



OUTDOOR LIGHTING SPECIALISTS SINCE 1972

## IES ROAD REPORT

PHOTOMETRIC FILENAME : NILAND FR T3 G 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)

[ISSUEDATE]

[TEST] 1

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

[MANUFAC]

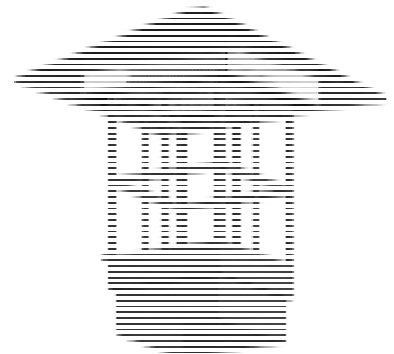
[LUMINAIRE] Niland Fr T3 G Short Cutoff AP

[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	107.9 (54 lamps)
Total Lamp Lumens	5826.6
Luminaire Lumens	2672
Total Luminaire Efficiency	46 %
Downward Total Efficiency	46 %
Upward Waste Light Ratio	0.00
Maximum Candela	1781.893
Maximum Candela Angle	70H 60V
Maximum Candela At 90 Degrees Vertical	1.095 (0.0% Lamp Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	191.312 (3.3% Lamp Lumens)
Total Luminaire Watts	53.12
Ballast Factor	1.00



**IES ROAD REPORT****PHOTOMETRIC FILENAME : NILAND FR T3 G SHORT CUTOFF AP LED50.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	198.2	3.4	7.4
FM - Front-Medium (30-60)	912.0	15.7	34.1
FH - Front-High (60-80)	754.1	12.9	28.2
FVH - Front-Very High (80-90)	18.4	0.3	0.7
BL - Back-Low (0-30)	156.7	2.7	5.9
BM - Back-Medium (30-60)	393.3	6.8	14.7
BH - Back-High (60-80)	226.3	3.9	8.5
BVH - Back-Very High (80-90)	8.8	0.2	0.3
UL - Uplight-Low (90-100)	0.2	0.0	0.0
UH - Uplight-High (100-180)	4.2	0.1	0.2
Total	2672.2	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>
<b>0</b>	715.063	715.063	715.063	715.063	715.063	715.063	715.063	715.063	715.063	715.063
<b>5</b>	723.847	729.063	745.685	753.005	762.503	749.745	732.324	740.628	737.872	722.764
<b>10</b>	701.923	732.717	748.158	756.881	722.912	703.129	705.306	684.933	676.923	646.264
<b>15</b>	695.439	719.602	720.439	695.907	688.845	571.105	448.494	376.989	341.298	315.412
<b>20</b>	498.271	532.179	590.335	601.555	427.566	267.258	238.481	287.004	321.785	322.978
<b>25</b>	194.990	202.151	215.389	248.804	232.404	305.348	360.109	456.195	517.452	502.381
<b>30</b>	312.176	363.000	300.636	232.453	414.710	551.666	468.129	546.610	553.327	531.096
<b>35</b>	528.291	673.208	593.005	423.518	648.073	629.102	511.325	612.357	638.132	604.582
<b>40</b>	504.989	633.568	677.625	529.410	644.099	668.693	642.032	729.556	757.250	683.911
<b>45</b>	423.678	535.710	559.430	447.485	672.888	839.926	828.324	913.805	908.183	805.527
<b>50</b>	397.399	509.369	503.156	431.048	783.098	1043.085	1085.961	1199.346	1217.419	1039.271
<b>55</b>	500.683	618.669	608.826	481.355	846.422	1274.271	1521.389	1596.179	1585.143	1319.841
<b>60</b>	443.609	568.522	552.183	458.471	826.331	1336.143	1695.968	1781.893	1763.709	1411.462
<b>65</b>	419.102	531.686	511.153	390.854	696.288	1212.461	1650.952	1693.422	1677.920	1283.055
<b>70</b>	337.447	426.680	413.910	304.659	537.592	988.140	1456.158	1452.898	1473.518	1096.775
<b>75</b>	205.977	252.839	266.778	194.867	308.252	581.932	802.328	739.779	792.178	627.982
<b>80</b>	48.363	65.390	81.926	63.422	82.676	157.737	191.312	161.575	175.367	146.184
<b>85</b>	1.993	1.870	1.919	2.042	3.137	5.180	8.108	14.751	21.912	20.460
<b>90</b>	0.221	0.234	0.246	0.172	0.185	0.320	0.615	1.058	1.095	0.701
<b>95</b>	0.148	0.135	0.123	0.074	0.049	0.062	0.098	0.197	0.172	0.062
<b>100</b>	0.098	0.123	0.111	0.086	0.049	0.074	0.098	0.111	0.111	0.086
<b>105</b>	0.123	0.123	0.111	0.111	0.074	0.111	0.123	0.123	0.111	0.086
<b>110</b>	0.135	0.135	0.172	0.123	0.135	0.209	0.209	0.197	0.172	0.148
<b>115</b>	0.283	0.320	0.332	0.357	0.381	0.418	0.443	0.344	0.295	0.246
<b>120</b>	0.541	0.627	0.689	0.800	0.861	0.874	0.861	0.701	0.615	0.517
<b>125</b>	1.058	1.206	1.341	1.427	1.562	1.599	1.587	1.366	1.230	0.935
<b>130</b>	1.390	1.513	1.686	1.882	2.153	2.325	2.165	1.956	1.686	1.403
<b>135</b>	1.538	1.538	1.686	2.030	2.534	2.645	2.510	2.325	2.030	1.698
<b>140</b>	1.464	1.612	1.870	2.067	2.485	2.694	2.731	2.473	2.227	1.993
<b>145</b>	1.562	1.686	1.907	2.288	2.584	2.707	2.682	2.399	2.251	1.845
<b>150</b>	1.464	1.587	1.845	2.264	2.522	2.596	2.338	2.079	1.956	1.747
<b>155</b>	1.304	1.378	1.612	1.870	2.153	2.165	2.079	1.907	1.796	1.587
<b>160</b>	1.033	1.107	1.169	1.230	1.378	1.452	1.587	1.550	1.550	1.427
<b>165</b>	0.566	0.578	0.517	0.529	0.677	0.849	0.812	0.923	0.923	0.837
<b>170</b>	0.197	0.221	0.209	0.123	0.037	0.037	0.172	0.271	0.357	0.369
<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

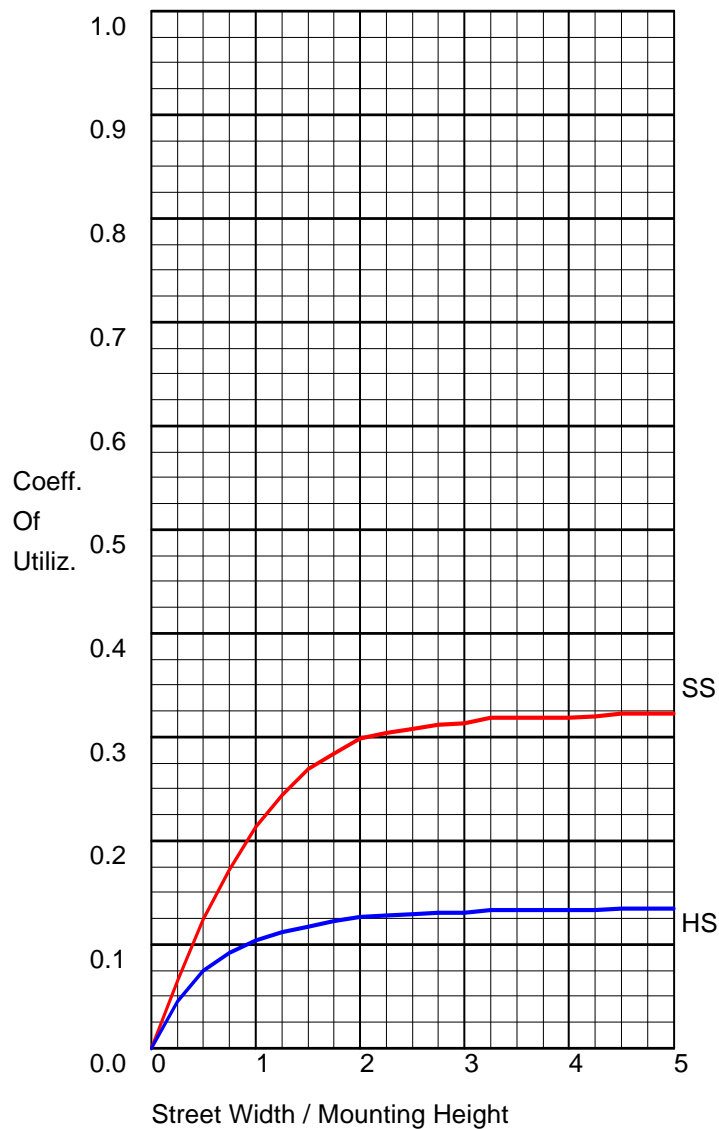
Vert. Angles	Horizontal Angles								
	<u>100</u>	<u>110</u>	<u>120</u>	<u>130</u>	<u>140</u>	<u>150</u>	<u>160</u>	<u>170</u>	<u>180</u>
<b>0</b>	715.063	715.063	715.063	715.063	715.063	715.063	715.063	715.063	715.063
<b>5</b>	707.742	696.276	668.816	597.274	540.188	479.140	446.021	421.784	423.900
<b>10</b>	627.305	551.900	387.335	313.591	337.311	350.660	376.103	363.283	379.265
<b>15</b>	306.099	261.648	300.476	361.241	387.618	397.559	414.586	406.885	393.524
<b>20</b>	289.563	246.072	323.729	386.548	386.745	374.503	392.601	391.912	390.583
<b>25</b>	430.482	272.893	282.649	347.498	364.206	351.472	335.712	304.475	300.611
<b>30</b>	418.733	277.654	316.839	359.186	332.070	299.615	291.901	278.441	289.342
<b>35</b>	465.398	328.748	346.317	350.033	322.351	290.732	283.510	304.610	318.537
<b>40</b>	495.712	326.054	335.269	330.139	286.611	274.283	284.605	299.799	304.081
<b>45</b>	526.224	329.499	300.931	275.809	239.355	233.154	244.682	274.271	276.067
<b>50</b>	616.934	331.640	271.060	230.792	202.507	204.254	211.673	253.516	258.548
<b>55</b>	708.702	352.789	251.289	205.620	190.721	200.317	211.981	257.797	292.110

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**CANDELA TABULATION - (Cont.)**

<b>60</b>	705.958	336.450	234.987	199.641	188.888	197.660	206.088	233.302	265.130
<b>65</b>	594.629	290.781	214.269	185.640	170.606	170.680	178.406	195.827	209.053
<b>70</b>	469.064	215.118	162.695	150.293	138.962	133.734	143.010	156.568	158.487
<b>75</b>	273.151	119.647	96.628	97.243	88.766	85.740	94.573	98.584	97.538
<b>80</b>	76.389	42.679	36.208	40.305	37.340	38.767	40.501	39.726	35.691
<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

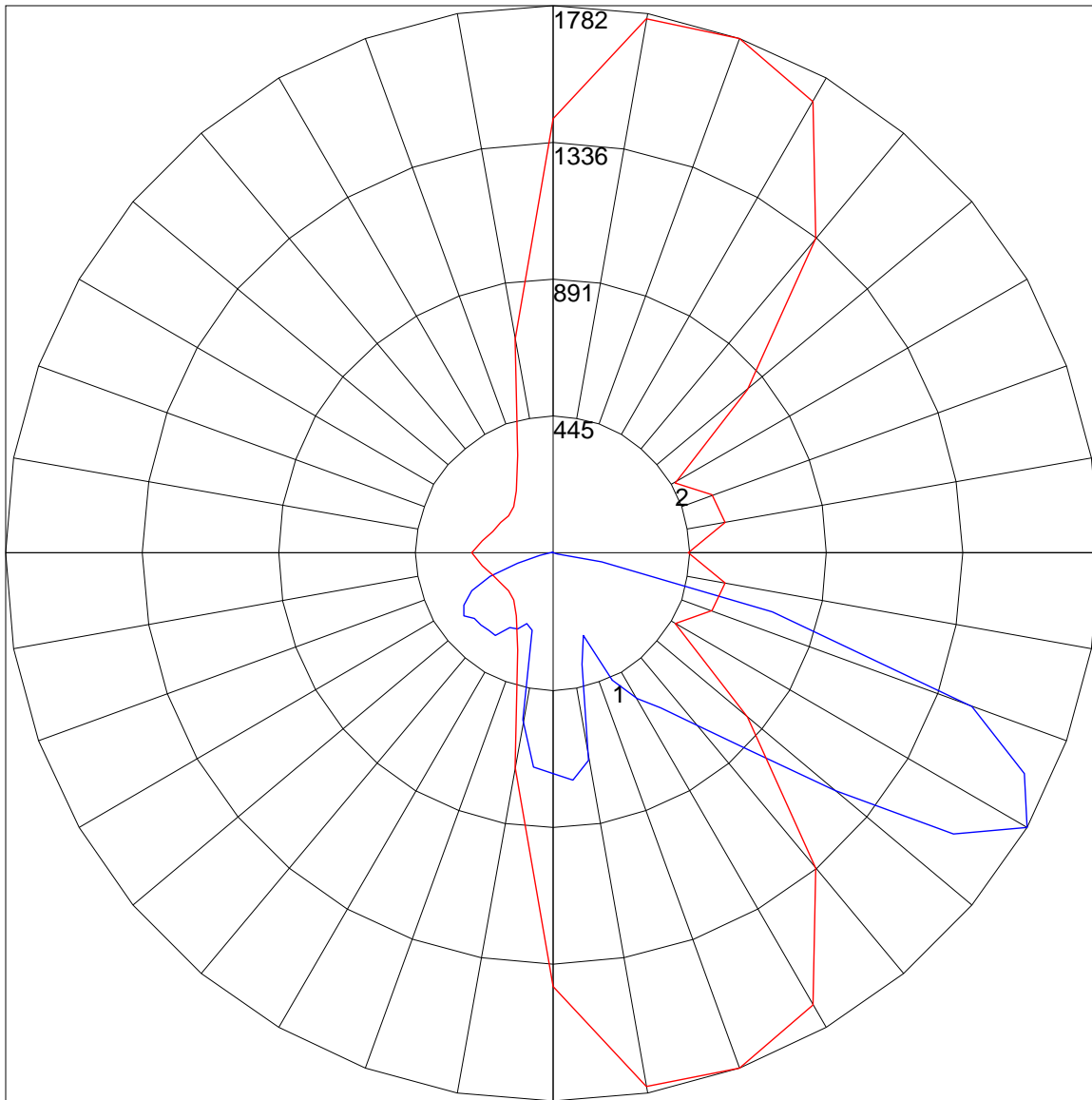
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

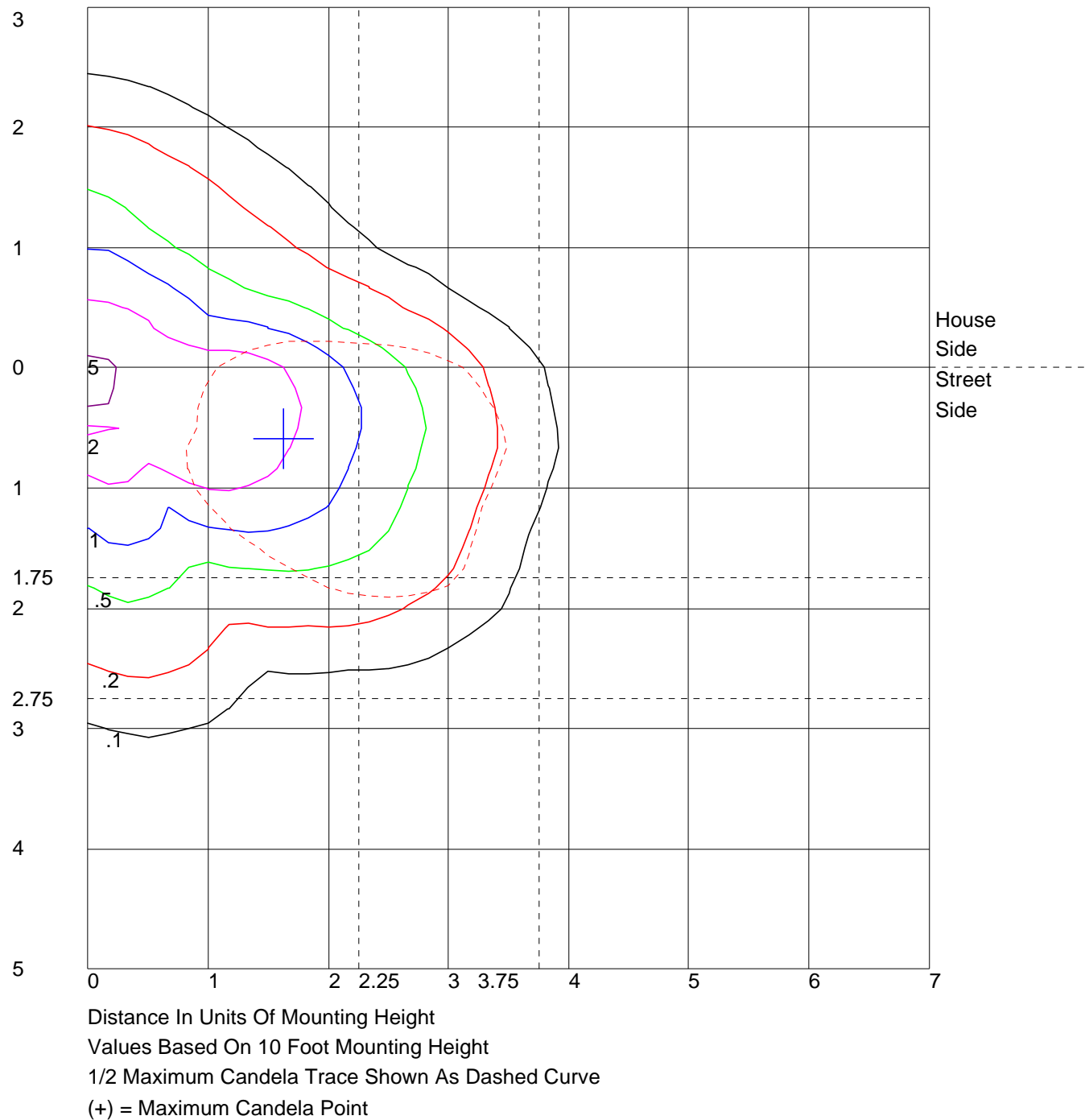
	Lumens	Percent Of Lamp
Downward Street Side	1882.7	32.3
Downward House Side	785.0	13.5
Downward Total	2667.7	45.8
Upward Street Side	3.0	0.1
Upward House Side	1.4	0.0
Upward Total	4.4	0.1
Total Flux	2672.1	45.9

POLAR GRAPH

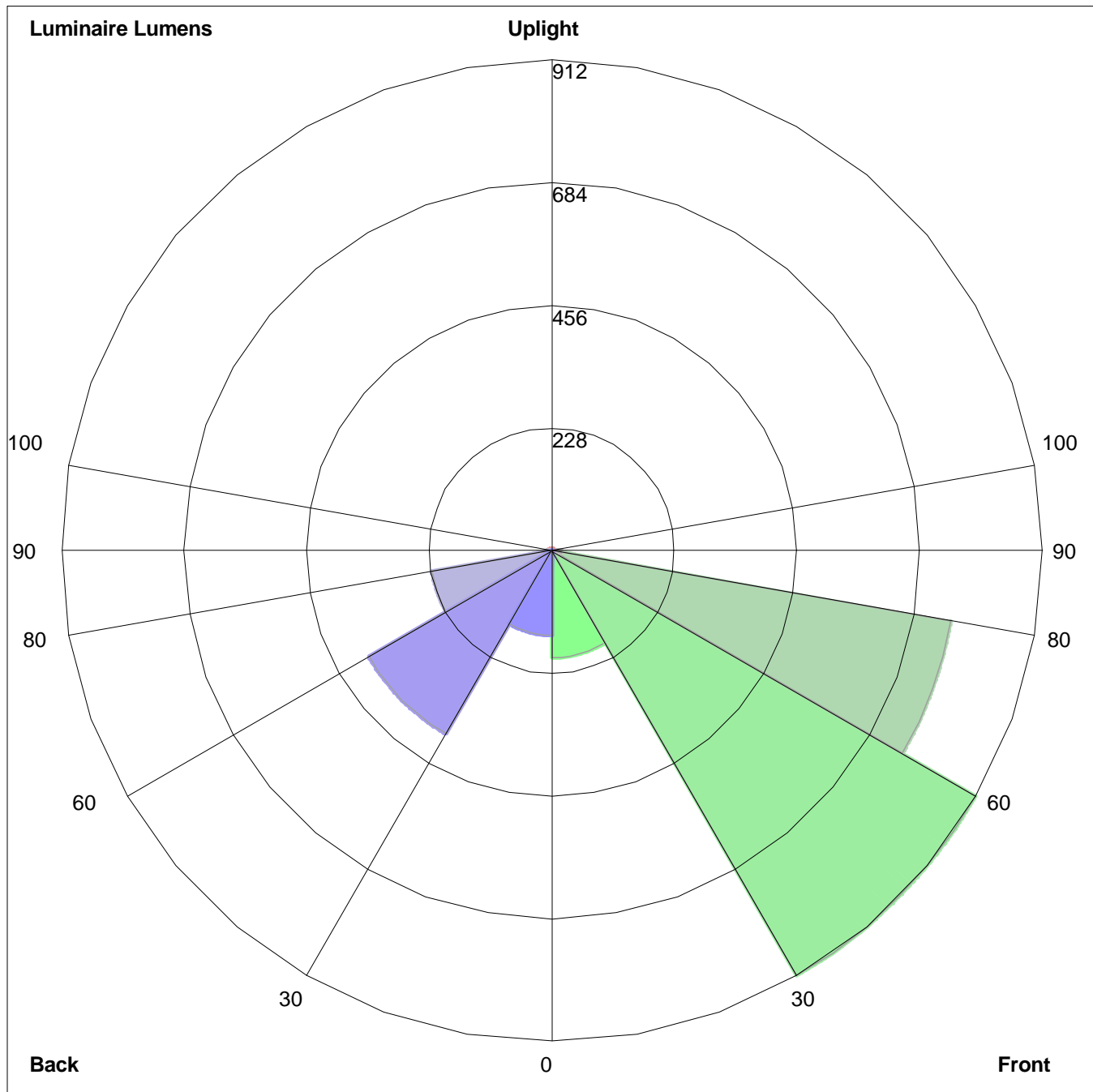


Maximum Candela = 1781.893 Located At Horizontal Angle = 70, Vertical Angle = 60  
# 1 - Vertical Plane Through Horizontal Angles (70 - 250) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (60) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=198.2, Medium=912.0, High=754.1, Very High=18.4  
Back: Low=156.7, Medium=393.3, High=226.3, Very High=8.8  
Uplight: Low=0.2, High=4.2

BUG Rating : B1-U1-G1