

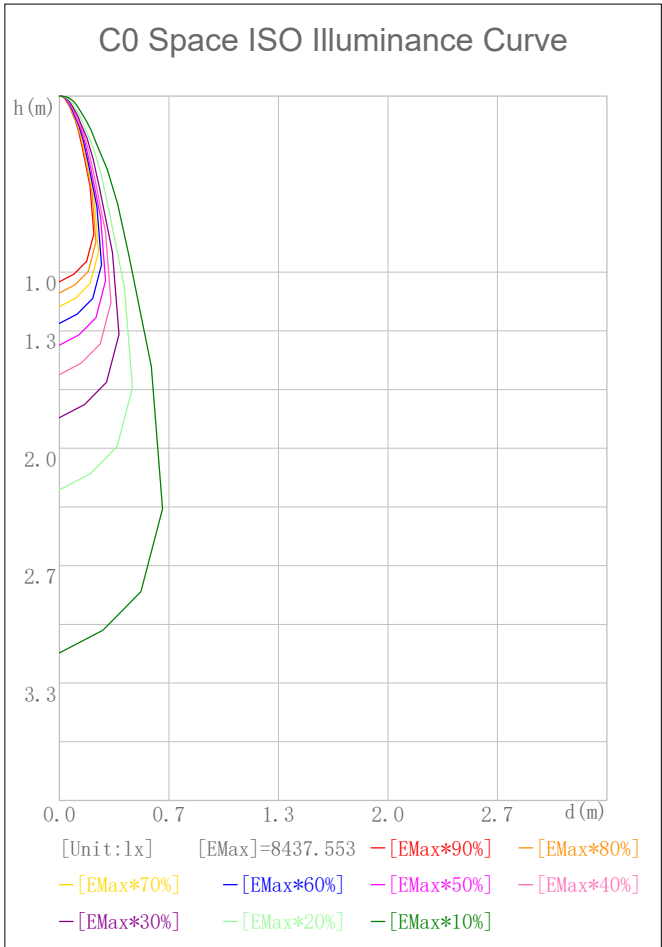
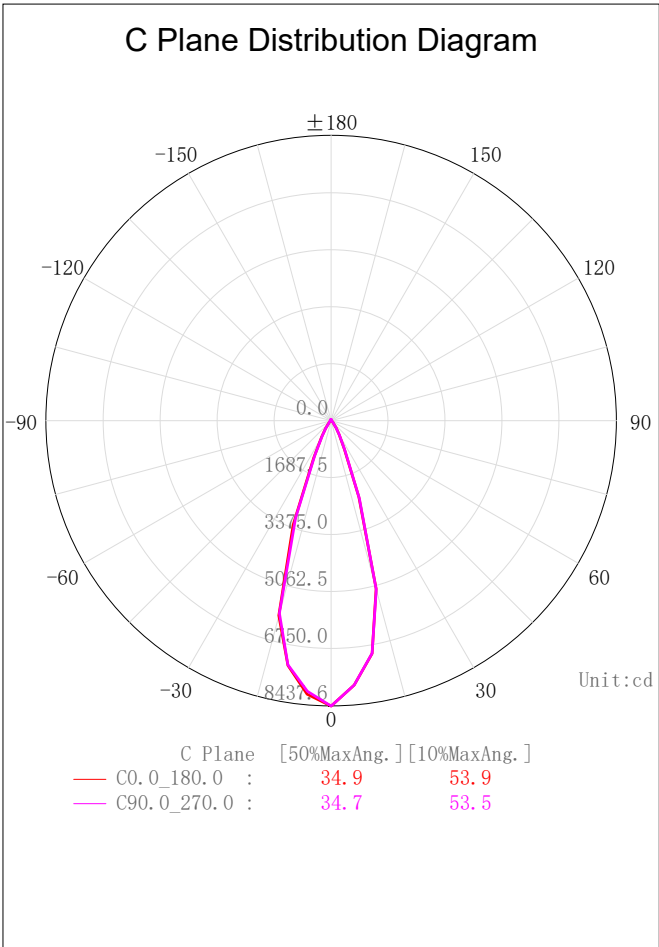
Indoor Luminaire Photometric Data

Description Information

Luminary Name: DL51-35-XX-01 4000K RA90 36D 电镀亮黑		Lum. Catalog:	Test ID: 01
Lamp Name:		Lamp Catalog: LED	Test Date: 2022/08/23
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(%): 50.0

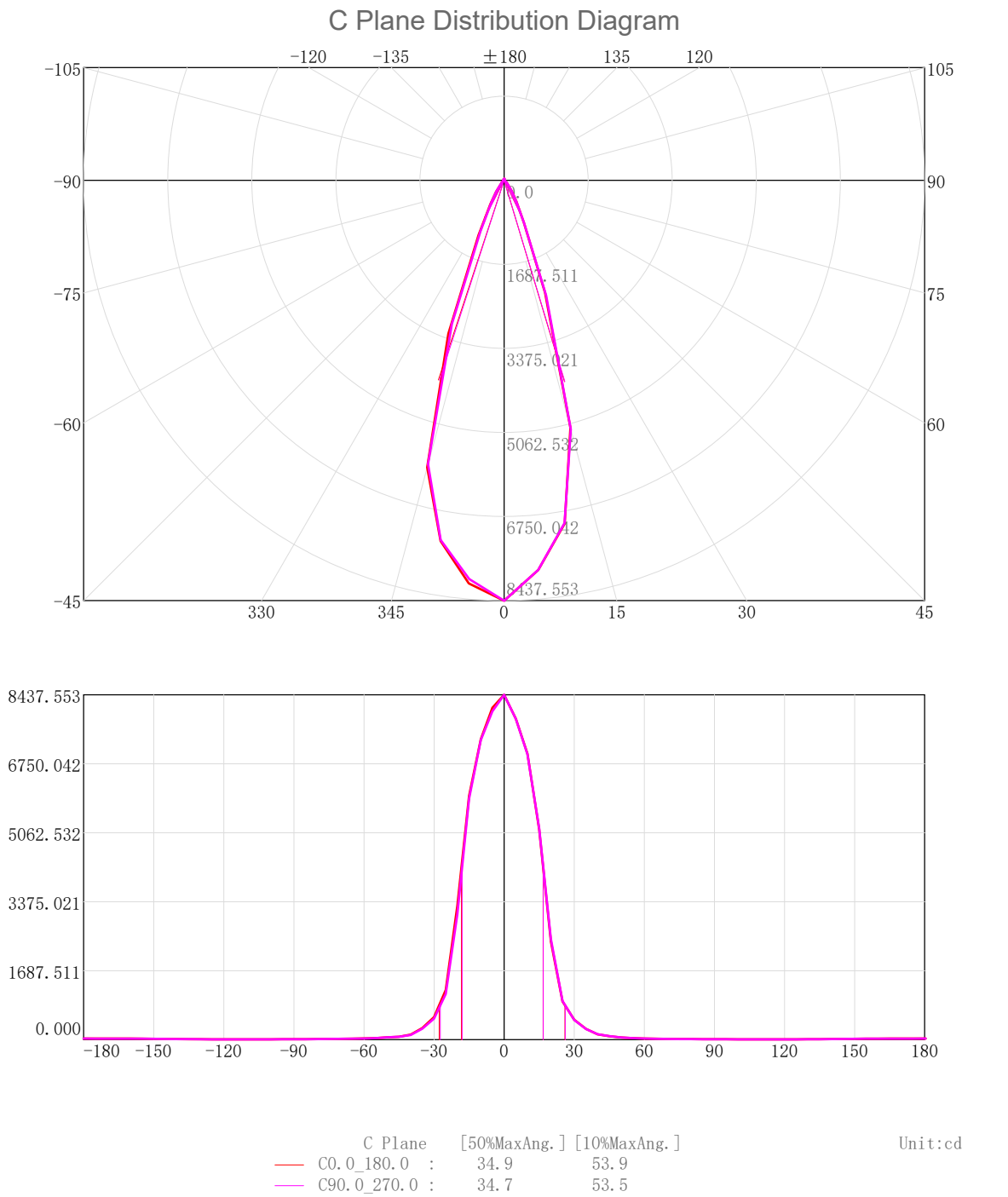
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 3222.310	Luminary Flux(lm): 3222.310	Field Angle(10%Imax): 53.9(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 3130.613lm 97.15%	
Rated Voltage(V):	Luminary EER(lm/W): 95.731	Up Lumens&Percent: 91.697lm 2.85%	
Tested Power(W): 33.660	Max. Candela(cd): 8437.553	S/MH: C0_a180=0.592 C90_270=0.589	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=0.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf):239.3, 0.146, 0.960	Beam Angle(50%Imax): 34.9(°)	ErP Φ use(90°): 3012.285lm	
Lamp Size (W*L*H):0.110m*0.110m*0.000m	Left=-18.2°, Right=16.7°	IRF(%): 593.081	



2D Plane Light Intensity Distribution Curve

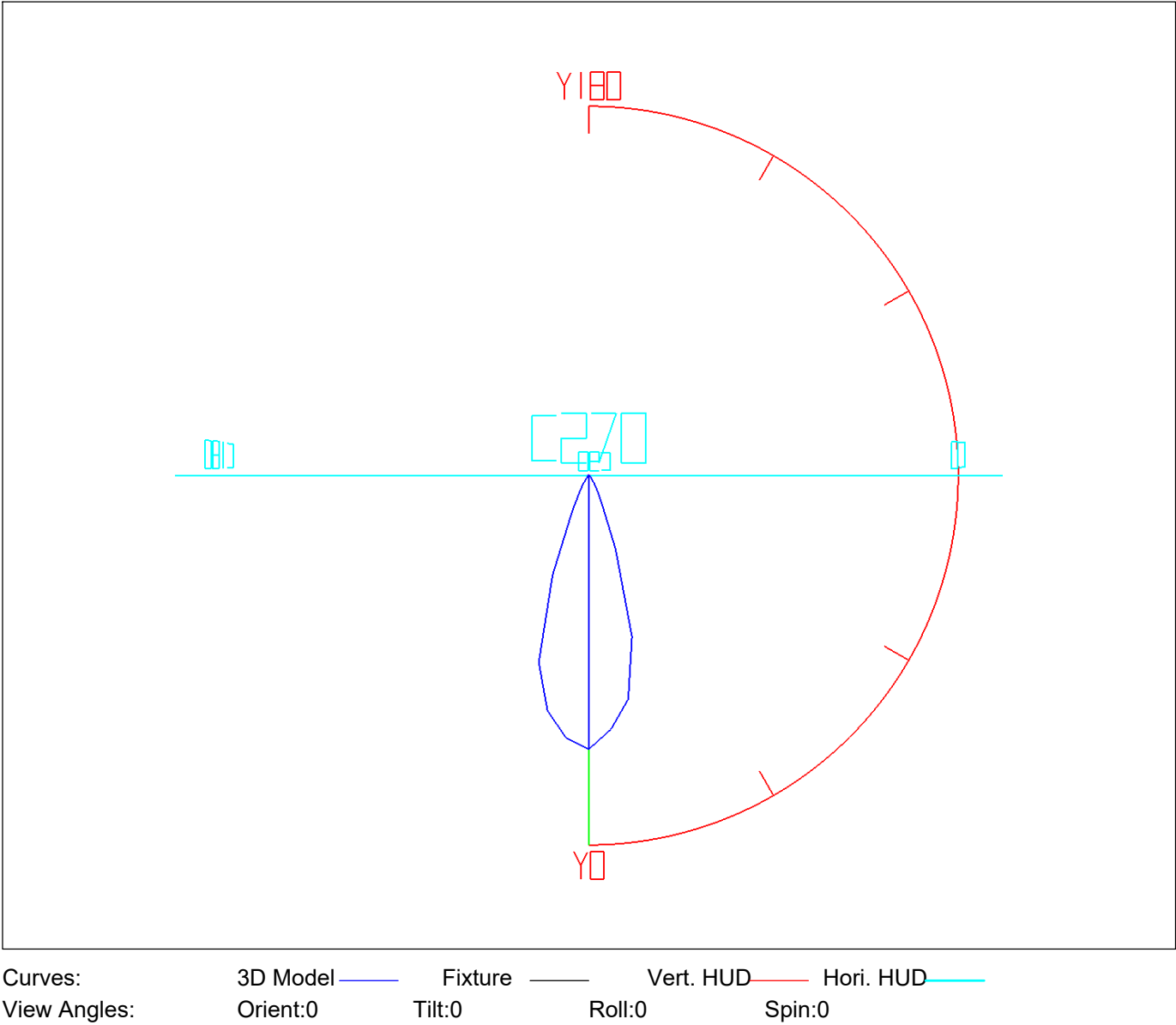
Lum. Name:DL51-35-XX-01 4000K RA90 36D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23



3D Light Intensity Distribution Modal

Lum. Name:DL51-35-XX-01 4000K RA90 36D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23

3D Light Intensity Distribution Modal

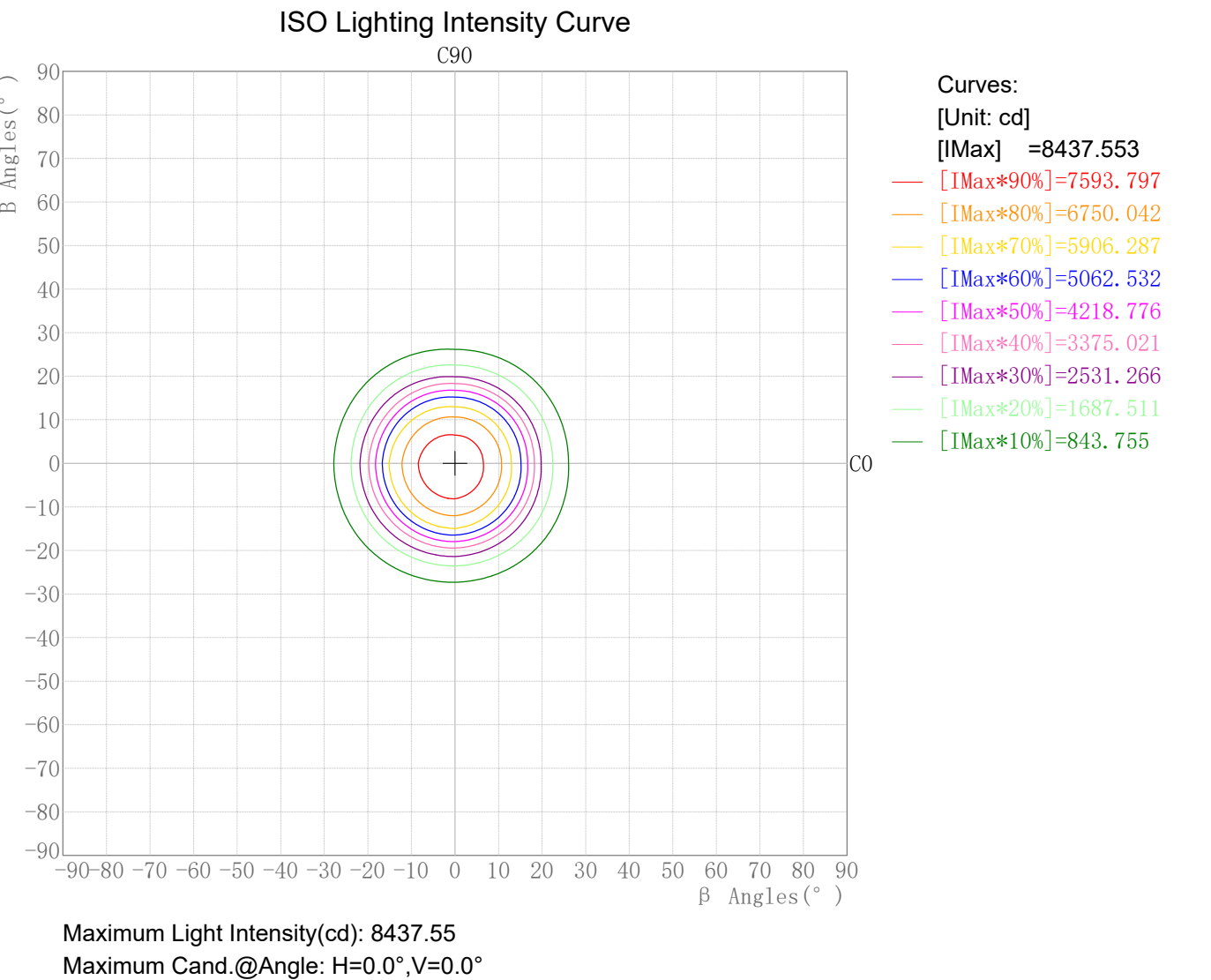


Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	196.07	196.07	6.08	6.08
5.0-10.0	541.19	737.26	16.80	22.88
10.0-15.0	753.92	1491.19	23.40	46.28
15.0-20.0	687.81	2178.99	21.35	67.62
20.0-25.0	404.72	2583.71	12.56	80.18
25.0-30.0	198.55	2782.27	6.16	86.34
30.0-35.0	115.29	2897.55	3.58	89.92
35.0-40.0	66.64	2964.20	2.07	91.99
40.0-45.0	38.77	3002.97	1.20	93.19
45.0-50.0	28.17	3031.14	0.87	94.07
50.0-55.0	21.11	3052.25	0.66	94.72
55.0-60.0	16.20	3068.45	0.50	95.23
60.0-65.0	13.84	3082.29	0.43	95.65
65.0-70.0	12.17	3094.46	0.38	96.03
70.0-75.0	10.74	3105.20	0.33	96.37
75.0-80.0	9.50	3114.70	0.29	96.66
80.0-85.0	8.41	3123.11	0.26	96.92
85.0-90.0	7.50	3130.61	0.23	97.15
90.0-95.0	6.82	3137.43	0.21	97.37
95.0-100.0	6.26	3143.69	0.19	97.56
100.0-105.0	5.84	3149.53	0.18	97.74
105.0-110.0	5.46	3154.99	0.17	97.91
110.0-115.0	5.12	3160.11	0.16	98.07
115.0-120.0	4.90	3165.01	0.15	98.22
120.0-125.0	4.87	3169.89	0.15	98.37
125.0-130.0	5.07	3174.96	0.16	98.53
130.0-135.0	5.49	3180.45	0.17	98.70
135.0-140.0	6.04	3186.49	0.19	98.89
140.0-145.0	6.45	3192.95	0.20	99.09
145.0-150.0	6.58	3199.53	0.20	99.29
150.0-155.0	6.37	3205.90	0.20	99.49
155.0-160.0	5.72	3211.61	0.18	99.67
160.0-165.0	4.64	3216.26	0.14	99.81
165.0-170.0	3.35	3219.60	0.10	99.92
170.0-175.0	2.02	3221.63	0.06	99.98
175.0-180.0	0.68	3222.31	0.02	100.00

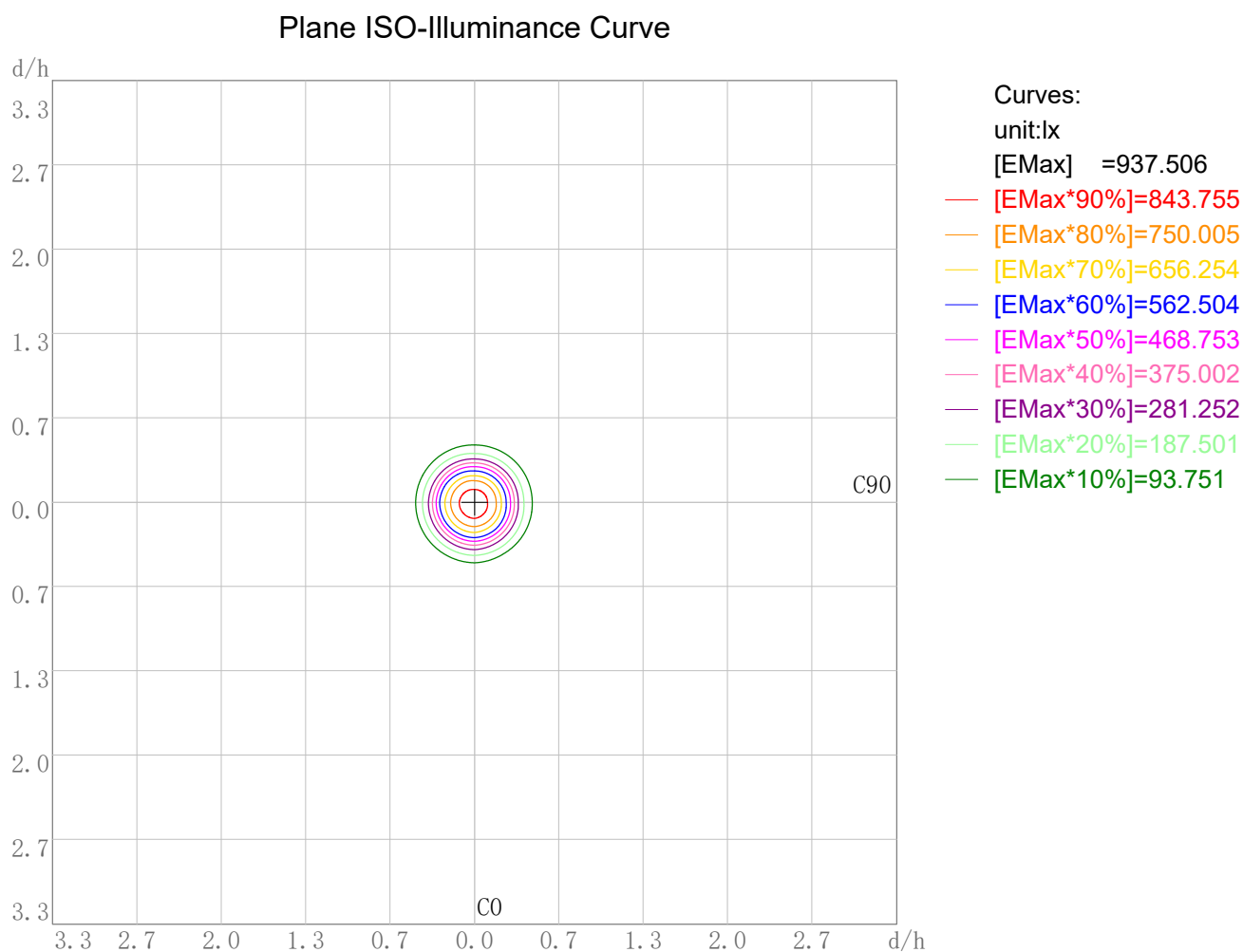
Rectangle ISO Lighting Intensity Diagram

Lum. Name:DL51-35-XX-01 4000K RA90 36D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23



Photometric Filename:DL51-35-XX-01 4000K RA90 36D 电镀亮黑.IES

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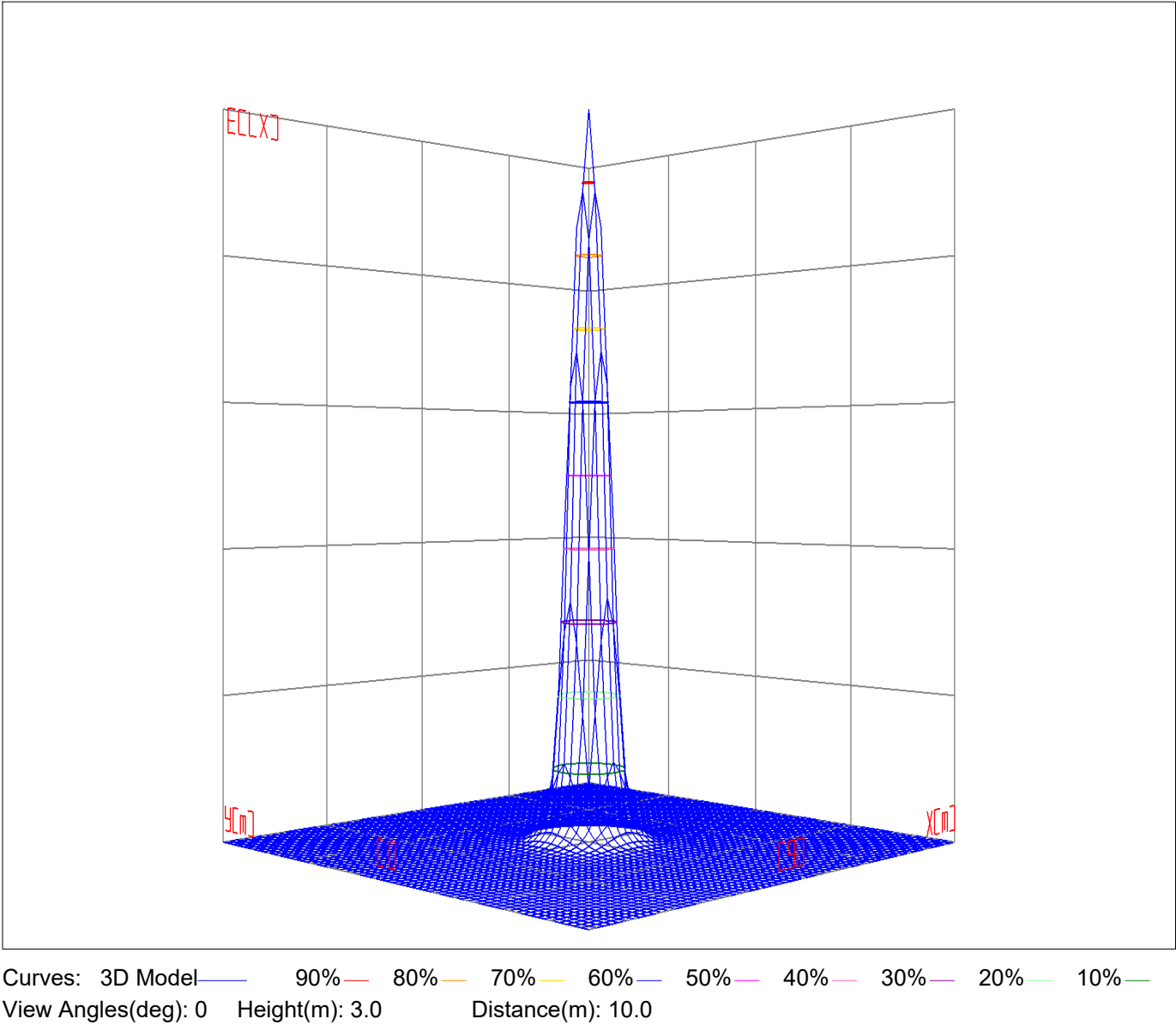


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 937.51
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 4000K RA90 36D 电镀亮黑	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/23

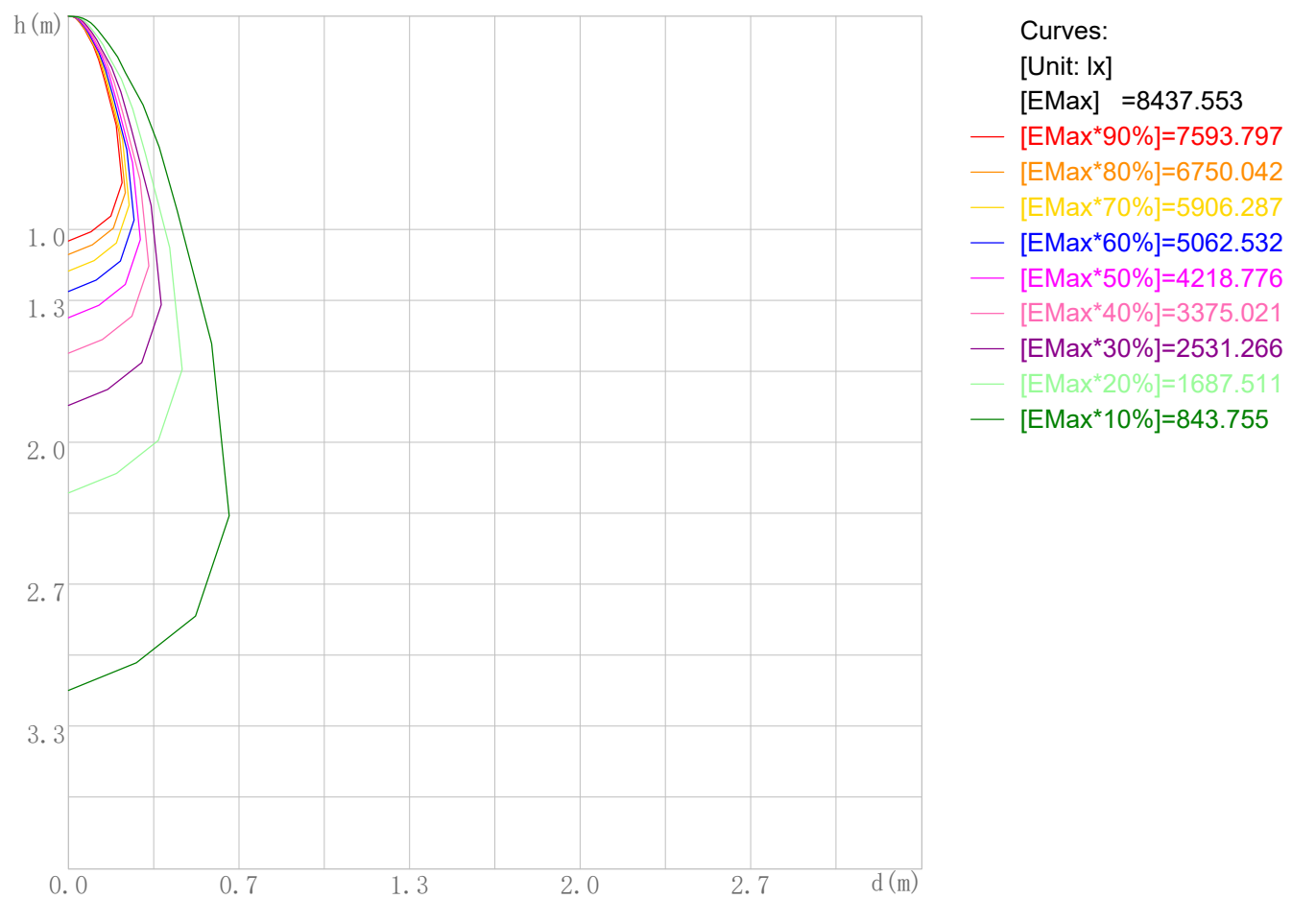
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: DL51-35-XX-01 4000K RA90 36D 电镀亮黑	Lum. Catelog:	Test ID: 01
Lamp Name:	Lamp Catelog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/23

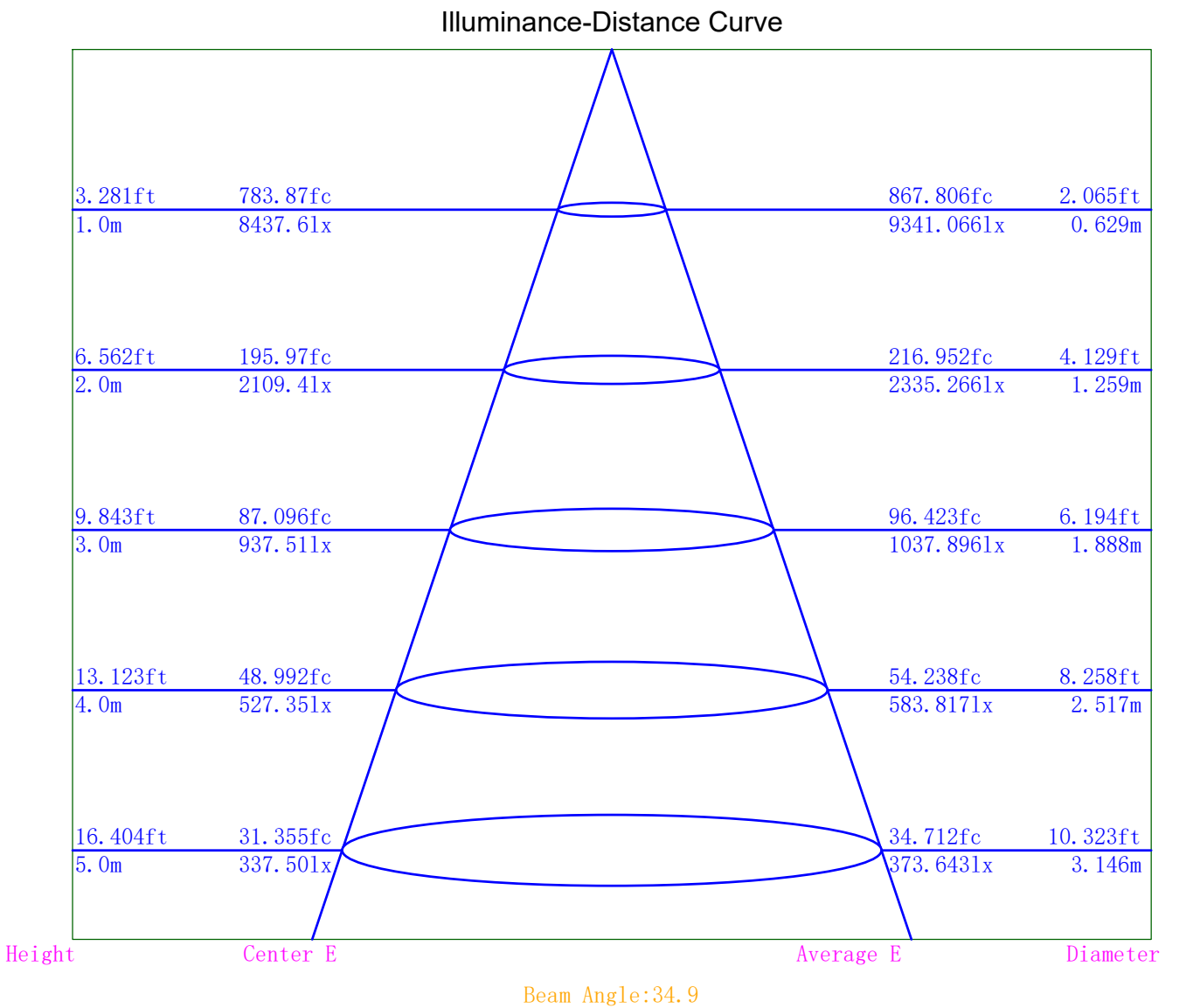
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:8437.55lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:8437.553cd,0deg

Illuminance-Distance Diagram

Lum. Name:DL51-35-XX-01 4000K RA90 36D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23



Indoor Luminance Limiting Curves

Lum. Name:DL51-35-XX-01 4000K RA90 36D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23

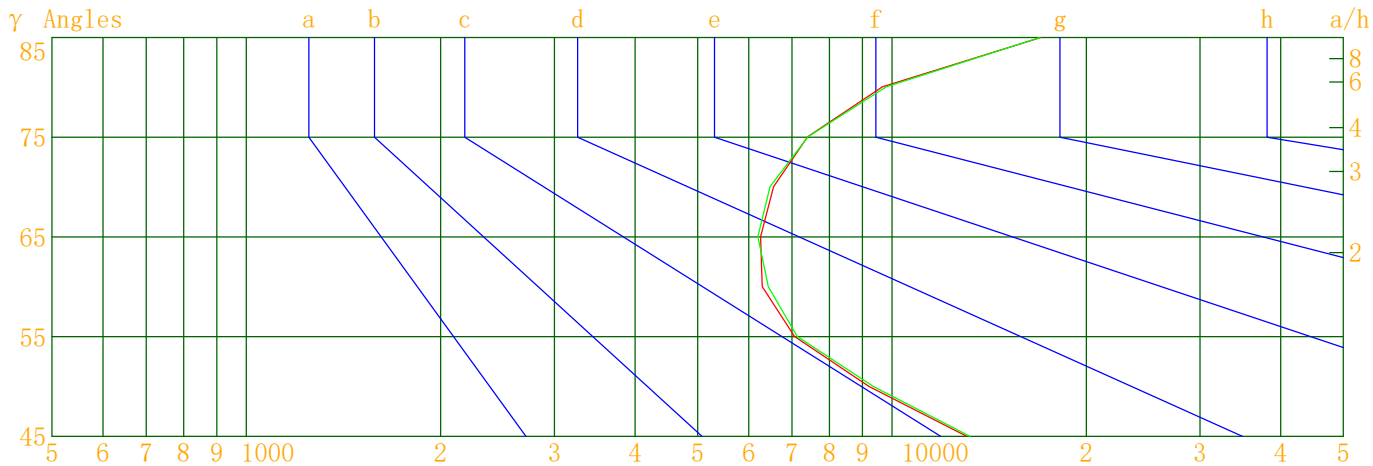
Glare Grade Table

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	13060	9214	7066	6296	6261	6556	7404	9665	16999
C90	13206	9355	7132	6432	6198	6473	7410	9799	16949

Luminance Limiting Curve



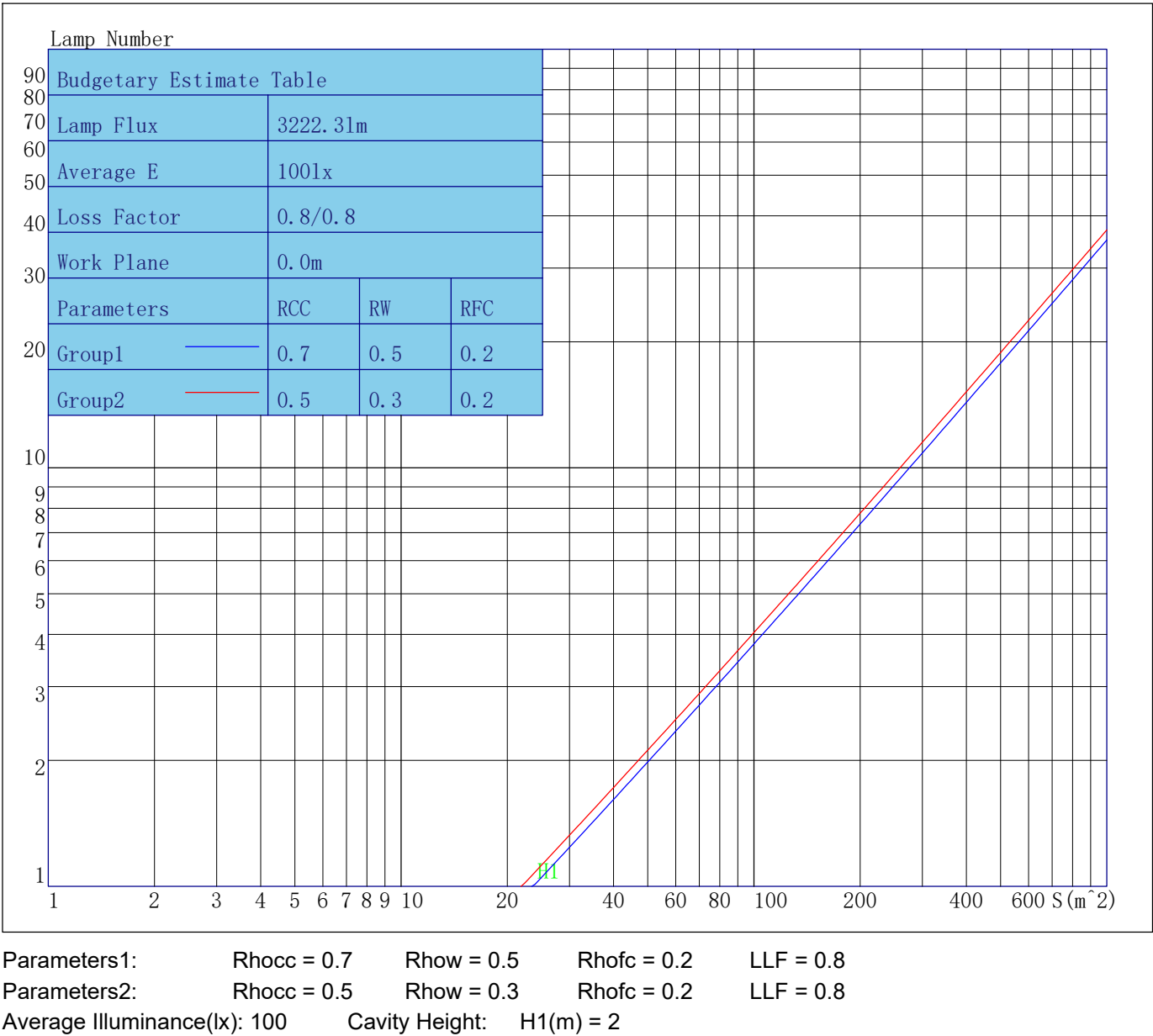
Luminous Size:Length(m)=-0.110Width(m)=-0.110Height(m)=0.000Area(m^2)=0.009503

Luminous Type:Without Luminous Side

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

Indoor Budgetary Estimate Table

Lum. Name:DL51-35-XX-01 4000K RA90 36D 电镀亮黑	Lum. Catalog:	Test ID:01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date: 2022/08/23



Indoor Coefficient of Utilization Table

Lum. Name:DL51-35-XX-01 4000K RA90 36D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23

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	99	99	99	97
1	113	111	109	107	111	108	106	105	104	102	101	100	98	97	96	95	94	92
2	109	104	101	98	106	103	99	97	99	96	94	96	93	92	92	91	89	88
3	104	99	95	91	102	97	93	90	94	91	89	92	89	87	89	87	85	84
4	100	94	89	86	99	93	88	85	90	87	84	88	85	83	86	84	81	80
5	97	90	85	81	95	89	84	81	87	83	80	85	82	79	83	80	78	77
6	93	86	81	77	92	85	80	77	83	79	76	82	78	76	80	77	75	74
7	90	82	77	74	89	82	77	74	80	76	73	79	75	73	78	74	72	71
8	87	79	74	71	86	78	74	71	77	73	70	76	72	70	75	72	69	68
9	84	76	71	68	83	76	71	68	75	70	68	74	70	67	73	69	67	66
10	81	73	69	66	80	73	68	65	72	68	65	71	67	65	70	67	65	64

Unified Glare Rating Table

Lum. Name:DL51-35-XX-01 4000K RA90 36D 电镀亮黑	Lum. Catelog:	Test ID:01
Lamp Name:	Lamp Catelog:LED	Test Lab:Quality Department
Manufacture:Shenzhen Norming Lighting	Test Machine:GON-2000	Test Date:2022/08/23

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	13.6	14.5	14.0	14.9	15.3	13.6	14.6	14.1	14.9	15.3
	14.2	15.0	14.7	15.4	15.9	14.3	15.1	14.7	15.5	15.9
	14.7	15.5	15.2	15.9	16.3	14.7	15.5	15.2	15.9	16.4
	15.4	16.0	15.8	16.5	17.0	15.4	16.1	15.9	16.5	17.0
	15.8	16.4	16.3	16.9	17.4	15.8	16.5	16.3	16.9	17.4
	16.3	17.0	16.8	17.4	17.9	16.4	17.0	16.9	17.4	17.9
X=4H Y=2H	13.7	14.4	14.1	14.8	15.3	13.7	14.5	14.2	14.9	15.3
	14.6	15.2	15.1	15.7	16.2	14.6	15.2	15.1	15.7	16.2
	15.3	15.8	15.8	16.3	16.8	15.3	15.8	15.8	16.3	16.8
	16.2	16.7	16.7	17.2	17.7	16.2	16.7	16.7	17.2	17.7
	16.8	17.2	17.3	17.7	18.2	16.8	17.2	17.3	17.7	18.3
	17.5	17.9	18.0	18.4	18.9	17.5	17.9	18.1	18.4	19.0
X=8H Y=4H	15.5	16.0	16.1	16.5	17.0	15.6	16.0	16.1	16.5	17.0
	16.7	17.1	17.3	17.6	18.2	16.8	17.1	17.3	17.7	18.2
	17.5	17.8	18.1	18.4	18.9	17.5	17.8	18.1	18.4	19.0
	18.5	18.7	19.1	19.3	19.9	18.5	18.8	19.1	19.3	20.0
X=12H Y=4H	15.6	16.0	16.1	16.5	17.1	15.6	16.0	16.2	16.5	17.1
	16.9	17.2	17.5	17.7	18.3	16.9	17.2	17.5	17.7	18.4
	17.8	18.0	18.3	18.6	19.2	17.8	18.1	18.4	18.6	19.3
Variations with the objverver position at spacings										
S=1.0H	0.1/-0.1					0.1/-0.1				
S=1.5H	0.1/-0.2					0.1/-0.2				
S=2.0H	0.1/-0.1					0.1/-0.1				
Reduced UGR Table:										
Nordic Standard Table:	BK0					BK0				
Correction Value	3.2					3.2				

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	8437.55	8437.55	8437.55	8437.55
γ 5.0	7850.54	7848.76	8120.47	8033.48
γ 10.0	6995.99	6982.63	7350.41	7331.80
γ 15.0	5142.07	5173.97	5965.00	5896.53
γ 20.0	2400.33	2462.22	3276.12	3066.76
γ 25.0	938.73	952.02	1217.23	1121.91
γ 30.0	491.08	485.23	554.04	515.56
γ 35.0	266.51	262.23	286.39	270.59
γ 40.0	132.28	136.70	125.25	117.78
γ 45.0	87.76	88.74	74.93	74.18
γ 50.0	56.28	57.15	59.90	58.69
γ 55.0	38.52	38.88	39.49	39.41
γ 60.0	29.92	30.56	31.98	31.56
γ 65.0	25.15	24.89	26.93	26.74
γ 70.0	21.31	21.04	23.23	22.97
γ 75.0	18.21	18.23	19.76	19.63
γ 80.0	15.95	16.17	17.16	16.93
γ 85.0	14.08	14.04	14.86	14.64
γ 90.0	13.10	12.83	13.18	12.91
γ 95.0	11.88	11.85	11.91	11.92
γ 100.0	11.34	11.05	11.21	11.06
γ 105.0	10.71	10.66	10.59	10.64
γ 110.0	10.34	10.01	10.16	10.39
γ 115.0	9.73	10.04	10.09	10.19
γ 120.0	10.00	9.98	10.20	10.47
γ 125.0	10.81	10.77	11.00	11.14
γ 130.0	12.42	11.95	12.36	12.82
γ 135.0	14.91	14.62	14.62	15.06
γ 140.0	18.20	17.68	17.51	17.91
γ 145.0	21.39	20.57	20.58	20.87
γ 150.0	24.04	23.56	23.97	23.86
γ 155.0	26.76	26.11	26.83	26.07
γ 160.0	28.20	27.77	28.51	27.73
γ 165.0	28.69	27.63	28.90	28.01
γ 170.0	28.36	27.79	28.62	27.68
γ 175.0	28.49	28.26	28.78	28.15
γ 180.0	28.74	28.74	28.74	28.74