This SAE Standard provides test procedures, requirements, and guidelines for stop lamps intended for use on vehicles 2032 mm or more in overall width. Stop lamps conforming to the requirements of this document may be used on vehicles less than 2032 mm in overall width.
Cargo Lamps for Use on Vehicles Under 5443 kg (12 000 lb) GVWR	J1424_200811		2008-11-06	Ground Vehicle Standard	This SAE Recommended Practice provides test procedures, performance requirements, design guidelines, and installation) GVWR (Gross Vehicle Weight Rating).
Rear High Mounted Stop Lamps and Rear High Mounted Turn Signal Lamps for Use on Vehicles 2032 mm or More in Overall Width	J1432_201005		2010-05-20	Ground Vehicle Standard	This SAE Recommended Practice provides test procedures, requirements, and guidelines for high-mounted stop lamps intended for use on vehicles 2032 mm or more in overall width. This document applies to trucks, motor coaches, van type trailers, and other vehicles with permanent structure greater than 2.8 m high. This document does not apply to school buses, truck tractors, pole
OEM Plastic Parts Repair	J1573_201112	A	2011-12-20	Ground Vehicle Standard	This SAE Recommended Practice defines the information required to repair the various types of plastics found on modern light-duty highway vehicles. Information is included for the repair and refinishing of most plastic body parts, both interior and exterior. Repair information is described for all commonly used plastics including, but not limited to, polyurethanes, polycarbonate blends
Replaceable Motorcycle Headlamp Bulbs	J1577_201203	A	2012-03-02	Ground Vehicle Standard	This SAE Recommended Practice provides performance parameters and dimensional specifications for available light sources (replaceable
Headlamp Design Guidelines for Mature Drivers (STABILIZED Feb 2011)	J1606_201102	A	2011-02-24	Ground Vehicle Standard	This SAE Information Report should be used as a supplement to SAE J1383. It is intended to provide additional information which is important to the automotive designer and engineer in the process of designing, developing, and engineering the headlamps of motor vehicles which will take into account the effects of the aging process on the driver.
All-Terrain Vehicle Headlamps	J1623_200802		2008-02-27	Ground Vehicle Standard	This SAE Recommended Practice provides test procedures and performance requirements for all-terrain vehicle headlamps.

Plastic Materials and Coatings for Use In or On Optical Parts Such as Lenses and Reflectors of High-Intensity Discharge Forward Lighting Devices Used in Motor Vehicles	J1647_200709		2007-09-20	Ground Vehicle Standard	This SAE Recommended Practice provides test methods and requirements to evaluate the suitability of plastic optical materials for possible use in discharge forward lighting (DFL) devices in motor vehicles. These materials are typically used for lenses and reflectors. Separate testing is required for each combination of material, industrial coating, DFL light source, and device focal length. The tests are intended to determine physical and optical characteristics of the materials and coatings. Performance expectations of finished assemblies, including plastic components, are to be based on tests for lighting devices, as specified in SAE Standards and Recommended Practices for motor vehicle lighting equipment. Optical components exposed to weathering should also be subject to SAE J576.
Event Data Recorder - Retrieval Tool Protocol	J1698/2_201301		2013-01-14	Ground Vehicle Standard	This Recommended Practice utilizes existing industry standards to identify a common physical interface and define the protocols necessary to retrieve records stored by light duty vehicle Event Data Recorders (EDRs). To accomplish this, the SAE J1962 Diagnostic Connector is designated as the primary physical interface for EDR Retrieval Tools.
Vehicle Event Data Interface-Vehicular Output Data Definition	J1698_200502		2005-02-04	Ground Vehicle Standard	This recommended practice aims to establish a common format for displaying and presenting crash-related data recorded and stored within certain electronic components currently installed in many light-duty vehicles. This recommended practice pertains only to the post-download format of such data and is not intended to standardize the format of the data stored within any on-board storage unit, or to standardize the method of data recording, storing, or extraction. Historically, crash data recording technology in light-duty vehicles has developed and evolved based on differing technical needs of manufacturers and their customers without industry standards or government regulation. As a result, wide variations currently exist among vehicle manufacturers regarding the scope and extent of recorded data. For this reason, this recommended practice is not
Harmonized Vehicle Headlamp Performance Requirements (STABILIZED Feb 2011)	J1735_201102	A	2011-02-24	Ground Vehicle Standard	This SAE Recommended Practice provides headlamp beam pattern test points for harmonized low and high beam headlamp beam patterns that incorporate elements of European, Asian, and U.S. photometric tables. These photometric tables are optional for those found in SAE J1383.
Discriminating Back-Up Alarm System Standard	J1741_199906		1999-06-01	Ground Vehicle Standard	This SAE Standard describes methods for evaluating the performance of the systems detection device, the minimum detection areas behind the machine, the visual and audible information presented to the operator and ground personnel, and the systems fault detection requirements. Also included are operator system function tests and maintenance procedures.The purpose of this document is to establish performance requirements for a Discriminating Back-Up Alarm System.

Determination of the Fogging Characteristics of Interior Automotive Materials	J1756_200608		2006-08-08	Ground Vehicle Standard	1.1 This recommended practice describes two methods for determining the tendency of interior materials used in automobiles and other vehicles to (a) produce a light scattering deposit (fog) on a glass surface, or (b) produce a measurable deposit (mass) on aluminum foil. 1.2 This document is applicable to the measurement of a fog condensate on glass or aluminum foil surfaces within the limits of the test conditions. 1.3 It is the responsibility of the user of this document to establish appropriate safety and health practices and to determine the applicability of regulatory limitations prior to its use.
Standard Metrology for Vehicular Displays	J1757/1_200704		2007-04-23	Ground Vehicle Standard	The scope of this SAE Standard is to provide methods to determine display optical performance in all typical automotive ambient light illumination - with focus on High Ambient Contrast Ratio, which is critical for display legibility in a sunshine environment. It covers indoor measurements and simulated outdoor lighting. It is not the scope of this document to set threshold values for automotive compliance, however some recommended values are presented for reference.
SAE Miniature Bulb Vibration Test (STABILIZED Jun 2012)	J1765_201206	B	2012-06-11	Ground Vehicle Standard	This SAE Recommended Practice was designed to be an accelerated vibration test that subjects bulbs to critical vibration/shock loading typically observed in normal vehicle service and can be employed for conformance of production (COP) testing. The test was designed for external vehicle applications.

Electrical Indicating System Specification	J1810_201005		2010-05-11	Ground Vehicle Standard	This SAE Standard describes those factors which affect the accuracy and reliability of voltage indicating units and electrical indicating and sending units for fuel level, pressure, and temperature suitable for off-road, self-propelled work machines as described in SAE J1116. Indicating units are divided into two groups, fully sealed and partially sealed. Serviceable lighting is not covered by this document unless otherwise specified. No ISO document has been found to be compatible.
Uniform Reference and Dimensional Guidelines for Collision Repair	J1828_200802		2008-02-08	Ground Vehicle Standard	This SAE Recommended Practice defines, for vehicle manufacturers and collision information and equipment providers, the types of vehicle dimensional data needed by the collision repair industry and aftermarket equipment modifiers to properly perform high-quality repairs to damaged vehicles. Both body-frame and unitized vehicles, including passenger cars and light turcks, are addressed.The purpose of this document is to provide a standardized format for
Emergency Vehicle Sirens (STABILIZED Oct 2012)	J1849_201210	A	2012-10-15	Ground Vehicle Standard	This SAE Recommended Practice provides laboratory test procedures, requirements and guidelines for electronic siren systems with a single loudspeaker, and electromechanical sirens for use on authorized emergency vehicles, which call for the right-of-way. This document is applicable only to such sirens that have all dimensions across the sound-emitting opening equal to or less than 0.5 m. Test
L.E.D. Signal and Marking Lighting Devices	J1889_201106		2011-06-24	Ground Vehicle Standard	This SAE Recommended Practice applies to functions of motor vehicle signalling and marking lighting devices which use light emitting diodes (L.E.D.'s) as light sources. This report provides test methods, requirements, and guidelines applicable to the special characteristics of L.E.D. lighting devices. These are in addition to those required for devices designed with incandescent light sources. This report is intended to be a guide to standard practice and is subject to change to reflect additional experience and technical advances.
Electrical Grounding Practice	J1908_201302	A	2013-02-21	Ground Vehicle Standard	This SAE Standard outlines general procedures for the grounding of electrical components in 12- and 24-V systems, intended for light and heavy-duty on-highway trucks and their trailers; and off-road machinery applications as described in SAE J1116.
Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronyms--Equivalent to ISO/TR 15031-2	J1930_200810		2008-10-16	Ground Vehicle Standard	SCOPE - Purpose This SAE Recommended Practice supersedes SAE J1930 Apr 2002, and is technically equivalent to ISO 15031-2. This document is applicable to all light-duty gasoline and diesel passenger vehicles and trucks, and to heavy-duty gasoline vehicles. Specific applications of this document include diagnostic, service and repair manuals, bulletins and updates, training manuals, repair data bases, underhood emission labels, and emission certification applications SAE J1930 Revised Proposed

Application - Configurable Messaging	J1939/74_201011	A	2010-11-05	Ground Vehicle Standard	The SAE J1939 documents are intended for light, medium, and heavy-duty vehicles used on or off road as well as appropriate stationary applications which use vehicle derived components (e.g. generator sets). Vehicles of interest include, but are not limited to, on- and off-highway trucks and their trailers, construction equipment, and agricultural equipment and implements. The purpose of these documents is to provide an open interconnect system for electronic systems. It is the intention of these documents to allow Electronic Control Units to communicate with each other by providing a standard architecture. This particular document, SAE J1939-74, describes the message structure for a set of messages which enable the user to determine and announce to others on the network, the parameter placement within a particular message from the special set of messages defined within this document.
Network Management	J1939/81_201106		2011-06-30	Ground Vehicle Standard	These SAE Recommended Practices are intended for light and heavy duty vehicles used on or off road as well as appropriate stationary applications which use vehicle derived components (e. g. generator sets). Vehicles of interest include, but are not limited to on and off highway trucks and their trailers; construction equipment; and agricultural equipment and implements. The purpose of these documents is to provide an open interconnect system for electronic systems. It is the intention of these documents to allow Electronic Control Units to communicate with each other by providing a standard architecture. Network management in the SAE J1939 network is concerned with the management of source addresses and the association of those addresses with an actual function and with the detection and reporting of network related errors. Due to the nature of management of source addresses, network management also specifies initialization processes, requirements for reaction to brief power outages and minimum requirements for ECUs on the network.
Center High Mounted Stop Lamp Standard for Vehicles Less than 2032 mm Overall Width	J1957_201108		2011-08-18	Ground Vehicle Standard	This SAE Standard provides test procedures, performance requirements, and guidelines for center high mounted stop lamps (CHMSL) for use on vehicles less than 2032 mm in overall width.
Retroreflective Materials for Vehicle Conspicuity	J1967_201106	A	2011-06-01	Ground Vehicle Standard	This SAE Recommended Practice applies to retroreflective materials that are used on truck tractors and trailers 2032 mm or more in overall width and with a Gross Vehicle Weight Rating (GVWR) over 4536 kg, and school buses. The retroreflective materials for the truck

Discharge Forward Lighting System and Subsystems	J2009_200510		2005-10-03	Ground Vehicle Standard	This SAE Recommended Practice applies to motor vehicle Forward Illumination Systems which use light generated by discharge sources. It provides test methods, requirements, and guidelines applicable to the special characteristics of gaseous discharge lighting devices which supplement those required for forward illumination systems using incandescent light sources. The document is applicable to integral beam and replaceable component discharge forward lighting systems. This document is intended to be a guide to standard practice and is subject to change to reflect additional experience and technical advances.
Side Turn Signal Lamps for Large Vehicles	J2039_200105		2001-05-30	Ground Vehicle Standard	This SAE Recommended Practice provides test procedures, requirements, and guidelines for side turn signal lamps intended for use on trailers 12 m or more in overall length except pole trailers. Side turn signal lamps conforming to the requirements of this document may be used on other large vehicles such as trucks, truck tractors, buses, and other applications where this type of lighting device is desirable.
Tail Lamps (Rear Position Lamps) for Use on Vehicles 2032 mm or More in Overall Width	J2040_201004		2010-04-21	Ground Vehicle Standard	This SAE Standard provides test procedures, requirements, and guidelines for tail lamps intended for use on vehicles 2032 mm or more in overall width. Tail lamps conforming to the requirements of this document may also be used on vehicles less than 2032 mm in overall width.
Reflex Reflectors for Use on Vehicles 2032 mm or More in Overall Width	J2041_200410		2004-10-18	Ground Vehicle Standard	This SAE Standard provides test procedures, requirements, and guidelines for reflex reflectors used on vehicles 2032 mm or more in overall width. Reflex reflectors conforming to these requirements may also be used on vehicles less than 2032 mm in overall width.
Clearance, Sidemarker, and Identification Lamps for Use on Motor Vehicles 2032 mm or More in Overall Width	J2042_200809		2008-09-26	Ground Vehicle Standard	This SAE Standard provides test procedures, requirements, and guidelines for clearance, sidemarker, and identification lamps intended for use on vehicles 2032 mm or more in overall width. A clearance lamp, sidemarker lamps, or an identification lamp conforming to the requirements of this document may be used on vehicles less than 2032 mm in overall width.

All-Wheel-Drive Drivetrain Schematic Symbol Standards	J2059_201302		2013-02-18	Ground Vehicle Standard	In this SAE Recommended Practice, attention will be given to passenger cars and light trucks (through Class III). The purpose of this recommended practice is to define standardized symbols that describe the arrangement and function of drivetrain systems and components of all-wheel-drive vehicles. This document presents basic symbols, superimposed symbols and symbols with modifiers. Various vehicle drivetrain schematics are shown with specific component arrangements or general driveline layout to illustrate varying levels of descriptive intent.
Daytime Running Light	J2087_201110	A	2011-10-10	Ground Vehicle Standard	This SAE Standard provides test procedures, requirements, and guidelines for a daytime running light (DRL) function.
Headlamp Cleaners	J2111_201009		2010-09-07	Ground Vehicle Standard	This SAE Recommended Practice provides test procedres, performance requirements, and guidelines for headlamp cleaners intended for use on motor vehicles. It includes informatino from European regulations and International Standards. It is applicable for all types of headlamp cleaners available and in use.
Manual Controls for Mature Drivers	J2119_199710		1997-10-01	Ground Vehicle Standard	Since little data exists to provide appropriate values for control parameters that would be appropriate for mature drivers, the following recommendations are of a general nature. However, they are based upon the current understanding of the aging processes that characterize mature drivers. Notwithstanding the lack of an extensive amount of data in this field, the dissemination of this SAE Information Report is considered to be appropriate and timely in light of the large increase in the number of mature drivers on the public roads, and because of the need to at least initiate efforts toward developing an information report covering this issue. It is realized that there may be cases where specific recommendations may conflict with vehicle packaging and/or operational requirements. Deviation from the recommendations may
Requirements for Composite Lighting Assemblies Used on	J2121_200907		2009-07-10	Ground Vehicle Standard	This SAE Standard provides general design performance requirements and related test procedures for composite lighting unit assemblies, other than signaling and marking devices, used on
Test for Signal and Marking Devices Used on Vehicles 2032 mm or More in Overall Width	J2139_200509		2005-09-19	Ground Vehicle Standard	This SAE Recommended Practice provides standardized laboratory tests, test methods, and performance requirements applicable to signal and marking devices used on vehicles 2032 mm or more in overall width.
Photometric Guidelines for Instrument Panel Displays That Accommodate Older Drivers	J2217_199110		1991-10-01	Ground Vehicle Standard	Physical parameters that influence the legibility of an instrument panel display include letter/graphic size, the luminance and color difference between graphics and background, the observer's luminance adaptation level, and the level of glare present. Several aspects of visual functioning deteriorate as part of the normal aging process. These include a reduction in luminance and color contrast
Front Position Lamp	J222_201303	A	2013-03-05	Ground Vehicle Standard	This SAE Standard provides test procedures, requirements, and guidelines for a Front Position lamp.
Stop Lamps and Front- and Rear-Turn Signal Lamps for Use on Motor Vehicles 2032 mm or More in Overall Width	J2261_201001		2010-01-07	Ground Vehicle Standard	This SAE Standard provides test procedures, requirements, and guidelines for stop lamps and turn signal lamps intended for use on vehicles 2032 mm or more in overall width. Stop lamps and front- and rear-turn signal lamps conforming to the requirements of this document may be used on vehicles less than 2032 mm in overall width.

Distributed Lighting Systems (DLS) (STABILIZED Feb 2011)	J2282_201102	A	2011-02-24	Ground Vehicle Standard	This SAE Recommended Practice applies to motor vehicle Distributed Lighting Systems (DLS) which use light generated by remote sources. It provides test methods, requirements, and guidelines applicable to these systems. This document is intended to be a guide to standard practice and is subject to change dependent upon additional experience and technical advances. This document covers Headlamp, Fog lamp, Auxiliary lamp, plus Signal and Marking lamp functions.
Discharge Signal Lighting System (STABILIZED Oct	J2320_201210	A	2012-10-15	Ground Vehicle Standard	This SAE Recommended Practice applies to motor vehicle signaling and marking devices which use light generated by a discharge
Recommendations of the SAE Task Force on Headlamp Mounting Height (STABILIZED Feb 2011)	J2338_201102	A	2011-02-24	Ground Vehicle Standard	The SAE International task force on headlamp mounting height has considered the ramificaitons of reducing the maximum mounting height of headlamps on highway vehicles. The task force has concluded that it is the best interest of the driving public to make a significant reduction in the recommended maximum height at which headlamps, particularly lower beam headlamps, may be mounted.
Application Guidelines for Electronically Driven and/or Controlled Exterior Automotive Lighting Equipment	J2357_201211		2012-11-01	Ground Vehicle Standard	This SAE Recommended Practice is intended as a guide toward standard practice and is subject to change to keep pace with experience and technical advances. This document establishes performance requirements, design requirements and design guidelines for electronic devices.
Video Based Light Measurement Techniques	J2382_200009		2000-09-01	Ground Vehicle Standard	Traditional methods of photometry rely on the use of a goniometer to rotate the test item around two axes at right angles. This method is satisfactory for most situations but has certain disadvantages: a. Point-by-point measurements with a goniometer may be slow. With more advanced requirements, particularly for headlamps, where the entire beam pattern is of concern, isocandela measurements are becoming increasingly needed. Such testing can be very time consuming. b. For production quality assurance, the speed of a goniometer may not allow testing to keep pace with the production line if a large quantity of lamps must be sampled. c. High Intensity Discharge (HID) lamps are becoming commonly used. Such lamps are orientation sensitive, changing in both lumen output and intensity distribution when tilted. This can introduce significant inaccuracies in test results when testing is performed using a goniometer. There is a need for alternative test techniques which can achieve very high speed data acquisition, the capture of full isocandela distribution, and the elimination of lamp tilting. This SAE Informational Report describes fundamentals of video-based testing to address these concerns. Further information is required to provide all details needed to set up a laboratory using these techniques. With the video-based system, the lamp is fixed in position and aimed at a receiving screen. A camera, of particular type and grade, views the screen and is able to perform measurement of the reflected light

Secondary Control Modifications	J2388_201110		2011-10-05	Ground Vehicle Standard	This SAE Recommended Practice establishes a uniform procedure for assuring the manufactured quality, installed utility and performance of automotive products to the relocation, alteration, replacement and/or extension of secondary controls and systems other than those provided by the vehicle manufacturer (OEM). These products are intended to provide driving capability to persons with physical disabilities. These products function as adaptive modifications to compensate for lost or reduced function in the extremities of the driver. These include, but are not limited to the following: Cruise Control; Door Locks; Gear Selector; Hazard Flasher; Headlight Beam Selector; Heater/Vent/Air Conditioner (HVAC); Horn; Ignition/Starter; Light controls; Mirrors; Parking Brake; Power Seats; Turn Signals; Power Window Controls; and Windshield Wiper/Washer and defogger; Rear Accessories (Defogger, Wiper/Washer). The purpose of any secondary control adaptation is to provide the effective use of the motor vehicle operating systems to a driver with a disability, so that he or she may drive and operate that motor vehicle with the same degree of safety as a non-disabled driver. Thus, the adaptive equipment must be (1) accessible to the driver with a disability for whom it is designed, (2) not susceptible to inadvertent
Human Factors in Forward Collision Warning Systems: Operating Characteristics and User Interface Requirements	J2400_200308		2003-08-29	Ground Vehicle Standard	Forward Collision Warning (FCW) systems are onboard systems intended to provide alerts to assist drivers in avoiding striking the rear end of another moving or stationary motorized vehicle. This SAE Information Report describes elements for a FCW operator interface, as well as requirements and test methods for systems capable of warning drivers of rear-end collisions. This Information Report applies to original equipment and aftermarket
Road Vehicles - Symbols for Controls, Indicators,	J2402_201001		2010-01-07	Ground Vehicle Standard	This SAE Standard specifies symbols (i.e. conventional signs) for use on controls, indicators, and tell-tales applying to passenger cars,
Harmonized Provisions for Installation of Lamps and Retro- Reflecting Devices	J2442_200009		2000-09-01	Ground Vehicle Standard	This SAE Recommended Practice applies to the location, number, color, and functioning of lamps and retro-reflecting devices installed on road vehicles. It provides a common denominator for installation
Mercury Switch Removal Process	J2456_199805		1998-05-01	Ground Vehicle Standard	Mercury capsules have been used in the automotive industry in various switching applications. the basic design and performance characteristics of mercury switches (or capsules) make these components particularly suited to underhood light and trunk light applications. The processes described in this SAe standard deal with the location, removal, storage, and recycling of mercury switches and capsules associated with these underhood and trunk light applications.
Mechanical Stop Lamp Switch	J249_198806		1988-06-01	Ground Vehicle Standard	This standard defines the test conditions, procedures, and performance specifications for 6-, 12-, and 24-V manually actuated mechanical stop lamp switches.
Minimum Performance of the Warning Light System Used on Emergency	J2498_201108		2011-08-05	Ground Vehicle Standard	This SAE Recommended Practice provides test procedures, requirements, and guidelines for the system of optical warning devices used on emergency vehicles.
Headlamp Switch	J253_198912		1989-12-01	Ground Vehicle Standard	This document defines the test conditions, procedures, and performance specifications for 6-,12-, and 24-V manually actuated
Forward Lighting Halogen Bulb Performance Requirements for Motor Vehicles	J2560_200707		2007-07-19	Ground Vehicle Standard	This SAE Recommended Practice is intended as a guide toward standard practice and is subject to change to keep pace with experience and technical advances. This document establishes performance requirements, material requirements, design requirements, and design guidelines for forward lighting replaceable bulbs.
Heavy Duty Lamp Electrical Connector Standard	J2577_201007	A	2010-07-07	Ground Vehicle Standard	This SAE Standard encompasses connectors that form the electrical interface(s) between the heavy duty lighting device(s) and the truck and truck/trailer wiring harness system. This document provides

Headlamp Mounting Height for Passenger and Pickup Truck Vehicles (STABILIZED Feb 2011)	J2584_201102	A	2011-02-24	Ground Vehicle Standard	The Mounting Height Task Force was tasked to determine the extent of the problem(s) associated with vehicle headlamps mounted at or above the level of the mirror(s) in passenger vehicles; the level of glare exposure caused by high-mounted headlamps; the appropriate height differential needed to maintain a glare level consistent with
Adaptive Forward Lighting System	J2591_200811		2008-11-06	Ground Vehicle Standard	This SAE Recommended Practice applies to motor vehicle Forward Illumination Devices which incorporate adaptive beam pattern capabilities. This document is to be used in conjunction with other forward lighting standards and/or recommended practices which define the base beam procedures, requirements, and guidelines.
Performance Requirements for Sealed Beam Motor Vehicle Headlamps	J2595_200605		2006-05-04	Ground Vehicle Standard	This SAE Recommended Practice is intended as a guide toward standard practice and is subject to change to keep pace with experience and technical advances. This document establishes performance requirements, material requirements, design requirements, and design guidelines for sealed beam headlamps.
Performance Requirements for Light Emitting Diode (LED) Road Illumination Device Systems	J2650_200509		2005-09-26	Ground Vehicle Standard	
Improved Roadway Illumination: Information Resource	J2738_201104	A	2011-04-14	Ground Vehicle Standard	Headlamps should illuminate the traffic scene ahead of the vehicle in such a way that the driver can operate the vehicle safely and in a relaxed manner. At the same time, negative effects on drivers of other vehicles, pedestrians and other people should be minimized. Various technical parameters such as beam pattern, mounting height, headlamp aiming, and source spectrum can be tuned to find the necessary compromise. The physiology of the vision system under specific night time conditions strongly influences these factors and how headlamps can be best optimized for visibility and comfort. The SAE Improved Roadway Illumination task force collected and reviewed relevant research on these topics. This document is a comprehensive summary of this information. The goal is to enable lighting experts, advocacy groups, and non-experts (journalists, consumer organizations, car drivers) to better understand the benefits and tradeoffs of improved roadway lighting with modern headlamp technology. It should be noted that all studies can not be included in this report, but the intent of this document is to provide the reader with a representative sample of the existing research as a starting point. Further, this document can be updated in the future to reflect new research findings.
Absorptive and Interference Coatings Applied on Replaceable Headlamp Bulbs (STABILIZED Feb 2011)	J2739_201102	A	2011-02-24	Ground Vehicle Standard	This report investigates the use of single and multi-layer coatings on replaceable headlamp bulbs and how such coatings can affect the performance of bulbs in terms of light scattering, which can contribute to glare, and spectral separation in headlamps. Tests were developed to investigate the effects of absorptive and interference
Snowmobile Stop Lamp	J278_201103	A	2011-03-12	Ground Vehicle Standard	This document provides test methods and requirements for the stop lamp on snowmobiles.
Snowmobile Tail Lamp (Rear Position Lamp)	J279_201103	A	2011-03-12	Ground Vehicle Standard	The SAE document provides test methods and requirements for tail lamps for snowmobiles.
Snowmobile Headlamps	J280_201103	A	2011-03-12	Ground Vehicle Standard	This standard provides test methods and requirements for snowmobile headlamps.

Road/Lane Departure Warning Systems: Information for the Human Interface	J2808_200708		2007-08-16	Ground Vehicle Standard	The Road/Lane Departure Warning System is a crash-avoidance technology which warns drivers if they are drifting (or have drifted) out of their lane or from the road. This warning system is designed to help prevent the possibility of a run-off-road crash. This system will not take control of the vehicle; it will only let the driver know that he/she needs to steer back into the lane. This warning system is not designed as a lane-change monitor, or a merging system which warns of other vehicles. This informational report applies to OEM and after-market Road/Lane Departure warning systems for light-duty vehicles on relatively straight roads with a radius of curvature of 500m or more, and under good weather conditions. Future revisions should consider the implications of newer variations on the user experience.
Pedestrian Visibility - Low Beam Optimization to Reduce Night-time	J2829_201102	A	2011-02-24	Ground Vehicle Standard	The primary purpose of vehicle forward lighting is not to see the world but to see the road! In their simplest form, headlights help drivers negotiate a safe path on the road. They do this by lighting the
Full Adaptive Forward Lighting Systems	J2838_201303		2013-03-05	Ground Vehicle Standard	This SAE standard provides test procedures, performance requirements, design guidelines and installation guidelines for full adaptive forward lighting systems (AFS).
Snowmobile and Snowmobile Cutter Lamps, Reflective	J292_200809		2008-09-30	Ground Vehicle Standard	This SAE Recommended Practice describes requirements for lamps, reflective devices, and associated equipment for signaling to enable safe operation in darkness and other conditions of reduced visibility.
LED Light Sources Tests and Requirements Standard - Part 2: LED Lumen and Color Maintenance	J2938_201202		2012-02-15	Ground Vehicle Standard	This SAE Recommended Practice provides test procedures, requirements, and guidelines for the methods of the measurement of lumen maintenance of LED devices (packages, arrays and modules). This document does not provide guidance or make any recommendation regarding predictive estimations or extrapolation for
Determination of the Effective Projected Luminous Lens Area (EPLLA) by Design Analysis	J2999_201303		2013-03-05	Ground Vehicle Standard	This SAE Standard provides a method for determining the Effective Projected Luminous Lens Area (EPLLA) of a lamp function using design analysis. This standard was created to clarify and address how to determine EPLLA with traditional and new technologies. Lamps can be evaluated using the method described in SAE J3333; however, no lamp is subjected to both methods.
Dimensional Specifications for General Service Sealed Lighting Units	J3003_201209	A	2012-09-11	Ground Vehicle Standard	This SAE Recommended Practice provides dimensional specifications for the 114mm (4½ inch) and 146mm (5¾ inch) general service sealed lighting units, intended for use in such applications as motorcycle headlamps, military headlamps, industrial machinery headlamps, fog lamps, spot lamps, etc. See Figures 1 and 2 and Tables 1 and 2.
Terminology - Motor Vehicle Lighting	J387_201204		2012-04-11	Ground Vehicle Standard	This SAE Recommended Practice provides definitions of common terms used in SAE Documents pertaining to motor vehicle lighting. It covers not only basic lighting terms but also terms which identify major segments of technical reports.
Voltages for Diesel Electrical Systems	J539_199311		1993-11-23	Ground Vehicle Standard	This SAE Recommended Practice is intended to apply to lamps, batteries, heaters, radios, and similar equipment for operation with mobile or automotive diesel engines. Twenty-four V systems have long been used for heavy duty services because 24 V permit

Headlamp Beam Switching	J564_199003		1990-03-16	Ground Vehicle Standard	This SAE Standard J564 defines the test conditions, procedures and performance specification for 6, 12, and 24 V manually actuated headlamp beam control switches.
Semiautomatic Headlamp Beam Switching Devices	J565_201002		2010-02-18	Ground Vehicle Standard	This SAE Standard provides test procedures, performance requirements, and guidelines for semiautomatic headlamp beam switching devices.
Light Source Retention System	J567_201005		2010-05-03	Ground Vehicle Standard	This SAE Standard references the performance and functional requirements of the International Electrotechnical Commission (IEC) and its U.S. member, the American National Standards Institute (ANSI). By referring to IEC/ANSI and its standards concerning bulb sockets, lamp holders, and gages, this document recognizes the need for harmonized standards world-wide for what are typically commodity items. Additional requirements are noted.
Requirements for Sealed Lighting Unit for Construction and Industrial Machines (STABILIZED Oct 2011)	J572_201110	A	2011-10-27	Ground Vehicle Standard	This SAE Standard applies to 145 mm nominal headlamp and floodlamp units.
Signal and Marking Light Sources	J573_201106		2011-06-24	Ground Vehicle Standard	Most signal and marking lighting devices have light sources (bulbs), which can be based on either filament or LED technology. To assure field replacement, it is important that light source types employed be readily available in normal service channels. This document defines the physical, electrical, and photometric characteristics necessary to achieve a proper replacement for popular types of signal and marking light sources. Some of the design characteristics in this document are listed solely
Test Methods and Equipment for Lighting Devices for Use on Vehicles Less than 2032 mm in Overall Width	J575_201204	A	2012-04-11	Ground Vehicle Standard	This SAE Recommended Practice is intended as a guide toward standard practice and is subject to change to keep pace with experience and technical advances. This document provides standardized laboratory tests, test methods and equipment, and requirements for lighting devices covered by SAE Recommended Practices and Standards. It is intended for devices used on vehicles less than 2032 mm in width. Tests for vehicles larger than 2032 mm
Plastic Material or Materials for Use in Optical Parts Such as Lenses and Reflex Reflectors of Motor Vehicle Lighting Devices	J576_201002		2010-02-15	Ground Vehicle Standard	This SAE Recommended Practice provides test methods and requirements to evaluate the suitability of plastic materials intended for optical applications in motor vehicles. The tests are intended to determine physical and optical characteristics of the material only. Performance expectations of finished assemblies, including plastic components, are to be based on tests for lighting devices, as specified in SAE Standards and Recommended Practices for motor vehicle lighting equipment. Field experience has shown that plastic materials meeting the requirements of this document and molded in accordance with good molding practices will produce durable lighting devices.

Color Specification	J578_201207	A	2012-07-20	Ground Vehicle Standard	This SAE Standard defines and provides a means for the control of colors employed in motor vehicle external lighting equipment, including lamps and reflex reflectors. The document applies to the overall effective color of light emitted by the device in any given direction and not to the color of the light from a small area of the lens. It does not apply to pilot, indicator, or tell-tale lights.
Auxiliary High Beam Lamps (STABILIZED Feb 2011)	J581_201102	A	2011-02-24	Ground Vehicle Standard	This SAE Standard provides test procedures, performance requirements and guidelines for auxiliary driving lamps.
Front Fog Lamp	J583_201111	A	2011-11-08	Ground Vehicle Standard	This SAE standard provides test procedures, performance requirements, design guidelines and installation guidelines for front fog lamps.
Motorcycle Headlamps	J584_201009	A	2010-09-13	Ground Vehicle Standard	This SAE Standard provides design parameter and general requirements for motorcycle headlamps.
Tail Lamps (Rear Position Lamps) for Use on Motor Vehicles Less Than 2032 mm in Overall Width	J585_200802		2008-02-01	Ground Vehicle Standard	This SAE Standard provides test procedures, requirements, and guidelines for tail lamps (rear position lamps) intended for use on vehicles of less than 2032mm in overall width.
Stop Lamps for Use on Motor Vehicles Less than 2032 mm in Overall Width	J586_201106		2011-06-15	Ground Vehicle Standard	This SAE Standard provides test procedures, requirements, and guidelines for stop lamps intended for use on vehicles of less than 2032 mm in overall width.
License Plate Illumination Devices (Rear Registration Plate Illumination Devices)	J587_201206		2012-06-21	Ground Vehicle Standard	This SAE Standard provides test procedures, requirements, and guidelines for vehicular license plate illumination devices.
Turn Signal Lamps for Use on Motor Vehicles	J588_201108	A	2011-08-05	Ground Vehicle Standard	This SAE Standard provides test procedures, requirements, and guidelines for turn signal lamps intended for use on vehicles of less
Spot Lamps (STABILIZED Feb 2011)	J591_201102	A	2011-02-21	Ground Vehicle Standard	This SAE Standard provides test procedures and performance requirements for spot lamps.
Sidemarker Lamps for Use on Road Vehicles Less than 2032 mm in Overall Width	J592_200903		2009-03-02	Ground Vehicle Standard	This SAE Standard provides test procedures, requirements, and guidelines for sidemarker lamps for vehicles less than 2032 mm in overall width.

Backup Lamp (Reversing Lamp)	J593_201008		2010-08-26	Ground Vehicle Standard	This SAE Standard provides installation requirements, test procedures, design guidelines, and performance requirements for backup lamps.
Reflex Reflectors	J594_201002		2010-02-18	Ground Vehicle Standard	This SAE Standard provides test procedures, requirements, and guidelines for reflex reflectors.
Directional Flashing Optical Warning Devices for Authorized Emergency,	J595_200811		2008-11-19	Ground Vehicle Standard	This document provides design guidelines, test procedure references, and performance requirements for flashing incandescent warning lamps. It is intended to apply to, but is not limited to, surface
Lighting Inspection Code	J599_199708		1997-08-01	Ground Vehicle Standard	This code is intended only for the inspection and maintenance of lighting equipment on motor vehicles that are in use.
Headlamp Aim Test Machines (STABILIZED Feb 2011)	J600_201102	A	2011-02-24	Ground Vehicle Standard	This SAE Recommended Practice provides laboratory test procedures for testing headlamp aim test machines to verify their ability to aim or to inspect the aim of headlamps, fog lamps, and auxiliary high beam lamps. This specification does
Headlamp Aiming Device for Mechanically Aimable Headlamp Units (STABILIZED Feb 2011)	J602_201102	A	2011-02-24	Ground Vehicle Standard	This document applies to the requirements of a device used in the field and inspection stations to aim and check aim of mechanically aimable headlamp units. The purpose of this document is to provide a laboratory test procedure to determine whether the devices under test are capable of accurately positioning headlamp units from their aiming pads and maintaining their accuracy in service within the tolerances designated in this document.
Trailer Couplings, Hitches, and Safety Chains--Automotive Type	J684_200507		2005-07-27	Ground Vehicle Standard	This SAE Standard includes couplings, hitches, and safety chains used in conjunction with all types of trailers or towed vehicles whose Gross Vehicle Weight Rating (GVWR) does not exceed 4540 kg (10 000 lb). This includes such types as utility, boat, camping, travel, and special purpose trailers which are normally towed by conventional passenger cars, light-duty commercial vehicles, light trucks, and multipurpose passenger vehicles. This document is intended primarily for ball-and-socket type of couplings and hitches. It should not be construed as a limitation to this type alone but
Motor Vehicle License Plates (STABILIZED Jul 2012)	J686_201207	A	2012-07-23	Ground Vehicle Standard	This SAE Standard establishes basic dimensions for motor vehicle license plates. It is based on data supplied by the American Association of Motor Vehicle Administrators, Motor Vehicle
Lighting Identification Code	J759_201202	A	2012-02-14	Ground Vehicle Standard	This SAE Recommended Practice provides the lighting function identification codes for use on all passenger vehicles, trucks, trailers, motorcycles, and emergency vehicles.
Emergency Warning Device and Emergency Warning Device Protective Container (STABILIZED Feb 2011)	J774_201102	A	2011-02-21	Ground Vehicle Standard	This SAE Standard provides test procedures and performance requirements for emergency warning devices (triangular shape), without self-contained energy sources, that are designed to be carried in motor vehicles and used to warn approaching traffic of the presence of a stopped vehicle, except for devices designed to be permanently affixed to the vehicle, and provides test procedures and performance requirements for protective containers for such

SAE Manual on Blast Cleaning	J792_196806		1968-06-01	Ground Vehicle Standard	This reportl on blast cleaning is a companion to the SAE Manual on Shot Peening. It is intended to help engineers, management, and shop personnel to increase their knowledge of the process. The information contained herein has been submitted and edited by a group that has had extensive and varied experience with blast cleaning and whose recommendations merit consideration
SAE Manual on Blast Cleaning	J792A_196806		1968-06-01	Ground Vehicle Standard	This reportl on blast cleaning is a companion to the SAE Manual on Shot Peening. It is intended to help engineers, management, and shop personnel to increase their knowledge of the process. The information contained herein has been submitted and edited by a group that has had extensive and varied experience with blast cleaning and whose recommendations merit consideration.
Optical Warning Devices for Authorized Emergency, Maintenance, and Service Vehicles	J845_200712		2007-12-03	Ground Vehicle Standard	This document provides design guidelines, test procedure references, and performance requirements for omni-directional and selective coverage, single color, optical warning devices used on authorized emergency, maintenance, and service vehicles. It is
Front Cornering Lamps for Use on Motor Vehicles	J852_200903		2009-03-31	Ground Vehicle Standard	This SAE Recommended Practice provides test procedures, performance requirements, and guidelines for front cornering lamps intended for use on motor vehicles.
School Bus Warning Lamp	J887_201106		2011-06-10	Ground Vehicle Standard	This document provides design guidelines, test procedure references, and performance requirements for red and yellow overhead warning devices on school bus vehicles which are used to alert traffic to stop when passengers are loading and unloading.
Passenger Car Windshield Demisting and Defrosting Systems	J902_201108	A	2011-08-04	Ground Vehicle Standard	This SAE Recommend Practice establishes for passenger cars, light trucks, and multipurpose vehicles with GVW of 4500 kg (10 000 lb) or less, as defined by EPA, and M1 category vehicles as defined by the European Commission: a. Minimum performance standards for defrosting and demisting systems. b. Test procedures that can be conducted on uniform test equipment by commercially available laboratory facilities.
Hazard Warning Signal Switch	J910_198810		1988-10-01	Ground Vehicle Standard	This standard defines the test conditions, procedures and performance specifications for 6, 12 and 24-V manually actuated hazard warning signal switch.
Side Turn Signal Lamps for Vehicles Less than 12 m in Length	J914_200909		2009-09-21	Ground Vehicle Standard	This SAE Standard provides installation requirements, test procedures, design guidelines, and performance requirements for side turn signal lamps for vehicles less than 12 m in length.
Automatic Transmissions--Manual Control Sequence	J915_200710		2007-10-22	Ground Vehicle Standard	The scope and purpose of this SAE Recommended Practice is to provide a standard pattern or sequence for the manual control of
Sound Measurement--Off-Road Work Machines--Operator--Singular Type	J919_200901		2009-01-13	Ground Vehicle Standard	This SAE Standard describes the instrumentation and procedures to be used in measuring sound levels at the operator station for self-propelled sweepers as defined in SAE J2130 and self-propelled off-road work machines in categories 1, 2, 4, and 5, of SAE J1116. This SAE document is applicable to machines that have operator
Motor Vehicle Drivers' Eye Locations	J941_201003	B	2010-03-16	Ground Vehicle Standard	This SAE Recommended Practice establishes the location of drivers¿ eyes inside a vehicle. Elliptical (eyellipse) models in three dimensions are used to represent tangent cutoff percentiles of driver eye locations. Procedures are provided to construct 95th and 99th
Headlamps for Industrial Equipment	J95_200701		2007-01-30	Ground Vehicle Standard	This SAE Standard provides performance and general design requirements and related test procedures for headlamps for use on industrial wheeled equipment that may be operated on public roads.

Passenger Car Backlight Defogging System (STABILIZED May 2011)	J953_201105	A	2011-05-26	Ground Vehicle Standard	The scope of this SAE Recommended Practice is to establish uniform test procedures for passenger cars, to determine whether the system is defined as a defroster or defogger, and to establish minimum performance requirements for each system. A defroster for purposes of this practice is a system which will remove moisture and/or frost from the interior surface of the backlight at -18 °C. A defogger is a system which will remove moisture and/or fog from the interior surface of the backlight at 4 °C. The test procedure is intended to simulate actual conditions by utilizing either a cold room with an appropriate device to introduce air flow over the backlight or a sufficiently large wind tunnel with ambient temperature control. The test procedure and the minimum performance requirements are based on currently available engineering data.
Flashing Warning Lamp for Industrial Equipment	J96_201007	A	2010-07-30	Ground Vehicle Standard	This SAE Standard covers the general requirements and the test requirements for a flashing warning lamp for industrial wheeled equipment.
Flashing Warning Lamp for Agricultural Equipment	J974_201104	A	2011-04-01	Ground Vehicle Standard	This SAE Standard covers the general requirements and the test requirements for a flashing warning lamp for agricultural equipment.
Lighting and Marking of Industrial Equipment on Highways (STABILIZED Mar 2011)	J99_201103		2011-03-08	Ground Vehicle Standard	To provide specifications for lighting and marking of industrial wheeled equipment whenever such equipment is operated or traveling on a highway.
Alarm--Backup--Electric Laboratory Performance Testing	J994_200903		2009-03-18	Ground Vehicle Standard	The scope of this SAE Standard is the definition of the functional, environmental, and life cycle test requirements for electrically operated backup alarm devices primarily intended for use on off-road, self propelled work machines as defined by SAE J1116 (limited to categories of 1) construction, and 2) general purpose industrial). This purpose of this document is to define a set of performance
Standards for Testing Automotive Halogen Light Sources	USCAR14-1	1	2002-04-15	Ground Vehicle Standard	Incandescent bulbs for use in automotive road illumination.
Specification for Testing Automotive Miniature Bulb Socket/Circuit Plate Assemblies	USCAR15		2004-01-30	Ground Vehicle Standard	This specification establishes the requirements and test procedures for automotive miniature bulb retention devices, including wedge base sockets with integral connector, direct wire, widge base sockets, circuit plate assemblies, and associated interfaces.Tests shall follow the sequence shown in the flow charts in Appendix E whenever the following occurs: new design; and design, material or process change made to an existing device, which could affect the outcome of the test.

Specification for Testing Automotive Light Bulb Sockets	USCAR15-3	3	2010-01-15	Ground Vehicle Standard	This specification establishes the requirements and test procedures for automotive miniature bulb retention devices, including wedge base sockets with integral connector, direct wire wedge base sockets, circuit plate assemblies, and associated interfaces. Tests shall follow the sequence shown in the flow charts in Appendix E whenever the following occurs: • New design • Design, material or process change made to an existing device, which could affect the outcome of the test. The test sequence shown in Appendix F shall be run annually. (Note: Production process control data collected at a shorter interval per an approved control plan, may be substituted if approved by customer's responsible engineer and purchasing representative.)
Specification for Testing Gas Discharge Light Source Subsystem	USCAR27		2007-10-08	Ground Vehicle Standard	This specification is a general level subsystem light source specification that establishes test requirements of a Gas Discharge Light Source (GDLS) subsystem for use on passenger vehicles. The completed test data to this test specification is intended to be
Specification for Testing Automotive LED Modules	USCAR33		2013-02-19	Ground Vehicle Standard	This specification is a general level subsystem light source specification that establishes test requirements of Light Emitting Diode (LED) components and
Specification for Testing Automotive Miniature Bulbs	USCAR3-3	3	2010-01-15	Ground Vehicle Standard	The procedures contained in this specification cover the laboratory testing of miniature incandescent bulbs for use in automotive illumination and signaling applications. The following tests shall be
Specification for Testing Automotive Lamp Assemblies	USCAR34		2009-11-15	Ground Vehicle Standard	The procedures contained in this specification cover the laboratory testing of Exterior Lamps for use in automotive road illumination. The following tests are intended to be run under the following
Standard for Testing Automotive Miniature Bulbs	USCAR3A		2000-05-01	Ground Vehicle Standard	This procedure covers the laboratory testing of miniature incandescent bulbs for use in automotive illumination and signaling applications.