



IES ROAD REPORT

PHOTOMETRIC FILENAME : XENM3-SA-3-LED-HO-CW.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST]LED-4767
[TESTLAB]LSI INDUSTRIES, INC
[ISSUE DATE]11/22/13
[TEST DATE]11/22/13
[MANUFACTURER]LSI INDUSTRIES, INC
[LUMCAT]XENM3-SA-3-LED-HO-CW
[ABSOLUTE]NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.
[OTHER]TEST PROCEDURE: IESNA LM-79-08
[ABSOLUTE LUMENS]9410
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Outdoor

CHARACTERISTICS

IES Classification	Type II
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	9410
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	87
Total Luminaire Watts	108
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	6155
Maximum Candela Angle	52.5H 52.5V
Maximum Candela (<90 Degrees Vertical)	6155
Maximum Candela Angle (<90 Degrees Vertical)	52.5H 52.5V
Maximum Candela At 90 Degrees Vertical	2 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	833 (8.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1104.5	N.A.	11.7
FM - Front-Medium (30-60)	4535.6	N.A.	48.2
FH - Front-High (60-80)	1911.0	N.A.	20.3
FVH - Front-Very High (80-90)	52.9	N.A.	0.6
BL - Back-Low (0-30)	602.5	N.A.	6.4
BM - Back-Medium (30-60)	890.9	N.A.	9.5
BH - Back-High (60-80)	293.2	N.A.	3.1
BVH - Back-Very High (80-90)	9.5	N.A.	0.1
UL - Uplight-Low (90-100)	1.5	N.A.	0.0
UH - Uplight-High (100-180)	8.8	N.A.	0.1
Total	9410.4	N.A.	100.0
BUG Rating	B2-U1-G2		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	<u>0.0</u>	<u>5.0</u>	<u>15.0</u>	<u>25.0</u>	<u>35.0</u>	<u>45.0</u>	<u>52.5</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>
0.0	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
2.5	1573	1568	1575	1585	1602	1622	1627	1636	1647	1652
5.0	1488	1484	1501	1529	1572	1625	1662	1687	1743	1782
7.5	1538	1533	1556	1589	1628	1681	1743	1764	1882	2000
10.0	1600	1594	1633	1706	1809	1943	2032	2047	2135	2287
12.5	1725	1719	1766	1881	2086	2249	2315	2328	2392	2536
15.0	1809	1806	1904	2139	2374	2545	2652	2693	2716	2748
17.5	1950	1947	2113	2501	2718	2881	2923	2930	2881	2861
20.0	2021	2018	2280	2819	3167	3203	3069	3043	2938	2869
22.5	2041	2042	2459	3097	3498	3421	3125	3024	2837	2778
25.0	2075	2088	2656	3417	3696	3498	3176	3056	2690	2584
27.5	2067	2085	2792	3641	3778	3539	3208	3086	2601	2449
30.0	1987	2047	2918	3744	3855	3608	3325	3211	2602	2373
32.5	1974	2065	3108	3879	3867	3747	3565	3451	2762	2417
35.0	2094	2239	3466	4001	3977	3824	3657	3576	3023	2680
37.5	2240	2470	3861	4165	4314	3968	3716	3691	3377	3055
40.0	2575	2764	4145	4372	4538	4307	3962	3914	3766	3447
42.5	2862	3052	4353	4373	4652	4802	4407	4296	4284	3926
45.0	3104	3305	4474	4419	4723	5353	4971	4854	4708	4160
47.5	2986	3234	4476	4470	4841	5720	5585	5473	5036	4394
50.0	2411	2761	3760	4296	4921	5890	5991	5956	5195	4444
52.5	2356	2721	3452	3683	4788	5900	6155	6147	5300	4384
55.0	1592	2042	2860	3481	4223	5768	6094	6114	5219	4232
57.5	1533	1812	2286	2760	3926	5330	5768	5800	5102	4045
60.0	1420	1697	2048	2388	3298	4650	5369	5452	4907	3968
62.5	644	935	1332	2131	2873	4007	4657	4766	4649	3996
65.0	709	801	910	1267	2491	3284	3985	4073	4543	4052
67.5	259	281	514	1011	1495	3086	3553	3727	3966	3406
70.0	36	39	67	304	1243	2465	3239	3098	3268	3321
72.5	24	27	37	113	698	2046	2563	2734	2991	2912
75.0	17	20	28	87	514	1547	2238	2320	2420	2355
77.5	10	12	18	36	414	1180	1535	1596	1627	1420
80.0	6	7	10	23	262	647	819	833	817	693
82.5	3	4	5	7	73	206	305	338	315	268
85.0	1	1	2	2	7	14	35	38	46	22
87.5	0	0	1	1	2	2	2	2	2	2
90.0	0	0	1	1	2	2	2	2	2	1
92.5	0	0	1	1	2	2	2	2	1	1
95.0	0	0	1	1	1	2	2	2	1	1
97.5	0	0	1	1	1	1	1	1	1	1
100.0	0	0	1	1	1	1	1	1	1	1
102.5	0	0	1	1	1	1	1	1	1	1
105.0	0	0	1	1	1	1	1	1	1	1
107.5	0	0	1	1	1	1	1	1	0	1
110.0	0	0	1	1	1	1	1	1	1	1
112.5	0	0	1	1	1	1	1	1	1	1
115.0	0	0	1	1	1	1	1	1	1	1
117.5	0	0	1	1	1	1	1	1	1	1
120.0	0	0	1	1	1	1	1	1	1	1
122.5	0	0	1	1	1	1	1	1	1	1
125.0	0	0	1	1	1	1	1	1	1	1
127.5	0	0	1	1	1	1	1	1	1	1
130.0	0	0	1	1	1	1	1	1	1	1

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CANDELA TABULATION - (Cont.)

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

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	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
2.5	1651	1655	1648	1643	1629	1609	1591	1573	1554	1541
5.0	1792	1798	1793	1776	1739	1687	1627	1562	1489	1435
7.5	2080	2091	2066	2023	1927	1771	1580	1418	1288	1218
10.0	2385	2399	2372	2317	2108	1847	1631	1457	1295	1184
12.5	2706	2733	2700	2560	2207	1971	1777	1569	1330	1145
15.0	2922	2944	2899	2626	2300	2129	1908	1614	1275	1011
17.5	2998	3002	2941	2485	2277	2163	1885	1505	1089	798
20.0	2924	2924	2860	2349	2156	1975	1703	1206	822	568
22.5	2770	2776	2707	2240	2072	1739	1296	809	560	396
25.0	2587	2591	2494	2177	2004	1473	874	514	411	337
27.5	2457	2461	2344	2138	1883	1169	583	420	392	319
30.0	2350	2327	2273	2140	1666	870	448	419	384	313
32.5	2418	2383	2294	2113	1437	626	439	410	375	296
35.0	2619	2621	2480	2117	1248	517	443	415	357	277
37.5	2861	2840	2685	2116	1141	543	428	383	341	269
40.0	3062	3017	2832	2071	858	610	434	327	312	271
42.5	3324	3216	3019	1983	684	587	439	296	262	260
45.0	3553	3372	3146	1874	663	492	441	256	230	212
47.5	3667	3468	3251	1710	695	488	469	194	199	171
50.0	3665	3455	3201	1532	711	428	477	150	156	167
52.5	3329	3261	3093	1288	676	376	423	126	118	109
55.0	3003	3063	3011	1054	619	357	307	115	69	47
57.5	2736	2889	2891	944	529	309	220	71	50	37
60.0	2586	2744	2785	894	463	259	137	60	41	28
62.5	2541	2650	2775	738	397	224	74	43	33	24
65.0	2517	2514	2611	538	269	135	66	37	27	24
67.5	2184	2121	2197	395	169	98	55	33	23	21
70.0	2247	2101	2048	296	81	83	51	27	19	17
72.5	2090	1857	1753	200	48	55	41	24	15	13
75.0	1771	1487	1267	83	28	38	23	17	13	12
77.5	1098	912	742	42	29	31	16	12	13	15

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CANDELA TABULATION - (Cont.)

80.0	520	443	382	25	34	23	13	13	14	16
82.5	217	197	165	18	25	14	14	10	8	8
85.0	23	22	27	6	7	9	7	4	3	2
87.5	1	1	1	1	2	3	3	2	2	1
90.0	1	1	1	1	2	2	2	2	1	0
92.5	1	1	1	1	2	2	3	2	1	0
95.0	1	1	1	2	2	3	3	2	2	0
97.5	1	1	1	2	3	3	3	2	2	0
100.0	1	1	1	2	3	3	3	3	2	1
102.5	1	1	1	2	3	3	3	3	2	1
105.0	1	1	1	2	3	3	3	3	2	1
107.5	1	1	1	2	3	3	3	3	2	1
110.0	1	1	2	2	3	4	4	3	2	1
112.5	1	1	1	2	3	4	4	3	2	1
115.0	1	1	2	3	3	4	4	3	2	1
117.5	1	1	2	3	4	4	4	4	3	1
120.0	1	1	2	3	4	4	4	4	3	2
122.5	1	1	2	3	4	4	4	4	3	1
125.0	1	1	2	3	4	4	4	4	3	2
127.5	1	1	2	3	4	4	4	4	3	2
130.0	1	1	2	3	4	4	4	4	3	2
132.5	1	2	2	3	4	4	4	4	3	2
135.0	1	1	2	3	4	4	4	4	3	2
137.5	1	1	2	3	4	4	4	4	3	2
140.0	1	1	2	3	3	4	4	4	3	2
142.5	1	1	1	2	3	4	4	4	3	2
145.0	1	1	1	2	3	4	4	4	3	2
147.5	1	1	2	2	3	4	4	4	3	2
150.0	1	1	2	2	3	4	4	4	3	2
152.5	1	1	2	2	3	3	4	3	3	2
155.0	1	1	2	2	3	3	4	4	3	2
157.5	1	1	2	2	3	3	4	3	3	2
160.0	1	1	1	2	3	3	4	3	3	2
162.5	1	1	1	2	2	3	3	3	2	2
165.0	1	1	1	1	2	3	3	3	2	1
167.5	0	0	1	1	2	2	3	3	2	1
170.0	0	0	0	1	1	2	3	2	2	1
172.5	0	0	0	1	2	2	2	2	1	1
175.0	0	0	0	1	1	2	2	2	1	0
177.5	0	0	0	1	1	2	2	2	1	0
180.0	1	1	1	1	1	1	1	1	1	1

Vert. Horizontal Angles

	<u>175.0</u>	<u>180.0</u>
0.0	1600	1600
2.5	1531	1518
5.0	1402	1385
7.5	1185	1169
10.0	1129	1112
12.5	1051	1030
15.0	882	860
17.5	637	613
20.0	410	392
22.5	282	268
25.0	240	231

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CANDELA TABULATION - (Cont.)

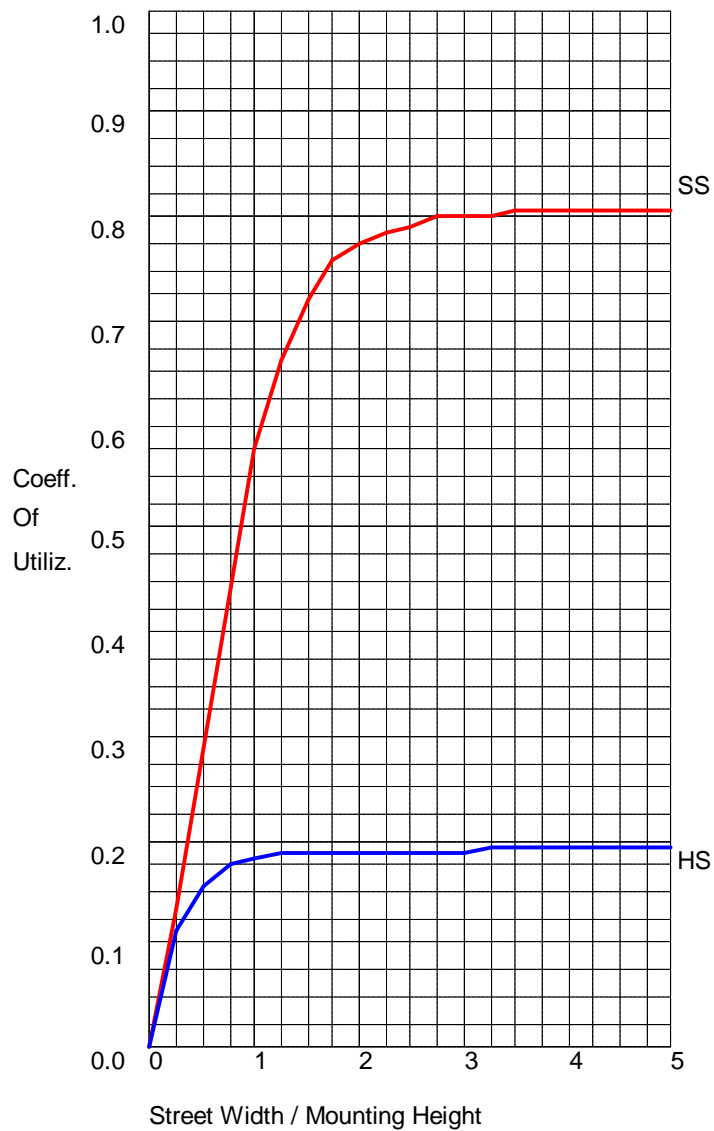
27.5	220	205
30.0	206	191
32.5	189	174
35.0	174	158
37.5	172	158
40.0	170	156
42.5	156	140
45.0	125	111
47.5	114	103
50.0	102	91
52.5	56	53
55.0	38	38
57.5	32	30
60.0	24	23
62.5	22	21
65.0	23	19
67.5	21	17
70.0	18	16
72.5	12	11
75.0	10	9
77.5	12	10
80.0	10	8
82.5	3	2
85.0	0	0
87.5	0	0
90.0	0	0
92.5	0	0
95.0	0	0
97.5	0	0
100.0	0	0
102.5	0	0
105.0	0	0
107.5	0	0
110.0	0	0
112.5	0	0
115.0	0	0
117.5	0	0
120.0	0	0
122.5	0	0
125.0	1	0
127.5	1	1
130.0	1	1
132.5	1	1
135.0	1	1
137.5	1	1
140.0	1	1
142.5	1	1
145.0	1	1
147.5	1	2
150.0	2	2
152.5	2	2
155.0	2	2
157.5	1	1
160.0	1	1
162.5	1	1
165.0	0	0

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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	1	1

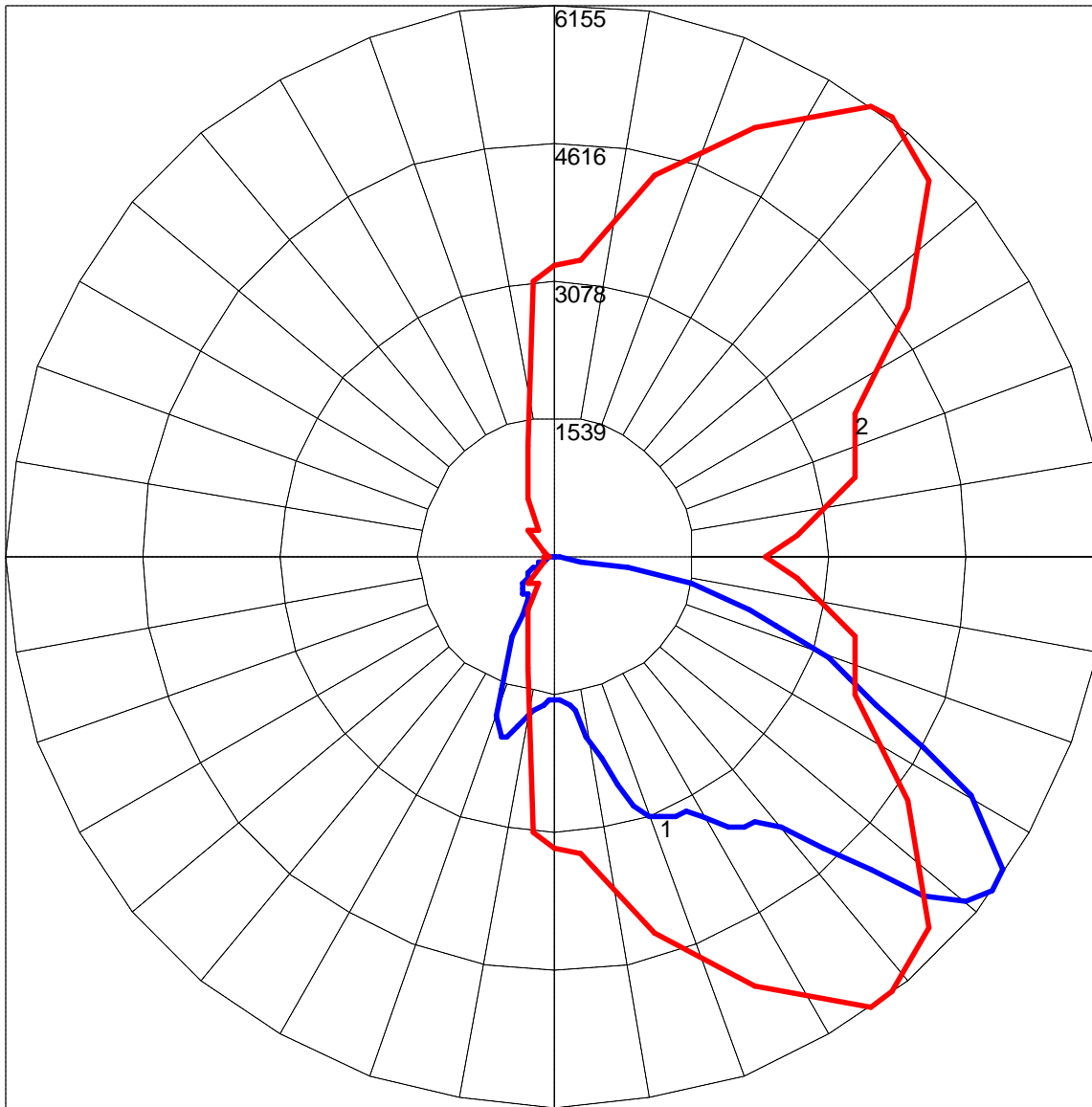
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

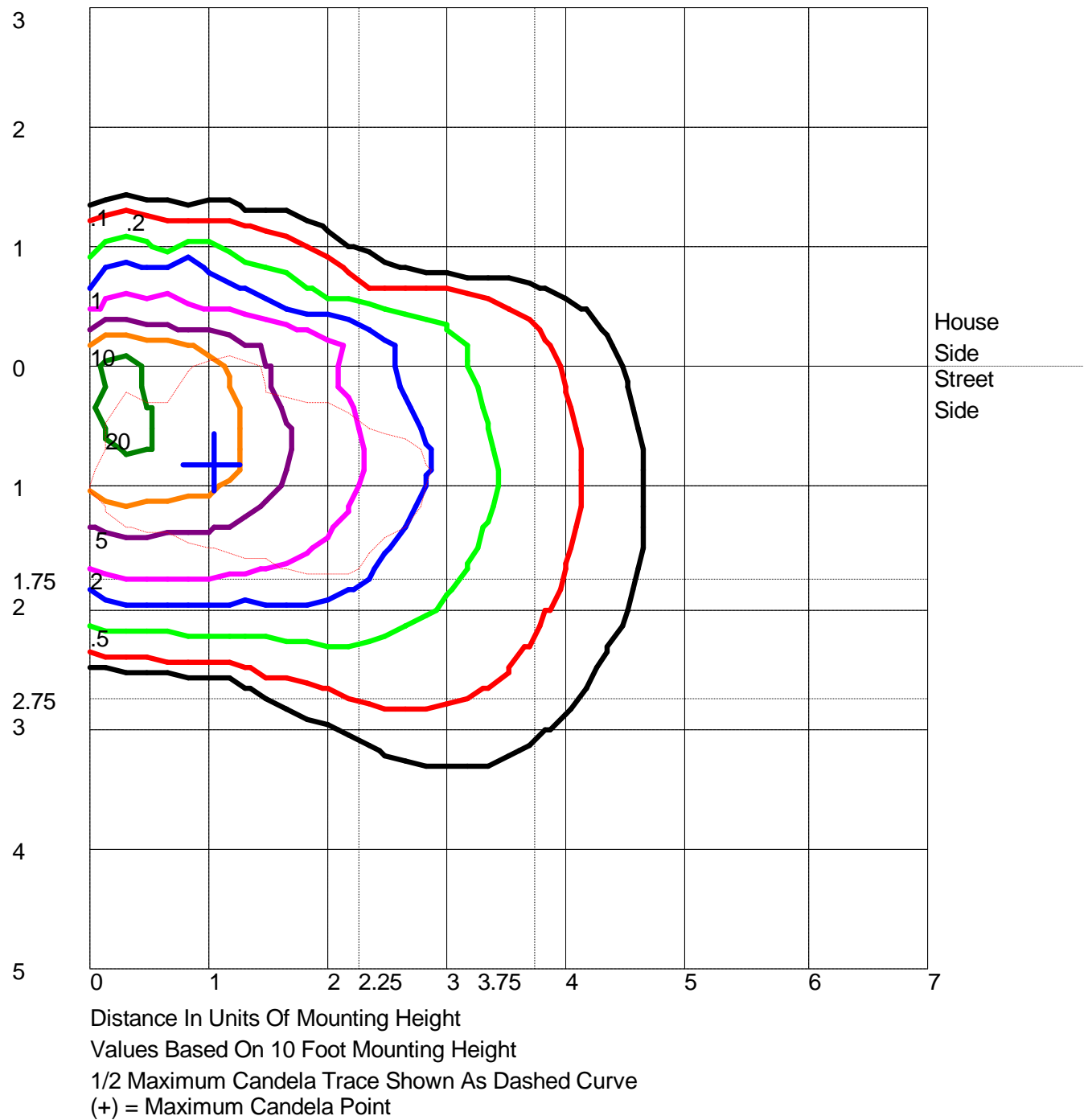
	Lumens	Percent Of Luminaire
Downward Street Side	7604.0	80.8
Downward House Side	1796.2	19.1
Downward Total	9400.2	99.9
Upward Street Side	2.8	0.0
Upward House Side	7.4	0.1
Upward Total	10.2	0.1
Total Flux	9410.4	100.0

POLAR GRAPH

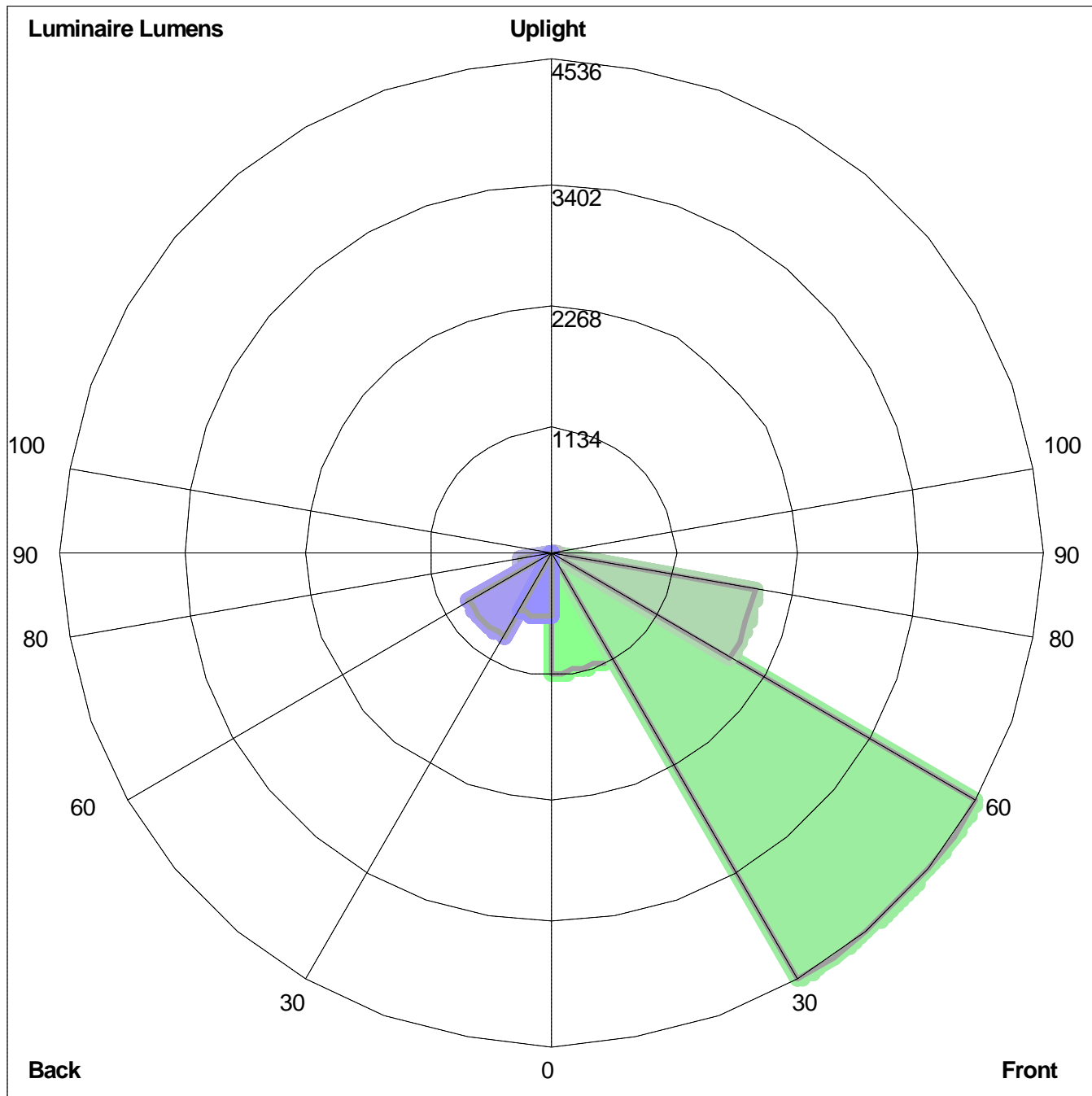


Maximum Candela = 6155 Located At Horizontal Angle = 52.5, Vertical Angle = 52.5
1 - Vertical Plane Through Horizontal Angles (52.5 - 232.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (52.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=1104.5, Medium=4535.6, High= 1911.0, Very High=52.9
Back: Low=602.5, Medium=890.9, High=293.2, Very High=9.5
Uplight: Low=1.5, High=8.8

BUG Rating : B2-U1-G2