

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P265925

Luminaire Tested: **ARCH-AF24-30-D-U-T2U-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265925
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-30-D-U-T2U-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3464.6 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

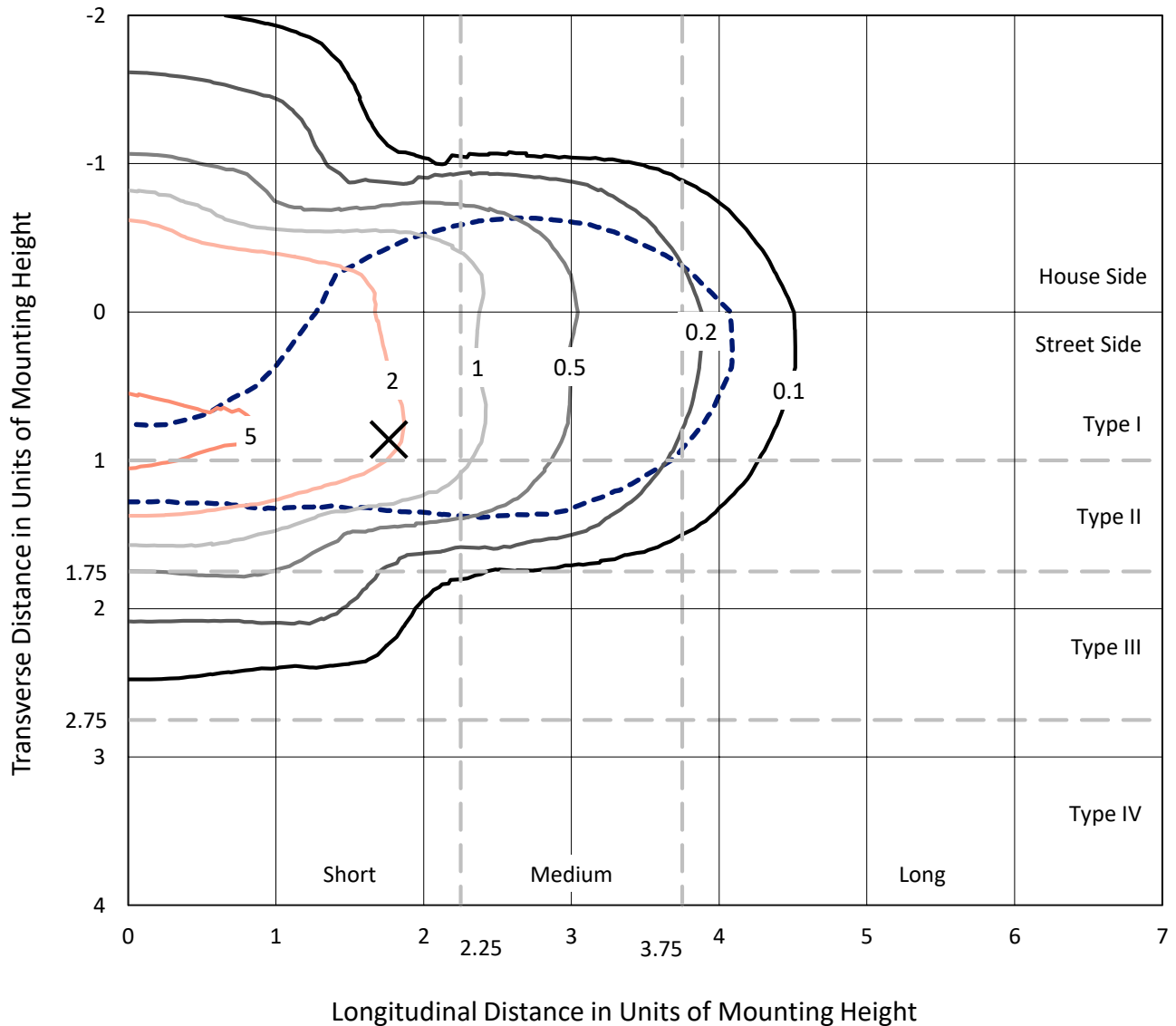
Input Watts (W): 31
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

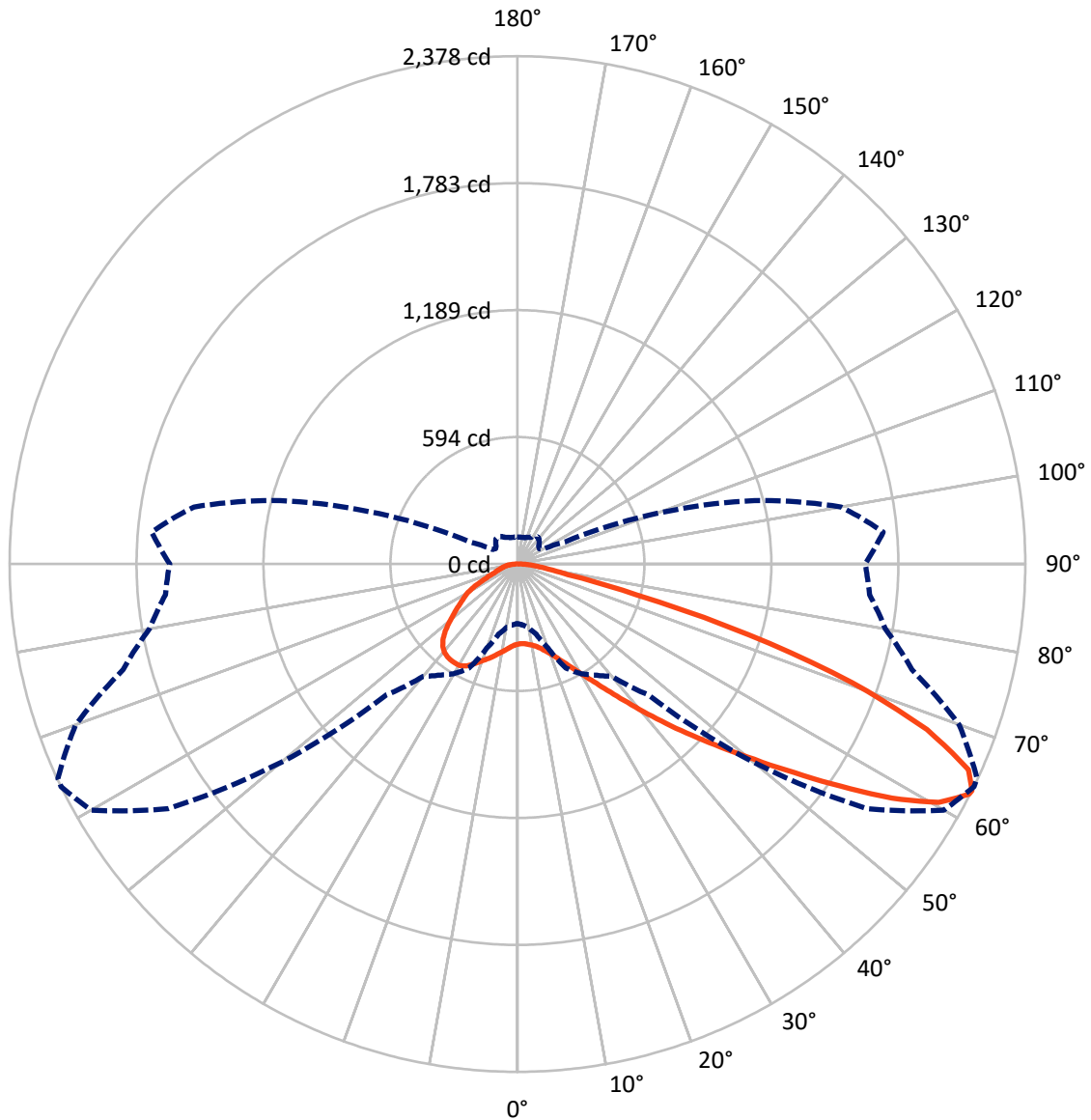
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.1 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1018.5	0.0	1018.5
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	2446.2	0.0	2446.2
	% Fixture	70.6	0.0	70.6
Total	Lumens	3464.6	0.0	3464.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	1.1
10°-20°	124.8	3.6
20°-30°	234.2	6.8
30°-40°	392.6	11.3
40°-50°	658.7	19.0
50°-60°	835.0	24.1
60°-70°	736.6	21.3
70°-80°	380.2	11.0
80°-90°	65.1	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3464.6	100.0
0°-180°	3464.6	100.0



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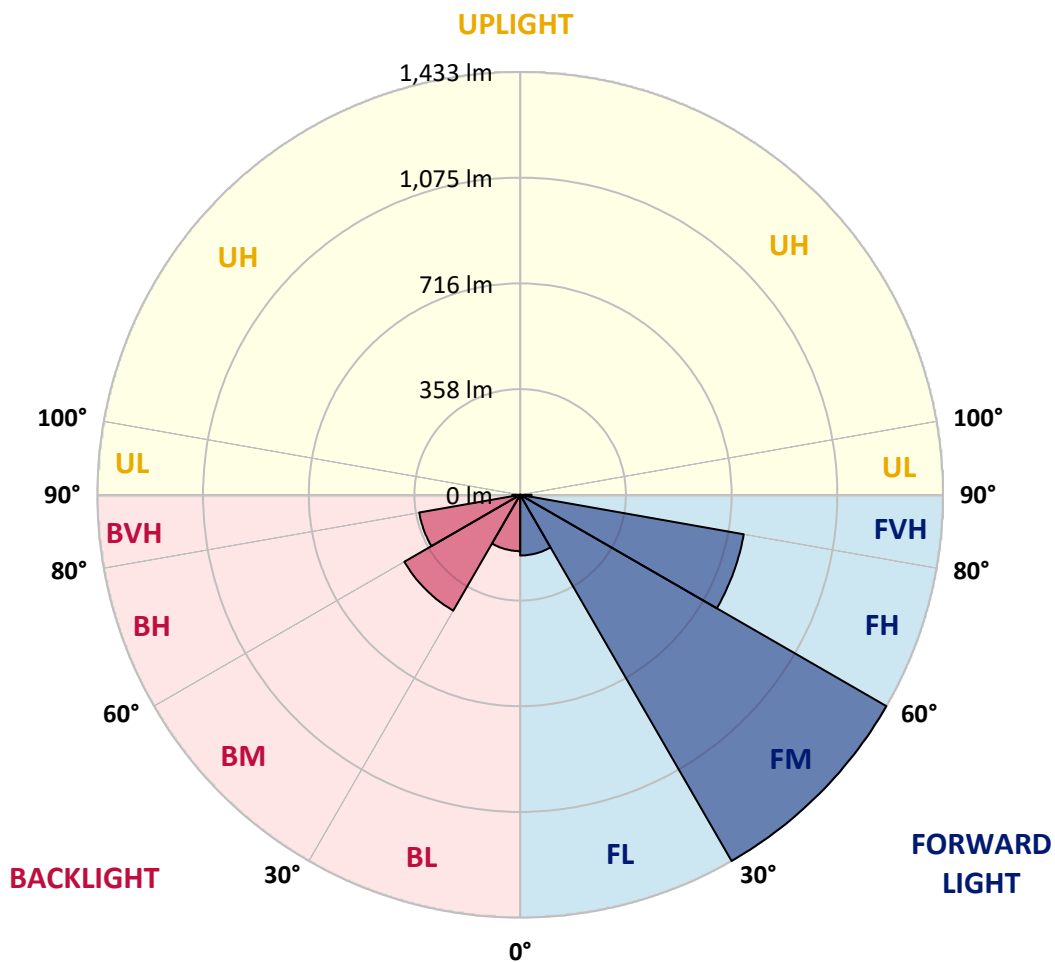
CATALOG NUMBER: ARCH-AF24-30-D-U-T2U-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	205.6	5.9			
FM	(30°-60°)	1432.9	41.4			
FH	(60°-80°)	769.3	22.2			G1/1800
FVH	(80°-90°)	38.3	1.1			G1/100
BL	(0°-30°)	190.8	5.5	B1/500		
BM	(30°-60°)	453.4	13.1	B1/1000		
BH	(60°-80°)	347.5	10.0	B1/500		G1/500
BVH	(80°-90°)	26.8	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	375.2	375.2	375.2	375.2	375.2	375.2	375.2	375.2	375.2	375.2	375.2
2.5°	372.8	372.3	372.3	372.3	372.3	371.8	372.3	373.4	372.8	372.3	373.4
5°	374.1	373.4	373.4	373.4	374.1	373.4	374.1	375.9	374.7	374.7	375.9
7.5°	377.0	376.4	377.0	376.4	376.4	376.4	377.0	378.6	378.1	378.6	380.4
10°	380.4	380.4	380.4	380.4	380.4	380.4	381.6	382.8	383.3	383.9	386.2
12.5°	390.9	390.9	390.9	390.4	390.4	388.5	390.9	392.0	393.2	394.4	396.2
15°	413.0	413.0	412.3	410.0	410.0	406.6	407.1	407.7	407.7	408.9	410.0
17.5°	441.8	441.3	440.2	438.5	436.0	432.1	430.8	429.7	428.0	427.5	427.5
20°	482.5	481.9	479.6	474.9	472.1	465.7	461.0	456.3	454.6	451.8	451.2
22.5°	540.5	540.5	535.8	528.9	526.5	513.2	499.8	490.0	486.5	482.5	482.5
25°	610.7	610.0	603.8	595.5	585.8	571.9	555.6	542.2	533.6	524.3	520.7
27.5°	694.7	693.0	684.2	674.4	655.9	638.5	619.4	605.5	590.4	578.8	568.4
30°	793.4	791.5	776.6	758.0	738.9	721.5	693.6	676.9	653.0	639.1	627.5
32.5°	907.6	905.9	878.6	860.7	840.4	818.9	785.7	759.2	729.0	709.2	693.0
35°	1053.2	1046.2	1007.4	982.3	950.4	929.0	894.3	858.3	822.9	795.1	771.4
37.5°	1210.3	1202.2	1167.9	1130.8	1099.5	1073.5	1024.2	979.0	937.2	898.9	869.3
40°	1374.4	1352.9	1316.5	1289.2	1267.8	1242.7	1191.2	1143.6	1078.1	1035.1	990.6
42.5°	1488.1	1467.2	1441.7	1423.8	1413.4	1394.2	1365.2	1324.0	1265.4	1266.6	1148.8
45°	1563.0	1532.1	1514.8	1516.0	1520.0	1520.0	1514.8	1508.4	1482.9	1500.3	1401.7
47.5°	1536.2	1516.0	1504.9	1528.1	1557.1	1586.0	1619.7	1656.2	1698.1	1747.4	1626.1
50°	1379.6	1387.3	1392.5	1441.7	1503.8	1569.9	1647.0	1746.8	1863.4	1885.9	1827.4
52.5°	1129.7	1146.0	1163.3	1238.8	1320.5	1434.8	1569.9	1734.5	1891.2	1983.4	1977.6
55°	877.5	897.8	934.9	991.1	1056.0	1163.9	1331.0	1585.0	1829.0	1975.8	2065.2
57.5°	624.6	654.1	702.8	781.2	838.6	899.6	1023.0	1304.9	1572.3	1845.4	2050.7
60°	415.2	429.1	461.0	558.4	655.4	719.2	806.7	908.7	1127.5	1503.8	1901.1
62.5°	294.6	303.8	323.6	367.6	455.3	570.7	623.5	670.5	740.7	967.4	1526.4
63°	278.4	286.5	302.6	339.9	418.7	538.2	592.2	635.0	686.0	865.2	1444.0
65°	230.9	234.3	243.0	261.0	303.3	402.5	490.7	516.7	525.4	556.2	904.8
67.5°	194.8	197.2	200.1	205.4	222.2	268.0	365.9	398.9	389.1	368.2	447.1
70°	169.3	171.0	175.7	182.0	187.8	199.6	251.6	301.0	290.0	261.5	273.8
72.5°	135.1	138.0	143.2	154.2	165.8	181.0	193.8	224.4	217.5	190.3	193.1
75°	106.7	108.4	113.0	121.2	132.2	149.6	174.6	185.1	165.8	140.3	140.3
77.5°	84.7	86.3	90.5	96.8	103.8	116.1	133.4	160.6	149.1	105.6	104.9
80°	63.8	65.5	69.6	75.4	82.4	91.1	101.5	113.6	136.8	98.5	79.0
82.5°	47.0	47.6	54.4	58.6	60.8	67.8	76.5	83.5	94.0	91.1	70.2
85°	35.4	34.9	39.4	42.3	42.8	44.6	49.9	56.9	61.4	59.2	54.4
87.5°	19.8	17.3	20.3	23.1	23.1	23.7	25.0	28.9	33.1	31.9	28.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	375.2	375.2	375.2	375.2	375.2	375.2	375.2	375.2	375.2	375.2	375.2
2.5°	373.4	373.4	372.8	372.8	373.4	373.4	372.8	374.7	375.9	375.9	376.4
5°	375.2	375.9	375.2	375.2	375.9	375.9	376.4	378.1	379.9	381.1	382.8
7.5°	380.4	381.1	380.4	380.4	381.1	381.6	382.8	385.1	386.2	388.5	391.4
10°	386.2	386.8	386.2	386.8	387.3	388.0	389.8	391.4	393.2	395.6	400.1
12.5°	396.7	397.3	396.2	396.7	398.4	398.4	399.6	400.7	403.7	406.6	411.2
15°	411.2	411.2	410.0	410.5	412.3	412.3	413.0	414.1	417.5	421.0	425.6
17.5°	428.0	429.1	428.6	429.1	430.3	430.8	430.8	432.1	434.4	436.7	441.3
20°	450.6	451.2	450.1	451.2	452.3	451.2	450.1	449.4	450.6	451.8	457.0
22.5°	481.3	480.8	477.9	477.9	477.9	475.6	472.7	469.2	469.2	467.4	471.5
25°	518.0	516.2	512.0	512.7	508.6	505.1	499.8	494.6	490.0	488.3	488.9
27.5°	560.8	557.3	553.3	552.1	548.1	541.7	533.0	523.2	515.5	509.8	508.6
30°	614.7	607.2	600.2	599.1	592.7	582.2	568.4	555.1	542.2	532.3	528.9
32.5°	678.5	666.9	655.9	654.8	644.4	630.4	613.5	594.9	576.4	560.8	553.3
35°	753.3	735.9	725.6	722.5	707.5	690.1	671.6	647.8	621.6	599.7	585.8
37.5°	844.3	826.4	808.5	809.1	788.2	767.8	742.9	714.0	680.8	650.2	630.4
40°	956.9	931.4	908.1	902.9	885.0	856.5	829.3	795.7	755.0	714.5	686.0
42.5°	1093.1	1051.5	1019.5	1014.8	991.1	956.3	923.3	878.6	837.4	788.2	753.9
45°	1248.0	1181.4	1143.1	1136.0	1097.8	1062.4	1022.5	974.9	924.4	868.8	828.1
47.5°	1440.5	1345.4	1280.5	1268.9	1216.1	1169.8	1128.0	1075.2	1014.8	952.8	908.1
50°	1665.0	1524.7	1437.1	1419.1	1348.4	1293.7	1240.5	1174.4	1109.9	1045.1	993.4
52.5°	1890.0	1739.2	1622.7	1600.6	1496.2	1423.2	1352.9	1286.9	1210.9	1146.5	1087.9
55°	2071.0	1970.6	1835.4	1804.8	1655.1	1556.0	1463.8	1388.4	1313.0	1261.8	1192.9
57.5°	2179.9	2174.7	2068.1	2025.7	1821.0	1674.4	1571.7	1485.7	1412.8	1391.2	1299.7
60°	2177.1	2312.1	2266.3	2234.4	1988.6	1795.5	1662.1	1569.2	1509.1	1533.3	1406.9
62.5°	2044.3	2317.9	2373.1	2364.3	2167.3	1892.9	1736.3	1640.7	1608.8	1681.3	1518.2
63°	1996.2	2304.6	2377.8	2374.3	2201.4	1911.5	1749.1	1654.6	1628.4	1718.9	1538.5
65°	1687.0	2188.1	2321.5	2337.1	2275.0	1975.3	1778.6	1689.9	1687.0	1803.0	1586.6
67.5°	1028.2	1848.8	2068.1	2098.3	2171.3	1995.6	1761.8	1677.8	1719.5	1815.1	1572.3
70°	439.6	1220.2	1662.1	1710.8	1889.4	1894.6	1713.6	1627.9	1712.0	1720.1	1469.0
72.5°	260.4	575.4	1131.4	1237.5	1495.0	1630.2	1603.6	1541.0	1612.7	1510.7	1250.9
75°	184.4	269.1	574.7	687.8	1041.0	1244.5	1347.2	1376.3	1373.2	1198.2	938.9
77.5°	132.2	172.8	242.5	285.9	581.2	799.1	924.4	1009.1	981.8	802.0	578.8
80°	92.2	119.5	148.5	157.7	269.8	410.5	487.2	524.3	508.0	400.7	259.3
82.5°	66.7	78.3	95.7	101.5	135.7	189.6	225.7	199.0	190.8	148.0	111.8
85°	51.7	50.5	59.7	62.1	79.5	99.2	101.5	79.0	69.0	61.4	62.6
87.5°	36.6	31.4	31.9	33.1	41.2	52.8	51.7	32.5	27.8	29.6	33.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	375.2	375.2	375.2	375.2	375.2	375.2	375.2	375.2	375.2	375.2	375.2
2.5°	377.6	378.1	379.3	379.9	381.1	381.1	382.1	382.8	383.9	385.1	385.6
5°	384.6	386.2	388.5	389.8	392.0	393.7	396.2	397.3	399.6	401.4	403.7
7.5°	395.0	397.8	400.7	404.1	407.7	410.5	413.0	415.8	419.9	422.7	424.4
10°	404.7	408.9	414.1	418.2	423.3	427.5	430.8	436.0	440.8	444.8	447.1
12.5°	417.5	422.7	428.0	434.4	441.3	446.5	451.8	458.8	465.1	469.8	472.1
15°	432.7	439.0	444.8	452.3	460.6	467.4	474.9	482.5	487.2	487.2	486.1
17.5°	448.3	453.6	460.6	469.2	480.1	488.9	492.9	494.1	492.5	488.3	485.4
20°	464.0	468.6	476.1	486.5	498.2	499.8	495.9	490.7	485.4	478.4	473.8
22.5°	476.7	483.1	494.6	506.9	507.5	497.7	486.5	477.9	469.8	461.5	452.9
25°	491.8	500.4	516.2	520.7	505.7	487.2	471.5	458.8	445.4	432.1	422.3
27.5°	510.3	523.2	538.8	525.4	495.9	469.8	448.3	429.1	411.8	393.2	382.1
30°	530.1	549.9	553.3	518.4	479.1	445.4	416.4	387.3	365.4	348.5	342.2
32.5°	553.9	579.3	558.4	506.3	456.3	412.3	373.4	338.8	320.2	309.6	306.9
35°	589.7	610.7	561.4	493.4	430.3	372.8	324.2	296.4	284.8	277.8	274.3
37.5°	641.4	640.9	560.8	477.9	400.1	329.9	284.8	265.0	255.7	250.0	243.6
40°	701.8	664.0	557.3	455.3	359.5	288.9	257.5	238.9	230.2	223.3	215.8
42.5°	761.5	679.7	547.4	421.7	309.0	259.3	237.8	221.0	211.7	204.2	193.8
45°	813.1	686.0	528.4	375.2	263.8	236.1	225.0	210.6	199.6	187.8	179.8
47.5°	853.7	684.9	497.7	320.8	233.6	219.7	214.5	204.8	191.3	176.8	166.5
50°	887.9	676.2	455.8	272.5	213.3	205.4	203.6	200.6	179.2	167.1	160.6
52.5°	919.1	663.5	411.2	240.0	196.0	189.1	192.5	189.6	174.6	164.1	157.7
55°	962.2	654.8	367.0	215.1	175.7	174.0	176.8	181.0	171.7	161.9	154.9
57.5°	1012.6	659.4	333.5	187.3	156.6	157.7	167.7	173.5	168.7	158.3	151.4
60°	1070.6	673.3	303.8	160.6	140.9	143.8	158.3	166.5	165.8	153.7	145.5
62.5°	1135.5	687.8	256.9	140.3	127.6	132.2	147.3	157.7	159.4	149.1	139.1
63°	1148.3	689.0	244.8	136.4	125.3	130.4	144.4	155.4	157.7	148.0	138.0
65°	1179.6	678.5	197.2	125.3	116.1	121.8	135.7	145.5	150.1	141.6	133.4
67.5°	1153.6	593.3	148.5	111.8	108.4	112.5	124.7	133.9	138.0	133.9	125.9
70°	1054.9	431.5	116.1	99.7	100.3	103.2	112.5	121.2	125.9	124.7	117.1
72.5°	849.5	244.8	96.8	89.3	91.1	94.5	100.9	109.1	113.0	112.5	107.3
75°	559.6	125.3	81.7	79.9	81.1	84.1	88.8	95.1	99.7	99.2	96.8
77.5°	277.1	87.0	70.2	70.7	71.3	73.7	77.2	83.0	85.8	86.3	85.8
80°	114.3	67.8	60.4	60.8	61.4	63.2	65.5	70.7	72.6	73.7	74.2
82.5°	68.5	51.7	48.1	49.2	49.9	51.7	53.4	58.0	59.7	61.4	61.4
85°	45.3	35.9	34.9	35.9	37.1	38.3	38.8	41.7	44.6	47.0	48.1
87.5°	24.3	21.5	20.9	21.5	21.5	22.5	23.7	26.7	30.2	32.5	33.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: ARCH-AF24-30-D-U-T2U-7027

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	375.2	375.2	375.2	375.2	375.2
2.5°	384.6	385.1	384.6	385.1	385.6
5°	403.7	404.7	404.1	404.1	406.6
7.5°	425.6	428.0	428.0	429.1	430.3
10°	449.4	451.8	453.6	453.6	455.3
12.5°	473.2	474.3	476.1	476.1	476.1
15°	485.4	484.8	484.2	483.6	483.6
17.5°	483.6	481.3	480.1	479.1	479.6
20°	470.9	466.8	465.7	464.0	465.1
22.5°	448.9	443.0	440.8	437.8	439.0
25°	415.8	408.9	407.7	404.1	405.9
27.5°	377.6	374.1	373.4	372.8	375.9
30°	341.5	342.8	343.3	344.5	347.4
32.5°	308.5	310.9	311.4	312.0	316.1
35°	276.0	273.2	276.0	274.9	278.4
37.5°	240.7	238.4	236.1	233.1	235.4
40°	211.1	207.0	200.1	196.5	197.2
42.5°	187.8	182.6	176.8	173.5	173.5
45°	172.8	166.5	161.2	158.9	158.9
47.5°	161.2	158.3	155.4	153.7	153.7
50°	156.6	153.2	151.4	150.1	150.1
52.5°	153.2	149.6	148.0	146.8	145.5
55°	150.1	144.9	143.2	142.7	142.7
57.5°	146.2	141.6	139.1	138.6	138.6
60°	139.7	136.4	133.9	133.4	133.4
62.5°	133.4	130.0	127.6	127.6	127.6
63°	132.2	128.2	126.4	126.4	126.4
65°	127.0	123.0	121.2	121.2	120.6
67.5°	120.1	116.1	114.9	114.9	113.6
70°	111.8	108.4	107.3	107.8	105.6
72.5°	103.8	100.3	98.5	98.5	96.3
75°	94.5	91.1	88.8	88.2	85.8
77.5°	84.1	81.1	79.0	76.5	75.4
80°	73.1	70.7	67.8	66.1	64.4
82.5°	61.4	59.2	57.4	59.7	51.1
85°	48.1	45.9	43.5	47.0	36.6
87.5°	35.4	34.2	31.9	27.8	24.3
90°	0.0	0.0	0.0	0.0	0.0

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