

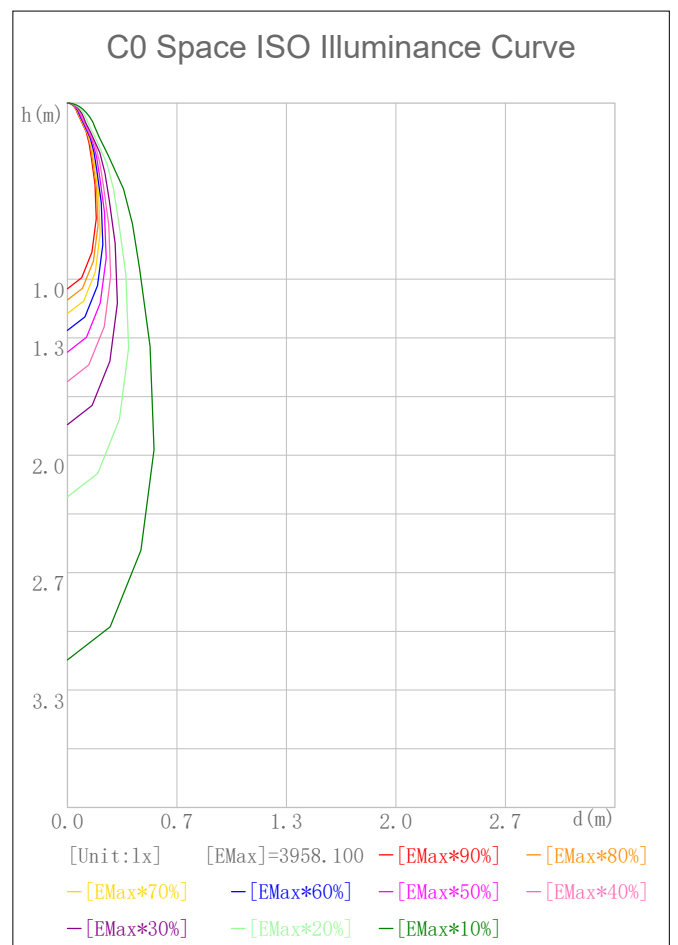
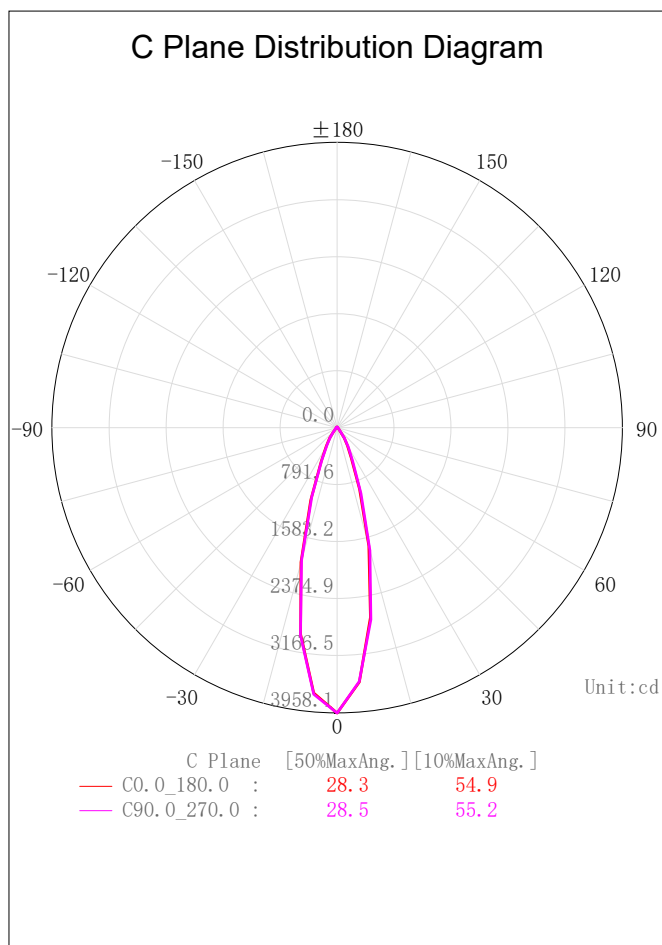
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-15-XX-01 3000K RA90 24D		Lum. Catalog:	Test ID: 01
Lamp Name:		Lamp Catalog: LED	Test Date: 2022/08/09
Manufacture: Shenzhen Norming Lighting		Shld. Ang(°):	Test Machine:GON-2000
Test Lab: Quality Department		Frequency(Hz):	Lamp CCT(K): Ra:
Lum. Size (W*L*H):0.055m*0.055m*0.000m		Lum. Area (m2):0.003	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25	Humidity(%): 50.0

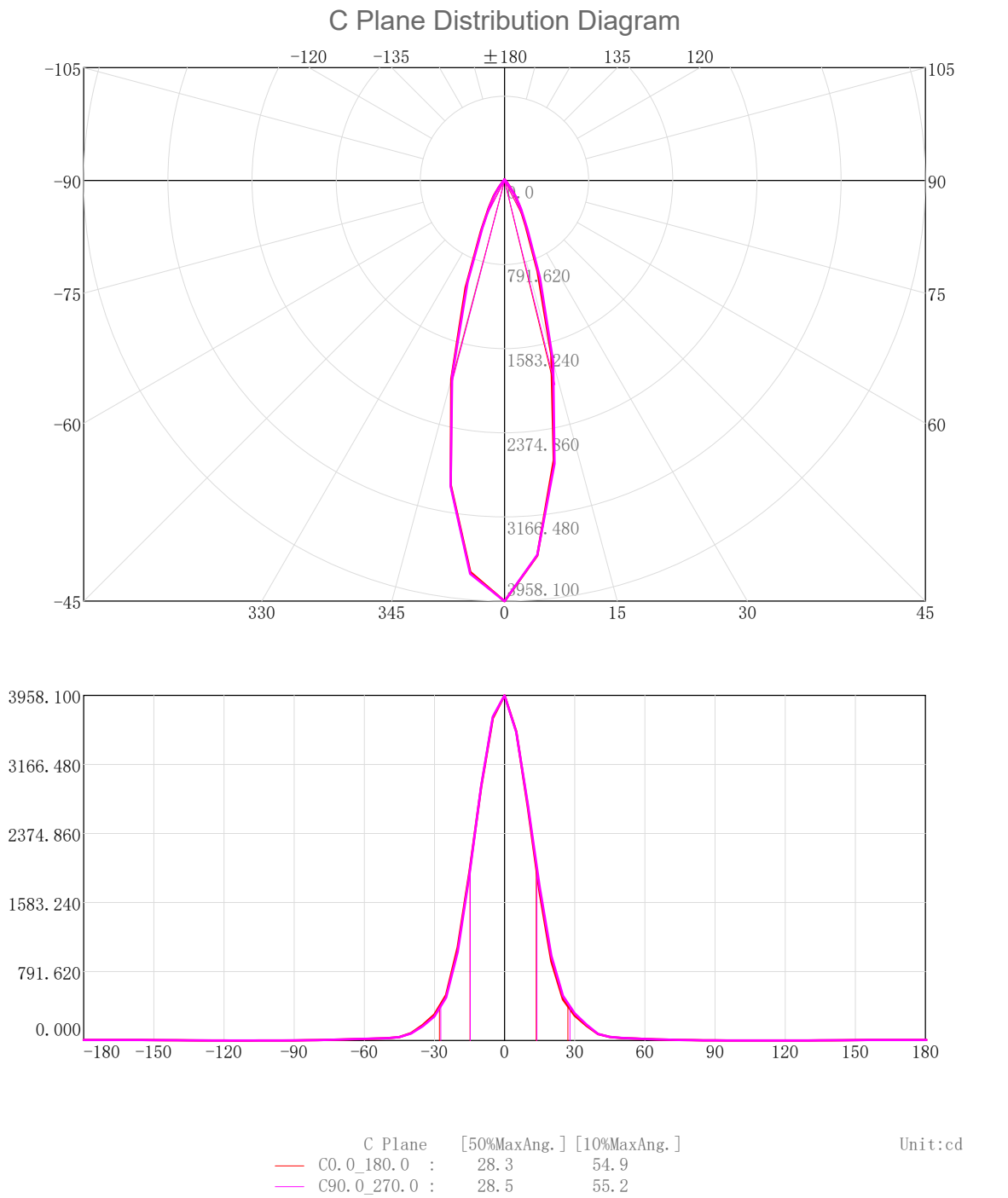
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 1301.430	Luminary Flux(lm): 1301.431	Field Angle(10%Imax): 54.9(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1283.6501m 98.63%
Rated Voltage(V):	Luminary EER(lm/W): 91.457	Up Lumens&Percent: 17.7811m 1.37%
Tested Power(W): 14.230	Max. Candela(cd): 3958.100	S/MH: C0_a180=0.474 C90_270=0.477
Lamps’ Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct
Tested Electrics(V, A, pf):239.7, 0.061, 0.971	Beam Angle(50%Imax): 28.3(°)	ErP φ use(90°): 1224.4441m
Lamp Size(W*L*H):0.055m*0.055m*0.000m	Left=-14.8° , Right=13.6°	IRF(%): 674.791



2D Plane Light Intensity Distribution Curve

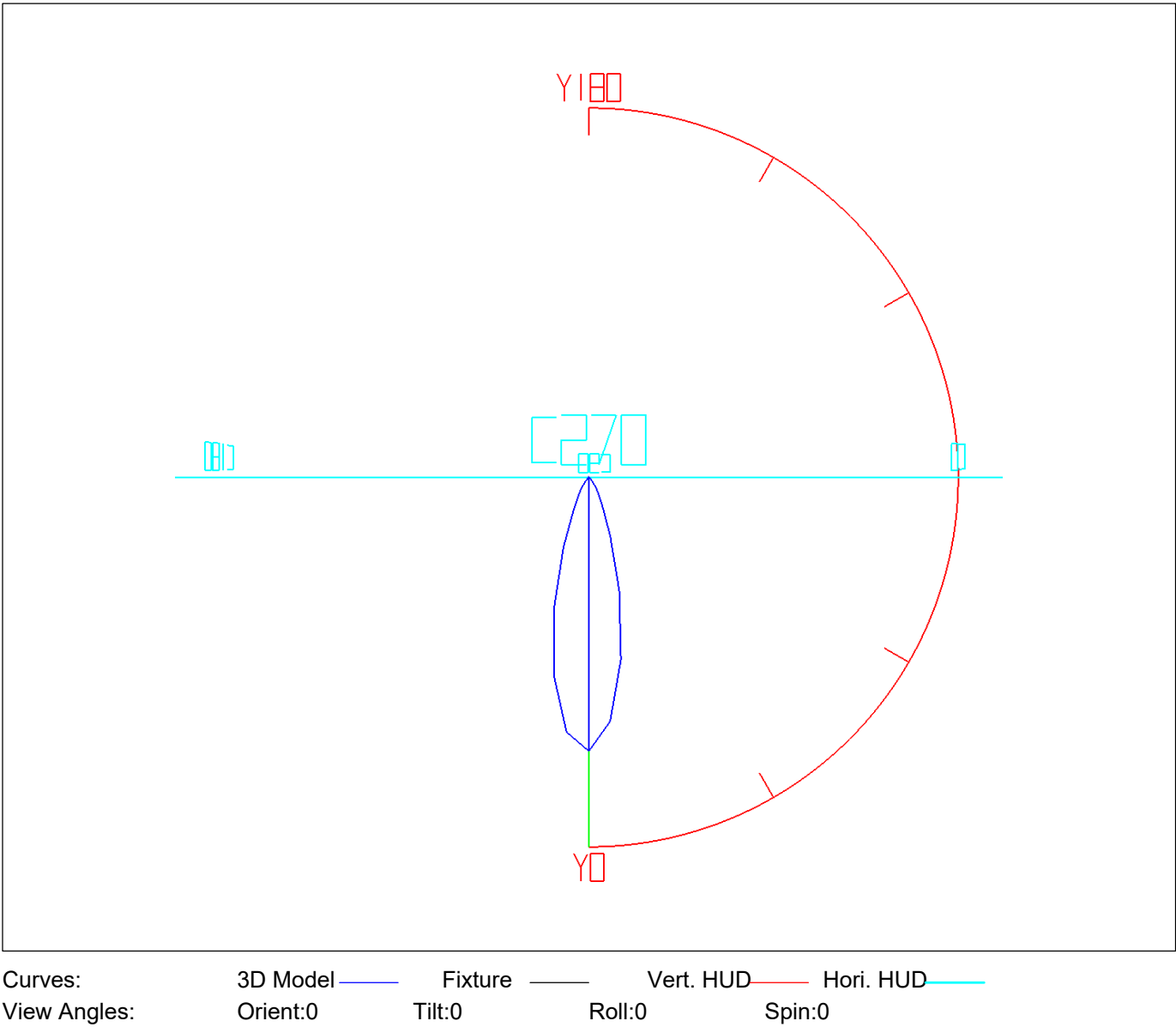
Lum. Name:DL51-15-XX-01 3000K RA90 24D	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/09



3D Light Intensity Distribution Modal

Lum. Name: DL51-15-XX-01 3000K RA90 24D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/09

3D Light Intensity Distribution Modal

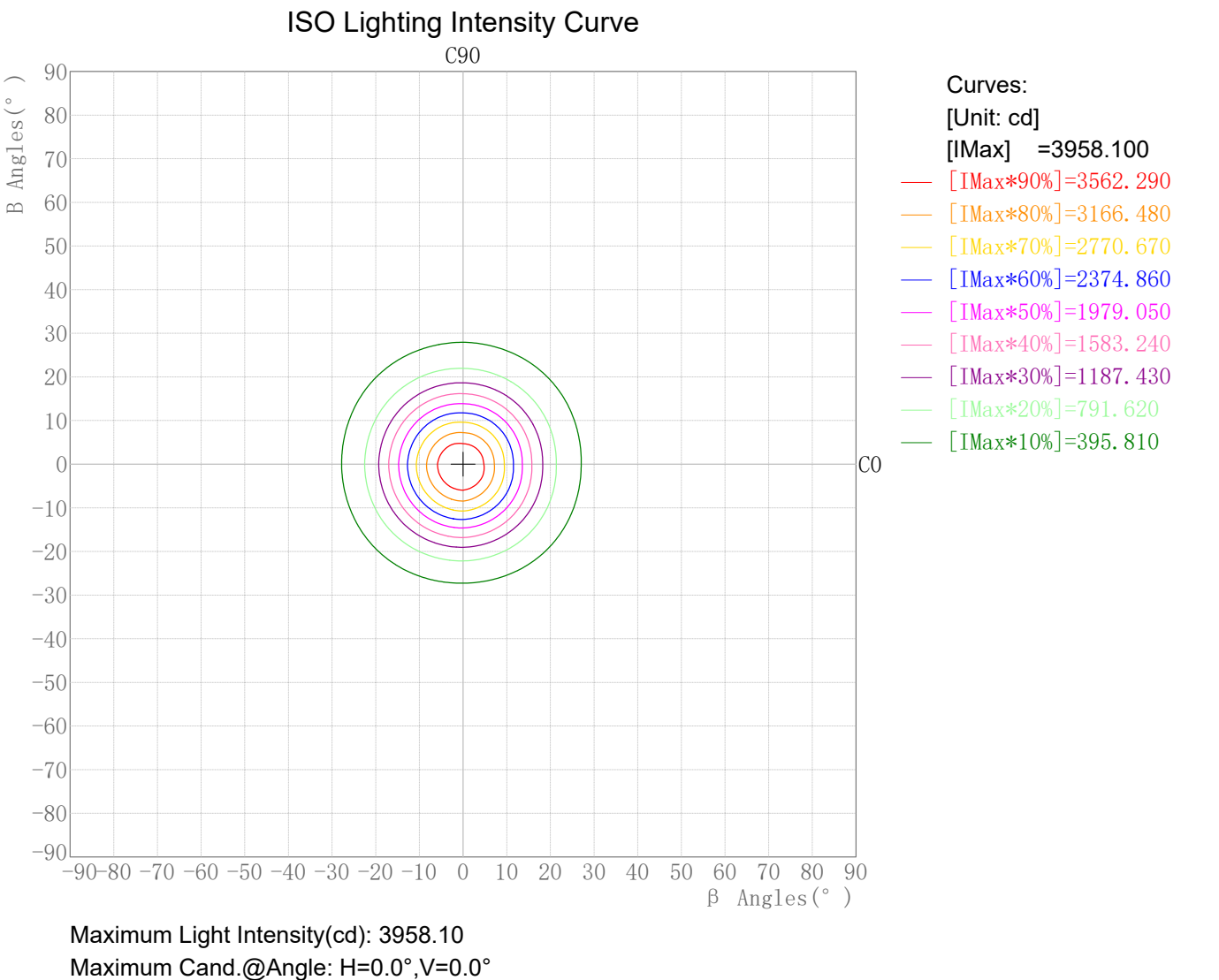


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0. 0-5. 0	90. 62	90. 62	6. 96	6. 96
5. 0-10. 0	229. 81	320. 43	17. 66	24. 62
10. 0-15. 0	274. 52	594. 95	21. 09	45. 71
15. 0-20. 0	232. 27	827. 22	17. 85	63. 56
20. 0-25. 0	156. 62	983. 83	12. 03	75. 60
25. 0-30. 0	100. 52	1084. 35	7. 72	83. 32
30. 0-35. 0	68. 98	1153. 33	5. 30	88. 62
35. 0-40. 0	42. 41	1195. 74	3. 26	91. 88
40. 0-45. 0	22. 40	1218. 14	1. 72	93. 60
45. 0-50. 0	14. 28	1232. 42	1. 10	94. 70
50. 0-55. 0	11. 66	1244. 08	0. 90	95. 59
55. 0-60. 0	10. 15	1254. 24	0. 78	96. 37
60. 0-65. 0	8. 48	1262. 72	0. 65	97. 03
65. 0-70. 0	6. 86	1269. 57	0. 53	97. 55
70. 0-75. 0	5. 42	1274. 99	0. 42	97. 97
75. 0-80. 0	4. 10	1279. 09	0. 32	98. 28
80. 0-85. 0	2. 81	1281. 90	0. 22	98. 50
85. 0-90. 0	1. 75	1283. 65	0. 13	98. 63
90. 0-95. 0	1. 16	1284. 81	0. 09	98. 72
95. 0-100. 0	0. 91	1285. 72	0. 07	98. 79
100. 0-105. 0	0. 77	1286. 49	0. 06	98. 85
105. 0-110. 0	0. 60	1287. 09	0. 05	98. 90
110. 0-115. 0	0. 53	1287. 61	0. 04	98. 94
115. 0-120. 0	0. 56	1288. 17	0. 04	98. 98
120. 0-125. 0	0. 58	1288. 76	0. 04	99. 03
125. 0-130. 0	0. 71	1289. 47	0. 05	99. 08
130. 0-135. 0	0. 94	1290. 41	0. 07	99. 15
135. 0-140. 0	1. 27	1291. 68	0. 10	99. 25
140. 0-145. 0	1. 58	1293. 25	0. 12	99. 37
145. 0-150. 0	1. 74	1294. 99	0. 13	99. 51
150. 0-155. 0	1. 74	1296. 73	0. 13	99. 64
155. 0-160. 0	1. 61	1298. 34	0. 12	99. 76
160. 0-165. 0	1. 34	1299. 68	0. 10	99. 87
165. 0-170. 0	0. 97	1300. 64	0. 07	99. 94
170. 0-175. 0	0. 59	1301. 23	0. 05	99. 98
175. 0-180. 0	0. 20	1301. 43	0. 02	100. 00

Rectangle ISO Lighting Intensity Diagram

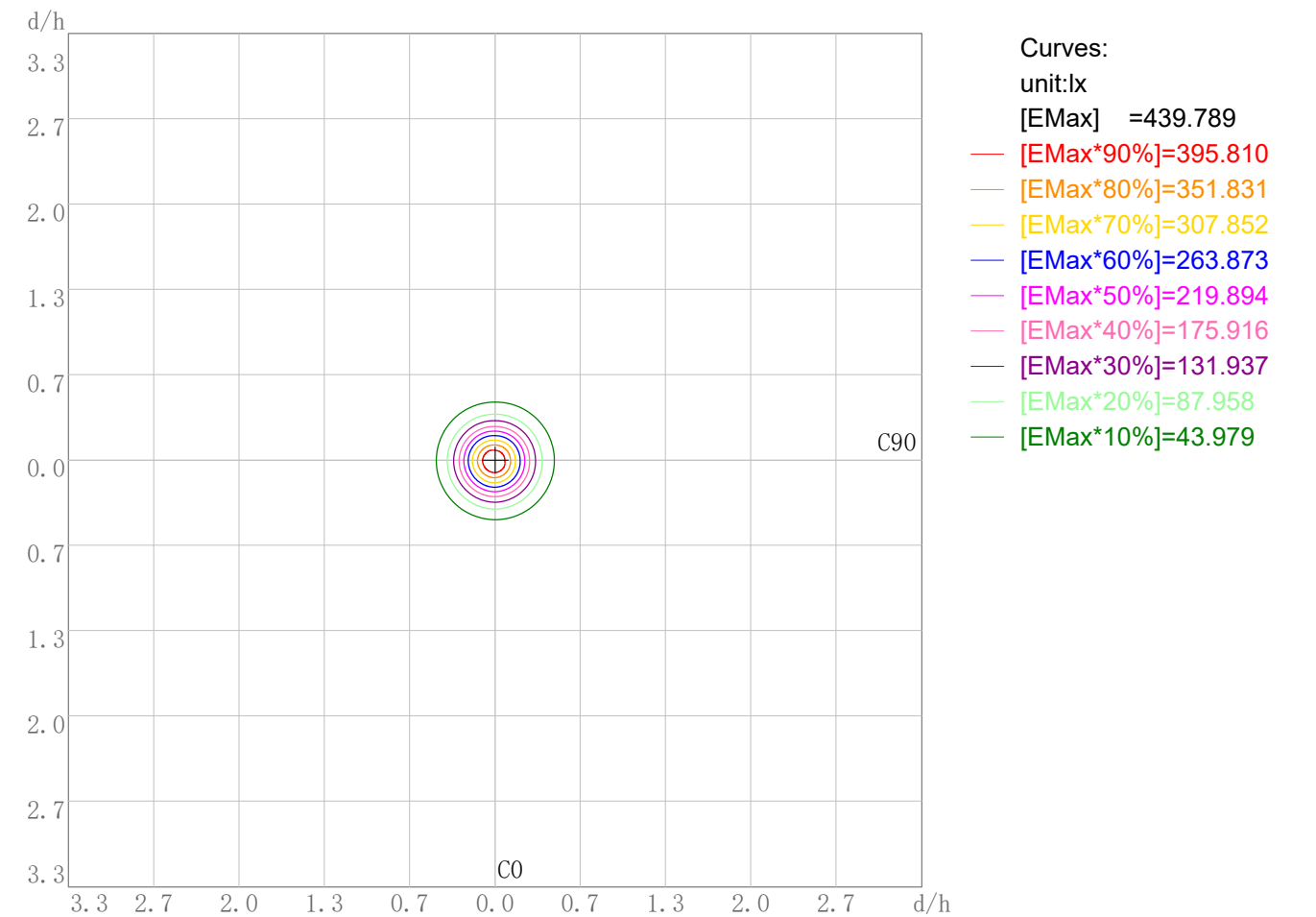
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Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/09



Plane ISO-Illuminance Diagram

Lum. Name:DL51-15-XX-01 3000K RA90 24D	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/09

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00

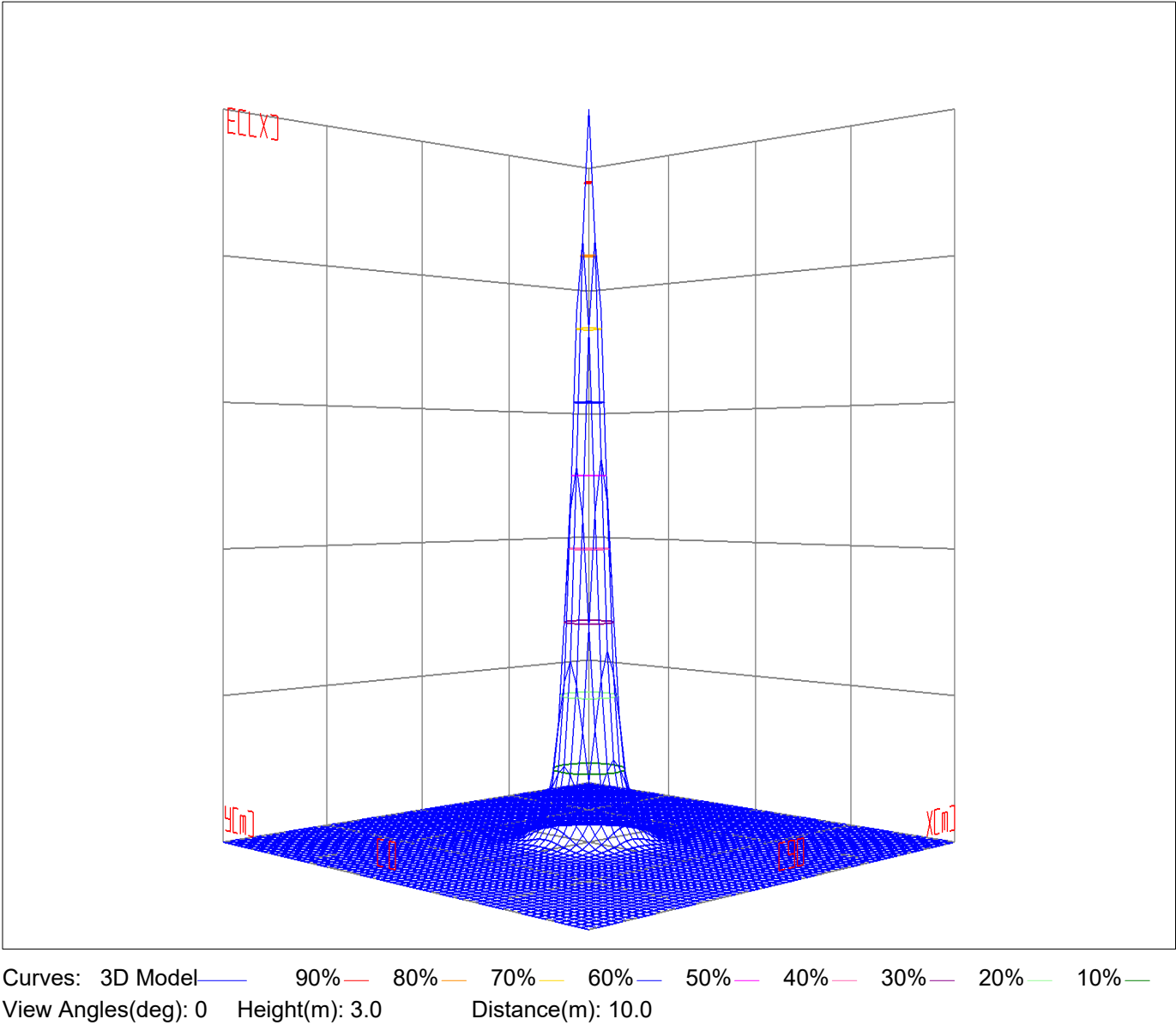
Working Plane Maximum Illuminance(lx): 439.79

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

3D Plane ISO Illuminance Diagram

Lum. Name: DL51-15-XX-01 3000K RA90 24D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/09

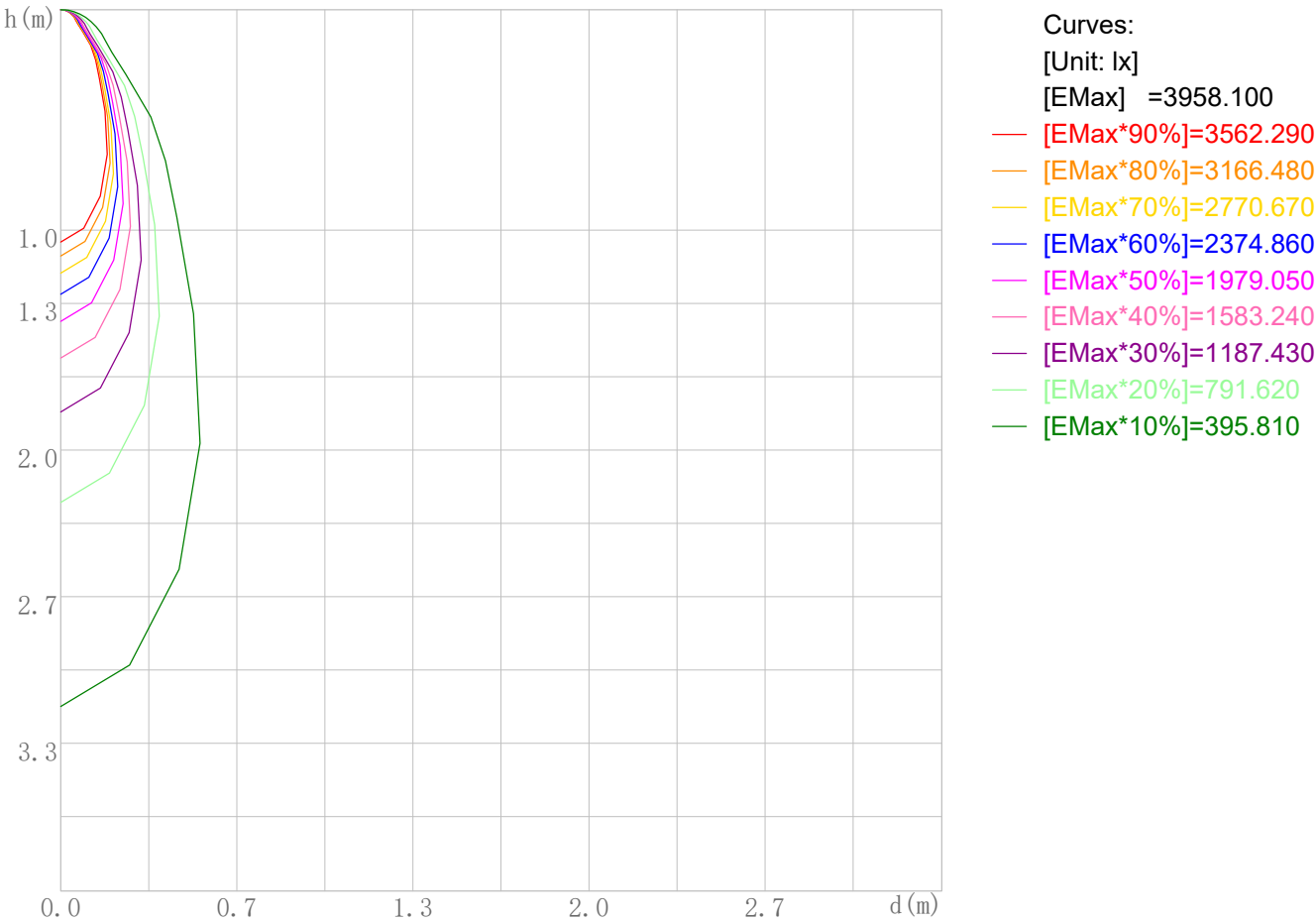
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: DL51-15-XX-01 3000K RA90 24D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/09

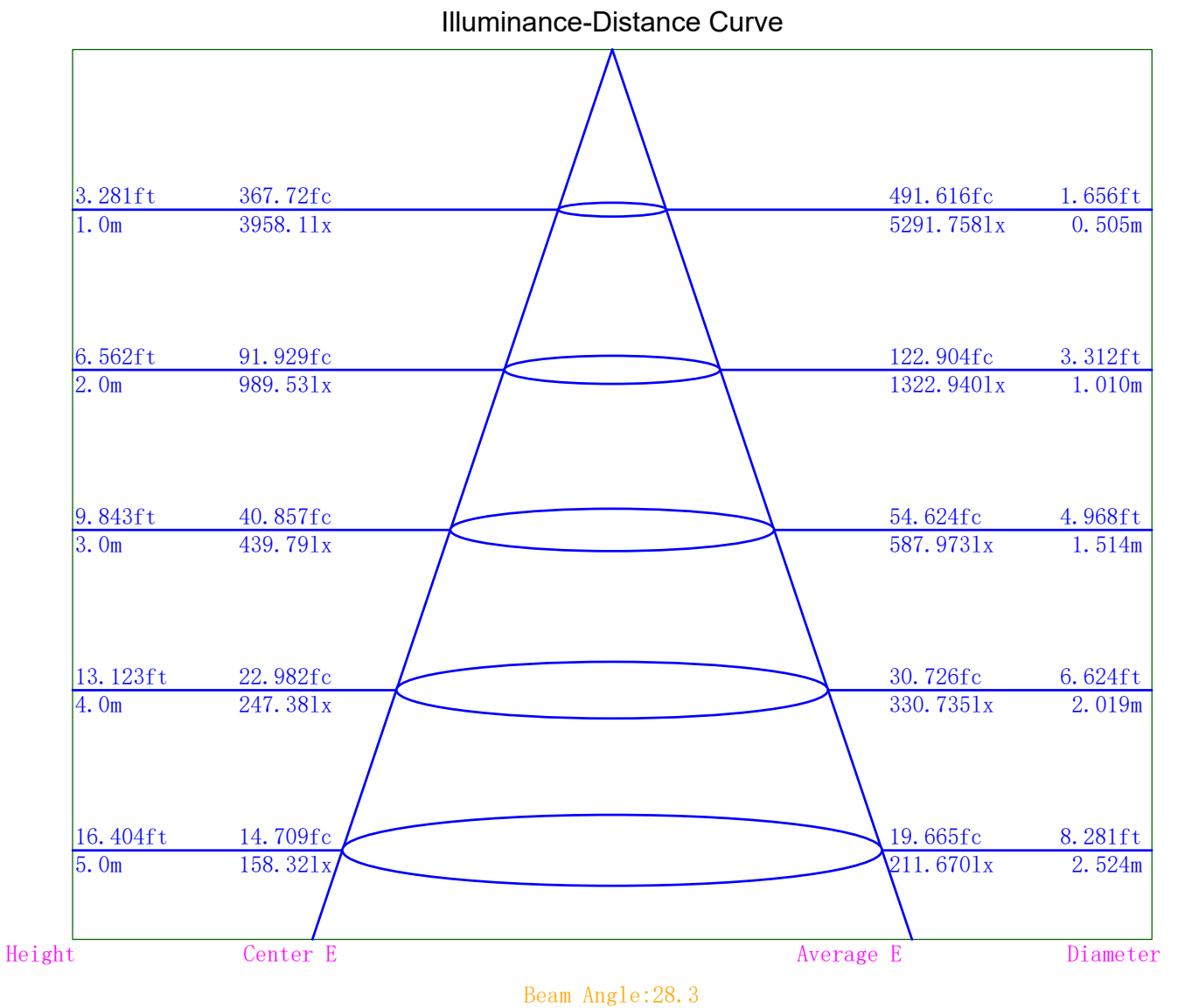
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:3958.10lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:3958.100cd,0eg

Illuminance-Distance Diagram

Lum. Name:DL51-15-XX-01 3000K RA90 24D	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/09



Indoor Luminance Limiting Curves

Lum. Name: DL51-15-XX-01 3000K RA90 24D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/09

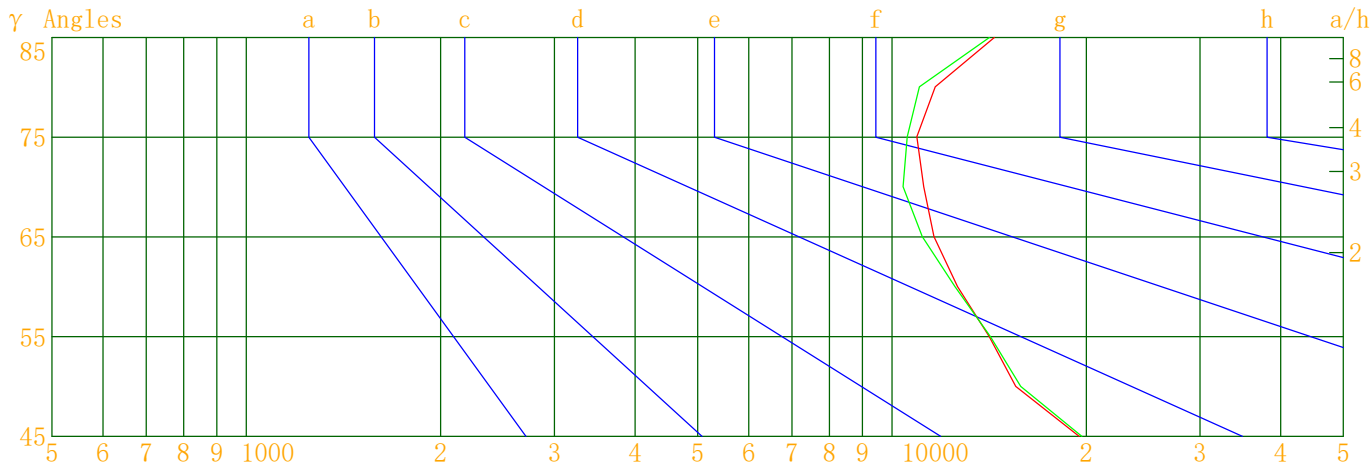
Glare Grade Table

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	19494	15554	14146	12631	11614	11198	10927	11666	14402
C90	19683	15828	14201	12520	11140	10403	10562	11030	14152

Luminance Limiting Curve



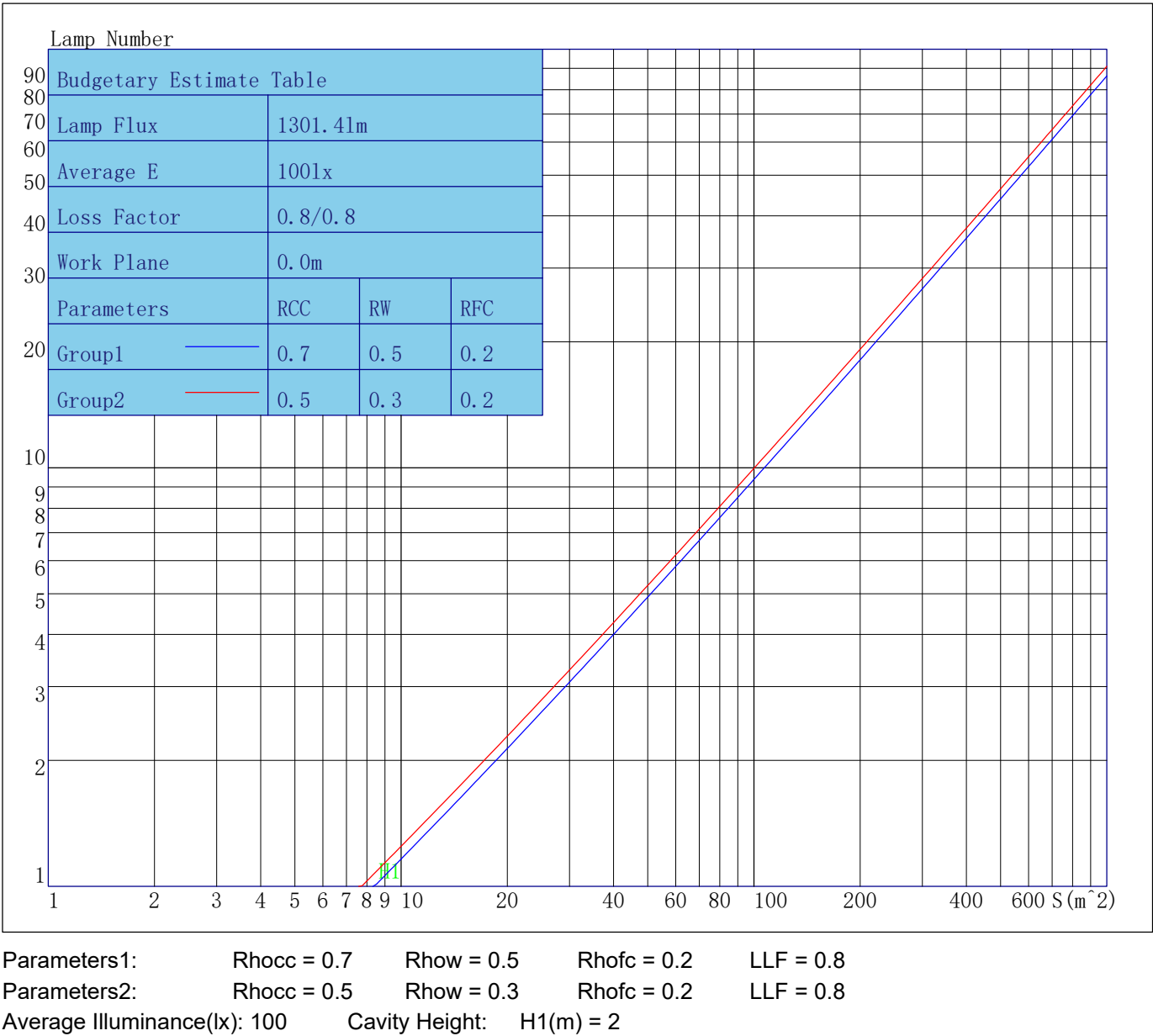
Luminous Size: Length(m)=0.055 Width(m)=0.055 Height(m)=0.000 Area(m^2)=0.003025

Luminous Type: Without Luminous Side

Luminous Curves: C0-C180 Color: C90-C270 Color:

Indoor Budgetary Estimate Table

Lum. Name:DL51-15-XX-01 3000K RA90 24D	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/09



Indoor Coefficient of Utilization Table

Lum. Name: DL51-15-XX-01 3000K RA90 24D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/09

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	110	110	110	105	105	105	101	101	101	99
1	114	111	109	107	111	109	107	105	105	103	101	101	99	98	97	96	95	93
2	109	104	101	98	107	103	99	97	99	97	94	96	94	92	93	92	90	88
3	104	99	94	91	102	97	93	90	95	91	88	92	89	87	90	87	85	84
4	100	94	89	85	98	93	88	85	90	87	84	88	85	82	86	84	81	80
5	96	89	84	81	95	88	84	80	86	82	79	85	81	79	83	80	78	76
6	93	85	80	77	91	84	80	76	83	79	76	81	78	75	80	77	74	73
7	89	82	77	73	88	81	76	73	80	75	72	78	75	72	77	74	71	70
8	86	78	73	70	85	78	73	70	77	72	69	76	72	69	75	71	69	67
9	83	75	70	67	82	75	70	67	74	70	67	73	69	66	72	69	66	65
10	81	73	68	65	80	72	68	64	71	67	64	71	67	64	70	66	64	63

Unified Glare Rating Table

Lum. Name: DL51-15-XX-01 3000K RA90 24D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/09

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	17.2	18.1	17.6	18.5	18.8	17.4	18.3	17.8	18.7	19.0
	17.7	18.6	18.1	18.9	19.3	17.8	18.7	18.2	19.0	19.4
	18.0	18.8	18.5	19.2	19.6	18.1	18.9	18.5	19.2	19.7
	18.3	19.0	18.8	19.4	19.9	18.3	19.1	18.8	19.5	19.9
	18.5	19.1	18.9	19.6	20.0	18.5	19.1	18.9	19.6	20.0
	18.6	19.3	19.1	19.7	20.1	18.6	19.2	19.1	19.7	20.1
X=4H Y=2H	17.3	18.0	17.7	18.4	18.8	17.4	18.2	17.9	18.6	19.0
	18.0	18.7	18.5	19.1	19.5	18.1	18.7	18.5	19.2	19.6
	18.5	19.0	18.9	19.5	20.0	18.5	19.0	18.9	19.5	20.0
	18.9	19.4	19.4	19.9	20.4	18.9	19.4	19.4	19.9	20.4
	19.2	19.6	19.7	20.1	20.6	19.1	19.5	19.6	20.0	20.5
	19.4	19.8	19.9	20.3	20.8	19.3	19.7	19.8	20.2	20.7
X=8H Y=4H	18.6	19.0	19.1	19.5	20.0	18.6	19.0	19.1	19.5	20.0
	19.2	19.6	19.8	20.1	20.7	19.2	19.5	19.7	20.0	20.6
	19.6	19.9	20.1	20.4	20.9	19.5	19.8	20.0	20.3	20.9
	19.9	20.2	20.5	20.7	21.3	19.8	20.1	20.4	20.6	21.2
X=12H Y=4H	18.6	19.0	19.1	19.5	20.0	18.6	19.0	19.1	19.5	20.0
	19.3	19.6	19.8	20.1	20.7	19.2	19.5	19.8	20.0	20.6
	19.7	19.9	20.2	20.5	21.1	19.6	19.9	20.1	20.4	21.0
Variations with the objerver position at spacings										
S=1.0H	0.3/-0.3					0.3/-0.3				
S=1.5H	0.5/-0.6					0.5/-0.6				
S=2.0H	0.7/-0.8					0.7/-0.7				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	2.1					1.9				

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

Candela Tabulation

V/H	C0.0	C90.0	C180.0	C270.0
γ 0.0	3958.10	3958.10	3958.10	3958.10
γ 5.0	3541.51	3535.61	3696.85	3713.59
γ 10.0	2671.68	2704.58	2910.69	2922.08
γ 15.0	1700.12	1765.46	1933.27	1903.35
γ 20.0	909.44	971.82	1070.73	1019.10
γ 25.0	472.27	513.90	521.82	494.01
γ 30.0	286.42	312.67	298.59	277.55
γ 35.0	170.89	184.97	178.61	163.98
γ 40.0	75.75	76.30	85.51	80.82
γ 45.0	41.70	42.10	40.37	41.35
γ 50.0	30.24	30.78	27.54	28.57
γ 55.0	24.55	24.64	23.54	24.69
γ 60.0	19.10	18.94	19.50	20.70
γ 65.0	14.85	14.24	15.64	16.57
γ 70.0	11.59	10.76	11.96	12.71
γ 75.0	8.56	8.27	9.33	9.73
γ 80.0	6.13	5.79	6.53	7.01
γ 85.0	3.80	3.73	4.17	4.19
γ 90.0	2.51	2.47	2.16	2.52
γ 95.0	2.06	1.98	1.30	1.94
γ 100.0	1.63	1.66	1.14	1.71
γ 105.0	1.25	1.32	1.53	1.24
γ 110.0	1.00	1.00	0.74	1.05
γ 115.0	1.02	1.06	0.76	1.71
γ 120.0	1.02	1.18	0.99	1.42
γ 125.0	1.12	1.27	1.36	1.73
γ 130.0	1.61	1.85	1.79	2.37
γ 135.0	2.61	2.64	2.65	3.11
γ 140.0	3.78	3.98	4.08	4.54
γ 145.0	5.47	5.13	5.32	5.48
γ 150.0	6.15	6.43	6.68	6.57
γ 155.0	7.13	7.24	7.37	7.45
γ 160.0	7.99	7.68	8.39	8.12
γ 165.0	8.30	7.96	8.28	8.13
γ 170.0	7.92	8.21	8.15	8.20
γ 175.0	8.34	8.27	8.37	8.40
γ 180.0	8.28	8.28	8.28	8.28