

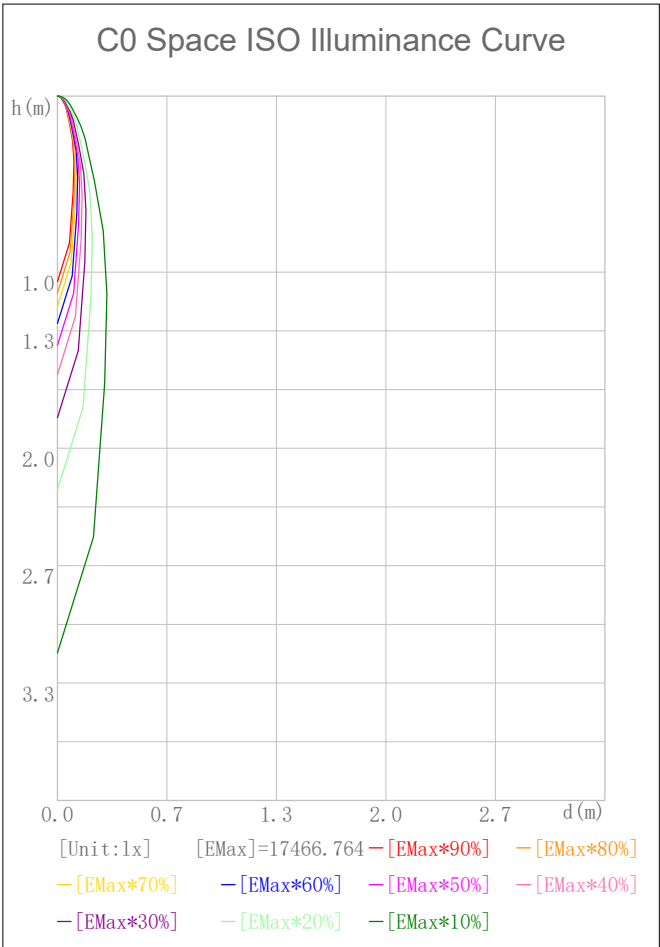
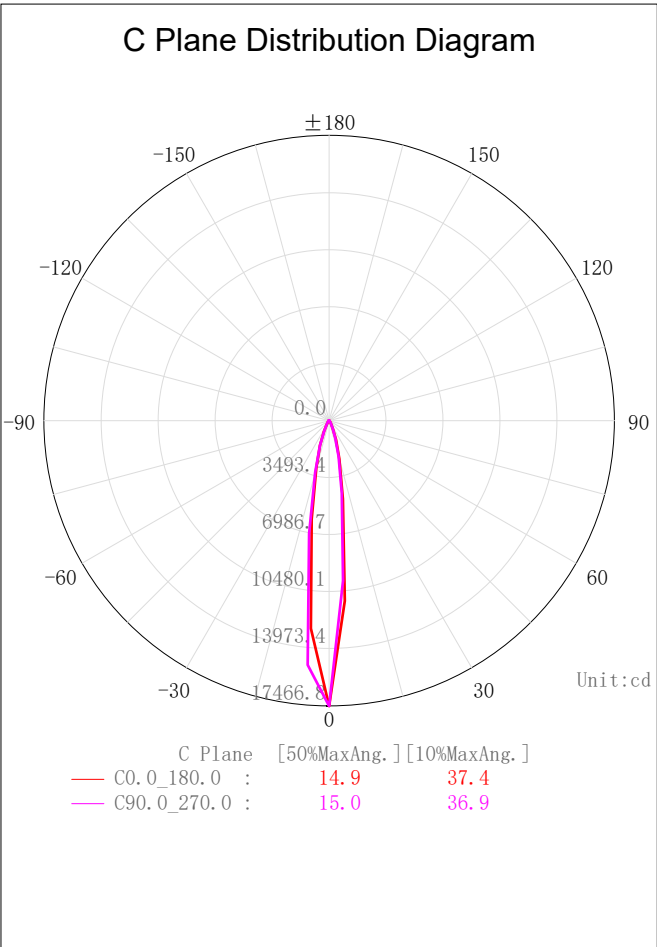
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-25-XX-01 4000K RA90 15D 白色	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Date: 2022/08/10
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):0.083m*0.083m*0.000m	Lum. Area (m2):0.007	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25
		Humidity(%): 50.0

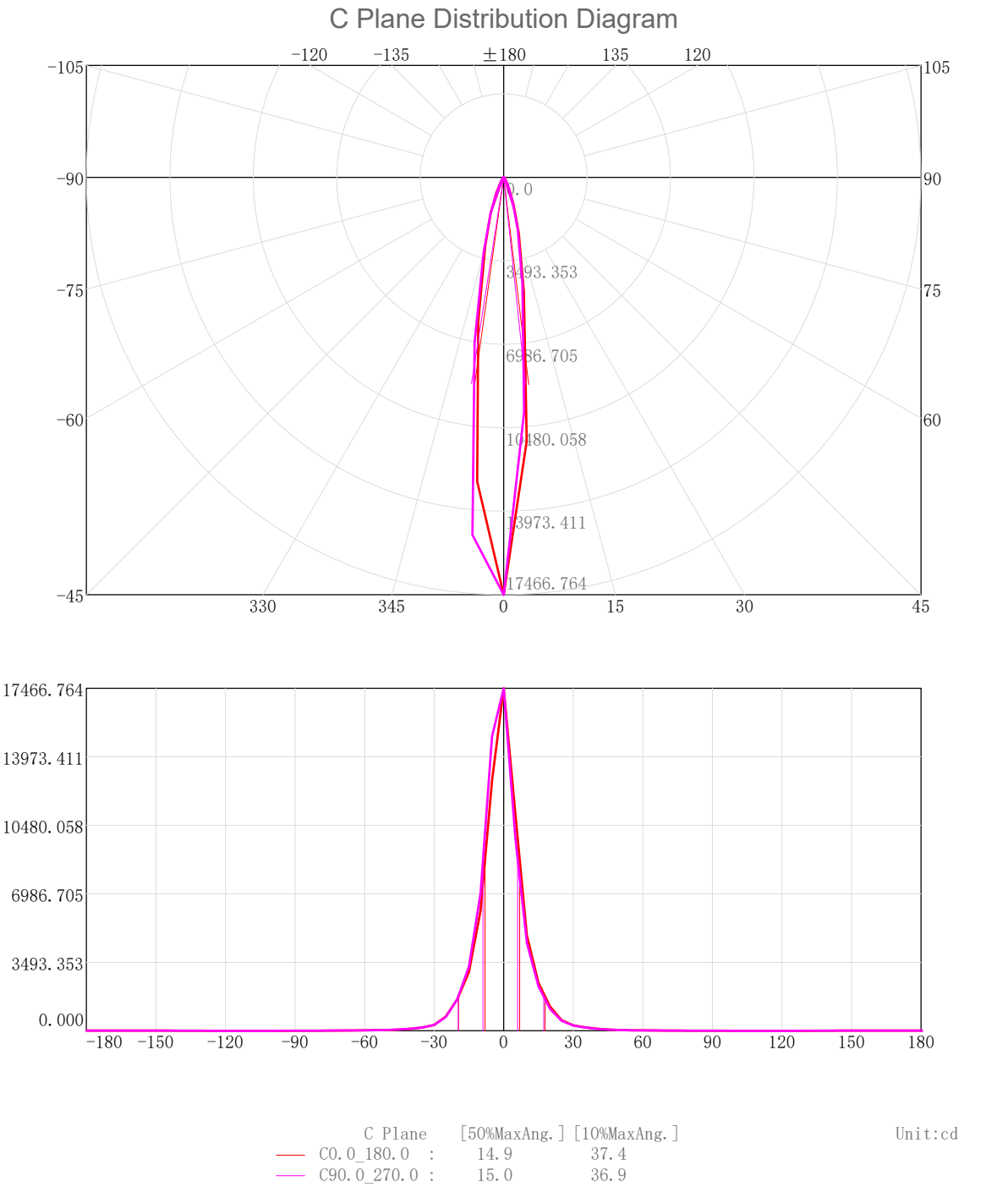
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 2432.160	Luminary Flux(lm): 2432.156	Field Angle(10%Imax): 37.4(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 2396.131lm 98.52%
Rated Voltage(V):	Luminary EER(lm/W): 100.627	Up Lumens&Percent: 36.025lm 1.48%
Tested Power(W): 24.170	Max. Candela(cd): 17466.764	S/MH: C0_a180=0.257 C90_270=0.258
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct
Tested Electrics (V, A, pf):239.9, 0.133, 0.752	Beam Angle(50%Imax): 14.9(°)	ErP Φ use(90°): 2271.983lm
Lamp Size (W*L*H):0.083m*0.083m*0.000m	Left=-8.0°, Right=6.9°	IRF(%): 1597.632



2D Plane Light Intensity Distribution Curve

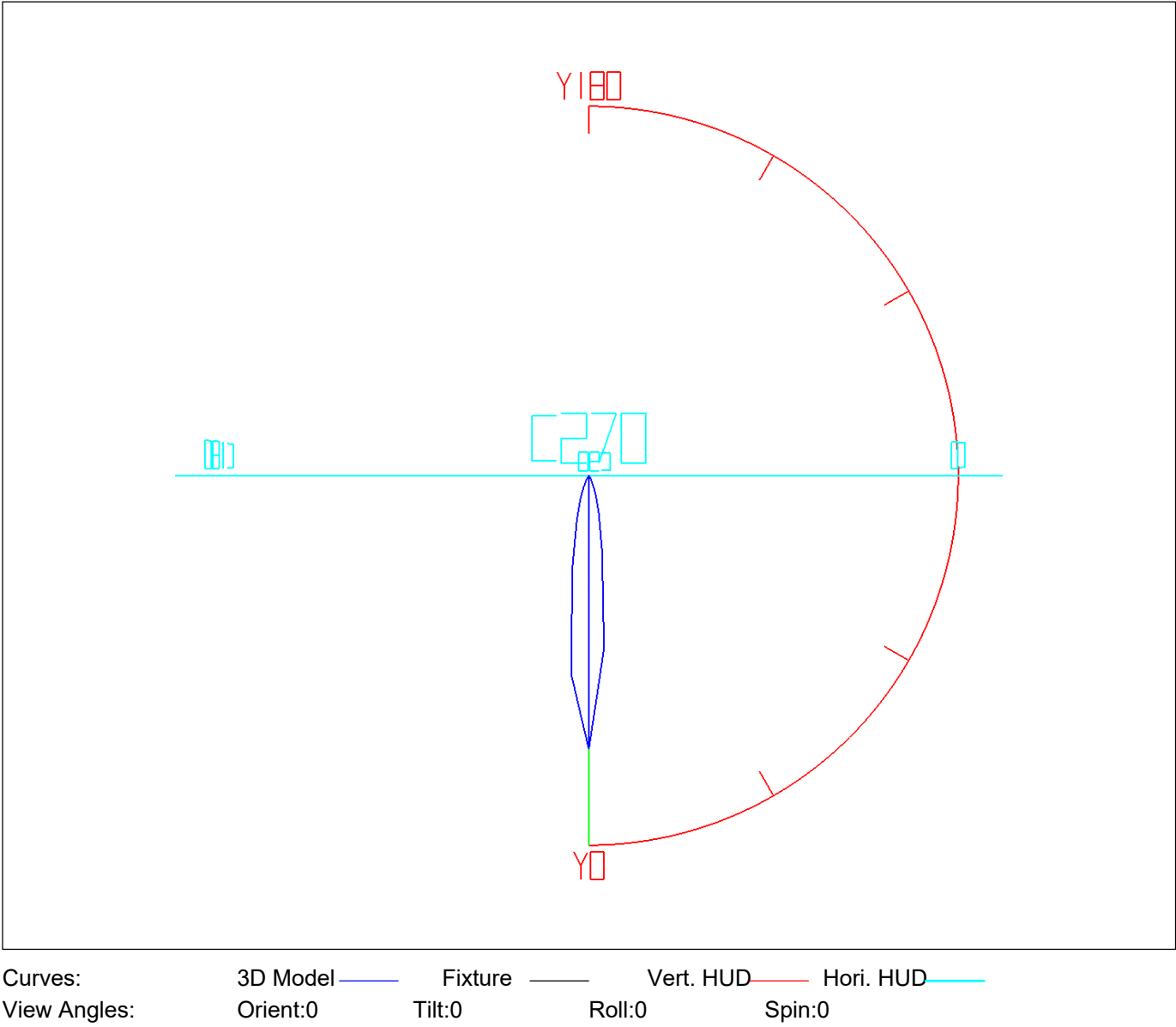
Lum. Name:DL51-25-XX-01 4000K RA90 15D 白色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10



3D Light Intensity Distribution Modal

Lum. Name:DL51-25-XX-01 4000K RA90 15D 白色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10

3D Light Intensity Distribution Modal

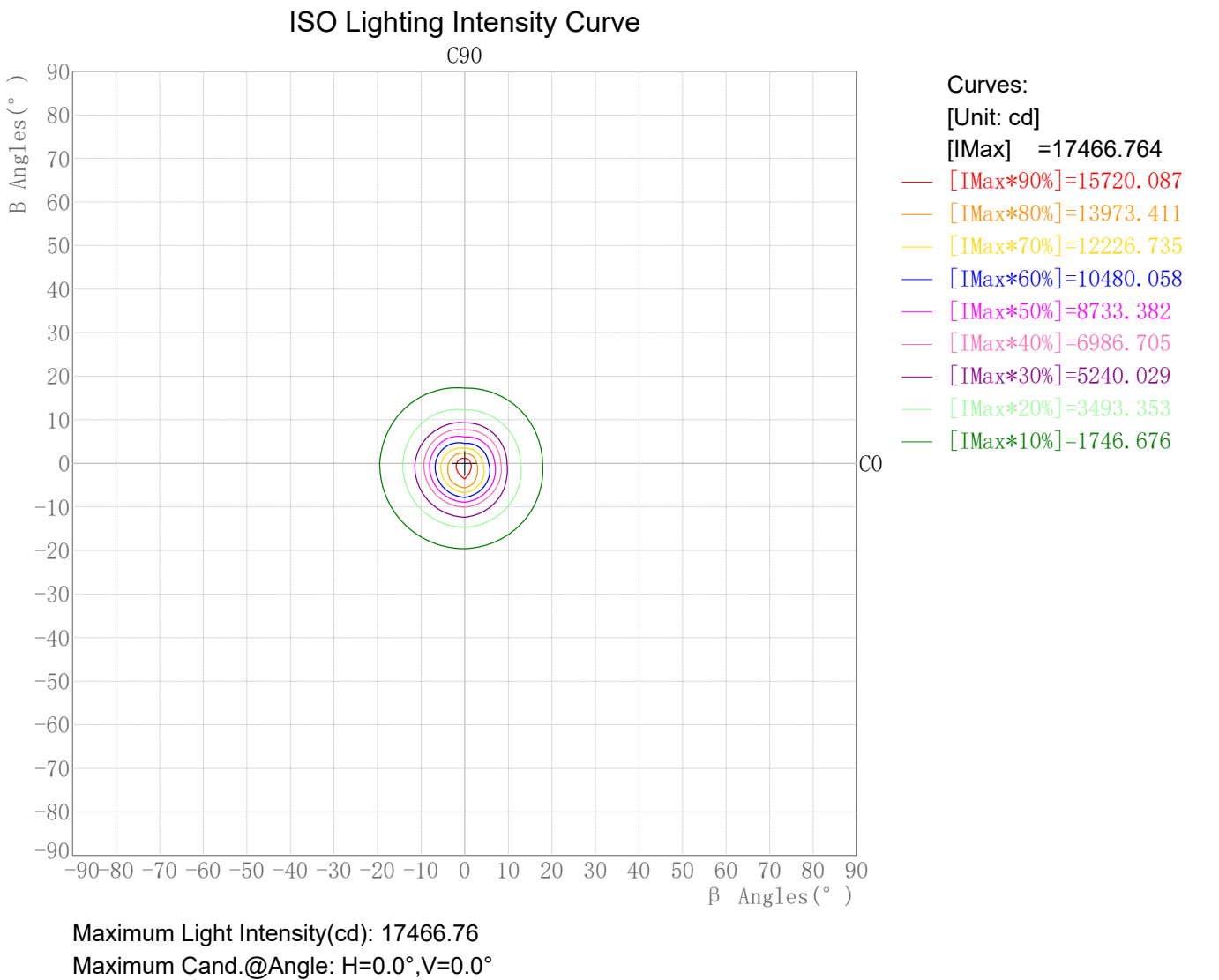


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0. 0-5. 0	354. 36	354. 36	14. 57	14. 57
5. 0-10. 0	636. 92	991. 28	26. 19	40. 76
10. 0-15. 0	496. 74	1488. 03	20. 42	61. 18
15. 0-20. 0	340. 93	1828. 96	14. 02	75. 20
20. 0-25. 0	211. 52	2040. 48	8. 70	83. 90
25. 0-30. 0	115. 75	2156. 23	4. 76	88. 65
30. 0-35. 0	68. 34	2224. 57	2. 81	91. 46
35. 0-40. 0	47. 22	2271. 78	1. 94	93. 41
40. 0-45. 0	32. 44	2304. 22	1. 33	94. 74
45. 0-50. 0	22. 04	2326. 26	0. 91	95. 65
50. 0-55. 0	16. 11	2342. 37	0. 66	96. 31
55. 0-60. 0	13. 23	2355. 61	0. 54	96. 85
60. 0-65. 0	11. 15	2366. 76	0. 46	97. 31
65. 0-70. 0	9. 15	2375. 91	0. 38	97. 69
70. 0-75. 0	7. 28	2383. 19	0. 30	97. 99
75. 0-80. 0	5. 62	2388. 81	0. 23	98. 22
80. 0-85. 0	4. 22	2393. 03	0. 17	98. 39
85. 0-90. 0	3. 10	2396. 13	0. 13	98. 52
90. 0-95. 0	2. 30	2398. 43	0. 09	98. 61
95. 0-100. 0	1. 84	2400. 27	0. 08	98. 69
100. 0-105. 0	1. 56	2401. 83	0. 06	98. 75
105. 0-110. 0	1. 36	2403. 19	0. 06	98. 81
110. 0-115. 0	1. 22	2404. 41	0. 05	98. 86
115. 0-120. 0	1. 09	2405. 49	0. 04	98. 90
120. 0-125. 0	1. 11	2406. 61	0. 05	98. 95
125. 0-130. 0	1. 36	2407. 97	0. 06	99. 01
130. 0-135. 0	1. 80	2409. 77	0. 07	99. 08
135. 0-140. 0	2. 45	2412. 22	0. 10	99. 18
140. 0-145. 0	3. 20	2415. 42	0. 13	99. 31
145. 0-150. 0	3. 68	2419. 10	0. 15	99. 46
150. 0-155. 0	3. 66	2422. 76	0. 15	99. 61
155. 0-160. 0	3. 30	2426. 06	0. 14	99. 75
160. 0-165. 0	2. 68	2428. 73	0. 11	99. 86
165. 0-170. 0	1. 93	2430. 66	0. 08	99. 94
170. 0-175. 0	1. 13	2431. 79	0. 05	99. 98
175. 0-180. 0	0. 36	2432. 16	0. 01	100. 00

Rectangle ISO Lighting Intensity Diagram

Lum. Name:DL51-25-XX-01 4000K RA90 15D 白色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10

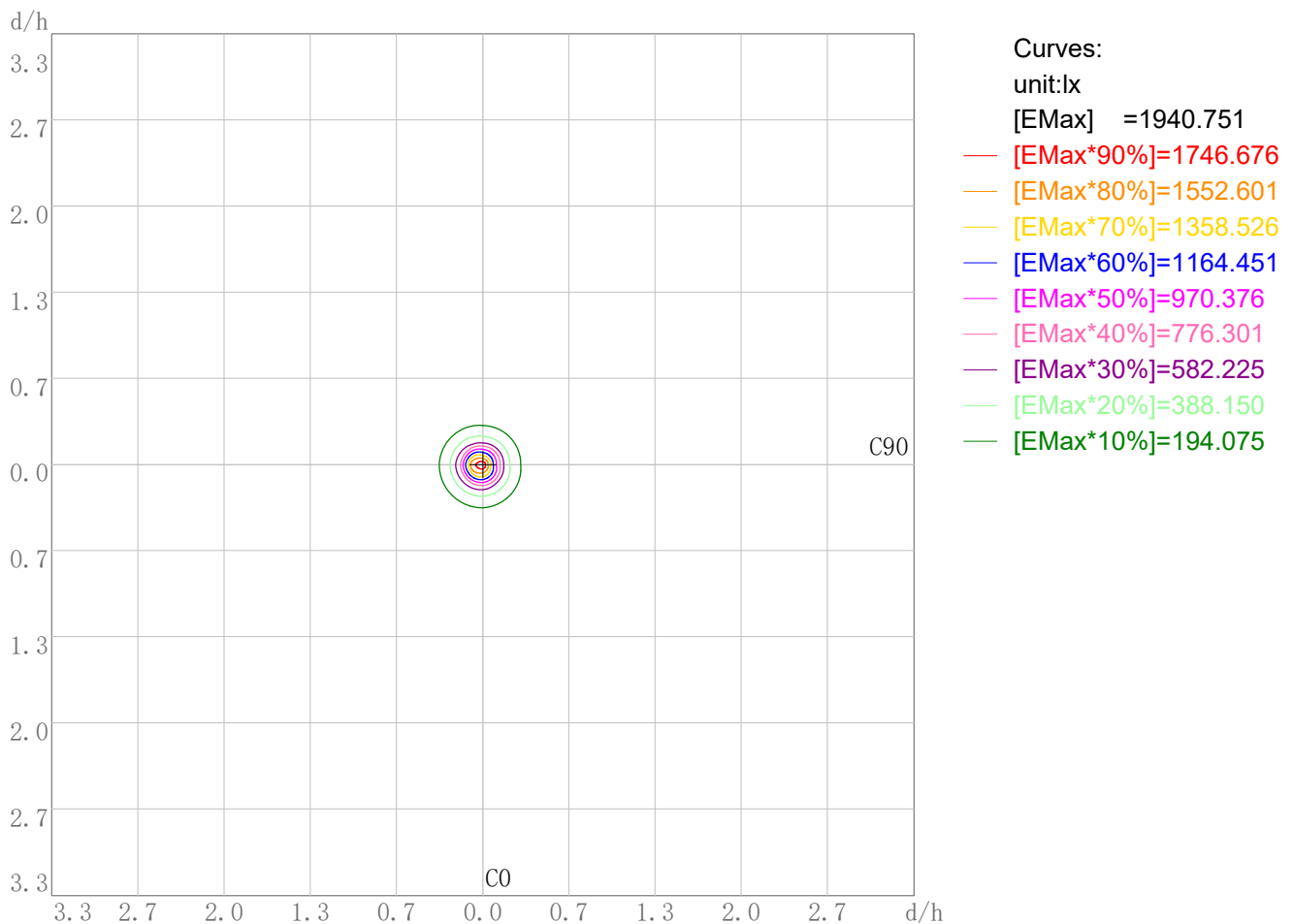


Photometric Filename:DL51-25-XX-01 4000K RA90 15D 白色.IES

Plane ISO-Illuminance Diagram

Lum. Name: DL51-25-XX-01 4000K RA90 15D 白色	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine: GON-2000	Test Date: 2022/08/10

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00

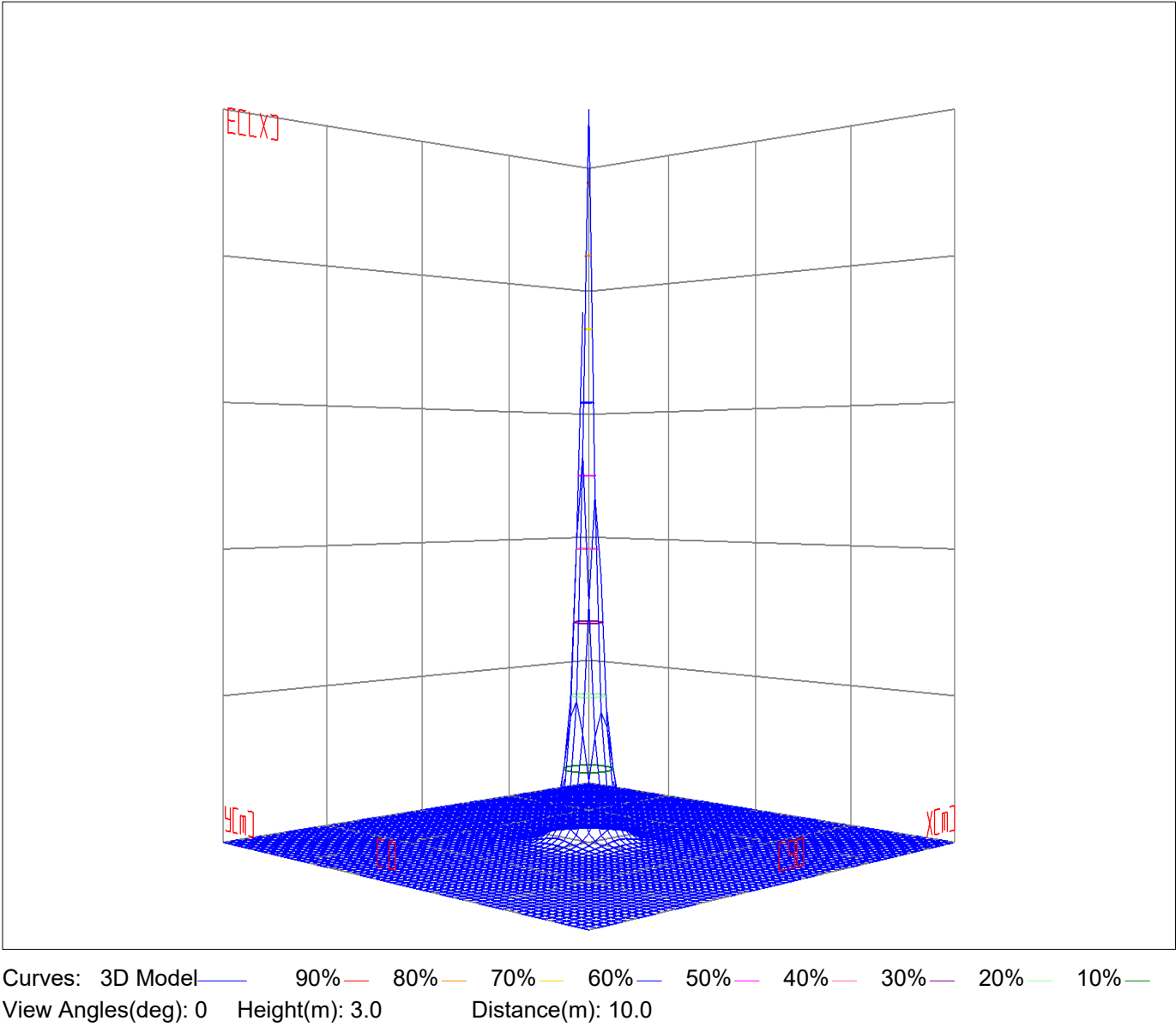
Working Plane Maximum Illuminance(lx): 1940.75

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

3D Plane ISO Illuminance Diagram

Lum. Name: DL51-25-XX-01 4000K RA90 15D 白色	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/10

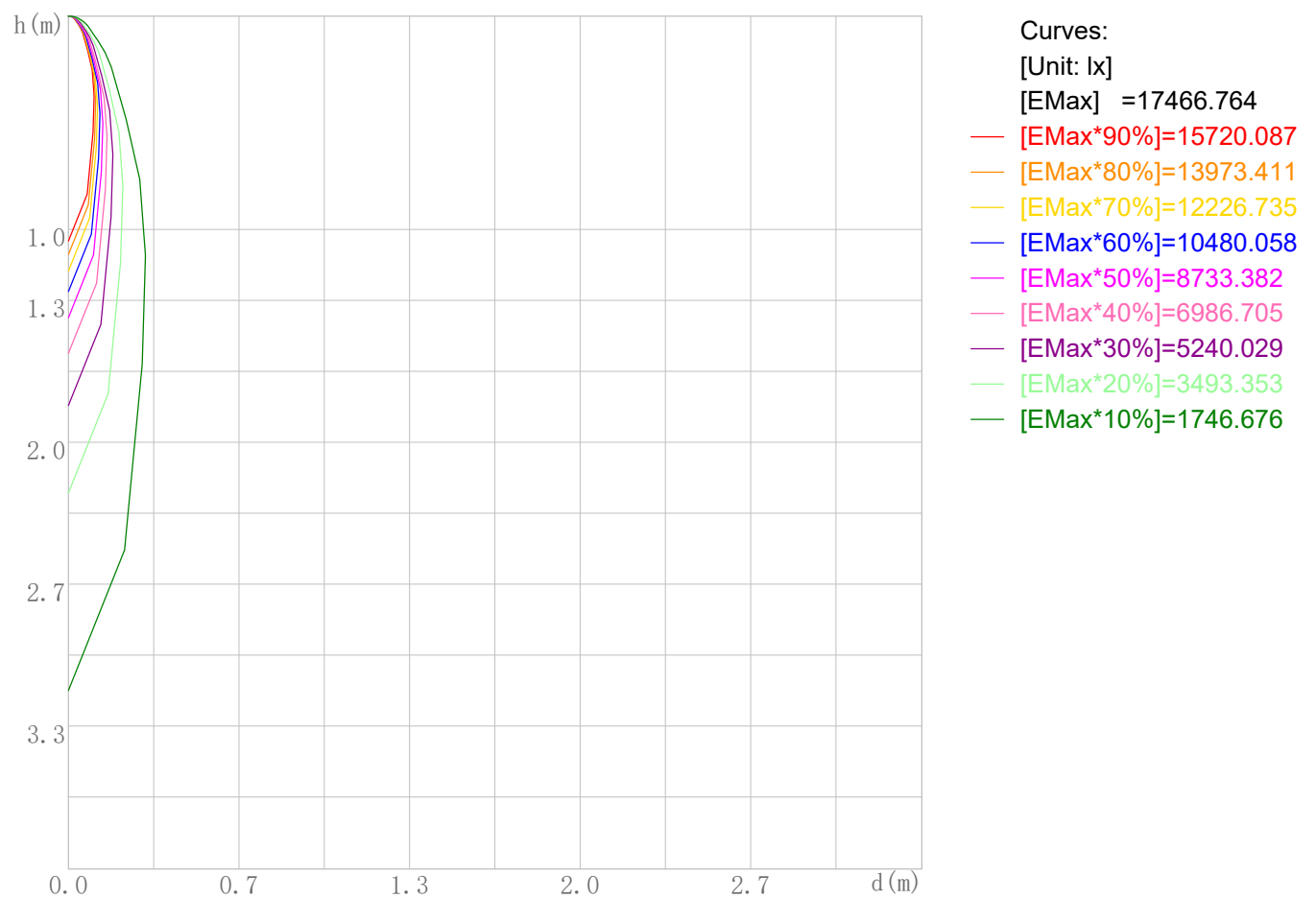
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: DL51-25-XX-01 4000K RA90 15D 白色	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/10

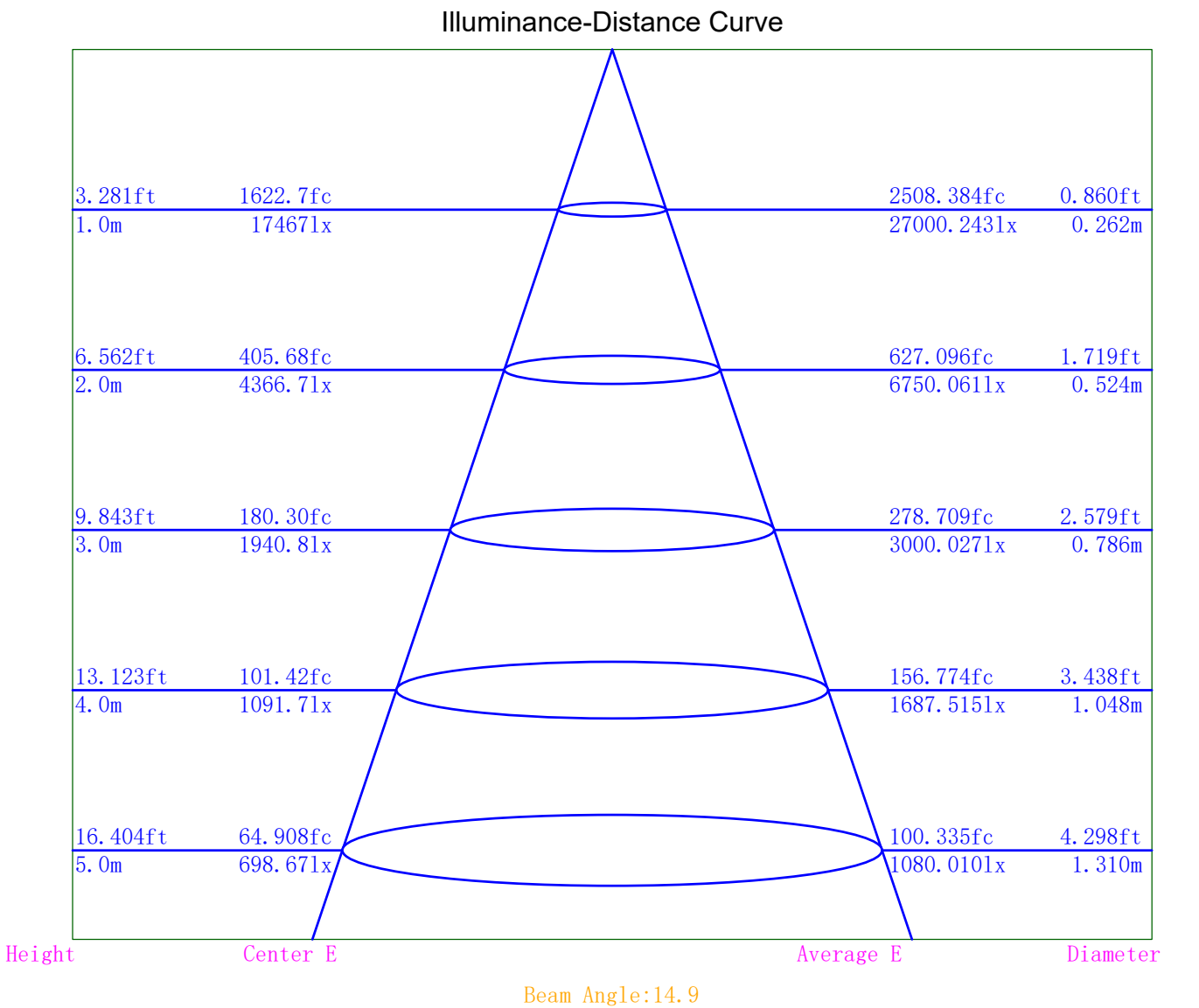
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:17466.76lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:17466.764cd,0deg

Illuminance-Distance Diagram

Lum. Name:DL51-25-XX-01 4000K RA90 15D 白色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10



Indoor Luminance Limiting Curves

Lum. Name:DL51-25-XX-01 4000K RA90 15D 白色	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10

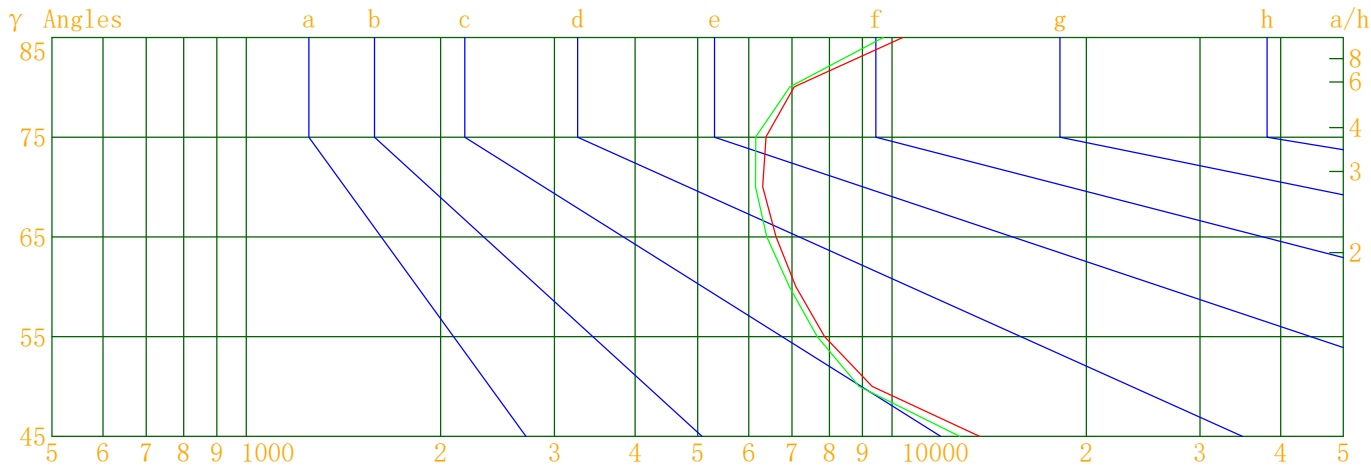
Glare Grade Table

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	13669	9320	7860	7097	6613	6305	6381	7058	10393
C90	12732	8891	7658	6932	6398	6147	6153	6947	9690

Luminance Limiting Curve



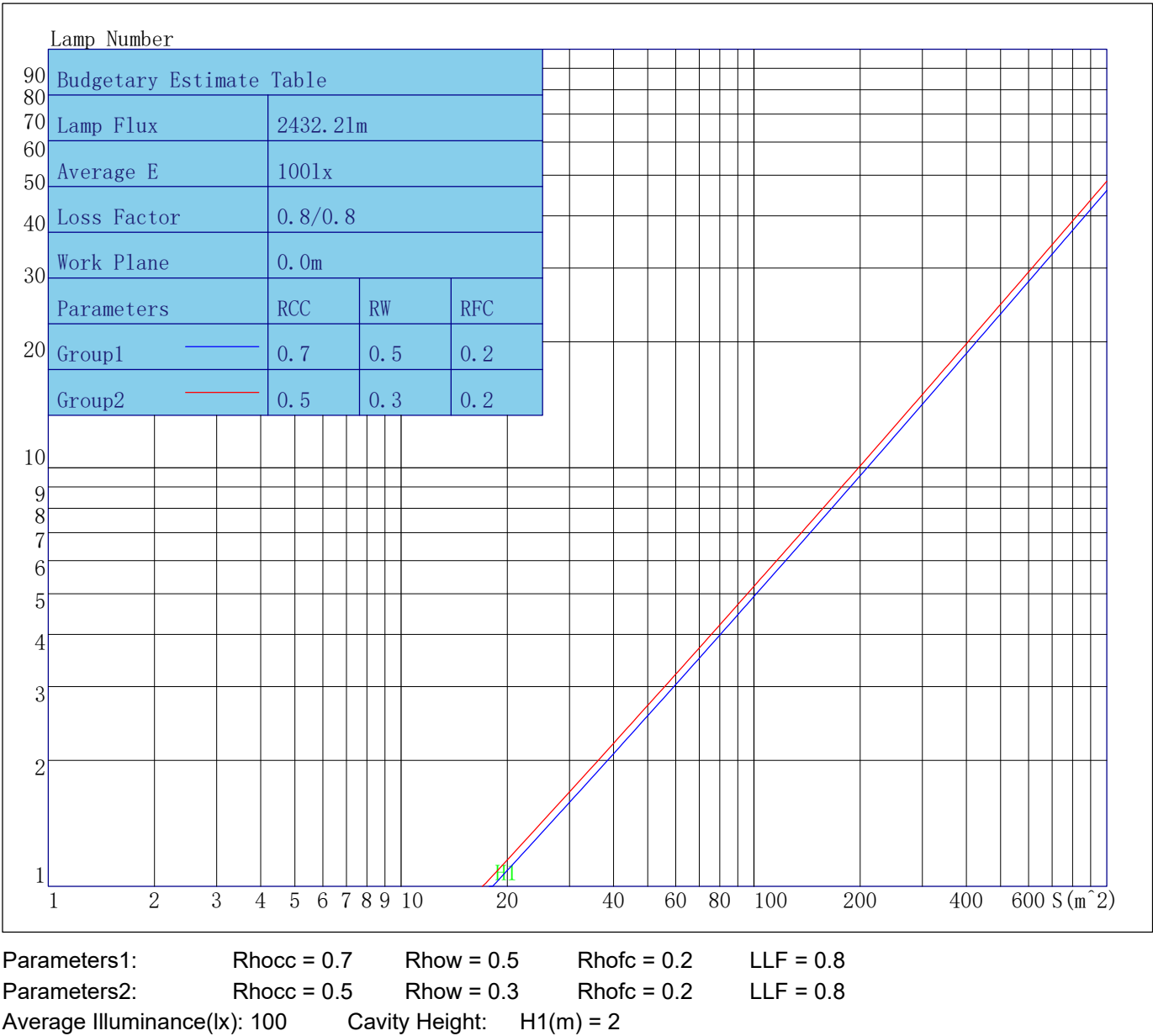
Luminous Size:Length(m)=0.083Width(m)=0.083Height(m)=0.000Area(m^2)=0.006889

Luminous Type:Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name:DL51-25-XX-01 4000K RA90 15D 白色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10



Indoor Coefficient of Utilization Table

Lum. Name:DL51-25-XX-01 4000K RA90 15D 白色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10

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	112	110	108	112	110	108	106	105	104	103	102	100	99	98	97	96	95
2	110	106	103	100	108	105	102	99	101	99	97	98	96	95	95	94	92	91
3	106	102	98	95	105	100	97	94	97	95	92	95	93	91	93	91	89	88
4	103	97	93	90	101	96	92	89	94	91	88	92	89	87	90	88	86	85
5	100	94	89	86	98	93	89	86	91	88	85	89	86	84	88	85	83	82
6	97	90	86	83	96	90	86	83	88	85	82	87	84	81	86	83	81	80
7	94	88	83	80	93	87	83	80	86	82	79	84	81	79	83	81	79	77
8	92	85	81	78	91	84	80	78	83	80	77	82	79	77	81	79	76	75
9	89	83	78	76	88	82	78	75	81	78	75	80	77	75	79	77	75	74
10	87	80	76	74	86	80	76	73	79	76	73	78	75	73	78	75	73	72

Unified Glare Rating Table

Lum. Name:DL51-25-XX-01 4000K RA90 15D 白色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/10

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	13.5	14.5	13.9	14.9	15.2	13.3	14.3	13.7	14.6	15.0
	14.2	15.0	14.6	15.4	15.8	14.0	14.8	14.4	15.2	15.6
	14.5	15.3	15.0	15.7	16.1	14.3	15.1	14.7	15.5	15.9
	14.9	15.6	15.3	16.0	16.5	14.7	15.4	15.1	15.8	16.3
	15.1	15.8	15.6	16.2	16.7	14.9	15.6	15.4	16.0	16.4
	15.4	16.0	15.8	16.4	16.9	15.1	15.8	15.6	16.2	16.7
X=4H Y=2H	13.7	14.5	14.1	14.9	15.3	13.5	14.3	13.9	14.6	15.1
	14.5	15.2	15.0	15.6	16.1	14.3	15.0	14.8	15.4	15.9
	15.0	15.6	15.5	16.1	16.6	14.8	15.4	15.3	15.9	16.4
	15.6	16.1	16.1	16.6	17.1	15.4	15.9	15.9	16.4	16.9
	15.9	16.4	16.4	16.8	17.3	15.7	16.2	16.2	16.6	17.2
	16.2	16.7	16.8	17.2	17.7	16.0	16.4	16.5	17.0	17.5
X=8H Y=4H	15.2	15.7	15.7	16.2	16.7	15.0	15.5	15.5	16.0	16.5
	15.9	16.3	16.5	16.9	17.4	15.8	16.1	16.3	16.7	17.2
	16.4	16.7	16.9	17.3	17.8	16.2	16.5	16.7	17.1	17.6
	16.9	17.2	17.5	17.7	18.4	16.7	17.0	17.2	17.5	18.1
X=12H Y=4H	15.2	15.6	15.7	16.1	16.7	15.0	15.4	15.5	15.9	16.5
	16.0	16.4	16.6	16.9	17.4	15.8	16.2	16.4	16.7	17.3
	16.5	16.8	17.1	17.4	18.0	16.3	16.6	16.9	17.2	17.8
Variations with the objverver position at spacings										
S=1.0H	0.2/-0.2					0.3/-0.3				
S=1.5H	0.4/-0.4					0.4/-0.4				
S=2.0H	0.5/-0.6					0.5/-0.6				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	2.4					2.4				

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	17466.8	17466.8	17466.8	17466.8
γ 5.0	11081.2	9842.7	12765.5	15012.1
γ 10.0	4873.3	4496.3	6124.6	7021.6
γ 15.0	2443.9	2268.7	2997.4	3270.5
γ 20.0	1233.7	1113.0	1608.8	1611.3
γ 25.0	546.3	513.7	734.3	706.0
γ 30.0	285.5	272.5	301.4	299.0
γ 35.0	181.2	171.8	170.5	174.5
γ 40.0	112.1	105.9	106.8	109.3
γ 45.0	66.6	62.0	67.3	70.8
γ 50.0	41.3	39.4	43.2	45.8
γ 55.0	31.1	30.3	32.6	32.9
γ 60.0	24.4	23.9	26.8	27.1
γ 65.0	19.3	18.6	21.4	22.1
γ 70.0	14.9	14.5	16.5	17.3
γ 75.0	11.4	11.0	12.6	13.3
γ 80.0	8.4	8.3	9.4	9.7
γ 85.0	6.2	5.8	6.8	7.5
γ 90.0	4.9	4.2	4.6	5.3
γ 95.0	3.9	3.6	3.3	3.9
γ 100.0	3.3	3.4	2.5	3.3
γ 105.0	3.0	2.8	2.4	2.7
γ 110.0	2.7	2.7	2.1	2.4
γ 115.0	2.2	2.3	2.1	2.8
γ 120.0	2.2	1.7	2.2	2.5
γ 125.0	2.3	2.3	2.9	3.3
γ 130.0	3.1	3.6	3.5	4.1
γ 135.0	5.1	5.4	5.2	5.6
γ 140.0	7.9	8.1	7.8	7.9
γ 145.0	11.4	11.1	11.2	11.4
γ 150.0	13.7	13.8	13.4	13.9
γ 155.0	15.6	14.8	15.1	15.4
γ 160.0	16.6	15.5	16.4	16.3
γ 165.0	16.4	16.0	16.6	16.1
γ 170.0	16.1	15.9	16.4	16.4
γ 175.0	15.4	15.2	15.3	15.8
γ 180.0	15.0	15.0	15.0	15.0