

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: P230981

Luminaire Tested: **ARCH-M-AF48-140-D-U-5WQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230981
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-AF48-140-D-U-5WQ-7050
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 905mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17438 lumens
Efficiency: N/A
Efficacy: 123.7 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): 141
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



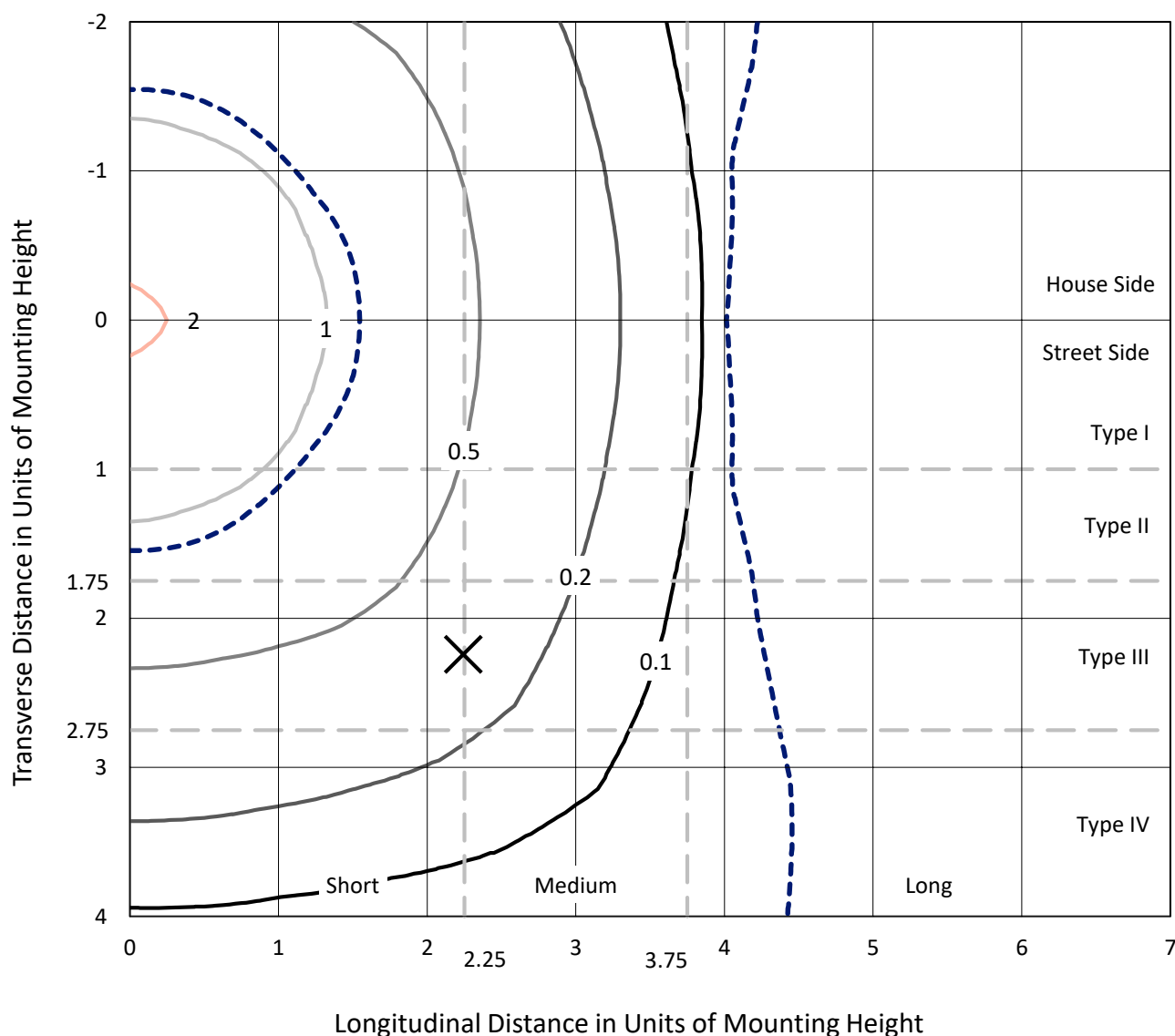
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

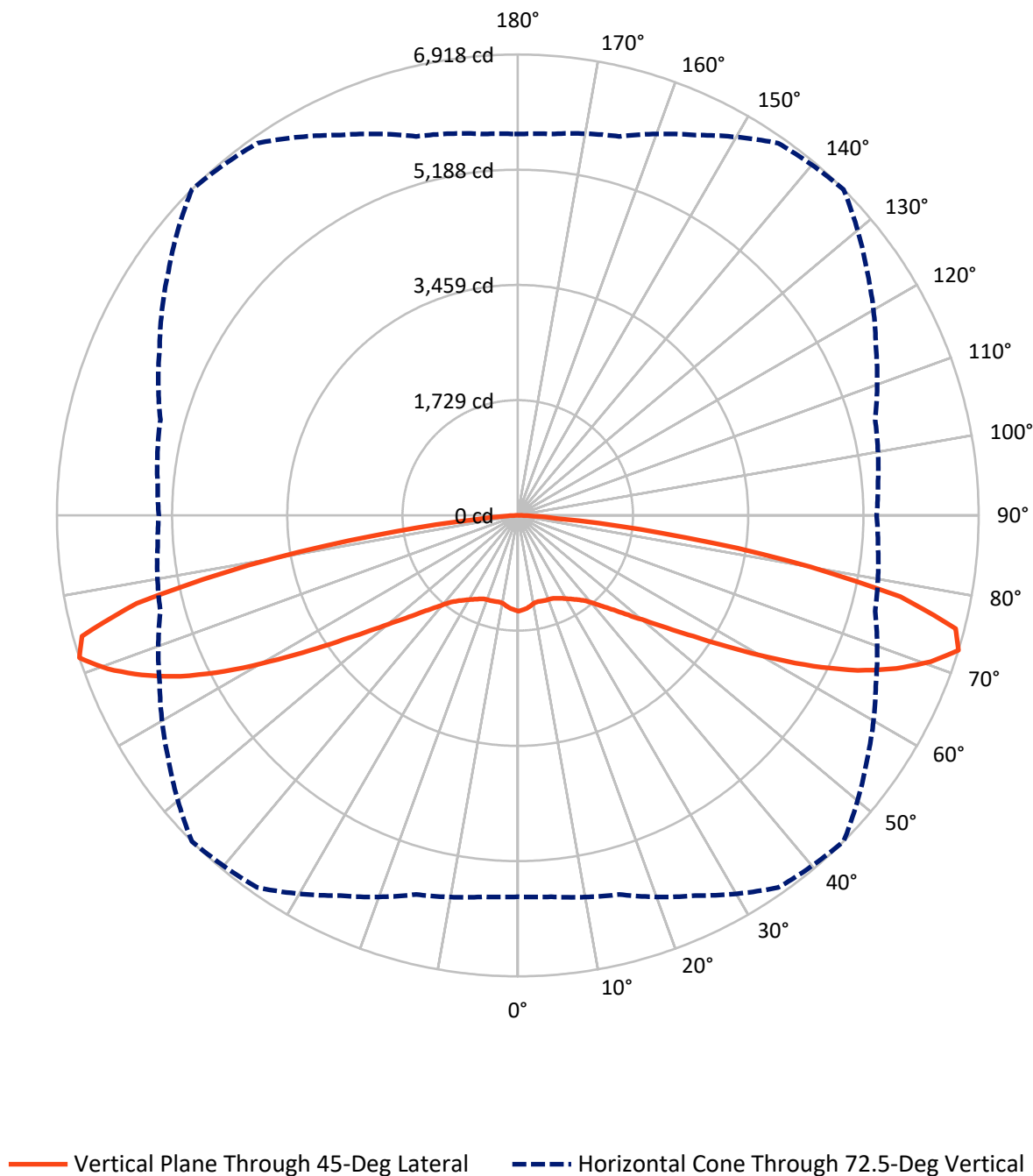


Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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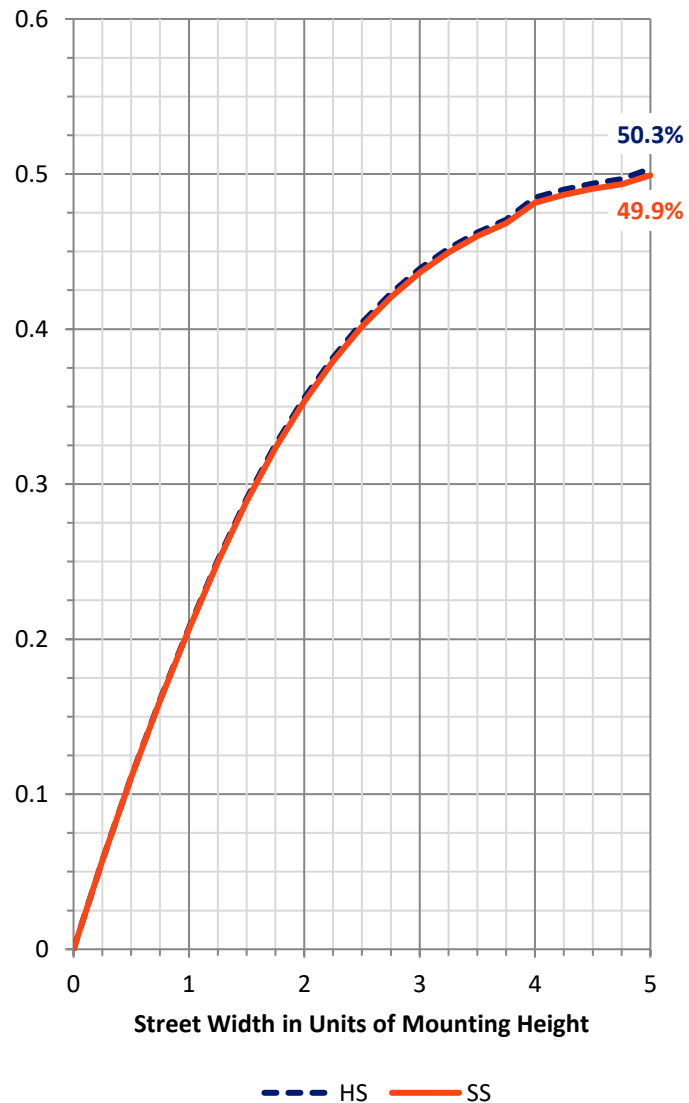
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8719.0	0.0	8719.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	8719.0	0.0	8719.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	17438.0	0.0	17438.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.3	0.8
10°-20°	381.6	2.2
20°-30°	638.5	3.7
30°-40°	981.1	5.6
40°-50°	1624.5	9.3
50°-60°	2888.1	16.6
60°-70°	5052.6	29.0
70°-80°	5140.7	29.5
80°-90°	598.6	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°	17438.0	100.0
0°-180°	17438.0	100.0

Coefficient of Utilization



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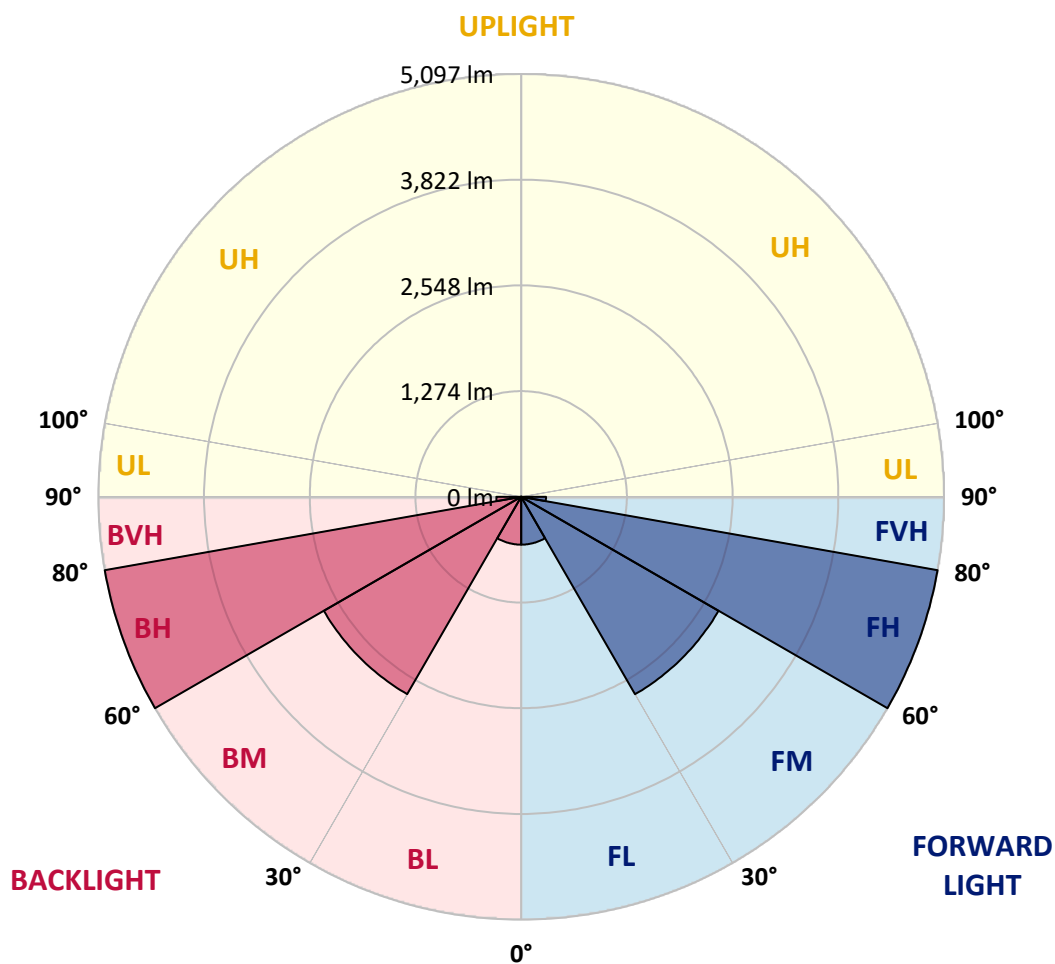
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	576.2	3.3			
FM	(30°-60°)	2746.9	15.8			
FH	(60°-80°)	5096.6	29.2			G3/7500
FVH	(80°-90°)	299.3	1.7			G3/500
BL	(0°-30°)	576.2	3.3	B2/1000		
BM	(30°-60°)	2746.9	15.8	B3/5000		
BH	(60°-80°)	5096.6	29.2	B5		G3/7500
BVH	(80°-90°)	299.3	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°	1437.3	1437.3	1437.3	1437.3	1437.3	1437.3	1437.3	1437.3	1437.3	1437.3	1437.3
2.5°	1424.0	1427.3	1420.7	1420.7	1420.7	1417.4	1420.7	1417.4	1420.7	1424.0	1424.0
5°	1410.7	1410.7	1404.1	1404.1	1404.1	1400.8	1404.1	1404.1	1407.4	1410.7	1410.7
7.5°	1380.9	1380.9	1377.5	1374.2	1370.9	1370.9	1374.2	1374.2	1377.5	1380.9	1380.9
10°	1364.3	1361.0	1354.3	1344.4	1341.0	1337.7	1344.4	1351.0	1361.0	1370.9	1367.6
12.5°	1357.6	1354.3	1341.0	1331.1	1324.4	1327.8	1334.4	1341.0	1357.6	1367.6	1364.3
15°	1364.3	1357.6	1341.0	1324.4	1327.8	1334.4	1341.0	1341.0	1361.0	1370.9	1370.9
17.5°	1364.3	1361.0	1341.0	1327.8	1331.1	1341.0	1344.4	1341.0	1357.6	1374.2	1374.2
20°	1367.6	1367.6	1341.0	1331.1	1334.4	1344.4	1347.7	1344.4	1357.6	1377.5	1377.5
22.5°	1374.2	1370.9	1344.4	1337.7	1344.4	1351.0	1354.3	1351.0	1364.3	1380.9	1384.2
25°	1387.5	1380.9	1357.6	1354.3	1367.6	1377.5	1377.5	1370.9	1377.5	1394.1	1394.1
27.5°	1404.1	1400.8	1374.2	1374.2	1390.8	1410.7	1400.8	1387.5	1394.1	1410.7	1410.7
30°	1434.0	1430.7	1404.1	1404.1	1427.3	1450.6	1427.3	1410.7	1420.7	1437.3	1440.6
32.5°	1477.1	1477.1	1453.9	1447.3	1487.1	1497.0	1487.1	1453.9	1460.5	1483.8	1483.8
35°	1550.2	1543.5	1520.3	1517.0	1556.8	1553.5	1550.2	1520.3	1526.9	1553.5	1553.5
37.5°	1646.4	1643.1	1623.2	1613.2	1633.1	1619.9	1626.5	1613.2	1629.8	1649.7	1653.1
40°	1769.2	1765.9	1749.3	1736.0	1742.7	1722.8	1729.4	1736.0	1752.6	1765.9	1769.2
42.5°	1921.9	1921.9	1905.3	1882.1	1872.1	1862.2	1862.2	1875.5	1892.1	1908.6	1908.6
45°	2111.1	2111.1	2091.2	2068.0	2038.1	2021.5	2028.1	2041.4	2061.3	2081.3	2087.9
47.5°	2333.5	2333.5	2307.0	2283.7	2253.9	2234.0	2234.0	2240.6	2270.5	2287.1	2297.0
50°	2582.5	2572.5	2546.0	2522.7	2506.1	2479.6	2482.9	2479.6	2506.1	2529.4	2536.0
52.5°	2841.4	2838.1	2811.5	2804.9	2814.8	2801.6	2801.6	2768.4	2778.3	2791.6	2788.3
55°	3163.4	3153.4	3130.2	3143.5	3183.3	3203.2	3196.6	3143.5	3113.6	3120.2	3116.9
57.5°	3515.2	3505.3	3498.6	3538.5	3628.1	3711.1	3694.5	3571.7	3515.2	3518.6	3521.9
60°	3873.7	3873.7	3893.6	3993.2	4185.8	4321.8	4272.1	4066.3	3966.7	3946.8	3940.1
62.5°	4242.2	4252.1	4295.3	4461.3	4756.7	4982.4	4856.3	4564.2	4414.8	4375.0	4361.7
65°	4670.4	4680.3	4743.4	4949.2	5340.9	5609.8	5394.0	5118.5	4909.4	4826.4	4813.1
67.5°	5291.1	5297.7	5347.5	5546.7	5915.2	6130.9	5908.5	5662.9	5437.2	5340.9	5334.3
70°	5848.8	5855.4	5898.6	6160.8	6499.4	6575.7	6330.1	6018.1	5782.4	5706.0	5692.8
72.5°	5722.6	5745.9	5888.6	6296.9	6818.0	6917.6	6399.8	5931.8	5553.3	5427.2	5387.4
75°	4799.8	4836.4	5062.1	5676.2	6506.0	6788.2	5988.2	5128.5	4564.2	4321.8	4258.8
77.5°	2801.6	2937.7	3326.0	4112.7	5297.7	5872.0	4932.6	3754.2	2804.9	2406.6	2273.8
80°	766.8	839.8	1122.0	1892.1	3322.7	4112.7	3146.8	1722.8	929.4	697.1	647.3
82.5°	242.3	322.0	408.3	544.4	1304.5	2167.6	1168.4	507.9	398.3	328.6	292.1
85°	129.5	139.4	229.0	265.6	391.7	607.4	361.8	265.6	239.0	175.9	166.0
87.5°	66.4	69.7	129.5	129.5	172.6	142.7	156.0	142.7	136.1	86.3	76.3
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)