

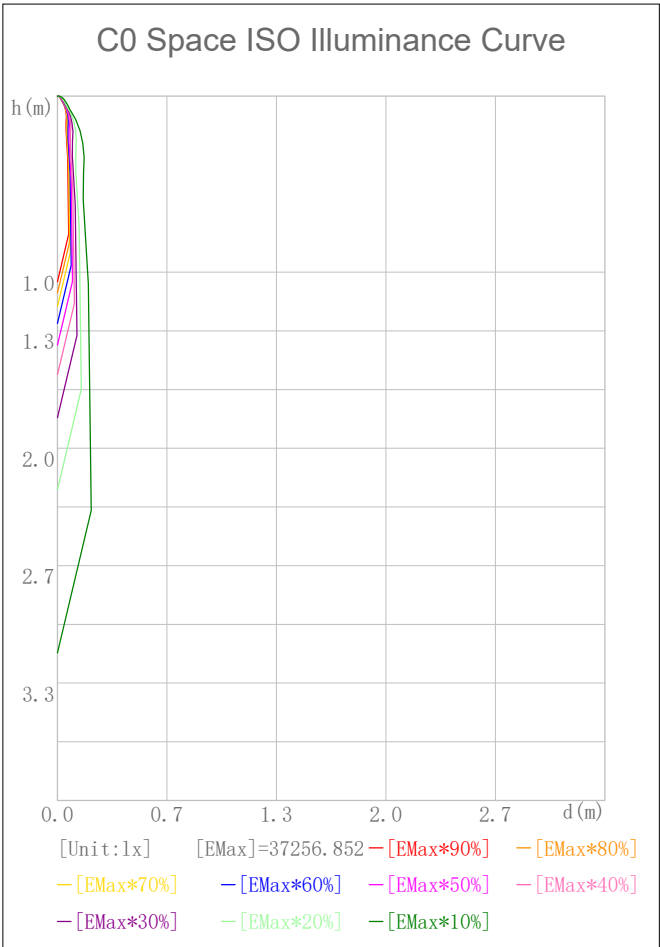
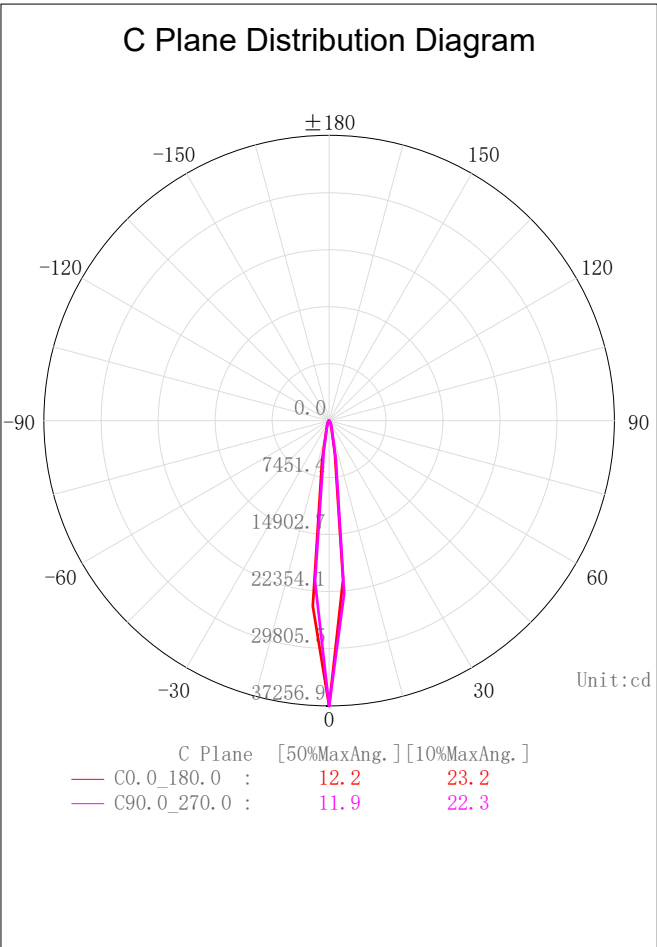
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-35-XX-01 2700K RA90 15D 黑色	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Date: 2022/08/05
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(%):

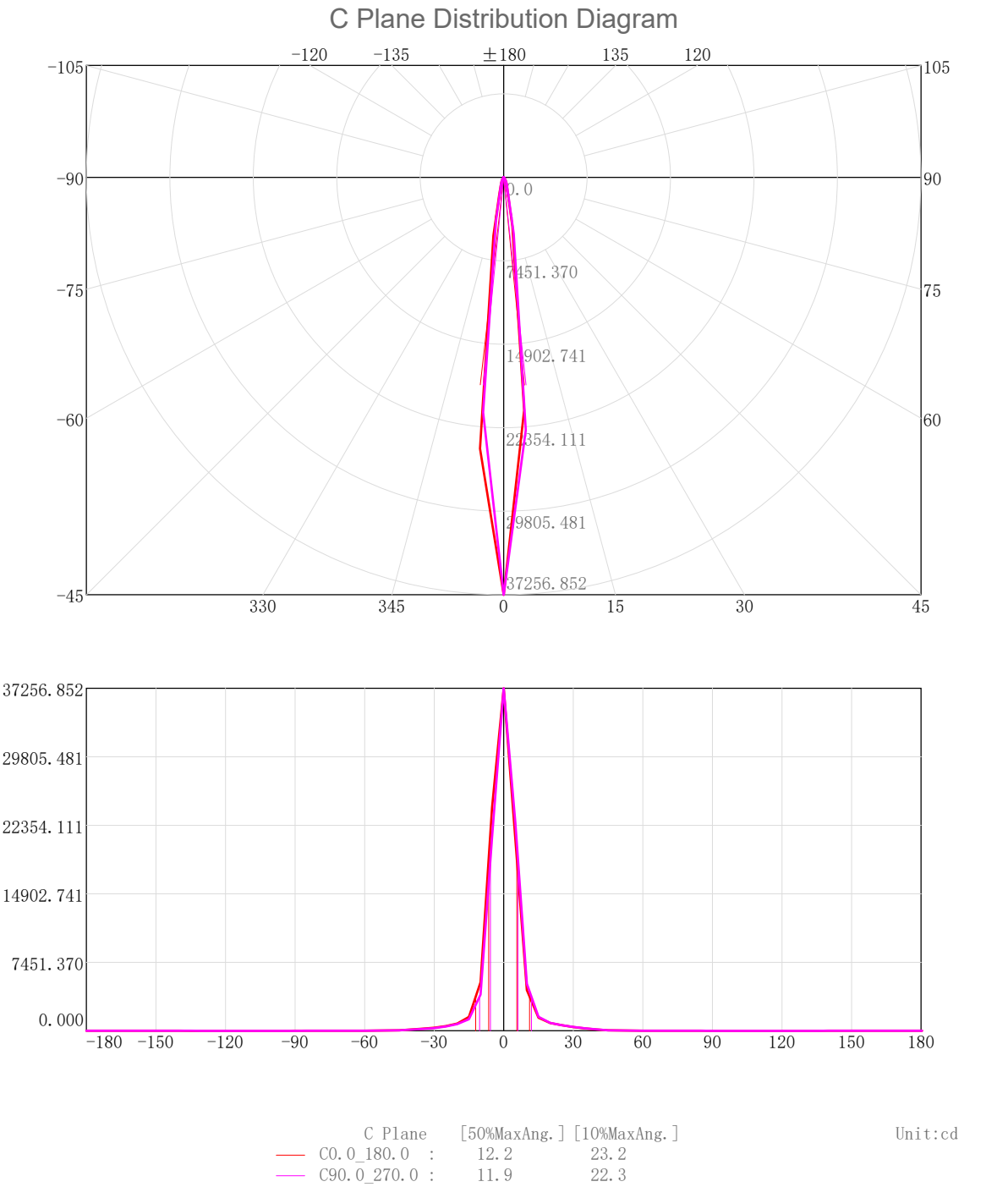
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 2812.190	Luminary Flux(lm): 2812.187	Field Angle(10%Imax): 23.2(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 2762.129lm 98.22%
Rated Voltage(V):	Luminary EER(lm/W): 83.572	Up Lumens&Percent: 50.057lm 1.78%
Tested Power(W): 33.650	Max. Candela(cd): 37256.852	S/MH: C0_a180=0.211 C90_270=0.205
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct
Tested Electrics (V, A, pf):240.0, 0.146	Beam Angle(50%Imax): 12.2(°)	ErP ϕ use(90°): 2721.915lm
Lamp Size (W*L*H):0.110m*0.110m*0.000m	Left=-6.5°, Right=5.7°	IRF(%): 2663.466



2D Plane Light Intensity Distribution Curve

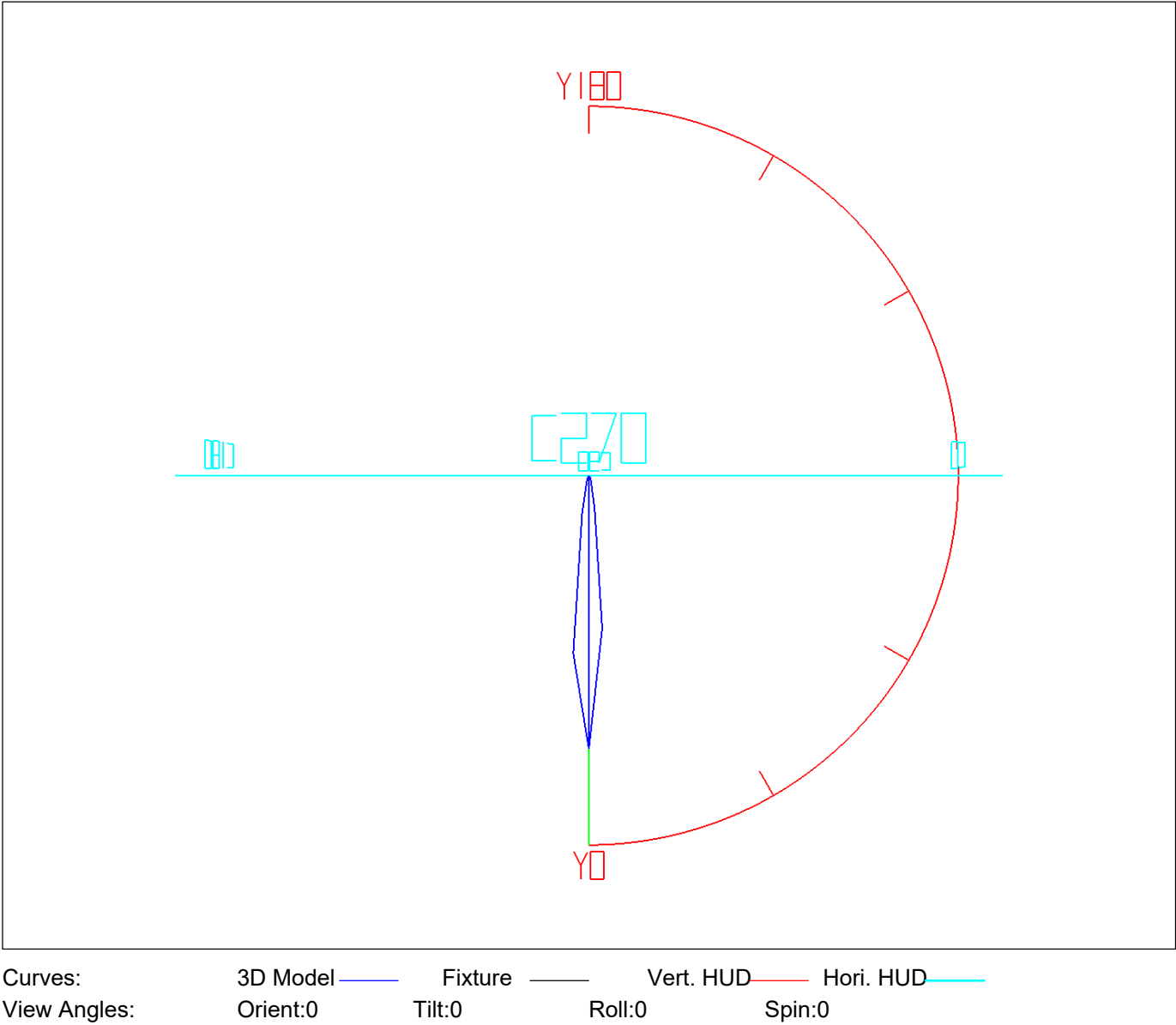
Lum. Name:DL51-35-XX-01 2700K RA90 15D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/05



3D Light Intensity Distribution Modal

Lum. Name:DL51-35-XX-01 2700K 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:2022/08/05

3D Light Intensity Distribution Modal

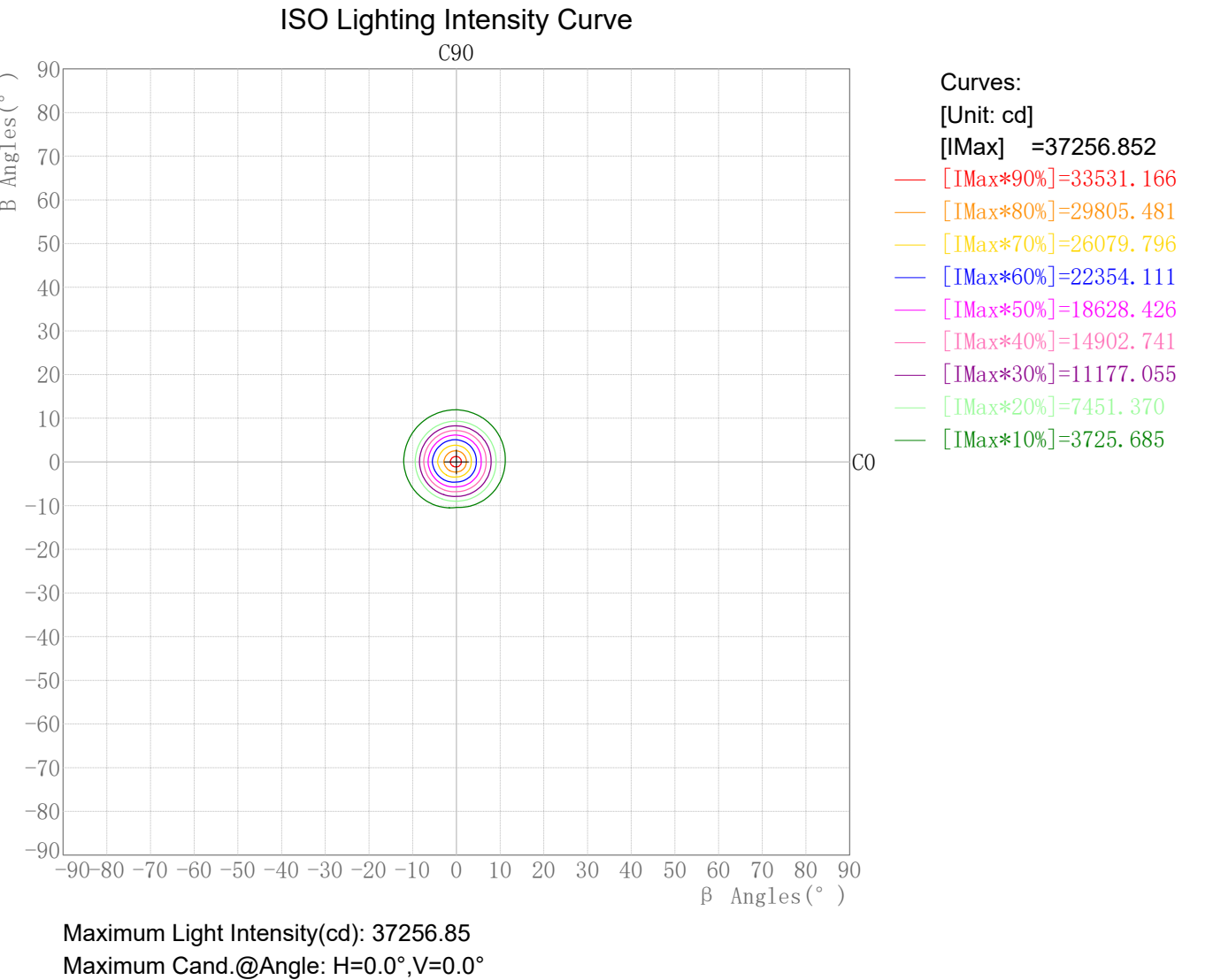


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	711.01	711.01	25.28	25.28
5.0-10.0	962.81	1673.82	34.24	59.52
10.0-15.0	363.79	2037.61	12.94	72.46
15.0-20.0	185.39	2223.00	6.59	79.05
20.0-25.0	143.50	2366.50	5.10	84.15
25.0-30.0	116.60	2483.10	4.15	88.30
30.0-35.0	89.82	2572.93	3.19	91.49
35.0-40.0	64.91	2637.83	2.31	93.80
40.0-45.0	38.15	2675.98	1.36	95.16
45.0-50.0	20.68	2696.67	0.74	95.89
50.0-55.0	15.12	2711.78	0.54	96.43
55.0-60.0	11.44	2723.22	0.41	96.84
60.0-65.0	9.42	2732.64	0.33	97.17
65.0-70.0	7.94	2740.58	0.28	97.45
70.0-75.0	6.66	2747.24	0.24	97.69
75.0-80.0	5.66	2752.90	0.20	97.89
80.0-85.0	4.94	2757.84	0.18	98.07
85.0-90.0	4.29	2762.13	0.15	98.22
90.0-95.0	3.50	2765.63	0.12	98.34
95.0-100.0	2.77	2768.41	0.10	98.44
100.0-105.0	2.41	2770.82	0.09	98.53
105.0-110.0	2.36	2773.17	0.08	98.61
110.0-115.0	2.24	2775.41	0.08	98.69
115.0-120.0	2.08	2777.49	0.07	98.77
120.0-125.0	2.02	2779.51	0.07	98.84
125.0-130.0	2.10	2781.61	0.07	98.91
130.0-135.0	2.40	2784.02	0.09	99.00
135.0-140.0	3.08	2787.10	0.11	99.11
140.0-145.0	4.15	2791.25	0.15	99.26
145.0-150.0	4.86	2796.11	0.17	99.43
150.0-155.0	4.73	2800.84	0.17	99.60
155.0-160.0	4.05	2804.89	0.14	99.74
160.0-165.0	3.22	2808.11	0.11	99.85
165.0-170.0	2.34	2810.45	0.08	99.94
170.0-175.0	1.34	2811.79	0.05	99.99
175.0-180.0	0.39	2812.19	0.01	100.00

Rectangle ISO Lighting Intensity Diagram

Lum. Name: DL51-35-XX-01 2700K 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: 2022/08/05

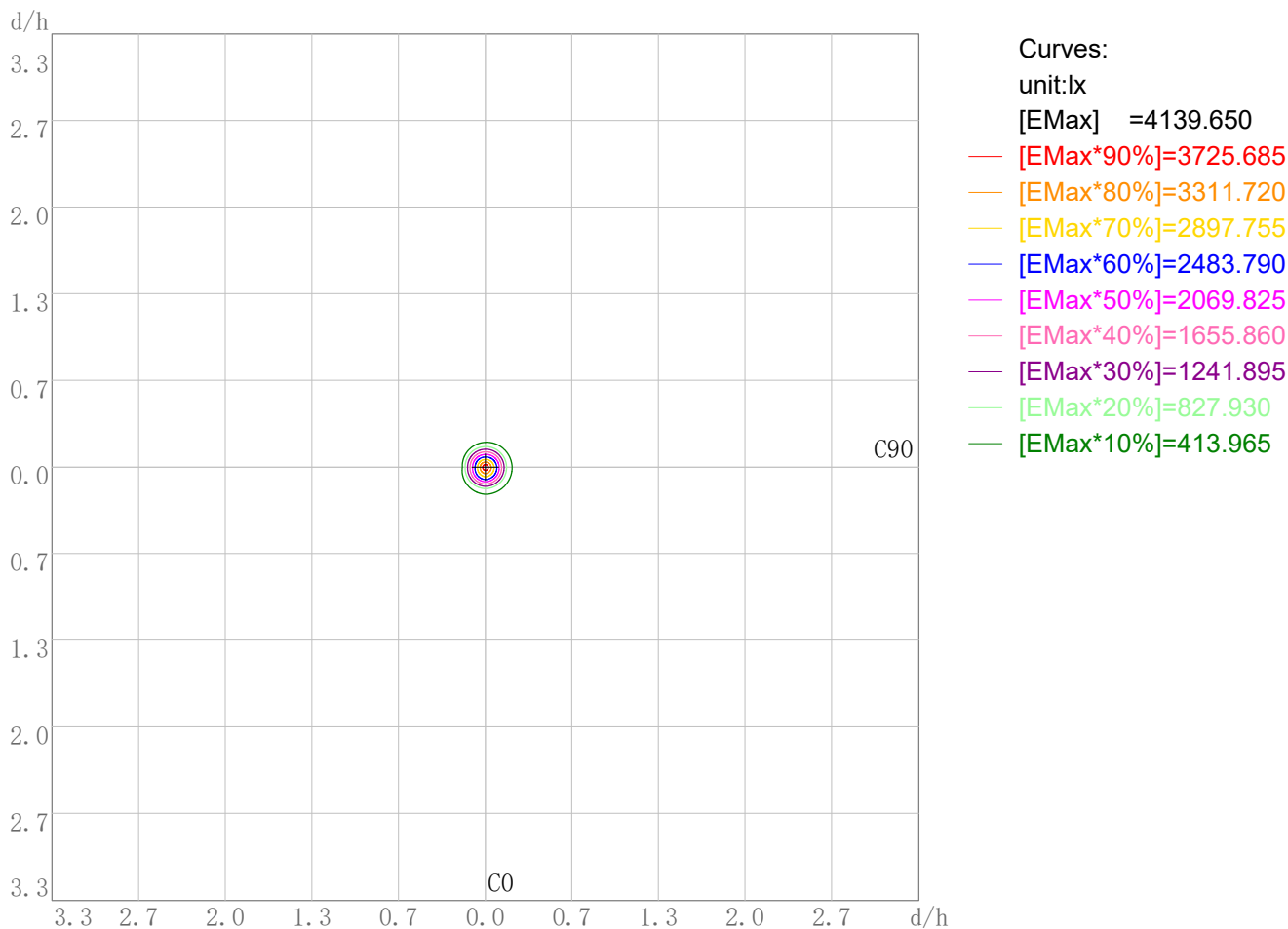


Photometric Filename:DL51-35-XX-01 2700K RA90 15D 黑色.IES

Plane ISO-Illuminance Diagram

Lum. Name: DL51-35-XX-01 2700K 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: 2022/08/05

Plane ISO-Illuminance Curve

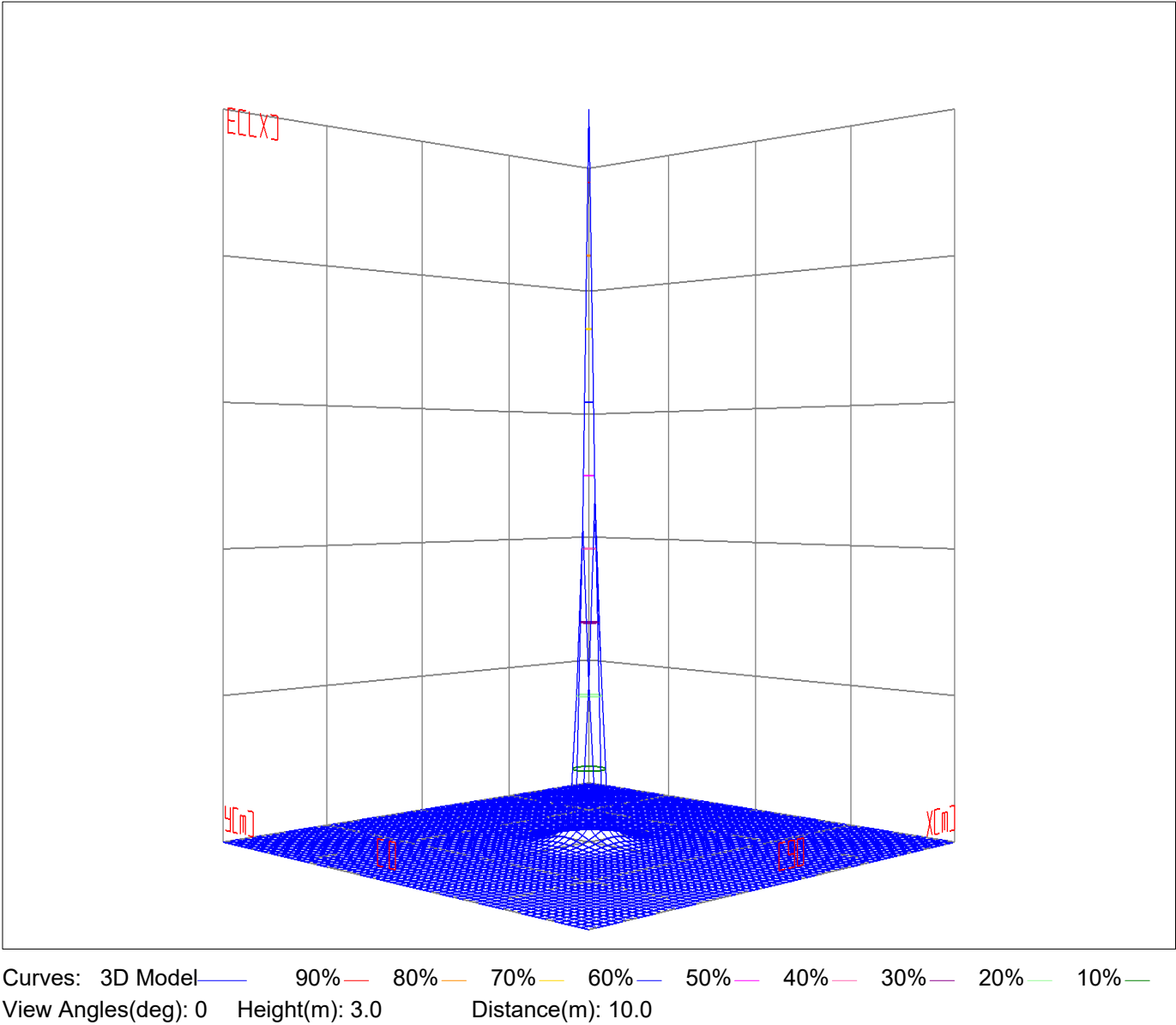


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 4139.65
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 2700K 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: 2022/08/05

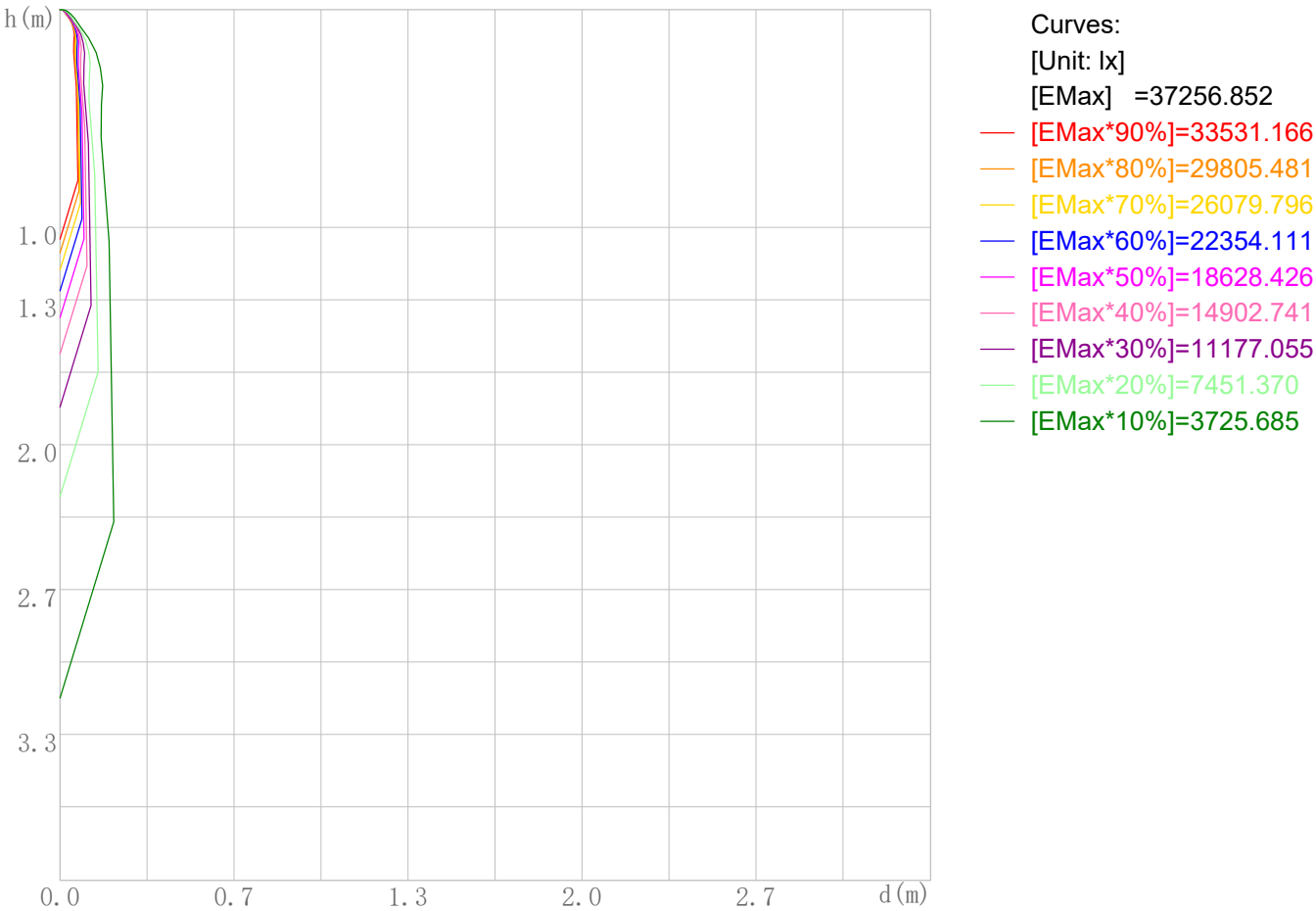
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name:DL51-35-XX-01 2700K 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:2022/08/05

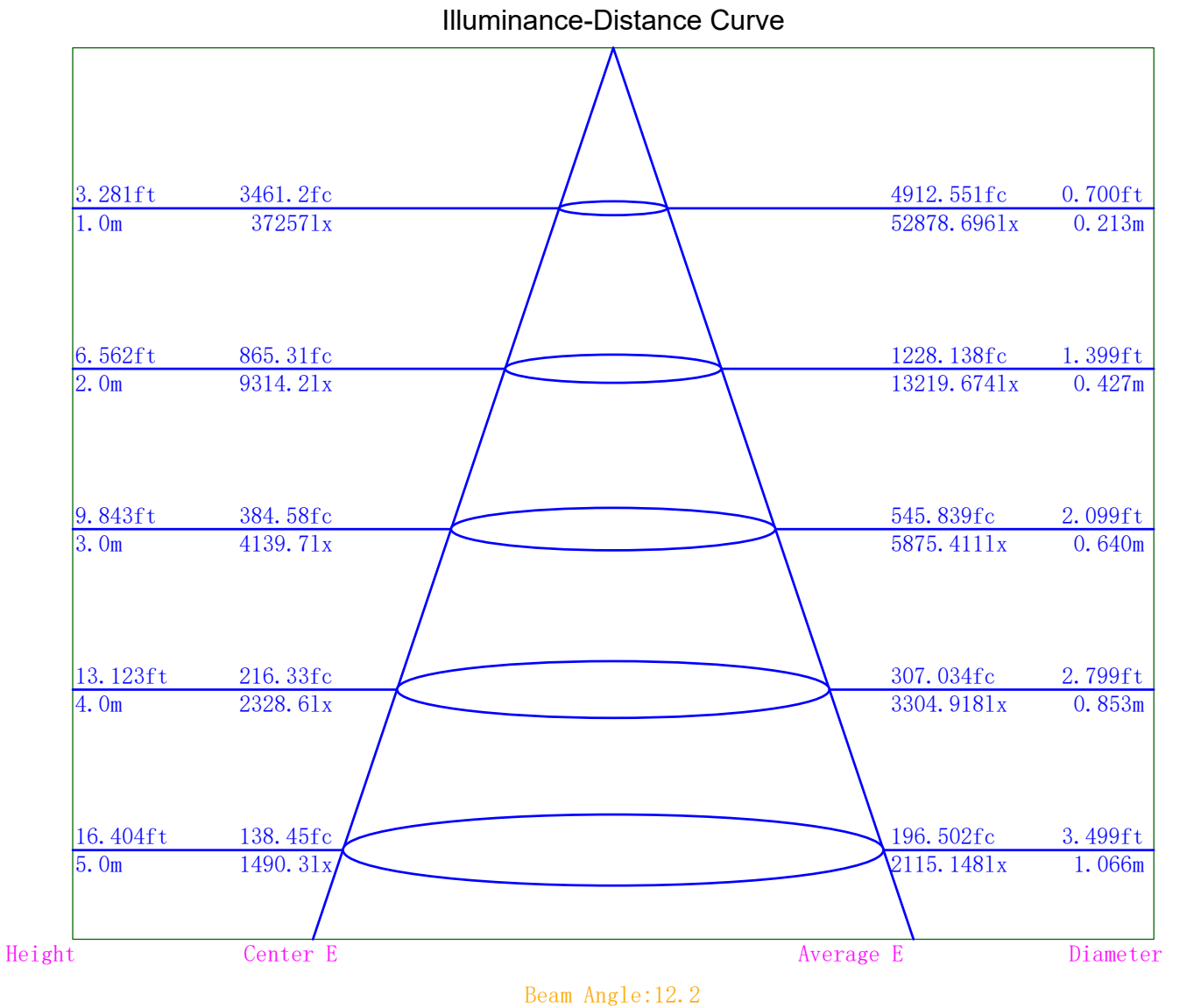
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:37256.85lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:37256.852cd,0deg

Illuminance-Distance Diagram

Lum. Name:DL51-35-XX-01 2700K 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:2022/08/05



Indoor Luminance Limiting Curves

Lum. Name:DL51-35-XX-01 2700K 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:2022/08/05

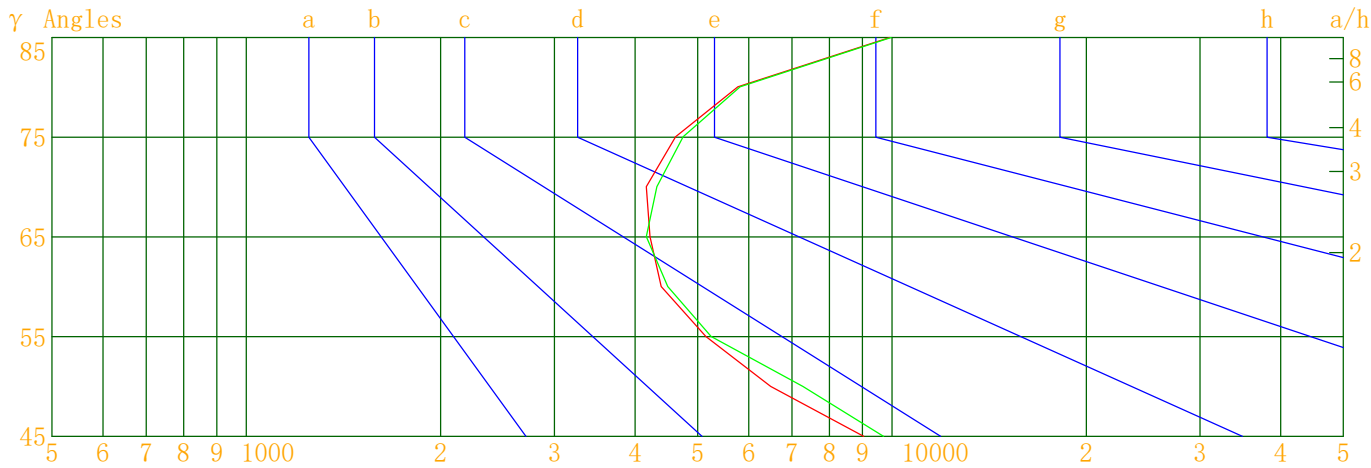
Glare Grade Table

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	9041	6487	5150	4390	4218	4163	4622	5771	9924
C90	9705	7276	5247	4494	4164	4324	4747	5817	9967

Luminance Limiting Curve



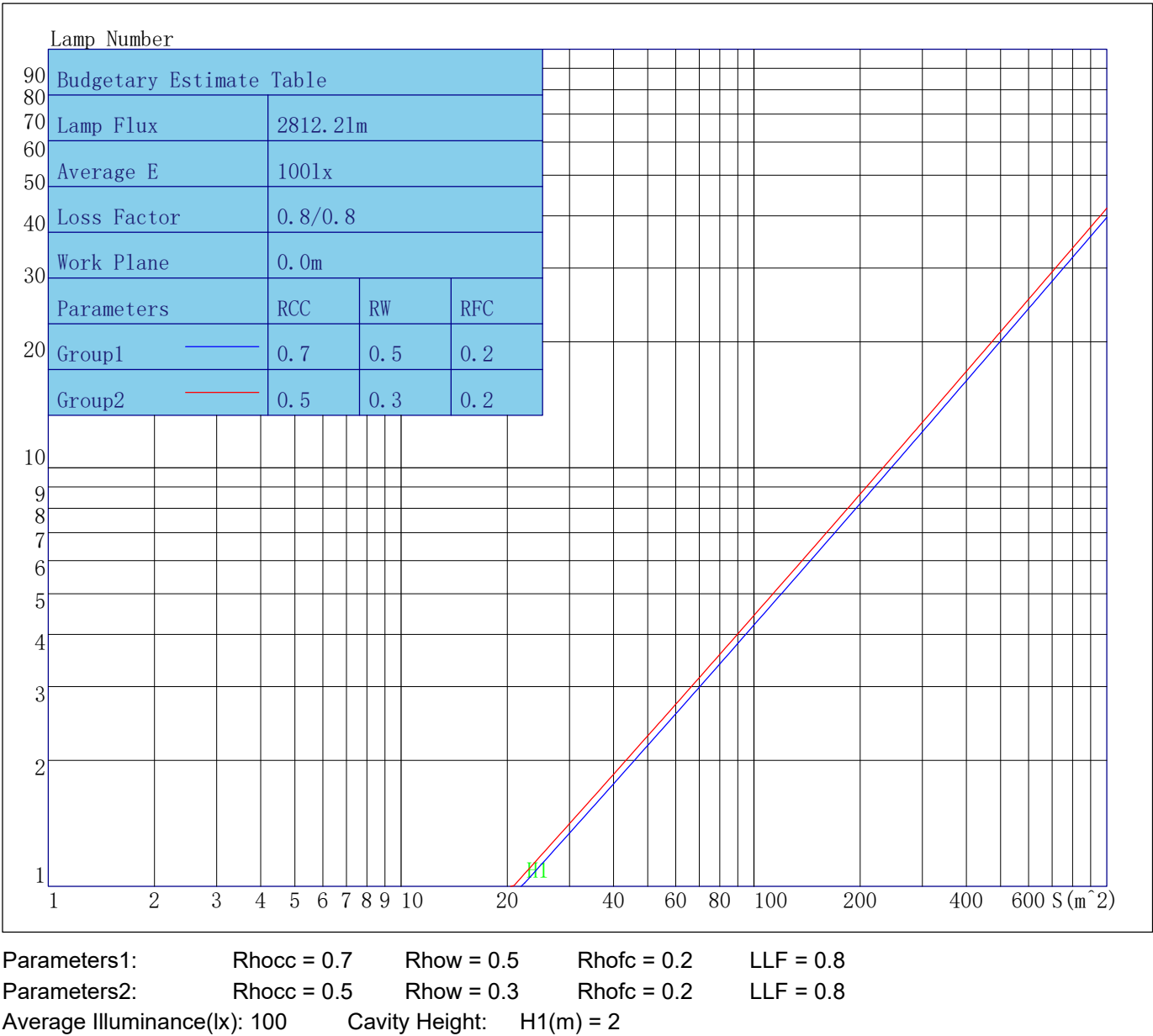
Luminous Size:Length(m)=-0.110Width(m)=-0.110Height(m)=0.000Area(m^2)=0.009503

Luminous Type:Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name:DL51-35-XX-01 2700K 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: 2022/08/05



Indoor Coefficient of Utilization Table

Lum. Name:DL51-35-XX-01 2700K 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:2022/08/05

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	115	113	111	109	112	110	109	107	106	105	104	102	101	100	98	98	97	95
2	111	108	105	102	109	106	103	101	102	100	99	99	98	96	96	95	94	93
3	108	103	100	97	106	102	99	96	99	97	95	97	95	93	94	93	91	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	92	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	84	95	89	86	83	88	85	83	87	85	83	86	84	82	81
9	94	88	84	82	93	87	84	82	87	84	81	86	83	81	85	83	81	80
10	92	86	83	80	91	86	83	80	85	82	80	84	82	80	84	81	80	79

Unified Glare Rating Table

Lum. Name:DL51-35-XX-01 2700K RA90 15D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/05

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	12.9	13.8	13.3	14.2	14.5	13.3	14.2	13.7	14.5	14.9
	13.3	14.0	13.7	14.4	14.8	13.6	14.4	14.0	14.8	15.2
	13.5	14.2	14.0	14.6	15.1	13.8	14.6	14.3	15.0	15.4
	13.9	14.6	14.4	15.0	15.4	14.2	14.8	14.6	15.3	15.7
	14.2	14.8	14.6	15.2	15.6	14.4	15.0	14.9	15.5	15.9
	14.5	15.1	15.0	15.5	16.0	14.7	15.3	15.2	15.7	16.2
X=4H Y=2H	12.9	13.6	13.3	14.0	14.4	13.2	14.0	13.7	14.3	14.8
	13.4	14.0	13.9	14.4	14.9	13.7	14.3	14.2	14.7	15.2
	13.8	14.3	14.3	14.8	15.3	14.1	14.6	14.6	15.1	15.6
	14.4	14.8	14.9	15.3	15.8	14.7	15.1	15.2	15.6	16.1
	14.8	15.2	15.3	15.7	16.2	15.0	15.4	15.5	15.9	16.4
	15.3	15.6	15.8	16.2	16.7	15.5	15.8	16.0	16.4	16.9
X=8H Y=4H	13.9	14.3	14.5	14.8	15.4	14.2	14.6	14.7	15.1	15.6
	14.8	15.1	15.3	15.6	16.1	15.0	15.3	15.5	15.8	16.4
	15.3	15.6	15.9	16.1	16.7	15.5	15.8	16.1	16.3	16.9
	16.1	16.3	16.6	16.8	17.4	16.2	16.5	16.8	17.0	17.6
X=12H Y=4H	14.0	14.3	14.5	14.8	15.3	14.2	14.6	14.7	15.1	15.6
	14.8	15.1	15.4	15.6	16.2	15.1	15.3	15.6	15.9	16.4
	15.5	15.7	16.1	16.3	16.9	15.7	15.9	16.3	16.5	17.1
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					0.2/-0.2				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	2.3					2.2				

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	37256.9	37256.9	37256.9	37256.9
γ 5.0	20869.1	22647.7	24300.7	21055.5
γ 10.0	4434.3	5119.6	5289.9	3941.1
γ 15.0	1423.1	1538.0	1515.9	1269.1
γ 20.0	852.2	876.0	790.2	733.3
γ 25.0	611.7	618.2	516.2	475.3
γ 30.0	409.3	420.9	334.3	299.6
γ 35.0	262.3	280.2	231.5	201.8
γ 40.0	142.1	161.9	144.5	131.8
γ 45.0	60.8	65.2	60.9	56.9
γ 50.0	39.6	44.4	42.3	39.4
γ 55.0	28.1	28.6	28.2	27.5
γ 60.0	20.9	21.4	22.0	21.3
γ 65.0	16.9	16.7	18.3	17.4
γ 70.0	13.5	14.1	14.6	14.0
γ 75.0	11.4	11.7	11.6	11.2
γ 80.0	9.5	9.6	10.2	9.4
γ 85.0	8.2	8.3	9.2	8.3
γ 90.0	7.0	7.0	7.7	7.0
γ 95.0	6.3	6.1	5.4	4.7
γ 100.0	5.3	5.6	4.0	3.4
γ 105.0	4.9	5.2	4.0	3.7
γ 110.0	5.0	5.1	4.1	4.0
γ 115.0	4.2	4.6	4.1	4.1
γ 120.0	4.0	3.8	4.8	4.6
γ 125.0	3.7	3.8	5.0	5.2
γ 130.0	4.8	4.5	5.8	5.8
γ 135.0	6.3	5.9	7.0	7.5
γ 140.0	9.5	8.8	10.2	11.4
γ 145.0	14.4	14.0	15.1	16.2
γ 150.0	17.8	17.7	18.3	18.6
γ 155.0	19.0	18.8	19.8	19.3
γ 160.0	19.9	18.8	20.3	18.4
γ 165.0	20.2	19.4	20.5	18.6
γ 170.0	19.5	20.1	20.0	19.8
γ 175.0	16.8	18.1	17.6	17.8
γ 180.0	15.4	15.4	15.4	15.4