

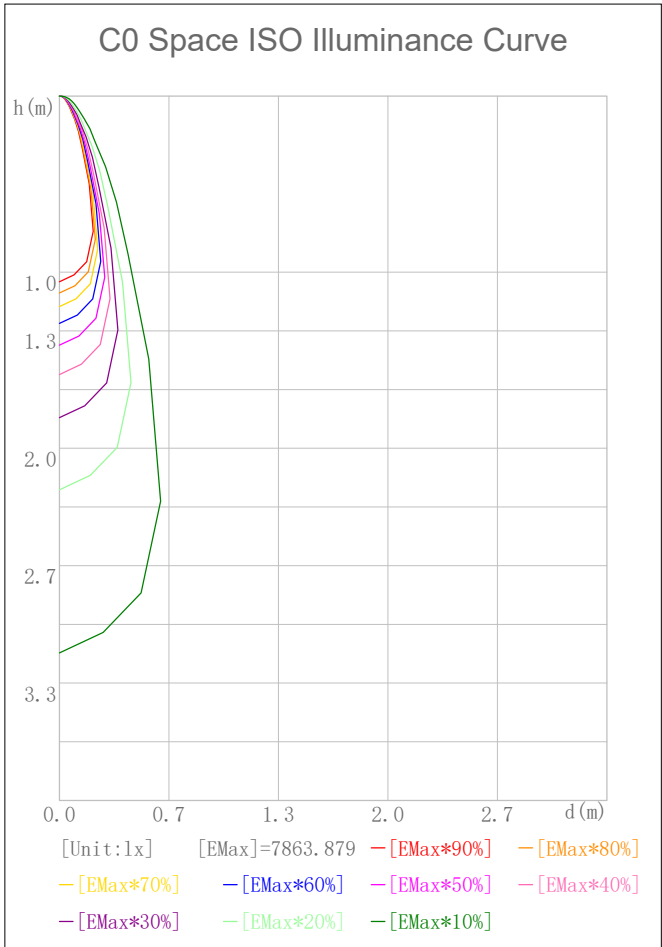
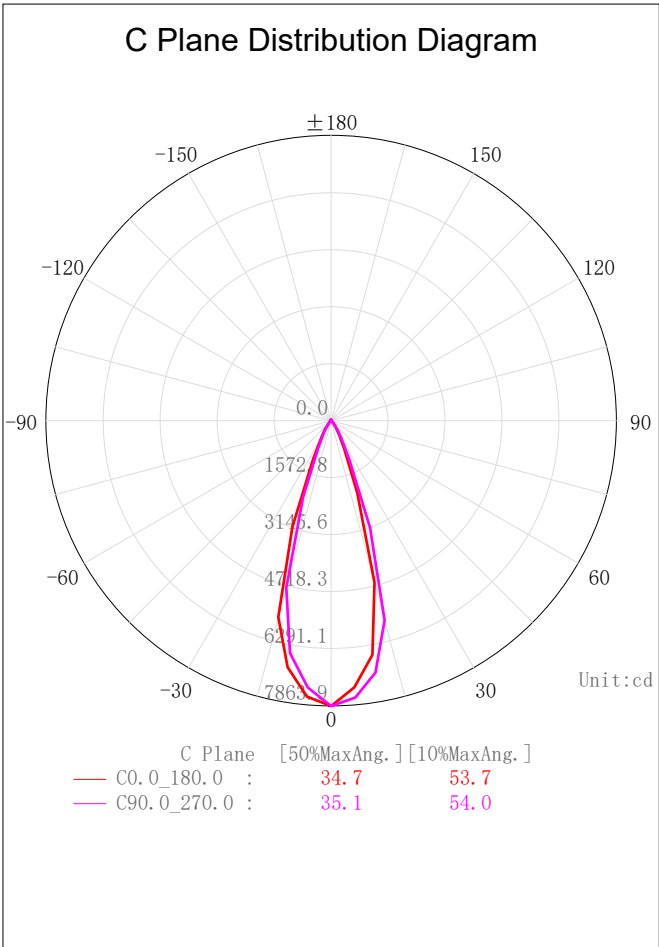
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-35-XX-01 3000K RA90 36D 黑色	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Date: 2022/08/10
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): 0.012	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25
		Humidity (%): 50.0

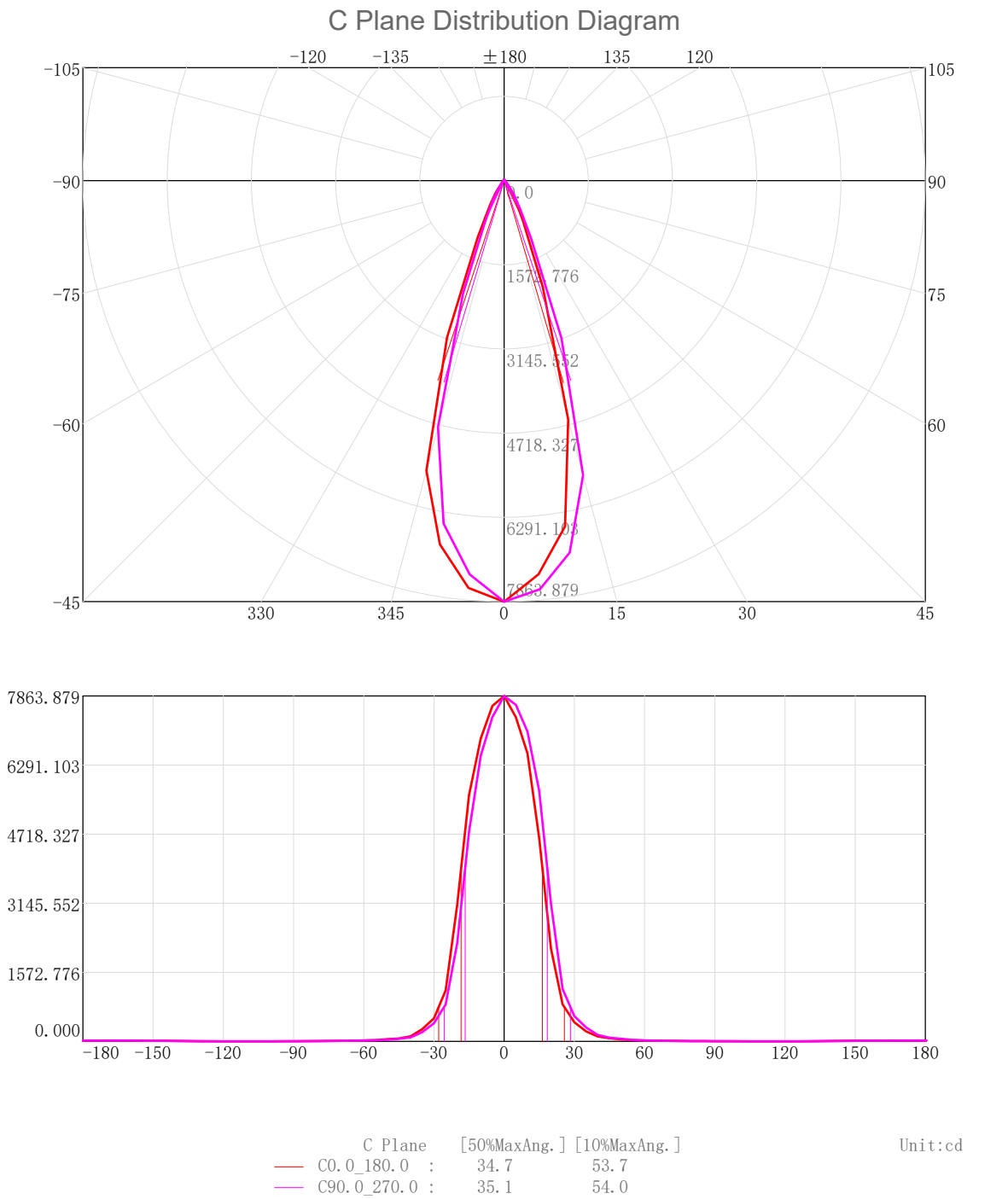
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 2974.920	Luminary Flux(lm): 2974.916	Field Angle(10%Imax): 53.7(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 2925.825lm 98.35%
Rated Voltage(V):	Luminary EER(lm/W): 88.460	Up Lumens&Percent: 49.091lm 1.65%
Tested Power(W): 33.630	Max. Candela(cd): 7863.879	S/MH: C0_a180=0.588 C90_270=0.595
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct
Tested Electrics (V, A, pf): 239.7, 0.146, 0.960	Beam Angle(50%Imax): 34.7(°)	ErP Φ use(90°): 2916.509lm
Lamp Size (W*L*H): 0.110m*0.110m*0.000m	Left=-18.4°, Right=16.4°	IRF (%): 597.239



2D Plane Light Intensity Distribution Curve

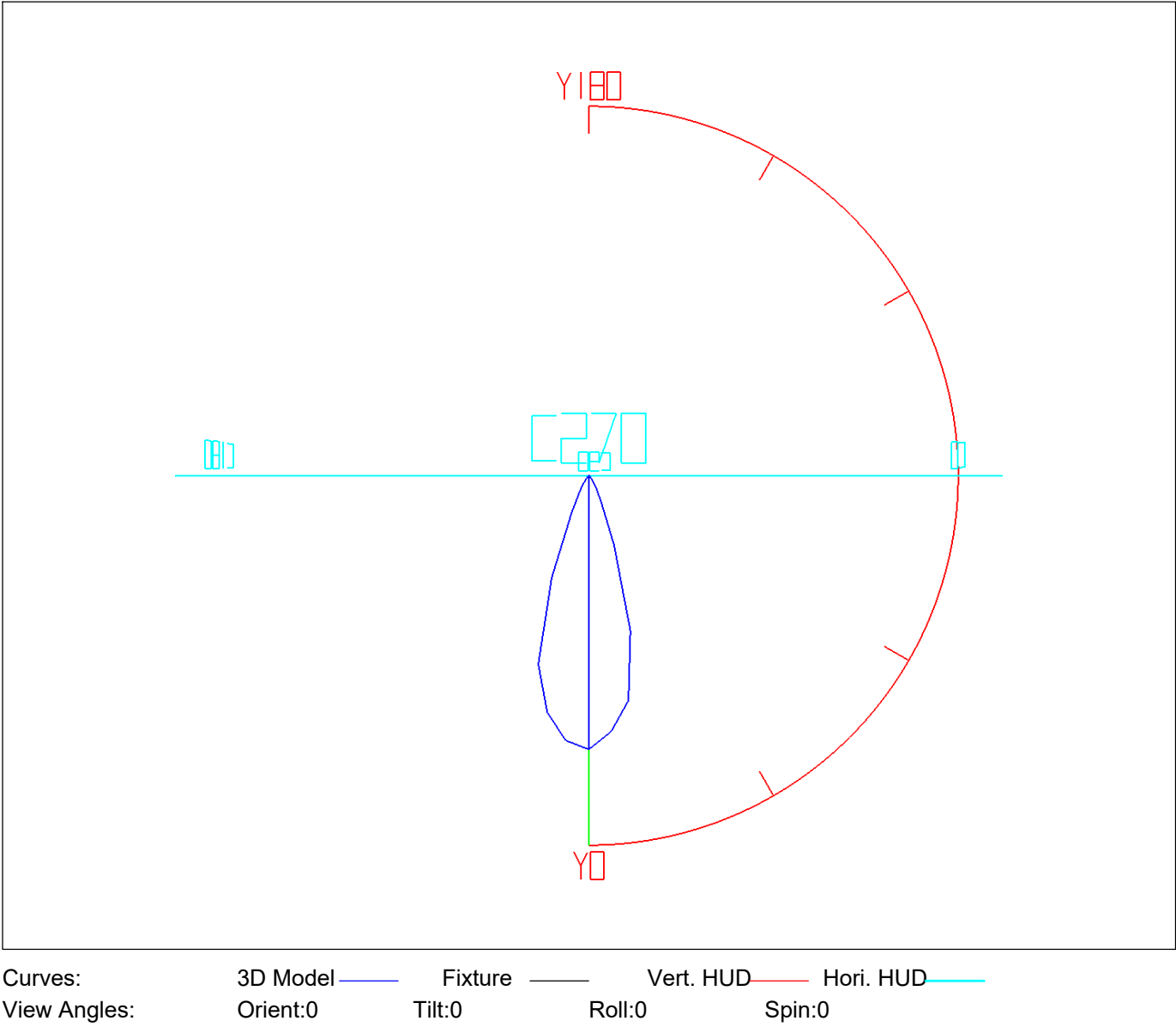
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Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10



3D Light Intensity Distribution Modal

Lum. Name:DL51-35-XX-01 3000K RA90 36D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10

3D Light Intensity Distribution Modal

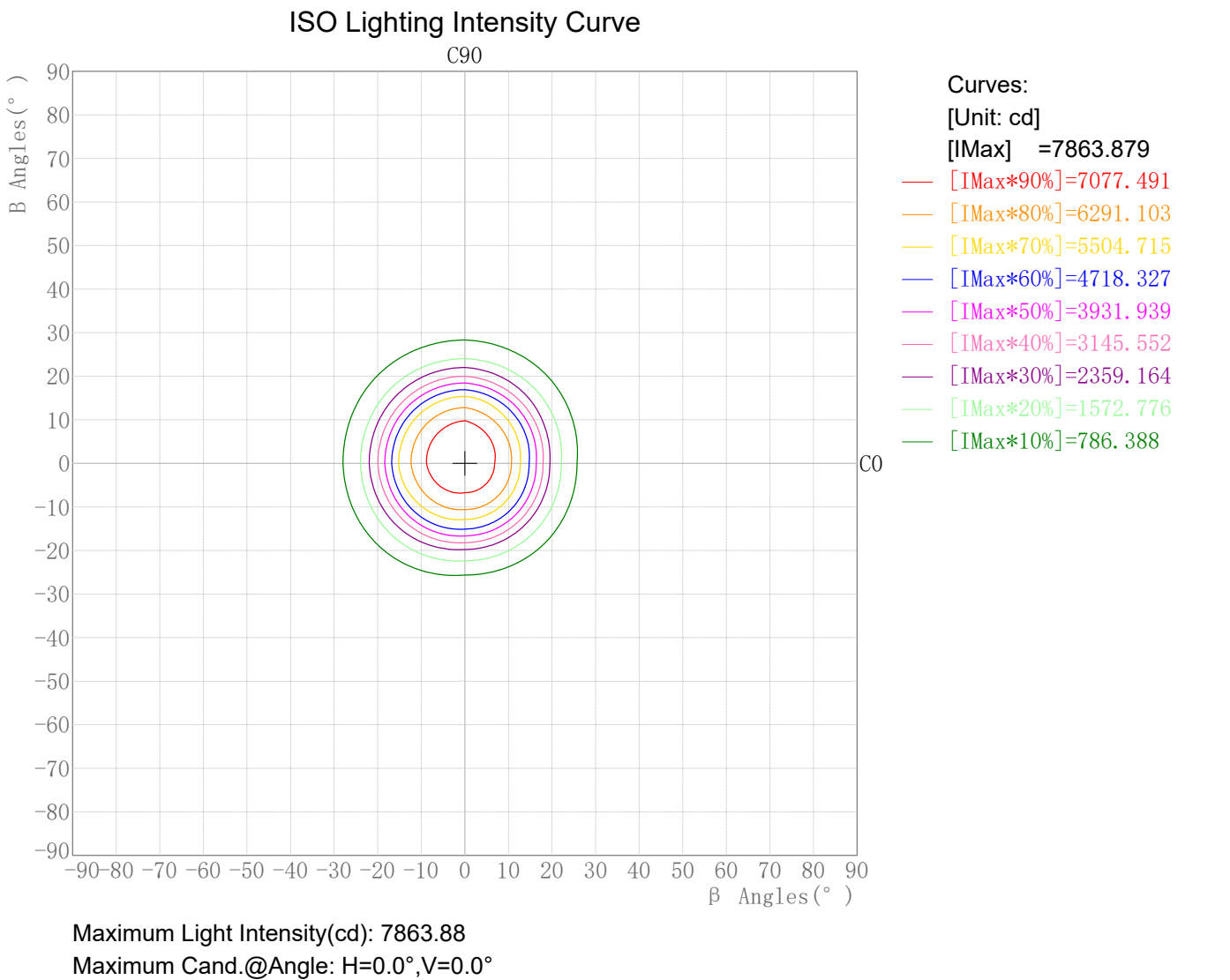


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	183.85	183.85	6.18	6.18
5.0-10.0	510.38	694.23	17.16	23.34
10.0-15.0	707.37	1401.60	23.78	47.11
15.0-20.0	644.94	2046.54	21.68	68.79
20.0-25.0	384.42	2430.96	12.92	81.72
25.0-30.0	189.99	2620.94	6.39	88.10
30.0-35.0	110.39	2731.33	3.71	91.81
35.0-40.0	63.33	2794.66	2.13	93.94
40.0-45.0	35.67	2830.33	1.20	95.14
45.0-50.0	25.00	2855.33	0.84	95.98
50.0-55.0	17.84	2873.17	0.60	96.58
55.0-60.0	12.80	2885.97	0.43	97.01
60.0-65.0	10.24	2896.21	0.34	97.35
65.0-70.0	8.46	2904.67	0.28	97.64
70.0-75.0	6.98	2911.65	0.23	97.87
75.0-80.0	5.67	2917.32	0.19	98.06
80.0-85.0	4.66	2921.99	0.16	98.22
85.0-90.0	3.84	2925.83	0.13	98.35
90.0-95.0	3.14	2928.97	0.11	98.46
95.0-100.0	2.67	2931.63	0.09	98.54
100.0-105.0	2.26	2933.90	0.08	98.62
105.0-110.0	1.97	2935.86	0.07	98.69
110.0-115.0	1.79	2937.66	0.06	98.75
115.0-120.0	1.76	2939.41	0.06	98.81
120.0-125.0	1.86	2941.27	0.06	98.87
125.0-130.0	2.21	2943.48	0.07	98.94
130.0-135.0	2.84	2946.32	0.10	99.04
135.0-140.0	3.55	2949.87	0.12	99.16
140.0-145.0	4.15	2954.03	0.14	99.30
145.0-150.0	4.48	2958.51	0.15	99.45
150.0-155.0	4.47	2962.97	0.15	99.60
155.0-160.0	4.10	2967.07	0.14	99.74
160.0-165.0	3.39	2970.46	0.11	99.85
165.0-170.0	2.46	2972.93	0.08	99.93
170.0-175.0	1.49	2974.41	0.05	99.98
175.0-180.0	0.50	2974.92	0.02	100.00

Rectangle ISO Lighting Intensity Diagram

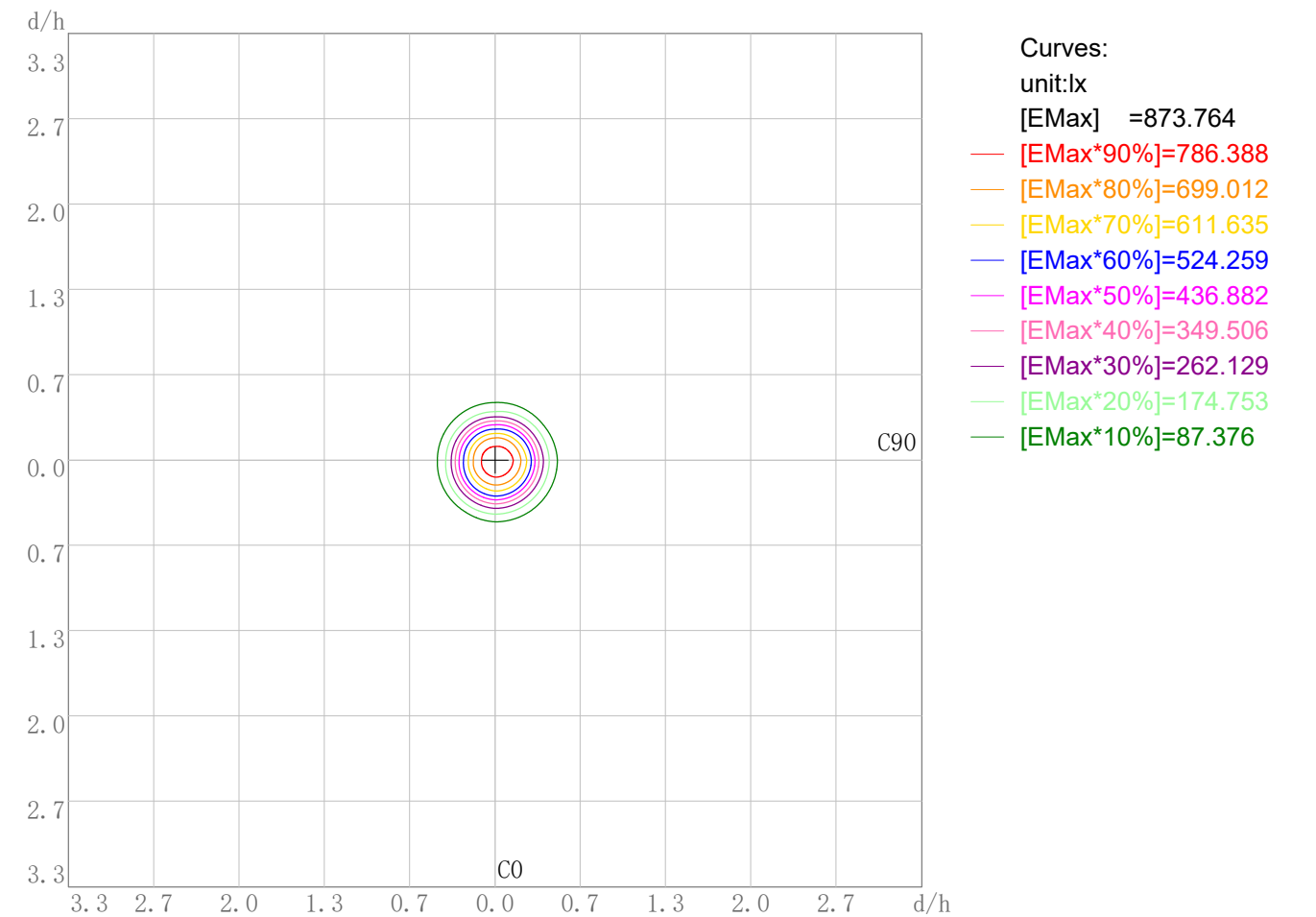
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Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/10



Plane ISO-Illuminance Diagram

Lum. Name:DL51-35-XX-01 3000K RA90 36D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10

Plane ISO-Illuminance Curve

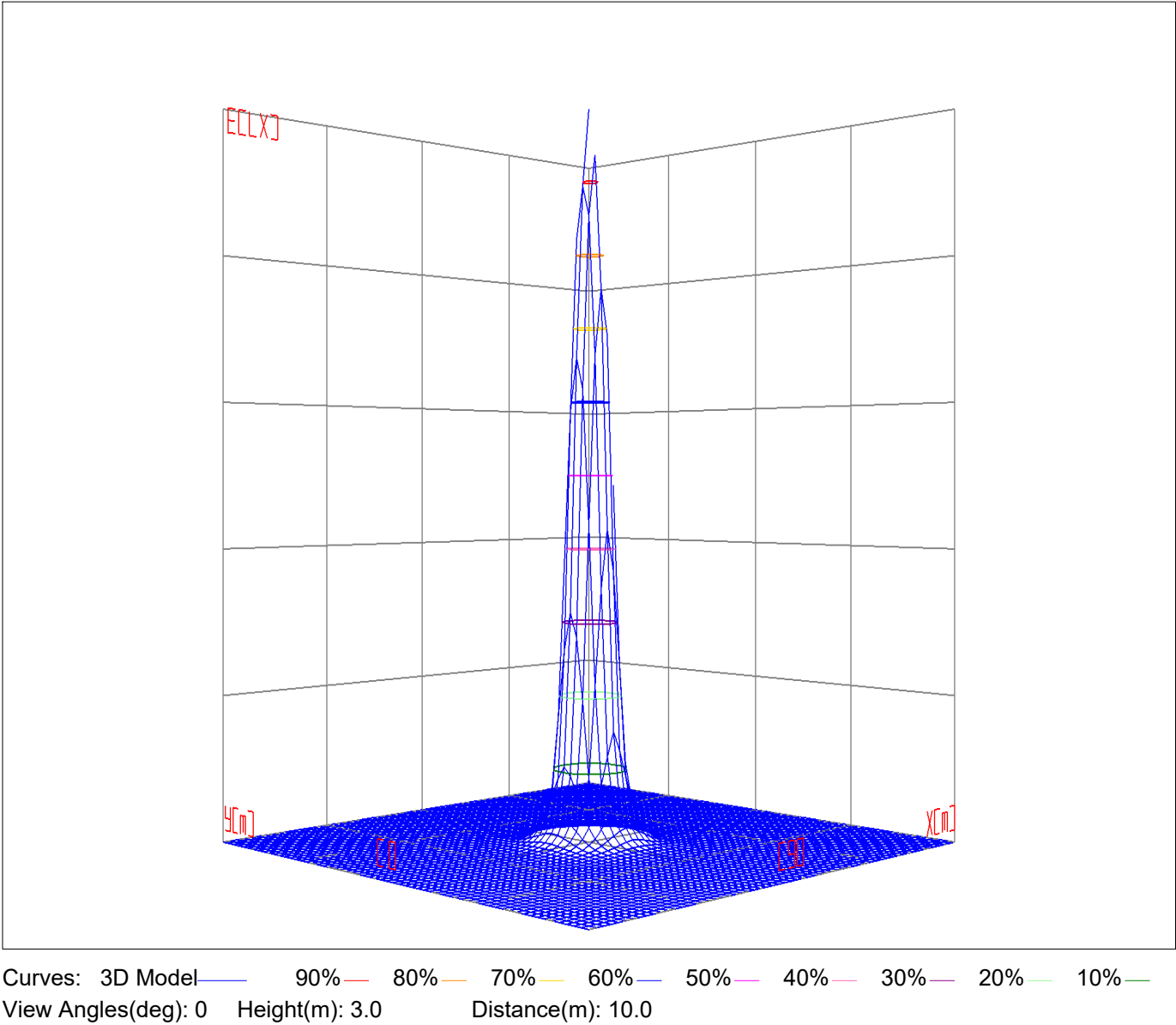


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 873.76
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name:DL51-35-XX-01 3000K RA90 36D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10

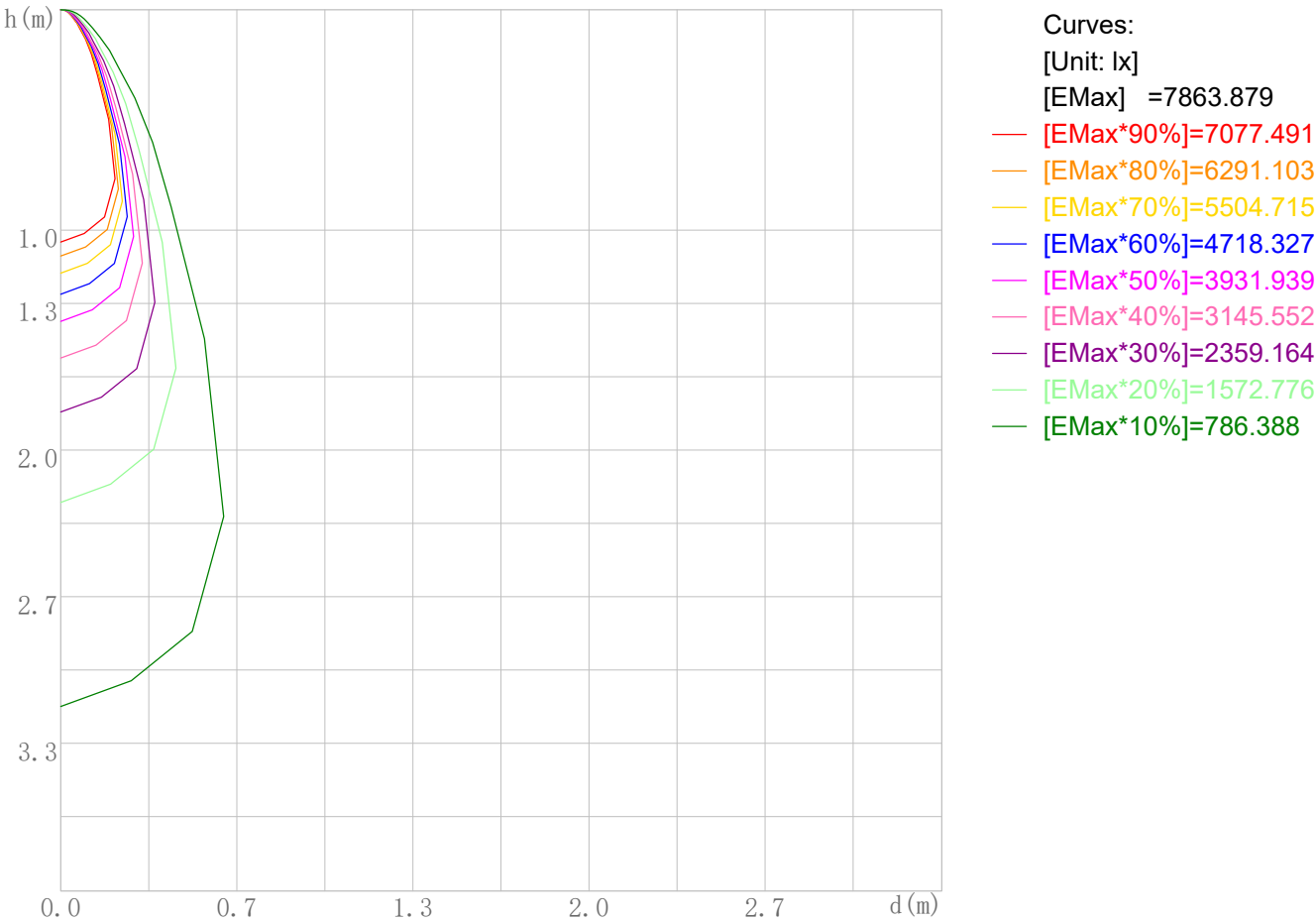
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name:DL51-35-XX-01 3000K RA90 36D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10

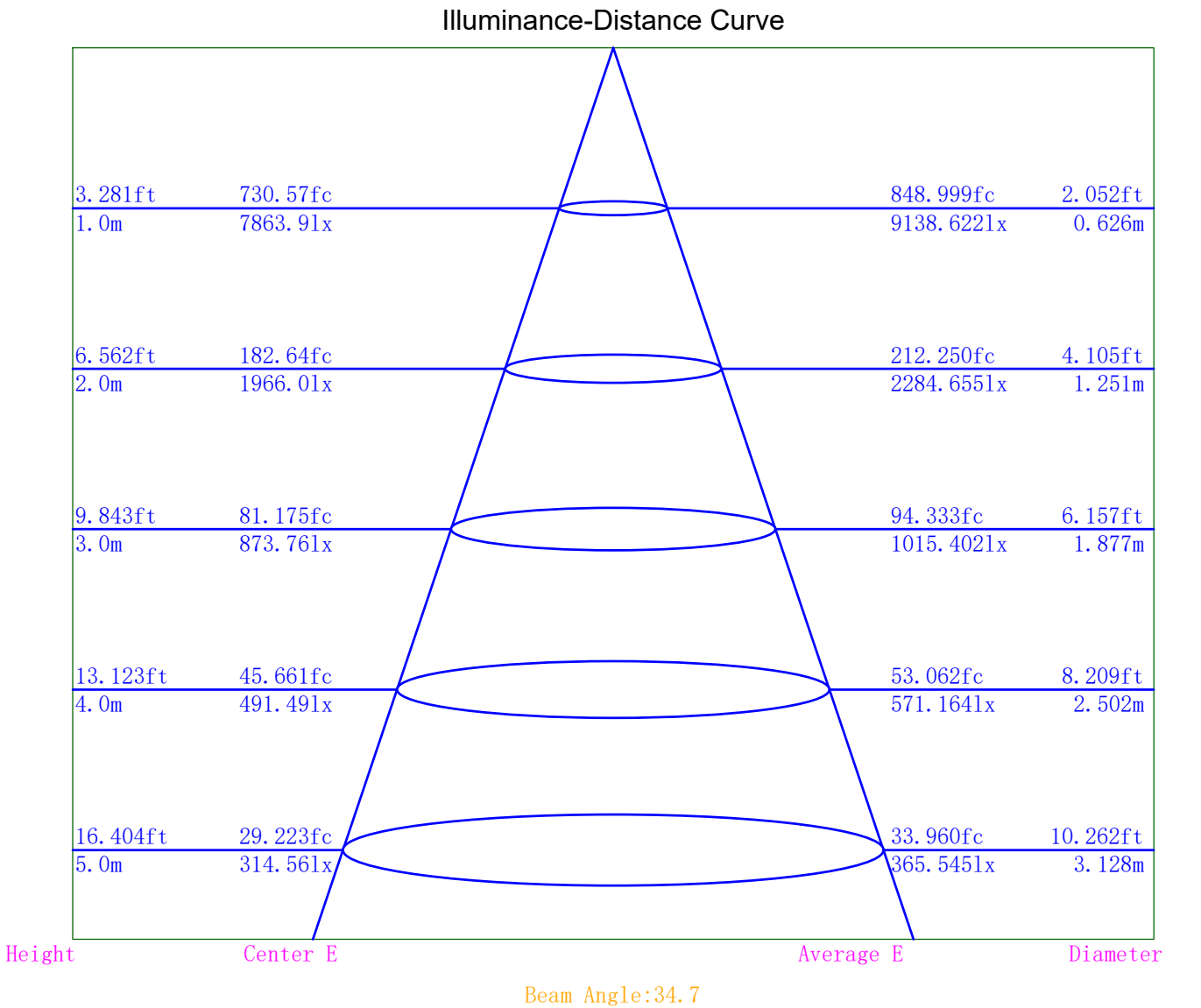
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:7863.88lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:7863.879cd,0deg

Illuminance-Distance Diagram

Lum. Name:DL51-35-XX-01 3000K RA90 36D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10



Indoor Luminance Limiting Curves

Lum. Name:DL51-35-XX-01 3000K RA90 36D 黑色	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10

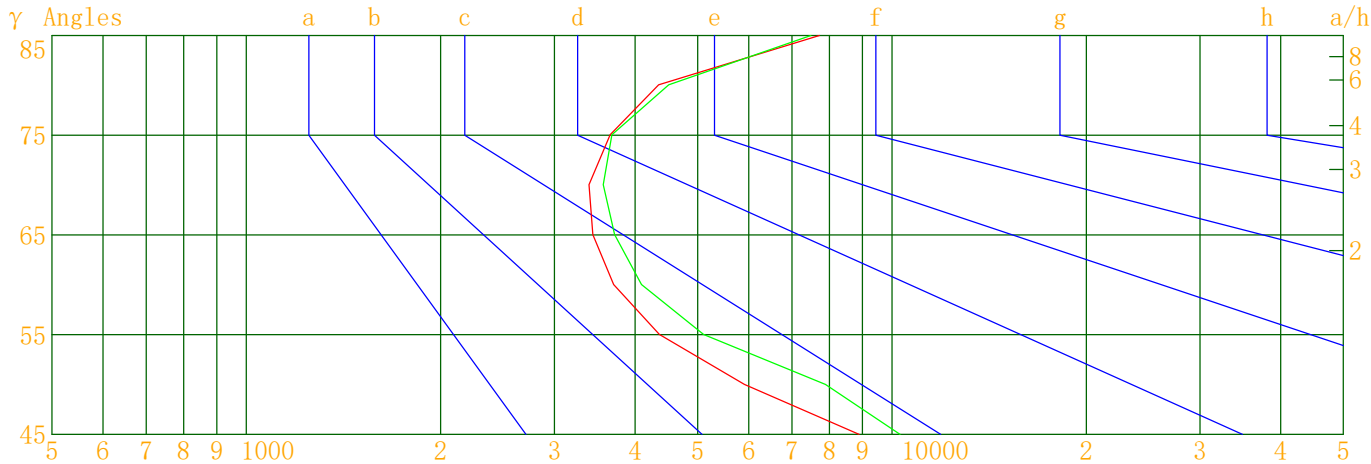
Glare Grade Table

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	8892	5909	4363	3706	3441	3394	3661	4351	7719
C90	10289	7889	5108	4094	3719	3572	3683	4510	7490

Luminance Limiting Curve



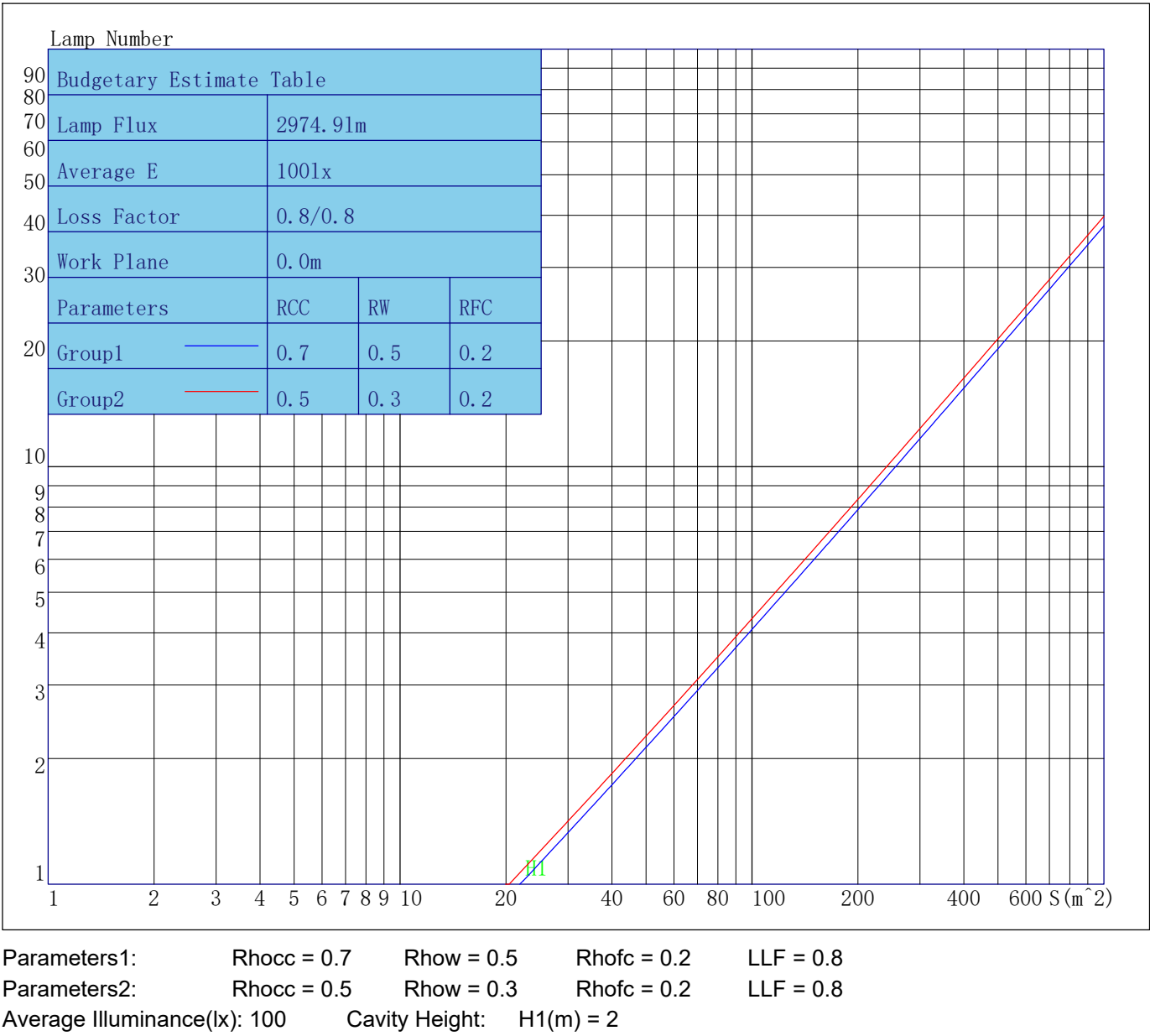
Luminous Size:Length(m)=0.110Width(m)=0.110Height(m)=0.000Area(m^2)=0.012100

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 36D 黑色	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/10



Indoor Coefficient of Utilization Table

Lum. Name:DL51-35-XX-01 3000K RA90 36D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10

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	101	101	101	98
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	97	96	95	94
2	109	105	102	99	107	103	100	98	100	97	95	97	95	93	94	92	91	89
3	105	100	96	92	103	98	94	91	96	92	90	93	90	88	91	88	87	85
4	101	95	90	87	99	94	90	86	91	88	85	89	86	84	87	85	83	82
5	97	91	86	82	96	90	85	82	88	84	81	86	83	80	84	82	79	78
6	94	87	82	78	93	86	81	78	84	80	78	83	80	77	82	79	76	75
7	91	83	78	75	89	83	78	75	81	77	74	80	76	74	79	76	73	72
8	88	80	75	72	87	79	75	72	78	74	71	77	74	71	76	73	71	70
9	85	77	72	69	84	77	72	69	76	72	69	75	71	68	74	71	68	67
10	82	74	70	67	81	74	69	67	73	69	66	72	69	66	72	68	66	65

Unified Glare Rating Table

Lum. Name:DL51-35-XX-01 3000K RA90 36D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10

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	12.1	13.0	12.5	13.3	13.7	13.4	14.3	13.8	14.6	15.0
	12.4	13.2	12.9	13.6	14.0	13.6	14.4	14.1	14.8	15.2
	12.7	13.4	13.1	13.8	14.2	13.8	14.5	14.2	14.9	15.3
	13.0	13.7	13.5	14.1	14.5	14.0	14.7	14.5	15.1	15.5
	13.2	13.8	13.7	14.3	14.7	14.2	14.8	14.7	15.2	15.7
	13.6	14.1	14.0	14.5	15.0	14.4	15.0	14.9	15.4	15.9
X=4H Y=2H	12.1	12.8	12.5	13.2	13.6	13.3	14.0	13.8	14.4	14.8
	12.6	13.2	13.1	13.6	14.1	13.7	14.3	14.2	14.7	15.2
	13.0	13.5	13.5	13.9	14.4	14.0	14.5	14.5	14.9	15.4
	13.5	13.9	14.0	14.4	14.9	14.4	14.8	14.9	15.3	15.8
	13.9	14.2	14.4	14.7	15.2	14.7	15.0	15.2	15.5	16.0
	14.3	14.7	14.9	15.2	15.7	15.0	15.3	15.5	15.9	16.4
X=8H Y=4H	13.1	13.5	13.6	14.0	14.5	14.0	14.4	14.6	14.9	15.4
	13.8	14.1	14.4	14.7	15.2	14.6	14.9	15.2	15.4	16.0
	14.3	14.6	14.9	15.1	15.7	15.0	15.3	15.6	15.8	16.4
	15.1	15.3	15.6	15.8	16.4	15.6	15.8	16.2	16.3	17.0
X=12H Y=4H	13.1	13.4	13.6	13.9	14.5	14.0	14.3	14.6	14.9	15.4
	13.9	14.1	14.5	14.7	15.2	14.7	14.9	15.2	15.4	16.0
	14.5	14.7	15.1	15.2	15.9	15.2	15.4	15.7	15.9	16.5
Variations with the objverver position at spacings										
S=1.0H	0.1/-0.1					0.2/-0.2				
S=1.5H	0.2/-0.3					0.3/-0.3				
S=2.0H	0.3/-0.3					0.3/-0.3				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	2.2					1.8				

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	7863.88	7863.88	7863.88	7863.88
γ 5.0	7378.37	7662.10	7636.06	7382.75
γ 10.0	6554.89	7052.72	6897.98	6504.08
γ 15.0	4618.66	5696.62	5606.52	4767.60
γ 20.0	2113.60	3135.59	3119.28	2244.42
γ 25.0	846.51	1196.73	1163.82	841.13
γ 30.0	438.42	578.88	524.96	414.63
γ 35.0	229.56	320.48	278.74	212.85
γ 40.0	116.43	149.91	116.63	93.75
γ 45.0	76.08	88.03	67.62	62.19
γ 50.0	45.96	61.36	51.96	41.68
γ 55.0	30.28	35.45	32.55	28.88
γ 60.0	22.42	24.77	24.76	22.37
γ 65.0	17.59	19.02	19.73	17.90
γ 70.0	14.05	14.78	16.28	14.28
γ 75.0	11.46	11.53	13.11	11.32
γ 80.0	9.14	9.48	10.13	8.64
γ 85.0	8.14	7.90	8.34	6.86
γ 90.0	6.48	6.45	6.50	5.41
γ 95.0	6.01	5.33	5.47	4.28
γ 100.0	4.93	4.47	4.57	4.16
γ 105.0	4.30	4.12	4.07	3.20
γ 110.0	3.86	3.39	3.78	3.37
γ 115.0	3.64	2.95	3.76	3.58
γ 120.0	3.78	3.14	4.20	3.86
γ 125.0	4.50	3.44	4.69	4.62
γ 130.0	6.08	4.62	6.11	6.62
γ 135.0	8.49	6.81	8.27	9.15
γ 140.0	11.53	9.56	11.10	11.80
γ 145.0	14.53	12.44	14.02	14.58
γ 150.0	17.30	15.10	16.82	17.02
γ 155.0	18.88	17.56	19.34	19.11
γ 160.0	20.13	19.35	21.43	20.38
γ 165.0	20.83	20.15	21.95	20.55
γ 170.0	20.46	20.29	21.81	20.06
γ 175.0	21.13	20.53	21.51	20.36
γ 180.0	21.12	21.12	21.12	21.12