



IES ROAD REPORT

PHOTOMETRIC FILENAME : VA1-L220-730-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-L220-730-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	21087
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	116
Total Luminaire Watts	182
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	21383.284
Maximum Candela Angle	77.5H 68V
Maximum Candela (<90 Degrees Vertical)	21383.284
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	816.638 (3.9% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L220-730-T2-F-S-XXX-DIM-UNV_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	3811.4	N.A.	18.1
FM - Front-Medium (30-60)	9234.7	N.A.	43.8
FH - Front-High (60-80)	3734.0	N.A.	17.7
FVH - Front-Very High (80-90)	54.5	N.A.	0.3
BL - Back-Low (0-30)	852.8	N.A.	4.0
BM - Back-Medium (30-60)	2030.6	N.A.	9.6
BH - Back-High (60-80)	1295.1	N.A.	6.1
BVH - Back-Very High (80-90)	73.8	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	21086.9	N.A.	100.0
BUG Rating	B3-U0-G3		

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PHOTOMETRIC FILENAME : VA1-L220-730-T2-F-S-XXX-DIM-UNV_.IES

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	4635.003	4635.003	4635.003	4635.003	4635.003	4635.003	4635.003	4635.003	4635.003	4635.003
2.5	5770.761	5661.063	5666.604	5552.474	5490.423	5382.941	5261.055	5099.278	4953.015	4898.720
5.0	7060.539	6987.408	6951.950	6756.932	6588.507	6328.114	6032.262	5676.576	5312.025	5197.895
7.5	8393.532	8327.049	8245.052	7965.822	7665.538	7252.233	6786.849	6246.117	5656.631	5507.043
10.0	9612.395	9525.966	9419.593	9111.553	8734.814	8199.622	7583.542	6803.470	6015.642	5809.543
12.5	10365.873	10328.200	10238.447	10013.511	9657.825	9086.068	8362.506	7377.444	6389.057	6134.204
15.0	10396.899	10396.899	10390.251	10409.088	10282.769	9852.843	9114.877	8038.954	6793.498	6487.674
17.5	10231.799	10226.258	10220.718	10307.146	10431.249	10379.170	9816.277	8686.059	7250.017	6888.791
20.0	10266.148	10265.040	10269.472	10278.337	10344.820	10521.001	10406.872	9390.783	7776.344	7346.418
22.5	10138.722	10150.910	10231.799	10339.280	10373.630	10466.707	10769.206	10103.264	8375.803	7872.745
25.0	9620.151	9644.528	9839.546	10200.773	10405.763	10485.544	10901.065	10802.448	9024.016	8455.583
27.5	8755.867	8784.676	9133.714	9672.230	10250.636	10548.703	10943.171	11396.366	9692.175	9061.690
30.0	8023.441	8058.899	8307.103	8861.132	9740.929	10523.218	11035.140	11857.318	10331.524	9666.689
32.5	7596.839	7632.297	7857.232	8241.728	8979.694	10283.877	11168.107	12149.845	10988.601	10249.527
35.0	7278.827	7304.312	7521.491	7879.393	8382.451	9805.197	11299.966	12307.189	11567.007	10768.098
37.5	6806.794	6828.955	7098.213	7510.410	7986.875	9292.166	11393.042	12400.266	12075.605	11240.130
40.0	5985.724	6014.534	6356.923	6900.979	7518.167	8793.541	11633.491	12488.911	12552.070	11752.053
42.5	4811.184	4835.561	5272.135	5897.079	6823.415	8125.382	11933.774	12800.275	12989.752	12208.572
45.0	3718.639	3728.612	4003.410	4490.955	5690.981	7330.905	11530.441	13845.172	13345.439	12671.740
47.5	2998.402	2996.186	3124.721	3330.819	4067.677	6181.850	10396.899	15056.279	13846.281	13209.148
50.0	2658.229	2646.040	2663.769	2711.416	2995.078	4080.974	9020.692	15692.304	15310.024	14578.706
52.5	2516.397	2505.317	2464.319	2391.187	2529.694	2805.600	6837.820	16381.515	17636.944	16836.926
55.0	2260.436	2269.301	2329.136	2283.706	2288.138	2416.672	4120.864	16675.150	19684.633	18952.207
57.5	1947.964	1956.829	2055.446	2231.627	2228.303	2243.815	3269.876	15482.881	20302.929	19723.415
60.0	1692.003	1704.192	1802.809	2013.340	2154.063	2116.389	3071.534	13198.067	20164.422	19925.081
62.5	1397.260	1418.313	1556.820	1785.080	1922.479	1914.723	2814.465	10662.833	19970.512	20109.019
65.0	1105.841	1129.110	1286.454	1529.119	1665.410	1632.168	2421.105	7880.502	19899.596	20362.764
67.5	782.288	802.233	979.522	1239.916	1379.531	1340.749	1928.019	5469.369	20684.100	21335.638
68.0	702.508	716.913	906.391	1177.865	1321.912	1282.022	1821.646	5083.766	20727.315	21383.284
70.0	569.541	576.190	632.701	935.200	1095.868	1062.627	1416.097	3736.368	18864.671	19395.430
72.5	447.655	453.195	498.626	661.510	860.960	858.744	997.251	2272.625	12686.145	22996.401
75.0	334.633	341.282	382.280	464.276	683.671	744.614	663.726	1172.324	4442.201	4423.364
77.5	234.908	243.773	282.555	340.174	534.083	689.211	405.549	619.404	940.740	970.658
80.0	156.236	163.992	192.802	219.395	401.117	511.922	241.556	340.174	433.250	443.223
82.5	94.185	94.185	110.806	125.210	249.313	227.152	128.535	172.857	223.828	216.071
85.0	39.890	39.890	46.538	53.187	122.994	78.672	54.295	62.051	84.212	81.996
87.5	7.756	7.756	8.864	8.864	23.269	9.973	6.648	8.864	9.973	9.973
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	4635.003	4635.003	4635.003	4635.003	4635.003	4635.003	4635.003	4635.003	4635.003	4635.003
2.5	4754.673	4660.488	4569.627	4361.312	4171.835	3967.952	3867.119	3725.288	3574.592	3571.268
5.0	4871.019	4651.623	4430.012	3960.196	3519.189	3108.100	2822.221	2570.692	2375.674	2313.623
7.5	4997.337	4656.056	4310.342	3574.592	2951.864	2407.808	2109.741	1913.614	1800.593	1762.919
10.0	5133.628	4677.109	4206.184	3226.662	2462.103	1980.098	1780.648	1692.003	1644.357	1621.087
12.5	5288.756	4713.675	4119.756	2915.298	2119.713	1769.567	1662.086	1606.683	1572.333	1555.712
15.0	5472.694	4783.482	4058.813	2640.500	1887.021	1670.950	1595.602	1553.496	1526.903	1512.498
17.5	5692.089	4878.775	4020.031	2418.888	1762.919	1614.439	1550.172	1520.254	1498.093	1481.472
20.0	5955.806	5011.742	4010.058	2244.924	1700.868	1577.873	1520.254	1498.093	1482.580	1459.311
22.5	6260.522	5185.707	4021.139	2111.957	1663.194	1549.064	1500.309	1482.580	1473.716	1447.122
25.0	6607.344	5378.509	4059.921	2010.015	1628.844	1522.470	1480.364	1468.176	1463.743	1417.205

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CANDELA TABULATION - (Cont.)

27.5	6967.463	5595.688	4117.540	1933.560	1593.386	1491.445	1457.095	1450.447	1432.718	1381.747
30.0	7340.878	5835.028	4190.672	1878.157	1561.252	1460.419	1427.177	1421.637	1396.152	1349.613
32.5	7694.348	6062.180	4273.776	1838.267	1530.227	1426.069	1391.720	1379.531	1336.317	1227.727
35.0	7987.983	6250.550	4346.908	1801.701	1499.201	1388.395	1352.938	1299.751	1207.782	1126.894
37.5	8230.648	6436.703	4422.256	1765.135	1455.987	1350.722	1270.941	1186.729	1111.381	1083.680
40.0	8540.904	6673.827	4536.385	1738.541	1411.665	1290.886	1170.108	1069.275	1067.059	1043.790
42.5	8816.810	6891.007	4680.433	1721.921	1365.126	1205.566	1098.085	1009.440	1024.953	1034.925
45.0	9124.850	7156.940	4858.830	1711.948	1315.264	1131.326	983.955	964.010	996.143	1012.764
47.5	9528.182	7520.383	5130.304	1724.137	1262.077	1083.680	942.957	929.660	964.010	988.387
50.0	10673.9138568.605	5910.376	1838.267	1219.971	1046.006	937.416	899.742	939.632	978.414	
52.5	12527.69310200.7737298.772	2171.792	1162.352	948.497	950.713	859.852	929.660	987.279		
55.0	13907.22411459.5268450.043	2322.488	1051.546	850.988	836.583	832.151	934.092	1002.792		
57.5	13613.58911295.5338364.722	2092.012	935.200	782.288	773.424	815.530	938.524	996.143		
60.0	13142.66410880.0127934.796	1713.056	825.502	722.453	729.102	804.449	918.579	954.037		
62.5	12710.52210455.6267622.324	1428.286	727.993	674.807	690.320	781.180	866.501	889.770		
65.0	12496.66710194.1257472.737	1216.647	640.457	619.404	650.429	737.966	795.585	875.365		
67.5	12552.0709897.165	7252.233	999.467	564.001	558.461	607.215	679.239	737.966	1163.460	
68.0	12477.8309739.821	7165.805	947.389	550.704	546.272	597.243	665.942	744.614	1235.484	
70.0	11153.7028025.657	6071.044	771.208	499.734	499.734	555.137	610.539	878.689	1500.309	
72.5	8016.793	5111.467	3891.496	535.192	435.466	448.763	496.410	536.300	1165.676	1710.840
75.0	2591.745	1872.616	1694.219	375.631	363.443	394.468	435.466	472.032	1334.101	1563.468
77.5	644.889	496.410	398.901	249.313	279.230	323.553	360.119	421.062	1227.727	1141.299
80.0	320.228	259.285	214.963	166.209	193.910	242.664	273.690	324.661	816.638	732.426
82.5	177.289	148.480	118.562	96.401	122.994	163.992	177.289	206.099	469.816	435.466
85.0	64.267	57.619	47.646	39.890	58.727	70.916	80.888	88.645	212.747	188.370
87.5	5.540	5.540	3.324	2.216	8.864	13.297	14.405	17.729	48.755	23.269
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

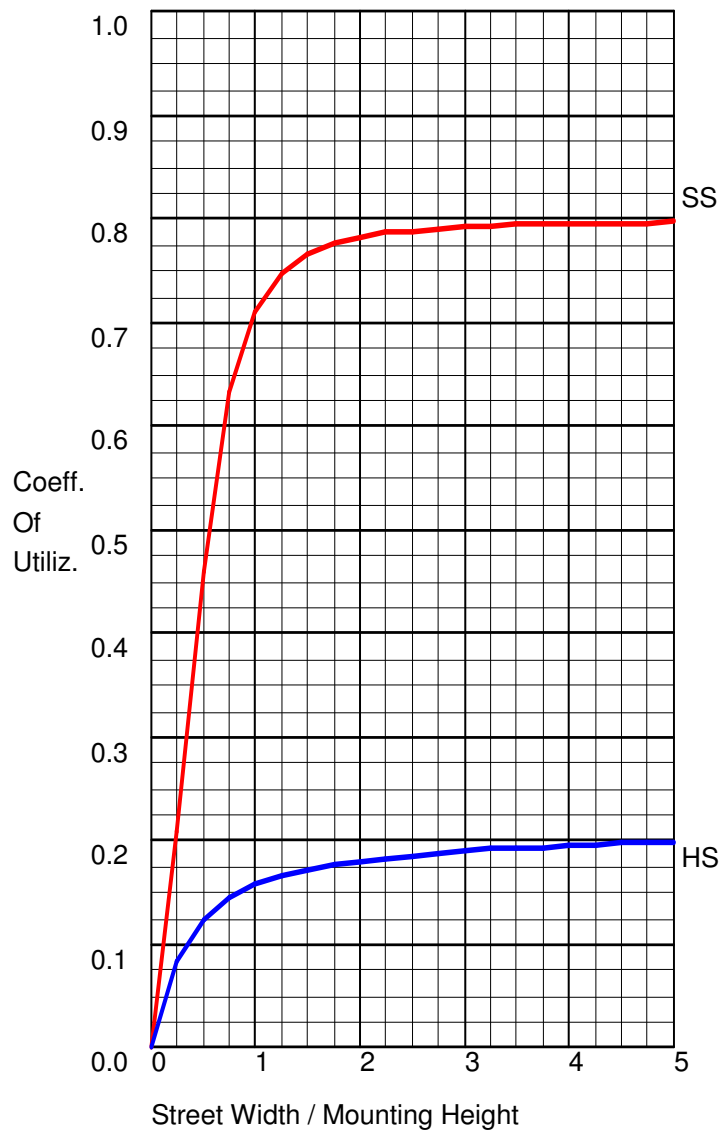
Vert. Horizontal Angles

	<u>175.0</u>	<u>180.0</u>
0.0	4635.003	4635.003
2.5	3425.004	3490.380
5.0	2196.169	2231.627
7.5	1725.245	1731.893
10.0	1603.359	1604.467
12.5	1543.523	1543.523
15.0	1504.741	1505.849
17.5	1473.716	1474.824
20.0	1447.122	1447.122
22.5	1428.286	1428.286
25.0	1387.287	1388.395
27.5	1356.262	1357.370
30.0	1290.886	1291.994
32.5	1174.540	1171.216
35.0	1102.517	1104.733
37.5	1069.275	1074.815
40.0	1026.061	1034.925
42.5	999.467	998.359
45.0	991.711	966.226
47.5	958.469	958.469
50.0	956.253	971.766
52.5	982.847	1000.575
55.0	1010.548	1026.061
57.5	1007.224	1020.521
60.0	969.550	983.955

IES ROAD REPORT**PHOTOMETRIC FILENAME : VA1-L220-730-T2-F-S-XXX-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

62.5	917.471	936.308
65.0	999.467	1046.006
67.5	1260.969	1306.399
68.0	1304.183	1347.397
70.0	1450.447	1496.985
72.5	1480.364	1503.633
75.0	1221.079	1269.833
77.5	838.799	843.231
80.0	539.624	532.975
82.5	325.769	333.525
85.0	76.456	85.320
87.5	4.432	0.000
90.0	0.000	0.000

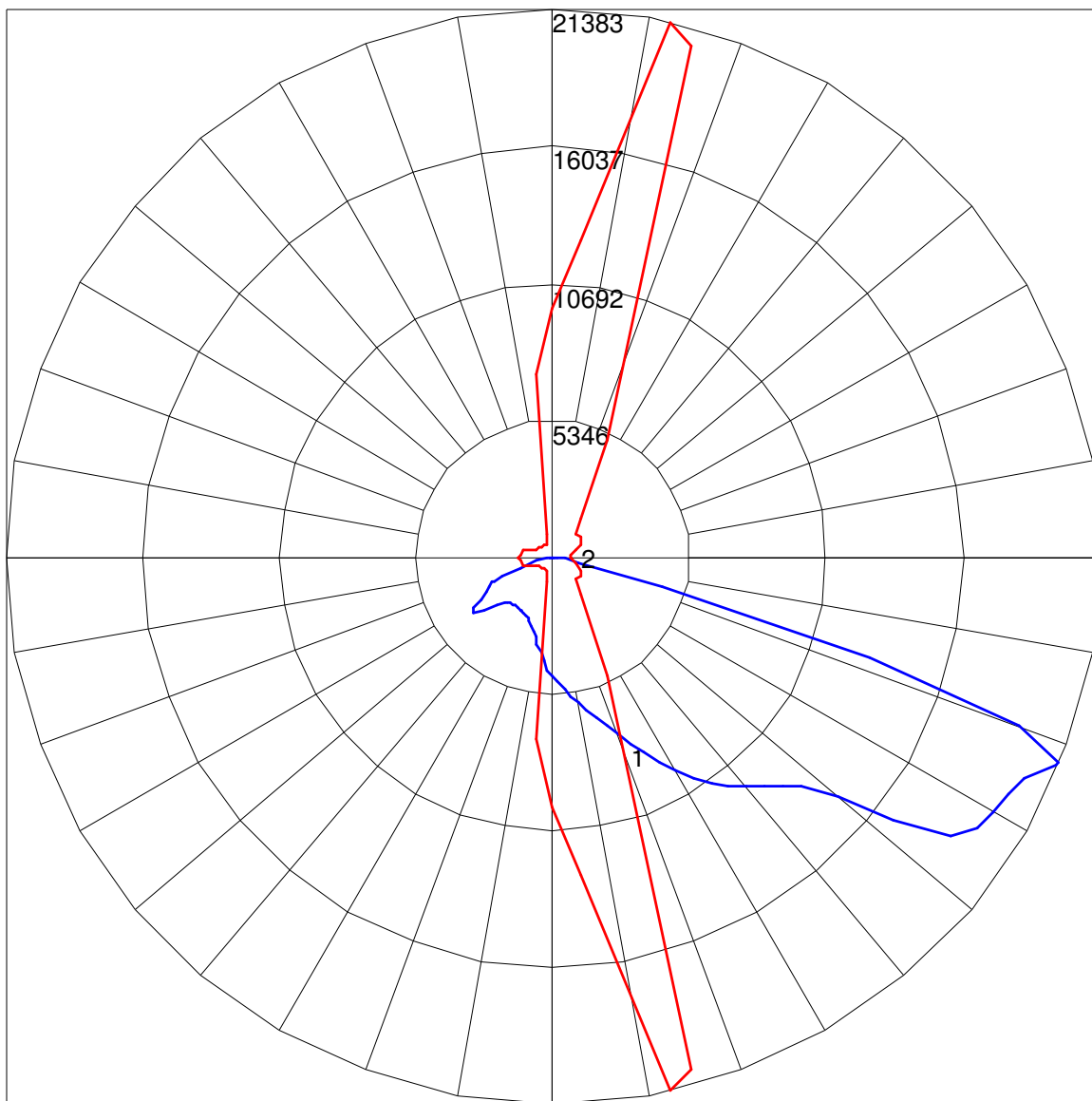
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

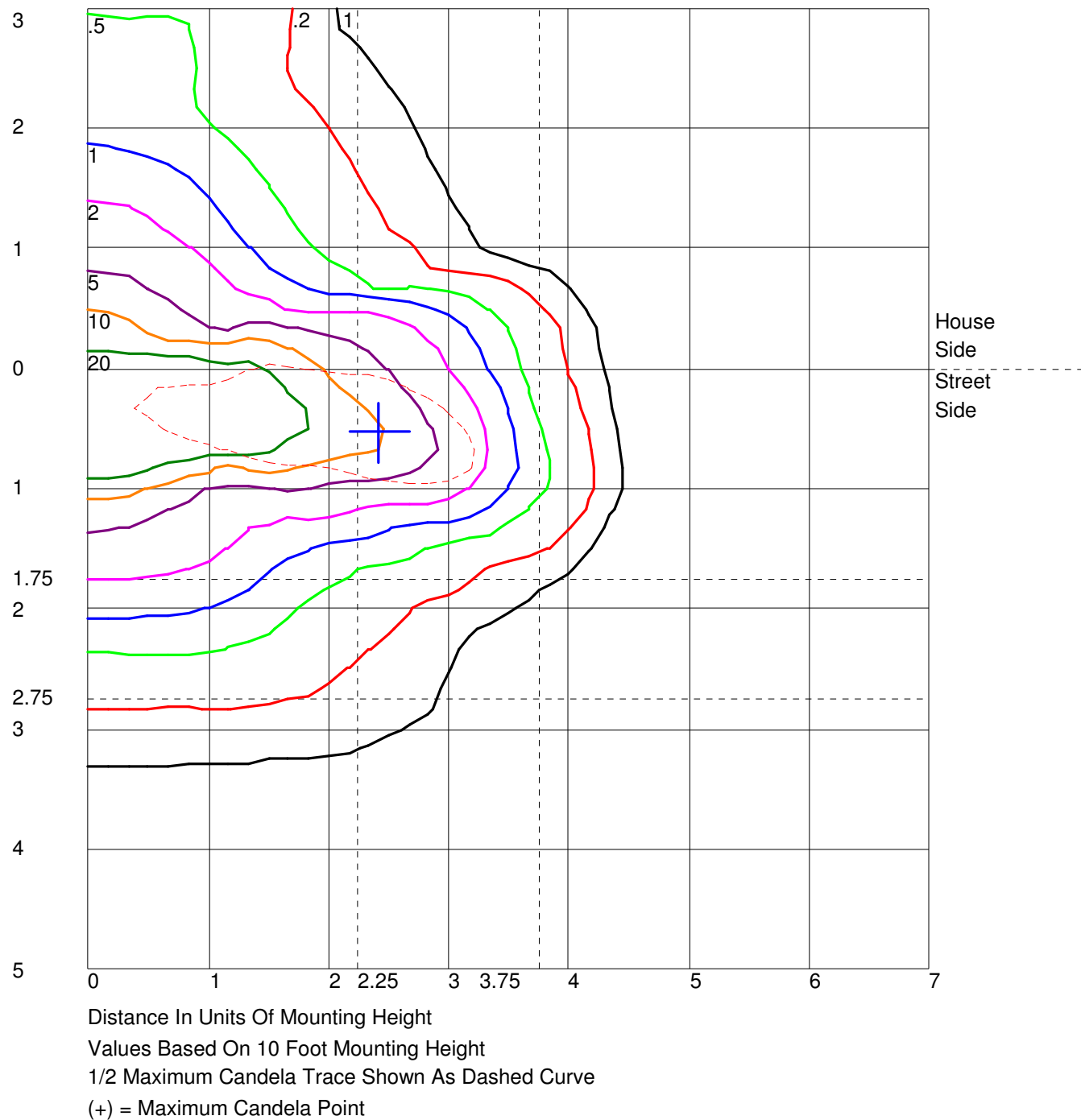
	Lumens	Percent Of Luminaire
Downward Street Side	16834.7	79.8
Downward House Side	4252.3	20.2
Downward Total	21087.0	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	21087.0	100.0

POLAR GRAPH

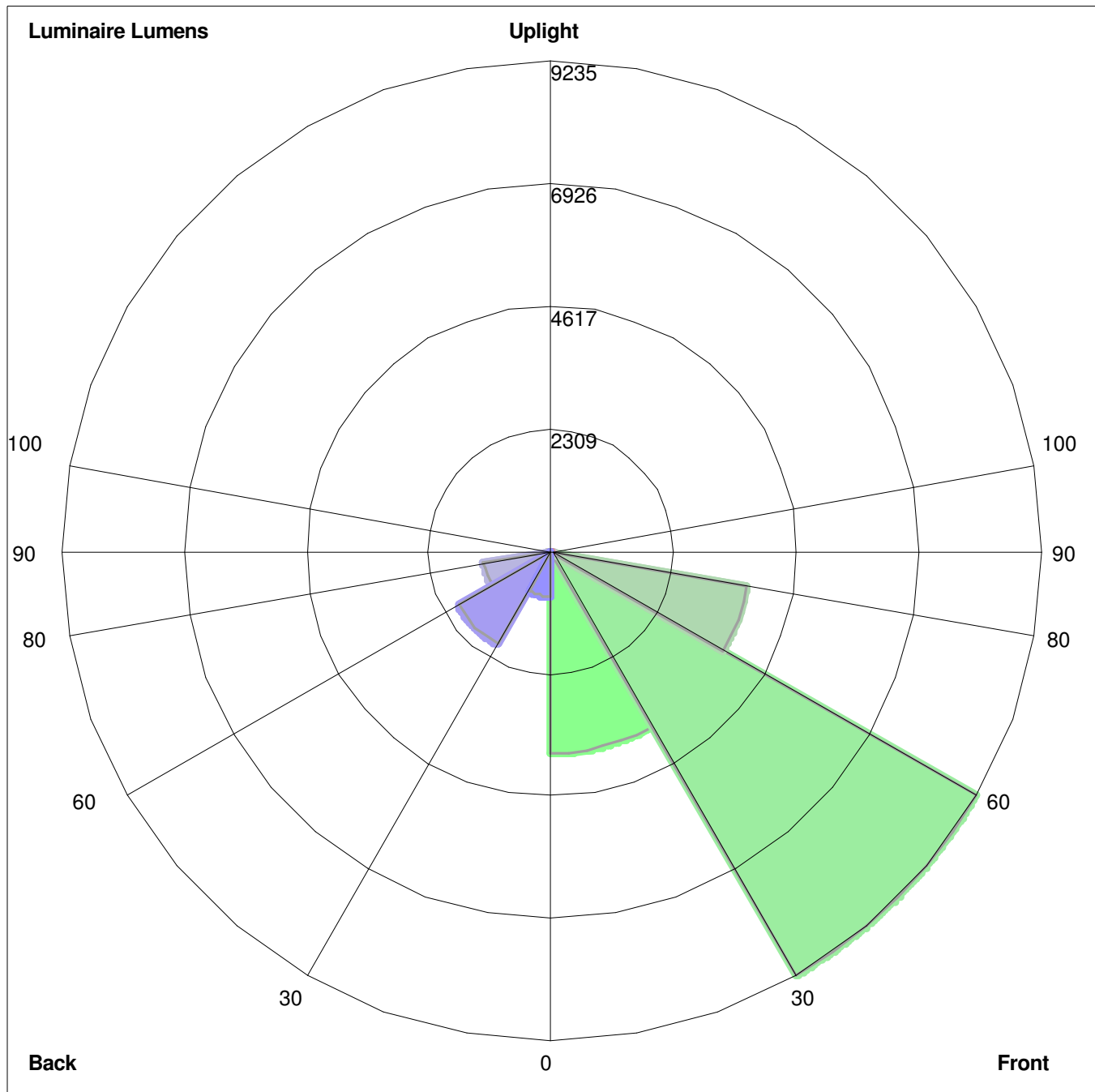


Maximum Candela = 21383.284 Located At Horizontal Angle = 77.5, Vertical Angle = 68
1 - Vertical Plane Through Horizontal Angles (77.5 - 257.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (68) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=3811.4, Medium=9234.7, High= 3734.0, Very High=54.5
Back: Low=852.8, Medium=2030.6, High=1295.1, Very High=73.8
Uplight: Low=0.0, High=0.0

BUG Rating : B3-U0-G3