



IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L160-730-T2-F-S-XXX-DIM-UNV_.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM ATAL011757
[TESTLAB] ATAL-LABS
[ISSUE DATE] 2023-01-18
[MANUFAC] WILLIAMS OUTDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] VA1-L160-730-T2-F-S-xxx-DIM-UNV_
[LUMINAIRE] VA1 LED AREA LIGHT FIXTURE WITH TYPE II
[MORE] OPTICS, CLEAR LENS
[LAMP] LED
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Outdoor, Architectural, Area, Parking, Site
[SEARCH_MOUNTING] Pole

CHARACTERISTICS

IES Classification	Type I
Longitudinal Classification	Medium
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	15629
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	119
Total Luminaire Watts	131
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	15848.525
Maximum Candela Angle	77.5H 68V
Maximum Candela (<90 Degrees Vertical)	15848.525
Maximum Candela Angle (<90 Degrees Vertical)	77.5H 68V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	605.263 (3.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L160-730-T2-F-S-XXX-DIM-UNV_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	2824.9	N.A.	18.1
FM - Front-Medium (30-60)	6844.5	N.A.	43.8
FH - Front-High (60-80)	2767.5	N.A.	17.7
FVH - Front-Very High (80-90)	40.4	N.A.	0.3
BL - Back-Low (0-30)	632.1	N.A.	4.0
BM - Back-Medium (30-60)	1505.0	N.A.	9.6
BH - Back-High (60-80)	959.9	N.A.	6.1
BVH - Back-Very High (80-90)	54.7	N.A.	0.3
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	15629.0	N.A.	100.0
BUG Rating	B2-U0-G2		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	<u>0.0</u>	<u>5.0</u>	<u>15.0</u>	<u>25.0</u>	<u>35.0</u>	<u>45.0</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>	<u>77.5</u>
0.0	3435.298	3435.298	3435.298	3435.298	3435.298	3435.298	3435.298	3435.298	3435.298	3435.298
2.5	4277.082	4195.778	4199.884	4115.295	4069.305	3989.643	3899.306	3779.403	3670.997	3630.756
5.0	5233.019	5178.817	5152.536	5007.996	4883.166	4690.171	4470.897	4207.275	3937.083	3852.494
7.5	6220.986	6171.710	6110.938	5903.982	5681.423	5375.096	5030.170	4629.399	4192.493	4081.624
10.0	7124.363	7060.305	6981.465	6753.157	6473.931	6077.266	5620.650	5042.489	4458.578	4305.825
12.5	7682.815	7654.892	7588.371	7421.656	7158.034	6734.268	6197.991	5467.897	4735.340	4546.452
15.0	7705.810	7705.810	7700.882	7714.843	7621.221	7302.575	6755.621	5958.185	5035.097	4808.432
17.5	7583.443	7579.337	7575.231	7639.288	7731.268	7692.670	7275.473	6437.796	5373.453	5105.725
20.0	7608.902	7608.081	7611.366	7617.936	7667.211	7797.790	7713.201	6960.113	5763.548	5444.902
22.5	7514.458	7523.492	7583.443	7663.105	7688.563	7757.549	7981.750	7488.178	6207.846	5834.997
25.0	7130.112	7148.179	7292.720	7560.448	7712.380	7771.510	8079.479	8006.388	6688.278	6266.976
27.5	6489.535	6510.888	6769.582	7168.711	7597.404	7818.321	8110.687	8446.579	7183.493	6716.201
30.0	5946.687	5972.967	6156.928	6567.554	7219.628	7799.432	8178.851	8788.220	7657.356	7164.604
32.5	5630.505	5656.785	5823.500	6108.474	6655.428	7622.042	8277.401	9005.031	8144.358	7596.583
35.0	5394.806	5413.695	5574.660	5839.925	6212.773	7267.261	8375.130	9121.648	8573.052	7980.929
37.5	5044.952	5061.377	5260.942	5566.448	5919.586	6887.021	8444.115	9190.634	8950.007	8330.783
40.0	4436.405	4457.757	4711.524	5114.759	5572.196	6517.458	8622.327	9256.334	9303.145	8710.201
42.5	3565.877	3583.945	3907.518	4370.704	5057.271	6022.243	8844.886	9487.106	9627.540	9048.557
45.0	2756.122	2763.514	2967.184	3328.535	4217.951	5433.405	8545.951	10261.547	9891.162	9391.840
47.5	2222.309	2220.666	2315.931	2468.684	3014.817	4581.766	7705.810	11159.175	10262.368	9790.148
50.0	1970.184	1961.150	1974.290	2009.604	2219.845	3024.672	6685.814	11630.574	11347.242	10805.216
52.5	1865.064	1856.851	1826.465	1772.262	1874.919	2079.411	5067.947	12141.393	13071.872	12478.928
55.0	1675.355	1681.925	1726.272	1692.601	1695.886	1791.151	3054.237	12359.025	14589.546	14046.698
57.5	1443.761	1450.331	1523.423	1654.002	1651.538	1663.036	2423.515	11475.357	15047.805	14618.290
60.0	1254.052	1263.086	1336.177	1492.215	1596.514	1568.592	2276.511	9781.935	14945.148	14767.758
62.5	1035.599	1051.203	1153.859	1323.037	1424.873	1419.124	2085.981	7902.910	14801.429	14904.085
65.0	819.610	836.856	953.474	1133.328	1234.342	1209.705	1794.436	5840.746	14748.869	15092.152
67.5	579.804	594.587	725.987	918.981	1022.459	993.715	1428.979	4053.701	15330.315	15813.212
68.0	520.674	531.350	671.784	872.991	979.754	950.189	1350.139	3767.905	15362.344	15848.525
70.0	422.124	427.051	468.935	693.137	812.218	787.581	1049.560	2769.263	13981.819	14375.199
72.5	331.786	335.892	369.564	490.288	638.113	636.470	739.127	1684.388	9402.517	9632.467
75.0	248.018	252.946	283.332	344.105	506.713	551.881	491.930	868.885	3292.400	3278.439
77.5	174.105	180.675	209.419	252.124	395.844	510.819	300.578	459.080	697.243	719.417
80.0	115.797	121.545	142.898	162.608	297.293	379.419	179.033	252.124	321.110	328.501
82.5	69.806	69.806	82.125	92.802	184.782	168.357	95.265	128.115	165.893	160.144
85.0	29.565	29.565	34.493	39.420	91.159	58.309	40.241	45.990	62.415	60.773
87.5	5.749	5.749	6.570	6.570	17.246	7.391	4.928	6.570	7.391	7.391
90.0	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>85.0</u>	<u>90.0</u>	<u>95.0</u>	<u>105.0</u>	<u>115.0</u>	<u>125.0</u>	<u>135.0</u>	<u>145.0</u>	<u>155.0</u>	<u>165.0</u>
0.0	3435.298	3435.298	3435.298	3435.298	3435.298	3435.298	3435.298	3435.298	3435.298	3435.298
2.5	3523.993	3454.187	3386.844	3232.449	3092.015	2940.904	2866.170	2761.050	2649.360	2646.896
5.0	3610.225	3447.617	3283.366	2935.155	2608.297	2303.612	2091.729	1905.305	1760.765	1714.775
7.5	3703.848	3450.902	3194.671	2649.360	2187.816	1784.581	1563.664	1418.303	1334.535	1306.612
10.0	3804.862	3466.506	3117.473	2391.486	1824.822	1467.578	1319.752	1254.052	1218.738	1201.492
12.5	3919.837	3493.607	3053.416	2160.715	1571.056	1311.540	1231.878	1190.816	1165.357	1153.038
15.0	4056.165	3545.346	3008.247	1957.044	1398.593	1238.448	1182.603	1151.396	1131.686	1121.009
17.5	4218.773	3615.974	2979.503	1792.794	1306.612	1196.564	1148.932	1126.758	1110.333	1098.014
20.0	4414.231	3714.524	2972.112	1663.857	1260.622	1169.463	1126.758	1110.333	1098.835	1081.589
22.5	4640.075	3843.460	2980.324	1565.307	1232.700	1148.111	1111.976	1098.835	1092.265	1072.555
25.0	4897.127	3986.358	3009.068	1489.752	1207.241	1128.401	1097.193	1088.159	1084.874	1050.382

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CANDELA TABULATION - (Cont.)

27.5	5164.034	4147.324	3051.773	1433.085	1180.961	1105.405	1079.947	1075.019	1061.879	1024.102
30.0	5440.796	4324.714	3105.976	1392.023	1157.144	1082.410	1057.773	1053.667	1034.778	1000.285
32.5	5702.775	4493.071	3167.570	1362.457	1134.149	1056.952	1031.493	1022.459	990.430	909.947
35.0	5920.407	4632.684	3221.772	1335.356	1111.154	1029.029	1002.749	963.329	895.165	835.214
37.5	6100.262	4770.654	3277.618	1308.255	1079.125	1001.106	941.976	879.561	823.716	803.185
40.0	6330.212	4946.402	3362.207	1288.545	1046.275	956.759	867.242	792.508	790.866	773.620
42.5	6534.704	5107.368	3468.969	1276.226	1011.783	893.522	813.861	748.161	759.658	767.050
45.0	6763.012	5304.468	3601.191	1268.835	974.826	838.499	729.272	714.489	738.306	750.625
47.5	7061.948	5573.839	3802.398	1277.868	935.406	803.185	698.886	689.031	714.489	732.557
50.0	7911.123	6350.743	4380.559	1362.457	904.199	775.262	694.779	666.857	696.422	725.166
52.5	9285.078	7560.448	5409.588	1609.654	861.494	702.992	704.634	637.292	689.031	731.736
55.0	10307.537	8493.391	6262.869	1721.345	779.368	630.722	620.045	616.760	692.316	743.233
57.5	10089.905	8371.845	6199.633	1550.524	693.137	579.804	573.234	604.442	695.601	738.306
60.0	9740.873	8063.876	5880.987	1269.656	611.833	535.456	540.384	596.229	680.818	707.098
62.5	9420.584	7749.336	5649.394	1058.594	539.563	500.143	511.640	578.983	642.219	659.466
65.0	9262.083	7555.520	5538.525	901.735	474.684	459.080	482.075	546.954	589.659	648.789
67.5	9303.145	7335.425	5375.096	740.770	418.017	413.911	450.046	503.428	546.954	862.315
68.0	9248.121	7218.807	5311.038	702.171	408.162	404.877	442.655	493.573	551.881	915.696
70.0	8266.725	5948.330	4499.641	571.592	370.385	370.385	411.447	452.510	651.253	1111.976
72.5	5941.760	3788.437	2884.238	396.665	322.752	332.607	367.921	397.486	863.957	1268.013
75.0	1920.909	1387.916	1255.695	278.405	269.371	292.366	322.752	349.853	988.788	1158.787
77.5	477.969	367.921	295.651	184.782	206.956	239.806	266.907	312.076	909.947	845.890
80.0	237.342	192.173	159.323	123.188	143.719	179.854	202.849	240.627	605.263	542.848
82.5	131.400	110.048	87.874	71.449	91.159	121.545	131.400	152.753	348.211	322.752
85.0	47.633	42.705	35.314	29.565	43.526	52.560	59.951	65.700	157.680	139.613
87.5	4.106	4.106	2.464	1.643	6.570	9.855	10.676	13.140	36.135	17.246
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

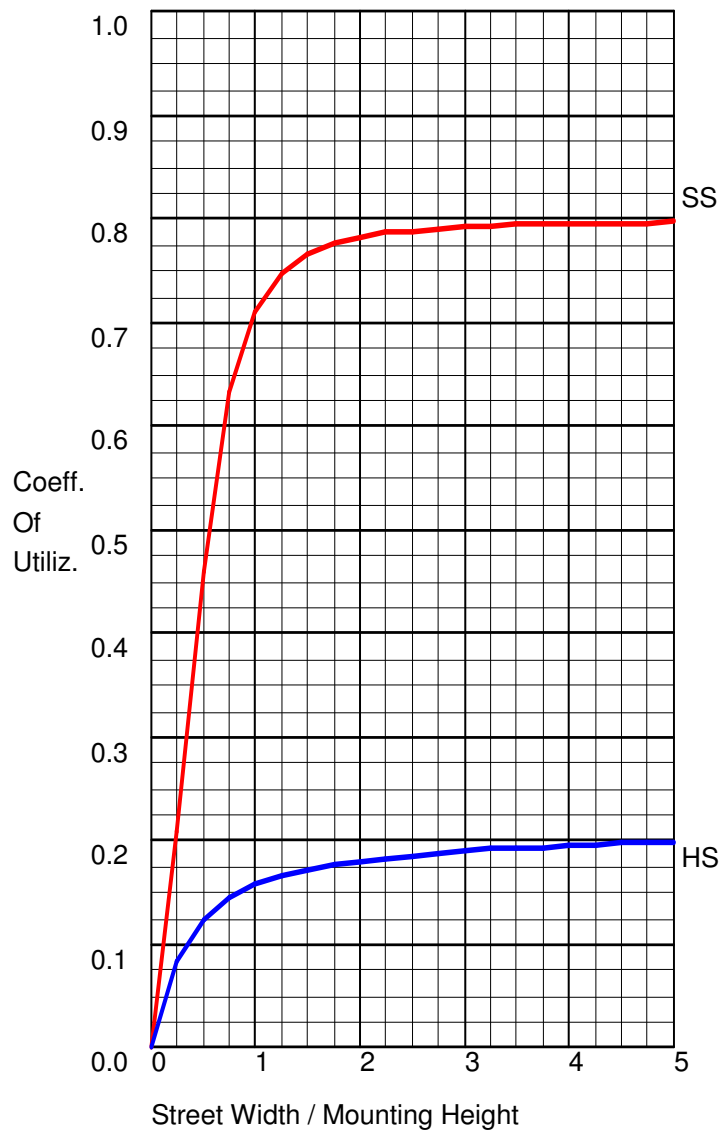
Vert. Horizontal Angles

	<u>175.0</u>	<u>180.0</u>
0.0	3435.298	3435.298
2.5	2538.491	2586.945
5.0	1627.722	1654.002
7.5	1278.690	1283.617
10.0	1188.352	1189.173
12.5	1144.004	1144.004
15.0	1115.261	1116.082
17.5	1092.265	1093.087
20.0	1072.555	1072.555
22.5	1058.594	1058.594
25.0	1028.208	1029.029
27.5	1005.213	1006.034
30.0	956.759	957.580
32.5	870.527	868.064
35.0	817.146	818.788
37.5	792.508	796.615
40.0	760.480	767.050
42.5	740.770	739.948
45.0	735.021	716.132
47.5	710.383	710.383
50.0	708.741	720.238
52.5	728.451	741.591
55.0	748.982	760.480
57.5	746.518	756.373
60.0	718.596	729.272

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L160-730-T2-F-S-XXX-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

62.5	679.997	693.958
65.0	740.770	775.262
67.5	934.585	968.256
68.0	966.614	998.643
70.0	1075.019	1109.512
72.5	1097.193	1114.439
75.0	905.020	941.155
77.5	621.688	624.973
80.0	399.950	395.022
82.5	241.448	247.197
85.0	56.666	63.236
87.5	3.285	0.000
90.0	0.000	0.000

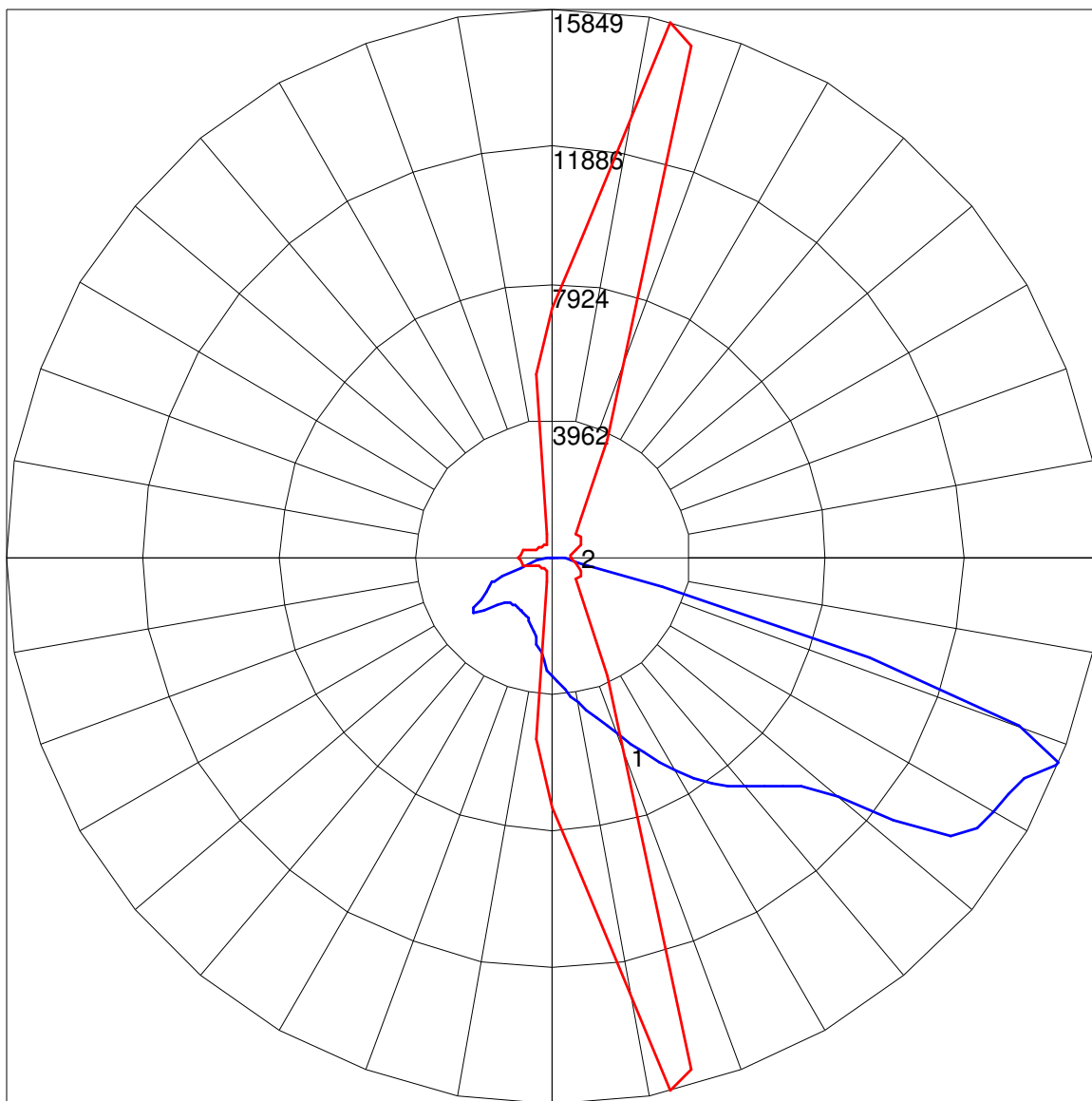
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

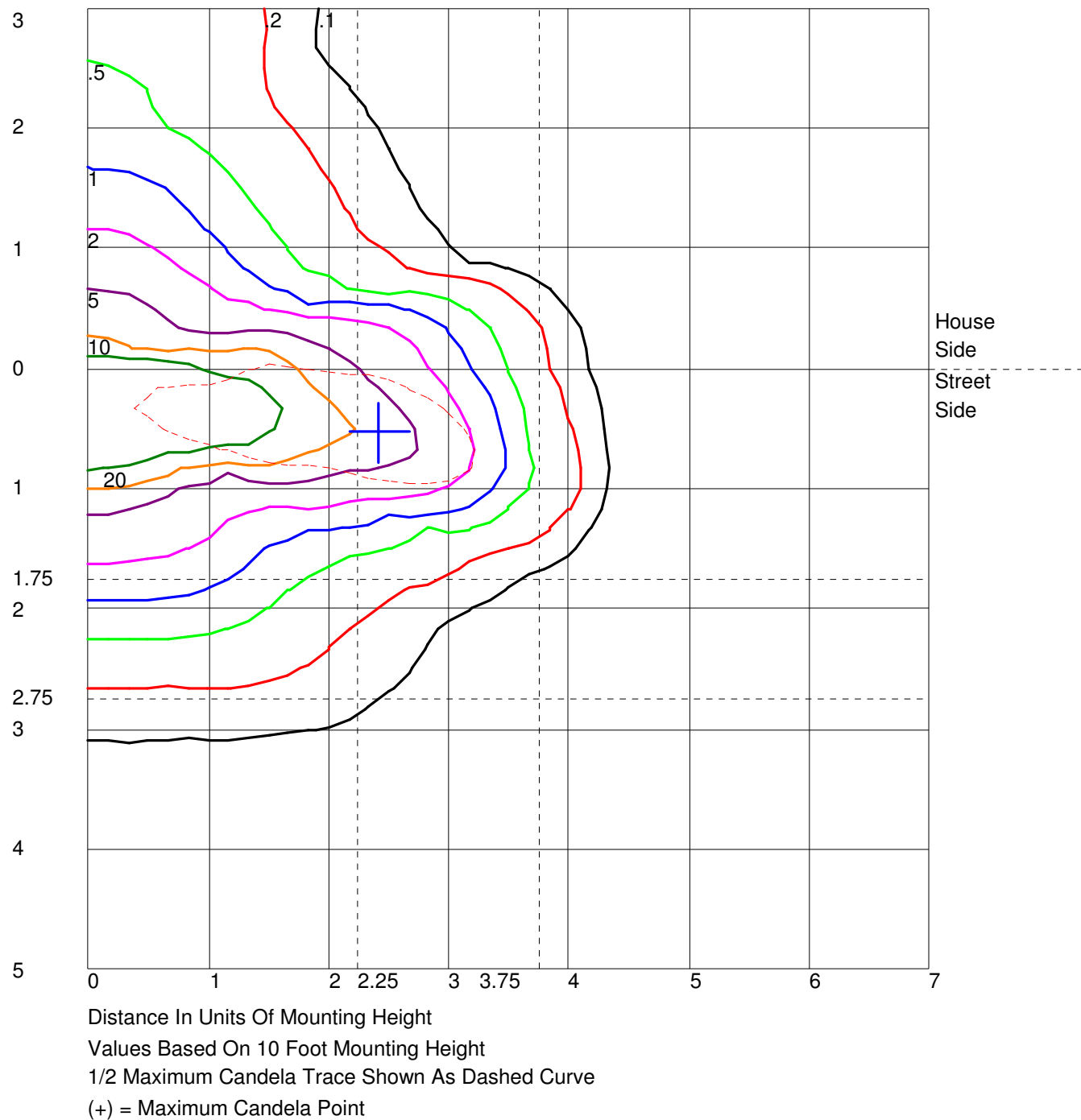
	Lumens	Percent Of Luminaire
Downward Street Side	12477.3	79.8
Downward House Side	3151.7	20.2
Downward Total	15629.0	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	15629.0	100.0

POLAR GRAPH

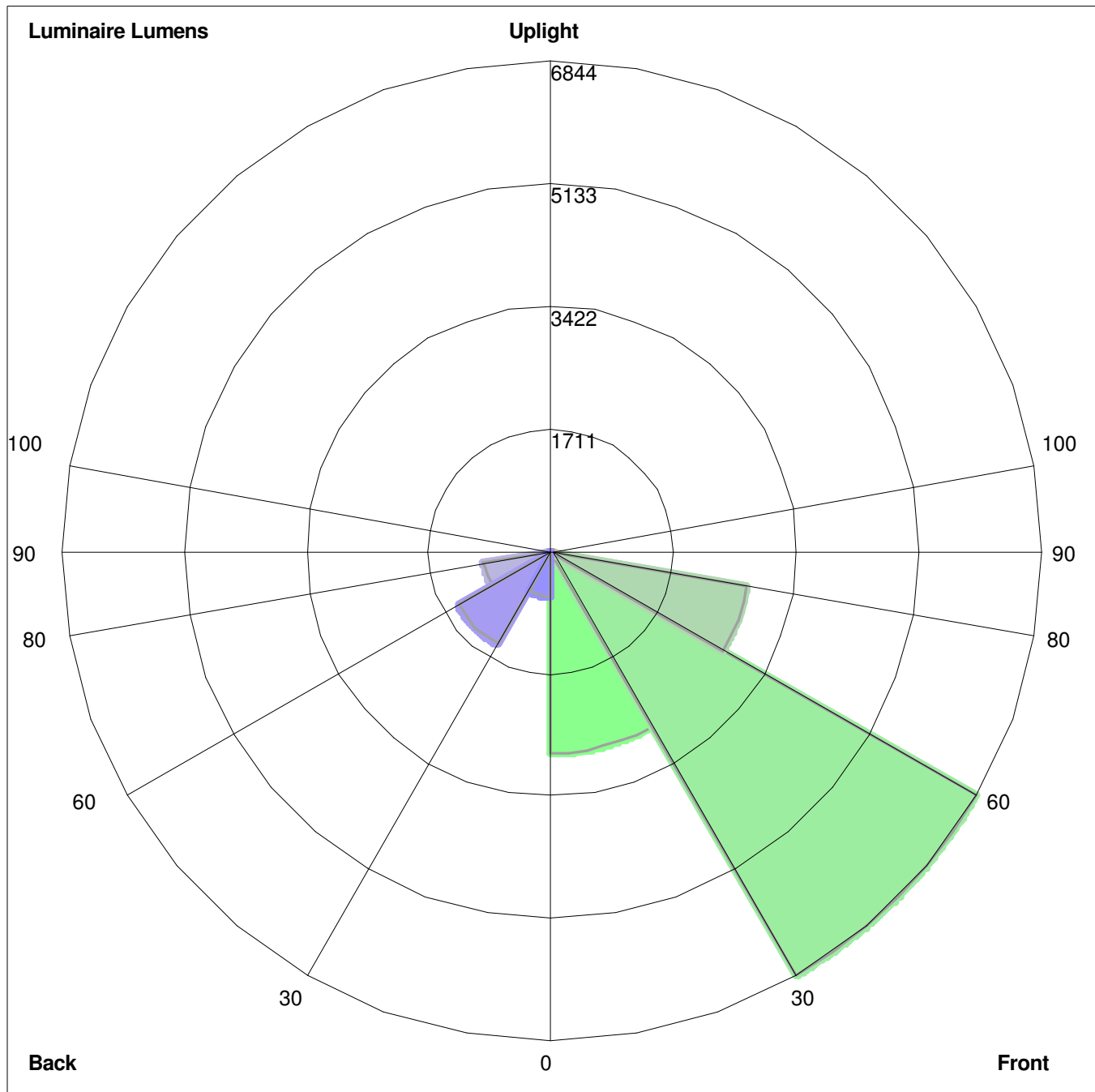


Maximum Candela = 15848.525 Located At Horizontal Angle = 77.5, Vertical Angle = 68
1 - Vertical Plane Through Horizontal Angles (77.5 - 257.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (68) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=2824.9, Medium=6844.5, High=2767.5, Very High=40.4
Back: Low=632.1, Medium= 1505.0, High=959.9, Very High=54.7
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G2