

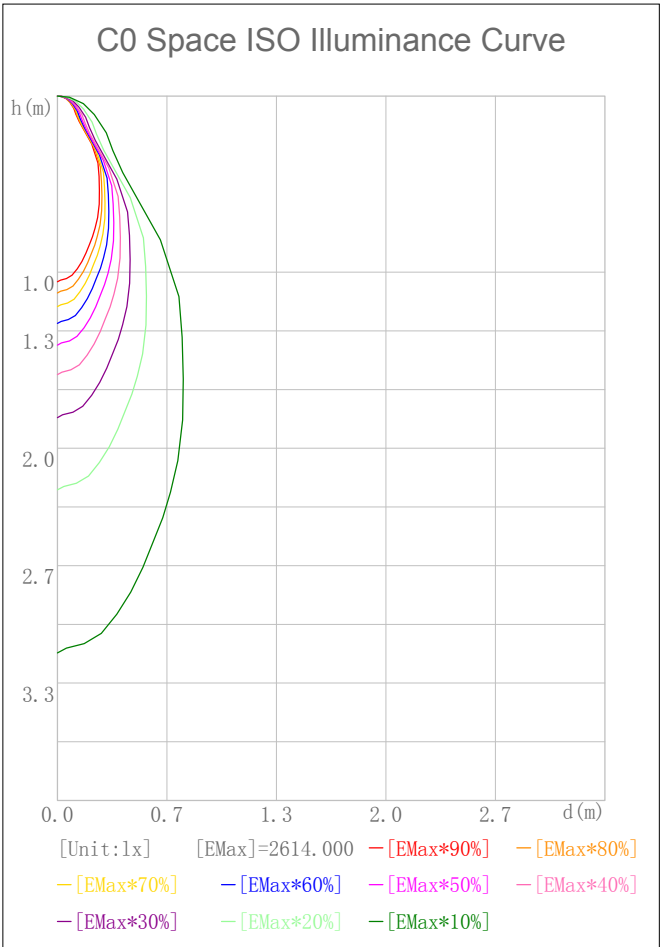
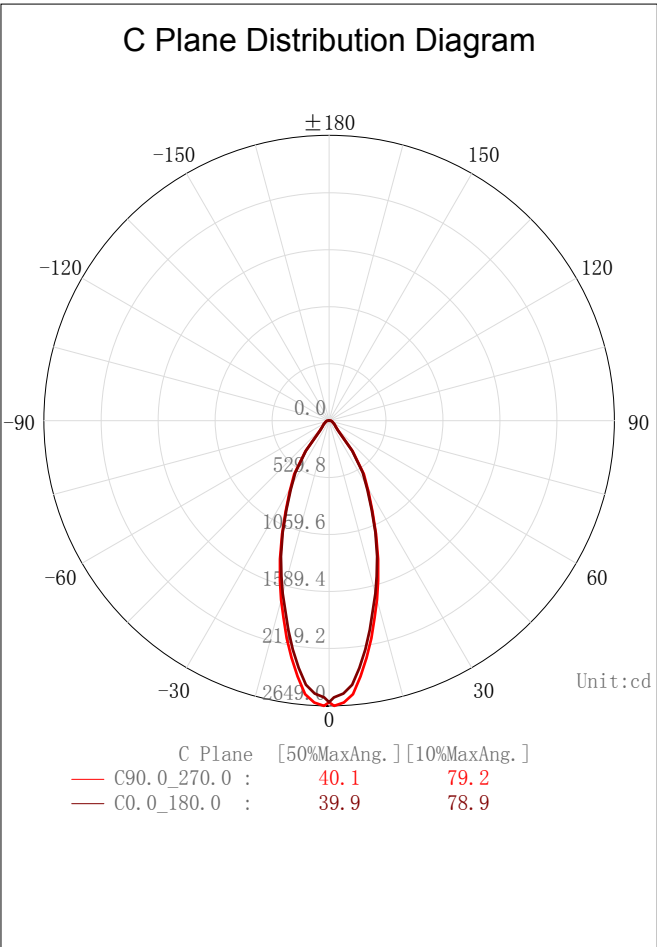
Indoor Luminaire Photometric Data

Description Information

Luminary Name: LED Recessed Downlight	Lum. Catalog: LG-9022A-AC-30K	Test ID: IESNA:LM-79-08
Lamp Name:	Lamp Catalog: LED	Test Date: 2/16/2021
Manufacture: Light and Green	Shld. Ang(°):	Test Machine:GON-2000
Test Lab: LIGHT LABORATORY, INC. (www.lightlaboratory.com)	Frequency (Hz):	Lamp CCT (K): Ra:
Lum. Size (W*L*H): 0.250m*0.250m*0.000m	Lum. Area (m2): 0.063	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=5.0 γ=1.0	Temp. (°C): 25
		Humidity (%):

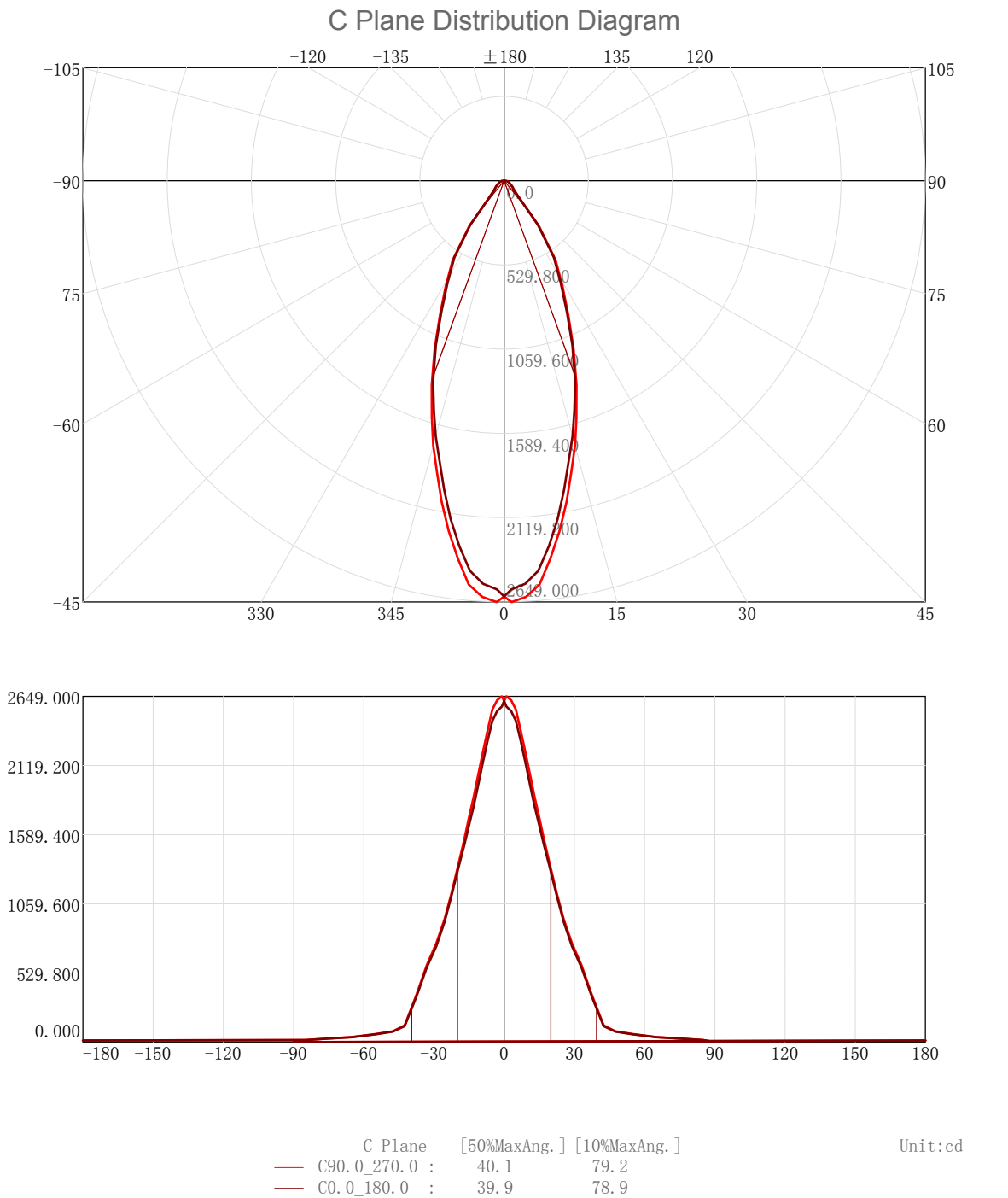
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 1665.731	Luminary Flux(lm): 1665.731	Field Angle(10%Imax): 79.2(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1665.731lm 100.00%
Rated Voltage(V):	Luminary EER(lm/W): 73.901	Up Lumens&Percent: 0.000lm 0.00%
Tested Power(W): 22.540	Max. Candela(cd): 2649.000	S/MH: C0_a180=0.619 C90_270=0.635
Lamps' Inside: 1	Max Cand@Ang. (°): C=90.0 γ=1.0	CIE Type: Semi-Direct
Tested Electrics (V, A, pf): 239.6, 0.056, 0.967	Beam Angle(50%Imax): 40.1(°)	ErP Φ use(90°): 1492.145lm
Lamp Size (W*L*H): 0.250m*0.250m*0.000m	Left=-20.0°, Right=20.0°	IRF (%): 358.487



2D Plane Light Intensity Distribution Curve

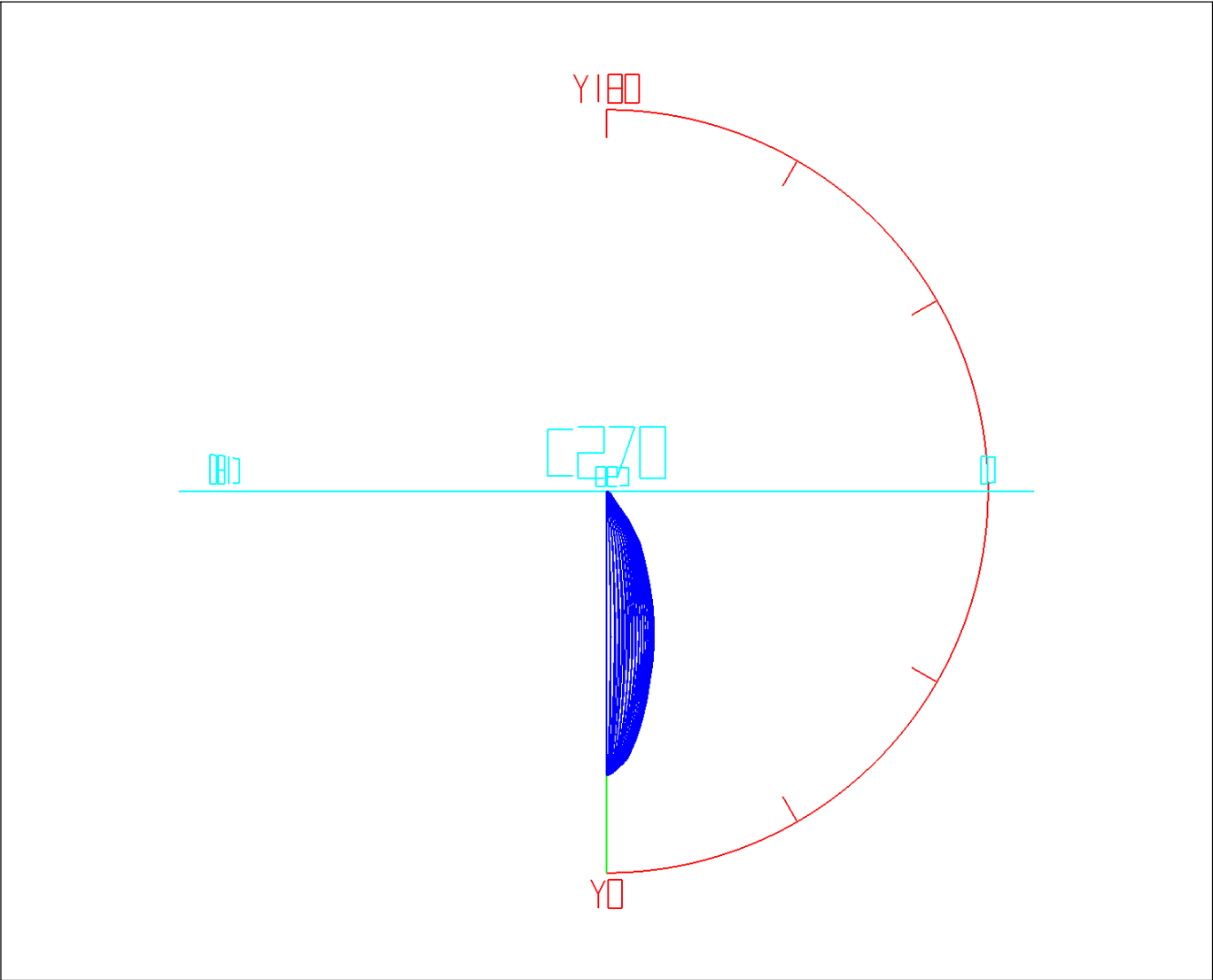
Lum. Name: LED Recessed Downlight	Lum. Catalog: LG-9022A-AC-30K	Test ID: IESNA:LM-79-08
Lamp Name:	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lig
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 2/16/2021



3D Light Intensity Distribution Modal

Lum. Name: LED Recessed Downlight	Lum. Catalog: LG-9022A-AC-30K	Test ID: IESNA:LM-79-08
Lamp Name:	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lig
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 2/16/2021

3D Light Intensity Distribution Modal



Curves:

3D Model

Fixture

Vert. HUD

Hori. HUD

View Angles:

Orient:0

Tilt:0

Roll:0

Spin:0

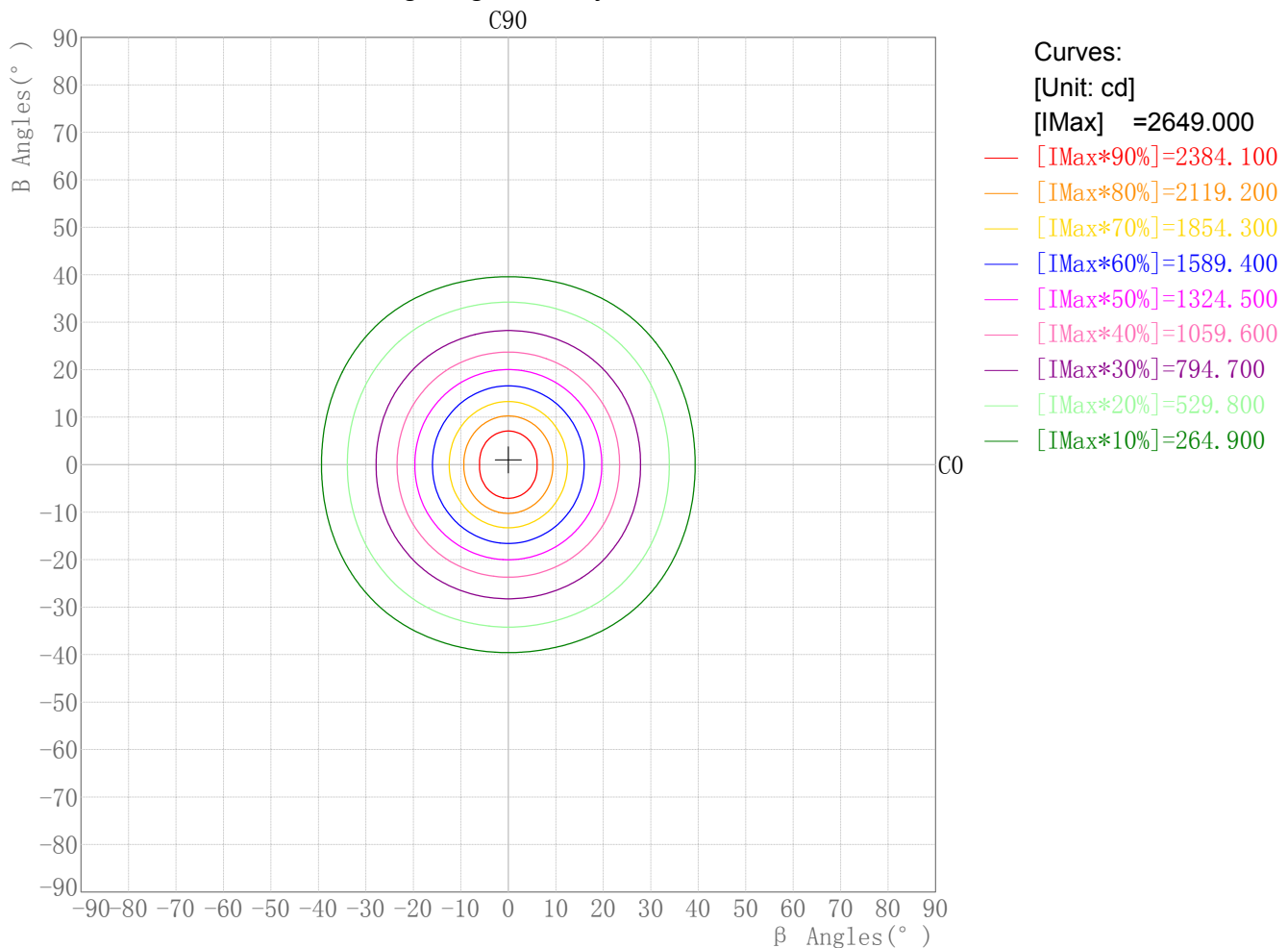
Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-1.0	2.50	2.50	0.15	0.15
1.0-3.0	19.86	22.36	1.19	1.34
3.0-5.0	38.92	61.28	2.34	3.68
5.0-7.0	55.75	117.03	3.35	7.03
7.0-9.0	69.40	186.42	4.17	11.19
9.0-11.0	80.15	266.57	4.81	16.00
11.0-13.0	87.99	354.56	5.28	21.29
13.0-15.0	93.72	448.27	5.63	26.91
15.0-17.0	97.43	545.71	5.85	32.76
17.0-19.5	123.68	669.38	7.42	40.19
19.5-22.5	146.21	815.59	8.78	48.96
22.5-25.5	137.87	953.46	8.28	57.24
25.5-29.0	147.21	1100.67	8.84	66.08
29.0-33.0	150.41	1251.08	9.03	75.11
33.0-37.5	134.16	1385.24	8.05	83.16
37.5-42.5	85.06	1470.30	5.11	88.27
42.5-47.5	40.35	1510.66	2.42	90.69
47.5-55.0	45.79	1556.45	2.75	93.44
55.0-65.0	47.20	1603.65	2.83	96.27
65.0-75.0	34.11	1637.76	2.05	98.32
75.0-85.0	23.59	1661.35	1.42	99.74
85.0-90.0	4.38	1665.73	0.26	100.00

Rectangle ISO Lighting Intensity Diagram

Lum. Name: LED Recessed Downlight	Lum. Catalog: LG-9022A-AC-30K	Test ID: IESNA:LM-79-08
Lamp Name:	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lightandgreen.com)
Manufacture: Light and Green	Test Machine: GON-2000	Test Date: 2/16/2021

ISO Lighting Intensity Curve



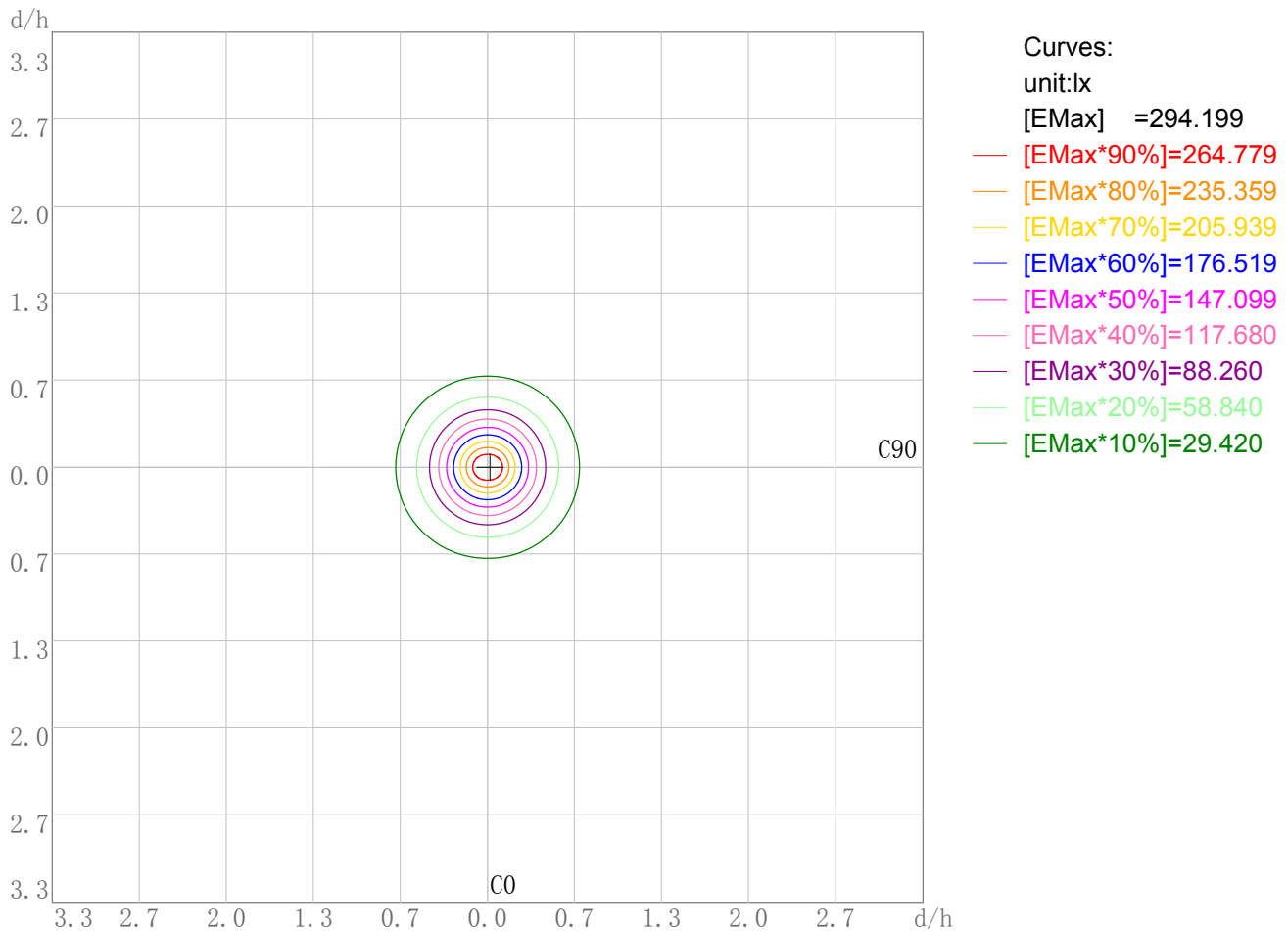
Maximum Light Intensity(cd): 2649.00

Maximum Cand.@Angle: H=0.0°,V=1.0°

Plane ISO-Illuminance Diagram

Lum. Name: LED Recessed Downlight	Lum. Catalog: LG-9022A-AC-30K	Test ID: IESNA:LM-79-08
Lamp Name:	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lig
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 2/16/2021

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00

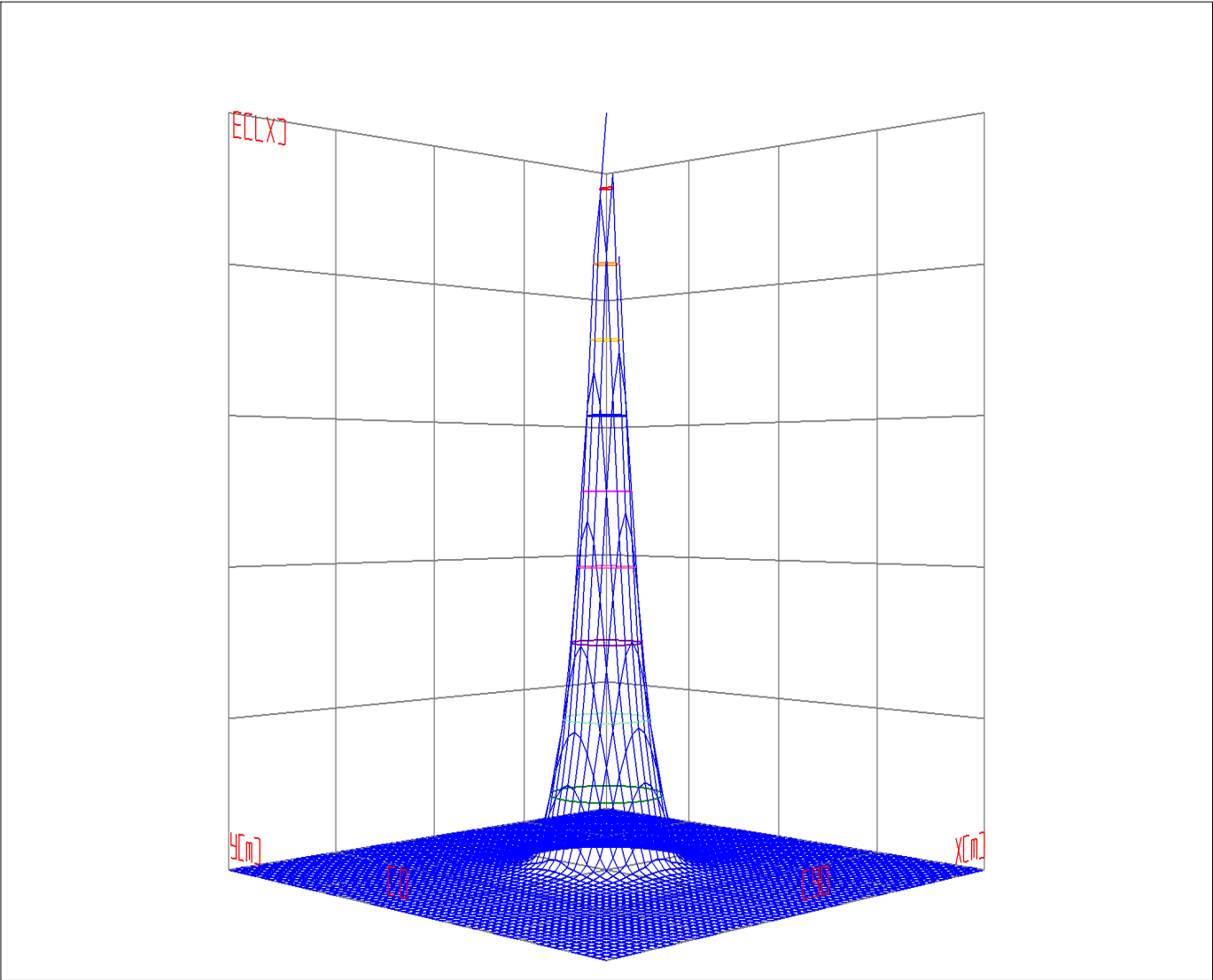
Working Plane Maximum Illuminance(lx): 294.20

Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: LED Recessed Downlight	Lum. Catelog: LG-9022A-AC-30K	Test ID: IESNA:LM-79-08
Lamp Name:	Lamp Catelog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lig
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 2/16/2021

3D Plane Illuminance Modal

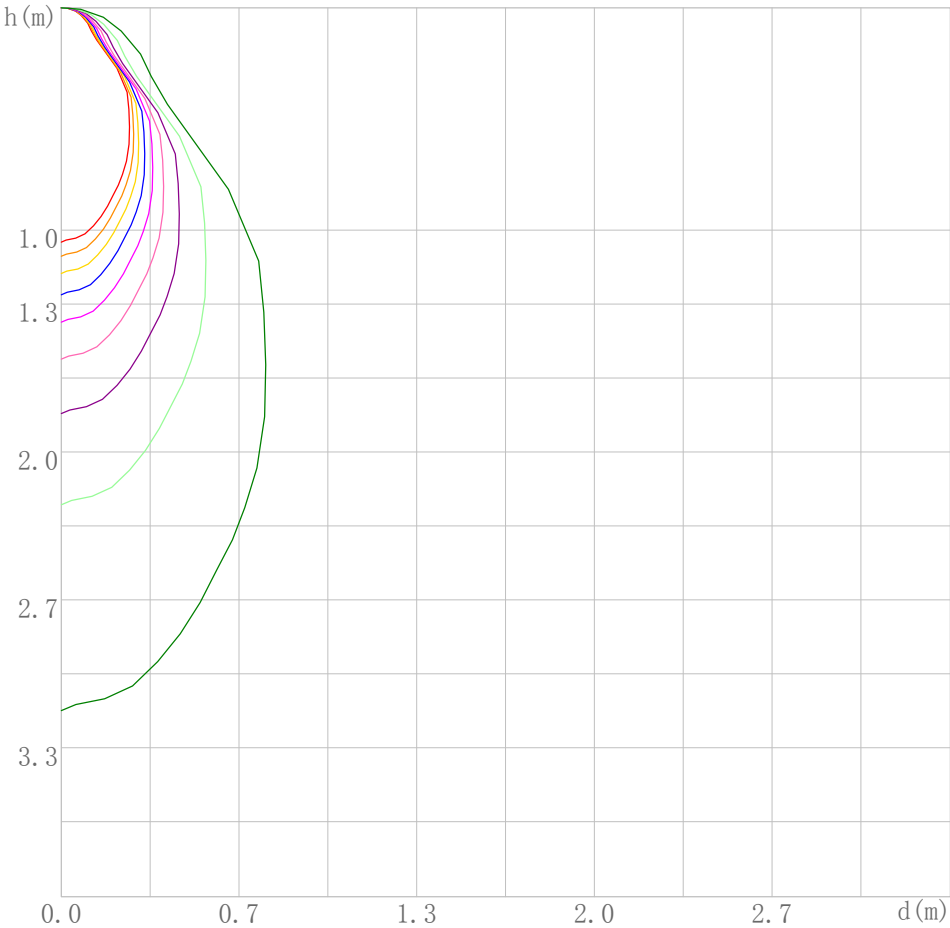


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

Lum. Name: LED Recessed Downlight	Lum. Catelog: LG-9022A-AC-30K	Test ID: IESNA:LM-79-08
Lamp Name:	Lamp Catelog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lig
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 2/16/2021

Space ISO Illuminance Curve

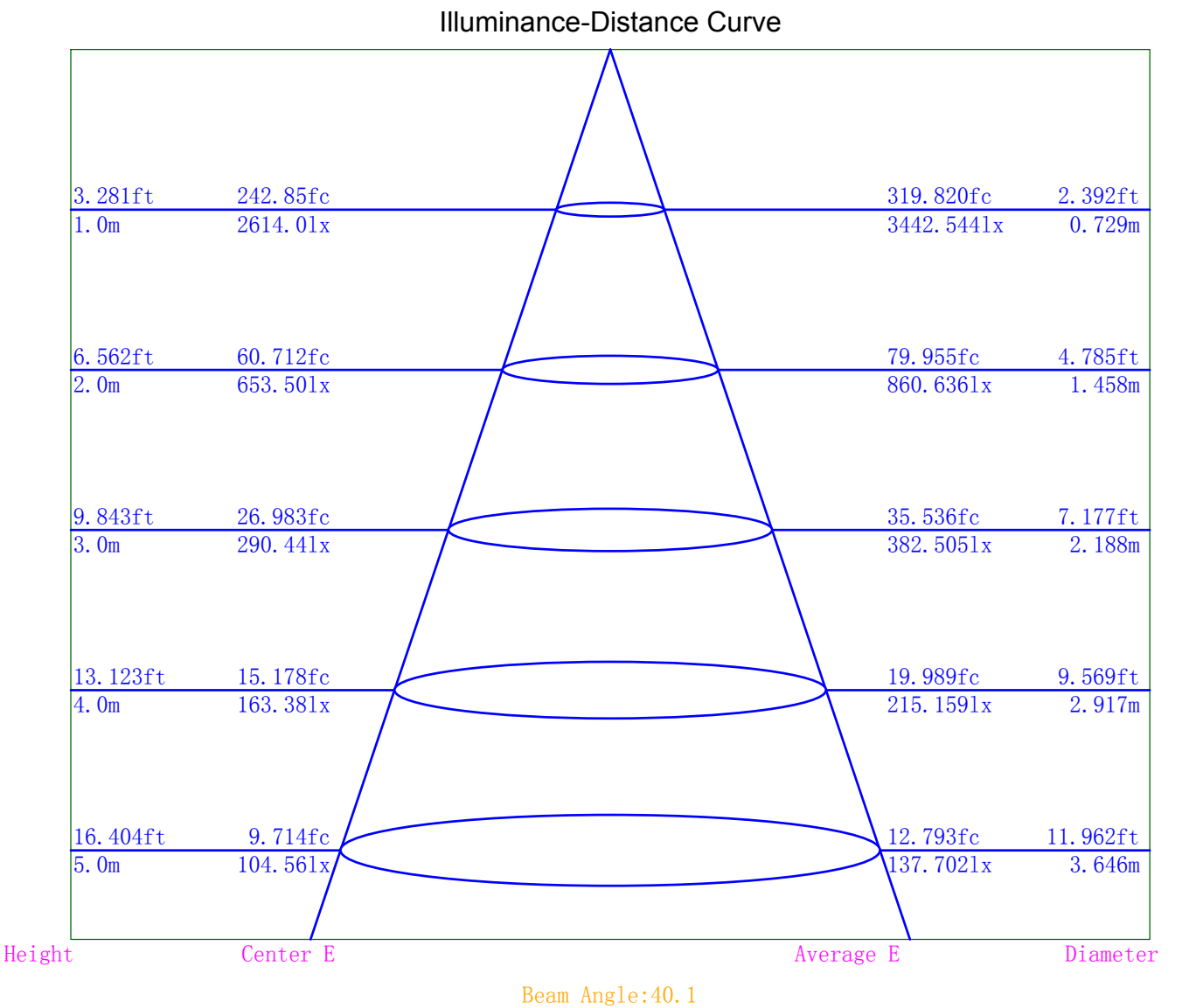


- Curves:
 [Unit: lx]
 [EMax] =2614.000
 — [EMax*90%]=2352.600
 — [EMax*80%]=2091.200
 — [EMax*70%]=1829.800
 — [EMax*60%]=1568.400
 — [EMax*50%]=1307.000
 — [EMax*40%]=1045.600
 — [EMax*30%]=784.200
 — [EMax*20%]=522.800
 — [EMax*10%]=261.400

Space Plane Maximum Illuminance and @Angle:2614.00lx,0.0deg
 Plane Maximum Lighting Intensity and @Angle:2614.000cd,0eg

Illuminance-Distance Diagram

Lum. Name: LED Recessed Downlight	Lum. Catalog: LG-9022A-AC-30K	Test ID: IESNA:LM-79-08
Lamp Name:	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lig
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 2/16/2021



Indoor Luminance Limiting Curves

Lum. Name: LED Recessed Downlight	Lum. Catalog: LG-9022A-AC-30K	Test ID: IESNA:LM-79-08
Lamp Name:	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lig
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 2/16/2021

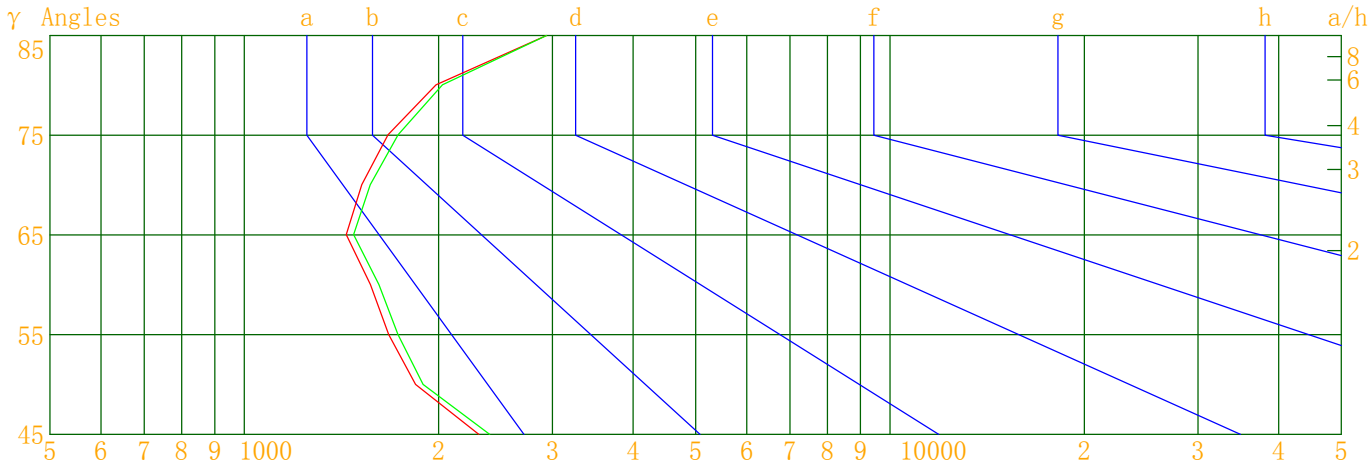
Glare Grade Table

GI	Quality	Using Illuminance							
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	a				2000	1000	500	<=300
			b	c	d	e	f	g	h

Luminance Table

Gama(deg)	45	50	55	60	65	70	75	80	85
C0	2308	1842	1674	1568	1439	1520	1669	1981	2937
C90	2399	1892	1729	1616	1477	1567	1731	2027	2937

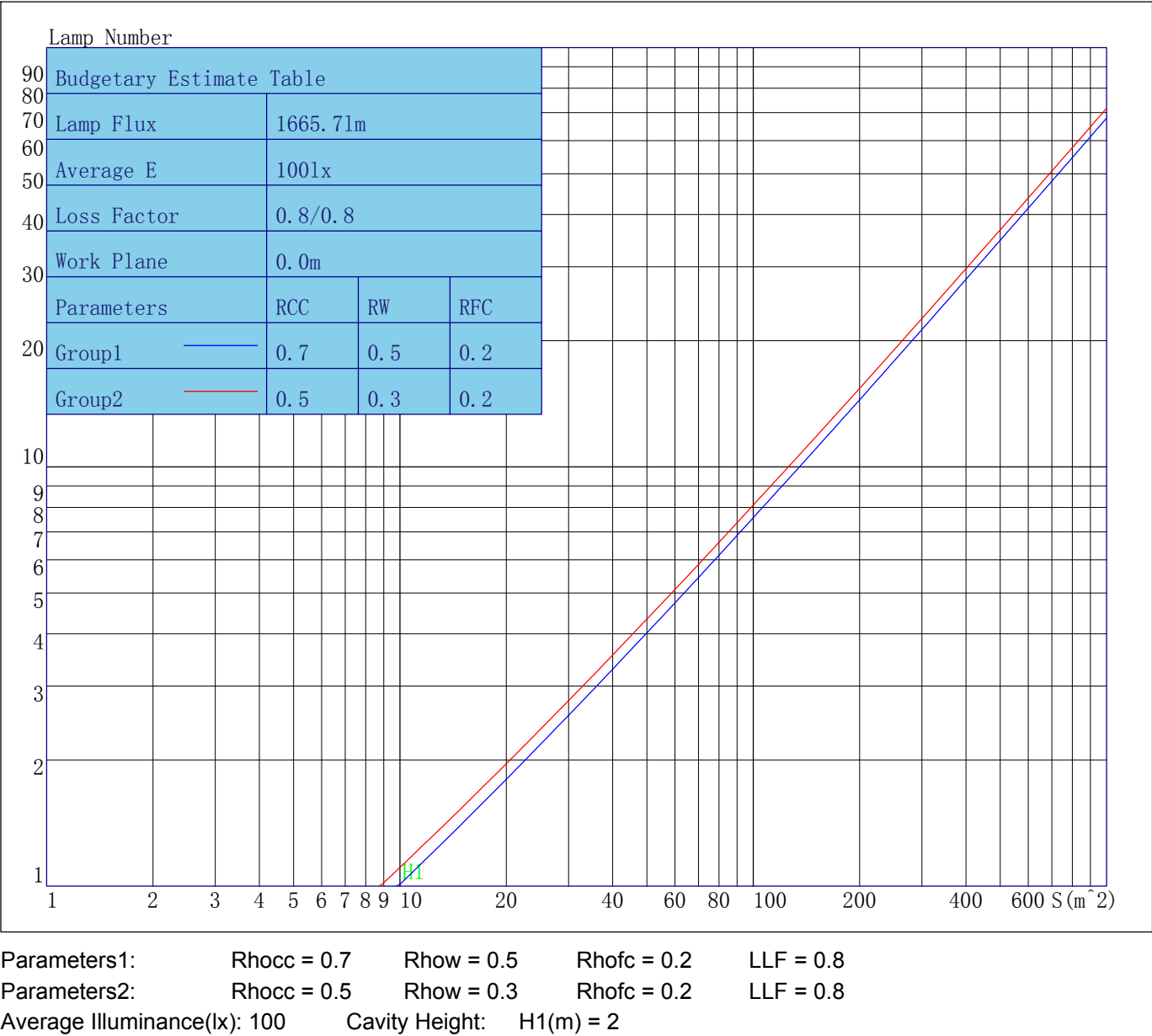
Luminance Limiting Curve



Luminous Size: Length(m)=0.250 Width(m)=0.250 Height(m)=0.000 Area(m^2)=0.062500
 Luminous Type: Without Luminous Side
 Luminous Curves: C0-C180 Color: — C90-C270 Color: —

Indoor Budgetary Estimate Table

Lum. Name: LED Recessed Downlight	Lum. Catalog: LG-9022A-AC-30K	Test ID: IESNA:LM-79-08
Lamp Name:	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lig
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 2/16/2021



Indoor Coefficient of Utilization Table

Lum. Name: LED Recessed Downlight	Lum. Catalog: LG-9022A-AC-30K	Test ID: IESNA:LM-79-08
Lamp Name:	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.lightandgreen.com)
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 2/16/2021

Coefficients of Utilization – Zonal Cavity Method																		
Coef.	Effective Floor Cavity Reflectance RFC=0.20																	
RhoCC (%)	80				70				50			30			10			0
RhoW (%)	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	Coefficient of Utilization(%)																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	90	88	86	85
3	101	94	89	85	99	93	88	84	90	86	82	88	84	81	85	82	80	78
4	96	88	82	78	94	87	81	77	84	80	76	82	78	75	81	77	74	73
5	91	82	76	72	89	81	76	71	79	74	71	78	73	70	76	72	69	68
6	86	77	71	67	85	76	71	66	75	70	66	74	69	66	72	68	65	64
7	82	73	67	62	81	72	66	62	71	66	62	70	65	62	69	64	61	60
8	79	69	63	59	77	68	62	58	67	62	58	66	61	58	65	61	58	56
9	75	65	59	55	74	65	59	55	64	59	55	63	58	55	62	58	55	53
10	72	62	56	52	71	61	56	52	61	56	52	60	55	52	59	55	52	50

Unified Glare Rating Table

Lum. Name: LED Recessed Downlight	Lum. Catalog: LG-9022A-AC-30K	Test ID: IESNA:LM-79-08
Lamp Name:	Lamp Catalog: LED	Test Lab: LIGHT LABORATORY, INC. (www.light-lab.com)
Manufacture: Light and Green	Test Machine:GON-2000	Test Date: 2/16/2021

Unified Glare Rating Table

Ceiling RCC	0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30
Wall RW	0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30
Floor RFC	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Room Size	Vewed crosswise					Vewed endwise				
X=2H Y=2H Y=3H Y=4H Y=6H Y=8H Y=12H	12.3	13.4	12.6	13.7	14.0	12.4	13.5	12.8	13.8	14.1
	12.9	13.9	13.3	14.2	14.6	13.1	14.0	13.5	14.4	14.7
	13.4	14.3	13.8	14.6	15.0	13.5	14.4	14.0	14.8	15.2
	13.9	14.7	14.3	15.1	15.5	14.1	14.9	14.5	15.3	15.7
	14.2	15.0	14.7	15.4	15.8	14.4	15.2	14.8	15.6	16.0
	14.6	15.3	15.0	15.7	16.1	14.7	15.5	15.2	15.9	16.3
X=4H Y=2H Y=3H Y=4H Y=6H Y=8H Y=12H	12.4	13.3	12.8	13.6	14.0	12.5	13.4	12.9	13.8	14.2
	13.3	14.0	13.7	14.5	14.9	13.5	14.2	13.9	14.6	15.0
	14.0	14.6	14.4	15.0	15.5	14.1	14.8	14.5	15.2	15.6
	14.7	15.3	15.2	15.7	16.2	14.9	15.5	15.4	15.9	16.4
	15.1	15.7	15.6	16.1	16.6	15.3	15.8	15.8	16.3	16.7
	15.6	16.1	16.1	16.6	17.0	15.8	16.2	16.2	16.7	17.2
X=8H Y=4H Y=6H Y=8H Y=12H	14.2	14.7	14.7	15.2	15.7	14.4	14.9	14.8	15.3	15.8
	15.2	15.6	15.7	16.1	16.7	15.3	15.8	15.9	16.3	16.8
	15.8	16.2	16.3	16.7	17.2	15.9	16.3	16.4	16.8	17.3
	16.5	16.8	17.0	17.3	17.9	16.6	16.9	17.1	17.4	18.0
X=12H Y=4H Y=6H Y=8H	14.3	14.7	14.7	15.2	15.7	14.4	14.8	14.9	15.3	15.8
	15.3	15.7	15.9	16.2	16.7	15.5	15.8	16.0	16.3	16.9
	16.0	16.3	16.5	16.8	17.4	16.1	16.4	16.6	16.9	17.5
Variations with the objverver position at spacings										
S=1.0H	0.2/-0.2					0.2/-0.2				
S=1.5H	0.3/-0.3					0.3/-0.4				
S=2.0H	0.2/-0.3					0.3/-0.4				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	2.8					2.8				

to the CIE Pub.117, data has been corrected, refers to the lamp's lumens 8.2flm.

IES Indoor Report

Photometric Filename:2XDC9W-3000K, Ra90, Reflector 38°.IES

Candela Tabulation

V/H	C0.0	C5.0	C10.0	C15.0	C20.0	C25.0	C30.0	C35.0	C40.0	C45.0	C50.0	C55.0
γ 0.0	2614.00	2614.00	2614.00	2614.00	2614.00	2614.00	2614.00	2614.00	2614.00	2614.00	2614.00	2614.00
γ 1.0	2570.00	2572.00	2574.00	2577.00	2583.00	2588.00	2593.00	2598.00	2604.00	2611.00	2618.00	2623.00
γ 3.0	2537.00	2539.00	2542.00	2545.00	2551.00	2557.00	2562.00	2567.00	2573.00	2580.00	2586.00	2592.00
γ 5.0	2462.00	2465.00	2468.00	2472.00	2479.00	2486.00	2491.00	2496.00	2503.00	2510.00	2516.00	2521.00
γ 7.0	2314.00	2316.00	2320.00	2323.00	2328.00	2335.00	2341.00	2344.00	2350.00	2358.00	2365.00	2370.00
γ 9.0	2152.00	2154.00	2156.00	2159.00	2164.00	2169.00	2174.00	2179.00	2185.00	2192.00	2198.00	2203.00
γ 11.0	1979.00	1981.00	1983.00	1986.00	1991.00	1997.00	2000.00	2005.00	2012.00	2018.00	2024.00	2030.00
γ 13.0	1806.00	1807.00	1809.00	1811.00	1816.00	1821.00	1825.00	1828.00	1833.00	1841.00	1847.00	1853.00
γ 15.0	1662.00	1664.00	1667.00	1669.00	1673.00	1675.00	1677.00	1680.00	1683.00	1689.00	1695.00	1699.00
γ 17.0	1512.00	1514.00	1516.00	1516.00	1518.00	1520.00	1522.00	1523.00	1524.00	1530.00	1533.00	1536.00
γ 19.5	1338.00	1338.00	1339.00	1340.00	1342.00	1344.00	1344.00	1344.00	1345.00	1347.00	1349.00	1351.00
γ 22.5	1122.00	1123.00	1124.00	1125.00	1126.00	1128.00	1128.00	1128.00	1129.00	1131.00	1132.00	1134.00
γ 25.5	918.00	920.00	920.00	922.00	924.00	925.00	926.00	926.00	927.00	930.00	932.00	934.00
γ 29.0	733.00	735.00	736.00	737.00	740.00	741.00	743.00	742.00	744.00	747.00	748.00	750.00
γ 33.0	575.00	576.00	577.00	579.00	581.00	582.00	584.00	584.00	585.00	588.00	589.00	591.00
γ 37.5	349.00	349.00	351.00	352.00	352.00	353.00	354.00	355.00	356.00	359.00	359.00	360.00
γ 42.5	123.00	123.00	123.00	124.00	124.00	125.00	125.00	125.00	126.00	127.00	128.00	128.00
γ 47.5	81.00	81.00	81.00	81.00	81.00	81.00	81.00	81.00	82.00	82.00	82.00	82.00
γ 55.0	60.00	60.00	60.00	60.00	60.00	60.00	61.00	61.00	61.00	61.00	61.00	61.00
γ 65.0	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	39.00	39.00	39.00
γ 75.0	27.00	27.00	27.00	27.00	27.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00
γ 85.0	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
γ 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
V/H	C60.0	C65.0	C70.0	C75.0	C80.0	C85.0	C90.0					
γ 0.0	2614.00	2614.00	2614.00	2614.00	2614.00	2614.00	2614.00					
γ 1.0	2629.00	2634.00	2638.00	2642.00	2646.00	2648.00	2649.00					
γ 3.0	2598.00	2603.00	2609.00	2613.00	2617.00	2620.00	2620.00					
γ 5.0	2527.00	2532.00	2536.00	2541.00	2545.00	2548.00	2549.00					
γ 7.0	2374.00	2379.00	2383.00	2386.00	2390.00	2392.00	2392.00					
γ 9.0	2208.00	2213.00	2219.00	2223.00	2227.00	2228.00	2229.00					
γ 11.0	2036.00	2041.00	2045.00	2049.00	2053.00	2054.00	2057.00					
γ 13.0	1857.00	1863.00	1867.00	1871.00	1875.00	1877.00	1878.00					
γ 15.0	1703.00	1708.00	1712.00	1717.00	1721.00	1722.00	1722.00					
γ 17.0	1540.00	1543.00	1547.00	1551.00	1554.00	1556.00	1556.00					
γ 19.5	1353.00	1355.00	1358.00	1360.00	1362.00	1364.00	1364.00					
γ 22.5	1135.00	1135.00	1137.00	1138.00	1139.00	1140.00	1141.00					
γ 25.5	935.00	935.00	935.00	937.00	938.00	938.00	938.00					
γ 29.0	751.00	752.00	753.00	754.00	755.00	755.00	756.00					
γ 33.0	590.00	591.00	590.00	591.00	591.00	592.00	593.00					
γ 37.5	360.00	359.00	360.00	360.00	361.00	362.00	362.00					
γ 42.5	128.00	128.00	128.00	128.00	129.00	129.00	129.00					
γ 47.5	82.00	83.00	83.00	83.00	83.00	83.00	83.00					
γ 55.0	61.00	62.00	62.00	62.00	62.00	62.00	62.00					
γ 65.0	39.00	39.00	39.00	39.00	39.00	39.00	39.00					
γ 75.0	28.00	28.00	28.00	28.00	28.00	28.00	28.00					
γ 85.0	16.00	16.00	16.00	16.00	16.00	16.00	16.00					
γ 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00					