

# IES Indoor Report

Photometric Filename:AD10104 20W 1204C9 4090 GR2-63-45D 500.IES

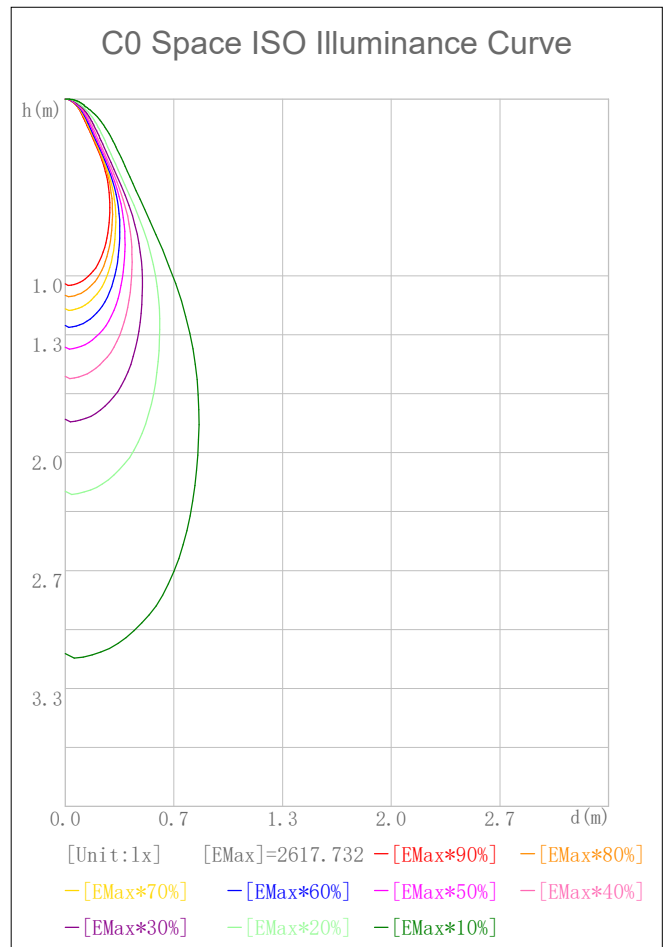
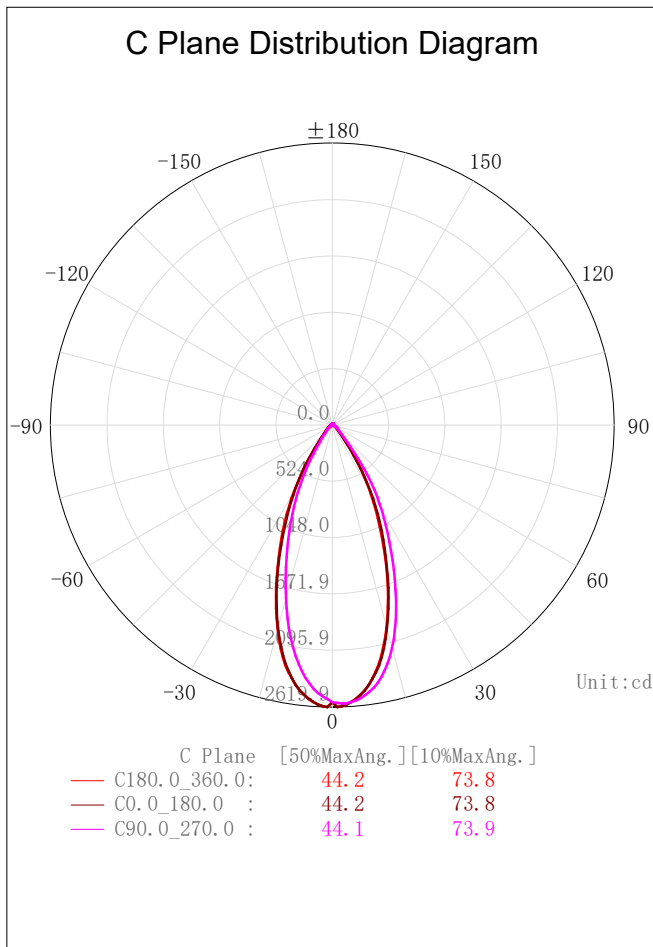
## Indoor Luminaire Photometric Data

### Description Information

Luminary Name: AD10104	Lum. Catalog: Down Light	Test ID:
Lamp Name: 1204C9	Lamp Catalog: COB	Test Date: 2023/07/14
Manufacture: -	Shld. Ang(°):45	Test Machine:GON-2000
Test Lab: Test	Frequency(Hz):50	Lamp CCT(K): 4000 Ra: 90
Lum. Size(W*L*H):0.115m*0.115m*0.000m	Lum. Area(m2):0.010	Lum. W(kg): 0.000
Test System: C, γ	Test Step: C=22.5 γ=1.0	Temp.(°C): 25
		Humidity(%): 50.0

### Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 1680.000	Luminary Flux(lm): 1680.351	Field Angle(10%Imax): 73.8(°)	
Rated Power(W): 20	Luminary Efficiency: 100.02%	Down Lumens&Percent: 1637.520lm 97.45%	
Rated Voltage(V): 220	Luminary EER(lm/W): 81.452	Up Lumens&Percent: 42.831lm 2.55%	
Tested Power(W): 20.630	Max. Candela(cd): 2619.894	S/MH: CO_a180=0.711 C90_270=0.701	
Lamps' Inside: 1	Max Cand@Ang.(°): C=180.0 γ=1.0	CIE Type: Semi-Direct	
Tested Electrics(V, A, pf):220.6, 0.096, 0.967	Beam Angle(50%Imax): 44.2(°)	ErP Φuse(90°): 1538.092lm	
Lamp Size(W*L*H):0.115m*0.115m*0.000m	Left=-22.2°, Right=21.9°	IRF(%): 352.736	



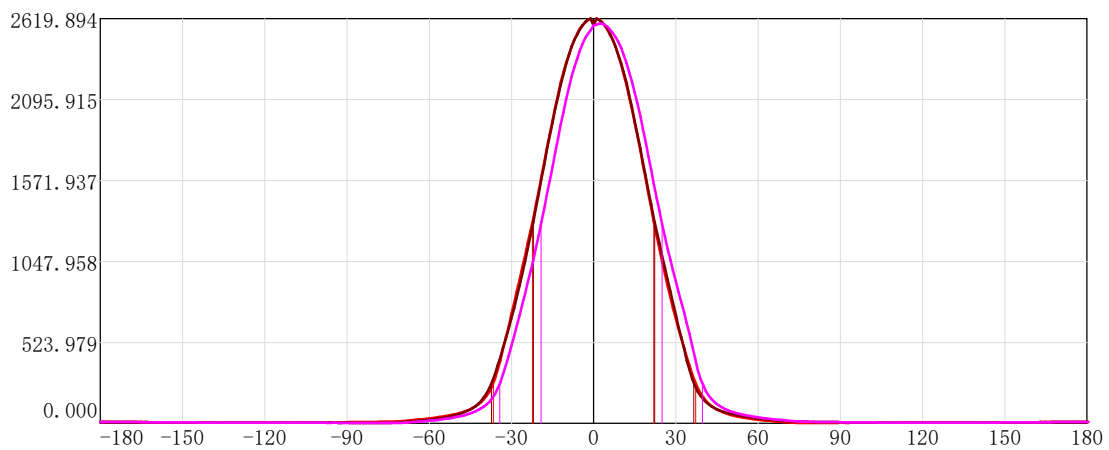
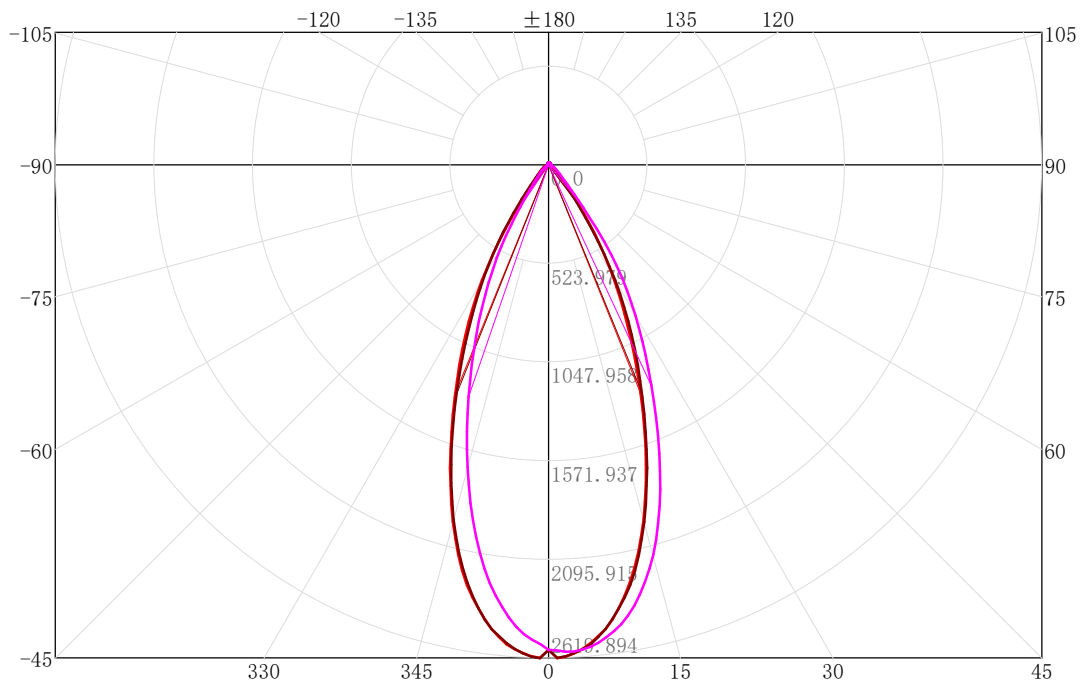
# IES Indoor Report

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## 2D Plane Light Intensity Distribution Curve

Lum. Name: AD10104	Lum. Catalog: Down Light	Test ID:
Lamp Name: 1204C9	Lamp Catalog: COB	Test Lab: Test
Manufacture: -	Test Machine: GON-2000	Test Date: 2023/07/14

C Plane Distribution Diagram



	C Plane	[50%MaxAng.]	[10%MaxAng.]	Unit:cd
—	C180.0_360.0:	44.2	73.8	
—	C0.0_180.0 :	44.2	73.8	
—	C90.0_270.0 :	44.1	73.9	

# IES Indoor Report

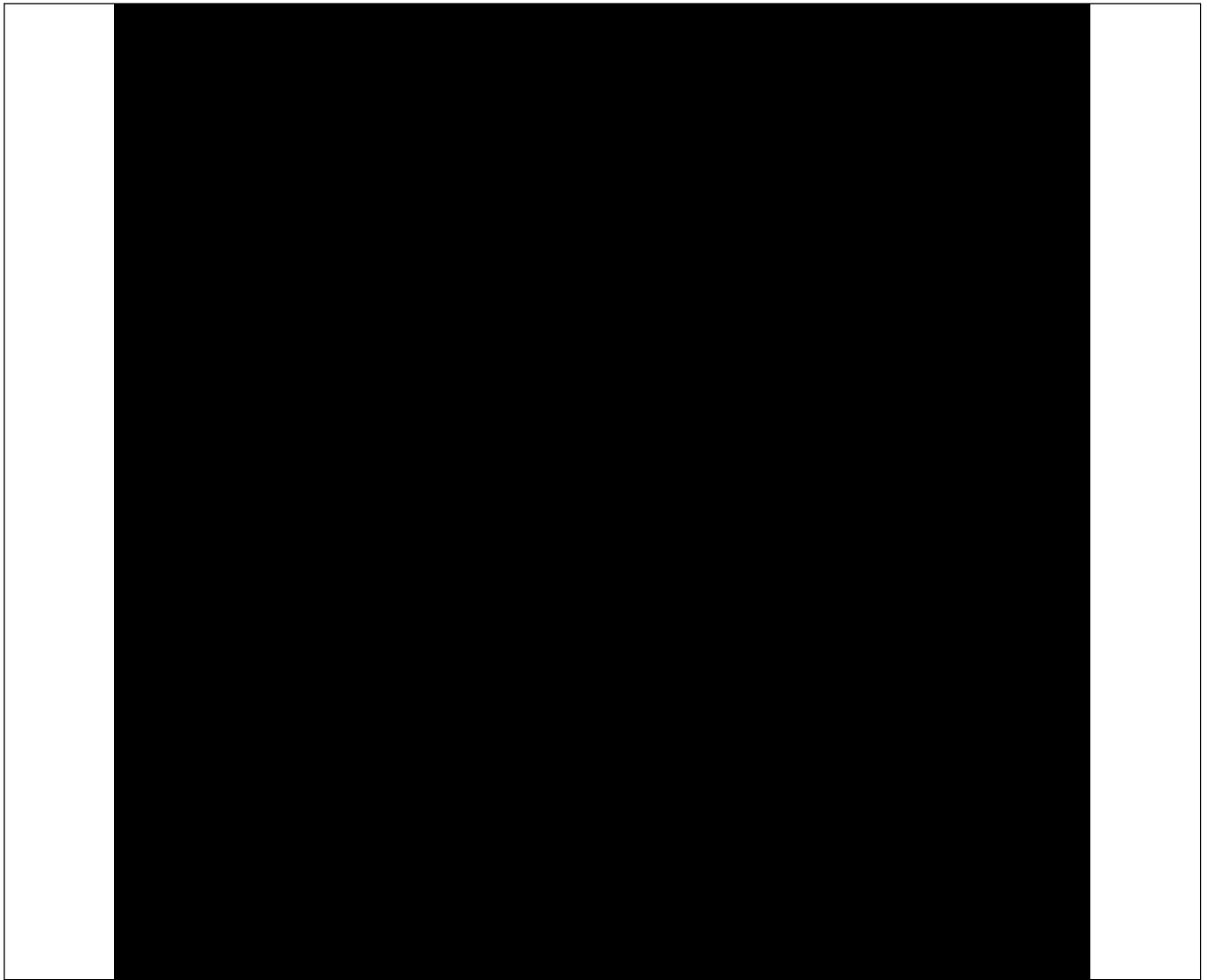
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## 3D Light Intensity Distribution Modal

Lum. Name: AD10104	Lum. Catalog: Down Light	Test ID:
Lamp Name: 1204C9	Lamp Catalog: COB	Test Lab: Test
Manufacture: -	Test Machine: GON-2000	Test Date: 2023/07/14

## 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

Photometric Filename:AD10104 20W 1204C9 4090 GR2-63-45D 500.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	2.46	2.46	0.15	0.15	47.0-48.0	5.99	1550.90	0.36	92.32
1.0-2.0	7.38	9.84	0.44	0.59	48.0-49.0	5.59	1556.49	0.33	92.65
2.0-3.0	12.24	22.08	0.73	1.31	49.0-50.0	5.23	1561.71	0.31	92.96
3.0-4.0	17.01	39.09	1.01	2.33	50.0-51.0	4.91	1566.62	0.29	93.25
4.0-5.0	21.66	60.75	1.29	3.62	51.0-52.0	4.61	1571.23	0.27	93.53
5.0-6.0	26.14	86.89	1.56	5.17	52.0-53.0	4.34	1575.57	0.26	93.78
6.0-7.0	30.43	117.32	1.81	6.98	53.0-54.0	4.09	1579.66	0.24	94.03
7.0-8.0	34.49	151.81	2.05	9.04	54.0-55.0	3.85	1583.51	0.23	94.26
8.0-9.0	38.28	190.09	2.28	11.32	55.0-56.0	3.64	1587.14	0.22	94.47
9.0-10.0	41.77	231.86	2.49	13.80	56.0-57.0	3.43	1590.57	0.20	94.68
10.0-11.0	44.91	276.77	2.67	16.47	57.0-58.0	3.23	1593.81	0.19	94.87
11.0-12.0	47.70	324.47	2.84	19.31	58.0-59.0	3.05	1596.86	0.18	95.05
12.0-13.0	50.10	374.57	2.98	22.30	59.0-60.0	2.87	1599.73	0.17	95.22
13.0-14.0	52.10	426.67	3.10	25.40	60.0-61.0	2.70	1602.43	0.16	95.38
14.0-15.0	53.69	480.36	3.20	28.59	61.0-62.0	2.53	1604.96	0.15	95.53
15.0-16.0	54.87	535.23	3.27	31.86	62.0-63.0	2.37	1607.33	0.14	95.67
16.0-17.0	55.64	590.87	3.31	35.17	63.0-64.0	2.21	1609.54	0.13	95.81
17.0-18.0	56.02	646.89	3.33	38.51	64.0-65.0	2.06	1611.60	0.12	95.93
18.0-19.0	56.04	702.93	3.34	41.84	65.0-66.0	1.90	1613.51	0.11	96.04
19.0-20.0	55.71	758.64	3.32	45.16	66.0-67.0	1.75	1615.26	0.10	96.15
20.0-21.0	55.06	813.70	3.28	48.43	67.0-68.0	1.61	1616.87	0.10	96.24
21.0-22.0	54.13	867.84	3.22	51.66	68.0-69.0	1.48	1618.34	0.09	96.33
22.0-23.0	52.96	920.79	3.15	54.81	69.0-70.0	1.35	1619.69	0.08	96.41
23.0-24.0	51.57	972.37	3.07	57.88	70.0-71.0	1.23	1620.92	0.07	96.48
24.0-25.0	49.99	1022.36	2.98	60.85	71.0-72.0	1.13	1622.04	0.07	96.55
25.0-26.0	48.23	1070.59	2.87	63.73	72.0-73.0	1.06	1623.10	0.06	96.61
26.0-27.0	46.32	1116.91	2.76	66.48	73.0-74.0	1.00	1624.10	0.06	96.67
27.0-28.0	44.23	1161.14	2.63	69.12	74.0-75.0	0.95	1625.05	0.06	96.73
28.0-29.0	41.98	1203.12	2.50	71.61	75.0-76.0	0.91	1625.96	0.05	96.78
29.0-30.0	39.57	1242.69	2.36	73.97	76.0-77.0	0.89	1626.84	0.05	96.84
30.0-31.0	36.99	1279.68	2.20	76.17	77.0-78.0	0.88	1627.72	0.05	96.89
31.0-32.0	34.24	1313.91	2.04	78.21	78.0-79.0	0.86	1628.58	0.05	96.94
32.0-33.0	31.36	1345.28	1.87	80.08	79.0-80.0	0.85	1629.44	0.05	96.99
33.0-34.0	28.36	1373.64	1.69	81.76	80.0-81.0	0.85	1630.29	0.05	97.04
34.0-35.0	25.32	1398.96	1.51	83.27	81.0-82.0	0.83	1631.12	0.05	97.09
35.0-36.0	22.35	1421.31	1.33	84.60	82.0-83.0	0.83	1631.95	0.05	97.14
36.0-37.0	19.49	1440.80	1.16	85.76	83.0-84.0	0.82	1632.76	0.05	97.19
37.0-38.0	16.87	1457.67	1.00	86.77	84.0-85.0	0.81	1633.58	0.05	97.24
38.0-39.0	14.60	1472.27	0.87	87.64	85.0-86.0	0.81	1634.38	0.05	97.28
39.0-40.0	12.78	1485.05	0.76	88.40	86.0-87.0	0.79	1635.18	0.05	97.33
40.0-41.0	11.31	1496.36	0.67	89.07	87.0-88.0	0.79	1635.96	0.05	97.38
41.0-42.0	10.10	1506.46	0.60	89.67	88.0-89.0	0.78	1636.74	0.05	97.43
42.0-43.0	9.12	1515.58	0.54	90.21	89.0-90.0	0.78	1637.52	0.05	97.47
43.0-44.0	8.29	1523.87	0.49	90.71	90.0-91.0	0.77	1638.29	0.05	97.52
44.0-45.0	7.59	1531.46	0.45	91.16	91.0-92.0	0.76	1639.05	0.05	97.56
45.0-46.0	6.98	1538.45	0.42	91.57	92.0-93.0	0.75	1639.80	0.04	97.61
46.0-47.0	6.46	1544.90	0.38	91.96	93.0-94.0	0.75	1640.55	0.04	97.65

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## Zonal Flux Tabulation - (Cont.)

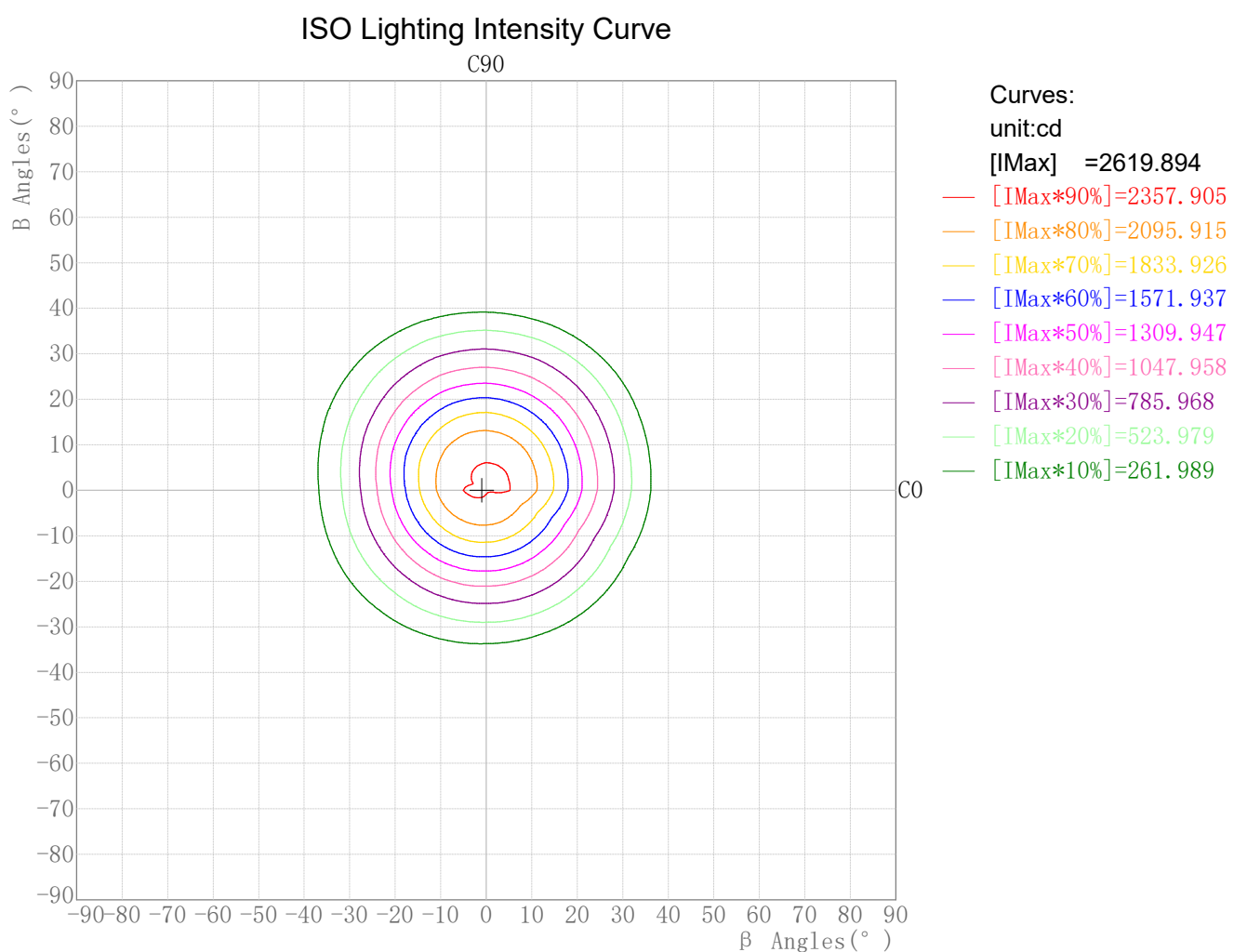
Zone (γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp	Zone (γ)	Zone Flux (lm)	Sums Flux (lm)	Zone%Lamp	Sums%Lamp
94.0-95.0	0.74	1641.29	0.04	97.70	141.0-142.0	0.48	1669.41	0.03	99.37
95.0-96.0	0.74	1642.03	0.04	97.74	142.0-143.0	0.47	1669.88	0.03	99.40
96.0-97.0	0.73	1642.76	0.04	97.78	143.0-144.0	0.47	1670.35	0.03	99.43
97.0-98.0	0.72	1643.48	0.04	97.83	144.0-145.0	0.46	1670.81	0.03	99.45
98.0-99.0	0.72	1644.20	0.04	97.87	145.0-146.0	0.45	1671.26	0.03	99.48
99.0-100.0	0.72	1644.91	0.04	97.91	146.0-147.0	0.45	1671.71	0.03	99.51
100.0-101.0	0.71	1645.62	0.04	97.95	147.0-148.0	0.44	1672.15	0.03	99.53
101.0-102.0	0.70	1646.33	0.04	98.00	148.0-149.0	0.44	1672.59	0.03	99.56
102.0-103.0	0.70	1647.03	0.04	98.04	149.0-150.0	0.43	1673.02	0.03	99.58
103.0-104.0	0.70	1647.72	0.04	98.08	150.0-151.0	0.42	1673.44	0.03	99.61
104.0-105.0	0.69	1648.41	0.04	98.12	151.0-152.0	0.42	1673.85	0.02	99.63
105.0-106.0	0.68	1649.09	0.04	98.16	152.0-153.0	0.41	1674.26	0.02	99.66
106.0-107.0	0.67	1649.76	0.04	98.20	153.0-154.0	0.40	1674.66	0.02	99.68
107.0-108.0	0.67	1650.43	0.04	98.24	154.0-155.0	0.39	1675.05	0.02	99.71
108.0-109.0	0.66	1651.09	0.04	98.28	155.0-156.0	0.38	1675.43	0.02	99.73
109.0-110.0	0.65	1651.74	0.04	98.32	156.0-157.0	0.37	1675.79	0.02	99.75
110.0-111.0	0.65	1652.39	0.04	98.36	157.0-158.0	0.36	1676.15	0.02	99.77
111.0-112.0	0.64	1653.03	0.04	98.39	158.0-159.0	0.35	1676.50	0.02	99.79
112.0-113.0	0.63	1653.66	0.04	98.43	159.0-160.0	0.34	1676.83	0.02	99.81
113.0-114.0	0.62	1654.28	0.04	98.47	160.0-161.0	0.32	1677.16	0.02	99.83
114.0-115.0	0.62	1654.90	0.04	98.51	161.0-162.0	0.31	1677.47	0.02	99.85
115.0-116.0	0.61	1655.52	0.04	98.54	162.0-163.0	0.29	1677.76	0.02	99.87
116.0-117.0	0.61	1656.12	0.04	98.58	163.0-164.0	0.28	1678.04	0.02	99.88
117.0-118.0	0.60	1656.72	0.04	98.61	164.0-165.0	0.27	1678.31	0.02	99.90
118.0-119.0	0.59	1657.31	0.04	98.65	165.0-166.0	0.25	1678.56	0.02	99.91
119.0-120.0	0.59	1657.90	0.03	98.68	166.0-167.0	0.24	1678.80	0.01	99.93
120.0-121.0	0.58	1658.48	0.03	98.72	167.0-168.0	0.22	1679.02	0.01	99.94
121.0-122.0	0.58	1659.06	0.03	98.75	168.0-169.0	0.21	1679.23	0.01	99.95
122.0-123.0	0.57	1659.63	0.03	98.79	169.0-170.0	0.19	1679.42	0.01	99.97
123.0-124.0	0.56	1660.19	0.03	98.82	170.0-171.0	0.17	1679.59	0.01	99.98
124.0-125.0	0.56	1660.74	0.03	98.85	171.0-172.0	0.16	1679.75	0.01	99.99
125.0-126.0	0.55	1661.29	0.03	98.89	172.0-173.0	0.14	1679.89	0.01	99.99
126.0-127.0	0.54	1661.84	0.03	98.92	173.0-174.0	0.12	1680.01	0.01	100.00
127.0-128.0	0.54	1662.37	0.03	98.95	174.0-175.0	0.10	1680.11	0.01	100.01
128.0-129.0	0.53	1662.91	0.03	98.98	175.0-176.0	0.09	1680.20	0.01	100.01
129.0-130.0	0.53	1663.43	0.03	99.01	176.0-177.0	0.07	1680.27	0.00	100.02
130.0-131.0	0.52	1663.96	0.03	99.04	177.0-178.0	0.05	1680.31	0.00	100.02
131.0-132.0	0.52	1664.47	0.03	99.08	178.0-179.0	0.03	1680.34	0.00	100.02
132.0-133.0	0.51	1664.99	0.03	99.11	179.0-180.0	0.01	1680.35	0.00	100.02
133.0-134.0	0.51	1665.49	0.03	99.14					
134.0-135.0	0.50	1666.00	0.03	99.17					
135.0-136.0	0.50	1666.50	0.03	99.20					
136.0-137.0	0.49	1666.99	0.03	99.23					
137.0-138.0	0.49	1667.48	0.03	99.25					
138.0-139.0	0.49	1667.97	0.03	99.28					
139.0-140.0	0.49	1668.46	0.03	99.31					
140.0-141.0	0.48	1668.94	0.03	99.34					

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## Rectangle ISO Lighting Intensity Diagram

Lum. Name: AD10104	Lum. Catalog: Down Light	Test ID:
Lamp Name: 1204C9	Lamp Catalog: COB	Test Lab: Test
Manufacture: -	Test Machine: GON-2000	Test Date: 2023/07/14



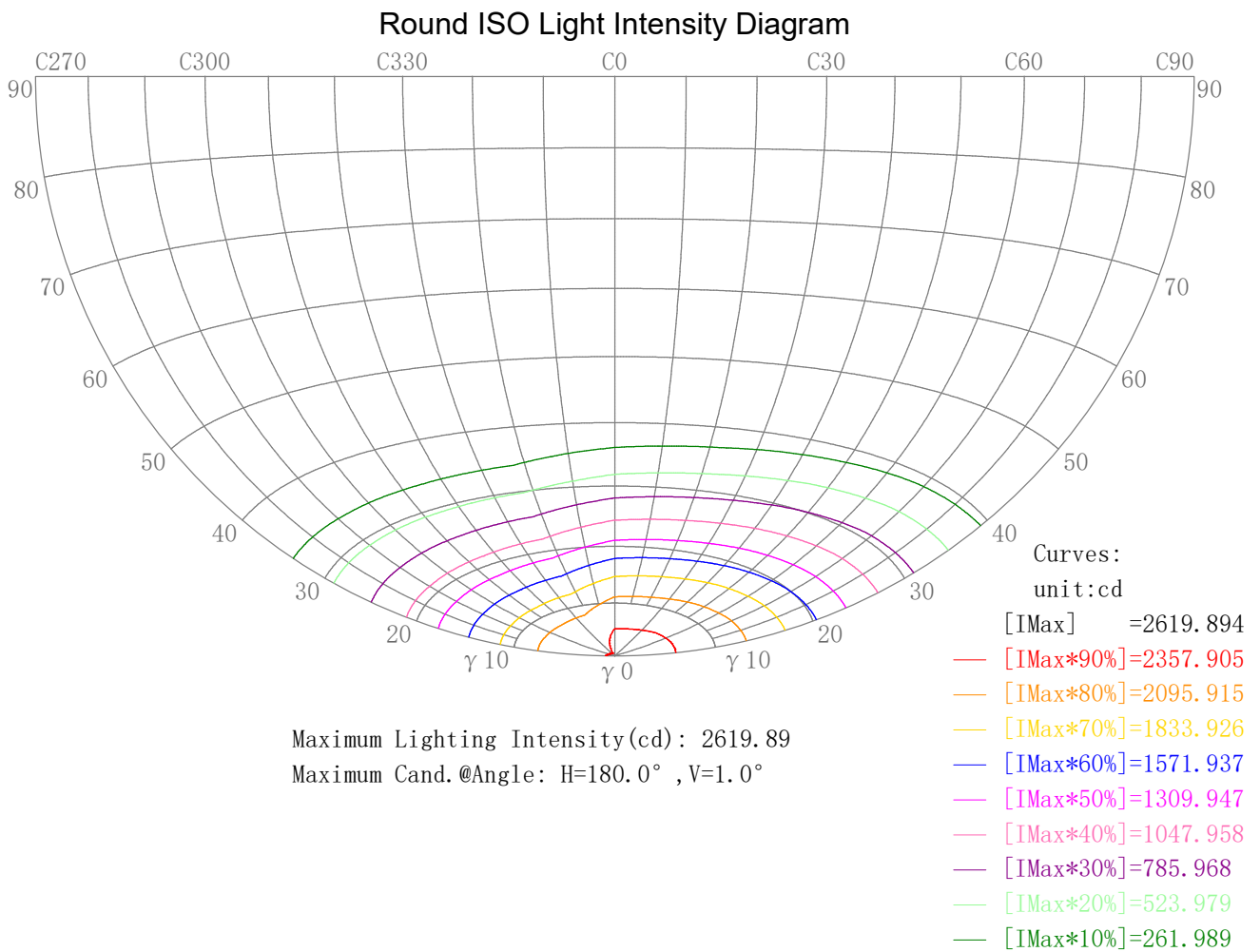
Maximum Light Intensity(cd): 2619.89  
Maximum Cand.@Angle: H=-1.0°,V=0.0°

# IES Indoor Report

Photometric Filename:AD10104 20W 1204C9 4090 GR2-63-45D 500.IES

## Round ISO Lighting Intensity Diagram

Lum. Name: AD10104	Lum. Catalog: Down Light	Test ID:
Lamp Name: 1204C9	Lamp Catalog: COB	Test Lab: Test
Manufacture: -	Test Machine: GON-2000	Test Date: 2023/07/14



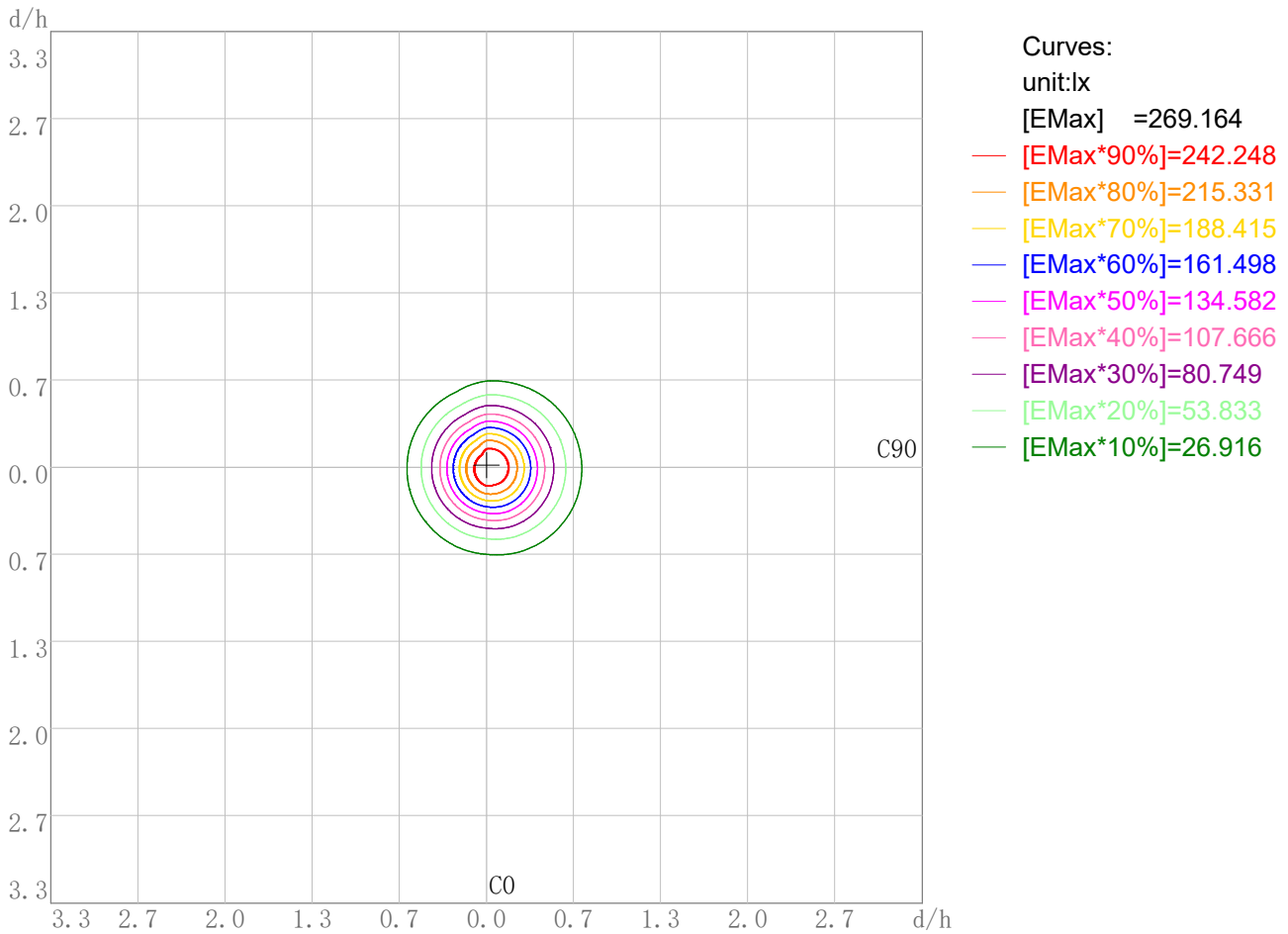
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Photometric Filename:AD10104 20W 1204C9 4090 GR2-63-45D 500.IES

## Plane ISO-Illuminance Diagram

Lum. Name: AD10104	Lum. Catalog: Down Light	Test ID:
Lamp Name: 1204C9	Lamp Catalog: COB	Test Lab: Test
Manufacture: -	Test Machine: GON-2000	Test Date: 2023/07/14

Plane ISO-Illuminance Curve





**IES Indoor Report**

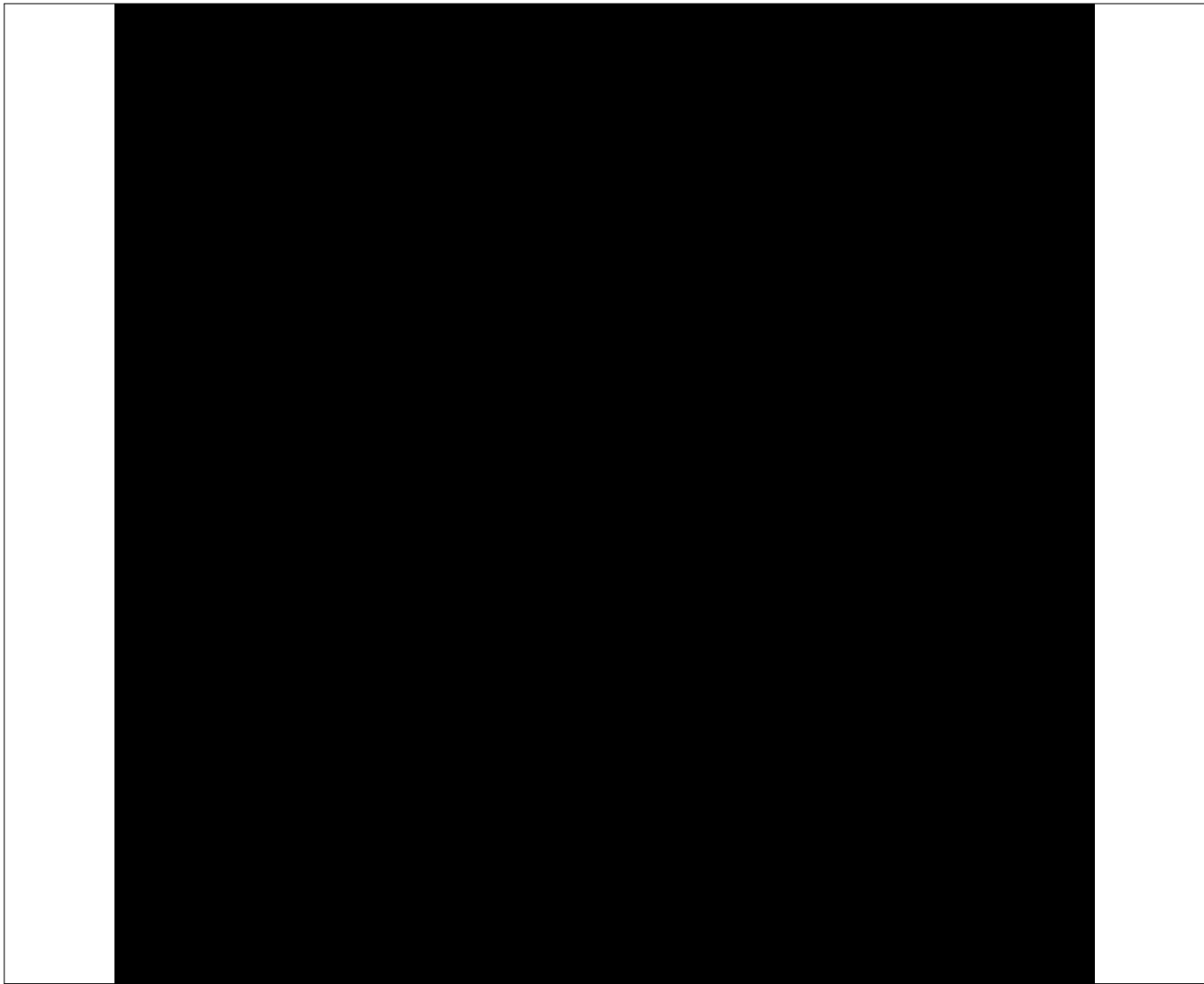
**Photometric Filename:AD10104 20W 1204C9 4090 GR2-63-45D 500.IES**

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**3D Plane ISO Illuminance Diagram**

Lum. Name: AD10104	Lum. Catalog: Down Light	Test ID:
Lamp Name: 1204C9	Lamp Catalog: COB	Test Lab: Test
Manufacture: -	Test Machine:GON-2000	Test Date: 2023/07/14

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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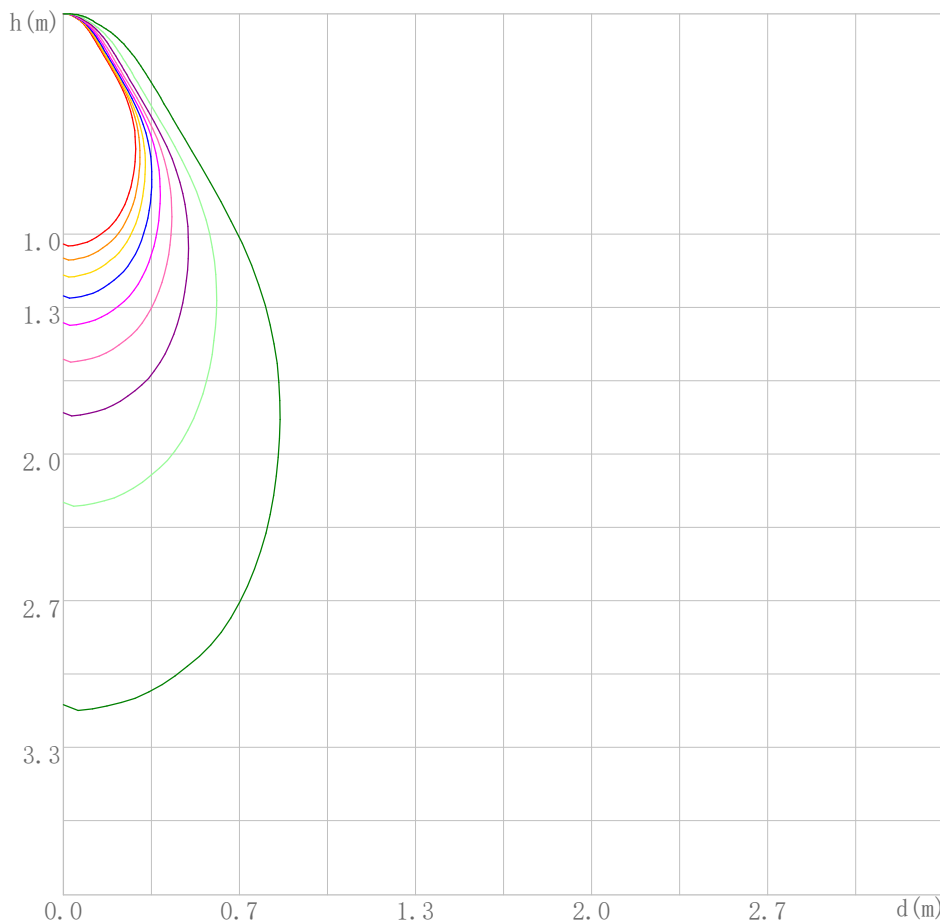
Photometric Filename:AD10104 20W 1204C9 4090 GR2-63-45D 500.IES

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## Space ISO Illuminance Diagram

Lum. Name: AD10104	Lum. Catalog: Down Light	Test ID:
Lamp Name: 1204C9	Lamp Catalog: COB	Test Lab: Test
Manufacture: -	Test Machine: GON-2000	Test Date: 2023/07/14

### Space ISO Illuminance Curve



- Curves:  
[Unit: lx]  
[EMax] =2617.732
- [EMax\*90%]=2355.959
  - [EMax\*80%]=2094.186
  - [EMax\*70%]=1832.413
  - [EMax\*60%]=1570.639
  - [EMax\*50%]=1308.866
  - [EMax\*40%]=1047.093
  - [EMax\*30%]=785.320
  - [EMax\*20%]=523.546
  - [EMax\*10%]=261.773

Space Plane Maximum Illuminance and @Angle:2617.73lx,1.0deg  
Plane Maximum Lighting Intensity and @Angle:2618.929cd,0deg

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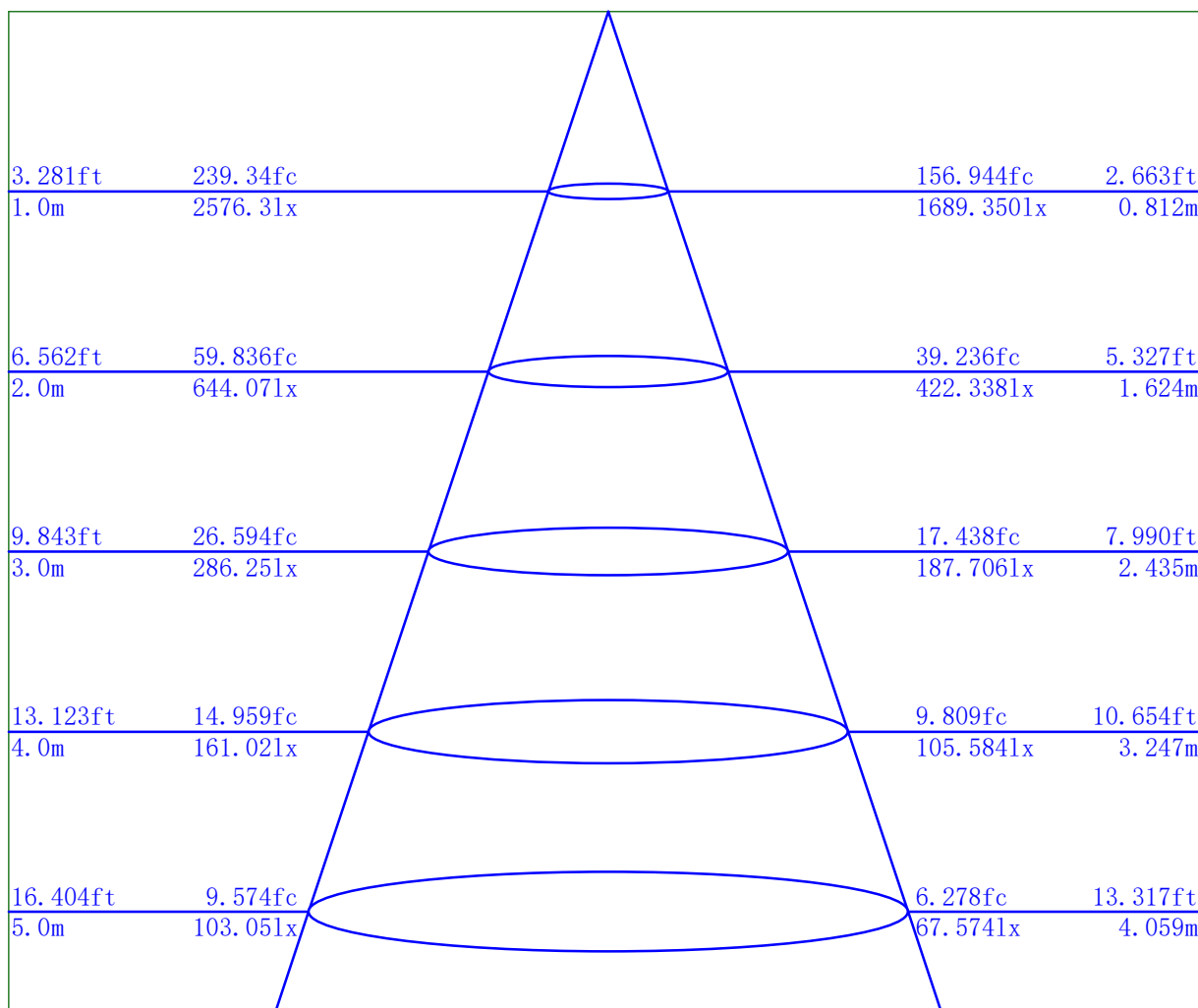
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## Illuminance-Distance Diagram

Lum. Name: AD10104	Lum. Catalog: Down Light	Test ID:
Lamp Name: 1204C9	Lamp Catalog: COB	Test Lab: Test
Manufacture: -	Test Machine: GON-2000	Test Date: 2023/07/14

Illuminance-Distance Curve



Height

Center E

Average E

Diameter

Beam Angle: 44.2

# IES Indoor Report

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## Indoor Luminance Limiting Curves

Lum. Name: AD10104	Lum. Catalog: Down Light	Test ID:
Lamp Name: 1204C9	Lamp Catalog: COB	Test Lab: Test
Manufacture: -	Test Machine:GON-2000	Test Date: 2023/07/14

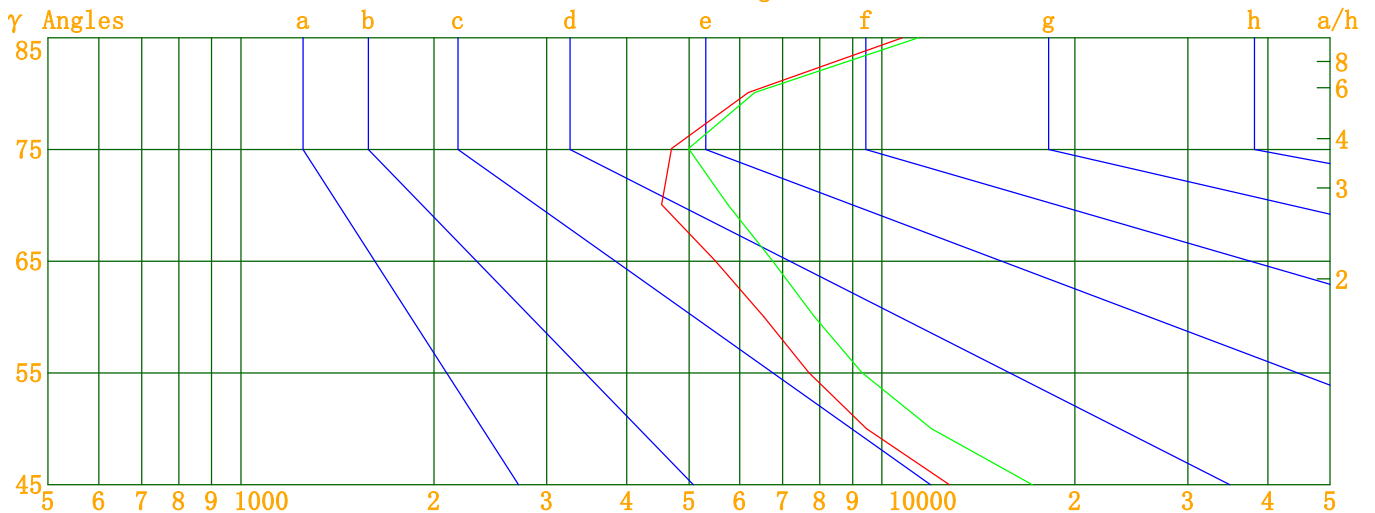
Glare Grade Table

GI	Quality	Using Illuminance							
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	12746	9456	7694	6537	5488	4530	4696	6192	10760
C90	17170	11940	9312	7843	6750	5747	4989	6331	11398

Luminance Limiting Curve



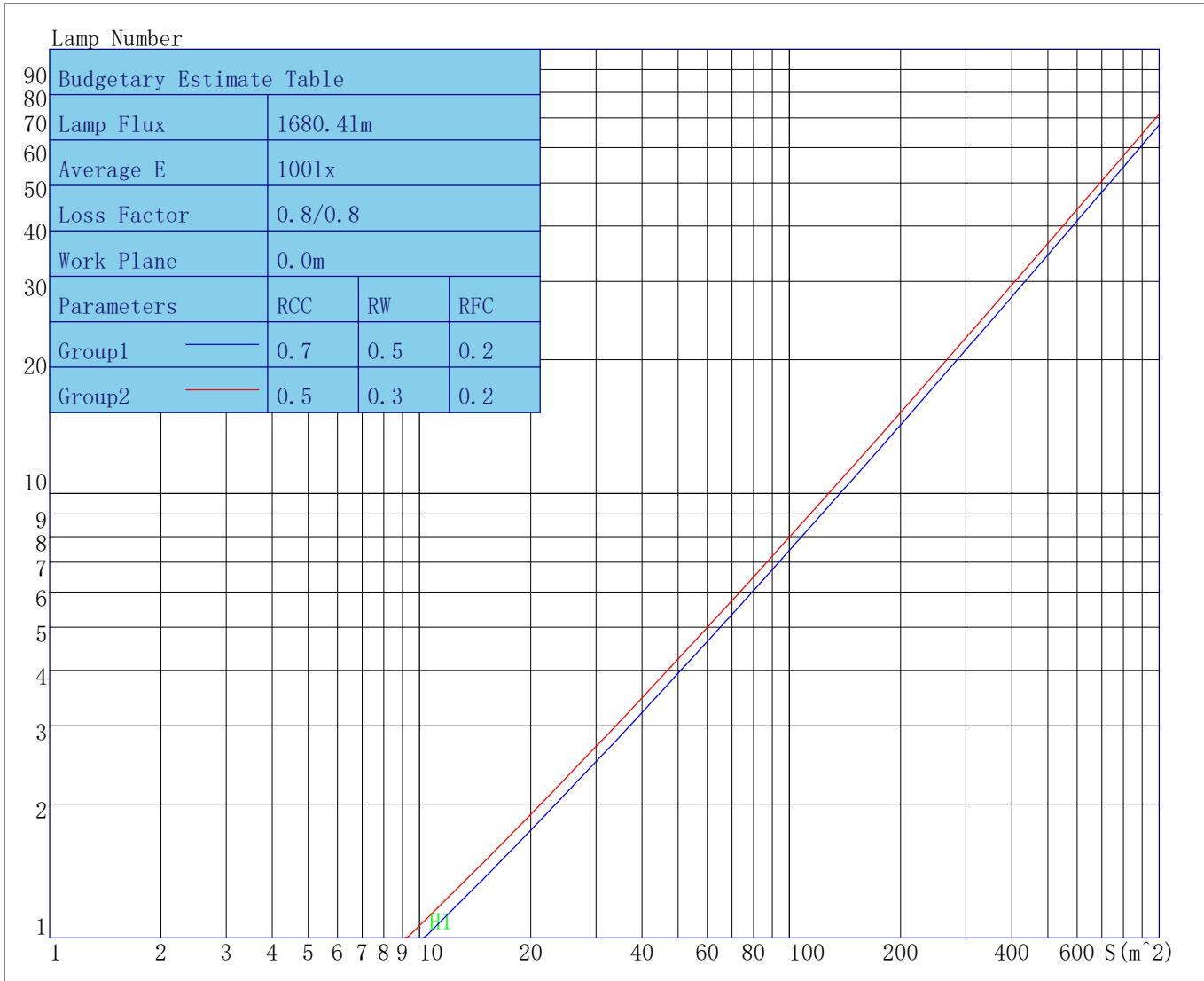
Luminous Size: Length(m)=-0.115 Width(m)=-0.115 Height(m)=0.000 Area(m^2)=0.010387  
 Luminous Type: Without Luminous Side  
 Luminous Curves: C0-C180 Color: — C90-C270 Color: —

**IES Indoor Report**

**Photometric Filename:AD10104 20W 1204C9 4090 GR2-63-45D 500.IES**

**Indoor Budgetary Estimate Table**

Lum. Name: AD10104	Lum. Catalog: Down Light	Test ID:
Lamp Name: 1204C9	Lamp Catalog: COB	Test Lab: Test
Manufacture: -	Test Machine: GON-2000	Test Date: 2023/07/14



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:AD10104 20W 1204C9 4090 GR2-63-45D 500.IES

## Indoor Coefficient of Utilization Table

Lum. Name: AD10104	Lum. Catalog: Down Light	Test ID:
Lamp Name: 1204C9	Lamp Catalog: COB	Test Lab: Test
Manufacture: -	Test Machine:GON-2000	Test Date: 2023/07/14

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	110	110	110	105	105	105	100	100	100	97
1	113	110	107	105	110	107	105	103	103	101	99	99	97	96	95	94	93	91
2	107	102	98	95	105	100	97	94	97	94	91	93	91	89	90	88	87	85
3	102	96	91	87	100	94	89	86	91	87	84	88	85	82	86	83	81	79
4	97	90	84	80	95	88	83	79	86	81	78	83	80	77	81	78	76	74
5	92	84	78	74	91	83	78	74	81	76	73	79	75	72	77	74	71	70
6	88	79	74	69	86	78	73	69	77	72	68	75	71	68	74	70	67	66
7	84	75	69	65	83	74	69	65	73	68	64	71	67	64	70	66	63	62
8	80	71	65	61	79	70	65	61	69	64	61	68	63	60	67	63	60	59
9	77	67	62	58	76	67	61	58	66	61	57	65	60	57	64	60	57	55
10	73	64	59	55	72	64	58	55	63	58	55	62	57	54	61	57	54	53

# IES Indoor Report

Photometric Filename:AD10104 20W 1204C9 4090 GR2-63-45D 500.IES

## Unified Glare Rating Table

Lum. Name: AD10104	Lum. Catalog: Down Light	Test ID:
Lamp Name: 1204C9	Lamp Catalog: COB	Test Lab: Test
Manufacture: -	Test Machine:GON-2000	Test Date: 2023/07/14

## Unified Glare Rating Table

Ceiling RCC	0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30	
Wall RW	0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30	
Floor RFC	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	
Room Size	Vewed crosswise					Vewed endwise					
X=2H	Y=2H	16.5	17.5	16.9	17.8	18.2	19.0	20.0	19.5	20.4	20.8
	Y=3H	16.6	17.5	17.1	17.9	18.3	19.2	20.0	19.6	20.4	20.9
	Y=4H	16.7	17.5	17.2	17.9	18.4	19.2	20.0	19.7	20.4	20.9
	Y=6H	17.0	17.7	17.4	18.1	18.6	19.3	20.0	19.8	20.5	20.9
	Y=8H	17.1	17.8	17.6	18.3	18.7	19.4	20.1	19.9	20.5	21.0
	Y=12H	17.4	18.1	17.9	18.5	19.0	19.6	20.2	20.0	20.6	21.1
X=4H	Y=2H	16.4	17.2	16.9	17.6	18.1	18.9	19.7	19.4	20.1	20.6
	Y=3H	16.7	17.3	17.1	17.8	18.2	19.2	19.8	19.6	20.3	20.8
	Y=4H	16.8	17.4	17.3	17.9	18.4	19.3	19.9	19.8	20.3	20.9
	Y=6H	17.2	17.7	17.7	18.2	18.7	19.5	20.0	20.0	20.5	21.0
	Y=8H	17.4	17.9	18.0	18.4	18.9	19.7	20.1	20.2	20.6	21.2
	Y=12H	17.9	18.3	18.4	18.8	19.4	19.9	20.3	20.5	20.9	21.4
X=8H	Y=4H	16.8	17.2	17.3	17.7	18.3	19.3	19.7	19.8	20.2	20.7
	Y=6H	17.3	17.6	17.8	18.2	18.8	19.6	19.9	20.1	20.5	21.1
	Y=8H	17.7	18.0	18.2	18.6	19.1	19.9	20.2	20.4	20.8	21.3
	Y=12H	18.3	18.6	18.9	19.1	19.8	20.3	20.6	20.9	21.1	21.8
X=12H	Y=4H	16.8	17.2	17.3	17.7	18.2	19.2	19.6	19.8	20.2	20.7
	Y=6H	17.3	17.6	17.9	18.1	18.7	19.6	19.9	20.2	20.4	21.0
	Y=8H	17.8	18.1	18.3	18.6	19.2	20.0	20.2	20.5	20.8	21.4
Variations with the objverer position at spacings											
S=1.0H	0.0/-0.1					0.1/-0.1					
S=1.5H	0.1/-0.2					0.3/-0.2					
S=2.0H	0.7/-0.4					0.6/-0.5					
Reduced UGR Table:											
Nordic Standard Table:	BKO					BKO					
Correction Value	1.6					1.3					

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

# IES Indoor Report

Photometric Filename:AD10104 20W 1204C9 4090 GR2-63-45D 500.IES

## Candela Tabulation

V/H	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5	C180.0	C202.5	C225.0	C247.5
$\gamma$ 0.0	2576.28	2576.28	2576.28	2576.28	2576.28	2576.28	2576.28	2576.28	2576.28	2576.28	2576.28	2576.28
$\gamma$ 1.0	2618.93	2607.41	2599.26	2590.09	2580.29	2570.02	2559.33	2547.93	2619.89	2598.63	2578.29	2560.54
$\gamma$ 2.0	2611.28	2604.01	2600.97	2595.08	2587.73	2578.46	2564.28	2549.26	2612.87	2583.69	2557.19	2536.41
$\gamma$ 3.0	2596.02	2594.54	2595.28	2591.72	2587.03	2578.82	2565.10	2546.67	2598.30	2562.19	2530.88	2508.73
$\gamma$ 4.0	2577.96	2578.75	2584.44	2583.96	2579.96	2572.65	2557.66	2537.38	2576.19	2534.37	2499.24	2477.31
$\gamma$ 5.0	2556.19	2559.21	2567.10	2569.73	2568.29	2560.32	2543.78	2521.64	2550.15	2504.26	2464.27	2435.89
$\gamma$ 6.0	2522.12	2535.78	2547.22	2549.73	2550.14	2542.66	2526.95	2498.29	2516.63	2469.19	2419.68	2384.11
$\gamma$ 7.0	2482.99	2503.33	2522.72	2526.93	2527.04	2521.14	2504.72	2471.43	2484.22	2421.73	2366.62	2327.14
$\gamma$ 8.0	2436.38	2462.76	2488.09	2498.15	2500.03	2495.40	2477.62	2441.79	2438.22	2367.47	2307.27	2263.59
$\gamma$ 9.0	2385.06	2415.09	2446.09	2460.12	2470.44	2467.87	2446.29	2406.06	2383.37	2307.82	2243.18	2196.71
$\gamma$ 10.0	2332.95	2361.90	2398.57	2417.45	2431.15	2427.91	2406.15	2360.04	2324.75	2244.45	2172.28	2125.10
$\gamma$ 11.0	2274.62	2303.52	2344.27	2369.49	2384.86	2383.48	2357.84	2305.94	2259.23	2174.72	2097.78	2046.75
$\gamma$ 12.0	2204.75	2239.61	2284.97	2315.25	2332.51	2331.95	2305.37	2250.21	2188.79	2098.24	2018.42	1963.71
$\gamma$ 13.0	2127.78	2168.93	2219.87	2255.17	2273.83	2274.84	2248.56	2188.27	2113.11	2017.00	1934.15	1876.84
$\gamma$ 14.0	2046.62	2092.20	2148.58	2187.95	2212.02	2213.35	2185.24	2120.04	2033.46	1933.51	1847.09	1787.27
$\gamma$ 15.0	1961.73	2012.45	2072.45	2115.57	2144.72	2146.65	2115.97	2046.11	1948.38	1846.97	1757.64	1696.38
$\gamma$ 16.0	1872.85	1928.88	1991.89	2038.89	2071.34	2072.01	2040.91	1969.12	1858.89	1755.49	1665.63	1604.95
$\gamma$ 17.0	1782.13	1840.74	1906.87	1956.69	1991.48	1994.04	1960.86	1888.39	1767.79	1662.17	1574.38	1513.76
$\gamma$ 18.0	1692.17	1750.18	1818.15	1871.58	1907.36	1911.57	1878.90	1803.88	1674.23	1570.19	1484.49	1424.09
$\gamma$ 19.0	1599.35	1659.65	1728.60	1784.59	1821.02	1825.98	1794.41	1717.30	1582.14	1479.68	1394.16	1335.23
$\gamma$ 20.0	1508.23	1568.77	1637.89	1694.55	1731.99	1738.98	1706.50	1626.42	1488.47	1388.02	1305.23	1248.31
$\gamma$ 21.0	1417.76	1478.73	1547.59	1603.07	1641.87	1649.31	1616.07	1535.28	1395.80	1297.70	1218.36	1165.41
$\gamma$ 22.0	1330.65	1390.30	1457.61	1512.86	1551.22	1558.94	1524.42	1443.88	1304.44	1210.37	1135.31	1085.69
$\gamma$ 23.0	1246.26	1303.71	1369.95	1424.09	1460.91	1470.40	1433.60	1353.21	1215.24	1127.25	1055.29	1008.57
$\gamma$ 24.0	1165.02	1221.27	1285.27	1338.08	1374.55	1382.76	1344.87	1264.08	1129.50	1047.09	977.41	933.56
$\gamma$ 25.0	1084.62	1142.27	1204.68	1256.14	1290.59	1299.27	1258.36	1176.88	1047.51	969.29	901.91	859.77
$\gamma$ 26.0	1008.31	1065.14	1126.82	1178.23	1210.18	1217.25	1174.99	1094.53	967.58	893.50	829.20	787.45
$\gamma$ 27.0	932.02	989.91	1054.47	1103.58	1133.70	1139.57	1095.54	1014.97	892.93	820.72	756.88	719.50
$\gamma$ 28.0	854.45	916.72	982.72	1032.84	1060.11	1065.46	1018.63	937.97	818.72	750.63	686.32	651.95
$\gamma$ 29.0	780.47	842.83	912.17	965.65	990.33	994.50	943.53	862.65	746.08	682.59	621.48	585.46
$\gamma$ 30.0	706.04	768.16	843.32	898.17	921.42	923.86	871.31	789.66	679.09	616.77	556.72	522.65
$\gamma$ 31.0	628.44	697.79	773.93	829.45	853.14	852.12	801.57	718.90	614.38	554.98	494.88	458.36
$\gamma$ 32.0	558.44	623.31	701.18	763.43	785.94	784.85	731.74	650.92	549.34	494.98	435.20	398.20
$\gamma$ 33.0	481.97	550.31	634.86	697.37	718.03	718.00	664.44	586.92	491.28	435.09	376.57	339.24
$\gamma$ 34.0	407.36	475.55	558.52	621.49	648.03	645.70	599.46	524.05	431.14	377.34	318.88	286.77
$\gamma$ 35.0	345.26	400.65	482.73	548.78	578.62	579.66	531.30	461.67	374.73	321.77	270.36	240.47
$\gamma$ 36.0	289.70	334.55	400.48	468.12	503.75	506.57	464.72	404.03	318.27	273.25	229.57	203.91
$\gamma$ 37.0	242.82	280.22	335.28	389.31	424.23	431.83	397.45	347.29	271.96	230.46	194.34	173.89
$\gamma$ 38.0	207.17	235.92	276.42	319.35	349.30	358.65	336.06	297.82	231.26	196.52	166.42	149.14
$\gamma$ 39.0	179.16	200.18	230.41	264.98	290.55	297.56	284.45	253.73	196.53	168.71	144.16	129.92
$\gamma$ 40.0	156.54	173.35	198.70	224.18	246.01	252.85	241.98	218.63	169.05	145.65	125.71	114.67
$\gamma$ 41.0	138.56	153.00	173.10	192.41	209.28	214.66	207.92	189.91	146.51	127.24	111.17	102.30
$\gamma$ 42.0	123.85	136.25	152.21	167.83	181.10	184.92	180.44	165.53	127.94	112.22	99.43	91.83
$\gamma$ 43.0	111.59	121.66	135.64	148.57	159.35	162.29	157.92	145.68	112.95	100.36	89.45	82.73
$\gamma$ 44.0	102.13	110.25	122.04	132.73	141.37	143.42	139.43	129.42	100.94	90.10	80.37	74.93
$\gamma$ 45.0	93.62	100.85	110.43	118.93	126.11	127.63	124.42	115.92	90.98	81.02	72.67	67.95
$\gamma$ 46.0	85.79	92.13	100.68	107.28	113.95	114.69	111.94	104.97	82.55	73.37	65.98	61.80



# IES Indoor Report

Photometric Filename:AD10104 20W 1204C9 4090 GR2-63-45D 500.IES

## Candela Tabulation - (Cont.)

V/H	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5	C180.0	C202.5	C225.0	C247.5
γ 47.0	79.08	84.53	91.85	97.70	103.35	104.07	101.30	95.68	74.55	66.51	60.06	56.57
γ 48.0	72.98	78.05	84.39	89.47	94.12	95.04	92.48	87.71	67.66	60.49	54.80	51.60
γ 49.0	67.75	72.42	77.67	82.21	86.30	87.11	84.91	80.49	61.70	55.40	50.50	47.43
γ 50.0	63.13	67.48	71.70	75.74	79.72	80.39	78.34	74.19	56.44	50.99	46.54	43.72
γ 51.0	59.22	63.00	66.98	70.23	73.89	74.93	72.50	68.74	52.05	47.21	43.12	40.33
γ 52.0	55.49	58.87	62.58	65.21	68.50	68.94	67.18	63.98	47.65	43.56	39.63	37.09
γ 53.0	52.38	55.29	58.41	60.99	63.59	64.31	62.62	59.58	44.07	40.10	36.23	34.22
γ 54.0	49.04	51.89	54.83	57.15	59.36	59.91	58.48	55.67	40.87	36.88	33.65	31.43
γ 55.0	45.84	48.75	51.45	53.66	55.48	55.71	54.90	52.30	37.77	33.97	31.15	29.12
γ 56.0	43.32	45.98	48.23	50.30	51.96	52.63	51.42	49.04	34.84	31.43	29.03	26.99
γ 57.0	40.70	43.20	45.08	47.15	48.92	48.75	48.23	46.42	32.10	29.18	26.46	24.84
γ 58.0	38.08	40.60	42.77	44.38	46.20	46.36	45.37	43.77	29.79	26.91	24.52	22.72
γ 59.0	36.07	38.07	40.26	41.67	43.48	43.27	42.54	41.10	27.31	24.77	22.47	20.90
γ 60.0	33.95	35.81	38.12	39.17	40.73	40.95	39.93	38.62	25.19	22.81	20.65	19.14
γ 61.0	31.78	33.78	35.49	36.73	38.05	38.23	37.55	36.10	23.03	21.09	19.12	17.63
γ 62.0	29.64	31.82	33.08	34.04	35.67	35.89	35.19	34.22	21.33	19.12	17.21	16.09
γ 63.0	27.94	29.79	31.05	31.99	33.45	33.63	33.01	31.84	19.38	17.38	15.66	14.56
γ 64.0	25.91	27.81	29.07	30.16	31.37	31.77	31.15	29.85	17.85	15.94	14.06	13.29
γ 65.0	24.09	25.80	27.08	28.13	29.63	29.70	29.29	27.75	16.07	14.31	12.74	11.66
γ 66.0	22.24	24.06	25.08	26.15	27.59	27.34	27.37	25.89	14.53	12.44	11.26	9.94
γ 67.0	20.53	22.23	23.68	24.28	25.54	25.78	25.58	24.16	13.02	11.16	9.79	8.62
γ 68.0	19.02	20.37	21.92	22.55	23.86	24.35	23.89	22.59	11.71	10.07	8.48	7.36
γ 69.0	17.37	18.63	19.99	21.11	22.10	22.64	22.05	21.18	10.17	8.89	7.25	6.30
γ 70.0	16.09	16.96	18.53	19.42	20.42	21.08	20.33	19.62	8.89	7.61	6.34	5.19
γ 71.0	14.36	15.46	17.09	17.83	18.88	19.37	19.05	18.20	7.76	6.48	5.27	4.05
γ 72.0	13.48	14.03	15.71	16.55	17.37	18.16	17.79	16.95	6.44	5.30	4.46	4.15
γ 73.0	12.96	13.34	14.56	15.07	16.03	16.51	16.62	15.63	5.93	4.40	4.14	4.38
γ 74.0	13.14	13.07	12.95	13.51	14.75	15.25	15.52	14.37	4.74	4.24	4.36	4.28
γ 75.0	12.62	12.76	12.58	12.90	13.41	14.41	13.79	13.01	4.62	4.34	4.34	4.11
γ 76.0	12.18	12.40	12.51	12.50	12.58	12.79	12.63	12.53	4.75	4.31	4.24	3.94
γ 77.0	11.87	12.01	12.15	12.11	12.34	12.22	12.34	11.91	4.74	4.23	4.18	4.00
γ 78.0	11.63	11.57	12.11	11.96	11.82	12.19	12.16	11.55	4.81	4.25	4.34	4.37
γ 79.0	11.18	11.36	11.55	11.59	11.36	11.54	11.91	11.37	4.91	4.22	4.21	4.38
γ 80.0	11.17	11.12	11.32	11.11	11.42	11.55	11.80	11.40	4.78	4.29	4.41	4.54
γ 81.0	10.75	10.94	10.86	10.95	11.25	11.30	11.40	10.98	4.78	4.27	4.32	4.55
γ 82.0	10.51	10.71	10.65	10.70	10.81	10.89	11.04	10.57	4.83	4.29	4.49	4.35
γ 83.0	10.23	10.38	10.79	10.42	10.63	11.07	10.82	10.29	4.77	4.36	4.74	4.45
γ 84.0	10.17	10.12	10.18	10.16	10.50	10.58	10.71	10.24	4.71	4.34	4.45	4.44
γ 85.0	9.74	9.88	9.83	9.94	10.32	10.40	10.55	10.21	4.82	4.41	4.56	4.50
γ 86.0	9.70	9.64	9.70	9.89	9.83	10.00	10.19	9.90	5.17	4.55	4.74	4.59
γ 87.0	9.51	9.44	9.41	9.57	9.67	9.97	9.99	9.53	5.12	4.60	4.73	4.52
γ 88.0	9.32	9.24	9.56	9.28	9.59	9.74	10.04	9.31	5.14	4.60	4.52	4.57
γ 89.0	9.38	9.05	9.16	9.00	9.59	9.36	9.82	9.32	5.07	4.67	4.68	4.67
γ 90.0	9.03	8.98	9.19	8.88	9.25	9.34	9.58	8.97	5.29	4.74	4.76	4.89
γ 91.0	9.06	8.92	8.76	8.76	9.03	9.15	9.35	8.77	5.19	4.90	4.88	4.96
γ 92.0	8.87	8.68	8.81	8.42	8.64	8.88	9.00	8.67	4.97	5.19	5.09	4.97
γ 93.0	8.52	8.51	8.28	8.35	8.45	8.54	9.01	8.30	5.15	5.00	4.93	5.14

# IES Indoor Report

Photometric Filename:AD10104 20W 1204C9 4090 GR2-63-45D 500.IES

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## Candela Tabulation - (Cont.)

V/H	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5	C180.0	C202.5	C225.0	C247.5
γ 94.0	8.14	8.48	8.32	8.21	8.40	8.70	9.04	8.26	5.25	5.16	5.05	5.17
γ 95.0	8.21	8.41	8.28	8.01	8.26	8.87	8.73	8.07	5.66	5.20	4.87	5.17
γ 96.0	8.13	8.16	8.14	7.87	8.17	8.69	8.49	7.83	5.45	5.21	5.22	5.33
γ 97.0	7.91	7.93	8.00	7.63	8.12	8.18	8.53	7.84	5.58	5.32	5.17	5.30
γ 98.0	8.04	7.91	7.55	7.68	7.75	8.23	8.44	7.68	5.56	5.37	5.20	5.35
γ 99.0	7.80	7.98	7.88	7.68	7.57	8.00	8.03	7.77	5.58	5.52	5.23	5.46
γ 100.0	7.68	7.83	7.65	7.61	7.66	7.94	8.00	7.71	5.74	5.57	5.53	5.48
γ 101.0	7.43	7.71	7.37	7.47	7.42	8.07	7.93	7.65	5.71	5.44	5.59	5.50
γ 102.0	7.63	7.63	7.38	7.41	7.34	7.62	7.86	7.58	5.59	5.23	5.77	5.29
γ 103.0	7.62	7.47	7.37	7.18	7.32	7.77	7.74	7.36	5.58	5.28	5.63	5.48
γ 104.0	7.66	7.28	7.79	7.16	7.14	7.44	7.54	7.22	5.66	5.38	5.45	5.59
γ 105.0	7.53	7.25	7.37	6.95	7.13	7.27	7.36	6.98	5.72	5.32	5.66	5.63
γ 106.0	7.20	7.28	7.40	6.82	6.98	7.24	7.23	7.18	5.87	5.43	5.54	5.70
γ 107.0	7.14	7.18	7.19	6.81	6.89	7.32	7.34	6.93	5.86	5.53	5.57	5.53
γ 108.0	7.16	7.15	7.18	6.82	6.78	7.30	7.25	6.72	5.85	5.44	5.67	5.76
γ 109.0	7.18	7.03	7.01	7.19	6.74	7.10	7.28	6.92	5.64	5.45	5.80	5.72
γ 110.0	6.93	6.75	7.36	7.06	6.65	6.91	7.10	6.83	6.16	5.37	5.57	5.55
γ 111.0	7.11	6.73	7.05	6.62	6.55	6.75	6.95	7.02	6.06	5.49	5.92	5.59
γ 112.0	6.69	6.72	7.01	7.06	6.70	6.94	6.99	6.74	6.05	5.53	6.00	5.57
γ 113.0	6.40	6.75	6.57	6.96	6.46	6.94	6.99	6.57	5.93	5.41	5.54	5.39
γ 114.0	6.74	6.57	6.67	6.73	6.25	6.62	6.90	6.55	5.97	5.42	5.96	5.47
γ 115.0	6.67	6.53	6.80	6.78	6.23	6.80	6.93	6.55	6.02	5.49	5.86	5.48
γ 116.0	6.59	6.38	6.73	6.69	6.32	6.56	6.70	6.70	6.08	5.50	5.92	5.65
γ 117.0	6.76	6.31	6.62	6.71	6.24	6.43	6.53	6.49	6.42	5.63	5.99	5.69
γ 118.0	6.55	6.36	6.60	6.65	6.25	6.16	6.72	6.21	5.95	5.82	6.07	5.58
γ 119.0	6.35	6.21	6.47	6.62	6.23	6.54	6.64	6.27	5.96	5.88	6.11	5.44
γ 120.0	6.54	6.27	6.35	6.48	6.05	6.47	6.78	6.21	6.22	5.74	5.95	5.63
γ 121.0	6.62	6.21	6.08	6.42	6.03	6.45	7.00	6.12	6.33	5.72	6.02	5.72
γ 122.0	6.44	5.96	6.25	6.46	6.13	6.28	6.83	6.32	6.27	5.70	5.80	5.71
γ 123.0	6.54	6.01	6.41	6.30	6.22	6.21	6.76	6.14	6.25	5.84	5.92	5.79
γ 124.0	6.77	6.15	6.24	6.27	5.96	6.36	6.75	6.00	6.49	6.02	5.93	5.92
γ 125.0	6.61	6.19	6.28	6.41	5.63	6.36	6.59	6.15	6.26	6.16	6.07	5.77
γ 126.0	6.38	6.31	5.93	6.16	5.81	6.35	6.52	6.19	6.20	6.12	5.84	5.75
γ 127.0	6.53	6.38	6.27	6.25	5.86	6.47	6.44	6.28	6.36	6.08	6.02	5.94
γ 128.0	6.51	6.35	6.16	6.48	5.91	6.40	6.20	6.10	6.12	6.12	5.84	5.82
γ 129.0	6.59	6.31	6.31	6.11	6.18	6.37	6.27	5.95	6.27	6.30	6.09	5.84
γ 130.0	6.71	6.44	6.37	5.99	5.90	6.31	6.40	5.99	6.33	6.30	6.19	6.30
γ 131.0	6.63	6.39	6.58	6.28	6.02	6.29	6.32	6.05	6.32	6.28	6.22	6.26
γ 132.0	6.92	6.35	6.64	6.38	6.04	6.34	6.31	6.01	6.67	6.36	6.20	6.30
γ 133.0	6.84	6.54	6.34	6.18	5.98	6.07	6.29	6.12	6.53	6.40	6.46	6.62
γ 134.0	6.93	6.59	6.64	6.24	6.24	6.12	6.45	5.93	6.69	6.38	6.61	6.76
γ 135.0	6.65	6.51	6.56	6.44	6.10	6.37	6.61	6.06	6.53	6.53	6.58	6.58
γ 136.0	6.76	6.47	6.23	6.36	6.07	6.27	6.61	6.34	6.54	6.67	6.49	6.72
γ 137.0	7.00	6.61	6.42	6.27	6.22	6.25	6.55	6.37	6.82	6.81	6.80	6.59
γ 138.0	7.08	6.64	6.64	6.34	6.40	6.57	6.66	6.64	7.16	6.86	6.78	6.61
γ 139.0	6.97	6.76	6.76	6.55	6.38	6.85	6.94	6.74	7.02	6.81	6.61	6.73
γ 140.0	7.22	7.16	6.81	6.63	6.24	6.60	7.01	6.40	7.21	6.92	6.85	6.60

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# IES Indoor Report

Photometric Filename:AD10104 20W 1204C9 4090 GR2-63-45D 500.IES

## Candela Tabulation - (Cont.)

V/H	C0.0	C22.5	C45.0	C67.5	C90.0	C112.5	C135.0	C157.5	C180.0	C202.5	C225.0	C247.5
γ 141.0	7.26	7.31	6.80	6.73	6.39	6.26	6.94	6.70	7.44	7.16	7.03	6.71
γ 142.0	7.36	7.26	7.06	6.74	6.56	6.65	7.06	6.68	7.28	7.18	6.93	6.73
γ 143.0	7.51	7.22	7.23	6.93	6.67	6.77	7.11	6.96	7.46	7.17	7.00	6.88
γ 144.0	7.63	7.16	6.94	7.06	6.83	6.62	7.10	7.37	7.61	7.18	7.34	6.92
γ 145.0	7.79	7.19	7.11	7.00	6.92	6.76	7.15	7.12	7.38	7.41	7.24	7.12
γ 146.0	7.91	7.63	7.14	6.92	7.00	6.80	7.36	7.11	7.61	7.60	7.41	7.33
γ 147.0	7.82	7.71	7.50	6.93	7.08	7.33	7.59	7.05	7.84	7.53	7.42	7.53
γ 148.0	7.69	7.65	7.50	7.14	7.10	7.34	7.85	7.38	7.81	7.56	7.57	7.56
γ 149.0	7.93	7.63	7.63	7.33	7.27	7.02	7.93	7.28	8.13	7.77	7.68	7.59
γ 150.0	7.91	7.75	7.73	7.28	7.44	7.48	8.02	7.46	7.76	7.91	7.72	7.96
γ 151.0	8.08	8.02	7.84	7.62	7.59	7.61	7.93	7.65	8.14	8.05	7.84	7.93
γ 152.0	8.21	8.43	7.91	7.73	7.62	7.59	7.92	7.78	8.01	8.11	8.15	8.10
γ 153.0	8.23	8.46	8.15	7.93	7.76	7.88	7.97	7.64	8.42	8.10	8.31	8.09
γ 154.0	8.45	8.36	8.09	7.96	7.98	8.01	8.05	7.80	8.61	8.29	8.42	8.12
γ 155.0	8.53	8.50	8.26	7.88	8.16	7.88	8.31	7.83	8.65	8.29	8.46	8.03
γ 156.0	8.42	8.55	8.13	7.93	8.34	7.95	8.41	7.92	8.67	8.54	8.64	8.44
γ 157.0	8.92	8.89	8.27	7.99	8.27	8.06	8.50	8.19	8.76	8.74	8.58	8.56
γ 158.0	8.79	8.94	8.66	8.23	8.24	8.14	8.45	8.16	9.07	8.65	8.87	8.56
γ 159.0	8.95	9.00	8.83	8.28	8.39	8.43	8.58	8.20	8.97	8.68	8.68	8.77
γ 160.0	9.03	9.20	8.98	8.52	8.55	8.26	8.77	8.45	9.22	8.99	8.89	8.78
γ 161.0	9.30	9.20	8.93	8.60	8.53	8.44	8.87	8.56	9.15	9.07	8.82	8.85
γ 162.0	9.22	9.19	8.83	8.34	8.55	8.59	8.80	8.59	9.24	8.96	8.86	8.86
γ 163.0	9.53	9.40	9.00	8.52	8.70	8.57	8.99	8.65	9.49	9.21	9.13	8.79
γ 164.0	9.39	9.41	8.98	8.81	8.73	8.64	9.17	8.51	9.28	9.26	8.80	8.98
γ 165.0	9.45	9.63	8.94	8.86	8.94	8.61	9.28	8.51	9.44	9.31	9.07	9.03
γ 166.0	9.27	9.82	9.29	8.86	9.00	8.75	9.43	8.83	9.68	9.33	9.13	9.10
γ 167.0	9.80	9.79	9.53	9.01	8.92	9.29	9.55	9.14	9.93	9.30	9.46	9.28
γ 168.0	9.81	9.82	9.44	9.19	9.34	9.13	9.55	9.14	9.84	9.46	9.40	9.37
γ 169.0	9.87	9.80	9.43	9.49	9.63	8.86	9.45	9.19	9.98	9.53	9.47	9.44
γ 170.0	9.93	9.67	9.60	9.49	9.53	9.11	9.39	9.10	9.97	9.54	9.57	9.37
γ 171.0	10.14	9.84	9.48	9.32	9.48	9.21	9.71	9.37	9.74	9.46	9.55	9.64
γ 172.0	10.34	9.95	9.72	9.13	9.43	9.29	9.88	9.42	10.12	9.55	9.73	9.53
γ 173.0	10.08	9.93	9.60	9.50	9.71	9.21	9.88	9.52	10.17	9.90	10.03	9.80
γ 174.0	10.23	10.02	9.78	9.88	9.86	9.23	9.79	9.46	10.49	10.00	9.90	9.80
γ 175.0	10.33	10.01	10.06	9.99	9.55	9.42	9.79	9.49	10.36	9.88	10.08	9.71
γ 176.0	10.33	9.83	9.91	10.13	9.62	9.66	10.01	9.49	10.47	10.14	9.87	9.89
γ 177.0	10.42	9.87	10.04	10.14	9.93	9.57	9.96	9.73	10.20	10.40	9.90	9.87
γ 178.0	10.43	10.18	10.31	10.02	9.91	9.53	9.94	9.62	10.40	10.35	9.83	9.67
γ 179.0	10.21	10.23	9.81	9.92	10.05	9.55	10.14	9.62	10.27	10.12	10.08	9.70
γ 180.0	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91
V/H	C270.0	C292.5	C315.0	C337.5								
γ 0.0	2576.28	2576.28	2576.28	2576.28								
γ 1.0	2545.80	2539.01	2529.47	2529.09								
γ 2.0	2522.66	2515.27	2509.43	2511.01								
γ 3.0	2496.50	2492.30	2485.83	2493.79								
γ 4.0	2458.56	2451.97	2454.11	2465.66								
γ 5.0	2412.88	2409.02	2412.57	2428.79								

# IES Indoor Report

Photometric Filename:AD10104 20W 1204C9 4090 GR2-63-45D 500.IES

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## Candela Tabulation - (Cont.)

V/H	C270. 0	C292. 5	C315. 0	C337. 5
$\gamma$ 6. 0	2361. 15	2359. 38	2364. 27	2385. 49
$\gamma$ 7. 0	2305. 22	2303. 41	2310. 23	2336. 64
$\gamma$ 8. 0	2242. 07	2240. 90	2251. 03	2280. 97
$\gamma$ 9. 0	2171. 90	2171. 36	2186. 31	2221. 95
$\gamma$ 10. 0	2096. 02	2096. 74	2114. 16	2155. 10
$\gamma$ 11. 0	2015. 55	2017. 60	2036. 99	2081. 93
$\gamma$ 12. 0	1931. 50	1933. 44	1955. 72	2004. 80
$\gamma$ 13. 0	1843. 60	1847. 04	1870. 79	1924. 64
$\gamma$ 14. 0	1752. 83	1756. 84	1783. 62	1839. 34
$\gamma$ 15. 0	1661. 05	1666. 64	1694. 02	1749. 92
$\gamma$ 16. 0	1569. 97	1575. 76	1602. 90	1658. 29
$\gamma$ 17. 0	1480. 30	1485. 78	1511. 94	1568. 42
$\gamma$ 18. 0	1391. 51	1397. 26	1422. 54	1480. 08
$\gamma$ 19. 0	1303. 77	1309. 64	1335. 05	1391. 43
$\gamma$ 20. 0	1219. 11	1224. 57	1250. 67	1303. 58
$\gamma$ 21. 0	1138. 07	1143. 45	1169. 71	1219. 33
$\gamma$ 22. 0	1059. 33	1065. 54	1091. 64	1138. 97
$\gamma$ 23. 0	984. 09	991. 50	1015. 87	1061. 56
$\gamma$ 24. 0	910. 77	918. 80	942. 15	985. 22
$\gamma$ 25. 0	838. 41	846. 56	870. 34	909. 77
$\gamma$ 26. 0	769. 56	777. 09	799. 30	837. 58
$\gamma$ 27. 0	701. 05	707. 78	727. 91	766. 56
$\gamma$ 28. 0	630. 91	637. 12	658. 69	690. 69
$\gamma$ 29. 0	566. 50	572. 55	589. 46	621. 39
$\gamma$ 30. 0	501. 93	503. 72	519. 46	550. 40
$\gamma$ 31. 0	439. 12	440. 01	453. 56	481. 54
$\gamma$ 32. 0	376. 01	374. 61	387. 19	414. 30
$\gamma$ 33. 0	319. 04	316. 45	324. 28	350. 20
$\gamma$ 34. 0	267. 88	262. 76	272. 29	291. 85
$\gamma$ 35. 0	225. 02	222. 17	228. 62	245. 39
$\gamma$ 36. 0	191. 21	188. 14	192. 37	207. 37
$\gamma$ 37. 0	163. 68	161. 00	164. 85	175. 98
$\gamma$ 38. 0	141. 32	139. 62	143. 43	151. 68
$\gamma$ 39. 0	123. 47	123. 05	125. 79	132. 66
$\gamma$ 40. 0	109. 71	109. 78	111. 50	117. 50
$\gamma$ 41. 0	98. 52	97. 87	99. 69	104. 37
$\gamma$ 42. 0	88. 53	88. 31	89. 78	93. 40
$\gamma$ 43. 0	80. 05	79. 69	81. 20	84. 50
$\gamma$ 44. 0	72. 72	72. 43	73. 52	76. 44
$\gamma$ 45. 0	65. 91	65. 53	66. 80	69. 22
$\gamma$ 46. 0	60. 09	59. 97	60. 91	63. 17
$\gamma$ 47. 0	54. 83	55. 11	55. 74	57. 91
$\gamma$ 48. 0	50. 23	50. 29	51. 19	53. 41
$\gamma$ 49. 0	46. 18	46. 48	47. 26	48. 97
$\gamma$ 50. 0	42. 85	42. 82	43. 49	45. 23
$\gamma$ 51. 0	39. 41	39. 84	39. 97	41. 60
$\gamma$ 52. 0	36. 22	36. 47	36. 87	38. 49

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# IES Indoor Report

Photometric Filename:AD10104 20W 1204C9 4090 GR2-63-45D 500.IES

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## Candela Tabulation - (Cont.)

V/H	C270. 0	C292. 5	C315. 0	C337. 5
$\gamma$ 53. 0	33. 44	33. 74	34. 12	35. 80
$\gamma$ 54. 0	30. 76	30. 84	31. 12	32. 92
$\gamma$ 55. 0	28. 28	28. 31	28. 56	30. 54
$\gamma$ 56. 0	25. 87	25. 99	26. 43	28. 06
$\gamma$ 57. 0	23. 67	23. 75	24. 29	25. 55
$\gamma$ 58. 0	21. 67	21. 52	22. 13	23. 32
$\gamma$ 59. 0	19. 94	19. 70	20. 20	21. 86
$\gamma$ 60. 0	18. 26	18. 17	18. 42	19. 77
$\gamma$ 61. 0	16. 66	16. 30	16. 72	17. 80
$\gamma$ 62. 0	15. 10	14. 64	15. 07	16. 05
$\gamma$ 63. 0	13. 64	13. 43	13. 46	14. 23
$\gamma$ 64. 0	12. 06	11. 93	12. 00	13. 14
$\gamma$ 65. 0	10. 68	10. 33	10. 50	11. 37
$\gamma$ 66. 0	9. 36	8. 78	8. 96	9. 76
$\gamma$ 67. 0	8. 19	7. 63	7. 71	8. 26
$\gamma$ 68. 0	6. 76	6. 47	6. 47	7. 08
$\gamma$ 69. 0	5. 83	5. 39	5. 44	6. 08
$\gamma$ 70. 0	4. 78	4. 05	4. 57	4. 91
$\gamma$ 71. 0	4. 14	3. 99	4. 10	4. 49
$\gamma$ 72. 0	4. 11	3. 98	4. 11	4. 29
$\gamma$ 73. 0	4. 25	4. 29	4. 10	4. 16
$\gamma$ 74. 0	4. 16	4. 09	4. 18	4. 35
$\gamma$ 75. 0	4. 31	4. 32	4. 22	4. 43
$\gamma$ 76. 0	4. 42	4. 13	4. 26	4. 47
$\gamma$ 77. 0	4. 26	4. 05	4. 49	4. 52
$\gamma$ 78. 0	4. 30	4. 36	4. 45	4. 41
$\gamma$ 79. 0	4. 16	4. 25	4. 32	4. 42
$\gamma$ 80. 0	4. 29	4. 44	4. 45	4. 57
$\gamma$ 81. 0	4. 41	4. 49	4. 54	4. 63
$\gamma$ 82. 0	4. 41	4. 23	4. 50	4. 68
$\gamma$ 83. 0	4. 49	4. 30	4. 52	5. 01
$\gamma$ 84. 0	4. 63	4. 59	4. 57	4. 92
$\gamma$ 85. 0	4. 76	4. 94	4. 79	4. 94
$\gamma$ 86. 0	4. 63	4. 96	4. 76	4. 88
$\gamma$ 87. 0	4. 73	4. 85	4. 78	4. 81
$\gamma$ 88. 0	4. 88	4. 90	4. 97	5. 14
$\gamma$ 89. 0	4. 80	4. 69	4. 97	5. 08
$\gamma$ 90. 0	4. 76	4. 98	4. 99	5. 28
$\gamma$ 91. 0	4. 87	4. 88	4. 92	5. 34
$\gamma$ 92. 0	4. 92	4. 83	4. 98	5. 48
$\gamma$ 93. 0	4. 93	5. 09	5. 11	5. 50
$\gamma$ 94. 0	5. 19	5. 18	5. 07	5. 46
$\gamma$ 95. 0	5. 29	5. 37	5. 06	5. 34
$\gamma$ 96. 0	5. 06	5. 43	5. 12	5. 34
$\gamma$ 97. 0	4. 97	5. 12	5. 31	5. 47
$\gamma$ 98. 0	5. 26	5. 35	5. 32	5. 42
$\gamma$ 99. 0	5. 32	5. 38	5. 05	5. 55

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# IES Indoor Report

Photometric Filename:AD10104 20W 1204C9 4090 GR2-63-45D 500.IES

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## Candela Tabulation - (Cont.)

V/H	C270. 0	C292. 5	C315. 0	C337. 5
$\gamma$ 100. 0	5. 39	5. 25	5. 21	5. 54
$\gamma$ 101. 0	5. 47	5. 46	5. 33	5. 83
$\gamma$ 102. 0	5. 44	5. 41	5. 48	5. 75
$\gamma$ 103. 0	5. 65	5. 58	5. 74	5. 70
$\gamma$ 104. 0	5. 75	5. 87	5. 73	5. 68
$\gamma$ 105. 0	5. 86	5. 37	5. 58	5. 81
$\gamma$ 106. 0	5. 94	5. 70	5. 49	5. 53
$\gamma$ 107. 0	5. 67	5. 80	5. 54	5. 61
$\gamma$ 108. 0	5. 55	5. 50	5. 62	6. 05
$\gamma$ 109. 0	5. 61	5. 46	5. 73	5. 84
$\gamma$ 110. 0	5. 70	5. 49	5. 75	5. 78
$\gamma$ 111. 0	5. 51	5. 75	5. 80	5. 72
$\gamma$ 112. 0	5. 47	5. 68	5. 75	5. 88
$\gamma$ 113. 0	5. 59	5. 75	5. 70	5. 90
$\gamma$ 114. 0	5. 64	5. 79	5. 64	6. 00
$\gamma$ 115. 0	5. 64	5. 71	5. 75	5. 95
$\gamma$ 116. 0	5. 71	5. 90	5. 83	5. 80
$\gamma$ 117. 0	5. 60	5. 96	5. 75	6. 02
$\gamma$ 118. 0	5. 62	6. 00	5. 84	6. 00
$\gamma$ 119. 0	5. 54	5. 84	5. 79	5. 82
$\gamma$ 120. 0	5. 74	6. 11	6. 03	5. 92
$\gamma$ 121. 0	5. 82	6. 05	6. 08	5. 99
$\gamma$ 122. 0	6. 05	6. 05	5. 87	6. 18
$\gamma$ 123. 0	6. 10	5. 97	5. 85	6. 00
$\gamma$ 124. 0	5. 86	5. 75	5. 82	6. 24
$\gamma$ 125. 0	5. 94	5. 94	5. 78	6. 27
$\gamma$ 126. 0	6. 17	6. 08	5. 96	6. 21
$\gamma$ 127. 0	6. 10	6. 00	6. 12	6. 15
$\gamma$ 128. 0	6. 10	6. 01	6. 28	6. 23
$\gamma$ 129. 0	6. 18	6. 14	6. 31	6. 24
$\gamma$ 130. 0	5. 96	6. 47	6. 11	6. 32
$\gamma$ 131. 0	6. 23	6. 14	6. 14	6. 33
$\gamma$ 132. 0	6. 23	6. 09	6. 21	6. 24
$\gamma$ 133. 0	6. 35	6. 36	6. 28	6. 21
$\gamma$ 134. 0	6. 37	6. 31	6. 53	6. 20
$\gamma$ 135. 0	6. 46	6. 24	6. 79	6. 38
$\gamma$ 136. 0	6. 74	6. 46	6. 65	6. 67
$\gamma$ 137. 0	6. 69	6. 64	6. 46	6. 61
$\gamma$ 138. 0	6. 89	6. 68	6. 69	6. 51
$\gamma$ 139. 0	6. 96	6. 88	6. 86	6. 58
$\gamma$ 140. 0	7. 15	6. 92	7. 02	6. 80
$\gamma$ 141. 0	7. 14	7. 07	7. 16	6. 95
$\gamma$ 142. 0	7. 22	6. 97	7. 15	7. 10
$\gamma$ 143. 0	7. 18	7. 08	7. 28	7. 20
$\gamma$ 144. 0	7. 17	7. 43	7. 46	7. 34
$\gamma$ 145. 0	7. 35	7. 50	7. 42	7. 19
$\gamma$ 146. 0	7. 53	7. 44	7. 50	7. 35

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# IES Indoor Report

Photometric Filename:AD10104 20W 1204C9 4090 GR2-63-45D 500.IES

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## Candela Tabulation - (Cont.)

V/H	C270. 0	C292. 5	C315. 0	C337. 5
γ 147. 0	7. 71	7. 42	7. 74	7. 44
γ 148. 0	7. 83	7. 51	7. 76	7. 78
γ 149. 0	7. 67	8. 17	7. 79	7. 54
γ 150. 0	7. 73	7. 84	7. 99	7. 81
γ 151. 0	7. 90	7. 94	8. 10	7. 83
γ 152. 0	8. 05	8. 16	8. 09	7. 97
γ 153. 0	8. 32	8. 00	8. 27	7. 94
γ 154. 0	8. 41	8. 22	8. 42	7. 99
γ 155. 0	8. 39	8. 24	8. 64	8. 15
γ 156. 0	8. 60	8. 27	8. 71	8. 19
γ 157. 0	8. 30	8. 49	8. 79	8. 34
γ 158. 0	8. 35	8. 63	8. 75	8. 46
γ 159. 0	8. 73	8. 78	8. 88	8. 40
γ 160. 0	8. 88	8. 74	8. 95	8. 47
γ 161. 0	9. 15	9. 04	9. 08	8. 78
γ 162. 0	9. 03	8. 90	9. 04	8. 87
γ 163. 0	9. 15	8. 81	9. 14	8. 83
γ 164. 0	9. 10	8. 88	9. 48	8. 89
γ 165. 0	9. 31	9. 00	9. 47	9. 18
γ 166. 0	9. 71	9. 26	9. 39	9. 26
γ 167. 0	9. 64	9. 25	9. 43	9. 10
γ 168. 0	9. 51	9. 41	9. 48	9. 10
γ 169. 0	9. 51	9. 38	9. 67	9. 36
γ 170. 0	9. 75	9. 58	9. 97	9. 31
γ 171. 0	9. 67	9. 18	10. 10	9. 36
γ 172. 0	9. 59	9. 31	10. 10	9. 54
γ 173. 0	9. 57	9. 76	10. 28	9. 54
γ 174. 0	9. 76	9. 68	10. 12	9. 70
γ 175. 0	9. 98	9. 82	9. 99	9. 76
γ 176. 0	9. 92	9. 32	10. 16	9. 76
γ 177. 0	9. 86	9. 90	10. 26	9. 54
γ 178. 0	9. 75	9. 89	10. 26	9. 80
γ 179. 0	9. 82	9. 71	10. 33	9. 63
γ 180. 0	9. 91	9. 91	9. 91	9. 91

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