

# IES Indoor Report

Photometric Filename:MD02-17-2700K RA80 28D TKP.IES

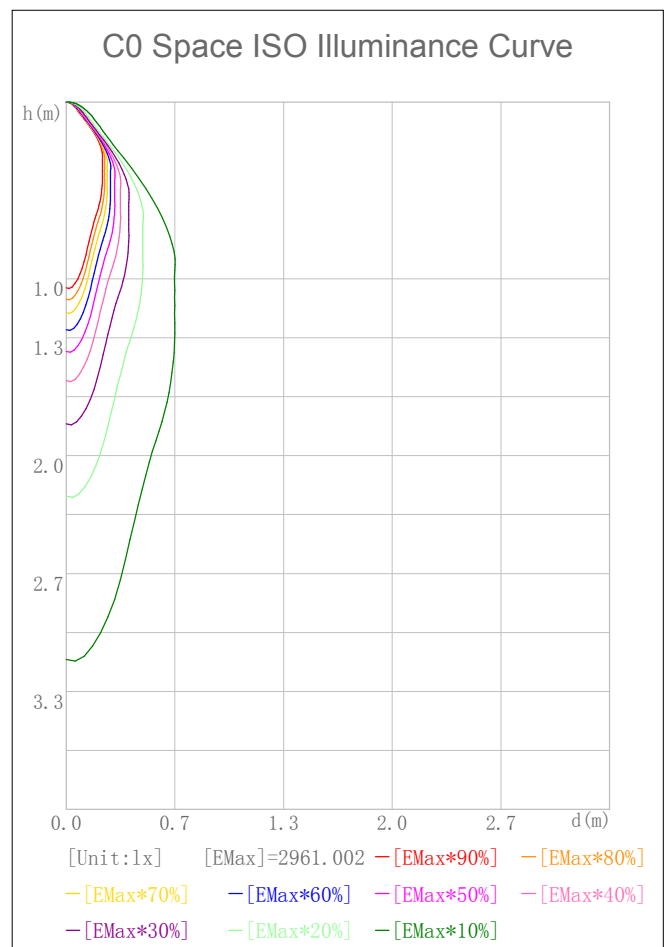
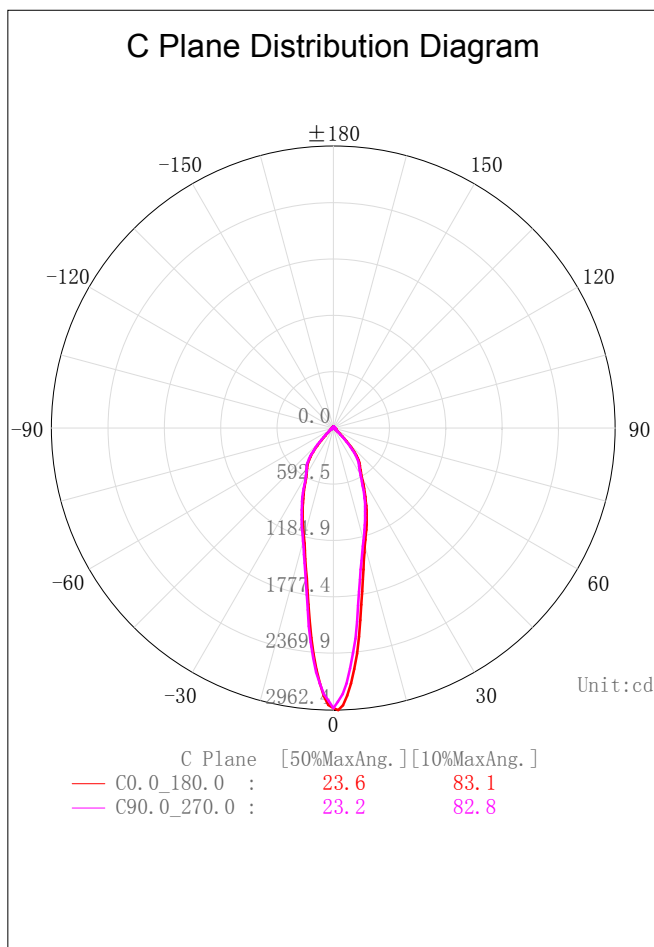
## Indoor Luminaire Photometric Data

### Description Information

Luminary Name: MD02-17-2700K RA80 28D TKP		Lum. Catalog:	Test ID:
Lamp Name:		Lamp Catalog: LED	Test Date: 2018/04/17
Manufacture: SHENZHEN NORMING LIGHTING CO.,LTD		Shld. Ang(°):	Test Machine:GON-2000
Test Lab: Quality Department		Frequency(Hz):	Lamp CCT(K): Ra:
Lum. Size(W*L*H):0.050m*0.000m*0.000m		Lum. Area(m2):0.002	Lum. W(kg): 0.000
Test System: C, γ	Test Step: C=90.0 γ=1.0	Temp.(°C): 25	Humidity(%): 50.0

### Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 1358.000	Luminary Flux(lm): 1417.714	Field Angle(10%Imax): 83.1(°)	
Rated Power(W):	Luminary Efficiency: 104.40%	Down Lumens&Percent: 1399.353lm 98.70%	
Rated Voltage(V):	Luminary EER(lm/W): 85.559	Up Lumens&Percent: 18.361lm 1.30%	
Tested Power(W): 16.570	Max. Candela(cd): 2962.355	S/MH: C0_a180=0.391 C90_270=0.381	
Lamps' Inside: 1	Max Cand@Ang.(°): C=0.0 γ=1.0	CIE Type: Semi-Direct	
Tested Electrics(V, A, pf):240.5, 0.070, 0.977		Beam Angle(50%Imax): 23.6(°)	ErP Φ use(90°): 1280.224lm
Lamp Size(W*L*H):0.050m*0.000m*0.000m	Left=-11.2°, Right=12.4°		IRF(%): 446.113



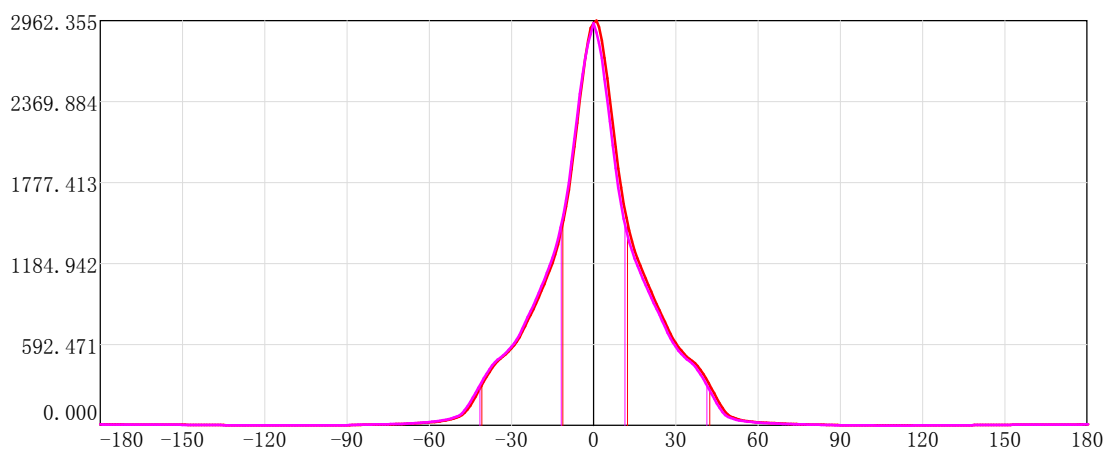
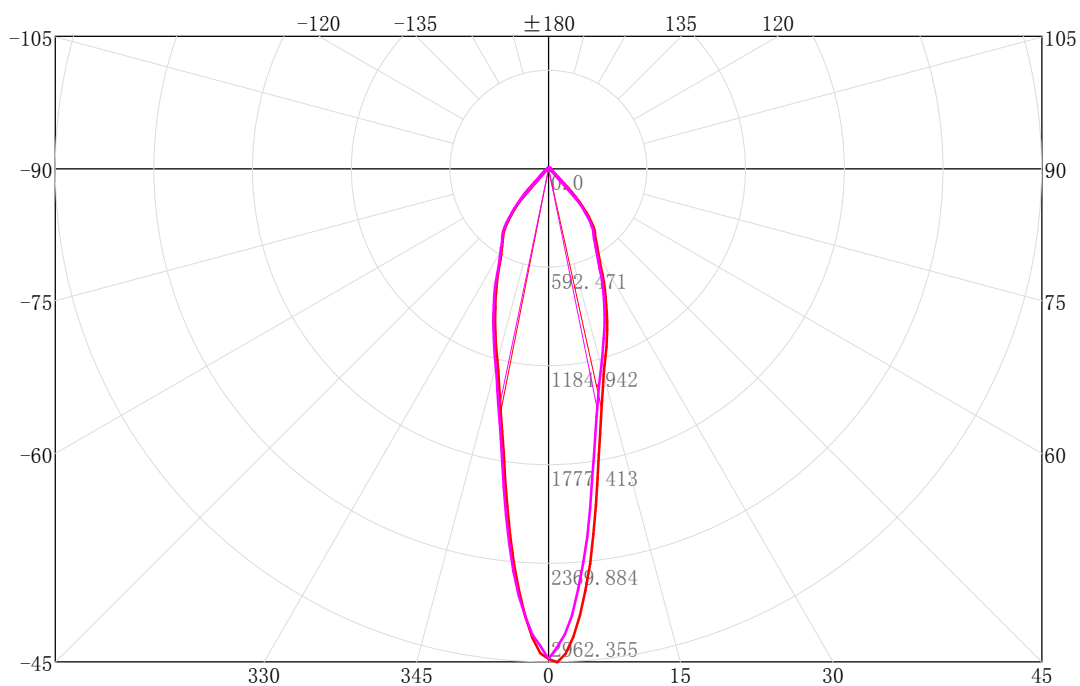
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## 2D Plane Light Intensity Distribution Curve

Lum. Name: MD02-17-2700K RA80 28D TKP	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: SHENZHEN NORMING LIGHTING CO.,LTD	Test Machine:GON-2000	Test Date: 2018/04/17

C Plane Distribution Diagram



	C Plane	[50%MaxAng. ]	[10%MaxAng. ]	Unit:cd
—	C0.0_180.0 :	23.6	83.1	
—	C90.0_270.0 :	23.2	82.8	

# IES Indoor Report

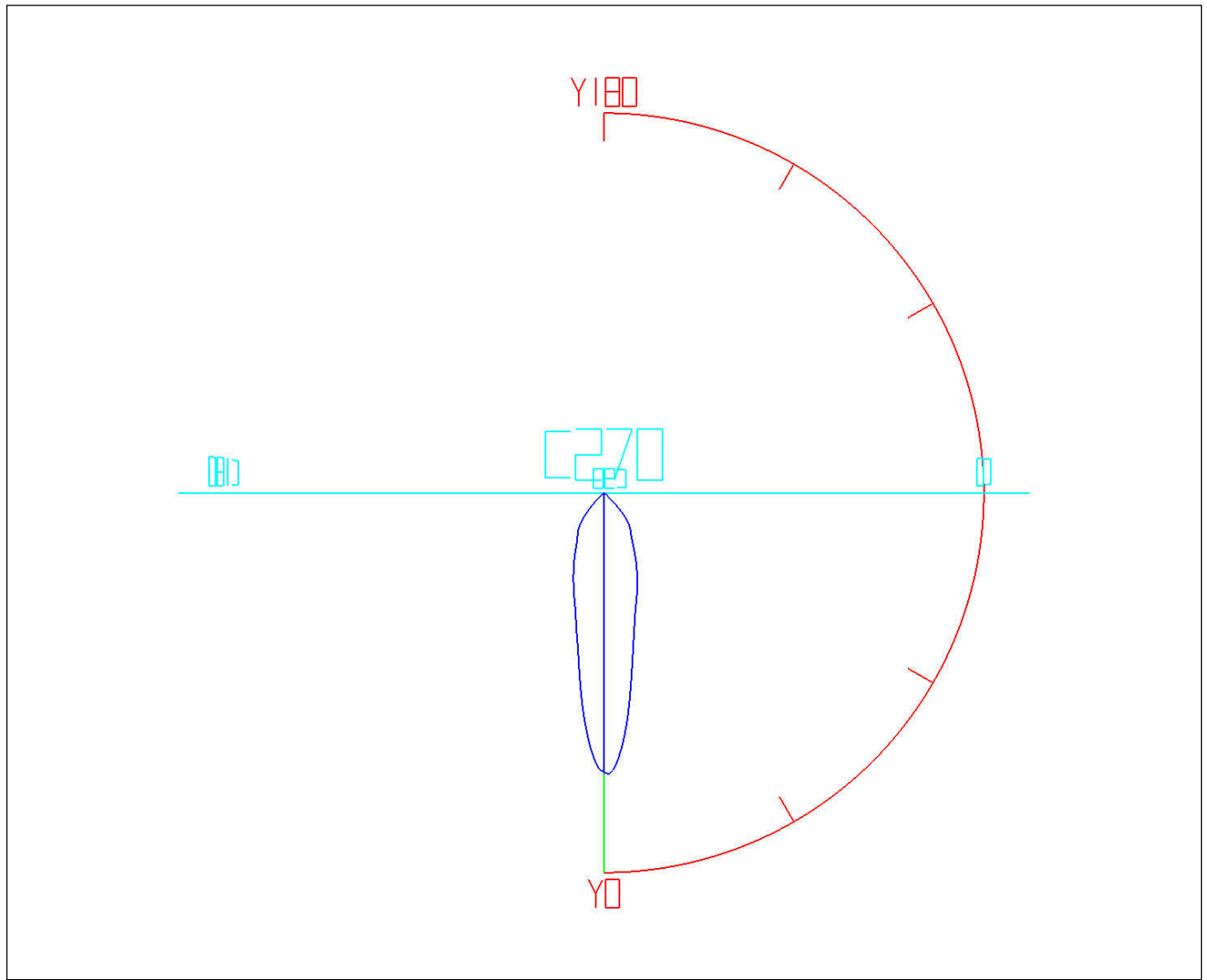
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## 3D Light Intensity Distribution Modal

Lum. Name: MD02-17-2700K RA80 28D TKP	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: SHENZHEN NORMING LIGHTING CO.,LTD	Test Machine:GON-2000	Test Date: 2018/04/17

## 3D Light Intensity Distribution Modal



Curves: 3D Model ——— Fixture ——— Vert. HUD ——— Hori. HUD ———  
View Angles: Orient:0 Tilt:0 Roll:0 Spin:0

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# IES Indoor Report

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## 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	2.80	2.80	0.21	0.21	47.0-48.0	7.86	1320.01	0.58	97.20
1.0-2.0	8.23	11.03	0.61	0.81	48.0-49.0	6.43	1326.44	0.47	97.68
2.0-3.0	13.28	24.30	0.98	1.79	49.0-50.0	5.49	1331.93	0.40	98.08
3.0-4.0	17.75	42.05	1.31	3.10	50.0-51.0	4.88	1336.81	0.36	98.44
4.0-5.0	21.58	63.63	1.59	4.69	51.0-52.0	4.38	1341.19	0.32	98.76
5.0-6.0	24.71	88.34	1.82	6.51	52.0-53.0	3.94	1345.13	0.29	99.05
6.0-7.0	27.12	115.47	2.00	8.50	53.0-54.0	3.58	1348.71	0.26	99.32
7.0-8.0	28.84	144.31	2.12	10.63	54.0-55.0	3.31	1352.02	0.24	99.56
8.0-9.0	30.08	174.38	2.21	12.84	55.0-56.0	3.07	1355.10	0.23	99.79
9.0-10.0	31.07	205.45	2.29	15.13	56.0-57.0	2.85	1357.94	0.21	100.00
10.0-11.0	31.95	237.40	2.35	17.48	57.0-58.0	2.65	1360.60	0.20	100.19
11.0-12.0	32.74	270.14	2.41	19.89	58.0-59.0	2.48	1363.08	0.18	100.37
12.0-13.0	33.41	303.55	2.46	22.35	59.0-60.0	2.33	1365.41	0.17	100.55
13.0-14.0	34.01	337.56	2.50	24.86	60.0-61.0	2.20	1367.61	0.16	100.71
14.0-15.0	34.63	372.19	2.55	27.41	61.0-62.0	2.09	1369.70	0.15	100.86
15.0-16.0	35.24	407.44	2.60	30.00	62.0-63.0	1.99	1371.69	0.15	101.01
16.0-17.0	35.78	443.22	2.64	32.64	63.0-64.0	1.89	1373.58	0.14	101.15
17.0-18.0	36.23	479.45	2.67	35.31	64.0-65.0	1.80	1375.38	0.13	101.28
18.0-19.0	36.55	516.00	2.69	38.00	65.0-66.0	1.71	1377.10	0.13	101.41
19.0-20.0	36.73	552.73	2.70	40.70	66.0-67.0	1.62	1378.71	0.12	101.53
20.0-21.0	36.76	589.49	2.71	43.41	67.0-68.0	1.52	1380.23	0.11	101.64
21.0-22.0	36.63	626.12	2.70	46.11	68.0-69.0	1.42	1381.66	0.10	101.74
22.0-23.0	36.41	662.53	2.68	48.79	69.0-70.0	1.33	1382.99	0.10	101.84
23.0-24.0	36.06	698.58	2.66	51.44	70.0-71.0	1.26	1384.25	0.09	101.93
24.0-25.0	35.57	734.15	2.62	54.06	71.0-72.0	1.20	1385.45	0.09	102.02
25.0-26.0	34.93	769.08	2.57	56.63	72.0-73.0	1.15	1386.61	0.09	102.11
26.0-27.0	34.15	803.23	2.51	59.15	73.0-74.0	1.11	1387.72	0.08	102.19
27.0-28.0	33.30	836.53	2.45	61.60	74.0-75.0	1.06	1388.78	0.08	102.27
28.0-29.0	32.59	869.12	2.40	64.00	75.0-76.0	1.02	1389.80	0.08	102.34
29.0-30.0	32.06	901.19	2.36	66.36	76.0-77.0	0.98	1390.78	0.07	102.41
30.0-31.0	31.59	932.78	2.33	68.69	77.0-78.0	0.93	1391.71	0.07	102.48
31.0-32.0	31.14	963.92	2.29	70.98	78.0-79.0	0.89	1392.60	0.07	102.55
32.0-33.0	30.74	994.66	2.26	73.24	79.0-80.0	0.84	1393.44	0.06	102.61
33.0-34.0	30.43	1025.09	2.24	75.49	80.0-81.0	0.80	1394.24	0.06	102.67
34.0-35.0	30.19	1055.28	2.22	77.71	81.0-82.0	0.76	1395.00	0.06	102.72
35.0-36.0	29.87	1085.16	2.20	79.91	82.0-83.0	0.72	1395.72	0.05	102.78
36.0-37.0	29.29	1114.45	2.16	82.07	83.0-84.0	0.68	1396.40	0.05	102.83
37.0-38.0	28.34	1142.78	2.09	84.15	84.0-85.0	0.63	1397.03	0.05	102.87
38.0-39.0	27.00	1169.79	1.99	86.14	85.0-86.0	0.59	1397.62	0.04	102.92
39.0-40.0	25.37	1195.16	1.87	88.01	86.0-87.0	0.54	1398.16	0.04	102.96
40.0-41.0	23.51	1218.67	1.73	89.74	87.0-88.0	0.47	1398.63	0.03	102.99
41.0-42.0	21.41	1240.08	1.58	91.32	88.0-89.0	0.40	1399.02	0.03	103.02
42.0-43.0	19.15	1259.23	1.41	92.73	89.0-90.0	0.33	1399.35	0.02	103.05
43.0-44.0	16.80	1276.03	1.24	93.96	90.0-91.0	0.29	1399.65	0.02	103.07
44.0-45.0	14.38	1290.41	1.06	95.02	91.0-92.0	0.28	1399.93	0.02	103.09
45.0-46.0	11.99	1302.39	0.88	95.91	92.0-93.0	0.26	1400.19	0.02	103.11
46.0-47.0	9.76	1312.15	0.72	96.62	93.0-94.0	0.25	1400.44	0.02	103.13

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## Zonal Flux Tabulation - (Cont.)

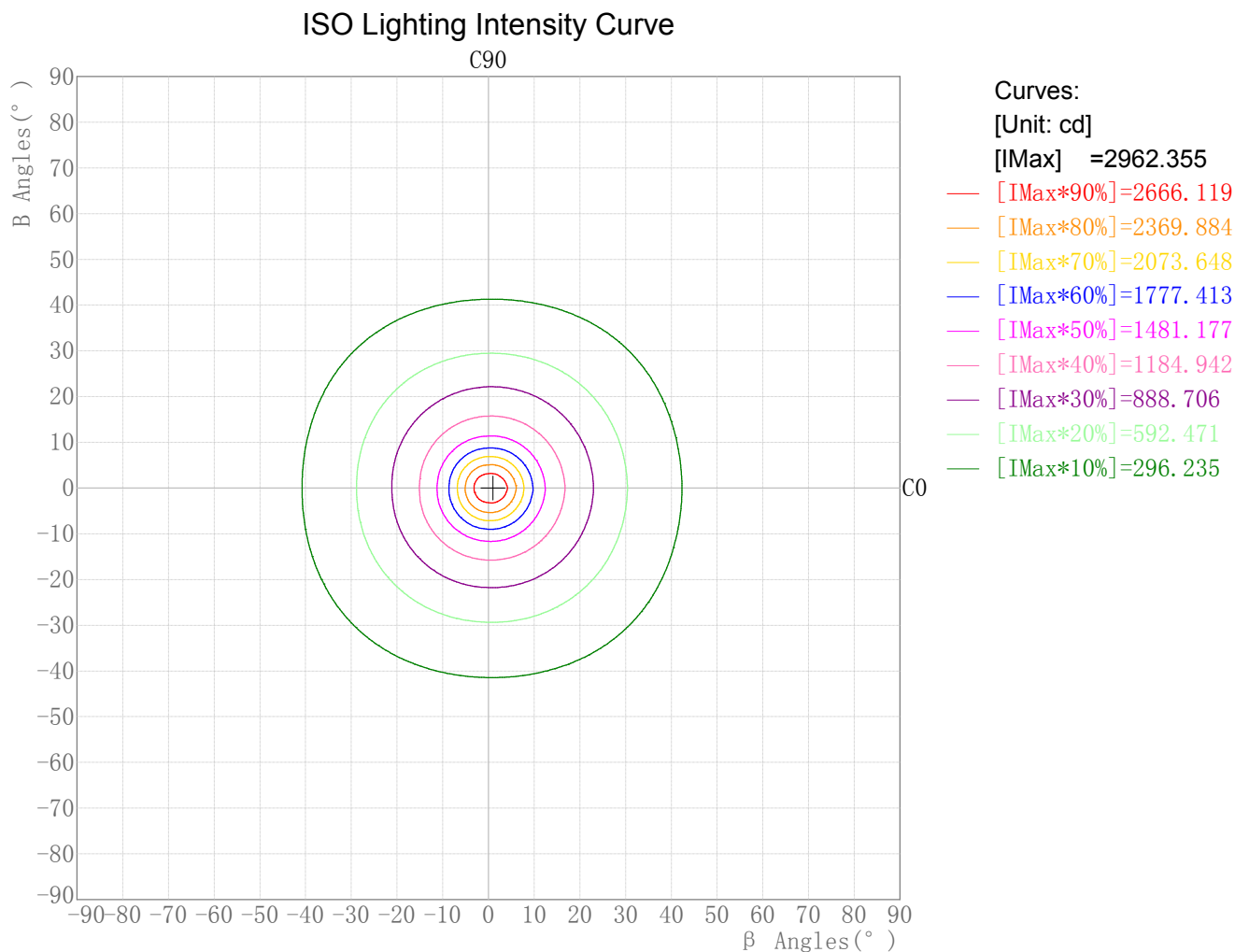
Zone (γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp	Zone (γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
94.0-95.0	0.24	1400.68	0.02	103.14	141.0-142.0	0.29	1409.45	0.02	103.79
95.0-96.0	0.22	1400.90	0.02	103.16	142.0-143.0	0.30	1409.75	0.02	103.81
96.0-97.0	0.21	1401.11	0.02	103.17	143.0-144.0	0.31	1410.05	0.02	103.83
97.0-98.0	0.20	1401.31	0.01	103.19	144.0-145.0	0.31	1410.36	0.02	103.86
98.0-99.0	0.19	1401.50	0.01	103.20	145.0-146.0	0.31	1410.67	0.02	103.88
99.0-100.0	0.18	1401.68	0.01	103.22	146.0-147.0	0.31	1410.98	0.02	103.90
100.0-101.0	0.18	1401.86	0.01	103.23	147.0-148.0	0.32	1411.30	0.02	103.92
101.0-102.0	0.17	1402.03	0.01	103.24	148.0-149.0	0.31	1411.61	0.02	103.95
102.0-103.0	0.16	1402.18	0.01	103.25	149.0-150.0	0.31	1411.93	0.02	103.97
103.0-104.0	0.15	1402.33	0.01	103.26	150.0-151.0	0.31	1412.24	0.02	103.99
104.0-105.0	0.15	1402.48	0.01	103.28	151.0-152.0	0.31	1412.55	0.02	104.02
105.0-106.0	0.15	1402.63	0.01	103.29	152.0-153.0	0.31	1412.85	0.02	104.04
106.0-107.0	0.14	1402.77	0.01	103.30	153.0-154.0	0.30	1413.16	0.02	104.06
107.0-108.0	0.14	1402.91	0.01	103.31	154.0-155.0	0.30	1413.45	0.02	104.08
108.0-109.0	0.14	1403.05	0.01	103.32	155.0-156.0	0.29	1413.74	0.02	104.10
109.0-110.0	0.14	1403.19	0.01	103.33	156.0-157.0	0.29	1414.03	0.02	104.13
110.0-111.0	0.14	1403.33	0.01	103.34	157.0-158.0	0.28	1414.31	0.02	104.15
111.0-112.0	0.14	1403.46	0.01	103.35	158.0-159.0	0.27	1414.58	0.02	104.17
112.0-113.0	0.14	1403.60	0.01	103.36	159.0-160.0	0.26	1414.85	0.02	104.19
113.0-114.0	0.14	1403.74	0.01	103.37	160.0-161.0	0.26	1415.10	0.02	104.20
114.0-115.0	0.14	1403.88	0.01	103.38	161.0-162.0	0.25	1415.35	0.02	104.22
115.0-116.0	0.14	1404.02	0.01	103.39	162.0-163.0	0.24	1415.59	0.02	104.24
116.0-117.0	0.14	1404.16	0.01	103.40	163.0-164.0	0.23	1415.82	0.02	104.26
117.0-118.0	0.14	1404.30	0.01	103.41	164.0-165.0	0.22	1416.03	0.02	104.27
118.0-119.0	0.15	1404.45	0.01	103.42	165.0-166.0	0.21	1416.24	0.02	104.29
119.0-120.0	0.15	1404.60	0.01	103.43	166.0-167.0	0.19	1416.43	0.01	104.30
120.0-121.0	0.15	1404.76	0.01	103.44	167.0-168.0	0.18	1416.62	0.01	104.32
121.0-122.0	0.16	1404.91	0.01	103.45	168.0-169.0	0.17	1416.79	0.01	104.33
122.0-123.0	0.16	1405.07	0.01	103.47	169.0-170.0	0.16	1416.94	0.01	104.34
123.0-124.0	0.17	1405.24	0.01	103.48	170.0-171.0	0.14	1417.09	0.01	104.35
124.0-125.0	0.17	1405.42	0.01	103.49	171.0-172.0	0.13	1417.22	0.01	104.36
125.0-126.0	0.18	1405.60	0.01	103.51	172.0-173.0	0.12	1417.33	0.01	104.37
126.0-127.0	0.19	1405.79	0.01	103.52	173.0-174.0	0.10	1417.43	0.01	104.38
127.0-128.0	0.19	1405.98	0.01	103.53	174.0-175.0	0.09	1417.52	0.01	104.38
128.0-129.0	0.20	1406.18	0.01	103.55	175.0-176.0	0.07	1417.59	0.01	104.39
129.0-130.0	0.20	1406.39	0.02	103.56	176.0-177.0	0.05	1417.64	0.00	104.39
130.0-131.0	0.21	1406.60	0.02	103.58	177.0-178.0	0.04	1417.68	0.00	104.39
131.0-132.0	0.22	1406.82	0.02	103.60	178.0-179.0	0.02	1417.71	0.00	104.40
132.0-133.0	0.23	1407.05	0.02	103.61	179.0-180.0	0.01	1417.71	0.00	104.40
133.0-134.0	0.24	1407.29	0.02	103.63					
134.0-135.0	0.24	1407.53	0.02	103.65					
135.0-136.0	0.25	1407.78	0.02	103.67					
136.0-137.0	0.26	1408.04	0.02	103.68					
137.0-138.0	0.27	1408.31	0.02	103.70					
138.0-139.0	0.28	1408.58	0.02	103.72					
139.0-140.0	0.28	1408.86	0.02	103.75					
140.0-141.0	0.29	1409.15	0.02	103.77					

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## Rectangle ISO Lighting Intensity Diagram

Lum. Name: MD02-17-2700K RA80 28D TKP	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: SHENZHEN NORMING LIGHTING CO.,LTD	Test Machine:GON-2000	Test Date: 2018/04/17



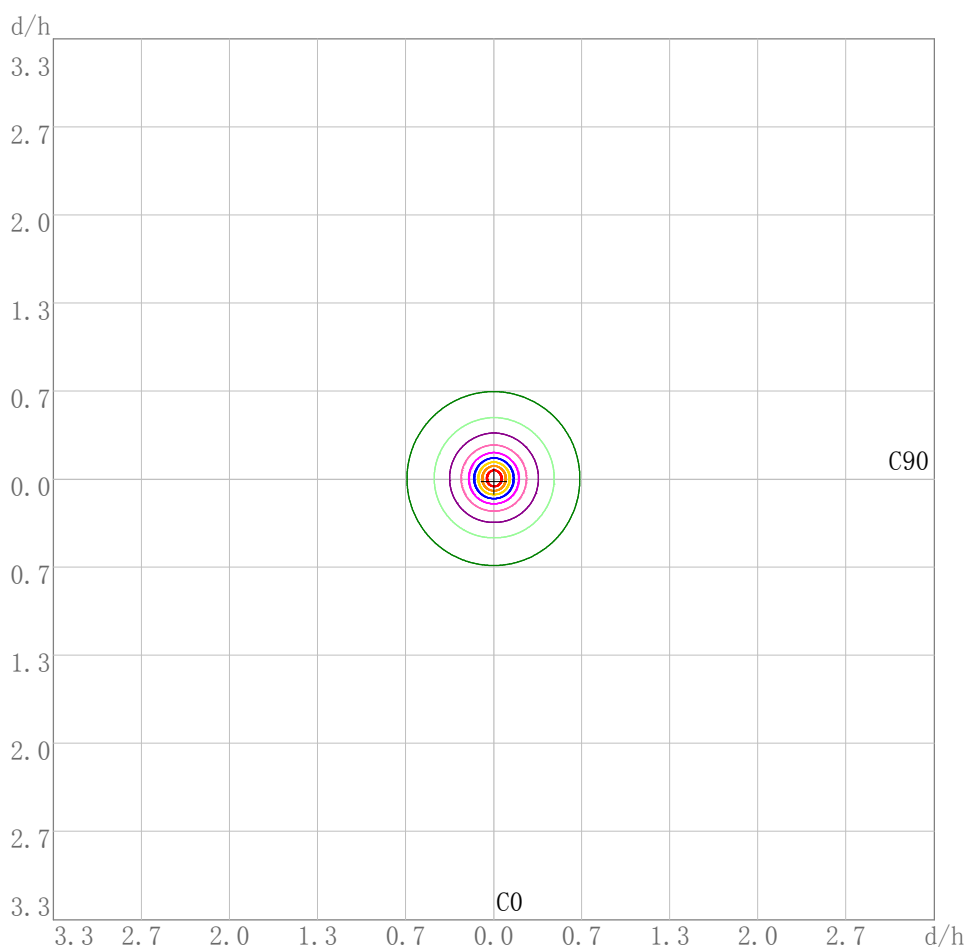
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## Plane ISO-Illuminance Diagram

Lum. Name: MD02-17-2700K RA80 28D TKP	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: SHENZHEN NORMING LIGHTING CO., LTD	Test Machine: GON-2000	Test Date: 2018/04/17

Plane ISO-Illuminance Curve



- Curves:  
unit:lx
- [EMax] =329.000
  - [EMax\*90%]=296.100
  - [EMax\*80%]=263.200
  - [EMax\*70%]=230.300
  - [EMax\*60%]=197.400
  - [EMax\*50%]=164.500
  - [EMax\*40%]=131.600
  - [EMax\*30%]=98.700
  - [EMax\*20%]=65.800
  - [EMax\*10%]=32.900

Working Plane Luminaire Mounting Height(m): 3.00  
 Working Plane Maximum Illuminance(lx): 329.00  
 Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

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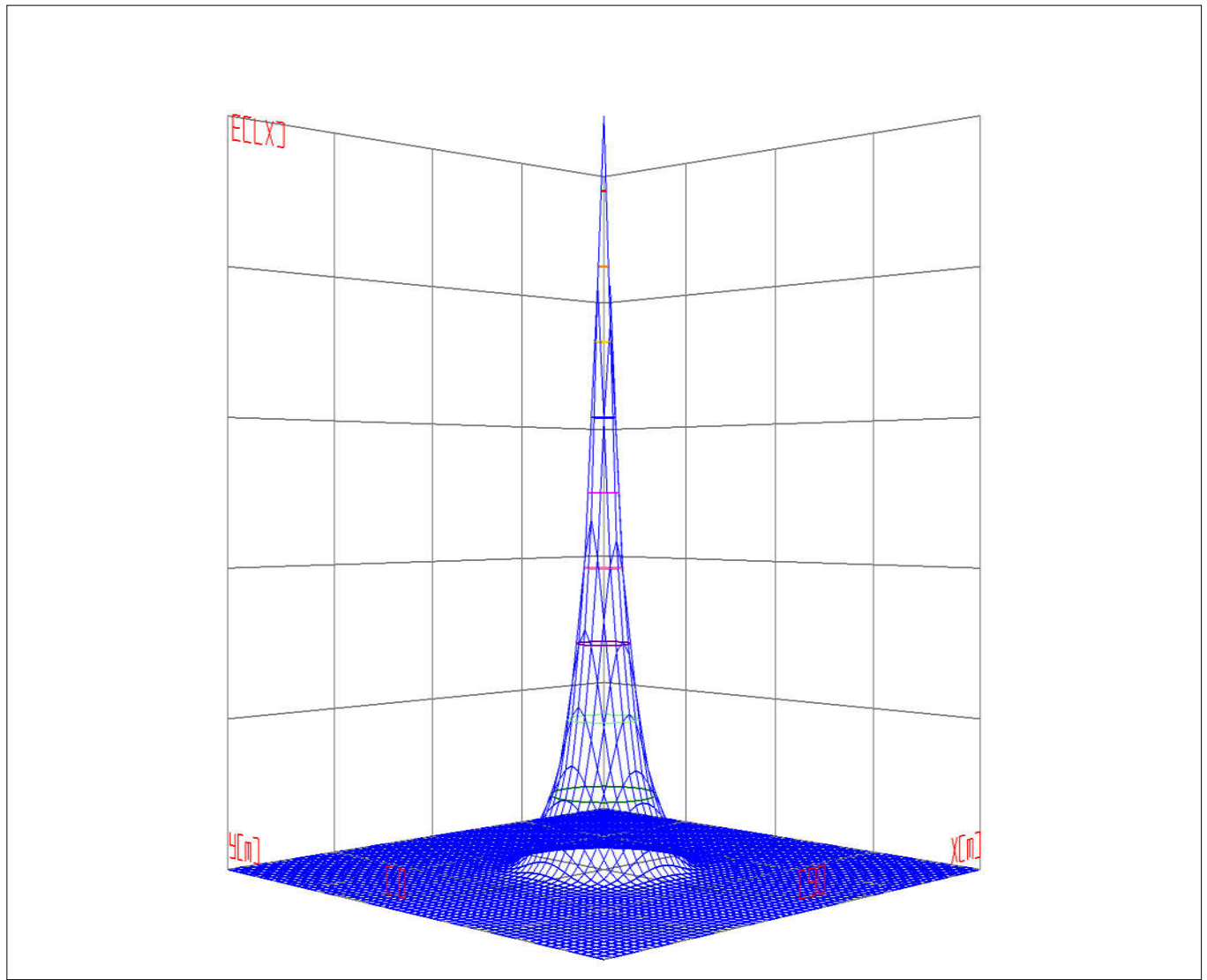
Photometric Filename:MD02-17-2700K RA80 28D TKP.IES

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## 3D Plane ISO Illuminance Diagram

Lum. Name: MD02-17-2700K RA80 28D TKP	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: SHENZHEN NORMING LIGHTING CO.,LTD	Test Machine:GON-2000	Test Date: 2018/04/17

### 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

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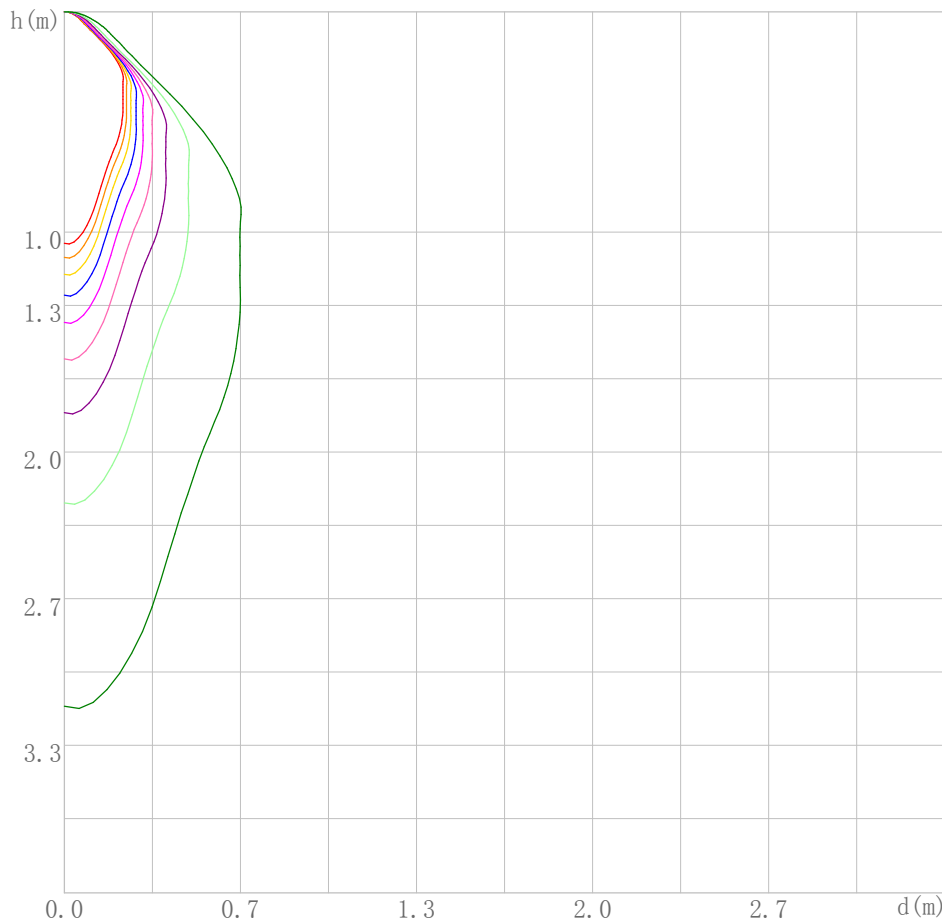
Photometric Filename:MD02-17-2700K RA80 28D TKP.IES

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## Space ISO Illuminance Diagram

Lum. Name: MD02-17-2700K RA80 28D TKP	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: SHENZHEN NORMING LIGHTING CO., LTD	Test Machine: GON-2000	Test Date: 2018/04/17

### Space ISO Illuminance Curve



- Curves:  
[Unit: lx]  
[EMax] =2961.002
- [EMax\*90%]=2664.901
  - [EMax\*80%]=2368.801
  - [EMax\*70%]=2072.701
  - [EMax\*60%]=1776.601
  - [EMax\*50%]=1480.501
  - [EMax\*40%]=1184.401
  - [EMax\*30%]=888.300
  - [EMax\*20%]=592.200
  - [EMax\*10%]=296.100

Space Plane Maximum Illuminance and @Angle:2961.00lx,1.0deg  
Plane Maximum Lighting Intensity and @Angle:2962.355cd,0deg

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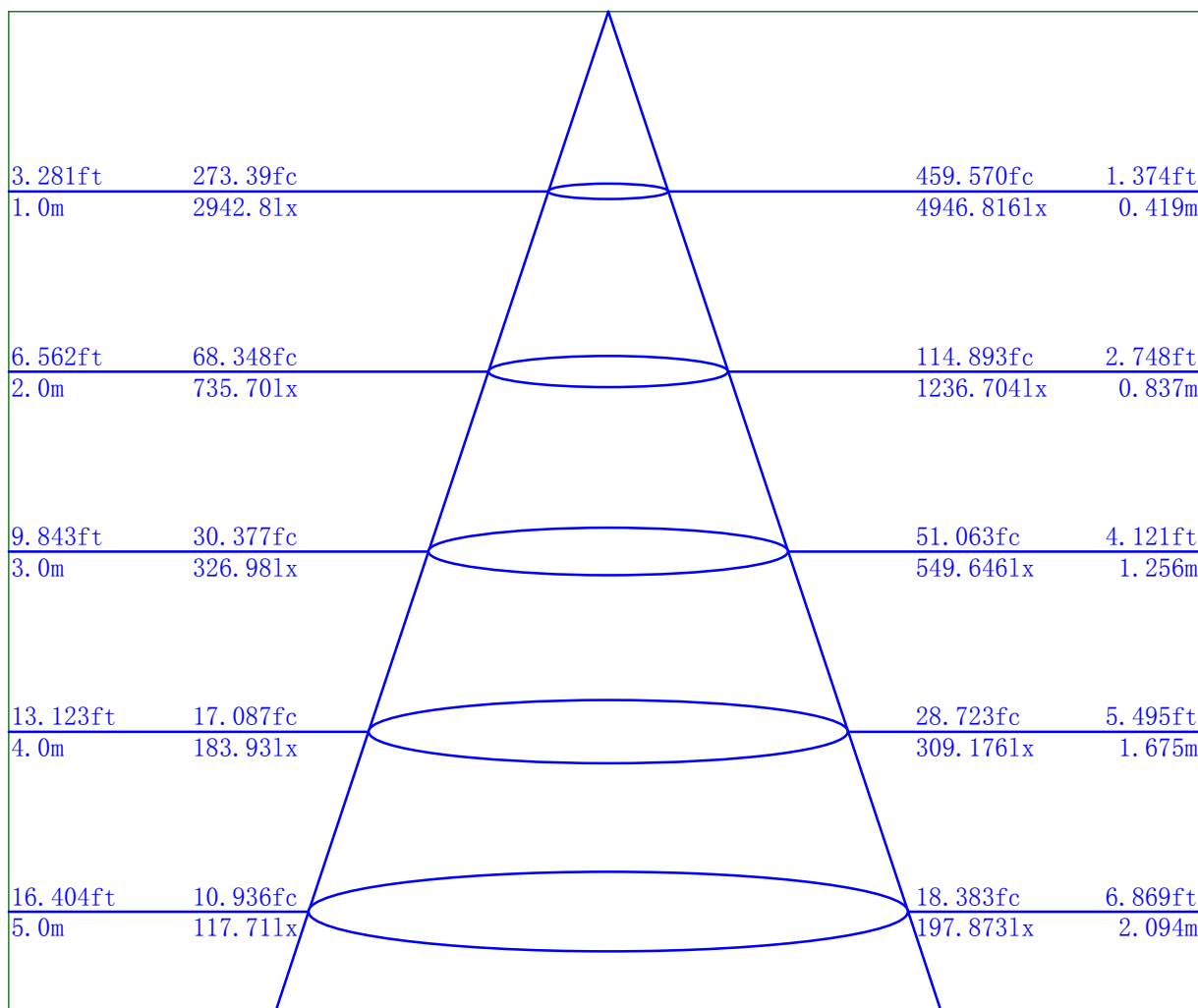
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## Illuminance-Distance Diagram

Lum. Name: MD02-17-2700K RA80 28D TKP	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: SHENZHEN NORMING LIGHTING CO.,LTD	Test Machine:GON-2000	Test Date: 2018/04/17

Illuminance-Distance Curve



Height

Center E

Average E

Diameter

Beam Angle:23.6

### Indoor Luminance Limiting Curves

Lum. Name: MD02-17-2700K RA80 28D TKP	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: SHENZHEN NORMING LIGHTING CO.,LTD	Test Machine:GON-2000	Test Date: 2018/04/17

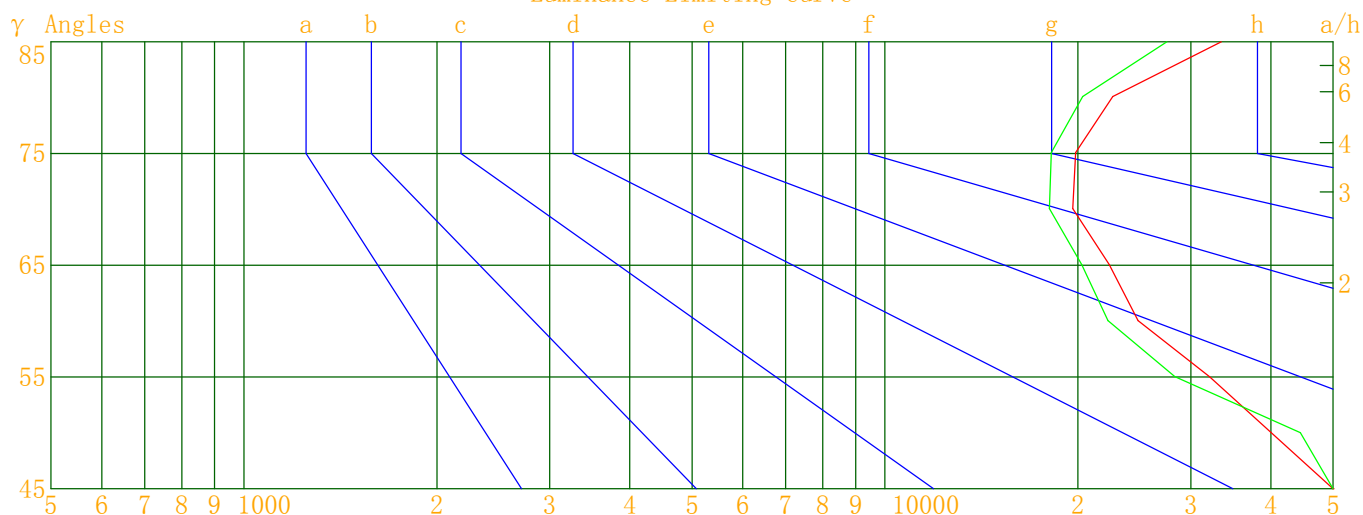
Glare Grade Table

GI	Quality	Using Illuminance							
		a	b	c	d	e	f	g	h
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	142632	51913	32095	24811	22375	19631	19827	22671	33460
C90	116680	44485	28329	22279	20273	18042	18182	20334	27529

Luminance Limiting Curve



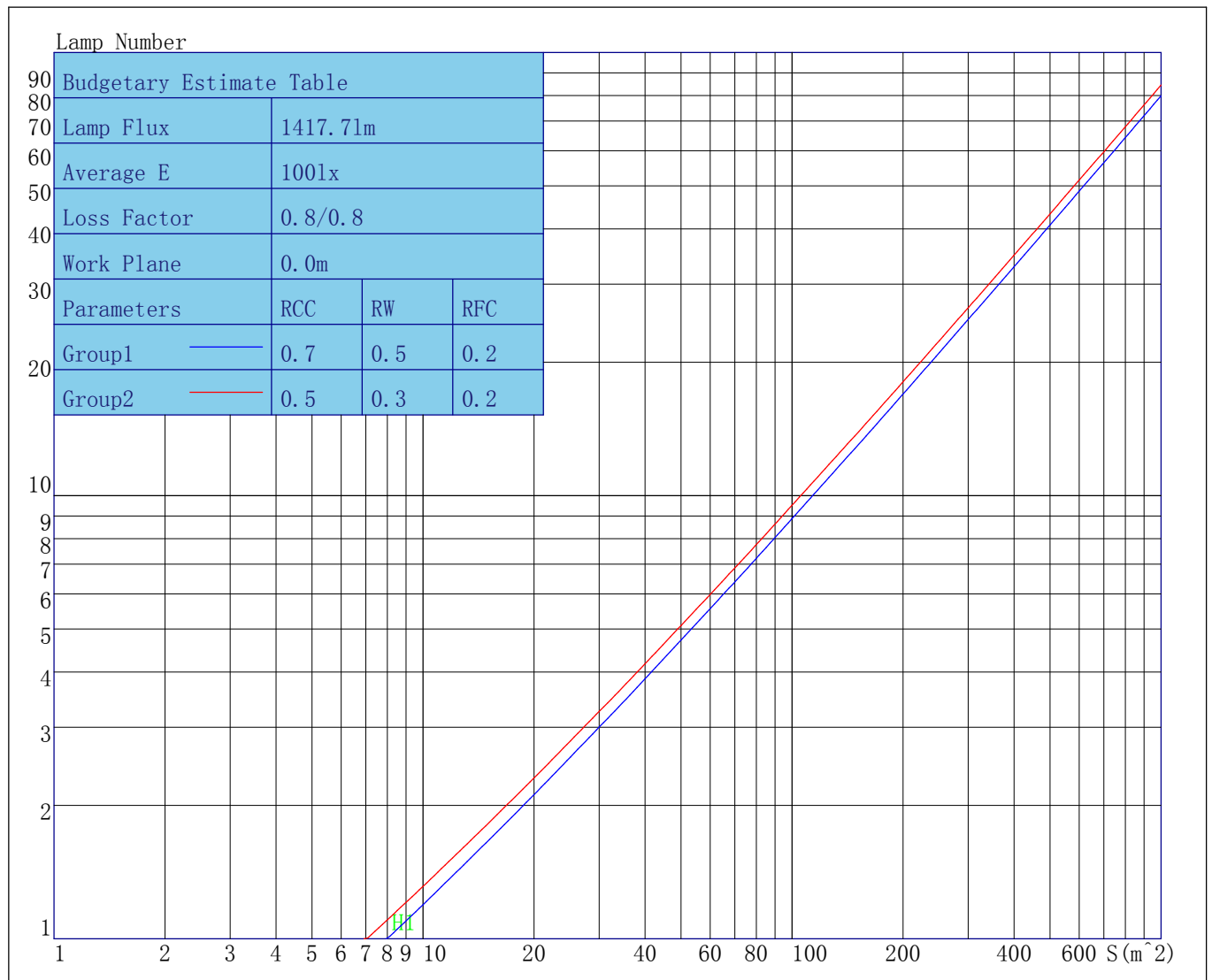
Luminous Size: Length(m)=0.000 Width(m)=-0.050 Height(m)=0.000 Area(m<sup>2</sup>)=0.001963  
 Luminous Type: Without Luminous Side  
 Luminous Curves: C0-C180 Color: — C90-C270 Color: —

# IES Indoor Report

Photometric Filename:MD02-17-2700K RA80 28D TKP.IES

## Indoor Budgetary Estimate Table

Lum. Name: MD02-17-2700K RA80 28D TKP	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: SHENZHEN NORMING LIGHTING CO.,LTD	Test Machine:GON-2000	Test Date: 2018/04/17



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:MD02-17-2700K RA80 28D TKP.IES

## Indoor Coefficient of Utilization Table

Lum. Name: MD02-17-2700K RA80 28D TKP	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: SHENZHEN NORMING LIGHTING CO.,LTD	Test Machine:GON-2000	Test Date: 2018/04/17

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	124	124	124	124	121	121	121	121	115	115	115	110	110	110	105	105	105	103
1	118	115	112	109	115	112	110	107	108	106	104	104	102	101	100	99	97	95
2	111	106	102	98	109	104	100	97	101	97	94	97	94	92	94	92	90	88
3	106	98	93	89	103	97	92	88	94	90	86	91	88	85	89	86	83	82
4	100	92	86	81	98	90	85	81	88	83	79	86	82	78	84	80	77	76
5	95	86	79	75	93	85	79	74	83	77	74	81	76	73	79	75	72	70
6	90	80	74	69	88	79	73	69	78	72	68	76	71	68	75	70	67	66
7	85	76	69	65	84	75	69	64	73	68	64	72	67	63	71	66	63	61
8	81	71	65	60	80	71	64	60	69	64	60	68	63	60	67	63	59	58
9	78	67	61	57	76	67	61	57	66	60	56	65	60	56	64	59	56	54
10	74	64	58	54	73	63	57	53	62	57	53	61	56	53	61	56	53	51

# IES Indoor Report

Photometric Filename:MD02-17-2700K RA80 28D TKP.IES

## Unified Glare Rating Table

Lum. Name: MD02-17-2700K RA80 28D TKP	Lum. Catalog:	Test ID:
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: SHENZHEN NORMING LIGHTING CO.,LTD	Test Machine:GON-2000	Test Date: 2018/04/17

## 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	25.0	26.1	25.4	26.5	26.8	24.5	25.6	24.9	25.9	26.3
	Y=3H	25.0	26.0	25.4	26.3	26.7	24.4	25.4	24.8	25.8	26.2
	Y=4H	25.0	25.9	25.4	26.3	26.7	24.4	25.4	24.9	25.8	26.2
	Y=6H	25.0	25.8	25.4	26.2	26.7	24.4	25.3	24.9	25.7	26.1
	Y=8H	25.0	25.8	25.4	26.2	26.7	24.4	25.3	24.9	25.7	26.1
	Y=12H	25.0	25.8	25.5	26.2	26.7	24.5	25.2	24.9	25.7	26.1
X=4H	Y=2H	24.8	25.7	25.2	26.1	26.5	24.3	25.2	24.7	25.6	26.0
	Y=3H	24.8	25.6	25.2	26.0	26.5	24.3	25.1	24.7	25.5	26.0
	Y=4H	24.8	25.6	25.3	26.0	26.5	24.3	25.0	24.8	25.5	26.0
	Y=6H	24.9	25.5	25.4	26.0	26.5	24.4	25.0	24.9	25.5	26.0
	Y=8H	25.0	25.6	25.5	26.0	26.5	24.4	25.0	24.9	25.5	26.0
	Y=12H	25.0	25.6	25.6	26.1	26.6	24.5	25.0	25.0	25.5	26.0
X=8H	Y=4H	24.7	25.3	25.2	25.8	26.3	24.2	24.8	24.7	25.3	25.8
	Y=6H	24.9	25.4	25.4	25.9	26.5	24.4	24.9	24.9	25.4	26.0
	Y=8H	25.0	25.5	25.5	26.0	26.5	24.5	24.9	25.0	25.5	26.0
	Y=12H	25.2	25.6	25.7	26.1	26.7	24.6	25.0	25.1	25.5	26.1
X=12H	Y=4H	24.7	25.2	25.2	25.7	26.3	24.2	24.7	24.7	25.2	25.7
	Y=6H	24.9	25.3	25.4	25.8	26.4	24.3	24.8	24.9	25.3	25.9
	Y=8H	25.0	25.4	25.5	25.9	26.5	24.5	24.9	25.0	25.4	26.0
Variations with the objerver position at spacings											
S=1.0H	0.2/-0.2					0.3/-0.3					
S=1.5H	0.4/-0.4					0.4/-0.4					
S=2.0H	0.6/-0.5					0.7/-0.6					
Reduced UGR Table:											
Nordic Standard Table:	BKO					BKO					
Correction Value	0.7					0.7					

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

# IES Indoor Report

Photometric Filename:MD02-17-2700K RA80 28D TKP.IES

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## Candela Tabulation

V/H	C0.0	C90.0	C180.0	C270.0
$\gamma$ 0.0	2942.80	2942.80	2942.80	2942.80
$\gamma$ 1.0	2962.35	2874.79	2908.28	2864.53
$\gamma$ 2.0	2914.47	2796.98	2815.49	2797.57
$\gamma$ 3.0	2815.48	2686.48	2688.53	2688.92
$\gamma$ 4.0	2689.00	2533.19	2541.77	2570.57
$\gamma$ 5.0	2540.57	2377.03	2383.51	2425.93
$\gamma$ 6.0	2382.42	2223.66	2213.67	2263.93
$\gamma$ 7.0	2210.01	2048.55	2039.66	2096.50
$\gamma$ 8.0	2037.72	1883.11	1873.11	1930.46
$\gamma$ 9.0	1880.55	1738.96	1723.85	1777.08
$\gamma$ 10.0	1742.87	1617.47	1601.84	1648.99
$\gamma$ 11.0	1620.56	1513.33	1502.62	1543.05
$\gamma$ 12.0	1519.73	1422.58	1408.00	1450.56
$\gamma$ 13.0	1428.64	1345.30	1321.97	1364.34
$\gamma$ 14.0	1348.15	1281.37	1250.03	1288.83
$\gamma$ 15.0	1280.00	1223.20	1189.19	1229.09
$\gamma$ 16.0	1223.50	1170.69	1135.05	1170.32
$\gamma$ 17.0	1171.31	1120.46	1083.11	1116.91
$\gamma$ 18.0	1123.86	1073.10	1033.86	1066.45
$\gamma$ 19.0	1074.92	1026.35	986.13	1017.93
$\gamma$ 20.0	1028.26	982.44	939.57	971.76
$\gamma$ 21.0	981.23	937.40	893.07	923.83
$\gamma$ 22.0	934.04	895.15	849.73	877.61
$\gamma$ 23.0	887.75	851.72	807.69	836.31
$\gamma$ 24.0	842.49	809.20	767.59	793.78
$\gamma$ 25.0	800.36	766.86	726.09	750.71
$\gamma$ 26.0	757.63	723.19	687.10	707.36
$\gamma$ 27.0	715.54	679.37	646.35	666.19
$\gamma$ 28.0	673.07	638.28	612.94	629.34
$\gamma$ 29.0	633.53	606.08	588.48	601.52
$\gamma$ 30.0	604.76	576.50	563.65	575.74
$\gamma$ 31.0	573.66	548.93	542.94	554.41
$\gamma$ 32.0	549.96	525.16	522.38	530.68
$\gamma$ 33.0	525.29	502.89	504.95	512.27
$\gamma$ 34.0	504.54	485.60	489.55	497.45
$\gamma$ 35.0	487.62	470.59	471.85	481.76
$\gamma$ 36.0	473.32	454.19	449.45	464.07
$\gamma$ 37.0	457.14	432.72	421.42	439.95
$\gamma$ 38.0	434.98	406.17	391.70	411.73
$\gamma$ 39.0	407.37	374.81	358.18	379.73
$\gamma$ 40.0	377.44	341.30	323.37	347.72
$\gamma$ 41.0	345.51	306.36	287.32	312.22
$\gamma$ 42.0	308.47	270.03	250.14	277.05
$\gamma$ 43.0	272.73	233.47	213.70	241.96
$\gamma$ 44.0	235.40	197.71	178.64	206.62
$\gamma$ 45.0	198.03	162.00	145.15	172.94
$\gamma$ 46.0	162.40	129.11	116.39	140.10

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# IES Indoor Report

Photometric Filename:MD02-17-2700K RA80 28D TKP.IES

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## Candela Tabulation - (Cont.)

V/H	C0.0	C90.0	C180.0	C270.0
γ 47.0	129.80	99.51	92.54	111.55
γ 48.0	100.86	77.90	76.31	89.09
γ 49.0	80.23	63.37	65.00	73.43
γ 50.0	65.52	56.15	58.31	64.98
γ 51.0	57.48	49.07	51.88	58.24
γ 52.0	50.88	42.52	46.12	51.88
γ 53.0	43.82	38.09	41.70	46.89
γ 54.0	39.60	34.61	37.79	42.80
γ 55.0	36.15	31.90	34.62	39.27
γ 56.0	33.27	29.25	31.56	35.87
γ 57.0	30.49	26.95	28.98	32.75
γ 58.0	28.14	25.28	26.69	30.24
γ 59.0	26.12	23.43	24.79	27.74
γ 60.0	24.36	21.87	23.25	25.64
γ 61.0	22.83	20.79	21.88	23.93
γ 62.0	21.60	19.65	20.42	22.42
γ 63.0	20.54	18.63	19.12	20.90
γ 64.0	19.50	17.81	18.11	19.80
γ 65.0	18.57	16.82	16.78	18.33
γ 66.0	17.59	16.17	15.64	17.36
γ 67.0	16.48	14.90	14.65	15.99
γ 68.0	15.56	14.03	13.53	14.86
γ 69.0	14.30	12.82	12.57	14.06
γ 70.0	13.18	12.12	11.85	12.84
γ 71.0	12.40	11.52	11.29	12.23
γ 72.0	11.80	10.82	10.84	11.71
γ 73.0	11.19	10.27	10.44	11.28
γ 74.0	10.56	9.76	10.04	10.87
γ 75.0	10.08	9.24	9.56	10.41
γ 76.0	9.56	8.79	9.15	10.03
γ 77.0	9.09	8.27	8.80	9.63
γ 78.0	8.57	7.76	8.32	9.22
γ 79.0	8.14	7.24	7.92	8.80
γ 80.0	7.73	6.93	7.51	8.37
γ 81.0	7.21	6.37	7.12	8.08
γ 82.0	6.82	6.06	6.73	7.66
γ 83.0	6.46	5.59	6.37	7.20
γ 84.0	6.06	5.28	5.94	6.77
γ 85.0	5.73	4.71	5.52	6.46
γ 86.0	5.25	4.22	5.01	6.08
γ 87.0	4.76	3.76	4.39	5.71
γ 88.0	4.25	3.04	3.69	4.82
γ 89.0	3.69	2.37	2.75	4.31
γ 90.0	3.07	2.23	2.43	3.28
γ 91.0	3.03	2.10	2.31	3.04
γ 92.0	2.79	2.00	2.24	2.88
γ 93.0	2.68	1.98	2.04	2.73

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# IES Indoor Report

Photometric Filename:MD02-17-2700K RA80 28D TKP.IES

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## Candela Tabulation - (Cont.)

V/H	C0.0	C90.0	C180.0	C270.0
$\gamma$ 94.0	2.58	1.80	1.98	2.64
$\gamma$ 95.0	2.43	1.63	1.79	2.47
$\gamma$ 96.0	2.25	1.62	1.77	2.34
$\gamma$ 97.0	2.21	1.43	1.68	2.16
$\gamma$ 98.0	1.97	1.43	1.60	2.10
$\gamma$ 99.0	2.03	1.36	1.48	2.06
$\gamma$ 100.0	1.82	1.32	1.44	1.97
$\gamma$ 101.0	1.91	1.26	1.36	1.92
$\gamma$ 102.0	1.70	1.19	1.26	1.75
$\gamma$ 103.0	1.68	1.09	1.33	1.67
$\gamma$ 104.0	1.59	1.11	1.27	1.70
$\gamma$ 105.0	1.55	1.13	1.29	1.59
$\gamma$ 106.0	1.56	1.04	1.29	1.63
$\gamma$ 107.0	1.54	1.06	1.22	1.52
$\gamma$ 108.0	1.46	0.99	1.25	1.59
$\gamma$ 109.0	1.52	1.04	1.19	1.56
$\gamma$ 110.0	1.49	1.11	1.24	1.61
$\gamma$ 111.0	1.43	1.07	1.24	1.58
$\gamma$ 112.0	1.45	1.14	1.29	1.59
$\gamma$ 113.0	1.44	1.08	1.32	1.55
$\gamma$ 114.0	1.47	1.13	1.39	1.60
$\gamma$ 115.0	1.44	1.13	1.42	1.64
$\gamma$ 116.0	1.43	1.14	1.47	1.59
$\gamma$ 117.0	1.46	1.18	1.57	1.67
$\gamma$ 118.0	1.43	1.26	1.61	1.71
$\gamma$ 119.0	1.49	1.28	1.62	1.75
$\gamma$ 120.0	1.51	1.33	1.74	1.82
$\gamma$ 121.0	1.56	1.35	1.80	1.99
$\gamma$ 122.0	1.61	1.35	1.85	1.95
$\gamma$ 123.0	1.71	1.44	1.99	2.04
$\gamma$ 124.0	1.73	1.61	2.07	2.09
$\gamma$ 125.0	1.95	1.63	2.18	2.25
$\gamma$ 126.0	1.99	1.77	2.28	2.24
$\gamma$ 127.0	2.08	1.93	2.45	2.38
$\gamma$ 128.0	2.07	2.00	2.51	2.50
$\gamma$ 129.0	2.21	2.12	2.60	2.54
$\gamma$ 130.0	2.28	2.23	2.71	2.67
$\gamma$ 131.0	2.50	2.35	2.87	2.79
$\gamma$ 132.0	2.56	2.53	3.04	3.01
$\gamma$ 133.0	2.71	2.58	3.22	3.03
$\gamma$ 134.0	2.78	2.74	3.41	3.24
$\gamma$ 135.0	3.01	2.91	3.54	3.37
$\gamma$ 136.0	3.11	3.04	3.67	3.55
$\gamma$ 137.0	3.27	3.17	3.90	3.64
$\gamma$ 138.0	3.47	3.38	4.07	3.87
$\gamma$ 139.0	3.61	3.57	4.27	4.07
$\gamma$ 140.0	3.80	3.65	4.46	4.25

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# IES Indoor Report

Photometric Filename:MD02-17-2700K RA80 28D TKP.IES

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## Candela Tabulation - (Cont.)

V/H	C0.0	C90.0	C180.0	C270.0
γ 141.0	3.93	3.89	4.61	4.43
γ 142.0	4.15	4.09	4.82	4.57
γ 143.0	4.38	4.26	5.01	4.70
γ 144.0	4.51	4.49	5.17	4.95
γ 145.0	4.65	4.65	5.33	5.12
γ 146.0	4.83	4.83	5.47	5.18
γ 147.0	4.99	4.99	5.70	5.40
γ 148.0	5.14	5.20	5.84	5.58
γ 149.0	5.38	5.27	5.88	5.69
γ 150.0	5.45	5.46	6.03	5.84
γ 151.0	5.59	5.62	6.28	5.97
γ 152.0	5.78	5.73	6.34	6.02
γ 153.0	5.87	5.86	6.50	6.10
γ 154.0	6.04	5.97	6.56	6.28
γ 155.0	6.21	6.11	6.70	6.47
γ 156.0	6.31	6.28	6.86	6.52
γ 157.0	6.42	6.35	6.97	6.66
γ 158.0	6.64	6.50	7.11	6.74
γ 159.0	6.72	6.53	7.18	6.80
γ 160.0	6.73	6.74	7.32	6.90
γ 161.0	7.05	6.88	7.41	6.97
γ 162.0	7.05	6.99	7.51	7.10
γ 163.0	7.21	7.04	7.51	7.19
γ 164.0	7.28	7.20	7.63	7.31
γ 165.0	7.39	7.30	7.78	7.36
γ 166.0	7.48	7.37	7.82	7.52
γ 167.0	7.64	7.54	7.90	7.52
γ 168.0	7.72	7.61	7.99	7.67
γ 169.0	7.82	7.64	8.04	7.72
γ 170.0	7.93	7.77	8.13	7.82
γ 171.0	7.97	7.90	8.18	7.84
γ 172.0	8.00	7.92	8.25	7.89
γ 173.0	8.11	7.97	8.26	7.99
γ 174.0	8.14	7.95	8.34	7.97
γ 175.0	8.15	8.04	8.31	8.04
γ 176.0	8.15	8.12	8.41	8.09
γ 177.0	8.25	8.15	8.43	8.11
γ 178.0	8.31	8.16	8.42	8.17
γ 179.0	8.30	8.21	8.46	8.12
γ 180.0	8.31	8.31	8.31	8.31

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