

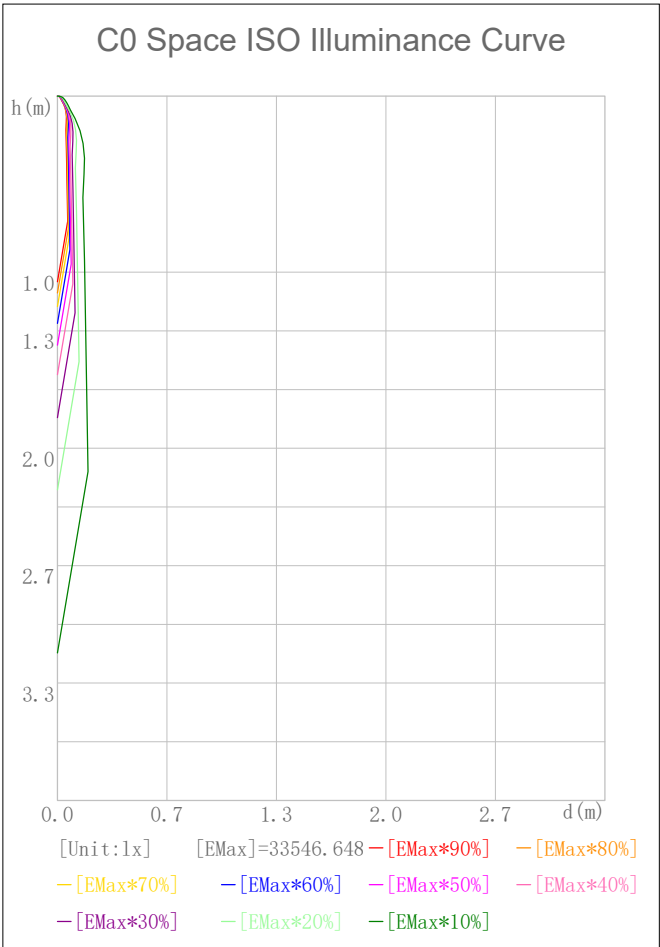
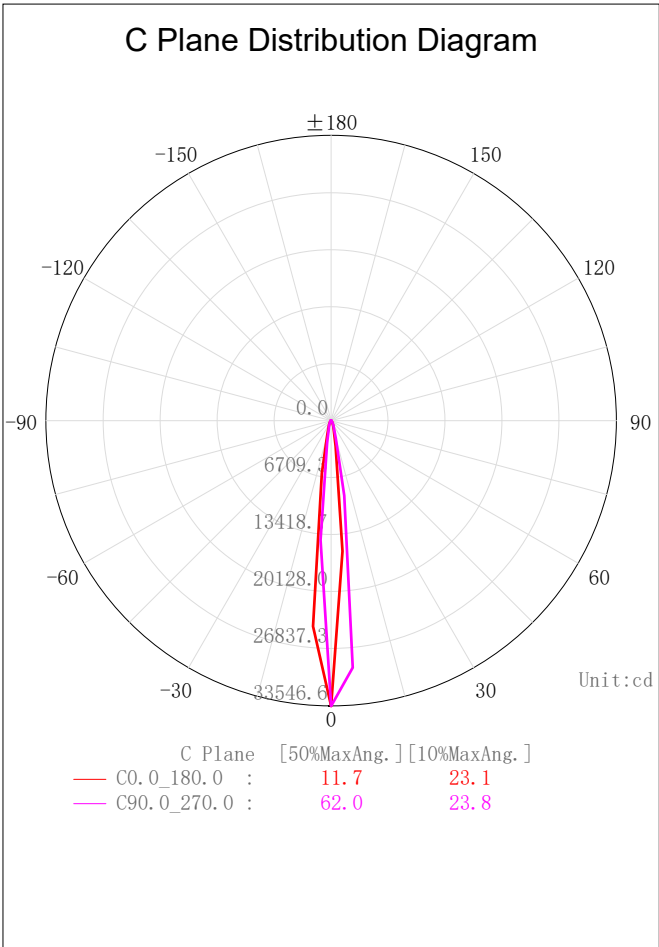
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-35-XX-01 2700K RA90 15D 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

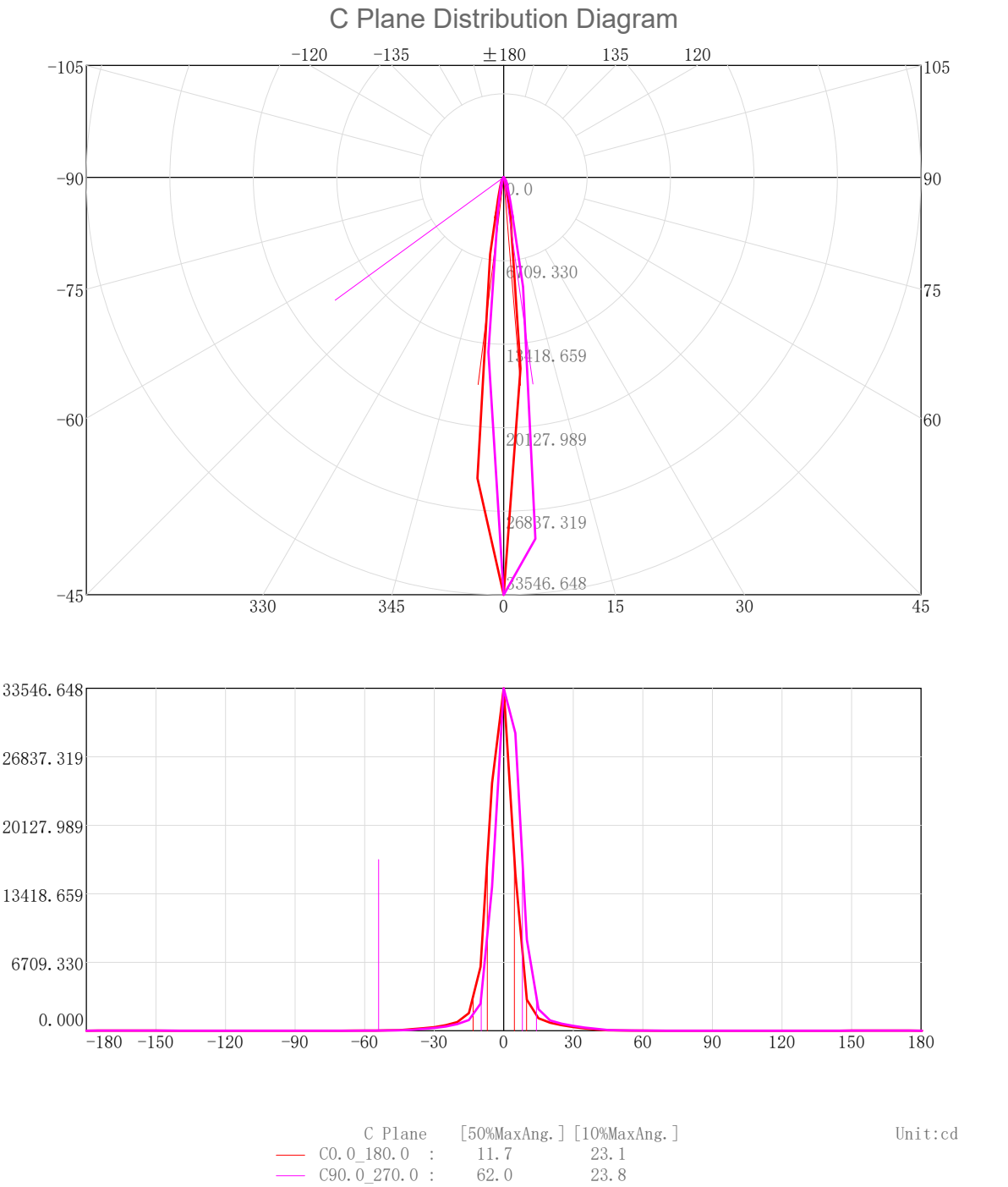
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 2808.170	Luminary Flux(lm): 2808.175	Field Angle(10%Imax): 23.1(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 2736.741lm 97.46%	
Rated Voltage(V):	Luminary EER(lm/W): 83.527	Up Lumens&Percent: 71.434lm 2.54%	
Tested Power(W): 33.620	Max. Candela(cd): 33546.648	S/MH: C0_a180=0.220 C90_270=0.178	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf):239.8, 0.146, 0.960	Beam Angle(50%Imax): 11.7(°)	ErP Φ use(90°): 2849.009lm	
Lamp Size (W*L*H):0.110m*0.110m*0.000m	Left=-7.1°, Right=4.6°	IRF(%): 2888.011	



2D Plane Light Intensity Distribution Curve

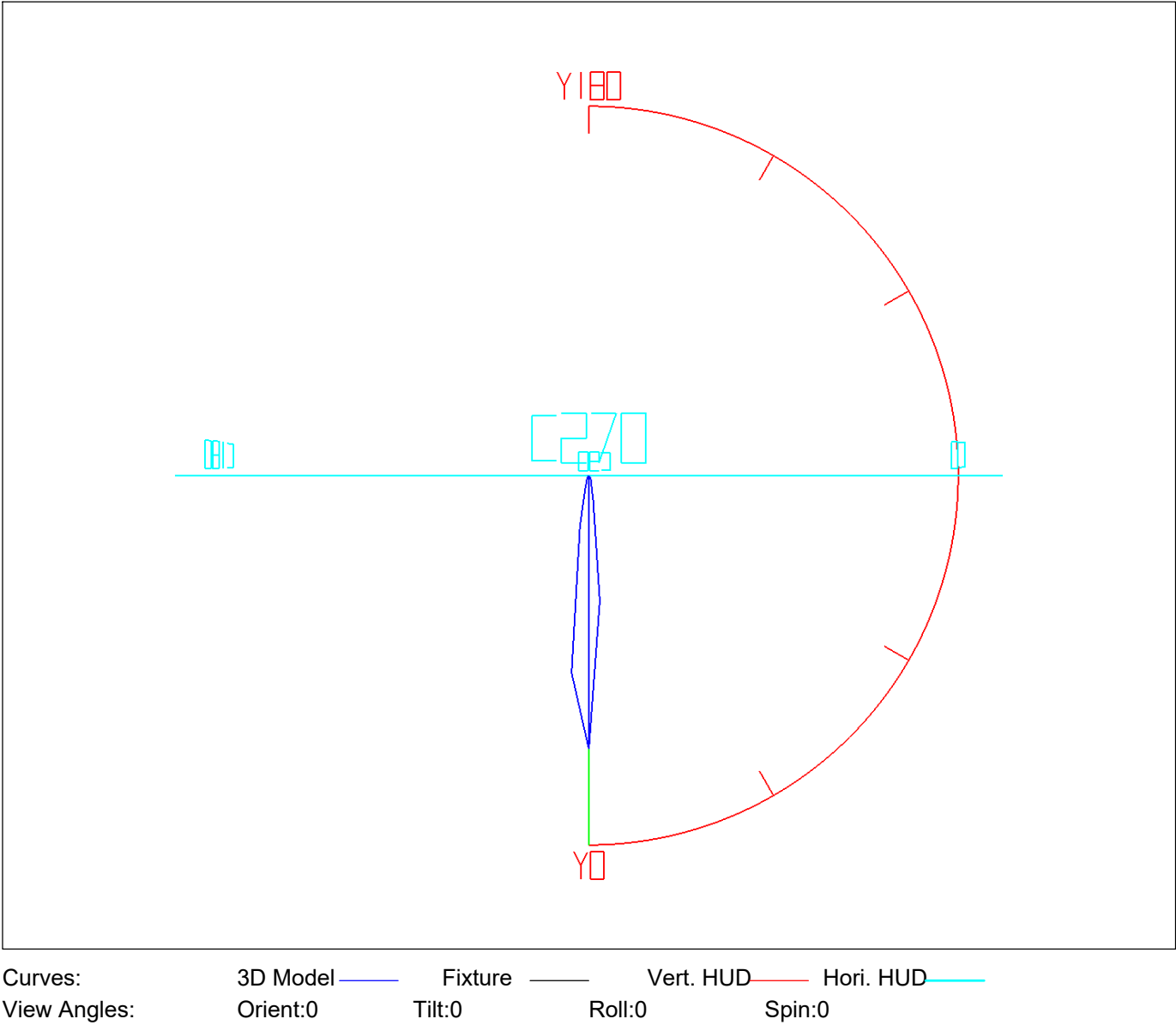
Lum. Name:DL51-35-XX-01 2700K RA90 15D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23



3D Light Intensity Distribution Modal

Lum. Name:DL51-35-XX-01 2700K RA90 15D 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

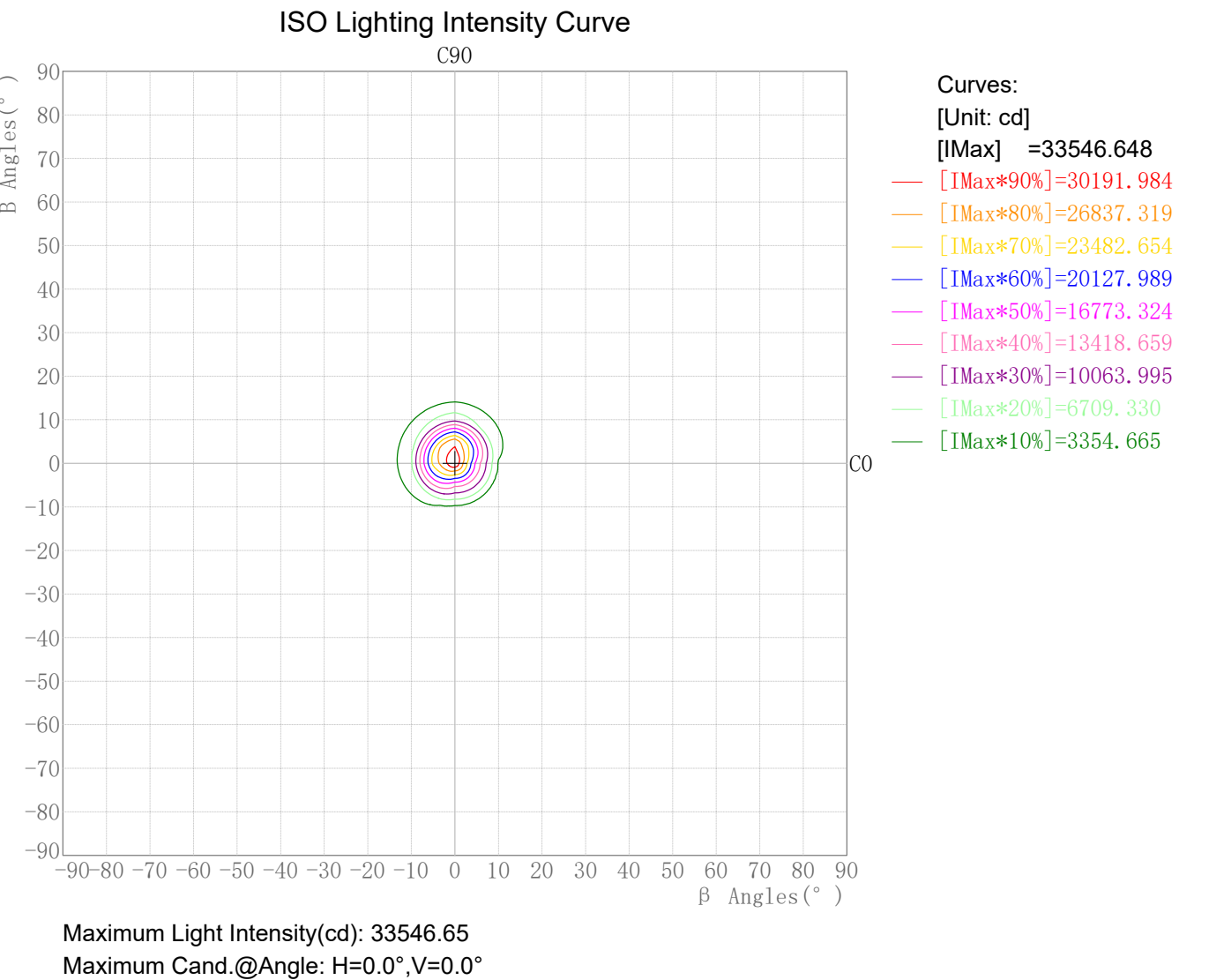


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	648.92	648.92	23.11	23.11
5.0-10.0	928.88	1577.79	33.08	56.19
10.0-15.0	401.80	1979.60	14.31	70.49
15.0-20.0	195.81	2175.41	6.97	77.47
20.0-25.0	146.46	2321.87	5.22	82.68
25.0-30.0	118.86	2440.73	4.23	86.92
30.0-35.0	91.76	2532.48	3.27	90.18
35.0-40.0	64.86	2597.34	2.31	92.49
40.0-45.0	38.36	2635.69	1.37	93.86
45.0-50.0	22.17	2657.87	0.79	94.65
50.0-55.0	16.50	2674.37	0.59	95.24
55.0-60.0	13.06	2687.43	0.47	95.70
60.0-65.0	11.06	2698.49	0.39	96.09
65.0-70.0	9.57	2708.06	0.34	96.43
70.0-75.0	8.36	2716.42	0.30	96.73
75.0-80.0	7.45	2723.87	0.27	97.00
80.0-85.0	6.76	2730.63	0.24	97.24
85.0-90.0	6.12	2736.74	0.22	97.46
90.0-95.0	5.39	2742.13	0.19	97.65
95.0-100.0	4.75	2746.88	0.17	97.82
100.0-105.0	4.36	2751.24	0.16	97.97
105.0-110.0	4.12	2755.37	0.15	98.12
110.0-115.0	3.89	2759.26	0.14	98.26
115.0-120.0	3.66	2762.92	0.13	98.39
120.0-125.0	3.59	2766.51	0.13	98.52
125.0-130.0	3.62	2770.13	0.13	98.65
130.0-135.0	3.77	2773.90	0.13	98.78
135.0-140.0	4.31	2778.21	0.15	98.93
140.0-145.0	5.19	2783.40	0.18	99.12
145.0-150.0	5.78	2789.18	0.21	99.32
150.0-155.0	5.55	2794.73	0.20	99.52
155.0-160.0	4.76	2799.49	0.17	99.69
160.0-165.0	3.80	2803.29	0.14	99.83
165.0-170.0	2.77	2806.07	0.10	99.93
170.0-175.0	1.61	2807.68	0.06	99.98
175.0-180.0	0.49	2808.17	0.02	100.00

Rectangle ISO Lighting Intensity Diagram

Lum. Name: DL51-35-XX-01 2700K RA90 15D 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

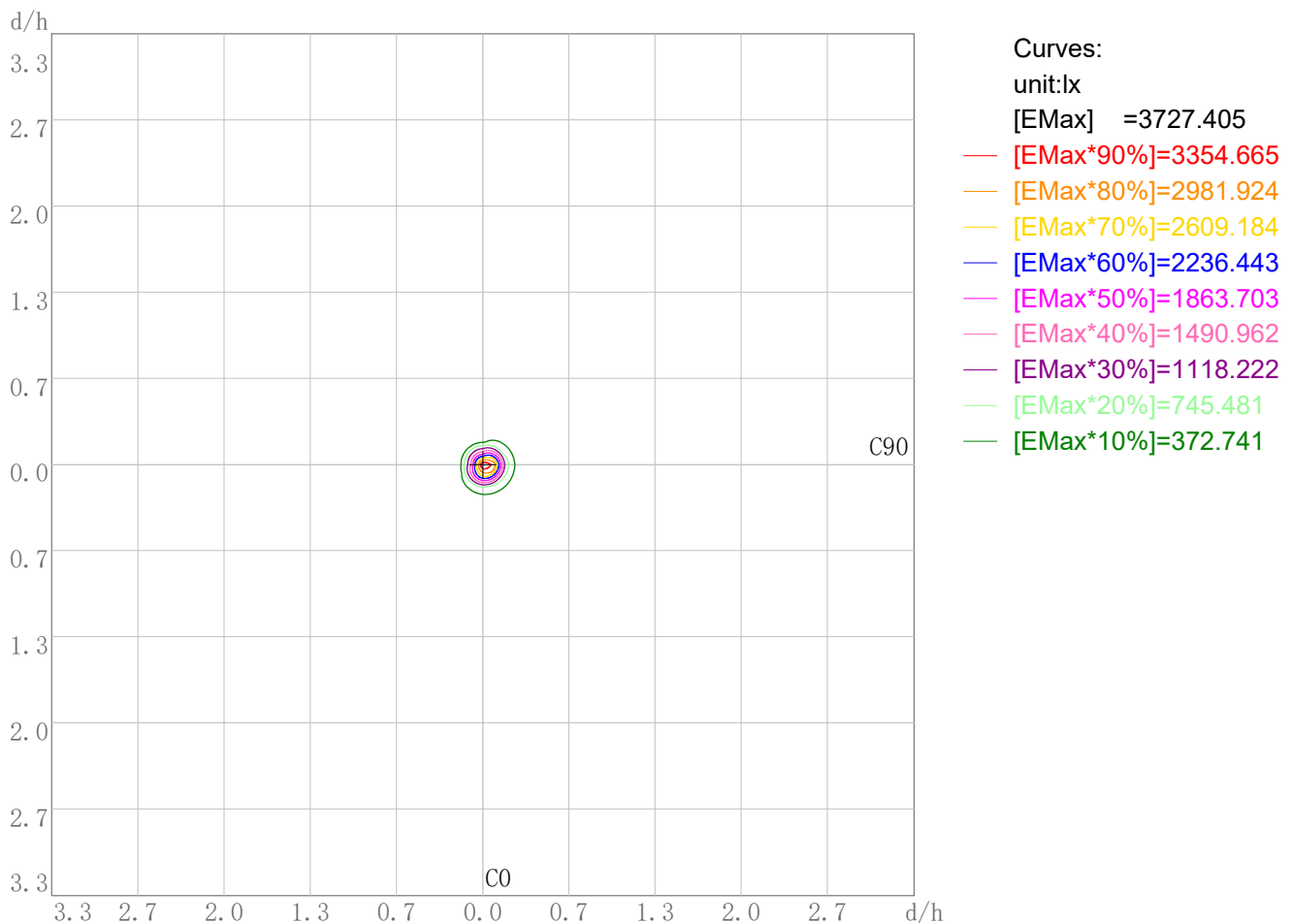


Photometric Filename:DL51-35-XX-01 2700K RA90 15D 电镀亮黑.IES

## Plane ISO-Illuminance Diagram

Lum. Name: DL51-35-XX-01 2700K RA90 15D 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

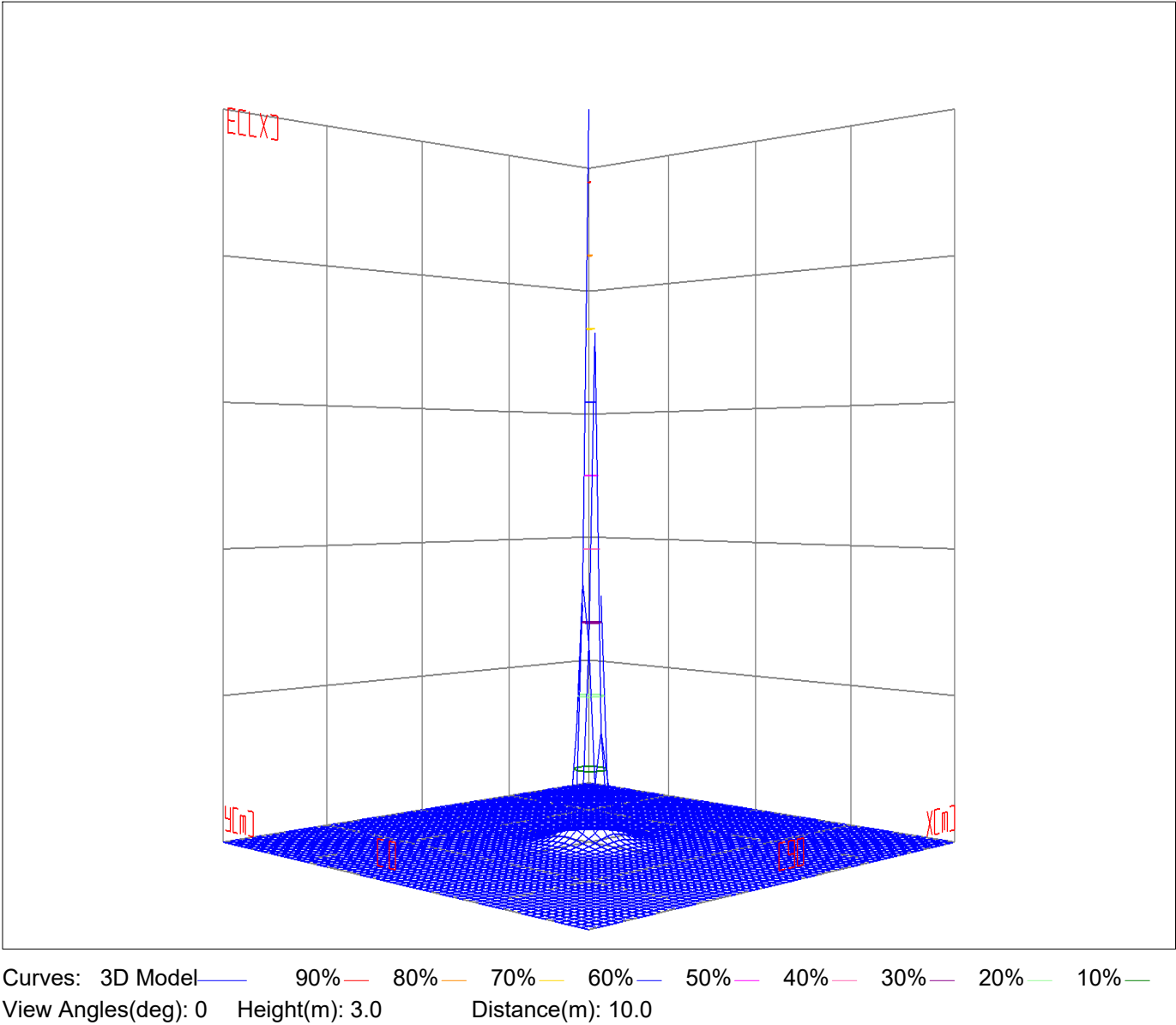
Working Plane Maximum Illuminance(lx): 3727.41

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

3D Plane ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 2700K RA90 15D 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

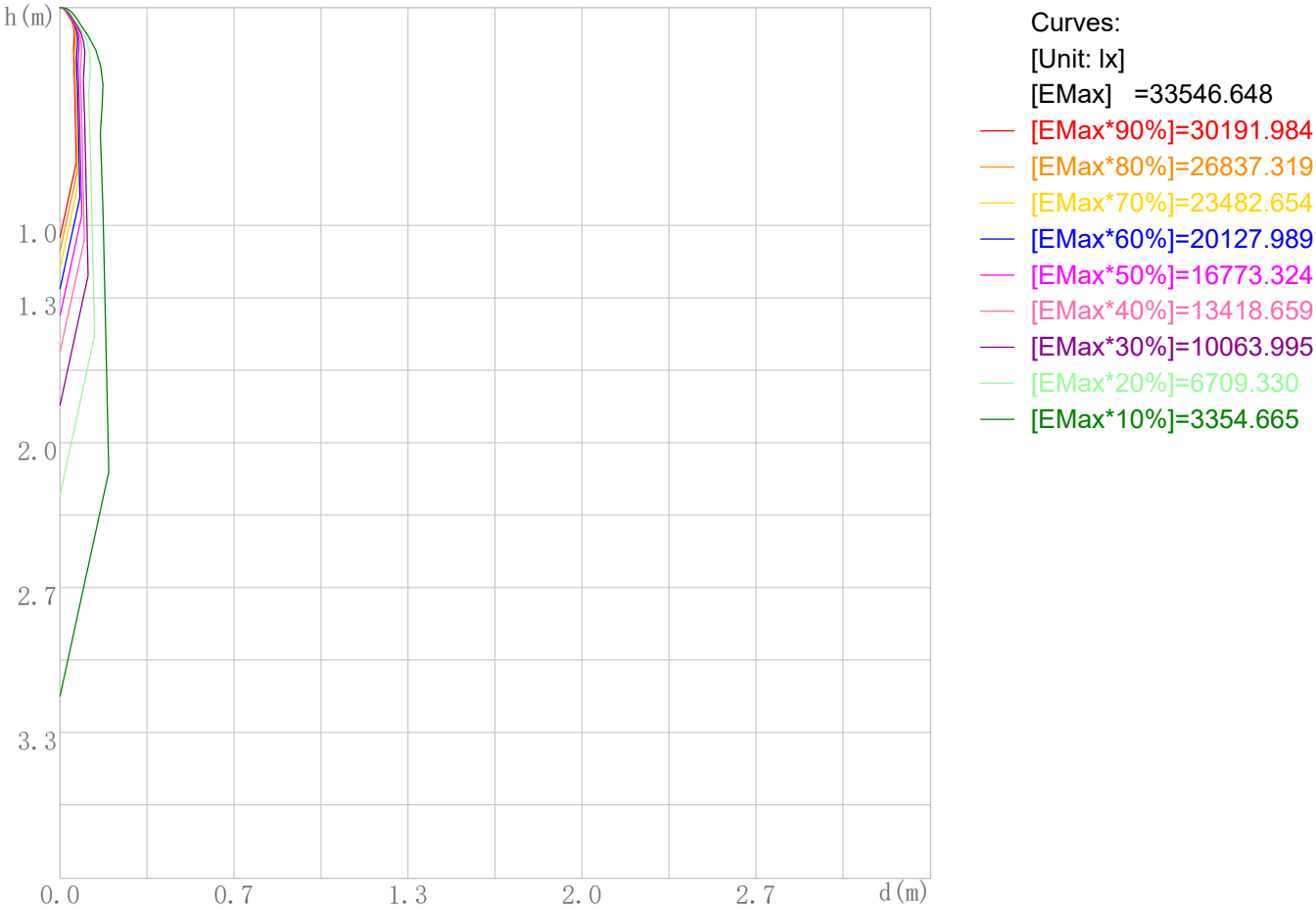
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 2700K RA90 15D 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

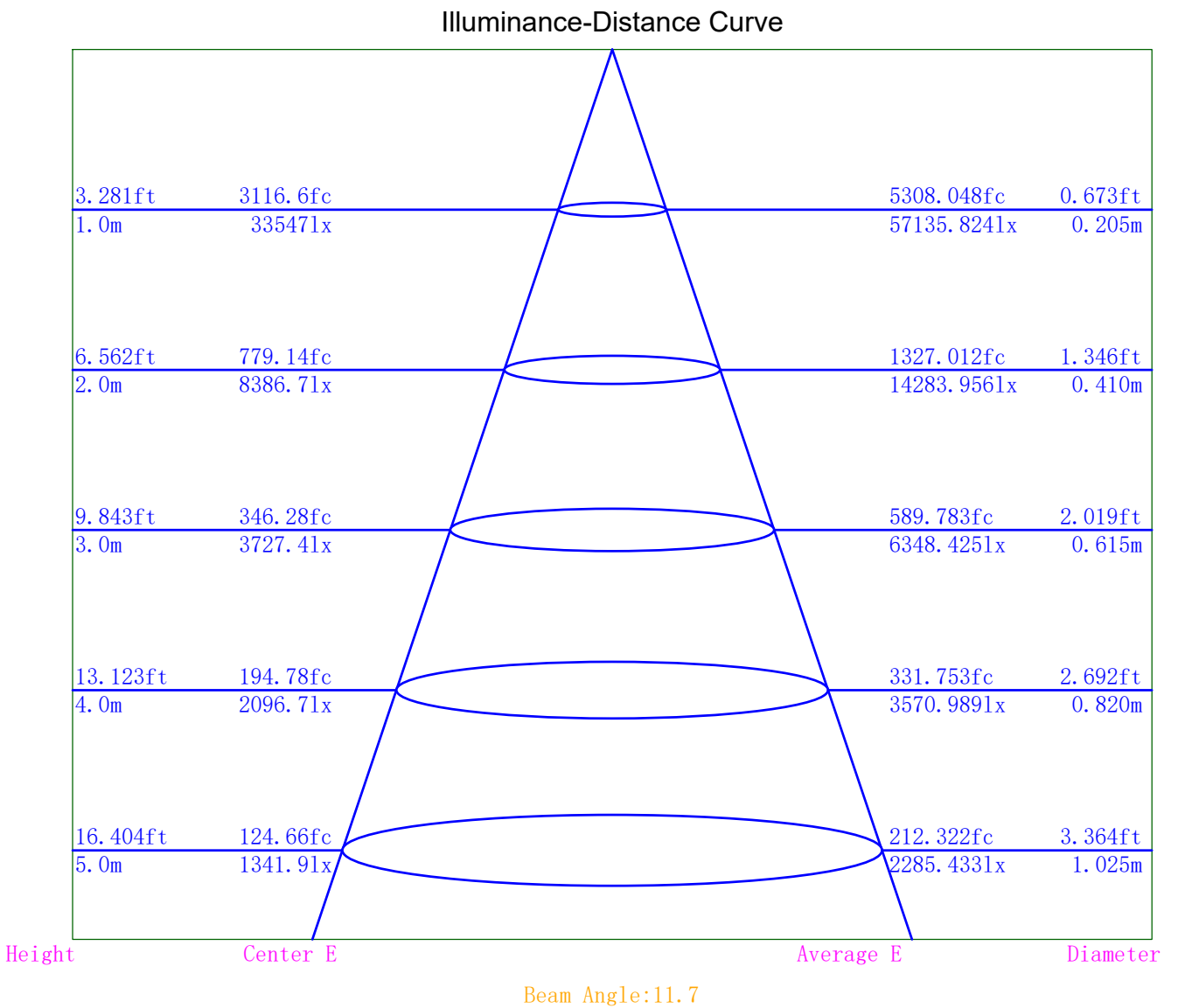


Space Plane Maximum Illuminance and @Angle:33546.65lx,0.0deg  
Plane Maximum Lighting Intensity and @Angle:33546.648cd,0deg



Illuminance-Distance Diagram

Lum. Name: DL51-35-XX-01 2700K RA90 15D 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 15D 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

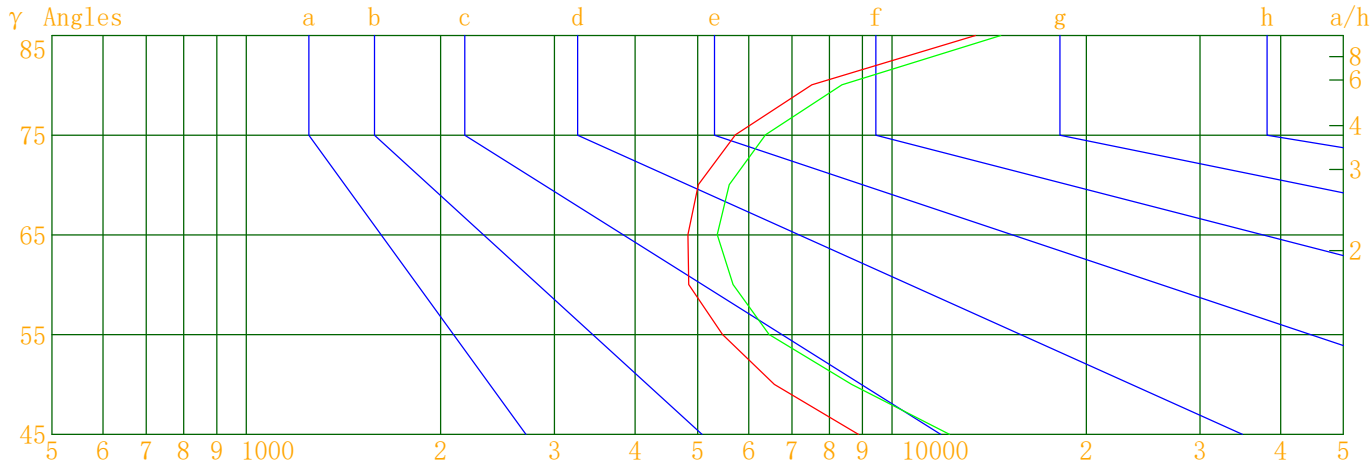
Glare Grade Table

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	8871	6573	5463	4843	4830	5014	5721	7515	13464
C90	12275	8659	6450	5675	5363	5596	6370	8365	14738

Luminance Limiting Curve



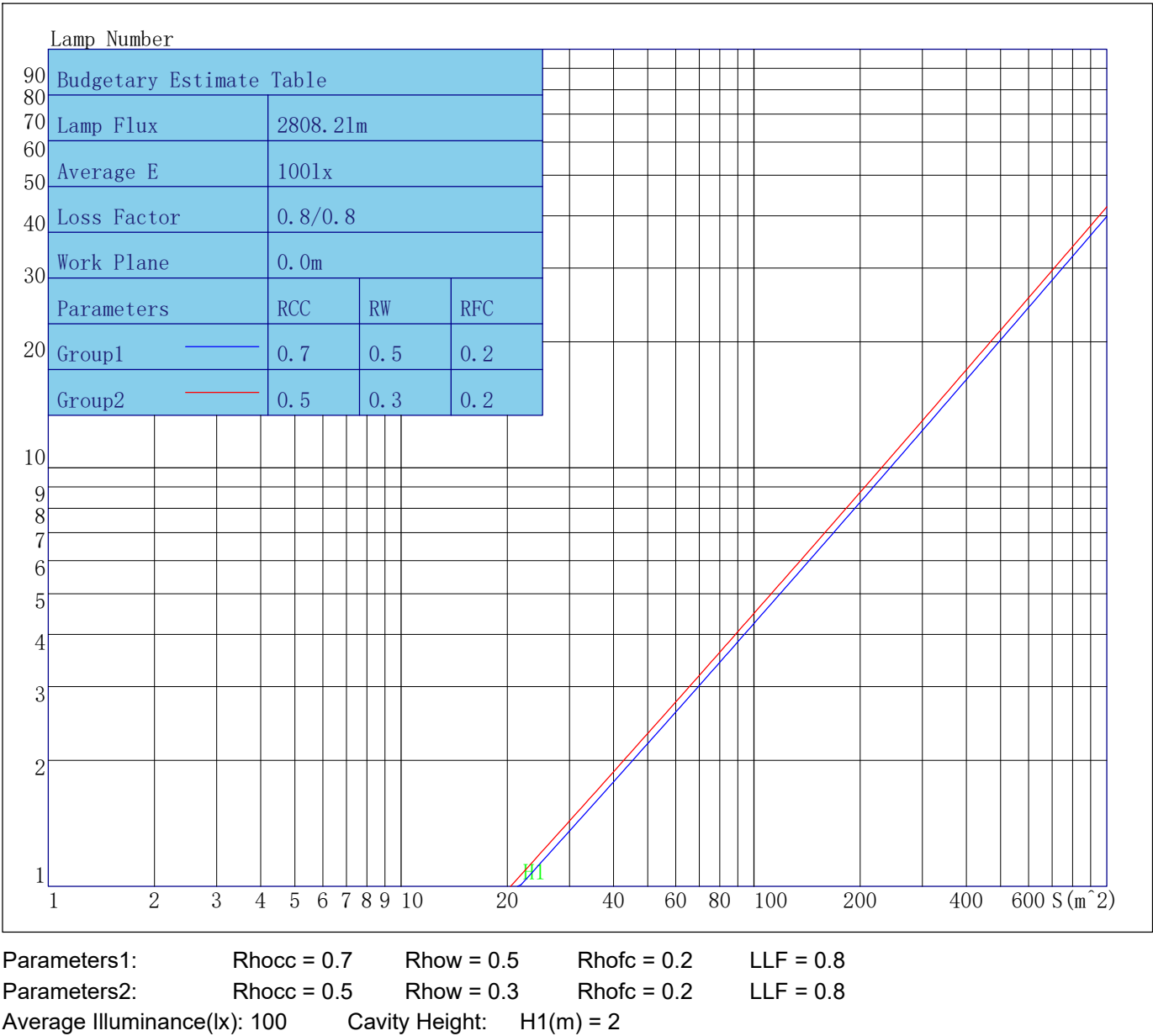
Luminous Size:Length(m)=-0.110Width(m)=-0.110Height(m)=0.000Area(m^2)=0.009503

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 15D 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 15D 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	112	110	108	112	110	108	106	105	104	103	101	100	99	97	97	96	94
2	111	107	104	101	108	105	102	100	102	99	98	98	97	95	95	94	93	91
3	107	103	99	96	105	101	98	95	98	96	93	96	94	92	93	92	90	89
4	104	99	95	92	102	98	94	91	95	92	90	93	91	89	91	89	88	86
5	101	96	92	89	100	95	91	88	93	90	87	91	88	86	89	87	86	84
6	99	93	89	86	98	92	88	86	91	87	85	89	86	84	88	85	84	83
7	97	90	87	84	95	90	86	84	89	85	83	87	84	82	86	84	82	81
8	94	88	84	82	93	88	84	82	87	83	81	86	83	81	85	82	80	79
9	92	86	83	80	92	86	82	80	85	82	80	84	81	79	83	81	79	78
10	91	85	81	79	90	84	81	78	83	80	78	83	80	78	82	79	78	77

Unified Glare Rating Table

Lum. Name:DL51-35-XX-01 2700K RA90 15D 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	12.9	13.6	13.3	14.0	14.4	14.4	15.2	14.8	15.6	15.9
	13.4	14.1	13.9	14.5	14.9	14.8	15.5	15.3	15.9	16.3
	13.9	14.4	14.3	14.9	15.3	15.2	15.8	15.6	16.2	16.6
	14.5	15.0	14.9	15.4	15.9	15.7	16.2	16.1	16.6	17.1
	14.9	15.4	15.4	15.8	16.3	16.0	16.5	16.5	16.9	17.4
	15.4	15.9	15.9	16.3	16.8	16.5	16.9	17.0	17.4	17.9
X=4H    Y=2H	12.9	13.5	13.4	13.9	14.4	14.4	15.0	14.8	15.4	15.8
	13.7	14.2	14.2	14.7	15.1	15.0	15.5	15.5	15.9	16.4
	14.4	14.8	14.9	15.2	15.8	15.5	15.9	16.0	16.4	16.9
	15.3	15.6	15.8	16.1	16.6	16.3	16.6	16.8	17.1	17.6
	15.8	16.1	16.3	16.6	17.1	16.8	17.0	17.3	17.5	18.1
	16.5	16.7	17.1	17.3	17.8	17.4	17.6	18.0	18.2	18.7
X=8H    Y=4H	14.6	14.9	15.2	15.4	15.9	15.7	15.9	16.2	16.4	17.0
	15.8	16.0	16.4	16.5	17.1	16.7	16.9	17.3	17.4	18.0
	16.6	16.7	17.1	17.3	17.8	17.4	17.5	18.0	18.1	18.7
	17.5	17.6	18.1	18.2	18.8	18.3	18.4	18.9	18.9	19.6
X=12H    Y=4H	14.7	14.9	15.2	15.4	16.0	15.7	15.9	16.2	16.4	17.0
	15.9	16.1	16.5	16.6	17.2	16.8	16.9	17.4	17.5	18.1
	16.8	16.9	17.4	17.5	18.1	17.6	17.7	18.2	18.3	18.9
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/-0.1				
S=2.0H	0.1/-0.1					0.1/-0.1				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	3.1					2.7				

to 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	33546.6	33546.6	33546.6	33546.6
γ 5.0	15424.7	29153.3	24271.3	14090.1
γ 10.0	3052.0	8941.5	6267.6	2662.5
γ 15.0	1237.9	2127.5	1742.3	1062.8
γ 20.0	796.2	1017.4	858.2	661.5
γ 25.0	561.3	709.1	552.7	429.5
γ 30.0	374.7	489.1	358.0	282.3
γ 35.0	234.3	323.5	247.2	183.2
γ 40.0	121.2	192.7	155.2	97.6
γ 45.0	59.6	82.5	66.4	53.4
γ 50.0	40.2	52.9	47.2	36.8
γ 55.0	29.8	35.2	32.4	29.2
γ 60.0	23.0	27.0	26.1	23.4
γ 65.0	19.4	21.5	21.7	19.8
γ 70.0	16.3	18.2	17.8	16.5
γ 75.0	14.1	15.7	15.2	14.2
γ 80.0	12.4	13.8	13.3	12.8
γ 85.0	11.2	12.2	12.2	11.7
γ 90.0	10.1	11.0	11.0	10.0
γ 95.0	9.2	10.0	9.4	8.0
γ 100.0	9.2	9.4	7.8	7.0
γ 105.0	8.5	8.8	7.3	7.3
γ 110.0	7.8	8.6	7.5	7.3
γ 115.0	7.6	8.1	7.2	7.4
γ 120.0	7.0	7.5	7.5	8.0
γ 125.0	7.8	7.2	8.1	9.0
γ 130.0	8.6	7.9	8.6	9.4
γ 135.0	10.3	8.7	9.4	11.8
γ 140.0	13.7	10.9	11.8	16.4
γ 145.0	18.5	15.5	16.4	21.1
γ 150.0	21.8	20.0	21.1	22.5
γ 155.0	22.7	22.0	22.9	22.4
γ 160.0	23.5	22.5	23.6	21.7
γ 165.0	23.9	22.3	24.3	22.4
γ 170.0	23.2	23.7	24.4	22.9
γ 175.0	20.9	22.9	22.4	20.0
γ 180.0	19.8	19.8	19.8	19.8