

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: P842089

Luminaire Tested: **ARCH4-270-727-U-5WQ**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842089
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: ARCH4-270-727-U-5WQ
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1045mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36440 lumens
Efficiency: N/A
Efficacy: 135.5 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): 269
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

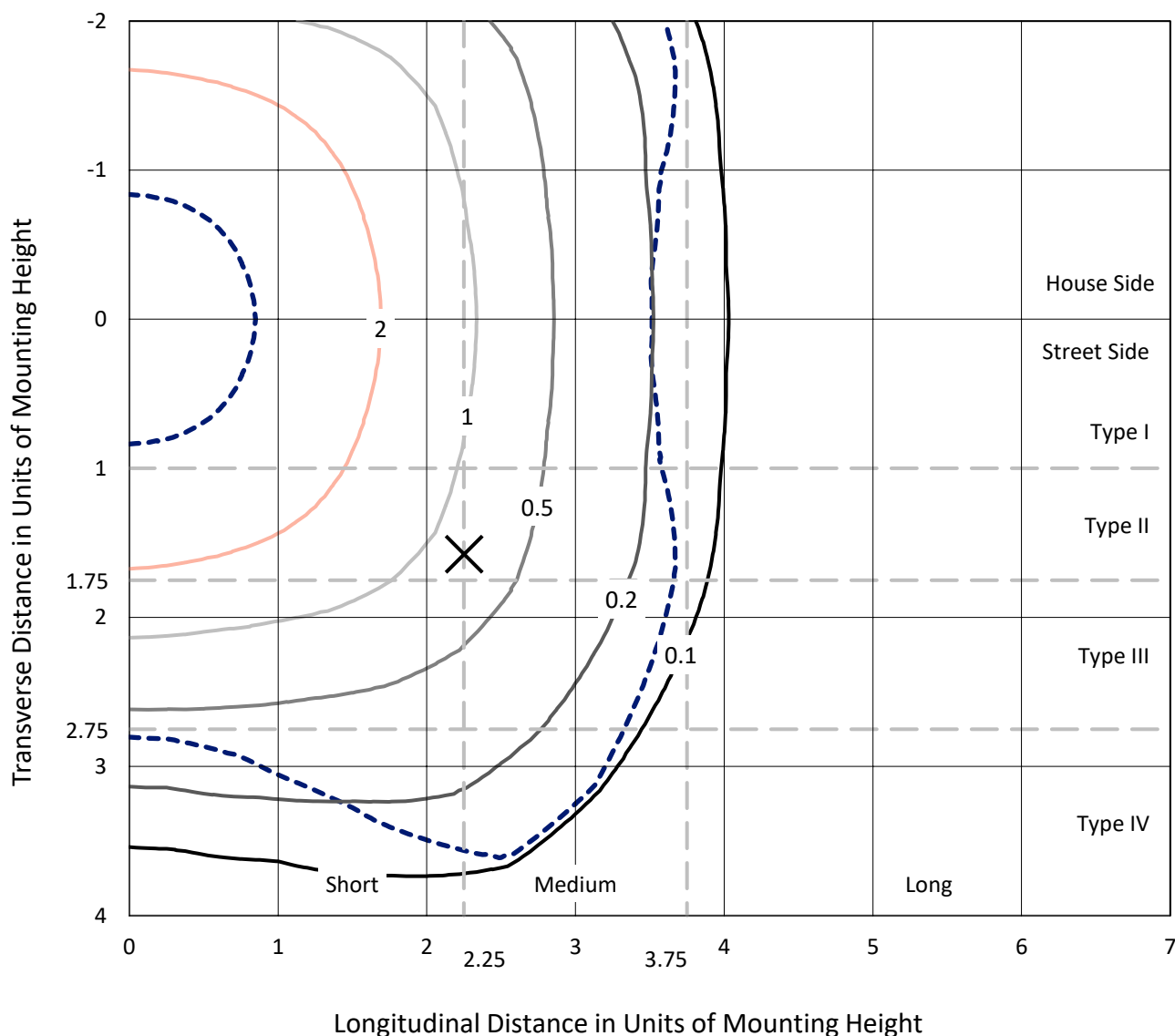


REPORT NUMBER: P842089

CATALOG NUMBER: ARCH4-270-727-U-5WQ

Iso-Footcandle Lines of Horizontal Illumination

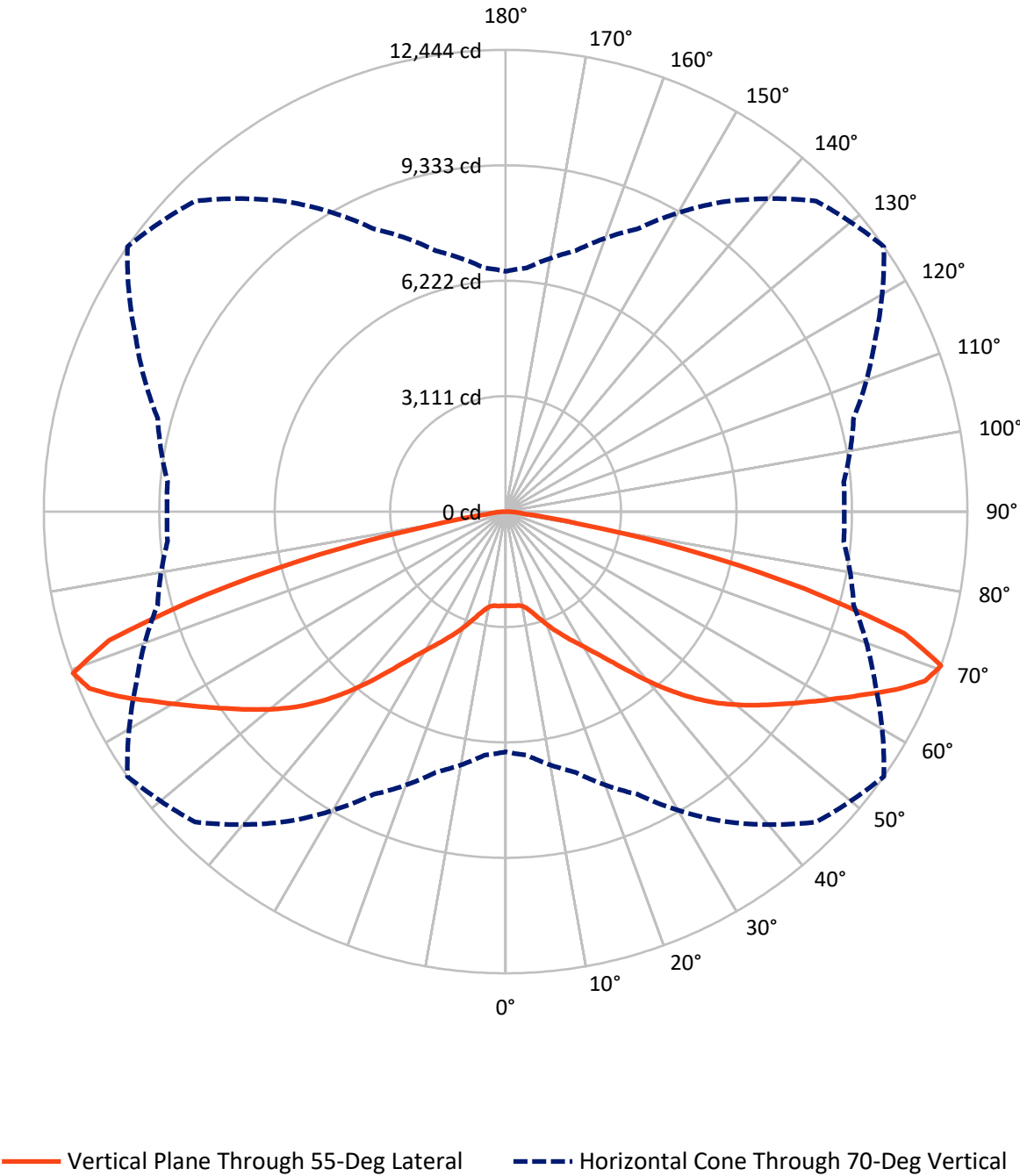
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type V - Medium - N/A

REPORT NUMBER: P842089
CATALOG NUMBER: ARCH4-270-727-U-5WQ

Luminous Intensity Polar Plot



REPORT NUMBER: P842089

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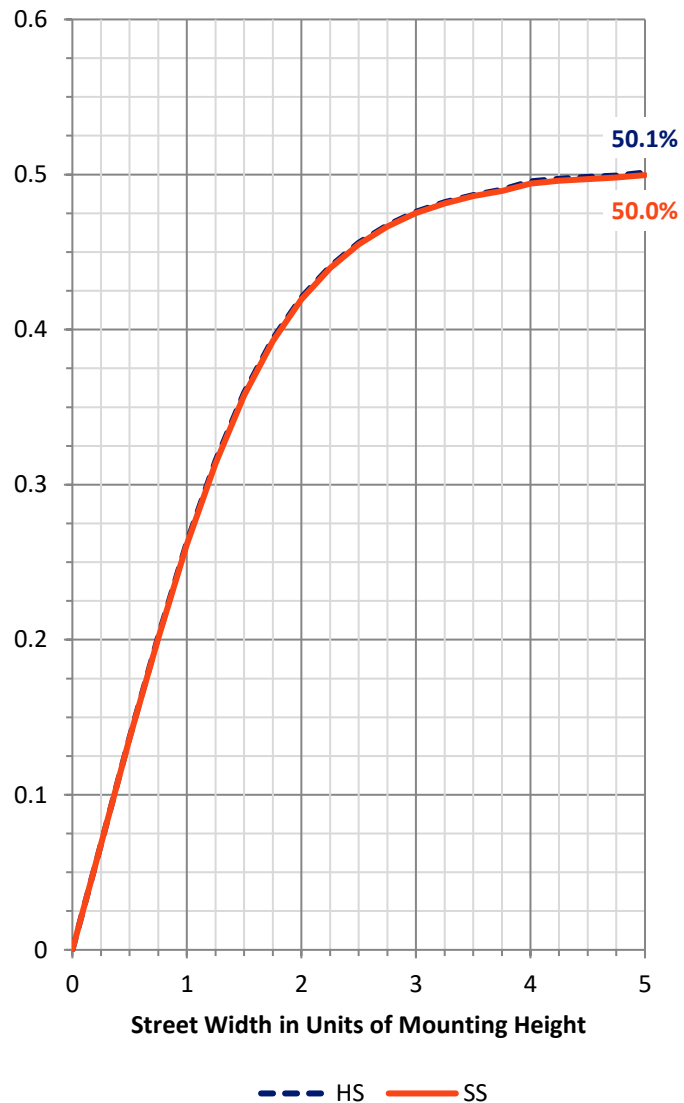
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18220.0	0.0	18220.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	18220.0	0.0	18220.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	36440.0	0.0	36440.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.2	0.7
10°-20°	834.6	2.3
20°-30°	1734.2	4.8
30°-40°	3203.0	8.8
40°-50°	5627.0	15.4
50°-60°	8115.5	22.3
60°-70°	9932.5	27.3
70°-80°	6320.2	17.3
80°-90°	427.7	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°	36440.0	100.0
0°-180°	36440.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842089

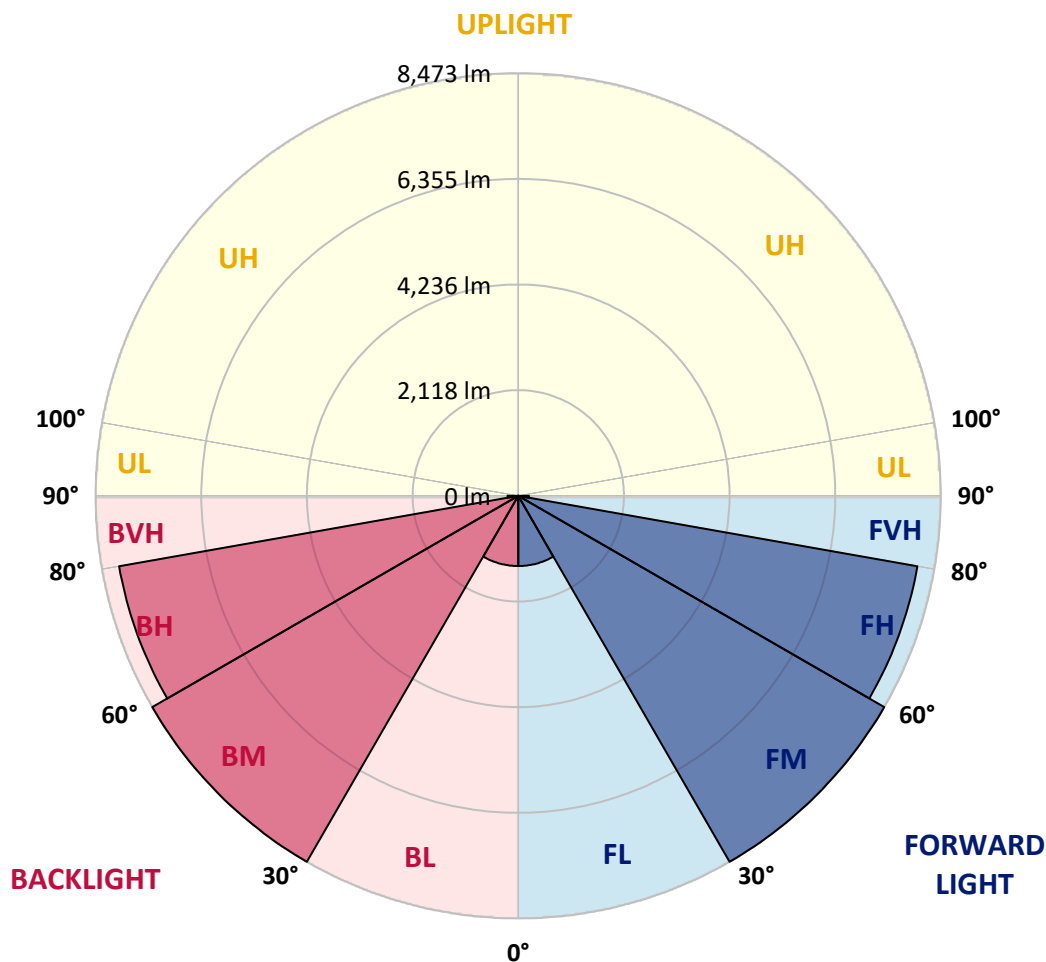
CATALOG NUMBER: ARCH4-270-727-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1407.1	3.9			
FM	(30°-60°)	8472.8	23.3			
FH	(60°-80°)	8126.4	22.3			G4/12000
FVH	(80°-90°)	213.8	0.6			G2/225
BL	(0°-30°)	1407.1	3.9	B3/2500		
BM	(30°-60°)	8472.8	23.3	B4/8500		
BH	(60°-80°)	8126.4	22.3	B5		G4/12000
BVH	(80°-90°)	213.8	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



REPORT NUMBER: P842089

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2540.2	2540.2	2540.2	2540.2	2540.2	2540.2	2540.2	2540.2	2540.2	2540.2	2540.2
2.5°	2574.1	2574.1	2567.3	2567.3	2553.8	2547.0	2540.2	2540.2	2533.4	2533.4	2526.7
5°	2587.6	2587.6	2587.6	2580.9	2574.1	2567.3	2553.8	2540.2	2533.4	2526.7	2519.9
7.5°	2594.4	2594.4	2587.6	2587.6	2580.9	2574.1	2553.8	2533.4	2526.7	2519.9	2519.9
10°	2648.6	2641.8	2635.0	2621.5	2621.5	2621.5	2594.4	2574.1	2567.3	2567.3	2567.3
12.5°	2777.3	2770.5	2757.0	2736.7	2736.7	2743.4	2702.8	2675.7	2675.7	2668.9	2668.9
15°	2967.0	2960.2	2946.6	2912.8	2906.0	2919.6	2858.6	2831.5	2831.5	2831.5	2824.7
17.5°	3177.0	3163.4	3143.1	3116.0	3116.0	3116.0	3055.0	3021.2	3000.8	3000.8	2994.1
20°	3353.1	3346.3	3346.3	3339.5	3359.9	3359.9	3278.6	3224.4	3177.0	3149.9	3143.1
22.5°	3508.9	3502.1	3515.7	3542.7	3583.4	3596.9	3502.1	3420.8	3346.3	3292.1	3278.6
25°	3718.9	3712.1	3705.3	3746.0	3813.7	3834.0	3732.4	3630.8	3556.3	3529.2	3515.7
27.5°	3942.4	3949.2	3956.0	3996.6	4050.8	4084.7	3983.1	3888.2	3827.3	3786.6	3773.1
30°	4193.0	4206.6	4226.9	4287.9	4328.5	4342.1	4254.0	4186.3	4132.1	4098.2	4077.9
32.5°	4511.4	4538.5	4565.6	4619.8	4640.1	4626.6	4585.9	4538.5	4497.9	4450.5	4443.7
35°	4985.6	5012.7	5005.9	5026.2	5033.0	5019.5	4999.1	4972.0	4951.7	4890.8	4884.0
37.5°	5581.7	5608.8	5568.1	5547.8	5500.4	5507.2	5500.4	5520.7	5527.5	5466.5	5459.8
40°	6184.6	6211.7	6157.5	6103.3	6055.9	6035.5	6069.4	6137.2	6137.2	6096.5	6096.5
42.5°	6828.1	6848.4	6760.4	6692.6	6631.6	6618.1	6638.4	6719.7	6740.0	6733.3	6733.3
45°	7471.6	7458.1	7342.9	7275.2	7221.0	7187.1	7193.9	7254.8	7295.5	7315.8	7315.8
47.5°	7966.1	7945.8	7850.9	7796.8	7762.9	7715.5	7715.5	7749.3	7769.7	7776.4	7776.4
50°	8359.0	8338.7	8243.8	8237.1	8237.1	8216.7	8196.4	8189.6	8176.1	8182.9	8182.9
52.5°	8697.7	8670.6	8602.9	8616.4	8677.4	8690.9	8663.8	8609.6	8555.4	8535.1	8541.9
55°	9063.5	9022.8	8968.6	9009.3	9131.2	9185.4	9144.8	9036.4	8941.5	8880.6	8880.6
57.5°	9354.8	9307.3	9307.3	9422.5	9646.0	9754.4	9666.4	9463.1	9300.6	9232.8	9239.6
60°	9151.5	9110.9	9273.5	9781.5	10201.5	10384.4	10235.4	9876.3	9612.2	9530.9	9544.4
62.5°	8751.9	8724.8	8928.0	9713.8	10702.8	11082.1	10858.6	10343.7	9950.9	9856.0	9856.0
65°	8162.5	8155.8	8440.3	9408.9	10817.9	11752.7	11563.0	10851.8	10343.7	10215.0	10242.1
67.5°	7552.9	7552.9	7810.3	8887.4	10682.4	12037.2	12186.2	11312.4	10533.4	10215.0	10221.8
70°	6475.8	6591.0	7275.2	8406.4	10187.9	11834.0	12443.7	10987.3	9707.0	9144.8	9124.4
72.5°	4267.6	4416.6	5778.1	7566.4	9700.2	11095.6	11231.1	9652.8	8060.9	7403.9	7370.0
75°	2574.1	2702.8	3746.0	5906.8	8528.3	8934.8	8338.7	7566.4	6022.0	5507.2	5507.2
77.5°	758.7	846.7	1727.3	3746.0	5900.1	5873.0	5141.4	4457.2	3563.1	3027.9	3068.6
80°	447.1	460.6	562.2	1707.0	2445.4	2574.1	1984.8	1239.6	1239.6	921.3	894.2
82.5°	345.5	345.5	359.0	426.8	589.3	657.1	501.3	426.8	487.7	413.2	392.9
85°	243.9	243.9	243.9	250.6	257.4	264.2	277.7	284.5	311.6	257.4	243.9
87.5°	74.5	81.3	88.1	101.6	121.9	128.7	135.5	121.9	121.9	115.2	108.4
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)