



IES ROAD REPORT
PHOTOMETRIC FILENAME : XENM3-SA-FT-LED-HO-CW.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]LED-4766
[TESTLAB]LSI INDUSTRIES, INC
[ISSUE DATE]11/22/13
[TEST DATE]11/22/13
[MANUFACTURER]LSI INDUSTRIES, INC
[LUMCAT]XENM3-SA-FT-LED-HO-CW
[ABSOLUTE]NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.
[OTHER]TEST PROCEDURE: IESNA LM-79-08
[ABSOLUTE LUMENS]8659
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Outdoor

CHARACTERISTICS

IES Classification	Type IV
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	8659
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	80
Total Luminaire Watts	108
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	5519
Maximum Candela Angle	25H 60V
Maximum Candela (<90 Degrees Vertical)	5519
Maximum Candela Angle (<90 Degrees Vertical)	25H 60V
Maximum Candela At 90 Degrees Vertical	4 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1553 (17.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT
PHOTOMETRIC FILENAME : XENM3-SA-FT-LED-HO-CW.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	954.4	N.A.	11.0
FM - Front-Medium (30-60)	3844.2	N.A.	44.4
FH - Front-High (60-80)	2884.9	N.A.	33.3
FVH - Front-Very High (80-90)	105.5	N.A.	1.2
BL - Back-Low (0-30)	241.6	N.A.	2.8
BM - Back-Medium (30-60)	448.3	N.A.	5.2
BH - Back-High (60-80)	152.5	N.A.	1.8
BVH - Back-Very High (80-90)	7.2	N.A.	0.1
UL - Uplight-Low (90-100)	3.1	N.A.	0.0
UH - Uplight-High (100-180)	17.1	N.A.	0.2
Total	8658.8	N.A.	100.0
BUG Rating	B1-U2-G2		

IES ROAD REPORT
PHOTOMETRIC FILENAME : XENM3-SA-FT-LED-HO-CW.IES

CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	<u>0.0</u>	<u>5.0</u>	<u>15.0</u>	<u>25.0</u>	<u>27.5</u>	<u>35.0</u>	<u>45.0</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>
0.0	711	711	711	711	711	711	711	711	711	711
2.5	823	820	814	803	792	785	762	742	724	709
5.0	1145	1139	1117	1074	1051	1016	945	876	816	760
7.5	1669	1657	1612	1519	1475	1388	1230	1092	953	831
10.0	2205	2179	2135	2035	2009	1869	1628	1382	1142	932
12.5	2615	2580	2533	2420	2394	2267	2084	1779	1408	1095
15.0	2826	2797	2782	2736	2720	2644	2433	2180	1745	1290
17.5	2846	2814	2817	2824	2825	2855	2761	2464	2047	1469
20.0	2807	2779	2805	2837	2839	2868	2915	2758	2361	1703
22.5	2549	2541	2619	2751	2781	2864	2973	3063	2704	1974
25.0	2466	2445	2475	2529	2553	2759	3095	3264	3025	2211
27.5	2434	2410	2428	2472	2490	2638	3162	3414	3333	2403
30.0	2459	2433	2427	2433	2454	2693	3074	3574	3514	2591
32.5	2622	2596	2551	2482	2501	2736	3062	3459	3552	2850
35.0	2750	2722	2695	2687	2716	2861	3007	3206	3559	2986
37.5	2963	2933	2878	2894	2978	3120	2943	2993	3415	3086
40.0	3200	3163	3081	3220	3294	3320	3017	2877	3267	3200
42.5	3576	3546	3409	3631	3712	3545	3161	2799	3069	3165
45.0	4037	3971	3913	4239	4226	3848	3290	2800	2875	3050
47.5	4034	3973	4058	4861	4822	4366	3525	2935	2644	2926
50.0	4172	4106	4260	4967	4938	4881	3866	3034	2496	2806
52.5	4233	4171	4572	5187	5111	4949	4348	3156	2438	2648
55.0	4352	4288	4666	5252	5234	5048	4631	3369	2492	2430
57.5	4434	4394	5042	5305	5205	5104	4571	3721	2610	2263
60.0	4057	4006	4869	5519	5484	5136	4730	4038	2735	2167
62.5	4192	4135	4932	5111	5090	5247	4751	4054	2955	2031
65.0	4210	4167	5020	5187	5126	4896	4906	4243	3025	1706
67.5	3385	3409	4304	5038	5111	5092	4750	3895	2907	1634
70.0	2705	2705	3202	3908	4125	4935	4585	3534	2928	1556
72.5	1908	1890	2334	3088	3338	3897	3985	3171	2692	1557
75.0	1239	1228	1457	2093	2310	2760	2883	2845	2383	1584
77.5	699	693	852	1369	1468	1672	1643	1900	2109	1544
80.0	132	131	237	525	587	801	834	953	1553	1252
82.5	29	31	70	95	100	131	206	379	673	837
85.0	9	9	15	21	23	25	28	50	146	361
87.5	2	2	4	4	5	4	5	6	8	33
90.0	0	0	1	3	3	3	3	3	4	3
92.5	0	1	2	3	3	3	3	4	4	4
95.0	0	1	2	3	3	3	4	4	4	4
97.5	0	1	2	2	2	3	3	4	4	4
100.0	0	1	2	2	3	3	3	4	4	4
102.5	1	1	2	2	2	3	3	4	4	5
105.0	0	1	2	2	2	3	3	3	4	4
107.5	0	1	2	2	2	3	3	4	4	4
110.0	0	1	2	2	2	2	3	4	4	4
112.5	1	1	2	2	2	3	3	4	4	4
115.0	0	1	2	2	2	3	3	4	4	4
117.5	0	1	2	2	2	3	3	3	4	4
120.0	0	1	2	2	2	3	3	4	4	4
122.5	0	1	1	2	2	2	3	3	4	4
125.0	0	1	2	2	2	3	3	4	4	4
127.5	0	1	2	2	2	3	3	4	4	4
130.0	1	1	2	2	2	3	3	4	4	4

IES ROAD REPORT
PHOTOMETRIC FILENAME : XENM3-SA-FT-LED-HO-CW.IES

CANDELA TABULATION - (Cont.)

132.5	0	1	2	2	2	3	3	4	4	4
135.0	0	1	2	2	2	3	3	3	4	4
137.5	1	1	2	2	2	2	3	4	4	4
140.0	1	1	2	2	2	2	3	3	4	4
142.5	0	1	2	2	2	2	3	3	4	4
145.0	1	1	2	2	2	2	3	3	4	4
147.5	0	1	2	2	2	2	3	3	4	4
150.0	1	1	2	2	2	3	3	4	4	4
152.5	0	1	2	2	2	2	3	4	4	4
155.0	0	1	2	2	2	3	3	4	4	4
157.5	1	1	2	2	2	3	3	3	4	4
160.0	0	1	2	2	2	3	3	4	4	4
162.5	1	1	2	2	2	3	3	4	4	4
165.0	1	1	2	2	2	3	3	3	3	4
167.5	0	1	2	2	2	3	3	3	3	3
170.0	0	1	2	2	3	3	3	3	4	3
172.5	0	1	2	2	2	3	3	3	3	3
175.0	1	1	2	2	2	2	3	3	3	3
177.5	1	1	2	2	2	2	3	3	3	3
180.0	2	2	2	2	2	2	2	2	2	2

Vert. Angles	Horizontal Angles									
	<u>85.0</u>	<u>90.0</u>	<u>95.0</u>	<u>105.0</u>	<u>115.0</u>	<u>125.0</u>	<u>135.0</u>	<u>145.0</u>	<u>155.0</u>	<u>165.0</u>
0.0	711	711	711	711	711	711	711	711	711	711
2.5	694	687	679	670	668	665	665	668	667	669
5.0	710	690	674	657	646	634	624	617	608	606
7.5	737	705	681	654	629	600	583	570	561	555
10.0	786	736	702	658	612	580	556	548	531	519
12.5	880	807	760	685	619	589	563	527	490	473
15.0	990	902	844	736	676	621	520	479	454	436
17.5	1080	973	908	786	792	599	499	450	417	390
20.0	1158	1016	943	862	824	611	511	422	367	339
22.5	1217	1040	956	951	753	634	535	397	329	305
25.0	1268	1057	959	951	735	637	538	388	302	273
27.5	1292	1037	955	975	771	625	553	347	271	250
30.0	1348	1049	958	938	813	641	475	312	252	236
32.5	1432	1066	954	891	844	679	433	306	241	227
35.0	1437	1021	901	829	879	664	428	307	232	210
37.5	1543	1033	878	716	789	627	407	309	220	197
40.0	1670	1085	882	672	631	595	393	310	202	157
42.5	1767	1134	912	649	532	595	355	315	163	106
45.0	1832	1167	937	643	460	608	313	266	133	103
47.5	1870	1190	949	625	406	536	268	203	156	112
50.0	1921	1193	956	602	362	422	195	179	203	105
52.5	1950	1178	945	564	327	333	138	162	206	108
55.0	1972	1175	969	524	305	216	125	148	190	116
57.5	1906	1118	937	495	280	138	127	139	170	137
60.0	1865	1019	876	449	258	134	122	138	165	161
62.5	1763	1027	820	408	190	137	110	124	161	179
65.0	1598	1029	780	364	127	144	94	112	159	164
67.5	1390	918	683	326	130	128	68	82	73	22
70.0	1216	801	560	261	143	97	53	44	27	13
72.5	1005	692	497	166	136	69	45	37	21	7
75.0	846	534	386	124	105	51	39	28	23	3
77.5	724	420	266	125	78	37	25	15	9	1

IES ROAD REPORT
PHOTOMETRIC FILENAME : XENM3-SA-FT-LED-HO-CW.IES

CANDELA TABULATION - (Cont.)

80.0	519	245	152	105	43	21	13	5	2	0
82.5	336	133	84	57	23	10	5	2	1	1
85.0	185	64	28	20	7	4	3	2	0	0
87.5	40	8	4	3	3	3	2	1	0	0
90.0	3	3	3	3	3	3	2	1	0	0
92.5	3	3	3	4	4	4	3	2	1	0
95.0	4	4	4	4	4	4	4	3	2	1
97.5	4	4	4	4	5	5	4	3	2	1
100.0	4	4	4	5	5	5	5	4	2	2
102.5	5	5	5	5	5	5	5	4	3	2
105.0	5	5	5	5	5	5	5	4	3	2
107.5	4	4	5	5	5	5	5	4	3	2
110.0	4	4	5	5	5	5	5	4	3	2
112.5	5	5	5	5	5	5	5	4	3	2
115.0	4	5	5	5	5	5	5	4	3	2
117.5	5	5	5	5	6	6	5	4	3	2
120.0	5	5	5	5	6	6	5	4	3	2
122.5	5	5	5	5	6	6	5	4	3	2
125.0	4	5	5	5	6	6	5	4	3	2
127.5	5	5	5	5	6	6	5	4	3	3
130.0	5	5	5	5	6	6	5	4	3	3
132.5	4	5	5	5	5	5	5	4	3	2
135.0	4	4	5	5	5	5	5	4	3	2
137.5	4	5	5	5	5	5	5	3	3	2
140.0	4	4	5	5	5	5	4	3	2	2
142.5	4	4	4	4	5	5	4	3	2	2
145.0	4	4	4	4	5	4	4	3	2	2
147.5	4	4	4	4	4	4	4	3	2	1
150.0	4	4	4	4	5	4	4	3	2	1
152.5	4	4	4	4	4	4	3	3	2	1
155.0	4	4	4	4	4	4	3	3	2	1
157.5	4	4	4	4	4	4	3	2	1	1
160.0	4	4	4	4	4	4	3	2	1	1
162.5	4	4	4	4	4	3	3	2	1	1
165.0	4	4	4	4	3	3	2	2	1	1
167.5	3	4	4	3	3	3	2	1	1	0
170.0	3	4	4	4	3	3	2	1	1	0
172.5	3	3	3	3	3	3	2	1	0	0
175.0	3	3	3	3	3	2	2	1	0	0
177.5	3	3	3	3	3	2	2	1	0	0
180.0	2	2	2	2	2	2	2	2	2	2

Vert. Horizontal Angles

	<u>175.0</u>	<u>180.0</u>
0.0	711	711
2.5	668	668
5.0	602	603
7.5	549	548
10.0	512	512
12.5	466	465
15.0	425	426
17.5	373	370
20.0	322	320
22.5	291	287
25.0	262	260

IES ROAD REPORT
PHOTOMETRIC FILENAME : XENM3-SA-FT-LED-HO-CW.IES

CANDELA TABULATION - (Cont.)

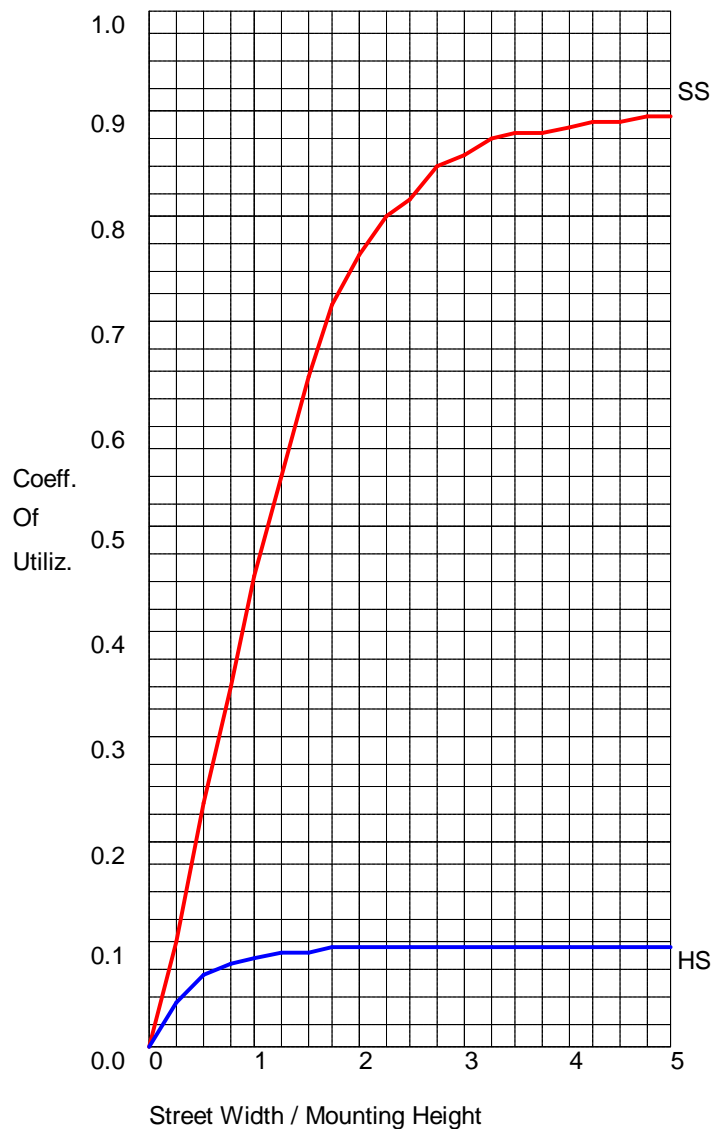
27.5	241	238
30.0	228	223
32.5	215	209
35.0	198	192
37.5	175	171
40.0	125	119
42.5	86	77
45.0	84	74
47.5	80	74
50.0	79	72
52.5	71	63
55.0	57	52
57.5	47	43
60.0	41	35
62.5	34	28
65.0	26	21
67.5	20	13
70.0	9	7
72.5	4	2
75.0	0	0
77.5	0	0
80.0	0	0
82.5	0	0
85.0	0	0
87.5	0	0
90.0	0	0
92.5	0	0
95.0	0	0
97.5	0	0
100.0	0	0
102.5	1	0
105.0	1	1
107.5	1	1
110.0	1	1
112.5	1	1
115.0	2	1
117.5	2	2
120.0	2	2
122.5	2	2
125.0	2	2
127.5	2	2
130.0	2	2
132.5	2	2
135.0	2	2
137.5	1	1
140.0	1	1
142.5	1	1
145.0	1	1
147.5	1	0
150.0	1	0
152.5	0	0
155.0	0	0
157.5	0	0
160.0	0	0
162.5	0	0
165.0	0	0

IES ROAD REPORT
PHOTOMETRIC FILENAME : XENM3-SA-FT-LED-HO-CW.IES

CANDELA TABULATION - (Cont.)

167.5	0	0
170.0	0	0
172.5	0	0
175.0	0	0
177.5	0	0
180.0	2	2

COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

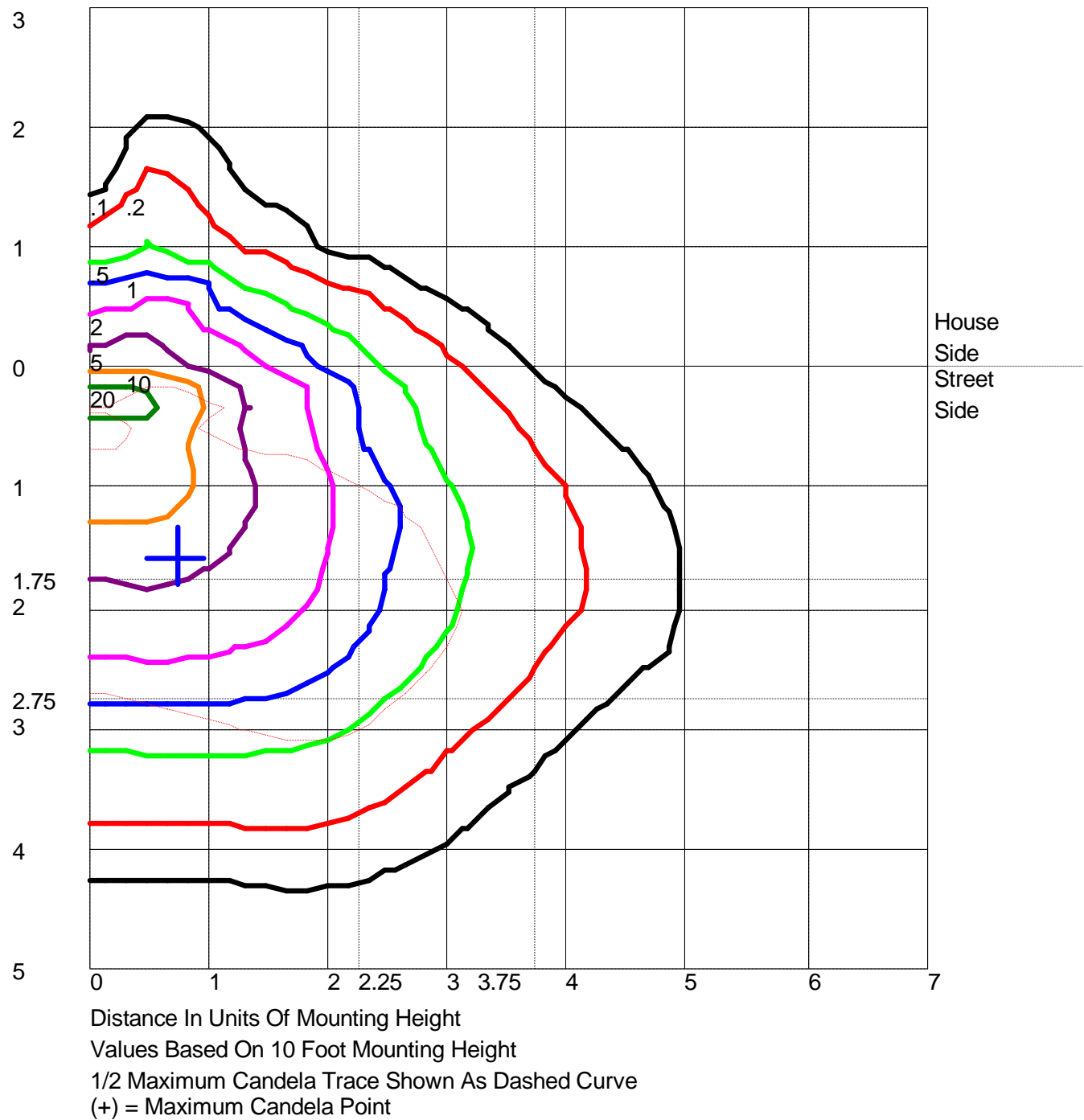
	Lumens	Percent Of Luminaire
Downward Street Side	7788.9	90.0
Downward House Side	849.6	9.8
Downward Total	8638.5	99.8
Upward Street Side	9.2	0.1
Upward House Side	11.0	0.1
Upward Total	20.2	0.2
Total Flux	8658.7	100.0

POLAR GRAPH

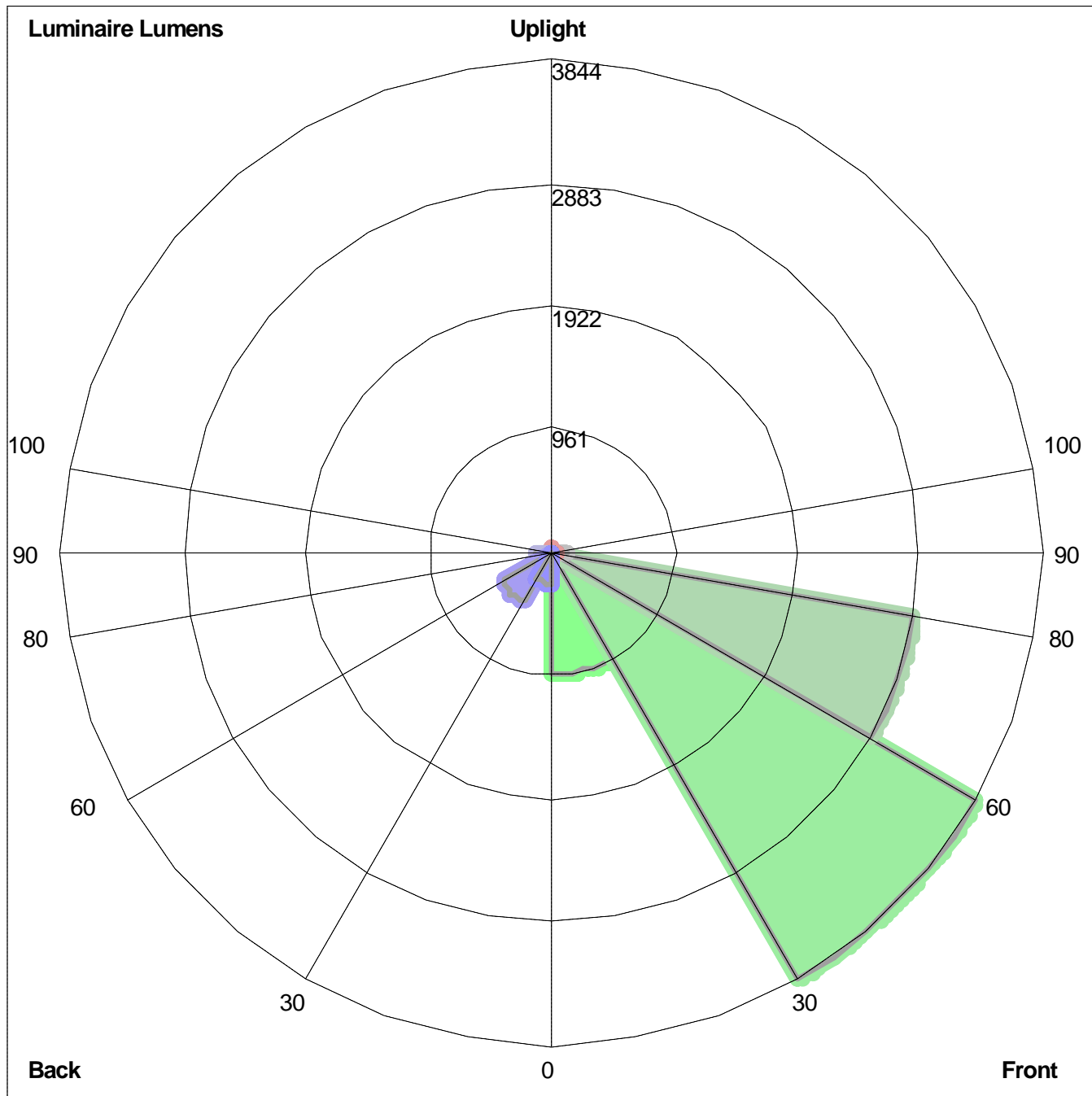


Maximum Candela = 5519 Located At Horizontal Angle = 25, Vertical Angle = 60
1 - Vertical Plane Through Horizontal Angles (25 - 205) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (60) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=954.4, Medium=3844.2, High=2884.9, Very High=105.5
Back: Low=241.6, Medium=448.3, High=152.5, Very High=7.2
Uplight: Low=3.1, High=17.1

BUG Rating : B1-U2-G2