IES Indoor Report
Photometric Filename:F16A-24V-3528-144-4000K.IES

Indoor Luminaire Photometric Data

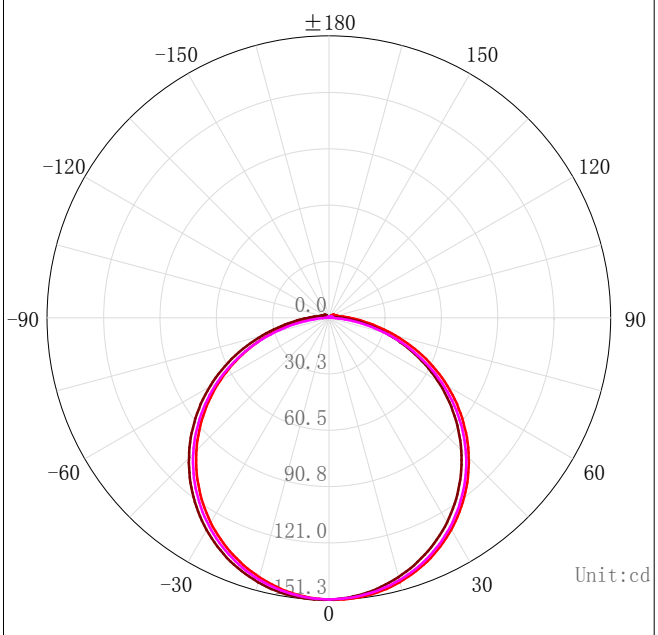
Description Information

Luminary Name: F16A-24V-3528-144-4000K		Lum. Catelog:	Test ID: 001
Lamp Name: LED		Lamp Catelog: F16A-24V-3528-144	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): 0.200
Test System: C, γ	Test Step: C=45.0 γ=1.0	Temp.(℃): 25	Humidity(%):

Character Parameter

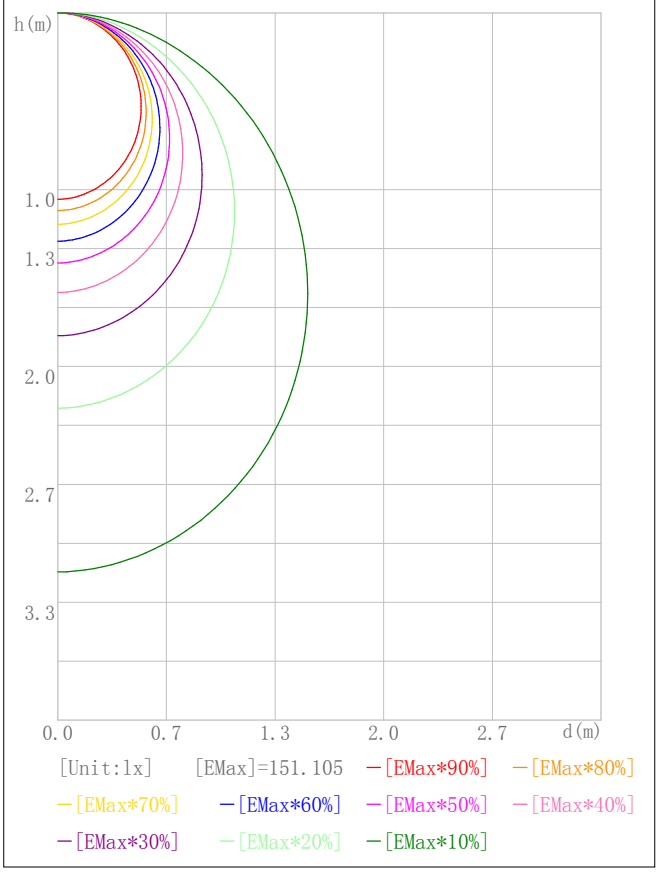
Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 461.040	Luminary Flux(lm): 461.039	Field Angle(10%Imax): 169.6(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 451.3671m 97.90%
Rated Voltage(V):	Luminary EER(lm/W): 51.802	Up Lumens&Percent: 9.6721m 2.10%
Tested Power(W): 8.900	Max.Candela(cd): 151.266	S/MH: C0_a180=1.268 C90_270=1.271
Lamps' Inside: 1	Max Cand@Ang.(°): C=180.0 γ=2.0	CIE Type: Semi-Direct
Tested Electrics(V,A,pf):24.0,0.370,1.000	Beam Angle(50%Imax): 115.4(°)	ErP Φuse(120°): 347.817lm
Lamp Size(W*L*H):0.010m*1.000m*0.015m	Left=-56.4° ,Right=59.1°	IRF(%): 107.643

C Plane Distribution Diagram



C Plane	[50%MaxAng.]	[10%MaxAng.]
C180.0_360.0:	115.4	169.6
C0.0_180.0 :	115.4	169.6
C90.0_270.0 :	115.0	161.9

C0 Space ISO Illuminance Curve

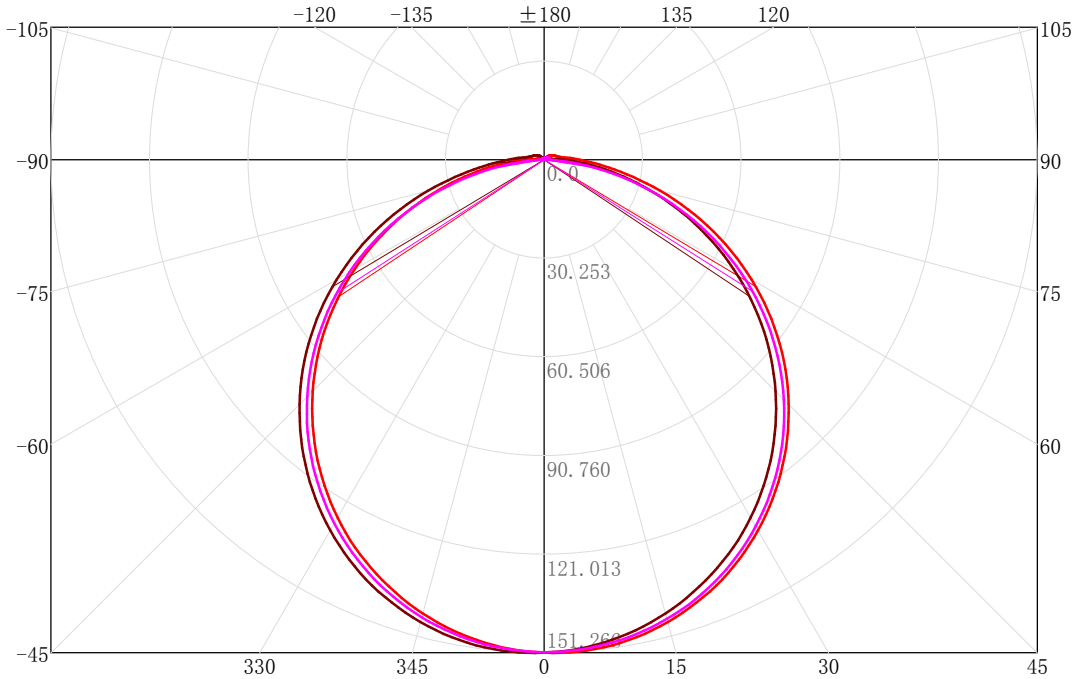


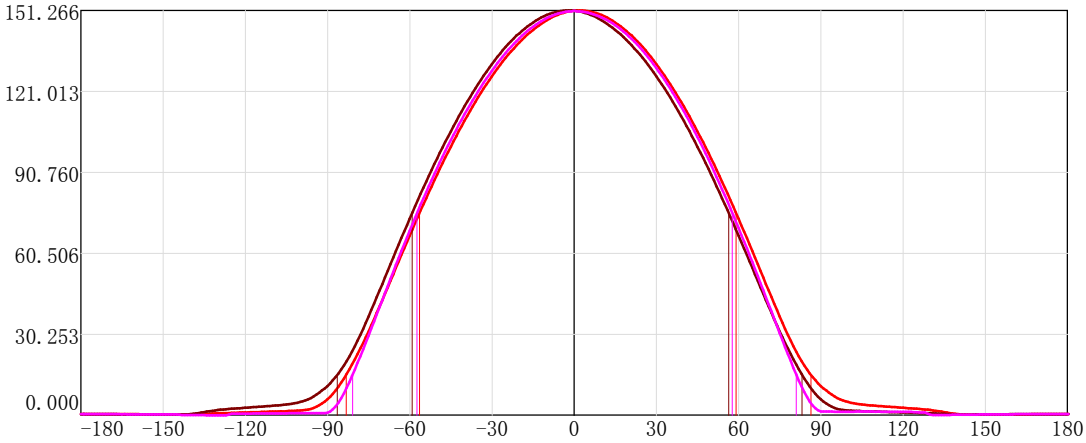
IES Indoor Report
Photometric Filename:F16A-24V-3528-144-4000K.IES

2D Plane Light Intensity Distribution Curve

Lum.Name: F16A-24V-3528-144-4000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F16A-24V-3528-144	Test Lab: LAB001
Manufacture: Olympia Lighting Co., Ltd	Test Machine:GON-2000	Test Date: 2018/11/19

C Plane Distribution Diagram





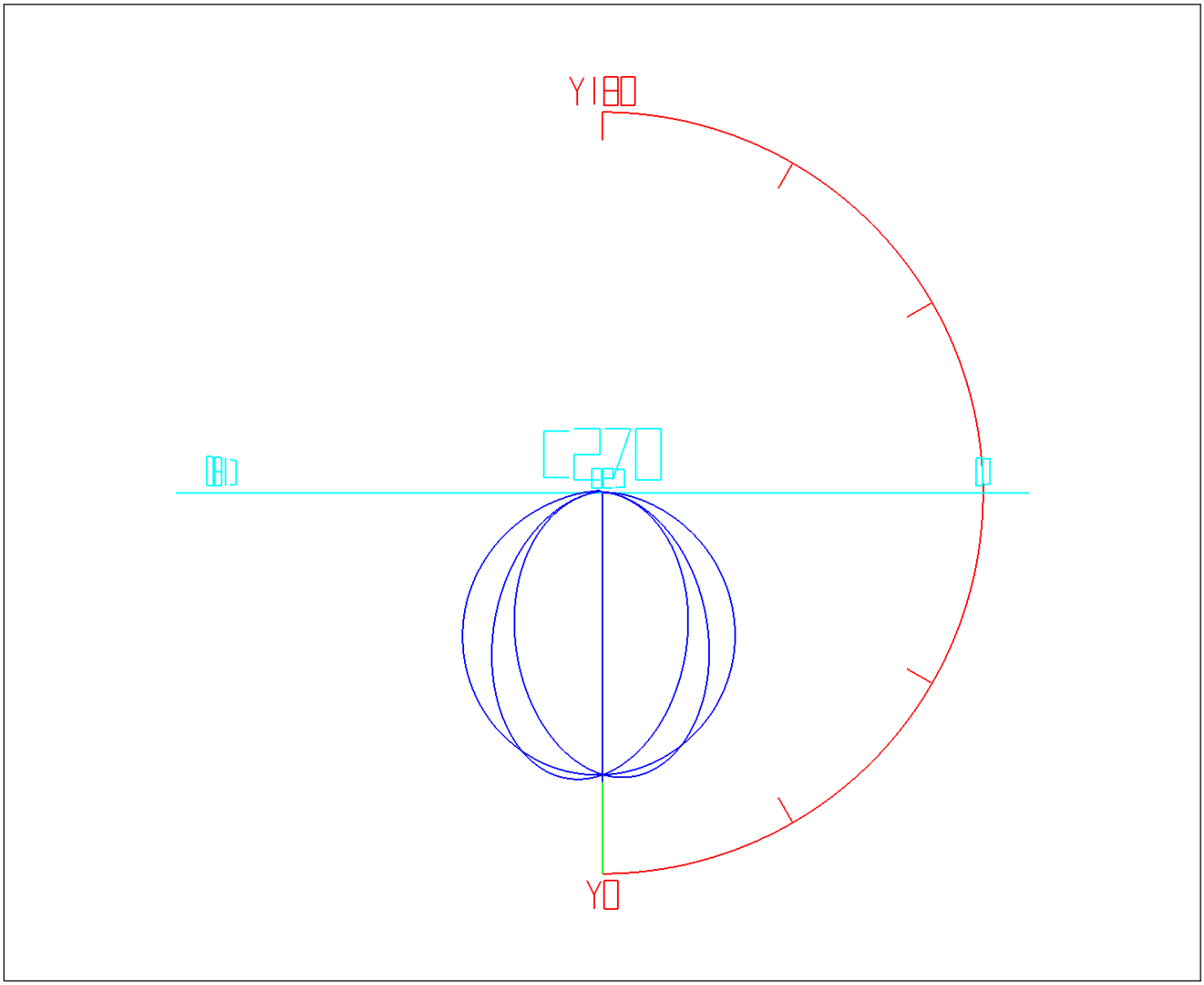
C Plane	[50%MaxAng.]	[10%MaxAng.]	Unit:cd
C180.0_360.0:	115.4	169.6	
C0.0_180.0 :	115.4	169.6	
C90.0_270.0 :	115.0	161.9	

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-4000K.IES

3D Light Intensity Distribution Modal

Lum.Name: F16A-24V-3528-144-4000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F16A-24V-3528-144	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:F16A-24V-3528-144-4000K.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	0.14	0.14	0.03	0.03	47.0-48.0	7.95	257.90	1.72	55.94
1.0-2.0	0.43	0.58	0.09	0.13	48.0-49.0	7.91	265.80	1.71	57.65
2.0-3.0	0.72	1.30	0.16	0.28	49.0-50.0	7.85	273.65	1.70	59.36
3.0-4.0	1.01	2.31	0.22	0.50	50.0-51.0	7.78	281.43	1.69	61.04
4.0-5.0	1.30	3.60	0.28	0.78	51.0-52.0	7.71	289.14	1.67	62.71
5.0-6.0	1.58	5.18	0.34	1.12	52.0-53.0	7.62	296.76	1.65	64.37
6.0-7.0	1.86	7.05	0.40	1.53	53.0-54.0	7.52	304.28	1.63	66.00
7.0-8.0	2.14	9.19	0.46	1.99	54.0-55.0	7.42	311.70	1.61	67.61
8.0-9.0	2.42	11.61	0.52	2.52	55.0-56.0	7.30	319.00	1.58	69.19
9.0-10.0	2.69	14.30	0.58	3.10	56.0-57.0	7.17	326.17	1.56	70.75
10.0-11.0	2.96	17.27	0.64	3.74	57.0-58.0	7.04	333.21	1.53	72.27
11.0-12.0	3.23	20.50	0.70	4.45	58.0-59.0	6.89	340.10	1.50	73.77
12.0-13.0	3.49	23.99	0.76	5.20	59.0-60.0	6.74	346.84	1.46	75.23
13.0-14.0	3.75	27.74	0.81	6.02	60.0-61.0	6.58	353.42	1.43	76.66
14.0-15.0	4.00	31.74	0.87	6.88	61.0-62.0	6.41	359.82	1.39	78.05
15.0-16.0	4.25	35.99	0.92	7.81	62.0-63.0	6.23	366.05	1.35	79.40
16.0-17.0	4.49	40.48	0.97	8.78	63.0-64.0	6.04	372.09	1.31	80.71
17.0-18.0	4.73	45.21	1.03	9.81	64.0-65.0	5.84	377.93	1.27	81.97
18.0-19.0	4.96	50.17	1.08	10.88	65.0-66.0	5.64	383.57	1.22	83.20
19.0-20.0	5.18	55.35	1.12	12.01	66.0-67.0	5.43	389.00	1.18	84.37
20.0-21.0	5.40	60.75	1.17	13.18	67.0-68.0	5.21	394.21	1.13	85.51
21.0-22.0	5.61	66.37	1.22	14.39	68.0-69.0	4.99	399.21	1.08	86.59
22.0-23.0	5.81	72.18	1.26	15.66	69.0-70.0	4.76	403.97	1.03	87.62
23.0-24.0	6.01	78.19	1.30	16.96	70.0-71.0	4.53	408.50	0.98	88.60
24.0-25.0	6.20	84.38	1.34	18.30	71.0-72.0	4.30	412.79	0.93	89.54
25.0-26.0	6.38	90.76	1.38	19.69	72.0-73.0	4.06	416.85	0.88	90.42
26.0-27.0	6.55	97.31	1.42	21.11	73.0-74.0	3.81	420.66	0.83	91.24
27.0-28.0	6.71	104.02	1.46	22.56	74.0-75.0	3.57	424.23	0.77	92.02
28.0-29.0	6.86	110.88	1.49	24.05	75.0-76.0	3.32	427.55	0.72	92.74
29.0-30.0	7.01	117.89	1.52	25.57	76.0-77.0	3.08	430.63	0.67	93.40
30.0-31.0	7.14	125.03	1.55	27.12	77.0-78.0	2.84	433.47	0.62	94.02
31.0-32.0	7.27	132.30	1.58	28.70	78.0-79.0	2.60	436.07	0.56	94.58
32.0-33.0	7.39	139.69	1.60	30.30	79.0-80.0	2.36	438.43	0.51	95.10
33.0-34.0	7.50	147.19	1.63	31.93	80.0-81.0	2.13	440.56	0.46	95.56
34.0-35.0	7.60	154.79	1.65	33.57	81.0-82.0	1.91	442.48	0.41	95.97
35.0-36.0	7.68	162.47	1.67	35.24	82.0-83.0	1.70	444.18	0.37	96.34
36.0-37.0	7.76	170.23	1.68	36.92	83.0-84.0	1.50	445.68	0.33	96.67
37.0-38.0	7.83	178.07	1.70	38.62	84.0-85.0	1.32	447.00	0.29	96.95
38.0-39.0	7.89	185.96	1.71	40.33	85.0-86.0	1.15	448.15	0.25	97.20
39.0-40.0	7.94	193.90	1.72	42.06	86.0-87.0	0.99	449.14	0.22	97.42
40.0-41.0	7.98	201.87	1.73	43.79	87.0-88.0	0.85	449.99	0.19	97.60
41.0-42.0	8.00	209.88	1.74	45.52	88.0-89.0	0.74	450.73	0.16	97.76
42.0-43.0	8.02	217.90	1.74	47.26	89.0-90.0	0.64	451.37	0.14	97.90
43.0-44.0	8.03	225.93	1.74	49.00	90.0-91.0	0.56	451.93	0.12	98.02
44.0-45.0	8.02	233.95	1.74	50.74	91.0-92.0	0.50	452.43	0.11	98.13
45.0-46.0	8.01	241.96	1.74	52.48	92.0-93.0	0.45	452.88	0.10	98.23
46.0-47.0	7.99	249.95	1.73	54.21	93.0-94.0	0.39	453.27	0.09	98.31

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-4000K.IES

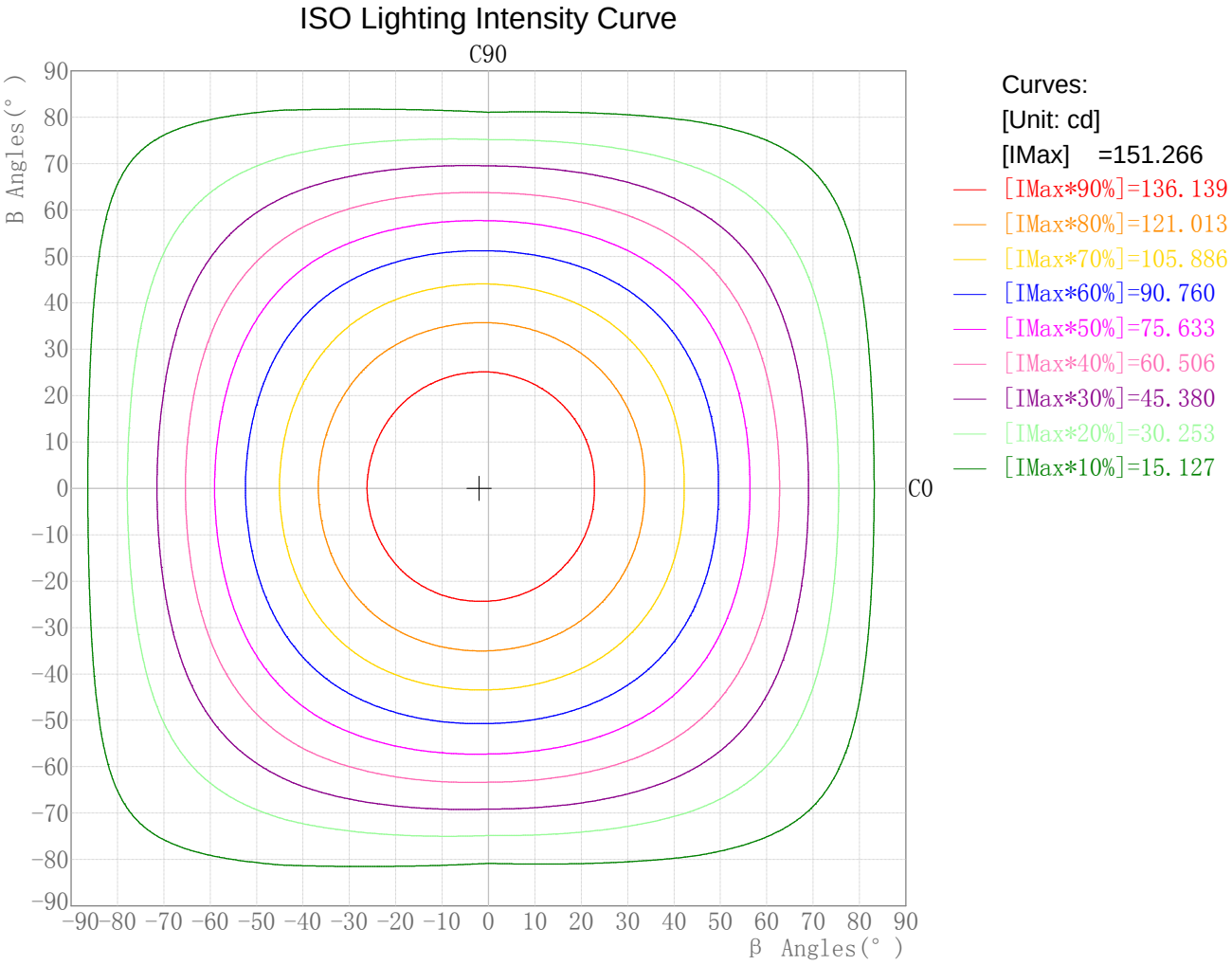
Zonal Flux Tabulation - (Cont.)

Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
94.0-95.0	0.35	453.62	0.08	98.39
95.0-96.0	0.32	453.95	0.07	98.46
96.0-97.0	0.30	454.25	0.07	98.53
97.0-98.0	0.28	454.53	0.06	98.59
98.0-99.0	0.27	454.80	0.06	98.65
99.0-100.0	0.26	455.06	0.06	98.70
100.0-101.0	0.25	455.31	0.05	98.76
101.0-102.0	0.24	455.56	0.05	98.81
102.0-103.0	0.24	455.80	0.05	98.86
103.0-104.0	0.23	456.03	0.05	98.91
104.0-105.0	0.22	456.25	0.05	98.96
105.0-106.0	0.22	456.47	0.05	99.01
106.0-107.0	0.21	456.68	0.05	99.05
107.0-108.0	0.21	456.89	0.04	99.10
108.0-109.0	0.20	457.09	0.04	99.14
109.0-110.0	0.19	457.28	0.04	99.19
110.0-111.0	0.19	457.47	0.04	99.23
111.0-112.0	0.18	457.66	0.04	99.27
112.0-113.0	0.18	457.83	0.04	99.30
113.0-114.0	0.17	458.01	0.04	99.34
114.0-115.0	0.17	458.18	0.04	99.38
115.0-116.0	0.16	458.34	0.04	99.41
116.0-117.0	0.16	458.50	0.03	99.45
117.0-118.0	0.16	458.66	0.03	99.48
118.0-119.0	0.15	458.81	0.03	99.52
119.0-120.0	0.15	458.95	0.03	99.55
120.0-121.0	0.14	459.09	0.03	99.58
121.0-122.0	0.13	459.23	0.03	99.61
122.0-123.0	0.13	459.35	0.03	99.63
123.0-124.0	0.12	459.48	0.03	99.66
124.0-125.0	0.11	459.59	0.02	99.69
125.0-126.0	0.10	459.69	0.02	99.71
126.0-127.0	0.09	459.79	0.02	99.73
127.0-128.0	0.09	459.87	0.02	99.75
128.0-129.0	0.08	459.95	0.02	99.76
129.0-130.0	0.07	460.02	0.01	99.78
130.0-131.0	0.06	460.08	0.01	99.79
131.0-132.0	0.05	460.13	0.01	99.80
132.0-133.0	0.05	460.18	0.01	99.81
133.0-134.0	0.05	460.23	0.01	99.82
134.0-135.0	0.04	460.27	0.01	99.83
135.0-136.0	0.04	460.31	0.01	99.84
136.0-137.0	0.04	460.34	0.01	99.85
137.0-138.0	0.03	460.38	0.01	99.86
138.0-139.0	0.03	460.41	0.01	99.86
139.0-140.0	0.03	460.44	0.01	99.87
140.0-141.0	0.03	460.46	0.01	99.88
141.0-142.0	0.03	460.49	0.01	99.88
142.0-143.0	0.02	460.51	0.01	99.89
143.0-144.0	0.02	460.54	0.01	99.89
144.0-145.0	0.02	460.56	0.01	99.90
145.0-146.0	0.02	460.59	0.01	99.90
146.0-147.0	0.02	460.61	0.00	99.91
147.0-148.0	0.02	460.63	0.00	99.91
148.0-149.0	0.02	460.65	0.00	99.92
149.0-150.0	0.02	460.67	0.00	99.92
150.0-151.0	0.02	460.70	0.00	99.93
151.0-152.0	0.02	460.72	0.00	99.93
152.0-153.0	0.02	460.74	0.00	99.93
153.0-154.0	0.02	460.76	0.00	99.94
154.0-155.0	0.02	460.78	0.00	99.94
155.0-156.0	0.02	460.80	0.00	99.95
156.0-157.0	0.02	460.81	0.00	99.95
157.0-158.0	0.02	460.83	0.00	99.95
158.0-159.0	0.02	460.85	0.00	99.96
159.0-160.0	0.02	460.86	0.00	99.96
160.0-161.0	0.02	460.88	0.00	99.97
161.0-162.0	0.02	460.90	0.00	99.97
162.0-163.0	0.01	460.91	0.00	99.97
163.0-164.0	0.01	460.92	0.00	99.98
164.0-165.0	0.01	460.94	0.00	99.98
165.0-166.0	0.01	460.95	0.00	99.98
166.0-167.0	0.01	460.96	0.00	99.98
167.0-168.0	0.01	460.97	0.00	99.99
168.0-169.0	0.01	460.98	0.00	99.99
169.0-170.0	0.01	460.99	0.00	99.99
170.0-171.0	0.01	461.00	0.00	99.99
171.0-172.0	0.01	461.01	0.00	99.99
172.0-173.0	0.01	461.02	0.00	99.99
173.0-174.0	0.01	461.02	0.00	100.00
174.0-175.0	0.00	461.03	0.00	100.00
175.0-176.0	0.00	461.03	0.00	100.00
176.0-177.0	0.00	461.03	0.00	100.00
177.0-178.0	0.00	461.04	0.00	100.00
178.0-179.0	0.00	461.04	0.00	100.00
179.0-180.0	0.00	461.04	0.00	100.00

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-4000K.IES

Rectangle ISO Lighting Intensity Diagram

Lum.Name: F16A-24V-3528-144-4000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F16A-24V-3528-144	Test Lab: LAB001
Manufacture: Olympia Lighting Co., Ltd	Test Machine:GON-2000	Test Date: 2018/11/19



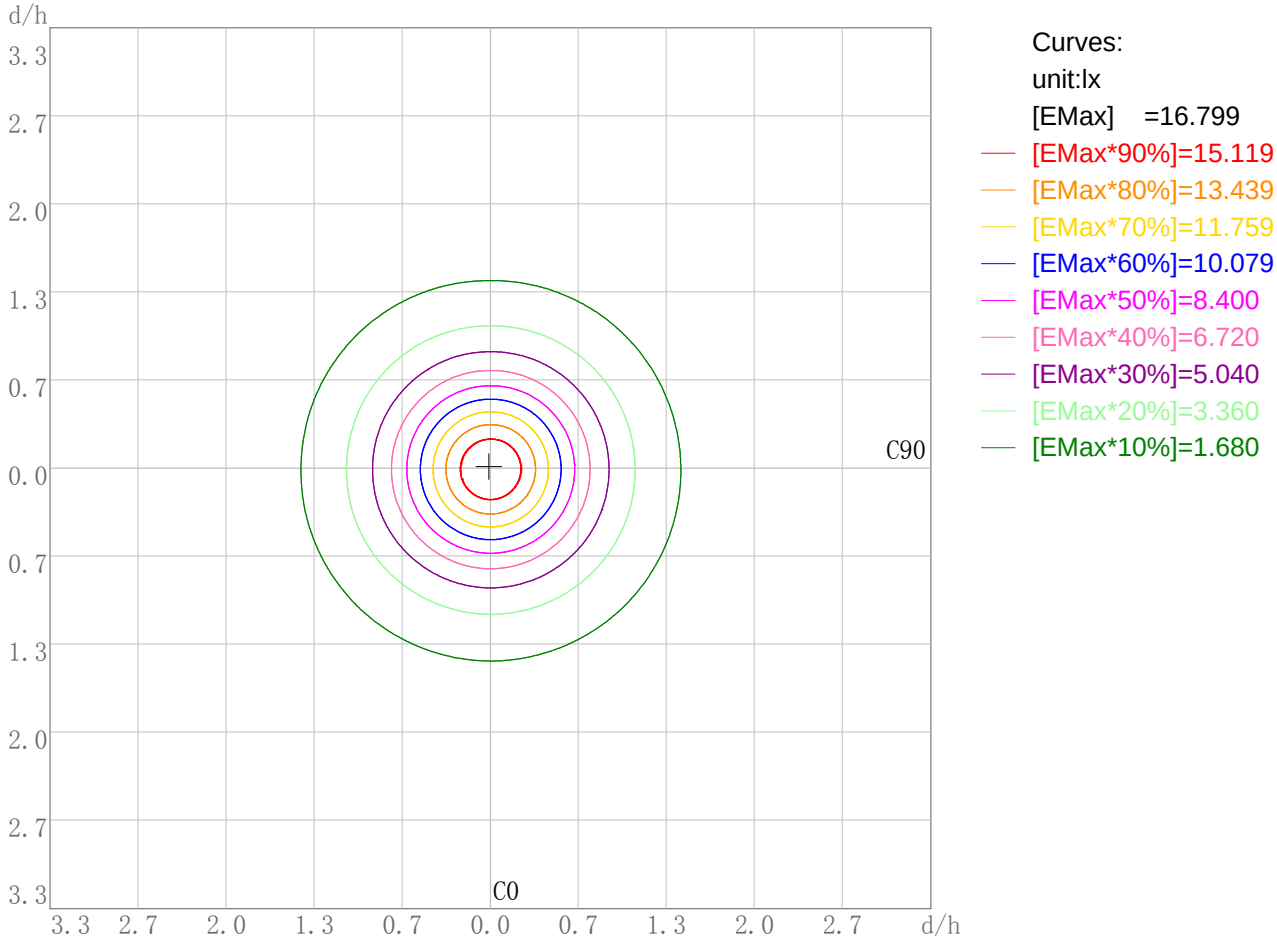
Maximum Light Intensity(cd): 151.27
Maximum Cand.@Angle: H=-2.0°,V=0.0°

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-4000K.IES

Plane ISO-Illuminance Diagram

Lum.Name: F16A-24V-3528-144-4000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F16A-24V-3528-144	Test Lab: LAB001
Manufacture: Olympia Lighting Co., Ltd	Test Machine:GON-2000	Test Date: 2018/11/19

Plane ISO-Illuminance Curve



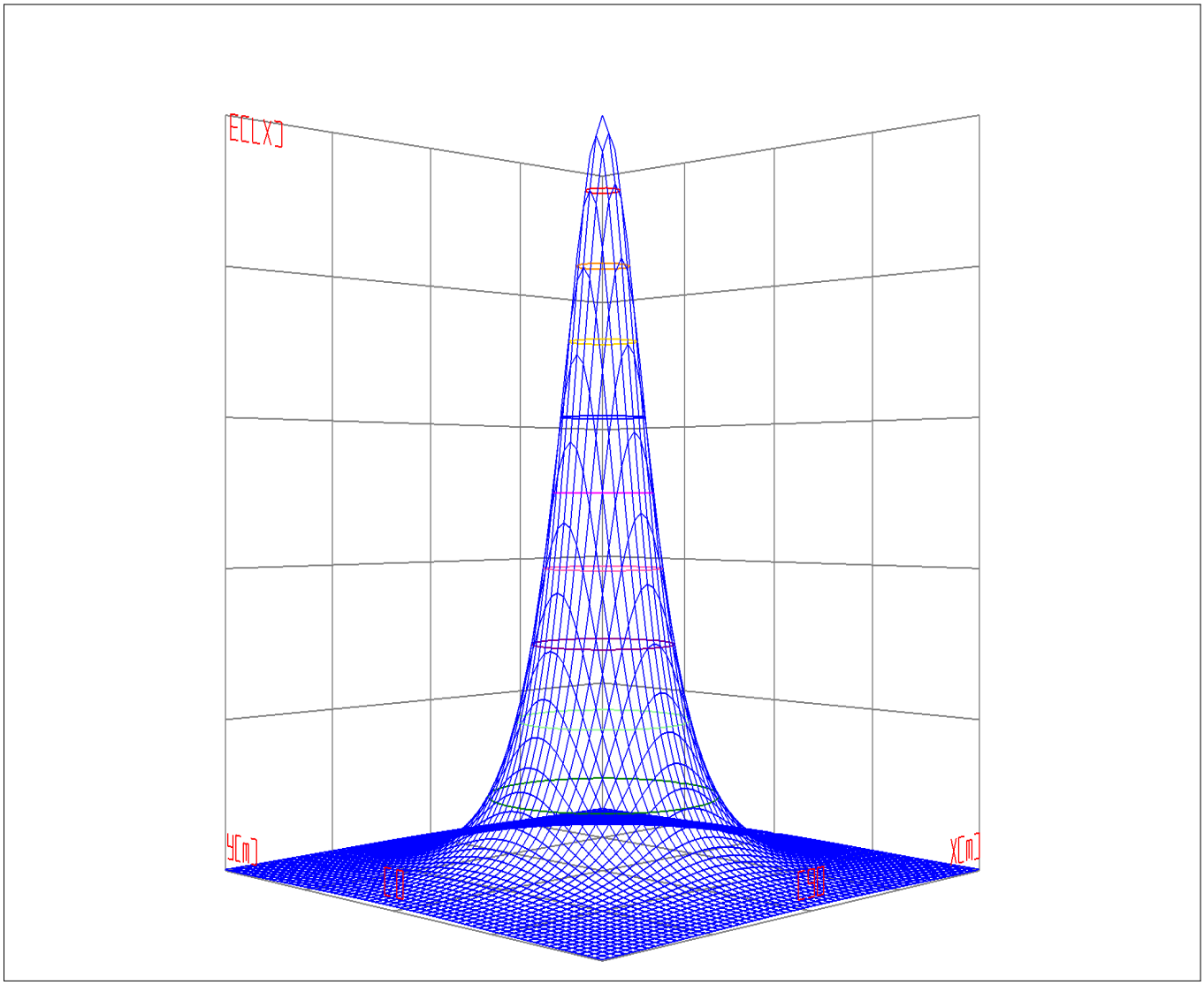
Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 16.80
Working Plane Maximum Illuminance Position(d/h):H-0.0 V-0.0

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-4000K.IES

3D Plane ISO Illuminance Diagram

Lum.Name: F16A-24V-3528-144-4000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F16A-24V-3528-144	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%

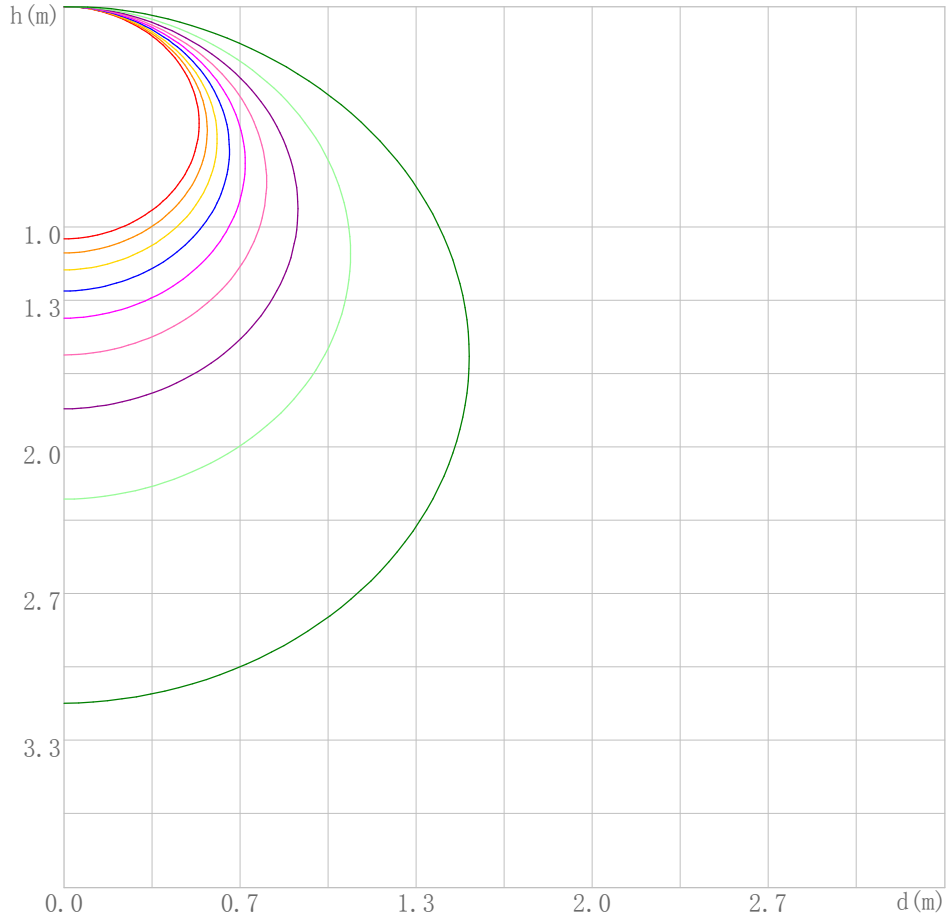
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-4000K.IES

Space ISO Illuminance Diagram

Lum.Name: F16A-24V-3528-144-4000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F16A-24V-3528-144	Test Lab: LAB001
Manufacture: Olympia Lighting Co., Ltd	Test Machine:GON-2000	Test Date: 2018/11/19

Space ISO Illuminance Curve



Curves:
[Unit: lx]
[EMax] =151.105
[EMax*90%]=135.994
[EMax*80%]=120.884
[EMax*70%]=105.773
[EMax*60%]=90.663
[EMax*50%]=75.552
[EMax*40%]=60.442
[EMax*30%]=45.331
[EMax*20%]=30.221
[EMax*10%]=15.110

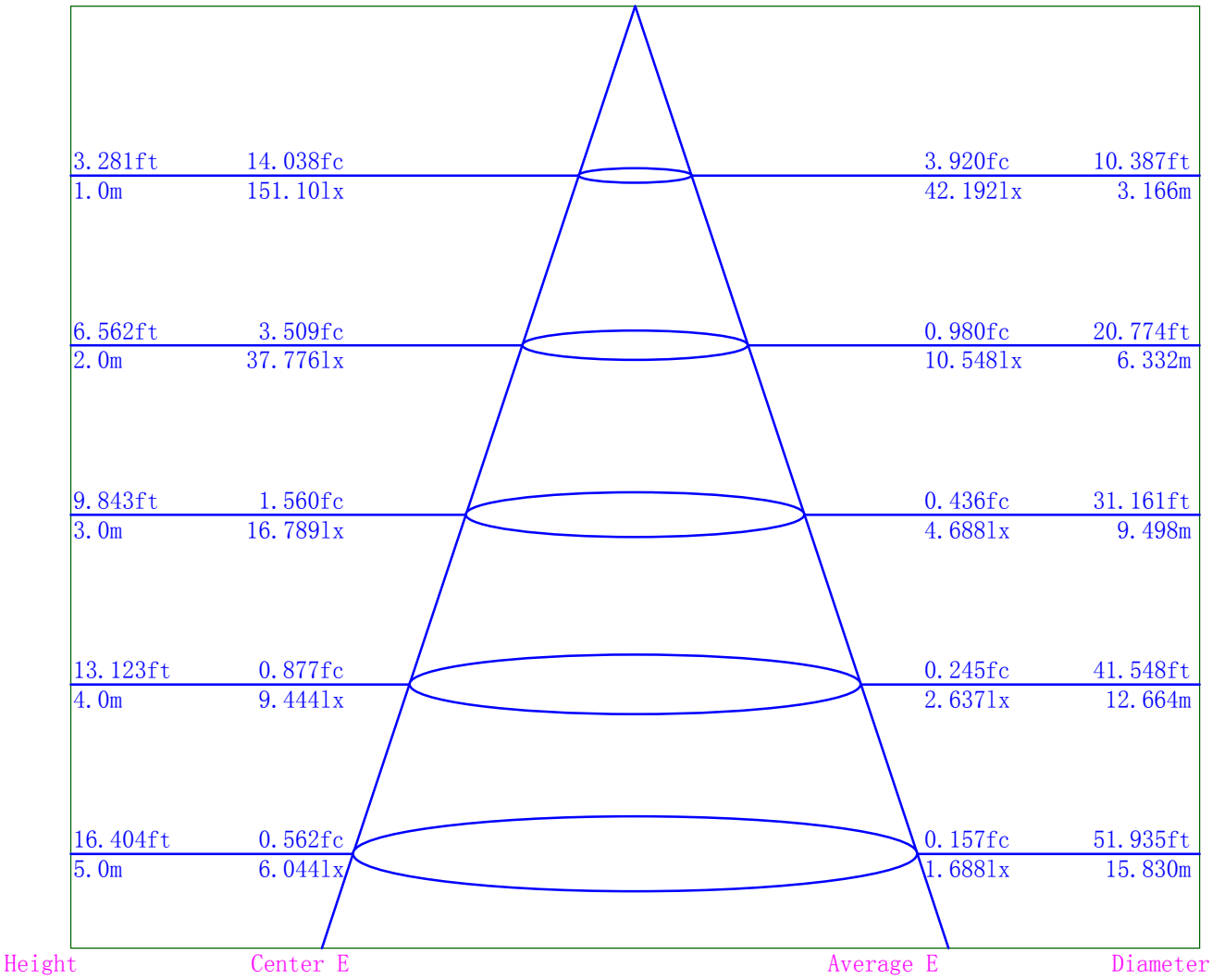
Space Plane Maximum Illuminance and @Angle:151.10lx,0.0deg
Plane Maximum Lighting Intensity and @Angle:151.105cd,0eg

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-4000K.IES

Illuminance-Distance Diagram

Lum.Name: F16A-24V-3528-144-4000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F16A-24V-3528-144	Test Lab: LAB001
Manufacture: Olympia Lighting Co., Ltd	Test Machine:GON-2000	Test Date: 2018/11/19

Illuminance-Distance Curve



Beam Angle:115.4

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-4000K.IES

Indoor Luminance Limiting Curves

Lum.Name:	F16A-24V-3528-144-4000K	Lum.Catelog:	Test ID: 001
Lamp Name:	LED	Lamp Catelog: F16A-24V-3528-144	Test Lab: LAB001
Manufacture:	Olympia Lighting Co., Ltd	Test Machine:GON-2000	Test Date: 2018/11/19

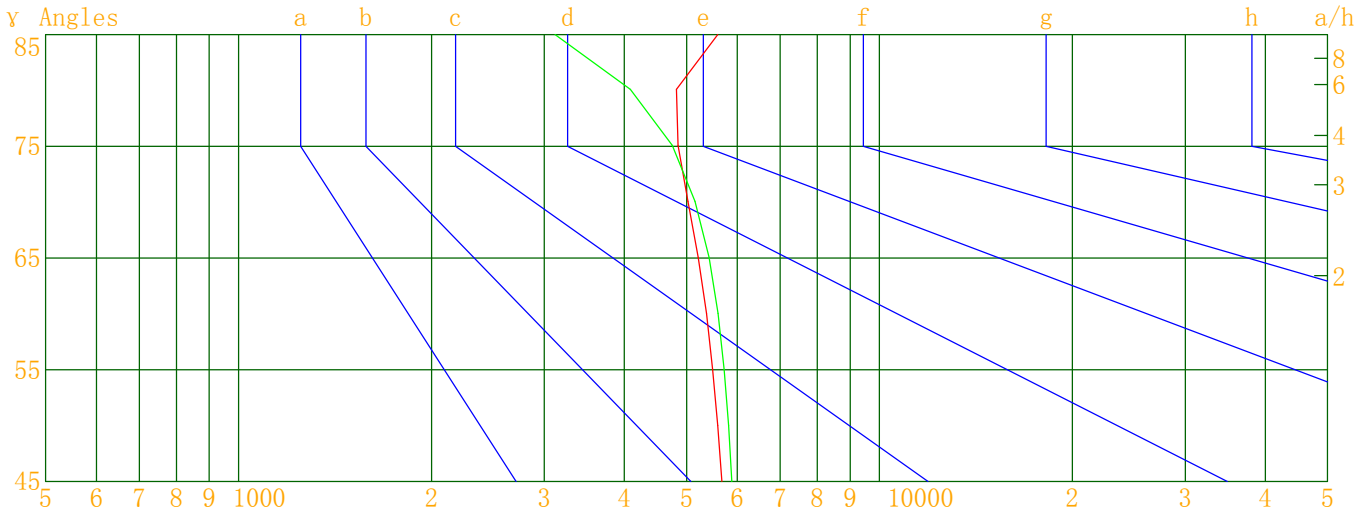
Glare Grade Table

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	5676	5594	5494	5370	5213	5028	4851	4821	5592
C90	5883	5816	5725	5598	5420	5157	4750	4088	3117

Luminance Limiting Curve



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

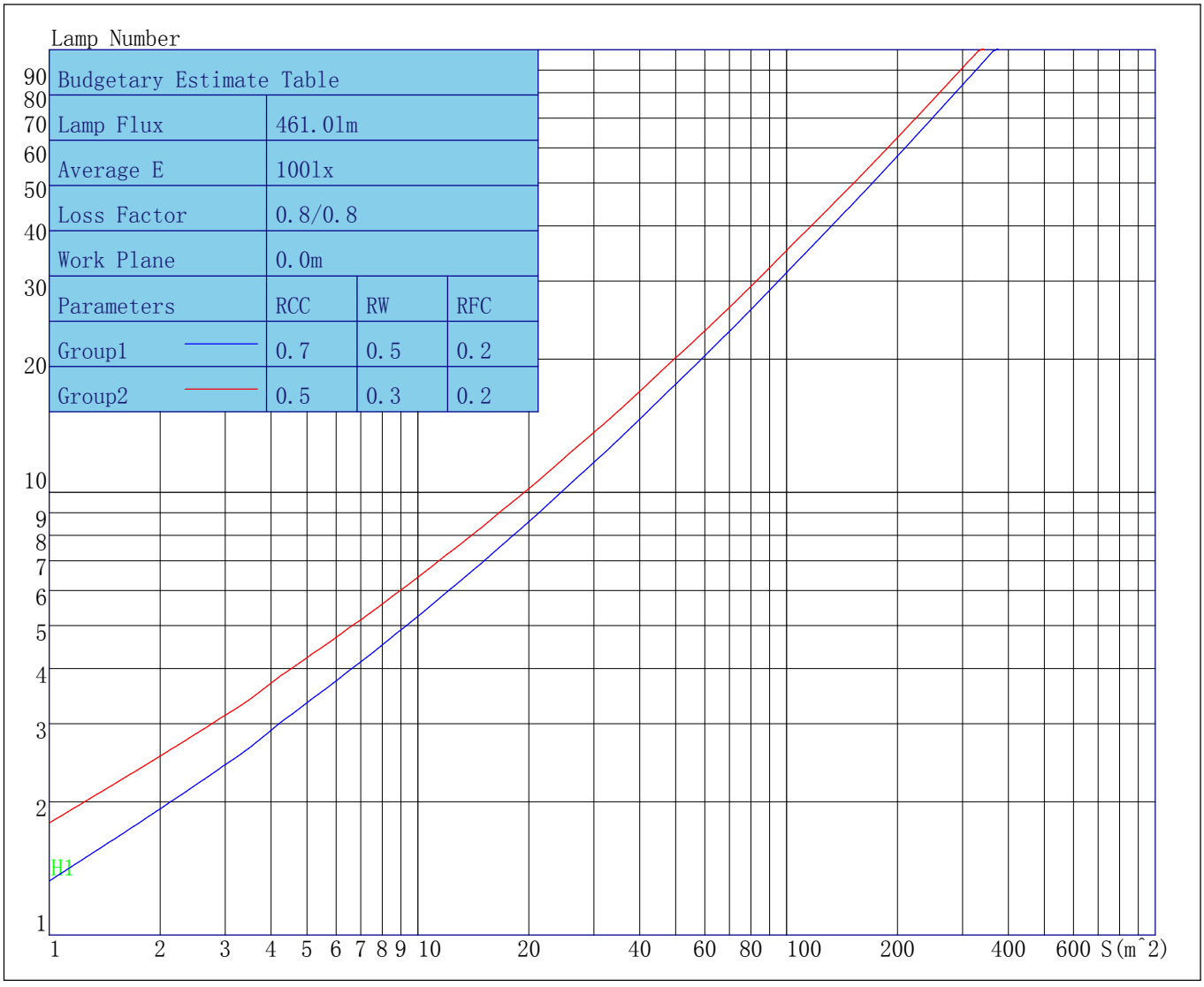
Luminous Type: Without Luminous Side

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

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-4000K.IES

Indoor Budgetary Estimate Table

Lum.Name: F16A-24V-3528-144-4000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F16A-24V-3528-144	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:F16A-24V-3528-144-4000K.IES

Indoor Coefficient of Utilization Table

Lum.Name: F16A-24V-3528-144-4000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F16A-24V-3528-144	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	110	110	110	105	105	105	100	100	100	98
1	108	103	98	94	105	100	96	92	96	92	89	91	89	86	87	85	83	81
2	98	89	82	76	95	87	81	75	83	78	73	79	75	71	76	72	69	67
3	89	78	70	63	86	76	68	62	73	66	61	70	64	60	67	62	58	56
4	81	69	60	53	79	67	59	53	65	57	52	62	56	51	60	54	50	48
5	75	61	52	46	72	60	52	45	58	50	45	56	49	44	54	48	43	41
6	69	55	46	40	67	54	46	39	52	45	39	50	44	38	48	43	38	36
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	34	31
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	41	34	30	28
9	55	42	34	28	54	41	33	28	40	33	28	39	32	27	37	31	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-4000K.IES

Unified Glare Rating Table

Lum.Name: F16A-24V-3528-144-4000K	Lum.Catelog:	Test ID: 001
Lamp Name: LED	Lamp Catelog: F16A-24V-3528-144	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	18.1	19.7	18.5	20.1	20.4	18.3	20.0	18.7	20.3	20.7
	Y=3H	19.8	21.2	20.2	21.6	22.0	20.0	21.5	20.4	21.8	22.3
	Y=4H	20.5	21.9	20.9	22.3	22.7	20.7	22.1	21.1	22.4	22.9
	Y=6H	21.1	22.4	21.5	22.8	23.2	21.2	22.4	21.6	22.8	23.3
	Y=8H	21.3	22.5	21.8	23.0	23.4	21.3	22.5	21.8	22.9	23.4
	Y=12H	21.6	22.7	22.0	23.1	23.6	21.4	22.5	21.8	23.0	23.5
X=4H	Y=2H	18.9	20.3	19.3	20.7	21.1	19.1	20.5	19.6	20.9	21.3
	Y=3H	20.8	21.9	21.2	22.4	22.8	21.0	22.2	21.4	22.6	23.0
	Y=4H	21.6	22.6	22.1	23.1	23.6	21.8	22.8	22.2	23.3	23.8
	Y=6H	22.3	23.2	22.8	23.7	24.2	22.4	23.3	22.9	23.8	24.3
	Y=8H	22.6	23.5	23.1	24.0	24.5	22.6	23.4	23.1	23.9	24.4
	Y=12H	22.9	23.7	23.4	24.2	24.7	22.7	23.5	23.2	24.0	24.5
X=8H	Y=4H	21.9	22.8	22.4	23.3	23.8	22.2	23.0	22.7	23.5	24.0
	Y=6H	22.8	23.5	23.3	24.1	24.7	22.9	23.6	23.4	24.1	24.8
	Y=8H	23.2	23.8	23.7	24.4	24.9	23.2	23.8	23.7	24.4	24.9
	Y=12H	23.6	24.2	24.2	24.7	25.3	23.4	24.0	23.9	24.5	25.1
X=12H	Y=4H	22.0	22.8	22.5	23.3	23.8	22.2	23.0	22.7	23.5	24.0
	Y=6H	22.9	23.5	23.4	24.0	24.6	23.0	23.7	23.6	24.2	24.7
	Y=8H	23.3	23.9	23.9	24.4	25.0	23.3	23.9	23.9	24.4	25.0
Variations with the objerver position at spacings											
S=1.0H		0.3/-0.4					0.5/-0.6				
S=1.5H		0.7/-0.7					0.9/-1.0				
S=2.0H		0.8/-1.0					1.0/-1.3				
Reduced UGR Table:											
Nordic Standard Table:		BK0					BK0				
Correction Value		3.2					3.0				

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

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-4000K.IES

Candela Tabulation

V/H	C0.0	C45.0	C90.0	C135.0	C180.0	C225.0	C270.0	C315.0
Y 0.0	151.10	151.10	151.10	151.10	151.10	151.10	151.10	151.10
Y 1.0	151.04	151.15	150.96	151.01	151.24	151.26	150.95	150.89
Y 2.0	150.87	151.02	150.92	151.01	151.27	151.23	150.86	150.76
Y 3.0	150.66	150.82	150.79	150.94	151.24	151.16	150.73	150.57
Y 4.0	150.36	150.59	150.65	150.84	151.17	151.04	150.55	150.31
Y 5.0	150.03	150.30	150.42	150.66	151.03	150.85	150.31	150.03
Y 6.0	149.65	149.96	150.15	150.45	150.82	150.61	150.02	149.68
Y 7.0	149.23	149.59	149.85	150.20	150.58	150.36	149.68	149.30
Y 8.0	148.73	149.16	149.52	149.89	150.36	150.01	149.29	148.83
Y 9.0	148.20	148.69	149.13	149.52	149.96	149.62	148.85	148.34
Y 10.0	147.61	148.17	148.69	149.13	149.56	149.19	148.38	147.76
Y 11.0	146.99	147.57	148.21	148.67	149.11	148.69	147.84	147.18
Y 12.0	146.30	146.97	147.67	148.17	148.60	148.17	147.25	146.55
Y 13.0	145.58	146.30	147.08	147.58	148.02	147.58	146.63	145.84
Y 14.0	144.80	145.58	146.43	146.98	147.40	146.96	145.93	145.09
Y 15.0	143.98	144.80	145.76	146.31	146.74	146.27	145.21	144.30
Y 16.0	143.14	144.01	145.03	145.61	146.01	145.52	144.44	143.49
Y 17.0	142.25	143.15	144.24	144.86	145.26	144.75	143.59	142.60
Y 18.0	141.31	142.24	143.42	144.07	144.45	143.90	142.72	141.67
Y 19.0	140.29	141.32	142.55	143.21	143.57	143.02	141.81	140.71
Y 20.0	139.28	140.33	141.61	142.33	142.68	142.11	140.84	139.70
Y 21.0	138.20	139.29	140.65	141.39	141.88	141.13	139.83	138.65
Y 22.0	137.09	138.20	139.64	140.39	140.86	140.12	138.78	137.54
Y 23.0	135.94	137.07	138.57	139.32	139.84	139.02	137.66	136.41
Y 24.0	134.77	135.90	137.44	138.23	138.72	137.93	136.50	135.23
Y 25.0	133.55	134.70	136.27	137.09	137.58	136.76	135.32	134.01
Y 26.0	132.26	133.46	135.05	135.90	136.39	135.53	134.09	132.74
Y 27.0	130.94	132.16	133.82	134.67	135.18	134.28	132.82	131.44
Y 28.0	129.55	130.83	132.53	133.40	133.90	133.00	131.50	130.10
Y 29.0	128.15	129.46	131.18	132.11	132.59	131.64	130.12	128.71
Y 30.0	126.68	128.02	129.80	130.74	131.23	130.26	128.70	127.29
Y 31.0	125.20	126.57	128.36	129.34	129.82	128.83	127.26	125.81
Y 32.0	123.67	125.08	126.86	127.89	128.36	127.37	125.76	124.33
Y 33.0	122.09	123.55	125.35	126.43	126.87	125.91	124.23	122.79
Y 34.0	120.49	121.99	123.81	124.90	125.35	124.35	122.65	121.25
Y 35.0	118.84	120.35	122.21	123.33	123.79	122.77	121.03	119.61
Y 36.0	117.15	118.72	120.56	121.72	122.18	121.14	119.38	117.97
Y 37.0	115.43	117.04	118.87	120.08	120.54	119.50	117.71	116.28
Y 38.0	113.66	115.31	117.15	118.40	118.85	117.81	115.96	114.56
Y 39.0	111.86	113.54	115.38	116.67	117.14	116.07	114.20	112.81
Y 40.0	110.01	111.73	113.60	114.91	115.38	114.32	112.40	111.01
Y 41.0	108.15	109.91	111.78	113.12	113.60	112.52	110.53	109.19
Y 42.0	106.25	107.99	109.88	111.28	111.75	110.66	108.64	107.33
Y 43.0	104.32	106.08	107.94	109.40	109.86	108.77	106.72	105.43
Y 44.0	102.35	104.13	105.99	107.50	107.96	106.86	104.76	103.48
Y 45.0	100.34	102.15	104.00	105.57	106.05	104.90	102.78	101.51
Y 46.0	98.32	100.15	101.98	103.58	104.08	102.91	100.75	99.50

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-4000K.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	96.27	98.08	99.90	101.57	102.09	100.89	98.69	97.49
Y 48.0	94.18	96.01	97.79	99.50	100.07	98.85	96.59	95.43
Y 49.0	92.04	93.90	95.64	97.42	98.01	96.78	94.46	93.34
Y 50.0	89.90	91.73	93.47	95.31	95.93	94.67	92.27	91.20
Y 51.0	87.73	89.51	91.24	93.18	93.82	92.51	90.07	89.04
Y 52.0	85.54	87.21	89.00	90.99	91.67	90.32	87.85	86.89
Y 53.0	83.30	84.97	86.73	88.76	89.49	88.14	85.58	84.67
Y 54.0	81.04	82.71	84.43	86.53	87.29	85.91	83.29	82.44
Y 55.0	78.77	80.42	82.10	84.26	85.04	83.64	80.97	80.17
Y 56.0	76.49	78.10	79.72	81.96	82.81	81.37	78.62	77.90
Y 57.0	74.18	75.77	77.32	79.65	80.51	79.06	76.24	75.59
Y 58.0	71.85	73.39	74.91	77.30	78.14	76.73	73.83	73.24
Y 59.0	69.49	71.01	72.43	74.91	75.79	74.35	71.39	70.87
Y 60.0	67.13	68.58	69.97	72.53	73.43	71.94	68.91	68.49
Y 61.0	64.75	66.15	67.47	70.08	71.06	69.53	66.44	66.08
Y 62.0	62.34	63.69	64.96	67.64	68.65	67.09	63.91	63.65
Y 63.0	59.93	61.22	62.40	65.16	66.27	64.64	61.36	61.20
Y 64.0	57.51	58.71	59.85	62.66	63.83	62.18	58.79	58.74
Y 65.0	55.07	56.21	57.27	60.15	61.40	59.68	56.20	56.26
Y 66.0	52.65	53.70	54.63	57.63	58.93	57.17	53.59	53.75
Y 67.0	50.21	51.16	52.01	55.09	56.49	54.64	50.95	51.24
Y 68.0	47.81	48.63	49.39	52.53	54.02	52.10	48.32	48.72
Y 69.0	45.40	46.10	46.74	49.97	51.53	49.56	45.68	46.20
Y 70.0	42.99	43.55	44.10	47.41	49.05	47.02	43.02	43.67
Y 71.0	40.61	41.03	41.42	44.85	46.60	44.46	40.36	41.16
Y 72.0	38.27	38.54	38.76	42.31	44.15	41.93	37.71	38.65
Y 73.0	35.93	36.01	36.07	39.78	41.71	39.39	35.06	36.14
Y 74.0	33.66	33.53	33.41	37.25	39.29	36.85	32.42	33.66
Y 75.0	31.39	31.07	30.74	34.72	36.91	34.34	29.79	31.22
Y 76.0	29.20	28.67	28.09	32.24	34.55	31.89	27.19	28.82
Y 77.0	27.05	26.32	25.46	29.81	32.26	29.45	24.60	26.46
Y 78.0	24.96	24.01	22.86	27.42	30.03	27.07	22.06	24.17
Y 79.0	22.90	21.79	20.27	25.10	27.88	24.75	19.56	21.94
Y 80.0	20.93	19.65	17.75	22.86	25.80	22.52	17.10	19.81
Y 81.0	19.01	17.58	15.28	20.73	23.82	20.37	14.72	17.74
Y 82.0	17.18	15.60	12.95	18.71	21.94	18.34	12.43	15.77
Y 83.0	15.42	13.73	10.74	16.82	20.21	16.44	10.26	13.89
Y 84.0	13.75	11.98	8.68	15.08	18.60	14.68	8.23	12.13
Y 85.0	12.18	10.37	6.79	13.53	17.09	13.10	6.39	10.49
Y 86.0	10.73	8.89	5.15	12.13	15.68	11.67	4.74	9.00
Y 87.0	9.32	7.56	3.76	10.82	14.36	10.39	3.32	7.61
Y 88.0	8.05	6.34	2.67	9.67	13.10	9.26	2.23	6.38
Y 89.0	6.94	5.29	1.92	8.65	11.94	8.27	1.42	5.29
Y 90.0	5.98	4.45	1.46	7.81	10.93	7.36	0.93	4.36
Y 91.0	5.14	3.80	1.42	7.10	10.06	6.64	0.87	3.58
Y 92.0	4.43	3.28	1.43	6.44	9.29	6.00	0.87	2.79
Y 93.0	3.83	2.79	1.40	5.76	8.52	5.33	0.85	2.15

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-4000K.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	3.25	2.45	1.40	5.15	7.80	4.74	0.83	1.46
Y 95.0	2.77	2.25	1.38	4.75	7.08	4.32	0.82	1.23
Y 96.0	2.40	2.12	1.35	4.42	6.48	4.00	0.83	1.24
Y 97.0	2.16	2.05	1.35	4.17	5.97	3.74	0.83	1.22
Y 98.0	2.00	2.00	1.35	3.95	5.57	3.56	0.81	1.16
Y 99.0	1.90	1.96	1.35	3.78	5.25	3.40	0.81	1.05
Y 100.0	1.83	1.91	1.35	3.66	4.97	3.28	0.80	1.07
Y 101.0	1.77	1.88	1.37	3.57	4.72	3.18	0.80	1.12
Y 102.0	1.73	1.83	1.37	3.47	4.52	3.12	0.79	1.12
Y 103.0	1.70	1.81	1.38	3.40	4.33	3.04	0.79	1.10
Y 104.0	1.65	1.77	1.38	3.34	4.20	2.98	0.78	1.08
Y 105.0	1.54	1.74	1.39	3.28	4.06	2.90	0.77	1.04
Y 106.0	1.47	1.69	1.39	3.22	3.96	2.80	0.77	1.03
Y 107.0	1.50	1.64	1.38	3.09	3.81	2.68	0.77	1.04
Y 108.0	1.48	1.60	1.39	3.02	3.73	2.60	0.76	1.04
Y 109.0	1.46	1.57	1.38	2.95	3.65	2.51	0.73	1.02
Y 110.0	1.42	1.54	1.37	2.83	3.58	2.40	0.73	0.98
Y 111.0	1.39	1.48	1.38	2.74	3.50	2.31	0.71	0.97
Y 112.0	1.35	1.44	1.37	2.68	3.44	2.26	0.71	0.95
Y 113.0	1.33	1.42	1.36	2.63	3.36	2.21	0.70	0.95
Y 114.0	1.27	1.42	1.36	2.60	3.27	2.17	0.69	0.95
Y 115.0	1.24	1.38	1.35	2.55	3.21	2.13	0.67	0.93
Y 116.0	1.22	1.34	1.34	2.49	3.13	2.09	0.66	0.93
Y 117.0	1.18	1.31	1.33	2.46	3.05	2.03	0.67	0.92
Y 118.0	1.14	1.29	1.32	2.38	2.98	1.98	0.65	0.90
Y 119.0	1.11	1.26	1.32	2.33	2.90	1.90	0.64	0.88
Y 120.0	1.07	1.25	1.30	2.25	2.83	1.84	0.64	0.87
Y 121.0	1.04	1.22	1.30	2.15	2.75	1.73	0.63	0.84
Y 122.0	1.03	1.16	1.28	2.04	2.68	1.63	0.62	0.81
Y 123.0	0.96	1.11	1.27	1.92	2.61	1.53	0.62	0.77
Y 124.0	0.95	1.05	1.24	1.81	2.54	1.42	0.62	0.72
Y 125.0	0.92	1.01	1.19	1.69	2.46	1.27	0.55	0.67
Y 126.0	0.88	0.96	1.11	1.55	2.38	1.13	0.26	0.64
Y 127.0	0.86	0.91	1.07	1.40	2.29	1.00	0.04	0.59
Y 128.0	0.83	0.86	1.05	1.26	2.19	0.88	0.00	0.56
Y 129.0	0.81	0.81	0.56	1.13	2.10	0.77	0.02	0.50
Y 130.0	0.79	0.77	0.20	1.01	1.98	0.67	0.02	0.44
Y 131.0	0.76	0.75	0.13	0.93	1.85	0.59	0.02	0.40
Y 132.0	0.71	0.74	0.14	0.86	1.71	0.54	0.03	0.38
Y 133.0	0.65	0.73	0.14	0.82	1.54	0.49	0.05	0.37
Y 134.0	0.59	0.73	0.14	0.78	1.39	0.45	0.05	0.35
Y 135.0	0.55	0.71	0.16	0.74	1.21	0.43	0.08	0.34
Y 136.0	0.51	0.71	0.16	0.71	1.05	0.41	0.08	0.34
Y 137.0	0.47	0.71	0.17	0.70	0.89	0.39	0.09	0.34
Y 138.0	0.40	0.69	0.18	0.66	0.75	0.37	0.11	0.33
Y 139.0	0.32	0.69	0.20	0.65	0.60	0.36	0.12	0.34
Y 140.0	0.29	0.67	0.20	0.63	0.49	0.35	0.13	0.33

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-4000K.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	0.27	0.67	0.22	0.61	0.40	0.35	0.14	0.34
Y 142.0	0.27	0.66	0.23	0.61	0.34	0.34	0.15	0.36
Y 143.0	0.28	0.65	0.23	0.59	0.31	0.34	0.15	0.35
Y 144.0	0.29	0.66	0.25	0.57	0.27	0.35	0.25	0.35
Y 145.0	0.29	0.64	0.25	0.57	0.26	0.35	0.32	0.36
Y 146.0	0.31	0.63	0.26	0.56	0.25	0.35	0.32	0.36
Y 147.0	0.32	0.62	0.26	0.56	0.23	0.34	0.32	0.35
Y 148.0	0.31	0.63	0.34	0.56	0.24	0.33	0.33	0.35
Y 149.0	0.33	0.62	0.35	0.55	0.23	0.34	0.33	0.35
Y 150.0	0.34	0.61	0.37	0.54	0.23	0.35	0.34	0.36
Y 151.0	0.36	0.60	0.37	0.54	0.24	0.36	0.34	0.36
Y 152.0	0.36	0.60	0.37	0.53	0.24	0.36	0.35	0.38
Y 153.0	0.38	0.60	0.38	0.54	0.25	0.37	0.35	0.38
Y 154.0	0.38	0.59	0.39	0.53	0.28	0.38	0.35	0.39
Y 155.0	0.39	0.58	0.39	0.53	0.28	0.37	0.37	0.38
Y 156.0	0.40	0.56	0.39	0.52	0.29	0.39	0.36	0.40
Y 157.0	0.41	0.56	0.38	0.51	0.30	0.38	0.36	0.39
Y 158.0	0.41	0.56	0.40	0.50	0.32	0.40	0.38	0.41
Y 159.0	0.44	0.56	0.41	0.50	0.33	0.42	0.40	0.41
Y 160.0	0.44	0.55	0.41	0.50	0.35	0.42	0.41	0.42
Y 161.0	0.46	0.54	0.43	0.49	0.36	0.43	0.40	0.42
Y 162.0	0.46	0.54	0.42	0.48	0.36	0.43	0.40	0.42
Y 163.0	0.47	0.53	0.44	0.49	0.39	0.44	0.40	0.43
Y 164.0	0.48	0.52	0.44	0.48	0.39	0.46	0.42	0.45
Y 165.0	0.49	0.51	0.44	0.49	0.41	0.46	0.42	0.44
Y 166.0	0.49	0.50	0.45	0.48	0.41	0.47	0.43	0.46
Y 167.0	0.50	0.52	0.45	0.47	0.43	0.47	0.43	0.46
Y 168.0	0.50	0.50	0.45	0.47	0.43	0.49	0.44	0.48
Y 169.0	0.50	0.50	0.46	0.47	0.45	0.49	0.45	0.47
Y 170.0	0.51	0.48	0.46	0.46	0.45	0.49	0.47	0.48
Y 171.0	0.49	0.46	0.46	0.47	0.47	0.49	0.47	0.47
Y 172.0	0.47	0.46	0.46	0.47	0.47	0.49	0.47	0.47
Y 173.0	0.48	0.45	0.47	0.47	0.48	0.50	0.48	0.47
Y 174.0	0.48	0.46	0.47	0.49	0.46	0.49	0.47	0.46
Y 175.0	0.47	0.46	0.47	0.50	0.45	0.51	0.49	0.44
Y 176.0	0.49	0.46	0.47	0.51	0.44	0.51	0.49	0.45
Y 177.0	0.48	0.46	0.49	0.50	0.44	0.52	0.49	0.46
Y 178.0	0.50	0.47	0.47	0.50	0.44	0.49	0.50	0.44
Y 179.0	0.49	0.47	0.49	0.50	0.46	0.50	0.49	0.47
Y 180.0	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48