

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: P842161

Luminaire Tested: **ARCH4-280-727-U-5WQ**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842161
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-280-727-U-5WQ
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1085mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37863 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type V - Medium
BUG Rating: B5 - U0 - G4

Input Watts (W): 279.7
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

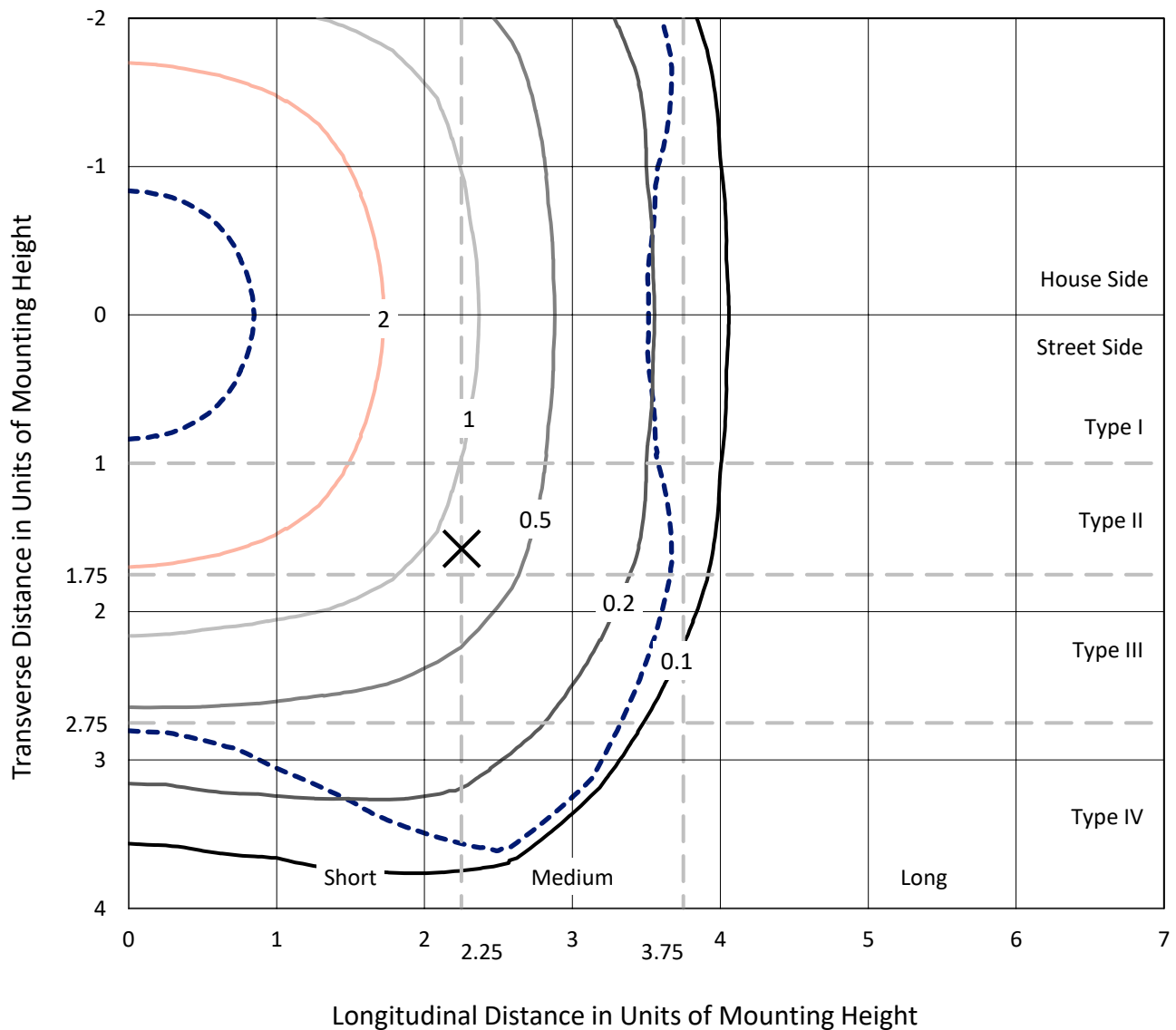


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Iso-Footcandle Lines of Horizontal Illumination

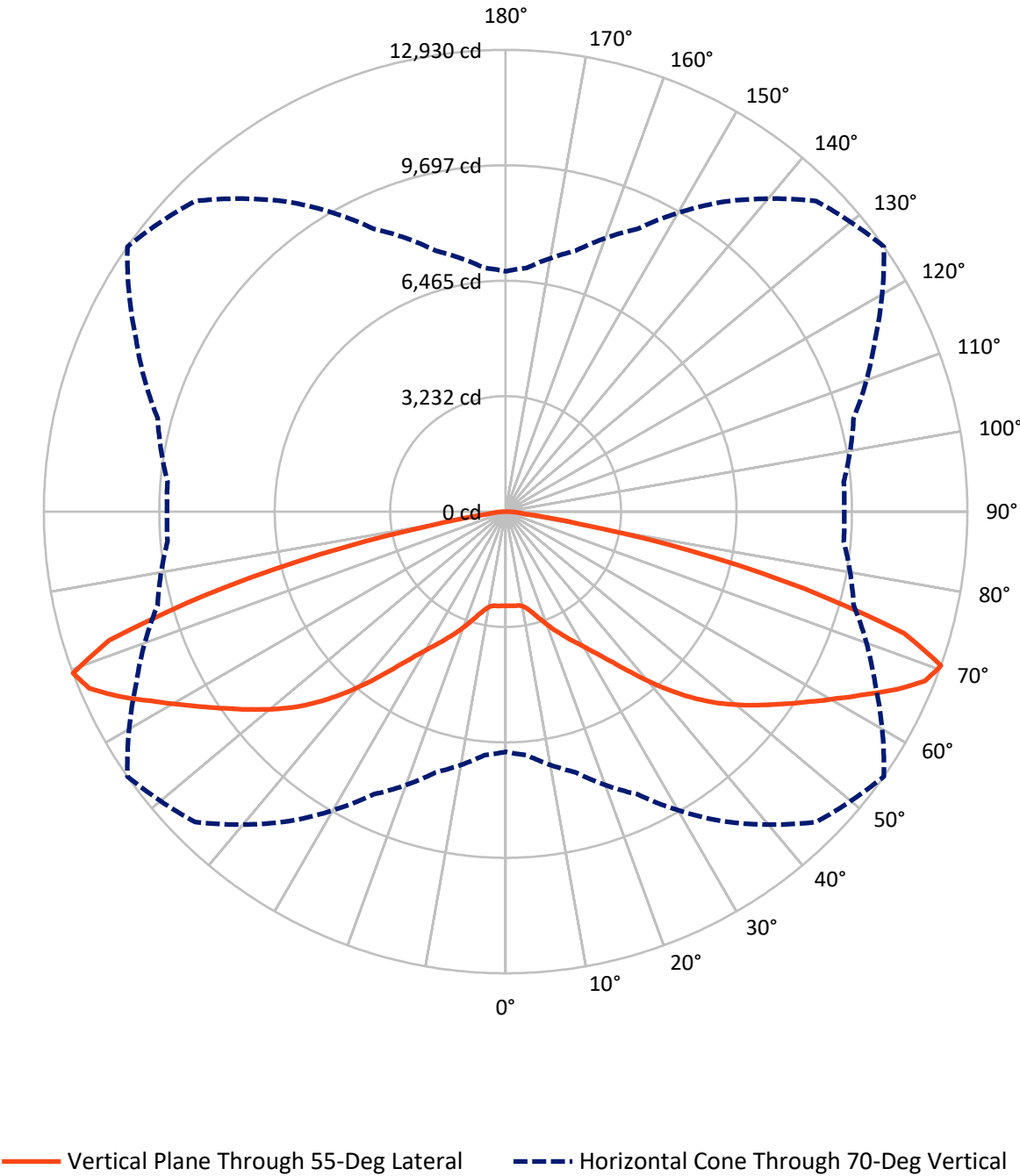
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
Type V - Medium - N/A

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Luminous Intensity Polar Plot



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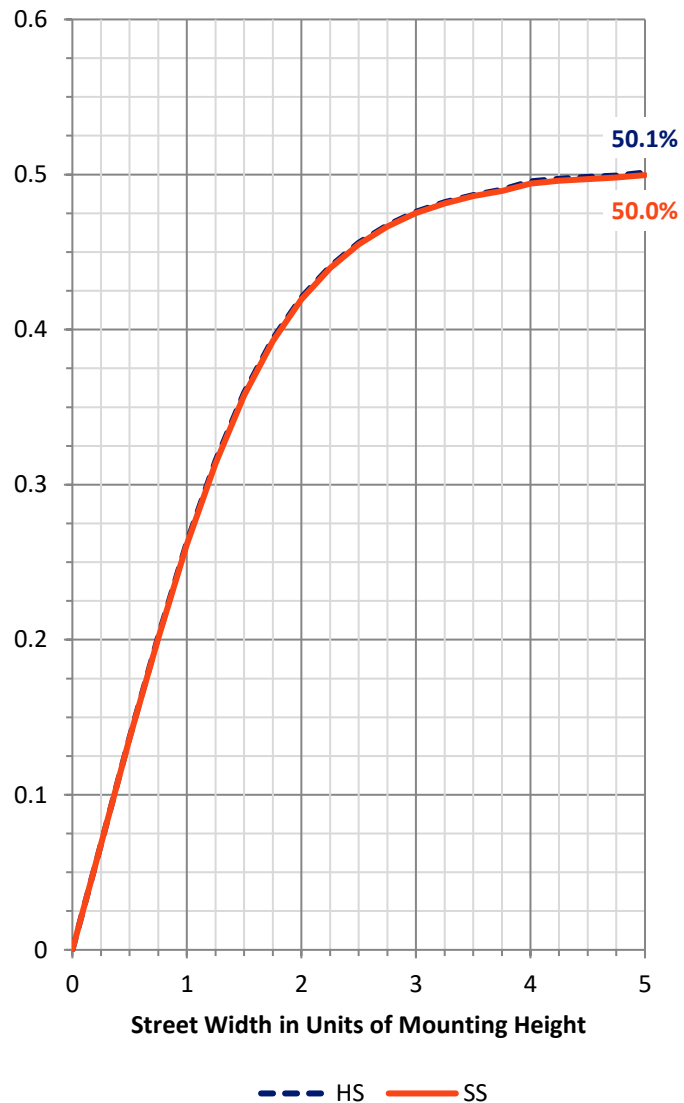
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18931.5	0.0	18931.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	18931.5	0.0	18931.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	37863.0	0.0	37863.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.8	0.7
10°-20°	867.2	2.3
20°-30°	1802.0	4.8
30°-40°	3328.1	8.8
40°-50°	5846.8	15.4
50°-60°	8432.4	22.3
60°-70°	10320.3	27.3
70°-80°	6567.1	17.3
80°-90°	444.4	1.2
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°	37863.0	100.0
0°-180°	37863.0	100.0

Coefficient of Utilization



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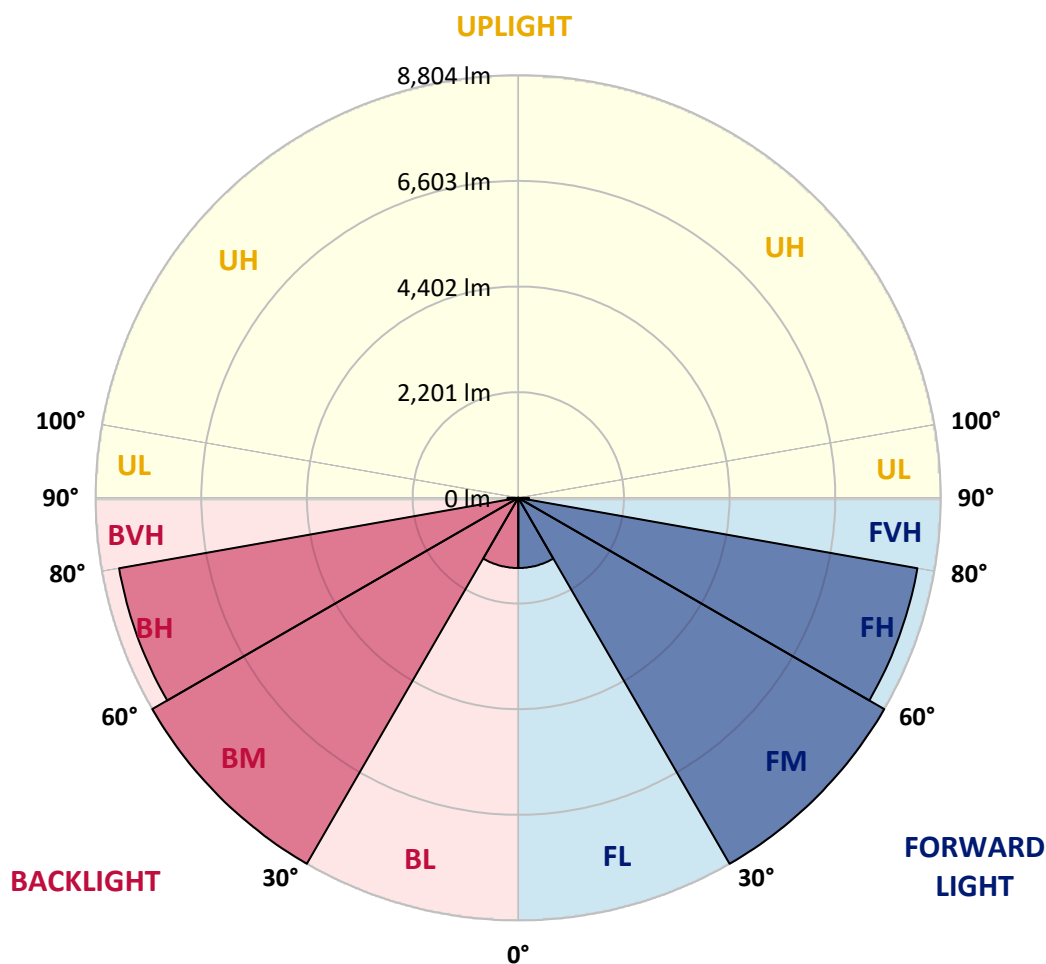
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1462.0	3.9			
FM	(30°-60°)	8803.6	23.3			
FH	(60°-80°)	8443.7	22.3			G4/12000
FVH	(80°-90°)	222.2	0.6			G2/225
BL	(0°-30°)	1462.0	3.9	B3/2500		
BM	(30°-60°)	8803.6	23.3	B5		
BH	(60°-80°)	8443.7	22.3	B5		G4/12000
BVH	(80°-90°)	222.2	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G4

Type V Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2639.4	2639.4	2639.4	2639.4	2639.4	2639.4	2639.4	2639.4	2639.4	2639.4	2639.4
2.5°	2674.6	2674.6	2667.6	2667.6	2653.5	2646.4	2639.4	2639.4	2632.4	2632.4	2625.3
5°	2688.7	2688.7	2688.7	2681.6	2674.6	2667.6	2653.5	2639.4	2632.4	2625.3	2618.3
7.5°	2695.7	2695.7	2688.7	2688.7	2681.6	2674.6	2653.5	2632.4	2625.3	2618.3	2618.3
10°	2752.0	2745.0	2737.9	2723.9	2723.9	2723.9	2695.7	2674.6	2667.6	2667.6	2667.6
12.5°	2885.8	2878.7	2864.6	2843.5	2843.5	2850.6	2808.3	2780.2	2780.2	2773.1	2773.1
15°	3082.8	3075.8	3061.7	3026.5	3019.5	3033.6	2970.2	2942.1	2942.1	2942.1	2935.0
17.5°	3301.0	3286.9	3265.8	3237.7	3237.7	3237.7	3174.3	3139.1	3118.0	3118.0	3111.0
20°	3484.0	3477.0	3477.0	3469.9	3491.1	3491.1	3406.6	3350.3	3301.0	3272.9	3265.8
22.5°	3645.9	3638.9	3652.9	3681.1	3723.3	3737.4	3638.9	3554.4	3477.0	3420.7	3406.6
25°	3864.1	3857.1	3850.0	3892.2	3962.6	3983.7	3878.2	3772.6	3695.2	3667.0	3652.9
27.5°	4096.4	4103.4	4110.4	4152.7	4209.0	4244.2	4138.6	4040.1	3976.7	3934.5	3920.4
30°	4356.8	4370.9	4392.0	4455.3	4497.6	4511.6	4420.1	4349.7	4293.4	4258.2	4237.1
32.5°	4687.6	4715.7	4743.9	4800.2	4821.3	4807.2	4765.0	4715.7	4673.5	4624.2	4617.2
35°	5180.3	5208.4	5201.4	5222.5	5229.5	5215.5	5194.4	5166.2	5145.1	5081.7	5074.7
37.5°	5799.7	5827.8	5785.6	5764.5	5715.2	5722.2	5715.2	5736.3	5743.4	5680.0	5673.0
40°	6426.1	6454.2	6397.9	6341.6	6292.3	6271.2	6306.4	6376.8	6376.8	6334.6	6334.6
42.5°	7094.7	7115.8	7024.3	6954.0	6890.6	6876.5	6897.7	6982.1	7003.2	6996.2	6996.2
45°	7763.4	7749.3	7629.6	7559.3	7503.0	7467.8	7474.8	7538.2	7580.4	7601.5	7601.5
47.5°	8277.2	8256.1	8157.5	8101.2	8066.0	8016.8	8016.8	8052.0	8073.1	8080.1	8080.1
50°	8685.4	8664.3	8565.8	8558.7	8558.7	8537.6	8516.5	8509.5	8495.4	8502.4	8502.4
52.5°	9037.3	9009.2	8938.8	8952.9	9016.2	9030.3	9002.1	8945.8	8889.5	8868.4	8875.5
55°	9417.4	9375.2	9318.9	9361.1	9487.8	9544.1	9501.9	9389.3	9290.7	9227.4	9227.4
57.5°	9720.1	9670.8	9670.8	9790.4	10022.7	10135.3	10043.8	9832.7	9663.8	9593.4	9600.4
60°	9508.9	9466.7	9635.6	10163.5	10599.9	10789.9	10635.1	10262.0	9987.5	9903.1	9917.1
62.5°	9093.6	9065.5	9276.6	10093.1	11120.7	11514.9	11282.6	10747.7	10339.4	10240.9	10240.9
65°	8481.3	8474.3	8769.9	9776.4	11240.4	12211.7	12014.6	11275.6	10747.7	10613.9	10642.1
67.5°	7847.8	7847.8	8115.3	9234.4	11099.6	12507.3	12662.1	11754.2	10944.7	10613.9	10621.0
70°	6728.7	6848.4	7559.3	8734.7	10585.8	12296.1	12929.6	11416.3	10086.1	9501.9	9480.8
72.5°	4434.2	4589.1	6003.8	7861.9	10079.0	11528.9	11669.7	10029.8	8375.7	7693.0	7657.8
75°	2674.6	2808.3	3892.2	6137.5	8861.4	9283.7	8664.3	7861.9	6257.2	5722.2	5722.2
77.5°	788.3	879.8	1794.8	3892.2	6130.5	6102.3	5342.2	4631.3	3702.2	3146.2	3188.4
80°	464.5	478.6	584.2	1773.7	2540.9	2674.6	2062.3	1288.0	1288.0	957.2	929.1
82.5°	359.0	359.0	373.0	443.4	612.3	682.7	520.8	443.4	506.8	429.3	408.2
85°	253.4	253.4	253.4	260.4	267.5	274.5	288.6	295.6	323.8	267.5	253.4
87.5°	77.4	84.5	91.5	105.6	126.7	133.7	140.8	126.7	126.7	119.7	112.6
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)