

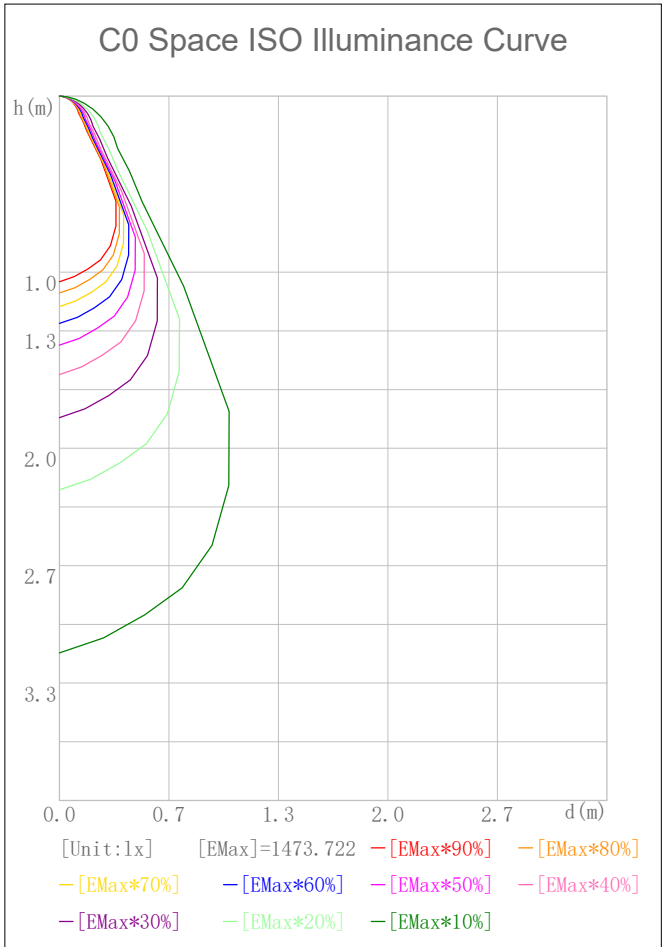
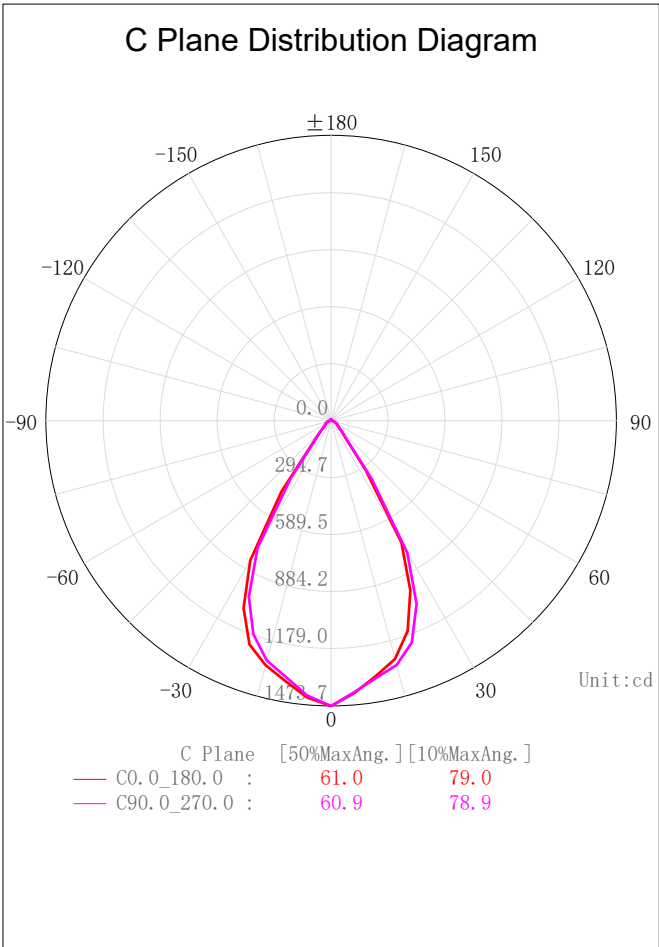
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-15-XX-01 4000K RA90 60D 白色	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):0.055m*0.055m*0.000m	Lum. Area (m2):0.003	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25
		Humidity(%): 50.0

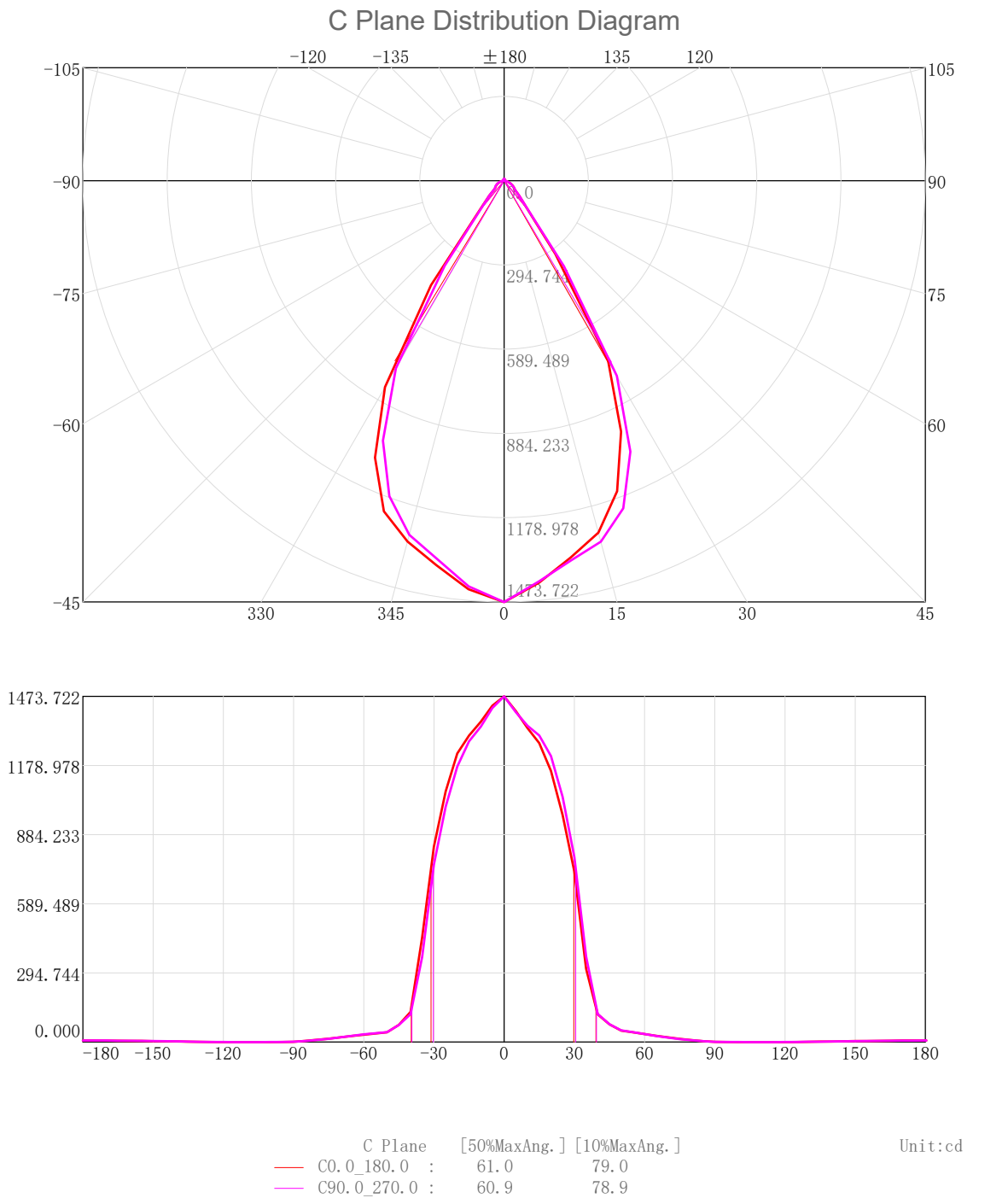
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 1359.680	Luminary Flux(lm): 1359.680	Field Angle(10%Imax): 79.0(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1349.674lm 99.26%
Rated Voltage(V):	Luminary EER(lm/W): 96.706	Up Lumens&Percent: 10.006lm 0.74%
Tested Power(W): 14.060	Max. Candela(cd): 1473.722	S/MH: C0_a180=0.950 C90_270=0.953
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct
Tested Electrics (V, A, pf):239.9, 0.060, 0.971	Beam Angle(50%Imax): 61.0(°)	ErP Φ use(90°): 1255.624lm
Lamp Size (W*L*H):0.055m*0.055m*0.000m	Left=-31.2°, Right=29.8°	IRF(%): 243.967



2D Plane Light Intensity Distribution Curve

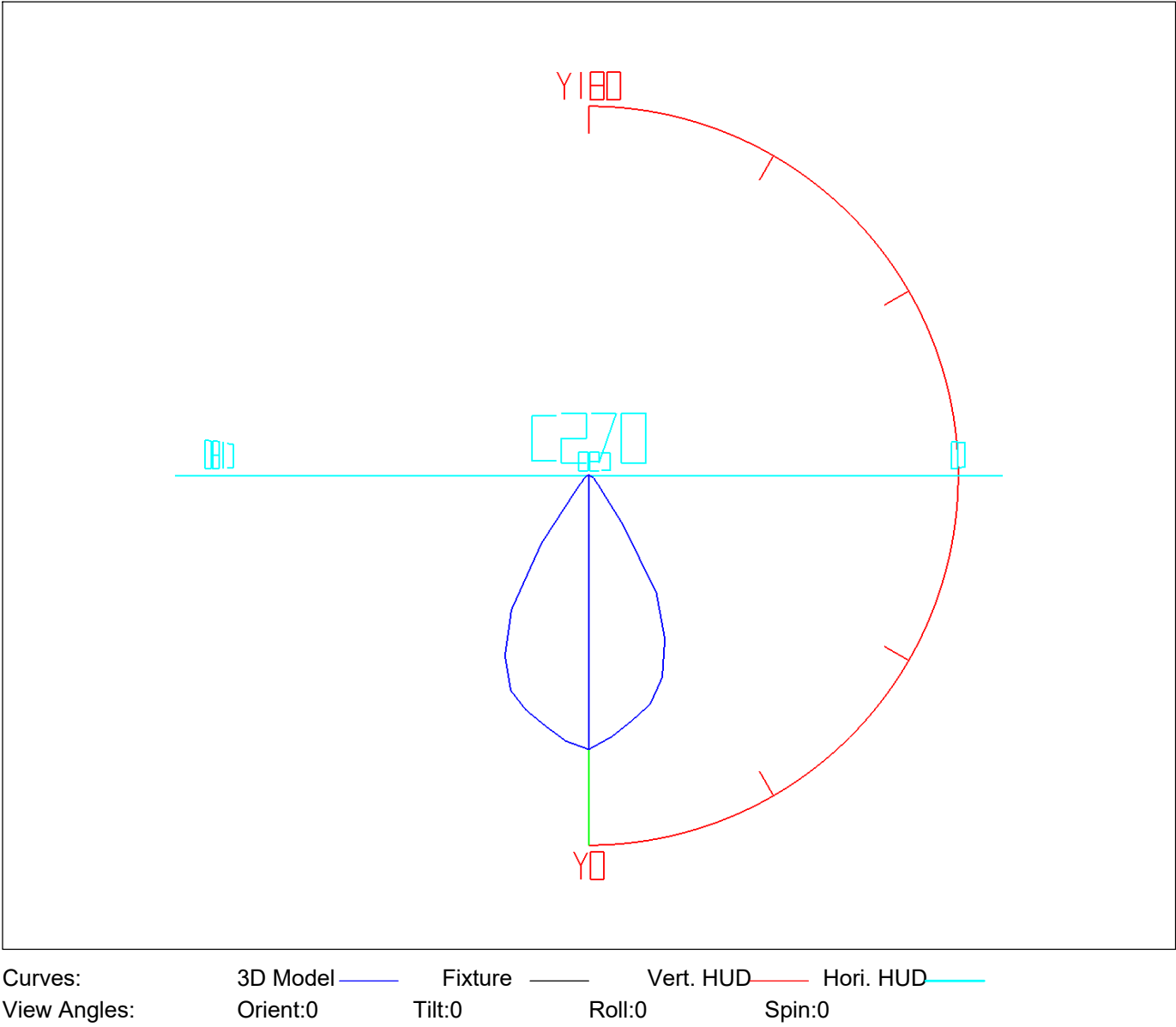
Lum. Name:DL51-15-XX-01 4000K RA90 60D 白色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10



3D Light Intensity Distribution Modal

Lum. Name:DL51-15-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:2022/08/10

3D Light Intensity Distribution Modal

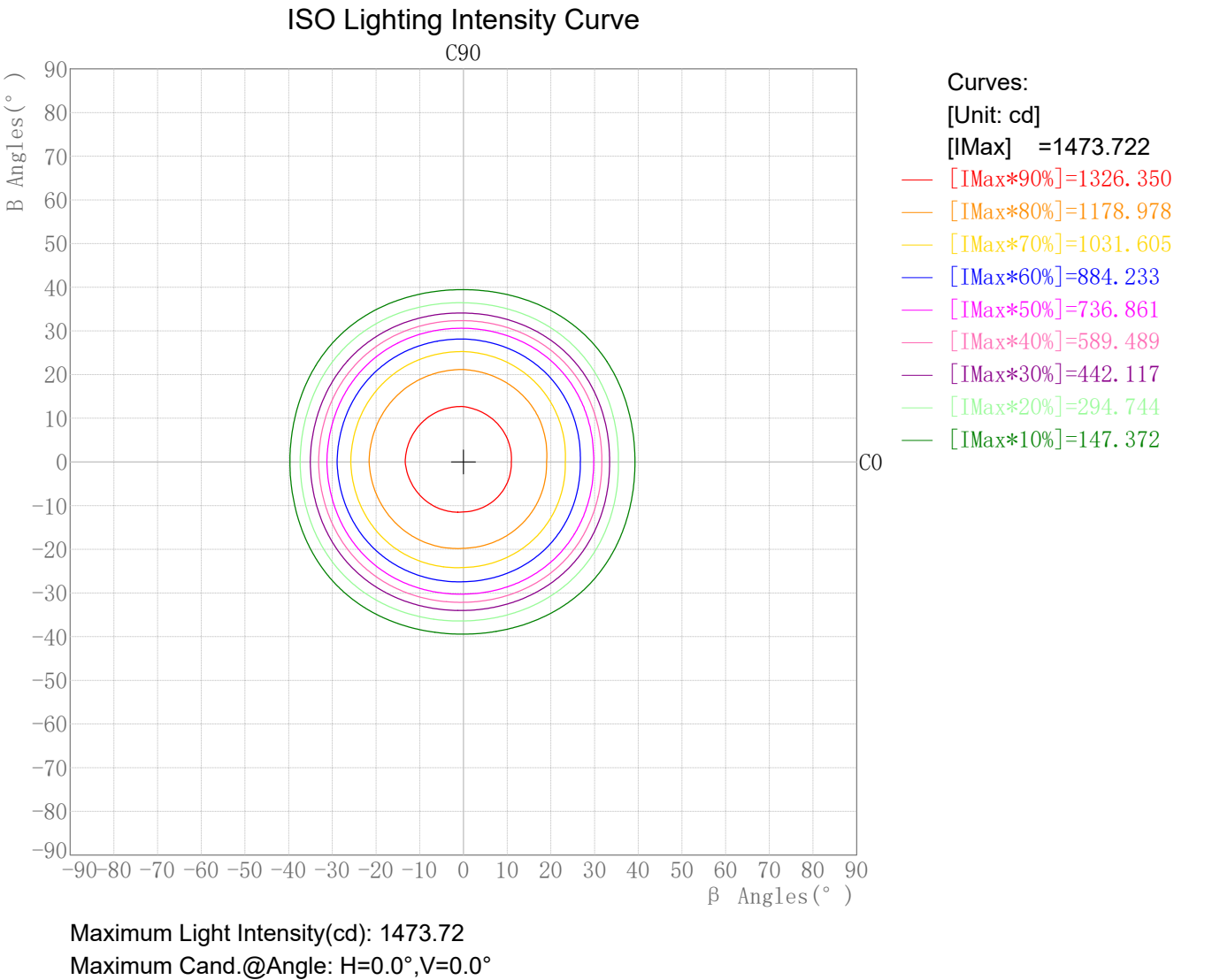


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	34.58	34.58	2.54	2.54
5.0-10.0	99.03	133.61	7.28	9.83
10.0-15.0	156.71	290.32	11.53	21.35
15.0-20.0	205.01	495.33	15.08	36.43
20.0-25.0	232.45	727.79	17.10	53.53
25.0-30.0	227.55	955.33	16.74	70.26
30.0-35.0	169.10	1124.44	12.44	82.70
35.0-40.0	82.27	1206.71	6.05	88.75
40.0-45.0	36.30	1243.01	2.67	91.42
45.0-50.0	24.37	1267.38	1.79	93.21
50.0-55.0	18.66	1286.04	1.37	94.58
55.0-60.0	16.92	1302.96	1.24	95.83
60.0-65.0	14.58	1317.54	1.07	96.90
65.0-70.0	11.83	1329.37	0.87	97.77
70.0-75.0	8.92	1338.29	0.66	98.43
75.0-80.0	6.11	1344.40	0.45	98.88
80.0-85.0	3.66	1348.06	0.27	99.15
85.0-90.0	1.61	1349.67	0.12	99.26
90.0-95.0	0.53	1350.21	0.04	99.30
95.0-100.0	0.24	1350.45	0.02	99.32
100.0-105.0	0.06	1350.51	0.00	99.33
105.0-110.0	0.00	1350.51	0.00	99.33
110.0-115.0	0.02	1350.53	0.00	99.33
115.0-120.0	0.08	1350.61	0.01	99.33
120.0-125.0	0.20	1350.80	0.01	99.35
125.0-130.0	0.43	1351.24	0.03	99.38
130.0-135.0	0.69	1351.93	0.05	99.43
135.0-140.0	0.90	1352.83	0.07	99.50
140.0-145.0	1.07	1353.90	0.08	99.58
145.0-150.0	1.18	1355.08	0.09	99.66
150.0-155.0	1.18	1356.27	0.09	99.75
155.0-160.0	1.08	1357.35	0.08	99.83
160.0-165.0	0.93	1358.28	0.07	99.90
165.0-170.0	0.75	1359.03	0.05	99.95
170.0-175.0	0.49	1359.51	0.04	99.99
175.0-180.0	0.17	1359.68	0.01	100.00

Rectangle ISO Lighting Intensity Diagram

Lum. Name:DL51-15-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:2022/08/10

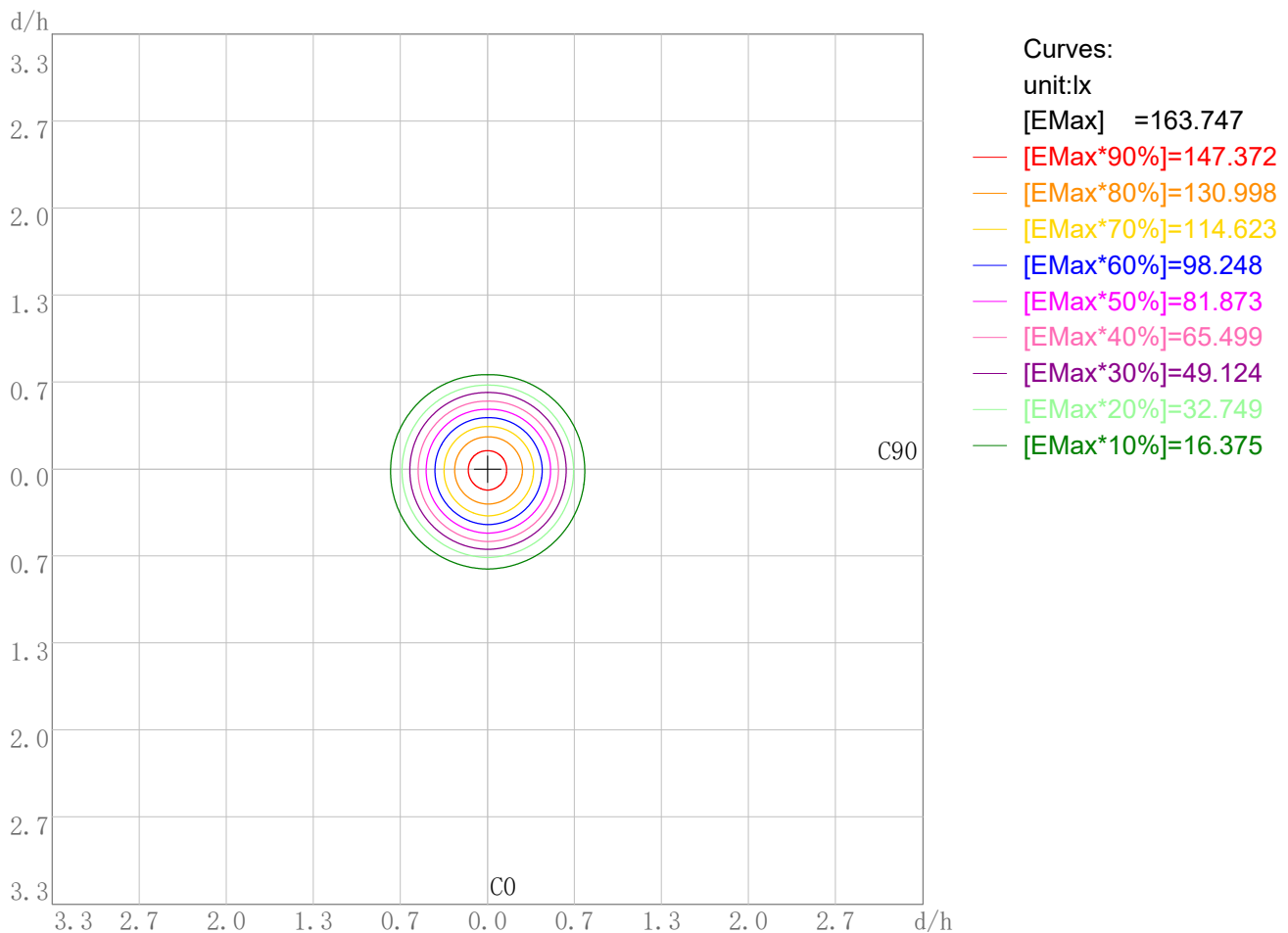


**Photometric Filename:DL51-15-XX-01 4000K RA90 60D 白色.IES**

## Plane ISO-Illuminance Diagram

Lum. Name: DL51-15-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: 2022/08/10

### Plane ISO-Illuminance Curve

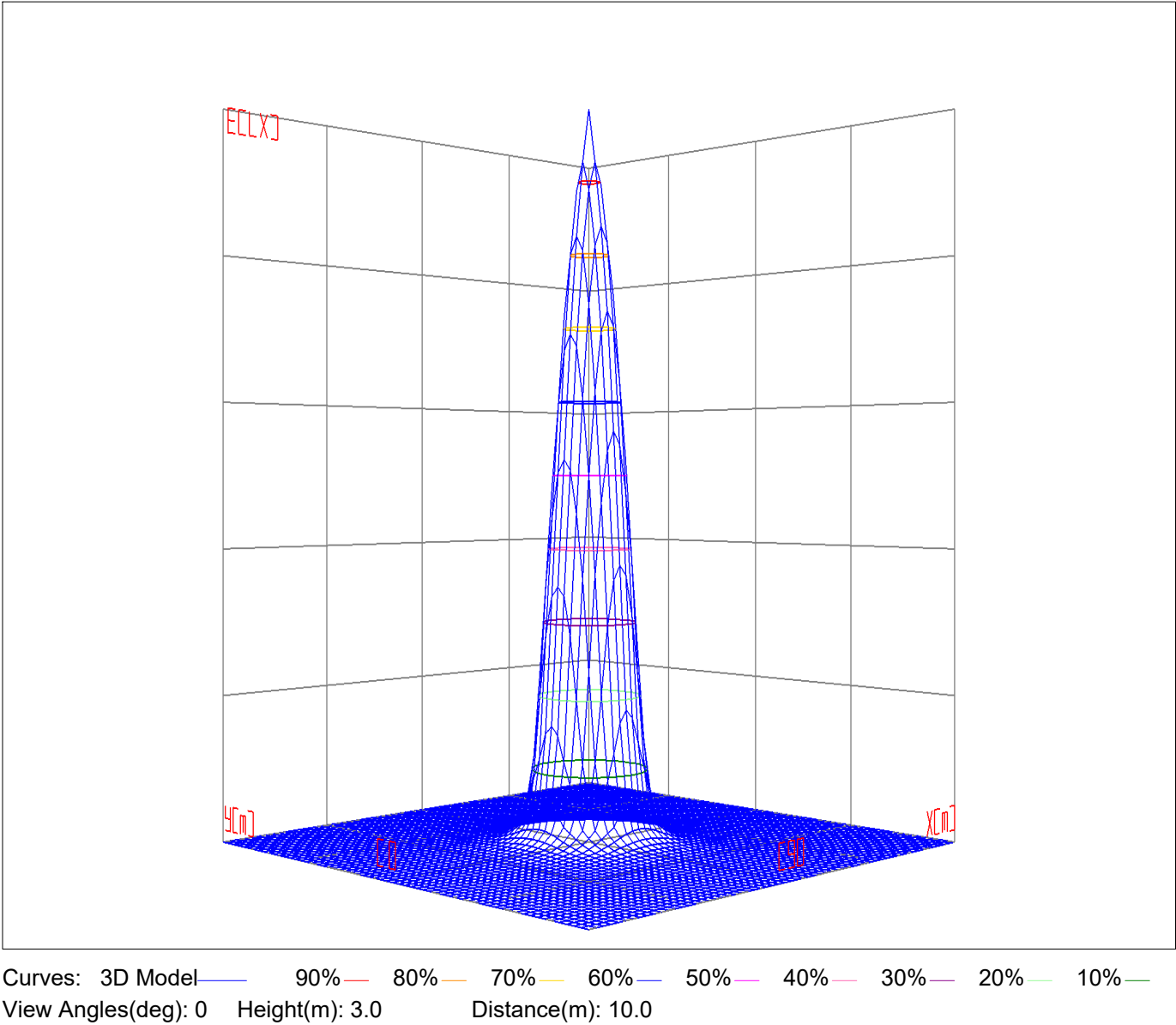


Working Plane Luminaire Mounting Height(m): 3.00  
Working Plane Maximum Illuminance(lx): 163.75  
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name:DL51-15-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:2022/08/10

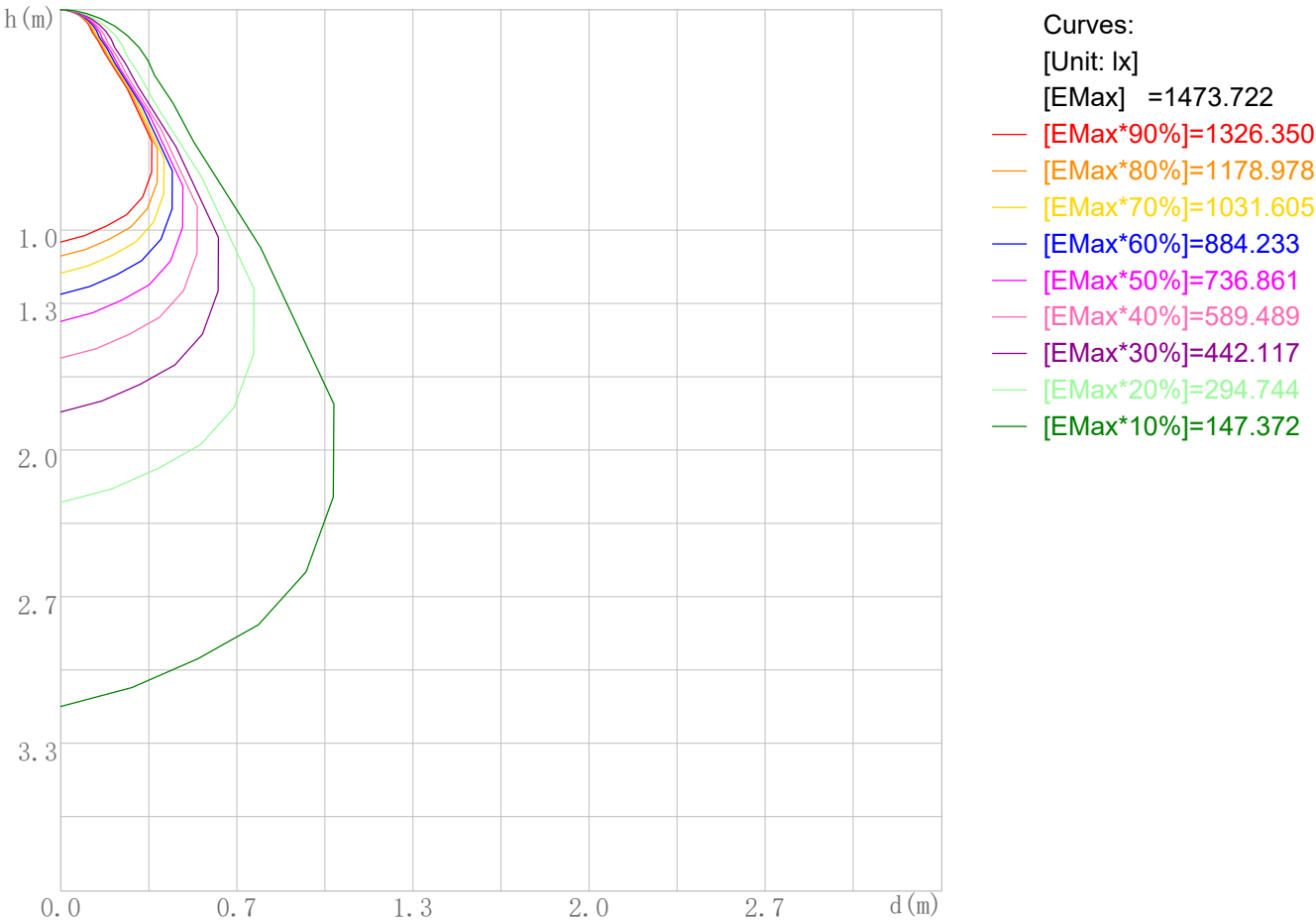
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name:DL51-15-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:2022/08/10

Space ISO Illuminance Curve

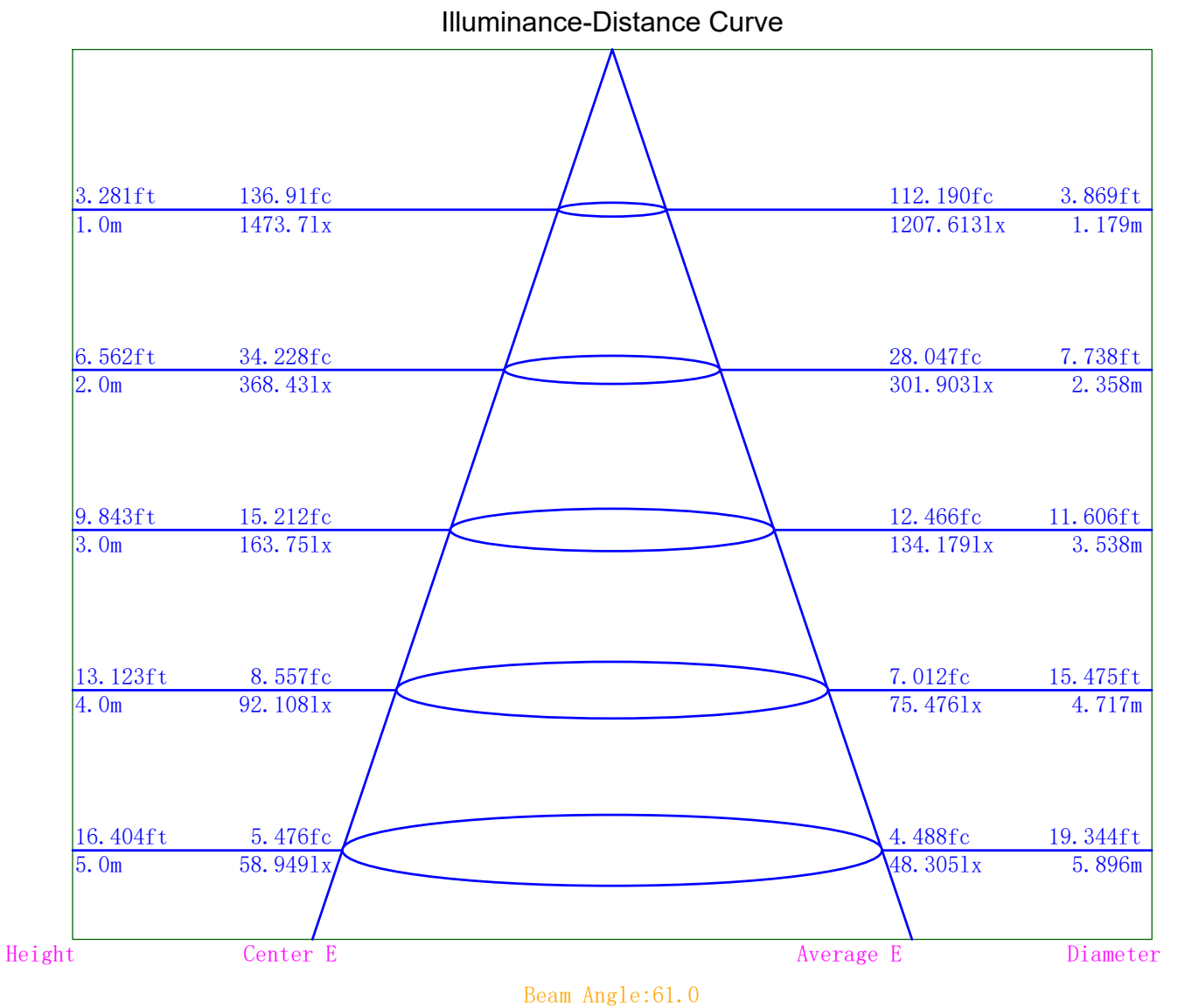


Space Plane Maximum Illuminance and @Angle:1473.72lx,0.0deg  
Plane Maximum Lighting Intensity and @Angle:1473.722cd,0eg



Illuminance-Distance Diagram

Lum. Name:DL51-15-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:2022/08/10



Indoor Luminance Limiting Curves

Lum. Name:DL51-15-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:2022/08/10

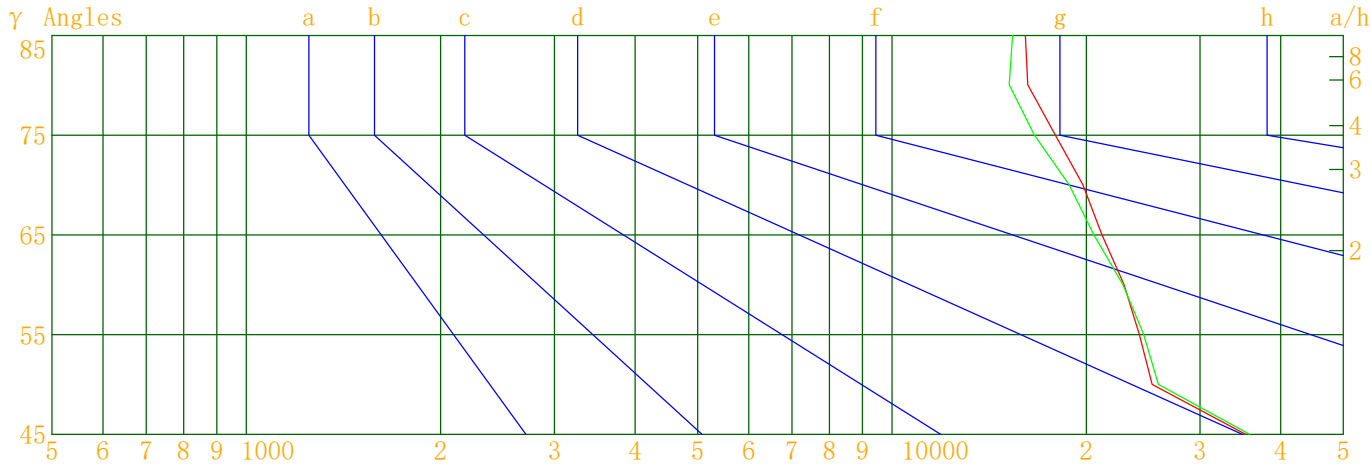
Glare Grade Table

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	35307	25291	24168	22869	21138	19754	17896	16227	16094
C90	35805	25862	24536	22775	20531	18809	16601	15186	15377

Luminance Limiting Curve



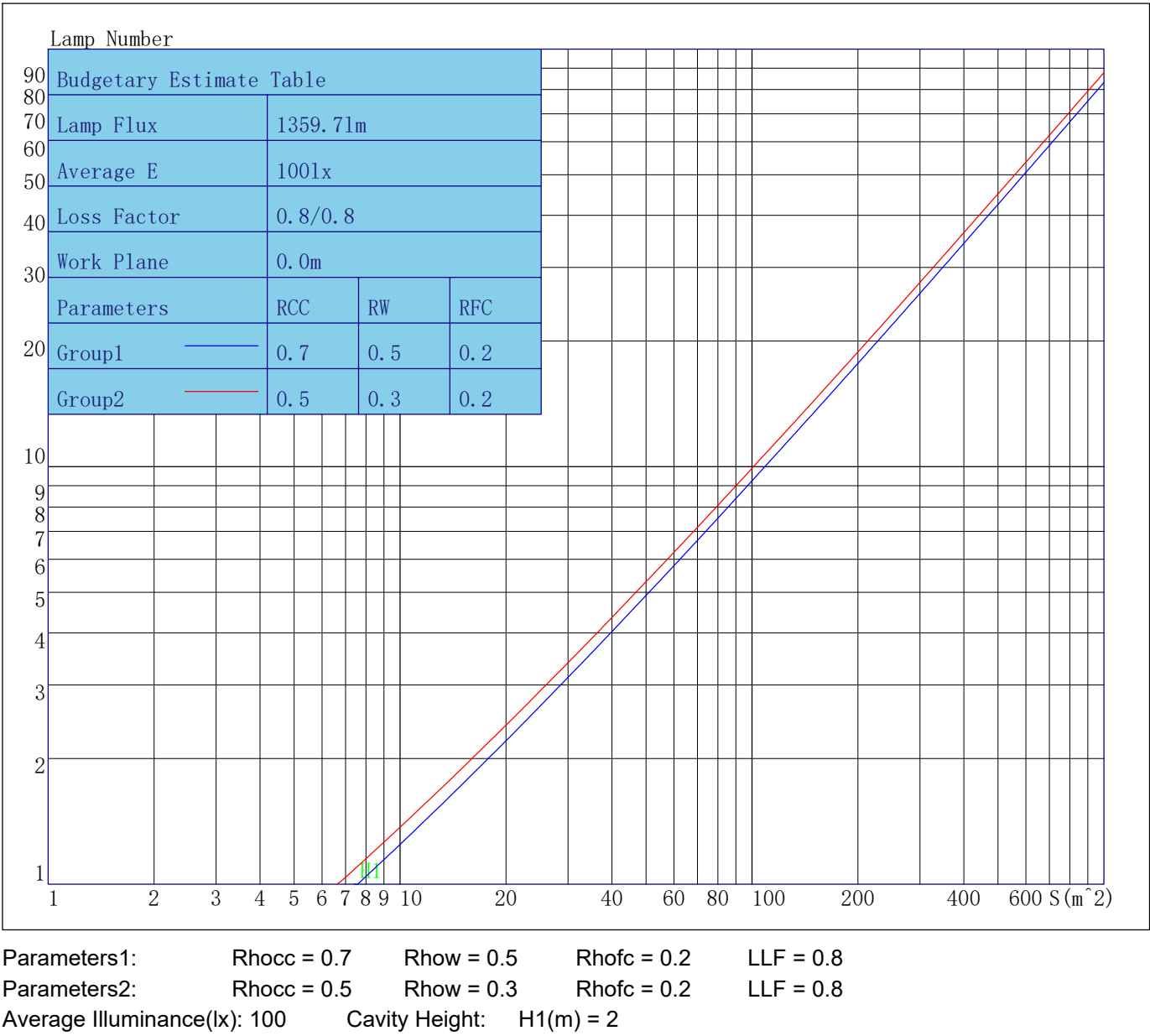
Luminous Size:Length(m)=0.055Width(m)=0.055Height(m)=0.000Area(m^2)=0.003025

Luminous Type:Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name:DL51-15-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:2022/08/10



Indoor Coefficient of Utilization Table

Lum. Name:DL51-15-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:2022/08/10

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	111	111	111	106	106	106	101	101	101	99
1	113	110	107	105	110	108	105	103	103	101	100	99	98	97	96	95	94	92
2	107	102	97	94	104	100	96	93	96	93	90	93	91	88	90	88	86	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	82	80	78
4	96	88	82	78	94	87	81	77	84	80	76	82	78	75	80	77	74	73
5	91	82	76	72	89	81	75	71	79	74	70	77	73	70	76	72	69	68
6	86	77	71	66	85	76	70	66	75	69	66	73	68	65	72	68	65	63
7	82	72	66	62	80	72	66	62	70	65	61	69	64	61	68	64	60	59
8	78	68	62	58	77	67	62	58	66	61	57	65	60	57	64	60	57	55
9	74	64	58	54	73	64	58	54	63	57	54	62	57	54	61	56	53	52
10	71	61	55	51	70	60	55	51	59	54	51	59	54	50	58	53	50	49

Unified Glare Rating Table

Lum. Name:DL51-15-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:2022/08/10

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	21.5	22.6	21.9	22.9	23.2	22.0	23.0	22.3	23.3	23.6
	Y=3H	22.0	22.9	22.4	23.2	23.6	22.3	23.2	22.7	23.6	23.9
	Y=4H	22.2	23.0	22.6	23.4	23.8	22.5	23.3	22.9	23.7	24.1
	Y=6H	22.4	23.1	22.8	23.5	23.9	22.6	23.3	23.0	23.7	24.1
	Y=8H	22.4	23.1	22.9	23.5	24.0	22.6	23.3	23.1	23.7	24.2
	Y=12H	22.5	23.1	22.9	23.5	24.0	22.6	23.3	23.1	23.7	24.2
X=4H	Y=2H	21.6	22.4	22.0	22.8	23.2	22.0	22.8	22.4	23.2	23.6
	Y=3H	22.2	22.9	22.7	23.3	23.8	22.5	23.2	22.9	23.6	24.0
	Y=4H	22.5	23.1	23.0	23.6	24.0	22.7	23.3	23.2	23.8	24.2
	Y=6H	22.8	23.3	23.3	23.8	24.3	23.0	23.5	23.4	23.9	24.4
	Y=8H	22.9	23.4	23.4	23.8	24.3	23.0	23.5	23.5	24.0	24.5
	Y=12H	23.0	23.4	23.5	23.9	24.4	23.1	23.5	23.6	24.0	24.5
X=8H	Y=4H	22.6	23.1	23.1	23.5	24.0	22.8	23.2	23.3	23.7	24.2
	Y=6H	23.0	23.3	23.5	23.9	24.4	23.1	23.5	23.6	24.0	24.5
	Y=8H	23.1	23.5	23.7	24.0	24.5	23.2	23.6	23.8	24.1	24.6
	Y=12H	23.3	23.6	23.8	24.1	24.7	23.4	23.6	23.9	24.2	24.7
X=12H	Y=4H	22.6	23.0	23.1	23.5	24.0	22.7	23.2	23.3	23.7	24.2
	Y=6H	23.0	23.3	23.5	23.8	24.4	23.1	23.4	23.6	23.9	24.5
	Y=8H	23.2	23.5	23.7	24.0	24.6	23.3	23.6	23.8	24.1	24.7
Variations with the objverver position at spacings											
S=1.0H		0.4/-0.4					0.5/-0.5				
S=1.5H		0.8/-0.9					0.8/-0.9				
S=2.0H		1.0/-1.2					1.0/-1.3				
Reduced UGR Table:											
Nordic Standard Table:		BK0					BK0				
Correction Value		1.5					1.3				

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	1473.72	1473.72	1473.72	1473.72
γ 5.0	1410.92	1406.30	1434.04	1424.19
γ 10.0	1338.67	1348.63	1365.51	1344.30
γ 15.0	1274.44	1307.07	1306.68	1282.21
γ 20.0	1155.95	1219.26	1230.52	1174.15
γ 25.0	968.29	1045.36	1068.55	1003.35
γ 30.0	727.21	788.47	833.55	757.51
γ 35.0	312.51	365.33	446.01	362.85
γ 40.0	118.19	120.11	128.69	118.80
γ 45.0	75.52	76.59	73.36	72.90
γ 50.0	49.18	50.29	42.06	42.59
γ 55.0	41.93	42.57	36.93	37.74
γ 60.0	34.59	34.45	31.66	32.93
γ 65.0	27.02	26.25	26.25	26.73
γ 70.0	20.44	19.46	20.44	20.25
γ 75.0	14.01	13.00	14.76	14.14
γ 80.0	8.52	7.98	9.84	9.14
γ 85.0	4.24	4.05	5.36	4.78
γ 90.0	1.04	1.39	1.18	1.51
γ 95.0	0.57	0.80	0.67	0.63
γ 100.0	0.01	0.29	0.13	0.48
γ 105.0	0.00	0.00	0.00	0.00
γ 110.0	0.00	0.00	0.00	0.01
γ 115.0	0.00	0.10	0.00	0.15
γ 120.0	0.24	0.43	0.05	0.30
γ 125.0	0.46	0.65	0.50	0.77
γ 130.0	1.25	1.63	1.30	1.45
γ 135.0	2.08	1.86	1.70	2.39
γ 140.0	2.62	2.88	2.71	3.26
γ 145.0	3.61	3.36	3.32	4.01
γ 150.0	4.49	4.35	4.30	4.60
γ 155.0	4.79	4.77	4.99	5.16
γ 160.0	5.15	5.21	5.37	5.72
γ 165.0	5.97	5.93	6.00	5.95
γ 170.0	6.75	6.56	6.38	6.76
γ 175.0	7.10	6.67	6.90	7.17
γ 180.0	7.12	7.12	7.12	7.12