

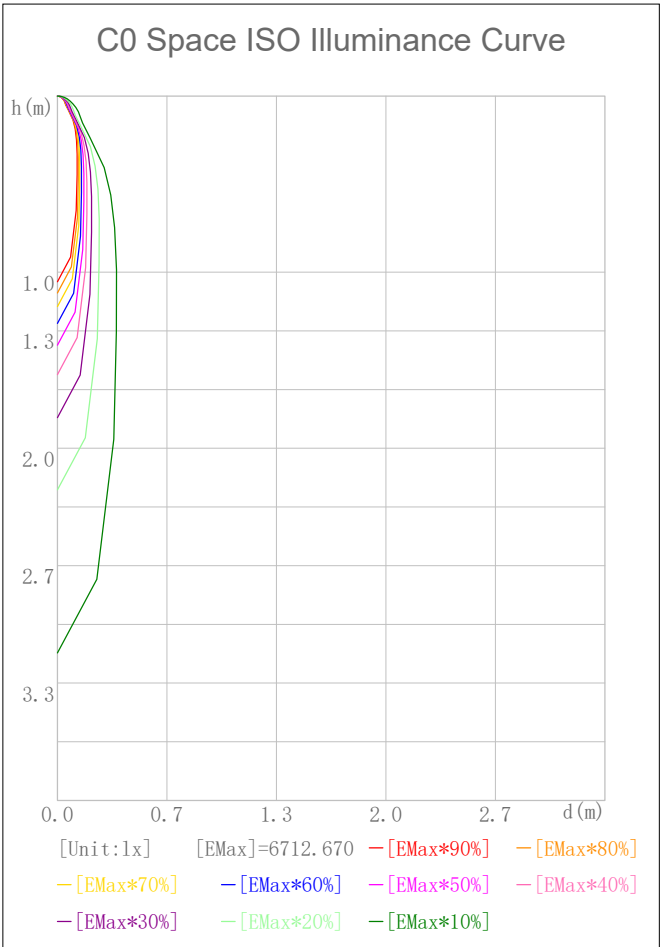
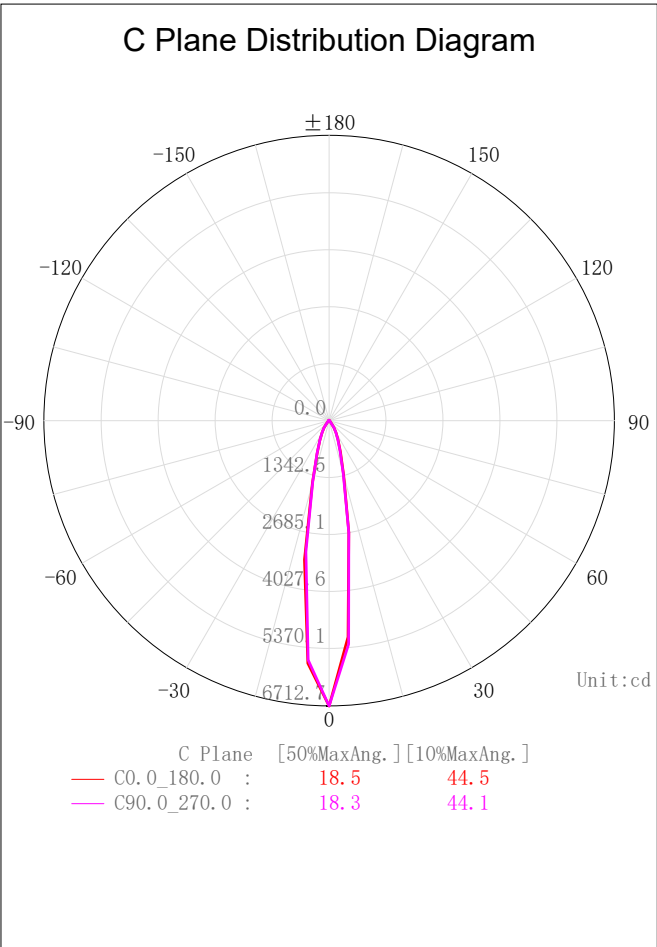
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-15-XX-01 4000K RA90 15D 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):0.055m*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

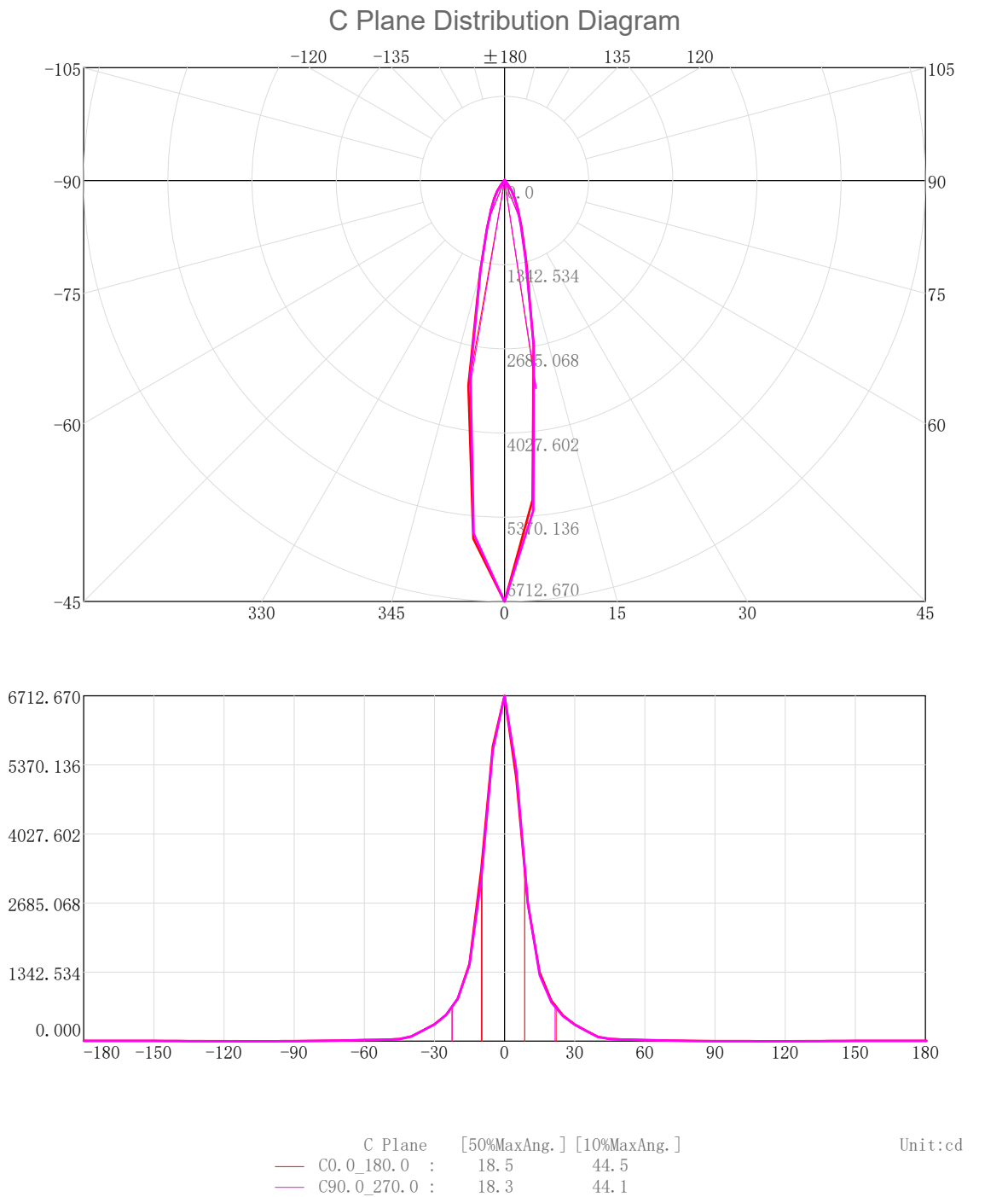
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 1369.230	Luminary Flux(lm): 1369.226	Field Angle(10%Imax): 44.5(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1350.909lm 98.66%
Rated Voltage(V):	Luminary EER(lm/W): 97.454	Up Lumens&Percent: 18.316lm 1.34%
Tested Power(W): 14.050	Max. Candela(cd): 6712.670	S/MH: C0_a180=0.317 C90_270=0.313
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct
Tested Electrics (V, A, pf):239.7, 0.060, 0.971	Beam Angle(50%Imax): 18.5(°)	ErP Φ use(90°): 1278.060lm
Lamp Size (W*L*H):0.055m*0.055m*0.000m	Left=-9.9°, Right=8.6°	IRF(%): 1064.000



2D Plane Light Intensity Distribution Curve

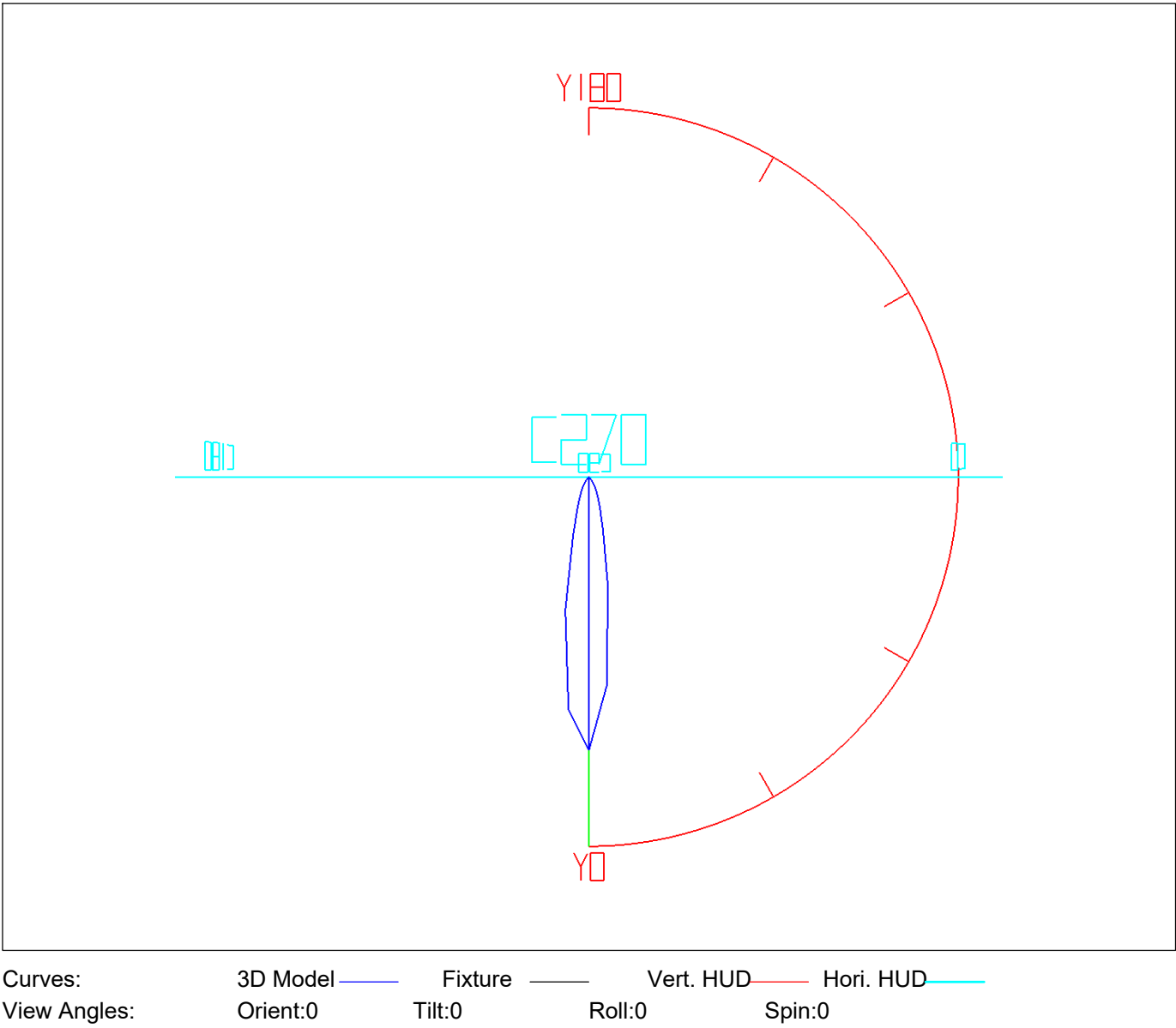
Lum. Name:DL51-15-XX-01 4000K RA90 15D 白色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/11



3D Light Intensity Distribution Modal

Lum. Name:DL51-15-XX-01 4000K RA90 15D 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

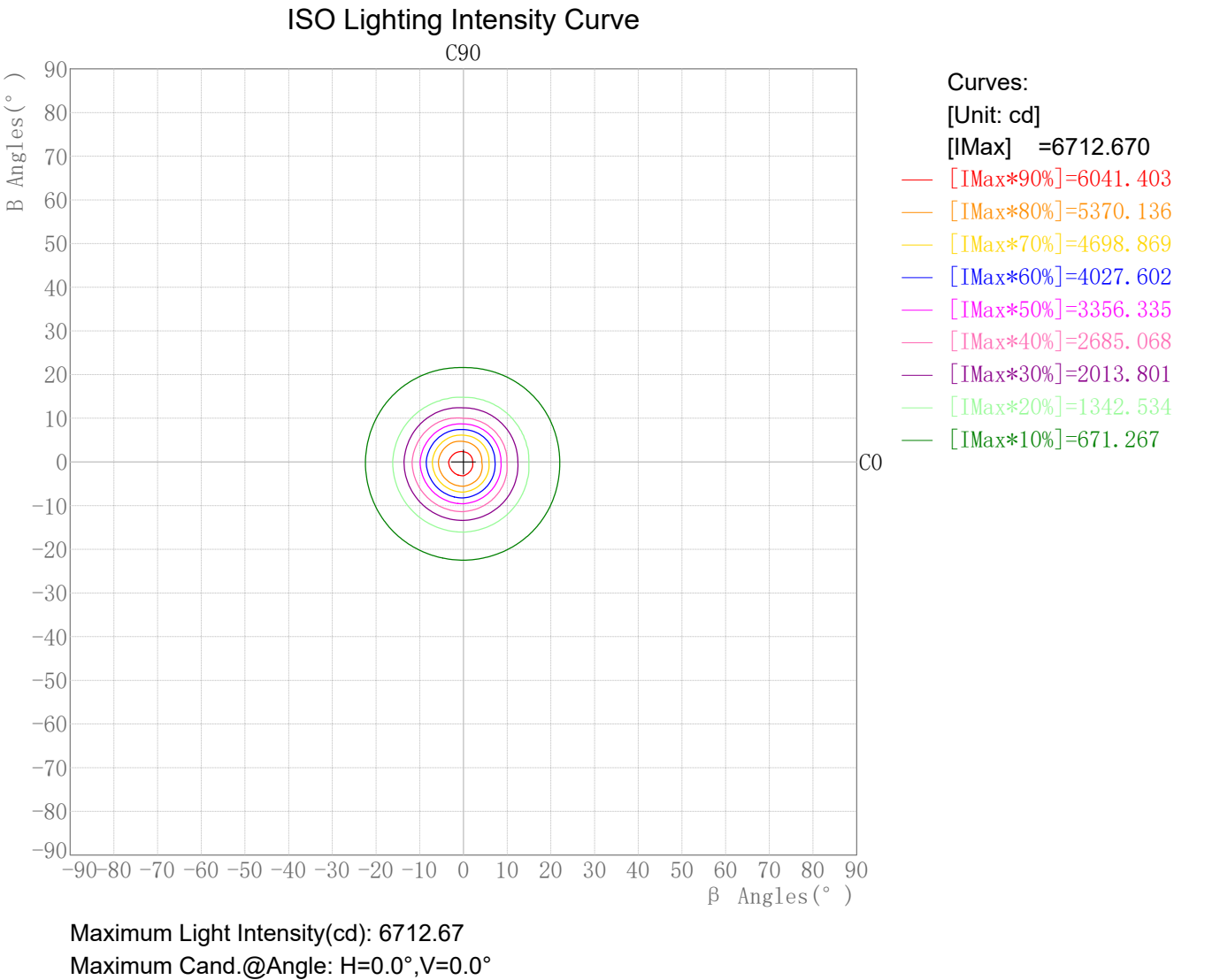


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	145.32	145.32	10.61	10.61
5.0-10.0	300.27	445.59	21.93	32.54
10.0-15.0	258.17	703.76	18.85	51.40
15.0-20.0	181.40	885.17	13.25	64.65
20.0-25.0	136.64	1021.80	9.98	74.63
25.0-30.0	104.91	1126.71	7.66	82.29
30.0-35.0	77.74	1204.45	5.68	87.97
35.0-40.0	48.29	1252.74	3.53	91.49
40.0-45.0	24.25	1276.99	1.77	93.26
45.0-50.0	15.60	1292.59	1.14	94.40
50.0-55.0	13.25	1305.84	0.97	95.37
55.0-60.0	11.67	1317.50	0.85	96.22
60.0-65.0	9.82	1327.33	0.72	96.94
65.0-70.0	7.95	1335.27	0.58	97.52
70.0-75.0	6.18	1341.46	0.45	97.97
75.0-80.0	4.56	1346.02	0.33	98.30
80.0-85.0	3.05	1349.07	0.22	98.53
85.0-90.0	1.84	1350.91	0.13	98.66
90.0-95.0	1.20	1352.11	0.09	98.75
95.0-100.0	0.91	1353.02	0.07	98.82
100.0-105.0	0.72	1353.74	0.05	98.87
105.0-110.0	0.63	1354.37	0.05	98.91
110.0-115.0	0.58	1354.95	0.04	98.96
115.0-120.0	0.57	1355.52	0.04	99.00
120.0-125.0	0.59	1356.11	0.04	99.04
125.0-130.0	0.72	1356.83	0.05	99.09
130.0-135.0	0.91	1357.74	0.07	99.16
135.0-140.0	1.25	1358.99	0.09	99.25
140.0-145.0	1.65	1360.65	0.12	99.37
145.0-150.0	1.89	1362.53	0.14	99.51
150.0-155.0	1.85	1364.39	0.14	99.65
155.0-160.0	1.65	1366.04	0.12	99.77
160.0-165.0	1.37	1367.40	0.10	99.87
165.0-170.0	1.02	1368.42	0.07	99.94
170.0-175.0	0.61	1369.03	0.04	99.99
175.0-180.0	0.20	1369.23	0.01	100.00

Rectangle ISO Lighting Intensity Diagram

Lum. Name:DL51-15-XX-01 4000K RA90 15D 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

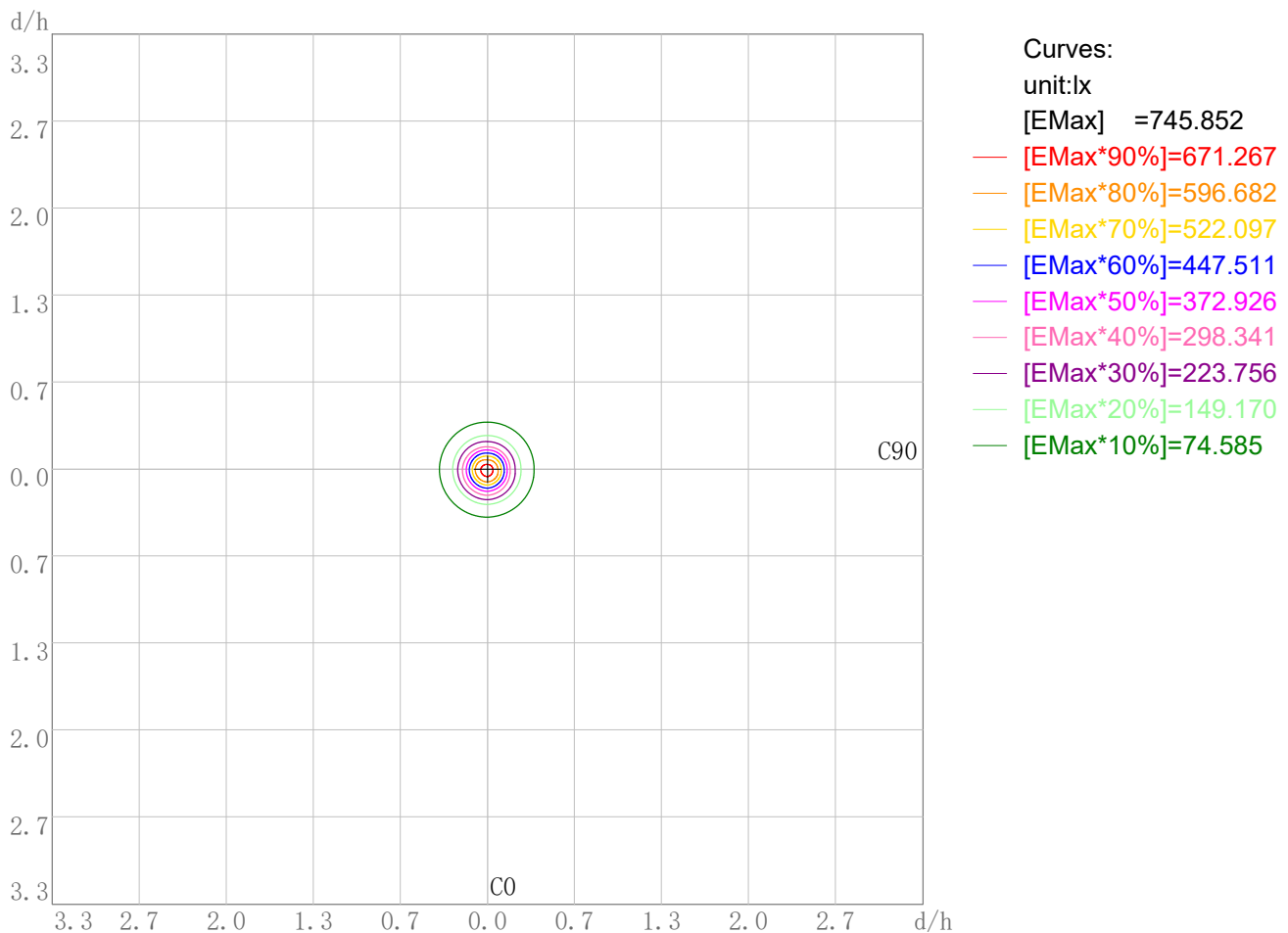


Photometric Filename:DL51-15-XX-01 4000K RA90 15D 白色.IES

Plane ISO-Illuminance Diagram

Lum. Name: DL51-15-XX-01 4000K RA90 15D 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

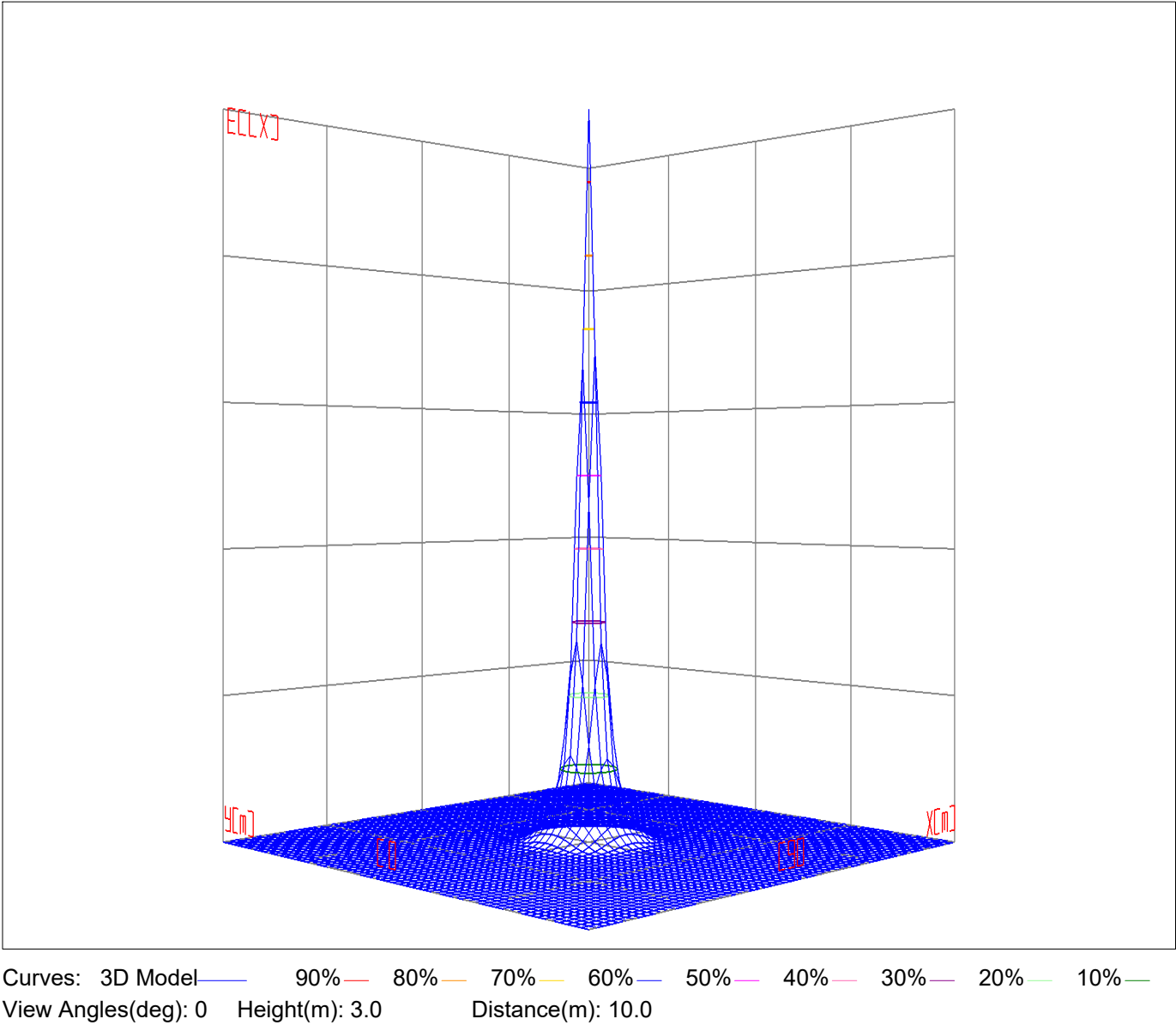


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 745.85
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: DL51-15-XX-01 4000K RA90 15D 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

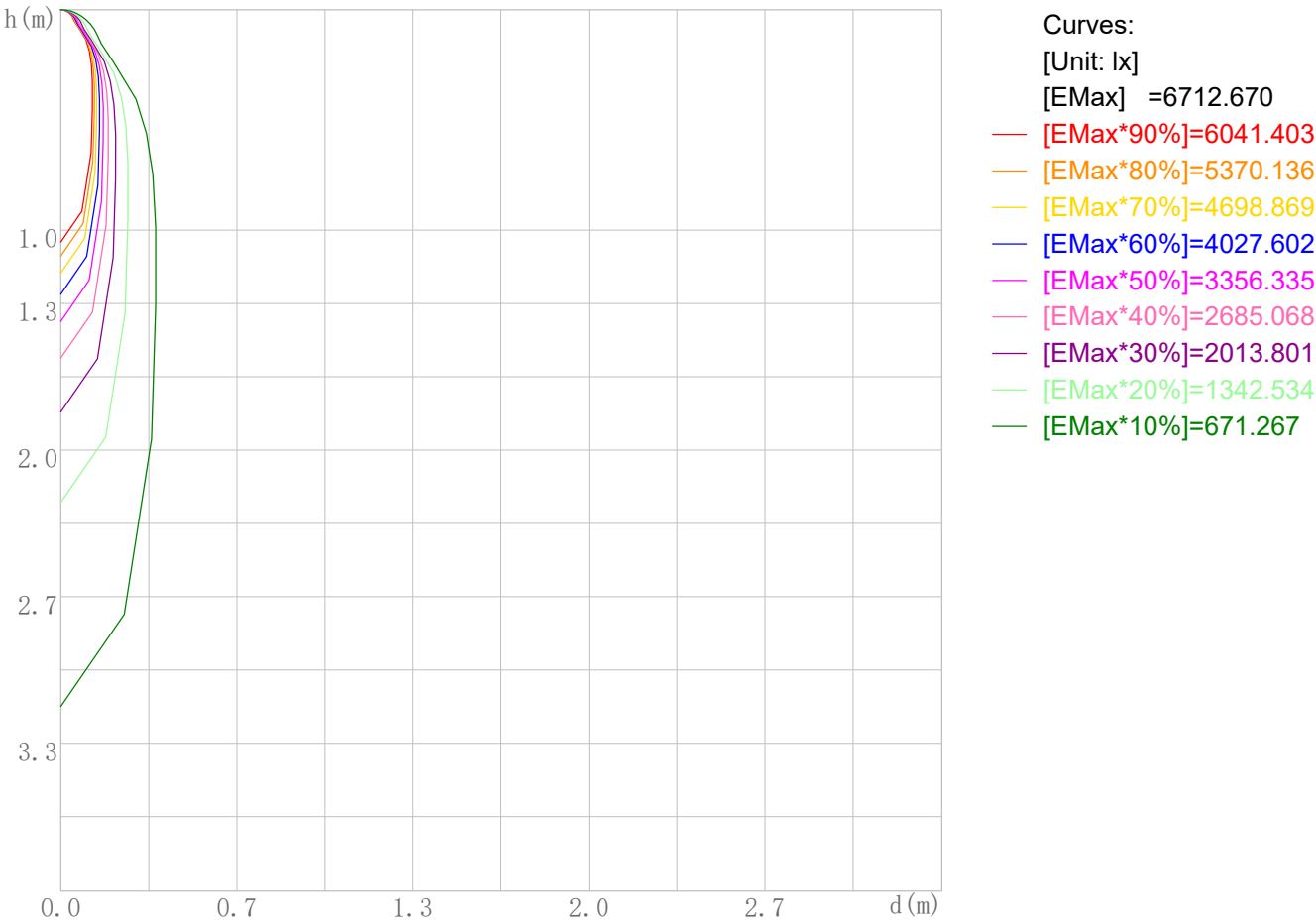
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name:DL51-15-XX-01 4000K RA90 15D 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

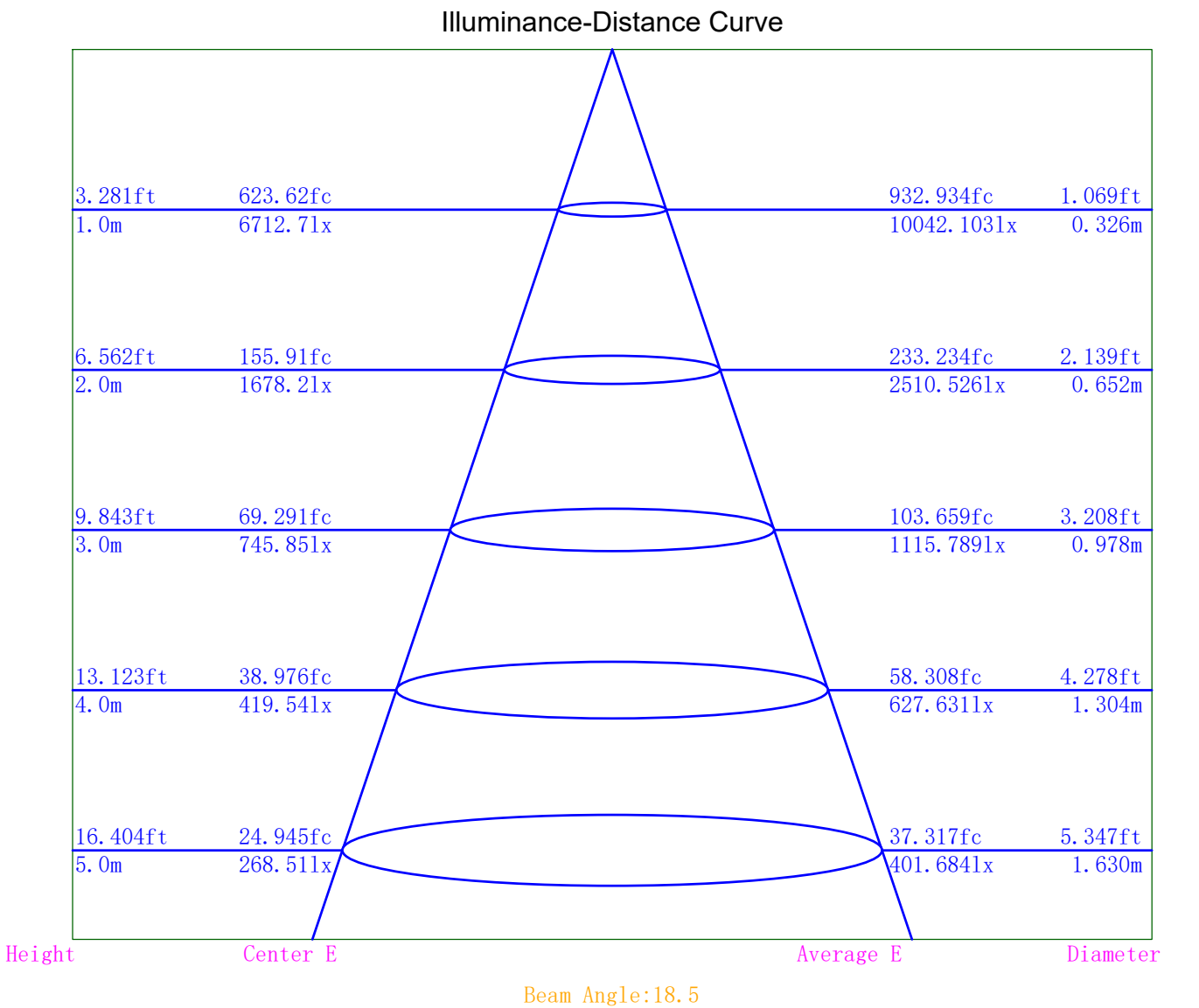
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:6712.67lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:6712.670cd,0deg

Illuminance-Distance Diagram

Lum. Name:DL51-15-XX-01 4000K RA90 15D 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:DL51-15-XX-01 4000K RA90 15D 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

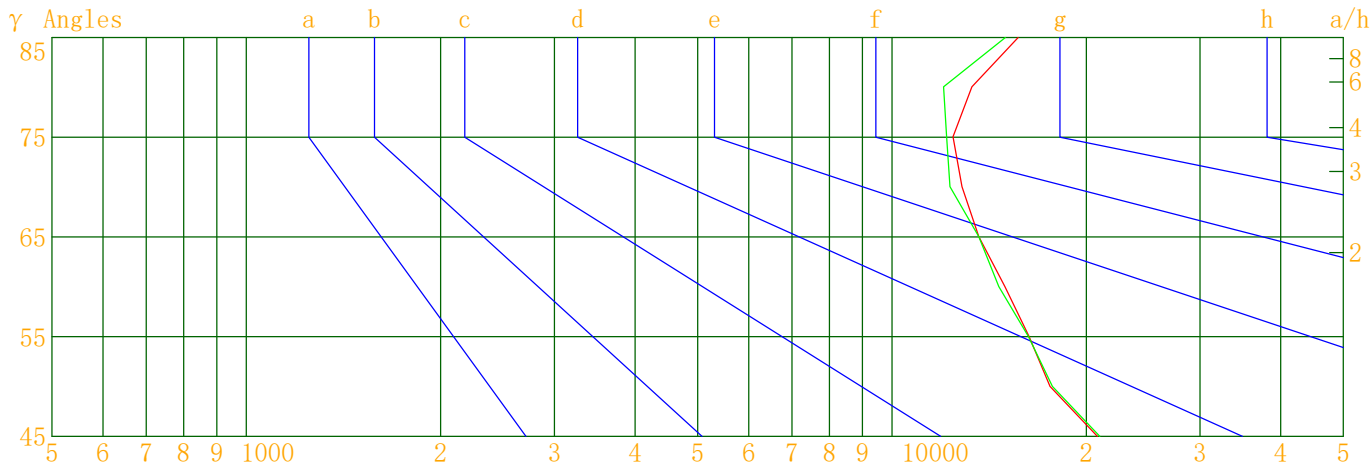
Glare Grade Table

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	20810	17571	16305	14955	13629	12839	12434	13301	15688
C90	20988	17719	16270	14637	13625	12299	12152	12018	14982

Luminance Limiting Curve



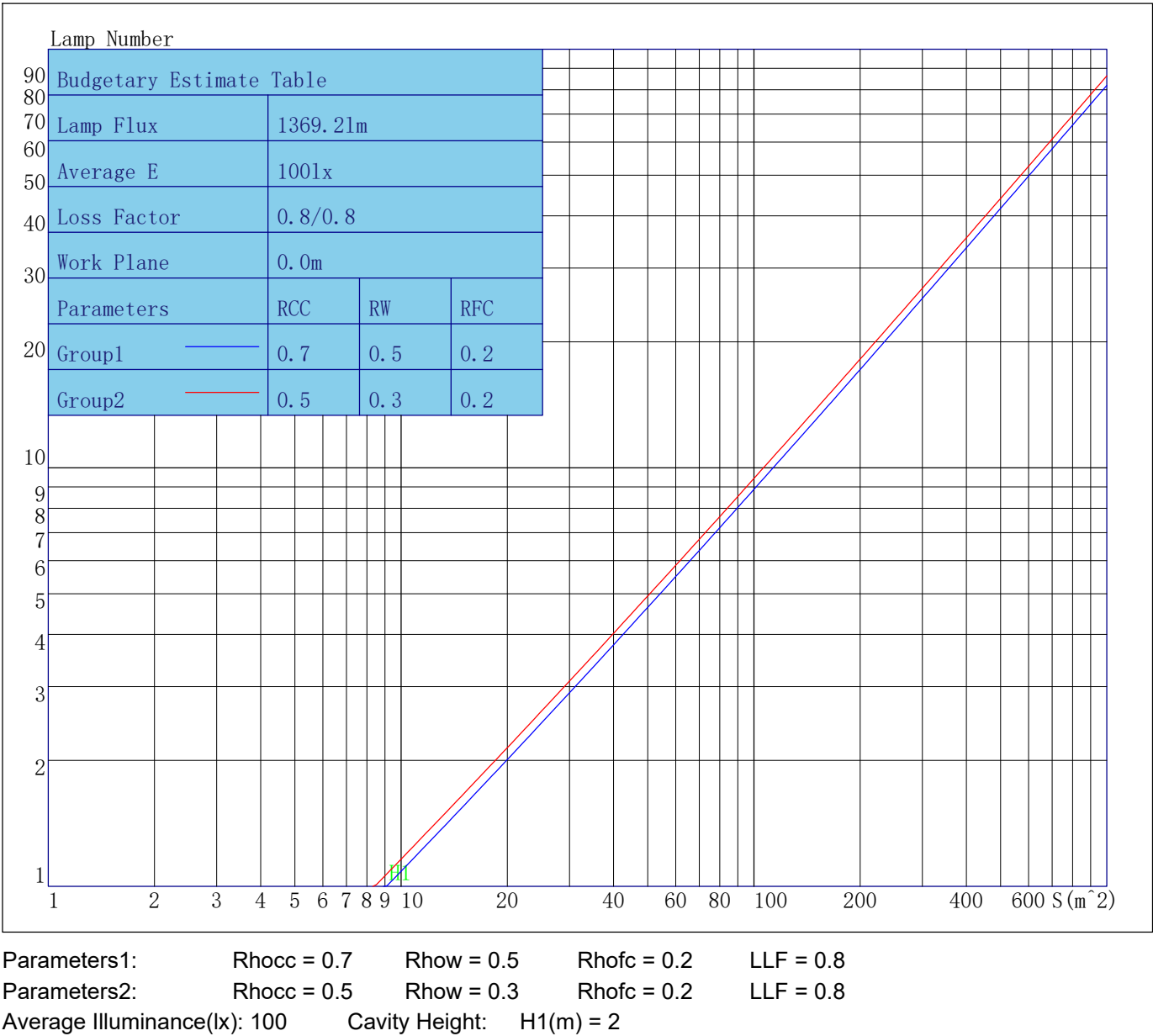
Luminous Size:Length(m)=0.055Width(m)=0.055Height(m)=0.000Area(m^2)=0.003025

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 15D 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 Coefficient of Utilization Table

Lum. Name:DL51-15-XX-01 4000K RA90 15D 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	101	101	101	99
1	114	111	109	107	111	109	107	105	105	103	102	101	100	98	97	96	95	94
2	109	105	101	98	107	103	100	97	100	97	95	97	94	93	94	92	91	89
3	105	99	95	92	103	98	94	91	95	92	89	93	90	88	90	88	86	85
4	101	95	90	86	99	93	89	86	91	87	85	89	86	84	87	85	82	81
5	97	90	85	82	96	89	85	81	87	84	81	86	82	80	84	81	79	78
6	94	86	82	78	92	86	81	78	84	80	77	83	79	77	81	78	76	75
7	91	83	78	75	89	82	78	75	81	77	74	80	76	74	79	76	73	72
8	88	80	75	72	87	79	75	72	78	74	71	77	74	71	76	73	71	70
9	85	77	73	69	84	77	72	69	76	72	69	75	71	69	74	71	68	67
10	82	75	70	67	81	74	70	67	73	69	67	73	69	66	72	69	66	65

Unified Glare Rating Table

Lum. Name: DL51-15-XX-01 4000K RA90 15D 白色	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/11

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	17.9	18.9	18.3	19.2	19.6	17.8	18.8	18.2	19.1	19.5
	Y=3H	18.5	19.3	18.9	19.7	20.1	18.4	19.2	18.8	19.6	20.0
	Y=4H	18.8	19.6	19.2	19.9	20.4	18.7	19.5	19.1	19.9	20.3
	Y=6H	19.1	19.8	19.5	20.2	20.6	18.9	19.7	19.4	20.1	20.5
	Y=8H	19.2	19.9	19.7	20.3	20.8	19.1	19.7	19.5	20.2	20.6
	Y=12H	19.3	20.0	19.8	20.4	20.9	19.2	19.8	19.6	20.2	20.7
X=4H	Y=2H	18.0	18.8	18.4	19.2	19.6	17.9	18.7	18.4	19.1	19.5
	Y=3H	18.8	19.4	19.2	19.9	20.3	18.7	19.4	19.2	19.8	20.2
	Y=4H	19.2	19.8	19.7	20.2	20.7	19.1	19.7	19.6	20.2	20.6
	Y=6H	19.7	20.2	20.2	20.6	21.2	19.5	20.0	20.0	20.5	21.0
	Y=8H	19.9	20.3	20.4	20.8	21.3	19.7	20.2	20.2	20.7	21.2
	Y=12H	20.1	20.5	20.6	21.0	21.5	19.9	20.3	20.4	20.8	21.3
X=8H	Y=4H	19.3	19.8	19.8	20.3	20.8	19.3	19.7	19.8	20.2	20.7
	Y=6H	19.9	20.3	20.5	20.8	21.4	19.8	20.2	20.3	20.7	21.3
	Y=8H	20.3	20.6	20.8	21.1	21.7	20.1	20.4	20.7	21.0	21.5
	Y=12H	20.6	20.9	21.1	21.4	22.0	20.4	20.7	21.0	21.2	21.8
X=12H	Y=4H	19.3	19.7	19.8	20.2	20.7	19.2	19.6	19.8	20.2	20.7
	Y=6H	20.0	20.3	20.5	20.8	21.4	19.9	20.2	20.4	20.7	21.3
	Y=8H	20.4	20.6	20.9	21.2	21.8	20.2	20.5	20.8	21.0	21.6
Variations with the objverver position at spacings											
S=1.0H		0.3/-0.3					0.4/-0.4				
S=1.5H		0.6/-0.6					0.6/-0.6				
S=2.0H		0.7/-0.8					0.8/-0.8				
Reduced UGR Table:											
Nordic Standard Table:		BK0					BK0				
Correction Value		2.0					2.0				

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	6712.67	6712.67	6712.67	6712.67
γ 5.0	5112.06	5279.35	5729.83	5652.91
γ 10.0	2667.62	2678.25	3319.32	3135.64
γ 15.0	1335.95	1285.49	1506.05	1480.36
γ 20.0	787.77	757.37	822.07	829.43
γ 25.0	502.67	488.45	511.86	511.48
γ 30.0	326.16	320.64	328.93	325.71
γ 35.0	201.38	196.89	205.95	206.04
γ 40.0	84.10	81.15	90.33	91.82
γ 45.0	44.51	44.89	43.72	43.39
γ 50.0	34.17	34.45	31.80	31.83
γ 55.0	28.29	28.23	27.36	27.62
γ 60.0	22.62	22.14	22.62	23.03
γ 65.0	17.42	17.42	18.10	18.27
γ 70.0	13.28	12.73	14.20	14.10
γ 75.0	9.73	9.51	10.72	10.34
γ 80.0	6.99	6.31	7.59	6.99
γ 85.0	4.14	3.95	4.74	4.22
γ 90.0	2.37	2.36	2.51	2.58
γ 95.0	2.15	2.22	1.82	1.57
γ 100.0	1.50	1.63	1.32	1.18
γ 105.0	1.63	1.44	0.91	1.21
γ 110.0	1.26	1.26	1.09	0.78
γ 115.0	1.18	0.95	1.25	1.34
γ 120.0	1.26	1.09	1.37	1.00
γ 125.0	1.46	1.25	1.61	1.21
γ 130.0	1.98	1.62	2.02	2.02
γ 135.0	2.65	2.46	2.69	2.67
γ 140.0	4.04	3.99	4.23	4.28
γ 145.0	5.72	5.65	5.81	5.91
γ 150.0	6.97	6.79	7.22	7.14
γ 155.0	7.67	7.53	7.75	7.53
γ 160.0	8.16	7.66	8.25	8.27
γ 165.0	8.49	8.32	8.76	8.41
γ 170.0	8.68	8.71	8.54	8.53
γ 175.0	8.58	8.26	8.53	8.35
γ 180.0	8.26	8.26	8.26	8.26