

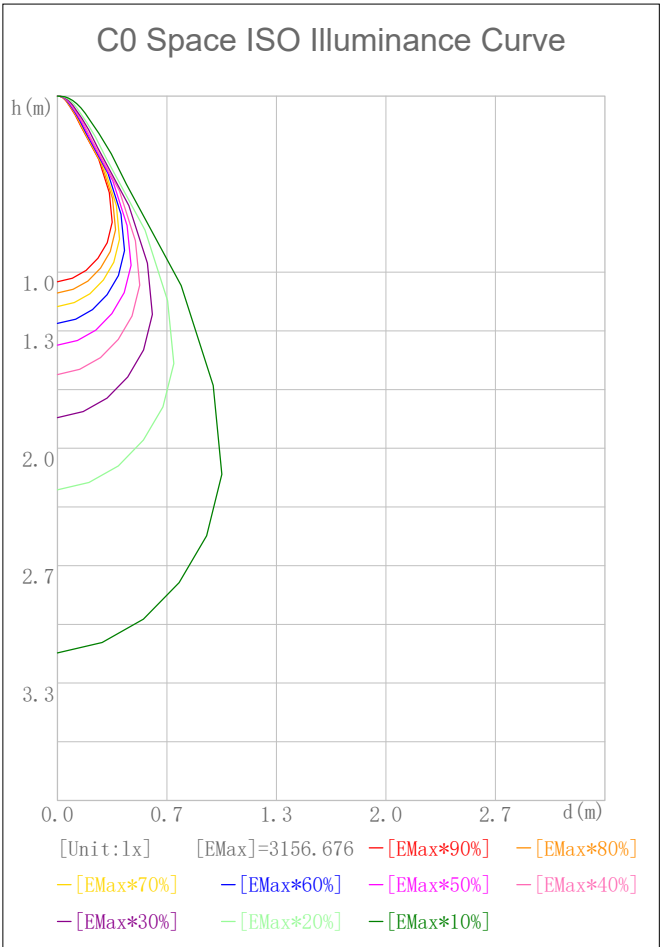
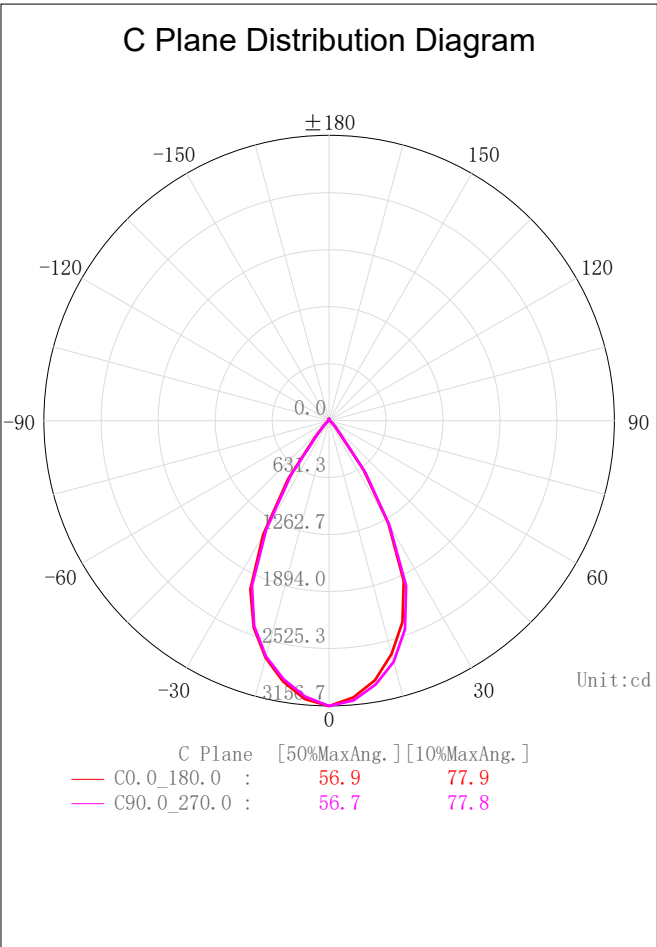
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-35-XX-01 3000K RA90 60D 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

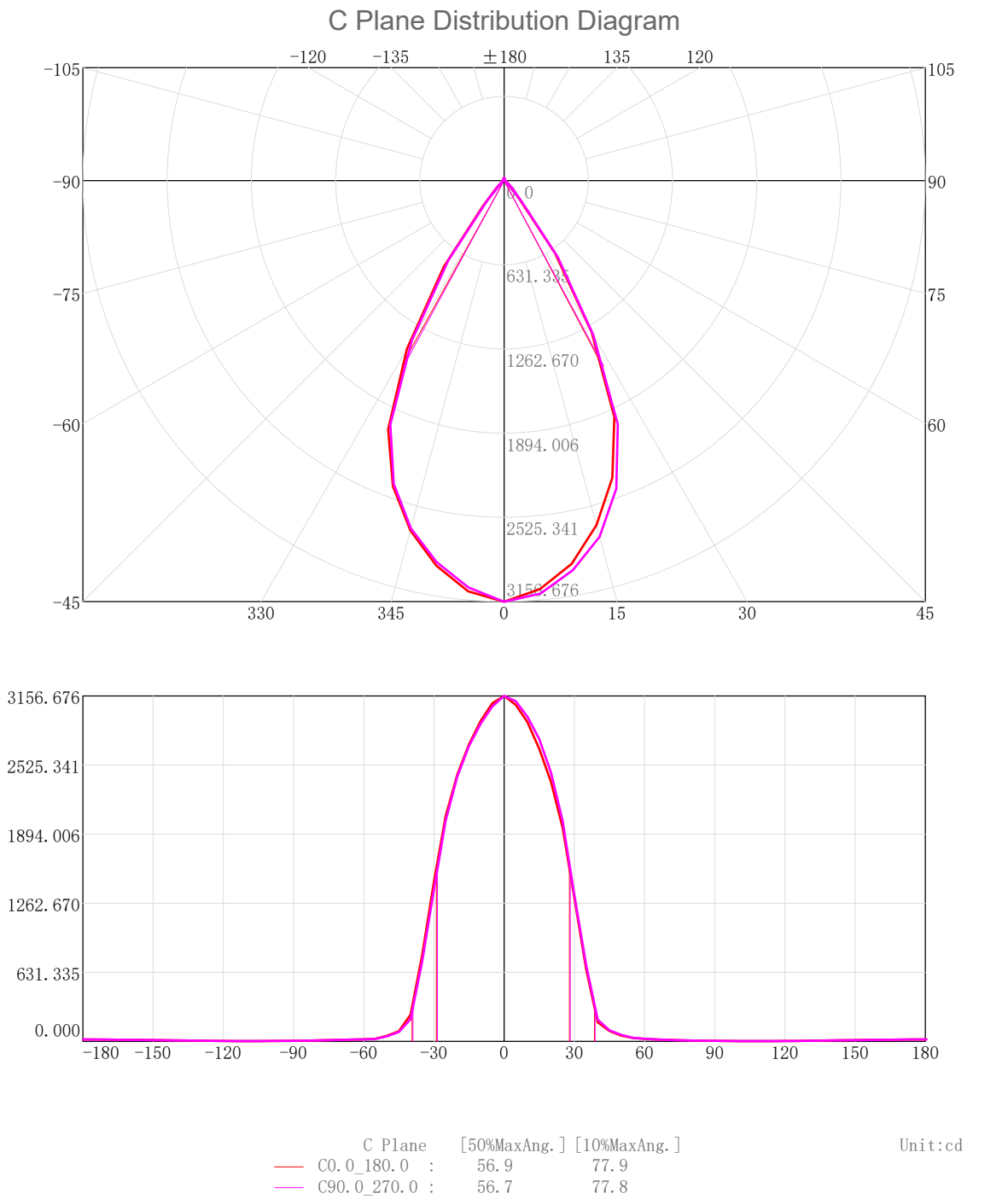
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 2603.320	Luminary Flux(lm): 2603.322	Field Angle(10%Imax): 77.9(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 2557.788lm 98.25%
Rated Voltage(V):	Luminary EER(lm/W): 77.342	Up Lumens&Percent: 45.534lm 1.75%
Tested Power(W): 33.660	Max. Candela(cd): 3156.676	S/MH: C0_a180=0.897 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, 0.959	Beam Angle(50%Imax): 56.9(°)	ErP Φ use(90°): 2471.655lm
Lamp Size (W*L*H): 0.110m*0.110m*0.000m	Left=-29.0°, Right=27.9°	IRF(%): 266.082



2D Plane Light Intensity Distribution Curve

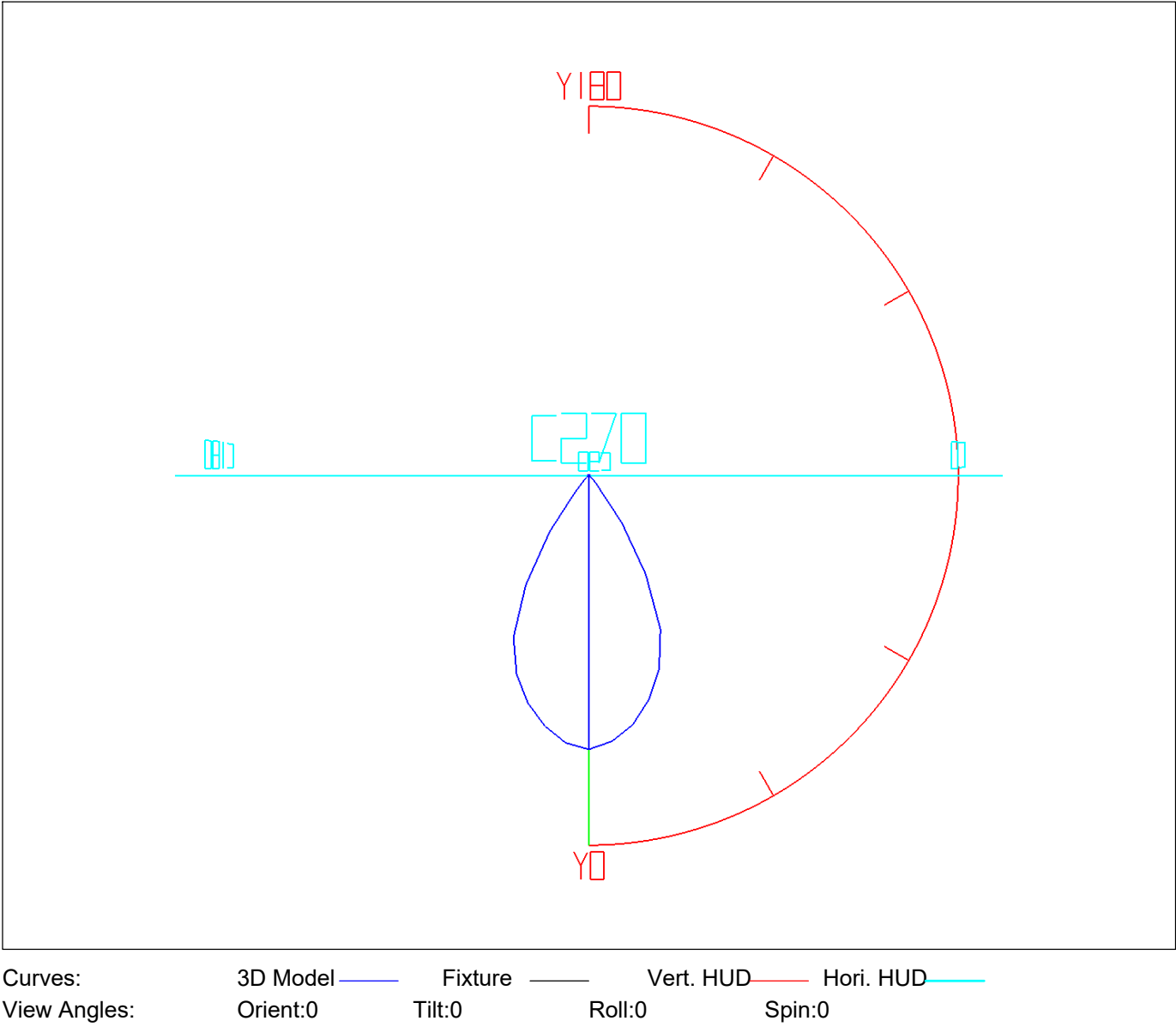
Lum. Name:DL51-35-XX-01 3000K RA90 60D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10



3D Light Intensity Distribution Modal

Lum. Name:DL51-35-XX-01 3000K RA90 60D 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

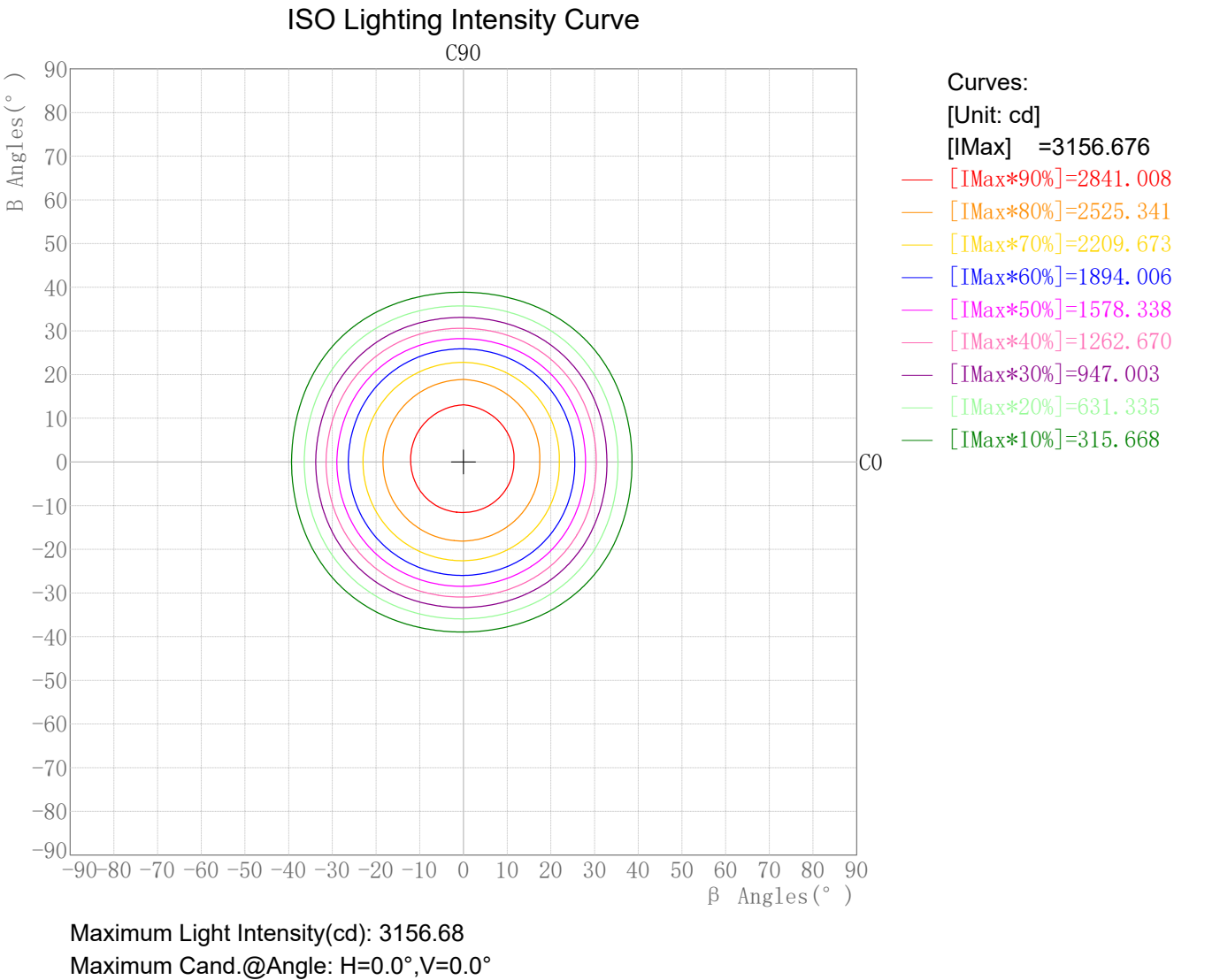


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	74.60	74.60	2.87	2.87
5.0-10.0	215.10	289.71	8.26	11.13
10.0-15.0	334.69	624.39	12.86	23.98
15.0-20.0	423.10	1047.49	16.25	40.24
20.0-25.0	464.89	1512.39	17.86	58.09
25.0-30.0	428.27	1940.65	16.45	74.55
30.0-35.0	308.28	2248.94	11.84	86.39
35.0-40.0	154.65	2403.58	5.94	92.33
40.0-45.0	55.60	2459.18	2.14	94.46
45.0-50.0	29.86	2489.05	1.15	95.61
50.0-55.0	17.84	2506.89	0.69	96.30
55.0-60.0	11.70	2518.59	0.45	96.75
60.0-65.0	9.71	2528.30	0.37	97.12
65.0-70.0	8.26	2536.56	0.32	97.44
70.0-75.0	6.97	2543.53	0.27	97.70
75.0-80.0	5.76	2549.28	0.22	97.92
80.0-85.0	4.66	2553.94	0.18	98.10
85.0-90.0	3.84	2557.79	0.15	98.25
90.0-95.0	3.17	2560.96	0.12	98.37
95.0-100.0	2.61	2563.57	0.10	98.47
100.0-105.0	2.21	2565.78	0.08	98.56
105.0-110.0	1.96	2567.74	0.08	98.63
110.0-115.0	1.93	2569.67	0.07	98.71
115.0-120.0	2.05	2571.72	0.08	98.79
120.0-125.0	2.33	2574.05	0.09	98.88
125.0-130.0	2.73	2576.78	0.11	98.98
130.0-135.0	3.09	2579.88	0.12	99.10
135.0-140.0	3.38	2583.26	0.13	99.23
140.0-145.0	3.57	2586.83	0.14	99.37
145.0-150.0	3.59	2590.42	0.14	99.50
150.0-155.0	3.44	2593.85	0.13	99.64
155.0-160.0	3.09	2596.95	0.12	99.76
160.0-165.0	2.62	2599.56	0.10	99.86
165.0-170.0	2.02	2601.59	0.08	99.93
170.0-175.0	1.29	2602.88	0.05	99.98
175.0-180.0	0.45	2603.32	0.02	100.00

Rectangle ISO Lighting Intensity Diagram

Lum. Name: DL51-35-XX-01 3000K RA90 60D 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

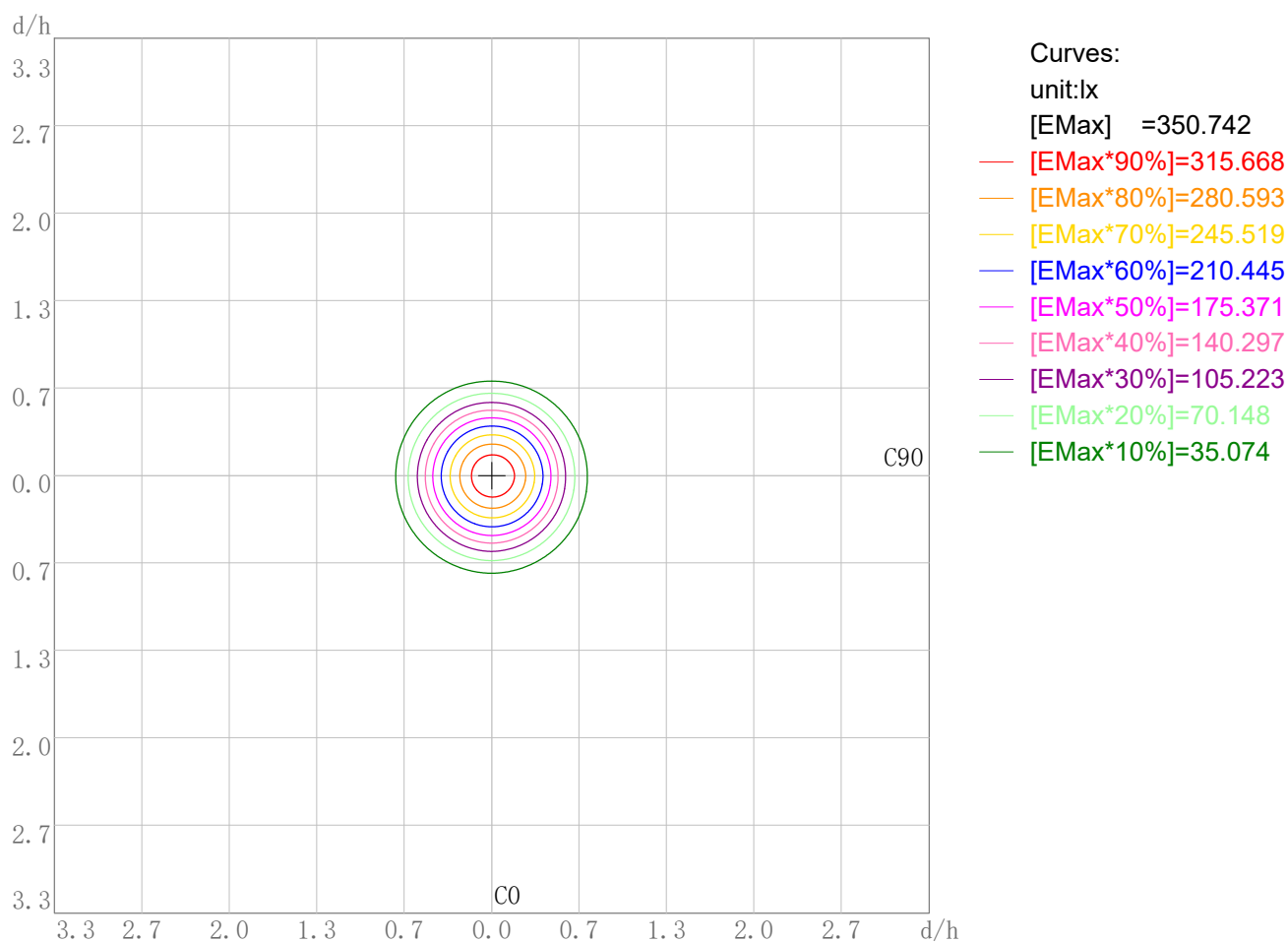


Photometric Filename:DL51-35-XX-01 3000K RA90 60D 黑色.IES

Plane ISO-Illuminance Diagram

Lum. Name: DL51-35-XX-01 3000K RA90 60D 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

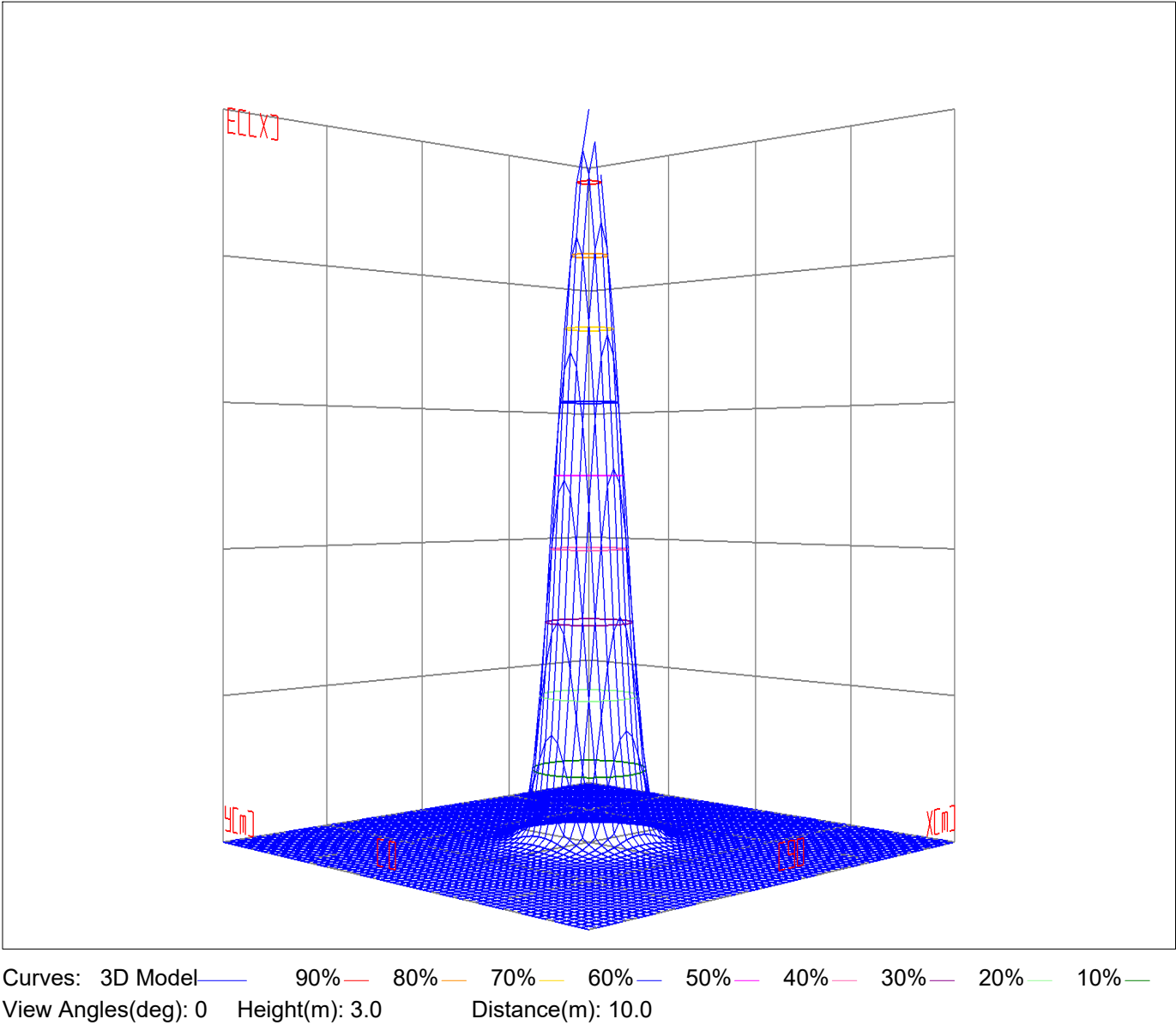


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 350.74
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 3000K RA90 60D 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

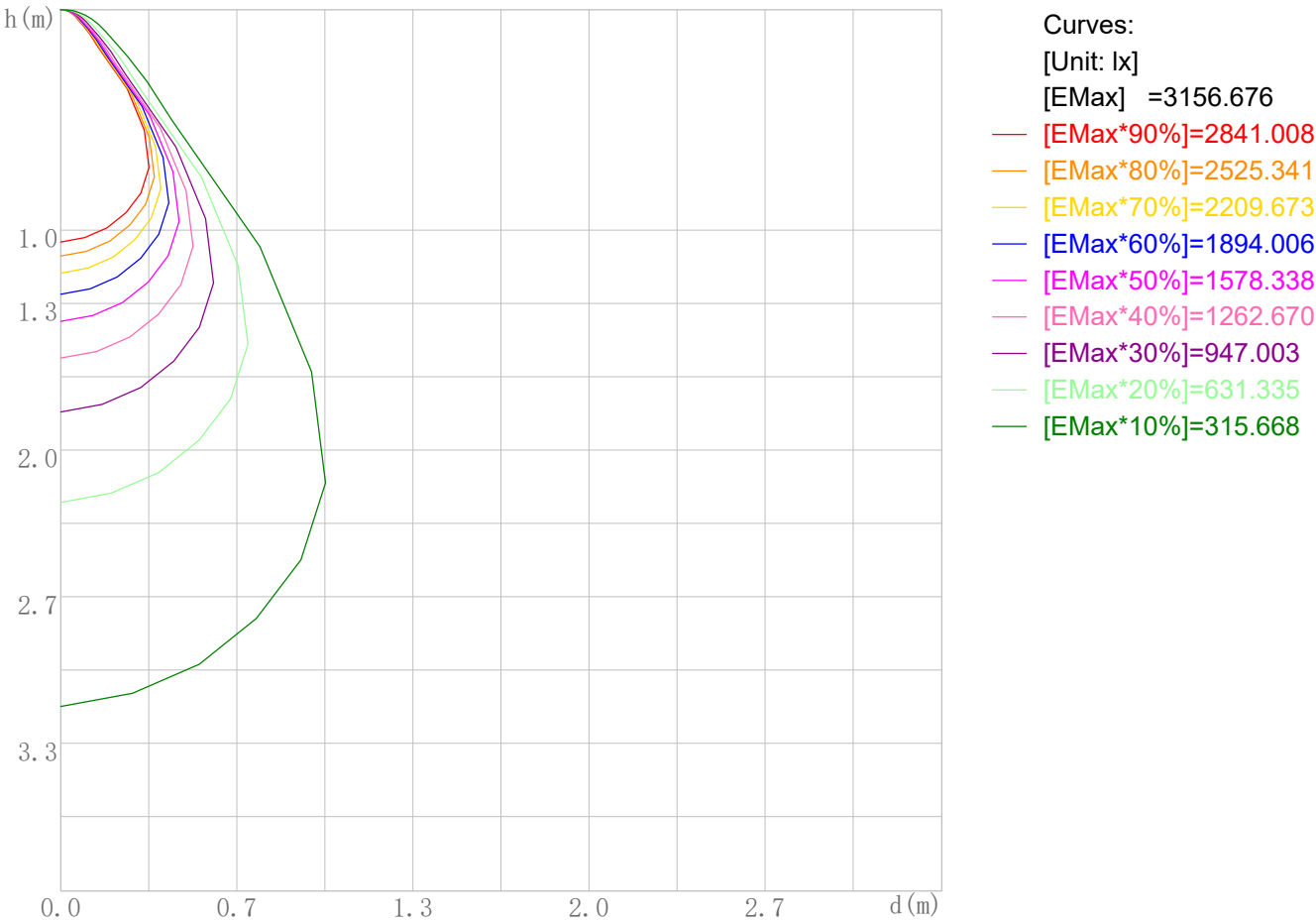
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name:DL51-35-XX-01 3000K RA90 60D 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

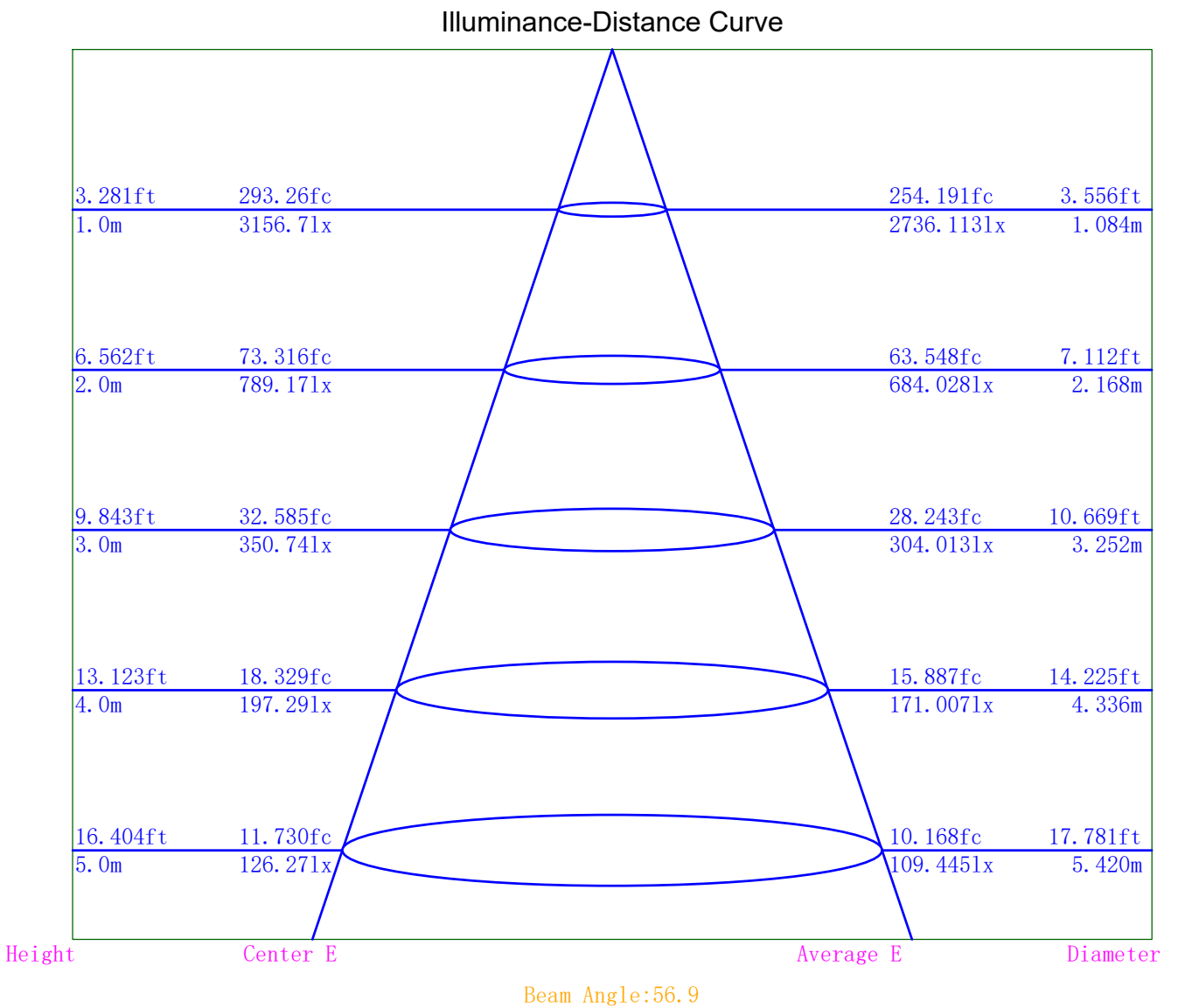
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:3156.68lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:3156.676cd,0deg

Illuminance-Distance Diagram

Lum. Name:DL51-35-XX-01 3000K RA90 60D 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 60D 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

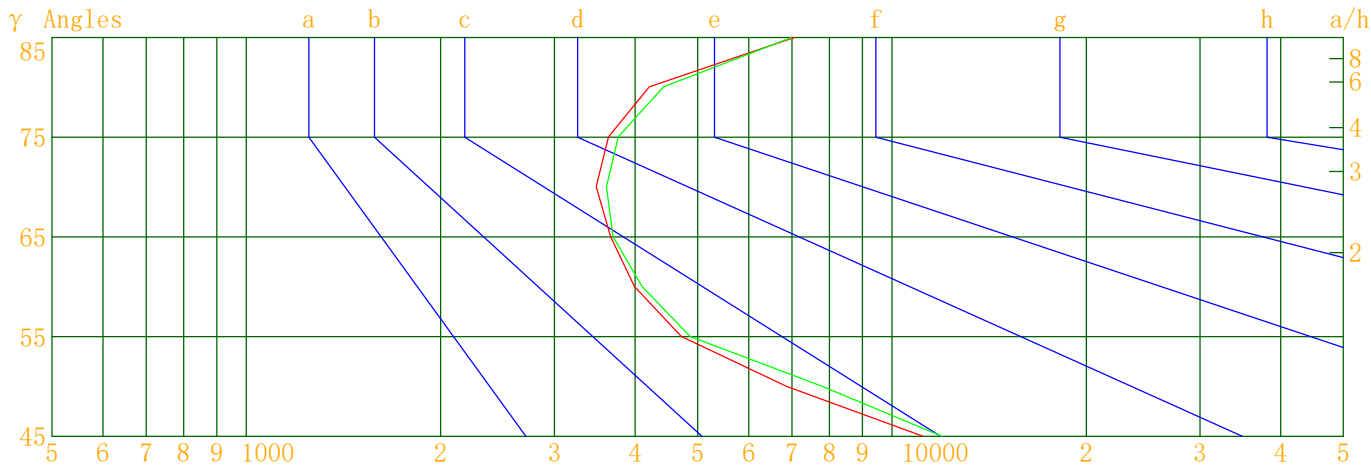
Glare Grade Table

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	11178	6869	4718	3992	3667	3482	3639	4211	7058
C90	11960	7802	4869	4102	3699	3613	3769	4428	6987

Luminance Limiting Curve



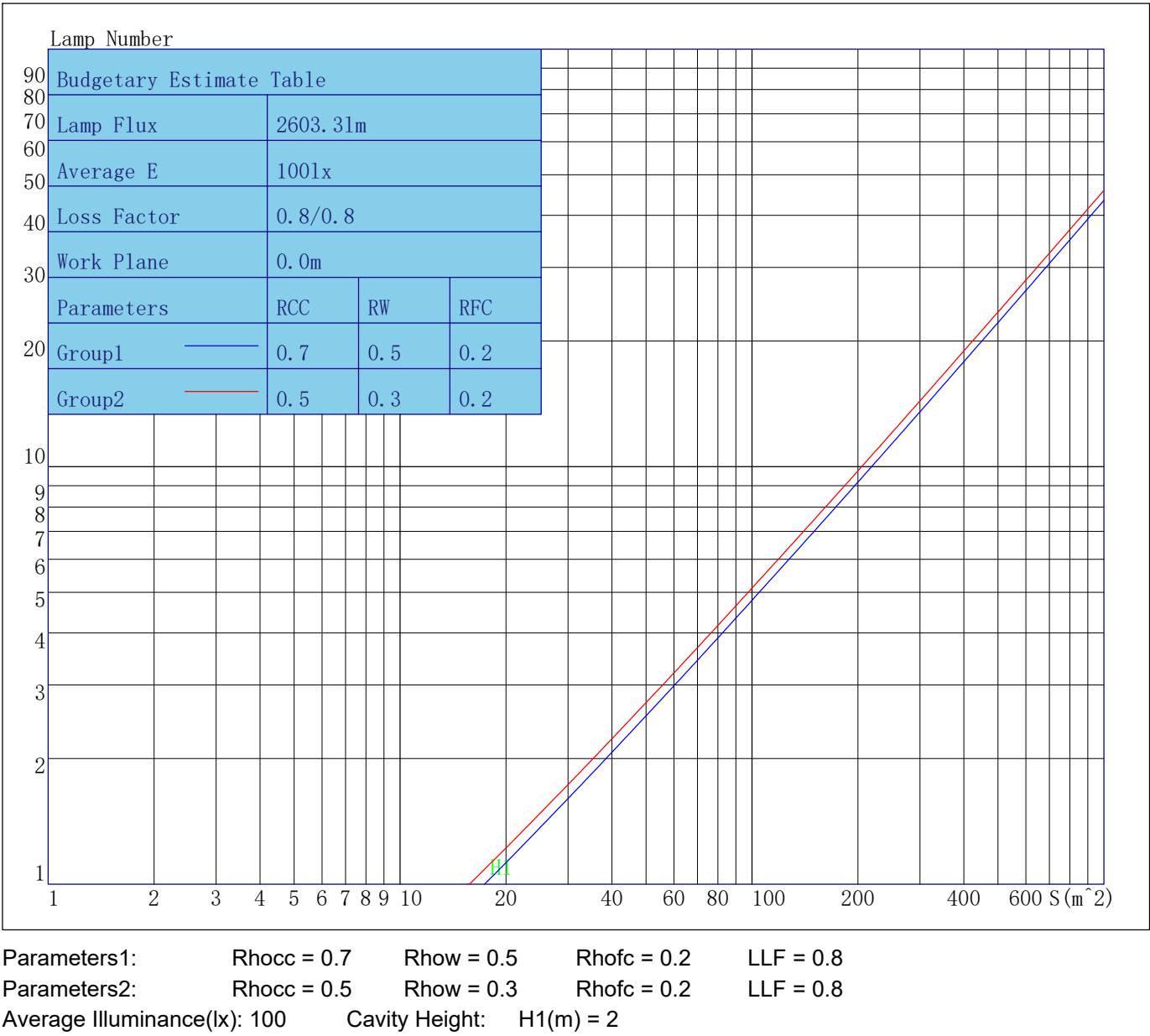
Luminous Size:Length(m)=0.110Width(m)=0.110Height(m)=0.000Area(m^2)=0.012100

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 60D 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 60D 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	100	100	100	98
1	113	110	108	105	110	108	106	104	103	102	100	99	98	97	96	95	94	92
2	107	103	99	95	105	101	97	94	97	94	92	94	92	89	91	89	87	86
3	102	96	91	87	100	94	90	86	91	88	84	89	86	83	86	84	81	80
4	97	90	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75
5	92	84	78	74	91	83	78	74	81	77	73	79	75	72	78	74	71	70
6	88	79	73	69	86	78	73	69	77	72	68	75	71	68	74	70	67	66
7	84	75	69	65	82	74	68	64	72	68	64	71	67	63	70	66	63	62
8	80	70	65	61	78	70	64	60	69	64	60	67	63	60	66	62	59	58
9	76	67	61	57	75	66	61	57	65	60	57	64	60	56	63	59	56	55
10	73	63	58	54	72	63	57	54	62	57	53	61	56	53	60	56	53	52

Unified Glare Rating Table

Lum. Name:DL51-35-XX-01 3000K RA90 60D 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	17.8	18.7	18.2	19.1	19.4	18.1	19.0	18.5	19.4	19.7	
	Y=3H	17.7	18.5	18.1	18.9	19.3	18.0	18.8	18.4	19.2	19.6
	Y=4H	17.7	18.5	18.2	18.9	19.3	18.0	18.7	18.4	19.1	19.6
	Y=6H	17.7	18.4	18.2	18.8	19.3	18.0	18.7	18.4	19.1	19.5
	Y=8H	17.7	18.4	18.2	18.8	19.3	18.0	18.7	18.5	19.1	19.5
	Y=12H	17.8	18.4	18.3	18.8	19.3	18.0	18.7	18.5	19.1	19.6
X=4H Y=2H	17.6	18.3	18.0	18.7	19.1	17.8	18.6	18.3	19.0	19.4	
	Y=3H	17.5	18.2	18.0	18.6	19.1	17.8	18.4	18.3	18.9	19.3
	Y=4H	17.6	18.1	18.0	18.6	19.1	17.8	18.4	18.3	18.8	19.3
	Y=6H	17.6	18.1	18.2	18.6	19.1	17.9	18.4	18.4	18.9	19.4
	Y=8H	17.7	18.1	18.2	18.6	19.1	18.0	18.4	18.5	18.9	19.4
	Y=12H	17.8	18.2	18.4	18.7	19.2	18.1	18.5	18.6	19.0	19.5
X=8H Y=4H	17.5	17.9	18.0	18.4	18.9	17.7	18.2	18.2	18.6	19.2	
	Y=6H	17.6	18.0	18.2	18.5	19.1	17.9	18.2	18.4	18.8	19.3
	Y=8H	17.8	18.1	18.3	18.6	19.2	18.0	18.3	18.6	18.9	19.4
	Y=12H	18.0	18.3	18.6	18.8	19.4	18.2	18.5	18.8	19.0	19.7
X=12H Y=4H	17.4	17.8	17.9	18.3	18.8	17.7	18.1	18.2	18.6	19.1	
	Y=6H	17.6	17.9	18.2	18.4	19.0	17.9	18.2	18.4	18.7	19.3
	Y=8H	17.8	18.1	18.4	18.6	19.2	18.1	18.3	18.6	18.8	19.5
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	0.4/-0.4					0.3/-0.4					
Reduced UGR Table:											
Nordic Standard Table:	BK0					BK0					
Correction Value	0.7					0.7					

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	3156.68	3156.68	3156.68	3156.68
γ 5.0	3073.94	3107.65	3091.12	3062.31
γ 10.0	2916.53	2965.45	2929.95	2905.04
γ 15.0	2673.48	2763.38	2714.94	2699.61
γ 20.0	2371.43	2456.63	2437.20	2418.70
γ 25.0	1955.72	2015.87	2057.09	2017.63
γ 30.0	1312.24	1337.64	1455.71	1384.67
γ 35.0	665.21	702.60	787.36	728.59
γ 40.0	175.85	200.15	244.46	203.40
γ 45.0	95.64	102.33	93.48	85.87
γ 50.0	53.42	60.68	52.44	47.28
γ 55.0	32.75	33.79	24.39	23.52
γ 60.0	24.15	24.82	19.75	19.24
γ 65.0	18.75	18.91	17.05	17.13
γ 70.0	14.41	14.95	14.65	14.57
γ 75.0	11.40	11.80	12.67	12.20
γ 80.0	8.85	9.30	10.00	9.83
γ 85.0	7.44	7.37	8.03	7.81
γ 90.0	6.07	6.08	6.70	6.63
γ 95.0	4.73	4.95	5.50	5.68
γ 100.0	4.24	4.20	4.70	4.48
γ 105.0	3.71	3.63	4.15	3.85
γ 110.0	3.47	3.52	3.70	4.02
γ 115.0	3.75	3.54	4.15	4.28
γ 120.0	4.42	4.10	4.74	4.70
γ 125.0	5.56	5.46	5.68	5.73
γ 130.0	7.16	6.76	6.88	7.06
γ 135.0	8.29	8.07	8.48	8.48
γ 140.0	9.66	9.74	10.31	10.08
γ 145.0	11.40	11.14	11.66	11.66
γ 150.0	12.96	12.41	13.07	13.11
γ 155.0	14.45	13.90	14.40	14.30
γ 160.0	15.39	15.02	15.42	15.10
γ 165.0	16.72	16.32	16.77	16.20
γ 170.0	17.71	17.43	17.83	17.54
γ 175.0	18.50	18.34	18.67	18.08
γ 180.0	18.98	18.98	18.98	18.98