

IES Indoor Report

Photometric Filename: AT10020-20W-4000K-RA90-24D-SBK-3T-IES.IES

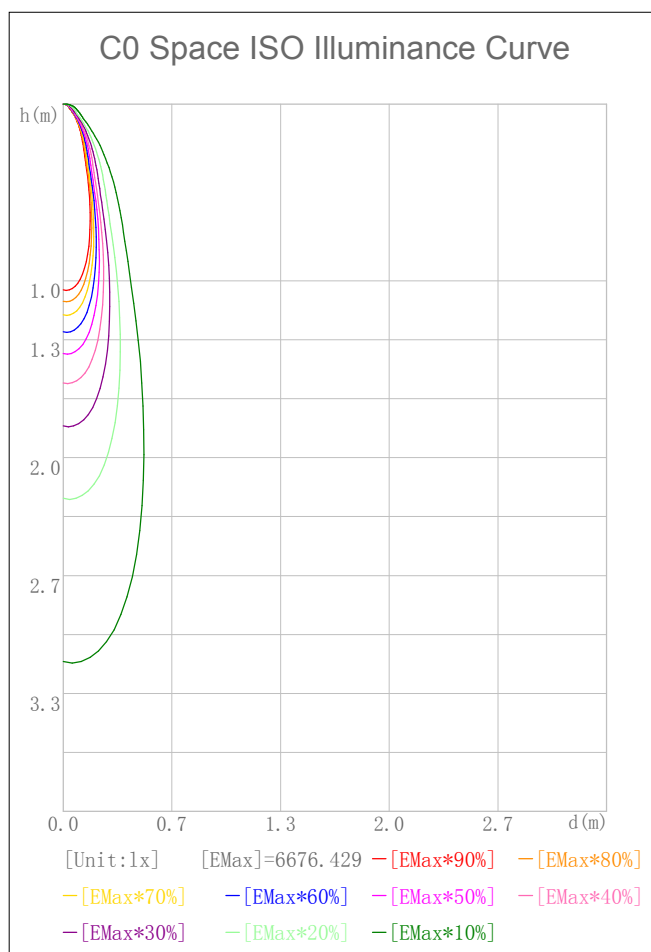
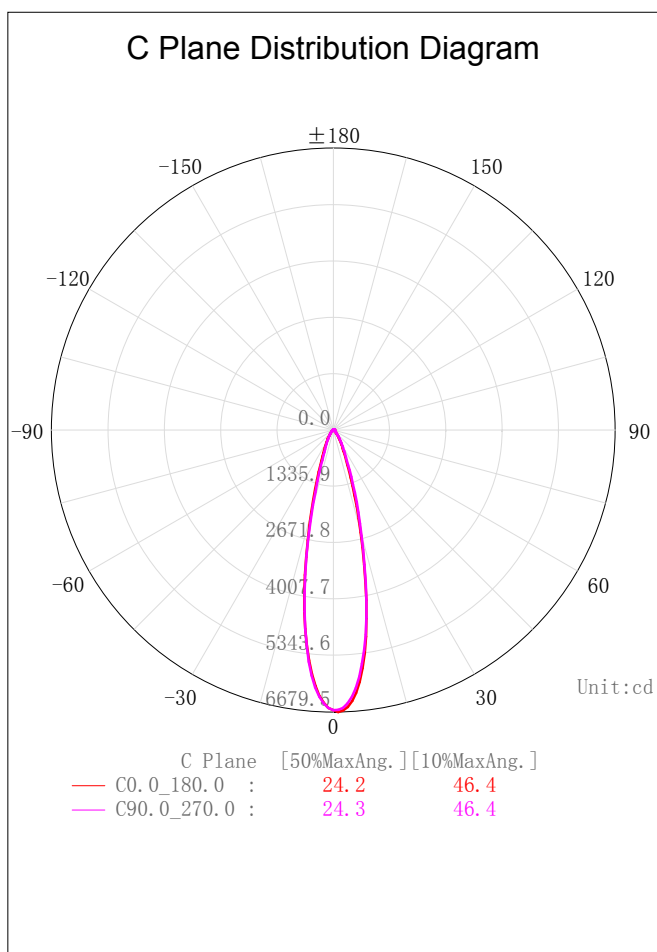
Indoor Luminaire Photometric Data

Description Information

Luminaire Name: AT10020-20W-4000K-RA90-24D-SBK-3T-IES		Lum. Catalog:	Test ID:
Lamp Name: 40G1000-C-73		Lamp Catalog: COB	Test Date: 2022/09/08
Manufacture:		Shld. Ang(°): 24	Test Machine: GON-2000
Test Lab: Test		Frequency(Hz): 50	Lamp CCT(K): 4000 Ra: 90
Lum. Size (W*L*H): 0.000m*0.000m*0.000m		Lum. Area (m2): 0.000	Lum. W (kg): 0.000
Test System: C, γ	Test Step: C=30.0 γ =1.0	Temp. (°C): 25	Humidity (%): 50.0

Character Parameter

Lamp Speciality Parameter		Luminaire Speciality Parameter	
Rated Flux(lm): 1800.000	Luminaire Flux(lm): 1696.790	Field Angle(10%Imax): 46.4(°)	
Rated Power(W): 20	Luminaire Efficiency: 94.27%	Down Lumens&Percent: 1643.622lm 96.87%	
Rated Voltage(V): 220	Luminaire EER(lm/W): 85.696	Up Lumens&Percent: 53.167lm 3.13%	
Tested Power(W): 19.800	Max. Candela(cd): 6679.481	S/MH: C0_a180=0.412 C90_270=0.412	
Lamps' Inside: 1	Max Cand@Ang.(°): C=0.0 γ =1.0	CIE Type: Semi-Direct	
Tested Electrics(V, A, pf): 220.9, 0.092, 0.965		Beam Angle(50%Imax): 24.2(°)	ErP Φ use(90°): 1564.223lm
Lamp Size(W*L*H): 0.000m*0.000m*0.000m		Left=-11.4°, Right=12.8°	IRF (%): 825.090



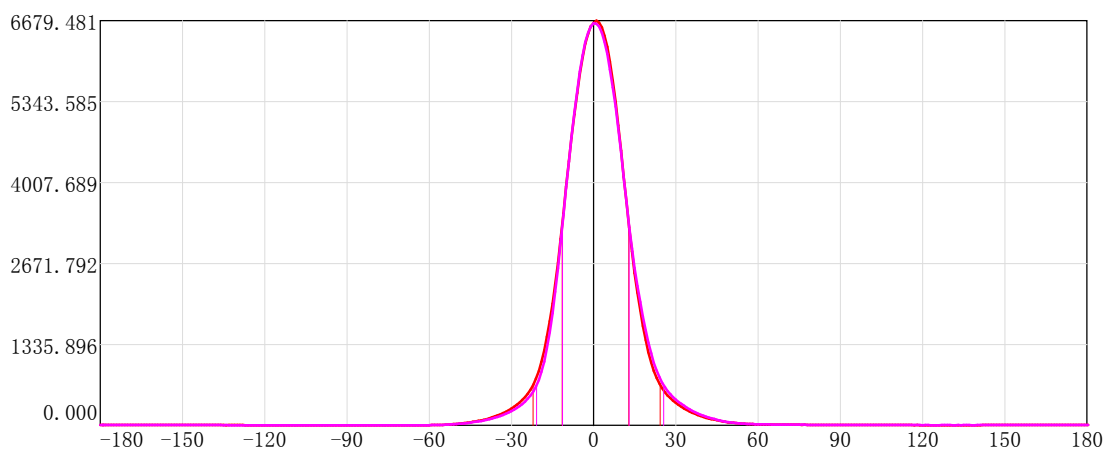
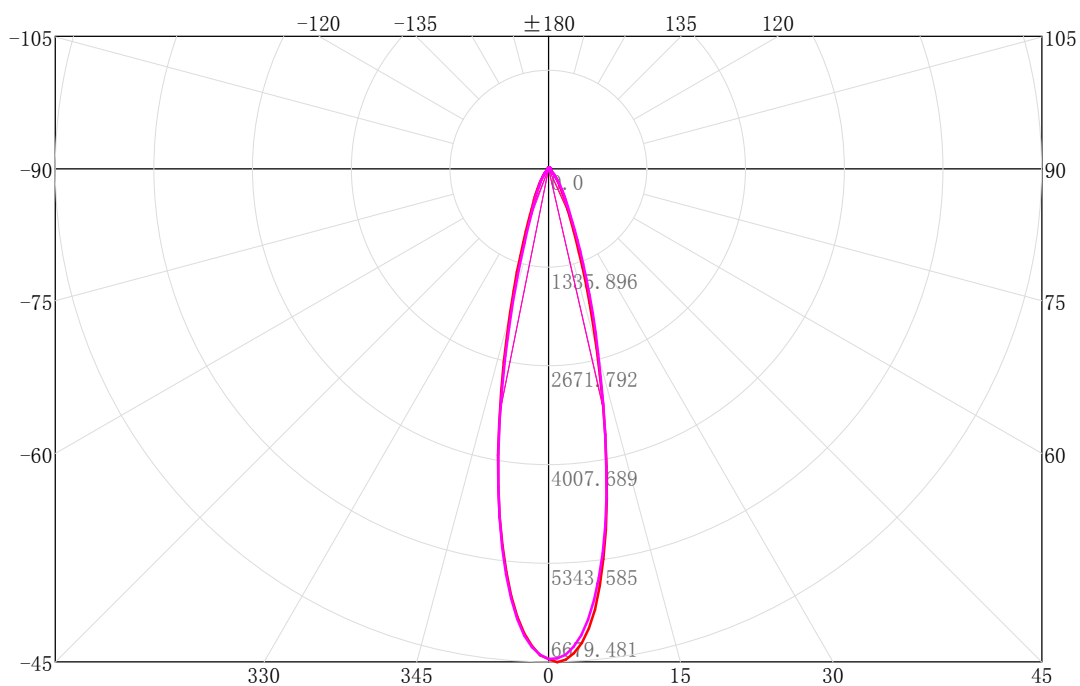
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2D Plane Light Intensity Distribution Curve

Lum. Name: AT10020-20W-4000K-RA90-24D-SBK-3T-IES	Lum. Catalog:	Test ID:
Lamp Name: 40G1000-C-73	Lamp Catalog: COB	Test Lab: Test
Manufacture:	Test Machine: GON-2000	Test Date: 2022/09/08

C Plane Distribution Diagram



	C Plane	[50%MaxAng.]	[10%MaxAng.]	Unit:cd
—	C0.0_180.0 :	24.2	46.4	
—	C90.0_270.0 :	24.3	46.4	

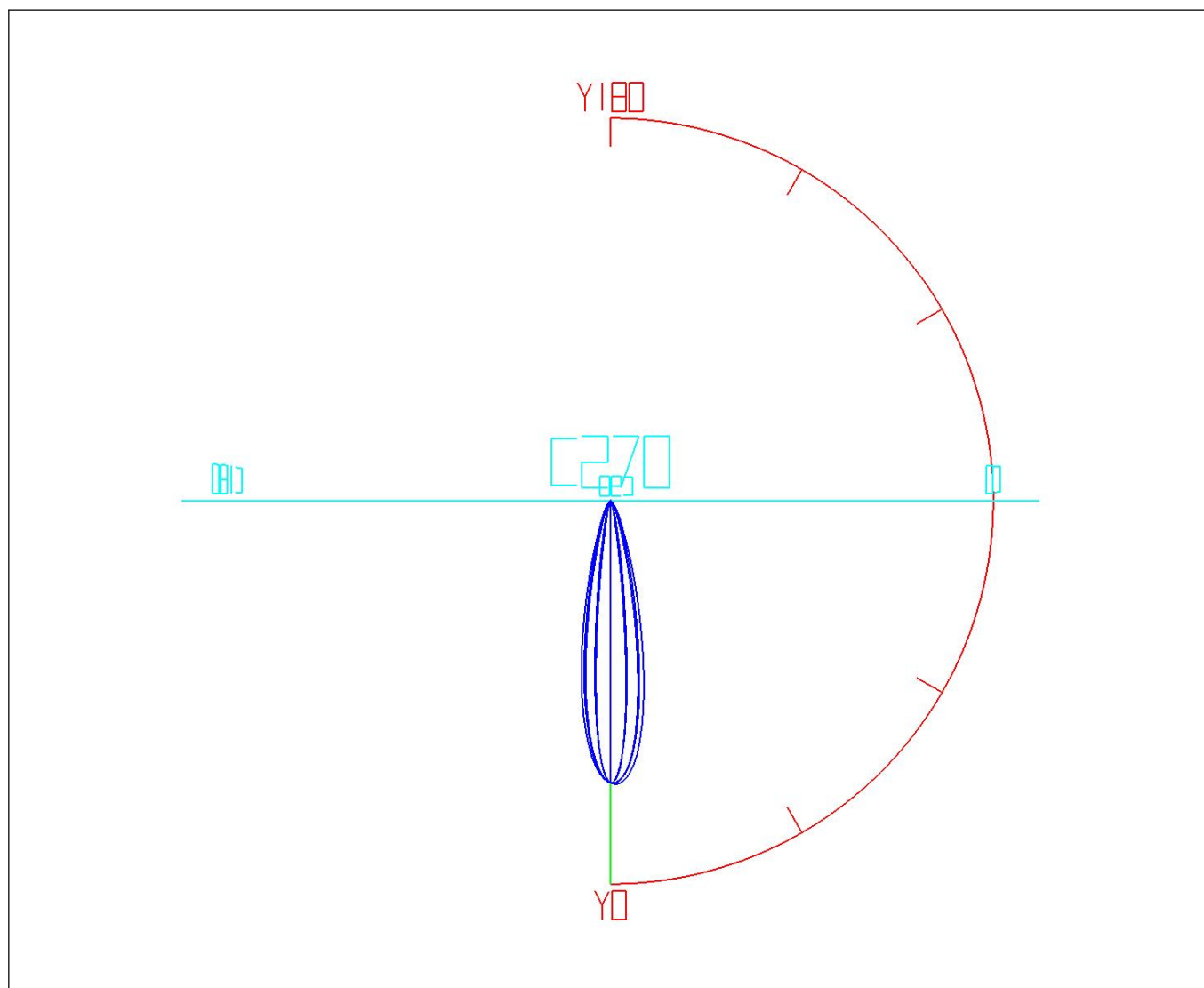
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3D Light Intensity Distribution Modal

Lum. Name: AT10020-20W-4000K-RA90-24D-SBK-3T-IES	Lum. Catalog:	Test ID:
Lamp Name: 40G1000-C-73	Lamp Catalog: COB	Test Lab: Test
Manufacture:	Test Machine: GON-2000	Test Date: 2022/09/08

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 (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	6.34	6.34	0.35	0.35	47.0-48.0	4.20	1583.68	0.23	87.98
1.0-2.0	18.86	25.20	1.05	1.40	48.0-49.0	3.77	1587.45	0.21	88.19
2.0-3.0	30.94	56.15	1.72	3.12	49.0-50.0	3.40	1590.84	0.19	88.38
3.0-4.0	42.29	98.43	2.35	5.47	50.0-51.0	3.08	1593.92	0.17	88.55
4.0-5.0	52.58	151.02	2.92	8.39	51.0-52.0	2.80	1596.72	0.16	88.71
5.0-6.0	61.53	212.55	3.42	11.81	52.0-53.0	2.55	1599.27	0.14	88.85
6.0-7.0	68.89	281.44	3.83	15.64	53.0-54.0	2.27	1601.54	0.13	88.97
7.0-8.0	74.49	355.93	4.14	19.77	54.0-55.0	2.00	1603.54	0.11	89.09
8.0-9.0	78.27	434.20	4.35	24.12	55.0-56.0	1.80	1605.34	0.10	89.19
9.0-10.0	80.12	514.32	4.45	28.57	56.0-57.0	1.66	1607.00	0.09	89.28
10.0-11.0	80.02	594.34	4.45	33.02	57.0-58.0	1.56	1608.56	0.09	89.36
11.0-12.0	78.20	672.53	4.34	37.36	58.0-59.0	1.49	1610.05	0.08	89.45
12.0-13.0	75.01	747.55	4.17	41.53	59.0-60.0	1.43	1611.48	0.08	89.53
13.0-14.0	70.83	818.37	3.93	45.47	60.0-61.0	1.39	1612.87	0.08	89.60
14.0-15.0	66.05	884.43	3.67	49.13	61.0-62.0	1.35	1614.22	0.07	89.68
15.0-16.0	61.03	945.46	3.39	52.53	62.0-63.0	1.30	1615.52	0.07	89.75
16.0-17.0	55.93	1001.40	3.11	55.63	63.0-64.0	1.26	1616.78	0.07	89.82
17.0-18.0	50.94	1052.34	2.83	58.46	64.0-65.0	1.21	1617.99	0.07	89.89
18.0-19.0	46.20	1098.54	2.57	61.03	65.0-66.0	1.17	1619.16	0.07	89.95
19.0-20.0	41.77	1140.31	2.32	63.35	66.0-67.0	1.14	1620.30	0.06	90.02
20.0-21.0	37.74	1178.05	2.10	65.45	67.0-68.0	1.12	1621.42	0.06	90.08
21.0-22.0	34.19	1212.25	1.90	67.35	68.0-69.0	1.10	1622.51	0.06	90.14
22.0-23.0	31.12	1243.36	1.73	69.08	69.0-70.0	1.08	1623.59	0.06	90.20
23.0-24.0	28.50	1271.86	1.58	70.66	70.0-71.0	1.06	1624.66	0.06	90.26
24.0-25.0	26.26	1298.11	1.46	72.12	71.0-72.0	1.05	1625.70	0.06	90.32
25.0-26.0	24.32	1322.44	1.35	73.47	72.0-73.0	1.04	1626.74	0.06	90.37
26.0-27.0	22.66	1345.10	1.26	74.73	73.0-74.0	1.03	1627.77	0.06	90.43
27.0-28.0	21.19	1366.28	1.18	75.90	74.0-75.0	1.03	1628.80	0.06	90.49
28.0-29.0	19.86	1386.14	1.10	77.01	75.0-76.0	1.02	1629.82	0.06	90.55
29.0-30.0	18.62	1404.77	1.03	78.04	76.0-77.0	1.01	1630.84	0.06	90.60
30.0-31.0	17.46	1422.23	0.97	79.01	77.0-78.0	1.01	1631.85	0.06	90.66
31.0-32.0	16.36	1438.59	0.91	79.92	78.0-79.0	1.00	1632.85	0.06	90.71
32.0-33.0	15.29	1453.88	0.85	80.77	79.0-80.0	1.00	1633.85	0.06	90.77
33.0-34.0	14.28	1468.16	0.79	81.56	80.0-81.0	0.99	1634.84	0.06	90.82
34.0-35.0	13.29	1481.45	0.74	82.30	81.0-82.0	0.99	1635.83	0.05	90.88
35.0-36.0	12.34	1493.79	0.69	82.99	82.0-83.0	0.99	1636.82	0.05	90.93
36.0-37.0	11.45	1505.25	0.64	83.62	83.0-84.0	0.98	1637.80	0.05	90.99
37.0-38.0	10.58	1515.83	0.59	84.21	84.0-85.0	0.98	1638.78	0.05	91.04
38.0-39.0	9.69	1525.52	0.54	84.75	85.0-86.0	0.98	1639.76	0.05	91.10
39.0-40.0	8.87	1534.39	0.49	85.24	86.0-87.0	0.98	1640.74	0.05	91.15
40.0-41.0	8.16	1542.55	0.45	85.70	87.0-88.0	0.97	1641.70	0.05	91.21
41.0-42.0	7.54	1550.09	0.42	86.12	88.0-89.0	0.96	1642.67	0.05	91.26
42.0-43.0	7.00	1557.09	0.39	86.51	89.0-90.0	0.96	1643.62	0.05	91.31
43.0-44.0	6.48	1563.57	0.36	86.86	90.0-91.0	0.95	1644.57	0.05	91.37
44.0-45.0	5.91	1569.48	0.33	87.19	91.0-92.0	0.94	1645.52	0.05	91.42
45.0-46.0	5.29	1574.78	0.29	87.49	92.0-93.0	0.94	1646.45	0.05	91.47
46.0-47.0	4.70	1579.48	0.26	87.75	93.0-94.0	0.93	1647.38	0.05	91.52

ALUDS

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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	0.92	1648.31	0.05	91.57	141.0-142.0	0.56	1683.14	0.03	93.51
95.0-96.0	0.91	1649.22	0.05	91.62	142.0-143.0	0.56	1683.70	0.03	93.54
96.0-97.0	0.90	1650.13	0.05	91.67	143.0-144.0	0.55	1684.25	0.03	93.57
97.0-98.0	0.90	1651.02	0.05	91.72	144.0-145.0	0.54	1684.79	0.03	93.60
98.0-99.0	0.89	1651.91	0.05	91.77	145.0-146.0	0.54	1685.32	0.03	93.63
99.0-100.0	0.88	1652.80	0.05	91.82	146.0-147.0	0.53	1685.86	0.03	93.66
100.0-101.0	0.87	1653.67	0.05	91.87	147.0-148.0	0.53	1686.39	0.03	93.69
101.0-102.0	0.87	1654.54	0.05	91.92	148.0-149.0	0.52	1686.91	0.03	93.72
102.0-103.0	0.86	1655.40	0.05	91.97	149.0-150.0	0.52	1687.43	0.03	93.75
103.0-104.0	0.85	1656.25	0.05	92.01	150.0-151.0	0.51	1687.94	0.03	93.77
104.0-105.0	0.85	1657.10	0.05	92.06	151.0-152.0	0.51	1688.45	0.03	93.80
105.0-106.0	0.84	1657.94	0.05	92.11	152.0-153.0	0.50	1688.95	0.03	93.83
106.0-107.0	0.83	1658.77	0.05	92.15	153.0-154.0	0.49	1689.44	0.03	93.86
107.0-108.0	0.82	1659.59	0.05	92.20	154.0-155.0	0.49	1689.93	0.03	93.89
108.0-109.0	0.82	1660.41	0.05	92.25	155.0-156.0	0.48	1690.41	0.03	93.91
109.0-110.0	0.81	1661.22	0.05	92.29	156.0-157.0	0.47	1690.88	0.03	93.94
110.0-111.0	0.81	1662.03	0.04	92.33	157.0-158.0	0.46	1691.34	0.03	93.96
111.0-112.0	0.80	1662.83	0.04	92.38	158.0-159.0	0.45	1691.79	0.02	93.99
112.0-113.0	0.79	1663.62	0.04	92.42	159.0-160.0	0.44	1692.22	0.02	94.01
113.0-114.0	0.79	1664.41	0.04	92.47	160.0-161.0	0.42	1692.64	0.02	94.04
114.0-115.0	0.79	1665.20	0.04	92.51	161.0-162.0	0.41	1693.05	0.02	94.06
115.0-116.0	0.78	1665.97	0.04	92.55	162.0-163.0	0.39	1693.44	0.02	94.08
116.0-117.0	0.76	1666.74	0.04	92.60	163.0-164.0	0.37	1693.81	0.02	94.10
117.0-118.0	0.76	1667.49	0.04	92.64	164.0-165.0	0.35	1694.17	0.02	94.12
118.0-119.0	0.76	1668.25	0.04	92.68	165.0-166.0	0.33	1694.50	0.02	94.14
119.0-120.0	0.75	1669.00	0.04	92.72	166.0-167.0	0.31	1694.81	0.02	94.16
120.0-121.0	0.74	1669.74	0.04	92.76	167.0-168.0	0.29	1695.10	0.02	94.17
121.0-122.0	0.73	1670.47	0.04	92.80	168.0-169.0	0.27	1695.37	0.01	94.19
122.0-123.0	0.71	1671.18	0.04	92.84	169.0-170.0	0.25	1695.62	0.01	94.20
123.0-124.0	0.71	1671.89	0.04	92.88	170.0-171.0	0.22	1695.84	0.01	94.21
124.0-125.0	0.70	1672.59	0.04	92.92	171.0-172.0	0.20	1696.04	0.01	94.22
125.0-126.0	0.69	1673.28	0.04	92.96	172.0-173.0	0.18	1696.22	0.01	94.23
126.0-127.0	0.68	1673.96	0.04	93.00	173.0-174.0	0.15	1696.37	0.01	94.24
127.0-128.0	0.67	1674.63	0.04	93.04	174.0-175.0	0.13	1696.50	0.01	94.25
128.0-129.0	0.67	1675.30	0.04	93.07	175.0-176.0	0.11	1696.60	0.01	94.26
129.0-130.0	0.65	1675.95	0.04	93.11	176.0-177.0	0.08	1696.68	0.00	94.26
130.0-131.0	0.65	1676.60	0.04	93.14	177.0-178.0	0.06	1696.74	0.00	94.26
131.0-132.0	0.64	1677.23	0.04	93.18	178.0-179.0	0.04	1696.78	0.00	94.27
132.0-133.0	0.63	1677.86	0.03	93.21	179.0-180.0	0.01	1696.79	0.00	94.27
133.0-134.0	0.62	1678.48	0.03	93.25					
134.0-135.0	0.61	1679.09	0.03	93.28					
135.0-136.0	0.60	1679.70	0.03	93.32					
136.0-137.0	0.59	1680.29	0.03	93.35					
137.0-138.0	0.58	1680.87	0.03	93.38					
138.0-139.0	0.58	1681.45	0.03	93.41					
139.0-140.0	0.57	1682.02	0.03	93.45					
140.0-141.0	0.56	1682.58	0.03	93.48					

ALUDS

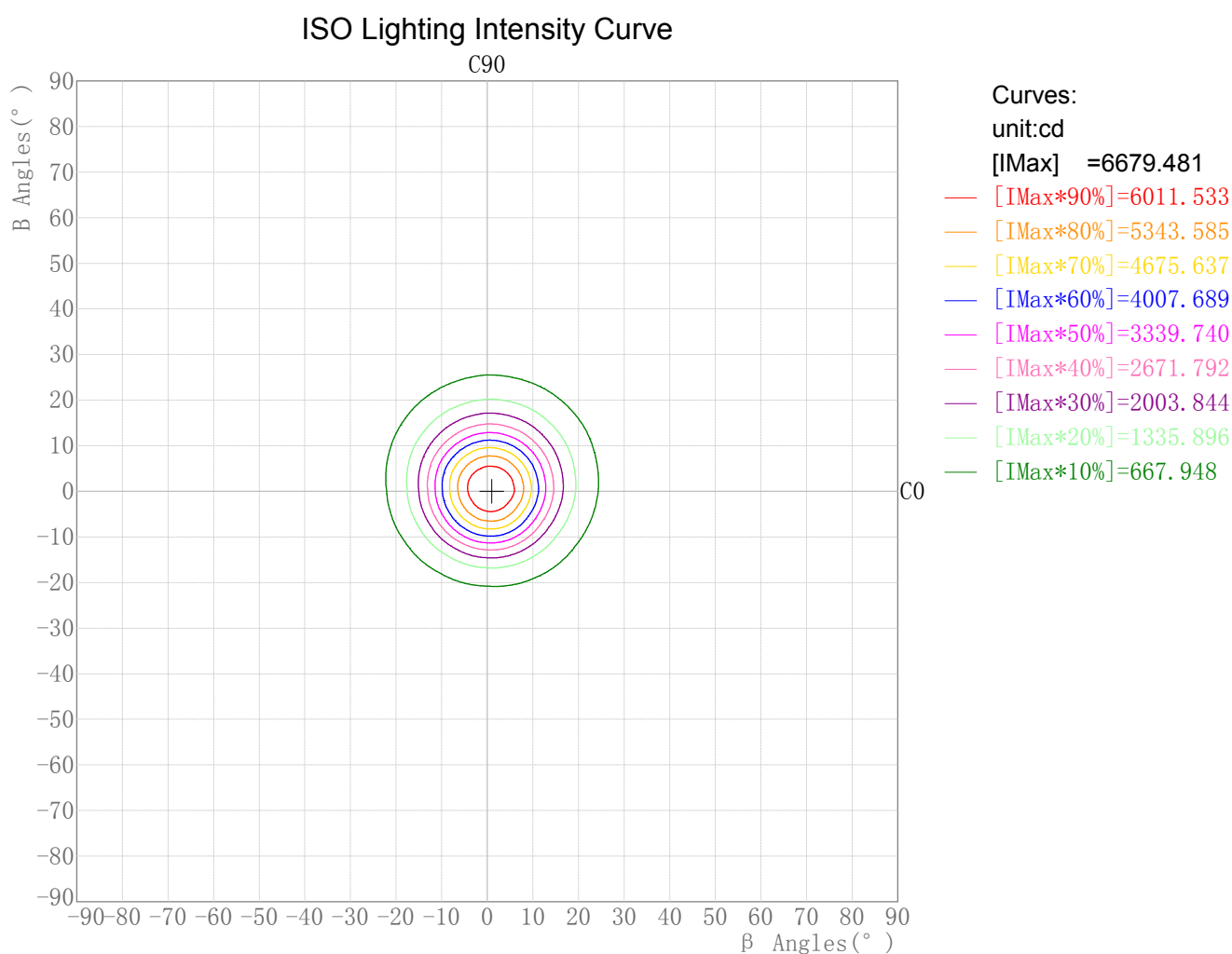
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Rectangle ISO Lighting Intensity Diagram

Lum. Name: AT10020-20W-4000K-RA90-24D-SBK-3T-IES	Lum. Catalog:	Test ID:
Lamp Name: 40G1000-C-73	Lamp Catalog: COB	Test Lab: Test
Manufacture:	Test Machine: GON-2000	Test Date: 2022/09/08

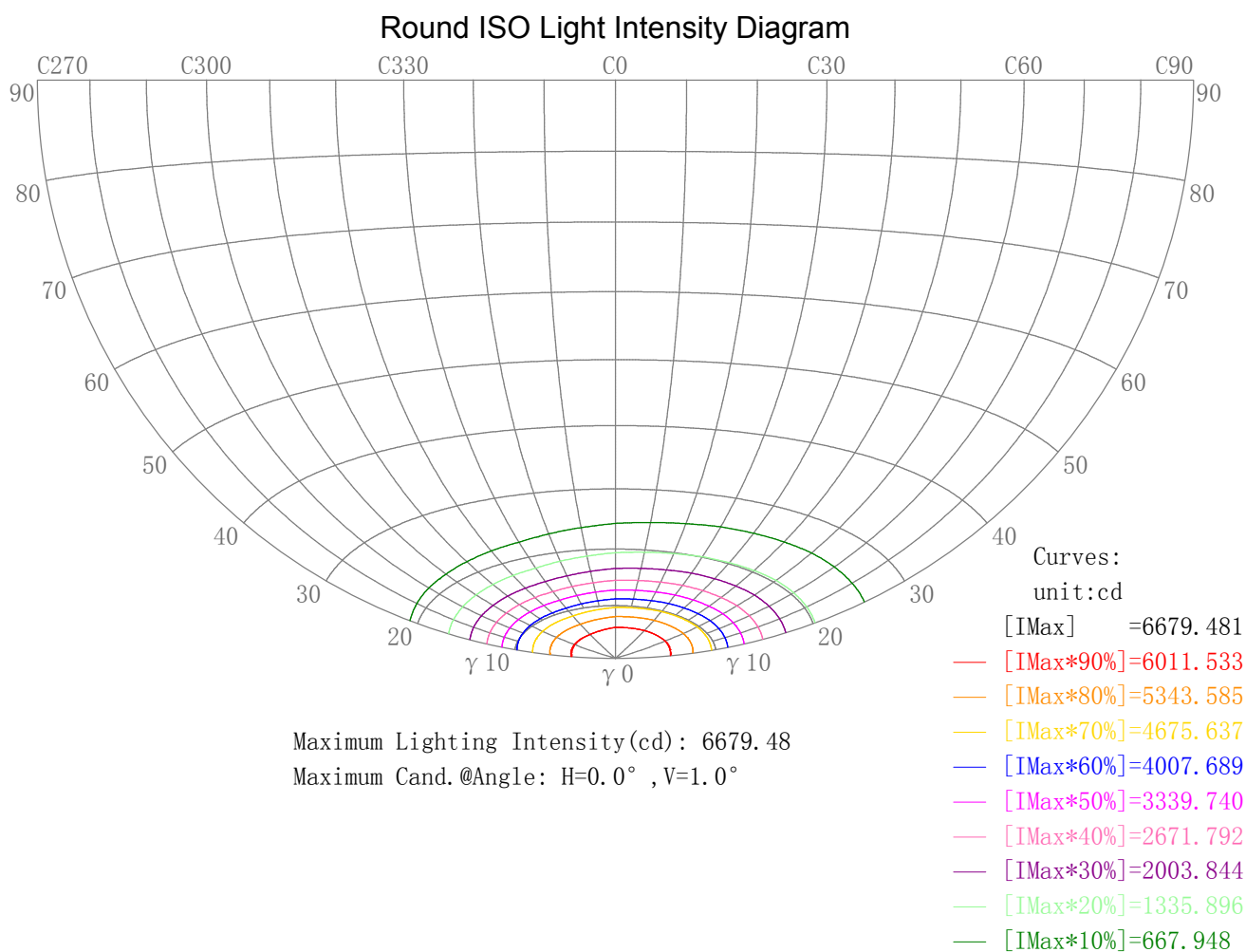


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Round ISO Lighting Intensity Diagram

Lum. Name: AT10020-20W-4000K-RA90-24D-SBK-3T-IES	Lum. Catalog:	Test ID:
Lamp Name: 40G1000-C-73	Lamp Catalog: COB	Test Lab: Test
Manufacture:	Test Machine: GON-2000	Test Date: 2022/09/08



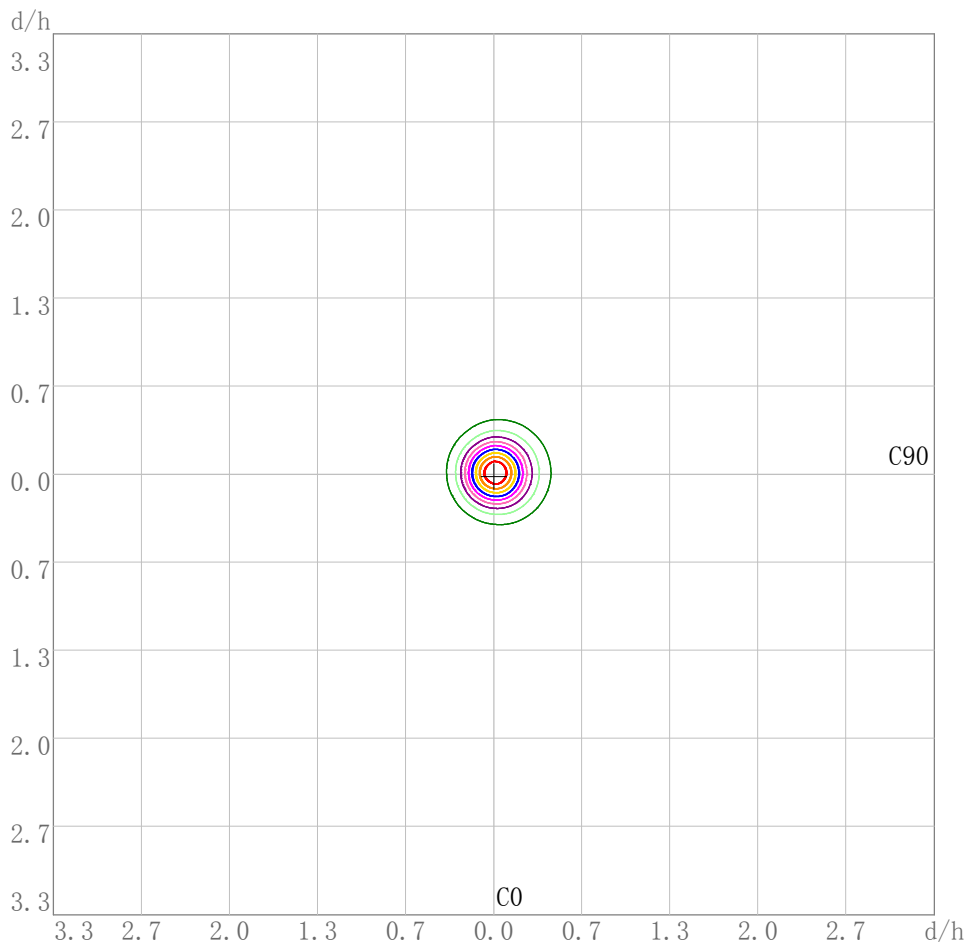
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Plane ISO-Illuminance Diagram

Lum. Name: AT10020-20W-4000K-RA90-24D-SBK-3T-IES	Lum. Catalog:	Test ID:
Lamp Name: 40G1000-C-73	Lamp Catalog: COB	Test Lab: Test
Manufacture:	Test Machine: GON-2000	Test Date: 2022/09/08

Plane ISO-Illuminance Curve



- Curves:
unit:lx
- [EMax] =741.826
 - [EMax*90%]=667.643
 - [EMax*80%]=593.460
 - [EMax*70%]=519.278
 - [EMax*60%]=445.095
 - [EMax*50%]=370.913
 - [EMax*40%]=296.730
 - [EMax*30%]=222.548
 - [EMax*20%]=148.365
 - [EMax*10%]=74.183

Working Plane Luminaire Mounting Height(m): 3.00
 Working Plane Maximum Illuminance(lx): 741.83
 Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

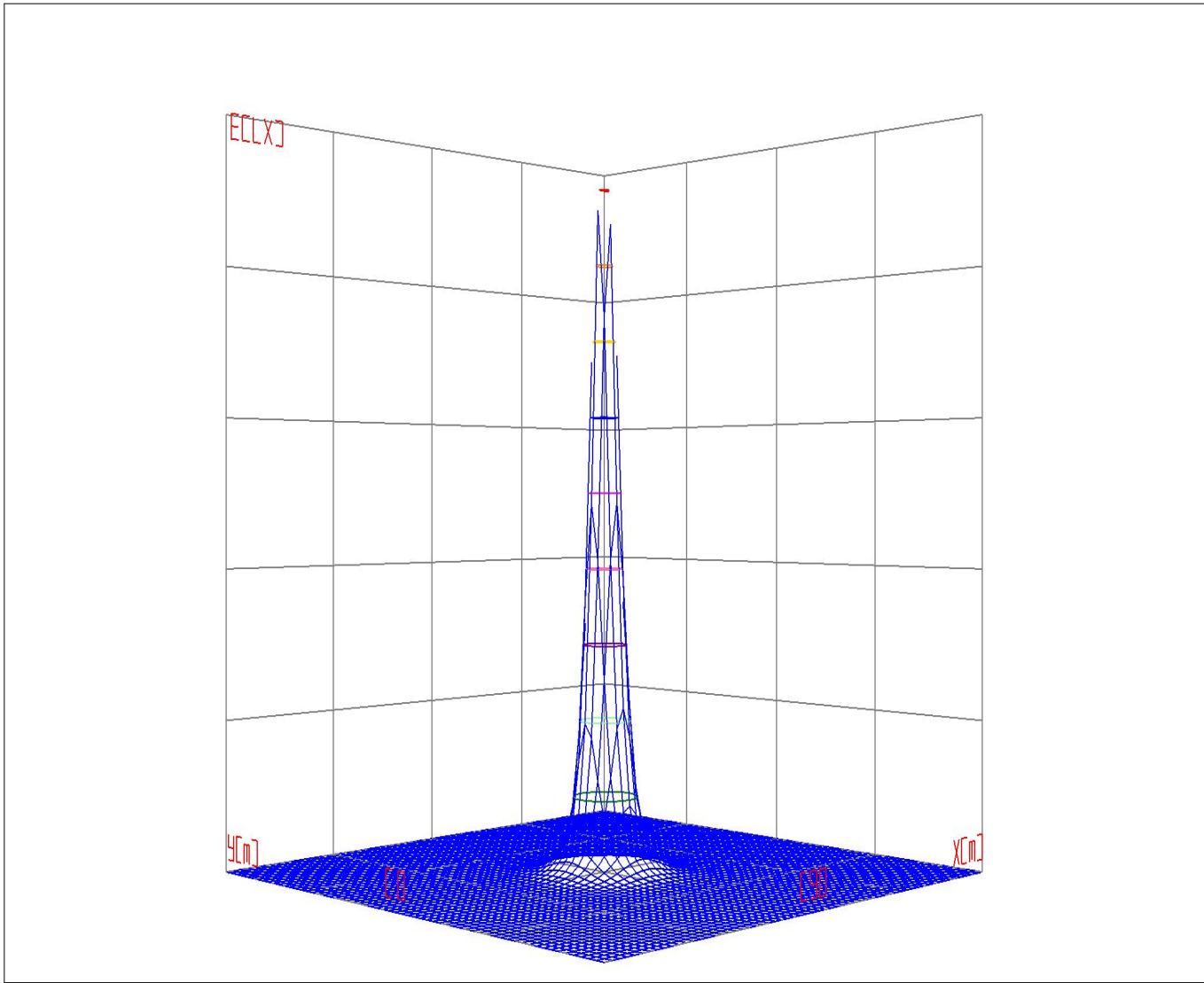
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3D Plane ISO Illuminance Diagram

Lum. Name: AT10020-20W-4000K-RA90-24D-SBK-3T-IES	Lum. Catalog:	Test ID:
Lamp Name: 40G1000-C-73	Lamp Catalog: COB	Test Lab: Test
Manufacture:	Test Machine: GON-2000	Test Date: 2022/09/08

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

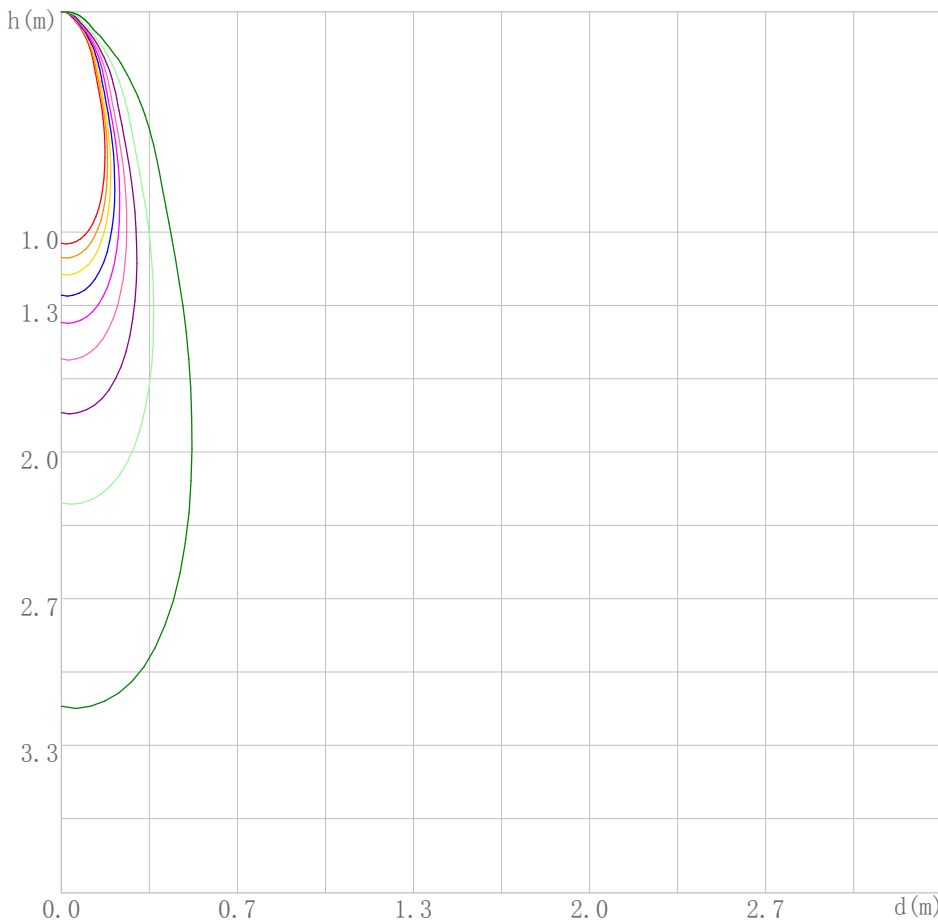
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Space ISO Illuminance Diagram

Lum. Name: AT10020-20W-4000K-RA90-24D-SBK-3T-IES	Lum. Catalog:	Test ID:
Lamp Name: 40G1000-C-73	Lamp Catalog: COB	Test Lab: Test
Manufacture:	Test Machine: GON-2000	Test Date: 2022/09/08

Space ISO Illuminance Curve



- Curves:
[Unit: lx]
[EMax] =6676.429
- [EMax*90%]=6008.787
 - [EMax*80%]=5341.144
 - [EMax*70%]=4673.501
 - [EMax*60%]=4005.858
 - [EMax*50%]=3338.215
 - [EMax*40%]=2670.572
 - [EMax*30%]=2002.929
 - [EMax*20%]=1335.286
 - [EMax*10%]=667.643

Space Plane Maximum Illuminance and @Angle:6676.43lx,1.0deg
Plane Maximum Lighting Intensity and @Angle:6679.481cd,0deg

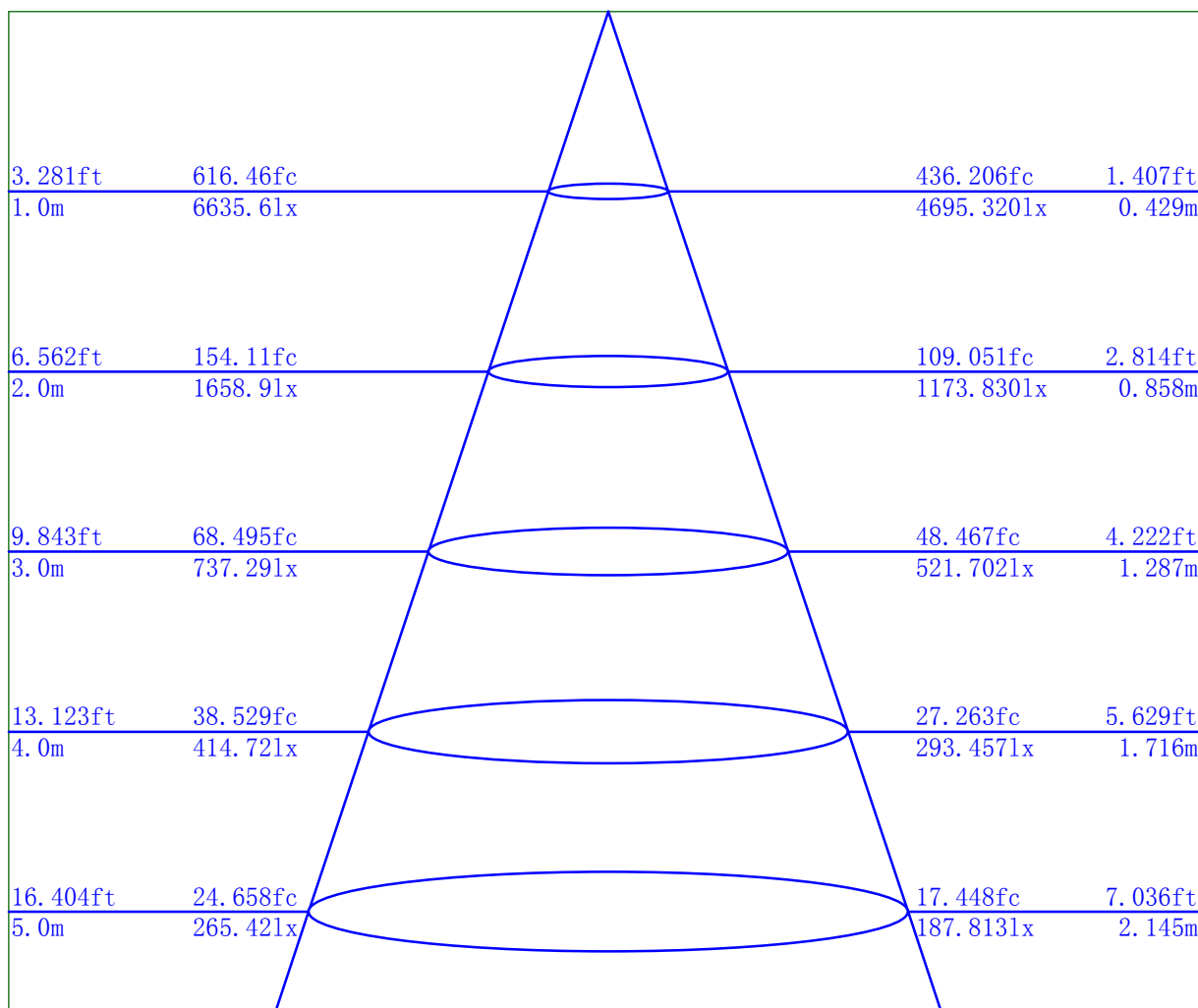
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Illuminance-Distance Diagram

Lum. Name: AT10020-20W-4000K-RA90-24D-SBK-3T-IES	Lum. Catalog:	Test ID:
Lamp Name: 40G1000-C-73	Lamp Catalog: COB	Test Lab: Test
Manufacture:	Test Machine: GON-2000	Test Date: 2022/09/08

Illuminance-Distance Curve



Beam Angle: 24.2

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Indoor Luminance Limiting Curves

Lum. Name: AT10020-20W-4000K-RA90-24D-SBK-3T-IES	Lum. Catalog:	Test ID:
Lamp Name: 40G1000-C-73	Lamp Catalog: COB	Test Lab: Test
Manufacture:	Test Machine: GON-2000	Test Date: 2022/09/08

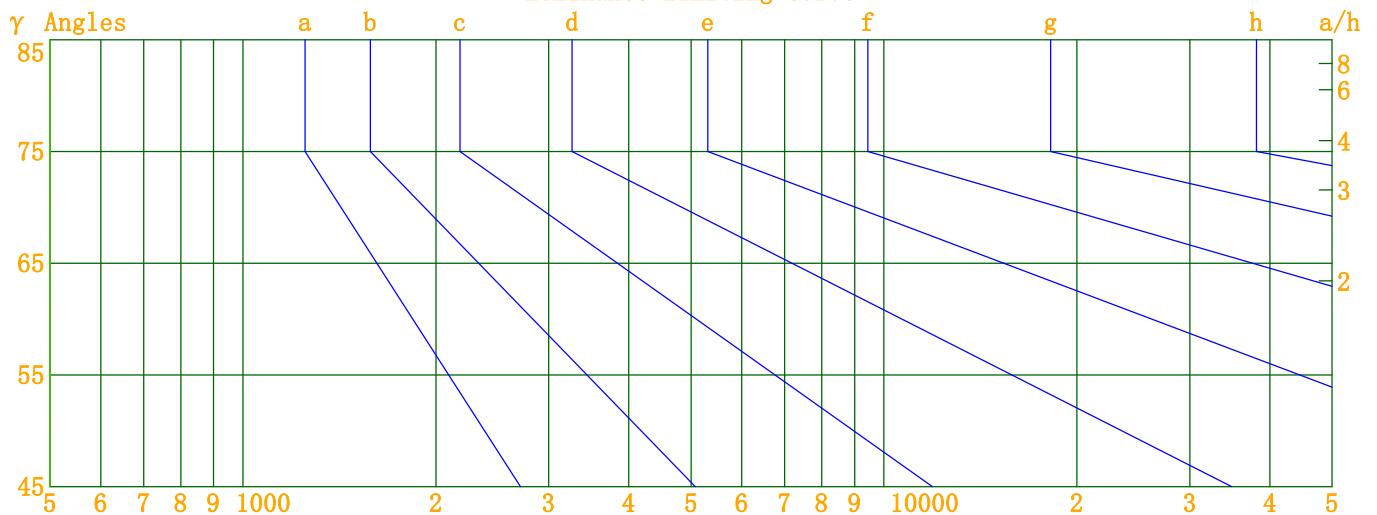
Glare Grade Table

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	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

Luminance Limiting Curve



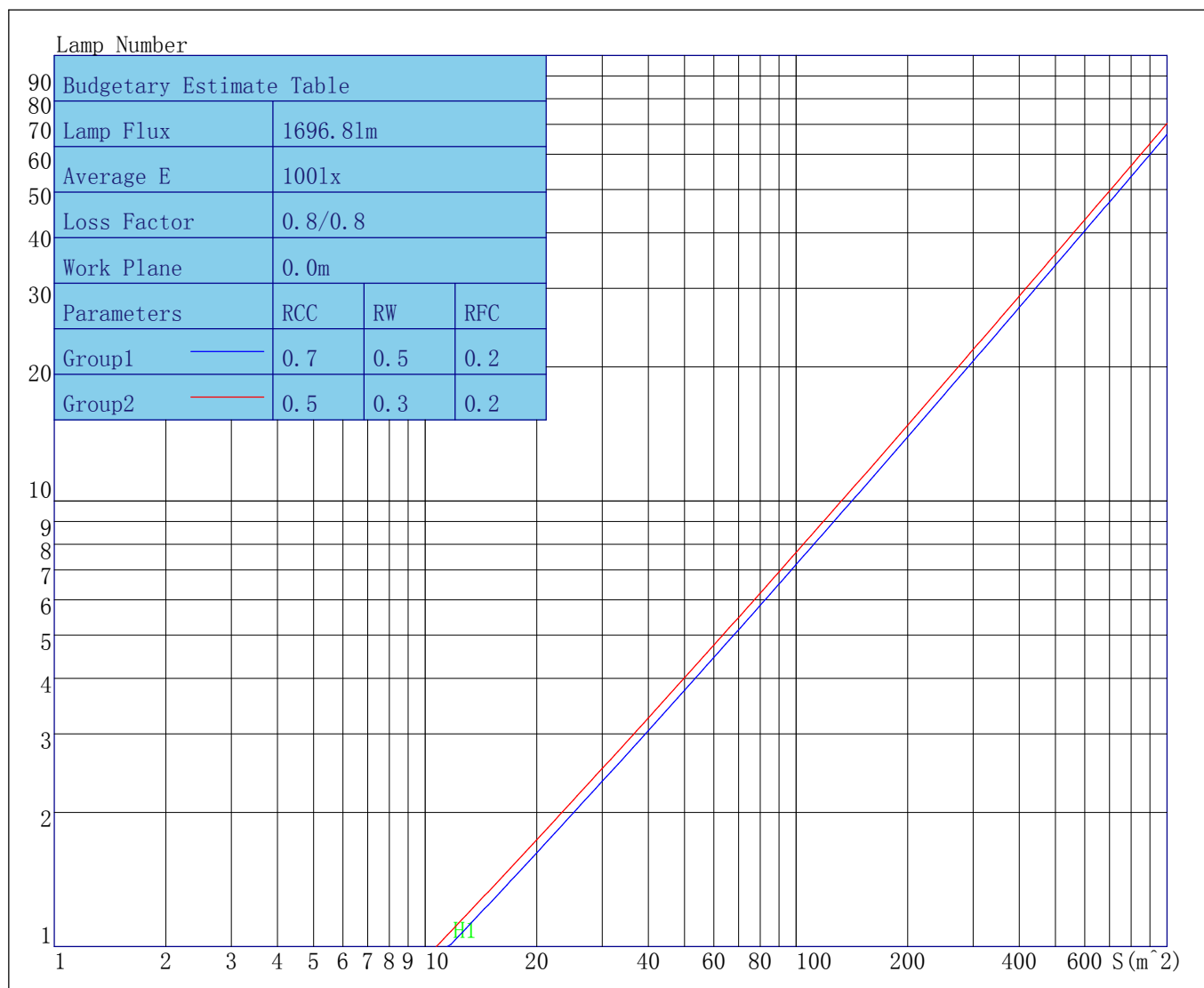
Luminous Size: Length(m)=0.000 Width(m)=0.000 Height(m)=0.000 Area(m^2)=0.000000
 Luminous Type: Without Luminous Side
 Luminous Curves: C0-C180 Color: — C90-C270 Color: —

IES Indoor Report

Photometric Filename: AT10020-20W-4000K-RA90-24D-SBK-3T-IES.IES

Indoor Budgetary Estimate Table

Lum. Name: AT10020-20W-4000K-RA90-24D-SBK-3T-IES	Lum. Catalog:	Test ID:
Lamp Name: 40G1000-C-73	Lamp Catalog: COB	Test Lab: Test
Manufacture:	Test Machine: GON-2000	Test Date: 2022/09/08



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: AT10020-20W-4000K-RA90-24D-SBK-3T-IES.IES

Indoor Coefficient of Utilization Table

Lum. Name: AT10020-20W-4000K-RA90-24D-SBK-3T-IES	Lum. Catalog:	Test ID:
Lamp Name: 40G1000-C-73	Lamp Catalog: COB	Test Lab: Test
Manufacture:	Test Machine: GON-2000	Test Date: 2022/09/08

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	112	112	112	112	109	109	109	109	103	103	103	98	98	98	93	93	93	91
1	107	104	102	100	104	102	100	99	98	96	95	94	93	92	90	89	89	87
2	103	99	95	92	100	97	94	91	93	91	89	90	88	86	87	86	84	83
3	99	93	89	86	97	92	88	85	89	86	84	87	84	82	84	82	80	79
4	95	89	85	81	93	88	84	81	85	82	79	83	80	78	81	79	77	76
5	91	85	80	77	90	84	80	77	82	78	76	80	77	75	79	76	74	73
6	88	81	77	74	87	81	76	73	79	75	73	77	74	72	76	73	71	70
7	85	78	74	71	84	78	73	70	76	72	70	75	72	69	74	71	69	68
8	82	75	71	68	81	75	71	68	74	70	67	72	69	67	71	69	66	65
9	80	73	68	65	79	72	68	65	71	67	65	70	67	64	69	66	64	63
10	78	70	66	63	77	70	66	63	69	65	63	68	65	62	67	64	62	61

IES Indoor Report

Photometric Filename: AT10020-20W-4000K-RA90-24D-SBK-3T-IES.IES

Unified Glare Rating Table

Lum. Name: AT10020-20W-4000K-RA90-24D-SBK-3T-IES	Lum. Catalog:	Test ID:
Lamp Name: 40G1000-C-73	Lamp Catalog: COB	Test Lab: Test
Manufacture:	Test Machine: GON-2000	Test Date: 2022/09/08

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	1.1	2.0	1.6	2.4	2.8	1.1	2.0	1.6	2.4	2.8
Y=3H	0.9	1.7	1.4	2.1	2.5	0.9	1.7	1.4	2.1	2.5
Y=4H	0.8	1.5	1.3	1.9	2.4	0.8	1.5	1.3	1.9	2.4
Y=6H	0.7	1.3	1.2	1.8	2.2	0.7	1.3	1.2	1.8	2.2
Y=8H	0.7	1.2	1.2	1.7	2.2	0.7	1.2	1.2	1.7	2.2
Y=12H	0.6	1.1	1.1	1.6	2.1	0.6	1.1	1.1	1.6	2.1
X=4H Y=2H	0.8	1.5	1.3	1.9	2.4	0.8	1.5	1.3	1.9	2.4
Y=3H	0.6	1.1	1.1	1.6	2.1	0.6	1.1	1.1	1.6	2.1
Y=4H	0.5	0.9	1.0	1.4	2.0	0.5	0.9	1.0	1.4	2.0
Y=6H	0.4	0.8	0.9	1.3	1.8	0.4	0.8	0.9	1.3	1.8
Y=8H	0.3	0.6	0.9	1.2	1.7	0.3	0.6	0.9	1.2	1.7
Y=12H	0.2	0.5	0.8	1.1	1.6	0.2	0.5	0.8	1.1	1.6
X=8H Y=4H	0.3	0.6	0.9	1.2	1.7	0.3	0.6	0.9	1.2	1.7
Y=6H	0.2	0.4	0.8	1.0	1.6	0.2	0.4	0.8	1.0	1.6
Y=8H	0.1	0.3	0.7	0.9	1.5	0.1	0.3	0.7	0.9	1.5
Y=12H	0.1	0.2	0.7	0.8	1.4	0.1	0.2	0.7	0.8	1.4
X=12H Y=4H	0.2	0.5	0.8	1.1	1.6	0.2	0.5	0.8	1.1	1.6
Y=6H	0.1	0.3	0.7	0.9	1.5	0.1	0.3	0.7	0.9	1.5
Y=8H	0.1	0.2	0.7	0.8	1.4	0.1	0.2	0.7	0.8	1.4
Variations with the objerver position at spacings										
S=1.0H	0.0/0.0					0.0/0.0				
S=1.5H	0.0/0.0					0.0/0.0				
S=2.0H	0.0/0.0					0.0/0.0				
Reduced UGR Table:										
Nordic Standard Table:	BKO					BKO				
Correction Value	0.0					0.0				

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

IES Indoor Report

Photometric Filename: AT10020-20W-4000K-RA90-24D-SBK-3T-IES.IES

Candela Tabulation

V/H	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0	C300.0	C330.0
γ 0.0	6635.57	6635.57	6635.57	6635.57	6635.57	6635.57	6635.57	6635.57	6635.57	6635.57	6635.57	6635.57
γ 1.0	6679.48	6664.32	6661.70	6626.98	6612.59	6587.92	6584.14	6556.13	6559.02	6579.11	6589.73	6620.53
γ 2.0	6646.86	6638.86	6624.79	6582.59	6547.10	6496.87	6463.40	6421.96	6430.48	6481.33	6512.48	6549.23
γ 3.0	6566.97	6566.49	6525.28	6481.35	6421.98	6362.07	6298.96	6233.85	6257.74	6326.85	6388.81	6437.43
γ 4.0	6433.23	6443.16	6396.98	6332.25	6244.06	6179.83	6075.34	5995.83	6038.08	6110.96	6203.09	6279.65
γ 5.0	6245.00	6263.15	6215.71	6130.74	6021.13	5941.31	5798.94	5716.13	5749.33	5839.77	5958.64	6063.62
γ 6.0	6002.04	6022.15	5978.83	5872.70	5750.70	5651.32	5484.84	5398.37	5425.39	5519.46	5663.79	5796.11
γ 7.0	5686.88	5726.05	5698.94	5574.65	5447.14	5316.19	5133.94	5036.55	5052.57	5160.20	5325.19	5464.53
γ 8.0	5336.42	5393.48	5370.20	5257.72	5115.28	4965.32	4754.48	4639.49	4649.23	4764.43	4950.16	5080.27
γ 9.0	4952.43	5026.79	5000.08	4904.03	4742.92	4597.68	4359.55	4224.70	4241.46	4351.52	4537.78	4672.98
γ 10.0	4534.57	4624.60	4601.56	4508.49	4340.74	4198.64	3940.52	3797.30	3814.64	3918.42	4101.62	4245.31
γ 11.0	4105.27	4202.60	4188.07	4095.44	3924.93	3778.90	3503.27	3364.29	3372.52	3476.01	3654.10	3805.75
γ 12.0	3679.69	3780.12	3776.07	3686.51	3515.92	3361.88	3079.94	2941.60	2931.57	3029.51	3211.11	3376.36
γ 13.0	3266.45	3370.00	3378.34	3289.51	3128.89	2967.60	2688.69	2541.51	2508.19	2599.67	2784.59	2957.65
γ 14.0	2870.83	2984.76	2997.68	2923.11	2769.52	2602.85	2330.70	2172.83	2119.61	2205.37	2382.66	2558.14
γ 15.0	2512.30	2636.86	2657.71	2596.98	2448.93	2277.36	2009.80	1840.94	1777.47	1851.33	2016.39	2192.93
γ 16.0	2190.01	2325.31	2357.90	2304.43	2161.61	1984.66	1718.89	1547.12	1477.61	1537.03	1691.22	1869.85
γ 17.0	1898.64	2043.94	2083.65	2039.73	1897.52	1718.22	1461.48	1296.42	1224.89	1271.54	1412.49	1587.77
γ 18.0	1640.85	1789.97	1835.35	1793.59	1658.12	1483.69	1239.39	1089.93	1020.83	1058.39	1183.39	1345.51
γ 19.0	1410.31	1559.67	1610.00	1570.49	1442.51	1274.53	1052.54	921.17	859.19	887.07	997.21	1143.35
γ 20.0	1209.44	1351.50	1402.17	1371.32	1248.36	1092.09	898.32	784.30	730.33	751.18	845.67	974.47
γ 21.0	1041.38	1168.26	1215.79	1193.07	1078.39	939.84	775.38	675.11	632.09	646.73	724.48	838.03
γ 22.0	900.77	1012.32	1055.74	1036.29	935.46	814.39	673.62	588.45	552.55	564.56	628.06	725.96
γ 23.0	786.39	882.16	920.13	905.81	818.13	710.66	591.05	519.27	488.07	498.34	551.84	635.16
γ 24.0	693.45	774.98	807.53	798.10	720.42	625.47	524.43	462.09	433.99	443.28	490.21	560.40
γ 25.0	615.72	687.58	713.93	707.17	637.43	556.40	468.42	413.35	388.09	396.58	438.01	499.51
γ 26.0	551.59	615.52	636.32	631.85	569.79	499.72	420.34	371.32	349.11	356.04	392.98	449.02
γ 27.0	498.05	555.50	571.48	569.17	514.68	450.41	379.27	334.76	315.25	321.28	353.94	405.45
γ 28.0	452.42	504.57	518.08	516.34	467.19	408.08	343.05	302.44	284.38	290.76	320.10	366.24
γ 29.0	411.27	460.13	471.28	470.07	425.74	370.53	310.07	273.52	257.06	263.07	290.04	331.82
γ 30.0	374.43	420.35	431.32	429.42	388.37	337.42	280.38	247.42	232.37	237.98	262.94	300.62
γ 31.0	340.65	384.25	394.84	392.68	353.74	307.46	253.94	223.70	210.15	215.33	238.23	273.03
γ 32.0	310.34	350.91	360.33	358.78	322.58	280.01	229.49	202.15	190.12	194.84	215.52	248.17
γ 33.0	282.42	319.75	328.86	327.03	294.09	254.88	207.07	182.49	171.67	176.62	195.42	225.83
γ 34.0	257.11	291.01	300.57	297.50	267.78	231.51	187.06	164.46	155.24	160.00	177.79	204.79
γ 35.0	234.29	264.40	273.67	270.19	243.06	209.69	168.11	147.99	139.46	144.81	160.79	185.33
γ 36.0	212.45	239.71	248.31	244.95	219.93	190.20	151.03	133.46	125.91	131.07	145.37	167.48
γ 37.0	193.33	217.47	225.71	222.02	199.66	172.73	136.03	120.31	114.28	118.50	131.98	151.29
γ 38.0	175.71	197.04	204.23	200.14	179.97	154.60	120.15	107.54	102.13	106.04	117.89	134.96
γ 39.0	157.22	177.43	184.21	179.85	160.59	138.07	107.03	95.63	90.70	93.98	104.69	118.44
γ 40.0	141.16	159.37	166.12	161.54	144.71	124.33	95.89	85.72	81.48	83.92	93.72	106.03
γ 41.0	127.79	143.84	150.02	145.92	131.01	113.09	86.81	77.64	73.66	76.14	84.54	95.48
γ 42.0	116.50	130.67	135.60	132.44	119.10	103.51	78.71	70.44	66.73	69.35	76.63	86.34
γ 43.0	106.65	119.12	123.72	120.53	108.72	95.11	70.94	63.97	60.85	63.03	69.71	78.09
γ 44.0	97.79	108.56	112.15	109.31	98.68	87.04	63.73	57.31	54.75	56.68	62.81	70.36
γ 45.0	87.85	97.12	100.32	96.63	87.81	77.50	55.11	50.11	47.95	49.85	55.24	61.99
γ 46.0	77.36	84.61	86.76	83.85	76.84	68.59	47.75	43.65	42.01	43.49	48.20	53.48

ALUDS

IES Indoor Report

Photometric Filename: AT10020-20W-4000K-RA90-24D-SBK-3T-IES.IES

Candela Tabulation - (Cont.)

V/H	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0	C300.0	C330.0
γ 47.0	68.14	73.77	75.11	73.13	67.53	61.09	41.39	38.31	36.82	38.08	42.25	46.37
γ 48.0	61.10	65.05	66.03	64.39	59.85	54.77	36.20	33.47	32.15	33.67	37.25	40.51
γ 49.0	54.74	58.12	58.40	56.76	53.16	49.12	31.31	29.32	28.58	29.76	32.76	35.45
γ 50.0	49.47	52.31	51.99	50.41	47.70	44.33	27.15	25.81	25.42	26.45	28.58	30.85
γ 51.0	45.07	47.13	46.51	45.20	43.36	40.74	23.91	22.78	22.29	23.30	25.08	27.01
γ 52.0	41.45	42.74	42.47	41.29	39.78	37.28	20.80	19.91	19.35	20.29	22.01	23.92
γ 53.0	37.78	38.95	38.64	37.81	36.13	34.13	17.50	16.65	16.63	17.22	18.72	20.64
γ 54.0	33.83	35.12	34.77	33.72	32.09	29.99	14.03	13.70	13.58	14.09	15.32	17.27
γ 55.0	29.96	31.07	30.40	29.81	28.50	26.91	12.15	11.66	11.60	11.71	12.62	14.18
γ 56.0	27.29	28.04	27.91	27.25	26.26	24.93	10.31	10.26	10.61	10.47	11.02	12.10
γ 57.0	25.25	25.88	25.90	25.31	24.59	23.64	9.53	9.33	9.72	9.41	9.86	10.73
γ 58.0	23.94	24.17	24.97	23.99	23.44	22.43	8.56	8.62	8.91	8.35	8.83	9.91
γ 59.0	22.69	23.13	23.36	22.97	22.66	21.61	8.31	7.93	8.16	7.94	8.20	9.10
γ 60.0	21.48	22.26	22.61	22.18	21.79	21.06	7.52	7.48	7.98	7.46	7.89	8.70
γ 61.0	20.71	21.42	21.68	21.38	20.97	20.15	7.16	7.11	7.47	7.08	7.44	8.34
γ 62.0	20.08	20.65	20.92	20.52	20.08	19.58	6.96	6.70	7.09	6.75	6.91	7.85
γ 63.0	19.24	19.93	20.07	19.73	19.47	18.82	6.35	6.47	6.70	6.20	6.46	7.30
γ 64.0	18.59	19.18	19.57	19.21	18.76	18.19	5.81	6.12	6.55	5.86	6.13	6.92
γ 65.0	17.74	18.34	18.75	18.35	17.93	17.46	5.59	5.71	5.91	5.52	5.89	6.27
γ 66.0	16.93	17.61	18.00	17.56	17.33	16.91	5.42	5.44	5.86	5.37	5.71	6.02
γ 67.0	16.55	16.92	17.25	17.00	16.74	16.41	5.21	5.45	5.77	5.17	5.62	5.76
γ 68.0	16.25	16.46	16.78	16.52	16.40	16.04	5.26	5.49	5.40	5.11	5.49	5.54
γ 69.0	15.40	16.02	16.28	16.00	15.86	15.68	5.22	5.49	5.34	4.93	5.42	5.52
γ 70.0	15.30	15.44	15.80	15.35	15.52	15.40	5.26	5.72	5.24	5.11	5.37	5.30
γ 71.0	14.76	15.08	15.38	15.03	15.17	14.90	5.16	5.64	5.24	5.06	5.30	5.34
γ 72.0	14.65	14.88	15.01	14.64	14.72	14.40	5.09	5.59	5.35	4.99	5.40	5.25
γ 73.0	14.07	14.66	14.51	14.40	14.47	13.93	5.26	5.51	5.23	5.35	5.52	5.28
γ 74.0	13.70	14.29	14.52	14.28	14.10	13.73	5.23	5.45	5.41	5.50	5.59	5.34
γ 75.0	13.56	14.05	14.07	13.94	13.71	13.50	5.48	5.73	5.61	5.57	5.62	5.63
γ 76.0	13.09	13.91	13.80	13.81	13.35	13.06	5.34	5.88	5.70	5.80	5.43	5.59
γ 77.0	13.33	13.51	13.44	13.44	13.16	12.48	5.39	5.94	5.59	5.69	5.47	5.75
γ 78.0	13.01	13.20	13.34	13.02	12.97	12.45	5.42	5.95	5.94	5.73	5.78	5.98
γ 79.0	12.69	12.99	12.87	12.90	12.46	12.03	5.68	5.93	5.77	5.90	5.79	6.19
γ 80.0	12.34	12.62	12.91	12.56	12.34	11.88	5.91	6.13	6.09	6.02	5.89	6.14
γ 81.0	11.91	12.32	12.46	12.50	12.20	11.66	5.89	6.30	6.05	6.09	6.09	6.09
γ 82.0	11.70	12.10	12.35	12.35	11.85	11.55	6.03	6.37	6.28	6.14	6.29	6.42
γ 83.0	11.53	11.91	12.00	12.07	11.86	11.38	6.31	6.47	6.14	6.28	6.34	6.29
γ 84.0	11.29	11.82	11.55	11.78	11.69	11.11	6.26	6.60	6.42	6.55	6.50	6.57
γ 85.0	10.83	11.70	11.52	11.43	11.57	11.02	6.32	6.78	6.58	6.80	6.66	6.53
γ 86.0	11.08	11.39	11.38	11.51	11.25	10.58	6.27	6.96	6.60	6.67	6.79	6.67
γ 87.0	11.14	10.99	11.00	11.36	10.85	10.55	6.61	7.02	6.97	6.68	6.70	6.78
γ 88.0	10.76	10.89	10.64	10.94	10.71	10.25	6.79	6.95	6.89	6.83	6.83	6.80
γ 89.0	10.63	10.67	10.55	10.82	10.56	10.26	6.92	6.97	7.20	7.00	6.83	6.88
γ 90.0	10.32	10.49	10.13	10.66	10.51	10.21	7.01	6.99	7.09	7.03	6.65	7.14
γ 91.0	10.23	10.48	10.13	10.47	10.52	9.89	6.82	7.01	7.19	6.89	6.83	7.22
γ 92.0	10.31	10.28	9.94	10.33	10.42	9.96	6.72	7.13	7.03	6.90	6.85	7.04
γ 93.0	9.86	10.15	9.90	10.12	10.24	9.75	7.03	7.32	6.95	6.96	6.95	6.86

IES Indoor Report

Photometric Filename: AT10020-20W-4000K-RA90-24D-SBK-3T-IES.IES

Candela Tabulation - (Cont.)

V/H	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0	C300.0	C330.0
γ 94.0	9.68	10.06	9.90	10.12	9.99	9.72	6.93	7.26	7.12	7.05	7.07	7.09
γ 95.0	9.32	9.88	9.65	10.07	9.83	9.48	6.91	7.21	6.94	7.35	7.20	7.16
γ 96.0	9.43	9.74	9.64	9.82	9.60	9.32	7.03	7.30	7.07	7.37	6.91	6.93
γ 97.0	9.44	9.69	9.14	9.75	9.56	9.32	6.95	7.20	7.00	7.25	6.90	6.85
γ 98.0	9.17	9.56	9.19	9.66	9.50	9.08	7.04	7.06	7.05	7.28	7.24	6.92
γ 99.0	9.13	9.36	9.02	9.72	9.25	8.88	7.13	7.07	7.12	7.43	7.32	7.14
γ 100.0	9.01	9.19	9.13	9.37	9.10	9.02	6.96	7.23	6.99	7.28	7.31	7.05
γ 101.0	8.87	9.13	8.63	9.22	9.12	9.04	6.91	7.24	7.09	7.22	7.28	7.05
γ 102.0	9.07	9.21	8.69	9.16	8.95	8.93	7.05	7.21	7.19	7.40	7.20	6.91
γ 103.0	8.76	9.19	8.67	9.04	8.72	8.76	7.16	7.30	6.95	7.27	7.18	6.99
γ 104.0	8.55	8.81	8.67	8.97	8.68	8.74	7.09	7.38	7.12	7.40	7.26	7.34
γ 105.0	8.66	8.66	8.72	9.01	8.74	8.31	7.10	7.41	7.17	7.47	7.22	7.12
γ 106.0	8.67	8.63	8.43	8.71	8.62	8.37	7.13	7.31	7.25	7.34	7.27	7.16
γ 107.0	8.40	8.52	8.38	8.68	8.41	8.45	7.18	7.33	7.27	7.03	7.35	7.22
γ 108.0	8.35	8.52	8.31	9.02	8.42	8.51	7.36	7.38	7.37	7.14	7.33	7.28
γ 109.0	8.22	8.42	8.15	8.84	8.34	8.46	7.03	7.48	7.04	7.34	7.27	7.33
γ 110.0	8.40	8.50	7.99	8.67	8.20	8.54	7.21	7.51	7.09	7.55	7.49	7.23
γ 111.0	8.45	8.54	7.85	8.48	8.26	8.37	7.36	7.48	7.15	7.54	7.55	7.21
γ 112.0	8.14	8.34	7.74	8.50	8.26	8.18	7.21	7.56	7.25	7.57	7.41	7.27
γ 113.0	8.37	8.20	7.99	8.47	8.11	8.19	7.53	7.66	7.26	7.64	7.36	7.53
γ 114.0	8.09	8.43	8.10	8.29	8.12	8.25	7.76	7.70	7.39	7.51	7.43	7.46
γ 115.0	8.34	8.47	7.77	8.17	8.17	8.32	7.76	7.81	7.12	7.43	7.50	7.63
γ 116.0	7.93	8.24	7.69	8.01	8.09	8.08	7.62	7.85	7.55	7.39	7.58	7.61
γ 117.0	7.79	8.22	7.82	7.94	8.10	8.01	7.39	7.83	7.32	7.46	7.45	7.58
γ 118.0	7.99	8.19	7.88	7.99	8.09	8.24	7.51	7.97	7.54	7.45	7.49	7.47
γ 119.0	7.80	8.16	7.96	8.16	8.16	8.19	7.66	8.00	7.65	7.51	7.65	7.76
γ 120.0	7.69	8.17	7.74	7.92	8.13	8.23	7.51	8.00	7.63	7.43	7.51	7.97
γ 121.0	7.77	8.06	7.72	7.94	8.14	8.09	7.72	7.98	7.29	7.68	7.65	7.74
γ 122.0	7.77	8.02	7.59	7.96	7.80	7.91	7.55	7.91	7.53	7.79	7.61	7.64
γ 123.0	7.84	7.89	7.29	7.71	7.72	7.73	7.63	7.97	7.65	7.64	7.51	7.65
γ 124.0	7.67	7.64	7.70	7.80	7.98	7.85	7.82	8.11	7.63	7.86	7.47	7.57
γ 125.0	7.65	7.68	7.38	7.84	7.94	7.79	7.51	8.27	7.90	7.92	7.52	7.59
γ 126.0	7.40	7.65	7.20	7.91	8.08	7.82	7.82	8.23	7.59	7.67	7.63	7.57
γ 127.0	7.55	7.56	7.37	8.09	8.02	7.73	7.81	8.02	7.49	7.84	7.70	7.63
γ 128.0	7.76	7.75	7.47	8.16	7.68	7.81	7.95	7.93	7.66	7.89	7.60	7.69
γ 129.0	7.52	7.86	7.45	8.19	7.69	7.65	7.99	7.92	7.53	7.78	7.60	7.56
γ 130.0	7.57	7.84	7.49	7.93	7.74	7.66	8.03	8.06	7.56	7.80	7.44	7.76
γ 131.0	7.55	7.78	7.27	7.84	7.71	7.78	8.11	8.21	7.50	7.89	7.55	7.68
γ 132.0	7.65	7.63	7.60	7.85	7.76	7.68	8.09	8.13	7.42	7.70	7.83	7.53
γ 133.0	7.82	7.64	7.41	8.00	7.74	7.64	8.04	7.94	7.69	7.66	8.06	7.61
γ 134.0	7.73	7.64	7.50	7.91	7.68	7.64	7.92	7.87	7.92	7.96	8.06	7.78
γ 135.0	7.81	7.65	7.32	8.11	7.83	7.71	8.21	7.86	7.86	7.90	7.96	7.82
γ 136.0	7.72	7.62	7.33	7.99	7.96	7.74	8.19	7.97	7.85	8.05	8.02	8.02
γ 137.0	7.73	7.61	7.43	7.92	7.90	7.84	8.09	7.98	7.75	8.01	8.10	8.16
γ 138.0	7.51	7.71	7.49	7.79	7.97	7.80	8.13	8.05	7.93	8.03	8.23	8.24
γ 139.0	7.60	7.70	7.62	7.89	8.08	7.84	8.14	8.31	7.89	8.13	8.49	7.97
γ 140.0	7.67	7.76	7.48	8.13	7.98	7.92	8.04	8.26	8.01	8.22	8.43	8.20

IES Indoor Report

Photometric Filename: AT10020-20W-4000K-RA90-24D-SBK-3T-IES.IES

Candela Tabulation - (Cont.)

V/H	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0	C300.0	C330.0
γ 141.0	7.77	7.98	7.67	8.32	7.93	8.10	8.41	8.26	8.19	8.31	8.45	8.24
γ 142.0	8.14	8.00	7.91	8.18	8.05	8.22	8.54	8.43	8.50	8.29	8.65	8.37
γ 143.0	8.43	7.99	7.63	8.17	8.09	8.11	8.86	8.52	8.69	8.54	8.69	8.72
γ 144.0	8.03	8.30	7.56	8.33	8.25	8.42	8.80	8.63	8.71	8.67	8.68	8.45
γ 145.0	8.45	8.35	8.17	8.43	8.44	8.41	9.09	8.89	8.92	8.71	8.53	8.53
γ 146.0	8.56	8.33	8.37	8.60	8.63	8.70	9.13	9.24	8.78	8.95	8.87	8.79
γ 147.0	8.98	8.57	8.62	8.87	8.85	8.74	9.26	9.41	8.87	8.93	9.17	8.84
γ 148.0	9.03	8.70	8.78	8.81	9.03	8.89	9.64	9.47	9.06	9.12	9.24	9.09
γ 149.0	8.91	8.79	8.85	8.98	9.21	9.18	9.46	9.64	9.16	9.47	9.47	9.27
γ 150.0	9.15	8.89	8.89	9.18	9.29	9.39	9.90	9.73	9.41	9.66	9.67	9.40
γ 151.0	9.28	9.15	9.21	9.44	9.48	9.73	9.80	9.91	9.70	9.94	9.81	9.51
γ 152.0	9.54	9.54	9.37	9.54	9.78	9.71	10.36	10.05	10.13	10.01	10.12	9.76
γ 153.0	9.81	9.81	9.57	9.82	9.94	9.97	10.41	10.27	10.02	10.11	10.12	9.88
γ 154.0	10.10	10.04	9.84	10.21	10.12	10.01	10.45	10.53	10.36	10.39	10.23	10.21
γ 155.0	10.48	10.27	9.92	10.34	10.54	10.52	10.57	10.69	10.40	10.57	10.49	10.44
γ 156.0	10.63	10.52	10.27	10.54	10.81	10.68	10.75	10.83	10.65	10.67	10.70	10.94
γ 157.0	10.77	10.76	10.55	10.61	10.87	10.65	10.92	11.15	10.92	10.85	10.88	11.03
γ 158.0	11.04	10.91	10.60	10.91	11.02	11.03	11.15	11.34	10.97	11.10	11.03	11.01
γ 159.0	11.24	11.22	10.91	11.05	11.27	11.21	11.27	11.36	11.20	11.29	11.33	11.30
γ 160.0	11.61	11.55	11.18	11.30	11.41	11.30	11.47	11.59	11.58	11.68	11.48	11.48
γ 161.0	11.65	11.57	11.48	11.45	11.64	11.41	11.75	11.78	11.64	11.85	11.46	11.68
γ 162.0	11.83	11.59	11.64	11.63	11.85	11.79	11.90	11.88	11.58	11.88	11.64	11.87
γ 163.0	12.00	11.75	11.59	11.71	12.02	11.93	12.17	11.96	11.72	11.99	11.79	12.05
γ 164.0	12.33	11.90	11.92	11.86	12.01	11.98	12.00	12.10	11.93	12.01	12.00	11.92
γ 165.0	12.42	12.07	11.83	12.00	12.09	12.07	12.49	12.17	11.99	12.19	12.19	12.00
γ 166.0	12.24	12.22	12.05	12.06	12.08	11.92	12.54	12.20	12.14	12.16	12.32	12.17
γ 167.0	12.42	12.30	12.17	12.25	12.31	11.85	12.38	12.12	12.10	12.02	12.23	12.01
γ 168.0	12.54	12.38	12.30	12.24	12.37	12.15	12.14	12.21	12.08	12.27	12.29	12.07
γ 169.0	12.53	12.36	12.10	12.31	12.30	12.27	12.25	12.42	12.08	12.26	12.22	12.04
γ 170.0	12.90	12.35	11.98	12.42	12.53	12.24	12.31	12.33	12.01	12.23	12.17	12.00
γ 171.0	12.74	12.46	12.19	12.57	12.55	12.47	12.28	12.28	12.02	12.44	12.24	12.02
γ 172.0	12.68	12.43	12.27	12.44	12.32	12.38	12.50	12.33	12.10	12.49	12.16	12.21
γ 173.0	12.60	12.41	12.32	12.28	12.36	12.32	12.57	12.33	12.18	12.43	12.07	12.28
γ 174.0	12.58	12.34	12.31	12.01	12.38	12.31	12.63	12.45	12.01	12.45	12.02	12.04
γ 175.0	12.60	12.29	12.35	12.15	12.17	12.49	12.37	12.49	11.86	12.31	11.98	11.94
γ 176.0	12.51	12.33	12.04	12.07	12.01	12.44	12.48	12.30	12.23	12.21	12.10	11.89
γ 177.0	12.73	12.34	11.78	12.26	11.96	12.36	12.34	12.26	12.04	12.10	12.10	11.95
γ 178.0	12.69	12.27	12.02	12.47	12.00	12.30	12.46	12.31	12.13	12.33	12.01	12.16
γ 179.0	12.61	12.23	12.09	12.19	12.10	12.20	12.33	12.26	12.00	12.27	11.99	12.01
γ 180.0	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22	12.22