

IES ROAD REPORT
PHOTOMETRIC FILENAME : FL23-180W-C340-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-340-PCC
[LAMPCAT] LED Chips
[LAMP] CREE

CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Medium
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	20819
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	110
Total Luminaire Watts	189
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	12893.19
Maximum Candela Angle	67.5H 70V
Maximum Candela (<90 Degrees Vertical)	12893.19
Maximum Candela Angle (<90 Degrees Vertical)	67.5H 70V
Maximum Candela At 90 Degrees Vertical	8.846 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	998.345 (4.8% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	2577.9	N.A.	12.4
FM - Front-Medium (30-60)	7709.1	N.A.	37.0
FH - Front-High (60-80)	4306.5	N.A.	20.7
FVH - Front-Very High (80-90)	85.6	N.A.	0.4
BL - Back-Low (0-30)	1584.0	N.A.	7.6
BM - Back-Medium (30-60)	2444.7	N.A.	11.7
BH - Back-High (60-80)	1929.7	N.A.	9.3
BVH - Back-Very High (80-90)	133.7	N.A.	0.6
UL - Uplight-Low (90-100)	4.5	N.A.	0.0
UH - Uplight-High (100-180)	43.7	N.A.	0.2
Total	20819.4	N.A.	100.0
BUG Rating	B3-U2-G3		

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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	5473.941	5473.941	5473.941	5473.941	5473.941	5473.941	5473.941	5473.941	5473.941	5473.941
5	5864.489	5861.330	5813.151	5654.394	5569.883	5221.568	5061.232	4952.235	4900.896	5001.994
10	6182.001	6169.364	6047.729	5807.622	5559.614	4957.764	4562.059	4269.032	4163.195	4341.697
15	6406.312	6393.675	6226.231	5885.814	5497.218	4696.330	3979.954	3577.141	3432.602	3614.263
20	6622.726	6611.669	6339.967	5909.509	5353.469	4325.900	3509.215	2957.124	2813.375	3032.158
25	6868.363	6756.997	6407.893	5894.503	5169.438	3899.392	2962.653	2416.090	2213.104	2449.264
30	7429.933	7001.054	6419.739	5806.831	4927.750	3476.043	2484.017	1926.395	1866.369	1975.365
35	8632.054	7900.671	6366.031	5695.465	4716.076	3092.185	2037.762	1571.841	1370.355	1575.158
40	8884.800	8513.579	6298.106	5675.720	4659.208	2756.508	1700.505	1095.573	1061.532	1068.403
45	8207.125	8471.719	6584.814	5773.659	4828.232	2576.426	1254.329	939.582	960.433	901.591
50	7023.170	7849.333	8069.695	6052.469	5010.683	2445.314	955.931	1025.436	1311.908	909.647
55	5486.951	6871.522	9267.868	6321.801	5483.001	2330.789	823.793	1395.629	1736.837	1257.883
60	2332.369	4889.839	8450.394	7608.433	7610.804	2418.460	741.097	1345.318	1371.144	1172.187
65	738.491	1724.989	6418.950	10240.1509880.776	3317.287	663.300	802.546	831.138	754.604	
70	518.129	719.535	4820.333	12893.19010095.6103464.195	601.139	638.261	1017.143	561.806		
75	239.950	413.081	1669.701	6841.509	1940.613	1351.163	819.053	1090.282	1541.353	905.461
80	145.644	157.097	620.017	998.345	408.342	379.593	705.951	992.342	898.274	913.597
85	43.283	47.469	110.181	110.023	66.662	70.216	238.687	302.979	272.807	254.404
90	1.263	1.343	2.844	3.633	2.449	8.214	6.713	5.450	4.739	5.608
95	0.868	0.868	1.106	0.947	1.738	10.347	6.161	2.528	1.738	2.685
100	0.947	0.947	0.947	1.106	2.054	12.480	7.898	3.239	1.974	3.317
105	1.027	1.106	1.027	1.343	2.449	13.902	10.110	4.739	2.923	4.897
110	1.185	1.343	1.263	1.422	2.764	13.269	10.031	6.081	4.107	6.161
115	1.343	1.422	1.501	1.501	2.844	12.953	10.110	7.740	5.608	7.582
120	1.738	1.738	1.817	2.212	4.028	10.742	8.846	7.740	6.713	7.582
125	2.685	2.212	1.974	2.369	3.633	8.214	7.819	7.898	7.582	8.057
130	5.213	3.001	2.528	3.475	6.951	6.397	6.792	8.135	13.191	8.214
135	6.081	3.950	3.317	4.502	7.662	6.476	7.187	9.241	15.639	9.084
140	6.003	4.897	4.502	6.003	8.451	8.767	9.477	11.926	16.033	11.610
145	6.556	6.556	6.713	8.214	10.268	11.610	12.796	15.006	16.903	14.770
150	8.451	9.162	9.715	11.294	13.191	15.165	16.349	18.720	19.430	18.720
155	10.742	12.164	13.111	14.295	15.797	18.324	19.983	21.957	22.116	22.589
160	14.533	15.639	17.060	17.455	18.956	21.800	24.090	24.642	24.485	24.801
165	18.877	19.824	20.535	20.378	21.325	24.564	25.748	24.801	25.196	25.591
170	20.615	20.615	21.167	21.325	22.273	23.931	24.169	23.774	23.616	23.616
175	21.325	21.721	21.800	21.721	22.273	23.300	23.220	22.905	22.510	21.800
180	22.339	22.339	22.339	22.339	22.339	22.339	22.339	22.339	22.339	22.339

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	5473.941	5473.941	5473.941	5473.941	5473.941	5473.941	5473.941
5	5159.961	5283.964	5546.187	5558.824	5708.102	5843.163	5864.489
10	4637.882	5050.964	5486.161	5650.445	5934.784	6129.872	6182.001
15	4083.422	4756.358	5429.294	5745.224	6112.496	6356.553	6406.312
20	3540.809	4389.086	5281.595	5742.065	6222.283	6525.577	6622.726
25	3045.585	4011.547	5119.679	5764.181	6272.042	6692.232	6868.363
30	2547.992	3577.931	4890.628	5692.306	6267.303	6877.051	7429.933
35	2085.152	3156.951	4698.699	5613.323	6213.594	7665.303	8632.054
40	1665.752	2854.446	4653.679	5596.736	6144.089	8263.994	8884.800
45	1297.375	2679.104	4708.968	5650.445	6359.713	8250.565	8207.125
50	989.184	2557.470	4828.232	5746.805	7800.363	7601.325	7023.170
55	813.762	2441.366	5257.110	5996.391	9006.433	6585.604	5486.951
60	720.799	2631.714	7271.966	7227.735	7909.360	4566.008	2332.369

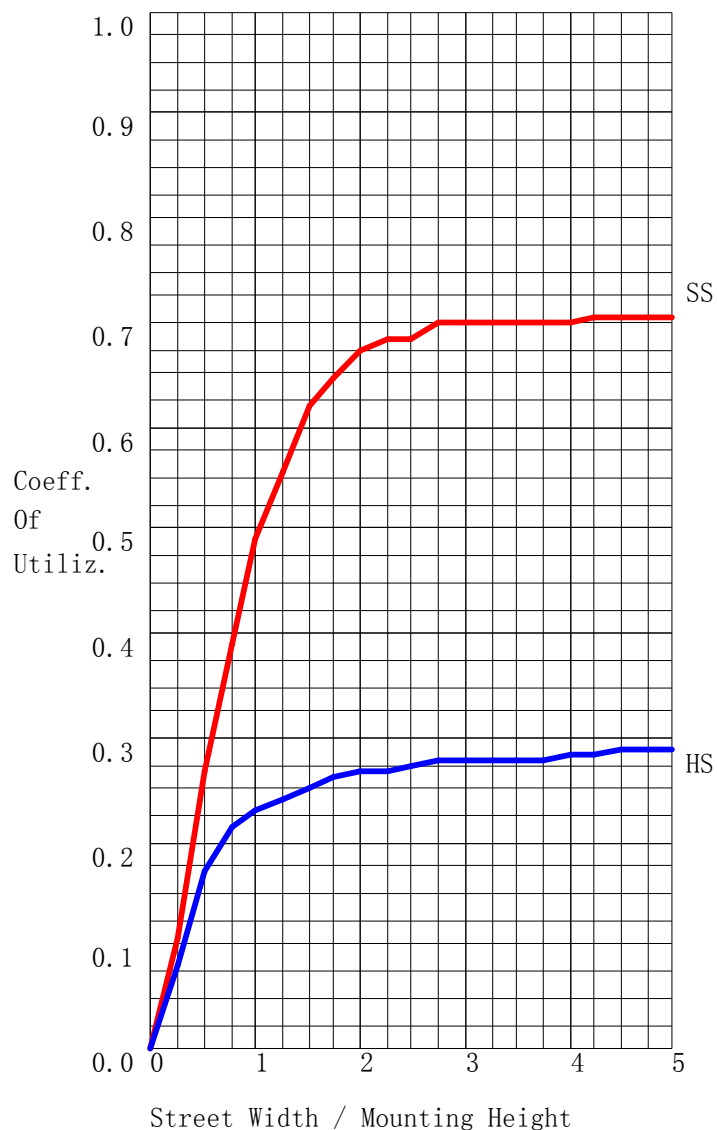
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CANDELA TABULATION - (Cont.)

65	639.367	3408.117	9568.794	9640.667	5823.418	1681.549	738.491
70	630.996	3381.262	9268.658	12016.480	4347.226	675.305	518.129
75	832.244	1033.493	1520.265	4803.747	1480.931	410.711	239.950
80	453.521	265.778	393.572	744.020	561.570	152.358	145.644
85	131.665	56.315	79.931	80.325	103.309	50.391	43.283
90	6.635	8.846	6.951	3.160	2.449	1.579	1.263
95	6.951	11.769	9.084	1.106	0.947	0.947	0.868
100	8.530	13.664	11.769	1.263	1.027	1.106	0.947
105	10.426	14.691	13.743	1.422	0.790	1.106	1.027
110	10.663	14.138	13.348	1.343	1.185	1.343	1.185
115	10.742	13.348	12.716	1.501	1.185	1.501	1.343
120	9.793	11.294	10.663	2.212	1.579	1.738	1.738
125	8.530	8.767	8.530	2.133	1.738	2.133	2.685
130	6.951	6.635	7.346	3.001	2.290	3.001	5.213
135	7.030	6.397	6.081	3.633	3.080	3.870	6.081
140	9.557	8.688	8.135	5.134	4.186	4.739	6.003
145	12.875	12.005	10.979	7.108	6.081	6.319	6.556
150	16.587	15.560	14.059	9.873	8.767	8.609	8.451
155	20.694	19.351	17.613	12.953	12.005	11.610	10.742
160	24.485	22.668	21.246	15.955	16.033	14.928	14.533
165	26.618	25.117	24.169	19.035	19.272	18.640	18.877
170	23.853	24.090	24.326	20.773	20.615	20.378	20.615
175	22.116	22.668	23.774	22.116	21.562	21.325	21.325
180	22.339	22.339	22.339	22.339	22.339	22.339	22.339

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COEFFICIENTS OF UTILIZATION

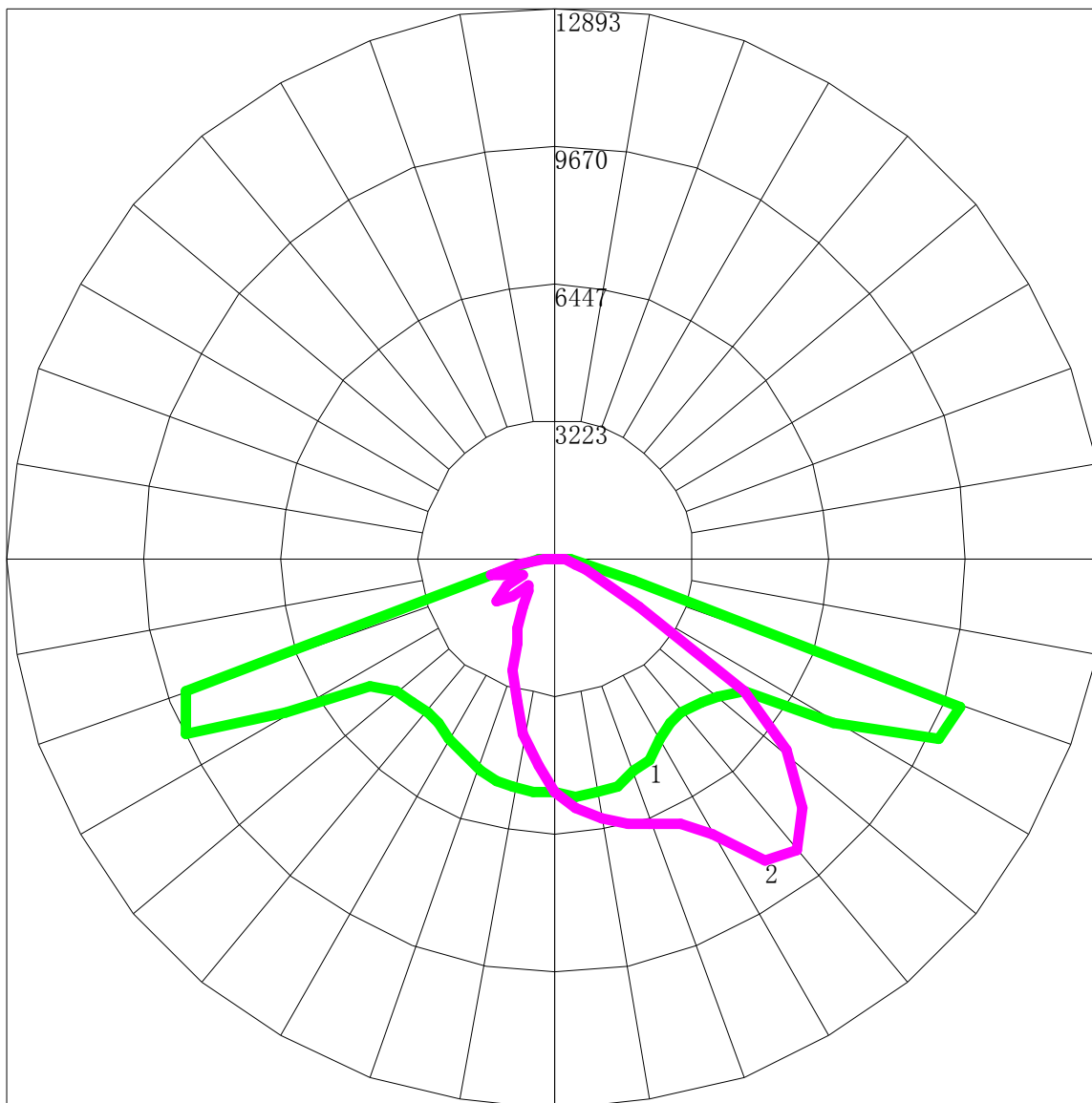


FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	14679.1	70.5
Downward House Side	6092.1	29.3
Downward Total	20771.2	99.8
Upward Street Side	15.3	0.1
Upward House Side	32.9	0.2
Upward Total	48.2	0.2
Total Flux	20819.4	100.0

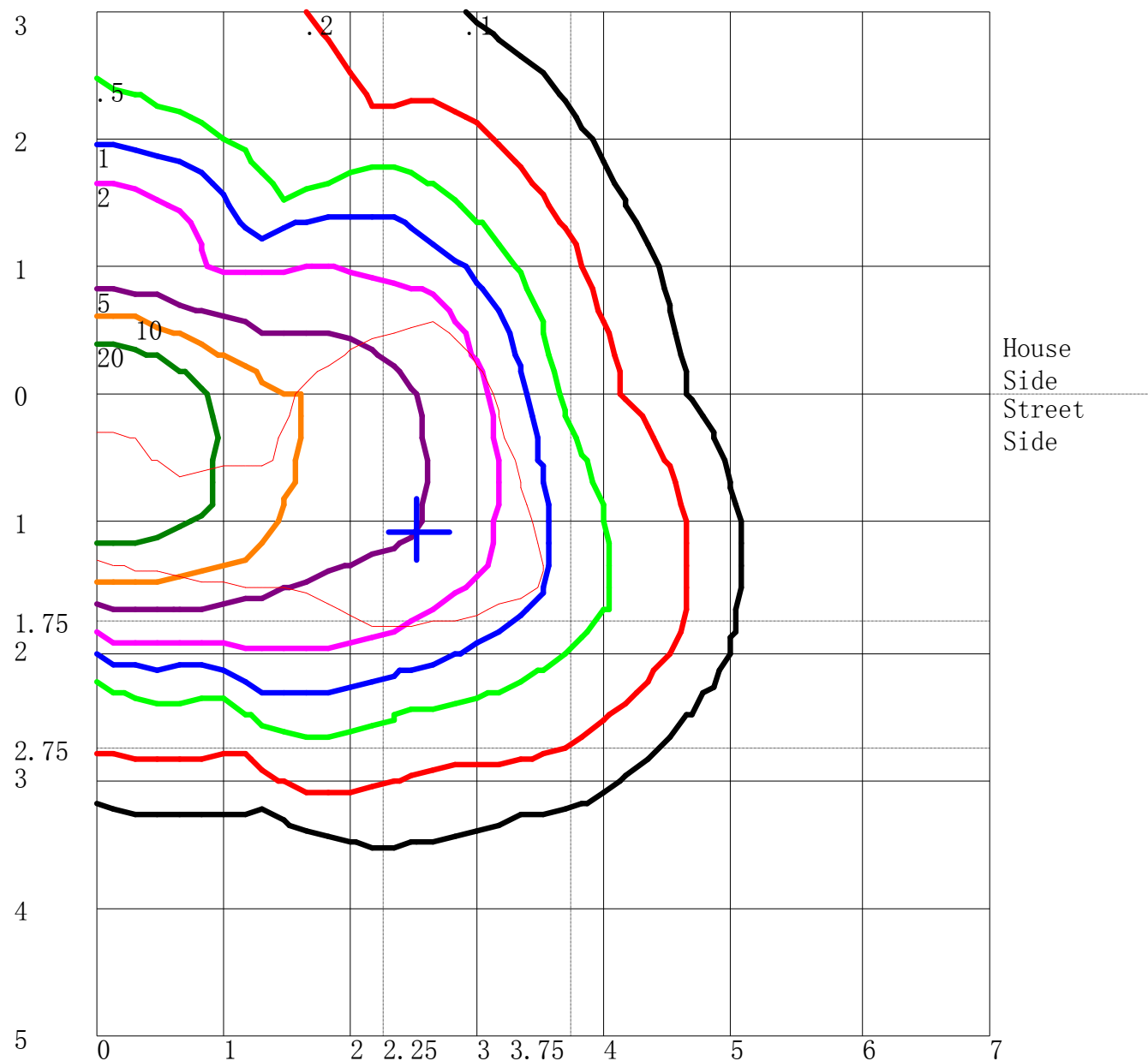
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POLAR GRAPH



Maximum Candela = 12893.19 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)

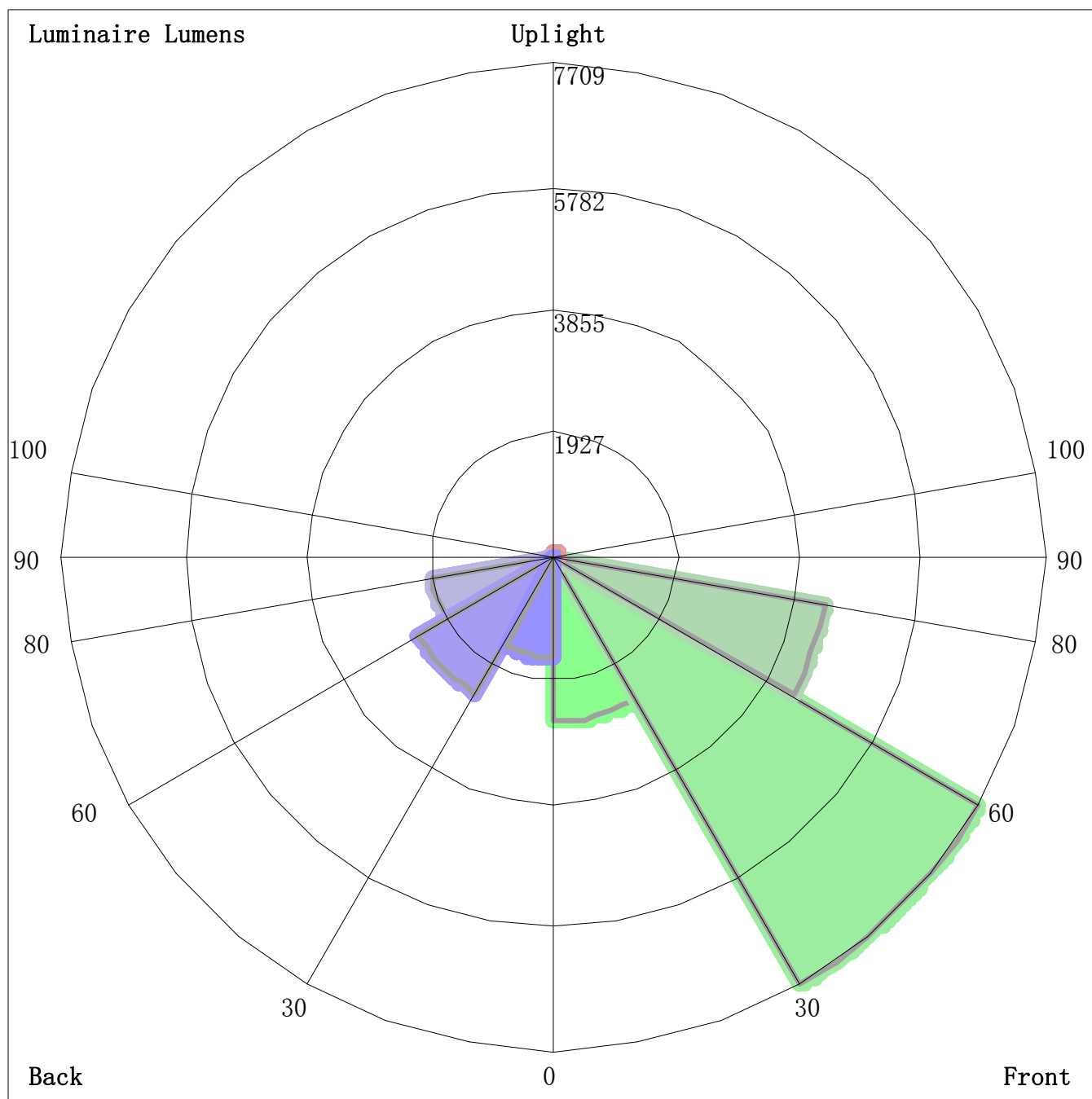
ISOLUX LINES OF HORIZONTAL ILLUMINANCE



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

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LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:

Front: Low=2577.9, Medium=7709.1, High=4306.5, Very High=85.6

Back: Low= 1584.0, Medium=2444.7, High=1929.7, Very High=133.7

Uplight: Low=4.5, High=43.7

BUG Rating : B3-U2-G3