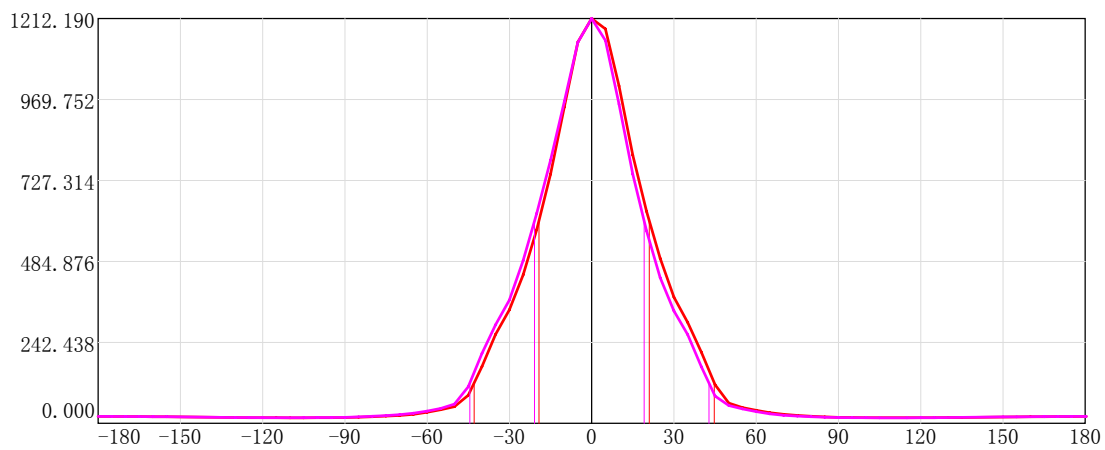
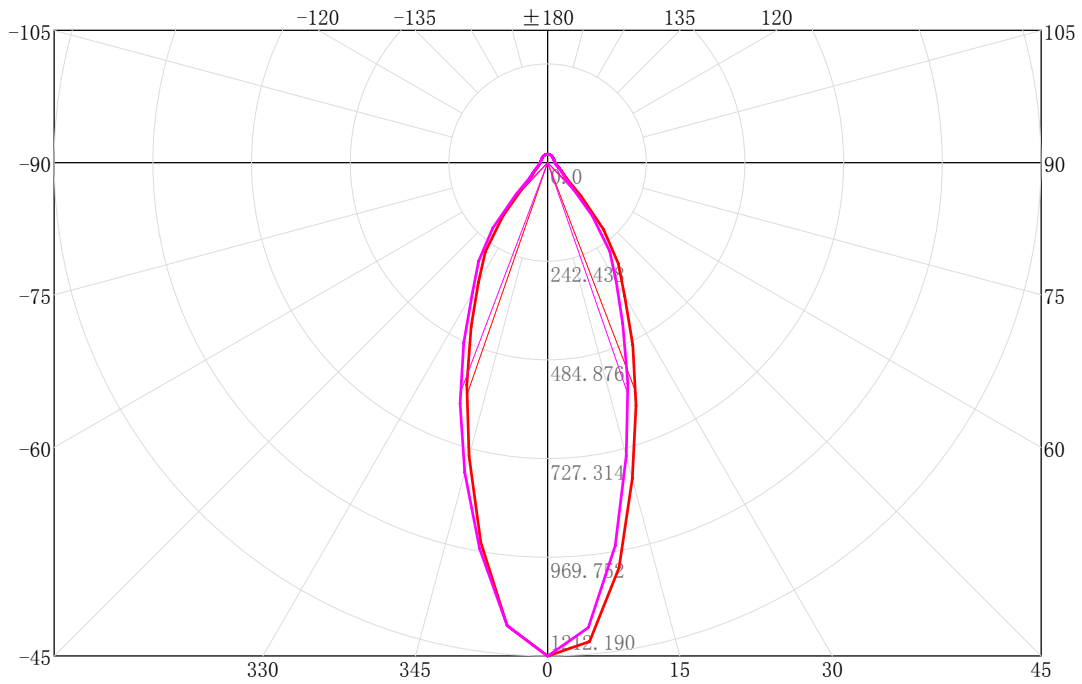


2D Plane Light Intensity Distribution Curve

Lum. Name: DC9W-3500K, Ra90, Reflector 40°	Lum. Catalog: 1000LM	Test ID: 01
Lamp Name: CL2-9MR	Lamp Catalog: lamps and lanterns	Test Lab:
LED Chip: Citizen CLU028-1202C4-35XH5M3	Test Machine:GON-2000	Test Date: 2017/06/13

C Plane Distribution Diagram



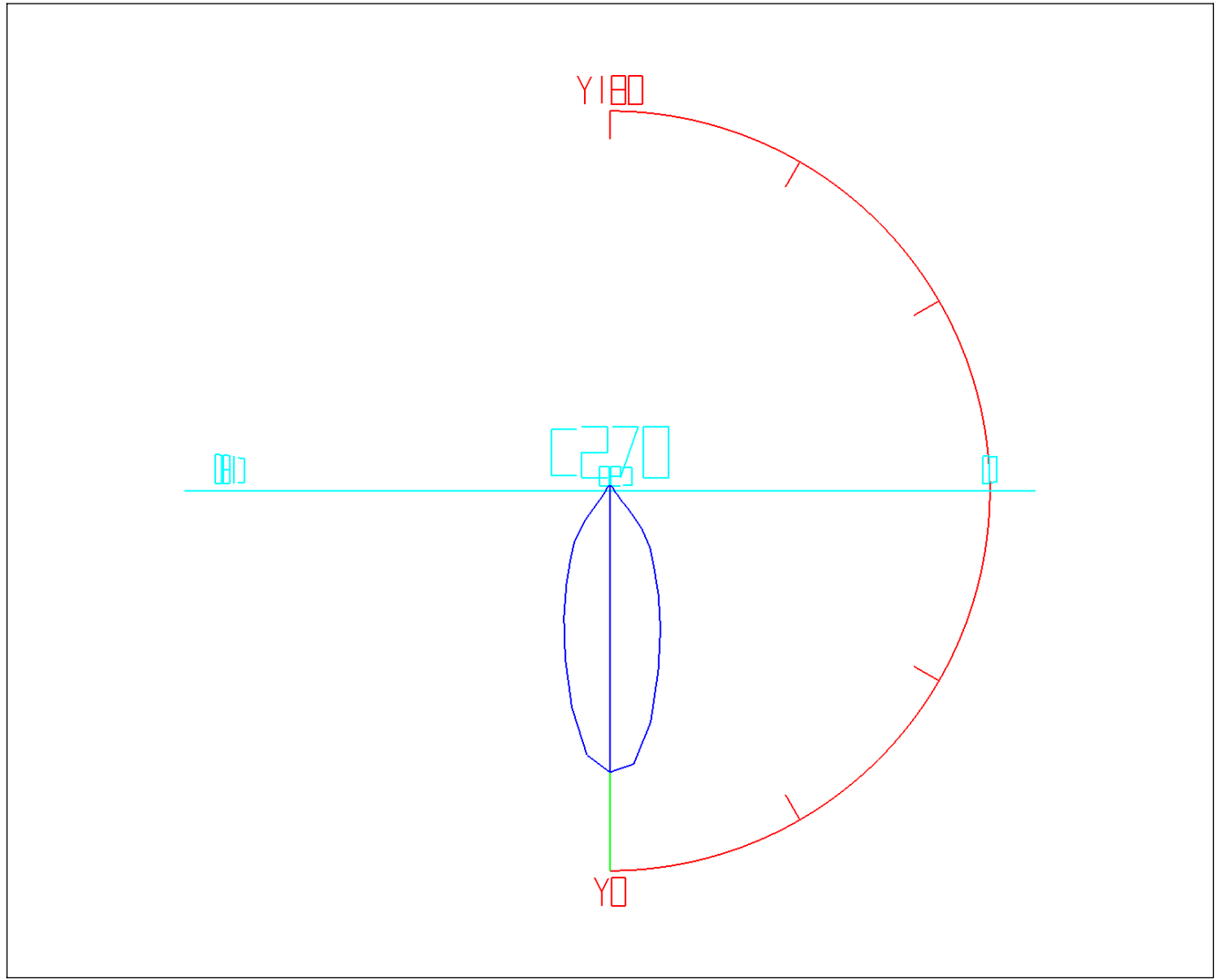
C Plane	[50%MaxAng.]	[10%MaxAng.]
C0.0_180.0	40.2	87.6
C90.0_270.0	39.9	87.2

Unit:cd

3D Light Intensity Distribution Modal

Lum. Name: DC9W-3500K, Ra90, Reflector 40°	Lum. Catalog: 1000LM	Test ID: 01
Lamp Name: CL2-9MR	Lamp Catalog: lamps and lanterns	Test Lab:
LED Chip: Citizen CLU028-1202C4-35XH5M3	Test Machine:GON-2000	Test Date: 2017/06/13

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

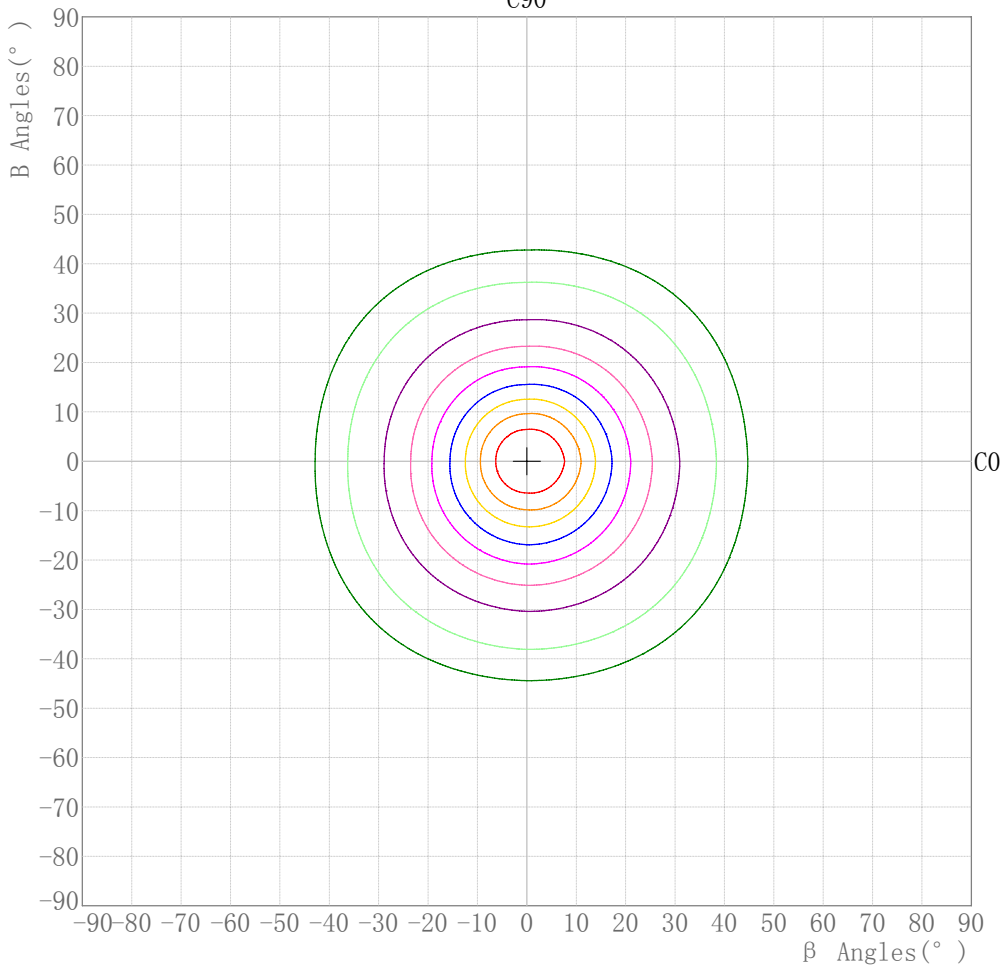
Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-5.0	28.27	28.27	3.14	3.14
5.0-10.0	75.90	104.17	8.44	11.59
10.0-15.0	103.20	207.37	11.48	23.07
15.0-20.0	113.39	320.76	12.61	35.68
20.0-25.0	112.33	433.09	12.50	48.17
25.0-30.0	104.04	537.13	11.57	59.75
30.0-35.0	94.08	631.20	10.46	70.21
35.0-40.0	79.02	710.23	8.79	79.00
40.0-45.0	53.51	763.74	5.95	84.95
45.0-50.0	31.03	794.77	3.45	88.41
50.0-55.0	21.72	816.49	2.42	90.82
55.0-60.0	18.62	835.11	2.07	92.89
60.0-65.0	16.04	851.15	1.78	94.68
65.0-70.0	13.97	865.12	1.55	96.23
70.0-75.0	12.64	877.77	1.41	97.64
75.0-80.0	11.70	889.46	1.30	98.94
80.0-85.0	10.85	900.31	1.21	100.15
85.0-90.0	10.14	910.44	1.13	101.27
90.0-95.0	9.71	920.15	1.08	102.35
95.0-100.0	9.46	929.61	1.05	103.41
100.0-105.0	9.20	938.81	1.02	104.43
105.0-110.0	8.92	947.73	0.99	105.42
110.0-115.0	8.63	956.37	0.96	106.38
115.0-120.0	8.32	964.69	0.93	107.31
120.0-125.0	7.99	972.68	0.89	108.20
125.0-130.0	7.62	980.30	0.85	109.04
130.0-135.0	7.22	987.52	0.80	109.85
135.0-140.0	6.78	994.30	0.75	110.60
140.0-145.0	6.27	1000.57	0.70	111.30
145.0-150.0	5.67	1006.24	0.63	111.93
150.0-155.0	4.97	1011.21	0.55	112.48
155.0-160.0	4.20	1015.41	0.47	112.95
160.0-165.0	3.35	1018.76	0.37	113.32
165.0-170.0	2.44	1021.20	0.27	113.59
170.0-175.0	1.49	1022.69	0.17	113.76
175.0-180.0	0.50	1023.19	0.06	113.81

Rectangle ISO Lighting Intensity Diagram

Lum. Name: DC9W-3500K, Ra90, Reflector 40°	Lum. Catalog: 1000LM	Test ID: 01
Lamp Name: CL2-9MR	Lamp Catalog: lamps and lanterns	Test Lab:
LED Chip: Citizen CLU028-1202C4-35XH5M3	Test Machine:GON-2000	Test Date: 2017/06/13

ISO Lighting Intensity Curve

C90



Curves:

[Unit: cd]

[IMax] =1212.190

- [IMax*90%]=1090.971
- [IMax*80%]=969.752
- [IMax*70%]=848.533
- [IMax*60%]=727.314
- [IMax*50%]=606.095
- [IMax*40%]=484.876
- [IMax*30%]=363.657
- [IMax*20%]=242.438
- [IMax*10%]=121.219

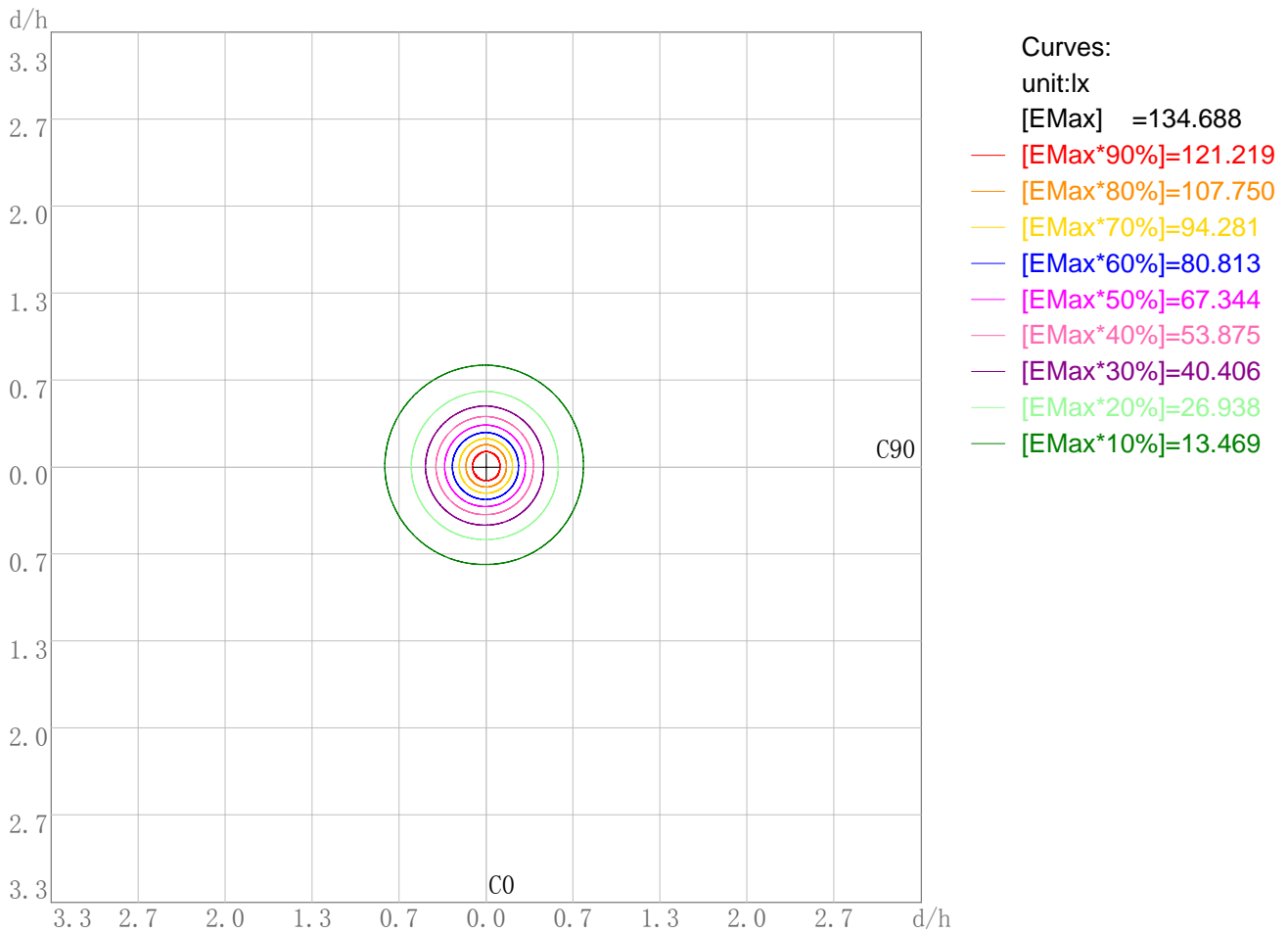
Maximum Light Intensity(cd): 1212.19

Maximum Cand.@Angle: H=0.0°,V=0.0°

Plane ISO-Illuminance Diagram

Lum. Name: DC9W-3500K, Ra90, Reflector 40°	Lum. Catalog: 1000LM	Test ID: 01
Lamp Name: CL2-9MR	Lamp Catalog: lamps and lanterns	Test Lab:
LED Chip: Citizen CLU028-1202C4-35XH5M3	Test Machine:GON-2000	Test Date: 2017/06/13

Plane ISO-Illuminance Curve

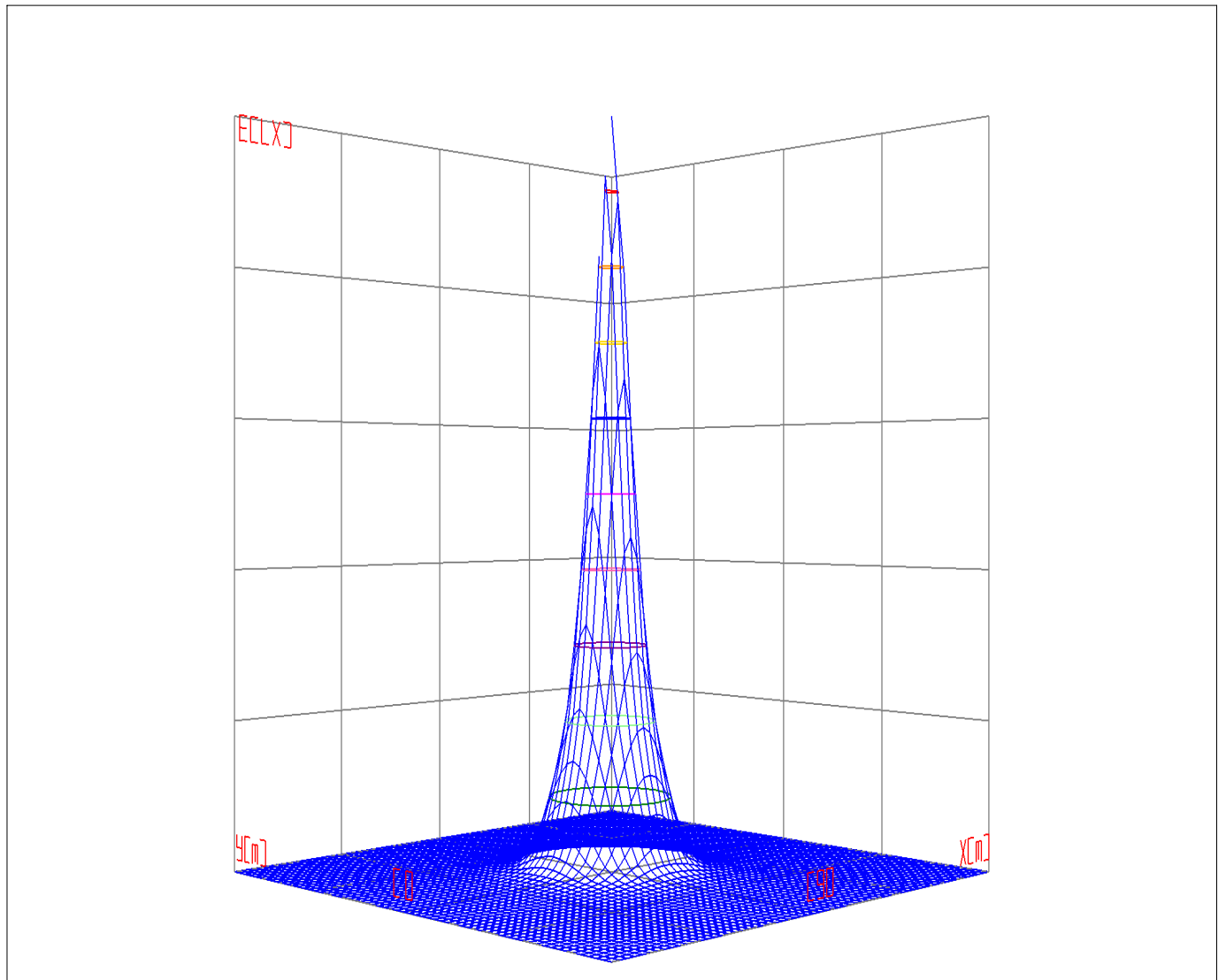


Working Plane Luminaire Mounting Height(m): 3.00
 Working Plane Maximum Illuminance(lx): 134.69
 Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name: DC9W-3500K, Ra90, Reflector 40°	Lum. Catalog: 1000LM	Test ID: 01
Lamp Name: CL2-9MR	Lamp Catalog: lamps and lanterns	Test Lab:
LED Chip: Citizen CLU028-1202C4-35XH5M3	Test Machine:GON-2000	Test Date: 2017/06/13

3D Plane Illuminance Modal

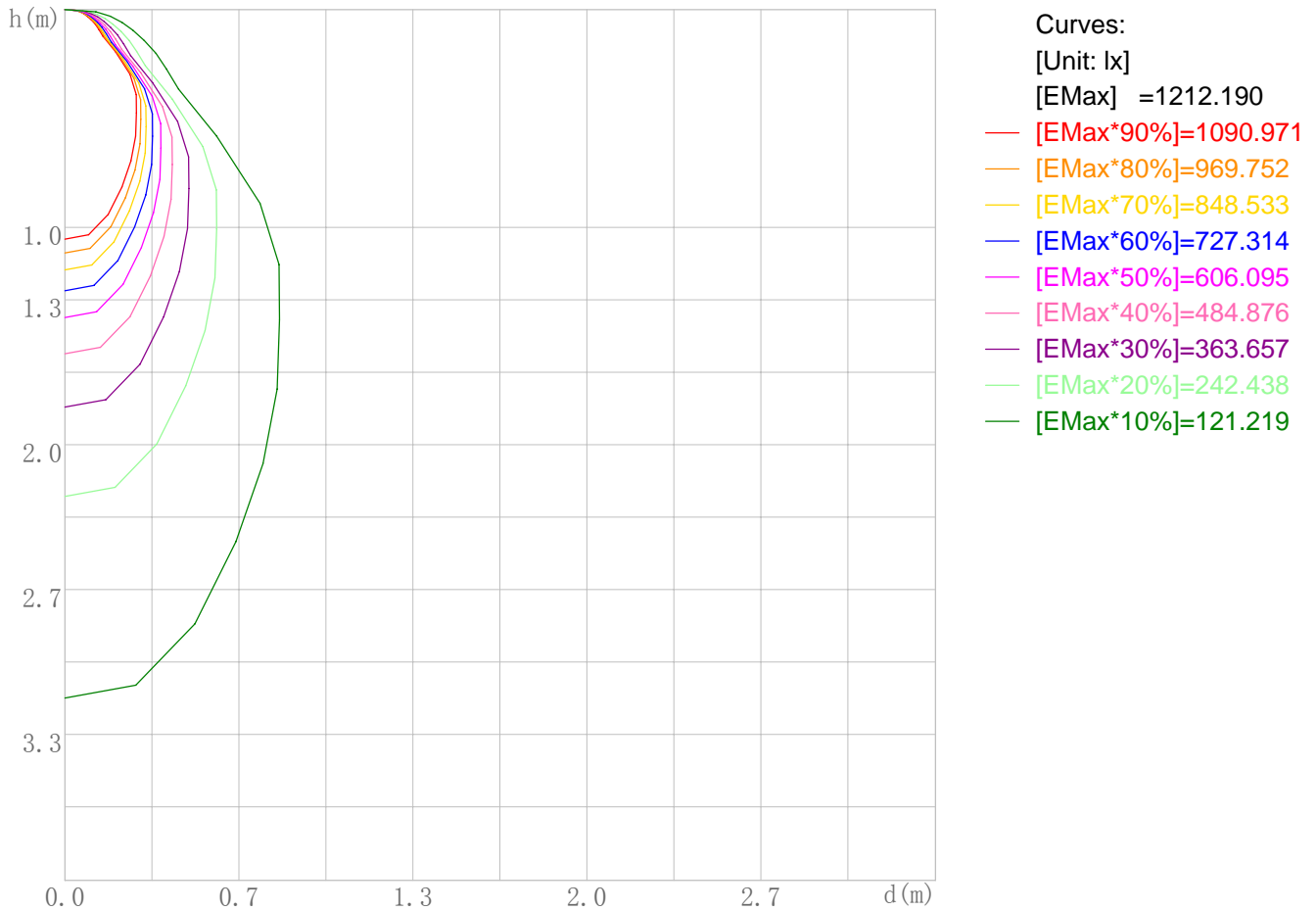


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
 View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

Lum. Name: DC9W-3500K, Ra90, Reflector 40°	Lum. Catalog: 1000LM	Test ID: 01
Lamp Name: CL2-9MR	Lamp Catalog: lamps and lanterns	Test Lab:
LED Chip: Citizen CLU028-1202C4-35XH5M3	Test Machine:GON-2000	Test Date: 2017/06/13

Space ISO Illuminance Curve

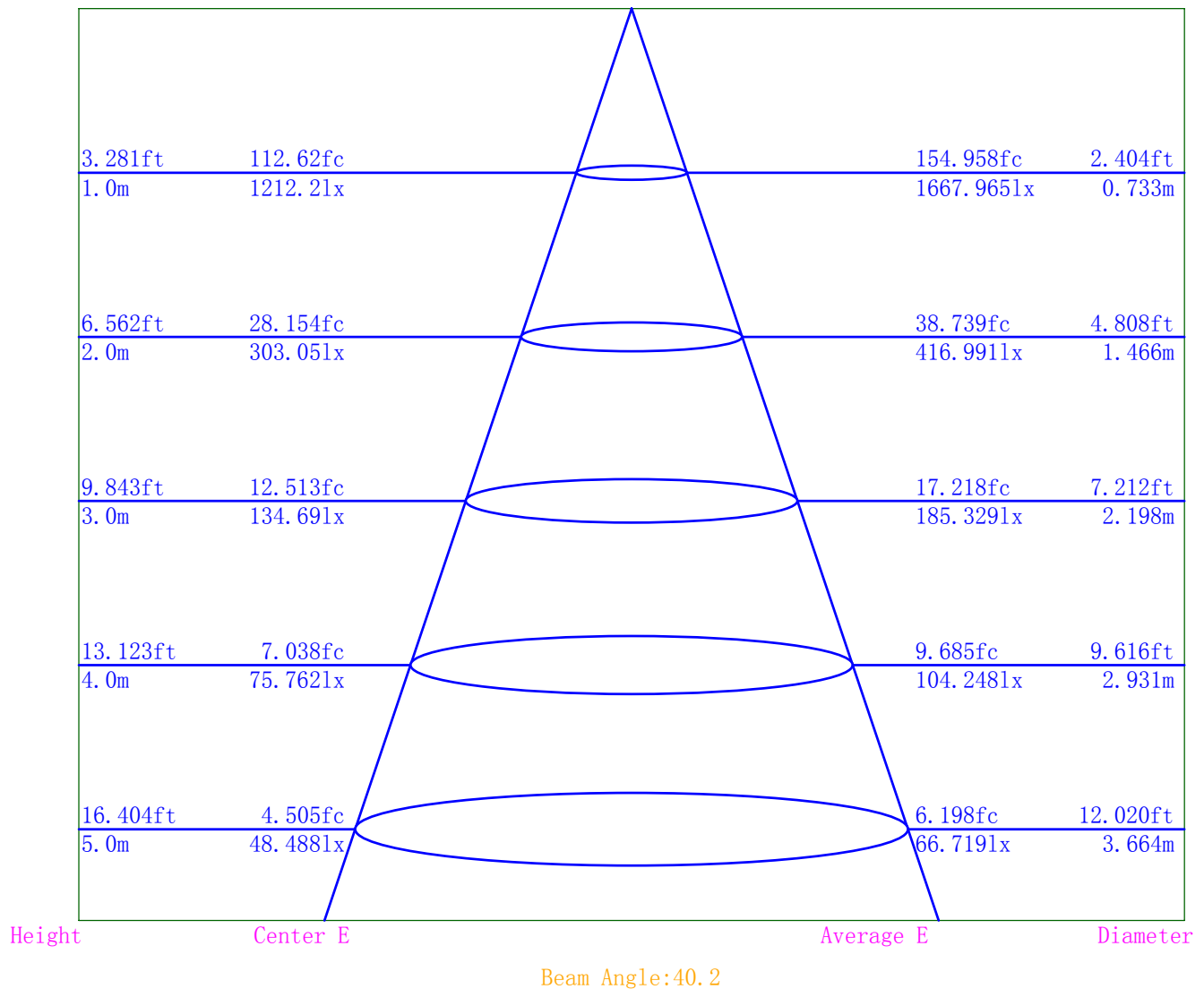


Space Plane Maximum Illuminance and @Angle:1212.19lx,0.0deg
 Plane Maximum Lighting Intensity and @Angle:1212.190cd,0deg

Illuminance-Distance Diagram

Lum. Name: DC9W-3500K, Ra90, Reflector 40°	Lum. Catalog: 1000LM	Test ID: 01
Lamp Name: CL2-9MR	Lamp Catalog: lamps and lanterns	Test Lab:
LED Chip: Citizen CLU028-1202C4-35XH5M3	Test Machine:GON-2000	Test Date: 2017/06/13

Illuminance-Distance Curve



Indoor Luminance Limiting Curves

Lum. Name: DC9W-3500K, Ra90, Reflector 40°	Lum. Catalog: 1000LM	Test ID: 01
Lamp Name: CL2-9MR	Lamp Catalog: lamps and lanterns	Test Lab:
LED Chip: Citizen CLU028-1202C4-35XH5M3	Test Machine:GON-2000	Test Date: 2017/06/13

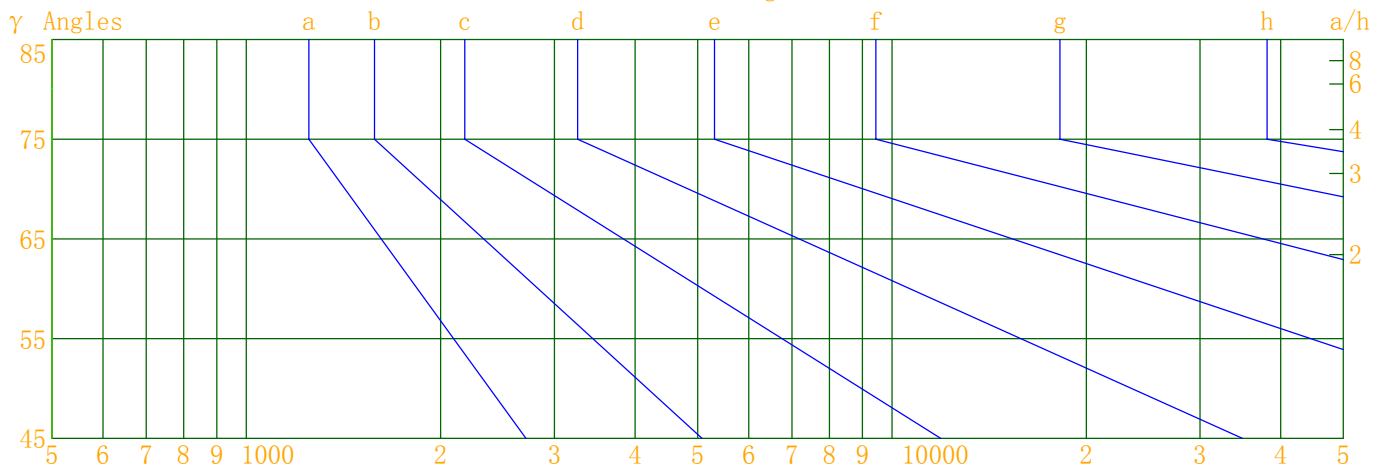
Glare Grade Table

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	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

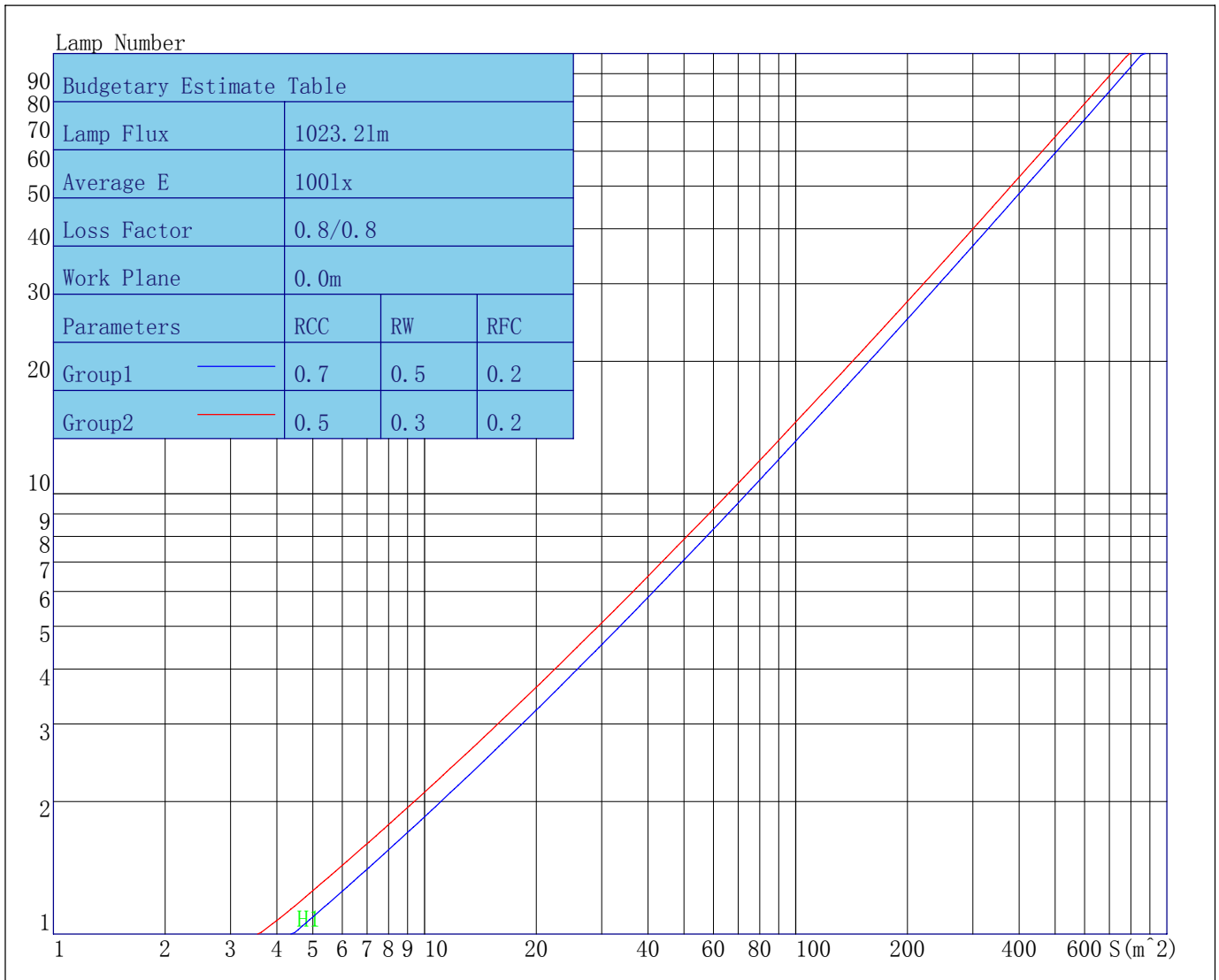
Luminance Limiting Curve



Luminous Size: Length(m)=0.000 Width(m)=0.000 Height(m)=0.000 Area(m^2)=0.000000
 Luminous Type: Without Luminous Side
 Luminous Curves: C0-C180 Color: — C90-C270 Color: —

Indoor Budgetary Estimate Table

Lum. Name: DC9W-3500K, Ra90, Reflector 40°	Lum. Catalog: 1000LM	Test ID: 01
Lamp Name: CL2-9MR	Lamp Catalog: lamps and lanterns	Test Lab:
LED Chip: Citizen CLU028-1202C4-35XH5M3	Test Machine:GON-2000	Test Date: 2017/06/13



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: DC9W-3500K, Ra90, Reflector 40°	Lum. Catalog: 1000LM	Test ID: 01
Lamp Name: CL2-9MR	Lamp Catalog: lamps and lanterns	Test Lab:
LED Chip: Citizen CLU028-1202C4-35XH5M3	Test Machine:GON-2000	Test Date: 2017/06/13

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	133	133	133	133	128	128	128	128	119	119	119	112	112	112	105	105	105	101
1	124	120	116	113	120	116	113	110	109	106	104	103	101	99	97	95	94	91
2	116	109	103	99	112	106	101	96	100	96	92	95	91	89	90	87	85	82
3	109	100	93	88	105	97	91	86	93	87	83	88	84	80	84	80	78	75
4	102	92	85	79	99	90	83	78	86	80	76	82	77	73	78	75	71	69
5	96	85	78	72	94	84	76	71	80	74	69	77	72	68	74	69	66	64
6	91	79	72	66	88	78	71	65	75	69	64	72	67	63	69	65	61	59
7	86	74	67	61	84	73	66	61	70	64	59	68	62	58	65	61	57	55
8	82	70	62	57	79	68	61	56	66	60	55	64	58	54	62	57	53	51
9	77	65	58	53	75	64	57	53	62	56	52	60	55	51	58	54	50	48
10	74	62	54	50	72	61	54	49	59	53	49	57	52	48	55	51	47	45

Unified Glare Rating Table

Lum. Name: DC9W-3500K, Ra90, Reflector 40°	Lum. Catalog: 1000LM	Test ID: 01
Lamp Name: CL2-9MR	Lamp Catalog: lamps and lanterns	Test Lab:
LED Chip: Citizen CLU028-1202C4-35XH5M3	Test Machine:GON-2000	Test Date: 2017/06/13

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	-2.2	-1.0	-1.6	-0.5	0.1	-2.2	-1.0	-1.6	-0.5	0.1
Y=3H	-2.4	-1.3	-1.8	-0.7	-0.1	-2.4	-1.3	-1.8	-0.7	-0.1
Y=4H	-2.5	-1.4	-1.9	-0.9	-0.2	-2.5	-1.4	-1.9	-0.9	-0.2
Y=6H	-2.6	-1.6	-2.0	-1.0	-0.4	-2.6	-1.6	-2.0	-1.0	-0.4
Y=8H	-2.6	-1.7	-2.0	-1.1	-0.4	-2.6	-1.7	-2.0	-1.1	-0.4
Y=12H	-2.7	-1.8	-2.1	-1.2	-0.5	-2.7	-1.8	-2.1	-1.2	-0.5
X=4H Y=2H	-2.5	-1.4	-1.9	-0.9	-0.2	-2.5	-1.4	-1.9	-0.9	-0.2
Y=3H	-2.7	-1.8	-2.1	-1.2	-0.5	-2.7	-1.8	-2.1	-1.2	-0.5
Y=4H	-2.8	-2.0	-2.2	-1.3	-0.7	-2.8	-2.0	-2.2	-1.3	-0.7
Y=6H	-2.9	-2.1	-2.3	-1.5	-0.8	-2.9	-2.1	-2.3	-1.5	-0.8
Y=8H	-3.0	-2.2	-2.3	-1.6	-0.9	-3.0	-2.2	-2.3	-1.6	-0.9
Y=12H	-3.0	-2.3	-2.4	-1.7	-1.0	-3.0	-2.3	-2.4	-1.7	-1.0
X=8H Y=4H	-3.0	-2.2	-2.3	-1.6	-0.9	-3.0	-2.2	-2.3	-1.6	-0.9
Y=6H	-3.1	-2.4	-2.4	-1.8	-1.0	-3.1	-2.4	-2.4	-1.8	-1.0
Y=8H	-3.2	-2.6	-2.5	-1.9	-1.2	-3.2	-2.6	-2.5	-1.9	-1.2
Y=12H	-3.2	-2.7	-2.6	-2.0	-1.2	-3.2	-2.7	-2.6	-2.0	-1.2
X=12H Y=4H	-3.0	-2.3	-2.4	-1.7	-1.0	-3.0	-2.3	-2.4	-1.7	-1.0
Y=6H	-3.2	-2.6	-2.5	-1.9	-1.1	-3.2	-2.6	-2.5	-1.9	-1.1
Y=8H	-3.2	-2.7	-2.6	-2.0	-1.2	-3.2	-2.7	-2.6	-2.0	-1.2
Variations with the objerver position at spacings										
S=1.0H	0.0/0.0					0.0/0.0				
S=1.5H	0.0/0.0					0.0/0.0				
S=2.0H	0.0/0.0					0.0/0.0				
Reduced UGR Table:										
Nordic Standard Table:	BKO					BKO				
Correction Value	0.0					0.0				

to 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	1212.19	1212.19	1212.19	1212.19
γ 5.0	1180.85	1146.73	1141.81	1141.33
γ 10.0	1010.65	955.85	946.55	962.99
γ 15.0	803.24	745.79	746.00	787.62
γ 20.0	634.90	576.49	580.15	629.16
γ 25.0	494.55	436.52	444.82	487.60
γ 30.0	378.24	336.83	340.40	369.51
γ 35.0	302.35	265.97	266.71	295.39
γ 40.0	213.78	169.96	170.52	209.88
γ 45.0	115.78	81.91	84.45	109.74
γ 50.0	60.83	53.44	50.45	57.74
γ 55.0	47.50	43.40	41.23	44.89
γ 60.0	39.24	35.68	33.44	36.88
γ 65.0	32.20	28.68	27.38	30.49
γ 70.0	27.12	24.64	24.04	26.13
γ 75.0	24.09	22.08	21.82	23.58
γ 80.0	21.64	20.17	20.05	21.42
γ 85.0	19.70	18.61	18.57	19.50
γ 90.0	18.19	17.59	17.66	18.25
γ 95.0	17.75	17.19	17.31	17.89
γ 100.0	17.48	17.05	17.08	17.49
γ 105.0	17.22	16.95	16.97	17.27
γ 110.0	17.11	16.83	16.96	17.25
γ 115.0	17.08	16.88	17.01	17.24
γ 120.0	17.15	17.04	17.25	17.32
γ 125.0	17.30	17.24	17.45	17.52
γ 130.0	17.55	17.61	17.74	17.80
γ 135.0	17.96	18.00	18.14	18.17
γ 140.0	18.35	18.45	18.74	18.70
γ 145.0	18.84	18.97	19.17	19.10
γ 150.0	19.25	19.41	19.61	19.56
γ 155.0	19.65	19.79	19.98	19.92
γ 160.0	20.03	20.17	20.29	20.22
γ 165.0	20.32	20.47	20.56	20.47
γ 170.0	20.63	20.67	20.73	20.74
γ 175.0	20.78	20.88	20.91	20.92
γ 180.0	20.97	20.97	20.97	20.97
