

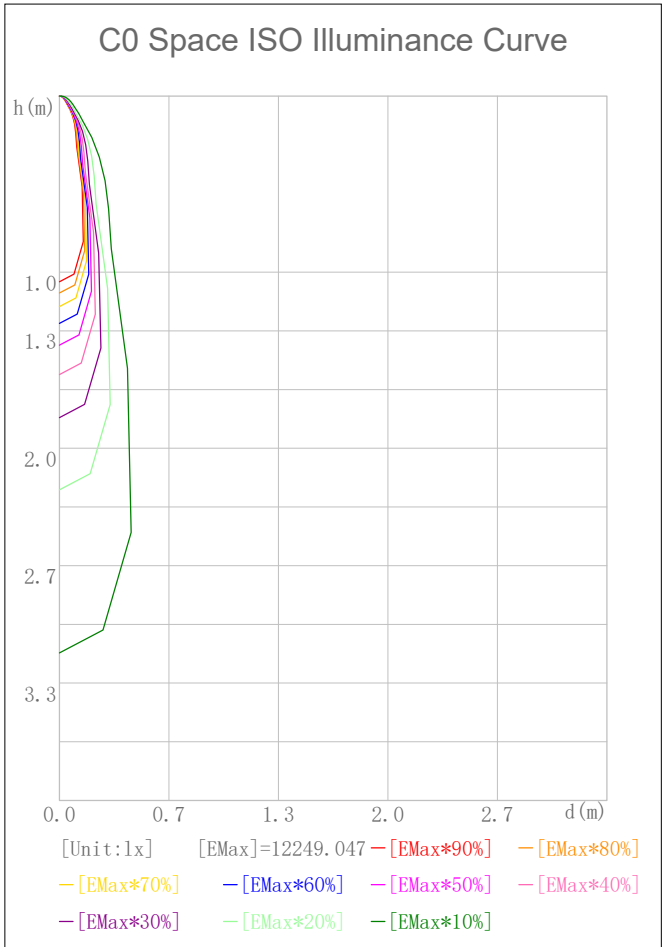
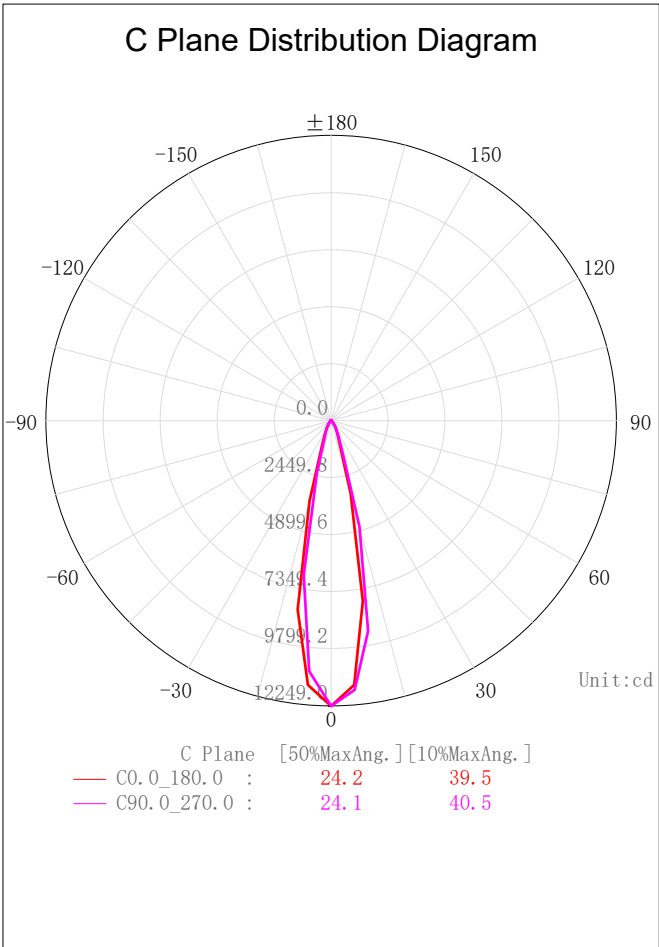
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-35-XX-01 2700K RA90 24D 黑色	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Date: 2022/08/05
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):0.110m*0.110m*0.000m	Lum. Area (m2):0.010	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=5.0	Temp. (°C): 25
		Humidity(%):

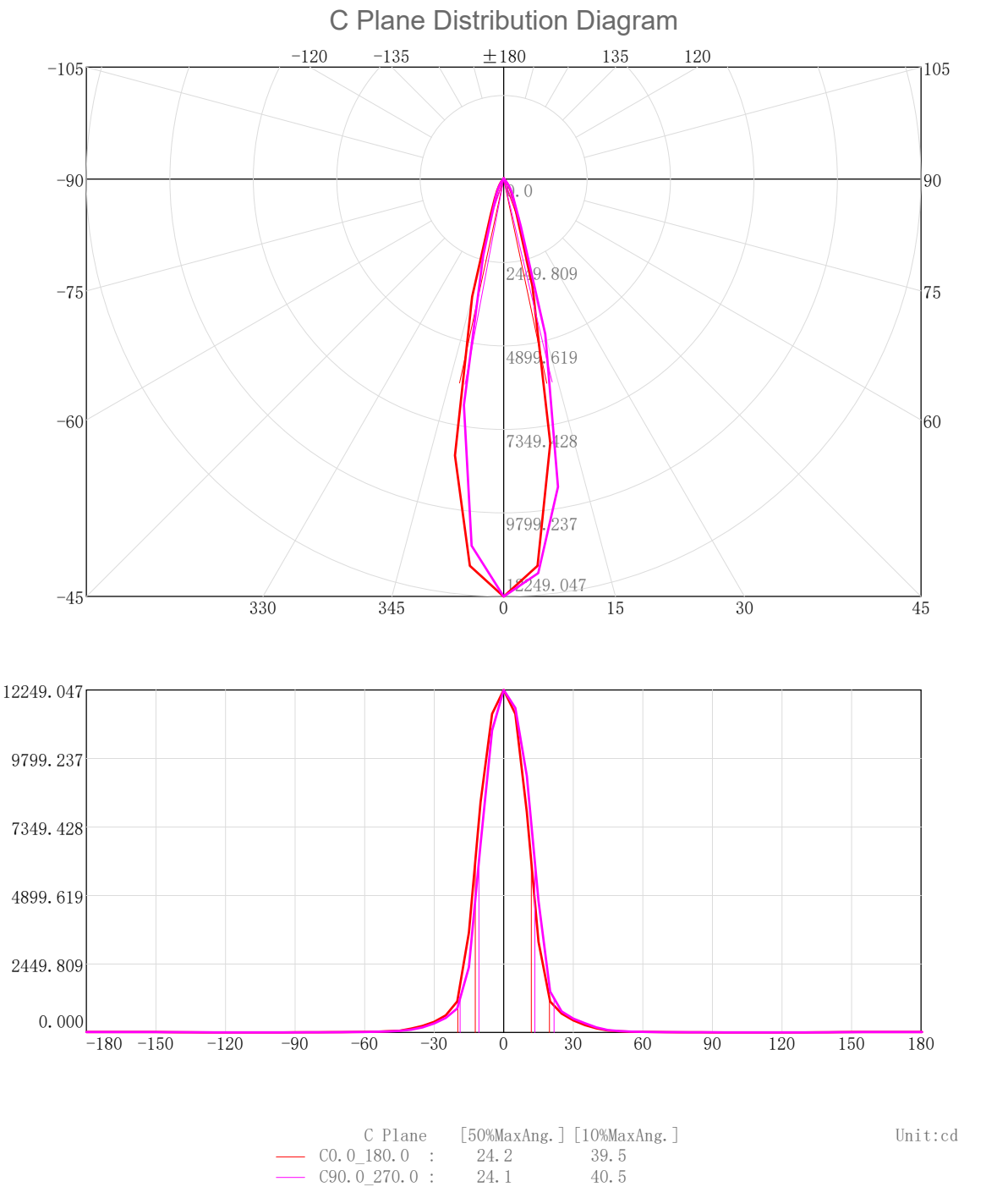
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 2702.500	Luminary Flux(lm): 2702.503	Field Angle(10%Imax): 39.5(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 2648.724lm 98.01%
Rated Voltage(V):	Luminary EER(lm/W): 80.264	Up Lumens&Percent: 53.779lm 1.99%
Tested Power(W): 33.670	Max.Candela(cd): 12249.047	S/MH: C0_a180=0.414 C90_270=0.412
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct
Tested Electrics (V, A, pf):240.0, 0.146	Beam Angle(50%Imax): 24.2(°)	ErP Φ use(90°): 2634.526lm
Lamp Size (W*L*H):0.110m*0.110m*0.000m	Left=-12.3°, Right=11.9°	IRF(%): 989.693



2D Plane Light Intensity Distribution Curve

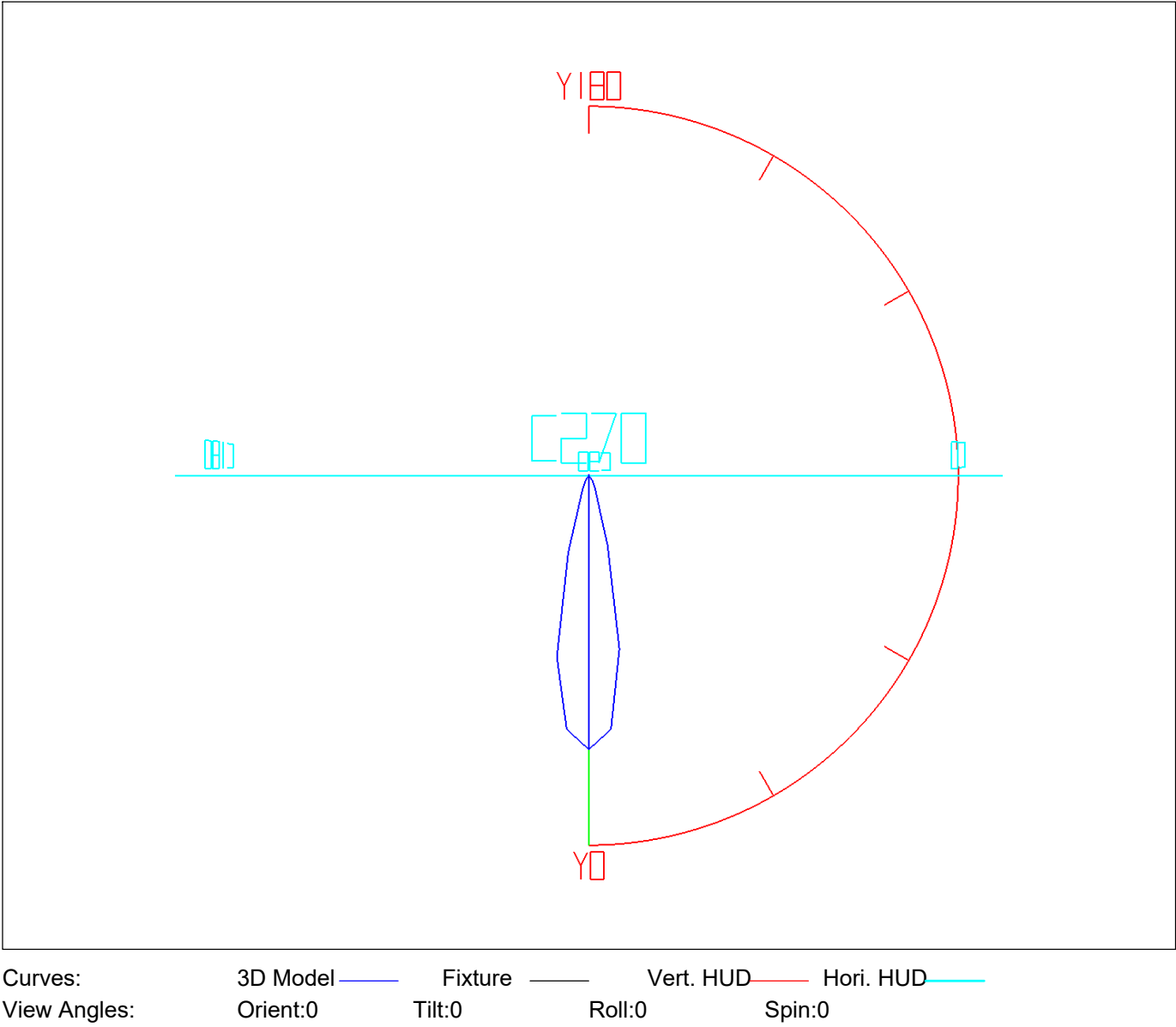
Lum. Name:DL51-35-XX-01 2700K RA90 24D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/05



3D Light Intensity Distribution Modal

Lum. Name:DL51-35-XX-01 2700K RA90 24D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/05

3D Light Intensity Distribution Modal

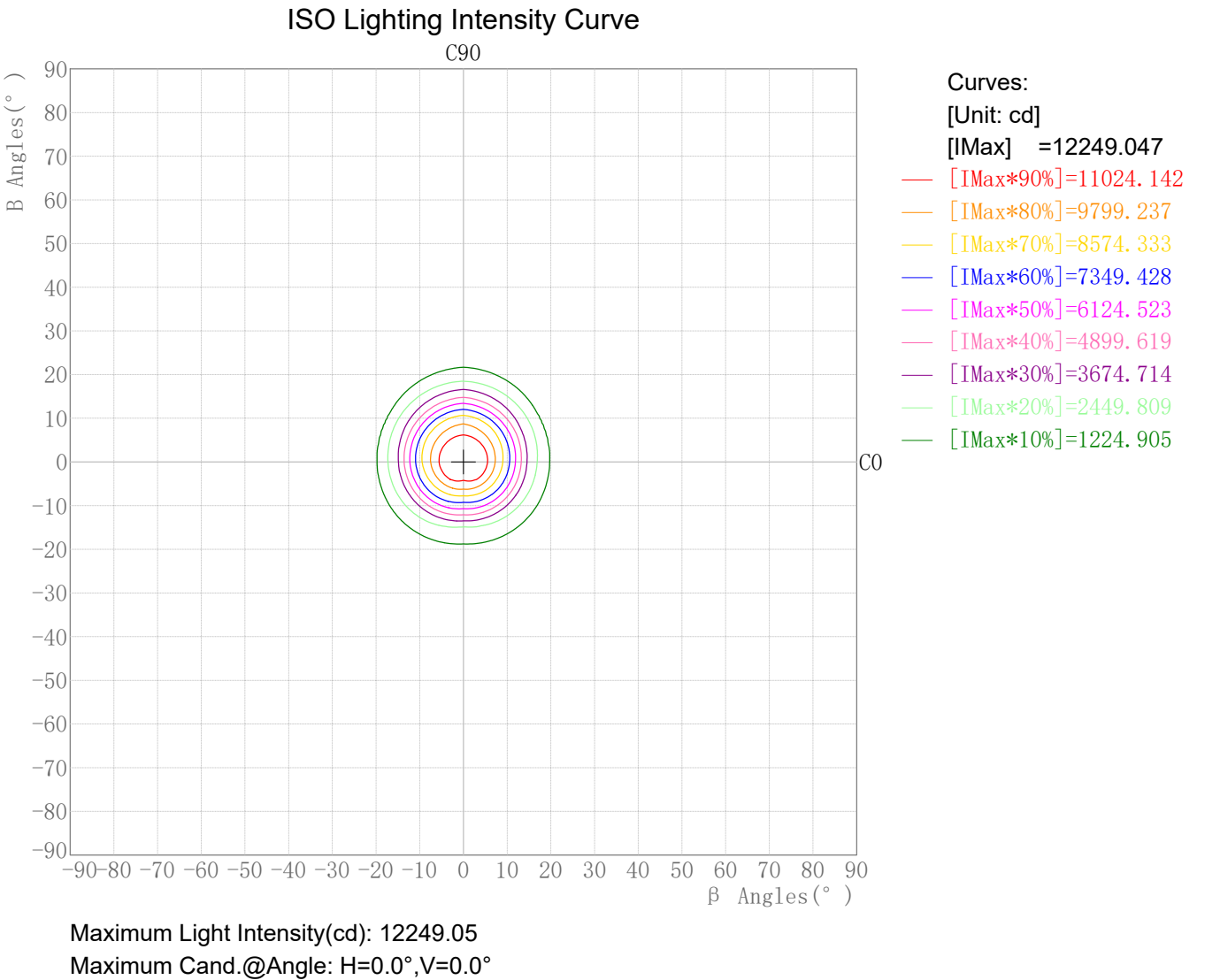


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0. 0-5. 0	281. 48	281. 48	10. 42	10. 42
5. 0-10. 0	690. 38	971. 86	25. 55	35. 96
10. 0-15. 0	680. 36	1652. 22	25. 18	61. 14
15. 0-20. 0	379. 48	2031. 71	14. 04	75. 18
20. 0-25. 0	186. 66	2218. 37	6. 91	82. 09
25. 0-30. 0	133. 24	2351. 60	4. 93	87. 02
30. 0-35. 0	98. 12	2449. 73	3. 63	90. 65
35. 0-40. 0	66. 68	2516. 41	2. 47	93. 11
40. 0-45. 0	39. 71	2556. 12	1. 47	94. 58
45. 0-50. 0	23. 59	2579. 71	0. 87	95. 46
50. 0-55. 0	16. 43	2596. 14	0. 61	96. 06
55. 0-60. 0	12. 03	2608. 17	0. 45	96. 51
60. 0-65. 0	9. 84	2618. 02	0. 36	96. 87
65. 0-70. 0	8. 27	2626. 29	0. 31	97. 18
70. 0-75. 0	7. 00	2633. 28	0. 26	97. 44
75. 0-80. 0	5. 97	2639. 26	0. 22	97. 66
80. 0-85. 0	5. 12	2644. 37	0. 19	97. 85
85. 0-90. 0	4. 35	2648. 72	0. 16	98. 01
90. 0-95. 0	3. 70	2652. 42	0. 14	98. 15
95. 0-100. 0	3. 21	2655. 64	0. 12	98. 27
100. 0-105. 0	2. 87	2658. 51	0. 11	98. 37
105. 0-110. 0	2. 63	2661. 13	0. 10	98. 47
110. 0-115. 0	2. 44	2663. 57	0. 09	98. 56
115. 0-120. 0	2. 33	2665. 90	0. 09	98. 65
120. 0-125. 0	2. 27	2668. 17	0. 08	98. 73
125. 0-130. 0	2. 42	2670. 59	0. 09	98. 82
130. 0-135. 0	2. 89	2673. 48	0. 11	98. 93
135. 0-140. 0	3. 58	2677. 06	0. 13	99. 06
140. 0-145. 0	4. 24	2681. 31	0. 16	99. 22
145. 0-150. 0	4. 68	2685. 99	0. 17	99. 39
150. 0-155. 0	4. 67	2690. 65	0. 17	99. 56
155. 0-160. 0	4. 17	2694. 82	0. 15	99. 72
160. 0-165. 0	3. 38	2698. 20	0. 12	99. 84
165. 0-170. 0	2. 42	2700. 62	0. 09	99. 93
170. 0-175. 0	1. 42	2702. 04	0. 05	99. 98
175. 0-180. 0	0. 47	2702. 50	0. 02	100. 00

Rectangle ISO Lighting Intensity Diagram

Lum. Name: DL51-35-XX-01 2700K RA90 24D 黑色	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/05

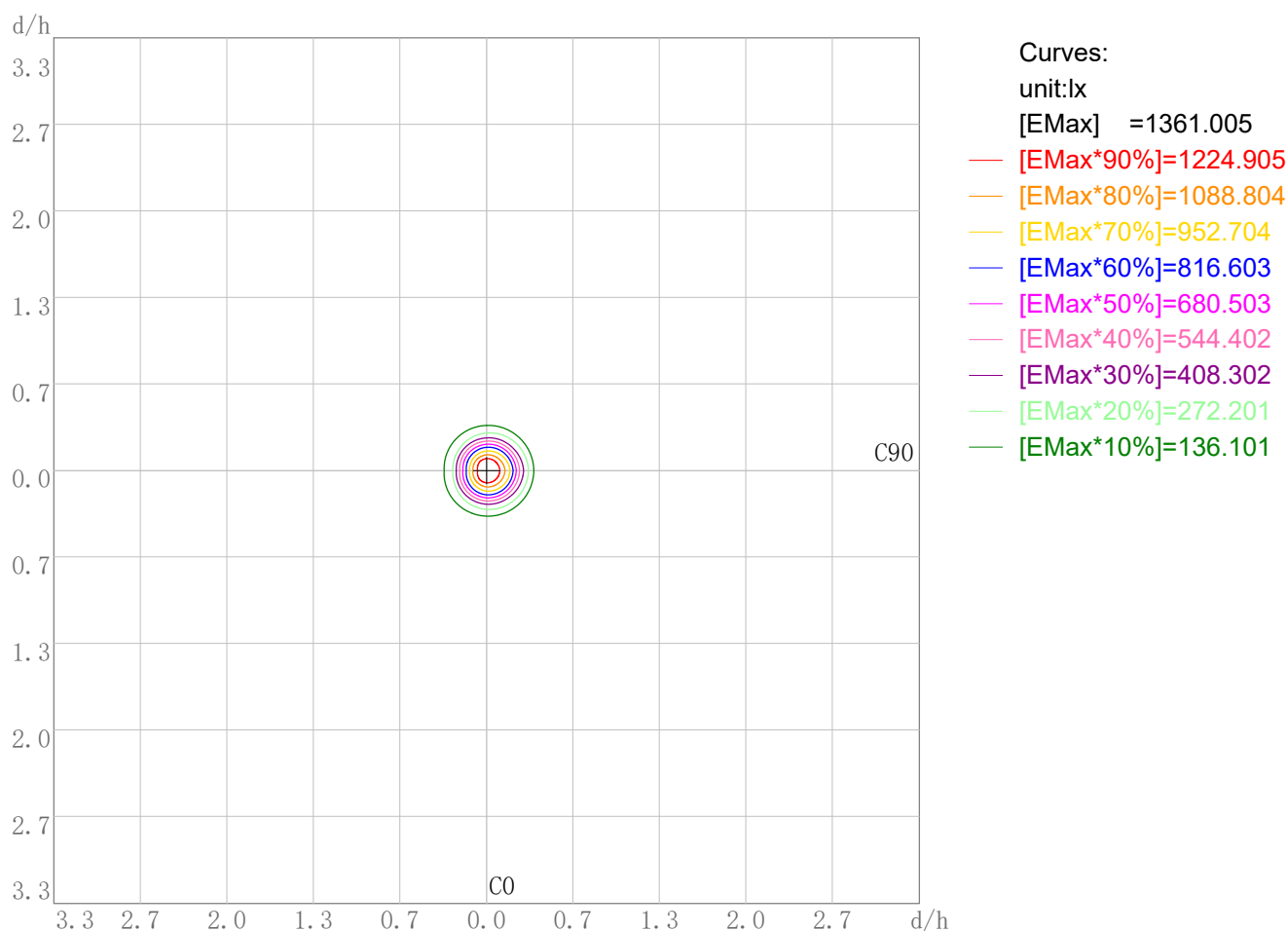


Photometric Filename:DL51-35-XX-01 2700K RA90 24D 黑色.IES

Plane ISO-Illuminance Diagram

Lum. Name: DL51-35-XX-01 2700K RA90 24D 黑色	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/05

Plane ISO-Illuminance Curve

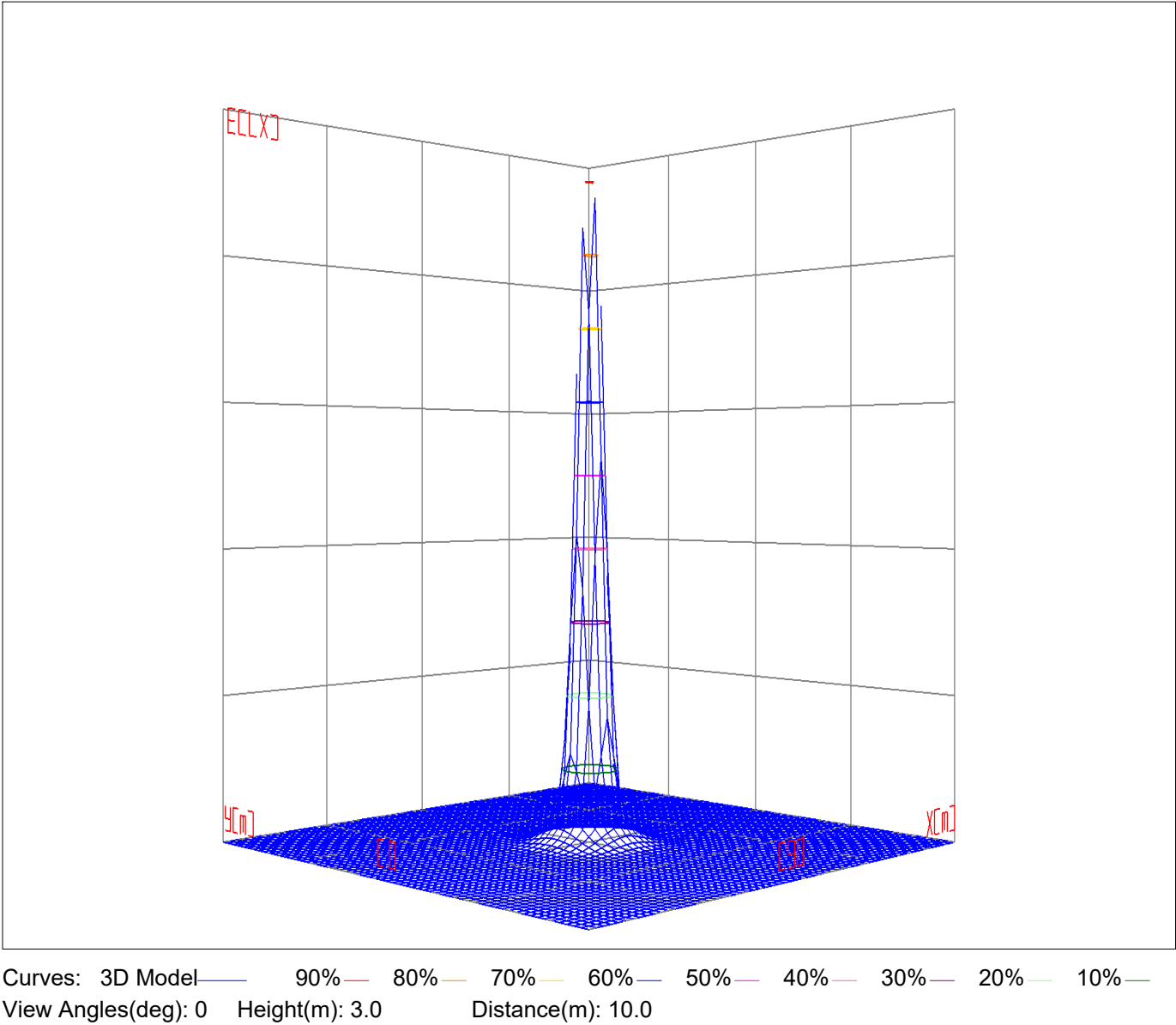


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 1361.01
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 2700K RA90 24D 黑色	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/05

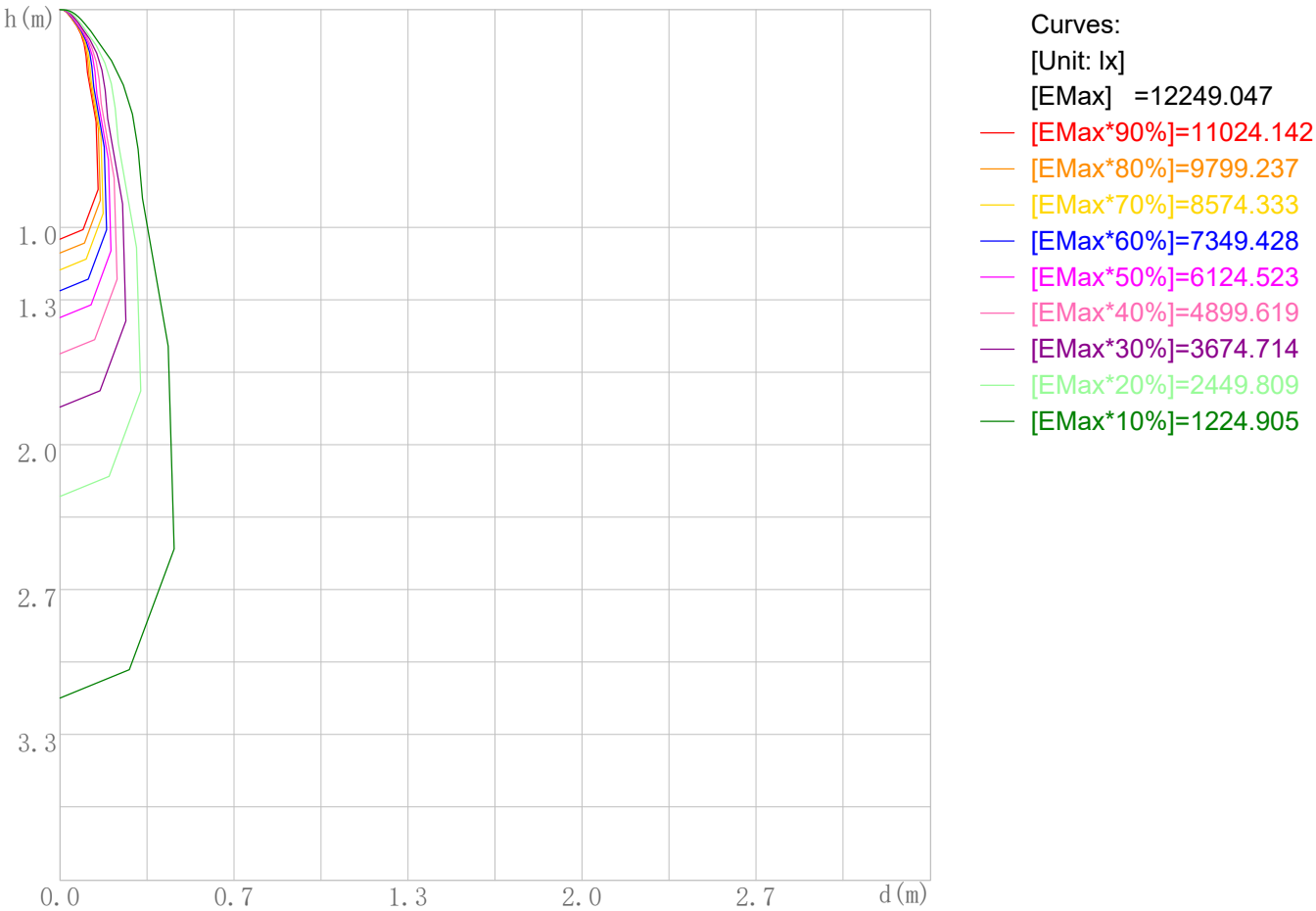
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name:DL51-35-XX-01 2700K RA90 24D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/05

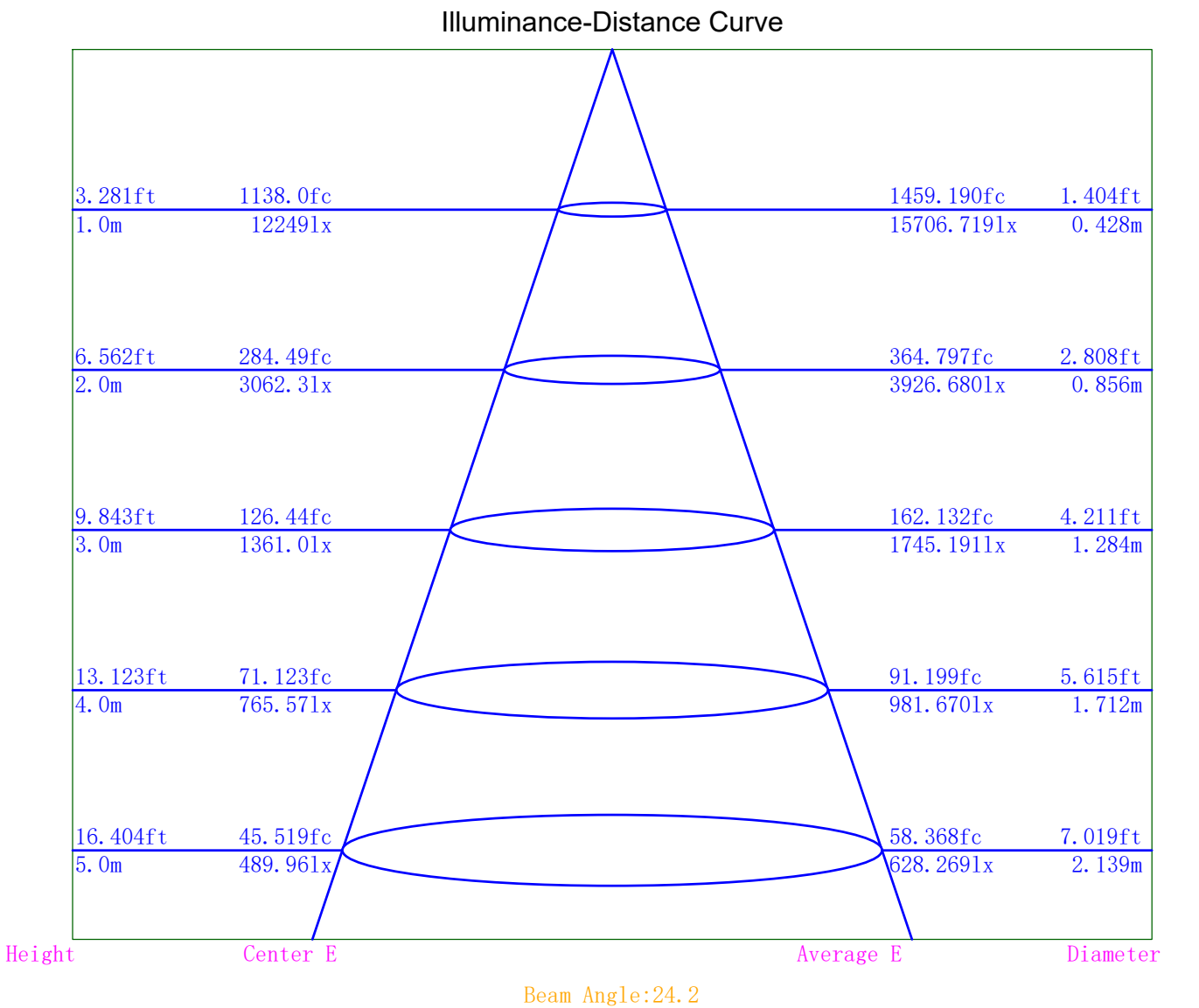
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:12249.05lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:12249.047cd,0deg

Illuminance-Distance Diagram

Lum. Name:DL51-35-XX-01 2700K RA90 24D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/05



Indoor Luminance Limiting Curves

Lum. Name:DL51-35-XX-01 2700K RA90 24D 黑色	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/05

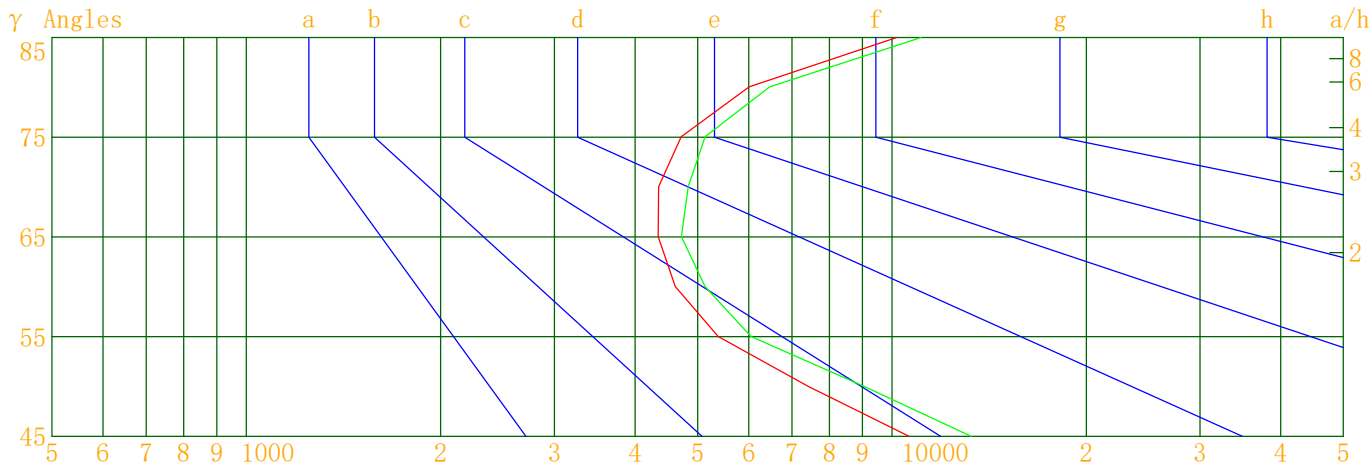
Glare Grade Table

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	10631	7419	5381	4617	4343	4351	4715	6009	10166
C90	13271	9057	6048	5134	4720	4836	5133	6465	11094

Luminance Limiting Curve



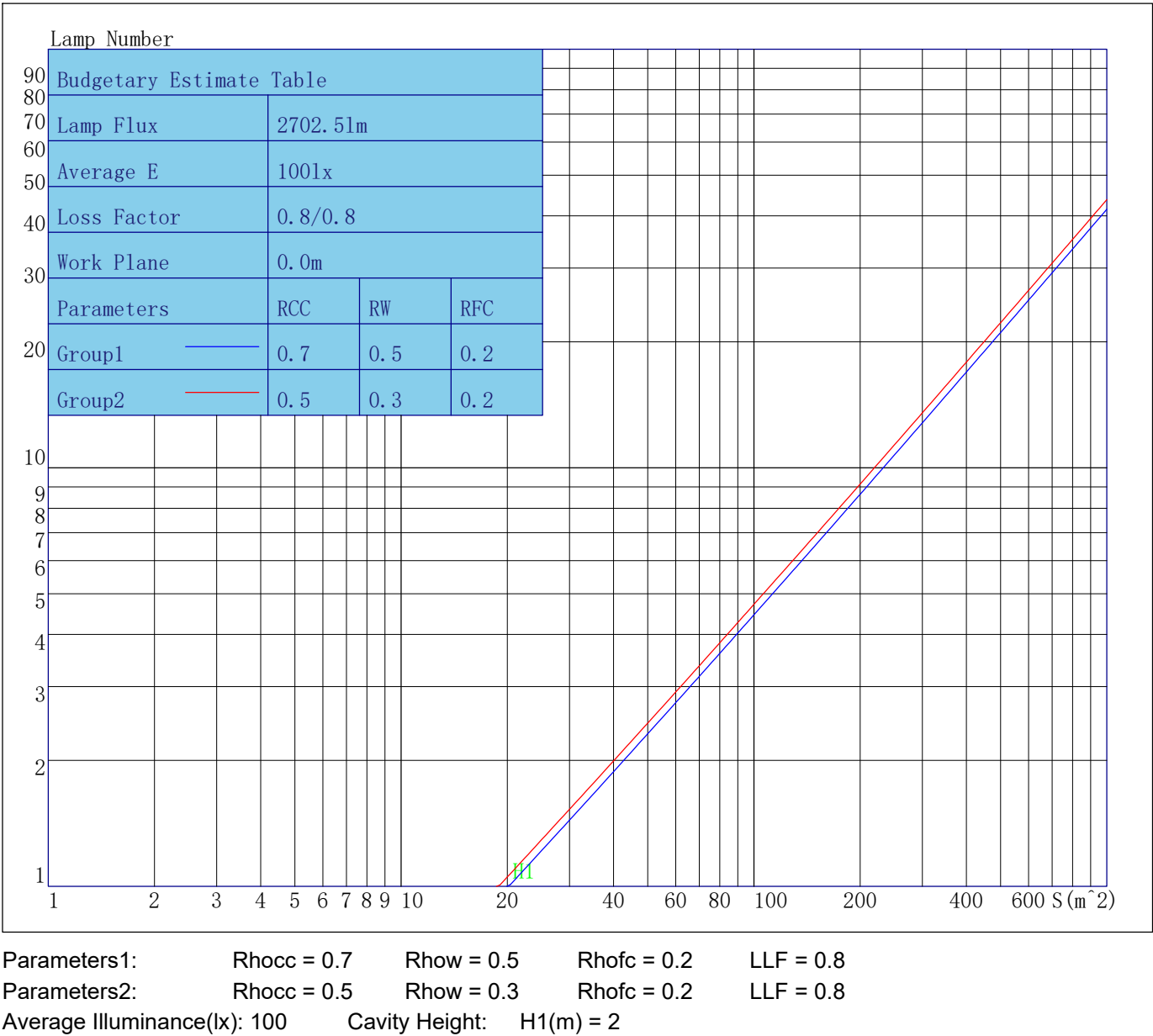
Luminous Size:Length(m)=-0.110Width(m)=-0.110Height(m)=0.000Area(m^2)=0.009503

Luminous Type:Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name:DL51-35-XX-01 2700K RA90 24D 黑色	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/05



Indoor Coefficient of Utilization Table

Lum. Name:DL51-35-XX-01 2700K RA90 24D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/05

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	100	100	100	98
1	114	112	110	108	111	109	108	106	105	104	102	101	100	99	97	96	96	94
2	110	106	103	100	108	104	101	99	101	98	96	97	96	94	94	93	92	90
3	106	101	97	94	104	99	96	93	97	94	91	94	92	90	92	90	88	87
4	102	97	92	89	101	95	92	89	93	90	87	91	88	86	89	87	85	84
5	99	93	88	85	98	92	88	85	90	86	84	88	85	83	87	84	82	81
6	96	89	85	82	95	89	84	81	87	83	81	86	82	80	84	82	79	78
7	93	86	82	79	92	86	81	79	84	81	78	83	80	78	82	79	77	76
8	91	84	79	76	89	83	79	76	82	78	76	81	78	75	80	77	75	74
9	88	81	77	74	87	81	76	74	80	76	73	79	75	73	78	75	73	72
10	86	79	75	72	85	78	74	72	77	74	71	77	73	71	76	73	71	70

Unified Glare Rating Table

Lum. Name:DL51-35-XX-01 2700K RA90 24D 黑色	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/05

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	14.4	13.9	14.8	15.1	14.5	15.4	14.9	15.7	16.1
	Y=3H	13.8	14.6	14.3	15.0	15.4	14.8	15.5	15.2	15.9	16.3
	Y=4H	14.1	14.8	14.5	15.2	15.6	15.0	15.7	15.4	16.1	16.5
	Y=6H	14.4	15.1	14.9	15.5	15.9	15.3	15.9	15.7	16.3	16.8
	Y=8H	14.7	15.3	15.2	15.7	16.2	15.5	16.1	16.0	16.5	17.0
	Y=12H	15.0	15.6	15.5	16.0	16.5	15.8	16.3	16.3	16.8	17.3
X=4H	Y=2H	13.5	14.2	13.9	14.6	15.0	14.4	15.1	14.9	15.5	16.0
	Y=3H	14.0	14.5	14.4	15.0	15.4	14.8	15.4	15.3	15.8	16.3
	Y=4H	14.4	14.9	14.8	15.3	15.8	15.2	15.7	15.6	16.1	16.6
	Y=6H	14.9	15.3	15.4	15.8	16.4	15.7	16.1	16.2	16.6	17.1
	Y=8H	15.3	15.7	15.8	16.2	16.7	16.0	16.4	16.5	16.9	17.4
	Y=12H	15.8	16.1	16.3	16.6	17.2	16.5	16.8	17.0	17.3	17.9
X=8H	Y=4H	14.5	14.9	15.0	15.4	15.9	15.2	15.6	15.8	16.1	16.6
	Y=6H	15.3	15.6	15.8	16.1	16.6	15.9	16.2	16.5	16.8	17.3
	Y=8H	15.8	16.1	16.4	16.6	17.2	16.5	16.7	17.0	17.3	17.8
	Y=12H	16.5	16.7	17.1	17.3	17.9	17.2	17.4	17.7	17.9	18.5
X=12H	Y=4H	14.5	14.8	15.0	15.3	15.9	15.2	15.6	15.8	16.1	16.6
	Y=6H	15.4	15.6	15.9	16.1	16.7	16.0	16.3	16.6	16.8	17.4
	Y=8H	16.0	16.2	16.6	16.8	17.4	16.6	16.8	17.2	17.4	18.0
Variations with the objverver position at spacings											
S=1.0H		0.1/-0.1					0.1/-0.1				
S=1.5H		0.2/-0.2					0.2/-0.2				
S=2.0H		0.2/-0.2					0.2/-0.2				
Reduced UGR Table:											
Nordic Standard Table:		BK0					BK0				
Correction Value		2.3					2.1				

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	12249.0	12249.0	12249.0	12249.0
γ 5.0	11392.0	11604.7	11391.1	10798.7
γ 10.0	7869.9	9171.4	8234.8	6732.6
γ 15.0	3249.8	4708.7	3572.4	2338.4
γ 20.0	1110.8	1465.1	1112.3	860.9
γ 25.0	676.1	756.0	613.3	524.4
γ 30.0	435.1	497.7	384.0	324.8
γ 35.0	267.9	334.2	236.2	185.5
γ 40.0	149.7	185.7	139.8	99.8
γ 45.0	71.4	89.2	65.3	57.0
γ 50.0	45.3	55.3	46.1	37.3
γ 55.0	29.3	33.0	29.3	26.7
γ 60.0	21.9	24.4	22.5	21.1
γ 65.0	17.4	19.0	18.2	17.5
γ 70.0	14.1	15.7	14.7	14.1
γ 75.0	11.6	12.6	12.3	11.9
γ 80.0	9.9	10.7	10.1	10.1
γ 85.0	8.4	9.2	8.8	8.0
γ 90.0	7.2	7.9	7.4	6.7
γ 95.0	6.7	6.7	6.1	5.5
γ 100.0	5.9	6.0	5.2	5.3
γ 105.0	5.5	5.9	4.5	4.7
γ 110.0	4.9	5.6	4.3	4.8
γ 115.0	4.7	5.1	4.2	4.8
γ 120.0	4.9	4.5	4.6	5.4
γ 125.0	4.8	4.5	5.0	5.7
γ 130.0	5.7	5.2	6.4	7.3
γ 135.0	7.8	6.5	8.5	9.8
γ 140.0	10.7	9.2	11.6	13.0
γ 145.0	13.8	12.5	14.7	16.1
γ 150.0	17.2	16.1	17.9	18.7
γ 155.0	19.5	18.2	19.9	19.8
γ 160.0	20.5	19.6	21.1	20.5
γ 165.0	20.6	20.1	21.2	20.4
γ 170.0	20.4	20.1	20.6	19.6
γ 175.0	19.4	19.7	20.1	19.1
γ 180.0	19.4	19.4	19.4	19.4