

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: P265943

Luminaire Tested: **ARCH-AF24-50-D-U-T2U-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265943
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-AF24-50-D-U-T2U-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5764.2 lumens
Efficiency: N/A
Efficacy: 106.7 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

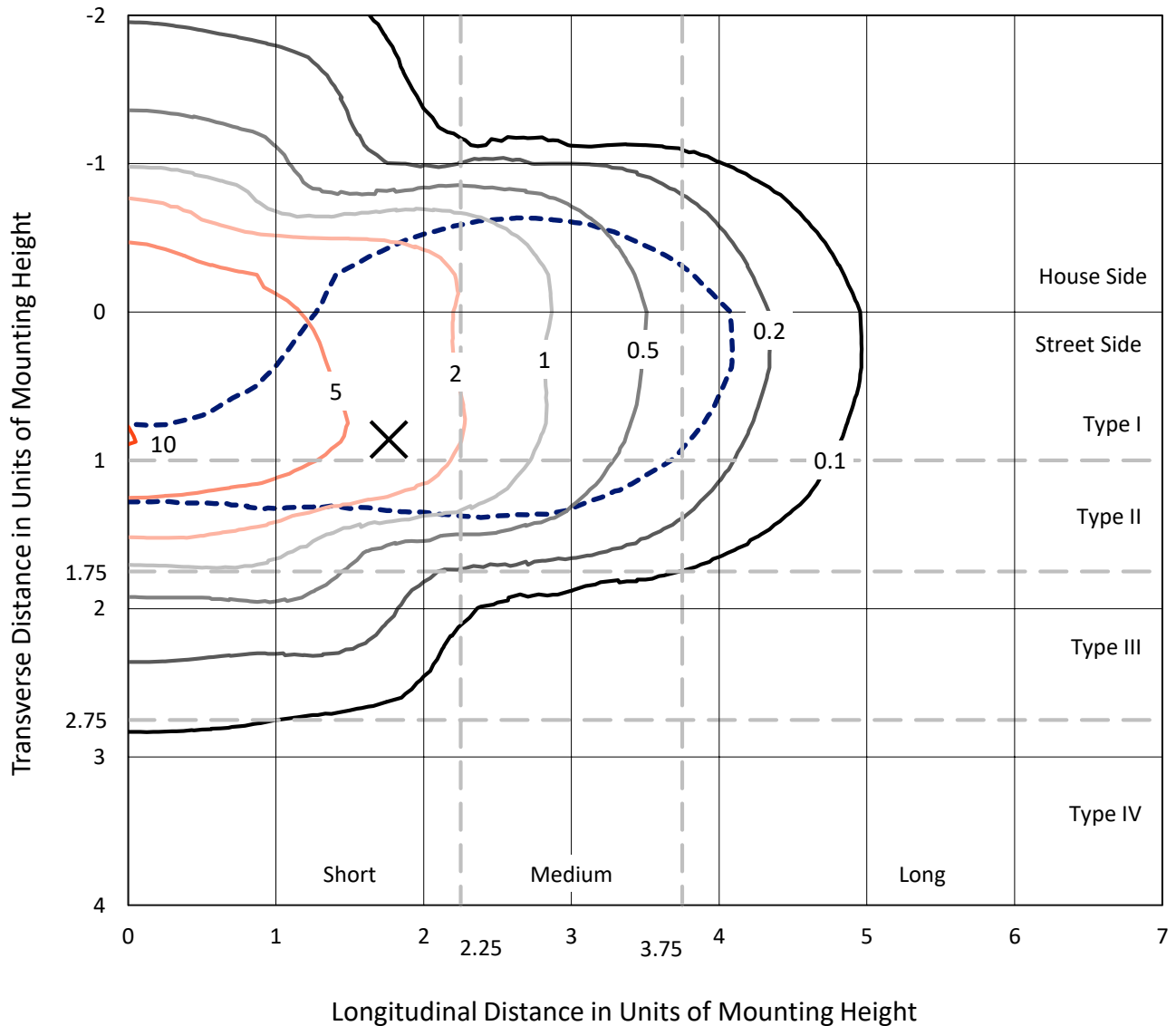
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P265943
 CATALOG NUMBER: ARCH-AF24-50-D-U-T2U-7027

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

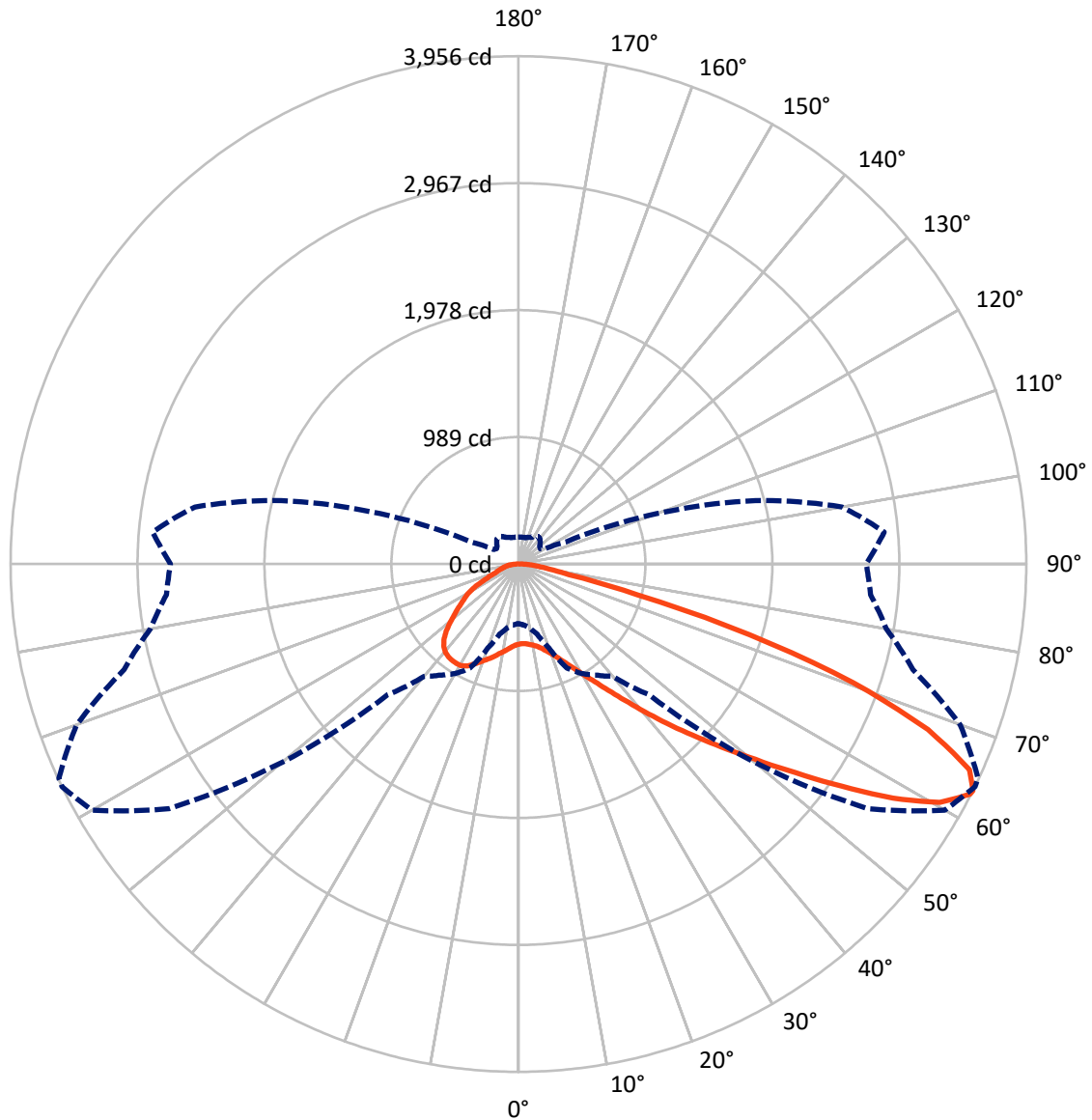


Based on 10 foot mounting height. Maximum calculated value = 10.1 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P265943

CATALOG NUMBER: ARCH-AF24-50-D-U-T2U-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical



REPORT NUMBER: P265943

CATALOG NUMBER: ARCH-AF24-50-D-U-T2U-7027

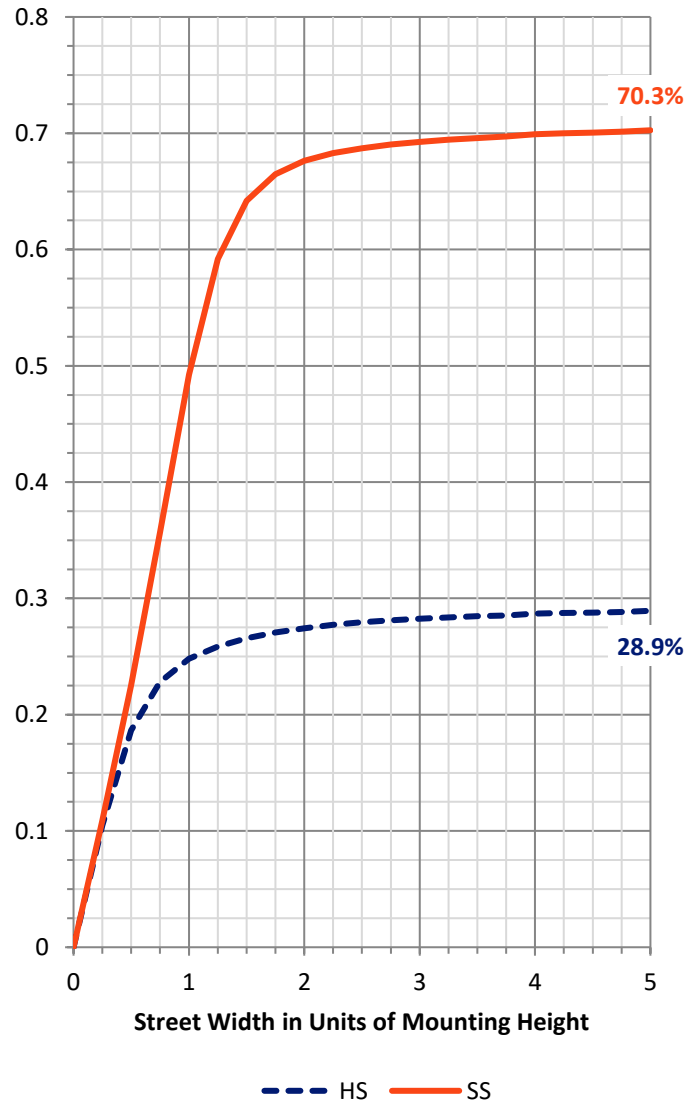
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1694.5	0.0	1694.5
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	4069.8	0.0	4069.8
	% Fixture	70.6	0.0	70.6
Total	Lumens	5764.2	0.0	5764.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.3	1.1
10°-20°	207.6	3.6
20°-30°	389.7	6.8
30°-40°	653.2	11.3
40°-50°	1095.9	19.0
50°-60°	1389.2	24.1
60°-70°	1225.5	21.3
70°-80°	632.6	11.0
80°-90°	108.2	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°	5764.2	100.0
0°-180°	5764.2	100.0



REPORT NUMBER: P265943

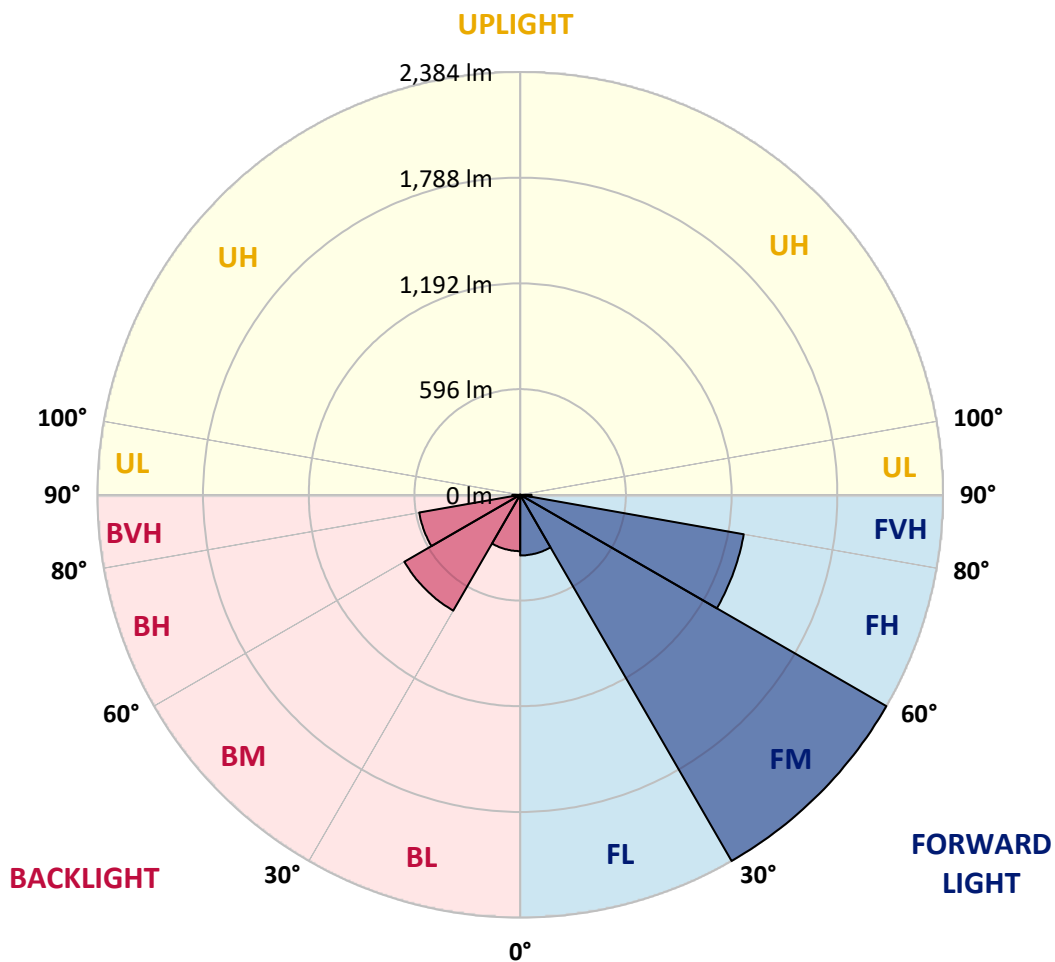
CATALOG NUMBER: ARCH-AF24-50-D-U-T2U-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	342.1	5.9			
FM	(30°-60°)	2383.9	41.4			
FH	(60°-80°)	1280.0	22.2			G1/1800
FVH	(80°-90°)	63.7	1.1			G1/100
BL	(0°-30°)	317.5	5.5	B1/500		
BM	(30°-60°)	754.3	13.1	B1/1000		
BH	(60°-80°)	578.1	10.0	B2/1000		G2/1000
BVH	(80°-90°)	44.5	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





REPORT NUMBER: P265943

CATALOG NUMBER: ARCH-AF24-50-D-U-T2U-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	624.2	624.2	624.2	624.2	624.2	624.2	624.2	624.2	624.2	624.2	624.2
2.5°	620.4	619.4	619.4	619.4	619.4	618.5	619.4	621.4	620.4	619.4	621.4
5°	622.3	621.4	621.4	621.4	622.3	621.4	622.3	625.2	623.3	623.3	625.2
7.5°	627.1	626.2	627.1	626.2	626.2	626.2	627.1	630.0	629.2	630.0	632.9
10°	632.9	632.9	632.9	632.9	632.9	632.9	634.9	636.8	637.7	638.8	642.6
12.5°	650.4	650.4	650.4	649.4	649.4	646.5	650.4	652.3	654.1	656.1	658.9
15°	686.9	686.9	686.0	682.2	682.2	676.3	677.3	678.3	678.3	680.2	682.2
17.5°	735.3	734.3	732.3	729.5	725.7	718.9	716.8	715.1	712.0	711.1	711.1
20°	802.7	801.7	798.0	790.1	785.4	774.8	767.1	759.3	756.5	751.6	750.7
22.5°	899.3	899.3	891.6	880.0	876.0	853.8	831.7	815.3	809.6	802.7	802.7
25°	1016.1	1015.1	1004.5	990.9	974.5	951.3	924.4	902.2	887.6	872.3	866.4
27.5°	1155.8	1153.1	1138.5	1122.2	1091.3	1062.3	1030.4	1007.3	982.2	963.0	945.6
30°	1319.9	1317.0	1291.9	1261.1	1229.2	1200.2	1154.0	1125.9	1086.4	1063.2	1044.0
32.5°	1510.1	1507.0	1461.7	1431.9	1398.1	1362.4	1307.5	1262.9	1212.8	1180.1	1153.1
35°	1752.1	1740.6	1676.0	1634.5	1581.3	1545.8	1487.9	1427.9	1369.1	1322.8	1283.3
37.5°	2013.7	2000.2	1943.3	1881.5	1829.4	1786.0	1703.9	1628.6	1559.2	1495.6	1446.4
40°	2286.7	2251.1	2190.2	2145.0	2109.2	2067.7	1981.8	1902.7	1793.6	1722.3	1648.0
42.5°	2475.8	2441.1	2398.7	2368.7	2351.4	2319.6	2271.3	2202.7	2105.3	2107.2	1911.5
45°	2600.4	2549.2	2520.3	2522.1	2528.9	2528.9	2520.3	2509.7	2467.1	2496.1	2332.1
47.5°	2555.9	2522.1	2503.8	2542.5	2590.6	2639.0	2694.8	2755.6	2825.1	2907.2	2705.4
50°	2295.3	2307.9	2316.5	2398.7	2501.9	2611.9	2740.2	2906.1	3100.1	3137.7	3040.3
52.5°	1879.6	1906.6	1935.5	2060.9	2197.0	2387.1	2611.9	2885.8	3146.5	3299.8	3290.2
55°	1459.8	1493.6	1555.3	1649.0	1757.1	1936.4	2214.3	2637.0	3043.2	3287.3	3435.8
57.5°	1039.2	1088.3	1169.5	1299.7	1395.2	1496.4	1702.0	2170.9	2615.8	3070.1	3411.8
60°	690.8	714.1	767.1	929.1	1090.4	1196.5	1342.1	1511.9	1875.8	2501.9	3162.8
62.5°	490.1	505.6	538.4	611.7	757.5	949.4	1037.3	1115.3	1232.1	1609.5	2539.5
63°	463.2	476.6	503.7	565.5	696.6	895.4	985.1	1056.5	1141.4	1439.5	2402.4
65°	384.0	389.9	404.2	434.2	504.6	669.5	816.3	859.7	874.2	925.3	1505.2
67.5°	324.2	328.1	332.9	341.5	369.6	445.7	608.8	663.8	647.4	612.6	743.8
70°	281.8	284.7	292.4	303.0	312.6	332.0	418.8	500.7	482.4	435.1	455.4
72.5°	224.8	229.6	238.3	256.6	276.0	301.0	322.2	373.3	361.7	316.5	321.4
75°	177.5	180.4	188.1	201.7	219.9	248.9	290.4	307.8	276.0	233.5	233.5
77.5°	140.9	143.8	150.6	161.2	172.7	193.0	221.9	267.2	247.9	175.6	174.6
80°	106.1	109.1	115.8	125.5	137.0	151.5	168.8	189.2	227.7	164.0	131.2
82.5°	78.2	79.1	90.6	97.5	101.2	112.8	127.4	139.0	156.3	151.5	116.8
85°	58.8	57.9	65.5	70.4	71.3	74.3	83.0	94.5	102.2	98.5	90.6
87.5°	32.8	28.9	33.7	38.5	38.5	39.5	41.5	48.2	54.9	53.1	48.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P265943

CATALOG NUMBER: ARCH-AF24-50-D-U-T2U-7027

CANDELA DISTRIBUTION (continued):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	624.2	624.2	624.2	624.2	624.2	624.2	624.2	624.2	624.2	624.2	624.2
2.5°	621.4	621.4	620.4	620.4	621.4	621.4	620.4	623.3	625.2	625.2	626.2
5°	624.2	625.2	624.2	624.2	625.2	625.2	626.2	629.2	632.0	633.9	636.8
7.5°	632.9	633.9	632.9	632.9	633.9	634.9	636.8	640.8	642.6	646.5	651.4
10°	642.6	643.5	642.6	643.5	644.5	645.5	648.3	651.4	654.1	658.1	665.7
12.5°	660.0	661.0	658.9	660.0	662.9	662.9	664.7	666.7	671.6	676.3	684.1
15°	684.1	684.1	682.2	683.2	686.0	686.0	686.9	688.9	694.7	700.5	708.3
17.5°	712.0	714.1	713.1	714.1	715.9	716.8	716.8	718.9	722.6	726.5	734.3
20°	749.6	750.7	748.7	750.7	752.6	750.7	748.7	747.7	749.6	751.6	760.3
22.5°	800.7	799.9	795.0	795.0	795.0	791.1	786.3	780.5	780.5	777.8	784.4
25°	861.7	858.7	852.0	852.9	846.2	840.5	831.7	823.0	815.3	812.3	813.3
27.5°	933.0	927.2	920.5	918.5	911.8	901.2	886.6	870.3	857.7	848.1	846.2
30°	1022.7	1010.2	998.6	996.7	986.1	968.7	945.6	923.4	902.2	885.8	880.0
32.5°	1128.9	1109.5	1091.3	1089.4	1071.9	1048.9	1020.8	989.9	959.1	933.0	920.5
35°	1253.3	1224.4	1207.1	1202.2	1177.0	1148.2	1117.3	1077.7	1034.3	997.7	974.5
37.5°	1404.8	1374.9	1345.0	1346.0	1311.3	1277.5	1236.0	1187.7	1132.8	1081.6	1048.9
40°	1592.1	1549.5	1510.9	1502.2	1472.4	1425.2	1379.7	1323.8	1256.3	1188.6	1141.4
42.5°	1818.8	1749.3	1696.2	1688.5	1649.0	1591.1	1536.0	1461.7	1393.2	1311.3	1254.4
45°	2076.4	1965.4	1901.7	1890.2	1826.4	1767.7	1701.0	1621.9	1538.0	1445.4	1377.8
47.5°	2396.7	2238.4	2130.4	2111.0	2023.3	1946.1	1876.6	1788.9	1688.5	1585.2	1510.9
50°	2770.2	2536.6	2390.8	2361.0	2243.2	2152.6	2063.9	1953.9	1846.7	1738.7	1652.8
52.5°	3144.4	2893.6	2699.6	2663.0	2489.4	2367.8	2251.1	2141.0	2014.5	1907.6	1810.1
55°	3445.4	3278.6	3053.8	3002.7	2753.8	2588.7	2435.3	2309.9	2184.5	2099.6	1984.7
57.5°	3626.8	3618.3	3440.7	3370.3	3029.7	2785.6	2614.7	2472.0	2350.3	2314.8	2162.2
60°	3622.1	3846.9	3770.6	3717.6	3308.5	2987.3	2765.3	2611.0	2510.6	2551.0	2340.8
62.5°	3401.2	3856.6	3948.2	3933.8	3605.6	3149.3	2888.8	2729.6	2676.5	2797.1	2526.0
63°	3321.0	3834.3	3956.0	3950.1	3662.6	3180.2	2910.0	2752.8	2709.3	2859.8	2559.8
65°	2806.8	3640.4	3862.4	3888.5	3785.2	3286.3	2959.2	2811.7	2806.8	2999.8	2639.8
67.5°	1710.7	3075.9	3440.7	3490.9	3612.4	3320.0	2931.3	2791.4	2860.8	3020.0	2615.8
70°	731.4	2030.1	2765.3	2846.3	3143.4	3152.2	2851.2	2708.4	2848.3	2861.8	2444.0
72.5°	433.3	957.1	1882.5	2059.1	2487.3	2712.3	2667.8	2563.7	2683.2	2513.5	2081.3
75°	306.9	447.6	956.2	1144.4	1731.9	2070.7	2241.5	2289.6	2284.7	1993.3	1562.2
77.5°	219.9	287.5	403.2	475.7	966.8	1329.6	1538.0	1678.8	1633.5	1334.4	963.0
80°	153.4	198.7	247.0	262.5	448.7	683.2	810.5	872.3	845.2	666.7	431.2
82.5°	111.0	130.3	159.2	168.8	225.7	315.6	375.3	330.9	317.5	246.0	186.2
85°	85.9	83.9	99.4	103.2	132.2	165.0	168.8	131.2	114.9	102.2	104.3
87.5°	60.7	52.1	53.1	54.9	68.5	87.9	85.9	54.1	46.4	49.1	56.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P265943

CATALOG NUMBER: ARCH-AF24-50-D-U-T2U-7027

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	624.2	624.2	624.2	624.2	624.2	624.2	624.2	624.2	624.2	624.2	624.2
2.5°	628.2	629.2	631.0	632.0	633.9	633.9	635.8	636.8	638.8	640.8	641.6
5°	639.8	642.6	646.5	648.3	652.3	655.1	658.9	661.0	664.7	667.7	671.6
7.5°	657.1	662.0	666.7	672.6	678.3	683.2	686.9	691.9	698.5	703.5	706.2
10°	673.5	680.2	688.9	695.6	704.4	711.1	716.8	725.7	733.2	740.1	743.8
12.5°	694.7	703.5	712.0	722.6	734.3	743.0	751.6	763.2	773.8	781.5	785.4
15°	719.8	730.4	740.1	752.6	766.2	777.8	790.1	802.7	810.5	810.5	808.6
17.5°	745.9	754.5	766.2	780.5	799.0	813.3	820.2	822.0	819.2	812.3	807.5
20°	772.0	779.5	792.1	809.6	828.9	831.7	825.0	816.3	807.5	796.0	788.4
22.5°	793.2	803.8	823.0	843.2	844.2	827.9	809.6	795.0	781.5	768.1	753.6
25°	818.1	832.6	858.7	866.4	841.4	810.5	784.4	763.2	741.0	718.9	702.5
27.5°	849.1	870.3	896.4	874.2	825.0	781.5	745.9	714.1	685.0	654.1	635.8
30°	881.9	914.7	920.5	862.6	796.9	741.0	692.8	644.5	607.9	579.9	569.3
32.5°	921.4	963.9	929.1	842.3	759.3	686.0	621.4	563.4	532.6	515.3	510.3
35°	981.3	1016.1	934.0	821.1	715.9	620.4	539.3	493.0	473.8	462.2	456.3
37.5°	1067.1	1066.2	933.0	795.0	665.7	549.0	473.8	441.0	425.4	415.8	405.2
40°	1167.4	1104.7	927.2	757.5	598.2	480.6	428.4	397.5	383.0	371.4	359.0
42.5°	1266.9	1130.8	910.8	701.4	514.3	431.2	395.7	367.5	352.1	339.6	322.2
45°	1352.8	1141.4	879.0	624.2	439.0	392.6	374.4	350.2	332.0	312.6	299.1
47.5°	1420.3	1139.5	827.9	533.6	388.8	365.7	356.9	340.5	318.4	294.3	276.9
50°	1477.3	1125.0	758.3	453.5	355.1	341.5	338.8	333.8	298.1	277.8	267.2
52.5°	1529.4	1103.7	684.1	399.4	326.2	314.5	320.3	315.6	290.4	273.1	262.5
55°	1600.7	1089.4	610.8	358.0	292.4	289.4	294.3	301.0	285.7	269.2	257.6
57.5°	1684.6	1097.0	554.9	311.6	260.5	262.5	278.8	288.4	280.8	263.5	251.9
60°	1781.1	1120.1	505.6	267.2	234.5	239.3	263.5	276.9	276.0	255.7	242.2
62.5°	1889.1	1144.4	427.5	233.5	212.3	219.9	245.1	262.5	265.3	247.9	231.6
63°	1910.4	1146.2	407.2	226.7	208.3	217.1	240.2	258.6	262.5	246.0	229.6
65°	1962.5	1128.9	328.1	208.3	193.0	202.6	225.7	242.2	249.9	235.4	221.9
67.5°	1919.0	987.1	247.0	186.2	180.4	187.1	207.5	222.9	229.6	222.9	209.3
70°	1755.1	717.8	193.0	165.9	166.9	171.8	187.1	201.7	209.3	207.5	194.9
72.5°	1413.6	407.2	161.2	148.6	151.5	157.3	168.0	181.4	188.1	187.1	178.6
75°	931.2	208.3	136.1	133.2	135.0	139.9	147.6	158.2	165.9	165.0	161.2
77.5°	461.2	144.7	116.8	117.7	118.7	122.4	128.3	138.0	142.8	143.8	142.8
80°	190.1	112.8	100.3	101.2	102.2	105.2	109.1	117.7	120.6	122.4	123.4
82.5°	113.8	85.9	80.0	82.0	83.0	85.9	88.8	96.5	99.4	102.2	102.2
85°	75.3	59.8	57.9	59.8	61.8	63.7	64.7	69.4	74.3	78.2	80.0
87.5°	40.6	35.8	34.8	35.8	35.8	37.5	39.5	44.3	50.1	54.1	56.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P265943

CATALOG NUMBER: ARCH-AF24-50-D-U-T2U-7027

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	624.2	624.2	624.2	624.2	624.2
2.5°	639.8	640.8	639.8	640.8	641.6
5°	671.6	673.5	672.6	672.6	676.3
7.5°	708.3	712.0	712.0	714.1	715.9
10°	747.7	751.6	754.5	754.5	757.5
12.5°	787.4	789.3	792.1	792.1	792.1
15°	807.5	806.6	805.7	804.7	804.7
17.5°	804.7	800.7	799.0	796.9	798.0
20°	783.4	776.8	774.8	772.0	773.8
22.5°	746.9	737.1	733.2	728.4	730.4
25°	691.9	680.2	678.3	672.6	675.3
27.5°	628.2	622.3	621.4	620.4	625.2
30°	568.3	570.2	571.2	573.1	578.0
32.5°	513.3	517.2	518.1	519.1	525.9
35°	459.3	454.5	459.3	457.3	463.2
37.5°	400.5	396.5	392.6	387.9	391.8
40°	351.1	344.5	332.9	327.2	328.1
42.5°	312.6	303.9	294.3	288.4	288.4
45°	287.5	276.9	268.2	264.5	264.5
47.5°	268.2	263.5	258.6	255.7	255.7
50°	260.5	254.7	251.9	249.9	249.9
52.5°	254.7	248.9	246.0	244.1	242.2
55°	249.9	241.3	238.3	237.3	237.3
57.5°	243.1	235.4	231.6	230.7	230.7
60°	232.5	226.7	222.9	221.9	221.9
62.5°	221.9	216.1	212.3	212.3	212.3
63°	219.9	213.3	210.4	210.4	210.4
65°	211.3	204.5	201.7	201.7	200.7
67.5°	199.8	193.0	191.0	191.0	189.2
70°	186.2	180.4	178.6	179.5	175.6
72.5°	172.7	166.9	164.0	164.0	160.2
75°	157.3	151.5	147.6	146.7	142.8
77.5°	139.9	135.0	131.2	127.4	125.5
80°	121.6	117.7	112.8	110.0	107.1
82.5°	102.2	98.5	95.5	99.4	84.9
85°	80.0	76.3	72.4	78.2	60.7
87.5°	58.8	57.0	53.1	46.4	40.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)