

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: P842260

Luminaire Tested: **ARCH4-290-740-U-5WQ**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842260
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: ARCH4-290-740-U-5WQ
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1120mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42227 lumens
Efficiency: N/A
Efficacy: 145.8 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

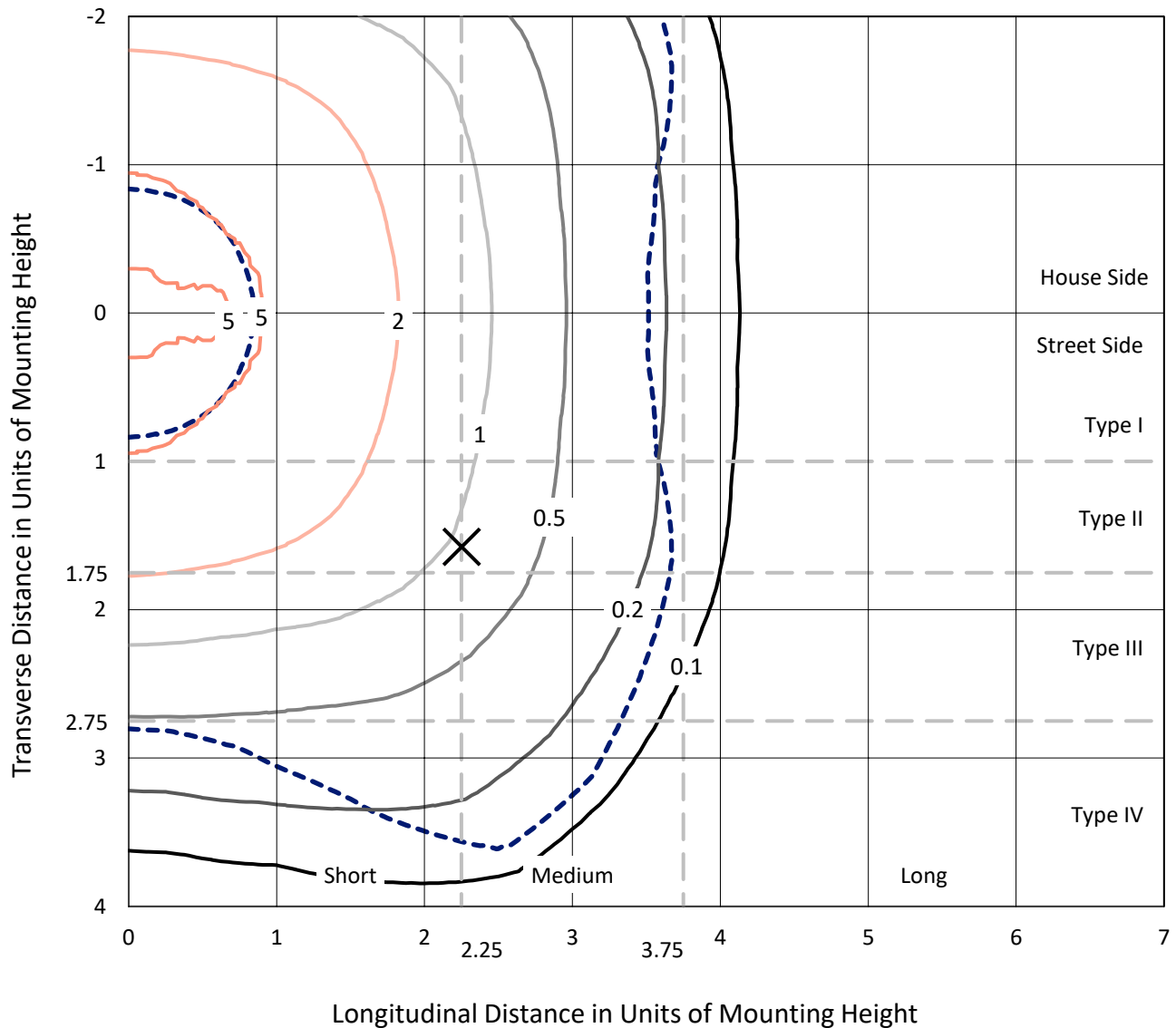


REPORT NUMBER: P842260

CATALOG NUMBER: ARCH4-290-740-U-5WQ

Iso-Footcandle Lines of Horizontal Illumination

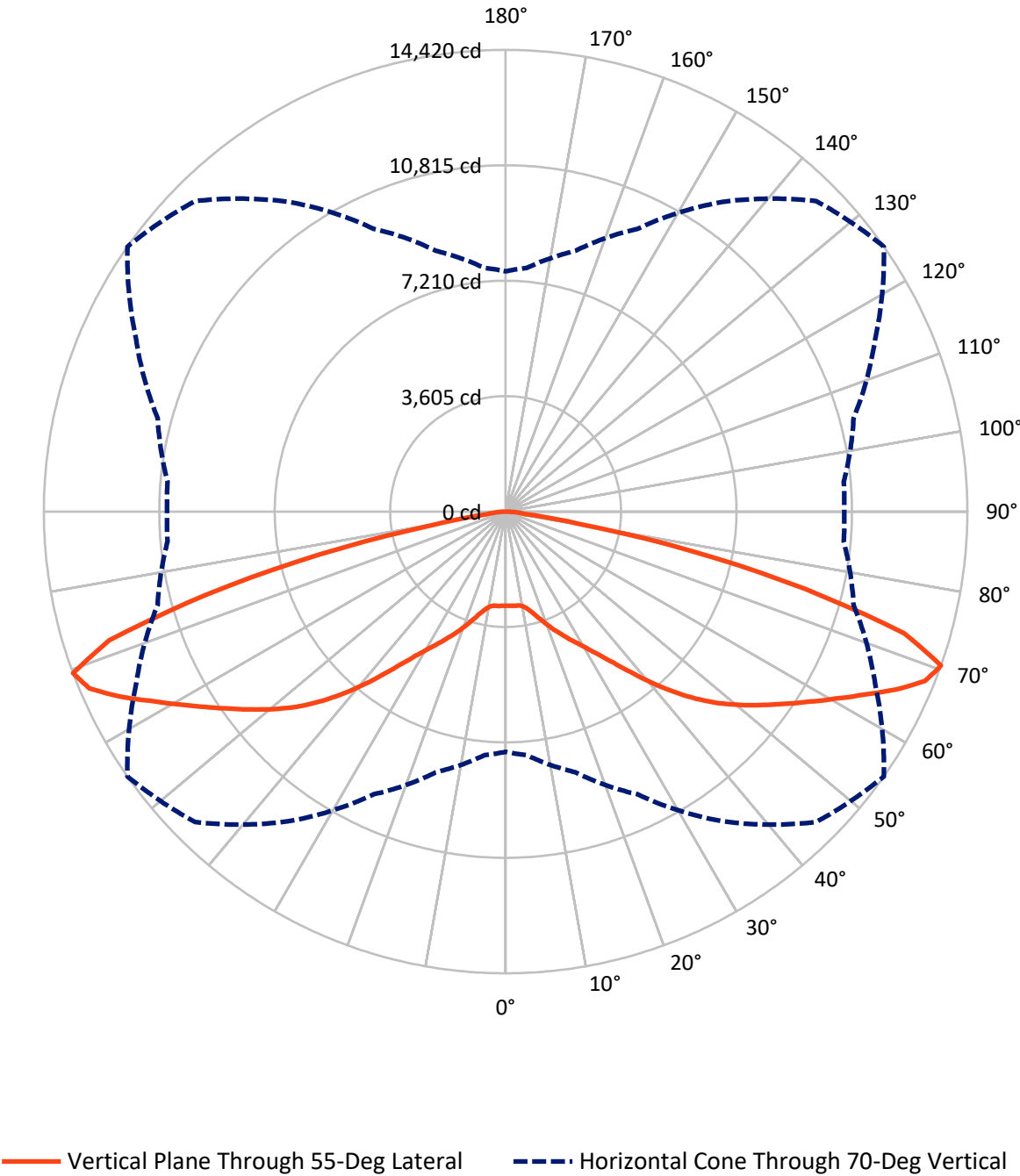
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
Type V - Medium - N/A

REPORT NUMBER: P842260
CATALOG NUMBER: ARCH4-290-740-U-5WQ

Luminous Intensity Polar Plot



REPORT NUMBER: P842260

CATALOG NUMBER: ARCH4-290-740-U-5WQ

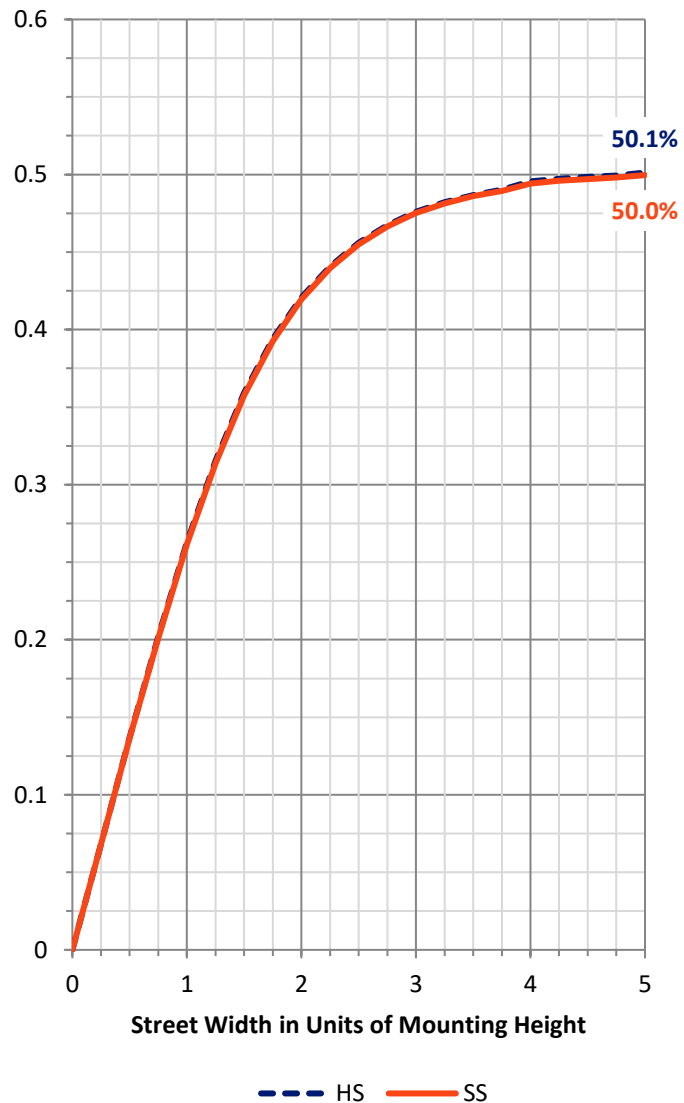
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21113.5	0.0	21113.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	21113.5	0.0	21113.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	42227.0	0.0	42227.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	284.2	0.7
10°-20°	967.2	2.3
20°-30°	2009.7	4.8
30°-40°	3711.7	8.8
40°-50°	6520.6	15.4
50°-60°	9404.3	22.3
60°-70°	11509.8	27.3
70°-80°	7324.0	17.3
80°-90°	495.6	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°	42227.0	100.0
0°-180°	42227.0	100.0

Coefficient of Utilization



REPORT NUMBER: P842260

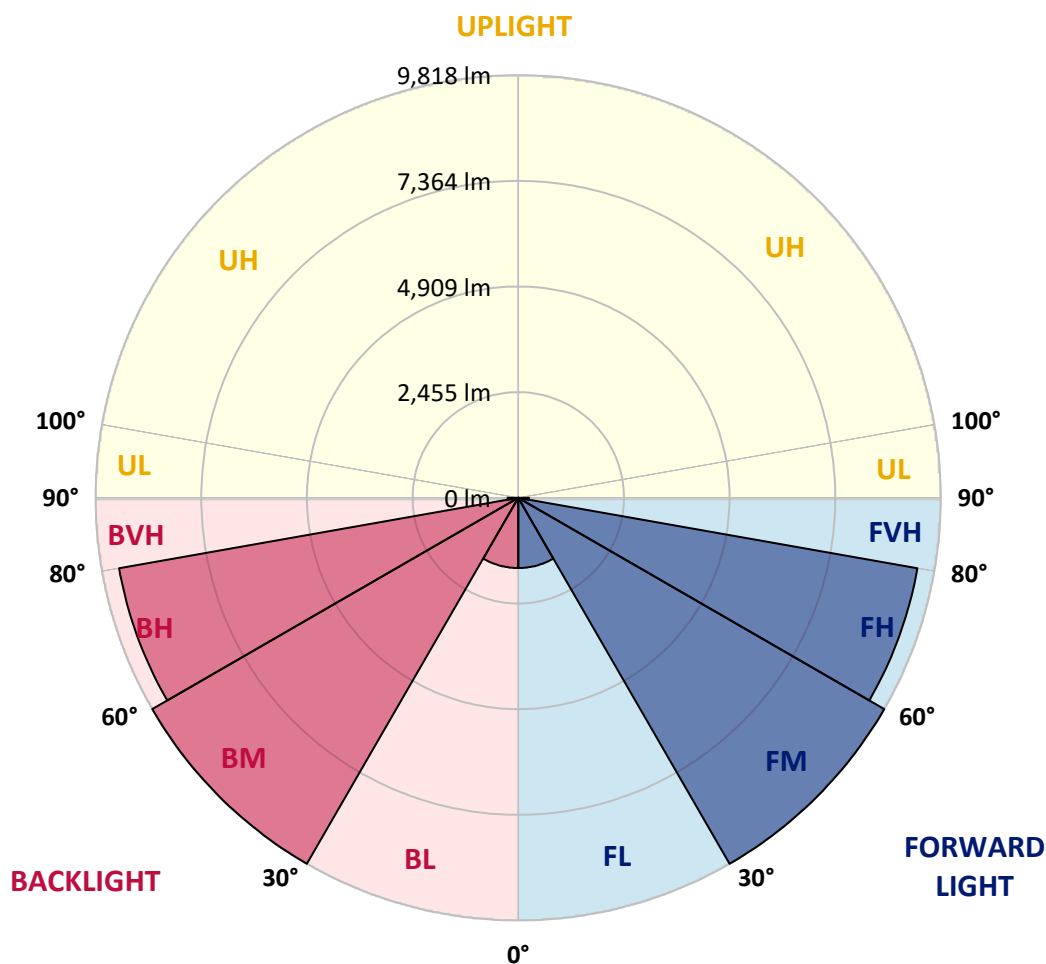
CATALOG NUMBER: ARCH4-290-740-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1630.5	3.9			
FM	(30°-60°)	9818.3	23.3			
FH	(60°-80°)	9416.9	22.3			G4/12000
FVH	(80°-90°)	247.8	0.6			G3/500
BL	(0°-30°)	1630.5	3.9	B3/2500		
BM	(30°-60°)	9818.3	23.3	B5		
BH	(60°-80°)	9416.9	22.3	B5		G4/12000
BVH	(80°-90°)	247.8	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: P842260

CATALOG NUMBER: ARCH4-290-740-U-5WQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2943.6	2943.6	2943.6	2943.6	2943.6	2943.6	2943.6	2943.6	2943.6	2943.6	2943.6
2.5°	2982.9	2982.9	2975.0	2975.0	2959.3	2951.5	2943.6	2943.6	2935.8	2935.8	2927.9
5°	2998.6	2998.6	2998.6	2990.7	2982.9	2975.0	2959.3	2943.6	2935.8	2927.9	2920.1
7.5°	3006.4	3006.4	2998.6	2998.6	2990.7	2982.9	2959.3	2935.8	2927.9	2920.1	2920.1
10°	3069.2	3061.4	3053.5	3037.8	3037.8	3037.8	3006.4	2982.9	2975.0	2975.0	2975.0
12.5°	3218.4	3210.5	3194.8	3171.3	3171.3	3179.1	3132.0	3100.6	3100.6	3092.8	3092.8
15°	3438.1	3430.3	3414.6	3375.4	3367.5	3383.2	3312.6	3281.2	3281.2	3281.2	3273.3
17.5°	3681.5	3665.8	3642.2	3610.8	3610.8	3610.8	3540.2	3500.9	3477.4	3477.4	3469.5
20°	3885.6	3877.7	3877.7	3869.9	3893.4	3893.4	3799.2	3736.4	3681.5	3650.1	3642.2
22.5°	4066.1	4058.3	4074.0	4105.4	4152.5	4168.2	4058.3	3964.1	3877.7	3814.9	3799.2
25°	4309.5	4301.6	4293.8	4340.9	4419.4	4442.9	4325.2	4207.4	4121.1	4089.7	4074.0
27.5°	4568.5	4576.3	4584.2	4631.3	4694.1	4733.3	4615.6	4505.7	4435.1	4388.0	4372.3
30°	4858.9	4874.6	4898.2	4968.8	5015.9	5031.6	4929.6	4851.1	4788.3	4749.0	4725.5
32.5°	5227.9	5259.3	5290.7	5353.5	5377.0	5361.3	5314.2	5259.3	5212.2	5157.2	5149.4
35°	5777.3	5808.7	5800.9	5824.4	5832.3	5816.6	5793.0	5761.6	5738.1	5667.5	5659.6
37.5°	6468.1	6499.5	6452.4	6428.9	6373.9	6381.8	6373.9	6397.5	6405.3	6334.7	6326.8
40°	7166.7	7198.1	7135.3	7072.5	7017.6	6994.0	7033.3	7111.8	7111.8	7064.7	7064.7
42.5°	7912.5	7936.0	7834.0	7755.5	7684.8	7669.1	7692.7	7786.9	7810.4	7802.6	7802.6
45°	8658.2	8642.5	8509.0	8430.5	8367.7	8328.5	8336.3	8407.0	8454.1	8477.6	8477.6
47.5°	9231.2	9207.6	9097.7	9035.0	8995.7	8940.8	8940.8	8980.0	9003.6	9011.4	9011.4
50°	9686.5	9662.9	9553.0	9545.2	9545.2	9521.6	9498.1	9490.2	9474.5	9482.4	9482.4
52.5°	10079.0	10047.6	9969.1	9984.8	10055.4	10071.1	10039.7	9976.9	9914.1	9890.6	9898.4
55°	10502.8	10455.7	10392.9	10440.0	10581.3	10644.1	10597.0	10471.4	10361.5	10290.9	10290.9
57.5°	10840.4	10785.4	10785.4	10918.9	11177.9	11303.5	11201.5	10966.0	10777.6	10699.1	10706.9
60°	10604.9	10557.8	10746.2	11334.9	11821.6	12033.5	11860.8	11444.8	11138.7	11044.5	11060.2
62.5°	10141.8	10110.4	10345.8	11256.4	12402.5	12842.0	12583.0	11986.4	11531.1	11421.2	11421.2
65°	9458.8	9451.0	9780.7	10903.2	12535.9	13619.1	13399.4	12575.1	11986.4	11837.3	11868.7
67.5°	8752.4	8752.4	9050.7	10298.7	12378.9	13948.8	14121.5	13108.9	12206.2	11837.3	11845.1
70°	7504.3	7637.7	8430.5	9741.4	11805.9	13713.3	14419.8	12732.1	11248.6	10597.0	10573.5
72.5°	4945.3	5118.0	6695.8	8768.1	11240.7	12857.7	13014.7	11185.8	9341.1	8579.7	8540.4
75°	2982.9	3132.0	4340.9	6844.9	9882.7	10353.7	9662.9	8768.1	6978.3	6381.8	6381.8
77.5°	879.2	981.2	2001.7	4340.9	6837.0	6805.7	5957.9	5165.1	4128.9	3508.8	3555.9
80°	518.1	533.8	651.5	1978.1	2833.7	2982.9	2299.9	1436.5	1436.5	1067.6	1036.2
82.5°	400.3	400.3	416.0	494.5	682.9	761.4	580.9	494.5	565.2	478.8	455.3
85°	282.6	282.6	282.6	290.4	298.3	306.1	321.8	329.7	361.1	298.3	282.6
87.5°	86.3	94.2	102.0	117.7	141.3	149.1	157.0	141.3	141.3	133.4	125.6
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)