

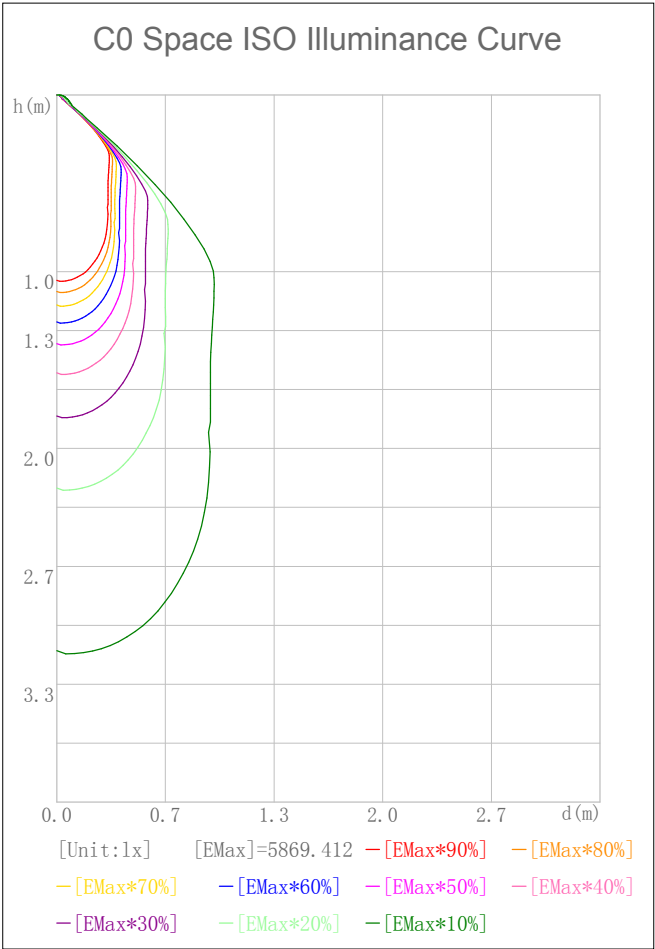
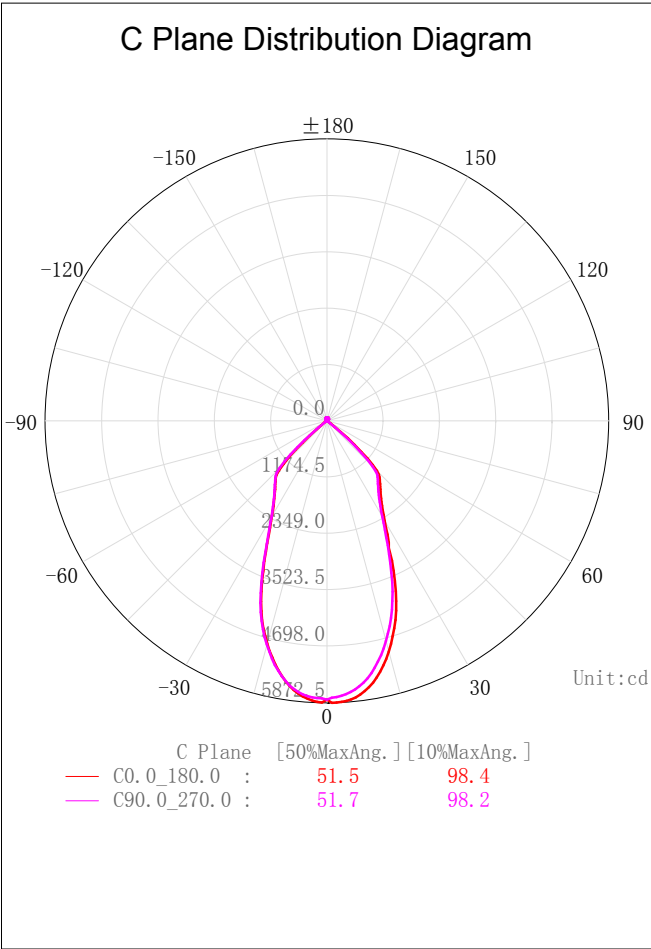
Indoor Luminaire Photometric Data

Description Information

Luminary Name:		Lum. Catalog:	Test ID:
Lamp Name:		Lamp Catalog:	Test Date: 2017/06/16
Manufacture:		Shld. Ang(°):	Test Machine:GON-2000
Test Lab:		Frequency (Hz):	Lamp CCT (K): 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

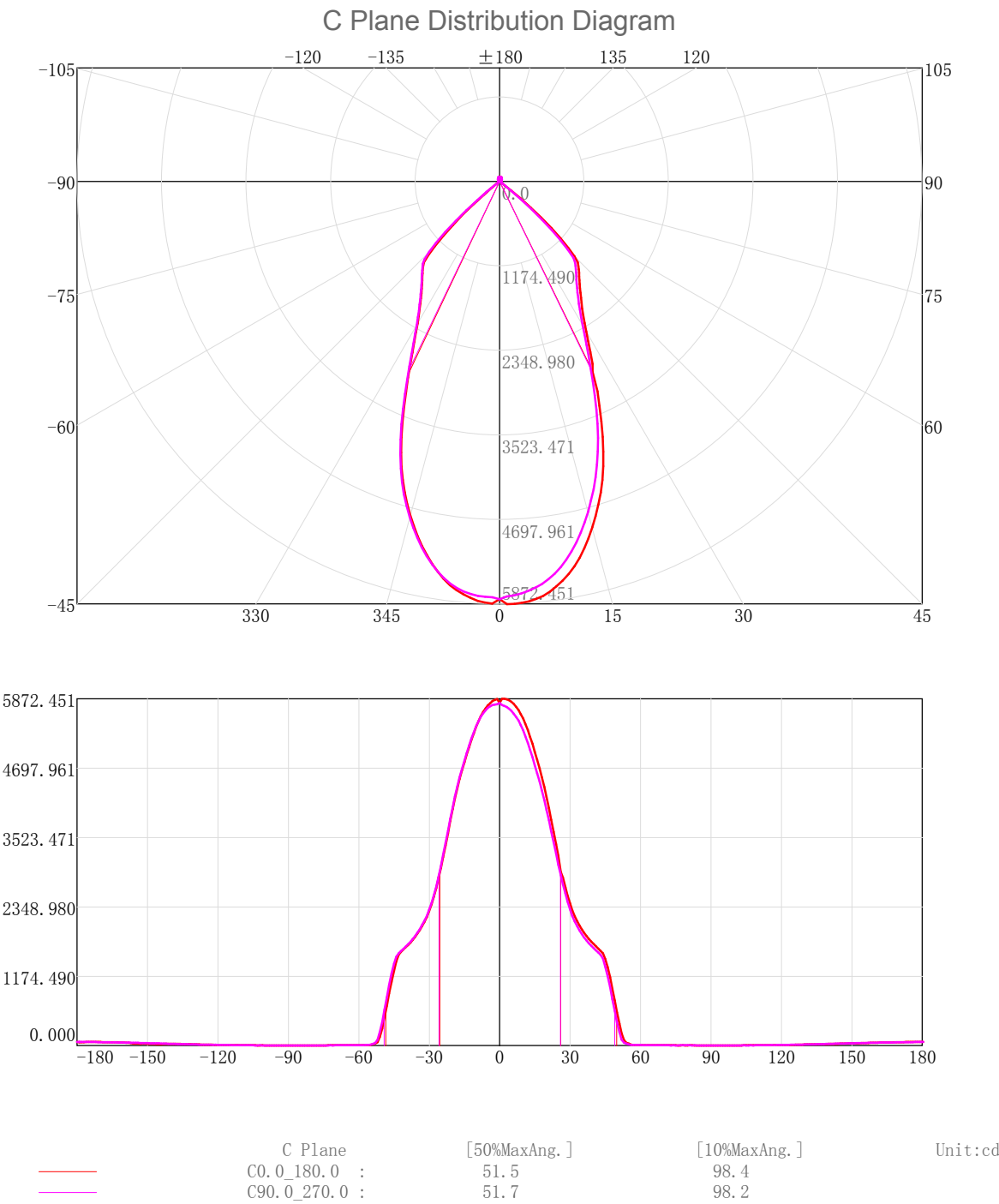
Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 5645.520	Luminary Flux(lm): 5645.521	Field Angle(10%Imax): 98.4(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 5516.371lm 97.71%	
Rated Voltage(V):	Luminary EER(lm/W): 111.837	Up Lumens&Percent: 129.150lm 2.29%	
Tested Power(W): 50.480	Max. Candela(cd): 5872.451	S/MH: C0_a180=0.818 C90_270=0.807	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 γ=2.0	CIE Type: Semi-Direct	
Tested Electrics(V, A, pf):221.2, 0.232, 0.980	Beam Angle(50%Imax): 51.5(°)	ErP Φuse(90°): 5049.091lm	
Lamp Size (W*L*H):0.050m*-0.050m*0.000m	Left=-25.4°, Right=26.1°	IRF (%): 222.185	



2D Plane Light Intensity Distribution Curve

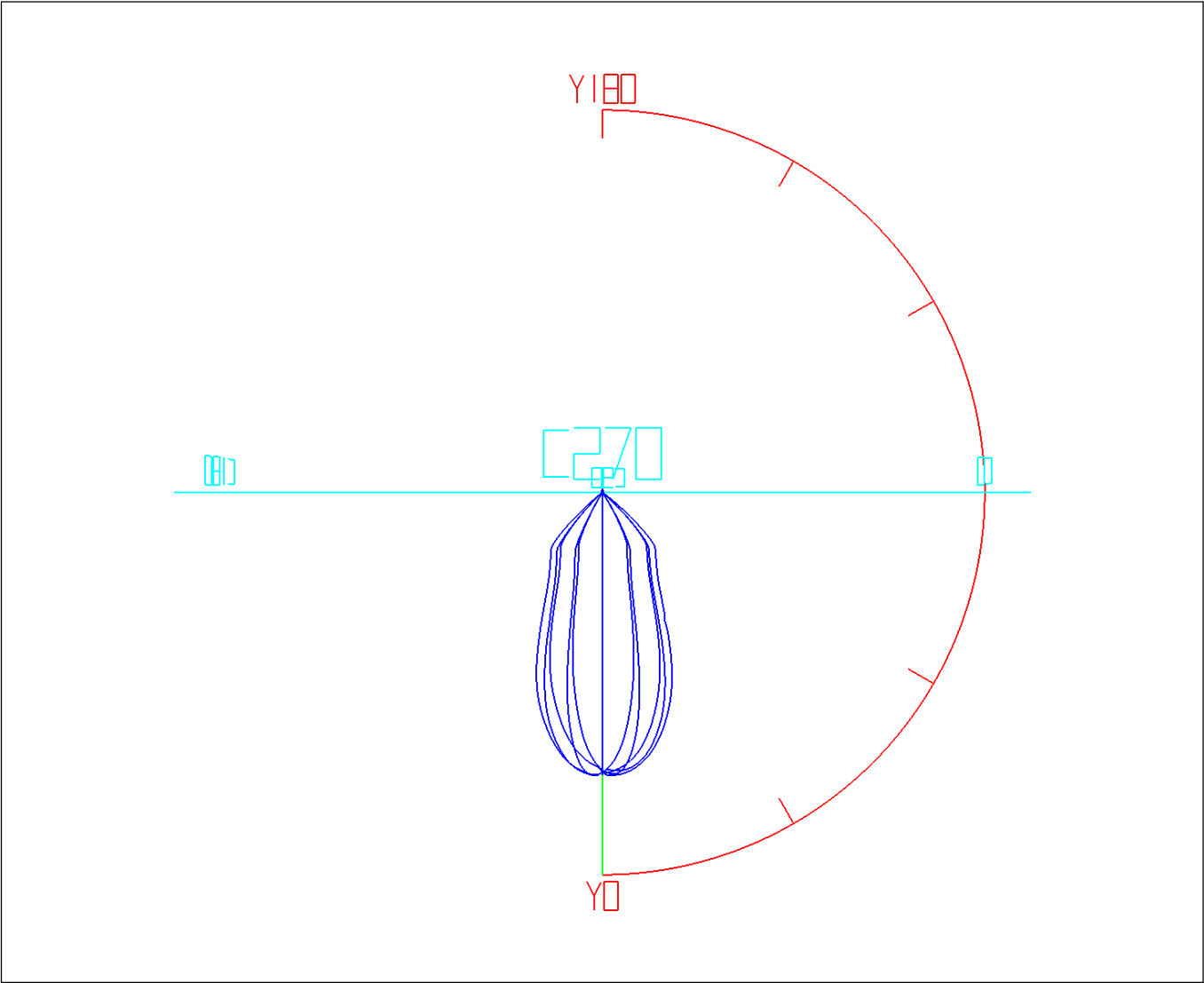
Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2017/06/16



3D Light Intensity Distribution Modal

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2017/06/16

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-50W-COB-5000-AH.IES

Zonal Flux Tabulation

Zone (γ)	Zone Flux (1m)	Sums Flux (1m)	Zone%Lamp	Sums%Lamp	Zone (γ)	Zone Flux (1m)	Sums Flux (1m)	Zone%Lamp	Sums%Lamp
0.0-1.0	5.55	5.55	0.10	0.10	47.0-48.0	73.60	5325.15	1.30	94.33
1.0-2.0	16.61	22.16	0.29	0.39	48.0-49.0	58.28	5383.43	1.03	95.36
2.0-3.0	27.62	49.77	0.49	0.88	49.0-50.0	42.77	5426.20	0.76	96.12
3.0-4.0	38.53	88.30	0.68	1.56	50.0-51.0	28.27	5454.48	0.50	96.62
4.0-5.0	49.27	137.57	0.87	2.44	51.0-52.0	16.30	5470.78	0.29	96.90
5.0-6.0	59.79	197.36	1.06	3.50	52.0-53.0	8.37	5479.15	0.15	97.05
6.0-7.0	70.03	267.39	1.24	4.74	53.0-54.0	4.49	5483.65	0.08	97.13
7.0-8.0	79.91	347.30	1.42	6.15	54.0-55.0	2.80	5486.44	0.05	97.18
8.0-9.0	89.36	436.66	1.58	7.73	55.0-56.0	1.79	5488.23	0.03	97.21
9.0-10.0	98.31	534.97	1.74	9.48	56.0-57.0	1.28	5489.52	0.02	97.24
10.0-11.0	106.71	641.68	1.89	11.37	57.0-58.0	1.14	5490.66	0.02	97.26
11.0-12.0	114.49	756.17	2.03	13.39	58.0-59.0	1.08	5491.74	0.02	97.28
12.0-13.0	121.64	877.81	2.15	15.55	59.0-60.0	1.07	5492.81	0.02	97.30
13.0-14.0	128.13	1005.95	2.27	17.82	60.0-61.0	1.03	5493.84	0.02	97.31
14.0-15.0	133.93	1139.88	2.37	20.19	61.0-62.0	0.99	5494.83	0.02	97.33
15.0-16.0	139.02	1278.90	2.46	22.65	62.0-63.0	0.98	5495.81	0.02	97.35
16.0-17.0	143.36	1422.26	2.54	25.19	63.0-64.0	0.95	5496.76	0.02	97.37
17.0-18.0	146.85	1569.11	2.60	27.79	64.0-65.0	0.92	5497.68	0.02	97.38
18.0-19.0	149.37	1718.48	2.65	30.44	65.0-66.0	0.92	5498.60	0.02	97.40
19.0-20.0	150.85	1869.33	2.67	33.11	66.0-67.0	0.92	5499.52	0.02	97.41
20.0-21.0	151.27	2020.60	2.68	35.79	67.0-68.0	0.88	5500.40	0.02	97.43
21.0-22.0	150.62	2171.22	2.67	38.46	68.0-69.0	0.86	5501.26	0.02	97.44
22.0-23.0	149.00	2320.22	2.64	41.10	69.0-70.0	0.86	5502.12	0.02	97.46
23.0-24.0	146.65	2466.87	2.60	43.70	70.0-71.0	0.82	5502.94	0.01	97.47
24.0-25.0	143.73	2610.60	2.55	46.24	71.0-72.0	0.81	5503.75	0.01	97.49
25.0-26.0	140.38	2750.98	2.49	48.73	72.0-73.0	0.80	5504.55	0.01	97.50
26.0-27.0	137.12	2888.10	2.43	51.16	73.0-74.0	0.76	5505.31	0.01	97.52
27.0-28.0	134.07	3022.17	2.37	53.53	74.0-75.0	0.75	5506.06	0.01	97.53
28.0-29.0	131.08	3153.25	2.32	55.85	75.0-76.0	0.76	5506.82	0.01	97.54
29.0-30.0	128.37	3281.62	2.27	58.13	76.0-77.0	0.74	5507.56	0.01	97.56
30.0-31.0	126.00	3407.62	2.23	60.36	77.0-78.0	0.72	5508.28	0.01	97.57
31.0-32.0	124.07	3531.69	2.20	62.56	78.0-79.0	0.74	5509.01	0.01	97.58
32.0-33.0	122.58	3654.27	2.17	64.73	79.0-80.0	0.74	5509.75	0.01	97.60
33.0-34.0	121.42	3775.69	2.15	66.88	80.0-81.0	0.72	5510.47	0.01	97.61
34.0-35.0	120.49	3896.19	2.13	69.01	81.0-82.0	0.71	5511.19	0.01	97.62
35.0-36.0	119.75	4015.93	2.12	71.13	82.0-83.0	0.68	5511.87	0.01	97.63
36.0-37.0	119.16	4135.09	2.11	73.25	83.0-84.0	0.67	5512.54	0.01	97.64
37.0-38.0	118.67	4253.76	2.10	75.35	84.0-85.0	0.67	5513.21	0.01	97.66
38.0-39.0	118.29	4372.05	2.10	77.44	85.0-86.0	0.65	5513.86	0.01	97.67
39.0-40.0	117.97	4490.03	2.09	79.53	86.0-87.0	0.62	5514.49	0.01	97.68
40.0-41.0	117.65	4607.68	2.08	81.62	87.0-88.0	0.63	5515.12	0.01	97.69
41.0-42.0	117.24	4724.91	2.08	83.69	88.0-89.0	0.63	5515.75	0.01	97.70
42.0-43.0	116.43	4841.34	2.06	85.76	89.0-90.0	0.62	5516.37	0.01	97.71
43.0-44.0	114.11	4955.45	2.02	87.78	90.0-91.0	0.63	5517.00	0.01	97.72
44.0-45.0	108.73	5064.18	1.93	89.70	91.0-92.0	0.60	5517.60	0.01	97.73
45.0-46.0	99.70	5163.87	1.77	91.47	92.0-93.0	0.60	5518.20	0.01	97.74
46.0-47.0	87.68	5251.55	1.55	93.02	93.0-94.0	0.61	5518.81	0.01	97.76

IES Indoor Report

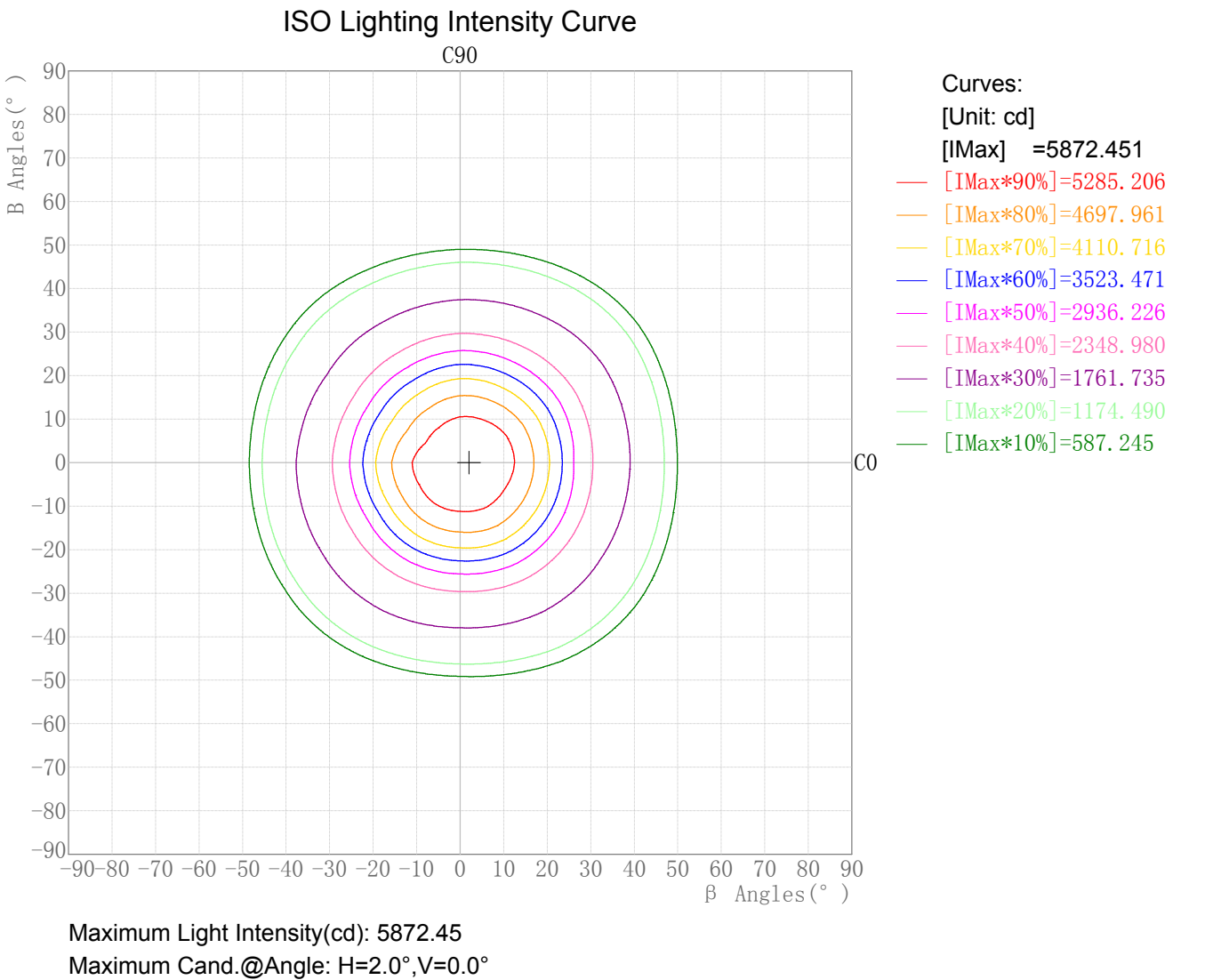
Photometric Filename:UL-50W-COB-5000-AH.IES

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	0.60	5519.41	0.01	97.77	141.0-142.0	2.30	5582.88	0.04	98.89
95.0-96.0	0.60	5520.01	0.01	97.78	142.0-143.0	2.32	5585.20	0.04	98.93
96.0-97.0	0.62	5520.63	0.01	97.79	143.0-144.0	2.33	5587.54	0.04	98.97
97.0-98.0	0.63	5521.26	0.01	97.80	144.0-145.0	2.33	5589.86	0.04	99.01
98.0-99.0	0.64	5521.91	0.01	97.81	145.0-146.0	2.33	5592.19	0.04	99.06
99.0-100.0	0.66	5522.57	0.01	97.82	146.0-147.0	2.32	5594.52	0.04	99.10
100.0-101.0	0.68	5523.25	0.01	97.83	147.0-148.0	2.33	5596.84	0.04	99.14
101.0-102.0	0.71	5523.96	0.01	97.85	148.0-149.0	2.33	5599.17	0.04	99.18
102.0-103.0	0.72	5524.68	0.01	97.86	149.0-150.0	2.31	5601.48	0.04	99.22
103.0-104.0	0.72	5525.41	0.01	97.87	150.0-151.0	2.30	5603.78	0.04	99.26
104.0-105.0	0.76	5526.16	0.01	97.89	151.0-152.0	2.29	5606.07	0.04	99.30
105.0-106.0	0.80	5526.96	0.01	97.90	152.0-153.0	2.26	5608.33	0.04	99.34
106.0-107.0	0.81	5527.77	0.01	97.91	153.0-154.0	2.23	5610.56	0.04	99.38
107.0-108.0	0.85	5528.62	0.01	97.93	154.0-155.0	2.22	5612.78	0.04	99.42
108.0-109.0	0.88	5529.50	0.02	97.94	155.0-156.0	2.18	5614.96	0.04	99.46
109.0-110.0	0.90	5530.40	0.02	97.96	156.0-157.0	2.15	5617.11	0.04	99.50
110.0-111.0	0.92	5531.33	0.02	97.98	157.0-158.0	2.12	5619.23	0.04	99.53
111.0-112.0	0.97	5532.30	0.02	97.99	158.0-159.0	2.08	5621.31	0.04	99.57
112.0-113.0	1.01	5533.31	0.02	98.01	159.0-160.0	2.03	5623.34	0.04	99.61
113.0-114.0	1.03	5534.33	0.02	98.03	160.0-161.0	1.97	5625.31	0.03	99.64
114.0-115.0	1.07	5535.40	0.02	98.05	161.0-162.0	1.92	5627.23	0.03	99.68
115.0-116.0	1.13	5536.53	0.02	98.07	162.0-163.0	1.85	5629.08	0.03	99.71
116.0-117.0	1.18	5537.71	0.02	98.09	163.0-164.0	1.76	5630.84	0.03	99.74
117.0-118.0	1.20	5538.91	0.02	98.11	164.0-165.0	1.68	5632.52	0.03	99.77
118.0-119.0	1.26	5540.17	0.02	98.13	165.0-166.0	1.59	5634.12	0.03	99.80
119.0-120.0	1.31	5541.48	0.02	98.16	166.0-167.0	1.50	5635.62	0.03	99.82
120.0-121.0	1.34	5542.83	0.02	98.18	167.0-168.0	1.41	5637.02	0.02	99.85
121.0-122.0	1.39	5544.22	0.02	98.21	168.0-169.0	1.31	5638.33	0.02	99.87
122.0-123.0	1.46	5545.68	0.03	98.23	169.0-170.0	1.21	5639.54	0.02	99.89
123.0-124.0	1.52	5547.20	0.03	98.26	170.0-171.0	1.11	5640.65	0.02	99.91
124.0-125.0	1.58	5548.78	0.03	98.29	171.0-172.0	1.00	5641.65	0.02	99.93
125.0-126.0	1.63	5550.40	0.03	98.32	172.0-173.0	0.89	5642.55	0.02	99.95
126.0-127.0	1.69	5552.10	0.03	98.35	173.0-174.0	0.78	5643.32	0.01	99.96
127.0-128.0	1.73	5553.83	0.03	98.38	174.0-175.0	0.67	5643.99	0.01	99.97
128.0-129.0	1.77	5555.60	0.03	98.41	175.0-176.0	0.55	5644.54	0.01	99.98
129.0-130.0	1.85	5557.45	0.03	98.44	176.0-177.0	0.43	5644.97	0.01	99.99
130.0-131.0	1.90	5559.35	0.03	98.47	177.0-178.0	0.31	5645.27	0.01	100.00
131.0-132.0	1.91	5561.26	0.03	98.51	178.0-179.0	0.19	5645.46	0.00	100.00
132.0-133.0	1.97	5563.23	0.03	98.54	179.0-180.0	0.06	5645.52	0.00	100.00
133.0-134.0	2.04	5565.27	0.04	98.58					
134.0-135.0	2.06	5567.33	0.04	98.61					
135.0-136.0	2.10	5569.43	0.04	98.65					
136.0-137.0	2.16	5571.59	0.04	98.69					
137.0-138.0	2.19	5573.78	0.04	98.73					
138.0-139.0	2.22	5576.01	0.04	98.77					
139.0-140.0	2.27	5578.28	0.04	98.81					
140.0-141.0	2.30	5580.58	0.04	98.85					

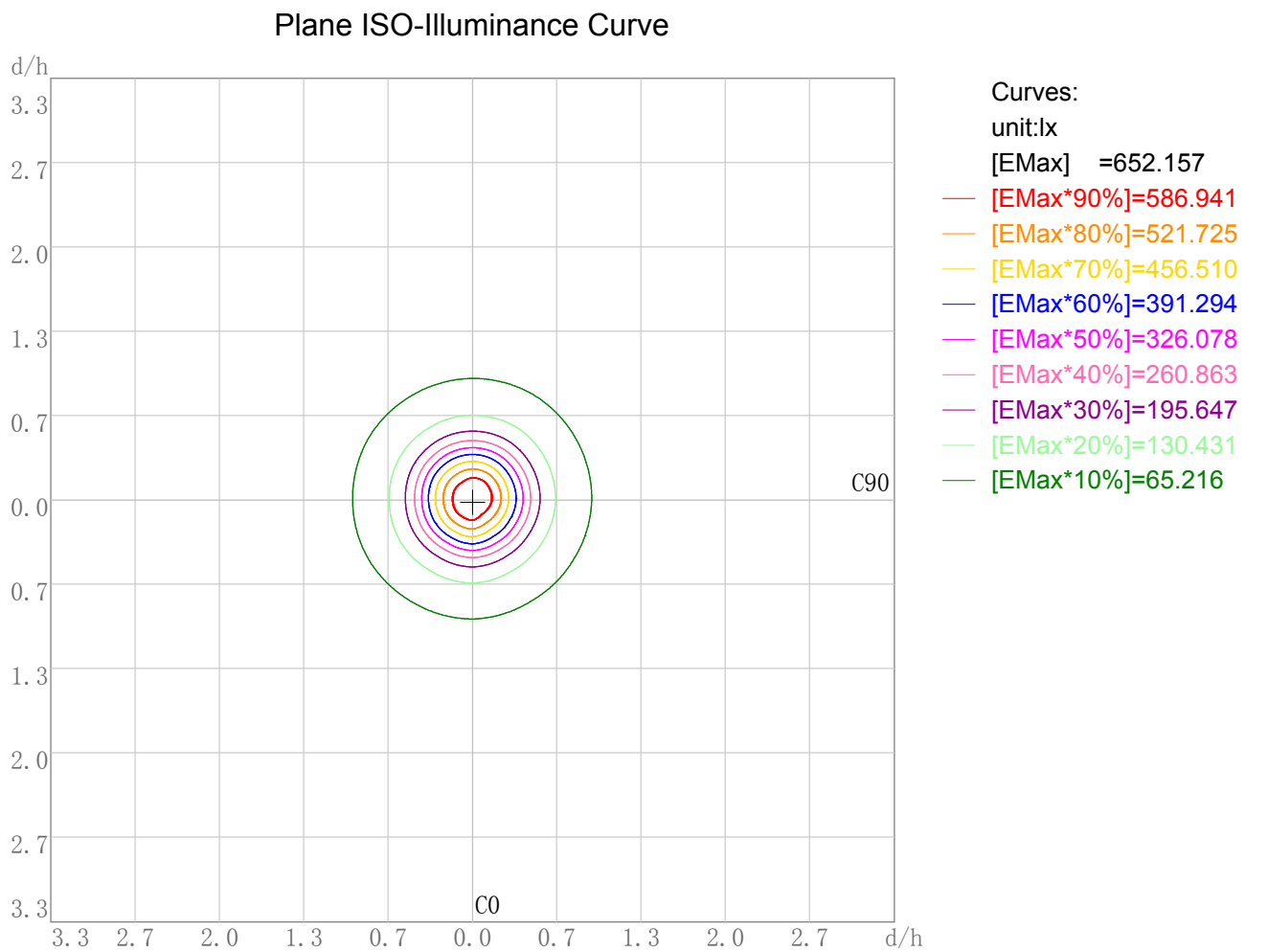
Rectangle ISO Lighting Intensity Diagram

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2017/06/16



Plane ISO-Illuminance Diagram

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2017/06/16

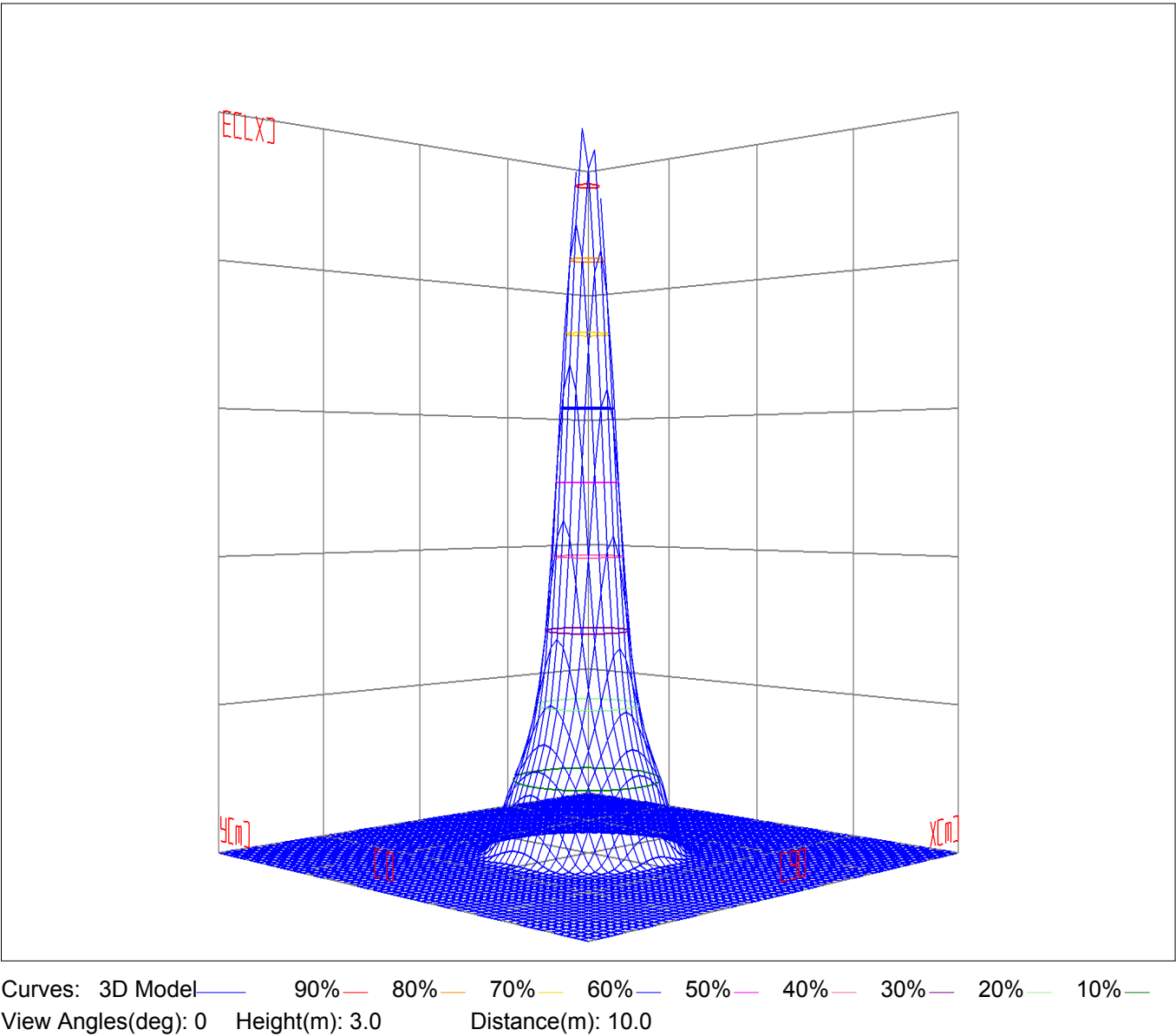


Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 652.16
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

Lum. Name:	Lum. Catelog:	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2017/06/16

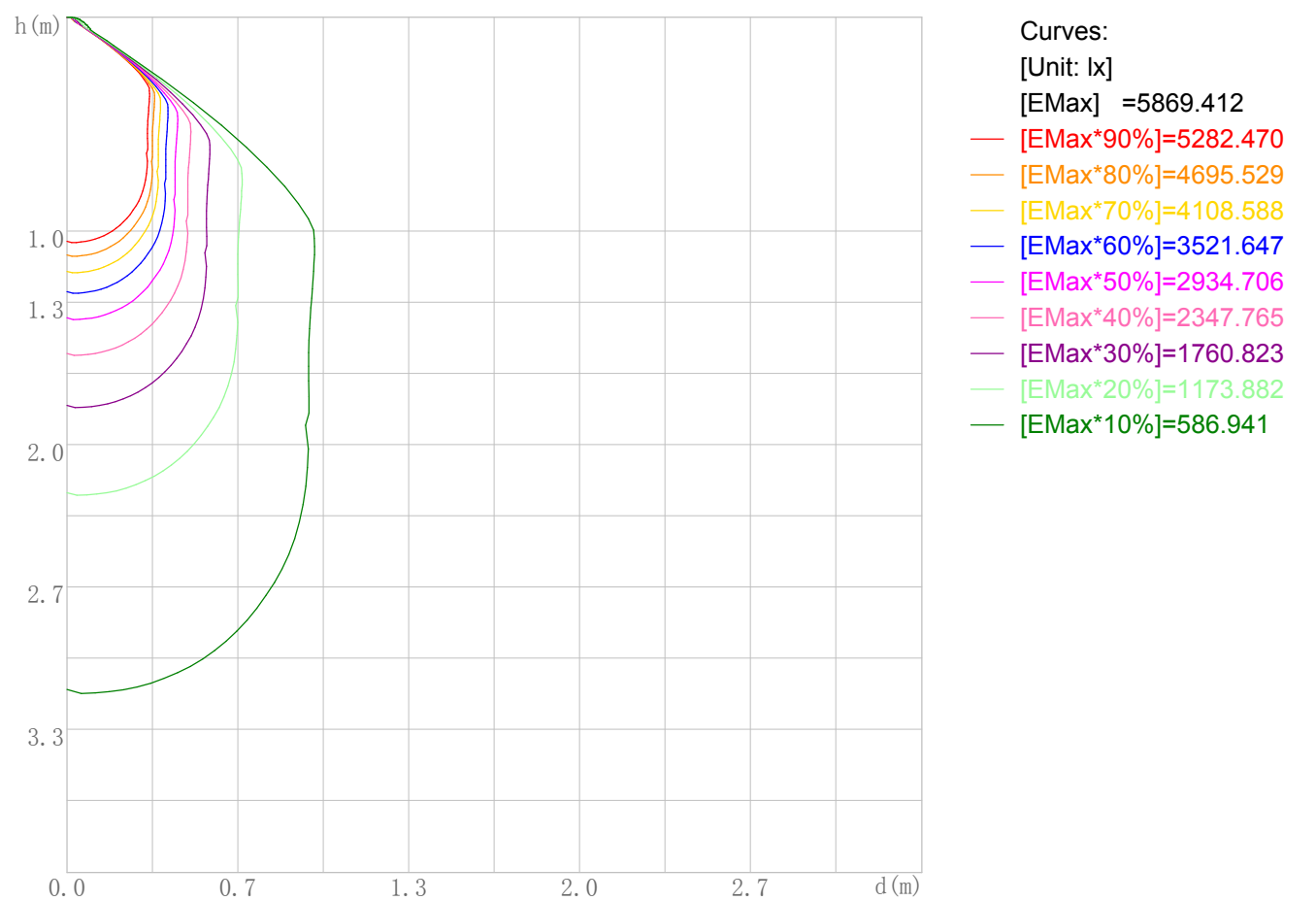
3D Plane Illuminance Modal



Space ISO Illuminance Diagram

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2017/06/16

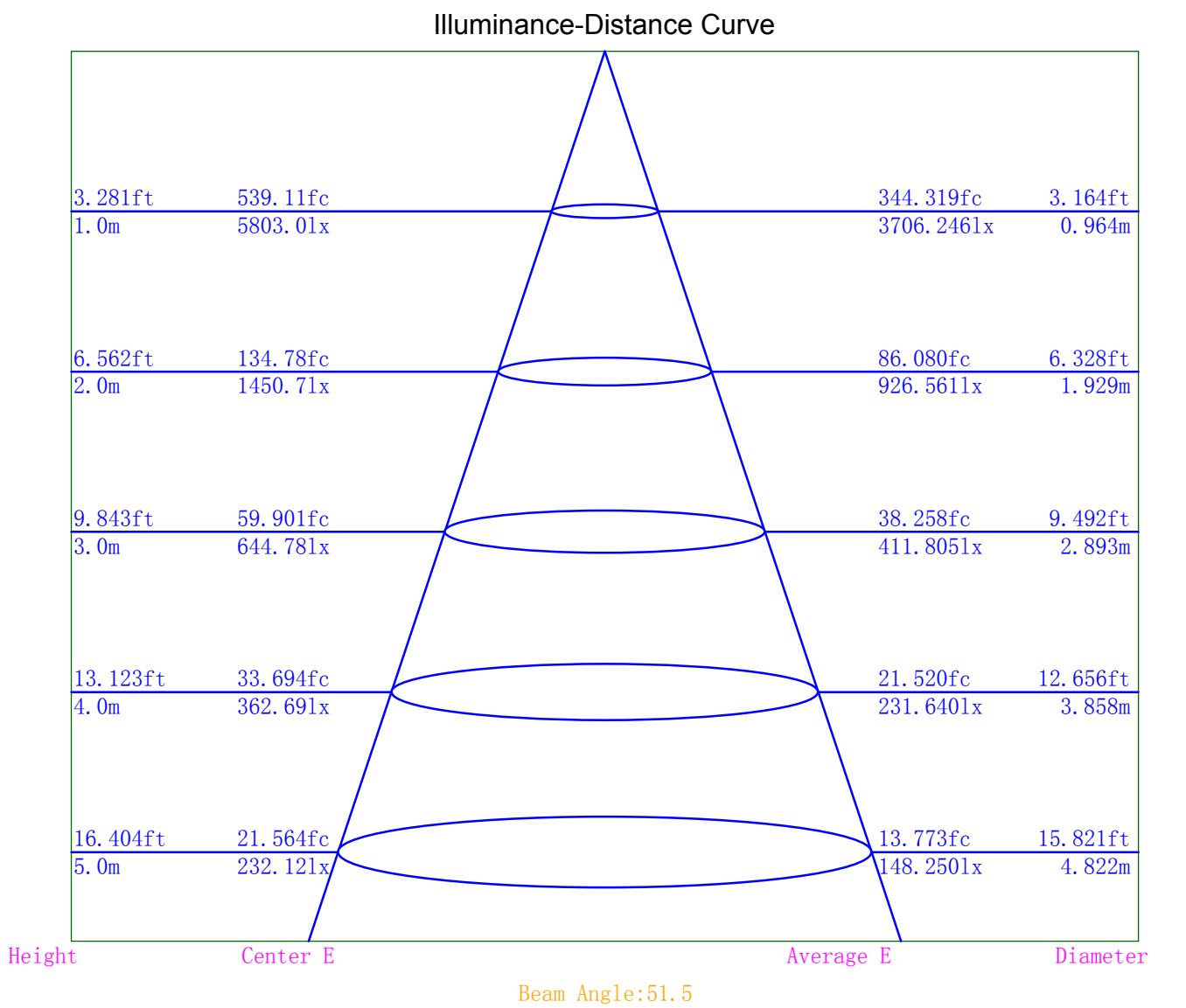
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:5869.41lx,1.0deg
Plane Maximum Lighting Intensity and @Angle:5872.451cd,0eg

Illuminance-Distance Diagram

Lum. Name:	Lum. Catelog:	Test ID:
Lamp Name:	Lamp Catelog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2017/06/16



Indoor Luminance Limiting Curves

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2017/06/16

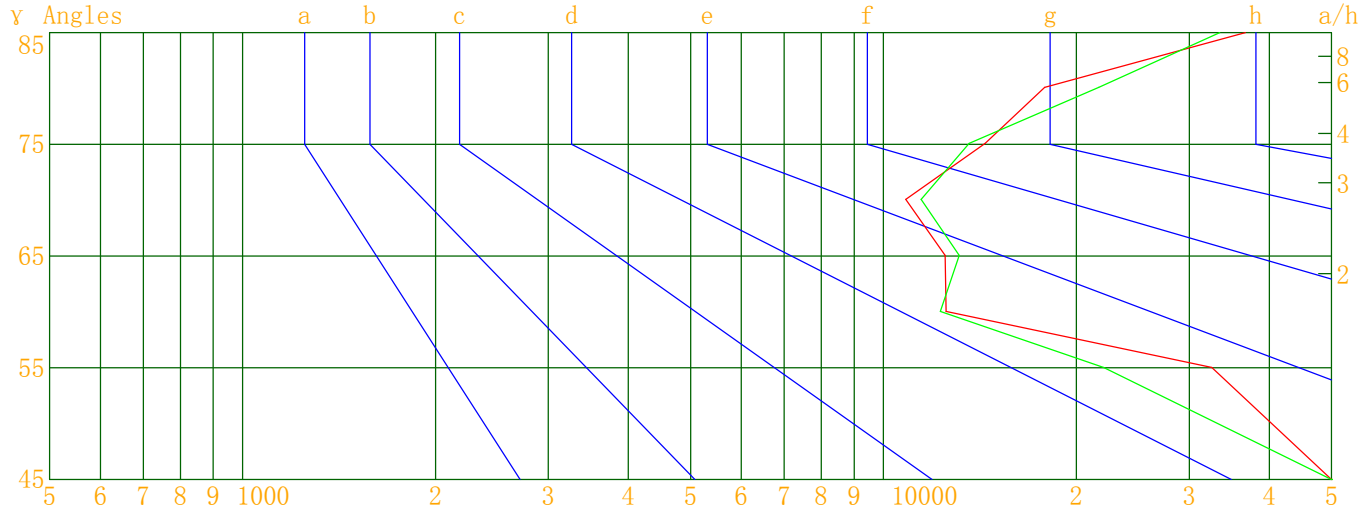
Glare Grade Table

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	1059329	449244	32508	12528	12479	10833	14412	17838	36715
C90	967718	313816	22058	12263	13122	11456	13609	21683	33460

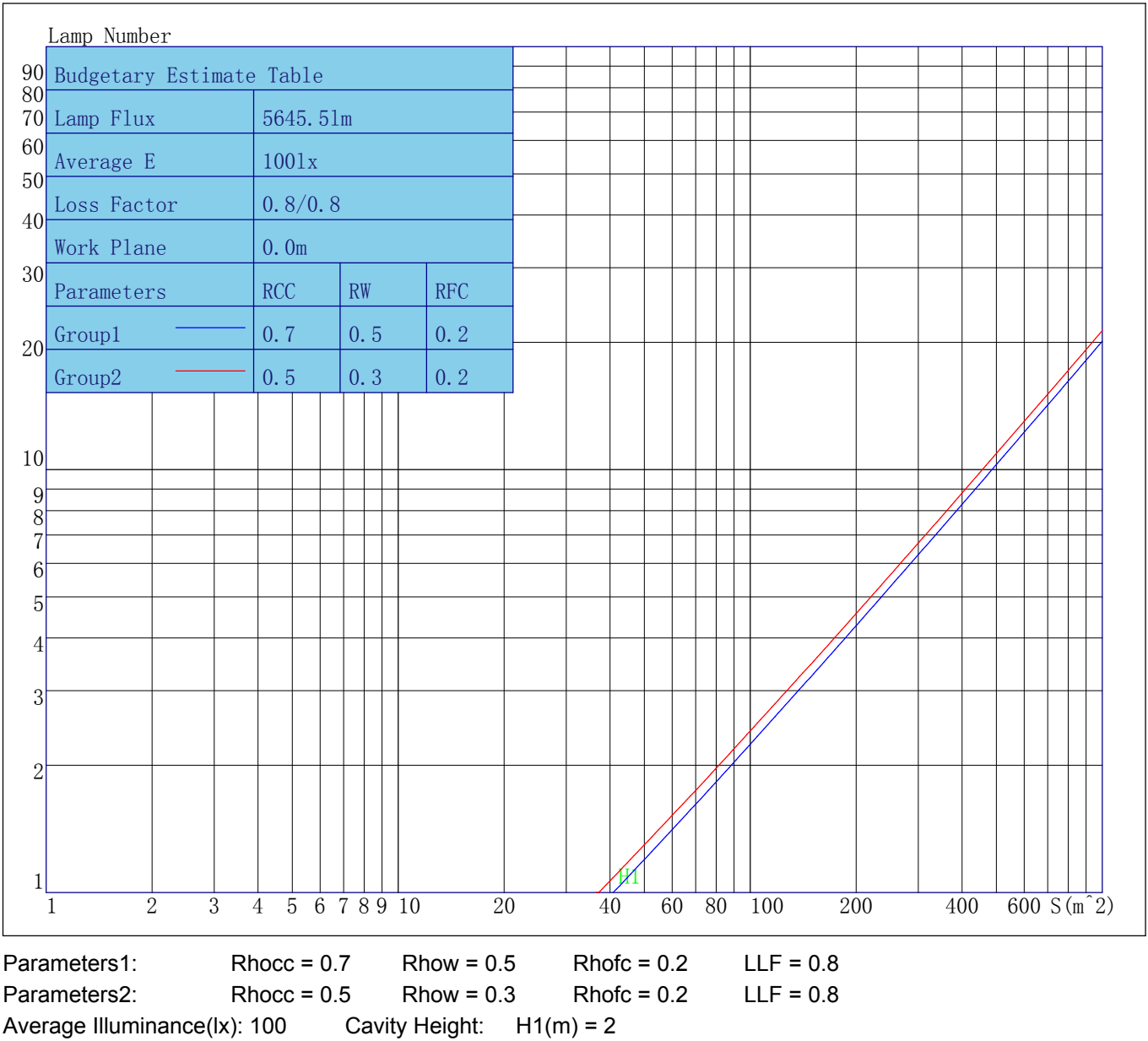
Luminance Limiting Curve



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:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2017/06/16



Indoor Coefficient of Utilization Table

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2017/06/16

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	115	115	115	115	110	110	110	105	105	105	100	100	100	98
1	112	110	107	104	110	107	105	103	103	101	99	99	97	96	95	94	92	91
2	106	101	97	93	104	99	95	92	96	92	89	92	90	87	89	87	85	83
3	100	93	88	84	98	92	87	83	89	85	81	86	83	80	84	81	78	76
4	95	87	81	76	93	85	80	75	83	78	74	80	76	73	78	75	72	70
5	89	80	74	69	87	79	73	69	77	72	68	75	71	67	73	70	66	65
6	84	75	68	64	83	74	68	63	72	67	63	70	66	62	69	65	61	60
7	80	70	63	59	78	69	63	58	67	62	58	66	61	57	65	60	57	55
8	75	65	59	54	74	65	58	54	63	58	54	62	57	53	61	56	53	52
9	71	61	55	51	70	61	55	50	59	54	50	58	53	50	57	53	50	48
10	68	58	51	47	67	57	51	47	56	51	47	55	50	47	54	50	46	45

IES Indoor Report
Photometric Filename:UL-50W-COB-5000-AH.IES

Unified Glare Rating Table

Lum. Name:	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog:	Test Lab:
Manufacture:	Test Machine:GON-2000	Test Date: 2017/06/16

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	32.0	33.1	32.4	33.4	33.8	31.3	32.3	31.7	32.7	33.1
	31.8	32.8	32.2	33.1	33.6	31.1	32.0	31.5	32.4	32.9
	31.7	32.6	32.2	33.0	33.4	31.0	31.9	31.5	32.3	32.7
	31.6	32.4	32.1	32.8	33.3	30.9	31.7	31.4	32.1	32.6
	31.6	32.3	32.0	32.8	33.2	30.9	31.6	31.3	32.1	32.5
	31.5	32.2	32.0	32.7	33.2	30.8	31.5	31.3	32.0	32.4
X=4H Y=2H	31.7	32.6	32.2	33.0	33.4	31.0	31.9	31.4	32.3	32.7
	31.5	32.2	32.0	32.7	33.2	30.8	31.5	31.3	32.0	32.5
	31.4	32.1	31.9	32.5	33.0	30.7	31.3	31.2	31.8	32.3
	31.3	31.9	31.8	32.4	32.9	30.6	31.2	31.1	31.7	32.2
	31.3	31.8	31.8	32.3	32.8	30.6	31.1	31.1	31.6	32.1
	31.2	31.6	31.7	32.2	32.7	30.5	30.9	31.0	31.5	32.0
X=8H Y=4H	31.2	31.8	31.8	32.3	32.8	30.5	31.1	31.1	31.5	32.1
	31.1	31.5	31.7	32.1	32.7	30.4	30.8	31.0	31.4	32.0
	31.1	31.4	31.6	32.0	32.5	30.4	30.7	30.9	31.3	31.8
	31.0	31.4	31.6	31.9	32.5	30.3	30.7	30.9	31.2	31.8
X=12H Y=4H	31.2	31.6	31.7	32.2	32.7	30.5	30.9	31.0	31.5	32.0
	31.1	31.4	31.6	32.0	32.6	30.4	30.7	30.9	31.3	31.9
	31.0	31.3	31.6	31.9	32.5	30.3	30.6	30.9	31.2	31.8
Variations with the objverver position at spacings										
S=1.0H	0.1/-0.1					0.1/-0.0				
S=1.5H	0.2/-0.1					0.2/-0.1				
S=2.0H	0.3/-0.3					0.2/-0.1				
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-50W-COB-5000-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	5802. 98	5802. 98	5802. 98	5802. 98	5802. 98	5802. 98	5802. 98	5802. 98	5802. 98	5802. 98	5802. 98	5802. 98
Y 1. 0	5872. 09	5833. 33	5796. 34	5767. 68	5734. 94	5711. 74	5866. 19	5832. 48	5805. 74	5778. 29	5753. 63	5726. 36
Y 2. 0	5872. 45	5828. 54	5788. 16	5753. 02	5717. 16	5691. 75	5854. 09	5819. 57	5798. 68	5773. 41	5750. 96	5727. 78
Y 3. 0	5862. 19	5818. 86	5769. 65	5733. 20	5688. 74	5664. 73	5833. 92	5798. 21	5786. 53	5765. 58	5751. 16	5725. 86
Y 4. 0	5849. 52	5802. 58	5747. 42	5704. 93	5652. 60	5628. 08	5799. 23	5767. 19	5763. 30	5746. 24	5738. 41	5715. 30
Y 5. 0	5823. 20	5779. 19	5716. 18	5666. 49	5607. 85	5580. 55	5759. 05	5726. 06	5731. 93	5718. 18	5716. 85	5695. 87
Y 6. 0	5787. 98	5746. 19	5671. 78	5623. 27	5553. 60	5525. 22	5710. 82	5673. 75	5687. 28	5679. 06	5687. 04	5667. 45
Y 7. 0	5739. 32	5703. 94	5620. 20	5567. 39	5488. 83	5460. 73	5650. 23	5611. 95	5631. 16	5627. 45	5646. 11	5627. 09
Y 8. 0	5680. 10	5649. 42	5557. 11	5503. 56	5412. 27	5382. 87	5576. 19	5542. 55	5566. 06	5565. 52	5595. 42	5576. 42
Y 9. 0	5613. 46	5586. 28	5485. 63	5424. 92	5327. 32	5294. 50	5491. 96	5453. 06	5485. 73	5489. 83	5530. 91	5519. 75
Y 10. 0	5536. 49	5508. 00	5399. 33	5337. 06	5228. 42	5196. 68	5394. 73	5355. 39	5395. 55	5402. 40	5458. 35	5449. 95
Y 11. 0	5446. 04	5414. 65	5303. 66	5235. 44	5120. 46	5088. 96	5287. 90	5251. 74	5294. 63	5304. 55	5371. 37	5366. 25
Y 12. 0	5343. 81	5312. 42	5199. 64	5125. 34	5003. 28	4973. 48	5178. 08	5137. 51	5181. 23	5197. 95	5274. 43	5270. 52
Y 13. 0	5228. 88	5202. 58	5083. 58	5007. 96	4878. 59	4851. 47	5056. 89	5012. 63	5061. 95	5081. 98	5170. 40	5167. 79
Y 14. 0	5109. 37	5080. 65	4960. 32	4882. 43	4748. 16	4723. 46	4930. 60	4885. 96	4934. 96	4954. 72	5055. 57	5054. 94
Y 15. 0	4975. 83	4950. 09	4826. 22	4749. 15	4612. 66	4590. 90	4798. 69	4751. 39	4800. 76	4825. 65	4934. 33	4932. 93
Y 16. 0	4836. 36	4812. 98	4690. 35	4609. 83	4472. 67	4453. 44	4664. 08	4605. 26	4658. 90	4690. 32	4803. 46	4805. 52
Y 17. 0	4693. 78	4666. 37	4542. 96	4469. 93	4328. 87	4310. 95	4515. 52	4449. 31	4507. 13	4546. 64	4664. 00	4673. 57
Y 18. 0	4544. 49	4512. 40	4387. 43	4319. 73	4177. 69	4156. 50	4358. 48	4277. 23	4345. 66	4389. 57	4512. 89	4525. 65
Y 19. 0	4383. 84	4352. 81	4228. 23	4160. 78	4012. 70	3992. 97	4188. 18	4093. 22	4172. 80	4218. 90	4347. 90	4366. 43
Y 20. 0	4209. 44	4182. 47	4054. 06	3992. 01	3837. 42	3818. 65	4005. 22	3897. 89	3988. 02	4034. 53	4171. 66	4194. 91
Y 21. 0	4021. 44	4005. 48	3873. 81	3814. 95	3652. 71	3632. 46	3808. 51	3701. 28	3793. 65	3841. 04	3981. 87	4017. 21
Y 22. 0	3824. 53	3815. 36	3686. 30	3631. 02	3463. 57	3439. 30	3598. 93	3498. 31	3591. 21	3637. 87	3787. 01	3824. 41
Y 23. 0	3619. 31	3615. 27	3493. 12	3443. 32	3276. 11	3251. 00	3390. 94	3301. 08	3389. 77	3433. 70	3582. 79	3621. 66
Y 24. 0	3412. 91	3416. 10	3305. 73	3253. 05	3094. 46	3065. 27	3195. 86	3106. 94	3192. 03	3233. 46	3377. 85	3419. 14
Y 25. 0	3215. 14	3222. 24	3120. 10	3065. 42	2914. 22	2887. 03	3008. 32	2898. 53	3004. 03	3039. 81	3184. 92	3222. 50
Y 26. 0	2944. 06	3035. 49	2940. 17	2890. 26	2744. 74	2719. 37	2832. 24	2759. 69	2829. 63	2857. 00	2999. 99	3028. 96
Y 27. 0	2844. 04	2860. 05	2769. 21	2728. 54	2587. 07	2563. 31	2669. 58	2611. 76	2672. 74	2692. 11	2823. 65	2852. 70
Y 28. 0	2684. 88	2701. 06	2618. 49	2574. 16	2445. 22	2418. 36	2522. 66	2475. 63	2530. 06	2545. 33	2664. 55	2689. 13
Y 29. 0	2538. 60	2558. 61	2477. 23	2435. 35	2322. 09	2290. 97	2393. 78	2353. 85	2402. 25	2419. 15	2519. 64	2540. 53
Y 30. 0	2407. 43	2428. 30	2349. 97	2308. 02	2213. 16	2181. 46	2281. 50	2245. 59	2289. 04	2304. 10	2388. 76	2405. 57
Y 31. 0	2292. 37	2315. 22	2235. 81	2196. 46	2113. 85	2086. 03	2183. 12	2150. 56	2191. 01	2202. 67	2276. 09	2286. 45
Y 32. 0	2193. 01	2214. 20	2137. 33	2104. 99	2030. 70	2006. 56	2096. 43	2068. 61	2107. 81	2115. 61	2181. 01	2181. 94
Y 33. 0	2108. 65	2125. 95	2054. 98	2025. 23	1954. 70	1936. 86	2023. 00	1995. 76	2033. 19	2040. 83	2095. 78	2096. 11
Y 34. 0	2035. 98	2047. 01	1985. 14	1953. 63	1889. 89	1875. 51	1956. 90	1932. 39	1967. 12	1972. 38	2020. 32	2020. 51
Y 35. 0	1970. 43	1976. 75	1920. 72	1889. 38	1832. 31	1817. 73	1896. 53	1875. 42	1906. 51	1911. 61	1953. 70	1950. 29
Y 36. 0	1912. 13	1915. 08	1862. 89	1833. 35	1779. 79	1767. 92	1841. 84	1824. 36	1851. 36	1856. 95	1893. 26	1889. 79
Y 37. 0	1858. 40	1857. 42	1811. 89	1781. 36	1733. 40	1722. 45	1793. 15	1775. 32	1802. 24	1805. 71	1838. 68	1833. 11
Y 38. 0	1809. 50	1808. 10	1762. 06	1735. 31	1689. 63	1680. 46	1747. 69	1732. 01	1755. 22	1759. 20	1789. 94	1781. 69
Y 39. 0	1764. 40	1763. 09	1718. 75	1692. 82	1648. 13	1640. 72	1705. 35	1692. 47	1713. 34	1716. 90	1742. 95	1738. 32
Y 40. 0	1721. 44	1718. 65	1680. 23	1652. 03	1611. 19	1603. 76	1666. 67	1652. 98	1675. 39	1675. 40	1700. 06	1695. 75
Y 41. 0	1683. 70	1678. 90	1640. 70	1615. 94	1573. 44	1566. 17	1629. 71	1615. 39	1636. 42	1637. 26	1659. 74	1655. 53
Y 42. 0	1644. 81	1640. 38	1603. 86	1578. 19	1534. 05	1525. 05	1589. 59	1577. 98	1598. 79	1599. 29	1621. 99	1616. 13
Y 43. 0	1605. 92	1601. 82	1564. 64	1538. 94	1472. 96	1454. 30	1539. 61	1519. 55	1559. 53	1562. 27	1585. 46	1581. 23
Y 44. 0	1562. 60	1563. 62	1516. 08	1474. 39	1348. 44	1322. 16	1425. 86	1400. 05	1486. 21	1503. 80	1546. 74	1543. 22
Y 45. 0	1470. 77	1485. 90	1406. 90	1343. 58	1187. 55	1160. 39	1269. 48	1236. 22	1349. 76	1387. 72	1476. 03	1482. 54
Y 46. 0	1330. 65	1350. 57	1250. 50	1178. 82	1006. 45	981. 34	1083. 65	1047. 35	1167. 84	1226. 49	1350. 22	1360. 81

IES Indoor Report
Photometric Filename:UL-50W-COB-5000-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	1158. 92	1181. 16	1067. 45	991. 23	816. 29	790. 39	887. 10	840. 12	964. 33	1030. 70	1185. 83	1205. 07
Y 48. 0	967. 40	991. 83	866. 63	790. 00	620. 79	593. 13	679. 68	629. 39	752. 52	821. 41	992. 55	1023. 35
Y 49. 0	765. 89	788. 83	661. 20	587. 83	429. 52	403. 32	476. 55	428. 78	541. 32	609. 38	785. 55	824. 87
Y 50. 0	566. 99	586. 99	463. 85	396. 07	254. 67	237. 29	294. 78	247. 93	346. 04	404. 34	584. 41	623. 32
Y 51. 0	375. 64	397. 68	280. 16	230. 39	119. 60	107. 90	149. 83	114. 72	181. 77	233. 05	389. 83	432. 18
Y 52. 0	209. 59	227. 08	135. 93	100. 50	53. 41	49. 09	62. 53	52. 18	75. 92	100. 63	219. 31	259. 65
Y 53. 0	92. 53	103. 30	62. 24	50. 53	38. 15	36. 72	37. 21	35. 77	42. 35	47. 99	95. 79	121. 89
Y 54. 0	50. 32	54. 85	43. 86	39. 08	27. 73	25. 74	26. 46	24. 69	30. 04	33. 57	48. 07	54. 52
Y 55. 0	36. 61	40. 79	33. 60	24. 84	14. 98	12. 67	14. 26	12. 19	15. 35	17. 25	33. 08	36. 90
Y 56. 0	16. 97	25. 42	16. 87	14. 61	14. 00	12. 80	12. 11	11. 61	13. 25	11. 67	14. 32	19. 58
Y 57. 0	12. 49	14. 58	14. 20	14. 02	13. 88	12. 54	11. 06	11. 95	10. 66	12. 36	13. 31	12. 72
Y 58. 0	13. 02	12. 48	13. 66	11. 97	11. 98	11. 42	11. 15	10. 44	11. 51	10. 17	11. 56	12. 46
Y 59. 0	12. 71	11. 90	12. 54	12. 01	12. 03	10. 82	10. 95	10. 22	10. 67	10. 03	11. 00	11. 71
Y 60. 0	12. 30	12. 75	12. 85	12. 04	12. 30	10. 57	9. 11	10. 73	9. 10	10. 58	11. 23	11. 77
Y 61. 0	10. 30	11. 15	12. 29	10. 39	11. 18	10. 10	9. 42	9. 46	9. 69	9. 11	10. 46	10. 40
Y 62. 0	11. 49	10. 97	10. 81	11. 29	10. 66	9. 09	10. 35	8. 51	9. 51	9. 02	9. 77	10. 03
Y 63. 0	9. 94	10. 29	11. 54	10. 53	11. 44	10. 22	9. 21	8. 46	9. 10	9. 67	9. 59	9. 90
Y 64. 0	8. 76	10. 22	10. 26	9. 77	11. 25	9. 68	8. 01	9. 28	10. 45	8. 03	9. 39	8. 38
Y 65. 0	10. 35	9. 41	9. 76	10. 89	8. 45	8. 85	8. 83	7. 45	9. 23	8. 36	8. 39	8. 69
Y 66. 0	9. 44	10. 43	10. 85	9. 66	10. 16	9. 12	8. 34	9. 18	8. 01	9. 12	9. 11	9. 65
Y 67. 0	8. 89	9. 96	10. 46	8. 21	9. 82	9. 02	7. 69	8. 72	8. 90	7. 91	9. 01	8. 33
Y 68. 0	9. 00	8. 44	8. 98	9. 70	8. 43	7. 86	8. 72	7. 65	7. 77	7. 64	8. 11	8. 39
Y 69. 0	8. 69	9. 33	9. 30	9. 00	8. 86	7. 96	8. 22	8. 27	7. 25	8. 48	7. 93	8. 87
Y 70. 0	7. 28	8. 15	9. 40	7. 69	9. 62	8. 31	7. 61	8. 02	8. 63	7. 48	8. 33	7. 83
Y 71. 0	8. 56	7. 68	8. 22	8. 84	8. 83	8. 46	7. 40	6. 35	7. 42	6. 52	7. 17	7. 73
Y 72. 0	7. 80	8. 34	8. 78	8. 85	7. 80	6. 57	7. 17	8. 23	6. 31	7. 53	8. 03	8. 51
Y 73. 0	7. 01	8. 29	7. 27	6. 59	7. 87	7. 68	8. 16	7. 29	8. 13	5. 58	8. 08	7. 54
Y 74. 0	7. 09	6. 88	8. 04	8. 29	8. 33	6. 93	5. 94	6. 39	6. 97	6. 55	6. 73	6. 36
Y 75. 0	7. 32	7. 12	8. 77	6. 92	6. 61	6. 42	6. 34	7. 65	7. 10	6. 70	7. 05	6. 83
Y 76. 0	6. 78	7. 27	7. 63	6. 45	7. 91	7. 44	6. 32	7. 06	8. 13	6. 31	7. 55	7. 09
Y 77. 0	6. 70	6. 32	6. 95	7. 54	7. 57	6. 13	6. 61	7. 16	6. 91	6. 33	6. 73	6. 62
Y 78. 0	7. 65	6. 85	8. 11	7. 12	6. 34	5. 67	5. 38	6. 49	6. 66	6. 42	5. 98	6. 28
Y 79. 0	6. 90	7. 52	7. 52	7. 01	6. 91	6. 93	6. 66	7. 11	7. 52	6. 58	7. 66	7. 40
Y 80. 0	6. 08	6. 36	6. 62	7. 39	7. 44	7. 03	6. 01	6. 64	5. 94	5. 59	6. 27	7. 79
Y 81. 0	7. 01	7. 09	7. 41	7. 13	6. 81	5. 56	5. 84	6. 66	6. 18	6. 82	7. 15	6. 27
Y 82. 0	7. 19	6. 88	6. 90	6. 19	6. 08	6. 75	6. 00	6. 35	6. 32	5. 98	7. 27	6. 25
Y 83. 0	4. 86	4. 96	5. 77	7. 07	7. 03	6. 73	6. 92	5. 77	5. 93	5. 50	5. 78	6. 60
Y 84. 0	6. 45	6. 39	7. 10	5. 89	6. 95	6. 18	6. 21	6. 51	5. 96	6. 46	5. 68	4. 62
Y 85. 0	6. 28	7. 09	5. 40	5. 73	5. 29	5. 65	5. 44	6. 73	7. 50	6. 13	6. 50	5. 93
Y 86. 0	6. 01	5. 57	4. 90	6. 39	5. 66	6. 20	5. 47	5. 53	5. 66	4. 84	6. 06	6. 44
Y 87. 0	4. 39	5. 94	5. 58	5. 54	6. 16	5. 50	5. 78	6. 37	6. 22	6. 28	5. 24	5. 31
Y 88. 0	6. 25	5. 93	5. 51	5. 08	5. 93	5. 88	6. 05	6. 60	6. 69	6. 19	5. 61	4. 97
Y 89. 0	5. 85	5. 32	4. 75	5. 94	5. 57	6. 76	4. 85	4. 66	5. 37	5. 53	5. 58	6. 88
Y 90. 0	5. 34	5. 63	5. 73	5. 38	6. 70	6. 33	5. 82	6. 19	6. 06	5. 84	4. 98	5. 18
Y 91. 0	5. 71	6. 19	4. 52	4. 75	5. 98	5. 22	6. 01	6. 02	6. 42	5. 93	6. 29	5. 35
Y 92. 0	5. 13	5. 34	4. 25	6. 14	4. 85	6. 14	5. 07	5. 28	5. 23	4. 86	5. 62	5. 76
Y 93. 0	5. 21	5. 41	5. 36	4. 59	5. 59	7. 10	5. 28	5. 21	5. 44	6. 07	5. 51	6. 11

IES Indoor Report
Photometric Filename:UL-50W-COB-5000-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 94. 0	6. 07	5. 96	4. 63	4. 72	6. 97	5. 27	4. 89	6. 06	6. 36	5. 79	5. 47	5. 11
Y 95. 0	5. 09	4. 59	4. 66	6. 02	4. 79	6. 41	4. 93	5. 53	5. 34	5. 37	6. 24	5. 59
Y 96. 0	5. 44	5. 44	5. 94	5. 13	4. 81	6. 66	4. 94	5. 31	6. 36	5. 89	4. 41	6. 23
Y 97. 0	6. 54	6. 24	5. 15	4. 44	6. 61	4. 85	6. 43	6. 36	6. 42	6. 13	6. 29	5. 20
Y 98. 0	6. 39	5. 31	4. 87	5. 32	6. 45	5. 95	5. 89	6. 53	5. 24	5. 26	6. 75	5. 24
Y 99. 0	5. 58	4. 70	6. 43	6. 34	6. 10	6. 52	5. 14	6. 36	6. 10	6. 87	6. 47	6. 33
Y 100. 0	6. 55	6. 34	4. 45	6. 29	6. 21	6. 48	6. 08	7. 13	7. 01	6. 35	5. 84	5. 71
Y 101. 0	6. 96	5. 59	5. 76	6. 43	7. 01	6. 93	7. 22	6. 70	5. 40	6. 18	7. 73	5. 69
Y 102. 0	6. 38	5. 88	6. 81	5. 89	7. 21	7. 14	6. 24	6. 68	7. 47	7. 69	6. 77	6. 51
Y 103. 0	6. 07	6. 85	5. 88	6. 33	6. 87	7. 01	6. 83	7. 50	7. 12	6. 64	6. 56	6. 95
Y 104. 0	7. 93	6. 34	6. 18	7. 14	6. 95	6. 72	7. 00	7. 42	6. 91	6. 16	7. 94	5. 82
Y 105. 0	7. 01	6. 55	6. 91	6. 02	8. 19	8. 58	8. 24	7. 37	7. 90	7. 22	7. 94	6. 72
Y 106. 0	7. 74	7. 65	6. 89	6. 77	7. 09	8. 38	7. 47	8. 44	8. 73	8. 25	6. 99	7. 91
Y 107. 0	8. 14	7. 55	6. 97	8. 50	7. 48	7. 24	7. 15	8. 45	7. 73	7. 49	8. 87	7. 28
Y 108. 0	8. 55	7. 40	8. 07	6. 95	9. 68	8. 44	9. 43	8. 08	9. 58	8. 79	9. 14	7. 16
Y 109. 0	7. 56	8. 61	6. 85	7. 30	8. 60	9. 22	8. 19	9. 85	10. 05	8. 85	8. 40	9. 18
Y 110. 0	9. 27	8. 04	7. 81	9. 17	8. 60	7. 55	9. 33	10. 34	8. 64	8. 72	9. 50	9. 49
Y 111. 0	8. 85	8. 92	8. 06	7. 95	8. 87	9. 39	10. 34	8. 88	10. 15	9. 81	9. 43	8. 64
Y 112. 0	8. 36	9. 00	8. 14	8. 46	10. 72	10. 93	12. 00	11. 22	10. 73	11. 00	8. 72	9. 97
Y 113. 0	9. 53	9. 77	8. 67	10. 07	10. 00	9. 53	10. 53	11. 38	9. 39	9. 85	10. 69	10. 55
Y 114. 0	10. 78	8. 60	9. 80	8. 84	10. 56	10. 33	11. 37	10. 65	12. 15	10. 71	10. 43	10. 45
Y 115. 0	10. 66	10. 10	9. 93	9. 95	11. 26	11. 63	12. 77	12. 41	12. 06	12. 16	9. 84	9. 76
Y 116. 0	11. 05	11. 11	10. 54	11. 62	13. 04	11. 39	12. 97	12. 82	11. 56	12. 19	11. 15	12. 54
Y 117. 0	12. 51	10. 54	10. 97	10. 82	12. 65	11. 55	12. 71	12. 92	13. 35	13. 85	12. 22	11. 61
Y 118. 0	12. 00	12. 79	9. 81	12. 41	13. 45	14. 53	12. 82	13. 61	13. 61	13. 94	11. 42	11. 12
Y 119. 0	12. 55	12. 70	12. 94	13. 44	14. 24	13. 53	14. 61	15. 35	13. 67	14. 12	11. 73	12. 69
Y 120. 0	13. 80	11. 51	13. 47	12. 68	15. 30	13. 85	15. 45	14. 99	15. 21	14. 24	13. 56	14. 45
Y 121. 0	14. 00	13. 24	13. 05	14. 44	14. 84	14. 35	14. 52	15. 55	15. 71	16. 34	13. 13	13. 86
Y 122. 0	14. 10	13. 69	14. 77	15. 11	16. 93	15. 95	16. 70	17. 09	15. 75	15. 55	13. 94	14. 46
Y 123. 0	15. 73	13. 83	15. 34	14. 10	17. 60	15. 19	17. 55	18. 02	18. 12	16. 79	15. 48	16. 70
Y 124. 0	15. 96	15. 12	15. 48	16. 77	17. 23	18. 12	17. 62	18. 69	18. 05	18. 33	16. 52	17. 11
Y 125. 0	16. 17	16. 64	16. 70	18. 17	18. 40	18. 45	18. 77	19. 29	17. 85	18. 40	16. 69	17. 75
Y 126. 0	18. 13	16. 44	17. 59	17. 28	20. 43	18. 38	20. 66	19. 07	19. 95	19. 29	18. 65	18. 73
Y 127. 0	18. 17	18. 77	17. 28	18. 15	20. 64	19. 68	20. 51	21. 75	20. 78	20. 87	19. 18	20. 17
Y 128. 0	18. 24	19. 66	19. 62	19. 57	20. 60	21. 74	21. 38	22. 31	20. 27	20. 64	19. 05	19. 24
Y 129. 0	19. 62	19. 19	19. 36	19. 12	21. 91	21. 42	23. 50	22. 46	23. 06	22. 13	20. 61	21. 23
Y 130. 0	22. 20	20. 84	20. 01	21. 50	22. 81	22. 84	25. 02	23. 98	23. 64	23. 23	21. 25	23. 07
Y 131. 0	21. 69	21. 96	21. 25	21. 99	23. 02	24. 10	23. 95	25. 03	23. 66	23. 81	21. 83	23. 07
Y 132. 0	22. 74	21. 68	22. 35	22. 56	23. 11	24. 00	25. 83	25. 77	26. 03	23. 65	23. 35	22. 48
Y 133. 0	23. 86	22. 88	22. 44	23. 60	26. 08	25. 14	27. 39	27. 01	26. 63	26. 18	24. 96	25. 73
Y 134. 0	24. 08	24. 57	24. 56	24. 84	26. 27	26. 70	28. 65	28. 35	26. 76	27. 11	23. 83	27. 06
Y 135. 0	25. 19	24. 86	25. 40	25. 57	26. 17	26. 44	28. 72	28. 09	28. 25	27. 48	26. 15	27. 08
Y 136. 0	27. 75	26. 20	25. 75	27. 22	26. 24	28. 21	30. 48	30. 14	29. 47	29. 87	27. 11	28. 15
Y 137. 0	27. 33	27. 94	27. 83	27. 76	29. 35	28. 76	31. 92	31. 03	30. 22	29. 79	28. 08	30. 01
Y 138. 0	28. 47	27. 09	28. 00	28. 02	29. 88	30. 01	32. 69	31. 83	33. 10	31. 46	30. 12	30. 01
Y 139. 0	29. 43	28. 65	29. 34	30. 39	31. 03	30. 07	32. 58	33. 38	33. 37	33. 71	31. 77	30. 49
Y 140. 0	30. 62	30. 84	30. 83	31. 79	33. 44	32. 42	33. 65	34. 86	34. 28	33. 87	31. 31	33. 47

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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	30. 34	30. 48	31. 51	32. 51	34. 32	33. 22	34. 72	35. 24	36. 34	34. 37	33. 65	33. 94
Y 142. 0	33. 42	30. 79	31. 75	33. 68	34. 08	34. 10	32. 90	35. 59	36. 21	37. 11	35. 47	33. 86
Y 143. 0	33. 83	34. 47	34. 71	34. 97	35. 20	35. 71	31. 99	39. 52	36. 87	37. 55	34. 55	35. 62
Y 144. 0	33. 56	34. 07	34. 87	35. 12	37. 27	36. 65	30. 14	38. 58	40. 15	37. 87	37. 09	37. 44
Y 145. 0	35. 90	34. 66	34. 94	36. 97	37. 71	37. 27	29. 92	39. 62	40. 39	40. 22	38. 84	37. 92
Y 146. 0	36. 65	37. 16	37. 64	38. 26	37. 59	37. 84	29. 73	42. 34	40. 09	40. 66	38. 87	39. 21
Y 147. 0	36. 24	37. 08	37. 97	37. 84	38. 88	39. 91	31. 27	42. 04	42. 95	40. 91	39. 47	40. 74
Y 148. 0	38. 35	37. 45	38. 57	40. 19	40. 91	40. 35	32. 11	42. 69	43. 65	43. 35	41. 75	42. 99
Y 149. 0	40. 64	40. 40	40. 39	40. 44	40. 87	41. 32	32. 20	45. 73	43. 83	43. 65	41. 74	41. 75
Y 150. 0	39. 83	40. 53	40. 88	41. 13	41. 26	43. 42	33. 18	45. 84	46. 06	44. 48	42. 71	43. 72
Y 151. 0	40. 85	41. 66	42. 35	43. 06	42. 88	42. 68	35. 33	45. 98	46. 51	46. 34	45. 01	45. 79
Y 152. 0	43. 11	43. 99	44. 29	44. 34	44. 11	43. 94	34. 98	48. 23	46. 61	46. 87	45. 56	46. 05
Y 153. 0	43. 04	44. 31	44. 01	44. 41	44. 49	46. 22	34. 60	49. 12	48. 87	47. 68	45. 75	45. 77
Y 154. 0	44. 91	44. 51	45. 09	46. 53	45. 90	46. 44	36. 77	49. 62	49. 56	49. 73	48. 24	48. 38
Y 155. 0	46. 85	46. 74	46. 67	46. 86	47. 74	47. 18	38. 81	52. 07	49. 95	51. 09	48. 77	49. 74
Y 156. 0	47. 04	47. 93	47. 26	47. 03	48. 79	49. 34	39. 44	52. 02	52. 20	49. 98	49. 06	50. 28
Y 157. 0	47. 96	47. 84	49. 01	49. 90	49. 08	49. 58	44. 22	52. 68	53. 58	53. 18	51. 13	50. 55
Y 158. 0	49. 62	50. 07	49. 84	49. 10	50. 57	50. 22	48. 92	55. 10	53. 13	54. 01	51. 98	52. 71
Y 159. 0	50. 82	51. 48	49. 45	50. 63	52. 55	52. 74	52. 12	54. 28	55. 28	53. 24	50. 95	53. 58
Y 160. 0	51. 01	50. 95	51. 78	52. 76	52. 70	52. 02	54. 47	54. 94	55. 43	55. 53	53. 62	53. 60
Y 161. 0	52. 85	52. 99	53. 83	52. 44	53. 77	53. 19	56. 67	57. 48	56. 17	55. 80	54. 86	55. 35
Y 162. 0	54. 06	54. 60	53. 58	54. 06	55. 07	54. 88	58. 02	57. 74	58. 87	56. 72	55. 66	56. 67
Y 163. 0	53. 82	55. 07	54. 48	55. 09	55. 53	55. 20	58. 62	57. 50	57. 83	57. 57	56. 26	56. 90
Y 164. 0	55. 46	56. 77	55. 92	55. 18	55. 46	56. 01	58. 29	59. 28	58. 03	59. 56	58. 12	56. 37
Y 165. 0	56. 90	56. 25	55. 83	56. 38	56. 21	56. 49	60. 89	59. 11	59. 84	57. 75	56. 59	58. 61
Y 166. 0	55. 83	57. 11	57. 68	57. 37	57. 59	58. 19	61. 30	58. 90	60. 22	59. 15	58. 74	60. 03
Y 167. 0	57. 45	58. 37	58. 16	57. 18	57. 50	56. 12	60. 69	60. 48	59. 68	60. 89	59. 59	59. 93
Y 168. 0	58. 78	59. 68	57. 50	57. 62	57. 76	58. 55	61. 69	61. 28	62. 25	60. 23	59. 51	59. 86
Y 169. 0	59. 30	59. 36	58. 60	59. 77	59. 43	59. 37	62. 35	59. 68	62. 63	60. 28	59. 69	62. 20
Y 170. 0	60. 65	60. 49	60. 21	59. 03	60. 02	59. 14	63. 07	62. 06	61. 48	62. 30	61. 94	61. 36
Y 171. 0	60. 75	59. 80	60. 85	59. 97	59. 94	60. 88	63. 73	62. 45	62. 82	62. 53	62. 47	62. 29
Y 172. 0	61. 32	61. 31	61. 21	60. 53	60. 70	60. 20	64. 87	63. 44	62. 53	62. 81	62. 60	62. 87
Y 173. 0	62. 69	62. 75	61. 16	60. 22	61. 63	61. 19	64. 48	63. 49	62. 69	63. 32	62. 85	63. 50
Y 174. 0	63. 28	63. 65	61. 61	61. 04	61. 47	62. 34	65. 69	63. 93	64. 27	63. 03	62. 23	62. 56
Y 175. 0	63. 80	63. 93	61. 90	61. 86	63. 36	62. 24	66. 30	65. 40	64. 40	63. 07	63. 36	64. 07
Y 176. 0	64. 30	63. 49	63. 91	62. 37	61. 95	63. 10	65. 85	64. 32	64. 56	63. 73	63. 90	63. 58
Y 177. 0	65. 42	64. 52	63. 59	63. 74	64. 76	64. 79	61. 51	64. 85	65. 90	63. 32	63. 22	64. 65
Y 178. 0	66. 93	64. 58	62. 95	63. 44	65. 11	64. 81	60. 46	65. 41	66. 49	64. 35	63. 82	65. 76
Y 179. 0	66. 76	65. 49	64. 39	62. 82	64. 92	64. 38	62. 12	64. 96	65. 30	63. 96	64. 50	64. 87
Y 180. 0	64. 91	64. 91	64. 91	64. 91	64. 91	64. 91	64. 91	64. 91	64. 91	64. 91	64. 91	64. 91