

# IES Indoor Report

Photometric Filename:MD17-13-C5-02 4000K RA80 40D.IES

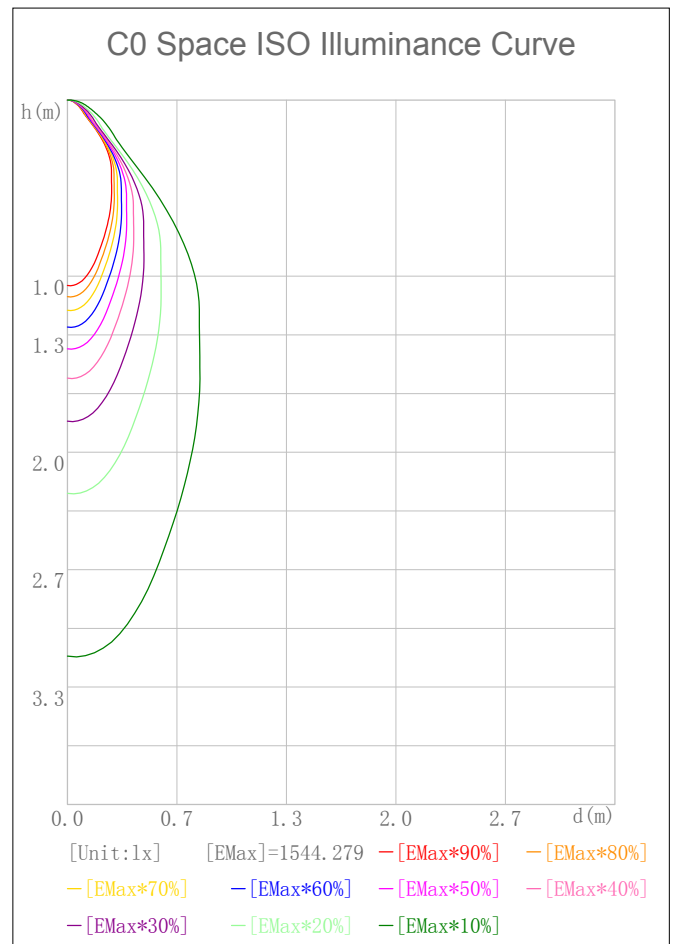
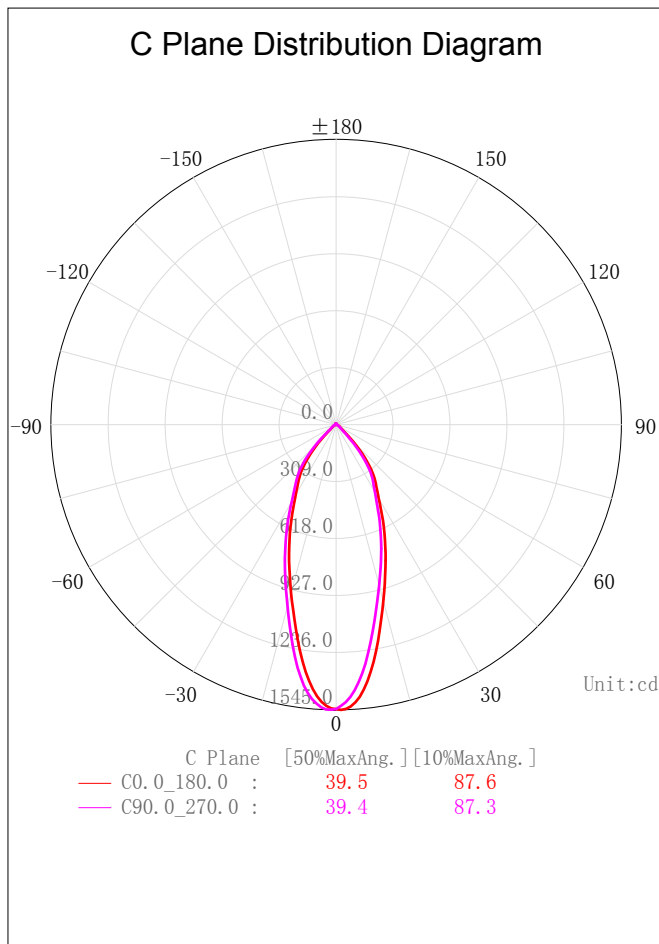
## Indoor Luminaire Photometric Data

### Description Information

Luminary Name: MD17-13-C5-02 4000K RA80 40D		Lum. Catalog:	Test ID: 01
Lamp Name:		Lamp Catalog: LED	Test Date: 2020/09/28
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*0.080m		Lum. Area (m2): 0.016	Lum. W(kg): 0.000
Test System: C, $\gamma$	Test Step: C=90.0 $\gamma$ =1.0	Temp. (°C): 25	Humidity(%): 50.0

### Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 1057.480	Luminary Flux(lm): 1057.480	Field Angle(10%Imax): 87.6(°)	
Rated Power(W):	Luminary Efficiency: 100.00%	Down Lumens&Percent: 1042.012lm 98.54%	
Rated Voltage(V):	Luminary EER(lm/W): 85.006	Up Lumens&Percent: 15.468lm 1.46%	
Tested Power(W): 12.440	Max. Candela(cd): 1544.985	S/MH: C0_a180=0.610 C90_270=0.607	
Lamps' Inside: 1	Max Cand@Ang. (°): C=0.0 $\gamma$ =1.0	CIE Type: Semi-Direct	
Tested Electrics (V, A, pf): 240.0, 0.054, 0.944	Beam Angle (50%Imax): 39.5(°)	ErP $\phi$ use(90°): 942.161lm	
Lamp Size (W*L*H): 0.050m*0.000m*0.080m	Left=-19.2°, Right=20.3°	IRF(%): 318.986	



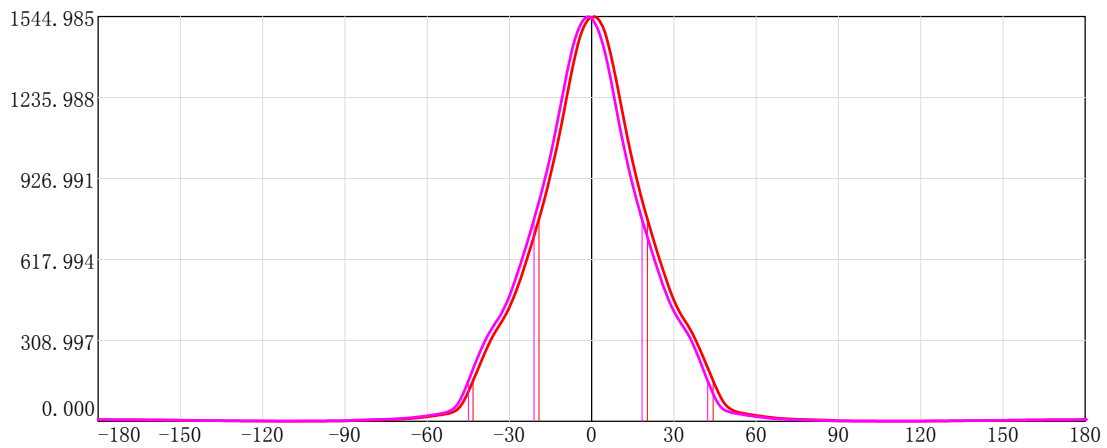
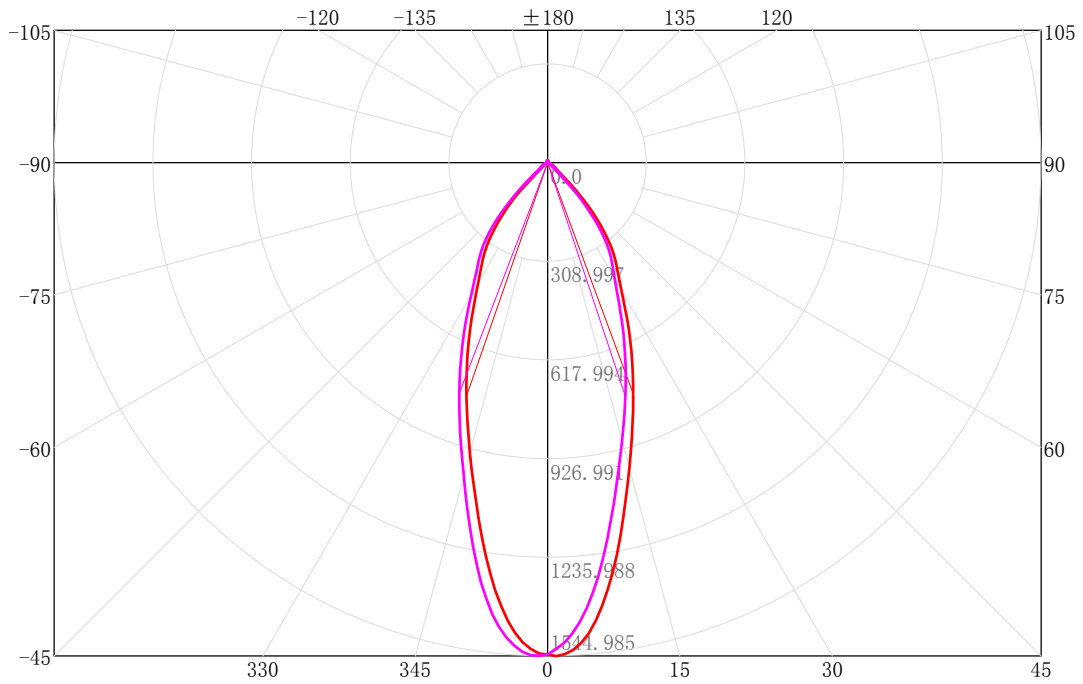
# IES Indoor Report

Photometric Filename:MD17-13-C5-02 4000K RA80 40D.IES

## 2D Plane Light Intensity Distribution Curve

Lum. Name: MD17-13-C5-02 4000K RA80 40D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting Co.Ltd	Test Machine:GON-2000	Test Date: 2020/09/28

C Plane Distribution Diagram



C Plane	[50%MaxAng.]	[10%MaxAng.]
— C0.0_180.0 :	39.5	87.6
— C90.0_270.0 :	39.4	87.3

Unit:cd

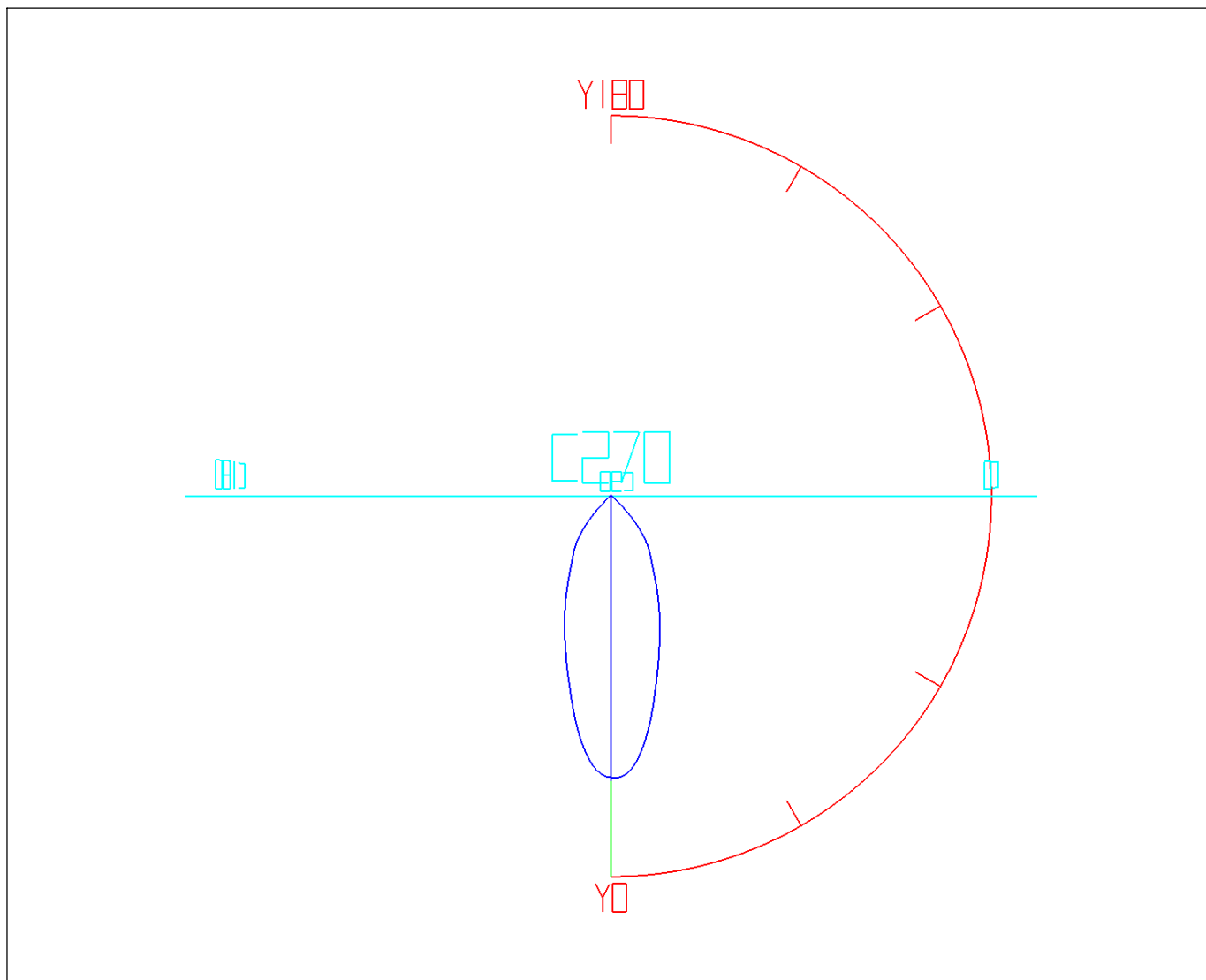
# IES Indoor Report

Photometric Filename:MD17-13-C5-02 4000K RA80 40D.IES

## 3D Light Intensity Distribution Modal

Lum. Name: MD17-13-C5-02 4000K RA80 40D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting Co.Ltd	Test Machine:GON-2000	Test Date: 2020/09/28

## 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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## Zonal Flux Tabulation

Zone( $\gamma$ )	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp	Zone( $\gamma$ )	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
0.0-1.0	1.47	1.47	0.14	0.14	47.0-48.0	5.90	980.34	0.56	92.71
1.0-2.0	4.40	5.87	0.42	0.56	48.0-49.0	4.84	985.18	0.46	93.16
2.0-3.0	7.26	13.14	0.69	1.24	49.0-50.0	4.07	989.25	0.39	93.55
3.0-4.0	10.02	23.16	0.95	2.19	50.0-51.0	3.55	992.81	0.34	93.88
4.0-5.0	12.63	35.79	1.19	3.38	51.0-52.0	3.20	996.01	0.30	94.19
5.0-6.0	15.06	50.85	1.42	4.81	52.0-53.0	2.95	998.96	0.28	94.47
6.0-7.0	17.27	68.12	1.63	6.44	53.0-54.0	2.75	1001.71	0.26	94.73
7.0-8.0	19.23	87.35	1.82	8.26	54.0-55.0	2.60	1004.31	0.25	94.97
8.0-9.0	20.95	108.31	1.98	10.24	55.0-56.0	2.47	1006.78	0.23	95.21
9.0-10.0	22.44	130.75	2.12	12.36	56.0-57.0	2.34	1009.12	0.22	95.43
10.0-11.0	23.70	154.45	2.24	14.61	57.0-58.0	2.22	1011.34	0.21	95.64
11.0-12.0	24.76	179.21	2.34	16.95	58.0-59.0	2.10	1013.44	0.20	95.84
12.0-13.0	25.64	204.85	2.42	19.37	59.0-60.0	1.98	1015.42	0.19	96.02
13.0-14.0	26.39	231.24	2.50	21.87	60.0-61.0	1.86	1017.28	0.18	96.20
14.0-15.0	27.02	258.27	2.56	24.42	61.0-62.0	1.75	1019.04	0.17	96.36
15.0-16.0	27.54	285.80	2.60	27.03	62.0-63.0	1.64	1020.68	0.16	96.52
16.0-17.0	27.95	313.75	2.64	29.67	63.0-64.0	1.53	1022.21	0.15	96.67
17.0-18.0	28.27	342.02	2.67	32.34	64.0-65.0	1.43	1023.64	0.13	96.80
18.0-19.0	28.48	370.51	2.69	35.04	65.0-66.0	1.33	1024.97	0.13	96.93
19.0-20.0	28.59	399.10	2.70	37.74	66.0-67.0	1.23	1026.20	0.12	97.04
20.0-21.0	28.60	427.70	2.70	40.44	67.0-68.0	1.15	1027.35	0.11	97.15
21.0-22.0	28.50	456.20	2.70	43.14	68.0-69.0	1.08	1028.43	0.10	97.25
22.0-23.0	28.32	484.52	2.68	45.82	69.0-70.0	1.02	1029.45	0.10	97.35
23.0-24.0	28.04	512.55	2.65	48.47	70.0-71.0	0.97	1030.42	0.09	97.44
24.0-25.0	27.67	540.22	2.62	51.09	71.0-72.0	0.92	1031.34	0.09	97.53
25.0-26.0	27.20	567.42	2.57	53.66	72.0-73.0	0.87	1032.21	0.08	97.61
26.0-27.0	26.67	594.09	2.52	56.18	73.0-74.0	0.83	1033.04	0.08	97.69
27.0-28.0	26.08	620.17	2.47	58.65	74.0-75.0	0.80	1033.84	0.08	97.76
28.0-29.0	25.48	645.65	2.41	61.06	75.0-76.0	0.76	1034.60	0.07	97.84
29.0-30.0	24.91	670.56	2.36	63.41	76.0-77.0	0.73	1035.32	0.07	97.90
30.0-31.0	24.37	694.93	2.30	65.72	77.0-78.0	0.70	1036.02	0.07	97.97
31.0-32.0	23.90	718.83	2.26	67.98	78.0-79.0	0.67	1036.69	0.06	98.03
32.0-33.0	23.47	742.30	2.22	70.20	79.0-80.0	0.64	1037.33	0.06	98.09
33.0-34.0	23.07	765.37	2.18	72.38	80.0-81.0	0.61	1037.95	0.06	98.15
34.0-35.0	22.63	787.99	2.14	74.52	81.0-82.0	0.59	1038.53	0.06	98.21
35.0-36.0	22.09	810.08	2.09	76.60	82.0-83.0	0.56	1039.09	0.05	98.26
36.0-37.0	21.40	831.48	2.02	78.63	83.0-84.0	0.53	1039.62	0.05	98.31
37.0-38.0	20.55	852.03	1.94	80.57	84.0-85.0	0.50	1040.12	0.05	98.36
38.0-39.0	19.50	871.52	1.84	82.42	85.0-86.0	0.47	1040.58	0.04	98.40
39.0-40.0	18.28	889.80	1.73	84.14	86.0-87.0	0.43	1041.01	0.04	98.44
40.0-41.0	16.91	906.71	1.60	85.74	87.0-88.0	0.38	1041.39	0.04	98.48
41.0-42.0	15.40	922.11	1.46	87.20	88.0-89.0	0.33	1041.72	0.03	98.51
42.0-43.0	13.79	935.90	1.30	88.50	89.0-90.0	0.29	1042.01	0.03	98.54
43.0-44.0	12.11	948.01	1.14	89.65	90.0-91.0	0.26	1042.27	0.02	98.56
44.0-45.0	10.41	958.42	0.98	90.63	91.0-92.0	0.24	1042.51	0.02	98.58
45.0-46.0	8.77	967.19	0.83	91.46	92.0-93.0	0.23	1042.74	0.02	98.61
46.0-47.0	7.24	974.44	0.68	92.15	93.0-94.0	0.22	1042.96	0.02	98.63

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## Zonal Flux Tabulation - (Cont.)

Zone( $\gamma$ )	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp	Zone( $\gamma$ )	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
94.0-95.0	0.21	1043.17	0.02	98.65	141.0-142.0	0.24	1051.00	0.02	99.39
95.0-96.0	0.20	1043.37	0.02	98.67	142.0-143.0	0.24	1051.25	0.02	99.41
96.0-97.0	0.19	1043.56	0.02	98.68	143.0-144.0	0.24	1051.49	0.02	99.43
97.0-98.0	0.18	1043.74	0.02	98.70	144.0-145.0	0.24	1051.73	0.02	99.46
98.0-99.0	0.17	1043.92	0.02	98.72	145.0-146.0	0.25	1051.98	0.02	99.48
99.0-100.0	0.17	1044.09	0.02	98.73	146.0-147.0	0.25	1052.23	0.02	99.50
100.0-101.0	0.16	1044.25	0.02	98.75	147.0-148.0	0.25	1052.47	0.02	99.53
101.0-102.0	0.16	1044.40	0.01	98.76	148.0-149.0	0.25	1052.72	0.02	99.55
102.0-103.0	0.15	1044.55	0.01	98.78	149.0-150.0	0.25	1052.97	0.02	99.57
103.0-104.0	0.15	1044.70	0.01	98.79	150.0-151.0	0.24	1053.21	0.02	99.60
104.0-105.0	0.14	1044.84	0.01	98.80	151.0-152.0	0.24	1053.45	0.02	99.62
105.0-106.0	0.14	1044.98	0.01	98.82	152.0-153.0	0.24	1053.69	0.02	99.64
106.0-107.0	0.14	1045.12	0.01	98.83	153.0-154.0	0.24	1053.93	0.02	99.66
107.0-108.0	0.13	1045.25	0.01	98.84	154.0-155.0	0.23	1054.16	0.02	99.69
108.0-109.0	0.13	1045.38	0.01	98.86	155.0-156.0	0.23	1054.39	0.02	99.71
109.0-110.0	0.13	1045.51	0.01	98.87	156.0-157.0	0.22	1054.61	0.02	99.73
110.0-111.0	0.13	1045.64	0.01	98.88	157.0-158.0	0.22	1054.83	0.02	99.75
111.0-112.0	0.13	1045.77	0.01	98.89	158.0-159.0	0.21	1055.04	0.02	99.77
112.0-113.0	0.13	1045.90	0.01	98.90	159.0-160.0	0.21	1055.25	0.02	99.79
113.0-114.0	0.13	1046.03	0.01	98.92	160.0-161.0	0.20	1055.45	0.02	99.81
114.0-115.0	0.13	1046.16	0.01	98.93	161.0-162.0	0.19	1055.64	0.02	99.83
115.0-116.0	0.13	1046.29	0.01	98.94	162.0-163.0	0.19	1055.83	0.02	99.84
116.0-117.0	0.13	1046.42	0.01	98.95	163.0-164.0	0.18	1056.00	0.02	99.86
117.0-118.0	0.13	1046.55	0.01	98.97	164.0-165.0	0.17	1056.17	0.02	99.88
118.0-119.0	0.14	1046.69	0.01	98.98	165.0-166.0	0.16	1056.33	0.02	99.89
119.0-120.0	0.14	1046.83	0.01	98.99	166.0-167.0	0.15	1056.48	0.01	99.91
120.0-121.0	0.14	1046.97	0.01	99.01	167.0-168.0	0.14	1056.63	0.01	99.92
121.0-122.0	0.15	1047.12	0.01	99.02	168.0-169.0	0.13	1056.76	0.01	99.93
122.0-123.0	0.15	1047.27	0.01	99.03	169.0-170.0	0.12	1056.88	0.01	99.94
123.0-124.0	0.15	1047.42	0.01	99.05	170.0-171.0	0.11	1056.99	0.01	99.95
124.0-125.0	0.16	1047.58	0.01	99.06	171.0-172.0	0.10	1057.09	0.01	99.96
125.0-126.0	0.16	1047.74	0.02	99.08	172.0-173.0	0.09	1057.18	0.01	99.97
126.0-127.0	0.17	1047.91	0.02	99.09	173.0-174.0	0.08	1057.26	0.01	99.98
127.0-128.0	0.17	1048.08	0.02	99.11	174.0-175.0	0.07	1057.33	0.01	99.99
128.0-129.0	0.18	1048.25	0.02	99.13	175.0-176.0	0.05	1057.38	0.01	99.99
129.0-130.0	0.18	1048.43	0.02	99.14	176.0-177.0	0.04	1057.42	0.00	99.99
130.0-131.0	0.19	1048.62	0.02	99.16	177.0-178.0	0.03	1057.46	0.00	100.00
131.0-132.0	0.19	1048.81	0.02	99.18	178.0-179.0	0.02	1057.47	0.00	100.00
132.0-133.0	0.20	1049.01	0.02	99.20	179.0-180.0	0.01	1057.48	0.00	100.00
133.0-134.0	0.20	1049.21	0.02	99.22					
134.0-135.0	0.21	1049.42	0.02	99.24					
135.0-136.0	0.21	1049.63	0.02	99.26					
136.0-137.0	0.22	1049.85	0.02	99.28					
137.0-138.0	0.22	1050.07	0.02	99.30					
138.0-139.0	0.23	1050.30	0.02	99.32					
139.0-140.0	0.23	1050.53	0.02	99.34					
140.0-141.0	0.24	1050.77	0.02	99.37					

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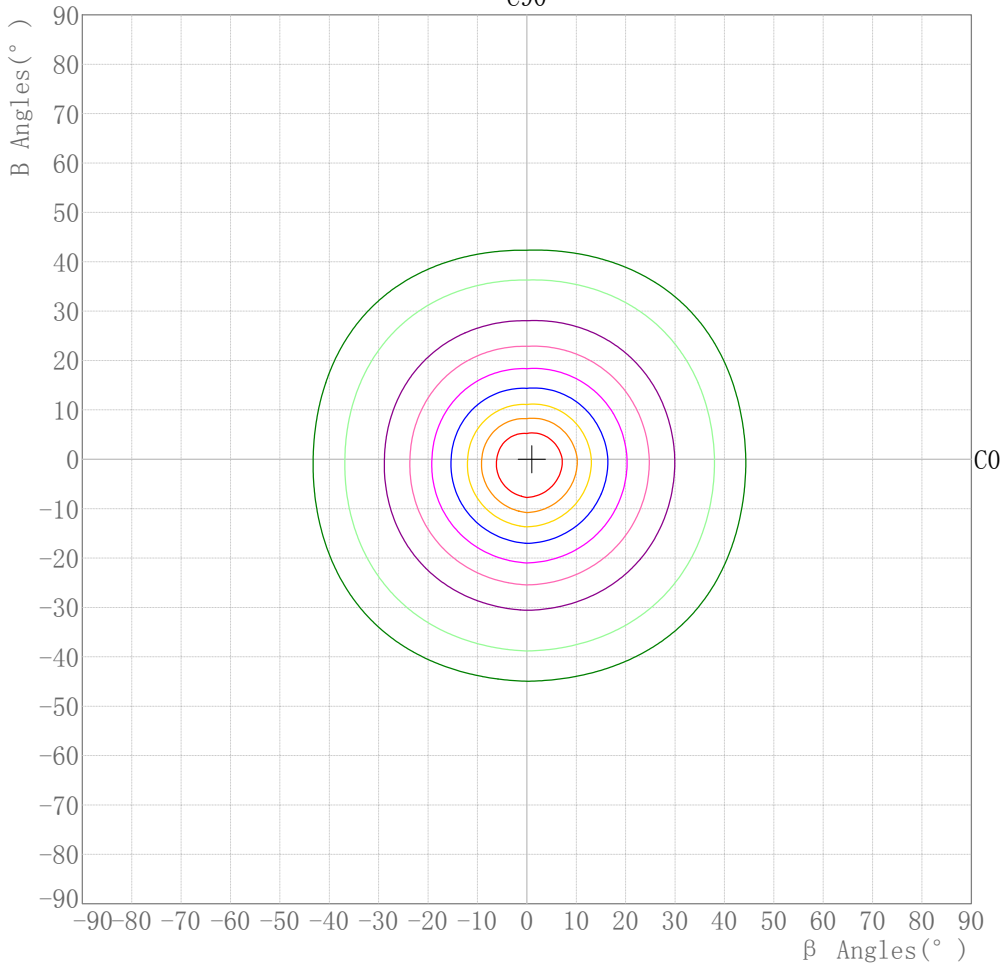
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## Rectangle ISO Lighting Intensity Diagram

Lum. Name: MD17-13-C5-02 4000K RA80 40D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting Co.Ltd	Test Machine:GON-2000	Test Date: 2020/09/28

### ISO Lighting Intensity Curve

C90



Maximum Light Intensity(cd): 1544.98

Maximum Cand.@Angle: H=1.0°,V=0.0°

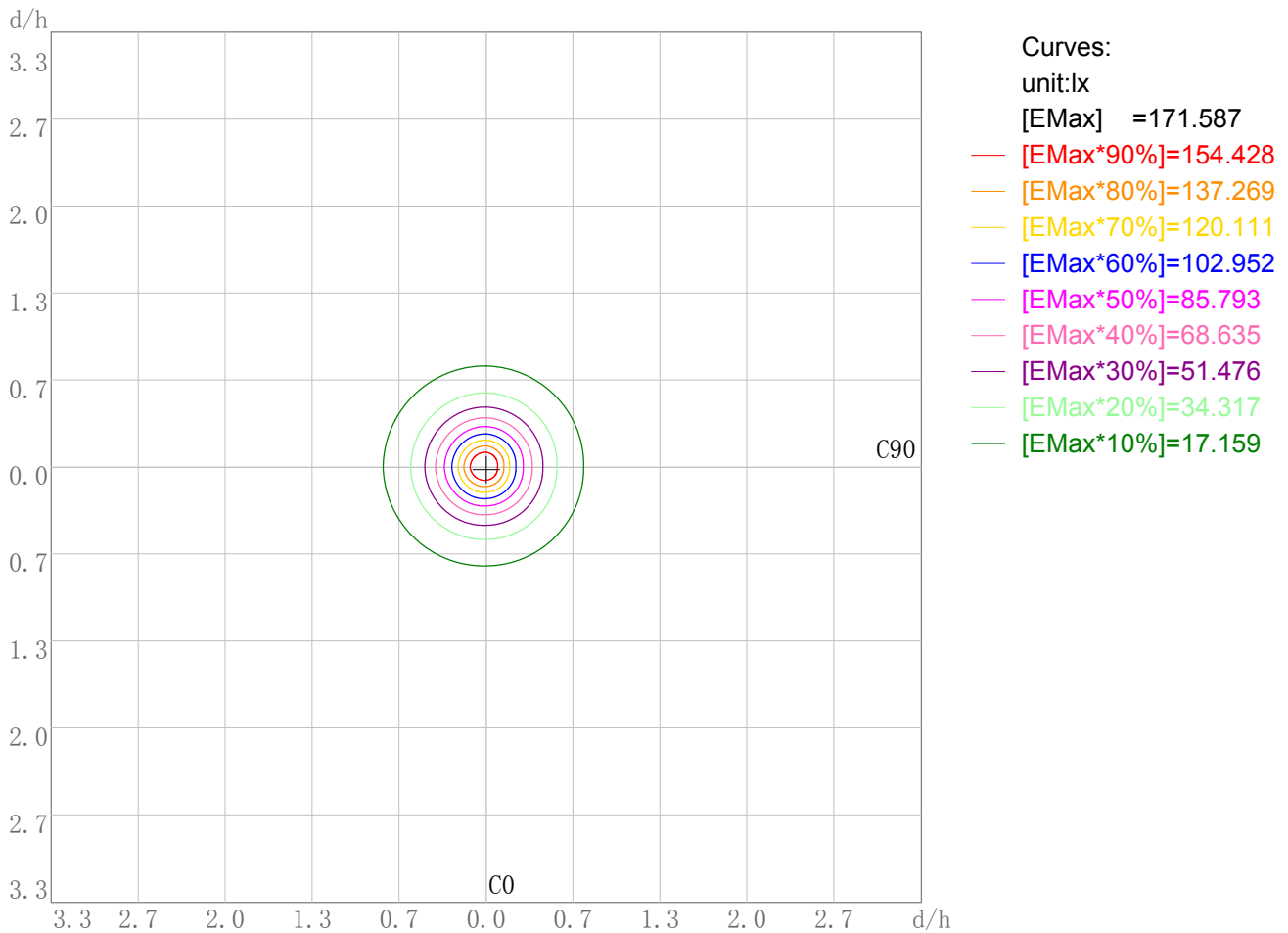
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## Plane ISO-Illuminance Diagram

Lum. Name: MD17-13-C5-02 4000K RA80 40D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting Co.Ltd	Test Machine:GON-2000	Test Date: 2020/09/28

### Plane ISO-Illuminance Curve



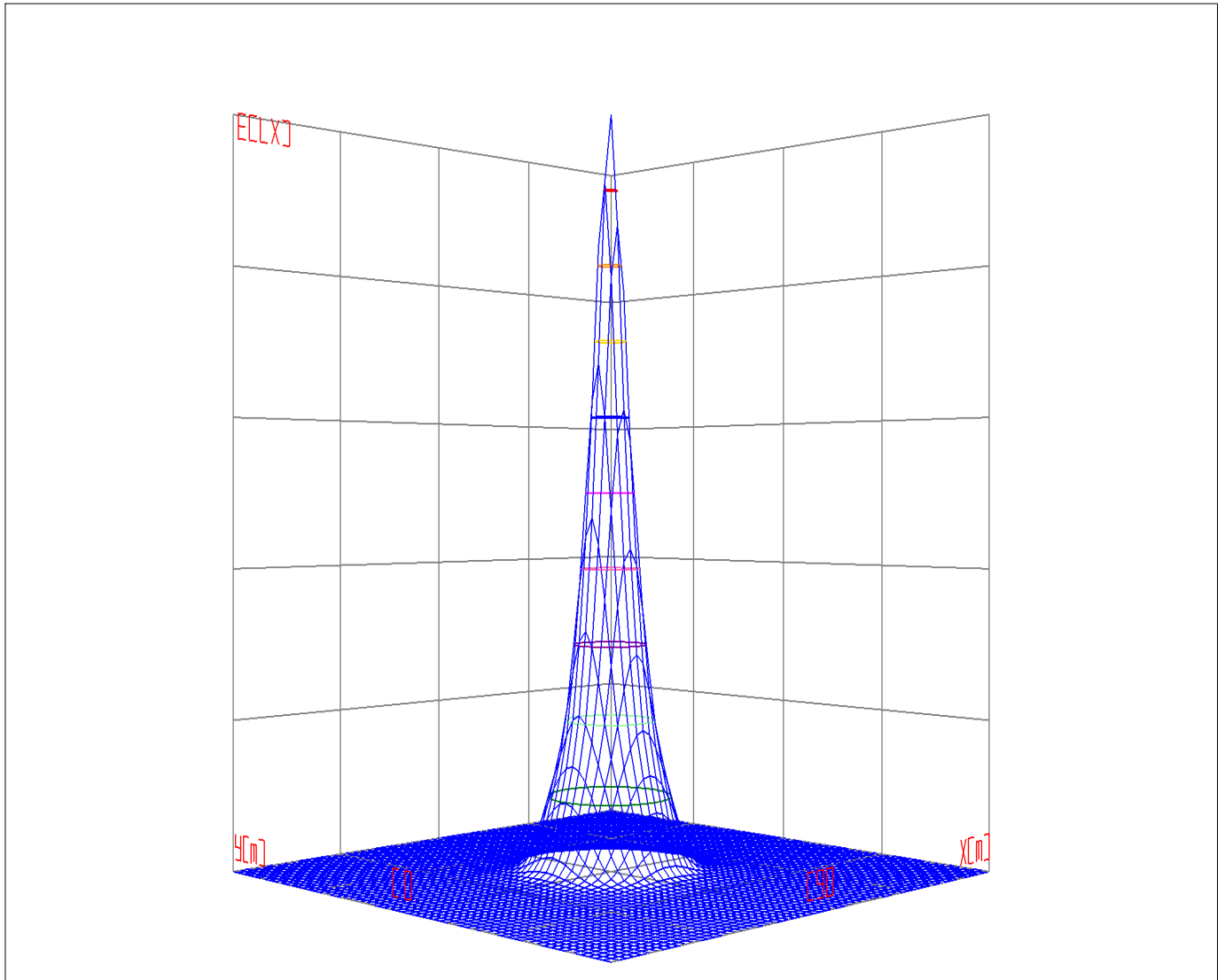
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## 3D Plane ISO Illuminance Diagram

Lum. Name: MD17-13-C5-02 4000K RA80 40D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting Co.Ltd	Test Machine:GON-2000	Test Date: 2020/09/28

### 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



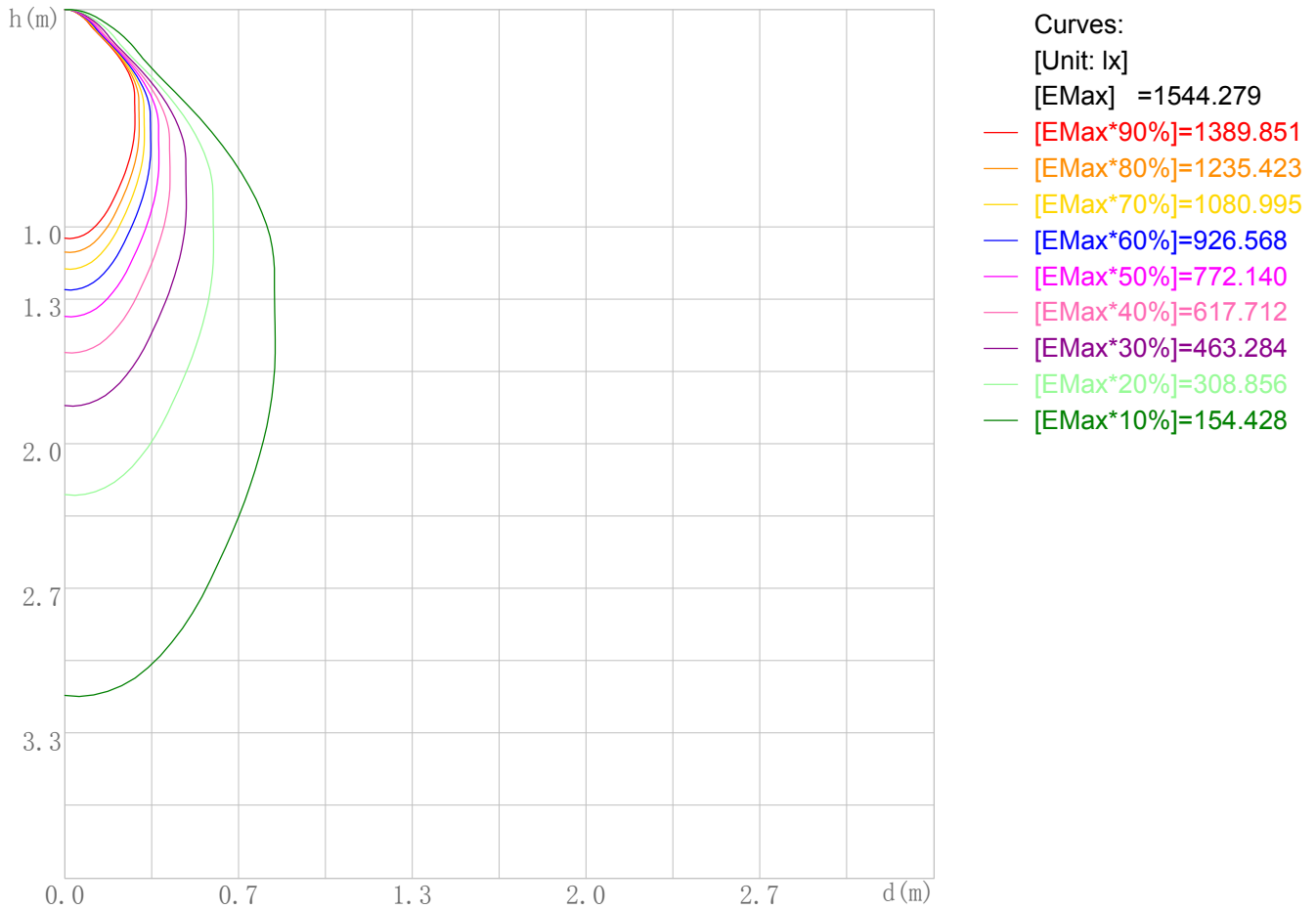
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## Space ISO Illuminance Diagram

Lum. Name: MD17-13-C5-02 4000K RA80 40D	Lum. Catalog: LED	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting Co.Ltd	Test Machine:GON-2000	Test Date: 2020/09/28

Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:1544.28lx,1.0deg  
Plane Maximum Lighting Intensity and @Angle:1544.985cd,0deg

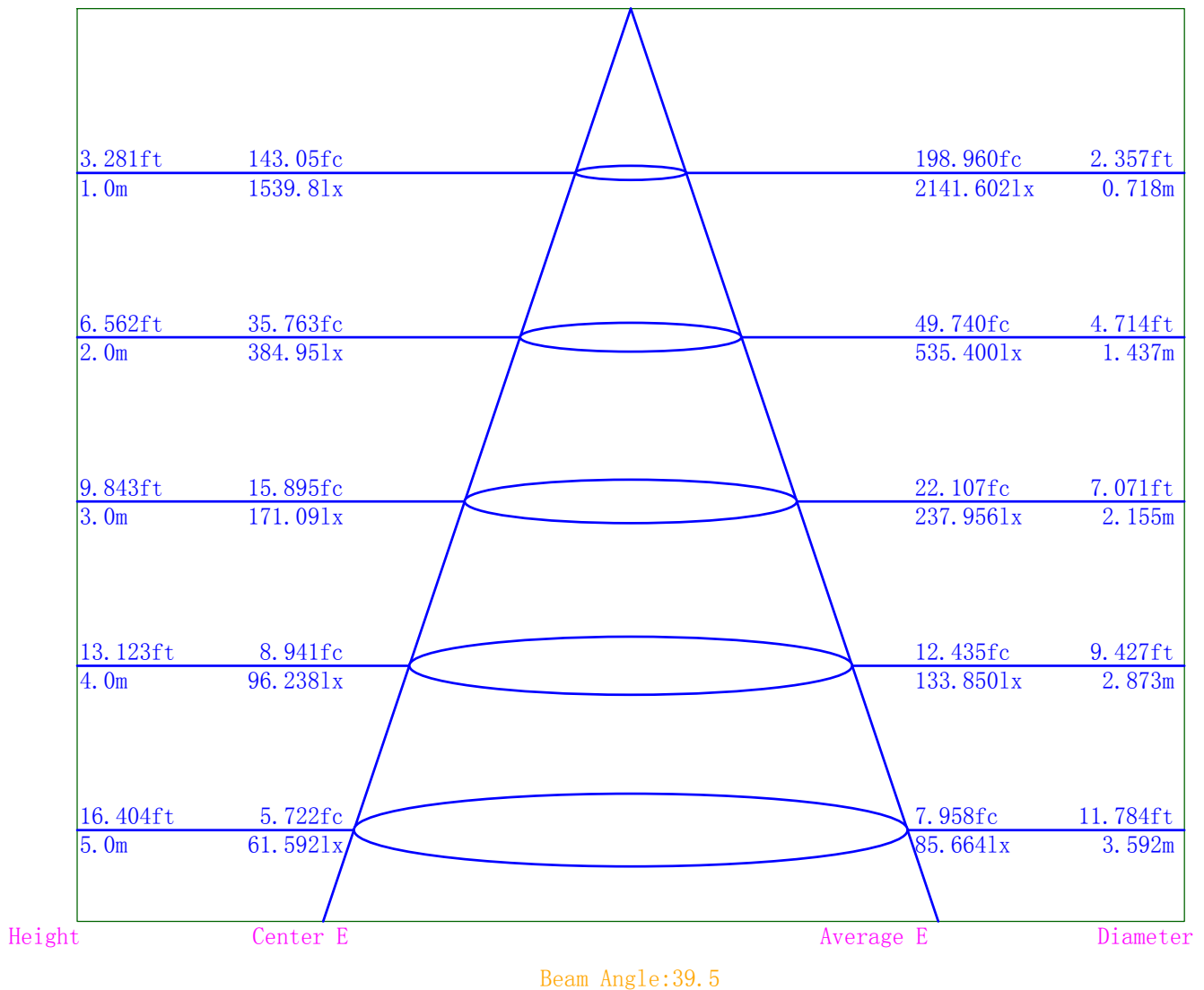
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## Illuminance-Distance Diagram

Lum. Name: MD17-13-C5-02 4000K RA80 40D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting Co.Ltd	Test Machine:GON-2000	Test Date: 2020/09/28

Illuminance-Distance Curve



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Photometric Filename:MD17-13-C5-02 4000K RA80 40D.IES

## Indoor Luminance Limiting Curves

Lum. Name: MD17-13-C5-02 4000K RA80 40D	Lum. Catalog: LED	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting Co.Ltd	Test Machine:GON-2000	Test Date: 2020/09/28

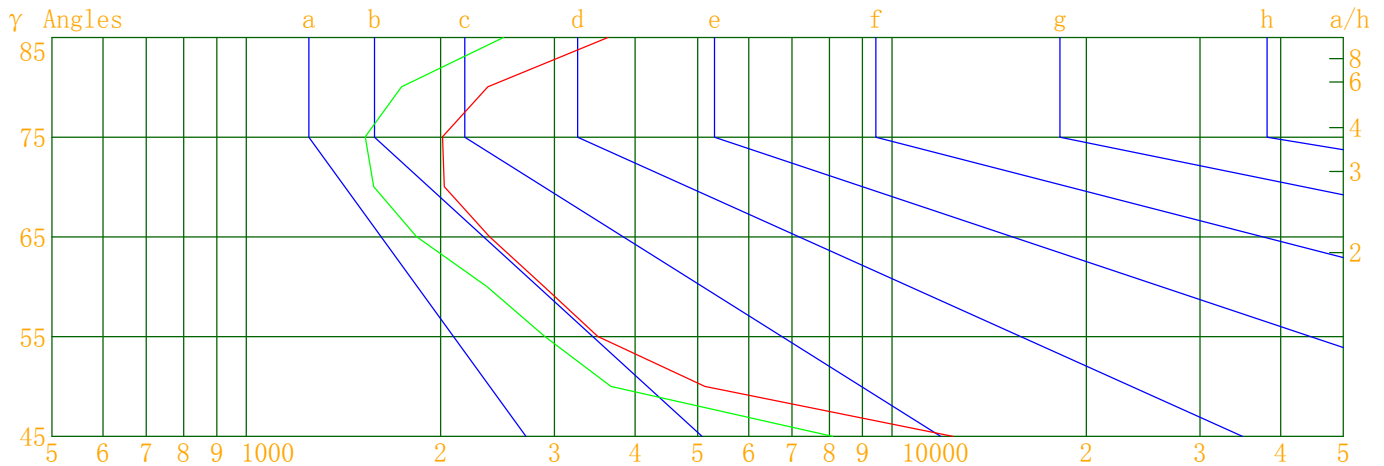
Glare Grade Table

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	12426	5133	3502	2892	2380	2026	2014	2367	3631
C90	8095	3671	2900	2359	1834	1575	1528	1740	2500

Luminance Limiting Curve



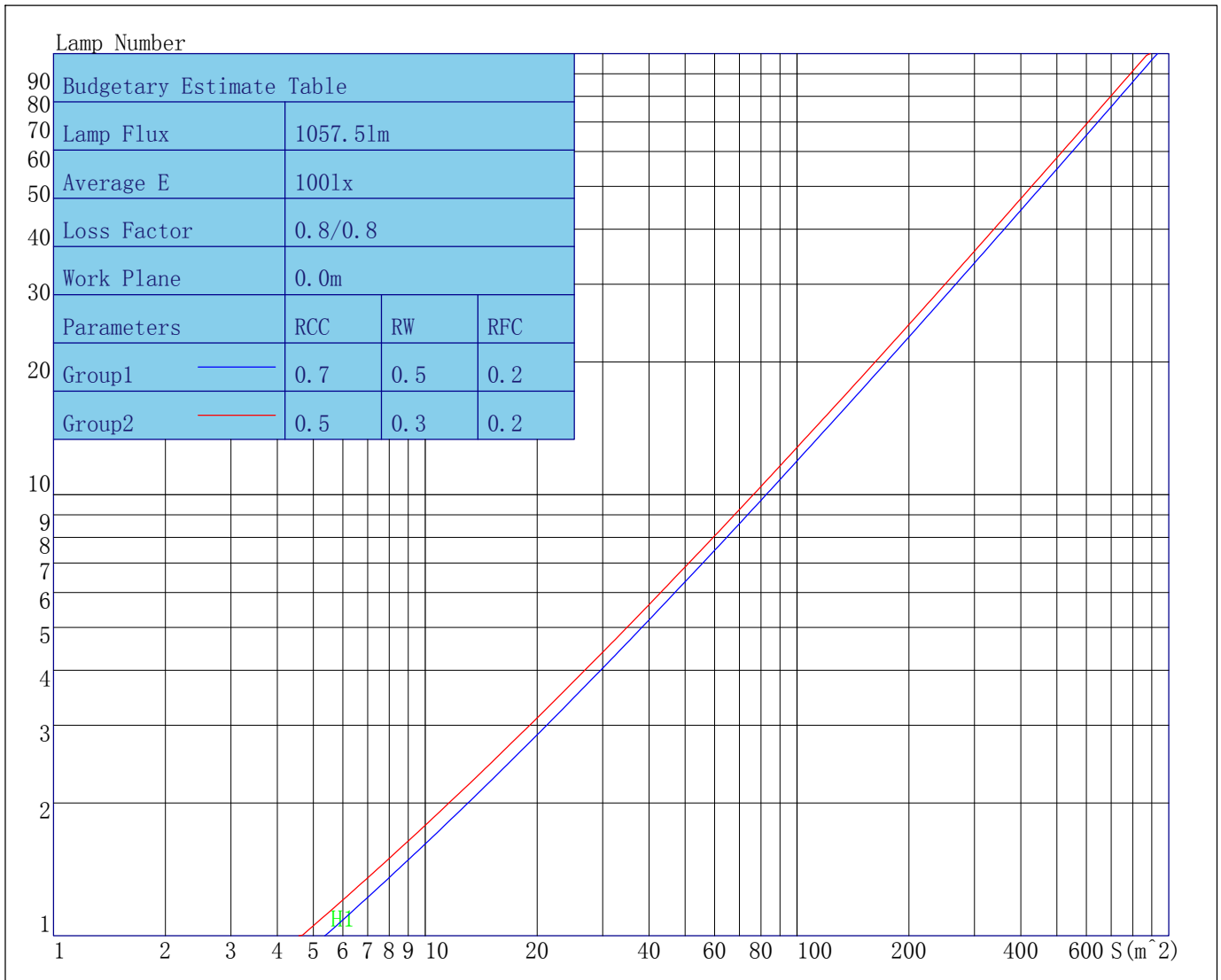
Luminous Size: Length(m)=0.000 Width(m)=-0.050 Height(m)=0.080 Area(m^2)=0.015708  
 Luminous Type: Without Luminous Side  
 Luminous Curves: C0-C180 Color: ——— C90-C270 Color: ———

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## Indoor Budgetary Estimate Table

Lum. Name: MD17-13-C5-02 4000K RA80 40D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting Co.Ltd	Test Machine:GON-2000	Test Date: 2020/09/28



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:MD17-13-C5-02 4000K RA80 40D.IES

## Indoor Coefficient of Utilization Table

Lum. Name: MD17-13-C5-02 4000K RA80 40D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting Co.Ltd	Test Machine:GON-2000	Test Date: 2020/09/28

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	101	101	101	99
1	113	110	107	104	110	107	105	103	103	101	99	99	97	96	95	94	93	91
2	107	101	97	93	104	99	96	92	96	93	90	93	90	88	90	88	86	84
3	101	94	89	84	99	92	88	84	90	86	82	87	84	81	84	82	79	78
4	95	87	82	77	93	86	81	77	84	79	75	82	78	74	80	76	73	72
5	90	82	75	71	89	81	75	71	79	74	70	77	72	69	75	71	68	67
6	86	76	70	66	84	75	70	65	74	69	65	72	68	64	71	67	64	62
7	81	72	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58
8	77	67	61	57	76	67	61	57	66	60	56	64	60	56	63	59	56	54
9	74	64	58	53	72	63	57	53	62	57	53	61	56	53	60	56	52	51
10	70	60	54	50	69	60	54	50	59	54	50	58	53	50	57	53	50	48

# IES Indoor Report

Photometric Filename:MD17-13-C5-02 4000K RA80 40D.IES

## Unified Glare Rating Table

Lum. Name: MD17-13-C5-02 4000K RA80 40D	Lum. Catalog:	Test ID: 01
Lamp Name:	Lamp Catalog: LED	Test Lab: Quality Department
Manufacture: Shenzhen Norming Lighting Co.Ltd	Test Machine:GON-2000	Test Date: 2020/09/28

## 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	Viewed crosswise					Viewed endwise				
X=2H Y=2H	16.9	18.0	17.3	18.3	18.7	15.9	17.0	16.3	17.3	17.7
Y=3H	16.9	17.9	17.3	18.2	18.6	15.9	16.8	16.3	17.2	17.6
Y=4H	16.9	17.8	17.3	18.2	18.6	15.8	16.7	16.3	17.1	17.5
Y=6H	16.9	17.8	17.4	18.2	18.6	15.8	16.7	16.3	17.1	17.5
Y=8H	17.0	17.7	17.4	18.2	18.6	15.9	16.6	16.3	17.1	17.5
Y=12H	17.0	17.8	17.5	18.2	18.6	15.9	16.6	16.3	17.0	17.5
X=4H Y=2H	16.7	17.6	17.2	18.0	18.4	15.7	16.6	16.1	17.0	17.4
Y=3H	16.8	17.5	17.2	18.0	18.4	15.7	16.5	16.2	16.9	17.4
Y=4H	16.8	17.5	17.3	17.9	18.4	15.8	16.4	16.2	16.9	17.4
Y=6H	16.9	17.5	17.4	18.0	18.5	15.8	16.4	16.3	16.9	17.4
Y=8H	17.0	17.6	17.5	18.0	18.6	15.9	16.4	16.4	16.9	17.4
Y=12H	17.2	17.6	17.7	18.1	18.7	16.0	16.4	16.5	16.9	17.5
X=8H Y=4H	16.8	17.3	17.3	17.8	18.3	15.7	16.2	16.2	16.7	17.2
Y=6H	16.9	17.4	17.5	17.9	18.5	15.8	16.3	16.4	16.8	17.4
Y=8H	17.1	17.5	17.7	18.0	18.6	15.9	16.3	16.5	16.9	17.4
Y=12H	17.3	17.7	17.9	18.2	18.8	16.1	16.5	16.7	17.0	17.6
X=12H Y=4H	16.7	17.2	17.2	17.7	18.2	15.7	16.1	16.2	16.6	17.2
Y=6H	16.9	17.3	17.5	17.8	18.4	15.8	16.2	16.4	16.7	17.3
Y=8H	17.1	17.5	17.7	18.0	18.6	16.0	16.3	16.5	16.9	17.5
Variations with the observer position at spacings										
S=1.0H	0.1/-0.1					0.2/-0.2				
S=1.5H	0.3/-0.3					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	0.8					0.7				

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

# IES Indoor Report

Photometric Filename:MD17-13-C5-02 4000K RA80 40D.IES

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## Candela Tabulation

V/H	C0.0	C90.0	C180.0	C270.0
$\gamma$ 0.0	1539.80	1539.80	1539.80	1539.80
$\gamma$ 1.0	1544.98	1522.69	1537.08	1544.29
$\gamma$ 2.0	1540.08	1503.93	1523.18	1542.77
$\gamma$ 3.0	1527.56	1476.54	1503.46	1532.84
$\gamma$ 4.0	1507.00	1441.10	1474.83	1514.61
$\gamma$ 5.0	1479.35	1400.61	1438.57	1491.54
$\gamma$ 6.0	1441.44	1354.28	1394.65	1460.70
$\gamma$ 7.0	1398.74	1304.35	1349.19	1424.55
$\gamma$ 8.0	1350.30	1248.31	1296.02	1377.95
$\gamma$ 9.0	1300.45	1193.55	1243.20	1331.94
$\gamma$ 10.0	1247.48	1138.10	1187.83	1277.49
$\gamma$ 11.0	1193.19	1086.36	1133.91	1224.57
$\gamma$ 12.0	1137.49	1035.22	1080.57	1169.14
$\gamma$ 13.0	1084.25	987.34	1031.08	1116.42
$\gamma$ 14.0	1035.49	942.03	986.02	1064.67
$\gamma$ 15.0	988.57	900.83	941.35	1014.69
$\gamma$ 16.0	944.23	860.38	897.04	969.58
$\gamma$ 17.0	901.69	822.53	856.47	928.05
$\gamma$ 18.0	859.77	785.33	817.84	886.79
$\gamma$ 19.0	821.22	749.49	780.53	847.25
$\gamma$ 20.0	783.14	714.96	743.64	808.42
$\gamma$ 21.0	747.30	680.47	707.30	772.01
$\gamma$ 22.0	712.22	646.56	672.80	735.13
$\gamma$ 23.0	677.60	613.85	639.79	699.96
$\gamma$ 24.0	643.82	582.32	606.63	665.75
$\gamma$ 25.0	611.02	551.63	573.82	632.50
$\gamma$ 26.0	579.31	519.55	542.51	599.09
$\gamma$ 27.0	547.25	491.94	512.60	567.60
$\gamma$ 28.0	516.05	464.66	484.54	535.81
$\gamma$ 29.0	488.10	441.49	459.17	506.00
$\gamma$ 30.0	462.14	419.92	435.43	477.71
$\gamma$ 31.0	439.41	401.42	414.06	452.94
$\gamma$ 32.0	418.73	384.20	394.97	430.87
$\gamma$ 33.0	400.64	368.52	378.23	410.64
$\gamma$ 34.0	384.43	352.07	361.81	392.66
$\gamma$ 35.0	367.51	334.80	343.89	377.10
$\gamma$ 36.0	349.62	315.53	325.87	360.26
$\gamma$ 37.0	330.30	293.67	305.67	343.97
$\gamma$ 38.0	308.77	269.60	284.06	326.20
$\gamma$ 39.0	286.07	244.28	260.67	305.19
$\gamma$ 40.0	262.74	217.69	236.62	282.90
$\gamma$ 41.0	238.20	190.51	211.51	259.20
$\gamma$ 42.0	213.25	163.24	186.24	233.62
$\gamma$ 43.0	187.77	137.22	161.04	206.93
$\gamma$ 44.0	162.65	112.06	136.00	179.39
$\gamma$ 45.0	138.02	89.91	112.53	153.00
$\gamma$ 46.0	114.88	71.08	90.76	127.08

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# IES Indoor Report

Photometric Filename:MD17-13-C5-02 4000K RA80 40D.IES

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## Candela Tabulation - (Cont.)

V/H	C0.0	C90.0	C180.0	C270.0
γ 47.0	93.58	56.21	71.63	103.21
γ 48.0	75.18	46.27	56.30	81.70
γ 49.0	61.64	40.78	45.15	64.21
γ 50.0	51.82	37.06	38.36	51.75
γ 51.0	45.20	33.65	34.12	44.12
γ 52.0	40.26	31.57	30.69	39.13
γ 53.0	36.10	29.69	28.73	34.74
γ 54.0	33.67	27.87	26.96	31.87
γ 55.0	31.55	26.13	25.26	29.94
γ 56.0	29.63	24.49	23.67	28.06
γ 57.0	27.83	22.81	22.14	26.43
γ 58.0	26.13	21.18	20.63	24.83
γ 59.0	24.31	19.77	19.20	23.25
γ 60.0	22.71	18.52	17.92	21.65
γ 61.0	21.30	17.25	16.71	20.25
γ 62.0	19.96	15.74	15.45	18.98
γ 63.0	18.50	14.57	14.17	17.85
γ 64.0	17.02	13.42	13.07	16.51
γ 65.0	15.80	12.18	12.09	15.24
γ 66.0	14.58	11.21	11.01	14.26
γ 67.0	13.33	10.42	10.18	13.18
γ 68.0	12.40	9.68	9.52	12.11
γ 69.0	11.59	9.05	8.95	11.38
γ 70.0	10.89	8.46	8.44	10.71
γ 71.0	10.20	7.94	8.01	10.14
γ 72.0	9.62	7.44	7.61	9.62
γ 73.0	9.10	7.00	7.24	9.19
γ 74.0	8.62	6.59	6.90	8.77
γ 75.0	8.19	6.21	6.58	8.35
γ 76.0	7.77	5.84	6.27	8.00
γ 77.0	7.39	5.53	6.01	7.72
γ 78.0	7.06	5.24	5.76	7.45
γ 79.0	6.75	5.00	5.48	7.13
γ 80.0	6.46	4.75	5.21	6.80
γ 81.0	6.17	4.51	4.93	6.51
γ 82.0	5.91	4.28	4.68	6.22
γ 83.0	5.59	4.00	4.41	5.94
γ 84.0	5.34	3.66	4.16	5.64
γ 85.0	4.97	3.42	3.89	5.39
γ 86.0	4.67	3.09	3.62	5.05
γ 87.0	4.29	2.55	3.31	4.71
γ 88.0	3.77	2.08	2.79	4.44
γ 89.0	3.14	1.93	2.24	3.86
γ 90.0	2.66	1.84	2.09	3.23
γ 91.0	2.51	1.75	1.98	2.79
γ 92.0	2.40	1.65	1.90	2.65
γ 93.0	2.30	1.58	1.81	2.52

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# IES Indoor Report

Photometric Filename:MD17-13-C5-02 4000K RA80 40D.IES

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## Candela Tabulation - (Cont.)

V/H	C0.0	C90.0	C180.0	C270.0
γ 94.0	2.19	1.51	1.72	2.42
γ 95.0	2.09	1.43	1.65	2.30
γ 96.0	2.01	1.37	1.58	2.21
γ 97.0	1.91	1.31	1.51	2.13
γ 98.0	1.84	1.25	1.45	2.03
γ 99.0	1.76	1.21	1.40	1.96
γ 100.0	1.70	1.16	1.35	1.88
γ 101.0	1.63	1.12	1.31	1.82
γ 102.0	1.58	1.09	1.27	1.75
γ 103.0	1.53	1.06	1.25	1.70
γ 104.0	1.49	1.04	1.22	1.66
γ 105.0	1.45	1.03	1.20	1.61
γ 106.0	1.43	1.01	1.19	1.58
γ 107.0	1.40	1.00	1.18	1.55
γ 108.0	1.37	1.00	1.17	1.52
γ 109.0	1.36	1.00	1.18	1.50
γ 110.0	1.35	1.01	1.18	1.49
γ 111.0	1.34	1.02	1.20	1.48
γ 112.0	1.33	1.03	1.22	1.48
γ 113.0	1.34	1.05	1.23	1.49
γ 114.0	1.34	1.07	1.27	1.48
γ 115.0	1.35	1.10	1.30	1.51
γ 116.0	1.36	1.12	1.33	1.53
γ 117.0	1.39	1.16	1.37	1.55
γ 118.0	1.41	1.19	1.41	1.58
γ 119.0	1.44	1.24	1.47	1.61
γ 120.0	1.47	1.30	1.50	1.65
γ 121.0	1.50	1.35	1.58	1.70
γ 122.0	1.55	1.41	1.63	1.74
γ 123.0	1.60	1.47	1.71	1.79
γ 124.0	1.65	1.54	1.78	1.85
γ 125.0	1.71	1.61	1.87	1.90
γ 126.0	1.78	1.70	1.93	1.97
γ 127.0	1.85	1.79	2.02	2.04
γ 128.0	1.93	1.87	2.11	2.12
γ 129.0	2.01	1.97	2.20	2.19
γ 130.0	2.09	2.07	2.31	2.27
γ 131.0	2.19	2.17	2.41	2.35
γ 132.0	2.28	2.28	2.52	2.44
γ 133.0	2.37	2.40	2.64	2.53
γ 134.0	2.48	2.50	2.74	2.65
γ 135.0	2.58	2.63	2.88	2.75
γ 136.0	2.71	2.76	2.99	2.86
γ 137.0	2.82	2.88	3.13	2.97
γ 138.0	2.94	3.00	3.25	3.08
γ 139.0	3.06	3.13	3.37	3.21
γ 140.0	3.20	3.24	3.49	3.33

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# IES Indoor Report

Photometric Filename:MD17-13-C5-02 4000K RA80 40D.IES

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## Candela Tabulation - (Cont.)

V/H	C0.0	C90.0	C180.0	C270.0
γ 141.0	3.31	3.38	3.61	3.43
γ 142.0	3.42	3.48	3.73	3.55
γ 143.0	3.53	3.61	3.86	3.67
γ 144.0	3.65	3.72	3.98	3.80
γ 145.0	3.77	3.84	4.10	3.91
γ 146.0	3.89	3.95	4.22	4.03
γ 147.0	4.00	4.08	4.32	4.14
γ 148.0	4.12	4.19	4.43	4.25
γ 149.0	4.23	4.30	4.55	4.35
γ 150.0	4.33	4.40	4.64	4.46
γ 151.0	4.44	4.50	4.76	4.57
γ 152.0	4.56	4.61	4.85	4.66
γ 153.0	4.66	4.73	4.95	4.76
γ 154.0	4.77	4.82	5.05	4.86
γ 155.0	4.87	4.91	5.15	4.95
γ 156.0	4.98	5.01	5.23	5.05
γ 157.0	5.07	5.11	5.32	5.14
γ 158.0	5.17	5.19	5.41	5.24
γ 159.0	5.27	5.28	5.50	5.31
γ 160.0	5.35	5.36	5.58	5.39
γ 161.0	5.43	5.44	5.66	5.46
γ 162.0	5.52	5.53	5.73	5.55
γ 163.0	5.60	5.61	5.80	5.62
γ 164.0	5.69	5.69	5.86	5.70
γ 165.0	5.77	5.76	5.94	5.77
γ 166.0	5.85	5.85	6.01	5.82
γ 167.0	5.91	5.91	6.06	5.89
γ 168.0	5.99	5.98	6.12	5.97
γ 169.0	6.05	6.03	6.18	6.02
γ 170.0	6.12	6.10	6.22	6.09
γ 171.0	6.18	6.15	6.28	6.13
γ 172.0	6.24	6.20	6.31	6.20
γ 173.0	6.28	6.26	6.35	6.24
γ 174.0	6.33	6.29	6.38	6.29
γ 175.0	6.38	6.34	6.42	6.33
γ 176.0	6.41	6.36	6.44	6.35
γ 177.0	6.44	6.40	6.47	6.41
γ 178.0	6.47	6.42	6.47	6.43
γ 179.0	6.49	6.43	6.50	6.46
γ 180.0	6.49	6.49	6.49	6.49

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