

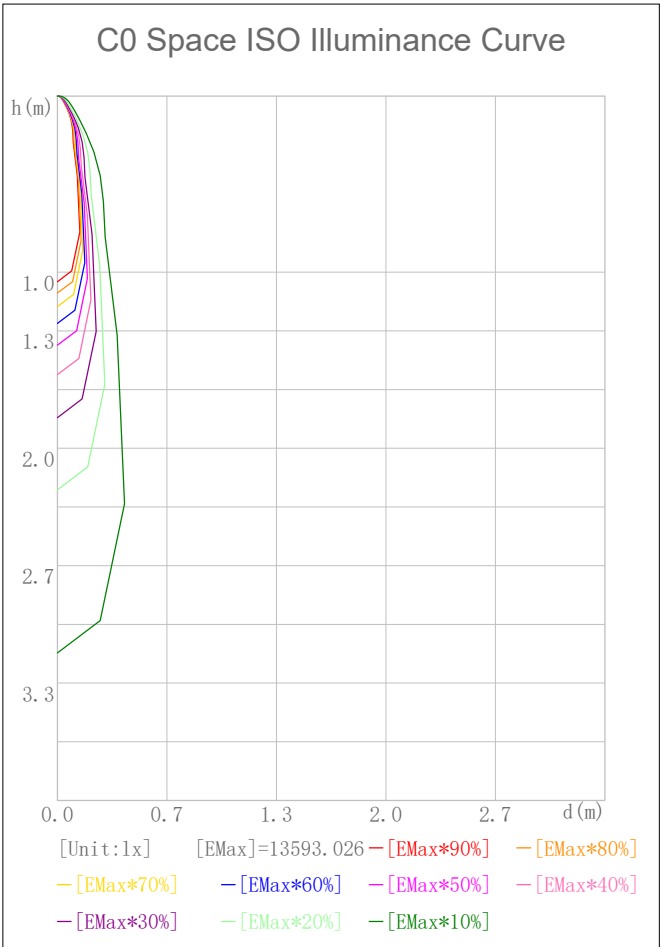
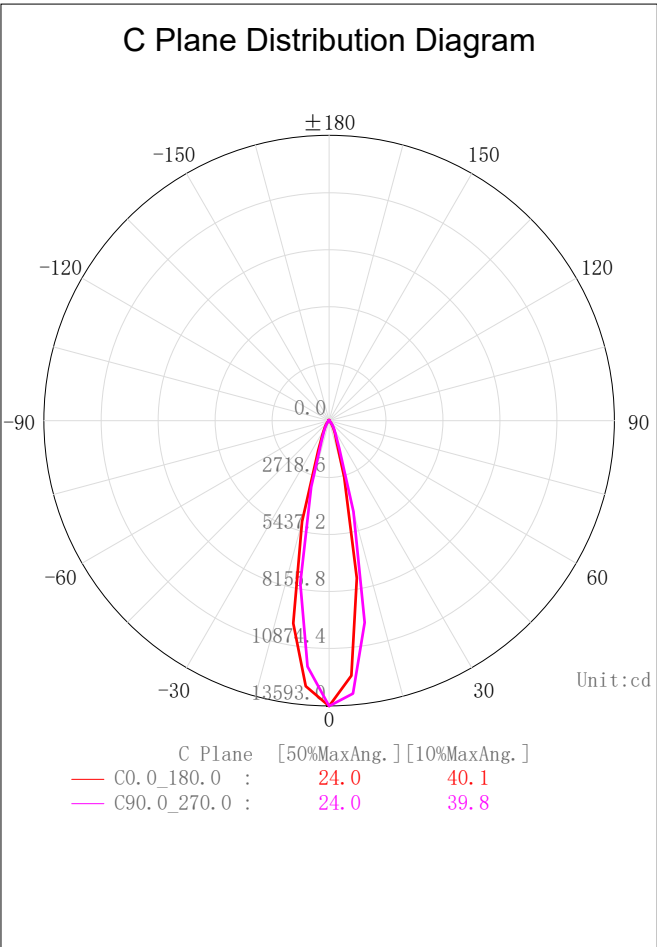
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-35-XX-01 3000K RA90 24D 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

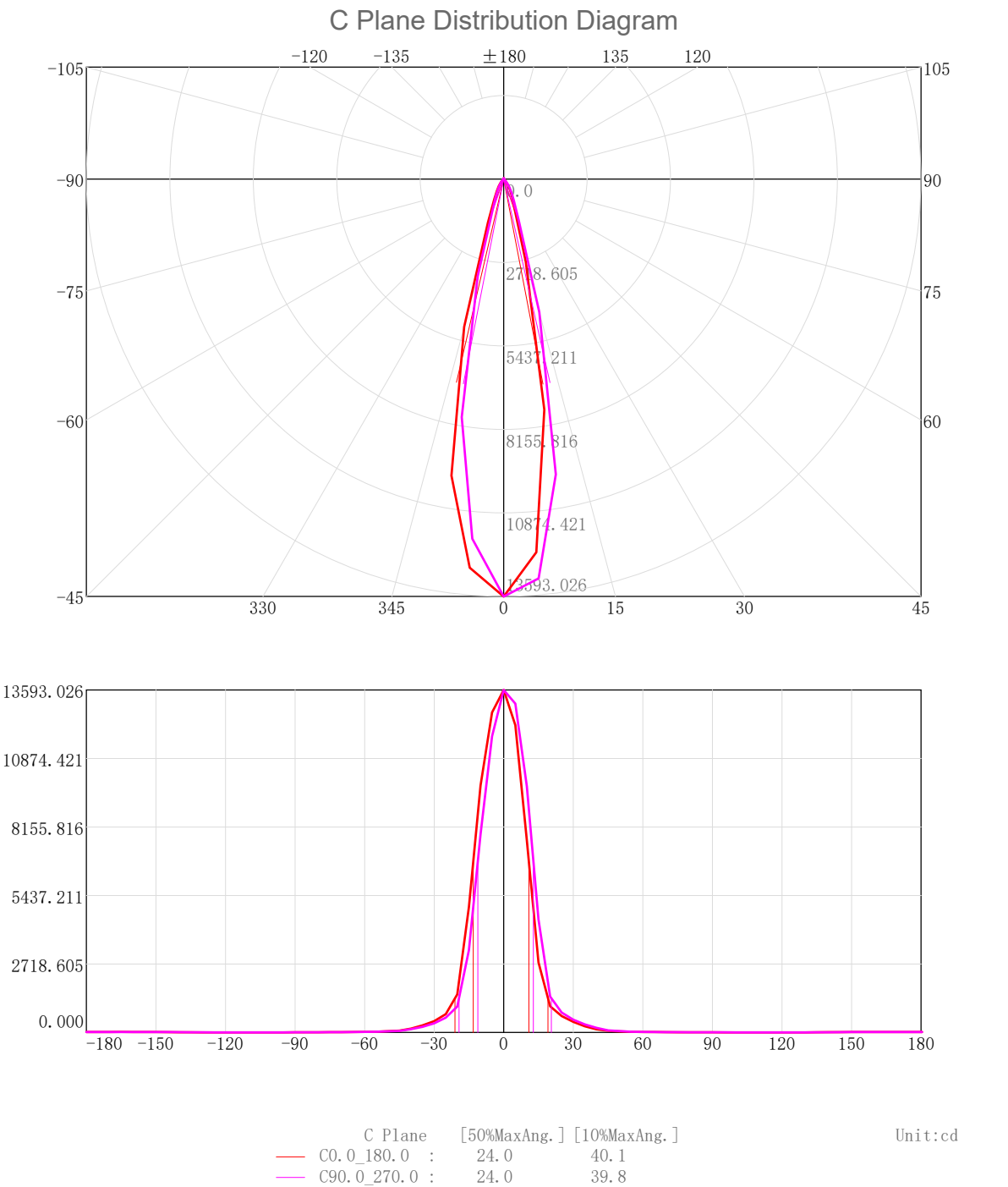
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 2976.590	Luminary Flux(lm): 2976.593	Field Angle(10%Imax): 40.1(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 2910.768lm 97.79%	
Rated Voltage(V):	Luminary EER(lm/W): 87.624	Up Lumens&Percent: 65.825lm 2.21%	
Tested Power(W): 33.970	Max. Candela(cd): 13593.026	S/MH: C0_a180=0.410 C90_270=0.410	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf):239.7, 0.147, 0.961	Beam Angle(50%Imax): 24.0(°)	ErP Φ use(90°): 2915.873lm	
Lamp Size (W*L*H):0.110m*0.110m*0.000m	Left=-13.1°, Right=10.9°	IRF(%): 1068.004	



2D Plane Light Intensity Distribution Curve

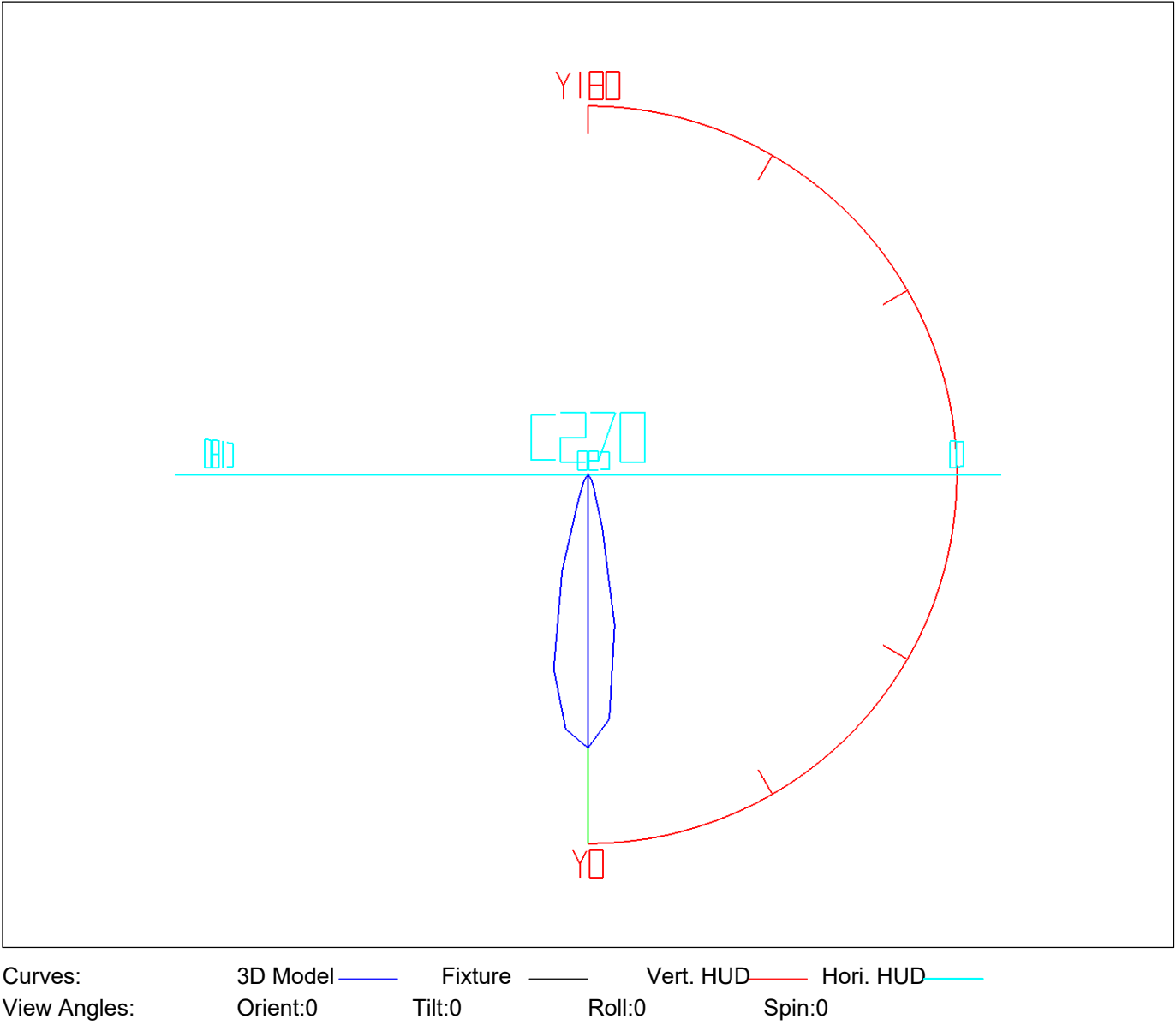
Lum. Name:DL51-35-XX-01 3000K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/20



3D Light Intensity Distribution Modal

Lum. Name:DL51-35-XX-01 3000K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID:01
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Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/20

3D Light Intensity Distribution Modal

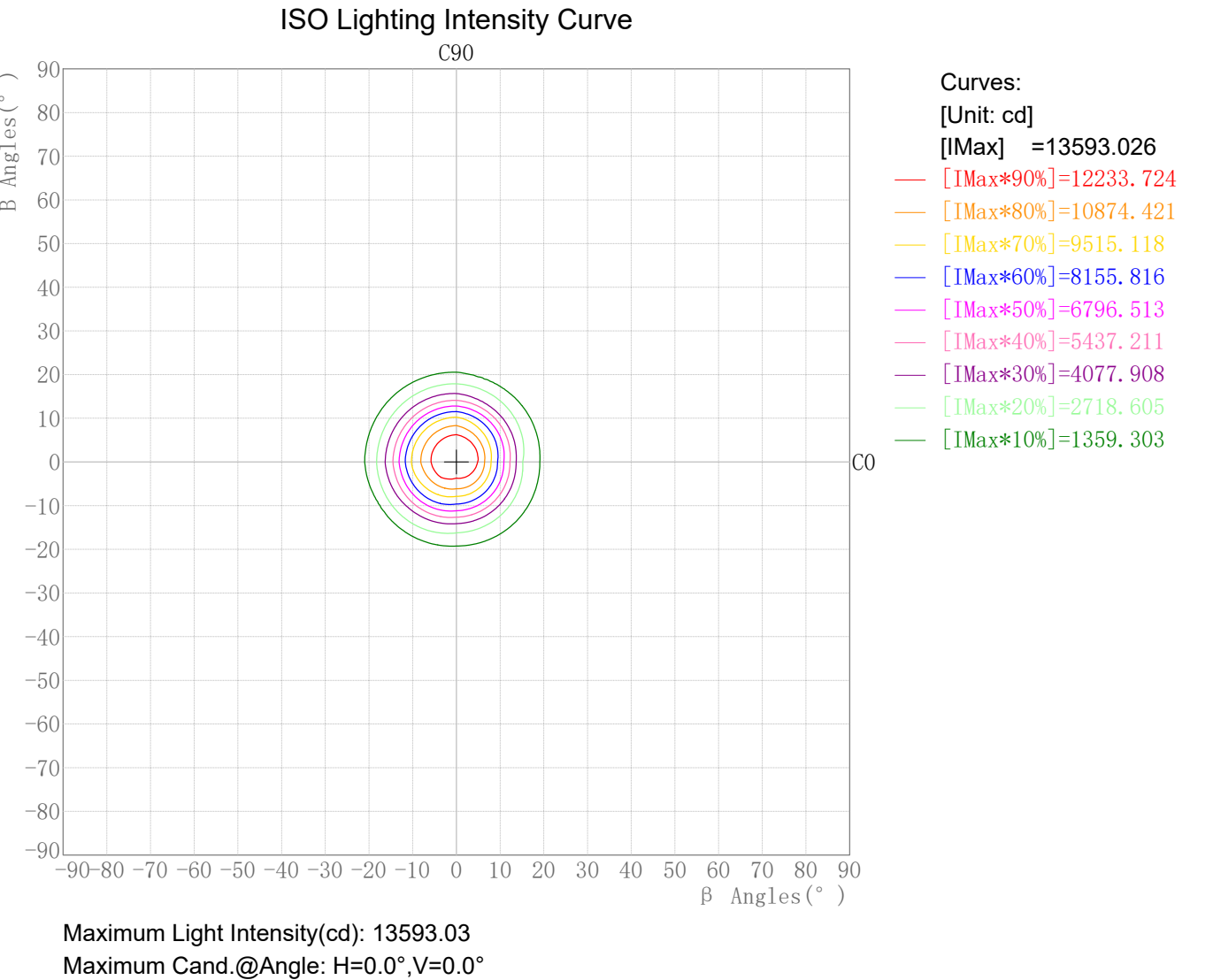


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	311.06	311.06	10.45	10.45
5.0-10.0	758.18	1069.24	25.47	35.92
10.0-15.0	750.24	1819.48	25.20	61.13
15.0-20.0	423.16	2242.64	14.22	75.34
20.0-25.0	204.25	2446.88	6.86	82.20
25.0-30.0	143.25	2590.14	4.81	87.02
30.0-35.0	104.46	2694.59	3.51	90.53
35.0-40.0	70.38	2764.98	2.36	92.89
40.0-45.0	41.81	2806.79	1.40	94.30
45.0-50.0	25.25	2832.04	0.85	95.14
50.0-55.0	18.08	2850.12	0.61	95.75
55.0-60.0	13.34	2863.46	0.45	96.20
60.0-65.0	11.11	2874.58	0.37	96.57
65.0-70.0	9.55	2884.13	0.32	96.89
70.0-75.0	8.18	2892.31	0.27	97.17
75.0-80.0	7.01	2899.32	0.24	97.40
80.0-85.0	6.11	2905.44	0.21	97.61
85.0-90.0	5.33	2910.77	0.18	97.79
90.0-95.0	4.62	2915.39	0.16	97.94
95.0-100.0	4.05	2919.43	0.14	98.08
100.0-105.0	3.68	2923.12	0.12	98.20
105.0-110.0	3.48	2926.60	0.12	98.32
110.0-115.0	3.29	2929.89	0.11	98.43
115.0-120.0	3.05	2932.95	0.10	98.53
120.0-125.0	2.94	2935.88	0.10	98.63
125.0-130.0	3.10	2938.99	0.10	98.74
130.0-135.0	3.61	2942.59	0.12	98.86
135.0-140.0	4.36	2946.95	0.15	99.00
140.0-145.0	5.10	2952.05	0.17	99.18
145.0-150.0	5.52	2957.57	0.19	99.36
150.0-155.0	5.39	2962.96	0.18	99.54
155.0-160.0	4.79	2967.75	0.16	99.70
160.0-165.0	3.89	2971.64	0.13	99.83
165.0-170.0	2.78	2974.42	0.09	99.93
170.0-175.0	1.64	2976.06	0.05	99.98
175.0-180.0	0.54	2976.59	0.02	100.00

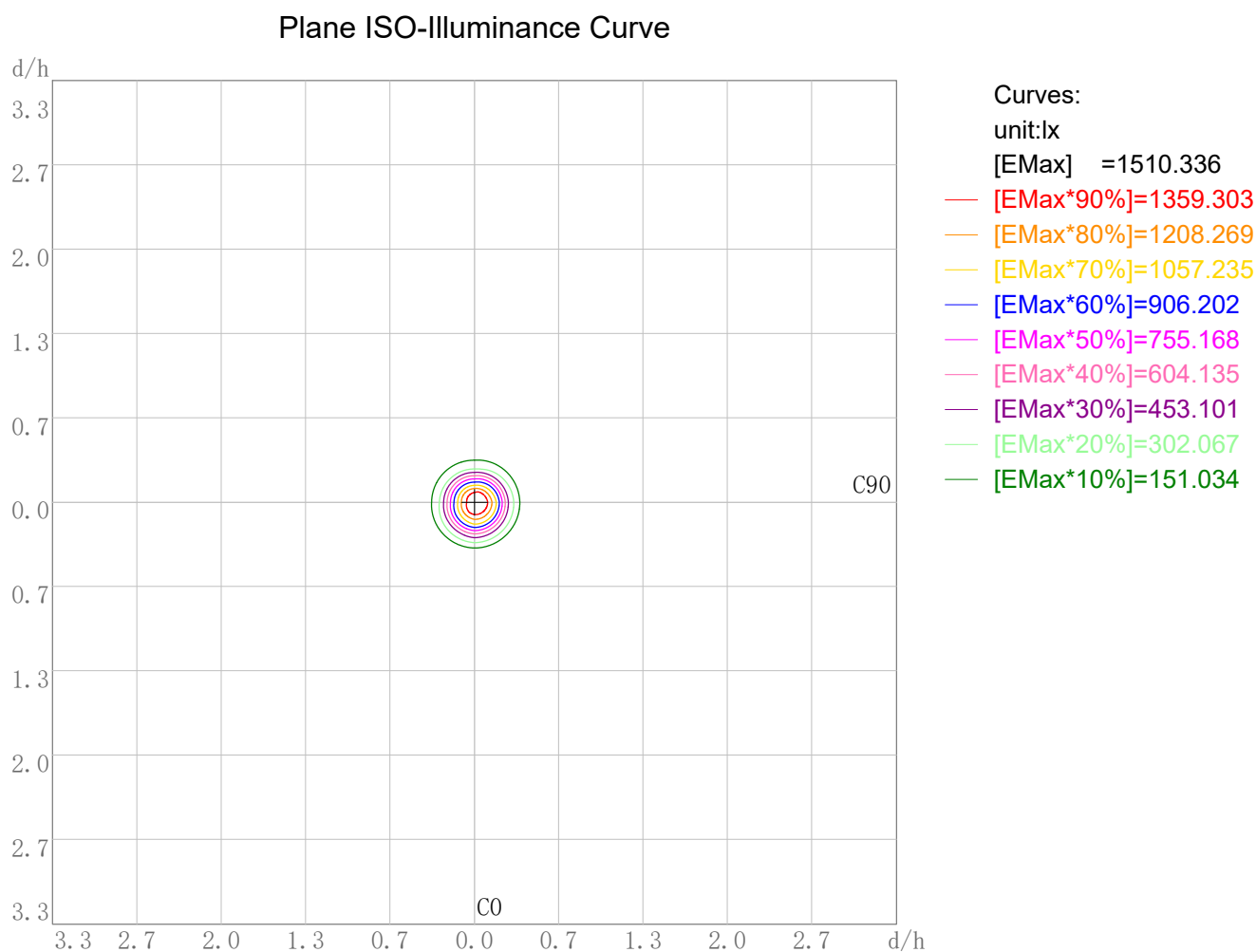
Rectangle ISO Lighting Intensity Diagram

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



**Photometric Filename:DL51-35-XX-01 3000K RA90 24D 电镀亮黑.IES**

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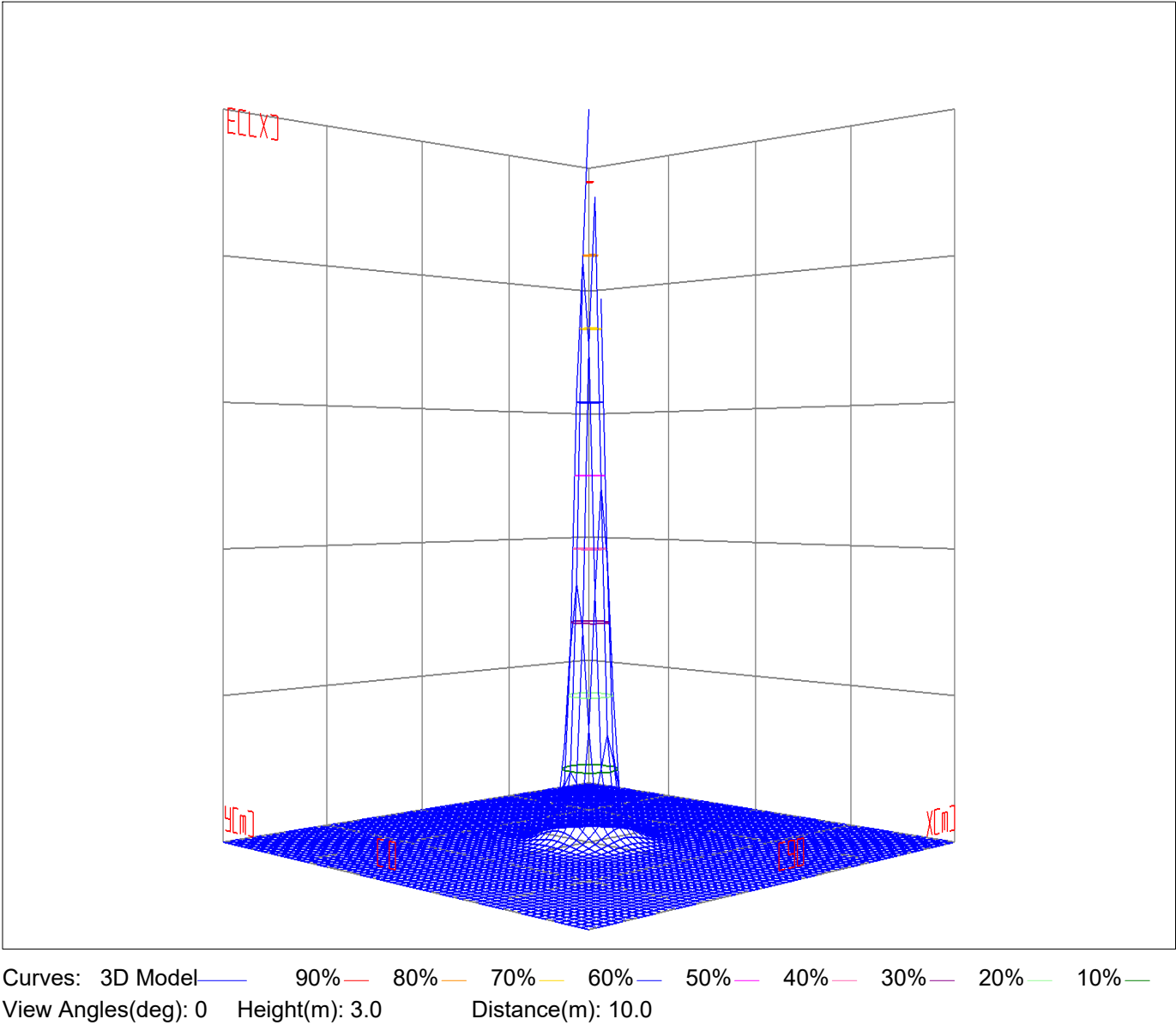


Working Plane Luminaire Mounting Height(m): 3.00  
Working Plane Maximum Illuminance(lx): 1510.34  
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 3000K RA90 24D 电镀亮黑	Lum. Catelog:	Test ID: 01
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Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/20

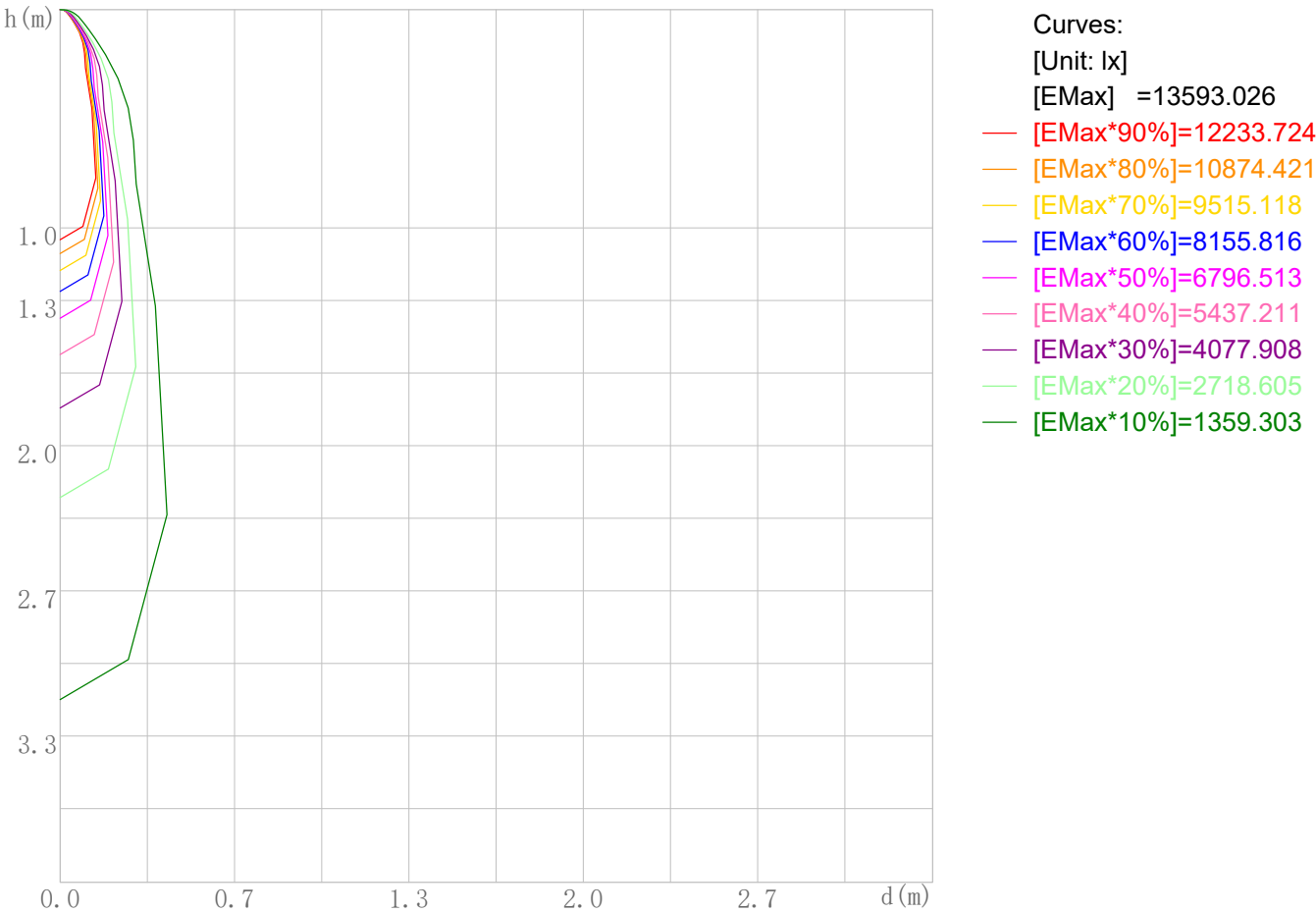
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 3000K RA90 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: 2022/08/20

Space ISO Illuminance Curve

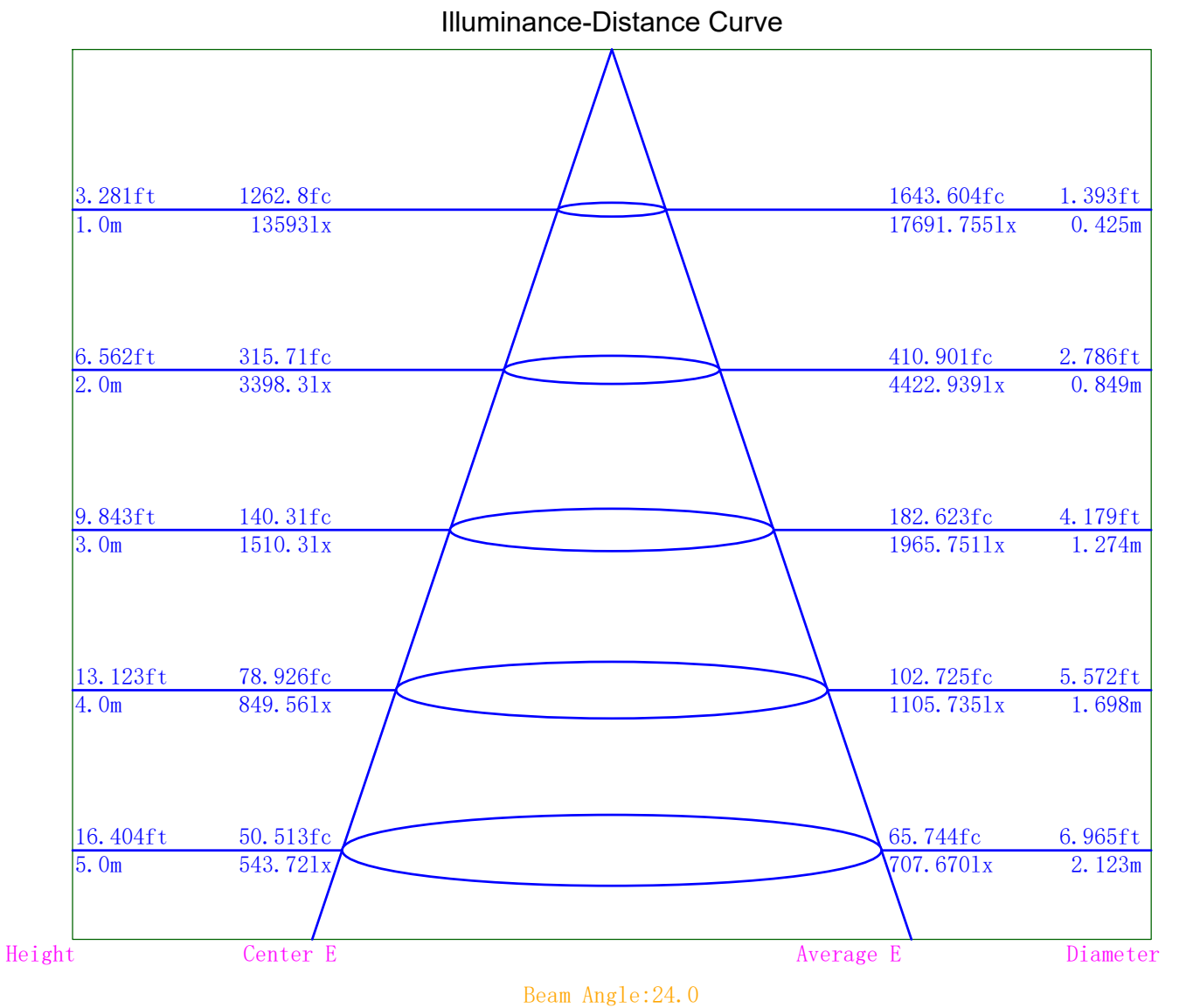


Space Plane Maximum Illuminance and @Angle:13593.03lx,0.0deg  
Plane Maximum Lighting Intensity and @Angle:13593.026cd,0deg



Illuminance-Distance Diagram

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



Indoor Luminance Limiting Curves

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

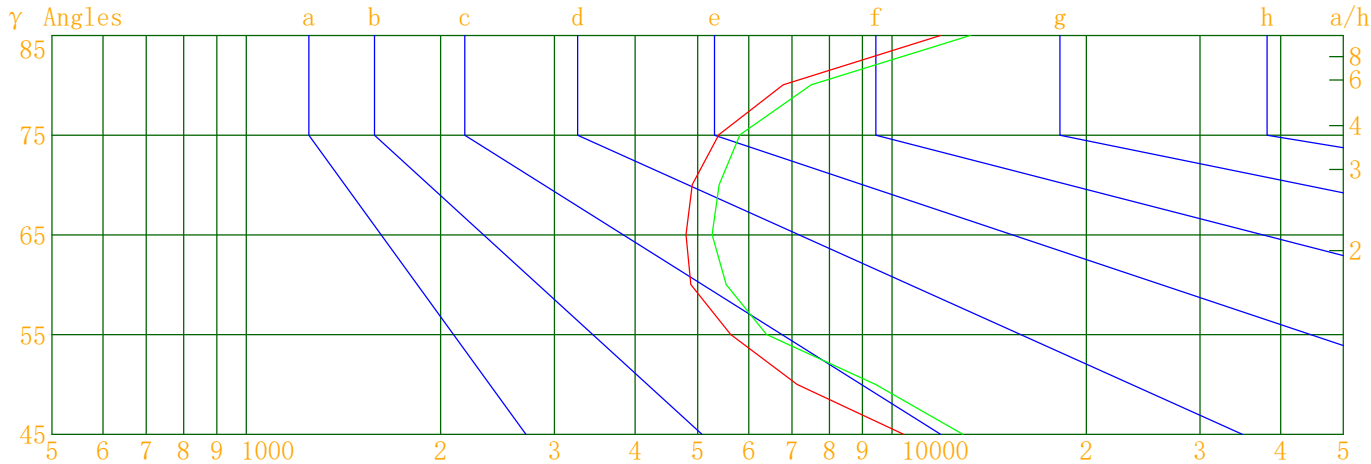
Glare Grade Table

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	10428	7130	5626	4881	4797	4906	5393	6785	11886
C90	12876	9432	6391	5537	5264	5399	5814	7498	13218

Luminance Limiting Curve



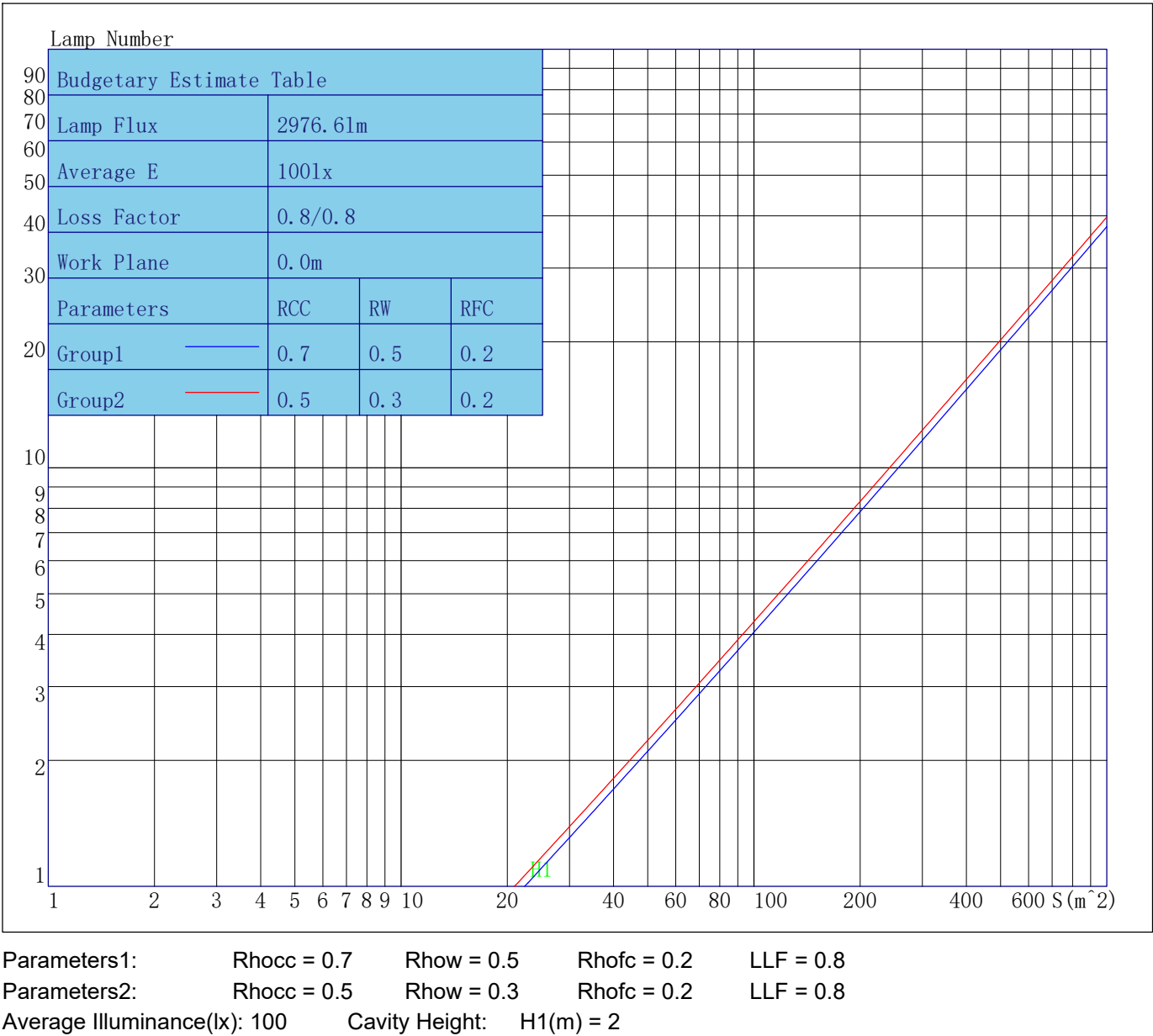
Luminous Size:Length(m)=-0.110Width(m)=-0.110Height(m)=0.000Area(m^2)=0.009503

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 24D 电镀亮黑	Lum. Catalog:	Test ID:01
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Indoor Coefficient of Utilization Table

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

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	119	119	119	119	116	116	116	116	110	110	110	105	105	105	100	100	100	98
1	114	112	110	108	111	109	107	106	105	103	102	101	100	99	97	96	95	94
2	110	106	103	100	107	104	101	99	100	98	96	97	95	94	94	93	92	90
3	106	101	97	94	104	99	96	93	97	94	91	94	92	90	92	90	88	87
4	102	97	92	89	101	95	91	88	93	90	87	91	88	86	89	87	85	83
5	99	93	88	85	98	92	88	85	90	86	84	88	85	83	86	84	82	81
6	96	89	85	82	95	89	84	81	87	83	81	85	82	80	84	81	79	78
7	93	86	82	79	92	86	81	78	84	81	78	83	80	77	82	79	77	76
8	91	84	79	76	89	83	79	76	82	78	76	81	78	75	80	77	75	74
9	88	81	77	74	87	81	76	74	80	76	73	79	75	73	78	75	73	72
10	86	79	75	72	85	78	74	72	77	74	71	77	73	71	76	73	71	70

Unified Glare Rating Table

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

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	13.1	13.9	13.5	14.3	14.7	14.3	15.2	14.7	15.5	15.9
	13.5	14.3	14.0	14.7	15.1	14.7	15.4	15.1	15.8	16.2
	13.9	14.6	14.3	15.0	15.4	14.9	15.6	15.4	16.0	16.5
	14.3	14.9	14.8	15.4	15.8	15.3	15.9	15.8	16.4	16.8
	14.6	15.2	15.1	15.6	16.1	15.6	16.2	16.1	16.6	17.1
	15.1	15.6	15.5	16.0	16.5	16.0	16.5	16.5	17.0	17.4
X=4H    Y=2H	13.1	13.8	13.6	14.2	14.6	14.3	14.9	14.7	15.3	15.8
	13.8	14.3	14.2	14.8	15.2	14.8	15.3	15.3	15.8	16.3
	14.3	14.8	14.8	15.2	15.7	15.2	15.7	15.7	16.2	16.7
	15.0	15.4	15.5	15.9	16.4	15.8	16.2	16.4	16.7	17.3
	15.4	15.8	15.9	16.3	16.8	16.2	16.6	16.8	17.1	17.6
	16.0	16.3	16.5	16.8	17.4	16.8	17.1	17.3	17.6	18.2
X=8H    Y=4H	14.5	14.8	15.0	15.3	15.9	15.3	15.7	15.9	16.2	16.7
	15.4	15.7	16.0	16.2	16.8	16.2	16.5	16.7	17.0	17.6
	16.0	16.3	16.6	16.8	17.4	16.8	17.0	17.4	17.6	18.1
	16.9	17.1	17.5	17.6	18.2	17.6	17.8	18.2	18.3	19.0
X=12H    Y=4H	14.5	14.8	15.0	15.3	15.9	15.4	15.7	15.9	16.2	16.7
	15.5	15.8	16.1	16.3	16.9	16.3	16.5	16.9	17.0	17.6
	16.3	16.5	16.8	17.0	17.6	17.0	17.2	17.6	17.7	18.4
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/-0.2					0.1/-0.2				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	2.7					2.4				

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	13593.0	13593.0	13593.0	13593.0
γ 5.0	12197.0	13051.1	12702.4	11757.0
γ 10.0	7624.6	9766.2	9806.8	7871.1
γ 15.0	2782.4	4487.4	4977.9	3273.3
γ 20.0	1044.9	1429.1	1514.3	1028.9
γ 25.0	655.8	793.5	730.0	593.0
γ 30.0	424.9	511.7	453.8	365.2
γ 35.0	245.9	323.6	287.2	225.1
γ 40.0	129.3	187.9	155.4	133.0
γ 45.0	70.1	86.5	76.5	64.6
γ 50.0	43.6	57.6	54.5	46.6
γ 55.0	30.7	34.8	33.9	31.0
γ 60.0	23.2	26.3	26.4	24.6
γ 65.0	19.3	21.1	21.6	20.4
γ 70.0	15.9	17.5	18.1	17.0
γ 75.0	13.3	14.3	14.9	14.3
γ 80.0	11.2	12.4	12.7	11.9
γ 85.0	9.8	10.9	10.8	10.3
γ 90.0	8.8	9.4	9.4	8.4
γ 95.0	7.9	8.5	7.7	7.4
γ 100.0	7.3	7.8	6.6	6.4
γ 105.0	6.7	7.4	6.3	6.5
γ 110.0	6.6	7.1	6.0	6.6
γ 115.0	6.4	6.7	6.0	6.6
γ 120.0	5.7	6.4	6.0	6.6
γ 125.0	6.3	6.0	6.5	7.4
γ 130.0	7.6	6.9	7.5	8.8
γ 135.0	10.6	9.0	9.4	11.6
γ 140.0	13.6	12.2	12.7	15.0
γ 145.0	17.8	15.8	16.1	18.9
γ 150.0	20.8	19.1	20.0	21.5
γ 155.0	22.4	21.5	21.9	23.2
γ 160.0	23.8	23.0	23.8	23.0
γ 165.0	23.7	23.3	24.3	23.6
γ 170.0	23.0	23.1	24.0	22.8
γ 175.0	22.3	22.8	22.6	22.4
γ 180.0	22.5	22.5	22.5	22.5