

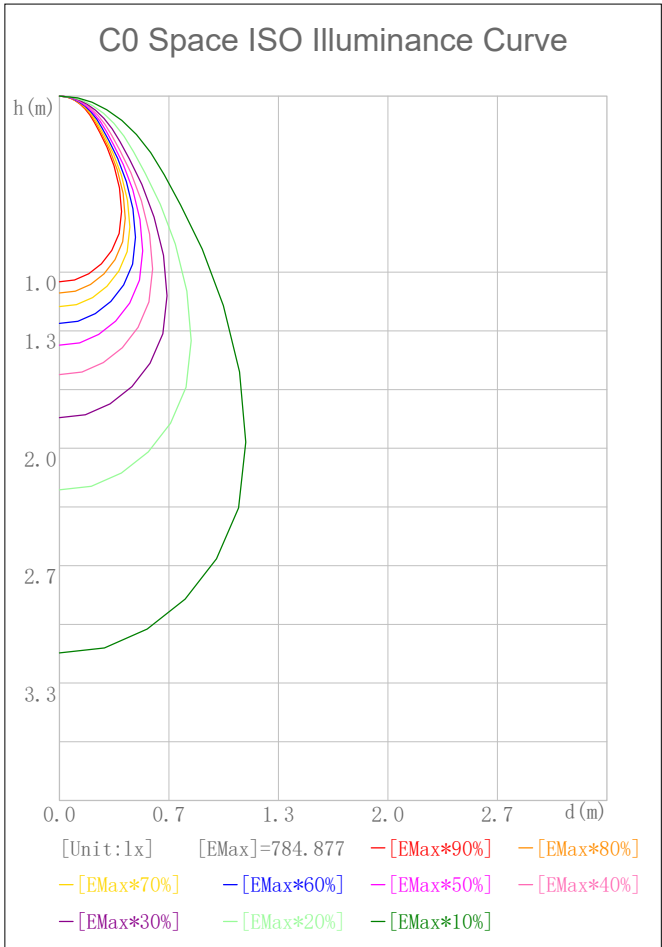
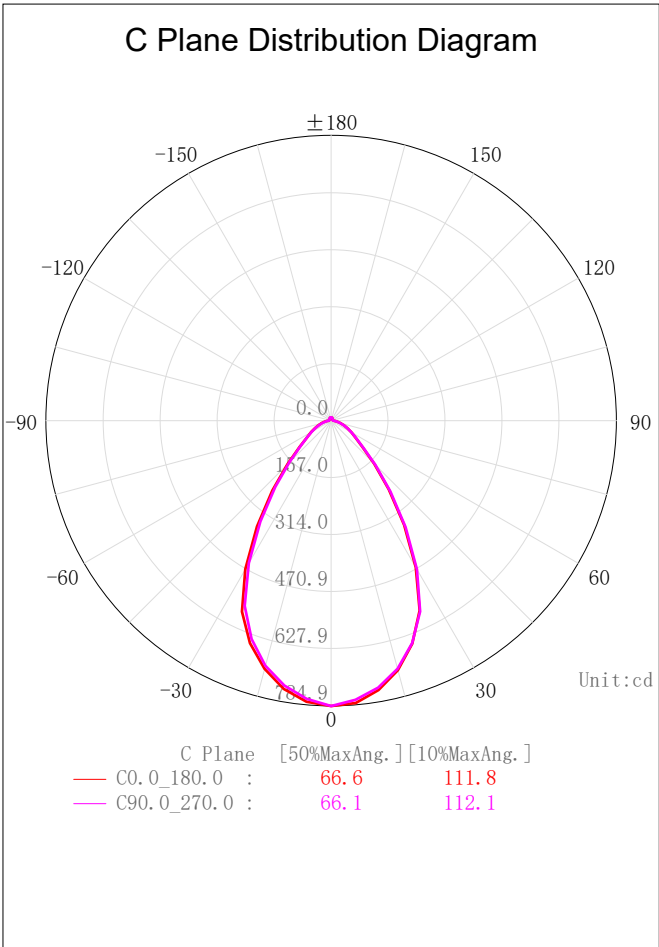
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL50-15-XX-01 2700K RA90		Lum. Catalog:	Test ID: 01
Lamp Name:		Lamp Catalog: LED	Test Date: 2022/08/02
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

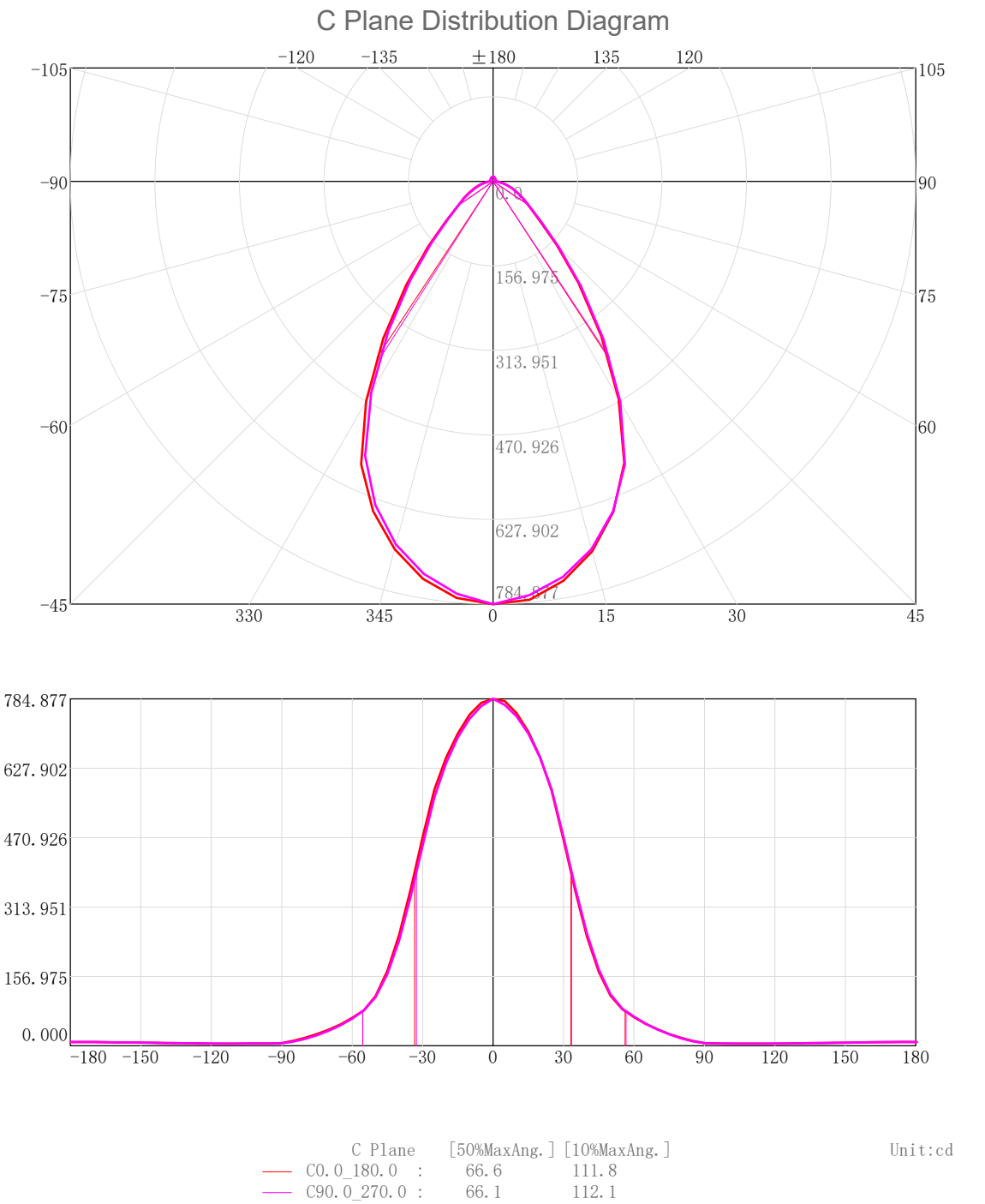
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 1086.230	Luminary Flux(lm): 1086.231	Field Angle(10%Imax): 111.8(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1049.330lm 96.60%	
Rated Voltage(V):	Luminary EER(lm/W): 73.245	Up Lumens&Percent: 36.901lm 3.40%	
Tested Power(W): 14.830	Max. Candela(cd): 784.877	S/MH: C0_a180=0.997 C90_270=0.989	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf):240.0, 0.063, 0.973	Beam Angle(50%Imax): 66.6(°)	ErP Φ use(90°): 830.128lm	
Lamp Size (W*L*H):0.055m*0.055m*0.000m	Left=-33.4°, Right=33.2°	IRF(%): 183.266	



2D Plane Light Intensity Distribution Curve

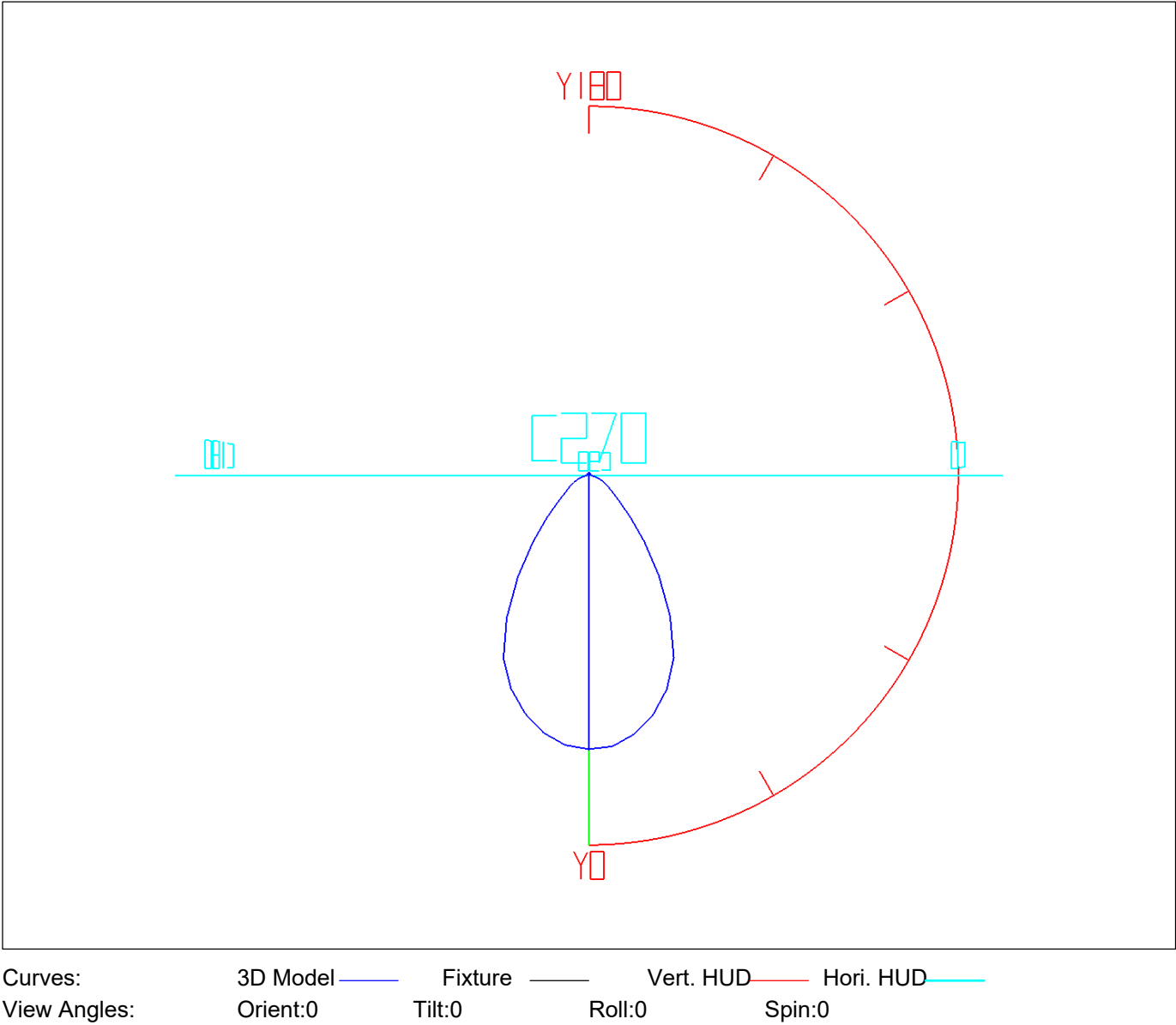
Lum. Name:DL50-15-XX-01 2700K RA90	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/02



3D Light Intensity Distribution Modal

Lum. Name:DL50-15-XX-01 2700K RA90	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/02

3D Light Intensity Distribution Modal

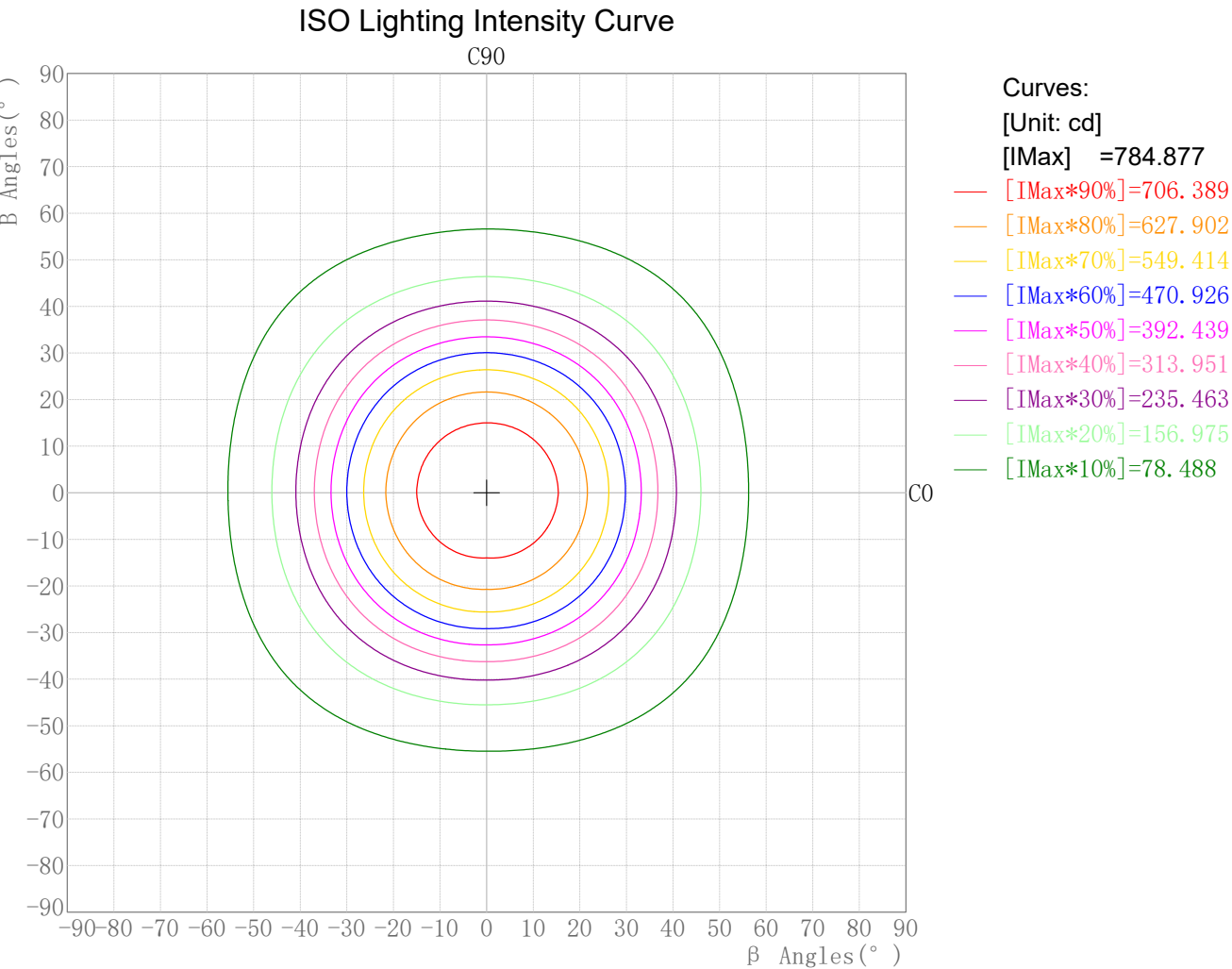


Zonal Flux Tabulation

Zone( γ )	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0. 0-5. 0	18. 63	18. 63	1. 72	1. 72
5. 0-10. 0	54. 40	73. 03	5. 01	6. 72
10. 0-15. 0	86. 15	159. 17	7. 93	14. 65
15. 0-20. 0	111. 60	270. 77	10. 27	24. 93
20. 0-25. 0	128. 28	399. 05	11. 81	36. 74
25. 0-30. 0	131. 61	530. 67	12. 12	48. 85
30. 0-35. 0	120. 17	650. 83	11. 06	59. 92
35. 0-40. 0	99. 77	750. 60	9. 18	69. 10
40. 0-45. 0	76. 93	827. 54	7. 08	76. 18
45. 0-50. 0	56. 79	884. 33	5. 23	81. 41
50. 0-55. 0	42. 43	926. 76	3. 91	85. 32
55. 0-60. 0	33. 71	960. 47	3. 10	88. 42
60. 0-65. 0	27. 35	987. 82	2. 52	90. 94
65. 0-70. 0	21. 50	1009. 32	1. 98	92. 92
70. 0-75. 0	16. 22	1025. 55	1. 49	94. 41
75. 0-80. 0	11. 57	1037. 12	1. 07	95. 48
80. 0-85. 0	7. 63	1044. 74	0. 70	96. 18
85. 0-90. 0	4. 59	1049. 33	0. 42	96. 60
90. 0-95. 0	3. 13	1052. 46	0. 29	96. 89
95. 0-100. 0	2. 85	1055. 32	0. 26	97. 15
100. 0-105. 0	2. 74	1058. 05	0. 25	97. 41
105. 0-110. 0	2. 63	1060. 68	0. 24	97. 65
110. 0-115. 0	2. 51	1063. 19	0. 23	97. 88
115. 0-120. 0	2. 45	1065. 65	0. 23	98. 11
120. 0-125. 0	2. 43	1068. 08	0. 22	98. 33
125. 0-130. 0	2. 45	1070. 53	0. 23	98. 55
130. 0-135. 0	2. 42	1072. 95	0. 22	98. 78
135. 0-140. 0	2. 31	1075. 26	0. 21	98. 99
140. 0-145. 0	2. 22	1077. 48	0. 20	99. 19
145. 0-150. 0	2. 08	1079. 56	0. 19	99. 39
150. 0-155. 0	1. 87	1081. 43	0. 17	99. 56
155. 0-160. 0	1. 63	1083. 07	0. 15	99. 71
160. 0-165. 0	1. 34	1084. 40	0. 12	99. 83
165. 0-170. 0	1. 00	1085. 40	0. 09	99. 92
170. 0-175. 0	0. 62	1086. 02	0. 06	99. 98
175. 0-180. 0	0. 21	1086. 23	0. 02	100. 00

Rectangle ISO Lighting Intensity Diagram

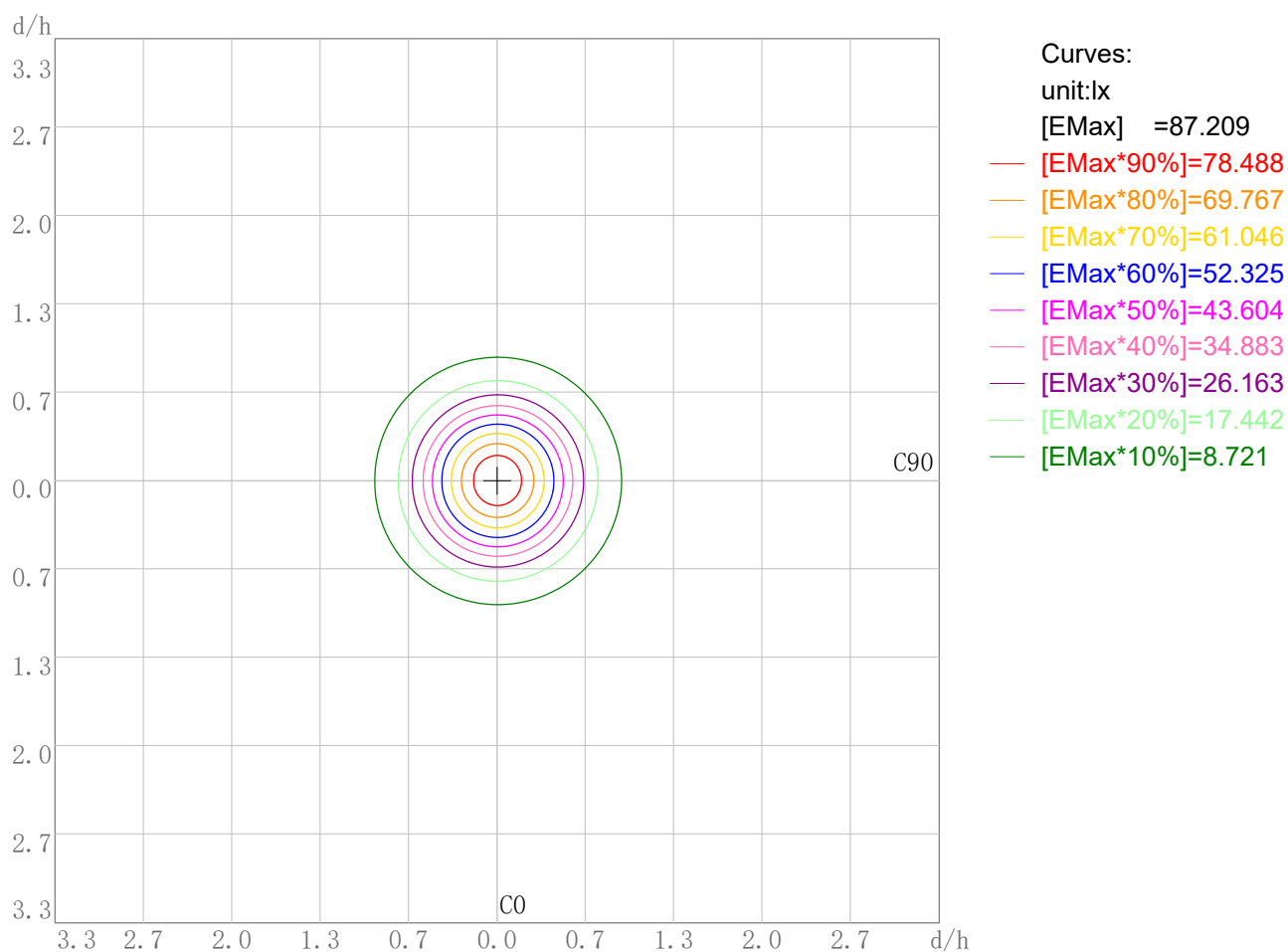
Lum. Name:DL50-15-XX-01 2700K RA90	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/02



## Plane ISO-Illuminance Diagram

Lum. Name: DL50-15-XX-01 2700K RA90	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/02

### Plane ISO-Illuminance Curve

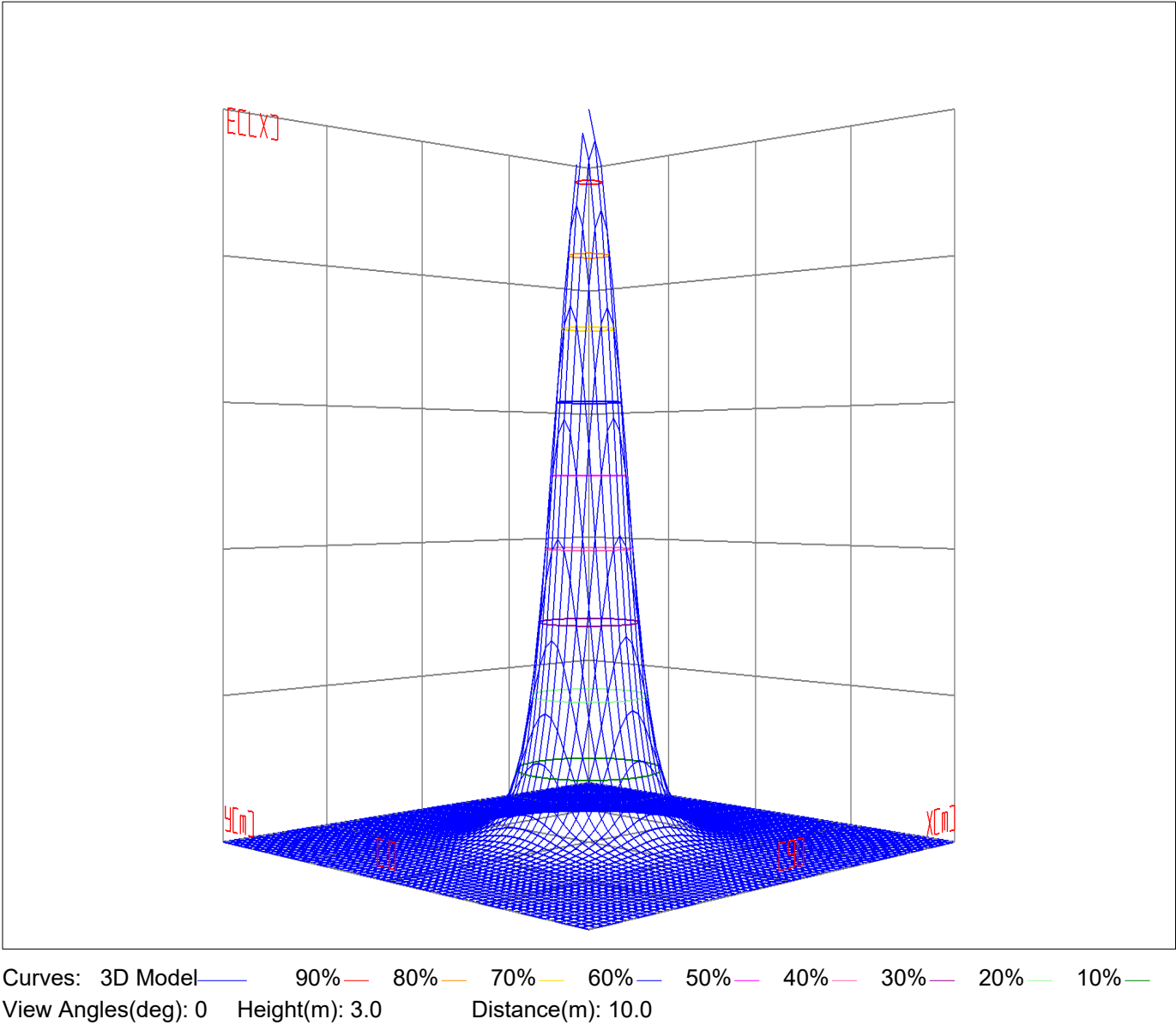


Working Plane Luminaire Mounting Height(m): 3.00  
Working Plane Maximum Illuminance(lx): 87.21  
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: DL50-15-XX-01 2700K RA90	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/02

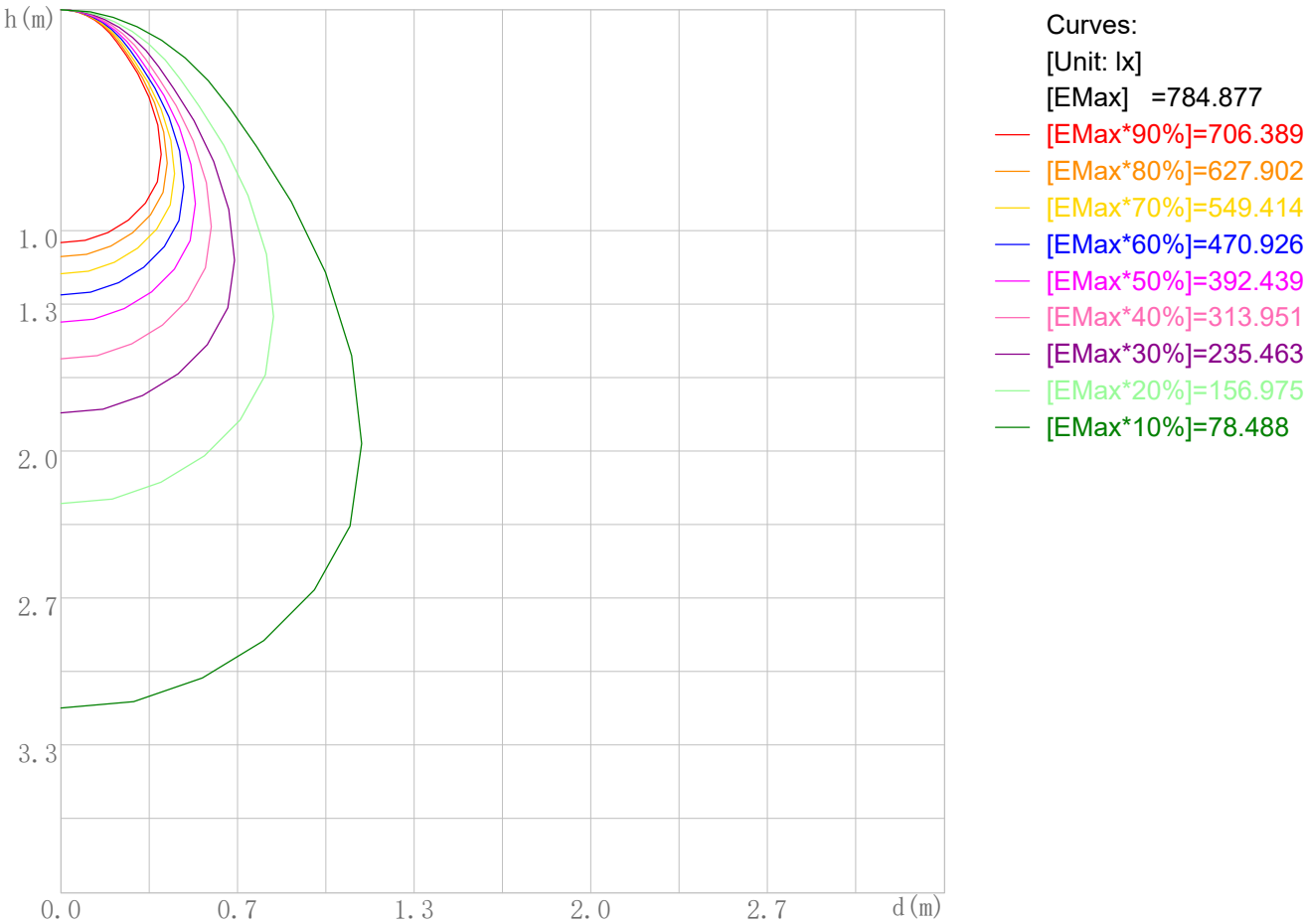
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name:DL50-15-XX-01 2700K RA90	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/02

Space ISO Illuminance Curve

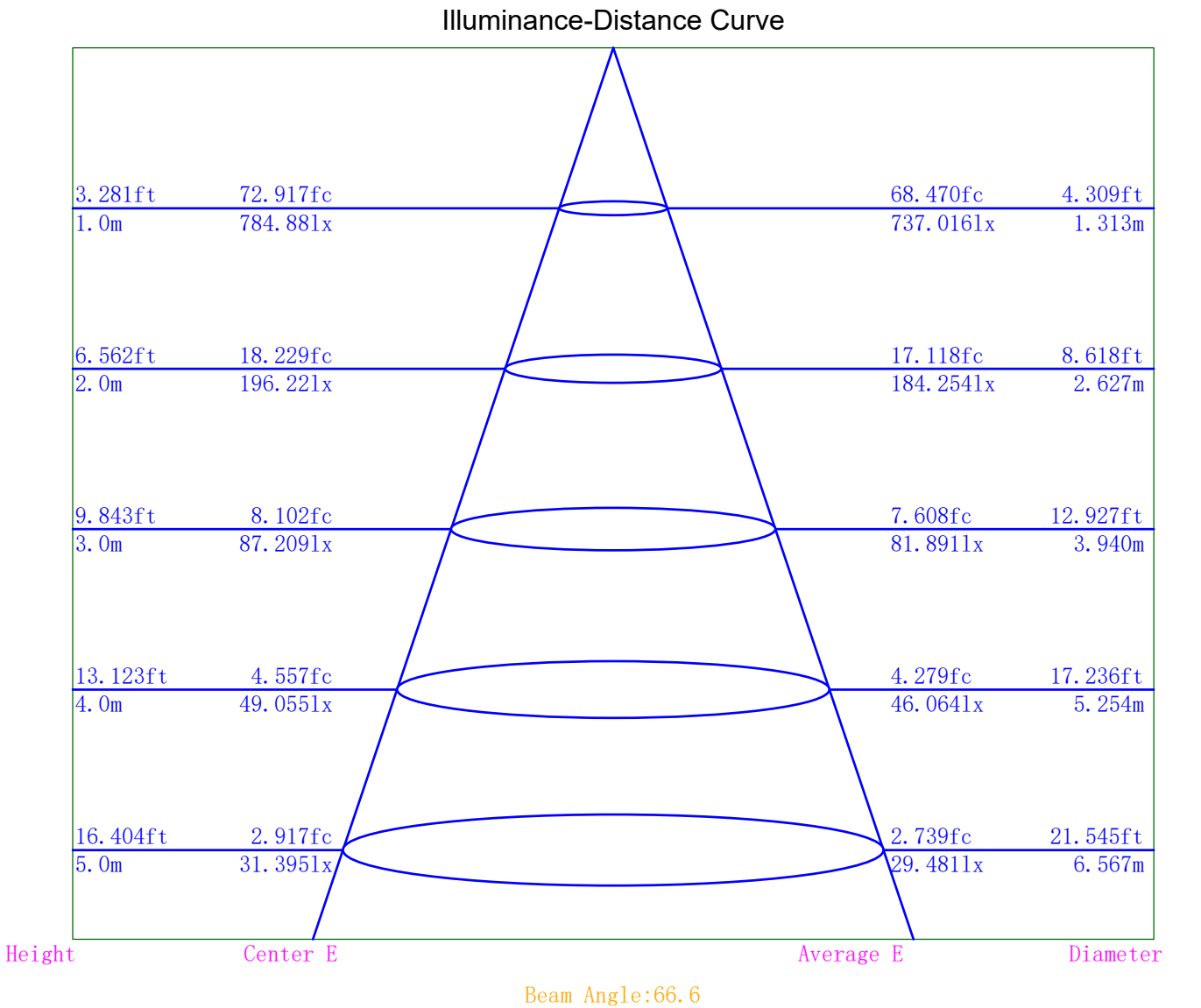


Space Plane Maximum Illuminance and @Angle:784.88lx,0.0deg  
Plane Maximum Lighting Intensity and @Angle:784.877cd,0deg



Illuminance-Distance Diagram

Lum. Name:DL50-15-XX-01 2700K RA90	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/02



Indoor Luminance Limiting Curves

Lum. Name:DL50-15-XX-01 2700K RA90	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/02

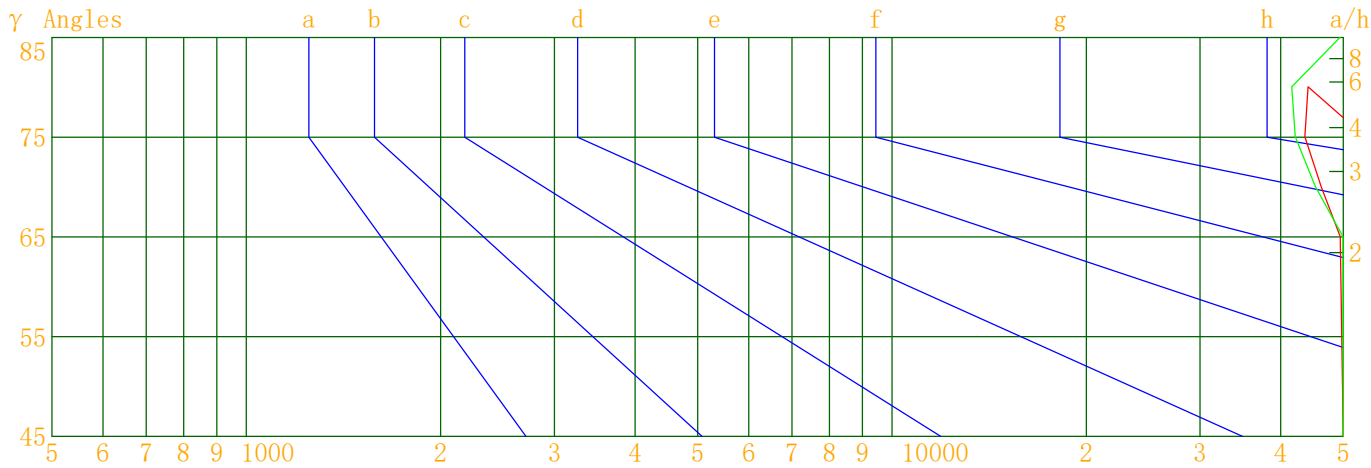
Glare Grade Table

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	99782	74076	60924	54466	49448	46223	43593	44103	53823
C90	102829	76368	62002	55594	49932	45268	42130	41606	49409

Luminance Limiting Curve



Luminous Size:

Length(m)=-0.055

Width(m)=-0.055

Height(m)=0.000

Area(m^2)=0.002376

Luminous Type:

Without Luminous Side

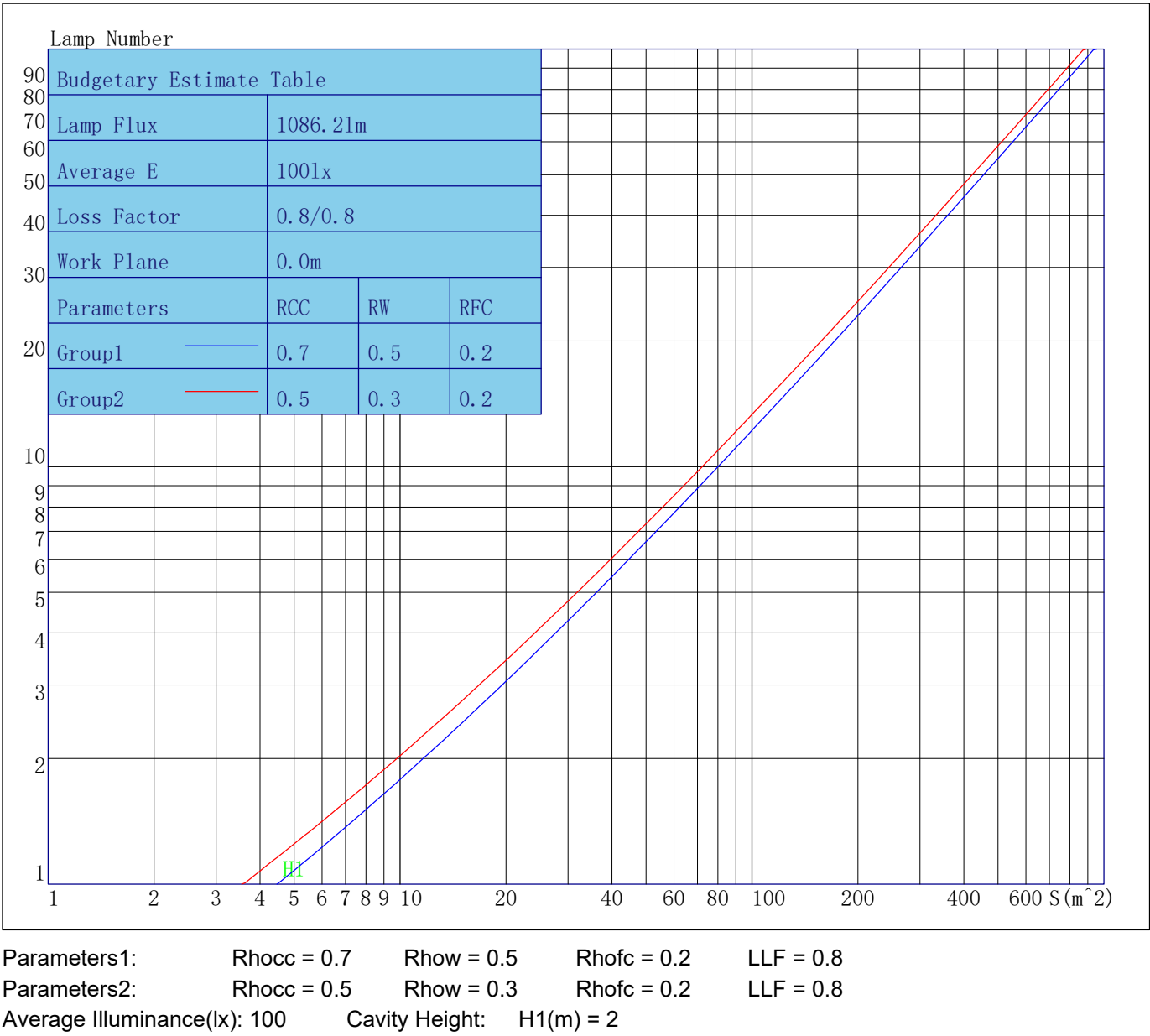
Luminous Curves:

C0-C180 Color: —

C90-C270 Color: —

Indoor Budgetary Estimate Table

Lum. Name:DL50-15-XX-01 2700K RA90	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/02



Indoor Coefficient of Utilization Table

Lum. Name: DL50-15-XX-01 2700K RA90	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/02

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	109	109	109	104	104	104	99	99	99	97
1	111	107	104	101	108	104	101	99	100	97	95	95	93	92	91	90	88	86
2	103	97	91	87	100	95	90	86	91	87	83	87	84	81	84	81	79	77
3	96	88	82	77	94	86	80	76	83	78	74	80	76	72	77	74	71	69
4	90	80	73	68	88	79	73	68	76	71	66	74	69	65	71	67	64	62
5	84	74	67	61	82	73	66	61	70	64	60	68	63	59	66	62	58	56
6	79	68	61	56	77	67	60	55	65	59	55	63	58	54	61	57	53	51
7	74	63	56	51	73	62	55	50	60	54	50	59	53	49	57	53	49	47
8	70	59	51	47	68	58	51	46	56	50	46	55	49	46	54	49	45	43
9	66	55	48	43	65	54	47	43	53	47	42	51	46	42	50	45	42	40
10	62	51	44	40	61	51	44	40	49	44	39	48	43	39	47	42	39	37

Unified Glare Rating Table

Lum. Name:DL50-15-XX-01 2700K RA90	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/02

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	25.5	26.7	25.9	27.1	27.5	25.6	26.9	26.1	27.2	27.6	
	Y=3H	26.3	27.4	26.7	27.8	28.2	26.4	27.5	26.8	27.9	28.3
	Y=4H	26.7	27.7	27.1	28.1	28.6	26.7	27.7	27.2	28.2	28.6
	Y=6H	27.0	27.9	27.5	28.4	28.8	27.0	28.0	27.5	28.4	28.9
	Y=8H	27.2	28.0	27.6	28.5	29.0	27.2	28.0	27.6	28.5	29.0
	Y=12H	27.3	28.1	27.8	28.6	29.1	27.3	28.1	27.8	28.6	29.1
X=4H    Y=2H	25.8	26.8	26.2	27.2	27.7	25.9	26.9	26.4	27.3	27.8	
	Y=3H	26.8	27.6	27.2	28.1	28.6	26.9	27.7	27.3	28.2	28.6
	Y=4H	27.3	28.0	27.8	28.5	29.0	27.3	28.1	27.8	28.6	29.1
	Y=6H	27.8	28.4	28.3	28.9	29.5	27.8	28.4	28.3	28.9	29.5
	Y=8H	28.0	28.6	28.5	29.1	29.6	28.0	28.6	28.5	29.1	29.6
	Y=12H	28.2	28.7	28.7	29.3	29.8	28.1	28.7	28.7	29.2	29.8
X=8H    Y=4H	27.4	28.0	28.0	28.5	29.1	27.5	28.1	28.0	28.6	29.1	
	Y=6H	28.0	28.5	28.6	29.1	29.7	28.1	28.5	28.6	29.1	29.7
	Y=8H	28.4	28.8	28.9	29.4	29.9	28.3	28.8	28.9	29.4	29.9
	Y=12H	28.7	29.1	29.3	29.6	30.3	28.7	29.0	29.2	29.6	30.2
X=12H    Y=4H	27.4	28.0	28.0	28.5	29.1	27.5	28.0	28.0	28.6	29.1	
	Y=6H	28.1	28.5	28.7	29.1	29.7	28.1	28.5	28.7	29.1	29.7
	Y=8H	28.5	28.8	29.0	29.4	30.1	28.5	28.8	29.0	29.4	30.0
Variations with the objerver position at spacings											
S=1.0H	0.3/-0.3					0.4/-0.4					
S=1.5H	0.6/-0.6					0.7/-0.7					
S=2.0H	0.8/-0.9					0.9/-1.0					
Reduced UGR Table:											
Nordic Standard Table:	BK0					BK0					
Correction Value	2.2					2.1					

o the CIE Pub.117,data has been corrected,refers to the lamp's lumens 8.2flm.

IES Indoor Report

Photometric Filename:DL50-15-XX-01 2700K RA90.IES

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Candela Tabulation

V/H	C0.0	C90.0	C180.0	C270.0
γ 0.0	784.88	784.88	784.88	784.88
γ 5.0	779.53	770.99	776.03	768.40
γ 10.0	752.71	745.60	749.17	739.91
γ 15.0	710.78	706.53	706.50	697.76
γ 20.0	652.88	651.51	651.42	639.07
γ 25.0	576.39	579.44	579.58	562.00
γ 30.0	466.42	472.54	471.44	452.23
γ 35.0	350.28	357.38	355.27	338.65
γ 40.0	247.08	254.01	250.82	238.39
γ 45.0	167.63	172.75	169.26	162.10
γ 50.0	113.13	116.63	112.65	110.13
γ 55.0	83.02	84.49	80.24	80.23
γ 60.0	64.70	66.04	63.30	61.33
γ 65.0	49.65	50.13	48.53	46.38
γ 70.0	37.56	36.78	36.51	34.09
γ 75.0	26.81	25.91	26.66	23.95
γ 80.0	18.19	17.17	18.41	15.86
γ 85.0	11.15	10.23	11.57	9.68
γ 90.0	6.05	6.33	6.06	5.98
γ 95.0	5.48	5.25	5.25	5.36
γ 100.0	5.09	5.13	5.28	5.17
γ 105.0	4.84	4.96	5.21	5.26
γ 110.0	5.02	4.88	4.92	5.11
γ 115.0	5.07	4.94	4.91	4.86
γ 120.0	5.05	5.28	4.99	5.24
γ 125.0	5.29	5.33	5.19	5.76
γ 130.0	6.03	5.74	5.78	5.90
γ 135.0	6.10	6.11	6.14	6.05
γ 140.0	6.43	6.31	6.50	6.34
γ 145.0	6.87	6.84	7.18	6.82
γ 150.0	7.18	7.06	7.26	7.31
γ 155.0	7.52	7.52	7.63	7.67
γ 160.0	8.15	8.08	7.56	8.09
γ 165.0	8.30	8.27	8.25	8.13
γ 170.0	8.72	8.38	8.62	8.55
γ 175.0	8.76	9.05	8.63	8.78
γ 180.0	8.81	8.81	8.81	8.81