



OUTDOOR LIGHTING SPECIALISTS SINCE 1972

IES ROAD REPORT

PHOTOMETRIC FILENAME : NILAND FR T2 D SHORT CUTOFF AP LED175.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TESTLAB] Photopia 3.1.5 see: www.ltioptics.com/ies

[ISSUEDATE]

[TEST] 1

[TESTDATE] Tue Aug 03 23:04:48 2010

[MANUFAC]

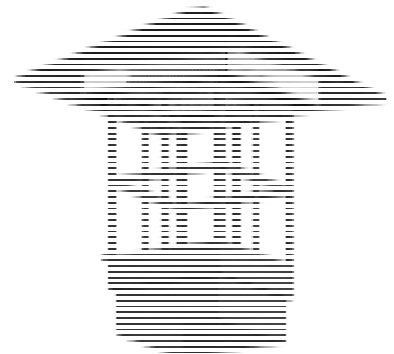
[LUMINAIRE] Niland Fr T2 D Short Cutoff AP

[LAMP] LED Cree XPG, Fr F1G Left & Right

[LAMPCAT] 3535 XPG, FRNRDLT, FRNRDRT

CHARACTERISTICS

IES Classification	Type II
Longitudinal Classification	Short
Cutoff Classification (deprecated)	Cutoff
Lumens Per Lamp	270 (54 lamps)
Total Lamp Lumens	14580
Luminaire Lumens	6528
Total Luminaire Efficiency	45 %
Downward Total Efficiency	45 %
Upward Waste Light Ratio	0.00
Maximum Candela	4328.991
Maximum Candela Angle	80H 55V
Maximum Candela At 90 Degrees Vertical	2.74 (0.0% Lamp Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	142.298 (1.0% Lamp Lumens)
Total Luminaire Watts	173.23
Ballast Factor	1.00



IES ROAD REPORT**PHOTOMETRIC FILENAME : NILAND FR T2 D SHORT CUTOFF AP LED175.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	507.5	3.5	7.8
FM - Front-Medium (30-60)	2106.0	14.4	32.3
FH - Front-High (60-80)	1318.4	9.0	20.2
FVH - Front-Very High (80-90)	14.5	0.1	0.2
BL - Back-Low (0-30)	422.7	2.9	6.5
BM - Back-Medium (30-60)	1312.3	9.0	20.1
BH - Back-High (60-80)	821.6	5.6	12.6
BVH - Back-Very High (80-90)	14.3	0.1	0.2
UL - Uplight-Low (90-100)	0.5	0.0	0.0
UH - Uplight-High (100-180)	10.5	0.1	0.2
Total	6528.3	44.7	100.0
BUG Rating	B2-U2-G2		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	<u>0</u>	<u>10</u>	<u>20</u>	<u>30</u>	<u>40</u>	<u>50</u>	<u>60</u>	<u>70</u>	<u>80</u>	<u>90</u>
0	1909.071	1909.071	1909.071	1909.071	1909.071	1909.071	1909.071	1909.071	1909.071	1909.071
5	1861.013	1950.141	1967.782	1927.266	1922.463	1922.279	1937.149	2002.325	1972.708	1887.767
10	1830.995	1851.376	1870.341	1878.469	1860.859	1847.651	1735.771	1686.358	1650.399	1590.672
15	1739.558	1818.219	1811.661	1828.255	1708.032	1362.325	1113.012	1000.393	948.301	922.255
20	1009.106	1114.366	1281.447	1361.894	1031.672	745.784	733.531	854.031	899.689	911.080
25	522.979	536.248	497.580	551.980	696.464	891.961	992.450	1145.030	1291.545	1278.153
30	951.842	1066.585	885.496	701.451	1100.666	1365.434	1166.612	1367.805	1503.329	1519.369
35	1431.226	1620.505	1560.316	1145.338	1390.834	1434.274	1367.682	1617.611	1744.176	1749.933
40	1278.245	1452.469	1515.090	1206.789	1251.830	1465.030	1579.989	1847.713	1991.026	1989.641
45	1056.302	1258.542	1345.269	1026.716	1256.818	1520.878	1877.176	2331.623	2401.448	2357.268
50	1282.402	1445.080	1326.088	1020.035	1311.249	1692.115	2178.088	3225.708	3480.809	3484.257
55	1294.747	1510.503	1503.021	1077.237	1311.126	1652.923	2590.511	4082.295	4328.991	4308.579
60	1228.401	1422.113	1384.892	1010.891	1208.790	1510.964	2471.426	4027.401	4171.054	4179.428
65	1072.742	1220.951	1170.275	861.082	1014.001	1101.097	1917.414	3498.419	4012.593	4135.033
70	748.032	815.948	850.491	645.172	641.786	659.796	1362.817	2756.083	3110.164	3131.284
75	311.287	349.155	399.831	310.672	245.218	265.507	752.896	1579.681	1748.209	1686.943
80	15.825	19.119	35.928	38.084	30.602	46.889	116.775	142.298	112.526	97.749
85	4.987	4.680	4.803	5.111	7.851	12.961	20.289	36.914	54.832	51.199
90	0.554	0.585	0.616	0.431	0.462	0.800	1.539	2.648	2.740	1.755
95	0.369	0.339	0.308	0.185	0.123	0.154	0.246	0.493	0.431	0.154
100	0.246	0.308	0.277	0.216	0.123	0.185	0.246	0.277	0.277	0.216
105	0.308	0.308	0.277	0.277	0.185	0.277	0.308	0.308	0.277	0.216
110	0.339	0.339	0.431	0.308	0.339	0.523	0.523	0.493	0.431	0.369
115	0.708	0.800	0.831	0.893	0.954	1.047	1.108	0.862	0.739	0.616
120	1.355	1.570	1.724	2.001	2.155	2.186	2.155	1.755	1.539	1.293
125	2.648	3.017	3.356	3.571	3.910	4.002	3.972	3.417	3.079	2.340
130	3.479	3.787	4.218	4.710	5.388	5.819	5.419	4.895	4.218	3.510
135	3.848	3.848	4.218	5.080	6.342	6.619	6.281	5.819	5.080	4.249
140	3.664	4.033	4.680	5.172	6.219	6.742	6.835	6.188	5.572	4.987
145	3.910	4.218	4.772	5.726	6.465	6.773	6.712	6.003	5.634	4.618
150	3.664	3.972	4.618	5.665	6.311	6.496	5.850	5.203	4.895	4.372
155	3.263	3.448	4.033	4.680	5.388	5.419	5.203	4.772	4.495	3.972
160	2.586	2.771	2.925	3.079	3.448	3.633	3.972	3.879	3.879	3.571
165	1.416	1.447	1.293	1.324	1.693	2.124	2.032	2.309	2.309	2.094
170	0.493	0.554	0.523	0.308	0.092	0.092	0.431	0.677	0.893	0.924
175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	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>100</u>	<u>110</u>	<u>120</u>	<u>130</u>	<u>140</u>	<u>150</u>	<u>160</u>	<u>170</u>	<u>180</u>
0	1909.071	1909.071	1909.071	1909.071	1909.071	1909.071	1909.071	1909.071	1909.071
5	1850.422	1812.800	1766.343	1647.689	1548.863	1445.080	1343.883	1269.964	1202.356
10	1600.524	1484.980	1124.187	906.369	904.153	998.084	1062.459	1054.670	1035.952
15	887.127	786.177	781.097	1013.878	1023.575	1044.141	1067.909	1069.417	992.942
20	847.782	669.094	834.174	978.565	952.735	940.851	1036.968	1085.273	1038.538
25	1122.771	778.757	676.421	856.710	941.220	929.213	881.062	869.548	818.288
30	1341.574	902.613	847.843	977.272	859.542	810.098	783.529	814.716	779.588
35	1526.820	1106.146	1047.220	1004.026	865.084	751.049	745.938	810.221	798.338
40	1768.559	1214.978	1010.645	909.386	793.443	671.372	637.599	672.080	682.455
45	2088.867	1429.625	1000.424	751.172	599.638	559.461	569.128	623.652	635.598
50	3060.751	1926.681	1039.154	617.710	479.354	494.316	552.103	592.742	619.804
55	3806.012	2365.827	1101.005	551.857	444.318	446.227	545.977	627.316	637.260

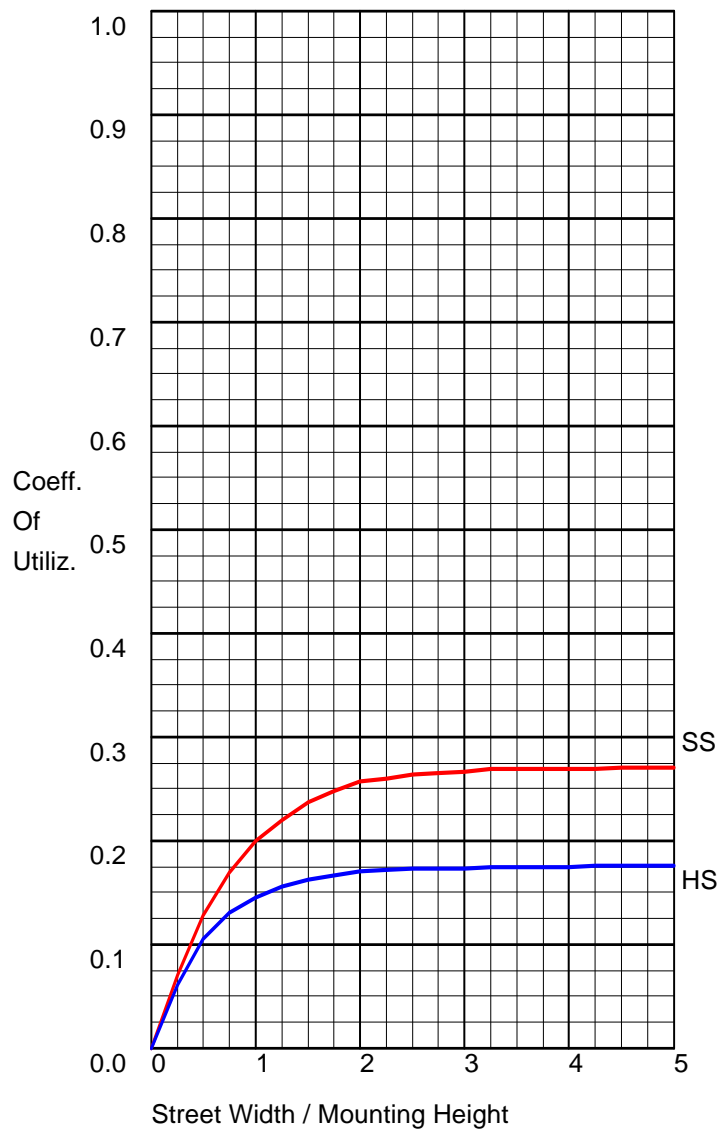
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CANDELA TABULATION - (Cont.)

60	3665.562	2334.978	1024.130	508.355	406.142	409.929	479.107	563.341	551.580
65	3543.553	2052.200	800.893	416.487	338.318	337.949	383.637	446.812	447.797
70	2776.834	1576.233	588.678	288.105	243.925	254.670	274.281	313.319	315.567
75	1565.796	880.385	315.074	154.705	137.803	151.903	163.325	172.869	174.439
80	110.341	99.627	66.346	47.320	42.732	51.815	54.955	54.431	47.597
85	29.463	17.364	15.578	17.826	14.501	14.008	14.562	13.669	11.299
90	2.186	1.570	0.800	0.647	0.616	0.739	1.108	1.601	1.108
95	0.246	0.185	0.092	0.123	0.154	0.216	0.369	0.523	0.400
100	0.123	0.092	0.092	0.092	0.123	0.185	0.308	0.400	0.369
105	0.154	0.123	0.123	0.154	0.185	0.216	0.277	0.308	0.400
110	0.246	0.154	0.185	0.246	0.246	0.246	0.277	0.308	0.369
115	0.431	0.308	0.308	0.431	0.462	0.493	0.400	0.400	0.431
120	0.893	0.585	0.585	0.708	0.862	0.862	0.677	0.647	0.585
125	1.539	1.078	0.924	0.954	1.139	1.139	1.016	0.924	0.893
130	2.432	1.632	1.231	1.231	1.447	1.509	1.355	1.108	1.047
135	3.079	2.001	1.539	1.478	1.539	1.662	1.570	1.293	1.385
140	3.510	2.802	2.124	1.847	1.878	1.816	1.662	1.539	1.201
145	3.848	3.109	2.863	2.463	2.278	2.001	1.601	1.447	1.385
150	3.818	3.263	3.171	3.294	2.771	2.309	1.786	1.478	1.416
155	3.541	3.294	3.109	3.417	3.417	2.648	2.217	2.001	1.632
160	3.079	2.802	2.832	2.863	2.863	3.109	2.709	2.525	2.371
165	1.847	1.570	1.355	1.970	2.371	1.847	1.878	2.063	2.063
170	0.800	0.523	0.400	0.062	0.123	0.493	0.924	1.201	1.078
175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

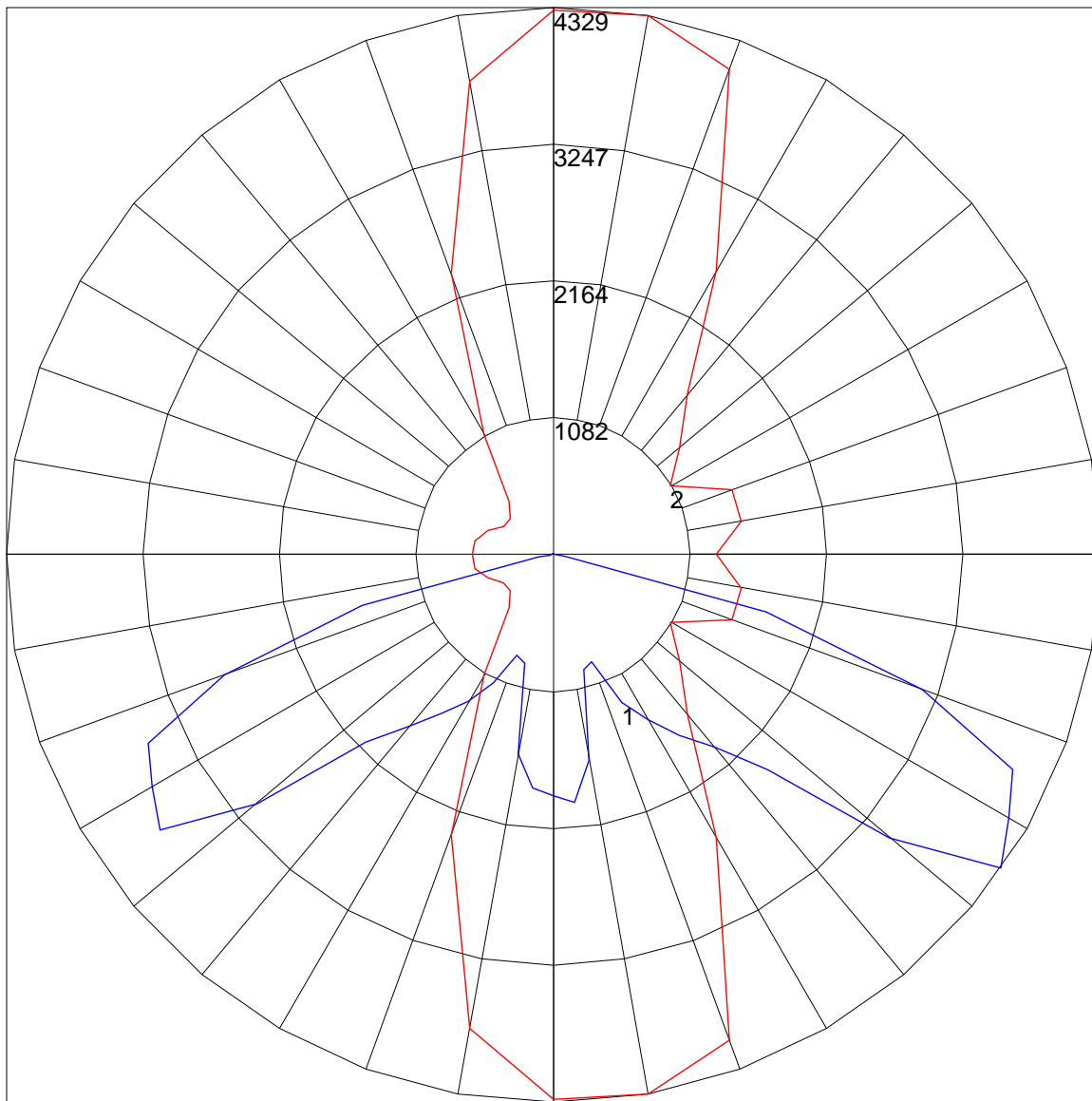
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

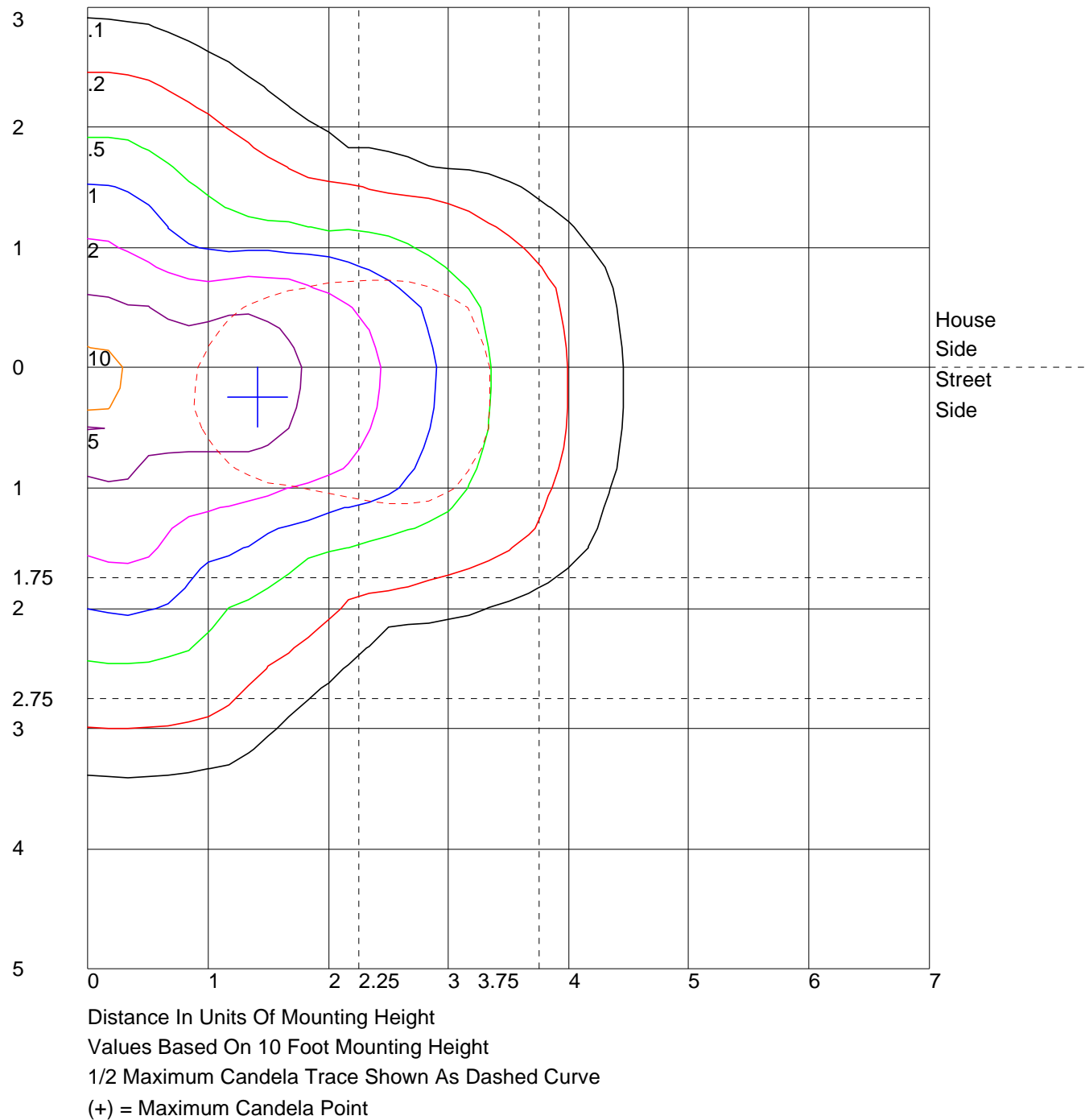
	Lumens	Percent Of Lamp
Downward Street Side	3946.5	27.1
Downward House Side	2570.9	17.6
Downward Total	6517.4	44.7
Upward Street Side	7.5	0.1
Upward House Side	3.6	0.0
Upward Total	11.1	0.1
Total Flux	6528.5	44.8

POLAR GRAPH

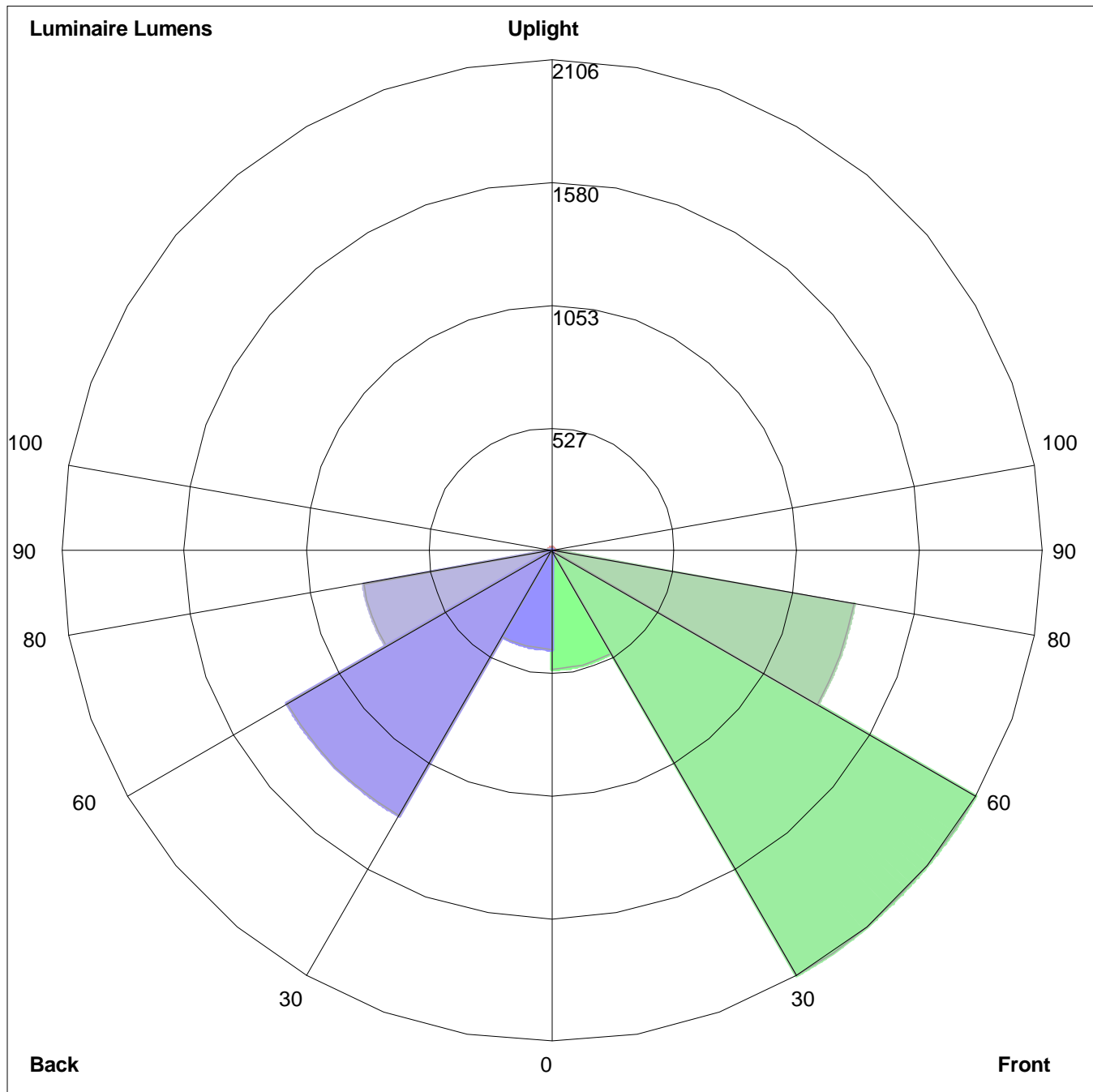


Maximum Candela = 4328.991 Located At Horizontal Angle = 80, Vertical Angle = 55
1 - Vertical Plane Through Horizontal Angles (80 - 260) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (55) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=507.5, Medium= 2106.0, High=1318.4, Very High=14.5
Back: Low=422.7, Medium=1312.3, High=821.6, Very High=14.3
Uplight: Low=0.5, High=10.5

BUG Rating : B2-U2-G2