

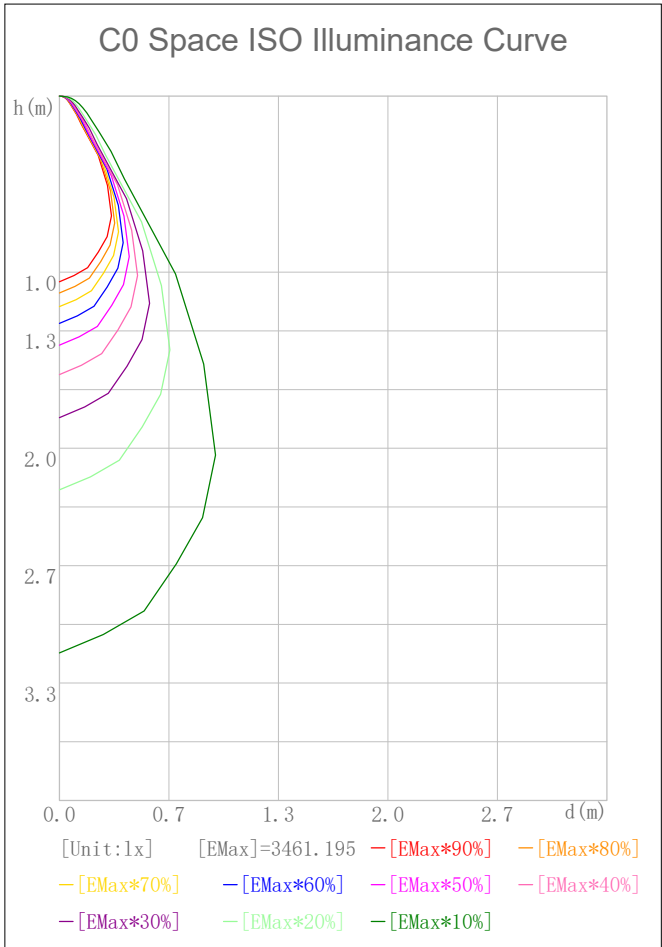
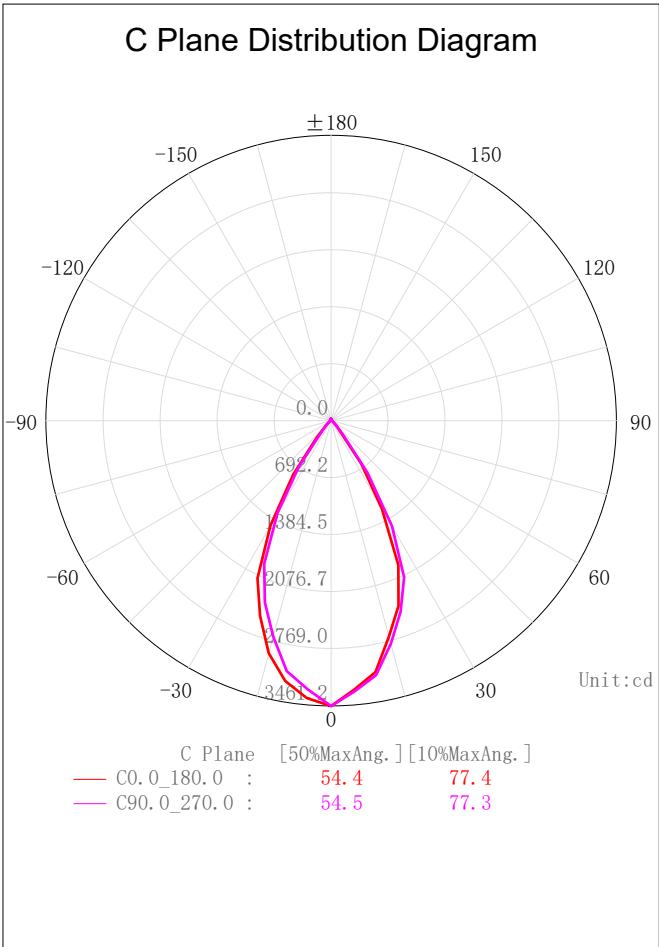
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-35-XX-01 3000K RA90 60D 电镀亮黑		Lum. Catalog:	Test ID: 01
Lamp Name:		Lamp Catalog: LED	Test Date: 2022/08/20
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

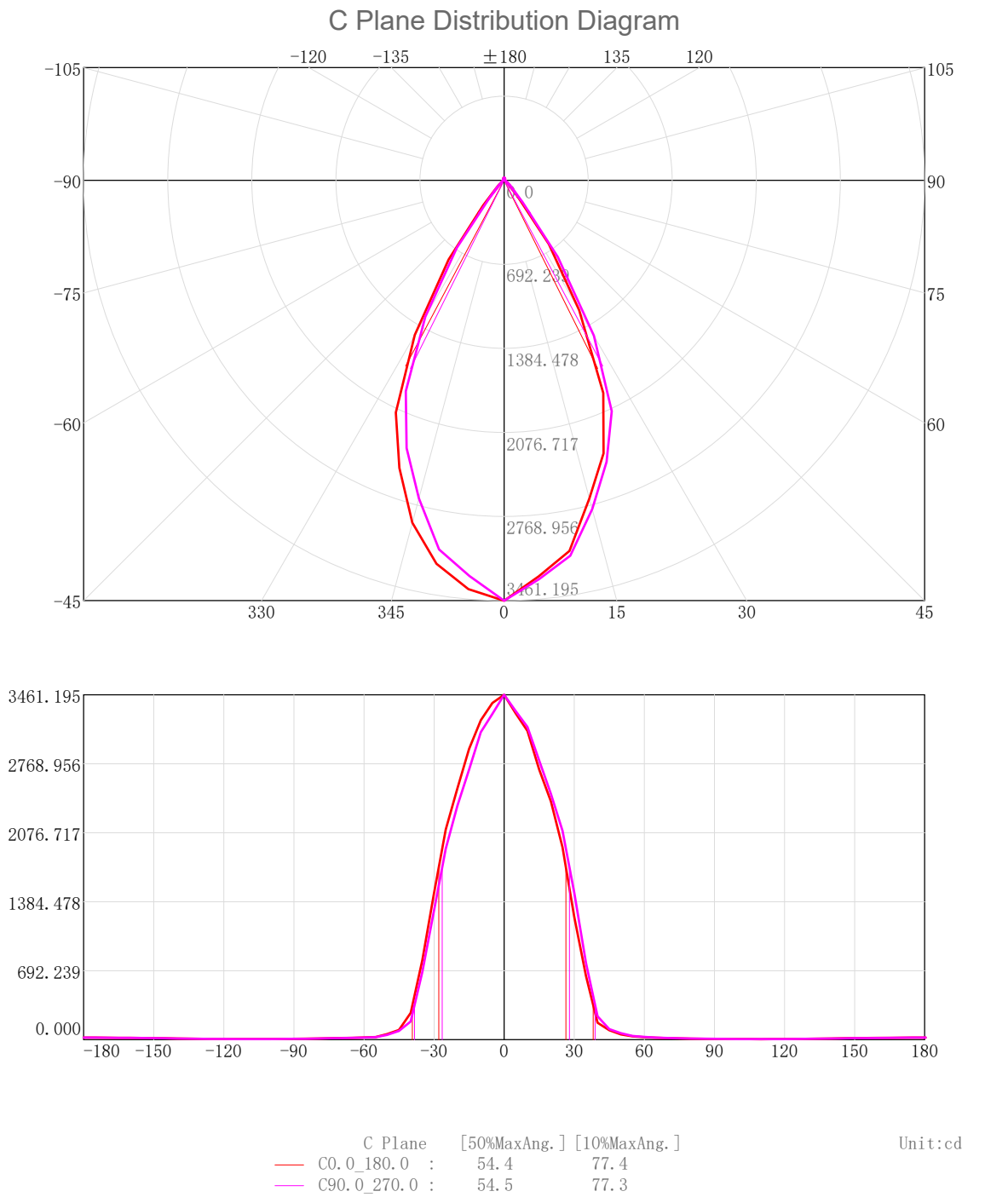
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 2681.870	Luminary Flux(lm): 2681.869	Field Angle(10%Imax): 77.4(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 2618.590lm 97.64%	
Rated Voltage(V):	Luminary EER(lm/W): 77.893	Up Lumens&Percent: 63.278lm 2.36%	
Tested Power(W): 34.430	Max. Candela(cd): 3461.195	S/MH: C0_a180=0.845 C90_270=0.835	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf):239.6, 0.149, 0.963	Beam Angle(50%Imax): 54.4(°)	ErP Φ use(90°): 2545.293lm	
Lamp Size (W*L*H):0.110m*~0.110m*0.000m	Left=-28.0°, Right=26.4°	IRF(%): 285.790	



2D Plane Light Intensity Distribution Curve

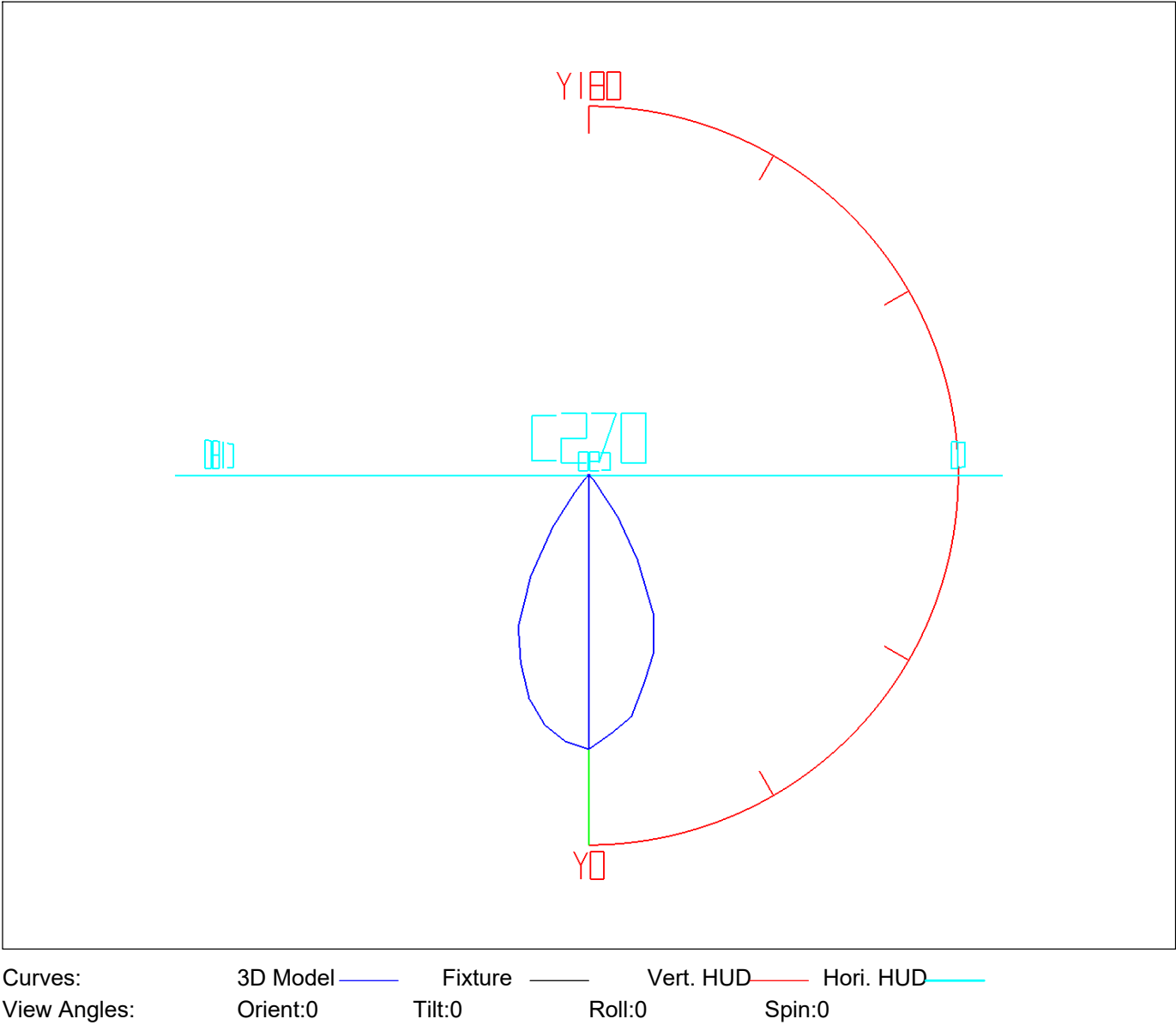
Lum. Name:DL51-35-XX-01 3000K RA90 60D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/20



3D Light Intensity Distribution Modal

Lum. Name:DL51-35-XX-01 3000K 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:2022/08/20

3D Light Intensity Distribution Modal

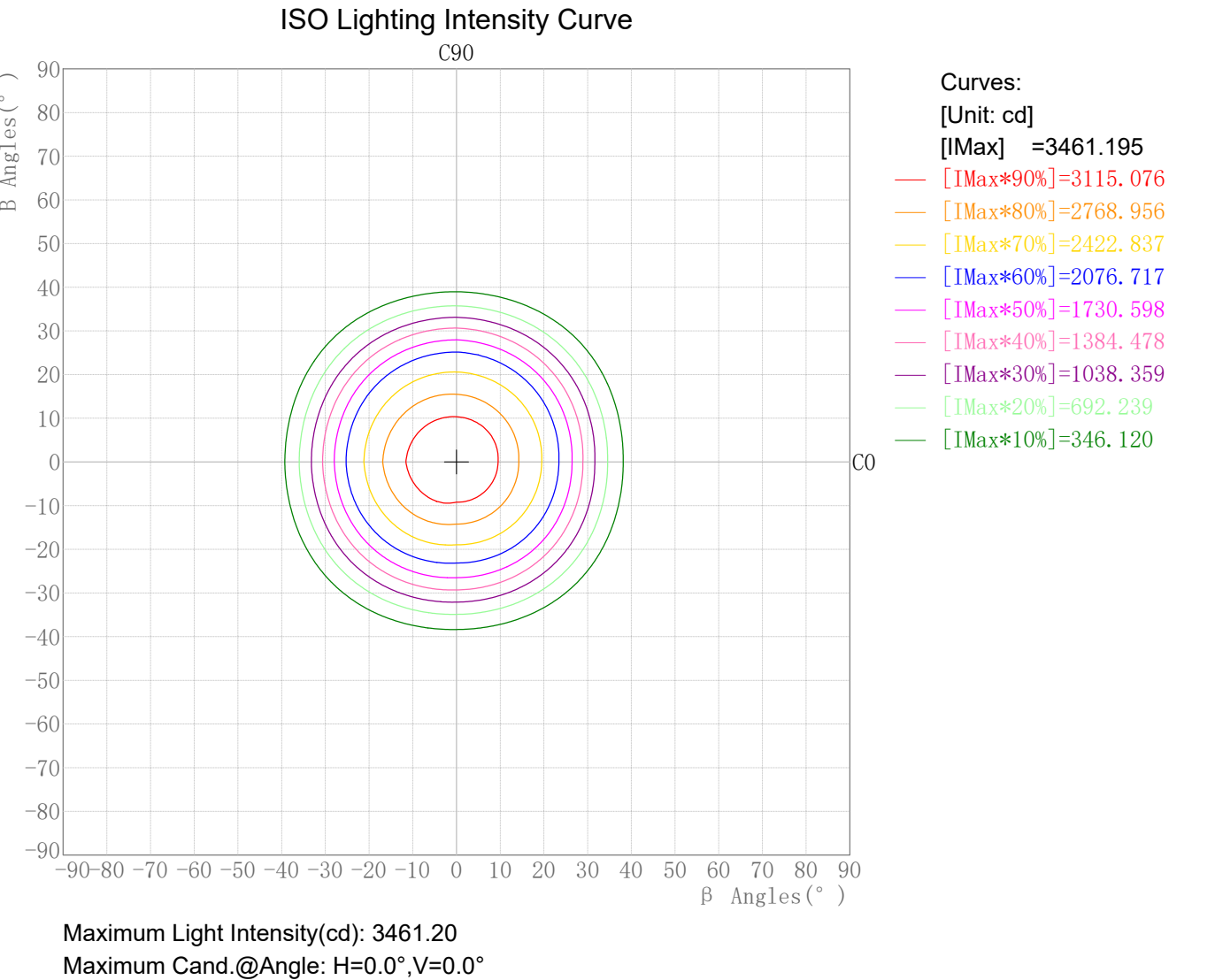


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	80.88	80.88	3.02	3.02
5.0-10.0	230.25	311.13	8.59	11.60
10.0-15.0	351.03	662.15	13.09	24.69
15.0-20.0	429.93	1092.09	16.03	40.72
20.0-25.0	466.18	1558.27	17.38	58.10
25.0-30.0	428.15	1986.42	15.96	74.07
30.0-35.0	307.99	2294.41	11.48	85.55
35.0-40.0	156.30	2450.71	5.83	91.38
40.0-45.0	57.81	2508.51	2.16	93.54
45.0-50.0	31.04	2539.55	1.16	94.69
50.0-55.0	19.07	2558.63	0.71	95.40
55.0-60.0	12.98	2571.60	0.48	95.89
60.0-65.0	10.91	2582.52	0.41	96.30
65.0-70.0	9.46	2591.97	0.35	96.65
70.0-75.0	8.21	2600.18	0.31	96.95
75.0-80.0	7.04	2607.22	0.26	97.22
80.0-85.0	6.06	2613.28	0.23	97.44
85.0-90.0	5.31	2618.59	0.20	97.64
90.0-95.0	4.66	2623.25	0.17	97.81
95.0-100.0	4.09	2627.34	0.15	97.97
100.0-105.0	3.69	2631.03	0.14	98.10
105.0-110.0	3.44	2634.47	0.13	98.23
110.0-115.0	3.35	2637.82	0.12	98.36
115.0-120.0	3.41	2641.23	0.13	98.48
120.0-125.0	3.62	2644.85	0.14	98.62
125.0-130.0	3.89	2648.74	0.14	98.76
130.0-135.0	4.15	2652.89	0.15	98.92
135.0-140.0	4.41	2657.30	0.16	99.08
140.0-145.0	4.54	2661.84	0.17	99.25
145.0-150.0	4.50	2666.34	0.17	99.42
150.0-155.0	4.22	2670.56	0.16	99.58
155.0-160.0	3.76	2674.32	0.14	99.72
160.0-165.0	3.13	2677.45	0.12	99.84
165.0-170.0	2.39	2679.84	0.09	99.92
170.0-175.0	1.51	2681.35	0.06	99.98
175.0-180.0	0.52	2681.87	0.02	100.00

Rectangle ISO Lighting Intensity Diagram

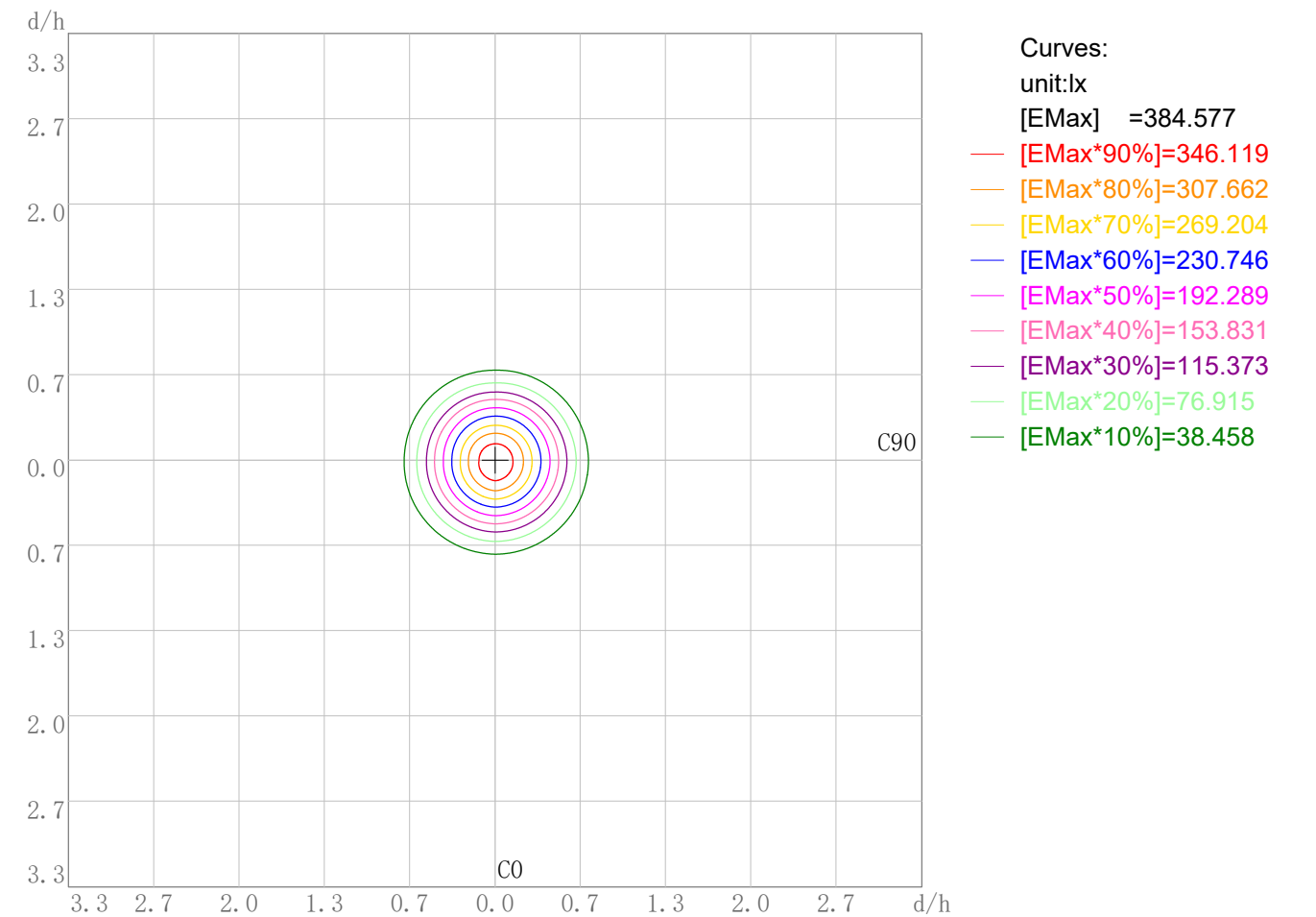
Lum. Name: DL51-35-XX-01 3000K RA90 60D 电镀亮黑	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/20



Plane ISO-Illuminance Diagram

Lum. Name: DL51-35-XX-01 3000K 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: 2022/08/20

Plane ISO-Illuminance Curve

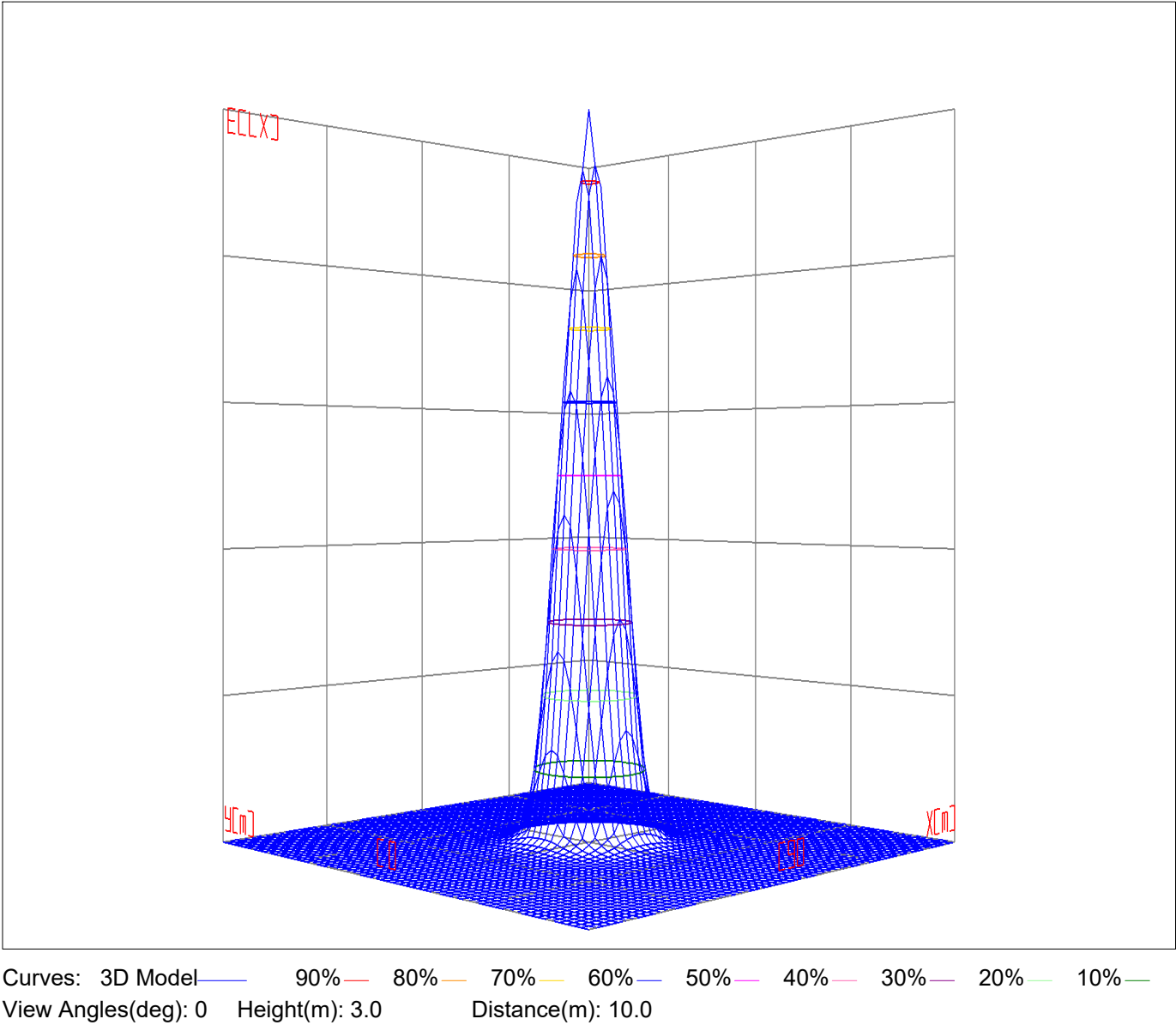


Working Plane Luminaire Mounting Height(m): 3.00  
Working Plane Maximum Illuminance(lx): 384.58  
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 3000K 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: 2022/08/20

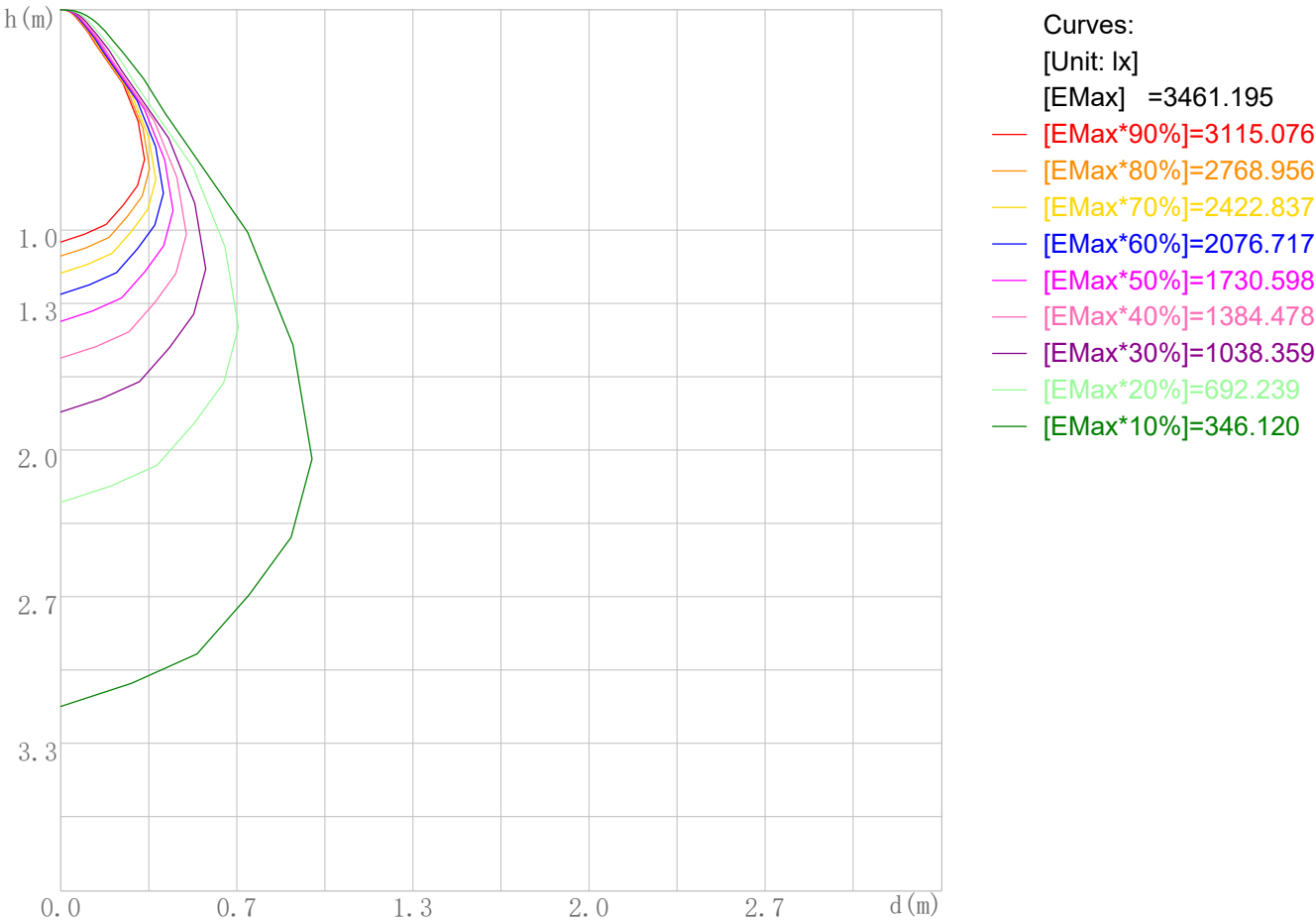
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 3000K 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: 2022/08/20

Space ISO Illuminance Curve

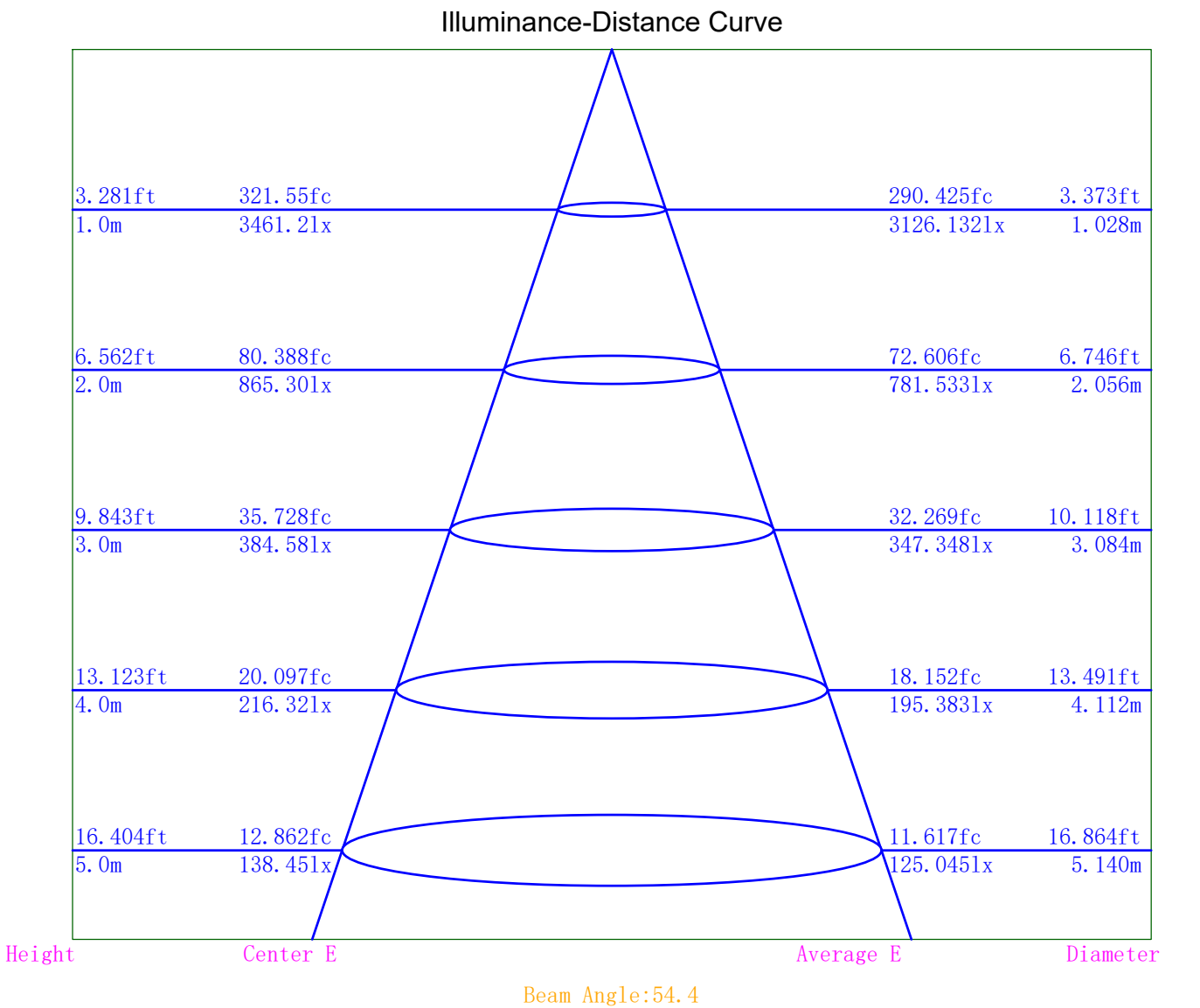


Space Plane Maximum Illuminance and @Angle:3461.20lx,0.0deg  
Plane Maximum Lighting Intensity and @Angle:3461.195cd,0deg



Illuminance-Distance Diagram

Lum. Name: DL51-35-XX-01 3000K 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: 2022/08/20



Indoor Luminance Limiting Curves

Lum. Name:DL51-35-XX-01 3000K 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:2022/08/20

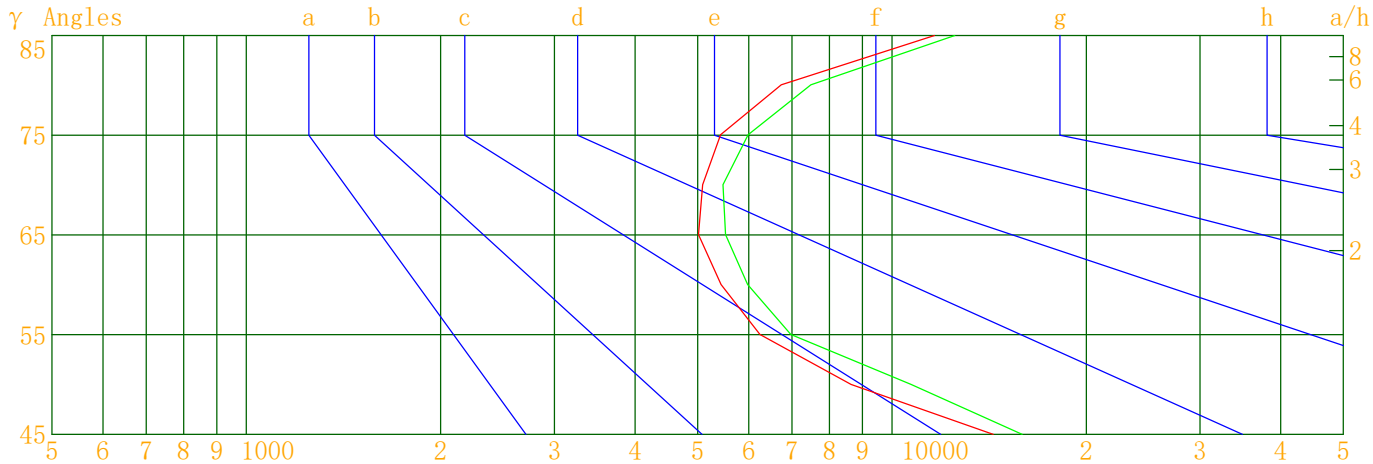
Glare Grade Table

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	14344	8640	6244	5437	5017	5091	5426	6739	11638
C90	15907	10708	6972	5976	5523	5472	5986	7486	12510

Luminance Limiting Curve



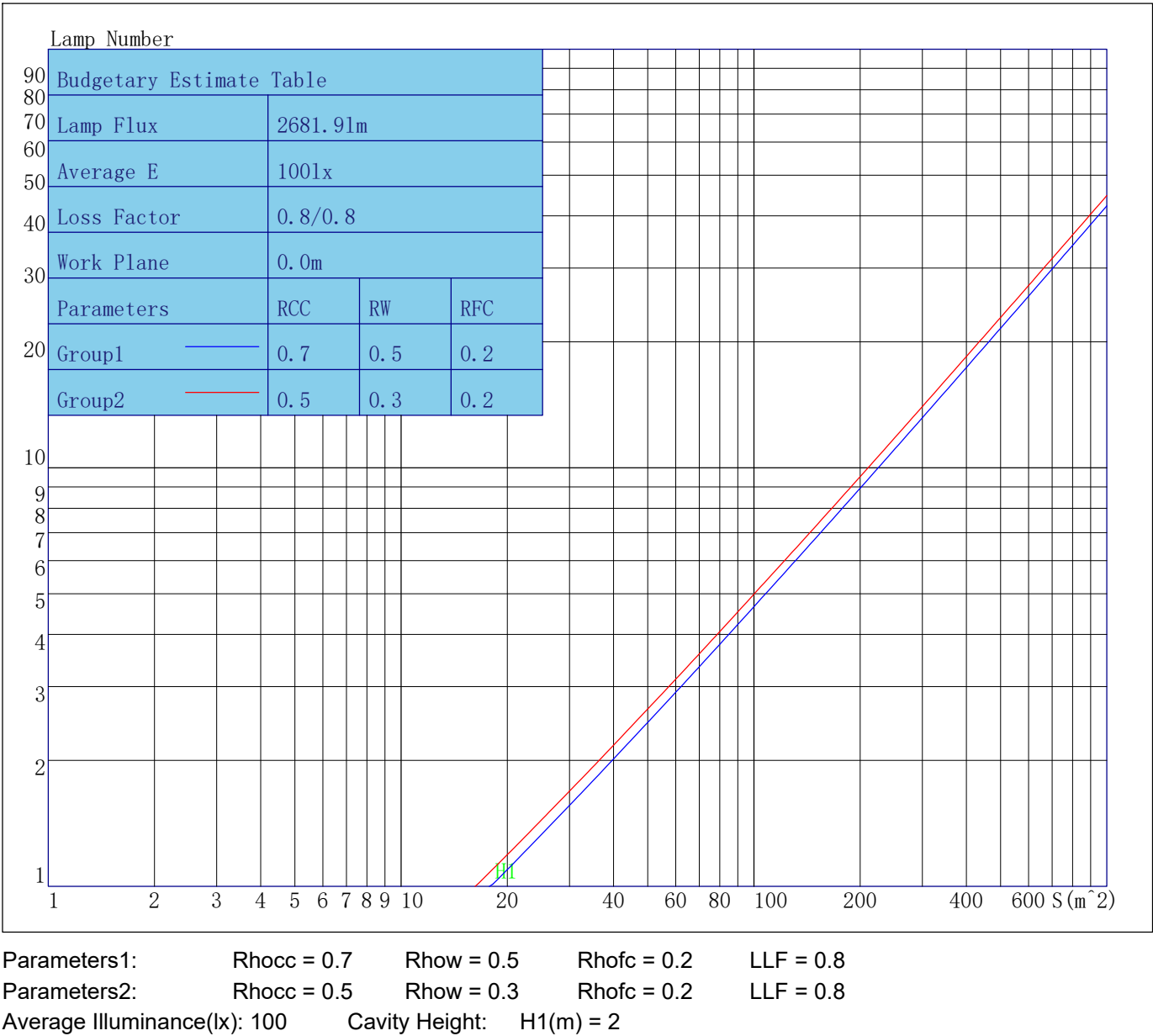
Luminous Size:Length(m)=-0.110Width(m)=-0.110Height(m)=0.000Area(m^2)=0.009503

Luminous Type:Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name:DL51-35-XX-01 3000K 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: 2022/08/20



Indoor Coefficient of Utilization Table

Lum. Name:DL51-35-XX-01 3000K 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:2022/08/20

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	110	107	105	110	108	105	103	103	101	100	99	98	96	95	94	93	91
2	107	102	98	95	105	100	97	94	97	94	91	93	91	89	90	88	87	85
3	102	96	91	87	100	94	89	86	91	87	84	88	85	83	86	83	81	79
4	97	89	84	80	95	88	83	79	86	81	78	83	80	77	81	78	76	74
5	92	84	78	74	90	83	78	74	81	76	73	79	75	72	77	74	71	69
6	88	79	73	69	86	78	73	69	76	72	68	75	71	67	73	70	67	65
7	84	75	69	64	82	74	68	64	72	67	64	71	66	63	70	66	63	61
8	80	70	65	61	78	70	64	60	68	63	60	67	63	60	66	62	59	58
9	76	67	61	57	75	66	61	57	65	60	57	64	59	56	63	59	56	55
10	73	63	58	54	72	63	57	54	62	57	53	61	56	53	60	56	53	52

Unified Glare Rating Table

Lum. Name:DL51-35-XX-01 3000K 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:2022/08/20

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	18.3	19.3	18.8	19.6	20.0	19.4	20.3	19.8	20.6	21.0
	18.3	19.1	18.7	19.5	19.9	19.3	20.1	19.7	20.5	20.9
	18.3	19.1	18.8	19.5	19.9	19.3	20.1	19.8	20.5	20.9
	18.4	19.1	18.9	19.5	20.0	19.4	20.0	19.8	20.5	20.9
	18.5	19.1	19.0	19.5	20.0	19.4	20.1	19.9	20.5	21.0
	18.6	19.2	19.1	19.6	20.1	19.5	20.1	20.0	20.6	21.0
X=4H    Y=2H	18.1	18.9	18.6	19.3	19.7	19.1	19.9	19.6	20.3	20.7
	18.2	18.8	18.6	19.2	19.7	19.1	19.7	19.6	20.2	20.7
	18.3	18.8	18.7	19.3	19.8	19.2	19.7	19.7	20.2	20.7
	18.4	18.9	19.0	19.4	19.9	19.4	19.8	19.9	20.3	20.8
	18.6	19.0	19.1	19.5	20.0	19.5	19.9	20.0	20.4	20.9
	18.8	19.2	19.3	19.7	20.2	19.7	20.0	20.2	20.6	21.1
X=8H    Y=4H	18.2	18.6	18.7	19.1	19.7	19.1	19.5	19.6	20.0	20.6
	18.5	18.8	19.1	19.4	19.9	19.4	19.7	19.9	20.3	20.8
	18.8	19.0	19.3	19.6	20.2	19.6	19.9	20.2	20.5	21.0
	19.2	19.4	19.7	19.9	20.6	20.0	20.2	20.5	20.7	21.4
X=12H    Y=4H	18.2	18.5	18.7	19.1	19.6	19.1	19.4	19.6	20.0	20.5
	18.5	18.8	19.1	19.3	19.9	19.4	19.7	20.0	20.2	20.8
	18.9	19.1	19.4	19.6	20.3	19.7	19.9	20.2	20.5	21.1
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	0.2/-0.3					0.2/-0.2				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	1.1					1.0				

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	3461.20	3461.20	3461.20	3461.20
γ 5.0	3273.03	3296.12	3378.52	3270.00
γ 10.0	3098.13	3137.88	3205.28	3086.24
γ 15.0	2711.48	2802.01	2918.38	2710.81
γ 20.0	2391.39	2466.74	2519.65	2346.53
γ 25.0	1932.14	2096.82	2109.86	1916.25
γ 30.0	1233.84	1476.95	1470.15	1297.00
γ 35.0	641.94	771.50	796.06	678.52
γ 40.0	170.84	234.98	269.75	183.61
γ 45.0	96.39	106.89	98.12	88.25
γ 50.0	52.78	65.41	57.70	48.94
γ 55.0	34.04	38.00	27.85	26.17
γ 60.0	25.84	28.40	22.64	21.60
γ 65.0	20.15	22.18	19.59	19.13
γ 70.0	16.55	17.79	17.29	16.74
γ 75.0	13.35	14.72	14.82	14.37
γ 80.0	11.12	12.35	12.43	12.11
γ 85.0	9.64	10.36	11.02	10.16
γ 90.0	8.59	9.35	9.51	8.91
γ 95.0	7.41	8.16	8.20	7.93
γ 100.0	6.79	7.24	7.29	7.23
γ 105.0	6.32	6.64	6.97	6.67
γ 110.0	6.09	6.71	6.46	6.78
γ 115.0	6.25	6.95	6.72	6.97
γ 120.0	6.90	7.10	7.34	7.87
γ 125.0	8.15	8.17	8.46	8.69
γ 130.0	9.52	9.05	9.61	9.82
γ 135.0	11.20	10.55	11.14	11.35
γ 140.0	12.94	12.27	12.94	12.84
γ 145.0	14.43	14.28	14.54	14.59
γ 150.0	16.10	15.75	16.31	16.12
γ 155.0	17.44	16.78	17.72	17.30
γ 160.0	18.69	17.91	18.80	18.65
γ 165.0	19.70	19.32	19.50	19.37
γ 170.0	21.15	20.50	20.86	20.67
γ 175.0	21.63	21.26	21.56	21.41
γ 180.0	21.98	21.98	21.98	21.98