

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: P230983

Luminaire Tested: **ARCH-M-AF48-160-D-U-5WQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230983
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29597)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-160-D-U-5WQ-7050
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19044 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 161
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



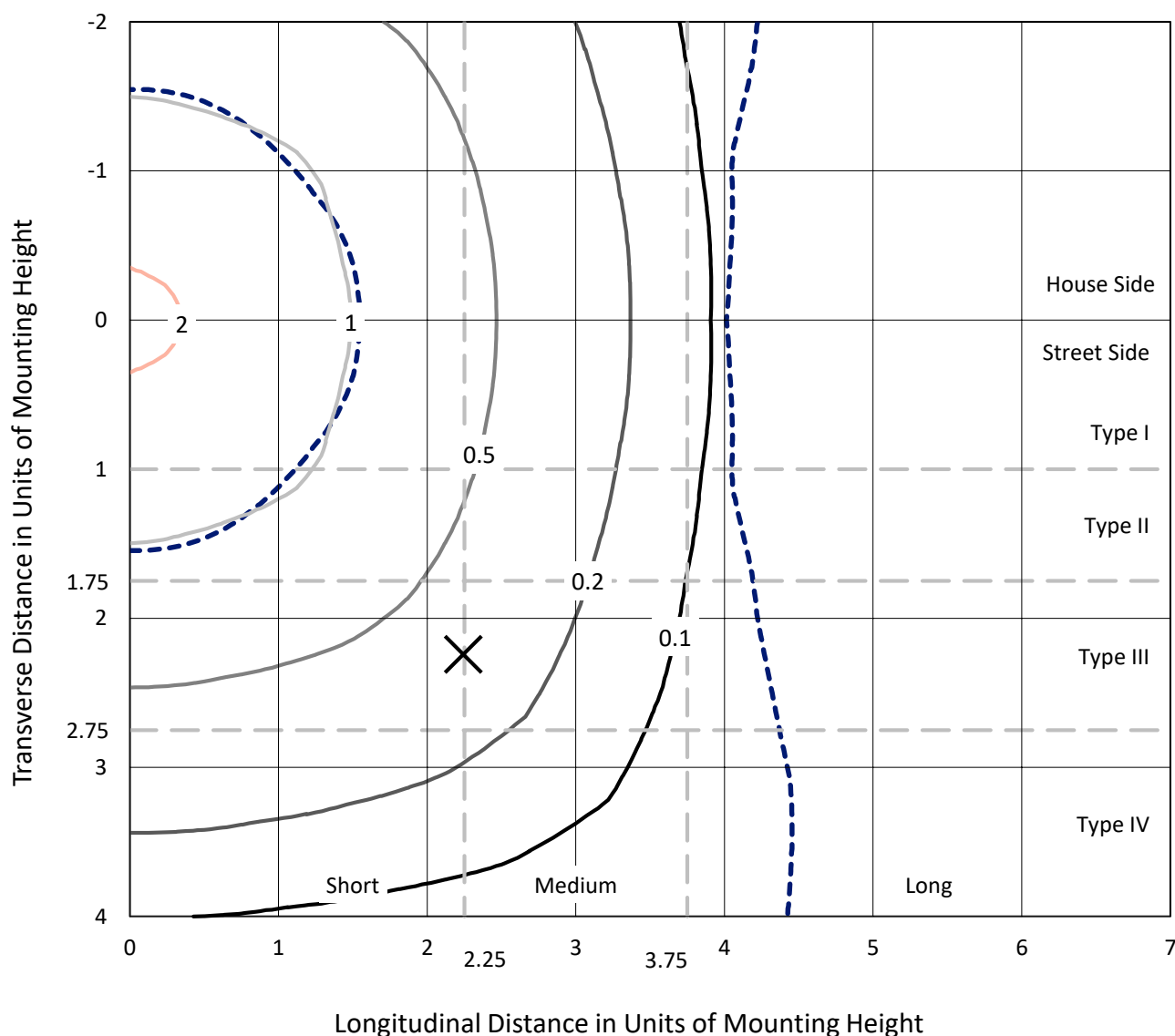
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

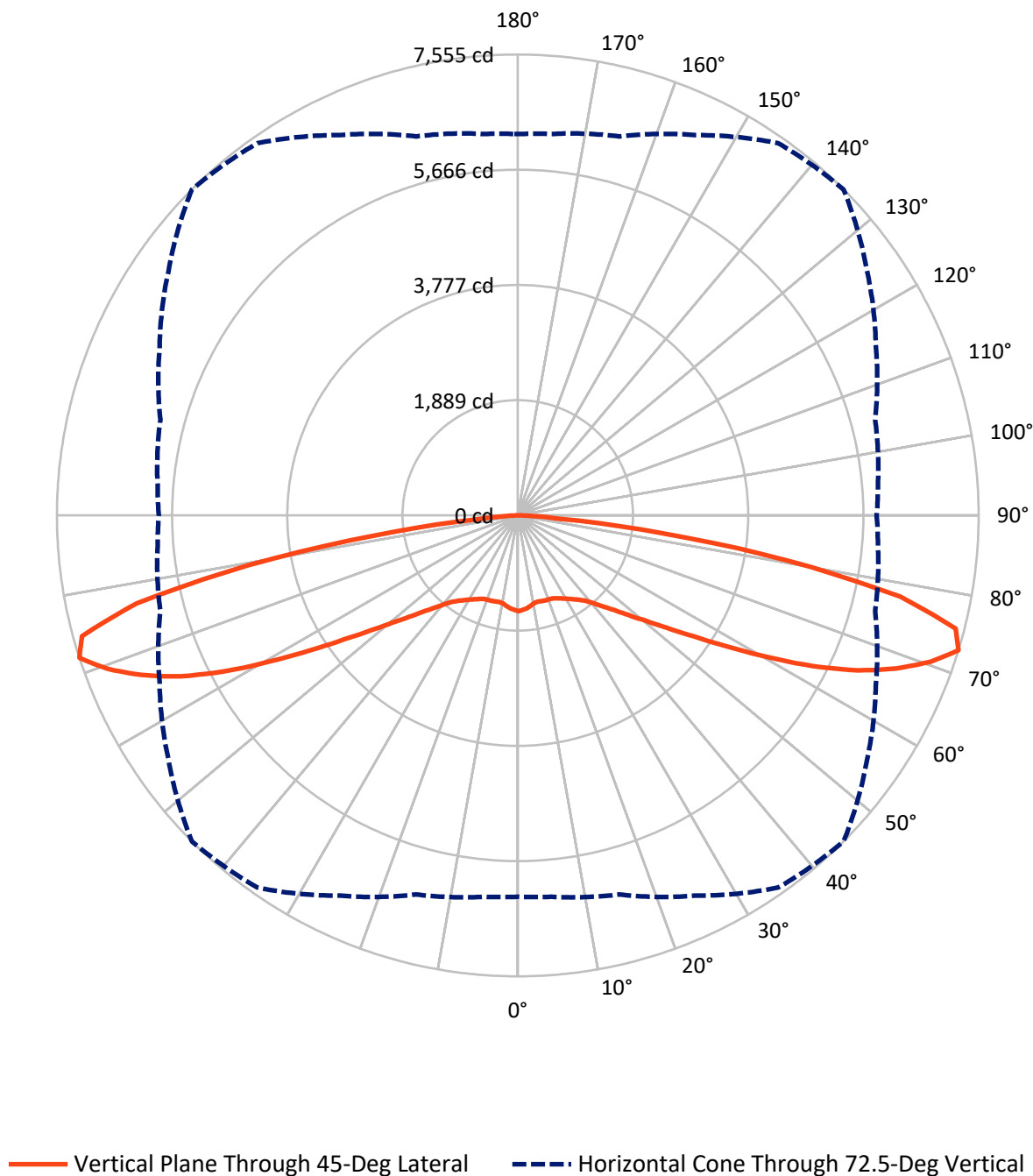


Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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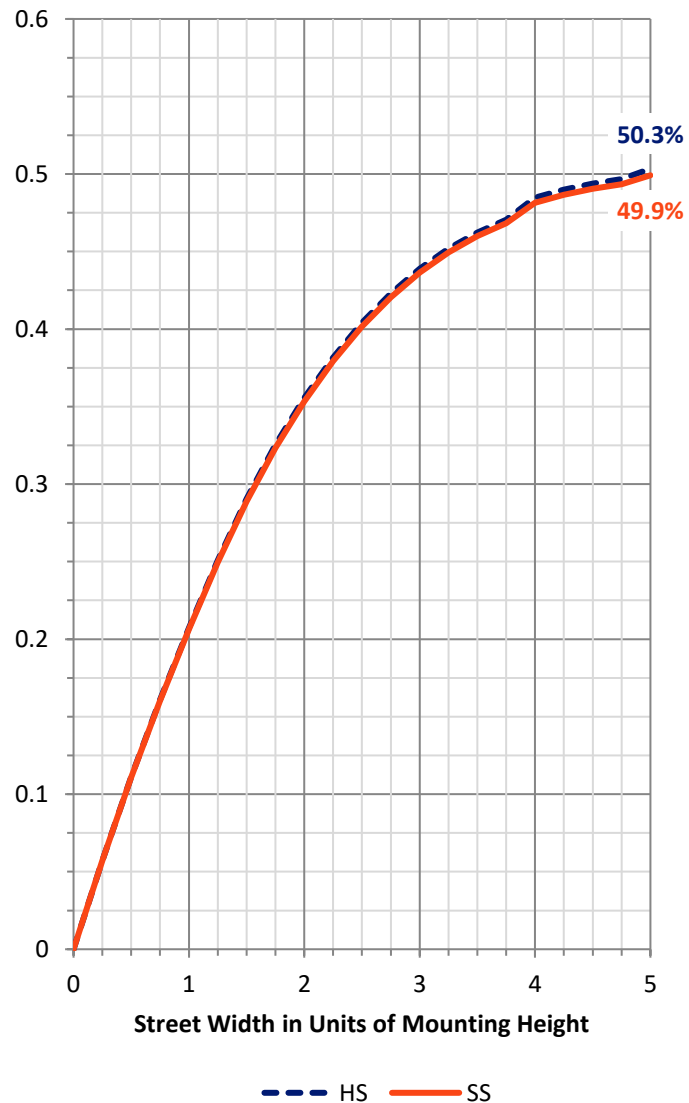
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9522.0	0.0	9522.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9522.0	0.0	9522.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	19044.0	0.0	19044.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.4	0.8
10°-20°	416.7	2.2
20°-30°	697.4	3.7
30°-40°	1071.5	5.6
40°-50°	1774.1	9.3
50°-60°	3154.1	16.6
60°-70°	5518.0	29.0
70°-80°	5614.1	29.5
80°-90°	653.7	3.4
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°	19044.0	100.0
0°-180°	19044.0	100.0

Coefficient of Utilization



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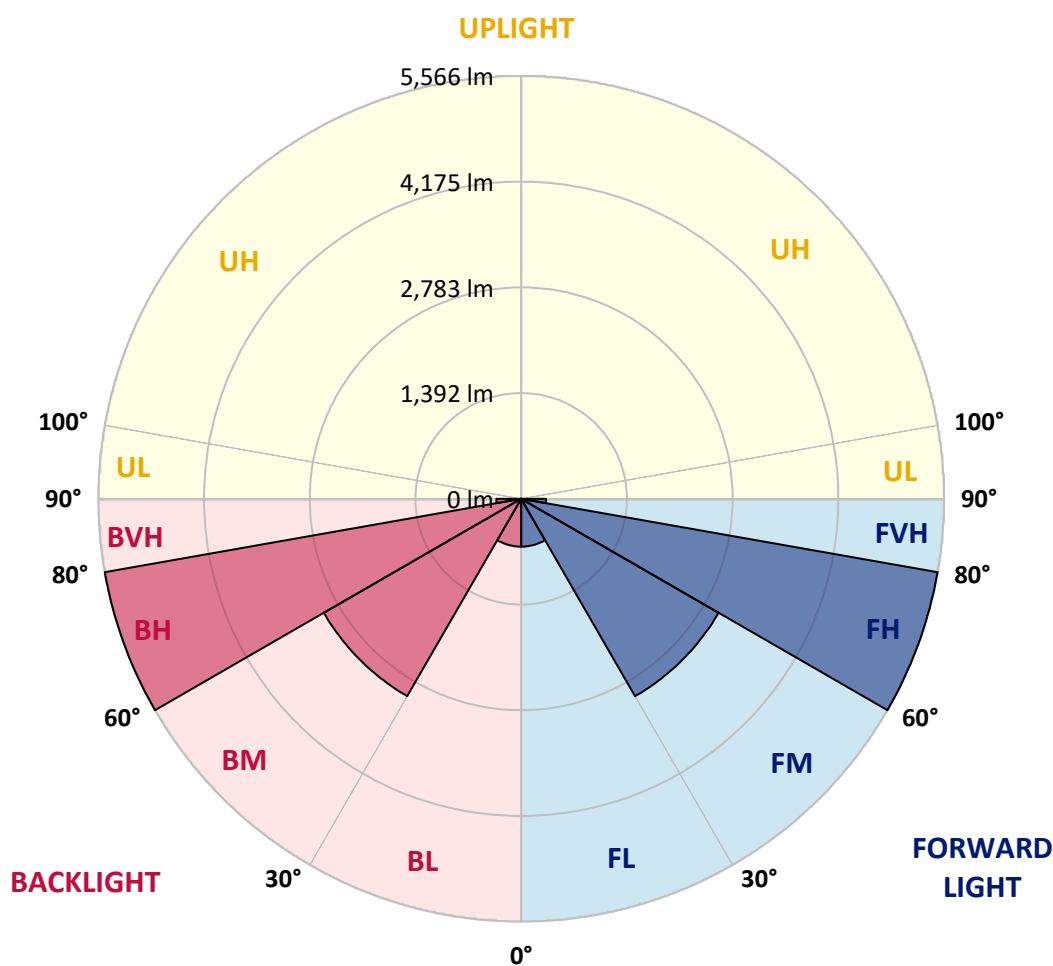
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	629.3	3.3			
FM	(30°-60°)	2999.8	15.8			
FH	(60°-80°)	5566.0	29.2			G3/7500
FVH	(80°-90°)	326.9	1.7			G3/500
BL	(0°-30°)	629.3	3.3	B2/1000		
BM	(30°-60°)	2999.8	15.8	B3/5000		
BH	(60°-80°)	5566.0	29.2	B5		G3/7500
BVH	(80°-90°)	326.9	1.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1569.7	1569.7	1569.7	1569.7	1569.7	1569.7	1569.7	1569.7	1569.7	1569.7	1569.7
2.5°	1555.2	1558.8	1551.5	1551.5	1551.5	1547.9	1551.5	1547.9	1551.5	1555.2	1555.2
5°	1540.7	1540.7	1533.4	1533.4	1533.4	1529.8	1533.4	1533.4	1537.0	1540.7	1540.7
7.5°	1508.0	1508.0	1504.4	1500.8	1497.2	1497.2	1500.8	1500.8	1504.4	1508.0	1508.0
10°	1489.9	1486.3	1479.0	1468.2	1464.5	1460.9	1468.2	1475.4	1486.3	1497.2	1493.5
12.5°	1482.7	1479.0	1464.5	1453.7	1446.4	1450.0	1457.3	1464.5	1482.7	1493.5	1489.9
15°	1489.9	1482.7	1464.5	1446.4	1450.0	1457.3	1464.5	1464.5	1486.3	1497.2	1497.2
17.5°	1489.9	1486.3	1464.5	1450.0	1453.7	1464.5	1468.2	1464.5	1482.7	1500.8	1500.8
20°	1493.5	1493.5	1464.5	1453.7	1457.3	1468.2	1471.8	1468.2	1482.7	1504.4	1504.4
22.5°	1500.8	1497.2	1468.2	1460.9	1468.2	1475.4	1479.0	1475.4	1489.9	1508.0	1511.7
25°	1515.3	1508.0	1482.7	1479.0	1493.5	1504.4	1504.4	1497.2	1504.4	1522.5	1522.5
27.5°	1533.4	1529.8	1500.8	1500.8	1518.9	1540.7	1529.8	1515.3	1522.5	1540.7	1540.7
30°	1566.0	1562.4	1533.4	1533.4	1558.8	1584.2	1558.8	1540.7	1551.5	1569.7	1573.3
32.5°	1613.2	1613.2	1587.8	1580.5	1624.0	1634.9	1624.0	1587.8	1595.0	1620.4	1620.4
35°	1692.9	1685.7	1660.3	1656.7	1700.2	1696.5	1692.9	1660.3	1667.5	1696.5	1696.5
37.5°	1798.0	1794.4	1772.7	1761.8	1783.5	1769.0	1776.3	1761.8	1779.9	1801.7	1805.3
40°	1932.2	1928.6	1910.4	1895.9	1903.2	1881.4	1888.7	1895.9	1914.1	1928.6	1932.2
42.5°	2098.9	2098.9	2080.8	2055.4	2044.6	2033.7	2033.7	2048.2	2066.3	2084.4	2084.4
45°	2305.6	2305.6	2283.8	2258.4	2225.8	2207.7	2214.9	2229.4	2251.2	2272.9	2280.2
47.5°	2548.4	2548.4	2519.4	2494.1	2461.4	2439.7	2439.7	2446.9	2479.6	2497.7	2508.6
50°	2820.3	2809.5	2780.5	2755.1	2737.0	2707.9	2711.6	2707.9	2737.0	2762.3	2769.6
52.5°	3103.1	3099.5	3070.5	3063.2	3074.1	3059.6	3059.6	3023.3	3034.2	3048.7	3045.1
55°	3454.7	3443.8	3418.5	3433.0	3476.5	3498.2	3491.0	3433.0	3400.3	3407.6	3404.0
57.5°	3839.0	3828.1	3820.9	3864.4	3962.2	4052.9	4034.7	3900.6	3839.0	3842.6	3846.2
60°	4230.5	4230.5	4252.2	4361.0	4571.3	4719.9	4665.5	4440.7	4332.0	4310.2	4303.0
62.5°	4632.9	4643.8	4690.9	4872.1	5194.8	5441.3	5303.5	4984.5	4821.4	4777.9	4763.4
65°	5100.5	5111.4	5180.3	5405.0	5832.8	6126.4	5890.8	5589.9	5361.5	5270.9	5256.4
67.5°	5778.4	5785.7	5840.0	6057.5	6459.9	6695.6	6452.7	6184.4	5937.9	5832.8	5825.5
70°	6387.4	6394.7	6441.8	6728.2	7097.9	7181.3	6913.1	6572.3	6314.9	6231.5	6217.0
72.5°	6249.7	6275.0	6430.9	6876.8	7446.0	7554.7	6989.2	6478.1	6064.8	5927.0	5883.5
75°	5241.9	5281.8	5528.3	6198.9	7105.2	7413.3	6539.7	5600.8	4984.5	4719.9	4651.0
77.5°	3059.6	3208.2	3632.3	4491.5	5785.7	6412.8	5386.9	4100.0	3063.2	2628.2	2483.2
80°	837.4	917.2	1225.3	2066.3	3628.7	4491.5	3436.6	1881.4	1015.0	761.3	706.9
82.5°	264.6	351.6	445.9	594.5	1424.7	2367.2	1276.0	554.6	435.0	358.9	319.0
85°	141.4	152.3	250.1	290.0	427.8	663.4	395.1	290.0	261.0	192.1	181.3
87.5°	72.5	76.1	141.4	141.4	188.5	155.9	170.4	155.9	148.6	94.3	83.4
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)