



## IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L160-750-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-L160-750-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	17690
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	135
Total Luminaire Watts	131
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	17938.441
Maximum Candela Angle	77.5H 68V
Maximum Candela (<90 Degrees Vertical)	17938.441
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	685.078 (3.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT****PHOTOMETRIC FILENAME : VA1-L160-750-T2-F-S-XXX-DIM-UNV\_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	3197.4	N.A.	18.1
FM - Front-Medium (30-60)	7747.0	N.A.	43.8
FH - Front-High (60-80)	3132.5	N.A.	17.7
FVH - Front-Very High (80-90)	45.8	N.A.	0.3
BL - Back-Low (0-30)	715.4	N.A.	4.0
BM - Back-Medium (30-60)	1703.5	N.A.	9.6
BH - Back-High (60-80)	1086.4	N.A.	6.1
BVH - Back-Very High (80-90)	61.9	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	17689.9	N.A.	100.0
BUG Rating	B3-U0-G3		

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : VA1-L160-750-T2-F-S-XXX-DIM-UNV\_.IES**

**CANDELA TABULATION**

<b>Vert. Angles</b>	<b>Horizontal Angles</b>										
	<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	3888.304	3888.304	3888.304	3888.304	3888.304	3888.304	3888.304	3888.304	3888.304	3888.304	3888.304
2.5	4841.092	4749.067	4753.715	4657.971	4605.916	4515.750	4413.500	4277.785	4155.085	4109.537	
5.0	5923.088	5861.737	5831.992	5668.391	5527.100	5308.656	5060.466	4762.081	4456.259	4360.515	
7.5	7041.335	6985.562	6916.776	6682.529	6430.621	6083.900	5693.489	5239.869	4745.349	4619.860	
10.0	8063.839	7991.335	7902.098	7643.683	7327.636	6878.664	6361.835	5707.432	5046.523	4873.627	
12.5	8695.933	8664.328	8589.035	8400.336	8101.951	7622.304	7015.308	6188.939	5359.781	5145.984	
15.0	8721.960	8721.960	8716.383	8732.185	8626.217	8265.552	7646.472	6743.880	5699.066	5442.511	
17.5	8583.457	8578.810	8574.162	8646.667	8750.776	8707.088	8234.877	7286.736	6082.041	5779.007	
20.0	8612.273	8611.344	8615.062	8622.499	8678.271	8826.070	8730.326	7877.930	6523.576	6162.911	
22.5	8505.375	8515.600	8583.457	8673.624	8702.440	8780.522	9034.289	8475.630	7026.463	6604.447	
25.0	8070.346	8090.796	8254.397	8557.430	8729.397	8796.324	9144.905	9062.175	7570.249	7093.390	
27.5	7345.298	7369.466	7662.274	8114.035	8599.260	8849.309	9180.228	9560.414	8130.767	7601.853	
30.0	6730.866	6760.611	6968.830	7433.605	8171.667	8827.929	9257.381	9947.106	8667.117	8109.387	
32.5	6372.989	6402.735	6591.433	6913.987	7533.067	8627.146	9368.927	10192.507	9218.340	8598.330	
35.0	6106.209	6127.588	6309.780	6610.024	7032.040	8225.581	9479.543	10324.503	9703.564	9033.359	
37.5	5710.221	5728.812	5954.692	6300.485	6700.191	7795.200	9557.625	10402.585	10130.227	9429.347	
40.0	5021.425	5045.593	5332.824	5789.233	6306.991	7376.903	9759.337	10476.949	10529.934	9858.799	
42.5	4036.103	4056.553	4422.795	4947.061	5724.164	6816.384	10011.245	10738.153	10897.105	10241.773	
45.0	3119.567	3127.933	3358.461	3767.463	4774.165	6149.898	9672.889	11614.717	11195.491	10630.325	
47.5	2515.360	2513.501	2621.329	2794.225	3412.375	5185.955	8721.960	12630.715	11615.647	11081.156	
50.0	2229.989	2219.764	2234.636	2274.607	2512.572	3423.530	7567.460	13164.276	12843.582	12230.079	
52.5	2111.006	2101.711	2067.317	2005.967	2122.161	2353.619	5736.248	13742.456	14795.635	14124.500	
55.0	1896.280	1903.717	1953.912	1915.801	1919.519	2027.347	3456.994	13988.786	16513.442	15899.010	
57.5	1634.148	1641.584	1724.314	1872.112	1869.323	1882.337	2743.100	12988.591	17032.130	16545.976	
60.0	1419.422	1429.647	1512.377	1688.991	1807.044	1775.439	2576.710	11071.861	16915.937	16715.154	
62.5	1172.162	1189.823	1306.017	1497.504	1612.768	1606.261	2361.055	8945.052	16753.266	16869.459	
65.0	927.690	947.211	1079.207	1282.778	1397.112	1369.226	2031.065	6610.954	16693.774	17082.326	
67.5	656.262	672.994	821.722	1040.166	1157.289	1124.755	1617.416	4588.255	17351.895	17898.470	
68.0	589.334	601.418	760.371	988.111	1108.952	1075.488	1528.179	4264.772	17388.148	17938.441	
70.0	477.788	483.366	530.773	784.540	919.324	891.438	1187.964	3134.440	15825.575	16270.829	
72.5	375.538	380.186	418.297	554.941	722.260	720.401	836.594	1906.505	10642.409	10902.683	
75.0	280.724	286.301	320.694	389.481	573.532	624.657	556.800	983.463	3726.563	3710.760	
77.5	197.064	204.501	237.035	285.372	448.043	578.180	340.215	519.618	789.187	814.285	
80.0	131.066	137.573	161.742	184.051	336.497	429.452	202.642	285.372	363.454	371.820	
82.5	79.012	79.012	92.955	105.039	209.149	190.558	107.828	145.010	187.769	181.262	
85.0	33.464	33.464	39.041	44.618	103.180	65.998	45.548	52.055	70.646	68.787	
87.5	6.507	6.507	7.436	7.436	19.521	8.366	5.577	7.436	8.366	8.366	
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

<b>Vert. Angles</b>	<b>Horizontal Angles</b>									
	<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	3888.304	3888.304	3888.304	3888.304	3888.304	3888.304	3888.304	3888.304	3888.304	3888.304
2.5	3988.696	3909.684	3833.461	3658.706	3499.753	3328.716	3244.127	3125.144	2998.726	2995.937
5.0	4086.298	3902.248	3716.338	3322.209	2952.248	2607.386	2367.562	2156.554	1992.954	1940.899
7.5	4192.267	3905.966	3615.946	2998.726	2476.319	2019.910	1769.862	1605.331	1510.517	1478.913
10.0	4306.602	3923.627	3528.569	2706.847	2065.458	1661.104	1493.786	1419.422	1379.451	1359.931
12.5	4436.738	3954.302	3456.064	2445.644	1778.228	1484.490	1394.324	1347.846	1319.030	1305.087
15.0	4591.044	4012.864	3404.939	2215.116	1583.022	1401.760	1338.551	1303.228	1280.919	1268.835
17.5	4775.094	4092.805	3372.405	2029.206	1478.913	1354.353	1300.439	1275.342	1256.751	1242.807
20.0	4996.327	4204.351	3364.039	1883.267	1426.858	1323.678	1275.342	1256.751	1243.737	1224.216
22.5	5251.953	4350.290	3373.334	1771.721	1395.253	1299.510	1258.610	1243.737	1236.300	1213.991
25.0	5542.902	4512.032	3405.868	1686.202	1366.437	1277.201	1241.878	1231.653	1227.935	1188.893

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : VA1-L160-750-T2-F-S-XXX-DIM-UNV\_.IES**

**CANDELA TABULATION - (Cont.)**

27.5	5845.005	4694.224	3454.205	1622.063	1336.692	1251.173	1222.357	1216.780	1201.907	1159.148
30.0	6158.264	4895.006	3515.555	1575.586	1309.735	1225.146	1197.259	1192.612	1171.232	1132.191
32.5	6454.790	5085.564	3585.271	1542.122	1283.707	1196.330	1167.514	1157.289	1121.036	1029.941
35.0	6701.120	5243.587	3646.622	1511.447	1257.680	1164.725	1134.980	1090.361	1013.209	945.352
37.5	6904.692	5399.751	3709.831	1480.772	1221.428	1133.120	1066.193	995.547	932.338	909.099
40.0	7164.965	5598.675	3805.574	1458.463	1184.246	1082.925	981.604	897.015	895.156	875.635
42.5	7396.423	5780.867	3926.416	1444.519	1145.205	1011.350	921.183	846.819	859.833	868.199
45.0	7654.838	6003.958	4076.073	1436.154	1103.375	949.070	825.440	808.708	835.665	849.608
47.5	7993.194	6308.851	4303.813	1446.379	1058.757	909.099	791.046	779.892	808.708	829.158
50.0	8954.348	7188.204	4958.216	1542.122	1023.434	877.494	786.399	754.794	788.258	820.792
52.5	10509.483	8557.430	6122.941	1821.916	975.097	795.694	797.553	721.330	779.892	828.228
55.0	11666.772	9613.398	7088.742	1948.335	882.142	713.894	701.810	698.091	783.610	841.242
57.5	11420.442	9475.825	7017.167	1754.989	784.540	656.262	648.825	684.148	787.328	835.665
60.0	11025.383	9127.244	6656.502	1437.083	692.514	606.066	611.643	674.853	770.596	800.342
62.5	10662.859	8771.226	6394.369	1198.189	610.714	566.095	579.109	655.332	726.907	746.428
65.0	10483.456	8551.853	6268.880	1020.645	537.279	519.618	545.645	619.080	667.416	734.344
67.5	10529.934	8302.734	6083.900	838.453	473.141	468.493	509.393	569.814	619.080	976.027
68.0	10467.654	8170.738	6011.395	794.765	461.986	458.268	501.027	558.659	624.657	1036.447
70.0	9356.842	6732.725	5093.000	646.966	419.227	419.227	465.704	512.182	737.133	1258.610
72.5	6725.289	4288.011	3264.577	448.972	365.313	376.467	416.438	449.902	977.886	1435.224
75.0	2174.216	1570.938	1421.281	315.117	304.892	330.920	365.313	395.988	1119.177	1311.594
77.5	540.998	416.438	334.638	209.149	234.246	271.428	302.103	353.229	1029.941	957.436
80.0	268.640	217.515	180.333	139.432	162.671	203.571	229.599	272.358	685.078	614.432
82.5	148.728	124.560	99.462	80.871	103.180	137.573	148.728	172.896	394.129	365.313
85.0	53.914	48.337	39.971	33.464	49.266	59.491	67.857	74.364	178.473	158.023
87.5	4.648	4.648	2.789	1.859	7.436	11.155	12.084	14.873	40.900	19.521
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**

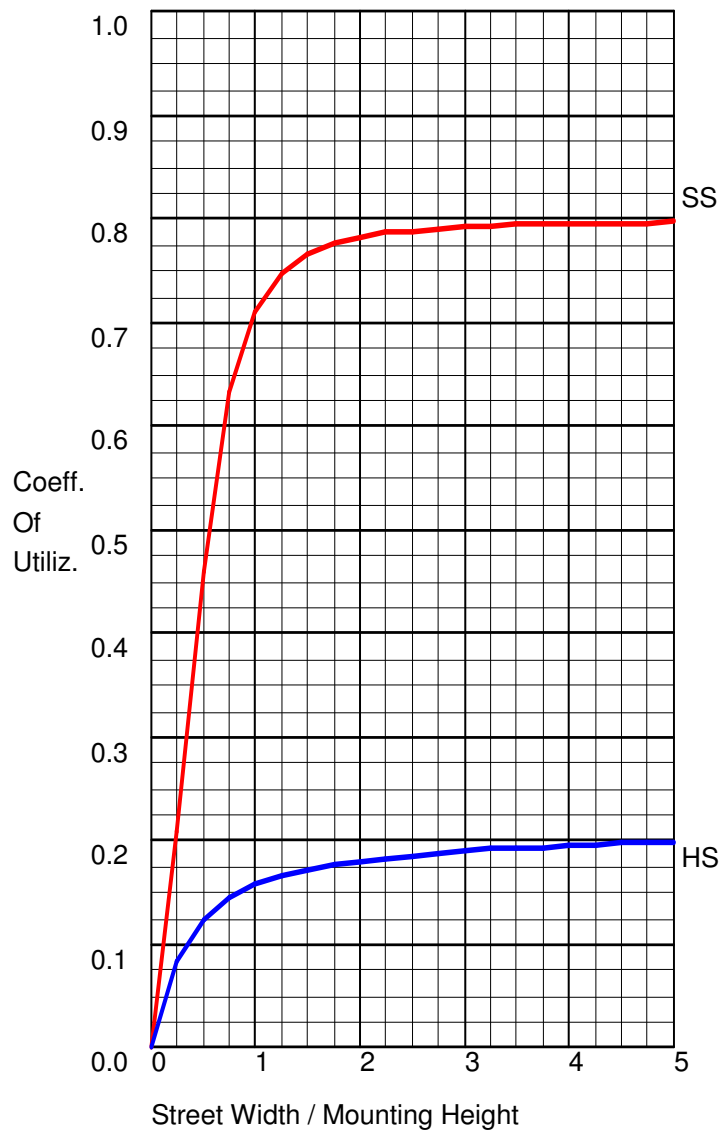
	<u>175.0</u>	<u>180.0</u>
0.0	3888.304	3888.304
2.5	2873.237	2928.080
5.0	1842.367	1872.112
7.5	1447.308	1452.885
10.0	1345.058	1345.987
12.5	1294.862	1294.862
15.0	1262.328	1263.257
17.5	1236.300	1237.230
20.0	1213.991	1213.991
22.5	1198.189	1198.189
25.0	1163.796	1164.725
27.5	1137.768	1138.698
30.0	1082.925	1083.854
32.5	985.322	982.534
35.0	924.901	926.761
37.5	897.015	901.663
40.0	860.763	868.199
42.5	838.453	837.524
45.0	831.947	810.567
47.5	804.060	804.060
50.0	802.201	815.215
52.5	824.510	839.383
55.0	847.749	860.763
57.5	844.960	856.115
60.0	813.356	825.440

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : VA1-L160-750-T2-F-S-XXX-DIM-UNV\_.IES**

**CANDELA TABULATION - (Cont.)**

<b>62.5</b>	769.667	785.469
<b>65.0</b>	838.453	877.494
<b>67.5</b>	1057.827	1095.939
<b>68.0</b>	1094.079	1130.332
<b>70.0</b>	1216.780	1255.821
<b>72.5</b>	1241.878	1261.398
<b>75.0</b>	1024.363	1065.263
<b>77.5</b>	703.669	707.387
<b>80.0</b>	452.690	447.113
<b>82.5</b>	273.287	279.794
<b>85.0</b>	64.139	71.575
<b>87.5</b>	3.718	0.000
<b>90.0</b>	0.000	0.000

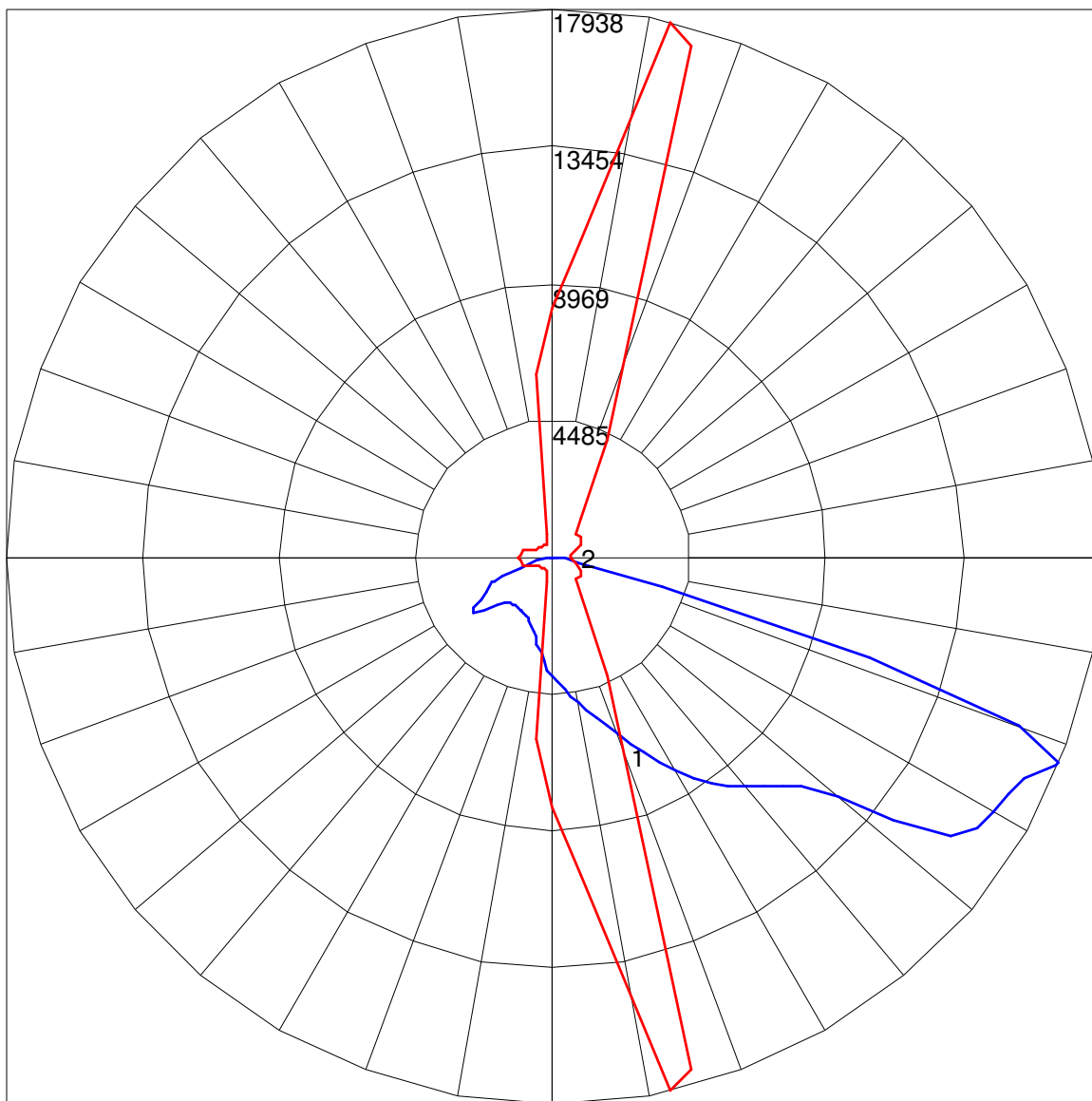
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

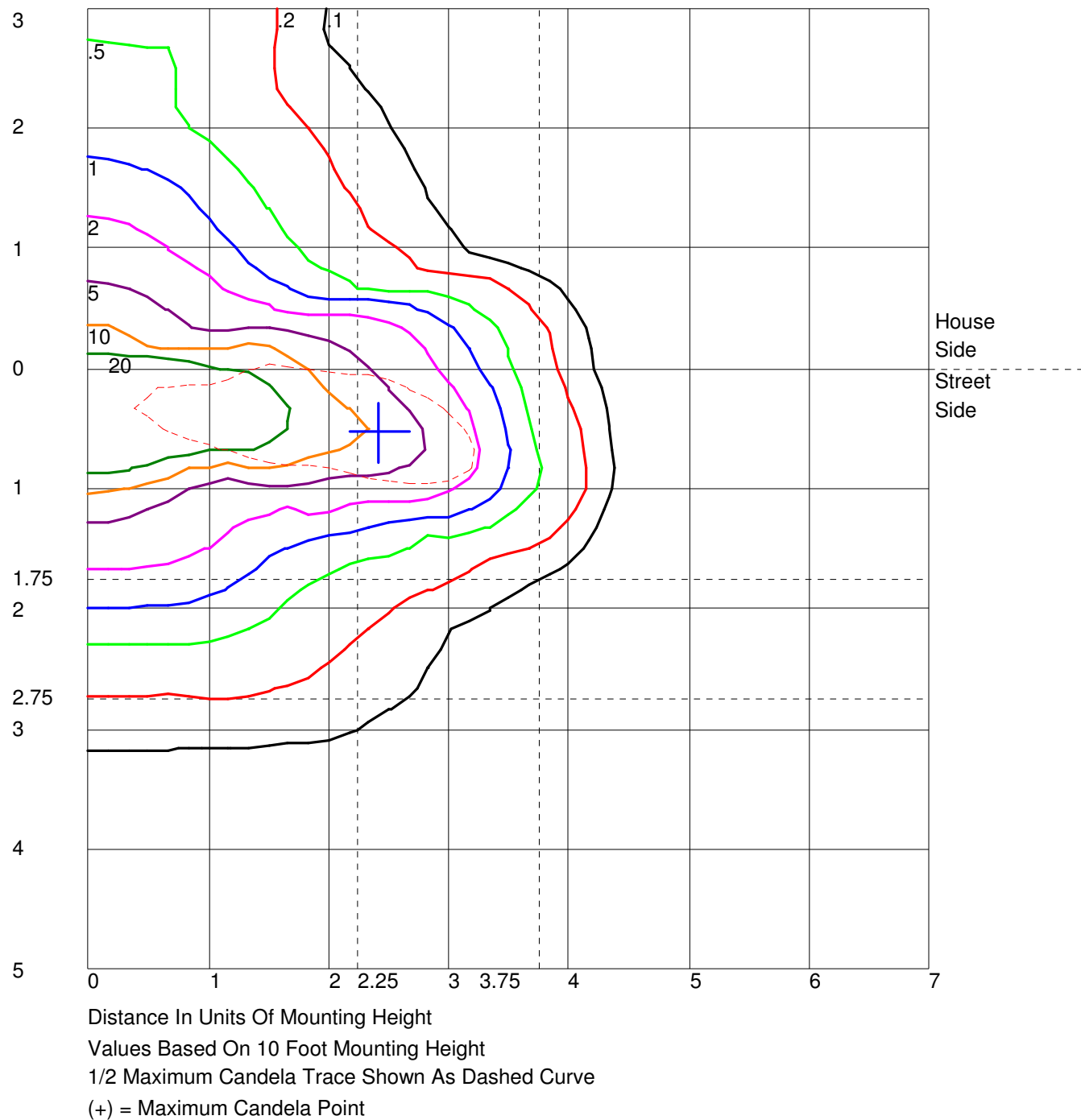
	Lumens	Percent Of Luminaire
Downward Street Side	14122.7	79.8
Downward House Side	3567.3	20.2
Downward Total	17690.0	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	17690.0	100.0

POLAR GRAPH



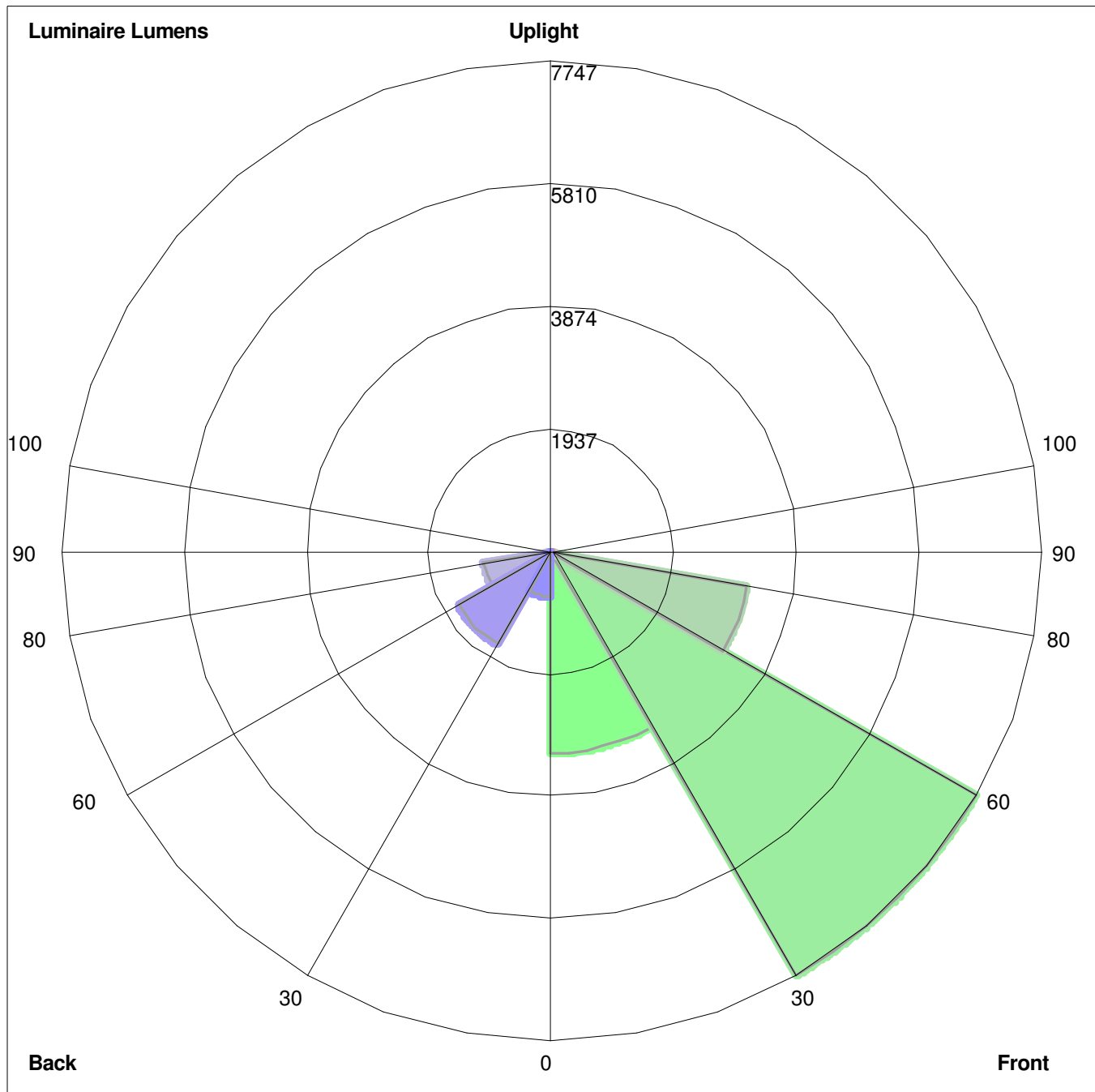
Maximum Candela = 17938.441 Located At Horizontal Angle = 77.5, Vertical Angle = 68  
# 1 - Vertical Plane Through Horizontal Angles (77.5 - 257.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (68) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=3197.4, Medium= 7747.0, High=3132.5, Very High=45.8  
Back: Low=715.4, Medium=1703.5, High=1086.4, Very High=61.9  
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G3