

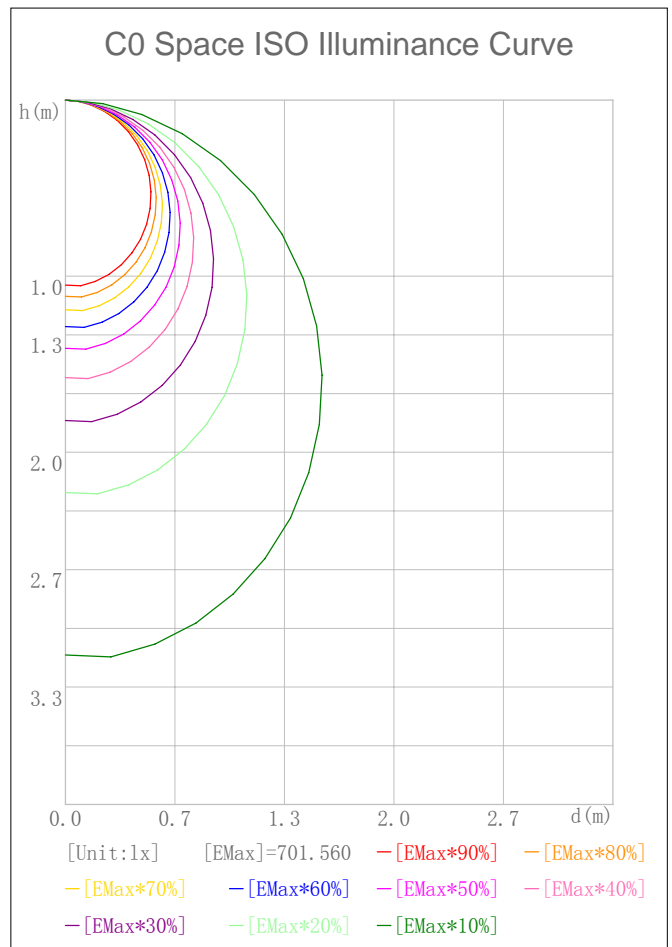
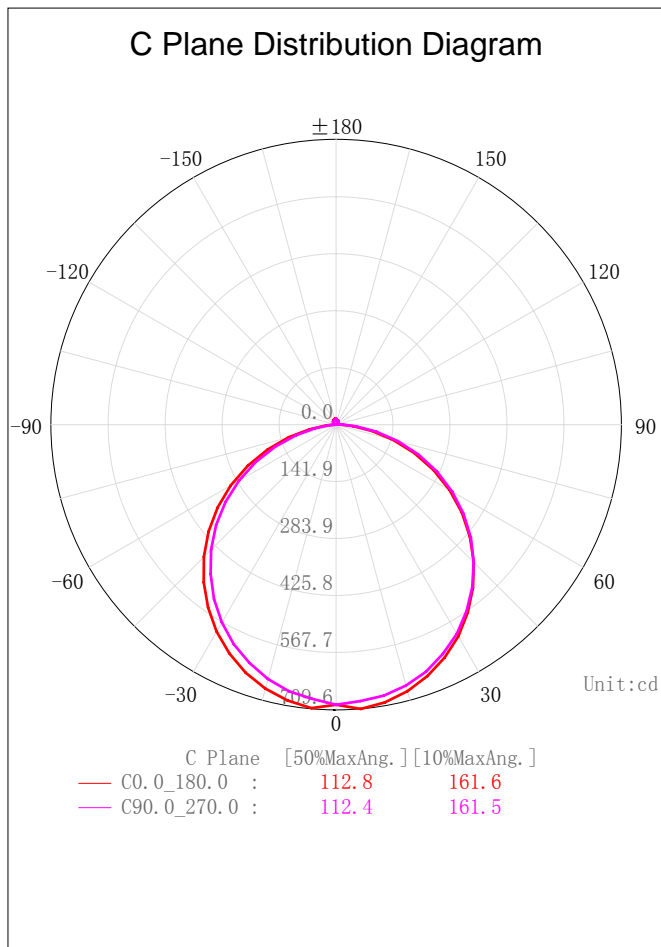
Indoor Luminaire Photometric Data

Description Information

Luminaire Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Date: 2020/08/19
Manufacture:	Shld. Ang(°):	Test Machine:GON-2000
Test Lab:	Frequency (Hz):	Lamp CCT(K): Ra:
Lum. Size (W*L*H): 0.380m*0.380m*0.020m	Lum. Area (m2): 0.152	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=22.5 γ=5.0	Temp. (°C): 25
		Humidity(%): 50.0

Character Parameter

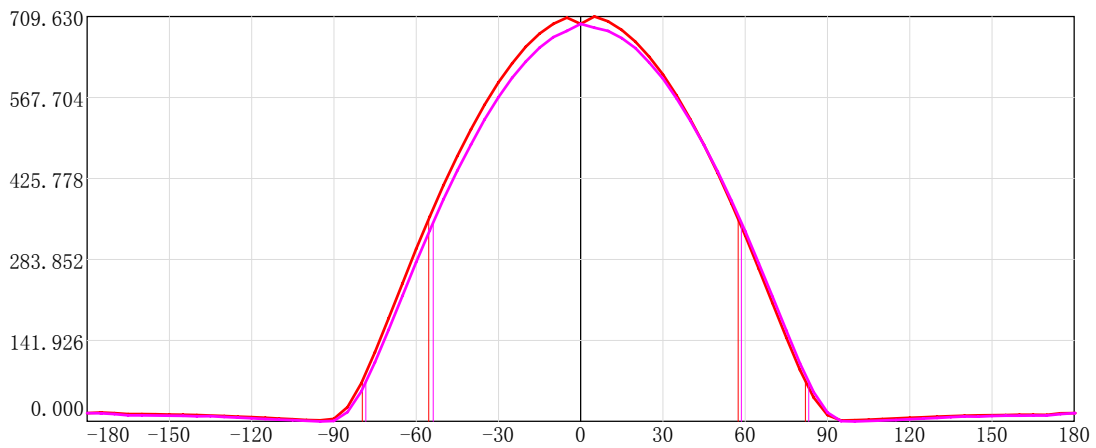
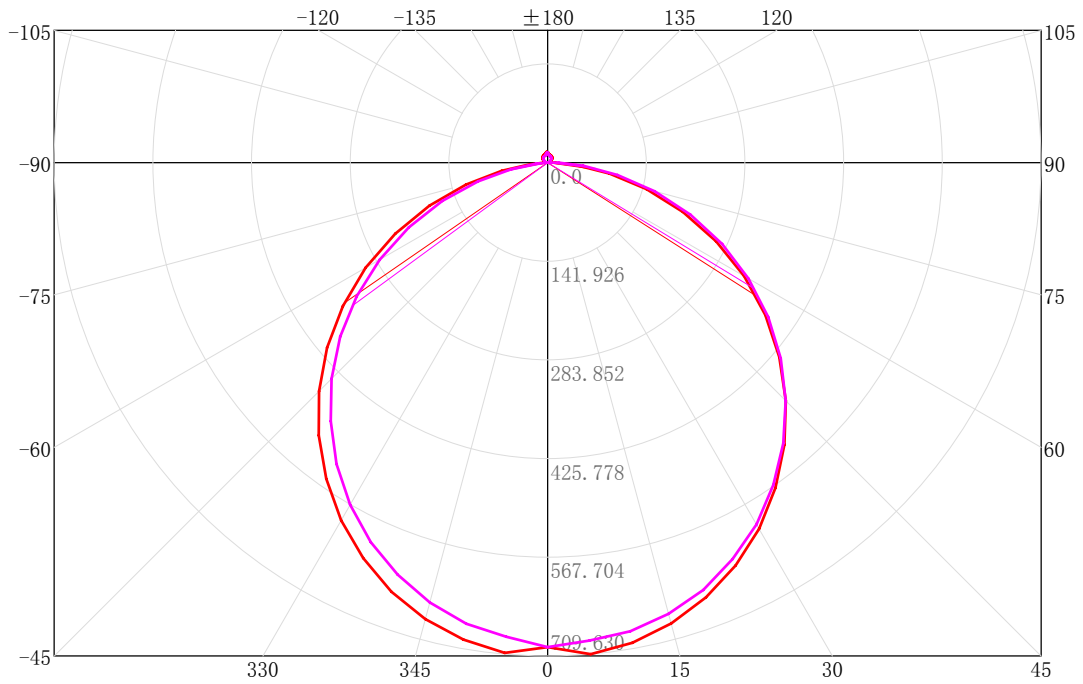
Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 2030.760	Luminaire Flux(lm): 2030.762	Field Angle(10%Imax): 161.6(°)	
Rated Power(W):	Luminaire Efficiency: 100.00%	Down Lumens&Percent: 1994.429lm 98.21%	
Rated Voltage(V):	Luminaire EER(lm/W): 74.881	Up Lumens&Percent: 36.333lm 1.79%	
Tested Power(W): 27.120	Max. Candela(cd): 709.630	S/MH: C0_a180=1.279 C90_270=1.249	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=5.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf): 230.0, 0.124, 0.948	Beam Angle(50%Imax): 112.8(°)	ErP φ use(120°): 1566.761lm	
Lamp Size (W*L*H): 0.380m*0.380m*0.020m	Left=-55.4°, Right=57.4°	IRF(%): 111.541	



2D Plane Light Intensity Distribution Curve

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/08/19

C Plane Distribution Diagram

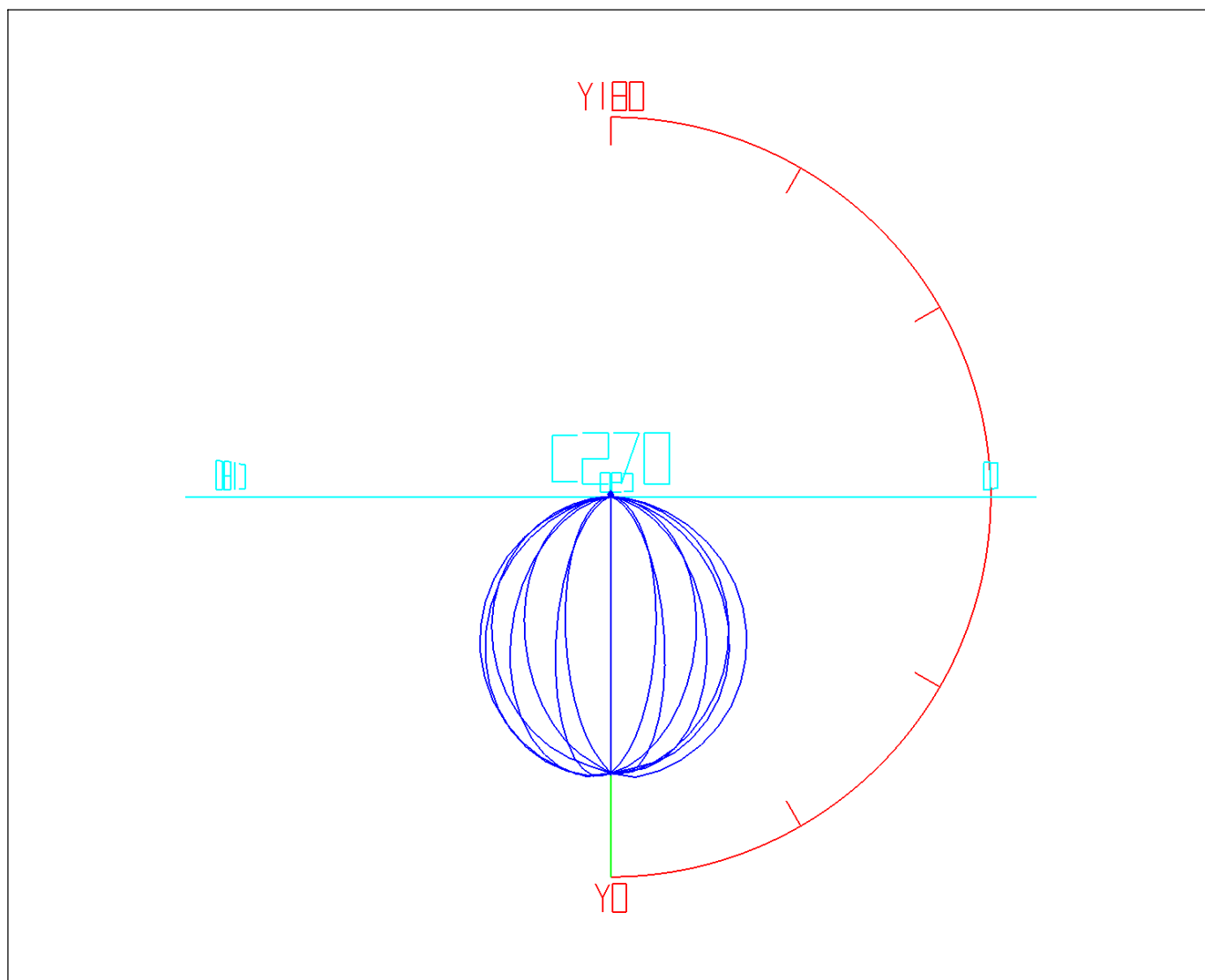


C Plane [50%MaxAng.] [10%MaxAng.] Unit:cd
 — C0.0_180.0 : 112.8 161.6
 — C90.0_270.0 : 112.4 161.5

3D Light Intensity Distribution Modal

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/08/19

3D Light Intensity Distribution Modal



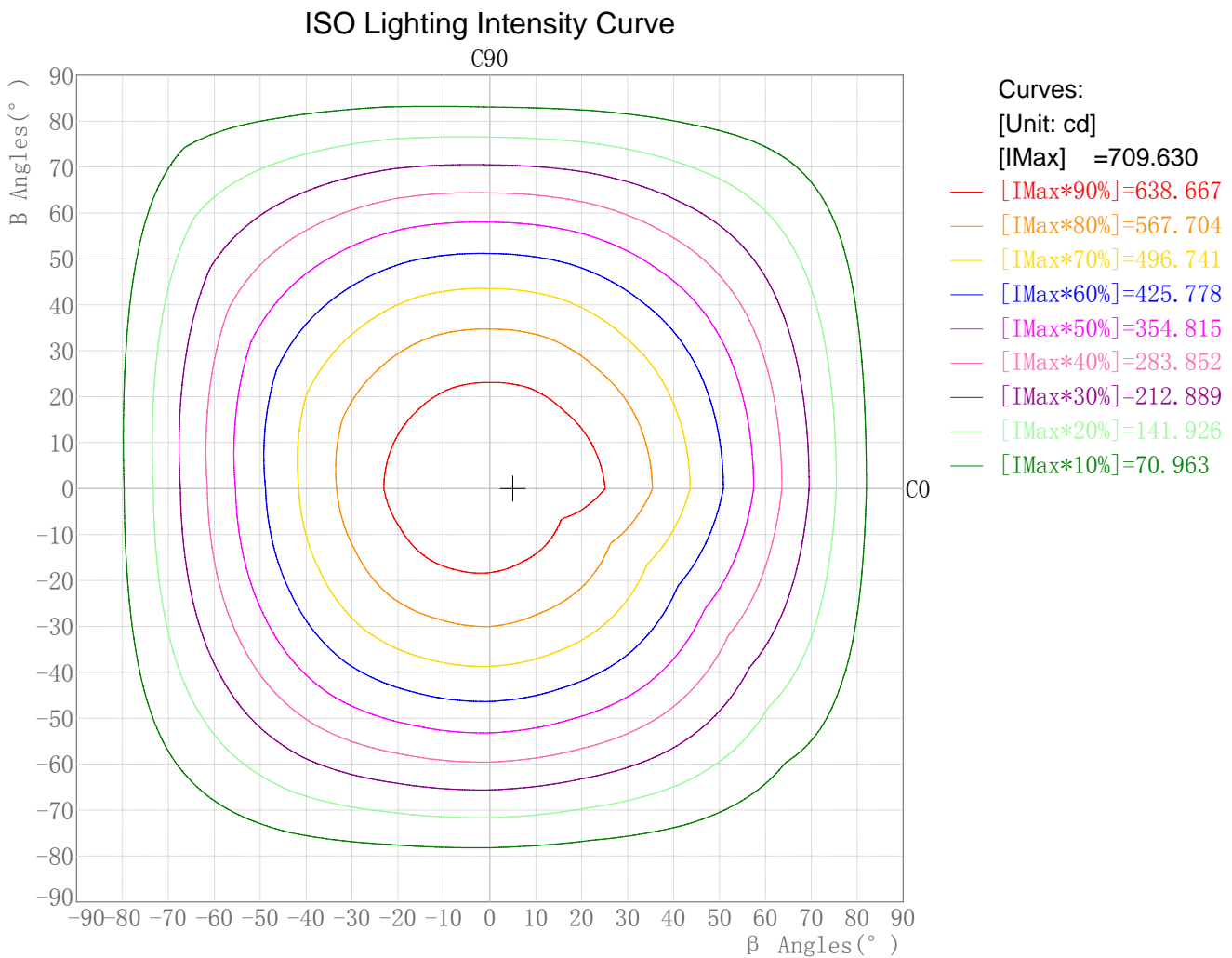
Curves: 3D Model ——— Fixture ——— Vert. HUD ——— Hori. HUD ———
View Angles: Orient:0 Tilt:0 Roll:0 Spin:0

Zonal Flux Tabulation

Zone (γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	16.60	16.60	0.82	0.82
5.0-10.0	49.15	65.75	2.42	3.24
10.0-15.0	80.04	145.79	3.94	7.18
15.0-20.0	108.19	253.98	5.33	12.51
20.0-25.0	132.63	386.61	6.53	19.04
25.0-30.0	152.63	539.24	7.52	26.55
30.0-35.0	167.53	706.77	8.25	34.80
35.0-40.0	176.80	883.57	8.71	43.51
40.0-45.0	180.21	1063.78	8.87	52.38
45.0-50.0	177.68	1241.46	8.75	61.13
50.0-55.0	169.15	1410.61	8.33	69.46
55.0-60.0	154.85	1565.46	7.63	77.09
60.0-65.0	135.29	1700.75	6.66	83.75
65.0-70.0	111.30	1812.05	5.48	89.23
70.0-75.0	84.19	1896.23	4.15	93.38
75.0-80.0	56.05	1952.28	2.76	96.14
80.0-85.0	30.38	1982.66	1.50	97.63
85.0-90.0	11.77	1994.43	0.58	98.21
90.0-95.0	2.76	1997.19	0.14	98.35
95.0-100.0	0.65	1997.84	0.03	98.38
100.0-105.0	0.85	1998.69	0.04	98.42
105.0-110.0	1.32	2000.01	0.07	98.49
110.0-115.0	1.78	2001.79	0.09	98.57
115.0-120.0	2.19	2003.98	0.11	98.68
120.0-125.0	2.53	2006.51	0.12	98.81
125.0-130.0	2.79	2009.30	0.14	98.94
130.0-135.0	2.97	2012.26	0.15	99.09
135.0-140.0	3.08	2015.35	0.15	99.24
140.0-145.0	3.08	2018.42	0.15	99.39
145.0-150.0	2.93	2021.36	0.14	99.54
150.0-155.0	2.65	2024.01	0.13	99.67
155.0-160.0	2.26	2026.27	0.11	99.78
160.0-165.0	1.82	2028.09	0.09	99.87
165.0-170.0	1.39	2029.47	0.07	99.94
170.0-175.0	0.94	2030.42	0.05	99.98
175.0-180.0	0.34	2030.76	0.02	100.00

Rectangle ISO Lighting Intensity Diagram

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/08/19

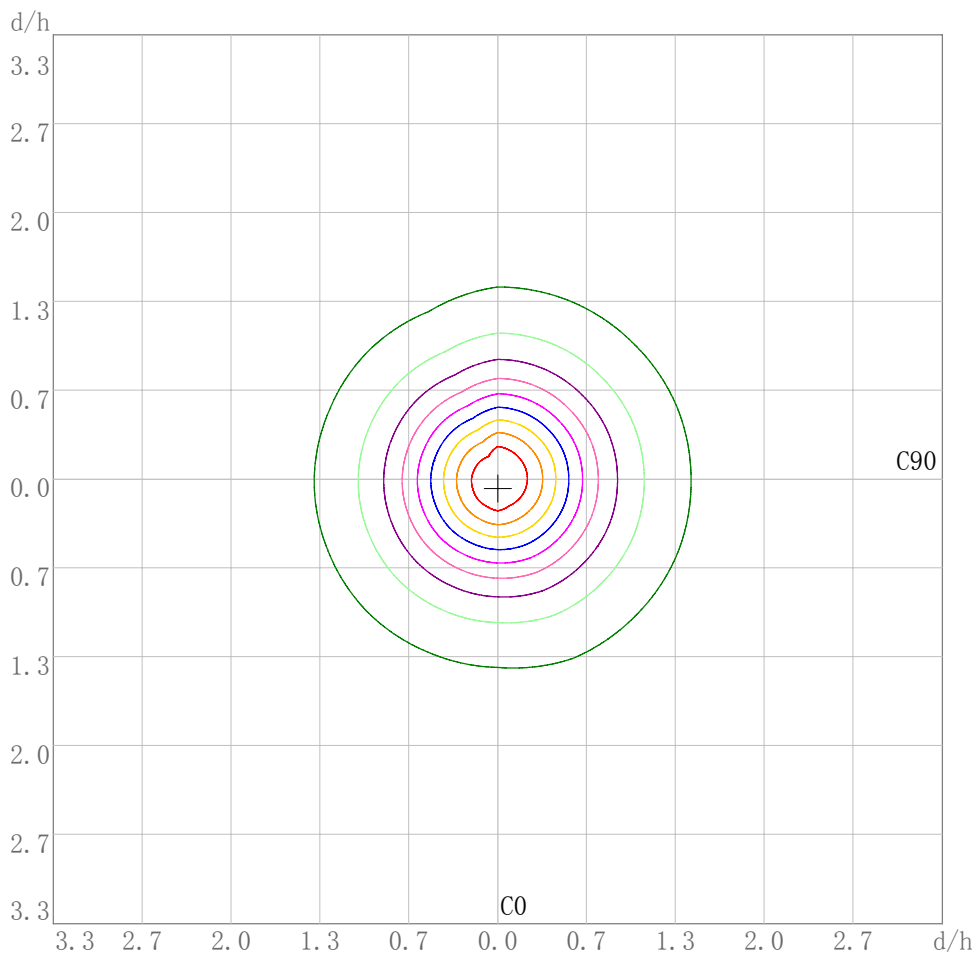


Maximum Light Intensity(cd): 709.63
Maximum Cand.@Angle: H=5.0°,V=0.0°

Plane ISO-Illuminance Diagram

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/08/19

Plane ISO-Illuminance Curve

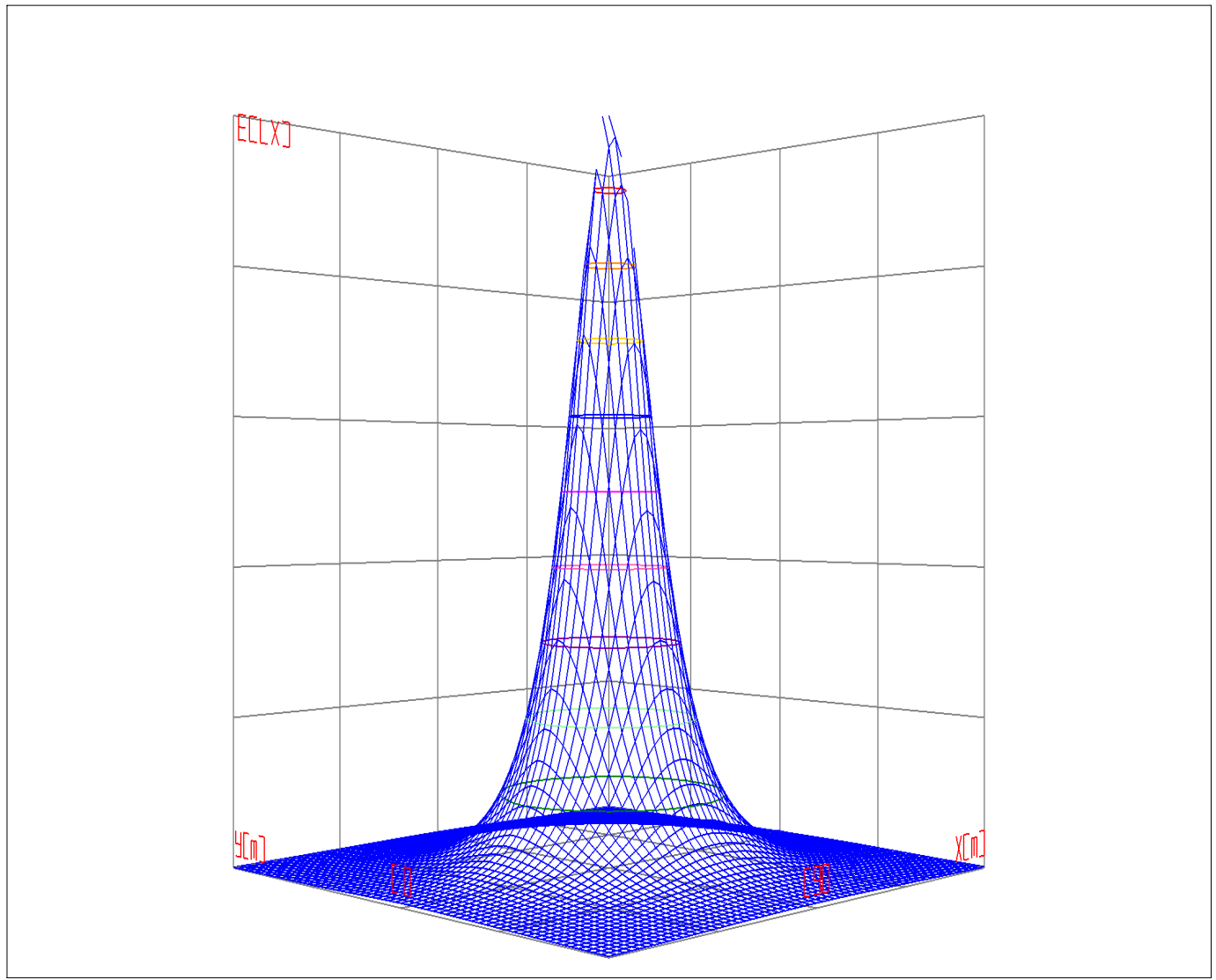


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 77.99
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.1

3D Plane ISO Illuminance Diagram

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/08/19

3D Plane Illuminance Modal

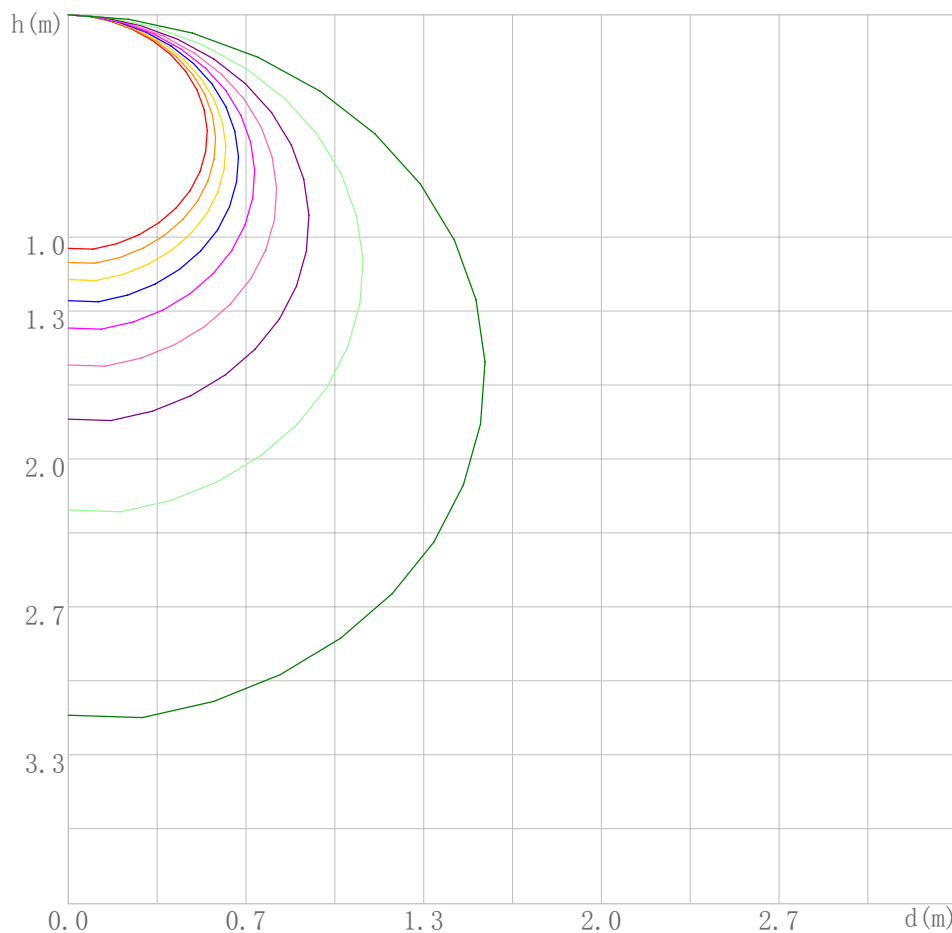


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/08/19

Space ISO Illuminance Curve



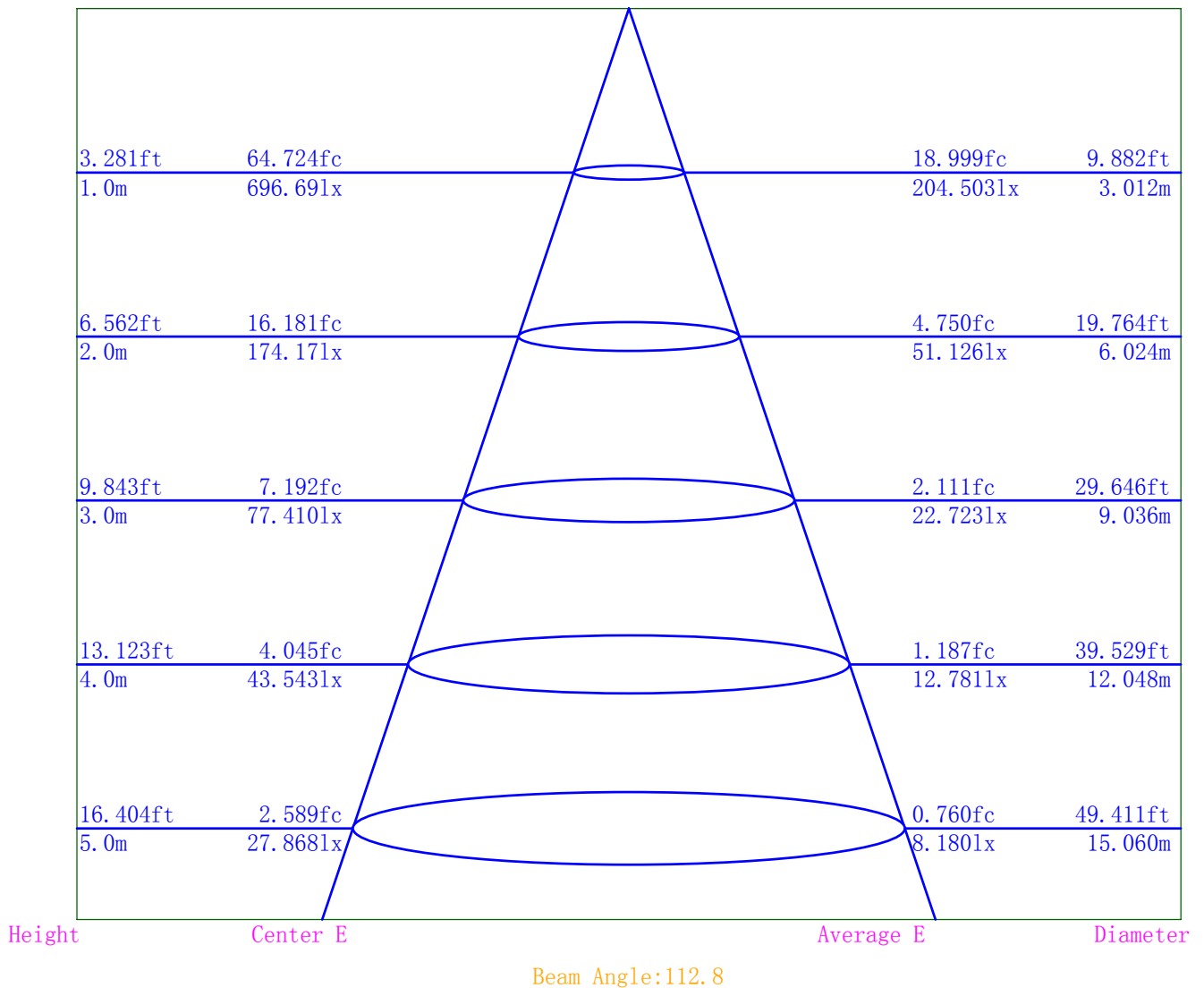
- Curves:
 [Unit: lx]
 [EMax] =701.560
- [EMax*90%]=631.404
 - [EMax*80%]=561.248
 - [EMax*70%]=491.092
 - [EMax*60%]=420.936
 - [EMax*50%]=350.780
 - [EMax*40%]=280.624
 - [EMax*30%]=210.468
 - [EMax*20%]=140.312
 - [EMax*10%]=70.156

Space Plane Maximum Illuminance and @Angle:701.56lx,5.0deg
 Plane Maximum Lighting Intensity and @Angle:709.630cd,0deg

Illuminance-Distance Diagram

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/08/19

Illuminance-Distance Curve



Indoor Luminance Limiting Curves

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine: GON-2000	Test Date: 2020/08/19

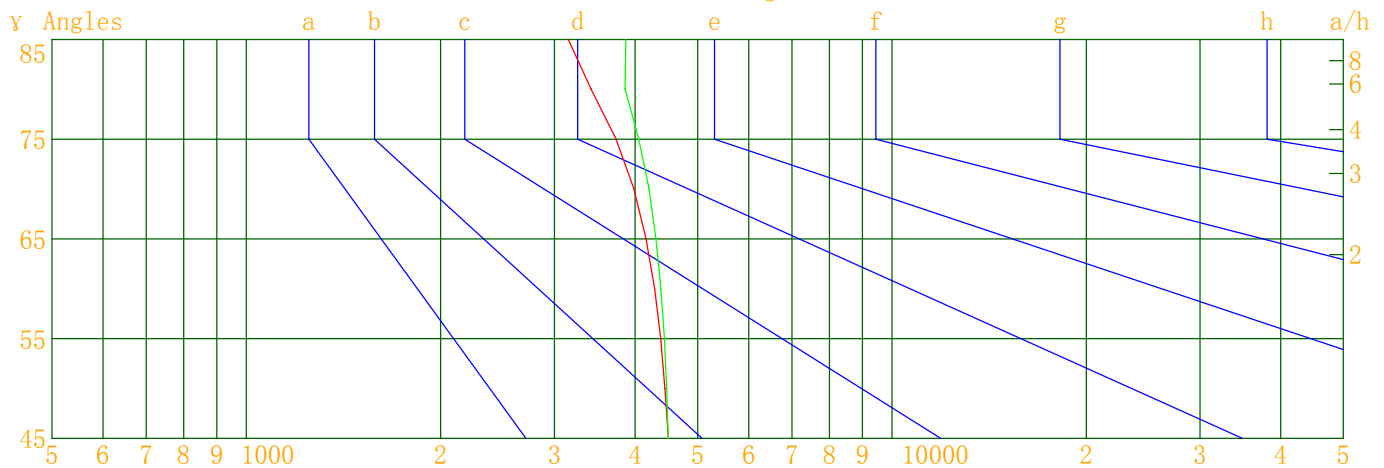
Glare Grade Table

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	4506	4450	4383	4290	4159	3982	3736	3418	3153
C90	4504	4478	4440	4387	4308	4203	4050	3860	3871

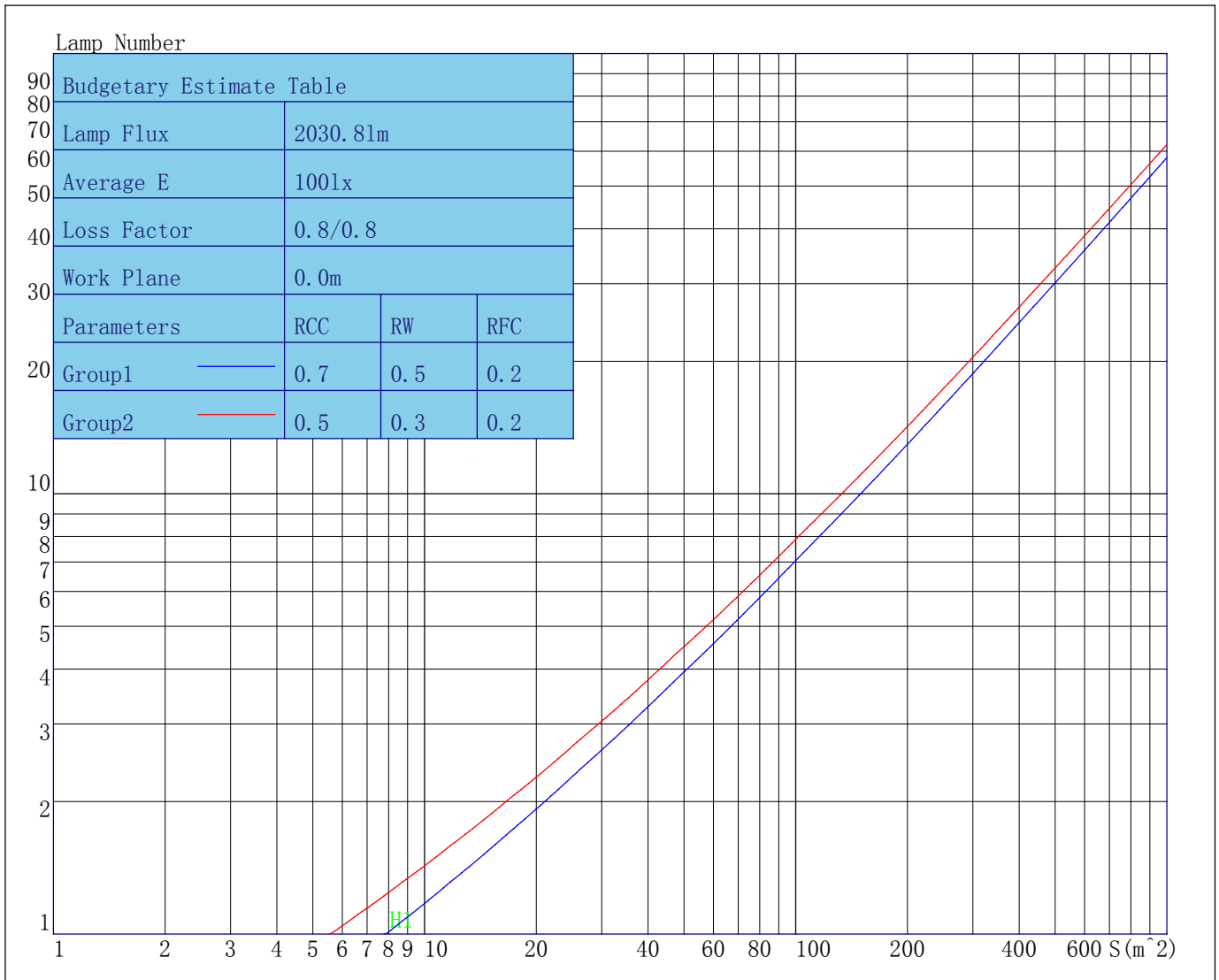
Luminance Limiting Curve



Luminous Size: Length(m)=0.380 Width(m)=0.380 Height(m)=0.020 Area(m²)=0.152000
 Luminous Type: Without Luminous Side
 Luminous Curves: C0-C180 Color: — C90-C270 Color: —

Indoor Budgetary Estimate Table

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/08/19



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:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/08/19

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	108	103	99	95	105	101	97	93	96	93	90	92	89	87	88	86	84	82
2	98	90	83	77	95	88	82	76	84	79	74	81	76	72	77	74	70	68
3	90	79	71	64	87	77	70	63	74	67	62	71	65	61	68	63	59	57
4	82	70	61	54	79	68	60	54	66	58	53	63	57	52	61	55	51	49
5	75	62	53	47	73	61	53	46	59	51	46	57	50	45	55	49	44	42
6	69	56	47	41	67	55	47	40	53	45	40	51	44	39	49	43	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	45	39	34	32
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	41	35	31	29
9	56	42	34	29	54	42	34	29	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	36	30	25	35	30	25	24

Unified Glare Rating Table

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2020/08/19

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	17.3	18.9	17.6	19.2	19.6	17.8	19.4	18.1	19.7	20.1
Y=3H	18.9	20.4	19.3	20.7	21.1	19.5	21.0	19.9	21.3	21.7
Y=4H	19.6	21.0	20.0	21.4	21.8	20.3	21.6	20.7	22.0	22.4
Y=6H	20.1	21.4	20.6	21.8	22.2	20.9	22.1	21.3	22.5	23.0
Y=8H	20.3	21.5	20.8	21.9	22.4	21.1	22.3	21.6	22.7	23.2
Y=12H	20.5	21.6	20.9	22.0	22.5	21.3	22.4	21.7	22.9	23.3
X=4H Y=2H	18.0	19.3	18.4	19.7	20.1	18.5	19.9	19.0	20.3	20.7
Y=3H	19.8	20.9	20.2	21.4	21.8	20.5	21.7	21.0	22.1	22.5
Y=4H	20.5	21.6	21.0	22.0	22.5	21.4	22.4	21.9	22.9	23.4
Y=6H	21.2	22.1	21.7	22.6	23.0	22.1	23.0	22.6	23.5	24.0
Y=8H	21.4	22.2	21.9	22.7	23.2	22.4	23.3	22.9	23.7	24.2
Y=12H	21.6	22.3	22.1	22.9	23.4	22.7	23.4	23.2	23.9	24.4
X=8H Y=4H	20.8	21.7	21.3	22.2	22.7	21.8	22.6	22.3	23.1	23.6
Y=6H	21.6	22.3	22.1	22.8	23.4	22.6	23.3	23.2	23.9	24.5
Y=8H	21.9	22.5	22.4	23.0	23.5	23.0	23.7	23.6	24.2	24.7
Y=12H	22.1	22.7	22.6	23.2	23.8	23.4	23.9	23.9	24.4	25.0
X=12H Y=4H	20.9	21.6	21.4	22.1	22.6	21.8	22.6	22.3	23.1	23.6
Y=6H	21.6	22.2	22.2	22.7	23.3	22.7	23.4	23.3	23.9	24.4
Y=8H	22.0	22.5	22.5	23.0	23.6	23.2	23.7	23.7	24.2	24.8
Variations with the objerver position at spacings										
S=1.0H	0.5/-0.5					0.4/-0.5				
S=1.5H	0.8/-1.0					0.7/-0.8				
S=2.0H	1.1/-1.3					0.8/-1.0				
Reduced UGR Table:										
Nordic Standard Table:	BKO					BKO				
Correction Value	2.8					3.2				

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

IES Indoor Report
Photometric Filename:1.IES

Candela Tabulation

V/H	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5	C180.0	C202.5	C225.0	C247.5
Y 0.0	696.69	696.69	696.69	696.69	696.69	696.69	696.69	696.69	696.69	696.69	696.69	696.69
Y 5.0	709.63	702.23	695.84	693.16	690.00	689.64	687.51	687.79	707.75	697.71	692.29	687.61
Y 10.0	701.22	693.79	688.34	685.86	684.40	682.99	681.87	681.53	696.60	686.19	681.48	675.33
Y 15.0	686.16	679.39	674.51	674.03	671.87	672.11	670.58	670.69	679.62	668.90	664.41	657.89
Y 20.0	665.36	659.36	655.04	655.22	653.97	654.68	652.22	653.14	656.64	645.96	640.59	634.44
Y 25.0	639.22	634.09	629.45	631.07	628.99	630.61	629.91	629.59	627.54	617.23	613.08	604.77
Y 30.0	608.11	603.68	598.94	601.11	600.70	602.92	601.35	602.17	593.94	583.14	579.12	570.37
Y 35.0	571.01	568.37	563.63	566.98	565.74	568.77	567.48	568.66	554.96	545.08	541.18	532.87
Y 40.0	529.46	527.18	523.71	527.98	527.00	530.94	528.82	530.36	511.99	501.95	498.41	489.65
Y 45.0	484.28	482.36	479.42	484.53	484.05	488.92	486.85	488.93	464.77	455.19	451.98	442.72
Y 50.0	434.74	434.16	431.36	437.15	437.48	442.71	441.10	442.64	414.05	404.42	401.86	392.12
Y 55.0	382.13	381.99	379.73	386.51	387.12	392.97	390.84	392.57	359.37	350.37	347.93	338.24
Y 60.0	326.02	326.86	325.30	332.31	333.42	339.16	336.83	339.02	302.17	293.46	291.38	281.75
Y 65.0	267.18	268.99	268.26	275.29	276.75	283.41	281.63	283.41	241.89	234.24	232.67	223.20
Y 70.0	207.04	209.46	208.90	216.66	218.52	224.99	223.47	224.87	181.13	173.99	173.11	163.60
Y 75.0	146.98	149.96	149.99	157.25	159.35	165.90	163.98	166.43	121.46	115.64	114.64	105.94
Y 80.0	90.21	93.21	93.32	100.04	101.88	108.16	106.94	109.37	66.97	62.65	61.57	54.43
Y 85.0	41.77	44.09	44.27	49.35	51.29	56.62	55.71	58.45	25.11	22.61	21.77	17.29
Y 90.0	11.31	12.64	11.96	14.45	15.79	18.70	18.60	20.59	4.54	3.74	3.23	1.13
Y 95.0	1.80	2.09	1.36	1.13	0.60	1.27	2.08	3.06	1.86	1.86	1.06	0.29
Y 100.0	2.19	1.91	0.91	0.21	0.00	0.00	0.00	0.73	2.51	2.32	1.57	1.21
Y 105.0	3.18	2.64	1.77	1.01	0.72	0.53	0.27	1.35	3.82	3.35	2.46	2.43
Y 110.0	4.18	3.64	2.53	1.66	1.58	1.40	1.65	2.76	5.15	4.34	3.61	3.27
Y 115.0	5.30	4.66	3.75	2.91	2.52	2.16	2.67	3.42	6.43	5.40	4.76	3.93
Y 120.0	6.38	5.48	4.60	3.28	3.80	3.08	3.61	4.67	7.50	6.49	5.54	5.02
Y 125.0	7.30	6.33	5.07	4.80	5.18	4.35	4.48	5.49	8.45	7.47	6.31	6.28
Y 130.0	8.34	7.22	5.74	5.69	6.29	5.33	5.02	6.47	9.48	8.28	6.96	7.01
Y 135.0	9.32	7.85	6.70	6.46	7.52	6.26	5.93	7.37	10.49	9.29	7.85	8.15
Y 140.0	10.09	9.03	7.76	7.87	8.75	7.33	7.16	8.31	11.12	10.09	9.09	9.10
Y 145.0	10.72	9.70	9.05	8.71	8.51	8.29	8.22	9.32	11.75	10.72	10.33	9.79
Y 150.0	11.06	10.58	10.07	9.77	9.66	9.29	9.26	10.02	12.07	10.95	10.61	9.92
Y 155.0	11.32	10.78	10.65	10.14	10.02	9.82	9.98	10.40	12.48	11.02	10.82	10.31
Y 160.0	11.66	11.01	10.74	10.45	10.19	10.28	9.98	10.47	12.92	11.69	11.01	10.59
Y 165.0	11.81	11.63	10.89	10.49	10.43	10.40	10.35	10.59	12.79	11.91	10.90	10.82
Y 170.0	11.56	11.76	10.78	10.49	10.43	10.63	10.49	11.06	14.66	13.59	13.53	13.06
Y 175.0	14.25	14.57	13.85	13.19	12.88	13.01	13.22	12.96	15.82	14.64	14.58	14.50
Y 180.0	14.72	14.72	14.72	14.72	14.72	14.72	14.72	14.72	14.72	14.72	14.72	14.72
V/H	C270.0	C292.5	C315.0	C337.5								
Y 0.0	696.69	696.69	696.69	696.69								
Y 5.0	684.43	681.23	680.63	679.73								
Y 10.0	673.35	669.09	668.12	665.60								
Y 15.0	654.91	650.70	649.57	648.41								
Y 20.0	630.41	626.08	625.20	622.54								
Y 25.0	602.09	596.64	595.31	593.09								
Y 30.0	567.96	561.10	561.17	558.67								
Y 35.0	529.23	523.02	521.60	519.27								
Y 40.0	485.22	479.85	478.91	475.38								

IES Indoor Report

Photometric Filename:1.IES

Candela Tabulation - (Cont.)

V/H	C270.0	C292.5	C315.0	C337.5
Y 45.0	439.30	432.24	432.04	428.28
Y 50.0	389.38	381.16	381.25	377.53
Y 55.0	335.27	327.24	328.08	323.46
Y 60.0	278.82	270.79	270.94	266.53
Y 65.0	220.09	211.92	212.25	208.35
Y 70.0	161.14	153.12	153.83	149.87
Y 75.0	103.65	96.58	97.67	94.14
Y 80.0	52.60	47.00	48.24	45.47
Y 85.0	16.58	13.82	14.36	13.44
Y 90.0	0.77	0.77	1.42	1.58
Y 95.0	0.05	0.00	0.00	1.35
Y 100.0	1.00	0.78	1.09	2.08
Y 105.0	2.15	1.63	2.20	3.03
Y 110.0	3.11	2.20	3.27	3.96
Y 115.0	4.28	3.15	3.94	4.75
Y 120.0	5.62	4.45	4.59	5.68
Y 125.0	6.79	5.63	5.13	6.60
Y 130.0	7.85	6.52	5.74	7.53
Y 135.0	9.19	7.64	7.22	8.16
Y 140.0	8.92	8.57	8.51	9.28
Y 145.0	9.87	9.67	9.62	9.96
Y 150.0	10.19	10.25	10.14	10.62
Y 155.0	10.51	10.44	10.61	11.06
Y 160.0	10.63	10.46	11.32	11.63
Y 165.0	10.56	10.78	11.35	11.98
Y 170.0	13.01	13.33	13.89	14.27
Y 175.0	14.31	14.42	14.49	14.71
Y 180.0	14.72	14.72	14.72	14.72