

IES ROAD REPORT
PHOTOMETRIC FILENAME : FL23-180W-C240-PCC.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IIESNA:LM-63-1995
[TEST] JK lighting Optical Testing Lab
[DATE] 2015-08-28
[MANUFAC] Fujian Juan Kuang Yaming Electric Ltd
[LUMCAT] High Bay and Area lighting
[LUMINAIRE] FL23-180W-C240-PCC
[LAMPCAT] LED Chips
[LAMP] CREE

CHARACTERISTICS

IES Classification	Type II
Longitudinal Classification	Medium
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	20665
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	189
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	14464.5
Maximum Candela Angle	67.5H 70V
Maximum Candela (<90 Degrees Vertical)	14464.5
Maximum Candela Angle (<90 Degrees Vertical)	67.5H 70V
Maximum Candela At 90 Degrees Vertical	7.317 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	922.731 (4.5% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	2560.1	N.A.	12.4
FM - Front-Medium (30-60)	8153.1	N.A.	39.5
FH - Front-High (60-80)	3849.6	N.A.	18.6
FVH - Front-Very High (80-90)	53.8	N.A.	0.3
BL - Back-Low (0-30)	1518.5	N.A.	7.3
BM - Back-Medium (30-60)	2481.4	N.A.	12.0
BH - Back-High (60-80)	1890.0	N.A.	9.1
BVH - Back-Very High (80-90)	111.9	N.A.	0.5
UL - Uplight-Low (90-100)	3.8	N.A.	0.0
UH - Uplight-High (100-180)	42.6	N.A.	0.2
Total	20664.8	N.A.	100.0
BUG Rating	B3-U2-G3		

IES ROAD REPORT
PHOTOMETRIC FILENAME : FL23-180W-C240-PCC.IES

CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
0	5344.884	5344.884	5344.884	5344.884	5344.884	5344.884	5344.884	5344.884	5344.884	5344.884
5	5751.760	5786.755	5708.019	5532.252	5412.954	5072.556	4946.896	4828.393	4758.404	4869.750
10	6093.748	6128.742	5979.222	5715.971	5407.386	4832.370	4421.984	4123.739	3994.897	4228.720
15	6303.712	6337.912	6164.531	5823.339	5375.573	4560.369	3844.581	3380.114	3229.002	3469.984
20	6461.981	6485.047	6271.104	5859.129	5250.708	4216.791	3307.739	2774.874	2573.658	2854.406
25	6843.735	6635.361	6281.444	5840.041	5070.965	3773.798	2802.711	2194.290	1984.326	2253.144
30	8564.015	7706.659	6275.081	5766.077	4868.954	3345.915	2298.477	1675.741	1548.568	1726.641
35	9516.014	9117.558	6294.965	5727.105	4734.545	2976.886	1849.120	1318.562	1097.782	1297.805
40	9048.365	9387.967	6895.431	5764.485	4804.533	2703.296	1468.242	982.698	955.339	937.603
45	8110.682	8764.435	8816.926	6030.917	5078.919	2561.728	1118.460	870.002	921.936	826.020
50	6350.637	7860.155	10903.050	6312.461	5467.036	2515.600	886.544	1076.944	1342.740	960.509
55	3596.441	5846.403	9753.815	6941.560	6909.748	2443.225	771.222	1105.019	1408.831	1010.853
60	1016.420	2444.817	7240.601	9477.042	9717.229	3065.167	687.475	1045.529	1012.523	914.699
65	669.659	919.391	5187.878	12869.880	12419.730	4033.867	631.961	702.825	705.847	656.140
70	412.772	573.426	2266.664	14464.500	7890.378	3692.675	614.783	572.790	904.438	506.938
75	206.942	255.695	1231.952	2925.986	1077.660	941.342	946.114	975.620	1405.491	868.570
80	127.013	124.467	460.491	500.257	239.471	214.180	515.925	922.731	854.811	849.960
85	36.266	37.618	91.542	56.230	51.855	51.616	149.282	298.484	289.179	261.184
90	1.114	1.114	1.830	1.830	1.908	6.839	6.283	5.329	4.295	4.295
95	0.874	0.874	1.034	0.954	1.830	8.509	4.295	1.988	1.670	2.148
100	1.034	0.954	0.954	1.114	2.148	11.373	6.124	2.306	1.512	2.227
105	1.034	1.034	1.114	1.432	2.863	14.077	8.191	3.261	2.068	3.261
110	1.194	1.272	1.272	1.590	3.022	14.077	9.385	4.533	2.863	4.374
115	1.352	1.352	1.352	1.590	2.943	13.680	10.101	6.203	4.295	6.203
120	1.830	1.670	1.830	2.227	4.215	11.851	9.225	6.999	5.408	6.839
125	2.386	1.988	1.830	2.386	3.897	9.225	8.113	7.397	6.521	7.237
130	4.851	2.784	2.386	3.579	7.079	6.760	6.919	7.555	10.577	7.794
135	5.408	3.420	3.102	4.374	7.953	6.442	7.079	8.907	13.441	9.147
140	5.567	4.454	4.454	5.647	8.351	8.431	9.385	11.453	14.872	11.533
145	6.203	6.124	6.203	7.953	9.941	11.373	12.487	14.554	16.702	14.554
150	8.113	8.827	9.305	10.817	12.725	14.475	15.986	18.452	19.486	18.770
155	10.657	12.009	12.725	13.998	15.668	17.894	19.724	22.110	22.348	22.587
160	14.316	15.350	16.782	17.100	18.452	21.076	23.462	24.019	24.735	25.053
165	16.782	17.178	17.974	18.372	19.486	23.144	24.655	24.257	24.735	24.973
170	19.406	19.486	19.486	19.884	20.917	22.508	22.269	21.951	22.190	22.428
175	20.122	20.202	20.122	20.202	20.996	22.508	22.190	22.030	22.030	21.554
180	21.628	21.628	21.628	21.628	21.628	21.628	21.628	21.628	21.628	21.628

Vert. Angles	Horizontal Angles						
	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0	5344.884	5344.884	5344.884	5344.884	5344.884	5344.884	5344.884
5	5009.725	5164.019	5397.842	5419.316	5623.714	5770.053	5751.760
10	4536.510	4940.533	5376.369	5537.819	5833.678	6069.889	6093.748
15	3955.131	4668.533	5304.790	5645.188	6009.445	6283.830	6303.712
20	3385.681	4297.914	5212.532	5677.796	6119.994	6421.420	6461.981
25	2871.904	3889.120	5020.860	5681.772	6131.924	6546.285	6843.735
30	2380.396	3481.119	4857.025	5667.456	6109.655	7489.536	8564.015
35	1898.431	3078.687	4732.159	5648.368	6106.473	8801.815	9516.014
40	1482.081	2848.840	4885.656	5727.900	6694.215	9115.968	9048.365
45	1155.442	2747.833	5076.532	5944.228	8925.090	8609.348	8110.682
50	897.281	2687.389	5432.042	6204.298	10633.440	7635.875	6350.637
55	759.770	2706.477	7196.859	7066.425	9026.096	5648.368	3596.441
60	677.295	3630.639	9974.913	9803.919	6299.736	2334.267	1016.420

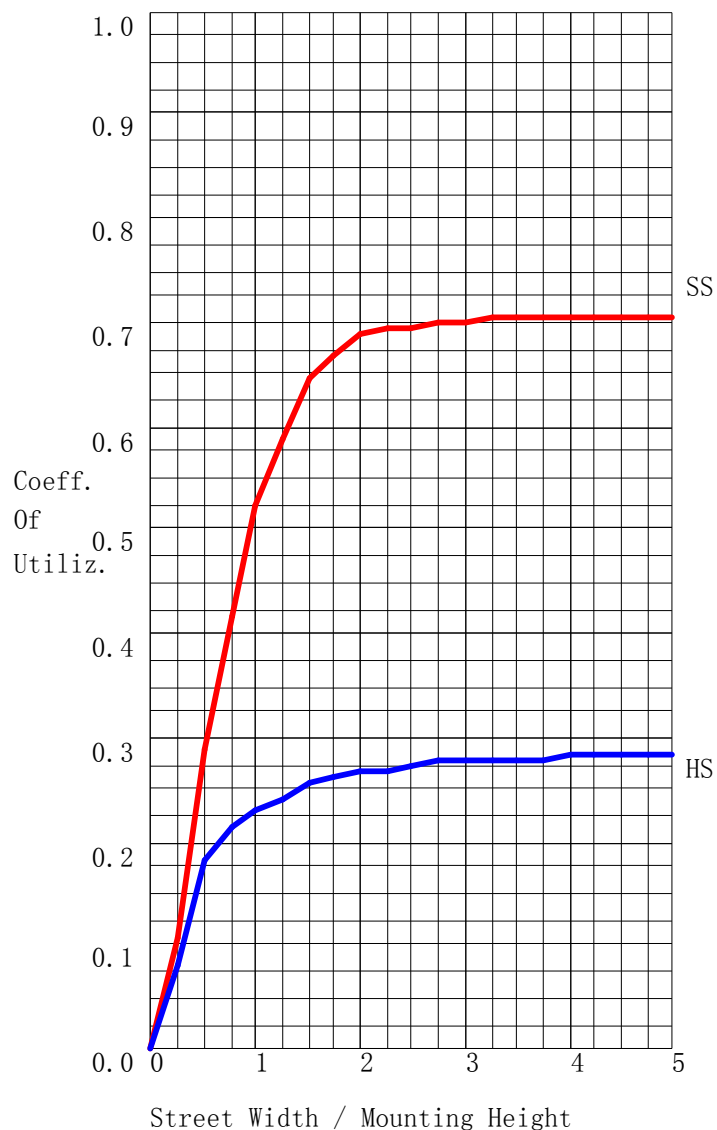
IES ROAD REPORT
PHOTOMETRIC FILENAME : FL23-180W-C240-PCC.IES

CANDELA TABULATION - (Cont.)

65	621.225	4258.147	12305.200	13044.060	4663.762	873.262	669.659
70	858.071	2768.512	4342.452	11887.660	2097.261	557.519	412.772
75	865.468	520.777	713.641	1284.444	1121.403	245.674	206.942
80	370.461	139.261	181.015	415.952	419.929	117.628	127.013
85	97.427	37.540	40.004	31.256	54.002	34.199	36.266
90	4.374	7.317	5.329	1.432	1.512	1.194	1.114
95	5.011	10.499	8.431	1.114	0.874	0.954	0.874
100	6.681	13.282	11.771	1.272	0.954	1.034	1.034
105	8.907	15.270	14.475	1.432	0.954	1.114	1.034
110	9.941	14.952	14.634	1.512	1.194	1.194	1.194
115	10.259	14.316	14.077	1.432	1.272	1.352	1.352
120	9.941	12.646	12.089	2.306	1.590	1.750	1.830
125	8.987	9.941	9.623	2.227	1.750	2.148	2.386
130	7.317	7.317	8.033	3.102	2.148	2.863	4.851
135	7.397	6.760	7.237	4.136	2.943	3.420	5.408
140	9.703	8.987	8.749	5.408	4.056	4.215	5.567
145	13.202	12.169	11.055	7.317	5.647	5.806	6.203
150	17.100	15.588	13.918	9.941	8.271	8.271	8.113
155	20.838	19.088	17.576	12.725	11.691	11.055	10.657
160	24.575	22.190	20.996	15.748	15.509	14.475	14.316
165	25.132	24.019	23.382	17.656	17.816	17.020	16.782
170	22.587	23.223	23.701	19.724	19.246	19.168	19.406
175	21.712	22.348	23.701	20.678	20.122	19.962	20.122
180	21.628	21.628	21.628	21.628	21.628	21.628	21.628

IES ROAD REPORT
PHOTOMETRIC FILENAME : FL23-180W-C240-PCC.IES

COEFFICIENTS OF UTILIZATION

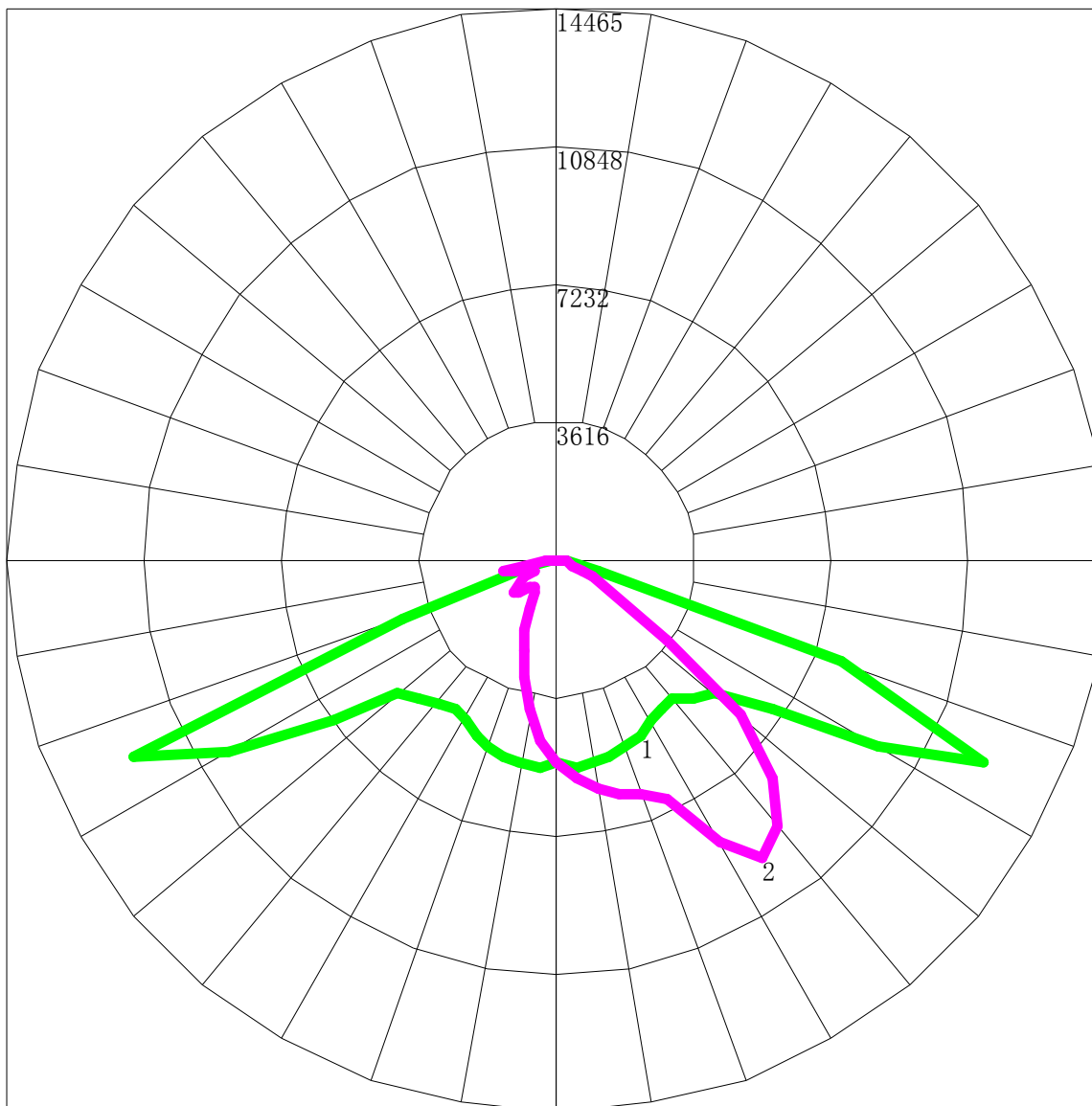


FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	14616.6	70.7
Downward House Side	6001.8	29.0
Downward Total	20618.4	99.8
Upward Street Side	14.8	0.1
Upward House Side	31.6	0.2
Upward Total	46.4	0.2
Total Flux	20664.8	100.0

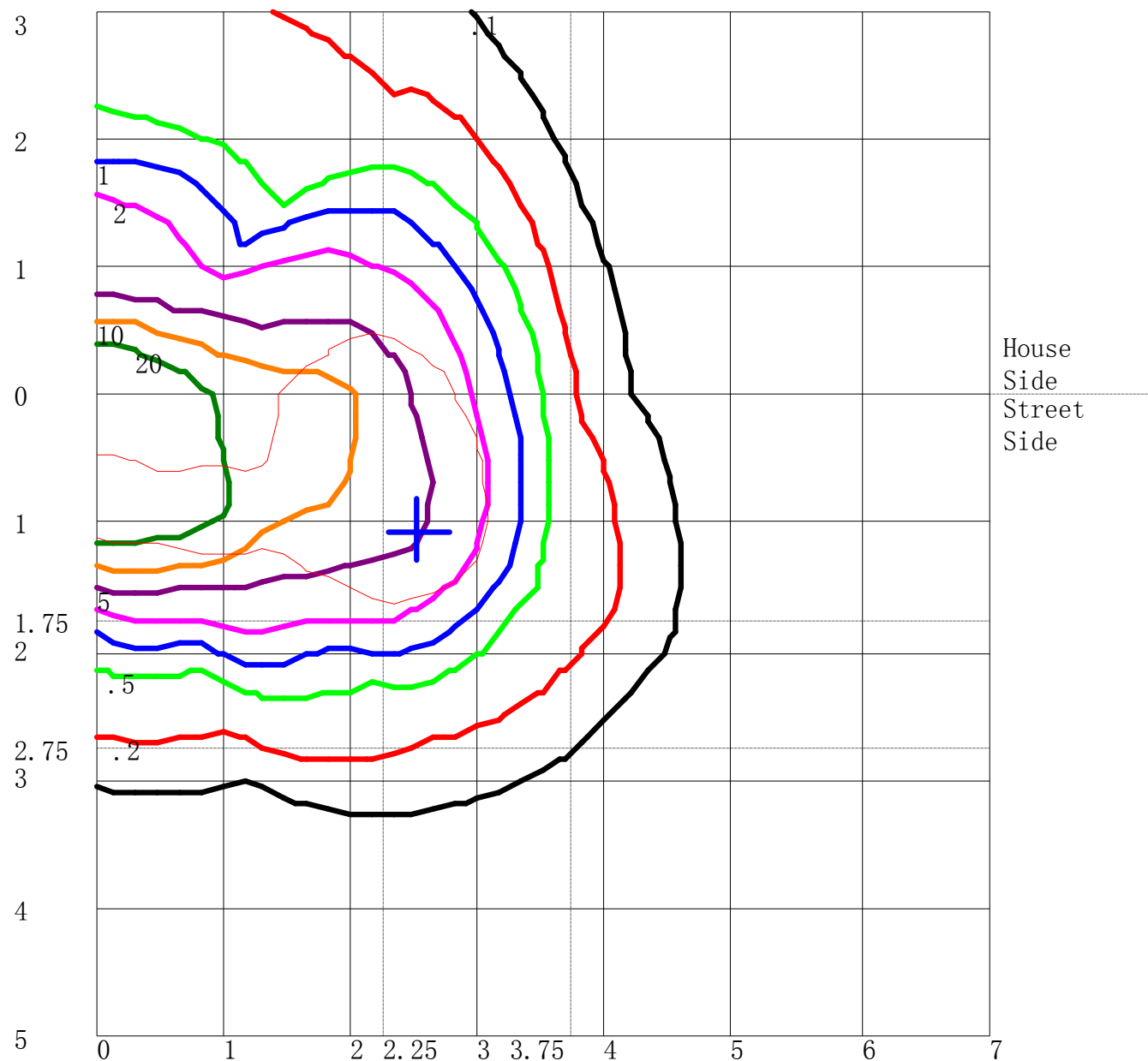
IES ROAD REPORT
PHOTOMETRIC FILENAME : FL23-180W-C240-PCC.IES

POLAR GRAPH



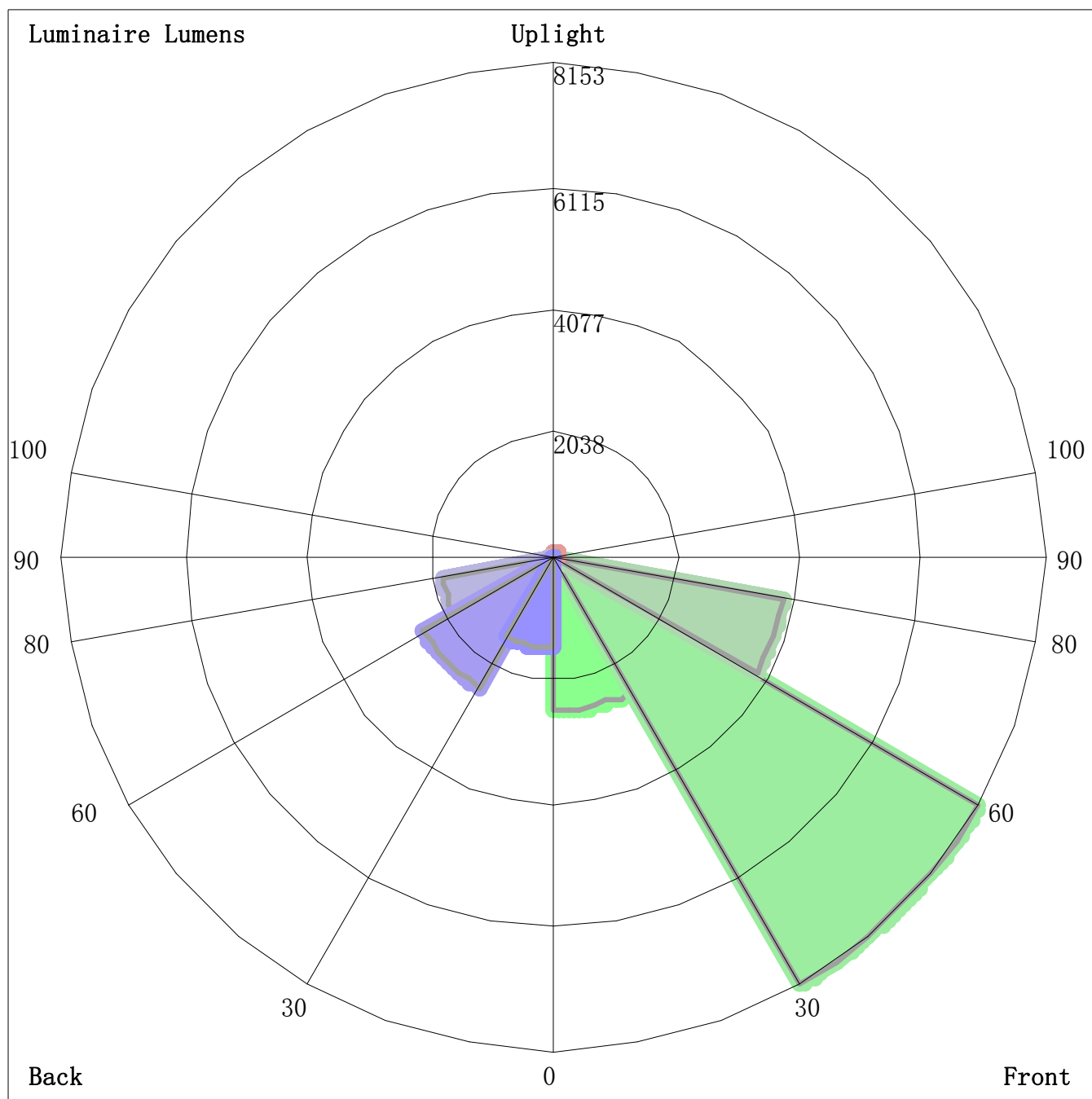
Maximum Candela = 14464.5 Located At Horizontal Angle = 67.5, Vertical Angle = 70
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Vertical Plane Through Horizontal Angles (0 - 180)

ISOLUX LINES OF HORIZONTAL ILLUMINANCE



Distance In Units Of Mounting Height
 Values Based On 10 Meter Mounting Height
 1/2 Maximum Candela Trace Shown As Dashed Curve
 (+) = Maximum Candela Point

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:

Front: Low=2560.1, Medium=8153.1, High=3849.6, Very High=53.8

Back: Low=1518.5, Medium=2481.4, High= 1890.0, Very High=111.9

Uplight: Low=3.8, High=42.6

BUG Rating : B3-U2-G3