

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: P967216

Luminaire Tested: **NAV-SB4D-740-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967216
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-20)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-740-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 46316.7 lumens
Efficiency: N/A
Efficacy: 157.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G4

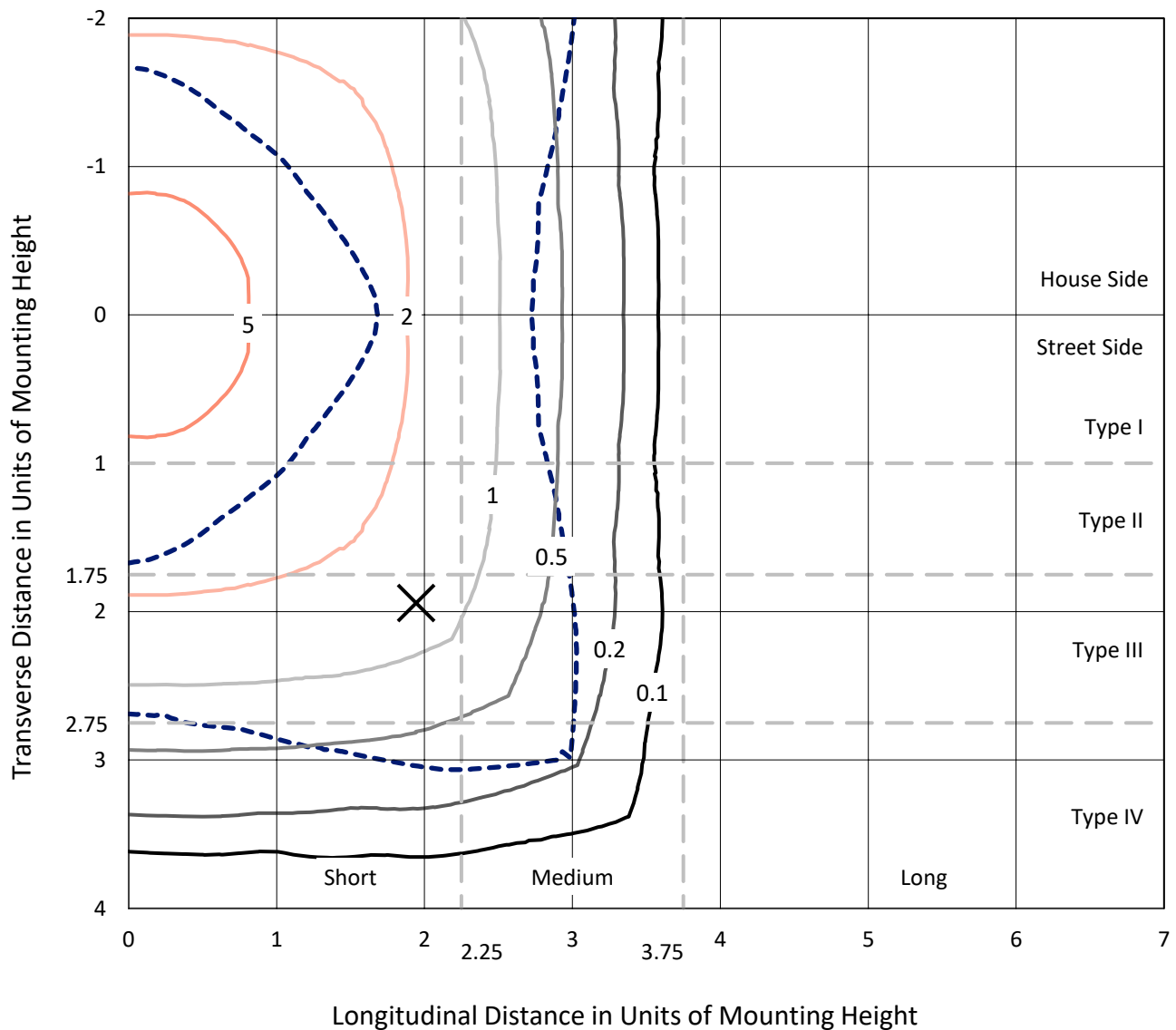
Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

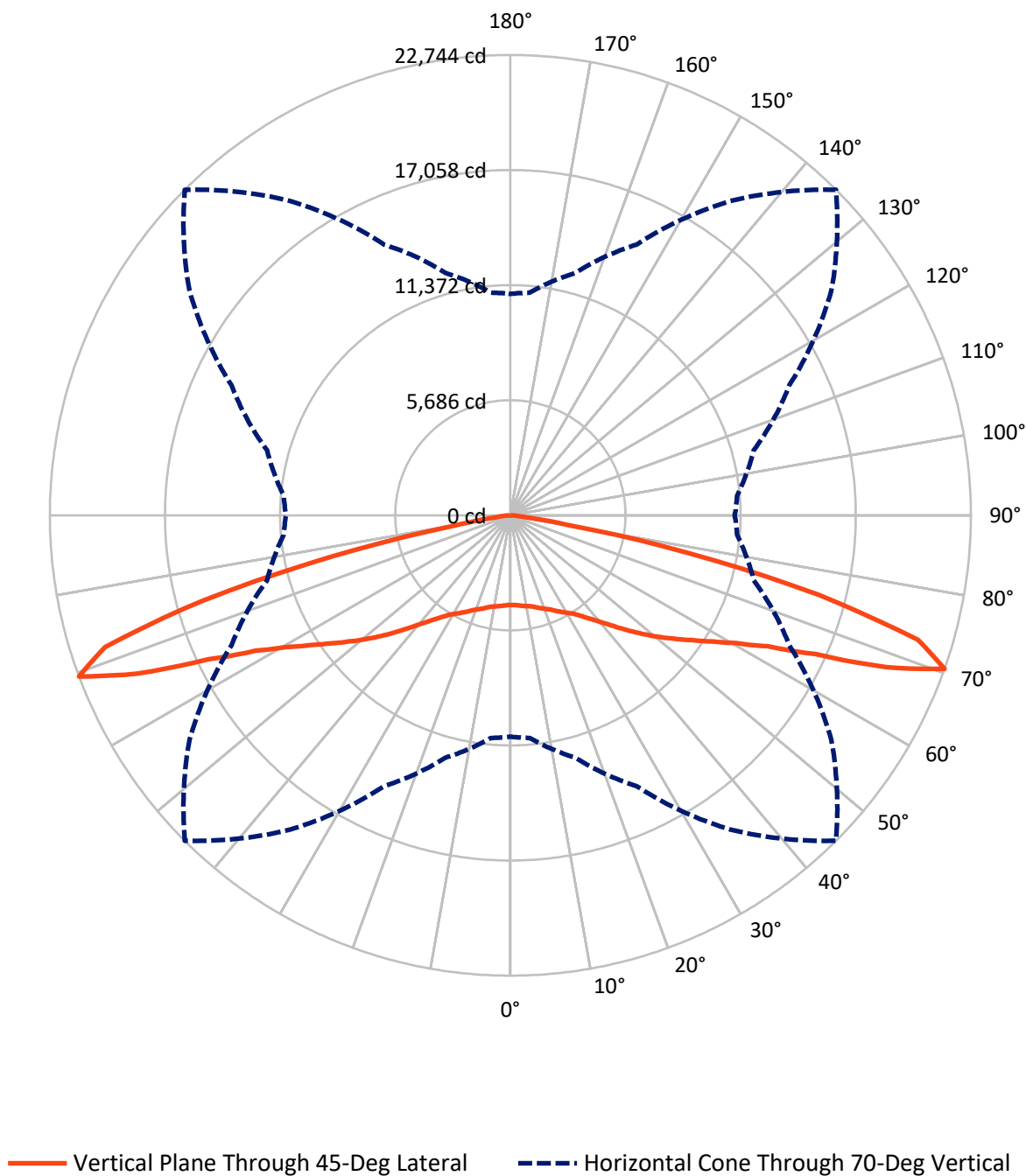
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



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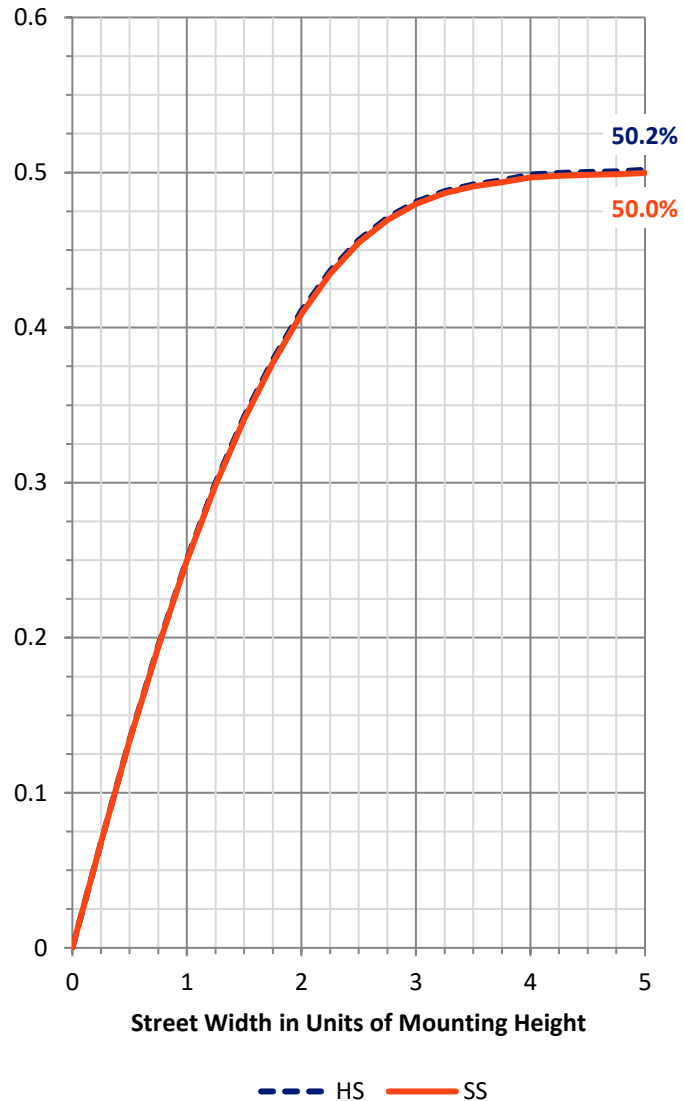
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	23158.3	0.0	23158.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	23158.3	0.0	23158.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	46316.7	0.0	46316.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	431.0	0.9
10°-20°	1336.5	2.9
20°-30°	2388.6	5.2
30°-40°	3871.8	8.4
40°-50°	6306.6	13.6
50°-60°	9615.4	20.8
60°-70°	14304.7	30.9
70°-80°	7796.5	16.8
80°-90°	265.5	0.6
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°	46316.7	100.0
0°-180°	46316.7	100.0

Coefficient of Utilization



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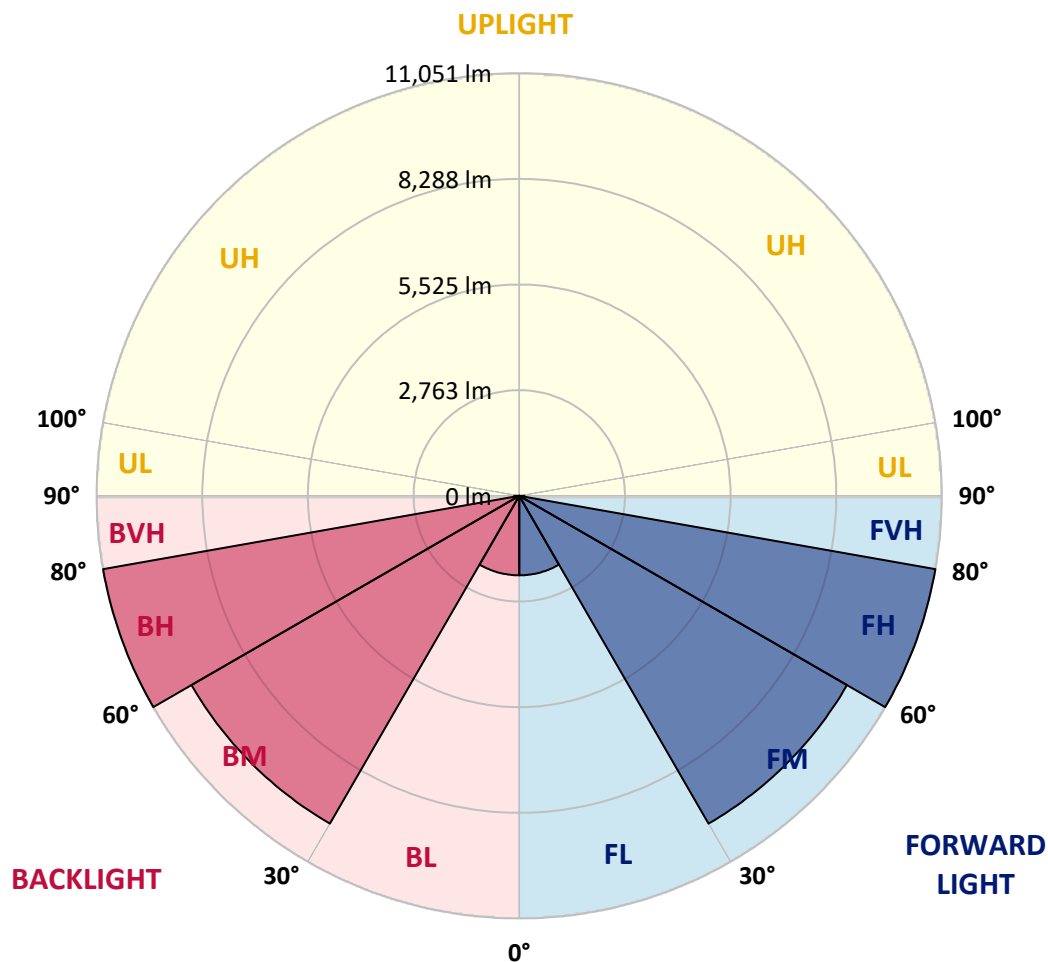
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2078.1	4.5			
FM	(30°-60°)	9896.9	21.4			
FH	(60°-80°)	11050.6	23.9			G4/12000
FVH	(80°-90°)	132.7	0.3			G2/225
BL	(0°-30°)	2078.1	4.5	B3/2500		
BM	(30°-60°)	9896.9	21.4	B5		
BH	(60°-80°)	11050.6	23.9	B5		G4/12000
BVH	(80°-90°)	132.7	0.3			G2/225
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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4436.6	4436.6	4436.6	4436.6	4436.6	4436.6	4436.6	4436.6	4436.6	4436.6	4436.6
2.5°	4457.6	4462.2	4452.9	4448.3	4443.7	4436.6	4439.0	4450.7	4459.9	4457.6	4459.9
5°	4494.8	4499.4	4492.5	4490.1	4480.8	4478.5	4478.5	4490.1	4497.1	4492.5	4494.8
7.5°	4536.6	4543.6	4532.0	4529.7	4525.1	4520.4	4518.0	4529.7	4536.6	4536.6	4536.6
10°	4576.2	4583.2	4573.9	4566.9	4562.3	4562.3	4557.6	4566.9	4578.5	4576.2	4576.2
12.5°	4618.0	4622.6	4613.4	4608.7	4608.7	4615.7	4608.7	4613.4	4622.6	4618.0	4615.7
15°	4669.2	4671.5	4669.2	4676.2	4687.8	4711.0	4690.1	4685.5	4690.1	4678.5	4678.5
17.5°	4739.0	4743.6	4752.9	4769.2	4785.4	4827.3	4790.1	4778.4	4778.4	4755.2	4755.2
20°	4825.0	4832.0	4845.9	4873.8	4894.8	4934.2	4897.0	4880.7	4873.8	4843.5	4843.5
22.5°	4915.7	4927.3	4948.2	4985.4	5022.6	5059.8	5022.6	4994.7	4973.8	4934.2	4932.0
25°	5020.3	5034.3	5066.8	5127.3	5178.4	5231.9	5187.7	5132.0	5090.0	5034.3	5031.9
27.5°	5169.1	5185.4	5224.9	5299.4	5364.4	5411.0	5369.1	5297.0	5238.9	5171.4	5169.1
30°	5378.4	5394.7	5441.2	5520.2	5564.4	5594.7	5566.8	5510.9	5441.2	5364.4	5364.4
32.5°	5648.2	5669.1	5720.2	5794.6	5804.0	5808.6	5799.2	5771.4	5720.2	5627.2	5629.5
35°	5990.0	6013.2	6071.4	6131.8	6122.5	6131.8	6117.8	6108.6	6071.4	5964.4	5964.4
37.5°	6408.5	6436.4	6496.9	6543.4	6520.1	6508.4	6510.8	6513.2	6492.2	6373.7	6373.7
40°	6894.5	6931.7	6975.8	7024.7	6985.2	6950.3	6973.6	6992.1	6973.6	6852.6	6852.6
42.5°	7394.5	7448.0	7494.4	7564.2	7531.6	7487.4	7520.0	7540.9	7501.4	7371.2	7380.5
45°	7950.2	8001.4	8061.8	8166.4	8143.2	8096.7	8143.2	8147.8	8080.4	7926.9	7943.2
47.5°	8524.5	8578.0	8668.7	8808.2	8798.9	8747.8	8808.2	8775.6	8689.6	8506.0	8494.3
50°	9068.7	9143.0	9282.6	9477.9	9496.5	9433.7	9515.1	9452.3	9308.1	9077.9	9073.3
52.5°	9580.2	9659.3	9880.2	10145.2	10212.7	10131.3	10240.6	10131.3	9915.0	9619.7	9591.8
55°	10117.4	10205.7	10468.4	10815.0	10949.8	10889.4	10991.7	10826.6	10519.6	10161.5	10112.6
57.5°	10749.8	10803.3	11117.3	11528.8	11756.6	11770.6	11817.1	11538.1	11166.0	10759.1	10703.4
60°	11435.8	11510.2	11852.0	12345.0	12705.4	12821.6	12772.8	12358.9	11926.4	11459.1	11384.7
62.5°	12314.8	12396.1	12805.4	13396.0	13965.7	14254.1	14063.4	13463.5	12928.6	12368.3	12270.6
65°	13042.6	13133.2	13872.7	14926.0	15963.1	16542.2	16063.1	14958.6	13996.0	13205.4	13075.1
67.5°	12514.7	12626.4	13786.7	15721.3	18300.0	20027.8	18388.4	15958.5	14072.6	13000.7	12840.3
70°	10938.2	11042.8	12396.1	14760.9	18958.1	22743.7	19353.4	15195.8	12440.3	11240.5	11080.0
72.5°	7261.9	7599.0	8968.6	11805.5	16928.1	21046.2	17095.6	11566.0	8319.9	7245.6	7010.8
75°	2409.0	2678.7	3613.5	6120.2	11338.1	15739.9	10794.0	5415.6	2862.4	2060.2	1948.6
77.5°	606.9	699.9	965.0	1750.9	4522.7	8961.7	4071.6	1430.1	779.0	544.1	486.0
80°	295.3	325.5	465.0	583.6	1132.4	2848.5	1062.6	548.8	367.4	283.7	260.5
82.5°	162.8	165.1	262.7	330.2	420.9	737.1	437.2	320.9	211.6	172.1	172.1
85°	99.9	97.7	139.5	176.7	176.7	262.7	209.3	176.7	121.0	107.0	111.6
87.5°	39.6	39.6	51.1	55.8	48.8	67.4	53.5	58.1	46.5	44.2	46.5
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)