

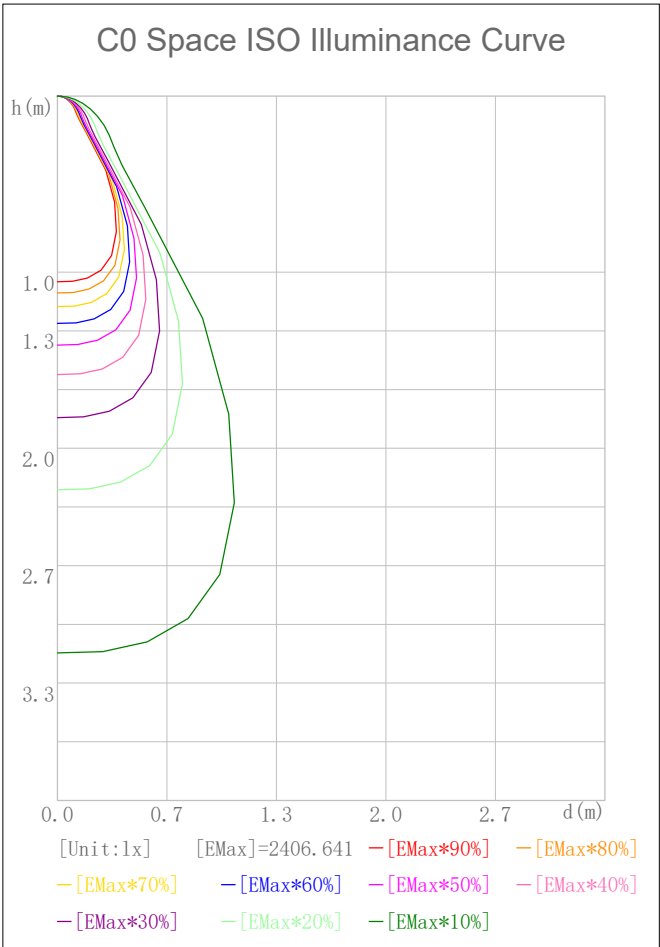
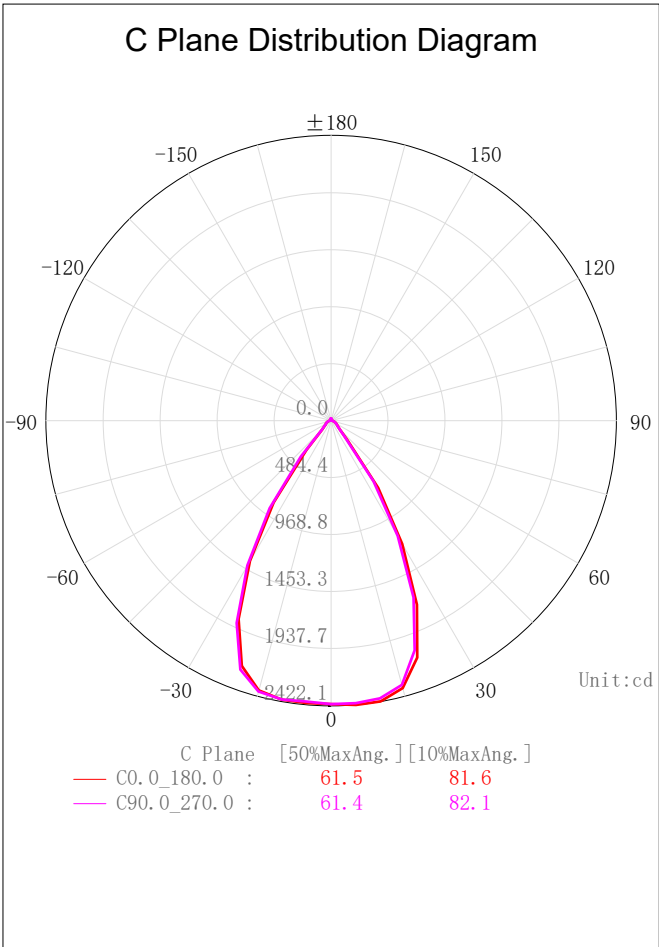
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-25-XX-01 4000K RA90 60D 白色	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):0.083m*0.083m*0.000m	Lum. Area (m2):0.007	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25
		Humidity(%): 50.0

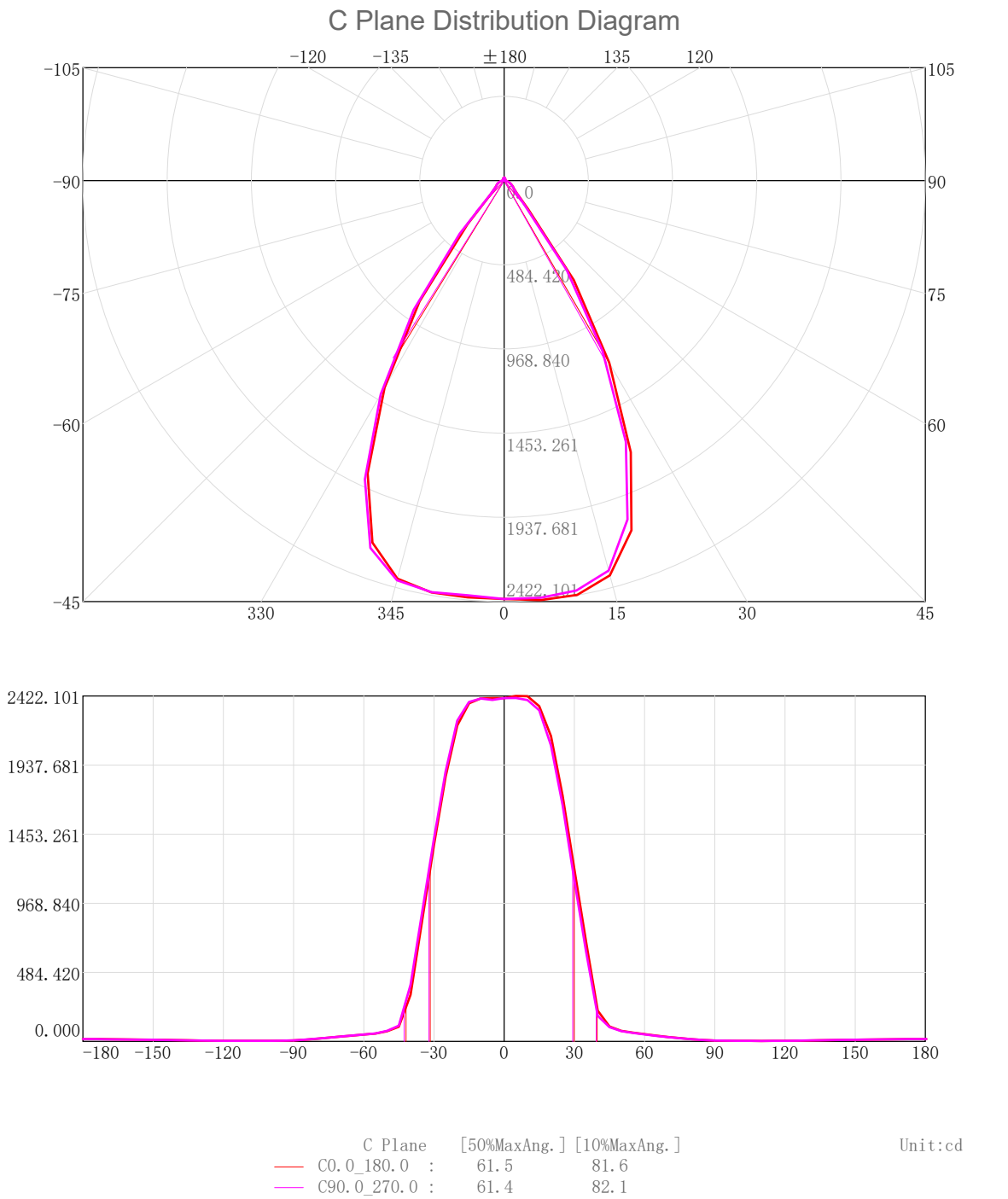
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 2454.300	Luminary Flux(lm): 2454.296	Field Angle(10%Imax): 81.6(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 2407.541lm 98.09%
Rated Voltage(V):	Luminary EER(lm/W): 100.710	Up Lumens&Percent: 46.755lm 1.91%
Tested Power(W): 24.370	Max. Candela(cd): 2422.101	S/MH: C0_a180=0.989 C90_270=0.985
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=5.0	CIE Type: Semi-Direct
Tested Electrics (V, A, pf):239.8, 0.105, 0.967	Beam Angle(50%Imax): 61.5(°)	ErP Φ use(90°): 2223.275lm
Lamp Size (W*L*H):0.083m*0.083m*0.000m	Left=-31.6°, Right=30.0°	IRF(%): 224.434



2D Plane Light Intensity Distribution Curve

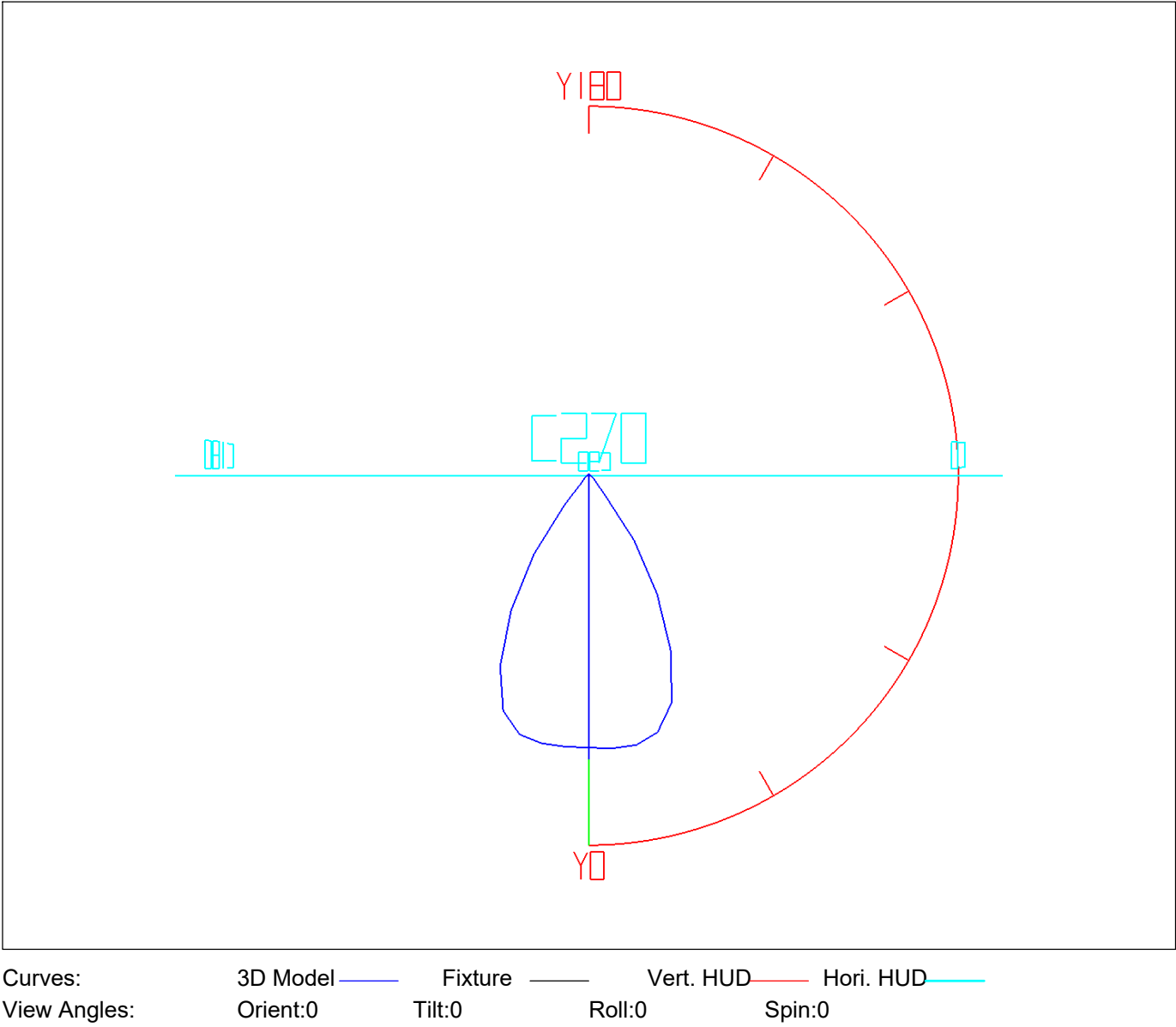
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Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/09



3D Light Intensity Distribution Modal

Lum. Name:DL51-25-XX-01 4000K RA90 60D 白色	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

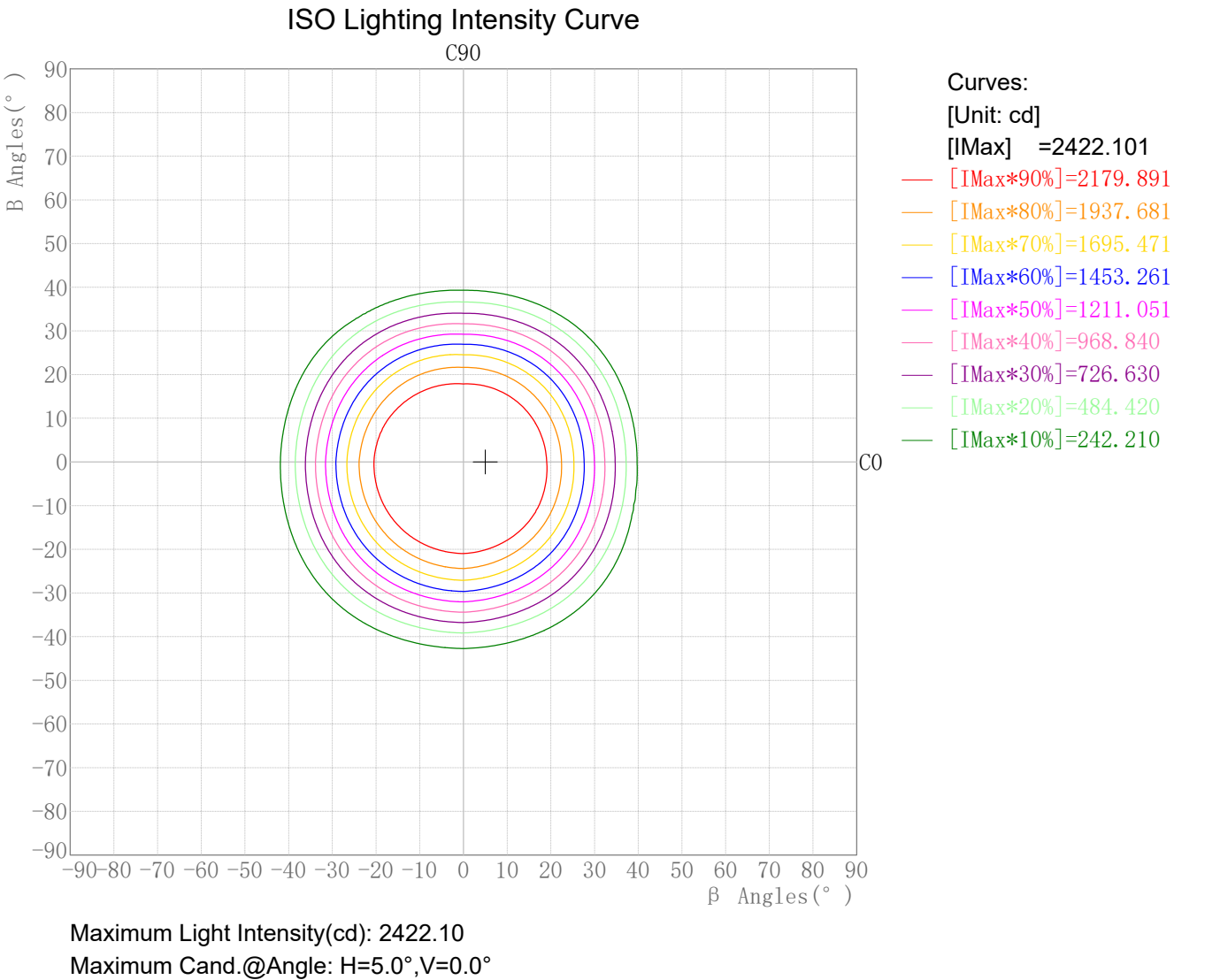


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	57.55	57.55	2.35	2.35
5.0-10.0	172.19	229.74	7.02	9.36
10.0-15.0	282.43	512.17	11.51	20.87
15.0-20.0	372.94	885.12	15.20	36.06
20.0-25.0	414.59	1299.70	16.89	52.96
25.0-30.0	388.09	1687.79	15.81	68.77
30.0-35.0	302.47	1990.26	12.32	81.09
35.0-40.0	175.33	2165.59	7.14	88.24
40.0-45.0	71.35	2236.95	2.91	91.14
45.0-50.0	36.11	2273.05	1.47	92.62
50.0-55.0	28.72	2301.77	1.17	93.79
55.0-60.0	25.02	2326.79	1.02	94.80
60.0-65.0	22.08	2348.87	0.90	95.70
65.0-70.0	18.70	2367.57	0.76	96.47
70.0-75.0	15.13	2382.71	0.62	97.08
75.0-80.0	11.54	2394.24	0.47	97.55
80.0-85.0	8.10	2402.34	0.33	97.88
85.0-90.0	5.20	2407.54	0.21	98.09
90.0-95.0	3.56	2411.10	0.15	98.24
95.0-100.0	2.95	2414.06	0.12	98.36
100.0-105.0	2.56	2416.62	0.10	98.46
105.0-110.0	2.29	2418.91	0.09	98.56
110.0-115.0	2.24	2421.14	0.09	98.65
115.0-120.0	2.34	2423.48	0.10	98.74
120.0-125.0	2.53	2426.02	0.10	98.85
125.0-130.0	2.81	2428.82	0.11	98.96
130.0-135.0	3.10	2431.93	0.13	99.09
135.0-140.0	3.35	2435.28	0.14	99.22
140.0-145.0	3.47	2438.75	0.14	99.37
145.0-150.0	3.44	2442.19	0.14	99.51
150.0-155.0	3.25	2445.44	0.13	99.64
155.0-160.0	2.91	2448.35	0.12	99.76
160.0-165.0	2.46	2450.81	0.10	99.86
165.0-170.0	1.88	2452.69	0.08	99.93
170.0-175.0	1.20	2453.88	0.05	99.98
175.0-180.0	0.42	2454.30	0.02	100.00

Rectangle ISO Lighting Intensity Diagram

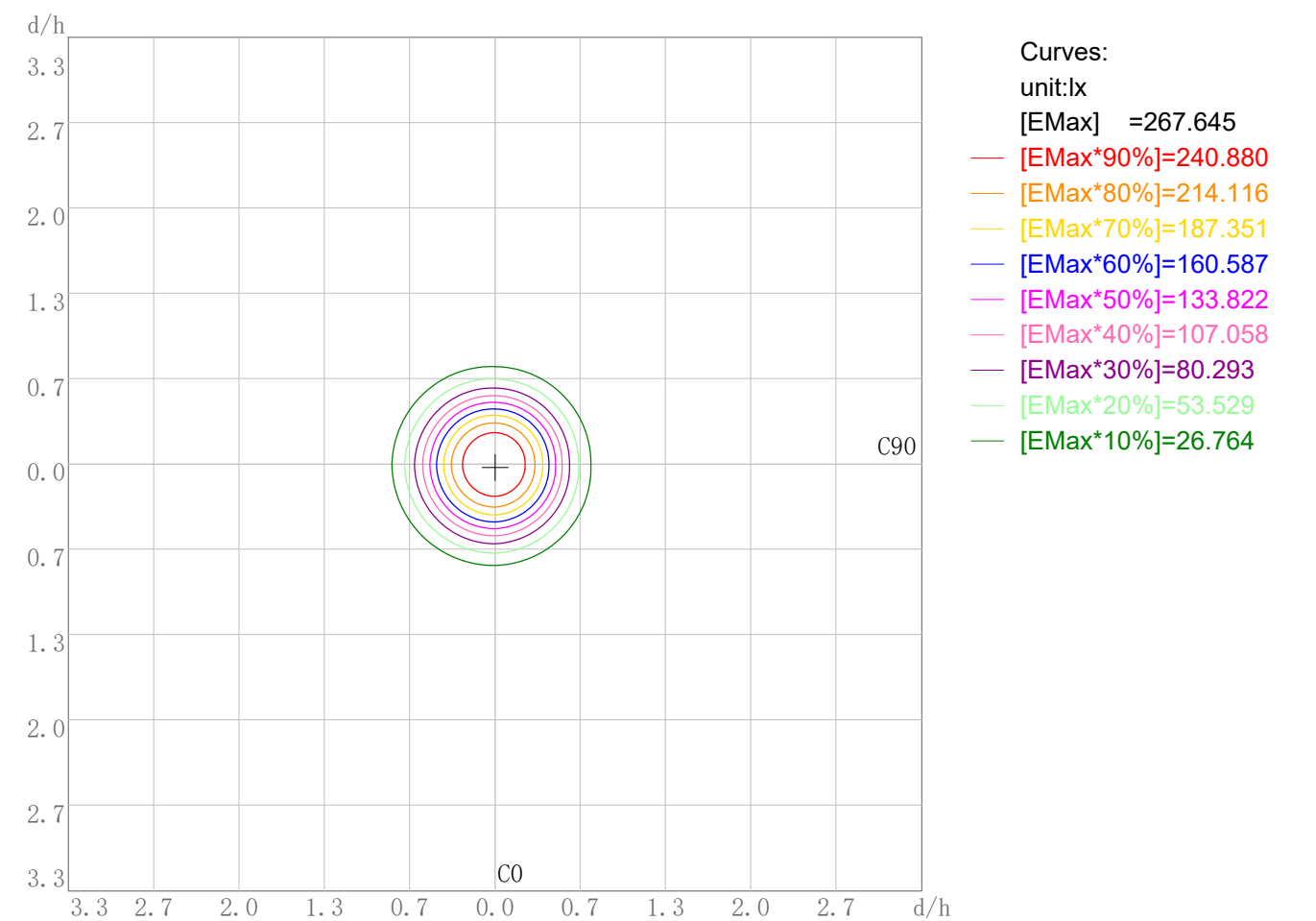
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Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/09



Plane ISO-Illuminance Diagram

Lum. Name:DL51-25-XX-01 4000K RA90 60D 白色	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

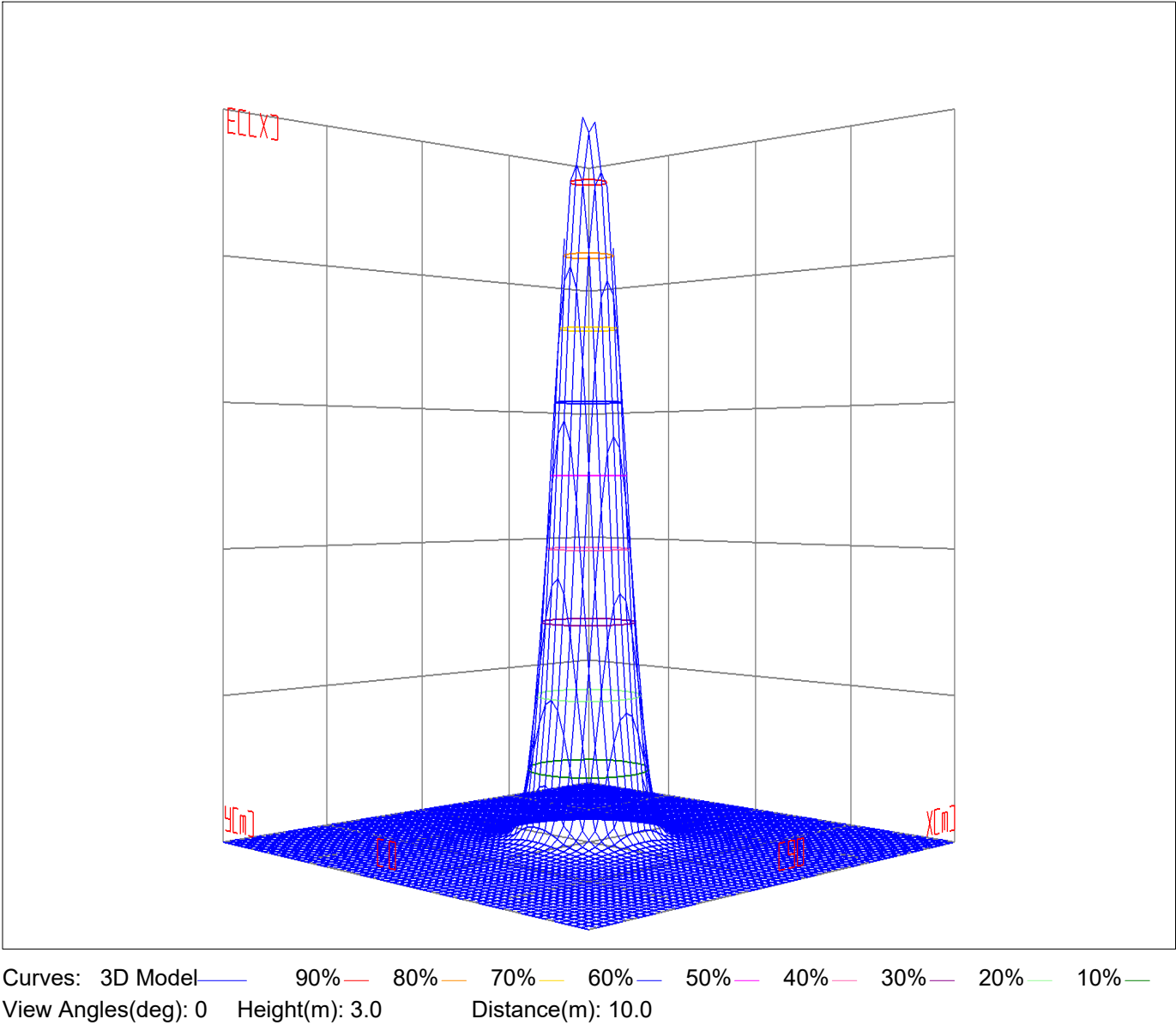


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 267.64
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name:DL51-25-XX-01 4000K RA90 60D 白色	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

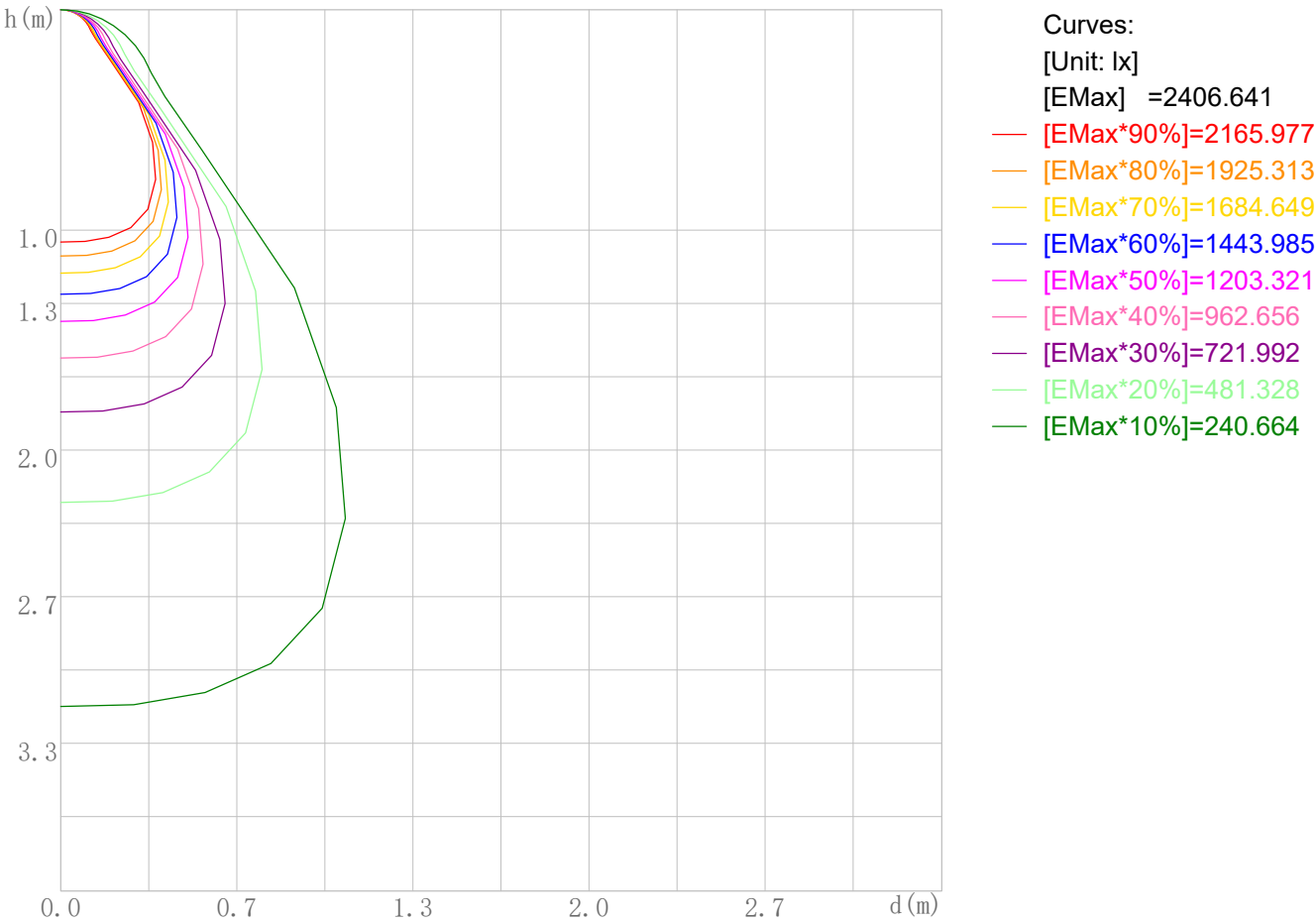
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: DL51-25-XX-01 4000K RA90 60D 白色	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

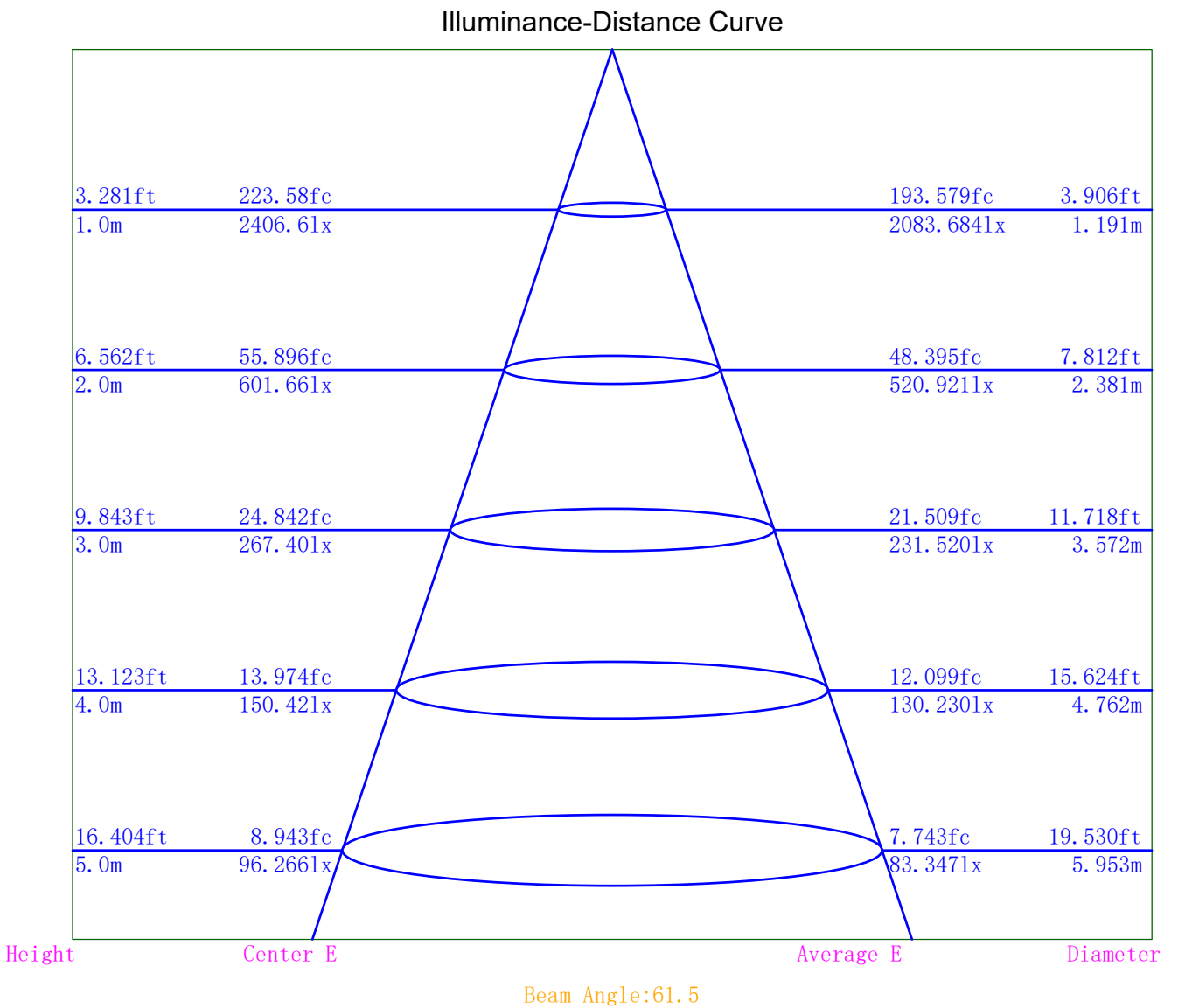
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:2406.64lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:2422.101cd,0eg

Illuminance-Distance Diagram

Lum. Name:DL51-25-XX-01 4000K RA90 60D 白色	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:DL51-25-XX-01 4000K RA90 60D 白色	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

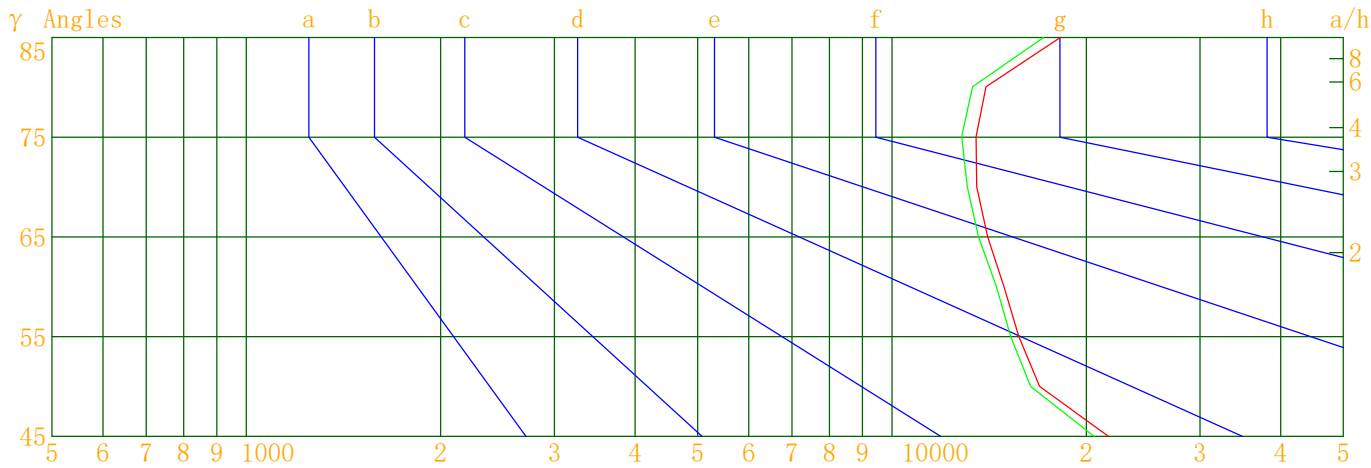
Glare Grade Table

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	21635	16930	15721	14903	14063	13531	13495	13985	18219
C90	20562	16397	15267	14508	13611	13078	12819	13331	17165

Luminance Limiting Curve



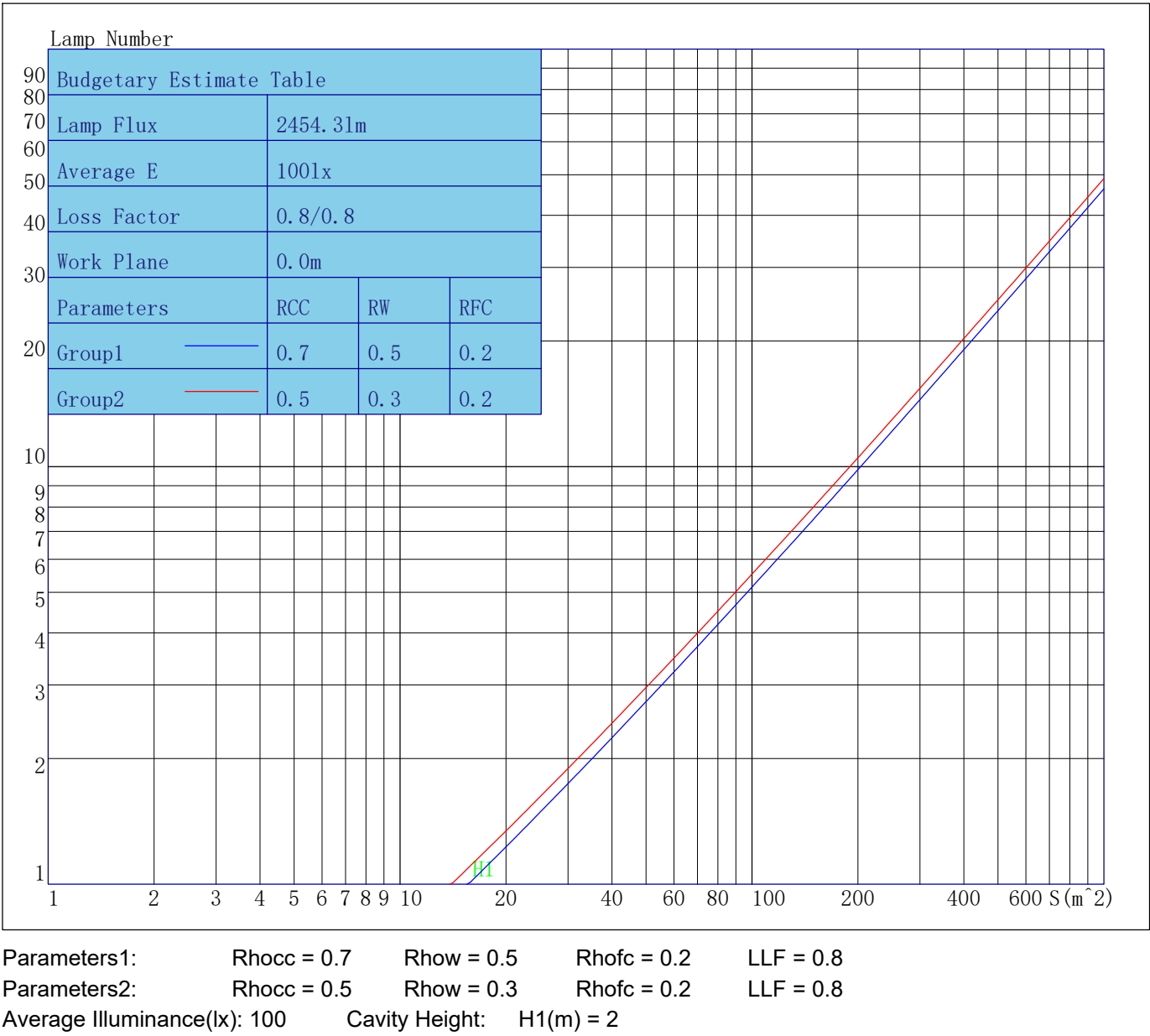
Luminous Size:Length(m)=0.083Width(m)=0.083Height(m)=0.000Area(m^2)=0.006889

Luminous Type:Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name:DL51-25-XX-01 4000K RA90 60D 白色	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:DL51-25-XX-01 4000K RA90 60D 白色	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	100	100	100	98
1	112	109	107	104	110	107	105	102	103	101	99	99	97	96	95	94	93	91
2	106	101	97	93	104	99	95	92	96	93	90	92	90	88	89	87	85	84
3	101	94	89	84	99	92	88	84	89	85	82	87	83	81	84	81	79	77
4	95	88	82	77	93	86	81	77	84	79	76	82	78	74	79	76	73	72
5	90	82	76	71	89	81	75	71	79	74	70	77	72	69	75	71	68	67
6	86	77	70	66	84	76	70	66	74	69	65	72	68	64	71	67	64	62
7	81	72	66	61	80	71	65	61	70	64	61	68	64	60	67	63	60	58
8	77	68	61	57	76	67	61	57	66	60	57	65	60	56	63	59	56	55
9	74	64	58	54	72	63	57	53	62	57	53	61	56	53	60	56	53	51
10	70	60	54	50	69	60	54	50	59	54	50	58	53	50	57	53	50	48

Unified Glare Rating Table

Lum. Name:DL51-25-XX-01 4000K RA90 60D 白色	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

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	20.6	21.6	21.0	21.9	22.3	20.1	21.1	20.5	21.5	21.9
	20.9	21.8	21.3	22.1	22.6	20.5	21.4	20.9	21.7	22.2
	21.1	21.9	21.5	22.3	22.7	20.7	21.5	21.1	21.9	22.3
	21.3	22.0	21.7	22.4	22.9	20.9	21.6	21.3	22.1	22.5
	21.4	22.1	21.8	22.5	23.0	21.0	21.7	21.4	22.1	22.6
	21.5	22.1	21.9	22.6	23.1	21.1	21.8	21.6	22.2	22.7
X=4H Y=2H Y=3H Y=4H Y=6H Y=8H Y=12H	20.5	21.3	20.9	21.7	22.2	20.1	20.9	20.5	21.3	21.8
	21.0	21.7	21.4	22.1	22.6	20.6	21.3	21.1	21.8	22.2
	21.3	21.9	21.8	22.4	22.9	20.9	21.6	21.4	22.0	22.5
	21.6	22.2	22.1	22.7	23.2	21.3	21.8	21.8	22.3	22.8
	21.8	22.3	22.3	22.8	23.3	21.5	22.0	22.0	22.4	23.0
	22.0	22.4	22.5	23.0	23.5	21.7	22.1	22.2	22.6	23.1
X=8H Y=4H Y=6H Y=8H Y=12H	21.4	21.9	21.9	22.3	22.9	21.0	21.5	21.5	22.0	22.5
	21.9	22.2	22.4	22.8	23.4	21.5	21.9	22.1	22.5	23.0
	22.1	22.5	22.7	23.0	23.6	21.8	22.1	22.4	22.7	23.2
	22.4	22.7	23.0	23.3	23.9	22.1	22.4	22.7	23.0	23.6
X=12H Y=4H Y=6H Y=8H	21.4	21.8	21.9	22.3	22.8	21.0	21.5	21.5	22.0	22.5
	21.9	22.2	22.4	22.7	23.3	21.6	21.9	22.1	22.4	23.0
	22.2	22.5	22.8	23.1	23.7	21.9	22.2	22.5	22.7	23.4
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	0.6/-0.7					0.7/-0.8				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	1.6					1.6				

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	2406.64	2406.64	2406.64	2406.64
γ 5.0	2422.10	2408.17	2406.42	2394.11
γ 10.0	2419.84	2393.78	2404.94	2403.78
γ 15.0	2350.65	2322.05	2370.25	2379.66
γ 20.0	2140.55	2074.16	2215.23	2248.35
γ 25.0	1723.65	1657.03	1857.65	1894.96
γ 30.0	1208.15	1130.94	1375.15	1419.22
γ 35.0	698.01	629.22	848.18	907.12
γ 40.0	216.54	179.65	327.17	397.67
γ 45.0	105.39	100.16	103.57	111.26
γ 50.0	74.97	72.61	71.81	74.99
γ 55.0	62.12	60.32	55.40	56.10
γ 60.0	51.33	49.97	48.69	49.03
γ 65.0	40.94	39.63	41.63	42.06
γ 70.0	31.88	30.81	34.06	34.44
γ 75.0	24.06	22.86	26.50	26.95
γ 80.0	16.73	15.95	19.41	20.00
γ 85.0	10.94	10.31	12.77	13.07
γ 90.0	6.74	6.91	7.58	7.71
γ 95.0	5.69	5.52	5.94	5.93
γ 100.0	4.93	5.14	5.12	5.22
γ 105.0	4.34	4.36	4.44	4.69
γ 110.0	4.02	4.25	4.45	4.53
γ 115.0	4.44	4.45	4.62	4.59
γ 120.0	5.00	5.15	5.12	5.05
γ 125.0	5.96	6.13	5.89	5.56
γ 130.0	7.08	7.47	6.88	6.72
γ 135.0	8.29	8.66	8.23	8.11
γ 140.0	9.98	10.06	9.48	9.53
γ 145.0	11.06	11.36	11.12	10.65
γ 150.0	12.33	12.60	12.32	11.98
γ 155.0	13.47	13.51	13.50	12.90
γ 160.0	14.50	14.67	14.68	13.86
γ 165.0	15.72	15.77	15.50	14.63
γ 170.0	16.59	16.47	16.19	15.76
γ 175.0	17.34	17.17	17.12	17.00
γ 180.0	17.63	17.63	17.63	17.63