



OUTDOOR LIGHTING SPECIALISTS SINCE 1972

IES ROAD REPORT

PHOTOMETRIC FILENAME : NILAND FR T2 D SHORT CUTOFF AP LED150.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] Tue Aug 03 23:04:48 2010

[MANUFAC]

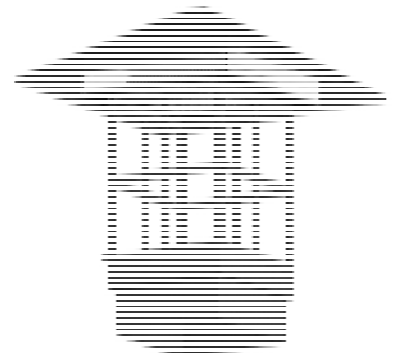
[LUMINAIRE] Niland Fr T2 D Short Cutoff AP

[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	248.4 (54 lamps)
Total Lamp Lumens	13413.6
Luminaire Lumens	6006
Total Luminaire Efficiency	45 %
Downward Total Efficiency	45 %
Upward Waste Light Ratio	0.00
Maximum Candela	3982.666
Maximum Candela Angle	80H 55V
Maximum Candela At 90 Degrees Vertical	2.521 (0.0% Lamp Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	130.914 (1.0% Lamp Lumens)
Total Luminaire Watts	153.66
Ballast Factor	1.00



IES ROAD REPORT**PHOTOMETRIC FILENAME : NILAND FR T2 D SHORT CUTOFF AP LED150.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	466.9	3.5	7.8
FM - Front-Medium (30-60)	1937.5	14.4	32.3
FH - Front-High (60-80)	1212.9	9.0	20.2
FVH - Front-Very High (80-90)	13.4	0.1	0.2
BL - Back-Low (0-30)	388.9	2.9	6.5
BM - Back-Medium (30-60)	1207.3	9.0	20.1
BH - Back-High (60-80)	755.8	5.6	12.6
BVH - Back-Very High (80-90)	13.2	0.1	0.2
UL - Uplight-Low (90-100)	0.5	0.0	0.0
UH - Uplight-High (100-180)	9.7	0.1	0.2
Total	6006.1	44.7	100.0
BUG Rating	B2-U1-G2		

IES ROAD REPORT
PHOTOMETRIC FILENAME : NILAND FR T2 D SHORT CUTOFF AP LED150.IES

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	1756.343	1756.343	1756.343	1756.343	1756.343	1756.343	1756.343	1756.343	1756.343	1756.343
5	1712.129	1794.127	1810.357	1773.082	1768.664	1768.494	1782.174	1842.136	1814.889	1736.743
10	1684.513	1703.264	1720.711	1728.189	1711.988	1699.837	1596.907	1551.447	1518.365	1463.416
15	1600.391	1672.759	1666.726	1681.992	1571.387	1253.337	1023.969	920.360	872.436	848.474
20	928.376	1025.216	1178.930	1252.941	949.137	686.121	674.848	785.708	827.712	838.192
25	481.140	493.347	457.773	507.821	640.746	820.603	913.052	1053.426	1188.220	1175.899
30	875.693	981.257	814.655	645.334	1012.611	1256.198	1073.281	1258.379	1383.061	1397.818
35	1316.726	1490.862	1435.489	1053.709	1279.565	1319.530	1258.265	1488.200	1604.640	1609.936
40	1175.984	1336.270	1393.881	1110.244	1151.682	1347.826	1453.588	1699.893	1831.741	1830.467
45	971.796	1157.857	1237.646	944.577	1156.271	1399.206	1726.999	2145.090	2209.329	2168.684
50	1179.808	1329.472	1220.000	938.431	1206.348	1556.744	2003.838	2967.647	3202.340	3205.512
55	1191.166	1389.660	1382.778	991.057	1206.234	1520.687	2383.266	3755.706	3982.666	3963.887
60	1130.128	1308.342	1274.099	930.019	1112.085	1390.085	2273.709	3705.204	3837.364	3845.068
65	986.921	1123.273	1076.652	792.194	932.879	1013.008	1764.019	3218.541	3691.580	3804.225
70	688.188	750.671	782.451	593.558	590.442	607.012	1253.790	2535.593	2861.347	2880.777
75	286.384	321.222	367.844	285.817	225.601	244.266	692.663	1453.304	1608.350	1551.985
80	14.559	17.589	33.054	35.037	28.154	43.137	107.433	130.914	103.524	89.929
85	4.588	4.305	4.419	4.702	7.223	11.924	18.666	33.960	50.445	47.103
90	0.510	0.538	0.566	0.397	0.425	0.736	1.416	2.436	2.521	1.614
95	0.340	0.312	0.283	0.170	0.113	0.142	0.227	0.453	0.397	0.142
100	0.227	0.283	0.255	0.198	0.113	0.170	0.227	0.255	0.255	0.198
105	0.283	0.283	0.255	0.255	0.170	0.255	0.283	0.283	0.255	0.198
110	0.312	0.312	0.397	0.283	0.312	0.482	0.482	0.453	0.397	0.340
115	0.651	0.736	0.765	0.821	0.878	0.963	1.020	0.793	0.680	0.566
120	1.246	1.445	1.586	1.841	1.983	2.011	1.983	1.614	1.416	1.190
125	2.436	2.776	3.087	3.286	3.597	3.682	3.654	3.144	2.832	2.153
130	3.201	3.484	3.880	4.334	4.957	5.353	4.985	4.504	3.880	3.229
135	3.541	3.541	3.880	4.673	5.835	6.090	5.778	5.353	4.673	3.909
140	3.371	3.710	4.305	4.758	5.721	6.203	6.288	5.693	5.127	4.588
145	3.597	3.880	4.390	5.268	5.948	6.231	6.175	5.523	5.183	4.249
150	3.371	3.654	4.249	5.212	5.806	5.976	5.382	4.787	4.504	4.022
155	3.002	3.172	3.710	4.305	4.957	4.985	4.787	4.390	4.135	3.654
160	2.379	2.549	2.691	2.832	3.172	3.342	3.654	3.569	3.569	3.286
165	1.303	1.331	1.190	1.218	1.558	1.954	1.869	2.124	2.124	1.926
170	0.453	0.510	0.482	0.283	0.085	0.085	0.397	0.623	0.821	0.850
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

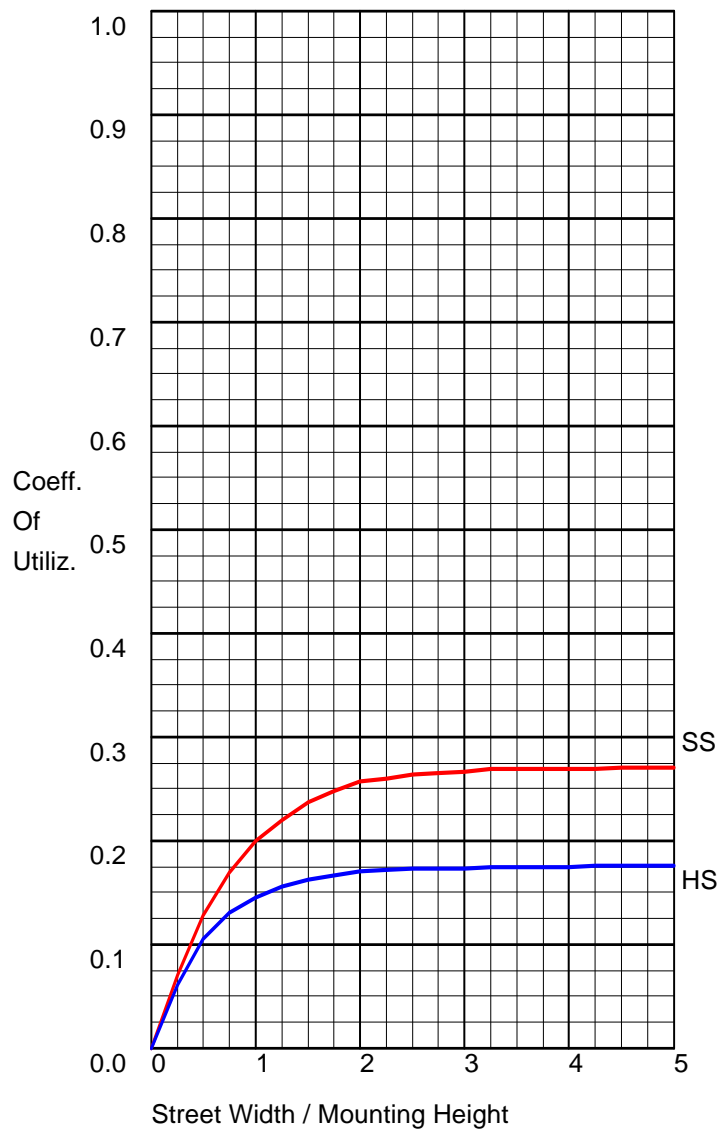
Vert. Angles	Horizontal Angles								
	<u>100</u>	<u>110</u>	<u>120</u>	<u>130</u>	<u>140</u>	<u>150</u>	<u>160</u>	<u>170</u>	<u>180</u>
0	1756.343	1756.343	1756.343	1756.343	1756.343	1756.343	1756.343	1756.343	1756.343
5	1702.386	1667.774	1625.033	1515.872	1424.952	1329.472	1236.371	1168.365	1106.166
10	1472.480	1366.180	1034.251	833.859	831.819	918.236	977.461	970.295	953.074
15	816.156	723.282	718.608	932.766	941.688	960.608	982.475	983.862	913.506
20	779.958	615.566	767.439	900.278	876.515	865.581	954.009	998.449	955.454
25	1032.948	716.456	622.307	788.172	865.921	854.875	810.576	799.983	752.824
30	1234.247	830.403	780.015	899.089	790.778	745.289	720.846	749.538	717.220
35	1404.672	1017.653	963.441	923.702	795.876	690.964	686.262	745.403	734.470
40	1627.072	1117.778	929.792	836.634	729.966	617.661	586.590	618.313	627.858
45	1921.755	1315.253	920.388	691.077	551.667	514.704	523.597	573.759	584.749
50	2815.887	1772.544	956.020	568.293	441.005	454.770	507.934	545.322	570.219
55	3501.526	2176.558	1012.923	507.708	408.772	410.528	502.298	577.130	586.278

IES ROAD REPORT
PHOTOMETRIC FILENAME : NILAND FR T2 D SHORT CUTOFF AP LED150.IES

CANDELA TABULATION - (Cont.)

60	3372.312	2148.177	942.198	467.686	373.650	377.134	440.778	518.273	507.453
65	3260.064	1888.021	736.821	383.167	311.252	310.913	352.945	411.066	411.973
70	2554.683	1450.132	541.583	265.056	224.411	234.296	252.339	288.253	290.321
75	1440.530	809.953	289.868	142.328	126.778	139.751	150.259	159.039	160.484
80	101.513	91.656	61.038	43.534	39.314	47.669	50.558	50.077	43.789
85	27.106	15.975	14.332	16.400	13.341	12.887	13.397	12.576	10.395
90	2.011	1.445	0.736	0.595	0.566	0.680	1.020	1.473	1.020
95	0.227	0.170	0.085	0.113	0.142	0.198	0.340	0.482	0.368
100	0.113	0.085	0.085	0.085	0.113	0.170	0.283	0.368	0.340
105	0.142	0.113	0.113	0.142	0.170	0.198	0.255	0.283	0.368
110	0.227	0.142	0.170	0.227	0.227	0.227	0.255	0.283	0.340
115	0.397	0.283	0.283	0.397	0.425	0.453	0.368	0.368	0.397
120	0.821	0.538	0.538	0.651	0.793	0.793	0.623	0.595	0.538
125	1.416	0.991	0.850	0.878	1.048	1.048	0.935	0.850	0.821
130	2.238	1.501	1.133	1.133	1.331	1.388	1.246	1.020	0.963
135	2.832	1.841	1.416	1.360	1.416	1.529	1.445	1.190	1.275
140	3.229	2.577	1.954	1.699	1.728	1.671	1.529	1.416	1.105
145	3.541	2.861	2.634	2.266	2.096	1.841	1.473	1.331	1.275
150	3.512	3.002	2.917	3.031	2.549	2.124	1.643	1.360	1.303
155	3.257	3.031	2.861	3.144	3.144	2.436	2.039	1.841	1.501
160	2.832	2.577	2.606	2.634	2.634	2.861	2.493	2.323	2.181
165	1.699	1.445	1.246	1.813	2.181	1.699	1.728	1.898	1.898
170	0.736	0.482	0.368	0.057	0.113	0.453	0.850	1.105	0.991
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



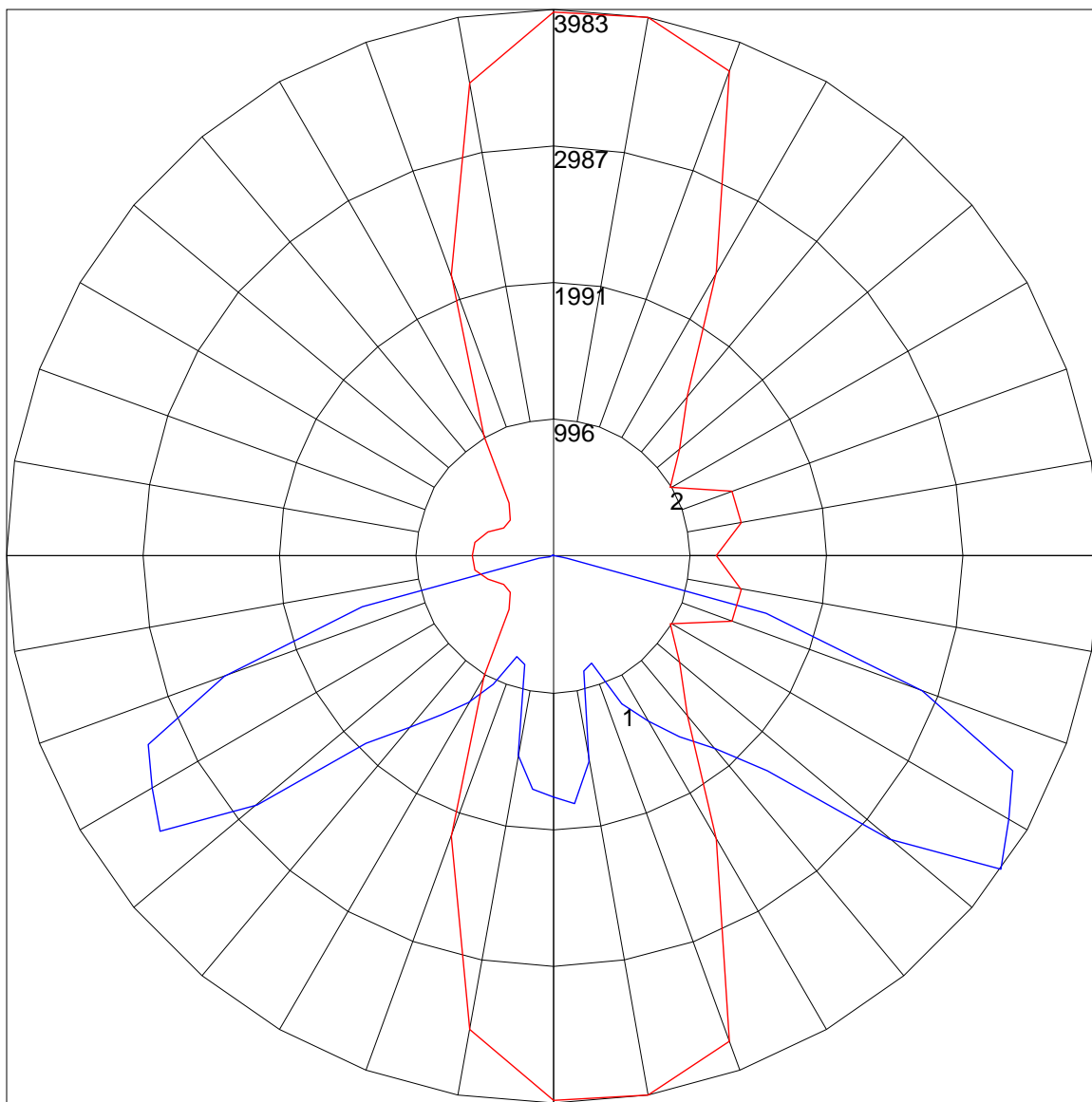
FLUX DISTRIBUTION

	Lumens	Percent Of Lamp
Downward Street Side	3630.8	27.1
Downward House Side	2365.2	17.6
Downward Total	5996.0	44.7
Upward Street Side	6.9	0.1
Upward House Side	3.3	0.0
Upward Total	10.2	0.1
Total Flux	6006.2	44.8

IES ROAD REPORT

PHOTOMETRIC FILENAME : NILAND FR T2 D SHORT CUTOFF AP LED150.IES

POLAR GRAPH

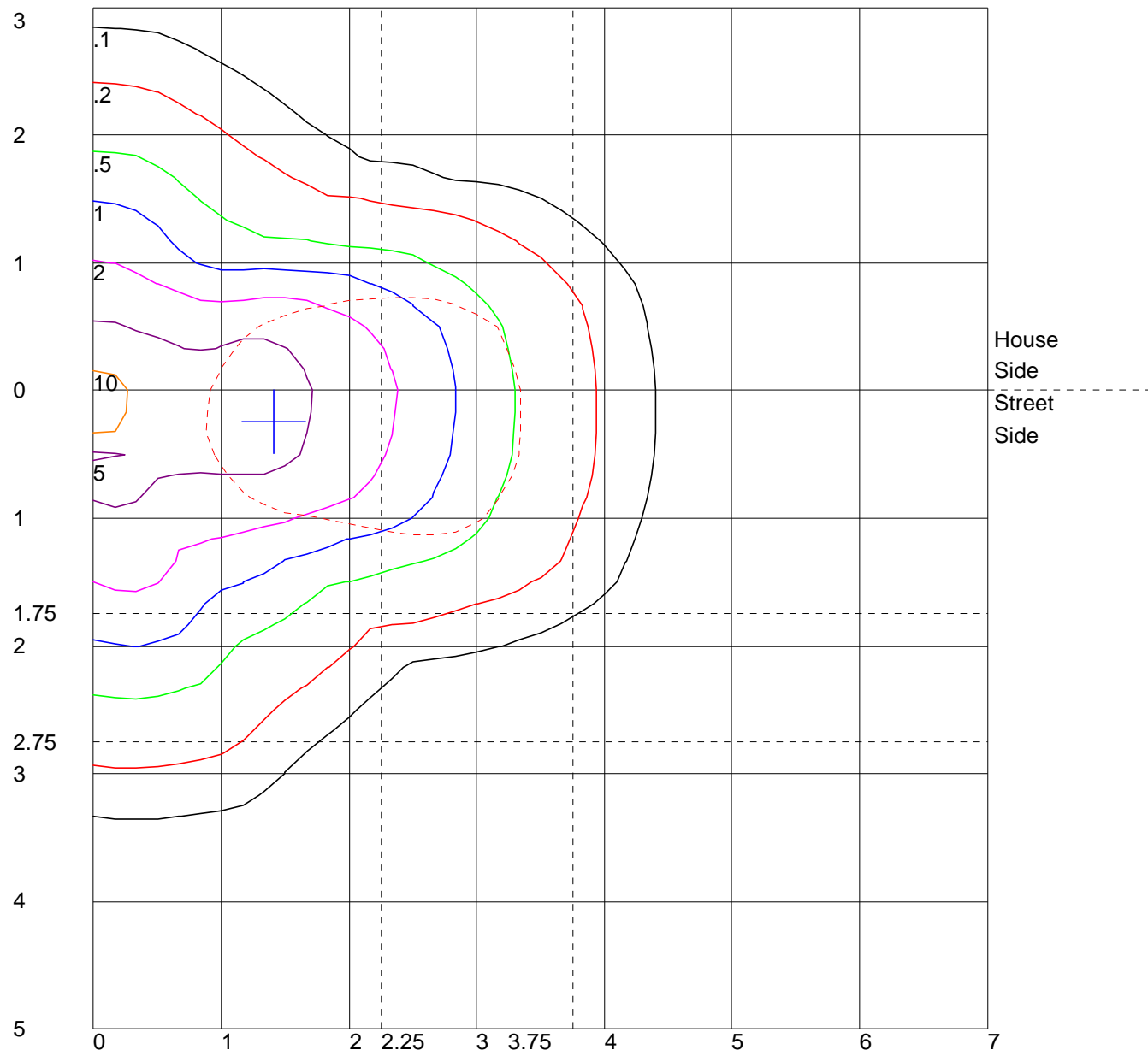


Maximum Candela = 3982.666 Located At Horizontal Angle = 80, Vertical Angle = 55

1 - Vertical Plane Through Horizontal Angles (80 - 260) (Through Max. Cd.)

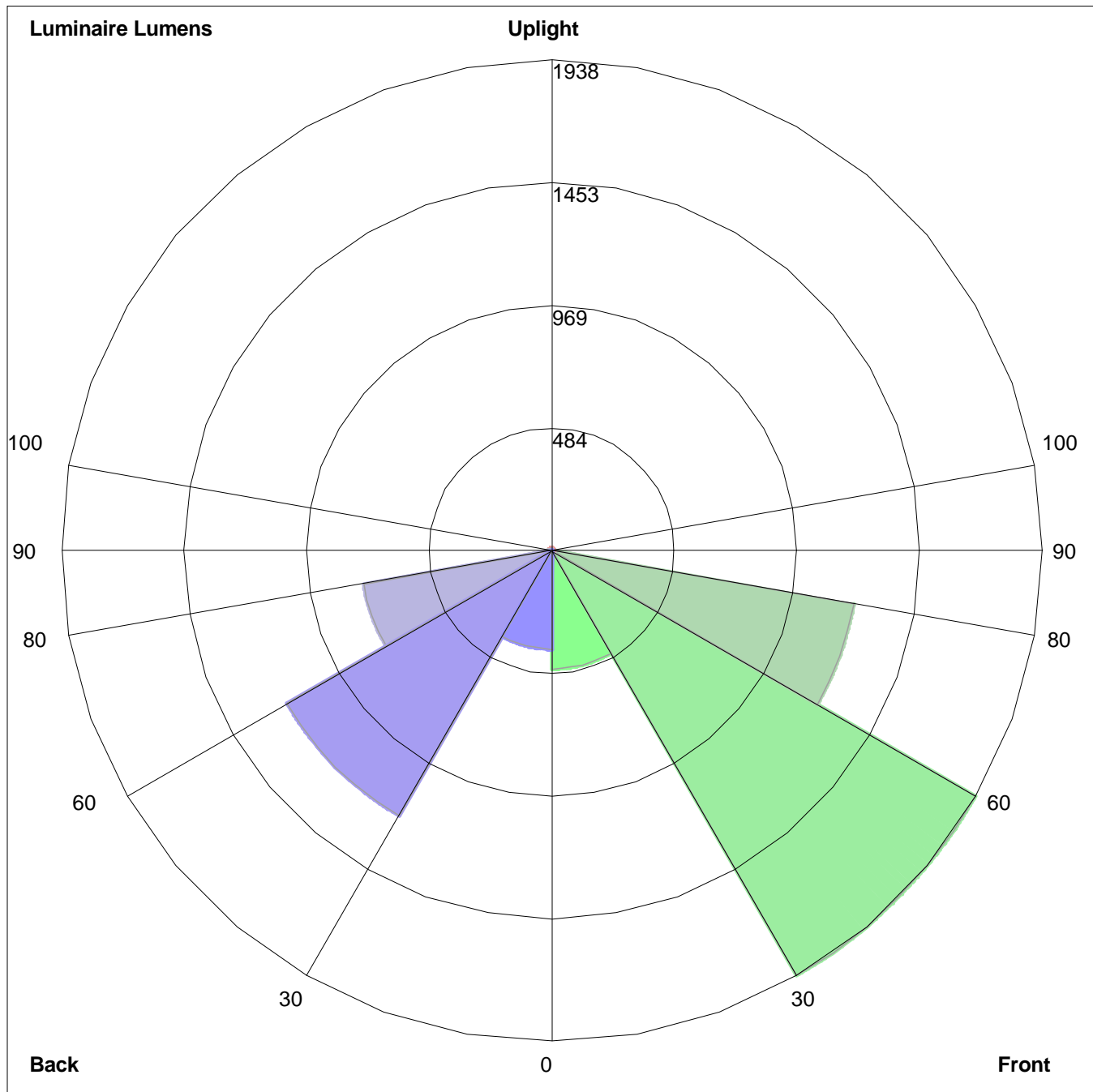
2 - Horizontal Cone Through Vertical Angle (55) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



Distance In Units Of Mounting Height
 Values Based On 10 Foot Mounting Height
 1/2 Maximum Candela Trace Shown As Dashed Curve
 (+) = Maximum Candela Point

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
 Front: Low=466.9, Medium=1937.5, High=1212.9, Very High=13.4
 Back: Low=388.9, Medium=1207.3, High=755.8, Very High=13.2
 Uplight: Low=0.5, High=9.7

BUG Rating : B2-U1-G2