

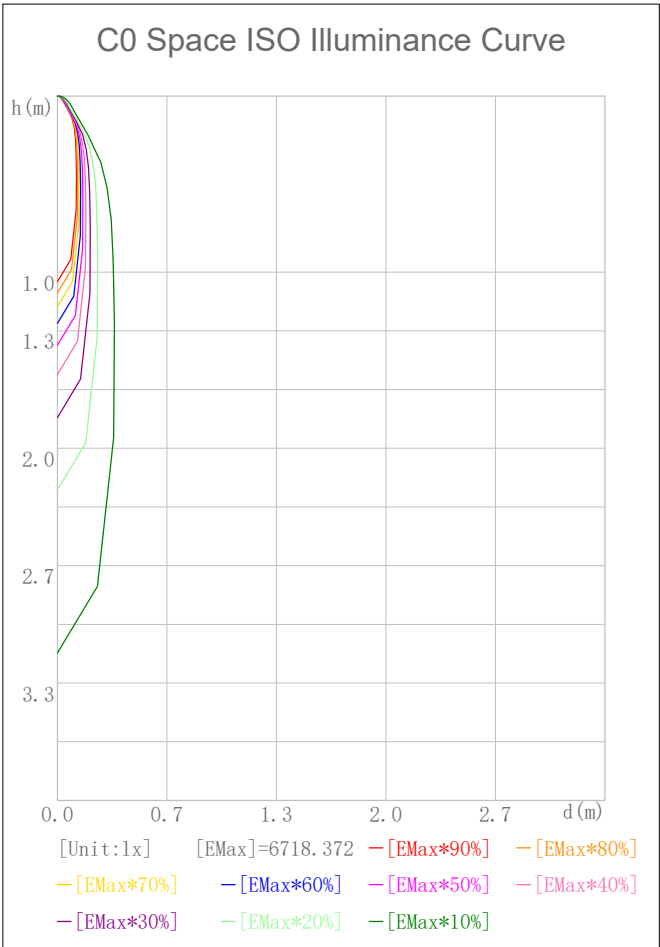
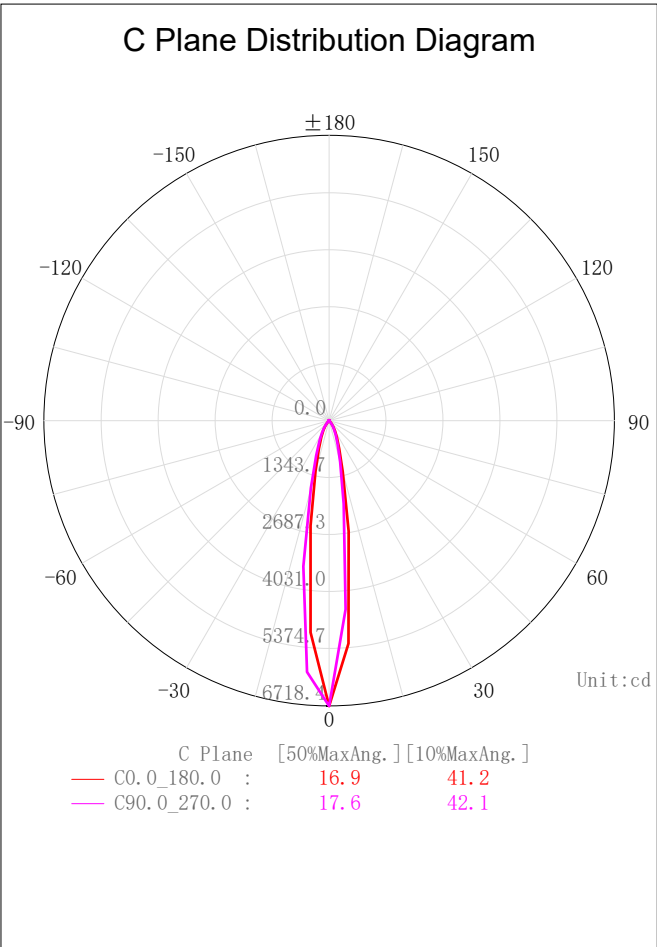
Indoor Luminaire Photometric Data

Description Information

Luminary Name: PD08-15-XX-01 3000K RA90 15D		Lum. Catalog:	Test ID: 01
Lamp Name:		Lamp Catalog: LED	Test Date: 2022/09/12
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

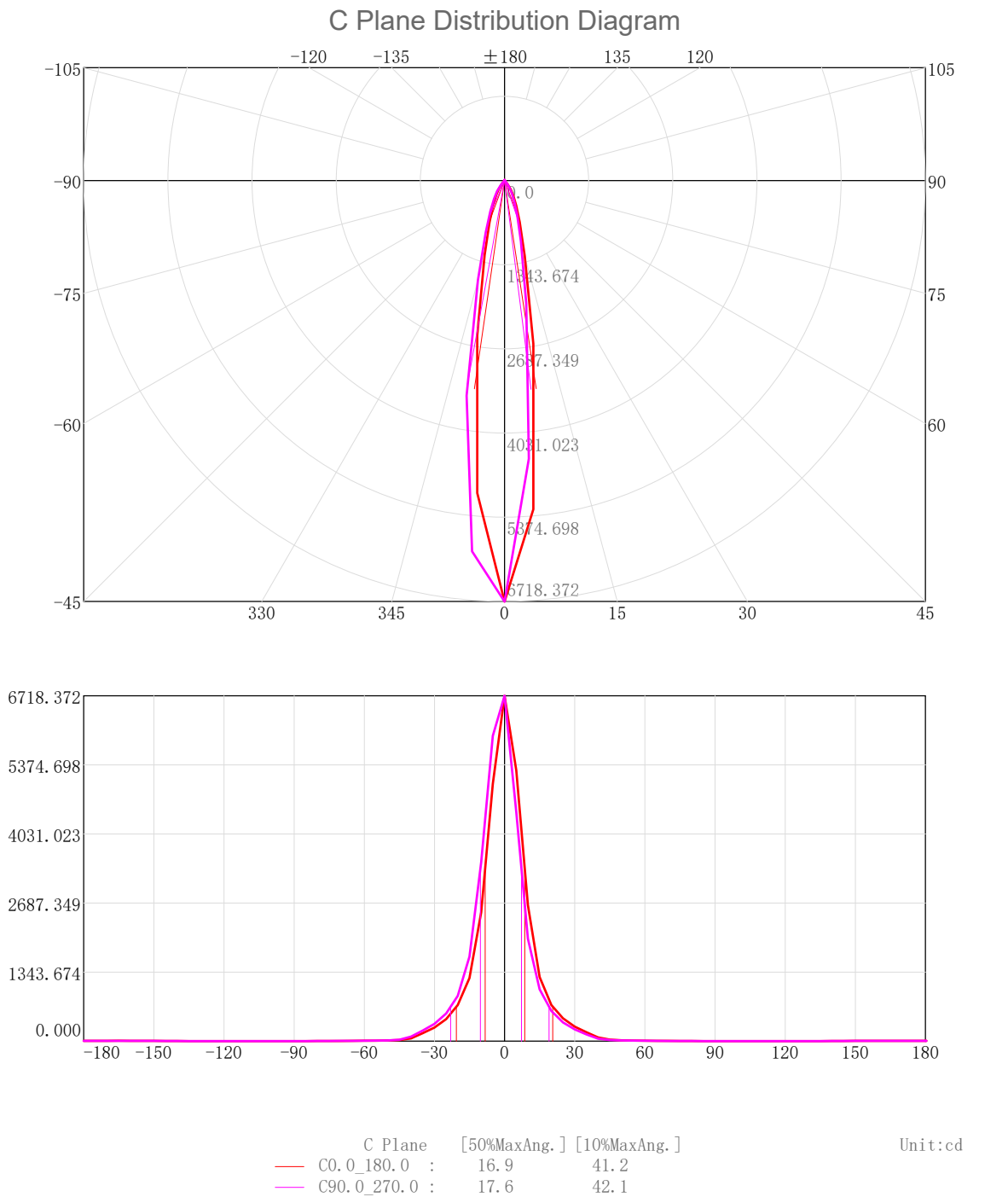
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 1218.430	Luminary Flux(lm): 1218.433	Field Angle(10%Imax): 41.2(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1195.460lm 98.11%	
Rated Voltage(V):	Luminary EER(lm/W): 91.680	Up Lumens&Percent: 22.973lm 1.89%	
Tested Power(W): 13.290	Max. Candela(cd): 6718.372	S/MH: C0_a180=0.291 C90_270=0.300	
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, 0.920	Beam Angle(50%Imax): 16.9(°)	ErP Φ use(90°): 1114.174lm	
Lamp Size (W*L*H):0.055m*0.055m*0.000m	Left=-8.3°, Right=8.6°	IRF(%): 1159.185	



2D Plane Light Intensity Distribution Curve

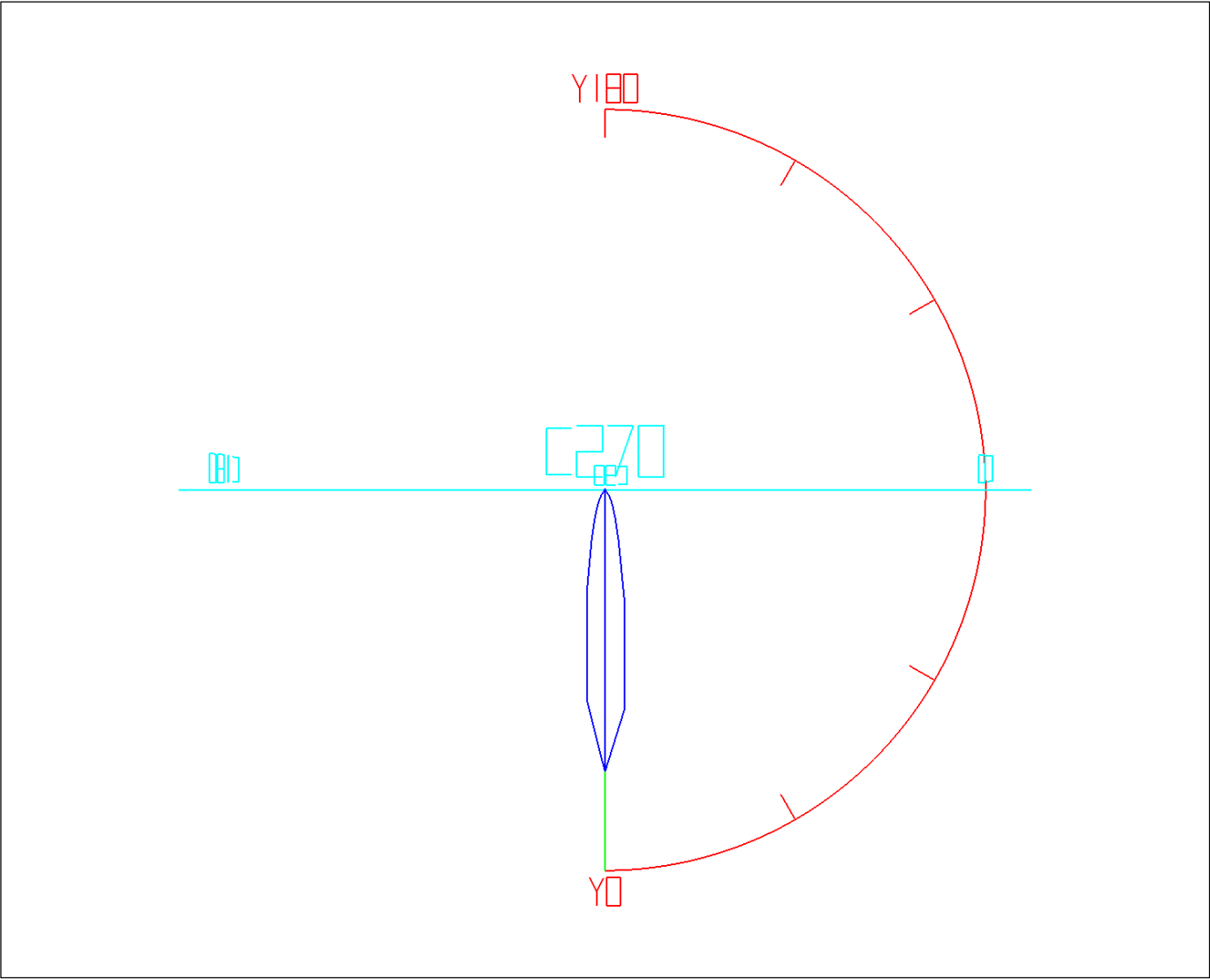
Lum. Name: PD08-15-XX-01 3000K RA90 15D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/12



3D Light Intensity Distribution Modal

Lum. Name: PD08-15-XX-01 3000K RA90 15D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/12

3D Light Intensity Distribution Modal



Curves: 3D Model — Fixture — Vert. HUD — Hori. HUD —

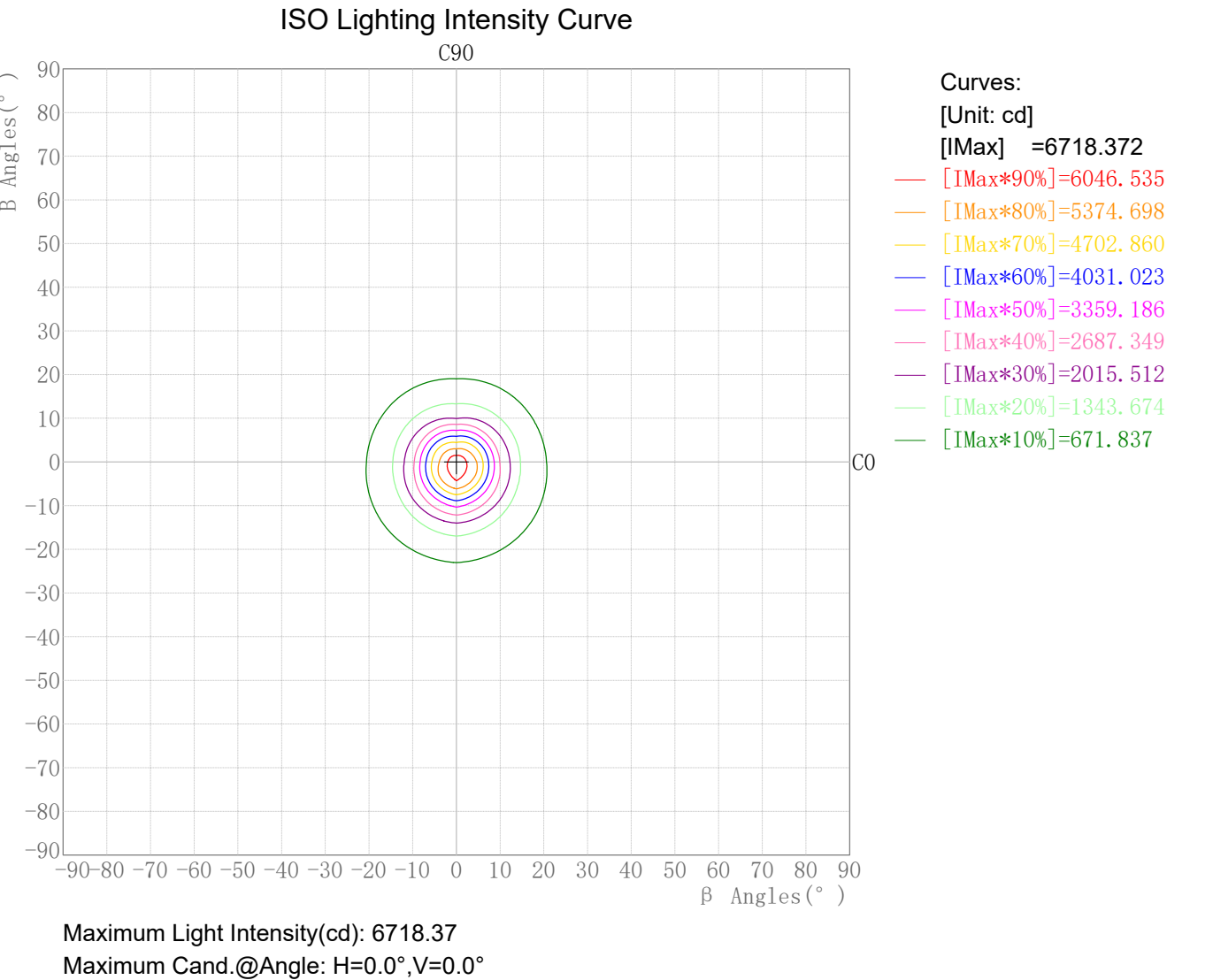
View Angles: Orient:0 Tilt:0 Roll:0 Spin:0

Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	142.08	142.08	11.66	11.66
5.0-10.0	279.94	422.02	22.98	34.64
10.0-15.0	233.82	655.85	19.19	53.83
15.0-20.0	165.08	820.92	13.55	67.38
20.0-25.0	122.13	943.05	10.02	77.40
25.0-30.0	91.62	1034.66	7.52	84.92
30.0-35.0	65.86	1100.52	5.41	90.32
35.0-40.0	39.23	1139.76	3.22	93.54
40.0-45.0	17.41	1157.17	1.43	94.97
45.0-50.0	8.75	1165.92	0.72	95.69
50.0-55.0	6.33	1172.25	0.52	96.21
55.0-60.0	5.20	1177.45	0.43	96.64
60.0-65.0	4.41	1181.87	0.36	97.00
65.0-70.0	3.78	1185.65	0.31	97.31
70.0-75.0	3.19	1188.84	0.26	97.57
75.0-80.0	2.65	1191.49	0.22	97.79
80.0-85.0	2.15	1193.64	0.18	97.97
85.0-90.0	1.82	1195.46	0.15	98.11
90.0-95.0	1.54	1197.00	0.13	98.24
95.0-100.0	1.28	1198.28	0.10	98.35
100.0-105.0	1.11	1199.39	0.09	98.44
105.0-110.0	1.01	1200.40	0.08	98.52
110.0-115.0	1.02	1201.42	0.08	98.60
115.0-120.0	0.97	1202.39	0.08	98.68
120.0-125.0	0.99	1203.38	0.08	98.76
125.0-130.0	1.11	1204.49	0.09	98.86
130.0-135.0	1.26	1205.75	0.10	98.96
135.0-140.0	1.56	1207.31	0.13	99.09
140.0-145.0	1.88	1209.19	0.15	99.24
145.0-150.0	2.06	1211.25	0.17	99.41
150.0-155.0	2.00	1213.25	0.16	99.57
155.0-160.0	1.79	1215.04	0.15	99.72
160.0-165.0	1.47	1216.50	0.12	99.84
165.0-170.0	1.07	1217.58	0.09	99.93
170.0-175.0	0.64	1218.22	0.05	99.98
175.0-180.0	0.21	1218.43	0.02	100.00

Rectangle ISO Lighting Intensity Diagram

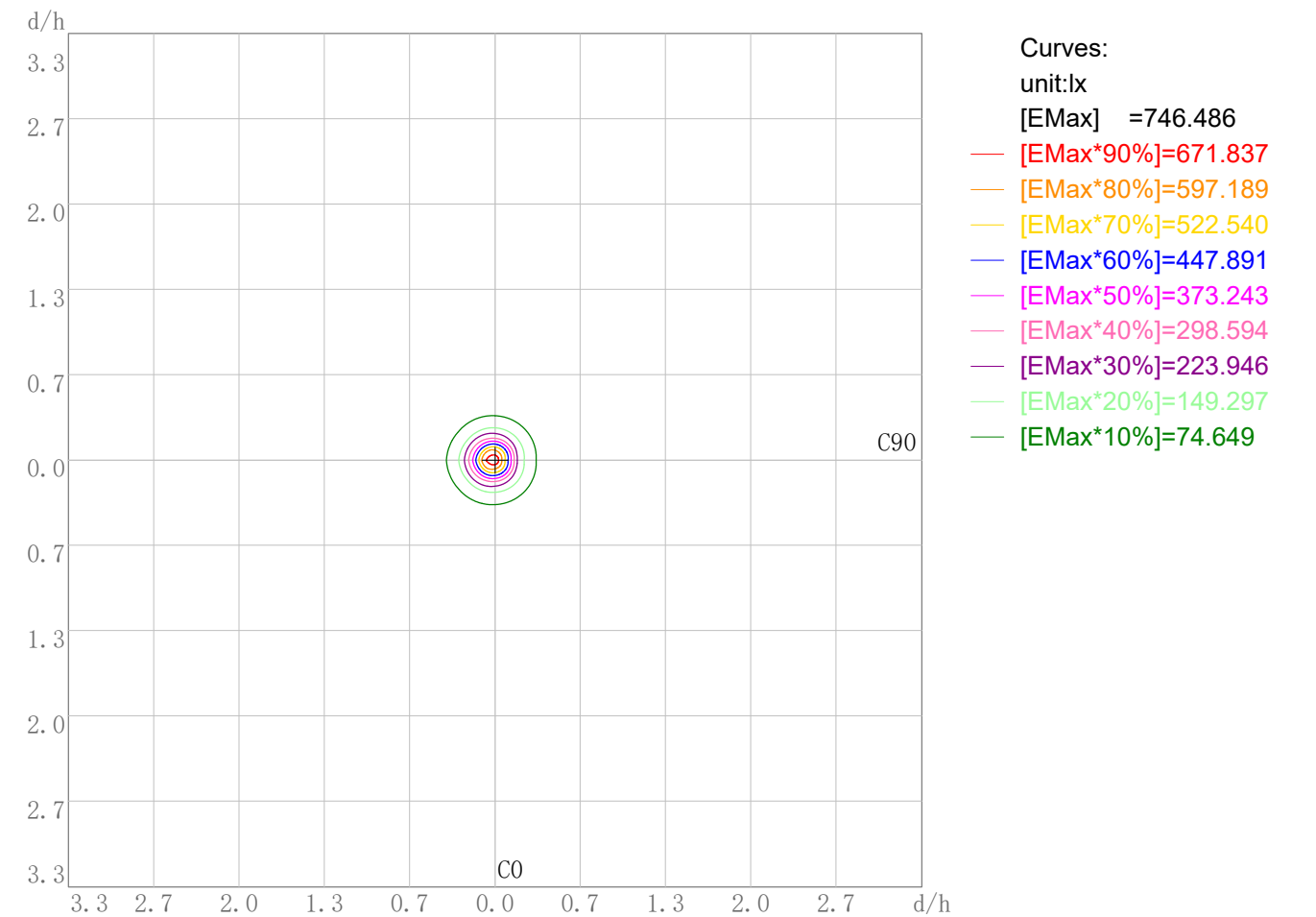
Lum. Name: PD08-15-XX-01 3000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/12



Plane ISO-Illuminance Diagram

Lum. Name: PD08-15-XX-01 3000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/12

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 746.49
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

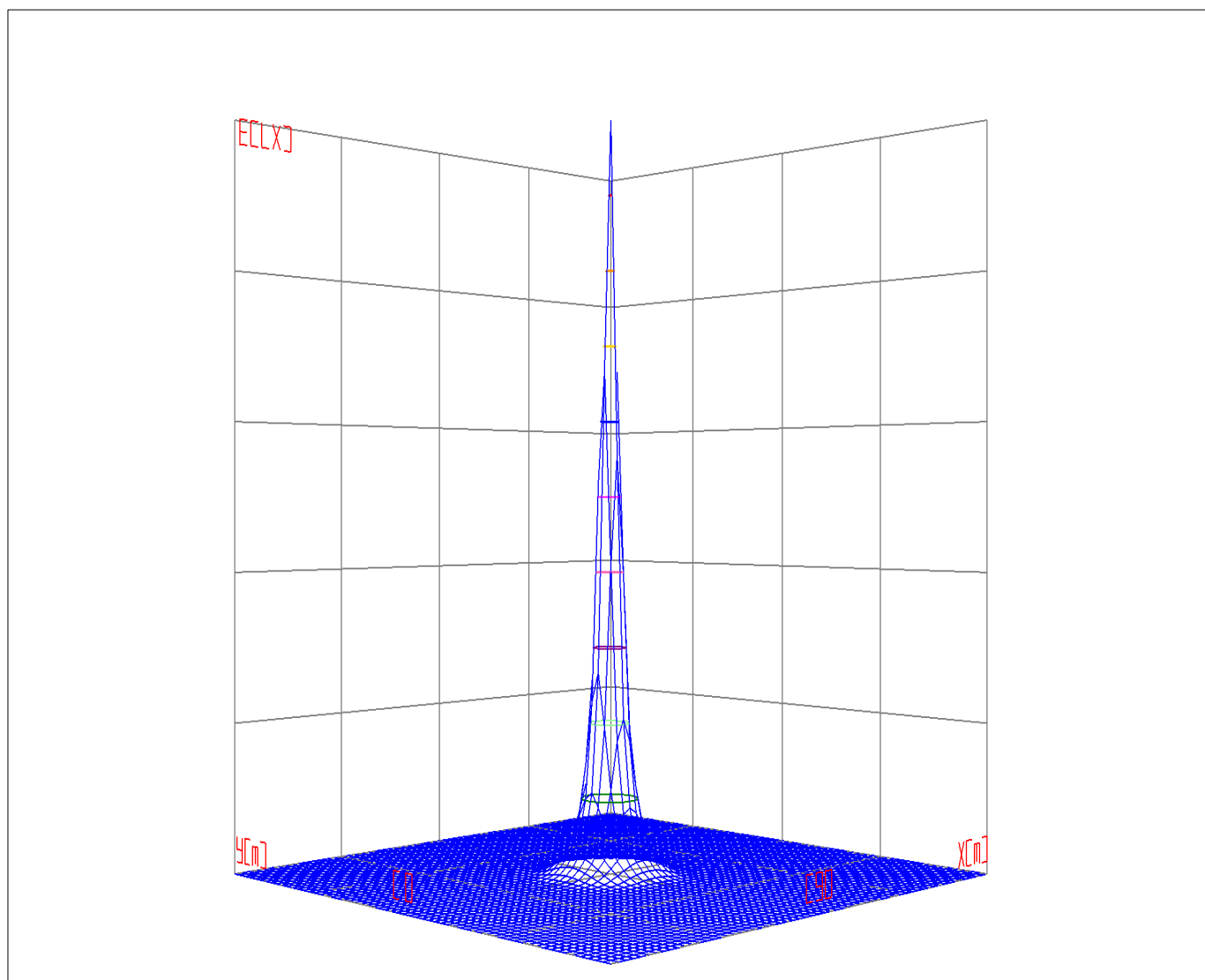
Photometric Filename:PD08-15-XX-01 3000K RA90 15D.IE

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3D Plane ISO Illuminance Diagram

Lum. Name: PD08-15-XX-01 3000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/12

3D Plane Illuminance Modal

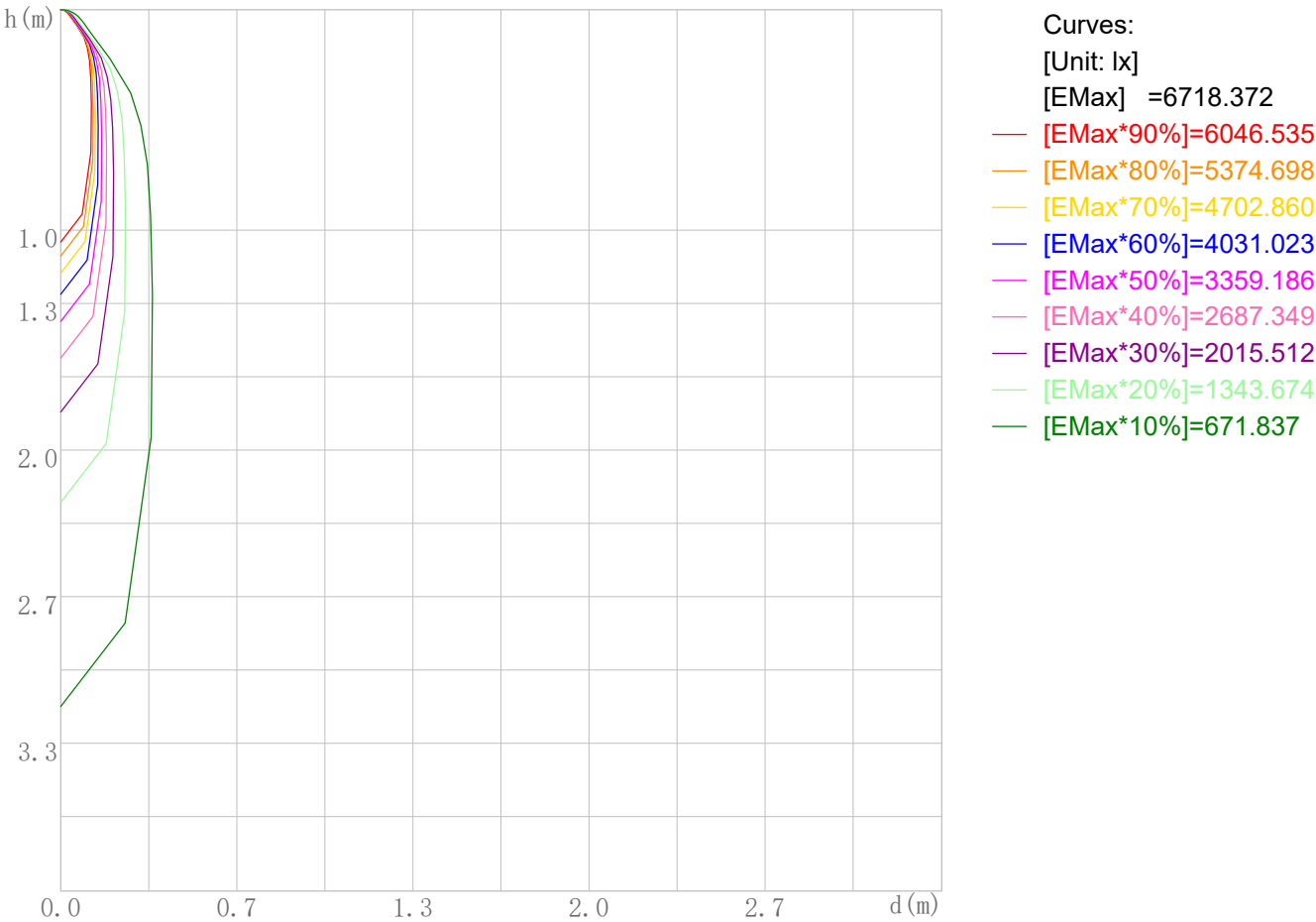


Curves: 3D Model 90% 80% 70% 60% 50% 40% 30% 20% 10%
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

Lum. Name: PD08-15-XX-01 3000K RA90 15D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/12

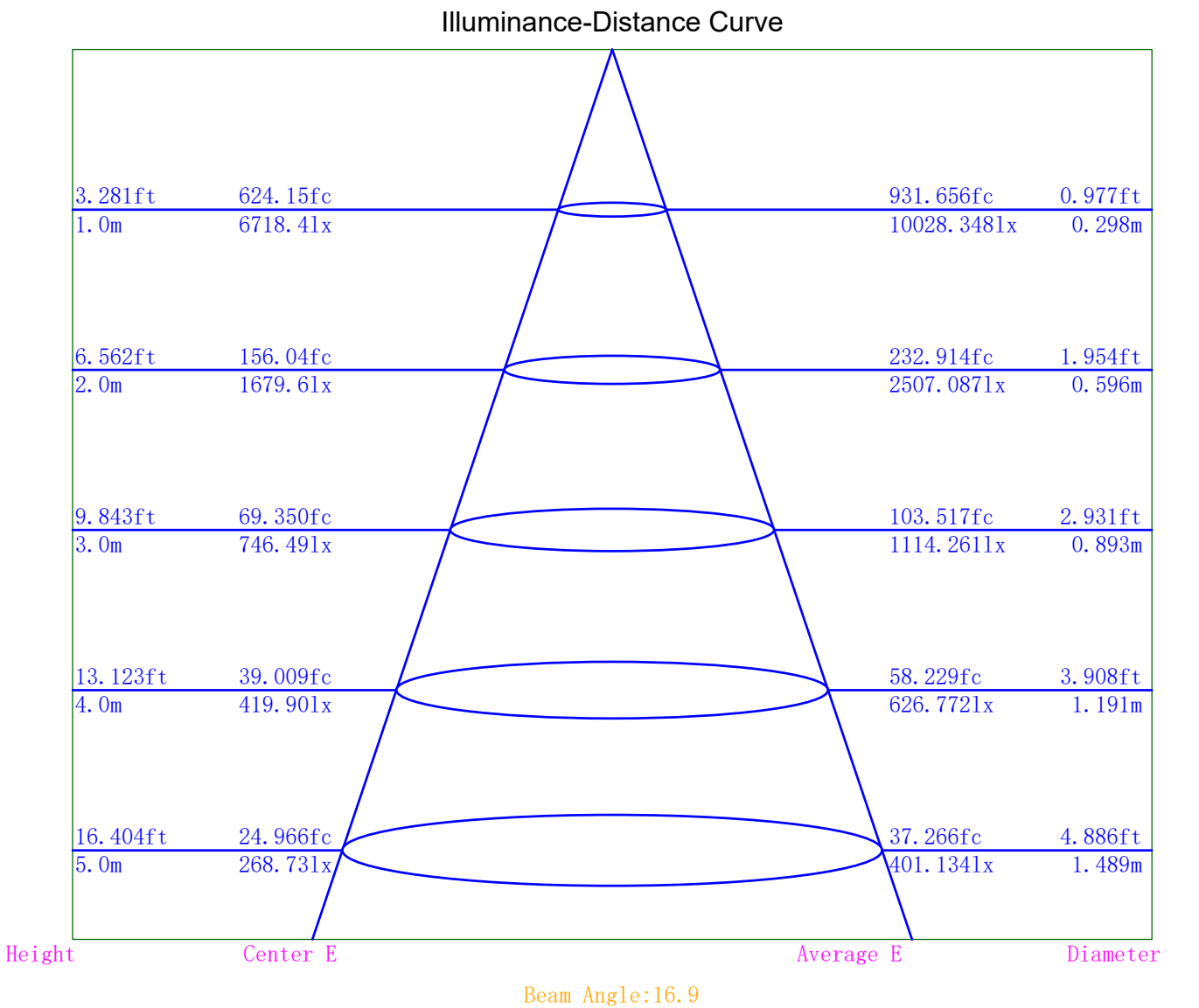
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:6718.37lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:6718.372cd,0deg

Illuminance-Distance Diagram

Lum. Name: PD08-15-XX-01 3000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/12



Indoor Luminance Limiting Curves

Lum. Name: PD08-15-XX-01 3000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/12

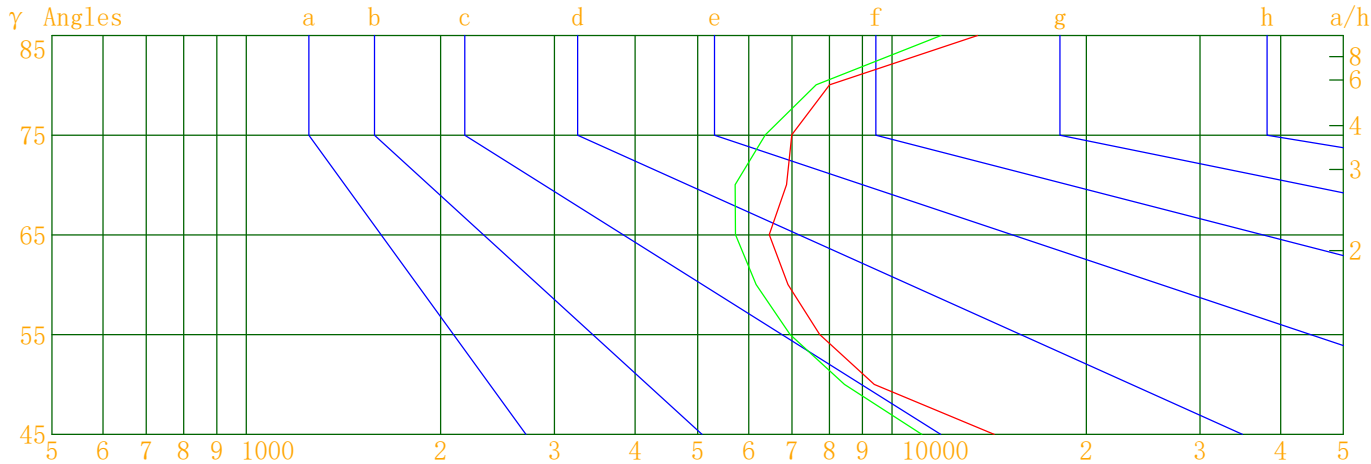
Glare Grade Table

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	14400	9387	7725	6900	6455	6866	6998	8005	13567
C90	11120	8443	6953	6159	5722	5716	6366	7632	11910

Luminance Limiting Curve



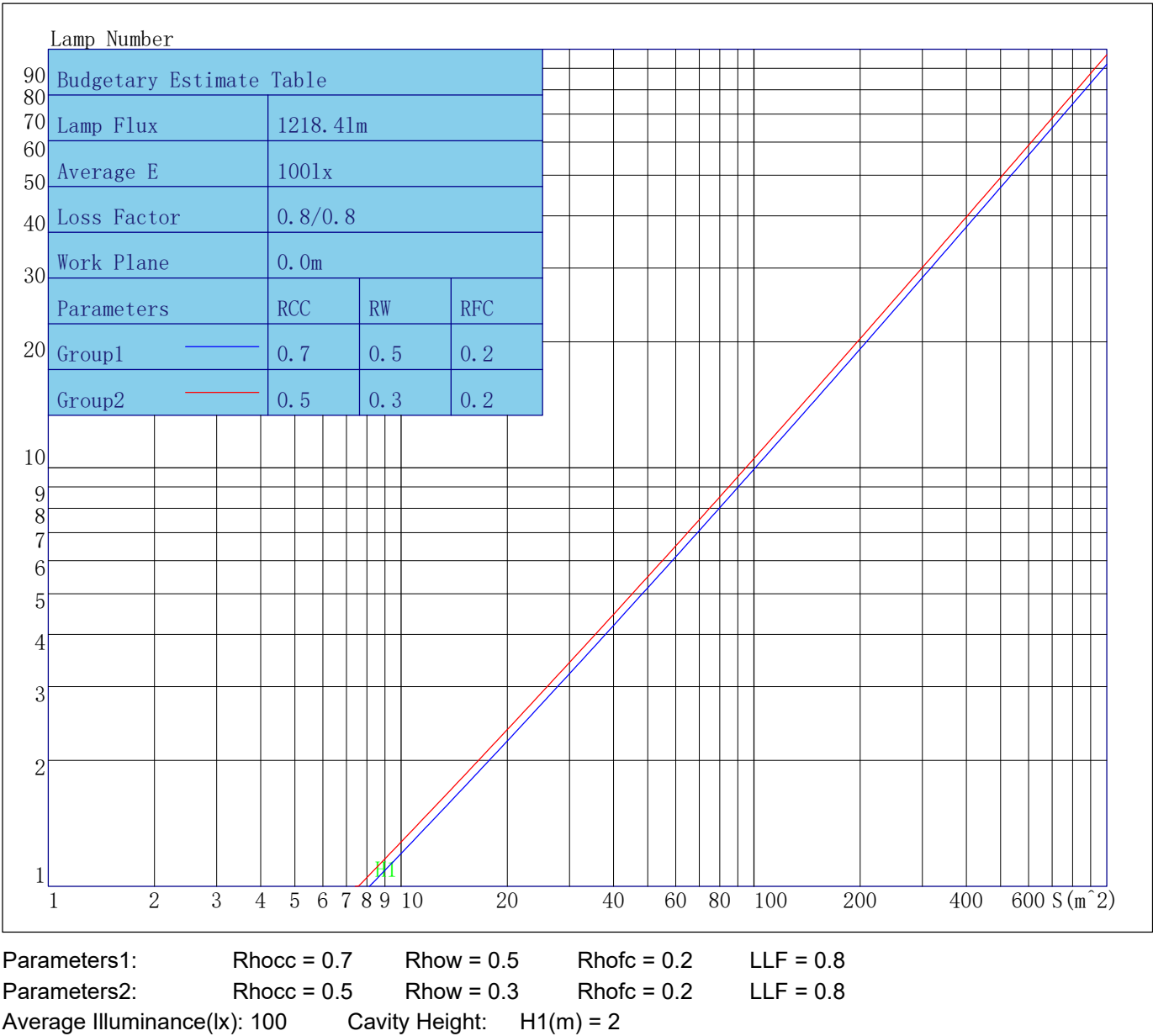
Luminous Size: Length(m)=0.055 Width(m)=0.055 Height(m)=0.000 Area(m^2)=0.003025

Luminous Type: Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name: PD08-15-XX-01 3000K RA90 15D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/12



Indoor Coefficient of Utilization Table

Lum. Name: PD08-15-XX-01 3000K RA90 15D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/12

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	114	112	109	107	111	109	107	106	105	103	102	101	100	99	97	96	96	94
2	110	106	102	99	107	104	101	98	100	98	96	97	95	93	94	93	91	90
3	106	100	96	93	104	99	95	92	96	93	90	93	91	89	91	89	87	86
4	102	96	91	88	100	95	90	87	92	89	86	90	87	85	88	86	84	82
5	98	92	87	84	97	91	86	83	89	85	82	87	84	81	85	83	81	79
6	95	88	83	80	94	87	83	80	86	82	79	84	81	78	83	80	78	77
7	92	85	80	77	91	84	80	77	83	79	76	82	78	76	80	77	75	74
8	89	82	77	74	88	81	77	74	80	76	73	79	76	73	78	75	73	72
9	86	79	75	72	85	79	74	71	78	74	71	77	73	71	76	73	70	69
10	84	77	72	69	83	76	72	69	75	72	69	75	71	69	74	71	68	67

Unified Glare Rating Table

Lum. Name: PD08-15-XX-01 3000K RA90 15D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/12

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	16.0	17.0	16.5	17.4	17.8	14.7	15.7	15.1	16.1	16.4
	16.2	17.1	16.7	17.5	17.9	14.9	15.8	15.4	16.2	16.6
	16.4	17.2	16.8	17.6	18.0	15.1	16.0	15.6	16.4	16.8
	16.6	17.4	17.0	17.8	18.2	15.4	16.2	15.9	16.6	17.0
	16.7	17.5	17.2	17.9	18.3	15.6	16.3	16.1	16.8	17.2
	16.9	17.6	17.4	18.1	18.5	15.8	16.5	16.3	16.9	17.4
X=4H Y=2H	15.9	16.7	16.4	17.1	17.6	14.6	15.4	15.1	15.8	16.3
	16.2	16.9	16.7	17.4	17.8	15.0	15.7	15.5	16.2	16.6
	16.5	17.1	17.0	17.6	18.1	15.4	16.0	15.8	16.4	16.9
	16.9	17.4	17.4	17.9	18.4	15.8	16.4	16.3	16.9	17.4
	17.1	17.6	17.6	18.1	18.6	16.1	16.6	16.6	17.1	17.6
	17.5	17.9	18.0	18.4	19.0	16.5	16.9	17.0	17.5	18.0
X=8H Y=4H	16.6	17.1	17.1	17.6	18.1	15.5	16.0	16.0	16.5	17.0
	17.1	17.5	17.6	18.1	18.6	16.1	16.5	16.7	17.1	17.7
	17.5	17.9	18.0	18.4	18.9	16.6	16.9	17.1	17.5	18.0
	18.0	18.4	18.6	18.9	19.5	17.1	17.5	17.7	18.0	18.6
X=12H Y=4H	16.6	17.0	17.1	17.5	18.1	15.5	15.9	16.0	16.4	17.0
	17.1	17.5	17.7	18.0	18.6	16.2	16.6	16.8	17.1	17.7
	17.6	17.9	18.2	18.5	19.1	16.7	17.1	17.3	17.6	18.2
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	0.3/-0.4					0.3/-0.3				
Reduced UGR Table:										
Nordic Standard Table:	BKO					BKO				
Correction Value	1.7					1.9				

o the CIE Pub.117,data has been corrected,refers to the lamp’s lumens 8.2flm.

IES Indoor Report

Photometric Filename:PD08-15-XX-01 3000K RA90 15D.IE

S

Candela Tabulation

V/H	C0.0	C90.0	C180.0	C270.0
γ 0.0	6718.37	6718.37	6718.37	6718.37
γ 5.0	5266.09	4456.31	5005.47	5939.32
γ 10.0	2647.35	1993.02	2510.15	3484.10
γ 15.0	1247.65	1009.45	1229.67	1645.66
γ 20.0	704.32	589.67	703.92	881.69
γ 25.0	444.97	366.16	428.90	538.00
γ 30.0	285.03	231.06	264.86	336.80
γ 35.0	174.84	133.01	156.00	207.37
γ 40.0	73.47	49.23	56.06	90.63
γ 45.0	30.80	23.79	22.90	29.34
γ 50.0	18.25	16.42	14.99	16.68
γ 55.0	13.40	12.06	11.68	13.03
γ 60.0	10.44	9.31	9.64	10.44
γ 65.0	8.25	7.32	8.06	9.14
γ 70.0	7.10	5.91	6.58	7.31
γ 75.0	5.48	4.98	5.34	6.14
γ 80.0	4.20	4.01	4.30	5.16
γ 85.0	3.58	3.14	3.33	3.98
γ 90.0	2.87	3.00	3.26	3.42
γ 95.0	2.43	2.46	2.42	2.67
γ 100.0	2.59	2.09	1.97	2.19
γ 105.0	2.00	2.20	1.63	1.92
γ 110.0	2.03	1.97	1.91	1.77
γ 115.0	2.29	1.76	2.13	2.21
γ 120.0	2.02	1.67	2.12	1.78
γ 125.0	2.26	2.44	2.20	2.59
γ 130.0	2.53	3.02	2.69	2.71
γ 135.0	3.59	3.63	3.51	3.37
γ 140.0	4.74	5.13	4.88	4.78
γ 145.0	6.28	6.45	6.47	6.30
γ 150.0	7.56	7.61	7.50	7.79
γ 155.0	8.30	8.14	8.31	8.02
γ 160.0	9.07	8.54	9.17	8.60
γ 165.0	9.11	8.71	9.33	8.74
γ 170.0	9.27	9.16	9.16	9.01
γ 175.0	8.67	8.91	8.80	9.04
γ 180.0	8.70	8.70	8.70	8.70