

Luminaire Property

Luminaire Description: GSD-40W
 Luminaire Categorie: GALAXY SATURN
 DIRECTLamp Categorie:

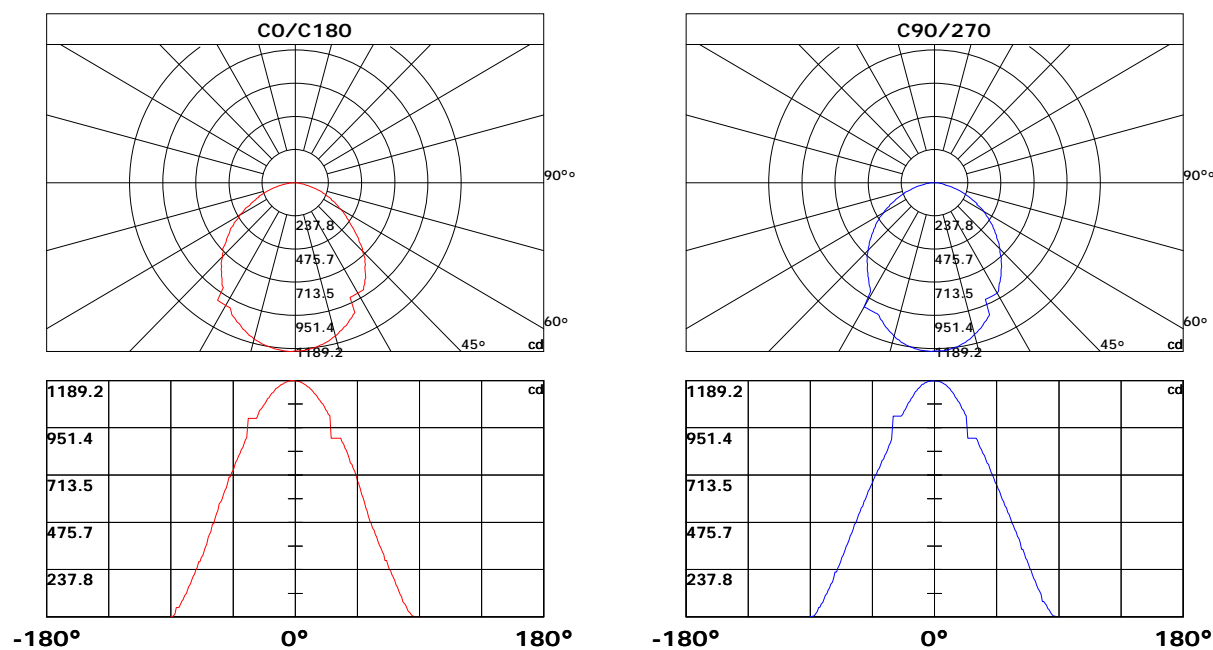
Lamp Description: Samsung 2835
 Number of Lamp:
 Lamp Lumens(lm): 3636.49
 Luminous Length(m):
 Luminous Width(m):
 Luminous Height(m):

Voltage: 120.0 V
 Current: 0.173 A
 Power: 37.24 W
 Power Factor: 0.974
 Test Lab:*MERCURY LIGHTING
 Photometric Type: Type C

Photometric Results

CIE Class: Direct
 Measurement Flux: 3636.49 lm
 Efficiency: 97.6523 lm/W
 Central Intensity: 1185.112cd
 Max. Intensity: 1189.17cd
 Field Angle(10%Imax): 153.63, 152.62

Max.Intensity Angle: C:180.0 G:1.0
 Beam Angle(50%Imax): 102.39, 100.02
 Luminaire Efficacy Rating(LER) : 100.00%
 Upward Ratio: 0.0%
 Downward Ratio: 100.0%



Light intensity data Unit[cd]

C\G	G0.0	G1.0	G2.0	G3.0	G4.0	G5.0	G6.0	G7.0	G8.0	G9.0
C0.0	1185.1	1187.4	1186.0	1183.5	1180.0	1177.8	1172.9	1170.1	1164.4	1157.7
C30.0	1185.1	1184.9	1184.6	1181.0	1181.0	1177.8	1173.2	1170.8	1165.5	1162.6
C60.0	1185.1	1187.4	1186.7	1186.0	1184.2	1182.8	1180.3	1178.2	1173.9	1168.3
C90.0	1185.1	1187.4	1186.0	1184.9	1182.1	1180.3	1176.1	1171.1	1167.6	1161.2
C120.0	1185.1	1179.3	1179.3	1178.5	1177.5	1176.4	1173.6	1170.1	1167.6	1163.3
C150.0	1185.1	1180.3	1179.6	1176.8	1173.2	1172.2	1165.1	1165.1	1160.1	1154.1
C180.0	1185.1	1189.2	1188.8	1188.1	1186.3	1184.9	1182.1	1180.0	1176.1	1171.1
C210.0	1185.1	1186.3	1186.0	1184.6	1183.5	1181.4	1179.6	1176.4	1171.5	1169.0
C240.0	1185.1	1186.0	1184.9	1183.5	1180.7	1177.1	1175.4	1169.7	1167.2	1160.8
C270.0	1185.1	1188.1	1187.4	1186.0	1184.9	1183.5	1178.5	1176.4	1171.5	1168.3
C300.0	1185.1	1177.1	1176.1	1173.6	1172.5	1168.6	1164.4	1161.9	1156.6	1153.4
C330.0	1185.1	1181.0	1181.0	1181.4	1180.7	1178.2	1176.4	1173.2	1171.5	1166.5
C360.0	1185.1	1187.4	1186.0	1183.5	1180.0	1177.8	1172.9	1170.1	1164.4	1157.7
C\G	G10.0	G11.0	G12.0	G13.0	G14.0	G15.0	G16.0	G17.0	G18.0	G19.0
C0.0	1154.1	1146.3	1142.1	1132.9	1123.0	1117.7	1107.0	1095.4	1088.6	1076.2
C30.0	1155.2	1147.4	1143.9	1135.4	1130.0	1120.5	1109.5	1104.2	1091.8	1079.1
C60.0	1166.2	1159.4	1155.5	1146.7	1136.8	1131.1	1119.4	1107.0	1100.7	1087.2
C90.0	1152.4	1147.7	1136.8	1131.1	1118.7	1105.6	1098.9	1084.7	1077.3	1062.4
C120.0	1157.7	1157.7	1147.4	1138.5	1133.6	1122.6	1116.2	1103.8	1090.8	1084.0
C150.0	1147.0	1143.1	1139.6	1131.1	1122.3	1117.3	1107.0	1095.7	1089.7	1076.6
C180.0	1168.6	1162.3	1158.7	1151.3	1147.4	1138.5	1129.7	1124.7	1114.5	1103.1
C210.0	1163.0	1159.8	1153.1	1145.6	1136.4	1131.8	1122.6	1112.0	1107.0	1095.4
C240.0	1153.4	1149.2	1139.3	1128.3	1116.6	1109.5	1096.4	1089.7	1075.5	1060.0
C270.0	1161.6	1153.1	1148.5	1137.5	1131.5	1118.7	1105.6	1098.5	1084.0	1076.6
C300.0	1147.0	1142.4	1132.9	1122.3	1116.6	1104.9	1098.5	1085.4	1071.6	1064.2
C330.0	1161.2	1161.2	1150.9	1147.4	1139.6	1131.1	1121.6	1116.6	1105.6	1093.6
C360.0	1154.1	1146.3	1142.1	1132.9	1123.0	1117.7	1107.0	1095.4	1088.6	1076.2
C\G	G20.0	G21.0	G22.0	G23.0	G24.0	G25.0	G26.0	G27.0	G28.0	G29.0
C0.0	1070.6	1056.1	1041.5	1034.1	1019.2	1011.4	898.9	898.9	898.9	898.9
C30.0	1072.3	1058.5	1043.3	1035.5	1019.6	1003.0	902.1	902.1	902.1	902.1
C60.0	1072.7	1065.3	1050.0	1033.8	1026.0	1009.0	999.8	999.8	999.8	999.8
C90.0	1046.1	1038.7	1021.4	1011.8	899.2	899.2	899.2	899.2	899.2	899.2
C120.0	1069.9	1062.4	1055.0	1039.8	1023.5	1006.8	997.3	997.3	997.3	997.3
C150.0	1063.5	1049.0	1041.9	1026.3	1018.5	1002.2	903.1	903.1	903.1	903.1
C180.0	1096.4	1084.7	1071.6	1064.9	1051.5	1044.4	1036.9	1013.9	998.0	998.0
C210.0	1083.0	1076.2	1062.4	1055.3	1040.1	1024.9	1016.8	1000.1	1000.1	1000.1
C240.0	1052.2	1035.5	1018.9	1010.0	904.9	904.9	904.9	904.9	904.9	904.9
C270.0	1061.0	1044.7	1036.2	1018.9	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0
C300.0	1049.0	1040.8	1023.5	1006.5	998.0	903.1	903.1	903.1	903.1	903.1
C330.0	1087.2	1074.1	1067.0	1052.5	1037.6	1029.9	1013.9	997.3	997.3	997.3
C360.0	1070.6	1056.1	1041.5	1034.1	1019.2	1011.4	898.9	898.9	898.9	898.9

Light intensity data Unit[cd]

C\G	G30.0	G31.0	G32.0	G33.0	G34.0	G35.0	G36.0	G37.0	G38.0	G39.0
C0.0	898.9	898.9	898.9	898.9	880.1	869.8	849.0	838.7	818.5	798.0
C30.0	902.1	902.1	902.1	892.1	872.0	851.8	840.8	819.9	809.3	776.0
C60.0	999.8	999.8	904.2	884.0	873.7	853.2	842.9	822.4	801.5	791.2
C90.0	899.2	889.3	869.8	850.7	841.2	822.0	812.5	793.7	775.3	765.8
C120.0	997.3	997.3	904.2	894.6	874.1	852.5	842.2	821.3	800.5	790.2
C150.0	903.1	903.1	903.1	883.6	873.4	843.3	843.3	822.8	812.1	775.3
C180.0	998.0	998.0	998.0	998.0	998.0	901.0	891.4	872.3	852.5	840.8
C210.0	1000.1	1000.1	1000.1	1000.1	898.2	887.9	868.1	847.2	836.6	815.7
C240.0	904.9	884.7	874.8	853.6	832.7	811.4	801.5	775.3	771.8	742.0
C270.0	1010.0	893.9	874.1	862.8	842.9	823.5	813.9	795.1	785.2	766.5
C300.0	903.1	882.9	862.8	851.8	831.3	810.4	800.5	775.7	770.7	750.5
C330.0	997.3	997.3	997.3	997.3	896.0	886.1	864.2	855.7	833.4	812.1
C360.0	898.9	898.9	898.9	898.9	880.1	869.8	849.0	838.7	818.5	798.0
C\G	G40.0	G41.0	G42.0	G43.0	G44.0	G45.0	G46.0	G47.0	G48.0	G49.0
C0.0	775.3	767.5	746.3	734.2	709.8	684.0	670.5	643.6	616.7	603.3
C30.0	766.5	755.5	733.2	710.5	687.9	687.9	663.1	640.1	628.4	604.7
C60.0	770.7	760.8	740.6	720.1	709.8	688.9	678.3	657.1	635.8	625.2
C90.0	745.9	726.5	715.1	695.0	674.8	664.5	643.3	633.0	612.1	590.5
C120.0	770.0	750.2	740.3	720.4	699.2	689.3	668.8	647.5	636.9	616.0
C150.0	768.6	757.6	735.3	723.6	701.3	678.7	667.0	644.0	621.0	608.9
C180.0	821.0	810.7	789.8	779.6	758.3	736.4	725.8	703.4	703.4	670.5
C210.0	805.4	783.8	761.9	750.9	738.5	706.3	694.6	671.6	646.8	635.5
C240.0	742.0	711.9	711.9	691.8	671.6	659.9	639.0	618.1	607.5	587.0
C270.0	748.4	738.9	720.4	711.2	692.5	672.6	662.7	642.9	632.6	612.1
C300.0	740.6	719.4	698.8	688.6	669.5	658.1	637.2	615.6	605.4	584.5
C330.0	801.2	779.6	768.6	746.6	724.0	712.7	689.6	666.3	654.2	630.2
C360.0	775.3	767.5	746.3	734.2	709.8	684.0	670.5	643.6	616.7	603.3
C\G	G50.0	G51.0	G52.0	G53.0	G54.0	G55.0	G56.0	G57.0	G58.0	G59.0
C0.0	576.0	548.7	535.3	507.3	482.5	470.5	447.8	436.9	414.2	403.2
C30.0	581.0	568.9	545.2	520.4	507.3	480.4	453.9	440.1	412.8	386.2
C60.0	601.8	590.9	568.9	558.3	525.4	514.4	492.4	470.9	466.3	439.3
C90.0	579.9	558.7	547.7	526.1	515.5	493.5	472.3	461.3	439.0	428.4
C120.0	604.7	583.1	583.1	549.1	527.1	516.2	494.2	483.6	467.3	441.1
C150.0	585.2	561.8	549.8	526.4	503.1	491.4	467.0	444.3	432.6	408.2
C180.0	647.2	635.8	613.2	590.9	579.2	568.2	534.6	521.5	495.3	468.7
C210.0	612.1	588.4	576.4	553.3	530.0	518.3	494.9	483.2	467.0	467.0
C240.0	565.7	555.1	533.5	512.3	501.7	480.1	469.4	447.8	425.9	414.9
C270.0	591.2	580.6	558.3	548.0	526.4	515.8	494.6	473.0	465.9	441.5
C300.0	573.9	541.7	541.7	509.4	488.2	488.2	466.3	444.7	433.7	410.3
C330.0	604.7	591.6	578.1	538.5	525.0	498.5	469.4	469.4	430.1	416.7
C360.0	576.0	548.7	535.3	507.3	482.5	470.5	447.8	436.9	414.2	403.2

Light intensity data Unit[cd]

C\G	G60.0	G61.0	G62.0	G63.0	G64.0	G65.0	G66.0	G67.0	G68.0	G69.0
C0.0	380.9	359.3	348.2	326.6	315.8	283.7	283.7	262.8	241.9	231.4
C30.0	372.8	346.1	333.0	308.2	284.0	274.5	251.5	241.0	220.2	199.9
C60.0	417.4	406.1	383.8	372.8	351.2	340.4	319.0	297.4	285.2	264.0
C90.0	406.4	394.0	371.7	339.2	339.2	317.3	295.8	285.0	263.6	242.5
C120.0	430.1	408.2	397.2	374.9	353.4	342.7	321.5	310.7	289.6	268.5
C150.0	395.4	369.2	342.9	329.5	303.1	290.3	266.0	254.3	231.8	209.3
C180.0	467.3	429.1	415.3	401.5	363.2	352.3	330.5	309.3	298.7	277.9
C210.0	418.5	392.3	378.5	365.0	338.6	313.9	289.2	278.2	256.5	245.7
C240.0	393.0	382.3	360.4	337.4	326.7	305.5	294.6	273.7	254.0	242.3
C270.0	419.5	408.9	386.9	365.4	354.4	333.2	311.5	301.0	279.7	258.5
C300.0	388.0	377.4	355.4	334.0	323.0	301.5	279.9	269.1	247.5	236.7
C330.0	390.1	365.0	353.0	329.6	317.9	295.4	284.3	273.2	241.1	230.4
C360.0	380.9	359.3	348.2	326.6	315.8	283.7	283.7	262.8	241.9	231.4
C\G	G70.0	G71.0	G72.0	G73.0	G74.0	G75.0	G76.0	G77.0	G78.0	G79.0
C0.0	210.7	200.4	180.2	160.5	149.5	130.3	111.9	102.7	76.7	67.2
C30.0	189.9	170.4	160.9	142.0	132.8	114.8	77.6	77.6	72.9	51.6
C60.0	253.2	231.3	209.8	198.9	177.1	166.3	145.6	135.3	115.7	106.1
C90.0	232.0	211.0	190.5	180.2	160.3	140.7	131.1	112.4	77.4	77.4
C120.0	258.1	237.2	215.6	205.4	185.2	165.5	155.8	136.7	115.1	115.1
C150.0	198.1	176.1	156.9	149.1	131.2	123.7	105.8	76.8	76.8	65.3
C180.0	277.9	246.1	235.9	213.7	204.6	184.2	164.2	153.2	134.1	115.8
C210.0	224.9	204.7	194.8	175.4	166.1	147.5	129.8	121.1	104.1	87.8
C240.0	221.3	210.8	190.4	170.7	160.8	141.5	132.2	113.5	76.7	76.7
C270.0	247.8	225.7	225.7	194.8	174.7	164.9	145.5	136.1	117.4	108.2
C300.0	215.2	193.9	183.5	163.1	152.9	133.3	114.5	104.4	76.7	76.7
C330.0	209.5	199.4	179.5	160.3	150.0	131.8	123.1	106.1	89.6	81.6
C360.0	210.7	200.4	180.2	160.5	149.5	130.3	111.9	102.7	76.7	67.2
C\G	G80.0	G81.0	G82.0	G83.0	G84.0	G85.0	G86.0	G87.0	G88.0	G89.0
C0.0	58.8	42.7	27.7	21.4	11.3	4.6	2.8	1.8	1.7	1.7
C30.0	51.6	38.5	32.3	20.7	11.3	5.1	3.4	1.6	1.1	0.8
C60.0	87.8	70.3	54.3	47.3	31.6	19.3	13.4	6.5	2.3	1.1
C90.0	66.1	57.8	42.3	35.0	22.1	11.8	5.3	3.7	1.7	1.1
C120.0	90.0	81.6	65.2	47.9	46.9	26.7	21.0	12.1	6.5	2.3
C150.0	58.0	44.1	31.1	24.7	15.3	8.4	6.1	3.4	2.1	1.5
C180.0	107.0	89.4	80.8	63.8	48.1	47.1	47.1	15.7	6.8	3.0
C210.0	79.8	64.9	49.8	46.8	29.9	24.3	15.6	8.7	4.1	2.0
C240.0	69.2	52.6	43.1	29.3	17.8	13.0	6.4	3.4	2.3	1.8
C270.0	90.6	73.1	64.7	48.6	46.7	27.4	15.9	7.6	3.7	2.1
C300.0	61.4	52.9	37.0	24.1	18.7	10.1	7.0	3.4	2.4	2.1
C330.0	66.5	52.4	47.3	31.4	20.7	16.1	9.1	4.5	2.1	1.8
C360.0	58.8	42.7	27.7	21.4	11.3	4.6	2.8	1.8	1.7	1.7

Light intensity data Unit[cd]

C\G	G90.0									
C0.0	1.7									
C30.0	0.7									
C60.0	1.0									
C90.0	1.0									
C120.0	1.3									
C150.0	1.3									
C180.0	1.7									
C210.0	1.6									
C240.0	1.6									
C270.0	2.0									
C300.0	2.0									
C330.0	1.7									
C360.0	1.7									

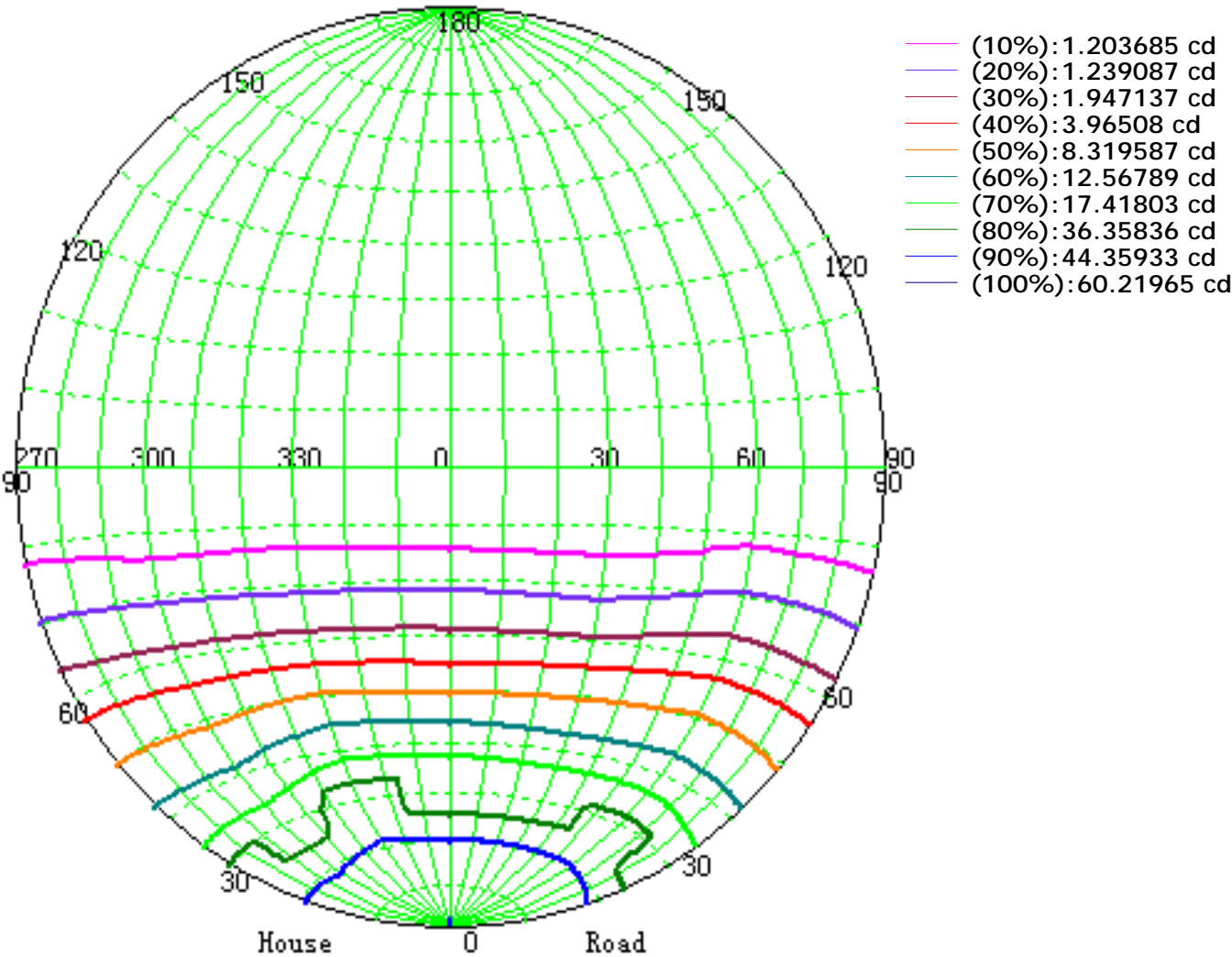
Zonal Luminous Flux Data

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Flux [lm]	Zonal Flux [%]	Sum Flux [%]
0.0	1185.11	0.00	0.00	0.00	0.00
0.0-1.0	1184.54	1.13	1.13	0.04	0.04
1.0-2.0	1183.86	3.40	4.53	0.12	0.16
2.0-3.0	1182.33	5.66	10.19	0.20	0.35
3.0-4.0	1180.56	7.91	18.10	0.27	0.63
4.0-5.0	1178.43	10.15	28.25	0.35	0.98
5.0-6.0	1174.80	12.37	40.62	0.43	1.40
6.0-7.0	1171.91	14.57	55.18	0.50	1.91
7.0-8.0	1167.78	16.74	71.93	0.58	2.49
8.0-9.0	1163.03	18.89	90.82	0.65	3.14
9.0-10.0	1157.28	21.00	111.82	0.73	3.87
10.0-11.0	1152.47	23.08	134.89	0.80	4.66
11.0-12.0	1145.71	25.12	160.02	0.87	5.53
12.0-13.0	1137.34	27.09	187.11	0.94	6.47
13.0-14.0	1129.37	29.01	216.12	1.00	7.47
14.0-15.0	1120.78	30.89	247.02	1.07	8.54
15.0-16.0	1111.05	32.70	279.72	1.13	9.67
16.0-17.0	1101.49	34.46	314.17	1.19	10.86
17.0-18.0	1091.43	36.16	350.33	1.25	12.11
18.0-19.0	1079.87	37.78	388.11	1.31	13.42
19.0-20.0	1068.65	39.32	427.43	1.36	14.78
20.0-21.0	1057.18	40.82	468.25	1.41	16.19
21.0-22.0	1044.40	42.23	510.48	1.46	17.65
22.0-23.0	1032.46	43.58	554.06	1.51	19.16
23.0-24.0	1004.02	44.52	598.59	1.54	20.70
24.0-25.0	987.41	45.28	643.87	1.57	22.27
25.0-26.0	957.17	45.90	689.77	1.59	23.85
26.0-27.0	952.47	46.72	736.49	1.62	25.47
27.0-28.0	951.15	48.20	784.68	1.67	27.14
28.0-29.0	951.15	49.77	834.45	1.72	28.86
29.0-30.0	951.15	51.36	885.81	1.78	30.63
30.0-31.0	937.28	52.55	938.37	1.82	32.45
31.0-32.0	915.77	53.09	991.45	1.84	34.29
32.0-33.0	905.63	53.66	1045.11	1.86	36.14
33.0-34.0	876.12	53.92	1099.03	1.86	38.01
34.0-35.0	851.08	53.64	1152.68	1.85	39.86
35.0-36.0	839.19	53.82	1206.49	1.86	41.72
36.0-37.0	820.01	54.11	1260.61	1.87	43.59
37.0-38.0	805.61	54.26	1314.87	1.88	45.47
38.0-39.0	785.35	54.30	1369.17	1.88	47.35
39.0-40.0	771.30	54.29	1423.46	1.88	49.22

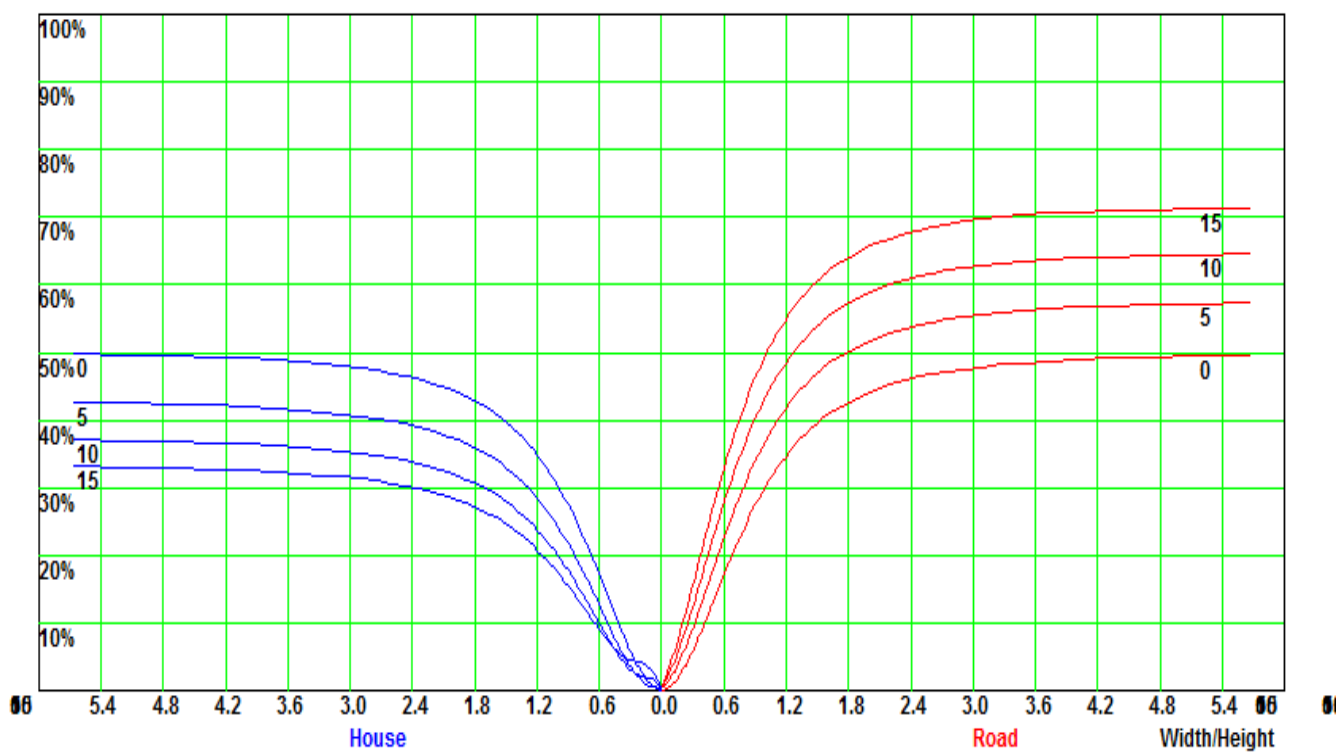
Zonal Luminous Flux Data

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Flux [lm]	Zonal Flux [%]	Sum Flux [%]
40.0-41.0	755.19	54.36	1477.82	1.88	51.10
41.0-42.0	738.53	54.27	1532.09	1.88	52.98
42.0-43.0	722.71	54.13	1586.22	1.87	54.85
43.0-44.0	703.09	53.81	1640.03	1.86	56.71
44.0-45.0	686.60	53.41	1693.44	1.85	58.56
45.0-46.0	669.99	53.05	1746.49	1.83	60.40
46.0-47.0	648.60	52.44	1798.94	1.81	62.21
47.0-48.0	633.41	51.83	1850.76	1.79	64.00
48.0-49.0	614.03	51.23	1901.99	1.77	65.77
49.0-50.0	593.61	50.35	1952.34	1.74	67.51
50.0-51.0	575.44	49.46	2001.80	1.71	69.22
51.0-52.0	560.92	48.76	2050.56	1.69	70.91
52.0-53.0	536.67	47.75	2098.31	1.65	72.56
53.0-54.0	517.61	46.47	2144.78	1.61	74.17
54.0-55.0	502.95	45.56	2190.33	1.58	75.74
55.0-56.0	479.73	44.40	2234.74	1.54	77.28
56.0-57.0	464.72	43.18	2277.92	1.49	78.77
57.0-58.0	445.84	42.11	2320.03	1.46	80.23
58.0-59.0	427.13	40.81	2360.84	1.41	81.64
59.0-60.0	406.63	39.39	2400.23	1.36	83.00
60.0-61.0	386.50	37.85	2438.08	1.31	84.31
61.0-62.0	368.86	36.40	2474.48	1.26	85.57
62.0-63.0	348.67	34.90	2509.37	1.21	86.78
63.0-64.0	330.87	33.34	2542.72	1.15	87.93
64.0-65.0	312.56	31.84	2574.56	1.10	89.03
65.0-66.0	293.96	30.26	2604.82	1.05	90.08
66.0-67.0	279.65	28.84	2633.67	1.00	91.07
67.0-68.0	259.15	27.29	2660.96	0.94	92.02
68.0-69.0	242.25	25.58	2686.54	0.88	92.90
69.0-70.0	228.21	24.16	2710.70	0.84	93.74
70.0-71.0	208.91	22.59	2733.29	0.78	94.52
71.0-72.0	193.63	20.93	2754.23	0.72	95.24
72.0-73.0	176.18	19.34	2773.56	0.67	95.91
73.0-74.0	162.11	17.78	2791.35	0.62	96.53
74.0-75.0	145.37	16.25	2807.60	0.56	97.09
75.0-76.0	128.09	14.52	2822.11	0.50	97.59
76.0-77.0	114.65	12.94	2835.05	0.45	98.04
77.0-78.0	94.44	11.19	2846.25	0.39	98.43
78.0-79.0	85.78	9.68	2855.93	0.33	98.76
79.0-80.0	73.90	8.61	2864.54	0.30	99.06
80.0-81.0	60.03	7.24	2871.78	0.25	99.31

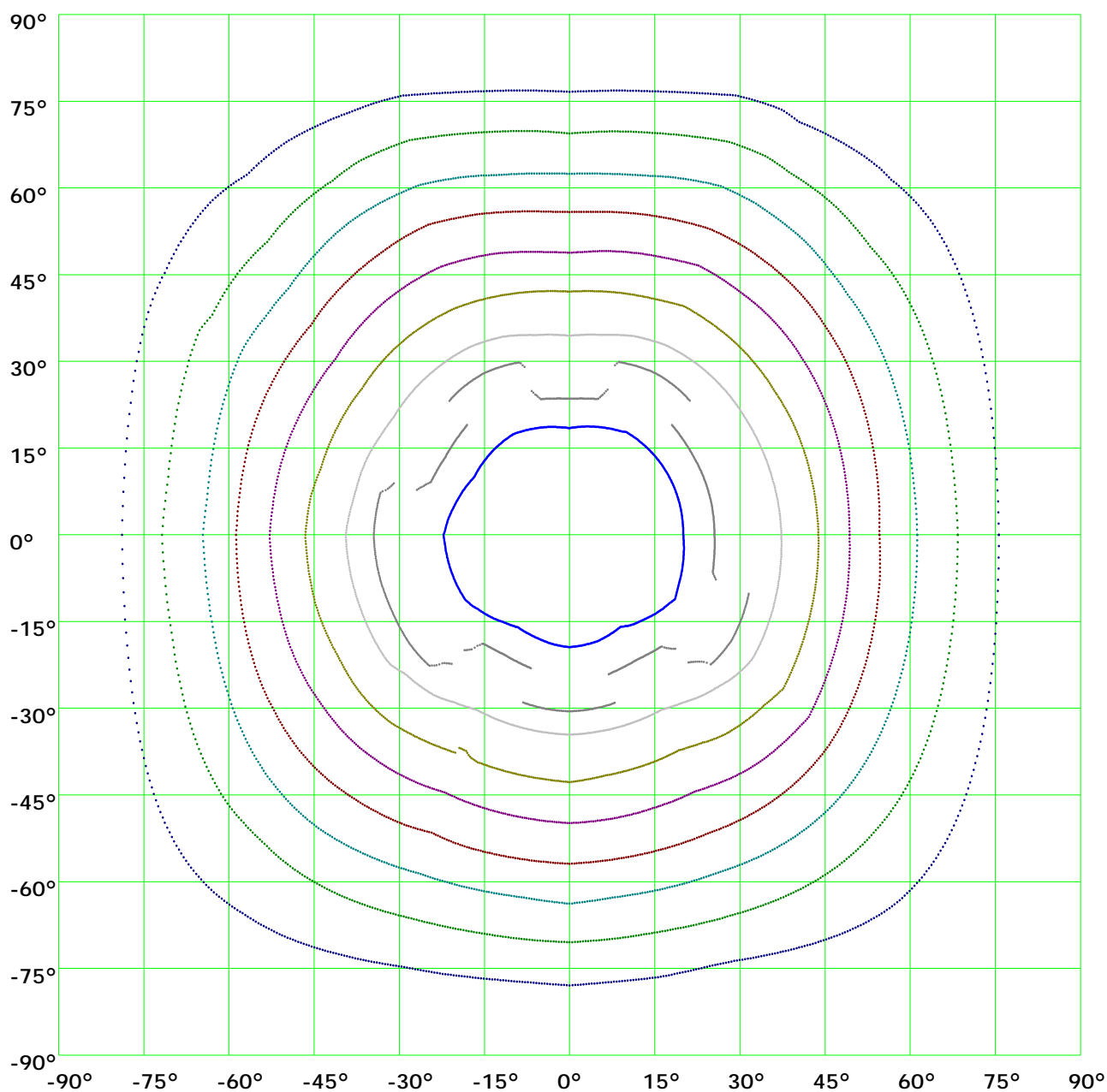
Iso-Candela [cd]



Coefficient Utilization Curve

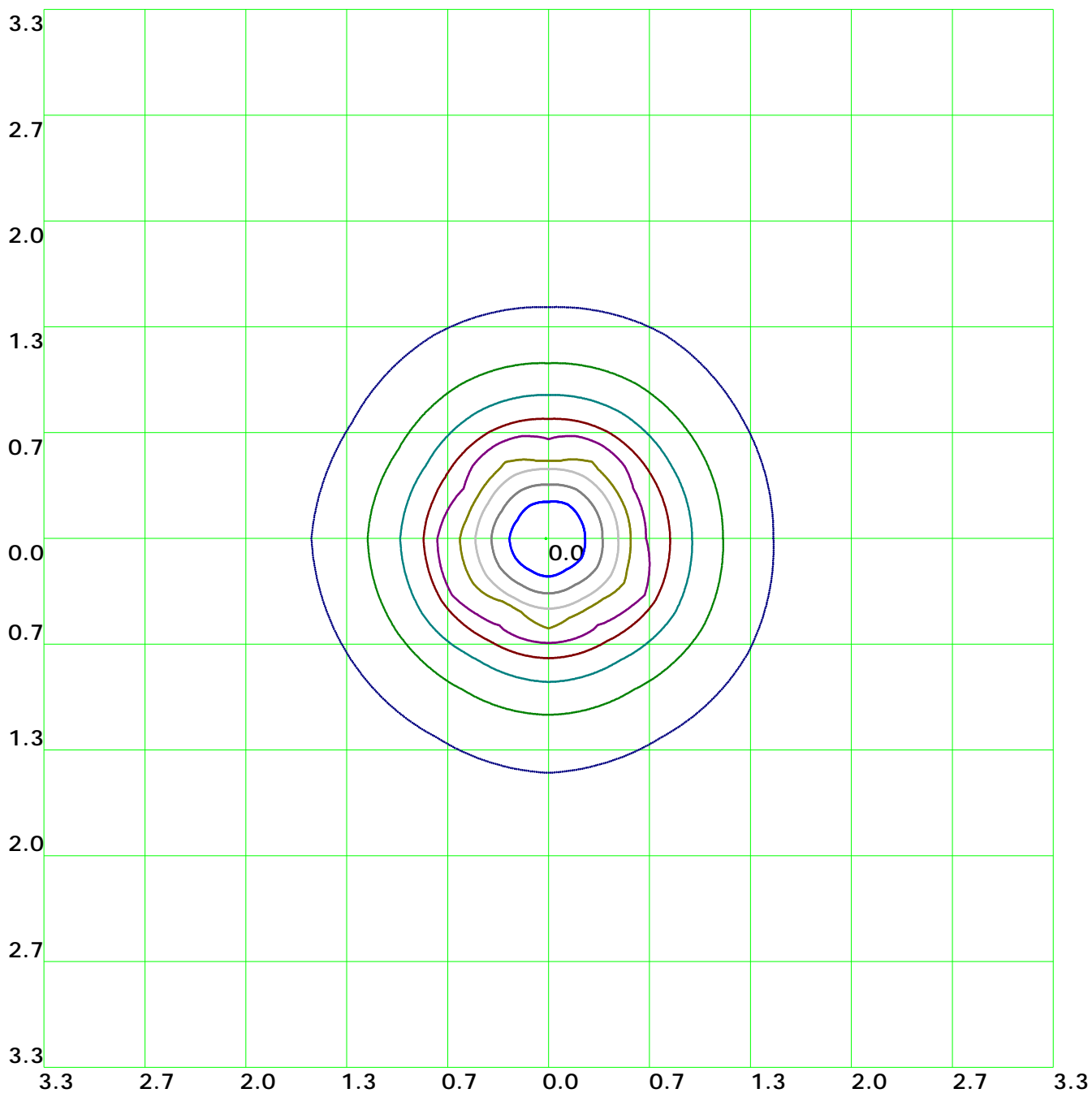


Isocandela(rectangle)



— (10%): 118.9cd	— (20%): 237.8cd	— (30%): 356.8cd	— (40%): 475.7cd
— (50%): 594.6cd	— (60%): 713.5cd	— (70%): 832.4cd	— (80%): 951.3cd
— (90%): 1070.3cd	— (100%): 1189.2cd		

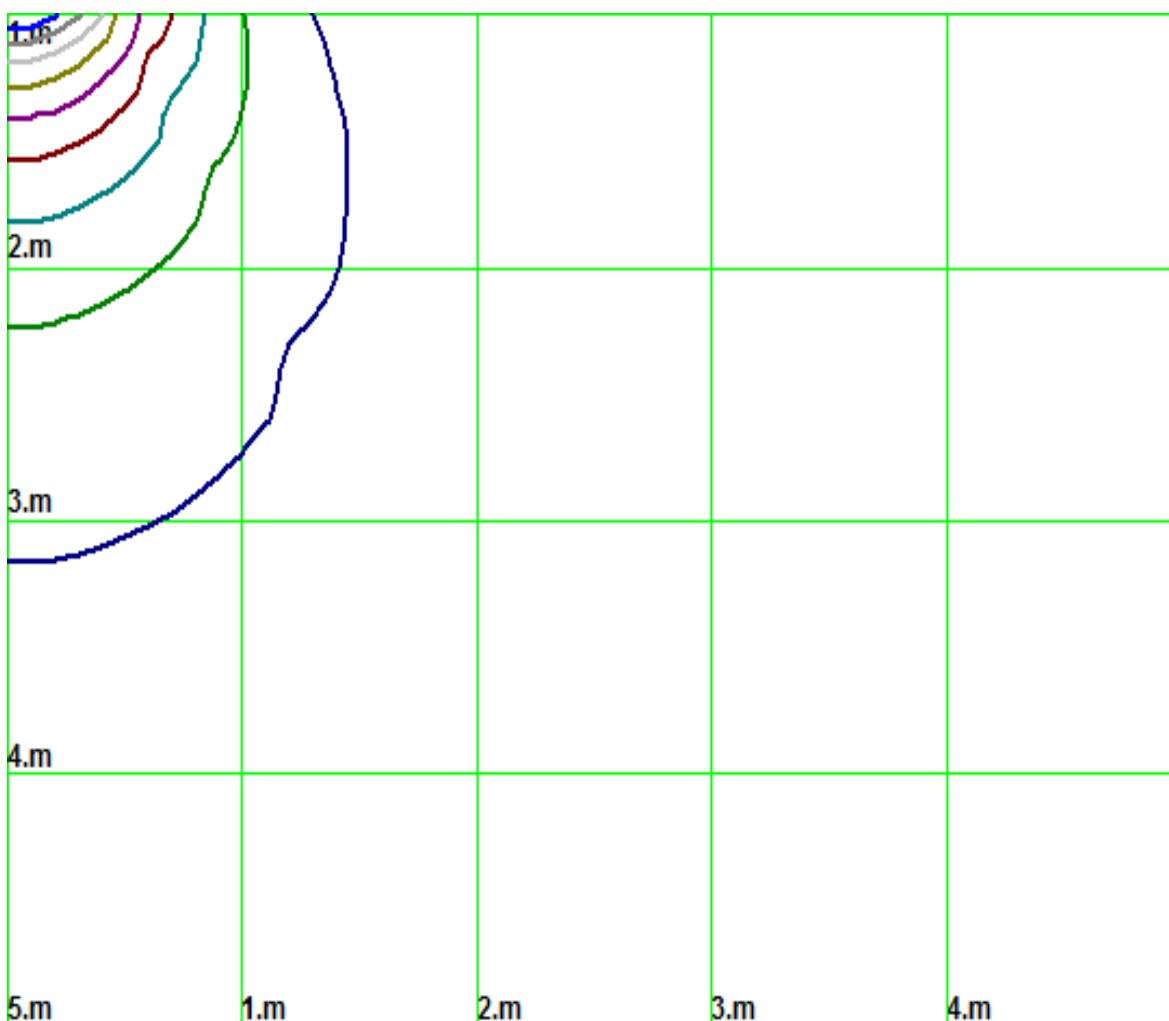
Isolx curve



Height: 1 m

- | | | | |
|-------------------|--------------------|------------------|------------------|
| — (10%): 118.9lx | — (20%): 237.8lx | — (30%): 356.8lx | — (40%): 475.7lx |
| — (50%): 594.6lx | — (60%): 713.5lx | — (70%): 832.4lx | — (80%): 951.3lx |
| — (90%): 1070.3lx | — (100%): 1188.1lx | | |

Space Isolx Curve



— (10%): 118.9lx	— (20%): 237.8lx	— (30%): 356.8lx	— (40%): 475.7lx
— (50%): 594.6lx	— (60%): 713.5lx	— (70%): 832.4lx	— (80%): 951.3lx
— (90%): 1070.3lx	— (100%): 1188.lx		

Luminance Limiting Curve

Diameter: 0mm

Length: 0mm

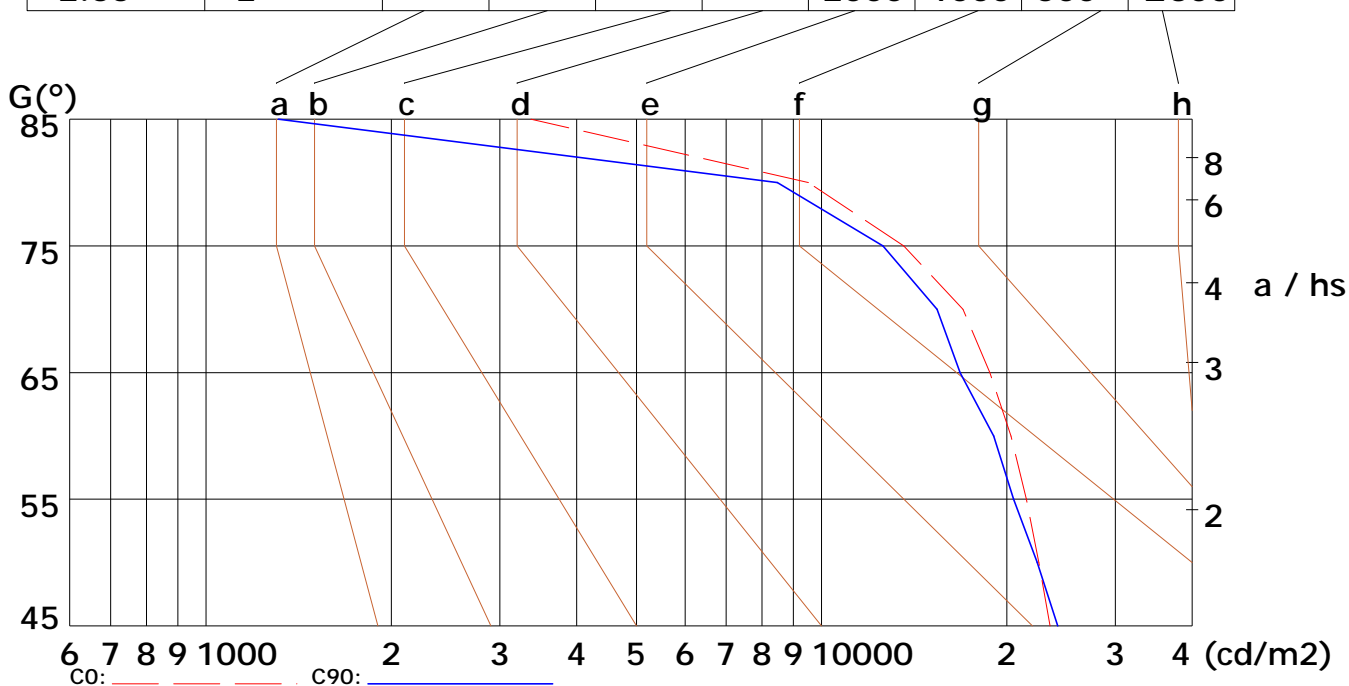
Width: 0mm

Height: 0mm

(cd/m²)

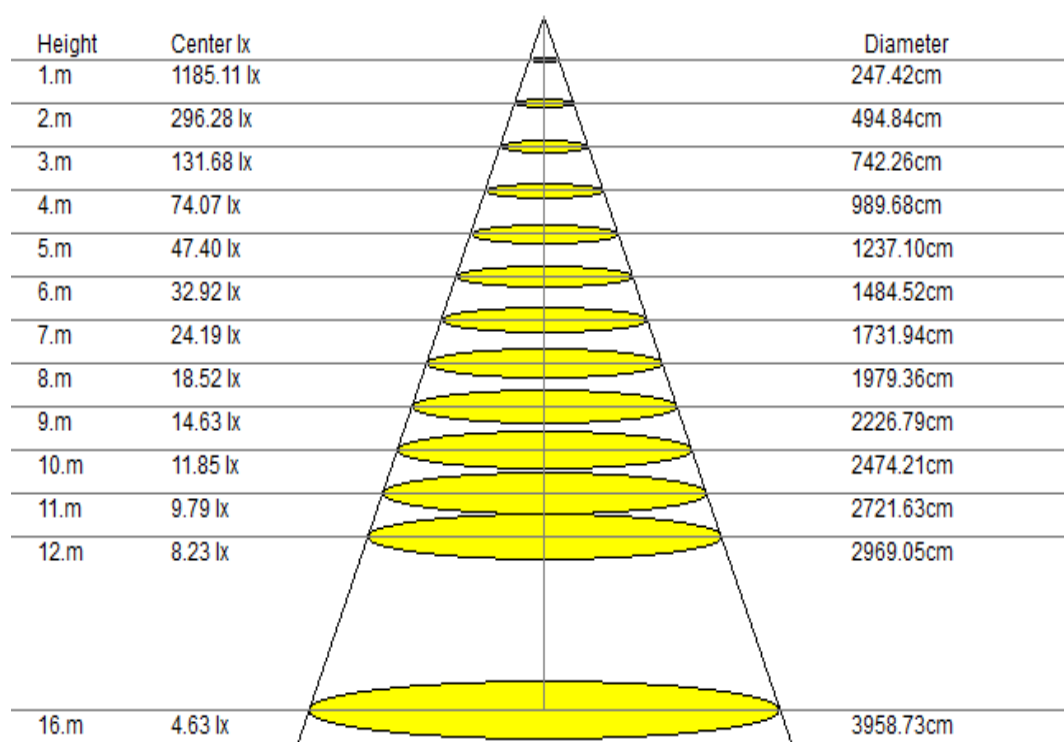
γ	45°	50°	55°	60°	65°	70°	75°	80°	85°
C0	23494	22554	21510	20321	18773	16960	13593	9521	3371
C90	24182	22402	20507	19047	16783	15400	12588	8471	1310

Glare	Quality	Service Values Illuminance (lx)									
1.15	A	2000	1000	500	≤300						
1.5	B		2000	1000	500	≤300					
1.85	C			2000	1000	500	≤300				
2.2	D				2000	1000	500	≤300			
2.55	E					2000	1000	500	≤300		



Lum. Limiting Curve (C0/C90)

Lux-Distance Curve

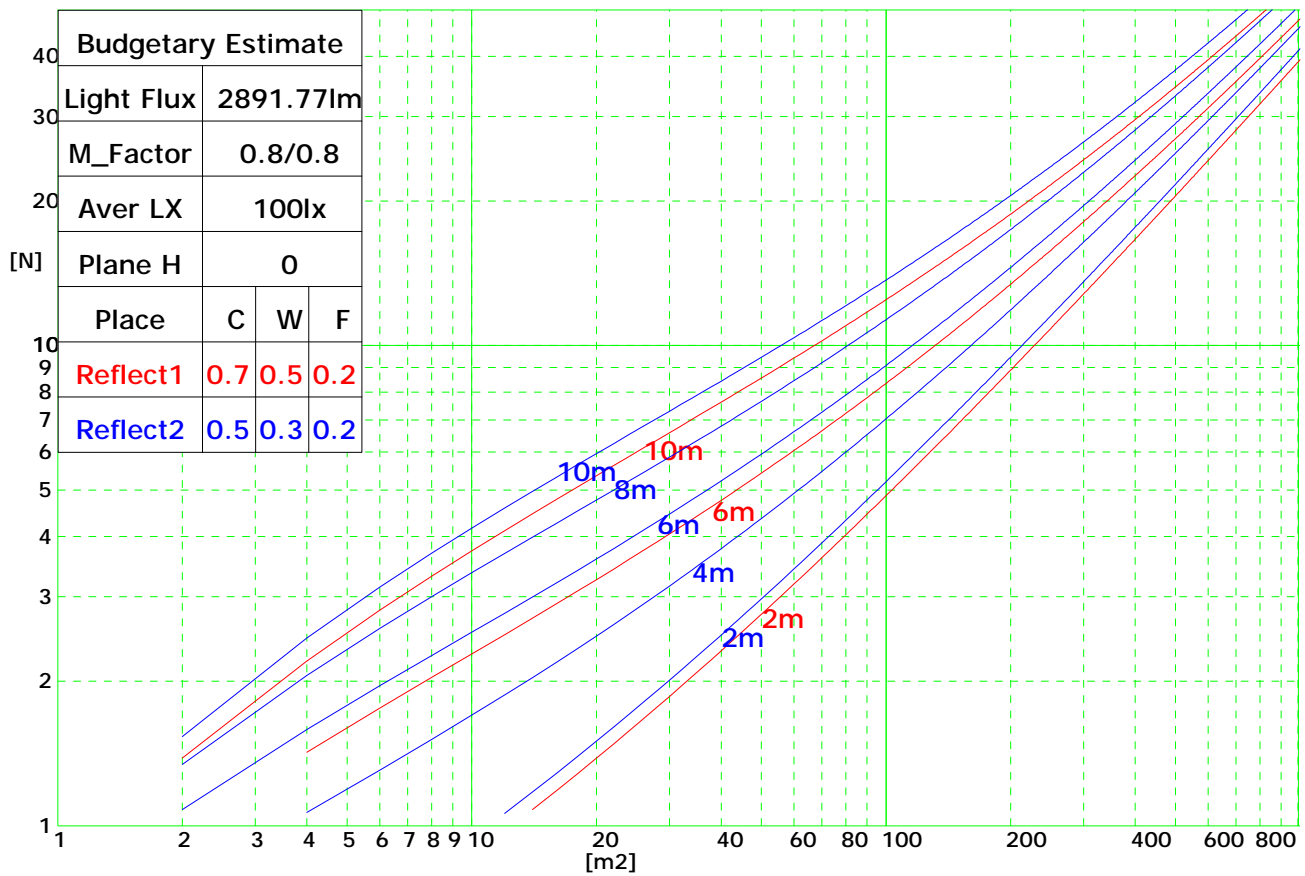


Beam Angle: 102.10° (50%Imax)

Coefficients of Utilization

RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION FOR RHOFC=20															
0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.06	1.04	1.03	1.05	1.03	1.01	1.01	0.99	0.97	0.96	0.94	0.92	0.90	0.87	0.85	0.80
2	0.91	0.89	0.87	0.90	0.88	0.85	0.88	0.85	0.82	0.84	0.81	0.78	0.80	0.76	0.72	0.68
3	0.79	0.76	0.74	0.78	0.75	0.73	0.77	0.73	0.70	0.75	0.70	0.66	0.71	0.66	0.62	0.58
4	0.68	0.66	0.64	0.69	0.65	0.63	0.68	0.63	0.60	0.67	0.61	0.57	0.64	0.59	0.54	0.50
5	0.60	0.57	0.56	0.61	0.57	0.55	0.61	0.56	0.52	0.60	0.54	0.50	0.58	0.52	0.47	0.43
6	0.53	0.51	0.49	0.54	0.50	0.48	0.54	0.50	0.46	0.54	0.48	0.44	0.53	0.47	0.42	0.38
7	0.48	0.45	0.44	0.48	0.45	0.43	0.49	0.44	0.41	0.49	0.43	0.39	0.49	0.42	0.37	0.34
8	0.43	0.41	0.39	0.44	0.40	0.38	0.45	0.40	0.37	0.45	0.39	0.35	0.45	0.38	0.33	0.30
9	0.39	0.37	0.35	0.40	0.37	0.35	0.41	0.36	0.33	0.42	0.36	0.32	0.42	0.35	0.30	0.27
10	0.36	0.33	0.32	0.37	0.33	0.31	0.38	0.33	0.30	0.39	0.33	0.29	0.39	0.32	0.28	0.25

Indoor Budgetary Estimate Chart



UGR

Ceiling	70	70	50	50	30	70	70	50	50	30	
Wall	50	30	50	30	30	50	30	50	30	30	
Floor	20	20	20	20	20	20	20	20	20	20	
Room Size	Left to light axis direction of observation					Direction of light axis parallel observation					
X	Y										
2H	2H	14.7	15.9	15.0	16.0	16.5	14.5	15.8	14.8	15.9	16.4
	3H	16.4	17.4	16.6	17.7	18.0	16.1	17.3	16.6	17.8	18.0
	4H	17.1	18.0	17.4	18.6	18.7	17.0	17.9	17.2	18.6	18.7
	6H	17.5	18.6	18.0	18.8	19.1	17.4	18.4	17.8	18.8	19.0
	8H	17.9	18.9	18.1	18.9	19.4	17.7	18.7	18.0	19.0	19.3
4H	12H	18.0	18.9	18.3	19.3	19.6	17.8	18.8	18.1	19.2	19.6
	2H	15.8	16.7	15.7	16.9	17.1	15.7	16.6	15.7	16.8	17.1
	3H	17.4	18.3	17.7	18.4	18.9	17.3	18.3	17.6	18.5	18.7
	4H	18.1	19.1	18.5	19.2	19.6	18.0	18.9	18.4	19.1	19.4
	6H	18.9	19.6	19.1	19.7	20.1	18.6	19.4	19.1	19.8	20.0
8H	8H	19.0	19.7	19.4	19.9	20.4	18.9	19.6	19.4	20.0	20.3
	12H	19.3	19.9	19.6	20.0	20.4	19.1	19.8	19.5	20.2	20.4
	4H	18.6	19.1	18.8	19.3	19.9	18.4	19.1	18.7	19.3	19.9
	6H	19.4	19.9	19.7	20.2	20.5	19.3	19.8	19.7	20.3	20.5
	8H	19.7	20.1	20.2	20.5	20.9	19.6	20.0	20.0	20.4	20.9
12H	12H	20.0	20.4	20.4	20.8	21.2	19.8	20.3	20.3	20.8	21.2
	4H	18.6	19.1	19.1	19.4	19.9	18.4	19.1	18.9	19.5	19.8
	6H	19.5	19.9	19.9	20.3	20.6	19.5	20.0	19.8	20.3	20.6
	8H	19.8	20.4	20.4	20.5	21.0	19.7	20.2	20.3	20.5	21.1