

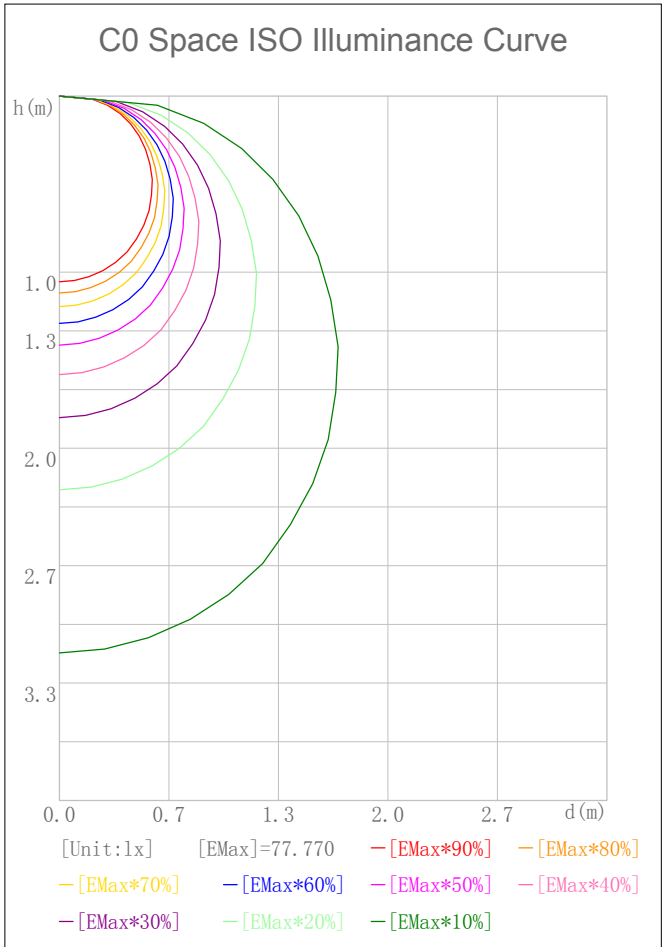
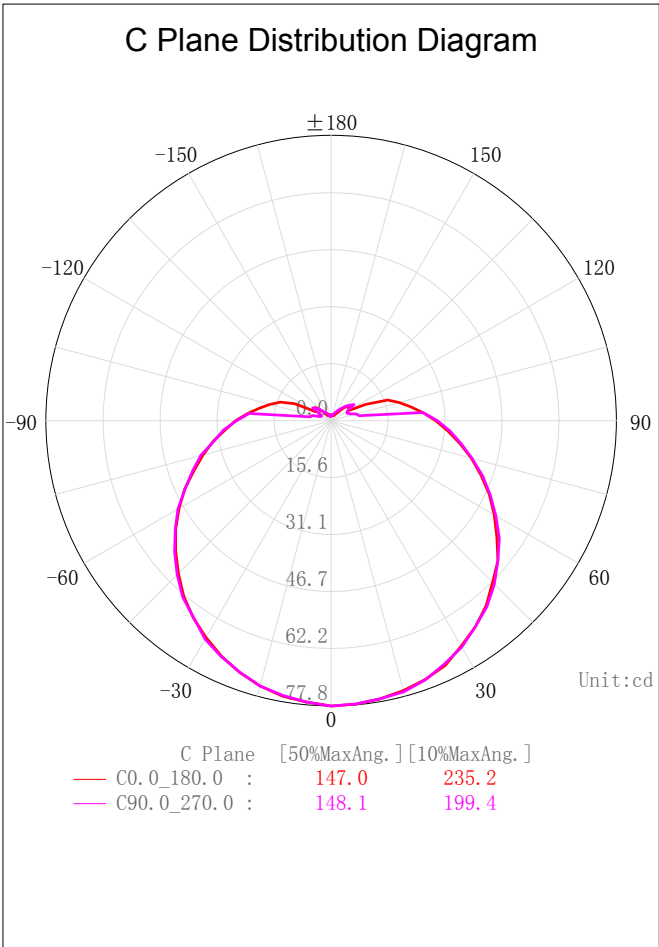
Indoor Luminaire Photometric Data

Description Information

Luminary Name:TR09-06-DW-03 1800-3000K RA90 150D		Lum. Catalog:	Test ID: 01
Lamp Name:		Lamp Catalog: LED	Test Date: 2022/08/29
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):0.110m*0.110m*0.000m		Lum. Area (m2):0.012	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25	Humidity(%): 50.0

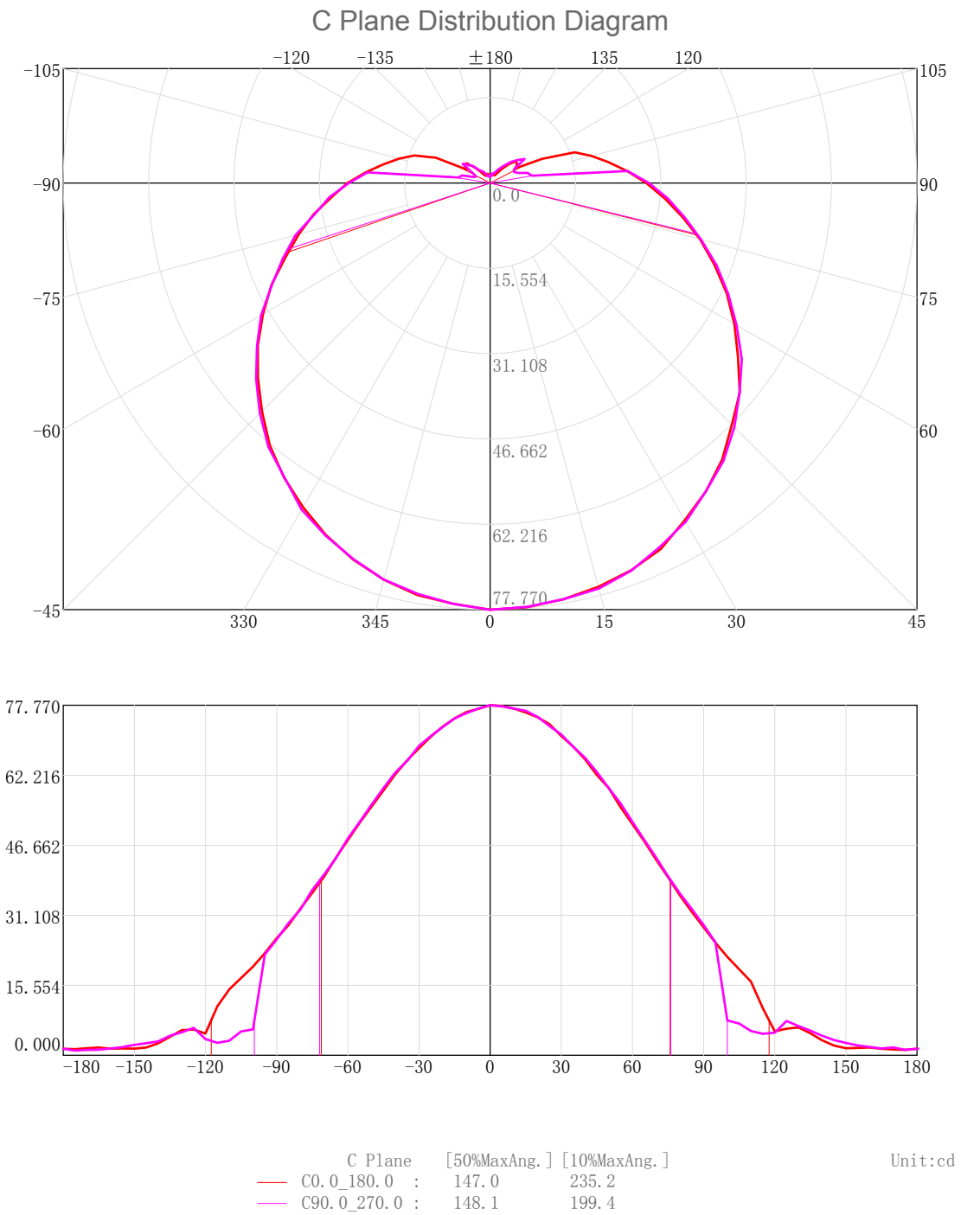
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 374.420	Luminary Flux(lm): 374.423	Field Angle(10%Imax): 235.2(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 318.294lm 85.01%	
Rated Voltage(V):	Luminary EER(lm/W): 64.467	Up Lumens&Percent: 56.129lm 14.99%	
Tested Power(W): 5.808	Max. Candela(cd): 77.770	S/MH: C0_a180=1.338 C90_270=1.339	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: General Diffuse	
Tested Electrics (V, A, pf):240.1, 0.029, 0.832	Beam Angle(50%Imax): 147.0(°)	ErP ϕ use(120°): 199.187lm	
Lamp Size(W*L*H):0.110m*0.110m*0.000m	Left=-71.1°, Right=75.9°	IRF(%): 95.349	



2D Plane Light Intensity Distribution Curve

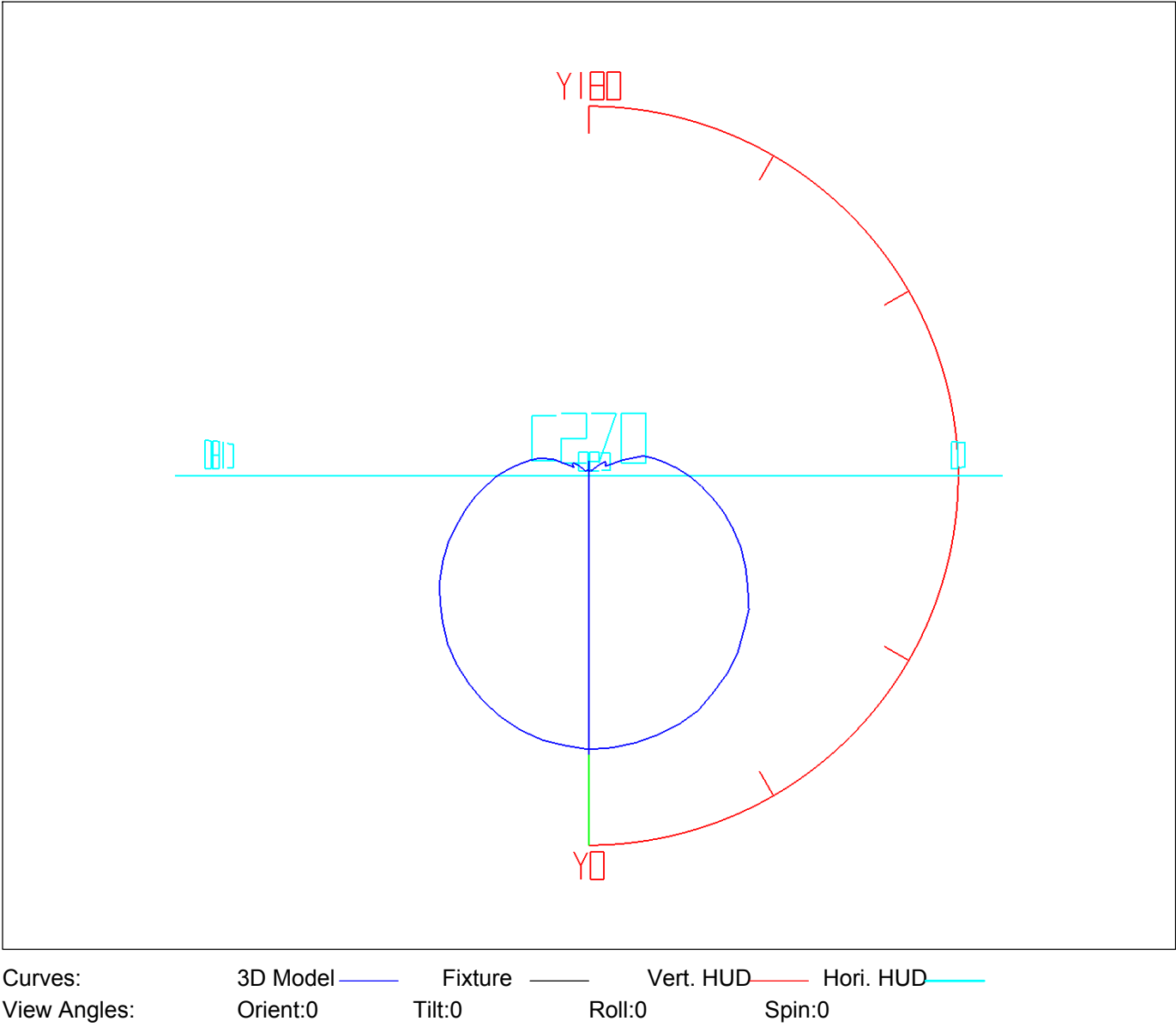
Lum. Name: TR09-06-DW-03 1800-3000K RA90 150D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/29



3D Light Intensity Distribution Modal

Lum. Name: TR09-06-DW-03 1800-3000K RA90 150D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/29

3D Light Intensity Distribution Modal

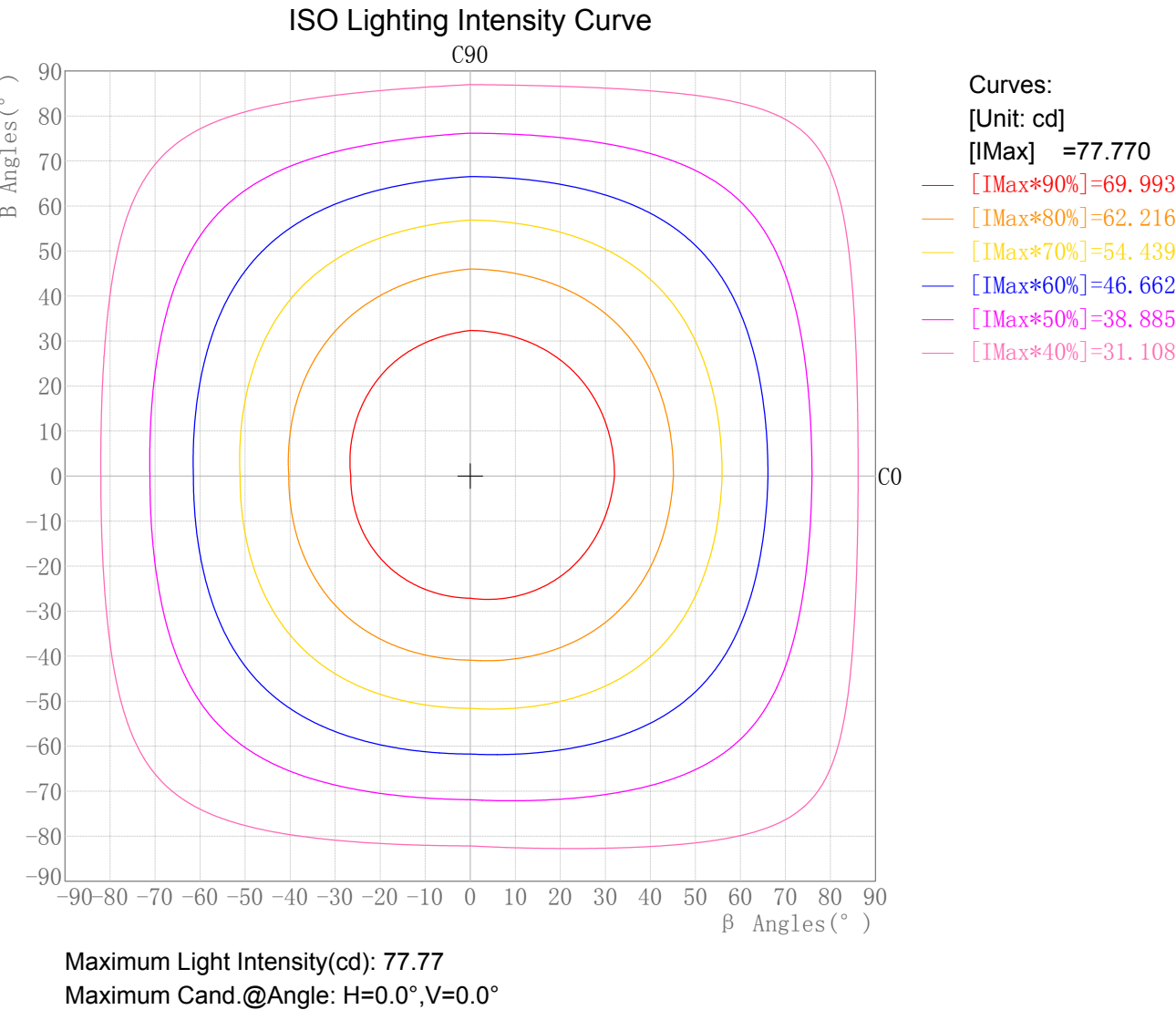


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	1.85	1.85	0.50	0.50
5.0-10.0	5.50	7.36	1.47	1.97
10.0-15.0	9.03	16.38	2.41	4.38
15.0-20.0	12.33	28.72	3.29	7.67
20.0-25.0	15.33	44.05	4.09	11.76
25.0-30.0	17.96	62.01	4.80	16.56
30.0-35.0	20.14	82.15	5.38	21.94
35.0-40.0	21.91	104.05	5.85	27.79
40.0-45.0	23.17	127.22	6.19	33.98
45.0-50.0	23.89	151.11	6.38	40.36
50.0-55.0	24.15	175.26	6.45	46.81
55.0-60.0	23.92	199.18	6.39	53.20
60.0-65.0	23.24	222.42	6.21	59.40
65.0-70.0	22.19	244.61	5.93	65.33
70.0-75.0	20.88	265.49	5.58	70.91
75.0-80.0	19.32	284.80	5.16	76.07
80.0-85.0	17.62	302.42	4.71	80.77
85.0-90.0	15.87	318.29	4.24	85.01
90.0-95.0	14.00	332.29	3.74	88.75
95.0-100.0	10.22	342.51	2.73	91.48
100.0-105.0	6.95	349.46	1.86	93.33
105.0-110.0	5.78	355.24	1.54	94.88
110.0-115.0	4.35	359.58	1.16	96.04
115.0-120.0	2.91	362.49	0.78	96.81
120.0-125.0	2.56	365.05	0.68	97.50
125.0-130.0	2.66	367.71	0.71	98.21
130.0-135.0	2.14	369.85	0.57	98.78
135.0-140.0	1.50	371.35	0.40	99.18
140.0-145.0	0.98	372.33	0.26	99.44
145.0-150.0	0.67	373.00	0.18	99.62
150.0-155.0	0.49	373.49	0.13	99.75
155.0-160.0	0.36	373.85	0.10	99.85
160.0-165.0	0.26	374.12	0.07	99.92
165.0-170.0	0.18	374.29	0.05	99.97
170.0-175.0	0.10	374.39	0.03	99.99
175.0-180.0	0.03	374.42	0.01	100.00

Rectangle ISO Lighting Intensity Diagram

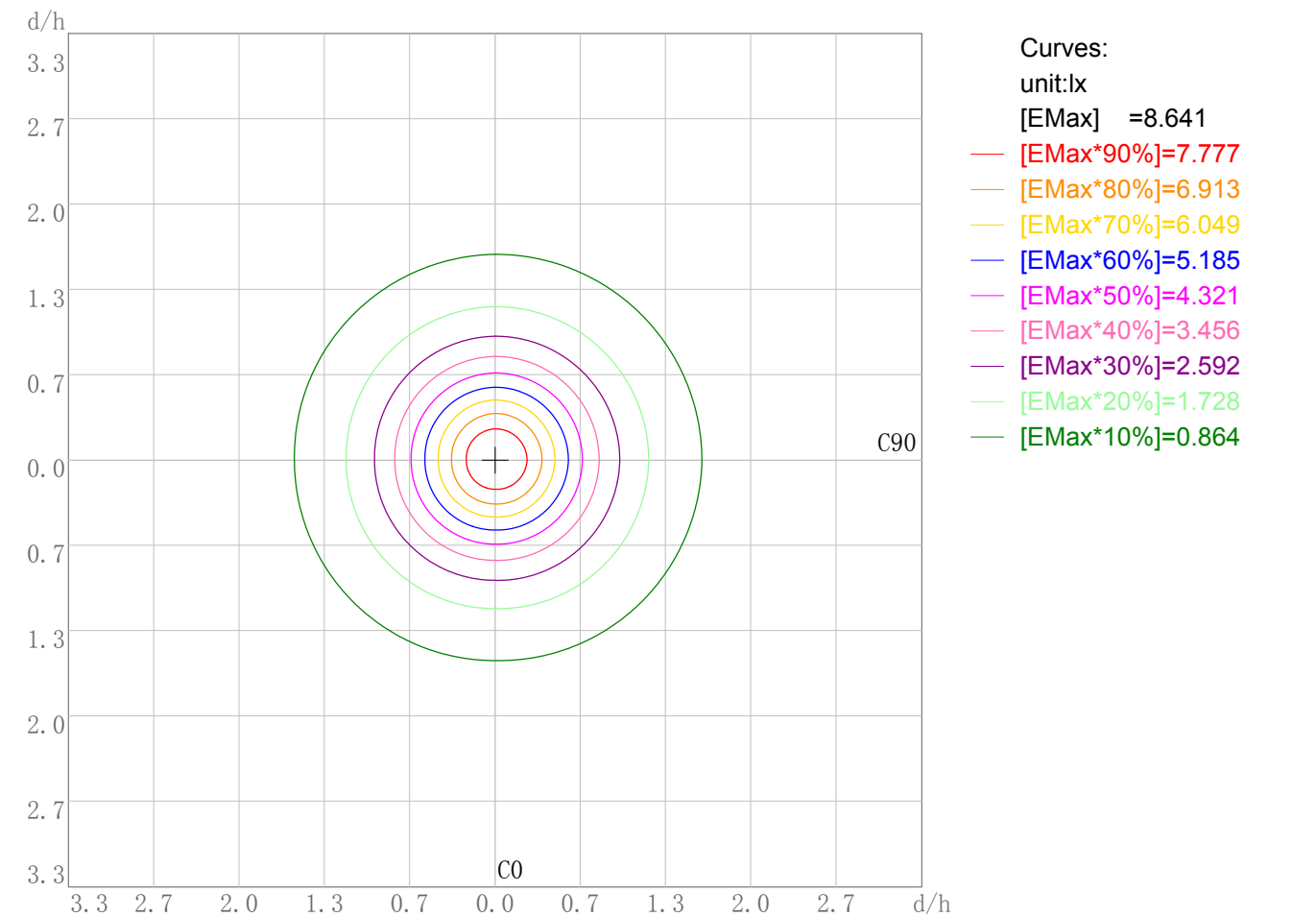
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Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/29



Plane ISO-Illuminance Diagram

Lum. Name: TR09-06-DW-03 1800-3000K RA90 150D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/29

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00

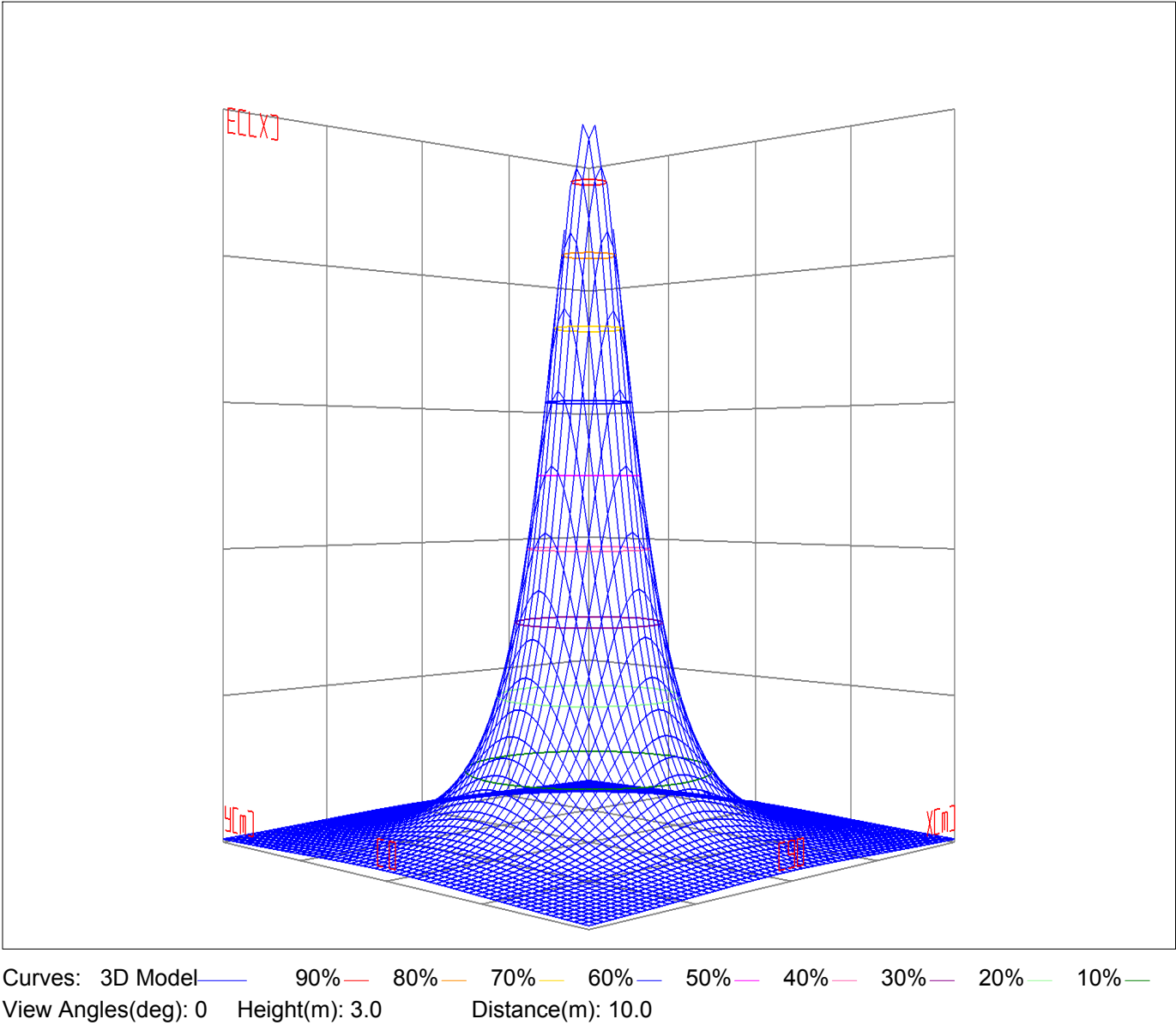
Working Plane Maximum Illuminance(lx): 8.64

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

3D Plane ISO Illuminance Diagram

Lum. Name: TR09-06-DW-03 1800-3000K RA90 150D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/29

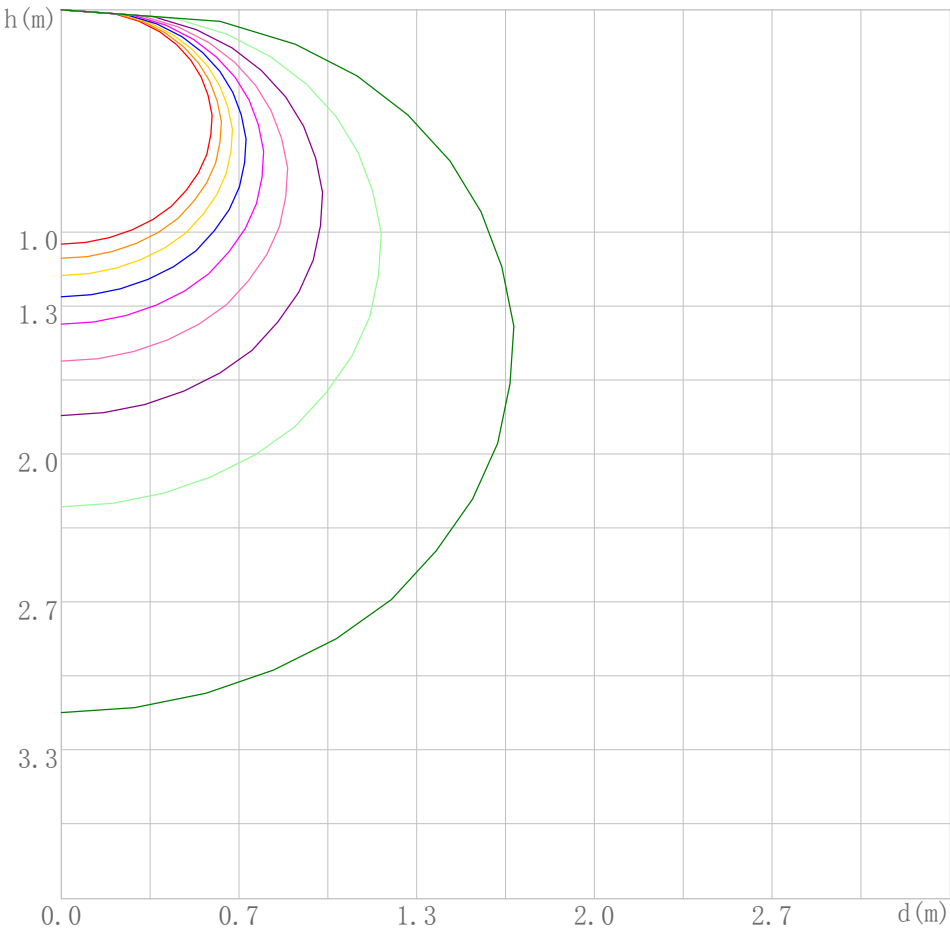
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: TR09-06-DW-03 1800-3000K RA90 150D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/29

Space ISO Illuminance Curve

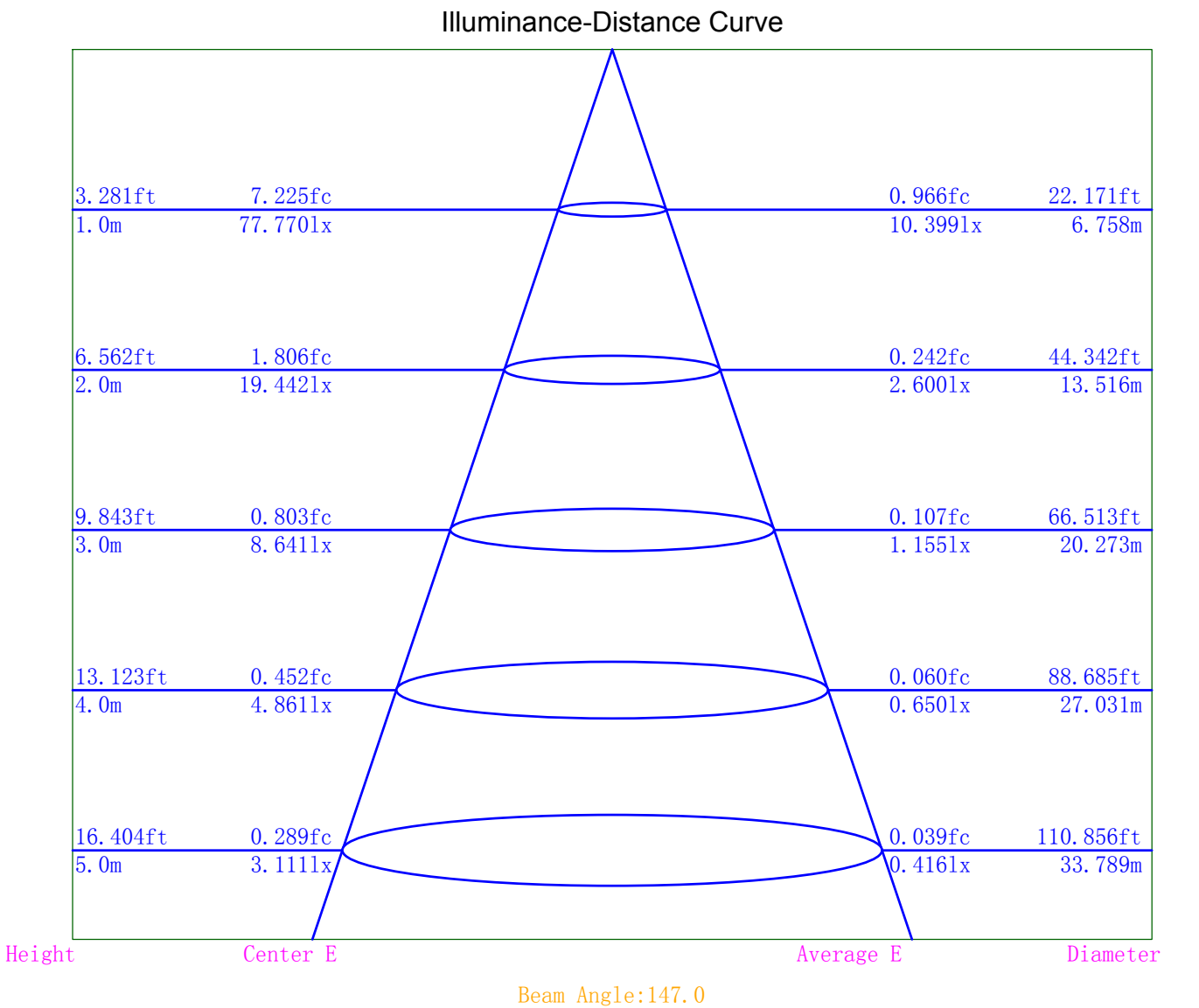


- Curves:
[Unit: lx]
[EMax] =77.770
- [EMax*90%]=69.993
 - [EMax*80%]=62.216
 - [EMax*70%]=54.439
 - [EMax*60%]=46.662
 - [EMax*50%]=38.885
 - [EMax*40%]=31.108
 - [EMax*30%]=23.331
 - [EMax*20%]=15.554
 - [EMax*10%]=7.777

Space Plane Maximum Illuminance and @Angle:77.77lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:77.770cd,0deg

Illuminance-Distance Diagram

Lum. Name: TR09-06-DW-03 1800-3000K RA90 150D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/29



Indoor Luminance Limiting Curves

Lum. Name: TR09-06-DW-03 1800-3000K RA90 150D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/29

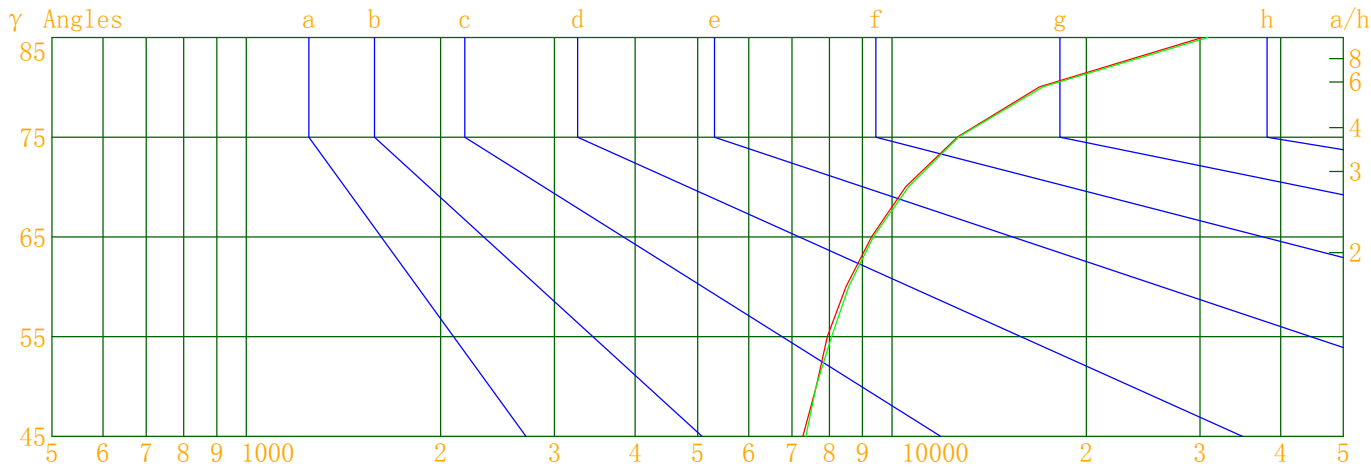
Glare Grade Table

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	7278	7633	7944	8491	9304	10506	12645	16932	30248
C90	7355	7630	8067	8571	9363	10612	12699	17132	30832

Luminance Limiting Curve



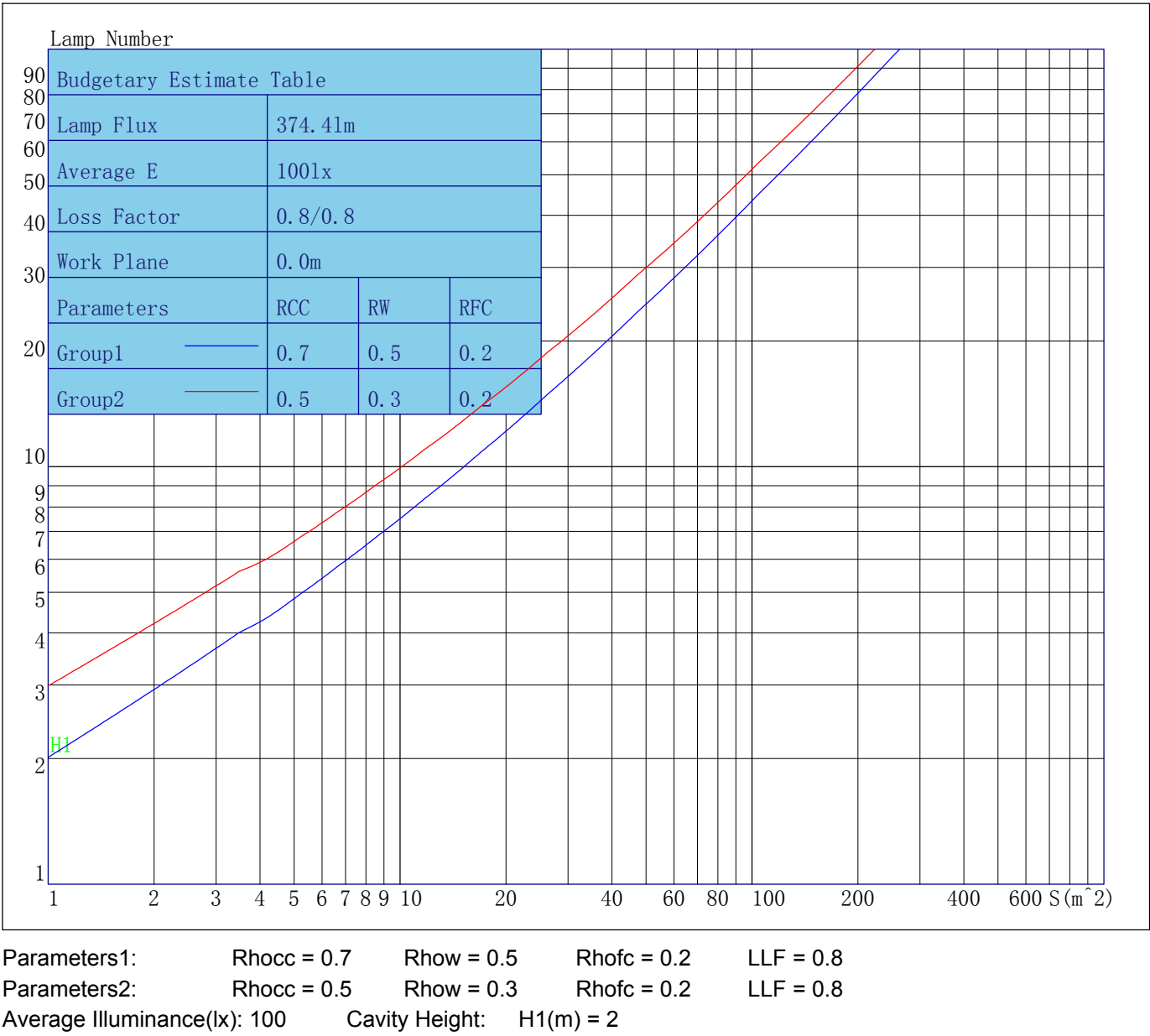
Luminous Size: Length(m)=0.110 Width(m)=0.110 Height(m)=0.000 Area(m^2)=0.012100

Luminous Type: Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name: TR09-06-DW-03 1800-3000K RA90 150D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/29



Indoor Coefficient of Utilization Table

Lum. Name: TR09-06-DW-03 1800-3000K RA90 150D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/29

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	115	115	115	115	111	111	111	111	103	103	103	95	95	95	88	88	88	85
1	101	95	89	84	97	91	86	82	84	80	76	78	74	71	72	69	66	63
2	91	81	73	66	87	78	70	64	72	65	60	66	61	56	61	57	53	50
3	82	70	61	53	78	67	59	52	62	55	49	57	51	46	53	48	43	40
4	75	61	52	44	71	59	50	43	54	47	41	50	44	38	46	41	36	34
5	68	54	44	37	65	52	43	36	48	41	35	45	38	33	41	36	31	28
6	63	49	39	32	60	47	38	31	43	36	30	40	34	28	37	31	27	24
7	58	44	34	28	55	42	34	27	39	32	26	36	30	25	34	28	24	21
8	54	40	31	25	51	38	30	24	36	28	23	33	27	22	31	25	21	19
9	50	36	28	22	48	35	27	22	33	26	21	31	24	20	29	23	19	17
10	47	33	25	20	45	32	25	19	30	23	19	28	22	18	27	21	17	15

Unified Glare Rating Table

Lum. Name: TR09-06-DW-03 1800-3000K RA90 150D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/29

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	18.4	19.9	19.0	20.5	21.2	18.5	19.9	19.1	20.5	21.2
	21.1	22.4	21.6	23.0	23.7	21.1	22.4	21.7	23.0	23.7
	22.5	23.8	23.1	24.4	25.1	22.5	23.8	23.1	24.4	25.1
	24.0	25.2	24.6	25.8	26.6	24.1	25.3	24.7	25.9	26.6
	24.9	26.0	25.5	26.7	27.4	24.9	26.1	25.6	26.7	27.4
	25.9	27.0	26.5	27.6	28.4	25.9	27.0	26.6	27.7	28.4
X=4H Y=2H	19.4	20.7	20.0	21.3	22.0	19.5	20.8	20.1	21.4	22.1
	22.3	23.4	22.9	24.0	24.7	22.3	23.4	22.9	24.0	24.8
	23.8	24.9	24.5	25.5	26.3	23.9	24.9	24.5	25.5	26.3
	25.6	26.5	26.2	27.2	27.9	25.6	26.5	26.3	27.2	28.0
	26.5	27.4	27.2	28.1	28.8	26.6	27.4	27.2	28.1	28.9
	27.6	28.4	28.3	29.1	29.9	27.7	28.5	28.4	29.2	30.0
X=8H Y=4H	24.5	25.4	25.2	26.1	26.8	24.5	25.4	25.2	26.1	26.9
	26.5	27.3	27.2	28.0	28.9	26.5	27.3	27.2	28.0	28.9
	27.7	28.3	28.3	29.0	29.8	27.7	28.4	28.4	29.1	29.9
	29.0	29.6	29.7	30.3	31.1	29.0	29.6	29.7	30.4	31.2
X=12H Y=4H	24.7	25.5	25.4	26.2	27.0	24.7	25.5	25.4	26.2	27.0
	26.8	27.5	27.5	28.2	29.0	26.8	27.5	27.5	28.2	29.0
	28.0	28.6	28.7	29.4	30.2	28.1	28.7	28.8	29.4	30.3
Variations with the objerver position at spacings										
S=1.0H	0.0/-0.0					0.1/-0.1				
S=1.5H	0.1/-0.1					0.1/-0.1				
S=2.0H	0.1/-0.2					0.1/-0.2				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	5.9					5.9				

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	77.77	77.77	77.77	77.77
γ 5.0	77.57	77.53	76.99	77.02
γ 10.0	77.02	77.02	76.26	76.03
γ 15.0	76.18	76.53	74.85	74.83
γ 20.0	75.10	75.18	73.00	72.91
γ 25.0	73.60	73.16	70.79	70.93
γ 30.0	70.95	71.27	68.20	68.73
γ 35.0	68.58	68.54	65.49	65.39
γ 40.0	65.79	66.11	62.44	62.84
γ 45.0	62.27	62.93	58.79	59.34
γ 50.0	59.37	59.35	55.24	55.66
γ 55.0	55.13	55.99	51.69	51.85
γ 60.0	51.37	51.85	47.81	48.17
γ 65.0	47.58	47.88	43.94	43.83
γ 70.0	43.48	43.92	39.71	40.19
γ 75.0	39.60	39.77	36.09	36.73
γ 80.0	35.58	36.00	32.61	32.40
γ 85.0	31.90	32.51	28.94	29.40
γ 90.0	28.45	28.95	26.02	25.72
γ 95.0	25.05	25.15	22.71	22.41
γ 100.0	21.89	7.77	19.71	5.79
γ 105.0	19.13	7.08	17.18	5.32
γ 110.0	16.39	5.42	14.67	3.24
γ 115.0	10.46	4.79	10.90	2.81
γ 120.0	5.34	5.05	4.85	3.64
γ 125.0	5.94	7.66	5.74	6.11
γ 130.0	6.21	6.51	5.61	5.12
γ 135.0	4.92	5.49	4.11	4.37
γ 140.0	3.35	4.36	2.68	3.10
γ 145.0	2.19	3.42	1.75	2.72
γ 150.0	1.61	2.76	1.51	2.34
γ 155.0	1.65	2.21	1.53	1.84
γ 160.0	1.76	1.86	1.50	1.53
γ 165.0	1.47	1.53	1.76	1.25
γ 170.0	1.32	1.79	1.60	1.24
γ 175.0	1.24	1.24	1.39	1.08
γ 180.0	1.46	1.46	1.46	1.46