

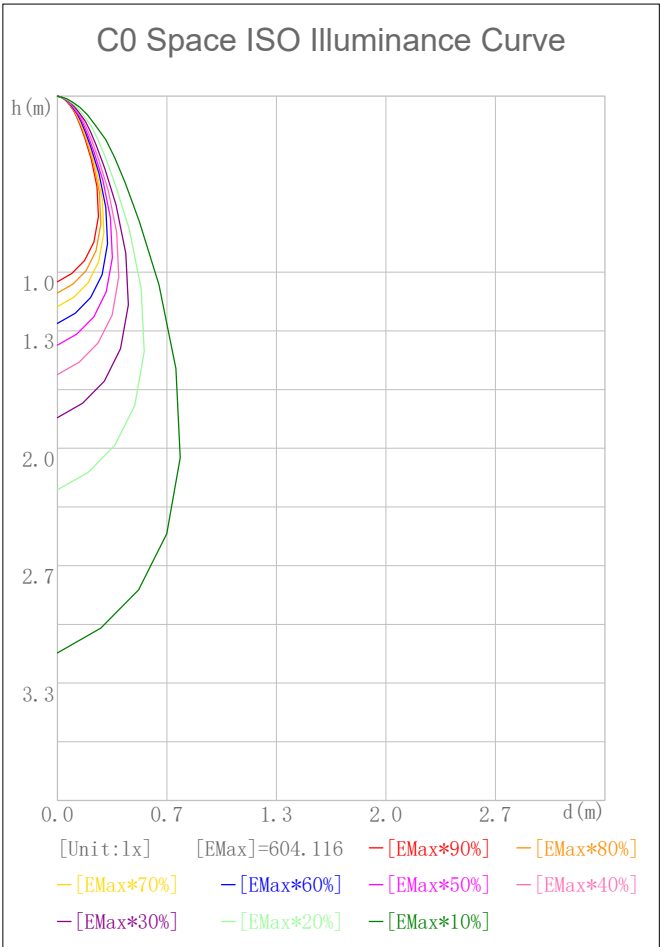
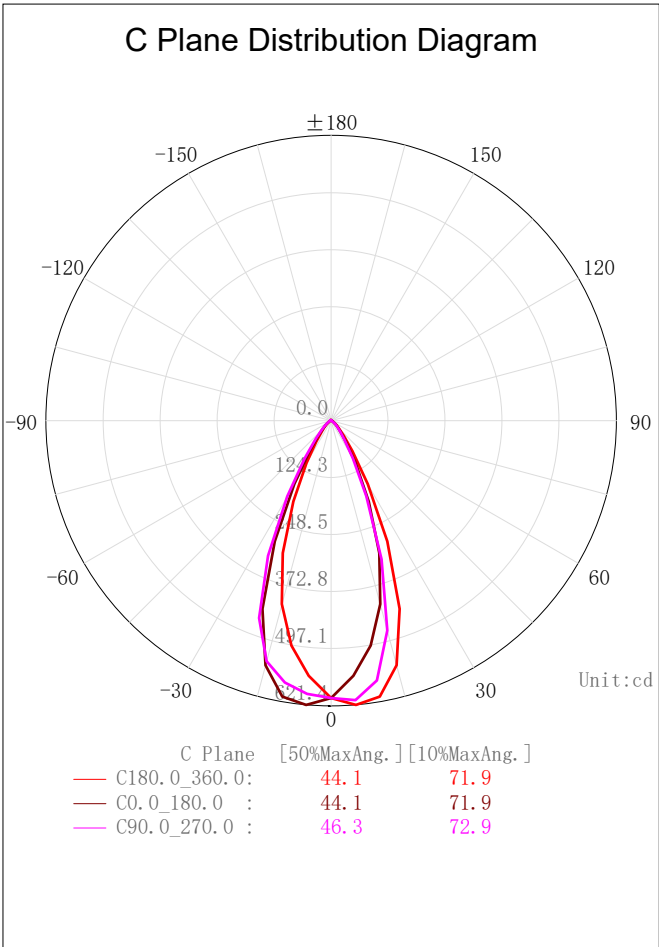
Indoor Luminaire Photometric Data

Description Information

Luminary Name: TR09-06-DW-02 1800-3000K RA90 36D		Lum. Catalog:	Test ID: 01
Lamp Name:		Lamp Catalog: LED	Test Date: 2022/08/18
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):0.039m*-0.039m*0.000m		Lum. Area (m2):0.001	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25	Humidity(%):

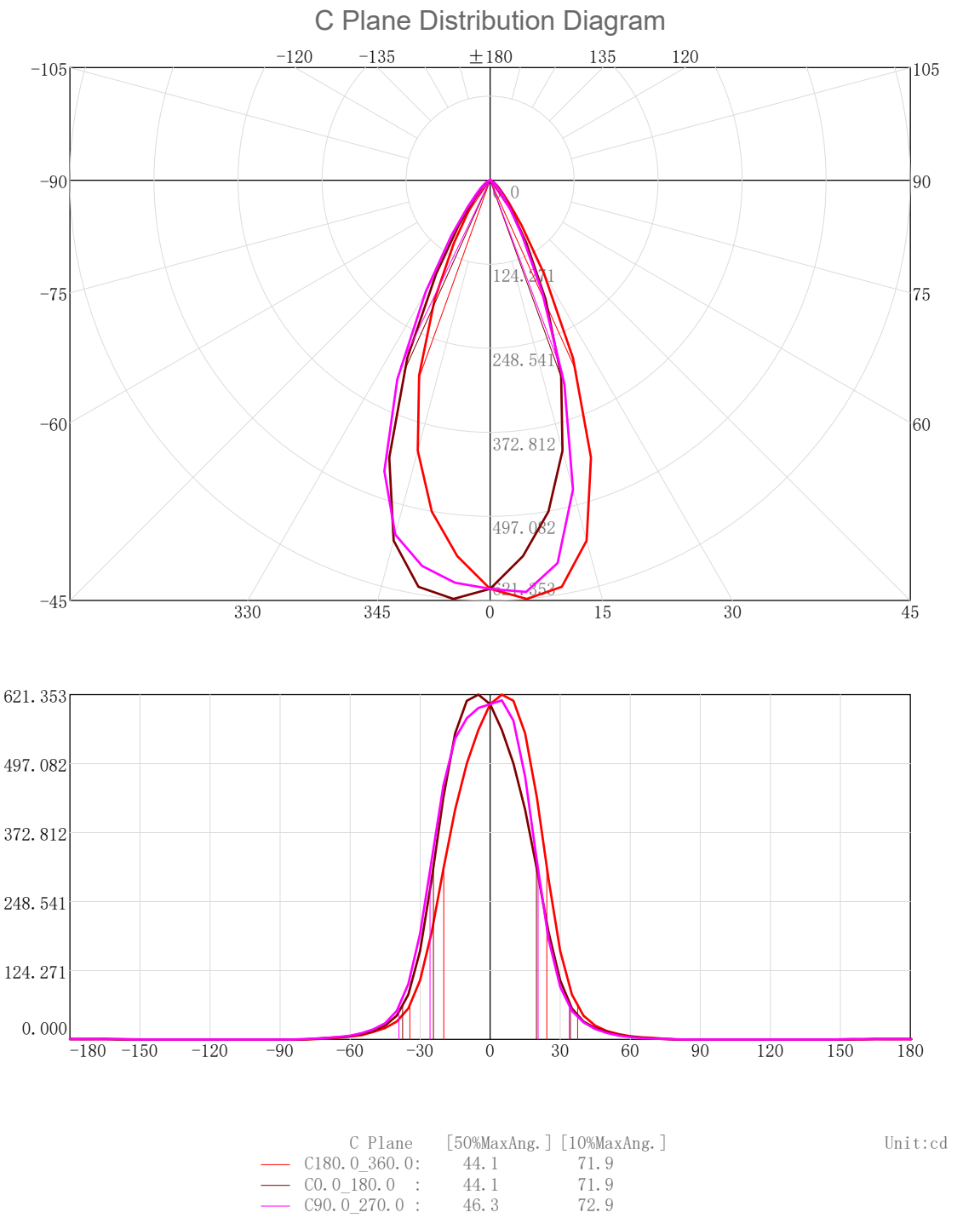
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 388.760	Luminary Flux(lm): 388.763	Field Angle(10%Imax): 71.9(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 388.314lm 99.88%	
Rated Voltage(V):	Luminary EER(lm/W): 66.878	Up Lumens&Percent: 0.449lm 0.12%	
Tested Power(W): 5.813	Max. Candela(cd): 621.353	S/MH: C0_a180=0.730 C90_270=0.763	
Lamps' Inside: 1	Max Cand@Ang. (°): C=180.0 γ=5.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf):240.0, 0.029, 0.891	Beam Angle(50%Imax): 44.1(°)	ErP ϕ use(90°): 365.902lm	
Lamp Size (W*L*H):0.039m*-0.039m*0.000m	Left=-19.8°, Right=24.3°	IRF(%): 364.523	



2D Plane Light Intensity Distribution Curve

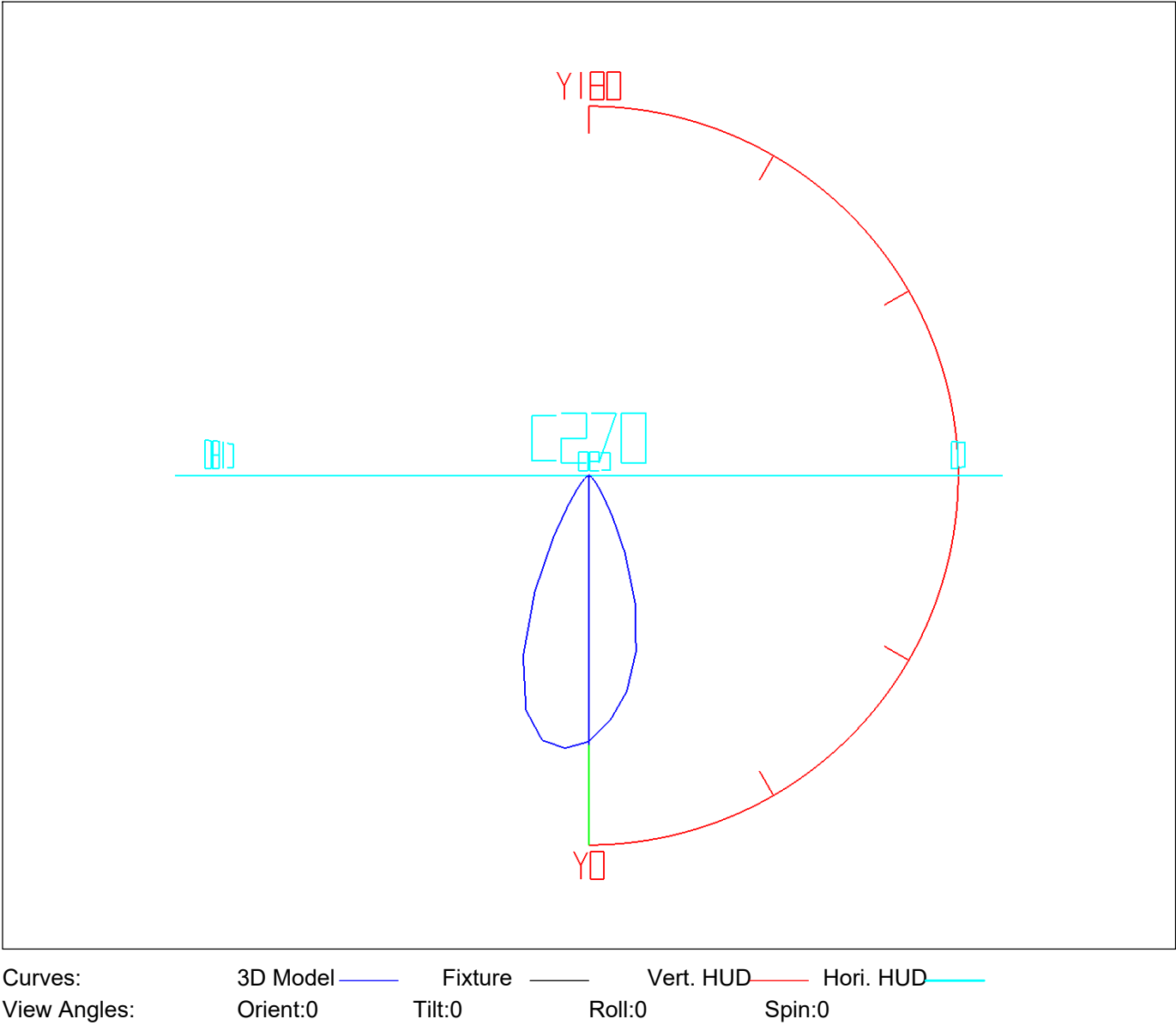
Lum. Name:TR09-06-DW-02 1800-3000K RA90 36D	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/18



3D Light Intensity Distribution Modal

Lum. Name:TR09-06-DW-02 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:2022/08/18

3D Light Intensity Distribution Modal

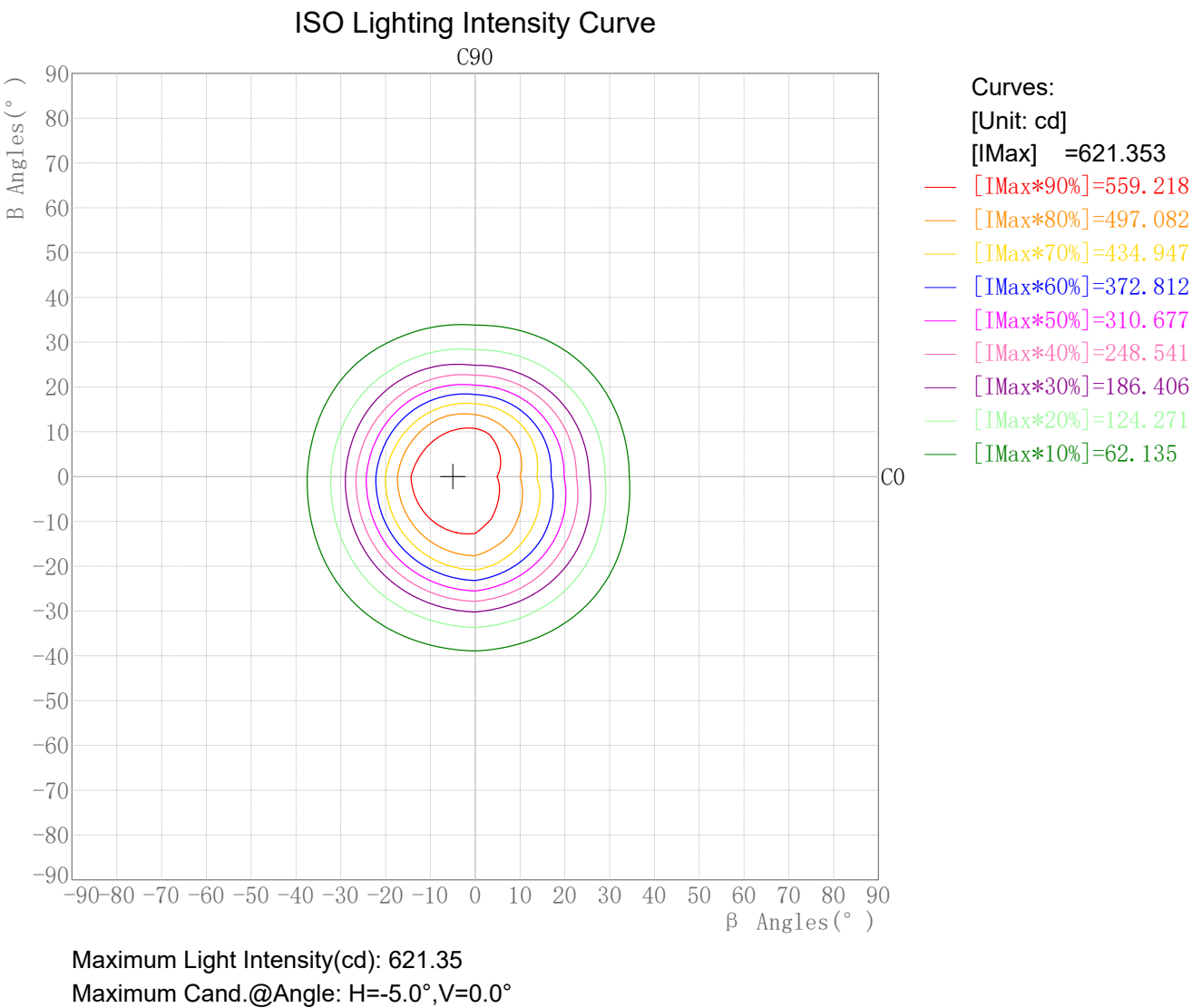


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	14.36	14.36	3.69	3.69
5.0-10.0	41.57	55.93	10.69	14.39
10.0-15.0	62.90	118.83	16.18	30.57
15.0-20.0	72.17	191.00	18.56	49.13
20.0-25.0	65.88	256.88	16.95	66.08
25.0-30.0	48.80	305.68	12.55	78.63
30.0-35.0	30.94	336.62	7.96	86.59
35.0-40.0	18.63	355.25	4.79	91.38
40.0-45.0	11.67	366.92	3.00	94.38
45.0-50.0	7.75	374.67	1.99	96.38
50.0-55.0	5.21	379.88	1.34	97.71
55.0-60.0	3.39	383.27	0.87	98.59
60.0-65.0	2.24	385.51	0.58	99.16
65.0-70.0	1.48	386.98	0.38	99.54
70.0-75.0	0.88	387.86	0.23	99.77
75.0-80.0	0.38	388.23	0.10	99.86
80.0-85.0	0.08	388.31	0.02	99.88
85.0-90.0	0.00	388.31	0.00	99.89
90.0-95.0	0.00	388.31	0.00	99.89
95.0-100.0	0.00	388.31	0.00	99.89
100.0-105.0	0.00	388.31	0.00	99.89
105.0-110.0	0.00	388.31	0.00	99.89
110.0-115.0	0.00	388.31	0.00	99.89
115.0-120.0	0.00	388.31	0.00	99.89
120.0-125.0	0.00	388.31	0.00	99.89
125.0-130.0	0.00	388.31	0.00	99.89
130.0-135.0	0.00	388.31	0.00	99.89
135.0-140.0	0.00	388.31	0.00	99.89
140.0-145.0	0.00	388.32	0.00	99.89
145.0-150.0	0.03	388.34	0.01	99.89
150.0-155.0	0.06	388.40	0.02	99.91
155.0-160.0	0.09	388.50	0.02	99.93
160.0-165.0	0.11	388.60	0.03	99.96
165.0-170.0	0.09	388.69	0.02	99.98
170.0-175.0	0.05	388.75	0.01	100.00
175.0-180.0	0.02	388.76	0.00	100.00

Rectangle ISO Lighting Intensity Diagram

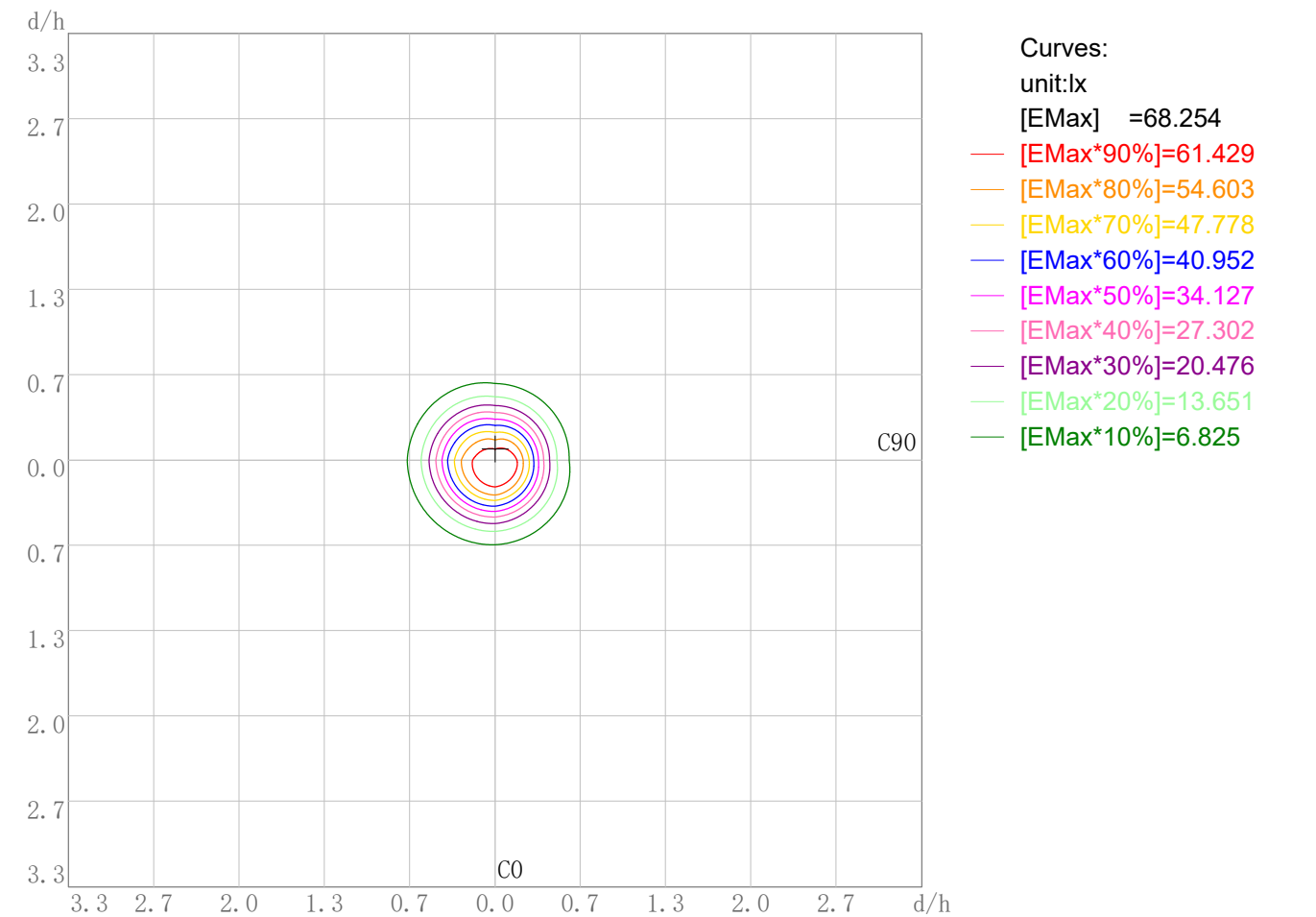
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Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/18



Plane ISO-Illuminance Diagram

Lum. Name:TR09-06-DW-02 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: 2022/08/18

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00

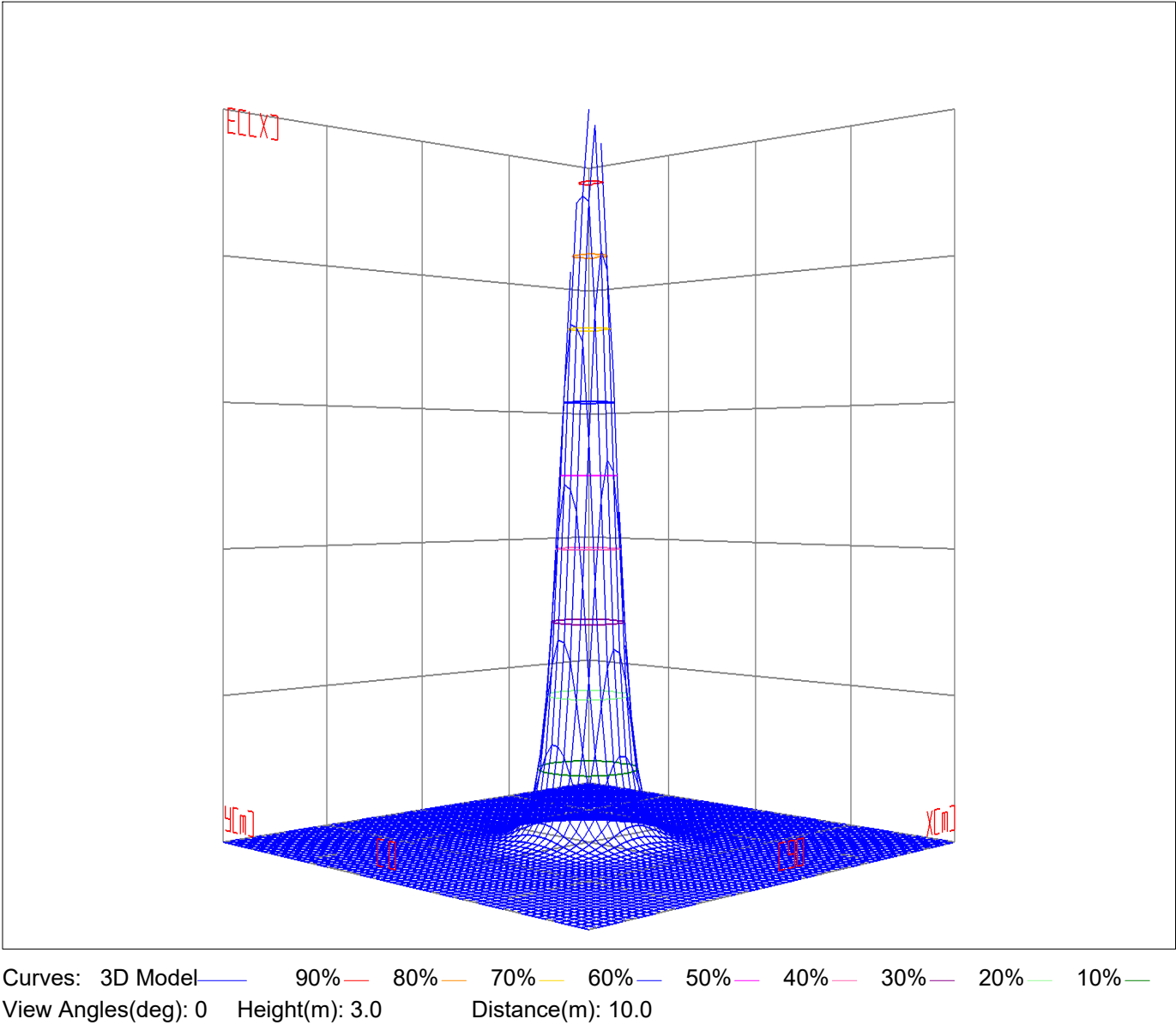
Working Plane Maximum Illuminance(lx): 68.25

Working Plane Maximum Illuminance Position(d/h):H0.0 V-0.1

3D Plane ISO Illuminance Diagram

Lum. Name:TR09-06-DW-02 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:2022/08/18

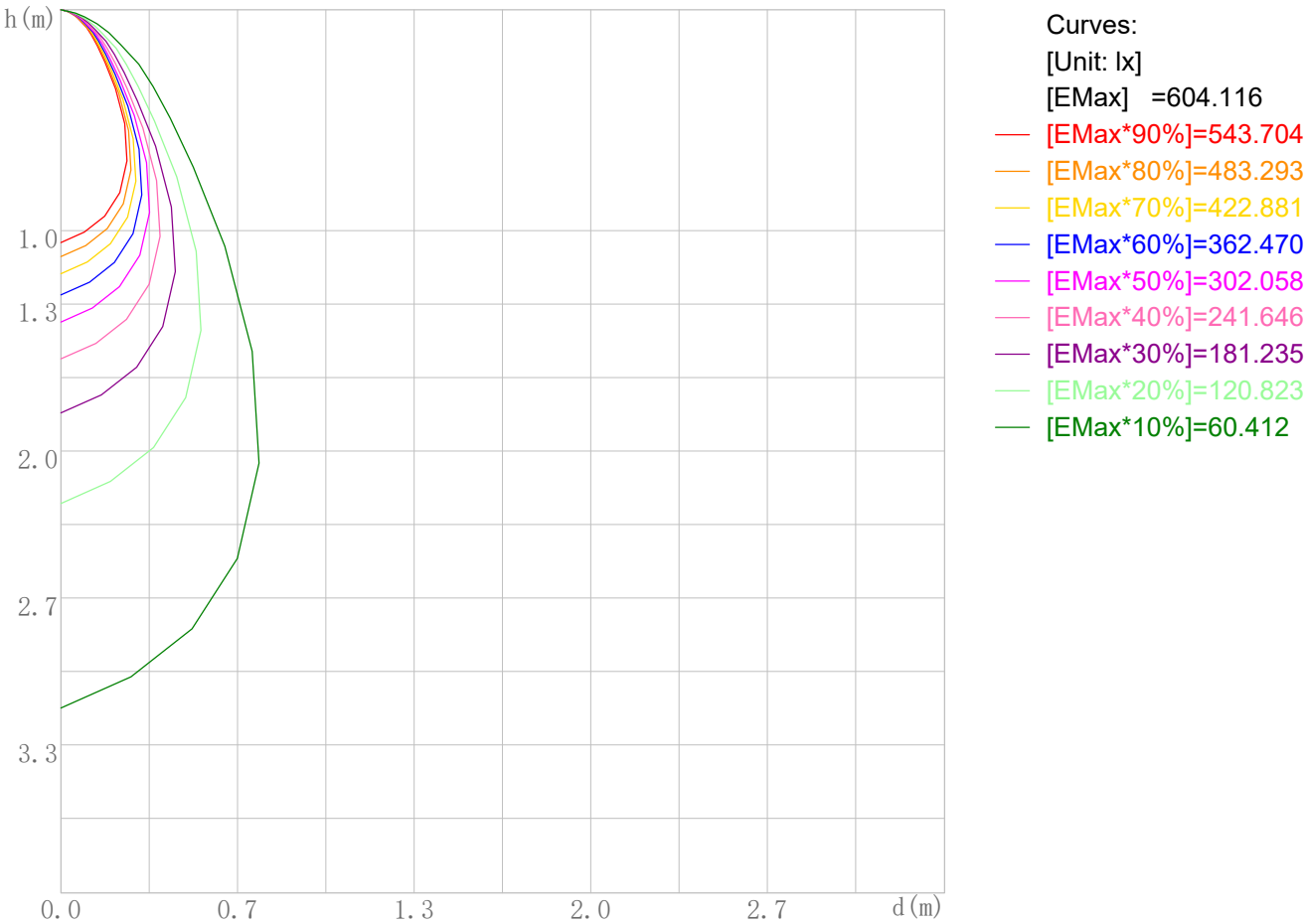
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name:TR09-06-DW-02 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:2022/08/18

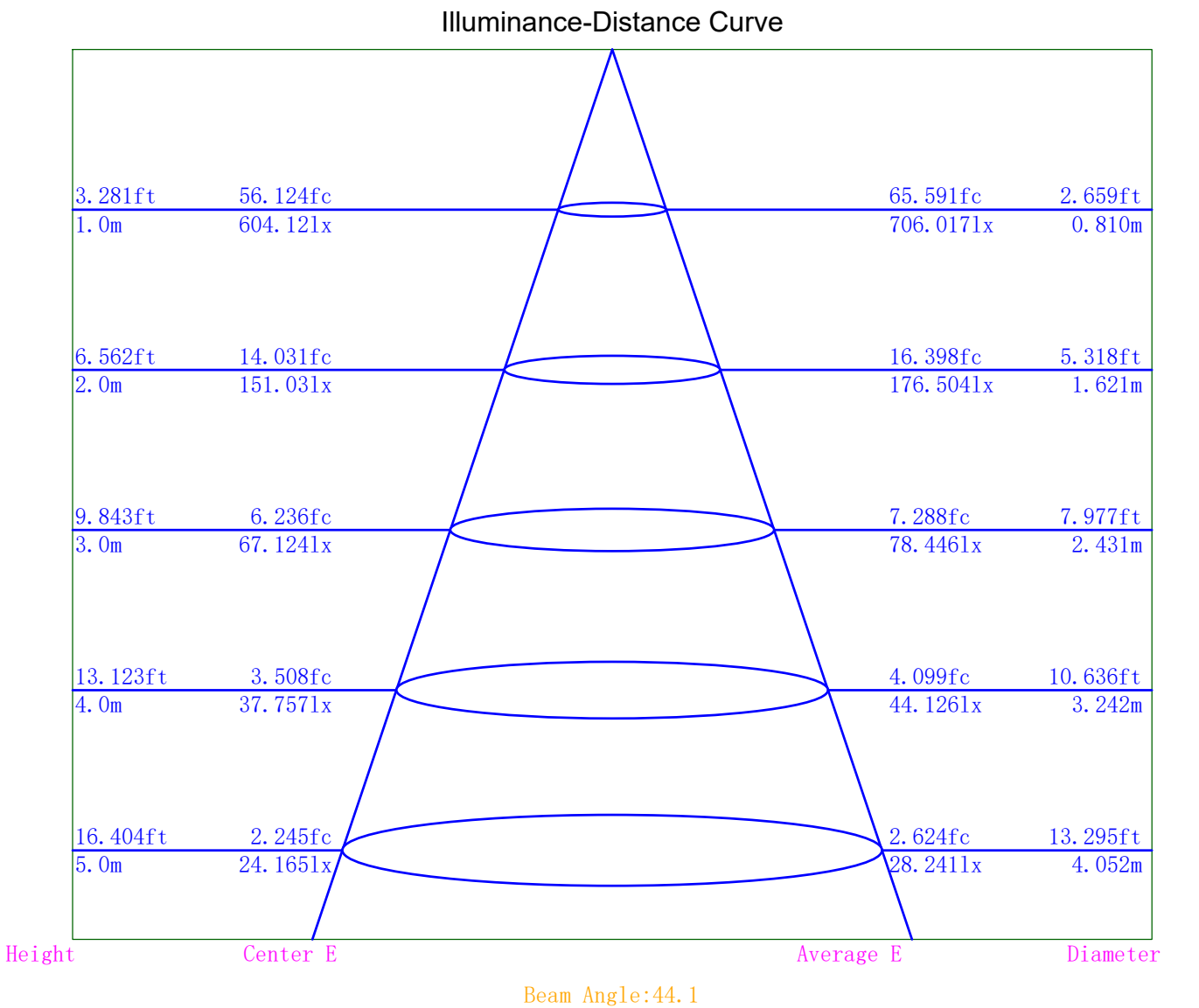
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:604.12lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:604.116cd,0eg

Illuminance-Distance Diagram

Lum. Name:TR09-06-DW-02 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:2022/08/18



Indoor Luminance Limiting Curves

Lum. Name:TR09-06-DW-02 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:2022/08/18

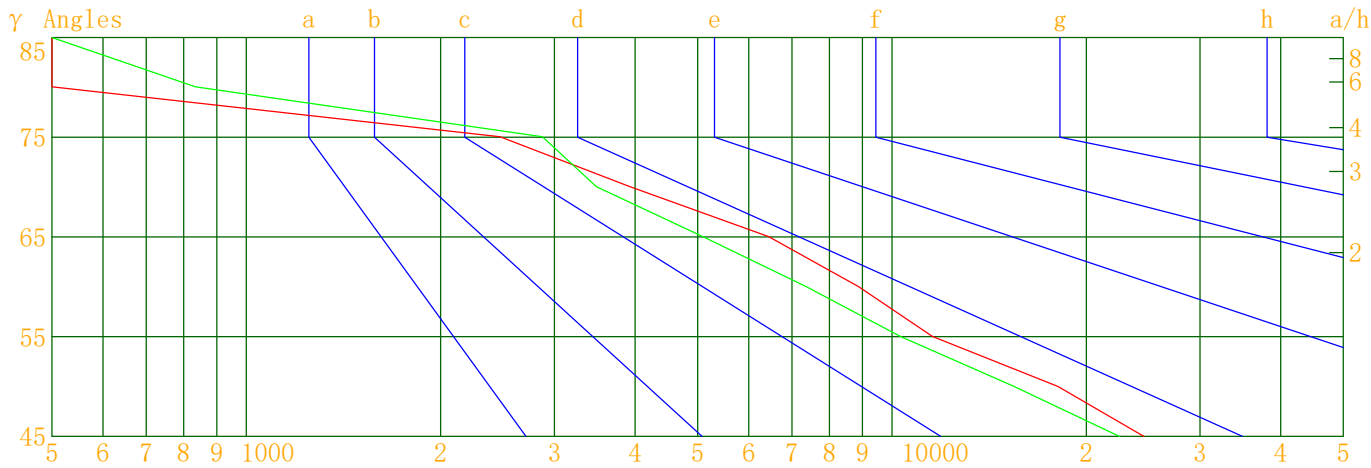
Glare Grade Table

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	24545	18067	11554	8873	6441	3928	2471	0	0
C90	22493	15451	10310	7360	5095	3485	2875	834	0

Luminance Limiting Curve



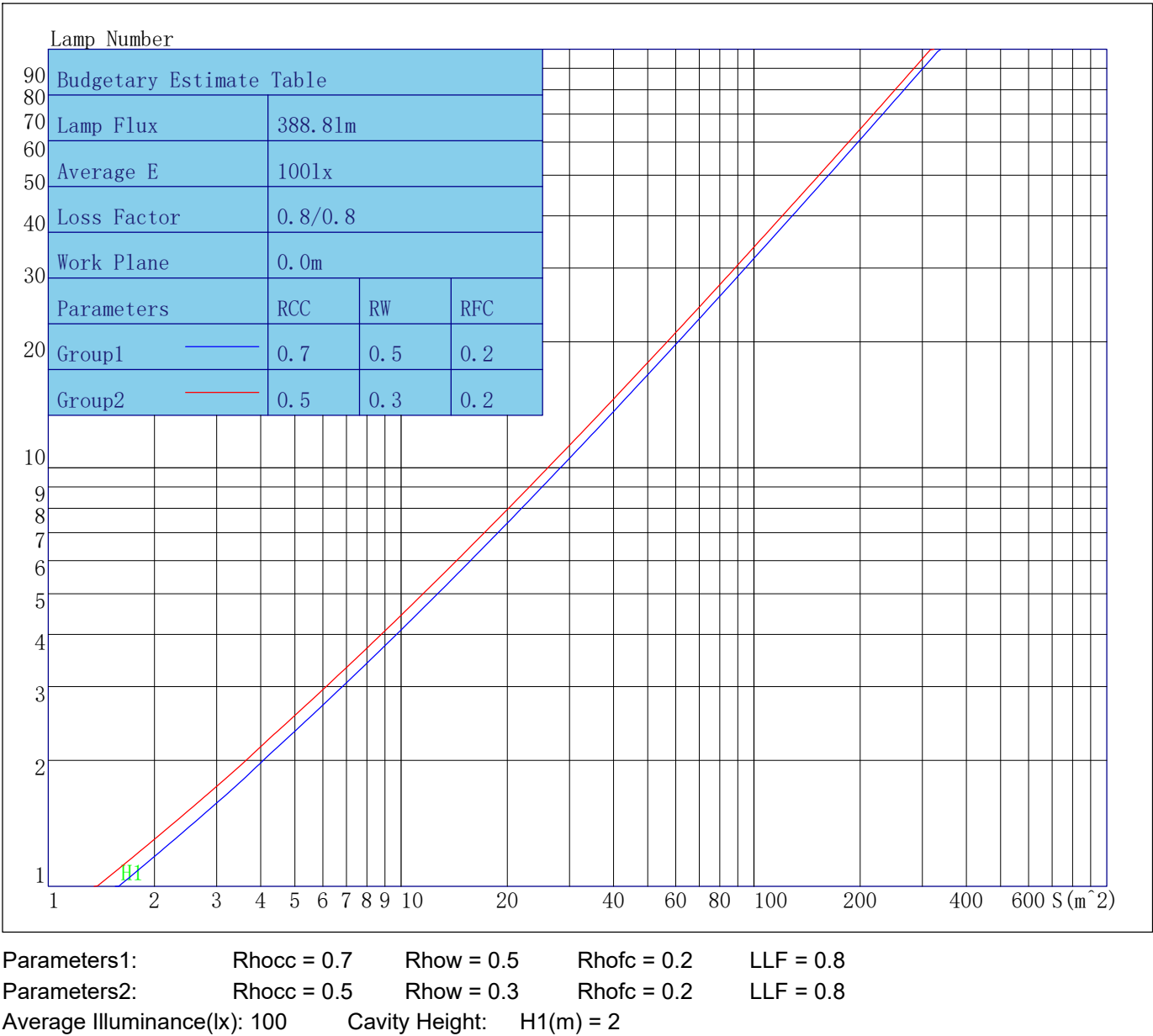
Luminous Size:Length(m)=-0.039Width(m)=-0.039Height(m)=0.000Area(m^2)=0.001195

Luminous Type:Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name:TR09-06-DW-02 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:2022/08/18



Indoor Coefficient of Utilization Table

Lum. Name:TR09-06-DW-02 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:2022/08/18

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	102	102	102	100
1	114	111	109	106	111	109	107	105	105	103	102	101	100	98	98	97	96	94
2	108	104	100	97	106	102	98	95	99	96	93	96	93	91	93	91	89	88
3	103	97	92	89	101	96	91	88	93	90	86	91	88	85	88	86	84	82
4	98	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77
5	94	86	81	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73
6	90	81	76	72	88	81	75	71	79	74	71	78	74	70	76	73	70	69
7	86	77	71	67	84	76	71	67	75	70	67	74	70	67	73	69	66	65
8	82	73	68	64	81	73	67	64	71	67	63	70	66	63	70	66	63	61
9	79	70	64	60	78	69	64	60	68	63	60	67	63	60	66	63	60	58
10	75	66	61	57	74	66	61	57	65	60	57	64	60	57	64	60	57	56

Unified Glare Rating Table

Lum. Name:TR09-06-DW-02 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:2022/08/18

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	17.9	18.9	18.3	19.3	19.6	17.3	18.3	17.6	18.6	18.9
	17.9	18.8	18.3	19.1	19.5	17.2	18.1	17.6	18.4	18.8
	17.9	18.7	18.3	19.0	19.4	17.2	18.0	17.6	18.3	18.7
	17.8	18.5	18.2	18.9	19.3	17.1	17.8	17.5	18.2	18.6
	17.7	18.4	18.1	18.8	19.2	17.0	17.7	17.5	18.1	18.5
	17.6	18.3	18.1	18.7	19.1	17.0	17.6	17.4	18.0	18.4
X=4H Y=2H	17.8	18.7	18.3	19.0	19.4	17.2	18.0	17.6	18.3	18.7
	17.9	18.5	18.3	18.9	19.3	17.2	17.8	17.6	18.2	18.6
	17.8	18.4	18.2	18.8	19.3	17.1	17.7	17.6	18.1	18.6
	17.7	18.2	18.2	18.7	19.1	17.0	17.5	17.5	18.0	18.5
	17.6	18.1	18.1	18.6	19.0	17.0	17.4	17.4	17.9	18.4
	17.6	18.0	18.1	18.5	18.9	16.9	17.3	17.4	17.8	18.3
X=8H Y=4H	17.7	18.1	18.1	18.6	19.1	17.0	17.5	17.5	17.9	18.4
	17.6	17.9	18.1	18.4	19.0	16.9	17.3	17.4	17.8	18.3
	17.5	17.8	18.0	18.3	18.8	16.8	17.1	17.4	17.7	18.2
	17.4	17.7	18.0	18.2	18.8	16.8	17.0	17.3	17.5	18.1
X=12H Y=4H	17.6	18.0	18.1	18.5	19.0	16.9	17.3	17.4	17.8	18.3
	17.5	17.8	18.0	18.3	18.9	16.8	17.2	17.4	17.6	18.2
	17.4	17.7	18.0	18.2	18.8	16.8	17.0	17.3	17.6	18.1
Variations with the objerver position at spacings										
S=1.0H	1.9/-2.8					1.6/-2.2				
S=1.5H	2.5/-4.0					2.1/-3.2				
S=2.0H	3.3/-5.0					2.8/-3.9				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	0.3					0.3				

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

IES Indoor Report

Photometric Filename:TR09-06-DW-02 1800-3000K RA90 36D.IES

Candela Tabulation

V/H	C0.0	C90.0	C180.0	C270.0
γ 0.0	604.12	604.12	604.12	604.12
γ 5.0	557.78	611.06	621.35	597.24
γ 10.0	497.23	574.57	610.27	578.93
γ 15.0	413.76	473.15	551.42	542.26
γ 20.0	306.91	321.37	436.20	457.55
γ 25.0	194.20	181.61	290.08	324.75
γ 30.0	106.67	94.95	159.62	190.57
γ 35.0	55.91	51.64	80.98	100.12
γ 40.0	32.47	30.83	43.06	51.66
γ 45.0	20.73	19.00	25.08	29.21
γ 50.0	13.87	11.86	15.18	18.49
γ 55.0	7.92	7.06	9.81	11.57
γ 60.0	5.30	4.40	5.88	6.78
γ 65.0	3.25	2.57	3.94	4.68
γ 70.0	1.61	1.42	2.89	2.96
γ 75.0	0.76	0.89	1.14	1.74
γ 80.0	0.00	0.17	0.16	0.77
γ 85.0	0.00	0.00	0.02	0.01
γ 90.0	0.00	0.00	0.00	0.00
γ 95.0	0.00	0.00	0.00	0.00
γ 100.0	0.00	0.00	0.00	0.00
γ 105.0	0.00	0.00	0.00	0.00
γ 110.0	0.00	0.00	0.00	0.00
γ 115.0	0.00	0.00	0.00	0.00
γ 120.0	0.00	0.00	0.00	0.00
γ 125.0	0.00	0.00	0.00	0.00
γ 130.0	0.00	0.00	0.00	0.00
γ 135.0	0.00	0.00	0.00	0.00
γ 140.0	0.00	0.00	0.00	0.00
γ 145.0	0.12	0.00	0.00	0.00
γ 150.0	0.13	0.36	0.02	0.09
γ 155.0	0.46	0.68	0.00	0.13
γ 160.0	0.50	0.42	0.36	0.94
γ 165.0	0.86	0.68	0.87	0.60
γ 170.0	0.76	0.71	0.75	0.76
γ 175.0	1.07	0.64	0.53	0.77
γ 180.0	0.76	0.76	0.76	0.76