

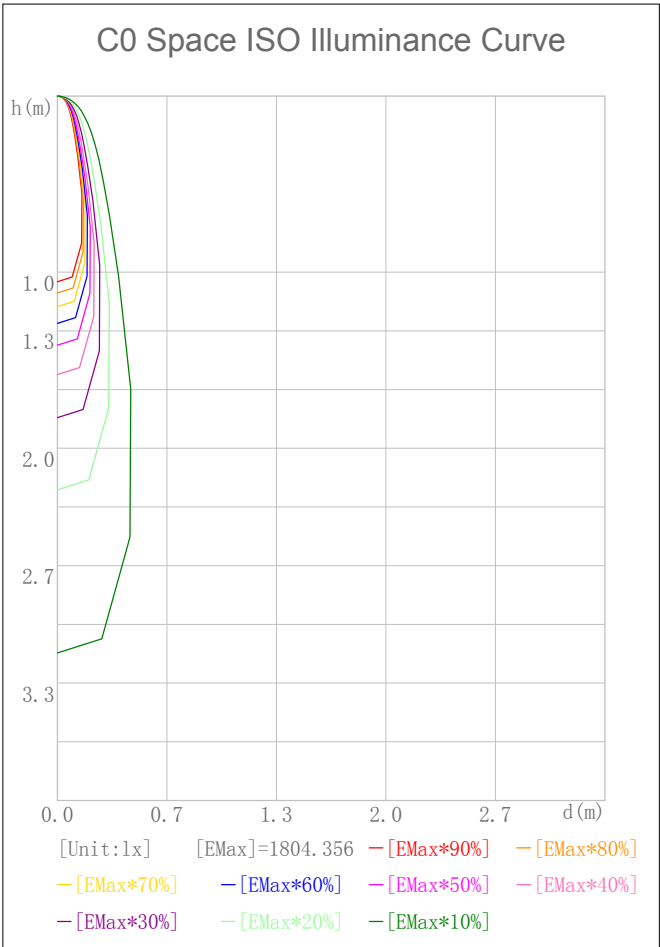
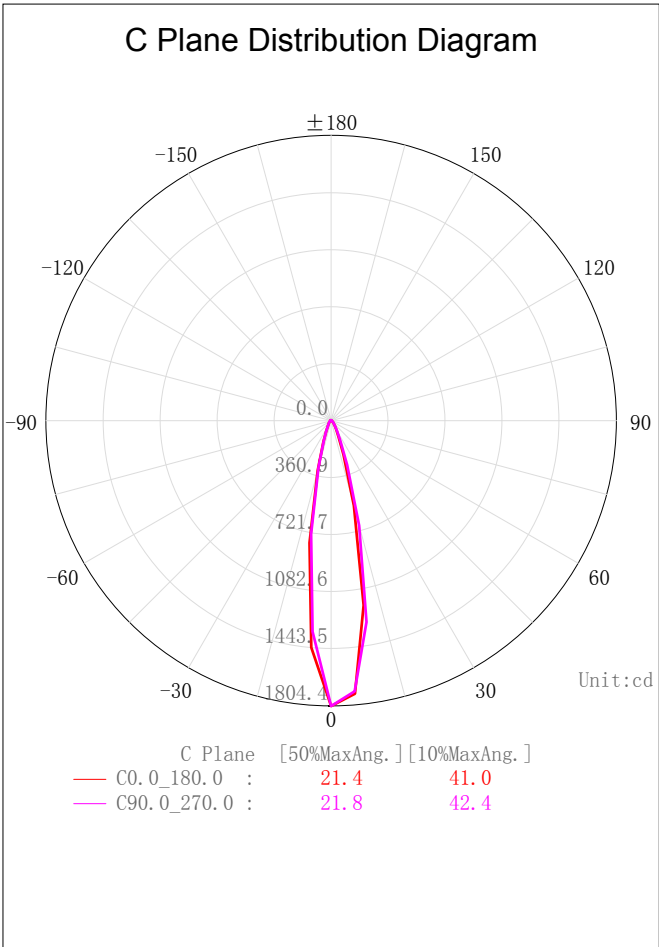
Indoor Luminaire Photometric Data

Description Information

Luminary Name: TR09-06-DW-01 1800-3000K RA90 24D		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

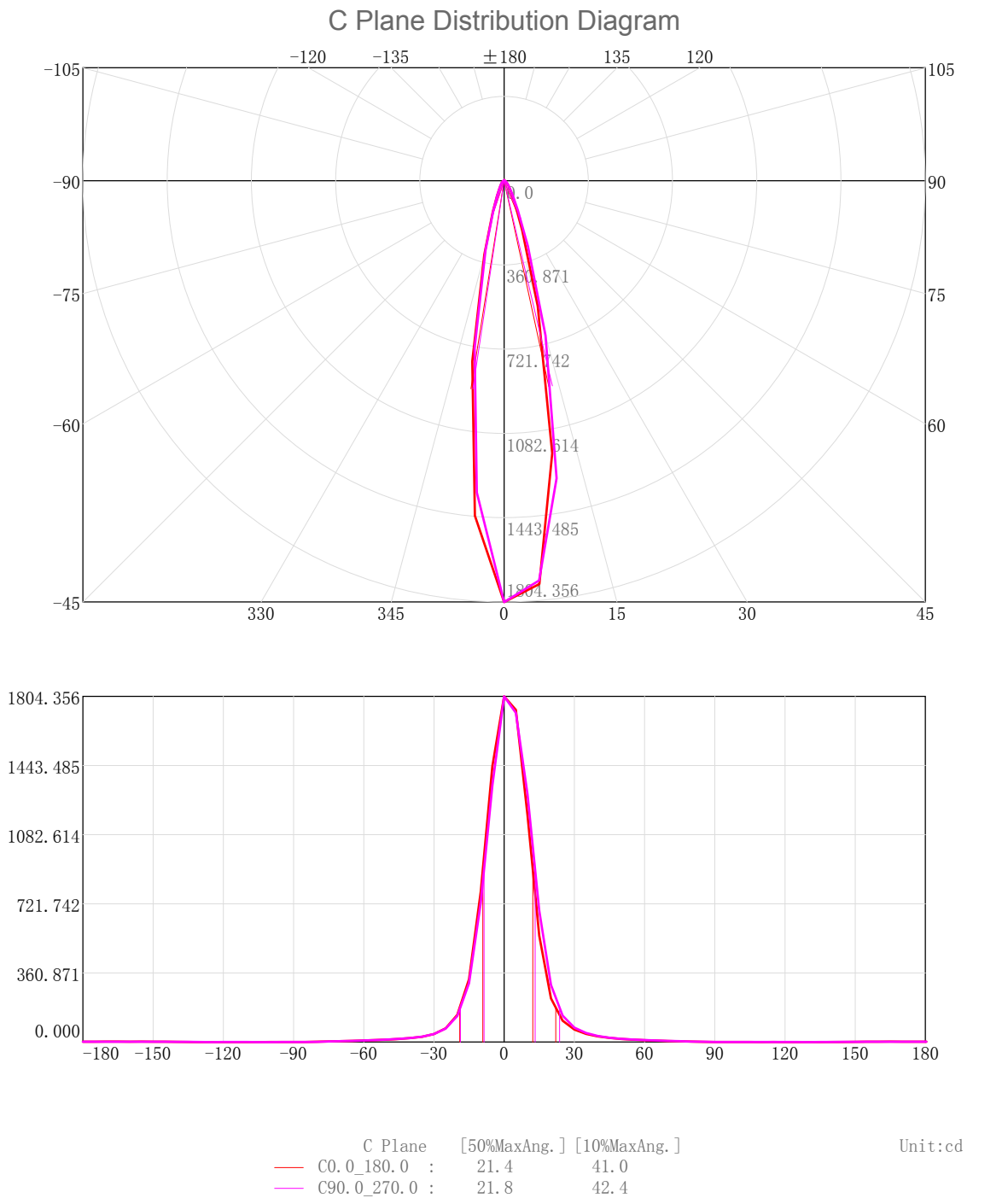
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 393.590	Luminary Flux(lm): 393.586	Field Angle(10%Imax): 41.0(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 388.505lm 98.71%	
Rated Voltage(V):	Luminary EER(lm/W): 67.860	Up Lumens&Percent: 5.080lm 1.29%	
Tested Power(W): 5.800	Max. Candela(cd): 1804.356	S/MH: C0_a180=0.365 C90_270=0.372	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf):240.1, 0.029, 0.833	Beam Angle(50%Imax): 21.4(°)	ErP Φ use(90°): 363.102lm	
Lamp Size (W*L*H):0.076m*0.076m*0.000m	Left=-9.1°, Right=12.2°	IRF(%): 951.772	



2D Plane Light Intensity Distribution Curve

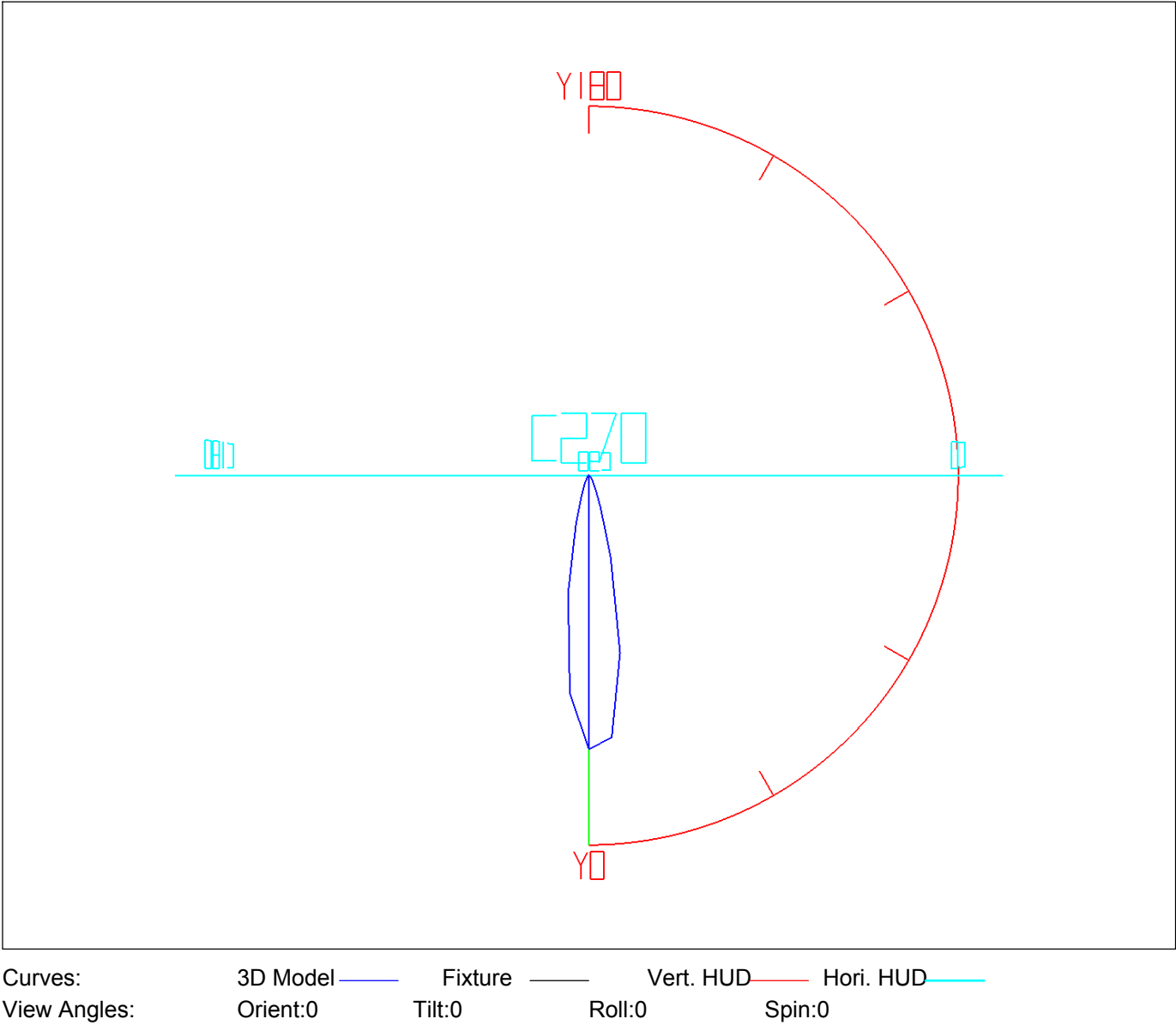
Lum. Name:TR09-06-DW-01 1800-3000K RA90 24D	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/29



3D Light Intensity Distribution Modal

Lum. Name:TR09-06-DW-01 1800-3000K RA90 24D	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

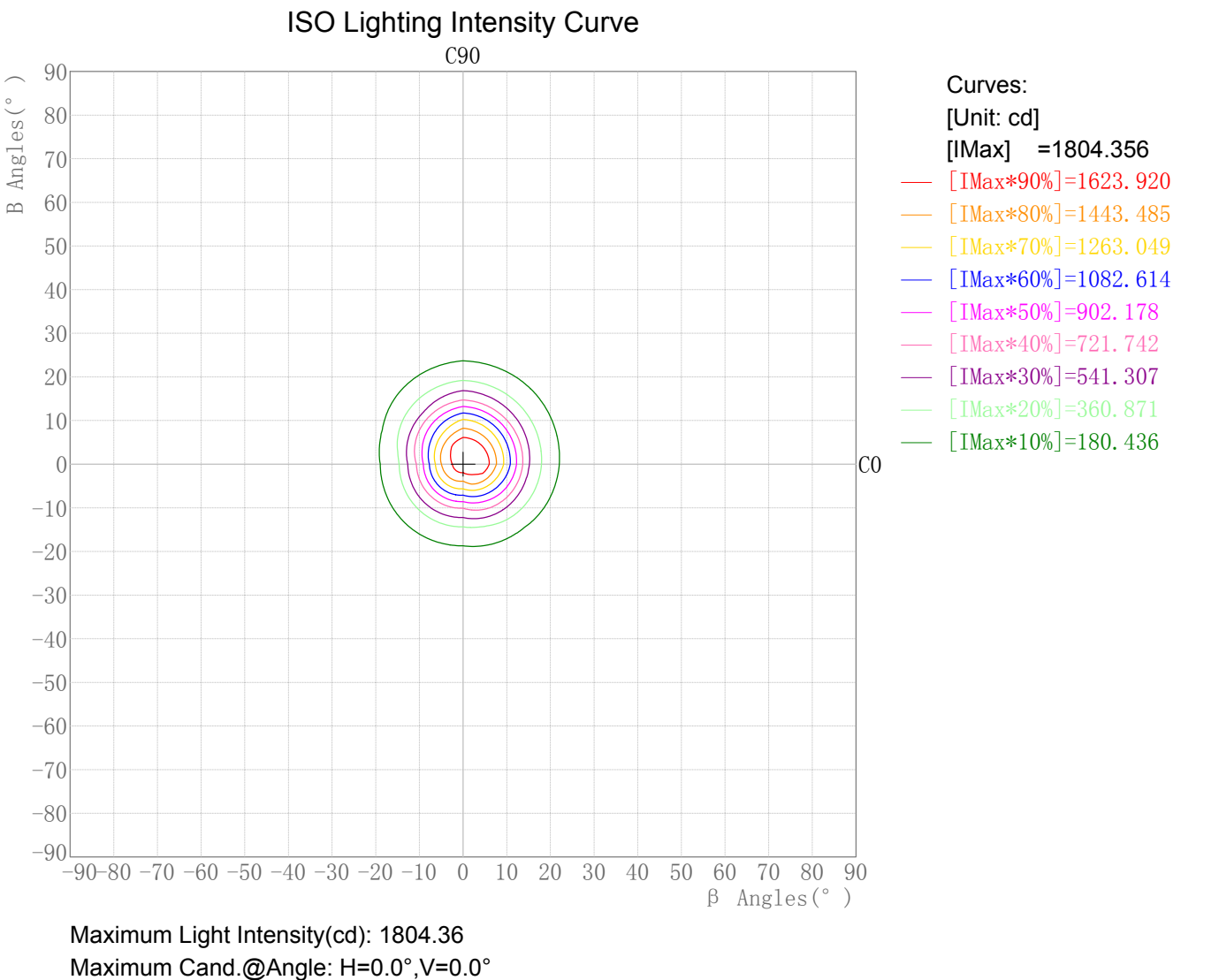


Zonal Flux Tabulation

Zone( γ )	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0. 0-5. 0	40. 20	40. 20	10. 21	10. 21
5. 0-10. 0	91. 43	131. 63	23. 23	33. 44
10. 0-15. 0	87. 03	218. 66	22. 11	55. 55
15. 0-20. 0	55. 23	273. 89	14. 03	69. 59
20. 0-25. 0	31. 38	305. 27	7. 97	77. 56
25. 0-30. 0	19. 56	324. 82	4. 97	82. 53
30. 0-35. 0	13. 72	338. 54	3. 49	86. 01
35. 0-40. 0	10. 50	349. 04	2. 67	88. 68
40. 0-45. 0	8. 47	357. 51	2. 15	90. 83
45. 0-50. 0	6. 99	364. 50	1. 78	92. 61
50. 0-55. 0	5. 86	370. 36	1. 49	94. 10
55. 0-60. 0	4. 95	375. 31	1. 26	95. 36
60. 0-65. 0	4. 12	379. 44	1. 05	96. 40
65. 0-70. 0	3. 29	382. 73	0. 84	97. 24
70. 0-75. 0	2. 49	385. 22	0. 63	97. 87
75. 0-80. 0	1. 75	386. 97	0. 44	98. 32
80. 0-85. 0	1. 01	387. 99	0. 26	98. 58
85. 0-90. 0	0. 52	388. 51	0. 13	98. 71
90. 0-95. 0	0. 31	388. 82	0. 08	98. 79
95. 0-100. 0	0. 22	389. 03	0. 06	98. 84
100. 0-105. 0	0. 19	389. 23	0. 05	98. 89
105. 0-110. 0	0. 18	389. 41	0. 05	98. 94
110. 0-115. 0	0. 19	389. 60	0. 05	98. 99
115. 0-120. 0	0. 18	389. 77	0. 04	99. 03
120. 0-125. 0	0. 15	389. 93	0. 04	99. 07
125. 0-130. 0	0. 14	390. 06	0. 03	99. 10
130. 0-135. 0	0. 21	390. 28	0. 05	99. 16
135. 0-140. 0	0. 37	390. 64	0. 09	99. 25
140. 0-145. 0	0. 48	391. 12	0. 12	99. 37
145. 0-150. 0	0. 53	391. 65	0. 13	99. 51
150. 0-155. 0	0. 54	392. 19	0. 14	99. 64
155. 0-160. 0	0. 49	392. 68	0. 13	99. 77
160. 0-165. 0	0. 39	393. 08	0. 10	99. 87
165. 0-170. 0	0. 29	393. 36	0. 07	99. 94
170. 0-175. 0	0. 17	393. 53	0. 04	99. 98
175. 0-180. 0	0. 06	393. 59	0. 01	100. 00

Rectangle ISO Lighting Intensity Diagram

Lum. Name:TR09-06-DW-01 1800-3000K RA90 24D	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

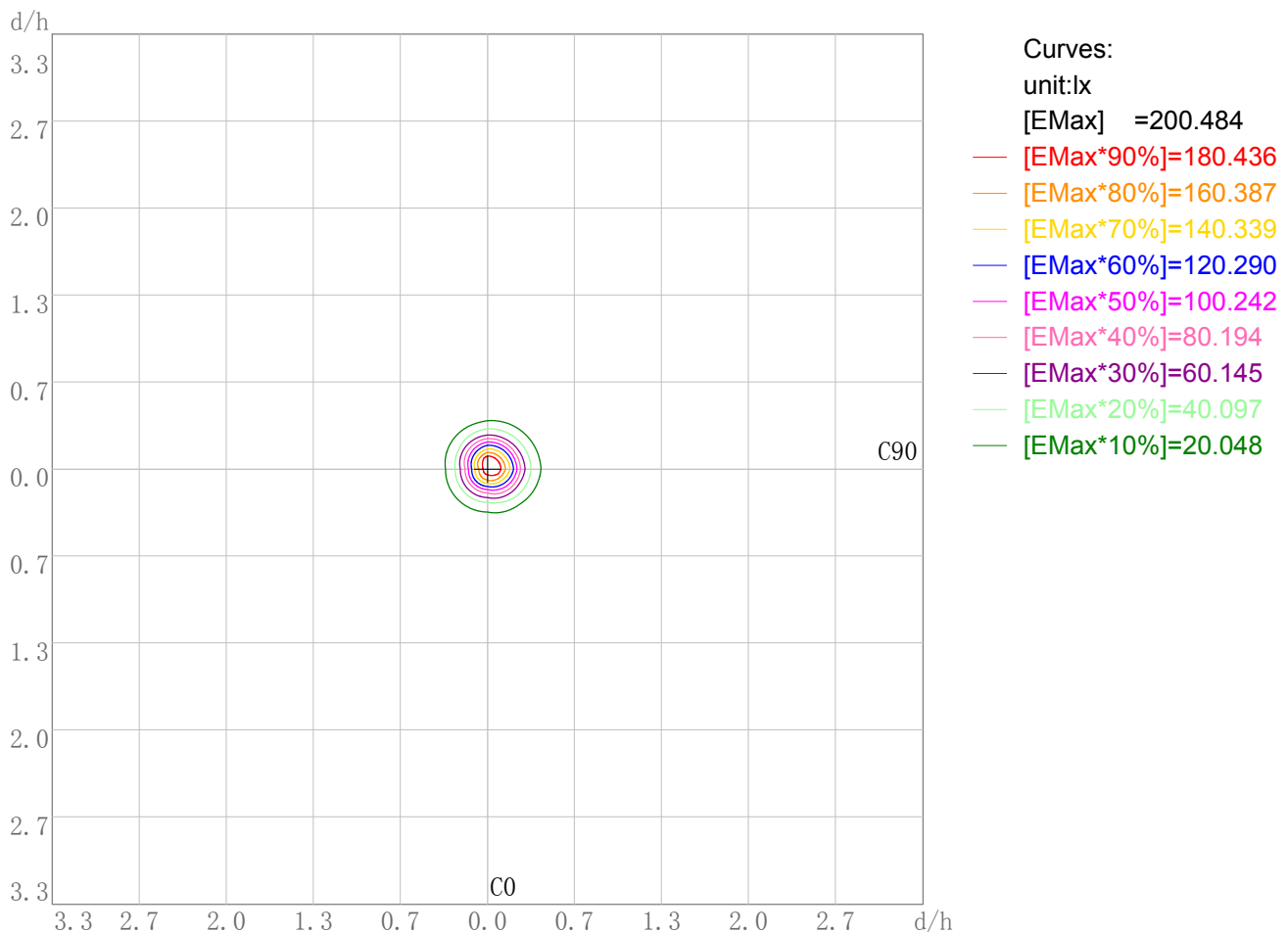


**Photometric Filename:TR09-06-DW-01 1800-3000K RA90 24D.IES**

## Plane ISO-Illuminance Diagram

Lum. Name: TR09-06-DW-01 1800-3000K RA90 24D	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

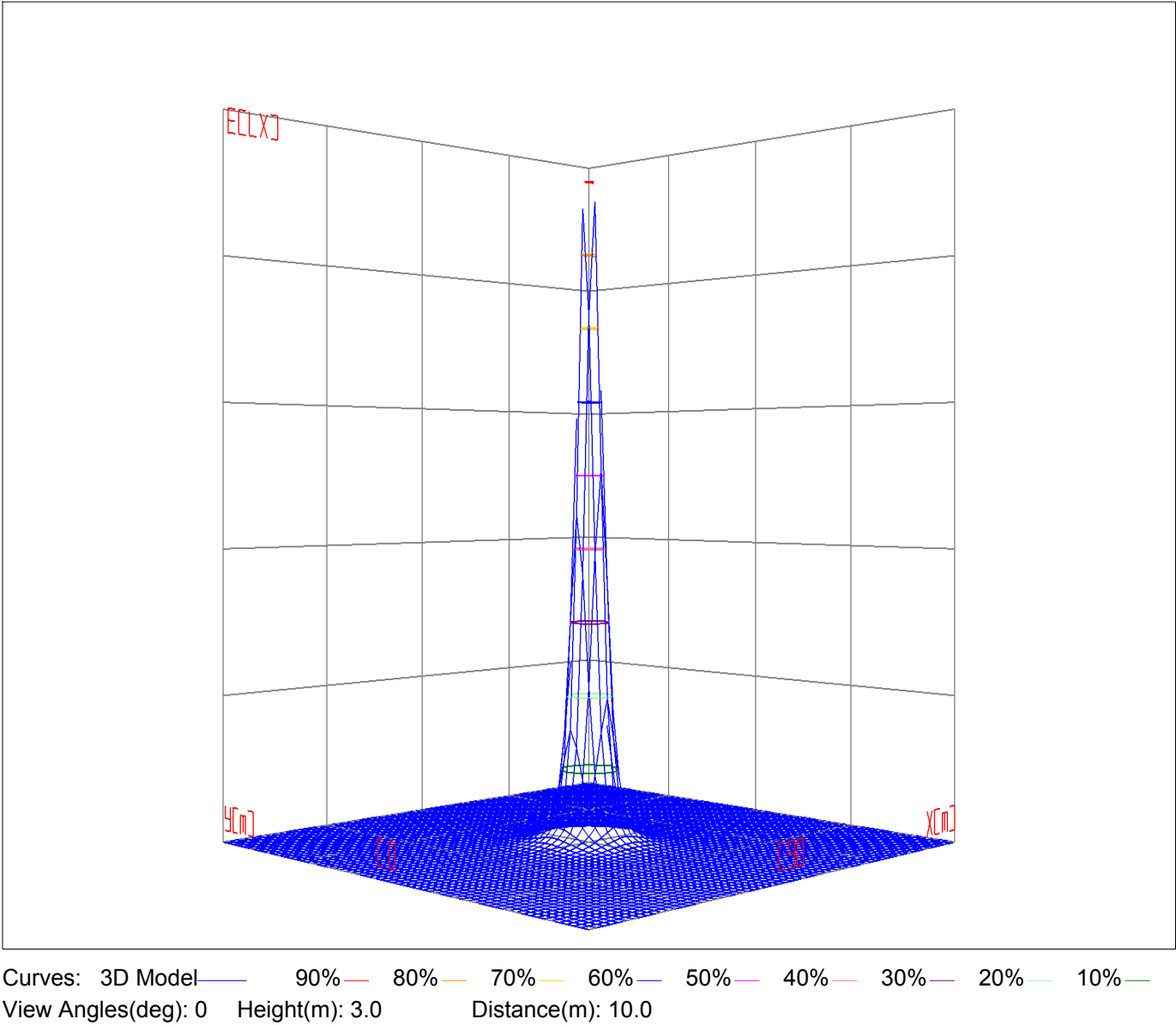
Working Plane Maximum Illuminance(lx): 200.48

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 24D	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

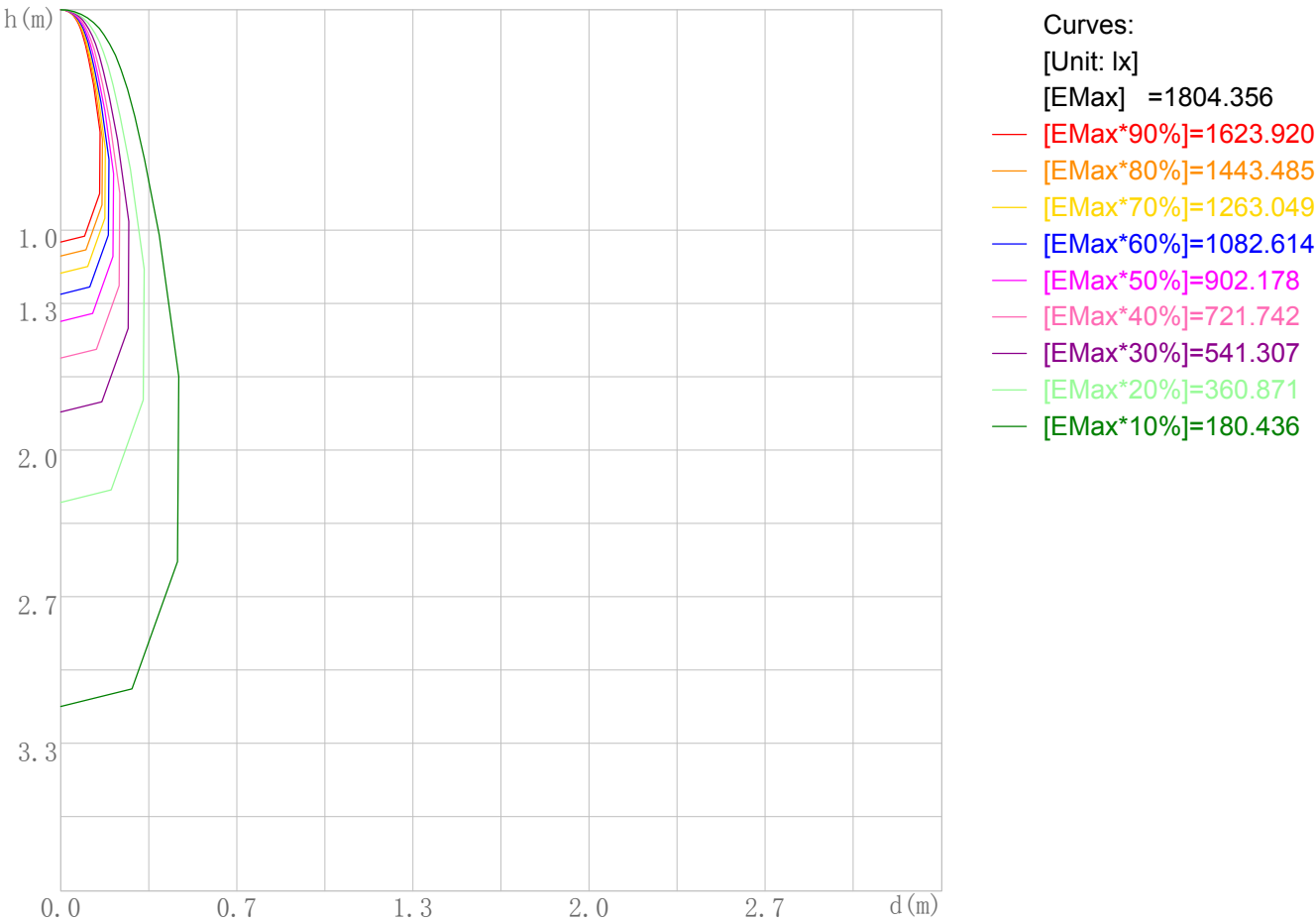
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name:TR09-06-DW-01 1800-3000K RA90 24D	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

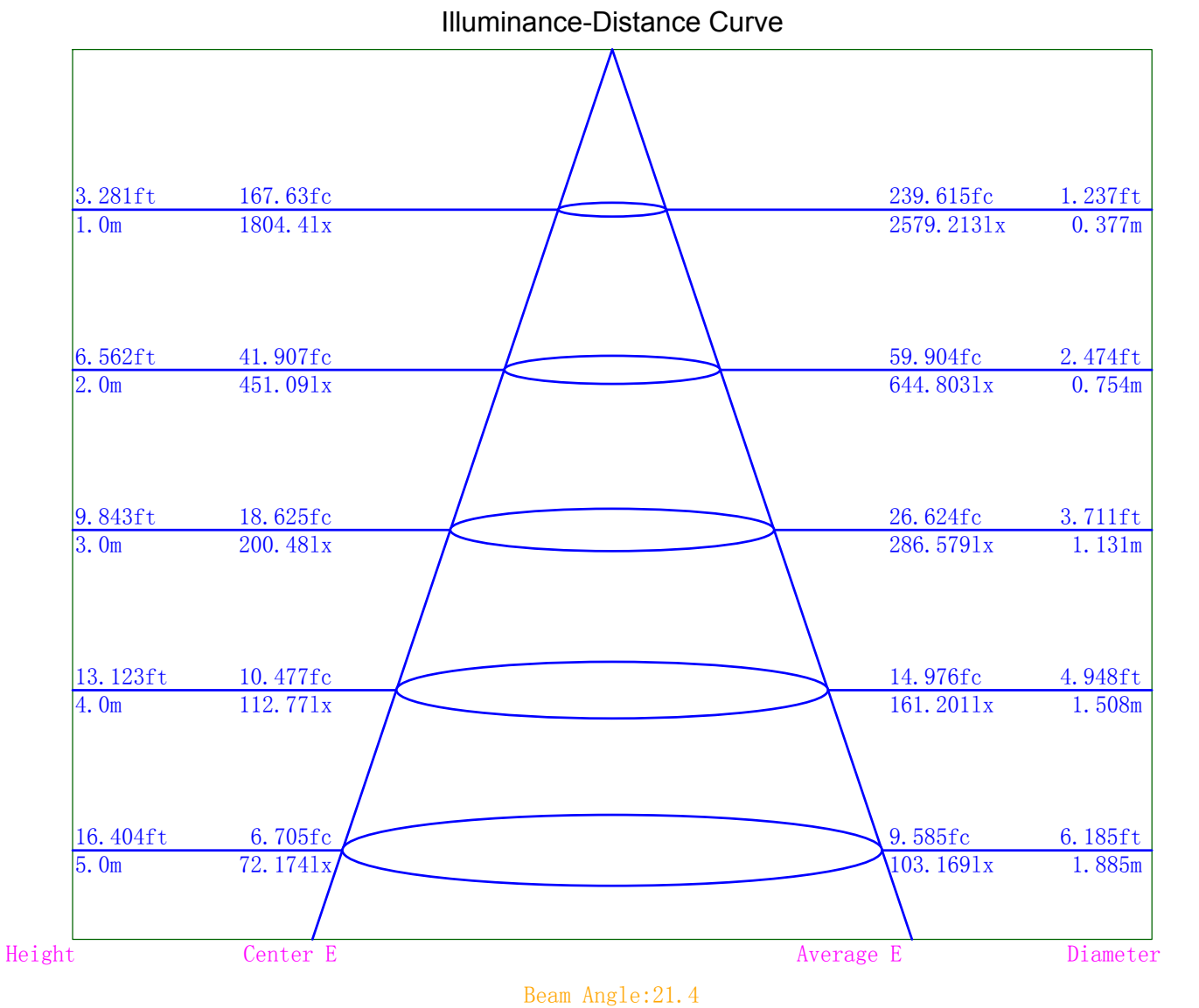


Space Plane Maximum Illuminance and @Angle:1804.36lx,0.0deg  
Plane Maximum Lighting Intensity and @Angle:1804.356cd,0deg



Illuminance-Distance Diagram

Lum. Name:TR09-06-DW-01 1800-3000K RA90 24D	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 24D	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

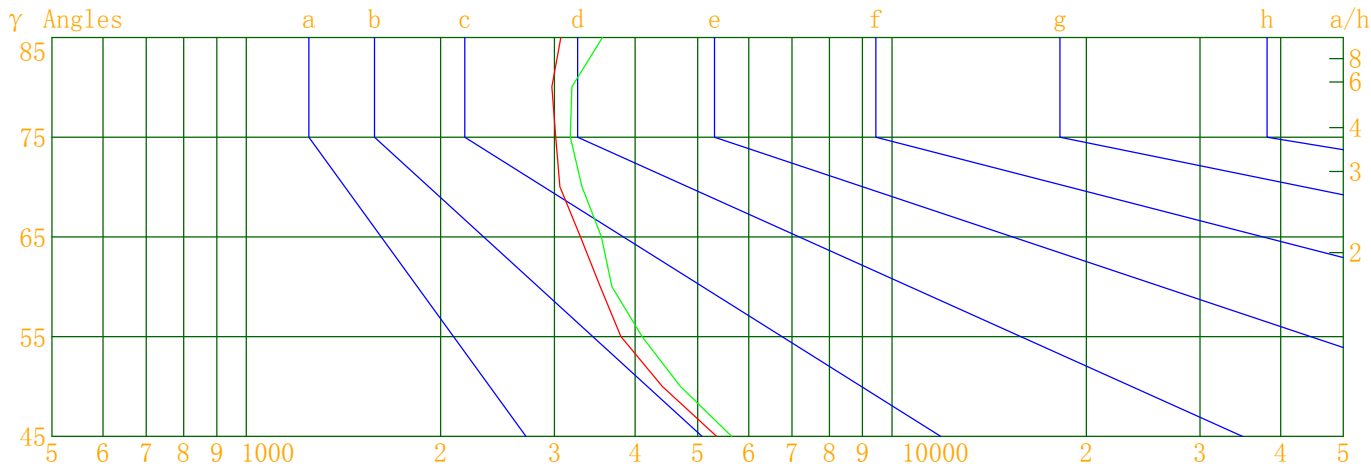
Glare Grade Table

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	5350	4409	3804	3533	3292	3059	3014	2974	3069
C90	5646	4701	4100	3682	3548	3311	3175	3192	3562

Luminance Limiting Curve



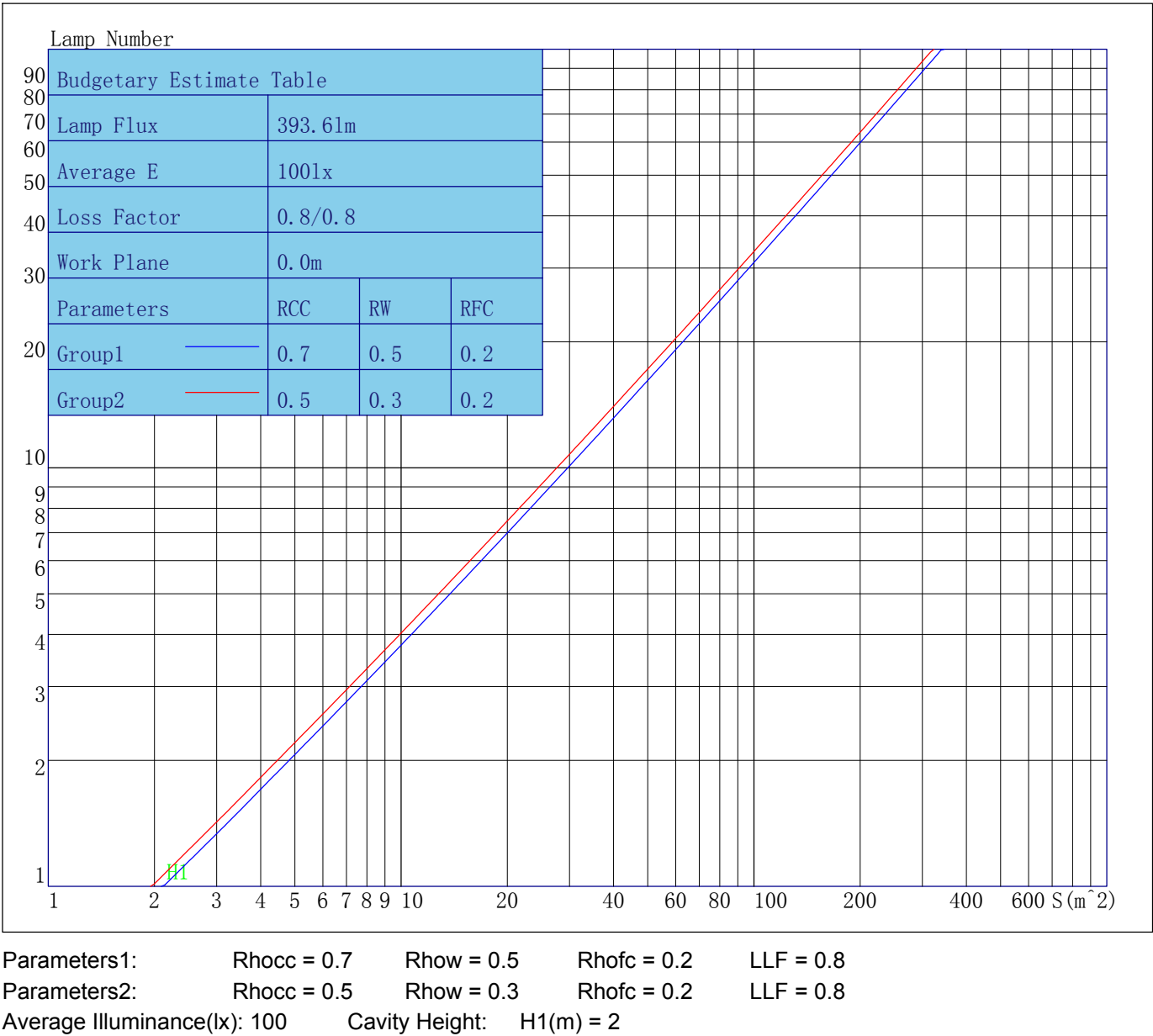
Luminous Size:Length(m)=0.076Width(m)=0.076Height(m)=0.000Area(m^2)=0.005776

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 24D	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 24D	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	110	110	110	105	105	105	101	101	101	99
1	114	111	109	107	111	109	107	105	105	103	102	101	99	98	97	96	95	93
2	109	105	101	98	107	103	100	97	100	97	95	96	94	92	94	92	90	89
3	105	99	95	91	103	98	94	91	95	92	89	92	90	88	90	88	86	85
4	101	94	90	86	99	93	89	86	91	87	84	89	86	83	87	84	82	81
5	97	90	85	82	96	89	85	81	87	84	81	86	82	80	84	81	79	78
6	94	87	82	78	92	86	81	78	84	80	77	83	79	77	82	79	76	75
7	91	83	79	75	90	83	78	75	81	77	74	80	77	74	79	76	74	72
8	88	80	76	72	87	80	75	72	79	75	72	78	74	72	77	74	71	70
9	85	78	73	70	84	77	73	70	76	72	70	76	72	69	75	71	69	68
10	83	75	71	68	82	75	71	68	74	70	68	73	70	67	73	69	67	66

Unified Glare Rating Table

Lum. Name:TR09-06-DW-01 1800-3000K RA90 24D	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	12.7	13.7	13.1	14.0	14.4	13.0	14.0	13.4	14.4	14.7
	13.7	14.6	14.1	14.9	15.3	14.1	15.0	14.5	15.3	15.7
	14.2	15.0	14.6	15.4	15.8	14.6	15.4	15.0	15.7	16.2
	14.6	15.3	15.0	15.7	16.2	15.0	15.7	15.4	16.1	16.6
	14.8	15.5	15.2	15.9	16.3	15.2	15.9	15.6	16.3	16.7
	14.9	15.5	15.4	16.0	16.4	15.3	16.0	15.8	16.4	16.8
X=4H    Y=2H	13.0	13.8	13.5	14.2	14.6	13.4	14.2	13.8	14.5	15.0
	14.3	14.9	14.7	15.4	15.8	14.6	15.3	15.0	15.7	16.1
	14.9	15.5	15.3	15.9	16.4	15.2	15.8	15.7	16.2	16.7
	15.4	15.9	15.9	16.4	16.9	15.8	16.3	16.3	16.8	17.3
	15.7	16.1	16.2	16.6	17.1	16.0	16.5	16.5	17.0	17.5
	15.8	16.2	16.4	16.7	17.2	16.2	16.6	16.8	17.1	17.7
X=8H    Y=4H	15.1	15.5	15.6	16.0	16.5	15.4	15.8	15.9	16.3	16.8
	15.8	16.1	16.3	16.6	17.2	16.1	16.5	16.6	17.0	17.5
	16.1	16.4	16.6	16.9	17.5	16.4	16.7	17.0	17.3	17.8
	16.4	16.6	16.9	17.1	17.8	16.8	17.0	17.3	17.6	18.2
X=12H    Y=4H	15.0	15.4	15.6	16.0	16.5	15.4	15.8	15.9	16.3	16.8
	15.8	16.1	16.3	16.6	17.2	16.1	16.4	16.7	16.9	17.5
	16.2	16.4	16.7	16.9	17.6	16.5	16.8	17.1	17.3	17.9
Variations with the objverver position at spacings										
S=1.0H	0.4/-0.4					0.4/-0.4				
S=1.5H	0.7/-0.8					0.6/-0.7				
S=2.0H	0.9/-1.0					0.8/-0.9				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	2.5					2.5				

to 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	1804.36	1804.36	1804.36	1804.36
γ 5.0	1733.78	1718.29	1439.77	1339.88
γ 10.0	1185.14	1293.47	784.91	728.30
γ 15.0	555.32	686.27	327.91	307.26
γ 20.0	227.88	298.21	141.96	135.99
γ 25.0	111.74	138.63	71.74	70.49
γ 30.0	65.34	75.92	42.18	42.10
γ 35.0	42.79	47.52	28.15	28.60
γ 40.0	29.71	32.26	21.11	21.60
γ 45.0	21.85	23.06	16.42	16.94
γ 50.0	16.37	17.45	13.04	13.29
γ 55.0	12.60	13.58	10.77	10.73
γ 60.0	10.20	10.63	8.57	8.57
γ 65.0	8.04	8.66	6.76	6.41
γ 70.0	6.04	6.54	4.70	4.81
γ 75.0	4.51	4.75	3.41	3.42
γ 80.0	2.98	3.20	2.27	1.64
γ 85.0	1.54	1.79	0.78	0.71
γ 90.0	0.86	0.80	0.47	0.63
γ 95.0	0.45	0.55	0.39	0.38
γ 100.0	0.43	0.59	0.36	0.07
γ 105.0	0.41	0.75	0.30	0.00
γ 110.0	0.23	0.43	0.30	0.38
γ 115.0	0.40	0.56	0.25	0.37
γ 120.0	0.12	0.51	0.27	0.43
γ 125.0	0.11	0.62	0.31	0.29
γ 130.0	0.06	0.22	0.35	0.57
γ 135.0	0.26	0.64	0.96	1.16
γ 140.0	0.66	1.07	1.44	1.72
γ 145.0	0.98	1.51	2.04	2.01
γ 150.0	1.63	1.68	2.43	2.03
γ 155.0	2.28	2.08	2.62	2.36
γ 160.0	2.43	2.33	2.47	2.29
γ 165.0	2.58	2.33	2.51	2.23
γ 170.0	2.29	2.37	2.51	2.46
γ 175.0	2.27	2.38	2.30	2.19
γ 180.0	2.33	2.33	2.33	2.33