

Report of Test

LLIA001630-001

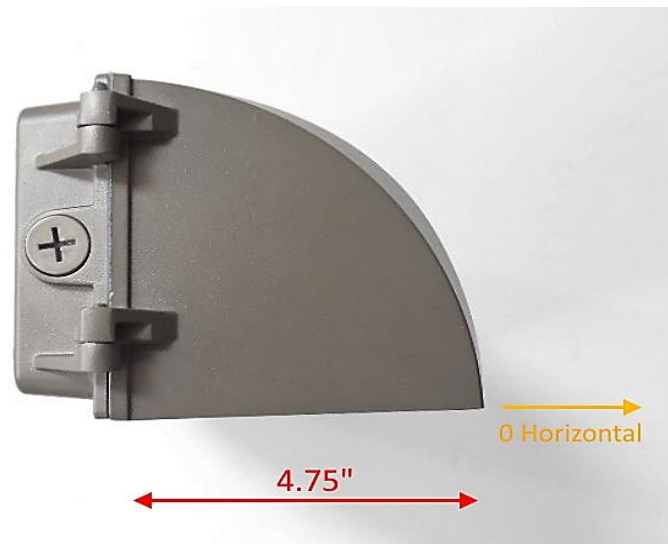
Roadway/Area Light Distribution Photometry Test Report

Catalog Number: WPFC-75W-PCTS-BZ-PC - 45W and 5000K Setting

Surface mounted wall pack, cast aluminum housing, clear plastic enclosure with lightly textured general finish, linear lens above each row of LEDs with vertical linear micro prisms.

192 LEDs, 96 cool white and 96 warm white LEDs on white circuit board

One BQ BQE78-0720-100-PVF-PS LED driver



Prepared For:

Topaz Lighting Corp

925 Waverly Avenue

Holtsville, NY 11742, USA

Performance Summary

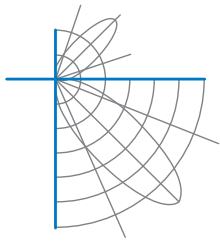
Input Voltage	120.0 Vac	Luminous Flux	6540.8 Lumens
Input Current	0.3781 A	Total Efficacy	146.5 Lm/W
Input Power	44.66 W		
Frequency	60.00 Hz		
Power Factor	0.984	Roadway Type	Area Light
Current THD	9.8 %	IES BUG Rating	B1 - U0 - G1

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

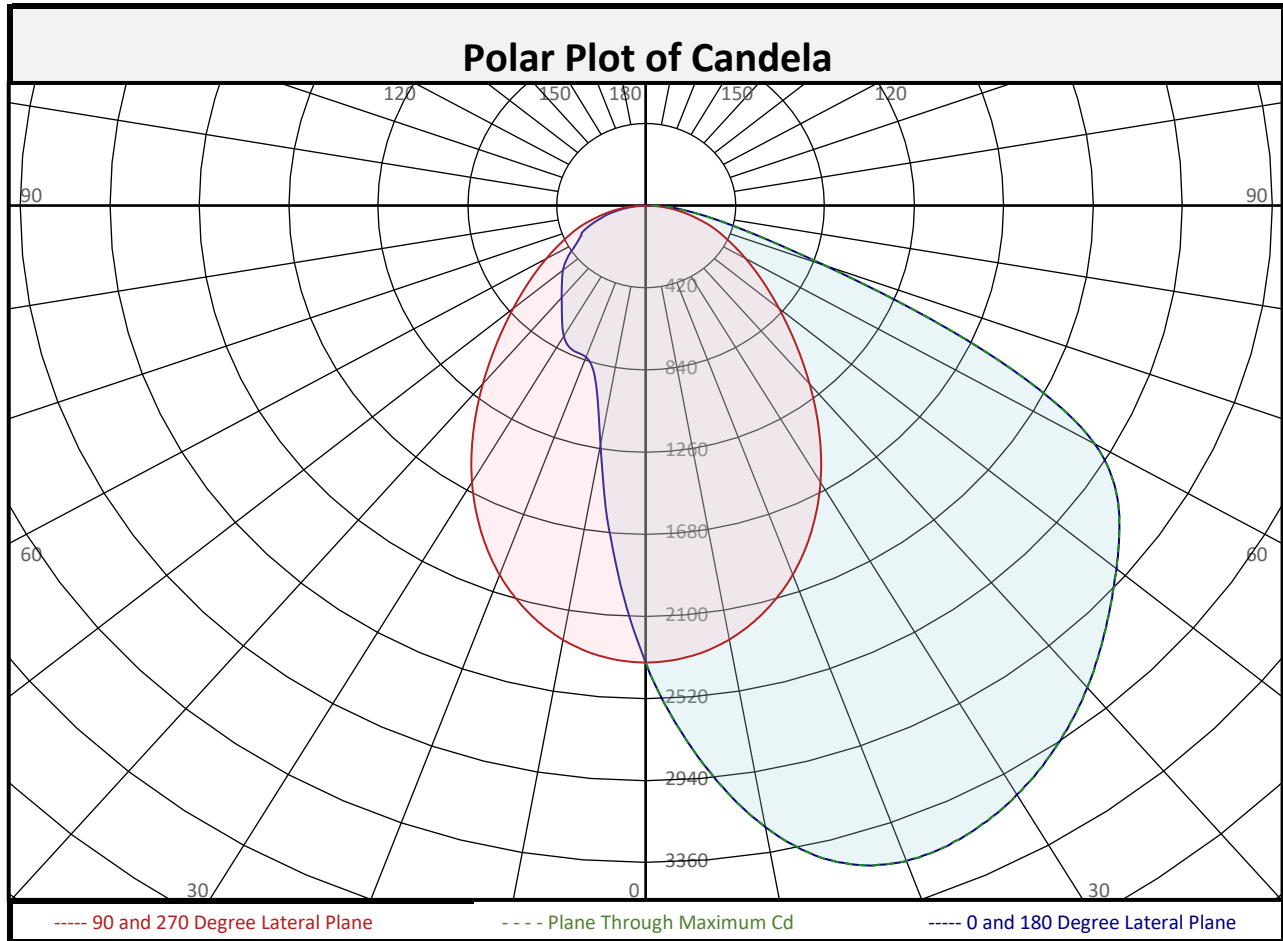
Test date: 01/12/2022

Report date: 01/14/2022

Signed: _____

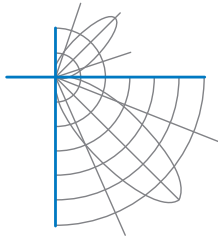


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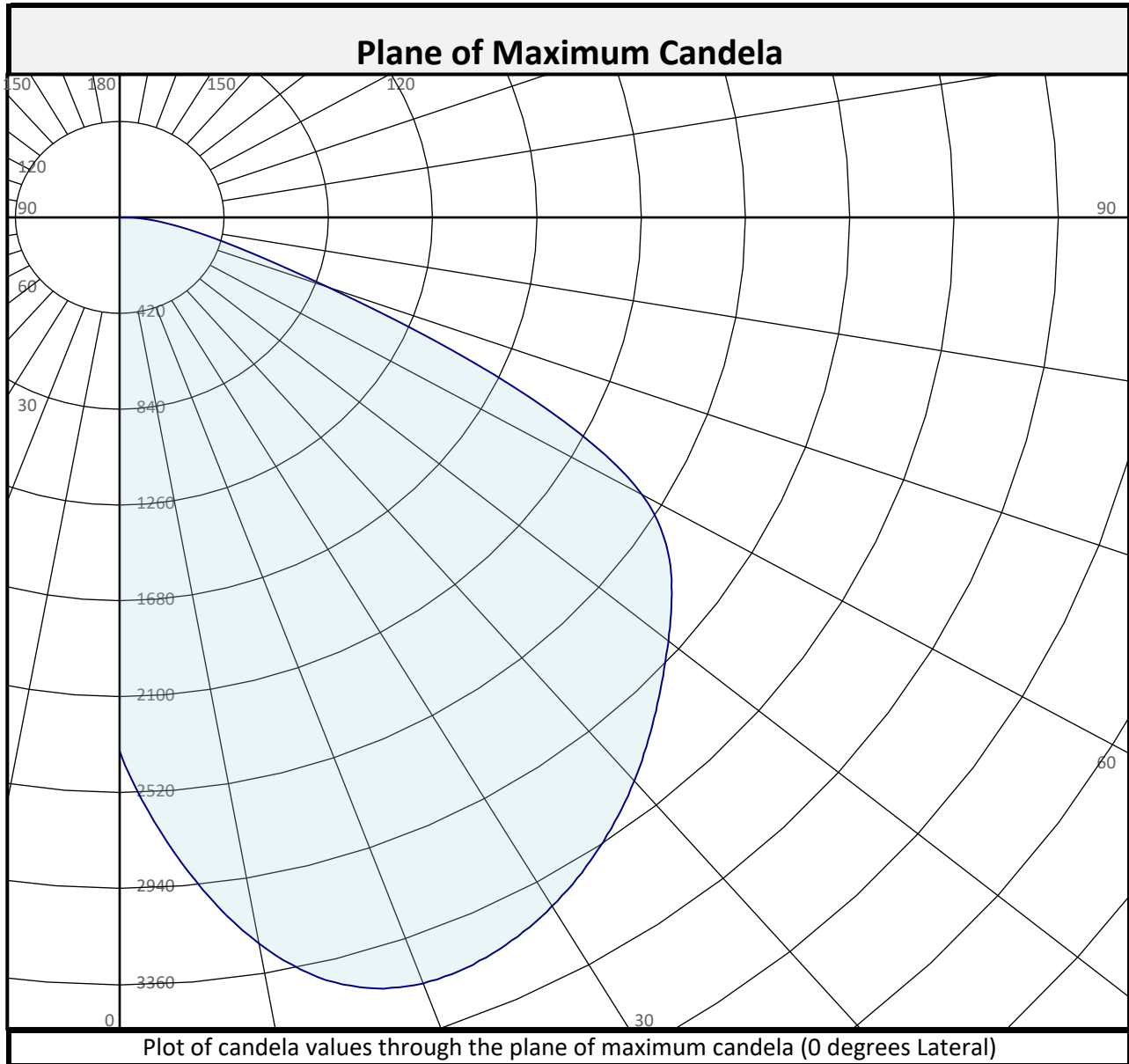


Zonal Flux Summary

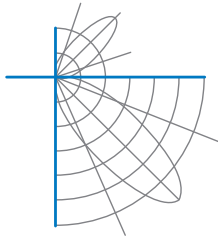
Zone (Deg Vert)	Flux (Lumens)	Percent of Total	Zone (Deg Vert)	Flux (Lumens)	Percent of Total	Zone (Deg Vert)	Flux (Lumens)	Percent of Total
0-10	218.2	3.3%	90-100	0.0	0.0%	0-20	829.5	12.7%
10-20	611.4	9.3%	100-110	0.0	0.0%	0-30	1761	26.9%
20-30	931.9	14.2%	110-120	0.0	0.0%	0-40	2892	44.2%
30-40	1131	17.3%	120-130	0.0	0.0%	0-60	5169	79.0%
40-50	1178	18.0%	130-140	0.0	0.0%	0-80	6429	98.3%
50-60	1098	16.8%	140-150	0.0	0.0%	10-90	6323	96.7%
60-70	847.2	13.0%	150-160	0.0	0.0%	20-50	3241	49.6%
70-80	413.7	6.3%	160-170	0.0	0.0%	40-90	3648	55.8%
80-90	111.3	1.7%	170-180	0.0	0.0%	60-90	1372	21.0%
0-90	6541	100.0%	90-180	0.0	0.0%	0-180	6541	100.0%



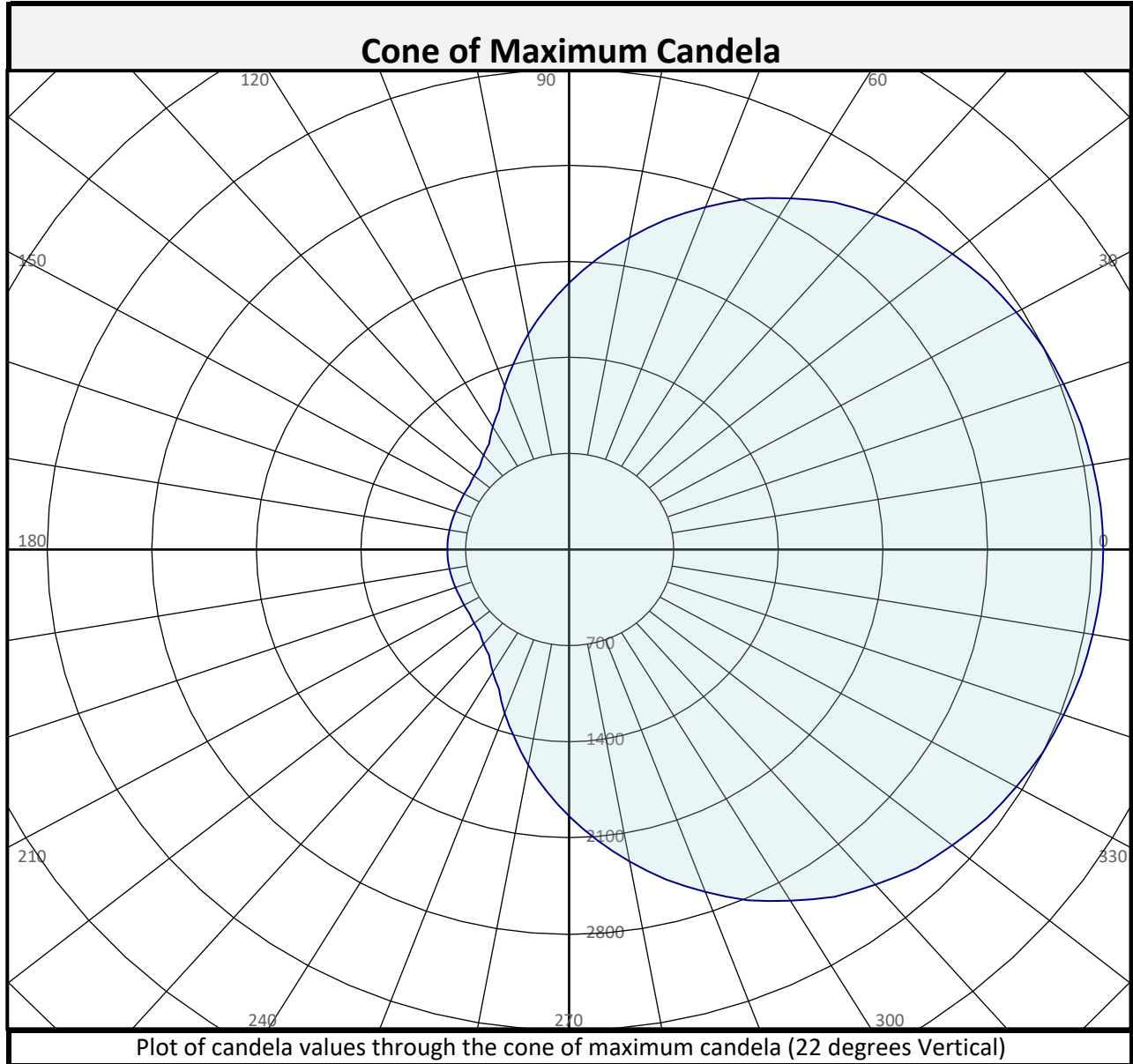
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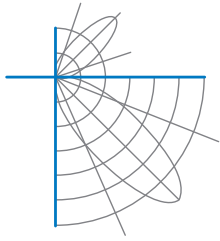
Street and House Side Flux Summary						
	Downward		Upward		Total	
	Lumens	% of Total	Lumens	% of Total	Lumens	% of Total
Street Side	5045.6	77.1%	0.0	0.0%	5045.6	77.1%
House Side	1495.2	22.9%	0.0	0.0%	1495.2	22.9%
Total	6540.8	100.0%	0.0	0.0%	6540.8	100.0%



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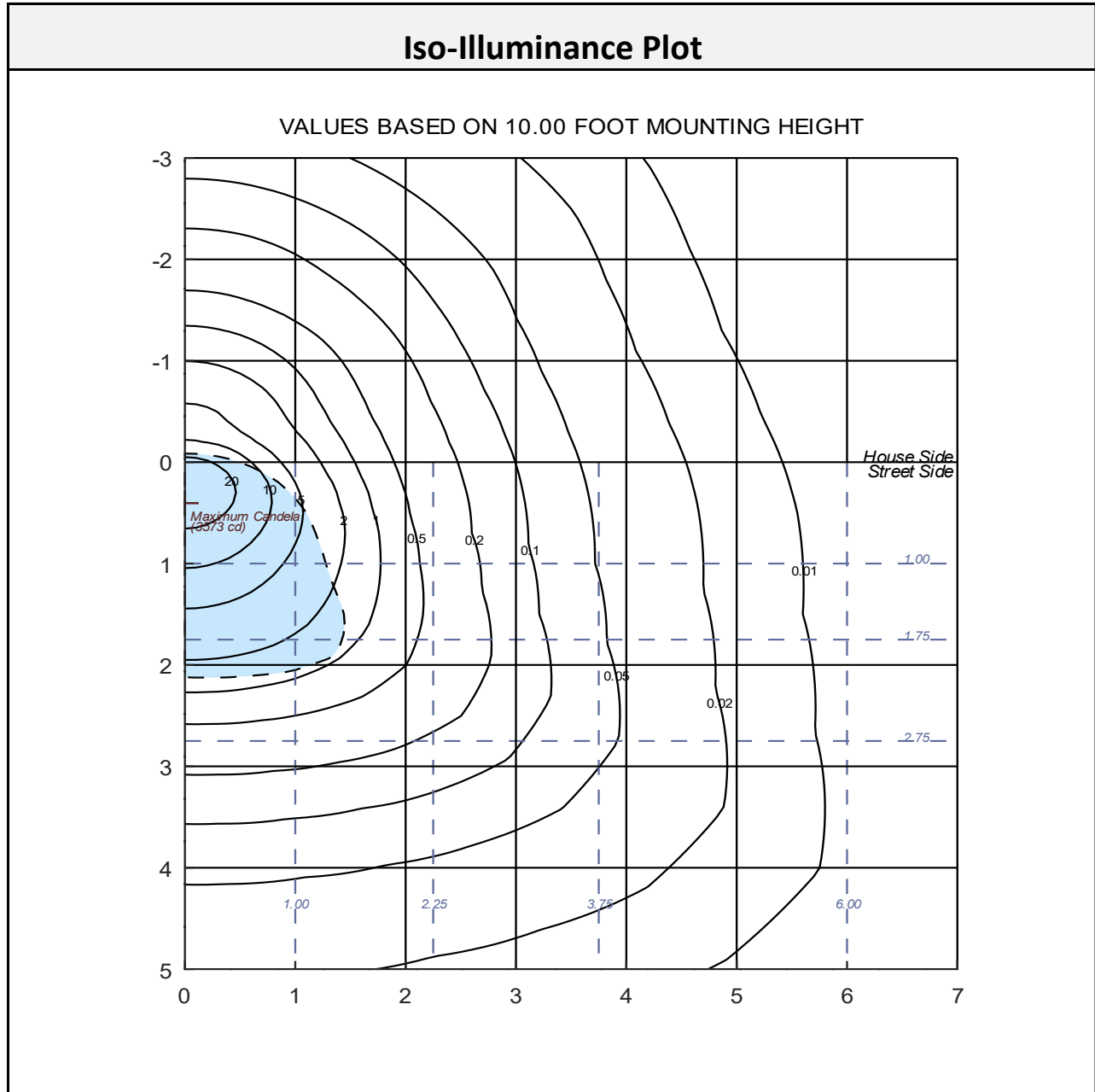


Street and House Side Flux Summary						
	Downward		Upward		Total	
	Lumens	% of Total	Lumens	% of Total	Lumens	% of Total
Street Side	5045.6	77.1%	0.0	0.0%	5045.6	77.1%
House Side	1495.2	22.9%	0.0	0.0%	1495.2	22.9%
Total	6540.8	100.0%	0.0	0.0%	6540.8	100.0%

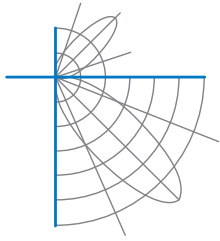


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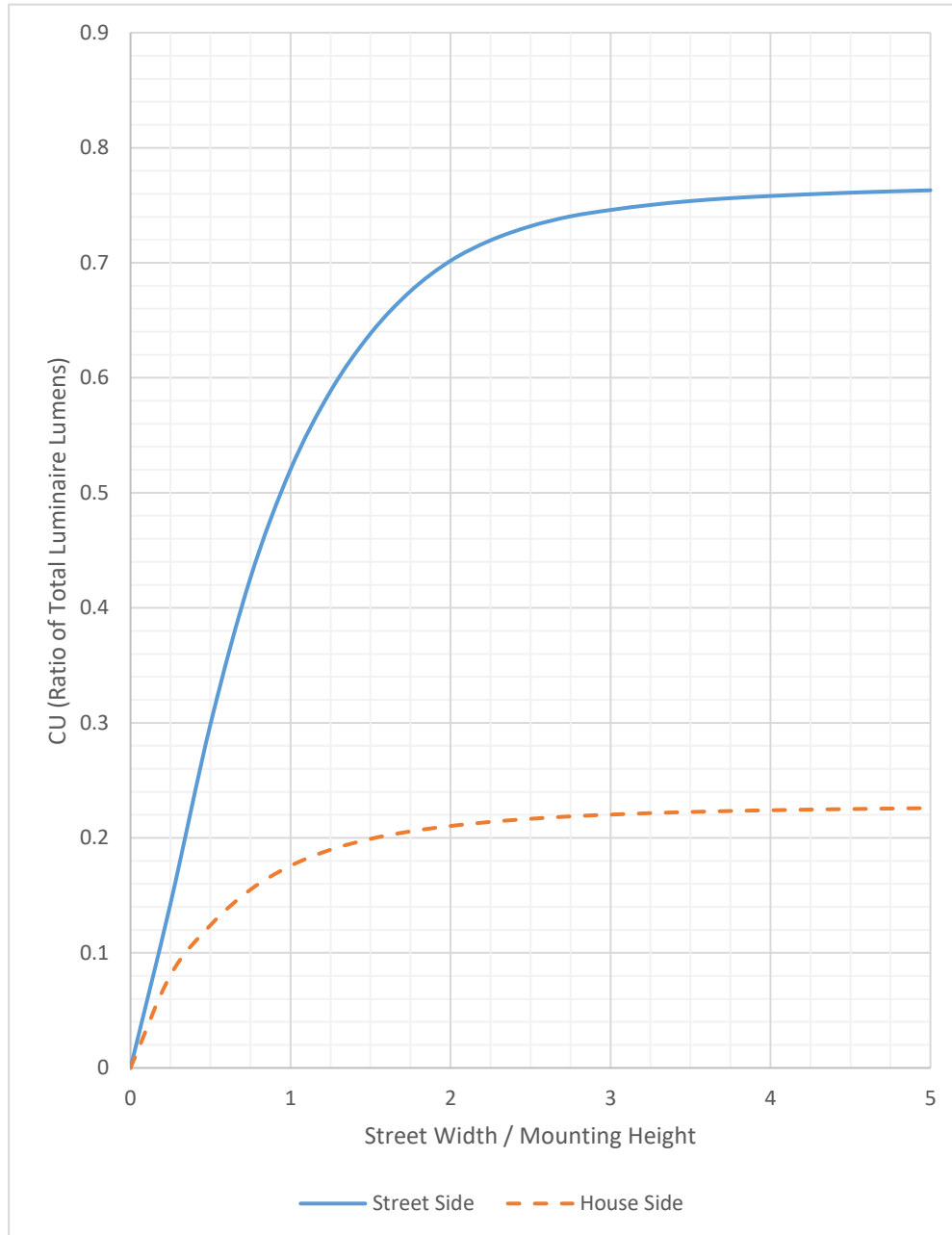


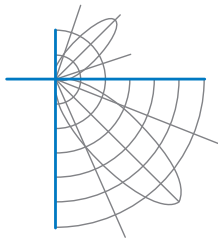
The isofootcandle values shown in the plot above are based on a mounting height of $h = 10.0$ feet. Grid values show multiples of mounting height. The isoilluminance contour lines are expressed in units of footcandles. The values expressed are based on the direct light from a single unit without the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



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Coefficients of Utilization Plot

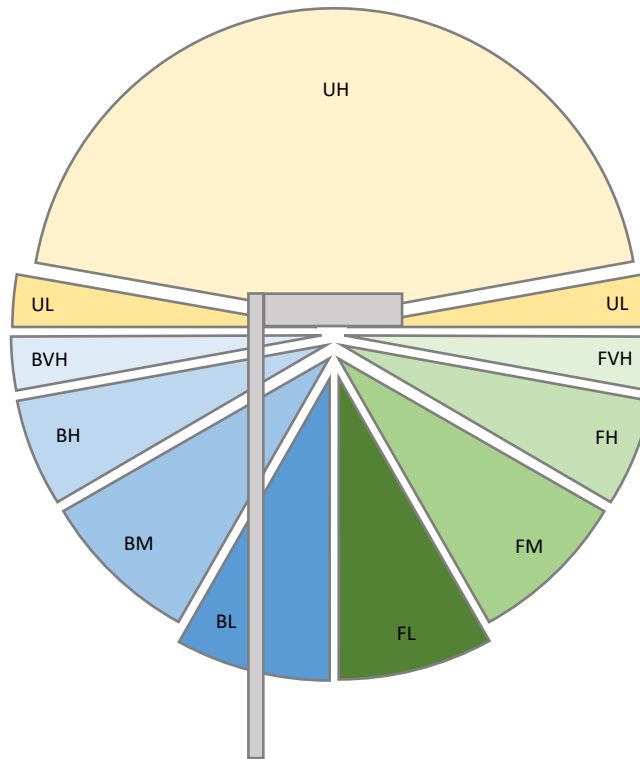




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LCS Tables and Bug Classification



Back Light

BL - Back Low (0°-30°)	496.5 Lm
BM - Back Mid (30°-60°)	698.7 Lm
BH - Back High (60°-80°)	269.2 Lm
BVH - Back Very High (80°-90°)	30.8 Lm

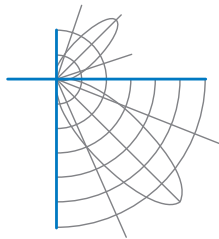
Forward Light

FL - Forward Low (0°-30°)	1264.9 Lm
FM - Forward Mid (30°-60°)	2708.4 Lm
FH - Forward High (60°-80°)	991.7 Lm
FVH - Forward Very High (80°-90°)	80.5 Lm

Uplight

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

BUG Ratings: B1 - U0 - G1



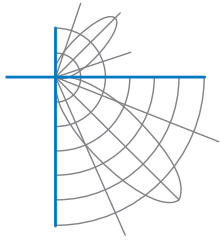
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Luminous Intensity (Candela) Table

	Lateral (C-Plane) Angles											
	0	5	15	25	35	45	55	65	75	85	90	
0	2337	2337	2337	2337	2337	2337	2337	2337	2337	2337	2337	2337
2.5	2597	2598	2585	2571	2547	2518	2481	2441	2397	2355	2330	
5	2832	2831	2811	2783	2736	2680	2611	2533	2449	2361	2315	
7.5	3045	3044	3017	2977	2911	2829	2728	2614	2488	2359	2290	
10	3227	3226	3196	3145	3065	2960	2831	2682	2516	2345	2254	
12.5	3373	3371	3340	3284	3194	3072	2919	2738	2532	2319	2207	
15	3477	3474	3444	3387	3293	3163	2990	2779	2536	2283	2151	
17.5	3540	3538	3509	3455	3363	3230	3044	2807	2530	2237	2085	
20	3569	3567	3540	3488	3402	3269	3077	2820	2513	2180	2012	
22.5	3572	3570	3544	3496	3413	3285	3092	2819	2483	2113	1930	
25	3555	3554	3529	3482	3401	3276	3086	2804	2441	2038	1841	
27.5	3524	3525	3499	3449	3371	3248	3062	2774	2386	1954	1744	
30	3482	3483	3455	3405	3324	3204	3018	2727	2319	1861	1641	
32.5	3430	3430	3401	3349	3264	3142	2956	2664	2239	1758	1533	
35	3369	3370	3339	3283	3194	3066	2879	2585	2147	1650	1422	
37.5	3300	3300	3269	3210	3115	2979	2788	2492	2043	1535	1311	
40	3224	3222	3190	3130	3026	2883	2684	2383	1927	1416	1201	
42.5	3142	3139	3107	3043	2932	2778	2570	2262	1801	1296	1095	
45	3057	3054	3021	2953	2833	2666	2444	2129	1665	1177	995	
47.5	2971	2969	2934	2861	2731	2548	2311	1987	1524	1062	903	
50	2887	2886	2848	2769	2625	2426	2172	1838	1378	953	817	
52.5	2802	2803	2765	2678	2521	2300	2027	1684	1232	854	739	
55	2712	2713	2682	2591	2421	2176	1880	1527	1092	764	668	
57.5	2598	2601	2582	2504	2327	2055	1735	1371	958	683	603	
60	2432	2440	2444	2397	2234	1940	1592	1218	835	609	542	
62.5	2147	2161	2208	2235	2124	1833	1453	1069	724	542	486	
65	1743	1763	1850	1969	1966	1724	1323	927	625	481	434	
67.5	1283	1302	1409	1595	1723	1584	1200	795	539	427	387	
70	896	909	1000	1186	1401	1404	1074	675	462	376	342	
72.5	639	648	709	849	1058	1173	940	567	391	323	295	
75	469	475	512	603	765	914	793	468	324	270	245	
77.5	349	352	374	429	538	672	635	376	264	223	202	
80	257	259	271	303	369	466	472	292	208	178	159	
82.5	184	185	191	208	244	304	321	211	154	133	117	
85	128	128	130	138	155	183	195	136	99	89	76	
87.5	78	78	78	79	84	93	96	69	49	42	35	
90	0	0	0	0	0	0	0	0	0	0	0	

Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.

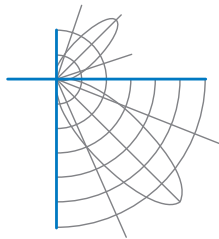


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Luminous Intensity (Candela) Table

	Lateral (C-Plane) Angles											
	0	5	15	25	35	45	55	65	75	85	90	
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
	92.5	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0
	97.5	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0
	102.5	0	0	0	0	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0	0	0	0
	107.5	0	0	0	0	0	0	0	0	0	0	0
	110	0	0	0	0	0	0	0	0	0	0	0
	112.5	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0	0
	117.5	0	0	0	0	0	0	0	0	0	0	0
	120	0	0	0	0	0	0	0	0	0	0	0
	122.5	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0
	127.5	0	0	0	0	0	0	0	0	0	0	0
	130	0	0	0	0	0	0	0	0	0	0	0
	132.5	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0
	137.5	0	0	0	0	0	0	0	0	0	0	0
	140	0	0	0	0	0	0	0	0	0	0	0
	142.5	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0
	147.5	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0
	152.5	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0
	157.5	0	0	0	0	0	0	0	0	0	0	0
	160	0	0	0	0	0	0	0	0	0	0	0
	162.5	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	
167.5	0	0	0	0	0	0	0	0	0	0	0	
170	0	0	0	0	0	0	0	0	0	0	0	
172.5	0	0	0	0	0	0	0	0	0	0	0	
175	0	0	0	0	0	0	0	0	0	0	0	
177.5	0	0	0	0	0	0	0	0	0	0	0	
180	0	0	0	0	0	0	0	0	0	0	0	



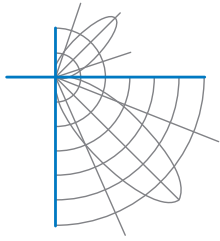
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Luminous Intensity (Candela) Table

	Lateral (C-Plane) Angles											
	90	95	105	115	125	135	145	155	165	175	180	
0	2337	2337	2337	2337	2337	2337	2337	2337	2337	2337	2337	
2.5	2330	2306	2261	2217	2176	2139	2108	2085	2068	2062	2058	
5	2315	2268	2176	2089	2006	1933	1870	1822	1788	1775	1770	
7.5	2290	2219	2082	1951	1826	1718	1639	1573	1524	1502	1496	
10	2254	2161	1979	1805	1650	1519	1401	1317	1264	1240	1234	
12.5	2207	2094	1870	1657	1476	1308	1191	1114	1067	1047	1043	
15	2151	2019	1755	1519	1296	1136	1033	972	938	924	922	
17.5	2085	1935	1634	1368	1143	1002	924	883	863	857	855	
20	2012	1846	1514	1223	1018	907	854	832	827	826	825	
22.5	1930	1749	1400	1098	924	842	811	808	814	819	818	
25	1841	1647	1283	993	854	797	788	799	811	817	816	
27.5	1744	1541	1164	909	799	766	775	792	800	803	802	
30	1641	1432	1055	840	755	744	763	776	777	776	774	
32.5	1533	1325	962	782	720	727	745	747	741	736	734	
35	1422	1219	883	733	691	707	717	710	699	693	691	
37.5	1311	1117	815	689	666	683	682	670	659	653	653	
40	1201	1021	755	650	641	653	645	633	624	619	619	
42.5	1095	933	702	615	614	620	610	600	593	589	589	
45	995	851	652	582	586	585	577	569	564	561	561	
47.5	903	778	606	550	555	553	547	542	538	536	536	
50	817	710	562	520	523	522	519	516	512	511	511	
52.5	739	646	522	489	492	494	492	487	483	481	481	
55	668	587	483	459	464	466	463	456	449	447	447	
57.5	603	532	445	429	435	435	428	416	408	406	406	
60	542	482	409	398	403	400	383	373	373	374	374	
62.5	486	434	374	366	367	355	344	342	346	349	350	
65	434	390	339	333	325	316	312	317	331	335	335	
67.5	387	348	304	294	287	282	290	299	303	305	305	
70	342	309	268	255	253	261	263	264	266	267	267	
72.5	295	266	229	219	230	231	228	227	228	229	229	
75	245	220	189	185	200	194	192	190	194	197	198	
77.5	202	179	153	152	163	159	158	160	160	160	160	
80	159	140	118	117	127	127	123	122	122	122	122	
82.5	117	100	85	84	93	90	86	85	85	84	84	
85	76	61	51	53	55	53	53	52	50	49	49	
87.5	35	25	22	24	25	25	23	21	19	18	18	
90	0	0	0	0	0	0	0	0	0	0	0	

Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.

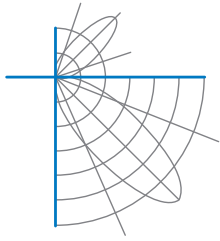


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Luminous Intensity (Candela) Table

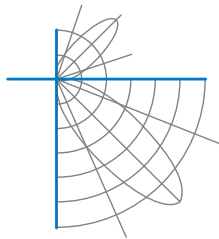
	Lateral (C-Plane) Angles											
	90	95	105	115	125	135	145	155	165	175	180	
Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.	90	0	0	0	0	0	0	0	0	0	0	0
	92.5	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0
	97.5	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0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



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Additional Pictures of Test Subject





Report of Test

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Test Distance 9.5 m
Ambient Temperature 24.7 °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.