

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: P963001

Luminaire Tested: **NAV-SB2D-740-U-5NQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963001
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-SB2D-740-U-5NQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23125 lumens
Efficiency: N/A
Efficacy: 156.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

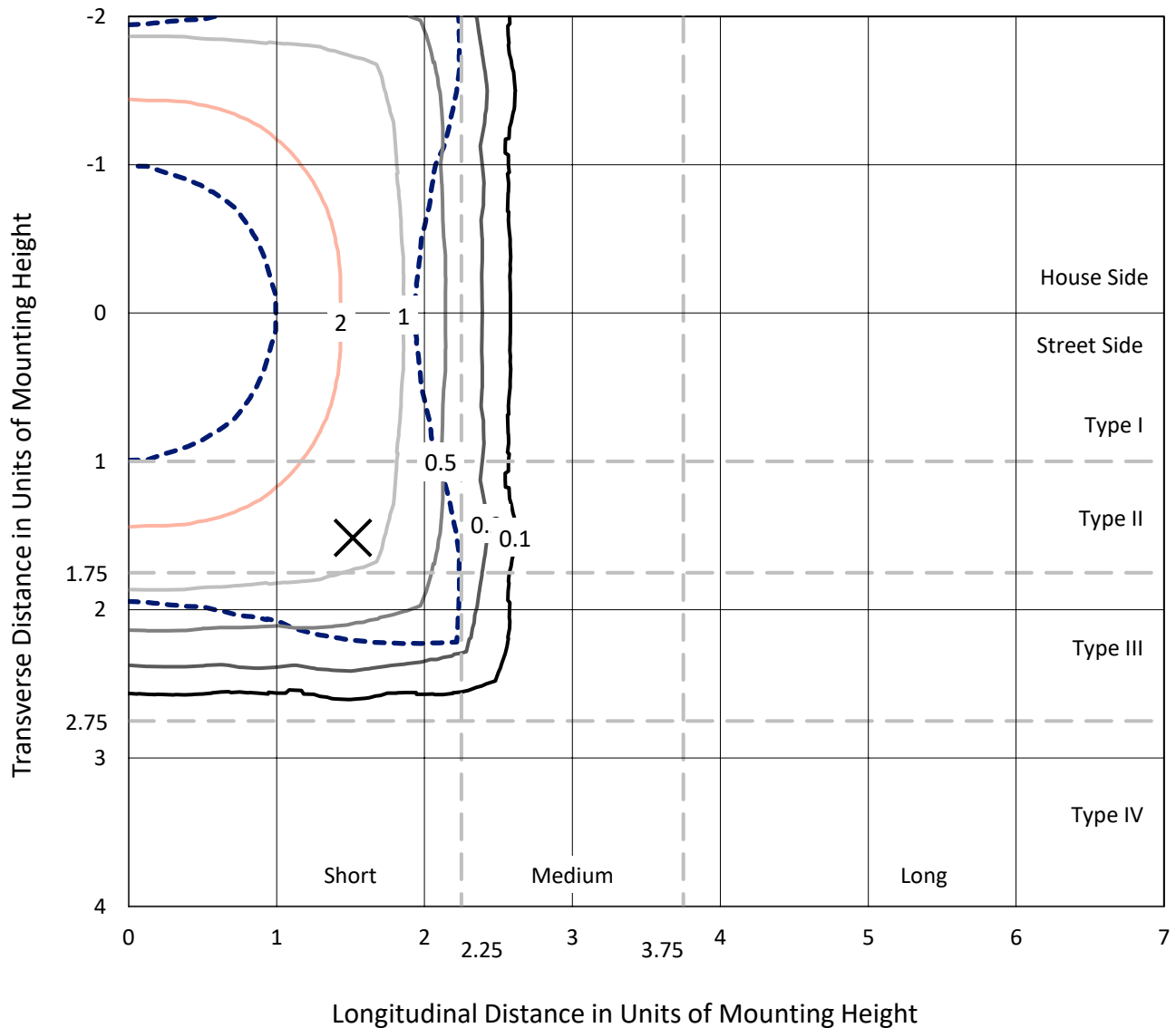
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

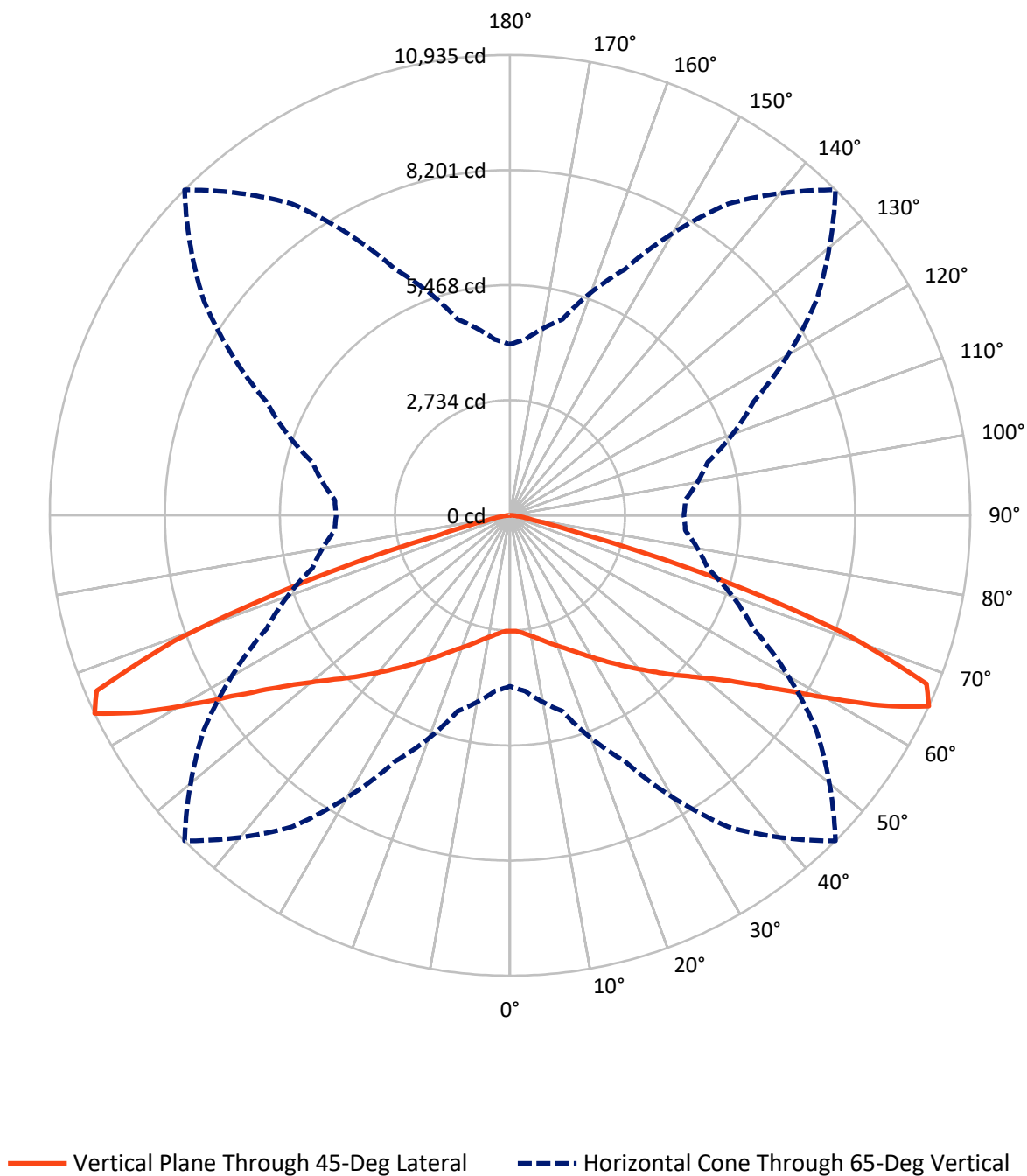
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
Type V - Short - N/A

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Luminous Intensity Polar Plot



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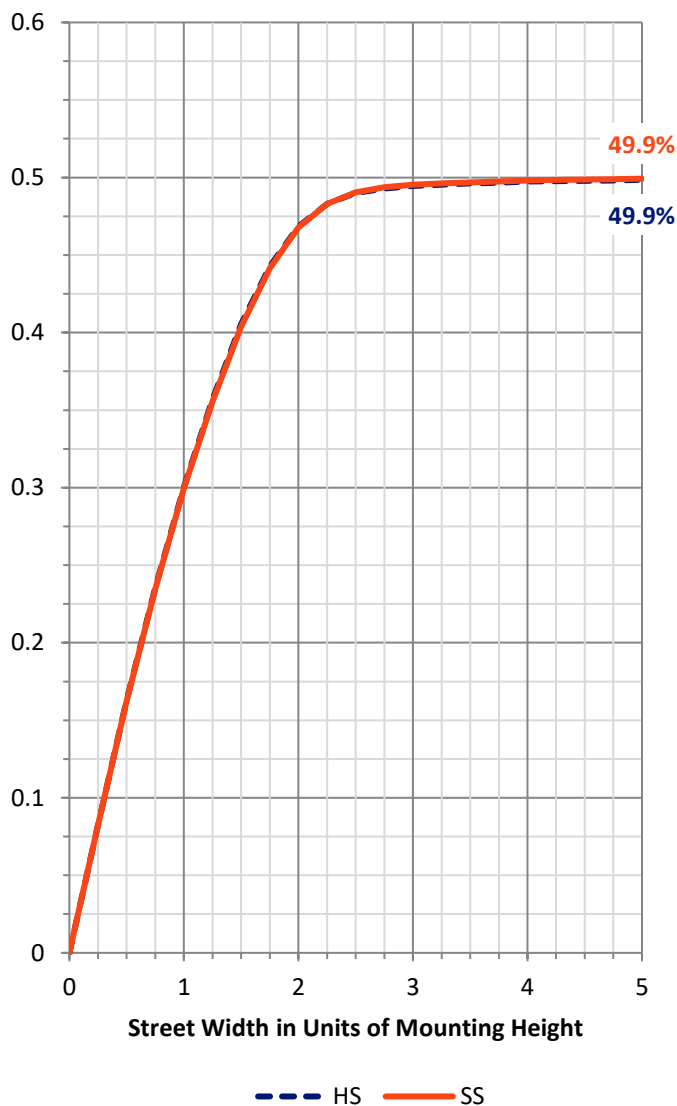
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11562.5	0.0	11562.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	11562.5	0.0	11562.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	23125.0	0.0	23125.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.6	1.2
10°-20°	886.3	3.8
20°-30°	1673.4	7.2
30°-40°	2740.1	11.8
40°-50°	4248.6	18.4
50°-60°	6276.0	27.1
60°-70°	5974.2	25.8
70°-80°	964.0	4.2
80°-90°	90.9	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°	23125.0	100.0
0°-180°	23125.0	100.0

Coefficient of Utilization



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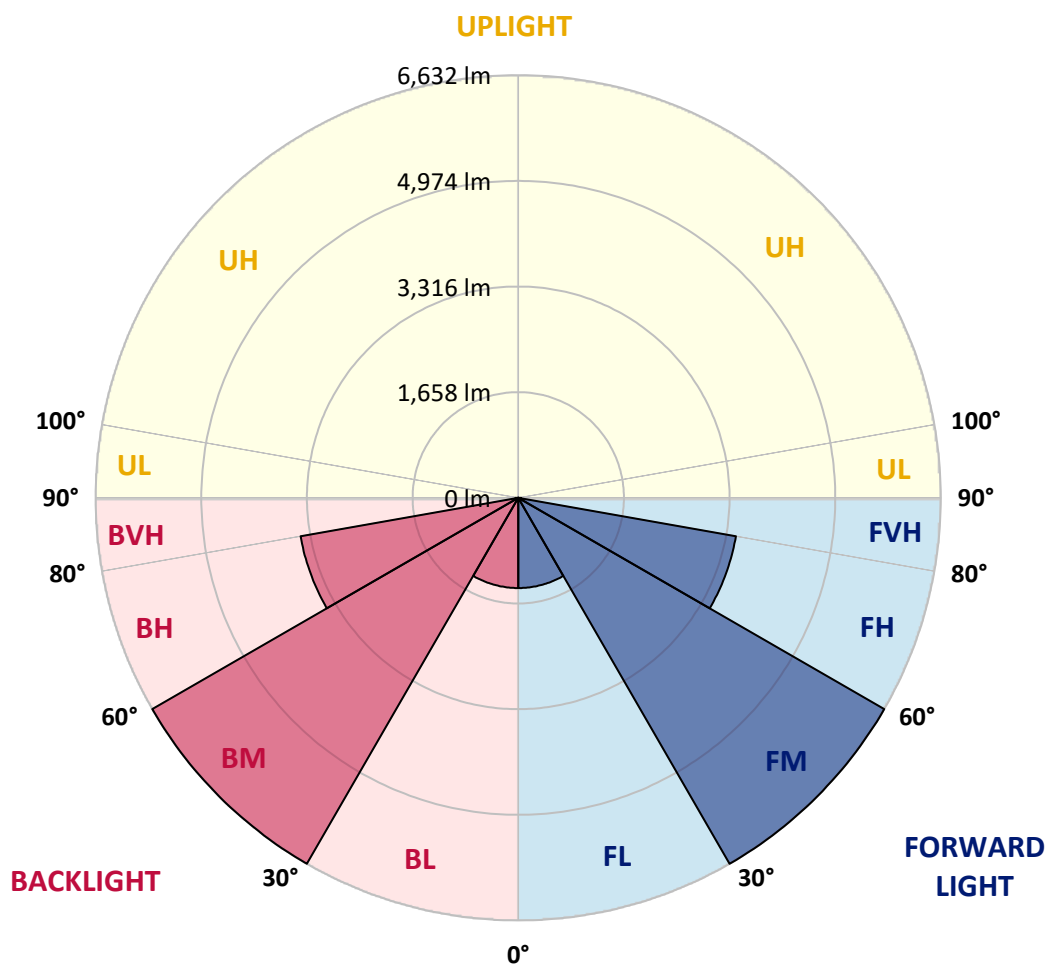
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1415.6	6.1			
FM	(30°-60°)	6632.3	28.7			
FH	(60°-80°)	3469.1	15.0			G2/5000
FVH	(80°-90°)	45.4	0.2			G1/100
BL	(0°-30°)	1415.6	6.1	B3/2500		
BM	(30°-60°)	6632.3	28.7	B4/8500		
BH	(60°-80°)	3469.1	15.0	B4/5000		G2/5000
BVH	(80°-90°)	45.4	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°	2752.1	2752.1	2752.1	2752.1	2752.1	2752.1	2752.1	2752.1	2752.1	2752.1	2752.1
2.5°	2770.7	2761.4	2768.3	2762.6	2757.9	2753.3	2755.6	2763.7	2767.2	2768.3	2768.3
5°	2807.8	2799.7	2803.2	2803.2	2795.1	2792.7	2793.8	2799.7	2806.7	2806.7	2806.7
7.5°	2868.2	2860.1	2868.2	2863.5	2856.6	2854.2	2853.1	2857.7	2868.2	2868.2	2864.7
10°	2941.2	2931.9	2936.6	2934.3	2926.2	2922.7	2921.5	2928.4	2937.8	2936.6	2934.3
12.5°	3021.3	3010.8	3016.7	3009.7	3007.4	3003.9	3003.9	3002.7	3008.5	3003.9	3006.2
15°	3110.7	3103.7	3106.0	3101.3	3104.8	3102.5	3093.2	3088.6	3090.9	3083.9	3085.1
17.5°	3216.2	3199.9	3208.0	3205.8	3205.8	3210.4	3195.3	3189.5	3194.2	3187.2	3193.0
20°	3338.0	3321.8	3325.3	3320.6	3314.8	3319.5	3300.9	3305.5	3309.0	3304.4	3314.8
22.5°	3471.5	3450.6	3449.4	3451.8	3439.0	3440.1	3427.4	3439.0	3445.9	3433.1	3445.9
25°	3608.4	3586.4	3601.4	3595.6	3579.4	3582.9	3573.6	3585.1	3591.0	3574.7	3593.2
27.5°	3753.4	3738.3	3752.2	3755.7	3736.0	3750.0	3736.0	3746.5	3752.2	3727.9	3746.5
30°	3922.8	3907.7	3920.5	3929.7	3906.6	3928.6	3917.0	3924.0	3925.1	3896.1	3913.6
32.5°	4107.3	4084.1	4116.6	4121.2	4095.7	4122.3	4107.3	4116.6	4122.3	4082.9	4109.6
35°	4332.4	4303.4	4340.5	4334.7	4312.7	4334.7	4320.8	4334.7	4348.6	4301.0	4330.0
37.5°	4574.9	4544.6	4584.1	4573.7	4552.8	4567.9	4559.8	4569.0	4591.1	4540.0	4571.4
40°	4841.7	4804.6	4858.0	4839.4	4819.7	4817.4	4822.0	4827.8	4856.8	4800.0	4818.5
42.5°	5127.2	5087.7	5167.7	5138.7	5110.9	5092.3	5107.4	5119.1	5146.8	5083.1	5116.7
45°	5453.2	5407.9	5512.3	5477.5	5433.4	5395.2	5419.5	5436.9	5477.5	5400.9	5440.4
47.5°	5812.9	5761.8	5873.1	5862.7	5790.8	5707.3	5763.0	5812.9	5843.0	5750.1	5781.5
50°	6164.3	6125.0	6271.2	6283.9	6195.7	6078.6	6156.3	6231.7	6239.8	6118.0	6133.1
52.5°	6493.9	6454.4	6666.8	6746.9	6667.9	6528.7	6611.0	6687.7	6626.2	6468.4	6473.0
55°	6757.3	6724.8	6995.1	7201.6	7228.3	7113.5	7162.2	7159.9	6958.0	6715.5	6723.6
57.5°	6821.1	6816.5	7157.6	7594.9	7873.4	7887.4	7791.0	7545.1	7110.0	6784.0	6763.1
60°	6531.0	6560.0	7028.8	7800.4	8542.9	8851.5	8435.0	7733.0	6937.1	6484.7	6431.3
62.5°	5663.1	5739.8	6304.8	7549.7	9083.6	9960.7	8951.3	7447.6	6227.1	5636.5	5601.7
65°	4058.6	4191.9	4816.2	6442.8	9034.9	10935.3	8877.0	6390.7	4862.6	4181.5	4131.7
67.5°	1841.3	1977.0	2507.3	4411.3	7853.8	10670.8	7835.2	4457.7	2632.6	1984.0	1955.0
70°	667.2	690.3	860.9	1765.9	5019.2	8502.3	5233.9	1778.7	915.4	735.6	726.3
72.5°	403.7	407.2	443.2	632.3	1743.8	5161.9	1818.1	653.2	452.5	401.5	408.4
75°	256.5	254.1	315.6	386.3	618.4	1741.6	648.6	386.3	314.5	286.6	288.9
77.5°	184.5	190.2	226.2	288.9	389.8	590.6	382.8	276.1	226.2	185.6	189.1
80°	138.1	141.6	164.7	225.1	273.8	367.8	243.6	204.2	170.6	116.0	119.5
82.5°	99.7	99.7	107.9	163.6	167.1	198.4	132.2	143.9	112.5	82.4	82.4
85°	59.1	58.0	67.3	97.5	87.0	73.1	60.4	88.1	70.7	51.0	49.9
87.5°	20.9	22.0	20.9	27.9	23.2	19.7	18.6	24.4	19.7	17.4	16.2
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)