

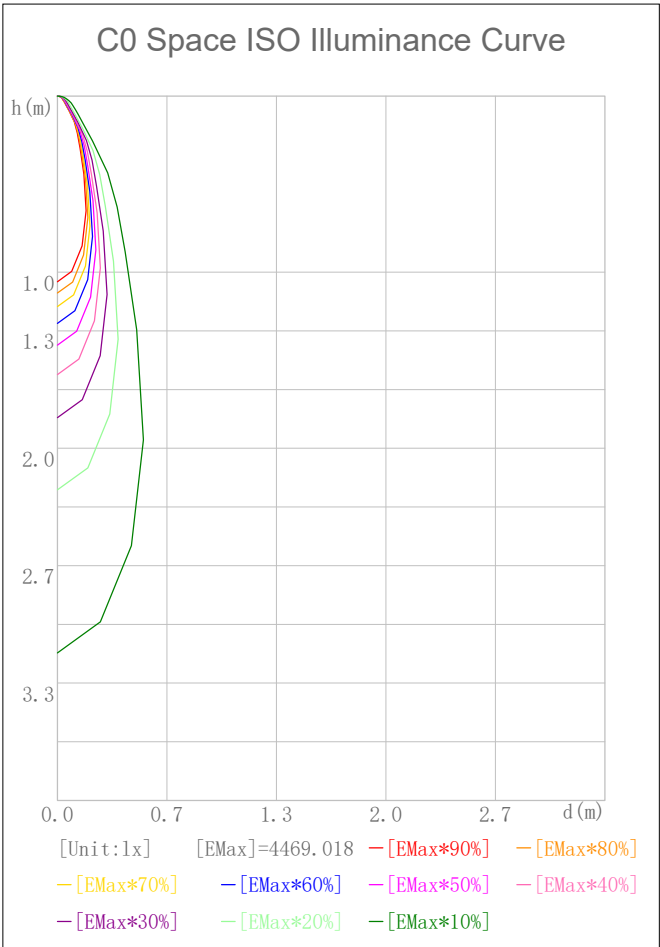
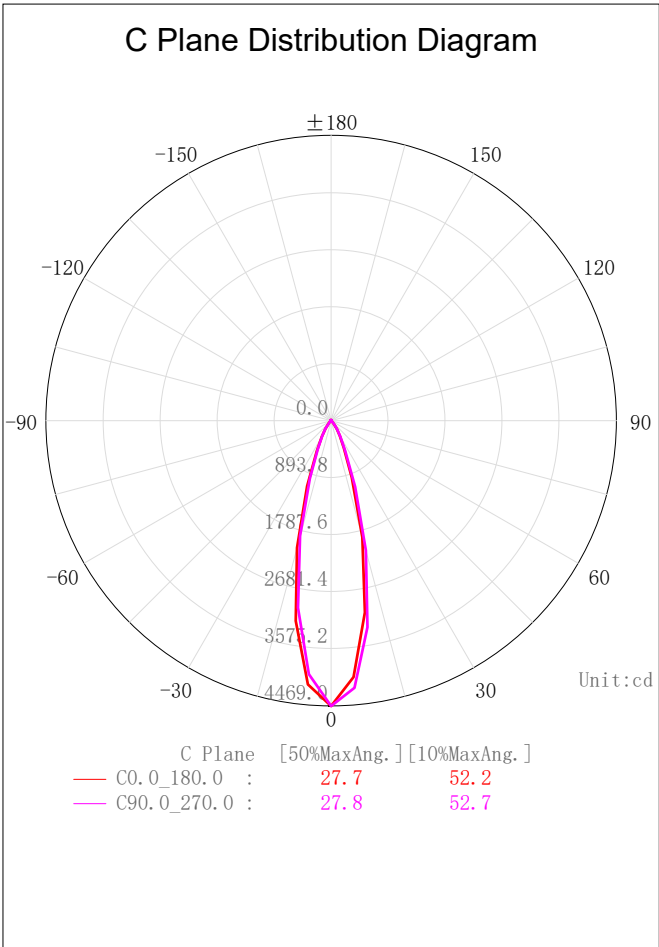
Indoor Luminaire Photometric Data

Description Information

Luminary Name: PD08-15-XX-01 4000K RA90 24D		Lum. Catalog:	Test ID: 01
Lamp Name:		Lamp Catalog: LED	Test Date: 2022/09/13
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

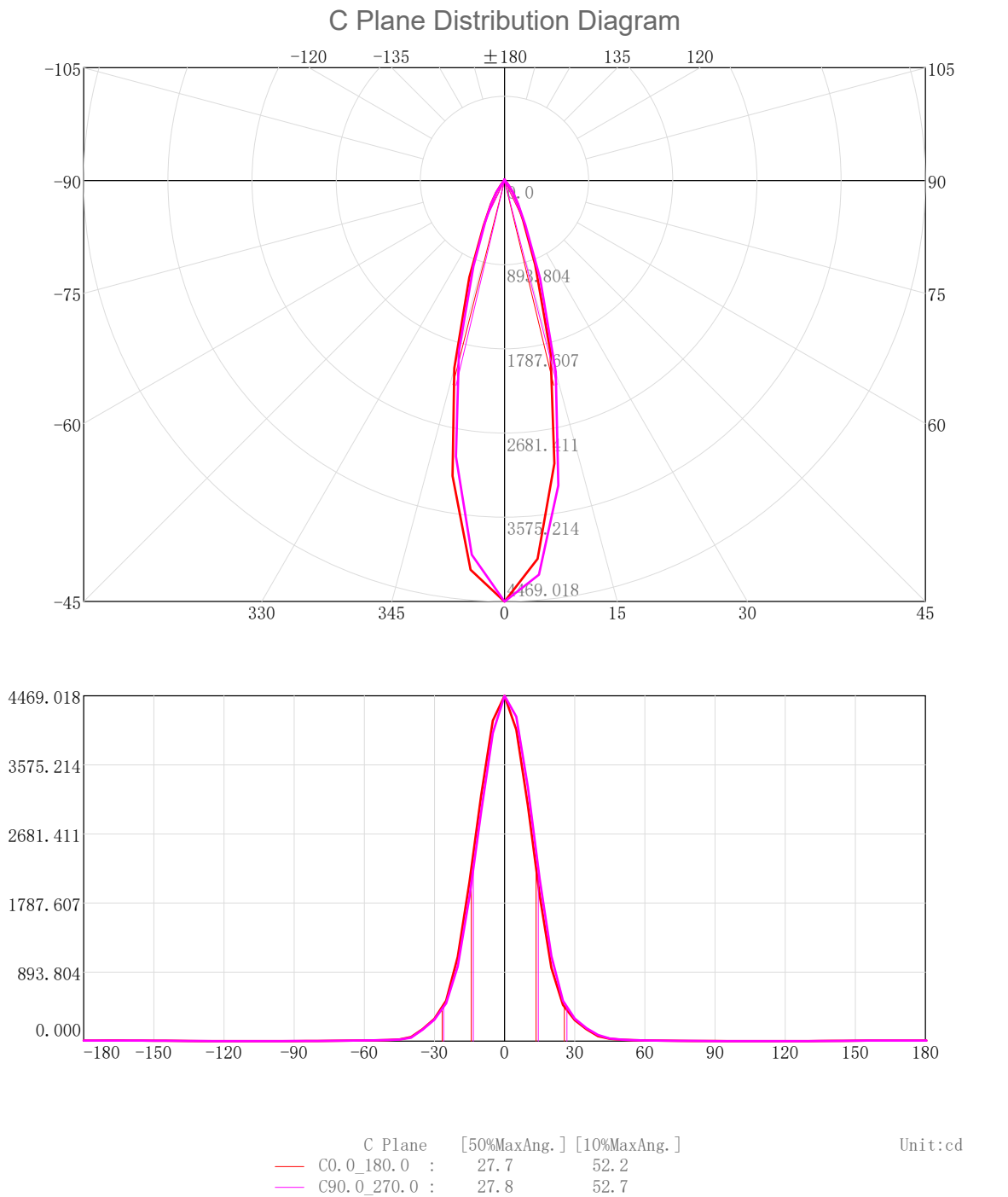
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 1351.000	Luminary Flux(lm): 1351.000	Field Angle(10%Imax): 52.2(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1329.465lm 98.41%	
Rated Voltage(V):	Luminary EER(lm/W): 103.209	Up Lumens&Percent: 21.536lm 1.59%	
Tested Power(W): 13.090	Max. Candela(cd): 4469.018	S/MH: C0_a180=0.466 C90_270=0.467	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf):240.1, 0.059, 0.918	Beam Angle(50%Imax): 27.7(°)	ErP Φ use(90°): 1307.167lm	
Lamp Size (W*L*H):0.055m*0.055m*0.000m	Left=-14.2°, Right=13.5°	IRF(%): 718.364	



2D Plane Light Intensity Distribution Curve

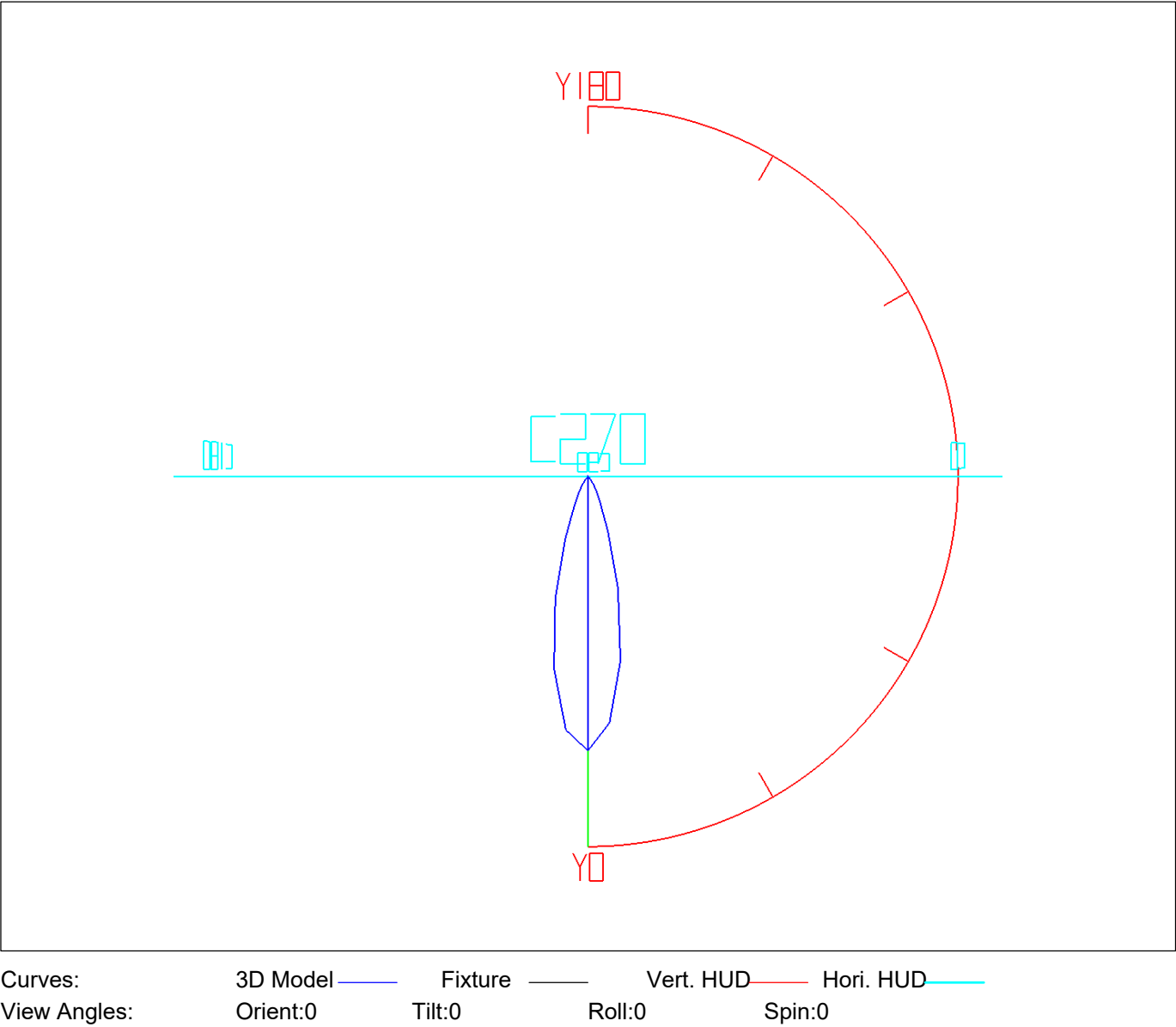
Lum. Name: PD08-15-XX-01 4000K RA90 24D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/13



3D Light Intensity Distribution Modal

Lum. Name: PD08-15-XX-01 4000K RA90 24D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/13

3D Light Intensity Distribution Modal

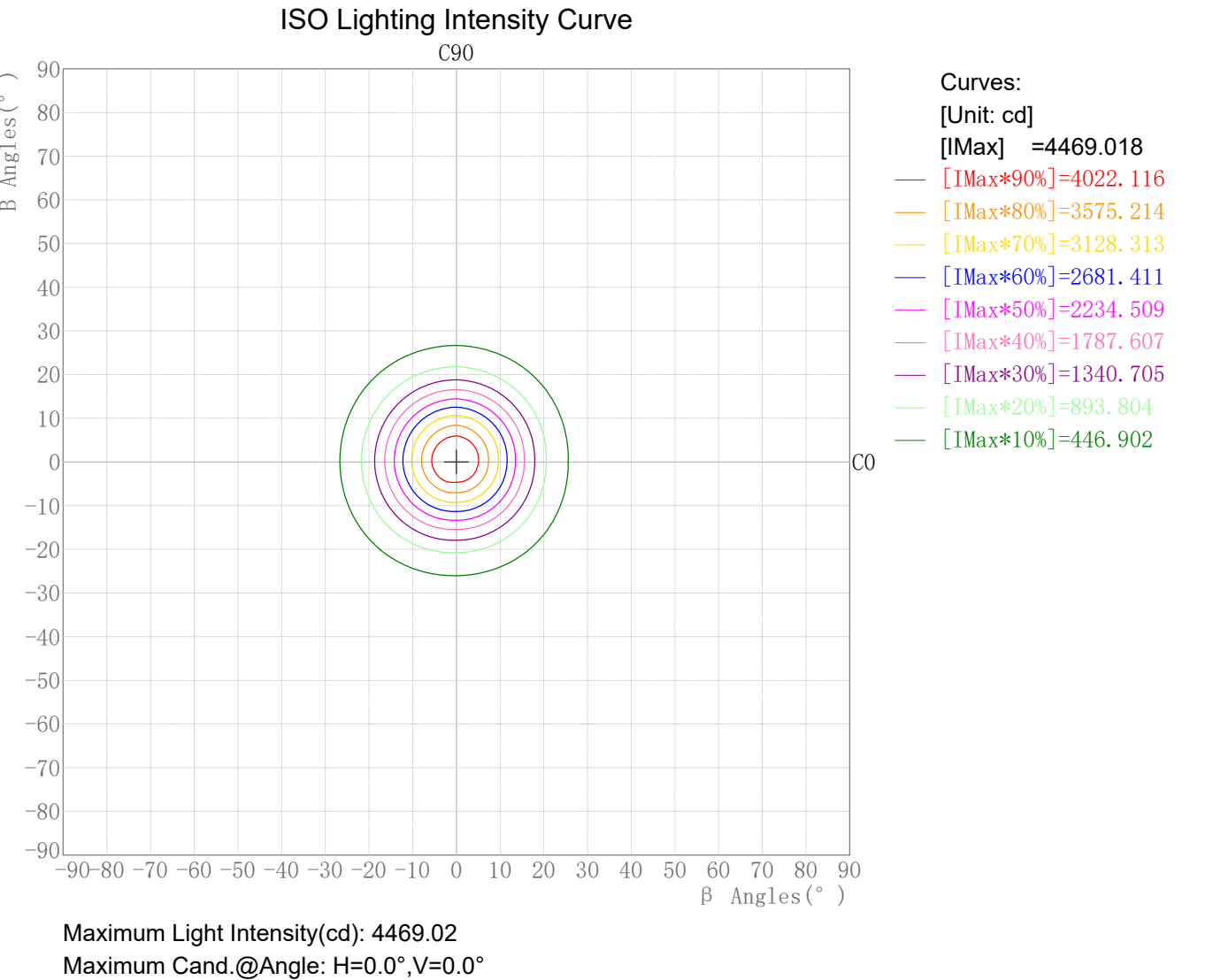


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	102.33	102.33	7.57	7.57
5.0-10.0	258.09	360.42	19.10	26.68
10.0-15.0	302.78	663.20	22.41	49.09
15.0-20.0	247.91	911.11	18.35	67.44
20.0-25.0	160.46	1071.57	11.88	79.32
25.0-30.0	99.52	1171.09	7.37	86.68
30.0-35.0	65.03	1236.12	4.81	91.50
35.0-40.0	36.62	1272.74	2.71	94.21
40.0-45.0	16.66	1289.40	1.23	95.44
45.0-50.0	9.26	1298.66	0.69	96.13
50.0-55.0	6.79	1305.45	0.50	96.63
55.0-60.0	5.56	1311.01	0.41	97.04
60.0-65.0	4.69	1315.70	0.35	97.39
65.0-70.0	3.97	1319.67	0.29	97.68
70.0-75.0	3.25	1322.92	0.24	97.92
75.0-80.0	2.64	1325.56	0.20	98.12
80.0-85.0	2.17	1327.73	0.16	98.28
85.0-90.0	1.74	1329.46	0.13	98.41
90.0-95.0	1.40	1330.87	0.10	98.51
95.0-100.0	1.17	1332.04	0.09	98.60
100.0-105.0	0.94	1332.98	0.07	98.67
105.0-110.0	0.83	1333.80	0.06	98.73
110.0-115.0	0.79	1334.59	0.06	98.79
115.0-120.0	0.72	1335.31	0.05	98.84
120.0-125.0	0.74	1336.06	0.06	98.89
125.0-130.0	0.93	1336.98	0.07	98.96
130.0-135.0	1.21	1338.19	0.09	99.05
135.0-140.0	1.55	1339.74	0.11	99.17
140.0-145.0	1.83	1341.58	0.14	99.30
145.0-150.0	2.01	1343.58	0.15	99.45
150.0-155.0	2.02	1345.60	0.15	99.60
155.0-160.0	1.85	1347.46	0.14	99.74
160.0-165.0	1.53	1348.99	0.11	99.85
165.0-170.0	1.12	1350.10	0.08	99.93
170.0-175.0	0.67	1350.78	0.05	99.98
175.0-180.0	0.22	1351.00	0.02	100.00

Rectangle ISO Lighting Intensity Diagram

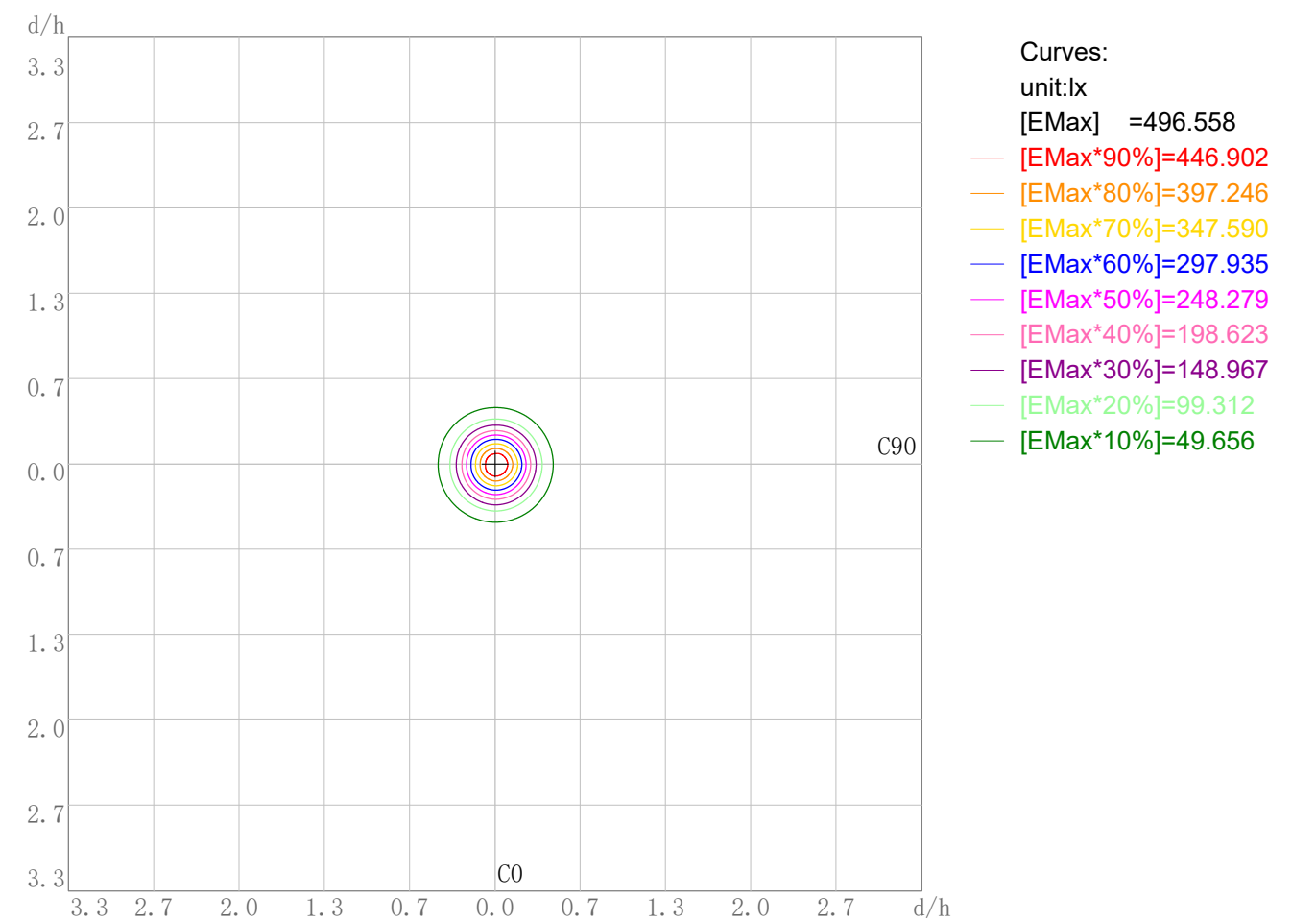
Lum. Name: PD08-15-XX-01 4000K RA90 24D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/13



Plane ISO-Illuminance Diagram

Lum. Name: PD08-15-XX-01 4000K RA90 24D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/13

Plane ISO-Illuminance Curve

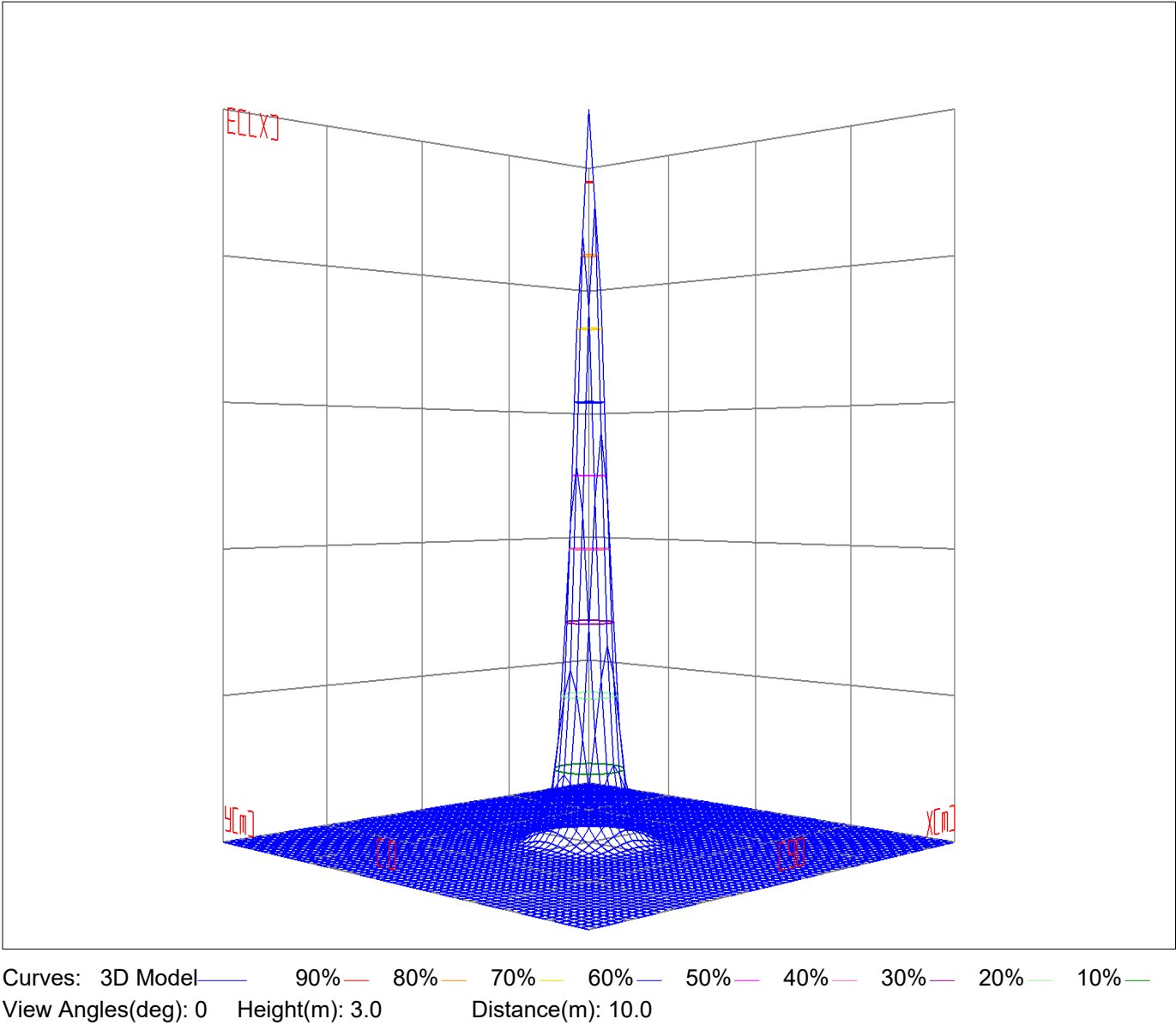


Working Plane Luminaire Mounting Height(m): 3.00  
Working Plane Maximum Illuminance(lx): 496.56  
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: PD08-15-XX-01 4000K RA90 24D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/13

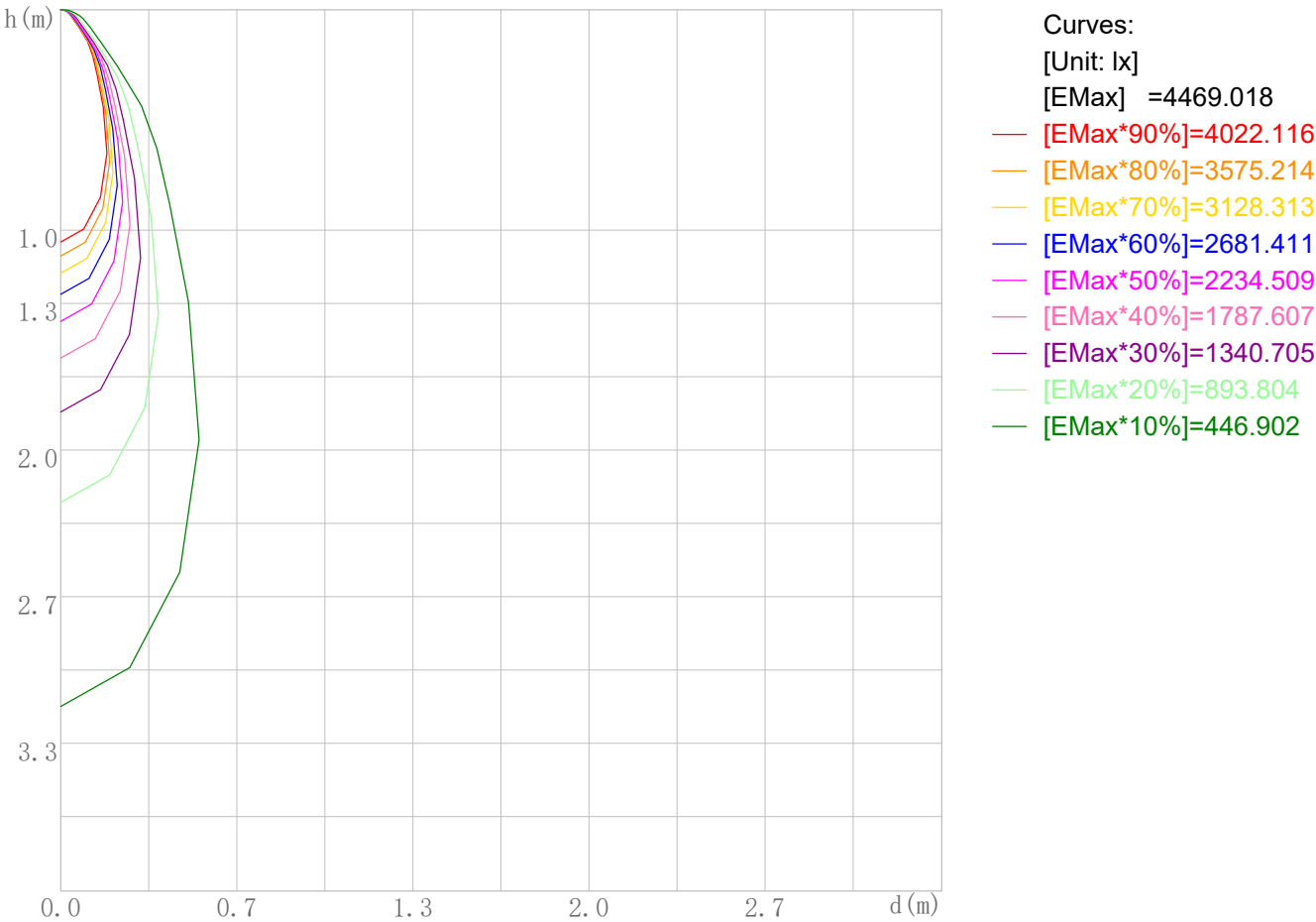
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: PD08-15-XX-01 4000K RA90 24D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/13

Space ISO Illuminance Curve

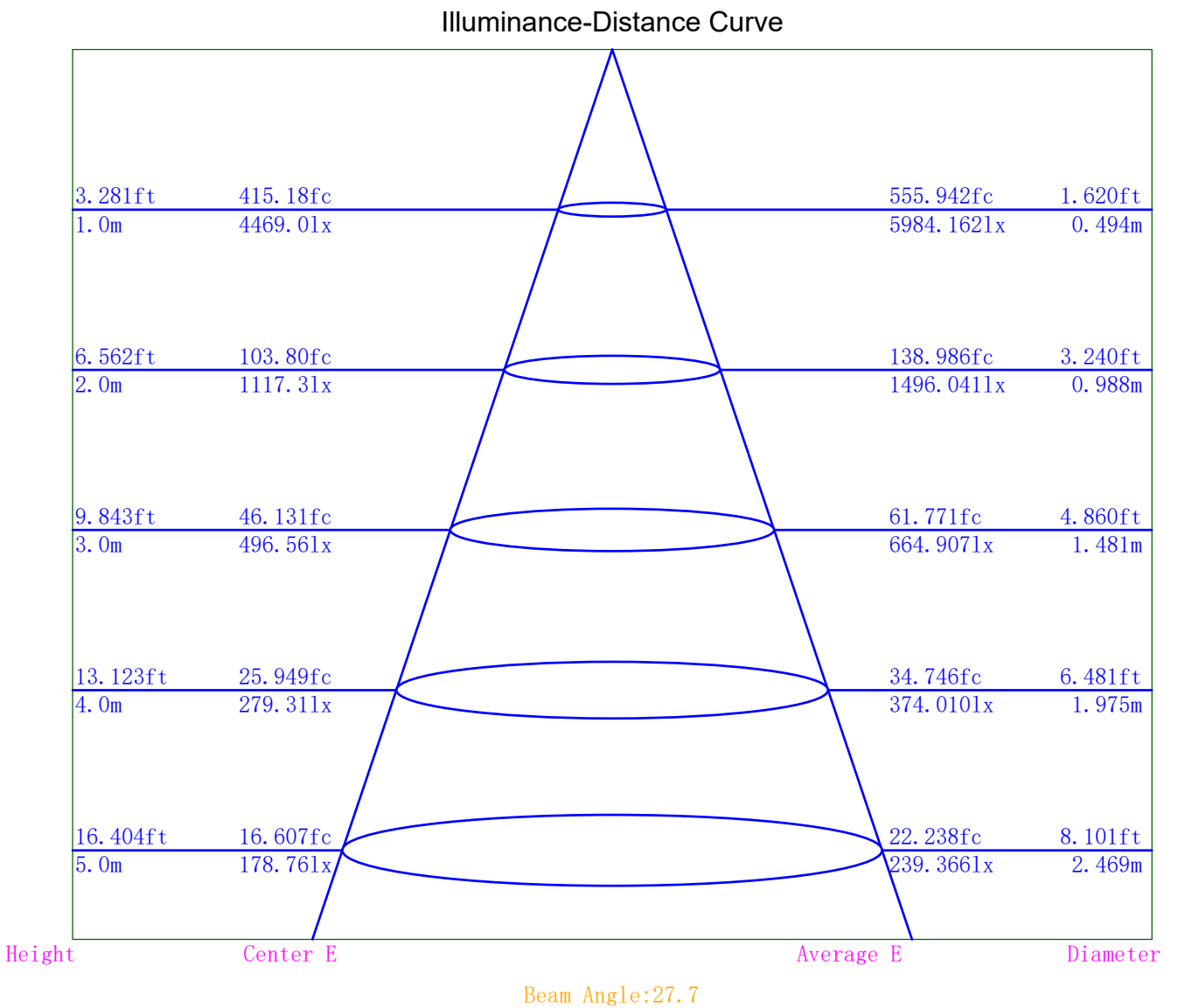


Space Plane Maximum Illuminance and @Angle:4469.02lx,0.0deg  
Plane Maximum Lighting Intensity and @Angle:4469.018cd,0deg



Illuminance-Distance Diagram

Lum. Name: PD08-15-XX-01 4000K RA90 24D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/13



Indoor Luminance Limiting Curves

Lum. Name: PD08-15-XX-01 4000K RA90 24D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/13

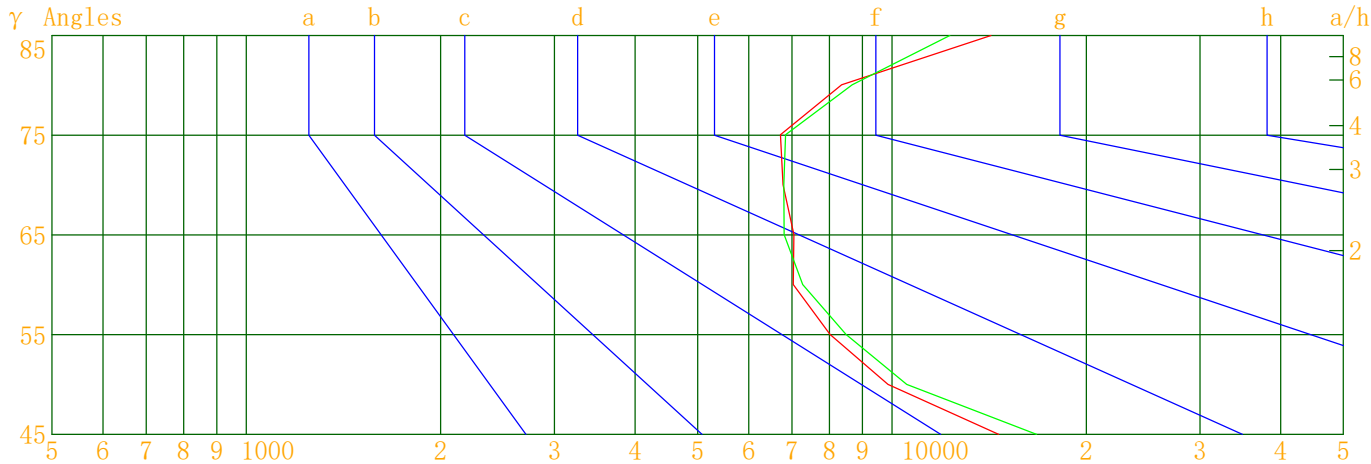
Glare Grade Table

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	14627	9860	8018	7032	7049	6781	6718	8354	14231
C90	16750	10539	8488	7271	6808	6799	6841	8675	12289

Luminance Limiting Curve



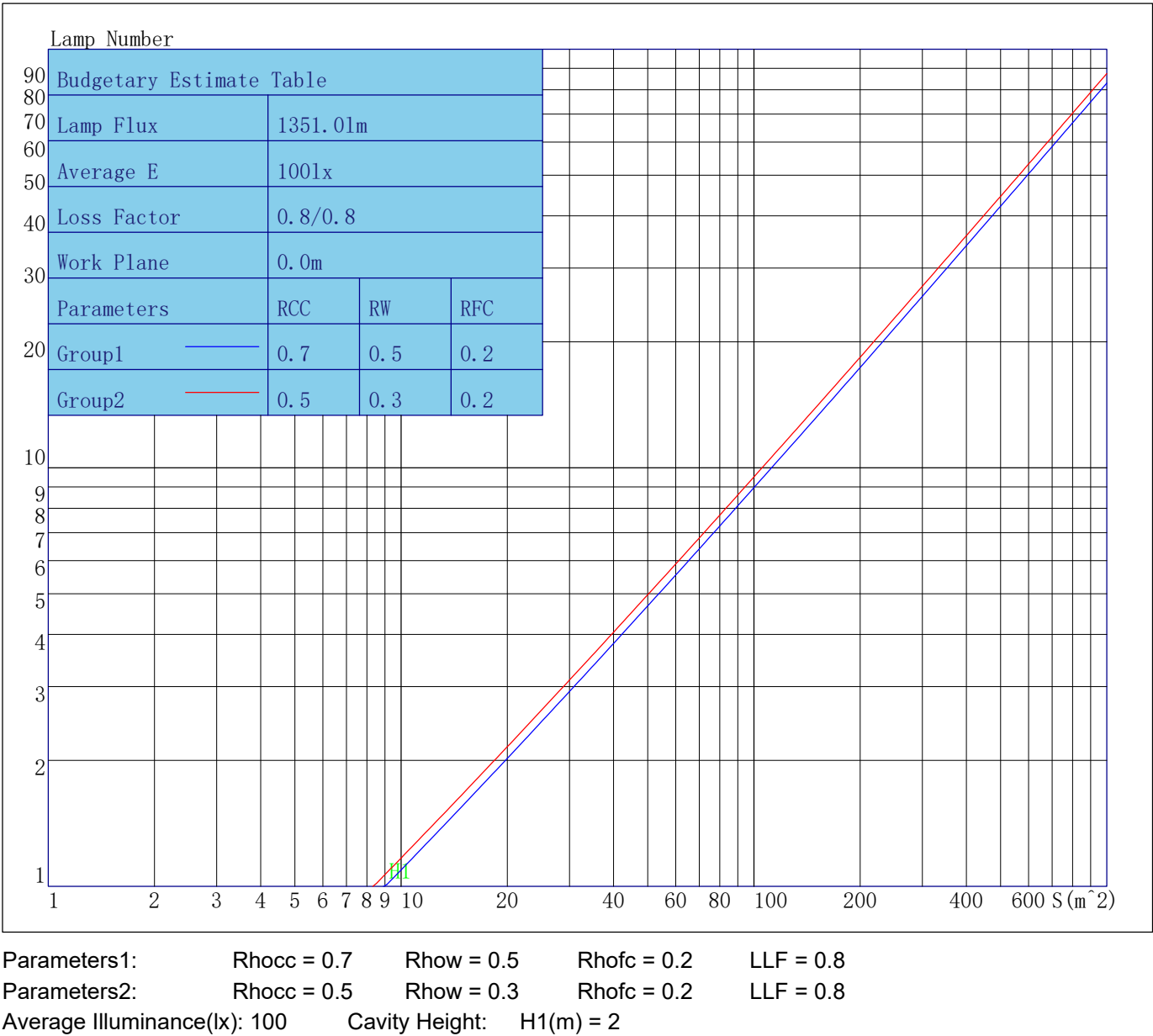
Luminous Size: Length(m)=0.055 Width(m)=0.055 Height(m)=0.000 Area(m^2)=0.003025

Luminous Type: Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name: PD08-15-XX-01 4000K RA90 24D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/13



Indoor Coefficient of Utilization Table

Lum. Name: PD08-15-XX-01 4000K RA90 24D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/13

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

Unified Glare Rating Table

Lum. Name: PD08-15-XX-01 4000K RA90 24D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/09/13

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	15.5	16.4	15.9	16.7	17.1	16.0	16.9	16.4	17.2	17.6	
	Y=3H	15.7	16.5	16.1	16.9	17.3	16.1	16.9	16.6	17.3	17.7
	Y=4H	15.9	16.6	16.3	17.0	17.4	16.3	17.0	16.7	17.4	17.8
	Y=6H	16.1	16.8	16.6	17.2	17.6	16.5	17.2	16.9	17.6	18.0
	Y=8H	16.3	16.9	16.8	17.3	17.8	16.6	17.3	17.1	17.7	18.1
	Y=12H	16.5	17.1	17.0	17.5	18.0	16.8	17.4	17.3	17.8	18.3
X=4H    Y=2H	15.4	16.1	15.8	16.5	16.9	15.8	16.6	16.3	16.9	17.4	
	Y=3H	15.8	16.4	16.2	16.8	17.3	16.2	16.7	16.6	17.2	17.6
	Y=4H	16.1	16.6	16.5	17.0	17.5	16.4	16.9	16.9	17.4	17.9
	Y=6H	16.5	16.9	17.0	17.4	17.9	16.8	17.2	17.3	17.7	18.2
	Y=8H	16.8	17.2	17.3	17.6	18.2	17.0	17.4	17.5	17.9	18.4
	Y=12H	17.1	17.5	17.7	18.0	18.5	17.3	17.7	17.8	18.2	18.7
X=8H    Y=4H	16.1	16.5	16.6	17.0	17.5	16.4	16.9	17.0	17.3	17.8	
	Y=6H	16.7	17.0	17.3	17.6	18.1	17.0	17.3	17.5	17.9	18.4
	Y=8H	17.1	17.4	17.7	18.0	18.5	17.4	17.6	17.9	18.2	18.7
	Y=12H	17.7	18.0	18.3	18.5	19.1	17.8	18.1	18.4	18.6	19.2
X=12H    Y=4H	16.1	16.5	16.6	17.0	17.5	16.4	16.8	16.9	17.3	17.8	
	Y=6H	16.8	17.0	17.3	17.5	18.1	17.0	17.3	17.6	17.8	18.4
	Y=8H	17.3	17.5	17.8	18.0	18.7	17.5	17.7	18.1	18.3	18.9
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					0.4/-0.4					
Reduced UGR Table:											
Nordic Standard Table:	BK0					BK0					
Correction Value	1.9					1.6					

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 4000K RA90 24D.IE**

**S**  
**Candela Tabulation**

V/H	C0.0	C90.0	C180.0	C270.0
γ 0.0	4469.02	4469.02	4469.02	4469.02
γ 5.0	4030.75	4199.33	4146.84	3986.52
γ 10.0	3049.64	3285.13	3184.46	2975.32
γ 15.0	1889.68	2102.17	2060.40	1870.23
γ 20.0	948.12	1102.48	1092.00	967.42
γ 25.0	469.72	523.58	525.43	490.96
γ 30.0	273.27	293.83	289.74	279.13
γ 35.0	155.02	169.32	156.75	149.34
γ 40.0	64.54	81.15	55.41	46.49
γ 45.0	31.29	35.83	23.35	21.80
γ 50.0	19.17	20.49	15.80	15.48
γ 55.0	13.91	14.73	12.80	12.60
γ 60.0	10.64	11.00	10.31	10.31
γ 65.0	9.01	8.70	8.48	8.68
γ 70.0	7.02	7.03	6.81	6.93
γ 75.0	5.26	5.36	5.55	5.77
γ 80.0	4.39	4.56	4.28	4.29
γ 85.0	3.75	3.24	3.85	3.64
γ 90.0	2.77	2.54	2.65	2.91
γ 95.0	2.53	2.45	2.34	2.27
γ 100.0	1.91	2.28	1.86	1.60
γ 105.0	1.39	1.69	1.78	1.56
γ 110.0	1.55	1.60	1.59	1.51
γ 115.0	1.45	1.53	2.04	1.19
γ 120.0	1.43	1.20	1.54	1.43
γ 125.0	1.67	1.32	2.02	2.27
γ 130.0	2.22	2.24	2.52	2.80
γ 135.0	3.19	3.12	3.80	4.05
γ 140.0	4.76	4.38	4.97	5.21
γ 145.0	5.94	5.85	6.26	6.59
γ 150.0	7.24	7.13	7.71	7.79
γ 155.0	8.24	8.07	8.73	8.98
γ 160.0	8.98	8.91	9.65	9.16
γ 165.0	9.22	9.18	9.99	9.20
γ 170.0	9.39	9.12	9.73	9.39
γ 175.0	9.08	9.24	9.63	9.49
γ 180.0	9.43	9.43	9.43	9.43