

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: P230977

Luminaire Tested: **ARCH-M-AF48-100-D-U-5WQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230977
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-AF48-100-D-U-5WQ-7050
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 660mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13667 lumens
Efficiency: N/A
Efficacy: 135.3 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B4 - U0 - G3

Input Watts (W): 101
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



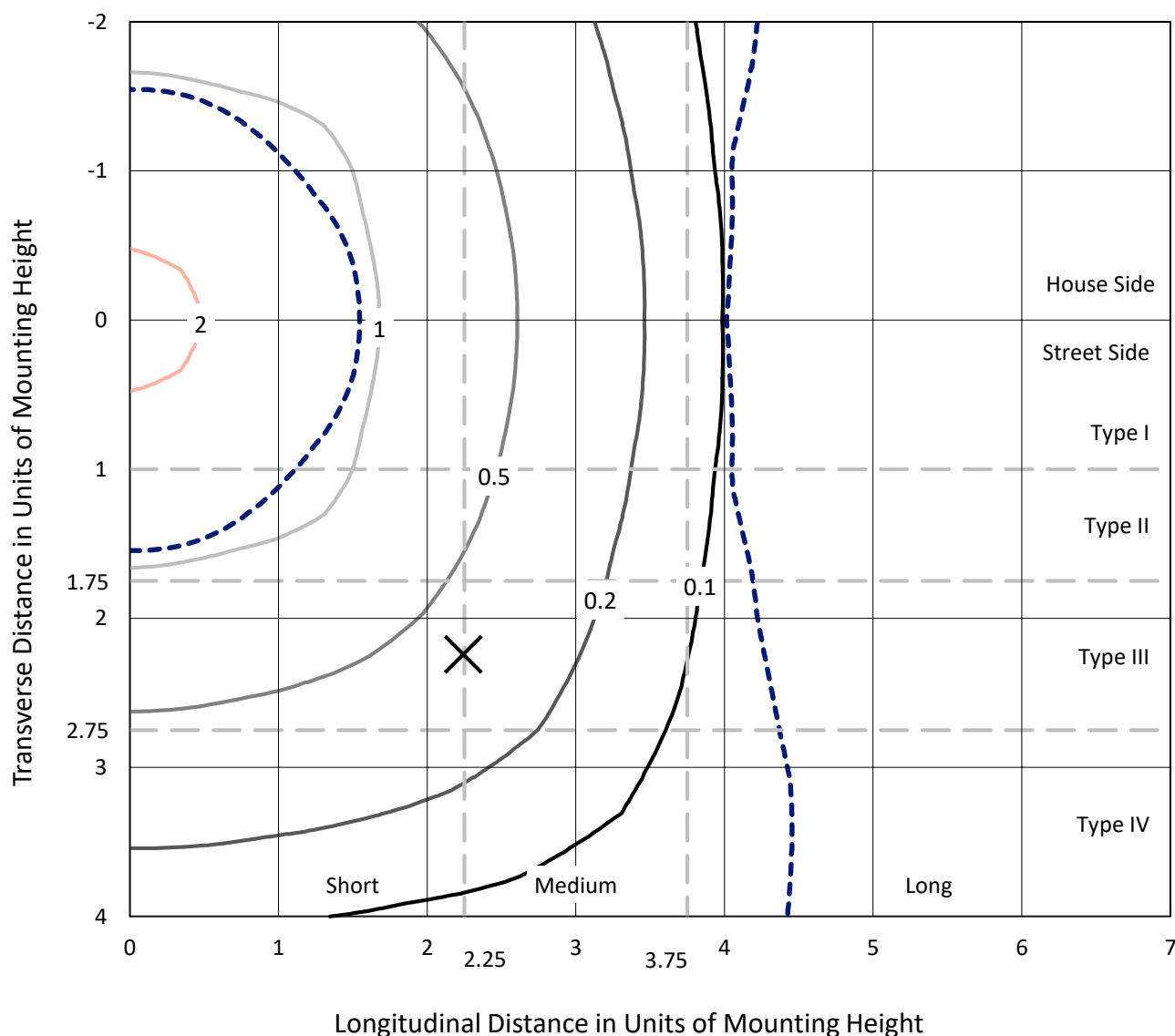
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

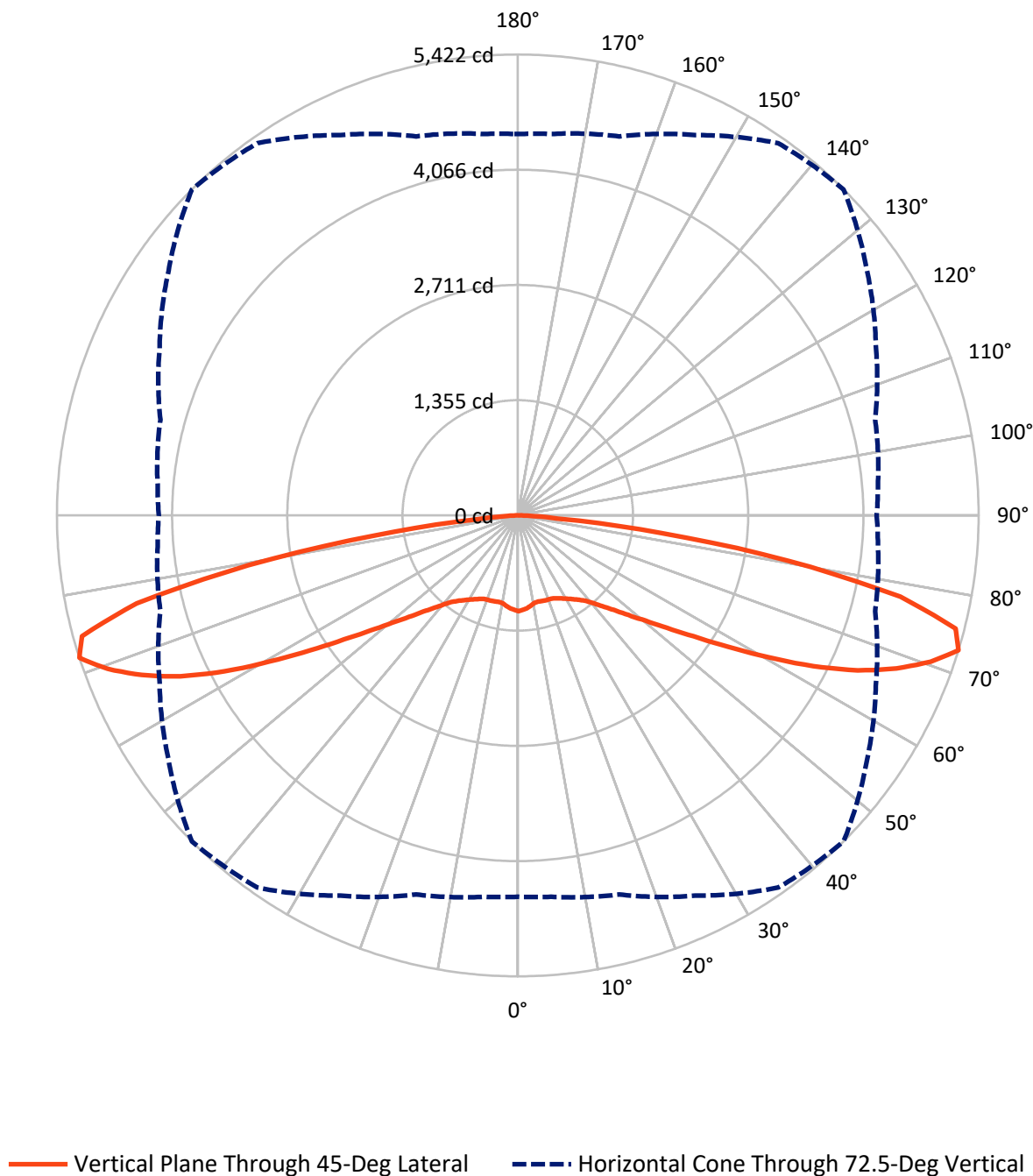


Based on 20 foot mounting height. Maximum calculated value = 2.8 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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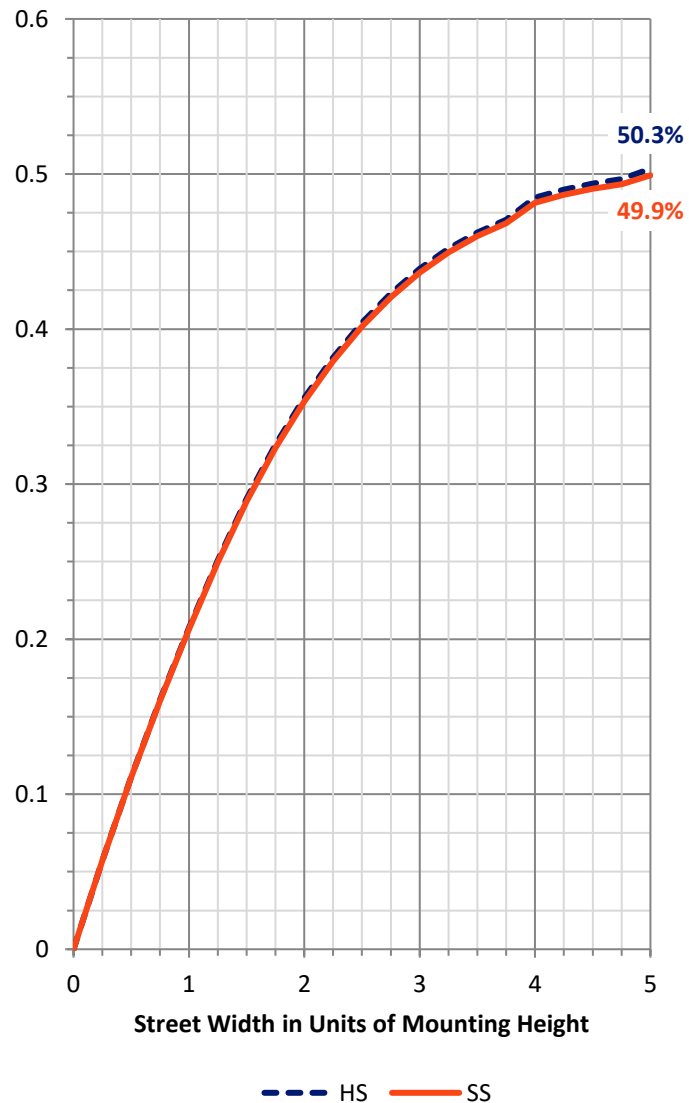
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6833.5	0.0	6833.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	6833.5	0.0	6833.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	13667.0	0.0	13667.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.7	0.8
10°-20°	299.0	2.2
20°-30°	500.5	3.7
30°-40°	769.0	5.6
40°-50°	1273.2	9.3
50°-60°	2263.5	16.6
60°-70°	3960.0	29.0
70°-80°	4029.0	29.5
80°-90°	469.2	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°	13667.0	100.0
0°-180°	13667.0	100.0

Coefficient of Utilization



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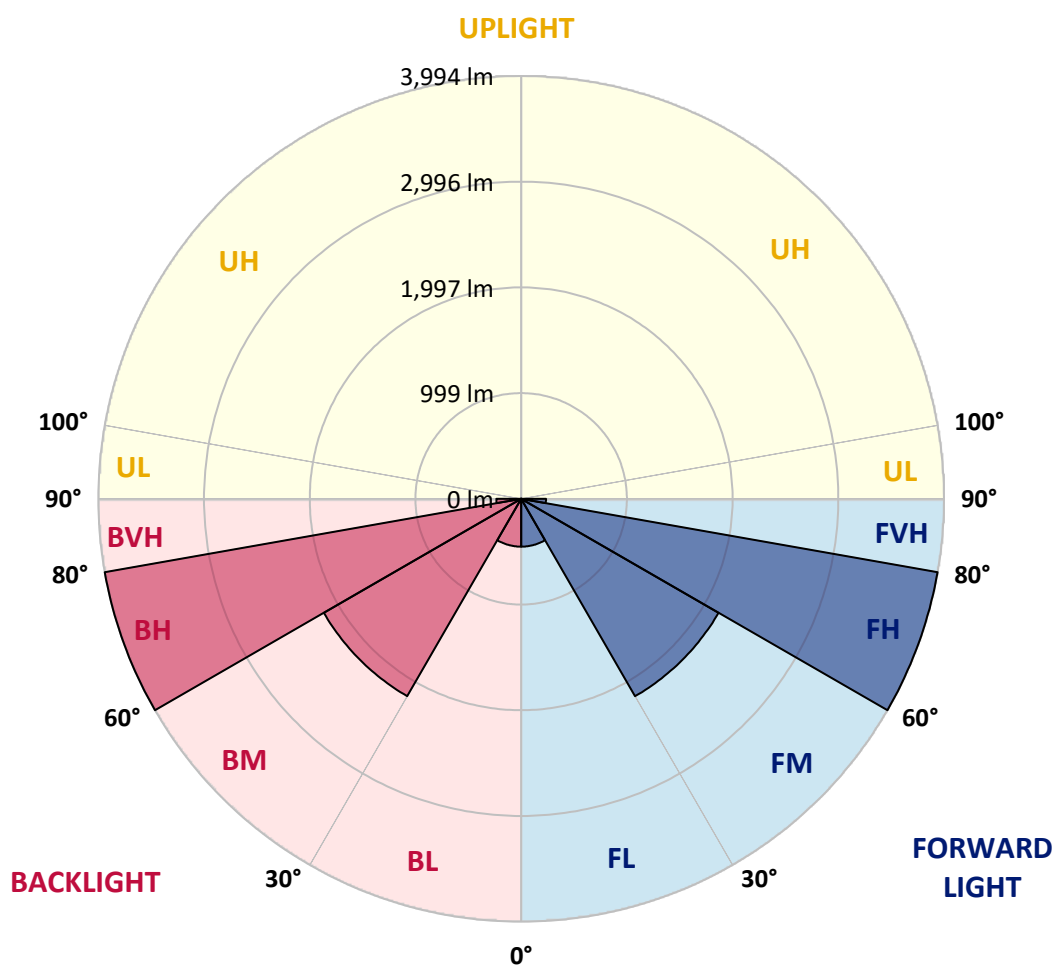
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	451.6	3.3			
FM	(30°-60°)	2152.9	15.8			
FH	(60°-80°)	3994.5	29.2			G2/5000
FVH	(80°-90°)	234.6	1.7			G3/500
BL	(0°-30°)	451.6	3.3	B1/500		
BM	(30°-60°)	2152.9	15.8	B2/2500		
BH	(60°-80°)	3994.5	29.2	B4/5000		G2/5000
BVH	(80°-90°)	234.6	1.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5	1126.5
2.5°	1116.1	1118.7	1113.5	1113.5	1113.5	1110.9	1113.5	1110.9	1113.5	1116.1	1116.1
5°	1105.7	1105.7	1100.5	1100.5	1100.5	1097.9	1100.5	1100.5	1103.1	1105.7	1105.7
7.5°	1082.3	1082.3	1079.7	1077.0	1074.4	1074.4	1077.0	1077.0	1079.7	1082.3	1082.3
10°	1069.2	1066.6	1061.4	1053.6	1051.0	1048.4	1053.6	1058.8	1066.6	1074.4	1071.8
12.5°	1064.0	1061.4	1051.0	1043.2	1038.0	1040.6	1045.8	1051.0	1064.0	1071.8	1069.2
15°	1069.2	1064.0	1051.0	1038.0	1040.6	1045.8	1051.0	1051.0	1066.6	1074.4	1074.4
17.5°	1069.2	1066.6	1051.0	1040.6	1043.2	1051.0	1053.6	1051.0	1064.0	1077.0	1077.0
20°	1071.8	1071.8	1051.0	1043.2	1045.8	1053.6	1056.2	1053.6	1064.0	1079.7	1079.7
22.5°	1077.0	1074.4	1053.6	1048.4	1053.6	1058.8	1061.4	1058.8	1069.2	1082.3	1084.9
25°	1087.5	1082.3	1064.0	1061.4	1071.8	1079.7	1079.7	1074.4	1079.7	1092.7	1092.7
27.5°	1100.5	1097.9	1077.0	1077.0	1090.1	1105.7	1097.9	1087.5	1092.7	1105.7	1105.7
30°	1123.9	1121.3	1100.5	1100.5	1118.7	1136.9	1118.7	1105.7	1113.5	1126.5	1129.1
32.5°	1157.7	1157.7	1139.5	1134.3	1165.5	1173.3	1165.5	1139.5	1144.7	1162.9	1162.9
35°	1214.9	1209.7	1191.5	1188.9	1220.1	1217.5	1214.9	1191.5	1196.7	1217.5	1217.5
37.5°	1290.4	1287.8	1272.2	1264.4	1280.0	1269.6	1274.8	1264.4	1277.4	1293.0	1295.6
40°	1386.6	1384.0	1371.0	1360.6	1365.8	1350.2	1355.4	1360.6	1373.6	1384.0	1386.6
42.5°	1506.3	1506.3	1493.3	1475.1	1467.3	1459.5	1459.5	1469.9	1482.9	1495.9	1495.9
45°	1654.6	1654.6	1639.0	1620.8	1597.4	1584.4	1589.6	1600.0	1615.6	1631.2	1636.4
47.5°	1828.9	1828.9	1808.1	1789.9	1766.5	1750.9	1750.9	1756.1	1779.5	1792.5	1800.3
50°	2024.0	2016.2	1995.4	1977.2	1964.2	1943.4	1946.0	1943.4	1964.2	1982.4	1987.6
52.5°	2226.9	2224.3	2203.5	2198.3	2206.1	2195.7	2195.7	2169.7	2177.5	2187.9	2185.3
55°	2479.3	2471.5	2453.3	2463.7	2494.9	2510.5	2505.3	2463.7	2440.3	2445.5	2442.9
57.5°	2755.1	2747.3	2742.1	2773.3	2843.5	2908.6	2895.5	2799.3	2755.1	2757.7	2760.3
60°	3036.0	3036.0	3051.6	3129.7	3280.6	3387.2	3348.2	3186.9	3108.9	3093.3	3088.1
62.5°	3324.8	3332.6	3366.4	3496.5	3728.0	3905.0	3806.1	3577.2	3460.1	3428.9	3418.5
65°	3660.4	3668.2	3717.6	3878.9	4185.9	4396.6	4227.5	4011.6	3847.7	3782.7	3772.3
67.5°	4146.9	4152.1	4191.1	4347.2	4636.0	4805.1	4630.8	4438.3	4261.4	4185.9	4180.7
70°	4584.0	4589.2	4623.0	4828.5	5093.9	5153.7	4961.2	4716.6	4531.9	4472.1	4461.7
72.5°	4485.1	4503.3	4615.2	4935.2	5343.6	5421.7	5015.8	4649.0	4352.4	4253.6	4222.3
75°	3761.9	3790.5	3967.4	4448.7	5099.1	5320.2	4693.2	4019.4	3577.2	3387.2	3337.8
77.5°	2195.7	2302.4	2606.8	3223.3	4152.1	4602.2	3865.9	2942.4	2198.3	1886.1	1782.1
80°	601.0	658.2	879.3	1482.9	2604.2	3223.3	2466.3	1350.2	728.4	546.3	507.3
82.5°	189.9	252.4	320.0	426.7	1022.4	1698.8	915.8	398.0	312.2	257.6	228.9
85°	101.5	109.3	179.5	208.1	307.0	476.1	283.6	208.1	187.3	137.9	130.1
87.5°	52.0	54.6	101.5	101.5	135.3	111.9	122.3	111.9	106.7	67.6	59.8
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)