

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: P265880

Luminaire Tested: **ARCH-AF16-30-D-U-T2U-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265880  
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-7027  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 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: 3284 lumens  
Efficiency: N/A  
Efficacy: 102.6 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

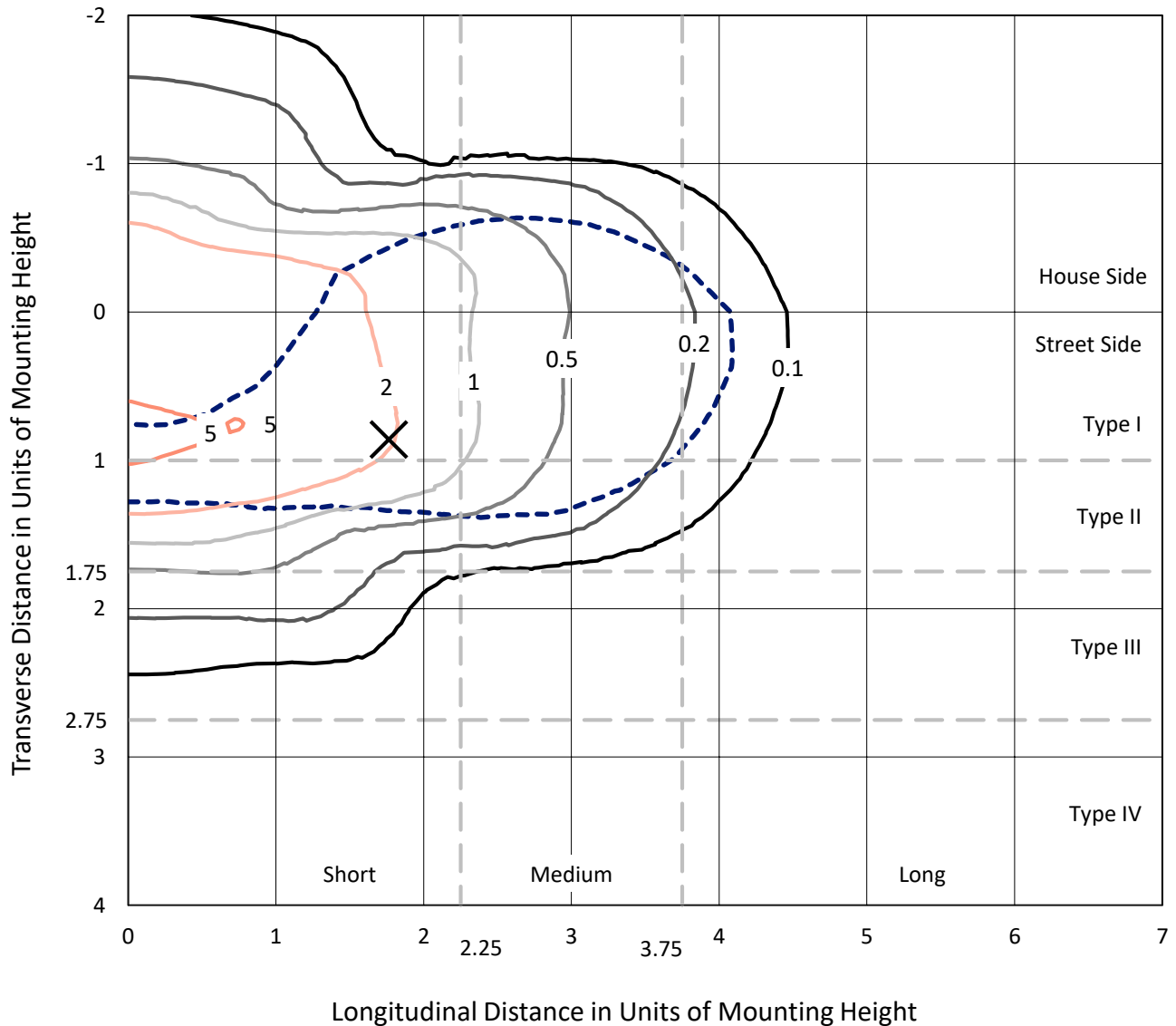
Input Watts (W): 32  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

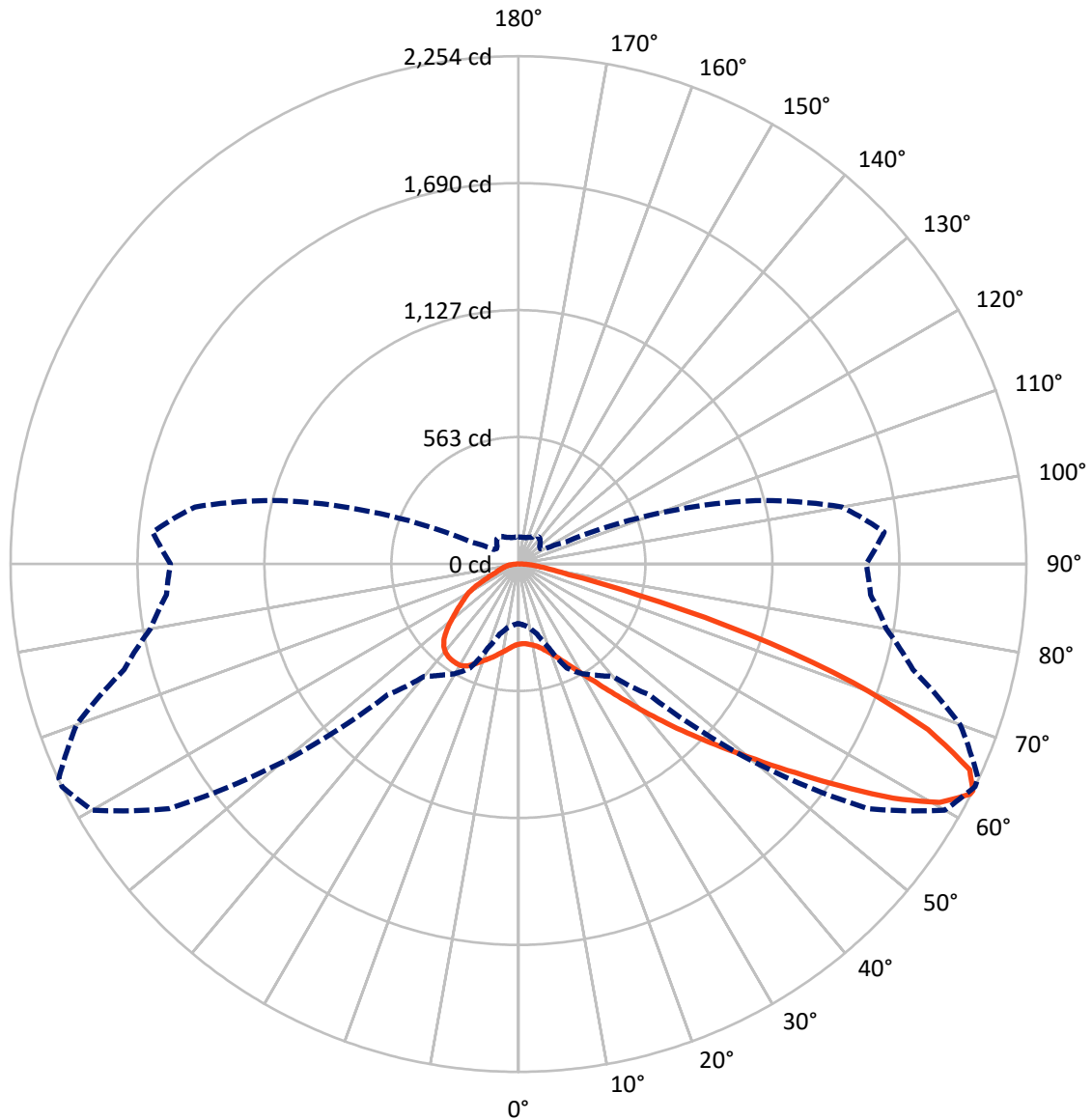
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.8 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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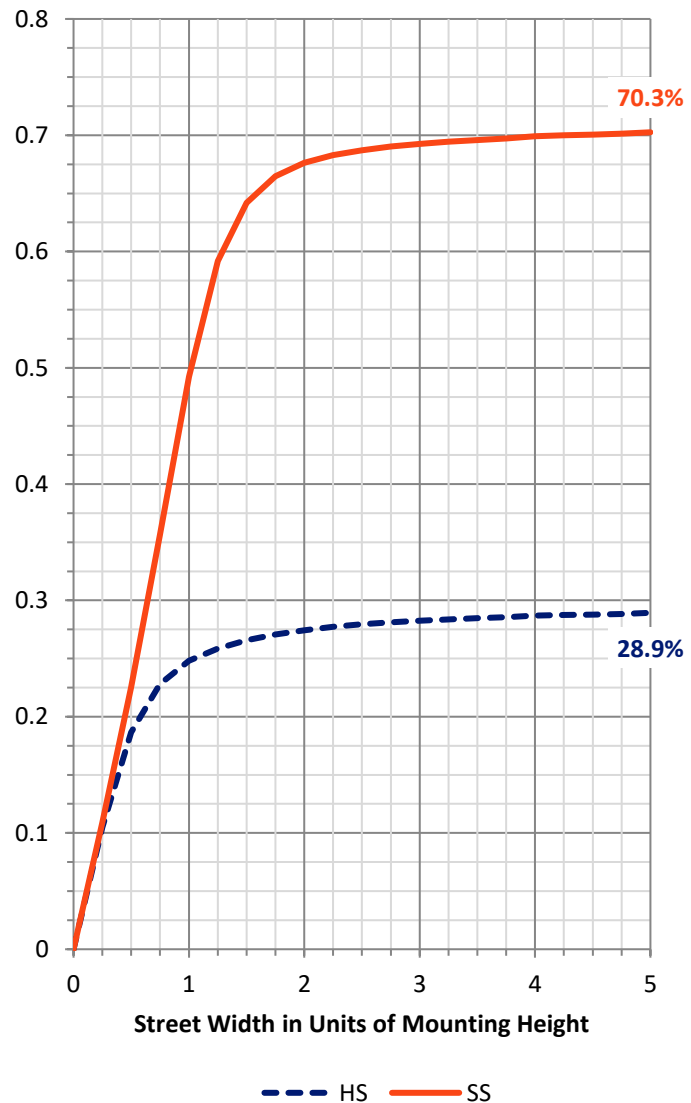
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	965.4	0.0	965.4
	% Fixture	29.4	0.0	29.4
<b>Street Side</b>	Lumens	2318.6	0.0	2318.6
	% Fixture	70.6	0.0	70.6
<b>Total</b>	Lumens	3284.0	0.0	3284.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.5	1.1
10°-20°	118.3	3.6
20°-30°	222.0	6.8
30°-40°	372.1	11.3
40°-50°	624.3	19.0
50°-60°	791.5	24.1
60°-70°	698.2	21.3
70°-80°	360.4	11.0
80°-90°	61.7	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°	3284.0	100.0
0°-180°	3284.0	100.0



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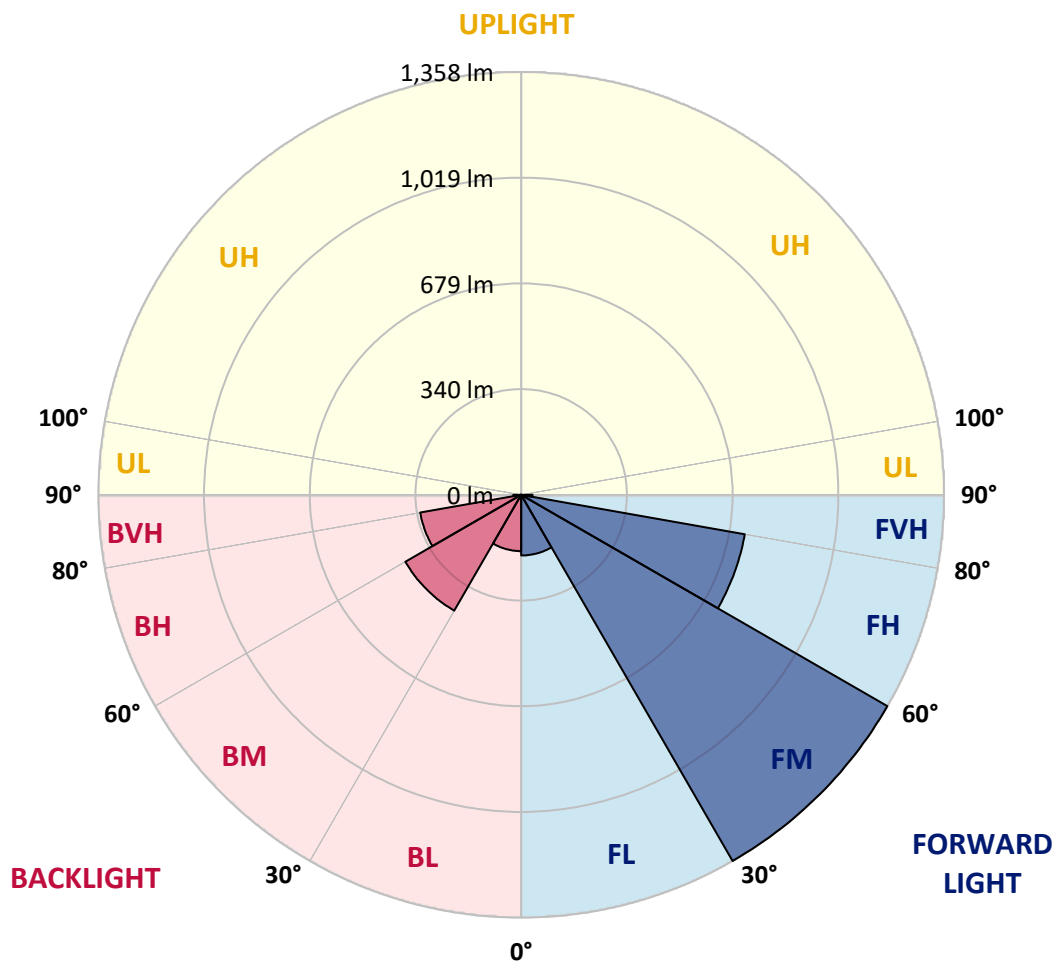
CATALOG NUMBER: ARCH-AF16-30-D-U-T2U-7027

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	194.9	5.9			
FM	(30°-60°)	1358.2	41.4			
FH	(60°-80°)	729.2	22.2			G1/1800
FVH	(80°-90°)	36.3	1.1			G1/100
BL	(0°-30°)	180.9	5.5	B1/500		
BM	(30°-60°)	429.7	13.1	B1/1000		
BH	(60°-80°)	329.4	10.0	B1/500		G1/500
BVH	(80°-90°)	25.4	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°	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6
2.5°	353.5	352.9	352.9	352.9	352.9	352.3	352.9	354.0	353.5	352.9	354.0
5°	354.7	354.0	354.0	354.0	354.7	354.0	354.7	356.2	355.1	355.1	356.2
7.5°	357.3	356.7	357.3	356.7	356.7	356.7	357.3	359.0	358.5	359.0	360.6
10°	360.6	360.6	360.6	360.6	360.6	360.6	361.7	362.8	363.4	364.0	366.1
12.5°	370.6	370.6	370.6	369.9	369.9	368.3	370.6	371.5	372.6	373.9	375.4
15°	391.4	391.4	390.9	388.6	388.6	385.4	385.9	386.5	386.5	387.6	388.6
17.5°	418.9	418.3	417.3	415.6	413.4	409.5	408.4	407.3	405.7	405.1	405.1
20°	457.3	456.8	454.6	450.2	447.4	441.3	437.0	432.7	430.9	428.2	427.7
22.5°	512.4	512.4	507.9	501.3	499.2	486.5	473.9	464.6	461.2	457.3	457.3
25°	578.9	578.2	572.2	564.6	555.2	541.9	526.6	514.0	505.7	496.9	493.6
27.5°	658.5	656.9	648.7	639.4	621.6	605.2	587.1	573.8	559.6	548.7	538.8
30°	752.1	750.4	736.0	718.5	700.3	683.8	657.5	641.5	618.9	605.7	594.8
32.5°	860.2	858.6	832.8	815.8	796.5	776.1	744.9	719.5	690.9	672.3	656.9
35°	998.2	991.6	954.9	931.3	901.0	880.6	847.6	813.5	780.1	753.7	731.1
37.5°	1147.2	1139.5	1107.2	1071.9	1042.3	1017.5	970.8	927.9	888.3	852.0	824.0
40°	1302.8	1282.5	1247.8	1222.1	1201.7	1177.9	1129.1	1084.1	1021.9	981.2	938.9
42.5°	1410.6	1390.8	1366.6	1349.6	1339.6	1321.4	1294.0	1255.0	1199.4	1200.6	1088.9
45°	1481.5	1452.3	1435.9	1436.8	1440.8	1440.8	1435.9	1429.8	1405.6	1422.0	1328.7
47.5°	1456.2	1436.8	1426.5	1448.4	1475.9	1503.5	1535.4	1570.0	1609.6	1656.2	1541.4
50°	1307.8	1314.8	1319.8	1366.6	1425.4	1488.0	1561.2	1655.8	1766.2	1787.6	1732.1
52.5°	1070.8	1086.2	1102.7	1174.2	1251.7	1359.9	1488.0	1644.2	1792.6	1880.1	1874.6
55°	831.7	851.0	886.1	939.4	1001.0	1103.3	1261.6	1502.3	1733.8	1872.8	1957.4
57.5°	592.1	620.1	666.3	740.5	794.9	852.6	969.7	1236.8	1490.3	1749.2	1943.8
60°	393.5	406.8	437.0	529.5	621.2	681.6	764.6	861.4	1068.7	1425.4	1801.9
62.5°	279.3	288.0	306.7	348.5	431.5	540.9	590.9	635.6	701.9	916.9	1446.8
63°	263.8	271.6	287.0	322.1	397.0	510.1	561.3	602.0	650.4	820.2	1368.7
65°	218.7	222.2	230.3	247.4	287.5	381.5	465.1	489.8	498.0	527.1	857.5
67.5°	184.7	186.8	189.6	194.7	210.6	254.0	346.8	378.1	368.8	349.0	423.8
70°	160.4	162.1	166.5	172.7	178.1	189.2	238.6	285.3	274.8	247.9	259.5
72.5°	128.1	130.9	135.7	146.2	157.3	171.4	183.7	212.8	206.2	180.3	183.1
75°	101.1	102.8	107.2	115.0	125.4	141.8	165.5	175.3	157.3	132.9	132.9
77.5°	80.3	81.9	85.8	91.7	98.5	110.0	126.4	152.3	141.3	100.0	99.5
80°	60.5	62.2	65.9	71.4	78.1	86.2	96.2	107.7	129.7	93.5	74.7
82.5°	44.6	45.0	51.7	55.5	57.8	64.3	72.6	79.2	89.0	86.2	66.6
85°	33.5	33.0	37.4	40.2	40.7	42.3	47.3	53.9	58.3	56.1	51.7
87.5°	18.7	16.4	19.3	22.0	22.0	22.5	23.6	27.5	31.4	30.3	27.5
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°	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6
2.5°	354.0	354.0	353.5	353.5	354.0	354.0	353.5	355.1	356.2	356.2	356.7
5°	355.6	356.2	355.6	355.6	356.2	356.2	356.7	358.5	360.1	361.2	362.8
7.5°	360.6	361.2	360.6	360.6	361.2	361.7	362.8	365.0	366.1	368.3	371.1
10°	366.1	366.7	366.1	366.7	367.1	367.8	369.5	371.1	372.6	375.0	379.4
12.5°	376.0	376.6	375.4	376.0	377.6	377.6	378.7	379.9	382.6	385.4	389.8
15°	389.8	389.8	388.6	389.1	390.9	390.9	391.4	392.5	395.9	399.0	403.5
17.5°	405.7	406.8	406.3	406.8	407.9	408.4	408.4	409.5	411.8	413.8	418.3
20°	427.1	427.7	426.5	427.7	428.9	427.7	426.5	426.1	427.1	428.2	433.2
22.5°	456.2	455.7	452.9	452.9	452.9	450.8	448.1	444.8	444.8	443.0	446.8
25°	490.8	489.2	485.4	486.0	482.1	478.7	473.9	468.8	464.6	462.8	463.3
27.5°	531.5	528.3	524.4	523.4	519.5	513.4	505.1	495.9	488.7	483.2	482.1
30°	582.7	575.5	568.9	567.9	561.8	551.9	538.8	526.0	514.0	504.7	501.3
32.5°	643.1	632.1	621.6	620.5	610.7	597.6	581.7	564.0	546.3	531.5	524.4
35°	714.1	697.5	687.7	685.0	670.7	654.1	636.5	614.0	589.3	568.4	555.2
37.5°	800.4	783.3	766.3	766.9	747.0	727.7	704.2	676.8	645.3	616.1	597.6
40°	907.0	882.9	860.8	855.8	838.8	811.9	786.0	754.1	715.7	677.2	650.4
42.5°	1036.1	996.6	966.3	961.9	939.4	906.5	875.0	832.8	793.8	747.0	714.6
45°	1183.0	1119.7	1083.4	1076.9	1040.5	1007.1	969.1	924.0	876.2	823.4	784.9
47.5°	1365.5	1275.4	1213.8	1202.8	1152.7	1108.8	1069.3	1019.1	961.9	903.2	860.8
50°	1578.2	1445.2	1362.2	1345.1	1278.1	1226.4	1175.8	1113.2	1052.2	990.7	941.7
52.5°	1791.5	1648.6	1538.1	1517.1	1418.2	1349.0	1282.5	1219.8	1147.8	1086.8	1031.3
55°	1962.9	1867.8	1739.7	1710.7	1568.9	1474.8	1387.4	1315.9	1244.5	1196.2	1130.7
57.5°	2066.3	2061.4	1960.2	1920.1	1726.1	1586.9	1489.7	1408.4	1339.1	1318.7	1231.8
60°	2063.5	2191.7	2148.2	2118.1	1885.0	1701.8	1575.4	1487.6	1430.3	1453.4	1333.5
62.5°	1937.7	2197.2	2249.4	2241.1	2054.2	1794.3	1645.9	1555.1	1525.0	1593.7	1439.2
63°	1892.1	2184.5	2253.8	2250.6	2086.8	1811.8	1657.9	1568.4	1543.6	1629.3	1458.4
65°	1599.2	2074.0	2200.5	2215.3	2156.6	1872.2	1685.9	1601.9	1599.2	1709.0	1504.0
67.5°	974.7	1752.5	1960.2	1988.8	2058.0	1891.6	1669.9	1590.3	1629.9	1720.6	1490.3
70°	416.6	1156.6	1575.4	1621.6	1791.0	1795.9	1624.3	1543.0	1622.7	1630.5	1392.5
72.5°	246.9	545.4	1072.4	1173.0	1417.2	1545.3	1519.9	1460.6	1528.7	1432.0	1185.8
75°	174.8	255.1	544.7	652.0	986.7	1179.7	1277.0	1304.5	1301.7	1135.6	890.0
77.5°	125.4	163.9	229.7	271.0	550.8	757.5	876.2	956.4	930.6	760.2	548.7
80°	87.5	113.2	140.8	149.5	255.6	389.1	461.8	496.9	481.5	379.9	245.7
82.5°	63.2	74.2	90.6	96.2	128.6	179.8	213.8	188.6	180.9	140.1	106.1
85°	48.9	47.8	56.7	58.7	75.3	94.1	96.2	74.7	65.3	58.3	59.4
87.5°	34.7	29.6	30.3	31.4	39.0	50.0	48.9	30.8	26.4	28.0	31.9
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):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6
2.5°	357.9	358.5	359.5	360.1	361.2	361.2	362.2	362.8	364.0	365.0	365.6
5°	364.4	366.1	368.3	369.5	371.5	373.2	375.4	376.6	378.7	380.4	382.6
7.5°	374.4	377.1	379.9	383.1	386.5	389.1	391.4	394.1	397.9	400.7	402.4
10°	383.7	387.6	392.5	396.3	401.4	405.1	408.4	413.4	417.8	421.7	423.8
12.5°	395.9	400.7	405.7	411.8	418.3	423.3	428.2	434.8	440.9	445.3	447.4
15°	410.0	416.2	421.7	428.9	436.4	443.0	450.2	457.3	461.8	461.8	460.7
17.5°	424.9	429.8	436.4	444.8	455.1	463.3	467.3	468.3	466.7	462.8	460.1
20°	439.8	444.1	451.3	461.2	472.1	473.9	470.1	465.1	460.1	453.6	449.2
22.5°	451.8	457.9	468.8	480.5	481.0	471.6	461.2	452.9	445.3	437.6	429.3
25°	466.1	474.3	489.2	493.6	479.3	461.8	446.8	434.8	422.2	409.5	400.1
27.5°	483.7	495.9	510.6	498.0	470.1	445.3	424.9	406.8	390.4	372.6	362.2
30°	502.4	521.1	524.4	491.5	454.1	422.2	394.6	367.1	346.2	330.3	324.3
32.5°	525.0	549.1	529.5	479.9	432.7	390.9	354.0	321.1	303.4	293.6	290.8
35°	559.0	578.9	532.2	467.7	407.9	353.5	307.3	280.9	269.9	263.4	260.0
37.5°	608.0	607.4	531.5	452.9	379.4	312.8	269.9	251.3	242.5	237.0	230.9
40°	665.1	629.4	528.3	431.5	340.7	273.8	244.1	226.6	218.3	211.6	204.5
42.5°	721.8	644.3	519.0	399.7	292.9	245.7	225.4	209.5	200.6	193.4	183.7
45°	770.7	650.4	500.7	355.6	250.1	223.8	213.3	199.6	189.2	178.1	170.4
47.5°	809.2	649.3	471.6	303.9	221.5	208.3	203.3	194.0	181.4	167.7	157.7
50°	841.6	641.0	432.1	258.4	202.3	194.7	193.0	190.3	169.9	158.3	152.3
52.5°	871.3	628.9	389.8	227.6	185.8	179.2	182.4	179.8	165.5	155.5	149.5
55°	912.0	620.5	348.0	203.9	166.5	164.8	167.7	171.4	162.8	153.4	146.8
57.5°	959.7	625.0	316.1	177.5	148.4	149.5	158.9	164.4	160.0	150.0	143.5
60°	1014.7	638.2	288.0	152.3	133.6	136.4	150.0	157.7	157.3	145.6	138.0
62.5°	1076.3	652.0	243.5	132.9	120.9	125.4	139.6	149.5	151.2	141.3	132.0
63°	1088.4	653.1	232.0	129.1	118.8	123.6	136.9	147.3	149.5	140.1	130.9
65°	1118.1	643.1	186.8	118.8	110.0	115.4	128.6	138.0	142.4	134.1	126.4
67.5°	1093.3	562.3	140.8	106.1	102.8	106.7	118.1	127.0	130.9	127.0	119.3
70°	1000.0	409.0	110.0	94.5	95.1	97.8	106.7	115.0	119.3	118.1	111.0
72.5°	805.3	232.0	91.7	84.7	86.2	89.7	95.7	103.3	107.2	106.7	101.7
75°	530.4	118.8	77.6	75.8	77.0	79.7	84.1	90.2	94.5	94.1	91.7
77.5°	262.8	82.5	66.6	67.1	67.6	69.8	73.1	78.6	81.3	81.9	81.3
80°	108.2	64.3	57.1	57.8	58.3	59.8	62.2	67.1	68.7	69.8	70.3
82.5°	64.9	48.9	45.6	46.7	47.3	48.9	50.6	54.9	56.7	58.3	58.3
85°	42.8	34.0	33.0	34.0	35.2	36.3	36.8	39.5	42.3	44.6	45.6
87.5°	23.0	20.3	19.9	20.3	20.3	21.4	22.5	25.3	28.6	30.8	31.9
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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CATALOG NUMBER: ARCH-AF16-30-D-U-T2U-7027

**CANDELA DISTRIBUTION (continued):**

	160°	165°	170°	175°	180°
0°	355.6	355.6	355.6	355.6	355.6
2.5°	364.4	365.0	364.4	365.0	365.6
5°	382.6	383.7	383.1	383.1	385.4
7.5°	403.5	405.7	405.7	406.8	407.9
10°	426.1	428.2	429.8	429.8	431.5
12.5°	448.6	449.6	451.3	451.3	451.3
15°	460.1	459.6	459.0	458.5	458.5
17.5°	458.5	456.2	455.1	454.1	454.6
20°	446.4	442.5	441.3	439.8	440.9
22.5°	425.4	420.0	417.8	415.0	416.2
25°	394.1	387.6	386.5	383.1	384.8
27.5°	357.9	354.7	354.0	353.5	356.2
30°	323.7	324.8	325.5	326.5	329.3
32.5°	292.5	294.6	295.3	295.7	299.6
35°	261.6	258.9	261.6	260.6	263.8
37.5°	228.1	226.0	223.8	221.1	223.1
40°	200.1	196.2	189.6	186.4	186.8
42.5°	178.1	173.2	167.7	164.4	164.4
45°	163.9	157.7	152.8	150.6	150.6
47.5°	152.8	150.0	147.3	145.6	145.6
50°	148.4	145.2	143.5	142.4	142.4
52.5°	145.2	141.8	140.1	139.1	138.0
55°	142.4	137.4	135.7	135.3	135.3
57.5°	138.5	134.1	132.0	131.4	131.4
60°	132.5	129.1	127.0	126.4	126.4
62.5°	126.4	123.2	120.9	120.9	120.9
63°	125.4	121.5	119.8	119.8	119.8
65°	120.5	116.5	115.0	115.0	114.4
67.5°	113.7	110.0	108.9	108.9	107.7
70°	106.1	102.8	101.7	102.2	100.0
72.5°	98.5	95.1	93.5	93.5	91.3
75°	89.7	86.2	84.1	83.5	81.3
77.5°	79.7	77.0	74.7	72.6	71.4
80°	69.3	67.1	64.3	62.6	61.1
82.5°	58.3	56.1	54.3	56.7	48.4
85°	45.6	43.4	41.2	44.6	34.7
87.5°	33.5	32.3	30.3	26.4	23.0
90°	0.0	0.0	0.0	0.0	0.0

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