

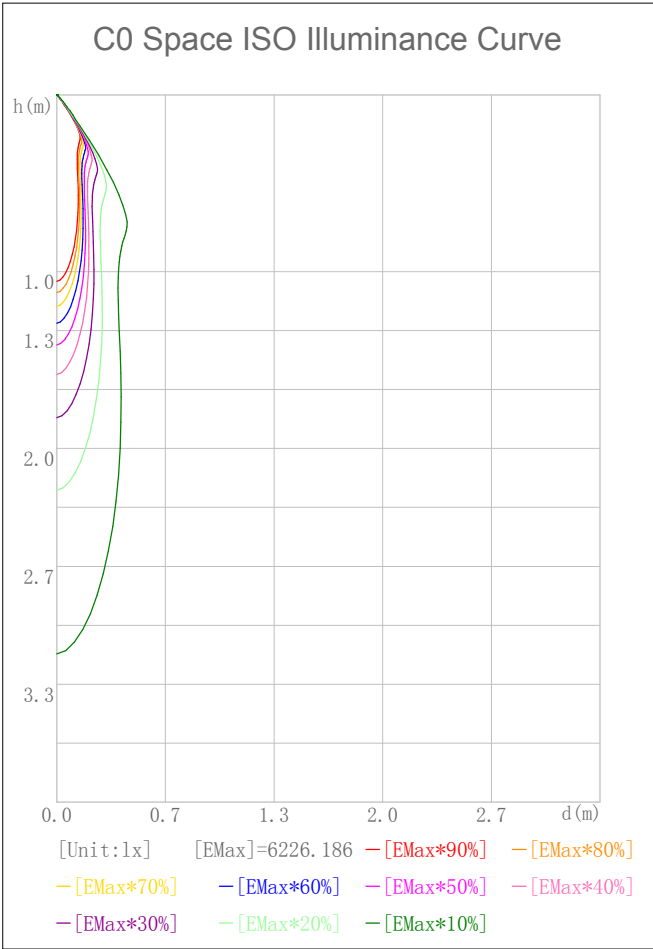
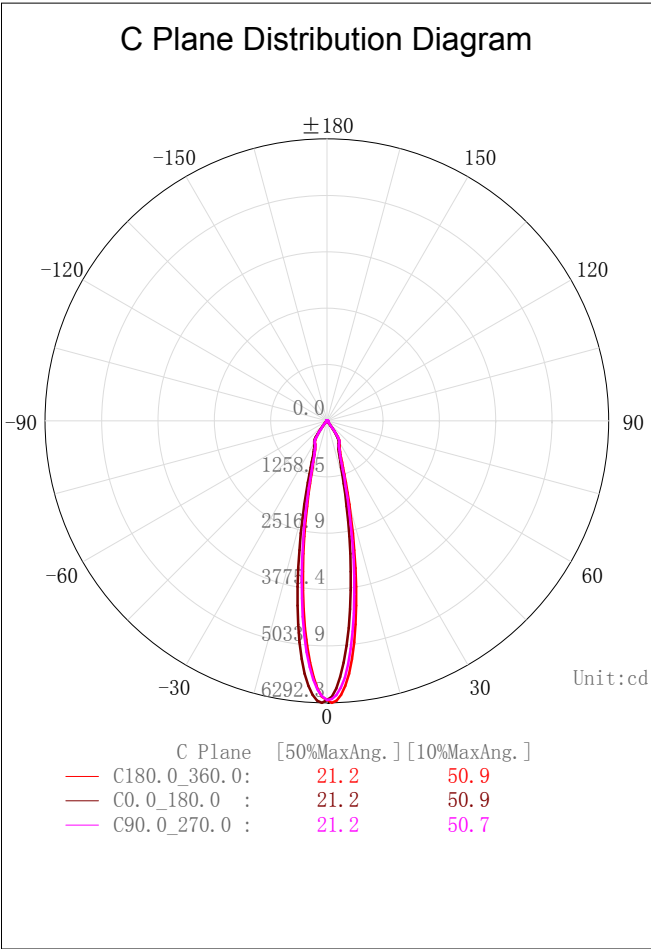
Indoor Luminaire Photometric Data

Description Information

Luminary Name: 55252	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Date: 2018/10/29
Manufacture:	Shld.Ang(°):	Test Machine:GON-2000
Test Lab:	Frequency (Hz):	Lamp CCT (K): 3000 Ra:
Lum. Size (W*L*H):0.050m*-0.050m*0.000m	Lum. Area (m2):0.002	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=30.0 γ=1.0	Temp. (°C): 25 Humidity (%): 50.0

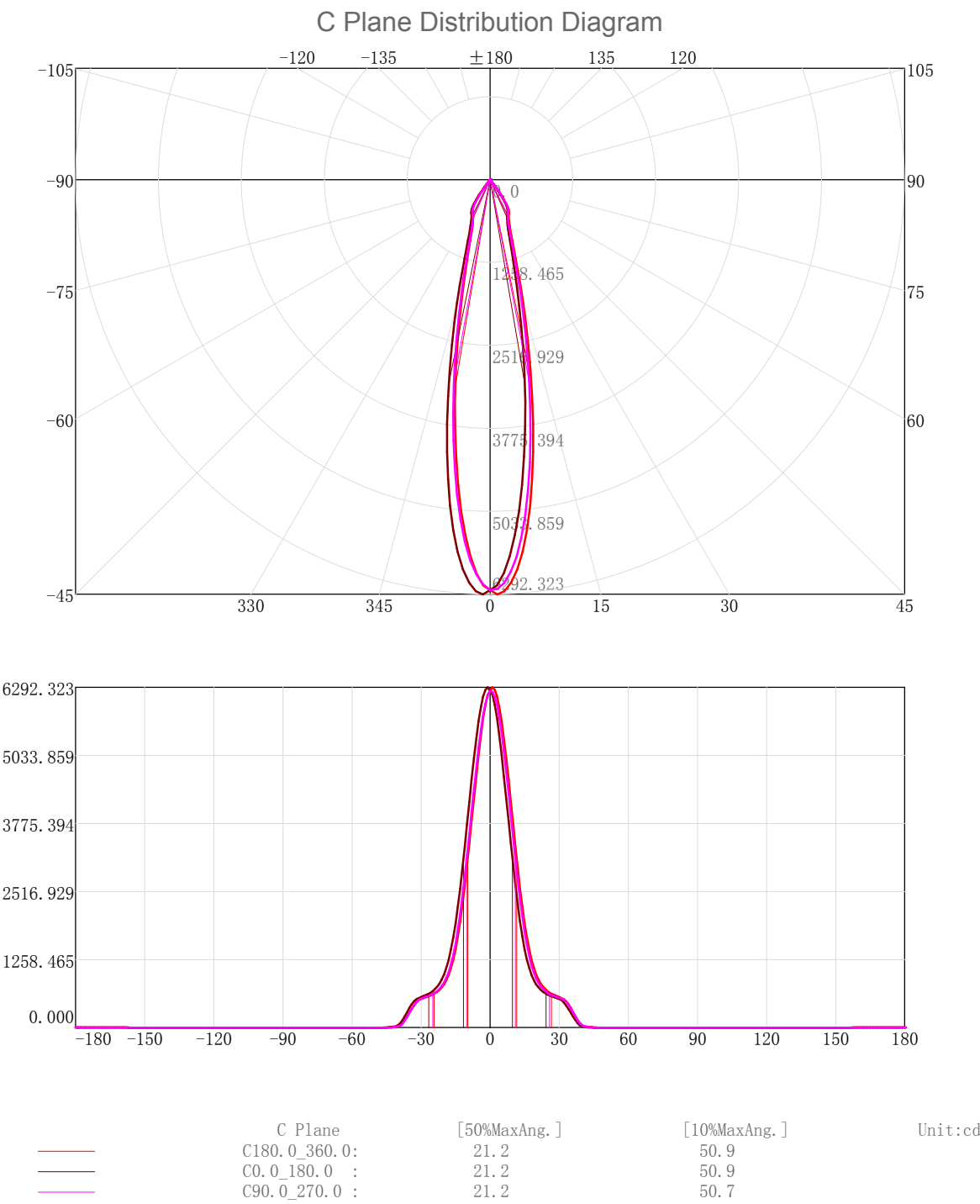
Character Parameter

Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 1414.370	Luminary Flux(lm): 1414.371	Field Angle(10%Imax): 50.9(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1411.887lm 99.82%
Rated Voltage(V): 220	Luminary EER(lm/W): 91.545	Up Lumens&Percent: 2.483lm 0.18%
Tested Power(W): 15.450	Max. Candela(cd): 6292.323	S/MH: C0_a180=0.363 C90_270=0.360
Lamps' Inside: 1	Max Cand@Ang. (°): C=180.0 γ=1.0	CIE Type: Semi-Direct
Tested Electrics(V, A, pf):219.6, 0.126, 0.557	Beam Angle(50%Imax): 21.2(°)	ErP Φuse(90°): 1421.350lm
Lamp Size (W*L*H):0.050m*-0.050m*0.000m	Left=-9.7°, Right=11.5°	IRF (%): 940.535



2D Plane Light Intensity Distribution Curve

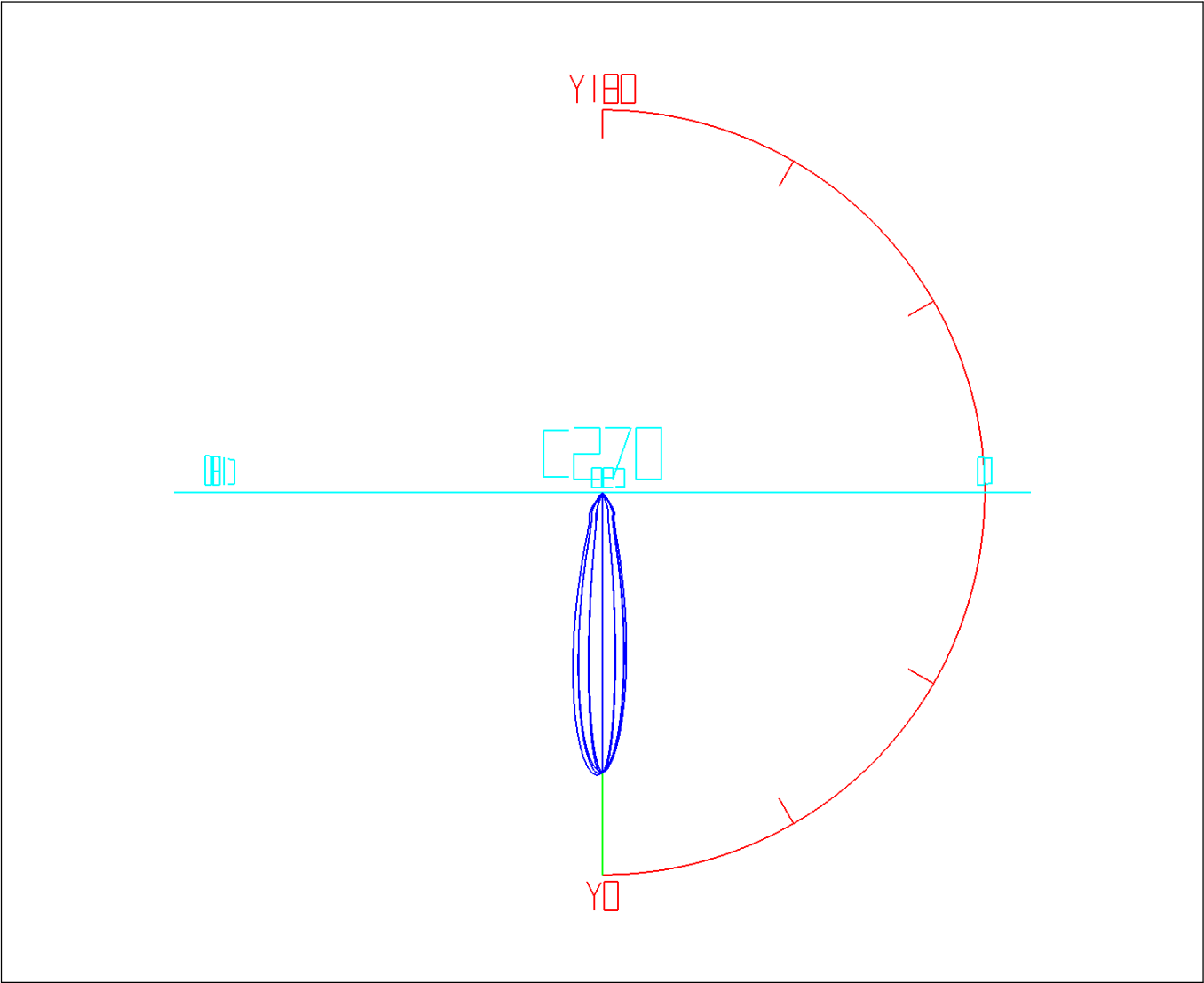
Lum. Name: 55252	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2018/10/29



3D Light Intensity Distribution Modal

Lum. Name: 55252	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2018/10/29

3D Light Intensity Distribution Modal



Curves:

View Angles:

3D Model

Orient:0

Fixture

Tilt:0

Vert. HUD

Roll:0

Hori. HUD

Spin:0

IES Indoor Report

Photometric Filename:UL-15W-COB-1500-AH.IES

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	5.94	5.94	0.42	0.42	47.0-48.0	0.11	1411.82	0.01	99.82
1.0-2.0	17.59	23.53	1.24	1.66	48.0-49.0	0.05	1411.87	0.00	99.82
2.0-3.0	28.59	52.11	2.02	3.68	49.0-50.0	0.02	1411.89	0.00	99.82
3.0-4.0	38.54	90.66	2.73	6.41	50.0-51.0	0.00	1411.89	0.00	99.82
4.0-5.0	47.12	137.77	3.33	9.74	51.0-52.0	0.00	1411.89	0.00	99.82
5.0-6.0	54.04	191.81	3.82	13.56	52.0-53.0	0.00	1411.89	0.00	99.82
6.0-7.0	59.19	251.01	4.19	17.75	53.0-54.0	0.00	1411.89	0.00	99.82
7.0-8.0	62.57	313.58	4.42	22.17	54.0-55.0	0.00	1411.89	0.00	99.82
8.0-9.0	64.24	377.82	4.54	26.71	55.0-56.0	0.00	1411.89	0.00	99.82
9.0-10.0	64.35	442.17	4.55	31.26	56.0-57.0	0.00	1411.89	0.00	99.82
10.0-11.0	63.08	505.25	4.46	35.72	57.0-58.0	0.00	1411.89	0.00	99.82
11.0-12.0	60.66	565.91	4.29	40.01	58.0-59.0	0.00	1411.89	0.00	99.82
12.0-13.0	57.37	623.29	4.06	44.07	59.0-60.0	0.00	1411.89	0.00	99.82
13.0-14.0	53.55	676.83	3.79	47.85	60.0-61.0	0.00	1411.89	0.00	99.82
14.0-15.0	49.49	726.32	3.50	51.35	61.0-62.0	0.00	1411.89	0.00	99.82
15.0-16.0	45.50	771.82	3.22	54.57	62.0-63.0	0.00	1411.89	0.00	99.82
16.0-17.0	41.80	813.62	2.96	57.53	63.0-64.0	0.00	1411.89	0.00	99.82
17.0-18.0	38.57	852.19	2.73	60.25	64.0-65.0	0.00	1411.89	0.00	99.82
18.0-19.0	35.90	888.09	2.54	62.79	65.0-66.0	0.00	1411.89	0.00	99.82
19.0-20.0	33.82	921.91	2.39	65.18	66.0-67.0	0.00	1411.89	0.00	99.82
20.0-21.0	32.24	954.16	2.28	67.46	67.0-68.0	0.00	1411.89	0.00	99.82
21.0-22.0	31.10	985.25	2.20	69.66	68.0-69.0	0.00	1411.89	0.00	99.82
22.0-23.0	30.30	1015.55	2.14	71.80	69.0-70.0	0.00	1411.89	0.00	99.82
23.0-24.0	29.78	1045.33	2.11	73.91	70.0-71.0	0.00	1411.89	0.00	99.82
24.0-25.0	29.47	1074.80	2.08	75.99	71.0-72.0	0.00	1411.89	0.00	99.82
25.0-26.0	29.37	1104.17	2.08	78.07	72.0-73.0	0.00	1411.89	0.00	99.82
26.0-27.0	29.44	1133.61	2.08	80.15	73.0-74.0	0.00	1411.89	0.00	99.82
27.0-28.0	29.61	1163.21	2.09	82.24	74.0-75.0	0.00	1411.89	0.00	99.82
28.0-29.0	29.77	1192.98	2.10	84.35	75.0-76.0	0.00	1411.89	0.00	99.82
29.0-30.0	29.83	1222.81	2.11	86.46	76.0-77.0	0.00	1411.89	0.00	99.82
30.0-31.0	29.77	1252.58	2.10	88.56	77.0-78.0	0.00	1411.89	0.00	99.82
31.0-32.0	29.23	1281.81	2.07	90.63	78.0-79.0	0.00	1411.89	0.00	99.82
32.0-33.0	27.74	1309.56	1.96	92.59	79.0-80.0	0.00	1411.89	0.00	99.82
33.0-34.0	25.26	1334.82	1.79	94.38	80.0-81.0	0.00	1411.89	0.00	99.82
34.0-35.0	21.90	1356.72	1.55	95.92	81.0-82.0	0.00	1411.89	0.00	99.82
35.0-36.0	17.87	1374.59	1.26	97.19	82.0-83.0	0.00	1411.89	0.00	99.82
36.0-37.0	13.54	1388.13	0.96	98.14	83.0-84.0	0.00	1411.89	0.00	99.82
37.0-38.0	9.30	1397.42	0.66	98.80	84.0-85.0	0.00	1411.89	0.00	99.82
38.0-39.0	5.64	1403.07	0.40	99.20	85.0-86.0	0.00	1411.89	0.00	99.82
39.0-40.0	3.10	1406.17	0.22	99.42	86.0-87.0	0.00	1411.89	0.00	99.82
40.0-41.0	1.85	1408.03	0.13	99.55	87.0-88.0	0.00	1411.89	0.00	99.82
41.0-42.0	1.32	1409.35	0.09	99.65	88.0-89.0	0.00	1411.89	0.00	99.82
42.0-43.0	0.93	1410.28	0.07	99.71	89.0-90.0	0.00	1411.89	0.00	99.82
43.0-44.0	0.60	1410.89	0.04	99.75	90.0-91.0	0.00	1411.89	0.00	99.82
44.0-45.0	0.40	1411.28	0.03	99.78	91.0-92.0	0.00	1411.89	0.00	99.82
45.0-46.0	0.27	1411.55	0.02	99.80	92.0-93.0	0.00	1411.89	0.00	99.82
46.0-47.0	0.17	1411.72	0.01	99.81	93.0-94.0	0.00	1411.89	0.00	99.82

IES Indoor Report

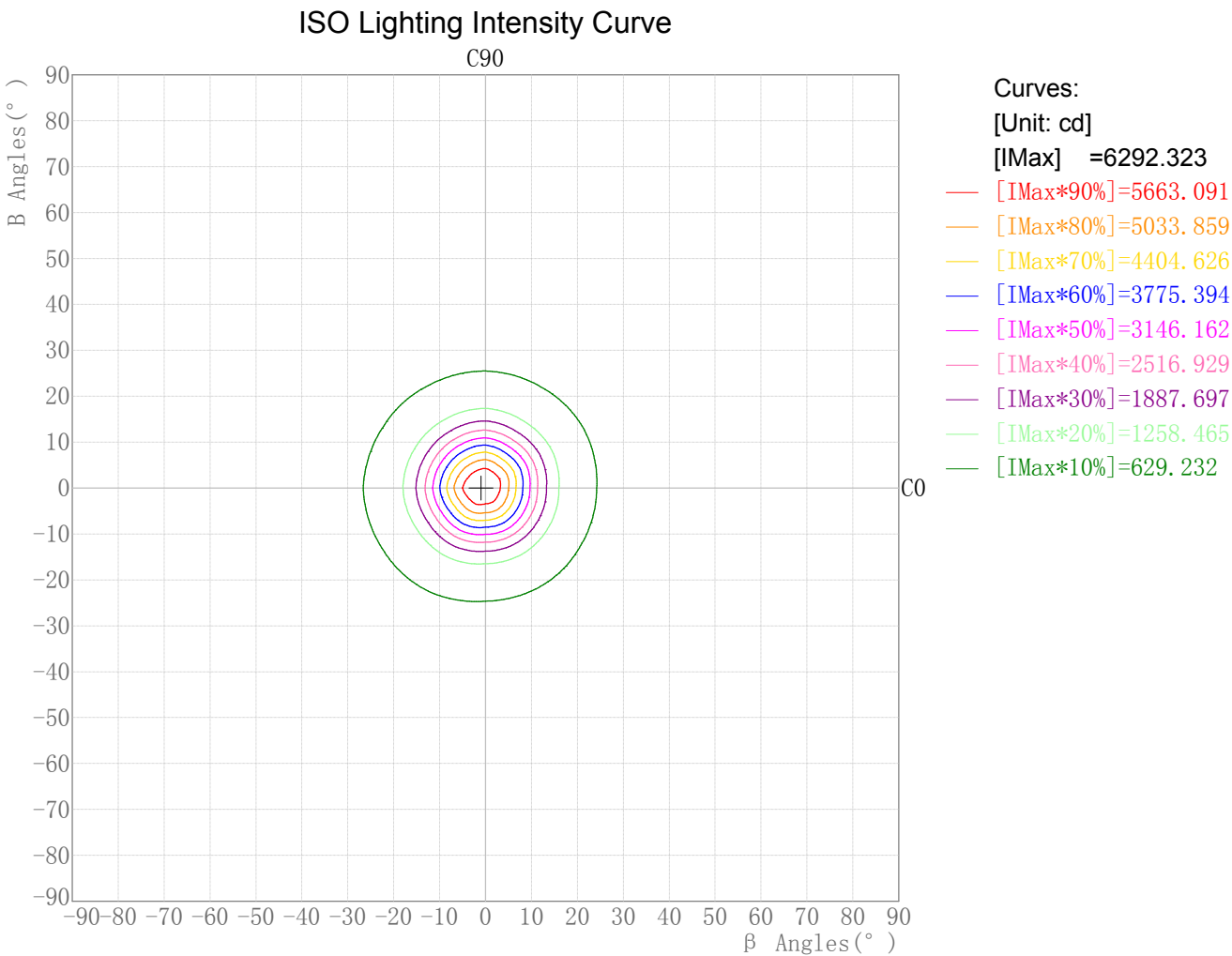
Photometric Filename:UL-15W-COB-1500-AH.IES

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	0.00	1411.89	0.00	99.82	141.0-142.0	0.00	1411.89	0.00	99.82
95.0-96.0	0.00	1411.89	0.00	99.82	142.0-143.0	0.00	1411.89	0.00	99.82
96.0-97.0	0.00	1411.89	0.00	99.82	143.0-144.0	0.00	1411.89	0.00	99.82
97.0-98.0	0.00	1411.89	0.00	99.82	144.0-145.0	0.00	1411.89	0.00	99.82
98.0-99.0	0.00	1411.89	0.00	99.82	145.0-146.0	0.00	1411.89	0.00	99.82
99.0-100.0	0.00	1411.89	0.00	99.82	146.0-147.0	0.00	1411.89	0.00	99.82
100.0-101.0	0.00	1411.89	0.00	99.82	147.0-148.0	0.00	1411.89	0.00	99.82
101.0-102.0	0.00	1411.89	0.00	99.82	148.0-149.0	0.00	1411.89	0.00	99.82
102.0-103.0	0.00	1411.89	0.00	99.82	149.0-150.0	0.00	1411.89	0.00	99.82
103.0-104.0	0.00	1411.89	0.00	99.82	150.0-151.0	0.00	1411.89	0.00	99.82
104.0-105.0	0.00	1411.89	0.00	99.82	151.0-152.0	0.01	1411.90	0.00	99.83
105.0-106.0	0.00	1411.89	0.00	99.82	152.0-153.0	0.02	1411.92	0.00	99.83
106.0-107.0	0.00	1411.89	0.00	99.82	153.0-154.0	0.04	1411.96	0.00	99.83
107.0-108.0	0.00	1411.89	0.00	99.82	154.0-155.0	0.06	1412.02	0.00	99.83
108.0-109.0	0.00	1411.89	0.00	99.82	155.0-156.0	0.08	1412.10	0.01	99.84
109.0-110.0	0.00	1411.89	0.00	99.82	156.0-157.0	0.09	1412.19	0.01	99.85
110.0-111.0	0.00	1411.89	0.00	99.82	157.0-158.0	0.11	1412.30	0.01	99.85
111.0-112.0	0.00	1411.89	0.00	99.82	158.0-159.0	0.12	1412.42	0.01	99.86
112.0-113.0	0.00	1411.89	0.00	99.82	159.0-160.0	0.13	1412.54	0.01	99.87
113.0-114.0	0.00	1411.89	0.00	99.82	160.0-161.0	0.13	1412.68	0.01	99.88
114.0-115.0	0.00	1411.89	0.00	99.82	161.0-162.0	0.14	1412.82	0.01	99.89
115.0-116.0	0.00	1411.89	0.00	99.82	162.0-163.0	0.14	1412.96	0.01	99.90
116.0-117.0	0.00	1411.89	0.00	99.82	163.0-164.0	0.14	1413.10	0.01	99.91
117.0-118.0	0.00	1411.89	0.00	99.82	164.0-165.0	0.14	1413.23	0.01	99.92
118.0-119.0	0.00	1411.89	0.00	99.82	165.0-166.0	0.14	1413.37	0.01	99.93
119.0-120.0	0.00	1411.89	0.00	99.82	166.0-167.0	0.13	1413.50	0.01	99.94
120.0-121.0	0.00	1411.89	0.00	99.82	167.0-168.0	0.12	1413.62	0.01	99.95
121.0-122.0	0.00	1411.89	0.00	99.82	168.0-169.0	0.12	1413.74	0.01	99.96
122.0-123.0	0.00	1411.89	0.00	99.82	169.0-170.0	0.11	1413.85	0.01	99.96
123.0-124.0	0.00	1411.89	0.00	99.82	170.0-171.0	0.10	1413.95	0.01	99.97
124.0-125.0	0.00	1411.89	0.00	99.82	171.0-172.0	0.09	1414.03	0.01	99.98
125.0-126.0	0.00	1411.89	0.00	99.82	172.0-173.0	0.08	1414.11	0.01	99.98
126.0-127.0	0.00	1411.89	0.00	99.82	173.0-174.0	0.07	1414.18	0.00	99.99
127.0-128.0	0.00	1411.89	0.00	99.82	174.0-175.0	0.06	1414.24	0.00	99.99
128.0-129.0	0.00	1411.89	0.00	99.82	175.0-176.0	0.05	1414.29	0.00	99.99
129.0-130.0	0.00	1411.89	0.00	99.82	176.0-177.0	0.04	1414.32	0.00	100.00
130.0-131.0	0.00	1411.89	0.00	99.82	177.0-178.0	0.03	1414.35	0.00	100.00
131.0-132.0	0.00	1411.89	0.00	99.82	178.0-179.0	0.02	1414.37	0.00	100.00
132.0-133.0	0.00	1411.89	0.00	99.82	179.0-180.0	0.01	1414.37	0.00	100.00
133.0-134.0	0.00	1411.89	0.00	99.82					
134.0-135.0	0.00	1411.89	0.00	99.82					
135.0-136.0	0.00	1411.89	0.00	99.82					
136.0-137.0	0.00	1411.89	0.00	99.82					
137.0-138.0	0.00	1411.89	0.00	99.82					
138.0-139.0	0.00	1411.89	0.00	99.82					
139.0-140.0	0.00	1411.89	0.00	99.82					
140.0-141.0	0.00	1411.89	0.00	99.82					

Rectangle ISO Lighting Intensity Diagram

Lum. Name: 55252	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2018/10/29

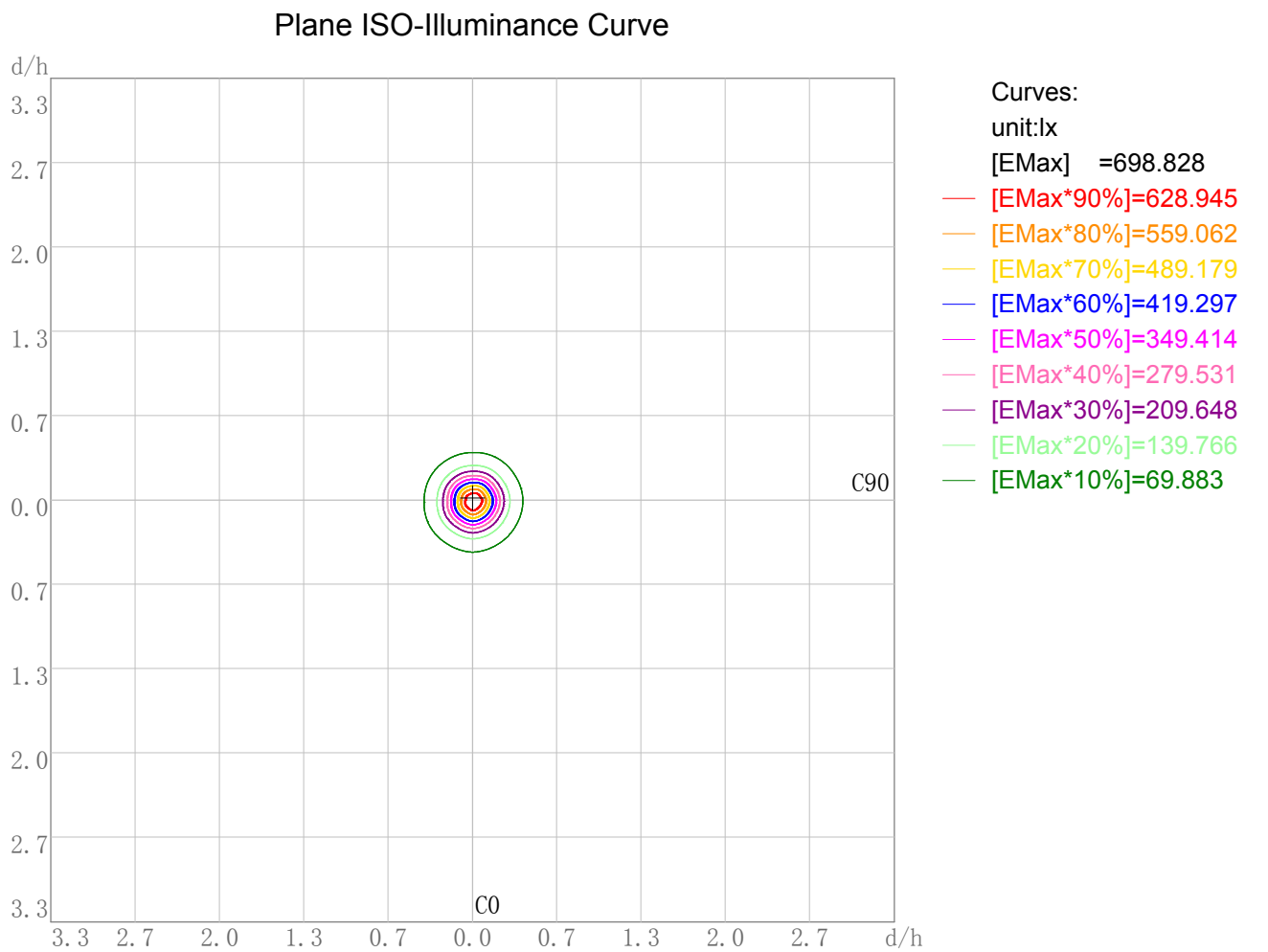


Maximum Light Intensity(cd): 6292.32

Maximum Cand.@Angle: H=-1.0°,V=0.0°

Plane ISO-Illuminance Diagram

Lum. Name: 55252	Lum. Catelog:	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2018/10/29

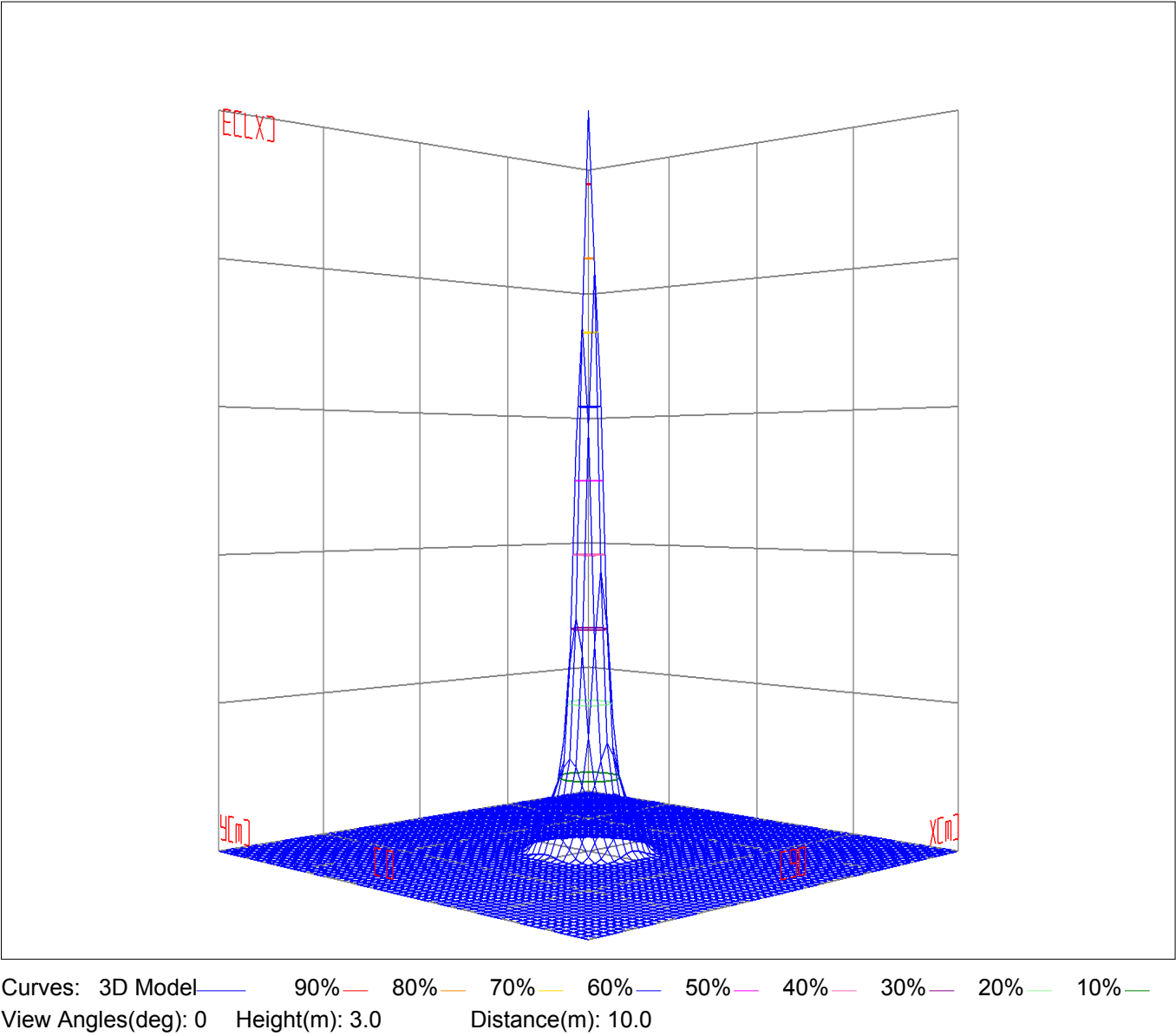


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 698.83
Working Plane Maximum Illuminance Position(d/h):H0.0 V-0.0

3D Plane ISO Illuminance Diagram

Lum. Name: 55252	Lum. Catelog:	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2018/10/29

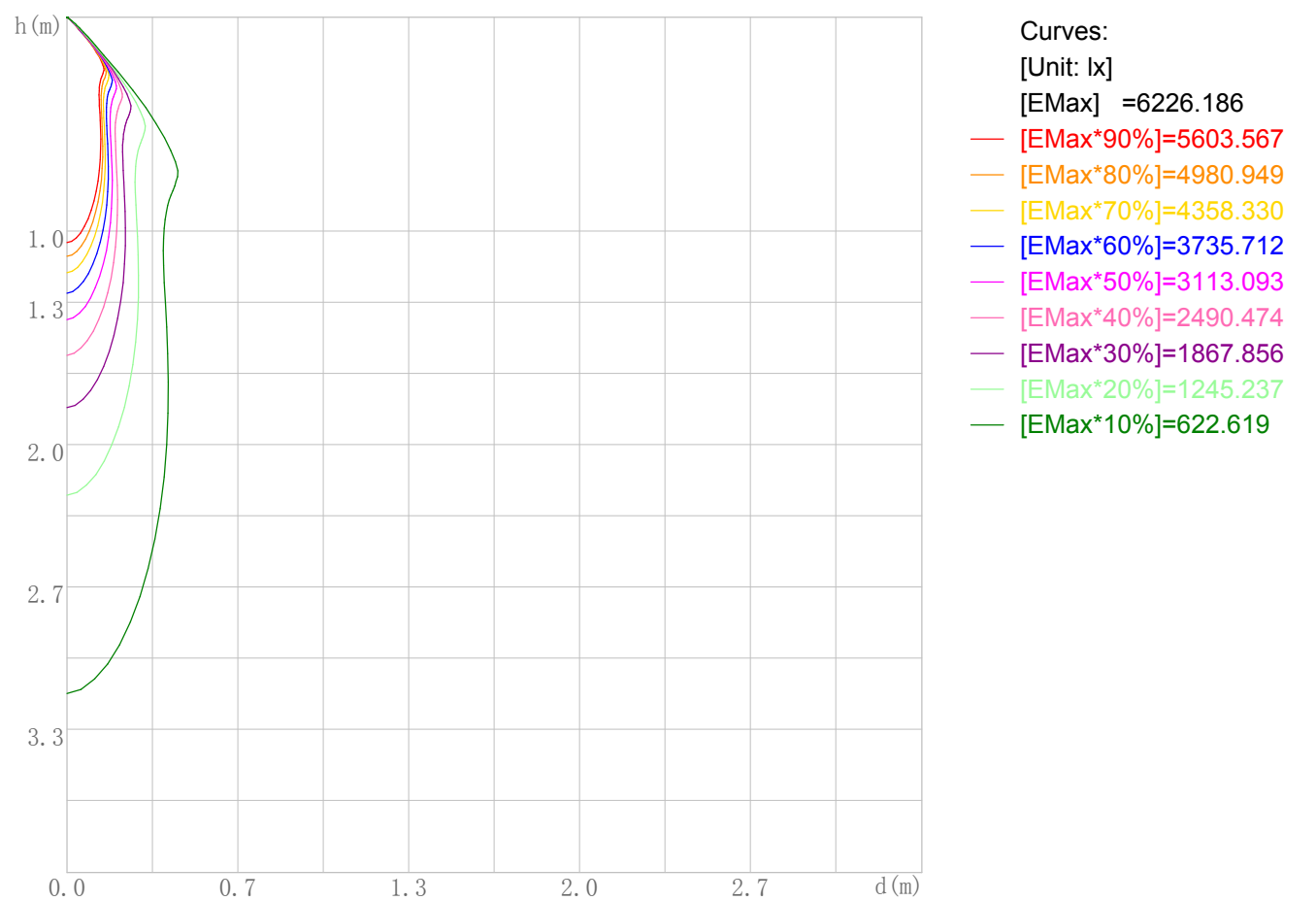
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name: 55252	Lum. Catelog:	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2018/10/29

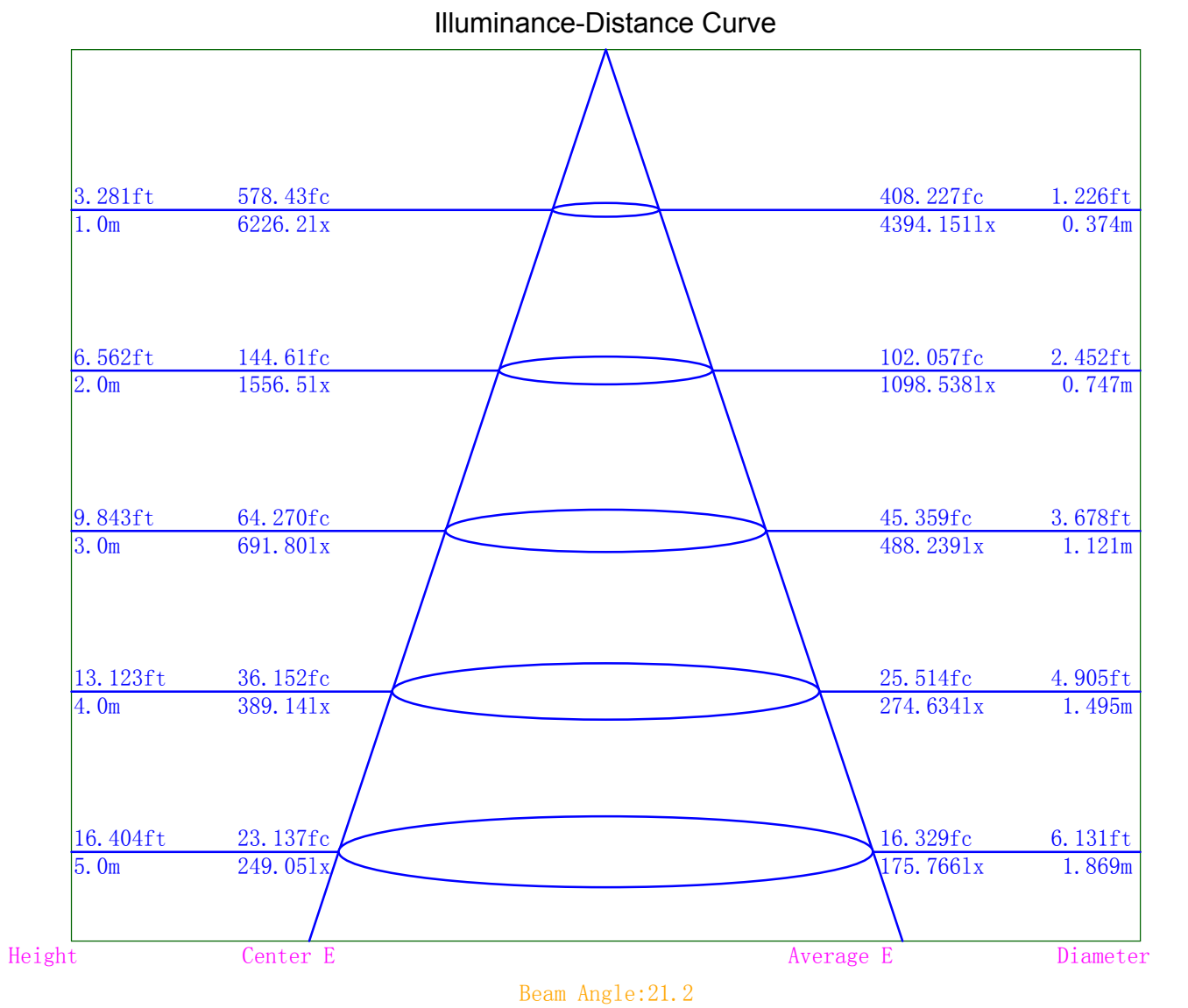
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:6226.19lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:6226.186cd,0eg

Illuminance-Distance Diagram

Lum. Name: 55252	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2018/10/29



Indoor Luminance Limiting Curves

Lum. Name: 55252	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2018/10/29

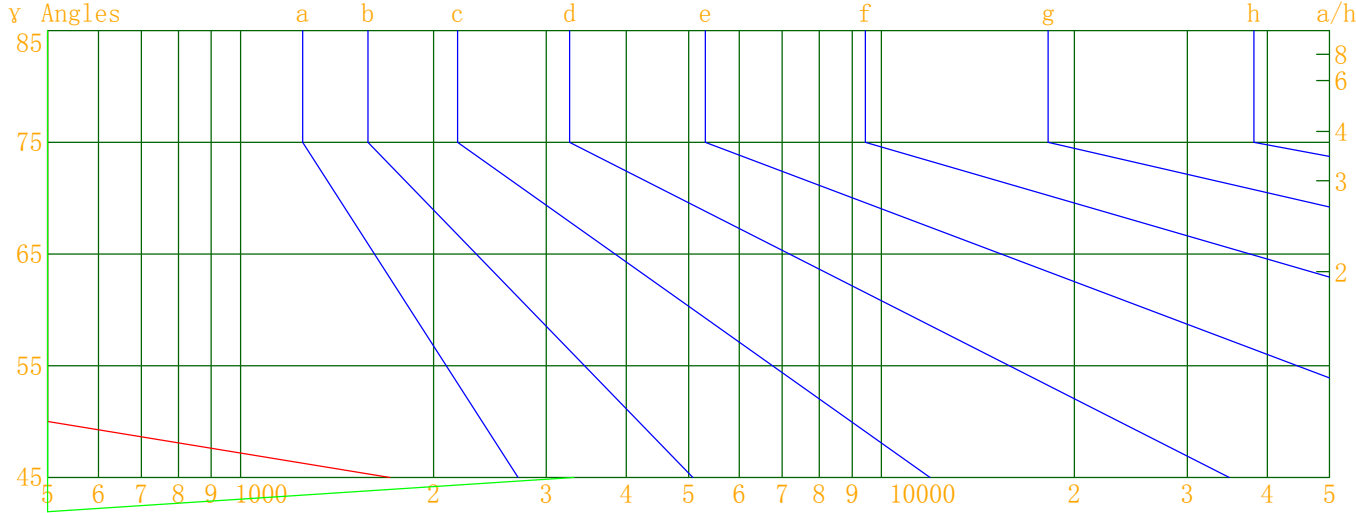
Glare Grade Table

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	1709	0	0	0	0	0	0	0	0
C90	3312	154	0	0	0	0	0	0	0

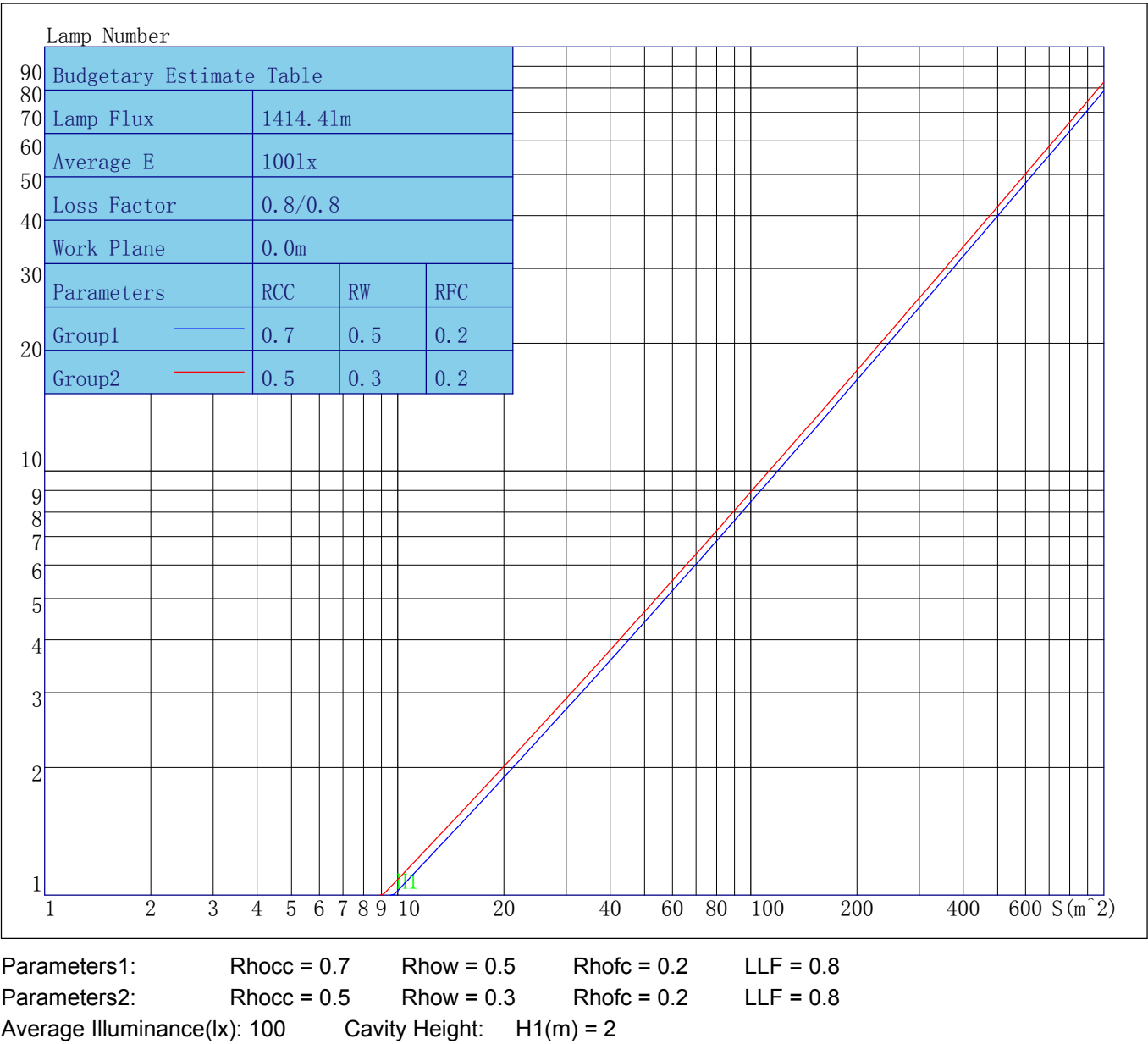
Luminance Limiting Curve



Luminous Size: Length(m)=-0.050 Width(m)=-0.050 Height(m)=0.000 Area(m^2)=0.001963
Luminous Type: Without Luminous Side
Luminous Curves: C0-C180 Color: — C90-C270 Color: —

Indoor Budgetary Estimate Table

Lum. Name: 55252	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2018/10/29



Indoor Coefficient of Utilization Table

Lum. Name: 55252	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2018/10/29

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	111	111	111	106	106	106	102	102	102	100
1	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96
2	110	106	103	101	108	105	102	99	102	99	97	99	97	95	96	95	93	92
3	106	101	97	94	105	100	96	93	97	94	92	95	93	91	93	91	89	88
4	103	97	92	89	101	96	92	89	94	90	87	92	89	86	90	87	86	84
5	99	92	88	85	98	92	87	84	90	86	83	88	85	83	87	84	82	81
6	96	89	84	81	94	88	84	80	87	83	80	85	82	79	84	81	79	78
7	92	85	81	77	91	85	80	77	83	80	77	82	79	76	81	78	76	75
8	89	82	77	74	88	82	77	74	81	77	74	80	76	74	79	76	73	72
9	87	79	75	72	86	79	74	71	78	74	71	77	74	71	76	73	71	70
10	84	76	72	69	83	76	72	69	75	71	69	75	71	69	74	71	68	67

Unified Glare Rating Table

Lum. Name: 55252	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2018/10/29

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	20.0	20.8	20.4	21.2	21.5	20.7	21.5	21.1	21.9	22.2
	Y=3H	19.8	20.5	20.2	20.9	21.2	20.5	21.2	20.9	21.6	21.9
	Y=4H	19.7	20.3	20.1	20.7	21.1	20.4	21.1	20.8	21.4	21.8
	Y=6H	19.5	20.2	20.0	20.5	21.0	20.2	20.9	20.7	21.2	21.7
	Y=8H	19.5	20.1	19.9	20.5	20.9	20.2	20.8	20.6	21.2	21.6
	Y=12H	19.4	20.0	19.8	20.4	20.8	20.1	20.7	20.5	21.1	21.5
X=4H	Y=2H	19.7	20.3	20.1	20.7	21.1	20.4	21.1	20.8	21.4	21.8
	Y=3H	19.4	20.0	19.8	20.4	20.8	20.1	20.7	20.5	21.1	21.5
	Y=4H	19.3	19.8	19.7	20.2	20.7	20.0	20.5	20.4	20.9	21.4
	Y=6H	19.2	19.6	19.6	20.0	20.5	19.9	20.3	20.3	20.7	21.2
	Y=8H	19.1	19.5	19.6	19.9	20.4	19.8	20.2	20.3	20.6	21.1
	Y=12H	19.0	19.4	19.5	19.8	20.3	19.7	20.1	20.2	20.5	21.0
X=8H	Y=4H	19.1	19.5	19.6	19.9	20.4	19.8	20.2	20.3	20.6	21.1
	Y=6H	19.0	19.3	19.5	19.8	20.3	19.7	20.0	20.2	20.5	21.0
	Y=8H	18.9	19.1	19.4	19.7	20.2	19.6	19.8	20.1	20.4	20.9
	Y=12H	18.8	19.0	19.4	19.6	20.1	19.5	19.7	20.1	20.3	20.8
X=12H	Y=4H	19.0	19.4	19.5	19.8	20.3	19.7	20.1	20.2	20.5	21.0
	Y=6H	18.9	19.1	19.4	19.6	20.2	19.6	19.8	20.1	20.3	20.9
	Y=8H	18.8	19.0	19.4	19.6	20.1	19.5	19.7	20.1	20.3	20.8
Variations with the objverver 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:		BK0					BK0				
Correction Value		0.0					0.0				

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

IES Indoor Report
Photometric Filename:UL-15W-COB-1500-AH.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
Y 0. 0	6226. 19	6226. 19	6226. 19	6226. 19	6226. 19	6226. 19	6226. 19	6226. 19	6226. 19	6226. 19	6226. 19	6226. 19
Y 1. 0	6154. 61	6185. 20	6174. 50	6205. 93	6198. 80	6192. 33	6292. 32	6237. 09	6200. 15	6139. 96	6134. 48	6090. 93
Y 2. 0	5971. 74	6048. 86	6047. 83	6122. 88	6112. 09	6127. 06	6246. 18	6148. 31	6099. 07	5994. 83	5992. 56	5929. 84
Y 3. 0	5719. 91	5835. 49	5850. 03	5963. 06	5954. 31	5992. 27	6122. 45	5979. 09	5922. 74	5782. 38	5778. 91	5697. 00
Y 4. 0	5404. 67	5559. 77	5587. 58	5742. 93	5731. 43	5784. 74	5928. 32	5746. 40	5684. 22	5506. 73	5504. 36	5402. 40
Y 5. 0	5040. 87	5229. 21	5263. 69	5451. 43	5439. 13	5507. 23	5665. 81	5454. 91	5383. 81	5176. 62	5169. 68	5061. 00
Y 6. 0	4647. 35	4854. 93	4899. 04	5111. 63	5096. 53	5177. 35	5347. 15	5111. 58	5032. 17	4802. 01	4793. 65	4678. 21
Y 7. 0	4234. 21	4453. 17	4504. 38	4734. 31	4718. 47	4807. 71	4983. 84	4730. 04	4648. 73	4405. 21	4394. 34	4274. 11
Y 8. 0	3818. 93	4042. 68	4095. 06	4334. 39	4315. 60	4414. 79	4587. 55	4325. 05	4245. 59	3993. 61	3985. 26	3862. 72
Y 9. 0	3410. 29	3630. 85	3685. 63	3923. 36	3907. 71	4008. 13	4174. 42	3911. 30	3832. 93	3582. 44	3576. 37	3456. 30
Y 10. 0	3010. 69	3226. 14	3277. 35	3513. 69	3496. 56	3599. 59	3759. 15	3501. 54	3426. 23	3181. 38	3178. 67	3061. 27
Y 11. 0	2630. 19	2835. 42	2889. 26	3110. 37	3098. 48	3196. 72	3348. 76	3102. 39	3032. 25	2799. 05	2796. 01	2685. 30
Y 12. 0	2280. 20	2467. 70	2521. 14	2731. 24	2717. 99	2809. 30	2949. 98	2722. 57	2659. 69	2442. 45	2432. 93	2330. 50
Y 13. 0	1963. 10	2135. 48	2183. 85	2377. 48	2364. 52	2450. 99	2577. 07	2366. 51	2311. 84	2111. 06	2101. 47	2005. 87
Y 14. 0	1685. 93	1837. 73	1880. 09	2058. 90	2044. 03	2124. 30	2239. 06	2047. 43	1994. 54	1814. 32	1803. 89	1720. 85
Y 15. 0	1450. 30	1581. 23	1617. 19	1775. 07	1761. 12	1832. 63	1932. 86	1764. 64	1715. 09	1557. 02	1545. 69	1476. 40
Y 16. 0	1254. 61	1363. 70	1393. 68	1527. 49	1515. 83	1579. 46	1668. 52	1522. 36	1477. 10	1341. 46	1330. 68	1275. 06
Y 17. 0	1097. 21	1183. 41	1208. 25	1318. 93	1310. 61	1364. 97	1442. 53	1319. 66	1280. 65	1166. 26	1156. 53	1111. 59
Y 18. 0	973. 61	1039. 22	1060. 17	1148. 31	1143. 55	1188. 94	1255. 86	1152. 53	1120. 89	1026. 51	1018. 74	983. 11
Y 19. 0	877. 05	927. 74	944. 76	1014. 38	1010. 28	1048. 04	1105. 13	1019. 56	994. 22	918. 32	911. 41	882. 14
Y 20. 0	802. 56	842. 25	855. 26	911. 82	905. 25	936. 90	985. 95	916. 41	895. 45	834. 50	827. 70	804. 52
Y 21. 0	745. 23	776. 56	786. 78	830. 24	823. 43	848. 88	891. 62	835. 54	817. 52	769. 06	762. 59	744. 29
Y 22. 0	699. 97	724. 95	733. 04	765. 42	759. 76	779. 51	816. 74	771. 96	757. 60	718. 15	712. 55	697. 79
Y 23. 0	663. 89	684. 18	690. 68	714. 58	709. 72	725. 14	757. 84	722. 46	710. 86	677. 72	672. 66	661. 07
Y 24. 0	634. 50	650. 87	656. 38	674. 17	670. 50	682. 43	710. 98	683. 09	673. 15	645. 30	639. 76	630. 63
Y 25. 0	611. 60	624. 32	628. 08	641. 52	639. 02	649. 23	673. 59	651. 46	642. 52	619. 96	614. 25	606. 64
Y 26. 0	593. 02	603. 68	606. 37	616. 65	615. 14	623. 82	644. 01	625. 89	618. 01	600. 06	594. 07	587. 62
Y 27. 0	578. 30	586. 72	588. 71	596. 92	596. 75	603. 44	621. 18	605. 66	598. 45	583. 47	577. 96	572. 81
Y 28. 0	564. 42	572. 75	572. 75	580. 78	581. 26	586. 55	602. 22	588. 30	580. 25	569. 88	564. 43	559. 36
Y 29. 0	548. 12	557. 57	556. 21	566. 93	567. 19	570. 07	585. 84	572. 22	561. 73	553. 22	548. 75	543. 40
Y 30. 0	533. 49	541. 67	539. 17	550. 96	549. 66	551. 81	567. 69	553. 00	540. 23	537. 49	533. 83	528. 59
Y 31. 0	510. 62	526. 23	523. 26	535. 91	534. 42	534. 17	549. 42	535. 53	520. 42	515. 76	515. 01	507. 46
Y 32. 0	466. 23	496. 49	494. 41	515. 66	511. 54	512. 52	528. 55	504. 51	487. 95	472. 65	477. 51	467. 96
Y 33. 0	409. 62	448. 15	447. 59	478. 52	470. 60	473. 91	489. 09	456. 84	437. 39	417. 67	423. 45	411. 94
Y 34. 0	347. 85	388. 22	391. 31	426. 42	414. 04	415. 55	437. 27	392. 15	375. 55	352. 45	361. 46	349. 25
Y 35. 0	277. 73	321. 29	321. 01	357. 92	343. 67	346. 12	366. 38	318. 17	301. 51	278. 91	294. 77	283. 13
Y 36. 0	210. 43	248. 56	245. 71	283. 58	267. 62	272. 09	288. 61	243. 47	228. 04	204. 10	218. 95	214. 65
Y 37. 0	142. 06	174. 54	172. 01	209. 46	193. 37	199. 52	213. 12	168. 97	157. 57	132. 21	147. 64	144. 73
Y 38. 0	82. 27	108. 63	107. 44	138. 76	125. 46	131. 54	145. 21	103. 23	97. 94	75. 34	87. 27	83. 65
Y 39. 0	41. 39	58. 38	55. 99	80. 74	69. 44	74. 14	83. 57	54. 83	51. 47	39. 28	44. 91	43. 27
Y 40. 0	24. 21	30. 34	29. 00	40. 71	35. 24	38. 36	42. 49	29. 28	27. 89	23. 74	25. 23	24. 21
Y 41. 0	18. 21	21. 98	21. 14	23. 72	22. 75	23. 56	24. 98	21. 40	20. 57	18. 02	19. 37	18. 31
Y 42. 0	12. 18	15. 67	15. 17	17. 93	17. 01	17. 85	19. 01	15. 41	14. 56	12. 25	13. 40	12. 51
Y 43. 0	7. 37	10. 34	9. 95	12. 27	11. 53	12. 48	12. 84	10. 03	9. 36	7. 39	8. 45	7. 61
Y 44. 0	4. 19	6. 26	5. 91	7. 71	7. 21	8. 09	8. 17	6. 07	5. 48	4. 01	4. 67	4. 19
Y 45. 0	2. 37	3. 66	3. 39	4. 60	4. 57	15. 03	4. 66	3. 52	2. 83	2. 17	2. 55	2. 11
Y 46. 0	1. 79	2. 77	2. 68	2. 87	3. 05	4. 95	2. 71	2. 47	1. 89	1. 53	1. 63	1. 53

IES Indoor Report
Photometric Filename:UL-15W-COB-1500-AH.IES

Candela Tabulation - (Cont.)

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
Y 47.0	1.27	1.98	2.17	2.25	2.49	2.55	2.16	1.91	1.41	0.98	1.11	1.03
Y 48.0	0.54	1.06	1.18	1.47	1.51	1.52	1.37	0.72	0.28	0.00	0.18	0.25
Y 49.0	0.03	0.52	0.63	0.66	0.69	0.70	0.47	0.17	0.00	0.00	0.00	0.00
Y 50.0	0.00	0.06	0.04	0.19	0.17	0.08	0.00	0.00	0.00	0.00	0.00	0.00
Y 51.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 52.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 53.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 54.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 55.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 56.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 57.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 58.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 59.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 60.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 61.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 62.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 63.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 64.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 65.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 66.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 67.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 68.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 69.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 70.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 71.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 72.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 73.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 74.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 75.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 76.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 77.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 78.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 79.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 80.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 81.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 82.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 83.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 84.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 85.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 86.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 87.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 88.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 89.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 91.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 92.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 93.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

IES Indoor Report
Photometric Filename:UL-15W-COB-1500-AH.IES

Candela Tabulation - (Cont.)

[illegible]

IES Indoor Report
Photometric Filename:UL-15W-COB-1500-AH.IES

Candela Tabulation - (Cont.)

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
Y 141. 0	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00
Y 142. 0	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00
Y 143. 0	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00
Y 144. 0	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00
Y 145. 0	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00
Y 146. 0	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00
Y 147. 0	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00
Y 148. 0	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00
Y 149. 0	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00
Y 150. 0	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00
Y 151. 0	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 00	0. 23	0. 24	0. 44
Y 152. 0	0. 20	0. 10	0. 04	0. 00	0. 00	0. 00	0. 00	0. 32	0. 34	0. 67	0. 69	0. 72
Y 153. 0	0. 77	0. 62	0. 54	0. 10	0. 16	0. 00	0. 36	0. 83	0. 74	1. 16	1. 06	1. 12
Y 154. 0	1. 22	0. 91	0. 91	0. 71	0. 56	0. 37	0. 89	1. 23	1. 25	1. 54	1. 55	1. 58
Y 155. 0	1. 57	1. 41	1. 39	1. 04	1. 00	0. 86	1. 33	1. 65	1. 65	1. 93	2. 02	2. 09
Y 156. 0	2. 05	1. 88	1. 86	1. 48	1. 47	1. 24	1. 79	2. 13	2. 13	2. 38	2. 43	2. 45
Y 157. 0	2. 53	2. 31	2. 21	1. 97	1. 82	1. 76	2. 19	2. 56	2. 48	2. 68	2. 79	2. 88
Y 158. 0	2. 80	2. 64	2. 57	2. 27	2. 22	2. 24	2. 57	2. 89	2. 93	3. 15	3. 14	3. 23
Y 159. 0	3. 31	2. 97	2. 93	2. 71	2. 65	2. 64	3. 05	3. 28	3. 23	3. 64	3. 42	3. 66
Y 160. 0	3. 60	3. 38	3. 33	3. 07	3. 00	2. 99	3. 45	3. 68	3. 64	3. 88	3. 90	3. 91
Y 161. 0	3. 87	3. 72	3. 64	3. 40	3. 38	3. 37	3. 77	3. 97	3. 95	4. 20	4. 19	4. 20
Y 162. 0	4. 25	4. 03	4. 05	3. 76	3. 69	3. 81	4. 10	4. 22	4. 32	4. 38	4. 43	4. 56
Y 163. 0	4. 43	4. 31	4. 16	4. 03	4. 02	4. 03	4. 41	4. 63	4. 51	4. 67	4. 68	4. 76
Y 164. 0	4. 71	4. 57	4. 35	4. 16	4. 31	4. 28	4. 59	4. 86	4. 68	4. 88	4. 89	4. 92
Y 165. 0	4. 98	4. 82	4. 57	4. 55	4. 55	4. 54	4. 86	4. 93	4. 95	5. 07	5. 18	5. 09
Y 166. 0	5. 05	4. 91	4. 80	4. 75	4. 76	4. 84	5. 12	5. 14	5. 13	5. 16	5. 24	5. 24
Y 167. 0	5. 22	5. 10	4. 95	4. 87	4. 95	4. 91	5. 33	5. 33	5. 16	5. 29	5. 29	5. 37
Y 168. 0	5. 32	5. 23	5. 08	4. 92	5. 08	5. 14	5. 37	5. 49	5. 37	5. 39	5. 36	5. 38
Y 169. 0	5. 50	5. 26	5. 21	5. 10	5. 09	5. 22	5. 46	5. 48	5. 40	5. 47	5. 50	5. 48
Y 170. 0	5. 48	5. 41	5. 31	5. 25	5. 18	5. 34	5. 53	5. 61	5. 48	5. 53	5. 56	5. 49
Y 171. 0	5. 55	5. 42	5. 40	5. 28	5. 23	5. 35	5. 57	5. 54	5. 47	5. 55	5. 56	5. 59
Y 172. 0	5. 52	5. 41	5. 44	5. 29	5. 28	5. 26	5. 65	5. 59	5. 53	5. 61	5. 66	5. 58
Y 173. 0	5. 60	5. 47	5. 36	5. 25	5. 42	5. 43	5. 62	5. 65	5. 45	5. 47	5. 52	5. 54
Y 174. 0	5. 60	5. 49	5. 39	5. 34	5. 35	5. 38	5. 65	5. 62	5. 51	5. 53	5. 61	5. 61
Y 175. 0	5. 56	5. 57	5. 39	5. 49	5. 30	5. 32	5. 58	5. 62	5. 49	5. 56	5. 51	5. 63
Y 176. 0	5. 57	5. 45	5. 45	5. 34	5. 32	5. 40	5. 50	5. 61	5. 51	5. 52	5. 49	5. 59
Y 177. 0	5. 67	5. 61	5. 39	5. 35	5. 33	5. 45	5. 53	5. 58	5. 51	5. 47	5. 54	5. 57
Y 178. 0	5. 61	5. 56	5. 47	5. 42	5. 38	5. 45	5. 66	5. 58	5. 35	5. 52	5. 55	5. 53
Y 179. 0	5. 69	5. 51	5. 45	5. 41	5. 40	5. 49	5. 66	5. 66	5. 43	5. 39	5. 57	5. 60
Y 180. 0	5. 56	5. 56	5. 56	5. 56	5. 56	5. 56	5. 56	5. 56	5. 56	5. 56	5. 56	5. 56