



IES ROAD REPORT

PHOTOMETRIC FILENAME : ALL MD 3 UV 850-EHS.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] Q2018032101 (scaled)
[TESTLAB] QSSI
[ISSUE DATE] 2018-3-21
[MANUFAC] LumenFocus, LLC
[LUMCAT] ALL MD 3 UV 850-EHS
[LUMINAIRE] ALL WITH ONE 167W LED ARRAY, HOUSE SIDE SHIELD
[LAMPCAT] SAMSUNG 351B-N WITH TYPE III OPTICS
[LAMP] SAMSUNG 351B-N 1164PCS

CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	13549
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	76
Total Luminaire Watts	179
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	7041.641
Maximum Candela Angle	10H 60V
Maximum Candela (<90 Degrees Vertical)	7041.641
Maximum Candela Angle (<90 Degrees Vertical)	10H 60V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	461.448 (3.4% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	2289.6	N.A.	16.9
FM - Front-Medium (30-60)	6308.4	N.A.	46.6
FH - Front-High (60-80)	2496.6	N.A.	18.4
FVH - Front-Very High (80-90)	62.1	N.A.	0.5
BL - Back-Low (0-30)	836.4	N.A.	6.2
BM - Back-Medium (30-60)	1374.2	N.A.	10.1
BH - Back-High (60-80)	175.0	N.A.	1.3
BVH - Back-Very High (80-90)	6.8	N.A.	0.1
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	13549.1	N.A.	100.0
BUG Rating	B2-U0-G2		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	0	10	20	30	40	50	60	70	80	90
0	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429
5	4486.784	4492.438	4384.533	4306.313	4192.754	3983.540	3786.107	3524.590	3200.874	2861.608
10	5486.674	5480.548	5384.423	5287.827	5102.174	4899.557	4649.820	4302.073	3816.263	3104.277
15	6075.205	6039.864	5987.561	5900.390	5748.662	5536.622	5191.231	4789.295	4246.942	3412.443
20	6447.925	6428.606	6404.105	6334.838	6146.828	5881.541	5616.255	5150.707	4575.370	3692.809
25	6634.525	6639.234	6651.955	6562.428	6343.319	6140.231	5805.678	5372.643	4785.055	3880.347
30	6658.080	6682.113	6673.162	6507.298	6384.784	6156.251	5897.091	5434.842	4864.216	3986.839
35	6628.399	6644.890	6575.149	6307.978	6209.498	6067.666	5816.515	5423.062	4845.839	4039.143
40	6577.980	6649.600	6444.628	6116.200	5942.326	5831.123	5621.909	5294.424	4729.924	3976.472
45	6410.229	6643.944	6386.198	6064.367	5809.447	5599.762	5365.575	4999.451	4471.234	3811.081
50	6492.219	6708.499	6444.156	6092.168	5758.086	5436.726	4998.980	4579.140	4131.498	3504.328
55	6773.055	6945.513	6696.249	6309.392	5860.337	5268.979	4663.013	4136.680	3624.014	3093.912
60	6747.607	7041.641	6835.725	6656.195	6075.205	5178.508	4245.529	3502.444	3005.326	2518.574
65	5166.257	5548.872	5500.810	5645.468	5385.837	4943.850	3710.243	2746.635	2253.758	1786.326
70	917.618	1300.517	2495.956	3482.182	3746.526	3286.633	2642.971	1839.572	1428.213	1176.591
75	393.736	493.160	561.060	837.797	910.221	1681.719	916.016	887.414	690.782	518.322
80	197.386	228.957	247.852	261.564	374.181	461.448	350.951	235.271	198.895	243.612
85	95.135	109.366	124.350	126.565	116.764	122.371	104.466	81.848	53.906	33.644
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Angles	Horizontal Angles									
	100	110	120	130	140	150	160	170	180	190
0	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429
5	2688.206	2558.626	2478.993	2420.564	2364.019	2330.564	2317.371	2284.858	2289.570	2290.983
10	2679.725	2441.768	2319.255	2232.554	2151.979	2101.089	2079.414	2016.744	2011.089	2023.341
15	2700.458	2316.899	2154.335	2026.168	1889.990	1820.253	1789.153	1759.939	1738.735	1746.274
20	2815.902	2259.884	1990.828	1793.394	1713.761	1620.934	1561.563	1531.406	1515.856	1521.039
25	2947.839	2225.486	1832.975	1638.840	1516.799	1451.301	1389.574	1352.349	1339.627	1353.763
30	3035.482	2096.848	1722.714	1500.306	1348.108	1287.795	1223.240	1201.564	1189.785	1194.025
35	3052.917	2050.670	1558.736	1324.548	1200.151	1116.748	1083.293	1058.319	1045.126	1063.031
40	3043.022	1975.749	1438.579	1200.151	1053.136	968.791	909.891	892.456	880.205	894.813
45	2882.341	1808.472	1296.747	1036.644	860.886	785.964	735.546	718.112	691.724	728.949
50	2544.490	1596.903	1068.686	821.776	678.531	586.175	530.574	509.840	503.715	510.783
55	2178.366	1286.381	794.446	572.510	450.469	346.334	296.386	274.239	245.025	252.093

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CANDELA TABULATION - (Cont.)

60	1568.160	817.535	481.568	294.973	258.219	109.649	40.476	29.309	24.786	27.330
65	1083.764	460.836	250.208	58.571	29.497	15.691	7.021	4.571	3.393	3.534
70	514.552	242.198	42.549	20.168	8.246	5.513	4.712	4.099	3.958	4.052
75	244.083	36.801	13.100	6.973	6.691	9.236	13.005	13.854	13.147	14.230
80	35.293	11.403	7.351	9.848	21.346	21.958	16.822	12.157	11.403	11.827
85	8.953	9.000	11.780	11.686	16.775	14.654	15.361	14.984	14.136	15.220
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**Vert.
Angles**

Horizontal Angles

	<u>200</u>	<u>210</u>	<u>220</u>	<u>230</u>	<u>240</u>	<u>250</u>	<u>260</u>	<u>270</u>	<u>280</u>	<u>290</u>
0	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429
5	2289.099	2310.774	2343.287	2380.512	2459.202	2533.181	2655.694	2812.603	3060.927	3338.936
10	2050.670	2069.990	2116.168	2183.078	2260.355	2380.512	2600.563	3018.048	3579.249	4102.754
15	1764.651	1785.855	1848.054	1986.116	2081.298	2234.439	2560.040	3216.424	3955.268	4547.569
20	1543.186	1578.998	1680.306	1744.861	1933.812	2140.199	2604.804	3394.538	4237.047	4855.735
25	1382.977	1439.522	1479.103	1609.154	1754.284	2103.445	2678.783	3521.762	4441.548	5077.200
30	1227.952	1273.659	1305.700	1450.830	1658.631	1960.199	2746.164	3600.453	4521.181	5111.597
35	1067.744	1102.141	1158.214	1278.841	1480.045	1910.723	2765.012	3624.485	4486.312	5096.519
40	897.639	946.173	1038.529	1136.539	1335.857	1839.101	2716.478	3581.134	4406.208	4966.939
45	705.389	764.289	829.786	961.252	1196.382	1646.850	2534.595	3424.223	4204.534	4734.165
50	507.484	563.558	641.777	769.944	995.178	1439.993	2254.701	3069.409	3829.929	4381.235
55	280.837	326.071	398.637	519.736	709.159	1100.256	1896.116	2644.856	3400.192	3852.546
60	34.822	84.110	250.208	246.910	376.961	689.368	1338.213	2038.419	2745.693	3266.843
65	4.947	13.665	21.911	39.722	116.293	297.328	810.467	1352.349	1964.440	2459.673
70	4.099	4.476	5.466	12.345	30.157	76.382	319.946	756.562	929.069	1578.526
75	13.854	10.413	6.927	6.502	8.764	24.361	54.000	256.051	539.008	669.672
80	14.843	22.005	21.487	12.487	7.445	7.257	21.440	45.613	144.141	172.413
85	15.644	14.607	15.785	12.157	10.649	13.005	5.937	18.094	43.115	68.324
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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CANDELA TABULATION - (Cont.)

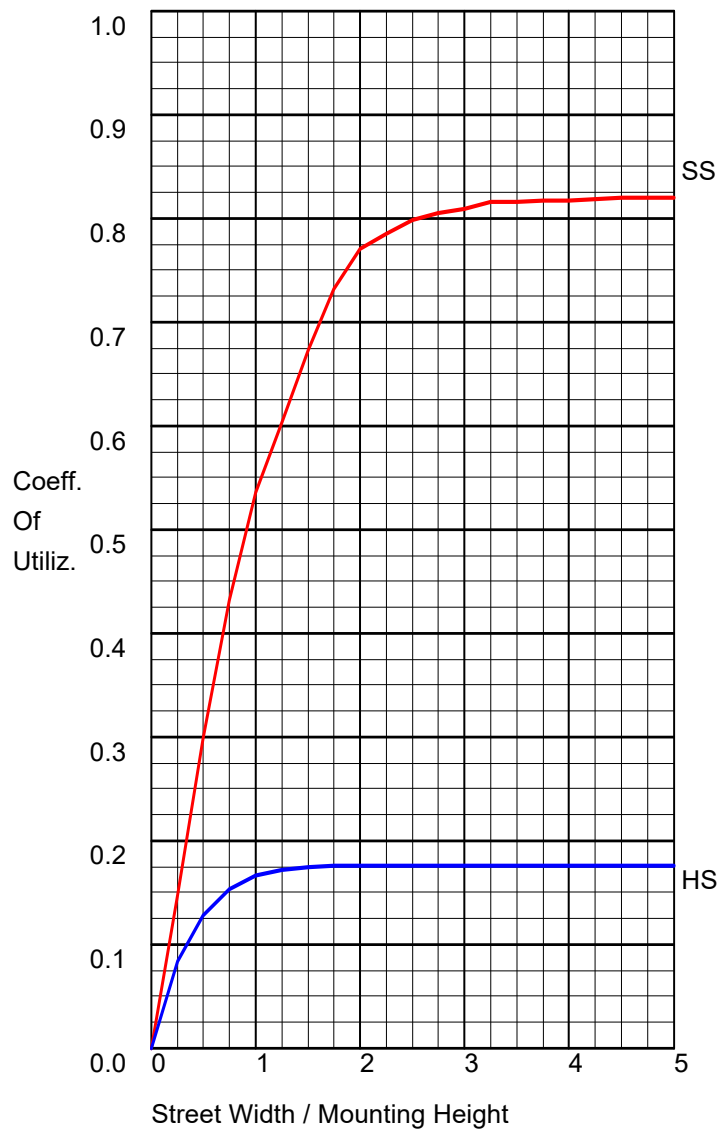
135	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**Vert.
Angles**

Horizontal Angles

	<u>300</u>	<u>310</u>	<u>320</u>	<u>330</u>	<u>340</u>	<u>350</u>	<u>360</u>
0	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429	2865.429
5	3637.678	3846.892	4057.990	4289.822	4321.392	4413.276	4486.784
10	4536.731	4768.091	5003.221	5197.827	5329.293	5417.879	5486.674
15	4996.624	5366.989	5641.700	5825.468	5939.970	6008.765	6075.205
20	5358.507	5672.327	5964.001	6247.194	6364.052	6408.345	6447.925
25	5507.407	5910.285	6153.424	6443.214	6613.317	6625.568	6634.525
30	5585.626	5923.478	6204.314	6385.728	6644.890	6661.381	6658.080
35	5496.098	5800.495	6018.661	6185.937	6380.544	6634.525	6628.399
40	5335.889	5571.490	5775.521	5955.991	6217.037	6634.048	6577.980
45	5043.745	5327.879	5611.542	5890.023	6209.498	6679.758	6410.229
50	4742.175	5174.738	5542.276	5921.594	6298.084	6773.524	6492.219
55	4349.664	5003.692	5581.386	6100.650	6516.721	7026.559	6773.055
60	4001.446	4891.075	5773.164	6408.345	6613.317	7029.860	6747.607
65	3312.549	4515.527	5115.367	5351.439	5503.637	5458.402	5166.257
70	2281.088	2900.718	3631.081	3479.826	2580.772	1388.632	917.618
75	899.713	1211.931	936.231	827.949	540.563	496.175	393.736
80	252.611	414.233	347.087	237.250	241.868	230.135	197.386
85	90.235	112.146	110.685	120.298	123.691	109.696	95.135
90	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000	0.000	0.000

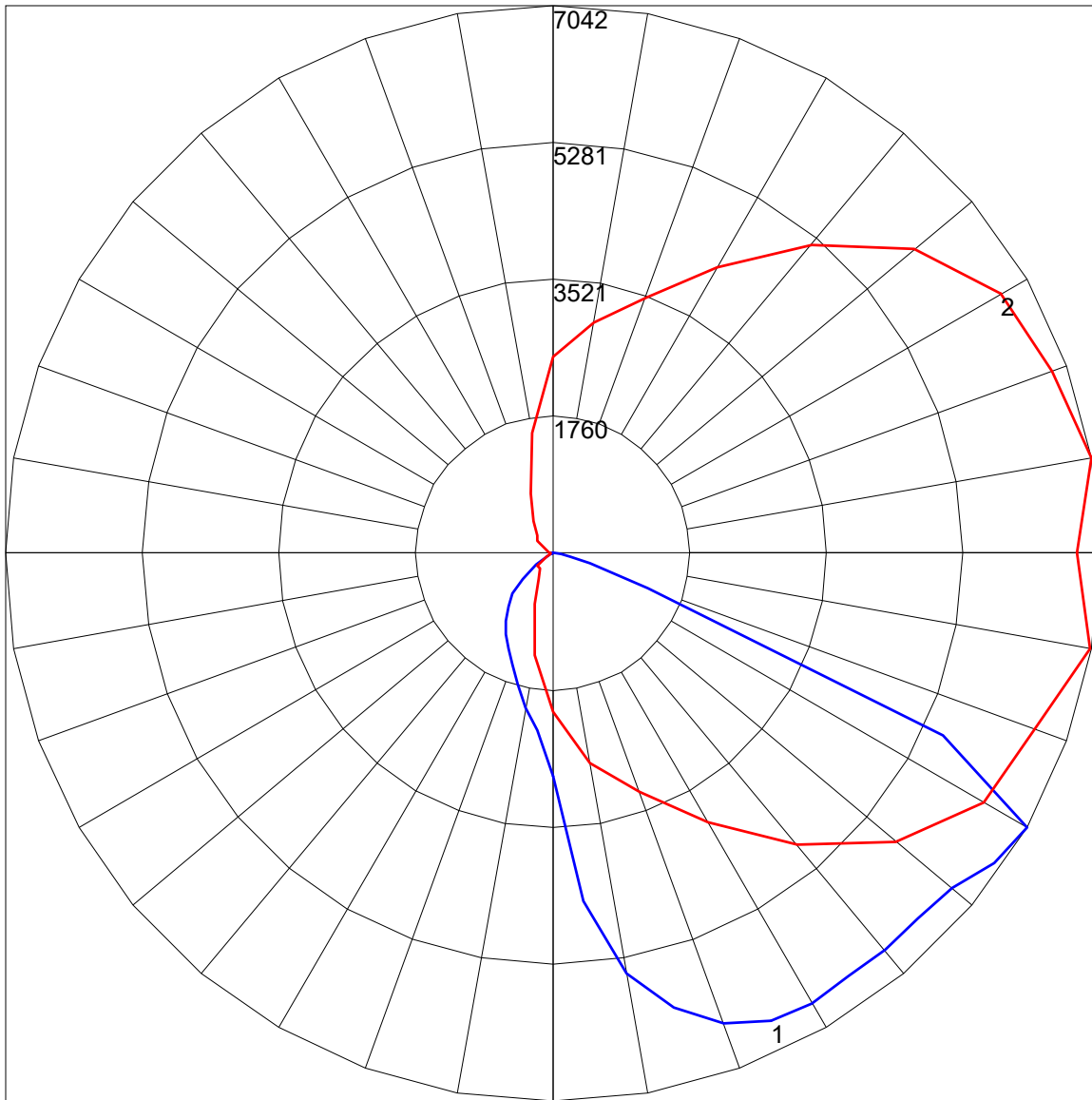
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

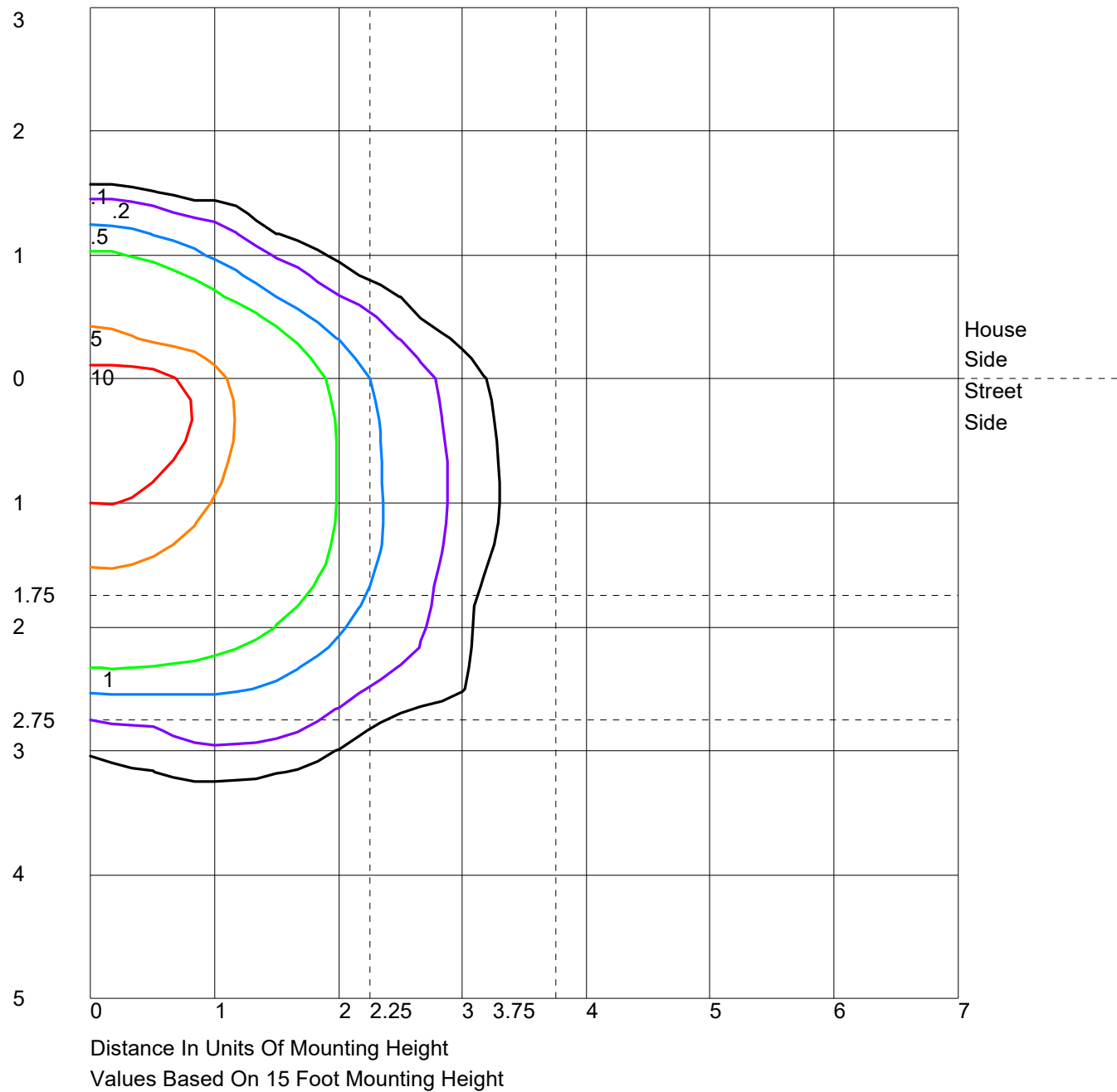
	Lumens	Percent Of Luminaire
Downward Street Side	11156.7	82.3
Downward House Side	2392.4	17.7
Downward Total	13549.1	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	13549.1	100.0

POLAR GRAPH

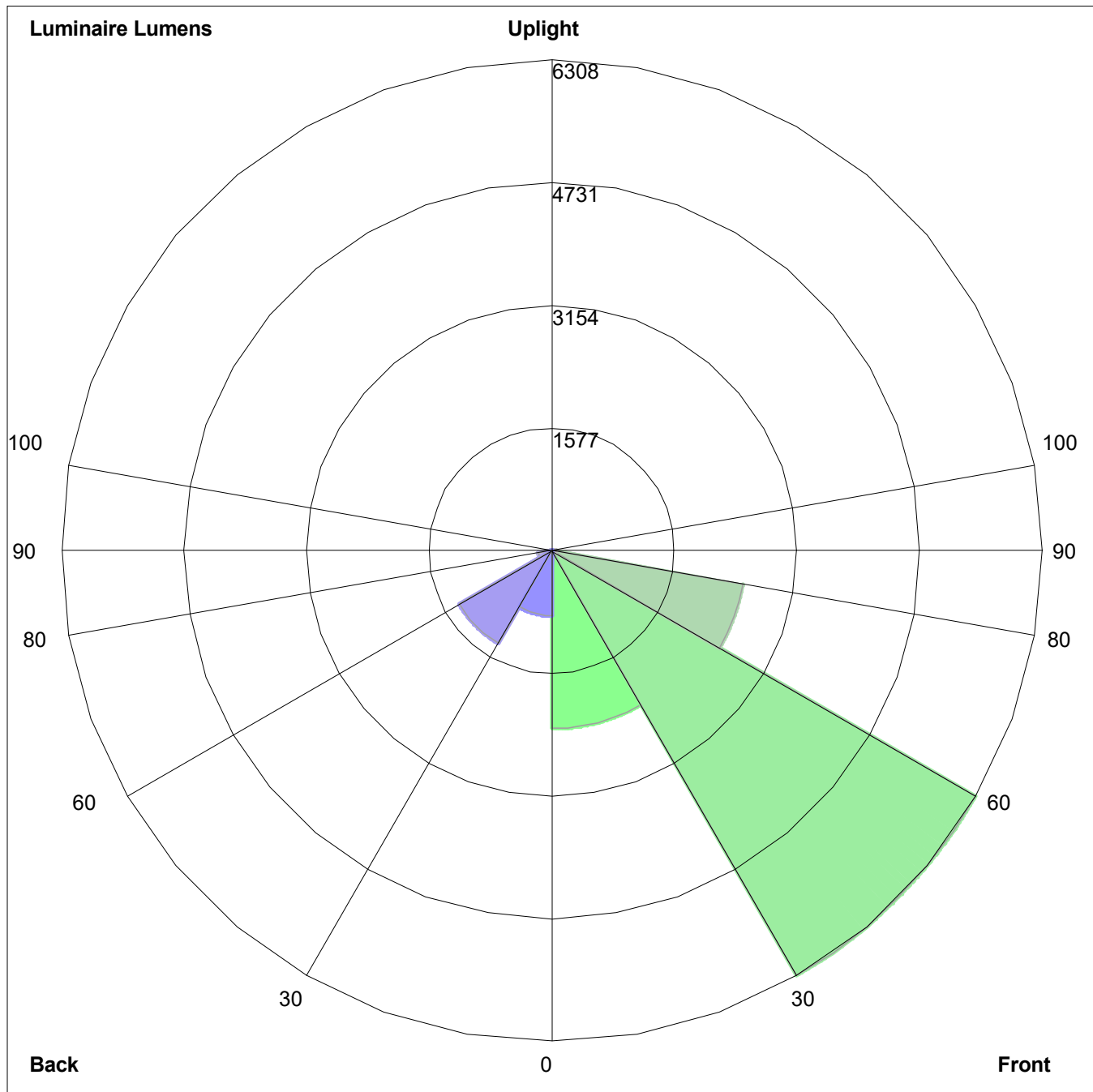


Maximum Candela = 7041.641 Located At Horizontal Angle = 10, Vertical Angle = 60
1 - Vertical Plane Through Horizontal Angles (10 - 190) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (60) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=2289.6, Medium=6308.4, High=2496.6, Very High=62.1
Back: Low=836.4, Medium=1374.2, High=175.0, Very High=6.8
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G2