

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: P841729

Luminaire Tested: **ARCH4-220-727-U-5WQ**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841729
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: ARCH4-220-727-U-5WQ
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31800 lumens
Efficiency: N/A
Efficacy: 143.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type V - Medium
BUG Rating: B5 - U0 - G3

Input Watts (W): 221.8
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

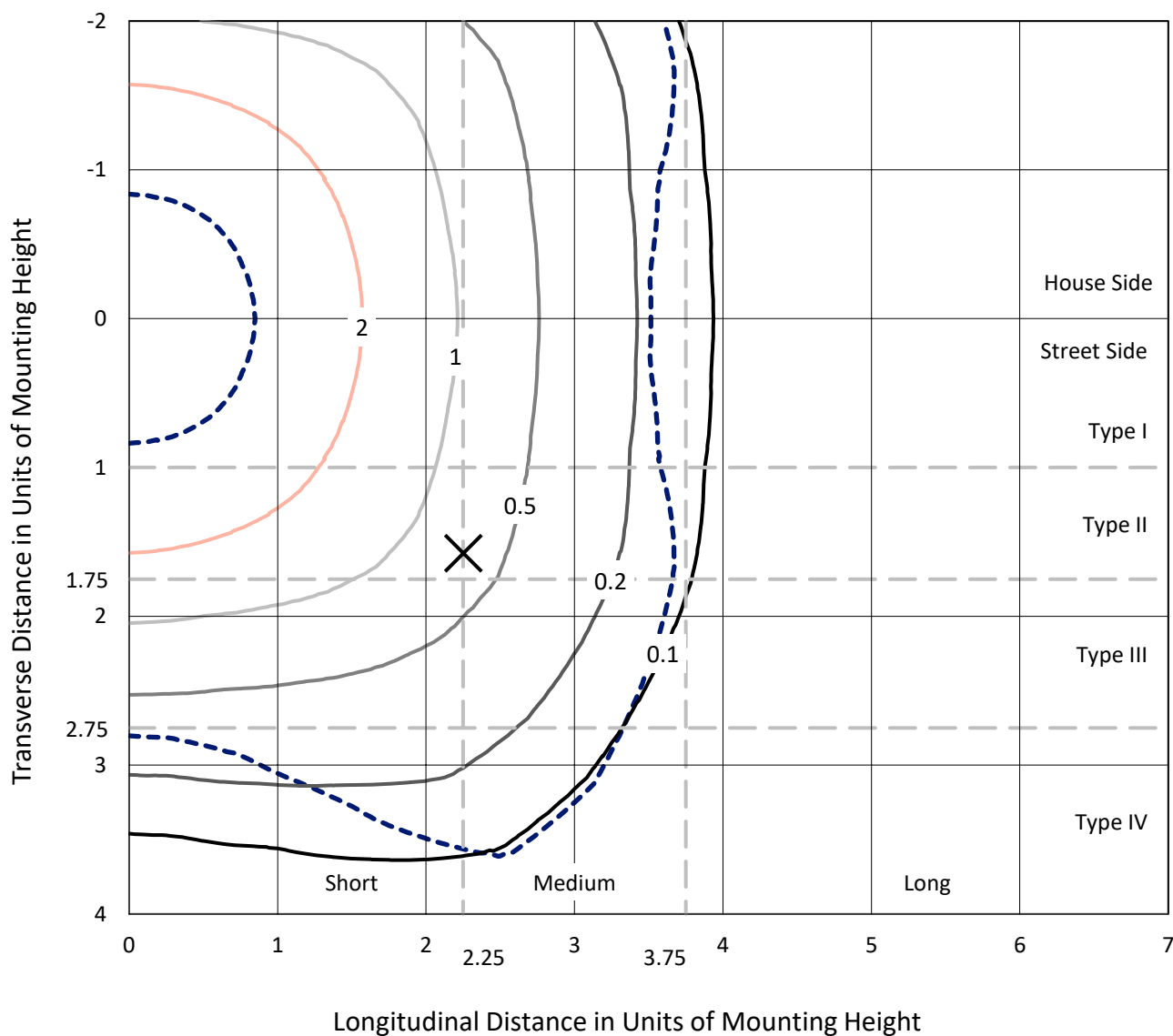


REPORT NUMBER: P841729

CATALOG NUMBER: ARCH4-220-727-U-5WQ

Iso-Footcandle Lines of Horizontal Illumination

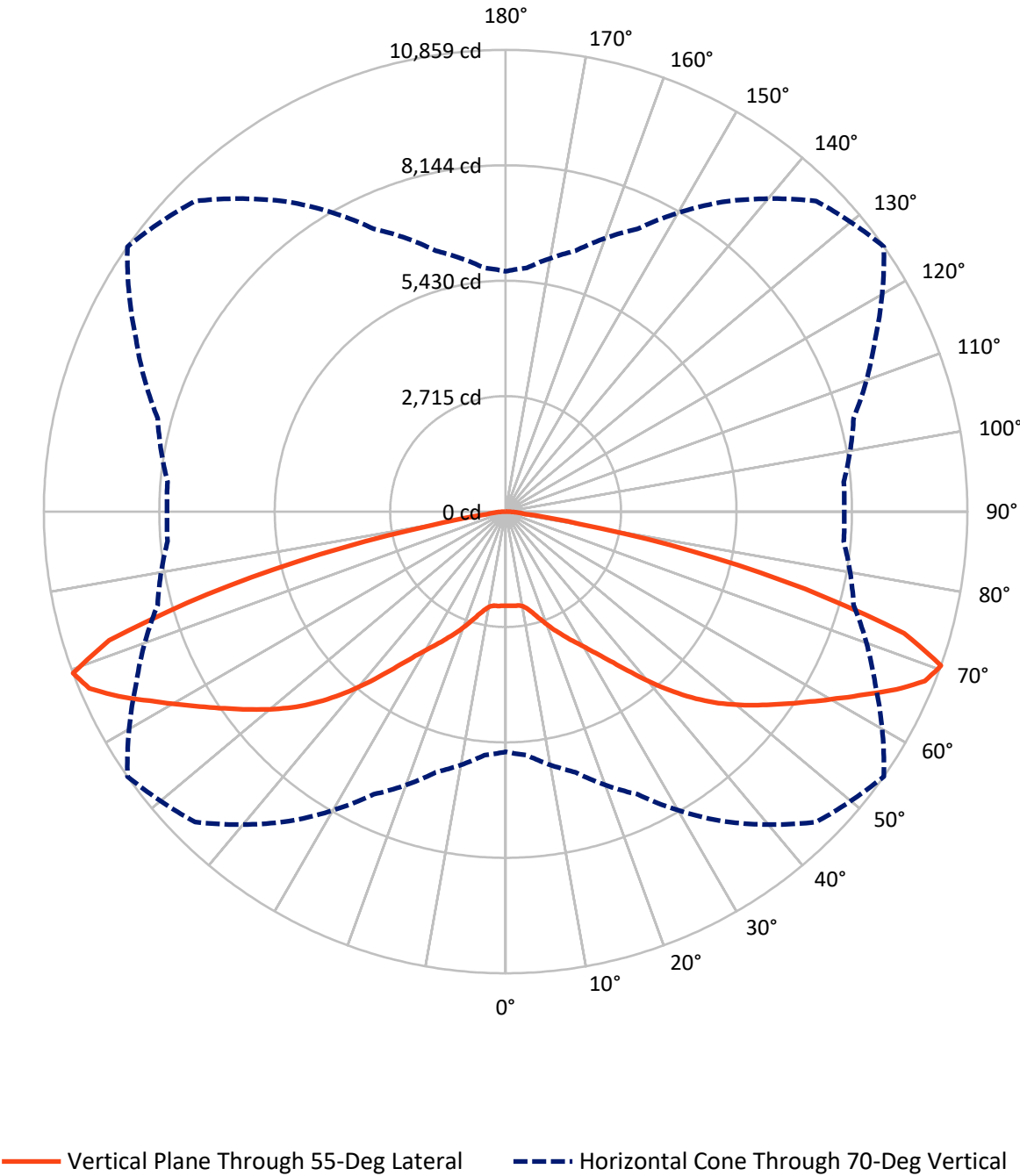
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
Type V - Medium - N/A

REPORT NUMBER: P841729
CATALOG NUMBER: ARCH4-220-727-U-5WQ

Luminous Intensity Polar Plot



REPORT NUMBER: P841729

CATALOG NUMBER: ARCH4-220-727-U-5WQ

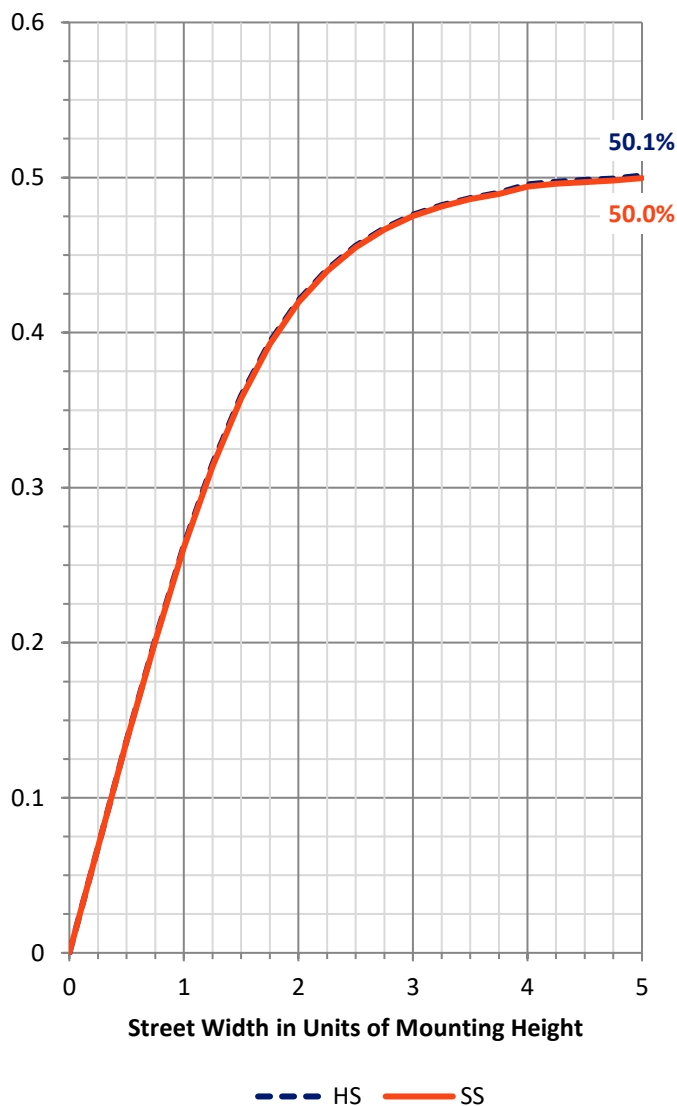
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15900.0	0.0	15900.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	15900.0	0.0	15900.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	31800.0	0.0	31800.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.0	0.7
10°-20°	728.3	2.3
20°-30°	1513.4	4.8
30°-40°	2795.2	8.8
40°-50°	4910.5	15.4
50°-60°	7082.1	22.3
60°-70°	8667.7	27.3
70°-80°	5515.5	17.3
80°-90°	373.2	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°	31800.0	100.0
0°-180°	31800.0	100.0

Coefficient of Utilization



REPORT NUMBER: P841729

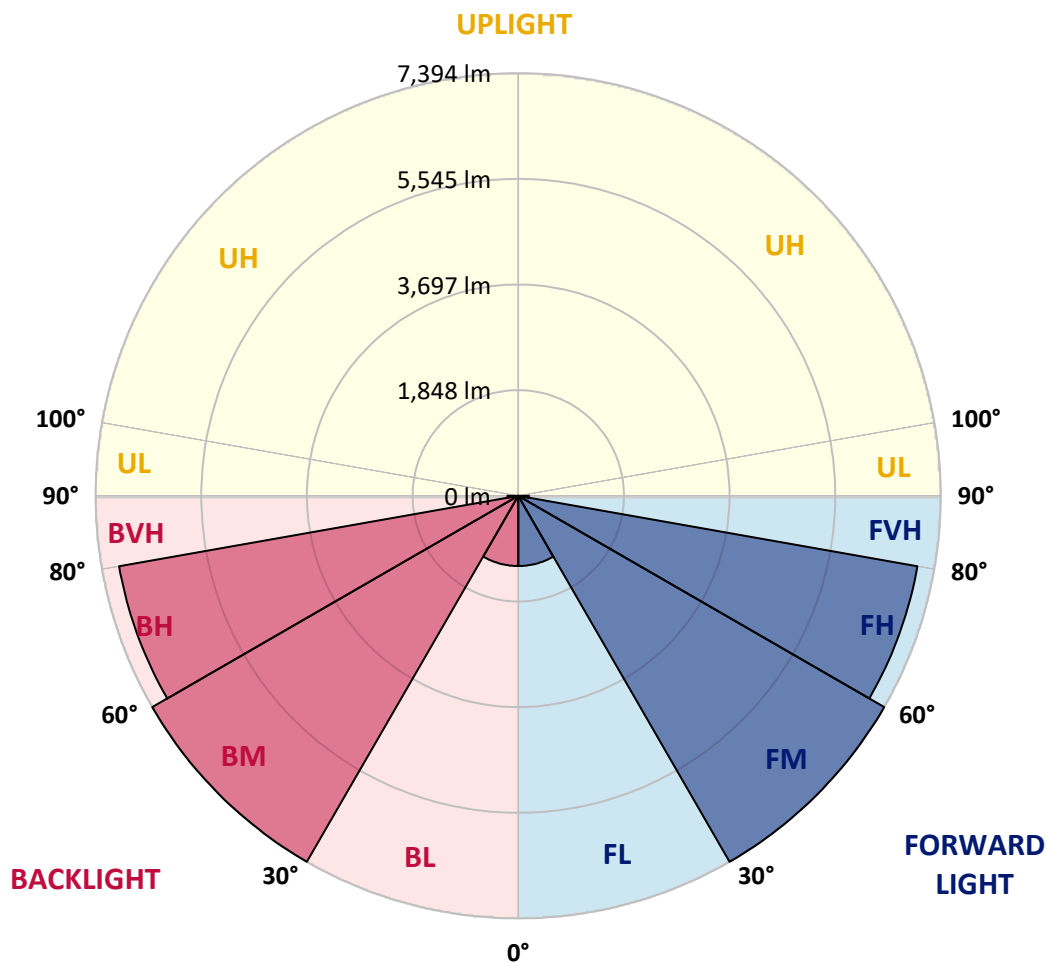
CATALOG NUMBER: ARCH4-220-727-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1227.9	3.9			
FM	(30°-60°)	7393.9	23.3			
FH	(60°-80°)	7091.6	22.3			G3/7500
FVH	(80°-90°)	186.6	0.6			G2/225
BL	(0°-30°)	1227.9	3.9	B3/2500		
BM	(30°-60°)	7393.9	23.3	B4/8500		
BH	(60°-80°)	7091.6	22.3	B5		G3/7500
BVH	(80°-90°)	186.6	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-G3

Type V Medium



REPORT NUMBER: P841729

CATALOG NUMBER: ARCH4-220-727-U-5WQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8	2216.8
2.5°	2246.3	2246.3	2240.4	2240.4	2228.6	2222.7	2216.8	2216.8	2210.8	2210.8	2204.9
5°	2258.1	2258.1	2258.1	2252.2	2246.3	2240.4	2228.6	2216.8	2210.8	2204.9	2199.0
7.5°	2264.1	2264.1	2258.1	2258.1	2252.2	2246.3	2228.6	2210.8	2204.9	2199.0	2199.0
10°	2311.3	2305.4	2299.5	2287.7	2287.7	2287.7	2264.1	2246.3	2240.4	2240.4	2240.4
12.5°	2423.7	2417.7	2405.9	2388.2	2388.2	2394.1	2358.6	2335.0	2335.0	2329.1	2329.1
15°	2589.2	2583.3	2571.4	2541.9	2536.0	2547.8	2494.6	2470.9	2470.9	2470.9	2465.0
17.5°	2772.4	2760.6	2742.9	2719.2	2719.2	2719.2	2666.0	2636.5	2618.7	2618.7	2612.8
20°	2926.1	2920.2	2920.2	2914.3	2932.0	2932.0	2861.1	2813.8	2772.4	2748.8	2742.9
22.5°	3062.1	3056.2	3068.0	3091.6	3127.1	3138.9	3056.2	2985.2	2920.2	2872.9	2861.1
25°	3245.3	3239.4	3233.5	3269.0	3328.1	3345.8	3257.2	3168.5	3103.5	3079.8	3068.0
27.5°	3440.4	3446.3	3452.2	3487.7	3535.0	3564.6	3475.9	3393.1	3339.9	3304.5	3292.6
30°	3659.1	3671.0	3688.7	3741.9	3777.4	3789.2	3712.3	3653.2	3605.9	3576.4	3558.6
32.5°	3937.0	3960.6	3984.3	4031.5	4049.3	4037.5	4002.0	3960.6	3925.1	3883.8	3877.9
35°	4350.8	4374.4	4368.5	4386.2	4392.1	4380.3	4362.6	4338.9	4321.2	4268.0	4262.1
37.5°	4871.0	4894.6	4859.1	4841.4	4800.0	4805.9	4800.0	4817.8	4823.7	4770.5	4764.6
40°	5397.1	5420.7	5373.4	5326.1	5284.8	5267.0	5296.6	5355.7	5355.7	5320.2	5320.2
42.5°	5958.7	5976.4	5899.5	5840.4	5787.2	5775.4	5793.1	5864.1	5881.8	5875.9	5875.9
45°	6520.2	6508.4	6407.9	6348.8	6301.5	6272.0	6277.9	6331.1	6366.5	6384.3	6384.3
47.5°	6951.8	6934.0	6851.3	6804.0	6774.4	6733.0	6733.0	6762.6	6780.3	6786.2	6786.2
50°	7294.6	7276.9	7194.1	7188.2	7188.2	7170.5	7152.7	7146.8	7135.0	7140.9	7140.9
52.5°	7590.2	7566.5	7507.4	7519.2	7572.5	7584.3	7560.6	7513.3	7466.0	7448.3	7454.2
55°	7909.4	7873.9	7826.6	7862.1	7968.5	8015.8	7980.3	7885.8	7803.0	7749.8	7749.8
57.5°	8163.6	8122.2	8122.2	8222.7	8417.8	8512.4	8435.5	8258.2	8116.3	8057.2	8063.1
60°	7986.2	7950.8	8092.7	8536.0	8902.5	9062.1	8932.1	8618.8	8388.2	8317.3	8329.1
62.5°	7637.5	7613.8	7791.2	8476.9	9339.9	9671.0	9475.9	9026.6	8683.8	8601.0	8601.0
65°	7123.2	7117.3	7365.6	8210.9	9440.4	10256.2	10090.7	9470.0	9026.6	8914.3	8938.0
67.5°	6591.2	6591.2	6815.8	7755.7	9322.2	10504.5	10634.5	9872.0	9192.2	8914.3	8920.2
70°	5651.3	5751.8	6348.8	7336.0	8890.7	10327.1	10859.2	9588.2	8471.0	7980.3	7962.6
72.5°	3724.2	3854.2	5042.4	6603.0	8465.1	9682.8	9801.0	8423.7	7034.5	6461.1	6431.6
75°	2246.3	2358.6	3269.0	5154.7	7442.4	7797.1	7276.9	6603.0	5255.2	4805.9	4805.9
77.5°	662.1	738.9	1507.4	3269.0	5148.8	5125.1	4486.7	3889.7	3109.4	2642.4	2677.8
80°	390.1	402.0	490.6	1489.7	2134.0	2246.3	1732.0	1081.8	1081.8	803.9	780.3
82.5°	301.5	301.5	313.3	372.4	514.3	573.4	437.4	372.4	425.6	360.6	342.9
85°	212.8	212.8	212.8	218.7	224.6	230.5	242.4	248.3	271.9	224.6	212.8
87.5°	65.0	70.9	76.8	88.7	106.4	112.3	118.2	106.4	106.4	100.5	94.6
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)