

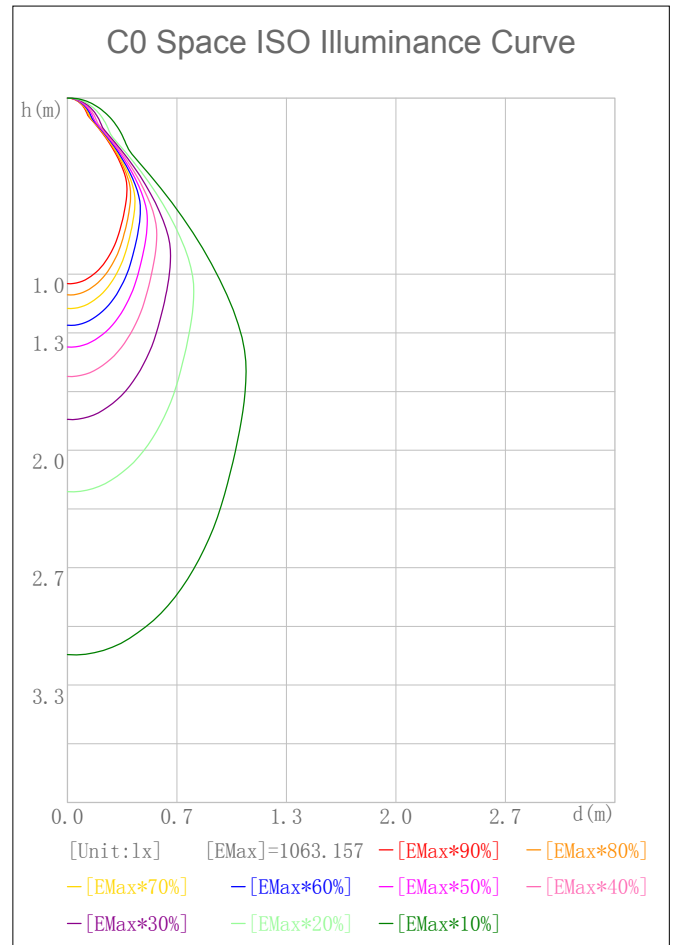
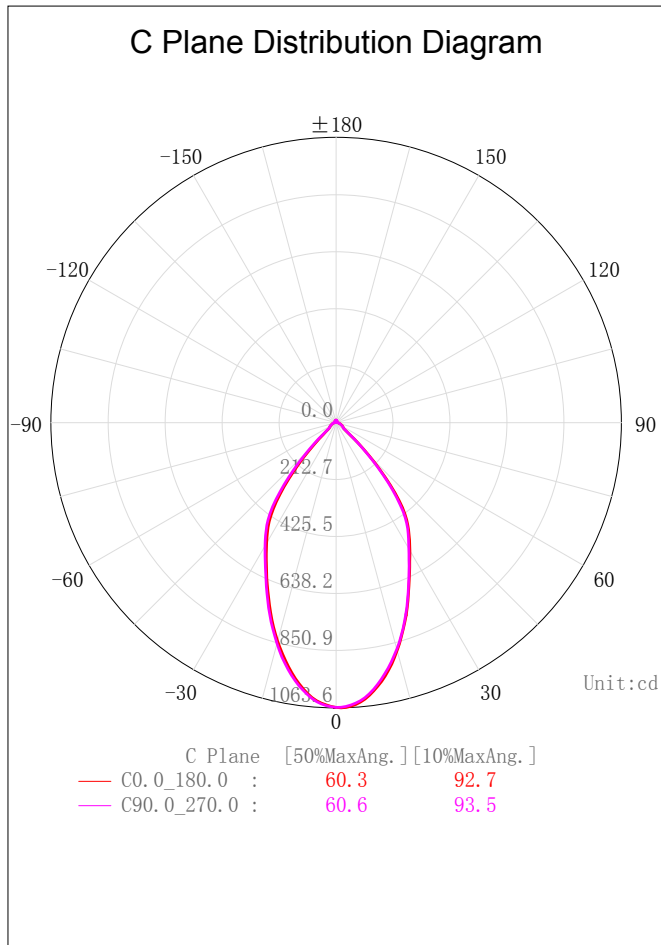
**Indoor Luminaire Photometric Data**

**Description Information**

Luminary Name: CL2-13TW 6500K RA90 Reflector 60D		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**

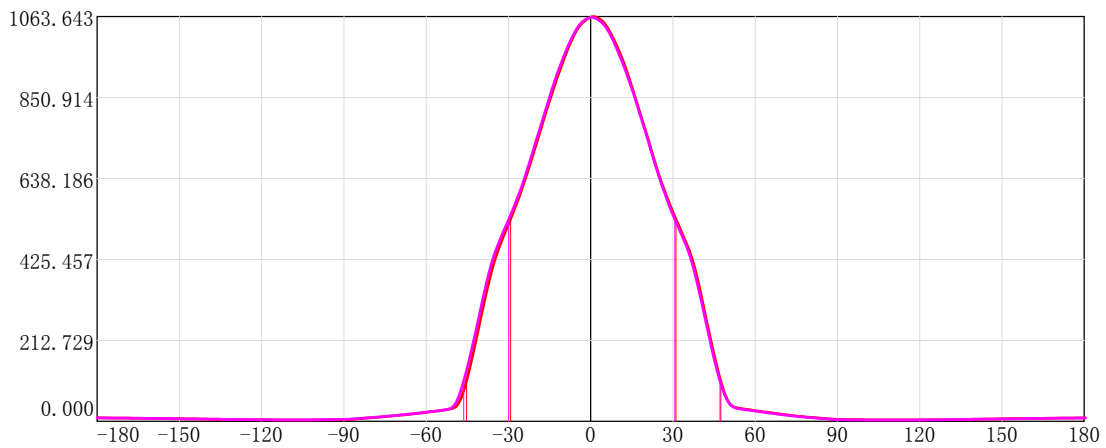
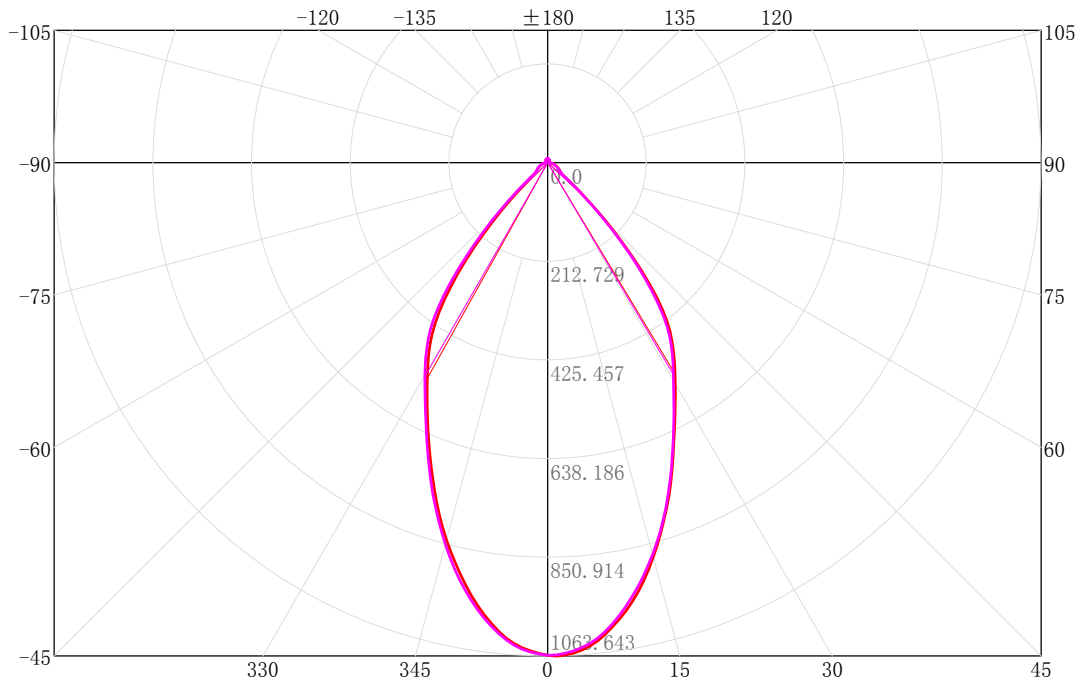
Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 1124.010	Luminary Flux(lm): 1124.009	Field Angle(10%Imax): 92.7(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1091.796lm 97.13%	
Rated Voltage(V):	Luminary EER(lm/W): 107.253	Up Lumens&Percent: 32.213lm 2.87%	
Tested Power(W): 10.480	Max. Candela(cd): 1063.643	S/MH: C0_a180=0.841 C90_270=0.844	
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): 60.3(°)	ErP φ use(90°): 980.177lm	
Lamp Size (W*L*H): 0.498m*0.498m*0.750m	Left=-29.2°, Right=31.1°	IRF(%): 211.315	



**2D Plane Light Intensity Distribution Curve**

Lum. Name: CL2-13TW 6500K RA90 Reflector 60D	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**

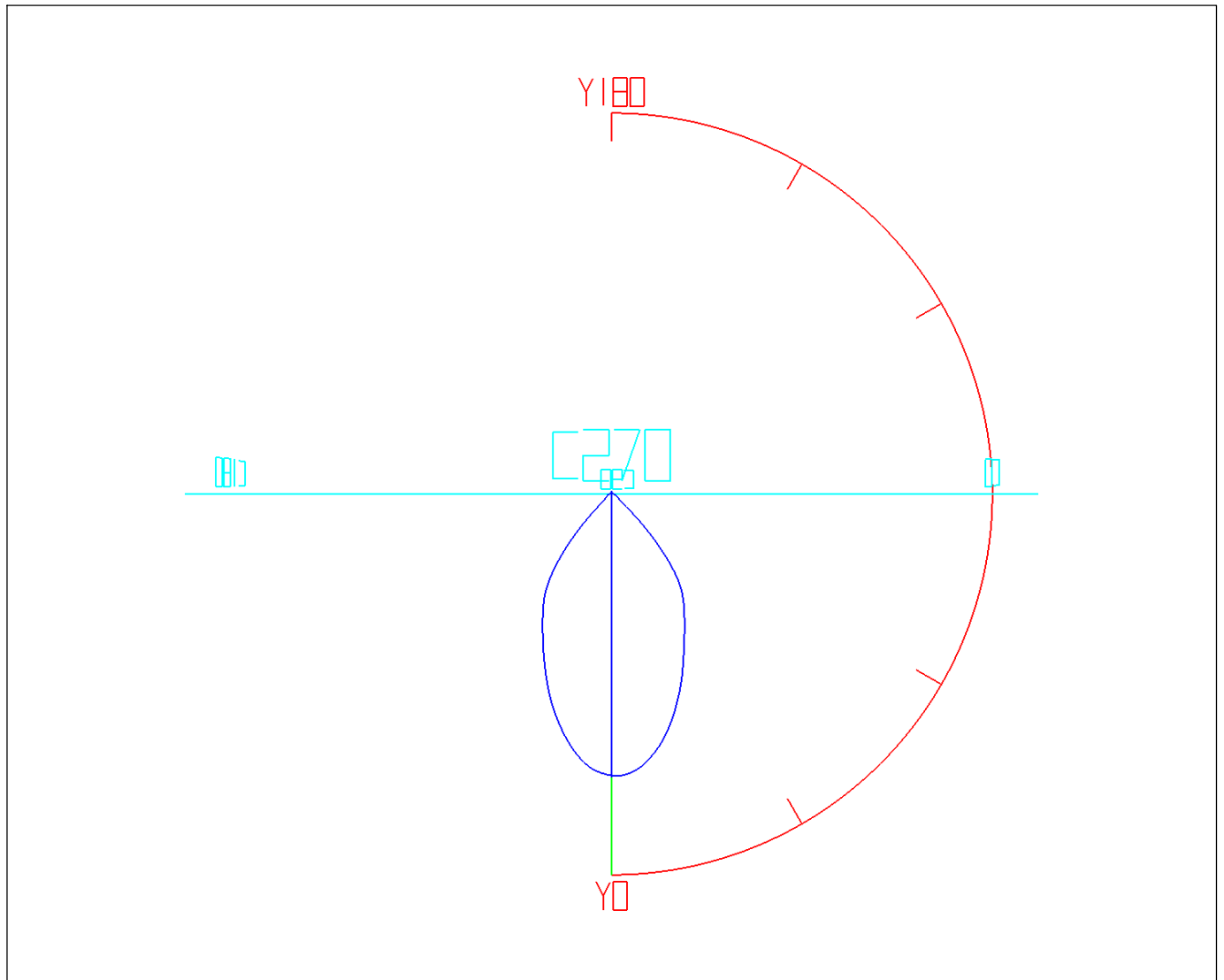


C Plane	[50%MaxAng.]	[10%MaxAng.]	Unit:cd
C0.0_180.0	60.3	92.7	
C90.0_270.0	60.6	93.5	

**3D Light Intensity Distribution Modal**

Lum. Name: CL2-13TW 6500K RA90 Reflector 60D	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	1.02	1.02	0.09	0.09	47.0-48.0	6.88	1009.93	0.61	89.85
1.0-2.0	3.04	4.06	0.27	0.36	48.0-49.0	5.42	1015.34	0.48	90.33
2.0-3.0	5.05	9.10	0.45	0.81	49.0-50.0	4.30	1019.64	0.38	90.71
3.0-4.0	7.02	16.12	0.62	1.43	50.0-51.0	3.56	1023.20	0.32	91.03
4.0-5.0	8.96	25.08	0.80	2.23	51.0-52.0	3.15	1026.35	0.28	91.31
5.0-6.0	10.84	35.92	0.96	3.20	52.0-53.0	2.96	1029.31	0.26	91.58
6.0-7.0	12.64	48.56	1.12	4.32	53.0-54.0	2.86	1032.18	0.25	91.83
7.0-8.0	14.38	62.94	1.28	5.60	54.0-55.0	2.79	1034.97	0.25	92.08
8.0-9.0	16.03	78.97	1.43	7.03	55.0-56.0	2.73	1037.70	0.24	92.32
9.0-10.0	17.59	96.56	1.57	8.59	56.0-57.0	2.68	1040.39	0.24	92.56
10.0-11.0	19.07	115.63	1.70	10.29	57.0-58.0	2.63	1043.01	0.23	92.79
11.0-12.0	20.45	136.08	1.82	12.11	58.0-59.0	2.57	1045.58	0.23	93.02
12.0-13.0	21.72	157.80	1.93	14.04	59.0-60.0	2.50	1048.08	0.22	93.24
13.0-14.0	22.90	180.70	2.04	16.08	60.0-61.0	2.43	1050.51	0.22	93.46
14.0-15.0	23.96	204.66	2.13	18.21	61.0-62.0	2.37	1052.88	0.21	93.67
15.0-16.0	24.93	229.59	2.22	20.43	62.0-63.0	2.30	1055.18	0.20	93.88
16.0-17.0	25.79	255.38	2.29	22.72	63.0-64.0	2.24	1057.42	0.20	94.08
17.0-18.0	26.54	281.91	2.36	25.08	64.0-65.0	2.17	1059.58	0.19	94.27
18.0-19.0	27.19	309.10	2.42	27.50	65.0-66.0	2.09	1061.68	0.19	94.45
19.0-20.0	27.73	336.83	2.47	29.97	66.0-67.0	2.02	1063.70	0.18	94.63
20.0-21.0	28.18	365.01	2.51	32.47	67.0-68.0	1.95	1065.65	0.17	94.81
21.0-22.0	28.53	393.54	2.54	35.01	68.0-69.0	1.88	1067.53	0.17	94.97
22.0-23.0	28.80	422.34	2.56	37.57	69.0-70.0	1.81	1069.33	0.16	95.14
23.0-24.0	29.00	451.34	2.58	40.15	70.0-71.0	1.74	1071.07	0.15	95.29
24.0-25.0	29.15	480.50	2.59	42.75	71.0-72.0	1.67	1072.74	0.15	95.44
25.0-26.0	29.26	509.76	2.60	45.35	72.0-73.0	1.60	1074.33	0.14	95.58
26.0-27.0	29.33	539.08	2.61	47.96	73.0-74.0	1.53	1075.86	0.14	95.72
27.0-28.0	29.36	568.44	2.61	50.57	74.0-75.0	1.46	1077.32	0.13	95.85
28.0-29.0	29.36	597.81	2.61	53.19	75.0-76.0	1.39	1078.71	0.12	95.97
29.0-30.0	29.35	627.15	2.61	55.80	76.0-77.0	1.33	1080.04	0.12	96.09
30.0-31.0	29.30	656.45	2.61	58.40	77.0-78.0	1.26	1081.30	0.11	96.20
31.0-32.0	29.20	685.65	2.60	61.00	78.0-79.0	1.20	1082.49	0.11	96.31
32.0-33.0	29.03	714.68	2.58	63.58	79.0-80.0	1.14	1083.63	0.10	96.41
33.0-34.0	28.77	743.46	2.56	66.14	80.0-81.0	1.08	1084.71	0.10	96.50
34.0-35.0	28.38	771.84	2.53	68.67	81.0-82.0	1.02	1085.73	0.09	96.59
35.0-36.0	27.80	799.65	2.47	71.14	82.0-83.0	0.96	1086.69	0.09	96.68
36.0-37.0	26.97	826.62	2.40	73.54	83.0-84.0	0.91	1087.60	0.08	96.76
37.0-38.0	25.85	852.46	2.30	75.84	84.0-85.0	0.85	1088.45	0.08	96.84
38.0-39.0	24.46	876.92	2.18	78.02	85.0-86.0	0.78	1089.24	0.07	96.91
39.0-40.0	22.83	899.75	2.03	80.05	86.0-87.0	0.72	1089.95	0.06	96.97
40.0-41.0	20.98	920.73	1.87	81.91	87.0-88.0	0.66	1090.61	0.06	97.03
41.0-42.0	18.98	939.71	1.69	83.60	88.0-89.0	0.61	1091.22	0.05	97.08
42.0-43.0	16.88	956.59	1.50	85.10	89.0-90.0	0.57	1091.80	0.05	97.13
43.0-44.0	14.73	971.31	1.31	86.42	90.0-91.0	0.55	1092.35	0.05	97.18
44.0-45.0	12.59	983.91	1.12	87.54	91.0-92.0	0.54	1092.89	0.05	97.23
45.0-46.0	10.53	994.44	0.94	88.47	92.0-93.0	0.53	1093.42	0.05	97.28
46.0-47.0	8.61	1003.05	0.77	89.24	93.0-94.0	0.52	1093.93	0.05	97.32

# IES Indoor Report

Photometric Filename:CL2-13TW 6500K RA90 Reflector 60D.IES

## Zonal Flux Tabulation - (Cont.)

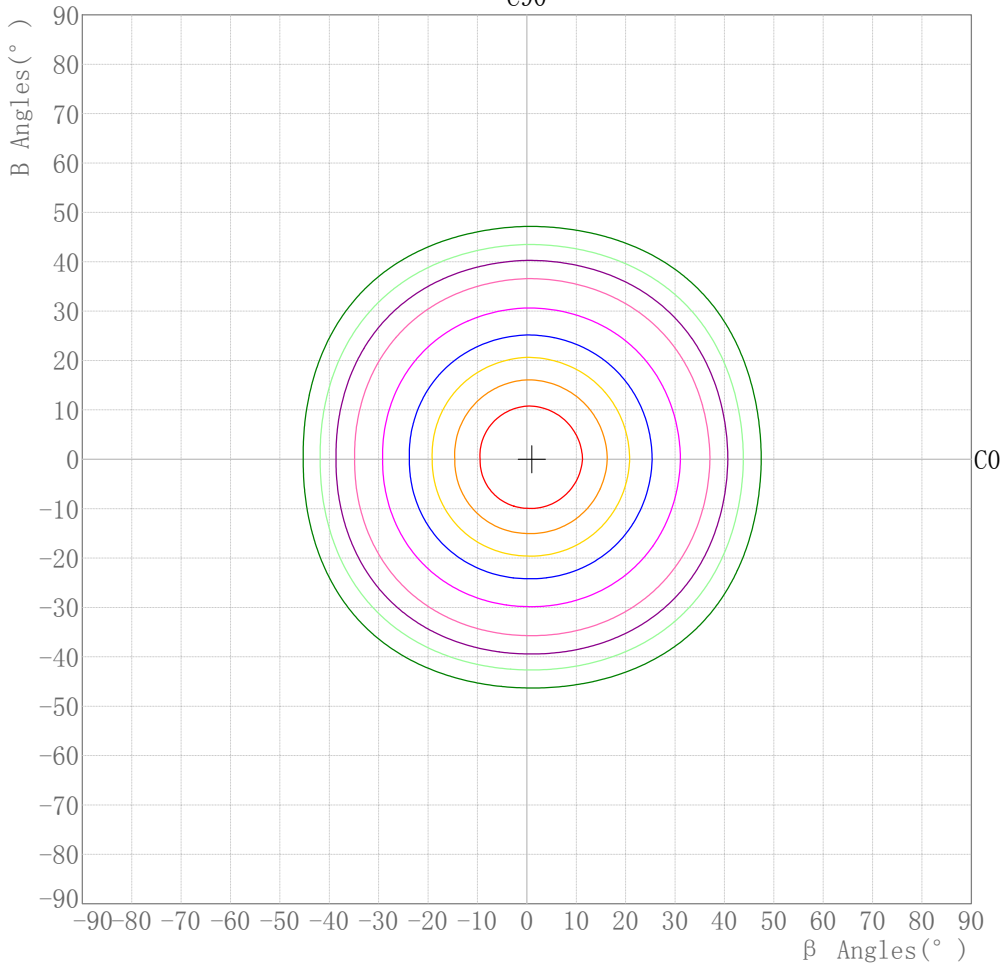
Zone (γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp	Zone (γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
94.0-95.0	0.51	1094.44	0.05	97.37	141.0-142.0	0.42	1114.27	0.04	99.13
95.0-96.0	0.50	1094.94	0.04	97.41	142.0-143.0	0.41	1114.68	0.04	99.17
96.0-97.0	0.49	1095.42	0.04	97.46	143.0-144.0	0.41	1115.09	0.04	99.21
97.0-98.0	0.48	1095.90	0.04	97.50	144.0-145.0	0.41	1115.50	0.04	99.24
98.0-99.0	0.47	1096.37	0.04	97.54	145.0-146.0	0.40	1115.90	0.04	99.28
99.0-100.0	0.46	1096.82	0.04	97.58	146.0-147.0	0.40	1116.30	0.04	99.31
100.0-101.0	0.45	1097.28	0.04	97.62	147.0-148.0	0.39	1116.69	0.03	99.35
101.0-102.0	0.44	1097.72	0.04	97.66	148.0-149.0	0.39	1117.08	0.03	99.38
102.0-103.0	0.44	1098.16	0.04	97.70	149.0-150.0	0.38	1117.46	0.03	99.42
103.0-104.0	0.43	1098.59	0.04	97.74	150.0-151.0	0.37	1117.84	0.03	99.45
104.0-105.0	0.43	1099.02	0.04	97.78	151.0-152.0	0.37	1118.20	0.03	99.48
105.0-106.0	0.42	1099.44	0.04	97.81	152.0-153.0	0.36	1118.56	0.03	99.52
106.0-107.0	0.42	1099.86	0.04	97.85	153.0-154.0	0.35	1118.91	0.03	99.55
107.0-108.0	0.41	1100.27	0.04	97.89	154.0-155.0	0.34	1119.26	0.03	99.58
108.0-109.0	0.41	1100.68	0.04	97.92	155.0-156.0	0.34	1119.59	0.03	99.61
109.0-110.0	0.41	1101.09	0.04	97.96	156.0-157.0	0.33	1119.92	0.03	99.64
110.0-111.0	0.41	1101.50	0.04	98.00	157.0-158.0	0.32	1120.24	0.03	99.66
111.0-112.0	0.41	1101.91	0.04	98.03	158.0-159.0	0.31	1120.54	0.03	99.69
112.0-113.0	0.40	1102.31	0.04	98.07	159.0-160.0	0.30	1120.84	0.03	99.72
113.0-114.0	0.40	1102.71	0.04	98.11	160.0-161.0	0.29	1121.13	0.03	99.74
114.0-115.0	0.40	1103.11	0.04	98.14	161.0-162.0	0.28	1121.41	0.02	99.77
115.0-116.0	0.40	1103.52	0.04	98.18	162.0-163.0	0.26	1121.67	0.02	99.79
116.0-117.0	0.40	1103.92	0.04	98.21	163.0-164.0	0.25	1121.92	0.02	99.81
117.0-118.0	0.40	1104.32	0.04	98.25	164.0-165.0	0.24	1122.16	0.02	99.84
118.0-119.0	0.40	1104.72	0.04	98.28	165.0-166.0	0.23	1122.39	0.02	99.86
119.0-120.0	0.40	1105.13	0.04	98.32	166.0-167.0	0.21	1122.60	0.02	99.87
120.0-121.0	0.40	1105.53	0.04	98.36	167.0-168.0	0.20	1122.81	0.02	99.89
121.0-122.0	0.41	1105.94	0.04	98.39	168.0-169.0	0.19	1122.99	0.02	99.91
122.0-123.0	0.41	1106.34	0.04	98.43	169.0-170.0	0.17	1123.16	0.02	99.92
123.0-124.0	0.41	1106.75	0.04	98.46	170.0-171.0	0.16	1123.32	0.01	99.94
124.0-125.0	0.41	1107.16	0.04	98.50	171.0-172.0	0.14	1123.46	0.01	99.95
125.0-126.0	0.41	1107.57	0.04	98.54	172.0-173.0	0.13	1123.59	0.01	99.96
126.0-127.0	0.41	1107.98	0.04	98.57	173.0-174.0	0.11	1123.70	0.01	99.97
127.0-128.0	0.41	1108.39	0.04	98.61	174.0-175.0	0.09	1123.79	0.01	99.98
128.0-129.0	0.41	1108.81	0.04	98.65	175.0-176.0	0.08	1123.87	0.01	99.99
129.0-130.0	0.42	1109.22	0.04	98.68	176.0-177.0	0.06	1123.93	0.01	99.99
130.0-131.0	0.42	1109.64	0.04	98.72	177.0-178.0	0.04	1123.97	0.00	100.00
131.0-132.0	0.42	1110.06	0.04	98.76	178.0-179.0	0.03	1124.00	0.00	100.00
132.0-133.0	0.42	1110.48	0.04	98.80	179.0-180.0	0.01	1124.01	0.00	100.00
133.0-134.0	0.42	1110.90	0.04	98.83					
134.0-135.0	0.42	1111.32	0.04	98.87					
135.0-136.0	0.42	1111.75	0.04	98.91					
136.0-137.0	0.42	1112.17	0.04	98.95					
137.0-138.0	0.42	1112.59	0.04	98.98					
138.0-139.0	0.42	1113.01	0.04	99.02					
139.0-140.0	0.42	1113.43	0.04	99.06					
140.0-141.0	0.42	1113.85	0.04	99.10					

**Rectangle ISO Lighting Intensity Diagram**

Lum. Name: CL2-13TW 6500K RA90 Reflector 60D	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**

C90



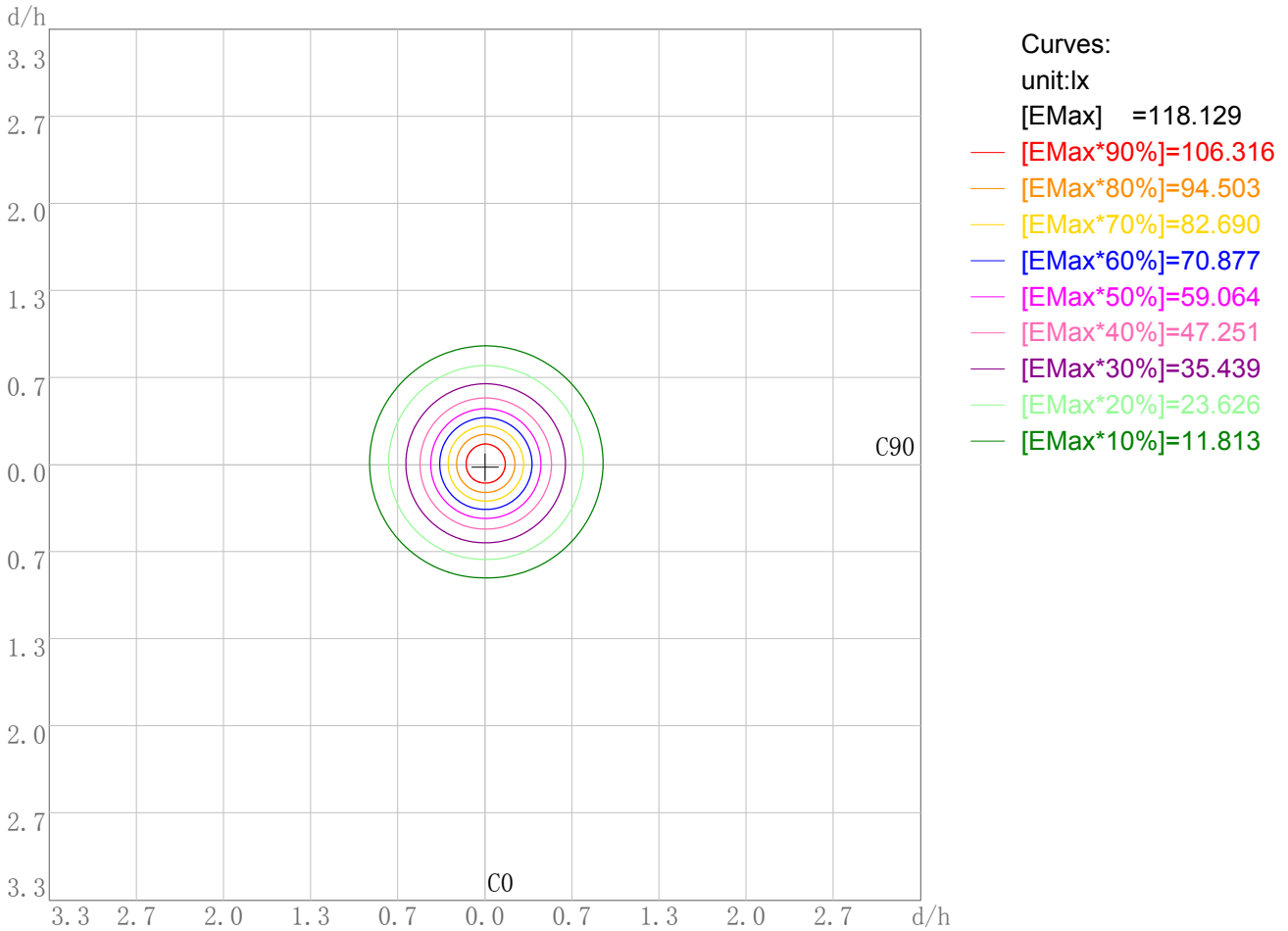
- Curves:**  
 [Unit: cd]  
 [IMax] =1063.643
- [IMax\*90%]=957.279
  - [IMax\*80%]=850.914
  - [IMax\*70%]=744.550
  - [IMax\*60%]=638.186
  - [IMax\*50%]=531.821
  - [IMax\*40%]=425.457
  - [IMax\*30%]=319.093
  - [IMax\*20%]=212.729
  - [IMax\*10%]=106.364

Maximum Light Intensity(cd): 1063.64  
 Maximum Cand.@Angle: H=1.0°,V=0.0°

**Plane ISO-Illuminance Diagram**

Lum. Name: CL2-13TW 6500K RA90 Reflector 60D	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**

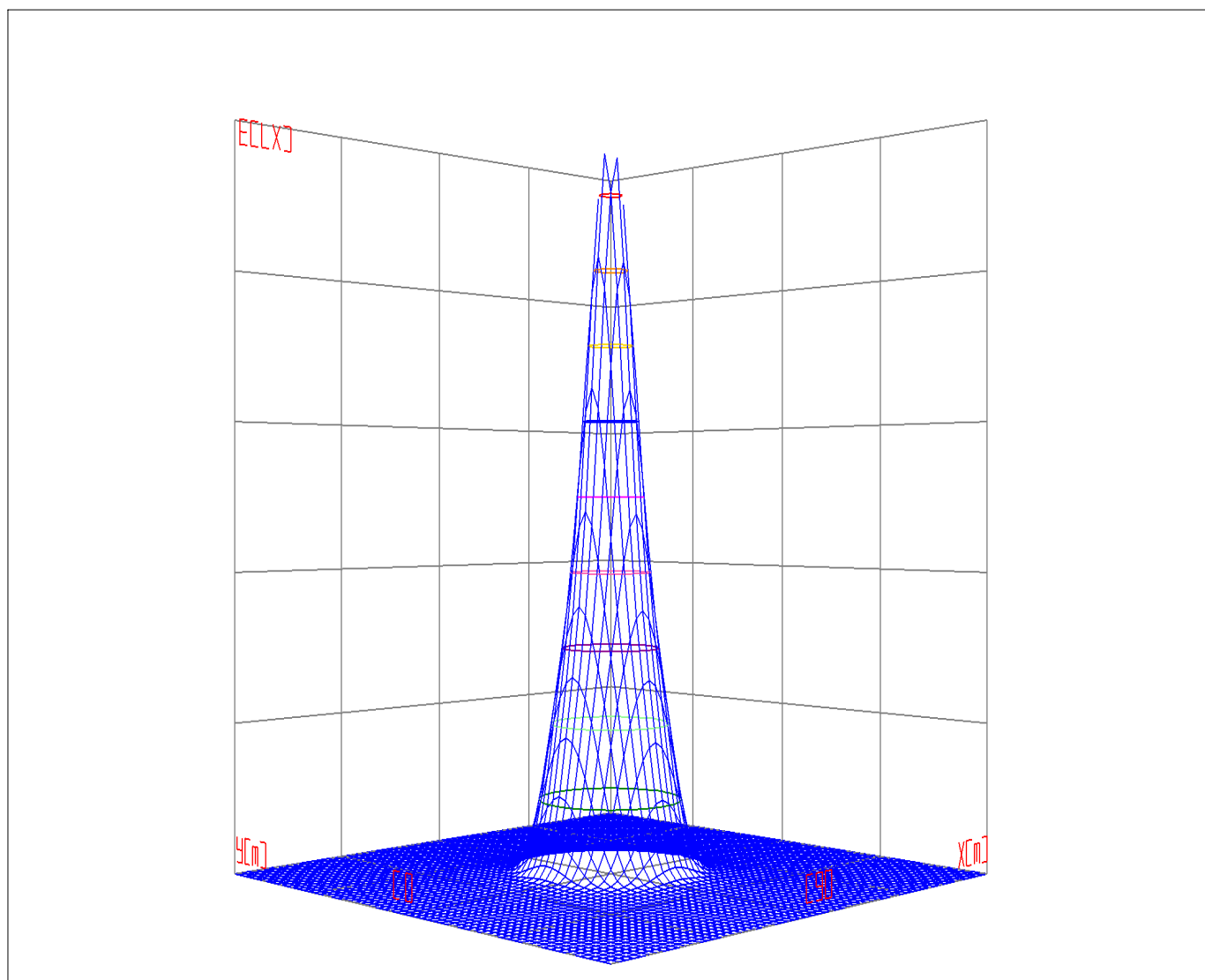


Working Plane Luminaire Mounting Height(m): 3.00  
 Working Plane Maximum Illuminance(lx): 118.13  
 Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

**3D Plane ISO Illuminance Diagram**

Lum. Name: CL2-13TW 6500K RA90 Reflector 60D	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**



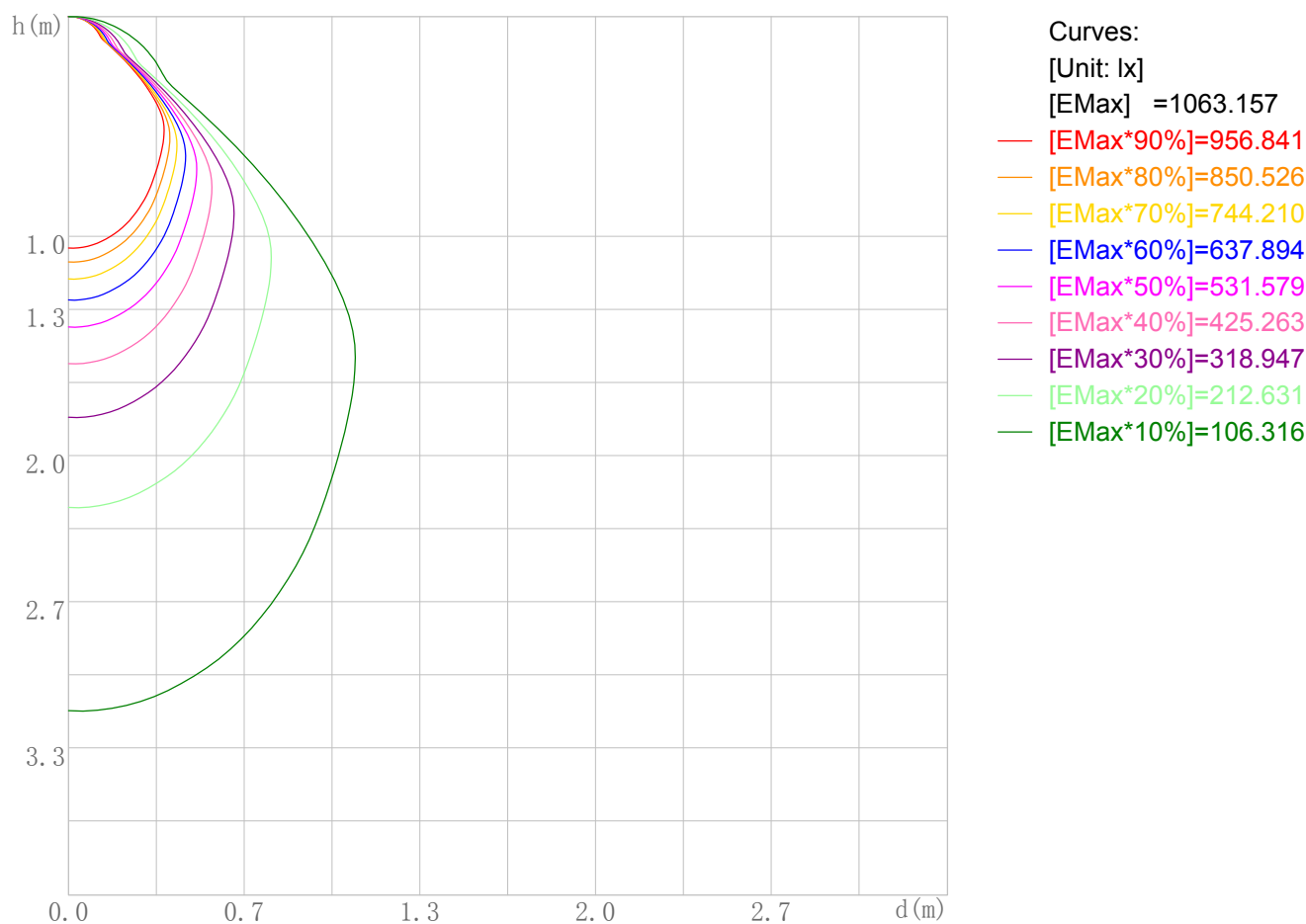
Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —  
 View Angles(deg): 0    Height(m): 3.0    Distance(m): 10.0



**Space ISO Illuminance Diagram**

Lum. Name: CL2-13TW 6500K RA90 Reflector 60D	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:1063.16lx,1.0deg  
 Plane Maximum Lighting Intensity and @Angle:1063.643cd,0deg

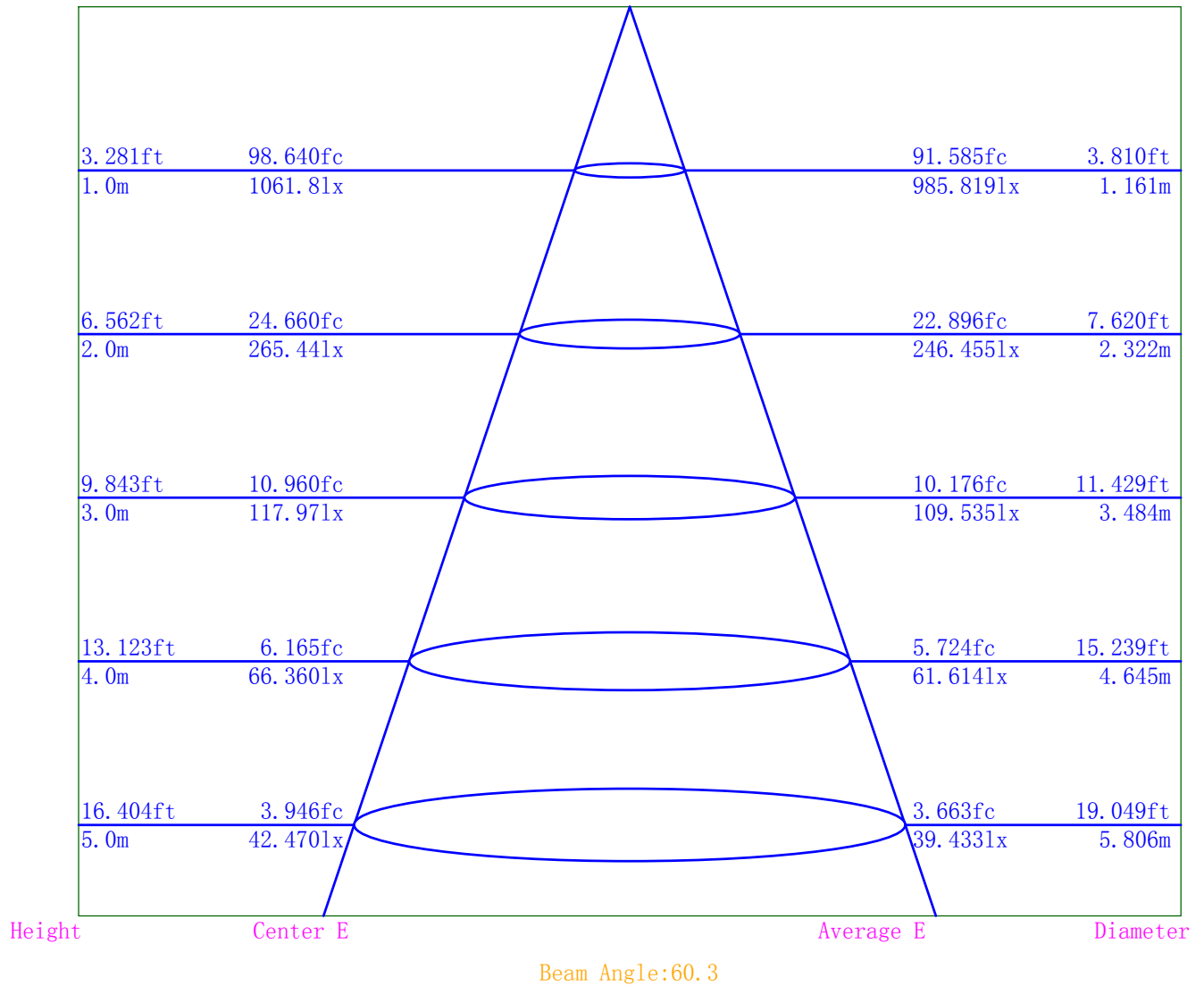
**IES Indoor Report**

**Photometric Filename:CL2-13TW 6500K RA90 Reflector 60D.IES**

**Illuminance-Distance Diagram**

Lum. Name: CL2-13TW 6500K RA90 Reflector 60D	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 60D	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

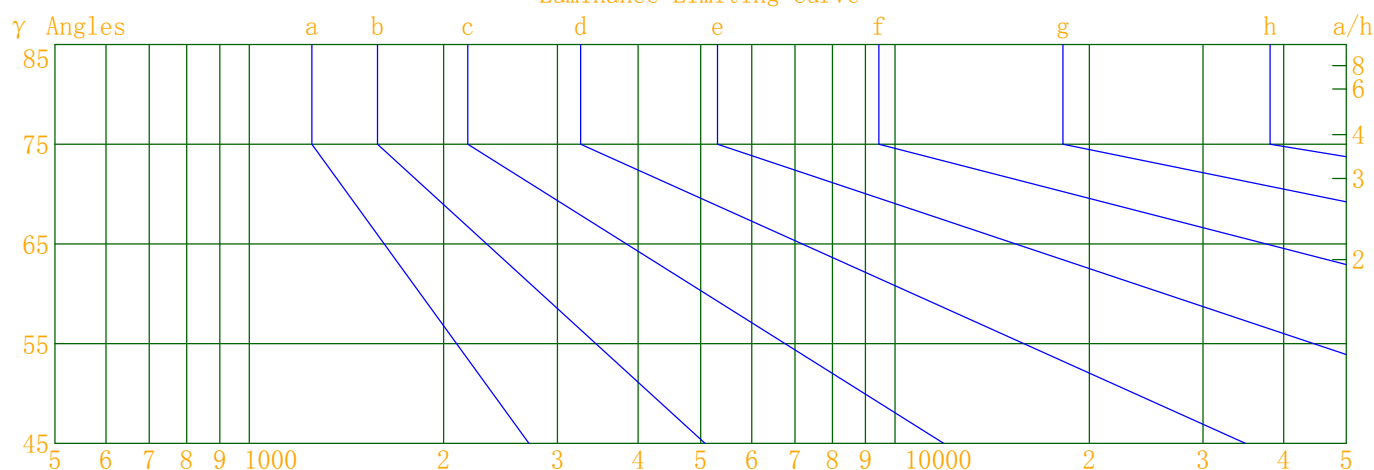
Glare Grade Table

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	400	136	95	91	89	88	89	102	149
C90	375	133	91	88	85	83	84	94	139

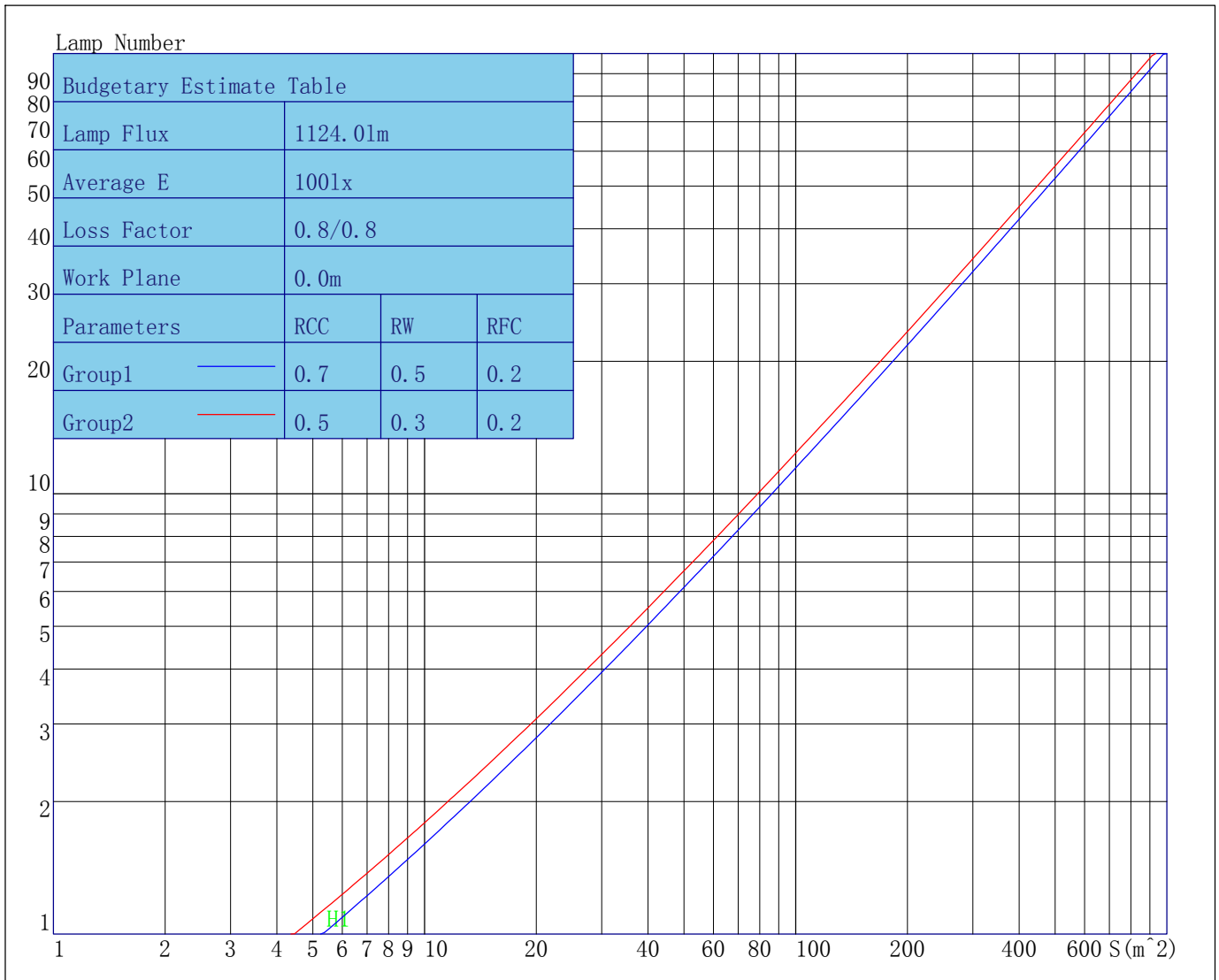
Luminance Limiting Curve



Luminous Size: Length(m)=0.498 Width(m)=0.498 Height(m)=0.750 Area(m<sup>2</sup>)=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 60D	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 60D	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	108	106	103	109	106	103	101	101	99	97	97	95	94	93	92	91	89
2	105	100	95	91	103	98	93	90	94	90	87	90	87	85	87	85	83	81
3	99	92	86	81	97	90	85	81	87	82	79	84	80	77	81	78	76	74
4	93	85	78	74	91	83	77	73	81	76	72	78	74	71	76	72	69	68
5	88	78	72	67	86	77	71	67	75	70	66	73	68	65	71	67	64	62
6	83	73	66	61	81	72	66	61	70	64	60	68	63	60	67	62	59	57
7	78	68	61	57	77	67	61	56	65	60	56	64	59	55	63	58	55	53
8	74	63	57	52	72	63	56	52	61	56	52	60	55	51	59	54	51	49
9	70	59	53	49	69	59	53	48	58	52	48	56	51	48	55	51	47	46
10	66	56	49	45	65	55	49	45	54	49	45	53	48	45	52	48	44	43

# IES Indoor Report

**Photometric Filename:CL2-13TW 6500K RA90 Reflector 60D.IES**

## Unified Glare Rating Table

Lum. Name: CL2-13TW 6500K RA90 Reflector 60D	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	5.4	6.5	5.8	6.8	7.2	5.2	6.2	5.6	6.6	7.0
Y=3H	5.5	6.5	5.9	6.9	7.3	5.3	6.2	5.7	6.6	7.1
Y=4H	5.6	6.5	6.1	6.9	7.4	5.4	6.3	5.8	6.7	7.1
Y=6H	5.7	6.6	6.2	7.0	7.5	5.5	6.3	6.0	6.8	7.2
Y=8H	5.8	6.6	6.3	7.1	7.5	5.6	6.4	6.1	6.8	7.3
Y=12H	5.9	6.7	6.4	7.1	7.6	5.7	6.4	6.2	6.9	7.4
X=4H Y=2H	5.2	6.1	5.7	6.5	7.0	5.0	5.9	5.5	6.3	6.8
Y=3H	5.5	6.2	6.0	6.7	7.2	5.3	6.0	5.7	6.5	6.9
Y=4H	5.7	6.3	6.2	6.8	7.3	5.4	6.1	5.9	6.6	7.1
Y=6H	5.9	6.5	6.5	7.0	7.6	5.7	6.3	6.2	6.8	7.3
Y=8H	6.1	6.6	6.6	7.1	7.7	5.8	6.4	6.4	6.9	7.4
Y=12H	6.3	6.8	6.9	7.3	7.9	6.0	6.5	6.6	7.0	7.6
X=8H Y=4H	5.7	6.2	6.2	6.7	7.2	5.5	6.0	6.0	6.5	7.0
Y=6H	6.1	6.5	6.6	7.0	7.6	5.8	6.3	6.4	6.8	7.4
Y=8H	6.3	6.7	6.9	7.3	7.8	6.1	6.4	6.6	7.0	7.6
Y=12H	6.7	7.0	7.3	7.6	8.2	6.4	6.7	7.0	7.3	7.9
X=12H Y=4H	5.7	6.1	6.2	6.7	7.2	5.4	5.9	6.0	6.4	7.0
Y=6H	6.1	6.5	6.7	7.0	7.6	5.8	6.2	6.4	6.8	7.4
Y=8H	6.4	6.7	7.0	7.3	7.9	6.1	6.5	6.7	7.0	7.7
Variations with the objerver position at spacings										
S=1.0H	0.2/-0.2					0.2/-0.2				
S=1.5H	0.4/-0.4					0.4/-0.4				
S=2.0H	0.4/-0.5					0.5/-0.5				
Reduced UGR Table:										
Nordic Standard Table:	BKO					BKO				
Correction Value	1.3					1.2				

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 60D.IES

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## Candela Tabulation

V/H	C0.0	C90.0	C180.0	C270.0
γ 0.0	1061.76	1061.76	1061.76	1061.76
γ 1.0	1063.64	1061.22	1058.02	1059.21
γ 2.0	1062.37	1058.42	1052.93	1055.52
γ 3.0	1058.73	1054.08	1047.04	1050.13
γ 4.0	1053.40	1047.93	1038.88	1042.43
γ 5.0	1045.90	1040.51	1028.52	1032.12
γ 6.0	1036.07	1030.59	1015.17	1019.49
γ 7.0	1023.76	1018.14	999.92	1005.44
γ 8.0	1009.71	1003.81	983.71	990.42
γ 9.0	995.07	988.01	966.11	973.69
γ 10.0	979.38	971.04	947.14	956.10
γ 11.0	962.38	953.27	926.87	937.16
γ 12.0	943.39	934.95	906.40	917.14
γ 13.0	923.29	915.29	885.33	896.37
γ 14.0	902.01	894.84	863.62	874.45
γ 15.0	879.92	874.29	841.83	851.45
γ 16.0	857.34	852.90	819.52	828.40
γ 17.0	833.94	830.38	796.11	805.21
γ 18.0	810.67	807.15	772.27	781.89
γ 19.0	787.72	783.72	748.32	758.49
γ 20.0	764.17	759.90	724.14	734.71
γ 21.0	740.07	735.83	700.51	710.70
γ 22.0	715.49	711.47	677.64	687.18
γ 23.0	691.29	687.33	655.16	664.22
γ 24.0	667.97	664.22	633.62	642.03
γ 25.0	645.77	641.88	612.52	620.67
γ 26.0	624.93	620.16	591.66	600.65
γ 27.0	604.90	599.47	571.91	581.37
γ 28.0	585.75	578.96	553.26	562.95
γ 29.0	567.58	560.15	535.21	545.53
γ 30.0	550.03	542.59	517.66	528.93
γ 31.0	533.24	525.71	500.26	512.54
γ 32.0	516.94	509.47	482.92	495.86
γ 33.0	500.35	493.54	464.64	478.47
γ 34.0	483.48	476.92	444.93	460.86
γ 35.0	466.35	459.23	422.42	441.52
γ 36.0	448.21	439.29	397.18	418.81
γ 37.0	427.21	415.55	368.99	392.66
γ 38.0	402.40	388.45	338.74	363.58
γ 39.0	373.93	359.11	307.28	332.50
γ 40.0	342.70	327.96	274.34	300.05
γ 41.0	308.60	295.84	240.84	266.80
γ 42.0	274.00	262.77	207.29	233.66
γ 43.0	240.03	229.13	174.12	201.29
γ 44.0	207.16	196.12	142.49	170.27
γ 45.0	175.58	164.81	113.15	141.14
γ 46.0	145.41	136.02	87.43	113.88

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# IES Indoor Report

Photometric Filename: CL2-13TW 6500K RA90 Reflector 60D.IES

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## Candela Tabulation - (Cont.)

V/H	C0.0	C90.0	C180.0	C270.0
γ 47.0	117.69	110.14	66.02	89.17
γ 48.0	92.71	87.25	49.92	67.77
γ 49.0	71.10	68.15	39.62	50.99
γ 50.0	54.25	53.16	35.40	39.81
γ 51.0	43.21	43.20	33.32	34.15
γ 52.0	38.48	37.75	31.77	31.82
γ 53.0	36.59	34.83	30.41	30.57
γ 54.0	35.06	33.37	29.37	29.54
γ 55.0	33.78	32.28	28.37	28.59
γ 56.0	32.60	31.24	27.53	27.71
γ 57.0	31.57	30.25	26.67	26.94
γ 58.0	30.58	29.32	25.75	26.09
γ 59.0	29.60	28.34	24.66	25.26
γ 60.0	28.37	27.36	23.75	24.36
γ 61.0	27.33	26.33	22.85	23.55
γ 62.0	26.36	25.30	22.04	22.71
γ 63.0	25.41	24.28	21.25	21.97
γ 64.0	24.48	23.33	20.39	21.13
γ 65.0	23.45	22.37	19.60	20.30
γ 66.0	22.50	21.33	18.88	19.51
γ 67.0	21.54	20.40	18.09	18.71
γ 68.0	20.52	19.47	17.34	17.90
γ 69.0	19.56	18.49	16.71	17.19
γ 70.0	18.66	17.60	16.03	16.49
γ 71.0	17.75	16.77	15.37	15.71
γ 72.0	16.80	15.90	14.76	15.05
γ 73.0	15.99	15.06	14.11	14.40
γ 74.0	15.20	14.34	13.34	13.72
γ 75.0	14.35	13.56	12.77	13.12
γ 76.0	13.63	12.79	12.18	12.56
γ 77.0	12.92	12.13	11.47	11.94
γ 78.0	12.16	11.41	10.84	11.30
γ 79.0	11.51	10.68	10.35	10.79
γ 80.0	10.97	10.16	9.83	10.25
γ 81.0	10.38	9.61	9.20	9.57
γ 82.0	9.66	8.98	8.70	9.00
γ 83.0	9.12	8.41	8.23	8.52
γ 84.0	8.61	7.94	7.75	8.05
γ 85.0	8.07	7.51	6.98	7.47
γ 86.0	7.29	6.97	6.32	6.81
γ 87.0	6.72	6.18	5.79	6.38
γ 88.0	6.26	5.61	5.34	5.90
γ 89.0	5.79	5.11	4.88	5.61
γ 90.0	5.46	4.71	4.77	5.48
γ 91.0	5.32	4.60	4.66	5.34
γ 92.0	5.20	4.50	4.57	5.22
γ 93.0	5.09	4.40	4.49	5.11

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## IES Indoor Report

Photometric Filename: CL2-13TW 6500K RA90 Reflector 60D.IES

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### Candela Tabulation - (Cont.)

V/H	C0.0	C90.0	C180.0	C270.0
γ 94.0	4.98	4.31	4.40	5.01
γ 95.0	4.87	4.23	4.32	4.92
γ 96.0	4.77	4.16	4.25	4.82
γ 97.0	4.67	4.08	4.18	4.74
γ 98.0	4.59	4.01	4.12	4.66
γ 99.0	4.51	3.94	4.07	4.59
γ 100.0	4.43	3.89	4.02	4.52
γ 101.0	4.36	3.83	3.97	4.46
γ 102.0	4.30	3.79	3.94	4.41
γ 103.0	4.25	3.76	3.92	4.38
γ 104.0	4.19	3.72	3.90	4.33
γ 105.0	4.16	3.70	3.87	4.30
γ 106.0	4.12	3.67	3.87	4.28
γ 107.0	4.09	3.65	3.86	4.27
γ 108.0	4.07	3.66	3.86	4.26
γ 109.0	4.06	3.66	3.87	4.25
γ 110.0	4.04	3.65	3.88	4.24
γ 111.0	4.04	3.66	3.90	4.25
γ 112.0	4.04	3.67	3.92	4.27
γ 113.0	4.06	3.70	3.96	4.28
γ 114.0	4.06	3.72	3.99	4.30
γ 115.0	4.07	3.74	4.02	4.33
γ 116.0	4.10	3.79	4.07	4.36
γ 117.0	4.13	3.82	4.12	4.39
γ 118.0	4.15	3.85	4.18	4.44
γ 119.0	4.19	3.90	4.22	4.48
γ 120.0	4.23	3.94	4.28	4.53
γ 121.0	4.28	4.01	4.35	4.59
γ 122.0	4.33	4.06	4.42	4.64
γ 123.0	4.38	4.13	4.47	4.71
γ 124.0	4.44	4.19	4.56	4.77
γ 125.0	4.50	4.26	4.64	4.84
γ 126.0	4.57	4.33	4.72	4.91
γ 127.0	4.64	4.41	4.80	4.99
γ 128.0	4.72	4.49	4.89	5.07
γ 129.0	4.79	4.57	4.99	5.15
γ 130.0	4.88	4.66	5.08	5.23
γ 131.0	4.96	4.75	5.17	5.31
γ 132.0	5.05	4.85	5.28	5.41
γ 133.0	5.14	4.95	5.39	5.51
γ 134.0	5.24	5.04	5.49	5.60
γ 135.0	5.34	5.14	5.60	5.70
γ 136.0	5.43	5.24	5.70	5.80
γ 137.0	5.54	5.35	5.81	5.90
γ 138.0	5.64	5.46	5.92	5.99
γ 139.0	5.74	5.56	6.03	6.08
γ 140.0	5.85	5.68	6.13	6.19

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## IES Indoor Report

Photometric Filename:CL2-13TW 6500K RA90 Reflector 60D.IES

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### Candela Tabulation - (Cont.)

V/H	C0.0	C90.0	C180.0	C270.0
γ 141.0	5.95	5.78	6.22	6.28
γ 142.0	6.05	5.88	6.32	6.37
γ 143.0	6.14	5.98	6.42	6.45
γ 144.0	6.24	6.08	6.53	6.55
γ 145.0	6.33	6.17	6.61	6.64
γ 146.0	6.42	6.26	6.71	6.72
γ 147.0	6.50	6.35	6.79	6.81
γ 148.0	6.59	6.44	6.88	6.90
γ 149.0	6.69	6.54	6.97	6.97
γ 150.0	6.77	6.62	7.06	7.06
γ 151.0	6.86	6.72	7.14	7.13
γ 152.0	6.95	6.81	7.24	7.22
γ 153.0	7.04	6.89	7.33	7.31
γ 154.0	7.14	7.00	7.42	7.39
γ 155.0	7.23	7.10	7.52	7.48
γ 156.0	7.32	7.19	7.62	7.57
γ 157.0	7.42	7.29	7.70	7.65
γ 158.0	7.51	7.39	7.80	7.74
γ 159.0	7.62	7.49	7.88	7.83
γ 160.0	7.71	7.59	7.97	7.92
γ 161.0	7.81	7.69	8.07	8.00
γ 162.0	7.91	7.78	8.15	8.08
γ 163.0	8.00	7.89	8.23	8.17
γ 164.0	8.10	7.97	8.31	8.24
γ 165.0	8.18	8.07	8.39	8.32
γ 166.0	8.27	8.15	8.48	8.40
γ 167.0	8.36	8.24	8.56	8.47
γ 168.0	8.46	8.32	8.62	8.55
γ 169.0	8.53	8.41	8.69	8.62
γ 170.0	8.62	8.49	8.76	8.70
γ 171.0	8.70	8.56	8.83	8.76
γ 172.0	8.77	8.64	8.89	8.82
γ 173.0	8.85	8.71	8.94	8.88
γ 174.0	8.92	8.78	9.00	8.93
γ 175.0	8.97	8.84	9.04	8.98
γ 176.0	9.02	8.89	9.08	9.02
γ 177.0	9.07	8.94	9.11	9.06
γ 178.0	9.11	8.98	9.14	9.09
γ 179.0	9.14	9.01	9.15	9.09
γ 180.0	9.12	9.12	9.12	9.12

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