



OUTDOOR LIGHTING SPECIALISTS SINCE 1972

IES ROAD REPORT

PHOTOMETRIC FILENAME : NILAND FR T3 G SHORT CUTOFF AP LED100.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

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

[ISSUE DATE]

[TEST] 1

[TEST DATE] Wed Aug 04 20:06:53 2010

[MANUFAC]

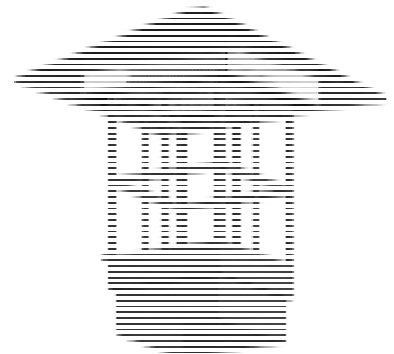
[LUMINAIRE] Niland Fr T3 G Short Cutoff AP

[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	176.4 (54 lamps)
Total Lamp Lumens	9525.6
Luminaire Lumens	4369
Total Luminaire Efficiency	46 %
Downward Total Efficiency	46 %
Upward Waste Light Ratio	0.00
Maximum Candela	2913.191
Maximum Candela Angle	70H 60V
Maximum Candela At 90 Degrees Vertical	1.79 (0.0% Lamp Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	312.773 (3.3% Lamp Lumens)
Total Luminaire Watts	96.89
Ballast Factor	1.00



IES ROAD REPORT**PHOTOMETRIC FILENAME : NILAND FR T3 G SHORT CUTOFF AP LED100.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	324.0	3.4	7.4
FM - Front-Medium (30-60)	1491.0	15.7	34.1
FH - Front-High (60-80)	1232.9	12.9	28.2
FVH - Front-Very High (80-90)	30.2	0.3	0.7
BL - Back-Low (0-30)	256.1	2.7	5.9
BM - Back-Medium (30-60)	643.0	6.8	14.7
BH - Back-High (60-80)	369.9	3.9	8.5
BVH - Back-Very High (80-90)	14.4	0.2	0.3
UL - Uplight-Low (90-100)	0.3	0.0	0.0
UH - Uplight-High (100-180)	6.9	0.1	0.2
Total	4368.7	46.0	100.0
BUG Rating	B1-U1-G1		

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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	1169.046	1169.046	1169.046	1169.046	1169.046	1169.046	1169.046	1169.046	1169.046	1169.046
5	1183.407	1191.936	1219.110	1231.077	1246.605	1225.747	1197.266	1210.843	1206.337	1181.637
10	1147.564	1197.909	1223.152	1237.413	1181.879	1149.535	1153.095	1119.787	1106.692	1056.568
15	1136.964	1176.468	1177.836	1137.728	1126.183	933.692	733.236	616.333	557.982	515.663
20	814.617	870.051	965.130	983.474	699.022	436.936	389.890	469.219	526.082	528.033
25	318.787	330.493	352.136	406.765	379.953	499.209	588.737	745.827	845.975	821.335
30	510.373	593.464	491.506	380.034	678.003	901.912	765.338	893.645	904.627	868.281
35	863.695	1100.618	969.495	692.404	1059.525	1028.509	835.958	1001.134	1043.273	988.422
40	825.599	1035.811	1107.839	865.526	1053.028	1093.236	1049.649	1192.740	1238.017	1118.117
45	692.666	875.824	914.604	731.586	1100.095	1373.183	1354.215	1493.967	1484.775	1316.944
50	649.702	832.760	822.602	704.714	1280.276	1705.325	1775.423	1960.793	1990.341	1699.090
55	818.559	1011.453	995.361	786.960	1383.803	2083.287	2487.297	2609.570	2591.528	2157.790
60	725.250	929.468	902.757	749.548	1350.957	2184.441	2772.715	2913.191	2883.463	2307.579
65	685.183	869.247	835.676	639.002	1138.352	1982.235	2699.118	2768.551	2743.208	2097.649
70	551.687	697.574	676.695	498.083	878.901	1615.496	2380.653	2375.323	2409.034	1793.103
75	336.749	413.363	436.152	318.586	503.956	951.392	1311.714	1209.455	1295.120	1026.679
80	79.068	106.906	133.939	103.688	135.166	257.882	312.773	264.157	286.705	238.995
85	3.258	3.057	3.138	3.339	5.129	8.468	13.255	24.117	35.823	33.450
90	0.362	0.382	0.402	0.282	0.302	0.523	1.006	1.730	1.790	1.146
95	0.241	0.221	0.201	0.121	0.080	0.101	0.161	0.322	0.282	0.101
100	0.161	0.201	0.181	0.141	0.080	0.121	0.161	0.181	0.181	0.141
105	0.201	0.201	0.181	0.181	0.121	0.181	0.201	0.201	0.181	0.141
110	0.221	0.221	0.282	0.201	0.221	0.342	0.342	0.322	0.282	0.241
115	0.463	0.523	0.543	0.583	0.624	0.684	0.724	0.563	0.483	0.402
120	0.885	1.026	1.126	1.307	1.408	1.428	1.408	1.146	1.006	0.845
125	1.730	1.971	2.192	2.333	2.554	2.615	2.595	2.233	2.011	1.529
130	2.273	2.474	2.756	3.077	3.520	3.802	3.540	3.198	2.756	2.293
135	2.514	2.514	2.756	3.319	4.143	4.325	4.103	3.802	3.319	2.776
140	2.394	2.635	3.057	3.379	4.063	4.405	4.465	4.043	3.641	3.258
145	2.554	2.756	3.118	3.741	4.224	4.425	4.385	3.922	3.681	3.017
150	2.394	2.595	3.017	3.701	4.123	4.244	3.822	3.399	3.198	2.856
155	2.132	2.253	2.635	3.057	3.520	3.540	3.399	3.118	2.937	2.595
160	1.690	1.810	1.911	2.011	2.253	2.373	2.595	2.534	2.534	2.333
165	0.925	0.945	0.845	0.865	1.106	1.388	1.328	1.509	1.509	1.368
170	0.322	0.362	0.342	0.201	0.060	0.060	0.282	0.443	0.583	0.603
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

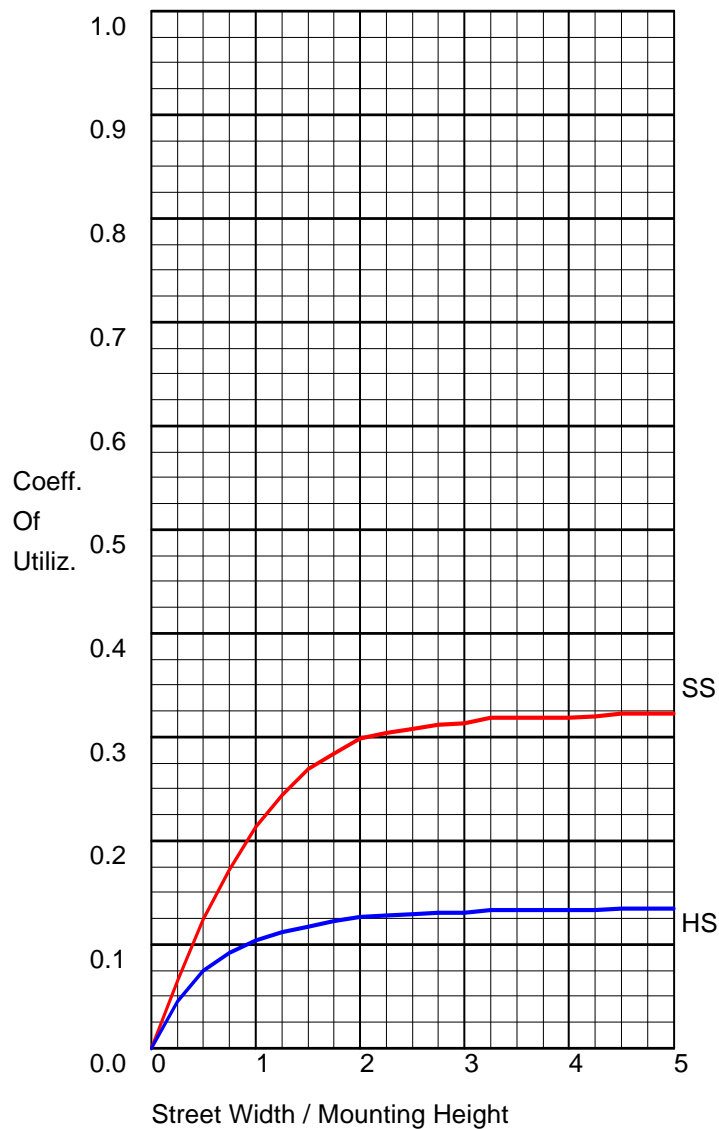
Vert. Angles	Horizontal Angles								
	<u>100</u>	<u>110</u>	<u>120</u>	<u>130</u>	<u>140</u>	<u>150</u>	<u>160</u>	<u>170</u>	<u>180</u>
0	1169.046	1169.046	1169.046	1169.046	1169.046	1169.046	1169.046	1169.046	1169.046
5	1157.078	1138.332	1093.437	976.474	883.145	783.340	729.193	689.568	693.028
10	1025.573	902.294	633.249	512.686	551.466	573.289	614.885	593.926	620.054
15	500.436	427.764	491.244	590.587	633.712	649.964	677.802	665.210	643.366
20	473.403	402.300	529.260	631.962	632.284	612.270	641.858	640.731	638.559
25	703.789	446.149	462.099	568.120	595.435	574.617	548.851	497.781	491.465
30	684.580	453.933	517.996	587.228	542.897	489.836	477.225	455.220	473.041
35	760.872	537.466	566.189	572.263	527.007	475.314	463.507	498.003	520.772
40	810.433	533.061	548.127	539.739	468.576	448.422	465.297	490.138	497.138
45	860.316	538.693	491.988	450.916	391.318	381.180	400.027	448.401	451.338
50	1008.617	542.193	443.152	377.319	331.076	333.933	346.061	414.469	422.696
55	1158.647	576.769	410.828	336.165	311.807	327.496	346.564	421.469	477.567

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CANDELA TABULATION - (Cont.)

60	1154.161	550.058	384.177	326.390	308.810	323.152	336.930	381.422	433.457
65	972.150	475.394	350.305	303.500	278.921	279.042	291.673	320.155	341.777
70	766.866	351.693	265.988	245.713	227.188	218.639	233.805	255.971	259.109
75	446.571	195.609	157.975	158.981	145.123	140.174	154.616	161.173	159.464
80	124.888	69.775	59.196	65.893	61.046	63.379	66.215	64.948	58.351
85	19.249	11.344	10.178	11.646	9.474	9.152	9.514	8.931	7.382
90	1.428	1.026	0.523	0.422	0.402	0.483	0.724	1.046	0.724
95	0.161	0.121	0.060	0.080	0.101	0.141	0.241	0.342	0.261
100	0.080	0.060	0.060	0.060	0.080	0.121	0.201	0.261	0.241
105	0.101	0.080	0.080	0.101	0.121	0.141	0.181	0.201	0.261
110	0.161	0.101	0.121	0.161	0.161	0.161	0.181	0.201	0.241
115	0.282	0.201	0.201	0.282	0.302	0.322	0.261	0.261	0.282
120	0.583	0.382	0.382	0.463	0.563	0.563	0.443	0.422	0.382
125	1.006	0.704	0.603	0.624	0.744	0.744	0.664	0.603	0.583
130	1.589	1.066	0.805	0.805	0.945	0.986	0.885	0.724	0.684
135	2.011	1.307	1.006	0.965	1.006	1.086	1.026	0.845	0.905
140	2.293	1.830	1.388	1.207	1.227	1.187	1.086	1.006	0.784
145	2.514	2.032	1.871	1.609	1.488	1.307	1.046	0.945	0.905
150	2.494	2.132	2.072	2.152	1.810	1.509	1.167	0.965	0.925
155	2.313	2.152	2.032	2.233	2.233	1.730	1.448	1.307	1.066
160	2.011	1.830	1.850	1.871	1.871	2.032	1.770	1.649	1.549
165	1.207	1.026	0.885	1.287	1.549	1.207	1.227	1.348	1.348
170	0.523	0.342	0.261	0.040	0.080	0.322	0.603	0.784	0.704
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

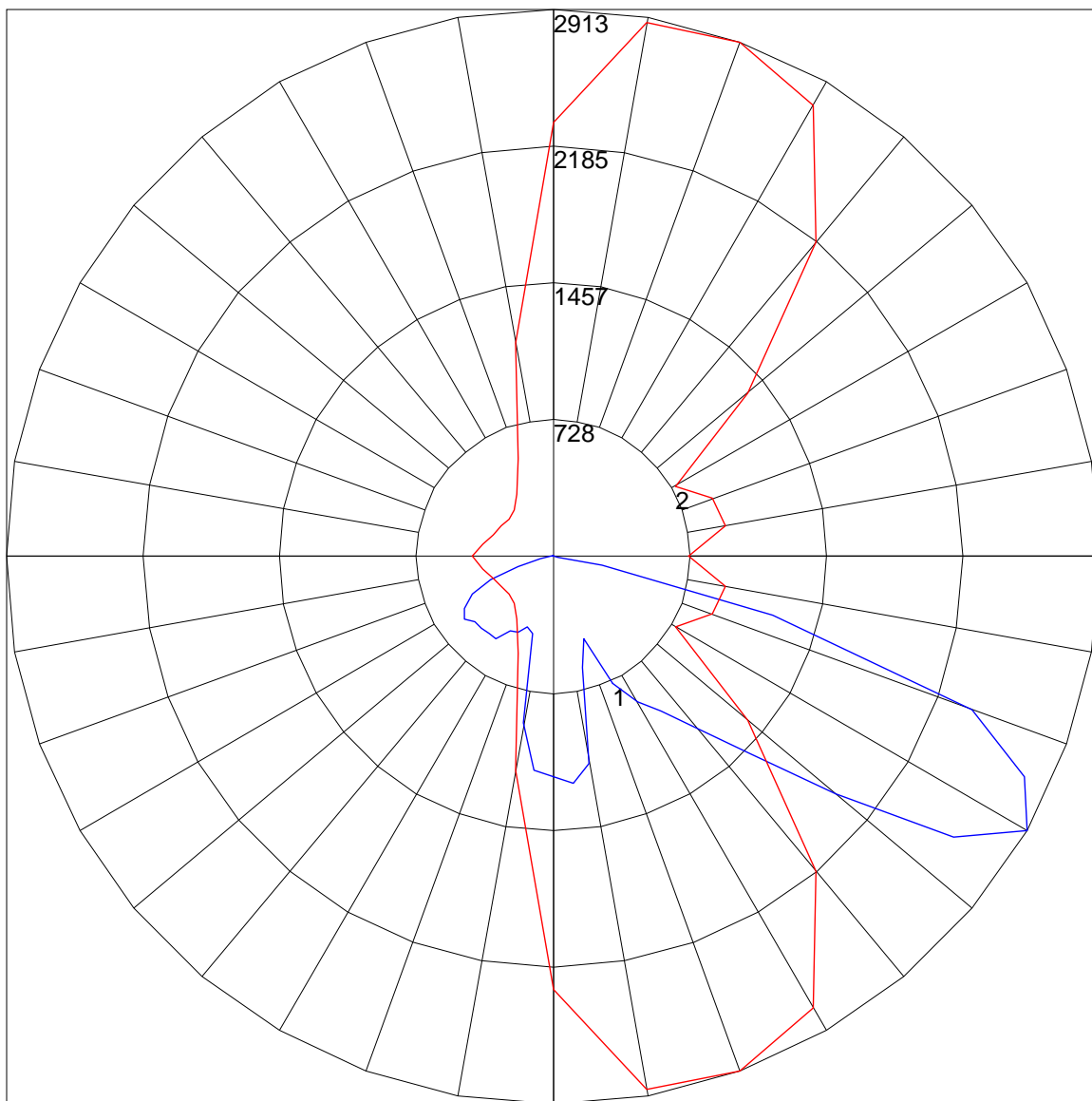
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

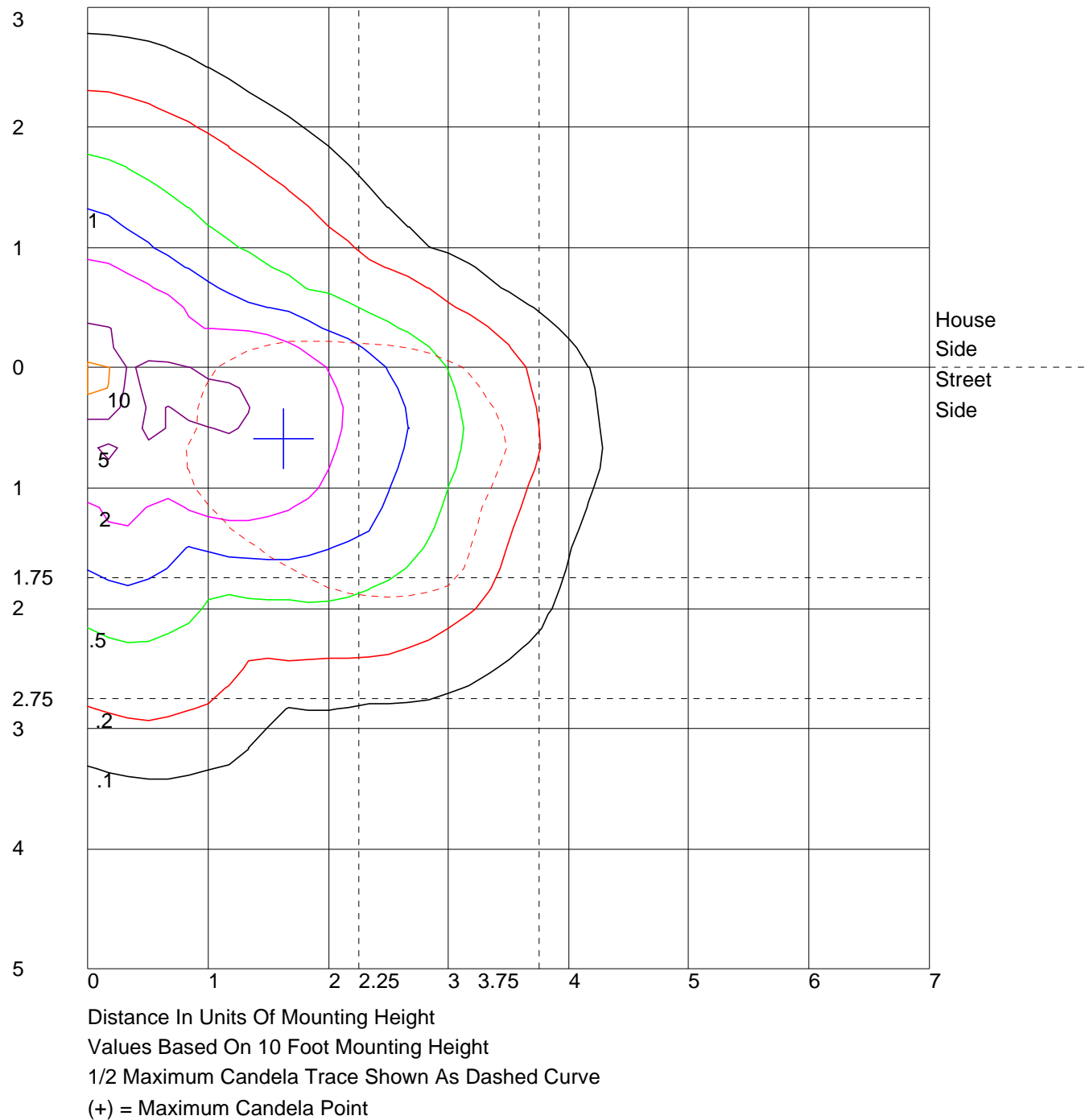
	Lumens	Percent Of Lamp
Downward Street Side	3078.0	32.3
Downward House Side	1283.5	13.5
Downward Total	4361.5	45.8
Upward Street Side	4.9	0.1
Upward House Side	2.3	0.0
Upward Total	7.2	0.1
Total Flux	4368.7	45.9

POLAR GRAPH

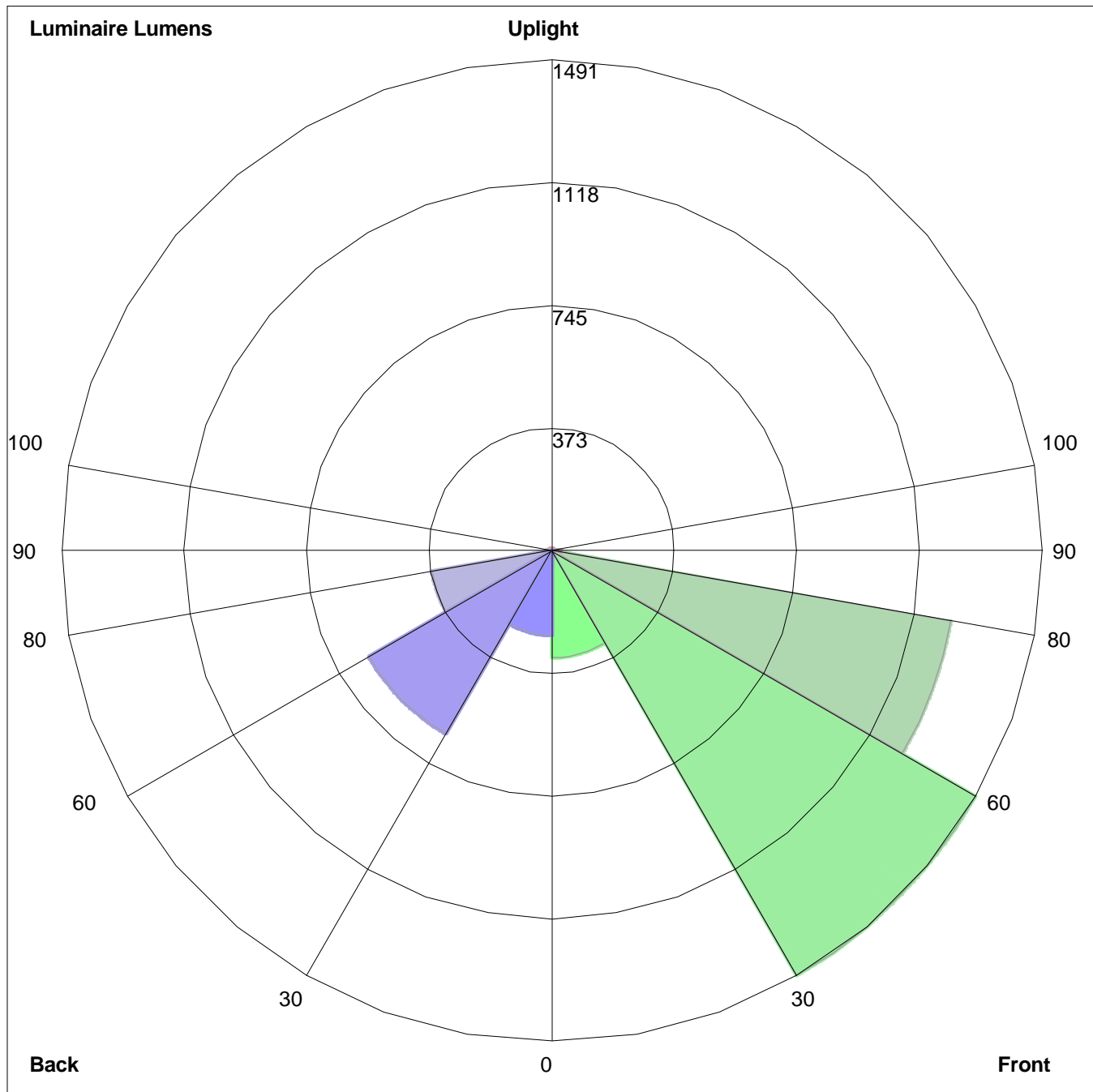


Maximum Candela = 2913.191 Located At Horizontal Angle = 70, Vertical Angle = 60
1 - Vertical Plane Through Horizontal Angles (70 - 250) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (60) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=324.0, Medium= 1491.0, High=1232.9, Very High=30.2
Back: Low=256.1, Medium=643.0, High=369.9, Very High=14.4
Uplight: Low=0.3, High=6.9

BUG Rating : B1-U1-G1