LightLab INTERNATIONAL ALLENTOWN LLC

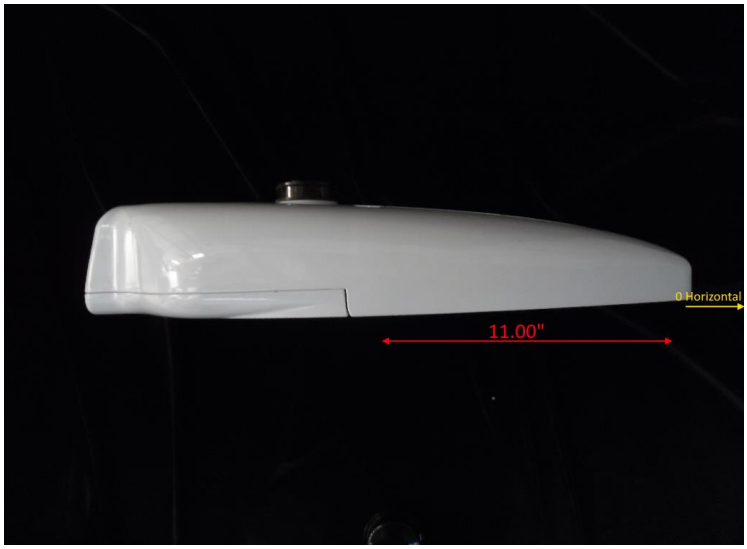
NVLAP TESTING Lab Code: 201079-0

Report of Test

LLIA001743-003A

Roadway/Area Light Distribution Photometry Test Report

Catalog Number: L6-60M-5-X-2ES-T-X-XX-3-XX-X-X-X
Pole/arm mounted, grey painted cast aluminum housing and driver compartment cover, one circuit board, one clear plastic lens with optic below each LED, open bottom.
60 white LEDs
Osram OT180W/UNV/1250C/2DIM/P6 LED driver at 1200mA, Littlefuse LSP10277SBX3472 surge suppressor



Prepared For:
LED Roadway Lighting
84 Chain Lake Drive
Suite 403
Halifax, Nova Scotia B3S 1A2, Canada

Performance Summary					
Input Voltage	120.0	Vac	Luminous Flux	22900.6	Lumens
Input Current	1.285	A	Total Efficacy	149.1	Lm/W
Input Power	153.6	W			
Frequency	60.00	Hz	Roadway Throw	Medium	
Power Factor	0.996		Roadway Type	Type II	
Current THD	4.0	%	IES BUG Rating	B3 - U0 - G3	

This test report was issued by LightLab International Allentown, LLC without alterations or erasures.

Test date: 04/28/2022
Report date: 05/02/2022

Signed: Michael L. Grather

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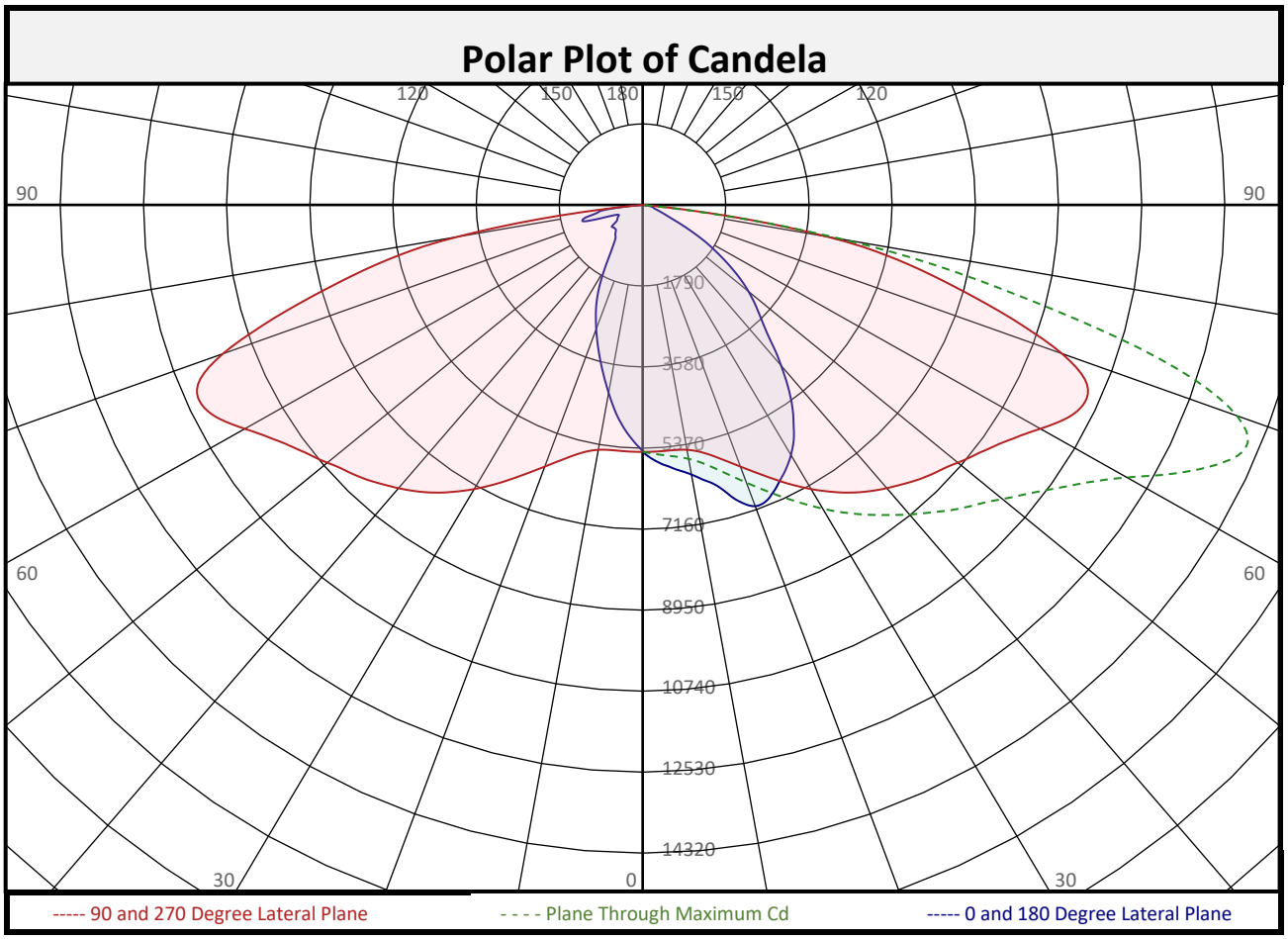

Zonal Flux Summary

Zone (Deg Vert)	Flux (Lumens)	Percent of Total	Zone (Deg Vert)	Flux (Lumens)	Percent of Total	Zone (Deg Vert)	Flux (Lumens)	Percent of Total
0-10	511.7	2.2%	90-100	0.0	0.0%	0-20	2019	8.8%
10-20	1507	6.6%	100-110	0.0	0.0%	0-30	4555	19.9%
20-30	2536	11.1%	110-120	0.0	0.0%	0-40	7930	34.6%
30-40	3375	14.7%	120-130	0.0	0.0%	0-60	16131	70.4%
40-50	3918	17.1%	130-140	0.0	0.0%	0-80	22581	98.6%
50-60	4283	18.7%	140-150	0.0	0.0%	10-90	22389	97.8%
60-70	4087	17.8%	150-160	0.0	0.0%	20-50	9829	42.9%
70-80	2364	10.3%	160-170	0.0	0.0%	40-90	14971	65.4%
80-90	319.3	1.4%	170-180	0.0	0.0%	60-90	6770	29.6%
0-90	22901	100.0%	90-180	0.0	0.0%	0-180	22901	100.0%

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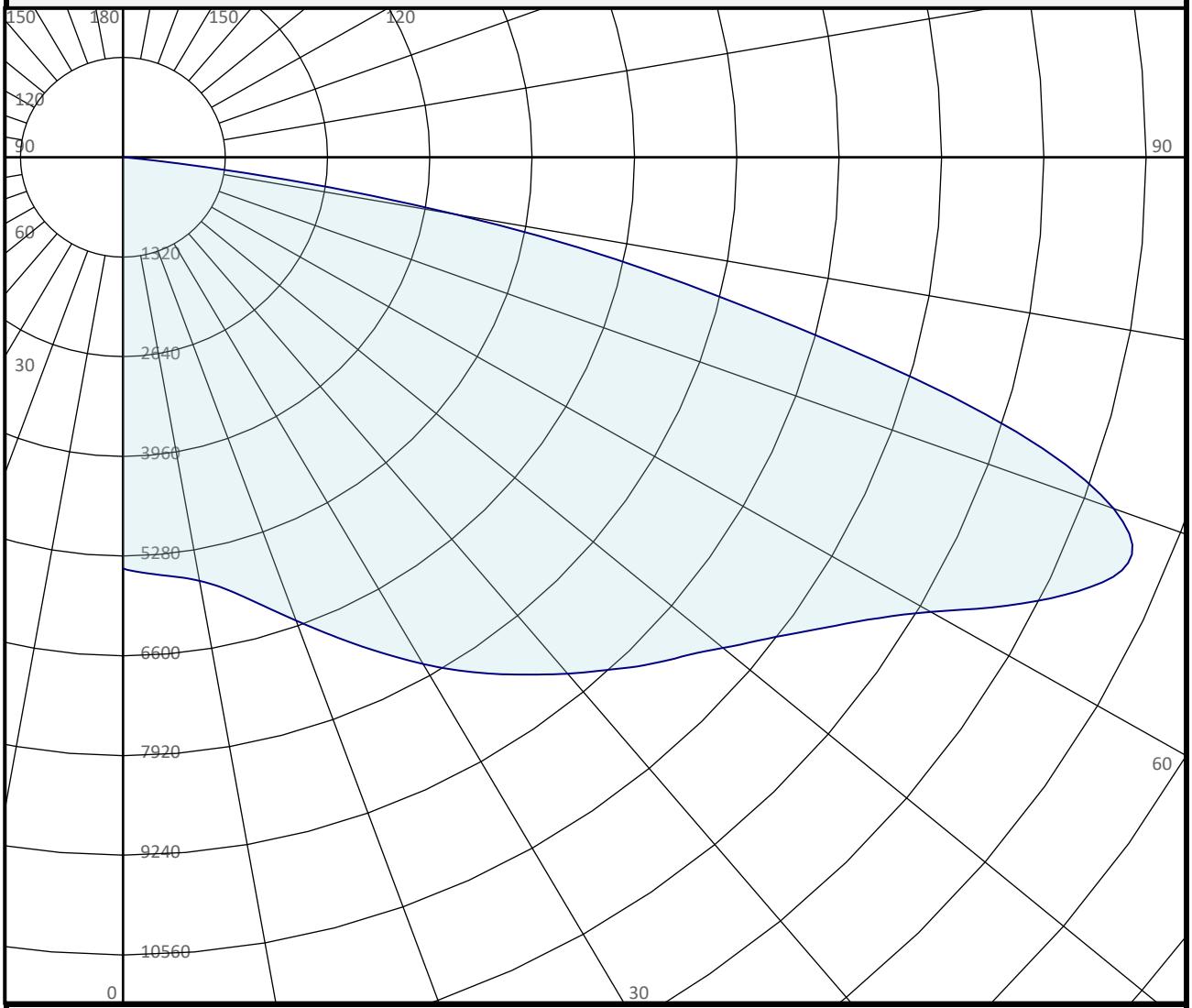
Plane of Maximum Candela



Plot of candela values through the plane of maximum candela (75 degrees Lateral)

Street and House Side Flux Summary						
	Downward		Upward		Total	
	Lumens	% of Total	Lumens	% of Total	Lumens	% of Total
Street Side	15613.4	68.2%	0.0	0.0%	15613.4	68.2%
House Side	7287.2	31.8%	0.0	0.0%	7287.2	31.8%
Total	22900.6	100.0%	0.0	0.0%	22900.6	100.0%

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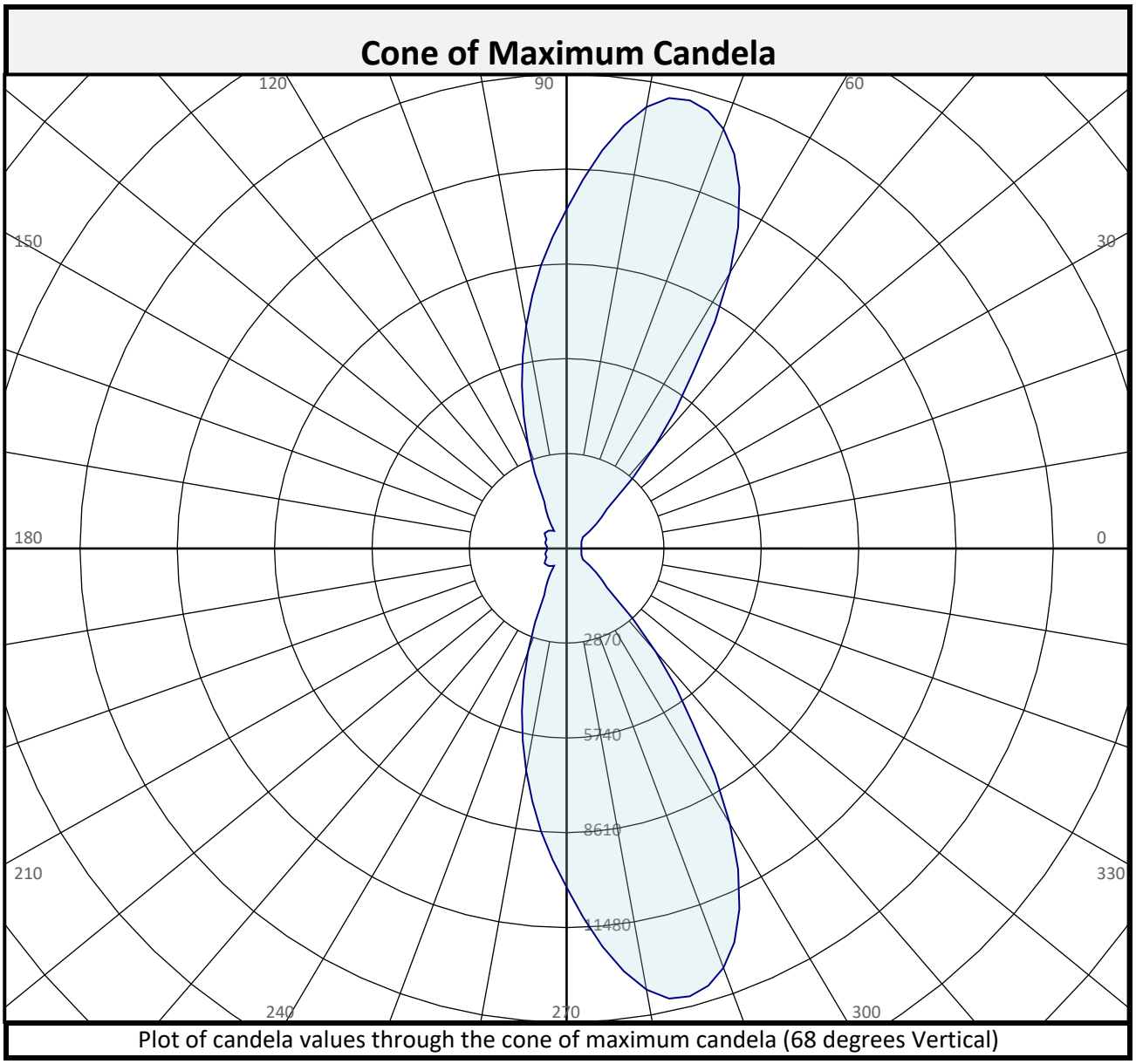

Plot of candela values through the cone of maximum candela (68 degrees Vertical)

Street and House Side Flux Summary

	Downward		Upward		Total	
	Lumens	% of Total	Lumens	% of Total	Lumens	% of Total
Street Side	15613.4	68.2%	0.0	0.0%	15613.4	68.2%
House Side	7287.2	31.8%	0.0	0.0%	7287.2	31.8%
Total	22900.6	100.0%	0.0	0.0%	22900.6	100.0%

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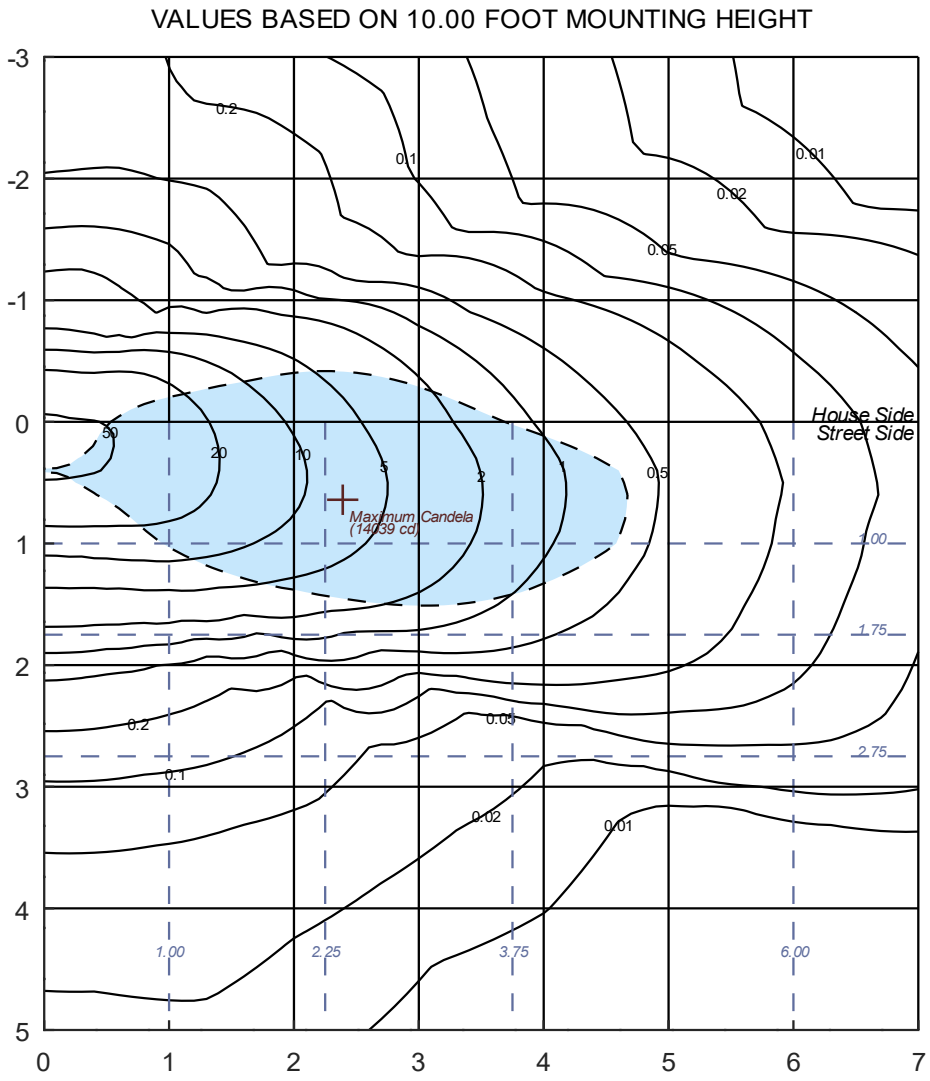
Iso-Illuminance Plot



The isofootcandle values shown in the plot above are based on a mounting height of h = 10.0 feet. Grid values show multiples of mounting height. The isoilluminance contour lines are expressed in units of footcandles. The values expressed are based on the direct light from a single unit without the contribution of room reflections.

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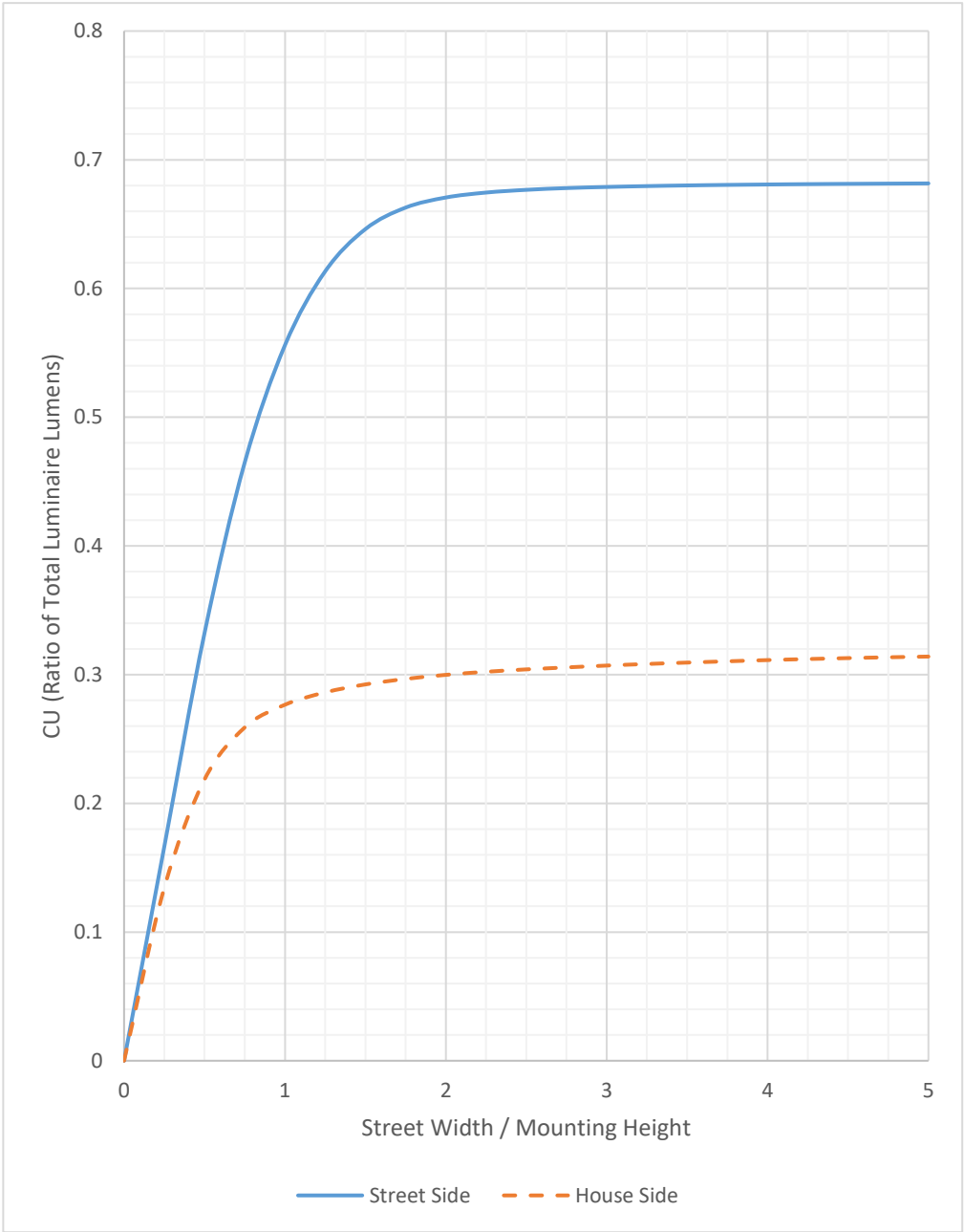
Coefficients of Utilization Plot



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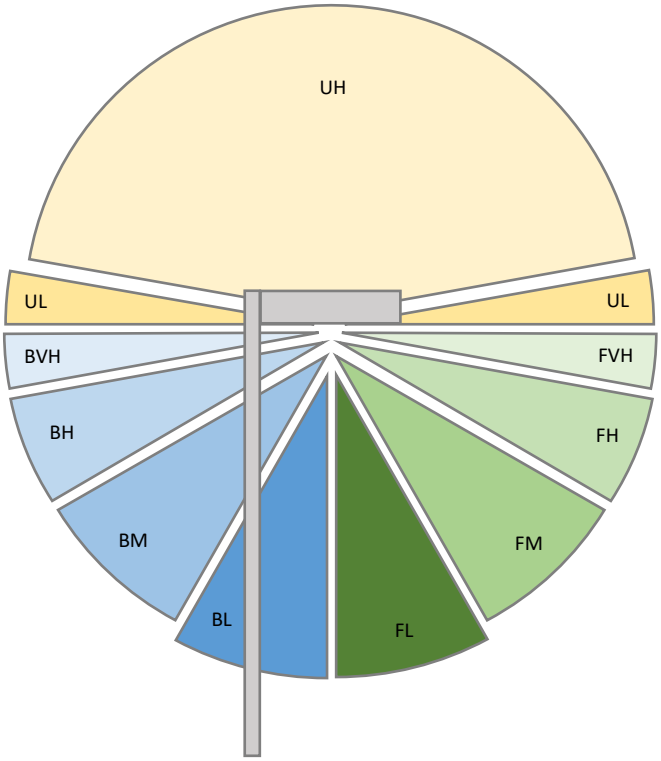
LCS Tables and Bug Classification



Back Light	
BL - Back Low (0°-30°)	1743.2 Lm
BM - Back Mid (30°-60°)	3457.7 Lm
BH - Back High (60°-80°)	1932.4 Lm
BVH - Back Very High (80°-90°)	153.9 Lm

Forward Light	
FL - Forward Low (0°-30°)	2811.9 Lm
FM - Forward Mid (30°-60°)	8118.1 Lm
FH - Forward High (60°-80°)	4518.1 Lm
FVH - Forward Very High (80°-90°)	165.3 Lm

Uplight	
UL - Upward Low (90°-100°)	0.0 Lm
UH - Upward High (100°-180°)	0.0 Lm

BUG Ratings: B3 - U0 - G3

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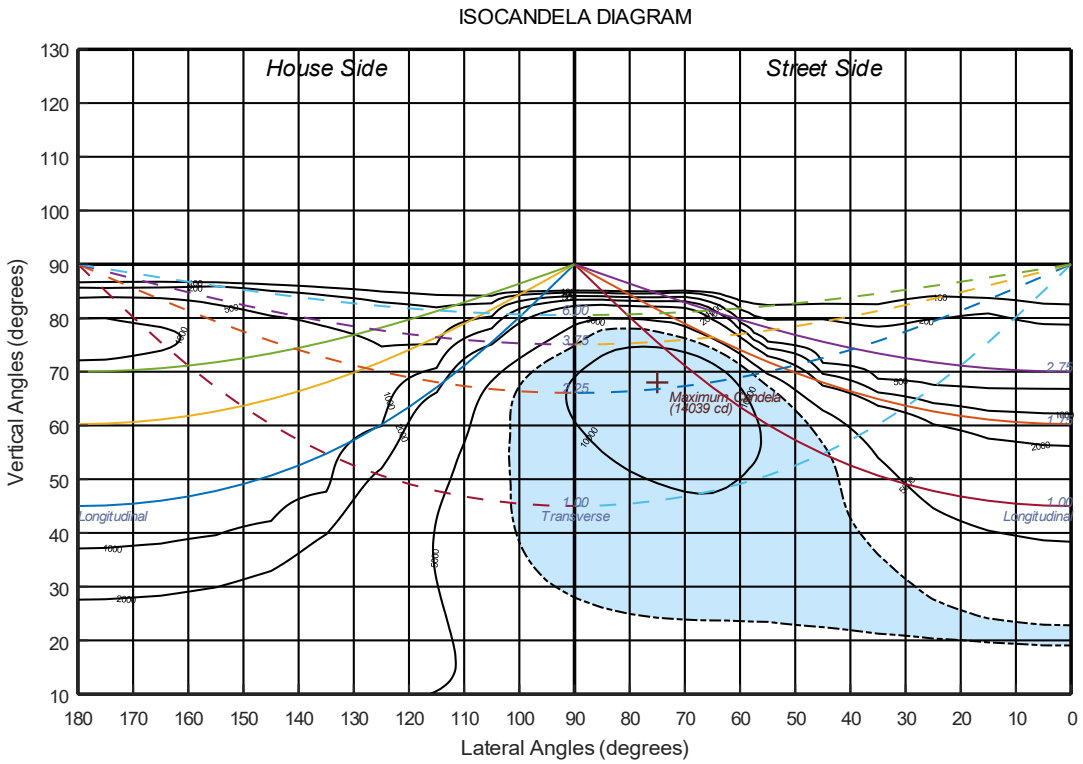
Iso-Candela Plot



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Luminous Intensity (Candela) Table

Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.	Lateral (C-Plane) Angles														
	0	5	15	25	35	45	55	57.5	60	62.5	65	67.5	70	72.5	75
0	5443	5443	5443	5443	5443	5443	5443	5443	5443	5443	5443	5443	5443	5443	5443
2.5	5637	5643	5634	5621	5597	5576	5556	5549	5543	5535	5528	5524	5515	5506	5502
5	5775	5782	5773	5753	5724	5691	5654	5645	5631	5618	5609	5595	5581	5563	5552
7.5	5906	5909	5898	5872	5833	5790	5749	5739	5719	5706	5692	5672	5653	5629	5609
10	6045	6044	6024	5991	5950	5907	5852	5840	5823	5811	5792	5773	5748	5722	5696
12.5	6232	6234	6205	6152	6090	6042	5999	5984	5964	5949	5932	5910	5887	5861	5830
15	6471	6468	6408	6331	6272	6216	6173	6165	6156	6142	6126	6108	6081	6056	6025
17.5	6853	6848	6782	6637	6488	6434	6389	6382	6379	6372	6362	6347	6321	6294	6263
20	7077	7078	7048	6983	6841	6679	6636	6628	6625	6619	6612	6606	6584	6558	6528
22.5	7039	7047	7089	7166	7175	7024	6910	6906	6893	6886	6883	6874	6861	6840	6814
25	6845	6860	6961	7151	7367	7393	7213	7196	7187	7175	7172	7169	7156	7140	7116
27.5	6630	6650	6773	7028	7404	7675	7580	7525	7497	7489	7486	7477	7467	7455	7428
30	6380	6407	6579	6866	7344	7835	7953	7907	7852	7828	7817	7807	7797	7771	7747
32.5	6058	6092	6314	6659	7237	7906	8275	8260	8230	8180	8146	8131	8113	8084	8056
35	5647	5692	5948	6396	7095	7910	8520	8571	8576	8546	8488	8447	8411	8385	8349
37.5	5179	5232	5547	6054	6893	7874	8697	8815	8871	8877	8835	8771	8722	8679	8633
40	4638	4699	5084	5679	6635	7809	8824	8995	9107	9163	9158	9099	9037	8981	8926
42.5	4084	4147	4597	5304	6345	7730	8921	9141	9302	9412	9443	9413	9349	9289	9210
45	3641	3690	4108	4947	6094	7664	9024	9288	9497	9648	9727	9729	9672	9606	9511
47.5	3306	3353	3701	4579	5849	7630	9186	9482	9720	9894	10008	10024	9979	9891	9783
50	2975	3017	3349	4188	5566	7600	9375	9702	9977	10183	10319	10365	10319	10230	10105
52.5	2605	2639	2947	3766	5236	7512	9601	9957	10261	10498	10658	10721	10690	10602	10473
55	2195	2223	2481	3277	4824	7269	9745	10162	10513	10796	10998	11096	11096	11027	10901
57.5	1793	1810	2011	2670	4268	6847	9746	10271	10692	11029	11300	11467	11521	11491	11393
60	1376	1390	1547	2054	3483	6191	9576	10264	10837	11316	11704	11967	12087	12098	12037
62.5	947	962	1044	1419	2495	5159	9141	10023	10817	11517	12122	12560	12798	12892	12857
65	626	625	636	811	1421	3636	8353	9528	10585	11504	12287	12921	13337	13557	13595
67.5	457	460	473	503	659	1953	6883	8450	9857	11106	12147	12957	13531	13885	14036
70	350	352	369	411	434	870	4586	6467	8275	9883	11209	12313	13093	13491	13603
72.5	270	277	292	340	376	404	2306	3884	5844	7544	9083	10321	11279	11907	12084
75	241	246	259	268	313	286	680	1649	3303	4883	6271	7484	8362	9054	9505
77.5	222	226	258	223	227	230	307	454	1247	2532	3762	4871	5823	6467	6977
80	168	175	216	195	159	194	187	223	371	1037	1813	2885	3647	4154	4365
82.5	101	105	149	157	102	105	97	106	136	296	621	1075	1452	1543	1587
85	45	46	52	52	39	38	36	38	41	51	69	94	115	109	94
87.5	8	8	8	7	7	10	14	16	17	18	19	20	22	23	24
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Luminous Intensity (Candela) Table

Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.		Lateral (C-Plane) Angles														
		77.5	80	82.5	85	90	95	105	115	125	135	145	155	165	175	180
	0	5443	5443	5443	5443	5443	5443	5443	5443	5443	5443	5443	5443	5443	5443	5443
	2.5	5492	5483	5476	5466	5455	5429	5385	5339	5303	5269	5237	5215	5198	5185	5184
	5	5535	5519	5504	5479	5454	5410	5325	5231	5155	5084	5019	4968	4932	4907	4906
	7.5	5590	5567	5541	5506	5459	5399	5265	5125	5002	4877	4768	4681	4625	4583	4580
	10	5673	5643	5607	5566	5493	5411	5224	5023	4834	4657	4493	4362	4278	4223	4218
	12.5	5803	5764	5723	5678	5578	5472	5214	4931	4664	4407	4197	4037	3936	3874	3868
	15	5990	5949	5902	5849	5725	5588	5247	4870	4490	4159	3910	3732	3613	3545	3538
	17.5	6224	6181	6126	6064	5921	5751	5323	4835	4340	3935	3644	3437	3306	3234	3225
	20	6487	6439	6382	6312	6149	5945	5430	4826	4227	3739	3395	3158	3008	2933	2926
	22.5	6772	6727	6662	6587	6403	6165	5560	4839	4140	3560	3150	2877	2714	2643	2637
	25	7076	7029	6959	6881	6679	6413	5712	4866	4070	3386	2897	2592	2428	2352	2345
	27.5	7394	7338	7268	7187	6967	6668	5876	4914	4006	3208	2638	2306	2113	2023	2011
	30	7713	7650	7574	7484	7247	6919	6040	4970	3938	3015	2362	1981	1763	1666	1653
	32.5	8014	7946	7865	7764	7509	7153	6192	5027	3862	2800	2053	1646	1436	1347	1335
	35	8298	8229	8145	8032	7756	7364	6322	5070	3773	2557	1727	1343	1184	1130	1124
	37.5	8572	8502	8410	8283	7974	7545	6419	5092	3660	2279	1418	1121	1026	986	981
	40	8849	8765	8659	8516	8168	7702	6480	5069	3505	1964	1156	980	926	910	908
	42.5	9122	9024	8903	8747	8350	7841	6509	5003	3297	1620	984	899	883	875	872
	45	9402	9284	9143	8972	8528	7959	6512	4891	3022	1290	888	865	846	825	818
	47.5	9654	9515	9356	9173	8679	8046	6481	4726	2688	1015	857	834	823	803	794
	50	9959	9803	9620	9418	8856	8151	6446	4515	2309	870	833	825	854	813	796
	52.5	10311	10133	9916	9678	9050	8271	6427	4272	1916	830	818	866	873	829	812
	55	10727	10517	10273	9986	9271	8403	6390	3959	1528	798	816	860	856	813	792
	57.5	11233	11010	10731	10396	9546	8534	6276	3577	1216	778	832	818	763	691	667
	60	11877	11636	11312	10912	9887	8707	6172	3184	992	777	847	776	716	650	629
	62.5	12694	12400	11991	11488	10247	8889	6056	2768	829	776	850	748	705	628	607
	65	13446	13107	12594	11967	10460	8943	5787	2268	727	773	835	714	681	593	574
	67.5	13951	13564	12935	12142	10354	8709	5243	1672	655	757	802	668	657	574	567
	70	13530	13165	12483	11587	9611	7977	4350	1128	600	739	747	596	654	676	681
	72.5	11981	11667	11118	10296	8315	6752	3198	746	548	705	655	562	801	1050	1079
	75	9684	9618	9368	8789	6923	5367	2032	510	493	638	578	690	1111	1339	1347
	77.5	7444	7523	7486	7242	5649	4050	1147	366	422	538	581	775	1076	1239	1237
	80	4661	4824	4832	4912	4028	2708	560	271	335	445	523	644	868	997	993
	82.5	1605	1707	1763	1949	1786	1200	223	179	223	320	397	501	661	806	795
	85	92	97	101	112	117	103	66	73	97	144	204	298	295	295	287
	87.5	25	26	28	29	30	32	34	34	33	33	38	45	60	62	62
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Report of Test

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Luminous Intensity (Candela) Table

Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.		Lateral (C-Plane) Angles														
		0	5	15	25	35	45	55	57.5	60	62.5	65	67.5	70	72.5	75
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	92.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	97.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	102.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	107.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	112.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	117.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	122.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	127.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	132.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	137.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	142.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	147.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	152.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	157.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	162.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	167.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	172.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	177.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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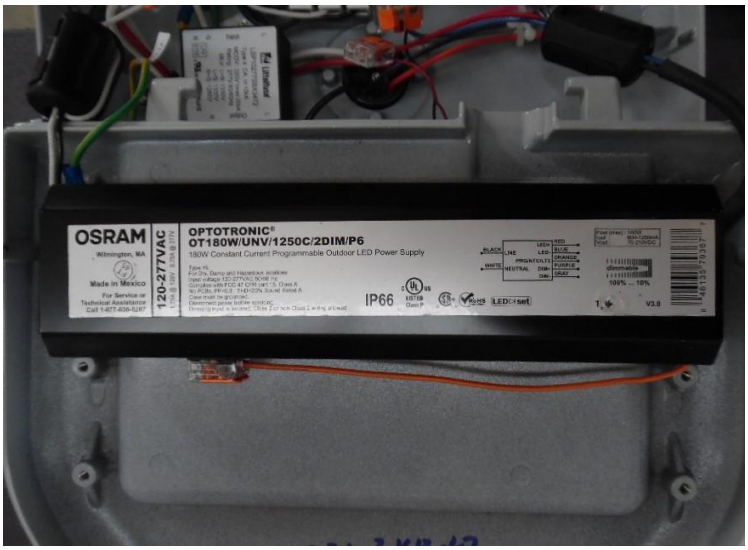
Luminous Intensity (Candela) Table

Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.	Lateral (C-Plane) Angles														
	77.5	80	82.5	85	90	95	105	115	125	135	145	155	165	175	180
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
107.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
112.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
117.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
122.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
132.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
137.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
142.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
147.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
152.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Report of Test

LLIA001743-003A

Additional Pictures of Test Subject



Report of Test

LLIA001743-003A

Test Distance	9.5 m
Ambient Temperature	24.6 °C

Notes

The laboratory has not participated in the selection of samples to be tested. All testing is performed on the understanding that the significance of the report is limited to the extent that the test sample is representative of production units.

Tested in accordance with the applicable sections of publications: IES LM-79-19. Format of reports and angular increments based on IES LM-31-20 and LM-10-20.

The luminous intensity values, and other derived quantities, contained in this report are based on absolute data.

Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

This report is free of erasures and corrections.

Photometric intensity values are reported using the IES C-Type spherical coordinate system as defined in IES LM-75-19.

This report may contain data that are not covered by the NVLAP accreditation. Quantities marked with ‡ are not covered.

This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the Federal Government.

The device under test emits no detectable uplight, as defined by ANSI/IES LM-31-20. For the purpose of this report, certain non-zero uplight readings, attributable to instrument artifacts, have been assigned a zero value.

LightLab INTERNATIONAL ALLENTOWN LLC

NVLAP TESTING Lab Code: 201079-0

Report of Test

LLIA001743-003B

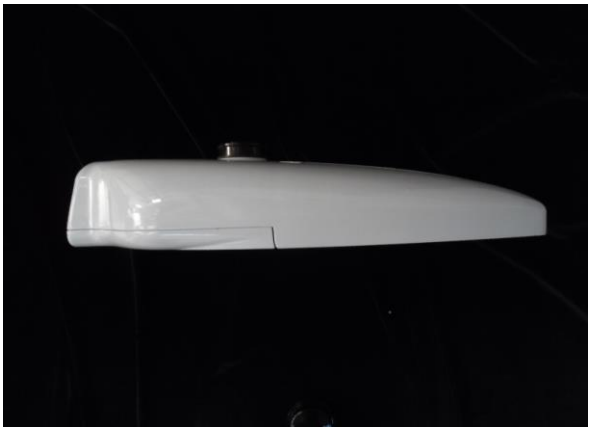
Integrating Sphere Report

Catalog Number: L6-60M-5-X-2ES-T-X-XX-3-XX-X-X-X

Pole/arm mounted, grey painted cast aluminum housing and driver compartment cover, one circuit board, one clear plastic lens with optic below each LED, open bottom.

60 white LEDs

Osram OT180W/UNV/1250C/2DIM/P6 LED driver at 1200mA, Littlefuse LSP10277SBX3472 surge suppressor



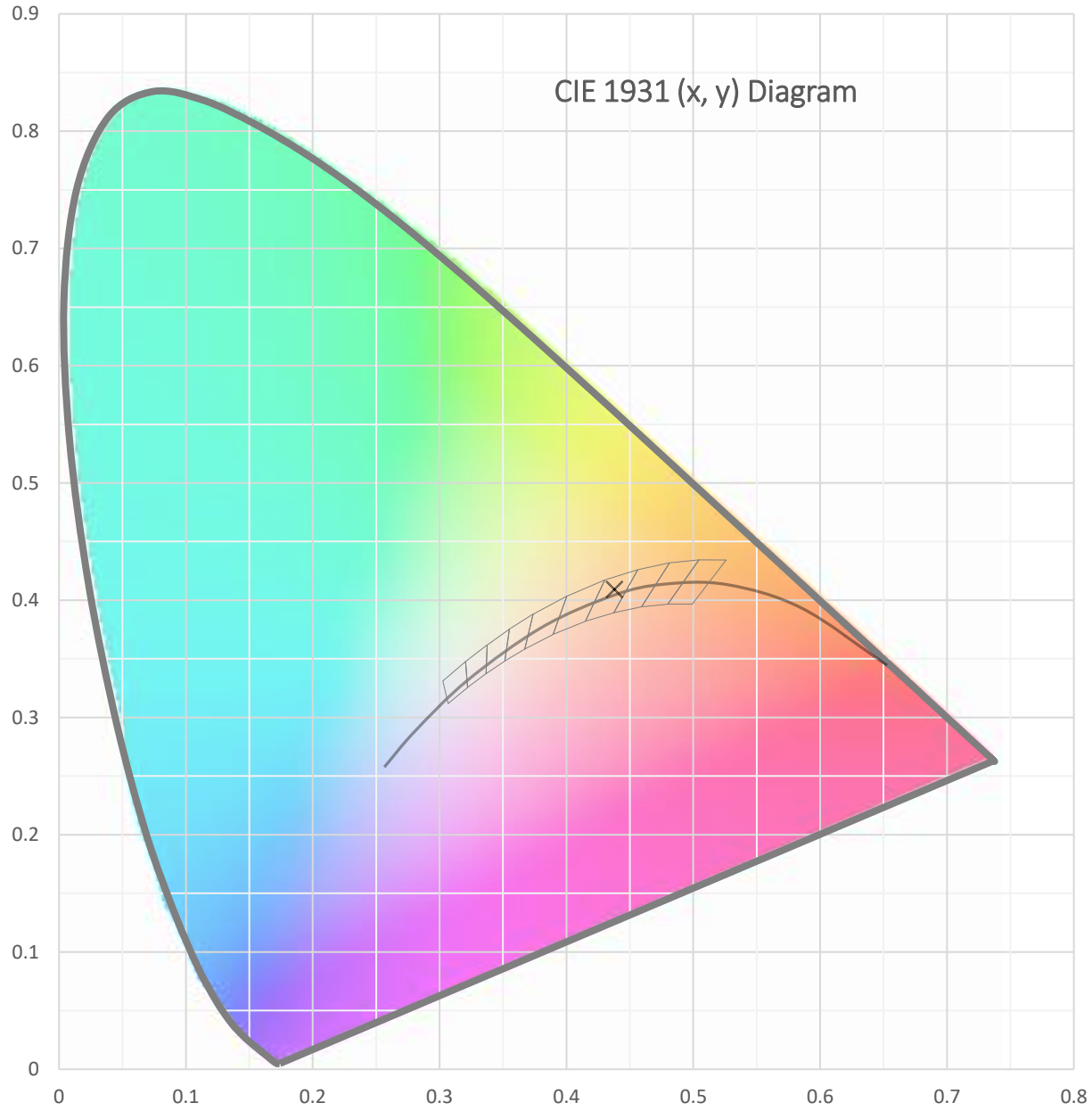
Performance Summary

Voltage	120.0	Vac
Current	1.284	A
Power	153.5	W
Frequency	59.99	Hz
Power Factor	0.996	
Current THD	3.9	%
Total Luminous Flux	22903.4	lm
Efficacy	149.2	lm/W
Chromaticity (x,y)	(0.4378, 0.4091)	
(u',v')	(0.2490, 0.5235)	
Duv	0.0019	
CCT	3026	K
CRI (Ra)	71	
R9	-43	
TM-30: Rf	72	
TM-30: Rg	93	
TM-30: Rcs,h1	-18	

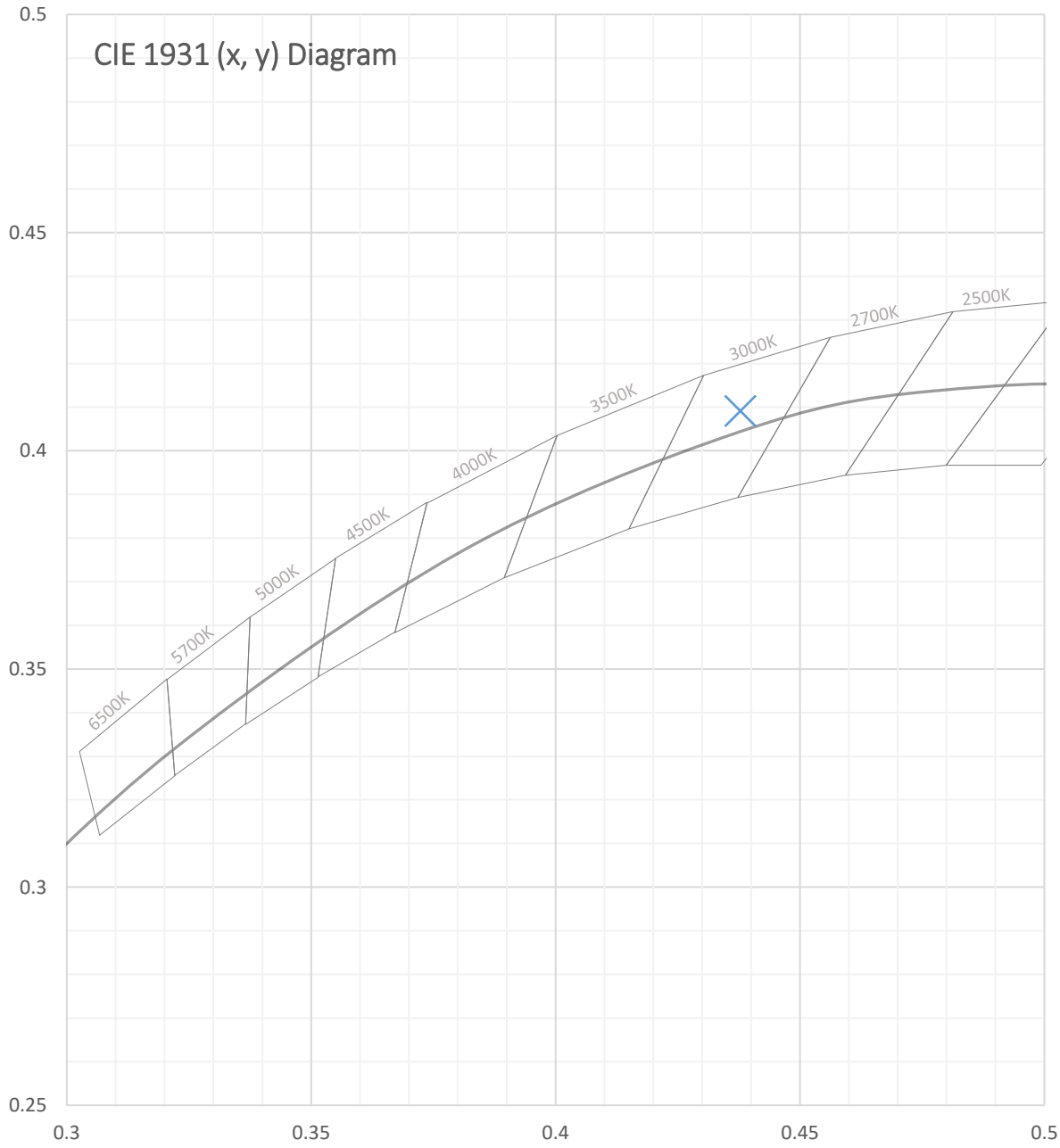
Prepared For:
LED Roadway Lighting
84 Chain Lake Drive
Suite 403
Halifax, Nova Scotia B3S 1A2, Canada

Test date: 04/28/2022
Report date: 05/02/2022

Test Report Number: LLIA001743-003B



Test Report Number: LLIA001743-003B



Test Report Number: LLIA001743-003B

Total Radiant Flux	64.32	W
Total Luminous Flux	22903.4	Lm
Chromaticity CIE 1931 (x, y)	(0.4378, 0.4091)	
Chromaticity CIE 1976 (u', v')	(0.2490, 0.5235)	
Correlated Color Temperature (CCT)	3026	K
Color Rendering Index (Ra)	71	
R1	66	
R2	81	
R3	95	
R4	67	
R5	66	
R6	75	
R7	76	
R8	40	
R9	-43	
R10	59	
R11	62	
R12	52	
R13	69	
R14	97	
TM-30: Rf	72	
TM-30: Rg	93	
TM-30: Rcs,h1	-18	
Distance from Planckian Locus (Duv)	0.0019	
Scotopic/Photopic Ratio ǂ	1.213	

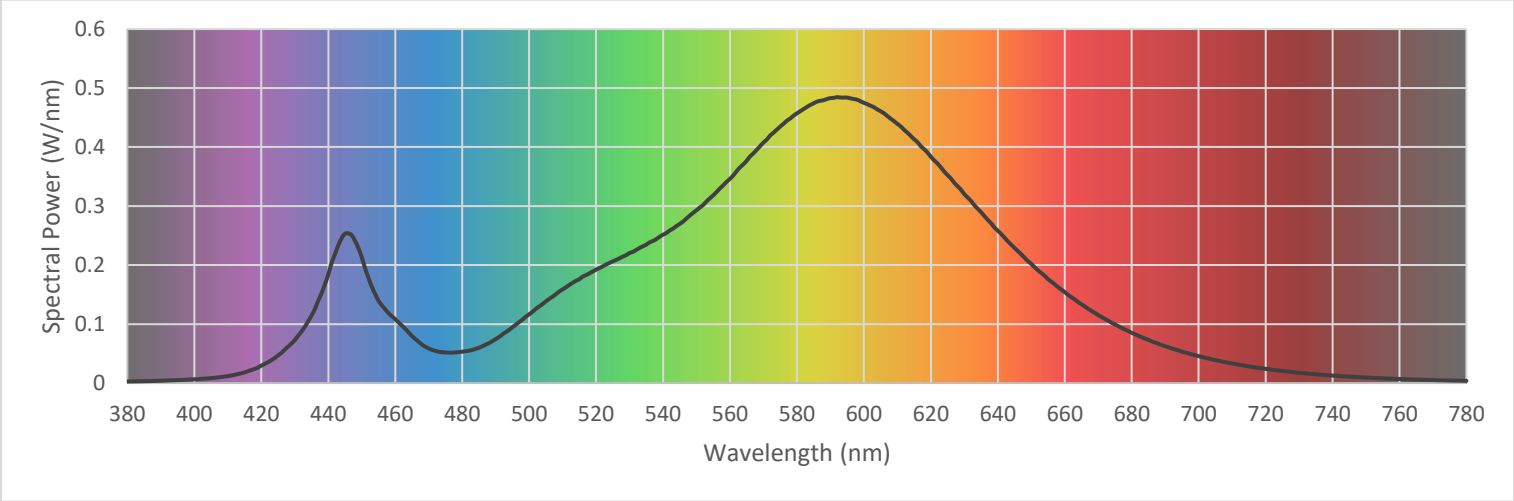
Electrical Data

Voltage	120.0	Vac
Current	1.284	A
Power	153.5	W
Frequency	59.99	Hz
Power Factor	0.996	
Current THD	3.9	%

Test Report Number: LLIA001743-003B

Summary Spectral Power Distribution (wavelength - nm, spectral power - W/nm)

380	0.002803	480	0.053115	580	0.457176	680	0.085178
385	0.003232	485	0.059801	585	0.474203	685	0.073244
390	0.003980	490	0.074506	590	0.482916	690	0.062530
395	0.005102	495	0.094522	595	0.483792	695	0.053302
400	0.006406	500	0.116622	600	0.474954	700	0.045669
405	0.008486	505	0.138436	605	0.460644	705	0.038875
410	0.011791	510	0.158837	610	0.439213	710	0.033186
415	0.018032	515	0.176040	615	0.413238	715	0.028252
420	0.029517	520	0.192315	620	0.383514	720	0.024071
425	0.046849	525	0.206280	625	0.352449	725	0.020482
430	0.072869	530	0.220441	630	0.320251	730	0.017505
435	0.114594	535	0.234653	635	0.289552	735	0.014895
440	0.184071	540	0.251433	640	0.258255	740	0.012745
445	0.253105	545	0.269812	645	0.229030	745	0.010931
450	0.213225	550	0.292993	650	0.202039	750	0.009362
455	0.139465	555	0.318271	655	0.176269	755	0.008031
460	0.108223	560	0.346193	660	0.154234	760	0.006914
465	0.079778	565	0.376834	665	0.133525	765	0.005945
470	0.058601	570	0.407718	670	0.115265	770	0.005111
475	0.051840	575	0.434674	675	0.099350	775	0.004414
						780	0.003825

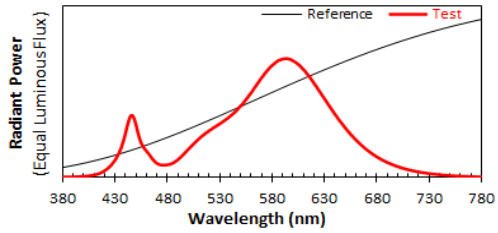


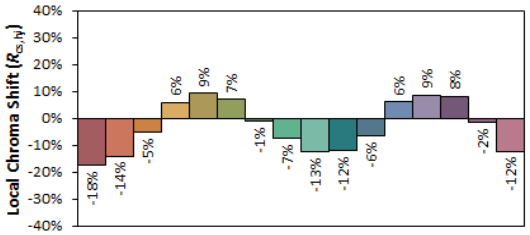
Test Report Number: LLIA001743-003B

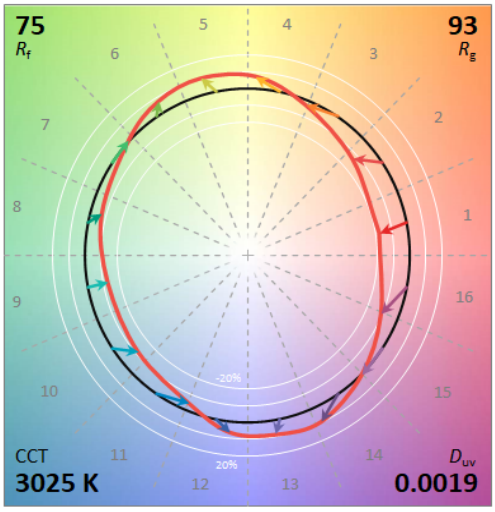
IES TM-30 Details

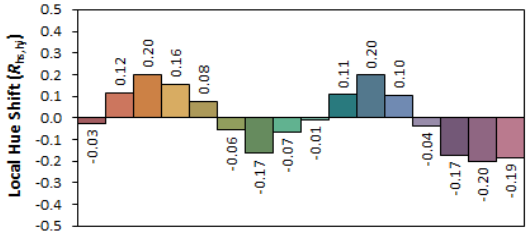
Source: LLIA001743-003B **Manufacturer:** LED Roadway Lighting

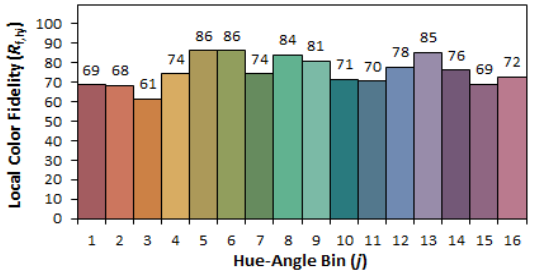
Date: 5/2/2022 **Model:** L6-60M-5-X-2ES-T-X-XX-3-XX-X-X-X

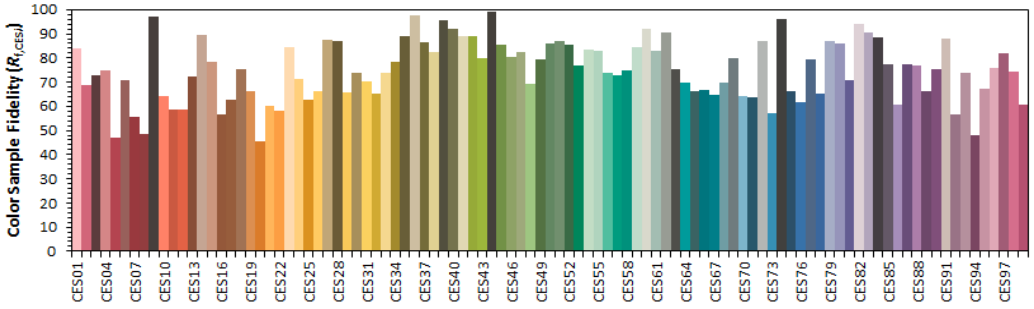












Notes:

x	0.4378
y	0.4091
u'	0.2490
v'	0.5235

CIE 13.3-1995 (CRI)

R_a	71
R_9	-43

Test Report Number: LLIA001743-003B

Test Equipment Configuration:	LightLab International Allentown 2m Integrating Sphere Measurements acquired using a Labsphere CDS 2600 spectroradiometer Testing was performed using 4π geometry
Test Temperature:	25.6 °C
Test Procedure:	Tested in accordance with the applicable sections of: LM-79-19, LM-78-20, LM-58-20, ANSI_ANSLG C78.377-2017, TM-30-20
Significance:	The laboratory has not participated in the selection of samples to be tested. All testing is performed on the understanding that the significance of the report is limited to the extent that the test sample is representative of production units.
Notes:	The measurements and other derived quantities contained in this report are based on the absolute data as measured. Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results. This report is free of erasures and corrections This report may contain data that are not covered by the NVLAP accreditation. Quantities marked with ‡ are not covered. This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the Federal Government.

USA west coast LightLab International, LLC, 24825 N. 16th Avenue, Suite 125, Phoenix, AZ, 85085, Ph : +1 623-434-1499, Fx : +1 623-434-1492, www.lightlabint.com

USA east coast LightLab Int'l Allentown LLC, 905 Harrison Street, Suite 135, Allentown, PA 18103, Ph: +1 484-273-0705, www.lightlaballentown.com, (issuing laboratory)

Australasia & S.E. Asia LightLab International, 50 Redcliffe Gardens Drive, Clontarf, Queensland, 4019, Australia, Ph : +61 7 3283 7862, Fx : +61 7 3283 8751, www.lightlabint.com

LightLab INTERNATIONAL ALLENTOWN LLC

NVLAP TESTING Lab Code: 201079-0

Report of Test

LLIA001743-003C

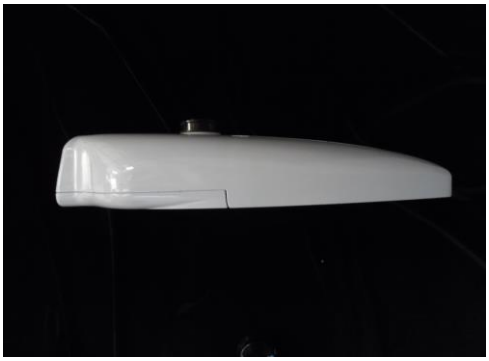
Electrical Test Report

Catalog Number: L6-60M-5-X-2ES-T-X-XX-3-XX-X-X-X

Pole/arm mounted, grey painted cast aluminum housing and driver compartment cover, one circuit board, one clear plastic lens with optic below each LED, open bottom.

60 white LEDs

Osram OT180W/UNV/1250C/2DIM/P6 LED driver at 1200mA, Littlefuse LSP10277SBX3472 surge suppressor



Performance Summary

Voltage	277.0	Vac
Current	0.5604	A
Power	149.8	W
Frequency	60.00	Hz
Power Factor	0.965	
Current THD	8.3	%
Ambient Temperature:	25.2	°C

Prepared For:
LED Roadway Lighting
84 Chain Lake Drive
Suite 403
Halifax, Nova Scotia B3S 1A2, Canada

Tested in accordance with the applicable sections of IES LM-79-19. The laboratory has not participated in the selection of samples to be tested. All testing is performed on the understanding that the significance of the report is limited to the extent that the test sample is representative of production units. Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results. This report is free of erasures and corrections. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

Test date: 04/28/2022
Report date: 05/02/2022

Electrical Report Template V1-4