

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: P841875

Luminaire Tested: **ARCH4-240-727-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841875
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-240-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 940mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34591 lumens
Efficiency: N/A
Efficacy: 144.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G4

Input Watts (W): 240.2
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: 24 FT



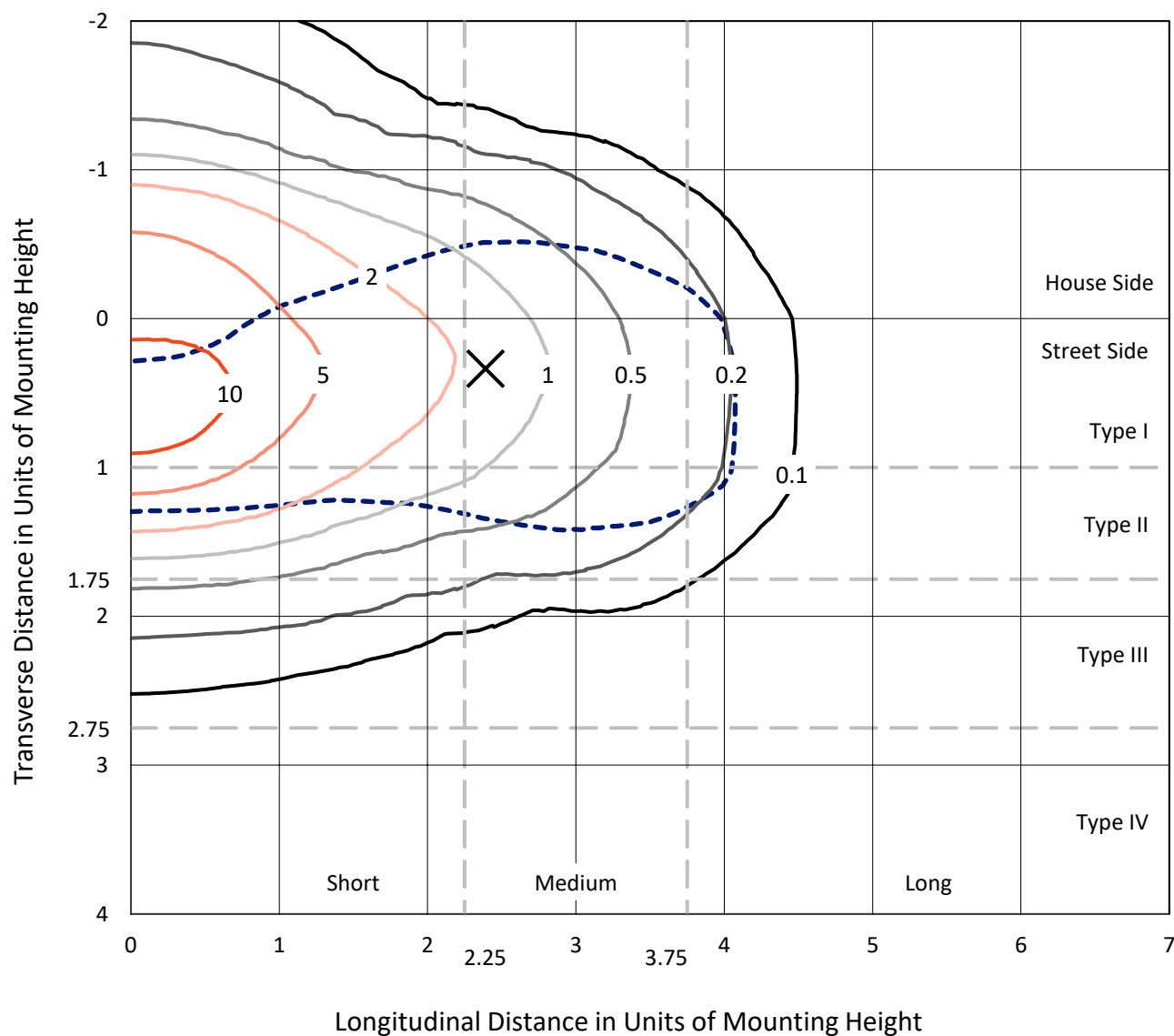
REPORT NUMBER: P841875

CATALOG NUMBER: ARCH4-240-727-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

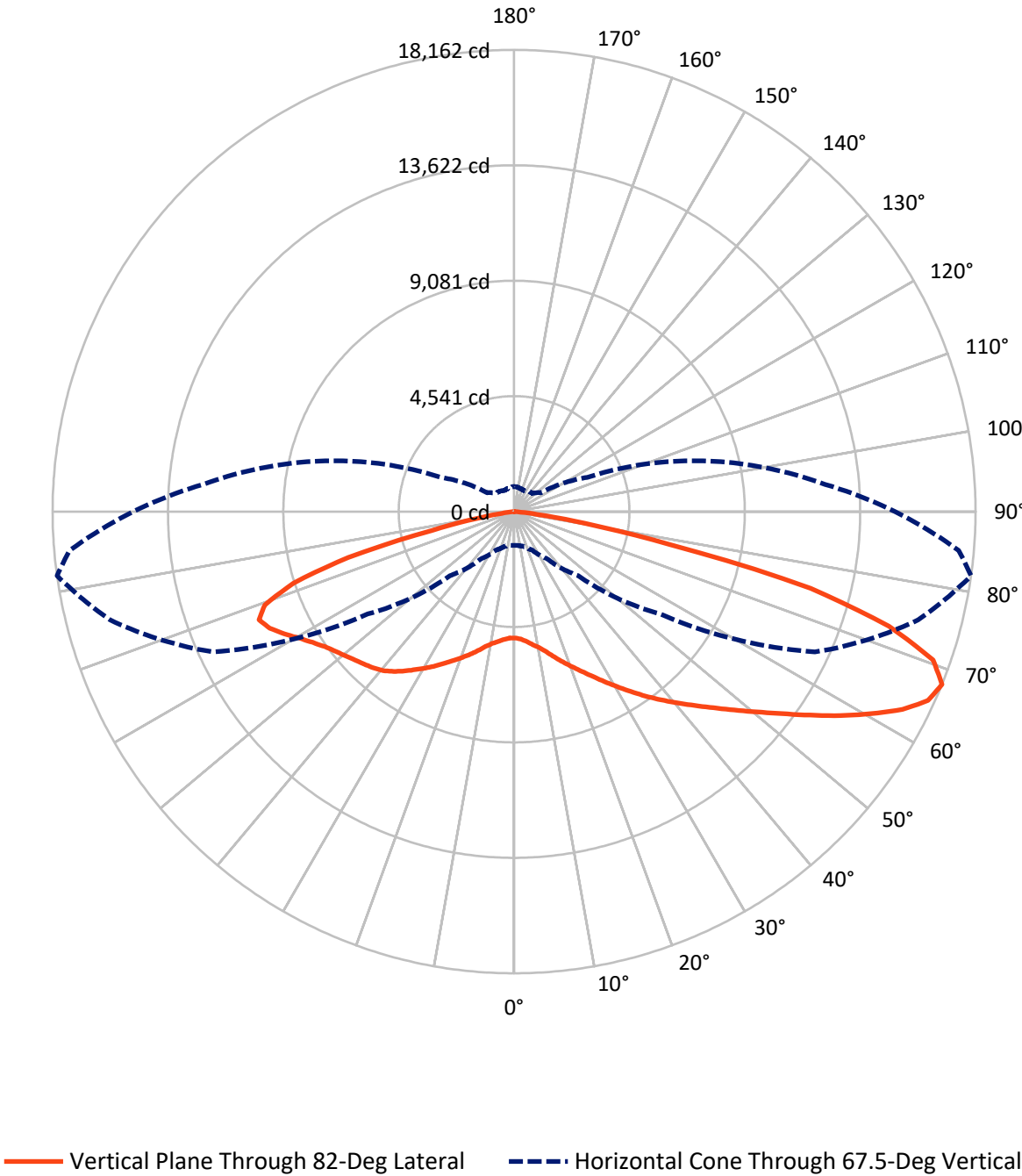
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.3 fc
Type II - Medium - N/A

REPORT NUMBER: P841875
CATALOG NUMBER: ARCH4-240-727-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P841875

CATALOG NUMBER: ARCH4-240-727-U-T2R

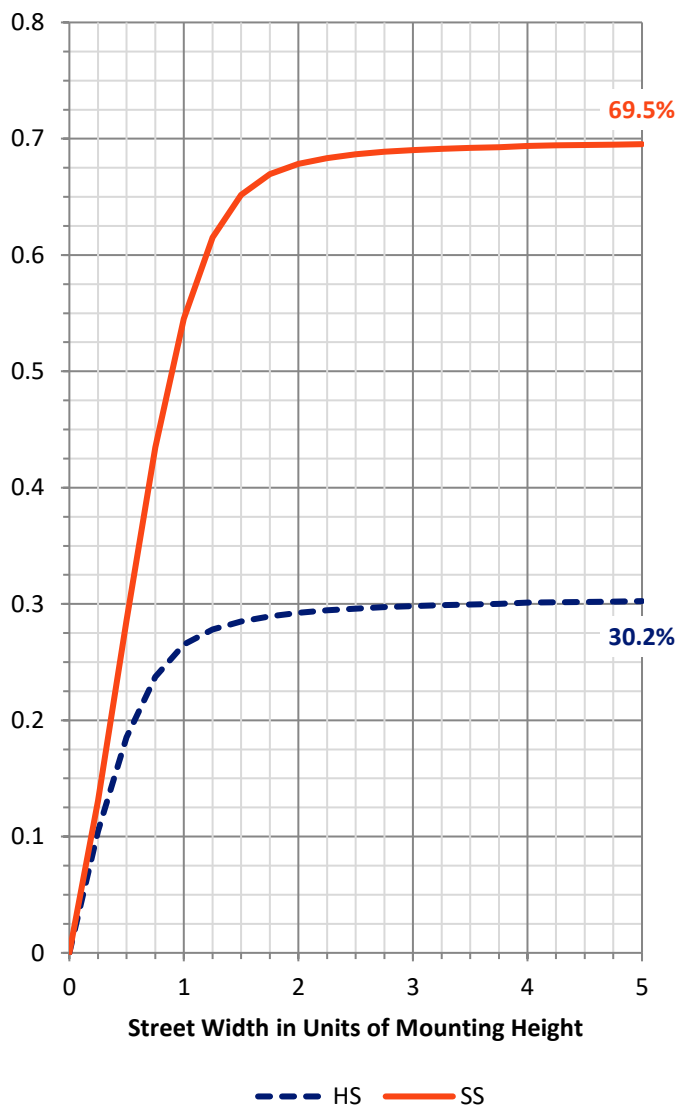
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10534.4	0.0	10534.4
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	24056.6	0.0	24056.6
	% Fixture	69.5	0.0	69.5
Total	Lumens	34591.0	0.0	34591.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	513.9	1.5
10°-20°	1851.0	5.4
20°-30°	3720.1	10.8
30°-40°	5843.7	16.9
40°-50°	7118.9	20.6
50°-60°	6726.4	19.4
60°-70°	5554.5	16.1
70°-80°	3024.7	8.7
80°-90°	237.8	0.7
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°	34591.0	100.0
0°-180°	34591.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841875

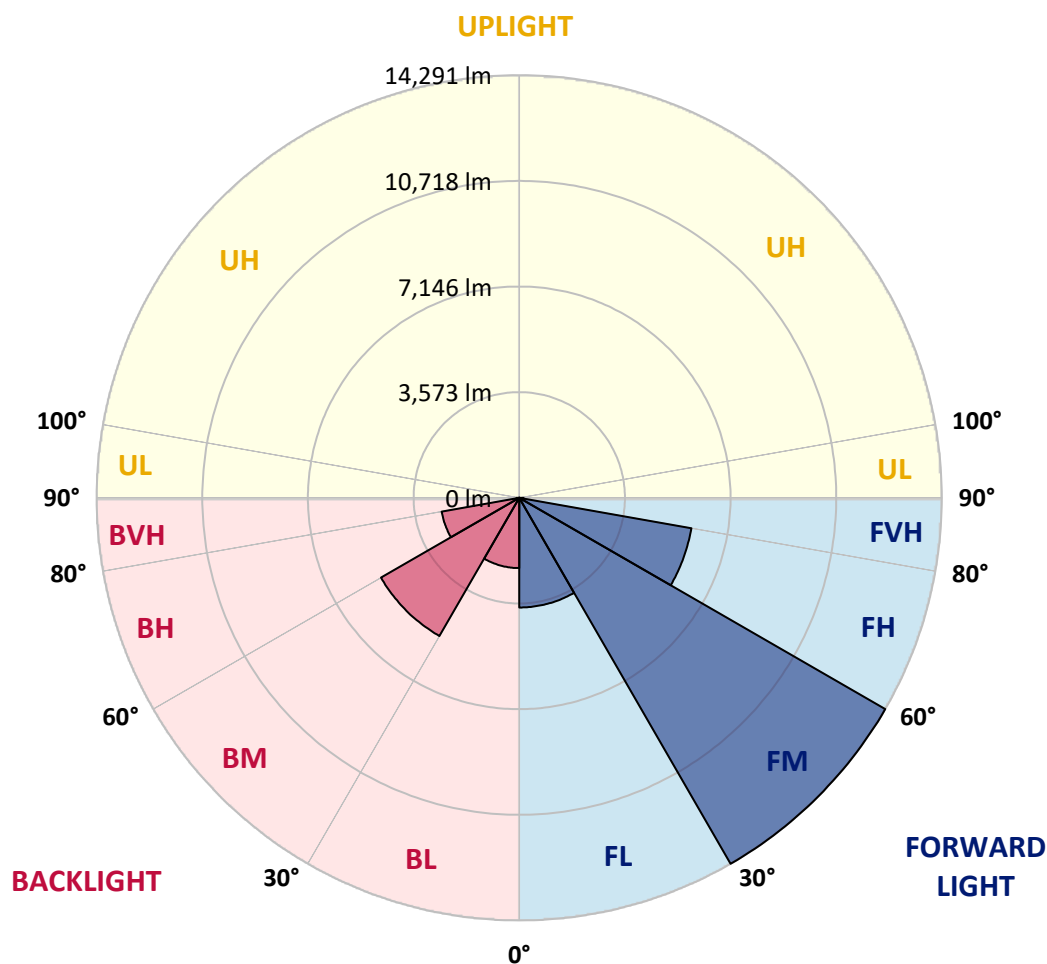
CATALOG NUMBER: ARCH4-240-727-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3709.4	10.7			
FM	(30°-60°)	14291.0	41.3			
FH	(60°-80°)	5912.9	17.1			G3/7500
FVH	(80°-90°)	143.3	0.4			G2/225
BL	(0°-30°)	2375.6	6.9	B3/2500		
BM	(30°-60°)	5398.0	15.6	B4/8500		
BH	(60°-80°)	2666.3	7.7	B4/5000		G4/5000
BVH	(80°-90°)	94.5	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Medium



REPORT NUMBER: P841875

CATALOG NUMBER: ARCH4-240-727-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4972.4	4972.4	4972.4	4972.4	4972.4	4972.4	4972.4	4972.4	4972.4	4972.4	4972.4
2.5°	5198.5	5198.5	5238.6	5238.6	5203.5	5148.2	5133.2	5072.9	5017.6	5017.6	5022.7
5°	5695.7	5690.7	5720.8	5680.6	5595.2	5484.8	5409.4	5278.8	5168.3	5133.2	5128.1
7.5°	6303.4	6298.4	6313.5	6248.2	6087.5	5906.7	5756.0	5545.0	5364.2	5288.9	5268.8
10°	6981.5	6976.5	6961.4	6850.9	6634.9	6353.7	6127.7	5836.3	5565.1	5444.6	5419.5
12.5°	7760.0	7750.0	7714.8	7554.1	7257.8	6896.1	6569.6	6192.9	5831.3	5665.6	5610.3
15°	8628.9	8613.9	8548.6	8352.7	7955.9	7498.8	7076.9	6594.8	6152.8	5936.8	5861.5
17.5°	9543.1	9543.1	9442.6	9151.3	8709.3	8141.7	7619.4	7006.6	6489.3	6223.1	6132.7
20°	10472.3	10467.2	10341.7	9990.1	9467.7	8814.8	8151.8	7478.7	6835.8	6514.4	6403.9
22.5°	11451.7	11441.6	11285.9	10884.1	10261.3	9523.0	8749.5	7945.9	7217.6	6830.8	6690.2
25°	12576.8	12561.7	12370.8	11878.6	11140.3	10306.5	9422.5	8493.3	7654.5	7182.4	7016.7
27.5°	13772.1	13752.1	13526.0	12953.5	12144.8	11140.3	10165.9	9126.2	8136.7	7574.2	7388.3
30°	14837.0	14821.9	14575.8	13988.1	13058.9	11969.0	10874.1	9759.0	8644.0	7991.1	7760.0
32.5°	15640.6	15640.6	15419.6	14842.0	13877.6	12762.6	11587.3	10356.7	9171.4	8438.1	8166.9
35°	16127.8	16142.8	15952.0	15489.9	14580.8	13511.0	12325.6	11059.9	9733.9	8915.2	8623.9
37.5°	16198.1	16248.3	16137.8	15826.4	15068.0	14133.8	13048.9	11738.0	10316.6	9397.4	9070.9
40°	15871.6	15906.8	15911.8	15791.3	15268.9	14580.8	13686.8	12456.2	10934.3	9904.7	9528.0
42.5°	15218.7	15243.8	15289.0	15324.2	15123.2	14776.7	14174.0	13124.2	11592.3	10422.0	9980.0
45°	14374.9	14369.8	14445.2	14595.9	14585.8	14666.2	14445.2	13732.0	12275.4	11009.7	10482.3
47.5°	13114.2	13089.1	13355.3	13696.8	13867.6	14244.3	14450.2	14209.1	13018.7	11657.6	11054.9
50°	11140.3	11115.2	11697.8	12501.4	13003.7	13576.3	14174.0	14495.4	13797.3	12385.9	11677.7
52.5°	8739.4	8714.3	9452.7	10859.0	11953.9	12787.7	13616.4	14560.7	14535.6	13199.6	12380.9
55°	6499.3	6479.2	7197.5	8719.3	10492.3	11873.6	12933.4	14389.9	15228.7	14133.8	13234.7
57.5°	4580.7	4570.6	5193.4	6454.1	8613.9	10758.5	12275.4	14058.4	15866.6	15148.4	14199.1
60°	3214.5	3199.4	3651.5	4625.9	6514.4	9076.0	11622.4	13616.4	16343.8	16147.9	15223.7
62.5°	2164.8	2154.7	2476.2	3289.8	4625.9	6986.5	10633.0	13320.1	16615.0	17152.4	16258.4
65°	1642.4	1637.4	1783.0	2230.1	3274.8	5017.6	9060.9	13284.9	16650.1	17905.8	17137.3
67.5°	1326.0	1331.0	1411.4	1667.5	2265.2	3566.1	7026.7	13064.0	16464.3	18162.0	17564.3
70°	1084.9	1084.9	1120.1	1290.8	1672.5	2405.9	4907.1	12059.4	15947.0	17493.9	17057.0
72.5°	828.7	833.8	944.3	1044.7	1260.7	1687.6	3144.2	9980.0	14726.5	15424.6	15093.1
75°	658.0	652.9	718.2	858.9	979.4	1205.4	1928.7	7157.3	12531.5	12054.4	11843.4
77.5°	472.1	467.1	517.3	637.9	743.4	853.9	1150.2	3611.3	6815.8	6263.3	6107.6
80°	321.5	311.4	356.6	442.0	492.2	502.3	562.5	1386.3	2973.4	2802.6	2767.5
82.5°	165.7	165.7	190.9	251.1	256.2	261.2	251.1	447.0	984.4	919.1	879.0
85°	65.3	65.3	70.3	85.4	85.4	90.4	90.4	115.5	105.5	100.5	95.4
87.5°	5.0	5.0	10.0	10.0	15.1	15.1	15.1	20.1	25.1	25.1	25.1
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: P841875

CATALOG NUMBER: ARCH4-240-727-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4972.4	4972.4	4972.4	4972.4	4972.4	4972.4	4972.4	4972.4	4972.4	4972.4	4972.4
2.5°	5012.6	4992.5	4927.2	4912.2	4902.1	4887.1	4892.1	4856.9	4841.8	4846.9	4826.8
5°	5103.0	5067.9	4987.5	4952.3	4942.3	4927.2	4942.3	4917.2	4892.1	4902.1	4892.1
7.5°	5228.6	5178.4	5077.9	5042.8	5037.7	5022.7	5042.8	5022.7	5002.6	5012.6	4992.5
10°	5359.2	5293.9	5183.4	5148.2	5148.2	5143.2	5163.3	5133.2	5113.1	5118.1	5108.1
12.5°	5550.0	5464.7	5344.1	5314.0	5298.9	5314.0	5319.0	5278.8	5243.7	5248.7	5233.6
15°	5781.1	5685.7	5555.1	5509.9	5499.8	5494.8	5474.7	5424.5	5379.3	5374.3	5359.2
17.5°	6032.2	5911.7	5756.0	5710.8	5665.6	5650.5	5600.3	5535.0	5464.7	5464.7	5444.6
20°	6273.3	6137.7	5951.9	5886.6	5821.3	5761.0	5675.6	5570.1	5479.7	5464.7	5444.6
22.5°	6534.5	6373.8	6157.8	6062.4	5946.8	5826.3	5680.6	5540.0	5424.5	5399.4	5384.3
25°	6825.8	6624.9	6368.7	6228.1	6042.3	5856.4	5640.5	5459.6	5324.0	5283.8	5273.8
27.5°	7147.3	6906.2	6594.8	6388.8	6117.6	5826.3	5550.0	5334.1	5168.3	5118.1	5103.0
30°	7473.7	7187.4	6800.7	6499.3	6117.6	5730.9	5384.3	5133.2	4942.3	4872.0	4861.9
32.5°	7800.2	7478.7	6986.5	6559.6	6057.3	5570.1	5168.3	4872.0	4656.0	4570.6	4590.7
35°	8192.0	7800.2	7157.3	6584.7	5956.9	5374.3	4922.2	4575.6	4354.7	4279.3	4294.4
37.5°	8598.8	8121.6	7292.9	6564.6	5816.2	5153.3	4646.0	4309.4	4033.2	3902.6	3917.7
40°	8950.4	8413.0	7388.3	6494.3	5635.4	4902.1	4374.7	3932.7	3551.0	3425.5	3410.4
42.5°	9281.9	8628.9	7438.6	6388.8	5429.5	4610.8	3988.0	3420.4	3038.7	2883.0	2888.0
45°	9628.4	8839.9	7418.5	6248.2	5173.3	4269.3	3490.8	2918.2	2581.6	2441.0	2446.0
47.5°	10025.2	9065.9	7398.4	6097.5	4861.9	3827.3	3013.6	2476.2	2184.9	2084.4	2074.4
50°	10447.1	9317.0	7373.3	5911.7	4515.4	3335.0	2541.5	2064.3	1818.2	1752.9	1737.8
52.5°	10924.3	9588.3	7358.2	5690.7	4098.5	2812.7	2119.6	1702.7	1536.9	1491.7	1486.7
55°	11496.9	9904.7	7378.3	5424.5	3596.2	2320.5	1763.0	1466.6	1356.1	1331.0	1326.0
57.5°	12195.0	10311.5	7438.6	5113.1	3068.8	1893.5	1501.8	1321.0	1250.6	1230.6	1230.6
60°	12953.5	10773.6	7549.1	4761.5	2541.5	1562.0	1331.0	1205.4	1175.3	1200.4	1200.4
62.5°	13772.1	11316.1	7744.9	4334.6	2049.2	1321.0	1195.4	1110.0	1089.9	1140.1	1145.2
65°	14530.6	11843.4	7870.5	3822.2	1627.3	1145.2	1089.9	1014.6	1024.6	1074.9	1069.8
67.5°	14997.7	12280.4	7694.7	3179.3	1290.8	1014.6	979.4	914.1	939.2	979.4	984.4
70°	14711.4	12034.3	6825.8	2400.8	1009.6	884.0	858.9	818.7	838.8	889.0	909.1
72.5°	13310.1	10778.6	5309.0	1622.3	813.7	743.4	753.4	733.3	758.4	803.6	848.8
75°	10803.8	8146.8	3561.1	1039.7	642.9	632.9	647.9	632.9	642.9	688.1	713.2
77.5°	5640.5	3972.9	1773.0	647.9	477.2	492.2	517.3	522.4	552.5	562.5	572.6
80°	2631.9	1788.1	738.3	361.6	316.4	346.6	396.8	401.8	411.9	426.9	431.9
82.5°	858.9	537.4	341.5	195.9	180.8	195.9	256.2	306.4	311.4	341.5	341.5
85°	90.4	55.2	75.3	80.4	70.3	85.4	115.5	110.5	50.2	30.1	30.1
87.5°	25.1	20.1	25.1	25.1	20.1	20.1	15.1	5.0	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)