



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : GLL MD 12.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] Q2015081802  
[TESTLAB] QSSI  
[MANUFAC] LumenFocus, LLC  
[ISSUEDATE] 08/18/2015  
[LUMCAT] GLL MD 12  
[LUMINAIRE] 120W 3' LED GROW LIGHT  
[LAMPCAT] C3 LED COB  
[LAMP] 24 C3 LED COBs

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	947
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	8
Total Luminaire Watts	116.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.28
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	3.00 ft
Luminous Width (90-270)	1.42 ft
Luminous Height	0.02 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	814	745	755
55	544	527	570
65	474	485	406
75	376	357	391
85	534	478	546

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**CANDELA TABULATION**

	<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>0.0</b>	407.138	407.138	407.138	407.138	407.138	407.138	407.138	407.138	407.138	407.138
<b>2.5</b>	401.832	401.038	400.388	404.288	399.810	393.236	396.054	398.798	394.898	434.409
<b>5.0</b>	399.521	395.981	402.627	398.509	395.115	394.392	397.426	395.042	398.871	430.798
<b>7.5</b>	398.076	396.126	398.004	398.943	394.320	393.309	392.803	394.753	389.336	430.725
<b>10.0</b>	396.993	395.476	392.803	392.875	394.537	390.925	392.225	387.602	387.241	420.685
<b>12.5</b>	391.503	391.864	393.309	387.458	388.830	387.675	390.708	383.341	380.740	415.773
<b>15.0</b>	386.230	386.591	385.941	382.474	382.329	384.713	381.535	378.356	375.250	410.934
<b>17.5</b>	378.862	375.250	378.068	381.029	382.835	382.329	376.551	375.684	371.133	410.067
<b>20.0</b>	375.395	377.345	373.878	375.828	373.011	379.151	377.201	371.133	370.772	406.383
<b>22.5</b>	372.722	373.156	372.433	372.722	369.689	371.278	372.433	371.855	367.738	402.843
<b>25.0</b>	369.905	368.099	364.054	360.732	363.404	364.632	364.777	364.054	363.693	396.776
<b>27.5</b>	367.883	361.093	353.797	350.547	347.152	347.513	352.714	348.235	352.930	383.124
<b>30.0</b>	357.987	351.991	343.612	335.089	334.656	331.550	329.382	337.256	333.789	361.093
<b>32.5</b>	339.062	329.238	328.443	322.737	317.031	314.503	323.170	314.358	309.374	340.217
<b>35.0</b>	313.997	310.385	309.663	311.613	306.051	305.184	298.178	289.799	285.682	309.663
<b>37.5</b>	292.255	294.061	293.988	293.194	292.327	288.426	278.530	269.357	263.506	282.503
<b>40.0</b>	272.463	273.185	271.018	276.363	273.763	263.217	254.838	245.881	240.391	257.511
<b>42.5</b>	251.443	246.242	248.337	247.759	247.181	245.159	230.712	221.683	219.299	234.757
<b>45.0</b>	228.834	227.678	223.128	224.211	210.631	211.498	204.130	198.063	200.374	213.882
<b>47.5</b>	201.097	199.508	194.379	187.589	182.027	182.027	181.377	179.282	177.693	190.551
<b>50.0</b>	163.969	163.969	161.730	161.730	158.696	157.685	157.757	160.213	157.612	169.242
<b>52.5</b>	139.049	136.882	133.270	134.570	136.231	139.626	142.949	139.988	138.615	151.184
<b>55.0</b>	124.385	118.462	113.984	115.428	120.051	123.663	120.485	122.868	122.868	131.825
<b>57.5</b>	111.744	103.871	102.571	103.510	105.027	107.194	106.833	107.122	107.411	113.839
<b>60.0</b>	96.359	93.614	95.492	95.709	95.492	97.876	96.864	93.758	91.303	95.925
<b>62.5</b>	86.246	85.957	89.497	90.869	92.097	90.652	85.307	81.696	77.578	80.251
<b>65.0</b>	80.179	82.057	83.068	83.863	84.440	82.490	80.179	74.761	67.104	69.849
<b>67.5</b>	73.533	75.411	74.472	71.800	73.172	72.522	69.560	65.515	62.193	64.721
<b>70.0</b>	59.664	60.098	59.448	59.448	60.315	61.181	60.459	59.737	57.642	60.170
<b>72.5</b>	49.480	47.818	46.374	46.085	48.107	48.757	49.913	50.274	50.202	51.358
<b>75.0</b>	39.439	39.367	38.572	37.706	37.922	39.078	39.511	39.367	39.873	42.040
<b>77.5</b>	31.494	31.060	30.699	31.060	30.699	31.060	31.783	30.266	30.049	33.227
<b>80.0</b>	26.293	26.221	25.282	25.209	24.920	25.209	25.137	24.487	24.631	26.943
<b>82.5</b>	22.681	22.248	21.959	21.670	21.453	21.453	21.525	21.742	21.670	23.837
<b>85.0</b>	19.792	19.503	19.070	19.142	19.142	19.286	19.214	19.720	19.864	21.814
<b>87.5</b>	17.697	17.264	17.191	16.830	16.758	16.975	17.047	18.058	18.708	20.659
<b>90.0</b>	15.458	15.097	15.024	14.736	14.519	14.736	14.880	15.458	16.758	16.036
<b>92.5</b>	13.508	13.219	13.002	12.569	12.496	12.424	11.991	12.135	11.702	2.962
<b>95.0</b>	5.562	4.478	4.551	4.190	4.117	3.973	3.828	4.190	1.589	0.578
<b>97.5</b>	4.117	3.973	3.901	3.756	4.478	4.262	2.673	1.589	0.722	0.650
<b>100.0</b>	5.417	4.045	3.539	3.178	2.817	2.239	1.517	0.939	0.650	0.578
<b>102.5</b>	3.178	3.034	2.889	2.456	2.023	2.239	1.083	0.650	0.578	0.650
<b>105.0</b>	2.600	2.528	2.239	3.684	2.167	1.228	0.650	0.578	0.650	0.650
<b>107.5</b>	3.684	3.539	2.456	1.950	1.300	0.722	0.578	0.650	0.578	0.650
<b>110.0</b>	2.023	2.023	1.517	1.011	0.722	0.578	0.578	0.578	0.650	0.650
<b>112.5</b>	0.867	0.867	0.795	0.650	0.578	0.578	0.578	0.578	0.578	0.650
<b>115.0</b>	0.650	0.578	0.578	0.506	0.578	0.578	0.578	0.578	0.578	0.650
<b>117.5</b>	0.506	0.506	0.506	0.506	0.578	0.578	0.578	0.578	0.578	0.650
<b>120.0</b>	0.506	0.506	0.506	0.506	0.506	0.578	0.578	0.578	0.578	0.578
<b>122.5</b>	0.506	0.506	0.578	0.506	0.506	0.578	0.578	0.578	0.578	0.578
<b>125.0</b>	0.578	0.578	0.578	0.578	0.578	0.578	0.578	0.578	0.650	0.650
<b>127.5</b>	0.578	0.578	0.578	0.578	0.650	0.578	0.650	0.650	0.650	0.722
<b>130.0</b>	0.650	0.650	0.650	0.722	0.650	0.722	0.722	0.722	0.722	0.722
<b>132.5</b>	0.722	0.722	0.722	0.795	0.795	0.795	0.795	0.795	0.795	0.795

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**CANDELA TABULATION - (Cont.)**

135.0	0.867	0.795	0.867	0.867	0.867	0.867	0.867	0.867	0.867	0.867
137.5	1.011	1.011	1.011	1.011	1.011	1.011	0.939	1.011	1.011	1.011
140.0	1.083	1.083	1.083	1.083	1.083	1.083	1.156	1.083	1.083	1.083
142.5	1.228	1.228	1.228	1.228	1.228	1.228	1.228	1.228	1.228	1.300
145.0	1.372	1.300	1.372	1.372	1.372	1.300	1.372	1.300	1.372	1.445
147.5	1.517	1.517	1.445	1.517	1.517	1.445	1.445	1.517	1.517	1.661
150.0	1.589	1.661	1.661	1.661	1.661	1.661	1.661	1.589	1.661	1.878
152.5	1.806	1.806	1.734	1.734	1.806	1.734	1.806	1.734	1.806	1.950
155.0	2.023	2.023	1.950	1.950	2.023	2.023	1.950	2.023	2.023	2.239
157.5	2.167	2.239	2.167	2.167	2.167	2.167	2.167	2.095	2.167	2.528
160.0	2.384	2.384	2.384	2.384	2.384	2.311	2.384	2.384	2.384	2.817
162.5	2.600	2.528	2.600	2.600	2.600	2.528	2.528	2.528	2.528	3.034
165.0	2.817	2.817	2.817	2.817	2.745	2.817	2.745	2.745	2.745	3.178
167.5	3.034	2.962	2.962	3.034	2.962	2.889	2.962	2.889	2.889	3.250
170.0	3.106	3.106	3.106	3.106	3.034	3.034	3.034	3.034	3.034	3.323
172.5	3.106	3.178	3.178	3.106	3.106	3.106	3.106	3.106	3.106	3.323
175.0	3.178	3.250	3.178	3.178	3.178	3.178	3.034	3.106	3.106	3.395
177.5	3.178	3.178	3.178	3.178	3.106	3.106	3.106	3.106	3.106	3.395
180.0	3.147	3.147	3.147	3.147	3.147	3.147	3.147	3.147	3.147	3.147

**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>	<u>190</u>
0.0	407.138	407.138	407.138	407.138	407.138	407.138	407.138	407.138	407.138	407.138
2.5	424.008	418.879	408.767	410.572	409.417	405.949	400.460	401.399	398.148	399.521
5.0	422.130	412.956	412.884	404.794	403.277	405.010	398.798	396.198	395.837	400.315
7.5	416.279	410.428	405.588	397.932	407.033	398.365	394.681	397.570	392.803	397.282
10.0	413.173	404.938	405.516	402.916	397.209	398.293	395.187	388.758	388.686	390.853
12.5	408.478	403.782	400.604	393.092	395.115	390.997	394.248	385.363	385.363	386.663
15.0	400.893	402.482	396.342	391.792	388.902	387.963	383.268	382.546	378.718	382.618
17.5	401.832	398.582	398.148	392.586	388.397	380.957	382.763	381.607	376.912	378.501
20.0	399.232	390.492	391.720	381.246	378.718	379.368	369.905	375.539	371.350	370.628
22.5	396.342	390.708	385.435	380.090	373.589	367.160	369.038	370.339	368.099	367.160
25.0	390.058	381.679	375.178	366.655	361.021	359.865	360.154	363.404	367.738	361.960
27.5	377.923	364.054	355.386	348.163	349.608	345.779	344.190	348.452	354.447	356.036
30.0	355.170	349.319	341.012	334.656	334.656	331.044	335.450	329.744	334.367	342.096
32.5	330.105	321.292	323.604	320.787	316.669	325.554	322.737	318.475	313.636	320.787
35.0	304.318	301.717	300.489	303.740	311.035	308.363	300.850	297.239	297.744	303.595
37.5	275.786	273.474	277.736	284.454	286.621	283.081	276.002	276.580	279.036	282.576
40.0	251.443	251.804	252.888	258.883	251.515	253.610	255.055	258.811	259.678	259.316
42.5	227.101	226.306	223.200	226.378	223.489	227.462	232.085	229.990	235.335	236.563
45.0	207.381	203.264	198.496	196.257	199.074	197.557	203.047	199.869	198.135	196.040
47.5	184.989	182.244	173.215	171.553	171.626	171.842	174.082	170.687	165.919	164.764
50.0	163.391	161.874	153.495	148.150	147.717	143.527	146.633	142.444	145.188	143.671
52.5	147.933	138.904	132.764	128.791	125.974	122.652	121.857	122.218	126.480	127.925
55.0	126.336	119.907	120.124	116.078	111.167	108.855	106.471	108.927	109.866	111.961
57.5	109.794	103.654	104.016	101.560	99.537	97.948	96.214	96.431	96.287	100.187
60.0	92.892	89.063	91.953	92.169	91.086	90.291	89.930	89.858	89.569	90.580
62.5	78.012	77.939	79.529	83.718	84.368	86.607	85.813	85.741	82.273	85.596
65.0	69.199	70.499	72.522	75.122	75.845	77.434	78.373	76.711	74.039	73.316
67.5	63.565	64.287	63.710	67.321	65.010	65.876	63.059	63.493	63.348	61.976
70.0	58.148	55.475	55.836	53.525	52.224	53.163	50.924	51.069	50.202	50.852
72.5	48.685	46.879	47.240	43.701	41.534	41.101	40.667	39.945	40.089	40.378
75.0	38.139	37.489	36.189	34.816	33.299	32.505	32.360	31.132	31.277	31.783
77.5	30.699	30.121	28.677	27.665	27.232	26.293	26.221	25.498	25.643	25.715
80.0	26.004	25.065	24.776	23.476	23.115	22.320	21.959	21.381	21.959	21.309

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**CANDELA TABULATION - (Cont.)**

82.5	23.115	22.248	21.453	20.514	20.081	19.286	19.070	19.070	18.997	18.997
85.0	21.381	20.225	19.503	18.130	17.553	16.830	16.758	16.758	16.325	16.758
87.5	20.370	18.492	17.119	15.602	15.097	14.736	14.374	14.158	14.230	14.447
90.0	17.191	15.024	13.797	13.002	12.930	12.785	12.352	12.569	11.774	12.569
92.5	4.045	5.129	4.623	4.478	4.478	4.334	4.334	4.334	4.262	4.190
95.0	0.578	1.517	3.539	5.345	5.851	6.429	6.068	4.984	4.551	4.912
97.5	0.578	0.650	1.372	2.239	2.745	3.034	5.345	6.068	6.068	5.995
100.0	0.650	0.578	0.867	1.445	1.806	2.311	2.673	2.745	2.962	2.962
102.5	0.578	0.578	0.578	0.939	1.661	1.878	2.023	2.239	2.311	2.311
105.0	0.650	0.578	0.578	0.578	0.939	1.589	2.167	2.239	2.095	2.167
107.5	0.650	0.578	0.578	0.506	0.578	0.867	1.300	1.589	1.878	1.878
110.0	0.578	0.578	0.578	0.578	0.506	0.578	0.795	0.939	1.156	1.083
112.5	0.578	0.578	0.506	0.578	0.506	0.506	0.506	0.578	0.650	0.650
115.0	0.650	0.578	0.578	0.506	0.506	0.506	0.433	0.506	0.506	0.433
117.5	0.650	0.578	0.578	0.506	0.506	0.506	0.433	0.433	0.433	0.506
120.0	0.578	0.578	0.506	0.506	0.506	0.578	0.506	0.506	0.506	0.506
122.5	0.650	0.578	0.578	0.578	0.506	0.506	0.506	0.506	0.506	0.506
125.0	0.650	0.578	0.578	0.578	0.578	0.578	0.578	0.578	0.506	0.506
127.5	0.650	0.650	0.650	0.650	0.578	0.578	0.578	0.578	0.578	0.578
130.0	0.722	0.722	0.650	0.650	0.650	0.650	0.650	0.650	0.650	0.578
132.5	0.795	0.722	0.722	0.722	0.722	0.722	0.722	0.722	0.650	0.650
135.0	0.867	0.867	0.795	0.795	0.795	0.795	0.795	0.795	0.722	0.795
137.5	1.011	0.867	0.939	0.939	0.867	0.867	0.867	0.867	0.867	0.867
140.0	1.083	1.011	1.011	0.939	0.939	0.939	0.939	1.011	0.939	0.939
142.5	1.228	1.156	1.156	1.083	1.083	1.156	1.156	1.083	1.083	1.083
145.0	1.372	1.300	1.300	1.300	1.300	1.228	1.228	1.228	1.228	1.228
147.5	1.589	1.445	1.445	1.372	1.445	1.445	1.372	1.372	1.300	1.372
150.0	1.734	1.661	1.661	1.589	1.589	1.589	1.589	1.589	1.589	1.589
152.5	2.023	1.950	1.878	1.806	1.806	1.806	1.806	1.806	1.806	1.806
155.0	2.384	2.167	2.167	2.095	2.095	2.167	2.095	2.095	2.095	2.023
157.5	2.528	2.456	2.384	2.384	2.384	2.384	2.384	2.311	2.311	2.311
160.0	2.817	2.745	2.600	2.600	2.600	2.600	2.600	2.600	2.600	2.600
162.5	3.034	2.889	2.817	2.817	2.817	2.817	2.817	2.817	2.817	2.817
165.0	3.178	2.962	2.962	2.962	2.962	2.962	2.962	2.962	2.889	2.889
167.5	3.250	3.034	3.106	3.034	3.034	3.034	3.034	3.034	3.034	3.034
170.0	3.250	3.178	3.106	3.106	3.034	3.106	3.106	3.106	3.034	3.034
172.5	3.250	3.178	3.106	3.034	3.106	3.106	3.106	3.034	3.034	3.034
175.0	3.178	3.106	3.106	3.106	3.034	3.106	3.106	3.034	3.034	3.034
177.5	3.250	3.178	3.178	3.106	3.106	3.178	3.034	3.106	3.106	3.034
180.0	3.147	3.147	3.147	3.147	3.147	3.147	3.147	3.147	3.147	3.147

**Vert.  
Angles**

**Horizontal Angles**

	<u>200</u>	<u>210</u>	<u>220</u>	<u>230</u>	<u>240</u>	<u>250</u>	<u>260</u>	<u>270</u>	<u>280</u>	<u>290</u>
0.0	407.138	407.138	407.138	407.138	407.138	407.138	407.138	407.138	407.138	407.138
2.5	400.893	397.643	398.943	393.453	399.593	397.354	403.277	434.770	428.342	419.096
5.0	399.521	399.087	396.415	394.898	395.620	396.126	398.148	432.315	428.053	421.696
7.5	395.476	399.160	398.509	394.248	396.126	395.115	392.297	432.531	420.396	417.868
10.0	389.264	394.175	391.142	390.058	393.814	392.370	391.720	426.897	415.773	413.534
12.5	383.268	388.252	390.781	392.875	388.180	390.130	381.751	423.574	410.717	409.561
15.0	379.368	382.185	386.735	385.435	384.857	384.569	381.463	418.518	410.139	404.794
17.5	378.790	380.307	379.512	384.496	385.363	383.918	378.501	414.834	405.949	399.665
20.0	370.194	368.750	373.228	375.901	372.578	375.901	376.840	416.279	406.600	403.060
22.5	365.643	363.188	359.359	364.271	369.689	378.140	375.756	410.500	400.749	400.026
25.0	357.842	356.831	355.242	357.337	359.937	369.472	366.799	403.566	392.948	394.753
27.5	351.630	351.630	345.418	349.536	352.786	362.537	361.598	395.403	387.819	383.413

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GLL MD 12.IES**

**CANDELA TABULATION - (Cont.)**

30.0	346.141	346.429	340.362	335.739	345.924	346.285	347.657	382.763	372.722	373.011
32.5	327.071	333.428	334.656	329.527	328.155	328.155	331.333	362.176	353.725	353.581
35.0	307.640	319.414	315.586	314.358	309.880	306.123	312.263	344.118	337.545	329.960
37.5	287.849	295.361	297.311	297.167	288.499	289.149	285.104	320.715	316.381	315.442
40.0	262.423	260.978	271.452	273.474	267.479	264.084	268.562	292.760	289.510	292.255
42.5	235.263	229.412	238.586	242.414	244.942	241.547	241.981	268.346	264.517	258.450
45.0	203.553	202.180	204.492	214.604	219.950	221.683	223.344	244.437	241.258	236.057
47.5	166.786	175.021	177.188	185.205	194.307	198.424	201.313	218.938	218.433	213.232
50.0	143.166	148.005	157.179	163.969	166.931	170.976	177.693	193.801	190.912	188.456
52.5	127.347	132.114	136.448	138.904	143.888	145.838	153.423	172.854	169.242	163.752
55.0	113.767	118.968	121.857	124.241	124.819	125.180	129.731	152.267	148.511	143.599
57.5	105.099	110.083	111.456	112.250	111.167	107.627	108.783	127.130	125.035	124.024
60.0	94.625	102.426	104.810	104.088	99.898	96.070	92.530	104.232	105.677	106.544
62.5	86.535	91.158	94.409	94.481	89.569	86.030	81.334	91.447	91.808	93.036
65.0	73.533	79.095	80.179	84.440	79.529	77.289	76.206	83.212	81.623	81.912
67.5	62.770	65.443	68.043	71.366	71.583	71.655	69.560	76.134	73.389	76.061
70.0	52.875	52.586	55.908	58.436	58.942	60.315	62.337	70.355	68.983	69.416
72.5	41.462	42.617	45.868	47.746	47.890	49.046	50.130	59.448	59.448	58.003
75.0	32.722	34.238	35.394	37.200	37.633	37.633	39.295	46.663	47.385	46.879
77.5	26.221	27.449	27.737	29.182	29.471	30.338	31.710	36.189	37.417	36.694
80.0	22.537	22.970	23.331	24.559	24.848	25.643	26.510	30.627	30.916	30.410
82.5	19.503	19.936	20.225	21.237	21.814	22.753	24.198	27.304	27.665	26.654
85.0	17.047	17.553	17.625	18.781	19.864	21.020	22.031	25.065	24.920	24.704
87.5	14.880	15.169	15.313	16.108	17.408	18.781	20.153	23.403	23.331	22.826
90.0	12.930	12.930	13.291	13.435	14.447	15.530	17.842	20.442	21.164	20.009
92.5	4.190	4.190	4.262	4.551	4.984	9.679	12.207	9.463	12.424	15.169
95.0	4.623	4.623	5.851	5.923	5.345	4.117	1.445	0.722	0.939	4.190
97.5	5.923	5.490	3.323	2.745	2.167	1.300	0.506	0.722	0.650	1.372
100.0	2.889	2.600	2.311	1.806	1.445	0.650	0.506	0.650	0.650	0.650
102.5	2.239	2.023	1.950	1.445	0.722	0.506	0.506	0.722	0.650	0.650
105.0	2.311	1.950	1.372	0.867	0.506	0.506	0.506	0.650	0.578	0.578
107.5	1.589	1.156	0.867	0.578	0.506	0.506	0.506	0.722	0.650	0.578
110.0	0.867	0.650	0.578	0.506	0.506	0.506	0.506	0.722	0.650	0.650
112.5	0.578	0.506	0.506	0.506	0.506	0.506	0.433	0.650	0.578	0.578
115.0	0.433	0.506	0.506	0.506	0.506	0.506	0.506	0.650	0.650	0.578
117.5	0.433	0.433	0.433	0.506	0.506	0.506	0.506	0.650	0.578	0.578
120.0	0.506	0.433	0.506	0.506	0.433	0.506	0.506	0.650	0.578	0.506
122.5	0.506	0.506	0.506	0.506	0.506	0.506	0.506	0.650	0.578	0.506
125.0	0.506	0.506	0.506	0.578	0.506	0.506	0.506	0.650	0.578	0.650
127.5	0.578	0.578	0.578	0.578	0.578	0.578	0.578	0.722	0.650	0.578
130.0	0.650	0.578	0.650	0.578	0.650	0.578	0.578	0.722	0.722	0.650
132.5	0.650	0.650	0.722	0.650	0.650	0.650	0.650	0.867	0.795	0.795
135.0	0.722	0.722	0.722	0.722	0.722	0.722	0.722	0.939	0.939	0.939
137.5	0.867	0.867	0.867	0.867	0.795	0.795	0.867	1.083	1.011	1.011
140.0	0.939	0.939	1.011	0.939	0.939	0.939	0.939	1.228	1.156	1.156
142.5	1.083	1.083	1.083	1.083	1.083	1.011	1.011	1.372	1.300	1.156
145.0	1.156	1.156	1.228	1.156	1.156	1.156	1.156	1.445	1.445	1.372
147.5	1.372	1.300	1.372	1.372	1.372	1.372	1.300	1.661	1.589	1.517
150.0	1.517	1.517	1.517	1.517	1.517	1.517	1.517	1.806	1.734	1.661
152.5	1.734	1.734	1.806	1.734	1.734	1.734	1.734	1.950	1.878	1.806
155.0	2.095	2.023	2.023	2.023	2.023	2.023	2.023	2.167	2.095	2.023
157.5	2.311	2.311	2.239	2.239	2.311	2.239	2.239	2.384	2.311	2.239
160.0	2.528	2.528	2.528	2.528	2.456	2.528	2.528	2.528	2.528	2.456
162.5	2.745	2.745	2.745	2.673	2.673	2.673	2.673	2.745	2.673	2.673
165.0	2.889	2.889	2.889	2.817	2.817	2.817	2.817	2.962	2.889	2.889
167.5	3.034	2.962	2.962	2.889	2.889	2.889	2.889	3.178	3.106	3.034

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GLL MD 12.IES**

**CANDELA TABULATION - (Cont.)**

<b>170.0</b>	3.034	3.034	2.962	2.962	2.962	2.962	2.962	3.323	3.178	3.178
<b>172.5</b>	3.034	2.962	2.962	3.034	2.962	2.962	2.962	3.395	3.323	3.250
<b>175.0</b>	3.034	3.034	3.034	3.034	2.962	3.034	3.034	3.395	3.323	3.178
<b>177.5</b>	3.034	3.034	3.034	3.034	3.034	3.034	3.034	3.395	3.323	3.250
<b>180.0</b>	3.147	3.147	3.147	3.147	3.147	3.147	3.147	3.147	3.147	3.147

**Vert. Horizontal Angles**

<b>Angles</b>	<b>300</b>	<b>310</b>	<b>320</b>	<b>330</b>	<b>340</b>	<b>350</b>	<b>360</b>
<b>0.0</b>	407.138	407.138	407.138	407.138	407.138	407.138	407.138
<b>2.5</b>	413.967	412.595	414.545	407.683	406.022	402.266	401.832
<b>5.0</b>	414.401	412.234	407.539	409.344	404.216	406.238	399.521
<b>7.5</b>	411.078	403.782	404.649	400.893	404.071	401.904	398.076
<b>10.0</b>	407.033	407.394	402.699	397.282	398.076	396.270	396.993
<b>12.5</b>	406.961	405.010	403.205	396.848	394.464	394.031	391.503
<b>15.0</b>	403.566	399.160	399.665	394.753	390.203	388.036	386.230
<b>17.5</b>	401.038	398.148	394.826	389.119	390.347	384.785	378.862
<b>20.0</b>	397.932	395.042	392.659	384.135	380.668	374.745	375.395
<b>22.5</b>	393.887	391.431	381.607	378.068	375.034	375.828	372.722
<b>25.0</b>	392.370	381.390	379.729	375.250	371.711	370.772	369.905
<b>27.5</b>	376.045	370.339	365.571	368.388	366.727	363.115	367.883
<b>30.0</b>	376.332	360.732	357.915	356.325	356.976	356.831	357.987
<b>32.5</b>	354.953	351.991	346.429	346.213	348.958	342.168	339.062
<b>35.0</b>	335.739	337.184	340.434	335.233	327.216	320.859	313.997
<b>37.5</b>	310.746	321.148	320.715	319.848	308.579	300.562	292.255
<b>40.0</b>	292.183	294.783	293.049	295.216	282.503	276.002	272.463
<b>42.5</b>	262.639	266.756	264.878	262.639	253.104	255.849	251.443
<b>45.0</b>	235.841	240.825	230.784	226.378	227.462	229.484	228.834
<b>47.5</b>	212.221	211.498	199.291	201.819	201.097	200.013	201.097
<b>50.0</b>	186.795	184.989	173.215	172.420	171.553	170.831	163.969
<b>52.5</b>	161.946	156.240	153.495	149.956	147.717	145.261	139.049
<b>55.0</b>	139.988	136.809	134.859	129.080	127.636	128.575	124.385
<b>57.5</b>	122.074	123.591	119.546	115.934	115.428	114.417	111.744
<b>60.0</b>	107.122	108.711	108.638	109.216	106.038	103.149	96.359
<b>62.5</b>	93.325	99.393	97.226	98.598	96.431	91.230	86.246
<b>65.0</b>	84.296	90.580	88.485	87.546	84.729	83.285	80.179
<b>67.5</b>	77.073	80.106	77.434	76.567	74.617	75.339	73.533
<b>70.0</b>	66.671	68.116	65.010	65.443	63.059	62.048	59.664
<b>72.5</b>	55.908	56.920	55.186	55.403	52.080	51.502	49.480
<b>75.0</b>	45.362	46.518	45.290	45.146	42.112	41.751	39.439
<b>77.5</b>	37.344	36.983	35.250	35.177	34.238	33.010	31.494
<b>80.0</b>	30.843	30.338	29.832	28.749	27.882	27.376	26.293
<b>82.5</b>	26.654	26.004	24.993	24.559	23.692	23.692	22.681
<b>85.0</b>	24.198	23.115	22.392	21.598	21.092	20.586	19.792
<b>87.5</b>	21.670	20.442	19.864	18.925	18.636	18.058	17.697
<b>90.0</b>	18.492	17.480	17.047	16.469	16.252	15.747	15.458
<b>92.5</b>	14.880	14.447	14.374	14.085	14.013	13.724	13.508
<b>95.0</b>	4.912	4.912	4.912	4.912	5.490	7.296	5.562
<b>97.5</b>	2.889	4.695	5.706	4.334	4.262	4.190	4.117
<b>100.0</b>	1.734	2.528	3.178	3.612	3.756	5.490	5.417
<b>102.5</b>	0.795	1.878	2.239	2.817	3.106	3.178	3.178
<b>105.0</b>	0.578	0.867	1.878	3.612	2.311	2.600	2.600
<b>107.5</b>	0.578	0.578	0.939	1.806	2.311	3.250	3.684
<b>110.0</b>	0.578	0.578	0.650	0.867	1.372	1.806	2.023
<b>112.5</b>	0.578	0.578	0.506	0.650	0.722	0.867	0.867
<b>115.0</b>	0.578	0.506	0.506	0.506	0.578	0.578	0.650

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GLL MD 12.IES**

**CANDELA TABULATION - (Cont.)**

<b>117.5</b>	0.578	0.578	0.506	0.506	0.506	0.506	0.506
<b>120.0</b>	0.506	0.506	0.506	0.506	0.506	0.506	0.506
<b>122.5</b>	0.506	0.506	0.506	0.506	0.506	0.506	0.506
<b>125.0</b>	0.578	0.578	0.578	0.578	0.578	0.578	0.578
<b>127.5</b>	0.650	0.578	0.578	0.578	0.578	0.578	0.578
<b>130.0</b>	0.650	0.722	0.650	0.650	0.650	0.650	0.650
<b>132.5</b>	0.722	0.722	0.795	0.795	0.722	0.722	0.722
<b>135.0</b>	0.867	0.867	0.867	0.867	0.867	0.867	0.867
<b>137.5</b>	0.939	0.939	0.939	0.939	0.939	0.939	1.011
<b>140.0</b>	1.083	1.083	1.083	1.083	1.083	1.083	1.083
<b>142.5</b>	1.228	1.156	1.228	1.228	1.156	1.228	1.228
<b>145.0</b>	1.372	1.372	1.372	1.372	1.300	1.372	1.372
<b>147.5</b>	1.517	1.517	1.445	1.445	1.445	1.517	1.517
<b>150.0</b>	1.589	1.661	1.589	1.589	1.589	1.661	1.589
<b>152.5</b>	1.806	1.806	1.806	1.806	1.806	1.806	1.806
<b>155.0</b>	2.023	2.023	1.950	1.950	1.950	1.950	2.023
<b>157.5</b>	2.239	2.095	2.167	2.167	2.167	2.167	2.167
<b>160.0</b>	2.384	2.384	2.384	2.384	2.311	2.311	2.384
<b>162.5</b>	2.600	2.600	2.600	2.600	2.600	2.600	2.600
<b>165.0</b>	2.817	2.745	2.745	2.817	2.817	2.817	2.817
<b>167.5</b>	2.962	2.962	2.962	2.962	2.962	2.962	3.034
<b>170.0</b>	3.106	3.106	3.106	3.106	3.106	3.178	3.106
<b>172.5</b>	3.178	3.178	3.178	3.178	3.178	3.178	3.106
<b>175.0</b>	3.250	3.178	3.178	3.178	3.178	3.178	3.178
<b>177.5</b>	3.178	3.178	3.178	3.178	3.106	3.178	3.178
<b>180.0</b>	3.147	3.147	3.147	3.147	3.147	3.147	3.147

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GLL MD 12.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	148.93	N.A.	15.70
0-30	318.93	N.A.	33.70
0-40	513.33	N.A.	54.20
0-60	791.52	N.A.	83.60
0-80	911.80	N.A.	96.30
0-90	933.75	N.A.	98.60
10-90	895.32	N.A.	94.60
20-40	364.40	N.A.	38.50
20-50	530.00	N.A.	56.00
40-70	356.16	N.A.	37.60
60-80	120.28	N.A.	12.70
70-80	42.30	N.A.	4.50
80-90	21.96	N.A.	2.30
90-110	8.43	N.A.	0.90
90-120	9.01	N.A.	1.00
90-130	9.53	N.A.	1.00
90-150	10.99	N.A.	1.20
90-180	13.02	N.A.	1.40
110-180	4.59	N.A.	0.50
0-180	946.77	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	38.44
10-20	110.50
20-30	170.00
30-40	194.40
40-50	165.61
50-60	112.58
60-70	77.97
70-80	42.30
80-90	21.96
90-100	6.88
100-110	1.54
110-120	0.58
120-130	0.52
130-140	0.64
140-150	0.82
150-160	0.94
160-170	0.80
170-180	0.30



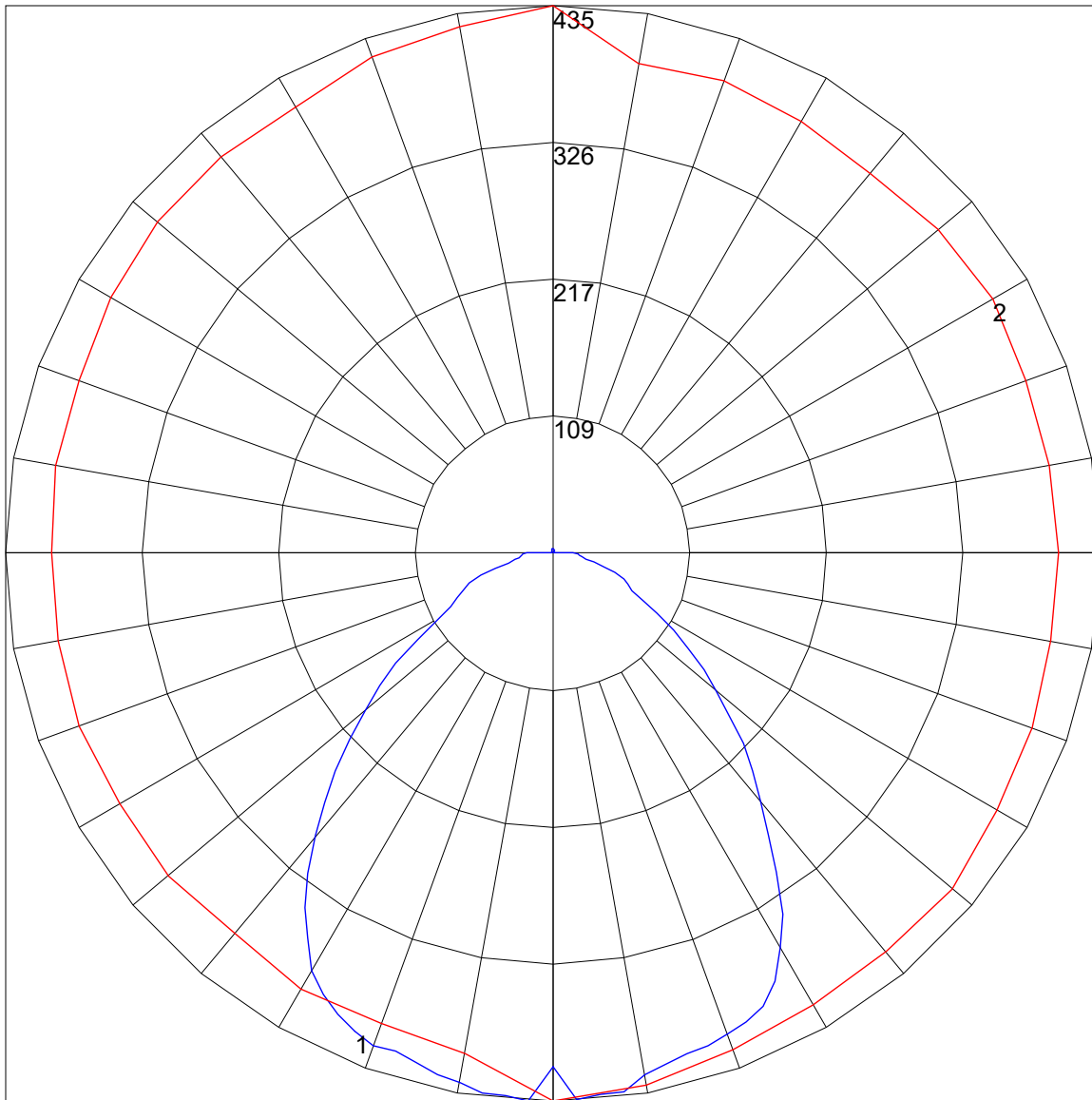
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GLL MD 12.IES**

**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	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	99
1	109	105	101	97	106	102	99	96	98	95	92	94	92	89	90	88	86	84
2	100	93	87	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	83	75	69	90	81	74	69	78	72	67	75	70	66	72	68	65	62
4	85	74	66	60	83	73	65	59	70	64	58	68	62	58	65	61	57	55
5	79	67	59	52	77	66	58	52	64	57	51	61	55	51	60	54	50	48
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	54	49	45	43
7	68	55	47	41	66	55	47	41	53	46	41	51	45	40	50	44	40	38
8	64	51	43	37	62	50	42	37	49	42	37	47	41	37	46	41	36	34
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29

POLAR GRAPH



Maximum Candela = 434.77 Located At Horizontal Angle = 270, Vertical Angle = 2.5  
# 1 - Vertical Plane Through Horizontal Angles (270 - 90) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)