

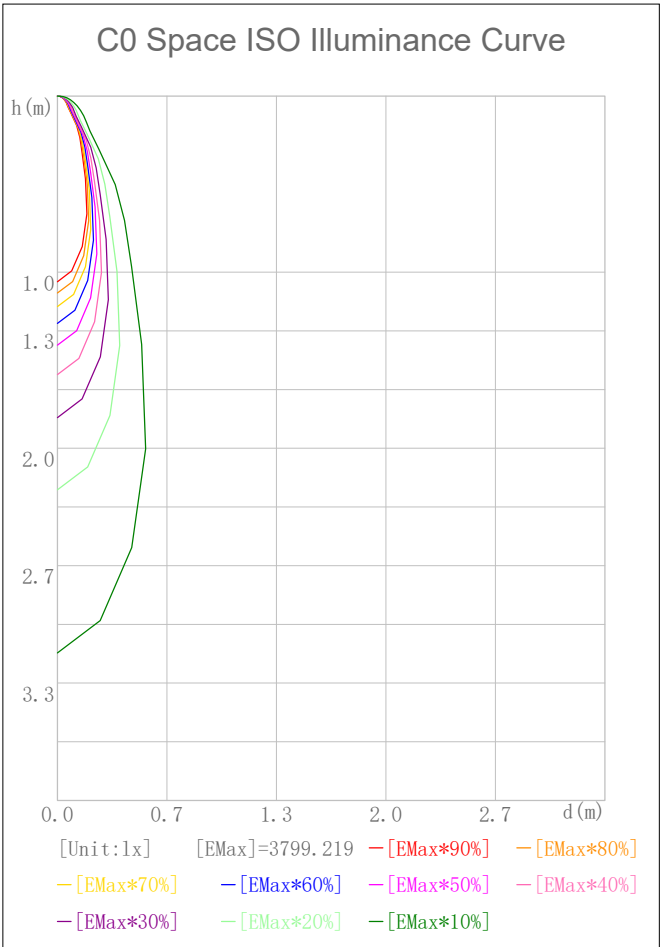
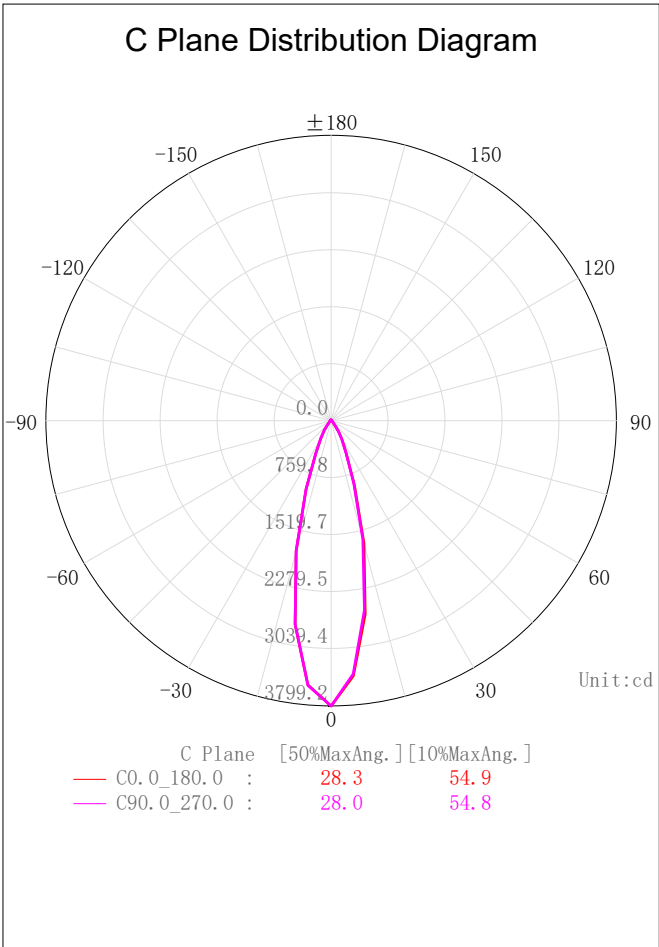
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-15-XX-01 2700K RA90 24D		Lum. Catalog:	Test ID: 01
Lamp Name:		Lamp Catalog: LED	Test Date: 2022/08/08
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):0.002	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25	Humidity(%): 50.0

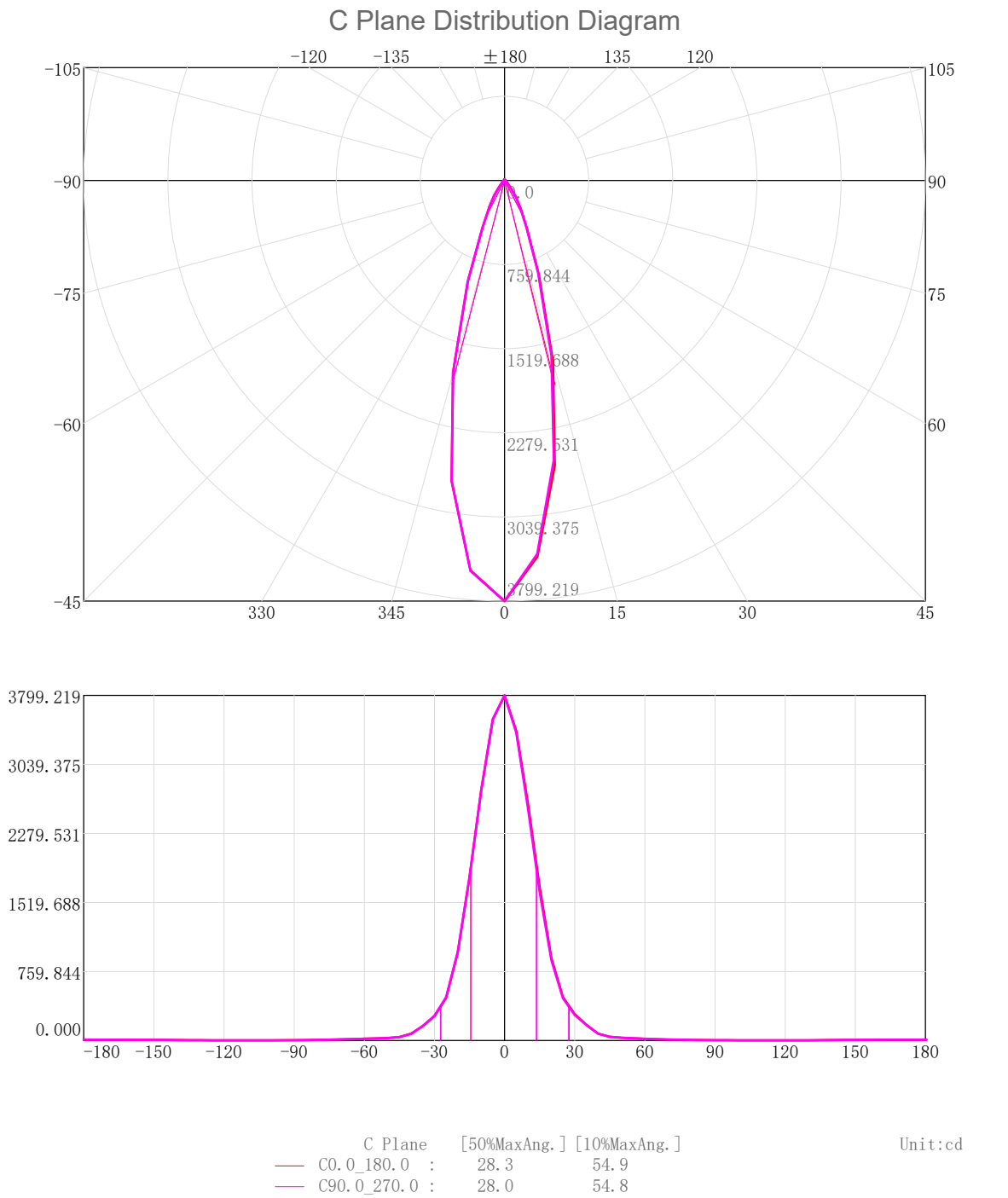
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 1256.780	Luminary Flux(lm): 1256.781	Field Angle(10%Imax): 54.9(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1227.572lm 97.68%	
Rated Voltage(V):	Luminary EER(lm/W): 89.070	Up Lumens&Percent: 29.209lm 2.32%	
Tested Power(W): 14.110	Max. Candela(cd): 3799.219	S/MH: C0_a180=0.474 C90_270=0.470	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf):239.9, 0.060, 0.970	Beam Angle(50%Imax): 28.3(°)	ErP Φ use(90°): 1154.533lm	
Lamp Size (W*L*H):0.055m*0.055m*0.000m	Left=-14.4°, Right=13.9°	IRF(%): 668.263	



2D Plane Light Intensity Distribution Curve

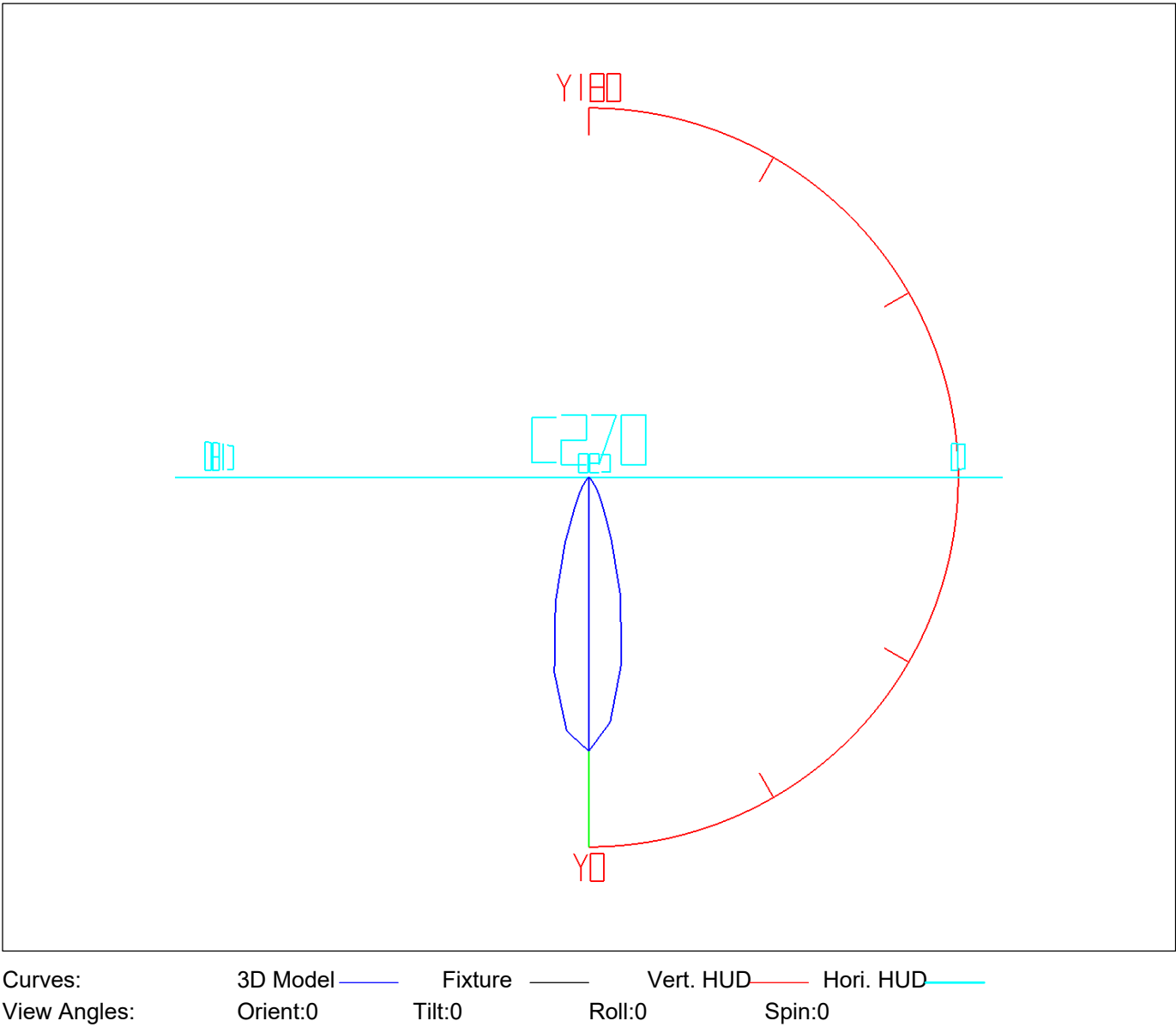
Lum. Name:DL51-15-XX-01 2700K RA90 24D	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/08



3D Light Intensity Distribution Modal

Lum. Name:DL51-15-XX-01 2700K 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:2022/08/08

3D Light Intensity Distribution Modal

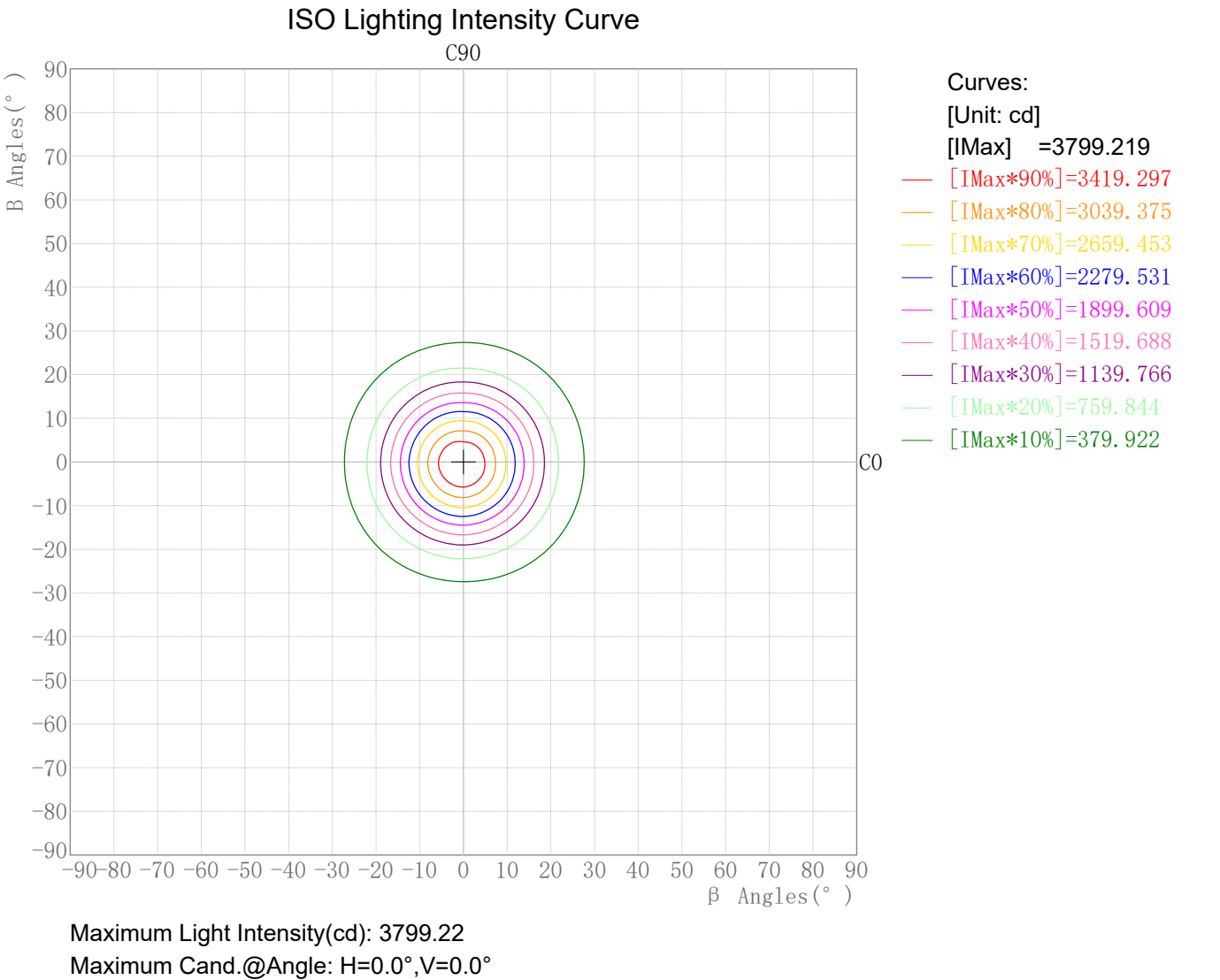


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0. 0-5. 0	86. 87	86. 87	6. 91	6. 91
5. 0-10. 0	219. 56	306. 42	17. 47	24. 38
10. 0-15. 0	261. 00	567. 43	20. 77	45. 15
15. 0-20. 0	219. 51	786. 94	17. 47	62. 62
20. 0-25. 0	147. 61	934. 55	11. 75	74. 36
25. 0-30. 0	95. 21	1029. 76	7. 58	81. 94
30. 0-35. 0	65. 51	1095. 27	5. 21	87. 15
35. 0-40. 0	40. 31	1135. 58	3. 21	90. 36
40. 0-45. 0	21. 57	1157. 15	1. 72	92. 07
45. 0-50. 0	14. 22	1171. 37	1. 13	93. 20
50. 0-55. 0	11. 87	1183. 24	0. 94	94. 15
55. 0-60. 0	10. 51	1193. 74	0. 84	94. 98
60. 0-65. 0	9. 00	1202. 75	0. 72	95. 70
65. 0-70. 0	7. 48	1210. 23	0. 60	96. 30
70. 0-75. 0	6. 09	1216. 32	0. 48	96. 78
75. 0-80. 0	4. 84	1221. 16	0. 38	97. 17
80. 0-85. 0	3. 68	1224. 84	0. 29	97. 46
85. 0-90. 0	2. 73	1227. 57	0. 22	97. 68
90. 0-95. 0	2. 19	1229. 77	0. 17	97. 85
95. 0-100. 0	1. 93	1231. 70	0. 15	98. 00
100. 0-105. 0	1. 73	1233. 43	0. 14	98. 14
105. 0-110. 0	1. 61	1235. 04	0. 13	98. 27
110. 0-115. 0	1. 49	1236. 53	0. 12	98. 39
115. 0-120. 0	1. 43	1237. 95	0. 11	98. 50
120. 0-125. 0	1. 45	1239. 41	0. 12	98. 62
125. 0-130. 0	1. 54	1240. 95	0. 12	98. 74
130. 0-135. 0	1. 70	1242. 64	0. 13	98. 88
135. 0-140. 0	1. 92	1244. 56	0. 15	99. 03
140. 0-145. 0	2. 15	1246. 71	0. 17	99. 20
145. 0-150. 0	2. 23	1248. 95	0. 18	99. 38
150. 0-155. 0	2. 16	1251. 10	0. 17	99. 55
155. 0-160. 0	1. 96	1253. 06	0. 16	99. 70
160. 0-165. 0	1. 61	1254. 67	0. 13	99. 83
165. 0-170. 0	1. 17	1255. 84	0. 09	99. 93
170. 0-175. 0	0. 71	1256. 54	0. 06	99. 98
175. 0-180. 0	0. 24	1256. 78	0. 02	100. 00

Rectangle ISO Lighting Intensity Diagram

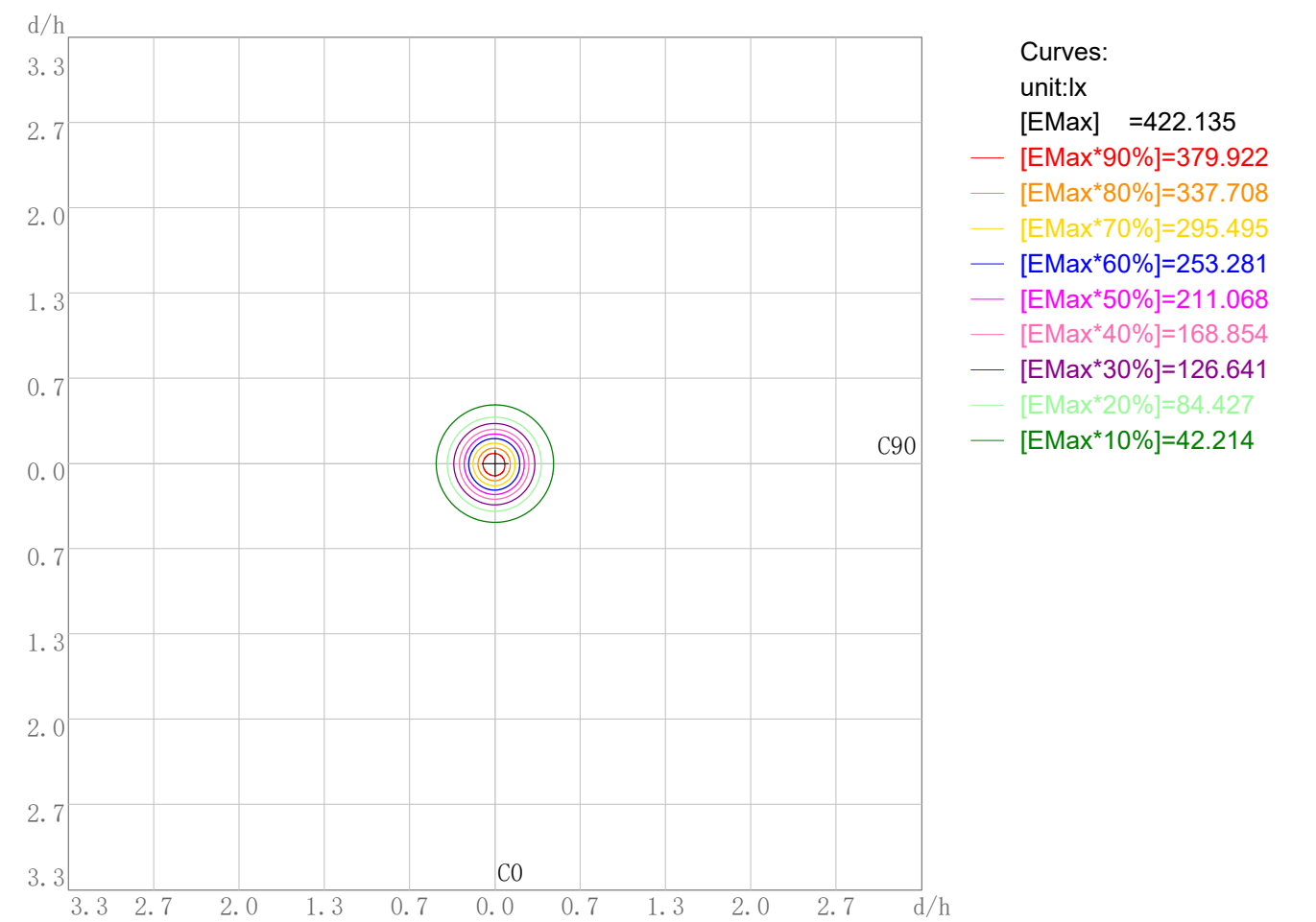
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Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/08



Plane ISO-Illuminance Diagram

Lum. Name:DL51-15-XX-01 2700K 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: 2022/08/08

Plane ISO-Illuminance Curve

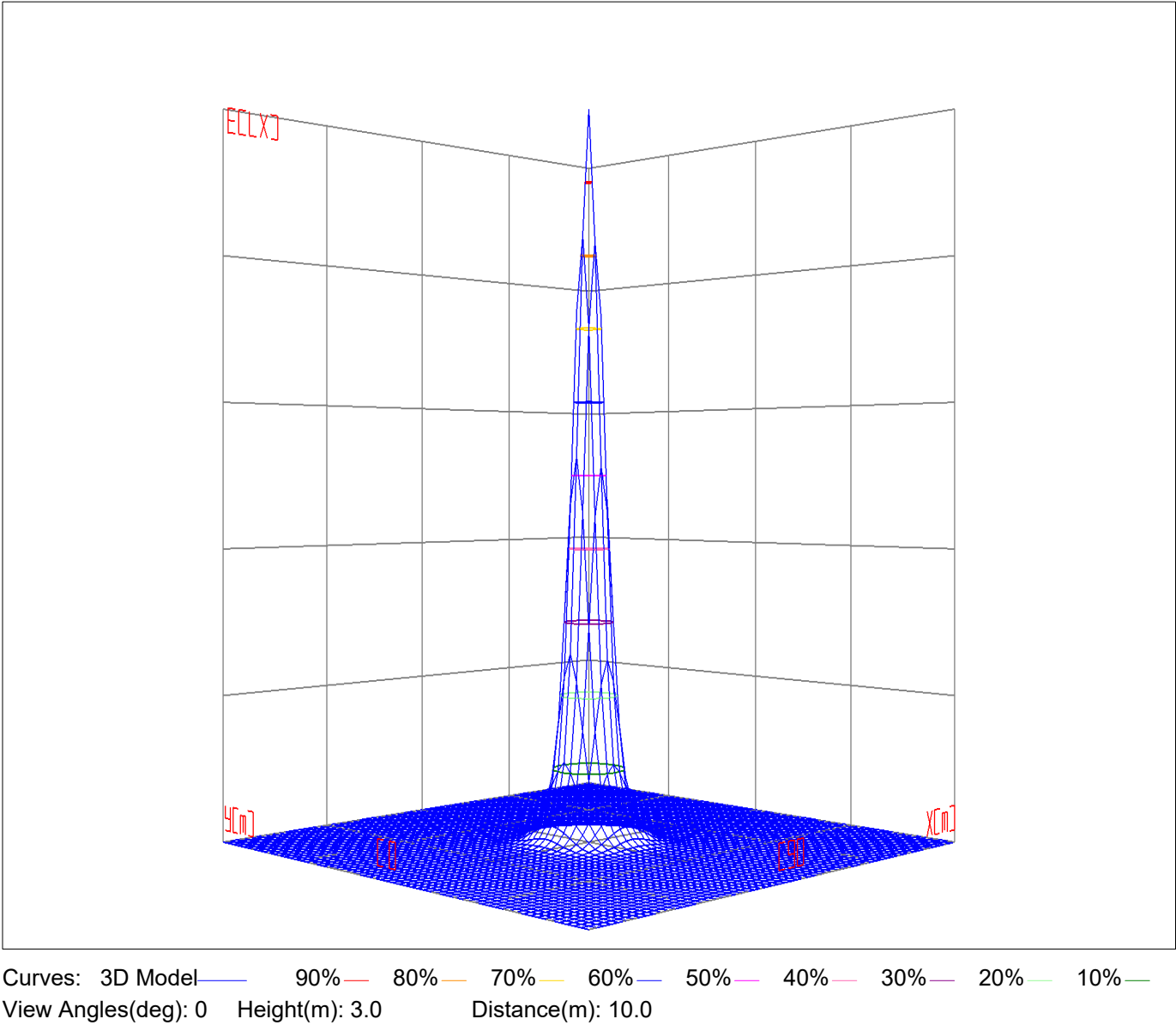


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 422.14
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: DL51-15-XX-01 2700K 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: 2022/08/08

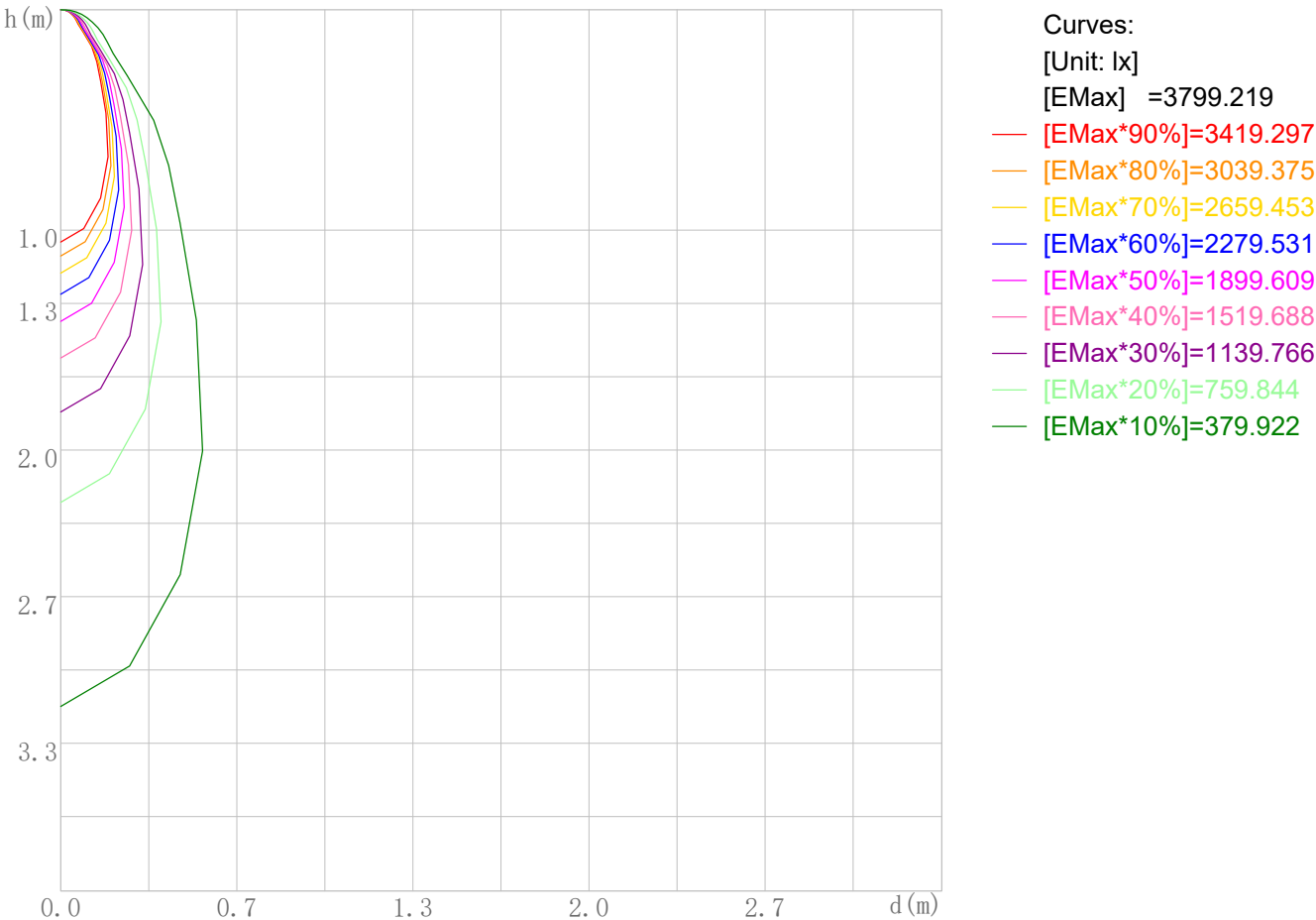
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name:DL51-15-XX-01 2700K 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:2022/08/08

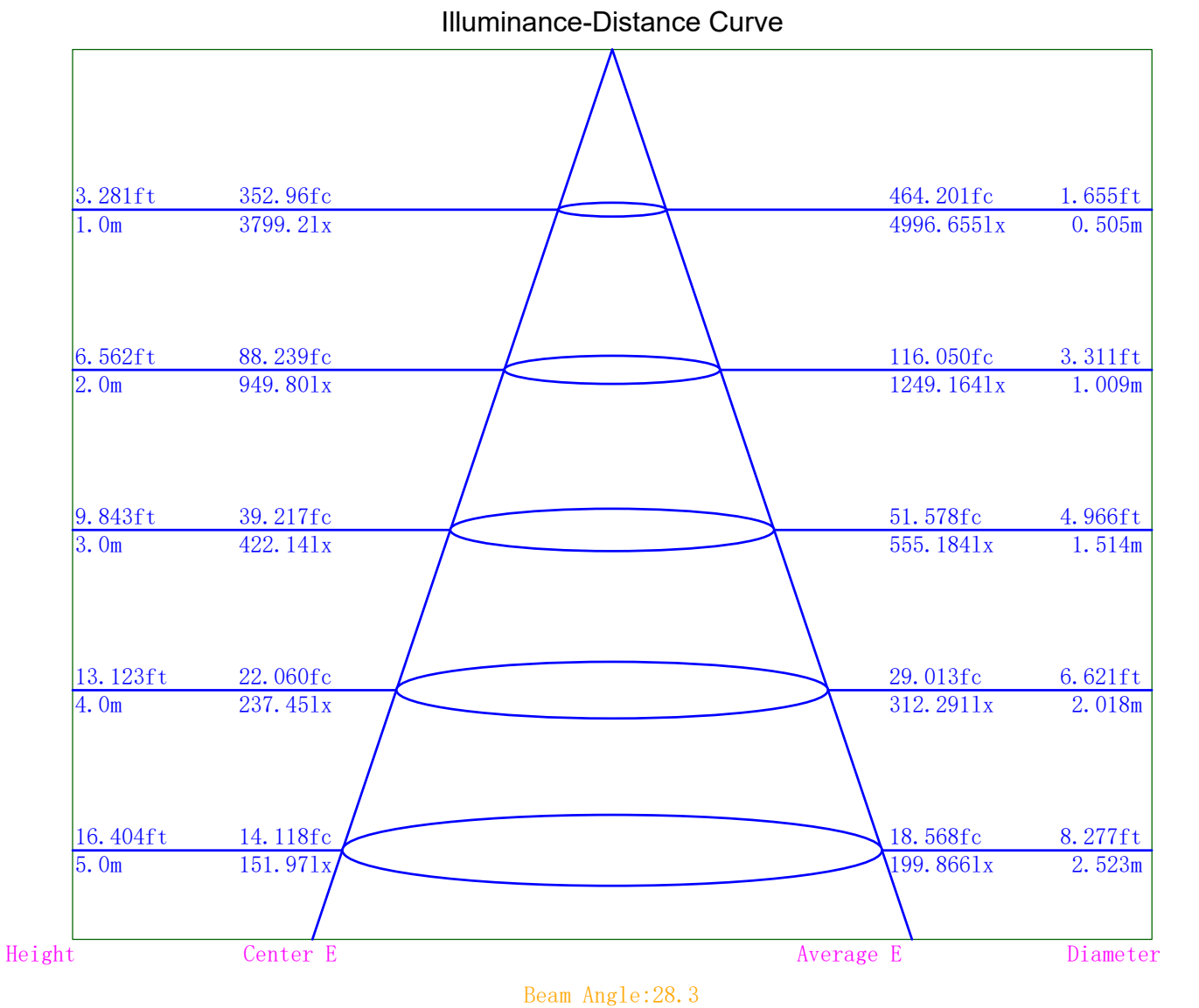
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:3799.22lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:3799.219cd,0deg

Illuminance-Distance Diagram

Lum. Name:DL51-15-XX-01 2700K 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:2022/08/08



Indoor Luminance Limiting Curves

Lum. Name:DL51-15-XX-01 2700K 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:2022/08/08

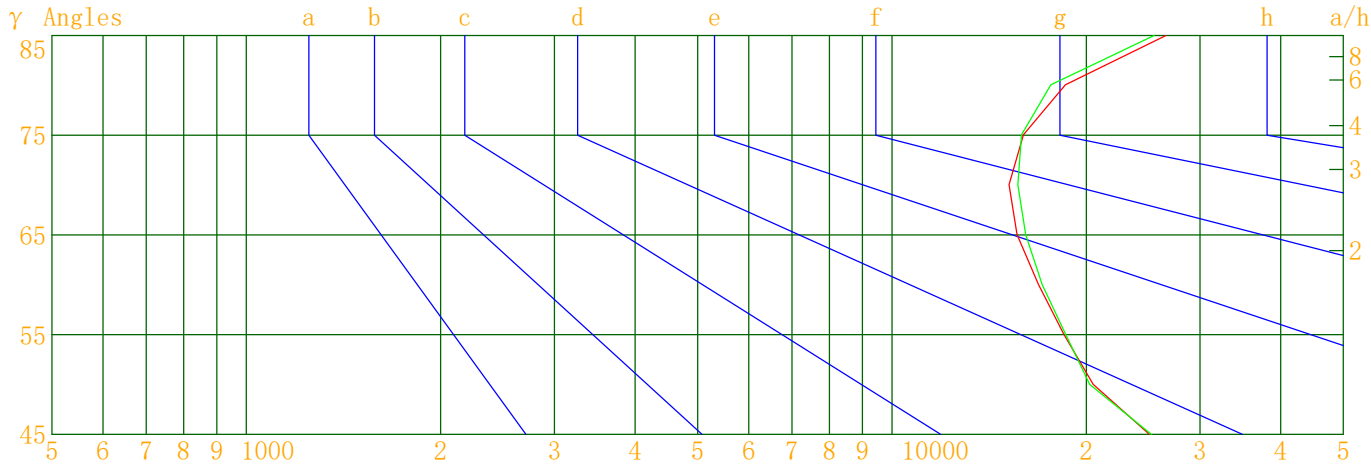
Glare Grade Table

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	25046	20502	18461	16861	15619	15185	15983	18562	26557
C90	25222	20242	18586	17090	16110	15667	15875	17624	25470

Luminance Limiting Curve



Luminous Size:

Length(m)=-0.055

Width(m)=-0.055

Height(m)=0.000

Area(m^2)=0.002376

Luminous Type:

Without Luminous Side

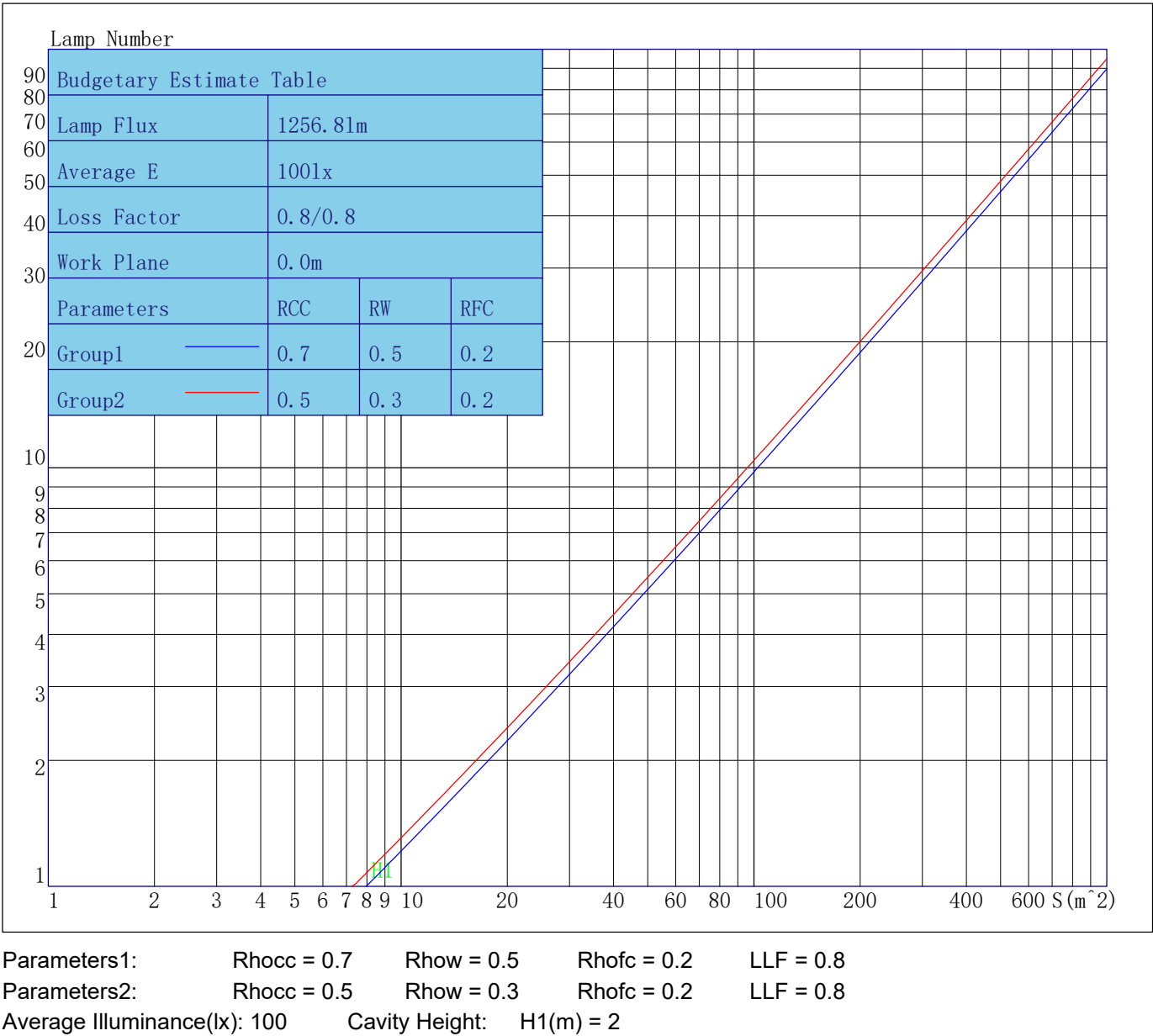
Luminous Curves:

C0-C180 Color: —

C90-C270 Color: —

Indoor Budgetary Estimate Table

Lum. Name:DL51-15-XX-01 2700K 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: 2022/08/08



Indoor Coefficient of Utilization Table

Lum. Name:DL51-15-XX-01 2700K 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:2022/08/08

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	118	118	118	118	115	115	115	115	110	110	110	105	105	105	100	100	100	98
1	113	111	108	106	111	108	106	104	104	102	101	100	98	97	96	95	94	92
2	108	104	100	97	106	102	99	96	98	96	93	95	93	91	92	90	89	87
3	104	98	94	90	102	97	93	89	94	90	88	91	88	86	89	86	84	83
4	100	93	88	84	98	92	87	84	89	86	83	87	84	81	85	82	80	79
5	96	89	83	80	94	87	83	79	86	81	78	84	80	78	82	79	77	75
6	92	85	79	76	91	84	79	75	82	78	75	80	77	74	79	76	73	72
7	89	81	76	72	87	80	75	72	79	74	71	77	74	71	76	73	70	69
8	86	78	73	69	84	77	72	69	76	72	68	75	71	68	74	70	68	66
9	83	75	70	66	82	74	69	66	73	69	66	72	68	65	71	68	65	64
10	80	72	67	64	79	71	67	64	70	66	63	70	66	63	69	65	63	62

Unified Glare Rating Table

Lum. Name:DL51-15-XX-01 2700K 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:2022/08/08

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	18.1	19.1	18.6	19.5	19.9	18.1	19.1	18.5	19.4	19.8
	18.8	19.6	19.2	20.0	20.4	18.8	19.6	19.2	20.0	20.4
	19.2	20.0	19.6	20.4	20.8	19.2	20.0	19.6	20.4	20.8
	19.6	20.3	20.1	20.8	21.2	19.6	20.3	20.0	20.7	21.2
	19.9	20.5	20.3	21.0	21.4	19.8	20.5	20.3	20.9	21.4
	20.1	20.8	20.6	21.2	21.7	20.1	20.7	20.5	21.1	21.6
X=4H Y=2H	18.3	19.1	18.7	19.5	19.9	18.2	19.0	18.7	19.4	19.9
	19.1	19.8	19.6	20.3	20.7	19.2	19.8	19.6	20.3	20.7
	19.7	20.3	20.2	20.7	21.2	19.7	20.3	20.2	20.8	21.3
	20.3	20.8	20.8	21.3	21.9	20.3	20.8	20.8	21.3	21.8
	20.7	21.1	21.2	21.6	22.2	20.6	21.1	21.1	21.6	22.1
	21.1	21.5	21.6	22.0	22.5	21.0	21.4	21.5	21.9	22.5
X=8H Y=4H	19.9	20.3	20.4	20.8	21.4	19.9	20.4	20.4	20.9	21.4
	20.7	21.1	21.3	21.6	22.2	20.7	21.1	21.2	21.6	22.2
	21.2	21.5	21.8	22.1	22.7	21.2	21.5	21.7	22.0	22.6
	21.8	22.1	22.4	22.6	23.3	21.7	22.0	22.3	22.5	23.2
X=12H Y=4H	19.9	20.3	20.4	20.8	21.4	19.9	20.3	20.4	20.8	21.4
	20.8	21.1	21.4	21.7	22.3	20.8	21.1	21.4	21.6	22.2
	21.4	21.7	21.9	22.2	22.8	21.3	21.6	21.9	22.2	22.8
Variations with the objerver position at spacings										
S=1.0H	0.2/-0.2					0.2/-0.3				
S=1.5H	0.4/-0.4					0.4/-0.4				
S=2.0H	0.4/-0.5					0.5/-0.5				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	2.5					2.5				

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	3799.22	3799.22	3799.22	3799.22
γ 5.0	3409.51	3385.78	3532.87	3539.68
γ 10.0	2614.46	2560.65	2755.08	2752.17
γ 15.0	1691.23	1634.99	1793.08	1798.31
γ 20.0	909.38	884.21	966.46	976.30
γ 25.0	477.86	466.22	469.55	479.66
γ 30.0	292.04	282.92	267.93	273.21
γ 35.0	174.32	169.87	158.57	160.70
γ 40.0	76.11	76.78	76.36	73.72
γ 45.0	42.08	42.37	39.19	39.31
γ 50.0	31.31	30.91	28.09	28.24
γ 55.0	25.16	25.33	24.59	24.66
γ 60.0	20.03	20.30	20.82	20.95
γ 65.0	15.68	16.18	17.13	17.07
γ 70.0	12.34	12.73	13.56	13.49
γ 75.0	9.83	9.76	10.88	10.66
γ 80.0	7.66	7.27	8.30	7.92
γ 85.0	5.50	5.27	6.09	6.19
γ 90.0	4.03	4.33	4.21	4.31
γ 95.0	3.87	3.82	3.78	3.70
γ 100.0	3.28	3.60	3.19	3.17
γ 105.0	3.03	3.30	3.20	3.11
γ 110.0	3.05	3.05	2.91	3.06
γ 115.0	2.80	2.65	2.98	2.98
γ 120.0	2.79	3.09	3.05	3.15
γ 125.0	3.12	3.08	3.48	3.36
γ 130.0	3.57	3.65	4.01	4.02
γ 135.0	4.24	4.58	4.65	4.84
γ 140.0	5.66	5.57	6.23	5.75
γ 145.0	6.92	7.04	7.14	7.17
γ 150.0	7.84	8.00	8.42	8.16
γ 155.0	8.85	9.03	8.91	8.90
γ 160.0	9.90	9.46	9.86	9.73
γ 165.0	10.08	9.83	9.79	9.67
γ 170.0	10.11	9.83	9.72	9.60
γ 175.0	10.05	9.89	9.92	9.76
γ 180.0	10.01	10.01	10.01	10.01