



OUTDOOR LIGHTING SPECIALISTS SINCE 1972

IES ROAD REPORT

PHOTOMETRIC FILENAME : NILAND FR T3 G SHORT CUTOFF AP LED200.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

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

[ISSUEDATE]

[TEST] 1

[TESTDATE] Wed Aug 04 20:06:53 2010

[MANUFAC]

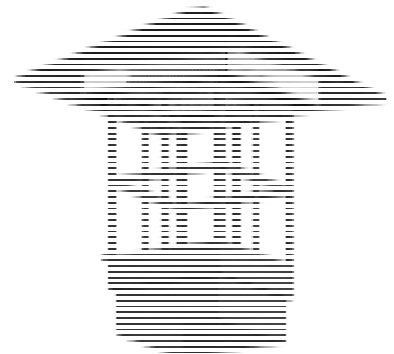
[LUMINAIRE] Niland Fr T3 G Short Cutoff AP

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

[LAMPCAT] 3535 XPG, FRNRDLT, FRNRDRT

CHARACTERISTICS

IES Classification	Type III
Longitudinal Classification	Short
Cutoff Classification (deprecated)	Cutoff
Lumens Per Lamp	290.3 (54 lamps)
Total Lamp Lumens	15676.2
Luminaire Lumens	7189
Total Luminaire Efficiency	46 %
Downward Total Efficiency	46 %
Upward Waste Light Ratio	0.00
Maximum Candela	4794.223
Maximum Candela Angle	70H 60V
Maximum Candela At 90 Degrees Vertical	2.946 (0.0% Lamp Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	514.728 (3.3% Lamp Lumens)
Total Luminaire Watts	192.98
Ballast Factor	1.00



IES ROAD REPORT**PHOTOMETRIC FILENAME : NILAND FR T3 G SHORT CUTOFF AP LED200.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	533.2	3.4	7.4
FM - Front-Medium (30-60)	2453.7	15.7	34.1
FH - Front-High (60-80)	2029.0	12.9	28.2
FVH - Front-Very High (80-90)	49.6	0.3	0.7
BL - Back-Low (0-30)	421.5	2.7	5.9
BM - Back-Medium (30-60)	1058.2	6.8	14.7
BH - Back-High (60-80)	608.8	3.9	8.5
BVH - Back-Very High (80-90)	23.6	0.2	0.3
UL - Uplight-Low (90-100)	0.6	0.0	0.0
UH - Uplight-High (100-180)	11.3	0.1	0.2
Total	7189.5	46.0	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	1923.892	1923.892	1923.892	1923.892	1923.892	1923.892	1923.892	1923.892	1923.892	1923.892
5	1947.527	1961.562	2006.282	2025.977	2051.532	2017.205	1970.334	1992.677	1985.262	1944.614
10	1888.540	1971.393	2012.935	2036.404	1945.011	1891.784	1897.643	1842.827	1821.278	1738.789
15	1871.095	1936.107	1938.358	1872.353	1853.353	1536.572	1206.682	1014.296	918.269	848.623
20	1340.611	1431.838	1588.309	1618.498	1150.376	719.064	641.639	772.192	865.770	868.981
25	524.626	543.891	579.508	669.412	625.287	821.546	968.881	1227.404	1392.216	1351.667
30	839.917	976.660	808.868	625.420	1115.785	1484.271	1259.512	1470.667	1488.740	1428.926
35	1421.378	1811.281	1595.492	1139.486	1743.655	1692.612	1375.731	1647.561	1716.909	1626.641
40	1358.684	1704.628	1823.164	1424.391	1732.963	1799.133	1727.402	1962.886	2037.397	1840.079
45	1139.916	1441.339	1505.158	1203.968	1810.420	2259.839	2228.625	2458.614	2443.486	2167.288
50	1069.212	1370.468	1353.752	1159.744	2106.944	2806.444	2921.803	3226.867	3275.493	2796.183
55	1347.099	1664.542	1638.061	1295.096	2277.317	3428.455	4093.331	4294.555	4264.863	3551.063
60	1193.541	1529.620	1485.661	1233.527	2223.262	3594.922	4563.042	4794.223	4745.299	3797.569
65	1127.603	1430.514	1375.268	1051.602	1873.379	3262.153	4441.923	4556.190	4514.482	3452.089
70	907.908	1147.993	1113.634	819.692	1446.403	2658.613	3917.827	3909.055	3964.533	2950.899
75	554.185	680.269	717.773	524.295	829.358	1565.701	2158.681	1990.393	2131.372	1689.600
80	130.122	175.934	220.423	170.638	222.442	424.394	514.728	434.722	471.829	393.312
85	5.362	5.031	5.164	5.495	8.441	13.936	21.814	39.689	58.954	55.048
90	0.596	0.629	0.662	0.463	0.497	0.861	1.655	2.847	2.946	1.887
95	0.397	0.364	0.331	0.199	0.132	0.166	0.265	0.530	0.463	0.166
100	0.265	0.331	0.298	0.232	0.132	0.199	0.265	0.298	0.298	0.232
105	0.331	0.331	0.298	0.298	0.199	0.298	0.331	0.331	0.298	0.232
110	0.364	0.364	0.463	0.331	0.364	0.563	0.563	0.530	0.463	0.397
115	0.761	0.861	0.894	0.960	1.026	1.125	1.192	0.927	0.794	0.662
120	1.456	1.688	1.854	2.152	2.317	2.350	2.317	1.887	1.655	1.390
125	2.847	3.244	3.608	3.840	4.204	4.303	4.270	3.674	3.310	2.516
130	3.740	4.071	4.535	5.065	5.793	6.256	5.826	5.263	4.535	3.774
135	4.138	4.138	4.535	5.462	6.819	7.117	6.753	6.256	5.462	4.568
140	3.939	4.336	5.031	5.561	6.687	7.249	7.349	6.653	5.991	5.362
145	4.204	4.535	5.131	6.157	6.951	7.282	7.216	6.455	6.058	4.965
150	3.939	4.270	4.965	6.091	6.786	6.984	6.289	5.594	5.263	4.700
155	3.509	3.707	4.336	5.031	5.793	5.826	5.594	5.131	4.833	4.270
160	2.781	2.979	3.145	3.310	3.707	3.906	4.270	4.171	4.171	3.840
165	1.523	1.556	1.390	1.423	1.821	2.284	2.185	2.483	2.483	2.251
170	0.530	0.596	0.563	0.331	0.099	0.099	0.463	0.728	0.960	0.993
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

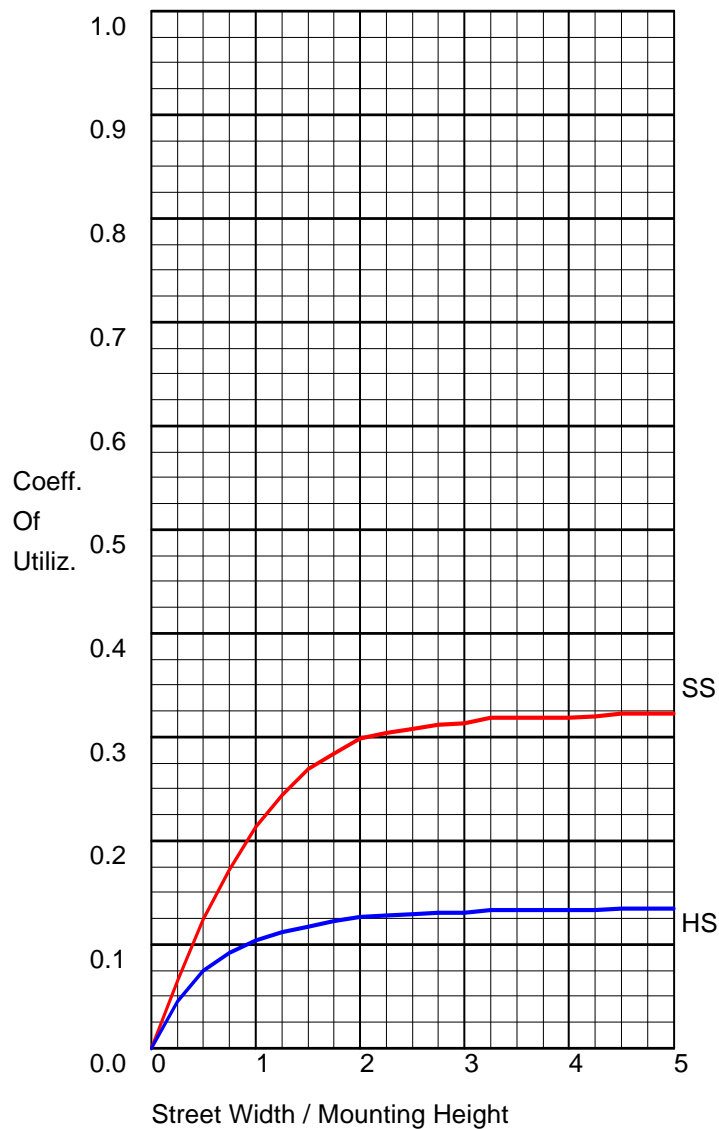
Vert. Angles	Horizontal Angles								
	<u>100</u>	<u>110</u>	<u>120</u>	<u>130</u>	<u>140</u>	<u>150</u>	<u>160</u>	<u>170</u>	<u>180</u>
0	1923.892	1923.892	1923.892	1923.892	1923.892	1923.892	1923.892	1923.892	1923.892
5	1904.197	1873.346	1799.464	1606.978	1453.388	1289.138	1200.029	1134.819	1140.512
10	1687.779	1484.900	1042.134	843.724	907.544	943.459	1011.913	977.421	1020.420
15	823.565	703.970	808.438	971.926	1042.896	1069.642	1115.454	1094.733	1058.785
20	779.077	662.063	871.000	1040.016	1040.546	1007.610	1056.302	1054.448	1050.873
25	1158.221	734.224	760.474	934.952	979.904	945.644	903.241	819.196	808.802
30	1126.610	747.035	852.463	966.398	893.443	806.121	785.366	749.153	778.481
35	1252.164	884.505	931.774	941.771	867.292	782.222	762.791	819.560	857.031
40	1333.726	877.256	902.049	888.246	771.133	737.965	765.737	806.617	818.137
45	1415.817	886.524	809.663	742.069	643.990	627.307	658.323	737.932	742.765
50	1659.875	892.284	729.292	620.951	544.851	549.551	569.511	682.089	695.628
55	1906.779	949.185	676.098	553.225	513.139	538.959	570.339	693.609	785.929

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CANDELA TABULATION - (Cont.)

60	1899.397	905.227	632.239	537.138	508.207	531.809	554.483	627.704	713.337
65	1599.862	782.354	576.496	499.469	459.018	459.217	480.005	526.877	562.461
70	1262.028	578.780	437.734	404.368	373.881	359.813	384.772	421.250	426.414
75	734.919	321.912	259.979	261.634	238.827	230.684	254.451	265.242	262.429
80	205.527	114.829	97.418	108.441	100.463	104.303	108.970	106.885	96.027
85	31.678	18.669	16.749	19.166	15.591	15.061	15.657	14.697	12.148
90	2.350	1.688	0.861	0.695	0.662	0.794	1.192	1.721	1.192
95	0.265	0.199	0.099	0.132	0.166	0.232	0.397	0.563	0.430
100	0.132	0.099	0.099	0.099	0.132	0.199	0.331	0.430	0.397
105	0.166	0.132	0.132	0.166	0.199	0.232	0.298	0.331	0.430
110	0.265	0.166	0.199	0.265	0.265	0.265	0.298	0.331	0.397
115	0.463	0.331	0.331	0.463	0.497	0.530	0.430	0.430	0.463
120	0.960	0.629	0.629	0.761	0.927	0.927	0.728	0.695	0.629
125	1.655	1.159	0.993	1.026	1.225	1.225	1.092	0.993	0.960
130	2.615	1.754	1.324	1.324	1.556	1.622	1.456	1.192	1.125
135	3.310	2.152	1.655	1.589	1.655	1.787	1.688	1.390	1.490
140	3.774	3.012	2.284	1.986	2.019	1.953	1.787	1.655	1.291
145	4.138	3.343	3.078	2.648	2.450	2.152	1.721	1.556	1.490
150	4.105	3.509	3.409	3.542	2.979	2.483	1.920	1.589	1.523
155	3.807	3.542	3.343	3.674	3.674	2.847	2.383	2.152	1.754
160	3.310	3.012	3.045	3.078	3.078	3.343	2.913	2.714	2.549
165	1.986	1.688	1.456	2.118	2.549	1.986	2.019	2.218	2.218
170	0.861	0.563	0.430	0.066	0.132	0.530	0.993	1.291	1.159
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

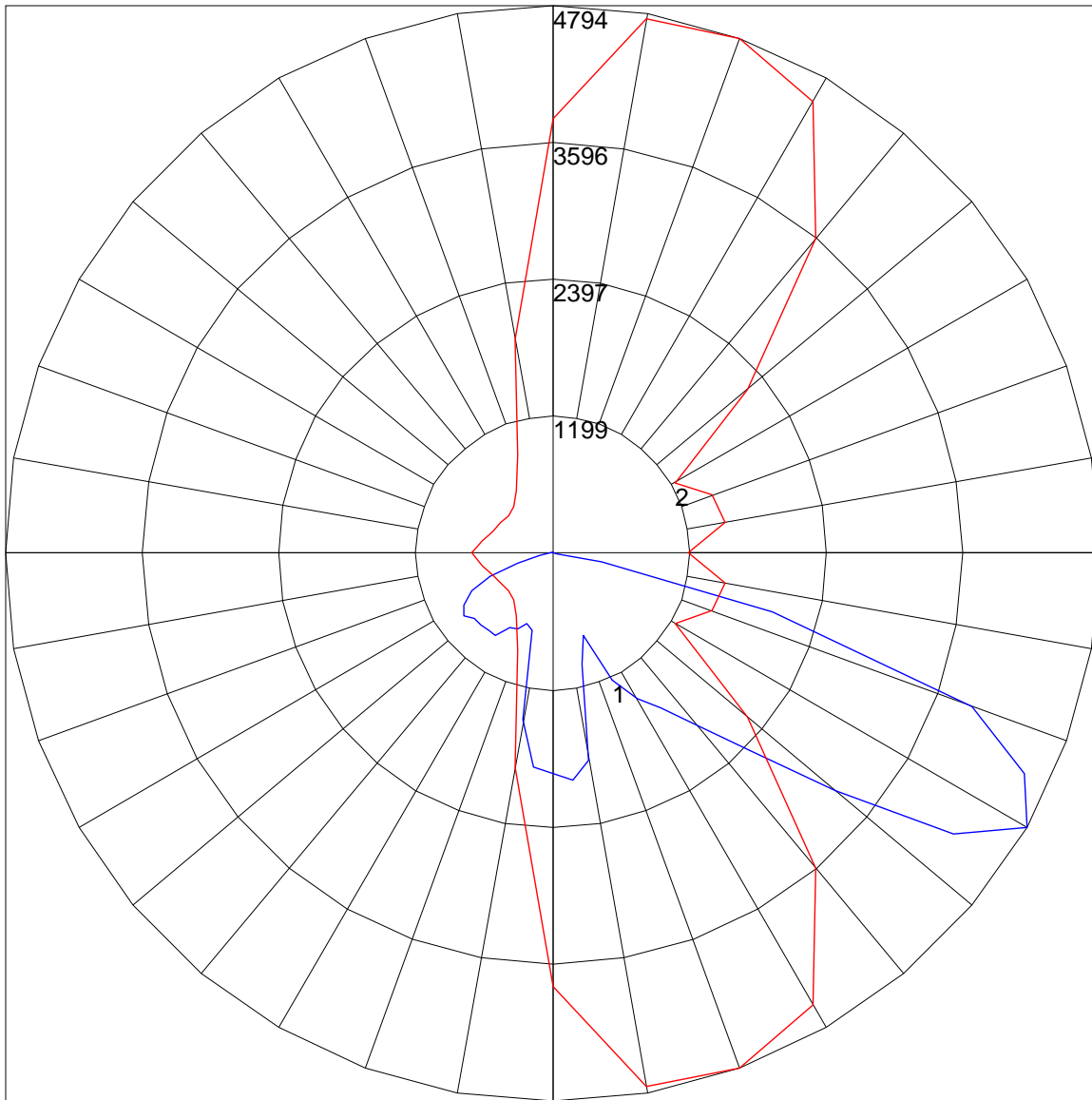
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

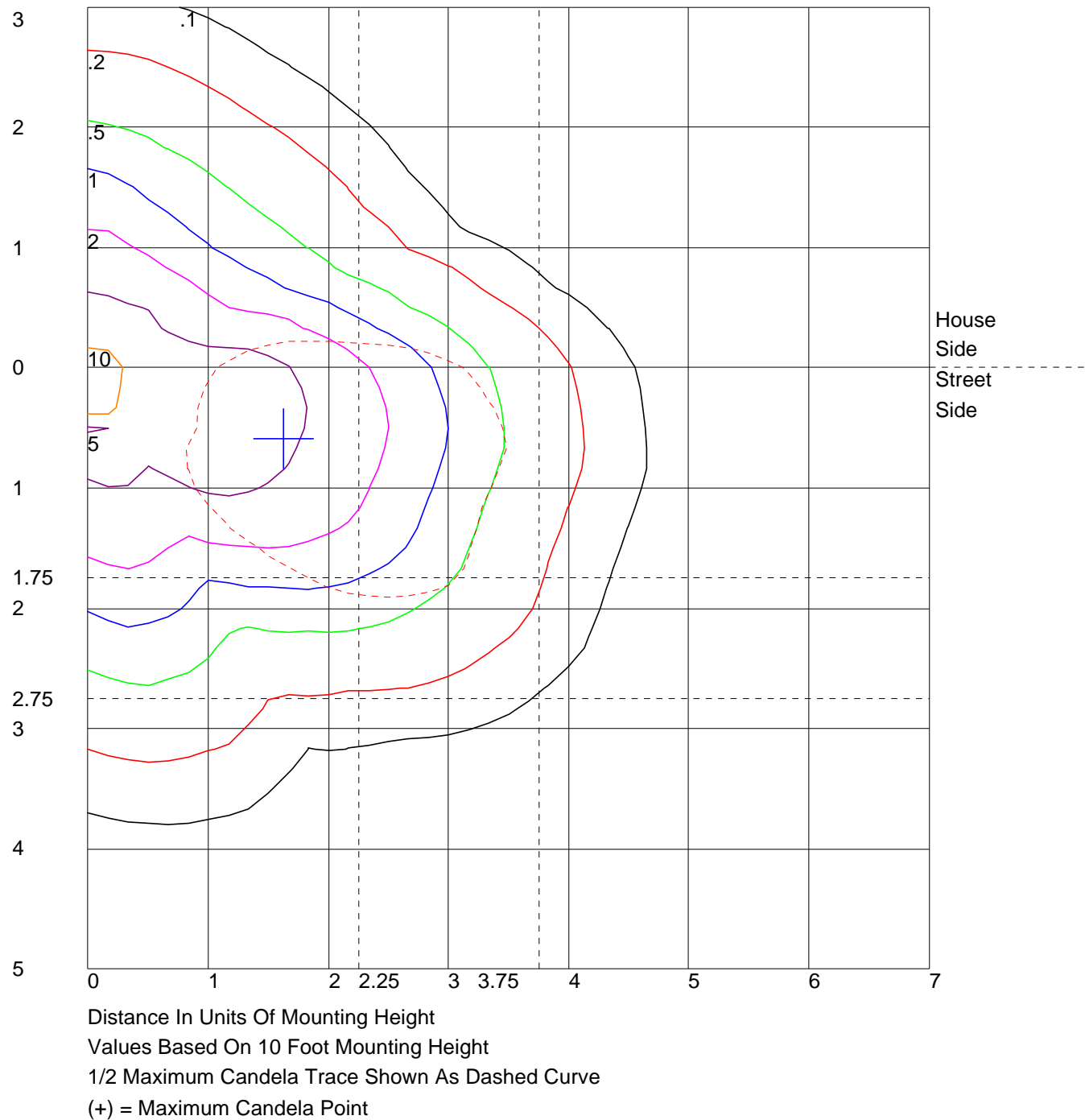
	Lumens	Percent Of Lamp
Downward Street Side	5065.4	32.3
Downward House Side	2112.2	13.5
Downward Total	7177.6	45.8
Upward Street Side	8.0	0.1
Upward House Side	3.8	0.0
Upward Total	11.8	0.1
Total Flux	7189.4	45.9

POLAR GRAPH

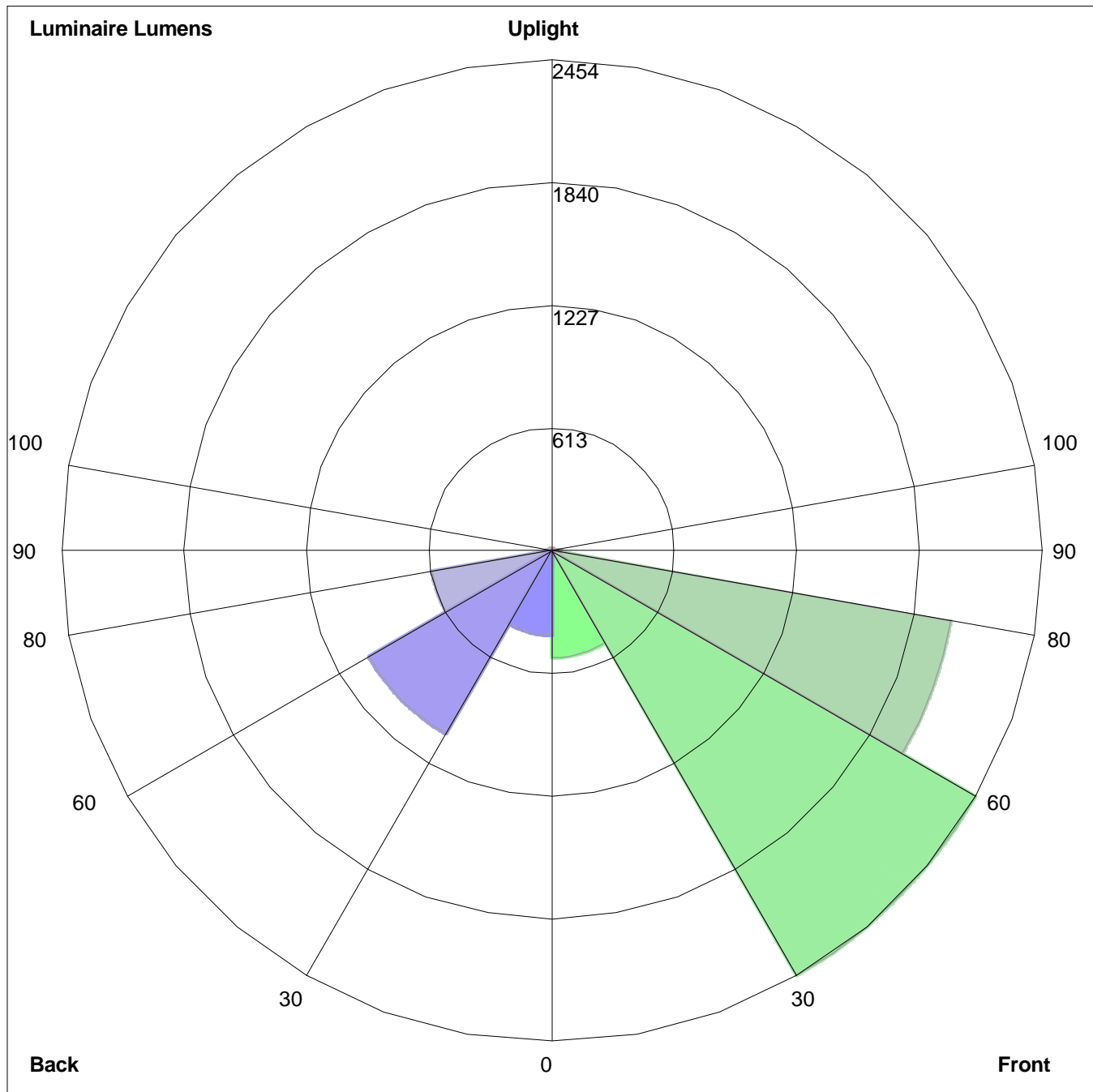


Maximum Candela = 4794.223 Located At Horizontal Angle = 70, Vertical Angle = 60
1 - Vertical Plane Through Horizontal Angles (70 - 250) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (60) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=533.2, Medium=2453.7, High= 2029.0, Very High=49.6
Back: Low=421.5, Medium=1058.2, High=608.8, Very High=23.6
Uplight: Low=0.6, High=11.3

BUG Rating : B2-U2-G2