

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: P966163

Luminaire Tested: **NAV-SB4B-740-U-5NQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966163
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-740-U-5NQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25645.5 lumens
Efficiency: N/A
Efficacy: 174.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

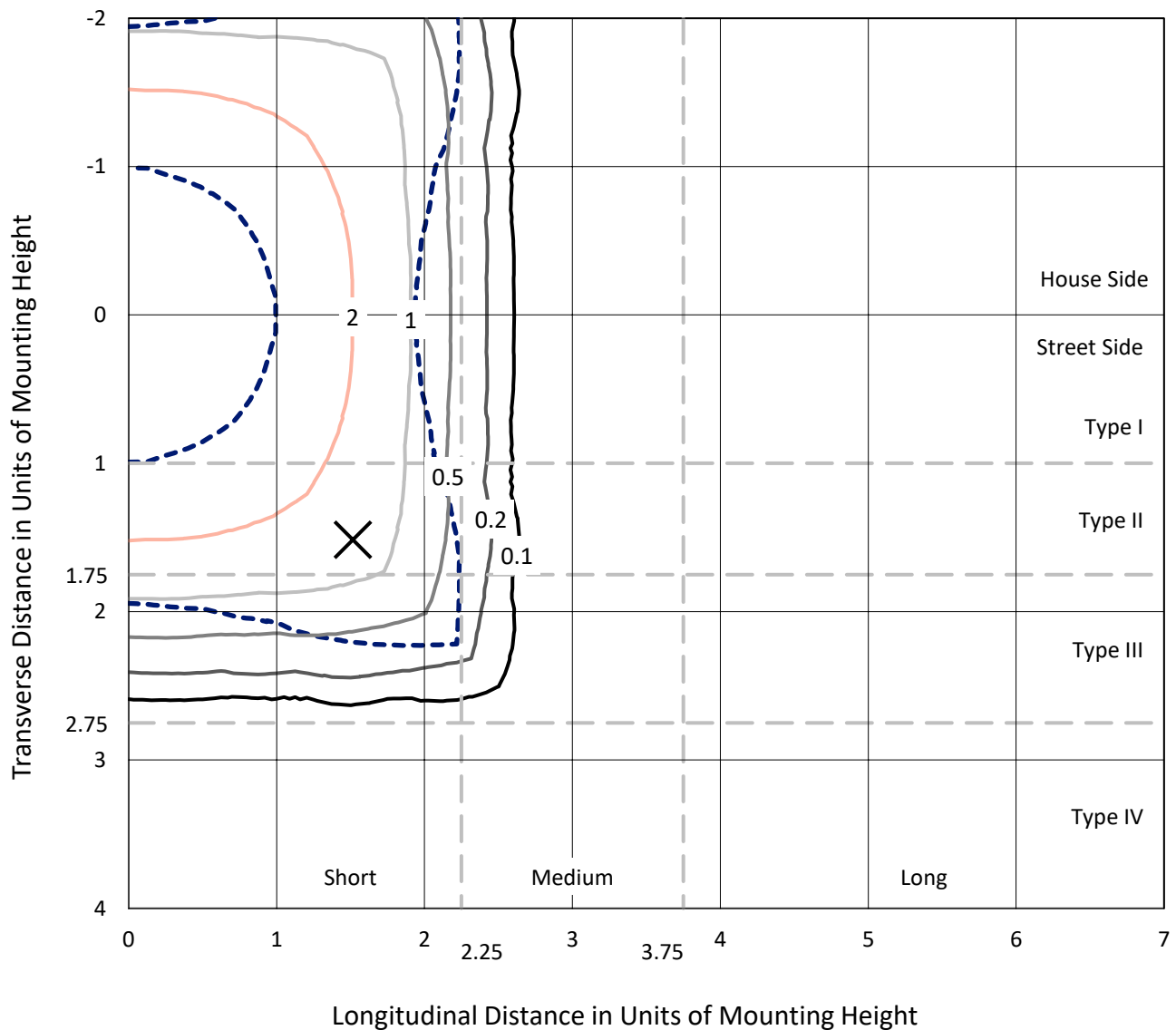
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

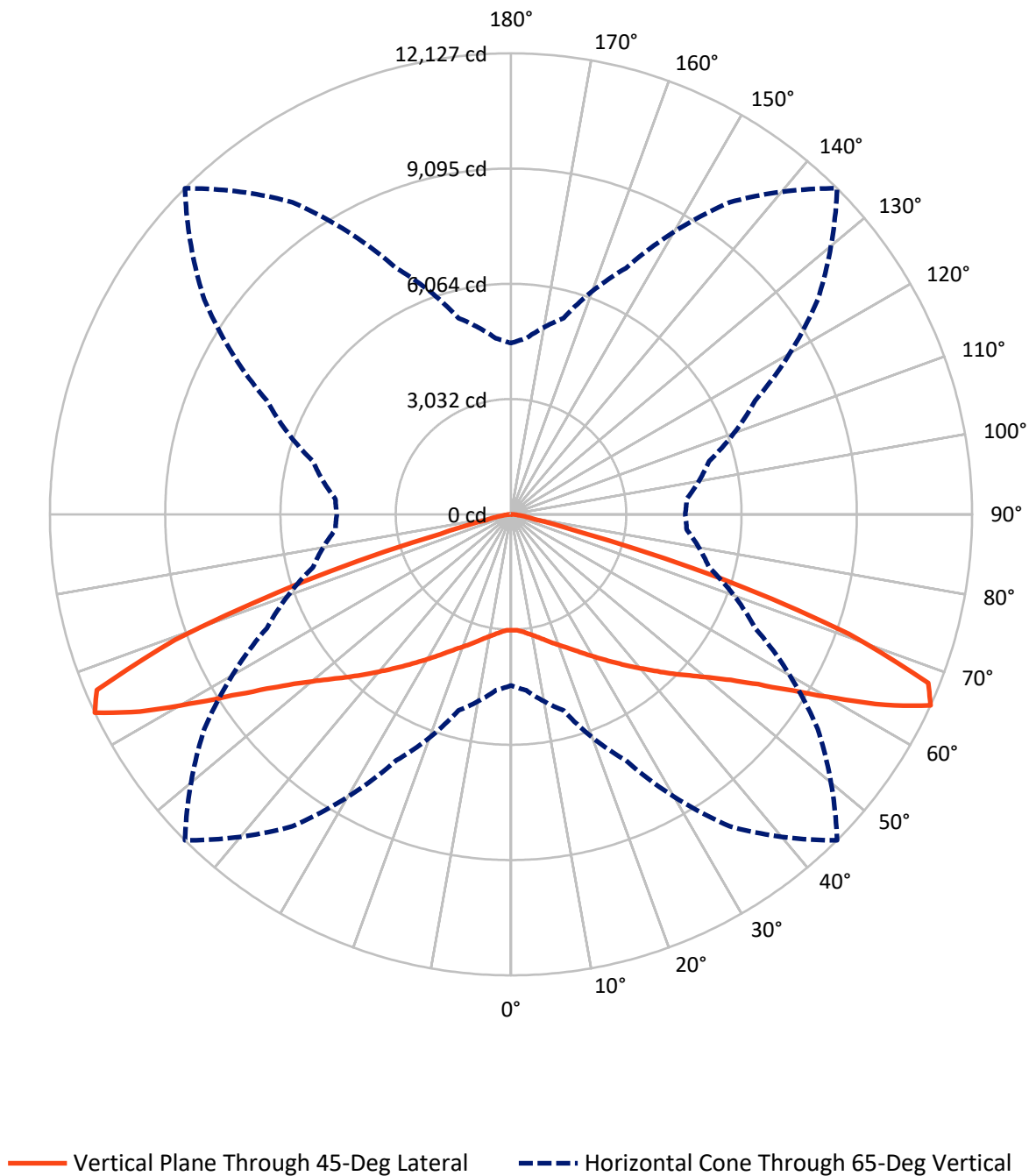
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
Type V - Short - N/A

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Luminous Intensity Polar Plot



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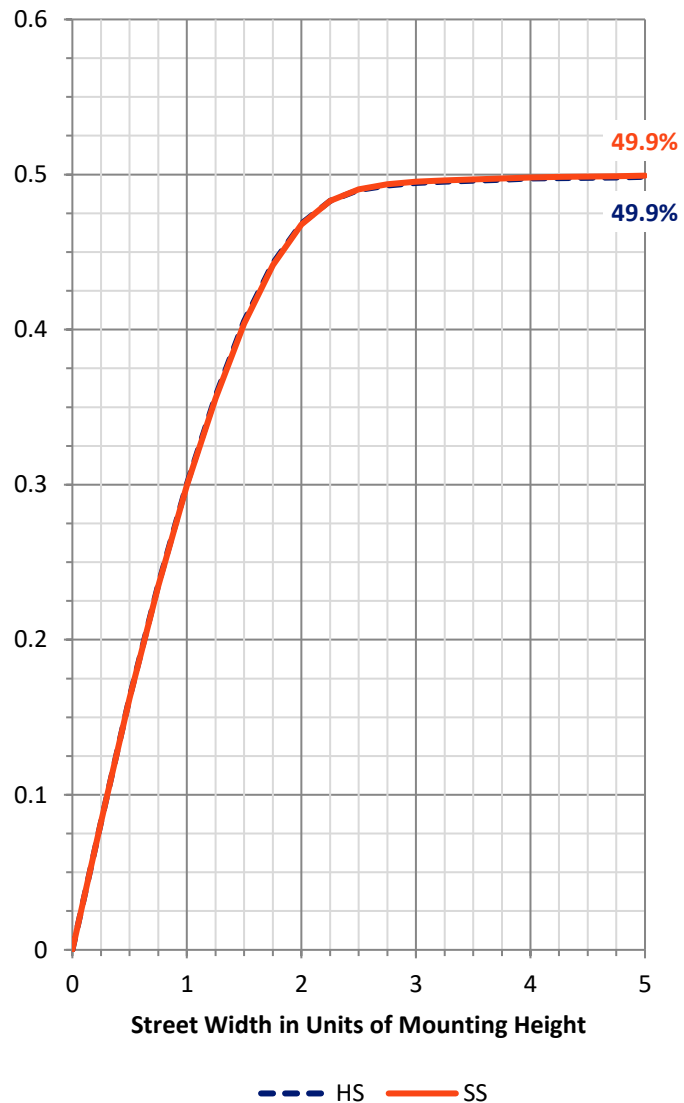
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12822.7	0.0	12822.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	12822.7	0.0	12822.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	25645.5	0.0	25645.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.2	1.2
10°-20°	982.9	3.8
20°-30°	1855.8	7.2
30°-40°	3038.8	11.8
40°-50°	4711.6	18.4
50°-60°	6960.1	27.1
60°-70°	6625.3	25.8
70°-80°	1069.1	4.2
80°-90°	100.8	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°	25645.5	100.0
0°-180°	25645.5	100.0

Coefficient of Utilization



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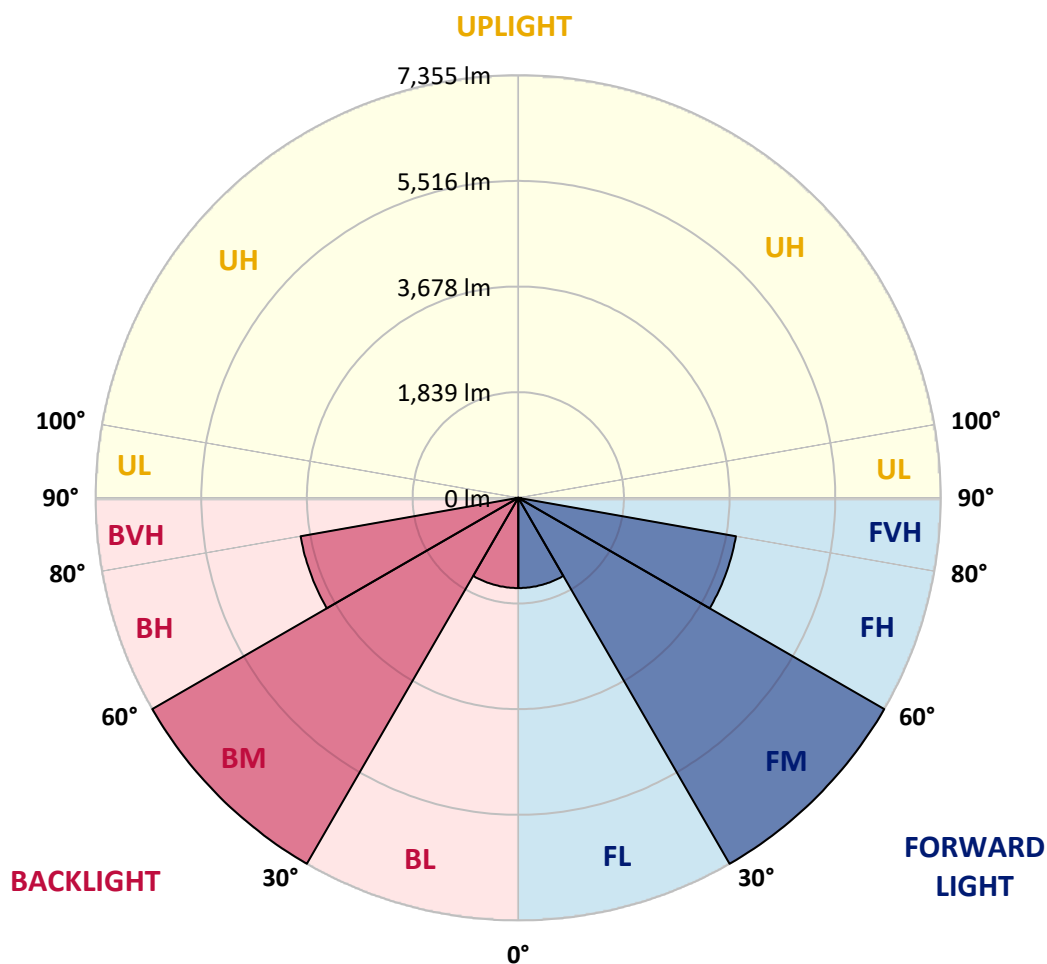
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1569.9	6.1			
FM	(30°-60°)	7355.2	28.7			
FH	(60°-80°)	3847.2	15.0			G2/5000
FVH	(80°-90°)	50.4	0.2			G1/100
BL	(0°-30°)	1569.9	6.1	B3/2500		
BM	(30°-60°)	7355.2	28.7	B4/8500		
BH	(60°-80°)	3847.2	15.0	B4/5000		G2/5000
BVH	(80°-90°)	50.4	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°	3052.0	3052.0	3052.0	3052.0	3052.0	3052.0	3052.0	3052.0	3052.0	3052.0	3052.0
2.5°	3072.6	3062.4	3070.1	3063.6	3058.5	3053.4	3055.9	3065.0	3068.7	3070.1	3070.1
5°	3113.8	3104.8	3108.7	3108.7	3099.7	3097.1	3098.4	3104.8	3112.5	3112.5	3112.5
7.5°	3180.8	3171.8	3180.8	3175.6	3167.9	3165.3	3164.0	3169.2	3180.8	3180.8	3176.9
10°	3261.8	3251.5	3256.6	3254.1	3245.0	3241.3	3239.9	3247.6	3258.0	3256.6	3254.1
12.5°	3350.6	3339.0	3345.4	3337.7	3335.1	3331.2	3331.2	3330.0	3336.5	3331.2	3333.8
15°	3449.6	3442.0	3444.5	3439.4	3443.2	3440.6	3430.4	3425.2	3427.8	3420.1	3421.3
17.5°	3566.8	3548.8	3557.8	3555.2	3555.2	3560.3	3543.6	3537.2	3542.3	3534.6	3541.1
20°	3701.9	3683.8	3687.7	3682.5	3676.2	3681.3	3660.7	3665.8	3669.7	3664.6	3676.2
22.5°	3849.8	3826.6	3825.4	3828.0	3813.8	3815.0	3800.9	3813.8	3821.5	3807.4	3821.5
25°	4001.7	3977.2	3993.9	3987.6	3969.5	3973.3	3963.1	3976.0	3982.3	3964.4	3984.9
27.5°	4162.5	4145.8	4161.2	4165.1	4143.2	4158.6	4143.2	4154.7	4161.2	4134.2	4154.7
30°	4350.4	4333.6	4347.7	4358.1	4332.4	4356.8	4344.0	4351.6	4353.0	4320.8	4340.1
32.5°	4554.9	4529.2	4565.2	4570.4	4542.1	4571.7	4554.9	4565.2	4571.7	4527.9	4557.6
35°	4804.6	4772.4	4813.6	4807.1	4782.6	4807.1	4791.7	4807.1	4822.6	4769.8	4802.0
37.5°	5073.4	5040.0	5083.8	5072.2	5049.0	5065.8	5056.7	5067.1	5091.5	5034.9	5069.6
40°	5369.5	5328.3	5387.4	5366.9	5345.0	5342.4	5347.5	5354.0	5386.2	5323.1	5343.7
42.5°	5686.0	5642.2	5731.0	5698.8	5667.9	5647.3	5664.0	5677.0	5707.8	5637.1	5674.4
45°	6047.5	5997.4	6113.1	6074.6	6025.7	5983.2	6010.2	6029.6	6074.6	5989.6	6033.4
47.5°	6446.4	6389.7	6513.4	6501.8	6421.9	6329.3	6391.1	6446.4	6479.8	6376.9	6411.7
50°	6836.2	6792.6	6954.6	6968.8	6871.0	6741.0	6827.3	6910.9	6919.9	6784.8	6801.5
52.5°	7201.8	7158.0	7393.4	7482.2	7394.8	7240.3	7331.6	7416.6	7348.4	7173.4	7178.6
55°	7493.8	7457.8	7757.6	7986.6	8016.2	7888.8	7942.8	7940.3	7716.4	7447.4	7456.5
57.5°	7564.6	7559.4	7937.7	8422.8	8731.6	8747.0	8640.2	8367.5	7884.9	7523.4	7500.2
60°	7242.9	7275.0	7794.9	8650.5	9474.1	9816.3	9354.4	8575.9	7693.2	7191.4	7132.3
62.5°	6280.4	6365.4	6991.9	8372.6	10073.6	11046.4	9926.9	8259.3	6905.7	6250.9	6212.2
65°	4500.9	4648.9	5341.2	7145.1	10019.6	12127.2	9844.6	7087.2	5392.6	4637.3	4582.0
67.5°	2042.0	2192.6	2780.6	4892.0	8709.7	11833.8	8689.1	4943.6	2919.5	2200.3	2168.1
70°	739.8	765.6	954.8	1958.4	5566.3	9429.0	5804.4	1972.5	1015.3	815.8	805.4
72.5°	447.8	451.6	491.5	701.3	1934.0	5724.5	2016.3	724.4	501.8	445.2	452.9
75°	284.3	281.8	349.9	428.4	685.8	1931.3	719.2	428.4	348.7	317.9	320.4
77.5°	204.6	211.0	250.9	320.4	432.3	655.0	424.7	306.3	250.9	205.9	209.7
80°	153.1	156.9	182.8	249.6	303.7	407.8	270.2	226.4	189.1	128.6	132.5
82.5°	110.7	110.7	119.6	181.4	185.3	220.1	146.7	159.6	124.8	91.3	91.3
85°	65.6	64.4	74.6	108.0	96.5	81.1	66.9	97.8	78.5	56.6	55.4
87.5°	23.2	24.5	23.2	30.9	25.7	21.8	20.6	27.1	21.8	19.3	18.0
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)