

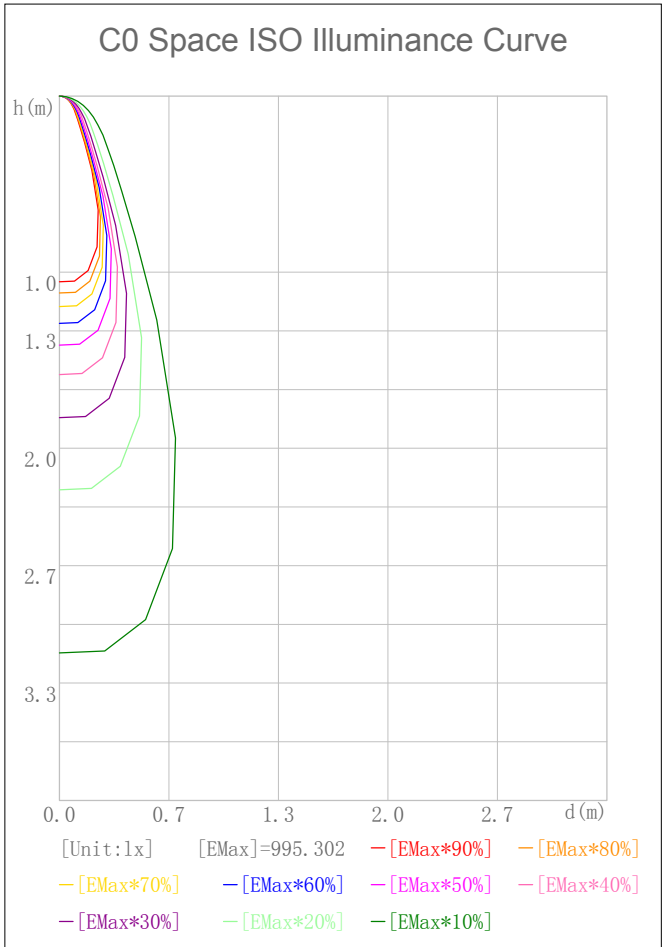
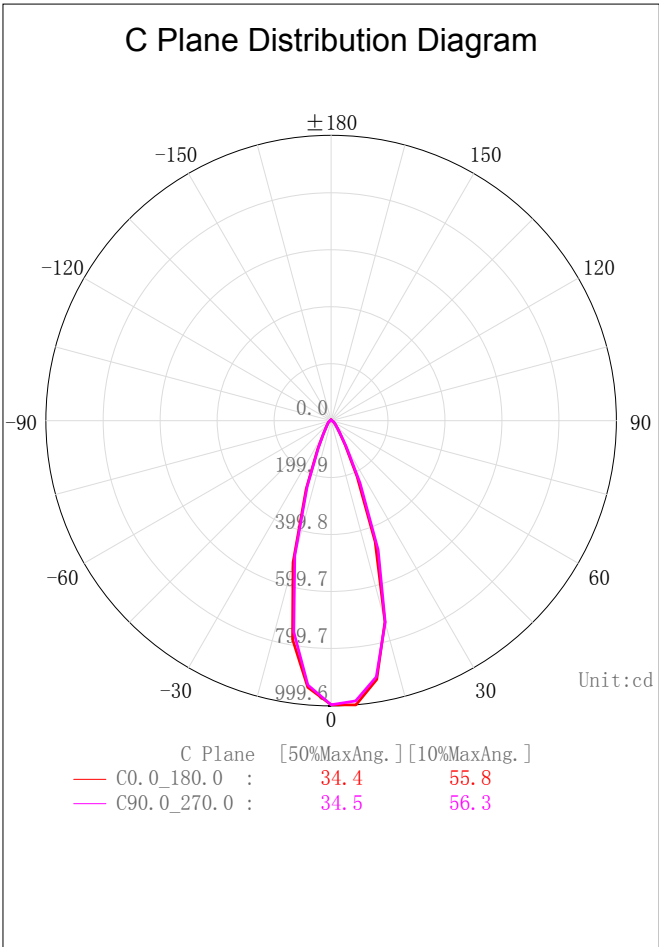
Indoor Luminaire Photometric Data

Description Information

Luminary Name:TR09-06-DW-01 1800-3000K RA90 36D		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):0.076m*0.076m*0.000m		Lum. Area (m2):0.006	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25	Humidity(%): 50.0

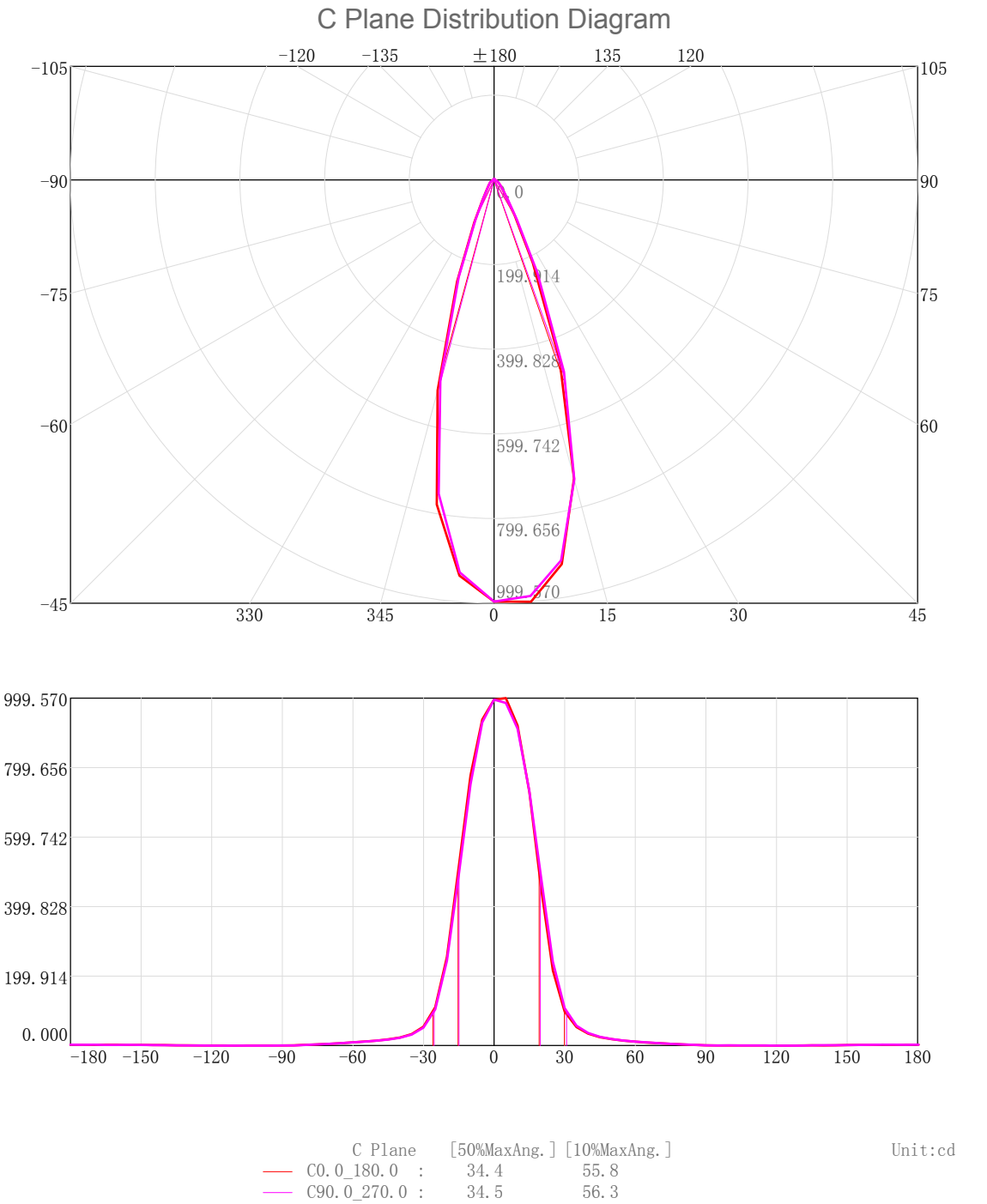
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 418.890	Luminary Flux(lm): 418.887	Field Angle(10%Imax): 55.8(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 414.339lm 98.91%	
Rated Voltage(V):	Luminary EER(lm/W): 72.334	Up Lumens&Percent: 4.548lm 1.09%	
Tested Power(W): 5.791	Max. Candela(cd): 999.570	S/MH: C0_a180=0.578 C90_270=0.576	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=5.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf):239.9, 0.028, 0.834	Beam Angle(50%Imax): 34.4(°)	ErP ϕ use(90°): 382.698lm	
Lamp Size(W*L*H):0.076m*0.076m*0.000m	Left=-15.3°, Right=19.1°	IRF(%): 495.329	



2D Plane Light Intensity Distribution Curve

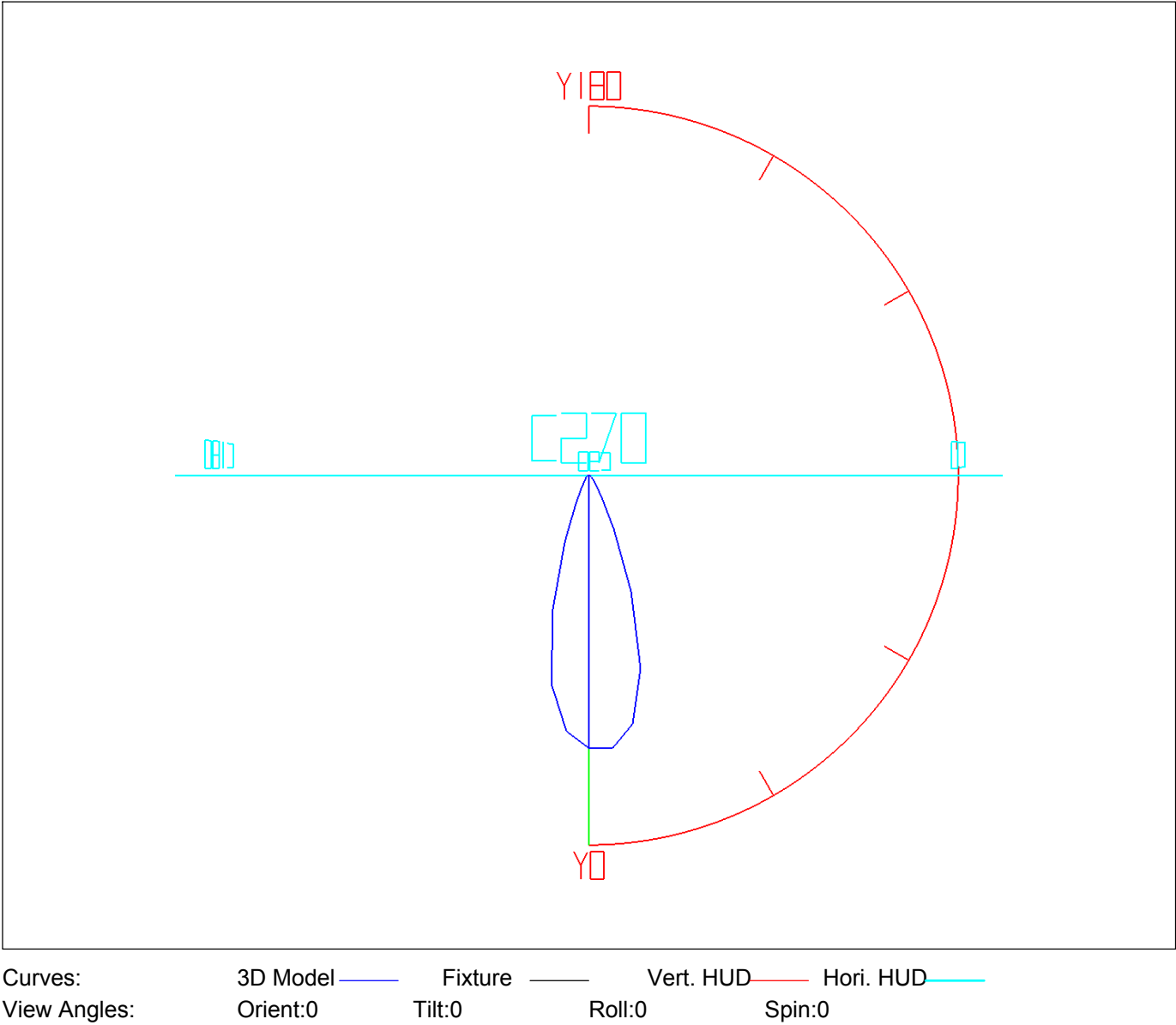
Lum. Name:TR09-06-DW-01 1800-3000K RA90 36D	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/29



3D Light Intensity Distribution Modal

Lum. Name: TR09-06-DW-01 1800-3000K RA90 36D	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

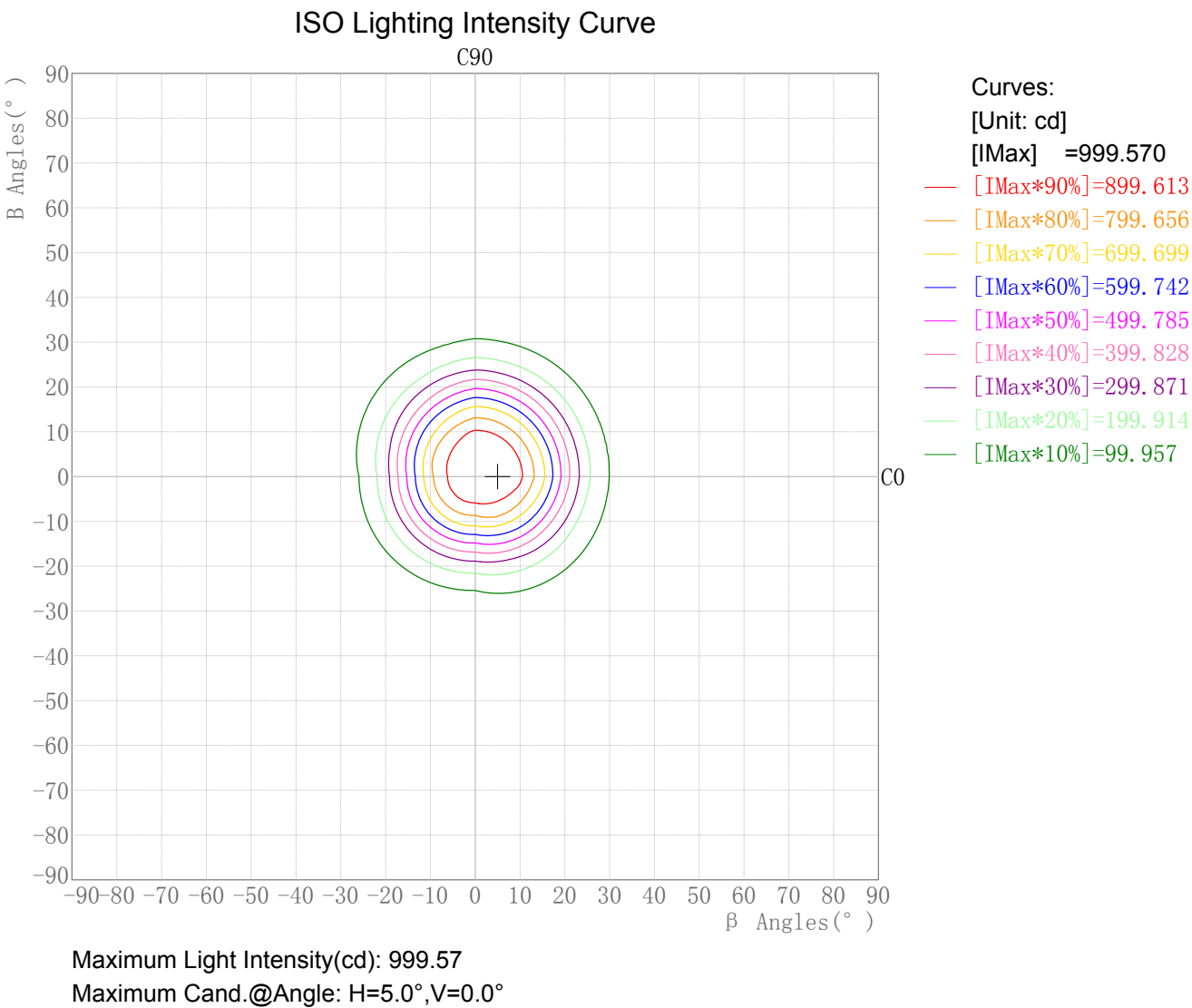


Zonal Flux Tabulation

Zone( γ )	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	23.41	23.41	5.59	5.59
5.0-10.0	64.53	87.95	15.41	21.00
10.0-15.0	86.45	174.40	20.64	41.63
15.0-20.0	80.34	254.74	19.18	60.81
20.0-25.0	55.21	309.95	13.18	73.99
25.0-30.0	31.14	341.09	7.43	81.43
30.0-35.0	17.92	359.01	4.28	85.70
35.0-40.0	12.15	371.16	2.90	88.61
40.0-45.0	9.32	380.48	2.22	90.83
45.0-50.0	7.62	388.10	1.82	92.65
50.0-55.0	6.42	394.51	1.53	94.18
55.0-60.0	5.41	399.92	1.29	95.47
60.0-65.0	4.51	404.43	1.08	96.55
65.0-70.0	3.61	408.04	0.86	97.41
70.0-75.0	2.74	410.78	0.65	98.06
75.0-80.0	1.91	412.69	0.46	98.52
80.0-85.0	1.11	413.80	0.26	98.79
85.0-90.0	0.54	414.34	0.13	98.91
90.0-95.0	0.25	414.59	0.06	98.97
95.0-100.0	0.17	414.77	0.04	99.02
100.0-105.0	0.17	414.94	0.04	99.06
105.0-110.0	0.12	415.06	0.03	99.09
110.0-115.0	0.12	415.18	0.03	99.11
115.0-120.0	0.10	415.28	0.02	99.14
120.0-125.0	0.09	415.36	0.02	99.16
125.0-130.0	0.14	415.51	0.03	99.19
130.0-135.0	0.24	415.74	0.06	99.25
135.0-140.0	0.35	416.09	0.08	99.33
140.0-145.0	0.42	416.51	0.10	99.43
145.0-150.0	0.47	416.98	0.11	99.54
150.0-155.0	0.50	417.48	0.12	99.66
155.0-160.0	0.46	417.94	0.11	99.77
160.0-165.0	0.40	418.34	0.09	99.87
165.0-170.0	0.31	418.64	0.07	99.94
170.0-175.0	0.18	418.83	0.04	99.98
175.0-180.0	0.06	418.89	0.01	100.00

Rectangle ISO Lighting Intensity Diagram

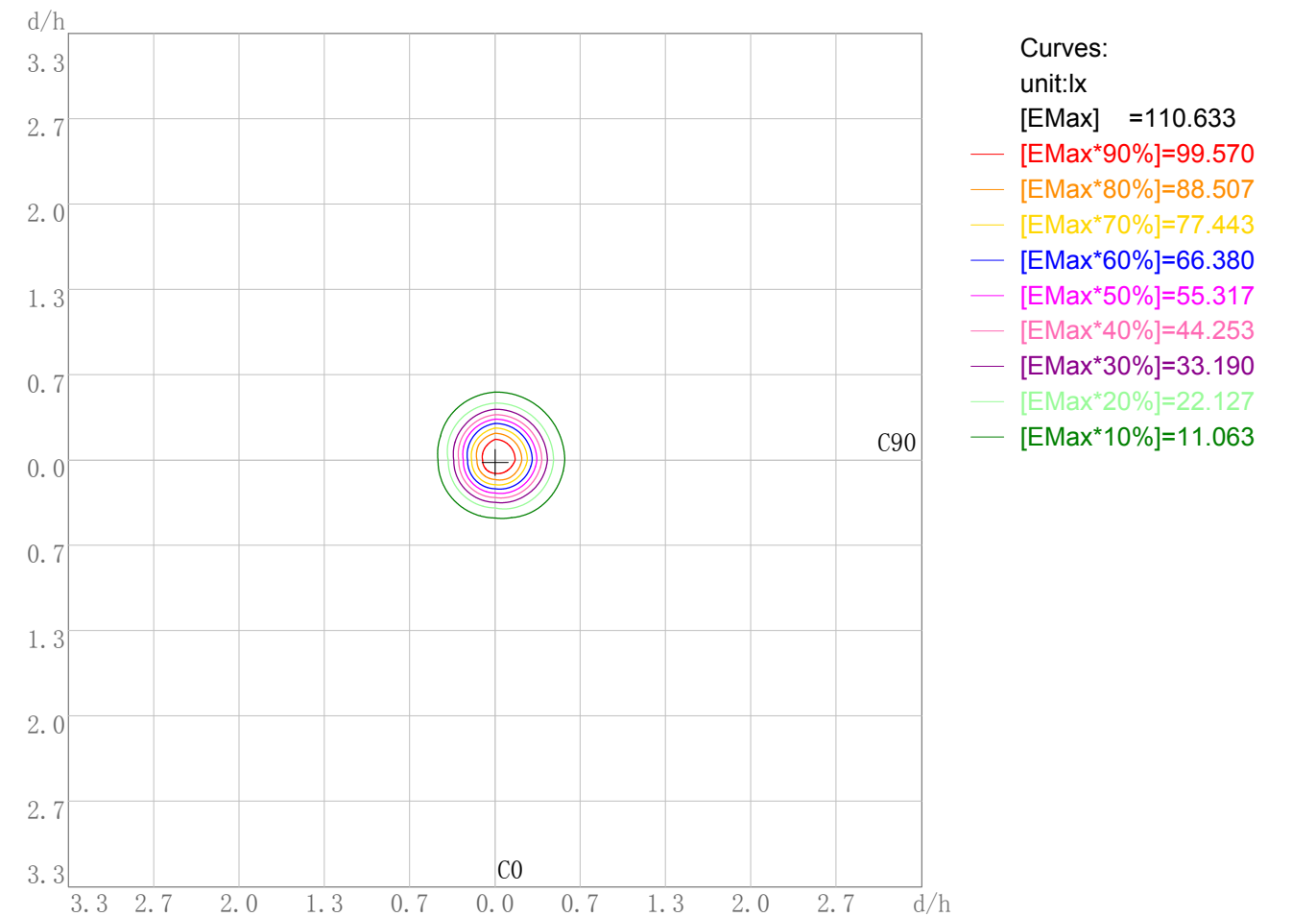
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Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/29



Plane ISO-Illuminance Diagram

Lum. Name: TR09-06-DW-01 1800-3000K RA90 36D	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

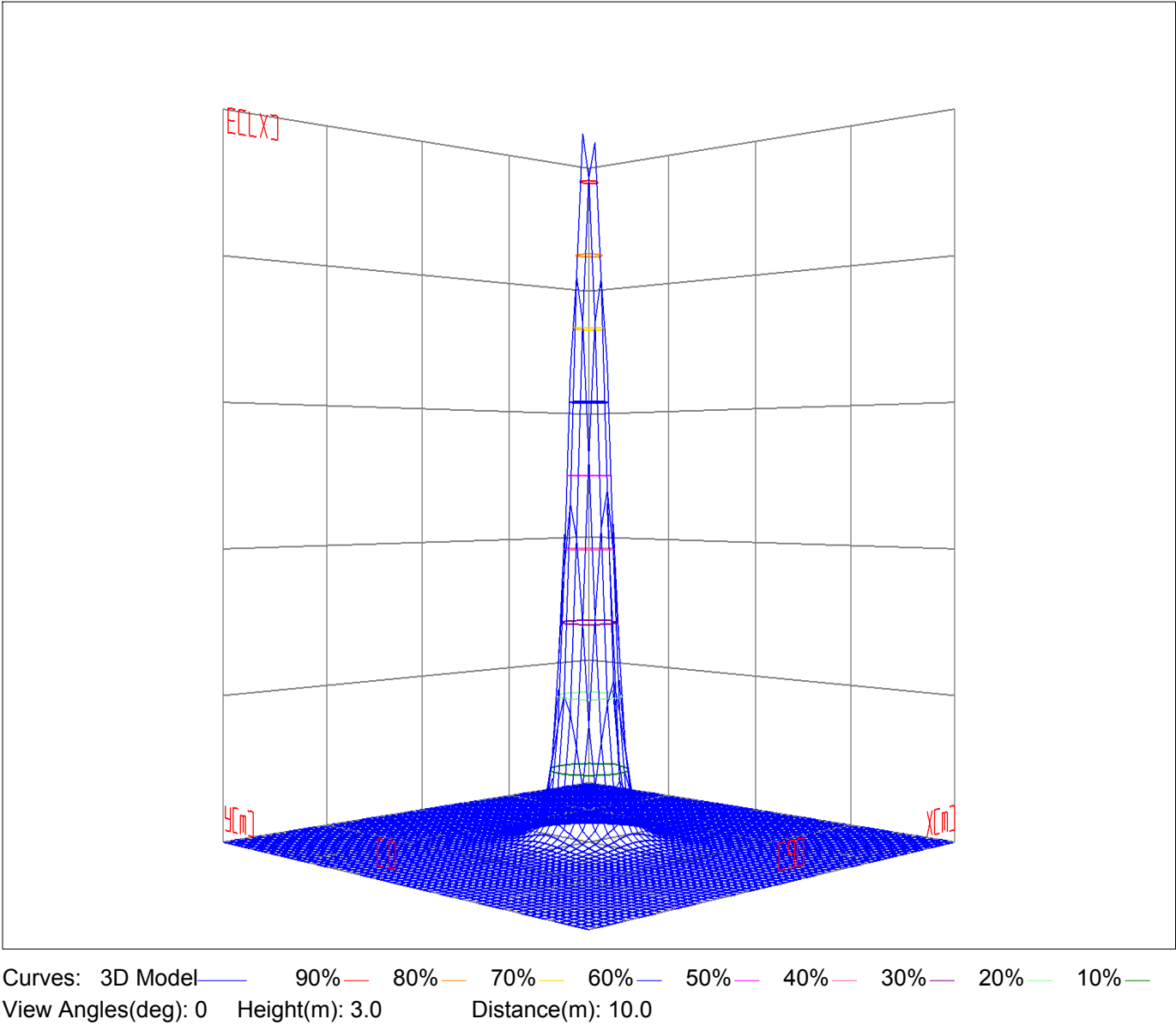
Working Plane Maximum Illuminance(lx): 110.63

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

3D Plane ISO Illuminance Diagram

Lum. Name: TR09-06-DW-01 1800-3000K RA90 36D	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

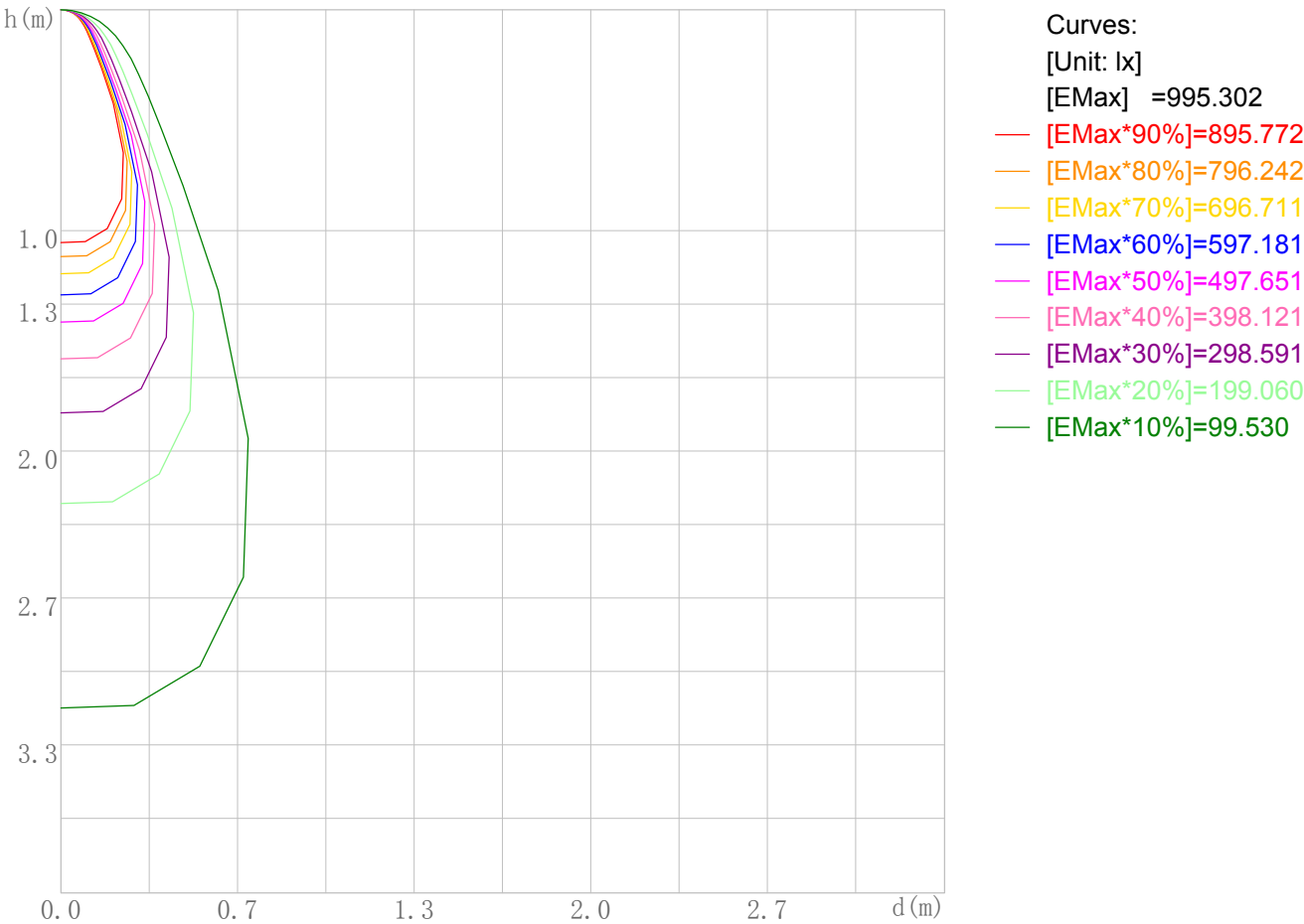
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: TR09-06-DW-01 1800-3000K RA90 36D	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

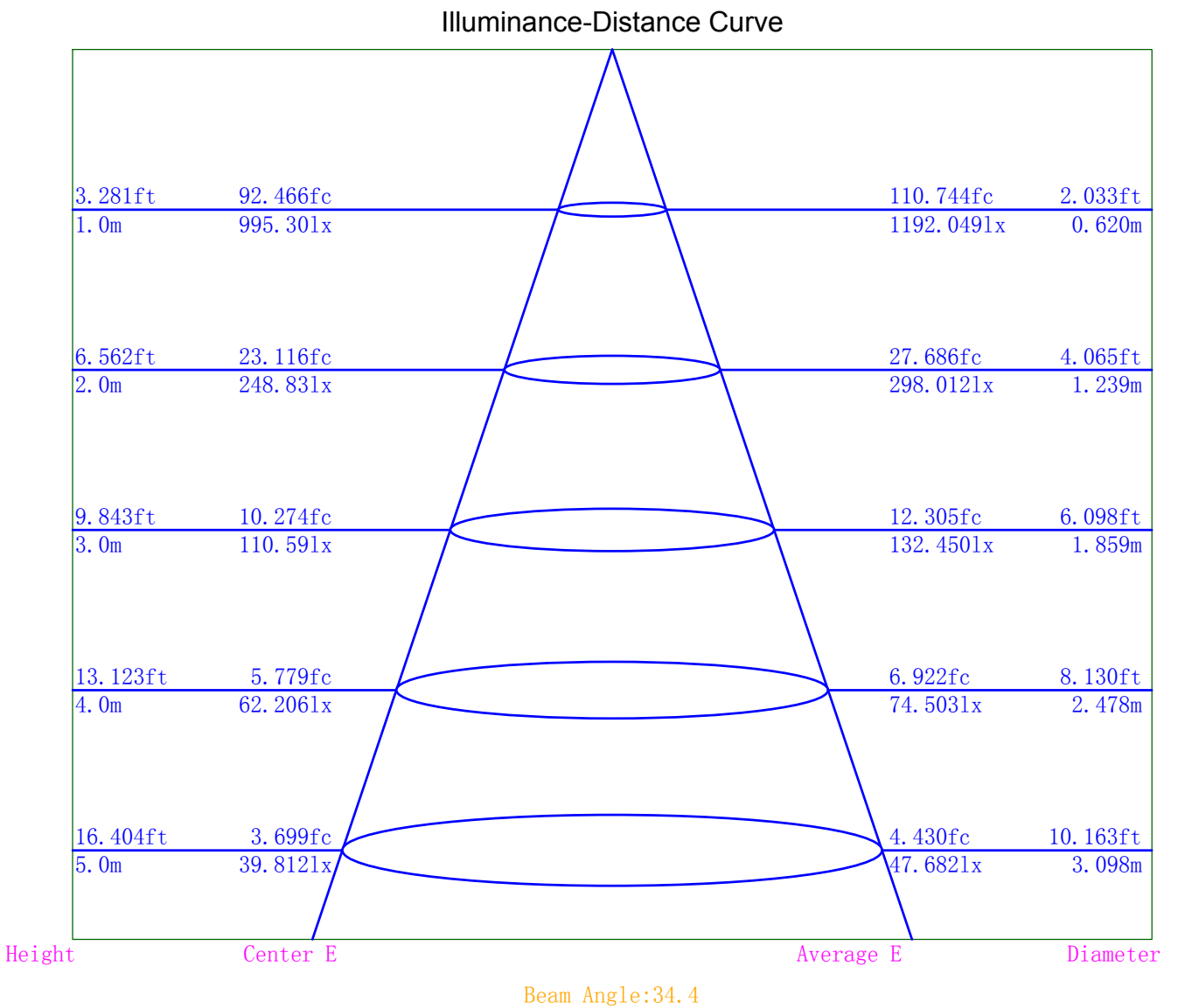


Space Plane Maximum Illuminance and @Angle:995.30lx,0.0deg  
Plane Maximum Lighting Intensity and @Angle:999.570cd,0deg



Illuminance-Distance Diagram

Lum. Name: TR09-06-DW-01 1800-3000K RA90 36D	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-01 1800-3000K RA90 36D	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

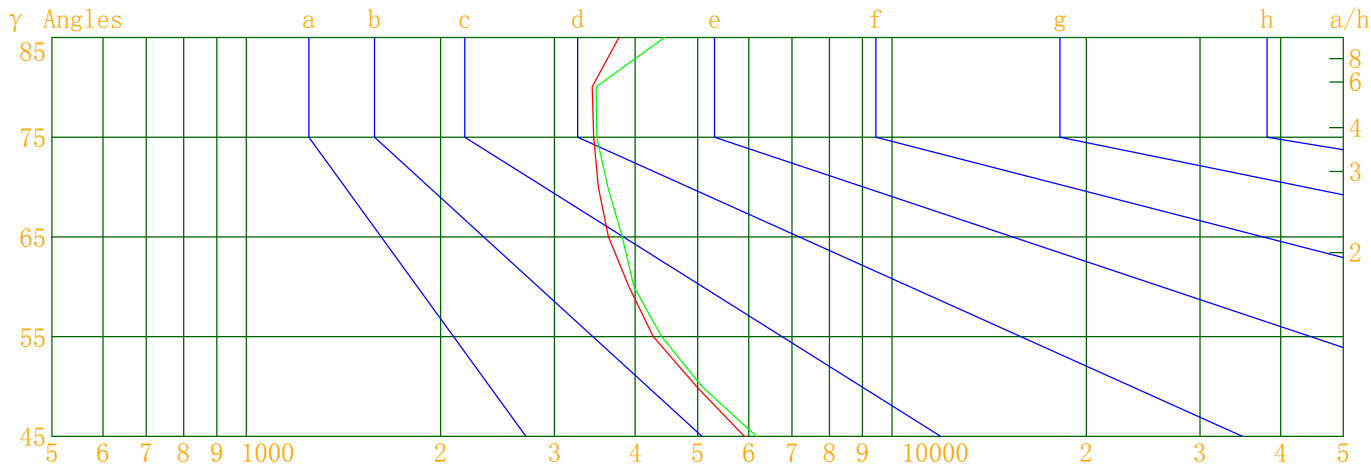
Glare Grade Table

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	5904	4978	4267	3913	3637	3508	3452	3433	3776
C90	6168	5075	4395	3982	3819	3629	3489	3483	4442

Luminance Limiting Curve



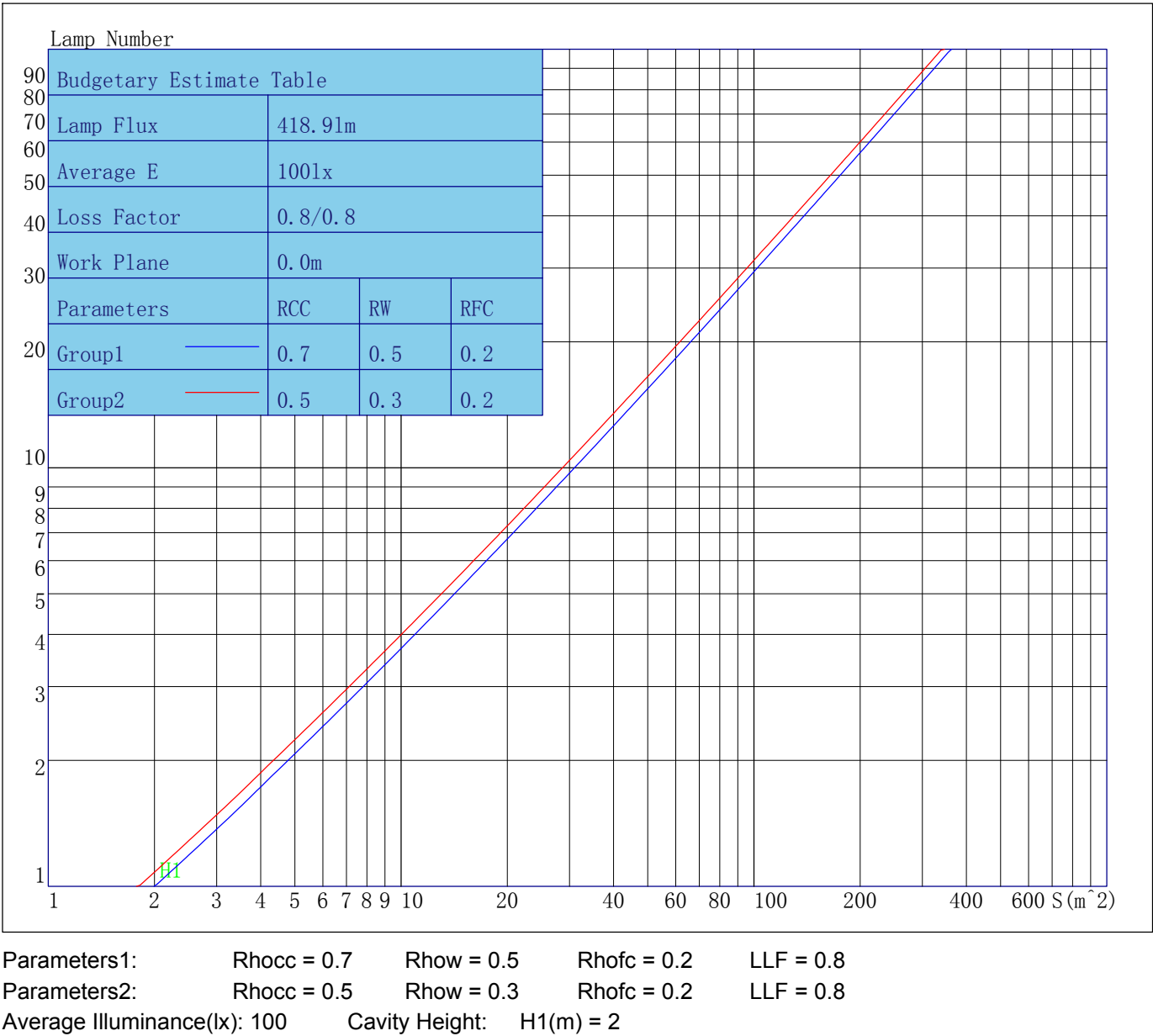
Luminous Size: Length(m)=0.076 Width(m)=0.076 Height(m)=0.000 Area(m^2)=0.005776

Luminous Type: Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name: TR09-06-DW-01 1800-3000K RA90 36D	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-01 1800-3000K RA90 36D	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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	113	111	108	106	111	108	106	104	104	102	101	100	99	98	97	96	95	93
2	108	104	100	97	106	102	98	95	98	96	93	95	93	91	92	91	89	87
3	103	97	93	89	101	96	92	88	93	90	87	91	88	85	88	86	84	82
4	99	92	87	83	97	91	86	83	89	85	82	87	83	81	85	82	80	78
5	95	87	82	78	93	86	82	78	85	80	77	83	79	76	81	78	76	74
6	91	83	78	74	90	82	77	74	81	76	73	79	76	73	78	75	72	71
7	88	79	74	70	86	79	74	70	77	73	70	76	72	69	75	72	69	68
8	84	76	71	67	83	75	71	67	74	70	67	73	69	66	72	69	66	65
9	81	73	68	64	80	72	68	64	72	67	64	71	67	64	70	66	63	62
10	79	70	65	62	78	70	65	62	69	64	61	68	64	61	67	64	61	60

Unified Glare Rating Table

Lum. Name: TR09-06-DW-01 1800-3000K RA90 36D	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	13.4	14.4	13.8	14.8	15.1	13.6	14.7	14.0	15.0	15.3
	14.4	15.3	14.8	15.6	16.0	14.6	15.5	15.0	15.9	16.3
	14.9	15.7	15.3	16.1	16.5	15.1	15.9	15.5	16.3	16.7
	15.3	16.1	15.7	16.4	16.9	15.5	16.2	15.9	16.6	17.1
	15.5	16.2	15.9	16.6	17.0	15.7	16.4	16.1	16.8	17.2
	15.6	16.3	16.1	16.7	17.2	15.9	16.5	16.3	16.9	17.4
X=4H    Y=2H	13.7	14.5	14.1	14.9	15.3	13.9	14.7	14.3	15.1	15.5
	14.9	15.6	15.4	16.0	16.5	15.1	15.8	15.5	16.2	16.7
	15.5	16.1	16.0	16.6	17.0	15.7	16.3	16.2	16.8	17.2
	16.1	16.6	16.6	17.1	17.6	16.3	16.8	16.8	17.3	17.8
	16.3	16.8	16.8	17.3	17.8	16.5	17.0	17.0	17.5	18.0
	16.5	16.9	17.0	17.5	18.0	16.8	17.2	17.3	17.7	18.2
X=8H    Y=4H	15.7	16.2	16.2	16.6	17.1	15.9	16.3	16.4	16.8	17.3
	16.4	16.8	16.9	17.3	17.8	16.6	17.0	17.1	17.5	18.0
	16.7	17.1	17.3	17.6	18.1	16.9	17.3	17.5	17.8	18.3
	17.1	17.3	17.6	17.9	18.5	17.3	17.6	17.9	18.1	18.7
X=12H    Y=4H	15.7	16.1	16.2	16.6	17.1	15.9	16.3	16.4	16.8	17.3
	16.4	16.8	17.0	17.3	17.8	16.6	16.9	17.2	17.4	18.0
	16.8	17.1	17.4	17.6	18.2	17.0	17.3	17.6	17.8	18.4
Variations with the objverver position at spacings										
S=1.0H	0.3/-0.4					0.4/-0.4				
S=1.5H	0.6/-0.7					0.6/-0.6				
S=2.0H	0.8/-0.9					0.7/-0.8				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	2.4					2.5				

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	995.30	995.30	995.30	995.30
γ 5.0	999.57	985.85	937.75	929.82
γ 10.0	920.90	911.89	778.03	752.16
γ 15.0	729.33	732.15	514.44	490.41
γ 20.0	452.11	482.06	255.04	244.04
γ 25.0	216.11	241.37	110.55	104.29
γ 30.0	97.62	107.84	54.72	51.65
γ 35.0	53.33	57.13	33.00	31.54
γ 40.0	34.27	36.21	23.30	22.58
γ 45.0	24.11	25.19	18.14	17.49
γ 50.0	18.48	18.84	14.42	14.18
γ 55.0	14.14	14.56	12.03	11.37
γ 60.0	11.30	11.50	9.34	9.40
γ 65.0	8.88	9.32	7.11	7.30
γ 70.0	6.93	7.17	5.13	5.22
γ 75.0	5.16	5.22	3.69	3.41
γ 80.0	3.44	3.49	2.34	1.80
γ 85.0	1.90	2.24	0.83	0.26
γ 90.0	0.77	0.86	0.55	0.46
γ 95.0	0.43	0.38	0.24	0.00
γ 100.0	0.47	0.68	0.37	0.01
γ 105.0	0.29	0.38	0.28	0.07
γ 110.0	0.40	0.36	0.10	0.00
γ 115.0	0.30	0.26	0.49	0.00
γ 120.0	0.04	0.17	0.34	0.00
γ 125.0	0.07	0.17	0.36	0.38
γ 130.0	0.31	0.12	0.72	0.47
γ 135.0	0.60	0.73	0.91	0.80
γ 140.0	0.54	1.19	1.48	1.34
γ 145.0	0.91	1.38	1.41	1.75
γ 150.0	1.62	1.41	2.20	2.11
γ 155.0	1.97	2.11	2.15	2.37
γ 160.0	2.03	2.19	2.65	2.02
γ 165.0	2.93	2.72	2.66	2.09
γ 170.0	2.42	2.62	2.49	2.68
γ 175.0	2.76	2.55	2.33	2.39
γ 180.0	2.64	2.64	2.64	2.64