IES Indoor Report
Photometric Filename:F16A-24V-3528-144-3000K.IES

Indoor Luminaire Photometric Data

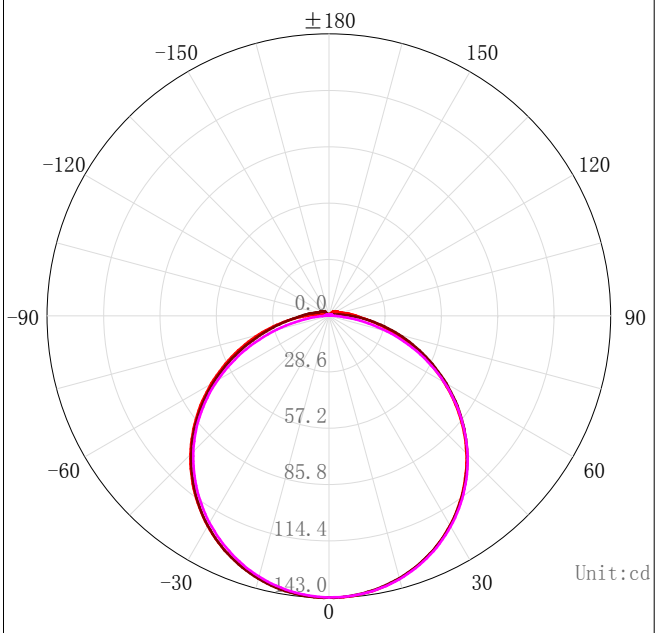
Description Information

Luminary Name: F16A-24V-3528-144-3000K		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): 0.300
Test System: C, γ	Test Step: C=45.0 γ=1.0	Temp.(℃): 25	Humidity(%):

Character Parameter

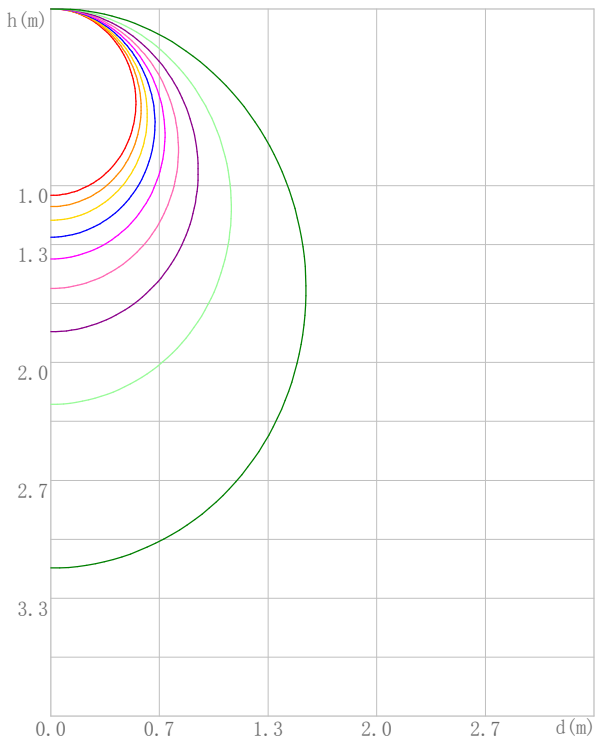
Lamp Speciality Parameter	Luminaire Speciality Parameter	
Rated Flux(lm): 449.180	Luminary Flux(lm): 449.177	Field Angle(10%Imax): 176.5(°)
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 435.152lm 96.88%
Rated Voltage(V):	Luminary EER(lm/W): 50.469	Up Lumens&Percent: 14.025lm 3.12%
Tested Power(W): 8.900	Max.Candela(cd): 142.961	S/MH: C0_a180=1.277 C90_270=1.272
Lamps' Inside: 1	Max Cand@Ang.(°): C=180.0 γ=1.0	CIE Type: Semi-Direct
Tested Electrics(V,A,pf):24.0,0.374,1.000	Beam Angle(50%Imax): 116.9(°)	ErP Φuse(120°): 330.534lm
Lamp Size(W*L*H):0.010m*1.000m*0.015m	Left=-58.7° ,Right=58.2°	IRF(%): 106.293

C Plane Distribution Diagram



C Plane	[50%MaxAng.]	[10%MaxAng.]
C180.0_360.0:	116.9	176.5
C0.0_180.0 :	116.9	176.5
C90.0_270.0 :	115.5	162.2

C0 Space ISO Illuminance Curve



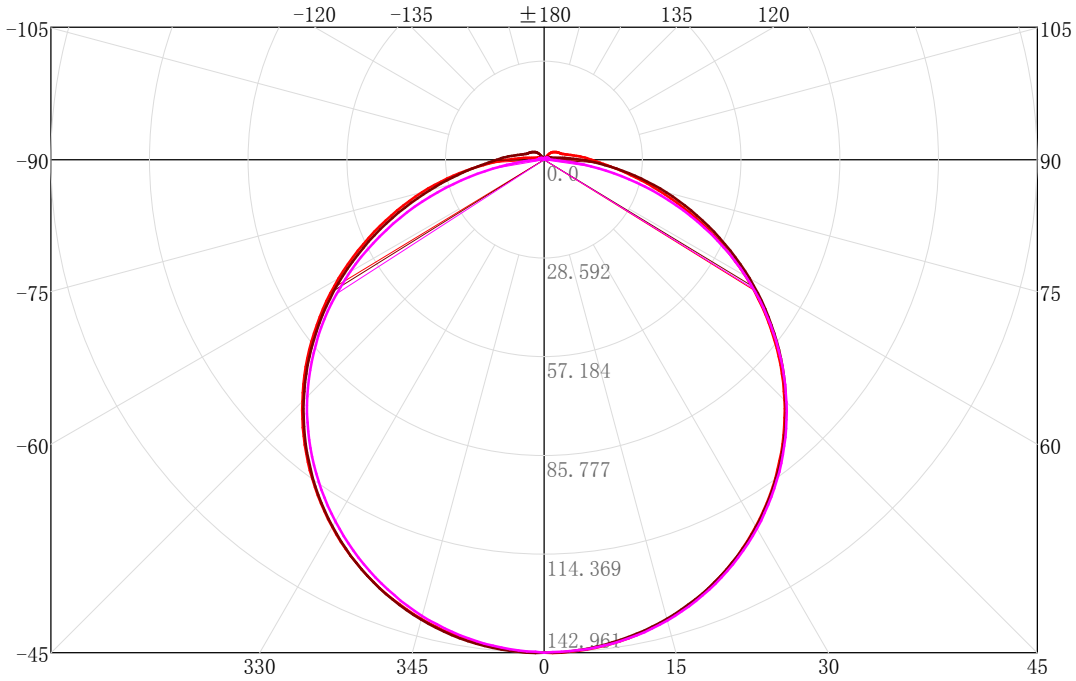
[Unit:lx] [EMax]=142.857 —[EMax*90%] —[EMax*80%] —[EMax*70%] —[EMax*60%] —[EMax*50%] —[EMax*40%] —[EMax*30%] —[EMax*20%] —[EMax*10%]

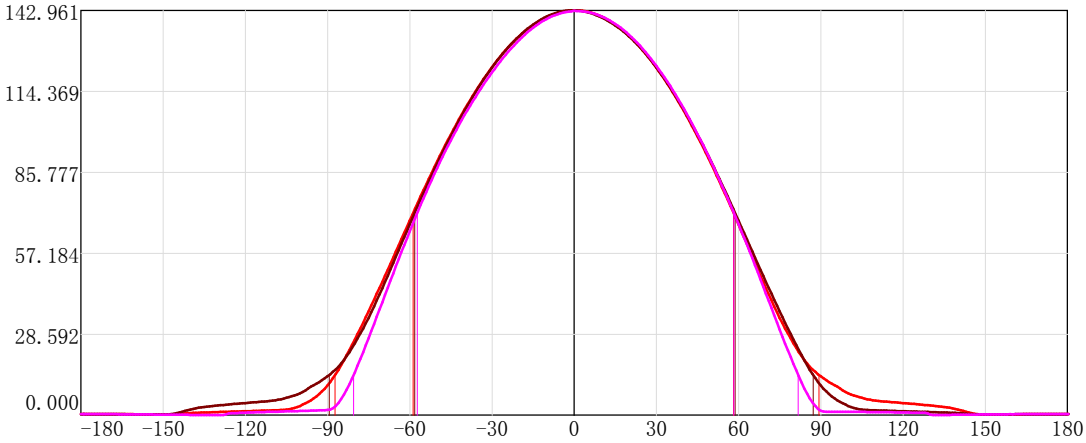
IES Indoor Report
Photometric Filename:F16A-24V-3528-144-3000K.IES

2D Plane Light Intensity Distribution Curve

Lum.Name: F16A-24V-3528-144-3000K	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





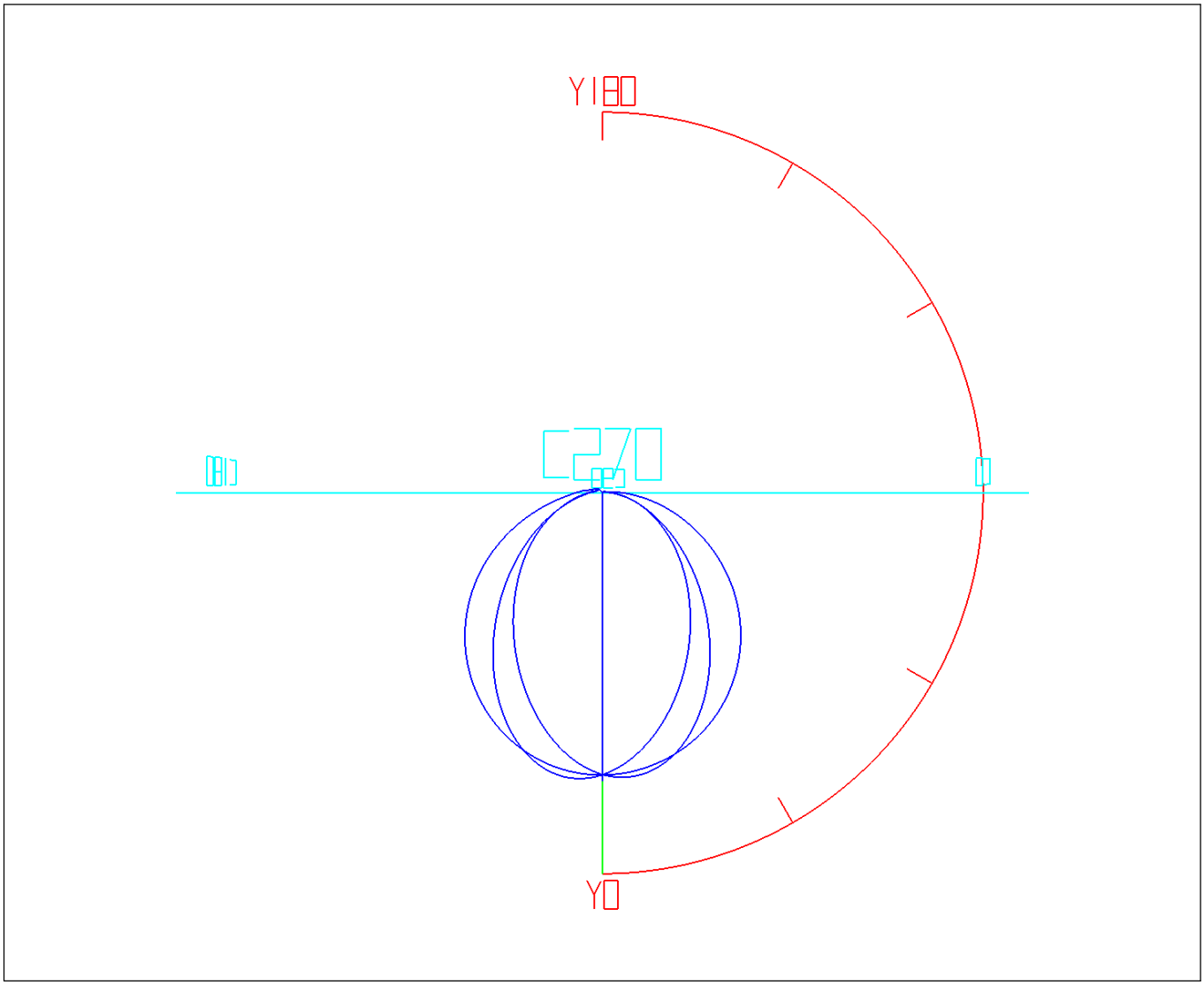
C Plane	[50%MaxAng.]	[10%MaxAng.]	Unit:cd
C180.0_360.0:	116.9	176.5	
C0.0_180.0 :	116.9	176.5	
C90.0_270.0 :	115.5	162.2	

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-3000K.IES

3D Light Intensity Distribution Modal

Lum.Name: F16A-24V-3528-144-3000K	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-3528-144-3000K.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	0.14	0.14	0.03	0.03	47.0-48.0	7.59	245.00	1.69	54.54
1.0-2.0	0.41	0.55	0.09	0.12	48.0-49.0	7.55	252.56	1.68	56.23
2.0-3.0	0.68	1.23	0.15	0.27	49.0-50.0	7.50	260.06	1.67	57.90
3.0-4.0	0.95	2.18	0.21	0.49	50.0-51.0	7.44	267.51	1.66	59.55
4.0-5.0	1.22	3.41	0.27	0.76	51.0-52.0	7.37	274.88	1.64	61.20
5.0-6.0	1.49	4.90	0.33	1.09	52.0-53.0	7.30	282.18	1.62	62.82
6.0-7.0	1.76	6.66	0.39	1.48	53.0-54.0	7.21	289.38	1.60	64.42
7.0-8.0	2.03	8.69	0.45	1.93	54.0-55.0	7.11	296.49	1.58	66.01
8.0-9.0	2.29	10.97	0.51	2.44	55.0-56.0	7.00	303.49	1.56	67.57
9.0-10.0	2.55	13.52	0.57	3.01	56.0-57.0	6.88	310.38	1.53	69.10
10.0-11.0	2.80	16.32	0.62	3.63	57.0-58.0	6.76	317.14	1.50	70.60
11.0-12.0	3.06	19.38	0.68	4.31	58.0-59.0	6.62	323.76	1.47	72.08
12.0-13.0	3.30	22.68	0.74	5.05	59.0-60.0	6.48	330.24	1.44	73.52
13.0-14.0	3.55	26.23	0.79	5.84	60.0-61.0	6.33	336.57	1.41	74.93
14.0-15.0	3.79	30.02	0.84	6.68	61.0-62.0	6.17	342.74	1.37	76.30
15.0-16.0	4.02	34.04	0.90	7.58	62.0-63.0	6.00	348.74	1.34	77.64
16.0-17.0	4.25	38.30	0.95	8.53	63.0-64.0	5.83	354.57	1.30	78.94
17.0-18.0	4.48	42.78	1.00	9.52	64.0-65.0	5.65	360.21	1.26	80.19
18.0-19.0	4.70	47.47	1.05	10.57	65.0-66.0	5.46	365.67	1.21	81.41
19.0-20.0	4.91	52.38	1.09	11.66	66.0-67.0	5.26	370.93	1.17	82.58
20.0-21.0	5.12	57.50	1.14	12.80	67.0-68.0	5.06	375.99	1.13	83.71
21.0-22.0	5.32	62.81	1.18	13.98	68.0-69.0	4.86	380.85	1.08	84.79
22.0-23.0	5.51	68.32	1.23	15.21	69.0-70.0	4.65	385.50	1.04	85.82
23.0-24.0	5.70	74.02	1.27	16.48	70.0-71.0	4.44	389.94	0.99	86.81
24.0-25.0	5.87	79.89	1.31	17.79	71.0-72.0	4.22	394.16	0.94	87.75
25.0-26.0	6.05	85.94	1.35	19.13	72.0-73.0	4.00	398.17	0.89	88.64
26.0-27.0	6.21	92.15	1.38	20.52	73.0-74.0	3.78	401.95	0.84	89.49
27.0-28.0	6.37	98.52	1.42	21.93	74.0-75.0	3.56	405.51	0.79	90.28
28.0-29.0	6.51	105.03	1.45	23.38	75.0-76.0	3.34	408.86	0.74	91.02
29.0-30.0	6.65	111.68	1.48	24.86	76.0-77.0	3.12	411.98	0.70	91.72
30.0-31.0	6.78	118.47	1.51	26.37	77.0-78.0	2.91	414.89	0.65	92.37
31.0-32.0	6.91	125.37	1.54	27.91	78.0-79.0	2.70	417.58	0.60	92.97
32.0-33.0	7.02	132.39	1.56	29.47	79.0-80.0	2.49	420.07	0.55	93.52
33.0-34.0	7.13	139.52	1.59	31.06	80.0-81.0	2.28	422.35	0.51	94.03
34.0-35.0	7.22	146.74	1.61	32.67	81.0-82.0	2.08	424.43	0.46	94.49
35.0-36.0	7.31	154.05	1.63	34.30	82.0-83.0	1.89	426.33	0.42	94.91
36.0-37.0	7.39	161.43	1.64	35.94	83.0-84.0	1.71	428.03	0.38	95.29
37.0-38.0	7.45	168.89	1.66	37.60	84.0-85.0	1.54	429.57	0.34	95.63
38.0-39.0	7.51	176.40	1.67	39.27	85.0-86.0	1.38	430.94	0.31	95.94
39.0-40.0	7.56	183.96	1.68	40.95	86.0-87.0	1.23	432.17	0.27	96.21
40.0-41.0	7.60	191.55	1.69	42.65	87.0-88.0	1.10	433.27	0.24	96.46
41.0-42.0	7.63	199.18	1.70	44.34	88.0-89.0	0.99	434.26	0.22	96.68
42.0-43.0	7.65	206.83	1.70	46.05	89.0-90.0	0.89	435.15	0.20	96.88
43.0-44.0	7.66	214.48	1.70	47.75	90.0-91.0	0.81	435.96	0.18	97.06
44.0-45.0	7.66	222.14	1.70	49.45	91.0-92.0	0.74	436.71	0.17	97.22
45.0-46.0	7.65	229.78	1.70	51.16	92.0-93.0	0.69	437.39	0.15	97.38
46.0-47.0	7.62	237.41	1.70	52.85	93.0-94.0	0.63	438.03	0.14	97.52

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-3000K.IES

Zonal Flux Tabulation - (Cont.)

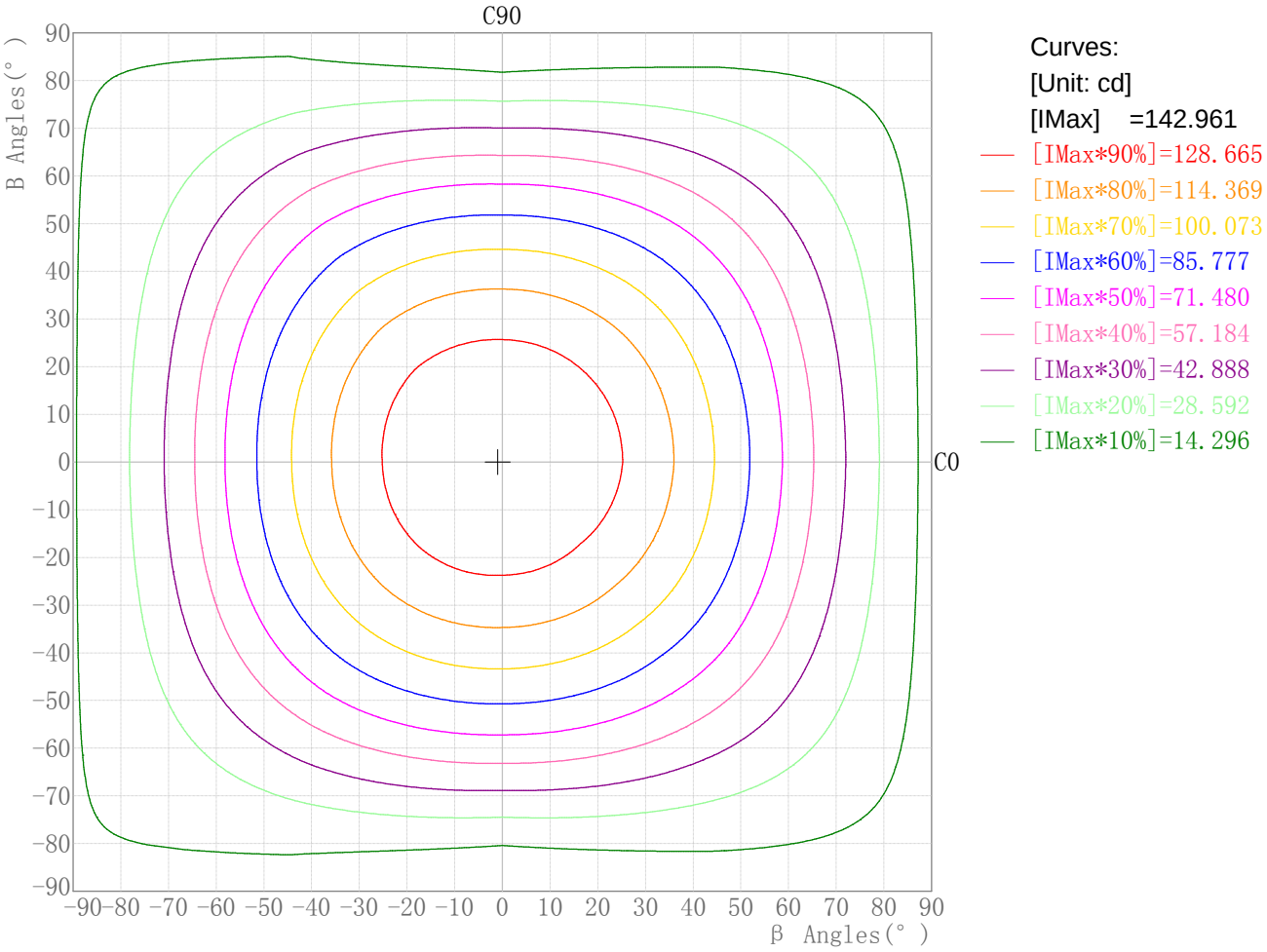
Zone(γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
94.0-95.0	0.58	438.61	0.13	97.65
95.0-96.0	0.54	439.15	0.12	97.77
96.0-97.0	0.50	439.64	0.11	97.88
97.0-98.0	0.46	440.10	0.10	97.98
98.0-99.0	0.42	440.52	0.09	98.07
99.0-100.0	0.40	440.92	0.09	98.16
100.0-101.0	0.37	441.29	0.08	98.24
101.0-102.0	0.35	441.65	0.08	98.32
102.0-103.0	0.34	441.98	0.08	98.40
103.0-104.0	0.32	442.31	0.07	98.47
104.0-105.0	0.31	442.62	0.07	98.54
105.0-106.0	0.30	442.92	0.07	98.61
106.0-107.0	0.29	443.20	0.06	98.67
107.0-108.0	0.28	443.48	0.06	98.73
108.0-109.0	0.27	443.75	0.06	98.79
109.0-110.0	0.26	444.01	0.06	98.85
110.0-111.0	0.25	444.26	0.06	98.91
111.0-112.0	0.24	444.51	0.05	98.96
112.0-113.0	0.24	444.75	0.05	99.01
113.0-114.0	0.23	444.98	0.05	99.06
114.0-115.0	0.23	445.20	0.05	99.11
115.0-116.0	0.22	445.42	0.05	99.16
116.0-117.0	0.21	445.64	0.05	99.21
117.0-118.0	0.21	445.85	0.05	99.26
118.0-119.0	0.20	446.05	0.05	99.30
119.0-120.0	0.20	446.25	0.04	99.35
120.0-121.0	0.19	446.44	0.04	99.39
121.0-122.0	0.18	446.62	0.04	99.43
122.0-123.0	0.18	446.80	0.04	99.47
123.0-124.0	0.17	446.97	0.04	99.51
124.0-125.0	0.16	447.13	0.04	99.54
125.0-126.0	0.16	447.29	0.04	99.58
126.0-127.0	0.15	447.44	0.03	99.61
127.0-128.0	0.14	447.58	0.03	99.64
128.0-129.0	0.13	447.71	0.03	99.67
129.0-130.0	0.12	447.83	0.03	99.70
130.0-131.0	0.11	447.94	0.02	99.72
131.0-132.0	0.10	448.04	0.02	99.75
132.0-133.0	0.09	448.14	0.02	99.77
133.0-134.0	0.08	448.22	0.02	99.79
134.0-135.0	0.08	448.30	0.02	99.80
135.0-136.0	0.07	448.37	0.02	99.82
136.0-137.0	0.06	448.43	0.01	99.83
137.0-138.0	0.06	448.49	0.01	99.85
138.0-139.0	0.05	448.54	0.01	99.86
139.0-140.0	0.05	448.59	0.01	99.87
140.0-141.0	0.04	448.63	0.01	99.88
141.0-142.0	0.04	448.67	0.01	99.89
142.0-143.0	0.03	448.70	0.01	99.89
143.0-144.0	0.03	448.73	0.01	99.90
144.0-145.0	0.03	448.76	0.01	99.91
145.0-146.0	0.02	448.78	0.01	99.91
146.0-147.0	0.02	448.80	0.00	99.92
147.0-148.0	0.02	448.82	0.00	99.92
148.0-149.0	0.02	448.84	0.00	99.92
149.0-150.0	0.02	448.86	0.00	99.93
150.0-151.0	0.02	448.88	0.00	99.93
151.0-152.0	0.02	448.90	0.00	99.94
152.0-153.0	0.02	448.91	0.00	99.94
153.0-154.0	0.02	448.93	0.00	99.94
154.0-155.0	0.02	448.95	0.00	99.95
155.0-156.0	0.02	448.96	0.00	99.95
156.0-157.0	0.02	448.98	0.00	99.96
157.0-158.0	0.02	448.99	0.00	99.96
158.0-159.0	0.01	449.01	0.00	99.96
159.0-160.0	0.01	449.02	0.00	99.96
160.0-161.0	0.01	449.04	0.00	99.97
161.0-162.0	0.01	449.05	0.00	99.97
162.0-163.0	0.01	449.06	0.00	99.97
163.0-164.0	0.01	449.08	0.00	99.98
164.0-165.0	0.01	449.09	0.00	99.98
165.0-166.0	0.01	449.10	0.00	99.98
166.0-167.0	0.01	449.11	0.00	99.98
167.0-168.0	0.01	449.12	0.00	99.99
168.0-169.0	0.01	449.13	0.00	99.99
169.0-170.0	0.01	449.14	0.00	99.99
170.0-171.0	0.01	449.14	0.00	99.99
171.0-172.0	0.01	449.15	0.00	99.99
172.0-173.0	0.01	449.16	0.00	99.99
173.0-174.0	0.01	449.16	0.00	100.00
174.0-175.0	0.00	449.17	0.00	100.00
175.0-176.0	0.00	449.17	0.00	100.00
176.0-177.0	0.00	449.17	0.00	100.00
177.0-178.0	0.00	449.18	0.00	100.00
178.0-179.0	0.00	449.18	0.00	100.00
179.0-180.0	0.00	449.18	0.00	100.00

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-3000K.IES

Rectangle ISO Lighting Intensity Diagram

Lum.Name: F16A-24V-3528-144-3000K	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

ISO Lighting Intensity Curve



Maximum Light Intensity(cd): 142.96

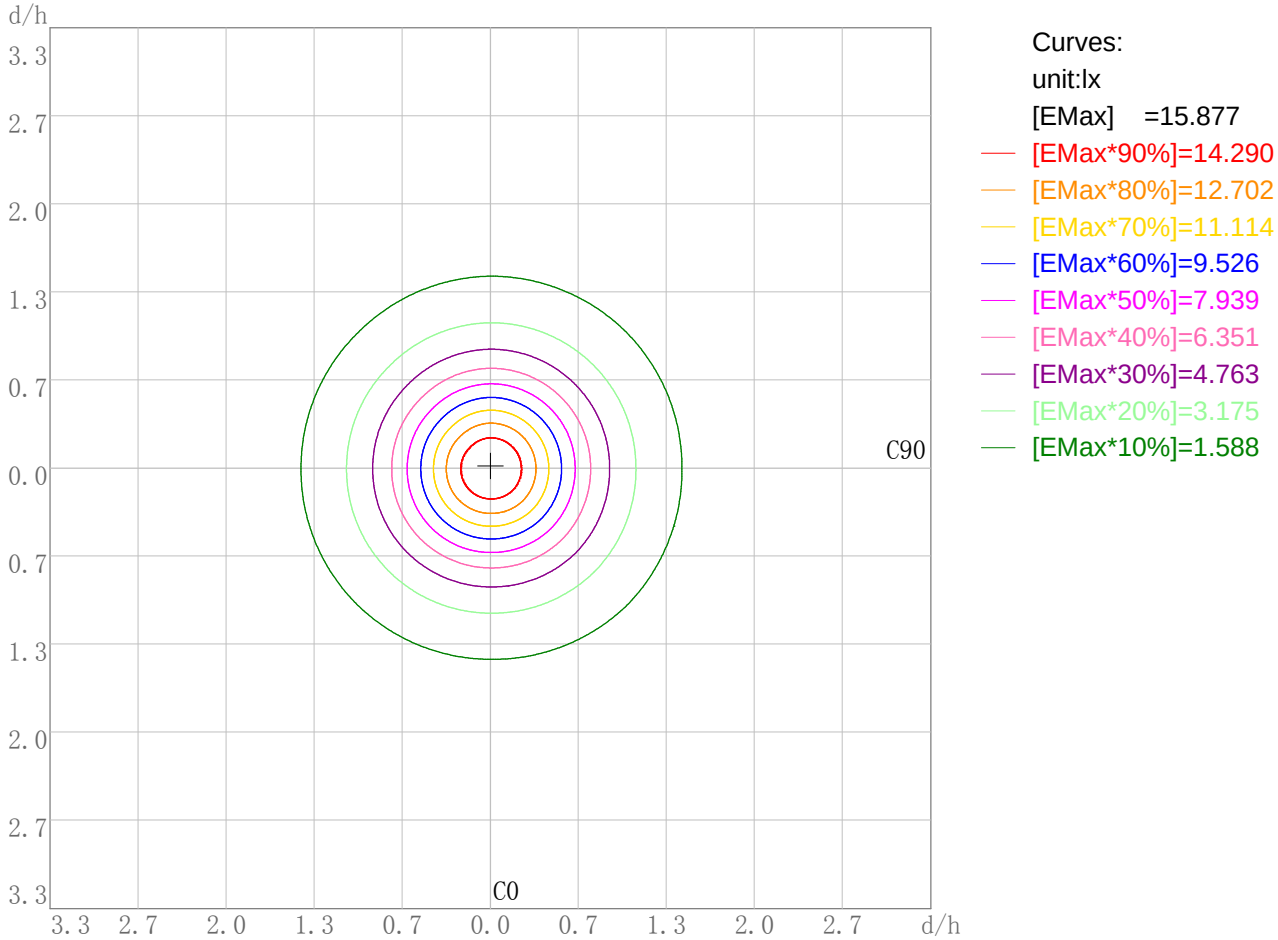
Maximum Cand.@Angle: H=-1.0°,V=0.0°

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-3000K.IES

Plane ISO-Illuminance Diagram

Lum.Name: F16A-24V-3528-144-3000K	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



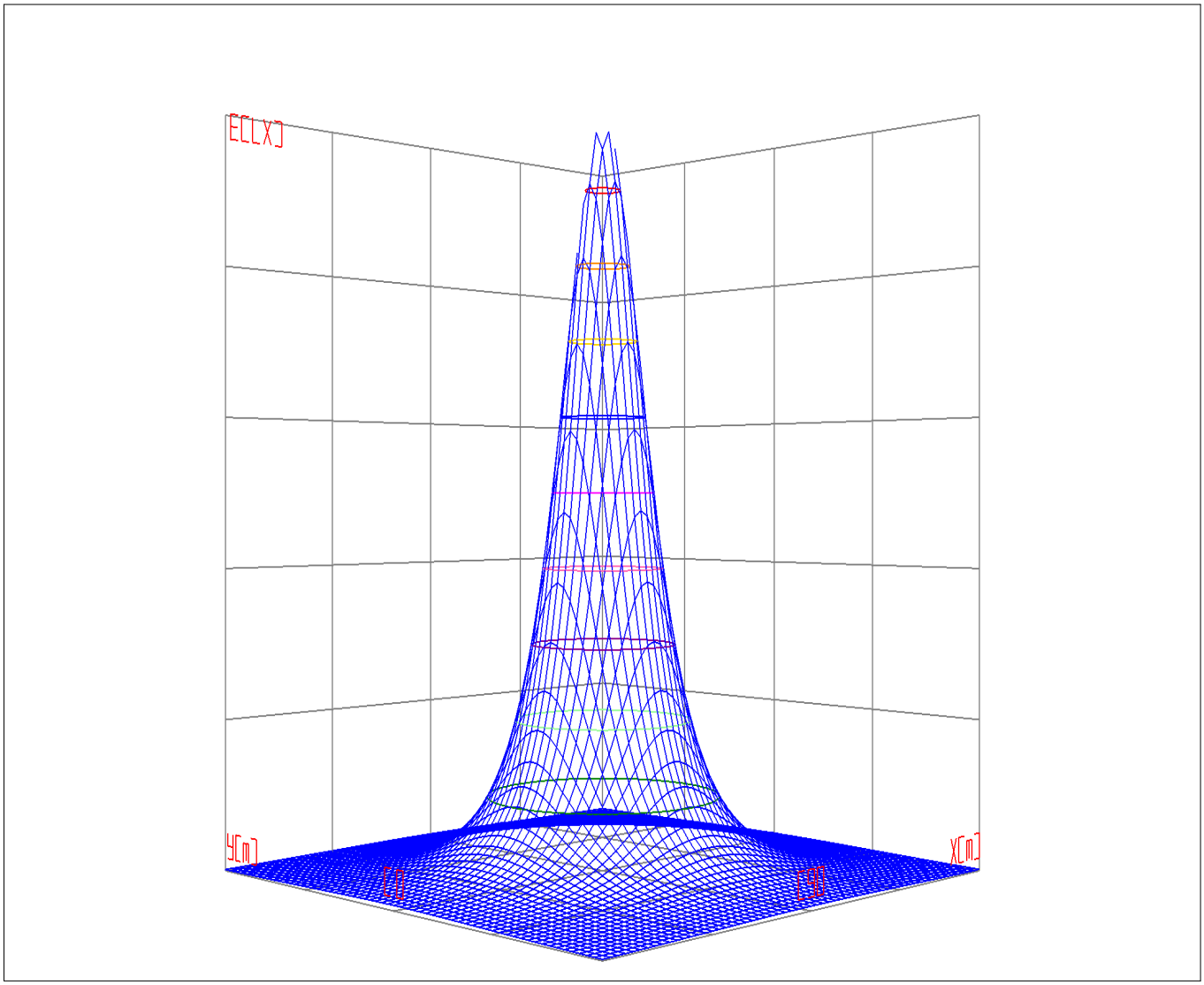
Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 15.88
Working Plane Maximum Illuminance Position(d/h):H0.0 V-0.0

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-3000K.IES

3D Plane ISO Illuminance Diagram

Lum.Name: F16A-24V-3528-144-3000K	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%

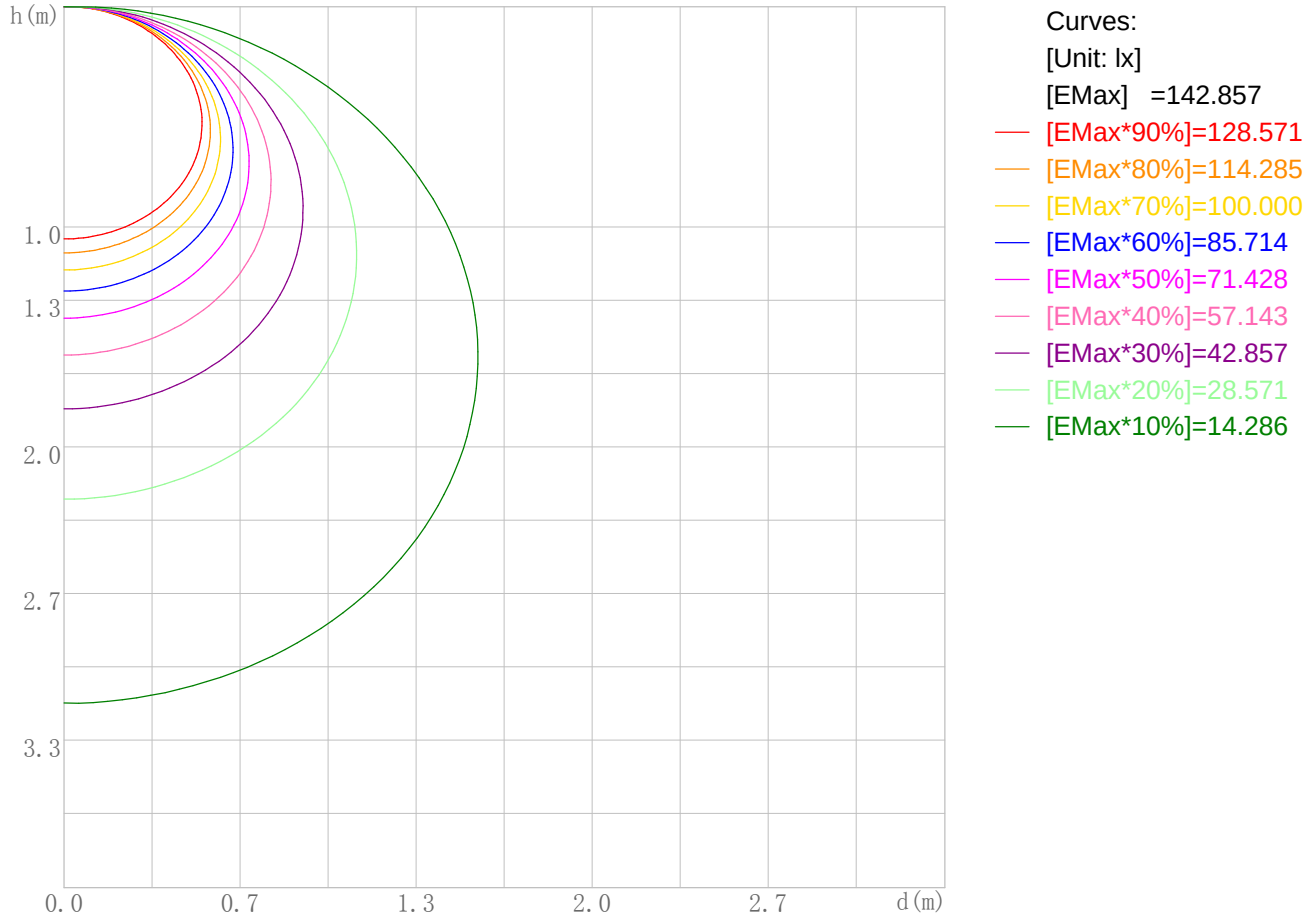
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-3000K.IES

Space ISO Illuminance Diagram

Lum.Name: F16A-24V-3528-144-3000K	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



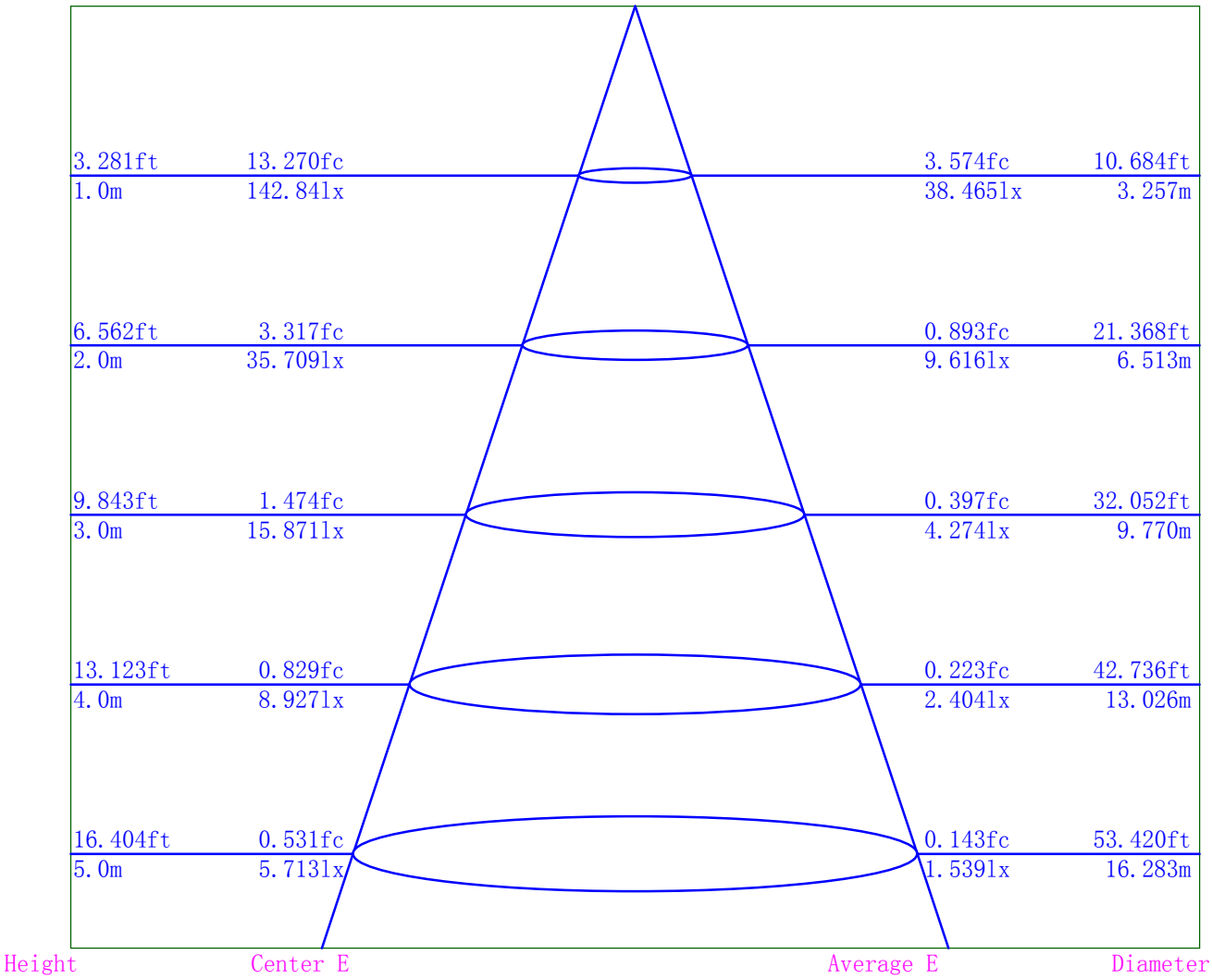
Space Plane Maximum Illuminance and @Angle:142.86lx,1.0deg
Plane Maximum Lighting Intensity and @Angle:142.922cd,0eg

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-3000K.IES

Illuminance-Distance Diagram

Lum.Name: F16A-24V-3528-144-3000K	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:116.9

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-3000K.IES

Indoor Luminance Limiting Curves

Lum.Name:	F16A-24V-3528-144-3000K	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

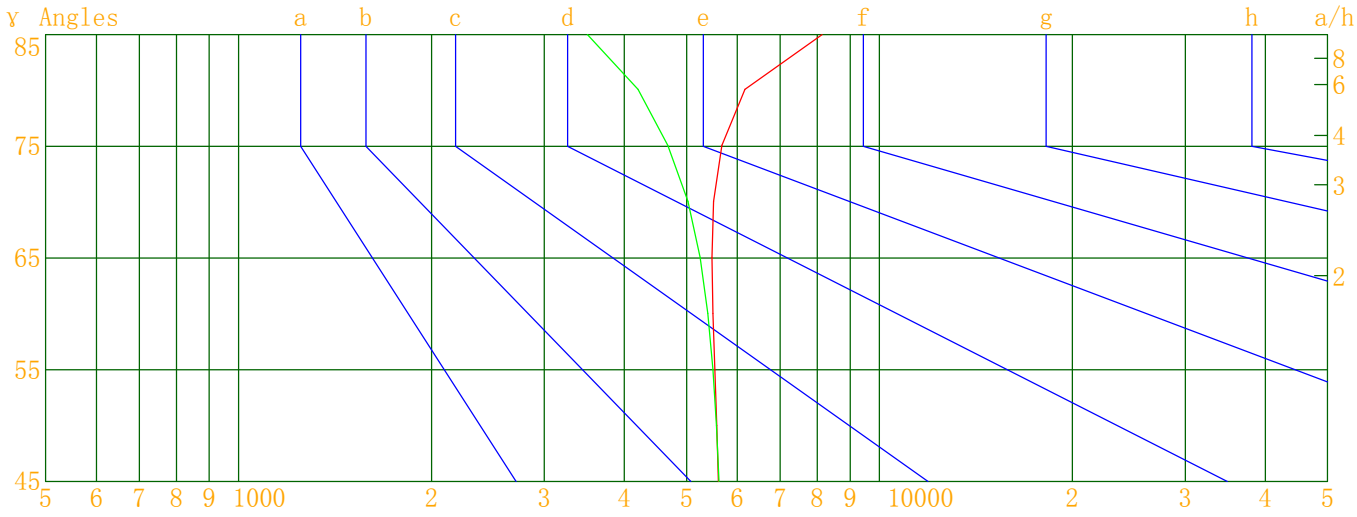
Glare Grade Table

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	5606	5573	5538	5499	5477	5509	5676	6169	8134
C90	5619	5569	5499	5398	5249	5023	4674	4198	3503

Luminance Limiting Curve



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

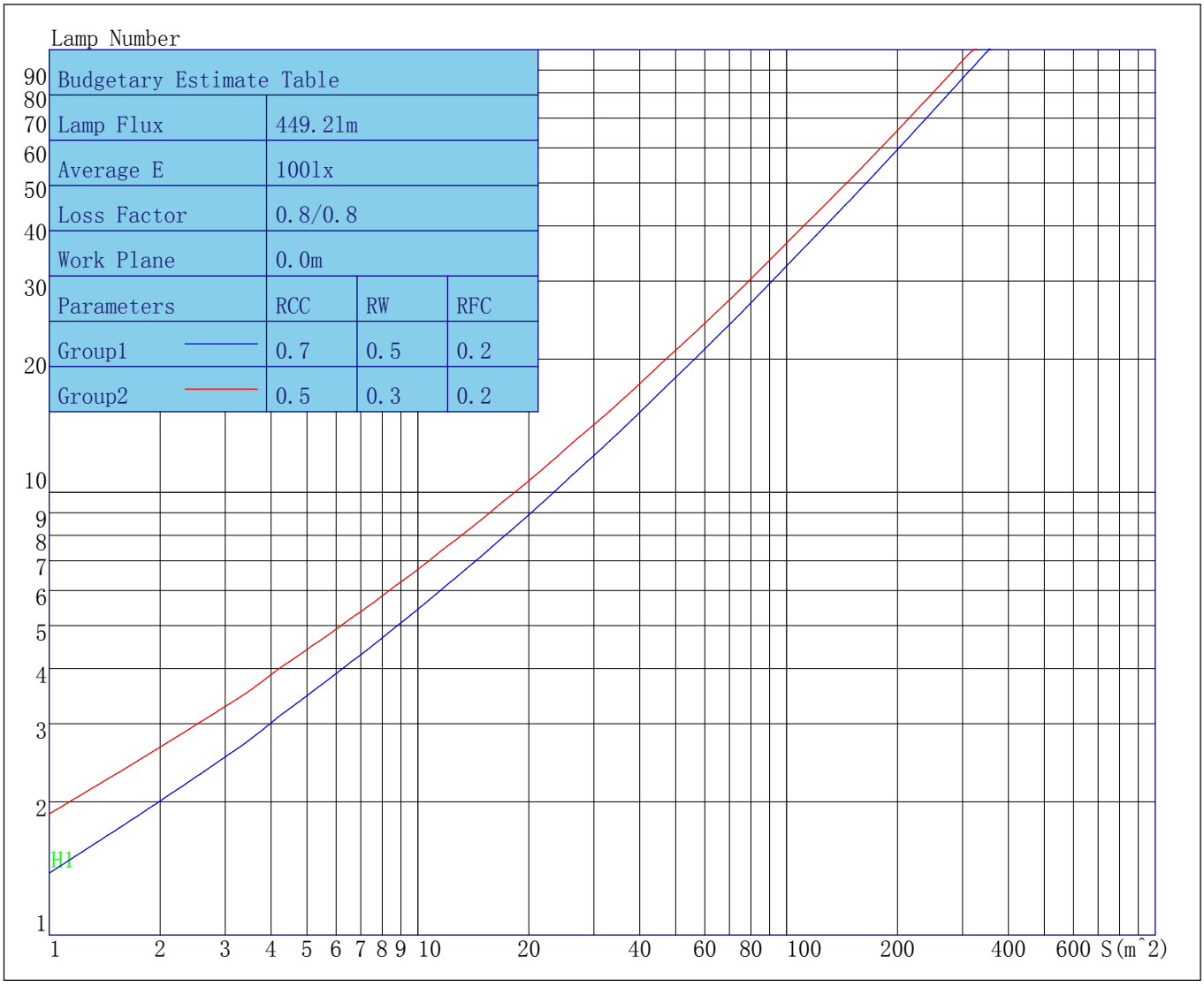
Luminous Type: Without Luminous Side

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

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-3000K.IES

Indoor Budgetary Estimate Table

Lum.Name: F16A-24V-3528-144-3000K	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-3528-144-3000K.IES

Indoor Coefficient of Utilization Table

Lum.Name: F16A-24V-3528-144-3000K	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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	107	102	97	93	104	99	95	92	95	91	88	90	87	85	86	84	82	79
2	97	88	81	75	94	86	80	74	82	77	72	78	74	70	75	71	68	65
3	88	77	69	62	86	76	68	61	72	65	60	69	63	58	66	61	57	55
4	81	68	59	52	78	67	58	52	64	57	51	61	55	50	59	53	49	46
5	74	61	52	45	72	60	51	45	57	50	44	55	48	43	53	47	42	40
6	68	55	46	39	66	54	45	39	51	44	38	49	43	38	48	42	37	35
7	63	50	41	34	61	49	40	34	47	39	34	45	38	33	43	37	33	31
8	59	45	37	31	57	44	36	30	43	35	30	41	35	30	40	34	29	27
9	55	41	33	27	53	41	33	27	39	32	27	38	31	27	37	31	26	24
10	52	38	30	25	50	38	30	25	36	29	24	35	29	24	34	28	24	22

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-3000K.IES

Unified Glare Rating Table

Lum.Name: F16A-24V-3528-144-3000K	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	20.5	18.2	19.8	18.6	20.1	20.5
	Y=3H	20.0	21.4	20.4	21.8	22.3	19.9	21.3	20.3	21.7	22.1
	Y=4H	20.8	22.2	21.3	22.6	23.1	20.6	21.9	21.0	22.3	22.8
	Y=6H	21.6	22.9	22.1	23.3	23.8	21.1	22.3	21.5	22.8	23.2
	Y=8H	22.0	23.2	22.5	23.7	24.2	21.2	22.5	21.7	22.9	23.4
	Y=12H	22.4	23.6	22.9	24.0	24.5	21.4	22.5	21.8	23.0	23.5
X=4H	Y=2H	18.9	20.3	19.4	20.7	21.1	19.0	20.3	19.4	20.8	21.2
	Y=3H	21.0	22.1	21.4	22.6	23.0	20.9	22.0	21.3	22.5	23.0
	Y=4H	21.9	23.0	22.4	23.5	24.0	21.7	22.8	22.2	23.2	23.7
	Y=6H	22.9	23.8	23.4	24.3	24.8	22.4	23.3	22.9	23.8	24.3
	Y=8H	23.3	24.2	23.9	24.7	25.2	22.6	23.5	23.1	24.0	24.5
	Y=12H	23.8	24.6	24.3	25.1	25.7	22.8	23.5	23.3	24.1	24.6
X=8H	Y=4H	22.3	23.2	22.8	23.7	24.2	22.1	23.0	22.6	23.5	24.0
	Y=6H	23.4	24.2	24.0	24.7	25.4	23.0	23.7	23.5	24.2	24.9
	Y=8H	24.0	24.6	24.6	25.2	25.8	23.3	24.0	23.9	24.5	25.1
	Y=12H	24.6	25.2	25.2	25.7	26.4	23.6	24.2	24.1	24.7	25.3
X=12H	Y=4H	22.4	23.1	22.9	23.7	24.2	22.2	23.0	22.7	23.5	24.1
	Y=6H	23.5	24.2	24.1	24.7	25.3	23.1	23.8	23.7	24.3	24.9
	Y=8H	24.2	24.7	24.7	25.3	25.9	23.5	24.1	24.1	24.6	25.3
Variations with the objerver position at spacings											
S=1.0H		0.2/-0.2					0.5/-0.5				
S=1.5H		0.5/-0.5					0.8/-0.9				
S=2.0H		0.5/-0.6					0.9/-1.1				
Reduced UGR Table:											
Nordic Standard Table:		BK0					BK0				
Correction Value		3.7					3.2				

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

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-3000K.IES

Candela Tabulation

V/H	C0.0	C45.0	C90.0	C135.0	C180.0	C225.0	C270.0	C315.0
Y 0.0	142.84	142.84	142.84	142.84	142.84	142.84	142.84	142.84
Y 1.0	142.92	142.80	142.73	142.77	142.96	142.81	142.65	142.61
Y 2.0	142.84	142.74	142.70	142.78	142.93	142.75	142.55	142.46
Y 3.0	142.70	142.61	142.61	142.74	142.83	142.63	142.40	142.26
Y 4.0	142.51	142.46	142.51	142.65	142.68	142.47	142.18	142.01
Y 5.0	142.28	142.24	142.34	142.51	142.49	142.27	141.94	141.74
Y 6.0	142.00	142.01	142.15	142.34	142.26	142.00	141.64	141.40
Y 7.0	141.68	141.70	141.90	142.13	141.96	141.71	141.29	141.02
Y 8.0	141.32	141.37	141.60	141.87	141.62	141.35	140.89	140.60
Y 9.0	140.92	140.99	141.25	141.57	141.24	140.96	140.46	140.12
Y 10.0	140.48	140.55	140.86	141.20	140.82	140.51	139.96	139.62
Y 11.0	140.00	140.08	140.43	140.79	140.33	140.02	139.43	139.08
Y 12.0	139.47	139.57	139.95	140.35	139.80	139.48	138.85	138.48
Y 13.0	138.93	139.00	139.41	139.84	139.22	138.88	138.20	137.84
Y 14.0	138.32	138.40	138.82	139.29	138.60	138.26	137.54	137.16
Y 15.0	137.68	137.76	138.21	138.69	137.94	137.59	136.83	136.45
Y 16.0	137.00	137.07	137.54	138.08	137.24	136.87	136.06	135.69
Y 17.0	136.28	136.34	136.82	137.37	136.47	136.08	135.25	134.89
Y 18.0	135.52	135.57	136.04	136.65	135.69	135.26	134.39	134.05
Y 19.0	134.70	134.77	135.24	135.86	134.84	134.41	133.48	133.16
Y 20.0	133.86	133.93	134.37	135.04	133.97	133.51	132.53	132.25
Y 21.0	132.96	133.02	133.47	134.18	133.04	132.56	131.54	131.29
Y 22.0	132.02	132.10	132.53	133.27	132.06	131.56	130.54	130.29
Y 23.0	131.03	131.12	131.54	132.32	131.05	130.53	129.47	129.24
Y 24.0	130.00	130.10	130.51	131.32	130.00	129.46	128.37	128.14
Y 25.0	128.91	129.04	129.43	130.28	128.87	128.34	127.23	126.99
Y 26.0	127.78	127.94	128.29	129.20	127.74	127.18	126.07	125.82
Y 27.0	126.62	126.78	127.13	128.07	126.55	125.99	124.87	124.60
Y 28.0	125.42	125.59	125.93	126.90	125.31	124.75	123.61	123.35
Y 29.0	124.17	124.37	124.68	125.71	124.03	123.49	122.33	122.08
Y 30.0	122.87	123.10	123.39	124.44	122.72	122.17	121.02	120.75
Y 31.0	121.55	121.79	122.06	123.17	121.37	120.81	119.68	119.39
Y 32.0	120.17	120.44	120.68	121.82	119.97	119.44	118.28	118.03
Y 33.0	118.78	119.06	119.28	120.47	118.53	118.03	116.85	116.57
Y 34.0	117.33	117.64	117.84	119.06	117.08	116.55	115.40	115.11
Y 35.0	115.85	116.15	116.36	117.61	115.57	115.08	113.91	113.62
Y 36.0	114.33	114.67	114.81	116.13	114.04	113.54	112.39	112.08
Y 37.0	112.80	113.13	113.24	114.59	112.45	111.99	110.83	110.50
Y 38.0	111.20	111.54	111.63	113.04	110.83	110.37	109.23	108.88
Y 39.0	109.57	109.93	109.99	111.42	109.17	108.73	107.61	107.23
Y 40.0	107.89	108.28	108.29	109.79	107.48	107.04	105.96	105.56
Y 41.0	106.21	106.58	106.58	108.10	105.76	105.33	104.25	103.85
Y 42.0	104.49	104.87	104.82	106.39	104.00	103.59	102.51	102.12
Y 43.0	102.73	103.12	103.03	104.64	102.21	101.82	100.75	100.33
Y 44.0	100.93	101.33	101.19	102.87	100.39	99.98	98.92	98.54
Y 45.0	99.11	99.51	99.34	101.05	98.52	98.15	97.06	96.70
Y 46.0	97.28	97.65	97.43	99.20	96.64	96.27	95.18	94.81

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-3000K.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	95.39	95.77	95.50	97.33	94.72	94.36	93.26	92.92
Y 48.0	93.47	93.86	93.53	95.40	92.77	92.41	91.28	90.97
Y 49.0	91.54	91.91	91.53	93.45	90.79	90.43	89.27	89.00
Y 50.0	89.56	89.92	89.49	91.46	88.78	88.41	87.23	87.02
Y 51.0	87.58	87.93	87.43	89.45	86.76	86.38	85.16	85.01
Y 52.0	85.58	85.90	85.33	87.39	84.69	84.31	83.06	82.96
Y 53.0	83.54	83.82	83.21	85.33	82.61	82.20	80.93	80.87
Y 54.0	81.47	81.76	81.05	83.25	80.50	80.08	78.73	78.76
Y 55.0	79.41	79.63	78.86	81.11	78.36	77.92	76.53	76.63
Y 56.0	77.31	77.49	76.65	78.94	76.22	75.75	74.27	74.47
Y 57.0	75.19	75.34	74.40	76.76	74.05	73.53	71.95	72.29
Y 58.0	73.05	73.15	72.11	74.55	71.83	71.28	69.62	70.07
Y 59.0	70.90	70.92	69.83	72.33	69.61	69.01	67.26	67.85
Y 60.0	68.73	68.69	67.47	70.07	67.39	66.71	64.89	65.61
Y 61.0	66.57	66.43	65.14	67.78	65.14	64.40	62.47	63.35
Y 62.0	64.39	64.17	62.75	65.49	62.88	62.07	60.06	61.08
Y 63.0	62.21	61.88	60.36	63.16	60.61	59.73	57.60	58.80
Y 64.0	60.03	59.59	57.92	60.81	58.34	57.35	55.13	56.51
Y 65.0	57.86	57.27	55.46	58.46	56.08	54.98	52.61	54.19
Y 66.0	55.68	54.93	52.99	56.08	53.81	52.59	50.11	51.87
Y 67.0	53.51	52.61	50.50	53.70	51.55	50.22	47.58	49.58
Y 68.0	51.37	50.28	47.98	51.32	49.31	47.82	45.05	47.27
Y 69.0	49.22	47.92	45.48	48.94	47.10	45.43	42.50	44.97
Y 70.0	47.10	45.60	42.95	46.57	44.88	43.06	39.94	42.69
Y 71.0	44.99	43.26	40.42	44.18	42.71	40.67	37.39	40.44
Y 72.0	42.91	40.95	37.87	41.82	40.56	38.33	34.82	38.20
Y 73.0	40.84	38.66	35.33	39.49	38.45	36.00	32.26	35.97
Y 74.0	38.79	36.37	32.78	37.20	36.37	33.72	29.73	33.78
Y 75.0	36.73	34.13	30.24	34.91	34.39	31.48	27.21	31.64
Y 76.0	34.67	31.93	27.73	32.70	32.49	29.31	24.70	29.54
Y 77.0	32.67	29.75	25.27	30.54	30.65	27.17	22.25	27.48
Y 78.0	30.67	27.62	22.89	28.41	28.88	25.12	19.84	25.44
Y 79.0	28.72	25.54	20.54	26.35	27.15	23.18	17.48	23.47
Y 80.0	26.78	23.50	18.23	24.41	25.46	21.33	15.19	21.52
Y 81.0	24.90	21.51	15.94	22.59	23.82	19.63	13.01	19.63
Y 82.0	23.03	19.58	13.73	20.86	22.29	18.01	10.96	17.81
Y 83.0	21.21	17.69	11.57	19.23	20.85	16.47	9.09	16.03
Y 84.0	19.43	15.87	9.51	17.67	19.53	15.05	7.36	14.35
Y 85.0	17.72	14.14	7.63	16.24	18.30	13.76	5.74	12.76
Y 86.0	16.10	12.52	5.99	14.91	17.19	12.61	4.42	11.27
Y 87.0	14.56	10.98	4.47	13.71	16.20	11.62	3.33	9.89
Y 88.0	13.11	9.57	3.24	12.63	15.33	10.77	2.53	8.65
Y 89.0	11.78	8.28	2.27	11.73	14.50	10.04	2.05	7.54
Y 90.0	10.55	7.16	1.62	10.92	13.77	9.38	1.89	6.58
Y 91.0	9.42	6.20	1.33	10.22	13.07	8.75	1.85	5.75
Y 92.0	8.42	5.36	1.25	9.60	12.40	8.16	1.81	5.04
Y 93.0	7.52	4.66	1.24	8.99	11.77	7.63	1.76	4.43

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-3000K.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	6.72	4.07	1.20	8.42	11.20	7.14	1.70	3.93
Y 95.0	6.00	3.59	1.20	7.93	10.65	6.46	1.68	3.50
Y 96.0	5.36	3.17	1.22	7.45	10.13	5.96	1.67	3.01
Y 97.0	4.79	2.72	1.23	6.80	9.49	5.56	1.62	2.70
Y 98.0	4.31	2.44	1.24	6.31	8.78	5.23	1.58	2.44
Y 99.0	3.80	2.22	1.22	5.93	8.22	4.96	1.56	2.25
Y 100.0	3.30	2.05	1.21	5.61	7.79	4.75	1.54	2.12
Y 101.0	2.89	1.95	1.20	5.30	7.40	4.57	1.51	2.03
Y 102.0	2.59	1.88	1.20	5.05	7.05	4.42	1.49	2.00
Y 103.0	2.34	1.85	1.20	4.84	6.75	4.29	1.48	1.98
Y 104.0	2.14	1.83	1.20	4.66	6.44	4.17	1.46	1.93
Y 105.0	2.02	1.79	1.19	4.48	6.20	4.09	1.41	1.88
Y 106.0	1.93	1.75	1.19	4.29	5.91	3.95	1.38	1.83
Y 107.0	1.88	1.71	1.18	4.18	5.66	3.85	1.33	1.77
Y 108.0	1.82	1.66	1.17	4.00	5.49	3.78	1.29	1.74
Y 109.0	1.79	1.62	1.16	3.91	5.34	3.63	1.26	1.69
Y 110.0	1.76	1.59	1.16	3.83	5.20	3.49	1.24	1.64
Y 111.0	1.73	1.53	1.15	3.68	5.07	3.40	1.20	1.60
Y 112.0	1.70	1.49	1.13	3.57	4.99	3.35	1.20	1.52
Y 113.0	1.68	1.46	1.11	3.53	4.91	3.31	1.18	1.46
Y 114.0	1.64	1.43	1.10	3.48	4.82	3.27	1.15	1.41
Y 115.0	1.62	1.41	1.08	3.43	4.75	3.21	1.12	1.38
Y 116.0	1.58	1.37	1.07	3.36	4.67	3.15	1.09	1.36
Y 117.0	1.56	1.35	1.05	3.33	4.59	3.09	1.05	1.35
Y 118.0	1.52	1.33	1.03	3.27	4.49	3.03	1.03	1.32
Y 119.0	1.50	1.31	1.01	3.22	4.42	2.96	0.98	1.26
Y 120.0	1.47	1.29	1.00	3.15	4.35	2.90	0.95	1.16
Y 121.0	1.43	1.25	0.98	3.09	4.26	2.83	0.91	1.13
Y 122.0	1.41	1.22	0.97	3.02	4.18	2.75	0.88	1.12
Y 123.0	1.38	1.19	0.94	2.96	4.09	2.68	0.83	1.10
Y 124.0	1.36	1.14	0.94	2.91	4.02	2.60	0.79	1.05
Y 125.0	1.33	1.12	0.92	2.83	3.91	2.51	0.75	1.04
Y 126.0	1.29	1.10	0.90	2.77	3.82	2.39	0.64	1.03
Y 127.0	1.26	1.05	0.89	2.70	3.74	2.26	0.34	1.00
Y 128.0	1.24	1.00	0.87	2.61	3.66	2.12	0.08	0.97
Y 129.0	1.19	0.97	0.63	2.51	3.56	1.93	0.09	0.92
Y 130.0	1.18	0.92	0.22	2.40	3.47	1.75	0.08	0.88
Y 131.0	1.13	0.83	0.12	2.24	3.38	1.54	0.10	0.80
Y 132.0	1.11	0.77	0.13	2.08	3.28	1.33	0.11	0.70
Y 133.0	1.07	0.69	0.13	1.90	3.17	1.13	0.11	0.61
Y 134.0	1.05	0.63	0.15	1.71	3.08	0.93	0.12	0.52
Y 135.0	1.02	0.56	0.16	1.49	2.97	0.76	0.13	0.47
Y 136.0	0.97	0.53	0.16	1.30	2.81	0.63	0.13	0.41
Y 137.0	0.95	0.51	0.16	1.09	2.66	0.52	0.14	0.37
Y 138.0	0.92	0.51	0.18	0.87	2.48	0.46	0.15	0.36
Y 139.0	0.89	0.50	0.19	0.69	2.28	0.44	0.17	0.33
Y 140.0	0.83	0.47	0.20	0.58	2.06	0.41	0.16	0.33

IES Indoor Report
Photometric Filename:F16A-24V-3528-144-3000K.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	0.74	0.48	0.21	0.49	1.82	0.41	0.18	0.31
Y 142.0	0.63	0.47	0.22	0.45	1.56	0.39	0.18	0.30
Y 143.0	0.54	0.48	0.23	0.45	1.29	0.39	0.19	0.28
Y 144.0	0.46	0.47	0.23	0.44	1.03	0.37	0.20	0.26
Y 145.0	0.40	0.45	0.24	0.44	0.79	0.38	0.23	0.27
Y 146.0	0.33	0.47	0.25	0.43	0.56	0.38	0.25	0.25
Y 147.0	0.29	0.46	0.27	0.43	0.42	0.36	0.25	0.25
Y 148.0	0.29	0.45	0.33	0.43	0.34	0.36	0.24	0.24
Y 149.0	0.31	0.44	0.33	0.42	0.31	0.36	0.25	0.24
Y 150.0	0.31	0.44	0.35	0.41	0.31	0.36	0.25	0.24
Y 151.0	0.31	0.44	0.36	0.41	0.31	0.36	0.25	0.26
Y 152.0	0.32	0.44	0.36	0.42	0.32	0.37	0.26	0.26
Y 153.0	0.32	0.42	0.38	0.41	0.31	0.36	0.27	0.27
Y 154.0	0.34	0.43	0.37	0.40	0.32	0.36	0.29	0.28
Y 155.0	0.35	0.42	0.37	0.40	0.34	0.37	0.30	0.28
Y 156.0	0.35	0.41	0.39	0.40	0.35	0.37	0.31	0.29
Y 157.0	0.36	0.41	0.38	0.40	0.35	0.37	0.32	0.32
Y 158.0	0.37	0.41	0.37	0.39	0.36	0.38	0.31	0.34
Y 159.0	0.37	0.40	0.40	0.40	0.37	0.39	0.33	0.34
Y 160.0	0.39	0.41	0.39	0.39	0.37	0.40	0.34	0.36
Y 161.0	0.40	0.41	0.42	0.40	0.38	0.40	0.33	0.37
Y 162.0	0.41	0.39	0.41	0.38	0.38	0.40	0.35	0.38
Y 163.0	0.41	0.39	0.41	0.40	0.39	0.41	0.36	0.37
Y 164.0	0.41	0.40	0.41	0.40	0.40	0.42	0.37	0.38
Y 165.0	0.41	0.40	0.42	0.40	0.42	0.41	0.37	0.40
Y 166.0	0.41	0.39	0.41	0.41	0.40	0.41	0.38	0.41
Y 167.0	0.41	0.40	0.42	0.41	0.42	0.42	0.41	0.41
Y 168.0	0.44	0.40	0.43	0.41	0.43	0.42	0.40	0.41
Y 169.0	0.43	0.41	0.42	0.41	0.43	0.41	0.41	0.42
Y 170.0	0.43	0.39	0.42	0.42	0.44	0.42	0.42	0.42
Y 171.0	0.43	0.41	0.43	0.42	0.44	0.42	0.42	0.42
Y 172.0	0.44	0.40	0.44	0.43	0.45	0.42	0.43	0.42
Y 173.0	0.44	0.42	0.43	0.44	0.44	0.44	0.43	0.43
Y 174.0	0.46	0.42	0.45	0.44	0.46	0.44	0.43	0.43
Y 175.0	0.46	0.43	0.46	0.44	0.46	0.44	0.43	0.42
Y 176.0	0.46	0.42	0.46	0.44	0.46	0.45	0.44	0.44
Y 177.0	0.46	0.43	0.47	0.44	0.45	0.44	0.42	0.44
Y 178.0	0.46	0.43	0.47	0.46	0.47	0.43	0.45	0.45
Y 179.0	0.46	0.43	0.47	0.46	0.47	0.44	0.44	0.45
Y 180.0	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46