

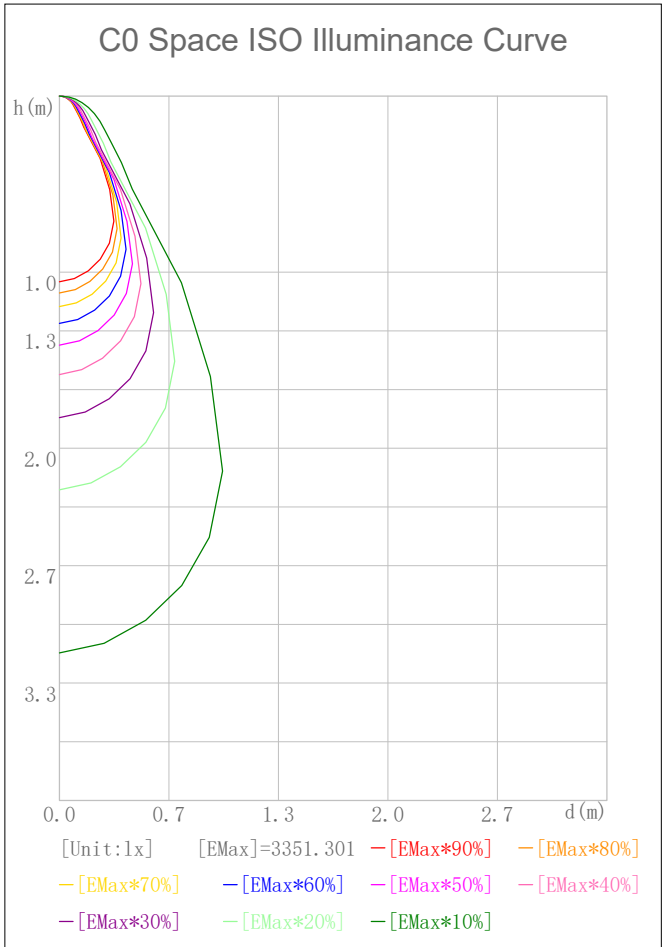
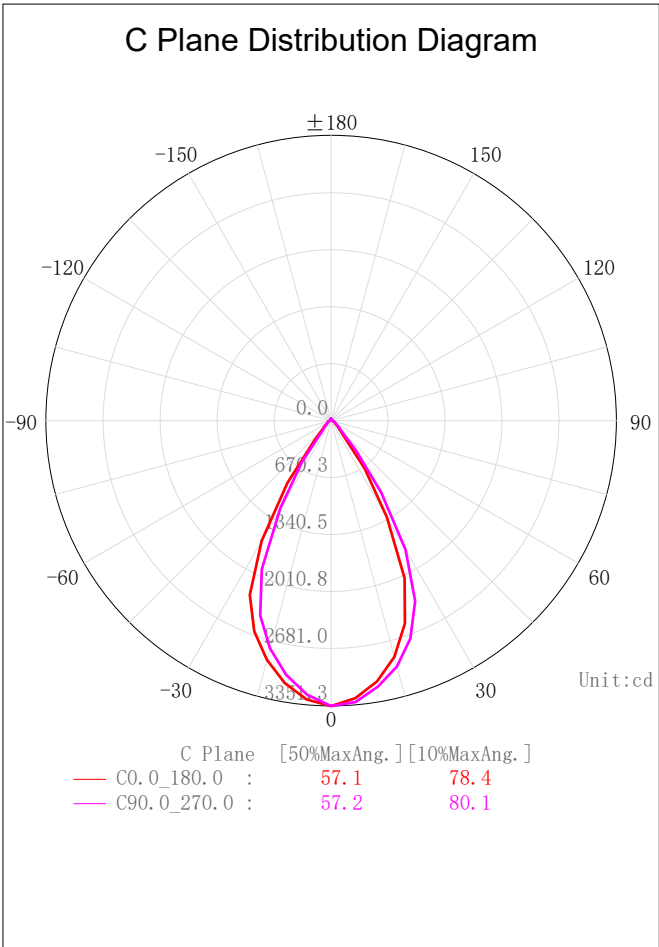
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-35-XX-01 4000K RA90 60D 白色	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

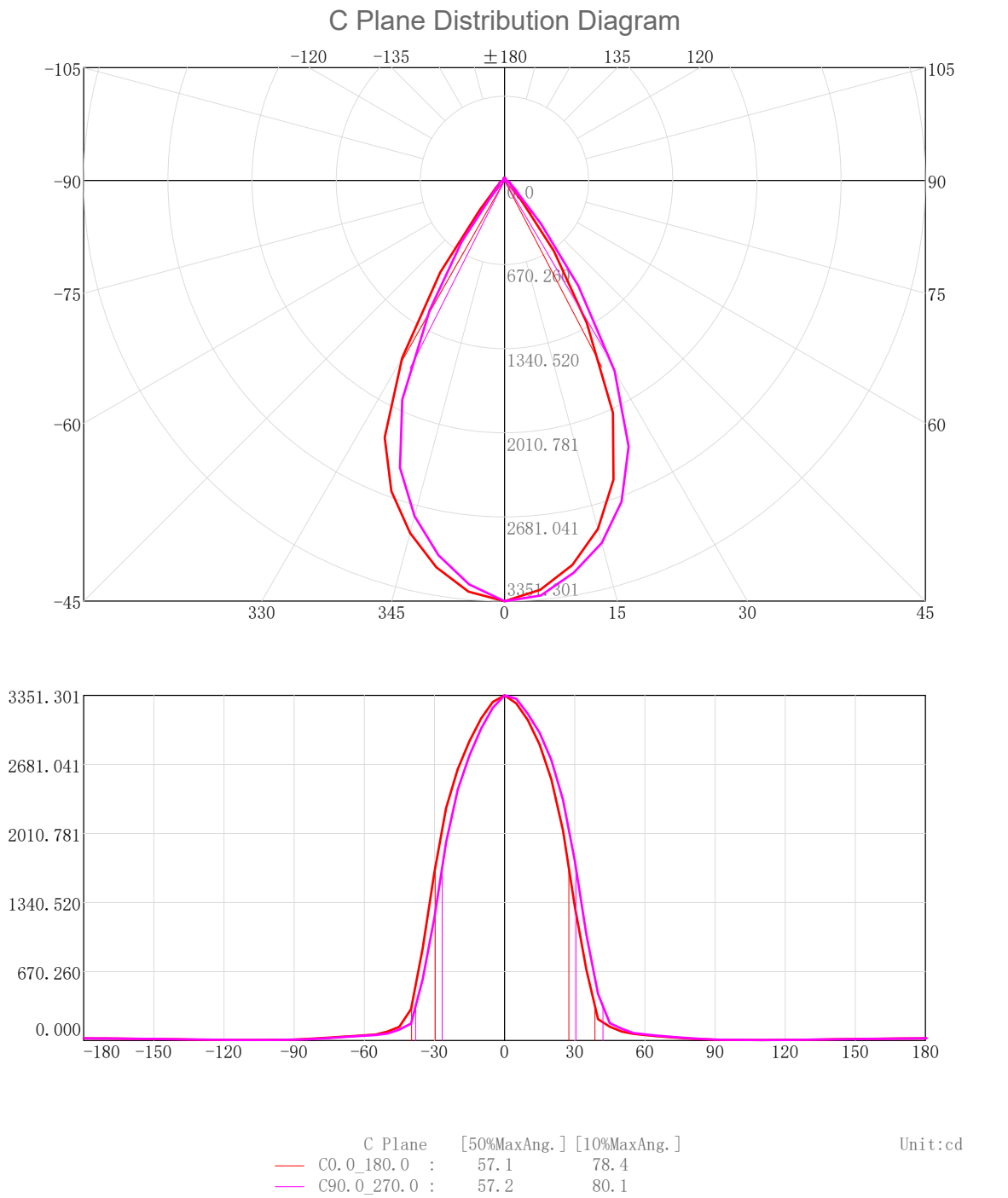
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 2918.520	Luminary Flux(lm): 2918.516	Field Angle(10%Imax): 78.4(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 2855.432lm 97.84%
Rated Voltage(V):	Luminary EER(lm/W): 86.654	Up Lumens&Percent: 63.084lm 2.16%
Tested Power(W): 33.680	Max. Candela(cd): 3351.301	S/MH: C0_a180=0.906 C90_270=0.901
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): 57.1(°)	ErP Φ use(90°): 2730.729lm
Lamp Size (W*L*H): 0.110m*0.110m*0.000m	Left=-29.6°, Right=27.5°	IRF(%): 263.075



2D Plane Light Intensity Distribution Curve

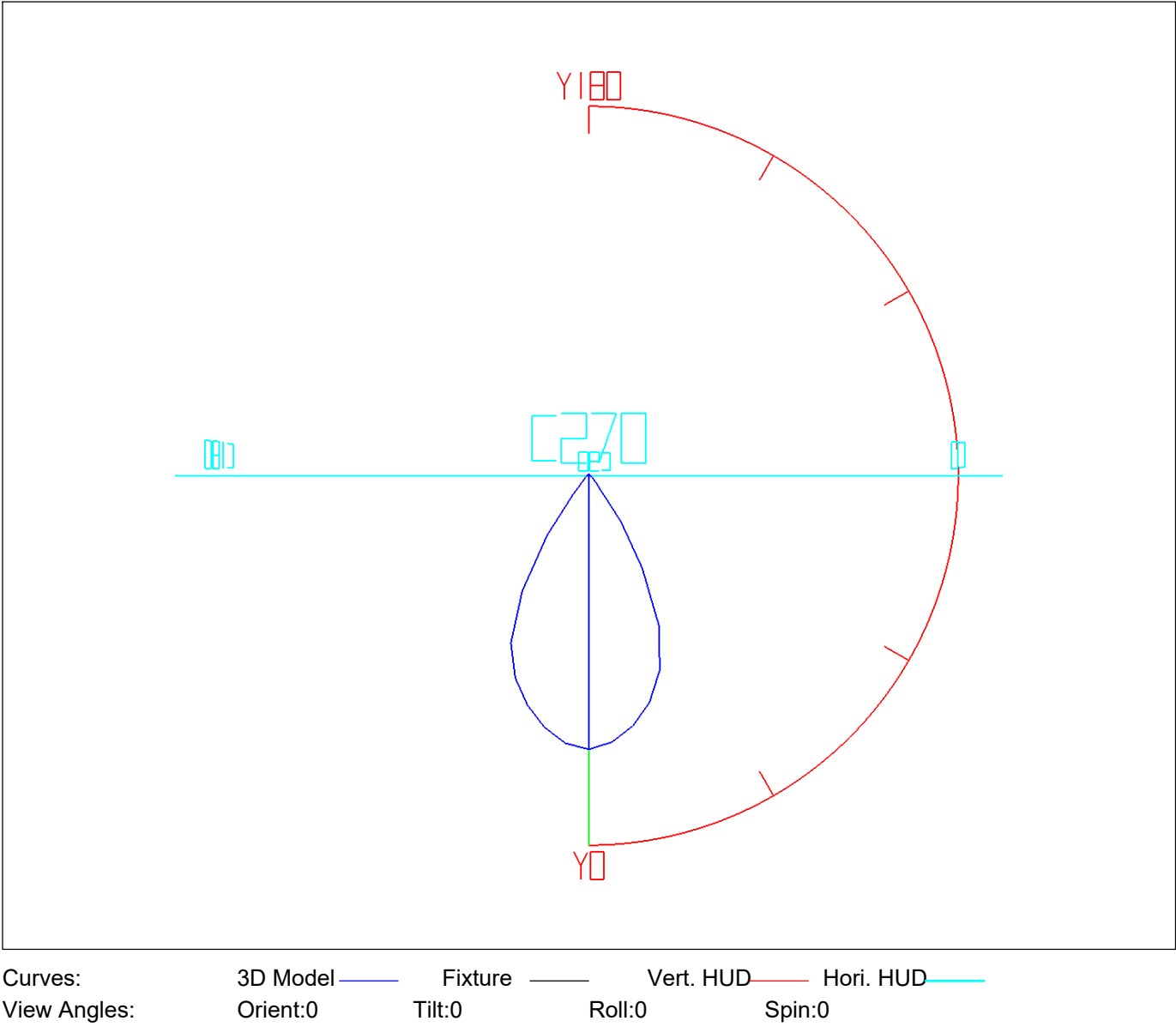
Lum. Name:DL51-35-XX-01 4000K RA90 60D 白色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/11



3D Light Intensity Distribution Modal

Lum. Name:DL51-35-XX-01 4000K RA90 60D 白色	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

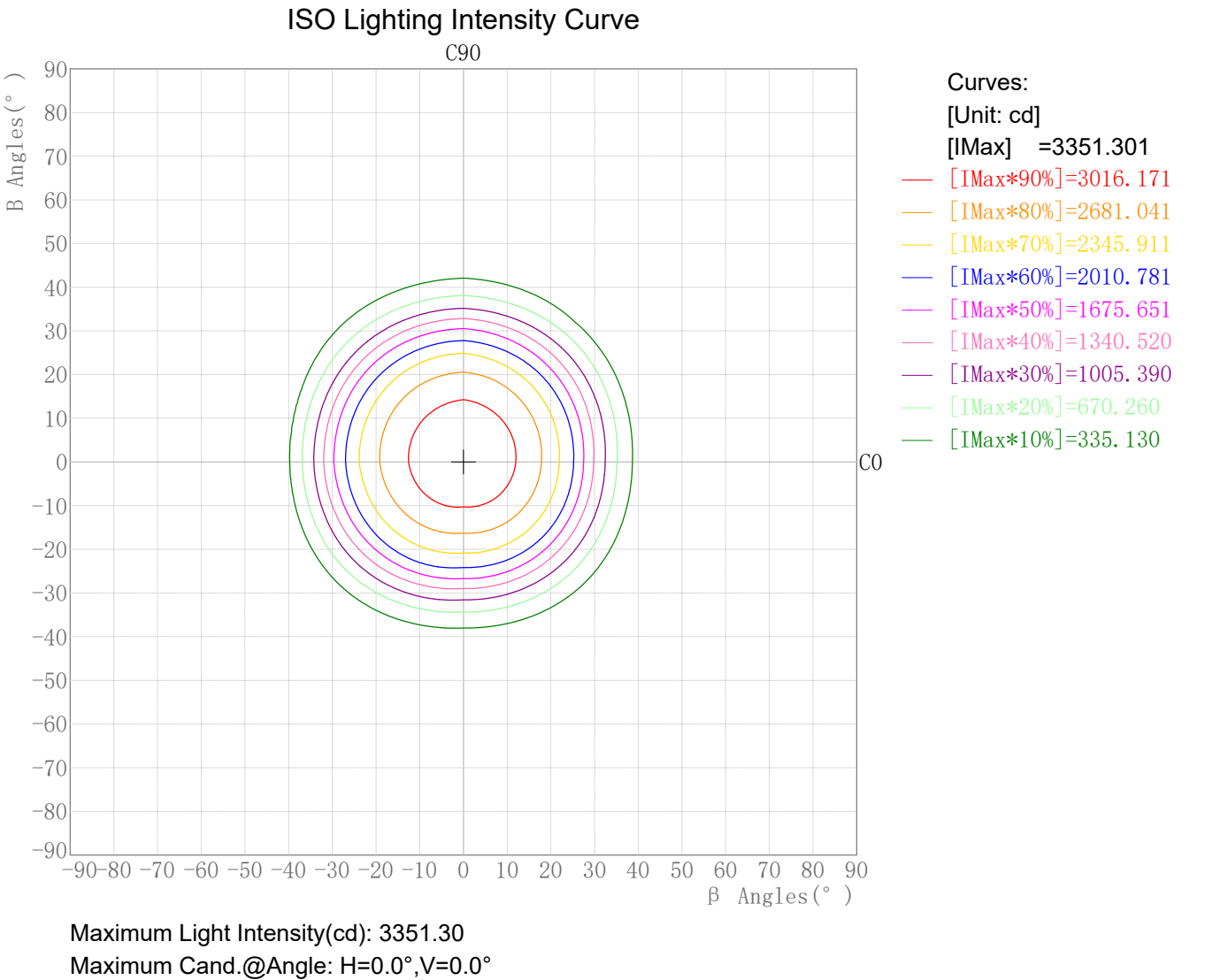


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	79.24	79.24	2.72	2.72
5.0-10.0	228.50	307.74	7.83	10.54
10.0-15.0	355.60	663.34	12.18	22.73
15.0-20.0	450.49	1113.83	15.44	38.16
20.0-25.0	495.33	1609.15	16.97	55.14
25.0-30.0	457.06	2066.21	15.66	70.80
30.0-35.0	334.29	2400.51	11.45	82.25
35.0-40.0	180.58	2581.09	6.19	88.44
40.0-45.0	77.64	2658.73	2.66	91.10
45.0-50.0	45.86	2704.59	1.57	92.67
50.0-55.0	33.55	2738.14	1.15	93.82
55.0-60.0	27.11	2765.25	0.93	94.75
60.0-65.0	23.87	2789.12	0.82	95.57
65.0-70.0	20.40	2809.52	0.70	96.27
70.0-75.0	16.71	2826.23	0.57	96.84
75.0-80.0	13.01	2839.24	0.45	97.28
80.0-85.0	9.56	2848.80	0.33	97.61
85.0-90.0	6.63	2855.43	0.23	97.84
90.0-95.0	4.88	2860.32	0.17	98.01
95.0-100.0	4.13	2864.45	0.14	98.15
100.0-105.0	3.65	2868.09	0.13	98.27
105.0-110.0	3.33	2871.43	0.11	98.39
110.0-115.0	3.20	2874.63	0.11	98.50
115.0-120.0	3.34	2877.97	0.11	98.61
120.0-125.0	3.59	2881.56	0.12	98.73
125.0-130.0	3.85	2885.42	0.13	98.87
130.0-135.0	4.16	2889.58	0.14	99.01
135.0-140.0	4.41	2893.99	0.15	99.16
140.0-145.0	4.53	2898.52	0.16	99.31
145.0-150.0	4.47	2902.99	0.15	99.47
150.0-155.0	4.21	2907.20	0.14	99.61
155.0-160.0	3.75	2910.95	0.13	99.74
160.0-165.0	3.14	2914.09	0.11	99.85
165.0-170.0	2.39	2916.48	0.08	99.93
170.0-175.0	1.51	2917.99	0.05	99.98
175.0-180.0	0.52	2918.52	0.02	100.00

Rectangle ISO Lighting Intensity Diagram

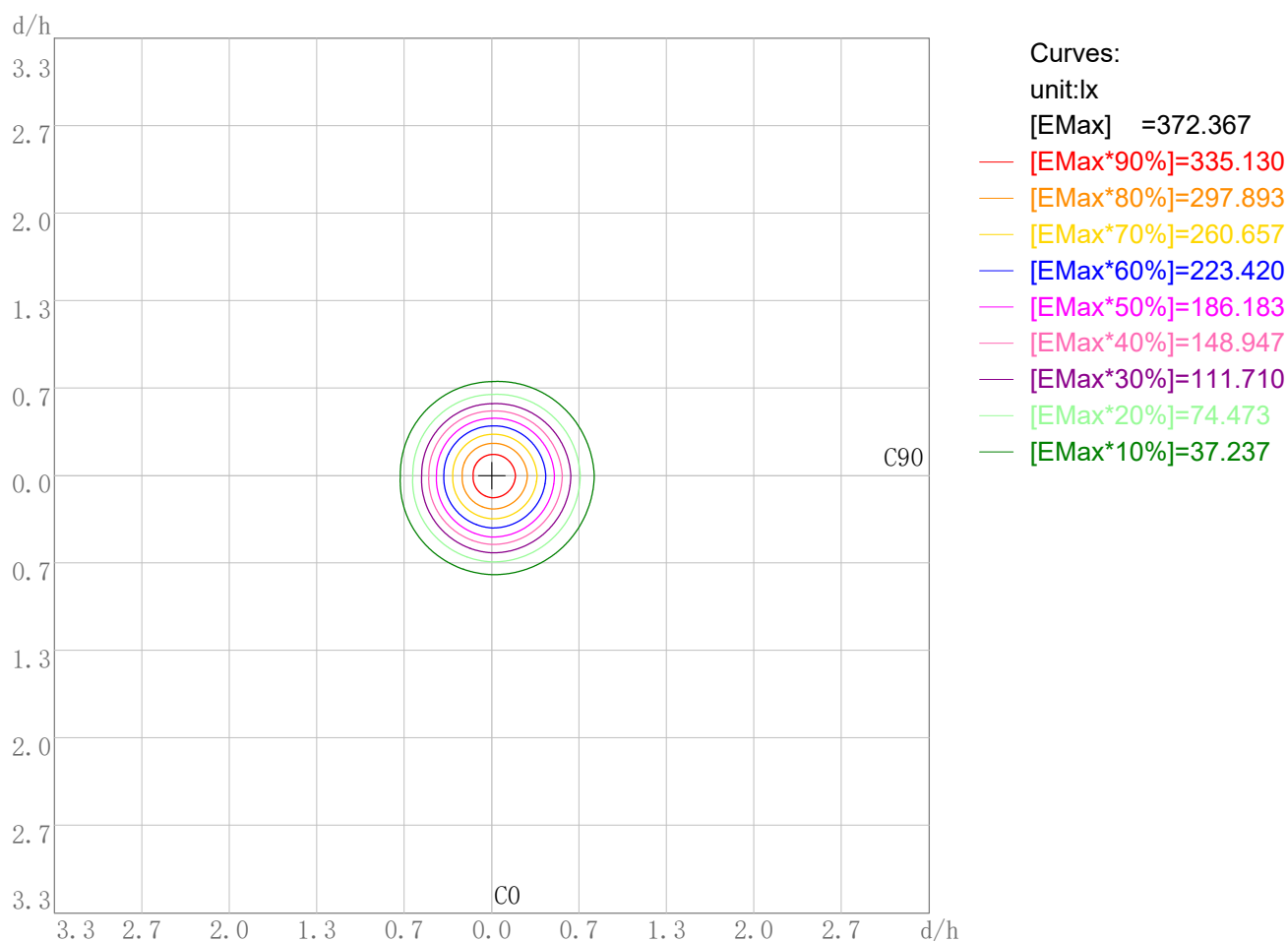
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Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/11



## Plane ISO-Illuminance Diagram

Lum. Name: DL51-35-XX-01 4000K RA90 60D 白色	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

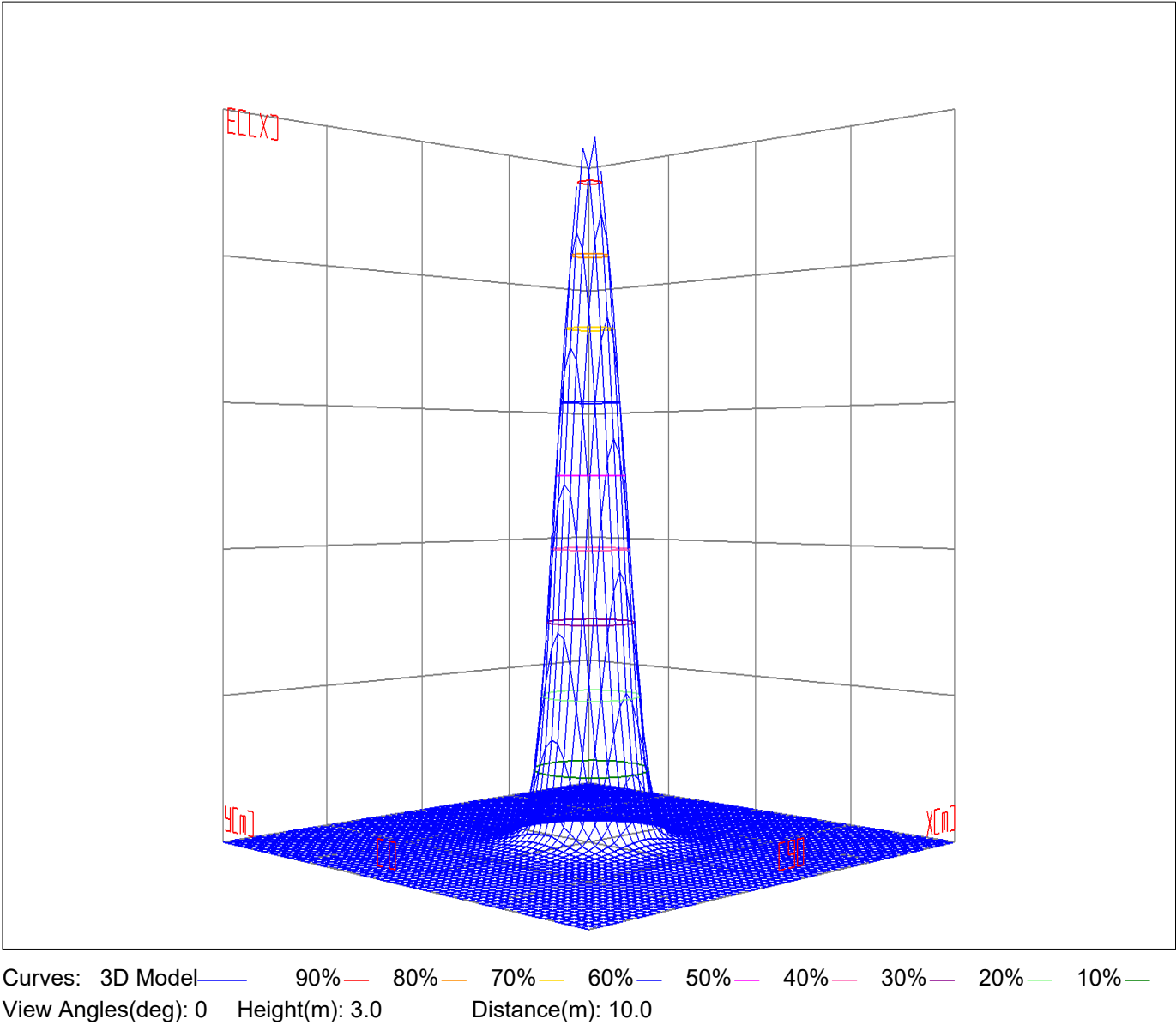


Working Plane Luminaire Mounting Height(m): 3.00  
Working Plane Maximum Illuminance(lx): 372.37  
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name:DL51-35-XX-01 4000K RA90 60D 白色	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

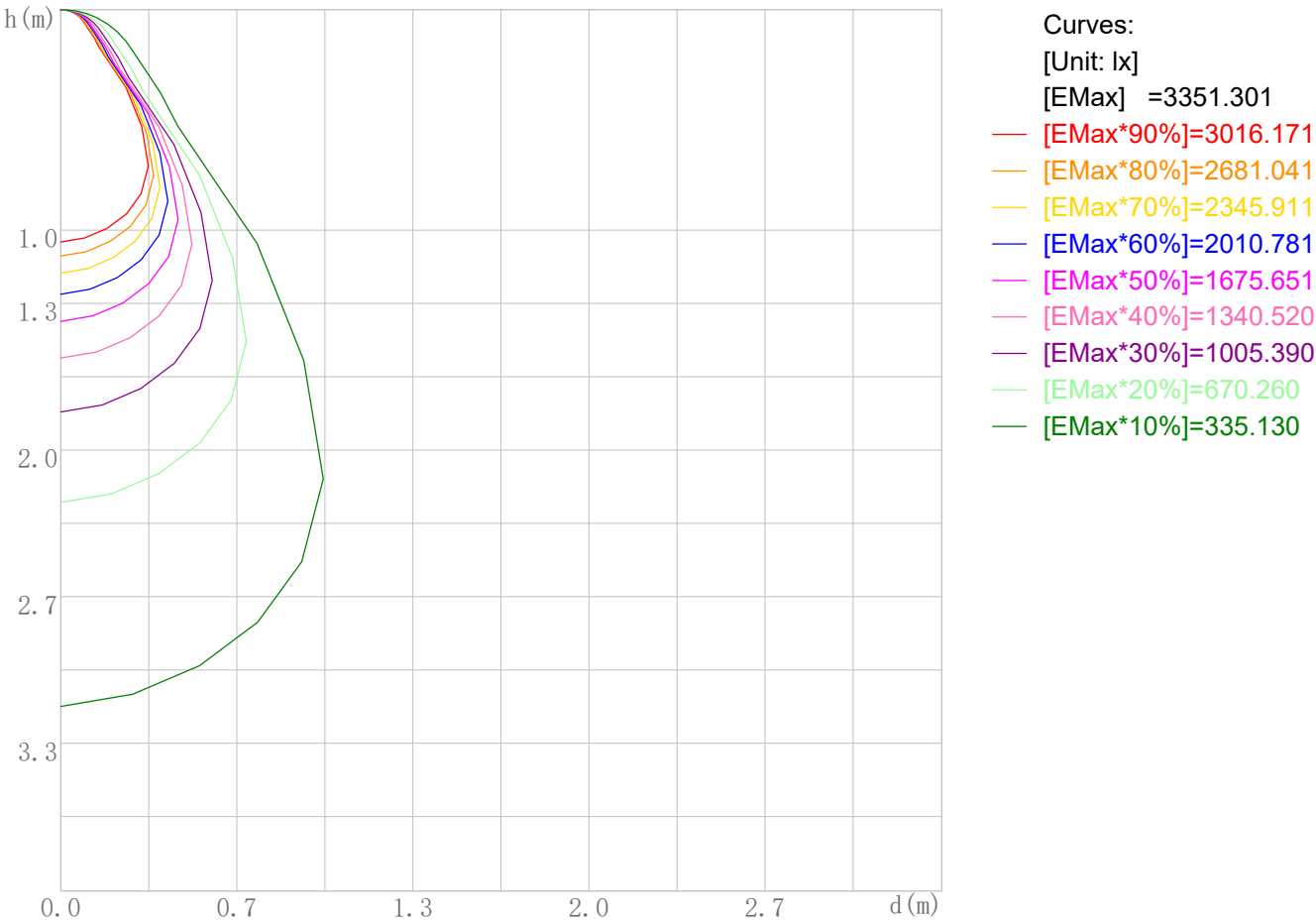
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name:DL51-35-XX-01 4000K RA90 60D 白色	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

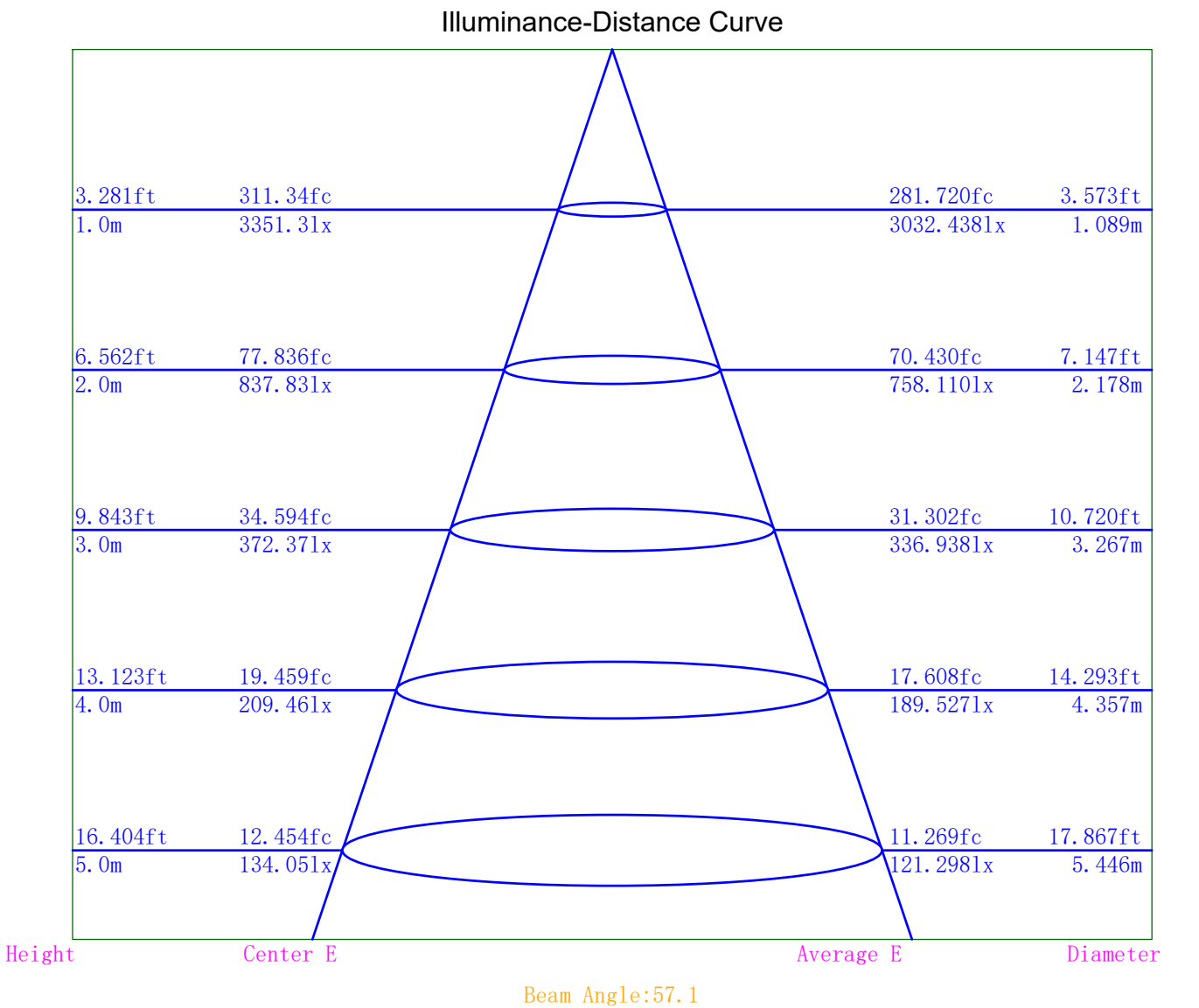


Space Plane Maximum Illuminance and @Angle:3351.30lx,0.0deg  
Plane Maximum Lighting Intensity and @Angle:3351.301cd,0eg



Illuminance-Distance Diagram

Lum. Name:DL51-35-XX-01 4000K RA90 60D 白色	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 60D 白色	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

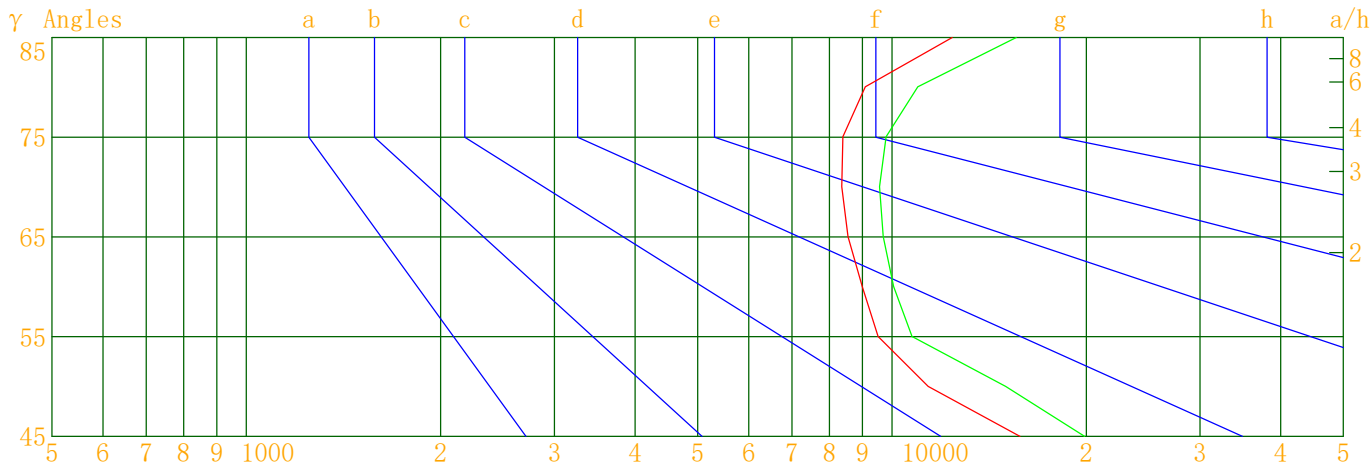
Glare Grade Table

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	15778	11381	9516	8992	8549	8360	8393	9092	12396
C90	19881	15003	10744	10058	9691	9567	9793	10966	15579

Luminance Limiting Curve



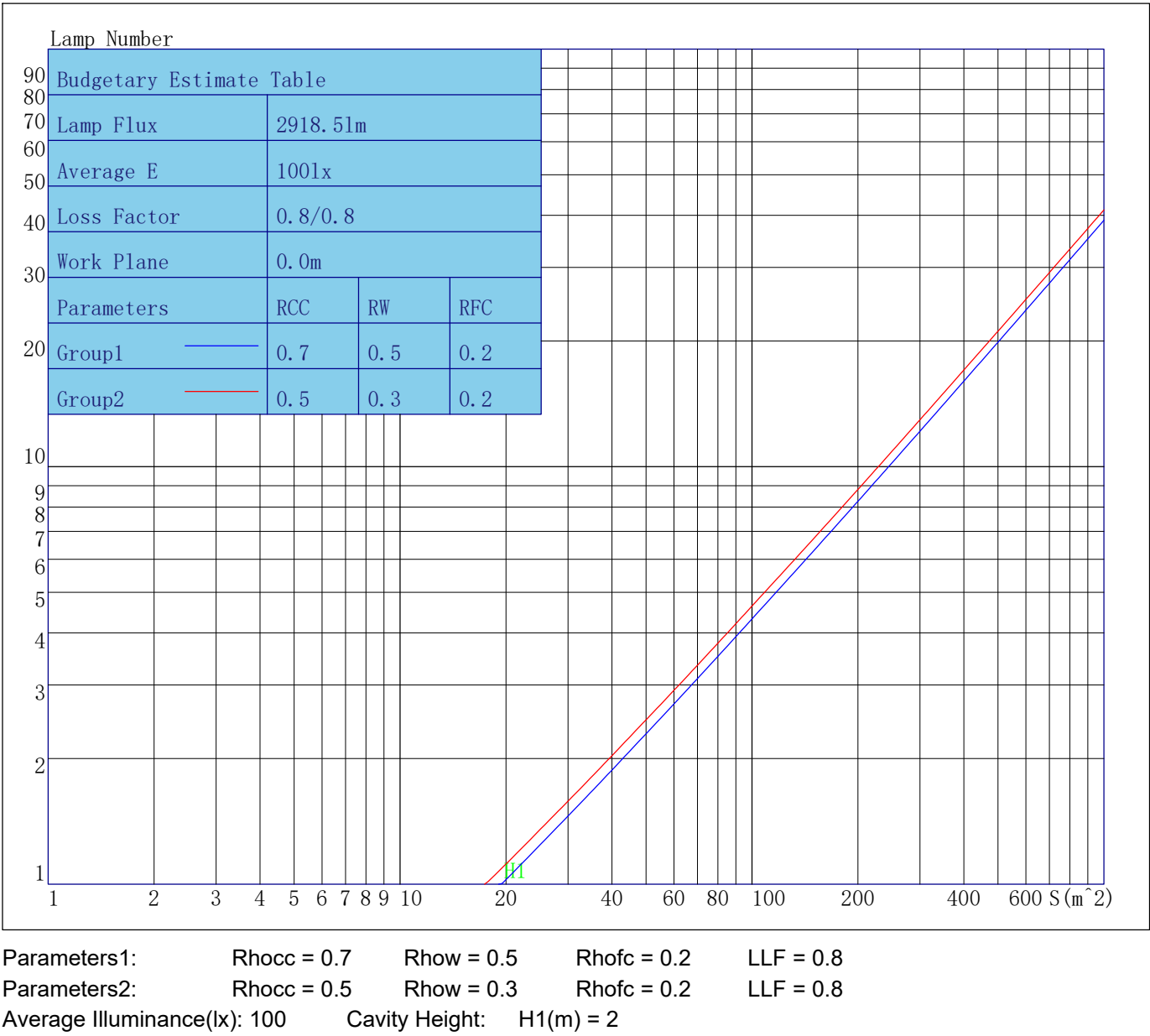
Luminous Size:Length(m)=0.110Width(m)=0.110Height(m)=0.000Area(m^2)=0.012100

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 60D 白色	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



Indoor Coefficient of Utilization Table

Lum. Name:DL51-35-XX-01 4000K RA90 60D 白色	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	112	110	107	104	110	107	105	103	103	101	99	99	97	96	95	94	93	91
2	107	101	97	94	104	100	96	92	96	93	90	93	90	88	90	87	86	84
3	101	94	89	85	99	93	88	84	90	86	83	87	84	81	85	82	80	78
4	96	88	82	78	94	87	81	77	84	80	76	82	78	75	80	77	74	72
5	91	82	76	72	89	81	76	72	79	74	71	77	73	70	76	72	69	68
6	86	77	71	67	85	76	71	67	75	70	66	73	69	65	72	68	65	63
7	82	73	67	62	81	72	66	62	70	65	62	69	65	61	68	64	61	59
8	78	69	63	58	77	68	62	58	67	61	58	65	61	57	64	60	57	56
9	75	65	59	55	73	64	59	55	63	58	54	62	57	54	61	57	54	52
10	71	61	56	52	70	61	55	52	60	55	51	59	54	51	58	54	51	49

Unified Glare Rating Table

Lum. Name:DL51-35-XX-01 4000K RA90 60D 白色	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	18.5	19.4	18.9	19.8	20.2	20.4	21.3	20.8	21.7	22.0
	Y=3H	18.8	19.6	19.2	20.0	20.4	20.6	21.4	21.0	21.8	22.2
	Y=4H	19.0	19.8	19.5	20.2	20.6	20.7	21.5	21.2	21.9	22.3
	Y=6H	19.2	19.9	19.7	20.4	20.8	20.9	21.6	21.3	22.0	22.5
	Y=8H	19.4	20.0	19.8	20.5	20.9	21.0	21.6	21.5	22.1	22.5
	Y=12H	19.5	20.1	20.0	20.6	21.0	21.1	21.7	21.6	22.2	22.7
X=4H	Y=2H	18.4	19.2	18.9	19.6	20.1	20.2	21.0	20.7	21.4	21.8
	Y=3H	19.0	19.6	19.4	20.0	20.5	20.6	21.2	21.0	21.6	22.1
	Y=4H	19.3	19.8	19.8	20.3	20.8	20.8	21.4	21.3	21.8	22.3
	Y=6H	19.7	20.1	20.2	20.6	21.2	21.2	21.6	21.7	22.1	22.6
	Y=8H	19.9	20.3	20.4	20.8	21.3	21.3	21.8	21.9	22.3	22.8
	Y=12H	20.1	20.5	20.6	21.0	21.5	21.6	21.9	22.1	22.5	23.0
X=8H	Y=4H	19.4	19.8	19.9	20.3	20.8	20.8	21.3	21.4	21.8	22.3
	Y=6H	19.9	20.2	20.5	20.8	21.4	21.3	21.6	21.9	22.2	22.7
	Y=8H	20.2	20.5	20.8	21.1	21.6	21.6	21.9	22.2	22.5	23.0
	Y=12H	20.6	20.9	21.2	21.4	22.0	22.0	22.2	22.6	22.8	23.4
X=12H	Y=4H	19.4	19.7	19.9	20.3	20.8	20.8	21.2	21.4	21.7	22.2
	Y=6H	20.0	20.2	20.5	20.8	21.4	21.3	21.6	21.9	22.1	22.7
	Y=8H	20.4	20.6	20.9	21.1	21.8	21.7	21.9	22.3	22.5	23.1
Variations with the objerver position at spacings											
S=1.0H		0.2/-0.2					0.2/-0.2				
S=1.5H		0.5/-0.5					0.4/-0.4				
S=2.0H		0.6/-0.6					0.4/-0.5				
Reduced UGR Table:											
Nordic Standard Table:		BK0					BK0				
Correction Value		1.7					1.5				

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	3351.30	3351.30	3351.30	3351.30
γ 5.0	3272.65	3318.63	3287.27	3230.24
γ 10.0	3109.75	3171.77	3128.60	3031.05
γ 15.0	2873.14	2989.00	2907.27	2767.96
γ 20.0	2535.44	2722.93	2634.41	2434.47
γ 25.0	2041.63	2337.66	2258.86	1925.46
γ 30.0	1308.58	1751.44	1631.37	1191.73
γ 35.0	685.06	1025.69	892.95	593.66
γ 40.0	207.87	452.64	305.80	165.74
γ 45.0	135.00	170.10	133.39	106.76
γ 50.0	88.52	116.69	88.74	68.68
γ 55.0	66.04	74.56	59.00	54.90
γ 60.0	54.40	60.85	51.47	47.95
γ 65.0	43.72	49.56	44.33	40.50
γ 70.0	34.60	39.59	37.14	32.84
γ 75.0	26.28	30.67	29.47	25.15
γ 80.0	19.10	23.04	22.43	18.29
γ 85.0	13.07	16.43	15.99	12.38
γ 90.0	9.16	10.99	10.25	8.66
γ 95.0	7.94	8.28	8.42	7.66
γ 100.0	6.80	7.36	7.45	6.86
γ 105.0	6.16	6.66	6.75	6.51
γ 110.0	5.90	6.23	6.21	6.60
γ 115.0	6.16	6.05	6.54	6.89
γ 120.0	7.30	6.96	7.25	7.85
γ 125.0	7.88	7.66	8.24	8.95
γ 130.0	9.43	8.85	9.60	10.31
γ 135.0	10.93	10.22	11.13	11.94
γ 140.0	12.93	11.74	12.81	13.58
γ 145.0	14.50	13.54	14.41	15.12
γ 150.0	15.97	15.10	16.00	16.74
γ 155.0	17.34	16.62	17.48	17.78
γ 160.0	18.50	17.82	18.63	18.76
γ 165.0	19.97	19.10	19.73	19.99
γ 170.0	20.63	20.18	20.96	20.86
γ 175.0	21.51	21.42	21.72	21.61
γ 180.0	22.20	22.20	22.20	22.20