



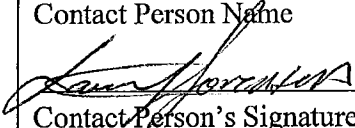
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

	)	DOCKET NO. TR-
	)	
Puget Sound & Pacific Railroad	)	PETITION TO MODIFY HIGHWAY-
_____	)	RAIL GRADE CROSSING ACTIVE
Petitioner,	)	WARNING DEVICES AND
	)	DISBURSEMENT OF FUNDS
vs.	)	FROM THE GRADE CROSSING
Various, see attached contacts	)	PROTECTIVE FUND
_____	)	
Respondent	)	
	)	
	)	USDOT CROSSING #
.....	)	Various – see attached
	)	

RECEIVED  
 PROJECT MANAGEMENT  
 2014 MAR -6 PM 2:35  
 STATE OF WASH.  
 UTIL. AND TRANSP.  
 COMMISSION

The Petitioner asks the Washington Utilities and Transportation Commission to approve the modification of highway-rail grade crossing warning signals and disburse funds from the Grade Crossing Protective Fund.

*Section 1 – Petitioner’s Information*

<u>Puget Sound &amp; Pacific Railroad</u> Petitioner
<u>1710 Midway Court</u> Street Address
<u>Centralia, WA 98531</u> City, State and Zip Code
_____ Mailing Address, if different than the street address
<u>Larry Sorensen</u> Contact Person Name
 Contact Person’s Signature
<u>904-999-5031      larry.sorensen@gwrr.com</u> Contact Phone Number and Email Address

**Section 2 – Respondent's Information**

_____ Various, see attached contact list _____
Respondent _____
Street Address _____
City, State and Zip Code _____
Mailing Address, if different than the street address _____
Contact Person Name _____
Contact Phone Number and Email Address _____

**Section 3 – Crossing Location**

1. Existing highway/roadway <u>Various, see attached</u> _____
2. Existing railroad <u>Various, see attached</u> _____
3. USDOT Crossing No. <u>Various, see attached</u> _____
4. Located in the ___ 1/4 of the ___ 1/4 of Sec. ___, Twp. ___, Range _____ W.M.
5. GPS location, if known <u>Various, see attached</u> _____
6. Railroad mile post (nearest tenth) <u>Various, see attached</u> _____
7. City <u>Various, see attached</u> _____ County <u>Various, see attached</u> _____

**Section 4 – Current Highway Traffic Information**

1. Name of highway Various, see attached
2. Road authority Various, see attached
3. Average annual daily traffic (AADT) Various, see attached
4. Number of lanes Various, see attached
5. Roadway speed Various, see attached
6. Is the crossing part of an established truck route?      Yes \_\_\_\_\_ No \_\_\_\_\_
7. If so, trucks are what percent of total daily traffic? \_\_\_\_\_
8. Is the crossing part of an established school bus route?    Yes \_\_\_\_\_ No \_\_\_\_\_
9. If so, how many school buses travel over the crossing each day? \_\_\_\_\_
10. Describe any changes to the information in 1 through 7, above, expected within ten years:  
None anticipated  
\_\_\_\_\_  
\_\_\_\_\_

**Section 5 – Current Crossing Information**

1. Railroad company Puget Sound & Pacific Railroad
2. Type of railroad at crossing     Common Carrier     Logging     Industrial  
    Passenger                     Excursion
3. Type of tracks at crossing     Main Line             Siding or Spur
4. Number of tracks at crossing Various, see attached
5. Average daily train traffic, freight Various, see attached  
   Authorized freight train speed See attached    Operated freight train speed See attached
6. Average daily train traffic, passenger None  
   Authorized passenger train speed \_\_\_\_\_    Operated passenger train speed \_\_\_\_\_
7. Describe any changes to the information in 1 through 4, above, expected within ten years:  
Train traffic is expected to increase, but do not know how much.  
\_\_\_\_\_  
\_\_\_\_\_
8. What is the available sight distance from the stop bar (or 25 feet from the tracks if no stop bar) on both approaches to the crossing?  
\_\_\_\_\_  
   N/A  
\_\_\_\_\_
9. If the sight distance is less than 400 feet, describe the structures, roadway or track curvature, visual obstacles or other characteristics that limit sight distance.  
\_\_\_\_\_  
   N/A  
\_\_\_\_\_

*Section 6 – Current Warning Devices*

1. Provide a complete description of the warning devices currently located at the crossing, including signs, gates, lights, train detection circuitry and any other warning devices.

Various, see attached.



**Section 8 – Illustration of Proposed Warning Devices**

Attach a detailed diagram, drawing, map or other illustration showing the proposed modification.

**Section 9 – Use of Surplus Equipment**

If surplus or used equipment is being installed as part of the project, please review the following statement and sign, accepting the terms and conditions.

“The recipient of surplus equipment voluntarily accepts the equipment as is. Proper installation and testing is required per Code of Federal Regulations 49, prior to activating the signal equipment. The recipient assumes full responsibility for functionality of the equipment.”

Name (print): \_\_\_\_\_ N/A \_\_\_\_\_  
Title: \_\_\_\_\_  
Company: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

**Section 10 – Project Cost Information**

1. Breakdown of estimated total cost.  
186 Individual mast lights units are being purchased from Leotek Electronics for \$70.00 each.  
20 Gate light sets are being purchased from National Electric Gate Co. for \$162.85 each.  
Washington Sales Tax @ 7.7% and Shipping estimated at 5%.  
186 x \$70.00 = \$13,020.00; 20 x \$162.85 = \$3,257.00; Total: \$16,277.00;  
Sales tax = \$1,253.33; Handling = \$813.85; **Total Project Cost = \$18,344.18**

2. Names of the parties contributing to the project and the amount each is contributing.

WUTC GCPF grant award to pay full cost of materials. Puget Sound & Pacific will pay for all labor.

3. Provide the amount the applicant is requesting from the GCPF grant program.  
\$20,000.00 is requested. RR will purchase only units proposed based on actual costs.

**Section 11 – Project Completion Date**

Project completion date: June 30, 2015

*Section 12 – Waiver of Hearing by Respondent*

**Waiver of Hearing**

The undersigned represents the Respondent in the petition to modify highway-rail grade crossing warning signals at the following crossing:

USDOT Crossing No. \_\_\_\_\_

We have investigated the conditions at the crossing. We are satisfied the conditions are the same as described by the Petitioner in this docket. We agree the warning signals should be modified and consent to a decision by the commission without a hearing.

Dated at \_\_\_\_\_, Washington, on the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.

\_\_\_\_\_  
Printed name of Respondent

\_\_\_\_\_  
Signature of Respondent's Representative

\_\_\_\_\_  
Title

\_\_\_\_\_  
Phone number and e-mail address

\_\_\_\_\_  
Mailing address



Road Authority	Contact	Address	City	State	Zip Code	Phone Number	Email Address
Grays Harbor County Mason County Kitsap County	Russell Esses Melissa McFadden Jacques Dean	100 W. Broadway Ave., Suite 31 100 W. Public Works Drive 614 Division Street	Montesano Shelton Port Orchard	Washington Washington Washington	98563 98584 98366	360-249-4222 360-427-9670 ext. 450 360-337-5777	pwd@co.grays-harbor.wa melissam@co.mason.wa.us jdean@co.kitsap.wa.us
City of Hoquiam City of Aberdeen Washington State	Brian Shay Malcolm Bowe Ahmer Nizam	609 Eighth Street 200 E. Market Street PO Box 47329	Hoquiam Aberdeen Olympia	Washington Washington Washington	98550 98520 98504-7329	360-538-3983 360-537-3228 360-705-7271	bshay@cityofhoquiam.com mbowle@aberdeewa.gov nizama@wsdot.wa.gov
Puget Sound & Pacific	Jon Rolufs	3220 State Street, Suite 200	Salem	Oregon	97304	503-363-6074	jrolufs@gwrr.com

# PUGET SOUND AND PACIFIC RAILROAD



# PUGET SOUND AND PACIFIC RAILROAD



SECTION 3: CROSSING LOCATION				SECTION 4: ROADWAY INFORMATION				SECTION 5: TRACK INFORMATION				SECTION 6: WARNING DEVICES															
STREET NAME	DOT #	RAILROAD M.P.	LOCATION	CITY	COUNTY	ROAD AUTHORITY	AADT	NUMBER OF LANES	ROADWAY SPEED	TRUCK ROUTE?	% TRUCKS OF AADT	STREET NAME	SCHOOL BUS ROUTE?	NUMBER OF BUSES PER DAY	RAILROAD TYPE	TYPE OF TRACK	NUMBER OF TRACKS AT CROSSING	DAILY FREIGHT TRAFFIC	TRAIN SPEED (MPH)	PASSENGER TRAIN TRAFFIC	FUTURE TRAFFIC	X-BUCKS	FLASHING LIGHTS	GATES	BELL	CANTILEVER FLASHING LIGHTS	TRAIN DETECTION SYSTEM

SHELTON SUB																													
SUMMIT RD	096644N	7.7	S2 T18N R5W	47 0701	-123 269718	MCCLEARY	GRAY'S HARBOR	COUNTY	860	2	35	NO	11	SUMMIT RD	YES	20	COM CARRIER	MAIN	1	4	0-25	0	77	2	2	2	1	2	REDUNDENT MOTION SENSOR
LYNCH RD	096663T	19.2	S8 T19N R3W	47 166103	-123 081653	SHELTON	MASON	COUNTY	2057	2	45	YES	16	LYNCH RD	YES	8	COM CARRIER	MAIN	1	4	20-25	0	77	2	2	2	1	2	REDUNDENT MOTION SENSOR
COLE RD	096664A	21.17	S33 T20N R3W	47 17221	-123 07413	SHELTON	MASON	COUNTY	1688	2	45	YES	16	COLE RD	YES	8	COM CARRIER	MAIN	1	4	20-25	0	77	2	2	2	1	2	REDUNDENT MOTION SENSOR

BANGOR SUB																													
MCEWAN PRAIRIE RD	096680U	4.7	S33 T21N R3W	47 2696	-123 073689	SHELTON	MASON	C	5087	2	45	YES	9	MCEWAN PRAIRIE RD	YES	8	COM CARRIER	MAIN	1	4	20-25	0	77	2	2	2	1	0	REDUNDENT CONSTANT WARNING
JOHNS PRAIRIE RD	096677B	3.45	S07 T20N R3W	47 247197	-123 068928	SHELTON	MASON	C	3575	2	45	YES	13	JOHNS PRAIRIE RD	YES	30	COM CARRIER	MAIN	1	10	5-25	0	77	2	2	2	1	0	REDUNDENT CONSTANT WARNING
ST ANDREWS DR	096693E	6.28	S27 T21N R3W	47 29037	-123 05205	SHELTON	MASON	C	463	2	25	NO	9	ST ANDREWS DR	YES	8	COM CARRIER	MAIN	1	4	20-25	0	77	2	2	0	1	0	PRESENT DETECTION
MASON BENSON RD	096691W	13.86	S15 T21 R02W	47 327441	-123 919748	ALLYN	MASON	C	1047	2	45	YES	9	MASON BENSON RD	YES	8	COM CARRIER	MAIN	1	4	20-25	0	77	2	2	2	1	0	PRESENT DETECTION
ELDORADO BLVD	096628V	38.6	S32 T25N R1E	47 616183	-122 772864	SILVERDALE	KITSAP	C	190	2	35	NO	9	ELDORADO BLVD	YES	8	COM CARRIER	MAIN	1	2	15-25	0	77	2	2	0	1	0	PRESENT DETECTION

ELUMA SUB																													
EIGHTH ST	096720J	72.86	S30 T29N R9W	46 973593	-123 88922	HOQUIAM	GRAY'S HARBOR	CITY	200	2	25	YES	75	EIGHTH ST	YES	8	COM CARRIER	MAIN	1	2	5-10	0	77	2	2	2	1	2	PRESENT DETECTION
ONTARIO ST	808716P	71.61	S12 T17N R10W	46 971530	-123 865460	HOQUIAM	GRAY'S HARBOR	CITY	200	2	25	YES	75	ONTARIO ST	NO	0	COM CARRIER	1 MAIN, TSDING	2	4	5-10	0	77	2	2	2	1	0	REDUNDENT CONSTANT WARNING
30TH ST	808714B	71.07	S7 T17N R9W	46 971530	-123 855860	HOQUIAM	GRAY'S HARBOR	CITY	5510	2	30	YES	75	30TH ST	NO	0	COM CARRIER	MAIN	1	8	5-10	0	77	2	2	2	1	0	REDUNDENT CONSTANT WARNING
MYRTLE ST	808711F	70.8	S7 T17N R9W	46 971350	-123 852270	HOQUIAM	GRAY'S HARBOR	CITY	3190	2	25	NO	11	MYRTLE ST	NO	0	COM CARRIER	MAIN	1	8	5-10	0	77	2	2	2	1	0	REDUNDENT MOTION SENSOR
HERON ST EAST	096695D	68.5	S9 T17N R9W	46 976270	-123 809540	ABERDEEN	GRAY'S HARBOR	CITY	120	1	25	NO	5	HERON ST EAST	YES	3	COM CARRIER	MAIN	1	8	5-10	0	77	1	1	0	1	0	PRESENT DETECTION
NEWELL ST	096683P	68.47	S9 T17N R9W	46 976270	-123 807640	ABERDEEN	GRAY'S HARBOR	CITY	220	2	25	NO	5	NEWELL ST	NO	0	COM CARRIER	MAIN	1	8	5-10	0	77	2	2	2	1	0	PRESENT DETECTION
SARGENT BLVD	096687L	67.14	S10 T17N R9W	46 98050	-123 801060	ABERDEEN	GRAY'S HARBOR	CITY	780	2	25	NO	75	SARGENT BLVD	YES	2	COM CARRIER	MAIN	1	8	10-25	0	77	2	2	2	1	0	REDUNDENT MOTION SENSOR
CENTRAL PARK DR	096692C	61.8	S16 T17N R9W	46 982290	-123 830380	ABERDEEN	GRAY'S HARBOR	COUNTY	644	2	25	NO	11	CENTRAL PARK DR	NO	0	COM CARRIER	MAIN	1	6	10-25	0	77	2	2	0	1	0	REDUNDENT MOTION SENSOR
DEVONSHIRE RD	096678M	58.91	S16 T17N R9W	46 971480	-123 82480	MONTESANO	GRAY'S HARBOR	COUNTY	882	2	35	NO	11	DEVONSHIRE RD	YES	4	COM CARRIER	MAIN	1	4	15-25	0	77	2	2	0	1	0	PRESENT DETECTION
US-12 OFF RAMP	808447E	97.9	S7 T17N R9W	46 974920	-123 600880	MONTESANO	GRAY'S HARBOR	STATE	7700	1	35	YES	25	US-12 OFF RAMP	YES	20	COM CARRIER	MAIN	1	2	5-15	0	77	2	2	0	1	0	PRESENT DETECTION
US-12 ON RAMP	808454K	1.38	S7 T17N R9W	46 975950	-123 600150	MONTESANO	GRAY'S HARBOR	STATE	2100	1	35	YES	25	US-12 ON RAMP	YES	20	COM CARRIER	1 MAIN, 1 SPUR	2	2	5-15	0	77	2	2	0	1	0	PRESENT DETECTION
BEACON RD	096659H	56.02	S4 T17N R7W	46 983709	-123 568872	MONTESANO	GRAY'S HARBOR	COUNTY	174	2	25	NO	11	BEACON RD	NO	0	COM CARRIER	MAIN	1	8	15-25	0	77	2	2	0	1	0	REDUNDENT MOTION SENSOR

# PSAP

STREET NAME	DOT #	CITY	M.P.	LIGHT HEADS	12" Light Cost @ \$70.00	GATES	Gate Light Set Cost @ \$162.85	Total Lighting Upgrade Cost	Sales tax of 7.7%	Shipping / Handling
<b>SHELTON SUB</b>										
SUMMIT RD	096544N	MCCLEARY	7.7	18	\$ 1,260.00	2	\$ 325.70	\$ 1,585.70	\$ 122.10	\$ 79.29
LYNCH RD	096563T	SHELTON	19.2	16	\$ 1,120.00	2	\$ 325.70	\$ 1,445.70	\$ 111.32	\$ 72.29
COLE RD	096564A	SHELTON	21.3	16	\$ 1,120.00	2	\$ 325.70	\$ 1,445.70	\$ 111.32	\$ 72.29
<b>BANBOR SUB</b>										
MCEWAN PRAIRIE RD	096580J	SHELTON	4.7	8	\$ 560.00	2	\$ 325.70	\$ 885.70	\$ 68.20	\$ 44.29
JOHNS PRAIRIE RD.	096577B	SHELTON	3.4	8	\$ 560.00	2	\$ 325.70	\$ 885.70	\$ 68.20	\$ 44.29
ST ANDREWS DR.	096583E	SHELTON	6.1	8	\$ 560.00	0	\$ -	\$ 560.00	\$ 43.12	\$ 28.00
MASON BENSON RD	096591J	ALLYN	13.8	8	\$ 560.00	2	\$ 325.70	\$ 885.70	\$ 68.20	\$ 44.29
ELDORADO BLVD	096626V	SILVERDALE	38.6	10	\$ 700.00	0	\$ -	\$ 700.00	\$ 53.90	\$ 35.00
<b>ELMA SUB</b>										
EIGHTH ST	096720J	HOQUIAM	72.8	20	\$ 1,400.00	2	\$ 325.70	\$ 1,725.70	\$ 132.88	\$ 86.29
ONTARIO ST	818716P	HOQUIAM	71.6	8	\$ 560.00	0	\$ -	\$ 560.00	\$ 43.12	\$ 28.00
30TH ST	808714B	HOQUIAM	71	8	\$ 560.00	2	\$ 325.70	\$ 885.70	\$ 68.20	\$ 44.29
MYRTLE ST	808711F	HOQUIAM	70.8	8	\$ 560.00	2	\$ 325.70	\$ 885.70	\$ 68.20	\$ 44.29
HERON ST. EAST	096695D	ABERDEEN	68.5	8	\$ 560.00	0	\$ -	\$ 560.00	\$ 43.12	\$ 28.00
NEWELL ST.	096693P	ABERDEEN	68.2	10	\$ 700.00	0	\$ -	\$ 700.00	\$ 53.90	\$ 35.00
SARGENT BLVD	096687L	ABERDEEN	67.1	8	\$ 560.00	2	\$ 325.70	\$ 885.70	\$ 68.20	\$ 44.29
CENTRAL PARK DR.	096682C	ABERDEEN	61	8	\$ 560.00	0	\$ -	\$ 560.00	\$ 43.12	\$ 28.00
DEVONSHIRE RD.	096678M	MONTESANO	58.9	8	\$ 560.00	0	\$ -	\$ 560.00	\$ 43.12	\$ 28.00
US-12 OFF RAMP	808475F	MONTESANO	58.4	8	\$ 560.00	0	\$ -	\$ 560.00	\$ 43.12	\$ 28.00
US-12 ON RAMP	808475K	MONTESANO	58.4	8	\$ 560.00	0	\$ -	\$ 560.00	\$ 43.12	\$ 28.00
BEACON RD	096659H	MONTESANO	56	8	\$ 560.00	0	\$ -	\$ 560.00	\$ 43.12	\$ 28.00
				186		20		\$ 16,277.00	\$ 1,253.33	\$ 813.85

PROJECT TOTAL ESTIMATED COST: \$ 18,344.18



August 6, 2013

Washington Utilities and Transportation Commission  
Attention: Grade Crossing Protective Fund  
1300 S. Evergreen Park Drive SW  
PO Box 47250  
Olympia, WA 98504-7250

RE: GRADE CROSSING PROTECTIVE FUND 2013 – 2015 GRAND APPLICATION

Commissioners,

Please except this as the application for funds to mitigate public safety hazards at highway-railway at grade crossings in the state of Washington. Puget Sound & Pacific Railroad is seeking funds to upgrade lighting at active highway-railway grade crossings from incandescent to LED. This change will help make the warning of traffic to oncoming trains much more visible.

Current incandescent lights use a 10 Volt bulb, much like a vehicle tail light. This light bulb by itself is not very bright. What makes this light much more visible is that it uses a reflecting mirror behind and a 12 in. red lens in front to amplify and spread the light making it much brighter. Problems with this type of light are that it is highly dependent on cleanliness and condition of the mirror, lens, and bulb, and it is very directional. This requires that it be adjusted both up and down and side to side to optimize its visibility. If one is off center from the light it is very hard to see. The reason for using such a low power bulb is because railroad warning systems rely on battery power to operate so that they are much less dependent on commercial power for the safe operations of trains. The Railroad industry has always used this approach and now the FRA has codified it into law.

Whereas the highway traffic industry has always used high voltage bulbs and converting to LED lighting has mainly reduced power consumption, changing to LED lighting in the Railroad industry has much more to do with safety and operating characteristics. Recent developments by manufacturers have created LED light units that are more visible and brighter. They can be seen at a much wider angle and their intensity is constant throughout a range of voltages. These light units are just as bright at full power as they are when the crossing is reduced to less than half of its normal power. Plus they are more efficient, using less power. This becomes critical in the event of a power outage as the lights remain bright and working longer.

Sincerely,

Jon Rolufs  
Manager of Signals

Puget Sound & Pacific Railroad  
200 Hawthorne Ave. SE #C-320, Salem, OR 97301  
Phone: 503-363-6074, FAX: 503-363-6169

The proposed project will consist of removing the lens, mirror, and bulb from the existing housings at eight highway–railway graded crossings and installing a LED unit in its place. These eight crossings have 120 light heads. The project will further replace the three lights on each gate arm with a set of sealed LED gate light units. These eight crossings have 15 gate arms. A list of crossings and unit count is included with this application.

Upgrading to LED lighting, will be a noticeable improvement to visibility and brightness.

No outside companies



## LED Gate Arm Light Set



National Electric Gate Company has an LED Array Gate Arm Light Set for the most demanding railroad crossing applications. "Yours"!! National Electric Gates LED light set is practically indestructible and mounts on top of your gate arm for great visibility.

Made of polycarbonate, which gives this light box the durability for continued abuse in most knockdown traffic conditions, the LED array gate arm lights are in stock and ready for your toughest crossing applications.



### Ordering Information

Item	Description	NEG Number
1	LED Array Base and Middle Head Lamp	NEG 2018-LED1
2	LED Array Unit END	NEG 2018-LED-E
3	Total LED Assembly (Complete with Coil Cords and Connectors)	NEG-2018-3LEDARR
4	Coil Cord Cables and Connectors (Only with Fittings Package)	NEG 203CCARRY

**National Electric Gate Company**



For more information or prototype sample please give us a call or fax us at  
912-748-5090 FAX 912-748-7542

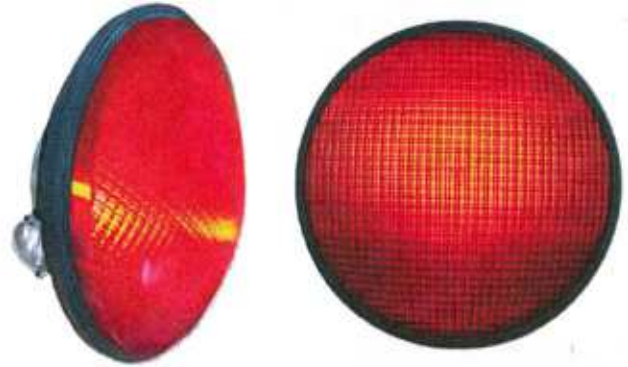




# LED Railroad Signal Module Grade Crossing IL Series

## The Leotek Advantage

A conventional incandescent look with energy efficient, long life LED technology that provides significant energy and maintenance savings, with exceptional color uniformity and readability.



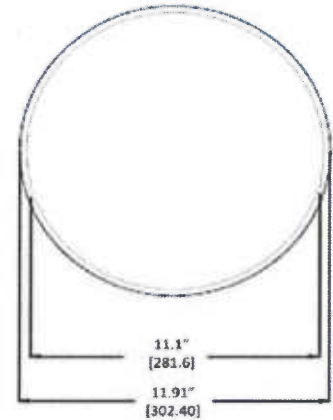
## Features and Benefits

- Meets AREMA and Transport Canada standards for Safety Assurance
- Manufactured in the USA
- Side Lights for extra safety and visibility
- Excellent moisture and dust resistance
- Robust hard-coated and UV-stabilized polycarbonate lens for increased longevity against the elements
- Maintains 70% of the initial lumen intensity after 100,000 hours of operation
- 5-Year Limited Warranty

## Technical Data

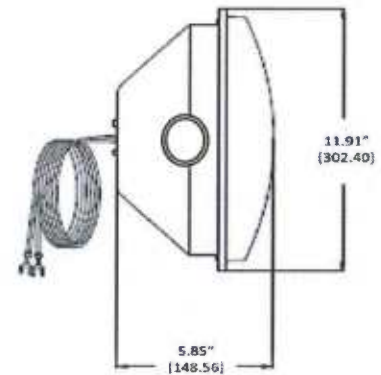
Operating Temperature:	-40°F to 165°F (-40°C to 74°C)
Operating Voltage:	8-20Vdc, 8-16Vac (50-60 Hz)
Power Factor:	>0.90
Turn-On/Turn-Off Time:	<75msec
Turn-Off Voltage:	>3.5 V ac, dc
Power Surge:	45Vrms for 80ms

## Mechanical Dimensions [in(mm)]



## Specifications

Moisture:	MIL-STD-810F
Photometry:	AREMA Part 3.2.35
Transient Immunity:	AREMA Part 11.3.3
Environmental Parameters:	AREMA Part 11.5.1 – Class B
Electronic Noise:	FCC Title 47 Sub. B Sec 15 Class A



## Ordering Information

Model	Ball Color	Side Light Color	LED Type	Dominant Wavelength	Wattage Drawn	Input Current
TSL-12RCS-ILR-E1 with Red Side Lights	●	●	AllnGaP	626	9	750mA
TSL-12RCS-ILW-E1 with White Side Lights	●	○	AllnGaP	626	9	750mA

