



## IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L83-740-T4-F-S-XXX-DIM-UNV\_.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] GEN FROM ATAL011762  
[TESTLAB] ATA-LABS  
[ISSUE DATE] 2023-01-18  
[MANUFAC] WILLIAMS OUTDOOR  
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.  
[LUMCAT] VA1-L83-740-T4-F-S-xxx-DIM-UNV\_  
[LUMINAIRE] VA1 LED AREA LIGHT FIXTURE WITH TYPE IV  
[MORE] OPTICS AND CLEAR LENS  
[LAMP] LED  
[BALLASTCAT] X1-EUD-200S105DT  
[BALLAST] (1) INVENTRONICS ELECTRONIC DRIVER  
[ \_SEARCH\_ SOURCETYPE] LED  
[ \_SEARCH\_ APPLICATION] Outdoor, Architectural, Area, Parking, Site  
[ \_SEARCH\_ MOUNTING] Pole

### CHARACTERISTICS

IES Classification	Type IV
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	8466
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	126
Total Luminaire Watts	67
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	7867.953
Maximum Candela Angle	42.5H 72.5V
Maximum Candela (<90 Degrees Vertical)	7867.953
Maximum Candela Angle (<90 Degrees Vertical)	42.5H 72.5V
Maximum Candela At 90 Degrees Vertical	0 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	579.212 (6.8% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT****PHOTOMETRIC FILENAME : VA1-L83-740-T4-F-S-XXX-DIM-UNV\_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	668.8	N.A.	7.9
FM - Front-Medium (30-60)	2589.8	N.A.	30.6
FH - Front-High (60-80)	2960.3	N.A.	35.0
FVH - Front-Very High (80-90)	53.2	N.A.	0.6
BL - Back-Low (0-30)	450.7	N.A.	5.3
BM - Back-Medium (30-60)	1069.2	N.A.	12.6
BH - Back-High (60-80)	635.5	N.A.	7.5
BVH - Back-Very High (80-90)	38.6	N.A.	0.5
UL - Uplight-Low (90-100)	0.0	N.A.	0.0
UH - Uplight-High (100-180)	0.0	N.A.	0.0
Total	8466.1	N.A.	100.0
BUG Rating	B2-U0-G2		

**IES ROAD REPORT**  
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**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>42.5</u>	<u>45.0</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>
0.0	1366.906	1366.906	1366.906	1366.906	1366.906	1366.906	1366.906	1366.906	1366.906	1366.906
2.5	1482.064	1475.214	1466.652	1460.659	1453.810	1444.820	1435.830	1425.555	1408.860	1389.595
5.0	1603.643	1598.506	1588.231	1576.673	1556.124	1534.291	1521.021	1488.057	1447.816	1403.723
7.5	1681.984	1679.416	1672.138	1664.004	1641.743	1613.061	1598.506	1546.706	1485.489	1422.131
10.0	1705.957	1707.242	1700.392	1699.964	1686.693	1660.579	1647.308	1589.516	1523.161	1441.395
12.5	1706.814	1709.382	1702.961	1704.245	1700.392	1674.707	1663.148	1615.201	1553.128	1461.087
15.0	1702.105	1704.245	1696.539	1695.683	1695.683	1674.707	1666.145	1630.185	1579.669	1485.061
17.5	1687.549	1690.118	1687.549	1686.693	1683.268	1666.573	1662.292	1648.165	1604.499	1507.321
20.0	1651.589	1654.586	1664.004	1669.141	1669.569	1657.583	1656.727	1661.864	1607.924	1521.449
22.5	1605.783	1608.780	1643.028	1647.737	1646.452	1644.740	1646.452	1643.028	1611.777	1541.141
25.0	1569.823	1575.817	1633.609	1616.486	1618.626	1633.181	1639.603	1634.038	1622.907	1564.258
27.5	1551.415	1567.255	1607.068	1598.506	1605.355	1630.613	1641.743	1643.884	1638.747	1595.937
30.0	1562.974	1575.817	1582.238	1595.937	1618.198	1643.028	1654.586	1671.710	1670.854	1636.606
32.5	1595.081	1588.231	1588.659	1623.335	1654.158	1674.707	1686.693	1715.376	1714.519	1686.265
35.0	1631.469	1616.486	1621.623	1679.416	1708.526	1727.362	1737.208	1769.744	1766.319	1743.630
37.5	1697.824	1684.981	1700.392	1755.188	1783.014	1795.001	1797.998	1821.115	1821.971	1807.416
40.0	1801.851	1791.148	1798.854	1852.794	1886.613	1877.623	1879.336	1867.349	1878.052	1878.480
42.5	1920.861	1908.874	1920.861	1963.242	2002.199	1979.082	1970.520	1921.717	1940.553	1959.818
45.0	2054.855	2047.149	2058.707	2102.373	2145.611	2100.661	2080.112	2027.028	2027.028	2054.427
47.5	2207.684	2192.273	2212.393	2274.895	2277.036	2249.210	2226.949	2164.447	2141.758	2167.444
50.0	2377.638	2356.233	2372.929	2452.555	2425.157	2411.029	2394.762	2348.956	2299.725	2302.293
52.5	2603.672	2593.826	2555.297	2619.512	2600.247	2600.675	2597.251	2598.963	2488.943	2459.832
55.0	2935.874	2924.743	2824.997	2813.438	2796.315	2832.703	2859.245	2873.800	2702.562	2647.766
57.5	3447.875	3421.333	3244.102	3082.710	3007.365	3129.800	3203.433	3137.506	2925.599	2815.151
60.0	3657.641	3651.220	3667.916	3450.871	3279.206	3508.236	3638.377	3427.326	3114.389	2926.455
62.5	3804.478	3834.444	3969.722	3916.210	3634.524	4023.234	4238.994	3726.993	3214.991	2944.864
65.0	4071.181	4136.251	4470.593	4442.767	4223.154	4914.099	5169.672	4103.716	3071.580	2820.288
67.5	3972.719	4075.034	4828.052	5216.762	5006.140	6243.333	6457.381	4304.064	2698.281	2554.013
70.0	3236.396	3307.460	4440.626	5825.085	5816.523	7596.541	7584.554	3828.451	2095.096	1964.955
72.5	2086.106	2208.969	3387.513	5211.197	5837.071	7867.953	7549.878	2365.223	1333.087	914.838
75.0	824.939	866.892	1505.181	3074.576	4396.105	5809.673	4524.533	963.641	765.861	420.389
77.5	511.573	497.446	455.493	884.016	1644.312	1566.399	854.905	391.279	418.249	271.412
80.0	337.767	384.429	266.703	423.814	579.212	427.239	317.646	220.897	240.589	177.231
82.5	179.800	211.051	166.957	219.184	241.017	178.515	169.097	125.004	124.576	101.030
85.0	77.913	99.318	72.776	83.907	95.037	68.923	72.776	57.365	53.940	44.522
87.5	23.973	31.251	16.268	16.696	19.692	14.555	13.699	14.555	11.559	11.559
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	1366.906	1366.906	1366.906	1366.906	1366.906	1366.906	1366.906	1366.906	1366.906	1366.906
2.5	1368.619	1360.485	1351.495	1332.659	1315.963	1296.271	1283.000	1271.869	1265.876	1259.883
5.0	1357.488	1338.224	1317.247	1274.866	1238.050	1204.659	1180.685	1164.846	1155.000	1148.578
7.5	1353.207	1321.956	1291.134	1227.348	1176.404	1139.588	1118.611	1110.050	1103.200	1101.060
10.0	1349.783	1306.545	1265.020	1183.682	1128.886	1097.635	1086.504	1088.217	1095.494	1105.341
12.5	1348.498	1292.846	1239.762	1143.013	1089.501	1070.237	1075.374	1092.926	1119.896	1146.866
15.0	1352.351	1282.144	1216.645	1105.341	1056.538	1052.257	1071.521	1105.341	1152.003	1192.672
17.5	1355.348	1274.010	1195.240	1071.949	1029.568	1036.845	1061.247	1105.769	1146.866	1180.685
20.0	1359.629	1267.588	1176.832	1042.839	1007.307	1020.150	1045.407	1071.093	1105.769	1142.585
22.5	1366.050	1261.167	1157.140	1015.869	988.043	1005.594	1012.016	1026.571	1056.966	1091.642
25.0	1378.037	1259.455	1140.872	993.180	972.631	985.474	970.919	982.477	1001.314	1034.277
27.5	1395.589	1262.451	1130.598	976.484	960.645	955.935	934.103	939.240	954.651	986.758

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## CANDELA TABULATION - (Cont.)

30.0	1423.415	1274.010	1125.889	963.213	951.655	925.541	902.852	902.852	910.129	942.236
32.5	1459.375	1291.134	1126.745	955.079	944.805	901.139	874.169	865.608	875.882	919.976
35.0	1508.178	1315.963	1133.595	952.083	935.815	880.591	847.628	832.644	862.611	907.989
37.5	1566.399	1350.211	1148.150	955.935	919.119	860.898	815.520	816.805	851.908	902.852
40.0	1638.318	1402.438	1175.548	968.350	901.996	843.347	790.691	806.959	841.634	902.424
42.5	1731.643	1473.930	1217.073	982.477	888.297	829.219	779.132	794.544	831.788	898.571
45.0	1845.944	1569.395	1277.007	987.615	884.872	814.236	774.851	781.273	821.514	891.293
47.5	1976.513	1686.265	1357.488	991.467	883.587	800.965	765.433	766.718	808.243	843.347
50.0	2128.915	1820.259	1446.960	1005.594	882.731	788.550	750.022	750.878	755.159	824.939
52.5	2296.300	1960.246	1542.853	1041.126	884.016	782.985	735.467	731.614	719.627	810.811
55.0	2497.505	2198.266	1714.519	1071.093	886.156	791.975	735.895	703.360	705.928	787.266
57.5	2824.569	2546.307	1875.483	1098.063	913.554	824.510	767.574	713.634	719.627	769.714
60.0	3142.643	2705.987	2005.196	1160.993	944.805	839.494	793.688	741.888	767.574	780.417
62.5	3123.379	2715.405	2145.611	1197.381	937.099	823.654	770.999	718.343	801.393	764.577
65.0	2899.486	2613.090	2036.875	1116.471	922.116	818.089	733.754	646.851	741.460	704.216
67.5	2154.173	1883.189	1339.936	814.664	820.658	798.825	700.791	580.068	657.553	662.263
70.0	1068.096	839.494	585.634	452.924	579.640	720.483	678.102	520.991	576.215	599.761
72.5	449.499	368.590	309.941	290.676	343.760	564.229	642.142	452.068	480.322	530.837
75.0	277.405	244.014	213.619	210.623	228.603	367.305	552.242	389.994	384.001	436.657
77.5	188.362	164.816	146.408	148.121	162.248	230.315	416.108	333.914	301.807	323.212
80.0	123.719	107.024	95.037	100.174	110.877	143.840	263.706	240.589	229.887	240.161
82.5	71.064	59.933	53.512	59.933	67.639	84.335	143.840	166.529	168.241	179.800
85.0	32.107	26.542	23.117	27.398	32.107	39.385	66.355	78.769	76.201	73.204
87.5	8.562	7.278	6.850	8.134	9.418	11.559	19.692	19.692	17.552	11.559
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

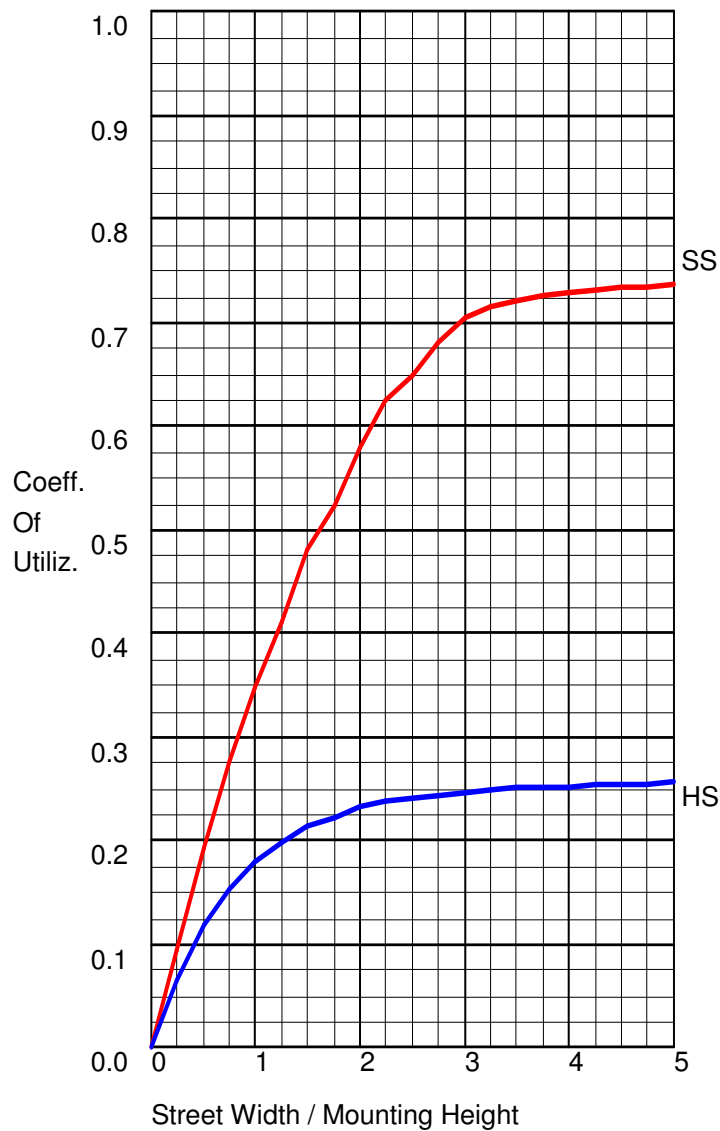
## Vert. Horizontal Angles

	<u>175.0</u>	<u>180.0</u>
0.0	1366.906	1366.906
2.5	1250.893	1256.886
5.0	1141.729	1143.441
7.5	1098.491	1097.635
10.0	1111.334	1108.765
12.5	1163.990	1161.849
15.0	1212.792	1214.505
17.5	1198.665	1199.949
20.0	1163.561	1162.705
22.5	1111.762	1115.615
25.0	1060.391	1065.956
27.5	1009.019	1015.013
30.0	970.919	977.768
32.5	953.795	960.645
35.0	943.949	949.942
37.5	946.517	951.226
40.0	951.655	955.935
42.5	945.233	949.514
45.0	916.979	920.404
47.5	894.718	899.427
50.0	899.855	903.280
52.5	895.146	898.999
55.0	872.457	879.735
57.5	850.196	857.046
60.0	822.798	828.363
62.5	772.711	780.845
65.0	711.493	728.617

**IES ROAD REPORT****PHOTOMETRIC FILENAME : VA1-L83-740-T4-F-S-XXX-DIM-UNV\_.IES****CANDELA TABULATION - (Cont.)**

<b>67.5</b>	646.423	669.540
<b>70.0</b>	577.500	607.466
<b>72.5</b>	512.429	538.543
<b>75.0</b>	427.667	447.359
<b>77.5</b>	349.325	376.295
<b>80.0</b>	314.650	334.770
<b>82.5</b>	181.940	184.509
<b>85.0</b>	53.084	47.947
<b>87.5</b>	4.709	2.569
<b>90.0</b>	0.000	0.000

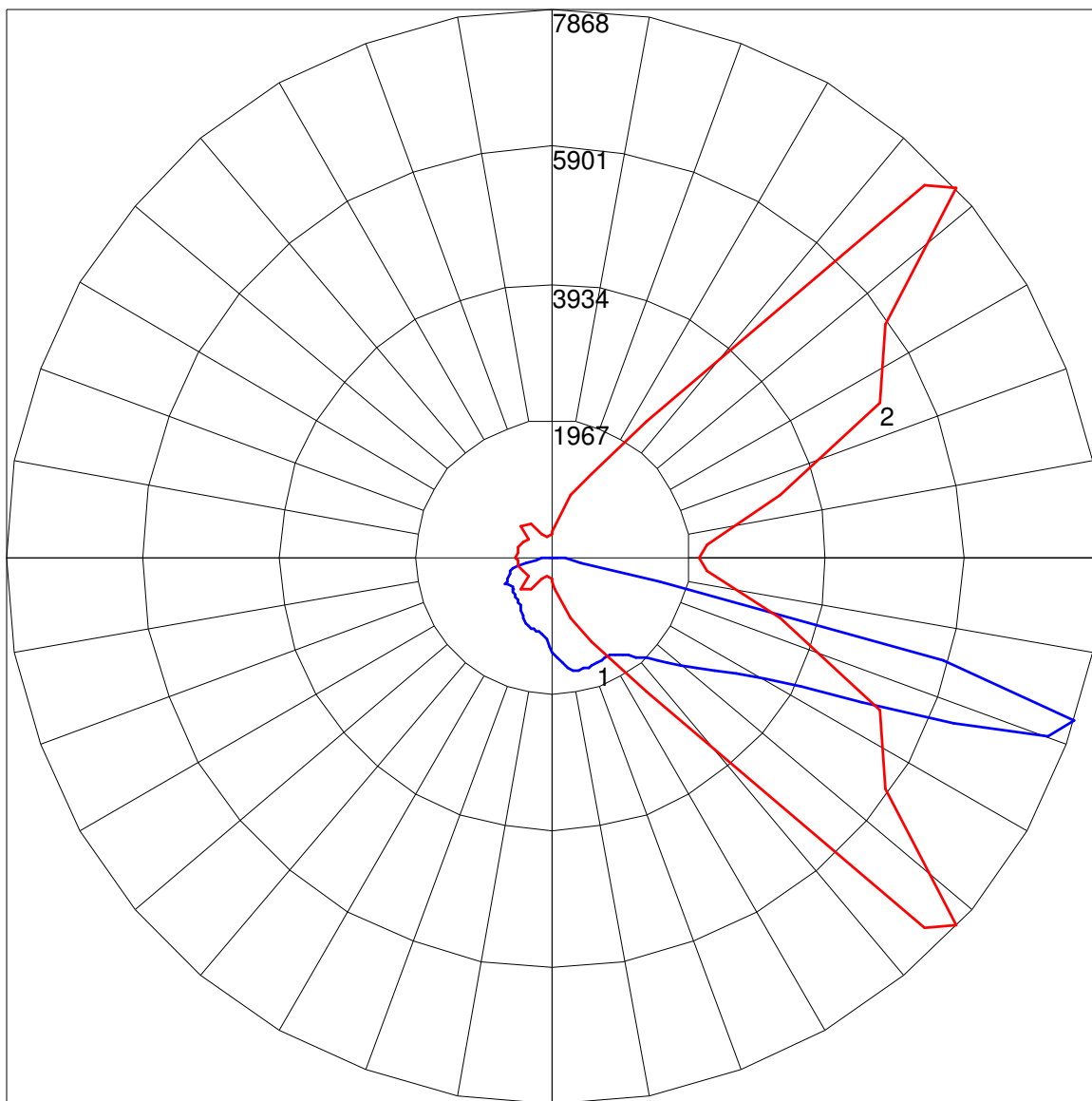
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

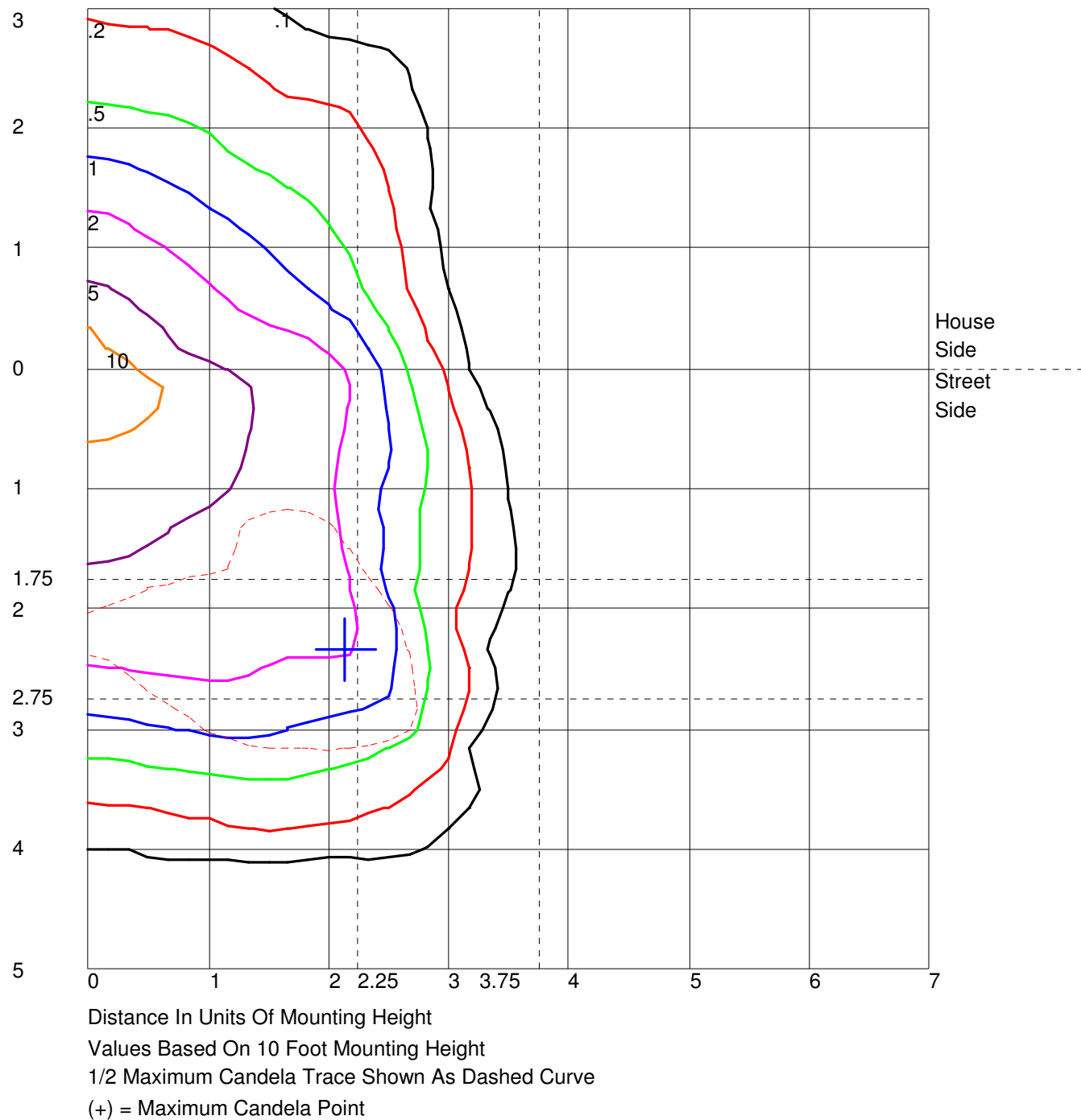
	Lumens	Percent Of Luminaire
Downward Street Side	6272.1	74.1
Downward House Side	2194.0	25.9
Downward Total	8466.1	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	8466.1	100.0

POLAR GRAPH



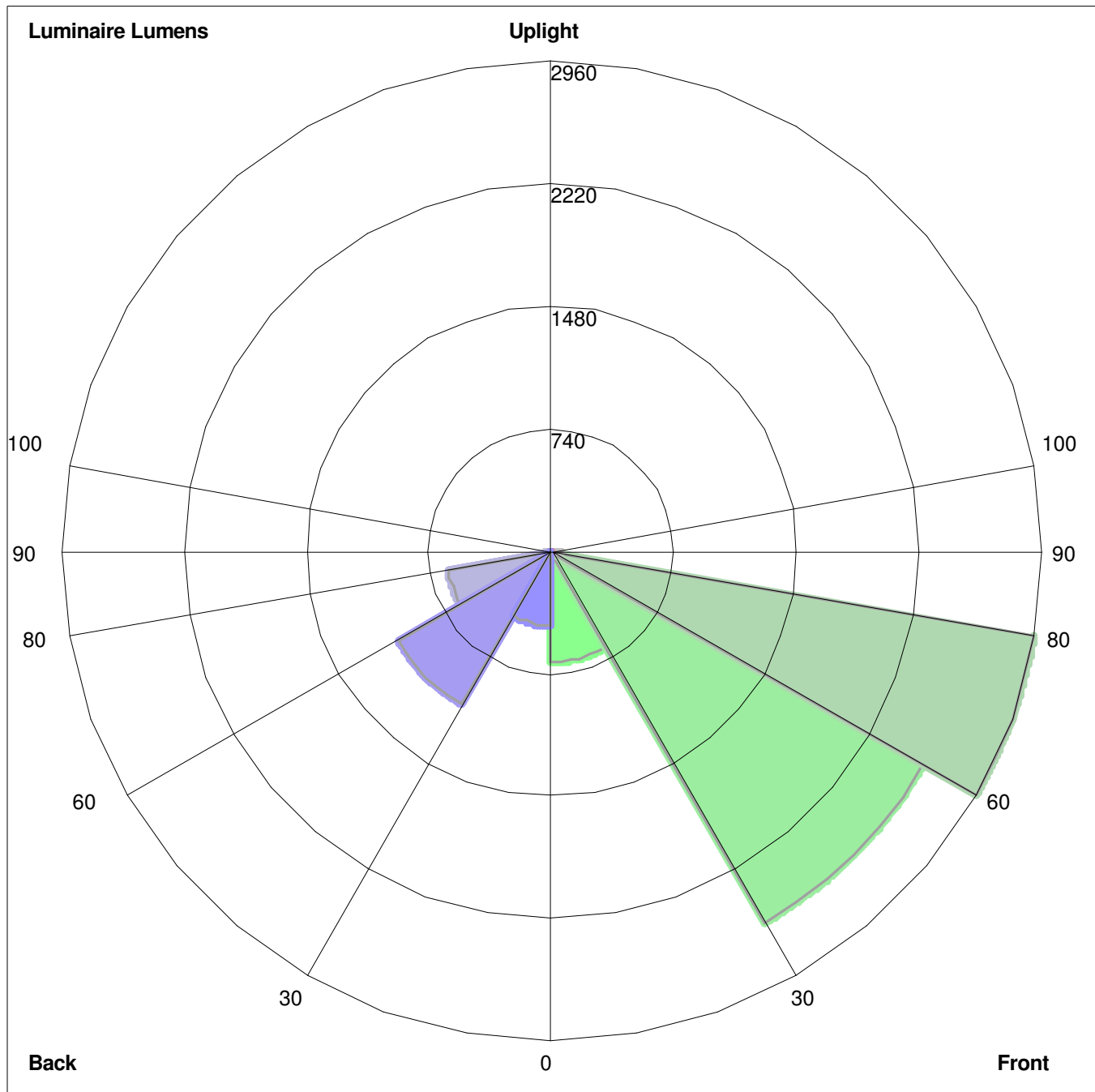
Maximum Candela = 7867.953 Located At Horizontal Angle = 42.5, Vertical Angle = 72.5  
# 1 - Vertical Plane Through Horizontal Angles (42.5 - 222.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (72.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE





LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=668.8, Medium=2589.8, High=2960.3, Very High=53.2  
Back: Low=450.7, Medium=1069.2, High=635.5, Very High=38.6  
Uplight: Low=0.0, High=0.0

BUG Rating : B2-U0-G2