

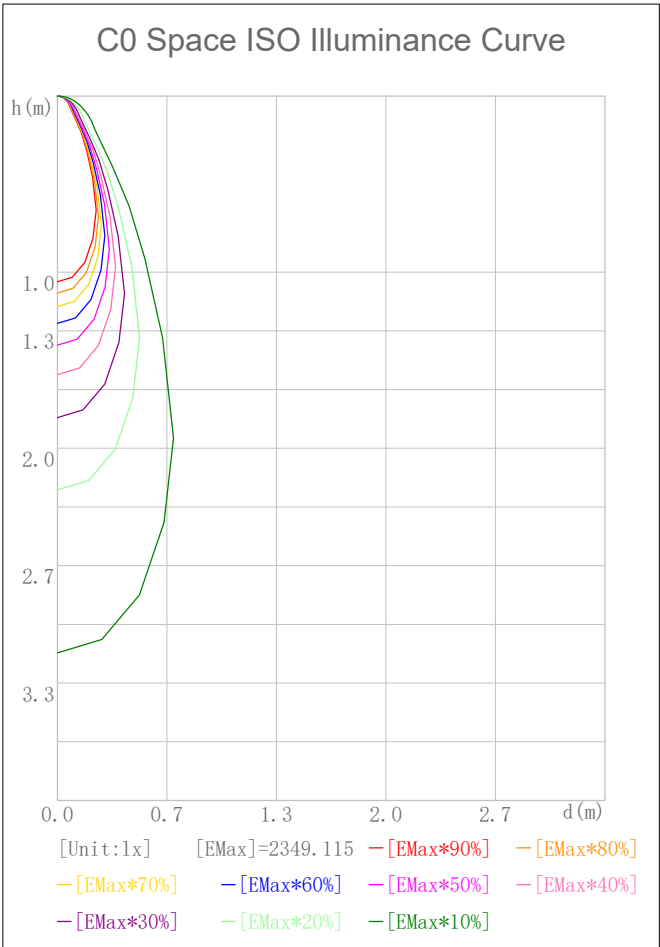
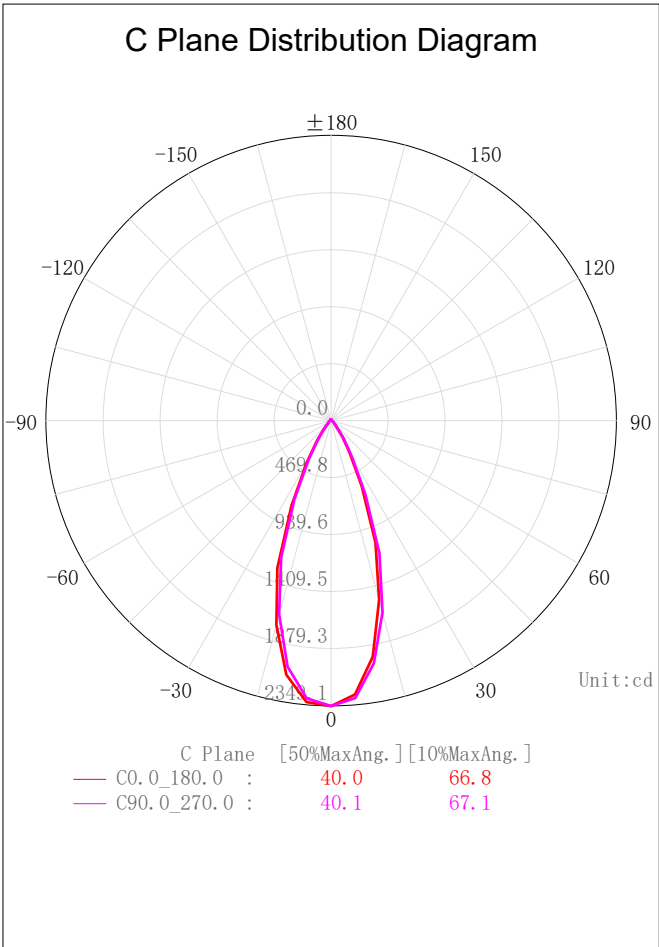
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-15-XX-01 2700K RA90 36D		Lum. Catalog:	Test ID: 01
Lamp Name:		Lamp Catalog: LED	Test Date: 2022/08/08
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):0.002	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25	Humidity(%): 50.0

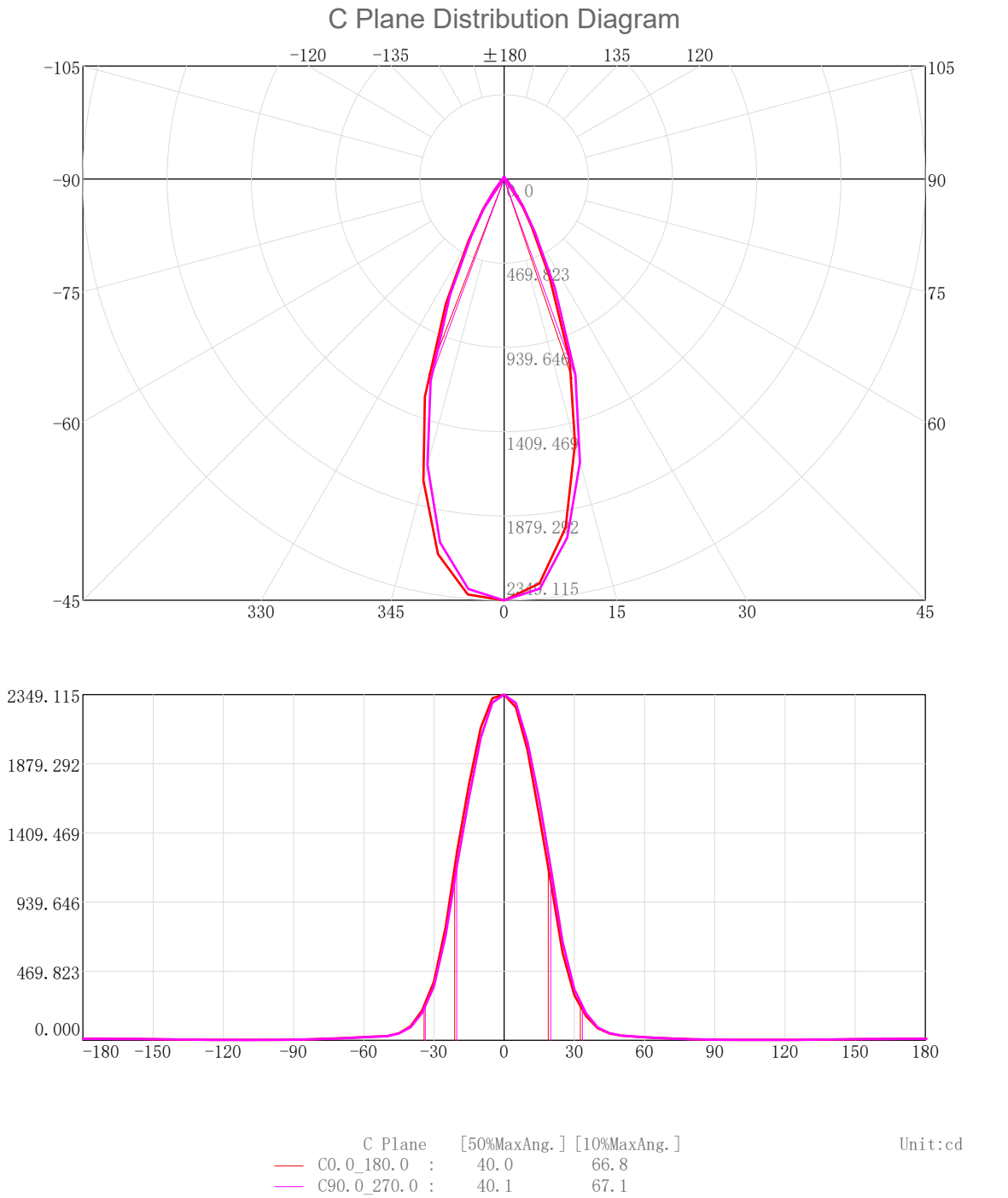
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 1247.900	Luminary Flux(lm): 1247.902	Field Angle(10%Imax): 66.8(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1215.811lm 97.43%	
Rated Voltage(V):	Luminary EER(lm/W): 88.378	Up Lumens&Percent: 32.091lm 2.57%	
Tested Power(W): 14.120	Max. Candela(cd): 2349.115	S/MH: C0_a180=0.650 C90_270=0.652	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf):240.2, 0.060, 0.970	Beam Angle(50%Imax): 40.0(°)	ErP ϕ use(90°): 1151.681lm	
Lamp Size (W*L*H):0.055m*-0.055m*0.000m	Left=-21.1°, Right=18.8°	IRF(%): 436.983	



2D Plane Light Intensity Distribution Curve

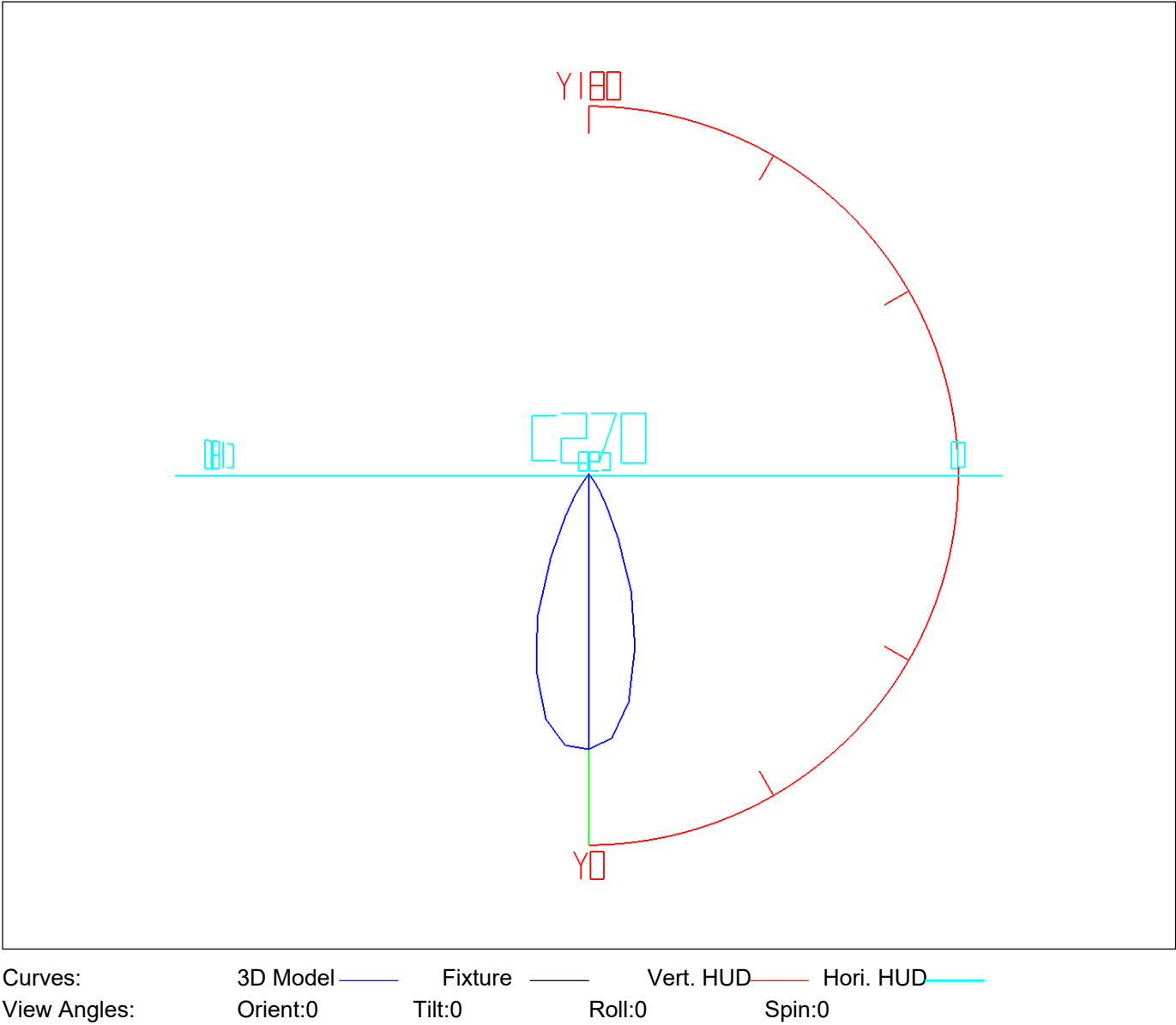
Lum. Name:DL51-15-XX-01 2700K RA90 36D	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/08



3D Light Intensity Distribution Modal

Lum. Name: DL51-15-XX-01 2700K 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: 2022/08/08

3D Light Intensity Distribution Modal

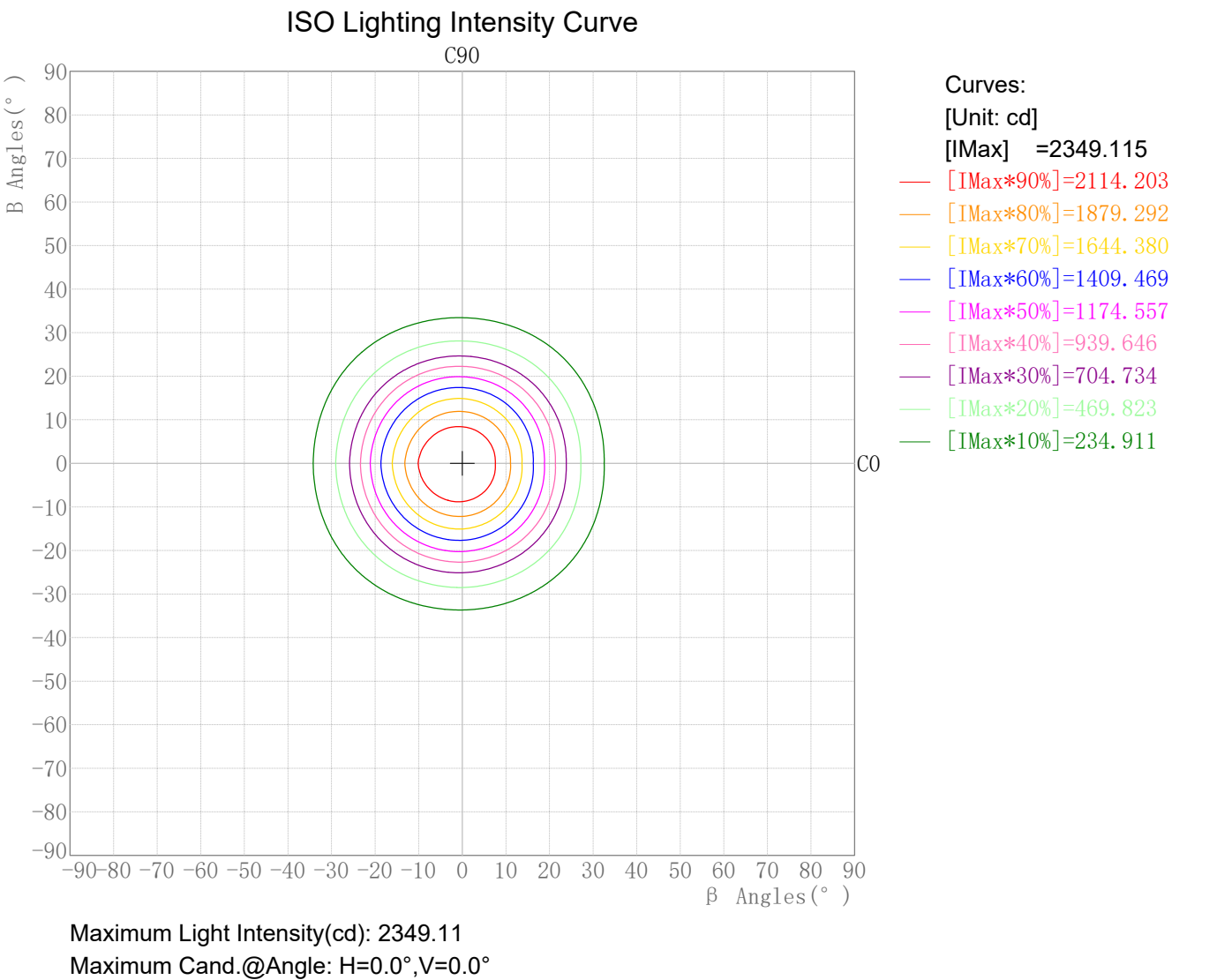


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0. 0-5. 0	55. 50	55. 50	4. 45	4. 45
5. 0-10. 0	155. 24	210. 75	12. 44	16. 89
10. 0-15. 0	218. 53	429. 28	17. 51	34. 40
15. 0-20. 0	232. 28	661. 55	18. 61	53. 01
20. 0-25. 0	195. 85	857. 41	15. 69	68. 71
25. 0-30. 0	131. 83	989. 24	10. 56	79. 27
30. 0-35. 0	79. 52	1068. 76	6. 37	85. 64
35. 0-40. 0	45. 70	1114. 45	3. 66	89. 31
40. 0-45. 0	25. 31	1139. 76	2. 03	91. 33
45. 0-50. 0	15. 96	1155. 72	1. 28	92. 61
50. 0-55. 0	12. 45	1168. 17	1. 00	93. 61
55. 0-60. 0	11. 10	1179. 27	0. 89	94. 50
60. 0-65. 0	9. 61	1188. 88	0. 77	95. 27
65. 0-70. 0	8. 09	1196. 97	0. 65	95. 92
70. 0-75. 0	6. 61	1203. 57	0. 53	96. 45
75. 0-80. 0	5. 22	1208. 79	0. 42	96. 87
80. 0-85. 0	3. 99	1212. 78	0. 32	97. 19
85. 0-90. 0	3. 03	1215. 81	0. 24	97. 43
90. 0-95. 0	2. 48	1218. 29	0. 20	97. 63
95. 0-100. 0	2. 21	1220. 50	0. 18	97. 80
100. 0-105. 0	2. 02	1222. 53	0. 16	97. 97
105. 0-110. 0	1. 85	1224. 37	0. 15	98. 11
110. 0-115. 0	1. 75	1226. 12	0. 14	98. 25
115. 0-120. 0	1. 70	1227. 82	0. 14	98. 39
120. 0-125. 0	1. 70	1229. 52	0. 14	98. 53
125. 0-130. 0	1. 84	1231. 36	0. 15	98. 67
130. 0-135. 0	1. 99	1233. 35	0. 16	98. 83
135. 0-140. 0	2. 14	1235. 49	0. 17	99. 01
140. 0-145. 0	2. 26	1237. 75	0. 18	99. 19
145. 0-150. 0	2. 28	1240. 03	0. 18	99. 37
150. 0-155. 0	2. 17	1242. 20	0. 17	99. 54
155. 0-160. 0	1. 94	1244. 14	0. 16	99. 70
160. 0-165. 0	1. 60	1245. 74	0. 13	99. 83
165. 0-170. 0	1. 18	1246. 93	0. 09	99. 92
170. 0-175. 0	0. 73	1247. 66	0. 06	99. 98
175. 0-180. 0	0. 25	1247. 90	0. 02	100. 00

Rectangle ISO Lighting Intensity Diagram

Lum. Name:DL51-15-XX-01 2700K 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: 2022/08/08

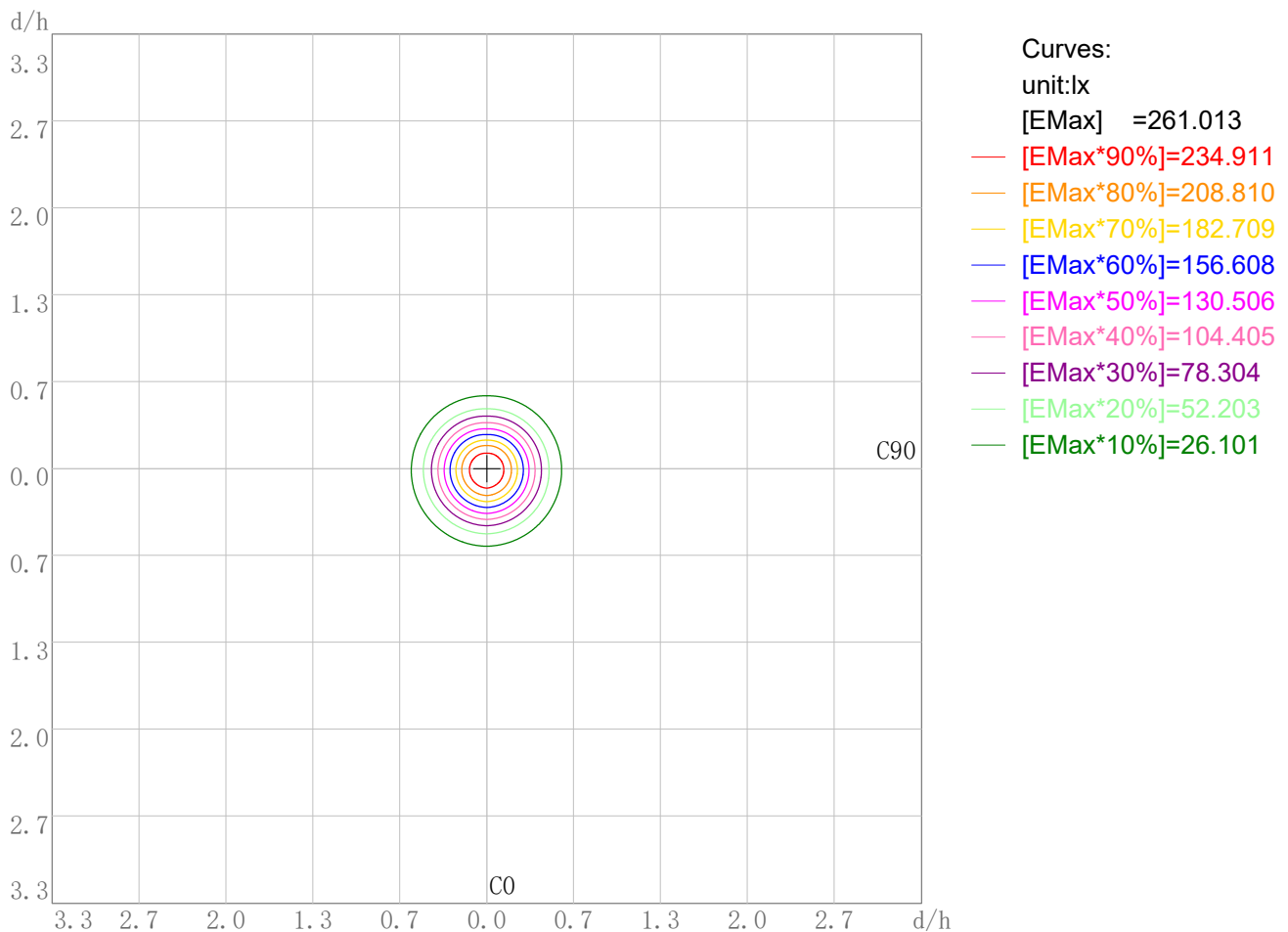


Photometric Filename:DL51-15-XX-01 2700K RA90 36D.IES

Plane ISO-Illuminance Diagram

Lum. Name: DL51-15-XX-01 2700K 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: 2022/08/08

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00

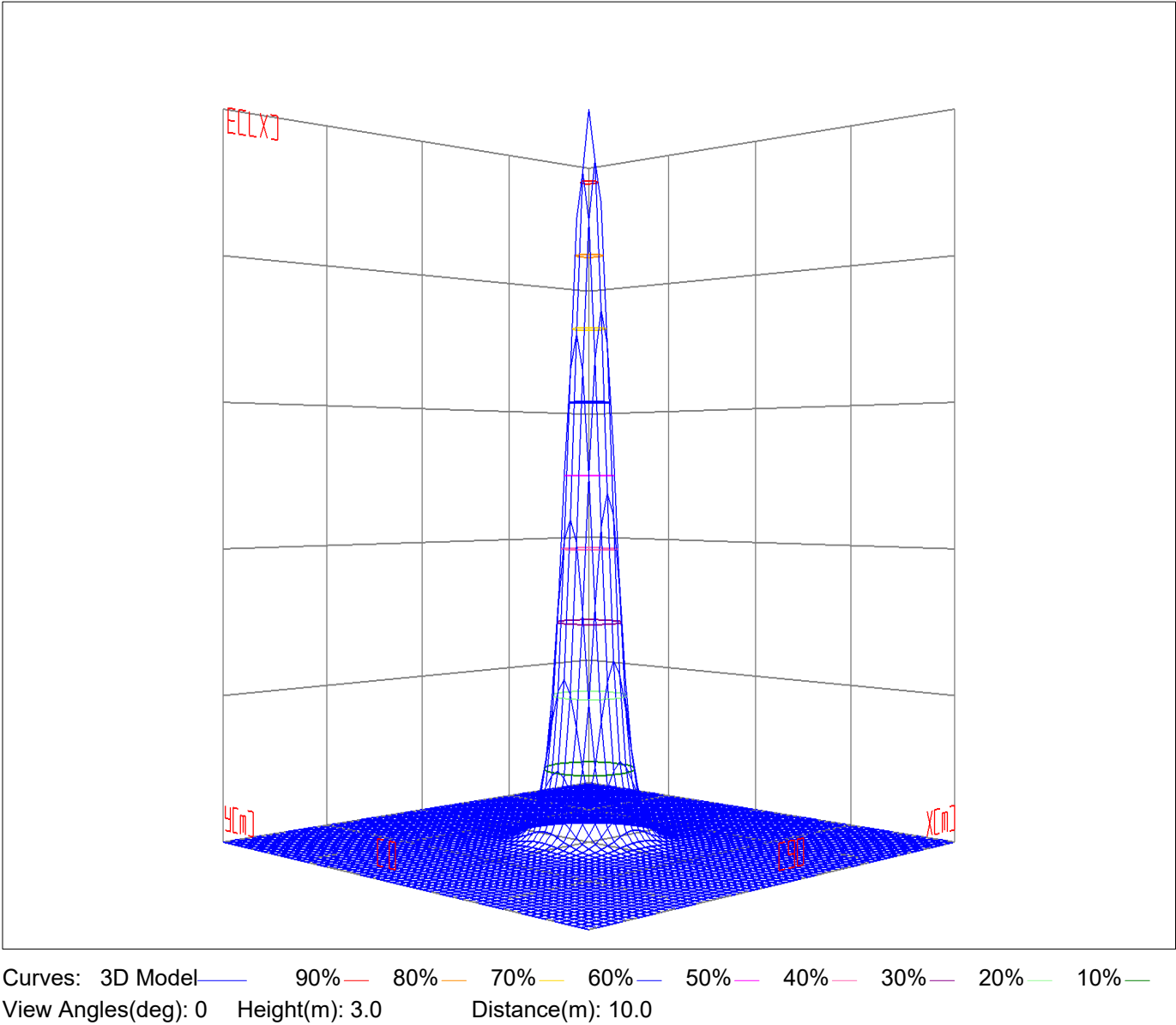
Working Plane Maximum Illuminance(lx): 261.01

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

3D Plane ISO Illuminance Diagram

Lum. Name: DL51-15-XX-01 2700K 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: 2022/08/08

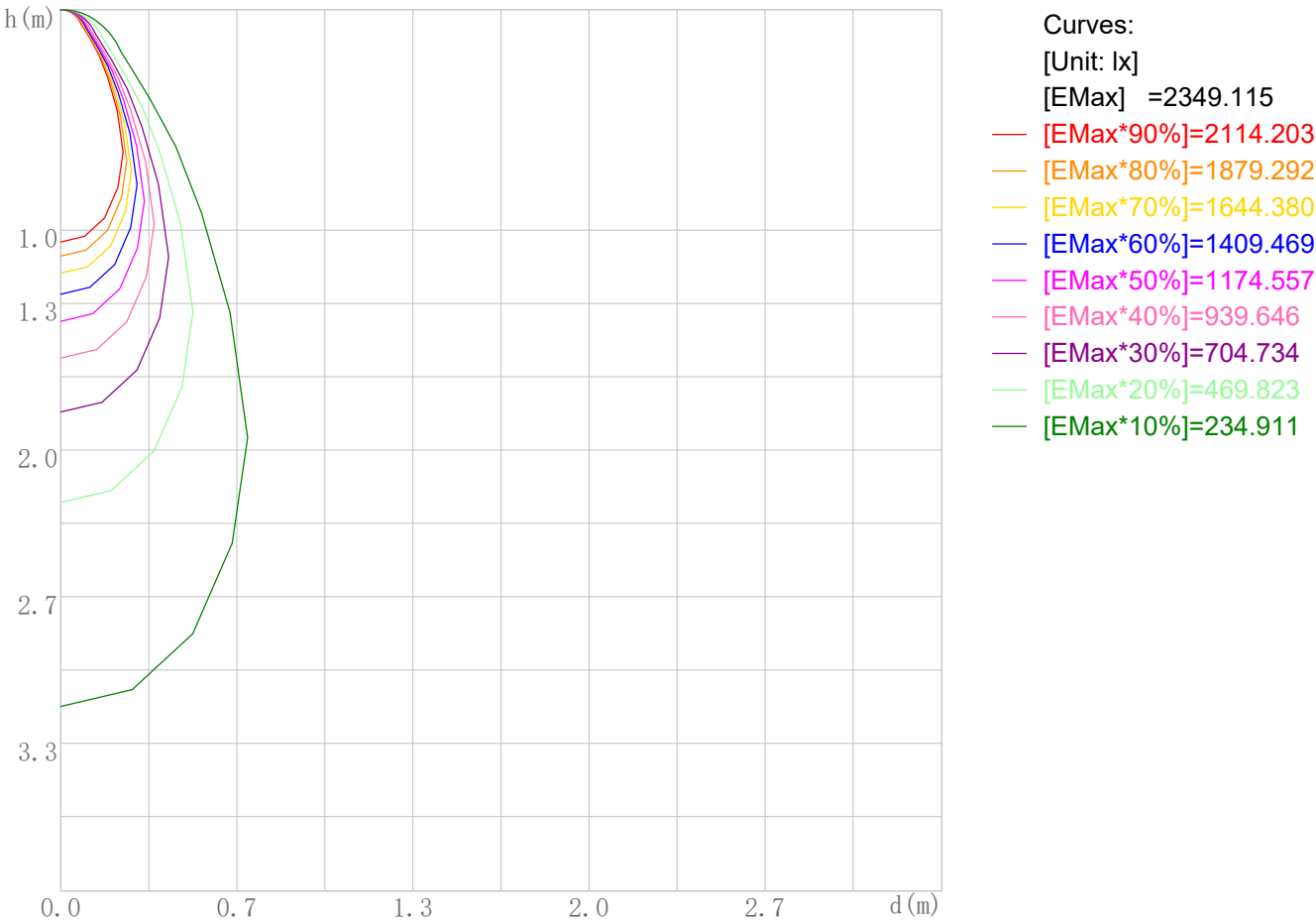
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: DL51-15-XX-01 2700K 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: 2022/08/08

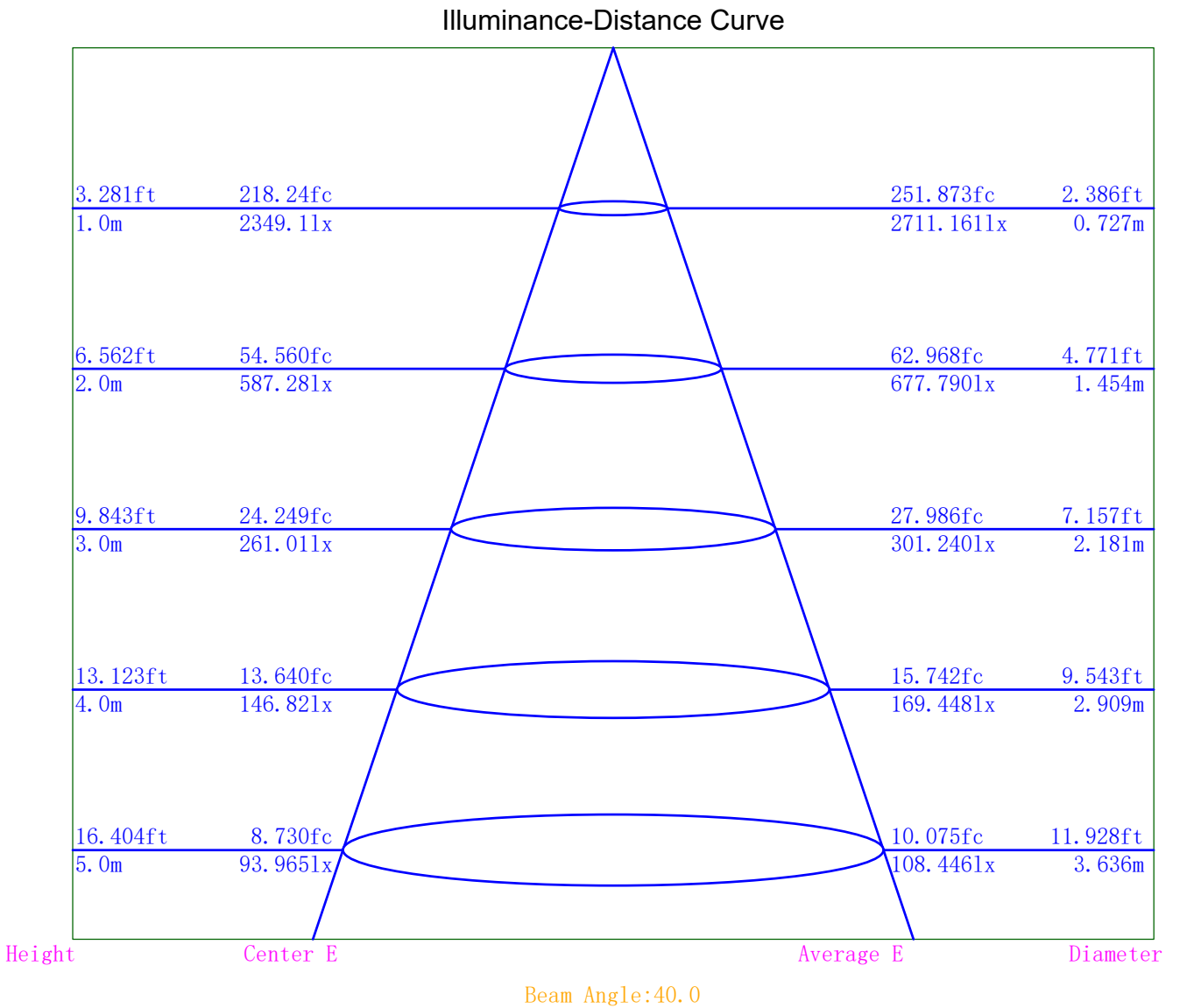
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:2349.11lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:2349.115cd,0deg

Illuminance-Distance Diagram

Lum. Name:DL51-15-XX-01 2700K 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:2022/08/08



Indoor Luminance Limiting Curves

Lum. Name:DL51-15-XX-01 2700K 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:2022/08/08

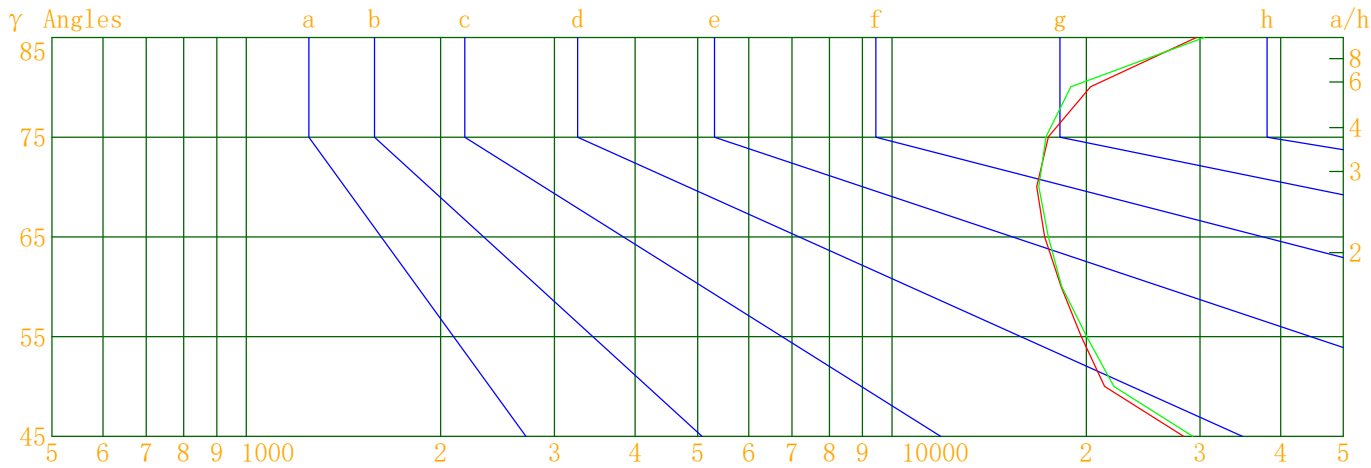
Glare Grade Table

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	28304	21344	19639	18276	17235	16754	17474	20303	29614
C90	29238	22067	20026	18316	17460	16886	17320	18928	30449

Luminance Limiting Curve



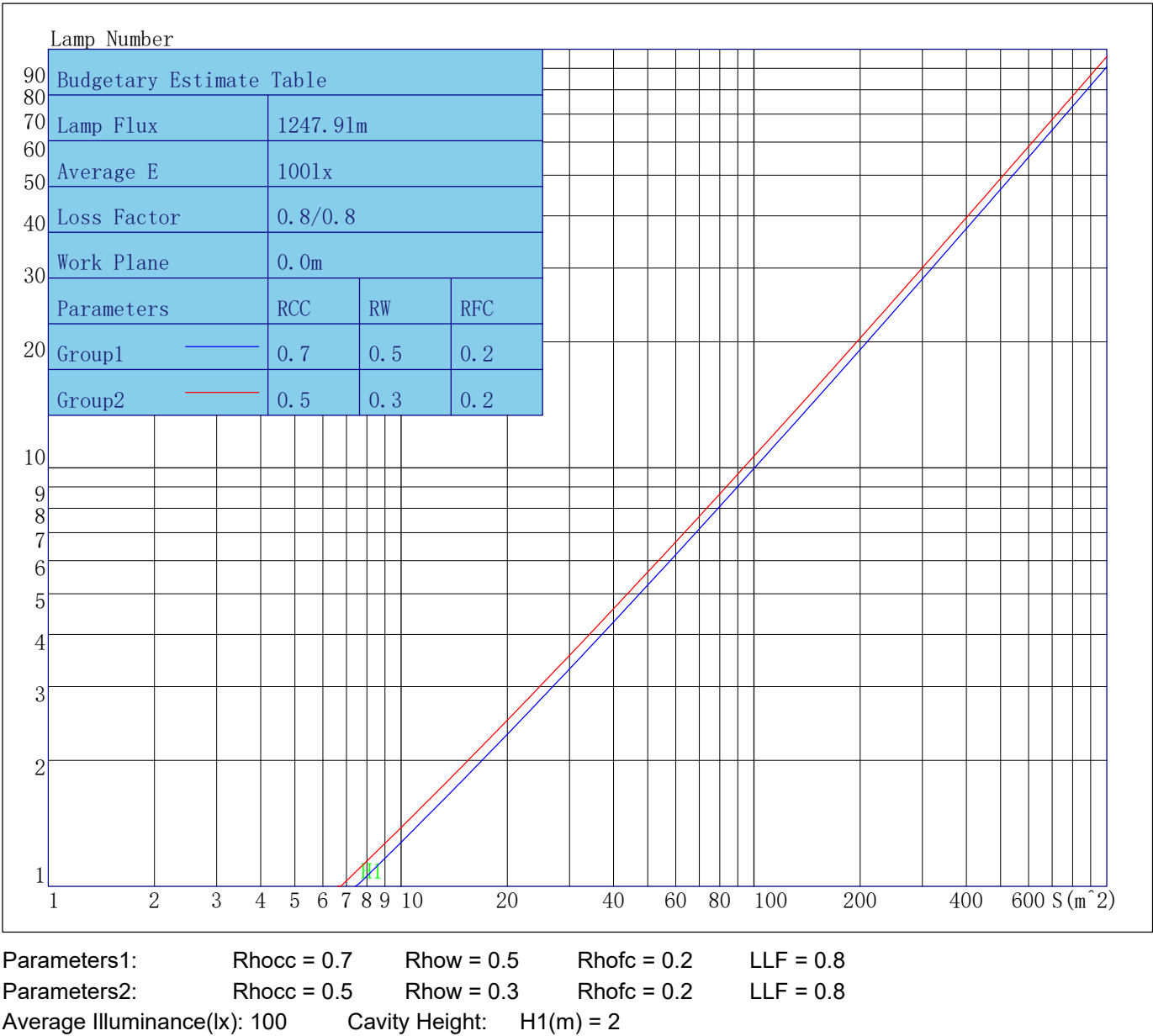
Luminous Size:Length(m)=-0.055Width(m)=-0.055Height(m)=0.000Area(m^2)=0.002376

Luminous Type:Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name:DL51-15-XX-01 2700K 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: 2022/08/08



Indoor Coefficient of Utilization Table

Lum. Name: DL51-15-XX-01 2700K 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: 2022/08/08

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	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	97
1	113	110	108	105	110	108	105	103	103	101	100	99	98	96	95	94	93	91
2	108	103	99	96	105	101	97	94	97	94	92	94	92	90	91	89	87	86
3	103	96	92	88	100	95	91	87	92	88	85	89	86	84	87	84	82	80
4	98	91	86	82	96	90	85	81	87	83	80	85	81	79	83	80	78	76
5	94	86	80	76	92	85	80	76	83	78	75	81	77	74	79	76	73	72
6	90	81	76	72	88	81	75	72	79	74	71	77	73	70	76	72	70	68
7	86	77	72	68	85	77	71	68	75	71	67	74	70	67	73	69	66	65
8	82	74	68	65	81	73	68	64	72	67	64	71	67	64	70	66	63	62
9	79	70	65	61	78	70	65	61	69	64	61	68	64	61	67	63	60	59
10	76	67	62	59	75	67	62	58	66	61	58	65	61	58	64	60	58	56

Unified Glare Rating Table

Lum. Name: DL51-15-XX-01 2700K RA90 36D	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/08

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	18.6	19.5	19.0	19.9	20.3	18.9	19.9	19.4	20.3	20.6
	19.3	20.1	19.7	20.5	20.9	19.6	20.4	20.0	20.8	21.2
	19.7	20.5	20.1	20.9	21.3	19.9	20.7	20.4	21.1	21.6
	20.1	20.9	20.6	21.3	21.7	20.3	21.0	20.8	21.5	21.9
	20.4	21.1	20.9	21.5	22.0	20.5	21.2	21.0	21.6	22.1
	20.7	21.3	21.2	21.8	22.3	20.8	21.5	21.3	21.9	22.4
X=4H Y=2H	18.7	19.5	19.2	19.9	20.4	19.0	19.8	19.5	20.2	20.7
	19.7	20.3	20.1	20.8	21.2	19.9	20.5	20.4	21.0	21.5
	20.2	20.8	20.7	21.3	21.8	20.4	21.0	20.9	21.5	22.0
	20.9	21.4	21.4	21.9	22.4	21.0	21.5	21.5	22.0	22.5
	21.2	21.7	21.8	22.2	22.7	21.3	21.8	21.8	22.3	22.8
	21.7	22.0	22.2	22.6	23.1	21.7	22.1	22.3	22.7	23.2
X=8H Y=4H	20.4	20.9	20.9	21.4	21.9	20.6	21.1	21.1	21.6	22.1
	21.3	21.6	21.8	22.2	22.8	21.4	21.7	21.9	22.3	22.9
	21.8	22.1	22.4	22.7	23.2	21.9	22.2	22.4	22.7	23.3
	22.4	22.7	23.0	23.2	23.9	22.5	22.7	23.0	23.3	23.9
X=12H Y=4H	20.4	20.8	21.0	21.4	21.9	20.6	21.0	21.2	21.5	22.1
	21.4	21.7	22.0	22.2	22.8	21.5	21.8	22.0	22.3	22.9
	22.0	22.2	22.5	22.8	23.4	22.0	22.3	22.6	22.8	23.5
Variations with the objerver position at spacings										
S=1.0H	0.2/-0.2					0.2/-0.2				
S=1.5H	0.4/-0.4					0.4/-0.4				
S=2.0H	0.4/-0.5					0.4/-0.5				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	2.6					2.5				

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	2349.11	2349.11	2349.11	2349.11
γ 5.0	2262.87	2292.26	2325.03	2294.61
γ 10.0	1973.49	2029.08	2124.22	2057.02
γ 15.0	1527.53	1634.43	1739.77	1650.27
γ 20.0	1068.03	1163.37	1291.44	1198.92
γ 25.0	595.58	669.22	769.34	713.53
γ 30.0	307.41	347.18	398.37	366.27
γ 35.0	165.50	183.77	204.42	187.12
γ 40.0	82.99	88.05	95.28	88.41
γ 45.0	47.55	49.12	48.24	47.05
γ 50.0	32.60	33.70	29.02	28.74
γ 55.0	26.76	27.29	25.56	25.36
γ 60.0	21.71	21.76	21.91	21.71
γ 65.0	17.31	17.53	18.25	17.97
γ 70.0	13.61	13.72	14.97	14.39
γ 75.0	10.74	10.65	11.93	11.08
γ 80.0	8.38	7.81	8.91	8.51
γ 85.0	6.13	6.30	6.46	6.15
γ 90.0	4.60	4.74	5.05	4.87
γ 95.0	4.11	4.52	4.16	4.21
γ 100.0	3.96	4.02	3.75	3.81
γ 105.0	3.59	3.46	3.87	3.80
γ 110.0	3.29	3.72	3.41	3.12
γ 115.0	3.34	3.67	3.53	3.56
γ 120.0	3.27	3.40	3.59	3.60
γ 125.0	3.88	3.95	4.02	3.68
γ 130.0	4.44	4.71	4.69	4.46
γ 135.0	5.38	5.31	5.30	5.14
γ 140.0	6.15	6.38	6.32	6.16
γ 145.0	7.36	7.30	7.53	7.03
γ 150.0	8.22	8.10	8.36	7.94
γ 155.0	9.12	8.95	9.03	8.83
γ 160.0	9.64	9.39	9.79	9.38
γ 165.0	9.97	9.73	10.44	9.55
γ 170.0	10.03	9.88	10.25	9.94
γ 175.0	10.35	10.22	10.69	10.07
γ 180.0	10.26	10.26	10.26	10.26