

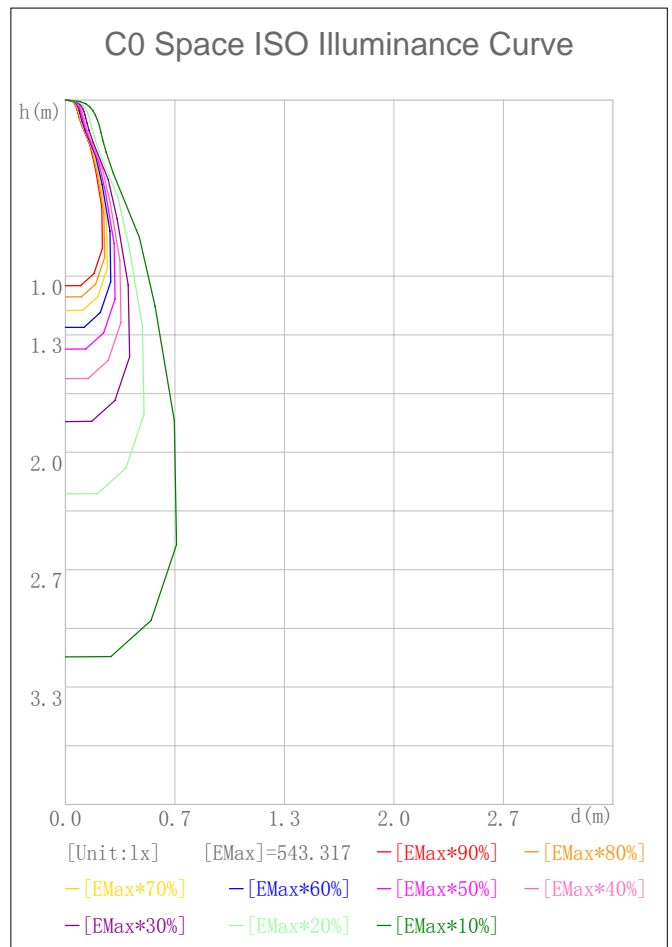
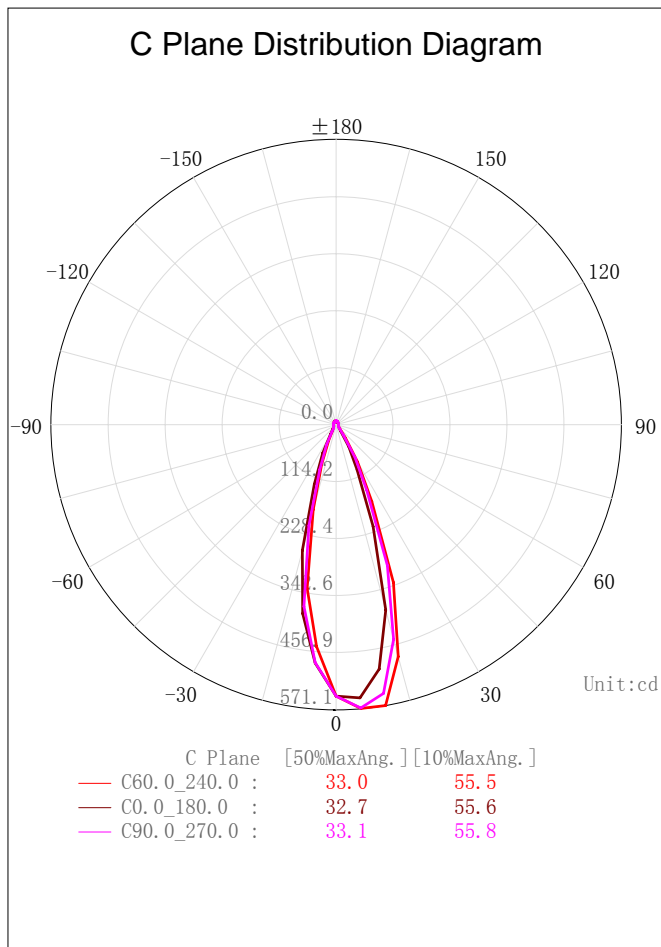
Indoor Luminaire Photometric Data

Description Information

Luminaire Name:LG-7002		Lum. Catalog:Grille light	Test ID:
Lamp Name:		Lamp Catalog:LED	Test Date: 2017/08/09
Manufacture:		Shld. Ang(°):	Test Machine:GON-2000
Test Lab:		Frequency (Hz):50	Lamp CCT(K): 3000 Ra:
Lum. Size (W*L*H):0.045m*0.075m*0.049m		Lum. Area (m2):0.007	Lum. W(kg): 0.000
Test System: C, γ	Test Step: C=30.0 γ=5.0	Temp. (°C): 25	Humidity(%): 50.0

Character Parameter

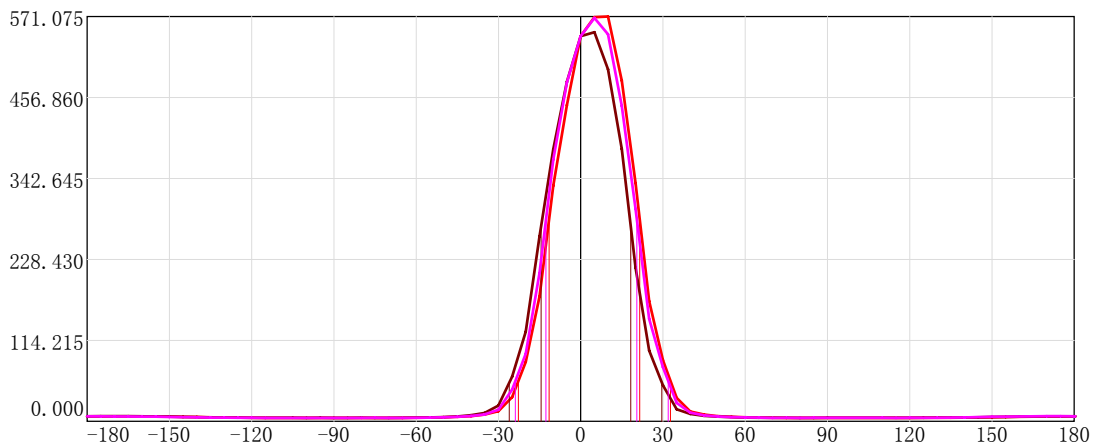
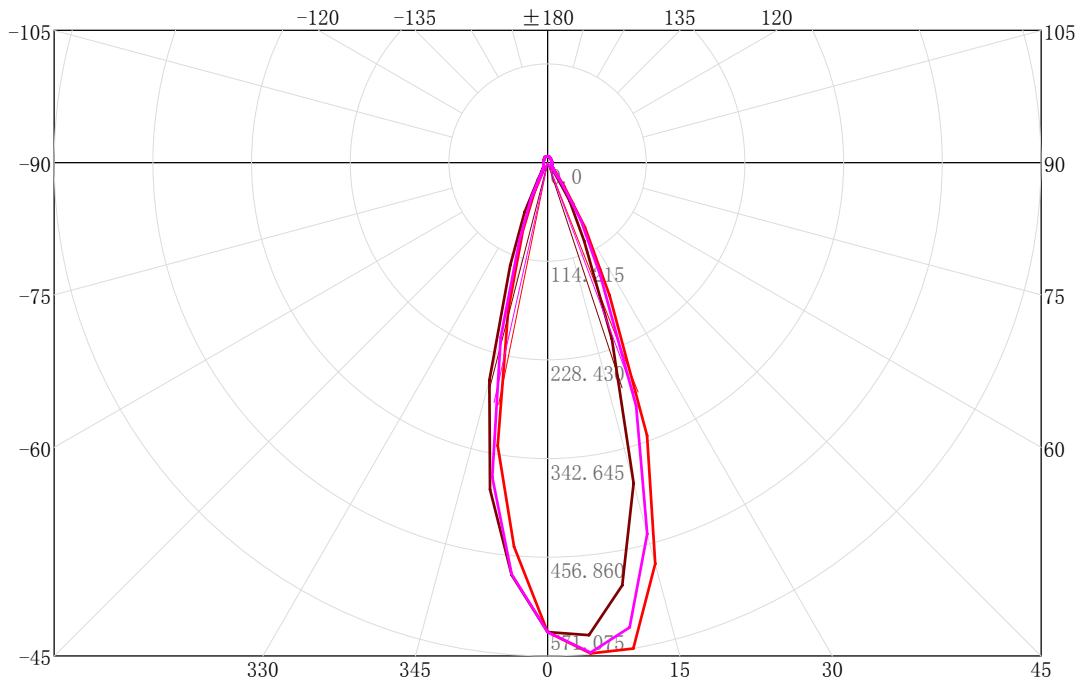
Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 255.660	Luminary Flux(lm): 255.655	Field Angle(10%Imax): 55.5(°)	
Rated Power(W): 4	Luminary Efficiency: 100.00%	Down Lumens&Percent: 221.116lm 86.49%	
Rated Voltage(V): 230	Luminary EER(lm/W): 57.554	Up Lumens&Percent: 34.539lm 13.51%	
Tested Power(W): 4.442	Max. Candela(cd): 571.075	S/MH: C0_a180=0.553 C90_270=0.570	
Lamps' Inside: 1	Max Cand@Ang. (°): C=60.0 γ=10.0	CIE Type: General Diffuse	
Tested Electrics (V, A, pf):231.0, 0.036, 0.531	Beam Angle (50%Imax): 33.0(°)	ErP φ use(90°): 196.454lm	
Lamp Size (W*L*H):0.045m*0.075m*0.049m	Left=-11.5°, Right=21.5°	IRF(%): 527.980	



2D Plane Light Intensity Distribution Curve

Lum. Name: LG-7002	Lum. Catalog: Grille light	Test ID:
Lamp Name:	Lamp Catalog:LED	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date:2017/08/09

C Plane Distribution Diagram



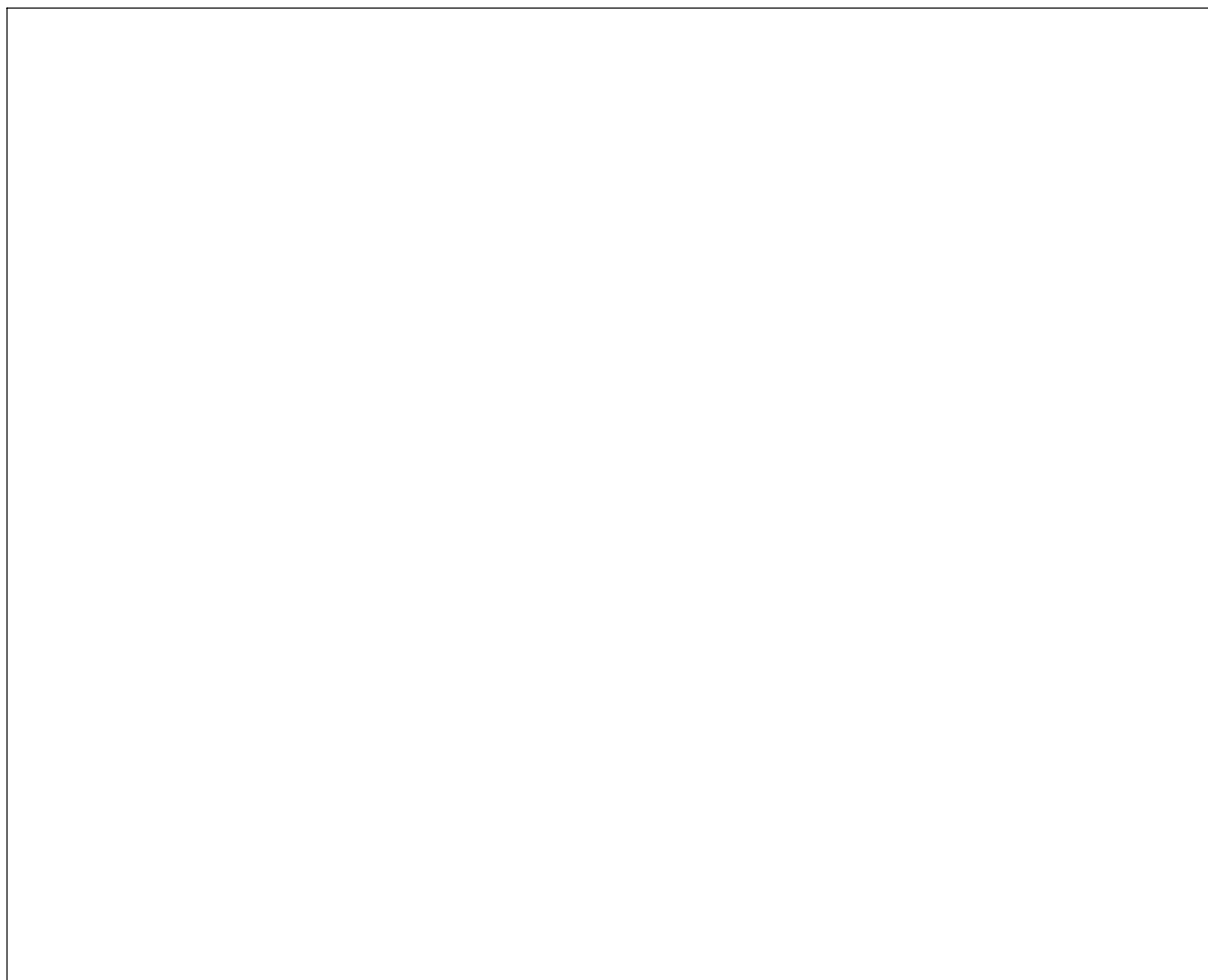
C Plane	[50%MaxAng.]	[10%MaxAng.]
— C60.0_240.0 :	33.0	55.5
— C0.0_180.0 :	32.7	55.6
— C90.0_270.0 :	33.1	55.8

Unit:cd

3D Light Intensity Distribution Modal

Lum. Name: LG-7002	Lum. Catalog: Grille light	Test ID:
Lamp Name:	Lamp Catalog:LED	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date:2017/08/09

3D Light Intensity Distribution Modal



Curves: 3D Model —— Fixture —— Vert. HUD —— Hori. HUD ——
View Angles: Orient:0 Tilt:0 Roll:0 Spin:0

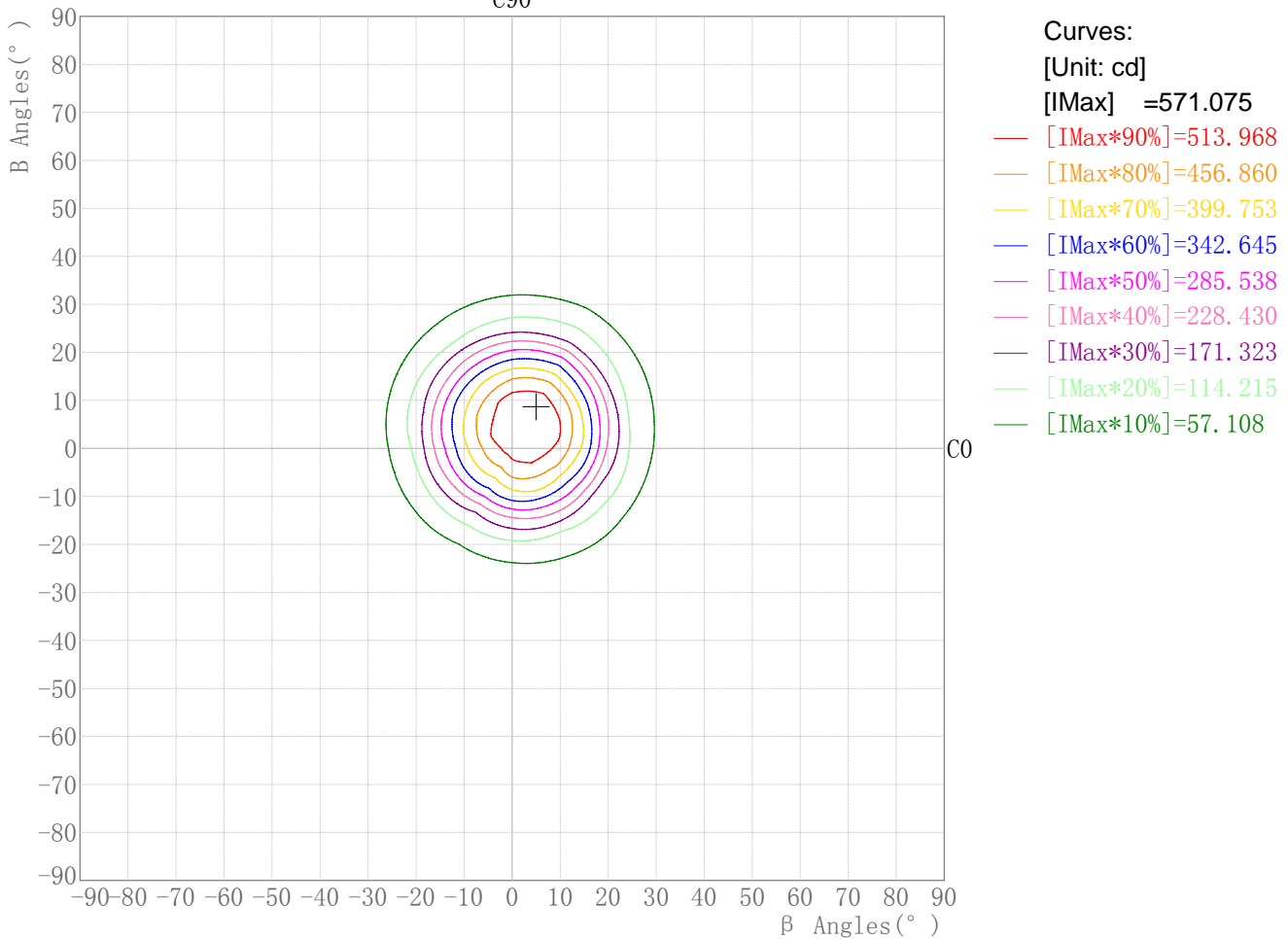
Zonal Flux Tabulation

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	12.67	12.67	4.95	4.95
5.0-10.0	34.46	47.13	13.48	18.43
10.0-15.0	45.72	92.84	17.88	36.32
15.0-20.0	42.00	134.84	16.43	52.74
20.0-25.0	28.90	163.74	11.30	64.05
25.0-30.0	16.59	180.33	6.49	70.53
30.0-35.0	8.61	188.94	3.37	73.90
35.0-40.0	4.48	193.42	1.75	75.66
40.0-45.0	3.30	196.72	1.29	76.95
45.0-50.0	2.90	199.63	1.14	78.08
50.0-55.0	2.72	202.35	1.06	79.15
55.0-60.0	2.65	205.00	1.04	80.18
60.0-65.0	2.62	207.62	1.02	81.21
65.0-70.0	2.62	210.23	1.02	82.23
70.0-75.0	2.66	212.89	1.04	83.27
75.0-80.0	2.71	215.60	1.06	84.33
80.0-85.0	2.75	218.35	1.08	85.41
85.0-90.0	2.77	221.12	1.08	86.49
90.0-95.0	2.77	223.89	1.08	87.57
95.0-100.0	2.75	226.63	1.07	88.65
100.0-105.0	2.71	229.34	1.06	89.70
105.0-110.0	2.65	231.99	1.04	90.74
110.0-115.0	2.57	234.56	1.01	91.75
115.0-120.0	2.48	237.04	0.97	92.72
120.0-125.0	2.39	239.43	0.93	93.65
125.0-130.0	2.30	241.73	0.90	94.55
130.0-135.0	2.20	243.92	0.86	95.41
135.0-140.0	2.10	246.02	0.82	96.23
140.0-145.0	1.99	248.01	0.78	97.01
145.0-150.0	1.85	249.86	0.72	97.73
150.0-155.0	1.66	251.52	0.65	98.38
155.0-160.0	1.43	252.96	0.56	98.94
160.0-165.0	1.16	254.12	0.45	99.40
165.0-170.0	0.85	254.96	0.33	99.73
170.0-175.0	0.52	255.48	0.20	99.93
175.0-180.0	0.17	255.66	0.07	100.00

Rectangle ISO Lighting Intensity Diagram

Lum. Name: LG-7002	Lum. Catalog: Grille light	Test ID:
Lamp Name:	Lamp Catalog:LED	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date:2017/08/09

ISO Lighting Intensity Curve
 C90

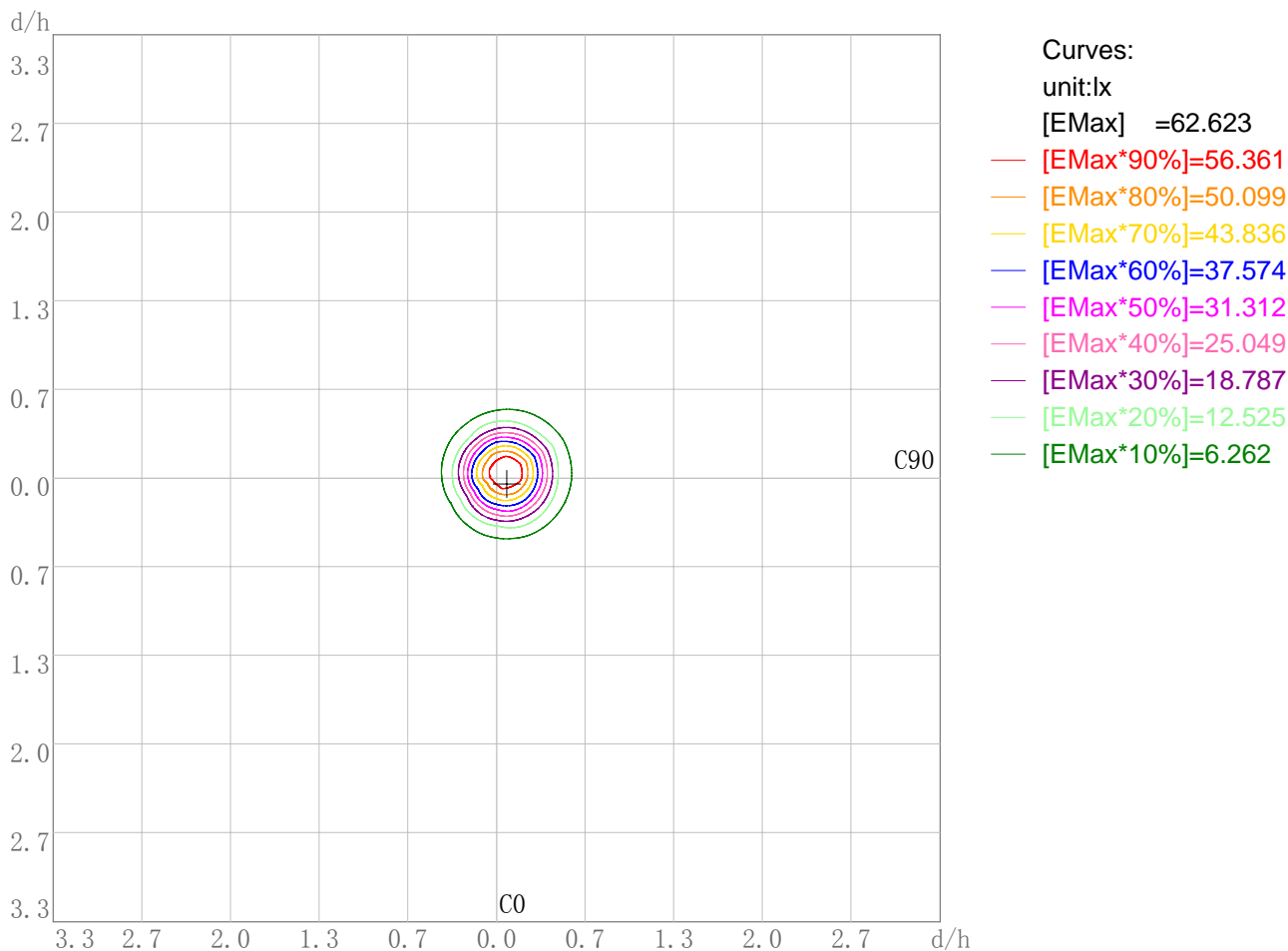


Maximum Light Intensity(cd): 571.08
 Maximum Cand.@Angle: H=5.0°,V=8.7°

Plane ISO-Illuminance Diagram

Lum. Name: LG-7002	Lum. Catalog: Grille light	Test ID:
Lamp Name:	Lamp Catalog:LED	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date:2017/08/09

Plane ISO-Illuminance Curve

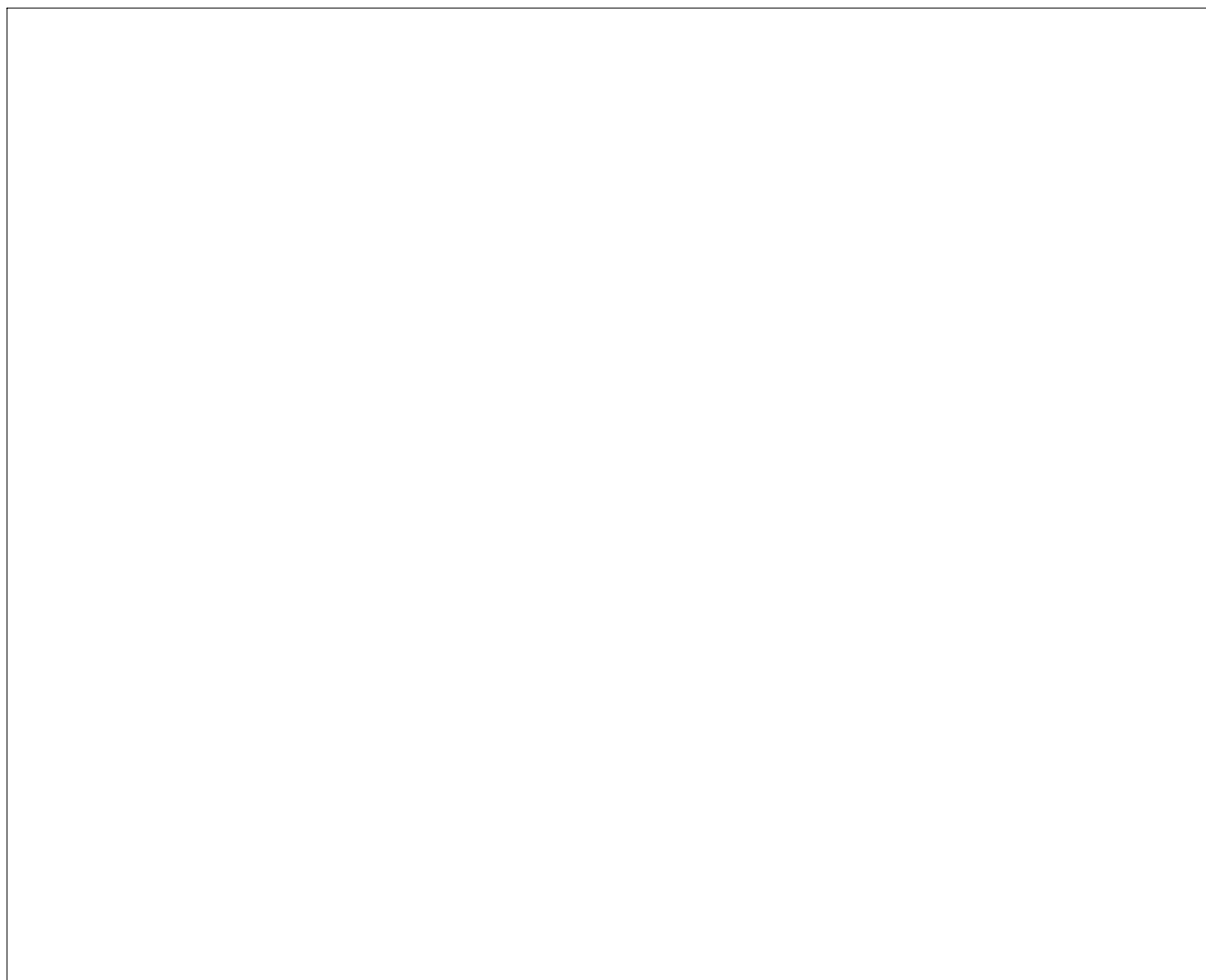


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 62.62
Working Plane Maximum Illuminance Position(d/h):H0.1 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: LG-7002	Lum. Catalog: Grille light	Test ID:
Lamp Name:	Lamp Catalog:LED	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date:2017/08/09

3D Plane Illuminance Modal

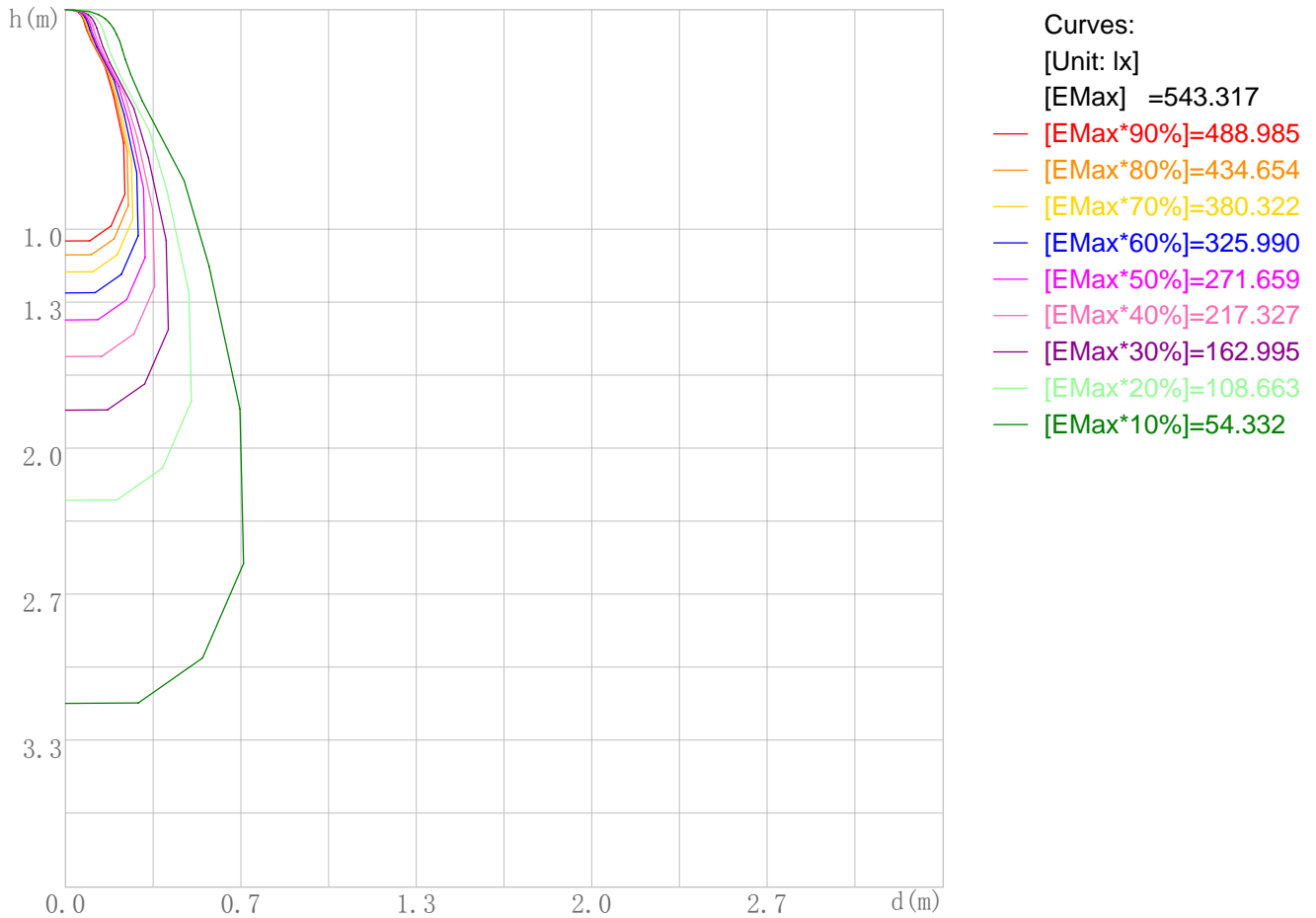


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

Lum. Name: LG-7002	Lum. Catalog: Grille light	Test ID:
Lamp Name:	Lamp Catalog:LED	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date:2017/08/09

Space ISO Illuminance Curve

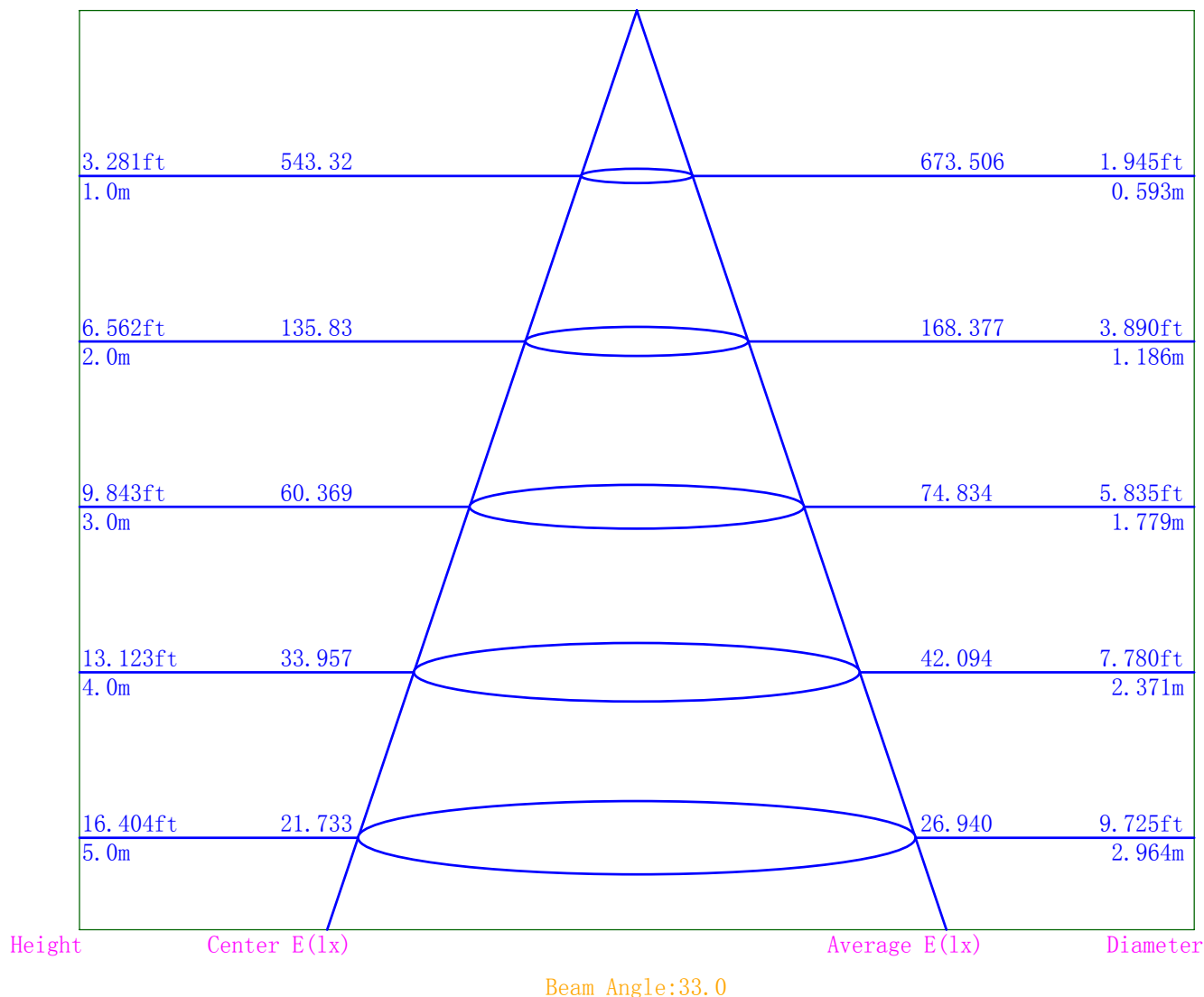


Space Plane Maximum Illuminance and @Angle:543.32lx,0.0deg
 Plane Maximum Lighting Intensity and @Angle:548.863cd,0deg

Illuminance-Distance Diagram

Lum. Name: LG-7002	Lum. Catalog: Grille light	Test ID:
Lamp Name:	Lamp Catalog:LED	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date:2017/08/09

Illuminance-Distance Curve



Indoor Luminance Limiting Curves

Lum. Name: LG-7002	Lum. Catalog: Grille light	Test ID:
Lamp Name:	Lamp Catalog:LED	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date:2017/08/09

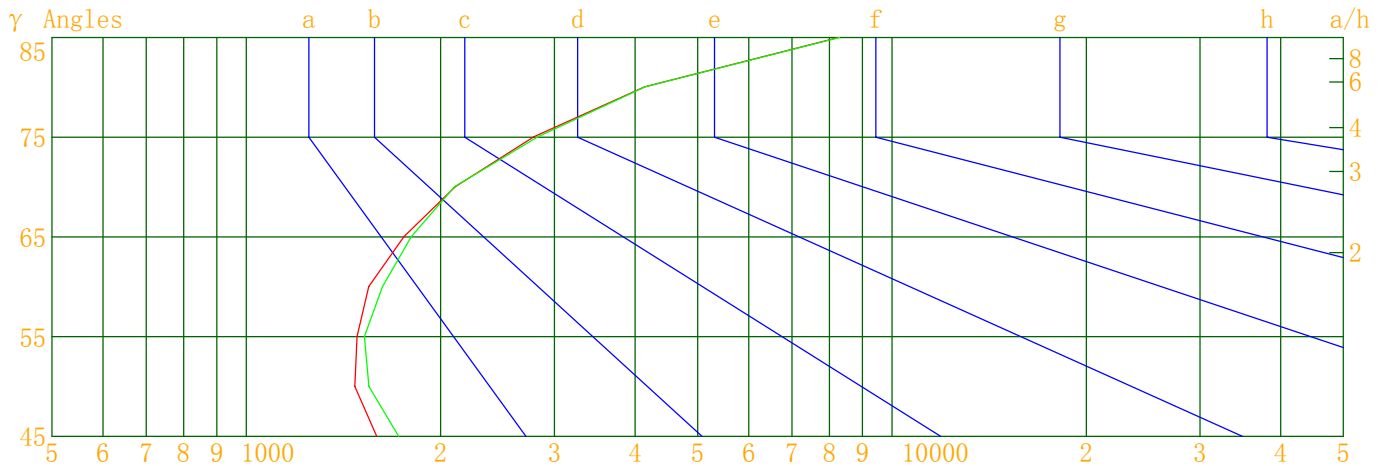
Glare Grade Table

GI	Quality	Using Illuminance							
		a	b	c	d	e	f	g	h
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	1592	1473	1485	1548	1754	2108	2789	4141	8263
C90	1721	1549	1524	1625	1802	2102	2828	4148	8295

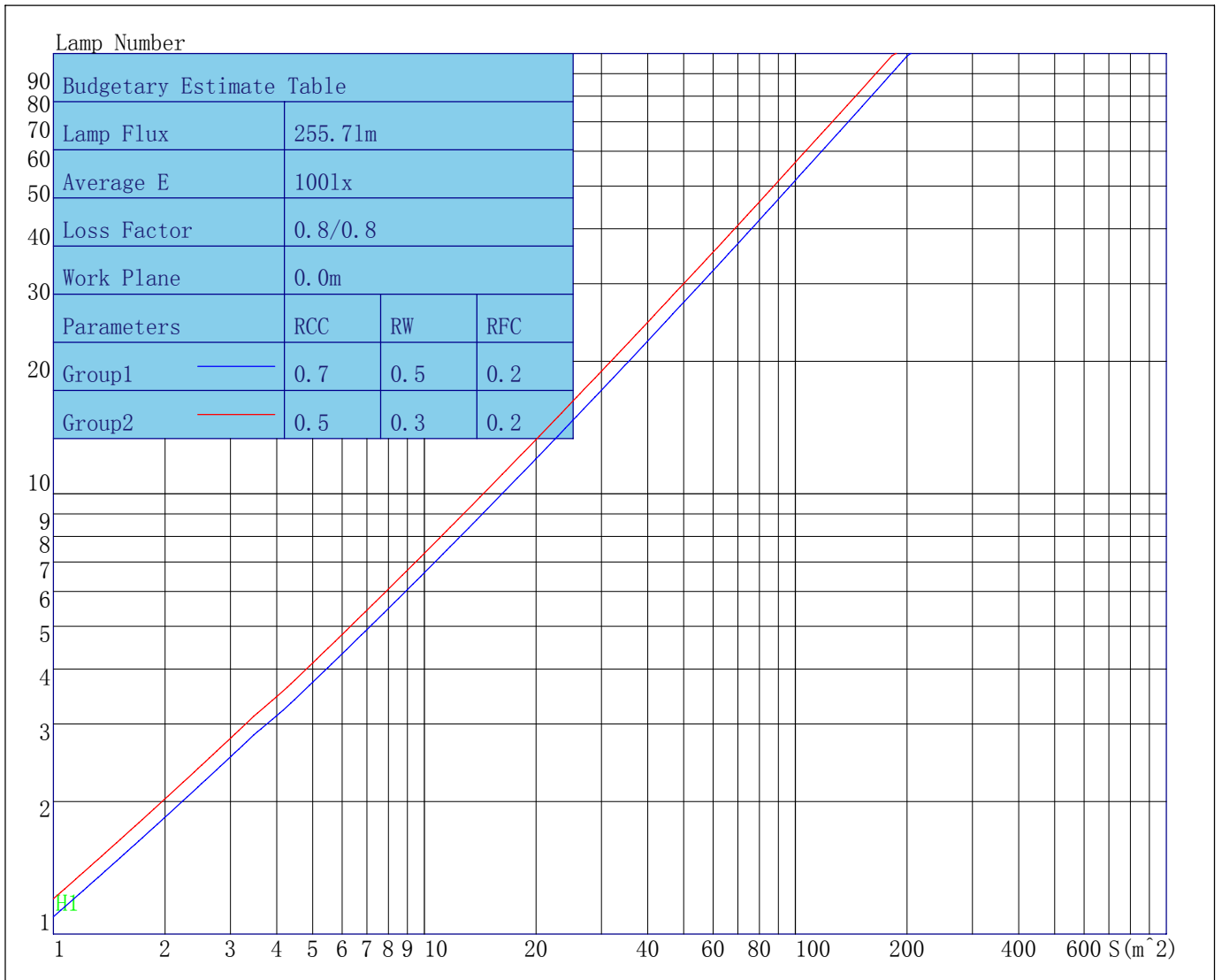
Luminance Limiting Curve



Luminous Size: Length(m)=0.075 Width(m)=0.045 Height(m)=0.049 Area(m²)=0.007050
 Luminous Type: Without Luminous Side
 Luminous Curves: C0-C180 Color: ——— C90-C270 Color: ———

Indoor Budgetary Estimate Table

Lum. Name: LG-7002	Lum. Catalog: Grille light	Test ID:
Lamp Name:	Lamp Catalog:LED	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date:2017/08/09



Parameters1: Rhocc = 0.7 Rhow = 0.5 Rhofc = 0.2 LLF = 0.8
Parameters2: Rhocc = 0.5 Rhow = 0.3 Rhofc = 0.2 LLF = 0.8
Average Illuminance(lx): 100 Cavity Height: H1(m) = 2

Indoor Coefficient of Utilization Table

Lum. Name: LG-7002	Lum. Catalog: Grille light	Test ID:
Lamp Name:	Lamp Catalog:LED	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date:2017/08/09

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	116	116	116	116	112	112	112	112	104	104	104	96	96	96	90	90	90	86
1	109	106	103	100	105	102	100	97	96	94	92	90	88	87	84	83	82	79
2	103	98	94	90	100	95	91	88	90	87	84	85	82	80	80	78	77	74
3	98	92	86	82	95	89	85	81	85	81	78	80	77	75	77	74	72	70
4	94	86	81	76	91	84	79	75	80	76	73	77	73	71	73	71	68	66
5	90	81	76	71	87	80	74	70	76	72	69	73	70	67	70	67	65	63
6	86	77	71	67	83	76	70	67	73	68	65	70	66	64	68	65	62	60
7	82	73	68	64	80	72	67	63	70	65	62	67	64	61	65	62	59	58
8	79	70	64	61	77	69	64	60	67	62	59	65	61	58	63	60	57	56
9	76	67	62	58	74	66	61	57	64	60	57	62	58	56	61	57	55	53
10	73	64	59	55	72	63	58	55	62	57	54	60	56	54	59	55	53	52

IES Indoor Report
Photometric Filename:LG-7002.IES

Unified Glare Rating Table

Lum. Name: LG-7002	Lum. Catalog: Grille light	Test ID:
Lamp Name:	Lamp Catalog:LED	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date:2017/08/09

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	Viewed crosswise					Viewed endwise				
X=2H Y=2H	14.2	14.9	13.9	14.6	15.1	15.0	15.7	14.7	15.5	15.9
Y=3H	16.9	17.5	16.7	17.4	17.9	17.3	18.0	17.1	17.8	18.3
Y=4H	18.7	19.3	18.5	19.2	19.7	18.9	19.5	18.8	19.4	19.9
Y=6H	20.8	21.3	20.7	21.3	21.8	20.9	21.4	20.8	21.4	21.9
Y=8H	22.0	22.5	21.9	22.5	23.0	22.0	22.6	22.0	22.5	23.1
Y=12H	23.3	23.9	23.3	23.9	24.4	23.4	23.9	23.4	23.9	24.5
X=4H Y=2H	14.4	15.0	14.2	14.8	15.4	15.1	15.7	15.0	15.6	16.1
Y=3H	17.2	17.8	17.2	17.8	18.3	17.6	18.1	17.6	18.1	18.7
Y=4H	19.1	19.6	19.2	19.7	20.3	19.3	19.8	19.4	19.9	20.5
Y=6H	21.5	21.9	21.7	22.1	22.8	21.6	22.0	21.7	22.1	22.8
Y=8H	22.9	23.3	23.1	23.5	24.1	22.9	23.3	23.1	23.5	24.2
Y=12H	24.4	24.8	24.7	25.1	25.8	24.4	24.8	24.7	25.1	25.8
X=8H Y=4H	21.1	21.5	21.3	21.7	22.4	21.3	21.7	21.5	21.9	22.6
Y=6H	23.3	23.7	23.7	24.0	24.7	23.4	23.7	23.7	24.1	24.8
Y=8H	24.7	25.0	25.1	25.3	26.1	24.7	25.0	25.1	25.4	26.1
Y=12H	26.3	26.5	26.7	26.9	27.7	26.3	26.6	26.7	27.0	27.7
X=12H Y=4H	21.5	21.9	21.8	22.2	22.9	21.7	22.1	22.0	22.3	23.0
Y=6H	23.9	24.2	24.3	24.6	25.3	24.0	24.3	24.4	24.7	25.4
Y=8H	25.4	25.7	25.8	26.1	26.8	25.4	25.7	25.9	26.1	26.9
Variations with the observer position at spacings										
S=1.0H	0.3/-0.4					0.3/-0.4				
S=1.5H	0.6/-0.8					0.6/-0.8				
S=2.0H	0.5/-0.8					0.5/-0.8				
Reduced UGR Table:										
Nordic Standard Table:	BKO					BKO				
Correction Value	7.3					6.9				

le is calculated according to the document STD.CIE 117-1995

IES Indoor Report
Photometric Filename:LG-7002.IES

Candela Tabulation

V/H	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0	C300.0	C330.0
γ 0.0	543.32	543.32	543.32	543.32	543.32	543.32	543.32	543.32	543.32	543.32	543.32	543.32
γ 5.0	548.86	568.58	570.09	569.14	542.93	515.69	478.92	459.39	446.14	477.97	497.80	518.71
γ 10.0	496.67	544.96	571.08	546.13	488.66	433.78	384.01	357.92	332.53	369.33	402.21	439.02
γ 15.0	384.18	440.93	480.65	444.93	388.42	328.17	260.83	215.14	176.12	209.35	250.64	302.31
γ 20.0	217.00	285.24	336.14	299.75	244.93	186.06	126.61	100.89	84.03	95.46	112.83	144.48
γ 25.0	99.95	130.30	169.73	144.76	114.66	90.29	63.21	45.24	34.32	44.86	58.87	76.86
γ 30.0	50.93	71.21	86.39	76.61	58.68	39.27	22.26	17.09	14.46	16.52	19.75	26.75
γ 35.0	17.12	23.79	33.19	26.12	19.59	15.29	12.04	10.60	9.77	9.97	11.45	12.88
γ 40.0	10.55	12.33	14.03	12.37	11.27	10.12	8.73	8.17	7.54	7.70	8.49	9.34
γ 45.0	7.94	9.10	9.61	8.58	8.52	7.88	6.99	6.91	6.50	6.58	7.06	7.59
γ 50.0	6.67	7.32	7.49	7.02	7.12	6.66	6.10	6.09	5.87	5.91	6.25	6.56
γ 55.0	6.00	6.36	6.45	6.16	6.23	6.03	5.68	5.55	5.51	5.50	5.70	5.98
γ 60.0	5.45	5.82	5.85	5.73	5.79	5.65	5.41	5.26	5.18	5.25	5.41	5.55
γ 65.0	5.23	5.44	5.45	5.37	5.41	5.38	5.14	5.06	5.03	5.05	5.15	5.24
γ 70.0	5.08	5.14	5.18	5.07	5.15	5.14	5.07	4.92	5.01	5.06	5.07	5.12
γ 75.0	5.09	5.02	5.07	5.16	5.06	5.14	5.07	4.99	4.99	5.10	5.11	5.09
γ 80.0	5.07	5.07	5.04	5.08	5.02	5.11	5.09	4.93	4.99	5.07	5.14	5.18
γ 85.0	5.08	5.00	5.01	5.10	5.08	5.14	5.03	4.96	4.99	5.04	5.11	5.08
γ 90.0	5.09	5.03	5.05	5.13	5.08	5.10	5.05	4.99	4.97	5.03	5.07	5.05
γ 95.0	5.09	5.13	4.95	5.11	5.05	5.11	5.10	4.96	4.99	5.00	5.09	5.11
γ 100.0	5.10	5.07	4.98	5.08	5.02	5.04	5.08	4.99	5.02	5.01	5.14	5.07
γ 105.0	5.12	5.06	5.04	5.13	5.08	5.14	5.13	5.00	5.01	5.05	5.02	5.06
γ 110.0	5.11	5.11	5.03	5.09	5.04	5.09	5.14	5.04	5.03	5.03	5.04	5.07
γ 115.0	5.12	5.13	5.08	5.07	5.11	5.13	5.11	5.06	5.03	5.03	5.01	5.11
γ 120.0	5.15	5.10	5.04	5.16	5.10	5.16	5.17	5.13	5.17	5.09	5.08	5.09
γ 125.0	5.20	5.14	5.13	5.20	5.20	5.28	5.33	5.28	5.33	5.18	5.11	5.20
γ 130.0	5.31	5.25	5.17	5.26	5.28	5.45	5.44	5.48	5.51	5.37	5.27	5.34
γ 135.0	5.45	5.32	5.24	5.48	5.48	5.61	5.72	5.72	5.88	5.53	5.52	5.46
γ 140.0	5.65	5.52	5.48	5.68	5.74	5.92	6.01	6.11	6.23	5.87	5.76	5.77
γ 145.0	5.87	5.76	5.64	5.99	6.09	6.22	6.38	6.47	6.55	6.16	5.99	6.01
γ 150.0	6.23	6.02	5.97	6.46	6.45	6.64	6.76	6.83	6.94	6.41	6.31	6.25
γ 155.0	6.41	6.29	6.29	6.73	6.81	6.91	7.07	7.12	7.10	6.72	6.59	6.53
γ 160.0	6.68	6.61	6.58	7.03	7.16	7.20	7.25	7.27	7.25	6.87	6.80	6.82
γ 165.0	6.93	6.86	6.79	7.28	7.27	7.30	7.40	7.32	7.27	7.02	6.99	7.01
γ 170.0	7.13	6.99	6.89	7.39	7.37	7.41	7.34	7.25	7.18	7.07	7.05	7.15
γ 175.0	7.22	7.14	7.02	7.43	7.37	7.38	7.36	7.22	7.20	7.24	7.16	7.26
γ 180.0	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30