

## Report of Test

**LLIA001772-001A**

Roadway/Area Light Distribution Photometry Test Report

Catalog Number: L6-16S-5-X-2ES-W-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.

16 white LEDs

Osram OT50W/UNV/800C/2DIMLT2/P6 LED driver at 600mA, Littlefuse LSP10277SBX3472 surge suppressor



Prepared For:

LED Roadway Lighting

84 Chain Lake Drive

Suite 403

Halifax, Nova Scotia B3S 1A2, Canada

### Performance Summary

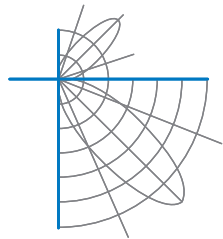
Input Voltage	120.0 Vac	Luminous Flux	4823.4 Lumens
Input Current	0.2793 A	Total Efficacy	147.2 Lm/W
Input Power	32.76 W		
Frequency	60.00 Hz	Roadway Throw	Short
Power Factor	0.977	Roadway Type	Type II
Current THD	8.2 %	IES BUG Rating	B1 - U0 - G1

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

Test date: 05/26/2022

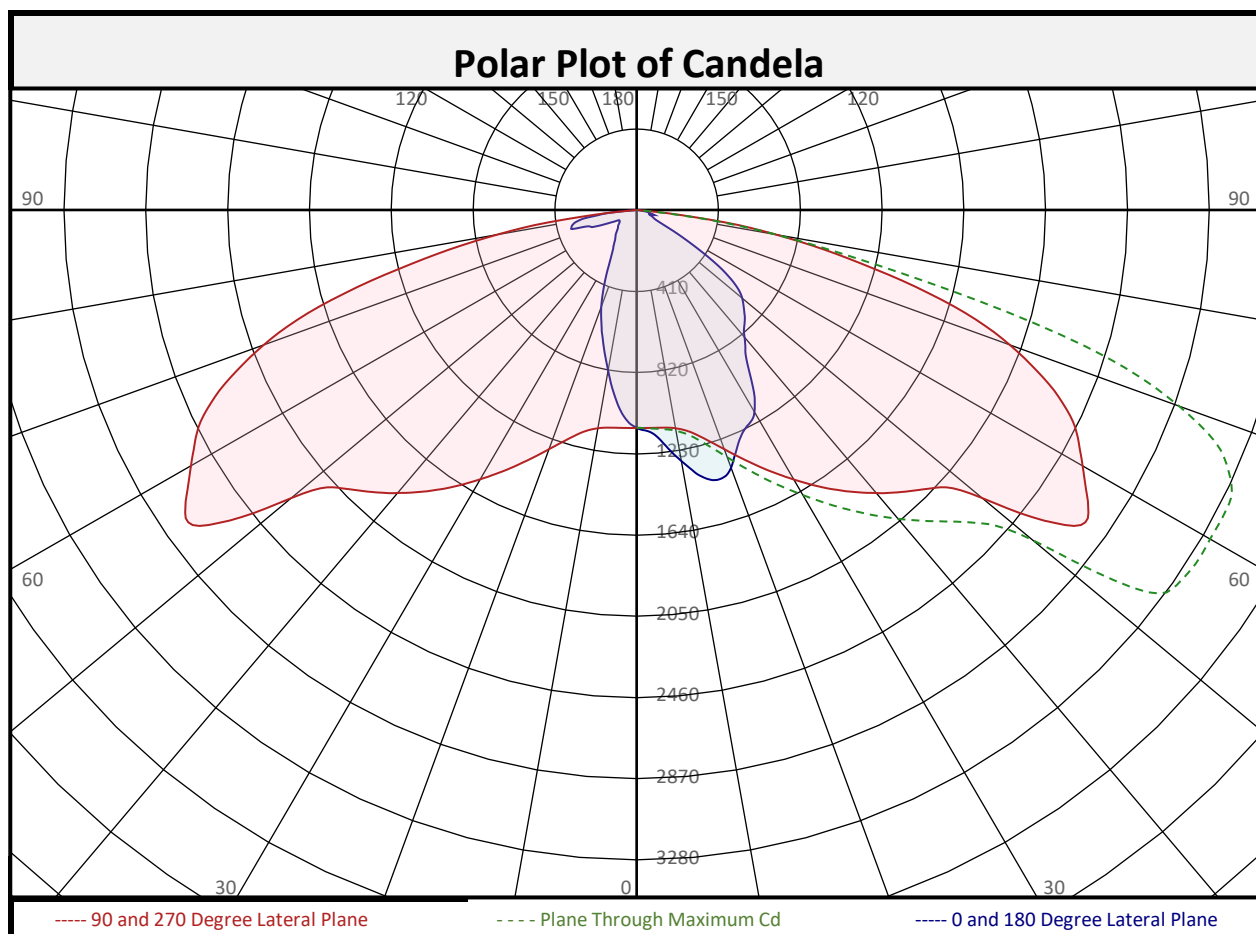
Report date: 05/26/2022

Signed: \_\_\_\_\_

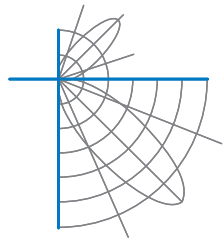


## Report of Test

### LLIA001772-001A

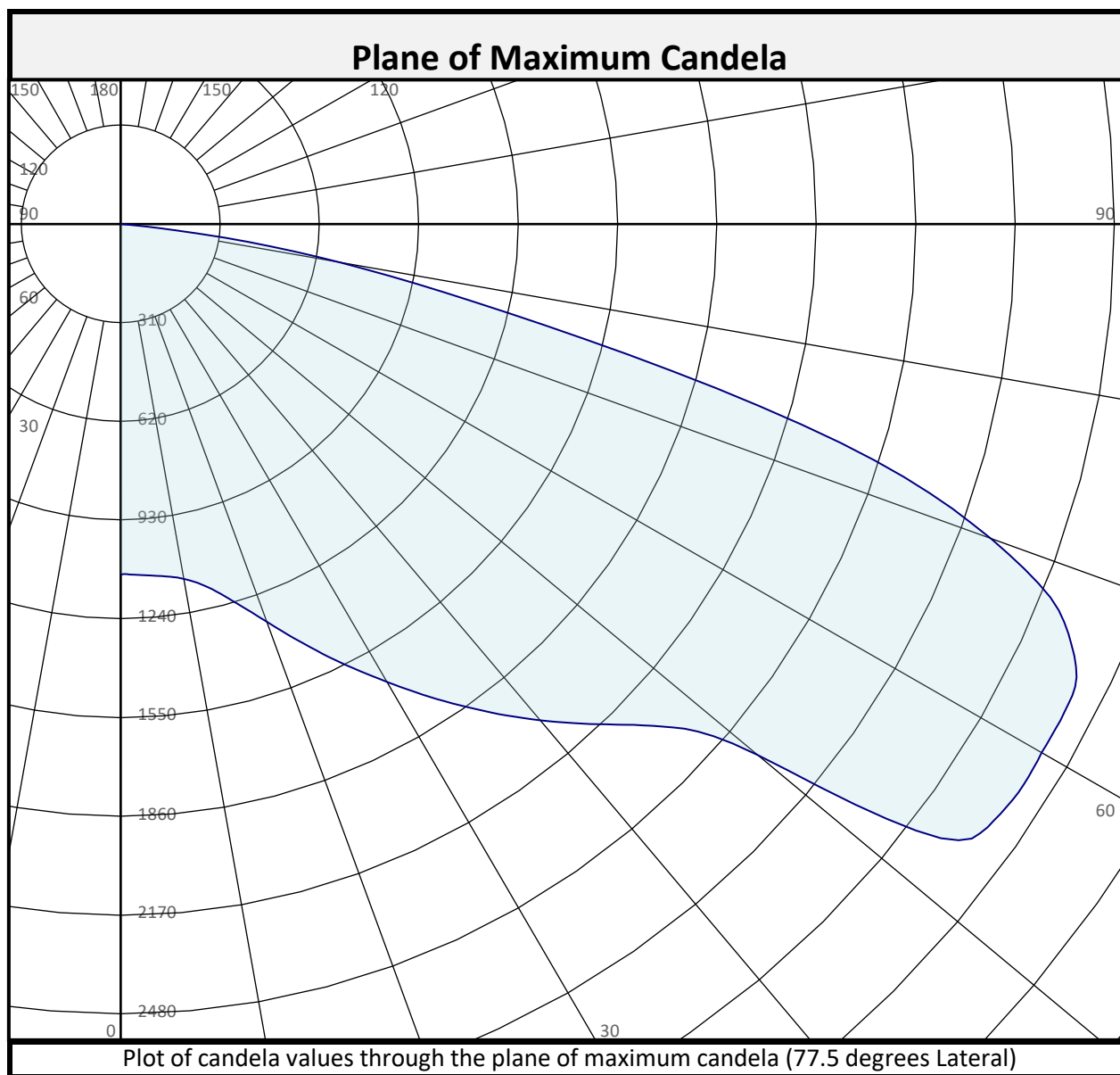


Zonal Flux Summary										
Zone (Deg Vert)	Flux (Lumens)	Percent of Total		Zone (Deg Vert)	Flux (Lumens)	Percent of Total		Zone (Deg Vert)	Flux (Lumens)	Percent of Total
0-10	103.6	2.1%		90-100	0.0	0.0%		0-20	412.7	8.6%
10-20	309.1	6.4%		100-110	0.0	0.0%		0-30	919.3	19.1%
20-30	506.6	10.5%		110-120	0.0	0.0%		0-40	1599	33.2%
30-40	679.6	14.1%		120-130	0.0	0.0%		0-60	3516	72.9%
40-50	852.0	17.7%		130-140	0.0	0.0%		0-80	4769	98.9%
50-60	1065	22.1%		140-150	0.0	0.0%		10-90	4720	97.9%
60-70	828.4	17.2%		150-160	0.0	0.0%		20-50	2038	42.3%
70-80	424.5	8.8%		160-170	0.0	0.0%		40-90	3225	66.9%
80-90	54.6	1.1%		170-180	0.0	0.0%		60-90	1308	27.1%
0-90	4823	100.0%		90-180	0.0	0.0%		0-180	4823	100.0%

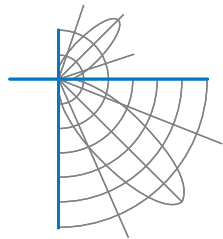


## Report of Test

### LLIA001772-001A

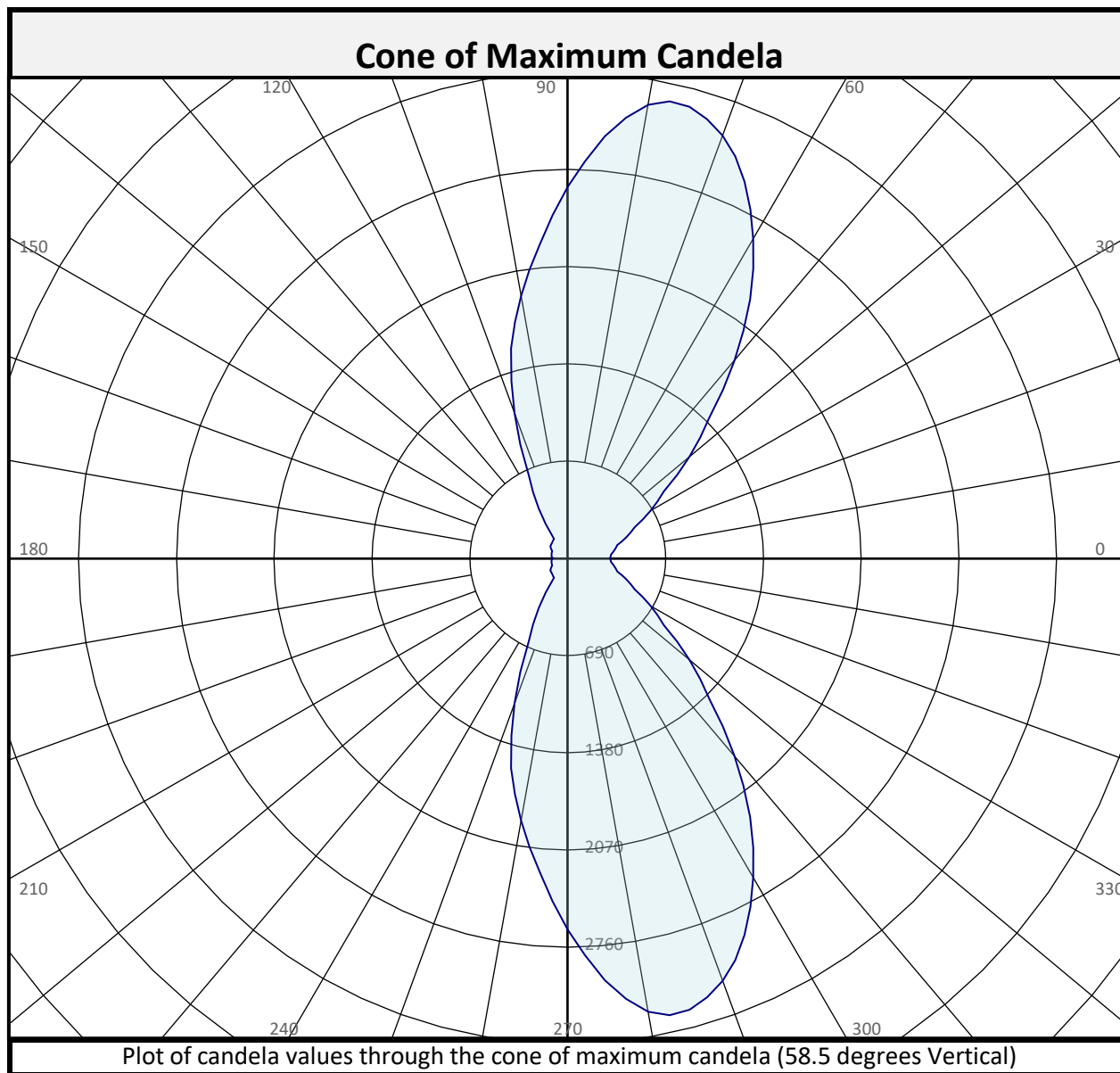


Street and House Side Flux Summary						
	Downward		Upward		Total	
	Lumens	% of Total	Lumens	% of Total	Lumens	% of Total
Street Side	3349.7	69.4%	0.0	0.0%	3349.7	69.4%
House Side	1473.7	30.6%	0.0	0.0%	1473.7	30.6%
Total	4823.4	100.0%	0.0	0.0%	4823.4	100.0%

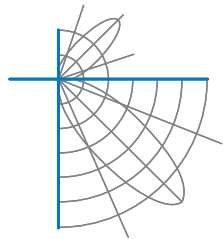


## Report of Test

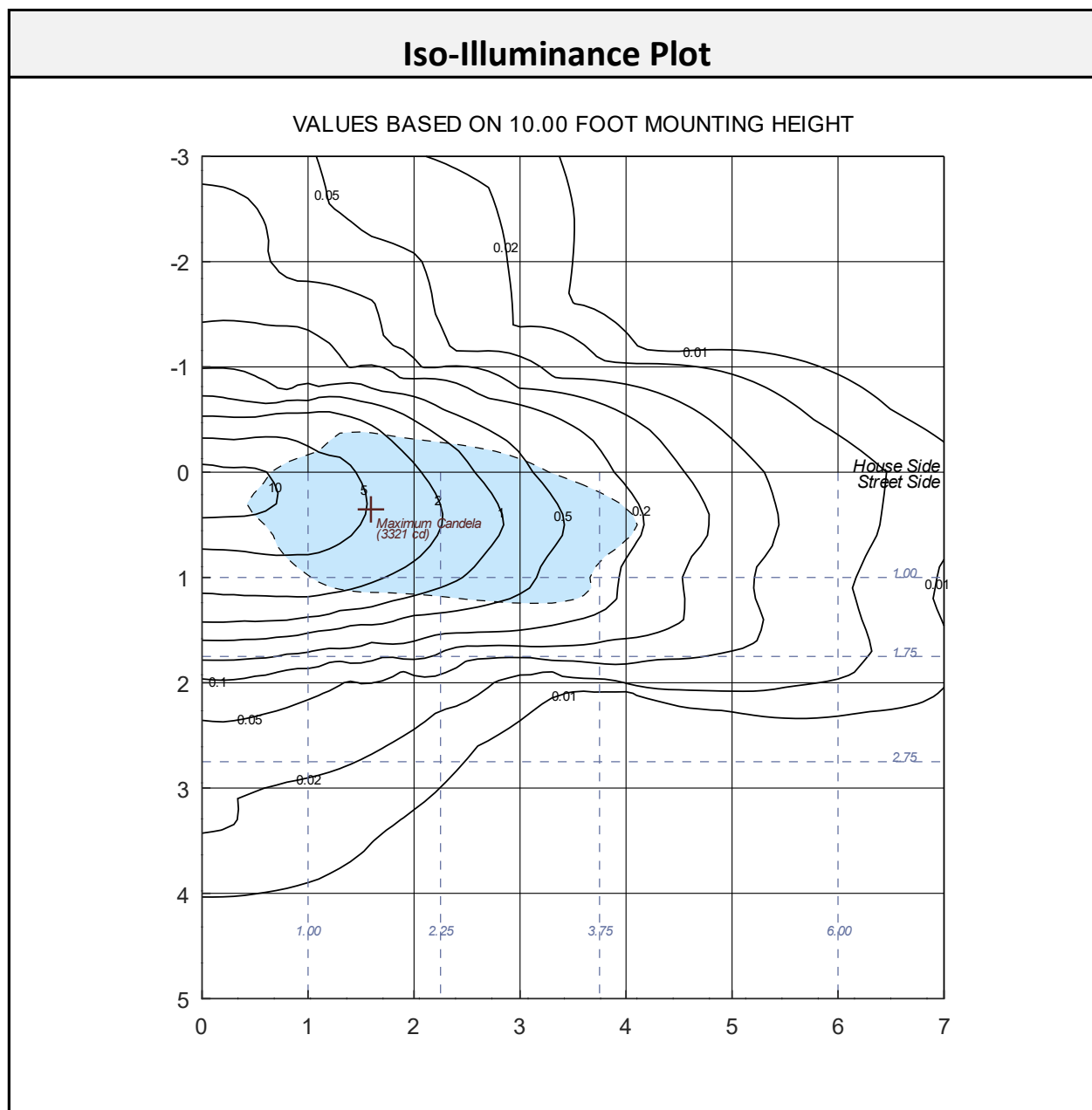
### LLIA001772-001A



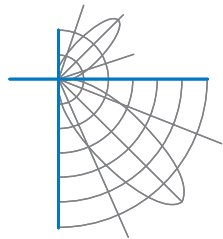
Street and House Side Flux Summary						
	Downward		Upward		Total	
	Lumens	% of Total	Lumens	% of Total	Lumens	% of Total
Street Side	3349.7	69.4%	0.0	0.0%	3349.7	69.4%
House Side	1473.7	30.6%	0.0	0.0%	1473.7	30.6%
Total	4823.4	100.0%	0.0	0.0%	4823.4	100.0%



## Report of Test LLIA001772-001A



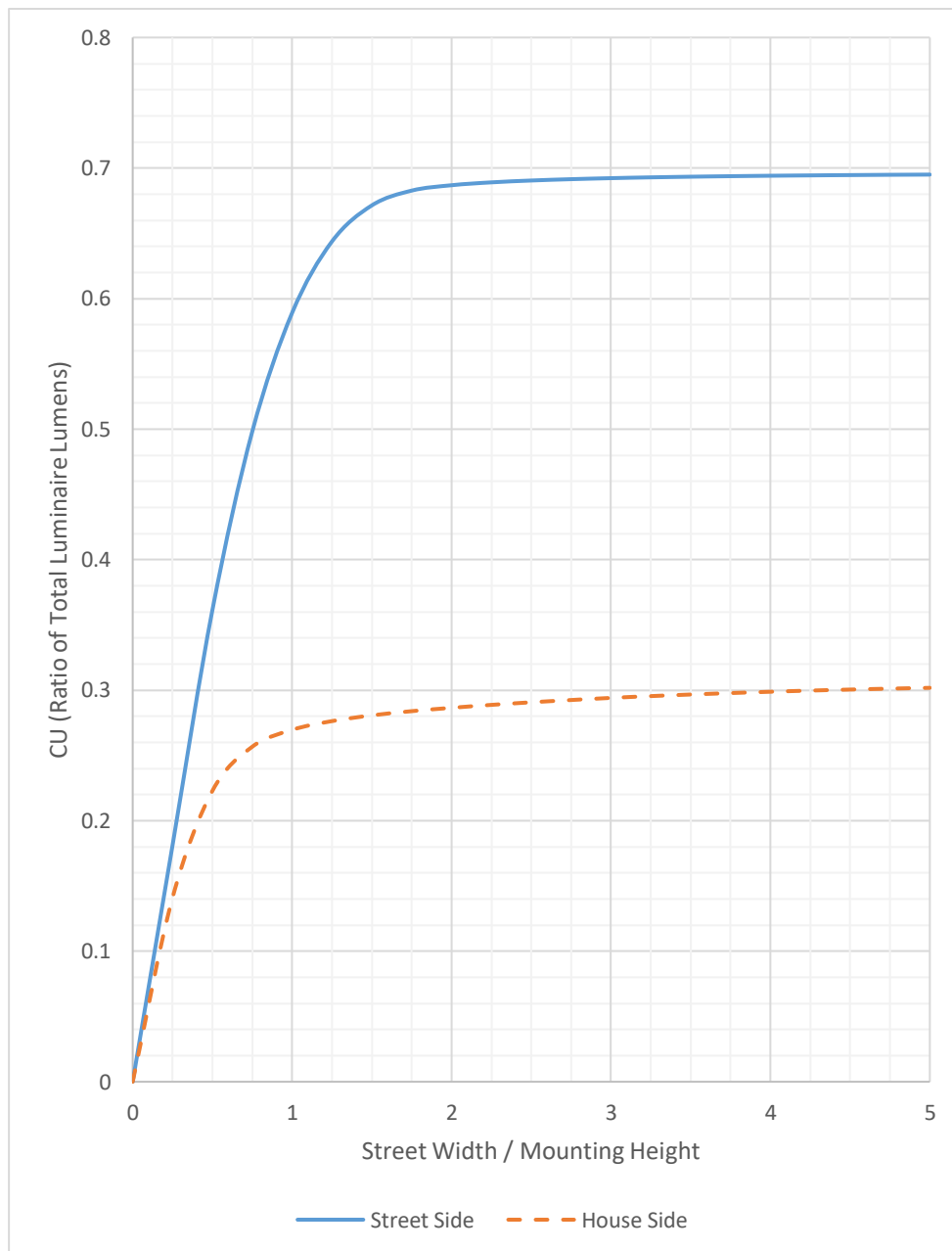
The isofootcandle values shown in the plot above are based on a mounting height of  $h = 10.0$  feet. Grid values show multiples of mounting height. The isoilluminance contour lines are expressed in units of footcandles. The values expressed are based on the direct light from a single unit without the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

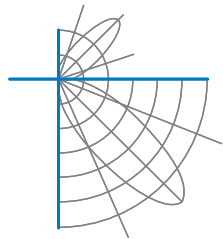


## Report of Test

### LLIA001772-001A

#### Coefficients of Utilization Plot

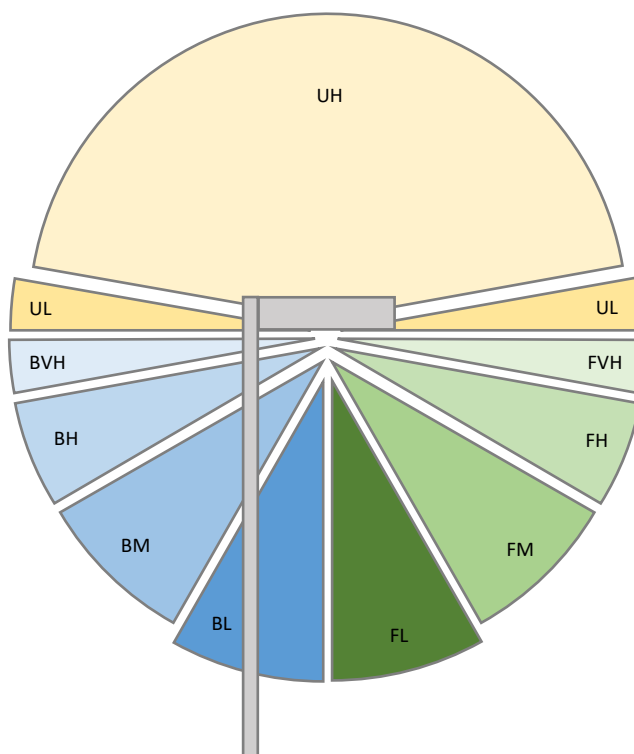




## Report of Test

### LLIA001772-001A

#### LCS Tables and Bug Classification



#### Back Light

BL - Back Low (0°-30°)	341.6 Lm
BM - Back Mid (30°-60°)	736.0 Lm
BH - Back High (60°-80°)	369.7 Lm
BVH - Back Very High (80°-90°)	26.4 Lm

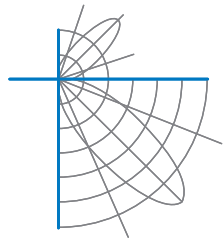
#### Forward Light

FL - Forward Low (0°-30°)	577.7 Lm
FM - Forward Mid (30°-60°)	1860.5 Lm
FH - Forward High (60°-80°)	883.3 Lm
FVH - Forward Very High (80°-90°)	28.2 Lm

#### Uplight

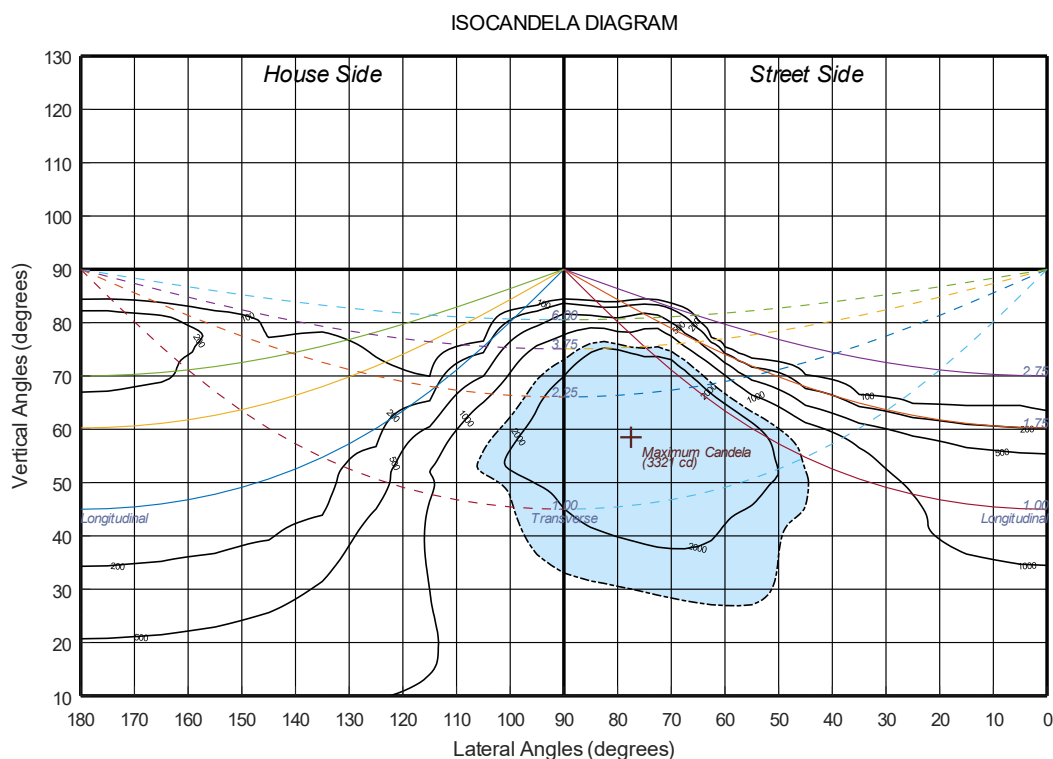
UL - Upward Low (90°-100°)	0.0 Lm
UH - Upward High (100°-180°)	0.0 Lm

BUG Ratings: B1 - U0 - G1

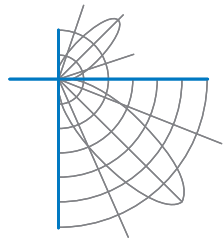


## Report of Test LLIA001772-001A

### Iso-Candela Plot





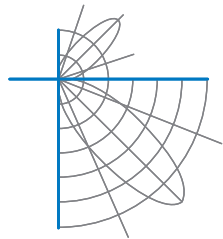


## Report of Test

LLIA001772-001A

Luminous Intensity (Candela) Table

		Lateral (C-Plane) Angles														
		0	5	15	25	35	45	55	57.5	60	62.5	65	67.5	70	72.5	75
Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.	0	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	2.5	1113	1114	1114	1112	1113	1110	1109	1109	1109	1110	1109	1109	1107	1105	1103
	5	1145	1145	1142	1137	1131	1123	1117	1117	1117	1117	1116	1115	1114	1111	1109
	7.5	1213	1213	1207	1194	1177	1156	1136	1133	1131	1129	1126	1125	1122	1120	1119
	10	1284	1283	1276	1260	1239	1210	1174	1167	1160	1154	1149	1145	1140	1137	1134
	12.5	1356	1354	1345	1325	1301	1271	1230	1219	1207	1197	1188	1181	1173	1166	1162
	15	1406	1404	1399	1387	1367	1334	1294	1282	1269	1257	1246	1235	1223	1214	1207
	17.5	1418	1417	1422	1426	1425	1406	1367	1355	1344	1332	1319	1307	1291	1278	1268
	20	1382	1385	1403	1434	1463	1474	1449	1436	1425	1415	1400	1386	1369	1354	1340
	22.5	1306	1310	1337	1399	1475	1528	1534	1524	1513	1501	1487	1474	1456	1439	1421
	25	1246	1249	1274	1339	1451	1563	1609	1606	1599	1590	1575	1562	1544	1525	1507
	27.5	1216	1217	1235	1293	1410	1573	1671	1677	1678	1675	1663	1649	1630	1613	1592
	30	1177	1181	1214	1269	1379	1561	1720	1737	1748	1753	1747	1737	1720	1701	1680
	32.5	1093	1101	1152	1244	1361	1546	1754	1787	1811	1826	1830	1826	1814	1795	1773
	35	976	986	1058	1188	1347	1535	1779	1830	1869	1897	1909	1913	1906	1891	1869
	37.5	893	902	973	1114	1322	1530	1798	1864	1920	1961	1984	1997	1996	1985	1964
	40	840	850	921	1057	1290	1538	1820	1894	1961	2017	2054	2076	2080	2076	2057
	42.5	796	806	886	1045	1290	1577	1862	1936	2008	2071	2120	2150	2162	2162	2150
	45	765	777	863	1034	1295	1652	1969	2034	2097	2155	2202	2237	2254	2255	2246
	47.5	727	739	827	1004	1271	1677	2065	2143	2218	2289	2342	2379	2391	2383	2368
	50	689	698	770	943	1224	1687	2185	2284	2379	2474	2547	2602	2628	2631	2620
	52.5	626	634	688	854	1151	1656	2326	2492	2651	2807	2943	3062	3147	3188	3188
	55	521	531	582	754	1075	1605	2288	2463	2635	2801	2956	3097	3203	3270	3306
	57.5	362	372	436	607	928	1504	2270	2452	2625	2794	2953	3091	3197	3274	3321
	60	212	219	259	376	644	1209	2145	2359	2563	2761	2935	3072	3177	3253	3307
	62.5	111	117	127	179	346	784	1805	2082	2342	2591	2825	3017	3149	3238	3302
	65	94	98	96	98	154	439	1304	1653	1960	2260	2558	2811	3012	3159	3254
	67.5	81	84	84	85	88	209	786	1149	1511	1856	2200	2489	2712	2904	3071
	70	69	70	73	76	79	104	388	632	1027	1422	1823	2160	2367	2513	2703
	72.5	77	75	65	68	70	75	138	242	490	903	1319	1763	2085	2167	2239
	75	81	81	80	61	59	54	68	78	126	404	748	1129	1574	1755	1703
	77.5	65	65	67	64	47	44	51	54	57	84	365	584	996	1272	1206
	80	51	52	57	63	32	38	34	35	37	43	117	298	499	786	819
	82.5	27	27	32	34	21	22	20	20	20	22	48	115	205	325	378
	85	13	12	12	11	11	10	9	8	8	9	14	25	35	45	43
	87.5	2	2	2	3	3	2	2	2	2	2	2	2	2	2	2
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

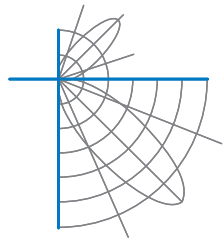


## Report of Test

**LLIA001772-001A**

Luminous Intensity (Candela) Table

		Lateral (C-Plane) Angles														
		77.5	80	82.5	85	90	95	105	115	125	135	145	155	165	175	180
Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.	0	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	2.5	1102	1103	1101	1102	1100	1097	1096	1091	1088	1083	1079	1075	1070	1069	1067
	5	1108	1107	1105	1104	1102	1098	1091	1078	1063	1047	1033	1021	1010	1005	1004
	7.5	1116	1115	1111	1110	1107	1101	1085	1058	1029	998	968	945	928	919	918
	10	1131	1129	1126	1124	1117	1109	1079	1036	987	938	897	863	839	827	826
	12.5	1158	1155	1152	1149	1138	1125	1078	1013	942	876	821	782	757	745	743
	15	1201	1198	1194	1190	1175	1156	1087	992	898	816	755	711	681	667	665
	17.5	1259	1254	1248	1244	1224	1197	1105	981	856	763	691	646	611	595	592
	20	1327	1319	1312	1306	1283	1248	1130	974	825	713	634	580	544	525	522
	22.5	1406	1395	1384	1377	1349	1306	1161	975	803	669	579	512	467	444	441
	25	1488	1473	1461	1453	1420	1367	1197	982	787	628	517	435	388	365	362
	27.5	1572	1556	1541	1531	1493	1430	1236	993	772	585	446	362	316	295	292
	30	1659	1642	1624	1610	1567	1493	1271	1001	759	533	376	296	263	247	245
	32.5	1751	1730	1709	1693	1644	1559	1307	1010	740	476	310	250	227	220	219
	35	1844	1820	1795	1776	1719	1623	1341	1022	716	413	262	220	202	194	193
	37.5	1939	1913	1885	1861	1792	1684	1372	1033	681	349	222	192	181	177	176
	40	2033	2007	1976	1947	1862	1740	1397	1040	636	287	189	174	169	165	165
	42.5	2127	2101	2065	2031	1931	1788	1415	1038	576	226	169	162	157	151	150
	45	2223	2192	2152	2110	1996	1834	1429	1021	501	181	157	152	146	138	136
	47.5	2339	2301	2252	2200	2069	1883	1443	984	417	157	149	147	141	130	127
	50	2591	2542	2484	2422	2258	2030	1509	950	345	149	149	141	136	124	121
	52.5	3127	3034	2923	2812	2571	2293	1734	984	293	150	148	136	127	115	111
	55	3301	3247	3150	3029	2745	2395	1699	841	236	151	148	127	115	107	105
	57.5	3321	3268	3164	3028	2676	2283	1596	712	186	154	149	122	114	109	102
	60	3318	3262	3138	2978	2580	2168	1444	539	149	157	147	118	117	112	103
	62.5	3319	3261	3125	2943	2493	2052	1246	353	132	159	142	113	115	128	126
	65	3288	3228	3074	2871	2377	1944	1006	214	126	157	136	111	139	158	160
	67.5	3167	3130	2962	2736	2204	1800	744	135	121	155	131	116	177	208	211
	70	2891	2952	2808	2563	1991	1607	498	100	115	149	124	131	219	243	247
	72.5	2465	2625	2556	2279	1727	1387	310	80	105	138	117	135	232	281	291
	75	1777	1979	2064	1889	1380	1091	168	62	94	125	109	141	290	337	340
	77.5	1132	1205	1378	1359	1026	754	70	47	82	107	98	180	268	326	327
	80	698	648	732	781	702	425	36	35	66	83	91	151	232	291	290
	82.5	328	263	252	295	358	161	18	23	36	52	68	92	145	190	190
	85	33	26	27	33	39	18	6	8	11	12	6	26	35	48	50
	87.5	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

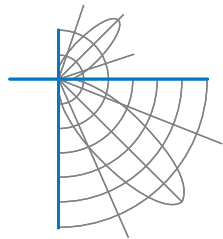


## Report of Test

LLIA001772-001A

Luminous Intensity (Candela) Table

		Lateral (C-Plane) Angles														
		0	5	15	25	35	45	55	57.5	60	62.5	65	67.5	70	72.5	75
Vertical (Gamma) Angles - Data was acquired in 0.5° increments shown.	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

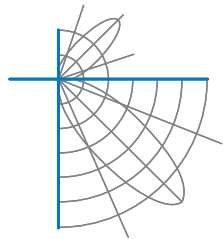


## Report of Test

LLIA001772-001A

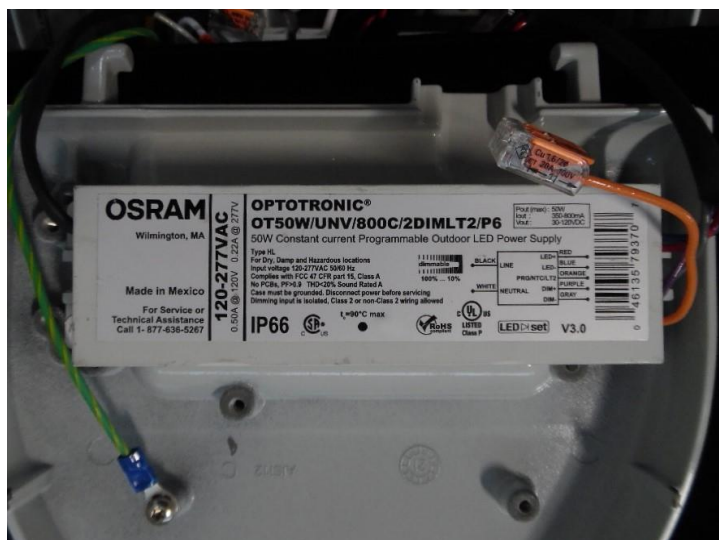
Luminous Intensity (Candela) Table

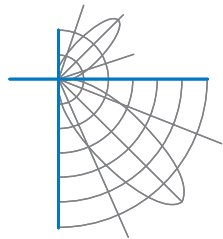
		Lateral (C-Plane) Angles														
		77.5	80	82.5	85	90	95	105	115	125	135	145	155	165	175	180
Vertical (Gamma) Angles - Data was acquired in 0.5° increments shown.	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	92.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	97.5	0	0	0	0	0	0	0	0	0	0	0	0	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 LLIA001772-001A

### Additional Pictures of Test Subject





## Report of Test

### LLIA001772-001A

Test Distance                      9.5 m  
Ambient Temperature          25.1 °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.

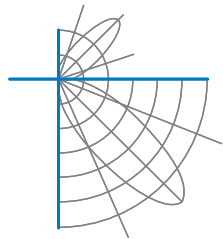
This report is free of erasures and corrections.

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.



## Report of Test

**LLIA001772-001B**

Integrating Sphere Report

Catalog Number: L6-16S-5-X-2ES-W-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.

16 white LEDs

Osram OT50W/UNV/800C/2DIMLT2/P6 LED driver at 600mA, Littlefuse LSP10277SBX3472 surge suppressor



### Performance Summary

Voltage	120.0 Vac
Current	0.2755 A
Power	32.85 W
Frequency	60.00 Hz
Power Factor	0.994
Current THD	6.6 %
Total Luminous Flux	4856.8 lm
Efficacy	147.8 lm/W
Chromaticity (x,y)	(0.4385, 0.4102)
(u',v')	(0.2490, 0.5240)
Duv	0.0022
CCT	3023 K
CRI (Ra)	71
R9	-44
TM-30: Rf	72
TM-30: Rg	93
TM-30: Rcs,h1	-18

Prepared For:

LED Roadway Lighting

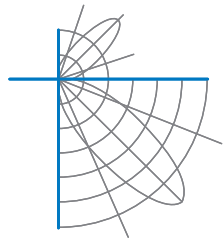
84 Chain Lake Drive

Suite 403

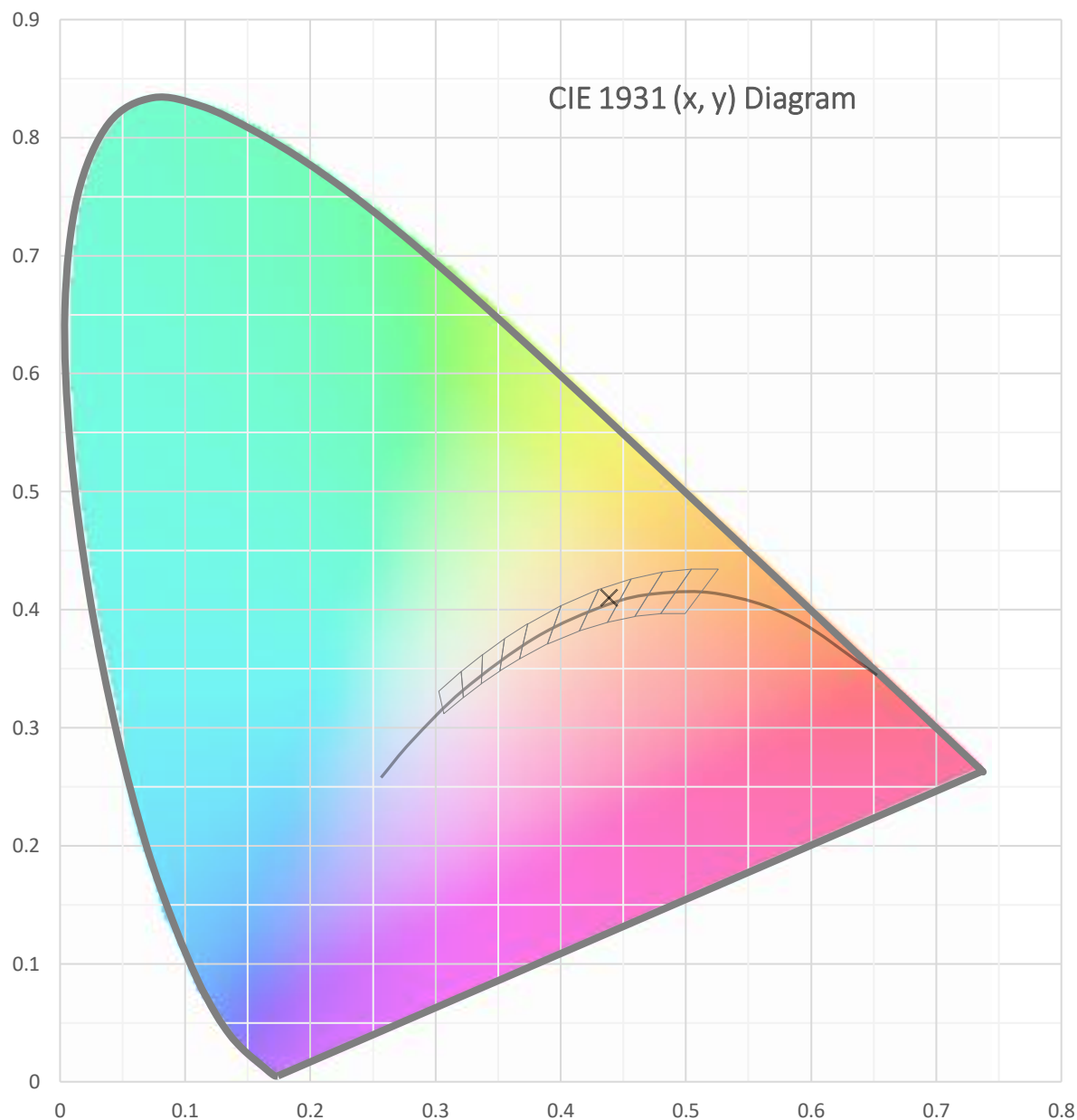
Halifax, Nova Scotia B3S 1A2, Canada

Test date: 05/26/2022

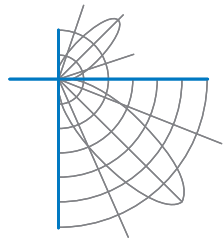
Report date: 05/26/2022



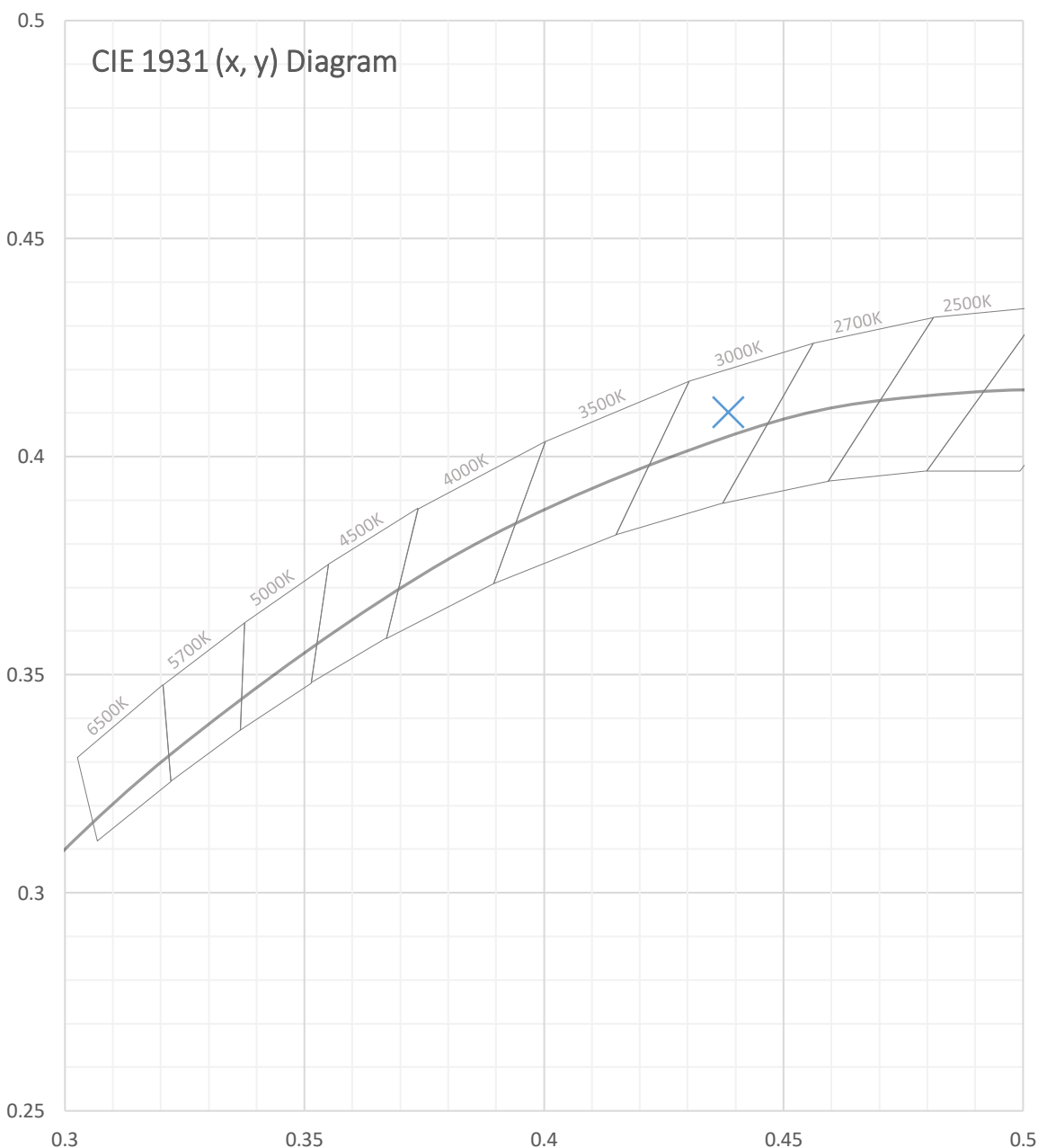
Test Report Number: LLIA001772-001B

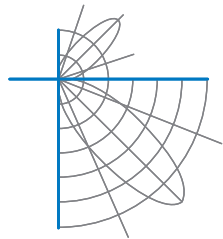






Test Report Number: LLIA001772-001B



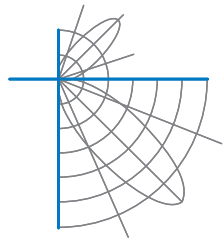


Test Report Number: LLIA001772-001B

Total Radiant Flux	13.57 W
Total Luminous Flux	4856.8 Lm
Chromaticity CIE 1931 (x, y)	(0.4385, 0.4102)
Chromaticity CIE 1976 (u', v')	(0.2490, 0.5240)
Correlated Color Temperature (CCT)	3023 K
Color Rendering Index (Ra)	71
R1	66
R2	81
R3	95
R4	67
R5	66
R6	75
R7	76
R8	39
R9	-44
R10	59
R11	63
R12	53
R13	69
R14	97
TM-30: Rf	72
TM-30: Rg	93
TM-30: Rcs,h1	-18
Distance from Planckian Locus (Duv)	0.0022
Scotopic/Photopic Ratio $\phi$	1.211

**Electrical Data**

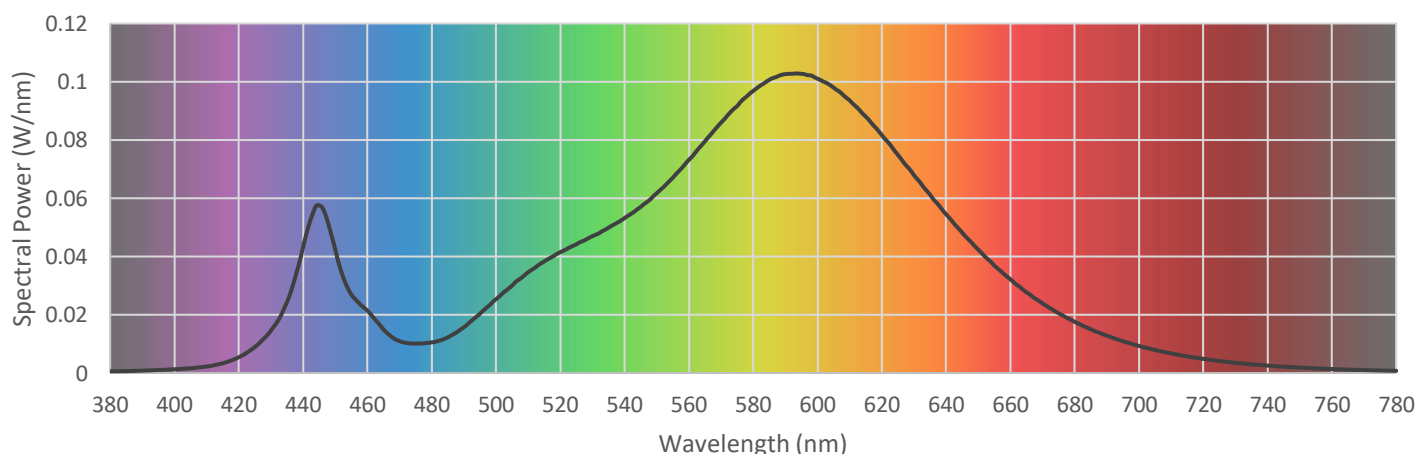
Voltage	120.0 Vac
Current	0.2755 A
Power	32.85 W
Frequency	60.00 Hz
Power Factor	0.994
Current THD	6.6 %

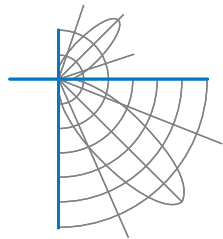


Test Report Number: LLIA001772-001B

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

380	0.000569	480	0.010494	580	0.096823	680	0.017561
385	0.000647	485	0.012224	585	0.100654	685	0.015019
390	0.000804	490	0.015720	590	0.102596	690	0.012816
395	0.001047	495	0.020328	595	0.102693	695	0.010886
400	0.001280	500	0.025344	600	0.101027	700	0.009303
405	0.001624	505	0.030012	605	0.097958	705	0.007905
410	0.002208	510	0.034596	610	0.093590	710	0.006728
415	0.003342	515	0.038308	615	0.088016	715	0.005720
420	0.005433	520	0.041486	620	0.081652	720	0.004844
425	0.008946	525	0.044171	625	0.074892	725	0.004101
430	0.014582	530	0.046966	630	0.067901	730	0.003504
435	0.024431	535	0.049886	635	0.061237	735	0.002972
440	0.043298	540	0.053191	640	0.054485	740	0.002531
445	0.057542	545	0.057019	645	0.048188	745	0.002168
450	0.042376	550	0.061730	650	0.042349	750	0.001848
455	0.026915	555	0.067039	655	0.036884	755	0.001578
460	0.021403	560	0.073188	660	0.032162	760	0.001362
465	0.014912	565	0.079541	665	0.027721	765	0.001166
470	0.010919	570	0.085958	670	0.023887	770	0.000999
475	0.010108	575	0.091620	675	0.020509	775	0.000867
						780	0.000748





Test Report Number: LLIA001772-001B

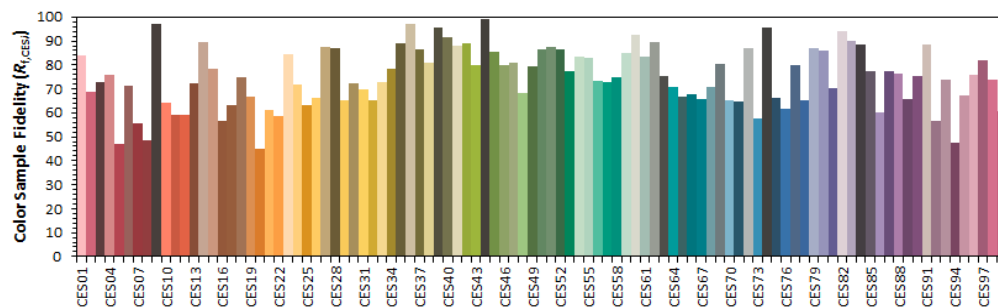
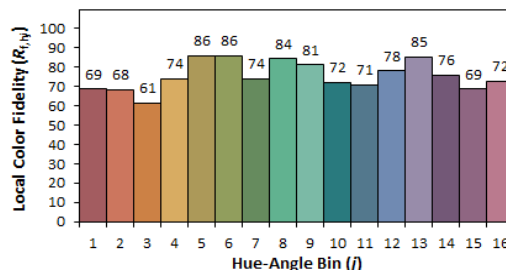
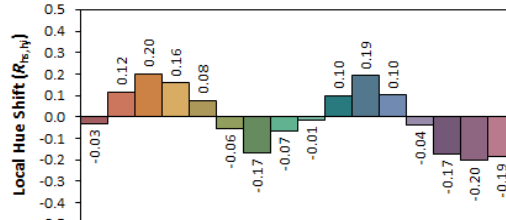
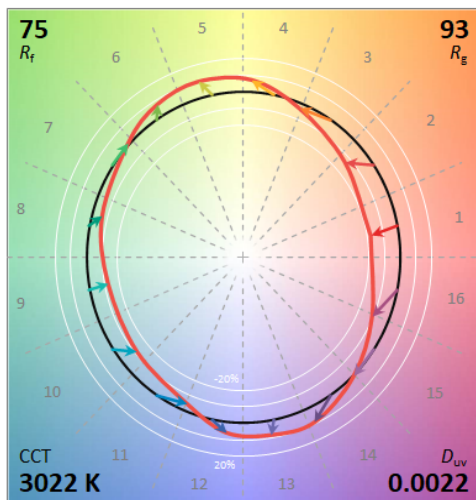
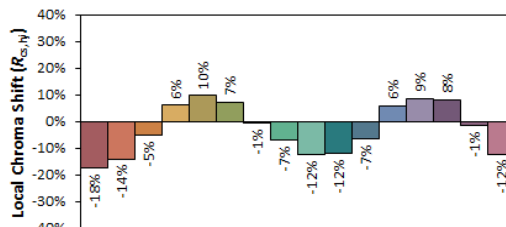
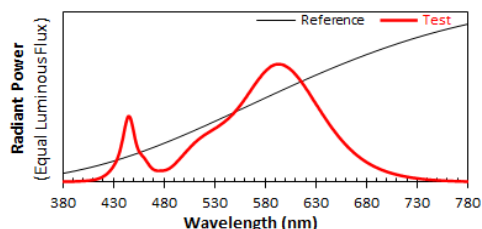
## IES TM-30 Details

Source: LLIA001772-001B

Manufacturer: LED Roadway Lighting

Date: 5/26/2022

Model: L6-16S-5-X-2ES-W-X-XX-3-XX-X-X-X



Notes:

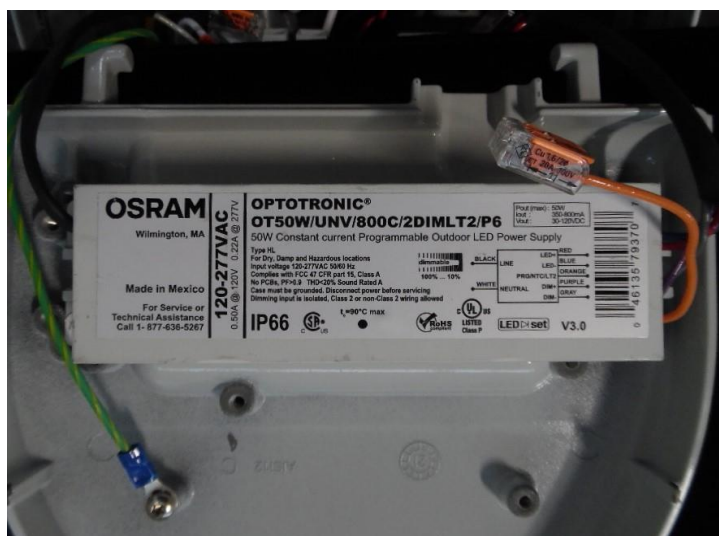
x 0.4385  
y 0.4101  
u' 0.2490  
v' 0.5240

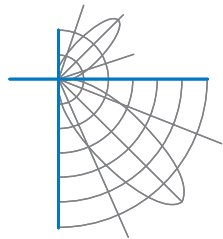
CIE 13.3-1995  
(CRI)  
R<sub>a</sub> 71  
R<sub>g</sub> -44



Test Report Number: LLIA001772-001B

### Additional Pictures of Test Subject





## Test Report Number: LLIA001772-001B

**Test Equipment Configuration:** LightLab International Allentown 2m Integrating Sphere  
Measurements acquired using a Labsphere CDS 2600 spectroradiometer  
Testing was performed using  $4\pi$  geometry

**Test Temperature:** 25.0 °C

**Test Procedure:** Tested in accordance with the applicable sections of:  
LM-79-19, LM-78-20, LM-58-20, ANSI\\_ANSI 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.

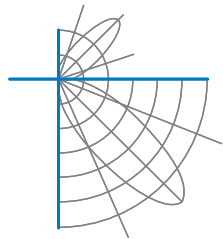
Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

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.

Sphere Report Template V2-17



## Report of Test

**LLIA001772-001C**

### Electrical Test Report

Catalog Number: L6-16S-5-X-2ES-W-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.

16 white LEDs

Osram OT50W/UNV/800C/2DIMLT2/P6 LED driver at 600mA, Littlefuse LSP10277SBX3472 surge suppressor



### Performance Summary

Voltage	277.0 Vac
Current	0.1309 A
Power	32.65 W
Frequency	60.00 Hz
Power Factor	0.901
Current THD	15.0 %
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: 05/26/2022

Report date: 05/26/2022

Electrical Report Template V1-4