

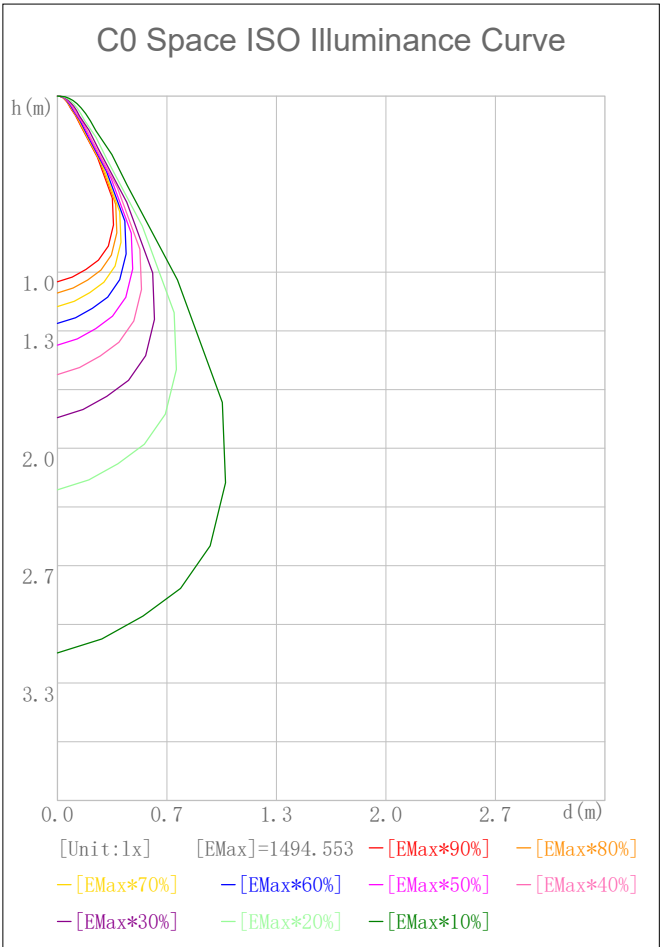
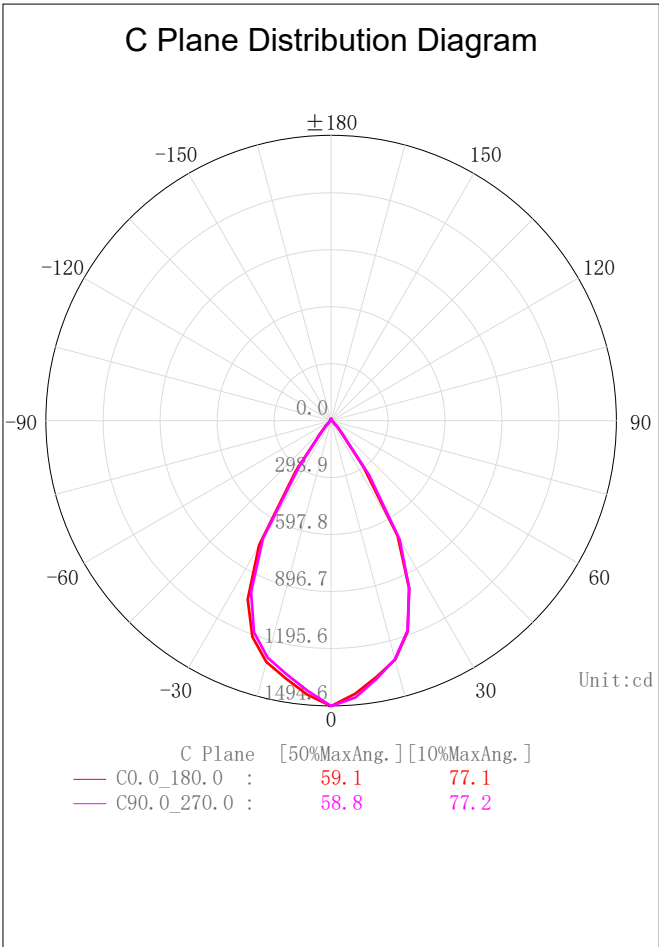
Indoor Luminaire Photometric Data

Description Information

Luminary Name: SD08-15-XX-01 4000K RA90 60D		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

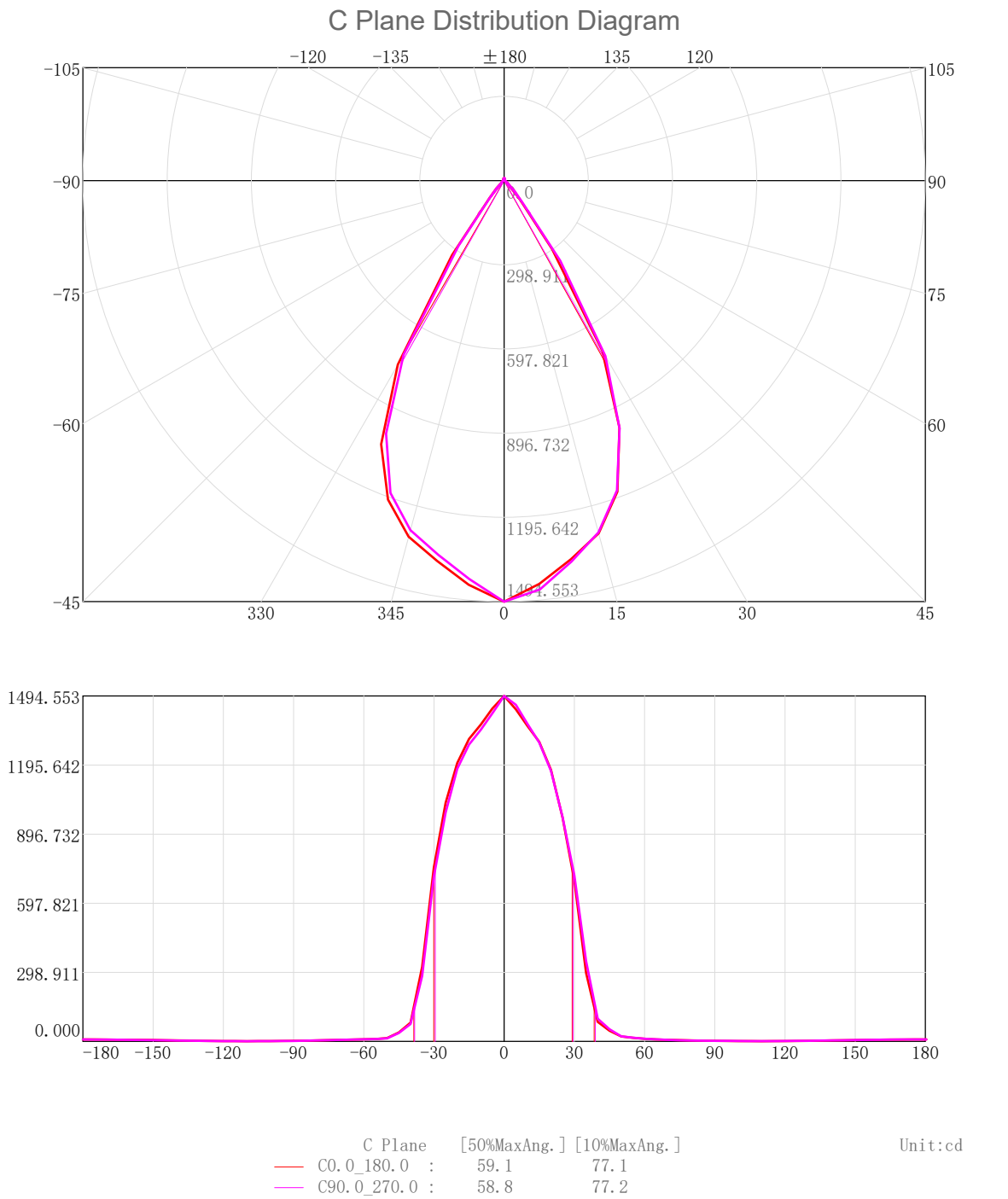
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 1248.400	Luminary Flux(lm): 1248.397	Field Angle(10%Imax): 77.1(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1227.548lm 98.33%	
Rated Voltage(V):	Luminary EER(lm/W): 95.225	Up Lumens&Percent: 20.849lm 1.67%	
Tested Power(W): 13.110	Max. Candela(cd): 1494.553	S/MH: C0_a180=0.930 C90_270=0.917	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf):239.7, 0.059, 0.918	Beam Angle(50%Imax): 59.1(°)	ErP Φ use(90°): 1190.342lm	
Lamp Size (W*L*H):0.055m*0.055m*0.000m	Left=-30.1°, Right=29.1°	IRF(%): 259.404	



2D Plane Light Intensity Distribution Curve

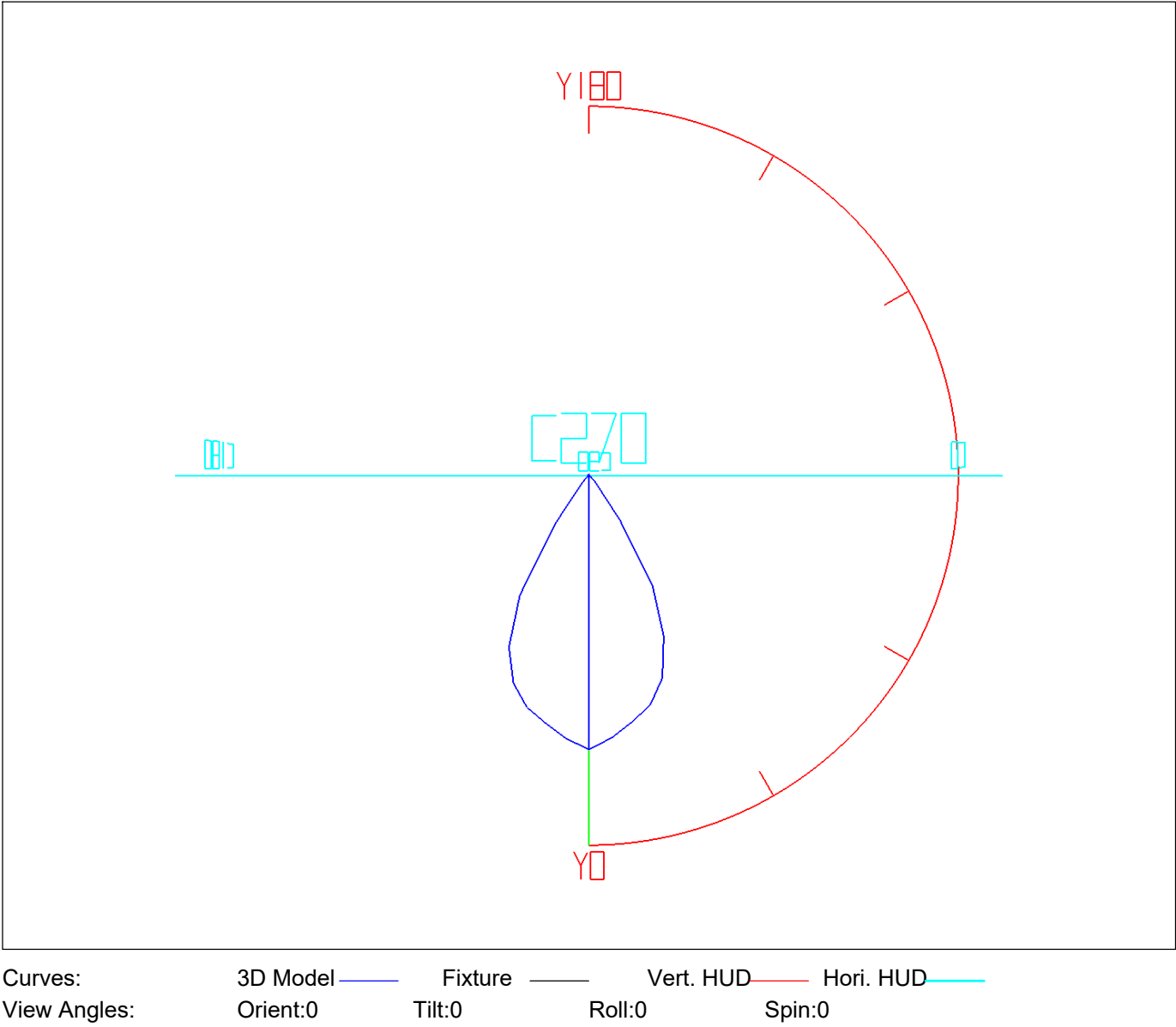
Lum. Name:SD08-15-XX-01 4000K RA90 60D	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/09/13



3D Light Intensity Distribution Modal

Lum. Name:SD08-15-XX-01 4000K RA90 60D	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

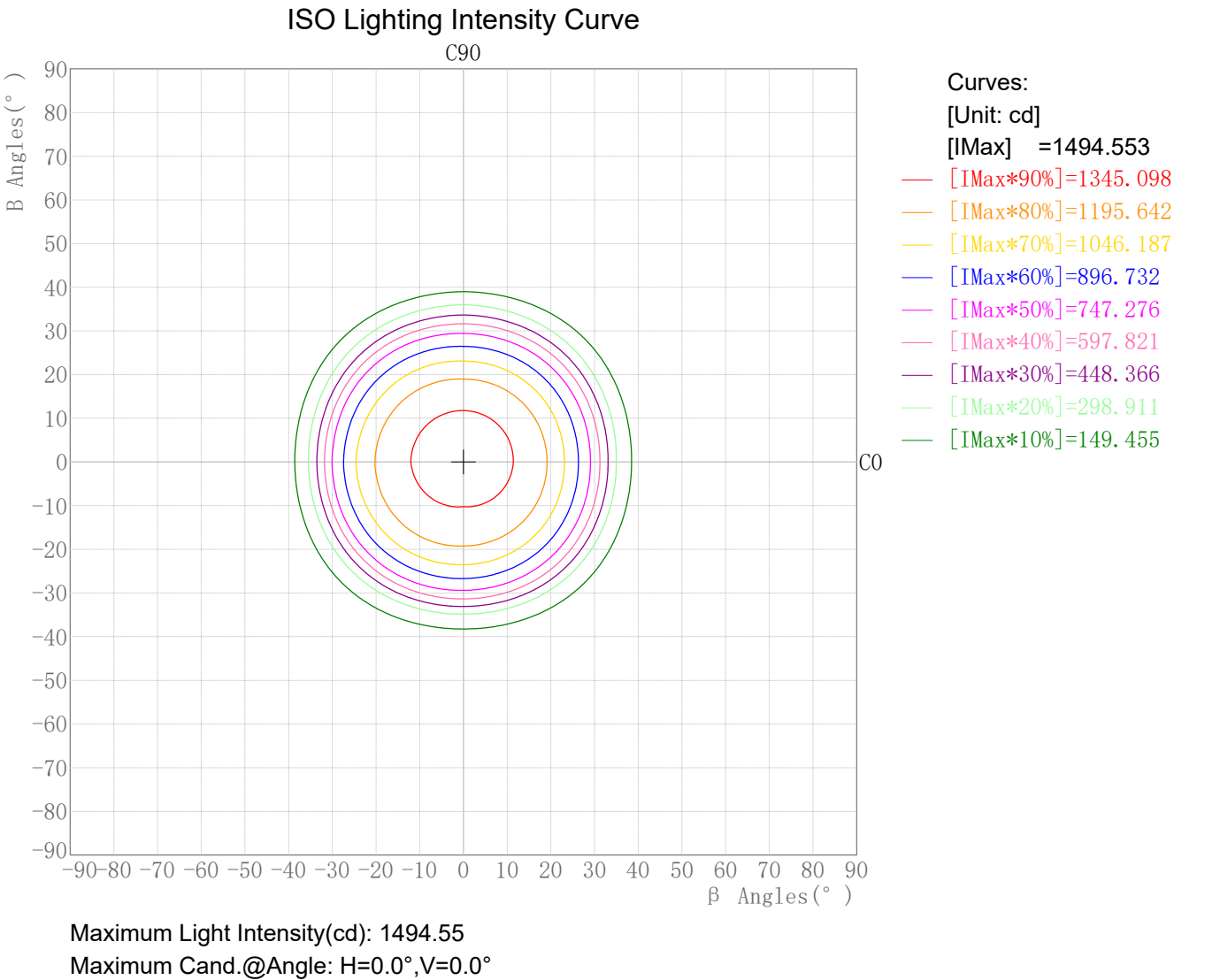


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	35.06	35.06	2.81	2.81
5.0-10.0	100.25	135.31	8.03	10.84
10.0-15.0	157.77	293.07	12.64	23.48
15.0-20.0	204.21	497.28	16.36	39.83
20.0-25.0	227.85	725.13	18.25	58.08
25.0-30.0	216.50	941.63	17.34	75.43
30.0-35.0	152.13	1093.76	12.19	87.61
35.0-40.0	66.35	1160.11	5.32	92.93
40.0-45.0	23.91	1184.02	1.92	94.84
45.0-50.0	12.53	1196.55	1.00	95.85
50.0-55.0	6.86	1203.41	0.55	96.40
55.0-60.0	5.55	1208.96	0.44	96.84
60.0-65.0	4.70	1213.67	0.38	97.22
65.0-70.0	3.98	1217.64	0.32	97.54
70.0-75.0	3.31	1220.95	0.26	97.80
75.0-80.0	2.70	1223.65	0.22	98.02
80.0-85.0	2.17	1225.83	0.17	98.19
85.0-90.0	1.72	1227.55	0.14	98.33
90.0-95.0	1.40	1228.95	0.11	98.44
95.0-100.0	1.15	1230.09	0.09	98.53
100.0-105.0	0.94	1231.03	0.08	98.61
105.0-110.0	0.83	1231.87	0.07	98.68
110.0-115.0	0.81	1232.67	0.06	98.74
115.0-120.0	0.87	1233.54	0.07	98.81
120.0-125.0	1.03	1234.57	0.08	98.89
125.0-130.0	1.24	1235.80	0.10	98.99
130.0-135.0	1.42	1237.22	0.11	99.10
135.0-140.0	1.58	1238.80	0.13	99.23
140.0-145.0	1.67	1240.47	0.13	99.36
145.0-150.0	1.70	1242.17	0.14	99.50
150.0-155.0	1.65	1243.82	0.13	99.63
155.0-160.0	1.51	1245.33	0.12	99.75
160.0-165.0	1.27	1246.60	0.10	99.86
165.0-170.0	0.97	1247.57	0.08	99.93
170.0-175.0	0.62	1248.19	0.05	99.98
175.0-180.0	0.21	1248.40	0.02	100.00

Rectangle ISO Lighting Intensity Diagram

Lum. Name:SD08-15-XX-01 4000K RA90 60D	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

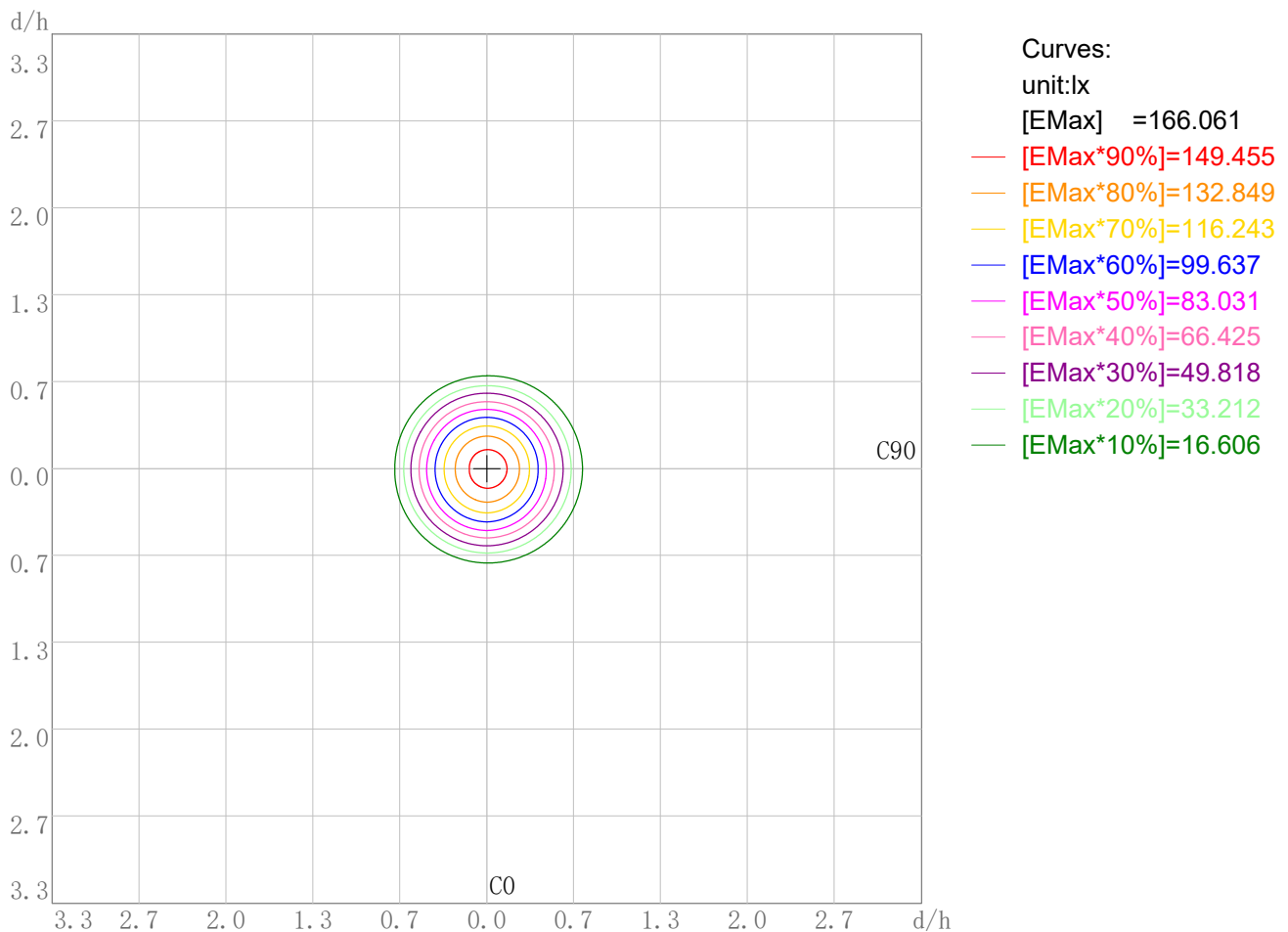


**Photometric Filename:SD08-15-XX-01 4000K RA90 60D.IES**

## Plane ISO-Illuminance Diagram

Lum. Name: SD08-15-XX-01 4000K RA90 60D	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

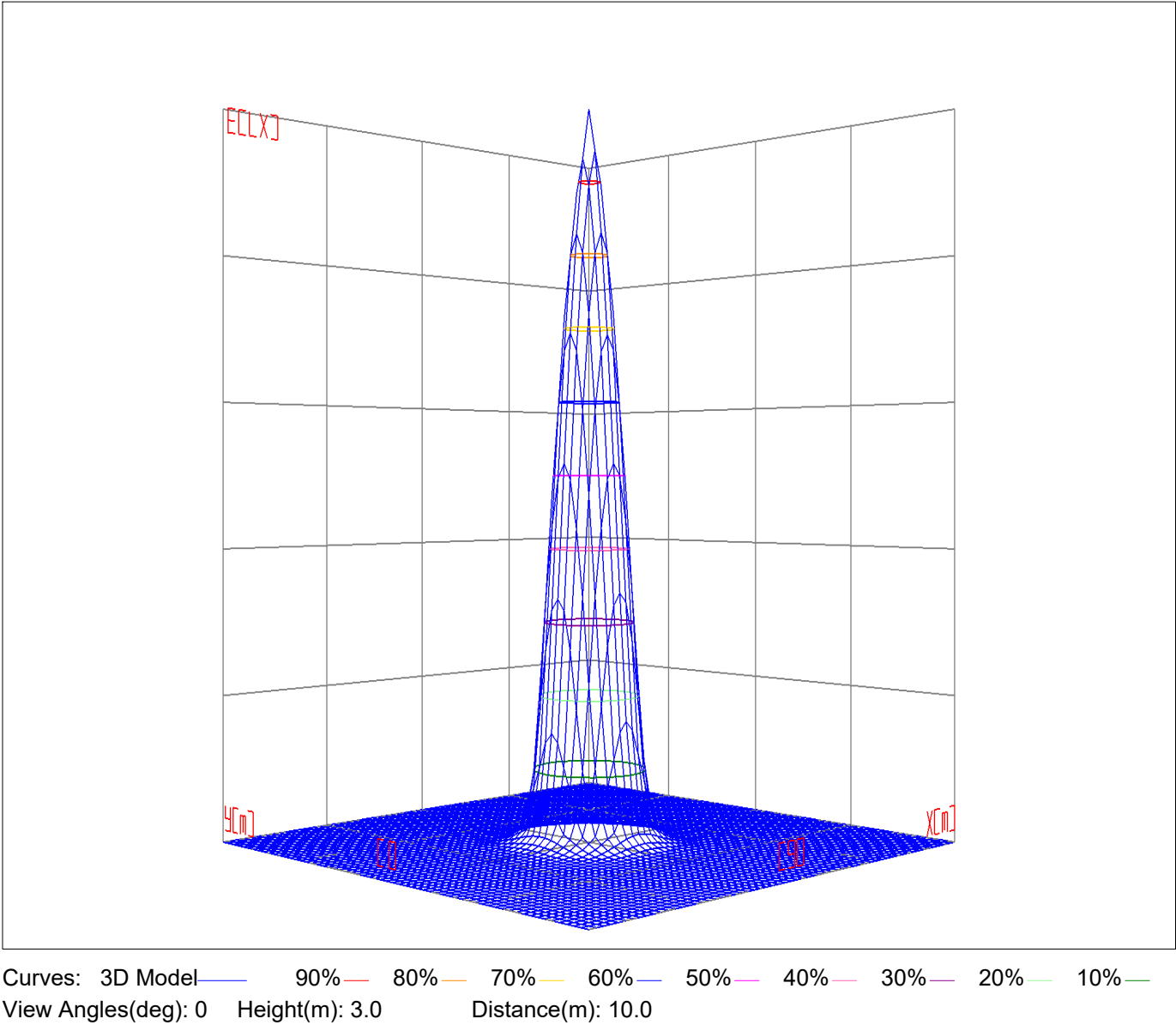
Working Plane Maximum Illuminance(lx): 166.06

Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: SD08-15-XX-01 4000K RA90 60D	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

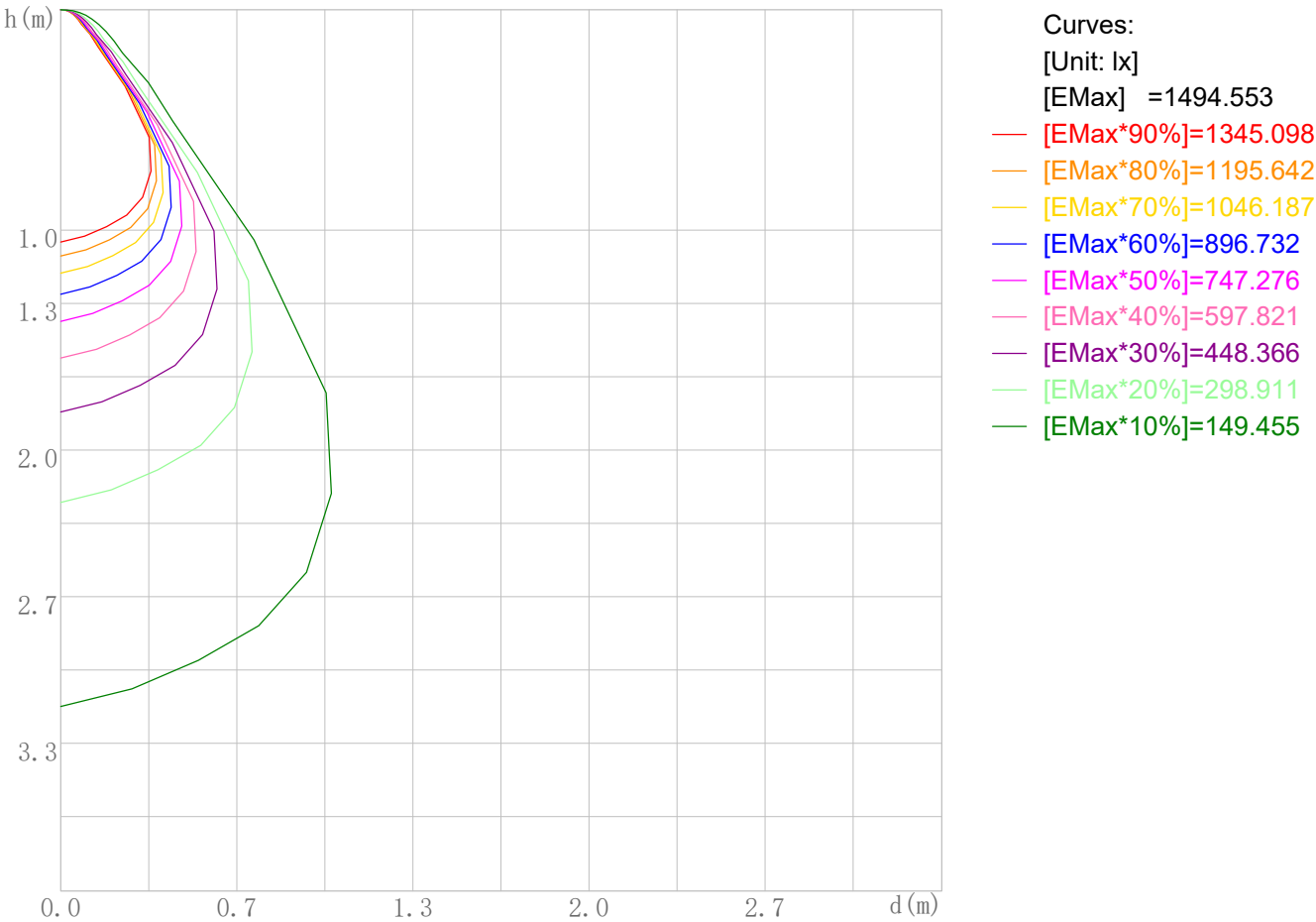
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name:SD08-15-XX-01 4000K RA90 60D	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

Space ISO Illuminance Curve

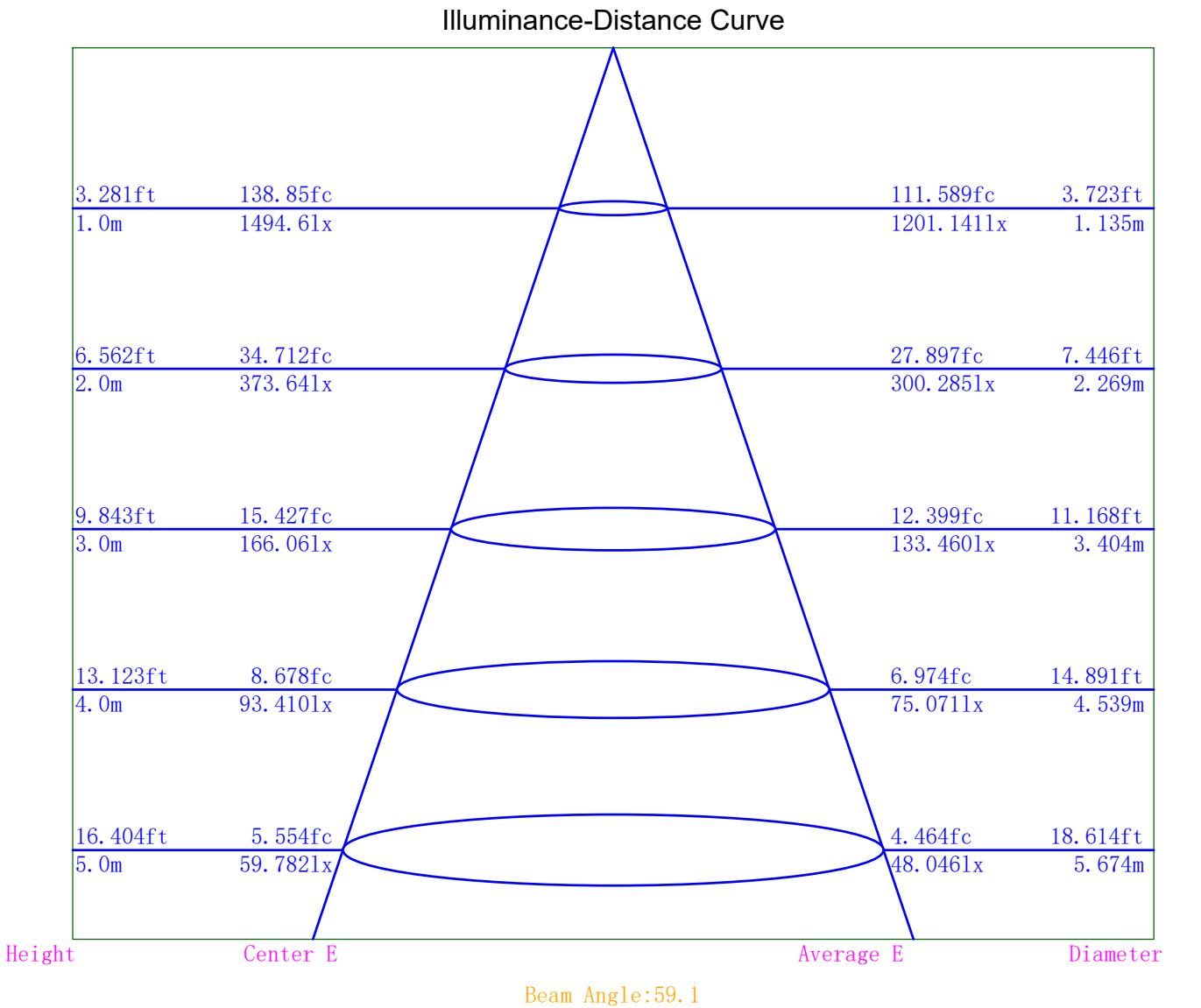


Space Plane Maximum Illuminance and @Angle:1494.55lx,0.0deg  
Plane Maximum Lighting Intensity and @Angle:1494.553cd,0deg



Illuminance-Distance Diagram

Lum. Name:SD08-15-XX-01 4000K RA90 60D	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:SD08-15-XX-01 4000K RA90 60D	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

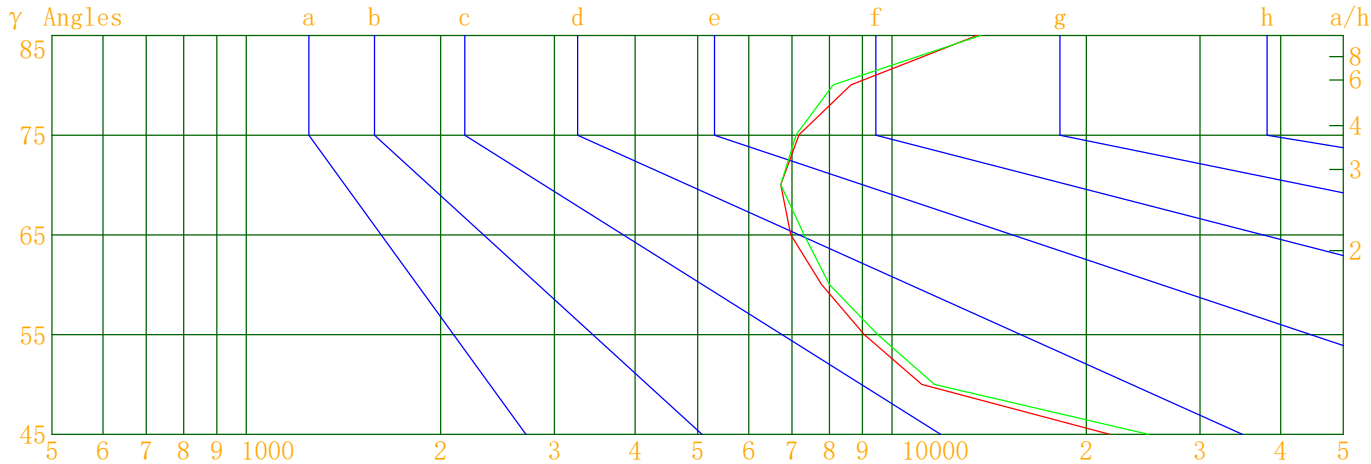
Glare Grade Table

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	21735	11123	9057	7779	6969	6727	7178	8641	13545
C90	24961	11637	9503	8001	7306	6726	7107	8110	13715

Luminance Limiting Curve



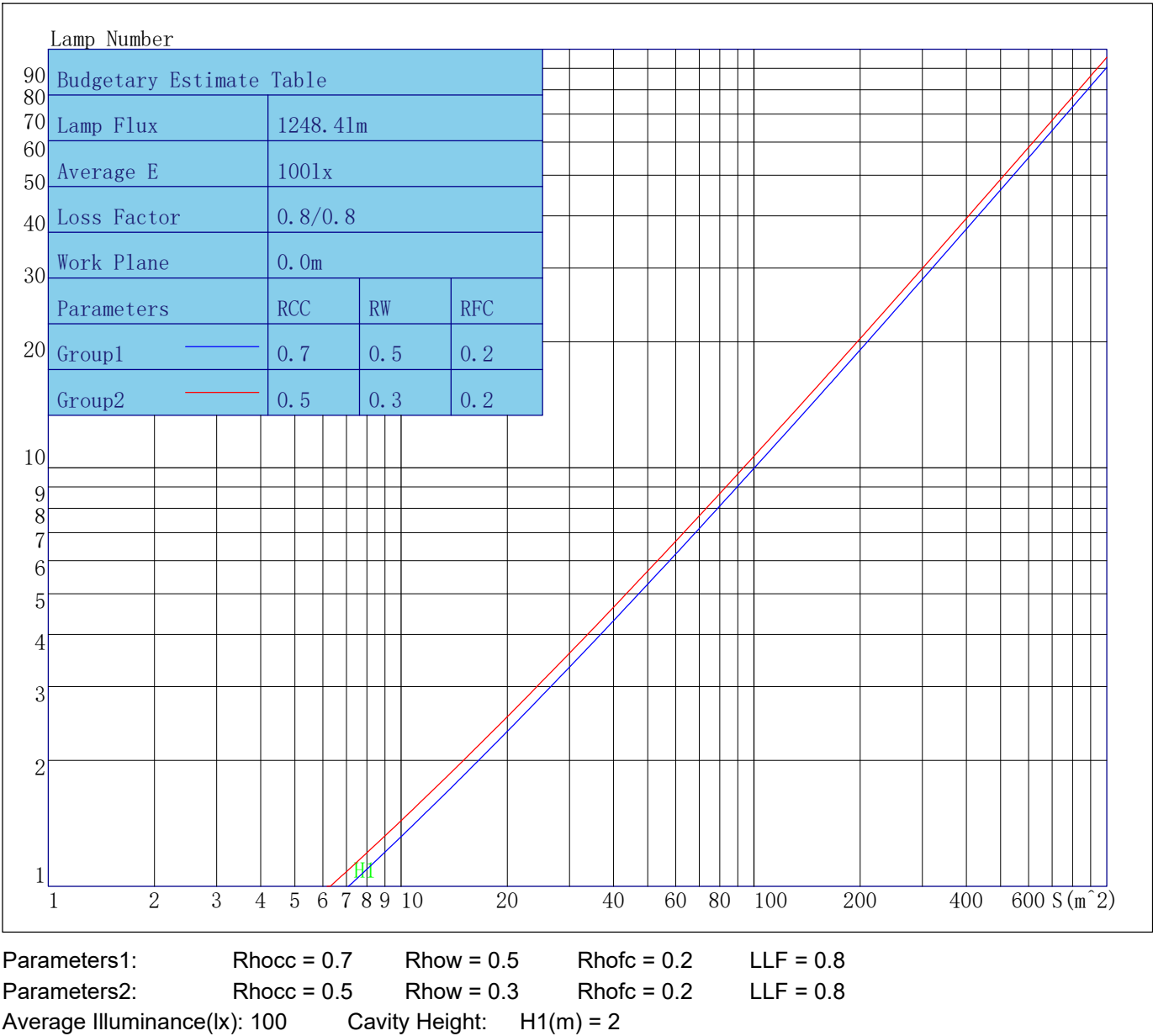
Luminous Size:Length(m)=0.055Width(m)=0.055Height(m)=0.000Area(m^2)=0.003025

Luminous Type:Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name:SD08-15-XX-01 4000K RA90 60D	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:SD08-15-XX-01 4000K RA90 60D	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	113	110	108	105	110	108	106	104	104	102	100	100	98	97	96	95	94	92
2	108	103	99	95	105	101	97	94	97	94	92	94	92	90	91	89	87	86
3	102	96	91	87	100	94	90	86	91	88	85	89	86	83	86	84	82	80
4	97	90	84	80	95	89	83	80	86	82	78	84	80	77	82	79	76	75
5	92	84	79	74	91	83	78	74	81	77	73	79	75	72	78	74	72	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	73	68	64	71	67	64	70	66	63	62
8	80	71	65	61	79	70	64	61	69	64	60	68	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	54	61	56	53	60	56	53	52

Unified Glare Rating Table

Lum. Name: SD08-15-XX-01 4000K RA90 60D	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	20.1	21.1	20.5	21.4	21.8	20.6	21.5	21.0	21.9	22.3
	20.1	20.9	20.5	21.2	21.6	20.5	21.3	20.9	21.7	22.1
	20.0	20.8	20.5	21.2	21.6	20.5	21.3	20.9	21.7	22.1
	20.1	20.7	20.5	21.2	21.6	20.5	21.2	20.9	21.6	22.0
	20.1	20.7	20.5	21.1	21.6	20.5	21.1	21.0	21.6	22.0
	20.1	20.7	20.6	21.2	21.6	20.5	21.2	21.0	21.6	22.0
X=4H    Y=2H	19.9	20.6	20.3	21.0	21.5	20.4	21.1	20.8	21.5	21.9
	19.9	20.5	20.3	20.9	21.4	20.3	20.9	20.8	21.4	21.8
	19.9	20.4	20.4	20.9	21.4	20.3	20.9	20.8	21.3	21.8
	20.0	20.4	20.5	20.9	21.4	20.4	20.9	20.9	21.3	21.9
	20.0	20.5	20.6	21.0	21.5	20.4	20.9	20.9	21.4	21.9
	20.2	20.5	20.7	21.1	21.6	20.5	20.9	21.1	21.4	21.9
X=8H    Y=4H	19.8	20.2	20.3	20.7	21.2	20.2	20.7	20.7	21.1	21.7
	20.0	20.3	20.5	20.8	21.4	20.3	20.7	20.9	21.2	21.8
	20.1	20.4	20.7	21.0	21.5	20.5	20.8	21.0	21.3	21.9
	20.4	20.6	20.9	21.1	21.8	20.7	20.9	21.2	21.5	22.1
X=12H    Y=4H	19.7	20.1	20.3	20.6	21.2	20.2	20.5	20.7	21.1	21.6
	19.9	20.2	20.5	20.8	21.3	20.3	20.6	20.9	21.1	21.7
	20.1	20.4	20.7	20.9	21.6	20.5	20.7	21.0	21.3	21.9
Variations with the objerver 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	0.7					0.7				

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	1494.55	1494.55	1494.55	1494.55
γ 5.0	1436.44	1456.42	1440.16	1419.72
γ 10.0	1364.35	1373.62	1370.42	1348.08
γ 15.0	1295.95	1293.04	1308.51	1284.48
γ 20.0	1174.78	1170.20	1204.53	1179.74
γ 25.0	967.71	969.77	1032.52	990.50
γ 30.0	696.30	718.57	753.85	713.92
γ 35.0	296.35	347.43	322.39	283.55
γ 40.0	84.88	98.92	81.49	75.81
γ 45.0	46.49	53.39	38.89	36.66
γ 50.0	21.63	22.63	14.52	13.78
γ 55.0	15.71	16.49	10.86	10.58
γ 60.0	11.77	12.10	9.30	9.27
γ 65.0	8.91	9.34	8.39	8.29
γ 70.0	6.96	6.96	7.11	6.86
γ 75.0	5.62	5.56	5.79	5.73
γ 80.0	4.54	4.26	4.48	4.45
γ 85.0	3.57	3.62	3.58	3.48
γ 90.0	2.79	2.84	2.83	2.45
γ 95.0	2.27	2.68	2.29	2.30
γ 100.0	1.89	2.14	1.75	1.57
γ 105.0	1.55	1.82	1.66	1.63
γ 110.0	1.41	1.90	1.40	1.39
γ 115.0	1.52	1.93	1.69	1.52
γ 120.0	1.77	2.15	1.84	1.83
γ 125.0	2.37	2.93	2.45	2.39
γ 130.0	3.13	3.17	3.21	3.07
γ 135.0	3.79	4.22	3.84	3.64
γ 140.0	4.67	4.80	4.65	4.41
γ 145.0	5.27	5.58	5.44	5.33
γ 150.0	6.05	6.27	6.22	6.01
γ 155.0	6.86	7.05	6.82	6.74
γ 160.0	7.45	7.53	7.83	7.28
γ 165.0	8.03	8.11	7.67	7.93
γ 170.0	8.45	8.65	8.52	8.01
γ 175.0	8.62	9.08	8.98	8.52
γ 180.0	8.86	8.86	8.86	8.86