

Report of Test

LLIA001528-005

Roadway/Area Light Distribution Photometry Test Report

Catalog Number: WP/80W/PCTS/BZ/PC - 80W and 4000K Setting
Surface mounted wall pack, cast aluminum housing, formed white enamel metal reflector, clear prismatic glass lens.
528 LEDs, 264 cool white and 264 warm white LEDs
One Fahold FT-75E-054B LED driver



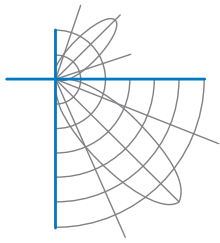
Prepared For:
Topaz Lighting Corp
925 Waverly Avenue
Holtsville, NY 11742, USA

Performance Summary			
Input Voltage	120.0 V	Luminous Flux	10762.0 Lumens
Input Current	0.6334 A	Total Efficacy	142.0 Lm/W
Input Power	75.81 W		
Frequency	60.00 Hz		
Power Factor	0.998	Roadway Type	Area Light
Current THD	5.1 %	IES BUG Rating	B3 - U4 - G4

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

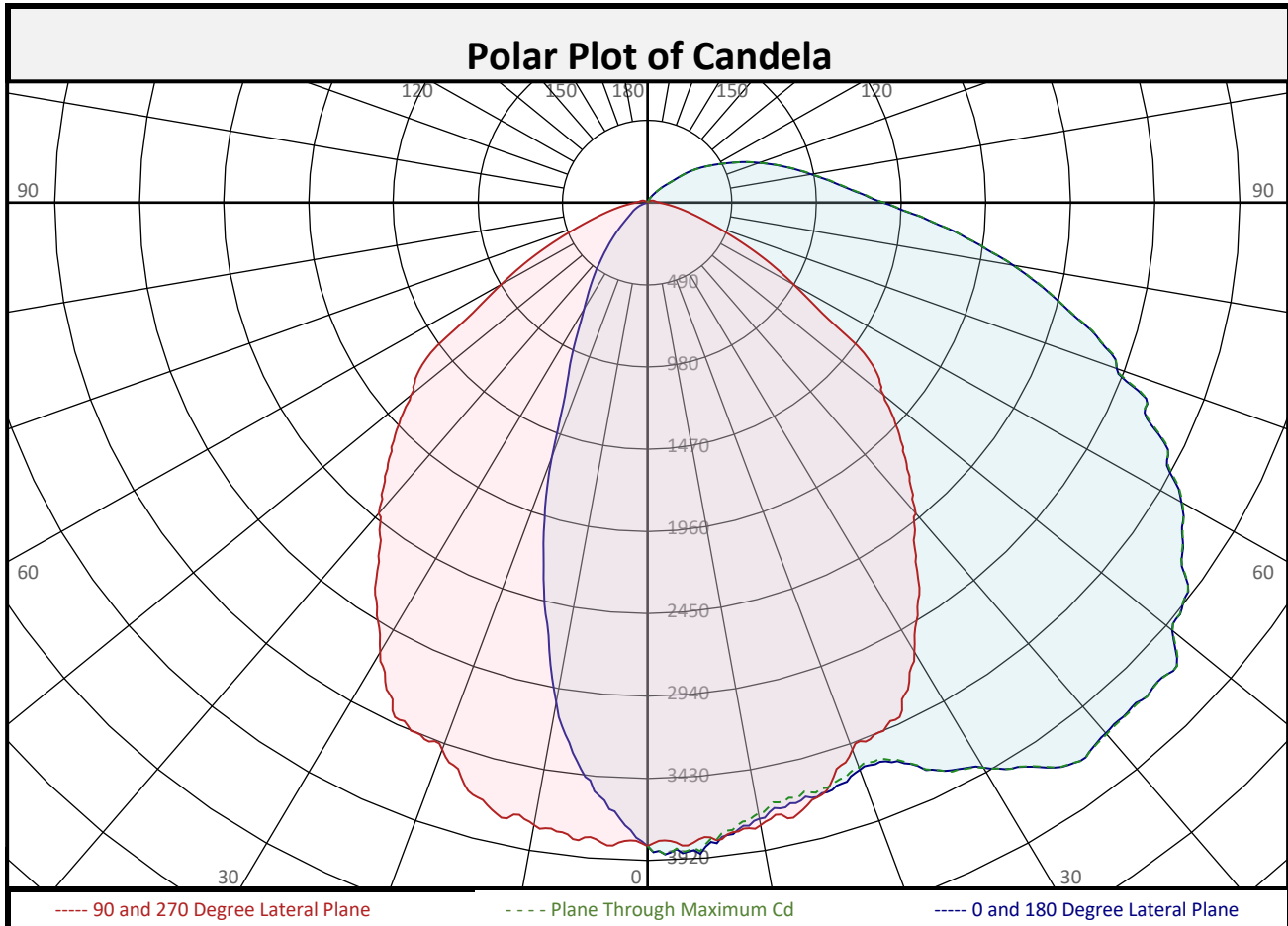
Test date: 09/01/2021
Report date: 09/02/2021

Signed: _____



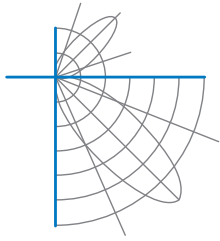
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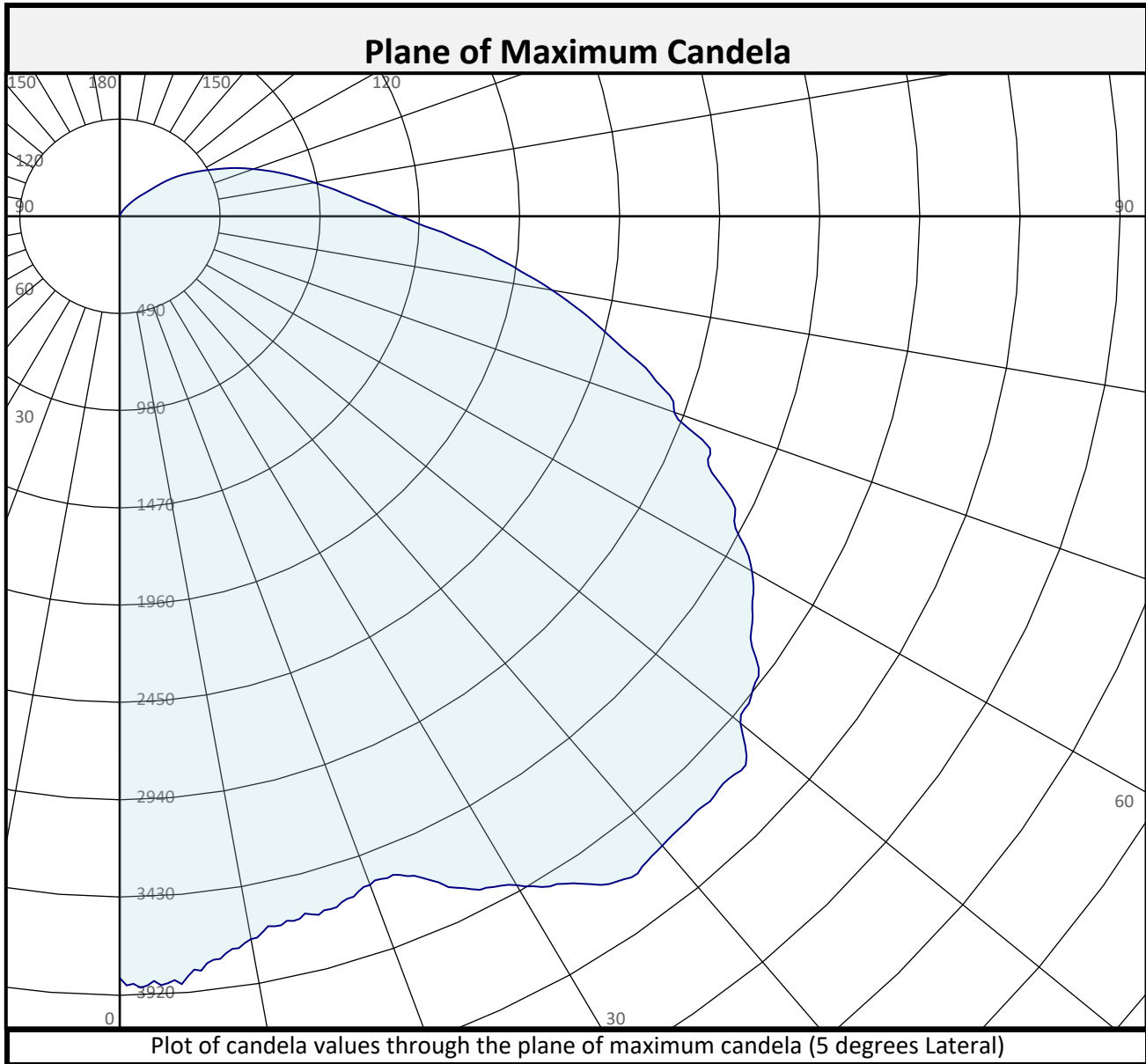


Zonal Flux Summary

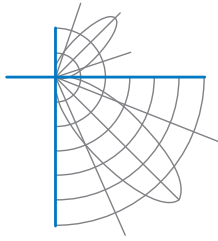
Zone (Deg Vert)	Flux (Lumens)	Percent of Total	Zone (Deg Vert)	Flux (Lumens)	Percent of Total	Zone (Deg Vert)	Flux (Lumens)	Percent of Total
0-10	350.9	3.3%	90-100	383.1	3.6%	0-20	1276	11.9%
10-20	924.7	8.6%	100-110	250.0	2.3%	0-30	2538	23.6%
20-30	1262	11.7%	110-120	152.6	1.4%	0-40	4001	37.2%
30-40	1464	13.6%	120-130	79.4	0.7%	0-60	7024	65.3%
40-50	1542	14.3%	130-140	31.5	0.3%	0-80	9238	85.8%
50-60	1481	13.8%	140-150	10.6	0.1%	10-90	9501	88.3%
60-70	1265	11.8%	150-160	2.6	0.0%	20-50	4268	39.7%
70-80	948.4	8.8%	160-170	0.2	0.0%	40-90	5851	54.4%
80-90	614.4	5.7%	170-180	0.0	0.0%	60-90	2828	26.3%
0-90	9852	91.5%	90-180	910.0	8.5%	0-180	10762	100.0%



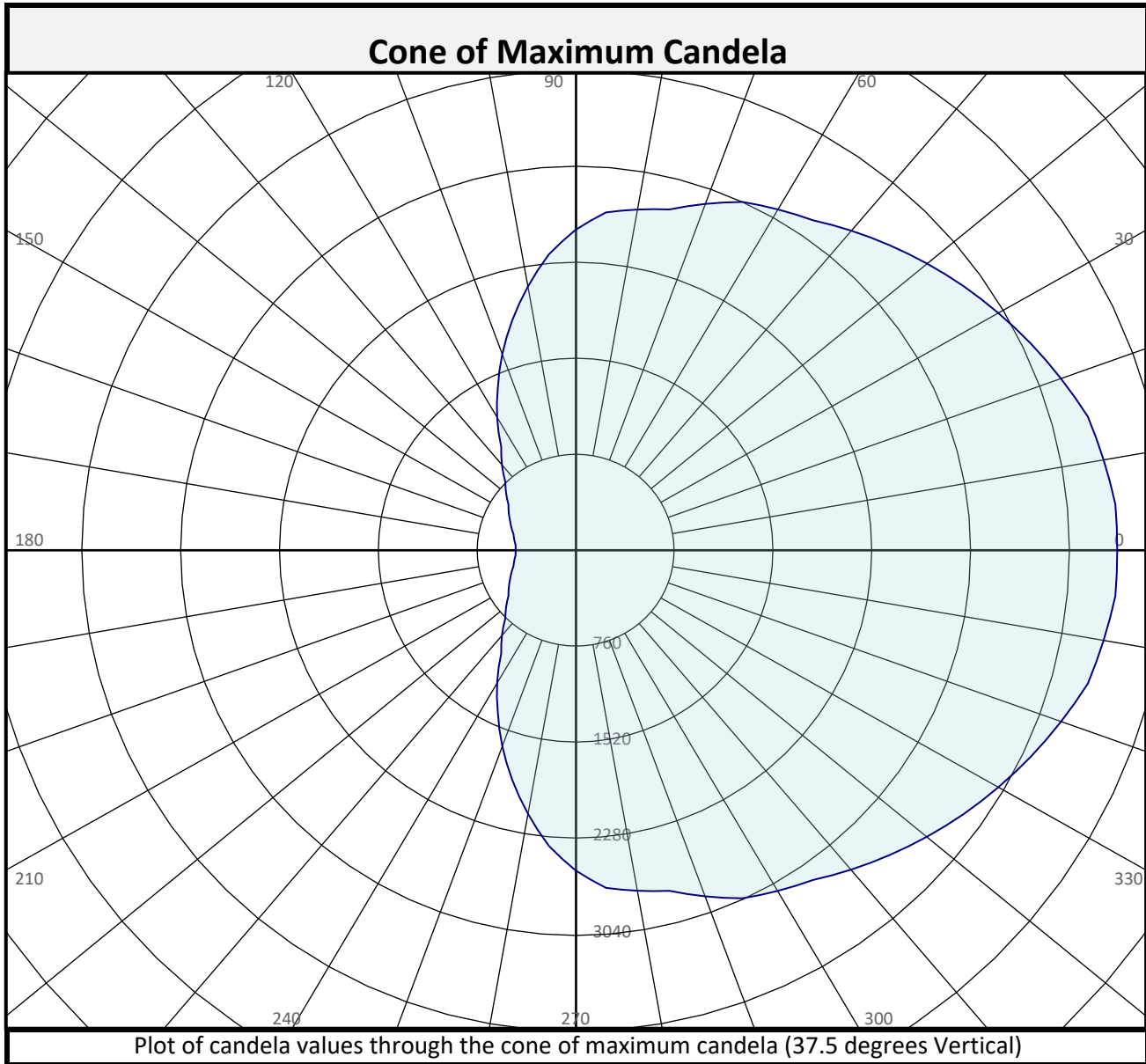
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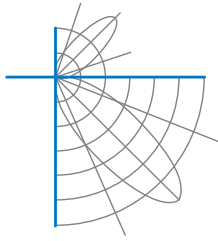
Street and House Side Flux Summary						
	Downward		Upward		Total	
	Lumens	% of Total	Lumens	% of Total	Lumens	% of Total
Street Side	7836.4	72.8%	893.5	8.3%	8729.9	81.1%
House Side	2015.6	18.7%	16.5	0.2%	2032.1	18.9%
Total	9852.0	91.5%	910.0	8.5%	10762.0	100.0%



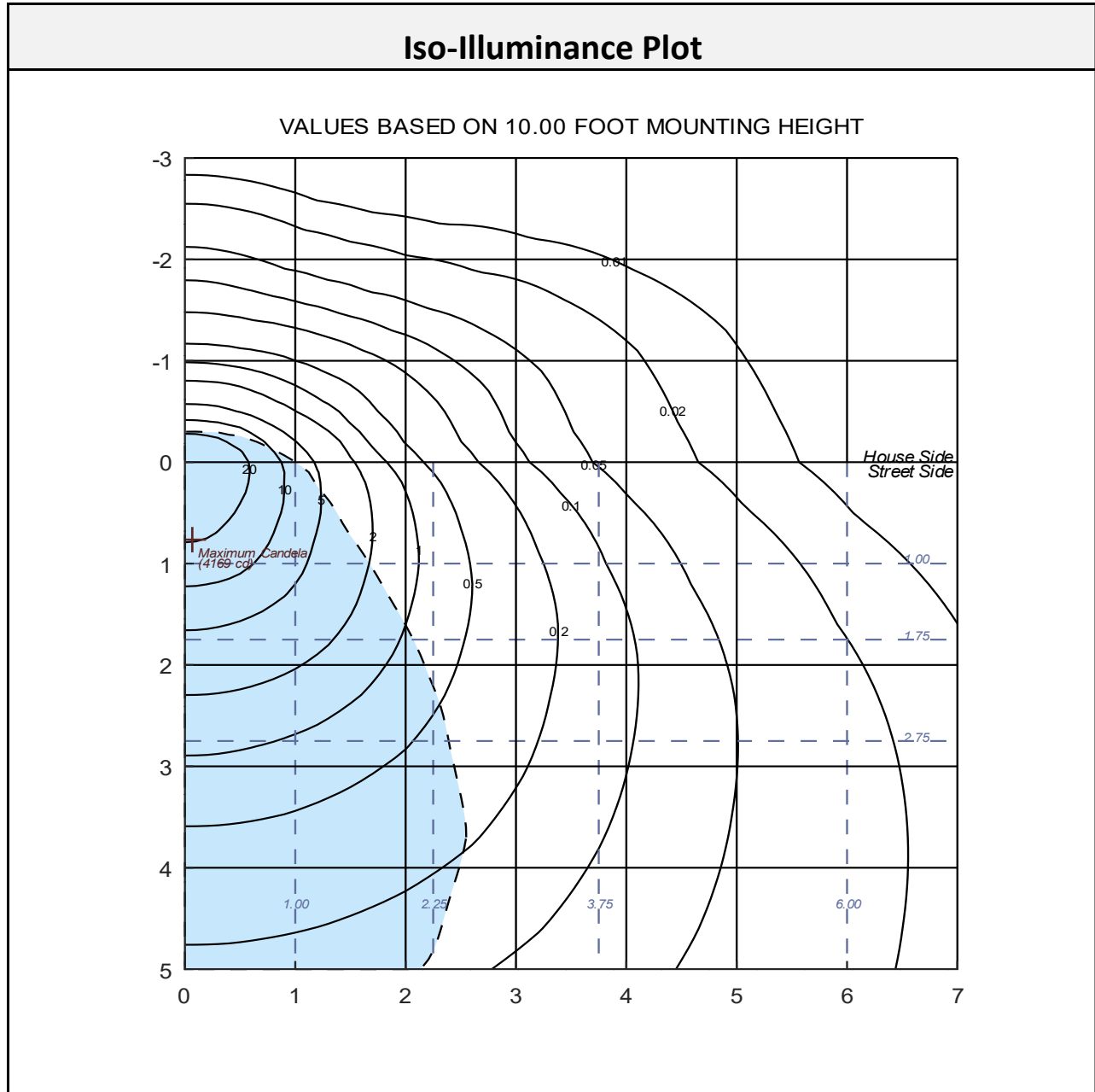
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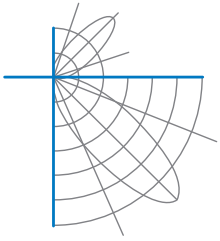
Street and House Side Flux Summary						
	Downward		Upward		Total	
	Lumens	% of Total	Lumens	% of Total	Lumens	% of Total
Street Side	7836.4	72.8%	893.5	8.3%	8729.9	81.1%
House Side	2015.6	18.7%	16.5	0.2%	2032.1	18.9%
Total	9852.0	91.5%	910.0	8.5%	10762.0	100.0%



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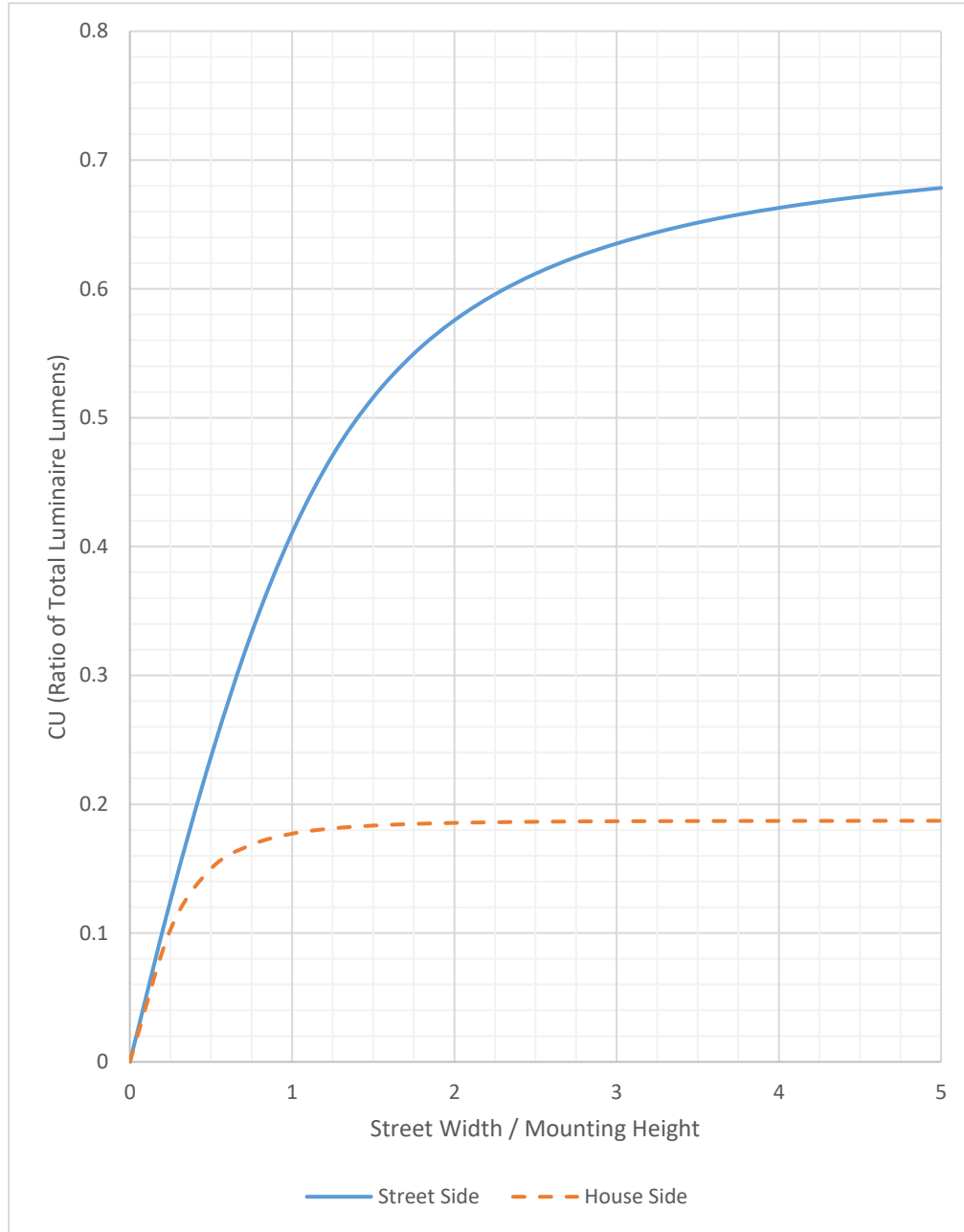


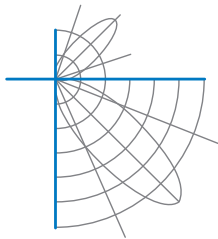
The isofootcandle values shown in the plot above are based on a mounting height of $h = 10.0$ feet. Grid values show multiples of mounting height. The isoilluminance contour lines are expressed in units of footcandles. The values expressed are based on the direct light from a single unit without the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



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Coefficients of Utilization Plot

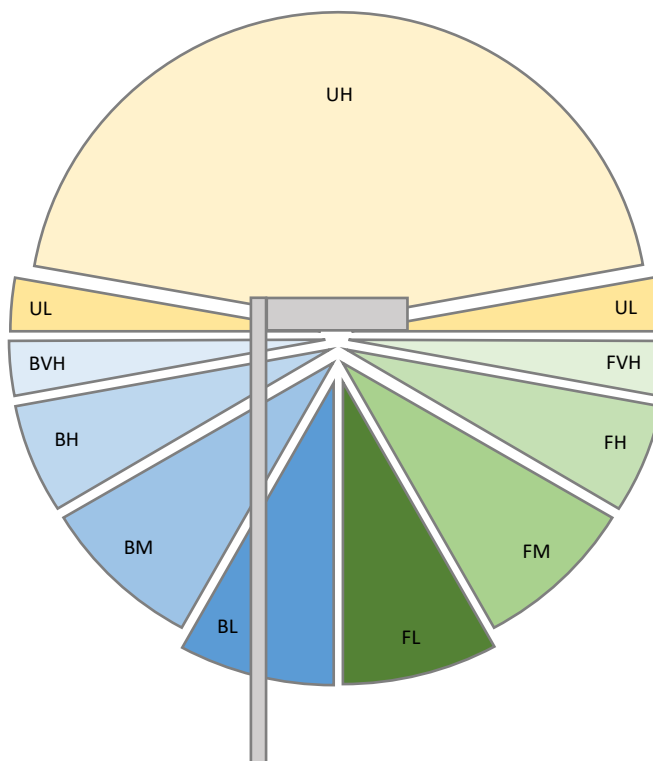




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LCS Tables and Bug Classification



Back Light

BL - Back Low (0°-30°)	1020.4 Lm
BM - Back Mid (30°-60°)	841.6 Lm
BH - Back High (60°-80°)	137.6 Lm
BVH - Back Very High (80°-90°)	16.1 Lm

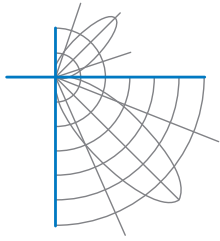
Forward Light

FL - Forward Low (0°-30°)	1517.2 Lm
FM - Forward Mid (30°-60°)	3644.9 Lm
FH - Forward High (60°-80°)	2075.9 Lm
FVH - Forward Very High (80°-90°)	598.4 Lm

Uplight

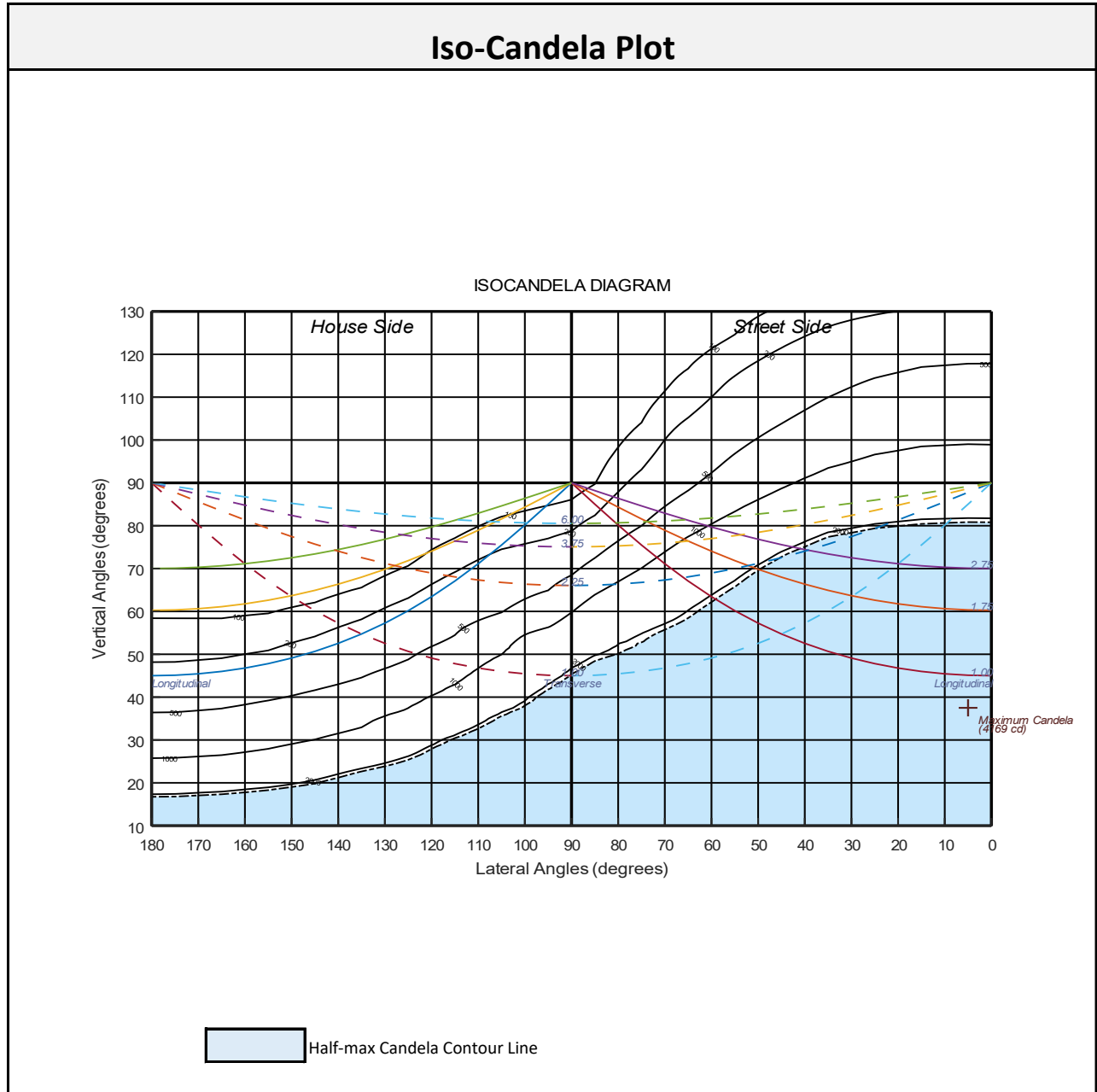
UL - Upward Low (90°-100°)	383.1 Lm
UH - Upward High (100°-180°)	526.9 Lm

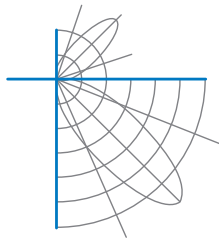
BUG Ratings: B3 - U4 - G4



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Iso-Candela Plot



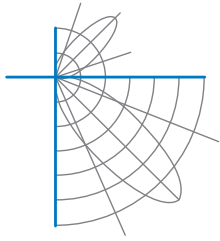


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Luminous Intensity (Candela) Table

	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.	0	3834	3834	3834	3834	3834	3834	3834	3834	3834	3834	3834
	2.5	3857	3852	3829	3817	3829	3846	3841	3828	3839	3832	3816
	5	3853	3840	3830	3854	3866	3873	3851	3835	3829	3819	3794
	7.5	3796	3770	3767	3800	3814	3788	3877	3858	3840	3818	3783
	10	3728	3695	3721	3746	3736	3765	3784	3827	3815	3809	3767
	12.5	3691	3655	3697	3648	3698	3707	3735	3751	3784	3797	3757
	15	3671	3638	3647	3674	3657	3662	3662	3740	3749	3724	3684
	17.5	3643	3619	3641	3621	3614	3621	3621	3641	3680	3639	3588
	20	3597	3582	3585	3602	3576	3571	3535	3515	3575	3533	3471
	22.5	3604	3589	3583	3554	3565	3505	3455	3472	3508	3501	3432
	25	3704	3700	3649	3577	3484	3452	3439	3473	3478	3466	3400
	27.5	3814	3822	3750	3640	3480	3392	3460	3398	3362	3353	3271
	30	3888	3888	3817	3708	3538	3461	3388	3341	3234	3186	3094
	32.5	3988	3985	3911	3735	3585	3450	3314	3240	3076	3013	2916
	35	4110	4109	3996	3799	3624	3458	3232	3135	2942	2864	2736
	37.5	4168	4169	4081	3866	3644	3415	3187	3041	2792	2684	2535
	40	4129	4136	4073	3900	3678	3380	3109	2902	2708	2570	2419
	42.5	4118	4124	4043	3899	3683	3363	3030	2835	2549	2408	2249
	45	4119	4122	4034	3887	3662	3318	2951	2729	2440	2275	2094
	47.5	4130	4129	4035	3873	3623	3254	2857	2643	2323	2138	1949
	50	3967	3970	3960	3872	3607	3192	2762	2534	2210	1978	1790
	52.5	3911	3911	3859	3764	3558	3140	2673	2401	2104	1890	1681
	55	3778	3783	3772	3687	3478	3071	2581	2262	1991	1726	1486
	57.5	3671	3675	3632	3545	3376	2983	2479	2134	1819	1439	1164
	60	3571	3577	3532	3436	3248	2861	2372	2012	1643	1256	984
	62.5	3392	3401	3381	3301	3124	2732	2254	1883	1489	1090	832
	65	3267	3277	3248	3140	2977	2590	2126	1749	1331	927	684
	67.5	3134	3132	3049	2988	2813	2440	1985	1608	1164	765	546
	70	2893	2892	2882	2811	2644	2282	1835	1459	1006	621	433
	72.5	2750	2754	2718	2628	2462	2099	1677	1305	858	499	344
75	2539	2545	2531	2438	2262	1920	1514	1149	722	399	276	
77.5	2350	2355	2316	2231	2075	1740	1350	997	601	318	222	
80	2151	2153	2119	2035	1865	1553	1191	855	499	252	178	
82.5	1944	1946	1911	1836	1670	1377	1046	729	416	198	141	
85	1740	1744	1718	1635	1482	1208	913	618	348	154	111	
87.5	1539	1544	1522	1446	1306	1061	792	523	290	122	88	
90	1365	1370	1353	1283	1160	938	691	446	245	98	71	

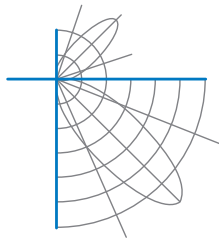


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Luminous Intensity (Candela) Table

	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	1365	1370	1353	1283	1160	938	691	446	245	98	71
	92.5	1239	1245	1227	1163	1041	835	606	387	208	82	61
	95	1133	1139	1123	1059	939	744	541	346	176	71	54
	97.5	1048	1052	1035	968	848	665	484	310	147	62	50
	100	966	970	953	887	768	596	429	275	126	56	46
	102.5	894	897	879	812	694	532	378	239	109	52	43
	105	825	828	809	740	622	472	332	203	95	48	40
	107.5	758	760	740	672	557	418	292	170	83	45	38
	110	692	694	675	609	499	372	257	143	73	41	35
	112.5	632	633	613	548	447	334	228	124	65	38	33
	115	569	568	549	488	403	299	199	110	59	35	30
	117.5	507	507	490	433	355	260	168	95	51	31	27
	120	454	453	435	380	306	221	139	81	44	28	24
	122.5	404	402	384	330	261	187	115	68	38	24	20
	125	356	353	332	281	221	158	98	58	33	20	17
	127.5	302	299	276	232	185	134	84	50	27	17	14
	130	237	235	218	186	153	113	71	41	22	14	11
	132.5	182	181	172	152	126	92	59	34	18	11	9
	135	149	149	142	127	104	74	49	29	14	9	7
	137.5	124	123	117	105	85	62	41	24	11	7	5
	140	99	99	95	84	68	51	35	20	8	5	4
	142.5	78	78	75	66	54	41	28	15	6	4	3
	145	62	62	60	53	43	33	22	11	4	2	1
	147.5	49	49	47	42	34	26	16	7	3	1	0
	150	38	38	37	32	26	19	12	4	1	0	0
	152.5	29	29	28	24	20	14	7	1	0	0	0
	155	22	22	21	19	15	10	4	0	0	0	0
	157.5	17	17	16	14	11	6	1	0	0	0	0
	160	12	12	11	10	7	3	0	0	0	0	0
	162.5	8	8	7	5	3	0	0	0	0	0	0
165	4	4	3	2	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	

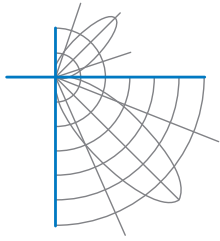


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Luminous Intensity (Candela) Table

	Lateral (C-Plane) Angles											
	90	95	105	115	125	135	145	155	165	175	180	
Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.	0	3834	3834	3834	3834	3834	3834	3834	3834	3834	3834	3834
	2.5	3816	3800	3786	3768	3730	3706	3693	3686	3680	3672	3673
	5	3794	3779	3737	3693	3640	3639	3565	3543	3522	3525	3521
	7.5	3783	3768	3681	3610	3548	3464	3421	3381	3323	3313	3306
	10	3767	3742	3623	3505	3407	3308	3209	3146	3082	3031	3029
	12.5	3757	3710	3547	3390	3261	3109	2963	2822	2719	2642	2641
	15	3684	3625	3478	3336	3114	2874	2629	2496	2390	2322	2320
	17.5	3588	3514	3353	3167	2914	2602	2356	2176	2062	1986	1976
	20	3471	3381	3179	2951	2666	2360	2067	1862	1719	1634	1619
	22.5	3432	3324	3034	2731	2375	2102	1803	1498	1327	1253	1245
	25	3400	3269	2927	2531	2121	1791	1448	1206	1099	1062	1056
	27.5	3271	3127	2787	2369	1868	1480	1192	1028	927	878	874
	30	3094	2952	2579	2127	1679	1210	1007	868	772	737	733
	32.5	2916	2772	2338	1859	1429	1027	849	741	667	636	635
	35	2736	2569	2138	1641	1176	903	724	643	577	548	545
	37.5	2535	2351	1883	1416	998	764	630	557	495	463	460
	40	2419	2220	1690	1198	849	650	550	471	415	389	387
	42.5	2249	2037	1515	1031	720	563	470	394	343	323	322
	45	2094	1864	1335	878	615	488	398	324	281	265	265
	47.5	1949	1703	1164	752	534	418	335	265	229	214	213
50	1790	1522	998	641	469	359	279	216	185	171	170	
52.5	1681	1402	874	551	409	304	229	176	151	141	140	
55	1486	1180	732	488	354	255	186	143	125	120	119	
57.5	1164	891	585	437	304	211	151	117	106	105	104	
60	984	729	492	382	256	171	121	96	90	92	92	
62.5	832	603	423	323	210	136	96	78	76	77	77	
65	684	496	373	272	170	106	75	61	61	63	63	
67.5	546	409	326	228	136	82	57	46	47	48	48	
70	433	338	280	187	107	62	41	31	31	31	31	
72.5	344	279	234	152	83	45	26	17	13	11	11	
75	276	232	192	123	65	32	13	2	0	0	0	
77.5	222	193	155	96	48	20	6	0	0	0	0	
80	178	157	123	74	34	14	4	0	0	0	0	
82.5	141	125	96	58	26	11	3	0	0	0	0	
85	111	97	76	46	21	9	2	0	0	0	0	
87.5	88	76	61	37	17	7	1	0	0	0	0	
90	71	63	50	31	14	6	1	0	0	0	0	

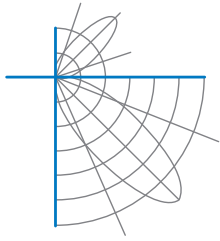


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Luminous Intensity (Candela) Table

	Lateral (C-Plane) Angles											
	90	95	105	115	125	135	145	155	165	175	180	
Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.	90	71	63	50	31	14	6	1	0	0	0	0
	92.5	61	55	42	26	12	5	0	0	0	0	0
	95	54	48	36	22	11	5	0	0	0	0	0
	97.5	50	43	32	19	9	4	0	0	0	0	0
	100	46	40	28	16	8	3	0	0	0	0	0
	102.5	43	37	26	14	7	3	0	0	0	0	0
	105	40	34	23	11	6	2	0	0	0	0	0
	107.5	38	32	20	10	5	1	0	0	0	0	0
	110	35	29	17	8	4	1	0	0	0	0	0
	112.5	33	26	15	7	3	0	0	0	0	0	0
	115	30	24	13	6	3	0	0	0	0	0	0
	117.5	27	21	11	5	2	0	0	0	0	0	0
	120	24	19	9	5	2	0	0	0	0	0	0
	122.5	20	16	8	4	1	0	0	0	0	0	0
	125	17	13	6	3	1	0	0	0	0	0	0
	127.5	14	11	5	2	1	0	0	0	0	0	0
	130	11	8	4	1	0	0	0	0	0	0	0
	132.5	9	7	3	1	0	0	0	0	0	0	0
	135	7	5	1	0	0	0	0	0	0	0	0
	137.5	5	3	1	0	0	0	0	0	0	0	0
	140	4	2	0	0	0	0	0	0	0	0	0
	142.5	3	1	0	0	0	0	0	0	0	0	0
	145	1	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 25.8 °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-31-95 and LM-10-96.

The luminous intensity values, 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.

Photometric intensity values are reported using the IES C-Type spherical coordinate system as defined in IES LM-75-01.

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.