

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: P239103

Luminaire Tested: **ARCH-AF16-60-D-U-T2U-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239103
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-AF16-60-D-U-T2U-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6484.5 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

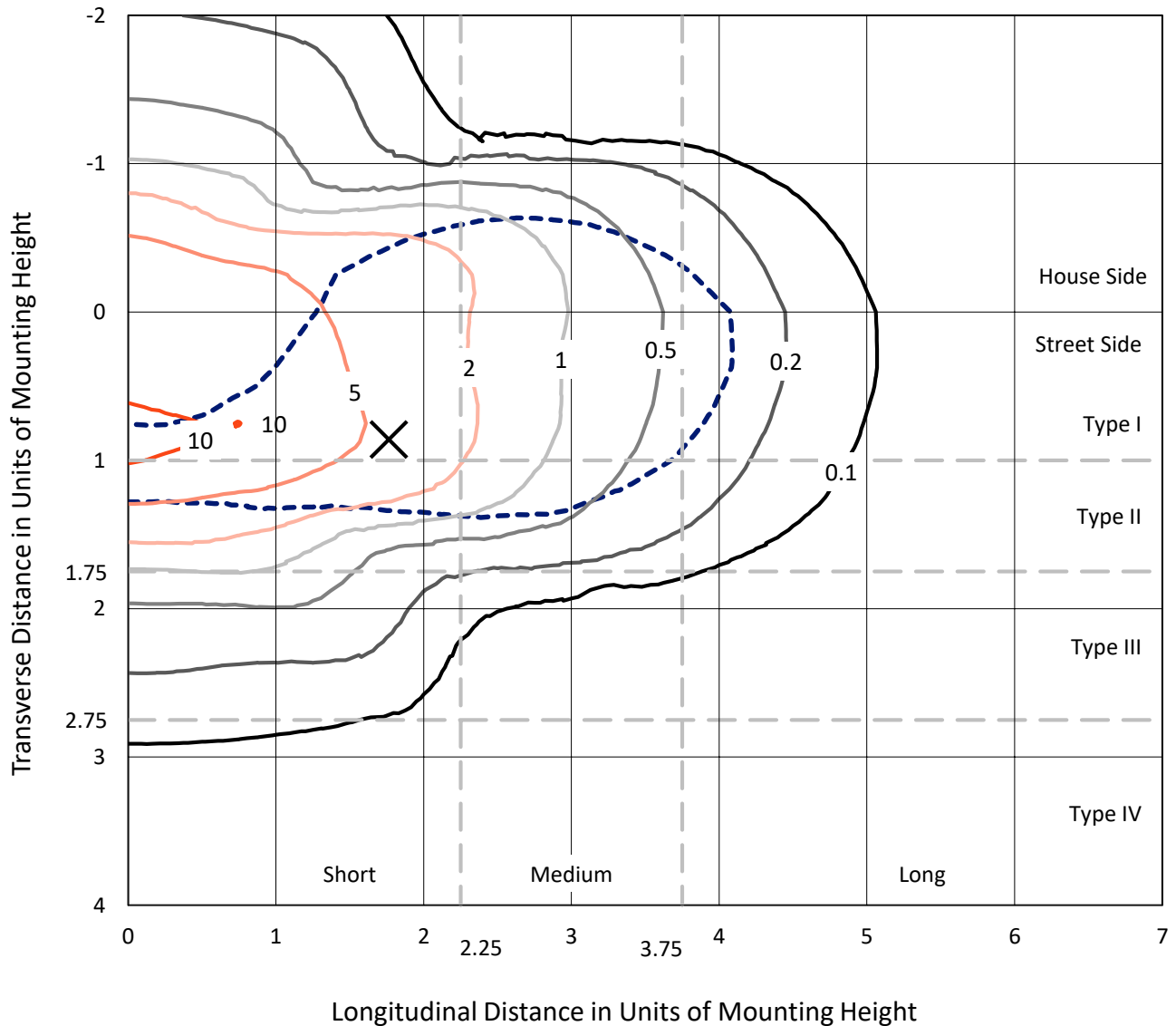
Input Watts (W): 63
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

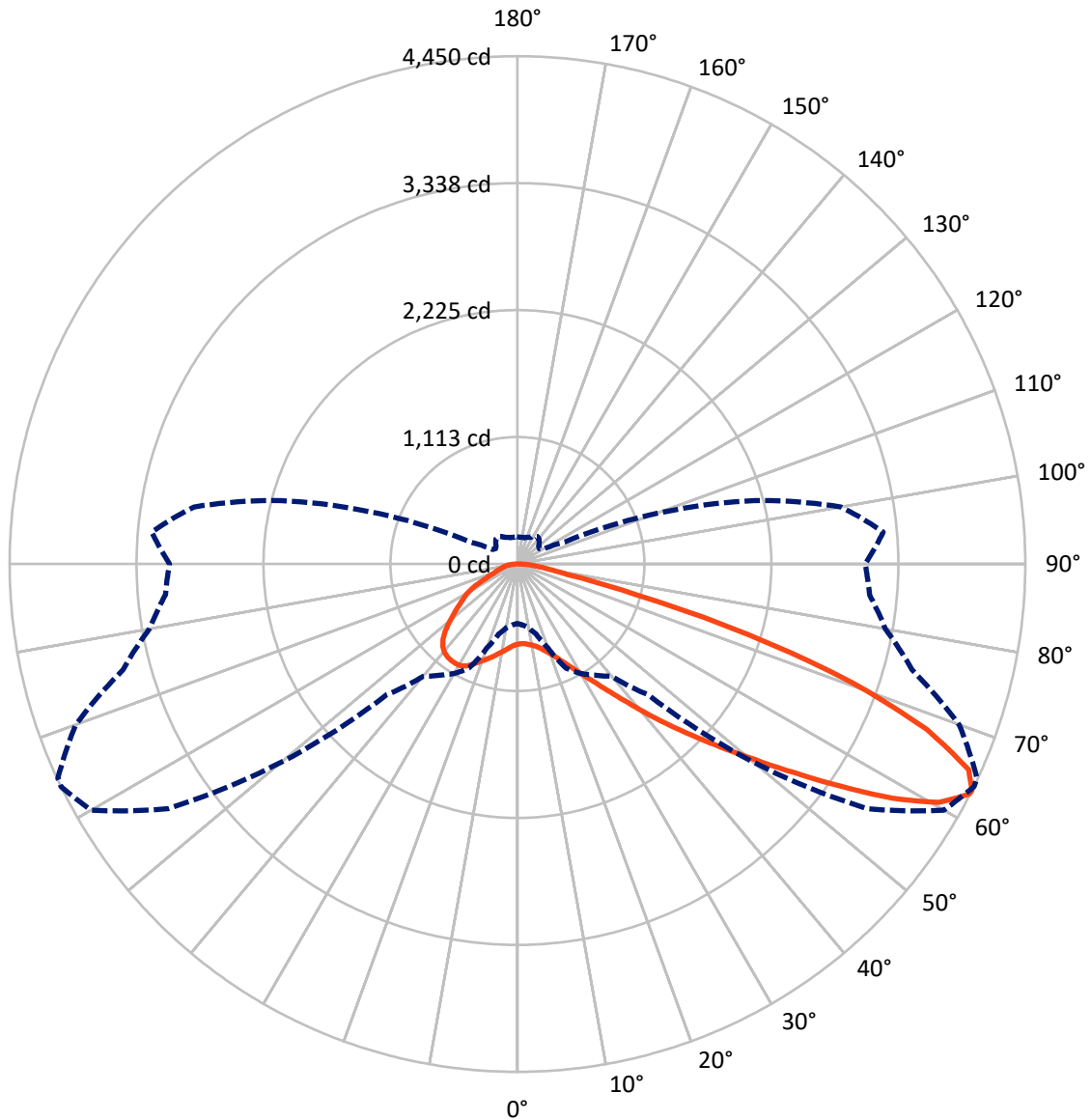
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.4 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	1906.2	0.0	1906.2
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	4578.3	0.0	4578.3
	% Fixture	70.6	0.0	70.6
Total	Lumens	6484.5	0.0	6484.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.1	1.1
10°-20°	233.5	3.6
20°-30°	438.4	6.8
30°-40°	734.8	11.3
40°-50°	1232.8	19.0
50°-60°	1562.8	24.1
60°-70°	1378.6	21.3
70°-80°	711.7	11.0
80°-90°	121.8	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°	6484.5	100.0
0°-180°	6484.5	100.0



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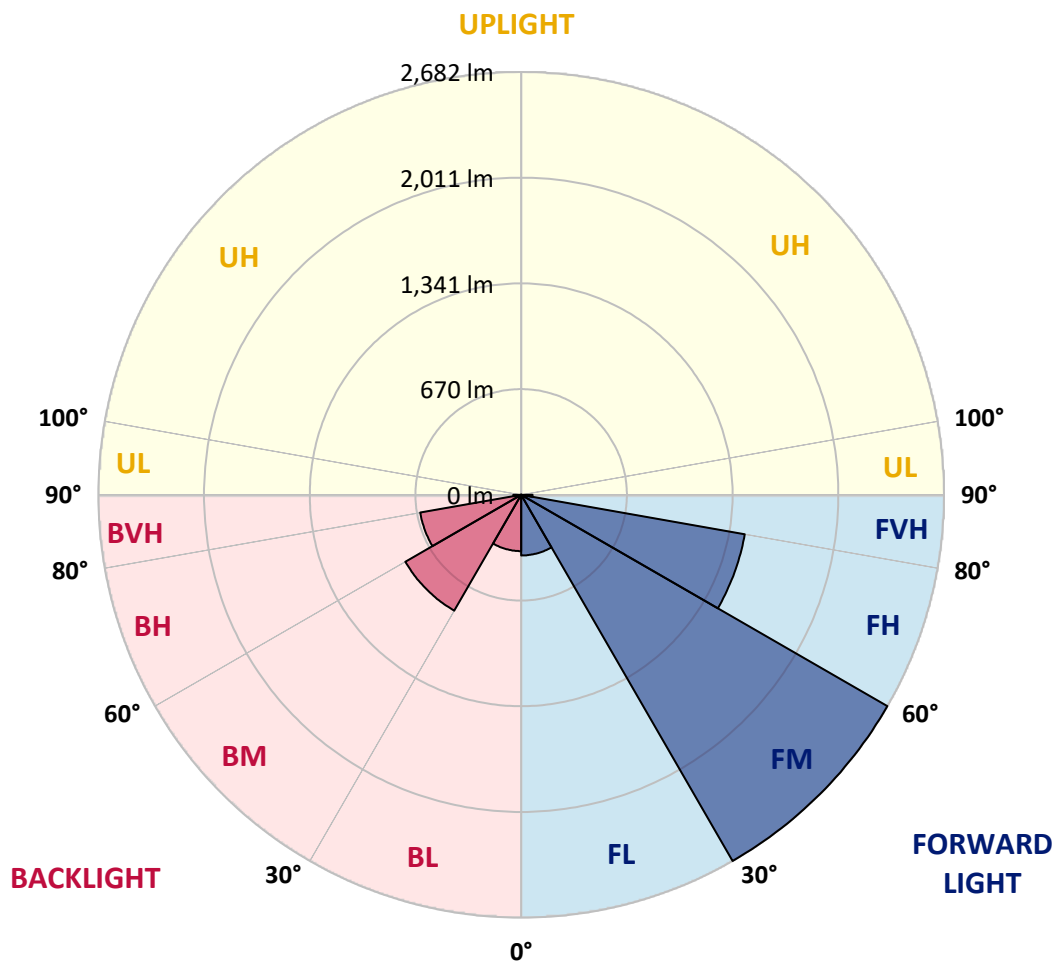
CATALOG NUMBER: ARCH-AF16-60-D-U-T2U-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	384.9	5.9			
FM	(30°-60°)	2681.8	41.4			
FH	(60°-80°)	1439.9	22.2			G1/1800
FVH	(80°-90°)	71.7	1.1			G1/100
BL	(0°-30°)	357.2	5.5	B1/500		
BM	(30°-60°)	848.6	13.1	B1/1000		
BH	(60°-80°)	650.4	10.0	B2/1000		G2/1000
BVH	(80°-90°)	50.1	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	702.3	702.3	702.3	702.3	702.3	702.3	702.3	702.3	702.3	702.3	702.3
2.5°	697.9	696.8	696.8	696.8	696.8	695.8	696.8	699.0	697.9	696.8	699.0
5°	700.2	699.0	699.0	699.0	700.2	699.0	700.2	703.4	701.2	701.2	703.4
7.5°	705.5	704.4	705.5	704.4	704.4	704.4	705.5	708.8	707.7	708.8	712.1
10°	712.1	712.1	712.1	712.1	712.1	712.1	714.2	716.4	717.5	718.6	722.9
12.5°	731.6	731.6	731.6	730.5	730.5	727.2	731.6	733.7	736.0	738.0	741.4
15°	772.8	772.8	771.7	767.4	767.4	760.9	762.0	763.0	763.0	765.3	767.4
17.5°	827.1	826.0	823.9	820.5	816.2	808.6	806.5	804.2	801.1	800.0	800.0
20°	903.0	902.1	897.7	889.0	883.6	871.6	862.9	854.2	851.0	845.5	844.5
22.5°	1011.6	1011.6	1002.9	989.9	985.5	960.6	935.6	917.2	910.6	903.0	903.0
25°	1143.0	1141.9	1130.0	1114.8	1096.3	1070.2	1039.8	1014.9	998.6	981.2	974.7
27.5°	1300.3	1297.1	1280.8	1262.4	1227.6	1195.1	1159.2	1133.2	1104.9	1083.3	1063.7
30°	1484.9	1481.7	1453.3	1418.6	1382.7	1350.2	1298.2	1266.7	1222.2	1196.2	1174.4
32.5°	1698.7	1695.4	1644.5	1610.8	1572.8	1532.6	1470.7	1420.8	1364.4	1327.5	1297.1
35°	1971.1	1958.2	1885.4	1838.8	1779.1	1738.9	1673.8	1606.4	1540.2	1488.1	1443.7
37.5°	2265.3	2250.0	2186.1	2116.6	2058.0	2009.2	1916.9	1832.2	1754.0	1682.4	1627.1
40°	2572.5	2532.3	2463.9	2412.9	2372.8	2326.0	2229.4	2140.5	2017.8	1937.5	1853.9
42.5°	2785.2	2746.1	2698.3	2664.8	2645.1	2609.3	2555.1	2478.0	2368.4	2370.6	2150.2
45°	2925.2	2867.7	2835.2	2837.4	2844.9	2844.9	2835.2	2823.2	2775.4	2808.0	2623.6
47.5°	2875.2	2837.4	2816.7	2860.1	2914.4	2968.7	3031.6	3100.0	3178.2	3270.3	3043.5
50°	2582.3	2596.3	2606.2	2698.3	2814.5	2938.3	3082.6	3269.4	3487.4	3529.8	3420.2
52.5°	2114.3	2144.8	2177.3	2318.5	2471.6	2685.4	2938.3	3246.5	3539.6	3712.2	3701.2
55°	1642.2	1680.3	1749.7	1855.0	1976.6	2178.4	2491.1	2966.5	3423.4	3698.1	3865.3
57.5°	1169.0	1224.4	1315.6	1462.1	1569.5	1683.4	1914.7	2442.2	2942.6	3453.8	3838.1
60°	777.2	803.2	862.9	1045.3	1226.6	1346.0	1509.9	1700.8	2110.2	2814.5	3558.0
62.5°	551.4	568.8	605.7	688.2	852.1	1068.0	1166.9	1254.8	1386.1	1810.5	2856.8
63°	521.0	536.3	566.6	636.1	783.7	1007.3	1108.2	1188.5	1284.1	1619.4	2702.7
65°	432.0	438.5	454.8	488.4	567.7	753.3	918.4	967.2	983.5	1040.9	1693.3
67.5°	364.7	369.1	374.4	384.3	415.7	501.5	684.9	746.8	728.3	689.2	836.8
70°	317.0	320.2	328.9	340.8	351.7	373.3	471.1	563.3	542.7	489.5	512.3
72.5°	252.9	258.3	268.1	288.8	310.4	338.7	362.5	420.1	407.0	355.9	361.4
75°	199.7	203.0	211.6	226.8	247.5	280.0	326.6	346.3	310.4	262.7	262.7
77.5°	158.4	161.7	169.4	181.3	194.3	217.1	249.6	300.7	278.9	197.5	196.4
80°	119.4	122.7	130.2	141.1	154.2	170.5	190.0	212.7	256.2	184.5	147.6
82.5°	88.0	89.0	102.0	109.6	113.9	127.0	143.2	156.3	175.8	170.5	131.3
85°	66.2	65.1	73.9	79.2	80.3	83.6	93.3	106.4	115.0	110.7	102.0
87.5°	36.9	32.6	38.0	43.3	43.3	44.5	46.7	54.3	61.8	59.6	54.3
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):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	702.3	702.3	702.3	702.3	702.3	702.3	702.3	702.3	702.3	702.3	702.3
2.5°	699.0	699.0	697.9	697.9	699.0	699.0	697.9	701.2	703.4	703.4	704.4
5°	702.3	703.4	702.3	702.3	703.4	703.4	704.4	707.7	710.9	713.1	716.4
7.5°	712.1	713.1	712.1	712.1	713.1	714.2	716.4	720.7	722.9	727.2	732.7
10°	722.9	724.0	722.9	724.0	725.1	726.1	729.5	732.7	736.0	740.2	749.0
12.5°	742.4	743.5	741.4	742.4	745.7	745.7	747.9	750.1	755.4	760.9	769.6
15°	769.6	769.6	767.4	768.5	771.7	771.7	772.8	774.9	781.5	788.0	796.7
17.5°	801.1	803.2	802.2	803.2	805.4	806.5	806.5	808.6	813.0	817.4	826.0
20°	843.4	844.5	842.3	844.5	846.6	844.5	842.3	841.2	843.4	845.5	855.3
22.5°	901.0	899.9	894.4	894.4	894.4	890.0	884.7	878.1	878.1	874.8	882.5
25°	969.2	966.1	958.4	959.6	951.9	945.4	935.6	925.9	917.2	914.0	915.0
27.5°	1049.7	1043.1	1035.4	1033.4	1025.7	1013.8	997.5	979.1	965.0	954.1	951.9
30°	1150.6	1136.4	1123.4	1121.2	1109.3	1089.8	1063.7	1038.7	1014.9	996.5	989.9
32.5°	1269.9	1248.3	1227.6	1225.5	1205.9	1179.9	1148.5	1113.7	1078.9	1049.7	1035.4
35°	1410.0	1377.4	1357.9	1352.4	1324.2	1291.7	1256.9	1212.4	1163.6	1122.3	1096.3
37.5°	1580.4	1546.8	1513.1	1514.3	1475.1	1437.1	1390.5	1336.1	1274.3	1216.8	1179.9
40°	1791.0	1743.2	1699.7	1690.0	1656.4	1603.2	1552.1	1489.2	1413.3	1337.3	1284.1
42.5°	2046.0	1967.9	1908.2	1899.5	1855.0	1789.8	1728.1	1644.5	1567.4	1475.1	1411.1
45°	2335.9	2211.0	2139.4	2126.4	2054.7	1988.5	1913.5	1824.6	1730.1	1626.0	1550.0
47.5°	2696.2	2518.2	2396.6	2375.0	2276.2	2189.3	2111.1	2012.3	1899.5	1783.3	1699.7
50°	3116.3	2853.7	2689.8	2656.1	2523.7	2421.6	2321.8	2198.0	2077.6	1956.0	1859.4
52.5°	3537.4	3255.2	3037.1	2995.8	2800.5	2663.6	2532.3	2408.6	2266.4	2145.9	2036.3
55°	3876.1	3688.3	3435.3	3377.9	3097.8	2912.2	2739.6	2598.5	2457.5	2361.8	2232.7
57.5°	4080.2	4070.4	3870.6	3791.4	3408.3	3133.7	2941.5	2780.8	2644.1	2603.9	2432.4
60°	4074.8	4327.6	4241.9	4182.1	3721.9	3360.5	3110.8	2937.2	2824.3	2869.9	2633.2
62.5°	3826.2	4338.4	4441.6	4425.3	4056.2	3542.8	3249.8	3070.7	3010.9	3146.6	2841.7
63°	3736.0	4313.4	4450.2	4443.8	4120.2	3577.5	3273.6	3096.7	3047.9	3217.2	2879.6
65°	3157.5	4095.4	4345.0	4374.3	4258.2	3697.0	3329.0	3162.9	3157.5	3374.6	2969.7
67.5°	1924.5	3460.3	3870.6	3927.1	4063.9	3734.9	3297.6	3140.1	3218.3	3397.4	2942.6
70°	822.7	2283.7	3110.8	3202.1	3536.2	3546.1	3207.5	3046.8	3204.1	3219.5	2749.4
72.5°	487.4	1076.8	2117.7	2316.3	2798.2	3051.2	3001.3	2884.0	3018.7	2827.5	2341.3
75°	345.2	503.6	1075.6	1287.3	1948.3	2329.3	2521.4	2575.7	2570.4	2242.5	1757.3
77.5°	247.5	323.4	453.8	535.2	1087.5	1495.8	1730.1	1888.6	1837.6	1501.1	1083.3
80°	172.6	223.6	277.8	295.2	504.8	768.5	911.8	981.2	950.9	750.1	485.2
82.5°	124.8	146.5	179.0	190.0	254.0	355.0	422.2	372.3	357.1	276.8	209.4
85°	96.5	94.4	111.8	116.2	148.7	185.6	190.0	147.6	129.2	115.0	117.2
87.5°	68.4	58.6	59.6	61.8	77.0	98.8	96.5	60.7	52.1	55.4	63.0
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°	702.3	702.3	702.3	702.3	702.3	702.3	702.3	702.3	702.3	702.3	702.3
2.5°	706.6	707.7	709.8	710.9	713.1	713.1	715.3	716.4	718.6	720.7	721.7
5°	719.7	722.9	727.2	729.5	733.7	737.0	741.4	743.5	747.9	751.1	755.4
7.5°	739.1	744.6	750.1	756.5	763.0	768.5	772.8	778.3	785.9	791.2	794.6
10°	757.6	765.3	774.9	782.7	792.3	800.0	806.5	816.2	824.9	832.5	836.8
12.5°	781.5	791.2	801.1	813.0	826.0	835.9	845.5	858.6	870.5	879.2	883.6
15°	809.7	821.6	832.5	846.6	861.8	874.8	889.0	903.0	911.8	911.8	909.6
17.5°	839.0	848.8	861.8	878.1	898.7	915.0	922.5	924.8	921.5	914.0	908.5
20°	868.4	877.1	891.1	910.6	932.4	935.6	928.0	918.4	908.5	895.5	886.7
22.5°	892.2	904.1	925.9	948.7	949.8	931.3	910.6	894.4	879.2	864.0	847.8
25°	920.4	936.7	966.1	974.7	946.5	911.8	882.5	858.6	833.6	808.6	790.2
27.5°	955.2	979.1	1008.4	983.5	928.0	879.2	839.0	803.2	770.6	736.0	715.3
30°	992.1	1029.0	1035.4	970.3	896.6	833.6	779.3	725.1	683.9	652.4	640.4
32.5°	1036.6	1084.4	1045.3	947.6	854.2	771.7	699.0	633.9	599.2	579.6	574.1
35°	1103.8	1143.0	1050.7	923.7	805.4	697.9	606.7	554.6	532.9	520.0	513.4
37.5°	1200.4	1199.4	1049.7	894.4	749.0	617.7	532.9	496.0	478.7	467.8	455.8
40°	1313.4	1242.9	1043.1	852.1	672.9	540.5	482.0	447.2	430.9	417.9	403.8
42.5°	1425.2	1272.1	1024.7	789.1	578.5	485.2	445.0	413.5	396.2	382.1	362.5
45°	1521.8	1284.1	988.8	702.3	493.9	441.7	421.2	394.0	373.3	351.7	336.5
47.5°	1597.7	1281.9	931.3	600.3	437.5	411.4	401.6	383.2	358.2	331.0	311.5
50°	1661.9	1265.7	853.1	510.1	399.5	384.3	381.0	375.6	335.4	312.6	300.7
52.5°	1720.4	1241.7	769.6	449.4	366.9	353.9	360.3	355.0	326.6	307.1	295.2
55°	1800.7	1225.5	687.0	402.7	328.9	325.6	331.0	338.7	321.3	302.8	289.7
57.5°	1895.2	1234.1	624.1	350.6	293.1	295.2	313.7	324.5	315.9	296.3	283.3
60°	2003.7	1260.2	568.8	300.7	263.8	269.3	296.3	311.5	310.4	287.7	272.5
62.5°	2125.3	1287.3	480.8	262.7	238.8	247.5	275.7	295.2	298.5	278.9	260.5
63°	2149.1	1289.5	458.1	255.1	234.5	244.2	270.3	290.8	295.2	276.8	258.3
65°	2207.8	1269.9	369.1	234.5	217.1	228.0	254.0	272.5	281.2	264.9	249.6
67.5°	2159.0	1110.4	277.8	209.4	203.0	210.6	233.4	250.7	258.3	250.7	235.6
70°	1974.5	807.5	217.1	186.8	187.8	193.2	210.6	226.8	235.6	233.4	219.3
72.5°	1590.2	458.1	181.3	167.1	170.5	176.9	188.9	204.1	211.6	210.6	200.8
75°	1047.5	234.5	153.1	149.8	152.0	157.4	166.1	178.0	186.8	185.6	181.3
77.5°	518.9	162.8	131.3	132.4	133.6	137.8	144.3	155.2	160.6	161.7	160.6
80°	213.8	127.0	112.9	113.9	115.0	118.3	122.7	132.4	135.7	137.8	139.0
82.5°	128.1	96.5	90.1	92.3	93.3	96.5	99.9	108.5	111.8	115.0	115.0
85°	84.6	67.3	65.1	67.3	69.5	71.7	72.7	78.1	83.6	88.0	90.1
87.5°	45.6	40.2	39.2	40.2	40.2	42.3	44.5	49.9	56.5	60.7	63.0
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-AF16-60-D-U-T2U-7030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	702.3	702.3	702.3	702.3	702.3
2.5°	719.7	720.7	719.7	720.7	721.7
5°	755.4	757.6	756.5	756.5	760.9
7.5°	796.7	801.1	801.1	803.2	805.4
10°	841.2	845.5	848.8	848.8	852.1
12.5°	885.6	887.8	891.1	891.1	891.1
15°	908.5	907.4	906.3	905.2	905.2
17.5°	905.2	901.0	898.7	896.6	897.7
20°	881.4	873.7	871.6	868.4	870.5
22.5°	840.1	829.3	824.9	819.5	821.6
25°	778.3	765.3	763.0	756.5	759.8
27.5°	706.6	700.2	699.0	697.9	703.4
30°	639.2	641.5	642.6	644.7	650.2
32.5°	577.4	581.8	582.9	584.0	591.5
35°	516.7	511.3	516.7	514.5	521.0
37.5°	450.4	446.1	441.7	436.4	440.7
40°	395.1	387.6	374.4	367.9	369.1
42.5°	351.7	341.9	331.0	324.5	324.5
45°	323.4	311.5	301.8	297.4	297.4
47.5°	301.8	296.3	290.8	287.7	287.7
50°	293.1	286.6	283.3	281.2	281.2
52.5°	286.6	280.0	276.8	274.6	272.5
55°	281.2	271.4	268.1	267.0	267.0
57.5°	273.4	264.9	260.5	259.4	259.4
60°	261.5	255.1	250.7	249.6	249.6
62.5°	249.6	243.1	238.8	238.8	238.8
63°	247.5	240.0	236.6	236.6	236.6
65°	237.7	230.1	226.8	226.8	225.7
67.5°	224.6	217.1	214.9	214.9	212.7
70°	209.4	203.0	200.8	201.9	197.5
72.5°	194.3	187.8	184.5	184.5	180.2
75°	176.9	170.5	166.1	165.0	160.6
77.5°	157.4	152.0	147.6	143.2	141.1
80°	136.8	132.4	127.0	123.8	120.5
82.5°	115.0	110.7	107.5	111.8	95.5
85°	90.1	85.8	81.4	88.0	68.4
87.5°	66.2	64.0	59.6	52.1	45.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)