

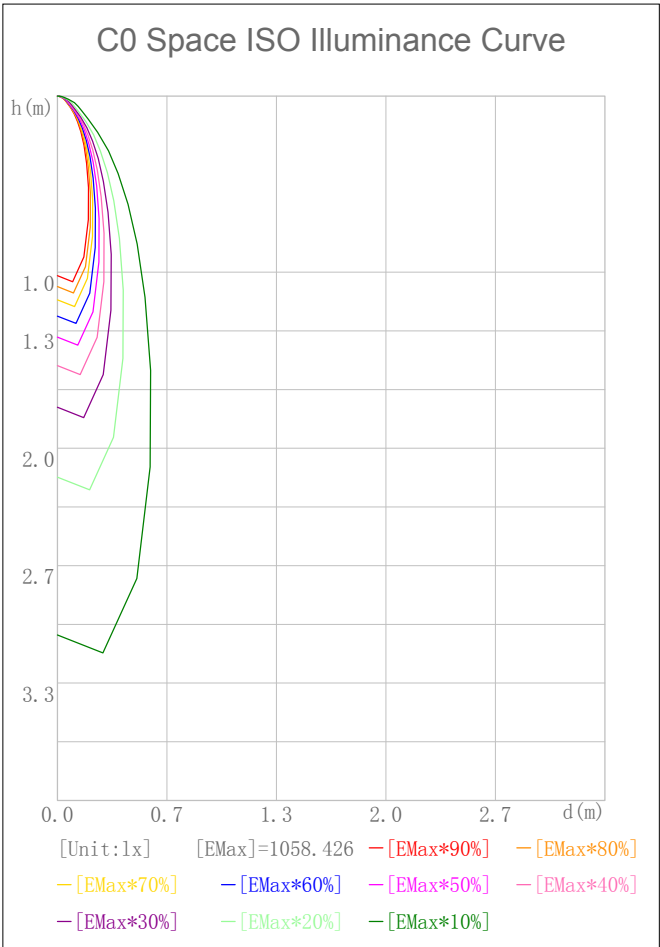
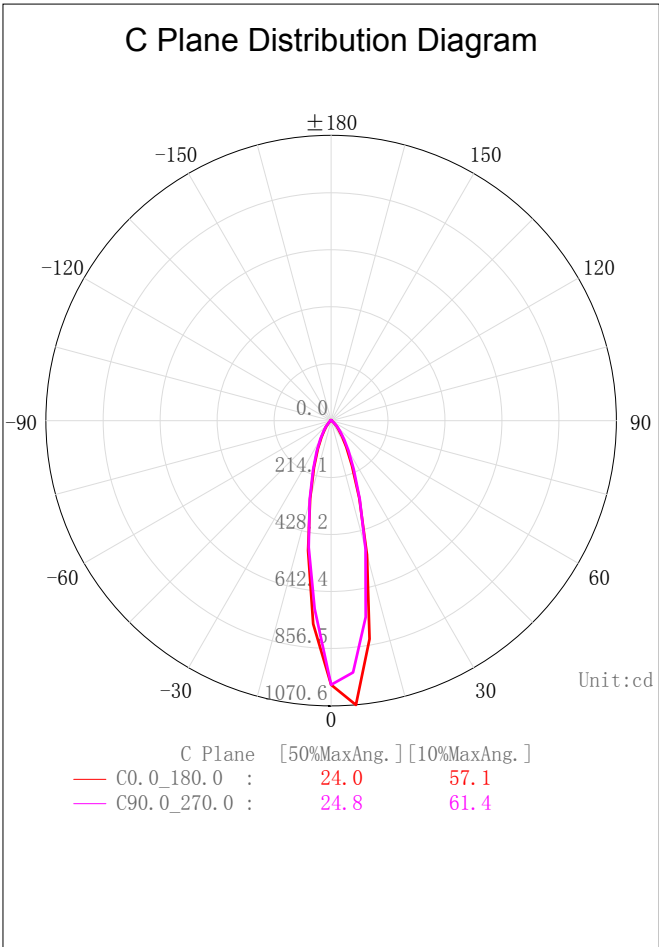
Indoor Luminaire Photometric Data

Description Information

Luminary Name:TR09-06-DW-04 1800-3000K RA90 15D	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):0.038m*0.038m*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 (%):50.0

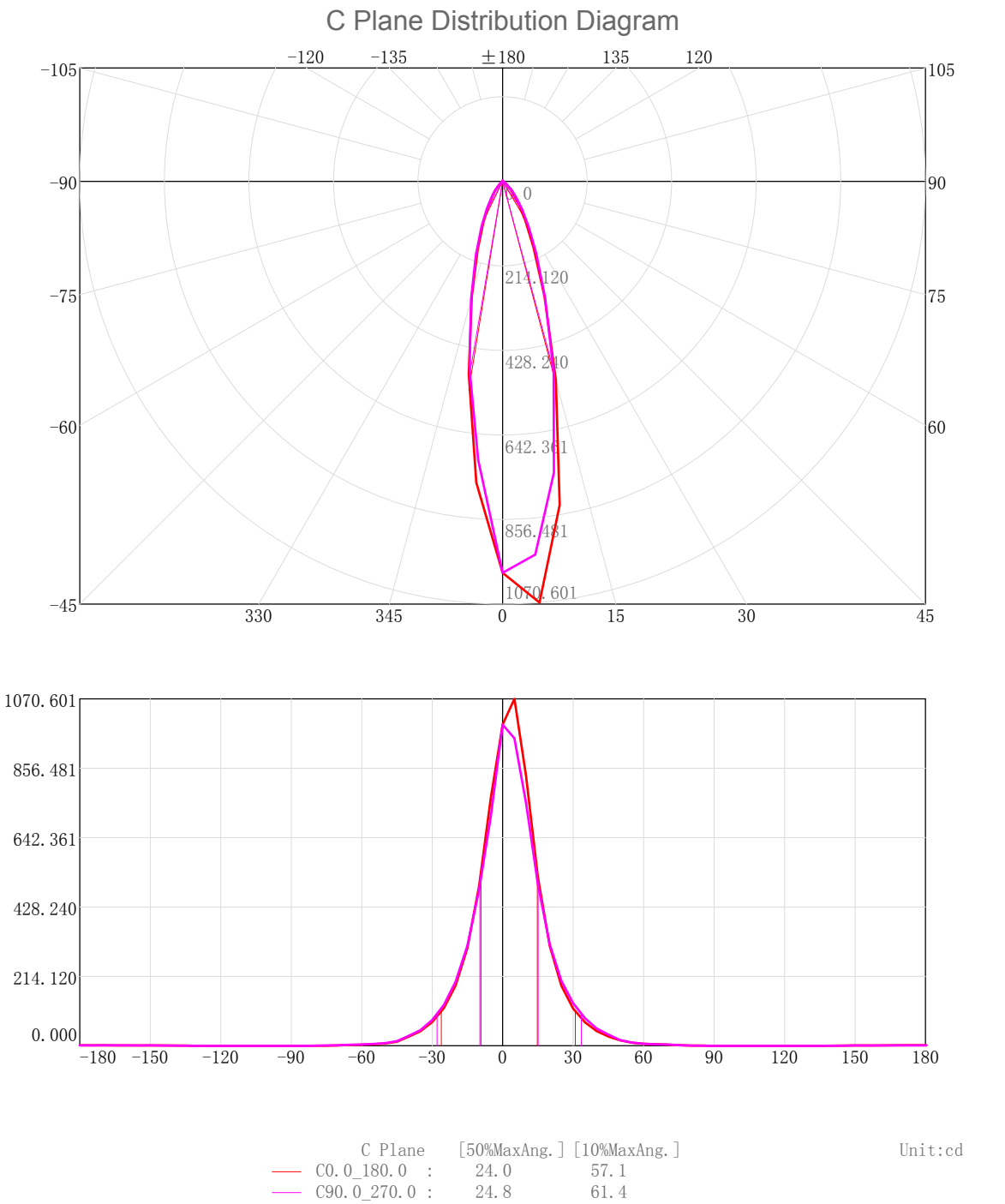
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm):343.380	Luminary Flux(lm):343.375	Field Angle(10%Imax):57.1(°)
Rated Power(W):	Luminary Efficiency:100.00%	Down Lumens&Percent:341.421lm 99.43%
Rated Voltage(V):	Luminary EER(lm/W):59.233	Up Lumens&Percent:1.9551m 0.57%
Tested Power(W):5.797	Max. Candela(cd):1070.601	S/MH:C0_a180=0.429 C90_270=0.415
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):24.0(°)	ErP Φ use(90°):320.543lm
Lamp Size(W*L*H):0.038m*0.038m*0.000m	Left=-9.2°, Right=14.8°	IRF (%):601.466



2D Plane Light Intensity Distribution Curve

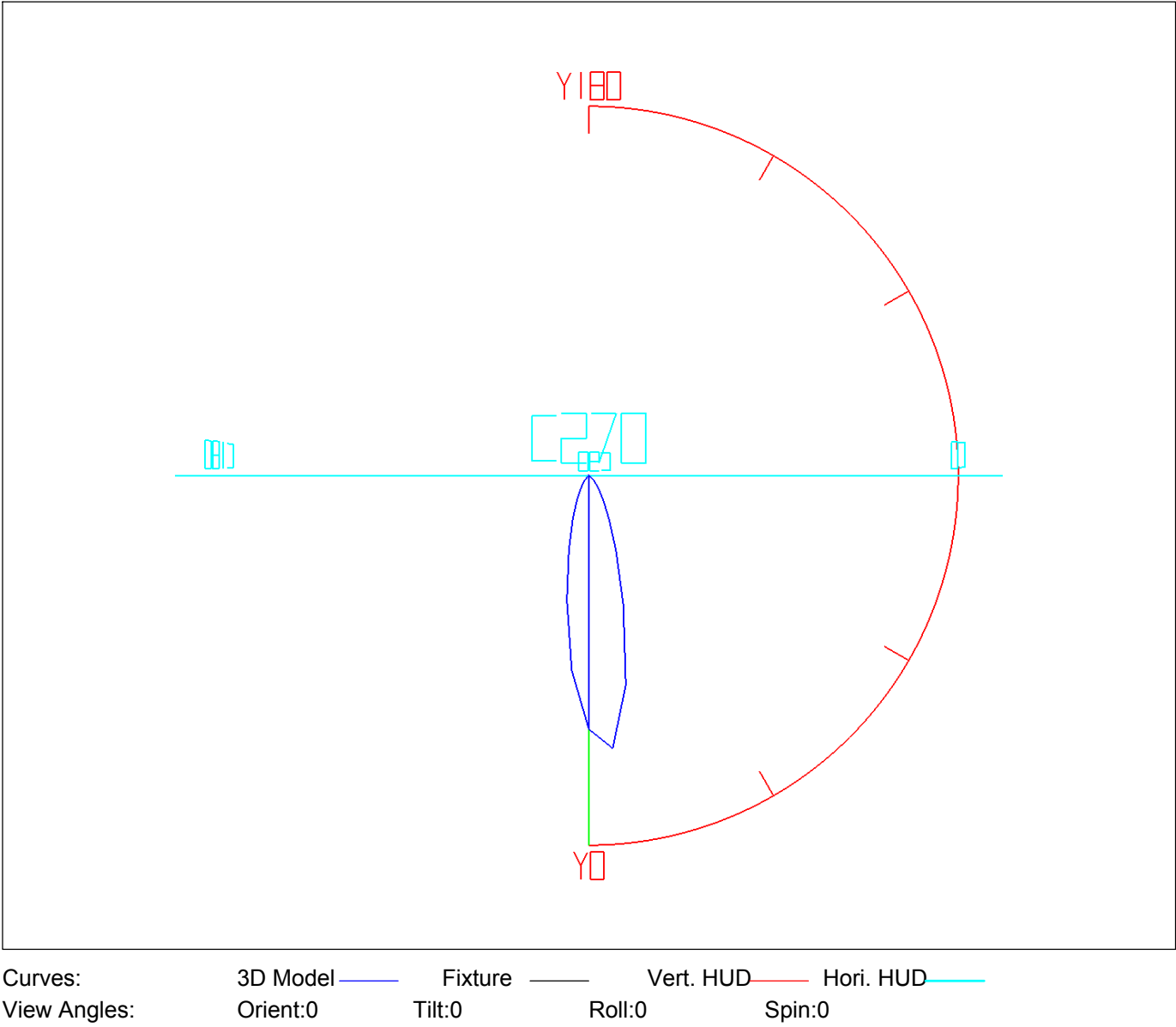
Lum. Name:TR09-06-DW-04 1800-3000K RA90 15D	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/29



3D Light Intensity Distribution Modal

Lum. Name: TR09-06-DW-04 1800-3000K RA90 15D	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

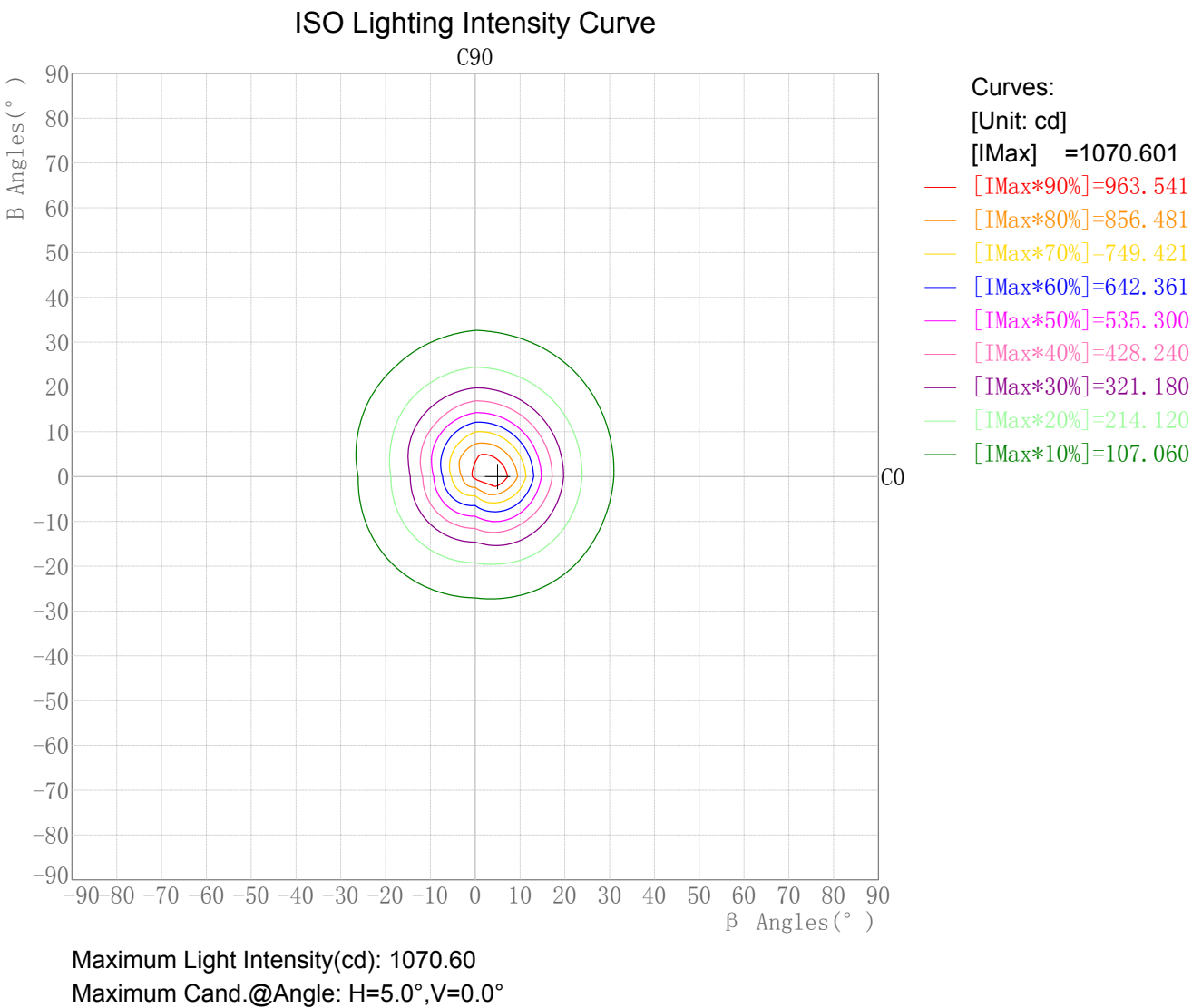


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0. 0-5. 0	22. 29	22. 29	6. 49	6. 49
5. 0-10. 0	54. 11	76. 40	15. 76	22. 25
10. 0-15. 0	62. 11	138. 51	18. 09	40. 34
15. 0-20. 0	54. 36	192. 87	15. 83	56. 17
20. 0-25. 0	42. 95	235. 82	12. 51	68. 68
25. 0-30. 0	32. 56	268. 39	9. 48	78. 16
30. 0-35. 0	23. 95	292. 34	6. 97	85. 13
35. 0-40. 0	17. 10	309. 44	4. 98	90. 12
40. 0-45. 0	11. 57	321. 01	3. 37	93. 49
45. 0-50. 0	7. 14	328. 15	2. 08	95. 57
50. 0-55. 0	4. 39	332. 54	1. 28	96. 84
55. 0-60. 0	2. 95	335. 50	0. 86	97. 70
60. 0-65. 0	2. 21	337. 71	0. 64	98. 35
65. 0-70. 0	1. 69	339. 40	0. 49	98. 84
70. 0-75. 0	1. 11	340. 51	0. 32	99. 16
75. 0-80. 0	0. 58	341. 08	0. 17	99. 33
80. 0-85. 0	0. 25	341. 33	0. 07	99. 40
85. 0-90. 0	0. 09	341. 42	0. 03	99. 43
90. 0-95. 0	0. 02	341. 44	0. 00	99. 43
95. 0-100. 0	0. 01	341. 44	0. 00	99. 44
100. 0-105. 0	0. 01	341. 45	0. 00	99. 44
105. 0-110. 0	0. 00	341. 45	0. 00	99. 44
110. 0-115. 0	0. 00	341. 45	0. 00	99. 44
115. 0-120. 0	0. 00	341. 46	0. 00	99. 44
120. 0-125. 0	0. 00	341. 46	0. 00	99. 44
125. 0-130. 0	0. 01	341. 47	0. 00	99. 44
130. 0-135. 0	0. 06	341. 53	0. 02	99. 46
135. 0-140. 0	0. 15	341. 68	0. 04	99. 50
140. 0-145. 0	0. 23	341. 91	0. 07	99. 57
145. 0-150. 0	0. 31	342. 22	0. 09	99. 66
150. 0-155. 0	0. 31	342. 53	0. 09	99. 75
155. 0-160. 0	0. 27	342. 80	0. 08	99. 83
160. 0-165. 0	0. 23	343. 03	0. 07	99. 90
165. 0-170. 0	0. 19	343. 22	0. 05	99. 95
170. 0-175. 0	0. 12	343. 34	0. 03	99. 99
175. 0-180. 0	0. 04	343. 38	0. 01	100. 00

Rectangle ISO Lighting Intensity Diagram

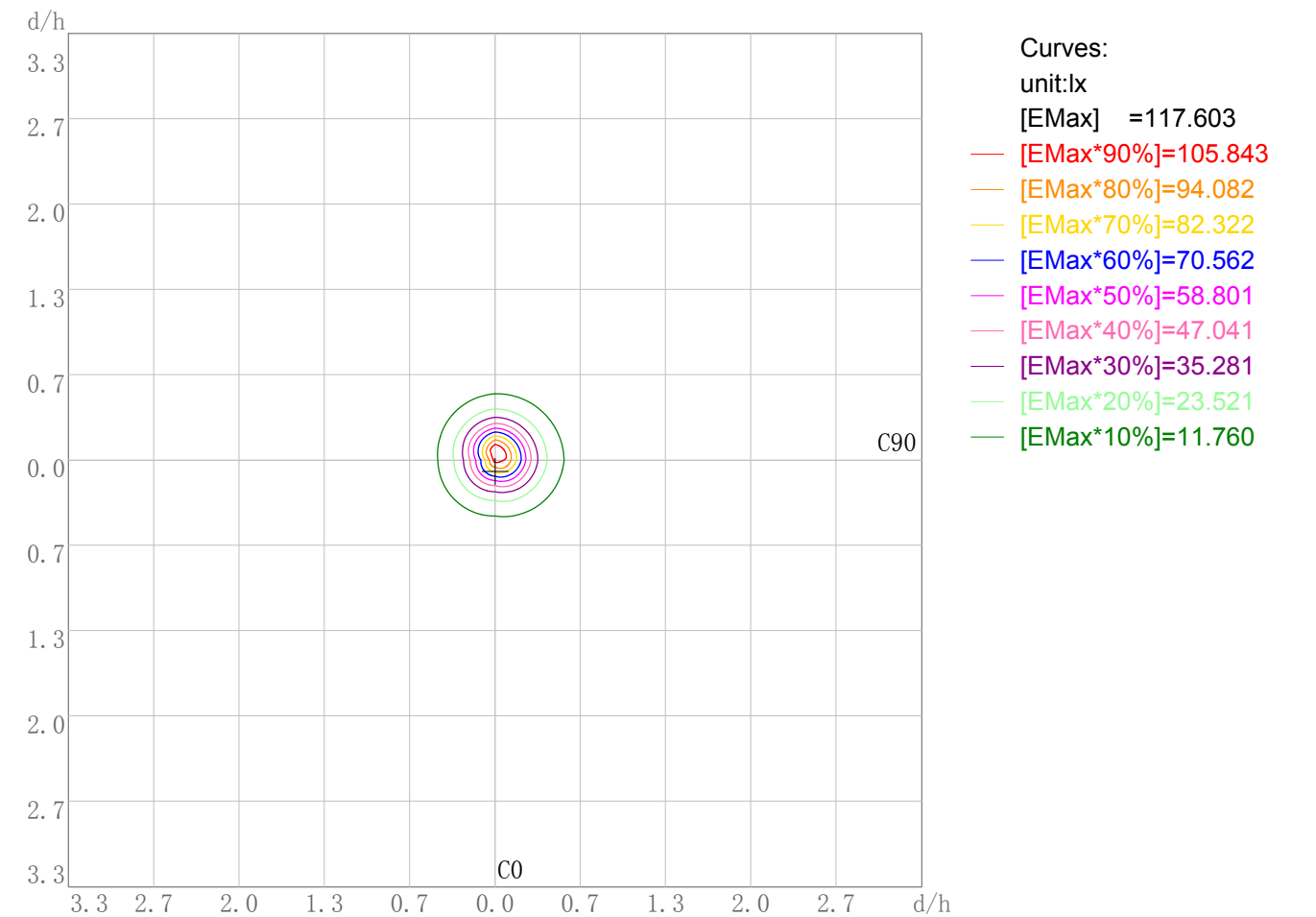
Lum. Name: TR09-06-DW-04 1800-3000K RA90 15D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/29



Plane ISO-Illuminance Diagram

Lum. Name:TR09-06-DW-04 1800-3000K RA90 15D	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

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00

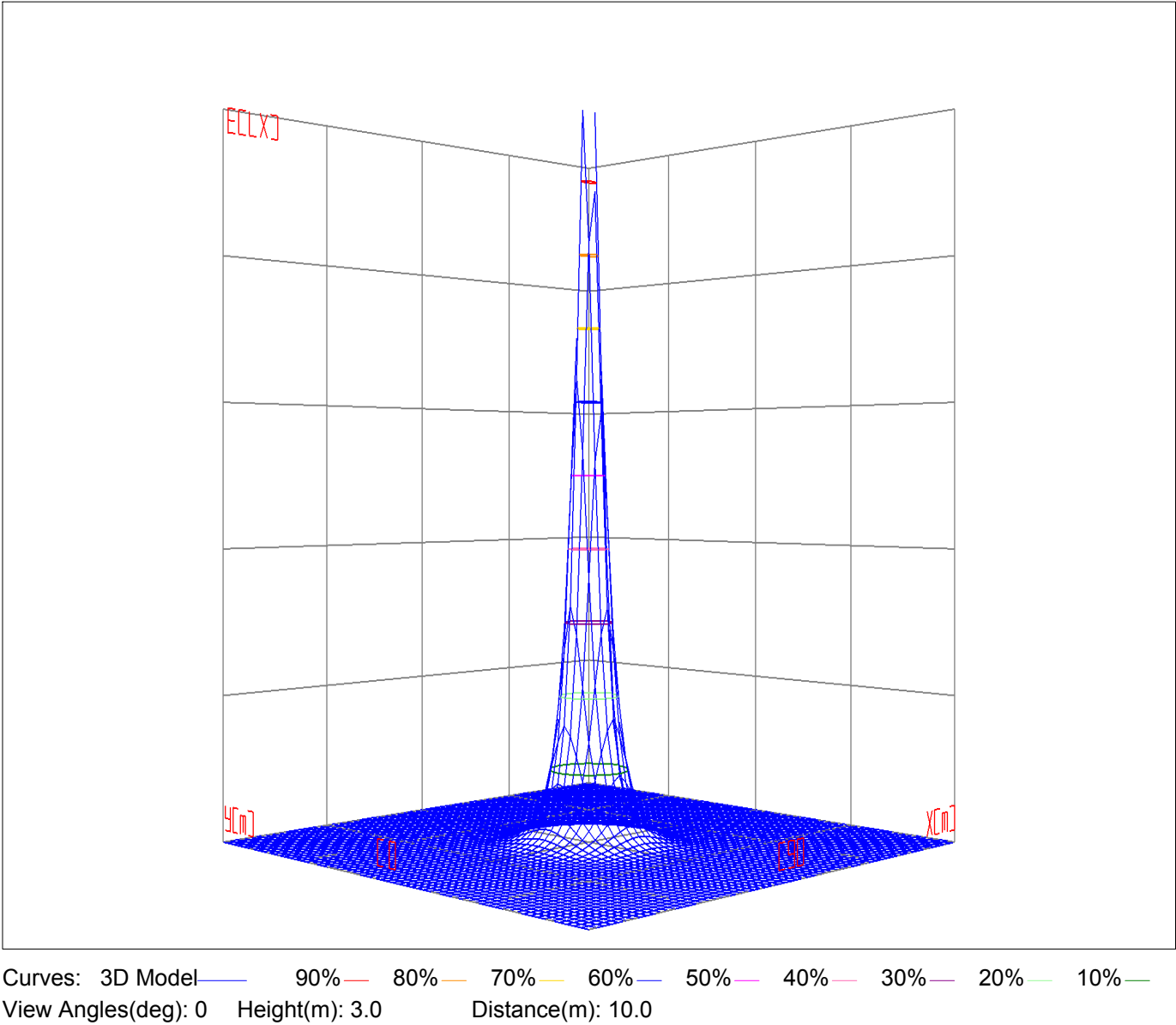
Working Plane Maximum Illuminance(lx): 117.60

Working Plane Maximum Illuminance Position(d/h):H0.0 V0.1

3D Plane ISO Illuminance Diagram

Lum. Name: TR09-06-DW-04 1800-3000K RA90 15D	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

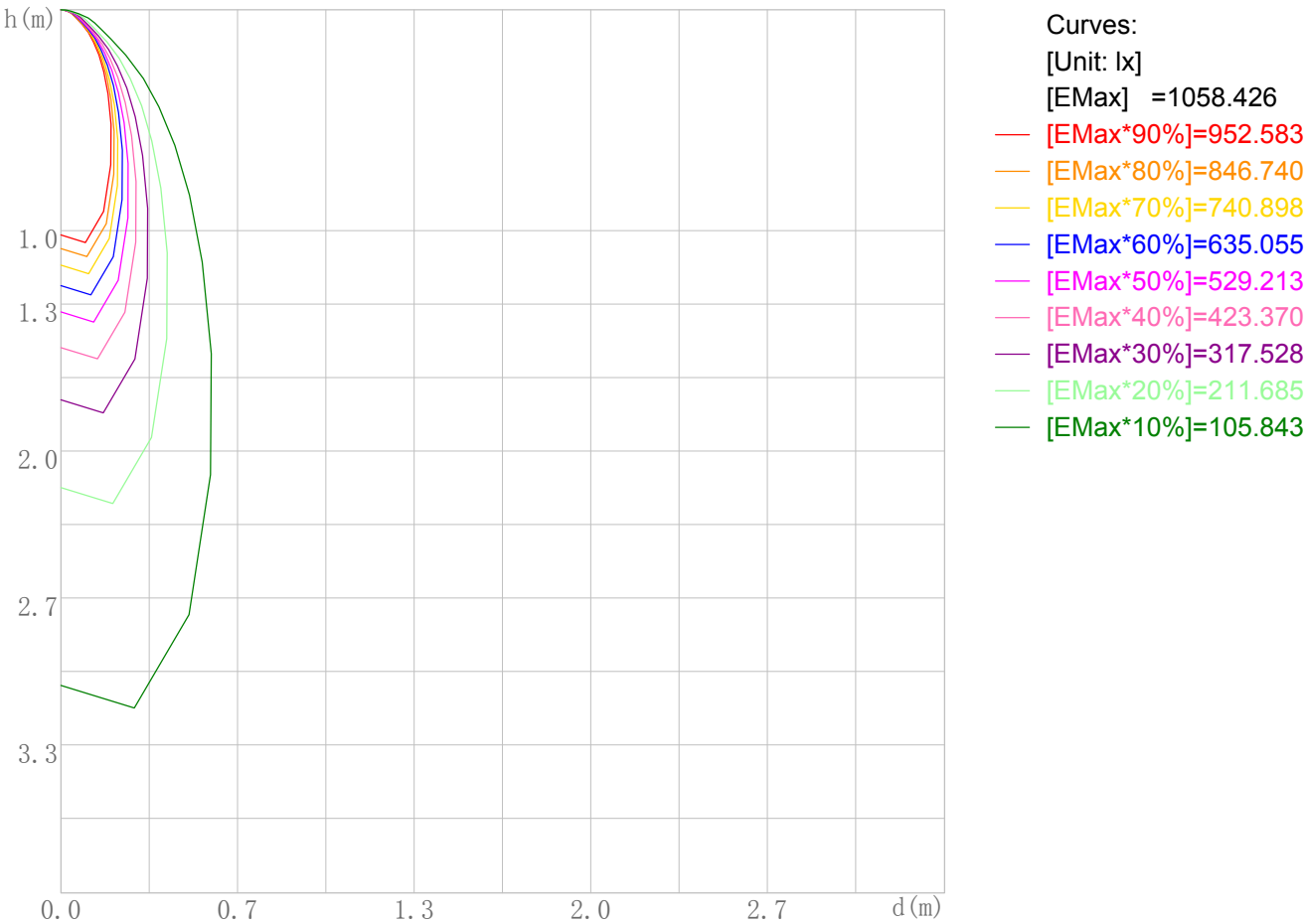
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: TR09-06-DW-04 1800-3000K RA90 15D	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

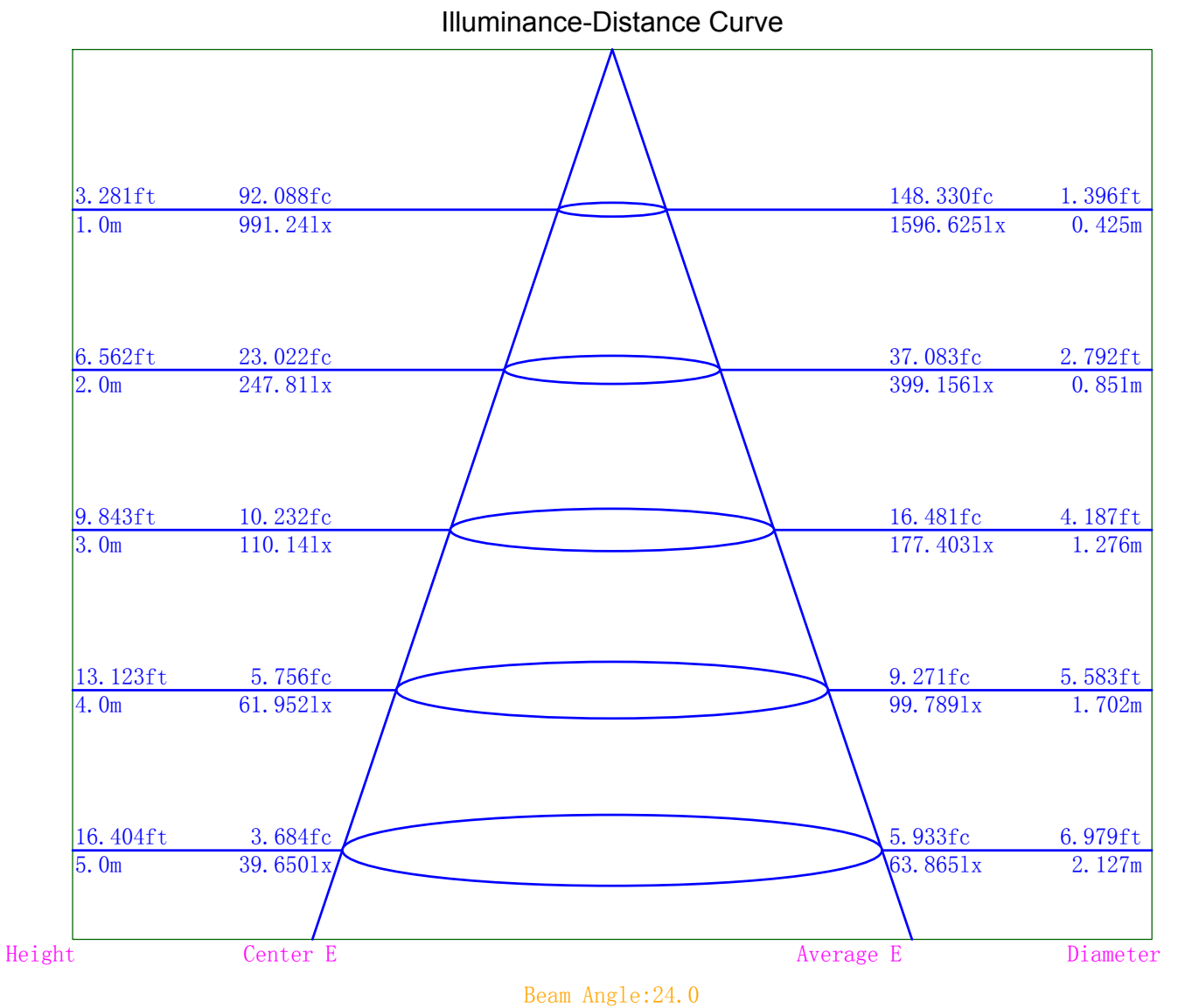
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:1058.43lx,5.0deg
Plane Maximum Lighting Intensity and @Angle:1070.601cd,0deg

Illuminance-Distance Diagram

Lum. Name: TR09-06-DW-04 1800-3000K RA90 15D	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-04 1800-3000K RA90 15D	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

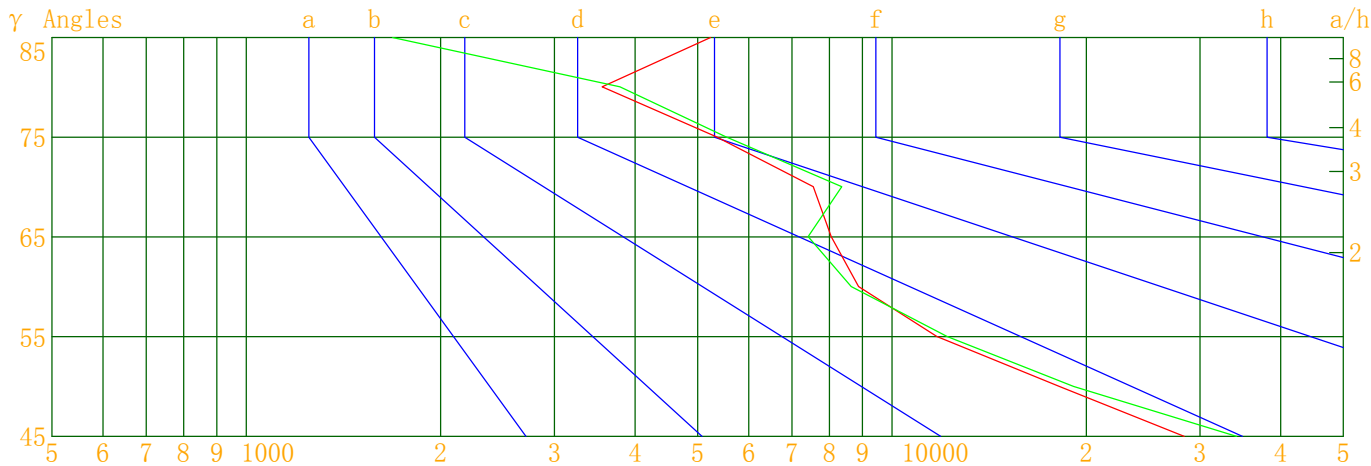
Glare Grade Table

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	28356	18163	11732	8877	8049	7552	5343	3557	5236
C90	34174	19110	12175	8647	7417	8362	5525	3789	1685

Luminance Limiting Curve



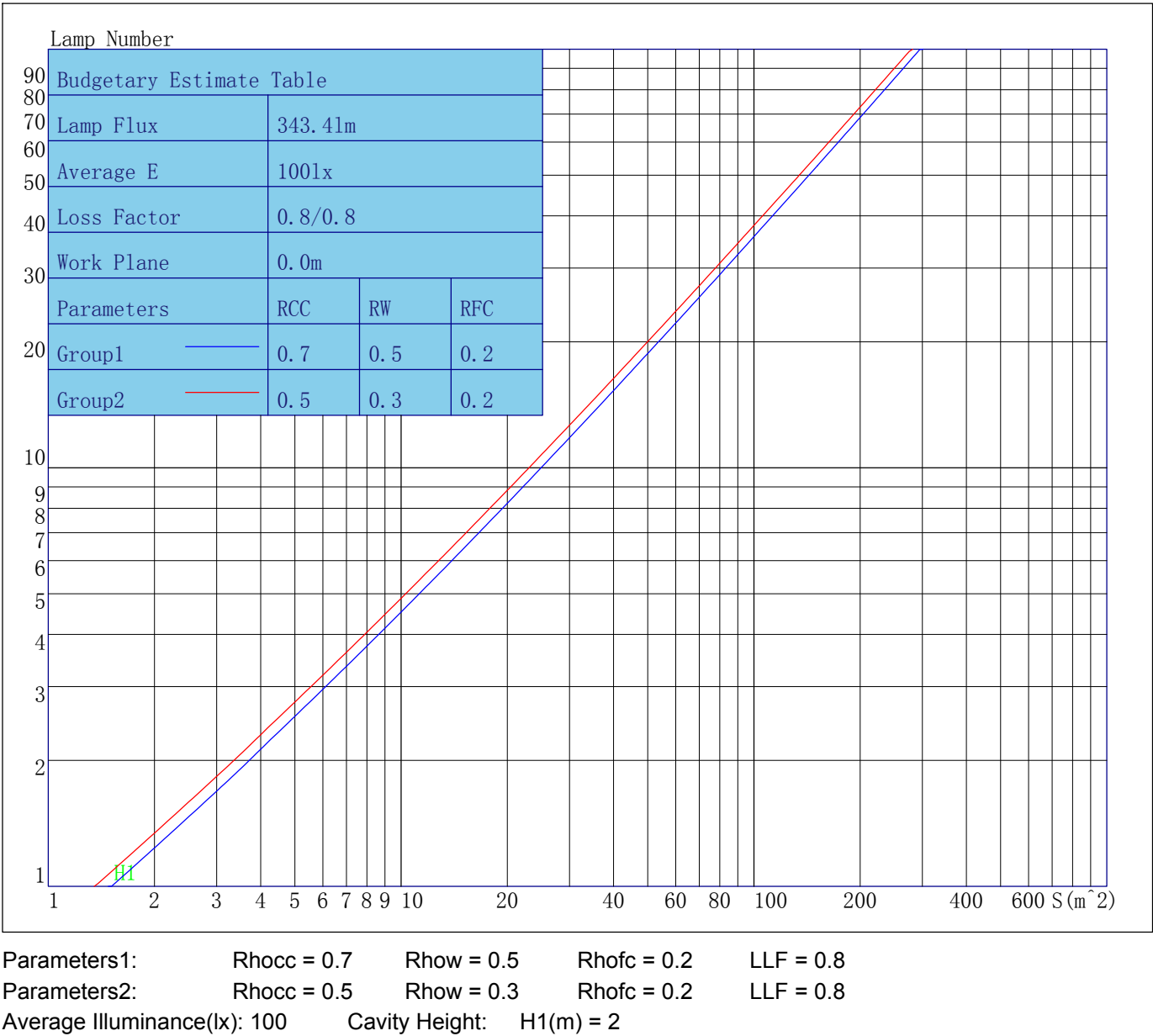
Luminous Size: Length(m)=0.038 Width(m)=0.038 Height(m)=0.000 Area(m^2)=0.001444

Luminous Type: Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name: TR09-06-DW-04 1800-3000K RA90 15D	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-04 1800-3000K RA90 15D	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	102	102	102	99
1	114	111	109	107	111	109	107	105	105	103	102	101	100	98	97	96	96	94
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88
3	104	98	93	90	102	97	92	89	94	90	87	91	88	86	89	87	85	83
4	99	92	87	84	98	91	87	83	89	85	82	87	84	81	85	82	80	79
5	95	88	82	78	94	87	82	78	85	81	77	83	79	77	82	78	76	75
6	91	83	78	74	90	82	77	74	81	76	73	80	76	73	78	75	72	71
7	88	79	74	70	86	79	74	70	77	73	70	76	72	69	75	71	69	68
8	84	76	70	67	83	75	70	67	74	70	66	73	69	66	72	68	66	64
9	81	72	67	64	80	72	67	64	71	67	63	70	66	63	69	66	63	62
10	78	70	64	61	77	69	64	61	68	64	61	68	63	61	67	63	60	59

Unified Glare Rating Table

Lum. Name:TR09-06-DW-04 1800-3000K RA90 15D	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

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	18.8	19.8	19.2	20.1	20.5	19.3	20.3	19.7	20.7	21.0
	19.0	19.9	19.4	20.2	20.6	19.5	20.4	19.9	20.7	21.1
	19.0	19.9	19.5	20.2	20.6	19.5	20.3	19.9	20.7	21.1
	19.0	19.8	19.4	20.1	20.6	19.5	20.2	19.9	20.6	21.0
	19.0	19.7	19.4	20.1	20.5	19.5	20.2	19.9	20.6	21.0
	19.0	19.6	19.4	20.0	20.5	19.4	20.1	19.9	20.5	20.9
X=4H Y=2H	18.7	19.5	19.1	19.9	20.3	19.2	20.0	19.6	20.4	20.8
	19.0	19.7	19.4	20.1	20.5	19.5	20.1	19.9	20.5	21.0
	19.1	19.7	19.5	20.1	20.6	19.5	20.1	20.0	20.6	21.0
	19.1	19.6	19.6	20.1	20.6	19.5	20.0	20.0	20.5	21.0
	19.1	19.6	19.6	20.0	20.5	19.5	20.0	20.0	20.4	20.9
	19.1	19.5	19.6	20.0	20.5	19.4	19.9	19.9	20.4	20.8
X=8H Y=4H	19.0	19.5	19.5	19.9	20.4	19.4	19.9	19.9	20.4	20.8
	19.0	19.4	19.6	19.9	20.5	19.4	19.8	20.0	20.3	20.9
	19.0	19.4	19.6	19.9	20.4	19.4	19.8	20.0	20.3	20.8
	19.1	19.4	19.6	19.9	20.5	19.4	19.7	19.9	20.2	20.8
X=12H Y=4H	18.9	19.4	19.5	19.9	20.3	19.4	19.8	19.9	20.3	20.8
	19.0	19.3	19.5	19.8	20.4	19.4	19.7	19.9	20.2	20.8
	19.0	19.3	19.5	19.8	20.4	19.4	19.7	19.9	20.2	20.8
Variations with the objverver position at spacings										
S=1.0H	0.6/-0.6					0.8/-0.9				
S=1.5H	1.4/-1.4					1.6/-1.7				
S=2.0H	1.6/-2.2					1.4/-2.5				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	0.7					0.6				

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	991.24	991.24	991.24	991.24
γ 5.0	1070.60	948.57	765.48	708.44
γ 10.0	831.87	748.64	494.55	482.66
γ 15.0	520.97	498.99	301.63	308.78
γ 20.0	309.48	314.26	186.31	197.96
γ 25.0	185.69	200.94	116.83	126.57
γ 30.0	115.00	131.45	73.14	79.68
γ 35.0	72.61	85.31	44.91	48.41
γ 40.0	45.65	53.94	28.36	30.85
γ 45.0	28.95	34.89	12.81	14.52
γ 50.0	16.86	17.74	7.38	8.29
γ 55.0	9.72	10.08	4.95	5.77
γ 60.0	6.41	6.24	3.59	4.36
γ 65.0	4.91	4.53	2.93	3.41
γ 70.0	3.73	4.13	1.37	1.71
γ 75.0	2.00	2.07	0.57	1.34
γ 80.0	0.89	0.95	0.48	0.31
γ 85.0	0.66	0.21	0.00	0.18
γ 90.0	0.08	0.14	0.01	0.00
γ 95.0	0.00	0.00	0.00	0.00
γ 100.0	0.09	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	0.06	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	0.21	0.00
γ 135.0	0.03	0.00	0.67	0.32
γ 140.0	0.42	0.25	0.77	0.78
γ 145.0	0.81	0.44	1.10	0.93
γ 150.0	1.07	1.09	1.36	1.57
γ 155.0	1.20	0.86	1.37	1.44
γ 160.0	1.34	1.23	1.20	1.54
γ 165.0	1.58	1.40	1.41	1.60
γ 170.0	1.52	1.71	1.70	1.70
γ 175.0	2.01	1.45	1.78	1.40
γ 180.0	1.52	1.52	1.52	1.52