



OUTDOOR LIGHTING SPECIALISTS SINCE 1972

## IES ROAD REPORT

PHOTOMETRIC FILENAME : NILAND FR T3 G SHORT CUTOFF AP LED150.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

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

[ISSUEDATE]

[TEST] 1

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

[MANUFAC]

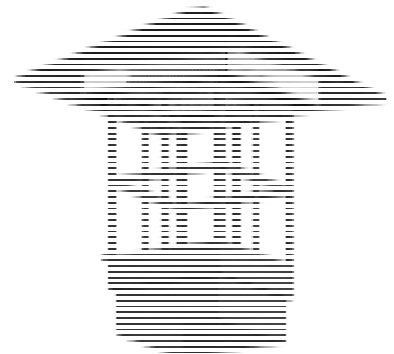
[LUMINAIRE] Niland Fr T3 G Short Cutoff AP

[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	248.4 (54 lamps)
Total Lamp Lumens	13413.6
Luminaire Lumens	6152
Total Luminaire Efficiency	46 %
Downward Total Efficiency	46 %
Upward Waste Light Ratio	0.00
Maximum Candela	4102.278
Maximum Candela Angle	70H 60V
Maximum Candela At 90 Degrees Vertical	2.521 (0.0% Lamp Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	440.438 (3.3% Lamp Lumens)
Total Luminaire Watts	153.66
Ballast Factor	1.00



**IES ROAD REPORT****PHOTOMETRIC FILENAME : NILAND FR T3 G SHORT CUTOFF AP LED150.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	456.2	3.4	7.4
FM - Front-Medium (30-60)	2099.5	15.7	34.1
FH - Front-High (60-80)	1736.1	12.9	28.2
FVH - Front-Very High (80-90)	42.5	0.3	0.7
BL - Back-Low (0-30)	360.7	2.7	5.9
BM - Back-Medium (30-60)	905.5	6.8	14.7
BH - Back-High (60-80)	520.9	3.9	8.5
BVH - Back-Very High (80-90)	20.2	0.2	0.3
UL - Uplight-Low (90-100)	0.5	0.0	0.0
UH - Uplight-High (100-180)	9.7	0.1	0.2
Total	6151.8	46.0	100.0
BUG Rating	B2-U1-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>
<b>0</b>	1646.219	1646.219	1646.219	1646.219	1646.219	1646.219	1646.219	1646.219	1646.219	1646.219
<b>5</b>	1666.443	1678.452	1716.718	1733.570	1755.437	1726.065	1685.958	1705.077	1698.732	1663.950
<b>10</b>	1615.969	1686.864	1722.411	1742.493	1664.290	1618.745	1623.758	1576.854	1558.415	1487.831
<b>15</b>	1601.042	1656.671	1658.597	1602.119	1585.861	1314.800	1032.523	867.904	785.736	726.142
<b>20</b>	1147.122	1225.183	1359.071	1384.902	984.344	615.282	549.032	660.742	740.814	743.562
<b>25</b>	448.907	465.392	495.868	572.796	535.040	702.973	829.044	1050.254	1191.279	1156.582
<b>30</b>	718.693	835.700	692.125	535.154	954.745	1270.048	1077.728	1258.407	1273.872	1222.690
<b>35</b>	1216.233	1549.861	1365.217	975.025	1491.995	1448.319	1177.174	1409.770	1469.109	1391.870
<b>40</b>	1162.587	1458.601	1560.029	1218.810	1482.846	1539.466	1478.088	1679.585	1743.342	1574.503
<b>45</b>	975.394	1233.312	1287.921	1030.201	1549.125	1933.680	1906.970	2103.765	2090.821	1854.486
<b>50</b>	914.894	1172.670	1158.367	992.360	1802.851	2401.394	2500.103	2761.137	2802.745	2392.613
<b>55</b>	1152.674	1424.301	1401.642	1108.177	1948.635	2933.630	3502.546	3674.728	3649.321	3038.542
<b>60</b>	1021.278	1308.852	1271.238	1055.494	1902.382	3076.071	3904.464	4102.278	4060.415	3249.471
<b>65</b>	964.857	1224.050	1176.777	899.825	1602.997	2791.330	3800.826	3898.600	3862.912	2953.853
<b>70</b>	776.871	982.305	952.904	701.387	1237.646	2274.899	3352.372	3344.866	3392.337	2525.000
<b>75</b>	474.200	582.087	614.178	448.624	709.658	1339.725	1847.121	1703.122	1823.754	1445.742
<b>80</b>	111.342	150.542	188.610	146.010	190.337	363.142	440.438	371.979	403.730	336.546
<b>85</b>	4.588	4.305	4.419	4.702	7.223	11.924	18.666	33.960	50.445	47.103
<b>90</b>	0.510	0.538	0.566	0.397	0.425	0.736	1.416	2.436	2.521	1.614
<b>95</b>	0.340	0.312	0.283	0.170	0.113	0.142	0.227	0.453	0.397	0.142
<b>100</b>	0.227	0.283	0.255	0.198	0.113	0.170	0.227	0.255	0.255	0.198
<b>105</b>	0.283	0.283	0.255	0.255	0.170	0.255	0.283	0.283	0.255	0.198
<b>110</b>	0.312	0.312	0.397	0.283	0.312	0.482	0.482	0.453	0.397	0.340
<b>115</b>	0.651	0.736	0.765	0.821	0.878	0.963	1.020	0.793	0.680	0.566
<b>120</b>	1.246	1.445	1.586	1.841	1.983	2.011	1.983	1.614	1.416	1.190
<b>125</b>	2.436	2.776	3.087	3.286	3.597	3.682	3.654	3.144	2.832	2.153
<b>130</b>	3.201	3.484	3.880	4.334	4.957	5.353	4.985	4.504	3.880	3.229
<b>135</b>	3.541	3.541	3.880	4.673	5.835	6.090	5.778	5.353	4.673	3.909
<b>140</b>	3.371	3.710	4.305	4.758	5.721	6.203	6.288	5.693	5.127	4.588
<b>145</b>	3.597	3.880	4.390	5.268	5.948	6.231	6.175	5.523	5.183	4.249
<b>150</b>	3.371	3.654	4.249	5.212	5.806	5.976	5.382	4.787	4.504	4.022
<b>155</b>	3.002	3.172	3.710	4.305	4.957	4.985	4.787	4.390	4.135	3.654
<b>160</b>	2.379	2.549	2.691	2.832	3.172	3.342	3.654	3.569	3.569	3.286
<b>165</b>	1.303	1.331	1.190	1.218	1.558	1.954	1.869	2.124	2.124	1.926
<b>170</b>	0.453	0.510	0.482	0.283	0.085	0.085	0.397	0.623	0.821	0.850
<b>175</b>	0.000	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	0.000

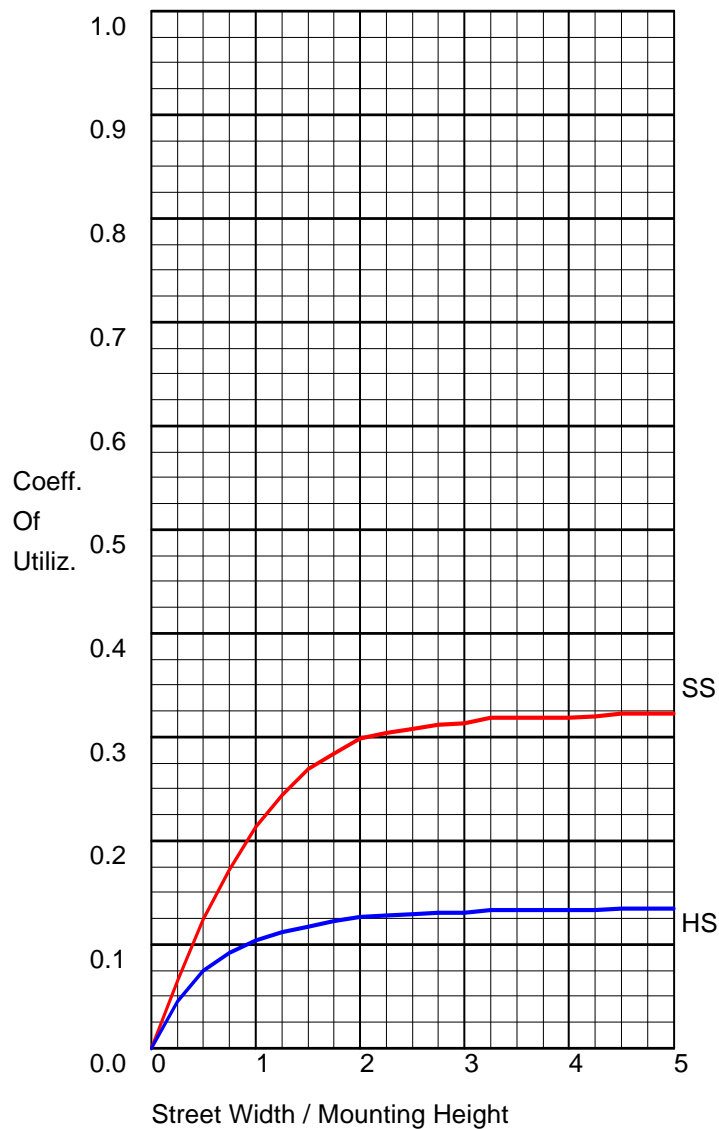
Vert. Angles	Horizontal Angles								
	<u>100</u>	<u>110</u>	<u>120</u>	<u>130</u>	<u>140</u>	<u>150</u>	<u>160</u>	<u>170</u>	<u>180</u>
<b>0</b>	1646.219	1646.219	1646.219	1646.219	1646.219	1646.219	1646.219	1646.219	1646.219
<b>5</b>	1629.366	1602.969	1539.749	1375.045	1243.622	1103.078	1026.830	971.032	975.903
<b>10</b>	1444.184	1270.586	891.725	721.950	776.559	807.291	865.865	836.351	873.144
<b>15</b>	704.701	602.367	691.757	831.649	892.376	915.262	954.462	936.731	905.971
<b>20</b>	666.634	566.508	745.289	889.912	890.365	862.183	903.847	902.261	899.202
<b>25</b>	991.057	628.255	650.716	800.011	838.475	809.160	772.877	700.962	692.069
<b>30</b>	964.007	639.216	729.428	826.919	764.493	689.774	672.015	641.029	666.124
<b>35</b>	1071.440	756.846	797.292	805.846	742.117	669.324	652.698	701.274	733.337
<b>40</b>	1141.231	750.643	771.857	760.046	659.836	631.455	655.219	690.199	700.056
<b>45</b>	1211.474	758.573	692.805	634.967	551.043	536.768	563.308	631.427	635.562
<b>50</b>	1420.307	763.502	624.034	531.330	466.213	470.235	487.314	583.644	595.229
<b>55</b>	1631.576	812.191	578.518	473.379	439.079	461.171	488.023	593.501	672.497

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**CANDELA TABULATION - (Cont.)**

<b>60</b>	1625.259	774.576	540.988	459.614	434.858	455.053	474.455	537.108	610.382
<b>65</b>	1368.956	669.438	493.291	427.381	392.769	392.939	410.726	450.833	481.281
<b>70</b>	1079.881	495.245	374.557	346.006	319.920	307.882	329.238	360.451	364.870
<b>75</b>	628.849	275.451	222.457	223.873	204.358	197.390	217.727	226.960	224.553
<b>80</b>	175.864	98.256	83.358	92.789	85.963	89.249	93.243	91.458	82.168
<b>85</b>	27.106	15.975	14.332	16.400	13.341	12.887	13.397	12.576	10.395
<b>90</b>	2.011	1.445	0.736	0.595	0.566	0.680	1.020	1.473	1.020
<b>95</b>	0.227	0.170	0.085	0.113	0.142	0.198	0.340	0.482	0.368
<b>100</b>	0.113	0.085	0.085	0.085	0.113	0.170	0.283	0.368	0.340
<b>105</b>	0.142	0.113	0.113	0.142	0.170	0.198	0.255	0.283	0.368
<b>110</b>	0.227	0.142	0.170	0.227	0.227	0.227	0.255	0.283	0.340
<b>115</b>	0.397	0.283	0.283	0.397	0.425	0.453	0.368	0.368	0.397
<b>120</b>	0.821	0.538	0.538	0.651	0.793	0.793	0.623	0.595	0.538
<b>125</b>	1.416	0.991	0.850	0.878	1.048	1.048	0.935	0.850	0.821
<b>130</b>	2.238	1.501	1.133	1.133	1.331	1.388	1.246	1.020	0.963
<b>135</b>	2.832	1.841	1.416	1.360	1.416	1.529	1.445	1.190	1.275
<b>140</b>	3.229	2.577	1.954	1.699	1.728	1.671	1.529	1.416	1.105
<b>145</b>	3.541	2.861	2.634	2.266	2.096	1.841	1.473	1.331	1.275
<b>150</b>	3.512	3.002	2.917	3.031	2.549	2.124	1.643	1.360	1.303
<b>155</b>	3.257	3.031	2.861	3.144	3.144	2.436	2.039	1.841	1.501
<b>160</b>	2.832	2.577	2.606	2.634	2.634	2.861	2.493	2.323	2.181
<b>165</b>	1.699	1.445	1.246	1.813	2.181	1.699	1.728	1.898	1.898
<b>170</b>	0.736	0.482	0.368	0.057	0.113	0.453	0.850	1.105	0.991
<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

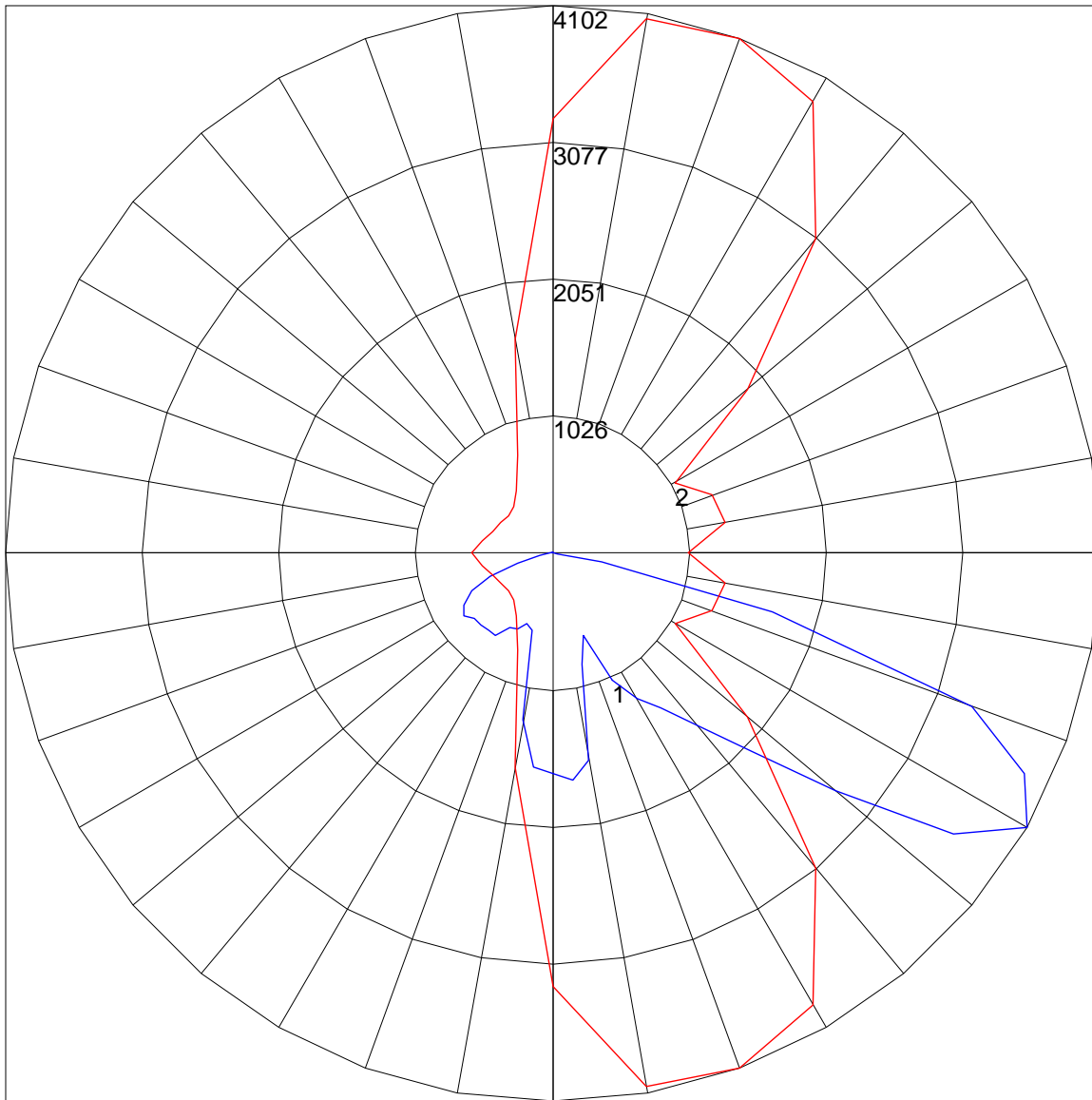
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

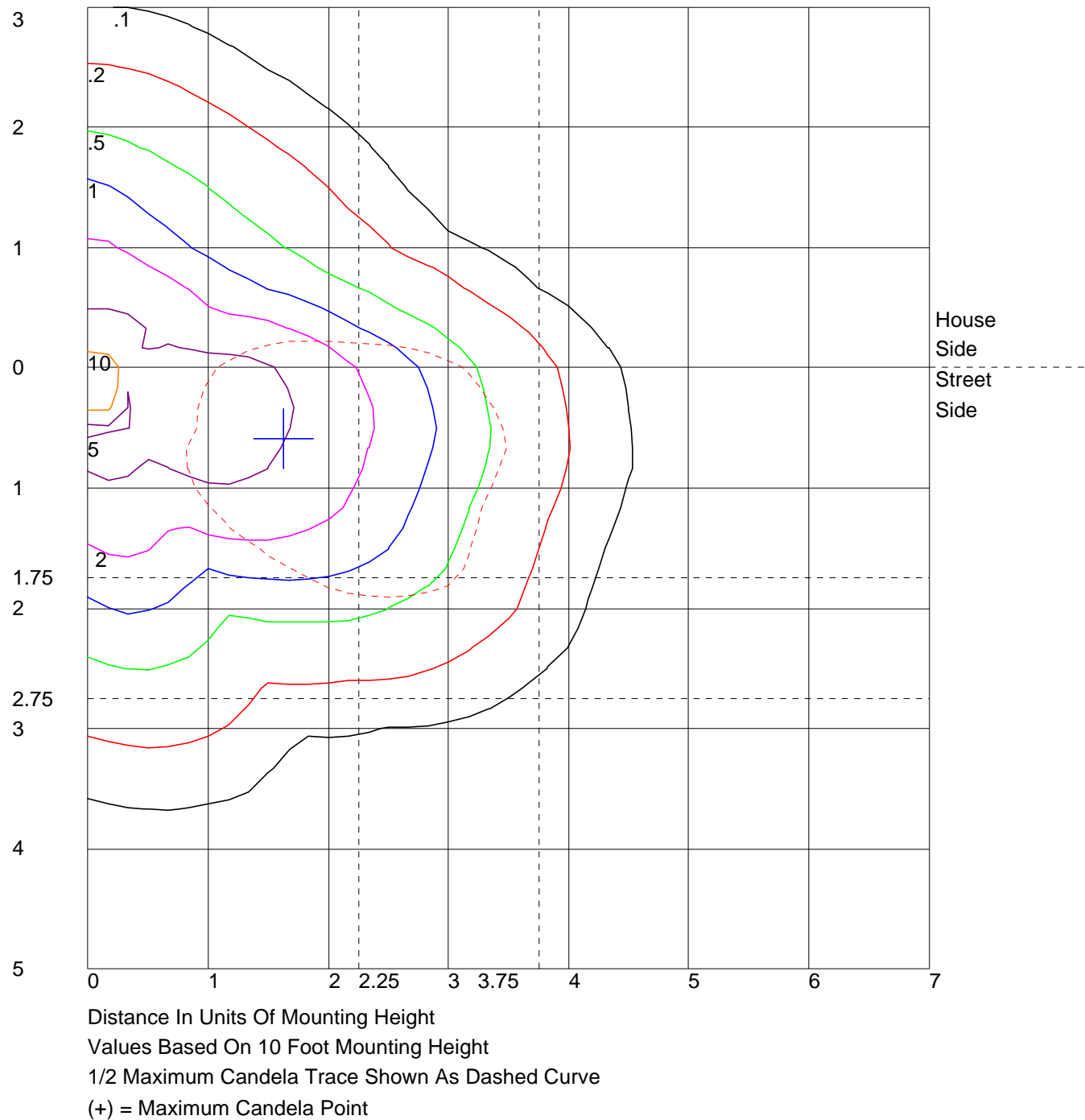
	Lumens	Percent Of Lamp
Downward Street Side	4334.4	32.3
Downward House Side	1807.3	13.5
Downward Total	6141.7	45.8
Upward Street Side	6.9	0.1
Upward House Side	3.3	0.0
Upward Total	10.2	0.1
Total Flux	6151.9	45.9

POLAR GRAPH

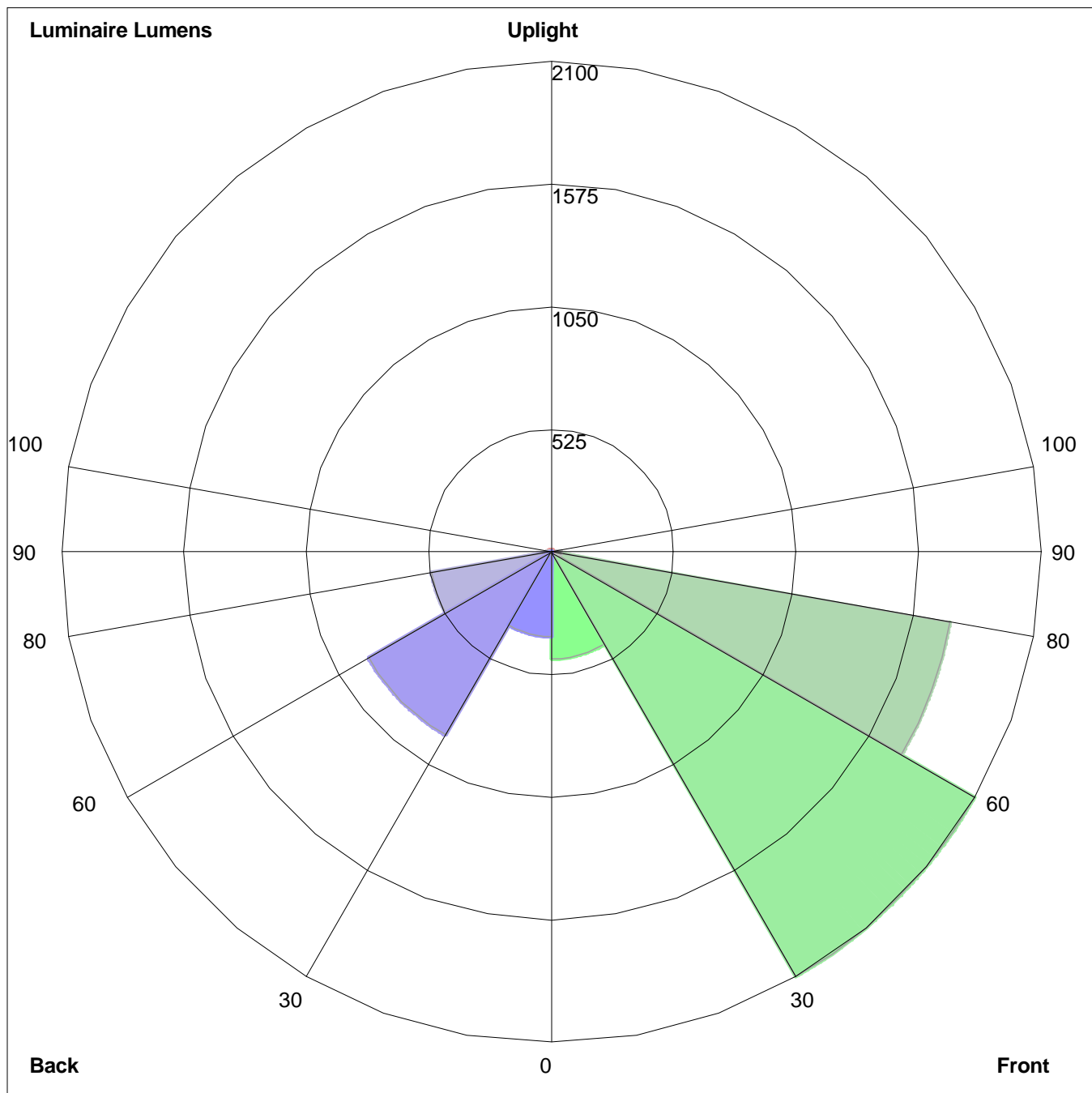


Maximum Candela = 4102.278 Located At Horizontal Angle = 70, Vertical Angle = 60  
# 1 - Vertical Plane Through Horizontal Angles (70 - 250) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (60) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=456.2, Medium=2099.5, High=1736.1, Very High=42.5  
Back: Low=360.7, Medium=905.5, High=520.9, Very High=20.2  
Uplight: Low=0.5, High=9.7

BUG Rating : B2-U1-G2