

Report of Test

LLIA001878-001A

Roadway/Area Light Distribution Photometry Test Report

Catalog Number: L6 16S 5 X G2S T X XX 3 X X X

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

16 white LEDs.

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

Client states LED string current at 400mA



Prepared For:

LED Roadway Lighting

84 Chain Lake Drive

Suite 403

Halifax, Nova Scotia B3S 1A2, Canada

Performance Summary

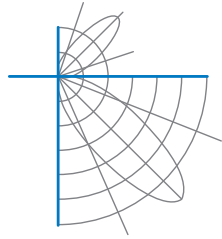
Input Voltage	120.0 Vac	Luminous Flux	5749.1 Lumens
Input Current	0.3719 A	Total Efficacy	131.0 Lm/W
Input Power	43.88 W		
Frequency	60.00 Hz	Roadway Throw	Short
Power Factor	0.983	Roadway Type	Type II
Current THD	4.7 %	IES BUG Rating	B2 - U0 - G1

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

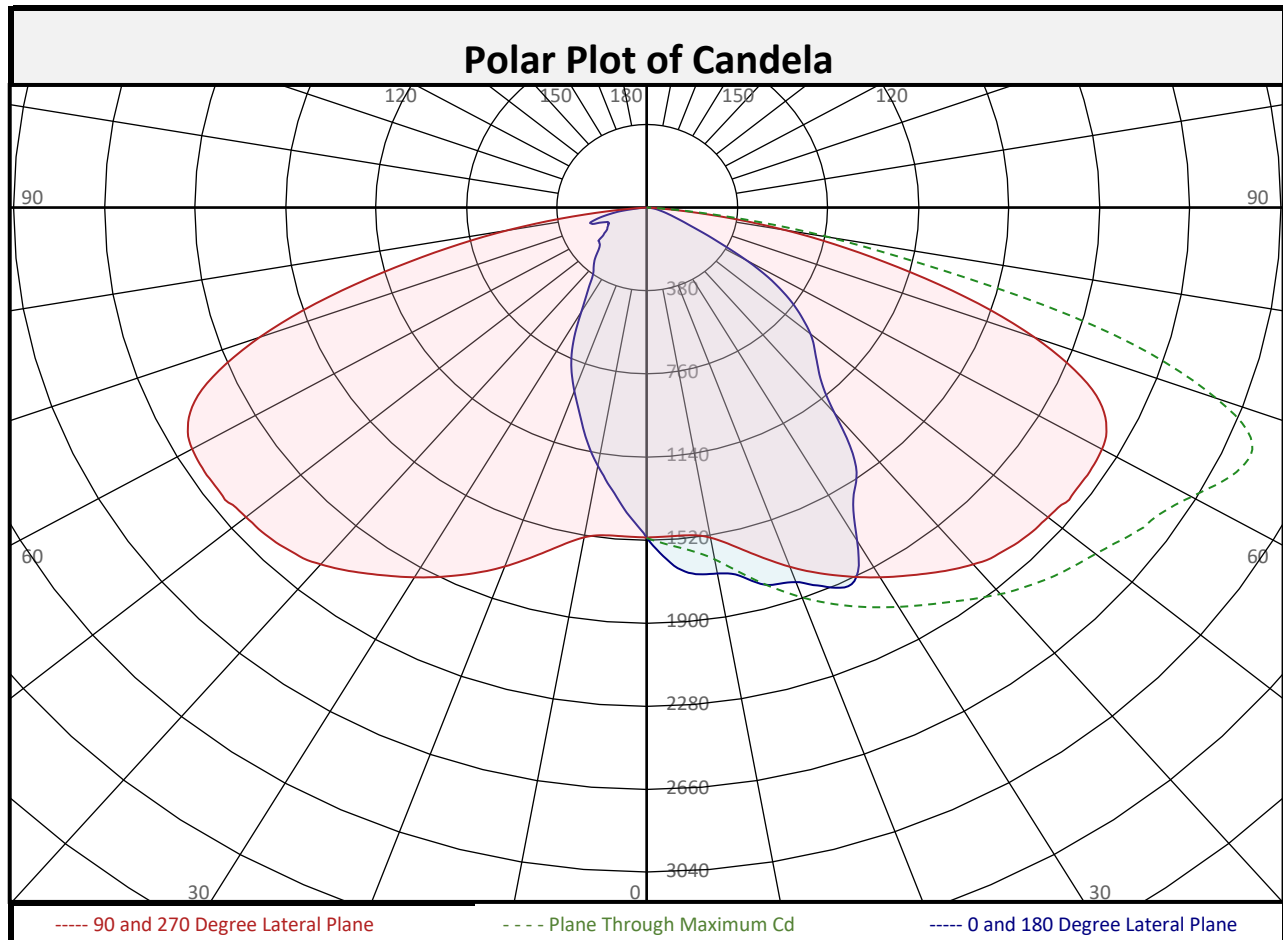
Test date: 09/01/2022

Report date: 09/02/2022

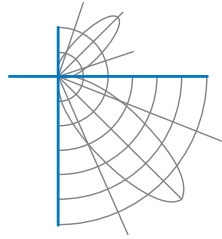
Signed: _____



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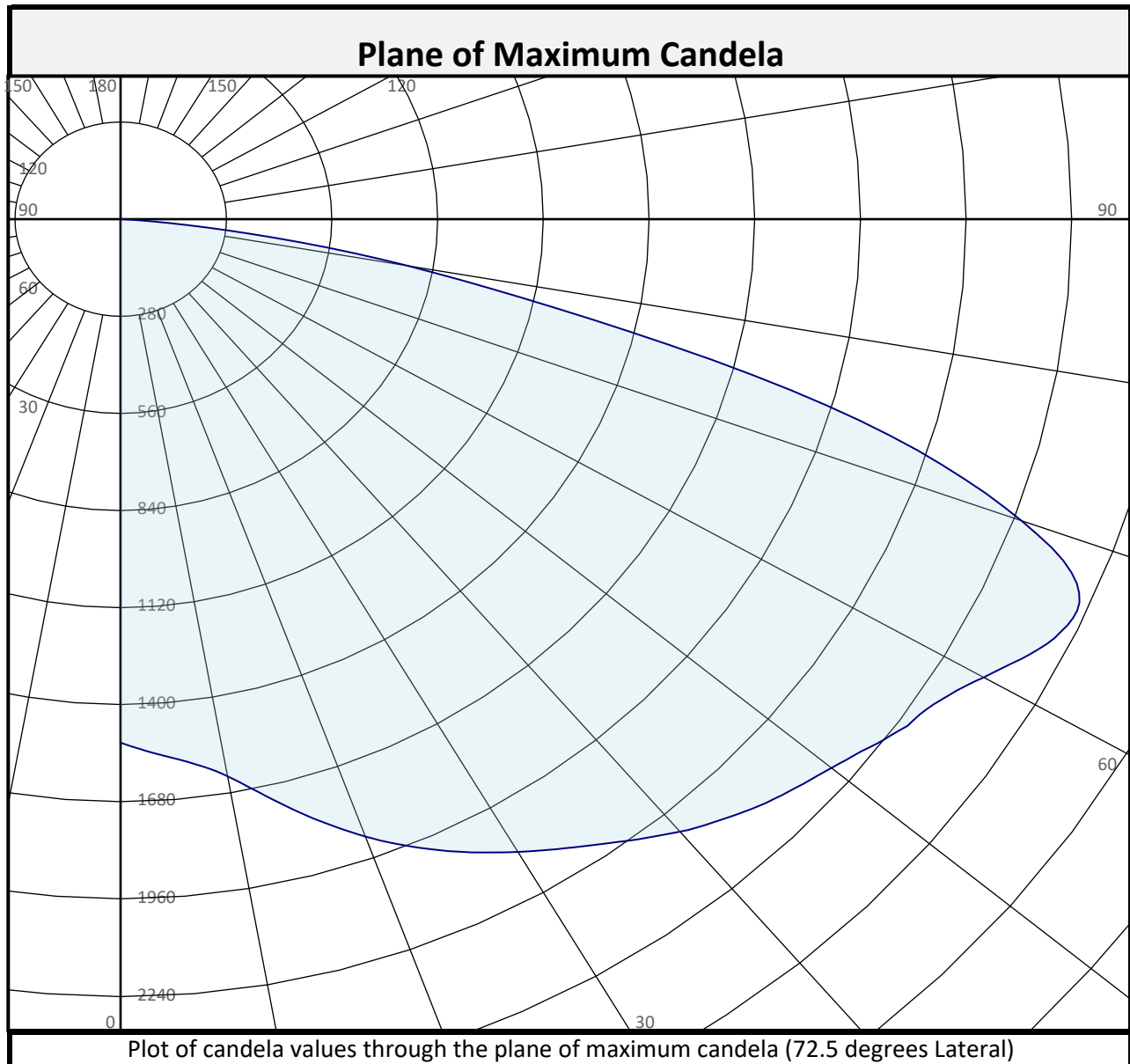


Zonal Flux Summary										
Zone (Deg Vert)	Flux (Lumens)	Percent of Total		Zone (Deg Vert)	Flux (Lumens)	Percent of Total		Zone (Deg Vert)	Flux (Lumens)	Percent of Total
0-10	143.5	2.5%		90-100	0.0	0.0%		0-20	569.5	9.9%
10-20	426.1	7.4%		100-110	0.0	0.0%		0-30	1285	22.4%
20-30	715.1	12.4%		110-120	0.0	0.0%		0-40	2212	38.5%
30-40	927.8	16.1%		120-130	0.0	0.0%		0-60	4306	74.9%
40-50	1032	18.0%		130-140	0.0	0.0%		0-80	5691	99.0%
50-60	1062	18.5%		140-150	0.0	0.0%		10-90	5606	97.5%
60-70	926.8	16.1%		150-160	0.0	0.0%		20-50	2675	46.5%
70-80	458.5	8.0%		160-170	0.0	0.0%		40-90	3537	61.5%
80-90	58.2	1.0%		170-180	0.0	0.0%		60-90	1443	25.1%
0-90	5749	100.0%		90-180	0.0	0.0%		0-180	5749	100.0%

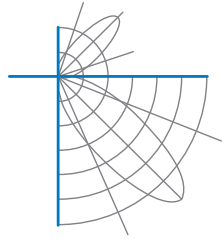


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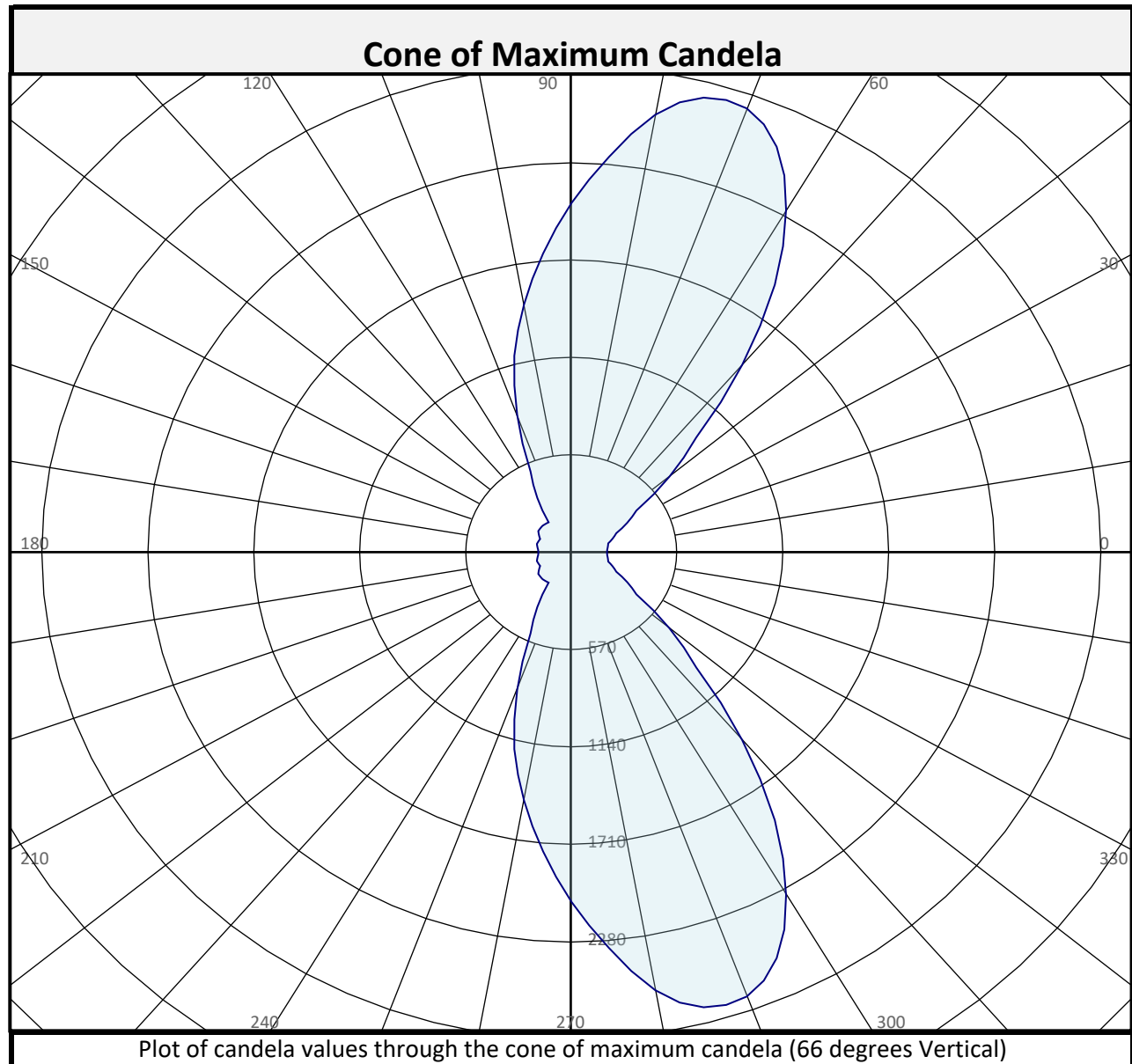
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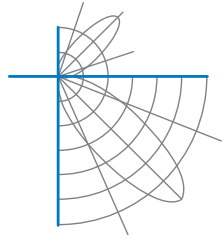
Street and House Side Flux Summary						
	Downward		Upward		Total	
	Lumens	% of Total	Lumens	% of Total	Lumens	% of Total
Street Side	3853.4	67.0%	0.0	0.0%	3853.4	67.0%
House Side	1895.7	33.0%	0.0	0.0%	1895.7	33.0%
Total	5749.1	100.0%	0.0	0.0%	5749.1	100.0%



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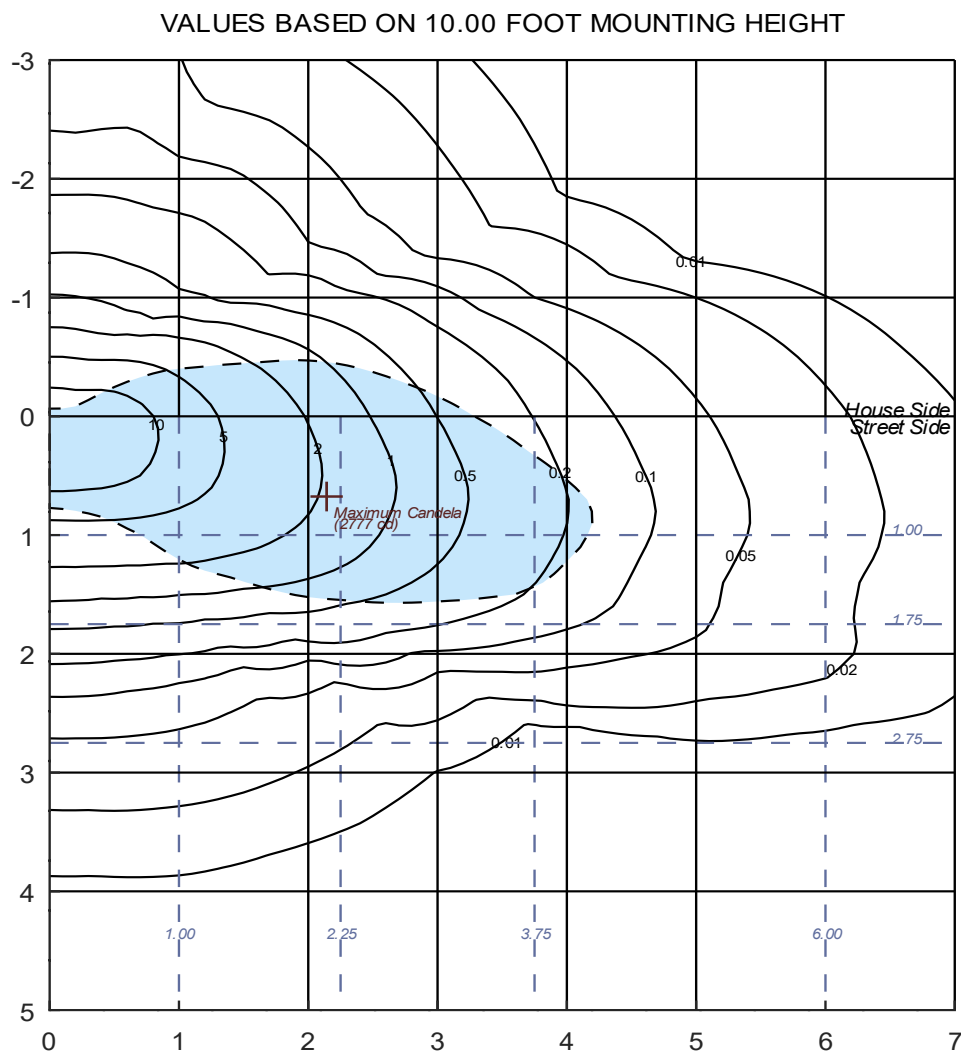


Street and House Side Flux Summary						
	Downward		Upward		Total	
	Lumens	% of Total	Lumens	% of Total	Lumens	% of Total
Street Side	3853.4	67.0%	0.0	0.0%	3853.4	67.0%
House Side	1895.7	33.0%	0.0	0.0%	1895.7	33.0%
Total	5749.1	100.0%	0.0	0.0%	5749.1	100.0%

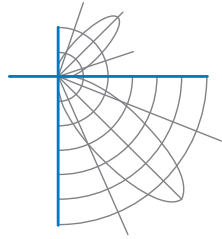


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Iso-Illuminance Plot

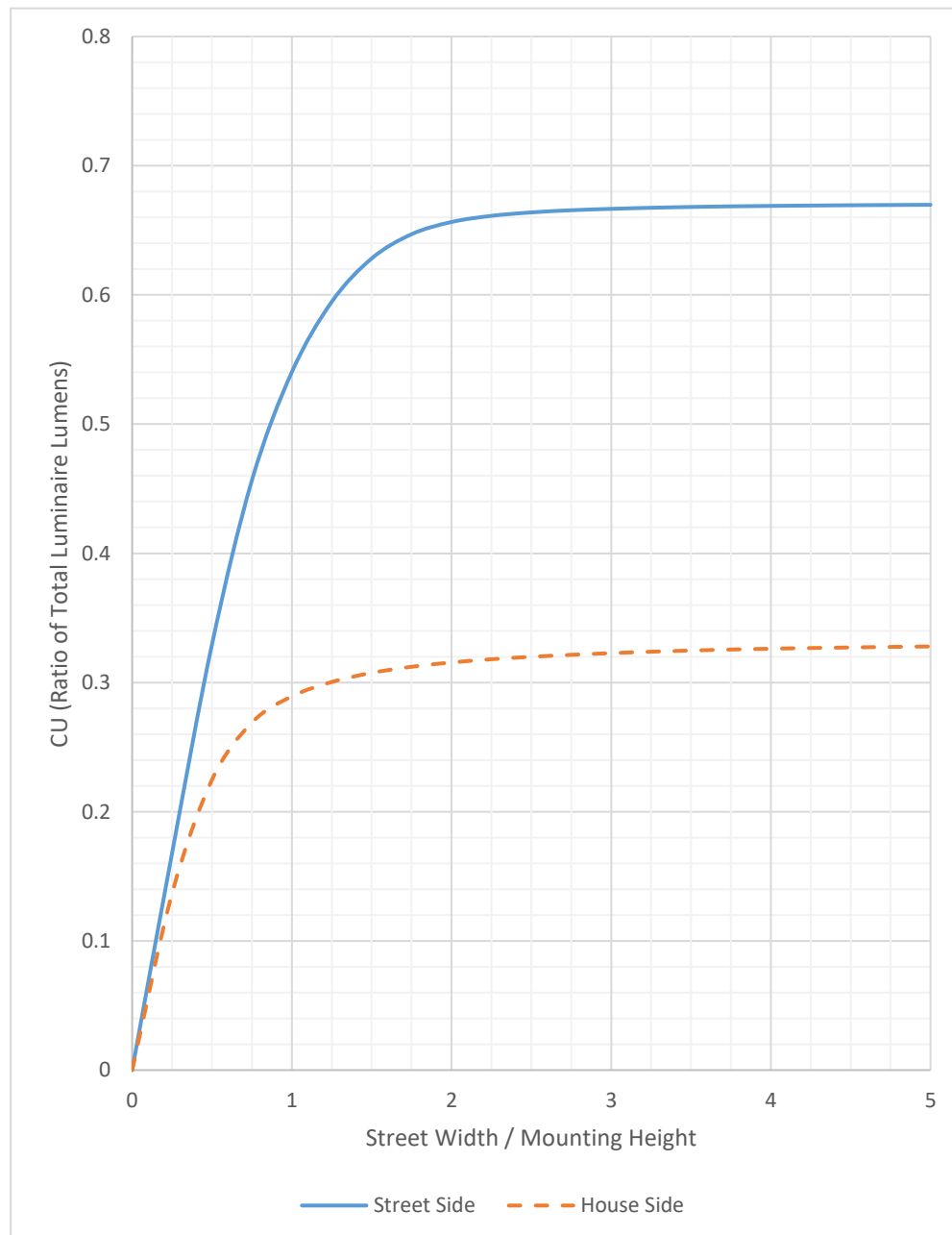


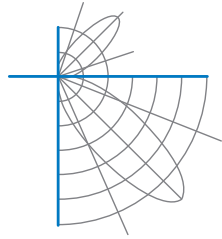
The isofootcandle values shown in the plot above are based on a mounting height of $h = 10.0$ feet. Grid values show multiples of mounting height. The isoilluminance contour lines are expressed in units of footcandles. The values expressed are based on the direct light from a single unit without the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



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Coefficients of Utilization Plot

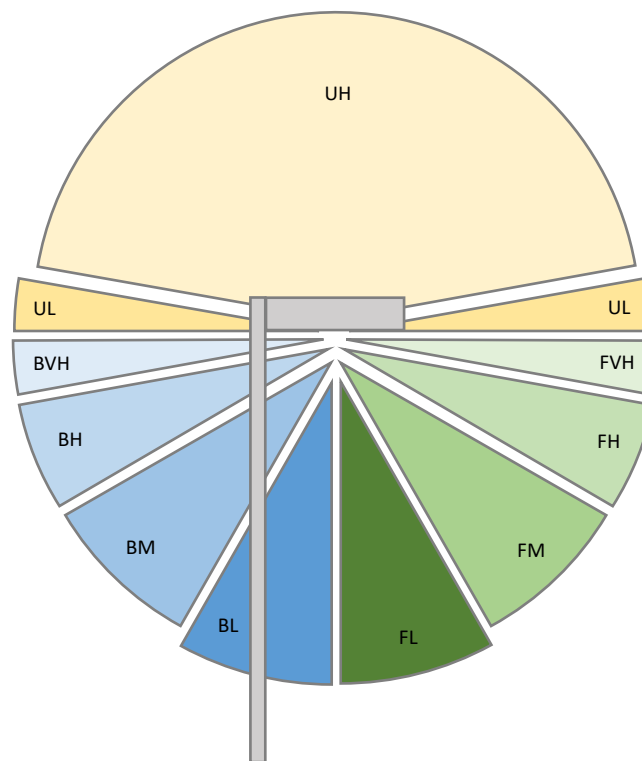




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LCS Tables and Bug Classification



Back Light

BL - Back Low (0°-30°)	505.3 Lm
BM - Back Mid (30°-60°)	959.6 Lm
BH - Back High (60°-80°)	409.4 Lm
BVH - Back Very High (80°-90°)	21.4 Lm

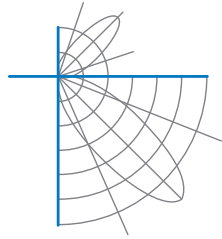
Forward Light

FL - Forward Low (0°-30°)	779.3 Lm
FM - Forward Mid (30°-60°)	2061.4 Lm
FH - Forward High (60°-80°)	975.8 Lm
FVH - Forward Very High (80°-90°)	36.8 Lm

Uplight

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

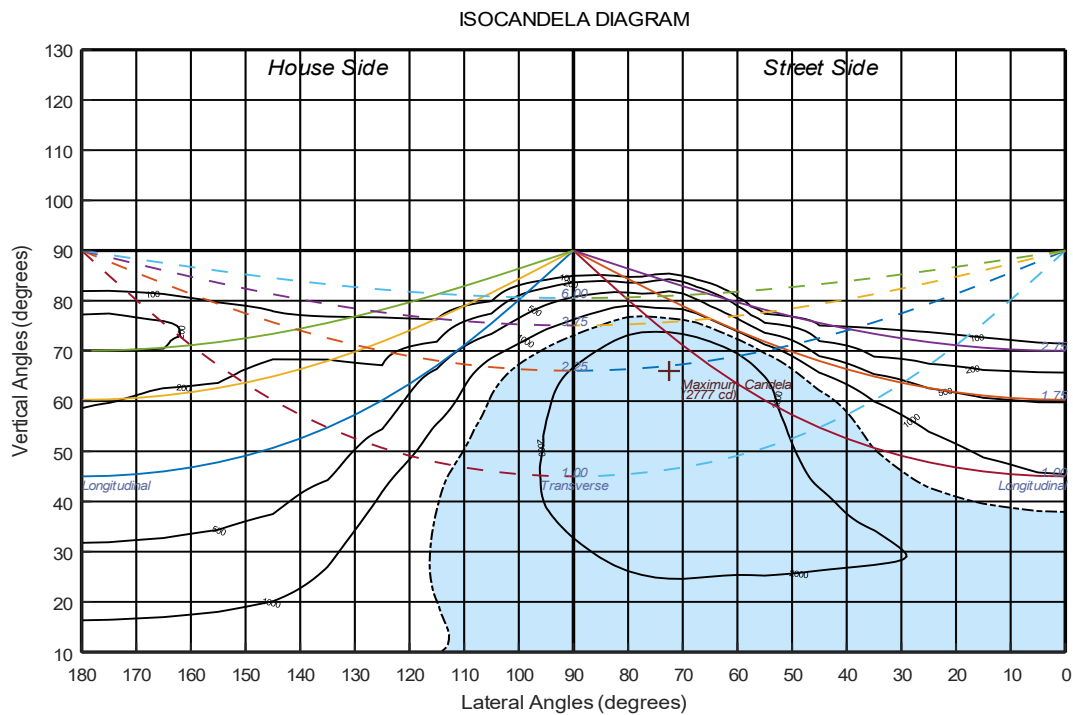
BUG Ratings: B2 - U0 - G1




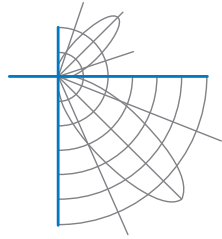
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Iso-Candela Plot



 Half-max Candela Contour Line

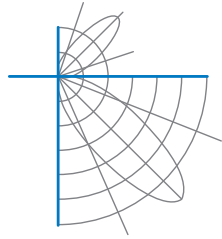


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Luminous Intensity (Candela) Table

		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	1509	1509	1509	1509	1509	1509	1509	1509	1509	1509	1509	1509	1509	1509	1509
	2.5	1595	1594	1592	1587	1581	1570	1557	1555	1552	1548	1545	1540	1537	1535	1530
	5	1662	1662	1658	1653	1643	1625	1603	1598	1592	1586	1580	1572	1565	1559	1551
	7.5	1691	1689	1688	1685	1681	1668	1649	1642	1634	1626	1617	1608	1598	1588	1577
	10	1698	1698	1697	1695	1699	1696	1689	1685	1680	1674	1666	1655	1644	1631	1618
	12.5	1718	1717	1712	1707	1713	1721	1731	1732	1732	1729	1723	1715	1705	1692	1678
	15	1774	1771	1762	1747	1741	1752	1774	1780	1784	1785	1784	1779	1771	1761	1747
	17.5	1805	1804	1804	1804	1800	1799	1821	1828	1836	1842	1843	1842	1838	1829	1818
	20	1822	1820	1820	1831	1856	1867	1873	1879	1886	1894	1898	1900	1899	1894	1886
	22.5	1870	1870	1867	1865	1892	1934	1930	1933	1938	1945	1951	1954	1955	1953	1948
	25	1917	1918	1919	1923	1942	1979	1994	1992	1991	1995	2000	2004	2008	2008	2003
	27.5	1902	1905	1936	1972	2003	2026	2054	2052	2048	2046	2048	2051	2055	2059	2056
	30	1763	1770	1845	1958	2052	2087	2104	2107	2105	2101	2100	2100	2103	2107	2107
	32.5	1609	1616	1685	1847	2050	2135	2154	2156	2155	2152	2150	2149	2151	2154	2155
	35	1529	1536	1583	1703	1972	2169	2205	2206	2205	2202	2200	2199	2199	2202	2204
	37.5	1417	1429	1504	1613	1849	2155	2256	2262	2260	2257	2256	2254	2254	2254	2254
	40	1221	1237	1359	1528	1747	2095	2295	2310	2319	2317	2315	2313	2311	2306	2303
	42.5	1084	1095	1201	1403	1667	2006	2319	2345	2363	2369	2363	2359	2356	2351	2345
	45	1010	1020	1097	1284	1578	1924	2316	2368	2394	2409	2410	2404	2401	2393	2382
	47.5	953	961	1033	1191	1485	1862	2288	2366	2415	2437	2447	2443	2437	2427	2414
	50	894	901	967	1119	1402	1812	2243	2340	2413	2455	2474	2477	2471	2461	2445
	52.5	816	819	886	1048	1327	1771	2200	2306	2397	2463	2496	2510	2510	2502	2489
	55	729	727	786	957	1246	1729	2167	2276	2380	2465	2522	2550	2555	2547	2531
	57.5	622	620	669	837	1142	1665	2135	2245	2353	2448	2521	2565	2582	2580	2568
	60	485	487	540	694	996	1550	2122	2238	2352	2456	2545	2610	2640	2643	2628
	62.5	331	334	372	505	804	1353	2104	2250	2383	2500	2602	2677	2713	2718	2701
	65	222	222	245	321	545	1086	1991	2183	2356	2511	2630	2717	2763	2771	2750
	67.5	159	161	170	198	289	721	1748	2004	2222	2413	2561	2659	2720	2745	2727
	70	117	119	131	147	157	368	1287	1628	1912	2143	2320	2436	2507	2542	2545
	72.5	89	91	102	114	121	171	729	1033	1355	1635	1877	2049	2159	2215	2223
	75	68	69	78	86	95	101	270	499	749	1024	1309	1533	1652	1733	1765
	77.5	51	52	59	61	70	74	97	169	359	528	754	1000	1137	1177	1225
	80	38	39	46	42	45	52	58	69	133	250	360	547	734	772	738
	82.5	23	24	30	28	27	31	34	38	53	93	155	224	347	414	370
	85	11	11	13	13	14	15	18	19	23	30	44	64	98	131	117
	87.5	4	5	5	5	5	5	6	6	7	7	7	8	8	8	9
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

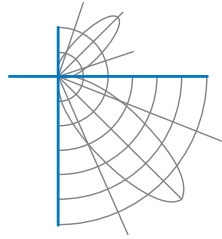


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Luminous Intensity (Candela) Table

		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	1509	1509	1509	1509	1509	1509	1509	1509	1509	1509	1509	1509	1509	1509	1509
	2.5	1524	1521	1519	1514	1506	1500	1487	1472	1462	1451	1444	1437	1431	1427	1425
	5	1544	1537	1529	1521	1506	1493	1466	1440	1418	1399	1380	1364	1353	1348	1346
	7.5	1566	1556	1545	1533	1511	1491	1450	1410	1374	1340	1310	1292	1280	1272	1270
	10	1605	1591	1575	1562	1532	1503	1444	1384	1328	1288	1250	1224	1208	1199	1198
	12.5	1662	1646	1626	1609	1573	1535	1457	1369	1296	1235	1191	1159	1139	1127	1124
	15	1731	1712	1690	1669	1627	1580	1482	1367	1269	1190	1131	1088	1062	1047	1044
	17.5	1802	1783	1759	1734	1686	1633	1511	1377	1252	1146	1067	1015	983	967	965
	20	1873	1854	1829	1802	1746	1687	1545	1387	1239	1104	1003	945	915	899	897
	22.5	1936	1919	1894	1864	1801	1736	1578	1402	1226	1065	944	884	853	834	831
	25	1992	1976	1951	1920	1853	1780	1608	1412	1211	1029	889	822	786	763	758
	27.5	2045	2030	2005	1974	1903	1825	1632	1418	1195	992	832	750	703	673	667
	30	2099	2082	2056	2025	1951	1868	1653	1418	1176	953	763	663	601	566	562
	32.5	2149	2132	2106	2073	1997	1908	1674	1415	1154	905	683	564	507	481	478
	35	2198	2180	2153	2121	2042	1946	1690	1407	1126	845	589	480	437	418	415
	37.5	2245	2227	2201	2169	2088	1982	1702	1394	1090	771	500	414	383	374	372
	40	2294	2275	2244	2213	2129	2013	1704	1376	1043	679	422	365	355	352	350
	42.5	2334	2316	2284	2248	2161	2031	1697	1352	986	574	365	339	331	329	329
	45	2367	2345	2314	2277	2180	2039	1678	1317	912	470	331	318	307	301	300
	47.5	2395	2370	2335	2294	2193	2042	1648	1257	810	388	313	297	283	275	274
	50	2422	2391	2350	2304	2199	2030	1606	1188	690	333	298	277	272	262	260
	52.5	2462	2427	2381	2330	2215	2023	1568	1113	581	303	286	272	269	257	256
	55	2501	2458	2403	2345	2215	2007	1532	1023	476	285	278	263	260	239	230
	57.5	2544	2499	2437	2368	2214	1982	1477	899	387	271	264	247	236	218	209
	60	2601	2547	2472	2389	2205	1948	1420	777	321	260	251	223	216	197	193
	62.5	2662	2594	2501	2395	2173	1896	1349	674	274	245	238	206	200	189	187
	65	2698	2609	2489	2355	2095	1807	1246	574	230	229	224	192	190	181	178
	67.5	2667	2559	2411	2247	1944	1660	1090	434	196	207	207	175	197	175	177
	70	2500	2389	2230	2051	1728	1449	858	282	169	181	184	155	197	198	198
	72.5	2191	2096	1940	1761	1458	1198	588	178	145	152	152	130	217	245	245
	75	1762	1691	1553	1401	1149	918	358	120	119	123	121	143	219	240	237
	77.5	1268	1263	1175	1058	857	654	197	83	90	92	102	132	172	199	195
	80	770	815	790	713	584	428	97	57	59	60	77	95	126	147	145
	82.5	331	349	376	369	314	205	44	36	34	36	41	53	70	83	81
	85	86	83	99	109	97	62	21	18	16	15	14	18	21	26	26
	87.5	9	9	9	9	9	9	8	6	4	1	0	0	0	0	0
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

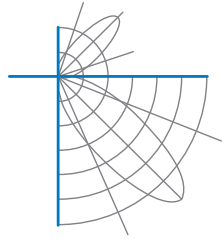


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Luminous Intensity (Candela) Table

		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.	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

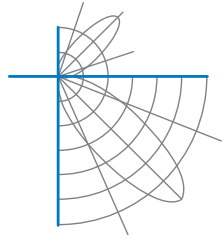


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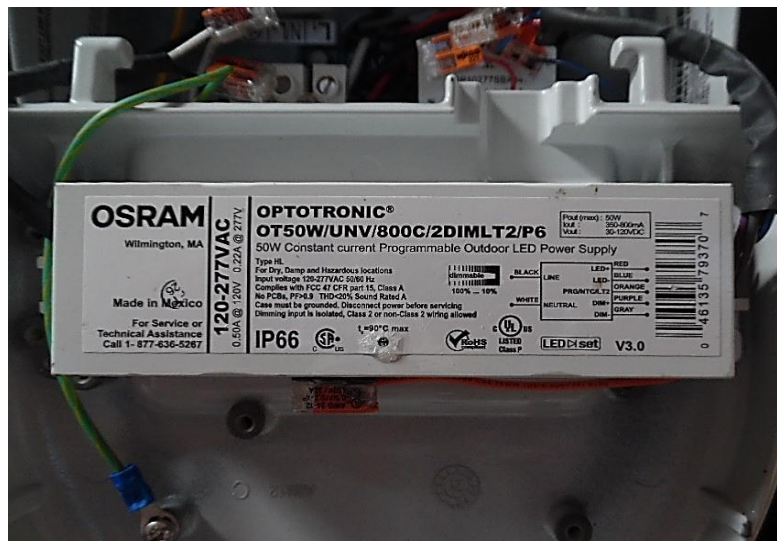
Luminous Intensity (Candela) Table

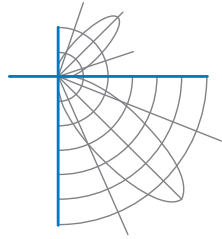
		Lateral (C-Plane) Angles														
		77.5	80	82.5	85	90	95	105	115	125	135	145	155	165	175	180
Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	92.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	97.5	0	0	0	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 LLIA001878-001A

Additional Pictures of Test Subject





Report of Test

LLIA001878-001A

Test Distance 9.5 m
Ambient Temperature 25.3 °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.

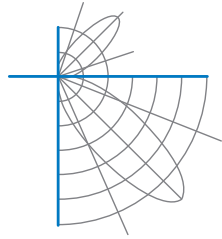
This report is free of erasures and corrections.

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

LLIA001878-001B

Integrating Sphere Report

Catalog Number: L6 16S 5 X G2S T X XX 3 X X X

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

16 white LEDs.

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

Client states LED string current at 400mA



Performance Summary

Voltage	120.0 Vac
Current	0.3705 A
Power	43.88 W
Frequency	59.99 Hz
Power Factor	0.987
Current THD	4.5 %
Total Luminous Flux	5806.8 lm
Efficacy	132.3 lm/W
Chromaticity (x,y)	(0.4373, 0.4058)
(u',v')	(0.2501, 0.5221)
Duv	0.0006
CCT	3008 K
CRI (Ra)	71
R9	-44
TM-30: Rf	71
TM-30: Rg	94
TM-30: Rcs,h1	-18

Prepared For:

LED Roadway Lighting

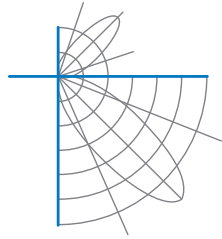
84 Chain Lake Drive

Suite 403

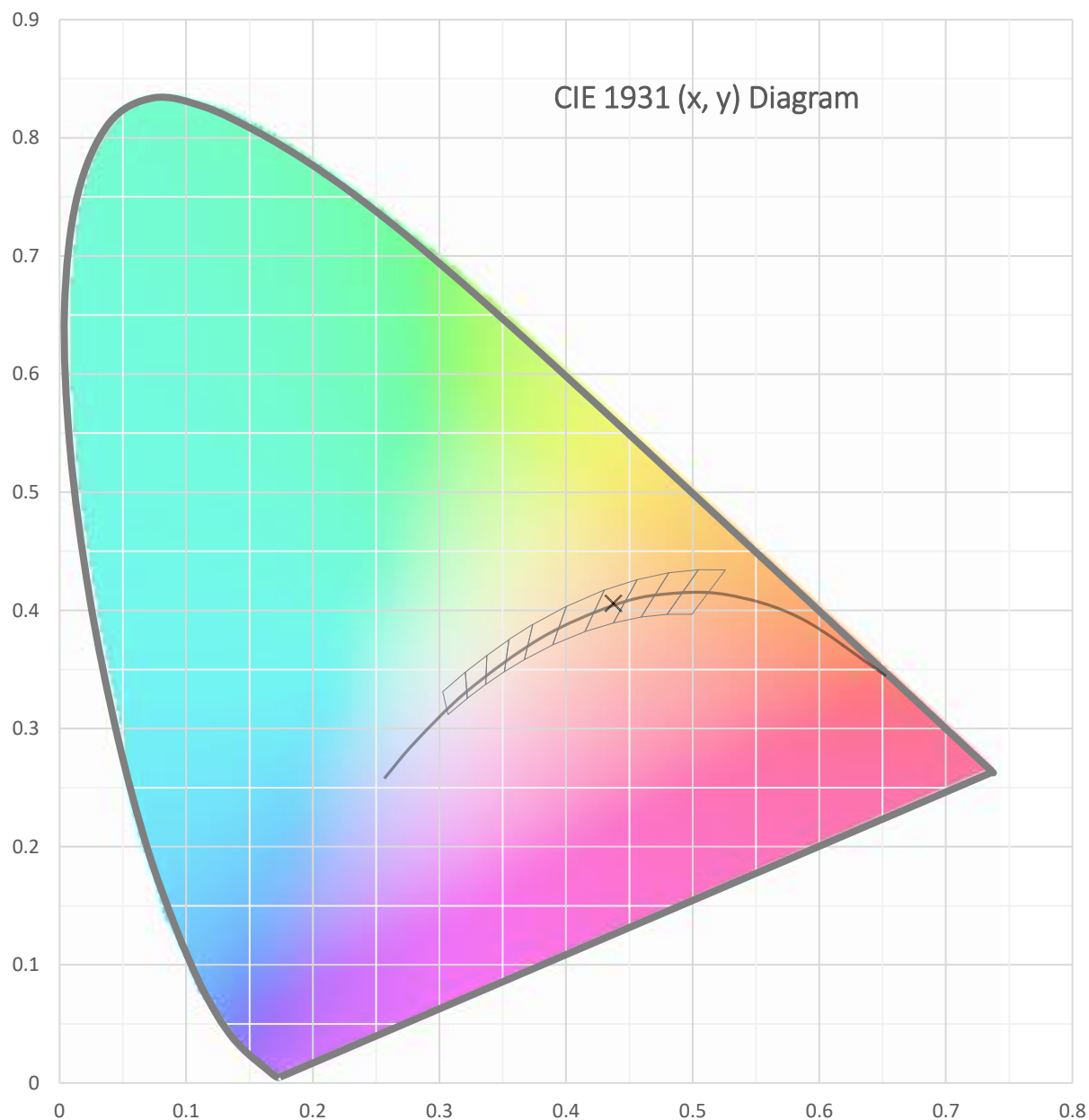
Halifax, Nova Scotia B3S 1A2, Canada

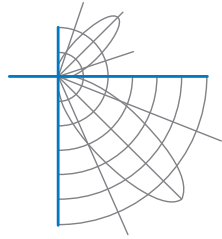
Test date: 09/01/2022

Report date: 09/02/2022

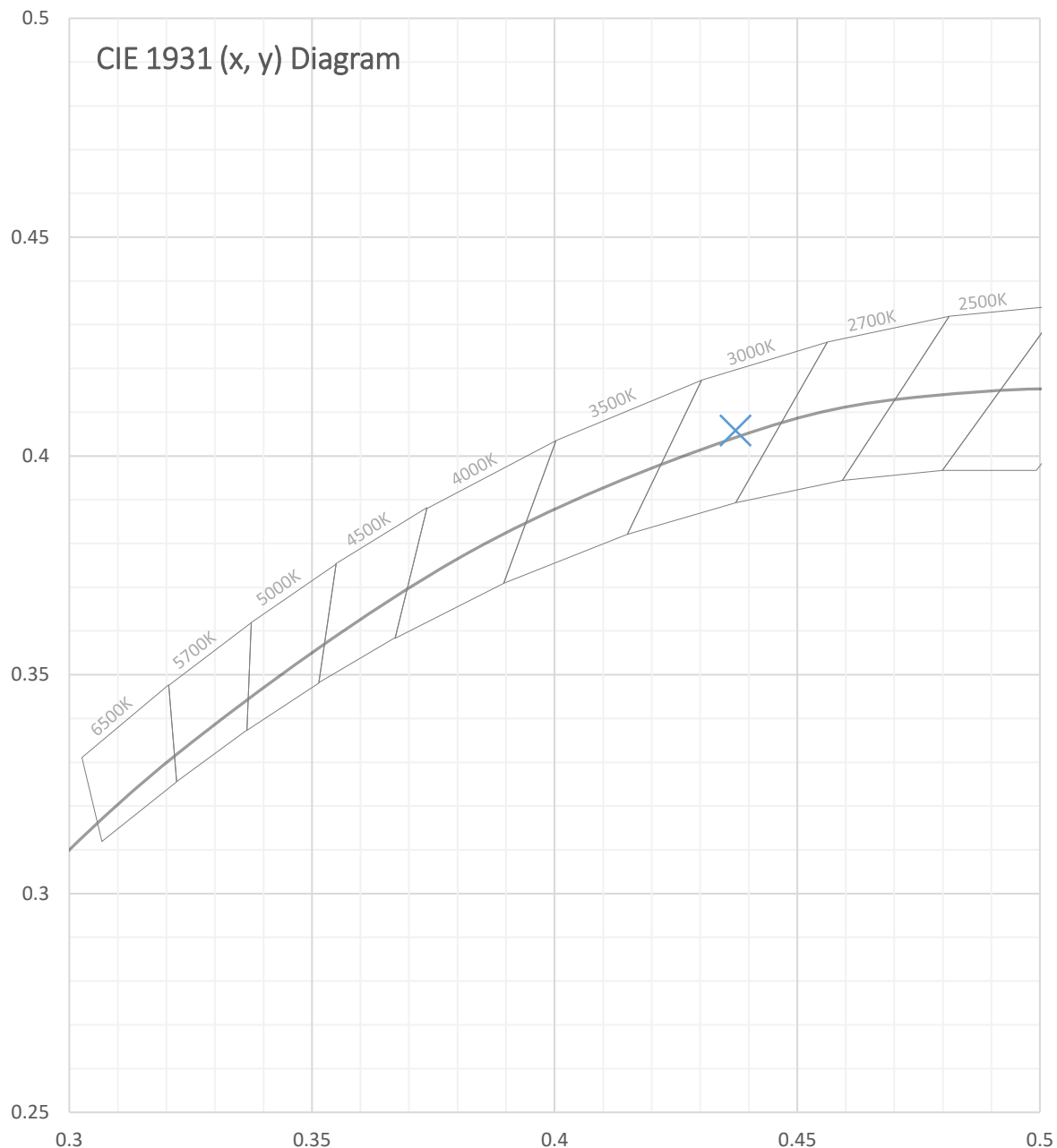


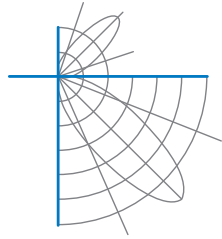
Test Report Number: LLIA001878-001B





Test Report Number: LLIA001878-001B



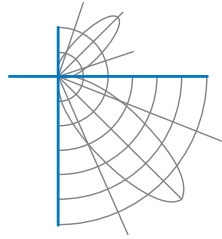


Test Report Number: LLIA001878-001B

Total Radiant Flux	16.32 W
Total Luminous Flux	5806.8 Lm
Chromaticity CIE 1931 (x, y)	(0.4373, 0.4058)
Chromaticity CIE 1976 (u', v')	(0.2501, 0.5221)
Correlated Color Temperature (CCT)	3008 K
Color Rendering Index (Ra)	71
R1	66
R2	82
R3	95
R4	67
R5	66
R6	76
R7	76
R8	39
R9	-44
R10	59
R11	63
R12	54
R13	69
R14	97
TM-30: Rf	71
TM-30: Rg	94
TM-30: Rcs,h1	-18
Distance from Planckian Locus (Duv)	0.0006
Scotopic/Photopic Ratio $\frac{V(\lambda)_{sc}}{V(\lambda)_{ph}}$	1.212

Electrical Data

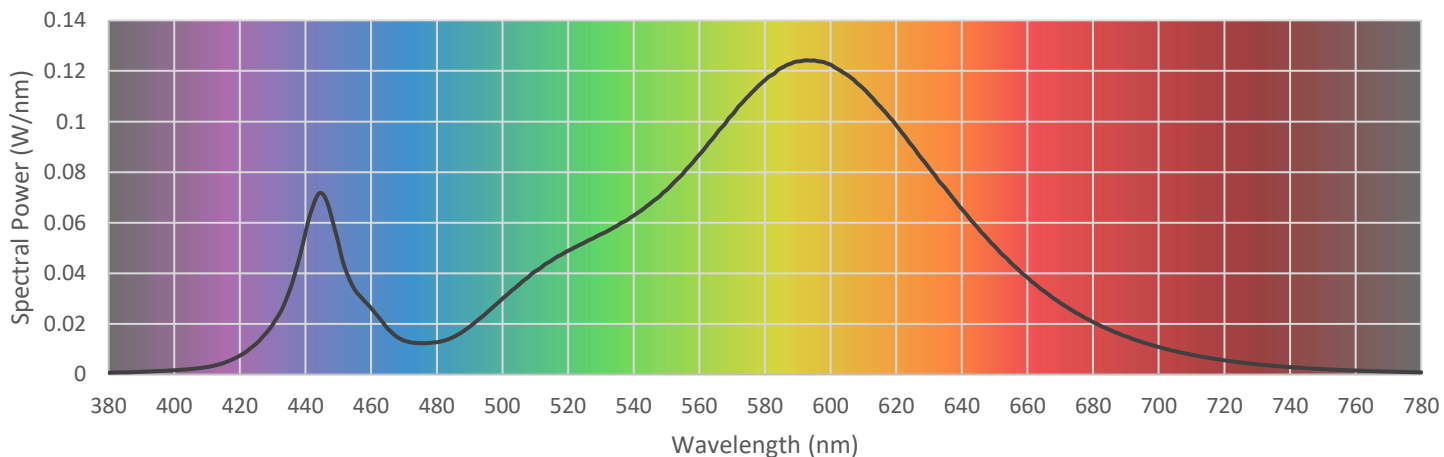
Voltage	120.0 Vac
Current	0.3705 A
Power	43.88 W
Frequency	59.99 Hz
Power Factor	0.987
Current THD	4.5 %

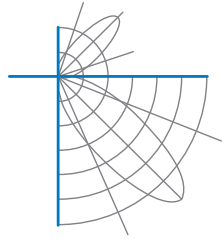


Test Report Number: LLIA001878-001B

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

380	0.000716	480	0.012751	580	0.116359	680	0.020695
385	0.000813	485	0.014747	585	0.121189	685	0.017714
390	0.001056	490	0.018873	590	0.123753	690	0.015060
395	0.001344	495	0.024165	595	0.124161	695	0.012759
400	0.001669	500	0.029953	600	0.122487	700	0.010861
405	0.002140	505	0.035471	605	0.118512	705	0.009192
410	0.002955	510	0.040770	610	0.113054	710	0.007796
415	0.004485	515	0.045043	615	0.106105	715	0.006614
420	0.007459	520	0.048899	620	0.098538	720	0.005602
425	0.012209	525	0.052121	625	0.090204	725	0.004753
430	0.019759	530	0.055443	630	0.081727	730	0.004033
435	0.032713	535	0.058805	635	0.073604	735	0.003402
440	0.056250	540	0.062820	640	0.065369	740	0.002912
445	0.071583	545	0.067493	645	0.057765	745	0.002483
450	0.052112	550	0.072891	650	0.050738	750	0.002117
455	0.033502	555	0.079349	655	0.044059	755	0.001807
460	0.026201	560	0.086884	660	0.038320	760	0.001559
465	0.018208	565	0.094809	665	0.032998	765	0.001333
470	0.013419	570	0.102661	670	0.028297	770	0.001148
475	0.012349	575	0.110105	675	0.024287	775	0.000979
						780	0.000847





Test Report Number: LLIA001878-001B

IES TM-30 Details

Source: LLIA001878-001B

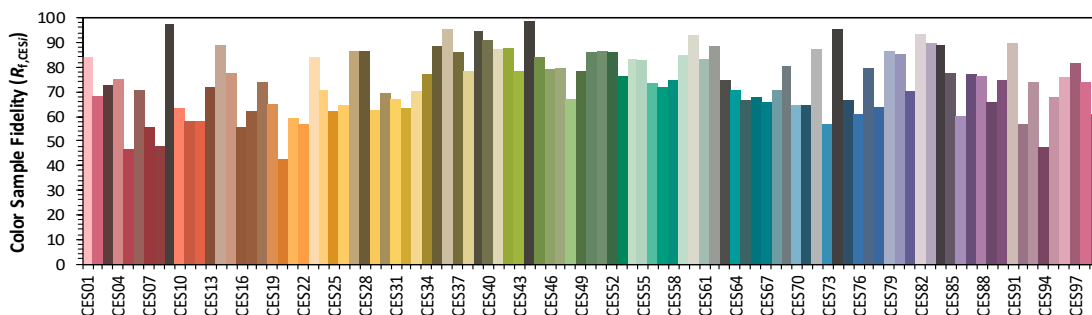
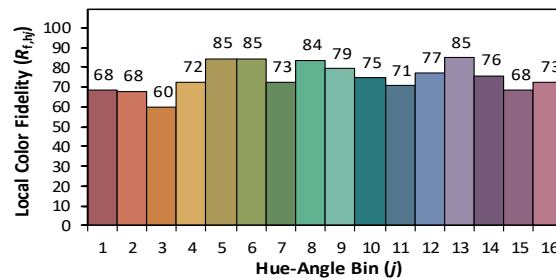
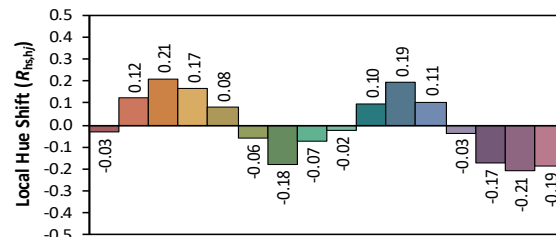
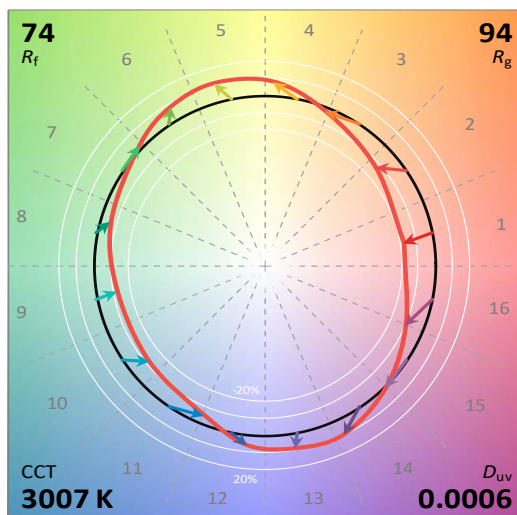
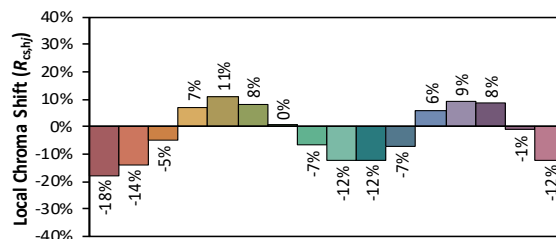
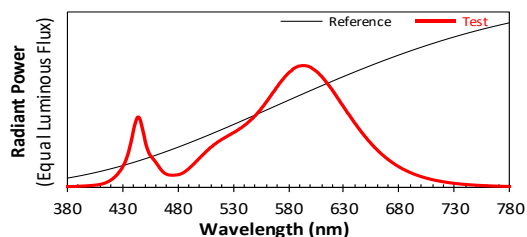
Manufacturer:

LED Roadway Lighting

Date: 9/2/2022

Model:

L6 16S 5 X G2S T X XX 3 X X X



Notes:

x 0.4373

y 0.4057

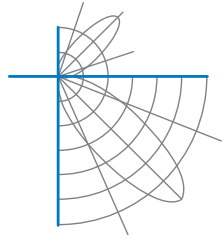
u' 0.2501

v' 0.5221

CIE 13.3-1995
(CRI)

R_a 71

R_g -44



Test Report Number: LLIA001878-001B

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:	25.1 °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:	<p>The measurements and other derived quantities contained in this report are based on the absolute data as measured.</p> <p>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.</p> <p>This report is free of erasures and corrections</p> <p>This report may contain data that are not covered by the NVLAP accreditation. Quantities marked with ‡ are not covered.</p> <p>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.</p>

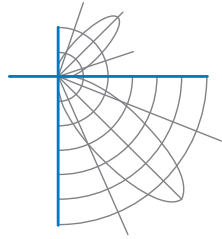
Sphere Report Template V2-18

North America (issuing laboratory)

LightLab International Allentown, LLC
905 Harrison Street, Suite 135
Allentown, PA 18103 USA
Ph: +1 484-273-0705
Fx: +1 484-209-5779
www.lightlaballentown.com

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



Report of Test

LLIA001878-001C

Electrical Test Report

Catalog Number: L6 16S 5 X G2S T X XX 3 X X X

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

16 white LEDs.

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

Client states LED string current at 400mA



Performance Summary

Voltage	277.0 Vac
Current	0.1659 A
Power	43.24 W
Frequency	60.00 Hz
Power Factor	0.941
Current THD	11.6 %

Ambient Temperature: 25.3 °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: 09/01/2022

Report date: 09/02/2022

Electrical Report Template V1-4

North America (issuing laboratory)

LightLab International Allentown, LLC
905 Harrison Street, Suite 135
Allentown, PA 18103 USA
Ph: +1 484-273-0705
Fx: +1 484-209-5779
www.lightlaballentown.com

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