

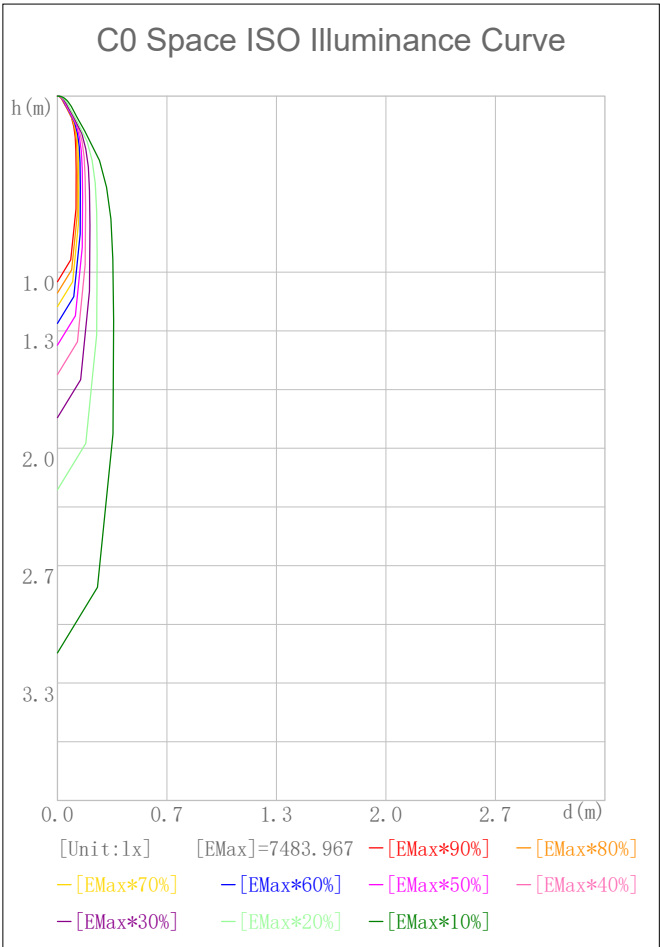
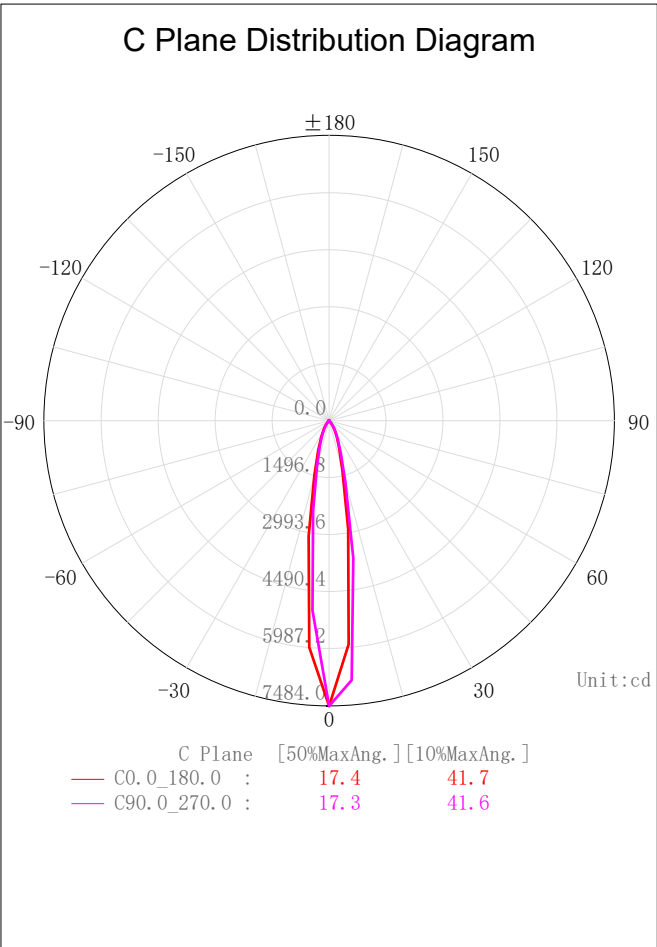
Indoor Luminaire Photometric Data

Description Information

Luminary Name: SD08-15-XX-01 4000K RA90 15D		Lum. Catalog:	Test ID: 01
Lamp Name:		Lamp Catalog: LED	Test Date: 2022/09/13
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):0.055m*0.055m*0.000m		Lum. Area (m2):0.003	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25	Humidity(%): 50.0

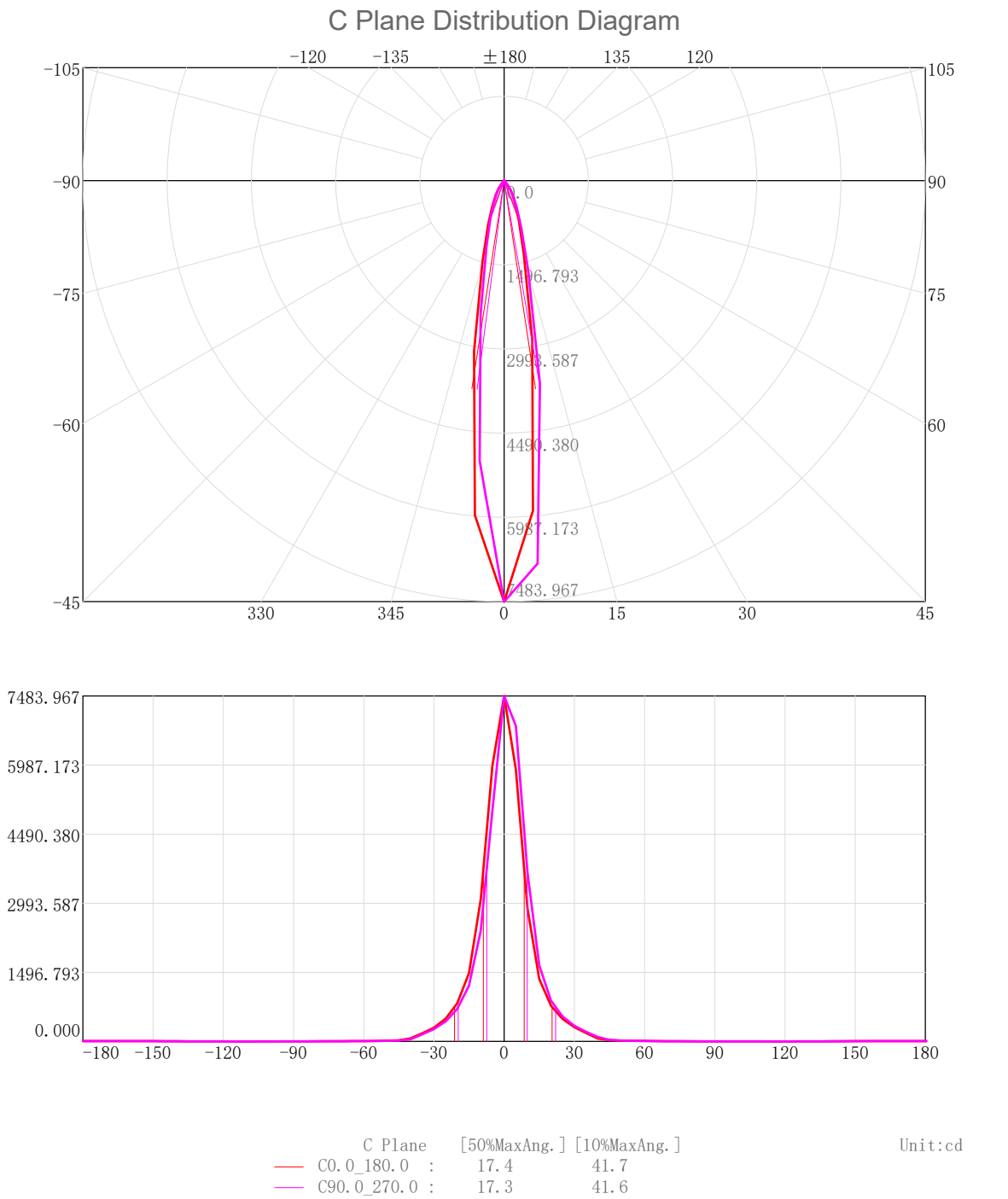
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 1353.470	Luminary Flux(lm): 1353.475	Field Angle(10%Imax): 41.7(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1332.145lm 98.42%	
Rated Voltage(V):	Luminary EER(lm/W): 101.232	Up Lumens&Percent: 21.329lm 1.58%	
Tested Power(W): 13.370	Max. Candela(cd): 7483.967	S/MH: C0_a180=0.300 C90_270=0.297	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf):239.9, 0.060, 0.921	Beam Angle(50%Imax): 17.4(°)	ErP Φ use(90°): 1328.702lm	
Lamp Size (W*L*H):0.055m*0.055m*0.000m	Left=-8.9°, Right=8.6°	IRF(%): 1194.520	



2D Plane Light Intensity Distribution Curve

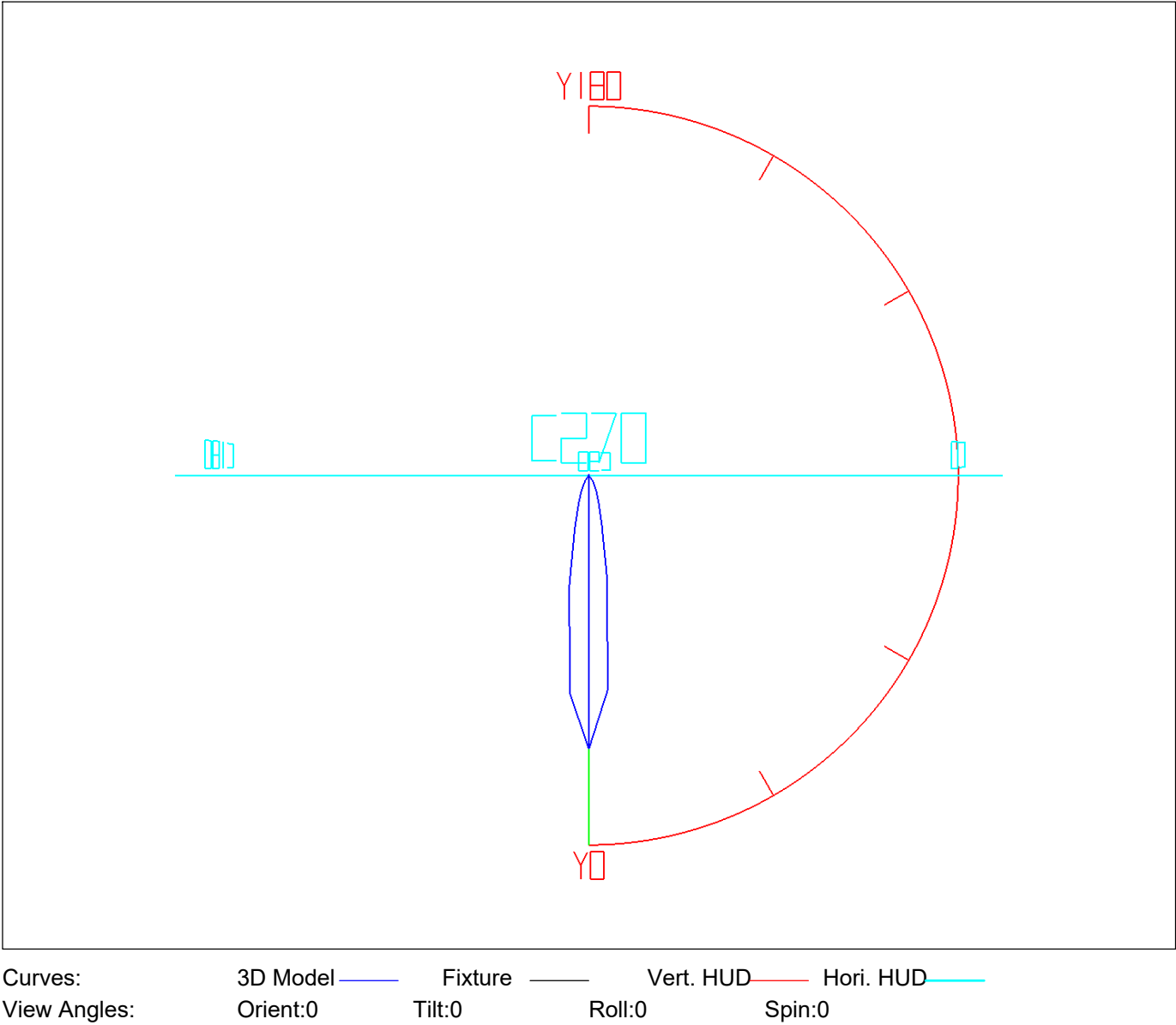
Lum. Name:SD08-15-XX-01 4000K RA90 15D	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/09/13



3D Light Intensity Distribution Modal

Lum. Name:SD08-15-XX-01 4000K 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:2022/09/13

3D Light Intensity Distribution Modal

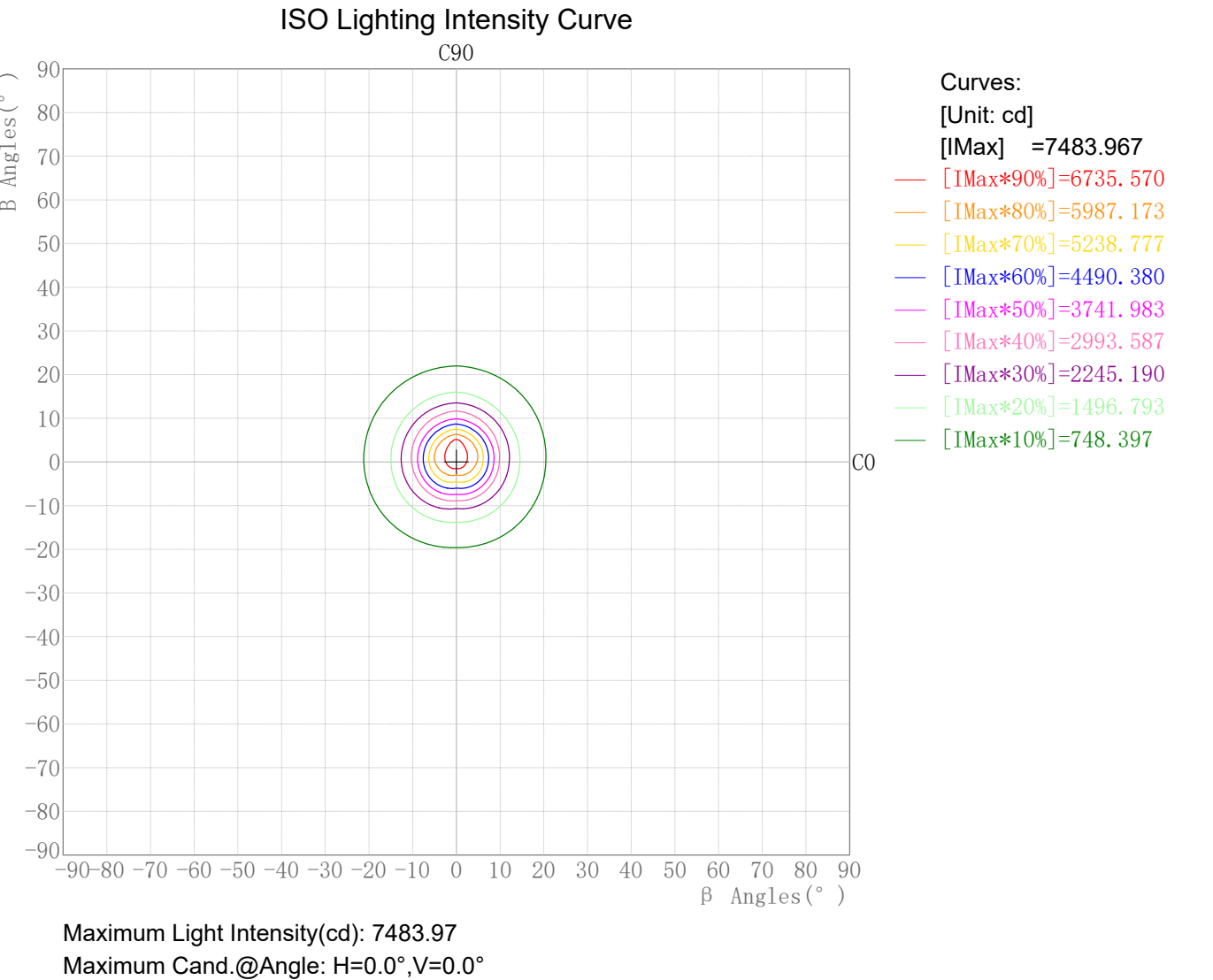


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0. 0-5. 0	160. 27	160. 27	11. 84	11. 84
5. 0-10. 0	319. 41	479. 68	23. 60	35. 44
10. 0-15. 0	262. 79	742. 47	19. 42	54. 86
15. 0-20. 0	183. 21	925. 68	13. 54	68. 39
20. 0-25. 0	135. 18	1060. 86	9. 99	78. 38
25. 0-30. 0	100. 53	1161. 39	7. 43	85. 81
30. 0-35. 0	71. 43	1232. 82	5. 28	91. 09
35. 0-40. 0	41. 70	1274. 52	3. 08	94. 17
40. 0-45. 0	18. 07	1292. 59	1. 34	95. 50
45. 0-50. 0	9. 26	1301. 85	0. 68	96. 19
50. 0-55. 0	6. 75	1308. 60	0. 50	96. 68
55. 0-60. 0	5. 50	1314. 11	0. 41	97. 09
60. 0-65. 0	4. 56	1318. 66	0. 34	97. 43
65. 0-70. 0	3. 79	1322. 45	0. 28	97. 71
70. 0-75. 0	3. 14	1325. 59	0. 23	97. 94
75. 0-80. 0	2. 59	1328. 19	0. 19	98. 13
80. 0-85. 0	2. 17	1330. 36	0. 16	98. 29
85. 0-90. 0	1. 79	1332. 15	0. 13	98. 42
90. 0-95. 0	1. 39	1333. 54	0. 10	98. 53
95. 0-100. 0	1. 11	1334. 65	0. 08	98. 61
100. 0-105. 0	0. 92	1335. 57	0. 07	98. 68
105. 0-110. 0	0. 85	1336. 43	0. 06	98. 74
110. 0-115. 0	0. 78	1337. 21	0. 06	98. 80
115. 0-120. 0	0. 72	1337. 93	0. 05	98. 85
120. 0-125. 0	0. 77	1338. 70	0. 06	98. 91
125. 0-130. 0	0. 90	1339. 60	0. 07	98. 97
130. 0-135. 0	1. 13	1340. 72	0. 08	99. 06
135. 0-140. 0	1. 46	1342. 18	0. 11	99. 17
140. 0-145. 0	1. 83	1344. 01	0. 14	99. 30
145. 0-150. 0	2. 06	1346. 07	0. 15	99. 45
150. 0-155. 0	2. 05	1348. 12	0. 15	99. 60
155. 0-160. 0	1. 84	1349. 96	0. 14	99. 74
160. 0-165. 0	1. 50	1351. 46	0. 11	99. 85
165. 0-170. 0	1. 12	1352. 58	0. 08	99. 93
170. 0-175. 0	0. 67	1353. 26	0. 05	99. 98
175. 0-180. 0	0. 22	1353. 47	0. 02	100. 00

Rectangle ISO Lighting Intensity Diagram

Lum. Name:SD08-15-XX-01 4000K 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:2022/09/13

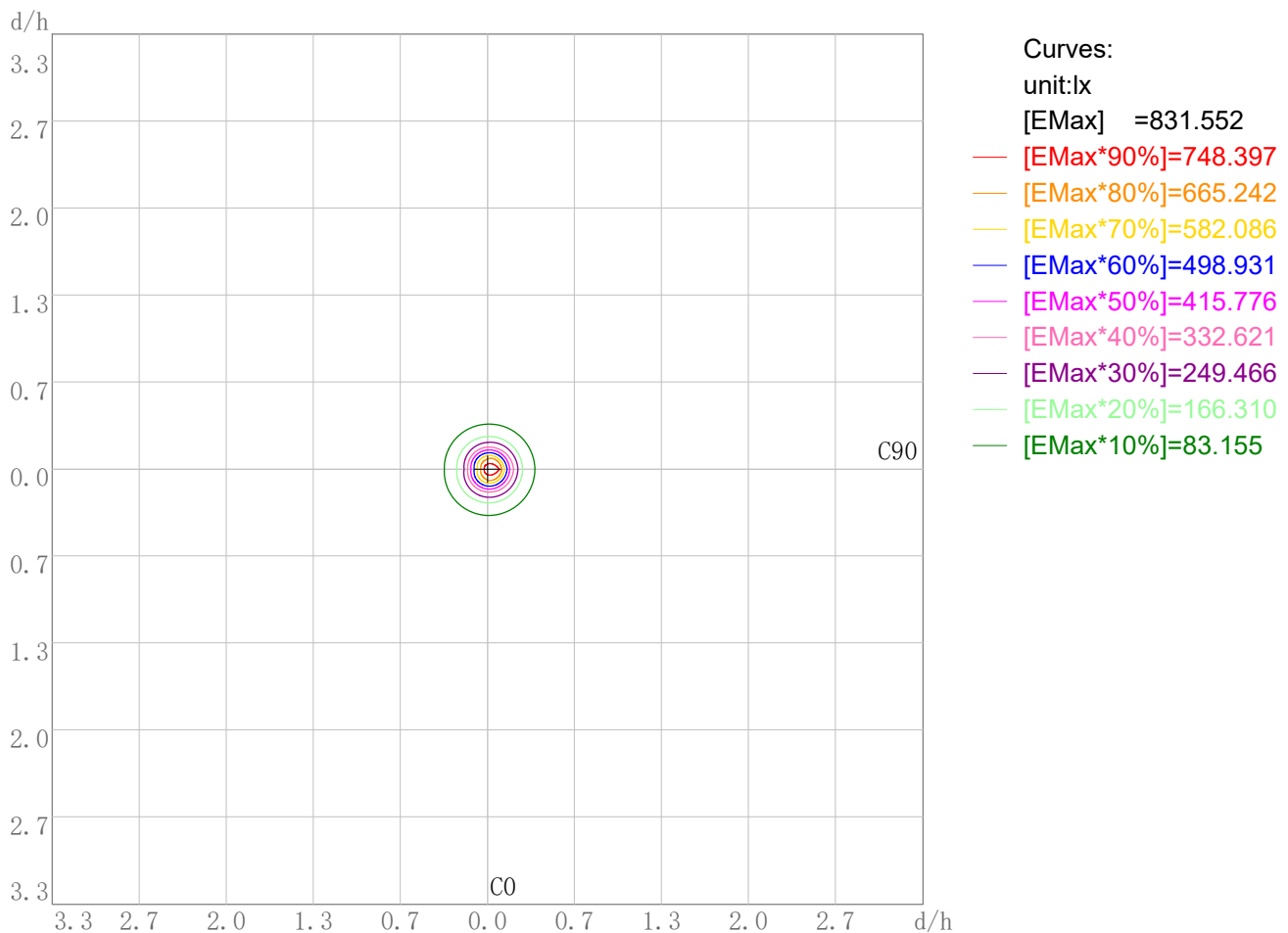


Photometric Filename:SD08-15-XX-01 4000K RA90 15D.IES

Plane ISO-Illuminance Diagram

Lum. Name: SD08-15-XX-01 4000K 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: 2022/09/13

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00

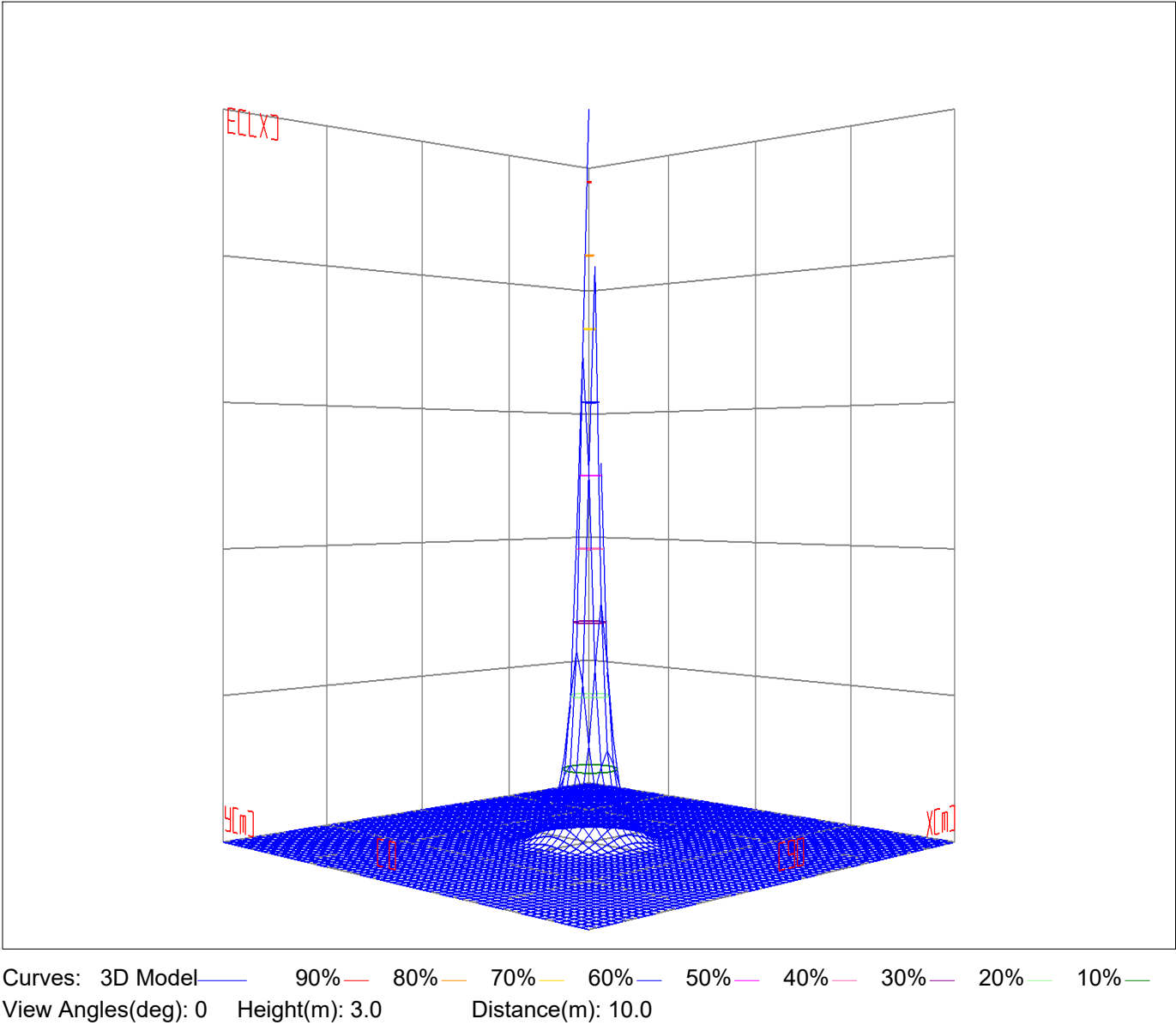
Working Plane Maximum Illuminance(lx): 831.55

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

3D Plane ISO Illuminance Diagram

Lum. Name: SD08-15-XX-01 4000K 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: 2022/09/13

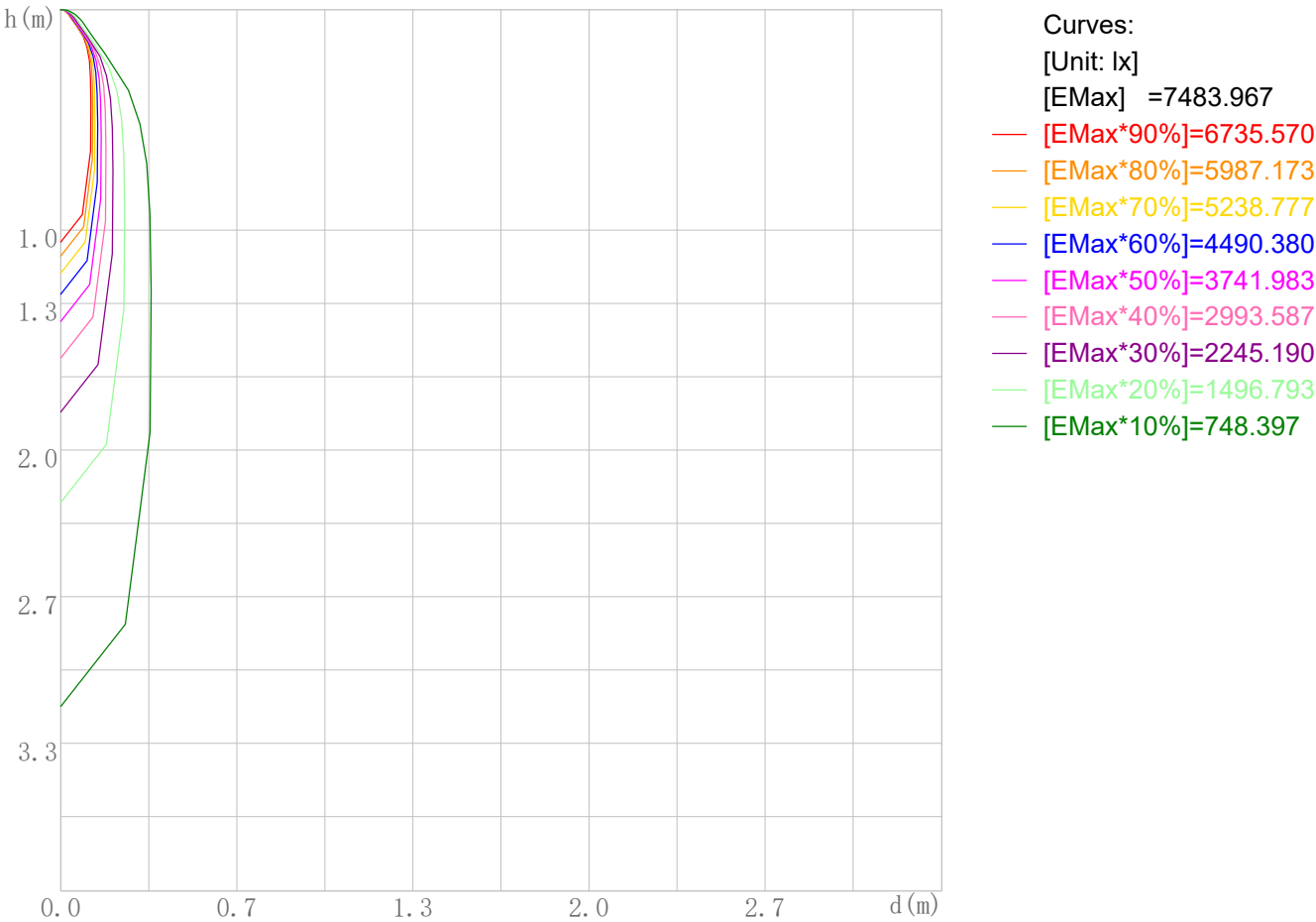
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: SD08-15-XX-01 4000K 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: 2022/09/13

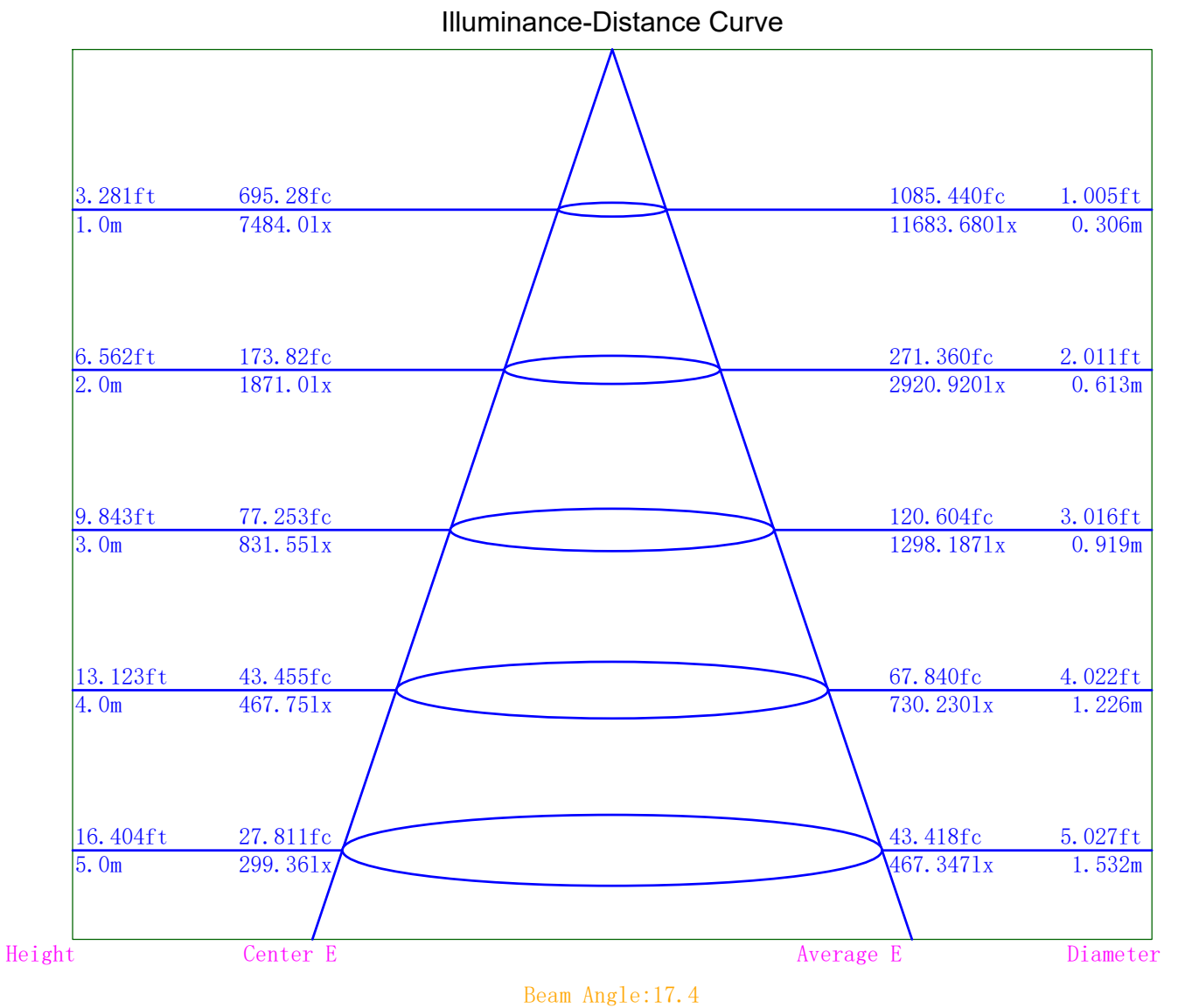
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:7483.97lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:7483.967cd,0deg

Illuminance-Distance Diagram

Lum. Name:SD08-15-XX-01 4000K 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:2022/09/13



Indoor Luminance Limiting Curves

Lum. Name:SD08-15-XX-01 4000K 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:2022/09/13

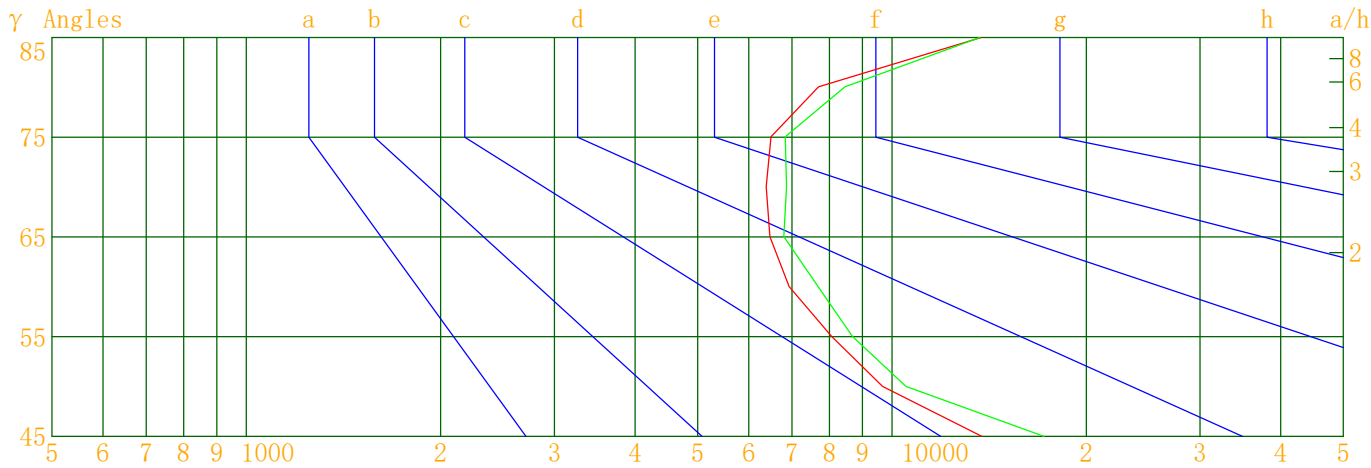
Glare Grade Table

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	13780	9672	8065	6930	6470	6387	6496	7695	13742
C90	17188	10508	8686	7681	6801	6866	6835	8456	13685

Luminance Limiting Curve



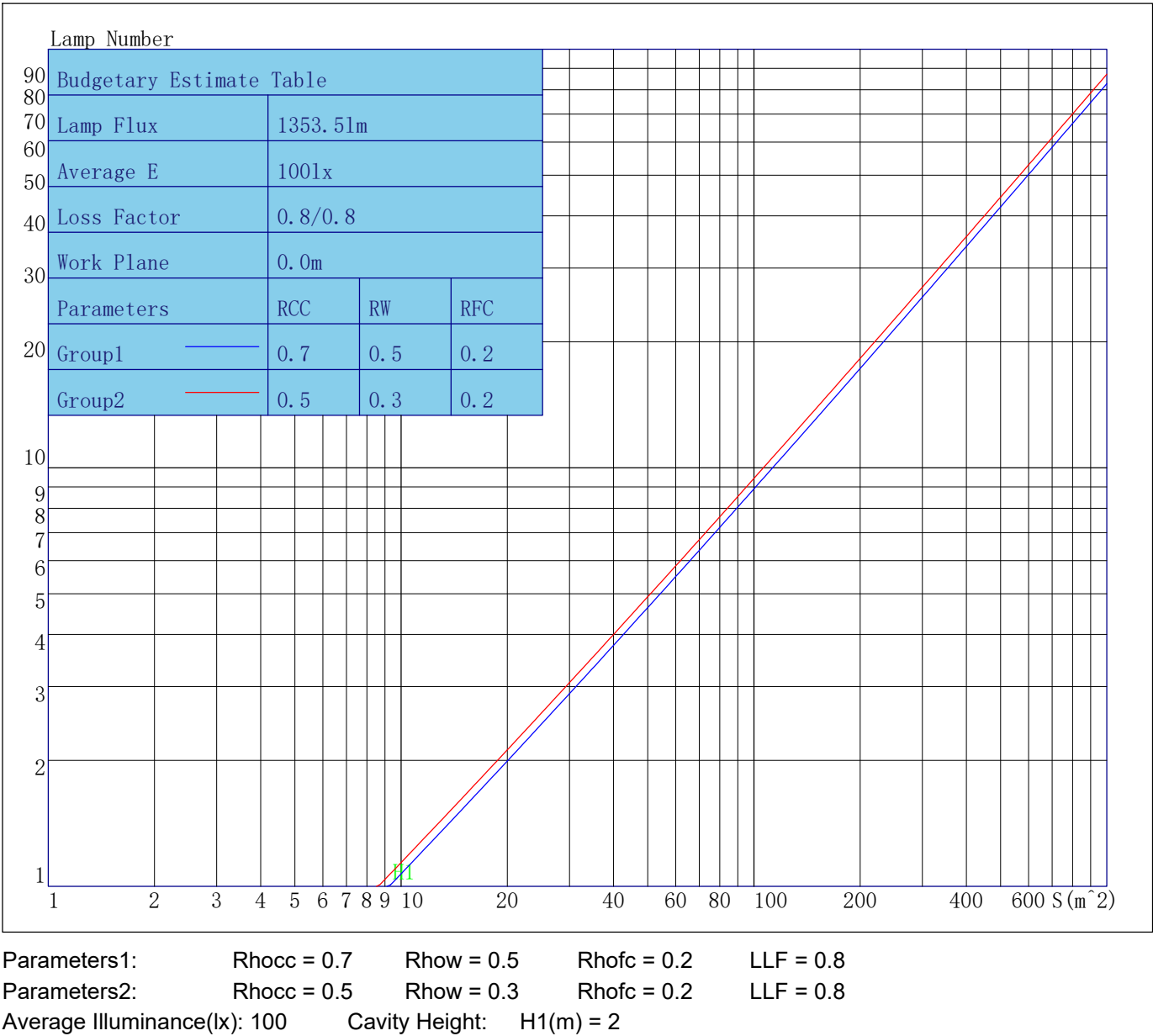
Luminous Size:Length(m)=0.055Width(m)=0.055Height(m)=0.000Area(m^2)=0.003025

Luminous Type:Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name:SD08-15-XX-01 4000K 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: 2022/09/13



Indoor Coefficient of Utilization Table

Lum. Name: SD08-15-XX-01 4000K 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: 2022/09/13

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	98
1	114	112	110	108	112	109	108	106	105	104	102	101	100	99	98	97	96	94
2	110	106	102	100	108	104	101	98	101	98	96	97	96	94	95	93	92	90
3	106	101	97	93	104	99	96	93	96	93	91	94	91	89	92	90	88	86
4	102	96	92	88	100	95	91	88	93	89	87	91	88	86	89	86	84	83
5	99	92	88	84	97	91	87	84	89	86	83	88	85	82	86	83	81	80
6	95	89	84	81	94	88	83	80	86	82	80	85	82	79	83	81	78	77
7	92	85	81	78	91	85	80	77	83	80	77	82	79	76	81	78	76	75
8	90	82	78	75	88	82	78	75	81	77	74	80	76	74	79	76	73	72
9	87	80	75	72	86	79	75	72	78	74	72	77	74	72	77	73	71	70
10	85	77	73	70	84	77	73	70	76	72	70	75	72	69	75	71	69	68

Unified Glare Rating Table

Lum. Name:SD08-15-XX-01 4000K 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:2022/09/13

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	16.1	17.0	16.5	17.3	17.7	16.9	17.8	17.3	18.1	18.5
	16.2	17.0	16.7	17.4	17.8	17.0	17.8	17.4	18.1	18.5
	16.4	17.0	16.8	17.4	17.9	17.1	17.8	17.5	18.2	18.6
	16.5	17.1	17.0	17.6	18.0	17.2	17.9	17.7	18.3	18.7
	16.6	17.2	17.1	17.7	18.1	17.4	17.9	17.8	18.4	18.8
	16.8	17.4	17.3	17.8	18.3	17.5	18.1	18.0	18.5	19.0
X=4H Y=2H	16.0	16.7	16.4	17.0	17.5	16.7	17.4	17.2	17.8	18.3
	16.2	16.8	16.7	17.2	17.7	17.0	17.5	17.4	18.0	18.4
	16.4	16.9	16.9	17.4	17.9	17.1	17.6	17.6	18.1	18.6
	16.8	17.2	17.3	17.6	18.2	17.4	17.8	17.9	18.3	18.8
	17.0	17.3	17.5	17.8	18.3	17.6	18.0	18.1	18.5	19.0
	17.3	17.6	17.8	18.1	18.7	17.9	18.2	18.4	18.7	19.3
X=8H Y=4H	16.5	16.8	17.0	17.3	17.8	17.1	17.5	17.6	18.0	18.5
	16.9	17.2	17.5	17.7	18.3	17.6	17.8	18.1	18.4	18.9
	17.3	17.5	17.8	18.1	18.6	17.9	18.1	18.5	18.7	19.2
	17.8	18.0	18.4	18.6	19.2	18.4	18.6	18.9	19.1	19.7
X=12H Y=4H	16.4	16.7	17.0	17.3	17.8	17.1	17.4	17.6	17.9	18.5
	17.0	17.2	17.5	17.7	18.3	17.6	17.8	18.2	18.3	18.9
	17.4	17.6	18.0	18.1	18.8	18.0	18.2	18.5	18.7	19.3
Variations with the objverver position at spacings										
S=1.0H	0.1/-0.1					0.1/-0.2				
S=1.5H	0.3/-0.3					0.3/-0.3				
S=2.0H	0.3/-0.3					0.3/-0.4				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	1.6					1.4				

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	7483.97	7483.97	7483.97	7483.97
γ 5.0	5890.03	6833.52	5969.34	4997.62
γ 10.0	2881.44	3661.28	3079.61	2402.15
γ 15.0	1353.77	1649.27	1482.18	1210.57
γ 20.0	774.97	884.88	828.93	707.55
γ 25.0	489.30	541.08	495.02	433.74
γ 30.0	310.15	340.06	299.68	268.49
γ 35.0	182.57	208.62	177.63	153.05
γ 40.0	65.84	96.68	68.73	46.64
γ 45.0	29.48	36.77	25.52	20.79
γ 50.0	18.81	20.43	16.54	15.00
γ 55.0	13.99	15.07	12.64	11.70
γ 60.0	10.48	11.62	10.10	9.64
γ 65.0	8.27	8.69	8.35	7.80
γ 70.0	6.61	7.10	6.85	6.16
γ 75.0	5.09	5.35	5.67	5.29
γ 80.0	4.04	4.44	4.46	4.42
γ 85.0	3.62	3.61	4.00	3.40
γ 90.0	2.63	3.15	3.06	2.60
γ 95.0	2.17	2.61	2.37	1.76
γ 100.0	2.08	2.19	1.76	1.42
γ 105.0	1.67	1.81	1.49	1.38
γ 110.0	1.75	2.16	1.47	1.34
γ 115.0	1.38	1.71	1.27	1.29
γ 120.0	1.45	1.68	1.49	1.60
γ 125.0	1.77	1.62	1.83	1.88
γ 130.0	2.22	2.43	2.25	2.50
γ 135.0	3.20	2.89	3.21	3.58
γ 140.0	4.55	4.23	4.57	5.20
γ 145.0	6.12	5.86	6.61	6.80
γ 150.0	7.66	7.26	7.84	7.83
γ 155.0	8.71	8.49	8.89	8.20
γ 160.0	9.08	9.21	9.15	8.31
γ 165.0	9.48	9.27	9.50	8.90
γ 170.0	9.65	9.60	10.05	9.09
γ 175.0	9.09	9.62	9.75	8.44
γ 180.0	9.09	9.09	9.09	9.09