

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: LUMARK

Report Number: P966132

Luminaire Tested: **NAV-SB4B-735-U-5NQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966132
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-18)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-735-U-5NQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24240.2 lumens
Efficiency: N/A
Efficacy: 164.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

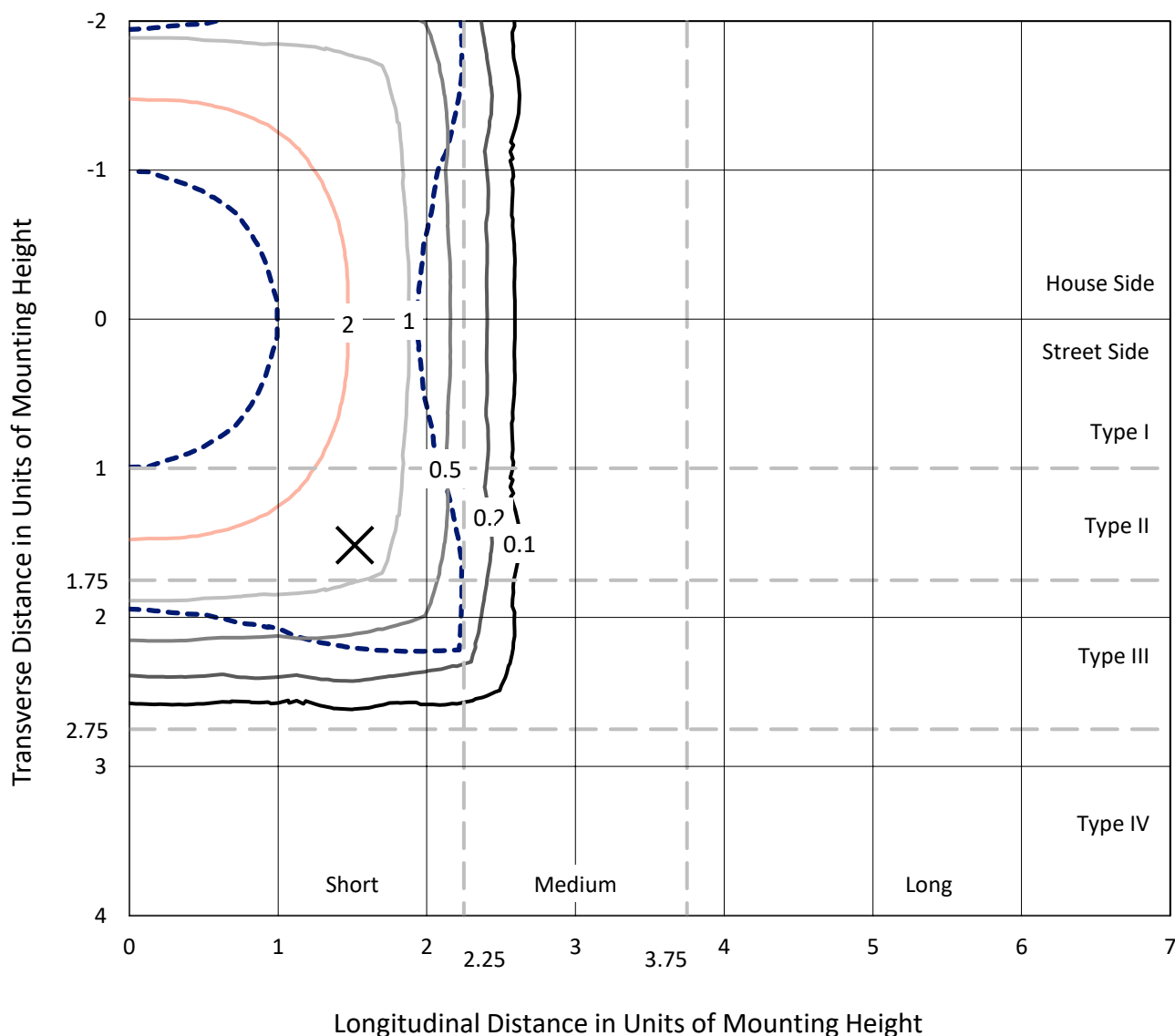
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

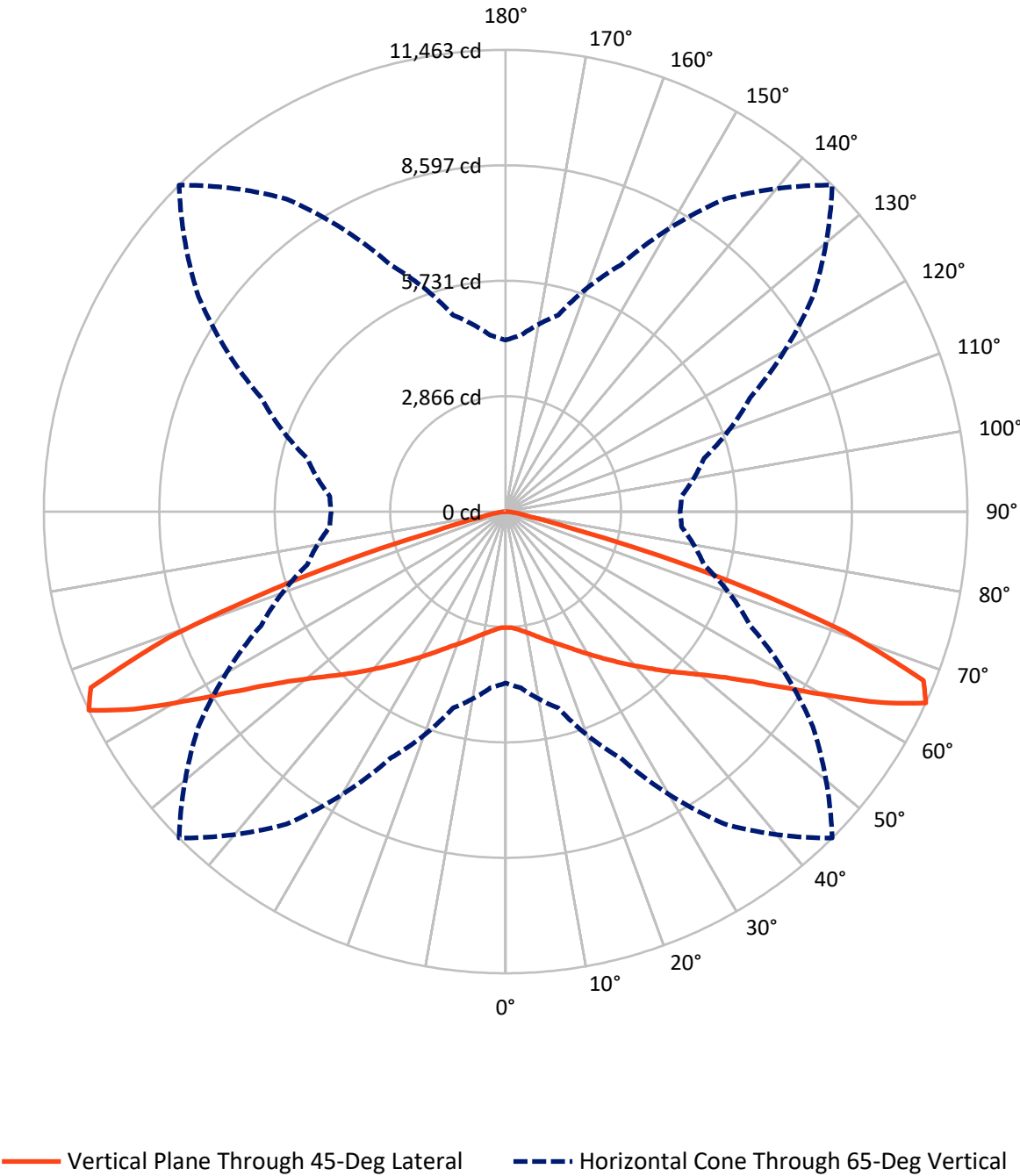
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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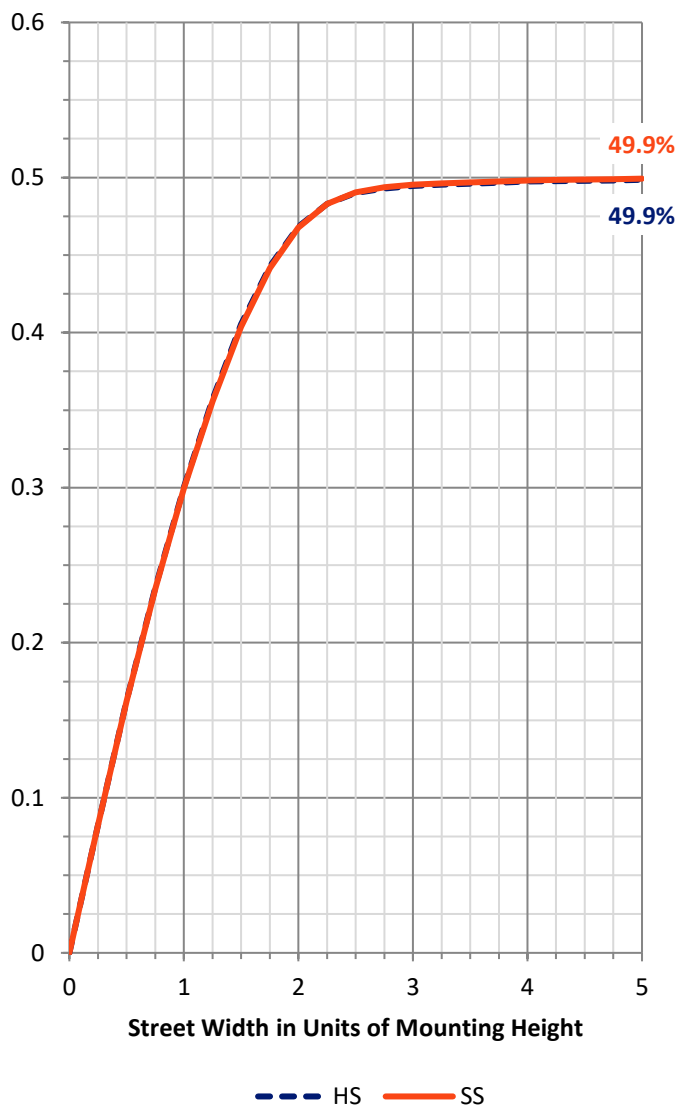
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12120.1	0.0	12120.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	12120.1	0.0	12120.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	24240.2	0.0	24240.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	284.7	1.2
10°-20°	929.0	3.8
20°-30°	1754.1	7.2
30°-40°	2872.3	11.8
40°-50°	4453.4	18.4
50°-60°	6578.7	27.1
60°-70°	6262.3	25.8
70°-80°	1010.5	4.2
80°-90°	95.3	0.4
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°	24240.2	100.0
0°-180°	24240.2	100.0

Coefficient of Utilization



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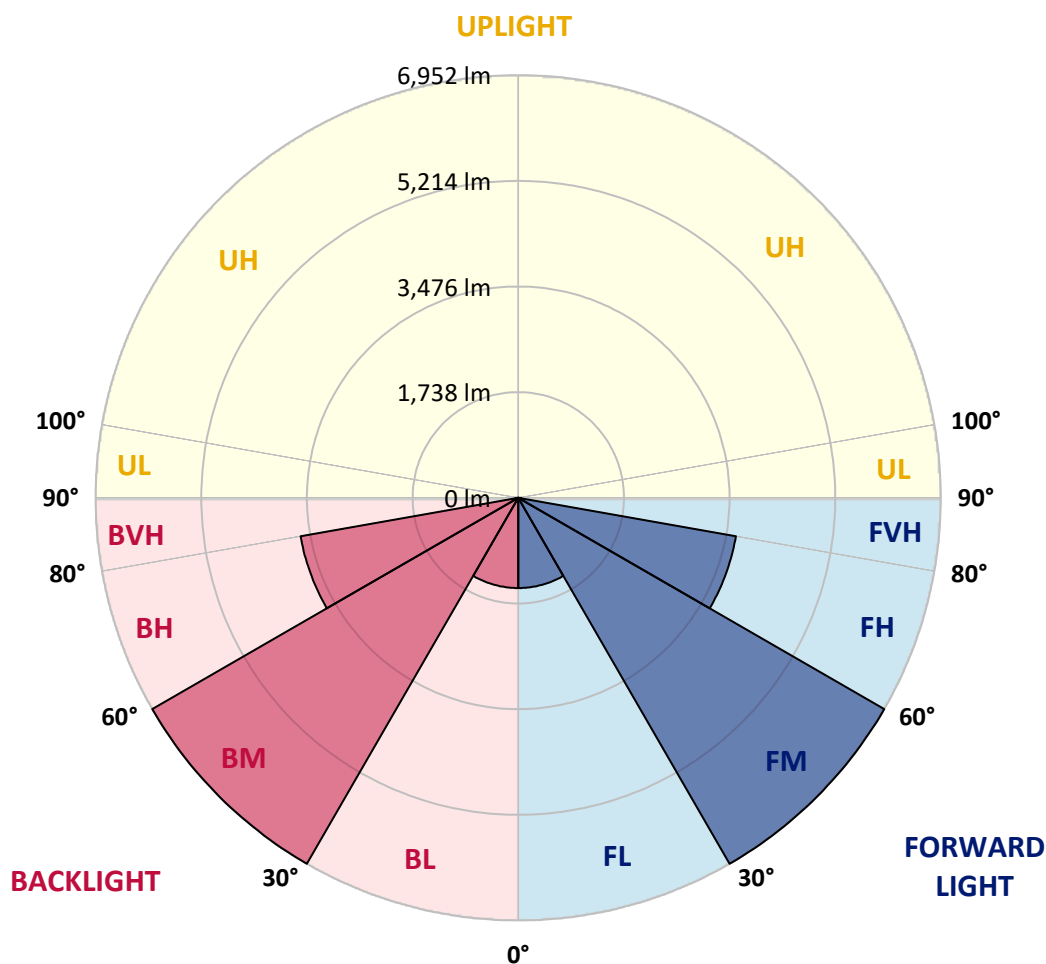
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1483.9	6.1			
FM	(30°-60°)	6952.2	28.7			
FH	(60°-80°)	3636.4	15.0			G2/5000
FVH	(80°-90°)	47.6	0.2			G1/100
BL	(0°-30°)	1483.9	6.1	B3/2500		
BM	(30°-60°)	6952.2	28.7	B4/8500		
BH	(60°-80°)	3636.4	15.0	B4/5000		G2/5000
BVH	(80°-90°)	47.6	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2884.9	2884.9	2884.9	2884.9	2884.9	2884.9	2884.9	2884.9	2884.9	2884.9	2884.9
2.5°	2904.3	2894.6	2901.9	2895.7	2890.9	2886.1	2888.4	2897.0	2900.6	2901.9	2901.9
5°	2943.2	2934.7	2938.4	2938.4	2929.9	2927.4	2928.6	2934.7	2942.0	2942.0	2942.0
7.5°	3006.4	2997.9	3006.4	3001.6	2994.3	2991.9	2990.6	2995.5	3006.4	3006.4	3002.8
10°	3083.1	3073.4	3078.2	3075.8	3067.2	3063.6	3062.4	3069.7	3079.4	3078.2	3075.8
12.5°	3166.9	3156.1	3162.1	3154.8	3152.4	3148.7	3148.7	3147.6	3153.6	3148.7	3151.2
15°	3260.6	3253.4	3255.8	3250.9	3254.6	3252.1	3242.4	3237.6	3239.9	3232.6	3233.9
17.5°	3371.3	3354.3	3362.8	3360.4	3360.4	3365.2	3349.4	3343.3	3348.2	3340.9	3347.0
20°	3499.0	3482.0	3485.6	3480.8	3474.6	3479.6	3460.1	3464.9	3468.6	3463.8	3474.6
22.5°	3638.9	3617.0	3615.8	3618.1	3604.8	3606.1	3592.6	3604.8	3612.1	3598.8	3612.1
25°	3782.4	3759.3	3775.1	3769.0	3752.0	3755.6	3745.9	3758.1	3764.1	3747.1	3766.6
27.5°	3934.4	3918.6	3933.2	3936.8	3916.2	3930.8	3916.2	3927.1	3933.2	3907.6	3927.1
30°	4112.0	4096.2	4109.5	4119.3	4095.0	4118.0	4105.9	4113.2	4114.5	4084.0	4102.3
32.5°	4305.3	4281.0	4315.0	4320.0	4293.2	4321.2	4305.3	4315.0	4321.2	4279.8	4307.8
35°	4541.3	4510.9	4549.8	4543.7	4520.7	4543.7	4529.2	4543.7	4558.3	4508.5	4538.9
37.5°	4795.5	4763.9	4805.2	4794.2	4772.4	4788.2	4779.7	4789.4	4812.5	4759.0	4791.9
40°	5075.2	5036.3	5092.2	5072.7	5052.1	5049.7	5054.6	5060.6	5091.0	5031.4	5050.9
42.5°	5374.4	5333.1	5416.9	5386.6	5357.4	5337.9	5353.7	5365.9	5395.1	5328.2	5363.4
45°	5716.1	5668.8	5778.1	5741.6	5695.5	5655.3	5680.9	5699.1	5741.6	5661.4	5702.8
47.5°	6093.2	6039.6	6156.5	6145.5	6070.0	5982.5	6040.8	6093.2	6124.8	6027.5	6060.3
50°	6461.7	6420.3	6573.5	6587.0	6494.5	6371.7	6453.2	6532.2	6540.7	6413.0	6428.8
52.5°	6807.1	6765.7	6988.2	7072.2	6989.5	6843.5	6929.9	7010.2	6945.7	6780.3	6785.2
55°	7083.2	7049.1	7332.4	7548.9	7576.9	7456.6	7507.6	7505.2	7293.6	7039.4	7047.9
57.5°	7150.1	7145.2	7502.8	7961.3	8253.1	8267.8	8166.8	7909.0	7452.9	7111.1	7089.2
60°	6846.0	6876.4	7367.7	8176.5	8954.9	9278.4	8841.8	8106.0	7271.7	6797.4	6741.4
62.5°	5936.3	6016.5	6608.8	7913.8	9521.6	10441.1	9383.0	7806.8	6527.3	5908.3	5871.8
65°	4254.3	4394.2	5048.4	6753.5	9470.6	11462.7	9305.2	6698.8	5097.1	4383.2	4330.9
67.5°	1930.1	2072.4	2628.2	4624.0	8232.5	11185.4	8213.0	4672.7	2759.6	2079.7	2049.3
70°	699.4	723.6	902.4	1851.0	5261.3	8912.3	5486.3	1864.5	959.6	771.1	761.4
72.5°	423.2	426.9	464.6	662.9	1828.0	5410.9	1905.8	684.7	474.3	420.8	428.1
75°	268.8	266.4	330.8	405.0	648.2	1825.5	679.9	405.0	329.6	300.4	302.8
77.5°	193.4	199.5	237.2	302.8	408.7	619.0	401.4	289.5	237.2	194.5	198.2
80°	144.7	148.4	172.7	236.0	287.0	385.5	255.4	214.0	178.8	121.7	125.3
82.5°	104.6	104.6	113.1	171.5	175.2	208.0	138.7	150.8	118.0	86.3	86.3
85°	62.0	60.8	70.5	102.2	91.2	76.7	63.2	92.5	74.2	53.5	52.3
87.5°	21.9	23.1	21.9	29.2	24.3	20.7	19.5	25.5	20.7	18.2	17.0
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)