

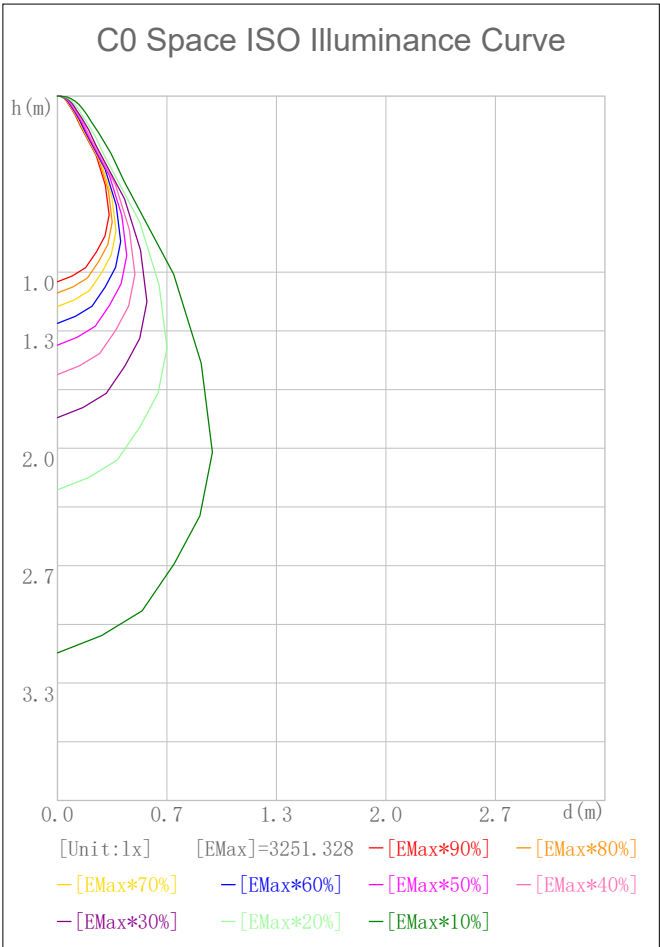
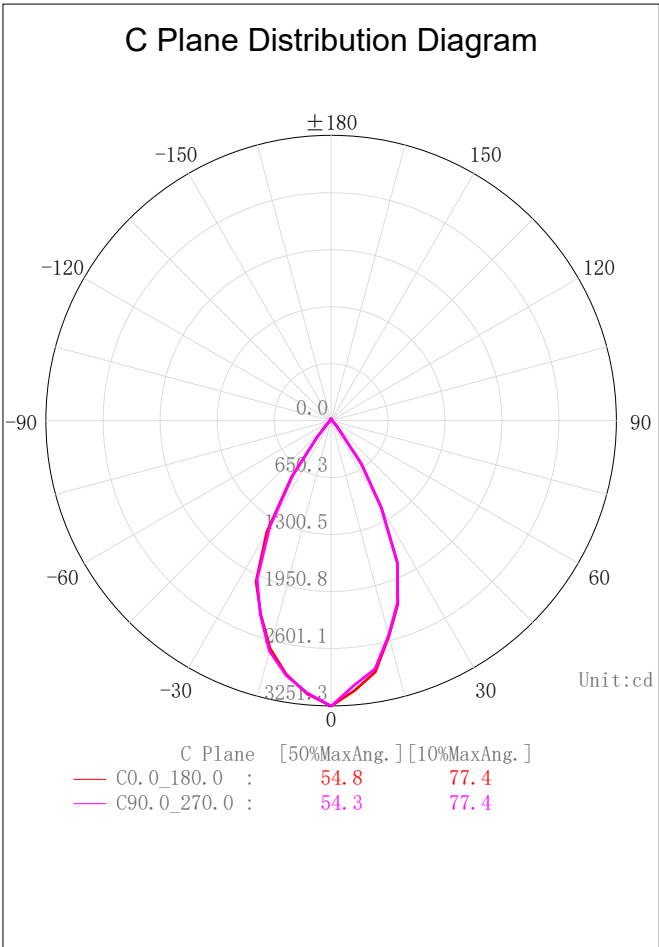
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-35-XX-01 2700K RA90 60D 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

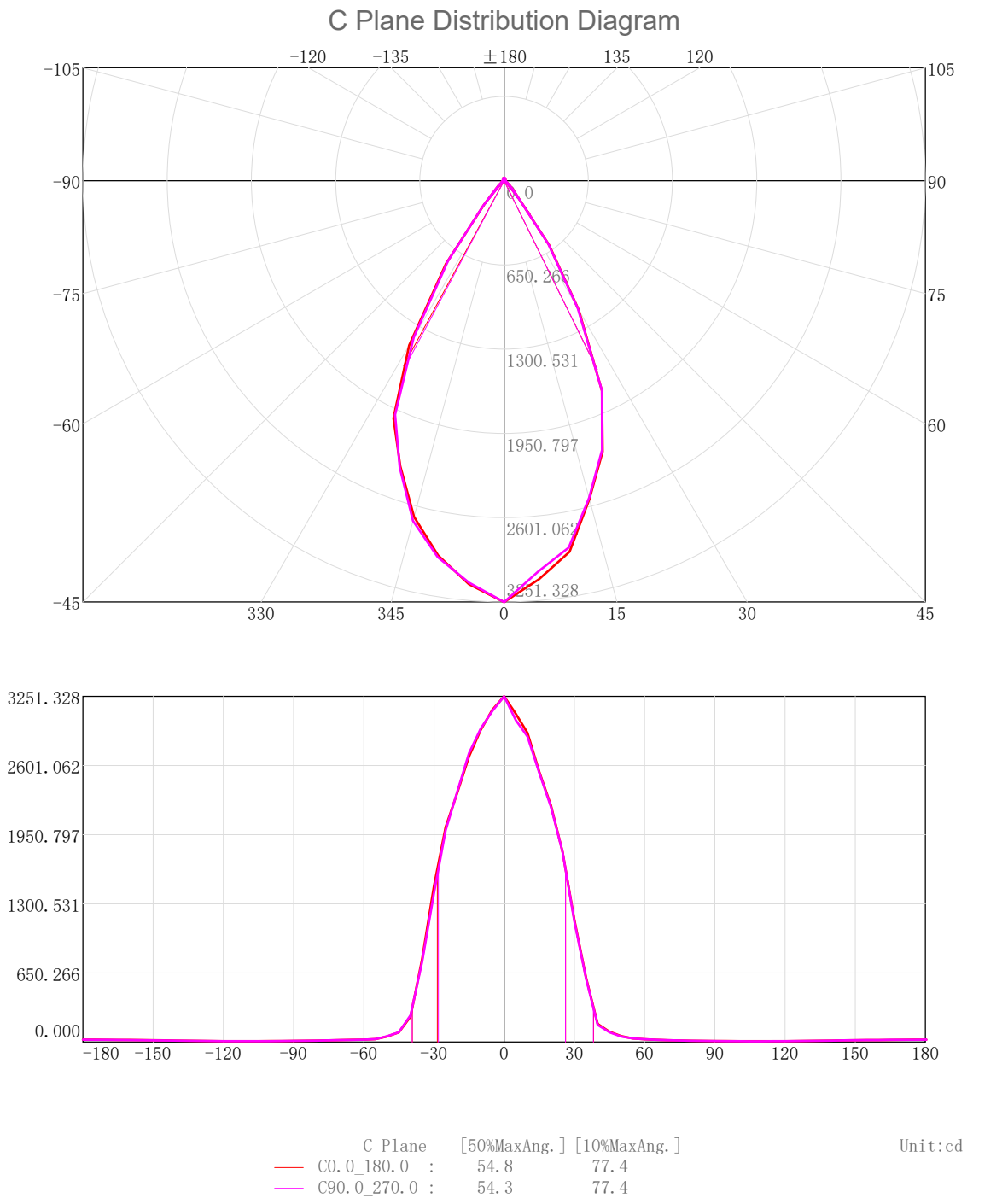
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 2548.290	Luminary Flux(lm): 2548.288	Field Angle(10%Imax): 77.4(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 2473.140lm 97.05%	
Rated Voltage(V):	Luminary EER(lm/W): 74.752	Up Lumens&Percent: 75.148lm 2.95%	
Tested Power(W): 34.090	Max. Candela(cd): 3251.328	S/MH: C0_a180=0.844 C90_270=0.840	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf):239.6, 0.147, 0.962	Beam Angle(50%Imax): 54.8(°)	ErP Φ use(90°): 2359.305lm	
Lamp Size (W*L*H):0.110m*0.110m*0.000m	Left=-28.6°, Right=26.3°	IRF(%): 286.582	



2D Plane Light Intensity Distribution Curve

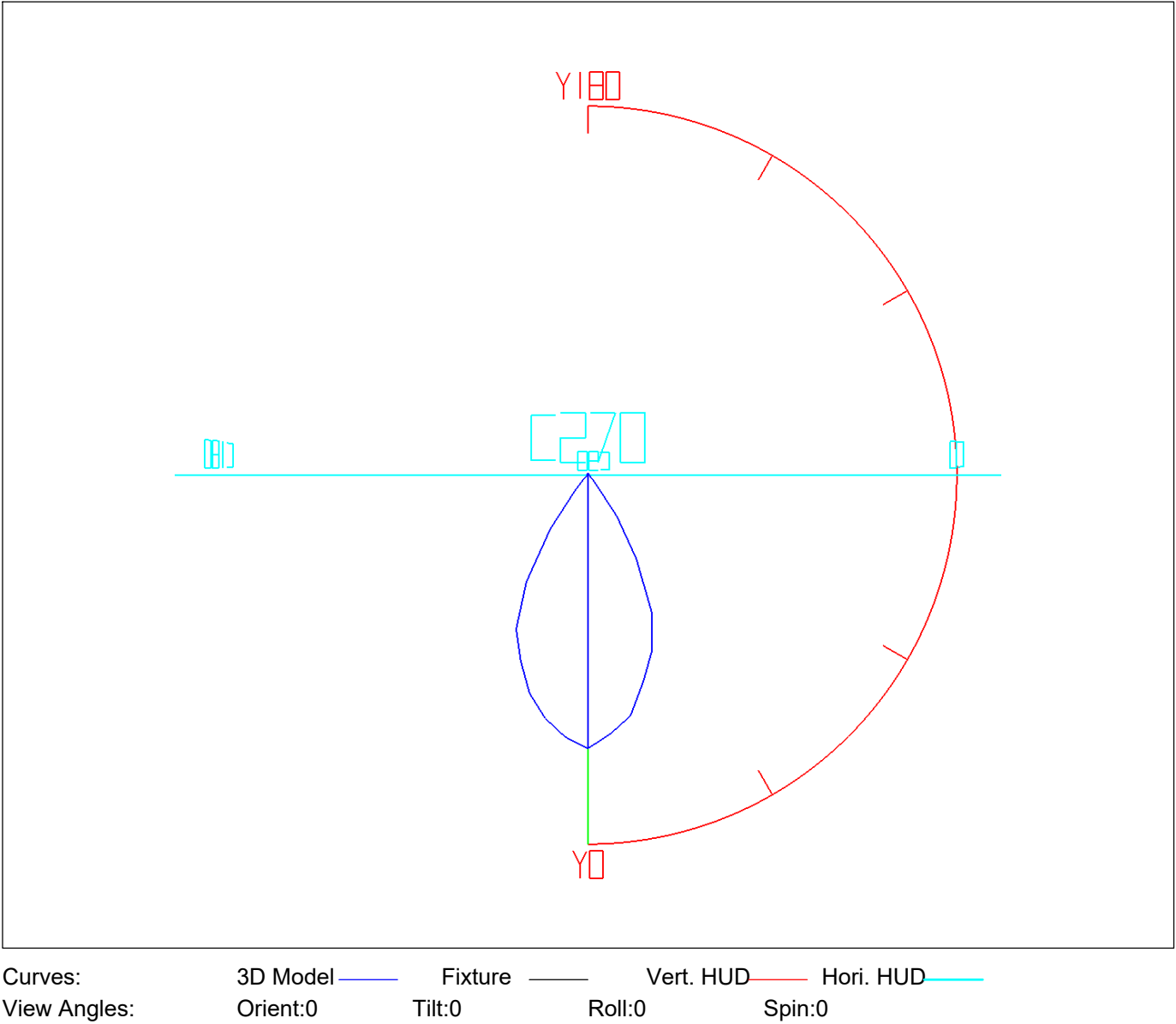
Lum. Name:DL51-35-XX-01 2700K RA90 60D 电镀亮黑	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23



3D Light Intensity Distribution Modal

Lum. Name:DL51-35-XX-01 2700K RA90 60D 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

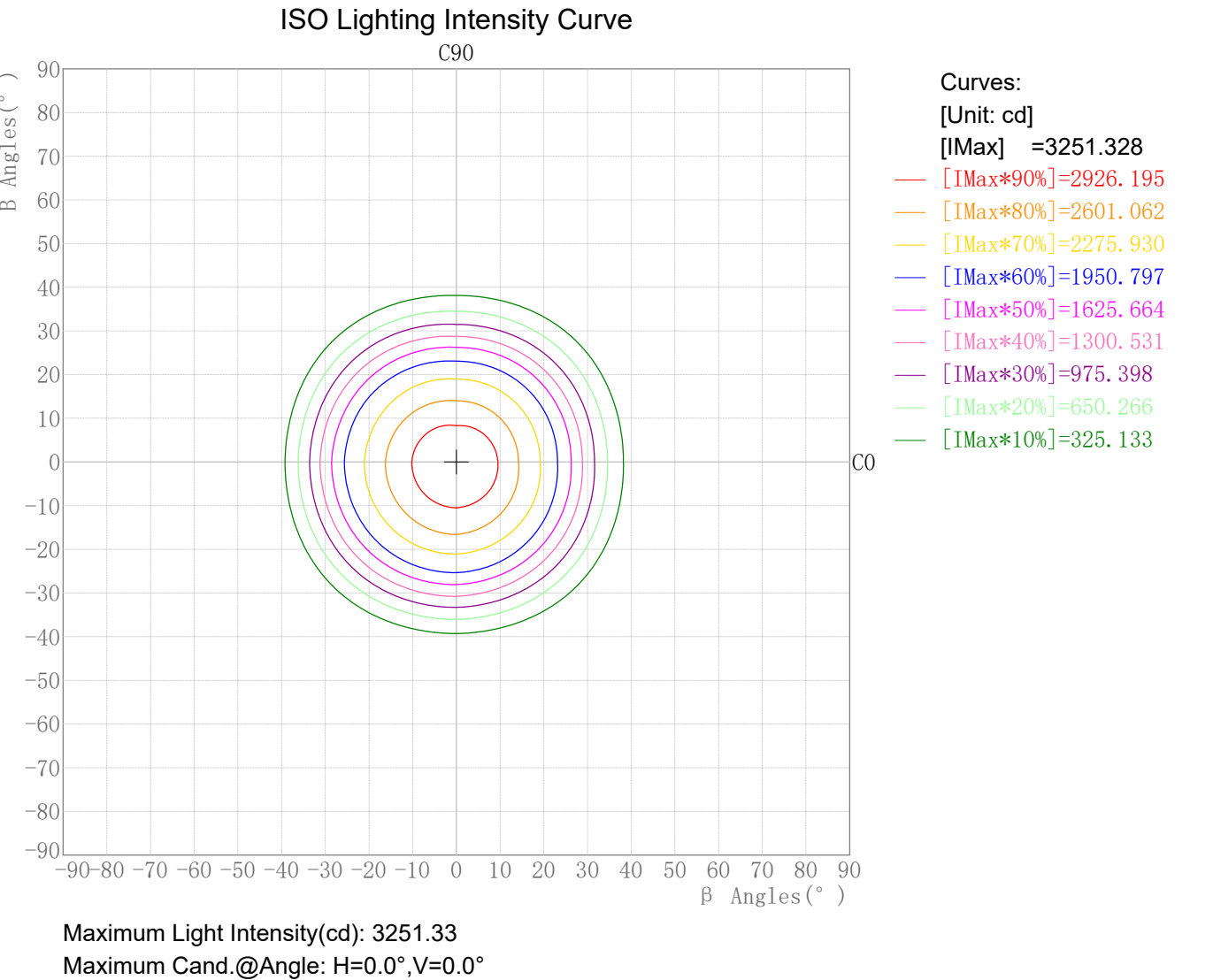


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	75.79	75.79	2.97	2.97
5.0-10.0	214.81	290.60	8.43	11.40
10.0-15.0	328.44	619.04	12.89	24.29
15.0-20.0	404.15	1023.19	15.86	40.15
20.0-25.0	438.52	1461.71	17.21	57.36
25.0-30.0	403.01	1864.72	15.81	73.18
30.0-35.0	290.35	2155.06	11.39	84.57
35.0-40.0	148.64	2303.70	5.83	90.40
40.0-45.0	55.57	2359.27	2.18	92.58
45.0-50.0	29.90	2389.17	1.17	93.76
50.0-55.0	18.73	2407.90	0.74	94.49
55.0-60.0	13.20	2421.10	0.52	95.01
60.0-65.0	11.39	2432.49	0.45	95.46
65.0-70.0	10.16	2442.65	0.40	95.85
70.0-75.0	9.05	2451.71	0.36	96.21
75.0-80.0	7.98	2459.68	0.31	96.52
80.0-85.0	7.07	2466.75	0.28	96.80
85.0-90.0	6.39	2473.14	0.25	97.05
90.0-95.0	5.76	2478.90	0.23	97.28
95.0-100.0	5.21	2484.11	0.20	97.48
100.0-105.0	4.81	2488.92	0.19	97.67
105.0-110.0	4.52	2493.44	0.18	97.85
110.0-115.0	4.37	2497.81	0.17	98.02
115.0-120.0	4.40	2502.20	0.17	98.19
120.0-125.0	4.54	2506.75	0.18	98.37
125.0-130.0	4.75	2511.50	0.19	98.56
130.0-135.0	4.96	2516.46	0.19	98.75
135.0-140.0	5.07	2521.53	0.20	98.95
140.0-145.0	5.10	2526.62	0.20	99.15
145.0-150.0	4.95	2531.57	0.19	99.34
150.0-155.0	4.60	2536.18	0.18	99.52
155.0-160.0	4.07	2540.25	0.16	99.68
160.0-165.0	3.36	2543.61	0.13	99.82
165.0-170.0	2.54	2546.15	0.10	99.92
170.0-175.0	1.59	2547.74	0.06	99.98
175.0-180.0	0.55	2548.29	0.02	100.00

Rectangle ISO Lighting Intensity Diagram

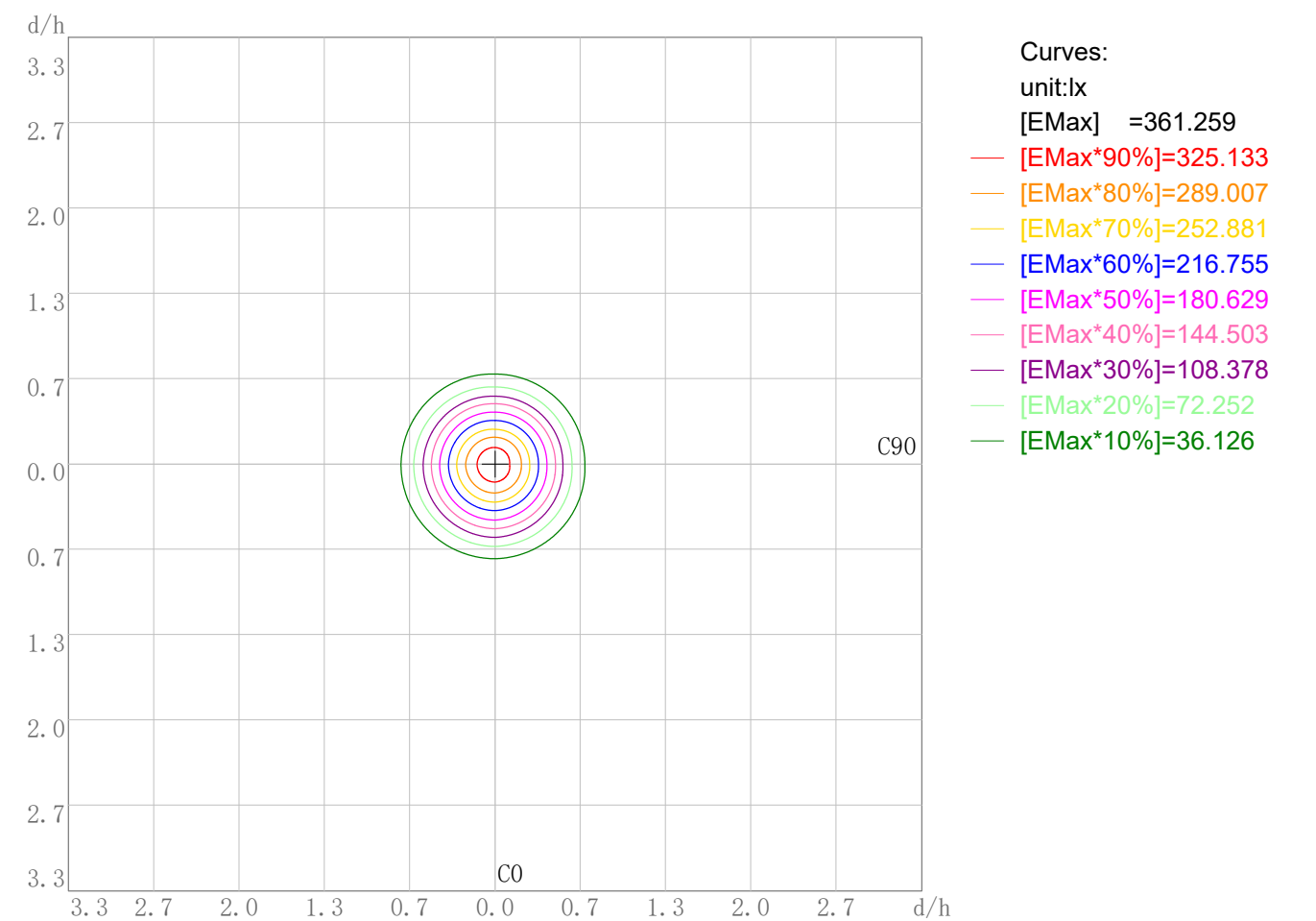
Lum. Name: DL51-35-XX-01 2700K RA90 60D 电镀亮黑	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/23



Plane ISO-Illuminance Diagram

Lum. Name: DL51-35-XX-01 2700K RA90 60D 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

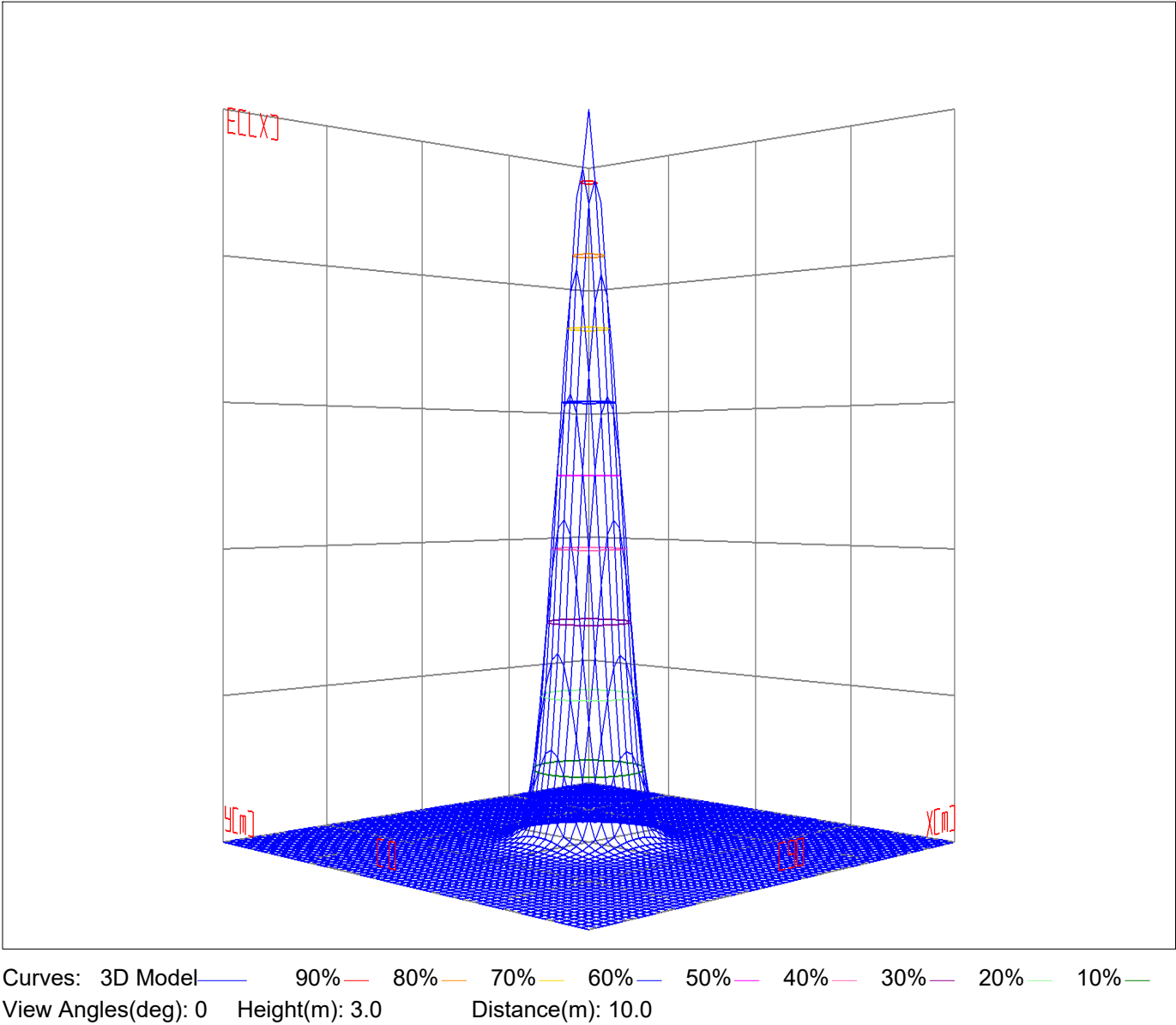


Working Plane Luminaire Mounting Height(m): 3.00  
Working Plane Maximum Illuminance(lx): 361.26  
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 2700K RA90 60D 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

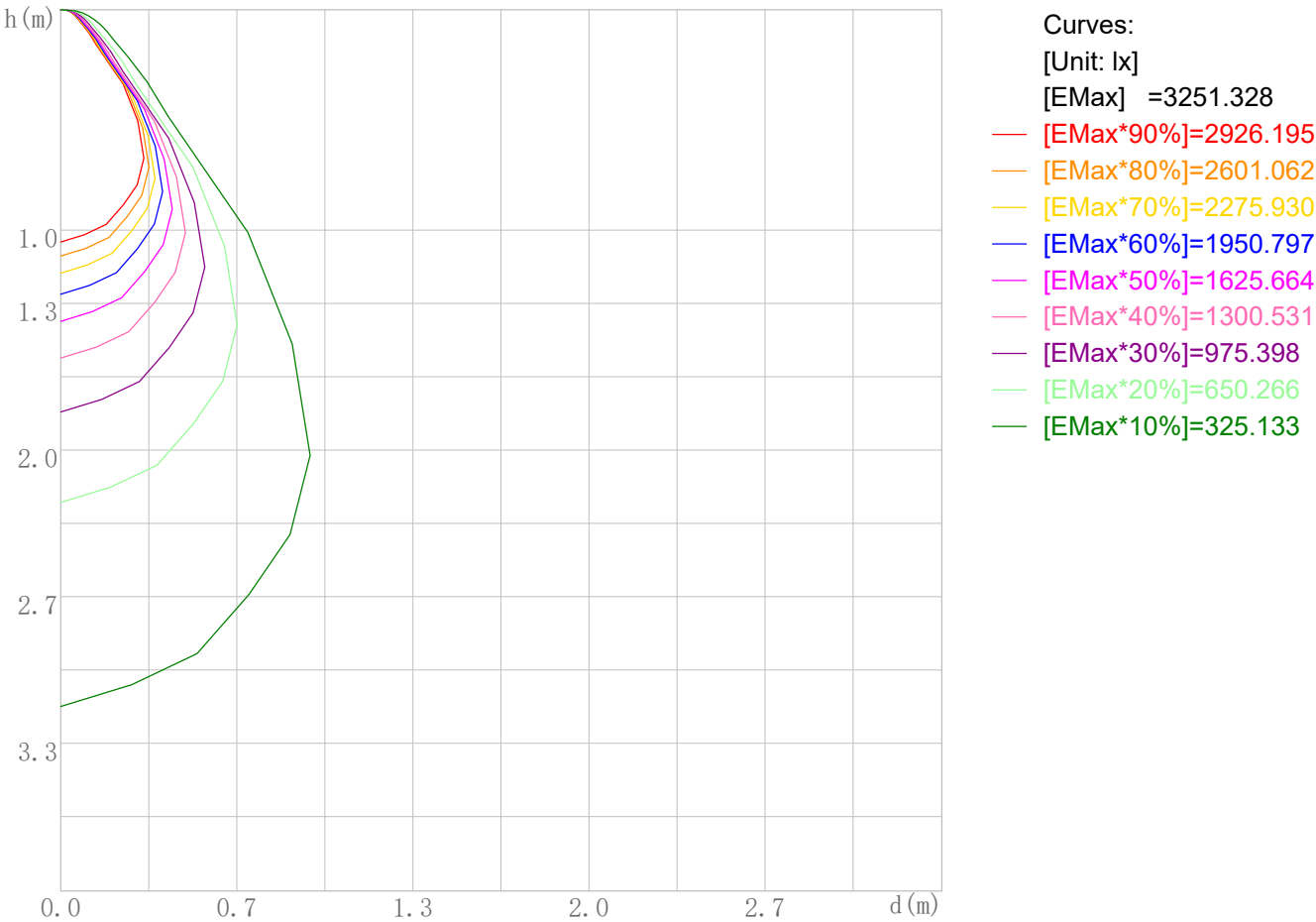
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name:DL51-35-XX-01 2700K RA90 60D 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

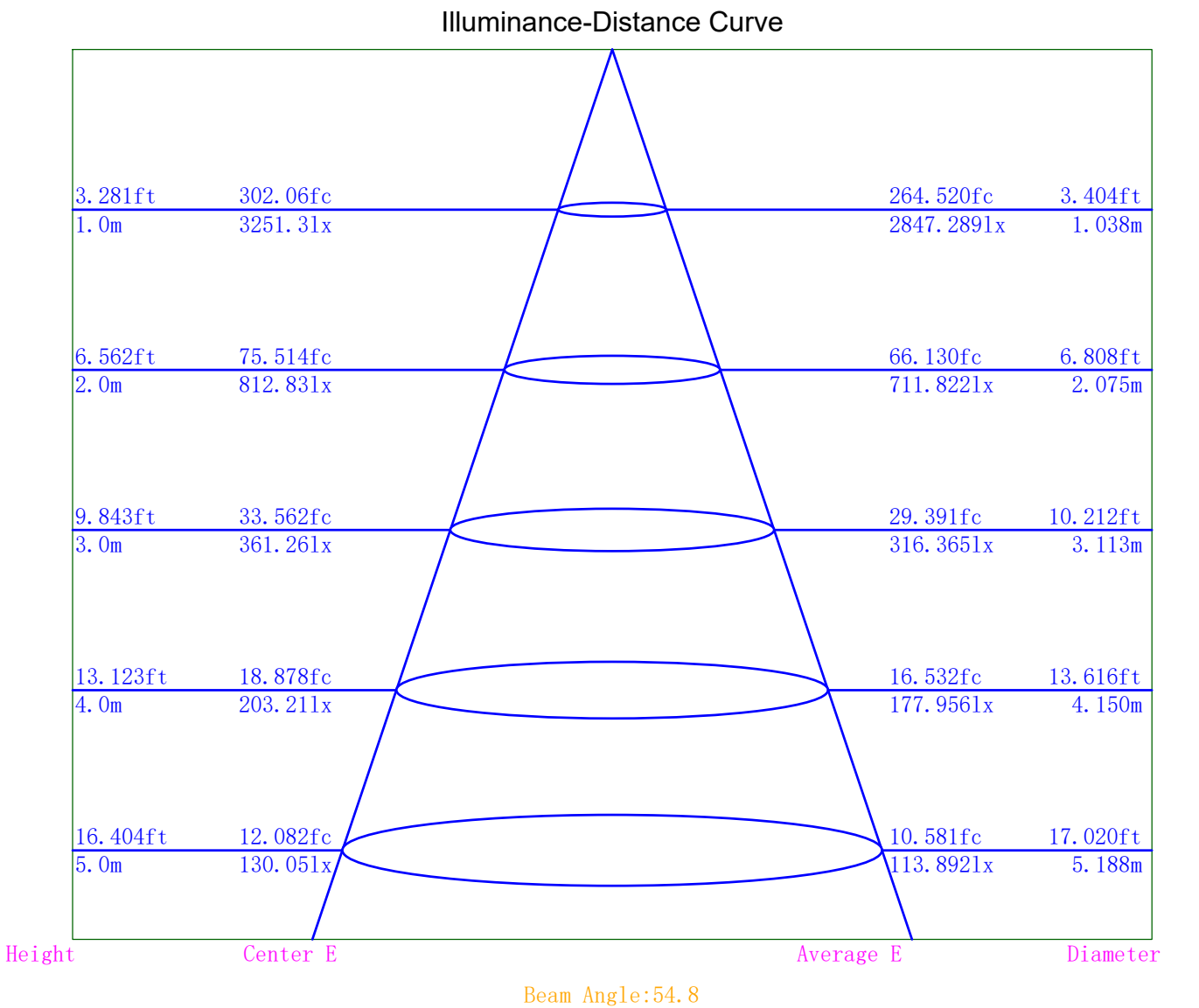


Space Plane Maximum Illuminance and @Angle:3251.33lx,0.0deg  
Plane Maximum Lighting Intensity and @Angle:3251.328cd,0deg



Illuminance-Distance Diagram

Lum. Name:DL51-35-XX-01 2700K RA90 60D 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 60D 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

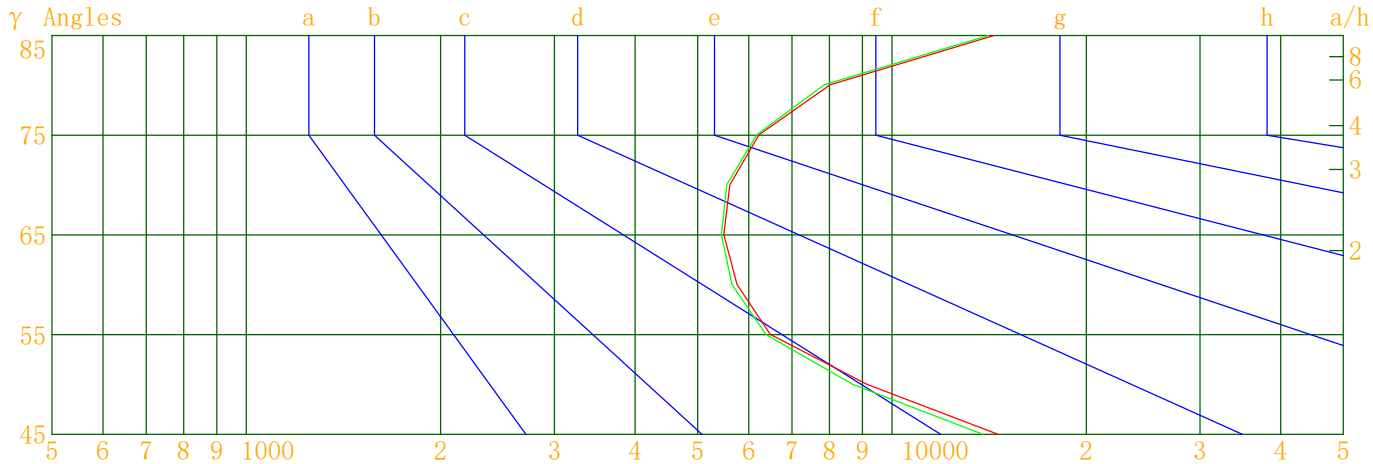
Glare Grade Table

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	14605	9155	6482	5756	5490	5608	6223	8019	14384
C90	13838	8695	6377	5651	5442	5550	6176	7852	14104

Luminance Limiting Curve



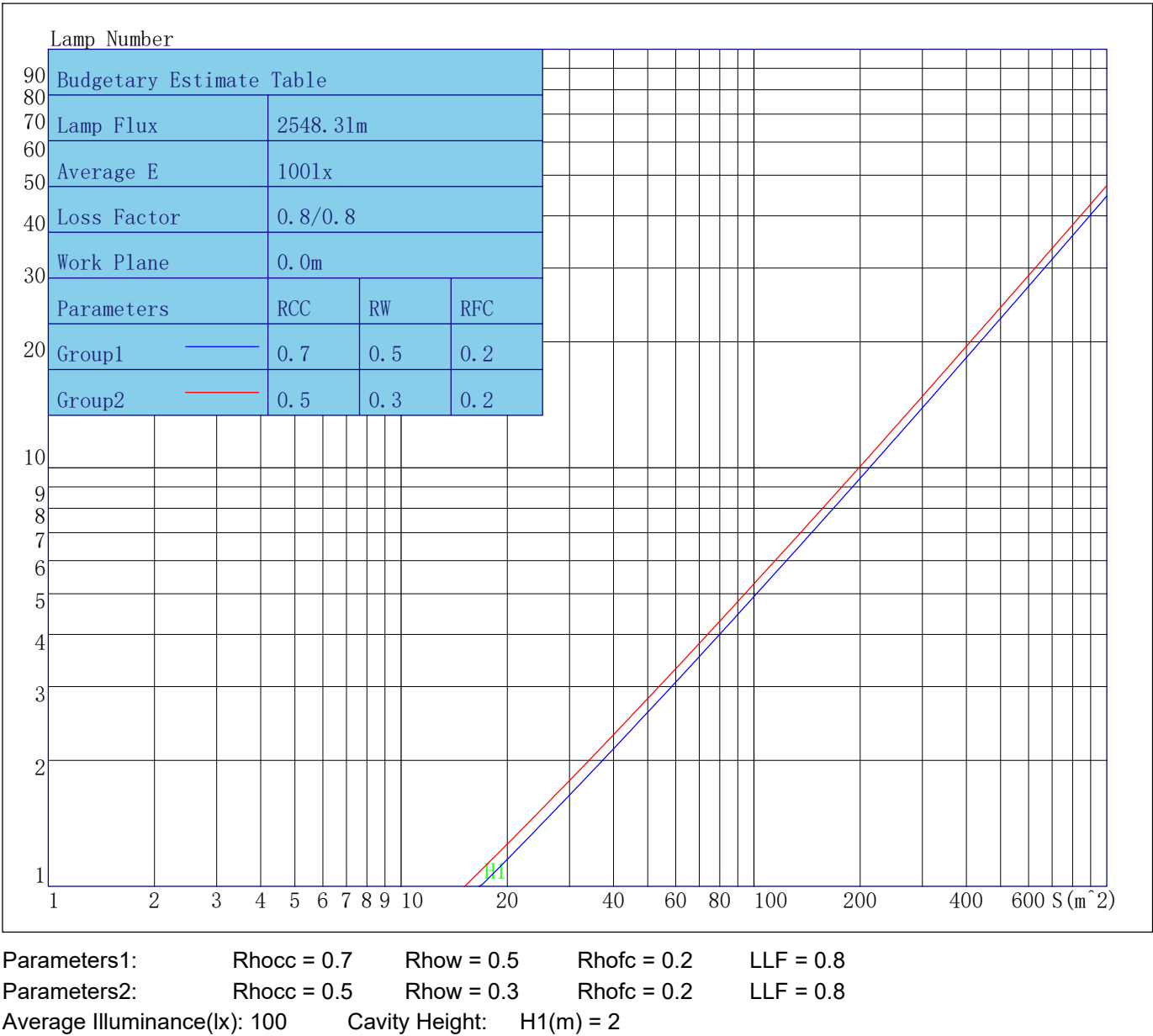
Luminous Size:Length(m)=-0.110Width(m)=-0.110Height(m)=0.000Area(m^2)=0.009503

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 60D 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 60D 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	109	109	109	104	104	104	99	99	99	97
1	113	110	107	105	110	107	105	103	103	101	99	98	97	96	94	93	92	90
2	107	102	98	94	104	100	96	93	96	93	91	93	90	88	90	88	86	84
3	102	95	90	86	99	94	89	85	90	87	84	88	84	82	85	82	80	79
4	97	89	83	79	95	88	83	79	85	81	77	83	79	76	81	78	75	73
5	92	84	78	73	90	82	77	73	80	76	72	78	74	71	76	73	70	69
6	87	79	73	68	86	78	72	68	76	71	67	74	70	67	73	69	66	65
7	83	74	68	64	82	73	68	64	72	67	63	70	66	63	69	65	62	61
8	79	70	64	60	78	69	64	60	68	63	59	67	62	59	65	62	59	57
9	76	66	60	56	74	66	60	56	64	59	56	63	59	56	62	58	55	54
10	72	63	57	53	71	62	57	53	61	56	53	60	56	53	59	55	52	51

Unified Glare Rating Table

Lum. Name:DL51-35-XX-01 2700K RA90 60D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catalog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23

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 Y=3H Y=4H Y=6H Y=8H Y=12H	18.1	19.0	18.5	19.4	19.8	18.0	19.0	18.5	19.3	19.7
	18.1	19.0	18.6	19.4	19.8	18.1	18.9	18.5	19.3	19.7
	18.2	19.0	18.7	19.4	19.9	18.1	18.9	18.6	19.3	19.8
	18.4	19.1	18.8	19.5	20.0	18.3	19.0	18.8	19.4	19.9
	18.5	19.2	19.0	19.6	20.1	18.4	19.1	18.9	19.5	20.0
	18.7	19.3	19.2	19.8	20.3	18.6	19.2	19.1	19.7	20.2
X=4H    Y=2H Y=3H Y=4H Y=6H Y=8H Y=12H	17.9	18.7	18.4	19.1	19.6	17.8	18.6	18.3	19.0	19.5
	18.0	18.7	18.5	19.1	19.6	18.0	18.6	18.4	19.1	19.5
	18.2	18.8	18.7	19.2	19.8	18.1	18.7	18.6	19.2	19.7
	18.5	19.0	19.0	19.5	20.0	18.4	18.9	19.0	19.4	20.0
	18.7	19.2	19.3	19.7	20.2	18.7	19.1	19.2	19.6	20.2
	19.1	19.5	19.6	20.0	20.6	19.0	19.4	19.6	19.9	20.5
X=8H    Y=4H Y=6H Y=8H Y=12H	18.2	18.6	18.7	19.1	19.7	18.1	18.6	18.6	19.1	19.6
	18.7	19.0	19.2	19.6	20.2	18.6	18.9	19.1	19.5	20.1
	19.0	19.4	19.6	19.9	20.5	19.0	19.3	19.5	19.9	20.4
	19.6	19.9	20.2	20.4	21.1	19.5	19.8	20.1	20.4	21.0
X=12H   Y=4H Y=6H Y=8H	18.2	18.6	18.7	19.1	19.7	18.1	18.5	18.6	19.0	19.6
	18.7	19.0	19.3	19.6	20.2	18.6	19.0	19.2	19.5	20.1
	19.2	19.4	19.7	20.0	20.6	19.1	19.4	19.7	19.9	20.6
Variations with the objverver position at spacings										
S=1.0H	0.1/-0.1					0.1/-0.1				
S=1.5H	0.2/-0.2					0.2/-0.2				
S=2.0H	0.1/-0.2					0.1/-0.2				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	1.5					1.5				

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	3251.33	3251.33	3251.33	3251.33
γ 5.0	3086.80	3026.11	3125.39	3113.78
γ 10.0	2907.79	2873.91	2936.07	2949.55
γ 15.0	2543.52	2533.16	2686.09	2717.33
γ 20.0	2224.47	2210.49	2344.67	2355.84
γ 25.0	1787.91	1786.91	2022.25	1991.92
γ 30.0	1151.27	1135.91	1465.61	1396.39
γ 35.0	604.86	594.72	782.49	755.54
γ 40.0	170.74	161.67	240.40	253.15
γ 45.0	98.14	92.99	90.92	92.39
γ 50.0	55.92	53.12	53.15	55.26
γ 55.0	35.33	34.76	28.62	28.44
γ 60.0	27.35	26.85	23.36	23.68
γ 65.0	22.05	21.85	21.39	20.90
γ 70.0	18.23	18.04	19.10	19.02
γ 75.0	15.31	15.19	16.94	16.73
γ 80.0	13.23	12.96	14.40	14.47
γ 85.0	11.91	11.68	12.72	12.68
γ 90.0	10.46	10.78	11.41	11.68
γ 95.0	9.68	9.55	10.38	10.20
γ 100.0	9.09	8.73	9.66	9.43
γ 105.0	8.70	8.29	9.07	8.91
γ 110.0	8.67	8.15	8.85	8.54
γ 115.0	8.50	8.50	9.05	8.75
γ 120.0	9.29	9.10	9.53	9.61
γ 125.0	10.14	10.25	10.52	10.20
γ 130.0	11.53	11.65	11.82	11.28
γ 135.0	13.24	12.80	13.15	12.68
γ 140.0	14.36	14.59	14.71	14.01
γ 145.0	16.24	16.51	16.18	15.58
γ 150.0	17.59	17.73	17.51	17.07
γ 155.0	18.97	18.92	19.35	18.41
γ 160.0	19.64	19.89	20.82	19.24
γ 165.0	20.95	21.23	20.95	20.54
γ 170.0	22.01	22.06	22.01	21.41
γ 175.0	22.58	22.45	23.25	22.38
γ 180.0	22.96	22.96	22.96	22.96