

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: P239100

Luminaire Tested: **ARCH-AF16-30-D-U-T2U-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239100
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-AF16-30-D-U-T2U-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3655.8 lumens
Efficiency: N/A
Efficacy: 114.2 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

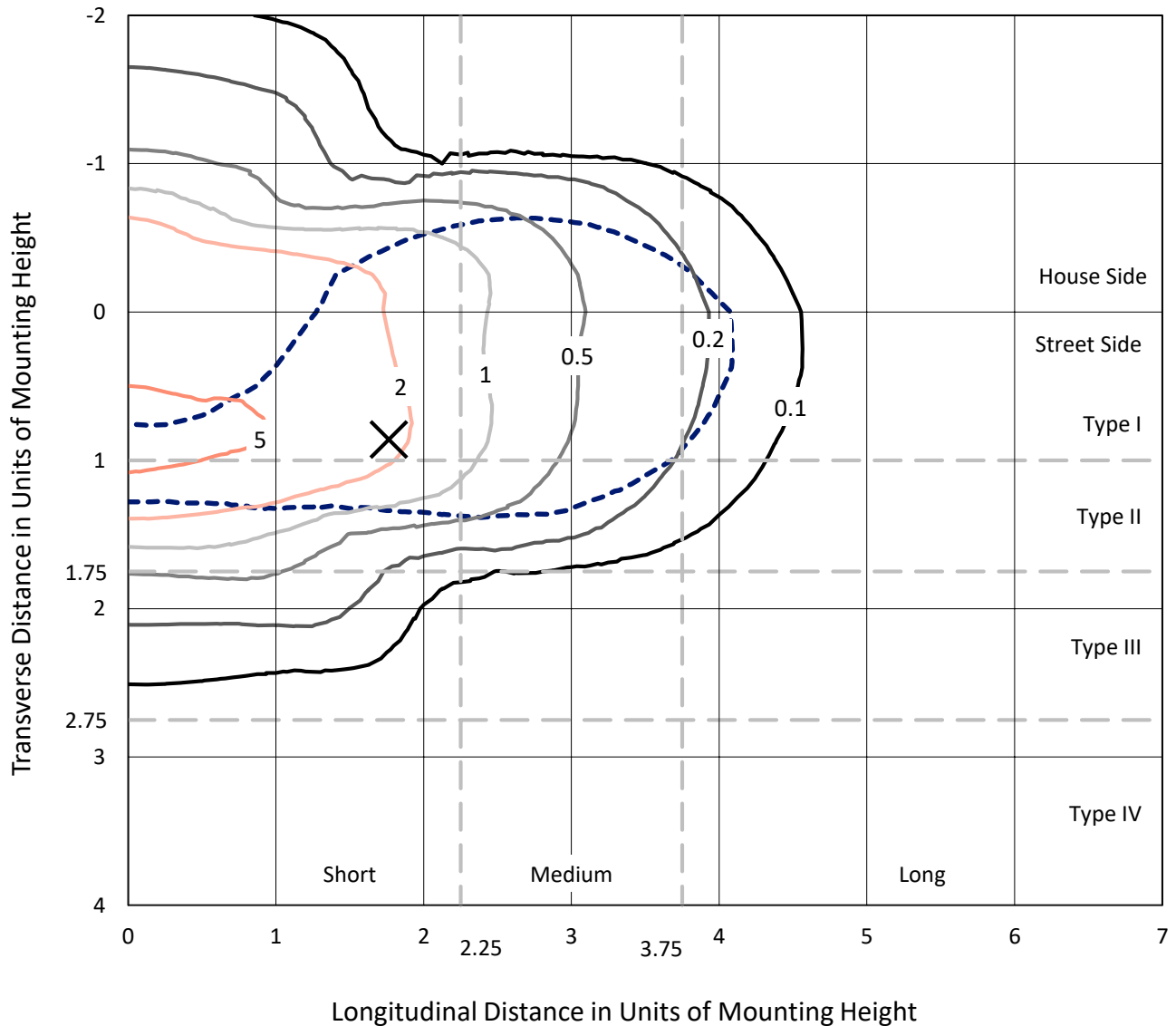
Input Watts (W): 32
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

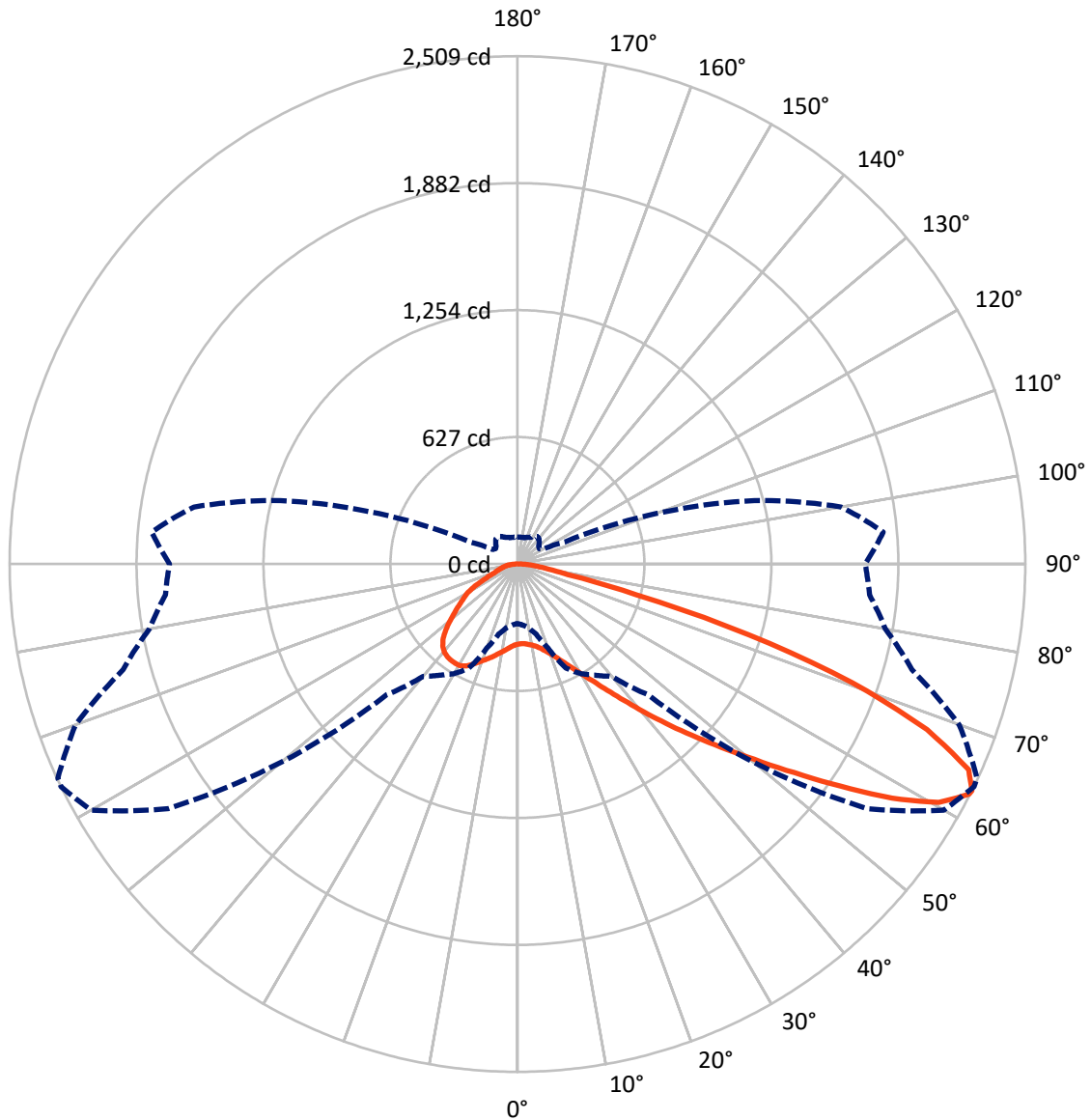
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.4 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	1074.7	0.0	1074.7
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	2581.1	0.0	2581.1
	% Fixture	70.6	0.0	70.6
Total	Lumens	3655.8	0.0	3655.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.5	1.1
10°-20°	131.7	3.6
20°-30°	247.2	6.8
30°-40°	414.3	11.3
40°-50°	695.0	19.0
50°-60°	881.1	24.1
60°-70°	777.2	21.3
70°-80°	401.2	11.0
80°-90°	68.7	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°	3655.8	100.0
0°-180°	3655.8	100.0



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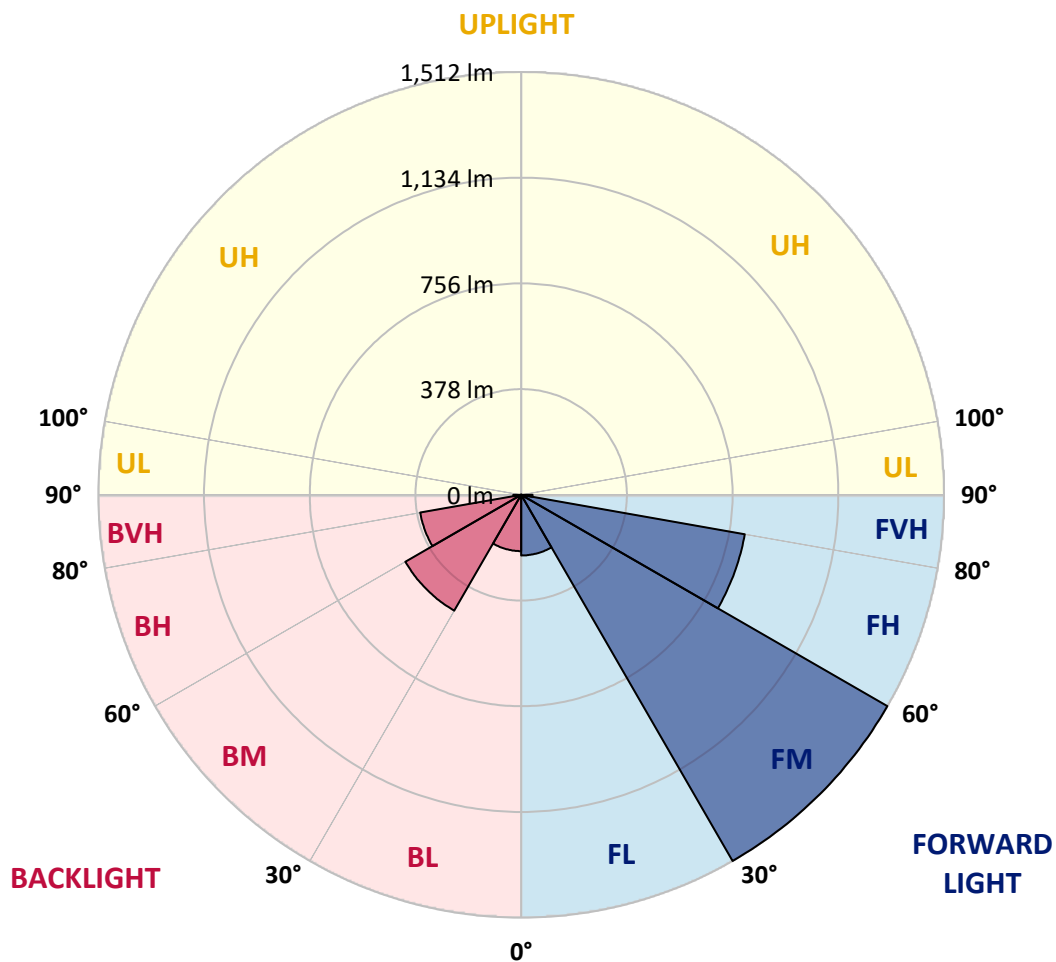
CATALOG NUMBER: ARCH-AF16-30-D-U-T2U-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	217.0	5.9			
FM	(30°-60°)	1511.9	41.4			
FH	(60°-80°)	811.8	22.2			G1/1800
FVH	(80°-90°)	40.4	1.1			G1/100
BL	(0°-30°)	201.4	5.5	B1/500		
BM	(30°-60°)	478.4	13.1	B1/1000		
BH	(60°-80°)	366.7	10.0	B1/500		G1/500
BVH	(80°-90°)	28.2	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°	395.9	395.9	395.9	395.9	395.9	395.9	395.9	395.9	395.9	395.9	395.9
2.5°	393.5	392.9	392.9	392.9	392.9	392.2	392.9	394.1	393.5	392.9	394.1
5°	394.8	394.1	394.1	394.1	394.8	394.1	394.8	396.5	395.3	395.3	396.5
7.5°	397.8	397.1	397.8	397.1	397.1	397.1	397.8	399.6	399.1	399.6	401.4
10°	401.4	401.4	401.4	401.4	401.4	401.4	402.6	403.9	404.5	405.2	407.5
12.5°	412.5	412.5	412.5	411.8	411.8	410.0	412.5	413.6	414.8	416.2	417.9
15°	435.7	435.7	435.1	432.6	432.6	429.0	429.6	430.2	430.2	431.5	432.6
17.5°	466.3	465.7	464.5	462.6	460.2	455.9	454.6	453.4	451.6	451.0	451.0
20°	509.1	508.5	506.1	501.2	498.1	491.3	486.5	481.7	479.7	476.7	476.1
22.5°	570.4	570.4	565.4	558.1	555.7	541.6	527.5	517.2	513.4	509.1	509.1
25°	644.4	643.7	637.0	628.5	618.1	603.3	586.2	572.2	563.0	553.2	549.5
27.5°	733.1	731.3	722.1	711.8	692.0	673.7	653.6	638.8	623.0	610.8	599.8
30°	837.2	835.3	819.3	799.8	779.6	761.2	731.9	714.1	689.0	674.3	662.1
32.5°	957.6	955.8	927.1	908.2	886.7	864.0	829.2	801.0	769.1	748.4	731.3
35°	1111.2	1103.9	1063.0	1036.7	1003.0	980.3	943.6	905.6	868.4	839.0	813.9
37.5°	1277.1	1268.5	1232.5	1193.3	1160.3	1132.7	1080.7	1032.9	988.9	948.5	917.3
40°	1450.3	1427.7	1389.1	1360.4	1337.7	1311.3	1256.9	1206.8	1137.6	1092.3	1045.2
42.5°	1570.3	1548.2	1521.3	1502.4	1491.3	1471.0	1440.5	1397.1	1335.2	1336.5	1212.2
45°	1649.2	1616.7	1598.4	1599.5	1603.9	1603.9	1598.4	1591.7	1564.7	1583.0	1479.1
47.5°	1621.0	1599.5	1588.0	1612.4	1643.0	1673.7	1709.2	1747.7	1791.8	1843.7	1715.9
50°	1455.8	1463.7	1469.2	1521.3	1586.8	1656.5	1737.9	1843.2	1966.1	1990.0	1928.2
52.5°	1192.0	1209.2	1227.5	1307.1	1393.4	1513.9	1656.5	1830.3	1995.5	2092.9	2086.8
55°	925.9	947.3	986.4	1045.8	1114.3	1228.2	1404.4	1672.4	1930.1	2084.8	2179.0
57.5°	659.1	690.3	741.7	824.3	884.9	949.1	1079.5	1376.8	1659.0	1947.2	2163.8
60°	438.1	452.9	486.5	589.4	691.5	758.8	851.2	958.9	1189.7	1586.8	2005.9
62.5°	310.9	320.6	341.4	388.0	480.4	602.1	657.8	707.5	781.4	1020.7	1610.6
63°	293.7	302.3	319.5	358.6	441.9	567.9	624.8	670.1	724.0	913.0	1523.7
65°	243.5	247.3	256.4	275.4	320.0	424.7	517.7	545.2	554.4	586.8	954.6
67.5°	205.6	208.0	211.1	216.7	234.4	282.8	386.1	420.9	410.6	388.5	471.8
70°	178.6	180.5	185.4	192.2	198.3	210.6	265.6	317.6	305.9	276.0	288.9
72.5°	142.6	145.7	151.1	162.8	175.1	190.8	204.5	236.9	229.5	200.7	203.8
75°	112.6	114.4	119.3	128.0	139.6	157.9	184.2	195.2	175.1	148.0	148.0
77.5°	89.4	91.2	95.5	102.1	109.6	122.4	140.7	169.5	157.3	111.3	110.8
80°	67.3	69.2	73.4	79.5	86.9	96.0	107.1	119.9	144.4	104.1	83.2
82.5°	49.6	50.1	57.5	61.8	64.3	71.6	80.8	88.2	99.1	96.0	74.1
85°	37.3	36.7	41.6	44.7	45.3	47.1	52.7	60.0	64.9	62.4	57.5
87.5°	20.8	18.3	21.5	24.5	24.5	25.1	26.3	30.6	34.9	33.7	30.6
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):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	395.9	395.9	395.9	395.9	395.9	395.9	395.9	395.9	395.9	395.9	395.9
2.5°	394.1	394.1	393.5	393.5	394.1	394.1	393.5	395.3	396.5	396.5	397.1
5°	395.9	396.5	395.9	395.9	396.5	396.5	397.1	399.1	400.9	402.1	403.9
7.5°	401.4	402.1	401.4	401.4	402.1	402.6	403.9	406.3	407.5	410.0	413.1
10°	407.5	408.2	407.5	408.2	408.7	409.4	411.3	413.1	414.8	417.4	422.3
12.5°	418.6	419.2	417.9	418.6	420.4	420.4	421.6	422.9	425.9	429.0	433.9
15°	433.9	433.9	432.6	433.2	435.1	435.1	435.7	436.9	440.7	444.2	449.2
17.5°	451.6	452.9	452.3	452.9	454.1	454.6	454.6	455.9	458.4	460.7	465.7
20°	475.5	476.1	474.8	476.1	477.4	476.1	474.8	474.3	475.5	476.7	482.2
22.5°	507.9	507.3	504.2	504.2	504.2	501.8	498.8	495.1	495.1	493.2	497.4
25°	546.4	544.6	540.3	541.0	536.7	532.9	527.5	521.9	517.2	515.2	515.8
27.5°	591.7	588.1	583.8	582.6	578.3	571.5	562.3	552.0	544.0	537.9	536.7
30°	648.7	640.7	633.3	632.2	625.4	614.4	599.8	585.6	572.2	561.8	558.1
32.5°	715.9	703.7	692.0	690.8	679.8	665.2	647.5	627.8	608.2	591.7	583.8
35°	794.9	776.5	765.6	762.5	746.6	728.2	708.6	683.5	656.0	632.7	618.1
37.5°	891.0	872.0	853.0	853.7	831.6	810.1	783.9	753.4	718.4	685.9	665.2
40°	1009.7	982.8	958.3	952.7	933.8	903.8	875.0	839.5	796.7	753.9	724.0
42.5°	1153.4	1109.4	1075.7	1070.8	1045.8	1009.1	974.1	927.1	883.7	831.6	795.5
45°	1316.9	1246.5	1206.1	1198.8	1158.3	1121.1	1078.8	1028.6	975.4	916.6	873.8
47.5°	1520.1	1419.8	1351.2	1339.0	1283.2	1234.3	1190.3	1134.5	1070.8	1005.4	958.3
50°	1756.9	1608.8	1516.4	1497.4	1422.8	1365.2	1308.9	1239.2	1171.3	1102.8	1048.3
52.5°	1994.3	1835.2	1712.2	1688.9	1578.8	1501.7	1427.7	1357.9	1277.7	1209.8	1148.0
55°	2185.1	2079.3	1936.7	1904.4	1746.5	1641.8	1544.5	1464.9	1385.4	1331.6	1258.7
57.5°	2300.2	2294.8	2182.1	2137.5	1921.5	1766.6	1658.3	1567.8	1490.7	1468.0	1371.3
60°	2297.1	2439.8	2391.4	2357.9	2098.4	1894.5	1753.8	1656.0	1592.2	1617.9	1484.5
62.5°	2157.1	2445.9	2504.0	2494.8	2286.8	1997.4	1832.2	1731.2	1697.6	1774.1	1602.1
63°	2106.3	2431.8	2508.9	2505.4	2323.0	2016.9	1845.6	1745.9	1718.3	1813.8	1623.5
65°	1780.2	2308.8	2449.6	2466.1	2400.7	2084.2	1876.8	1783.2	1780.2	1902.5	1674.3
67.5°	1085.0	1950.9	2182.1	2214.0	2291.0	2105.7	1859.0	1770.3	1814.4	1915.4	1659.0
70°	463.8	1287.5	1753.8	1805.2	1993.7	1999.2	1808.2	1717.7	1806.4	1815.1	1550.1
72.5°	274.8	607.1	1193.8	1305.8	1577.6	1720.2	1692.0	1625.9	1701.8	1594.1	1320.0
75°	194.6	284.0	606.4	725.8	1098.4	1313.2	1421.6	1452.2	1449.1	1264.2	990.8
77.5°	139.6	182.4	255.7	301.7	613.2	843.3	975.4	1064.7	1036.0	846.3	610.8
80°	97.4	126.0	156.7	166.4	284.5	433.2	514.1	553.2	536.0	422.9	273.5
82.5°	70.4	82.6	100.9	107.1	143.2	200.1	238.0	209.9	201.4	156.0	118.1
85°	54.4	53.2	63.1	65.4	83.8	104.7	107.1	83.2	72.7	64.9	66.1
87.5°	38.6	33.0	33.7	34.9	43.4	55.7	54.4	34.3	29.4	31.2	35.5
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	395.9	395.9	395.9	395.9	395.9	395.9	395.9	395.9	395.9	395.9	395.9
2.5°	398.4	399.1	400.2	400.9	402.1	402.1	403.2	403.9	405.2	406.3	407.0
5°	405.7	407.5	410.0	411.3	413.6	415.5	417.9	419.2	421.6	423.5	425.9
7.5°	416.8	419.8	422.9	426.5	430.2	433.2	435.7	438.7	443.0	446.1	448.0
10°	427.1	431.5	436.9	441.2	446.8	451.0	454.6	460.2	465.1	469.4	471.8
12.5°	440.7	446.1	451.6	458.4	465.7	471.2	476.7	484.0	490.8	495.7	498.1
15°	456.4	463.3	469.4	477.4	485.8	493.2	501.2	509.1	514.1	514.1	512.8
17.5°	473.0	478.5	485.8	495.1	506.6	515.8	520.2	521.3	519.5	515.2	512.2
20°	489.6	494.4	502.4	513.4	525.6	527.5	523.3	517.7	512.2	504.9	500.0
22.5°	503.0	509.7	521.9	534.9	535.5	525.0	513.4	504.2	495.7	487.1	477.9
25°	518.9	528.0	544.6	549.5	533.6	514.1	497.4	484.0	470.0	455.9	445.4
27.5°	538.5	552.0	568.4	554.4	523.3	495.7	473.0	452.9	434.6	414.8	403.2
30°	559.3	580.1	583.8	547.1	505.5	470.0	439.3	408.7	385.4	367.7	361.0
32.5°	584.4	611.3	589.4	534.2	481.7	435.1	394.1	357.4	337.8	326.8	323.7
35°	622.3	644.4	592.4	520.7	454.1	393.5	342.1	312.7	300.5	293.2	289.4
37.5°	676.8	676.2	591.7	504.2	422.3	348.2	300.5	279.7	269.9	263.8	257.0
40°	740.4	700.7	588.1	480.4	379.3	304.8	271.7	252.2	243.0	235.6	227.6
42.5°	803.5	717.2	577.7	444.9	326.1	273.5	250.9	233.2	223.3	215.3	204.5
45°	857.9	724.0	557.4	395.9	278.4	249.1	237.4	222.2	210.6	198.3	189.7
47.5°	900.8	722.8	525.0	338.3	246.6	231.9	226.3	216.0	201.9	186.7	175.6
50°	936.9	713.6	481.0	287.6	225.2	216.7	214.8	211.8	189.1	176.2	169.5
52.5°	969.9	700.1	433.9	253.4	206.8	199.5	203.1	200.1	184.2	173.1	166.4
55°	1015.2	690.8	387.4	227.0	185.4	183.5	186.7	190.8	181.2	170.8	163.4
57.5°	1068.4	695.8	351.9	197.6	165.2	166.4	176.9	183.0	178.1	167.0	159.7
60°	1129.6	710.5	320.6	169.5	148.7	151.8	167.0	175.6	175.1	162.1	153.6
62.5°	1198.1	725.8	271.1	148.0	134.6	139.6	155.4	166.4	168.3	157.3	146.9
63°	1211.6	727.0	258.3	143.7	132.2	137.6	152.4	164.0	166.4	156.0	145.7
65°	1244.7	715.9	208.0	132.2	122.4	128.5	143.2	153.6	158.5	149.3	140.7
67.5°	1217.1	626.0	156.7	118.1	114.4	118.8	131.5	141.4	145.7	141.4	132.8
70°	1113.2	455.3	122.4	105.2	105.9	108.9	118.8	128.0	132.8	131.5	123.6
72.5°	896.5	258.3	102.1	94.3	96.0	99.8	106.5	115.0	119.3	118.8	113.2
75°	590.5	132.2	86.4	84.4	85.7	88.7	93.6	100.4	105.2	104.7	102.1
77.5°	292.5	91.8	74.1	74.7	75.3	77.7	81.4	87.5	90.5	91.2	90.5
80°	120.5	71.6	63.6	64.3	64.9	66.6	69.2	74.7	76.5	77.7	78.3
82.5°	72.2	54.4	50.8	52.0	52.7	54.4	56.3	61.1	63.1	64.9	64.9
85°	47.7	37.9	36.7	37.9	39.2	40.4	41.0	44.0	47.1	49.6	50.8
87.5°	25.6	22.6	22.1	22.6	22.6	23.8	25.1	28.2	31.8	34.3	35.5
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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CATALOG NUMBER: ARCH-AF16-30-D-U-T2U-7030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	395.9	395.9	395.9	395.9	395.9
2.5°	405.7	406.3	405.7	406.3	407.0
5°	425.9	427.1	426.5	426.5	429.0
7.5°	449.2	451.6	451.6	452.9	454.1
10°	474.3	476.7	478.5	478.5	480.4
12.5°	499.4	500.5	502.4	502.4	502.4
15°	512.2	511.6	511.0	510.4	510.4
17.5°	510.4	507.9	506.6	505.5	506.1
20°	496.9	492.6	491.3	489.6	490.8
22.5°	473.6	467.5	465.1	462.0	463.3
25°	438.7	431.5	430.2	426.5	428.4
27.5°	398.4	394.8	394.1	393.5	396.5
30°	360.4	361.6	362.3	363.5	366.6
32.5°	325.6	328.0	328.7	329.2	333.5
35°	291.2	288.2	291.2	290.1	293.7
37.5°	253.9	251.6	249.1	246.1	248.4
40°	222.8	218.4	211.1	207.5	208.0
42.5°	198.3	192.8	186.7	183.0	183.0
45°	182.4	175.6	170.1	167.7	167.7
47.5°	170.1	167.0	164.0	162.1	162.1
50°	165.2	161.6	159.7	158.5	158.5
52.5°	161.6	157.9	156.0	154.8	153.6
55°	158.5	153.0	151.1	150.6	150.6
57.5°	154.2	149.3	146.9	146.3	146.3
60°	147.5	143.7	141.4	140.7	140.7
62.5°	140.7	137.1	134.6	134.6	134.6
63°	139.6	135.3	133.4	133.4	133.4
65°	134.1	129.7	128.0	128.0	127.3
67.5°	126.6	122.4	121.2	121.2	119.9
70°	118.1	114.4	113.2	113.8	111.3
72.5°	109.6	105.9	104.1	104.1	101.6
75°	99.8	96.0	93.6	93.0	90.5
77.5°	88.7	85.7	83.2	80.8	79.5
80°	77.1	74.7	71.6	69.7	68.0
82.5°	64.9	62.4	60.5	63.1	53.9
85°	50.8	48.3	45.9	49.6	38.6
87.5°	37.3	36.0	33.7	29.4	25.6
90°	0.0	0.0	0.0	0.0	0.0

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