

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: P966256

Luminaire Tested: **NAV-SB4B-827-U-5NQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966256
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-827-U-5NQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21078.1 lumens
Efficiency: N/A
Efficacy: 143.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

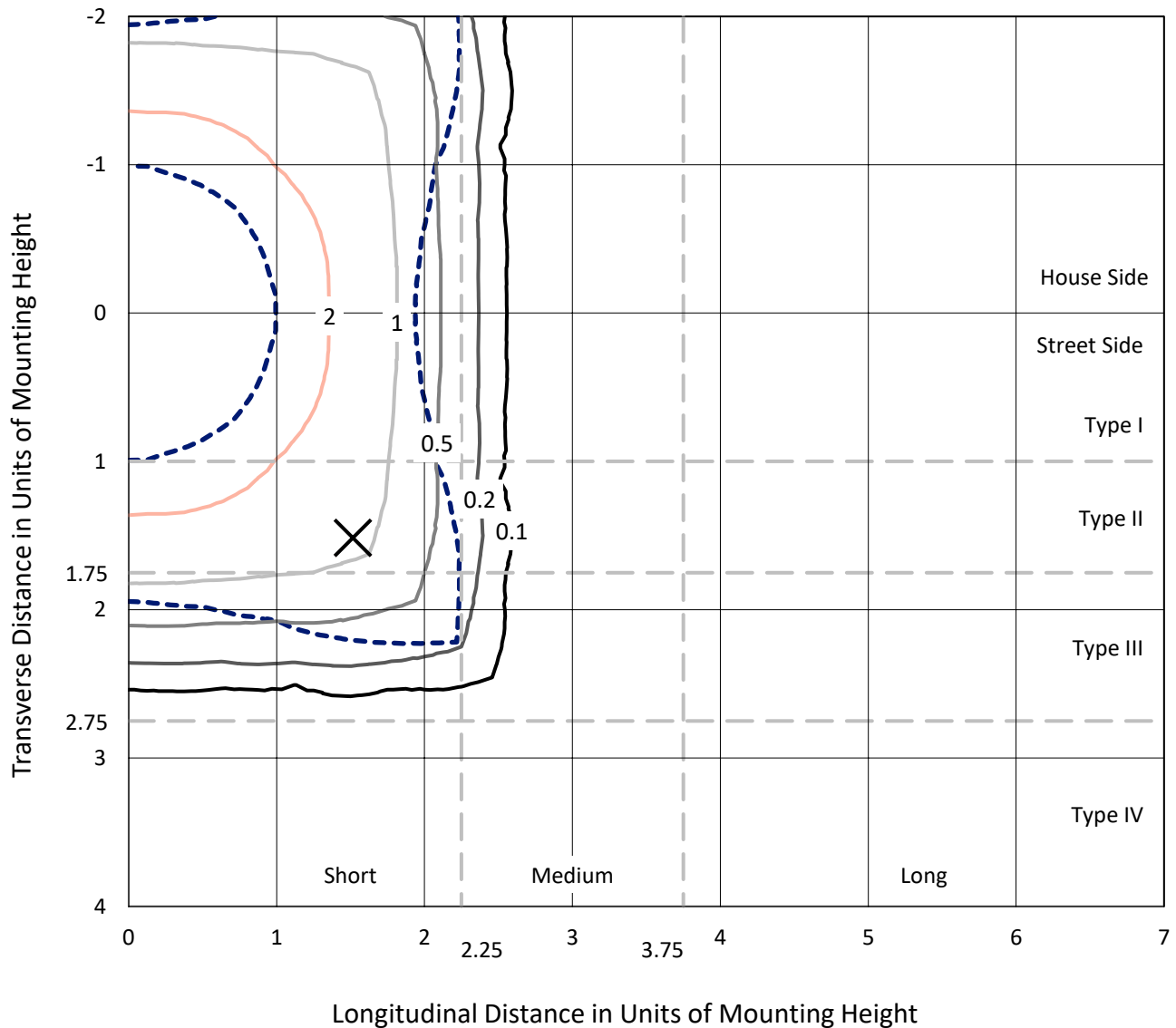
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

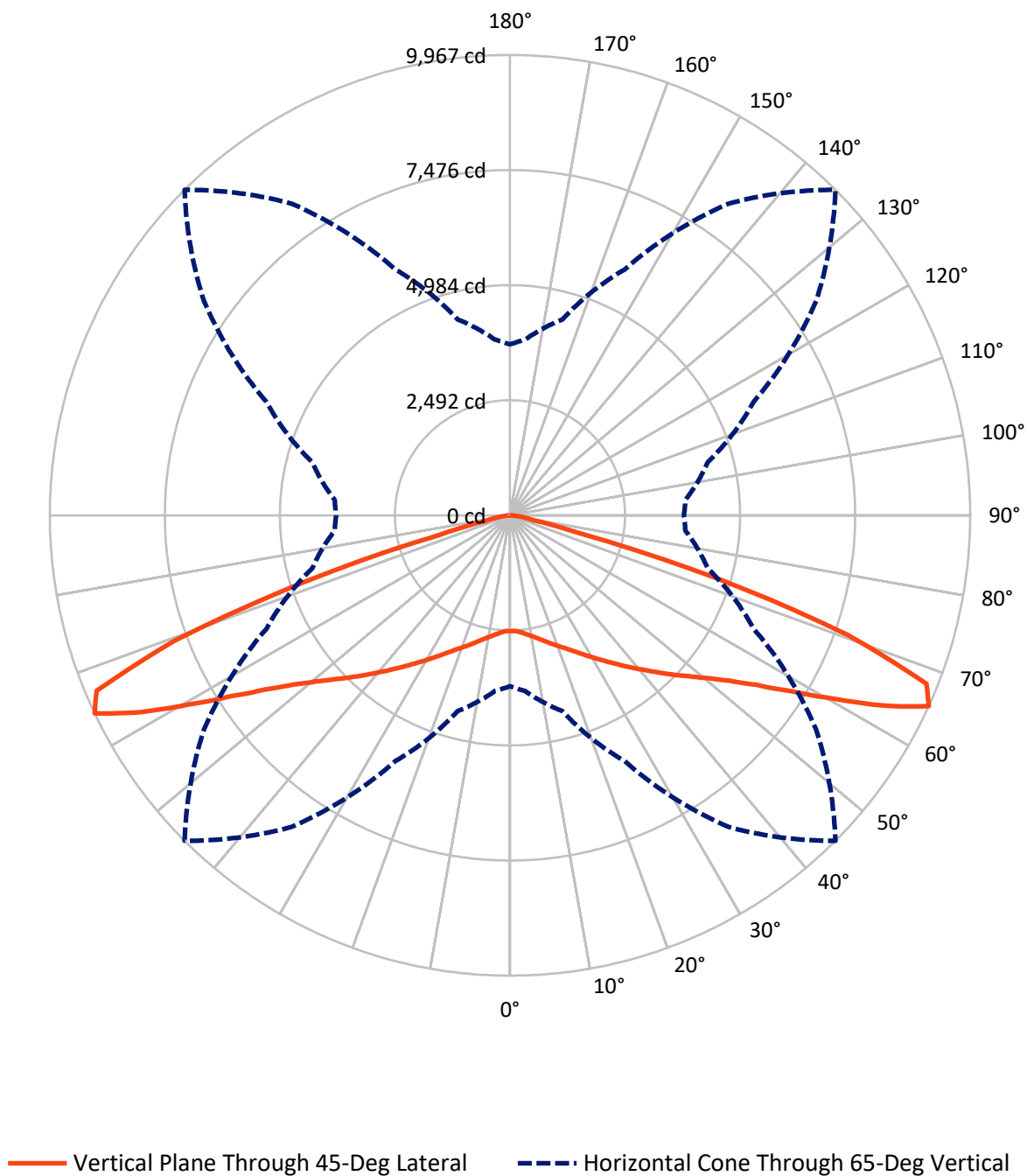
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
Type V - Short - N/A

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Luminous Intensity Polar Plot



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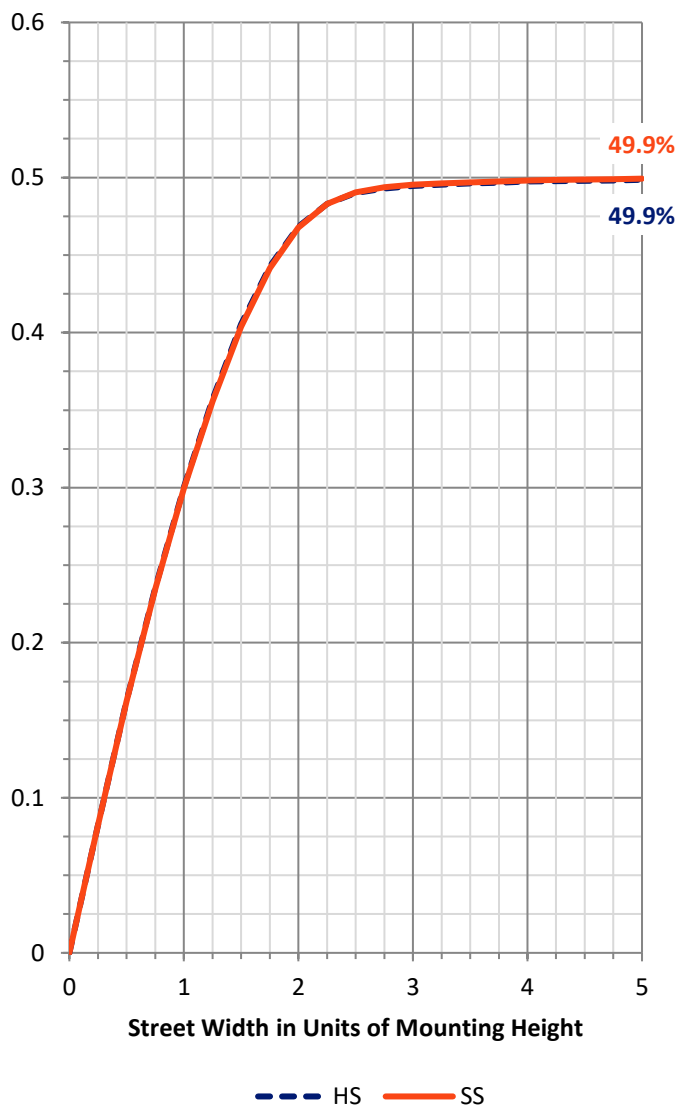
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10539.0	0.0	10539.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10539.0	0.0	10539.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	21078.1	0.0	21078.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.6	1.2
10°-20°	807.8	3.8
20°-30°	1525.3	7.2
30°-40°	2497.6	11.8
40°-50°	3872.5	18.4
50°-60°	5720.5	27.1
60°-70°	5445.4	25.8
70°-80°	878.7	4.2
80°-90°	82.8	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°	21078.1	100.0
0°-180°	21078.1	100.0

Coefficient of Utilization



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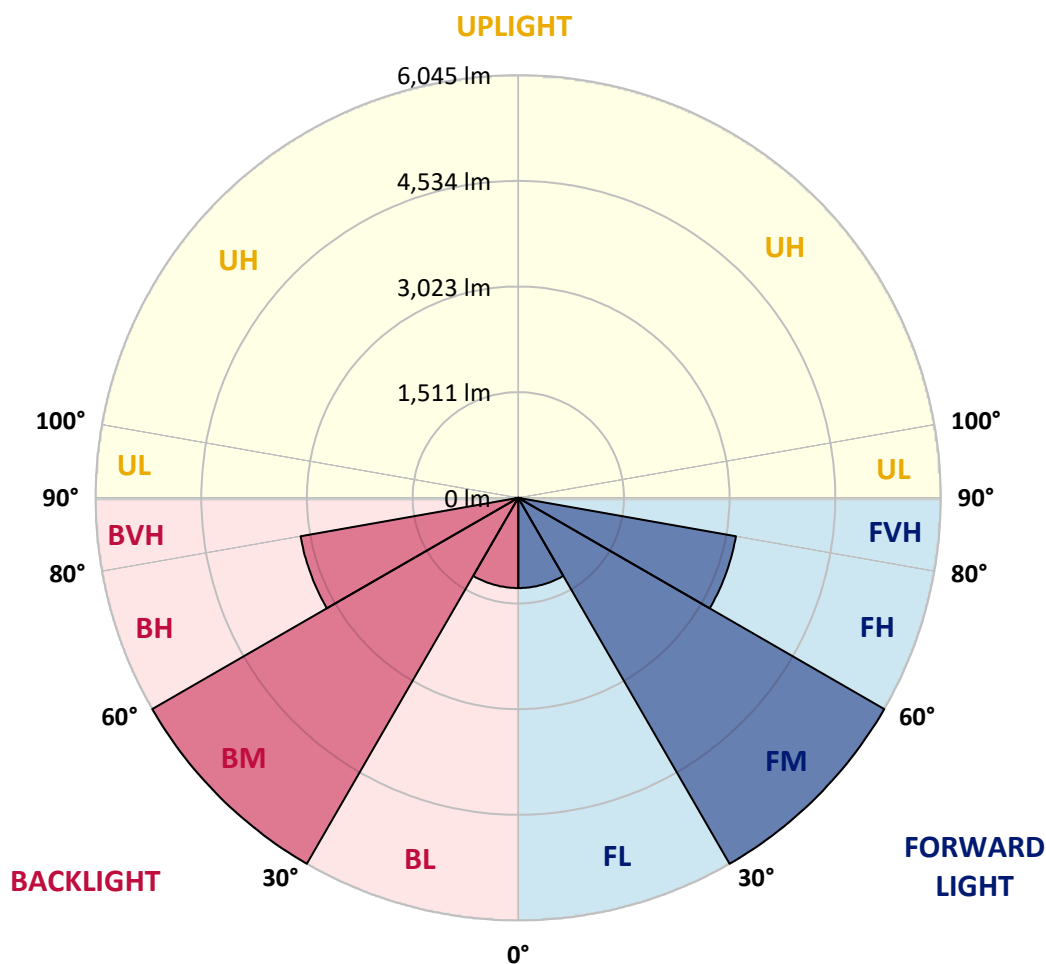
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1290.3	6.1			
FM	(30°-60°)	6045.3	28.7			
FH	(60°-80°)	3162.0	15.0			G2/5000
FVH	(80°-90°)	41.4	0.2			G1/100
BL	(0°-30°)	1290.3	6.1	B3/2500		
BM	(30°-60°)	6045.3	28.7	B4/8500		
BH	(60°-80°)	3162.0	15.0	B4/5000		G2/5000
BVH	(80°-90°)	41.4	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°	2508.5	2508.5	2508.5	2508.5	2508.5	2508.5	2508.5	2508.5	2508.5	2508.5	2508.5
2.5°	2525.4	2517.0	2523.3	2518.0	2513.8	2509.6	2511.7	2519.0	2522.2	2523.3	2523.3
5°	2559.2	2551.8	2555.0	2555.0	2547.6	2545.5	2546.6	2551.8	2558.2	2558.2	2558.2
7.5°	2614.3	2606.9	2614.3	2610.1	2603.7	2601.6	2600.5	2604.7	2614.3	2614.3	2611.1
10°	2680.9	2672.4	2676.7	2674.5	2667.2	2664.0	2663.0	2669.2	2677.7	2676.7	2674.5
12.5°	2753.9	2744.3	2749.7	2743.3	2741.2	2738.0	2738.0	2737.0	2742.2	2738.0	2740.1
15°	2835.3	2828.9	2831.0	2826.8	2830.0	2827.9	2819.5	2815.2	2817.3	2811.0	2812.0
17.5°	2931.5	2916.7	2924.1	2922.0	2922.0	2926.3	2912.5	2907.2	2911.4	2905.1	2910.4
20°	3042.6	3027.7	3030.9	3026.7	3021.4	3025.6	3008.7	3013.0	3016.2	3011.9	3021.4
22.5°	3164.2	3145.1	3144.1	3146.2	3134.6	3135.7	3124.0	3134.6	3140.9	3129.3	3140.9
25°	3289.0	3268.9	3282.7	3277.3	3262.6	3265.8	3257.2	3267.8	3273.1	3258.3	3275.2
27.5°	3421.1	3407.4	3420.1	3423.3	3405.3	3418.0	3405.3	3414.8	3420.1	3397.9	3414.8
30°	3575.6	3561.8	3573.5	3582.0	3560.7	3580.8	3570.3	3576.6	3577.7	3551.2	3567.1
32.5°	3743.7	3722.6	3752.2	3756.4	3733.2	3757.4	3743.7	3752.2	3757.4	3721.5	3745.9
35°	3948.9	3922.5	3956.3	3951.0	3930.9	3951.0	3938.4	3951.0	3963.7	3920.3	3946.8
37.5°	4169.9	4142.4	4178.4	4168.9	4149.8	4163.5	4156.2	4164.6	4184.8	4138.2	4166.7
40°	4413.1	4379.3	4428.0	4411.0	4393.0	4390.9	4395.2	4400.4	4426.9	4375.1	4392.0
42.5°	4673.3	4637.3	4710.3	4683.8	4658.5	4641.6	4655.3	4665.9	4691.3	4633.1	4663.8
45°	4970.4	4929.2	5024.4	4992.7	4952.5	4917.6	4939.8	4955.7	4992.7	4922.9	4958.8
47.5°	5298.3	5251.8	5353.3	5343.8	5278.2	5202.1	5252.8	5298.3	5325.8	5241.2	5269.7
50°	5618.7	5582.8	5716.0	5727.7	5647.3	5540.5	5611.4	5680.1	5687.5	5576.4	5590.2
52.5°	5919.1	5883.2	6076.7	6149.7	6077.7	5950.8	6025.9	6095.7	6039.6	5895.8	5900.1
55°	6159.1	6129.5	6375.9	6564.2	6588.5	6483.8	6528.2	6526.2	6342.1	6121.1	6128.5
57.5°	6217.3	6213.1	6524.0	6922.7	7176.5	7189.2	7101.4	6877.2	6480.7	6183.5	6164.5
60°	5952.9	5979.3	6406.7	7109.9	7786.7	8068.1	7688.4	7048.5	6323.1	5910.7	5862.0
62.5°	5161.9	5231.7	5746.8	6881.4	8279.5	9079.0	8159.0	6788.4	5675.8	5137.6	5105.8
65°	3699.3	3820.9	4389.9	5872.5	8235.2	9967.4	8091.4	5825.0	4432.2	3811.4	3766.0
67.5°	1678.3	1802.1	2285.3	4020.8	7158.5	9726.2	7141.6	4063.1	2399.6	1808.4	1782.0
70°	608.1	629.2	784.7	1609.6	4575.0	7749.7	4770.6	1621.2	834.5	670.5	662.0
72.5°	368.1	371.2	404.0	576.4	1589.5	4705.1	1657.2	595.4	412.5	365.9	372.3
75°	233.7	231.6	287.6	352.2	563.6	1587.4	591.2	352.2	286.6	261.2	263.3
77.5°	168.1	173.4	206.2	263.3	355.4	538.3	349.0	251.7	206.2	169.2	172.4
80°	125.9	129.0	150.2	205.2	249.6	335.3	222.1	186.1	155.5	105.8	109.0
82.5°	90.9	90.9	98.4	149.1	152.3	180.8	120.5	131.1	102.6	75.1	75.1
85°	53.9	52.9	61.3	88.9	79.3	66.6	55.0	80.4	64.5	46.5	45.5
87.5°	19.1	20.1	19.1	25.4	21.1	17.9	16.9	22.2	17.9	15.9	14.8
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)