



# The Perfect Lighting Choice.™

visit us at [www.JDG.com](http://www.JDG.com)

## IES INDOOR REPORT PHOTOMETRIC FILENAME : FSN SEED 3 LIGHT.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] 18097-B  
[TESTLAB] LightLab International ([www.LightLabInternational.com](http://www.LightLabInternational.com))  
[MANUFAC] Justice Design Group, Los Angeles, CA 90071  
[LUMCAT] Artisan Glass (FSN) - Seeded Glass (SEED) 3-Light Bath Bar  
[LUMINAIRE] Justice Design Group - Wall mount bathroom luminaire. Product ID: FSN SEED 3-Light  
[MORE] Steel formed housing and three frosted clear glass lenses with white interior.  
[MORE] 30 LEDs mounted in three circular arrays with white plastic dome lenses.  
[MORE] No driver.  
[MORE] Operating at 120 VAC and 60 Hz.  
[MORE] Simulated data from test of one and six lamp fixtures.  
[ISSUE DATE] April 20, 2018

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1798
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	80
Total Luminaire Watts	22.49
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.56
Spacing Criterion (90-270)	1.74
Spacing Criterion (Diagonal)	1.54
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.08 m
Luminous Width (90-270)	0.50 m
Luminous Height	0.14 m

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3207	3575	7608
55	2704	2819	5401
65	2419	2443	4495
75	2245	2210	4524
85	2161	2094	5062

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : FSN SEED 3 LIGHT.IES**

**CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
<b>0.0</b>	281.710	281.710	281.710	281.710	281.710	281.710	281.710	281.710	281.710
<b>0.5</b>	278.982	279.794	280.865	280.995	281.905	283.041	283.918	283.983	284.015
<b>1.0</b>	279.697	280.638	281.093	281.288	282.262	284.080	285.476	286.028	286.450
<b>1.5</b>	281.937	282.489	282.489	282.002	283.203	285.574	287.619	288.918	289.438
<b>2.0</b>	284.437	284.664	284.502	283.106	284.307	287.197	290.119	292.133	292.782
<b>2.5</b>	287.489	287.684	286.840	284.762	285.704	289.145	292.944	295.672	296.419
<b>3.0</b>	291.126	290.509	289.438	286.710	287.132	291.158	296.126	299.179	300.185
<b>3.5</b>	294.795	293.918	292.327	288.691	288.788	293.237	299.081	302.848	304.439
<b>4.0</b>	298.594	297.685	295.022	290.899	290.444	295.672	302.361	306.582	308.140
<b>4.5</b>	302.426	301.094	298.140	292.977	292.230	298.107	305.543	310.478	312.296
<b>5.0</b>	306.030	304.991	301.159	295.217	293.918	300.510	308.530	314.050	316.225
<b>5.5</b>	309.666	308.400	304.179	297.717	295.769	302.913	311.809	318.011	320.122
<b>6.0</b>	313.855	312.167	307.264	300.120	297.620	305.510	315.251	321.940	324.668
<b>6.5</b>	317.622	315.803	310.576	302.458	299.341	307.978	318.466	325.739	328.272
<b>7.0</b>	321.388	319.310	313.693	304.958	301.322	310.478	321.908	329.700	332.428
<b>7.5</b>	325.122	323.239	316.875	307.426	303.270	313.076	325.349	333.564	336.454
<b>8.0</b>	328.661	326.843	320.154	309.796	305.218	315.641	328.596	337.331	340.318
<b>8.5</b>	332.298	330.577	323.304	312.296	307.004	318.238	332.006	341.097	344.182
<b>9.0</b>	336.389	334.051	326.518	314.797	309.082	320.804	335.513	344.734	348.046
<b>9.5</b>	340.221	337.656	329.798	317.232	311.192	323.434	338.532	348.273	351.910
<b>10.0</b>	343.890	341.422	332.915	319.765	313.011	325.869	341.779	352.202	355.709
<b>10.5</b>	347.526	345.383	336.194	322.395	314.959	328.499	345.156	355.806	359.540
<b>11.0</b>	351.683	348.793	339.344	324.895	316.907	331.097	348.273	359.410	363.339
<b>11.5</b>	355.579	352.429	342.429	327.622	318.888	333.694	351.553	362.885	366.879
<b>12.0</b>	359.183	356.163	345.708	330.122	320.869	336.292	354.735	366.619	370.548
<b>12.5</b>	362.138	359.508	349.117	332.558	322.784	338.987	357.852	369.866	374.152
<b>13.0</b>	364.216	362.787	352.137	335.090	324.635	341.487	361.001	373.437	377.366
<b>13.5</b>	365.515	365.385	355.482	337.558	326.648	344.117	364.054	376.717	380.061
<b>14.0</b>	365.937	367.041	358.469	339.831	328.596	346.552	367.041	379.704	381.847
<b>14.5</b>	366.943	368.405	361.618	342.396	330.317	349.052	369.996	382.139	382.821
<b>15.0</b>	367.690	369.281	364.573	344.864	332.460	351.520	373.113	383.893	383.243
<b>15.5</b>	368.437	369.963	367.398	347.364	334.409	353.858	375.938	384.575	383.114
<b>16.0</b>	368.697	370.840	369.801	349.832	336.064	356.358	378.763	384.997	382.919
<b>16.5</b>	369.022	370.937	371.976	352.137	337.850	358.761	381.652	384.932	382.464
<b>17.0</b>	369.054	371.165	373.860	354.475	339.961	361.001	384.218	384.607	381.782
<b>17.5</b>	369.476	371.652	375.353	356.910	341.649	363.242	386.425	384.250	381.522
<b>18.0</b>	369.249	371.587	376.295	359.151	343.435	365.645	388.406	383.633	380.646
<b>18.5</b>	369.476	371.554	377.107	361.424	345.318	367.820	389.640	383.049	379.769
<b>19.0</b>	369.411	371.717	377.464	363.696	347.137	370.126	390.322	382.399	378.925
<b>19.5</b>	368.924	371.230	377.724	366.002	348.955	372.236	390.582	381.685	377.951
<b>20.0</b>	368.307	371.100	377.821	368.047	350.676	374.541	390.452	380.711	377.172
<b>20.5</b>	367.788	370.807	377.788	370.320	352.592	376.620	390.095	379.867	376.035
<b>21.0</b>	366.586	369.996	377.659	372.366	354.345	378.795	389.575	378.892	374.964
<b>21.5</b>	365.937	369.184	377.399	374.509	356.163	380.938	388.893	377.691	373.892
<b>22.0</b>	365.287	368.567	376.977	376.457	357.982	382.886	388.179	376.587	372.496
<b>22.5</b>	364.216	367.495	376.555	378.308	359.833	384.964	387.465	375.223	370.840
<b>23.0</b>	363.177	366.229	376.100	379.931	361.553	386.783	386.458	373.795	369.476
<b>23.5</b>	361.683	364.736	375.191	381.068	363.080	388.698	385.321	372.431	367.625
<b>24.0</b>	360.255	363.177	374.379	382.042	364.898	390.484	384.218	370.580	365.742
<b>24.5</b>	359.021	361.911	373.437	382.886	366.489	392.238	382.984	368.534	364.054
<b>25.0</b>	357.527	360.190	372.139	383.568	368.112	393.764	381.587	366.814	362.138
<b>25.5</b>	355.871	358.566	370.905	384.088	369.736	394.933	380.256	364.736	359.962
<b>26.0</b>	354.053	356.715	369.379	384.218	371.132	395.972	378.503	362.495	357.884
<b>26.5</b>	352.332	354.800	367.788	384.607	372.626	396.621	376.912	360.352	355.417

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : FSN SEED 3 LIGHT.IES**

**CANDELA TABULATION - (Cont.)**

27.0	349.962	352.689	366.002	384.477	373.989	396.913	375.126	357.852	353.079
27.5	348.338	350.903	364.151	384.218	375.321	396.978	373.015	355.546	350.676
28.0	345.935	348.728	361.976	383.601	376.555	396.718	370.905	352.981	348.078
28.5	343.630	346.195	359.768	382.919	377.951	395.939	368.599	350.351	345.286
29.0	341.422	343.792	357.592	381.685	379.315	394.933	366.099	347.526	342.494
29.5	338.987	341.519	355.124	380.419	380.548	393.569	363.567	344.702	339.636
30.0	336.552	339.019	352.494	378.860	381.555	391.848	360.839	341.812	336.487
30.5	333.499	336.422	349.799	376.944	382.854	389.997	357.787	338.695	333.207
31.0	331.097	334.019	346.974	375.256	383.860	387.919	354.832	335.513	330.122
31.5	328.499	331.259	344.247	373.243	384.997	385.646	351.715	332.395	326.648
32.0	325.414	328.369	341.519	370.905	386.101	383.016	348.533	329.116	323.401
32.5	322.622	325.642	338.305	368.632	386.750	380.126	345.189	325.609	319.570
33.0	319.602	322.589	335.318	365.937	387.562	376.977	341.942	322.037	316.031
33.5	316.128	319.797	332.298	363.080	388.179	373.892	338.565	318.368	311.809
34.0	313.303	316.582	328.954	360.385	387.984	370.190	334.928	314.829	308.238
34.5	310.283	313.465	325.836	357.040	387.497	366.651	331.389	311.063	304.309
35.0	306.712	310.186	322.460	353.696	385.873	362.950	327.525	307.231	300.120
35.5	303.530	307.166	319.213	350.254	383.666	359.118	323.888	303.367	295.997
36.0	300.153	303.627	315.706	346.650	380.808	355.059	320.089	299.179	292.068
36.5	296.581	300.315	312.426	342.753	377.431	351.196	316.225	295.347	287.749
37.0	293.431	297.003	308.920	338.760	373.178	346.845	312.264	291.321	283.625
37.5	290.055	293.529	305.218	334.701	367.853	342.591	308.238	287.035	279.242
38.0	286.483	289.957	301.841	330.642	361.976	338.305	304.276	282.814	274.923
38.5	283.041	286.418	298.140	326.291	355.871	333.792	299.958	278.365	270.735
39.0	279.567	283.041	294.600	321.973	349.572	329.473	295.867	274.144	266.481
39.5	276.255	279.404	290.931	317.492	343.273	324.927	291.613	269.696	262.000
40.0	273.397	275.930	287.165	313.043	336.941	320.446	287.424	265.345	257.812
40.5	270.085	272.391	283.398	308.660	330.934	315.836	282.976	260.961	253.461
41.0	266.741	268.981	279.729	304.049	324.927	311.322	278.658	256.578	249.272
41.5	264.241	265.637	275.800	299.763	319.115	306.712	274.177	252.130	245.246
42.0	261.513	262.293	271.969	295.250	313.725	302.101	269.761	247.779	241.187
42.5	259.240	258.981	268.040	290.704	308.173	297.393	265.150	243.493	237.291
43.0	257.292	255.896	264.208	286.223	302.945	292.782	260.539	239.304	233.232
43.5	255.604	253.234	260.247	281.515	298.042	287.944	256.026	235.278	229.855
44.0	254.208	250.539	256.416	276.904	293.139	283.073	251.220	231.024	226.576
44.5	252.130	248.460	252.552	272.553	288.399	278.300	246.577	227.290	223.491
45.0	250.409	246.447	248.590	267.650	283.658	273.235	241.869	223.686	220.991
45.5	248.785	244.532	244.954	263.137	279.242	268.429	237.421	220.406	218.523
46.0	246.999	242.941	241.155	258.526	274.566	263.299	232.810	217.354	216.185
46.5	245.116	241.122	237.453	253.915	270.183	258.169	228.232	214.692	213.718
47.0	243.200	239.206	234.011	249.045	265.475	253.071	223.491	212.224	211.217
47.5	241.512	237.518	230.440	244.369	260.702	247.811	219.172	209.756	208.717
48.0	239.791	235.797	227.387	239.694	255.929	242.583	214.854	207.418	206.120
48.5	237.908	233.816	224.400	234.758	250.993	237.193	210.535	204.951	203.944
49.0	236.382	232.063	221.835	230.147	245.960	232.063	206.574	202.580	201.606
49.5	234.628	230.245	219.205	225.277	240.798	226.706	202.743	200.145	199.171
50.0	232.907	228.524	216.900	220.569	235.537	221.608	199.366	197.905	196.995
50.5	231.186	226.673	214.529	216.055	230.017	216.315	196.184	195.469	194.723
51.0	229.628	225.017	212.516	211.639	224.498	210.990	193.294	193.261	192.320
51.5	228.199	223.134	210.698	206.704	218.945	205.827	190.729	190.891	190.274
52.0	226.316	221.608	209.074	202.386	213.068	200.697	188.294	188.846	188.164
52.5	225.017	219.919	207.256	198.035	207.061	195.632	186.215	186.605	186.021
53.0	223.394	218.166	205.535	193.554	201.379	190.631	183.878	184.300	183.910
53.5	222.030	216.575	203.749	189.690	195.502	185.891	181.702	182.611	181.767
54.0	220.634	215.146	202.093	185.696	189.755	181.183	179.624	180.273	179.851
54.5	218.783	213.458	200.340	182.059	184.300	176.864	177.513	178.293	178.098

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : FSN SEED 3 LIGHT.IES**

**CANDELA TABULATION - (Cont.)**

55.0	217.322	212.159	198.651	178.780	178.747	172.481	175.435	176.215	176.020
55.5	216.348	210.698	196.931	176.052	173.520	168.389	173.357	174.331	174.299
56.0	215.016	209.204	195.340	173.260	168.260	164.948	171.279	172.416	172.351
56.5	213.685	207.711	193.554	171.019	163.357	161.668	169.266	170.565	170.467
57.0	212.549	206.509	191.963	168.617	158.778	159.168	167.383	168.649	168.714
57.5	211.185	204.886	190.372	166.344	154.232	157.187	165.435	166.798	166.961
58.0	210.113	203.587	188.683	164.688	150.011	155.564	163.357	165.045	165.175
58.5	208.620	202.386	187.254	163.422	146.310	153.843	161.506	163.227	163.292
59.0	207.613	201.022	185.761	161.895	143.160	152.252	159.687	161.376	161.636
59.5	206.347	199.723	184.202	160.564	140.563	150.693	157.739	159.785	160.142
60.0	204.983	198.522	182.774	159.168	138.614	149.070	156.051	158.031	158.259
60.5	203.782	197.288	181.377	157.739	136.991	147.349	154.232	156.213	156.798
61.0	202.710	196.021	179.916	156.246	135.660	145.660	152.382	154.622	154.914
61.5	201.834	194.917	178.260	154.914	134.458	144.069	150.758	152.934	153.518
62.0	200.535	193.619	177.026	153.258	133.322	142.511	148.972	151.310	151.732
62.5	199.333	192.385	175.630	151.927	131.991	140.822	147.381	149.719	150.044
63.0	198.294	191.183	174.169	150.466	130.724	139.199	145.758	147.901	148.648
63.5	196.931	189.982	172.870	149.037	129.425	137.575	144.102	146.505	146.927
64.0	195.859	188.943	171.669	147.674	128.094	136.114	142.381	144.946	145.466
64.5	195.080	187.774	170.240	146.147	126.730	134.458	140.887	143.452	143.875
65.0	193.976	186.605	169.169	144.784	125.432	132.965	139.296	141.829	142.381
65.5	192.742	185.469	167.708	143.485	124.068	131.244	137.543	140.498	140.855
66.0	191.670	184.462	166.539	142.056	122.737	129.783	136.082	138.939	139.394
66.5	190.729	183.228	165.240	140.563	121.438	128.289	134.458	137.413	138.030
67.0	189.722	182.287	163.973	139.459	119.879	126.665	132.802	135.887	136.504
67.5	188.521	181.150	162.675	138.095	118.678	125.074	131.471	134.458	135.010
68.0	187.482	179.981	161.538	136.536	117.412	123.808	130.010	132.965	133.679
68.5	186.573	178.910	160.369	135.335	115.983	122.120	128.484	131.666	132.413
69.0	185.631	177.968	159.103	134.004	114.587	120.821	127.153	130.205	130.724
69.5	184.592	176.864	157.967	132.575	113.288	119.425	125.659	128.808	129.425
70.0	183.683	175.922	156.700	131.406	111.892	117.834	124.328	127.445	128.192
70.5	182.481	174.818	155.434	130.140	110.528	116.437	122.899	126.146	126.503
71.0	181.442	173.779	154.525	128.679	109.197	115.041	121.470	124.652	125.367
71.5	180.631	172.968	153.388	127.542	107.898	113.645	120.074	123.386	124.035
72.0	179.689	171.896	152.187	126.211	106.631	112.151	118.775	121.990	122.737
72.5	178.812	170.890	151.180	124.847	105.300	110.853	117.412	120.756	121.373
73.0	177.741	169.916	150.076	123.776	104.001	109.456	116.145	119.360	120.107
73.5	176.734	169.006	148.940	122.444	102.703	108.060	114.749	118.158	118.775
74.0	176.052	167.935	147.901	121.146	101.469	106.729	113.515	116.860	117.574
74.5	175.306	166.928	146.732	120.074	100.073	105.365	112.216	115.593	116.243
75.0	174.234	166.117	145.725	118.938	98.936	104.164	111.015	114.424	114.911
75.5	173.163	165.110	144.816	117.639	97.702	102.930	109.716	113.028	113.710
76.0	172.286	164.201	143.810	116.535	96.371	101.534	108.417	111.827	112.411
76.5	171.247	163.292	142.673	115.431	95.105	100.397	107.183	110.593	111.275
77.0	170.208	162.318	141.861	114.262	94.001	99.163	105.885	109.456	110.106
77.5	169.688	161.538	140.790	113.061	92.702	97.800	104.716	108.158	109.034
78.0	168.714	160.564	139.653	112.021	91.630	96.696	103.547	106.956	107.735
78.5	167.610	159.590	138.842	110.723	90.364	95.494	102.378	105.787	106.599
79.0	167.026	158.681	137.868	109.781	89.195	94.195	101.144	104.651	105.203
79.5	165.889	157.804	136.764	108.807	88.026	92.994	99.975	103.417	104.131
80.0	165.370	156.895	135.952	107.541	86.922	91.825	98.806	102.280	102.995
80.5	164.428	156.116	134.913	106.567	85.883	90.689	97.572	101.241	101.988
81.0	163.486	155.272	133.971	105.527	84.747	89.520	96.598	100.040	100.657
81.5	162.870	154.265	133.127	104.488	83.805	88.546	95.494	98.969	99.585
82.0	161.798	153.421	132.120	103.579	82.734	87.377	94.260	97.994	98.579
82.5	161.084	152.739	131.114	102.638	81.630	86.175	93.221	96.890	97.507

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : FSN SEED 3 LIGHT.IES**

**CANDELA TABULATION - (Cont.)**

83.0	160.012	151.732	130.335	101.566	80.558	85.201	92.182	95.786	96.371
83.5	159.233	151.018	129.458	100.592	79.584	84.195	91.078	94.650	95.235
84.0	158.551	150.239	128.484	99.780	78.577	83.091	90.104	93.708	94.163
84.5	157.707	149.297	127.769	98.741	77.636	82.052	89.000	92.539	93.059
85.0	157.025	148.453	126.925	97.897	76.759	81.013	88.059	91.598	92.280
85.5	156.278	147.674	125.984	97.020	75.720	79.909	87.149	90.559	91.143
86.0	155.499	146.862	125.172	96.079	74.876	79.032	85.981	89.325	90.332
86.5	154.687	146.212	124.522	95.267	73.934	78.025	85.006	88.416	89.000
87.0	153.810	145.401	123.581	94.650	73.090	77.084	84.130	87.572	88.091
87.5	153.096	144.556	122.899	93.676	72.441	76.207	83.156	86.500	87.247
88.0	152.414	144.069	122.217	93.059	71.466	75.330	82.311	85.623	86.175
88.5	151.667	143.323	121.470	92.377	70.882	74.454	81.402	84.747	85.234
89.0	151.537	142.900	120.918	91.630	70.200	73.837	80.526	83.740	84.162
89.5	151.602	142.868	120.918	91.565	69.713	73.187	79.714	82.928	83.350
90.0	151.310	143.063	121.146	91.695	69.973	73.025	79.389	82.441	82.798
90.5	151.797	143.258	121.178	91.793	69.973	73.090	79.194	82.182	82.636
91.0	152.219	143.388	121.373	91.988	69.908	73.090	79.032	82.052	82.474
91.5	152.349	143.777	121.535	92.182	70.135	73.122	79.000	81.987	82.182
92.0	152.609	143.745	121.860	92.117	70.168	73.122	78.837	81.727	82.084
92.5	152.804	144.004	121.990	92.377	70.362	73.025	78.707	81.467	81.857
93.0	153.064	144.232	121.990	92.604	70.298	72.830	78.707	81.370	81.727
93.5	153.453	144.394	122.444	92.702	70.622	72.863	78.707	81.240	81.500
94.0	153.616	144.719	122.574	92.962	70.557	72.798	78.415	81.110	81.240
94.5	153.843	144.816	122.769	93.027	70.720	72.635	78.512	80.883	80.850
95.0	154.330	145.043	122.899	93.189	70.720	72.635	78.285	80.428	80.623
95.5	154.265	145.401	123.061	93.384	70.817	72.603	78.123	80.298	80.526
96.0	154.655	145.563	123.289	93.514	70.882	72.538	77.960	80.136	80.103
96.5	154.849	145.725	123.678	93.611	71.077	72.441	77.766	79.779	79.909
97.0	155.077	145.953	123.613	93.838	71.044	72.376	77.668	79.551	79.487
97.5	155.239	146.147	123.808	94.098	71.077	72.213	77.571	79.487	79.324
98.0	155.596	146.180	124.035	94.066	71.337	72.278	77.279	79.162	79.064
98.5	155.629	146.472	124.198	94.358	71.369	72.083	77.181	78.935	78.740
99.0	155.824	146.667	124.198	94.618	71.466	71.889	77.116	78.675	78.480
99.5	156.051	146.732	124.425	94.520	71.531	71.889	76.759	78.415	78.025
100.0	156.116	146.894	124.522	94.715	71.694	71.759	76.694	78.188	77.831
100.5	156.376	146.927	124.555	94.877	71.726	71.661	76.597	77.863	77.506
101.0	156.343	147.024	124.685	95.072	71.889	71.531	76.402	77.506	77.181
101.5	156.700	147.089	124.815	95.137	71.954	71.304	76.175	77.311	76.727
102.0	156.570	147.187	124.782	95.299	72.213	71.239	75.947	76.954	76.597
102.5	156.668	147.187	124.815	95.332	72.213	71.142	75.655	76.629	76.272
103.0	156.700	147.284	124.880	95.462	72.408	70.882	75.395	76.369	75.980
103.5	156.700	147.316	124.815	95.657	72.343	70.785	75.201	76.175	75.395
104.0	156.960	147.349	124.685	95.462	72.408	70.622	74.908	75.850	75.265
104.5	157.025	147.479	124.717	95.657	72.473	70.427	74.519	75.460	74.746
105.0	156.733	147.511	124.652	95.754	72.668	70.233	74.161	75.233	74.389
105.5	156.895	147.316	124.620	95.559	72.733	70.070	73.804	74.811	73.967
106.0	157.025	147.349	124.717	95.624	72.635	69.940	73.447	74.356	73.707
106.5	156.960	147.414	124.652	95.624	72.733	69.778	73.122	74.032	73.285
107.0	157.057	147.414	124.555	95.592	72.635	69.648	72.733	73.545	72.960
107.5	156.960	147.316	124.522	95.559	72.635	69.453	72.408	73.155	72.408
108.0	156.960	147.284	124.458	95.722	72.733	69.064	72.051	72.506	71.856
108.5	157.025	147.251	124.522	95.559	72.603	68.999	71.726	72.116	71.272
109.0	156.733	147.219	124.360	95.559	72.668	68.642	71.369	71.564	70.914
109.5	156.830	146.992	124.198	95.429	72.506	68.544	71.012	71.142	70.103
110.0	156.668	147.024	124.100	95.429	72.603	68.382	70.655	70.492	69.843
110.5	156.700	146.764	124.100	95.397	72.473	68.187	70.200	70.168	69.031

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : FSN SEED 3 LIGHT.IES**

**CANDELA TABULATION - (Cont.)**

111.0	156.505	146.797	123.970	95.494	72.506	67.992	69.908	69.616	68.447
111.5	156.408	146.699	123.970	95.364	72.343	67.830	69.388	69.161	68.155
112.0	156.018	146.635	123.841	95.332	72.311	67.505	69.064	68.577	67.440
112.5	156.116	146.505	123.581	95.235	72.376	67.408	68.771	68.122	66.791
113.0	156.051	146.310	123.581	95.137	72.343	67.115	68.414	67.635	66.206
113.5	155.856	146.147	123.418	95.007	72.246	66.986	67.895	66.953	65.752
114.0	155.596	146.050	123.191	95.007	72.213	66.823	67.570	66.596	65.232
114.5	155.661	145.855	123.094	94.845	72.181	66.499	67.245	65.849	64.583
115.0	155.272	145.628	122.802	94.715	72.018	66.304	66.563	65.135	63.836
115.5	155.142	145.660	122.672	94.618	72.051	66.044	66.401	64.485	63.252
116.0	154.817	145.206	122.412	94.390	71.791	66.012	65.849	63.609	62.570
116.5	154.849	145.076	122.250	94.358	71.889	65.622	65.297	62.927	61.888
117.0	154.427	144.849	121.990	94.195	71.726	65.492	65.070	62.310	60.719
117.5	154.070	144.524	121.892	94.033	71.564	65.265	64.713	61.433	60.102
118.0	153.875	144.297	121.503	93.773	71.434	64.972	64.193	60.784	59.063
118.5	153.583	144.167	121.308	93.643	71.239	64.745	63.739	60.069	58.316
119.0	153.193	143.745	121.081	93.579	71.142	64.550	63.479	59.323	57.407
119.5	152.869	143.550	120.853	93.416	71.142	64.356	62.894	58.478	56.433
120.0	152.577	143.355	120.659	93.156	70.914	64.128	62.635	57.602	55.556
120.5	152.349	142.836	120.399	92.832	70.752	63.804	62.148	56.822	54.712
121.0	152.025	142.608	120.009	92.832	70.492	63.576	61.628	56.108	53.835
121.5	151.440	142.381	119.684	92.669	70.492	63.252	61.401	55.394	52.926
122.0	151.180	141.894	119.457	92.280	70.395	62.992	60.946	54.582	51.984
122.5	150.726	141.569	119.230	92.052	70.135	62.894	60.524	53.900	51.205
123.0	150.369	141.277	118.808	91.955	69.973	62.505	60.167	53.153	50.328
123.5	149.882	140.660	118.451	91.533	69.843	62.310	59.810	52.504	49.257
124.0	149.817	140.205	118.223	91.403	69.778	62.115	59.225	51.725	48.543
124.5	149.005	139.881	117.866	91.176	69.518	61.790	58.933	51.075	47.763
125.0	148.453	139.361	117.541	90.916	69.291	61.725	58.641	50.361	46.952
125.5	147.901	138.939	117.054	90.559	69.129	61.433	58.284	49.744	46.335
126.0	147.251	138.355	116.697	90.364	69.064	61.303	58.056	49.192	45.653
126.5	146.992	137.803	116.275	90.039	68.901	61.141	57.634	48.543	44.971
127.0	146.018	137.381	115.918	89.877	68.804	60.979	57.147	48.023	44.289
127.5	145.368	136.731	115.431	89.585	68.674	60.719	56.887	47.569	43.770
128.0	144.914	136.147	115.009	89.228	68.447	60.654	56.595	46.854	43.185
128.5	144.199	135.497	114.554	89.033	68.447	60.589	56.173	46.270	42.633
129.0	143.485	135.140	114.165	88.676	68.155	60.297	55.848	45.620	42.081
129.5	142.998	134.426	113.613	88.448	68.025	60.102	55.621	45.068	41.724
130.0	142.056	133.971	113.158	87.994	67.895	59.745	55.037	44.549	41.204
130.5	141.504	133.322	112.638	87.766	67.895	59.647	54.809	44.062	40.523
131.0	140.855	132.672	112.151	87.572	67.570	59.453	54.485	43.607	40.230
131.5	140.303	132.120	111.729	87.149	67.440	59.323	54.095	42.990	39.938
132.0	139.361	131.471	111.112	87.052	67.343	59.193	53.770	42.536	39.386
132.5	138.517	130.627	110.658	86.565	67.148	58.998	53.543	42.049	38.899
133.0	137.933	130.010	110.138	86.175	66.856	58.803	53.153	41.627	38.802
133.5	137.056	129.360	109.586	85.916	66.823	58.641	52.861	41.302	38.315
134.0	136.342	128.581	109.067	85.526	66.531	58.576	52.504	40.847	38.152
134.5	135.660	127.867	108.515	85.104	66.499	58.381	52.277	40.360	37.730
135.0	134.848	127.185	107.833	84.714	66.239	58.121	51.952	40.068	37.405
135.5	134.069	126.308	107.411	84.390	66.044	58.154	51.627	39.711	37.081
136.0	133.192	125.854	106.761	84.000	65.817	57.797	51.238	39.126	36.659
136.5	132.380	125.107	106.209	83.740	65.654	57.634	50.880	38.867	36.237
137.0	131.471	124.230	105.625	83.253	65.492	57.439	50.751	38.477	35.782
137.5	130.562	123.483	105.040	82.896	65.167	57.277	50.264	38.022	35.620
138.0	129.588	122.704	104.424	82.571	65.102	56.985	50.101	37.828	35.522
138.5	128.841	121.860	103.904	82.149	64.908	56.985	49.971	37.503	35.100

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : FSN SEED 3 LIGHT.IES**

**CANDELA TABULATION - (Cont.)**

139.0	127.867	121.178	103.222	81.662	64.550	56.887	49.517	37.048	34.840
139.5	127.023	120.301	102.573	81.272	64.388	56.660	49.289	36.789	34.516
140.0	126.373	119.522	101.696	80.948	64.291	56.595	49.062	36.431	34.191
140.5	125.464	118.580	101.241	80.331	63.901	56.303	48.640	36.172	33.899
141.0	124.555	117.964	100.527	80.103	63.771	56.076	48.510	35.717	33.509
141.5	123.776	116.924	99.943	79.584	63.511	56.043	48.185	35.392	33.184
142.0	122.834	116.145	99.196	79.064	63.187	55.848	47.926	35.003	32.795
142.5	121.698	115.333	98.579	78.675	62.992	55.621	47.763	34.840	32.405
143.0	120.788	114.392	97.865	78.155	62.765	55.556	47.536	34.321	32.308
143.5	119.814	113.450	97.085	77.636	62.505	55.264	47.146	34.029	32.015
144.0	118.905	112.573	96.403	77.246	62.148	55.037	47.081	33.769	31.821
144.5	117.931	111.664	95.722	76.824	61.920	55.102	47.017	33.574	31.593
145.0	116.892	110.885	95.105	76.175	61.628	54.842	46.659	33.152	31.431
145.5	115.950	109.976	94.390	75.817	61.433	54.615	46.432	32.990	31.398
146.0	114.879	109.002	93.611	75.330	61.109	54.355	46.335	32.762	31.593
146.5	113.937	107.995	92.799	74.811	60.751	54.257	46.042	32.275	31.561
147.0	112.996	107.119	92.182	74.291	60.427	54.063	46.075	32.048	31.463
147.5	112.021	106.015	91.436	73.772	60.329	53.900	45.783	31.853	31.561
148.0	110.853	105.105	90.624	73.285	59.907	53.673	45.588	31.593	31.626
148.5	109.749	104.229	89.942	72.733	59.745	53.478	45.426	31.301	31.691
149.0	108.580	103.352	89.130	72.278	59.355	53.348	45.361	31.009	31.853
149.5	107.768	102.345	88.351	71.629	58.998	53.251	45.166	30.879	32.015
150.0	106.664	101.241	87.572	71.174	58.608	52.926	45.003	30.652	31.983
150.5	105.592	100.397	86.760	70.655	58.414	52.861	44.906	30.522	32.178
151.0	104.553	99.228	86.045	70.005	58.056	52.601	44.711	30.489	32.405
151.5	103.612	98.287	85.299	69.551	57.732	52.472	44.549	30.230	32.275
152.0	102.248	97.410	84.422	69.096	57.439	52.212	44.419	29.937	32.210
152.5	101.144	96.274	83.708	68.414	57.050	52.082	44.159	29.905	32.340
153.0	100.300	95.202	82.734	67.732	56.790	51.920	44.192	29.775	32.308
153.5	99.001	94.260	82.052	67.213	56.400	51.660	44.127	29.743	32.438
154.0	97.897	93.221	81.175	66.693	56.076	51.432	43.867	29.678	32.340
154.5	96.696	92.117	80.266	66.044	55.783	51.205	43.867	29.678	32.275
155.0	95.494	90.981	79.487	65.427	55.491	50.945	43.672	29.645	32.275
155.5	94.423	89.877	78.675	64.778	55.102	50.751	43.412	29.710	32.470
156.0	93.384	88.903	77.798	64.323	54.712	50.621	43.412	29.743	32.470
156.5	91.955	87.831	76.856	63.609	54.485	50.328	43.412	29.613	32.665
157.0	91.078	86.825	76.110	62.927	53.965	50.134	43.218	29.353	32.600
157.5	89.812	85.721	75.168	62.310	53.543	49.809	43.153	29.223	32.438
158.0	88.676	84.519	74.421	61.790	53.251	49.647	43.120	28.996	32.438
158.5	87.669	83.578	73.642	61.076	52.764	49.387	42.958	28.574	32.405
159.0	86.403	82.539	72.635	60.427	52.374	49.030	42.893	28.411	32.438
159.5	85.234	81.370	71.791	59.875	51.984	48.932	42.828	28.022	32.470
160.0	84.032	80.201	70.882	59.063	51.562	48.575	42.601	27.989	32.438
160.5	82.961	79.129	70.038	58.446	51.205	48.445	42.406	27.827	32.405
161.0	81.695	77.960	69.064	57.862	50.848	48.121	42.211	27.762	32.665
161.5	80.331	76.856	68.252	57.017	50.361	47.861	41.919	27.372	32.795
162.0	79.064	75.753	67.148	56.303	49.971	47.536	41.627	27.112	32.957
162.5	77.863	74.616	66.304	55.751	49.744	47.309	41.172	26.820	32.957
163.0	76.662	73.415	65.395	55.004	49.127	46.984	40.165	26.625	33.022
163.5	75.363	72.343	64.388	54.355	48.867	46.659	39.094	26.138	33.217
164.0	74.291	71.142	63.511	53.738	48.478	46.562	37.763	25.327	33.119
164.5	72.960	69.908	62.570	52.861	47.991	46.172	36.107	24.612	32.502
165.0	71.694	68.674	61.628	52.179	47.536	45.555	34.581	24.255	31.528
165.5	70.330	67.570	60.654	51.400	47.114	44.841	32.957	24.093	30.230
166.0	69.161	66.369	59.647	50.783	46.562	43.705	31.009	23.963	28.736
166.5	67.765	65.102	58.511	50.101	45.945	42.146	29.385	23.638	26.625

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : FSN SEED 3 LIGHT.IES**

**CANDELA TABULATION - (Cont.)**

<b>167.0</b>	66.336	63.901	57.602	49.452	44.971	40.490	28.087	23.476	24.125
<b>167.5</b>	65.070	62.700	56.660	48.640	43.575	38.509	26.788	22.794	21.950
<b>168.0</b>	63.609	61.271	55.361	48.023	41.627	36.366	25.976	22.339	19.352
<b>168.5</b>	62.277	60.005	54.387	47.244	39.906	34.353	25.456	21.787	16.949
<b>169.0</b>	60.914	58.836	53.478	46.075	37.568	32.210	24.872	20.716	14.092
<b>169.5</b>	59.485	57.602	52.277	44.646	35.490	30.132	24.645	19.547	11.040
<b>170.0</b>	57.991	56.271	51.075	42.731	33.152	28.541	24.190	17.858	8.215
<b>170.5</b>	56.563	54.582	49.809	40.750	31.171	27.502	23.541	15.780	5.942
<b>171.0</b>	55.102	53.024	47.958	38.672	29.515	26.463	23.021	13.962	3.637
<b>171.5</b>	53.770	51.692	46.367	36.496	28.379	25.879	22.112	12.404	2.403
<b>172.0</b>	52.212	50.199	44.809	34.418	27.372	25.456	20.554	10.553	2.143
<b>172.5</b>	50.880	48.153	42.633	32.892	26.496	24.710	18.735	8.734	2.111
<b>173.0</b>	48.543	46.302	40.555	31.463	25.749	23.865	16.884	6.981	2.013
<b>173.5</b>	45.750	44.192	38.217	29.775	24.807	22.145	14.449	5.910	1.721
<b>174.0</b>	44.257	41.464	35.522	28.411	24.028	19.644	11.949	5.455	1.494
<b>174.5</b>	41.821	38.834	33.087	26.853	22.567	17.144	9.546	4.903	1.266
<b>175.0</b>	38.899	36.009	30.749	24.904	20.456	14.287	7.630	4.481	0.974
<b>175.5</b>	35.100	32.730	27.989	22.924	17.858	11.170	6.526	3.702	0.714
<b>176.0</b>	31.301	29.093	25.262	20.554	15.099	8.475	5.780	3.085	0.942
<b>176.5</b>	27.210	25.002	22.047	17.209	11.884	6.526	4.935	2.175	0.747
<b>177.0</b>	22.437	20.846	18.443	13.800	8.994	5.487	4.156	1.429	0.617
<b>177.5</b>	17.501	16.170	15.034	10.748	6.624	4.838	3.507	0.942	0.617
<b>178.0</b>	12.241	11.332	11.462	7.306	4.870	4.026	2.760	0.779	1.039
<b>178.5</b>	7.793	7.241	7.566	4.643	3.929	3.312	2.078	0.844	0.714
<b>179.0</b>	4.578	4.351	4.059	2.890	3.052	2.630	1.623	0.779	0.812
<b>179.5</b>	1.623	2.468	1.559	1.559	2.111	2.111	1.007	0.812	1.136
<b>180.0</b>	1.169	1.169	1.169	1.169	1.169	1.169	1.169	1.169	1.169



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : FSN SEED 3 LIGHT.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	132.36	N.A.	7.40
0-30	303.94	N.A.	16.90
0-40	511.44	N.A.	28.50
0-60	875.14	N.A.	48.70
0-80	1157.82	N.A.	64.40
0-90	1272.05	N.A.	70.80
10-90	1242.06	N.A.	69.10
20-40	379.08	N.A.	21.10
20-50	574.66	N.A.	32.00
40-70	513.58	N.A.	28.60
60-80	282.68	N.A.	15.70
70-80	132.81	N.A.	7.40
80-90	114.23	N.A.	6.40
90-110	208.83	N.A.	11.60
90-120	300.90	N.A.	16.70
90-130	377.85	N.A.	21.00
90-150	481.68	N.A.	26.80
90-180	525.61	N.A.	29.20
110-180	316.78	N.A.	17.60
0-180	1797.66	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	29.99
10-20	102.37
20-30	171.59
30-40	207.50
40-50	195.58
50-60	168.12
60-70	149.88
70-80	132.81
80-90	114.23
90-100	106.43
100-110	102.40
110-120	92.06
120-130	76.95
130-140	60.31
140-150	43.52
150-160	27.86
160-170	13.69
170-180	2.38

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : FSN SEED 3 LIGHT.IES**

**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0	
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	71	0
1	100	94	89	85	94	89	85	81	80	76	73	71	68	66	63	60	59	54	0
2	90	81	74	68	85	77	70	65	69	63	59	61	57	53	54	51	48	44	0
3	82	71	63	56	77	67	60	54	60	54	49	54	49	44	47	43	40	37	0
4	75	63	54	47	70	59	51	45	53	47	41	48	42	38	42	38	34	31	0
5	69	56	47	40	65	53	45	39	48	41	36	43	37	33	38	33	30	27	0
6	63	50	41	35	60	48	40	34	43	36	31	38	33	28	34	30	26	23	0
7	59	45	37	31	55	43	35	29	39	32	27	35	29	25	31	27	23	21	0
8	54	41	33	27	51	39	31	26	36	29	24	32	26	22	29	24	21	18	0
9	51	38	30	24	48	36	28	23	33	26	22	29	24	20	27	22	19	16	0
10	47	35	27	22	45	33	26	21	30	24	20	27	22	18	25	20	17	15	0

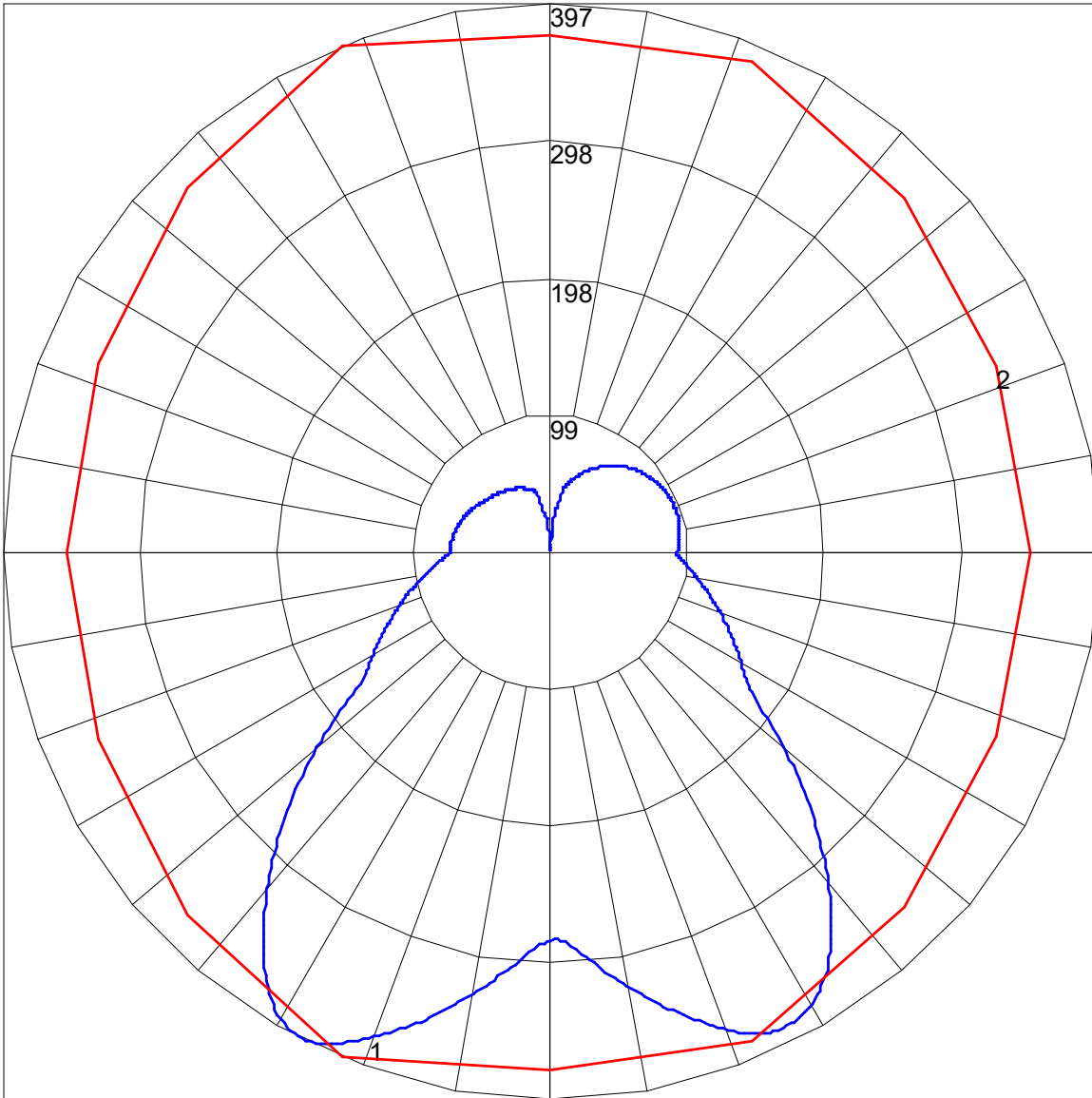
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : FSN SEED 3 LIGHT.IES**

**UGR TABLE - CORRECTED**

Reflectances											
Ceiling Cavity	70	70	50	50	30	70	70	50	50	30	
Walls	50	30	50	30	30	50	30	50	30	30	
Floor Cavity	20	20	20	20	20	20	20	20	20	20	
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	13.2	14.4	13.9	15.1	16.1	11.4	12.6	12.2	13.4	14.3
	3H	15.5	16.6	16.2	17.3	18.3	13.3	14.3	14.0	15.1	16.1
	4H	16.6	17.6	17.4	18.4	19.4	14.1	15.1	14.8	15.8	16.8
	6H	17.7	18.6	18.5	19.4	20.4	14.8	15.7	15.6	16.5	17.5
	8H	18.2	19.1	19.0	19.9	20.9	15.1	16.0	15.9	16.8	17.8
	12H	18.7	19.5	19.5	20.4	21.4	15.4	16.3	16.2	17.1	18.1
4H	2H	13.8	14.8	14.6	15.6	16.6	12.4	13.4	13.2	14.2	15.2
	3H	16.4	17.2	17.2	18.1	19.1	14.4	15.3	15.2	16.1	17.1
	4H	17.7	18.5	18.5	19.3	20.3	15.4	16.2	16.2	17.0	18.0
	6H	18.9	19.6	19.7	20.5	21.5	16.2	16.9	17.1	17.8	18.8
	8H	19.5	20.2	20.3	21.0	22.1	16.6	17.3	17.5	18.1	19.2
	12H	20.1	20.7	21.0	21.6	22.6	17.0	17.6	17.9	18.5	19.5
8H	4H	18.1	18.7	18.9	19.6	20.6	16.1	16.7	16.9	17.6	18.6
	6H	19.6	20.1	20.4	21.0	22.0	17.2	17.7	18.0	18.6	19.6
	8H	20.3	20.8	21.2	21.7	22.8	17.7	18.2	18.5	19.1	20.1
	12H	21.1	21.6	22.0	22.4	23.5	18.2	18.6	19.0	19.5	20.6
12H	4H	18.2	18.8	19.0	19.6	20.7	16.3	16.9	17.1	17.7	18.8
	6H	19.7	20.2	20.6	21.1	22.2	17.5	18.0	18.3	18.8	19.9
	8H	20.6	21.0	21.4	21.9	23.0	18.1	18.5	18.9	19.4	20.5

Maximum UGR = 23.5

POLAR GRAPH



Maximum Candela = 396.978 Located At Horizontal Angle = 112.5, Vertical Angle = 27.5  
# 1 - Vertical Plane Through Horizontal Angles (112.5 - 292.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (27.5) (Through Max. Cd.)