

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: P239105

Luminaire Tested: **ARCH-AF24-30-D-U-T2U-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239105
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-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 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: 3530 lumens
Efficiency: N/A
Efficacy: 113.9 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

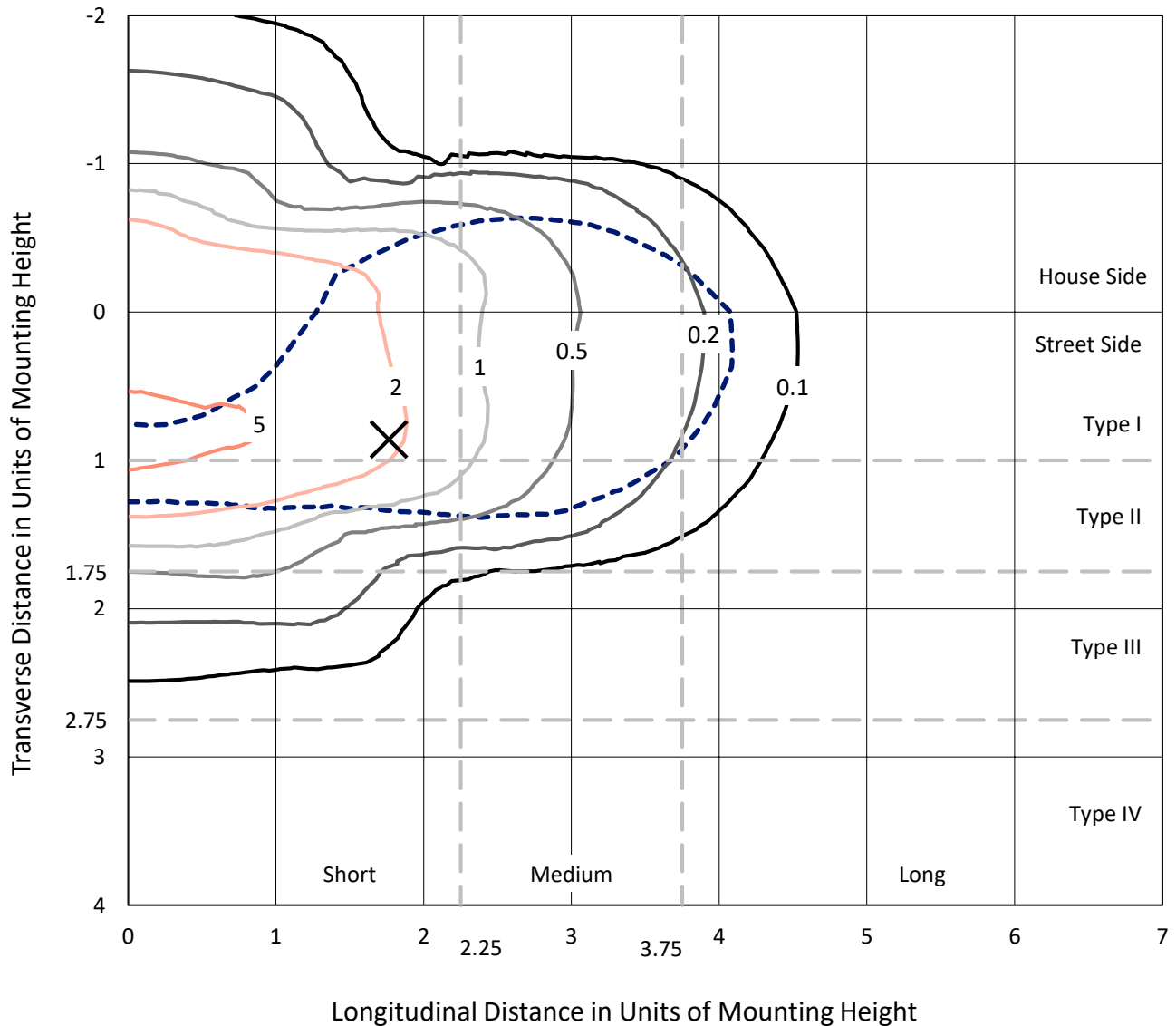
Input Watts (W): 31
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

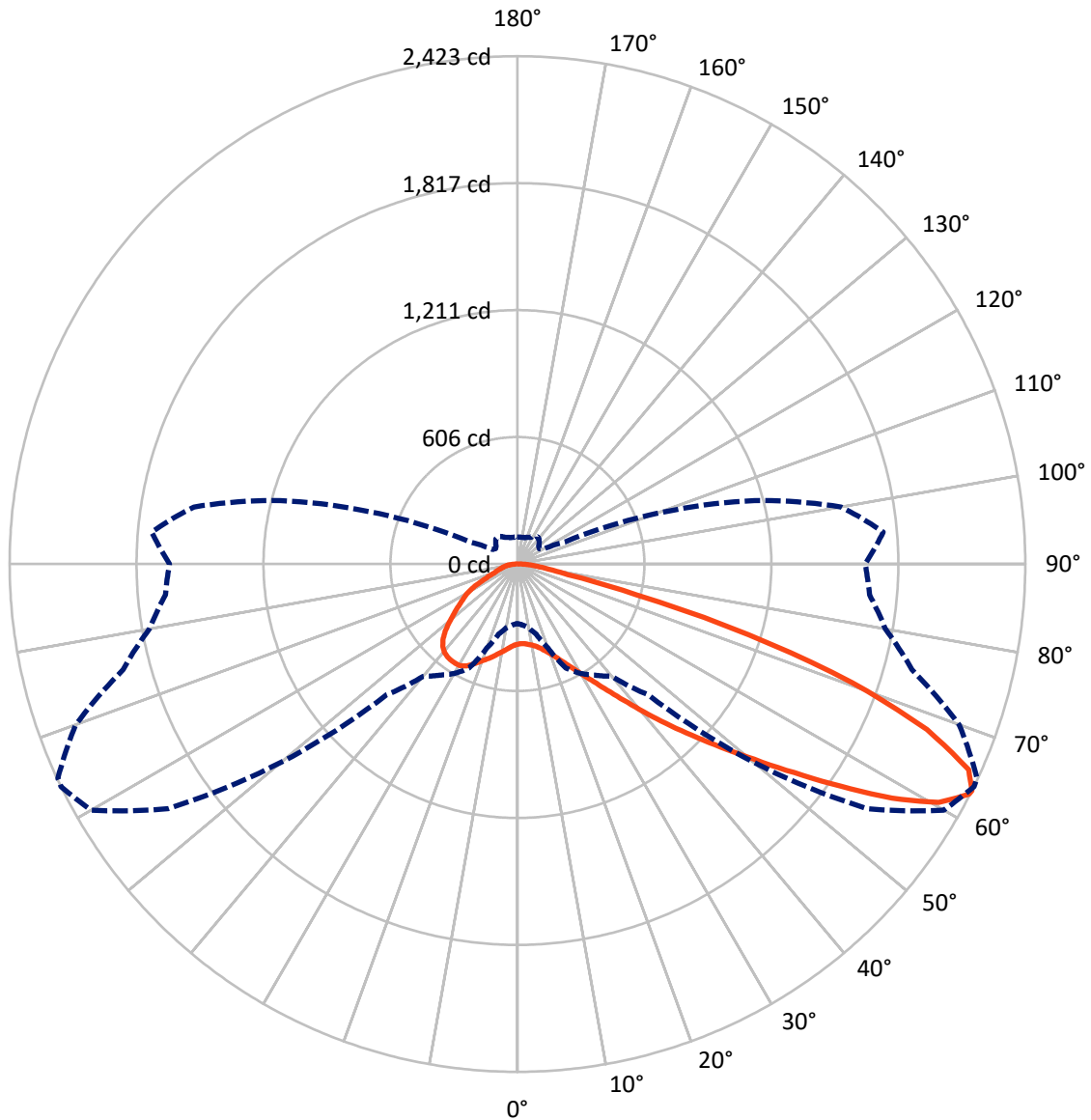
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.2 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	1037.7	0.0	1037.7
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	2492.3	0.0	2492.3
	% Fixture	70.6	0.0	70.6
Total	Lumens	3530.0	0.0	3530.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.2	1.1
10°-20°	127.1	3.6
20°-30°	238.6	6.8
30°-40°	400.0	11.3
40°-50°	671.1	19.0
50°-60°	850.8	24.1
60°-70°	750.5	21.3
70°-80°	387.4	11.0
80°-90°	66.3	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°	3530.0	100.0
0°-180°	3530.0	100.0



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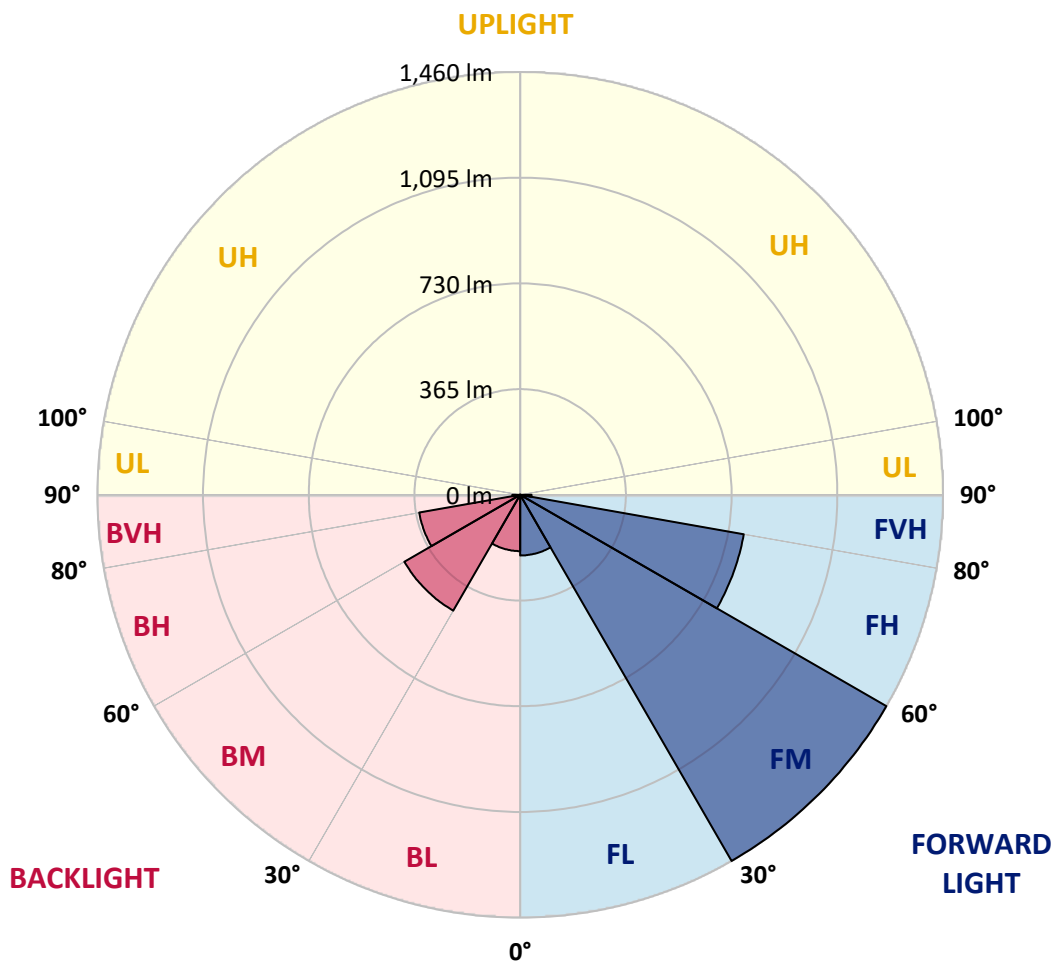
CATALOG NUMBER: ARCH-AF24-30-D-U-T2U-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	209.5	5.9			
FM	(30°-60°)	1459.9	41.4			
FH	(60°-80°)	783.9	22.2			G1/1800
FVH	(80°-90°)	39.0	1.1			G1/100
BL	(0°-30°)	194.4	5.5	B1/500		
BM	(30°-60°)	461.9	13.1	B1/1000		
BH	(60°-80°)	354.1	10.0	B1/500		G1/500
BVH	(80°-90°)	27.3	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°	382.3	382.3	382.3	382.3	382.3	382.3	382.3	382.3	382.3	382.3	382.3
2.5°	379.9	379.3	379.3	379.3	379.3	378.8	379.3	380.5	379.9	379.3	380.5
5°	381.1	380.5	380.5	380.5	381.1	380.5	381.1	382.9	381.7	381.7	382.9
7.5°	384.1	383.5	384.1	383.5	383.5	383.5	384.1	385.8	385.3	385.8	387.6
10°	387.6	387.6	387.6	387.6	387.6	387.6	388.8	390.0	390.6	391.2	393.5
12.5°	398.3	398.3	398.3	397.7	397.7	395.9	398.3	399.4	400.6	401.8	403.6
15°	420.7	420.7	420.1	417.8	417.8	414.2	414.8	415.4	415.4	416.6	417.8
17.5°	450.2	449.7	448.5	446.7	444.3	440.2	439.0	437.8	436.1	435.5	435.5
20°	491.6	491.0	488.7	483.9	481.0	474.5	469.7	465.0	463.2	460.3	459.7
22.5°	550.7	550.7	546.0	538.9	536.5	522.9	509.3	499.3	495.7	491.6	491.6
25°	622.2	621.6	615.1	606.8	596.8	582.6	566.1	552.5	543.6	534.2	530.6
27.5°	707.9	706.1	697.2	687.2	668.3	650.6	631.1	616.9	601.5	589.7	579.1
30°	808.3	806.5	791.2	772.3	752.8	735.1	706.7	689.6	665.3	651.1	639.3
32.5°	924.7	923.0	895.2	876.9	856.2	834.3	800.6	773.5	742.7	722.6	706.1
35°	1073.0	1065.9	1026.4	1000.9	968.4	946.6	911.1	874.5	838.5	810.1	785.9
37.5°	1233.2	1224.9	1190.0	1152.2	1120.3	1093.7	1043.5	997.4	954.9	915.9	885.7
40°	1400.4	1378.5	1341.3	1313.5	1291.7	1266.2	1213.7	1165.2	1098.4	1054.7	1009.2
42.5°	1516.2	1494.9	1468.9	1450.6	1440.0	1420.5	1390.9	1349.0	1289.3	1290.5	1170.5
45°	1592.4	1561.1	1543.4	1544.6	1548.7	1548.7	1543.4	1536.9	1510.9	1528.6	1428.2
47.5°	1565.2	1544.6	1533.3	1557.0	1586.5	1616.0	1650.3	1687.5	1730.1	1780.3	1656.8
50°	1405.7	1413.4	1418.7	1468.9	1532.1	1599.5	1678.1	1779.7	1898.5	1921.5	1861.9
52.5°	1151.0	1167.6	1185.3	1262.1	1345.4	1461.8	1599.5	1767.3	1926.9	2020.8	2014.9
55°	894.0	914.7	952.5	1009.8	1076.0	1185.9	1356.1	1614.9	1863.6	2013.1	2104.1
57.5°	636.4	666.5	716.1	795.9	854.4	916.5	1042.3	1329.5	1601.9	1880.2	2089.3
60°	423.1	437.2	469.7	569.0	667.7	732.7	821.9	925.9	1148.7	1532.1	1936.9
62.5°	300.2	309.6	329.7	374.6	463.8	581.4	635.2	683.1	754.6	985.6	1555.2
63°	283.6	291.9	308.4	346.3	426.6	548.3	603.3	647.0	699.0	881.6	1471.3
65°	235.2	238.7	247.6	265.9	309.0	410.1	499.9	526.5	535.3	566.7	921.8
67.5°	198.5	200.9	203.9	209.2	226.3	273.0	372.8	406.5	396.5	375.2	455.6
70°	172.5	174.3	179.0	185.5	191.4	203.3	256.4	306.7	295.4	266.5	278.9
72.5°	137.7	140.6	145.9	157.2	169.0	184.4	197.4	228.7	221.6	193.8	196.8
75°	108.7	110.5	115.2	123.5	134.7	152.4	177.9	188.5	169.0	143.0	143.0
77.5°	86.3	88.0	92.2	98.7	105.8	118.2	135.9	163.7	151.9	107.5	106.9
80°	65.0	66.8	70.9	76.8	83.9	92.8	103.4	115.8	139.4	100.4	80.4
82.5°	47.9	48.5	55.5	59.7	62.0	69.1	78.0	85.1	95.7	92.8	71.5
85°	36.0	35.5	40.2	43.1	43.7	45.5	50.8	57.9	62.6	60.3	55.5
87.5°	20.1	17.7	20.7	23.6	23.6	24.2	25.4	29.5	33.7	32.5	29.5
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°	382.3	382.3	382.3	382.3	382.3	382.3	382.3	382.3	382.3	382.3	382.3
2.5°	380.5	380.5	379.9	379.9	380.5	380.5	379.9	381.7	382.9	382.9	383.5
5°	382.3	382.9	382.3	382.3	382.9	382.9	383.5	385.3	387.0	388.2	390.0
7.5°	387.6	388.2	387.6	387.6	388.2	388.8	390.0	392.3	393.5	395.9	398.8
10°	393.5	394.1	393.5	394.1	394.7	395.3	397.1	398.8	400.6	403.0	407.7
12.5°	404.2	404.8	403.6	404.2	405.9	405.9	407.1	408.3	411.3	414.2	418.9
15°	418.9	418.9	417.8	418.3	420.1	420.1	420.7	421.9	425.4	429.0	433.7
17.5°	436.1	437.2	436.7	437.2	438.4	439.0	439.0	440.2	442.6	444.9	449.7
20°	459.1	459.7	458.5	459.7	460.9	459.7	458.5	457.9	459.1	460.3	465.6
22.5°	490.4	489.8	486.9	486.9	486.9	484.5	481.6	478.0	478.0	476.2	480.4
25°	527.7	525.9	521.7	522.3	518.2	514.7	509.3	504.0	499.3	497.5	498.1
27.5°	571.4	567.8	563.7	562.5	558.4	551.9	543.0	533.0	525.3	519.4	518.2
30°	626.3	618.6	611.6	610.4	603.9	593.2	579.1	565.5	552.5	542.4	538.9
32.5°	691.3	679.5	668.3	667.1	656.5	642.3	625.1	606.2	587.3	571.4	563.7
35°	767.5	749.8	739.2	736.2	720.9	703.1	684.2	660.0	633.4	611.0	596.8
37.5°	860.3	842.0	823.7	824.3	803.0	782.3	756.9	727.4	693.7	662.4	642.3
40°	974.9	948.9	925.3	920.0	901.7	872.7	845.0	810.7	769.3	728.0	699.0
42.5°	1113.8	1071.3	1038.8	1034.0	1009.8	974.4	940.7	895.2	853.2	803.0	768.1
45°	1271.6	1203.6	1164.6	1157.5	1118.5	1082.5	1041.7	993.3	941.9	885.1	843.8
47.5°	1467.7	1370.8	1304.7	1292.8	1239.1	1191.8	1149.3	1095.5	1034.0	970.8	925.3
50°	1696.4	1553.4	1464.2	1445.9	1373.8	1318.2	1263.9	1196.5	1130.9	1064.8	1012.2
52.5°	1925.7	1772.0	1653.3	1630.8	1524.5	1450.0	1378.5	1311.2	1233.8	1168.2	1108.5
55°	2110.0	2007.8	1870.1	1838.8	1686.4	1585.3	1491.4	1414.6	1337.7	1285.7	1215.4
57.5°	2221.1	2215.8	2107.1	2063.9	1855.4	1705.9	1601.3	1513.8	1439.4	1417.5	1324.2
60°	2218.2	2355.8	2309.1	2276.6	2026.1	1829.4	1693.5	1598.9	1537.5	1562.3	1433.5
62.5°	2082.8	2361.7	2417.9	2409.0	2208.1	1928.6	1769.1	1671.6	1639.1	1713.0	1546.9
63°	2033.8	2348.1	2422.6	2419.1	2243.0	1947.5	1782.1	1685.8	1659.2	1751.4	1567.6
65°	1718.9	2229.4	2365.3	2381.2	2318.0	2012.5	1812.2	1721.8	1718.9	1837.0	1616.6
67.5°	1047.6	1883.7	2107.1	2137.8	2212.2	2033.2	1795.1	1709.4	1752.0	1849.4	1601.9
70°	447.9	1243.2	1693.5	1743.1	1925.1	1930.4	1746.0	1658.6	1744.3	1752.5	1496.7
72.5°	265.3	586.2	1152.8	1260.9	1523.3	1661.0	1633.8	1570.0	1643.2	1539.2	1274.5
75°	187.9	274.2	585.6	700.8	1060.6	1268.0	1372.6	1402.2	1399.2	1220.8	956.6
77.5°	134.7	176.1	247.0	291.3	592.1	814.2	941.9	1028.1	1000.4	817.2	589.7
80°	93.9	121.7	151.3	160.7	274.8	418.3	496.3	534.2	517.6	408.3	264.1
82.5°	68.0	79.8	97.5	103.4	138.3	193.2	229.9	202.7	194.4	150.7	114.0
85°	52.6	51.4	60.9	63.2	81.0	101.0	103.4	80.4	70.3	62.6	63.8
87.5°	37.2	31.9	32.5	33.7	42.0	53.8	52.6	33.1	28.4	30.1	34.3
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°	382.3	382.3	382.3	382.3	382.3	382.3	382.3	382.3	382.3	382.3	382.3
2.5°	384.7	385.3	386.4	387.0	388.2	388.2	389.4	390.0	391.2	392.3	392.9
5°	391.8	393.5	395.9	397.1	399.4	401.2	403.6	404.8	407.1	408.9	411.3
7.5°	402.4	405.3	408.3	411.8	415.4	418.3	420.7	423.7	427.8	430.7	432.5
10°	412.4	416.6	421.9	426.0	431.3	435.5	439.0	444.3	449.1	453.2	455.6
12.5°	425.4	430.7	436.1	442.6	449.7	455.0	460.3	467.4	473.9	478.6	481.0
15°	440.8	447.3	453.2	460.9	469.2	476.2	483.9	491.6	496.3	496.3	495.2
17.5°	456.7	462.1	469.2	478.0	489.2	498.1	502.2	503.4	501.7	497.5	494.6
20°	472.7	477.4	485.1	495.7	507.6	509.3	505.2	499.9	494.6	487.5	482.7
22.5°	485.7	492.2	504.0	516.4	517.0	507.0	495.7	486.9	478.6	470.3	461.5
25°	501.1	509.9	525.9	530.6	515.2	496.3	480.4	467.4	453.8	440.2	430.2
27.5°	520.0	533.0	548.9	535.3	505.2	478.6	456.7	437.2	419.5	400.6	389.4
30°	540.1	560.2	563.7	528.2	488.1	453.8	424.2	394.7	372.3	355.1	348.6
32.5°	564.3	590.3	569.0	515.8	465.0	420.1	380.5	345.1	326.2	315.5	312.6
35°	600.9	622.2	572.0	502.8	438.4	379.9	330.3	301.9	290.1	283.0	279.5
37.5°	653.5	652.9	571.4	486.9	407.7	336.2	290.1	270.0	260.6	254.7	248.2
40°	715.0	676.6	567.8	463.8	366.3	294.3	262.3	243.4	234.6	227.5	219.8
42.5°	775.8	692.5	557.8	429.6	314.9	264.1	242.3	225.1	215.7	208.0	197.4
45°	828.4	699.0	538.3	382.3	268.8	240.5	229.3	214.5	203.3	191.4	183.2
47.5°	869.8	697.8	507.0	326.8	238.1	223.9	218.6	208.6	195.0	180.2	169.6
50°	904.6	689.0	464.4	277.7	217.4	209.2	207.4	204.4	182.6	170.2	163.7
52.5°	936.5	676.0	418.9	244.6	199.7	192.6	196.2	193.2	177.9	167.2	160.7
55°	980.3	667.1	374.0	219.2	179.0	177.3	180.2	184.4	174.9	164.9	157.8
57.5°	1031.7	671.8	339.8	190.9	159.5	160.7	170.8	176.7	171.9	161.3	154.2
60°	1090.8	686.0	309.6	163.7	143.6	146.5	161.3	169.6	169.0	156.6	148.3
62.5°	1156.9	700.8	261.8	143.0	130.0	134.7	150.1	160.7	162.5	151.9	141.8
63°	1169.9	702.0	249.4	138.9	127.6	132.9	147.1	158.4	160.7	150.7	140.6
65°	1201.8	691.3	200.9	127.6	118.2	124.1	138.3	148.3	153.0	144.2	135.9
67.5°	1175.3	604.5	151.3	114.0	110.5	114.6	127.0	136.5	140.6	136.5	128.2
70°	1074.8	439.6	118.2	101.6	102.2	105.2	114.6	123.5	128.2	127.0	119.4
72.5°	865.6	249.4	98.7	91.0	92.8	96.3	102.8	111.1	115.2	114.6	109.3
75°	570.2	127.6	83.3	81.5	82.7	85.7	90.4	96.9	101.6	101.0	98.7
77.5°	282.4	88.6	71.5	72.1	72.7	75.0	78.6	84.5	87.4	88.0	87.4
80°	116.4	69.1	61.5	62.0	62.6	64.4	66.8	72.1	73.9	75.0	75.6
82.5°	69.7	52.6	49.0	50.2	50.8	52.6	54.4	59.1	60.9	62.6	62.6
85°	46.1	36.6	35.5	36.6	37.8	39.0	39.6	42.5	45.5	47.9	49.0
87.5°	24.8	21.9	21.3	21.9	21.9	23.0	24.2	27.2	30.7	33.1	34.3
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-7030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	382.3	382.3	382.3	382.3	382.3
2.5°	391.8	392.3	391.8	392.3	392.9
5°	411.3	412.4	411.8	411.8	414.2
7.5°	433.7	436.1	436.1	437.2	438.4
10°	457.9	460.3	462.1	462.1	463.8
12.5°	482.2	483.3	485.1	485.1	485.1
15°	494.6	494.0	493.4	492.8	492.8
17.5°	492.8	490.4	489.2	488.1	488.7
20°	479.8	475.7	474.5	472.7	473.9
22.5°	457.3	451.4	449.1	446.1	447.3
25°	423.7	416.6	415.4	411.8	413.6
27.5°	384.7	381.1	380.5	379.9	382.9
30°	348.0	349.2	349.8	351.0	353.9
32.5°	314.3	316.7	317.3	317.9	322.0
35°	281.3	278.3	281.3	280.1	283.6
37.5°	245.2	242.9	240.5	237.5	239.9
40°	215.1	210.9	203.9	200.3	200.9
42.5°	191.4	186.1	180.2	176.7	176.7
45°	176.1	169.6	164.3	161.9	161.9
47.5°	164.3	161.3	158.4	156.6	156.6
50°	159.5	156.0	154.2	153.0	153.0
52.5°	156.0	152.4	150.7	149.5	148.3
55°	153.0	147.7	145.9	145.4	145.4
57.5°	148.9	144.2	141.8	141.2	141.2
60°	142.4	138.9	136.5	135.9	135.9
62.5°	135.9	132.4	130.0	130.0	130.0
63°	134.7	130.6	128.8	128.8	128.8
65°	129.4	125.3	123.5	123.5	122.9
67.5°	122.3	118.2	117.0	117.0	115.8
70°	114.0	110.5	109.3	109.9	107.5
72.5°	105.8	102.2	100.4	100.4	98.1
75°	96.3	92.8	90.4	89.8	87.4
77.5°	85.7	82.7	80.4	78.0	76.8
80°	74.5	72.1	69.1	67.4	65.6
82.5°	62.6	60.3	58.5	60.9	52.0
85°	49.0	46.7	44.3	47.9	37.2
87.5°	36.0	34.9	32.5	28.4	24.8
90°	0.0	0.0	0.0	0.0	0.0

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