

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: P265907

Luminaire Tested: **ARCH-AF16-60-D-U-T2U-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265907
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-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 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: 5825.1 lumens
Efficiency: N/A
Efficacy: 92.5 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

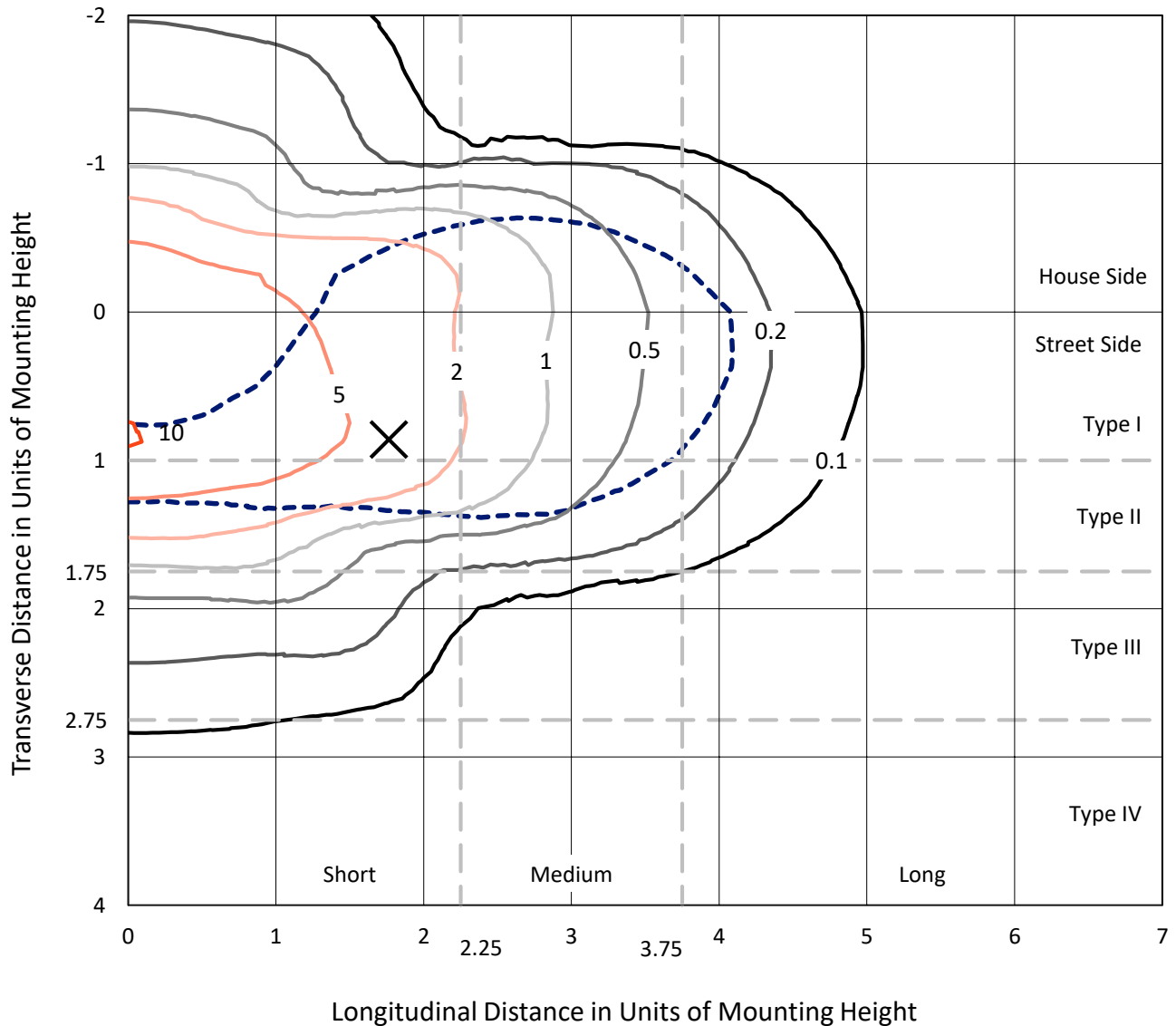
Input Watts (W): 63
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

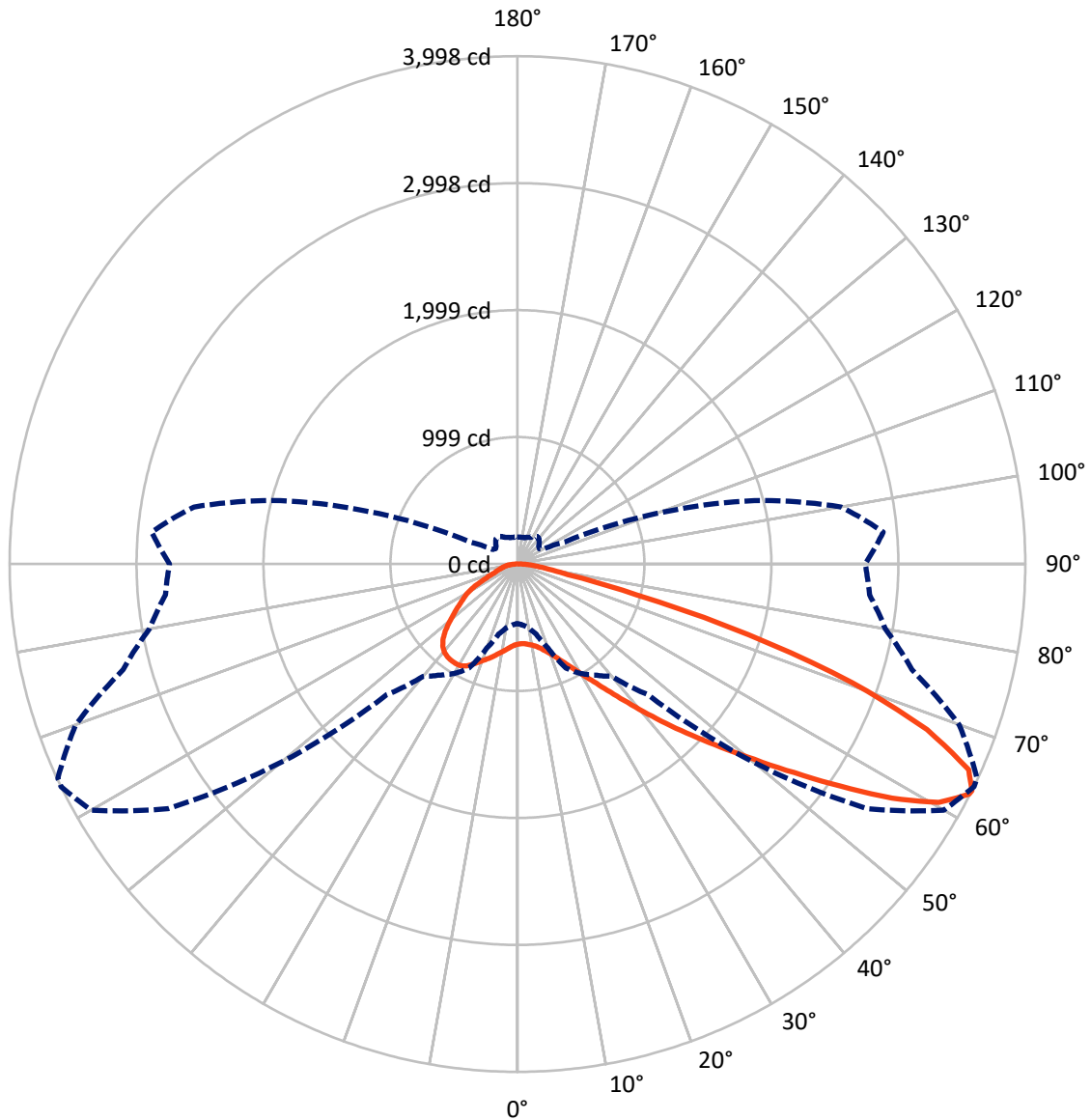
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.2 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	1712.4	0.0	1712.4
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	4112.7	0.0	4112.7
	% Fixture	70.6	0.0	70.6
Total	Lumens	5825.1	0.0	5825.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.0	1.1
10°-20°	209.8	3.6
20°-30°	393.8	6.8
30°-40°	660.1	11.3
40°-50°	1107.4	19.0
50°-60°	1403.9	24.1
60°-70°	1238.4	21.3
70°-80°	639.3	11.0
80°-90°	109.4	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°	5825.1	100.0
0°-180°	5825.1	100.0



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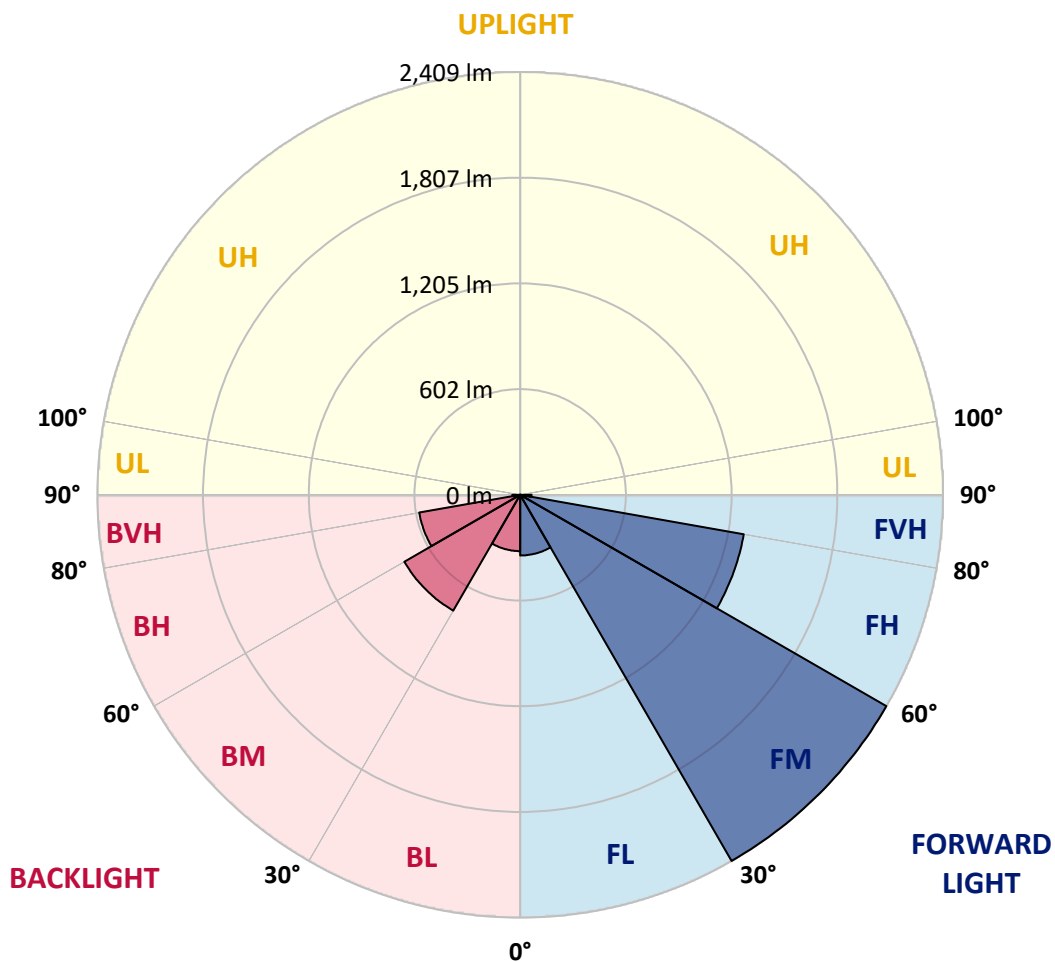
CATALOG NUMBER: ARCH-AF16-60-D-U-T2U-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	345.7	5.9			
FM	(30°-60°)	2409.1	41.4			
FH	(60°-80°)	1293.5	22.2			G1/1800
FVH	(80°-90°)	64.4	1.1			G1/100
BL	(0°-30°)	320.8	5.5	B1/500		
BM	(30°-60°)	762.3	13.1	B1/1000		
BH	(60°-80°)	584.3	10.0	B2/1000		G2/1000
BVH	(80°-90°)	45.0	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°	630.9	630.9	630.9	630.9	630.9	630.9	630.9	630.9	630.9	630.9	630.9
2.5°	626.9	625.9	625.9	625.9	625.9	625.0	625.9	627.9	626.9	625.9	627.9
5°	629.0	627.9	627.9	627.9	629.0	627.9	629.0	631.9	629.9	629.9	631.9
7.5°	633.8	632.8	633.8	632.8	632.8	632.8	633.8	636.7	635.7	636.7	639.7
10°	639.7	639.7	639.7	639.7	639.7	639.7	641.6	643.5	644.5	645.5	649.4
12.5°	657.2	657.2	657.2	656.2	656.2	653.2	657.2	659.1	661.2	662.9	666.0
15°	694.2	694.2	693.2	689.4	689.4	683.5	684.5	685.4	685.4	687.5	689.4
17.5°	743.0	742.0	740.1	737.1	733.2	726.4	724.5	722.4	719.6	718.6	718.6
20°	811.2	810.4	806.4	798.6	793.7	783.0	775.1	767.3	764.5	759.5	758.6
22.5°	908.7	908.7	900.9	889.2	885.3	862.9	840.5	823.9	818.0	811.2	811.2
25°	1026.8	1025.8	1015.1	1001.4	984.8	961.4	934.1	911.7	897.0	881.4	875.6
27.5°	1168.1	1165.2	1150.5	1134.0	1102.8	1073.6	1041.3	1018.0	992.5	973.1	955.5
30°	1333.9	1331.0	1305.5	1274.3	1242.1	1212.9	1166.2	1137.9	1097.9	1074.6	1055.0
32.5°	1526.0	1523.0	1477.3	1447.0	1412.9	1376.7	1321.1	1276.3	1225.6	1192.5	1165.2
35°	1770.6	1759.1	1693.7	1651.8	1598.2	1562.1	1503.6	1443.0	1383.6	1336.8	1296.9
37.5°	2034.9	2021.2	1963.8	1901.4	1848.7	1804.9	1722.0	1645.9	1575.6	1511.3	1461.6
40°	2310.9	2274.8	2213.3	2167.5	2131.5	2089.5	2002.7	1922.8	1812.6	1740.5	1665.4
42.5°	2502.0	2466.8	2423.9	2393.8	2376.1	2343.9	2295.3	2226.0	2127.5	2129.5	1931.5
45°	2627.7	2576.1	2546.9	2548.9	2555.6	2555.6	2546.9	2536.1	2493.2	2522.4	2356.8
47.5°	2582.8	2548.9	2530.3	2569.2	2618.0	2666.8	2723.3	2784.7	2855.0	2937.7	2734.0
50°	2319.7	2332.3	2341.2	2423.9	2528.3	2639.5	2769.1	2936.9	3132.7	3170.8	3072.4
52.5°	1899.3	1926.7	1955.9	2082.7	2220.3	2412.3	2639.5	2916.3	3179.6	3334.7	3324.8
55°	1475.2	1509.4	1571.8	1666.4	1775.6	1956.9	2237.8	2664.8	3075.3	3322.0	3472.2
57.5°	1050.1	1099.9	1181.8	1313.4	1409.9	1512.2	1720.0	2193.8	2643.4	3102.6	3447.8
60°	698.2	721.5	775.1	939.0	1101.9	1209.1	1356.4	1527.8	1895.6	2528.3	3196.2
62.5°	495.3	511.0	544.1	618.2	765.4	959.4	1048.2	1127.2	1245.1	1626.4	2566.3
63°	468.0	481.8	509.0	571.4	704.0	904.9	995.5	1067.6	1153.5	1454.7	2427.8
65°	388.1	393.9	408.5	438.7	510.0	676.7	825.0	868.8	883.5	935.0	1521.1
67.5°	327.6	331.6	336.3	345.2	373.4	450.5	615.2	670.9	654.2	619.1	751.7
70°	284.8	287.6	295.5	306.1	315.9	335.3	423.2	506.0	487.5	439.7	460.2
72.5°	227.2	232.0	240.8	259.4	278.8	304.3	325.6	377.4	365.6	319.7	324.6
75°	179.4	182.4	190.1	203.7	222.3	251.5	293.4	311.1	278.8	236.0	236.0
77.5°	142.3	145.3	152.2	162.9	174.5	195.0	224.2	270.1	250.5	177.4	176.4
80°	107.3	110.2	117.0	126.8	138.5	153.2	170.7	191.1	230.1	165.7	132.6
82.5°	79.1	79.9	91.6	98.5	102.3	114.1	128.6	140.4	157.9	153.2	117.9
85°	59.5	58.5	66.4	71.1	72.1	75.1	83.8	95.6	103.3	99.4	91.6
87.5°	33.1	29.3	34.1	38.9	38.9	40.0	42.0	48.8	55.5	53.5	48.8
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°	630.9	630.9	630.9	630.9	630.9	630.9	630.9	630.9	630.9	630.9	630.9
2.5°	627.9	627.9	626.9	626.9	627.9	627.9	626.9	629.9	631.9	631.9	632.8
5°	630.9	631.9	630.9	630.9	631.9	631.9	632.8	635.7	638.6	640.6	643.5
7.5°	639.7	640.6	639.7	639.7	640.6	641.6	643.5	647.4	649.4	653.2	658.2
10°	649.4	650.4	649.4	650.4	651.4	652.3	655.3	658.2	661.2	664.9	672.8
12.5°	666.9	667.9	666.0	666.9	669.9	669.9	671.8	673.8	678.6	683.5	691.3
15°	691.3	691.3	689.4	690.3	693.2	693.2	694.2	696.1	702.0	707.9	715.7
17.5°	719.6	721.5	720.6	721.5	723.5	724.5	724.5	726.4	730.3	734.3	742.0
20°	757.6	758.6	756.6	758.6	760.5	758.6	756.6	755.7	757.6	759.5	768.3
22.5°	809.4	808.4	803.4	803.4	803.4	799.5	794.7	788.8	788.8	785.8	792.8
25°	870.6	867.9	860.9	862.0	855.1	849.3	840.5	831.7	823.9	821.1	821.9
27.5°	943.0	937.0	930.1	928.3	921.4	910.7	896.1	879.5	866.9	857.1	855.1
30°	1033.6	1020.8	1009.2	1007.2	996.5	979.0	955.5	933.1	911.7	895.2	889.2
32.5°	1140.8	1121.4	1102.8	1100.9	1083.3	1059.9	1031.7	1000.4	969.2	943.0	930.1
35°	1266.6	1237.3	1219.8	1214.9	1189.5	1160.3	1129.1	1089.1	1045.3	1008.2	984.8
37.5°	1419.7	1389.5	1359.2	1360.3	1325.1	1291.0	1249.1	1200.2	1144.7	1093.1	1059.9
40°	1608.9	1565.9	1526.8	1518.1	1488.0	1440.2	1394.3	1337.8	1269.6	1201.3	1153.5
42.5°	1837.9	1767.8	1714.1	1706.3	1666.4	1607.8	1552.4	1477.3	1408.0	1325.1	1267.6
45°	2098.4	1986.2	1921.8	1910.2	1845.7	1786.3	1718.9	1639.0	1554.2	1460.6	1392.4
47.5°	2422.0	2262.1	2152.9	2133.5	2044.7	1966.7	1896.4	1807.7	1706.3	1601.9	1526.8
50°	2799.4	2563.5	2416.3	2386.0	2267.1	2175.3	2085.7	1974.5	1866.3	1757.1	1670.3
52.5°	3177.7	2924.2	2728.2	2691.1	2515.7	2392.7	2274.8	2163.7	2035.9	1927.7	1829.2
55°	3481.9	3313.2	3085.9	3034.4	2782.8	2616.0	2461.0	2334.2	2207.6	2121.6	2005.6
57.5°	3665.3	3656.5	3477.0	3405.8	3061.7	2815.0	2642.4	2498.0	2375.2	2339.1	2185.0
60°	3660.4	3887.5	3810.5	3756.8	3343.4	3018.8	2794.4	2638.5	2537.1	2578.0	2365.4
62.5°	3437.1	3897.2	3989.9	3975.3	3643.7	3182.5	2919.3	2758.4	2704.7	2826.6	2552.7
63°	3356.1	3874.7	3997.6	3991.9	3701.2	3213.7	2940.7	2781.8	2737.9	2890.0	2586.8
65°	2836.4	3678.9	3903.1	3929.5	3825.2	3321.0	2990.5	2841.2	2836.4	3031.4	2667.7
67.5°	1728.8	3108.4	3477.0	3527.7	3650.6	3355.1	2962.3	2820.8	2891.0	3051.9	2643.4
70°	739.0	2051.5	2794.4	2876.5	3176.6	3185.5	2881.3	2737.0	2878.3	2892.1	2469.8
72.5°	437.8	967.3	1902.3	2080.7	2513.6	2740.9	2696.1	2590.7	2711.7	2540.0	2103.2
75°	310.1	452.4	966.2	1156.4	1750.2	2092.4	2265.0	2313.8	2309.0	2014.4	1578.6
77.5°	222.3	290.5	407.7	480.8	976.9	1343.7	1554.2	1696.5	1650.7	1348.4	973.1
80°	155.0	200.9	249.5	265.2	453.5	690.3	819.1	881.4	854.2	673.8	435.9
82.5°	112.1	131.6	160.8	170.7	228.2	318.9	379.3	334.4	320.8	248.7	188.1
85°	86.7	84.8	100.4	104.4	133.6	166.7	170.7	132.6	116.1	103.3	105.3
87.5°	61.4	52.6	53.5	55.5	69.2	88.8	86.7	54.5	46.8	49.8	56.6
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°	630.9	630.9	630.9	630.9	630.9	630.9	630.9	630.9	630.9	630.9	630.9
2.5°	634.7	635.7	637.6	638.6	640.6	640.6	642.6	643.5	645.5	647.4	648.3
5°	646.5	649.4	653.2	655.3	659.1	662.1	666.0	667.9	671.8	674.7	678.6
7.5°	663.9	668.9	673.8	679.6	685.4	690.3	694.2	699.2	706.0	710.7	713.8
10°	680.6	687.5	696.1	703.1	711.7	718.6	724.5	733.2	741.0	747.8	751.7
12.5°	702.0	710.7	719.6	730.3	742.0	750.9	759.5	771.3	782.0	789.8	793.7
15°	727.4	738.0	747.8	760.5	774.2	785.8	798.6	811.2	819.1	819.1	817.1
17.5°	753.7	762.5	774.2	788.8	807.3	821.9	828.7	830.8	827.8	821.1	816.1
20°	780.1	787.9	800.5	818.0	837.6	840.5	833.6	825.0	816.1	804.4	796.5
22.5°	801.5	812.2	831.7	852.2	853.2	836.6	818.0	803.4	789.8	776.1	761.6
25°	826.8	841.4	867.9	875.6	850.2	819.1	792.8	771.3	748.8	726.4	709.8
27.5°	858.1	879.5	905.9	883.5	833.6	789.8	753.7	721.5	692.2	661.2	642.6
30°	891.2	924.4	930.1	871.6	805.4	748.8	700.0	651.4	614.4	586.1	575.3
32.5°	931.2	974.1	939.0	851.2	767.3	693.2	627.9	569.4	538.3	520.7	515.7
35°	991.5	1026.8	943.8	829.8	723.5	626.9	545.0	498.2	478.7	467.1	461.2
37.5°	1078.3	1077.4	943.0	803.4	672.8	554.9	478.7	445.6	430.0	420.2	409.4
40°	1179.8	1116.5	937.0	765.4	604.5	485.5	433.0	401.7	387.1	375.4	362.7
42.5°	1280.3	1142.7	920.5	708.9	519.7	435.9	399.7	371.4	355.9	343.2	325.6
45°	1367.0	1153.5	888.2	630.9	443.7	396.8	378.4	353.9	335.3	315.9	302.3
47.5°	1435.2	1151.5	836.6	539.3	393.0	369.6	360.8	344.2	321.8	297.3	279.8
50°	1492.9	1137.0	766.3	458.2	358.9	345.2	342.3	337.4	301.3	280.8	270.1
52.5°	1545.4	1115.4	691.3	403.7	329.6	317.9	323.7	318.9	293.4	275.9	265.2
55°	1617.6	1100.9	617.1	361.7	295.5	292.5	297.3	304.3	288.6	272.0	260.2
57.5°	1702.5	1108.6	560.6	314.9	263.3	265.2	281.8	291.5	283.8	266.2	254.5
60°	1799.9	1132.0	511.0	270.1	237.0	241.9	266.2	279.8	278.8	258.4	244.8
62.5°	1909.2	1156.4	431.9	236.0	214.5	222.3	247.7	265.2	268.1	250.5	234.0
63°	1930.5	1158.4	411.5	229.2	210.7	219.4	242.8	261.2	265.2	248.7	232.0
65°	1983.3	1140.8	331.6	210.7	195.0	204.8	228.2	244.8	252.6	238.0	224.2
67.5°	1939.4	997.5	249.5	188.1	182.4	189.2	209.7	225.2	232.0	225.2	211.6
70°	1773.7	725.4	195.0	167.8	168.7	173.6	189.2	203.7	211.6	209.7	197.0
72.5°	1428.5	411.5	162.9	150.1	153.2	158.9	169.7	183.3	190.1	189.2	180.4
75°	941.0	210.7	137.5	134.6	136.5	141.4	149.2	159.9	167.8	166.7	162.9
77.5°	466.1	146.2	117.9	118.9	120.0	123.8	129.6	139.4	144.3	145.3	144.3
80°	192.1	114.1	101.4	102.3	103.3	106.3	110.2	118.9	121.9	123.8	124.9
82.5°	115.1	86.7	80.9	82.9	83.8	86.7	89.7	97.5	100.4	103.3	103.3
85°	76.0	60.5	58.5	60.5	62.4	64.4	65.3	70.2	75.1	79.1	80.9
87.5°	41.0	36.1	35.2	36.1	36.1	38.0	40.0	44.8	50.8	54.5	56.6
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-AF16-60-D-U-T2U-7027

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	630.9	630.9	630.9	630.9	630.9
2.5°	646.5	647.4	646.5	647.4	648.3
5°	678.6	680.6	679.6	679.6	683.5
7.5°	715.7	719.6	719.6	721.5	723.5
10°	755.7	759.5	762.5	762.5	765.4
12.5°	795.5	797.5	800.5	800.5	800.5
15°	816.1	815.1	814.1	813.1	813.1
17.5°	813.1	809.4	807.3	805.4	806.4
20°	791.8	784.8	783.0	780.1	782.0
22.5°	754.7	745.0	741.0	736.2	738.0
25°	699.2	687.5	685.4	679.6	682.5
27.5°	634.7	629.0	627.9	626.9	631.9
30°	574.2	576.3	577.3	579.1	584.1
32.5°	518.7	522.6	523.6	524.6	531.3
35°	464.2	459.3	464.2	462.2	468.0
37.5°	404.6	400.7	396.8	392.0	395.9
40°	354.9	348.2	336.3	330.5	331.6
42.5°	315.9	307.1	297.3	291.5	291.5
45°	290.5	279.8	271.1	267.2	267.2
47.5°	271.1	266.2	261.2	258.4	258.4
50°	263.3	257.5	254.5	252.6	252.6
52.5°	257.5	251.5	248.7	246.7	244.8
55°	252.6	243.8	240.8	239.8	239.8
57.5°	245.6	238.0	234.0	233.0	233.0
60°	234.9	229.2	225.2	224.2	224.2
62.5°	224.2	218.4	214.5	214.5	214.5
63°	222.3	215.6	212.5	212.5	212.5
65°	213.5	206.7	203.7	203.7	202.7
67.5°	201.8	195.0	193.0	193.0	191.1
70°	188.1	182.4	180.4	181.4	177.4
72.5°	174.5	168.7	165.7	165.7	161.9
75°	158.9	153.2	149.2	148.2	144.3
77.5°	141.4	136.5	132.6	128.6	126.8
80°	122.9	118.9	114.1	111.2	108.2
82.5°	103.3	99.4	96.6	100.4	85.8
85°	80.9	77.1	73.1	79.1	61.4
87.5°	59.5	57.5	53.5	46.8	41.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)