



IES ROAD REPORT

PHOTOMETRIC FILENAME : ALL HI 4 UV 850-EHS.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] Q2018031901
[TESTLAB] QSSI
[ISSUE DATE] 2018-3-19
[MANUFAC] LumenFocus, LLC
[LUMCAT] ALL HI 4 UV 850-EHS
[LUMINAIRE] ALL WITH ONE 256W LED ARRAY, HOUSE SIDE SHIELD
[LAMPCAT] SAMSUNG 351B-N WITH TYPE IV OPTICS
[LAMP] SAMSUNG 351B-N LEDs

CHARACTERISTICS

IES Classification	Type IV
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	18106
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	64
Total Luminaire Watts	281.5
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	14422.04
Maximum Candela Angle	350H 65V
Maximum Candela (<90 Degrees Vertical)	14422.04
Maximum Candela Angle (<90 Degrees Vertical)	350H 65V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1430.43 (7.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	1333.6	N.A.	7.4
FM - Front-Medium (30-60)	7593.7	N.A.	41.9
FH - Front-High (60-80)	6779.8	N.A.	37.4
FVH - Front-Very High (80-90)	185.2	N.A.	1.0
BL - Back-Low (0-30)	822.2	N.A.	4.5
BM - Back-Medium (30-60)	1176.2	N.A.	6.5
BH - Back-High (60-80)	191.9	N.A.	1.1
BVH - Back-Very High (80-90)	23.6	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	18106.2	N.A.	100.0
BUG Rating	B2-U0-G3		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	<u>0</u>	<u>10</u>	<u>20</u>	<u>30</u>	<u>40</u>	<u>50</u>	<u>60</u>	<u>70</u>	<u>80</u>	<u>90</u>
0	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919
5	2478.314	2467.479	2464.590	2455.200	2441.475	2429.918	2418.361	2393.801	2369.965	2416.916
10	2596.776	2591.720	2591.720	2583.774	2575.106	2564.271	2540.434	2504.318	2445.809	2453.755
15	2845.980	2866.205	2907.378	2918.935	2923.269	2886.430	2796.862	2696.458	2565.716	2491.316
20	3299.603	3319.106	3302.493	3288.768	3237.483	3184.753	3110.353	2999.836	2838.034	2647.339
25	3850.019	3842.795	3805.956	3709.887	3517.747	3414.454	3294.547	3189.809	3022.951	2822.143
30	4687.921	4644.582	4502.283	4357.817	4079.719	3724.333	3432.512	3232.427	3069.180	2862.594
35	6017.009	5908.659	5505.599	5244.115	4939.292	4618.578	3982.927	3289.491	3028.729	2819.976
40	7909.513	7772.270	7301.311	6284.271	5980.169	5812.589	5132.876	3779.953	2937.716	2692.846
45	8870.212	8906.328	8716.355	7494.896	7187.905	7088.946	6534.197	4862.002	2946.384	2479.036
50	9671.997	9484.192	8907.772	8375.415	8194.111	8265.621	7608.301	5941.886	3552.419	2223.332
55	10423.220	10228.190	9543.423	9028.401	9230.654	9201.761	8350.134	6462.686	4238.632	2362.019
60	13160.850	12770.790	11247.400	10288.870	10098.890	9699.446	8407.921	6401.288	4406.212	2760.745
65	14400.370	14378.700	14060.150	12898.650	10524.350	9558.592	7738.320	5726.632	4203.238	2651.673
70	9742.063	10262.860	11739.310	11687.300	11001.080	8956.169	7239.913	4708.146	2431.363	1222.905
75	3397.118	3610.205	4275.471	5923.828	7060.775	5817.646	3522.081	1417.861	476.377	374.889
80	905.079	978.685	1227.889	1417.428	1430.430	1335.516	605.457	245.737	143.166	96.070
85	239.308	264.373	325.121	355.170	385.002	270.224	167.003	113.334	69.488	46.951
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>100</u>	<u>110</u>	<u>120</u>	<u>130</u>	<u>140</u>	<u>150</u>	<u>160</u>	<u>170</u>	<u>180</u>	<u>190</u>
0	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919
5	2385.134	2354.073	2326.625	2299.898	2276.062	2255.836	2243.557	2236.333	2232.000	2232.722
10	2387.300	2326.625	2279.673	2237.778	2203.829	2174.936	2142.431	2128.706	2124.372	2133.040
15	2364.186	2254.392	2172.046	2082.477	2022.524	1993.631	1971.239	1963.293	1958.237	1964.015
20	2385.134	2182.881	1984.240	1855.666	1788.489	1764.652	1758.873	1750.928	1750.928	1752.372
25	2475.425	2102.702	1774.042	1593.460	1530.617	1542.897	1596.349	1620.186	1631.743	1624.520
30	2479.036	1957.514	1552.287	1348.590	1275.635	1334.143	1435.270	1511.114	1532.062	1514.726
35	2380.799	1795.712	1326.198	1112.388	1075.549	1107.332	1220.738	1328.365	1346.423	1328.365
40	2226.221	1589.126	1111.666	909.413	878.353	888.466	972.256	1076.994	1108.776	1084.217
45	1935.844	1352.924	905.802	721.608	681.157	669.600	724.497	819.122	844.404	824.179
50	1654.135	1102.998	705.716	535.969	491.907	476.015	492.629	581.476	652.264	601.701
55	1566.734	897.856	510.687	377.056	372.722	278.025	333.066	589.421	793.841	672.489

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CANDELA TABULATION - (Cont.)

60	1407.821	656.598	378.501	203.119	147.283	111.889	78.517	62.193	63.421	65.010
65	963.588	375.612	138.471	73.894	42.906	26.076	10.618	8.451	7.440	7.584
70	379.223	119.618	55.836	22.320	12.641	12.280	13.074	12.424	11.557	11.846
75	102.282	50.852	16.975	13.941	15.819	20.009	28.965	40.162	42.545	44.712
80	46.879	15.313	15.963	20.948	34.600	59.809	102.571	90.436	98.743	96.503
85	13.291	17.625	26.437	29.399	40.017	52.224	197.774	108.133	42.473	106.905
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	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919
5	2240.667	2242.112	2255.836	2265.949	2286.174	2303.510	2322.291	2423.417	2440.031	2455.200
10	2142.431	2165.545	2187.938	2208.885	2242.834	2283.285	2328.069	2457.366	2506.485	2544.768
15	1963.293	1981.351	2014.578	2078.866	2143.153	2213.941	2299.898	2484.815	2596.776	2706.570
20	1755.262	1758.873	1792.101	1842.664	1967.627	2121.483	2299.898	2623.502	2843.091	3002.726
25	1599.238	1543.619	1506.780	1589.126	1739.370	2039.137	2362.019	2777.359	3038.842	3210.757
30	1450.438	1335.588	1261.910	1320.419	1535.673	1891.782	2364.908	2828.644	3111.075	3299.603
35	1247.464	1113.110	1069.771	1094.330	1298.027	1741.537	2290.508	2770.858	3055.456	3347.999
40	988.147	898.578	868.241	906.524	1105.887	1550.842	2147.487	2612.667	2996.225	3748.170
45	739.666	687.658	680.435	720.163	888.466	1310.307	1917.064	2376.466	2982.500	4724.760
50	509.243	486.128	494.074	538.136	688.380	1075.549	1630.299	2216.831	3540.139	5886.267
55	383.557	320.931	377.779	372.722	497.685	879.076	1477.165	2365.631	4252.356	6586.205
60	92.169	123.952	159.707	208.609	377.779	658.043	1339.922	2671.176	4523.953	6535.642
65	9.101	25.715	43.629	73.750	131.753	385.724	916.637	2257.281	4269.692	6006.896
70	11.846	11.413	12.063	21.959	51.936	106.688	397.282	944.230	2677.677	4816.496
75	28.315	18.997	15.819	13.580	15.241	41.751	87.619	184.628	577.358	1276.574
80	110.300	63.782	33.155	19.720	14.230	12.063	37.778	75.556	142.371	248.120
85	219.083	64.504	42.834	29.038	25.570	13.941	9.029	33.299	73.894	122.724
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.)

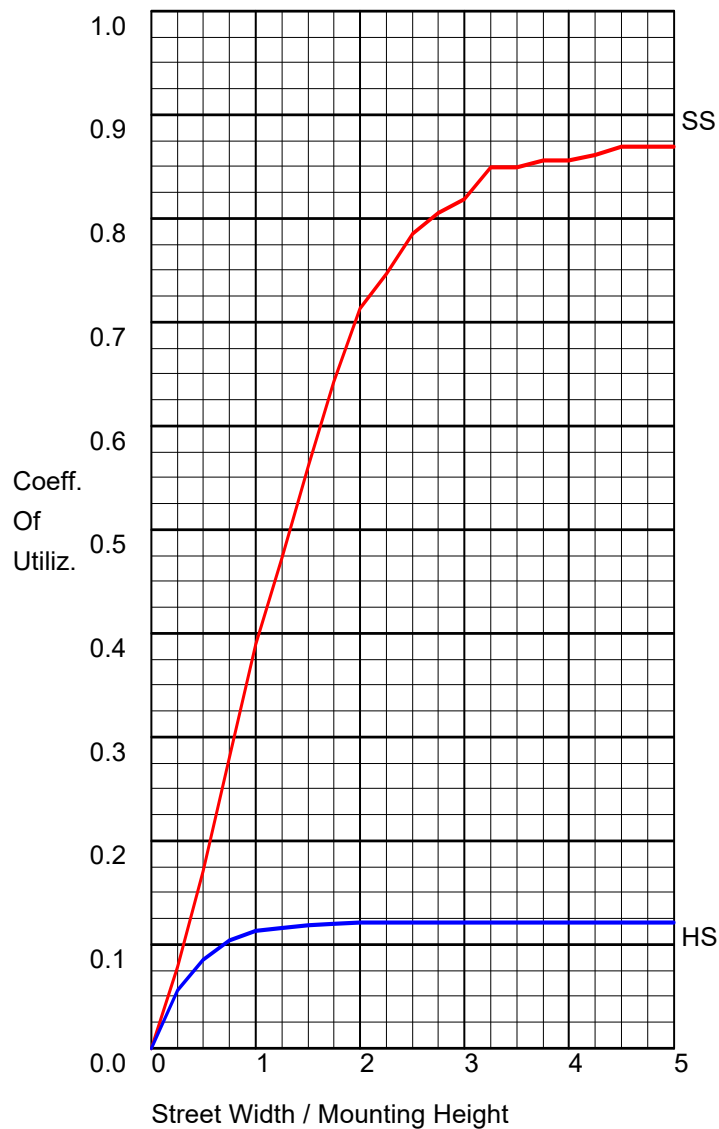
135	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919	2357.919
5	2467.479	2474.702	2476.869	2476.869	2479.036	2479.036	2478.314
10	2578.718	2598.943	2609.056	2605.444	2606.167	2603.999	2596.776
15	2797.584	2889.320	2941.328	2939.883	2892.931	2866.927	2845.980
20	3122.632	3206.423	3258.430	3309.716	3320.551	3293.824	3299.603
25	3333.553	3439.013	3536.527	3712.053	3808.124	3842.795	3850.019
30	3470.073	3710.609	4034.213	4333.979	4547.067	4644.582	4687.921
35	3877.467	4466.166	4805.661	5139.377	5475.983	5836.426	6017.009
40	4994.189	5613.226	5797.420	6046.624	7029.715	7707.260	7909.513
45	6378.174	6836.853	6910.530	7154.678	8277.179	8711.299	8870.212
50	7396.659	7913.125	7933.350	8097.318	8622.453	9476.969	9671.997
55	8273.567	9027.680	8932.332	8823.261	9289.163	10083.730	10423.220
60	8557.443	9685.000	9914.700	10132.120	11006.140	12626.330	13160.850
65	8048.200	9671.275	10491.120	12882.750	14070.990	14422.040	14400.370
70	7445.777	9110.747	11192.500	11938.670	11917.000	10695.540	9742.063
75	3796.566	6238.764	7242.080	6249.599	4518.174	3615.261	3397.118
80	738.005	1337.250	1341.511	1401.898	1238.073	1041.383	905.079
85	171.409	290.738	455.212	375.178	322.231	279.614	239.308
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

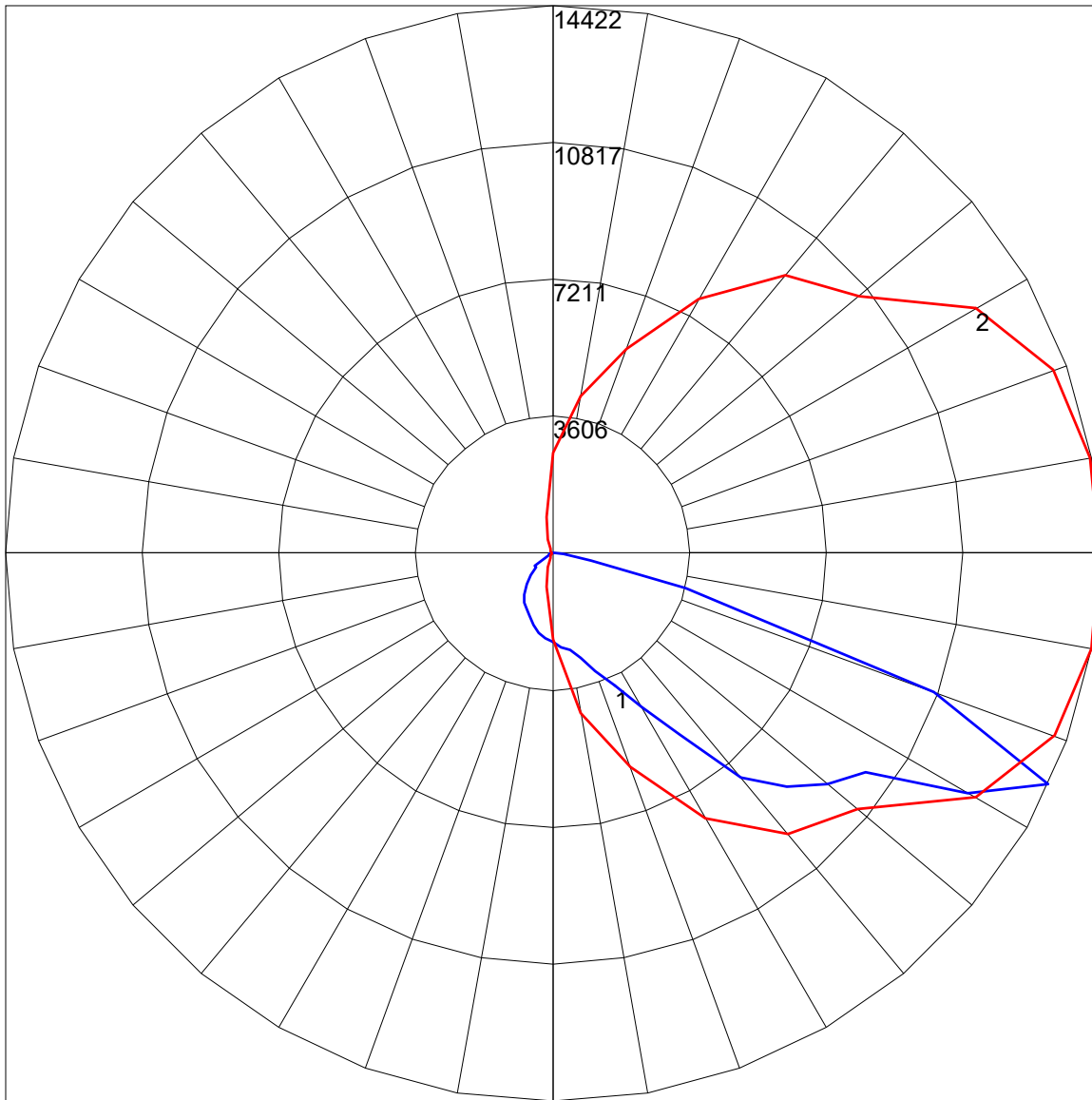
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

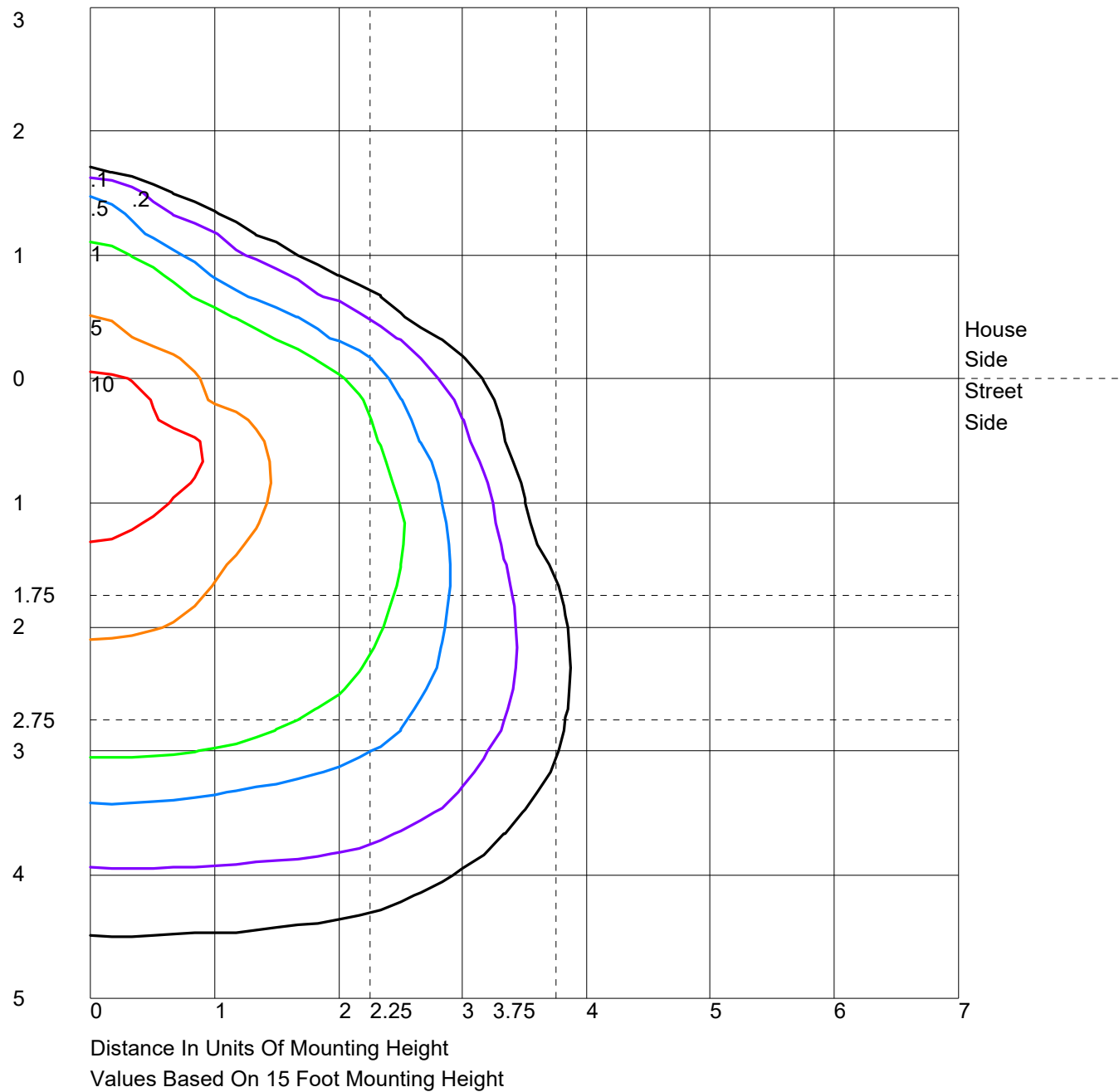
	Lumens	Percent Of Luminaire
Downward Street Side	15892.3	87.8
Downward House Side	2213.9	12.2
Downward Total	18106.2	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	18106.2	100.0

POLAR GRAPH

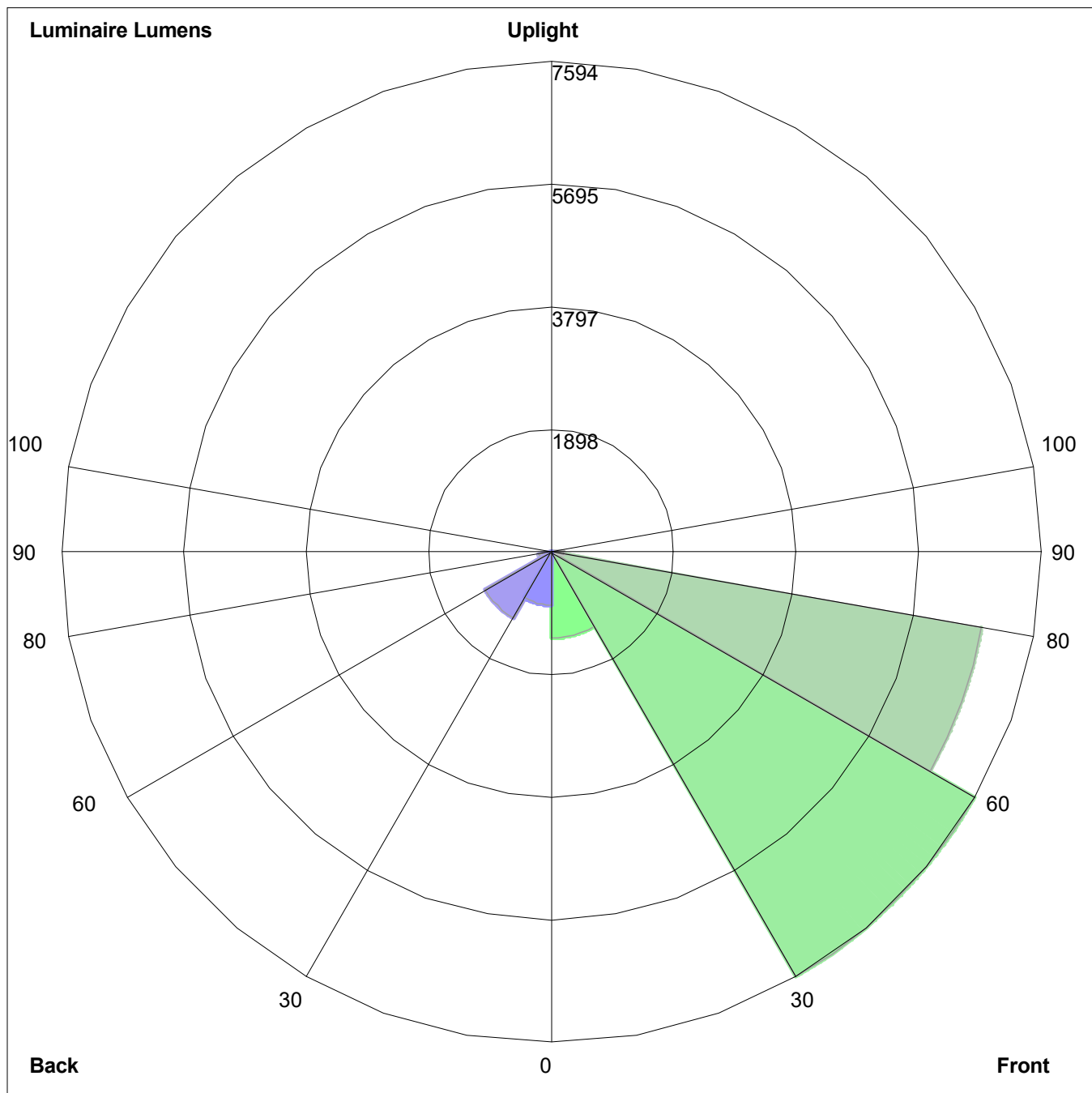


Maximum Candela = 14422.04 Located At Horizontal Angle = 350, Vertical Angle = 65
1 - Vertical Plane Through Horizontal Angles (350 - 170) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (65) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=1333.6, Medium=7593.7, High=6779.8, Very High=185.2
Back: Low=822.2, Medium=1176.2, High=191.9, Very High=23.6
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G3