

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: P842233

Luminaire Tested: **ARCH4-290-727-U-5WQ**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842233
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: ARCH4-290-727-U-5WQ
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1120mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38809 lumens
Efficiency: N/A
Efficacy: 134.0 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): 289.7
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

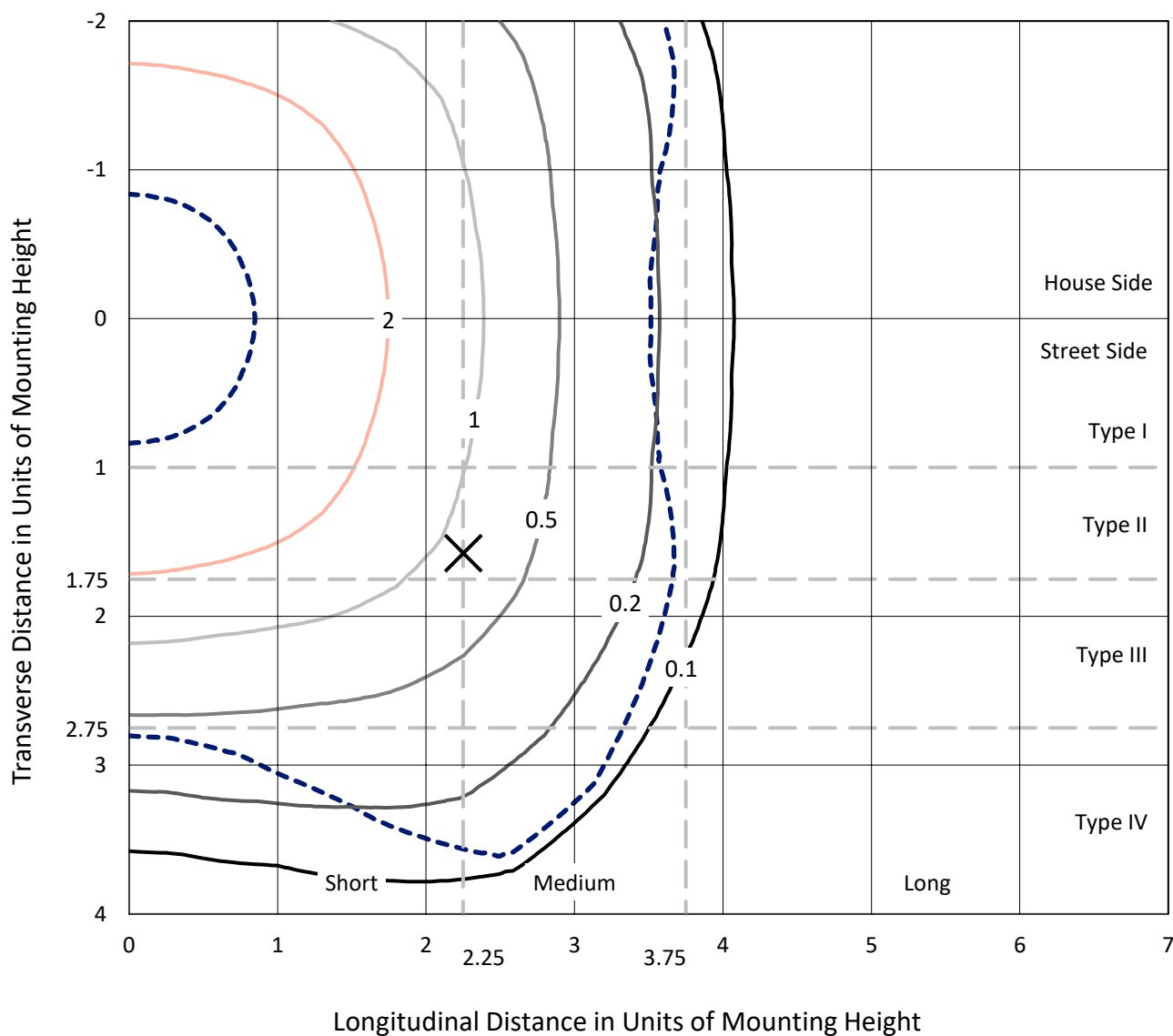


REPORT NUMBER: P842233

CATALOG NUMBER: ARCH4-290-727-U-5WQ

Iso-Footcandle Lines of Horizontal Illumination

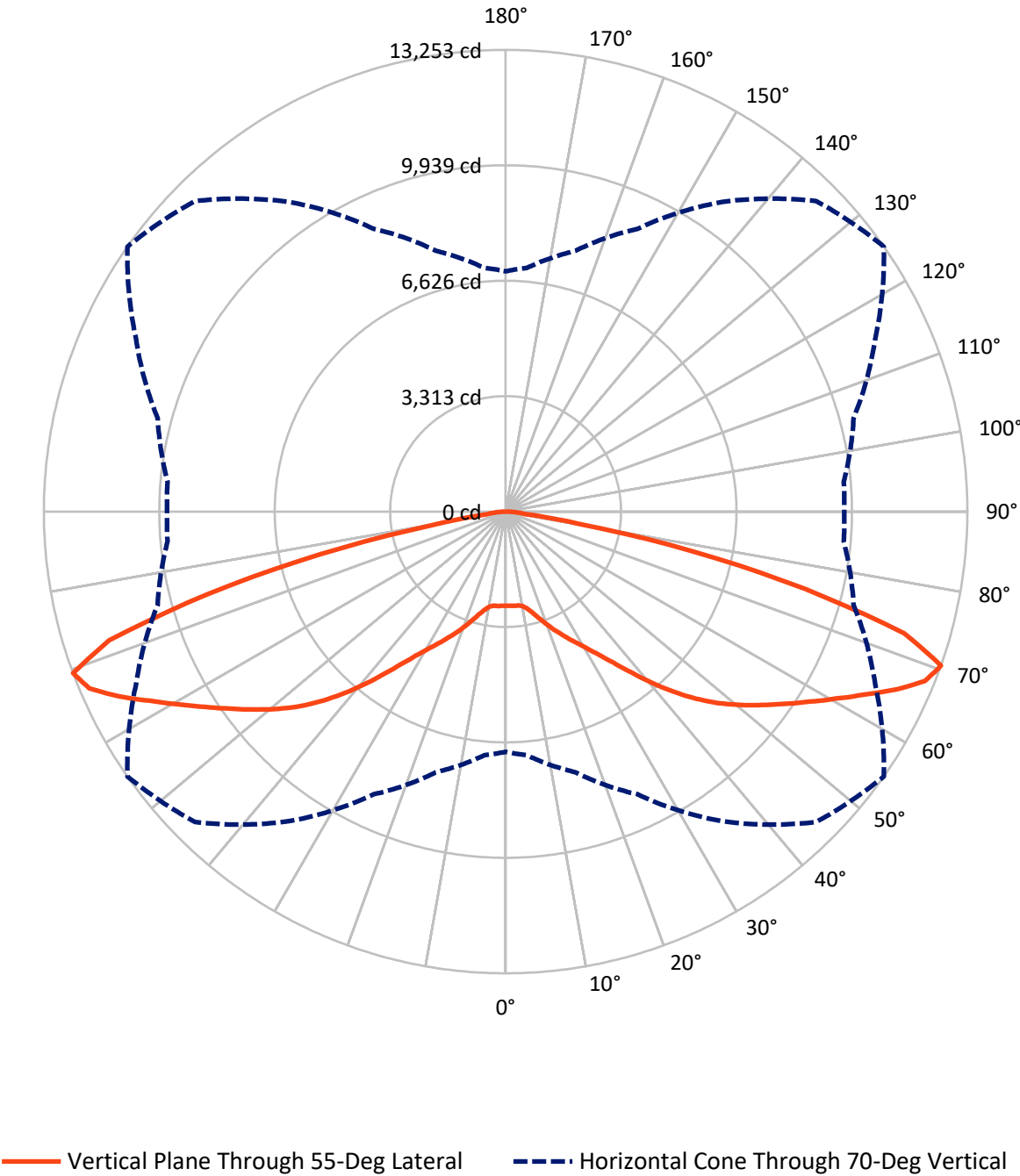
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
Type V - Medium - N/A

REPORT NUMBER: P842233
CATALOG NUMBER: ARCH4-290-727-U-5WQ

Luminous Intensity Polar Plot



REPORT NUMBER: P842233

CATALOG NUMBER: ARCH4-290-727-U-5WQ

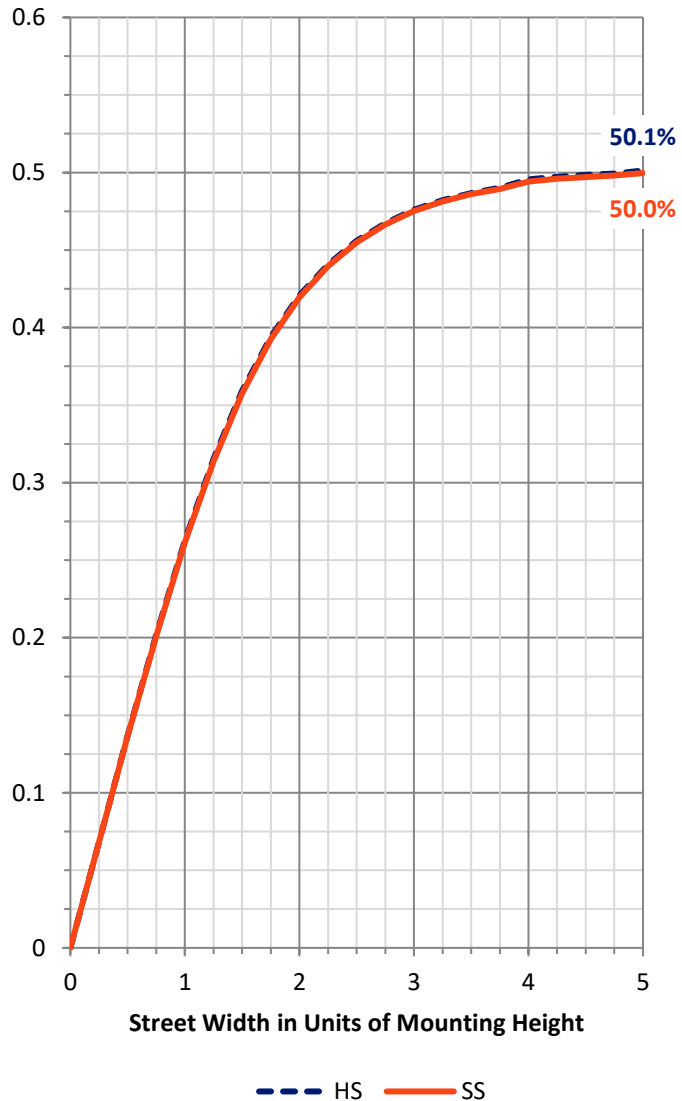
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	19404.5	0.0	19404.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	19404.5	0.0	19404.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	38809.0	0.0	38809.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.2	0.7
10°-20°	888.9	2.3
20°-30°	1847.0	4.8
30°-40°	3411.2	8.8
40°-50°	5992.8	15.4
50°-60°	8643.1	22.3
60°-70°	10578.2	27.3
70°-80°	6731.1	17.3
80°-90°	455.5	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°	38809.0	100.0
0°-180°	38809.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842233

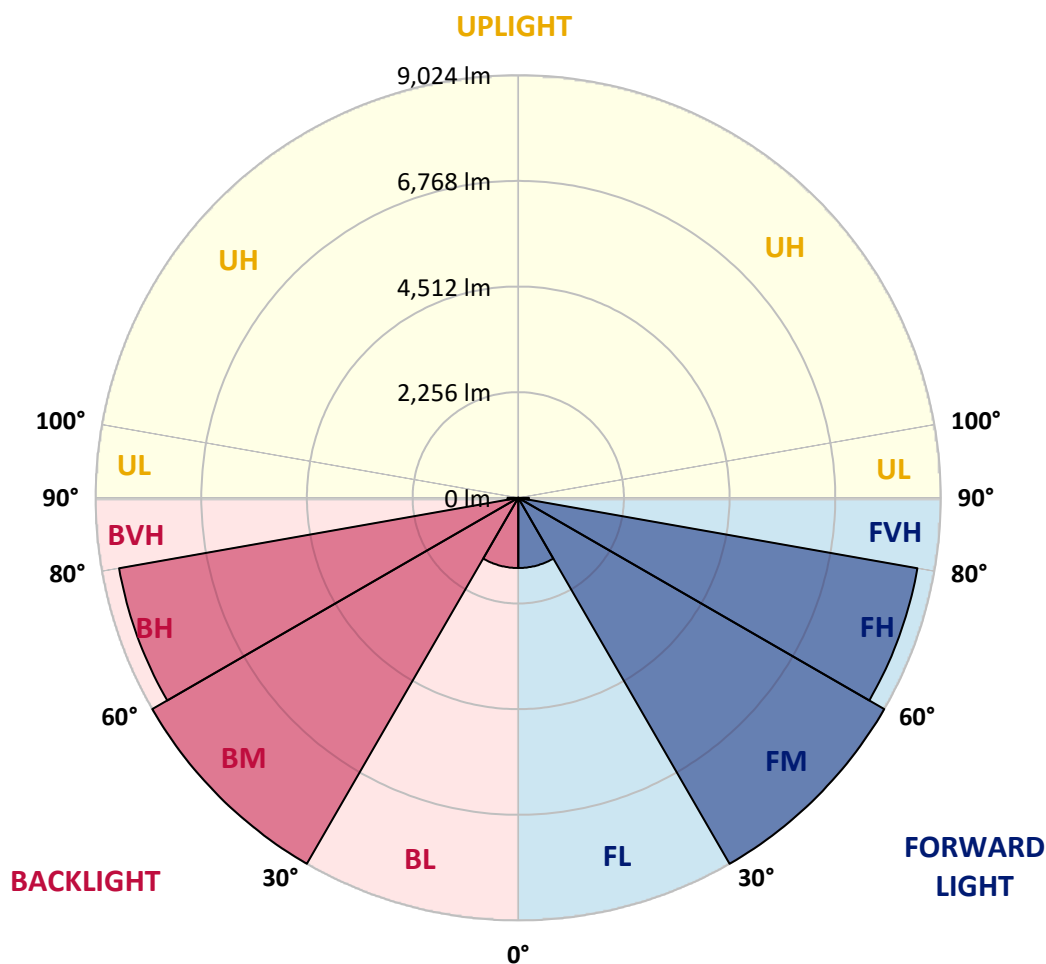
CATALOG NUMBER: ARCH4-290-727-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1498.5	3.9			
FM	(30°-60°)	9023.6	23.3			
FH	(60°-80°)	8654.7	22.3			G4/12000
FVH	(80°-90°)	227.7	0.6			G3/500
BL	(0°-30°)	1498.5	3.9	B3/2500		
BM	(30°-60°)	9023.6	23.3	B5		
BH	(60°-80°)	8654.7	22.3	B5		G4/12000
BVH	(80°-90°)	227.7	0.6			G3/500
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: P842233

CATALOG NUMBER: ARCH4-290-727-U-5WQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4	2705.4
2.5°	2741.4	2741.4	2734.2	2734.2	2719.8	2712.6	2705.4	2705.4	2698.1	2698.1	2690.9
5°	2755.9	2755.9	2755.9	2748.6	2741.4	2734.2	2719.8	2705.4	2698.1	2690.9	2683.7
7.5°	2763.1	2763.1	2755.9	2755.9	2748.6	2741.4	2719.8	2698.1	2690.9	2683.7	2683.7
10°	2820.8	2813.6	2806.4	2791.9	2791.9	2791.9	2763.1	2741.4	2734.2	2734.2	2734.2
12.5°	2957.9	2950.6	2936.2	2914.6	2914.6	2921.8	2878.5	2849.6	2849.6	2842.4	2842.4
15°	3159.9	3152.6	3138.2	3102.1	3094.9	3109.4	3044.4	3015.6	3015.6	3015.6	3008.4
17.5°	3383.5	3369.1	3347.4	3318.6	3318.6	3318.6	3253.6	3217.6	3195.9	3195.9	3188.7
20°	3571.1	3563.9	3563.9	3556.6	3578.3	3578.3	3491.7	3434.0	3383.5	3354.6	3347.4
22.5°	3737.0	3729.8	3744.2	3773.1	3816.4	3830.8	3729.8	3643.2	3563.9	3506.1	3491.7
25°	3960.6	3953.4	3946.2	3989.5	4061.6	4083.3	3975.1	3866.9	3787.5	3758.6	3744.2
27.5°	4198.7	4205.9	4213.1	4256.4	4314.1	4350.2	4242.0	4141.0	4076.1	4032.8	4018.4
30°	4465.6	4480.1	4501.7	4566.6	4609.9	4624.4	4530.6	4458.4	4400.7	4364.6	4343.0
32.5°	4804.7	4833.6	4862.4	4920.1	4941.8	4927.4	4884.1	4833.6	4790.3	4739.8	4732.6
35°	5309.7	5338.6	5331.3	5353.0	5360.2	5345.8	5324.1	5295.3	5273.6	5208.7	5201.5
37.5°	5944.6	5973.4	5930.1	5908.5	5858.0	5865.2	5858.0	5879.6	5886.8	5821.9	5814.7
40°	6586.6	6615.5	6557.8	6500.1	6449.6	6427.9	6464.0	6536.1	6536.1	6492.8	6492.8
42.5°	7272.0	7293.6	7199.8	7127.7	7062.8	7048.3	7070.0	7156.6	7178.2	7171.0	7171.0
45°	7957.3	7942.9	7820.3	7748.1	7690.4	7654.3	7661.6	7726.5	7769.8	7791.4	7791.4
47.5°	8484.0	8462.3	8361.3	8303.6	8267.6	8217.1	8217.1	8253.1	8274.8	8282.0	8282.0
50°	8902.4	8880.8	8779.8	8772.6	8772.6	8750.9	8729.3	8722.1	8707.6	8714.8	8714.8
52.5°	9263.1	9234.3	9162.1	9176.6	9241.5	9255.9	9227.1	9169.3	9111.6	9090.0	9097.2
55°	9652.7	9609.4	9551.7	9595.0	9724.8	9782.6	9739.3	9623.8	9522.8	9457.9	9457.9
57.5°	9962.9	9912.4	9912.4	10035.1	10273.1	10388.6	10294.8	10078.3	9905.2	9833.1	9840.3
60°	9746.5	9703.2	9876.3	10417.4	10864.7	11059.5	10900.8	10518.4	10237.1	10150.5	10164.9
62.5°	9320.8	9292.0	9508.4	10345.3	11398.6	11802.6	11564.5	11016.2	10597.8	10496.8	10496.8
65°	8693.2	8686.0	8989.0	10020.6	11521.2	12516.8	12314.8	11557.3	11016.2	10879.1	10908.0
67.5°	8043.9	8043.9	8318.1	9465.1	11376.9	12819.8	12978.5	12047.8	11218.2	10879.1	10886.3
70°	6896.8	7019.5	7748.1	8952.9	10850.3	12603.3	13252.6	11701.6	10338.1	9739.3	9717.6
72.5°	4545.0	4703.7	6153.8	8058.3	10330.8	11817.0	11961.3	10280.3	8585.0	7885.2	7849.1
75°	2741.4	2878.5	3989.5	6290.8	9082.8	9515.6	8880.8	8058.3	6413.5	5865.2	5865.2
77.5°	808.0	901.8	1839.6	3989.5	6283.6	6254.8	5475.6	4747.0	3794.7	3224.8	3268.1
80°	476.1	490.6	598.8	1818.0	2604.4	2741.4	2113.8	1320.2	1320.2	981.1	952.3
82.5°	367.9	367.9	382.4	454.5	627.6	699.8	533.9	454.5	519.4	440.1	418.4
85°	259.7	259.7	259.7	266.9	274.1	281.4	295.8	303.0	331.9	274.1	259.7
87.5°	79.4	86.6	93.8	108.2	129.9	137.1	144.3	129.9	129.9	122.6	115.4
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)