

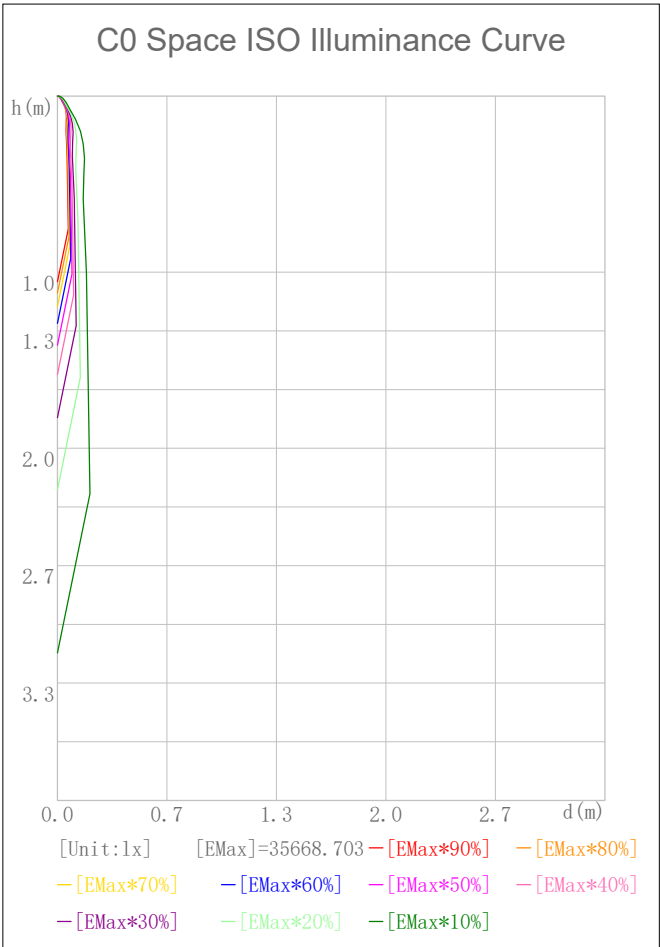
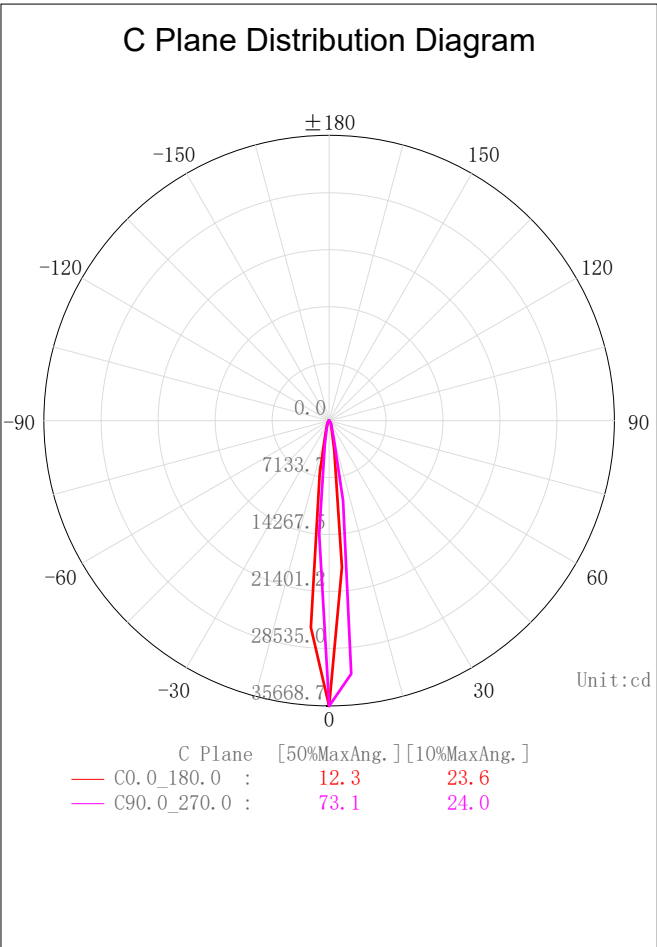
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-35-XX-01 3000K RA90 15D 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

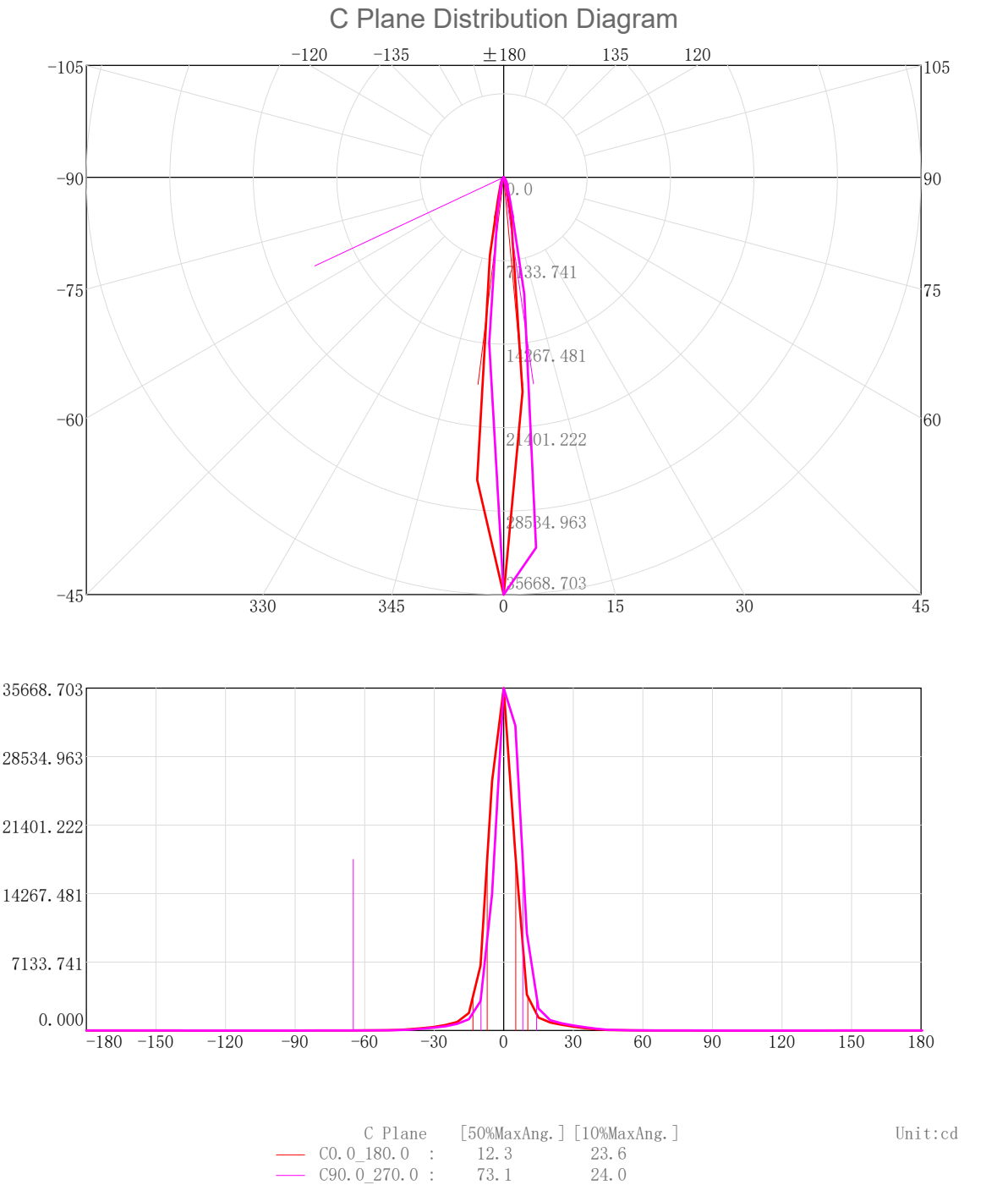
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 2992.980	Luminary Flux(lm): 2992.975	Field Angle(10%Imax): 23.6(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 2952.618lm 98.65%
Rated Voltage(V):	Luminary EER(lm/W): 89.183	Up Lumens&Percent: 40.357lm 1.35%
Tested Power(W): 33.560	Max. Candela(cd): 35668.703	S/MH: C0_a180=0.213 C90_270=0.173
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct
Tested Electrics (V, A, pf): 240.0, 0.145, 0.960	Beam Angle(50%Imax): 12.3(°)	ErP Φ use(90°): 3092.689lm
Lamp Size (W*L*H): 0.110m*0.110m*0.000m	Left=-7.1°, Right=5.2°	IRF(%): 2796.641



2D Plane Light Intensity Distribution Curve

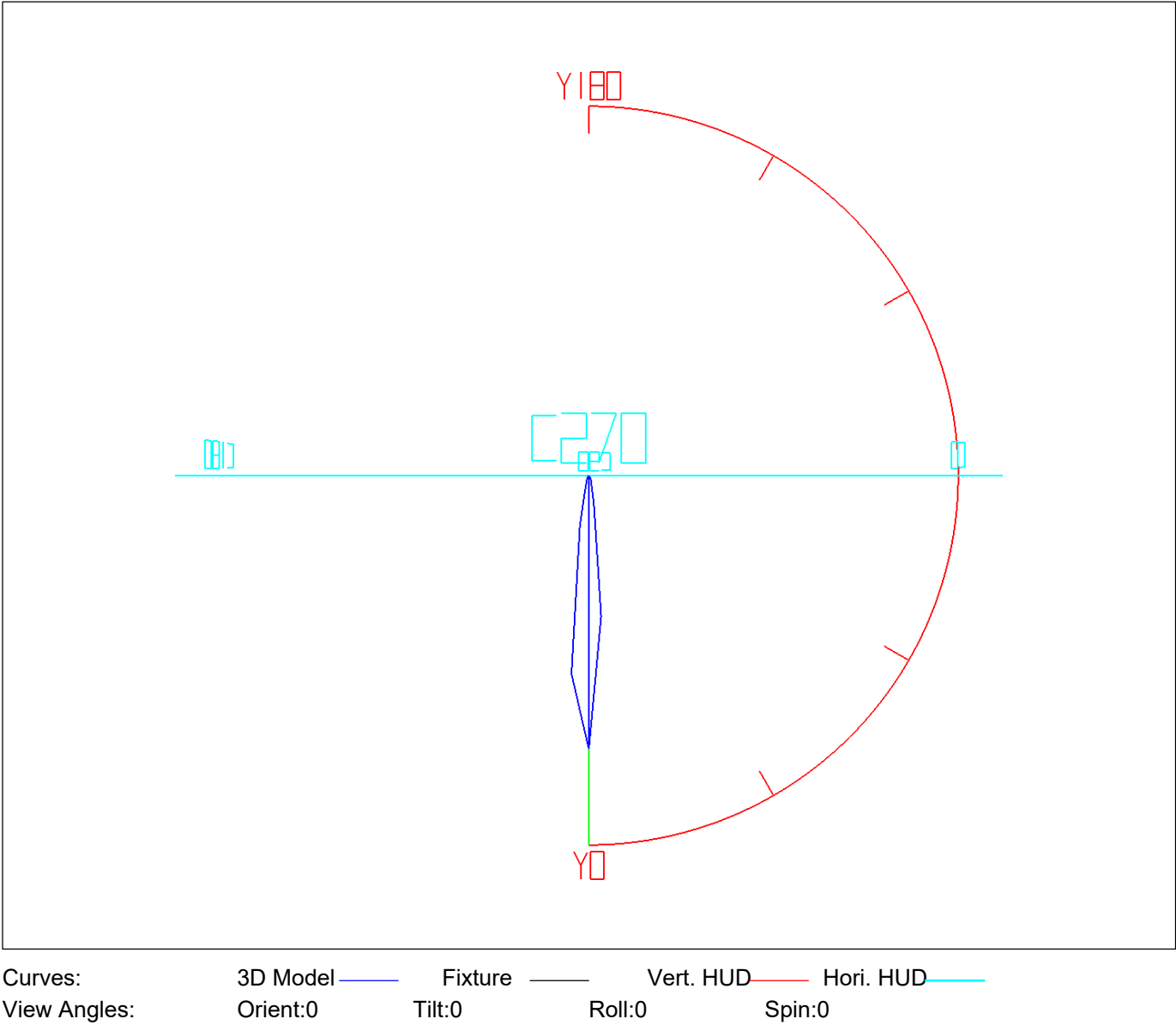
Lum. Name:DL51-35-XX-01 3000K RA90 15D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10



3D Light Intensity Distribution Modal

Lum. Name:DL51-35-XX-01 3000K RA90 15D 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

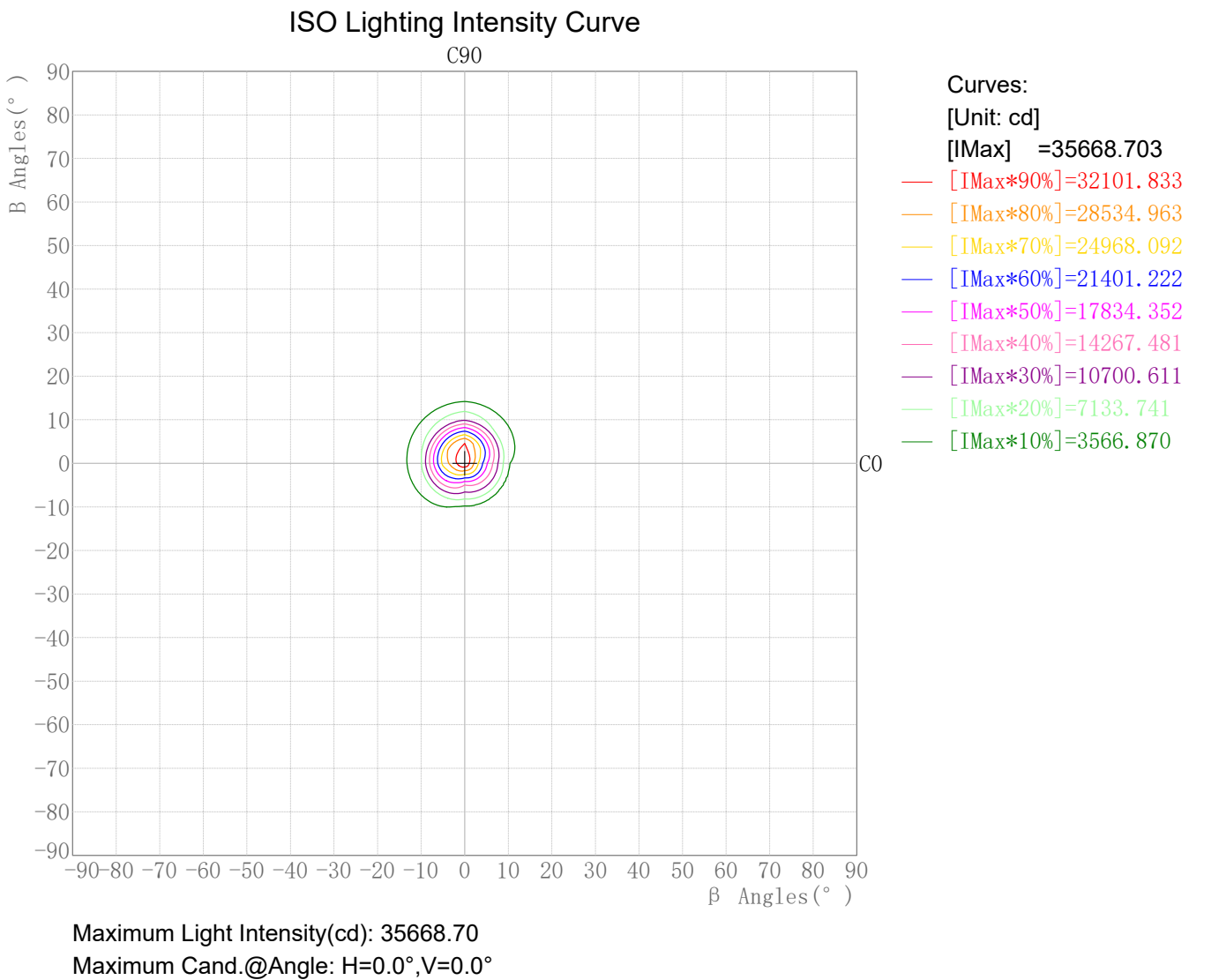


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	696.41	696.41	23.27	23.27
5.0-10.0	1020.26	1716.67	34.09	57.36
10.0-15.0	450.90	2167.57	15.07	72.42
15.0-20.0	210.19	2377.76	7.02	79.44
20.0-25.0	155.77	2533.53	5.20	84.65
25.0-30.0	127.22	2660.74	4.25	88.90
30.0-35.0	98.79	2759.53	3.30	92.20
35.0-40.0	69.12	2828.65	2.31	94.51
40.0-45.0	39.64	2868.29	1.32	95.83
45.0-50.0	21.86	2890.15	0.73	96.56
50.0-55.0	15.36	2905.51	0.51	97.08
55.0-60.0	11.54	2917.04	0.39	97.46
60.0-65.0	9.19	2926.23	0.31	97.77
65.0-70.0	7.45	2933.68	0.25	98.02
70.0-75.0	6.13	2939.82	0.20	98.22
75.0-80.0	5.09	2944.90	0.17	98.39
80.0-85.0	4.25	2949.15	0.14	98.54
85.0-90.0	3.47	2952.62	0.12	98.65
90.0-95.0	2.58	2955.19	0.09	98.74
95.0-100.0	1.84	2957.03	0.06	98.80
100.0-105.0	1.50	2958.54	0.05	98.85
105.0-110.0	1.42	2959.95	0.05	98.90
110.0-115.0	1.28	2961.23	0.04	98.94
115.0-120.0	1.14	2962.37	0.04	98.98
120.0-125.0	1.18	2963.55	0.04	99.02
125.0-130.0	1.35	2964.90	0.05	99.06
130.0-135.0	1.73	2966.63	0.06	99.12
135.0-140.0	2.54	2969.17	0.08	99.20
140.0-145.0	3.68	2972.85	0.12	99.33
145.0-150.0	4.50	2977.35	0.15	99.48
150.0-155.0	4.54	2981.89	0.15	99.63
155.0-160.0	3.95	2985.85	0.13	99.76
160.0-165.0	3.14	2988.99	0.10	99.87
165.0-170.0	2.29	2991.28	0.08	99.94
170.0-175.0	1.31	2992.59	0.04	99.99
175.0-180.0	0.39	2992.98	0.01	100.00

Rectangle ISO Lighting Intensity Diagram

Lum. Name: DL51-35-XX-01 3000K RA90 15D 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

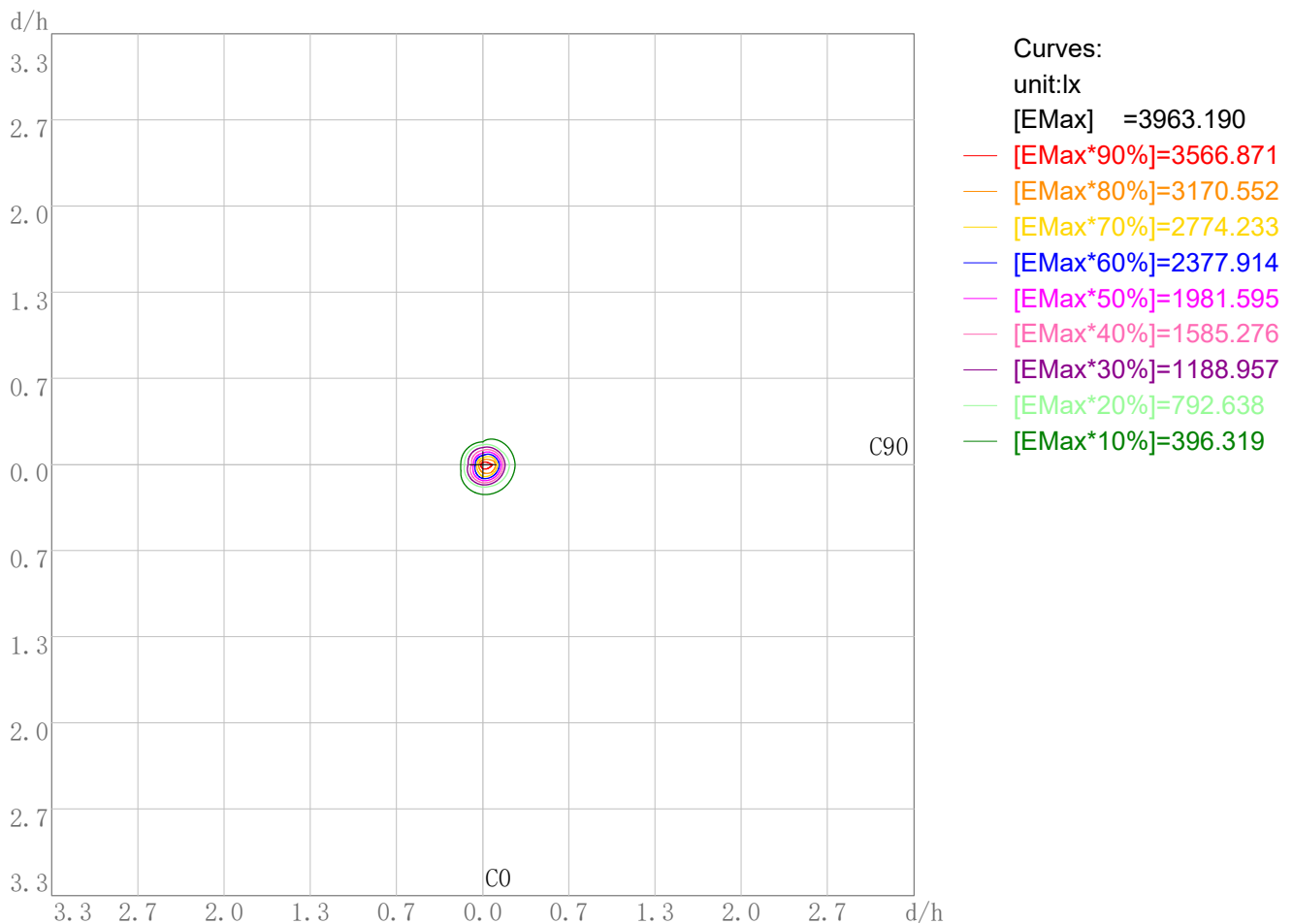


Photometric Filename:DL51-35-XX-01 3000K RA90 15D 黑色.IES

Plane ISO-Illuminance Diagram

Lum. Name: DL51-35-XX-01 3000K RA90 15D 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

Plane ISO-Illuminance Curve

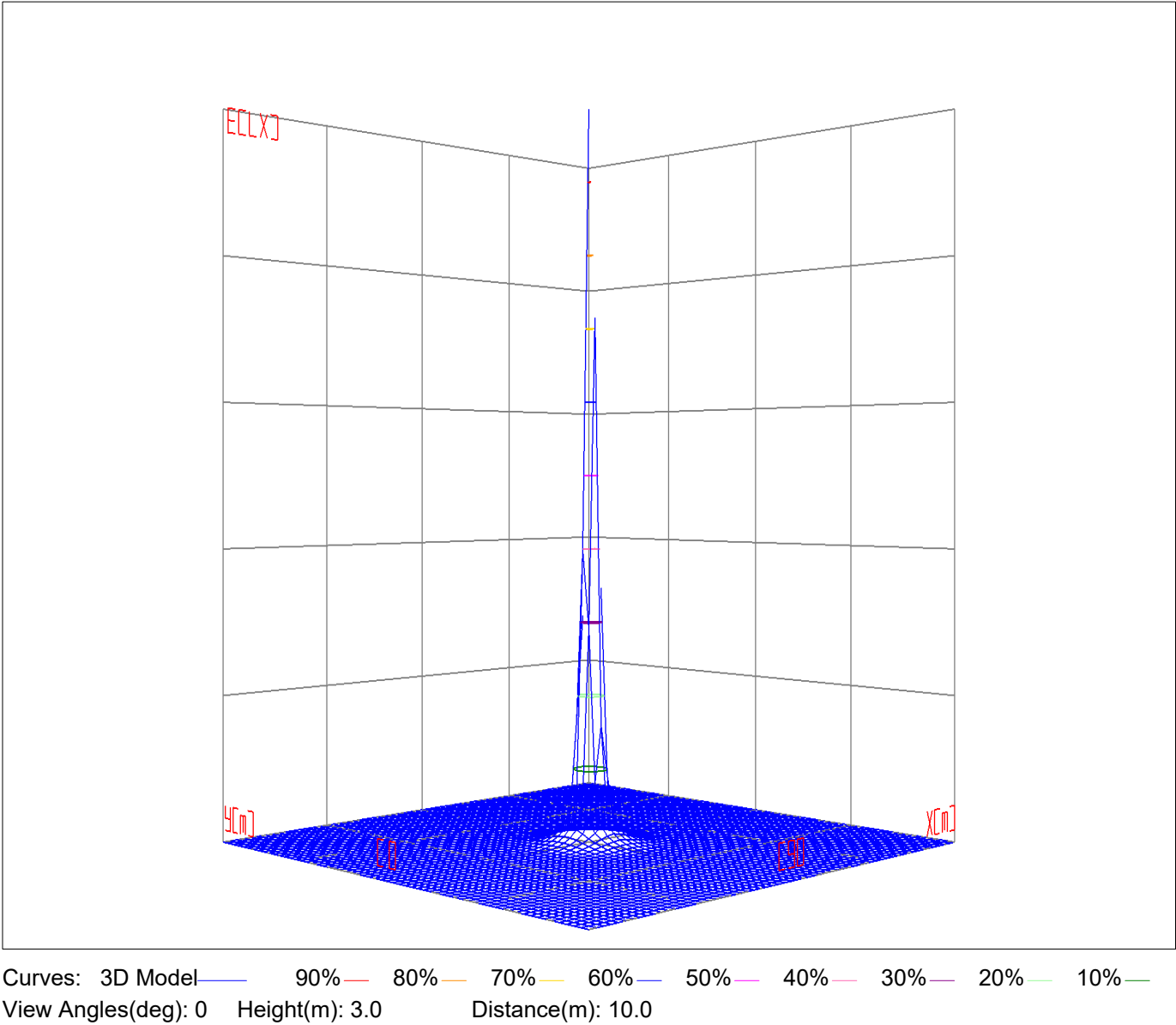


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 3963.19
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name:DL51-35-XX-01 3000K RA90 15D 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

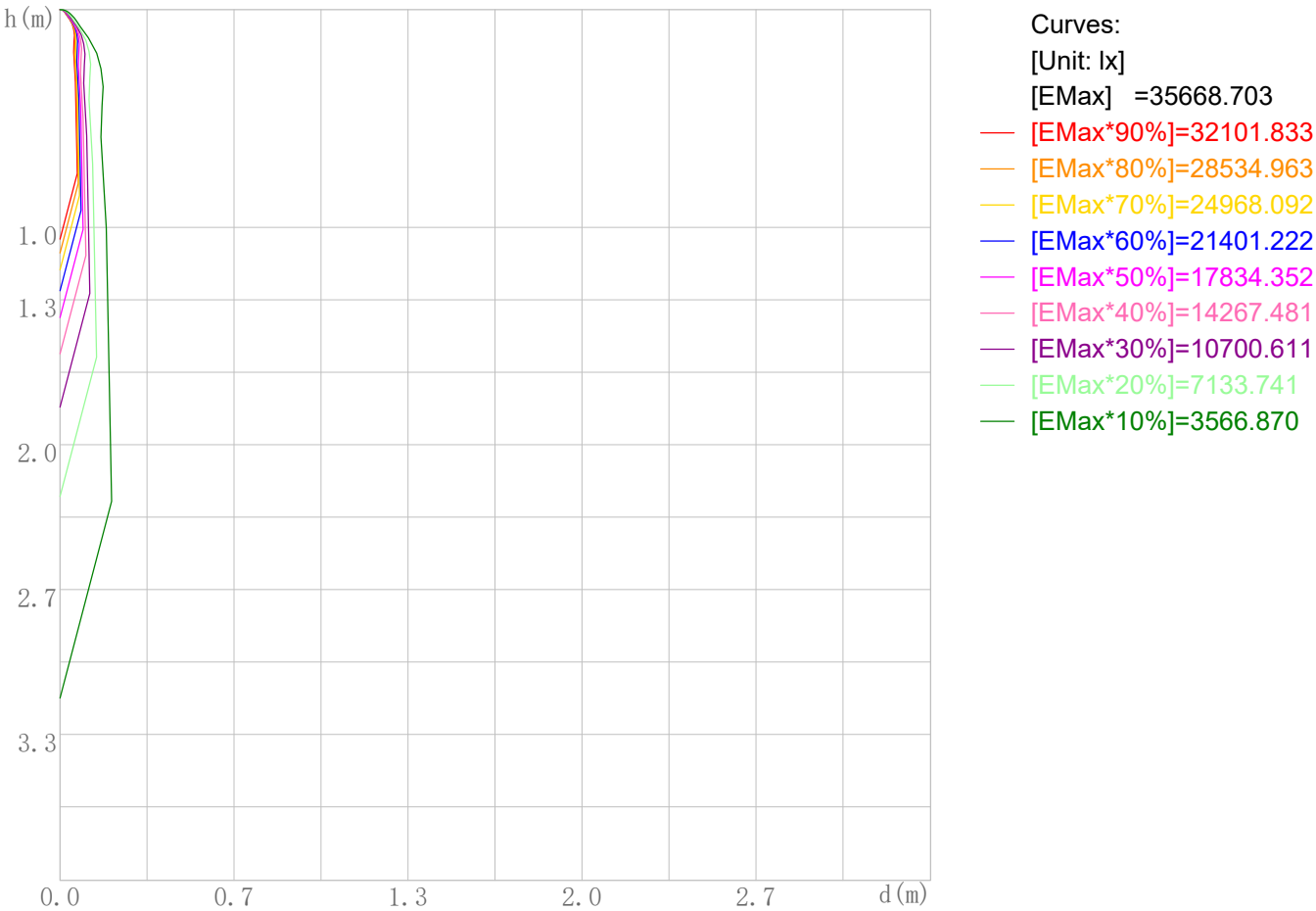
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 3000K RA90 15D 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

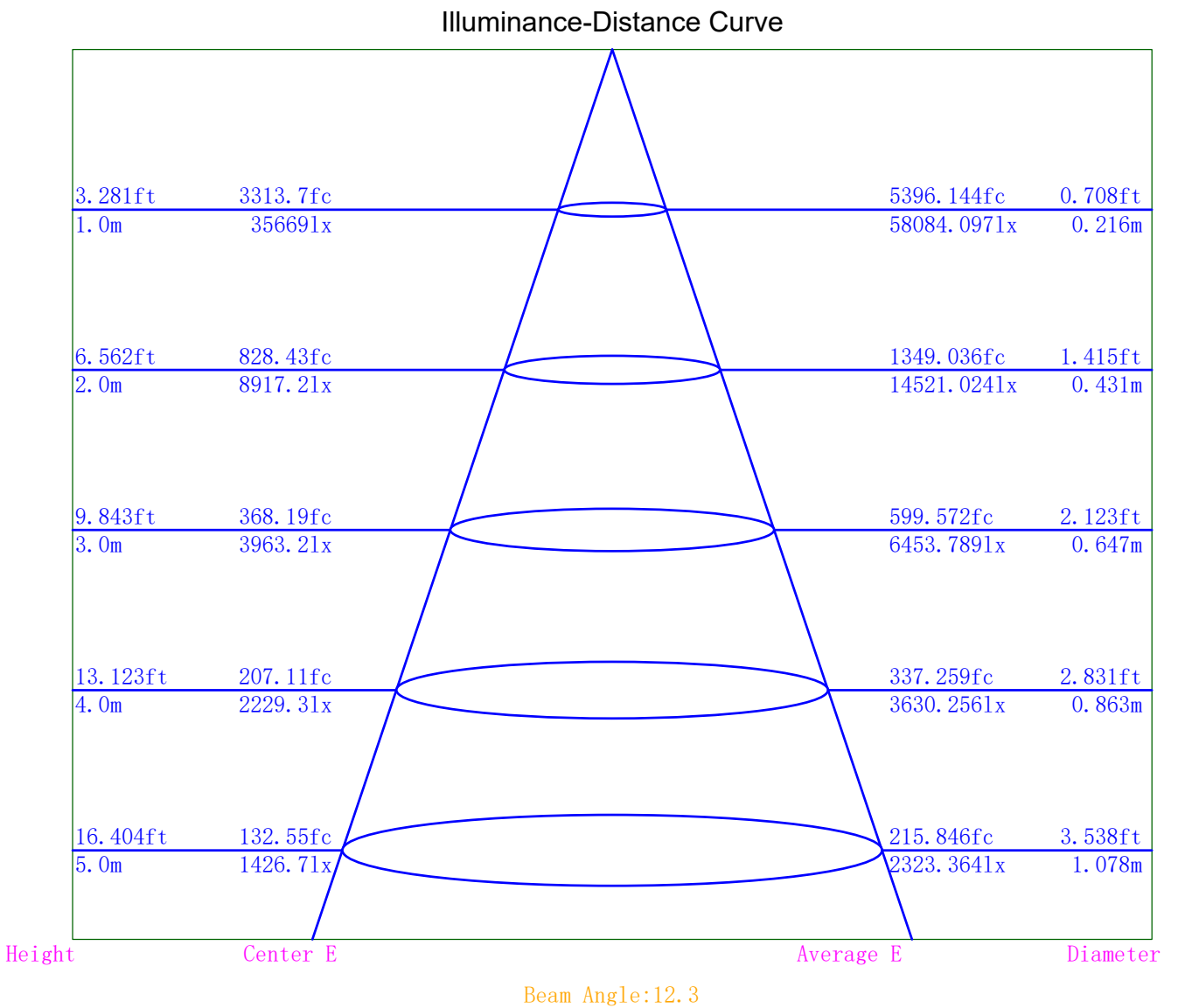
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:35668.70lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:35668.703cd,0deg

Illuminance-Distance Diagram

Lum. Name:DL51-35-XX-01 3000K RA90 15D 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 15D 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

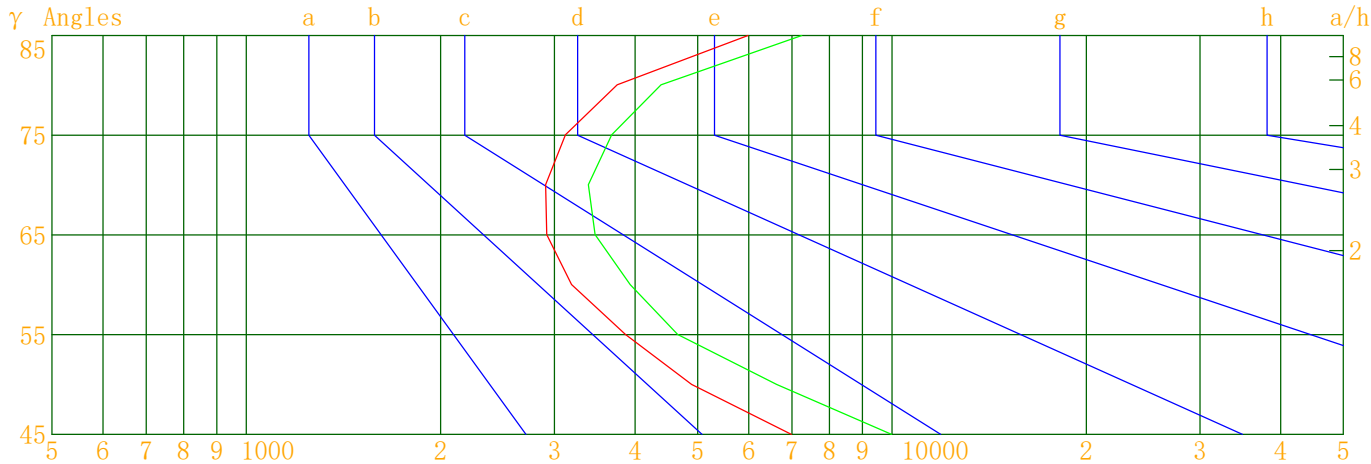
Glare Grade Table

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	6986	4893	3867	3189	2920	2907	3121	3754	5983
C90	9987	6627	4657	3932	3468	3387	3682	4389	7249

Luminance Limiting Curve



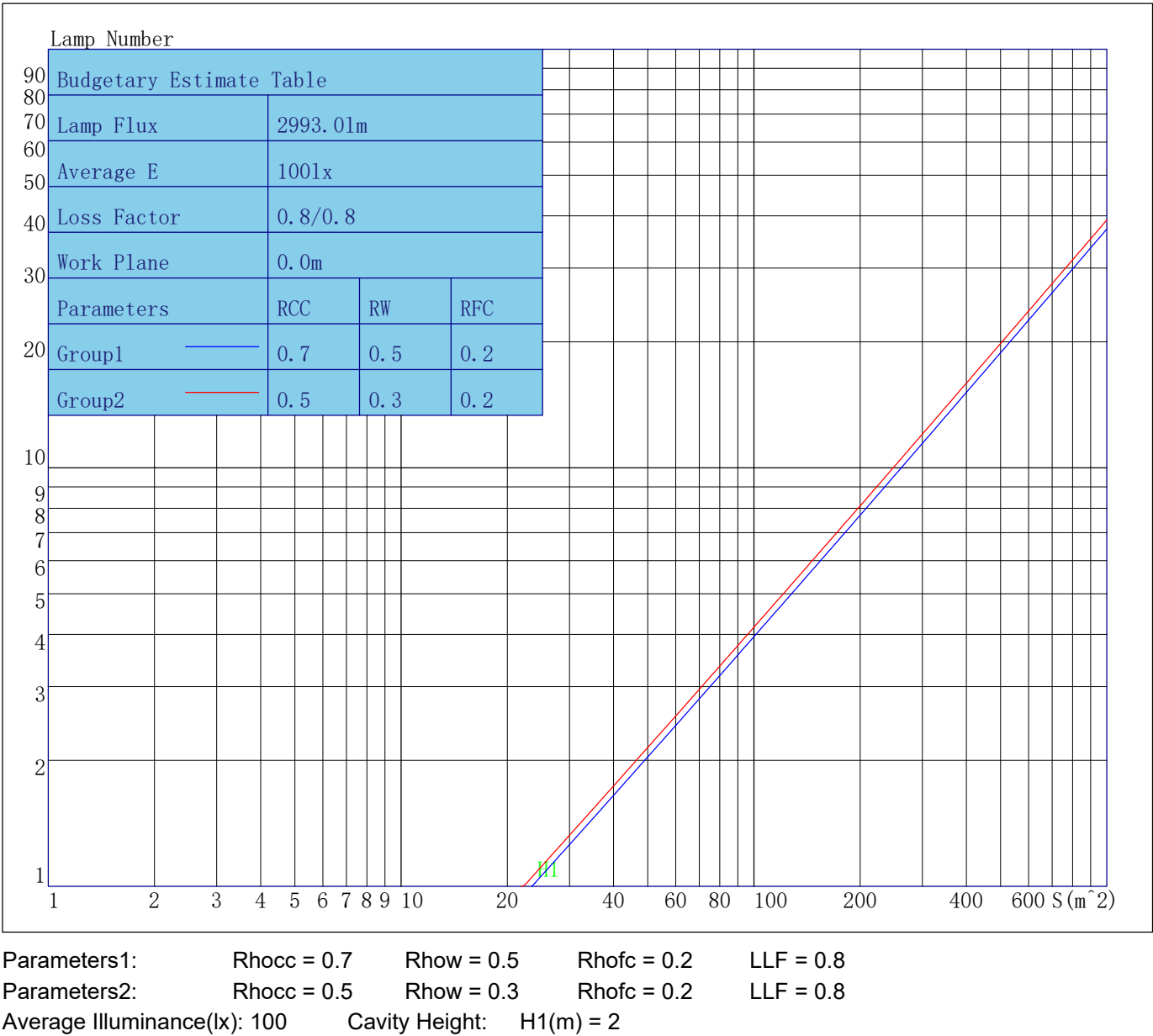
Luminous Size:Length(m)=0.110Width(m)=0.110Height(m)=0.000Area(m^2)=0.012100

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 15D 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 Coefficient of Utilization Table

Lum. Name:DL51-35-XX-01 3000K RA90 15D 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	99
1	115	113	111	109	112	110	109	107	106	105	104	102	101	100	99	98	97	96
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	97	95	94	93
3	108	104	100	97	106	102	99	96	99	97	95	97	95	93	95	93	92	90
4	105	100	96	93	103	99	95	93	97	94	92	95	92	90	93	91	89	88
5	102	97	93	90	101	96	92	90	94	91	89	93	90	88	91	89	87	86
6	100	94	90	88	99	93	90	87	92	89	87	91	88	86	89	87	85	84
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	85	84	83
8	96	90	86	83	95	89	86	83	88	85	83	87	84	82	86	84	82	81
9	94	88	84	82	93	87	84	81	86	83	81	86	83	81	85	82	81	80
10	92	86	82	80	91	86	82	80	85	82	80	84	81	79	84	81	79	78

Unified Glare Rating Table

Lum. Name:DL51-35-XX-01 3000K RA90 15D 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	12.0	12.8	12.4	13.1	13.5	13.6	14.4	14.0	14.8	15.1
	12.3	12.9	12.7	13.3	13.7	13.8	14.5	14.2	14.8	15.2
	12.4	13.0	12.9	13.4	13.8	13.9	14.5	14.4	14.9	15.4
	12.7	13.2	13.1	13.6	14.1	14.2	14.7	14.6	15.1	15.5
	12.9	13.3	13.3	13.8	14.2	14.3	14.8	14.8	15.2	15.7
	13.1	13.5	13.5	14.0	14.4	14.5	15.0	15.0	15.4	15.8
X=4H Y=2H	12.0	12.5	12.4	12.9	13.4	13.5	14.1	13.9	14.5	14.9
	12.4	12.8	12.8	13.2	13.7	13.8	14.3	14.3	14.7	15.1
	12.7	13.0	13.1	13.5	14.0	14.1	14.4	14.5	14.9	15.4
	13.1	13.4	13.6	13.9	14.4	14.4	14.7	14.9	15.2	15.7
	13.4	13.6	13.9	14.1	14.6	14.7	14.9	15.2	15.4	15.9
	13.7	13.9	14.3	14.5	15.0	15.0	15.2	15.5	15.8	16.3
X=8H Y=4H	12.7	13.0	13.3	13.5	14.0	14.1	14.3	14.6	14.8	15.3
	13.4	13.6	13.9	14.1	14.6	14.6	14.8	15.2	15.3	15.8
	13.8	13.9	14.4	14.5	15.0	15.0	15.1	15.6	15.7	16.2
	14.4	14.5	14.9	15.0	15.6	15.6	15.6	16.1	16.2	16.8
X=12H Y=4H	12.7	12.9	13.3	13.5	14.0	14.0	14.3	14.6	14.8	15.3
	13.4	13.6	14.0	14.1	14.7	14.7	14.8	15.2	15.3	15.9
	14.0	14.1	14.5	14.6	15.2	15.1	15.2	15.7	15.7	16.4
Variations with the objverver position at spacings										
S=1.0H	0.1/-0.1					0.2/-0.2				
S=1.5H	0.3/-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	1.9					1.7				

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	35668.7	35668.7	35668.7	35668.7
γ 5.0	18402.6	31769.6	25952.7	14215.5
γ 10.0	3753.5	10137.6	6777.0	3073.1
γ 15.0	1357.3	2292.9	1835.1	1178.3
γ 20.0	841.7	1089.9	907.8	698.8
γ 25.0	600.7	755.3	590.4	456.0
γ 30.0	404.7	534.1	375.6	304.2
γ 35.0	260.1	356.6	256.0	192.2
γ 40.0	133.4	198.7	160.6	99.5
γ 45.0	59.8	85.4	66.4	52.6
γ 50.0	38.1	51.5	44.8	34.0
γ 55.0	26.8	32.3	29.2	25.8
γ 60.0	19.3	23.8	22.7	19.7
γ 65.0	14.9	17.7	17.7	15.4
γ 70.0	12.0	14.0	13.9	12.1
γ 75.0	9.8	11.5	10.8	9.8
γ 80.0	7.9	9.2	8.6	8.4
γ 85.0	6.3	7.6	7.7	6.7
γ 90.0	5.3	6.3	6.1	4.6
γ 95.0	4.3	4.8	4.0	2.4
γ 100.0	3.5	3.9	2.4	1.8
γ 105.0	3.0	3.9	2.1	1.9
γ 110.0	3.3	3.3	2.1	2.1
γ 115.0	2.1	2.8	2.1	2.5
γ 120.0	1.9	2.1	2.4	3.0
γ 125.0	2.6	1.6	3.2	3.6
γ 130.0	3.0	2.7	3.7	4.4
γ 135.0	5.1	3.5	5.2	6.5
γ 140.0	9.0	5.9	7.6	11.9
γ 145.0	14.0	10.9	12.6	16.3
γ 150.0	17.6	15.5	16.9	18.4
γ 155.0	19.3	18.3	19.0	18.5
γ 160.0	19.5	18.5	19.9	17.6
γ 165.0	19.9	18.1	20.3	18.6
γ 170.0	19.1	19.3	20.5	18.7
γ 175.0	16.6	18.3	18.1	15.7
γ 180.0	15.4	15.4	15.4	15.4