



OUTDOOR LIGHTING SPECIALISTS SINCE 1972

## IES ROAD REPORT

PHOTOMETRIC FILENAME : NILAND FR T2 D SHORT CUTOFF AP LED50.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

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

[ISSUE DATE]

[TEST] 1

[TEST DATE] Tue Aug 03 23:04:48 2010

[MANUFACTURER]

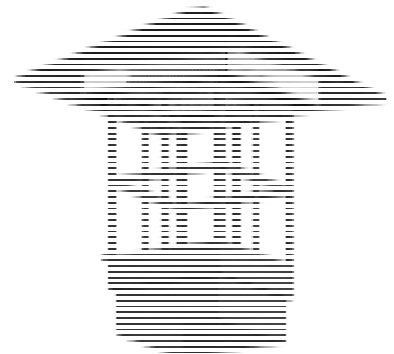
[LUMINAIRE] Niland Fr T2 D Short Cutoff AP

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

[LAMP CATEGORY] 3535 XPG, FRNRDLT, FRNRDRT

### CHARACTERISTICS

IES Classification	Type II
Longitudinal Classification	Short
Cutoff Classification (deprecated)	Cutoff
Lumens Per Lamp	107.9 (54 lamps)
Total Lamp Lumens	5826.6
Luminaire Lumens	2609
Total Luminaire Efficiency	45 %
Downward Total Efficiency	45 %
Upward Waste Light Ratio	0.00
Maximum Candela	1729.937
Maximum Candela Angle	80H 55V
Maximum Candela At 90 Degrees Vertical	1.095 (0.0% Lamp Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	56.864 (1.0% Lamp Lumens)
Total Luminaire Watts	53.12
Ballast Factor	1.00



**IES ROAD REPORT****PHOTOMETRIC FILENAME : NILAND FR T2 D SHORT CUTOFF AP LED50.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	202.8	3.5	7.8
FM - Front-Medium (30-60)	841.6	14.4	32.3
FH - Front-High (60-80)	526.9	9.0	20.2
FVH - Front-Very High (80-90)	5.8	0.1	0.2
BL - Back-Low (0-30)	168.9	2.9	6.5
BM - Back-Medium (30-60)	524.4	9.0	20.1
BH - Back-High (60-80)	328.3	5.6	12.6
BVH - Back-Very High (80-90)	5.7	0.1	0.2
UL - Uplight-Low (90-100)	0.2	0.0	0.0
UH - Uplight-High (100-180)	4.2	0.1	0.2
Total	2608.8	44.7	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	762.897	762.897	762.897	762.897	762.897	762.897	762.897	762.897	762.897	762.897
5	743.692	779.309	786.359	770.168	768.249	768.175	774.117	800.162	788.327	754.383
10	731.696	739.841	747.420	750.668	743.630	738.352	693.643	673.897	659.527	635.659
15	695.156	726.591	723.970	730.601	682.558	544.408	444.778	399.774	378.957	368.549
20	403.255	445.319	512.088	544.235	412.274	298.028	293.131	341.285	359.531	364.083
25	208.991	214.294	198.841	220.580	278.318	356.443	396.599	457.573	516.123	510.771
30	380.372	426.225	353.859	280.312	439.845	545.650	466.198	546.598	600.755	607.165
35	571.942	647.581	623.528	457.696	555.800	573.160	546.548	646.424	697.002	699.302
40	510.808	580.431	605.455	482.253	500.252	585.451	631.390	738.377	795.647	795.094
45	422.116	502.934	537.592	410.293	502.245	607.768	750.151	931.755	959.659	942.004
50	512.469	577.478	529.927	407.623	523.997	676.197	870.400	1289.047	1390.989	1392.367
55	517.403	603.622	600.632	430.482	523.948	660.536	1035.211	1631.353	1729.937	1721.780
60	490.890	568.300	553.426	403.969	483.053	603.807	987.623	1609.417	1666.823	1670.169
65	428.686	487.912	467.662	344.103	405.212	440.017	766.231	1398.027	1603.499	1652.428
70	298.926	326.066	339.870	257.822	256.468	263.666	544.605	1101.377	1242.874	1251.313
75	124.396	139.528	159.779	124.150	97.993	106.101	300.870	631.267	698.614	674.131
80	6.324	7.640	14.358	15.219	12.229	18.737	46.665	56.864	44.967	39.062
85	1.993	1.870	1.919	2.042	3.137	5.180	8.108	14.751	21.912	20.460
90	0.221	0.234	0.246	0.172	0.185	0.320	0.615	1.058	1.095	0.701
95	0.148	0.135	0.123	0.074	0.049	0.062	0.098	0.197	0.172	0.062
100	0.098	0.123	0.111	0.086	0.049	0.074	0.098	0.111	0.111	0.086
105	0.123	0.123	0.111	0.111	0.074	0.111	0.123	0.123	0.111	0.086
110	0.135	0.135	0.172	0.123	0.135	0.209	0.209	0.197	0.172	0.148
115	0.283	0.320	0.332	0.357	0.381	0.418	0.443	0.344	0.295	0.246
120	0.541	0.627	0.689	0.800	0.861	0.874	0.861	0.701	0.615	0.517
125	1.058	1.206	1.341	1.427	1.562	1.599	1.587	1.366	1.230	0.935
130	1.390	1.513	1.686	1.882	2.153	2.325	2.165	1.956	1.686	1.403
135	1.538	1.538	1.686	2.030	2.534	2.645	2.510	2.325	2.030	1.698
140	1.464	1.612	1.870	2.067	2.485	2.694	2.731	2.473	2.227	1.993
145	1.562	1.686	1.907	2.288	2.584	2.707	2.682	2.399	2.251	1.845
150	1.464	1.587	1.845	2.264	2.522	2.596	2.338	2.079	1.956	1.747
155	1.304	1.378	1.612	1.870	2.153	2.165	2.079	1.907	1.796	1.587
160	1.033	1.107	1.169	1.230	1.378	1.452	1.587	1.550	1.550	1.427
165	0.566	0.578	0.517	0.529	0.677	0.849	0.812	0.923	0.923	0.837
170	0.197	0.221	0.209	0.123	0.037	0.037	0.172	0.271	0.357	0.369
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

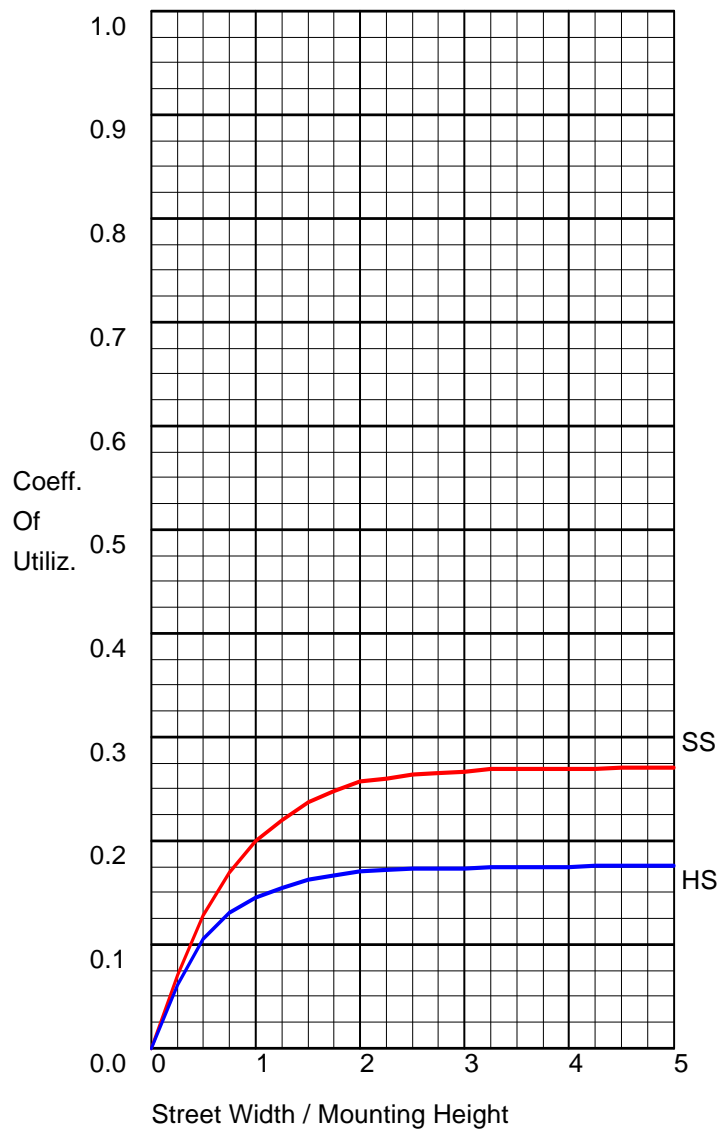
Vert. Angles	Horizontal Angles								
	<u>100</u>	<u>110</u>	<u>120</u>	<u>130</u>	<u>140</u>	<u>150</u>	<u>160</u>	<u>170</u>	<u>180</u>
0	762.897	762.897	762.897	762.897	762.897	762.897	762.897	762.897	762.897
5	739.459	724.425	705.860	658.444	618.952	577.478	537.038	507.499	480.481
10	639.596	593.423	449.244	362.200	361.314	398.851	424.577	421.464	413.984
15	354.511	314.169	312.139	405.162	409.038	417.256	426.754	427.357	396.796
20	338.788	267.381	333.350	391.051	380.729	375.980	414.390	433.693	415.017
25	448.678	311.204	270.309	342.356	376.127	371.329	352.087	347.486	327.001
30	536.116	360.699	338.812	390.534	343.487	323.729	313.111	325.574	311.537
35	610.143	442.034	418.487	401.225	345.702	300.132	298.089	323.778	319.029
40	706.746	485.526	403.871	363.406	317.073	268.292	254.795	268.574	272.721
45	834.746	571.302	399.786	300.181	239.626	223.570	227.433	249.222	253.995
50	1223.127	769.934	415.263	246.847	191.558	197.537	220.630	236.870	247.684
55	1520.946	945.424	439.980	220.531	177.557	178.320	218.181	250.686	254.660

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**CANDELA TABULATION - (Cont.)**

<b>60</b>	1464.820	933.096	409.259	203.147	162.301	163.814	191.459	225.120	220.421
<b>65</b>	1416.063	820.093	320.050	166.435	135.198	135.050	153.308	178.553	178.947
<b>70</b>	1109.669	629.889	235.246	115.131	97.477	101.770	109.607	125.208	126.106
<b>75</b>	625.718	351.817	125.909	61.823	55.068	60.703	65.267	69.081	69.709
<b>80</b>	44.094	39.813	26.513	18.910	17.077	20.706	21.961	21.752	19.020
<b>85</b>	11.774	6.939	6.225	7.123	5.795	5.598	5.819	5.463	4.515
<b>90</b>	0.874	0.627	0.320	0.258	0.246	0.295	0.443	0.640	0.443
<b>95</b>	0.098	0.074	0.037	0.049	0.062	0.086	0.148	0.209	0.160
<b>100</b>	0.049	0.037	0.037	0.037	0.049	0.074	0.123	0.160	0.148
<b>105</b>	0.062	0.049	0.049	0.062	0.074	0.086	0.111	0.123	0.160
<b>110</b>	0.098	0.062	0.074	0.098	0.098	0.098	0.111	0.123	0.148
<b>115</b>	0.172	0.123	0.123	0.172	0.185	0.197	0.160	0.160	0.172
<b>120</b>	0.357	0.234	0.234	0.283	0.344	0.344	0.271	0.258	0.234
<b>125</b>	0.615	0.431	0.369	0.381	0.455	0.455	0.406	0.369	0.357
<b>130</b>	0.972	0.652	0.492	0.492	0.578	0.603	0.541	0.443	0.418
<b>135</b>	1.230	0.800	0.615	0.591	0.615	0.664	0.627	0.517	0.554
<b>140</b>	1.403	1.120	0.849	0.738	0.750	0.726	0.664	0.615	0.480
<b>145</b>	1.538	1.243	1.144	0.984	0.910	0.800	0.640	0.578	0.554
<b>150</b>	1.526	1.304	1.267	1.316	1.107	0.923	0.714	0.591	0.566
<b>155</b>	1.415	1.316	1.243	1.366	1.366	1.058	0.886	0.800	0.652
<b>160</b>	1.230	1.120	1.132	1.144	1.144	1.243	1.083	1.009	0.947
<b>165</b>	0.738	0.627	0.541	0.787	0.947	0.738	0.750	0.824	0.824
<b>170</b>	0.320	0.209	0.160	0.025	0.049	0.197	0.369	0.480	0.431
<b>175</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>180</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

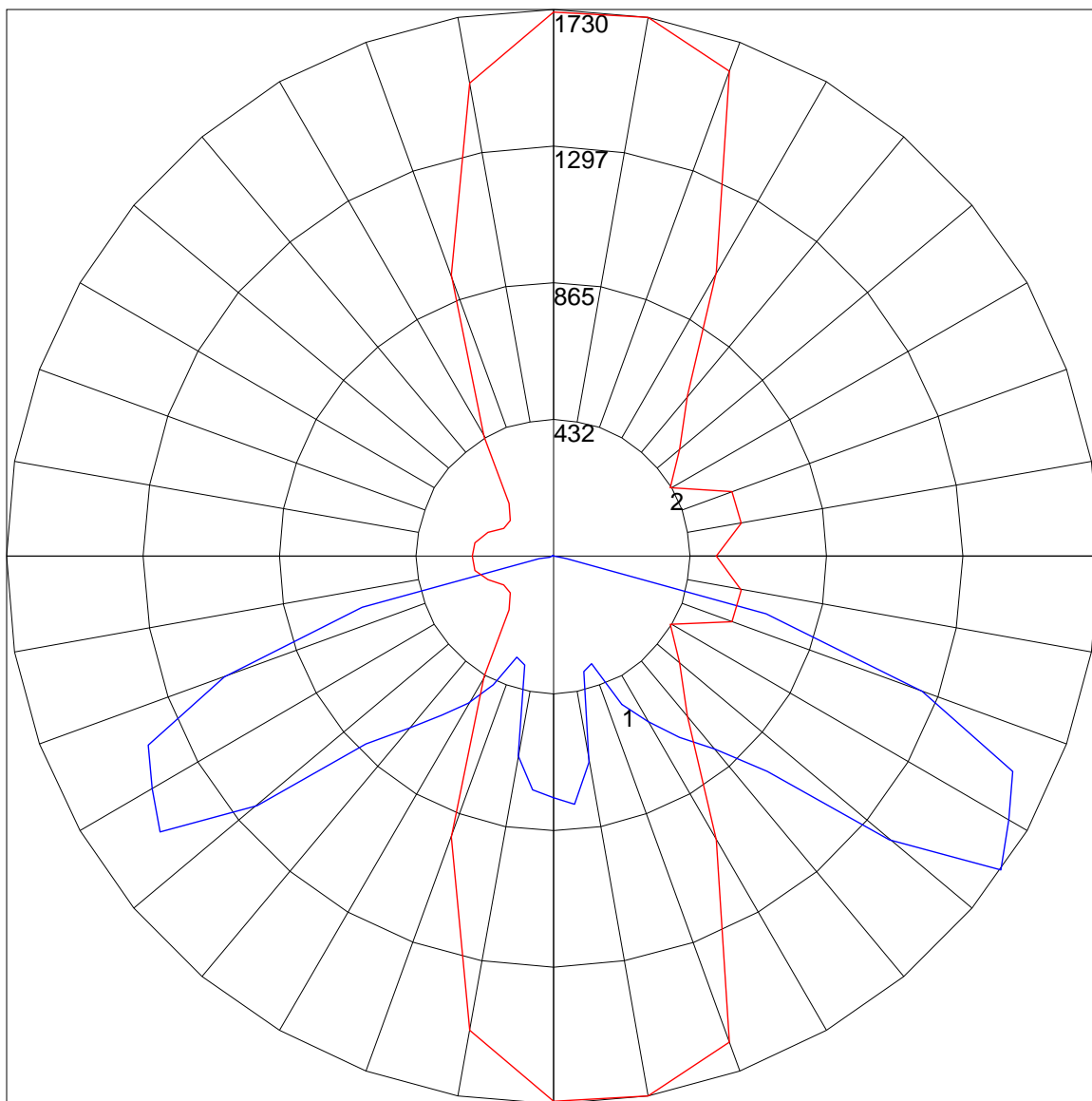
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

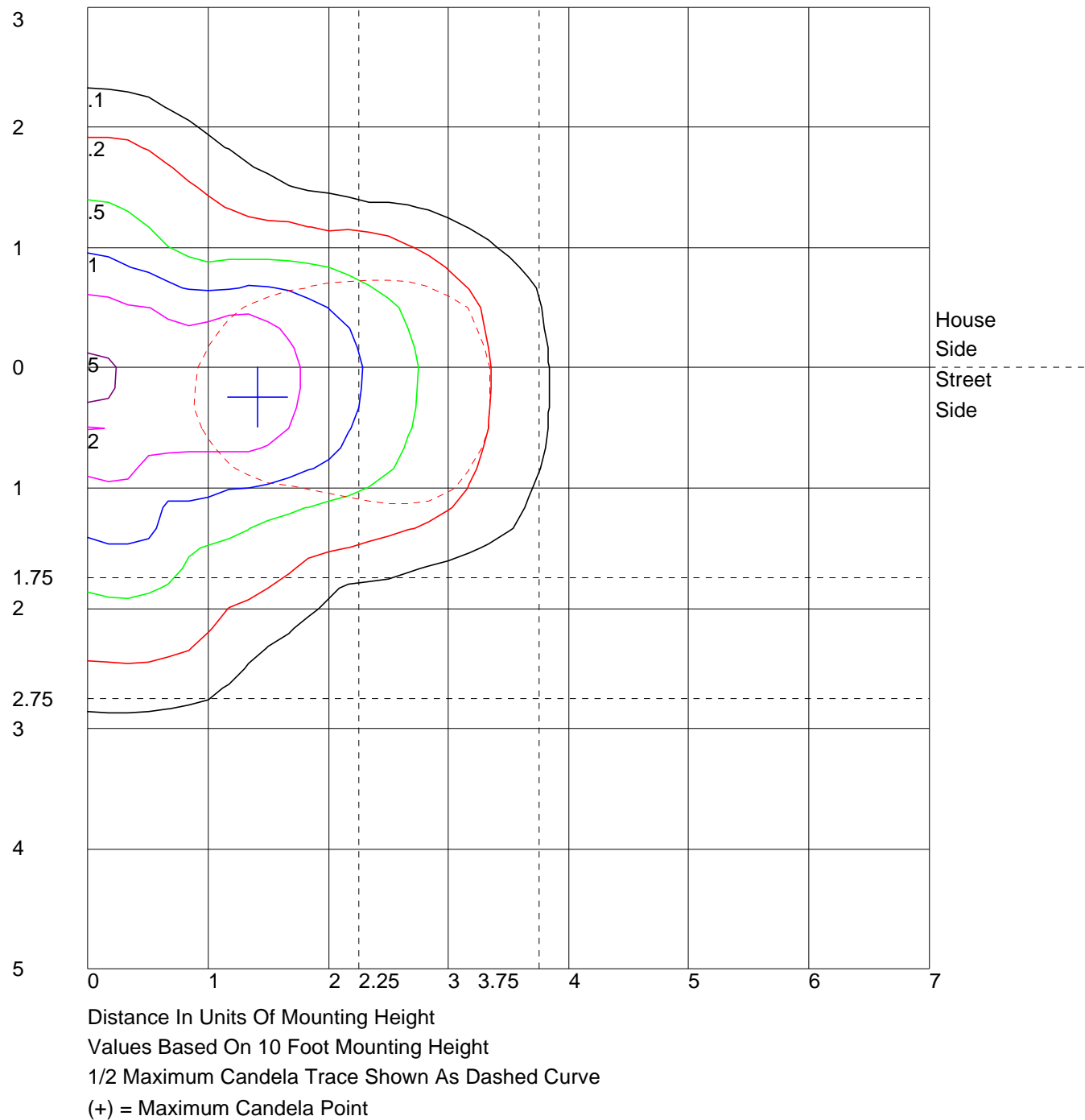
	Lumens	Percent Of Lamp
Downward Street Side	1577.1	27.1
Downward House Side	1027.4	17.6
Downward Total	2604.5	44.7
Upward Street Side	3.0	0.1
Upward House Side	1.4	0.0
Upward Total	4.4	0.1
Total Flux	2608.9	44.8

POLAR GRAPH

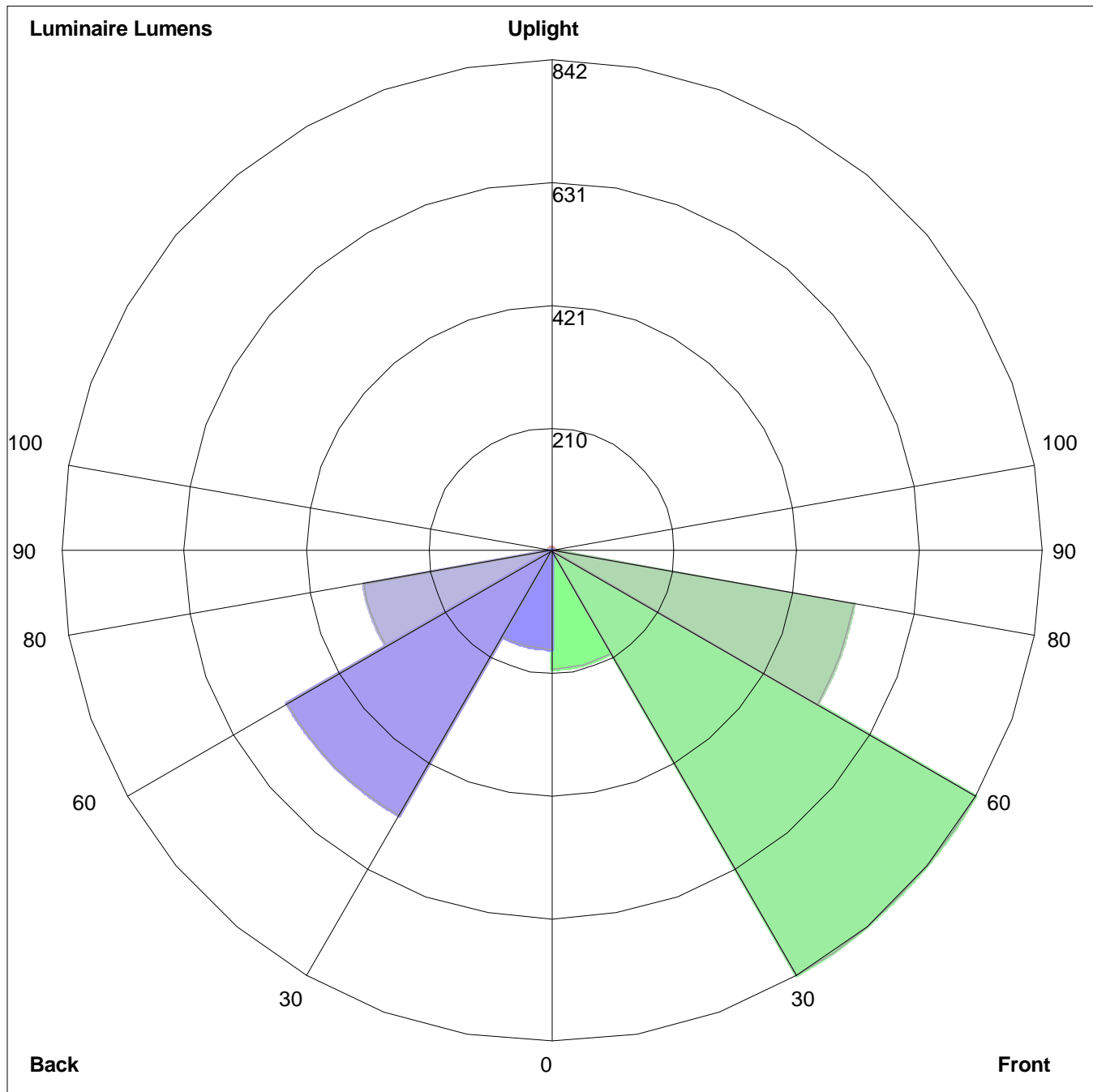


Maximum Candela = 1729.937 Located At Horizontal Angle = 80, Vertical Angle = 55  
# 1 - Vertical Plane Through Horizontal Angles (80 - 260) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (55) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=202.8, Medium=841.6, High=526.9, Very High=5.8  
Back: Low=168.9, Medium=524.4, High=328.3, Very High=5.7  
Uplight: Low=0.2, High=4.2

BUG Rating : B1-U1-G1