

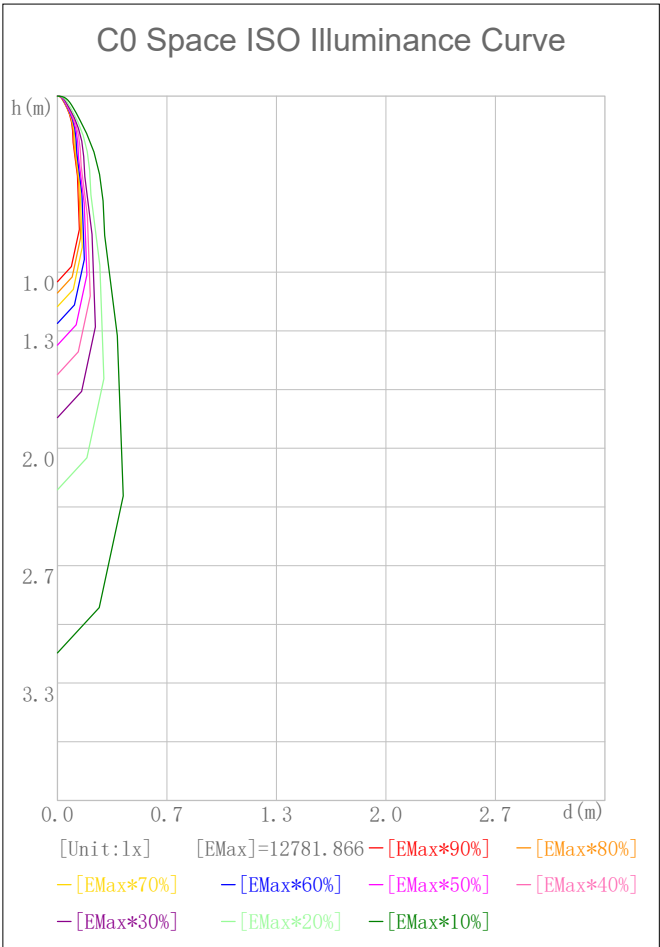
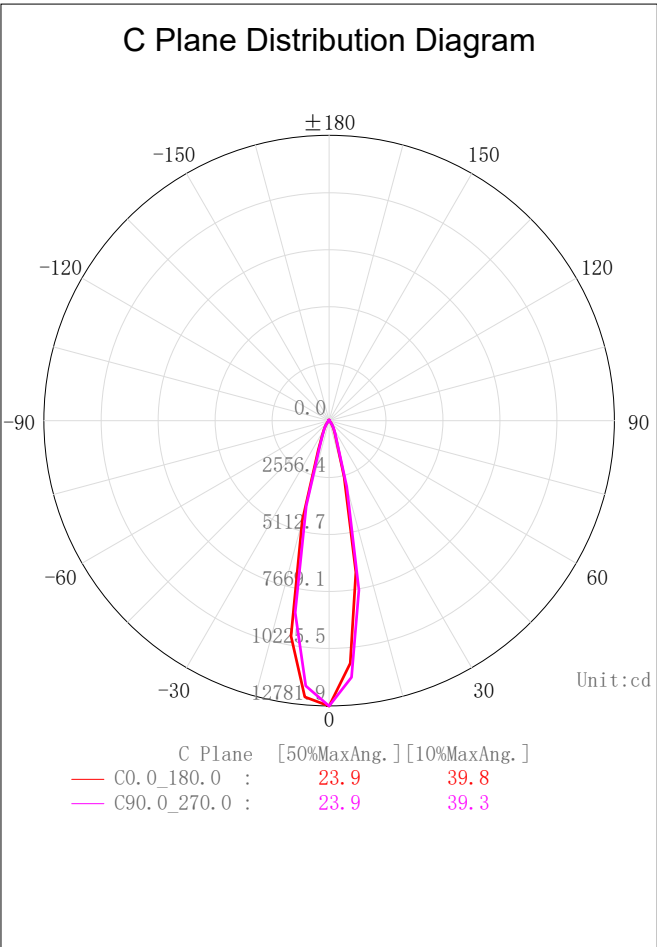
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-35-XX-01 2700K RA90 24D 电镀亮黑		Lum. Catalog:	Test ID: 01
Lamp Name:		Lamp Catalog: LED	Test Date: 2022/08/23
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):0.110m*0.110m*0.000m		Lum. Area (m2):0.010	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25	Humidity(%): 50.0

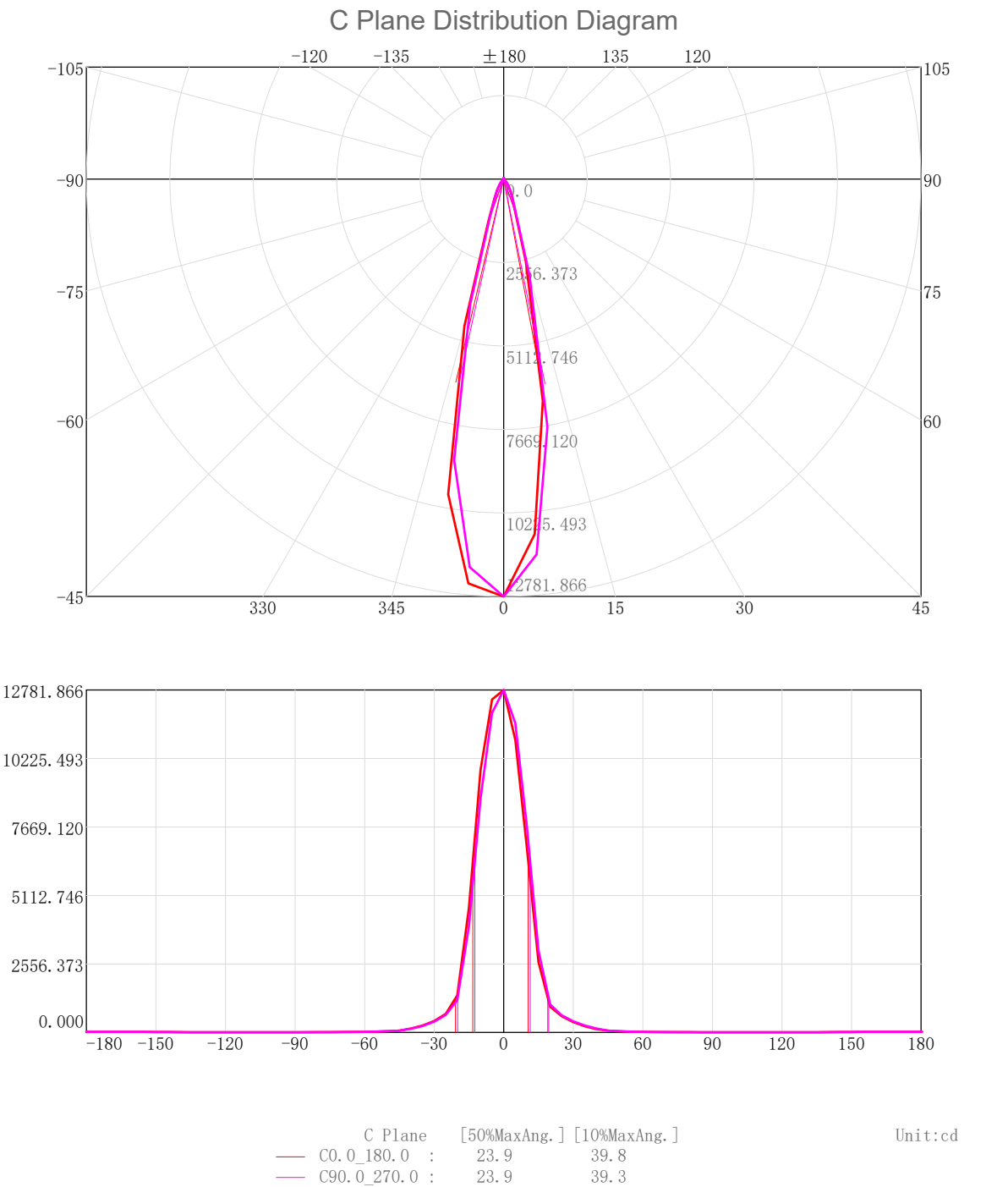
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 2812.770	Luminary Flux(lm): 2812.773	Field Angle(10%Imax): 39.8(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 2735.320lm 97.25%	
Rated Voltage(V):	Luminary EER(lm/W): 83.589	Up Lumens&Percent: 77.453lm 2.75%	
Tested Power(W): 33.650	Max. Candela(cd): 12781.866	S/MH: C0_a180=0.409 C90_270=0.409	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf):240.0, 0.146, 0.959	Beam Angle(50%Imax): 23.9(°)	ErP Φ use(90°): 2669.198lm	
Lamp Size (W*L*H):0.110m*0.110m*0.000m	Left=-13.3°, Right=10.6°	IRF(%): 1075.982	



2D Plane Light Intensity Distribution Curve

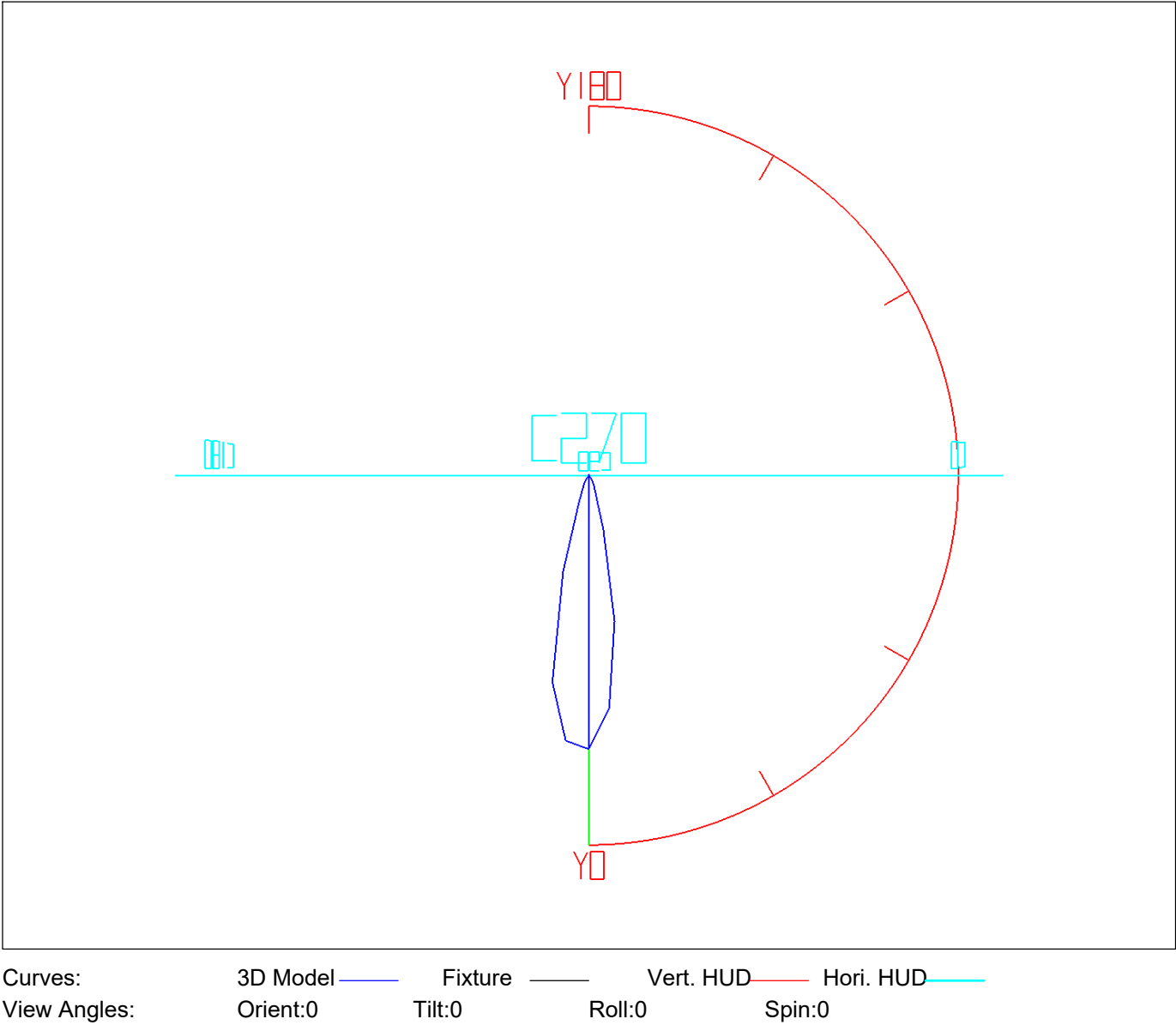
Lum. Name:DL51-35-XX-01 2700K RA90 24D 电镀亮黑	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23



3D Light Intensity Distribution Modal

Lum. Name:DL51-35-XX-01 2700K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23

3D Light Intensity Distribution Modal

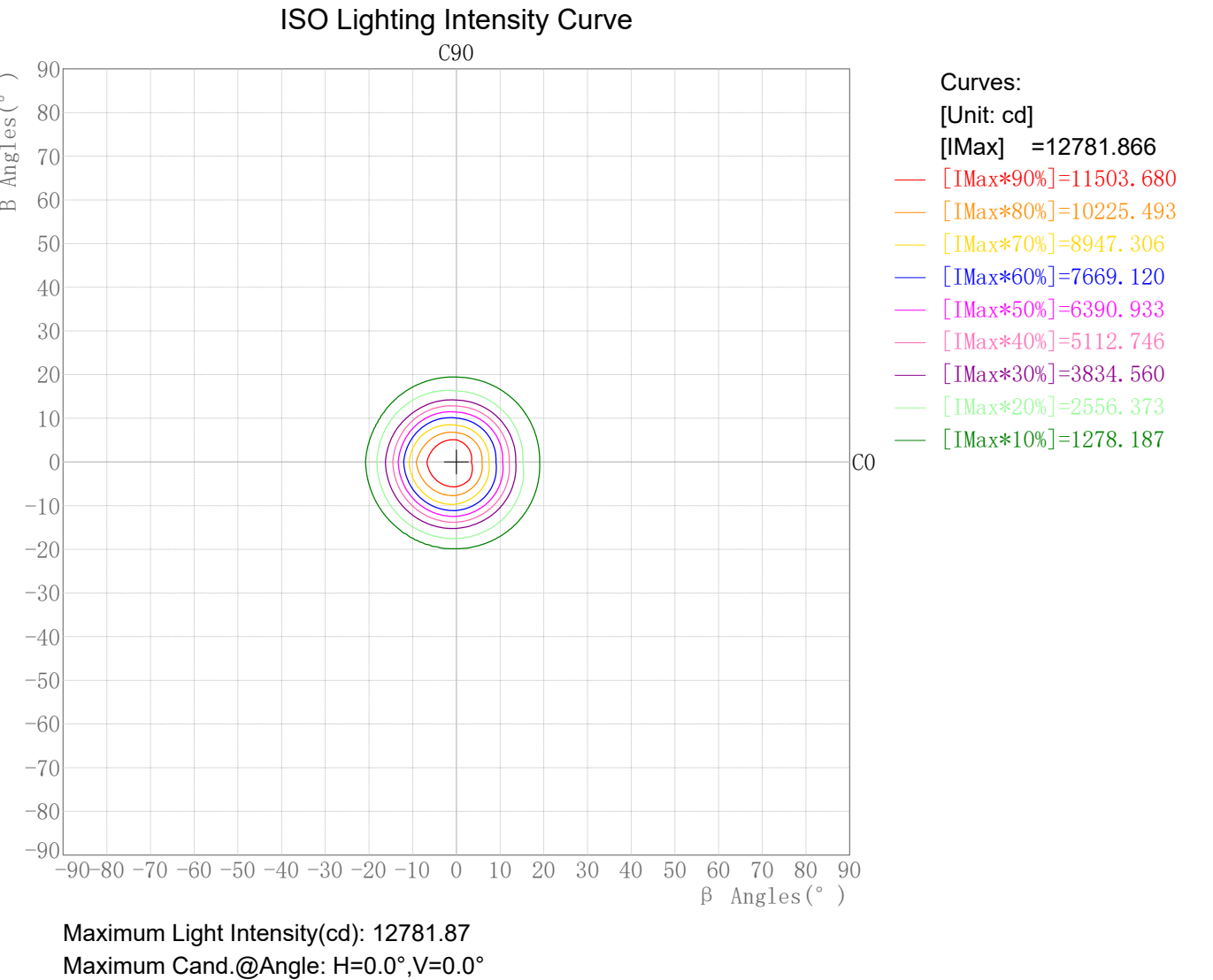


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	292.69	292.69	10.41	10.41
5.0-10.0	714.97	1007.66	25.42	35.82
10.0-15.0	703.47	1711.13	25.01	60.83
15.0-20.0	389.50	2100.62	13.85	74.68
20.0-25.0	189.16	2289.78	6.73	81.41
25.0-30.0	134.46	2424.25	4.78	86.19
30.0-35.0	97.47	2521.72	3.47	89.65
35.0-40.0	65.82	2587.54	2.34	91.99
40.0-45.0	39.63	2627.17	1.41	93.40
45.0-50.0	24.19	2651.36	0.86	94.26
50.0-55.0	17.87	2669.23	0.64	94.90
55.0-60.0	13.64	2682.86	0.48	95.38
60.0-65.0	11.61	2694.48	0.41	95.79
65.0-70.0	10.24	2704.72	0.36	96.16
70.0-75.0	9.06	2713.78	0.32	96.48
75.0-80.0	8.01	2721.79	0.28	96.77
80.0-85.0	7.14	2728.94	0.25	97.02
85.0-90.0	6.38	2735.32	0.23	97.25
90.0-95.0	5.71	2741.03	0.20	97.45
95.0-100.0	5.24	2746.27	0.19	97.64
100.0-105.0	4.85	2751.12	0.17	97.81
105.0-110.0	4.54	2755.66	0.16	97.97
110.0-115.0	4.32	2759.98	0.15	98.12
115.0-120.0	4.10	2764.08	0.15	98.27
120.0-125.0	3.97	2768.04	0.14	98.41
125.0-130.0	4.04	2772.09	0.14	98.55
130.0-135.0	4.39	2776.47	0.16	98.71
135.0-140.0	4.97	2781.44	0.18	98.89
140.0-145.0	5.59	2787.03	0.20	99.08
145.0-150.0	5.87	2792.90	0.21	99.29
150.0-155.0	5.66	2798.56	0.20	99.49
155.0-160.0	5.01	2803.56	0.18	99.67
160.0-165.0	4.04	2807.60	0.14	99.82
165.0-170.0	2.90	2810.50	0.10	99.92
170.0-175.0	1.71	2812.21	0.06	99.98
175.0-180.0	0.56	2812.77	0.02	100.00

Rectangle ISO Lighting Intensity Diagram

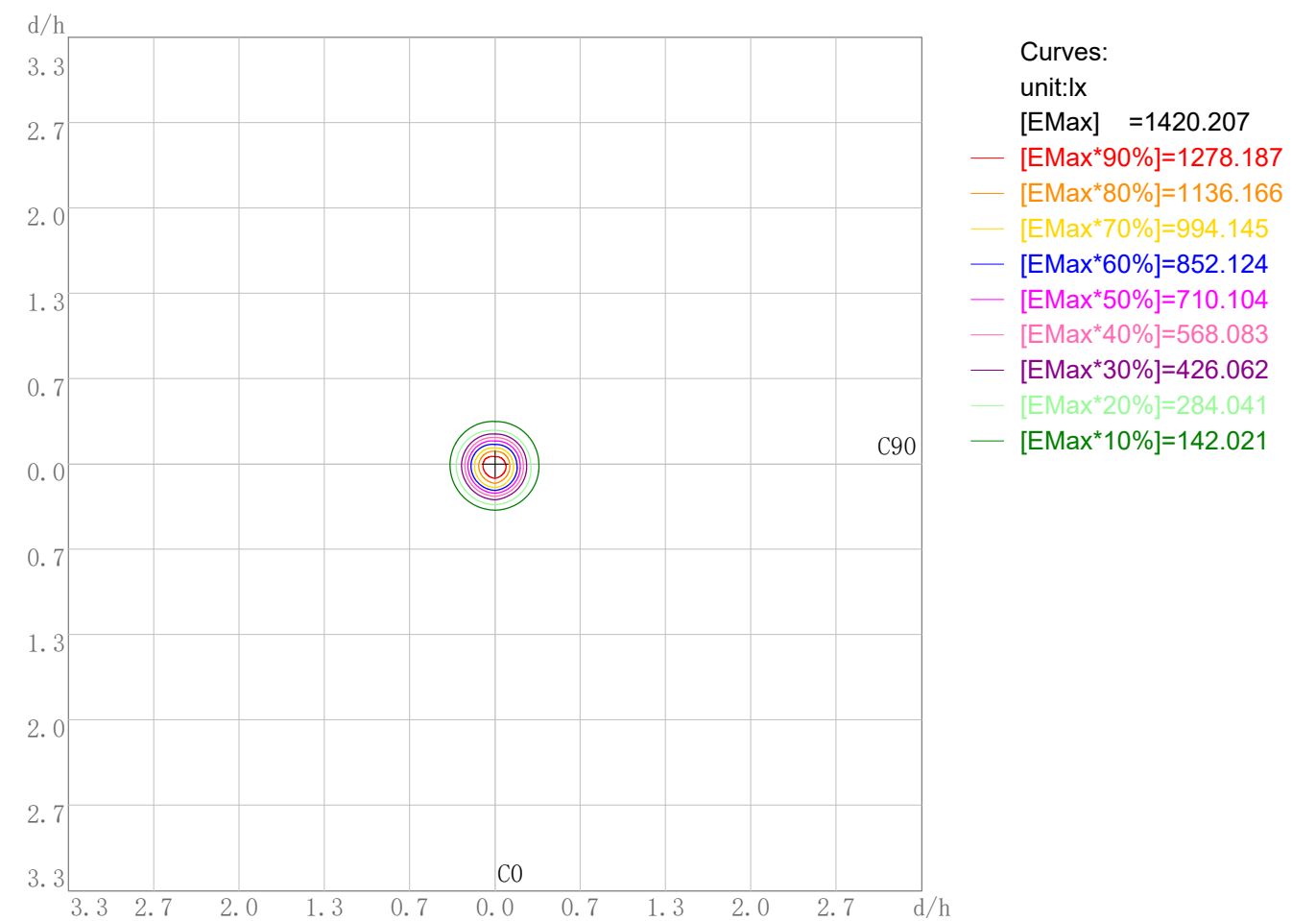
Lum. Name:DL51-35-XX-01 2700K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23



Plane ISO-Illuminance Diagram

Lum. Name: DL51-35-XX-01 2700K RA90 24D 电镀亮黑	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/23

Plane ISO-Illuminance Curve

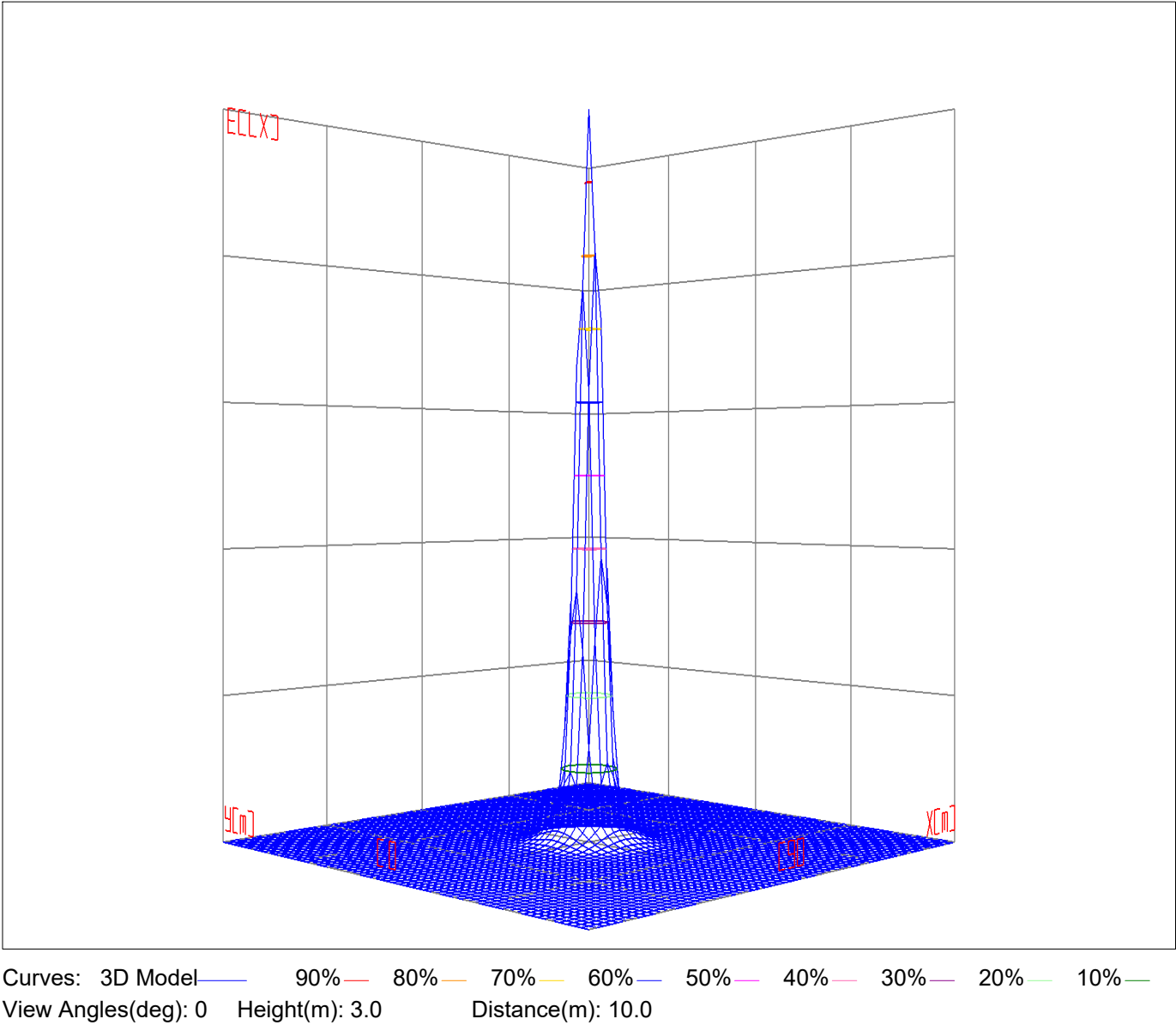


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 1420.21
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 2700K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/23

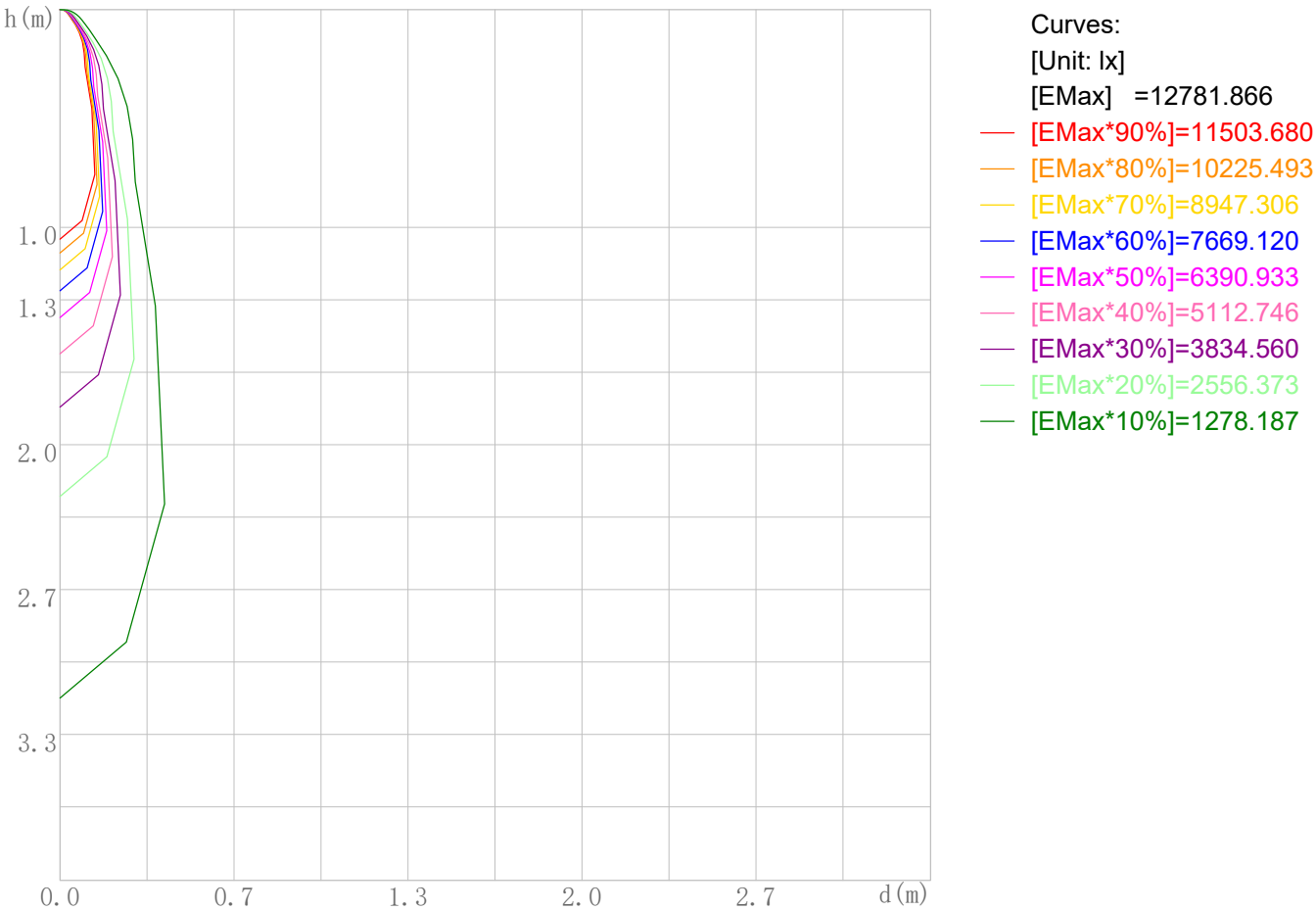
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 2700K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/23

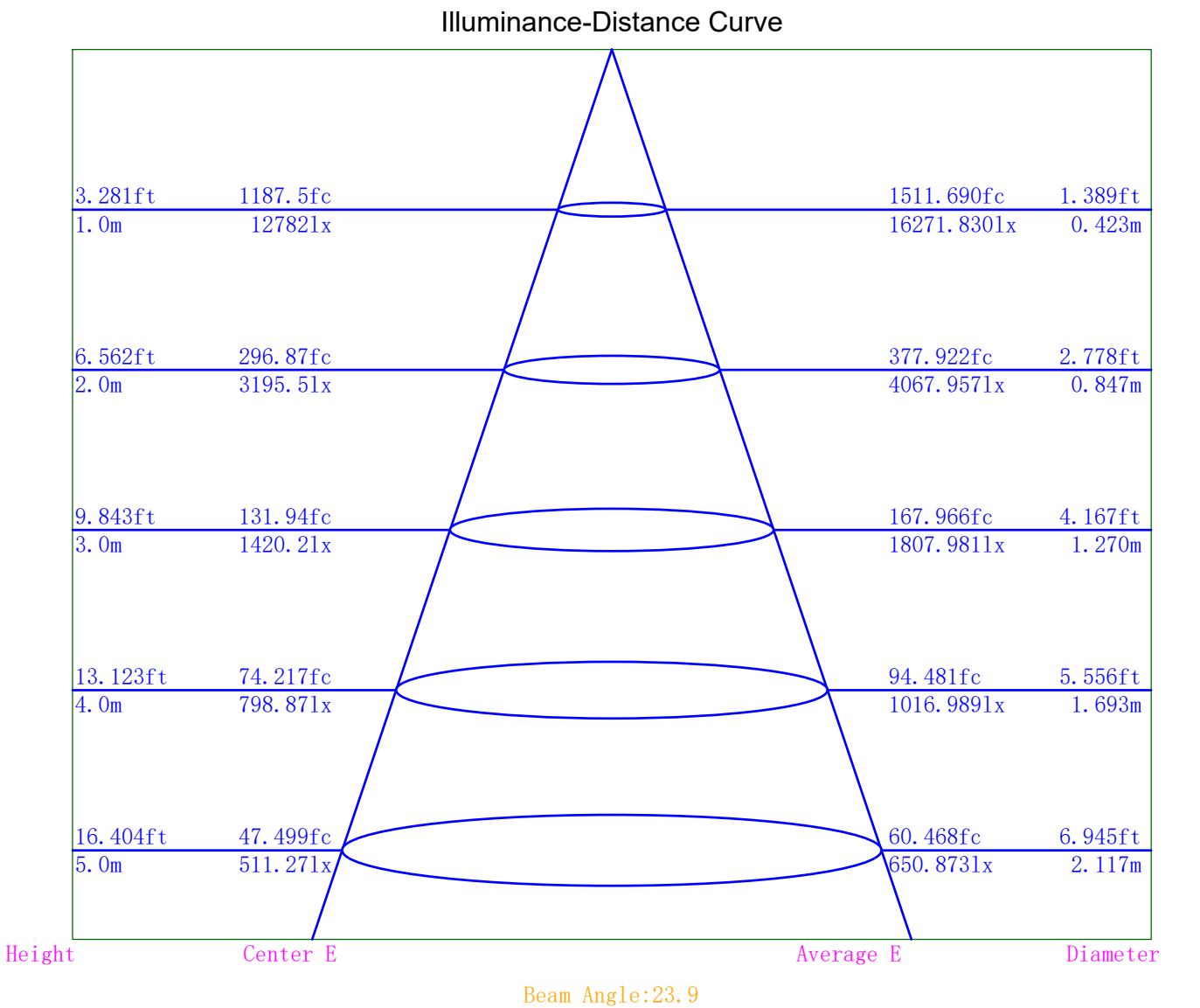
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:12781.87lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:12781.866cd,0deg

Illuminance-Distance Diagram

Lum. Name:DL51-35-XX-01 2700K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23



Indoor Luminance Limiting Curves

Lum. Name:DL51-35-XX-01 2700K RA90 24D 电镀亮黑	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/23

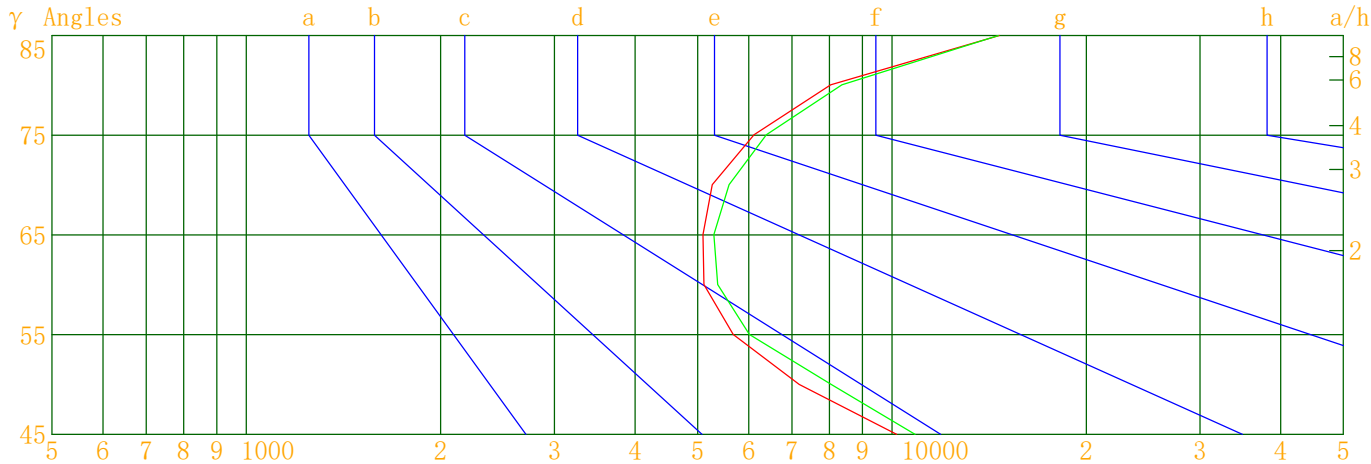
Glare Grade Table

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	10168	7183	5679	5114	5097	5268	6116	8037	14661
C90	10861	8053	6015	5372	5300	5593	6390	8364	14618

Luminance Limiting Curve



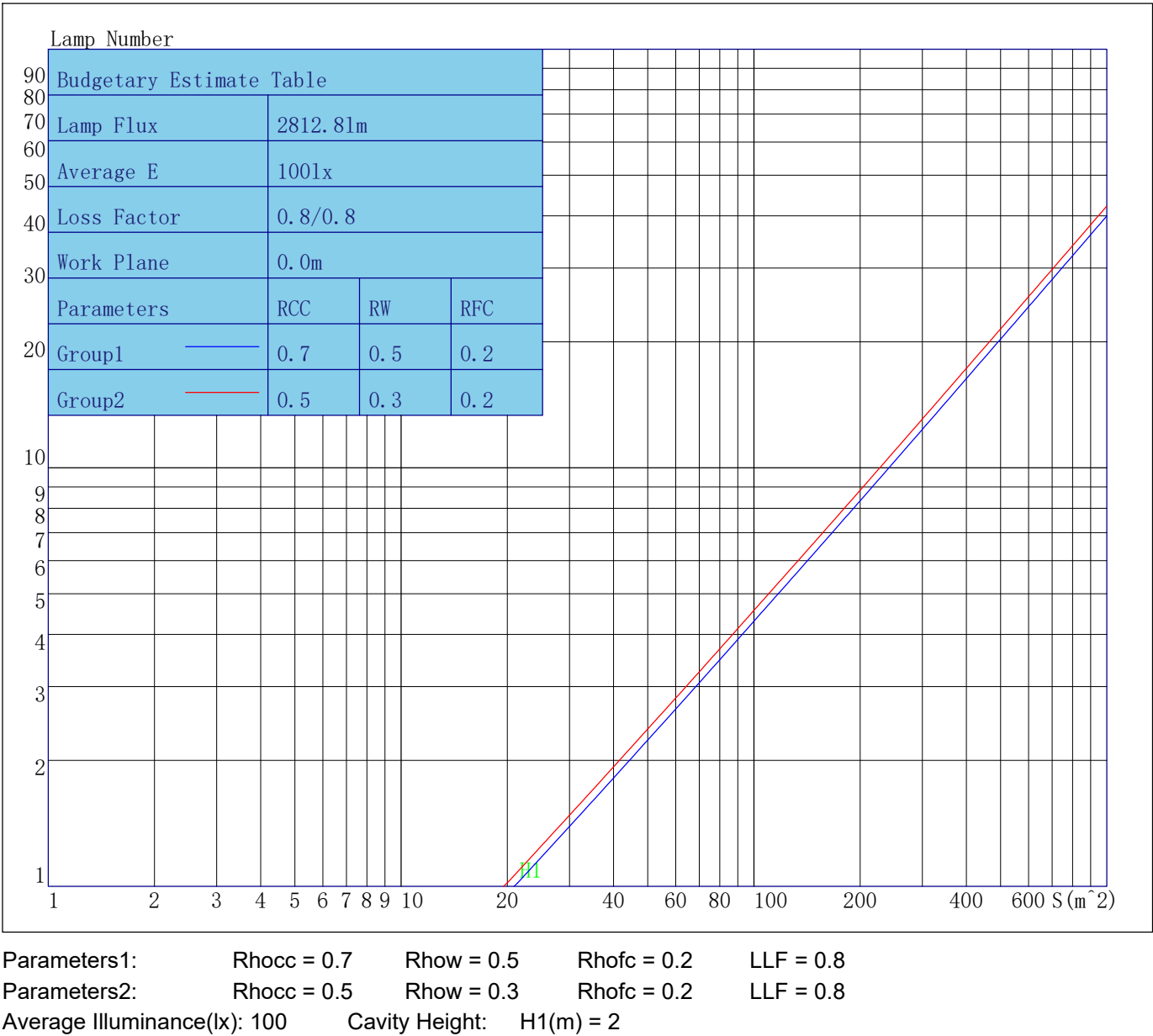
Luminous Size:Length(m)=-0.110Width(m)=-0.110Height(m)=0.000Area(m^2)=0.009503

Luminous Type:Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name:DL51-35-XX-01 2700K RA90 24D 电镀亮黑	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/23



Indoor Coefficient of Utilization Table

Lum. Name:DL51-35-XX-01 2700K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23

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	104	104	104	100	100	100	97
1	114	111	109	107	111	109	107	105	104	103	102	100	99	98	97	96	95	93
2	110	106	102	99	107	104	101	98	100	98	96	97	95	93	94	92	91	89
3	106	101	97	93	104	99	95	92	96	93	91	93	91	89	91	89	87	86
4	102	96	92	89	100	95	91	88	93	89	87	90	88	85	88	86	84	83
5	99	92	88	85	97	91	87	84	89	86	83	88	85	82	86	83	81	80
6	96	89	84	81	94	88	84	81	86	83	80	85	82	79	83	81	79	77
7	93	86	81	78	92	85	81	78	84	80	77	82	79	77	81	78	76	75
8	90	83	79	76	89	82	78	75	81	78	75	80	77	75	79	76	74	73
9	88	81	76	73	87	80	76	73	79	75	73	78	75	72	77	74	72	71
10	85	78	74	71	84	78	74	71	77	73	71	76	73	71	75	72	70	69

Unified Glare Rating Table

Lum. Name:DL51-35-XX-01 2700K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23

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	13.0	13.9	13.4	14.2	14.6	13.5	14.4	13.9	14.7	15.1
	13.5	14.3	14.0	14.7	15.2	14.0	14.8	14.5	15.2	15.6
	14.0	14.7	14.5	15.1	15.6	14.4	15.2	14.9	15.6	16.0
	14.6	15.3	15.1	15.7	16.2	15.0	15.7	15.5	16.1	16.6
	15.1	15.7	15.6	16.1	16.6	15.4	16.1	15.9	16.5	17.0
	15.6	16.2	16.1	16.7	17.2	16.0	16.6	16.5	17.0	17.5
X=4H Y=2H	13.0	13.8	13.5	14.2	14.6	13.5	14.2	14.0	14.6	15.1
	13.9	14.5	14.4	14.9	15.4	14.3	14.9	14.8	15.4	15.8
	14.5	15.1	15.0	15.5	16.1	14.9	15.4	15.4	15.9	16.4
	15.5	15.9	16.0	16.4	16.9	15.8	16.2	16.3	16.7	17.3
	16.0	16.4	16.6	16.9	17.5	16.3	16.8	16.9	17.3	17.8
	16.8	17.1	17.3	17.7	18.2	17.0	17.4	17.6	17.9	18.5
X=8H Y=4H	14.8	15.2	15.3	15.7	16.3	15.2	15.6	15.7	16.1	16.6
	16.0	16.3	16.6	16.9	17.4	16.3	16.6	16.9	17.2	17.7
	16.8	17.1	17.4	17.6	18.2	17.0	17.3	17.6	17.9	18.5
	17.8	18.0	18.4	18.6	19.2	18.0	18.2	18.6	18.8	19.4
X=12H Y=4H	14.9	15.2	15.4	15.8	16.3	15.2	15.6	15.7	16.1	16.6
	16.2	16.4	16.7	17.0	17.6	16.4	16.7	17.0	17.3	17.9
	17.1	17.3	17.6	17.9	18.5	17.3	17.5	17.9	18.1	18.7
Variations with the objverver position at spacings										
S=1.0H	0.0/-0.0					0.1/-0.1				
S=1.5H	0.1/-0.1					0.1/-0.2				
S=2.0H	0.1/-0.1					0.1/-0.1				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	3.2					3.1				

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	12781.9	12781.9	12781.9	12781.9
γ 5.0	10911.9	11537.1	12426.9	11929.3
γ 10.0	6898.8	7706.8	9799.7	8734.2
γ 15.0	2626.1	3059.2	4650.6	3960.6
γ 20.0	964.2	1049.3	1387.9	1206.4
γ 25.0	608.8	644.6	696.3	656.7
γ 30.0	389.1	419.0	431.4	404.1
γ 35.0	233.7	262.8	263.8	243.7
γ 40.0	127.1	153.5	152.7	140.7
γ 45.0	68.3	73.0	71.8	69.1
γ 50.0	43.9	49.2	52.6	51.0
γ 55.0	31.0	32.8	34.3	34.0
γ 60.0	24.3	25.5	27.2	27.0
γ 65.0	20.5	21.3	22.8	22.6
γ 70.0	17.1	18.2	19.7	19.6
γ 75.0	15.0	15.7	16.8	16.5
γ 80.0	13.3	13.8	14.5	14.2
γ 85.0	12.1	12.1	12.6	12.7
γ 90.0	11.0	10.7	10.9	11.2
γ 95.0	9.9	10.0	9.9	9.9
γ 100.0	9.7	9.7	8.8	9.3
γ 105.0	9.2	9.2	8.0	8.7
γ 110.0	8.9	8.8	8.0	8.6
γ 115.0	8.4	8.4	8.2	9.0
γ 120.0	8.2	8.2	8.4	8.7
γ 125.0	8.2	8.5	8.9	9.5
γ 130.0	9.7	9.5	9.5	10.6
γ 135.0	11.9	11.8	11.4	12.4
γ 140.0	15.3	14.6	14.4	15.4
γ 145.0	18.8	18.3	18.3	18.8
γ 150.0	21.3	21.1	21.2	21.6
γ 155.0	23.5	23.3	23.3	23.6
γ 160.0	24.6	24.2	24.5	24.0
γ 165.0	24.5	24.5	24.9	24.8
γ 170.0	23.8	24.1	24.9	24.0
γ 175.0	23.3	23.6	24.1	23.3
γ 180.0	23.4	23.4	23.4	23.4