



**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : XGBM-FTA-LED-HO-NW-HSS.IES**

**DESCRIPTIVE INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST]LED-5350A  
[TESTLAB]LSI INDUSTRIES, INC  
[ISSUE DATE]03/30/16  
[TEST DATE]03/30/16  
[MANUFACTURER]LSI INDUSTRIES, INC  
[LUMCAT]XGBM-FTA-LED-HO-NW-HSS  
[ABSOLUTE]NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.  
[OTHER]Tested with new Flat Black HSS Shield  
[OTHER]TEST PROCEDURE: IESNA LM-79-08  
[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	16855
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	58
Total Luminaire Watts	288.6
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	11284
Maximum Candela Angle	20H 62.5V
Maximum Candela (<90 Degrees Vertical)	11284
Maximum Candela Angle (<90 Degrees Vertical)	20H 62.5V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	3011 (17.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1955.7	N.A.	11.6
FM - Front-Medium (30-60)	6456.5	N.A.	38.3
FH - Front-High (60-80)	5822.2	N.A.	34.5
FVH - Front-Very High (80-90)	355.5	N.A.	2.1
BL - Back-Low (0-30)	1022.7	N.A.	6.1
BM - Back-Medium (30-60)	1028.0	N.A.	6.1
BH - Back-High (60-80)	208.4	N.A.	1.2
BVH - Back-Very High (80-90)	6.5	N.A.	0.0
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	16855.5	N.A.	100.0
BUG Rating	B3-U0-G3		

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**CANDELA TABULATION**

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<u><b>0</b></u>	<u><b>5</b></u>	<u><b>15</b></u>	<u><b>20</b></u>	<u><b>25</b></u>	<u><b>35</b></u>	<u><b>45</b></u>	<u><b>55</b></u>	<u><b>65</b></u>	<u><b>75</b></u>
<b>0.0</b>	4145	4145	4145	4145	4145	4145	4145	4145	4145	4145
<b>2.5</b>	4234	4268	4249	4231	4232	4208	4190	4174	4148	4138
<b>5.0</b>	4383	4417	4389	4369	4359	4322	4286	4247	4202	4175
<b>7.5</b>	4650	4670	4603	4562	4509	4451	4408	4342	4268	4210
<b>10.0</b>	4913	4953	4937	4920	4916	4845	4601	4437	4350	4254
<b>12.5</b>	4927	4966	4954	4936	4944	4938	4914	4709	4456	4335
<b>15.0</b>	4752	4799	4853	4869	4926	4965	4950	4974	4622	4470
<b>17.5</b>	4388	4436	4501	4539	4630	4839	4992	5054	5013	4646
<b>20.0</b>	4123	4161	4194	4229	4309	4511	4894	5152	5242	4815
<b>22.5</b>	4262	4303	4309	4234	4154	4248	4668	5238	5431	5003
<b>25.0</b>	4097	4138	4164	4169	4227	4250	4404	5154	5597	5390
<b>27.5</b>	4058	4089	4104	4094	4122	4251	4237	4869	5769	5799
<b>30.0</b>	4112	4152	4110	4074	4085	4177	4371	4608	5753	5991
<b>32.5</b>	4483	4473	4250	4190	4160	4156	4335	4504	5540	5949
<b>35.0</b>	4780	4811	4780	4738	4481	4286	4392	4761	5115	5774
<b>37.5</b>	5040	5063	4946	4872	4870	4678	4500	4654	4715	5624
<b>40.0</b>	5310	5315	5200	5146	5133	5268	4707	4577	4462	5451
<b>42.5</b>	6017	6019	5656	5472	5396	5628	5252	4481	4487	5076
<b>45.0</b>	6450	6459	6296	6190	6181	5878	5449	4464	4271	4739
<b>47.5</b>	6904	6887	6671	6698	6863	6454	5632	4603	4123	4393
<b>50.0</b>	7585	7588	7353	7390	7489	7097	5792	4944	4027	4070
<b>52.5</b>	8078	8101	8067	8286	8413	7378	6364	5030	4018	3861
<b>55.0</b>	8177	8199	8304	8830	9012	8032	6678	5241	4134	3743
<b>57.5</b>	8458	8465	8527	8924	9090	8425	7113	5631	4436	3833
<b>60.0</b>	9493	9464	9550	9803	9363	8482	7646	5858	4293	3633
<b>62.5</b>	10243	10286	10856	11284	10522	8697	7864	5913	4200	3405
<b>65.0</b>	9123	9203	10324	11038	11106	9660	8038	6098	4103	3100
<b>67.5</b>	8510	8523	9137	9501	9606	9919	8205	5911	3869	2815
<b>70.0</b>	8295	8336	8914	9055	9034	8649	7943	5470	3788	2485
<b>72.5</b>	7375	7467	7984	8410	8942	8421	6500	5159	3563	2087
<b>75.0</b>	5584	5491	6079	6843	7710	7557	5860	4414	3013	1713
<b>77.5</b>	3201	3308	3708	4332	5192	5363	4761	3686	2560	1292
<b>80.0</b>	1616	1679	1937	2250	2731	2912	3011	2831	1848	1140
<b>82.5</b>	802	821	886	943	1040	1199	1347	1448	1194	734
<b>85.0</b>	395	408	436	467	481	506	497	510	498	348
<b>87.5</b>	207	209	222	236	232	227	221	203	137	76
<b>90.0</b>	0	0	0	0	0	0	0	0	0	0
<b>92.5</b>	0	0	0	0	0	0	0	0	0	0
<b>95.0</b>	0	0	0	0	0	0	0	0	0	0
<b>97.5</b>	0	0	0	0	0	0	0	0	0	0
<b>100.0</b>	0	0	0	0	0	0	0	0	0	0
<b>102.5</b>	0	0	0	0	0	0	0	0	0	0
<b>105.0</b>	0	0	0	0	0	0	0	0	0	0
<b>107.5</b>	0	0	0	0	0	0	0	0	0	0
<b>110.0</b>	0	0	0	0	0	0	0	0	0	0
<b>112.5</b>	0	0	0	0	0	0	0	0	0	0
<b>115.0</b>	0	0	0	0	0	0	0	0	0	0
<b>117.5</b>	0	0	0	0	0	0	0	0	0	0
<b>120.0</b>	0	0	0	0	0	0	0	0	0	0
<b>122.5</b>	0	0	0	0	0	0	0	0	0	0
<b>125.0</b>	0	0	0	0	0	0	0	0	0	0
<b>127.5</b>	0	0	0	0	0	0	0	0	0	0
<b>130.0</b>	0	0	0	0	0	0	0	0	0	0

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**CANDELA TABULATION - (Cont.)**

132.5	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
140.0	0	0	0	0	0	0	0	0	0	0
142.5	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
150.0	0	0	0	0	0	0	0	0	0	0
152.5	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
160.0	0	0	0	0	0	0	0	0	0	0
162.5	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
170.0	0	0	0	0	0	0	0	0	0	0
172.5	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
180.0	0	0	0	0	0	0	0	0	0	0

Vert. Angles	Horizontal Angles									
	<u>85</u>	<u>90</u>	<u>95</u>	<u>105</u>	<u>115</u>	<u>125</u>	<u>135</u>	<u>145</u>	<u>155</u>	<u>165</u>
0.0	4145	4145	4145	4145	4145	4145	4145	4145	4145	4145
2.5	4127	4117	4112	4109	4097	4093	4105	4100	4090	4107
5.0	4145	4124	4106	4076	4030	3991	3966	3934	3903	3903
7.5	4163	4131	4101	4035	3947	3881	3845	3804	3761	3750
10.0	4182	4142	4098	3994	3872	3801	3733	3578	3324	3209
12.5	4231	4172	4112	3950	3821	3708	3313	3079	2900	2744
15.0	4327	4256	4160	3936	3763	3325	2983	2636	2307	2073
17.5	4425	4334	4207	3935	3668	3067	2597	2055	1624	1363
20.0	4518	4392	4227	3937	3349	2806	2094	1438	1008	787
22.5	4608	4454	4254	3922	3213	2476	1559	928	586	465
25.0	4743	4543	4310	3936	3051	2096	1126	599	405	369
27.5	4888	4638	4381	3881	2815	1648	843	489	363	328
30.0	5001	4708	4417	3632	2517	1273	713	485	330	287
32.5	4976	4638	4326	3431	2135	985	720	491	285	237
35.0	4906	4534	4224	3203	1705	888	707	478	253	218
37.5	4865	4470	4155	2956	1286	833	674	408	256	209
40.0	4746	4381	4058	2629	973	767	623	329	237	168
42.5	4576	4277	3969	2280	718	697	547	314	207	164
45.0	4461	4142	3845	1911	564	577	454	278	196	135
47.5	4353	4039	3738	1569	498	455	371	276	138	85
50.0	4257	3967	3655	1268	446	368	291	220	104	63
52.5	4258	3910	3551	1017	398	299	266	152	79	33
55.0	4146	3690	3347	849	360	235	171	98	61	27
57.5	4056	3464	3005	748	344	220	98	49	37	20
60.0	3781	3189	2573	681	327	153	51	29	18	11
62.5	3323	2858	2188	588	263	106	38	21	5	1
65.0	2801	2467	1811	458	215	64	28	9	0	0
67.5	2429	2164	1464	376	131	50	18	2	0	0
70.0	2137	1899	1129	350	89	32	6	0	0	0
72.5	1660	1462	747	279	57	23	4	0	0	0
75.0	1200	1059	474	180	39	12	2	0	0	0
77.5	757	708	281	87	25	6	1	0	0	0

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**CANDELA TABULATION - (Cont.)**

80.0	524	472	161	62	16	5	1	0	0	0
82.5	277	219	78	39	10	6	1	0	0	0
85.0	128	86	22	22	6	4	2	0	0	0
87.5	30	13	8	8	5	4	2	1	0	0
90.0	0	0	0	0	0	0	0	0	0	0
92.5	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
100.0	0	0	0	0	0	0	0	0	0	0
102.5	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
110.0	0	0	0	0	0	0	0	0	0	0
112.5	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
120.0	0	0	0	0	0	0	0	0	0	0
122.5	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
130.0	0	0	0	0	0	0	0	0	0	0
132.5	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
140.0	0	0	0	0	0	0	0	0	0	0
142.5	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
150.0	0	0	0	0	0	0	0	0	0	0
152.5	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
160.0	0	0	0	0	0	0	0	0	0	0
162.5	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
170.0	0	0	0	0	0	0	0	0	0	0
172.5	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
180.0	0	0	0	0	0	0	0	0	0	0

**Vert. Horizontal Angles**  
**Angles**

	<u>175</u>	<u>180</u>
0.0	4145	4145
2.5	4107	4169
5.0	3899	3940
7.5	3727	3768
10.0	3153	3193
12.5	2666	2693
15.0	1954	1968
17.5	1238	1237
20.0	685	680
22.5	416	412
25.0	350	350

IES ROAD REPORT  
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CANDELA TABULATION - (Cont.)

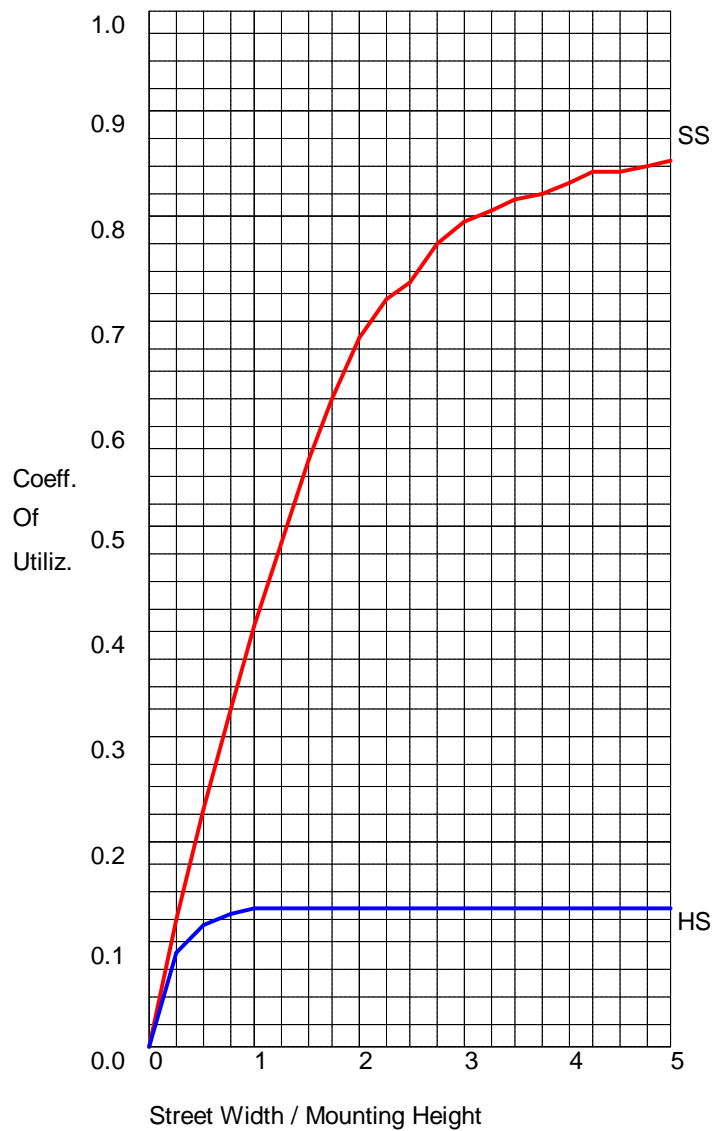
27.5	307	306
30.0	252	250
32.5	219	214
35.0	210	201
37.5	193	181
40.0	162	156
42.5	155	150
45.0	102	93
47.5	76	65
50.0	51	42
52.5	29	24
55.0	24	21
57.5	15	13
60.0	4	3
62.5	0	0
65.0	0	0
67.5	0	0
70.0	0	0
72.5	0	0
75.0	0	0
77.5	0	0
80.0	0	0
82.5	0	0
85.0	0	0
87.5	0	0
90.0	0	0
92.5	0	0
95.0	0	0
97.5	0	0
100.0	0	0
102.5	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	0	0
127.5	0	0
130.0	0	0
132.5	0	0
135.0	0	0
137.5	0	0
140.0	0	0
142.5	0	0
145.0	0	0
147.5	0	0
150.0	0	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

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**CANDELA TABULATION - (Cont.)**

<b>167.5</b>	0	0
<b>170.0</b>	0	0
<b>172.5</b>	0	0
<b>175.0</b>	0	0
<b>177.5</b>	0	0
<b>180.0</b>	0	0

COEFFICIENTS OF UTILIZATION

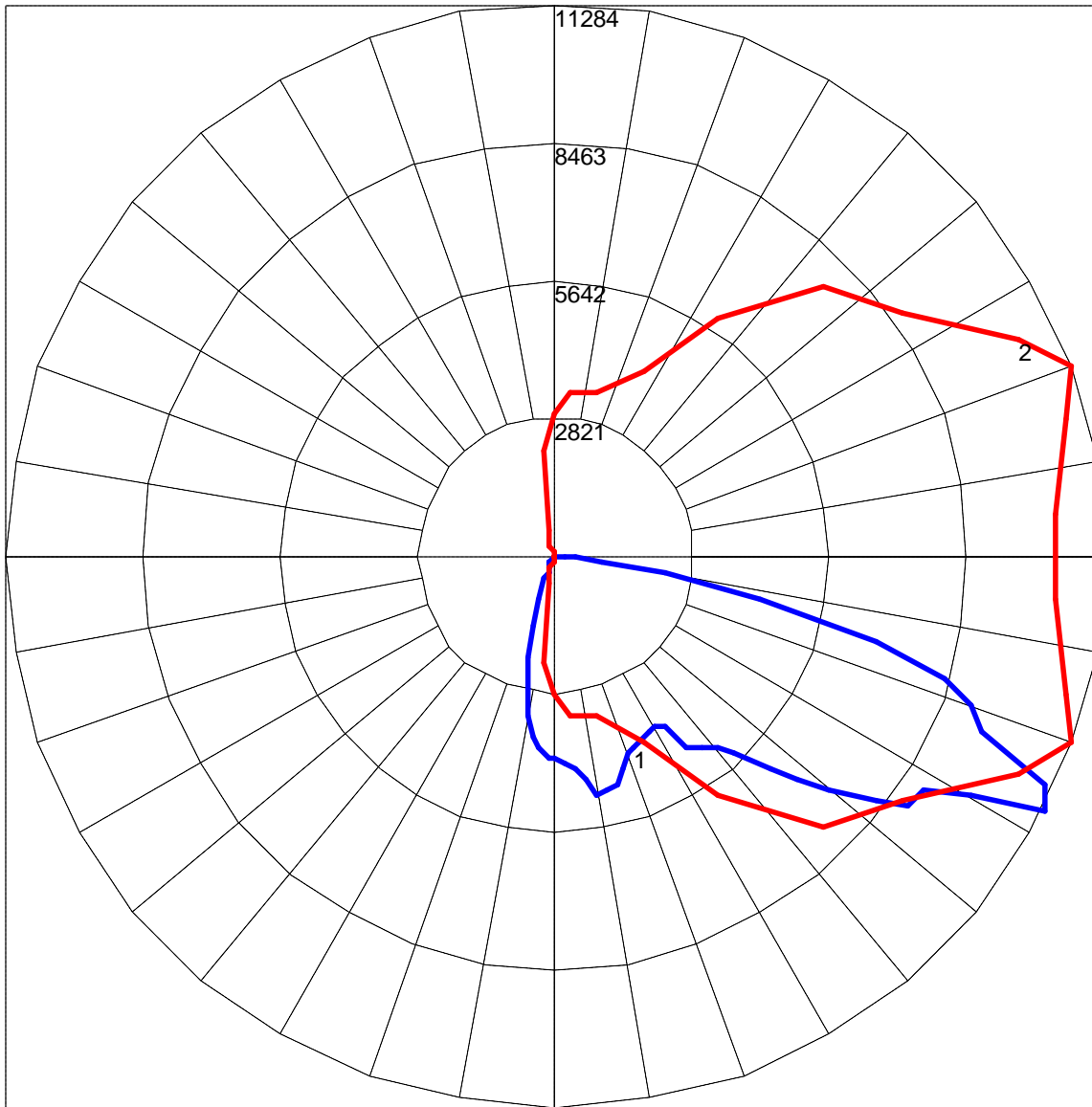


FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	14589.9	86.6
Downward House Side	2265.5	13.4
Downward Total	16855.4	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	16855.4	100.0

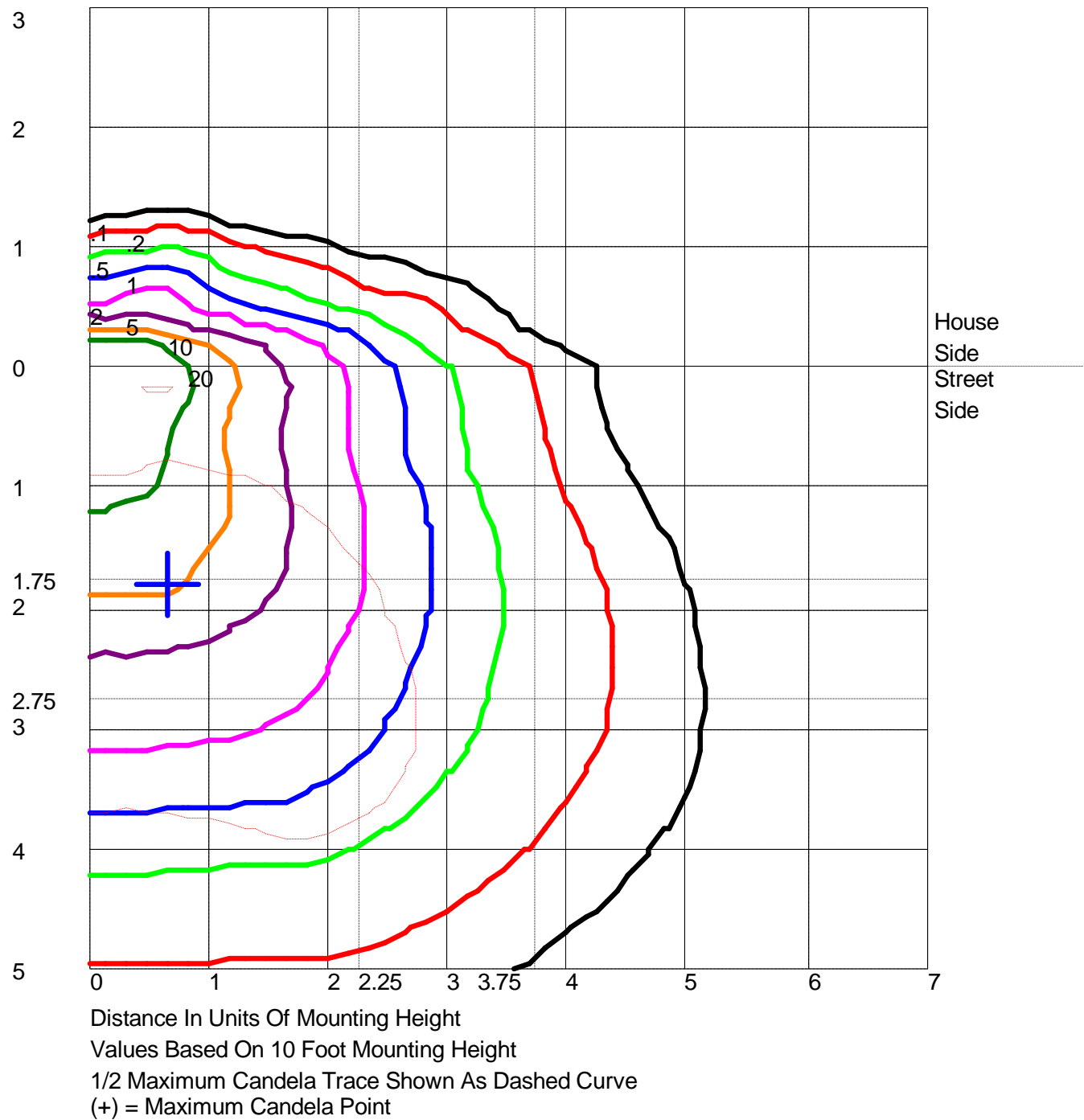


POLAR GRAPH

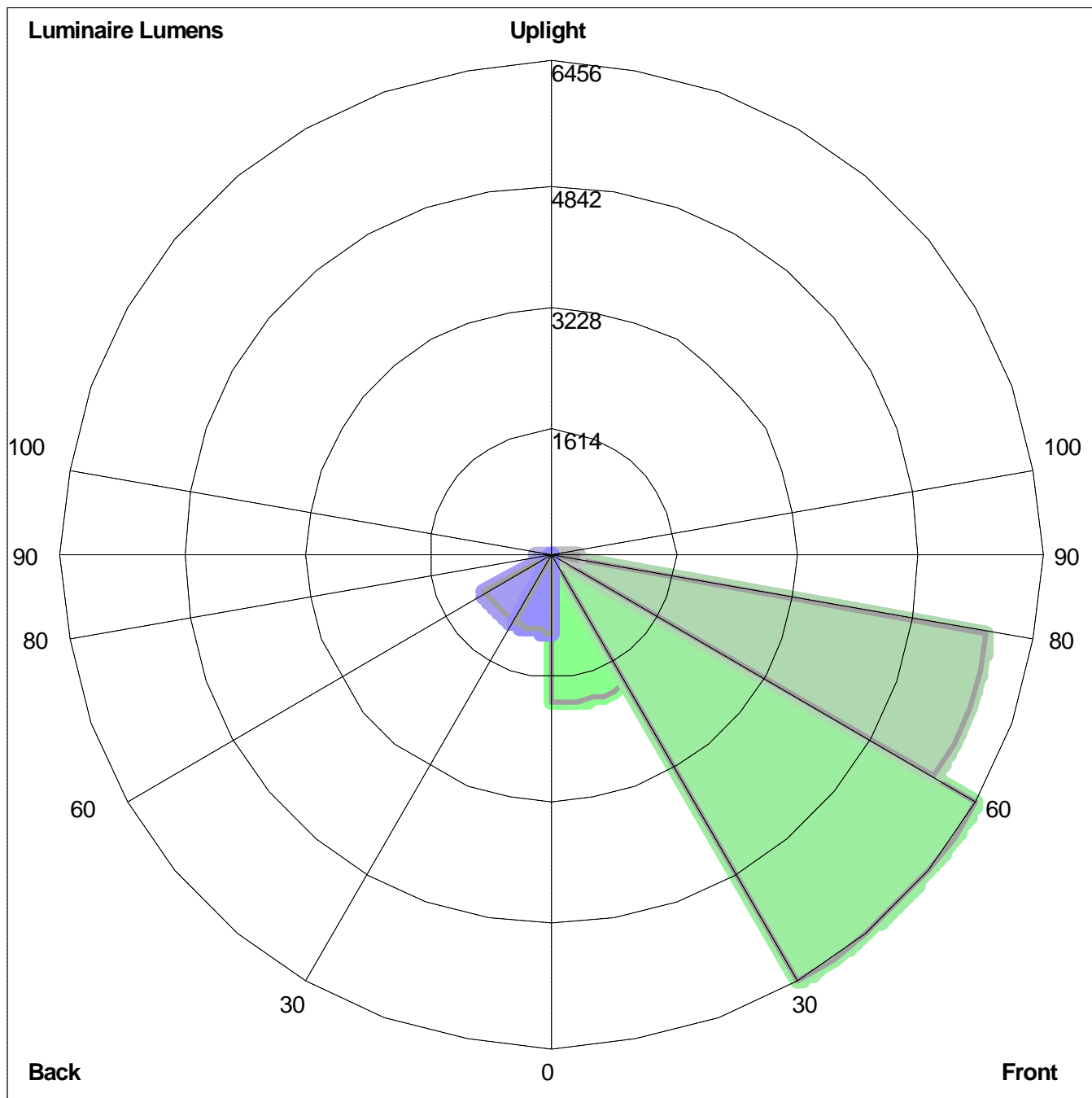


Maximum Candela = 11284 Located At Horizontal Angle = 20, Vertical Angle = 62.5  
# 1 - Vertical Plane Through Horizontal Angles (20 - 200) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (62.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=1955.7, Medium=6456.5, High=5822.2, Very High=355.5  
Back: Low=1022.7, Medium= 1028.0, High=208.4, Very High=6.5  
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G3