



OUTDOOR LIGHTING SPECIALISTS SINCE 1972

## IES ROAD REPORT

PHOTOMETRIC FILENAME : NILAND FR T2 D SHORT CUTOFF AP LED75.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]

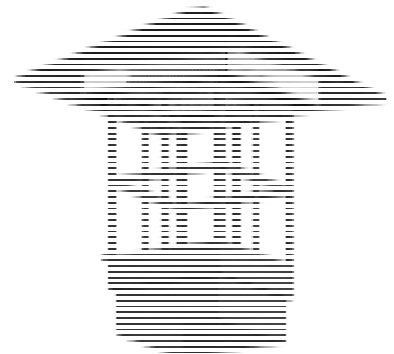
[LUMINAIRE] Niland Fr T2 D Short Cutoff AP

[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	149.9 (54 lamps)
Total Lamp Lumens	8094.6
Luminaire Lumens	3624
Total Luminaire Efficiency	45 %
Downward Total Efficiency	45 %
Upward Waste Light Ratio	0.00
Maximum Candela	2403.379
Maximum Candela Angle	80H 55V
Maximum Candela At 90 Degrees Vertical	1.521 (0.0% Lamp Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	79.001 (1.0% Lamp Lumens)
Total Luminaire Watts	78.91
Ballast Factor	1.00



**IES ROAD REPORT****PHOTOMETRIC FILENAME : NILAND FR T2 D SHORT CUTOFF AP LED75.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	281.8	3.5	7.8
FM - Front-Medium (30-60)	1169.2	14.4	32.3
FH - Front-High (60-80)	732.0	9.0	20.2
FVH - Front-Very High (80-90)	8.1	0.1	0.2
BL - Back-Low (0-30)	234.7	2.9	6.5
BM - Back-Medium (30-60)	728.6	9.0	20.1
BH - Back-High (60-80)	456.1	5.6	12.6
BVH - Back-Very High (80-90)	8.0	0.1	0.2
UL - Uplight-Low (90-100)	0.3	0.0	0.0
UH - Uplight-High (100-180)	5.8	0.1	0.2
Total	3624.6	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	1059.883	1059.883	1059.883	1059.883	1059.883	1059.883	1059.883	1059.883	1059.883	1059.883
5	1033.201	1082.684	1092.478	1069.984	1067.318	1067.215	1075.471	1111.655	1095.213	1048.055
10	1016.536	1027.851	1038.380	1042.893	1033.116	1025.783	963.669	936.236	916.272	883.113
15	965.772	1009.443	1005.802	1015.015	948.269	756.339	617.924	555.400	526.480	512.020
20	560.238	618.676	711.437	756.099	572.766	414.046	407.244	474.143	499.491	505.815
25	290.349	297.715	276.247	306.450	386.664	495.201	550.991	635.701	717.043	709.608
30	528.446	592.149	491.612	389.433	611.070	758.065	647.682	759.381	834.622	843.527
35	794.591	899.676	866.260	635.871	772.166	796.284	759.313	898.069	968.336	971.532
40	709.659	806.385	841.151	669.988	694.994	813.359	877.182	1025.817	1105.383	1104.613
45	586.440	698.720	746.869	570.014	697.763	844.365	1042.175	1294.476	1333.241	1308.714
50	711.967	802.283	736.221	566.305	727.982	939.432	1209.236	1790.856	1932.484	1934.398
55	718.821	838.604	834.451	598.063	727.914	917.674	1438.206	2266.418	2403.379	2392.047
60	681.987	789.532	768.867	561.229	671.099	838.861	1372.092	2235.942	2315.695	2320.345
65	595.568	677.850	649.716	478.057	562.955	611.310	1064.515	1942.261	2227.721	2295.697
70	415.294	453.000	472.178	358.188	356.308	366.307	756.612	1530.129	1726.708	1738.434
75	172.821	193.845	221.979	172.479	136.141	147.405	417.995	877.011	970.575	936.561
80	8.785	10.614	19.947	21.143	16.990	26.032	64.831	79.001	62.473	54.268
85	2.769	2.598	2.666	2.837	4.359	7.196	11.264	20.494	30.442	28.425
90	0.308	0.325	0.342	0.239	0.256	0.444	0.855	1.470	1.521	0.974
95	0.205	0.188	0.171	0.103	0.068	0.085	0.137	0.273	0.239	0.085
100	0.137	0.171	0.154	0.120	0.068	0.103	0.137	0.154	0.154	0.120
105	0.171	0.171	0.154	0.154	0.103	0.154	0.171	0.171	0.154	0.120
110	0.188	0.188	0.239	0.171	0.188	0.291	0.291	0.273	0.239	0.205
115	0.393	0.444	0.461	0.496	0.530	0.581	0.615	0.479	0.410	0.342
120	0.752	0.872	0.957	1.111	1.196	1.214	1.196	0.974	0.855	0.718
125	1.470	1.675	1.863	1.983	2.171	2.222	2.205	1.897	1.709	1.299
130	1.931	2.102	2.342	2.615	2.991	3.230	3.008	2.718	2.342	1.949
135	2.137	2.137	2.342	2.820	3.521	3.675	3.487	3.230	2.820	2.359
140	2.034	2.239	2.598	2.872	3.453	3.743	3.795	3.436	3.094	2.769
145	2.171	2.342	2.649	3.179	3.589	3.760	3.726	3.333	3.128	2.564
150	2.034	2.205	2.564	3.145	3.504	3.606	3.248	2.889	2.718	2.427
155	1.812	1.914	2.239	2.598	2.991	3.008	2.889	2.649	2.495	2.205
160	1.436	1.538	1.624	1.709	1.914	2.017	2.205	2.154	2.154	1.983
165	0.786	0.803	0.718	0.735	0.940	1.179	1.128	1.282	1.282	1.162
170	0.273	0.308	0.291	0.171	0.051	0.051	0.239	0.376	0.496	0.513
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

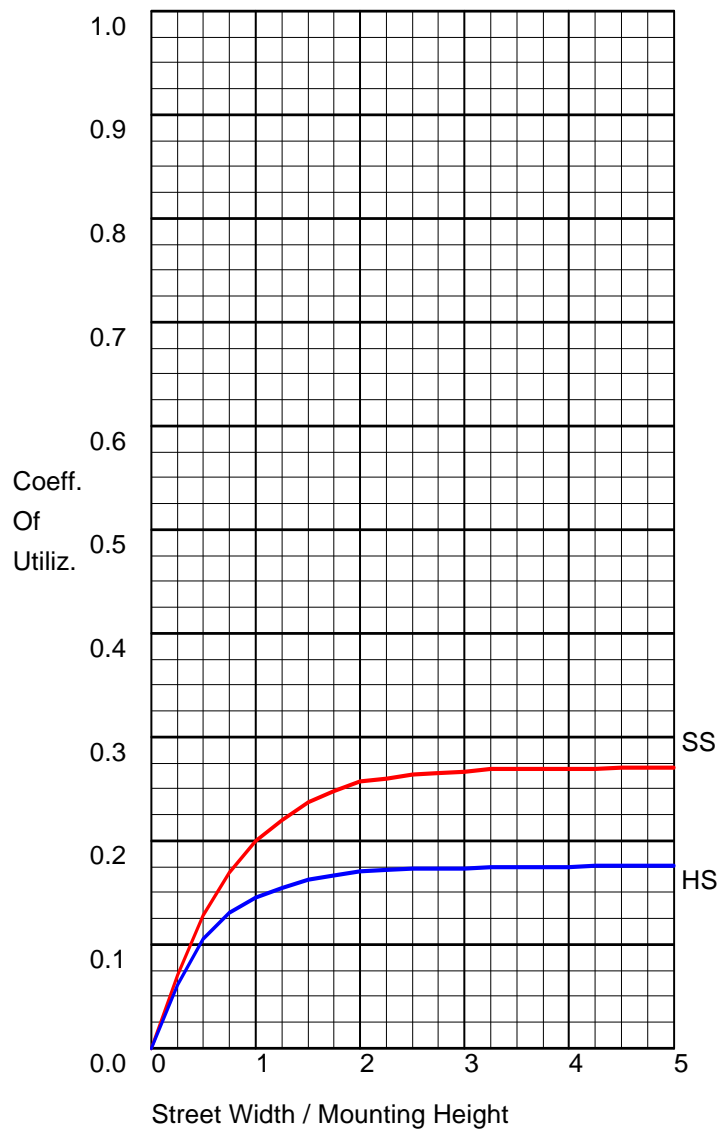
Vert. Angles	Horizontal Angles								
	<u>100</u>	<u>110</u>	<u>120</u>	<u>130</u>	<u>140</u>	<u>150</u>	<u>160</u>	<u>170</u>	<u>180</u>
0	1059.883	1059.883	1059.883	1059.883	1059.883	1059.883	1059.883	1059.883	1059.883
5	1027.322	1006.435	980.642	914.768	859.902	802.283	746.100	705.061	667.527
10	888.583	824.435	624.129	503.200	501.970	554.119	589.859	585.534	575.142
15	492.517	436.472	433.651	562.887	568.271	579.689	592.884	593.722	551.264
20	470.673	371.469	463.119	543.282	528.941	522.344	575.706	602.524	576.578
25	623.343	432.352	375.537	475.630	522.549	515.883	489.150	482.758	454.299
30	744.818	501.115	470.708	542.564	477.203	449.752	435.002	452.316	432.814
35	847.663	614.113	581.398	557.417	480.279	416.969	414.132	449.821	443.223
40	981.873	674.534	561.092	504.875	440.505	372.734	353.984	373.127	378.887
45	1159.702	793.703	555.418	417.037	332.909	310.603	315.970	346.241	352.873
50	1699.275	1069.659	576.920	342.942	266.129	274.436	306.518	329.080	344.104
55	2113.031	1313.465	611.258	306.381	246.678	247.737	303.117	348.275	353.796

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**CANDELA TABULATION - (Cont.)**

<b>60</b>	2035.055	1296.339	568.579	282.230	225.483	227.585	265.992	312.757	306.227
<b>65</b>	1967.318	1139.345	444.642	231.226	187.828	187.623	212.988	248.062	248.609
<b>70</b>	1541.649	875.097	326.824	159.951	135.423	141.388	152.276	173.949	175.197
<b>75</b>	869.302	488.774	174.924	85.889	76.506	84.334	90.675	95.974	96.846
<b>80</b>	61.259	55.311	36.834	26.271	23.724	28.767	30.510	30.219	26.425
<b>85</b>	16.357	9.640	8.649	9.896	8.051	7.777	8.085	7.589	6.273
<b>90</b>	1.214	0.872	0.444	0.359	0.342	0.410	0.615	0.889	0.615
<b>95</b>	0.137	0.103	0.051	0.068	0.085	0.120	0.205	0.291	0.222
<b>100</b>	0.068	0.051	0.051	0.051	0.068	0.103	0.171	0.222	0.205
<b>105</b>	0.085	0.068	0.068	0.085	0.103	0.120	0.154	0.171	0.222
<b>110</b>	0.137	0.085	0.103	0.137	0.137	0.137	0.154	0.171	0.205
<b>115</b>	0.239	0.171	0.171	0.239	0.256	0.273	0.222	0.222	0.239
<b>120</b>	0.496	0.325	0.325	0.393	0.479	0.479	0.376	0.359	0.325
<b>125</b>	0.855	0.598	0.513	0.530	0.632	0.632	0.564	0.513	0.496
<b>130</b>	1.350	0.906	0.684	0.684	0.803	0.838	0.752	0.615	0.581
<b>135</b>	1.709	1.111	0.855	0.820	0.855	0.923	0.872	0.718	0.769
<b>140</b>	1.949	1.555	1.179	1.026	1.043	1.008	0.923	0.855	0.667
<b>145</b>	2.137	1.726	1.590	1.367	1.265	1.111	0.889	0.803	0.769
<b>150</b>	2.119	1.812	1.761	1.829	1.538	1.282	0.991	0.820	0.786
<b>155</b>	1.966	1.829	1.726	1.897	1.897	1.470	1.231	1.111	0.906
<b>160</b>	1.709	1.555	1.573	1.590	1.590	1.726	1.504	1.402	1.316
<b>165</b>	1.026	0.872	0.752	1.094	1.316	1.026	1.043	1.145	1.145
<b>170</b>	0.444	0.291	0.222	0.034	0.068	0.273	0.513	0.667	0.598
<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

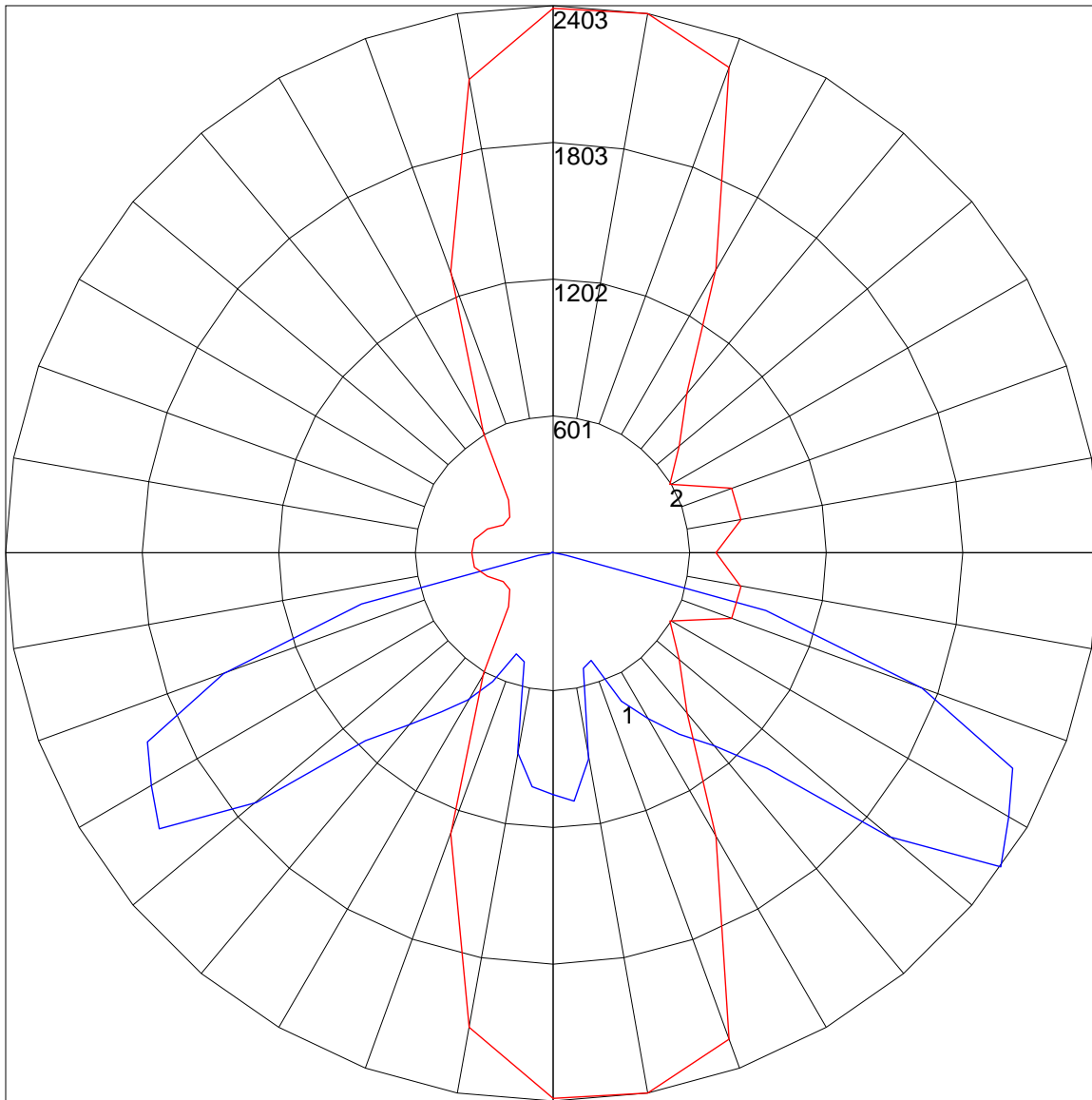
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

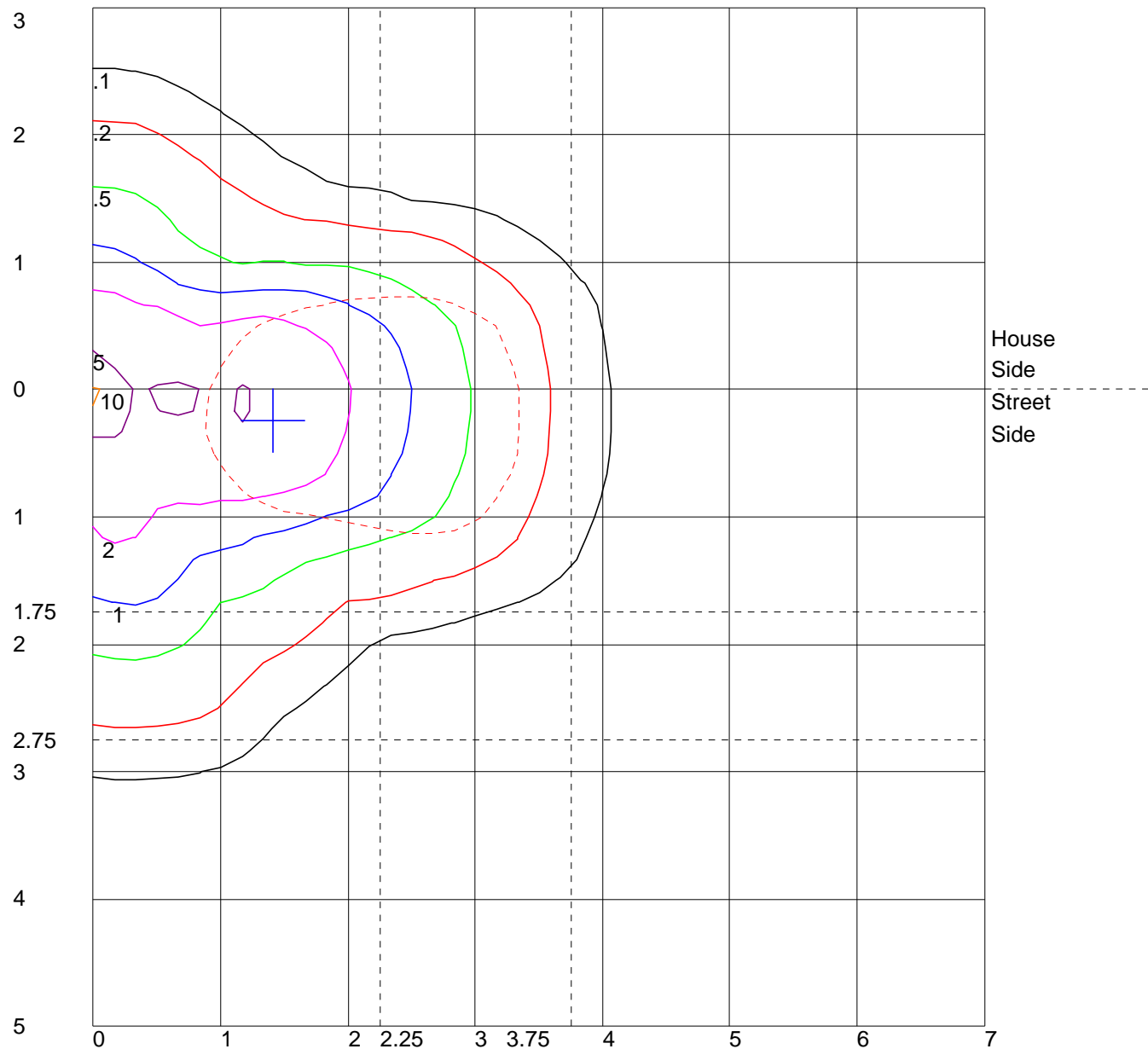
	Lumens	Percent Of Lamp
Downward Street Side	2191.0	27.1
Downward House Side	1427.3	17.6
Downward Total	3618.3	44.7
Upward Street Side	4.1	0.1
Upward House Side	2.0	0.0
Upward Total	6.1	0.1
Total Flux	3624.4	44.8

POLAR GRAPH

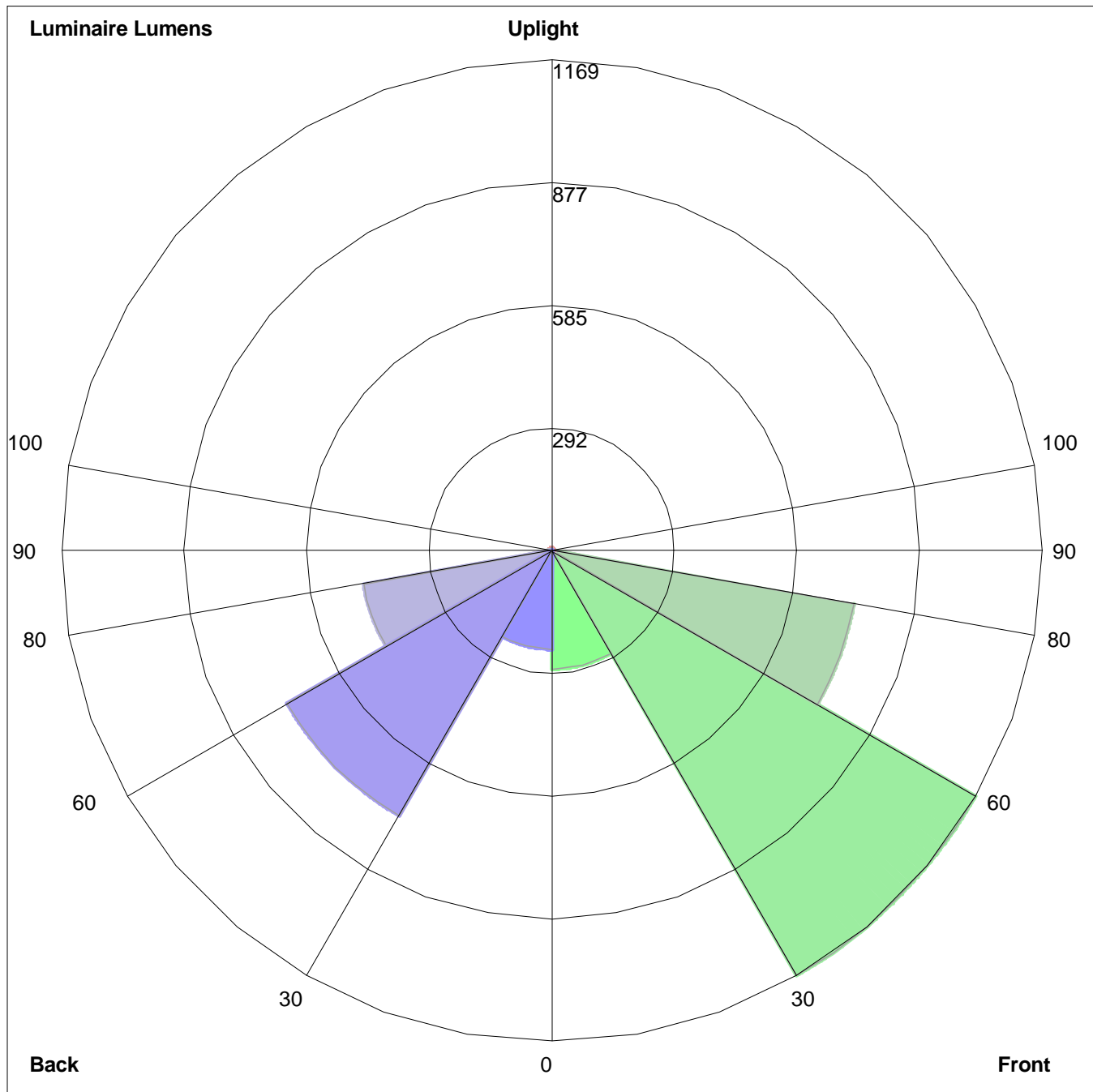


Maximum Candela = 2403.379 Located At Horizontal Angle = 80, Vertical Angle = 55  
# 1 - Vertical Plane Through Horizontal Angles (80 - 260) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (55) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=281.8, Medium=1169.2, High=732.0, Very High=8.1  
Back: Low=234.7, Medium=728.6, High=456.1, Very High=8.0  
Uplight: Low=0.3, High=5.8

BUG Rating : B1-U1-G1