

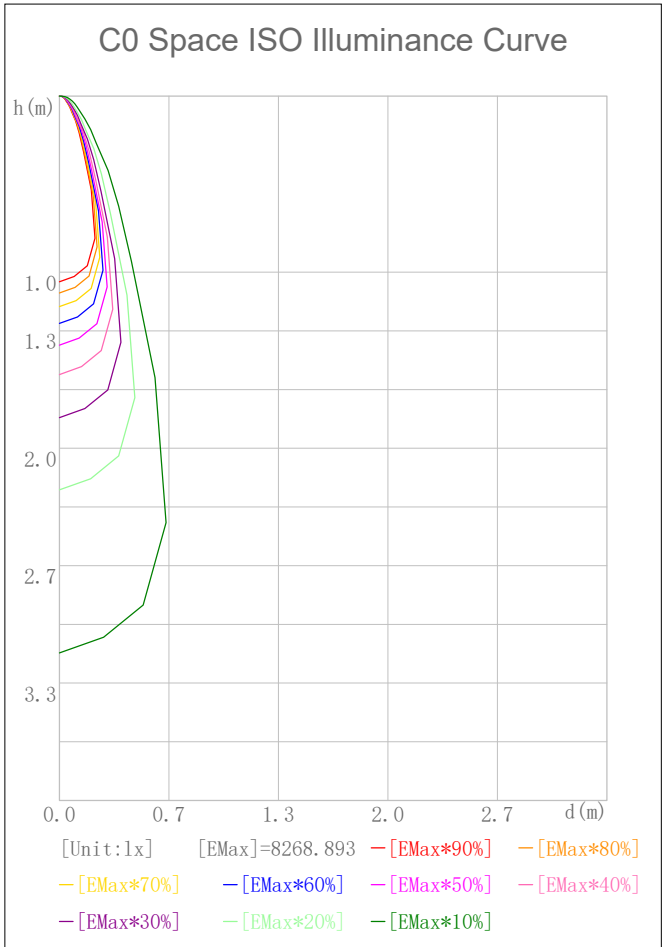
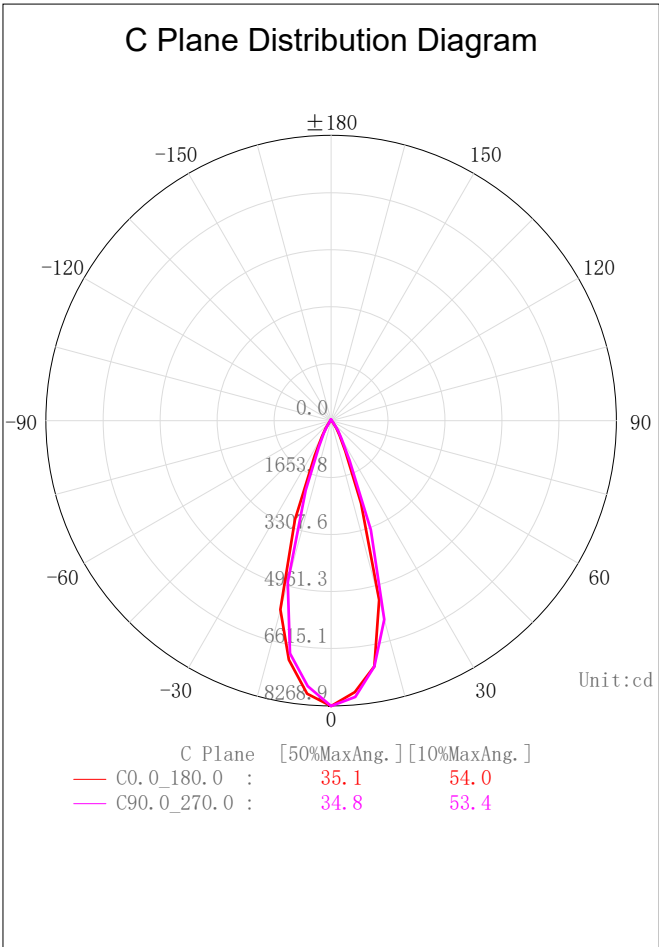
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-35-XX-01 4000K RA90 36D 黑色	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Date: 2022/08/11
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

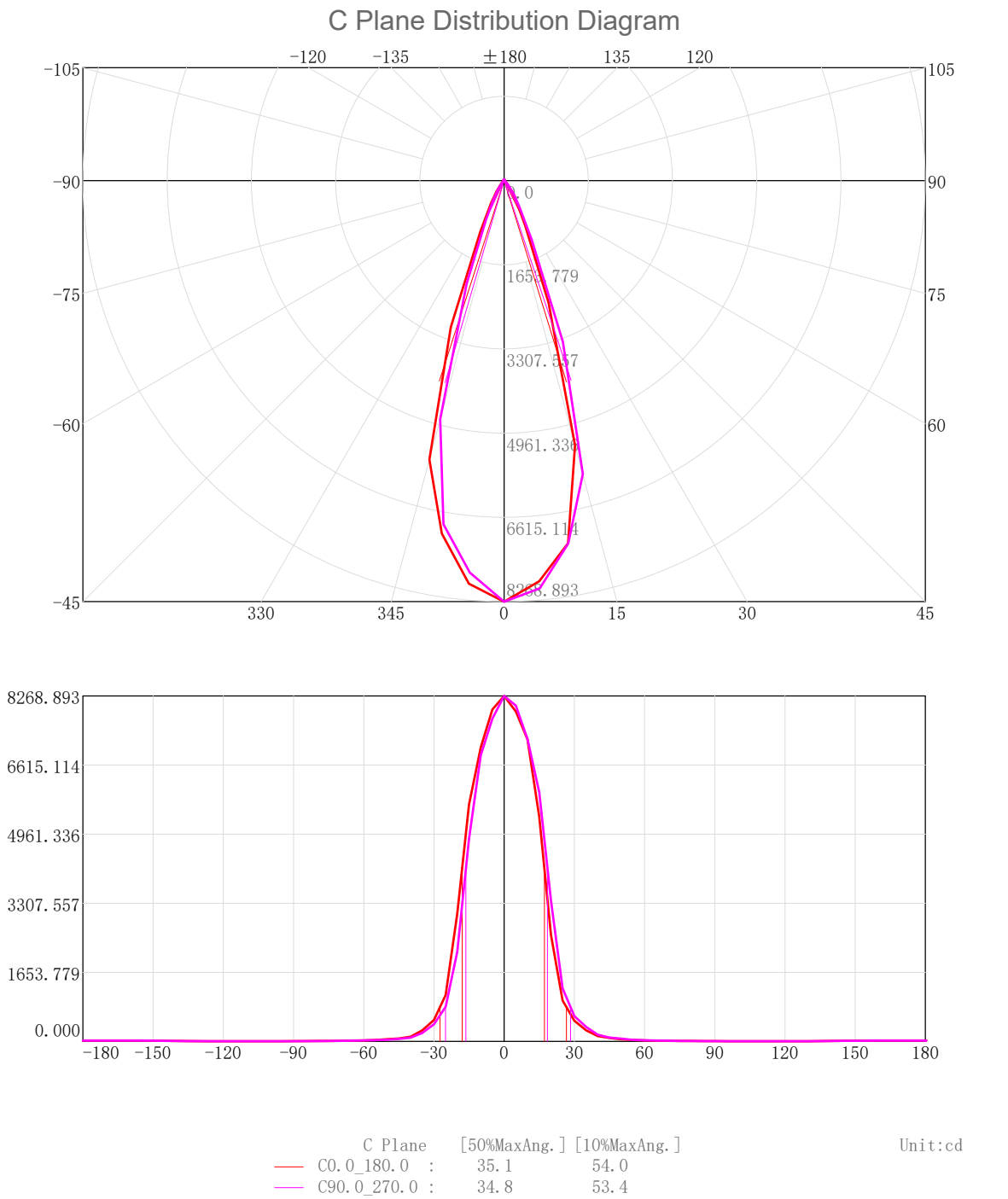
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 3142.850	Luminary Flux(lm): 3142.850	Field Angle(10%Imax): 54.0(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 3079.692lm 97.99%
Rated Voltage(V):	Luminary EER(lm/W): 93.232	Up Lumens&Percent: 63.158lm 2.01%
Tested Power(W): 33.710	Max. Candela(cd): 8268.893	S/MH: C0_a180=0.596 C90_270=0.590
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct
Tested Electrics (V, A, pf): 239.8, 0.146, 0.960	Beam Angle(50%Imax): 35.1(°)	ErP Φ use(90°): 3039.686lm
Lamp Size (W*L*H): 0.110m*0.110m*0.000m	Left=-17.9°, Right=17.2°	IRF(%): 578.826



2D Plane Light Intensity Distribution Curve

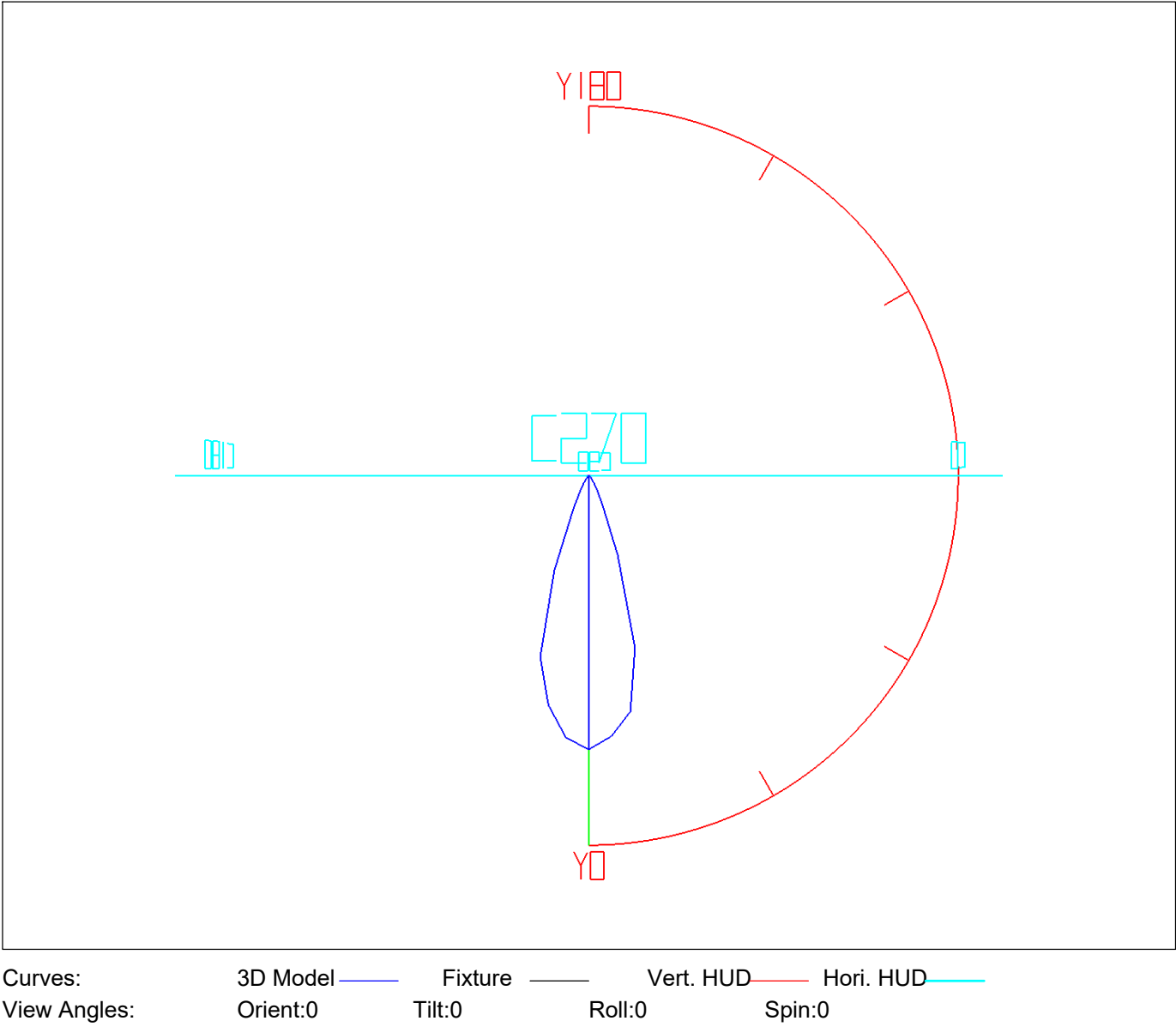
Lum. Name:DL51-35-XX-01 4000K RA90 36D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/11



3D Light Intensity Distribution Modal

Lum. Name:DL51-35-XX-01 4000K 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:2022/08/11

3D Light Intensity Distribution Modal

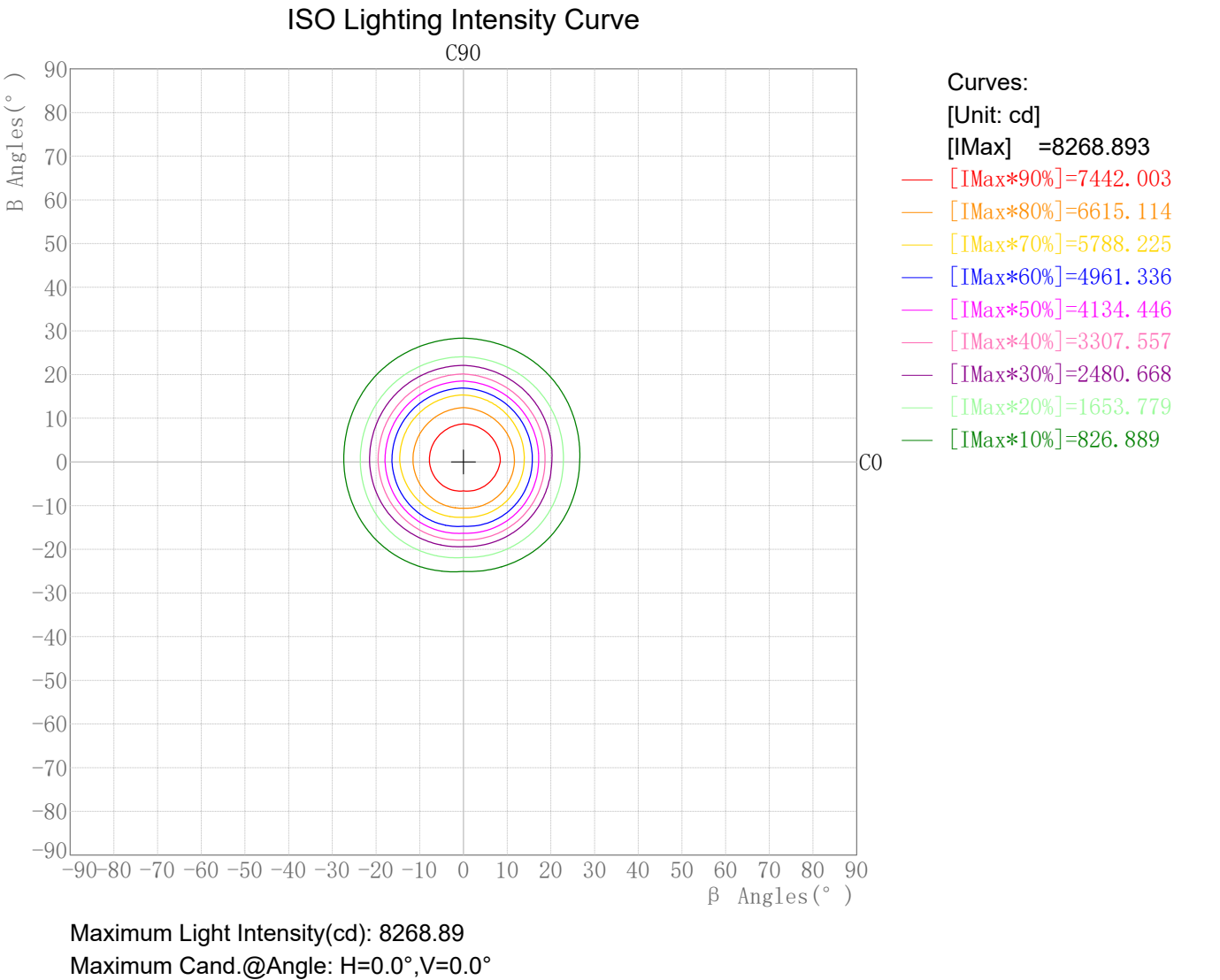


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	193.31	193.31	6.15	6.15
5.0-10.0	536.23	729.54	17.06	23.21
10.0-15.0	744.76	1474.29	23.70	46.91
15.0-20.0	679.67	2153.97	21.63	68.54
20.0-25.0	401.70	2555.66	12.78	81.32
25.0-30.0	197.02	2752.68	6.27	87.59
30.0-35.0	114.73	2867.42	3.65	91.24
35.0-40.0	66.27	2933.69	2.11	93.34
40.0-45.0	37.85	2971.54	1.20	94.55
45.0-50.0	26.93	2998.47	0.86	95.41
50.0-55.0	19.49	3017.96	0.62	96.03
55.0-60.0	14.23	3032.19	0.45	96.48
60.0-65.0	11.63	3043.82	0.37	96.85
65.0-70.0	9.81	3053.64	0.31	97.16
70.0-75.0	8.24	3061.87	0.26	97.42
75.0-80.0	6.96	3068.83	0.22	97.64
80.0-85.0	5.88	3074.72	0.19	97.83
85.0-90.0	4.97	3079.69	0.16	97.99
90.0-95.0	4.34	3084.04	0.14	98.13
95.0-100.0	3.83	3087.87	0.12	98.25
100.0-105.0	3.38	3091.25	0.11	98.36
105.0-110.0	3.05	3094.29	0.10	98.46
110.0-115.0	2.83	3097.12	0.09	98.54
115.0-120.0	2.73	3099.85	0.09	98.63
120.0-125.0	2.83	3102.68	0.09	98.72
125.0-130.0	3.14	3105.83	0.10	98.82
130.0-135.0	3.70	3109.53	0.12	98.94
135.0-140.0	4.35	3113.88	0.14	99.08
140.0-145.0	4.90	3118.78	0.16	99.23
145.0-150.0	5.23	3124.01	0.17	99.40
150.0-155.0	5.18	3129.19	0.16	99.57
155.0-160.0	4.72	3133.91	0.15	99.72
160.0-165.0	3.88	3137.79	0.12	99.84
165.0-170.0	2.80	3140.59	0.09	99.93
170.0-175.0	1.69	3142.28	0.05	99.98
175.0-180.0	0.57	3142.85	0.02	100.00

Rectangle ISO Lighting Intensity Diagram

Lum. Name:DL51-35-XX-01 4000K 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:2022/08/11

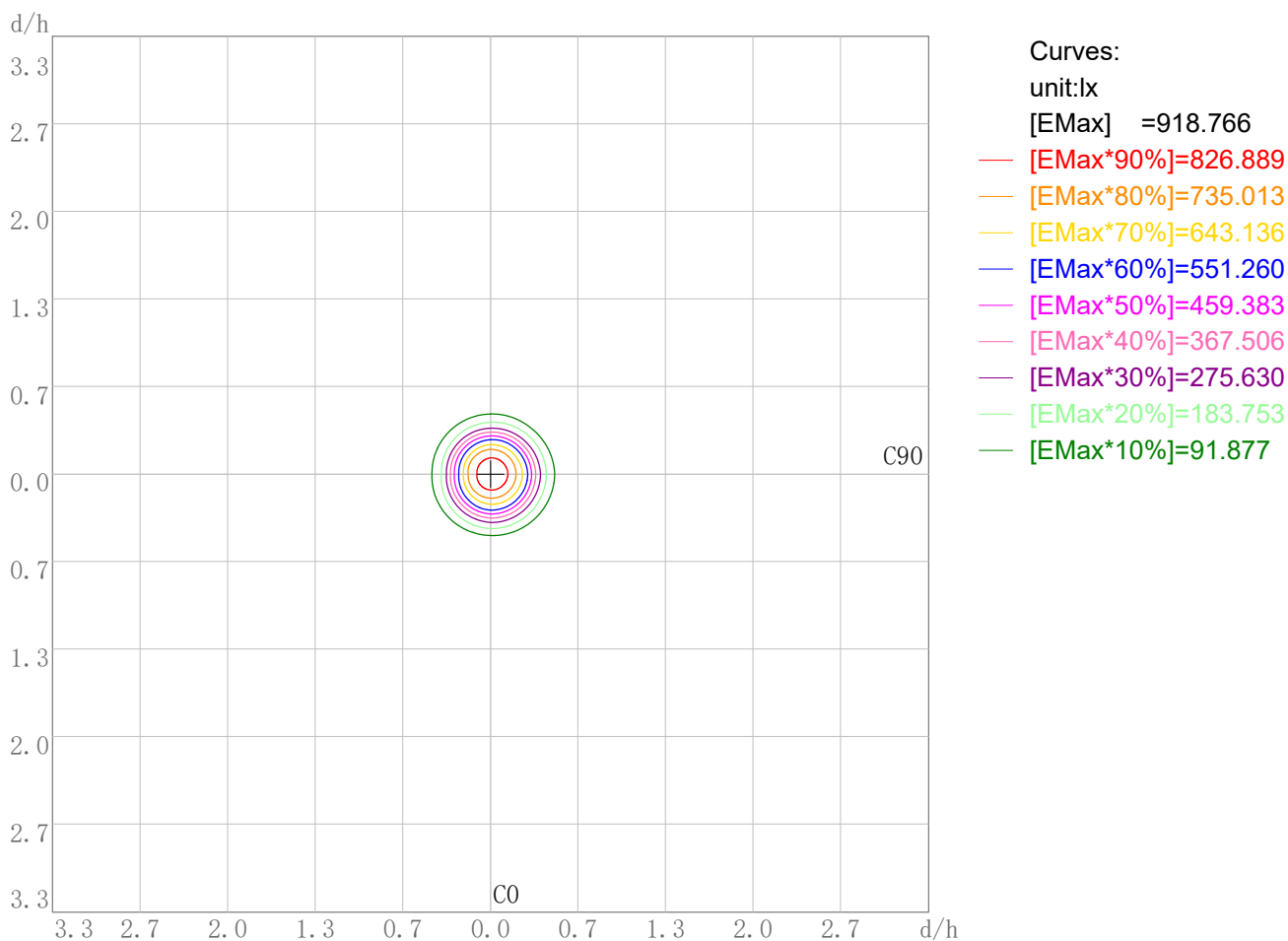


## Photometric Filename:DL51-35-XX-01 4000K RA90 36D 黑色.IES

## Plane ISO-Illuminance Diagram

Lum. Name: DL51-35-XX-01 4000K 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: 2022/08/11

## Plane ISO-Illuminance Curve

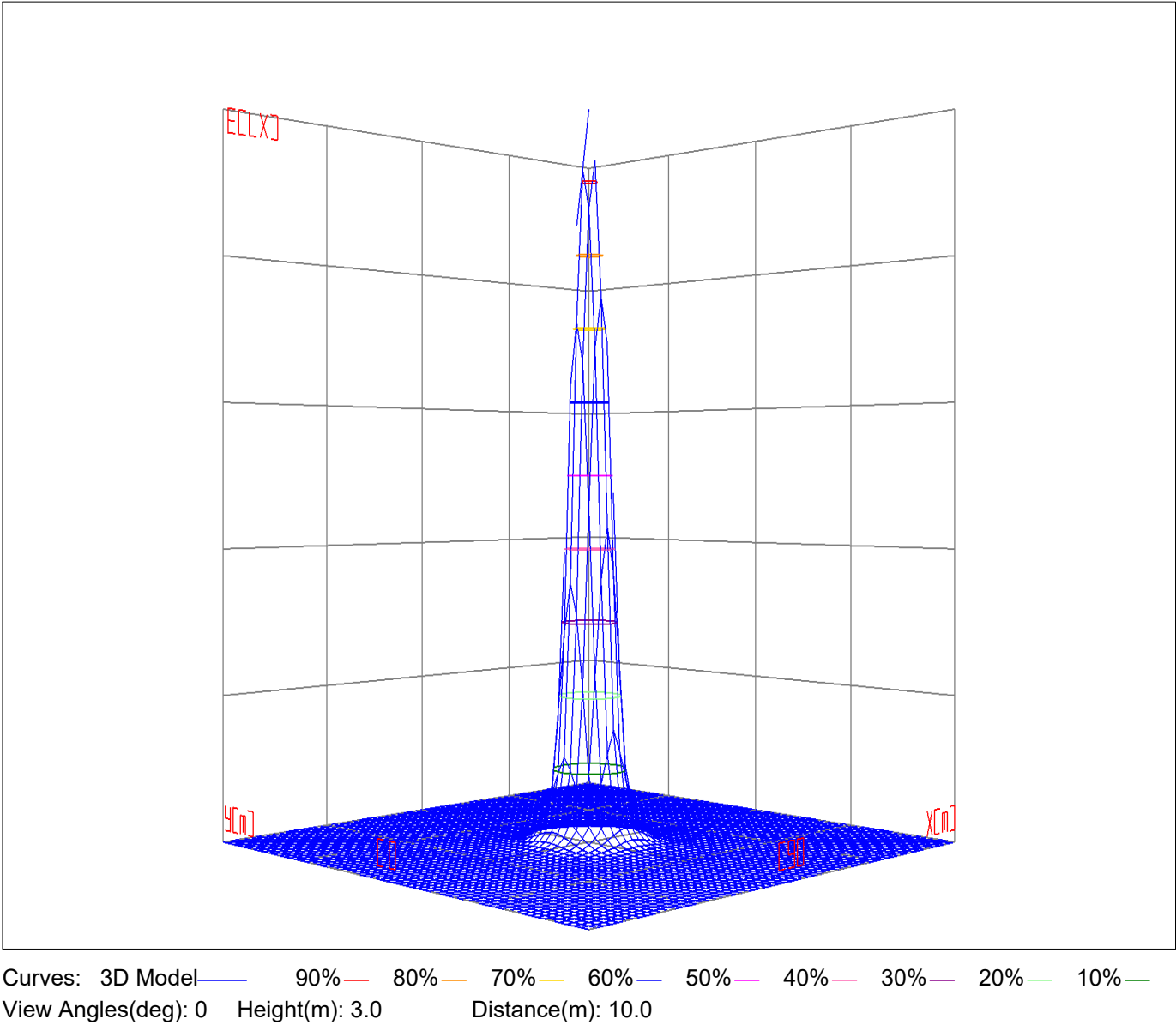


Working Plane Luminaire Mounting Height(m): 3.00  
Working Plane Maximum Illuminance(lx): 918.77  
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 4000K 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: 2022/08/11

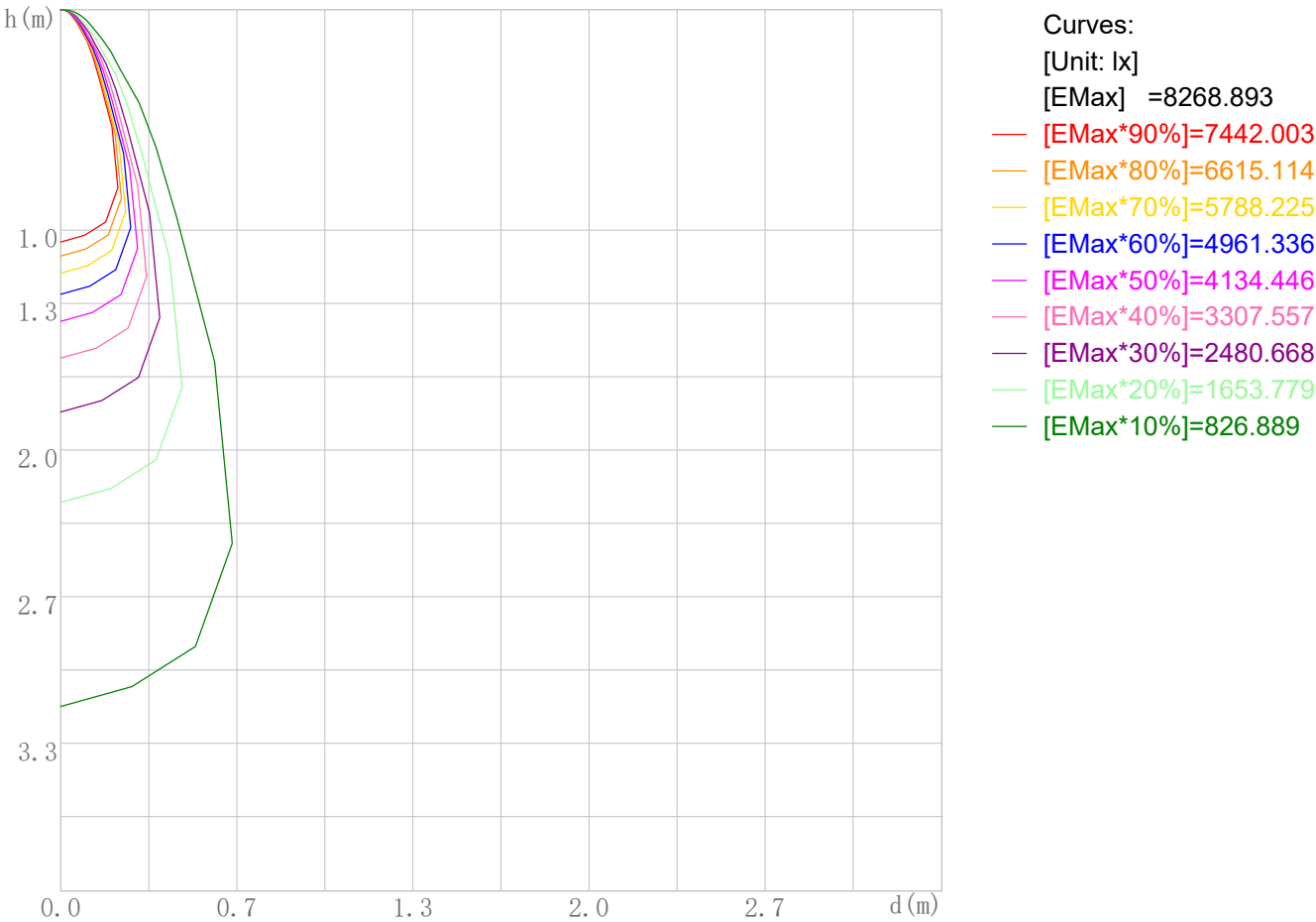
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name:DL51-35-XX-01 4000K 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:2022/08/11

Space ISO Illuminance Curve

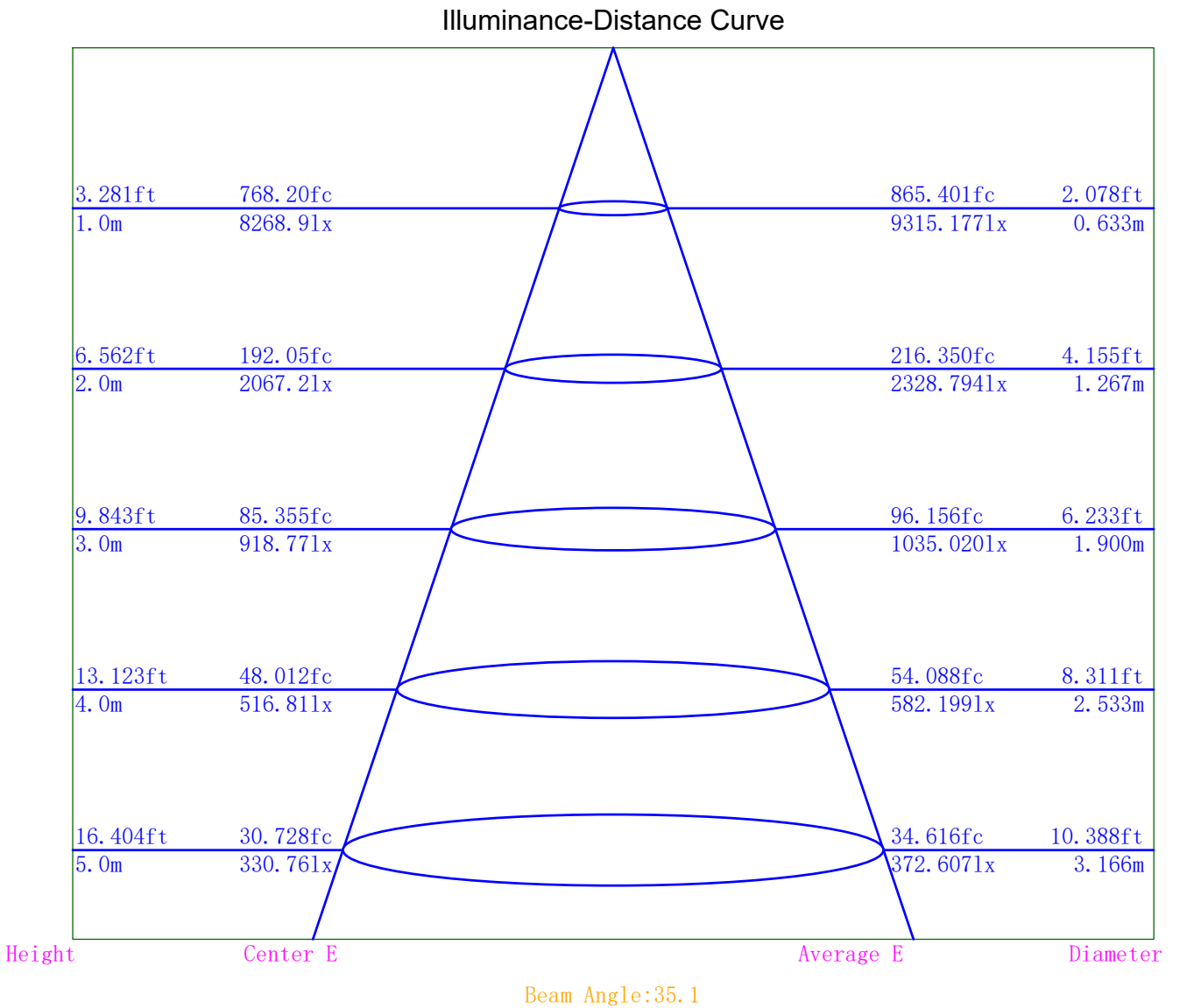


Space Plane Maximum Illuminance and @Angle:8268.89lx,0.0deg  
Plane Maximum Lighting Intensity and @Angle:8268.893cd,0deg



Illuminance-Distance Diagram

Lum. Name:DL51-35-XX-01 4000K 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:2022/08/11



Indoor Luminance Limiting Curves

Lum. Name:DL51-35-XX-01 4000K 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:2022/08/11

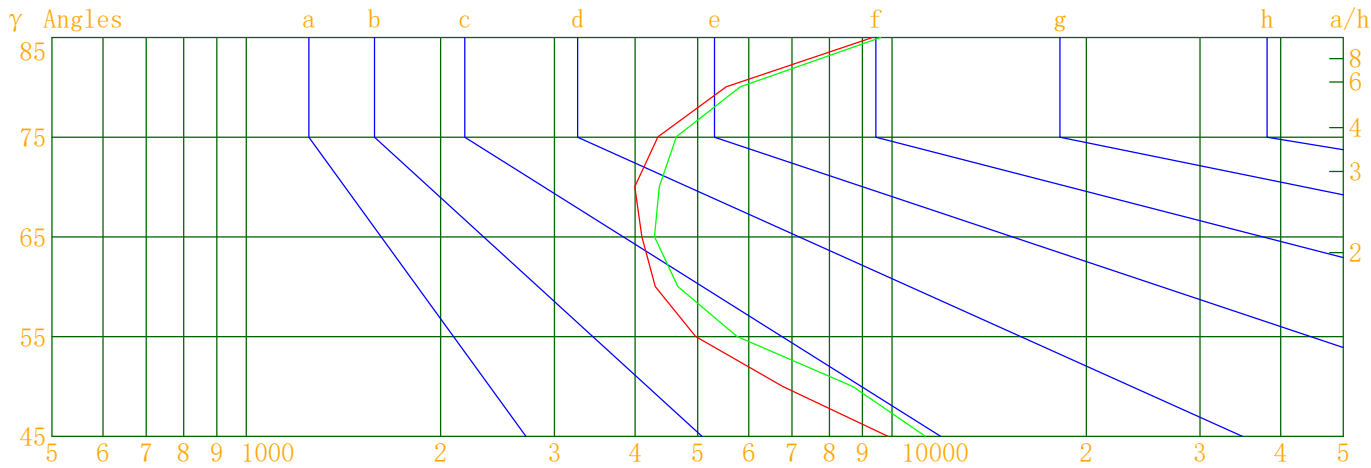
Glare Grade Table

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	9860	6773	4965	4298	4099	3996	4341	5537	9331
C90	11268	8690	5757	4658	4288	4362	4635	5823	9604

Luminance Limiting Curve



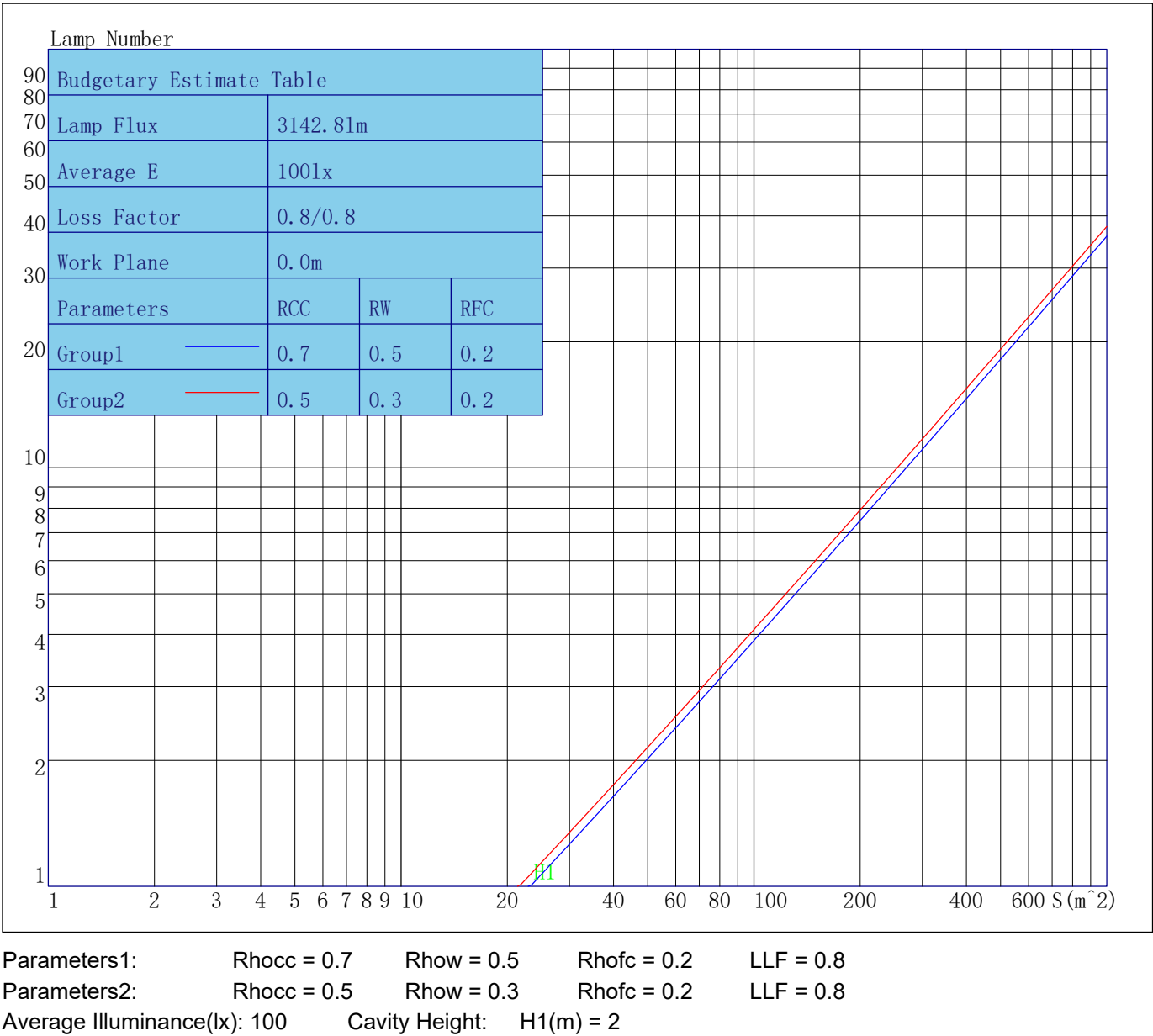
Luminous Size:Length(m)=0.110Width(m)=0.110Height(m)=0.000Area(m^2)=0.012100

Luminous Type:Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name:DL51-35-XX-01 4000K 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:2022/08/11



Indoor Coefficient of Utilization Table

Lum. Name:DL51-35-XX-01 4000K 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:2022/08/11

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	111	109	107	111	109	107	105	105	103	102	101	99	98	97	96	95	93
2	109	105	101	99	107	103	100	97	100	97	95	96	94	93	93	92	90	89
3	105	100	95	92	103	98	94	91	95	92	89	93	90	88	90	88	86	85
4	101	95	90	87	99	93	89	86	91	88	85	89	86	84	87	85	82	81
5	97	90	86	82	96	89	85	82	87	84	81	86	82	80	84	81	79	78
6	94	87	82	78	92	86	81	78	84	80	77	83	79	77	81	78	76	75
7	90	83	78	75	89	82	78	74	81	77	74	80	76	73	78	75	73	72
8	87	80	75	72	86	79	75	71	78	74	71	77	73	71	76	73	70	69
9	85	77	72	69	83	76	72	69	75	71	68	74	71	68	73	70	68	67
10	82	74	69	66	81	74	69	66	73	69	66	72	68	66	71	68	65	64

Unified Glare Rating Table

Lum. Name:DL51-35-XX-01 4000K 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:2022/08/11

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	12.7	13.6	13.1	13.9	14.3	13.8	14.6	14.2	15.0	15.4
	13.1	13.9	13.5	14.2	14.7	14.1	14.8	14.5	15.2	15.6
	13.4	14.1	13.8	14.5	14.9	14.3	15.0	14.7	15.4	15.8
	13.8	14.4	14.2	14.8	15.3	14.6	15.3	15.1	15.7	16.1
	14.1	14.7	14.5	15.1	15.6	14.9	15.5	15.3	15.9	16.4
	14.4	15.0	14.9	15.4	15.9	15.2	15.7	15.6	16.2	16.6
X=4H    Y=2H	12.7	13.4	13.1	13.8	14.2	13.7	14.4	14.1	14.8	15.2
	13.3	13.9	13.7	14.3	14.8	14.2	14.7	14.6	15.2	15.7
	13.7	14.2	14.2	14.7	15.2	14.5	15.0	15.0	15.5	16.0
	14.4	14.8	14.9	15.3	15.8	15.1	15.5	15.6	16.0	16.5
	14.8	15.2	15.3	15.6	16.2	15.4	15.8	16.0	16.3	16.8
	15.3	15.6	15.8	16.1	16.7	15.9	16.2	16.4	16.8	17.3
X=8H    Y=4H	13.9	14.3	14.4	14.8	15.3	14.6	15.0	15.2	15.5	16.0
	14.7	15.0	15.3	15.6	16.1	15.4	15.7	15.9	16.2	16.8
	15.3	15.6	15.9	16.1	16.7	15.9	16.2	16.5	16.7	17.3
	16.1	16.3	16.6	16.8	17.5	16.6	16.8	17.2	17.3	18.0
X=12H    Y=4H	13.9	14.2	14.4	14.8	15.3	14.6	15.0	15.2	15.5	16.0
	14.8	15.1	15.4	15.6	16.2	15.5	15.7	16.0	16.2	16.8
	15.5	15.7	16.1	16.3	16.9	16.1	16.3	16.6	16.8	17.5
Variations with the objerver 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/-0.3				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	2.4					2.2				

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	8268.89	8268.89	8268.89	8268.89
γ 5.0	7896.61	8036.15	7945.19	7725.83
γ 10.0	7230.35	7236.90	7036.66	6851.20
γ 15.0	5381.13	5964.54	5669.03	4850.38
γ 20.0	2548.01	3368.55	3058.77	2147.85
γ 25.0	981.04	1272.79	1111.89	831.19
γ 30.0	497.34	608.17	514.29	410.56
γ 35.0	269.20	348.64	264.56	203.82
γ 40.0	129.73	164.55	115.86	92.45
γ 45.0	84.36	96.40	71.00	63.33
γ 50.0	52.68	67.58	55.02	42.79
γ 55.0	34.46	39.95	34.64	31.39
γ 60.0	26.00	28.18	26.82	24.87
γ 65.0	20.96	21.93	21.93	20.71
γ 70.0	16.54	18.05	17.90	16.99
γ 75.0	13.60	14.52	14.61	13.86
γ 80.0	11.63	12.23	12.25	11.36
γ 85.0	9.84	10.13	9.86	9.31
γ 90.0	8.22	8.80	8.68	7.81
γ 95.0	7.89	7.83	7.19	7.04
γ 100.0	6.86	6.93	6.51	6.19
γ 105.0	6.12	6.17	5.92	5.81
γ 110.0	5.58	5.55	5.73	5.73
γ 115.0	5.54	5.38	5.51	5.61
γ 120.0	5.58	5.33	5.96	6.04
γ 125.0	6.15	5.84	6.72	7.39
γ 130.0	7.85	6.87	8.13	8.87
γ 135.0	10.39	8.98	10.84	11.31
γ 140.0	13.09	11.74	13.28	14.41
γ 145.0	16.09	15.23	16.38	17.37
γ 150.0	19.26	17.79	20.01	19.95
γ 155.0	21.73	20.49	22.04	22.38
γ 160.0	23.79	22.61	23.79	23.30
γ 165.0	23.64	23.15	24.47	23.42
γ 170.0	23.57	23.31	24.00	23.03
γ 175.0	23.93	23.54	23.98	23.49
γ 180.0	24.21	24.21	24.21	24.21