

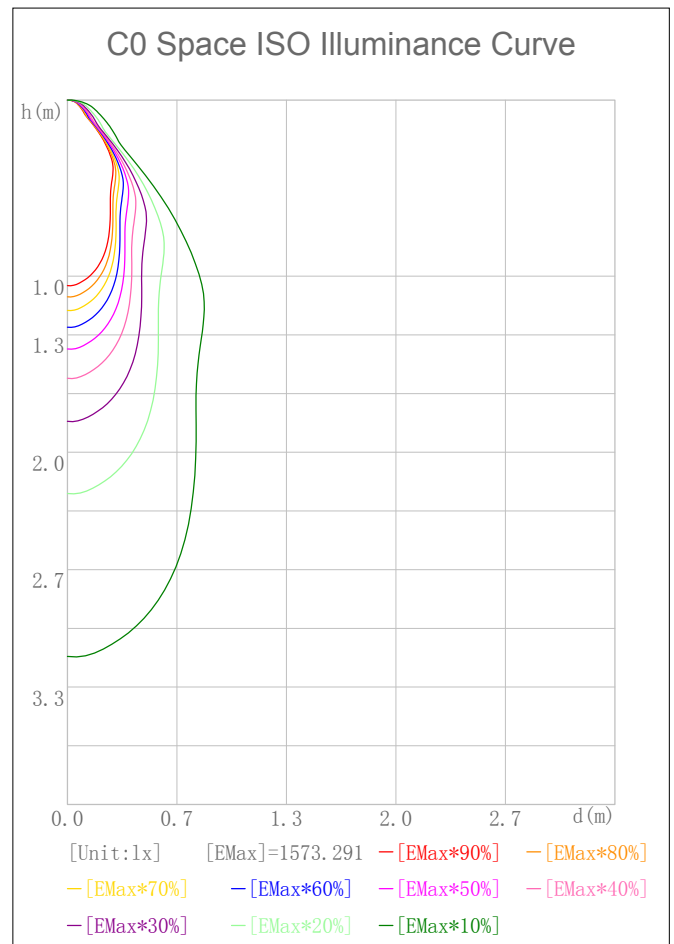
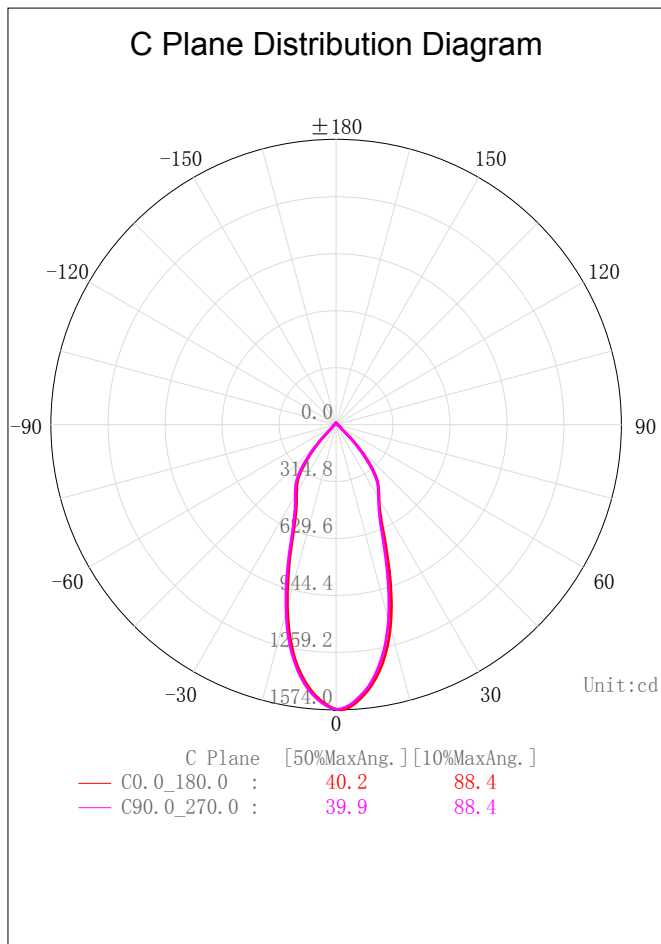
### Indoor Luminaire Photometric Data

#### Description Information

Luminary Name: CL2-13TW 6500K RA90 Reflector 38D		Lum. Catalog:	Test ID: 01
Lamp Name:		Lamp Catalog: LED	Test Date: 2020/01/07
Manufacture:		Shld. Ang(°):	Test Machine:GON-2000
Test Lab: QUality peatment	Frequency (Hz):		Lamp CCT(K): Ra:
Lum. Size (W*L*H): 0.498m*0.498m*0.750m		Lum. Area (m2): 0.622	Lum. W(kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=1.0	Temp. (°C): 25	Humidity(%):

#### Character Parameter

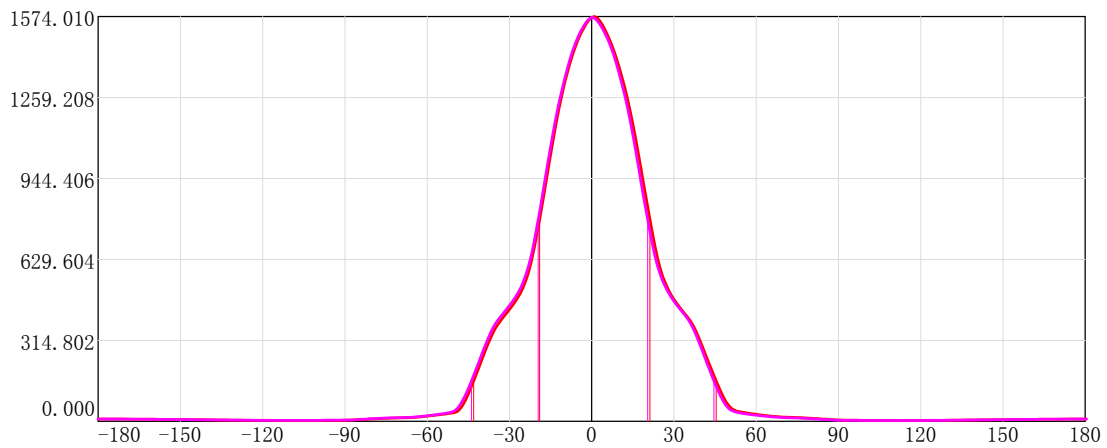
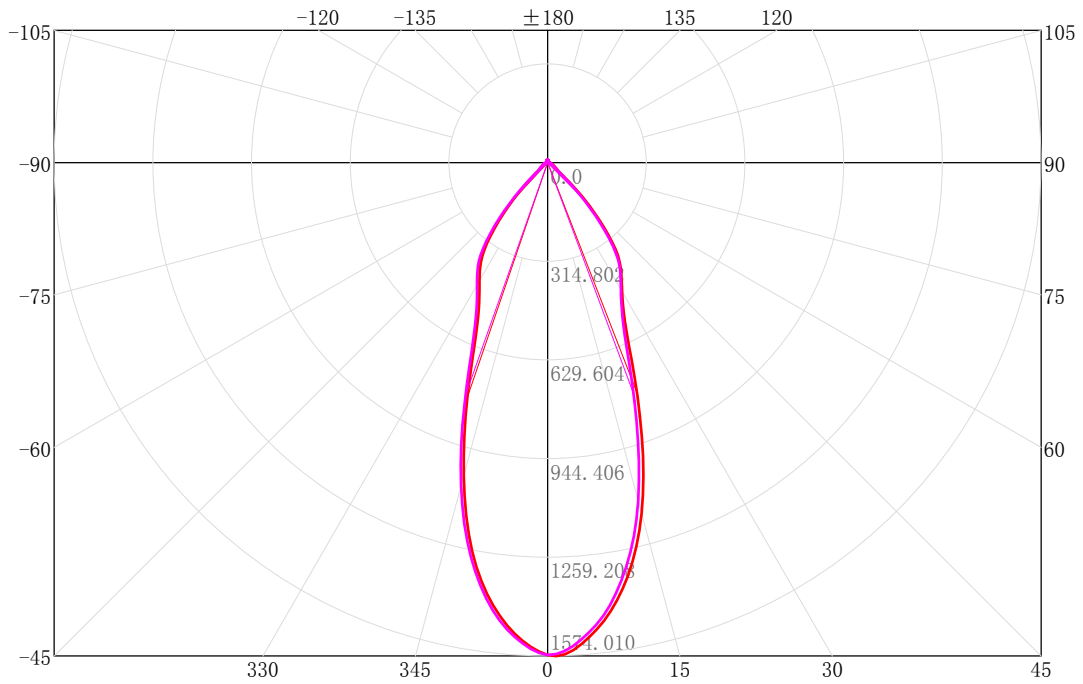
Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 1146.940	Luminary Flux(lm): 1146.942	Field Angle(10%Imax): 88.4(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1114.488lm 97.17%
Rated Voltage(V):	Luminary EER(lm/W): 109.441	Up Lumens&Percent: 32.454lm 2.83%
Tested Power(W): 10.480	Max. Candela(cd): 1574.010	S/MH: C0_a180=0.651 C90_270=0.646
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=1.0	CIE Type: Semi-Direct
Tested Electrics (V, A, pf): 35.0, 0.299	Beam Angle (50%Imax): 40.2(°)	ErP φ use(90°): 1004.784lm
Lamp Size (W*L*H): 0.498m*0.498m*0.750m	Left=-18.9°, Right=21.2°	IRF(%): 302.001



**2D Plane Light Intensity Distribution Curve**

Lum. Name: CL2-13TW 6500K RA90 Reflector 38D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality peatment
Manufacture:	Test Machine:GON-2000	Test Date: 2020/01/07

**C Plane Distribution Diagram**



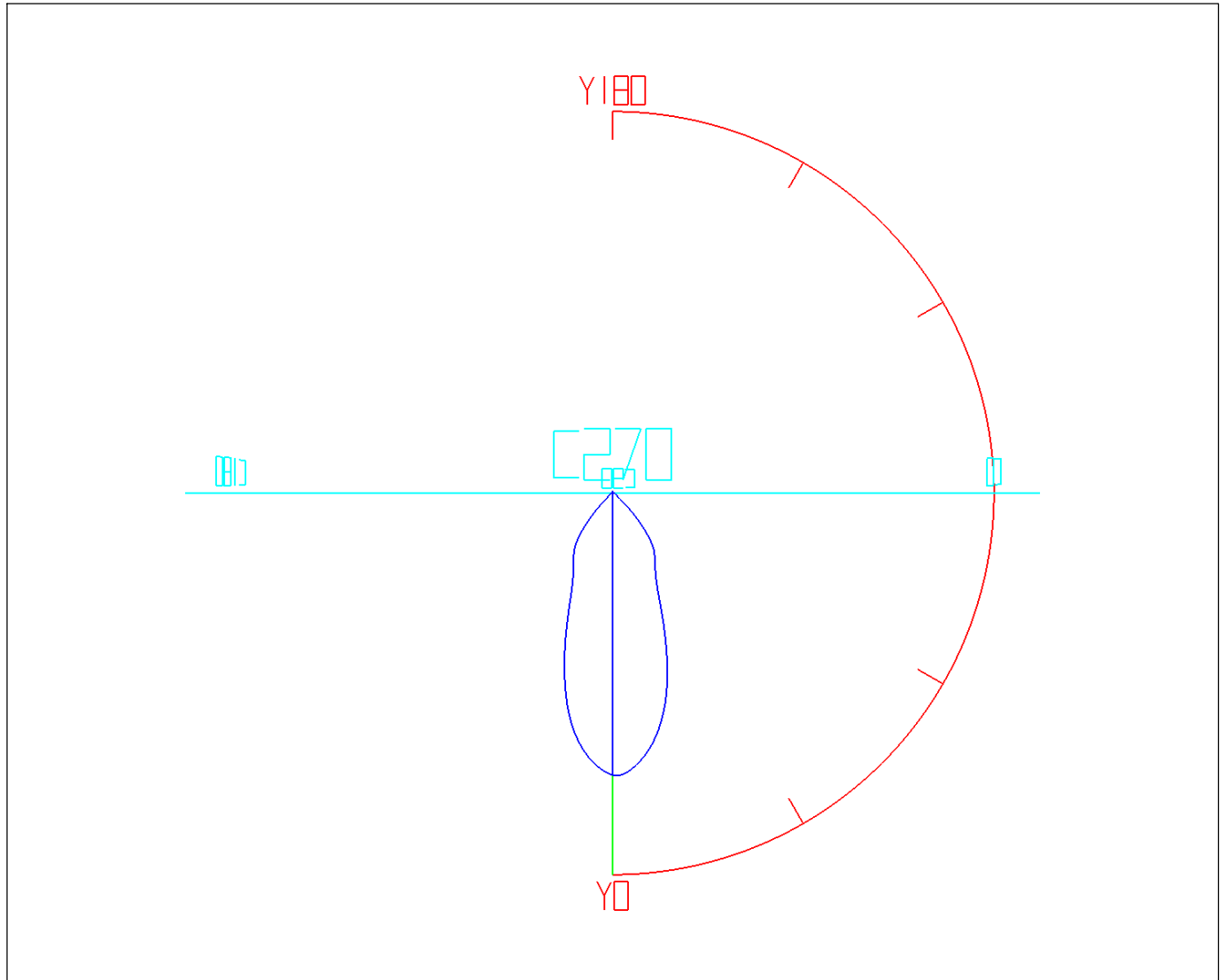
C Plane	[50%MaxAng.]	[10%MaxAng.]
C0.0_180.0	40.2	88.4
C90.0_270.0	39.9	88.4

Unit:cd

**3D Light Intensity Distribution Modal**

Lum. Name: CL2-13TW 6500K RA90 Reflector 38D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality peatment
Manufacture:	Test Machine:GON-2000	Test Date: 2020/01/07

**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	Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-1.0	1.50	1.50	0.13	0.13	47.0-48.0	6.59	1035.73	0.57	90.30
1.0-2.0	4.48	5.98	0.39	0.52	48.0-49.0	5.30	1041.03	0.46	90.77
2.0-3.0	7.41	13.39	0.65	1.17	49.0-50.0	4.33	1045.35	0.38	91.14
3.0-4.0	10.25	23.64	0.89	2.06	50.0-51.0	3.70	1049.05	0.32	91.47
4.0-5.0	13.00	36.64	1.13	3.19	51.0-52.0	3.33	1052.38	0.29	91.76
5.0-6.0	15.64	52.28	1.36	4.56	52.0-53.0	3.10	1055.49	0.27	92.03
6.0-7.0	18.14	70.42	1.58	6.14	53.0-54.0	2.94	1058.43	0.26	92.28
7.0-8.0	20.49	90.92	1.79	7.93	54.0-55.0	2.82	1061.25	0.25	92.53
8.0-9.0	22.67	113.58	1.98	9.90	55.0-56.0	2.71	1063.96	0.24	92.77
9.0-10.0	24.64	138.23	2.15	12.05	56.0-57.0	2.61	1066.57	0.23	92.99
10.0-11.0	26.40	164.63	2.30	14.35	57.0-58.0	2.50	1069.07	0.22	93.21
11.0-12.0	27.91	192.54	2.43	16.79	58.0-59.0	2.40	1071.46	0.21	93.42
12.0-13.0	29.17	221.71	2.54	19.33	59.0-60.0	2.29	1073.76	0.20	93.62
13.0-14.0	30.13	251.84	2.63	21.96	60.0-61.0	2.19	1075.94	0.19	93.81
14.0-15.0	30.80	282.64	2.69	24.64	61.0-62.0	2.09	1078.03	0.18	93.99
15.0-16.0	31.17	313.82	2.72	27.36	62.0-63.0	2.00	1080.03	0.17	94.17
16.0-17.0	31.25	345.06	2.72	30.09	63.0-64.0	1.91	1081.94	0.17	94.33
17.0-18.0	31.04	376.10	2.71	32.79	64.0-65.0	1.84	1083.78	0.16	94.49
18.0-19.0	30.58	406.68	2.67	35.46	65.0-66.0	1.76	1085.54	0.15	94.65
19.0-20.0	29.92	436.60	2.61	38.07	66.0-67.0	1.70	1087.24	0.15	94.79
20.0-21.0	29.12	465.71	2.54	40.60	67.0-68.0	1.65	1088.89	0.14	94.94
21.0-22.0	28.24	493.95	2.46	43.07	68.0-69.0	1.60	1090.49	0.14	95.08
22.0-23.0	27.39	521.34	2.39	45.46	69.0-70.0	1.57	1092.06	0.14	95.22
23.0-24.0	26.66	548.00	2.32	47.78	70.0-71.0	1.55	1093.61	0.13	95.35
24.0-25.0	26.09	574.09	2.27	50.05	71.0-72.0	1.53	1095.13	0.13	95.48
25.0-26.0	25.68	599.77	2.24	52.29	72.0-73.0	1.50	1096.64	0.13	95.61
26.0-27.0	25.40	625.17	2.21	54.51	73.0-74.0	1.48	1098.12	0.13	95.74
27.0-28.0	25.23	650.40	2.20	56.71	74.0-75.0	1.45	1099.56	0.13	95.87
28.0-29.0	25.13	675.53	2.19	58.90	75.0-76.0	1.41	1100.97	0.12	95.99
29.0-30.0	25.07	700.60	2.19	61.08	76.0-77.0	1.36	1102.33	0.12	96.11
30.0-31.0	25.03	725.63	2.18	63.27	77.0-78.0	1.31	1103.64	0.11	96.23
31.0-32.0	24.98	750.61	2.18	65.44	78.0-79.0	1.26	1104.90	0.11	96.33
32.0-33.0	24.90	775.51	2.17	67.62	79.0-80.0	1.19	1106.09	0.10	96.44
33.0-34.0	24.76	800.27	2.16	69.77	80.0-81.0	1.13	1107.22	0.10	96.54
34.0-35.0	24.52	824.79	2.14	71.91	81.0-82.0	1.07	1108.29	0.09	96.63
35.0-36.0	24.10	848.90	2.10	74.01	82.0-83.0	1.00	1109.28	0.09	96.72
36.0-37.0	23.45	872.34	2.04	76.06	83.0-84.0	0.93	1110.22	0.08	96.80
37.0-38.0	22.52	894.87	1.96	78.02	84.0-85.0	0.88	1111.09	0.08	96.87
38.0-39.0	21.35	916.21	1.86	79.88	85.0-86.0	0.81	1111.90	0.07	96.95
39.0-40.0	19.97	936.18	1.74	81.62	86.0-87.0	0.74	1112.65	0.06	97.01
40.0-41.0	18.45	954.63	1.61	83.23	87.0-88.0	0.67	1113.31	0.06	97.07
41.0-42.0	16.80	971.43	1.46	84.70	88.0-89.0	0.61	1113.92	0.05	97.12
42.0-43.0	15.06	986.49	1.31	86.01	89.0-90.0	0.57	1114.49	0.05	97.17
43.0-44.0	13.28	999.77	1.16	87.17	90.0-91.0	0.55	1115.04	0.05	97.22
44.0-45.0	11.50	1011.27	1.00	88.17	91.0-92.0	0.54	1115.58	0.05	97.27
45.0-46.0	9.76	1021.03	0.85	89.02	92.0-93.0	0.53	1116.10	0.05	97.31
46.0-47.0	8.11	1029.14	0.71	89.73	93.0-94.0	0.52	1116.62	0.04	97.36

# IES Indoor Report

Photometric Filename:CL2-13TW 6500K RA90 Reflector 38D.IES

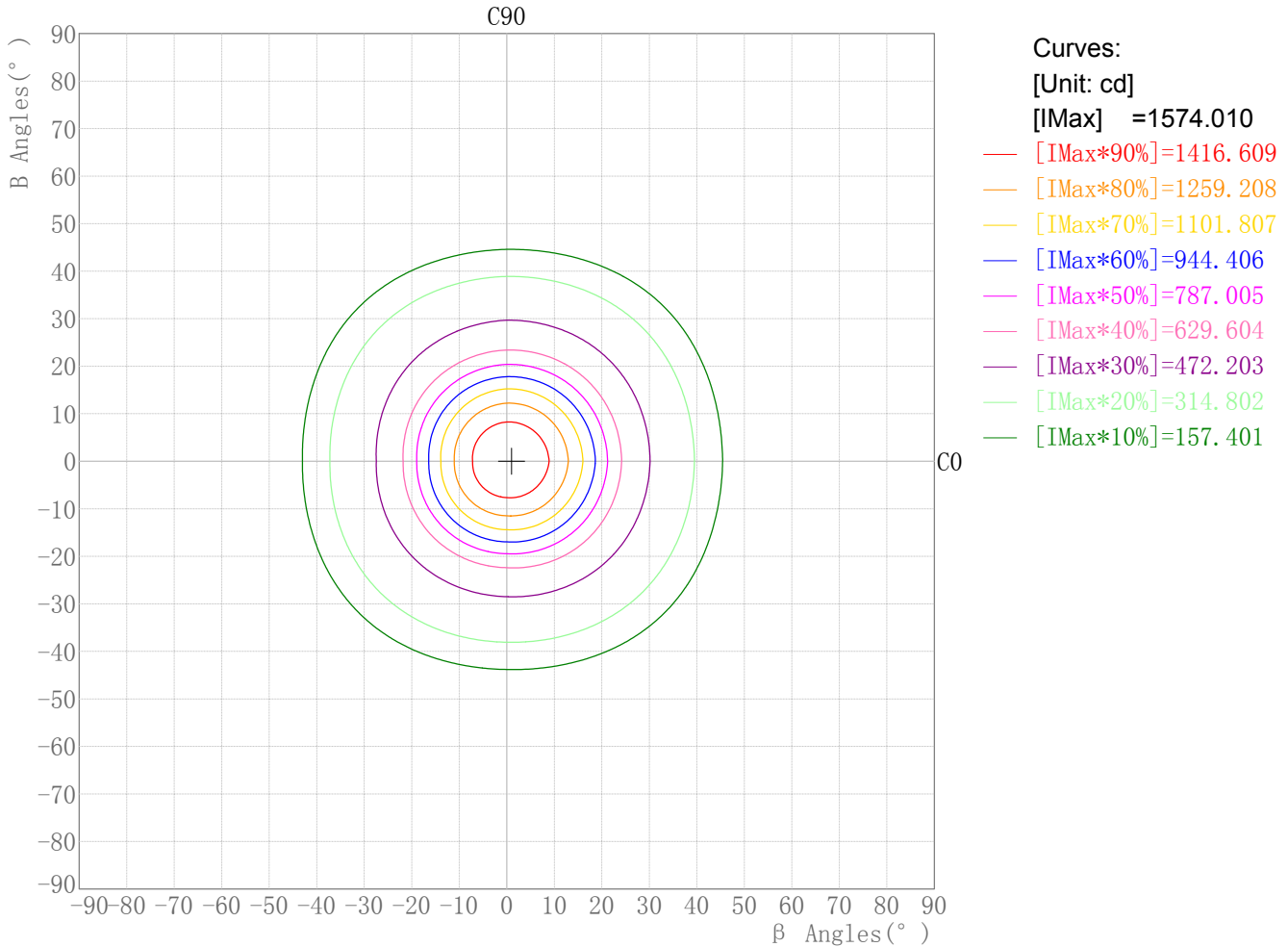
## Zonal Flux Tabulation - (Cont.)

Zone (γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp	Zone (γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
94.0-95.0	0.50	1117.12	0.04	97.40	141.0-142.0	0.42	1136.73	0.04	99.11
95.0-96.0	0.49	1117.62	0.04	97.44	142.0-143.0	0.42	1137.16	0.04	99.15
96.0-97.0	0.48	1118.10	0.04	97.49	143.0-144.0	0.42	1137.58	0.04	99.18
97.0-98.0	0.48	1118.58	0.04	97.53	144.0-145.0	0.42	1138.00	0.04	99.22
98.0-99.0	0.47	1119.04	0.04	97.57	145.0-146.0	0.42	1138.42	0.04	99.26
99.0-100.0	0.46	1119.50	0.04	97.61	146.0-147.0	0.41	1138.83	0.04	99.29
100.0-101.0	0.45	1119.95	0.04	97.65	147.0-148.0	0.41	1139.24	0.04	99.33
101.0-102.0	0.44	1120.40	0.04	97.69	148.0-149.0	0.40	1139.64	0.04	99.36
102.0-103.0	0.44	1120.84	0.04	97.72	149.0-150.0	0.40	1140.04	0.03	99.40
103.0-104.0	0.43	1121.27	0.04	97.76	150.0-151.0	0.39	1140.44	0.03	99.43
104.0-105.0	0.43	1121.69	0.04	97.80	151.0-152.0	0.39	1140.82	0.03	99.47
105.0-106.0	0.42	1122.12	0.04	97.84	152.0-153.0	0.38	1141.20	0.03	99.50
106.0-107.0	0.42	1122.53	0.04	97.87	153.0-154.0	0.37	1141.58	0.03	99.53
107.0-108.0	0.41	1122.95	0.04	97.91	154.0-155.0	0.36	1141.94	0.03	99.56
108.0-109.0	0.41	1123.35	0.04	97.94	155.0-156.0	0.36	1142.30	0.03	99.60
109.0-110.0	0.41	1123.76	0.04	97.98	156.0-157.0	0.35	1142.64	0.03	99.63
110.0-111.0	0.40	1124.16	0.04	98.01	157.0-158.0	0.34	1142.98	0.03	99.65
111.0-112.0	0.40	1124.56	0.03	98.05	158.0-159.0	0.33	1143.31	0.03	99.68
112.0-113.0	0.40	1124.96	0.03	98.08	159.0-160.0	0.32	1143.63	0.03	99.71
113.0-114.0	0.40	1125.36	0.03	98.12	160.0-161.0	0.30	1143.93	0.03	99.74
114.0-115.0	0.40	1125.76	0.03	98.15	161.0-162.0	0.29	1144.22	0.03	99.76
115.0-116.0	0.40	1126.15	0.03	98.19	162.0-163.0	0.28	1144.50	0.02	99.79
116.0-117.0	0.39	1126.55	0.03	98.22	163.0-164.0	0.27	1144.77	0.02	99.81
117.0-118.0	0.39	1126.94	0.03	98.26	164.0-165.0	0.25	1145.02	0.02	99.83
118.0-119.0	0.39	1127.33	0.03	98.29	165.0-166.0	0.24	1145.26	0.02	99.85
119.0-120.0	0.39	1127.73	0.03	98.32	166.0-167.0	0.22	1145.49	0.02	99.87
120.0-121.0	0.39	1128.12	0.03	98.36	167.0-168.0	0.21	1145.70	0.02	99.89
121.0-122.0	0.39	1128.51	0.03	98.39	168.0-169.0	0.19	1145.89	0.02	99.91
122.0-123.0	0.39	1128.91	0.03	98.43	169.0-170.0	0.18	1146.07	0.02	99.92
123.0-124.0	0.40	1129.30	0.03	98.46	170.0-171.0	0.16	1146.23	0.01	99.94
124.0-125.0	0.40	1129.70	0.03	98.50	171.0-172.0	0.15	1146.38	0.01	99.95
125.0-126.0	0.40	1130.10	0.03	98.53	172.0-173.0	0.13	1146.51	0.01	99.96
126.0-127.0	0.40	1130.50	0.03	98.57	173.0-174.0	0.11	1146.62	0.01	99.97
127.0-128.0	0.40	1130.90	0.04	98.60	174.0-175.0	0.10	1146.72	0.01	99.98
128.0-129.0	0.40	1131.30	0.04	98.64	175.0-176.0	0.08	1146.80	0.01	99.99
129.0-130.0	0.41	1131.71	0.04	98.67	176.0-177.0	0.06	1146.86	0.01	99.99
130.0-131.0	0.41	1132.12	0.04	98.71	177.0-178.0	0.04	1146.91	0.00	100.00
131.0-132.0	0.41	1132.53	0.04	98.74	178.0-179.0	0.03	1146.93	0.00	100.00
132.0-133.0	0.41	1132.94	0.04	98.78	179.0-180.0	0.01	1146.94	0.00	100.00
133.0-134.0	0.42	1133.35	0.04	98.82					
134.0-135.0	0.42	1133.77	0.04	98.85					
135.0-136.0	0.42	1134.19	0.04	98.89					
136.0-137.0	0.42	1134.61	0.04	98.93					
137.0-138.0	0.42	1135.04	0.04	98.96					
138.0-139.0	0.42	1135.46	0.04	99.00					
139.0-140.0	0.42	1135.89	0.04	99.04					
140.0-141.0	0.42	1136.31	0.04	99.07					

**Rectangle ISO Lighting Intensity Diagram**

Lum. Name: CL2-13TW 6500K RA90 Reflector 38D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality peatment
Manufacture:	Test Machine:GON-2000	Test Date: 2020/01/07

**ISO Lighting Intensity Curve**

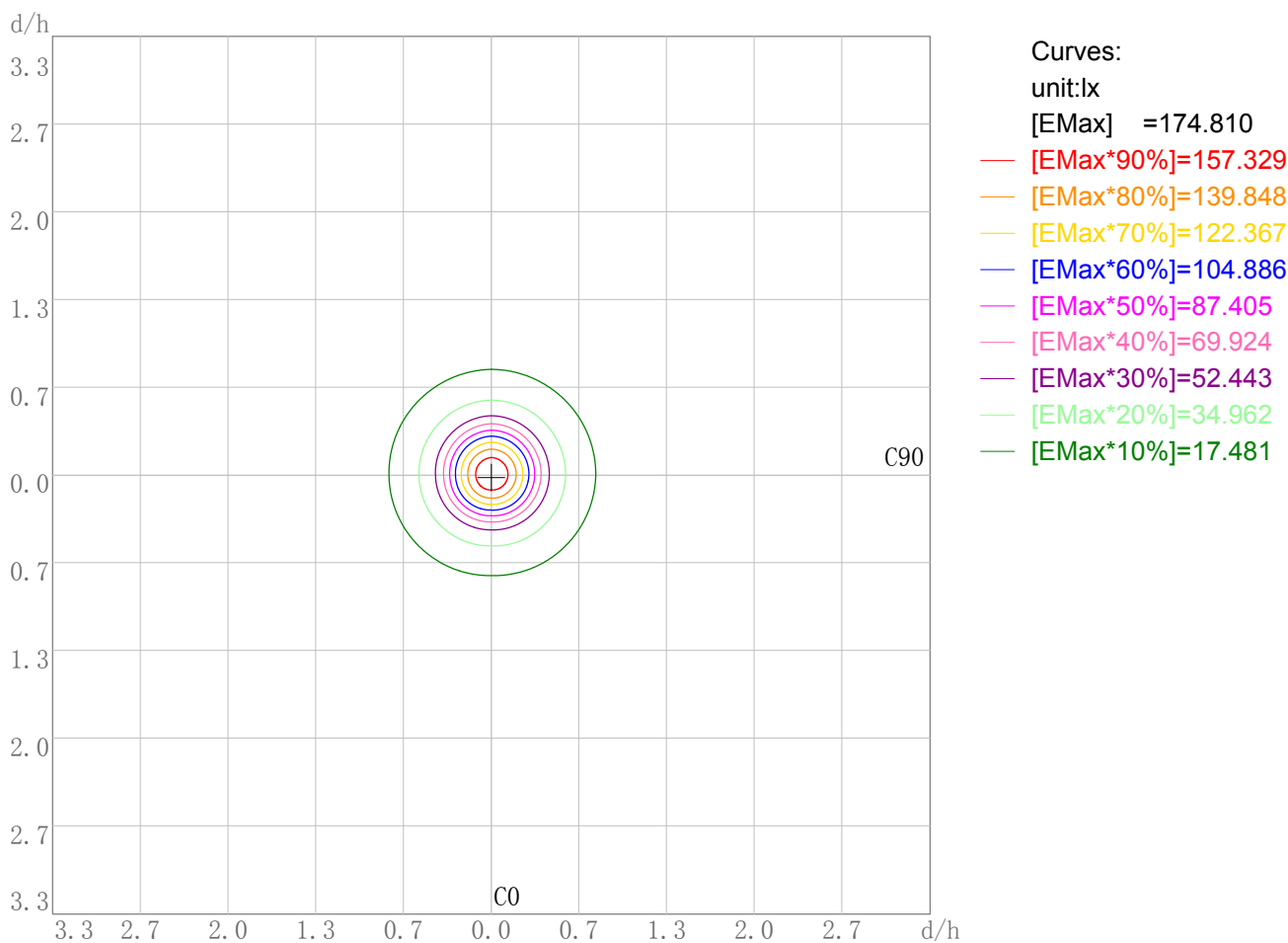


Maximum Light Intensity(cd): 1574.01  
 Maximum Cand.@Angle: H=1.0°,V=0.0°

**Plane ISO-Illuminance Diagram**

Lum. Name: CL2-13TW 6500K RA90 Reflector 38D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality peatment
Manufacture:	Test Machine:GON-2000	Test Date: 2020/01/07

**Plane ISO-Illuminance Curve**

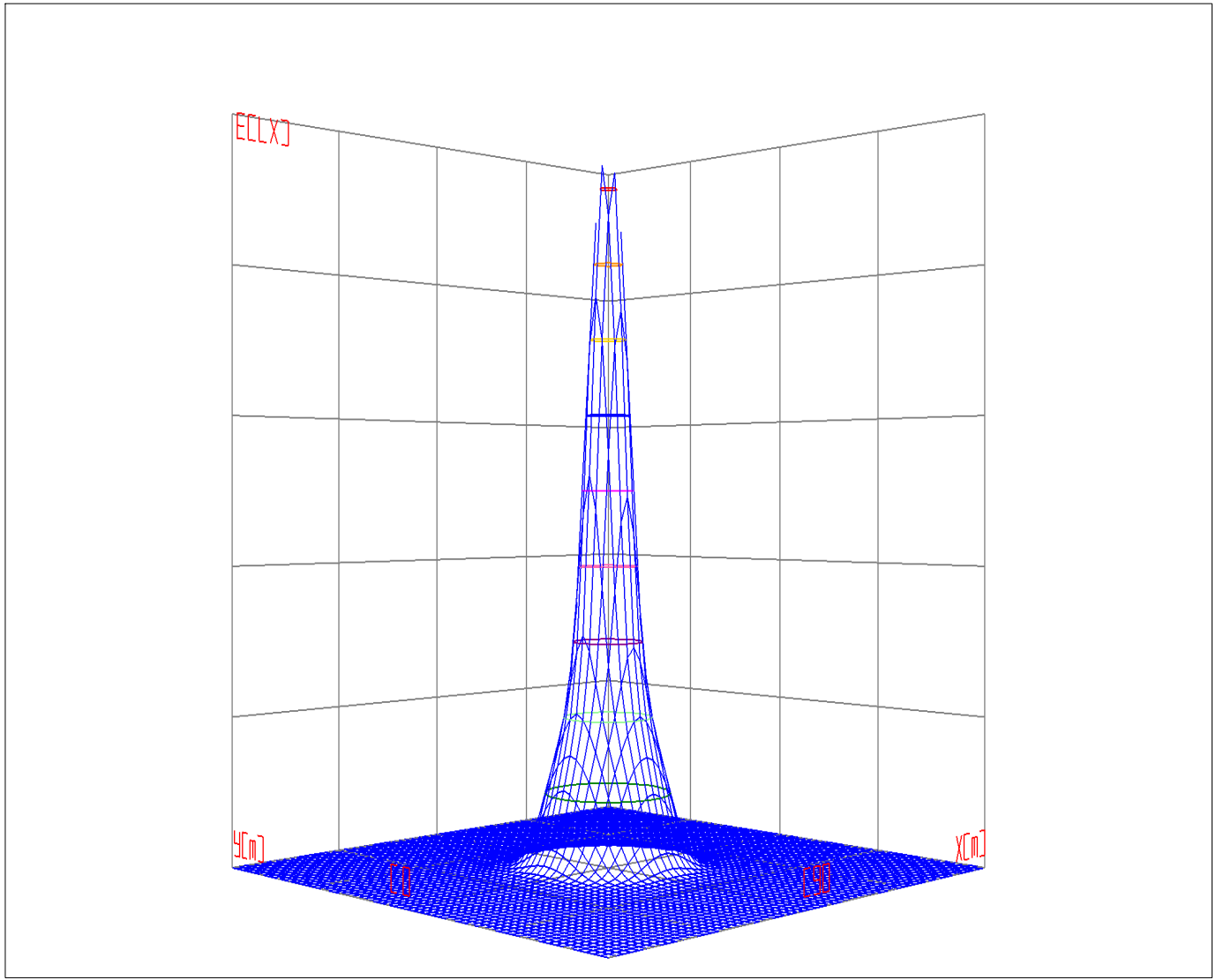


Working Plane Luminaire Mounting Height(m): 3.00  
 Working Plane Maximum Illuminance(lx): 174.81  
 Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

**3D Plane ISO Illuminance Diagram**

Lum. Name: CL2-13TW 6500K RA90 Reflector 38D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality peatment
Manufacture:	Test Machine:GON-2000	Test Date: 2020/01/07

**3D Plane Illuminance Modal**



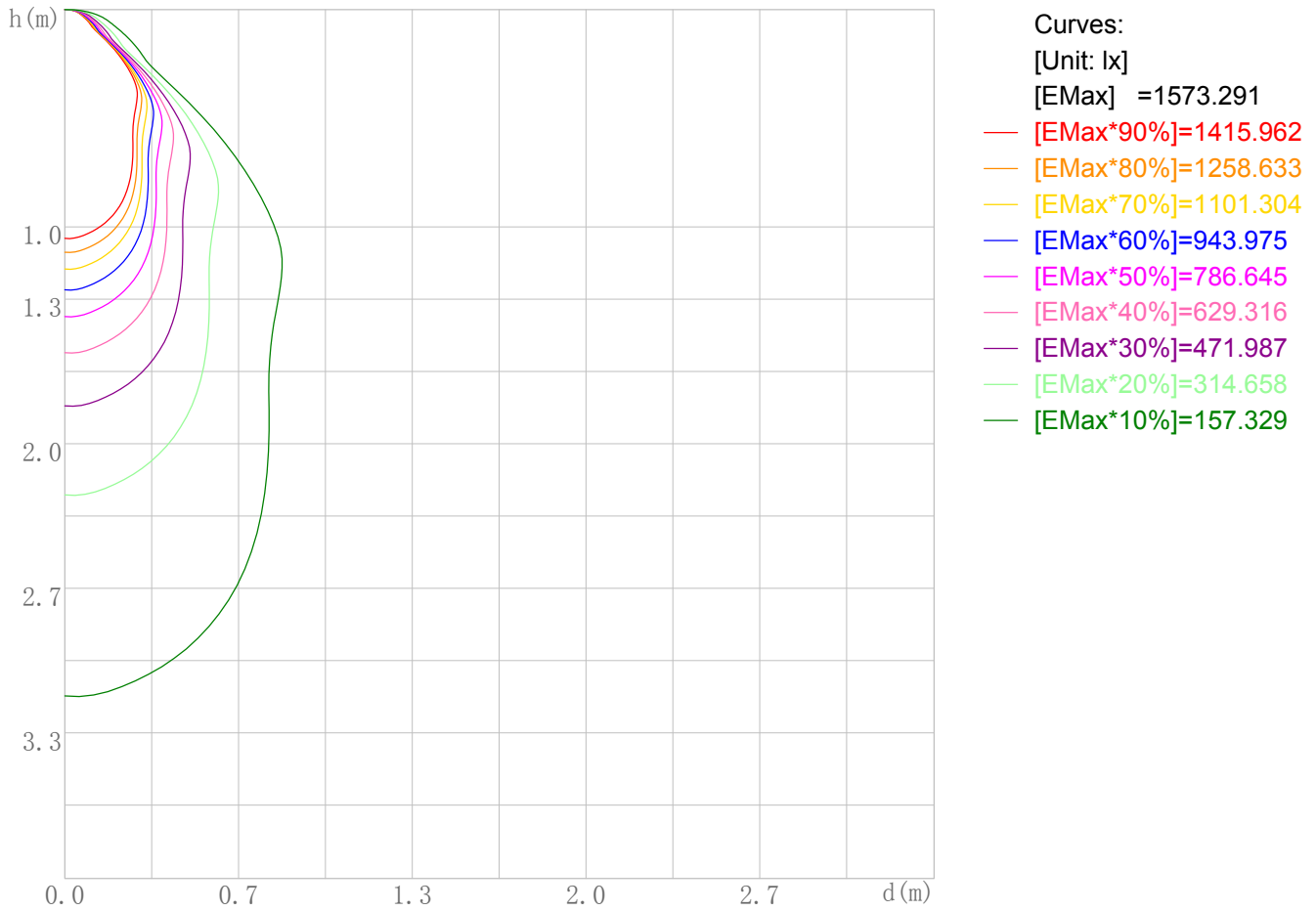
Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —  
 View Angles(deg): 0    Height(m): 3.0    Distance(m): 10.0



**Space ISO Illuminance Diagram**

Lum. Name: CL2-13TW 6500K RA90 Reflector 38D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality peatment
Manufacture:	Test Machine:GON-2000	Test Date: 2020/01/07

Space ISO Illuminance Curve

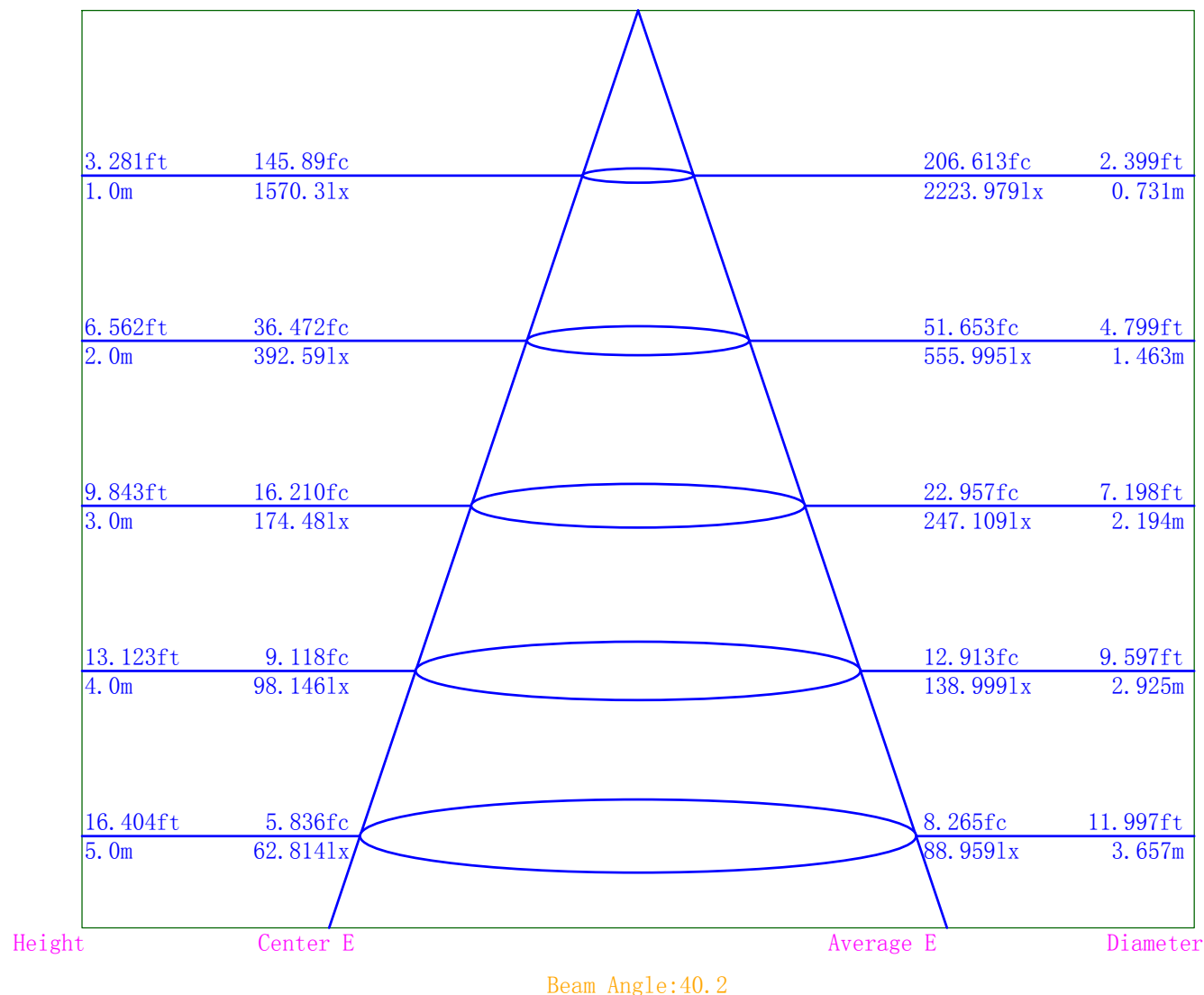


Space Plane Maximum Illuminance and @Angle:1573.29lx,1.0deg  
 Plane Maximum Lighting Intensity and @Angle:1574.010cd,0deg

**Illuminance-Distance Diagram**

Lum. Name: CL2-13TW 6500K RA90 Reflector 38D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality peatment
Manufacture:	Test Machine:GON-2000	Test Date: 2020/01/07

**Illuminance-Distance Curve**



**Indoor Luminance Limiting Curves**

Lum. Name: CL2-13TW 6500K RA90 Reflector 38D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality peatment
Manufacture:	Test Machine:GON-2000	Test Date: 2020/01/07

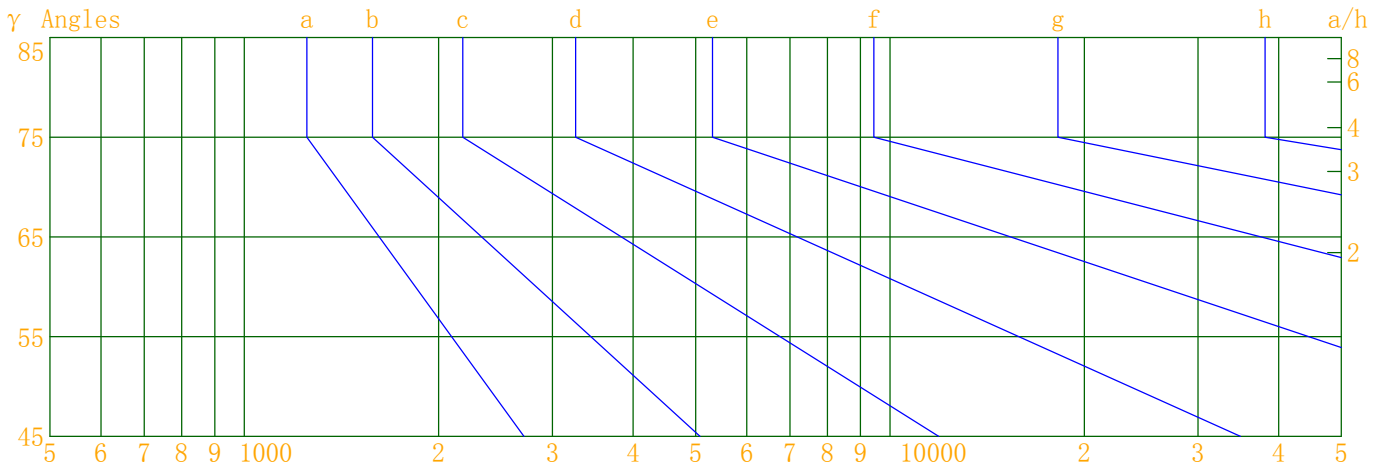
Glare Grade Table

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	383	154	101	89	81	80	94	114	168
C90	333	125	88	78	70	70	81	96	138

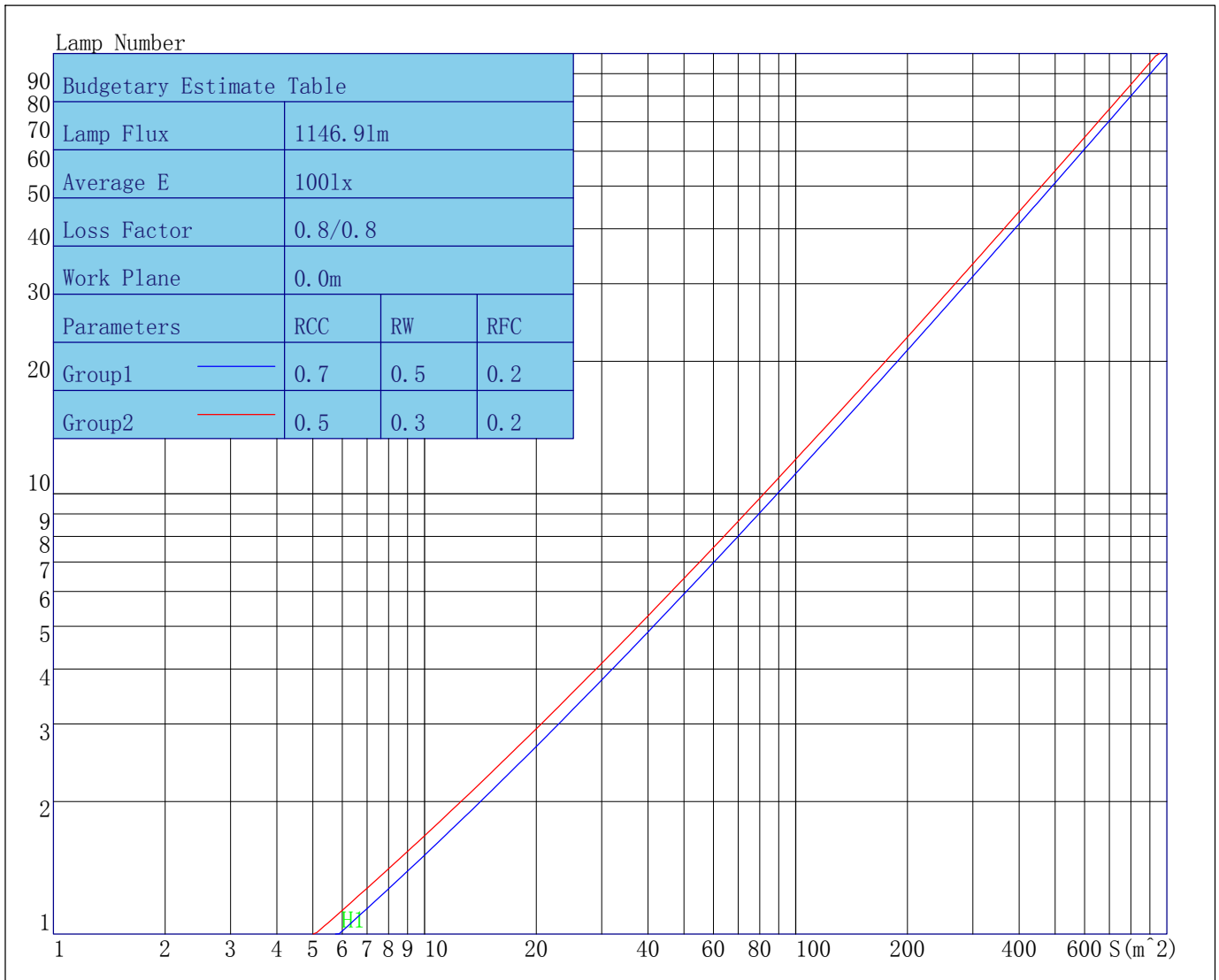
Luminance Limiting Curve



Luminous Size: Length(m)=0.498 Width(m)=0.498 Height(m)=0.750 Area(m^2)=0.621504  
 Luminous Type: Without Luminous Side  
 Luminous Curves: C0-C180 Color: — C90-C270 Color: —

**Indoor Budgetary Estimate Table**

Lum. Name: CL2-13TW 6500K RA90 Reflector 38D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality peatment
Manufacture:	Test Machine:GON-2000	Test Date: 2020/01/07



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: CL2-13TW 6500K RA90 Reflector 38D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality peatment
Manufacture:	Test Machine:GON-2000	Test Date: 2020/01/07

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	112	109	106	104	109	106	104	102	102	100	98	98	96	95	94	92	91	89
2	106	100	96	92	103	98	94	91	95	91	89	91	89	86	88	86	84	82
3	100	93	88	83	98	91	86	82	88	84	81	85	82	79	83	80	78	76
4	95	86	80	76	92	85	80	75	83	78	74	80	76	73	78	75	72	70
5	90	81	74	70	88	79	74	69	77	72	68	75	71	68	73	70	67	65
6	85	75	69	64	83	74	68	64	73	67	63	71	66	63	69	65	62	61
7	80	71	64	60	79	70	64	60	68	63	59	67	62	59	65	61	58	57
8	76	67	60	56	75	66	60	56	64	59	55	63	58	55	62	58	55	53
9	73	63	57	52	72	62	56	52	61	56	52	60	55	52	59	54	51	50
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	48	47

# IES Indoor Report

**Photometric Filename:CL2-13TW 6500K RA90 Reflector 38D.IES**

## Unified Glare Rating Table

Lum. Name: CL2-13TW 6500K RA90 Reflector 38D	Lum. Catalog: LED	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality peatment
Manufacture:	Test Machine:GON-2000	Test Date: 2020/01/07

## 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	4.6	5.7	5.1	6.1	6.5	4.2	5.3	4.7	5.7	6.1
Y=3H	4.8	5.7	5.2	6.1	6.5	4.3	5.3	4.8	5.7	6.1
Y=4H	4.9	5.8	5.4	6.2	6.7	4.5	5.3	4.9	5.7	6.2
Y=6H	5.2	6.0	5.6	6.4	6.9	4.6	5.5	5.1	5.9	6.4
Y=8H	5.3	6.1	5.8	6.5	7.0	4.8	5.5	5.2	6.0	6.5
Y=12H	5.5	6.2	6.0	6.7	7.2	4.9	5.6	5.4	6.1	6.6
X=4H Y=2H	4.5	5.4	4.9	5.8	6.2	4.1	5.0	4.6	5.4	5.8
Y=3H	4.7	5.5	5.2	5.9	6.4	4.3	5.0	4.8	5.5	6.0
Y=4H	5.0	5.7	5.5	6.1	6.6	4.5	5.2	5.0	5.7	6.2
Y=6H	5.4	6.0	6.0	6.5	7.0	4.9	5.5	5.4	6.0	6.5
Y=8H	5.7	6.2	6.2	6.7	7.3	5.1	5.6	5.6	6.1	6.7
Y=12H	6.0	6.5	6.5	7.0	7.5	5.3	5.8	5.9	6.3	6.9
X=8H Y=4H	5.1	5.6	5.6	6.1	6.6	4.6	5.1	5.1	5.6	6.2
Y=6H	5.6	6.1	6.2	6.6	7.2	5.1	5.5	5.6	6.1	6.7
Y=8H	6.0	6.4	6.6	7.0	7.5	5.4	5.8	6.0	6.4	6.9
Y=12H	6.5	6.8	7.1	7.4	8.0	5.8	6.2	6.4	6.7	7.3
X=12H Y=4H	5.0	5.5	5.6	6.0	6.6	4.6	5.0	5.1	5.6	6.1
Y=6H	5.7	6.1	6.3	6.6	7.2	5.1	5.5	5.7	6.0	6.7
Y=8H	6.1	6.5	6.7	7.0	7.7	5.5	5.9	6.1	6.4	7.1
Variations with the objerver position at spacings										
S=1.0H	0.1/-0.1					0.2/-0.3				
S=1.5H	0.3/-0.3					0.3/-0.4				
S=2.0H	0.2/-0.3					0.3/-0.4				
Reduced UGR Table:										
Nordic Standard Table:	BKO					BKO				
Correction Value	1.6					1.4				

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

# IES Indoor Report

Photometric Filename:CL2-13TW 6500K RA90 Reflector 38D.IES

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## Candela Tabulation

V/H	C0.0	C90.0	C180.0	C270.0
γ 0.0	1570.34	1570.34	1570.34	1570.34
γ 1.0	1574.01	1567.64	1560.02	1563.91
γ 2.0	1569.46	1558.52	1545.12	1551.93
γ 3.0	1557.41	1544.43	1526.90	1535.43
γ 4.0	1540.09	1525.70	1506.16	1515.97
γ 5.0	1519.60	1504.65	1482.23	1493.69
γ 6.0	1497.17	1482.36	1453.84	1467.78
γ 7.0	1472.63	1456.00	1423.51	1438.87
γ 8.0	1444.49	1425.93	1388.77	1404.54
γ 9.0	1413.81	1391.75	1350.88	1366.86
γ 10.0	1379.31	1353.86	1309.43	1326.24
γ 11.0	1342.21	1313.33	1261.66	1281.88
γ 12.0	1301.20	1270.01	1210.31	1233.68
γ 13.0	1257.07	1222.52	1154.49	1181.66
γ 14.0	1209.61	1171.01	1094.95	1125.46
γ 15.0	1157.97	1115.51	1033.95	1066.52
γ 16.0	1102.95	1056.62	971.20	1005.07
γ 17.0	1044.85	994.86	908.00	942.17
γ 18.0	984.14	932.16	845.15	878.24
γ 19.0	922.46	870.04	783.70	814.57
γ 20.0	860.46	809.07	724.56	753.89
γ 21.0	800.14	750.57	669.80	696.85
γ 22.0	741.74	696.00	620.62	645.64
γ 23.0	686.96	646.35	579.60	604.42
γ 24.0	637.01	605.28	547.65	570.27
γ 25.0	595.09	571.78	521.00	541.50
γ 26.0	561.85	543.91	498.56	517.31
γ 27.0	534.15	520.36	479.78	497.00
γ 28.0	511.17	500.27	463.38	479.76
γ 29.0	491.49	482.76	448.77	464.31
γ 30.0	474.60	467.22	434.85	450.25
γ 31.0	459.62	453.01	421.43	436.72
γ 32.0	445.49	439.72	408.24	423.89
γ 33.0	431.80	426.68	394.55	410.48
γ 34.0	418.64	413.69	379.95	396.85
γ 35.0	405.21	399.01	363.44	381.46
γ 36.0	390.41	381.98	343.52	363.12
γ 37.0	372.99	361.69	320.54	341.44
γ 38.0	352.07	338.08	295.45	316.87
γ 39.0	327.74	311.95	268.65	290.71
γ 40.0	301.81	284.70	241.20	263.51
γ 41.0	274.74	256.86	213.35	235.77
γ 42.0	247.35	228.55	185.39	207.50
γ 43.0	220.42	200.25	157.67	179.25
γ 44.0	194.04	172.61	130.95	152.20
γ 45.0	168.17	146.40	105.82	126.85
γ 46.0	143.02	121.73	82.94	103.53

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# IES Indoor Report

Photometric Filename: CL2-13TW 6500K RA90 Reflector 38D.IES

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## Candela Tabulation - (Cont.)

V/H	C0.0	C90.0	C180.0	C270.0
γ 47.0	118.80	99.03	63.38	82.72
γ 48.0	96.25	78.75	48.44	64.75
γ 49.0	76.71	62.20	38.79	50.45
γ 50.0	61.38	49.96	34.50	41.11
γ 51.0	50.70	42.57	32.63	36.57
γ 52.0	43.99	38.76	31.07	34.28
γ 53.0	39.96	35.48	29.52	32.45
γ 54.0	37.70	33.06	28.14	30.74
γ 55.0	35.84	31.35	26.73	29.19
γ 56.0	34.07	29.80	25.40	27.67
γ 57.0	32.44	28.31	24.08	26.26
γ 58.0	30.79	26.94	22.77	24.77
γ 59.0	29.31	25.54	21.51	23.40
γ 60.0	27.70	24.15	20.29	22.10
γ 61.0	26.22	22.85	19.14	20.84
γ 62.0	24.82	21.61	18.17	19.71
γ 63.0	23.50	20.45	17.24	18.72
γ 64.0	22.31	19.42	16.41	17.83
γ 65.0	21.22	18.48	15.64	17.02
γ 66.0	20.18	17.58	14.98	16.33
γ 67.0	19.26	16.77	14.44	15.74
γ 68.0	18.42	16.04	14.09	15.28
γ 69.0	17.66	15.44	13.82	14.94
γ 70.0	17.07	14.98	13.64	14.79
γ 71.0	16.56	14.62	13.49	14.60
γ 72.0	16.21	14.24	13.16	14.49
γ 73.0	15.87	13.89	12.94	14.19
γ 74.0	15.45	13.60	12.64	13.94
γ 75.0	15.06	13.06	12.12	13.56
γ 76.0	14.69	12.64	11.89	13.12
γ 77.0	14.01	12.15	11.23	12.60
γ 78.0	13.67	11.51	10.73	11.98
γ 79.0	12.99	10.96	10.10	11.61
γ 80.0	12.29	10.35	9.46	10.51
γ 81.0	11.68	9.65	9.09	10.38
γ 82.0	11.03	9.31	8.15	9.47
γ 83.0	10.47	8.34	7.75	8.85
γ 84.0	9.53	7.94	7.30	8.40
γ 85.0	9.09	7.48	6.66	7.78
γ 86.0	8.56	6.84	5.97	7.11
γ 87.0	7.68	6.05	5.48	6.50
γ 88.0	6.81	5.47	4.93	5.84
γ 89.0	5.97	4.78	4.81	5.57
γ 90.0	5.52	4.66	4.70	5.43
γ 91.0	5.39	4.56	4.61	5.30
γ 92.0	5.25	4.46	4.51	5.18
γ 93.0	5.14	4.37	4.42	5.08

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# IES Indoor Report

Photometric Filename:CL2-13TW 6500K RA90 Reflector 38D.IES

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## Candela Tabulation - (Cont.)

V/H	C0.0	C90.0	C180.0	C270.0
γ 94.0	5.04	4.30	4.34	4.97
γ 95.0	4.93	4.22	4.27	4.88
γ 96.0	4.84	4.14	4.20	4.78
γ 97.0	4.74	4.07	4.14	4.70
γ 98.0	4.65	4.01	4.07	4.62
γ 99.0	4.57	3.95	4.02	4.55
γ 100.0	4.50	3.90	3.98	4.48
γ 101.0	4.43	3.84	3.93	4.41
γ 102.0	4.36	3.81	3.90	4.36
γ 103.0	4.31	3.77	3.88	4.32
γ 104.0	4.25	3.73	3.85	4.28
γ 105.0	4.21	3.71	3.83	4.25
γ 106.0	4.17	3.68	3.83	4.22
γ 107.0	4.14	3.66	3.82	4.20
γ 108.0	4.11	3.65	3.82	4.18
γ 109.0	4.09	3.64	3.83	4.17
γ 110.0	4.07	3.63	3.83	4.17
γ 111.0	4.04	3.64	3.85	4.18
γ 112.0	4.04	3.64	3.86	4.18
γ 113.0	4.04	3.66	3.89	4.20
γ 114.0	4.03	3.66	3.92	4.20
γ 115.0	4.04	3.69	3.96	4.23
γ 116.0	4.06	3.71	4.00	4.26
γ 117.0	4.06	3.73	4.03	4.28
γ 118.0	4.08	3.76	4.08	4.32
γ 119.0	4.10	3.80	4.13	4.35
γ 120.0	4.13	3.84	4.18	4.41
γ 121.0	4.15	3.89	4.24	4.45
γ 122.0	4.20	3.92	4.31	4.50
γ 123.0	4.24	3.98	4.38	4.57
γ 124.0	4.29	4.05	4.46	4.62
γ 125.0	4.35	4.11	4.55	4.70
γ 126.0	4.41	4.18	4.63	4.77
γ 127.0	4.47	4.26	4.72	4.84
γ 128.0	4.55	4.34	4.82	4.93
γ 129.0	4.62	4.42	4.93	5.02
γ 130.0	4.71	4.51	5.04	5.12
γ 131.0	4.80	4.62	5.14	5.22
γ 132.0	4.90	4.73	5.26	5.33
γ 133.0	4.99	4.84	5.39	5.44
γ 134.0	5.10	4.94	5.52	5.56
γ 135.0	5.21	5.06	5.64	5.67
γ 136.0	5.32	5.18	5.77	5.80
γ 137.0	5.45	5.31	5.91	5.92
γ 138.0	5.58	5.44	6.03	6.05
γ 139.0	5.70	5.58	6.16	6.16
γ 140.0	5.84	5.71	6.28	6.28

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## IES Indoor Report

Photometric Filename:CL2-13TW 6500K RA90 Reflector 38D.IES

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### Candela Tabulation - (Cont.)

V/H	C0.0	C90.0	C180.0	C270.0
γ 141.0	5.96	5.84	6.41	6.40
γ 142.0	6.09	5.98	6.54	6.52
γ 143.0	6.21	6.10	6.67	6.64
γ 144.0	6.33	6.22	6.79	6.77
γ 145.0	6.46	6.34	6.92	6.88
γ 146.0	6.58	6.46	7.03	6.99
γ 147.0	6.70	6.58	7.14	7.11
γ 148.0	6.82	6.70	7.26	7.22
γ 149.0	6.94	6.82	7.38	7.34
γ 150.0	7.05	6.93	7.50	7.43
γ 151.0	7.16	7.05	7.61	7.54
γ 152.0	7.28	7.17	7.71	7.66
γ 153.0	7.40	7.28	7.82	7.75
γ 154.0	7.52	7.39	7.93	7.86
γ 155.0	7.63	7.52	8.04	7.96
γ 156.0	7.76	7.63	8.15	8.05
γ 157.0	7.88	7.74	8.24	8.14
γ 158.0	7.98	7.85	8.33	8.24
γ 159.0	8.09	7.95	8.42	8.32
γ 160.0	8.19	8.05	8.50	8.40
γ 161.0	8.28	8.15	8.59	8.48
γ 162.0	8.38	8.25	8.65	8.55
γ 163.0	8.47	8.33	8.72	8.61
γ 164.0	8.55	8.41	8.78	8.68
γ 165.0	8.63	8.49	8.84	8.73
γ 166.0	8.70	8.56	8.90	8.80
γ 167.0	8.77	8.62	8.96	8.84
γ 168.0	8.84	8.69	8.99	8.90
γ 169.0	8.90	8.75	9.05	8.94
γ 170.0	8.95	8.81	9.10	8.99
γ 171.0	9.01	8.87	9.14	9.04
γ 172.0	9.08	8.93	9.19	9.09
γ 173.0	9.14	8.99	9.24	9.13
γ 174.0	9.19	9.05	9.28	9.18
γ 175.0	9.25	9.10	9.31	9.23
γ 176.0	9.28	9.15	9.35	9.27
γ 177.0	9.33	9.20	9.37	9.30
γ 178.0	9.37	9.23	9.40	9.34
γ 179.0	9.40	9.26	9.41	9.35
γ 180.0	9.38	9.38	9.38	9.38

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