



IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L160-740-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-L160-740-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	17175
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	131
Total Luminaire Watts	131
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	17415.96
Maximum Candela Angle	77.5H 68V
Maximum Candela (<90 Degrees Vertical)	17415.96
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	665.124 (3.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L160-740-T2-F-S-XXX-DIM-UNV_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	3104.3	N.A.	18.1
FM - Front-Medium (30-60)	7521.4	N.A.	43.8
FH - Front-High (60-80)	3041.2	N.A.	17.7
FVH - Front-Very High (80-90)	44.4	N.A.	0.3
BL - Back-Low (0-30)	694.6	N.A.	4.0
BM - Back-Medium (30-60)	1653.9	N.A.	9.6
BH - Back-High (60-80)	1054.8	N.A.	6.1
BVH - Back-Very High (80-90)	60.1	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	17174.7	N.A.	100.0
BUG Rating	B3-U0-G3		

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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	3775.052	3775.052	3775.052	3775.052	3775.052	3775.052	3775.052	3775.052	3775.052	3775.052	
2.5	4700.089	4610.744	4615.257	4522.302	4471.763	4384.223	4284.951	4153.189	4034.063	3989.841	
5.0	5750.570	5691.007	5662.127	5503.292	5366.116	5154.034	4913.073	4623.379	4326.465	4233.510	
7.5	6836.247	6782.099	6715.316	6487.892	6243.321	5906.698	5527.659	5087.251	4607.134	4485.300	
10.0	7828.970	7758.577	7671.939	7421.051	7114.209	6678.314	6176.538	5541.196	4899.536	4731.676	
12.5	8442.653	8411.968	8338.868	8155.665	7865.971	7400.294	6810.978	6008.678	5203.670	4996.101	
15.0	8467.922	8467.922	8462.507	8477.849	8374.967	8024.807	7423.758	6547.455	5533.073	5283.990	
17.5	8333.453	8328.941	8324.428	8394.821	8495.899	8453.482	7995.025	7074.501	5904.893	5610.686	
20.0	8361.430	8360.527	8364.137	8371.357	8425.505	8568.999	8476.044	7648.475	6333.569	5983.408	
22.5	8257.645	8267.572	8333.453	8420.993	8448.970	8524.778	8771.153	8228.766	6821.808	6412.084	
25.0	7835.287	7855.141	8013.977	8308.184	8475.142	8540.120	8878.548	8798.228	7349.755	6886.786	
27.5	7131.357	7154.821	7439.100	7877.703	8348.795	8591.561	8912.842	9281.954	7893.948	7380.440	
30.0	6534.821	6563.700	6765.854	7217.092	7933.657	8570.804	8987.747	9657.384	8414.676	7873.191	
32.5	6187.368	6216.247	6399.449	6712.608	7313.656	8375.869	9096.044	9895.637	8949.843	8347.893	
35.0	5928.357	5949.114	6125.999	6417.499	6827.222	7986.000	9203.439	10023.788	9420.935	8770.251	
37.5	5543.903	5561.953	5781.254	6116.975	6505.039	7568.154	9279.247	10099.596	9835.171	9154.705	
40.0	4875.169	4898.634	5177.498	5620.614	6123.292	7162.041	9475.084	10171.794	10223.235	9571.649	
42.5	3918.546	3938.400	4293.975	4802.971	5557.440	6617.848	9719.654	10425.390	10579.713	9943.468	
45.0	3028.706	3036.828	3260.642	3657.731	4635.111	5970.774	9391.154	11276.424	10869.407	10320.703	
47.5	2442.097	2440.292	2544.979	2712.839	3312.985	5034.907	8467.922	12262.829	11277.326	10758.403	
50.0	2165.037	2155.110	2169.550	2208.356	2439.390	3323.815	7347.048	12780.849	12469.495	11873.862	
52.5	2049.520	2040.496	2007.104	1947.541	2060.350	2285.066	5569.172	13342.189	14364.693	13713.106	
55.0	1841.049	1848.269	1897.002	1860.001	1863.611	1968.298	3356.304	13581.344	16032.466	15435.930	
57.5	1586.551	1593.771	1674.091	1817.584	1814.877	1827.512	2663.203	12610.282	16536.047	16064.053	
60.0	1378.079	1388.006	1468.327	1639.797	1754.411	1723.727	2501.660	10749.378	16423.238	16228.303	
62.5	1138.021	1155.168	1267.977	1453.887	1565.794	1559.477	2292.286	8684.516	16265.305	16378.114	
65.0	900.670	919.622	1047.773	1245.415	1356.420	1329.345	1971.908	6418.401	16207.546	16584.781	
67.5	637.147	653.392	797.788	1009.869	1123.581	1091.995	1570.306	4454.616	16846.499	17377.154	
68.0	572.169	583.901	738.224	959.331	1076.653	1044.163	1483.669	4140.555	16881.695	17415.960	
70.0	463.872	469.287	515.313	761.689	892.548	865.473	1153.363	3043.145	15364.635	15796.920	
72.5	364.600	369.112	406.114	538.778	701.223	699.418	812.227	1850.976	10332.435	10585.128	
75.0	272.547	277.962	311.354	378.137	556.827	606.463	540.582	954.818	3618.022	3602.680	
77.5	191.325	198.544	230.131	277.060	434.993	561.339	330.306	504.483	766.201	790.568	
80.0	127.249	133.566	157.031	178.690	326.696	416.943	196.740	277.060	352.868	360.990	
82.5	76.710	76.710	90.247	101.980	203.057	185.007	104.687	140.786	182.300	175.983	
85.0	32.489	32.489	37.904	43.319	100.175	64.076	44.221	50.539	68.588	66.783	
87.5	6.317	6.317	7.220	7.220	18.952	8.122	5.415	7.220	8.122	8.122	
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	3775.052	3775.052	3775.052	3775.052	3775.052	3775.052	3775.052	3775.052	3775.052	3775.052
2.5	3872.520	3795.809	3721.806	3552.141	3397.818	3231.763	3149.637	3034.121	2911.384	2908.677
5.0	3967.280	3788.590	3608.095	3225.445	2866.260	2531.442	2298.604	2093.742	1934.906	1884.368
7.5	4070.162	3792.199	3510.627	2911.384	2404.193	1961.078	1718.312	1558.574	1466.522	1435.838
10.0	4181.166	3809.346	3425.795	2628.007	2005.299	1612.723	1450.277	1378.079	1339.273	1320.321
12.5	4307.513	3839.128	3355.402	2374.411	1726.434	1441.252	1353.712	1308.589	1280.612	1267.075
15.0	4457.323	3895.984	3305.765	2150.598	1536.915	1360.932	1299.564	1265.270	1243.610	1231.878
17.5	4636.013	3973.597	3274.179	1970.103	1435.838	1314.906	1262.562	1238.196	1220.146	1206.609
20.0	4850.802	4081.894	3266.057	1828.414	1385.299	1285.124	1238.196	1220.146	1207.511	1188.559
22.5	5098.983	4223.582	3275.081	1720.117	1354.615	1261.660	1221.951	1207.511	1200.292	1178.632
25.0	5381.458	4380.613	3306.668	1637.089	1326.638	1240.000	1205.706	1195.779	1192.169	1154.265

IES ROAD REPORT

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CANDELA TABULATION - (Cont.)

27.5	5674.762	4557.498	3353.597	1574.819	1297.759	1214.731	1186.754	1181.340	1166.900	1125.386
30.0	5978.896	4752.433	3413.160	1529.695	1271.587	1189.462	1162.388	1157.875	1137.118	1099.214
32.5	6266.786	4937.440	3480.846	1497.206	1246.318	1161.485	1133.508	1123.581	1088.385	999.942
35.0	6505.941	5090.861	3540.409	1467.424	1221.049	1130.801	1101.922	1058.603	983.698	917.817
37.5	6703.583	5242.477	3601.777	1437.642	1185.852	1100.117	1035.139	966.551	905.182	882.620
40.0	6956.276	5435.606	3694.732	1415.983	1149.753	1051.383	953.013	870.888	869.083	850.131
42.5	7180.993	5612.491	3812.054	1402.446	1111.849	981.893	894.353	822.155	834.789	842.912
45.0	7431.881	5829.085	3957.352	1394.324	1071.238	921.427	801.398	785.153	811.325	824.862
47.5	7760.381	6125.097	4178.459	1404.251	1027.919	882.620	768.006	757.176	785.153	805.008
50.0	8693.541	6978.838	4813.801	1497.206	993.625	851.936	763.494	732.810	765.299	796.885
52.5	10203.3818308.184	5944.602	1768.851	946.696	772.518	774.323	700.321	757.176	804.105	
55.0	11326.9629333.395	6882.273	1891.587	856.449	693.101	681.369	677.759	760.786	816.740	
57.5	11087.8069199.829	6812.783	1703.873	761.689	637.147	629.927	664.222	764.396	811.325	
60.0	10704.2558861.401	6462.623	1395.226	672.344	588.414	593.828	655.197	748.152	777.031	
62.5	10352.2898515.753	6208.125	1163.290	592.926	549.607	562.242	636.245	705.735	724.687	
65.0	10178.1128302.769	6086.291	990.917	521.630	504.483	529.753	601.048	647.977	712.955	
67.5	10223.2358060.906	5906.698	814.032	459.360	454.847	494.556	553.217	601.048	947.599	
68.0	10162.7707932.754	5836.305	771.616	448.530	444.920	486.434	542.387	606.463	1006.259	
70.0	9084.312	6536.626	4944.660	628.123	407.016	407.016	452.140	497.264	715.663	1221.951
72.5	6529.406	4163.117	3169.492	435.895	354.673	365.502	404.309	436.798	949.404	1393.421
75.0	2110.889	1525.183	1379.884	305.939	296.012	321.281	354.673	384.454	1086.580	1273.392
77.5	525.240	404.309	324.891	203.057	227.424	263.523	293.304	342.940	999.942	929.549
80.0	260.815	211.179	175.080	135.371	157.933	197.642	222.911	264.425	665.124	596.536
82.5	144.396	120.932	96.565	78.515	100.175	133.566	144.396	167.860	382.649	354.673
85.0	52.344	46.929	38.806	32.489	47.831	57.758	65.881	72.198	173.275	153.421
87.5	4.512	4.512	2.707	1.805	7.220	10.830	11.732	14.440	39.709	18.952
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

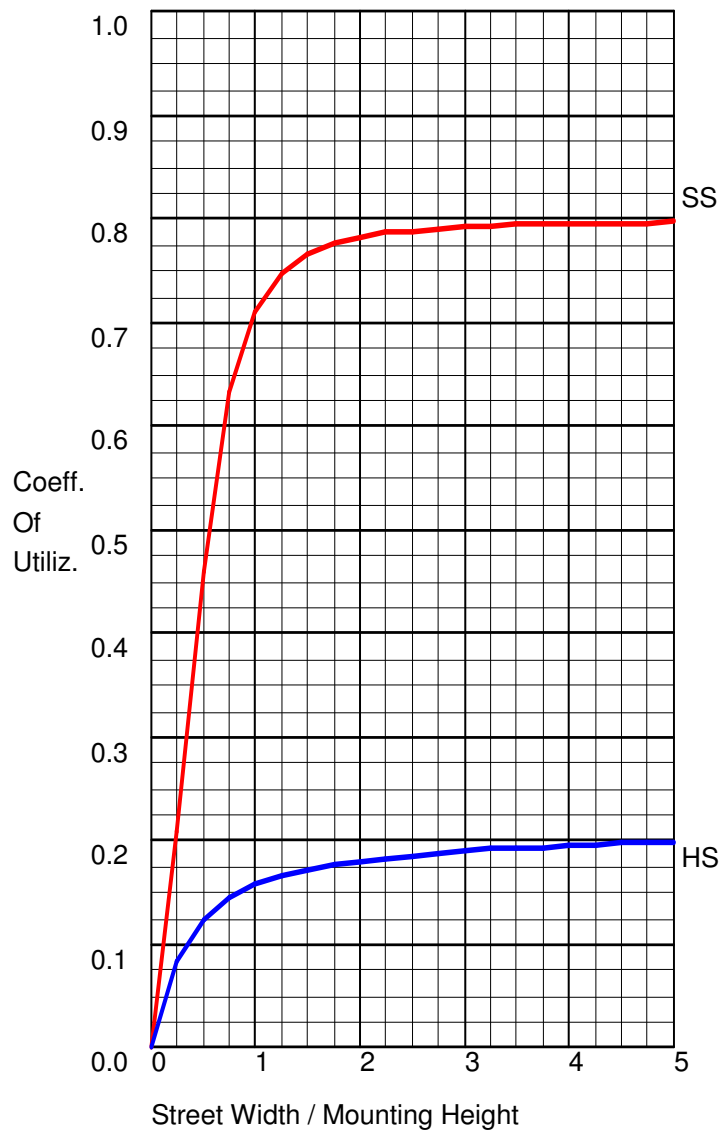
Vert. Horizontal Angles

	<u>175.0</u>	<u>180.0</u>
0.0	3775.052	3775.052
2.5	2789.550	2842.796
5.0	1788.705	1817.584
7.5	1405.153	1410.568
10.0	1305.881	1306.784
12.5	1257.148	1257.148
15.0	1225.561	1226.463
17.5	1200.292	1201.194
20.0	1178.632	1178.632
22.5	1163.290	1163.290
25.0	1129.899	1130.801
27.5	1104.629	1105.532
30.0	1051.383	1052.286
32.5	956.623	953.916
35.0	897.963	899.767
37.5	870.888	875.401
40.0	835.692	842.912
42.5	814.032	813.130
45.0	807.715	786.958
47.5	780.641	780.641
50.0	778.836	791.470
52.5	800.495	814.935
55.0	823.057	835.692
57.5	820.350	831.179
60.0	789.666	801.398

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L160-740-T2-F-S-XXX-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

62.5	747.249	762.591
65.0	814.032	851.936
67.5	1027.016	1064.018
68.0	1062.213	1097.409
70.0	1181.340	1219.244
72.5	1205.706	1224.658
75.0	994.527	1034.236
77.5	683.173	686.783
80.0	439.505	434.090
82.5	265.328	271.645
85.0	62.271	69.491
87.5	3.610	0.000
90.0	0.000	0.000

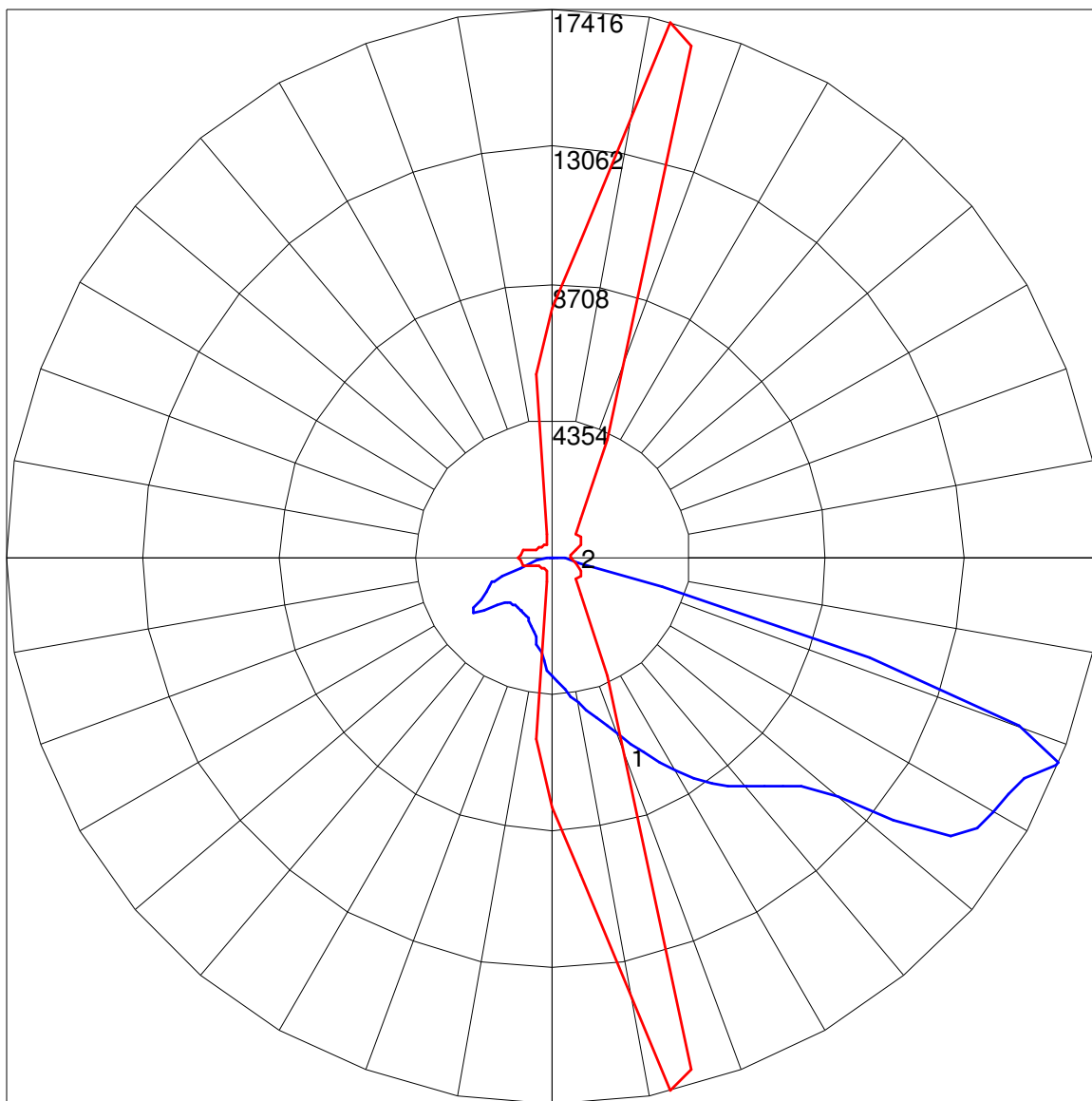
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

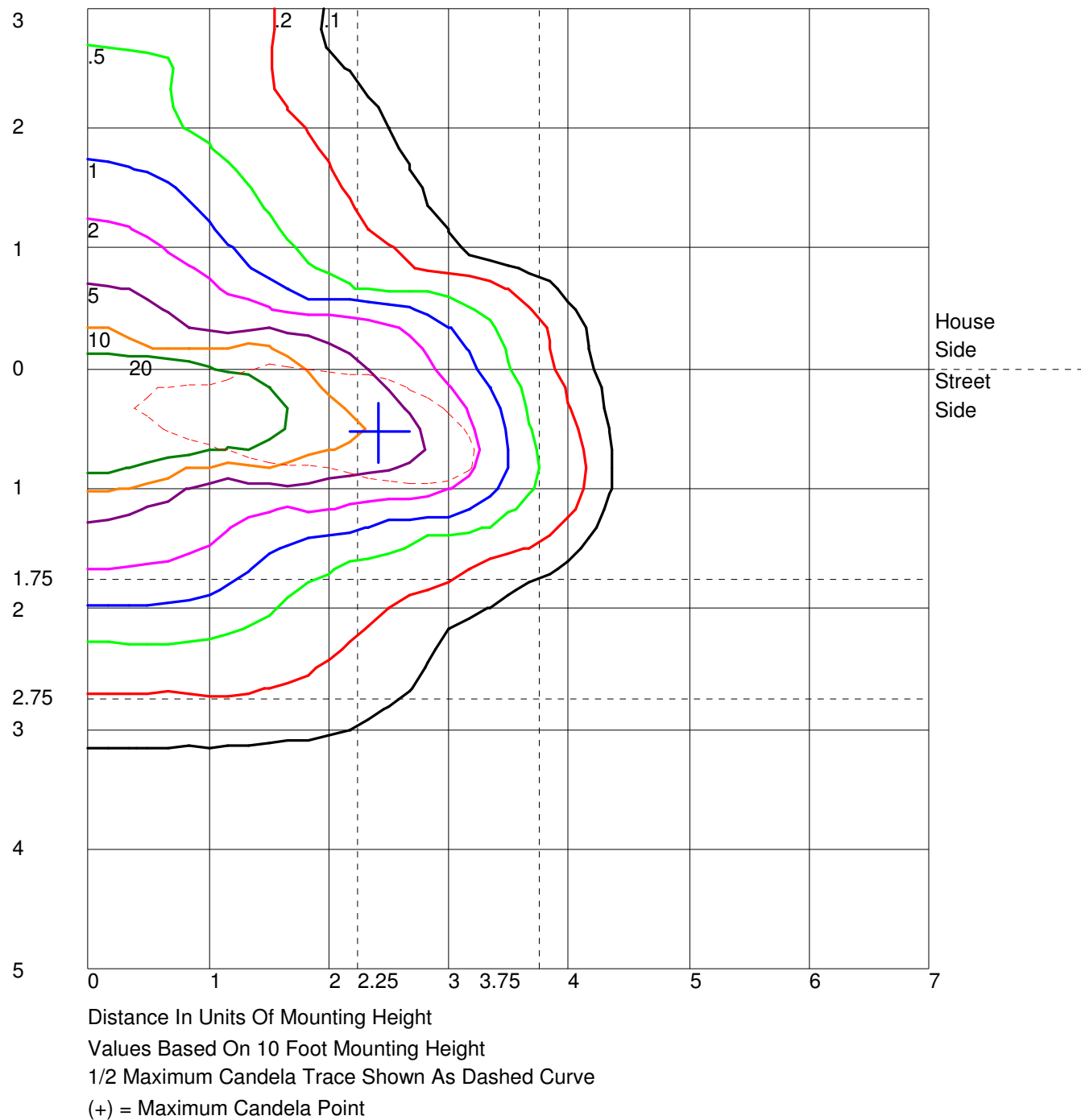
	Lumens	Percent Of Luminaire
Downward Street Side	13711.3	79.8
Downward House Side	3463.4	20.2
Downward Total	17174.7	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	17174.7	100.0

POLAR GRAPH

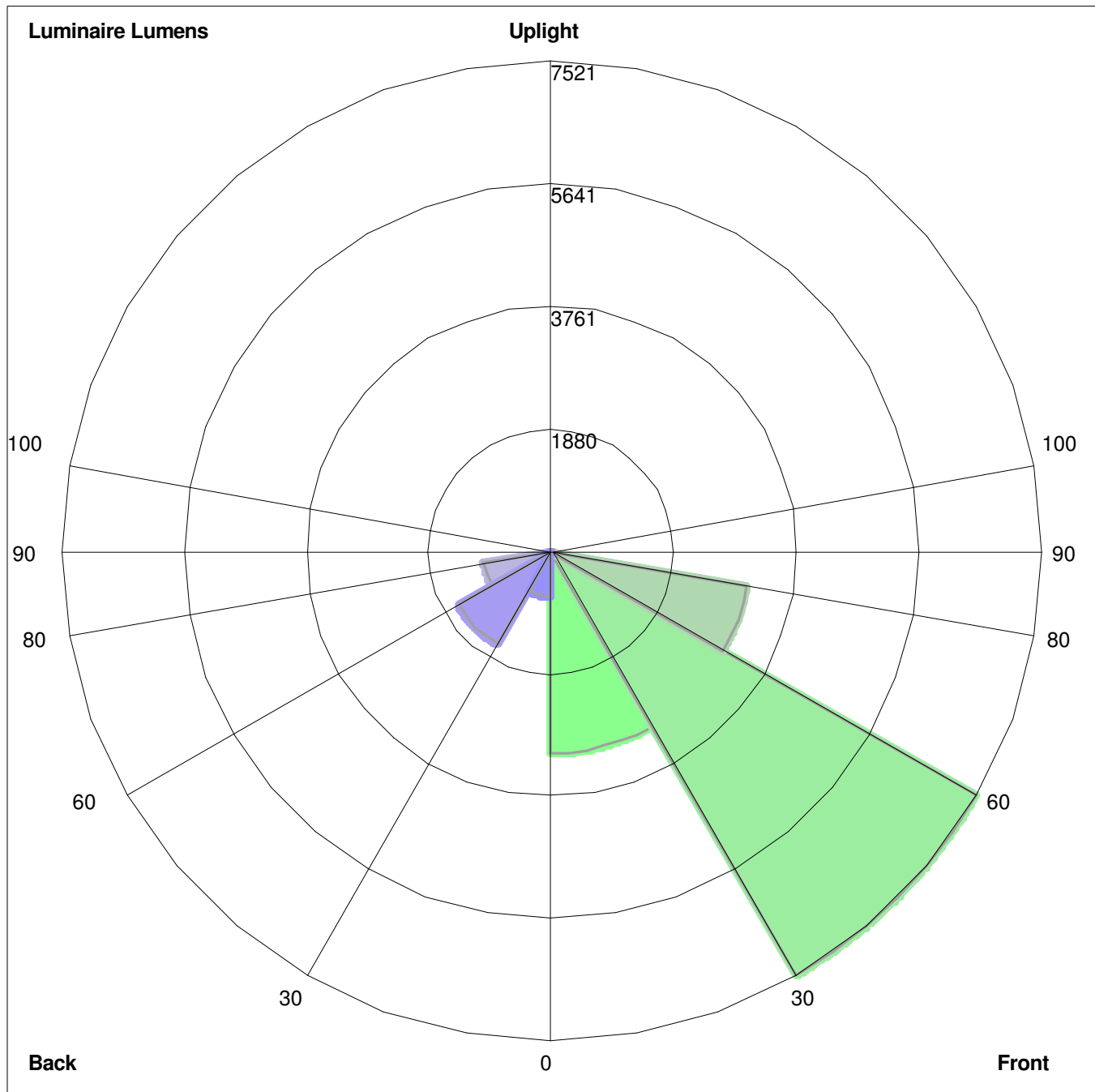


Maximum Candela = 17415.96 Located At Horizontal Angle = 77.5, Vertical Angle = 68
1 - Vertical Plane Through Horizontal Angles (77.5 - 257.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (68) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=3104.3, Medium=7521.4, High=3041.2, Very High=44.4
Back: Low=694.6, Medium=1653.9, High=1054.8, Very High=60.1
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G3