IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

Indoor Luminaire Photometric Data

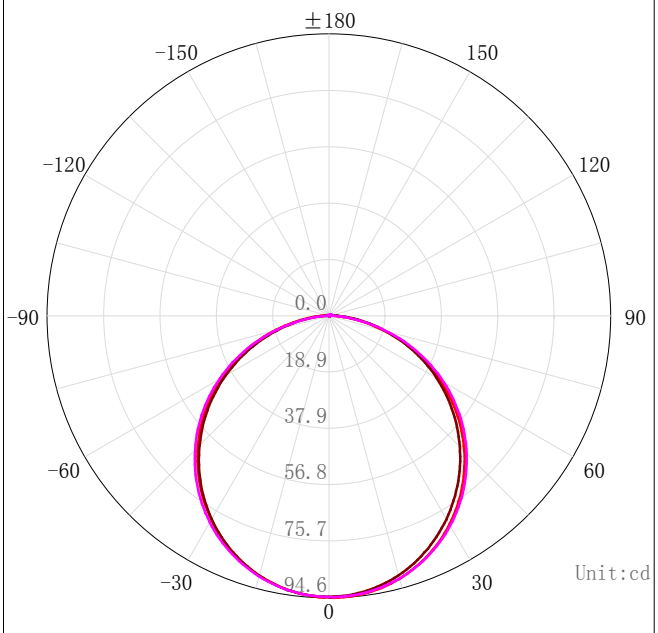
Description Information

Luminary Name: F15A-24V-5050-60-3000K		Lum. Catelog:	Test ID: 001
Lamp Name: LED		Lamp Catelog: F15A-24V-5050-60-3	Test Date: 2018/11/19
Manufacture: Olympia Lighting Co., Ltd		Shld.Ang(°):	Test Machine:GON-2000
Test Lab: LAB001		Frequency(Hz):	Lamp CCT(K): Ra:
Lum.Size(W*L*H):0.010m*1.000m*0.015m		Lum.Area(m2):0.025	Lum.W(kg): 0.300
Test System: C, γ	Test Step: C=45.0 γ=1.0	Temp.(℃): 25	Humidity(%):

Character Parameter

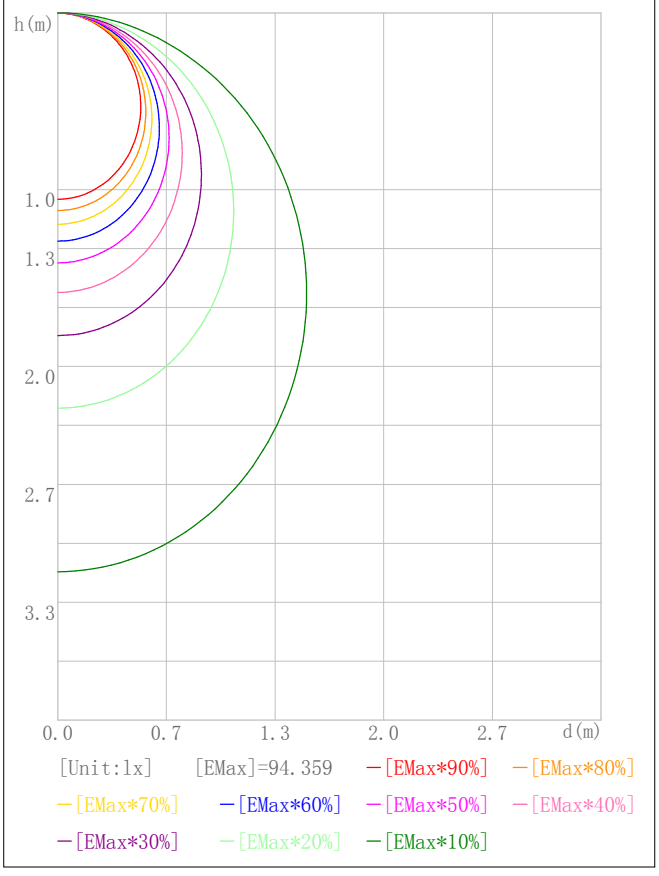
Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 273.960	Luminary Flux(lm): 273.956	Field Angle(10%Imax): 162.4(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 272.4081m 99.43%
Rated Voltage(V):	Luminary EER(lm/W): 24.905	Up Lumens&Percent: 1.5481m 0.57%
Tested Power(W): 11.000	Max.Candela(cd): 94.640	S/MH: C0_a180=1.242 C90_270=1.270
Lamps' Inside: 1	Max Cand@Ang.(°): C=135.0 γ=1.0	CIE Type: Semi-Direct
Tested Electrics(V,A,pf):24.0,0.459,1.000	Beam Angle(50%Imax): 113.0(°)	ErP Φuse(120°): 213.329lm
Lamp Size(W*L*H):0.010m*1.000m*0.015m	Left=-55.9° ,Right=57.1°	IRF(%): 108.517

C Plane Distribution Diagram



C Plane	[50%MaxAng.]	[10%MaxAng.]
C135.0_315.0:	113.0	162.4
C0.0_180.0 :	111.3	162.6
C90.0_270.0 :	114.9	161.7

C0 Space ISO Illuminance Curve

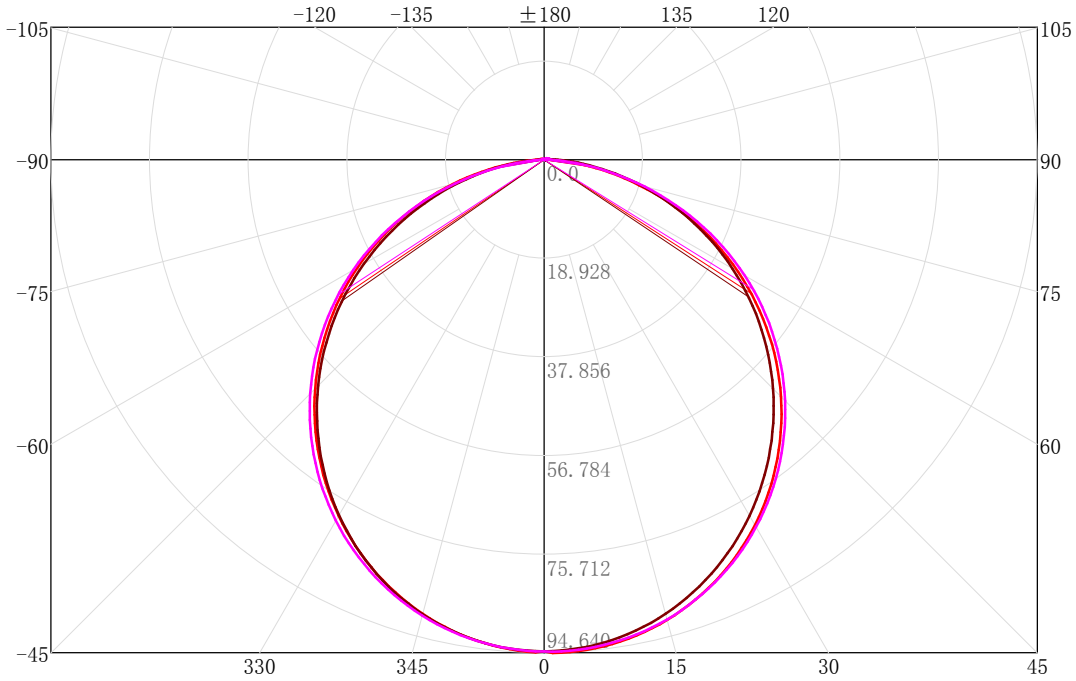


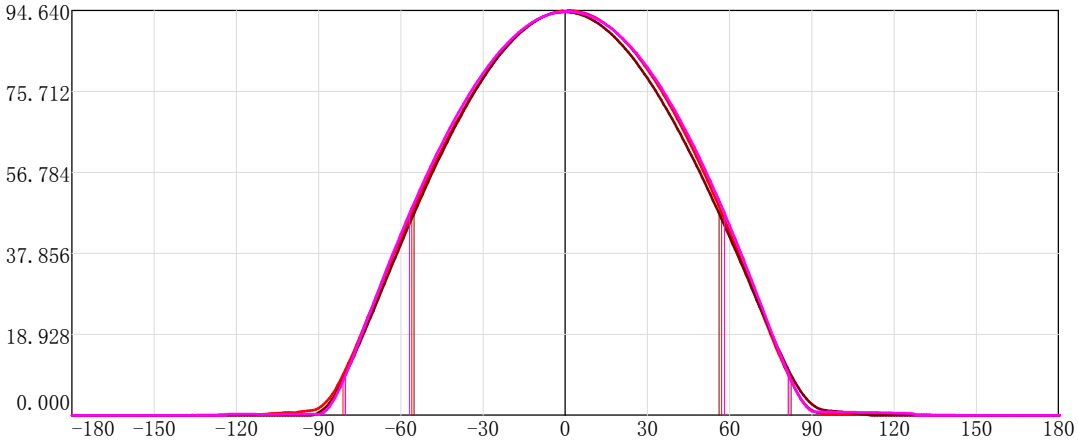
IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

2D Plane Light Intensity Distribution Curve

Lum.Name: F15A-24V-5050-60-3000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F15A-24V-5050-60-3	Test Lab: LAB001
Manufacture: Olympia Lighting Co., Ltd	Test Machine:GON-2000	Test Date: 2018/11/19

C Plane Distribution Diagram





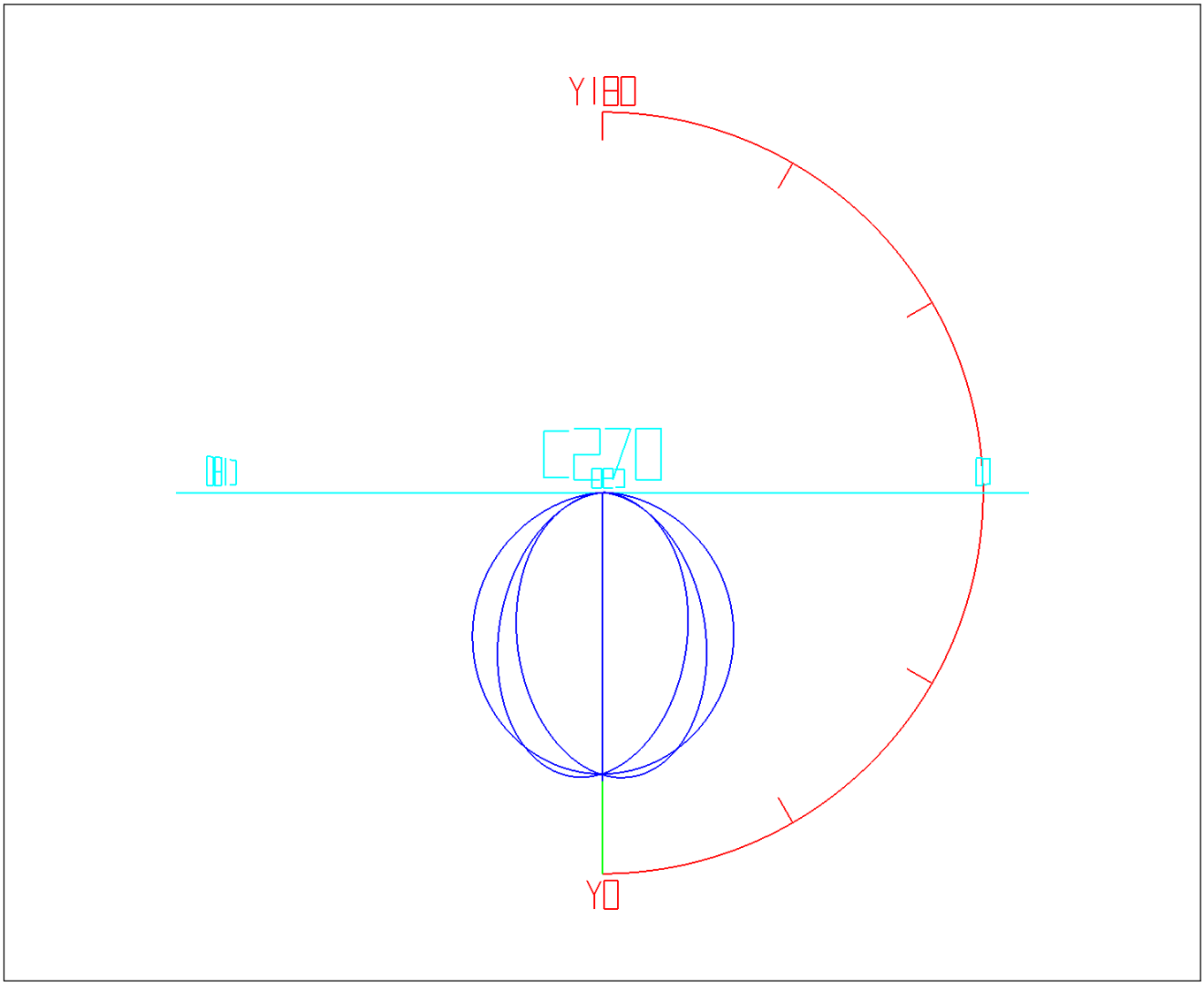
C Plane	[50%MaxAng.]	[10%MaxAng.]	Unit:cd
C135.0_315.0:	113.0	162.4	
C0.0_180.0 :	111.3	162.6	
C90.0_270.0 :	114.9	161.7	

IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

3D Light Intensity Distribution Modal

Lum.Name: F15A-24V-5050-60-3000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F15A-24V-5050-60-3	Test Lab: LAB001
Manufacture: Olympia Lighting Co., Ltd	Test Machine:GON-2000	Test Date: 2018/11/19

3D Light Intensity Distribution Modal



Curves: 3D Model Fixture Vert. HUD Hori. HUD

View Angles: Orient:0 Tilt:0 Roll:0 Spin:0

IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.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	0.09	0.09	0.03	0.03	47.0-48.0	4.84	159.13	1.77	58.08
1.0-2.0	0.27	0.36	0.10	0.13	48.0-49.0	4.81	163.94	1.76	59.84
2.0-3.0	0.45	0.81	0.16	0.30	49.0-50.0	4.77	168.71	1.74	61.58
3.0-4.0	0.63	1.44	0.23	0.53	50.0-51.0	4.73	173.44	1.73	63.31
4.0-5.0	0.81	2.25	0.30	0.82	51.0-52.0	4.68	178.11	1.71	65.01
5.0-6.0	0.99	3.24	0.36	1.18	52.0-53.0	4.62	182.73	1.69	66.70
6.0-7.0	1.16	4.40	0.42	1.61	53.0-54.0	4.56	187.29	1.66	68.36
7.0-8.0	1.34	5.74	0.49	2.09	54.0-55.0	4.49	191.77	1.64	70.00
8.0-9.0	1.51	7.25	0.55	2.65	55.0-56.0	4.41	196.18	1.61	71.61
9.0-10.0	1.68	8.93	0.61	3.26	56.0-57.0	4.33	200.51	1.58	73.19
10.0-11.0	1.85	10.78	0.67	3.93	57.0-58.0	4.24	204.75	1.55	74.74
11.0-12.0	2.01	12.79	0.74	4.67	58.0-59.0	4.15	208.91	1.52	76.25
12.0-13.0	2.18	14.97	0.79	5.46	59.0-60.0	4.05	212.96	1.48	77.73
13.0-14.0	2.34	17.30	0.85	6.32	60.0-61.0	3.95	216.91	1.44	79.18
14.0-15.0	2.49	19.80	0.91	7.23	61.0-62.0	3.84	220.75	1.40	80.58
15.0-16.0	2.65	22.45	0.97	8.19	62.0-63.0	3.73	224.48	1.36	81.94
16.0-17.0	2.80	25.24	1.02	9.21	63.0-64.0	3.61	228.09	1.32	83.25
17.0-18.0	2.94	28.19	1.07	10.29	64.0-65.0	3.48	231.57	1.27	84.53
18.0-19.0	3.08	31.27	1.13	11.41	65.0-66.0	3.36	234.93	1.23	85.75
19.0-20.0	3.22	34.49	1.18	12.59	66.0-67.0	3.22	238.15	1.18	86.93
20.0-21.0	3.36	37.85	1.22	13.82	67.0-68.0	3.09	241.24	1.13	88.06
21.0-22.0	3.48	41.33	1.27	15.09	68.0-69.0	2.95	244.19	1.08	89.13
22.0-23.0	3.61	44.94	1.32	16.40	69.0-70.0	2.80	246.99	1.02	90.16
23.0-24.0	3.73	48.67	1.36	17.76	70.0-71.0	2.66	249.65	0.97	91.13
24.0-25.0	3.84	52.51	1.40	19.17	71.0-72.0	2.51	252.16	0.92	92.04
25.0-26.0	3.95	56.46	1.44	20.61	72.0-73.0	2.36	254.51	0.86	92.90
26.0-27.0	4.05	60.52	1.48	22.09	73.0-74.0	2.20	256.71	0.80	93.71
27.0-28.0	4.15	64.67	1.52	23.60	74.0-75.0	2.05	258.76	0.75	94.45
28.0-29.0	4.24	68.91	1.55	25.15	75.0-76.0	1.89	260.65	0.69	95.14
29.0-30.0	4.33	73.24	1.58	26.74	76.0-77.0	1.73	262.38	0.63	95.77
30.0-31.0	4.41	77.66	1.61	28.35	77.0-78.0	1.58	263.96	0.58	96.35
31.0-32.0	4.49	82.15	1.64	29.98	78.0-79.0	1.42	265.39	0.52	96.87
32.0-33.0	4.56	86.70	1.66	31.65	79.0-80.0	1.27	266.66	0.46	97.33
33.0-34.0	4.62	91.32	1.69	33.33	80.0-81.0	1.13	267.78	0.41	97.75
34.0-35.0	4.68	96.00	1.71	35.04	81.0-82.0	0.98	268.76	0.36	98.10
35.0-36.0	4.73	100.73	1.73	36.77	82.0-83.0	0.84	269.61	0.31	98.41
36.0-37.0	4.77	105.50	1.74	38.51	83.0-84.0	0.71	270.31	0.26	98.67
37.0-38.0	4.81	110.31	1.76	40.27	84.0-85.0	0.58	270.90	0.21	98.88
38.0-39.0	4.84	115.16	1.77	42.03	85.0-86.0	0.47	271.37	0.17	99.05
39.0-40.0	4.87	120.02	1.78	43.81	86.0-87.0	0.37	271.74	0.14	99.19
40.0-41.0	4.89	124.91	1.78	45.59	87.0-88.0	0.29	272.03	0.10	99.29
41.0-42.0	4.90	129.81	1.79	47.38	88.0-89.0	0.22	272.24	0.08	99.37
42.0-43.0	4.91	134.72	1.79	49.17	89.0-90.0	0.16	272.41	0.06	99.43
43.0-44.0	4.91	139.63	1.79	50.97	90.0-91.0	0.13	272.54	0.05	99.48
44.0-45.0	4.90	144.53	1.79	52.75	91.0-92.0	0.10	272.64	0.04	99.52
45.0-46.0	4.89	149.41	1.78	54.54	92.0-93.0	0.09	272.72	0.03	99.55
46.0-47.0	4.87	154.28	1.78	56.32	93.0-94.0	0.08	272.80	0.03	99.58

IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

Zonal Flux Tabulation - (Cont.)

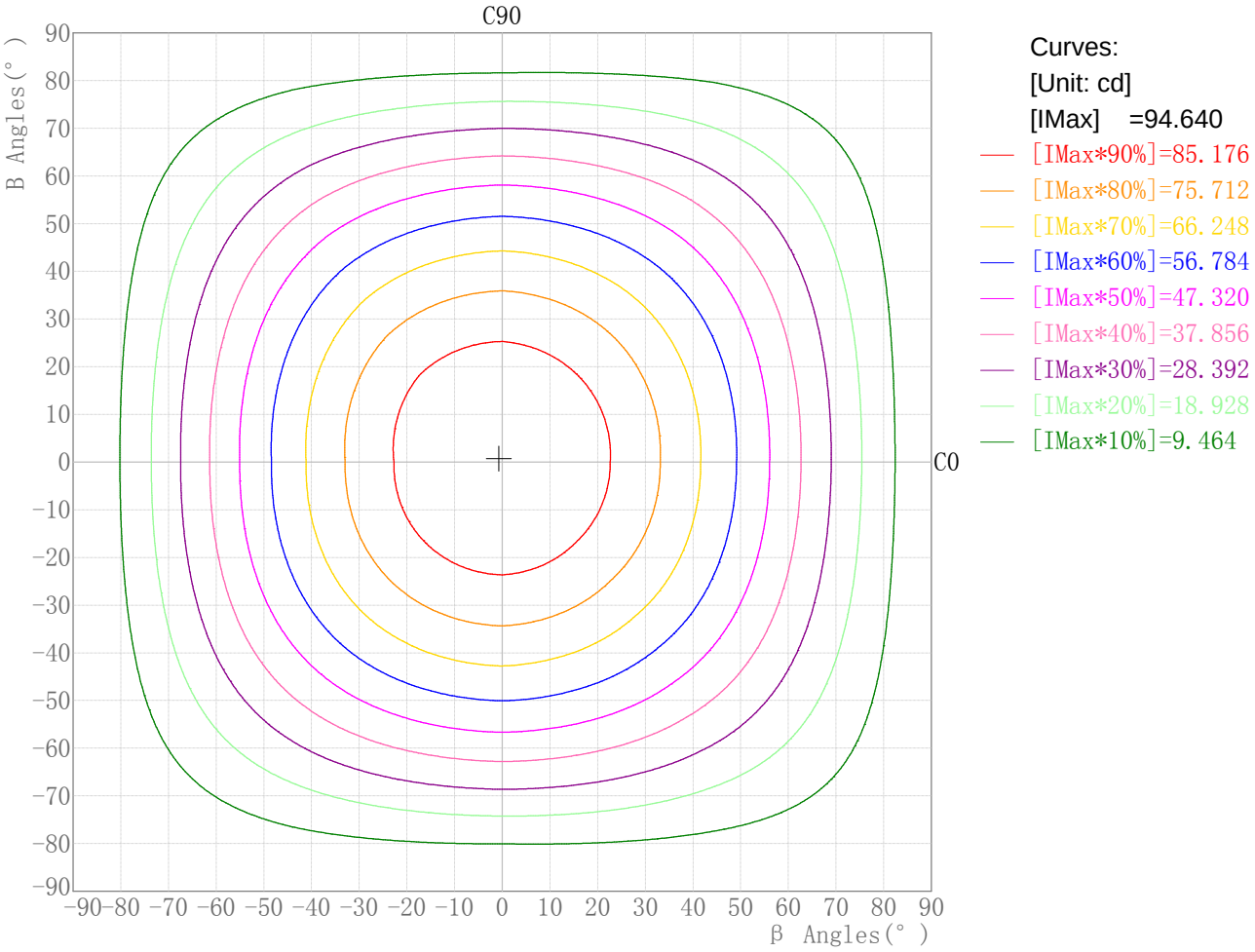
Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
94.0-95.0	0.07	272.87	0.03	99.60
95.0-96.0	0.07	272.93	0.02	99.63
96.0-97.0	0.06	273.00	0.02	99.65
97.0-98.0	0.06	273.06	0.02	99.67
98.0-99.0	0.06	273.11	0.02	99.69
99.0-100.0	0.05	273.17	0.02	99.71
100.0-101.0	0.05	273.22	0.02	99.73
101.0-102.0	0.05	273.27	0.02	99.75
102.0-103.0	0.05	273.32	0.02	99.77
103.0-104.0	0.05	273.36	0.02	99.78
104.0-105.0	0.04	273.40	0.02	99.80
105.0-106.0	0.04	273.44	0.01	99.81
106.0-107.0	0.04	273.48	0.01	99.82
107.0-108.0	0.03	273.51	0.01	99.84
108.0-109.0	0.03	273.54	0.01	99.85
109.0-110.0	0.03	273.57	0.01	99.86
110.0-111.0	0.03	273.60	0.01	99.87
111.0-112.0	0.02	273.62	0.01	99.88
112.0-113.0	0.02	273.64	0.01	99.88
113.0-114.0	0.02	273.67	0.01	99.89
114.0-115.0	0.02	273.69	0.01	99.90
115.0-116.0	0.02	273.71	0.01	99.91
116.0-117.0	0.02	273.73	0.01	99.92
117.0-118.0	0.02	273.75	0.01	99.92
118.0-119.0	0.02	273.77	0.01	99.93
119.0-120.0	0.02	273.79	0.01	99.94
120.0-121.0	0.02	273.81	0.01	99.94
121.0-122.0	0.02	273.83	0.01	99.95
122.0-123.0	0.02	273.84	0.01	99.96
123.0-124.0	0.01	273.86	0.01	99.96
124.0-125.0	0.01	273.87	0.00	99.97
125.0-126.0	0.01	273.88	0.00	99.97
126.0-127.0	0.01	273.89	0.00	99.98
127.0-128.0	0.01	273.90	0.00	99.98
128.0-129.0	0.01	273.91	0.00	99.98
129.0-130.0	0.01	273.91	0.00	99.98
130.0-131.0	0.00	273.92	0.00	99.98
131.0-132.0	0.00	273.92	0.00	99.99
132.0-133.0	0.00	273.93	0.00	99.99
133.0-134.0	0.00	273.93	0.00	99.99
134.0-135.0	0.00	273.93	0.00	99.99
135.0-136.0	0.00	273.94	0.00	99.99
136.0-137.0	0.00	273.94	0.00	99.99
137.0-138.0	0.00	273.94	0.00	99.99
138.0-139.0	0.00	273.94	0.00	99.99
139.0-140.0	0.00	273.95	0.00	99.99
140.0-141.0	0.00	273.95	0.00	100.00
141.0-142.0	0.00	273.95	0.00	100.00
142.0-143.0	0.00	273.95	0.00	100.00
143.0-144.0	0.00	273.95	0.00	100.00
144.0-145.0	0.00	273.95	0.00	100.00
145.0-146.0	0.00	273.95	0.00	100.00
146.0-147.0	0.00	273.95	0.00	100.00
147.0-148.0	0.00	273.95	0.00	100.00
148.0-149.0	0.00	273.95	0.00	100.00
149.0-150.0	0.00	273.95	0.00	100.00
150.0-151.0	0.00	273.95	0.00	100.00
151.0-152.0	0.00	273.95	0.00	100.00
152.0-153.0	0.00	273.96	0.00	100.00
153.0-154.0	0.00	273.96	0.00	100.00
154.0-155.0	0.00	273.96	0.00	100.00
155.0-156.0	0.00	273.96	0.00	100.00
156.0-157.0	0.00	273.96	0.00	100.00
157.0-158.0	0.00	273.96	0.00	100.00
158.0-159.0	0.00	273.96	0.00	100.00
159.0-160.0	0.00	273.96	0.00	100.00
160.0-161.0	0.00	273.96	0.00	100.00
161.0-162.0	0.00	273.96	0.00	100.00
162.0-163.0	0.00	273.96	0.00	100.00
163.0-164.0	0.00	273.96	0.00	100.00
164.0-165.0	0.00	273.96	0.00	100.00
165.0-166.0	0.00	273.96	0.00	100.00
166.0-167.0	0.00	273.96	0.00	100.00
167.0-168.0	0.00	273.96	0.00	100.00
168.0-169.0	0.00	273.96	0.00	100.00
169.0-170.0	0.00	273.96	0.00	100.00
170.0-171.0	0.00	273.96	0.00	100.00
171.0-172.0	0.00	273.96	0.00	100.00
172.0-173.0	0.00	273.96	0.00	100.00
173.0-174.0	0.00	273.96	0.00	100.00
174.0-175.0	0.00	273.96	0.00	100.00
175.0-176.0	0.00	273.96	0.00	100.00
176.0-177.0	0.00	273.96	0.00	100.00
177.0-178.0	0.00	273.96	0.00	100.00
178.0-179.0	0.00	273.96	0.00	100.00
179.0-180.0	0.00	273.96	0.00	100.00

IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

Rectangle ISO Lighting Intensity Diagram

Lum.Name: F15A-24V-5050-60-3000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F15A-24V-5050-60-3	Test Lab: LAB001
Manufacture: Olympia Lighting Co., Ltd	Test Machine:GON-2000	Test Date: 2018/11/19

ISO Lighting Intensity Curve



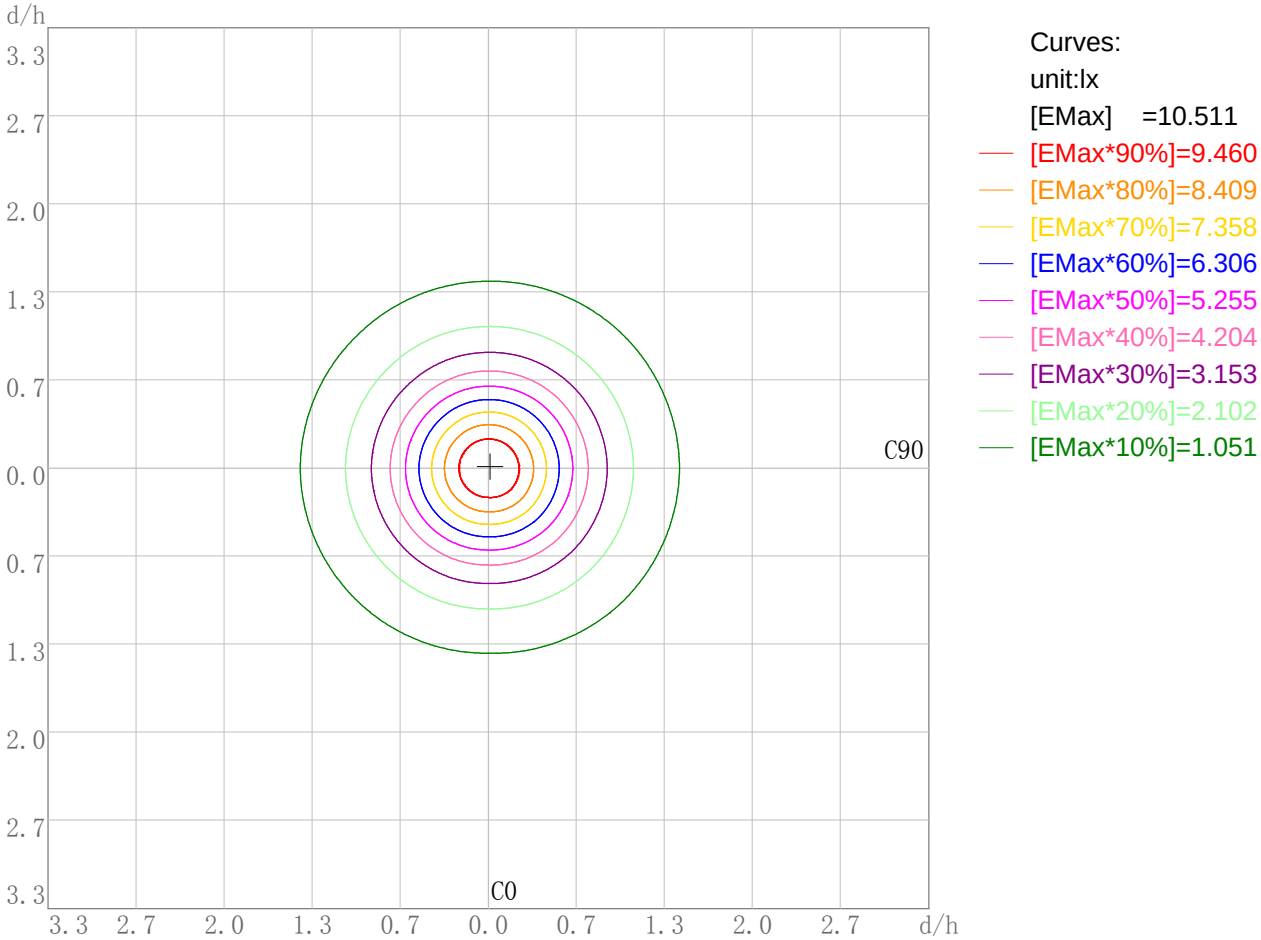
Maximum Light Intensity(cd): 94.64
Maximum Cand.@Angle: H=-0.7°,V=0.7°

IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

Plane ISO-Illuminance Diagram

Lum.Name: F15A-24V-5050-60-3000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F15A-24V-5050-60-3	Test Lab: LAB001
Manufacture: Olympia Lighting Co., Ltd	Test Machine:GON-2000	Test Date: 2018/11/19

Plane ISO-Illuminance Curve



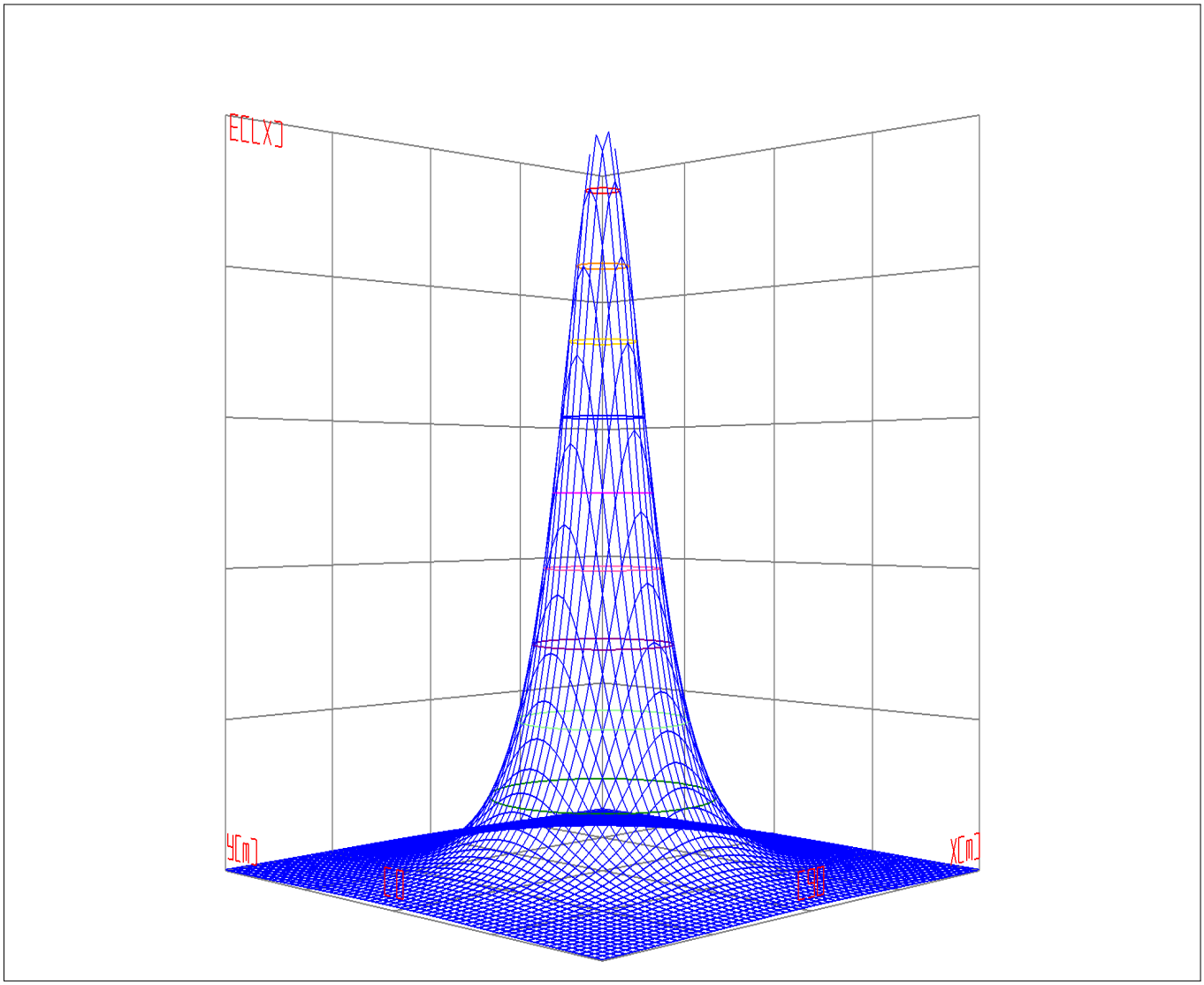
Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 10.51
Working Plane Maximum Illuminance Position(d/h):H0.0 V-0.0

IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

3D Plane ISO Illuminance Diagram

Lum.Name: F15A-24V-5050-60-3000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F15A-24V-5050-60-3	Test Lab: LAB001
Manufacture: Olympia Lighting Co., Ltd	Test Machine:GON-2000	Test Date: 2018/11/19

3D Plane Illuminance Modal



Curves: 3D Model 90% 80% 70% 60% 50% 40% 30% 20% 10%

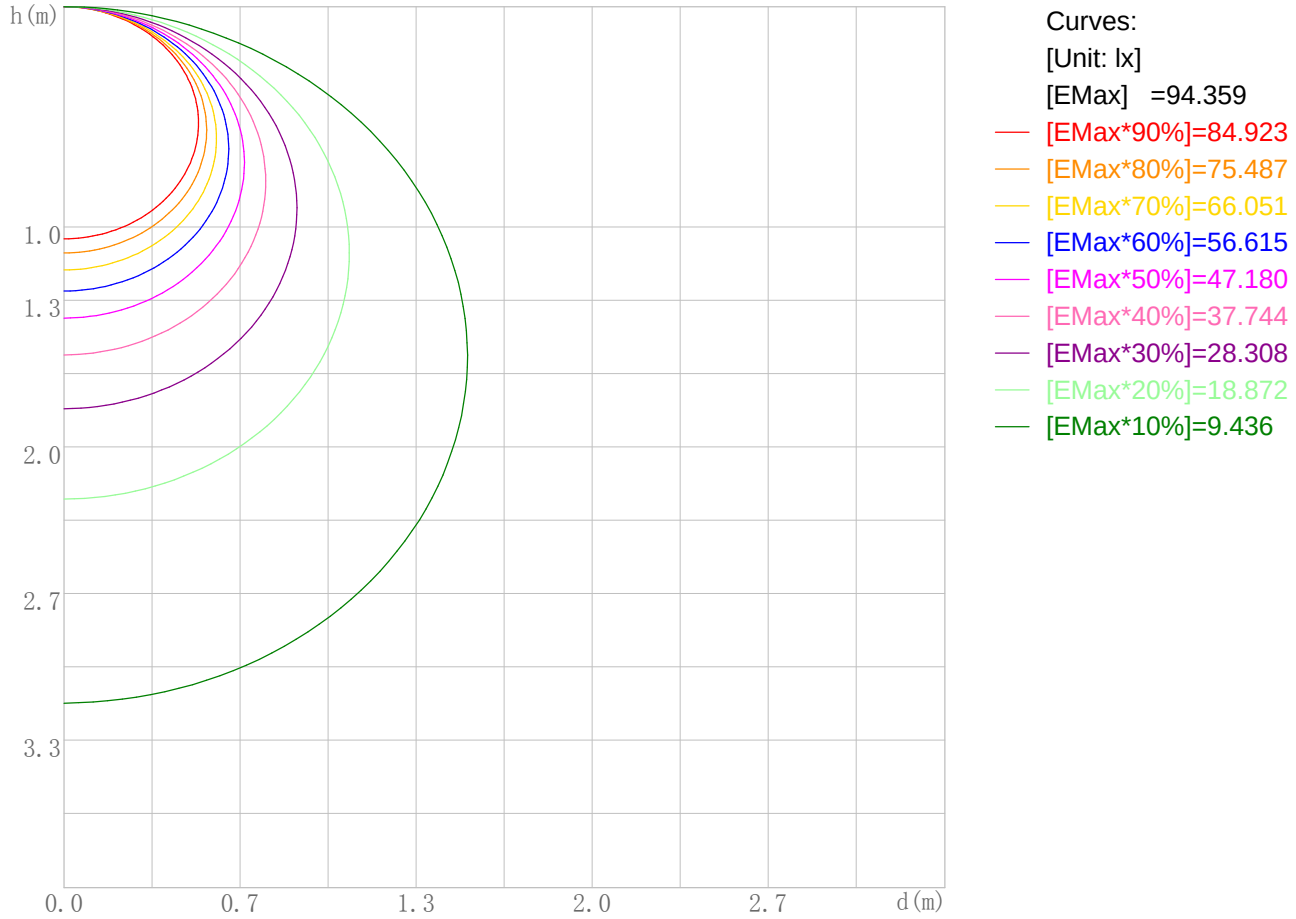
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

Space ISO Illuminance Diagram

Lum.Name: F15A-24V-5050-60-3000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F15A-24V-5050-60-3	Test Lab: LAB001
Manufacture: Olympia Lighting Co., Ltd	Test Machine:GON-2000	Test Date: 2018/11/19

Space ISO Illuminance Curve



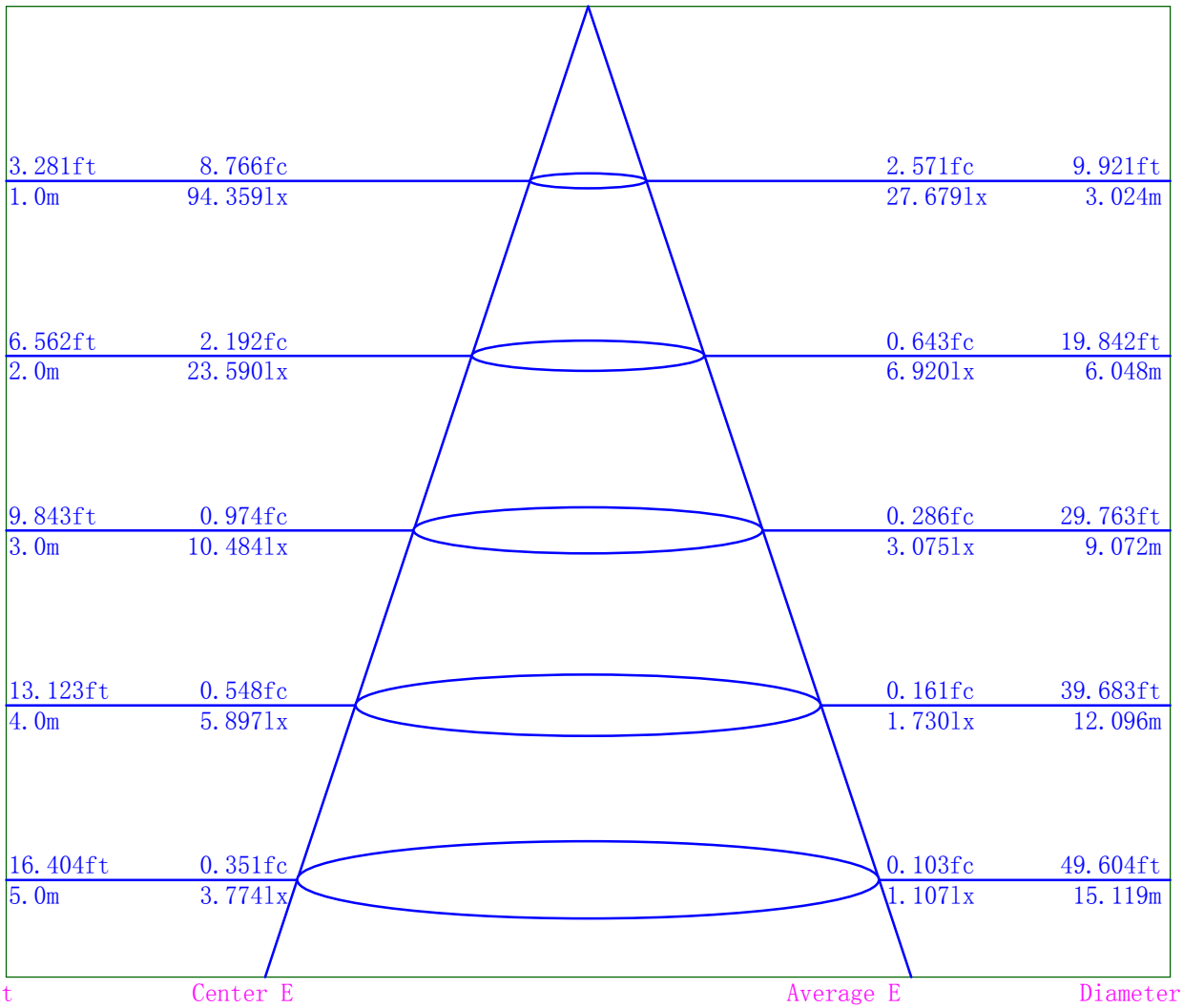
Space Plane Maximum Illuminance and @Angle:94.36lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:94.359cd,0eg

IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

Illuminance-Distance Diagram

Lum.Name: F15A-24V-5050-60-3000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F15A-24V-5050-60-3	Test Lab: LAB001
Manufacture: Olympia Lighting Co., Ltd	Test Machine:GON-2000	Test Date: 2018/11/19

Illuminance-Distance Curve



Beam Angle:113.0

IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

Indoor Luminance Limiting Curves

Lum.Name:	F15A-24V-5050-60-3000K	Lum.Catelog:		Test ID:	001
Lamp Name:	LED	Lamp Catelog:	F15A-24V-5050-60-3	Test Lab:	LAB001
Manufacture:	Olympia Lighting Co., Ltd	Test Machine:	GON-2000	Test Date:	2018/11/19

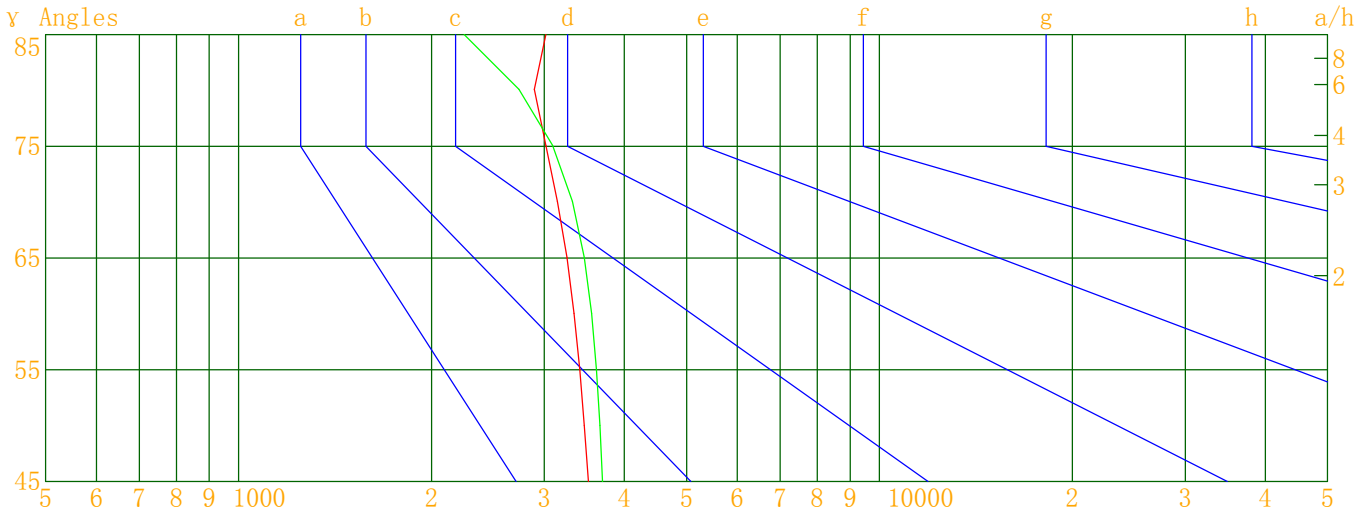
Glare Grade Table

GI	Quality	Using Illuminace							
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	3513	3464	3406	3338	3254	3144	3018	2894	3015
C90	3698	3664	3619	3556	3461	3318	3091	2740	2249

Luminance Limiting Curve



Luminous Size: Length(m)=1.000 Width(m)=0.010 Height(m)=0.015 Area(m^2)=0.025000

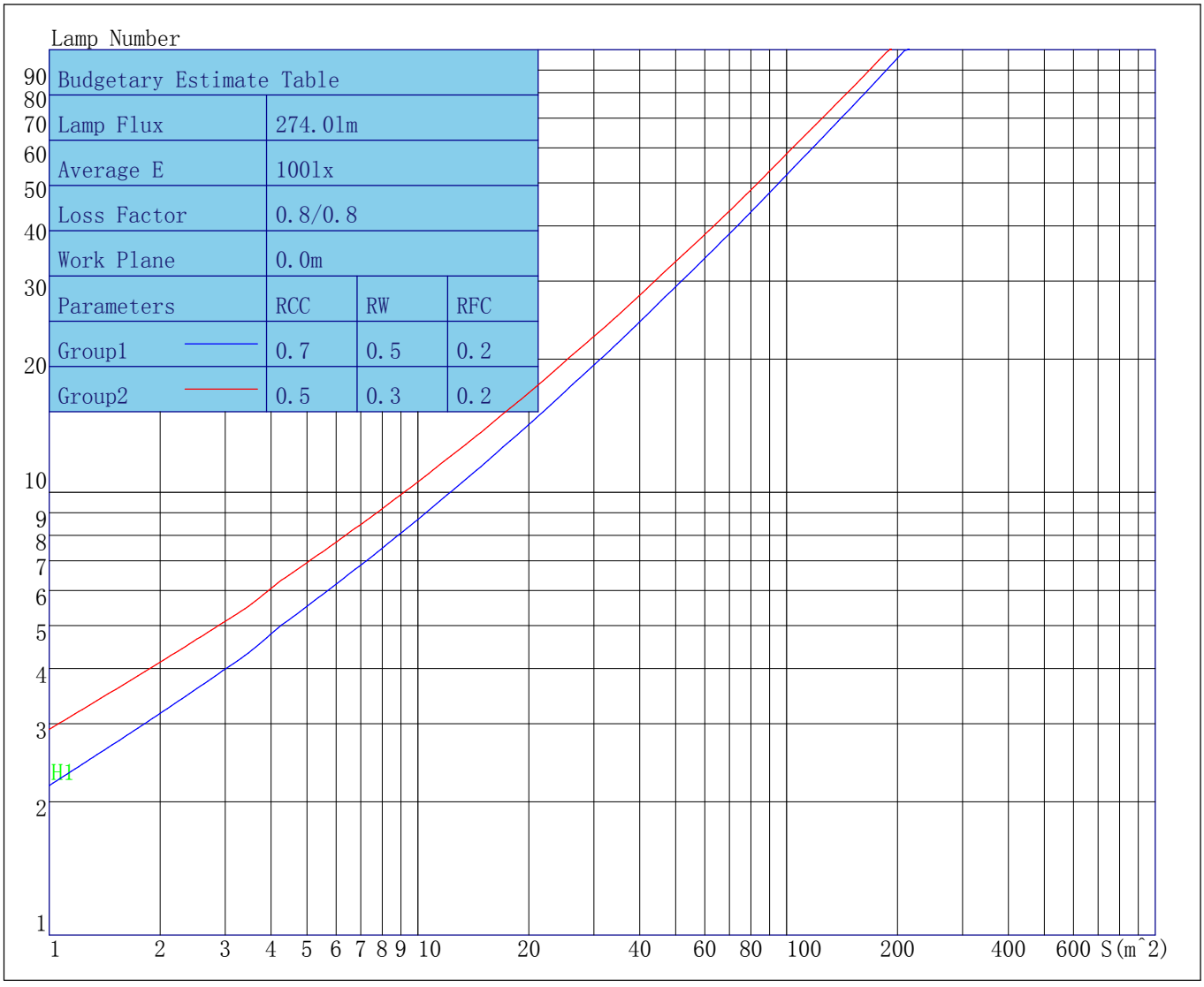
Luminous Type: Without Luminous Side

Luminous Curves: C0-C180 Color: C90-C270 Color:

IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

Indoor Budgetary Estimate Table

Lum.Name: F15A-24V-5050-60-3000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F15A-24V-5050-60-3	Test Lab: LAB001
Manufacture: Olympia Lighting Co., Ltd	Test Machine:GON-2000	Test Date: 2018/11/19



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

IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

Indoor Coefficient of Utilization Table

Lum.Name: F15A-24V-5050-60-3000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F15A-24V-5050-60-3	Test Lab: LAB001
Manufacture: Olympia Lighting Co., Ltd	Test Machine:GON-2000	Test Date: 2018/11/19

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	99
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	47	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	41	68	55	47	40	53	46	40	51	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	33	28	40	33	28	39	32	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24

IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

Unified Glare Rating Table

Lum.Name: F15A-24V-5050-60-3000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F15A-24V-5050-60-3	Test Lab: LAB001
Manufacture: Olympia Lighting Co., Ltd	Test Machine:GON-2000	Test Date: 2018/11/19

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	16.7	18.3	17.0	18.6	19.0	17.0	18.6	17.3	18.9	19.2
	Y=3H	18.4	19.8	18.7	20.2	20.6	18.7	20.1	19.1	20.5	20.9
	Y=4H	19.1	20.5	19.5	20.8	21.2	19.4	20.8	19.8	21.1	21.5
	Y=6H	19.6	20.9	20.1	21.3	21.7	19.9	21.2	20.3	21.5	21.9
	Y=8H	19.9	21.1	20.3	21.5	21.9	20.0	21.3	20.5	21.7	22.1
	Y=12H	20.0	21.2	20.5	21.6	22.0	20.1	21.3	20.6	21.7	22.1
X=4H	Y=2H	17.5	18.9	17.9	19.2	19.6	17.7	19.1	18.1	19.5	19.9
	Y=3H	19.3	20.5	19.8	20.9	21.3	19.6	20.8	20.0	21.2	21.6
	Y=4H	20.2	21.2	20.6	21.7	22.1	20.4	21.5	20.9	21.9	22.3
	Y=6H	20.9	21.8	21.3	22.2	22.7	21.1	22.0	21.5	22.4	22.9
	Y=8H	21.1	22.0	21.6	22.5	22.9	21.3	22.1	21.7	22.6	23.1
	Y=12H	21.4	22.1	21.9	22.6	23.1	21.4	22.2	21.9	22.7	23.1
X=8H	Y=4H	20.5	21.4	21.0	21.8	22.3	20.8	21.6	21.2	22.1	22.5
	Y=6H	21.4	22.1	21.9	22.6	23.2	21.5	22.2	22.0	22.7	23.3
	Y=8H	21.7	22.3	22.2	22.9	23.4	21.8	22.4	22.3	23.0	23.5
	Y=12H	22.0	22.6	22.6	23.1	23.7	22.0	22.6	22.5	23.1	23.7
X=12H	Y=4H	20.6	21.3	21.1	21.8	22.3	20.8	21.6	21.3	22.0	22.5
	Y=6H	21.4	22.1	22.0	22.5	23.1	21.6	22.2	22.1	22.7	23.3
	Y=8H	21.8	22.4	22.4	22.9	23.5	21.9	22.5	22.4	23.0	23.6
Variations with the objerver position at spacings											
S=1.0H		0.4/-0.4					0.5/-0.6				
S=1.5H		0.7/-0.8					0.8/-1.0				
S=2.0H		0.9/-1.1					1.0/-1.2				
Reduced UGR Table:											
Nordic Standard Table:		BK0					BK0				
Correction Value		3.1					2.9				

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

IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

Candela Tabulation

V/H	C0.0	C45.0	C90.0	C135.0	C180.0	C225.0	C270.0	C315.0
Y 0.0	94.36	94.36	94.36	94.36	94.36	94.36	94.36	94.36
Y 1.0	94.26	94.24	94.40	94.64	94.28	94.21	94.34	94.55
Y 2.0	94.20	94.19	94.39	94.62	94.22	94.15	94.28	94.44
Y 3.0	94.10	94.11	94.33	94.56	94.14	94.05	94.18	94.32
Y 4.0	93.97	94.00	94.24	94.47	94.03	93.92	94.03	94.15
Y 5.0	93.80	93.83	94.11	94.36	93.86	93.76	93.87	93.95
Y 6.0	93.59	93.66	93.97	94.21	93.68	93.57	93.66	93.71
Y 7.0	93.35	93.45	93.81	94.03	93.43	93.35	93.44	93.44
Y 8.0	93.08	93.21	93.61	93.81	93.16	93.08	93.20	93.15
Y 9.0	92.77	92.94	93.36	93.57	92.85	92.79	92.91	92.82
Y 10.0	92.42	92.62	93.08	93.29	92.50	92.46	92.58	92.47
Y 11.0	92.04	92.29	92.79	92.98	92.12	92.10	92.23	92.07
Y 12.0	91.61	91.91	92.47	92.61	91.70	91.71	91.84	91.63
Y 13.0	91.18	91.51	92.10	92.23	91.25	91.27	91.43	91.19
Y 14.0	90.70	91.08	91.71	91.82	90.76	90.83	91.00	90.68
Y 15.0	90.17	90.62	91.28	91.37	90.25	90.33	90.52	90.17
Y 16.0	89.62	90.13	90.82	90.90	89.71	89.81	90.01	89.62
Y 17.0	89.04	89.61	90.34	90.37	89.11	89.26	89.47	89.03
Y 18.0	88.42	89.04	89.82	89.83	88.50	88.68	88.90	88.42
Y 19.0	87.78	88.46	89.28	89.24	87.85	88.07	88.31	87.78
Y 20.0	87.11	87.82	88.69	88.65	87.18	87.43	87.69	87.10
Y 21.0	86.40	87.19	88.09	88.00	86.47	86.74	87.04	86.40
Y 22.0	85.68	86.53	87.46	87.33	85.74	86.04	86.36	85.68
Y 23.0	84.92	85.81	86.79	86.64	84.95	85.31	85.66	84.93
Y 24.0	84.11	85.07	86.11	85.90	84.16	84.55	84.92	84.14
Y 25.0	83.31	84.29	85.39	85.15	83.33	83.75	84.15	83.32
Y 26.0	82.46	83.53	84.65	84.36	82.47	82.94	83.36	82.48
Y 27.0	81.58	82.71	83.87	83.52	81.57	82.08	82.55	81.63
Y 28.0	80.68	81.86	83.07	82.68	80.63	81.21	81.71	80.74
Y 29.0	79.78	80.99	82.22	81.80	79.68	80.30	80.83	79.81
Y 30.0	78.86	80.10	81.37	80.89	78.72	79.37	79.92	78.87
Y 31.0	77.87	79.18	80.48	79.96	77.71	78.43	79.00	77.91
Y 32.0	76.89	78.22	79.55	79.01	76.70	77.44	78.05	76.92
Y 33.0	75.87	77.26	78.61	78.03	75.65	76.43	77.06	75.91
Y 34.0	74.84	76.26	77.64	77.01	74.56	75.37	76.07	74.88
Y 35.0	73.77	75.25	76.65	75.97	73.46	74.32	75.04	73.83
Y 36.0	72.68	74.20	75.62	74.90	72.35	73.22	73.99	72.72
Y 37.0	71.59	73.15	74.58	73.82	71.20	72.11	72.90	71.62
Y 38.0	70.47	72.05	73.50	72.70	70.03	70.99	71.80	70.50
Y 39.0	69.34	70.94	72.41	71.56	68.84	69.83	70.67	69.38
Y 40.0	68.17	69.83	71.28	70.40	67.65	68.65	69.53	68.21
Y 41.0	67.00	68.68	70.14	69.22	66.41	67.46	68.36	67.04
Y 42.0	65.80	67.52	68.99	68.02	65.17	66.25	67.18	65.83
Y 43.0	64.58	66.34	67.79	66.79	63.91	65.01	65.96	64.63
Y 44.0	63.37	65.13	66.60	65.54	62.62	63.75	64.73	63.37
Y 45.0	62.11	63.90	65.37	64.27	61.30	62.47	63.46	62.11
Y 46.0	60.85	62.66	64.11	62.98	59.99	61.17	62.18	60.83

IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

Candela Tabulation - (Cont.)

V/H	C0.0	C45.0	C90.0	C135.0	C180.0	C225.0	C270.0	C315.0
Y 47.0	59.58	61.40	62.85	61.66	58.68	59.85	60.89	59.56
Y 48.0	58.28	60.12	61.54	60.33	57.33	58.51	59.56	58.26
Y 49.0	56.98	58.83	60.23	58.97	55.95	57.14	58.24	56.92
Y 50.0	55.67	57.51	58.88	57.61	54.54	55.75	56.88	55.58
Y 51.0	54.32	56.17	57.53	56.23	53.13	54.36	55.48	54.22
Y 52.0	52.96	54.81	56.14	54.81	51.73	52.93	54.09	52.84
Y 53.0	51.59	53.45	54.76	53.38	50.30	51.49	52.66	51.45
Y 54.0	50.22	52.07	53.34	51.93	48.85	50.03	51.23	50.05
Y 55.0	48.84	50.66	51.89	50.47	47.39	48.59	49.77	48.64
Y 56.0	47.44	49.23	50.44	48.99	45.92	47.10	48.32	47.19
Y 57.0	46.02	47.81	48.98	47.51	44.41	45.59	46.83	45.76
Y 58.0	44.60	46.37	47.48	46.02	42.92	44.09	45.33	44.29
Y 59.0	43.16	44.93	45.97	44.50	41.42	42.57	43.78	42.84
Y 60.0	41.72	43.45	44.45	42.96	39.90	41.05	42.26	41.35
Y 61.0	40.28	41.96	42.90	41.42	38.36	39.49	40.70	39.85
Y 62.0	38.83	40.47	41.35	39.85	36.83	37.94	39.15	38.35
Y 63.0	37.35	38.97	39.76	38.27	35.29	36.37	37.55	36.82
Y 64.0	35.86	37.44	38.18	36.69	33.74	34.78	35.97	35.28
Y 65.0	34.38	35.91	36.57	35.09	32.20	33.17	34.34	33.74
Y 66.0	32.88	34.37	34.94	33.49	30.64	31.58	32.73	32.21
Y 67.0	31.39	32.83	33.32	31.87	29.08	29.99	31.08	30.66
Y 68.0	29.89	31.28	31.69	30.26	27.52	28.39	29.44	29.10
Y 69.0	28.39	29.74	30.03	28.63	25.94	26.77	27.76	27.54
Y 70.0	26.89	28.17	28.37	26.99	24.38	25.16	26.09	25.97
Y 71.0	25.38	26.59	26.70	25.37	22.86	23.54	24.41	24.42
Y 72.0	23.90	25.02	25.00	23.75	21.33	21.92	22.73	22.86
Y 73.0	22.42	23.46	23.33	22.13	19.83	20.34	21.03	21.30
Y 74.0	20.98	21.89	21.66	20.50	18.31	18.75	19.33	19.71
Y 75.0	19.52	20.35	20.00	18.91	16.85	17.19	17.63	18.15
Y 76.0	18.08	18.83	18.32	17.34	15.39	15.64	15.96	16.62
Y 77.0	16.67	17.28	16.67	15.79	13.93	14.15	14.30	15.12
Y 78.0	15.26	15.80	15.03	14.30	12.49	12.71	12.67	13.65
Y 79.0	13.90	14.34	13.44	12.84	11.09	11.30	11.07	12.21
Y 80.0	12.56	12.93	11.89	11.41	9.70	9.92	9.54	10.82
Y 81.0	11.24	11.56	10.36	10.02	8.39	8.57	8.04	9.50
Y 82.0	9.94	10.23	8.89	8.68	7.14	7.26	6.61	8.21
Y 83.0	8.73	8.95	7.47	7.38	5.94	6.02	5.28	7.01
Y 84.0	7.60	7.71	6.13	6.12	4.80	4.87	4.07	5.86
Y 85.0	6.57	6.52	4.90	4.95	3.78	3.81	2.97	4.89
Y 86.0	5.59	5.47	3.78	3.90	2.89	2.85	2.02	4.04
Y 87.0	4.69	4.54	2.82	2.96	2.12	2.06	1.25	3.27
Y 88.0	3.87	3.70	2.05	2.21	1.52	1.43	0.68	2.64
Y 89.0	3.19	3.00	1.42	1.63	1.03	0.94	0.34	2.10
Y 90.0	2.65	2.46	1.00	1.19	0.62	0.59	0.24	1.67
Y 91.0	2.15	2.03	0.85	0.87	0.30	0.36	0.25	1.38
Y 92.0	1.75	1.69	0.86	0.62	0.06	0.20	0.27	1.23
Y 93.0	1.46	1.51	0.84	0.49	0.00	0.09	0.29	1.12

IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

Candela Tabulation - (Cont.)

V/H	C0.0	C45.0	C90.0	C135.0	C180.0	C225.0	C270.0	C315.0
Y 94.0	1.27	1.41	0.80	0.41	0.00	0.03	0.31	1.05
Y 95.0	1.16	1.36	0.78	0.35	0.00	0.00	0.31	0.97
Y 96.0	1.06	1.31	0.79	0.32	0.00	0.01	0.31	0.88
Y 97.0	1.02	1.25	0.79	0.32	0.00	0.00	0.30	0.82
Y 98.0	0.95	1.21	0.78	0.33	0.00	0.00	0.29	0.64
Y 99.0	0.90	1.13	0.79	0.31	0.00	0.00	0.28	0.62
Y 100.0	0.85	1.08	0.79	0.30	0.00	0.01	0.30	0.69
Y 101.0	0.79	1.01	0.77	0.32	0.00	0.01	0.28	0.68
Y 102.0	0.71	0.95	0.77	0.31	0.00	0.01	0.28	0.64
Y 103.0	0.67	0.89	0.76	0.30	0.00	0.00	0.26	0.58
Y 104.0	0.62	0.83	0.75	0.31	0.00	0.02	0.25	0.56
Y 105.0	0.54	0.74	0.74	0.30	0.00	0.00	0.25	0.50
Y 106.0	0.48	0.67	0.71	0.30	0.00	0.00	0.24	0.46
Y 107.0	0.40	0.60	0.70	0.29	0.00	0.00	0.22	0.41
Y 108.0	0.32	0.55	0.69	0.29	0.00	0.01	0.23	0.35
Y 109.0	0.26	0.50	0.68	0.29	0.00	0.00	0.22	0.30
Y 110.0	0.17	0.45	0.68	0.28	0.00	0.00	0.24	0.28
Y 111.0	0.09	0.43	0.65	0.28	0.00	0.00	0.23	0.25
Y 112.0	0.03	0.40	0.65	0.27	0.00	0.00	0.26	0.23
Y 113.0	0.00	0.38	0.64	0.28	0.00	0.00	0.27	0.21
Y 114.0	0.00	0.37	0.64	0.26	0.00	0.00	0.28	0.21
Y 115.0	0.00	0.36	0.61	0.26	0.00	0.00	0.27	0.21
Y 116.0	0.00	0.35	0.60	0.26	0.00	0.00	0.29	0.20
Y 117.0	0.00	0.35	0.59	0.25	0.00	0.00	0.29	0.21
Y 118.0	0.00	0.35	0.57	0.24	0.00	0.00	0.29	0.19
Y 119.0	0.00	0.33	0.56	0.23	0.00	0.00	0.30	0.17
Y 120.0	0.00	0.32	0.56	0.25	0.00	0.00	0.29	0.16
Y 121.0	0.00	0.32	0.53	0.23	0.00	0.00	0.29	0.15
Y 122.0	0.00	0.32	0.53	0.22	0.00	0.00	0.29	0.14
Y 123.0	0.00	0.32	0.51	0.21	0.00	0.00	0.27	0.14
Y 124.0	0.00	0.32	0.49	0.20	0.00	0.00	0.00	0.13
Y 125.0	0.00	0.31	0.47	0.20	0.00	0.00	0.00	0.12
Y 126.0	0.00	0.30	0.47	0.18	0.00	0.00	0.00	0.11
Y 127.0	0.00	0.28	0.41	0.19	0.00	0.00	0.00	0.11
Y 128.0	0.00	0.26	0.11	0.17	0.00	0.00	0.00	0.09
Y 129.0	0.00	0.24	0.00	0.17	0.00	0.00	0.00	0.09
Y 130.0	0.00	0.23	0.00	0.16	0.00	0.00	0.00	0.09
Y 131.0	0.00	0.22	0.00	0.15	0.00	0.00	0.00	0.06
Y 132.0	0.00	0.21	0.00	0.13	0.00	0.00	0.00	0.06
Y 133.0	0.00	0.20	0.00	0.13	0.00	0.00	0.00	0.06
Y 134.0	0.00	0.19	0.00	0.11	0.00	0.00	0.00	0.06
Y 135.0	0.00	0.19	0.00	0.10	0.00	0.00	0.00	0.04
Y 136.0	0.00	0.18	0.00	0.10	0.00	0.00	0.00	0.04
Y 137.0	0.00	0.16	0.00	0.09	0.00	0.00	0.00	0.03
Y 138.0	0.00	0.16	0.00	0.07	0.00	0.00	0.00	0.01
Y 139.0	0.00	0.14	0.00	0.06	0.00	0.00	0.00	0.01
Y 140.0	0.00	0.13	0.00	0.06	0.00	0.00	0.00	0.02

IES Indoor Report
Photometric Filename:F15A-24V-5050-60-3000K.IES

Candela Tabulation - (Cont.)

V/H	C0.0	C45.0	C90.0	C135.0	C180.0	C225.0	C270.0	C315.0
Y 141.0	0.00	0.13	0.00	0.05	0.00	0.00	0.00	0.00
Y 142.0	0.00	0.10	0.00	0.04	0.00	0.00	0.00	0.00
Y 143.0	0.00	0.11	0.00	0.04	0.00	0.00	0.00	0.00
Y 144.0	0.00	0.09	0.00	0.02	0.00	0.00	0.00	0.00
Y 145.0	0.00	0.08	0.00	0.02	0.00	0.00	0.00	0.00
Y 146.0	0.00	0.08	0.00	0.02	0.00	0.00	0.00	0.00
Y 147.0	0.00	0.07	0.00	0.01	0.00	0.00	0.00	0.00
Y 148.0	0.00	0.06	0.00	0.01	0.00	0.00	0.00	0.00
Y 149.0	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Y 150.0	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00
Y 151.0	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Y 152.0	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Y 153.0	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Y 154.0	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Y 155.0	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Y 156.0	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Y 157.0	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Y 158.0	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Y 159.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 161.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 162.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 163.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 164.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 166.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 167.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 168.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 169.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 171.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 172.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 173.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 174.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 176.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 177.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 178.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 179.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Y 180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00