

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: P231116

Luminaire Tested: **ARCH-M-AF48-60-D-U-T2R-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231116
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-60-D-U-T2R-7050-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 405mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7114 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - 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

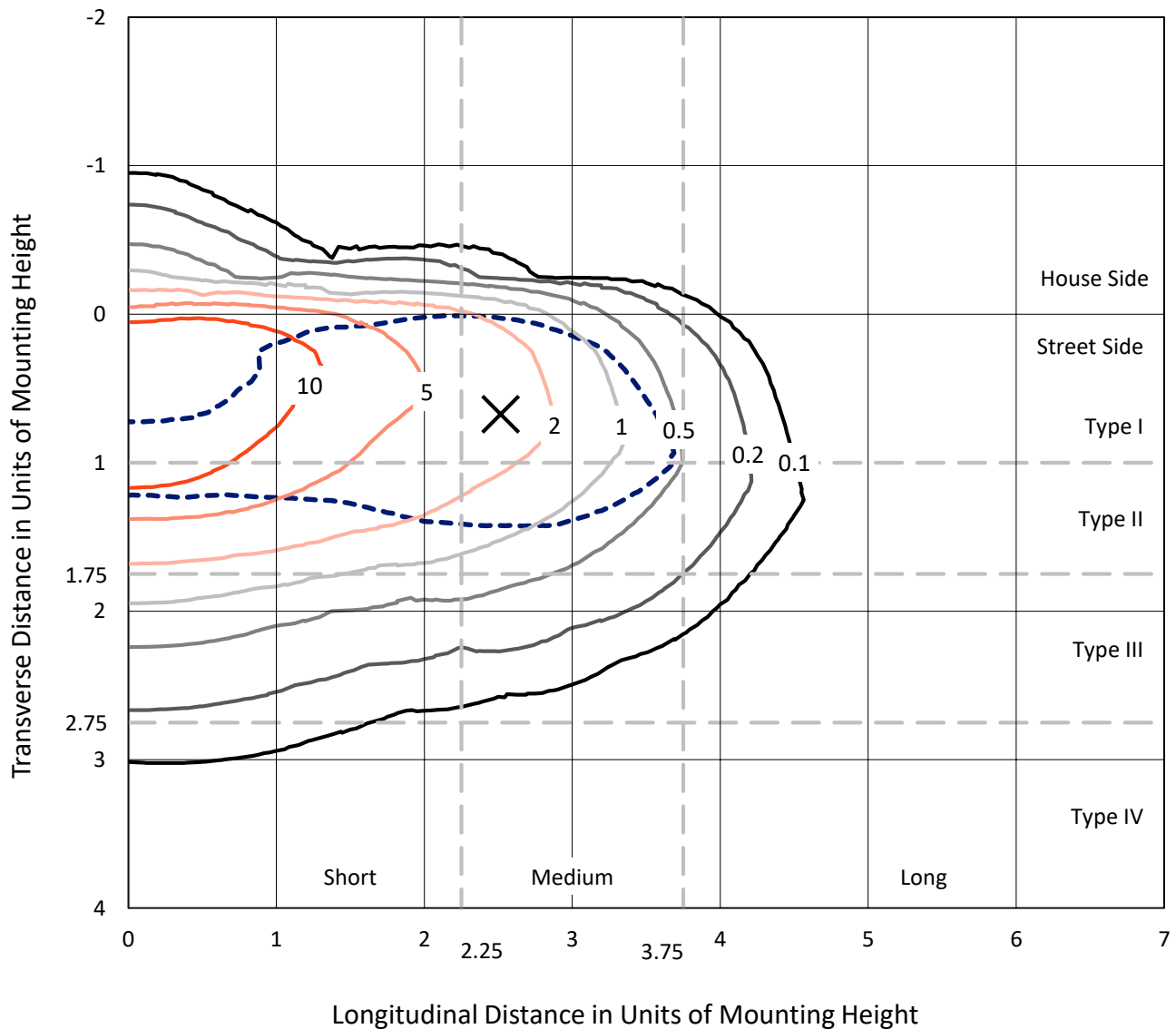


REPORT NUMBER: P231116

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T2R-7050-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

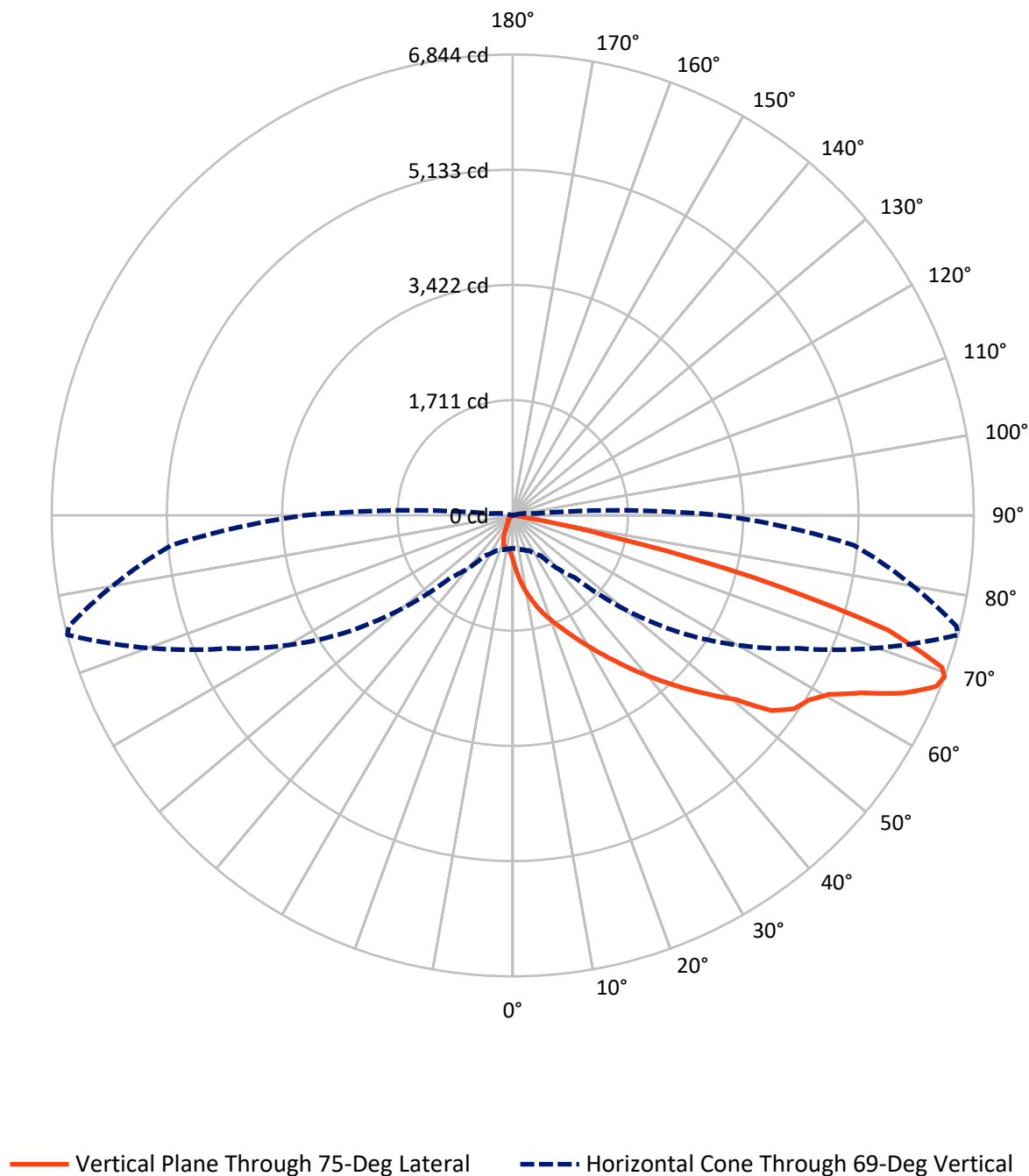


Based on 10 foot mounting height. Maximum calculated value = 18.1 fc
Type II - Medium - Full Cutoff

REPORT NUMBER: P231116

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T2R-7050-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P231116

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T2R-7050-HSS

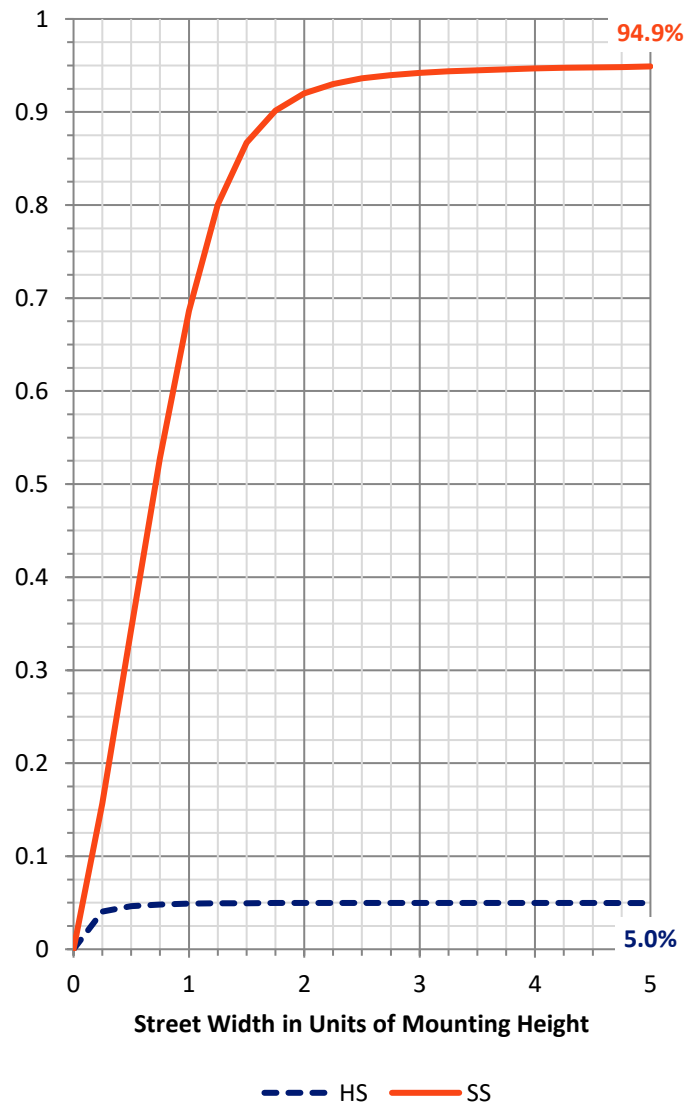
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	354.9	0.0	354.9
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	6759.1	0.0	6759.1
	% Fixture	95.0	0.0	95.0
Total	Lumens	7114.0	0.0	7114.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.2	1.1
10°-20°	276.0	3.9
20°-30°	526.8	7.4
30°-40°	945.0	13.3
40°-50°	1447.8	20.4
50°-60°	1682.7	23.7
60°-70°	1490.1	20.9
70°-80°	642.7	9.0
80°-90°	25.7	0.4
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°	7114.0	100.0
0°-180°	7114.0	100.0

Coefficient of Utilization



REPORT NUMBER: P231116

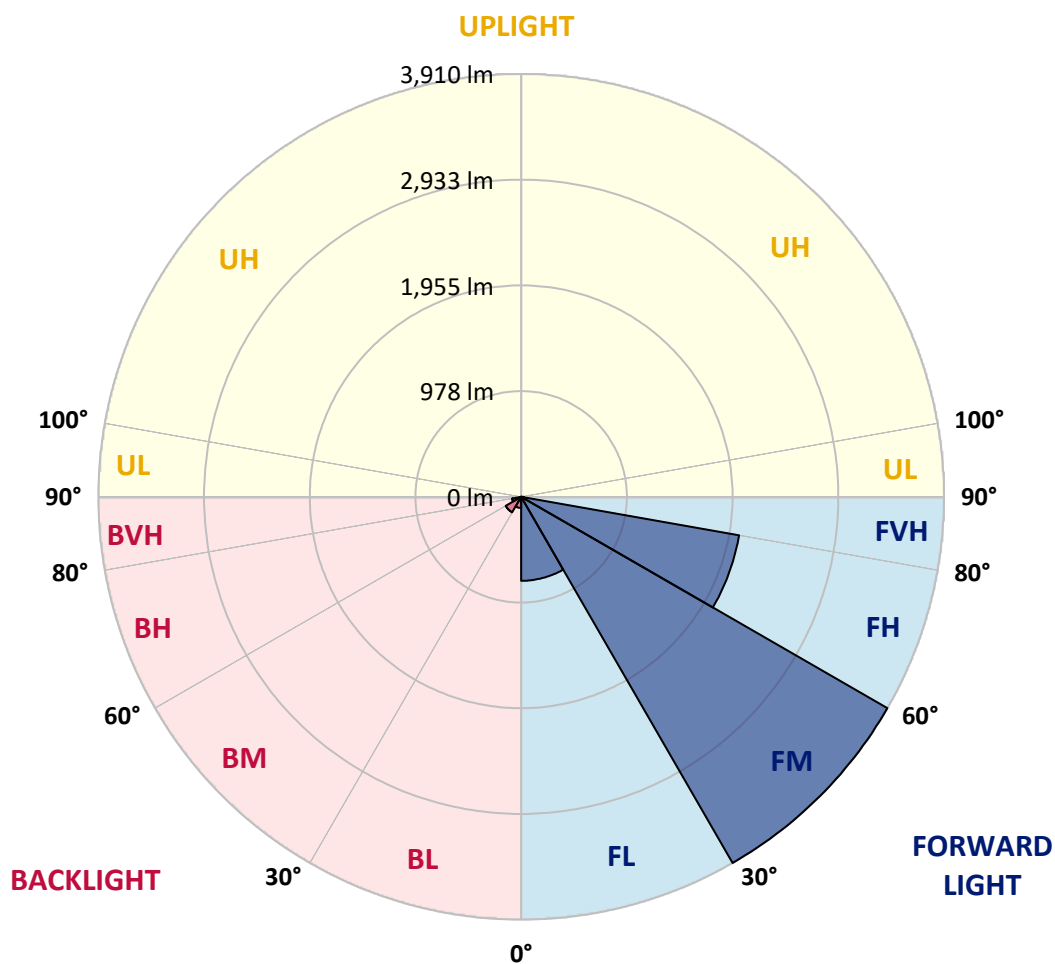
CATALOG NUMBER: ARCH-M-AF48-60-D-U-T2R-7050-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	776.9	10.9			
FM	(30°-60°)	3910.0	55.0			
FH	(60°-80°)	2046.8	28.8			G2/5000
FVH	(80°-90°)	25.4	0.4			G1/100
BL	(0°-30°)	103.1	1.4	B0/110		
BM	(30°-60°)	165.5	2.3	B0/220		
BH	(60°-80°)	86.0	1.2	B0/110		G0/110
BVH	(80°-90°)	0.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G2

Type II Medium





REPORT NUMBER: P231116

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T2R-7050-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	662.0	662.0	662.0	662.0	662.0	662.0	662.0	662.0	662.0	662.0	662.0
2.5°	1090.5	1079.7	1069.0	1056.7	1029.0	981.4	921.5	857.0	777.1	763.3	698.8
5°	1323.9	1319.3	1308.6	1291.7	1260.9	1208.7	1141.1	1045.9	912.3	889.3	752.6
7.5°	1488.2	1485.2	1476.0	1456.0	1428.3	1376.1	1305.5	1202.6	1047.5	1021.3	820.1
10°	1635.7	1634.2	1626.5	1608.0	1580.4	1523.6	1448.3	1340.8	1176.5	1147.3	898.5
12.5°	1769.3	1770.8	1767.8	1758.6	1738.6	1684.8	1598.8	1482.1	1300.9	1268.6	992.2
15°	1847.6	1852.2	1864.5	1883.0	1889.1	1846.1	1757.0	1628.0	1428.3	1400.7	1099.7
17.5°	1821.5	1826.1	1864.5	1927.5	1987.4	1993.5	1913.7	1766.2	1554.3	1526.6	1205.6
20°	1758.6	1764.7	1804.6	1890.6	2007.4	2088.8	2056.5	1916.8	1674.1	1640.3	1307.0
22.5°	1829.2	1829.2	1841.5	1893.7	1999.7	2127.2	2170.2	2067.3	1797.0	1755.5	1408.4
25°	2071.9	2067.3	2041.2	2019.7	2053.4	2167.1	2256.2	2220.9	1941.3	1893.7	1515.9
27.5°	2379.0	2400.5	2351.4	2273.1	2196.3	2245.4	2333.0	2372.9	2101.1	2051.9	1626.5
30°	2723.1	2732.3	2673.9	2569.5	2434.3	2386.7	2423.6	2503.4	2274.6	2220.9	1741.7
32.5°	3033.3	3025.6	2976.5	2867.4	2700.0	2597.1	2540.3	2607.9	2463.5	2402.1	1859.9
35°	3308.2	3314.4	3254.5	3128.5	2964.2	2855.2	2720.0	2726.1	2675.5	2604.8	1996.6
37.5°	3555.5	3544.8	3487.9	3362.0	3213.0	3094.8	2951.9	2849.0	2907.4	2833.7	2150.2
40°	3756.7	3746.0	3686.1	3563.2	3423.4	3326.7	3214.6	3013.4	3151.6	3067.1	2314.5
42.5°	3916.4	3904.2	3853.5	3735.2	3600.1	3514.0	3460.3	3216.1	3412.7	3328.2	2498.8
45°	3994.8	3984.0	3953.3	3864.2	3746.0	3670.7	3696.8	3449.5	3692.2	3621.6	2701.6
47.5°	3902.6	3898.0	3933.3	3918.0	3850.4	3810.5	3901.1	3704.5	3985.6	3916.4	2935.0
50°	3623.1	3630.8	3733.7	3861.1	3893.4	3941.0	4068.5	3973.3	4300.4	4226.7	3203.8
52.5°	2933.5	2985.7	3296.0	3603.1	3841.2	4020.9	4265.1	4357.2	4813.4	4741.2	3623.1
55°	2190.1	2211.6	2549.5	3074.8	3630.8	4014.7	4411.0	4583.0	5066.8	4993.1	3733.7
57.5°	1737.1	1744.7	1912.1	2448.2	3197.7	3876.5	4487.8	4664.4	5177.4	5115.9	3898.0
60°	1363.8	1373.1	1494.4	1863.0	2587.9	3503.3	4377.2	4735.1	5393.9	5344.8	4185.2
62.5°	1061.3	1070.5	1144.2	1360.8	1941.3	2928.9	4154.5	4848.7	5805.5	5782.5	4655.2
65°	821.7	824.8	875.4	976.8	1371.5	2306.9	3882.7	4954.7	6361.5	6341.6	5036.1
67.5°	606.7	611.3	646.6	709.6	926.1	1657.2	3437.3	4873.3	6780.8	6722.5	5174.3
69°	489.9	494.5	525.3	575.9	731.1	1305.5	3030.2	4672.1	6843.8	6788.5	5086.8
70°	419.3	422.4	453.1	496.1	623.6	1108.9	2707.7	4498.5	6760.8	6707.1	4887.1
72.5°	268.8	284.1	314.9	342.5	413.1	734.1	1827.7	3730.6	5833.2	5741.0	3827.4
75°	149.0	153.6	208.9	242.7	274.9	477.7	1016.7	2326.8	3710.6	3646.1	2047.3
77.5°	122.9	125.9	147.4	184.3	184.3	267.2	384.0	916.9	1411.5	1273.2	554.4
80°	86.0	89.1	112.1	121.3	132.1	150.5	124.4	201.2	218.1	193.5	82.9
82.5°	59.9	63.0	76.8	99.8	106.0	70.6	46.1	59.9	63.0	63.0	32.3
85°	10.8	15.4	56.8	82.9	63.0	21.5	26.1	21.5	20.0	21.5	7.7
87.5°	0.0	0.0	35.3	39.9	33.8	9.2	10.8	7.7	4.6	6.1	3.1
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: P231116

CATALOG NUMBER: ARCH-M-AF48-60-D-U-T2R-7050-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	662.0	662.0	662.0	662.0	662.0	662.0	662.0	662.0	662.0	662.0	662.0
2.5°	666.6	634.3	579.0	539.1	505.3	479.2	468.4	451.5	439.3	445.4	437.7
5°	685.0	628.2	539.1	482.3	442.3	408.5	380.9	359.4	342.5	339.4	336.4
7.5°	714.2	632.8	516.0	445.4	385.5	333.3	290.3	258.0	233.5	233.5	224.2
10°	754.1	645.1	502.2	408.5	319.5	248.8	205.8	175.1	162.8	161.3	158.2
12.5°	809.4	668.1	491.5	360.9	248.8	181.2	155.1	144.4	139.8	138.2	136.7
15°	884.7	701.9	479.2	302.6	188.9	149.0	138.2	129.0	124.4	122.9	121.3
17.5°	956.8	732.6	453.1	242.7	153.6	135.2	122.9	115.2	109.0	107.5	107.5
20°	1024.4	758.7	408.5	188.9	138.2	121.3	109.0	99.8	93.7	92.2	92.2
22.5°	1095.1	780.2	353.2	153.6	125.9	107.5	95.2	86.0	79.9	78.3	76.8
25°	1170.3	795.6	290.3	136.7	113.7	95.2	81.4	73.7	69.1	67.6	66.0
27.5°	1251.7	801.7	230.4	124.4	99.8	82.9	70.6	63.0	59.9	58.4	58.4
30°	1325.4	795.6	178.2	110.6	87.5	72.2	61.4	55.3	52.2	50.7	50.7
32.5°	1402.2	780.2	142.8	98.3	76.8	61.4	52.2	47.6	46.1	44.5	44.5
35°	1483.6	760.2	122.9	87.5	66.0	53.8	46.1	43.0	41.5	39.9	39.9
37.5°	1578.9	735.7	112.1	78.3	58.4	47.6	39.9	38.4	36.9	36.9	36.9
40°	1686.4	705.0	104.4	70.6	52.2	41.5	35.3	33.8	32.3	32.3	32.3
42.5°	1800.0	669.6	96.8	63.0	46.1	35.3	30.7	30.7	29.2	29.2	27.6
45°	1927.5	634.3	89.1	55.3	39.9	30.7	26.1	24.6	24.6	23.0	23.0
47.5°	2078.0	602.1	81.4	49.1	35.3	26.1	23.0	21.5	20.0	18.4	18.4
50°	2290.0	599.0	72.2	43.0	32.3	21.5	18.4	16.9	15.4	13.8	13.8
52.5°	2500.4	571.3	61.4	35.3	26.1	18.4	13.8	12.3	10.8	10.8	9.2
55°	2548.0	525.3	53.8	30.7	20.0	13.8	10.8	7.7	7.7	6.1	6.1
57.5°	2652.4	503.8	46.1	24.6	15.4	10.8	6.1	4.6	4.6	4.6	4.6
60°	2858.2	497.6	39.9	21.5	10.8	7.7	4.6	3.1	3.1	1.5	1.5
62.5°	3142.4	491.5	33.8	18.4	7.7	4.6	3.1	1.5	0.0	0.0	0.0
65°	3299.0	450.0	27.6	13.8	6.1	4.6	1.5	0.0	0.0	0.0	0.0
67.5°	3257.6	371.7	24.6	9.2	4.6	3.1	1.5	0.0	0.0	0.0	0.0
69°	3084.0	313.3	20.0	7.7	4.6	3.1	1.5	0.0	0.0	0.0	0.0
70°	2875.1	270.3	18.4	6.1	3.1	1.5	1.5	0.0	0.0	0.0	0.0
72.5°	2041.2	141.3	12.3	4.6	3.1	1.5	0.0	0.0	0.0	0.0	0.0
75°	953.8	63.0	7.7	3.1	1.5	1.5	0.0	0.0	0.0	0.0	0.0
77.5°	210.4	29.2	4.6	3.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	39.9	10.8	3.1	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	13.8	4.6	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.6	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)