

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: P963156

Luminaire Tested: **NAV-SB2D-835-U-5NQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963156
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-835-U-5NQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20274.5 lumens
Efficiency: N/A
Efficacy: 137.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

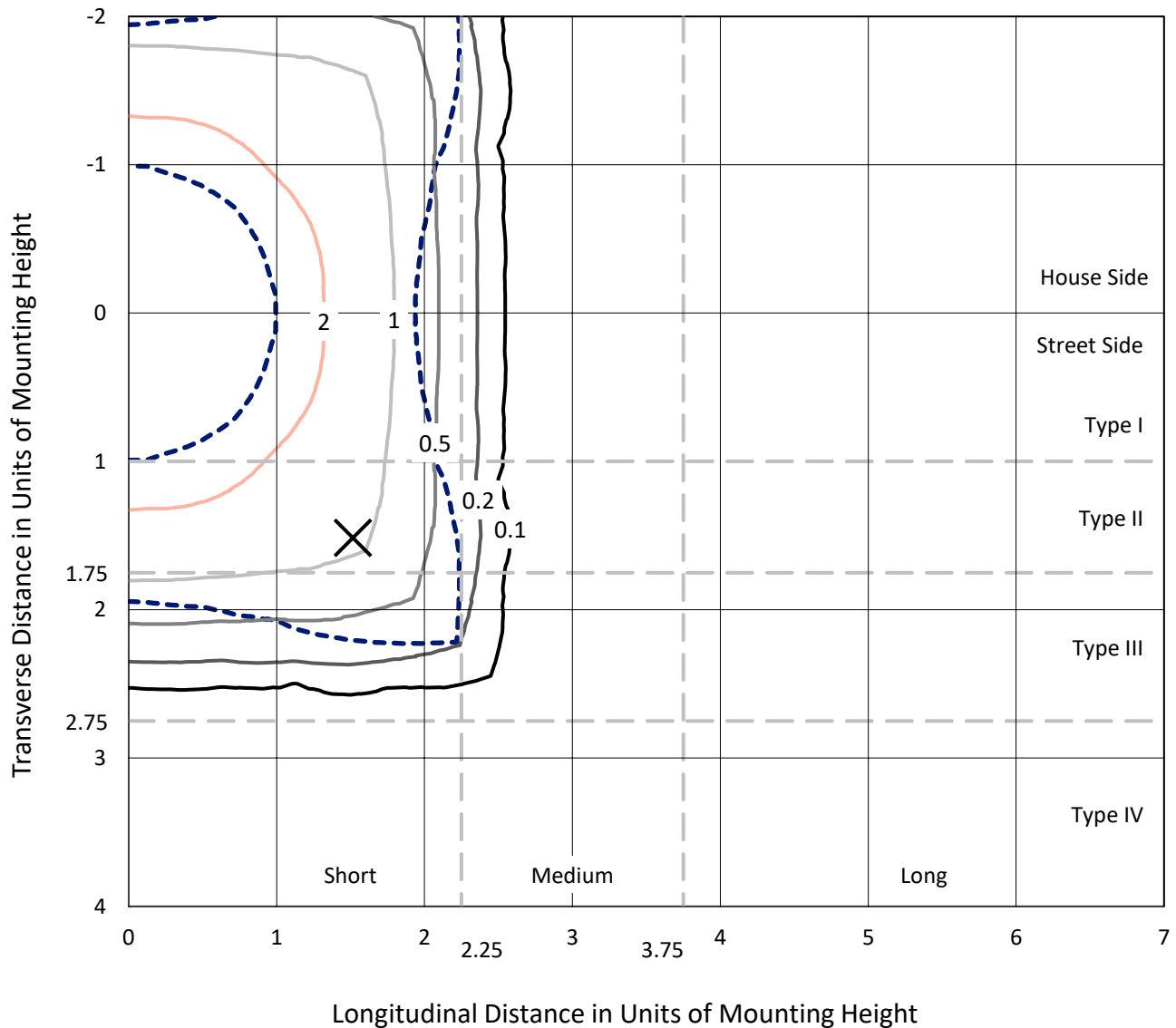
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

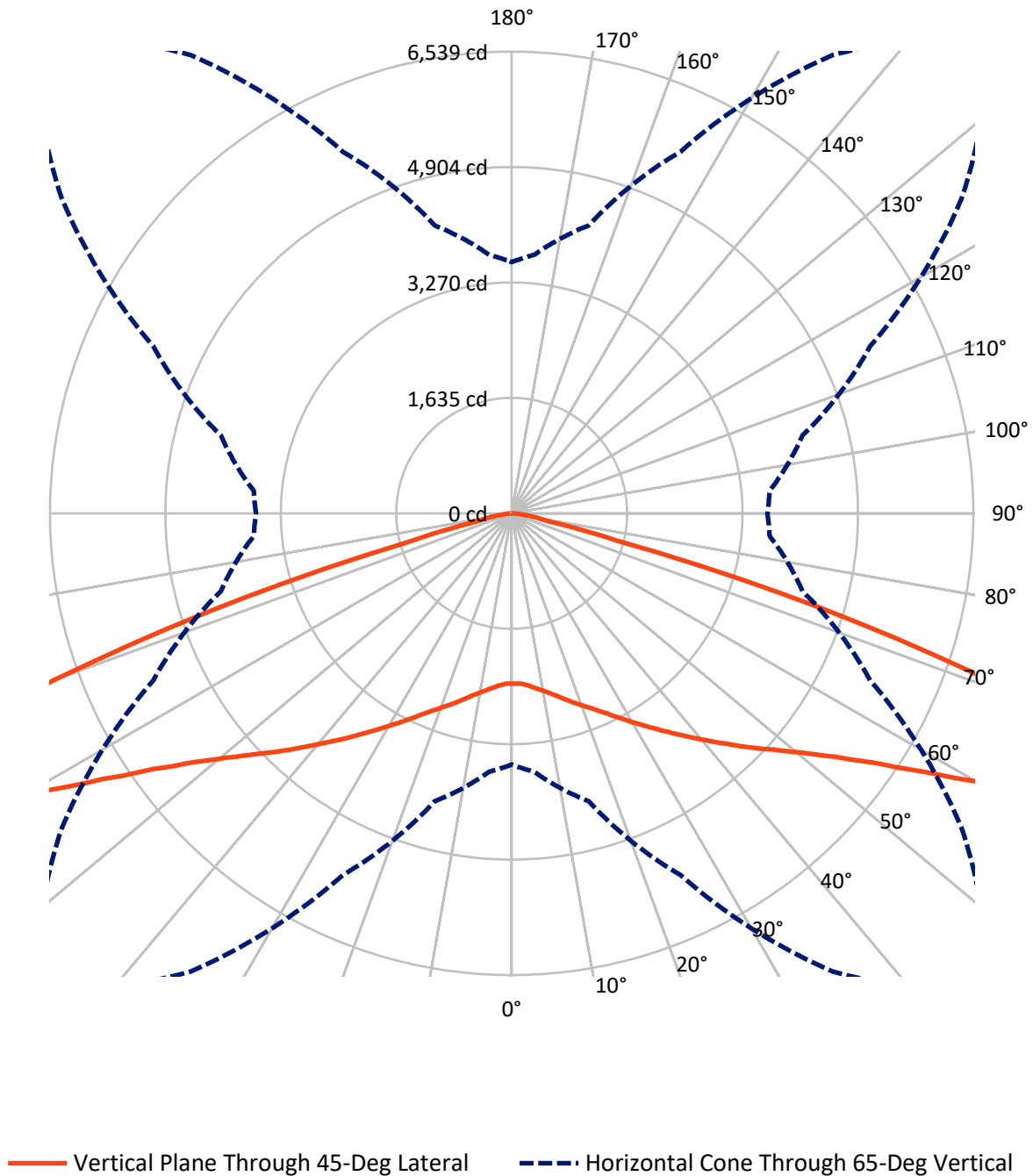
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
Type V - Short - N/A

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Luminous Intensity Polar Plot



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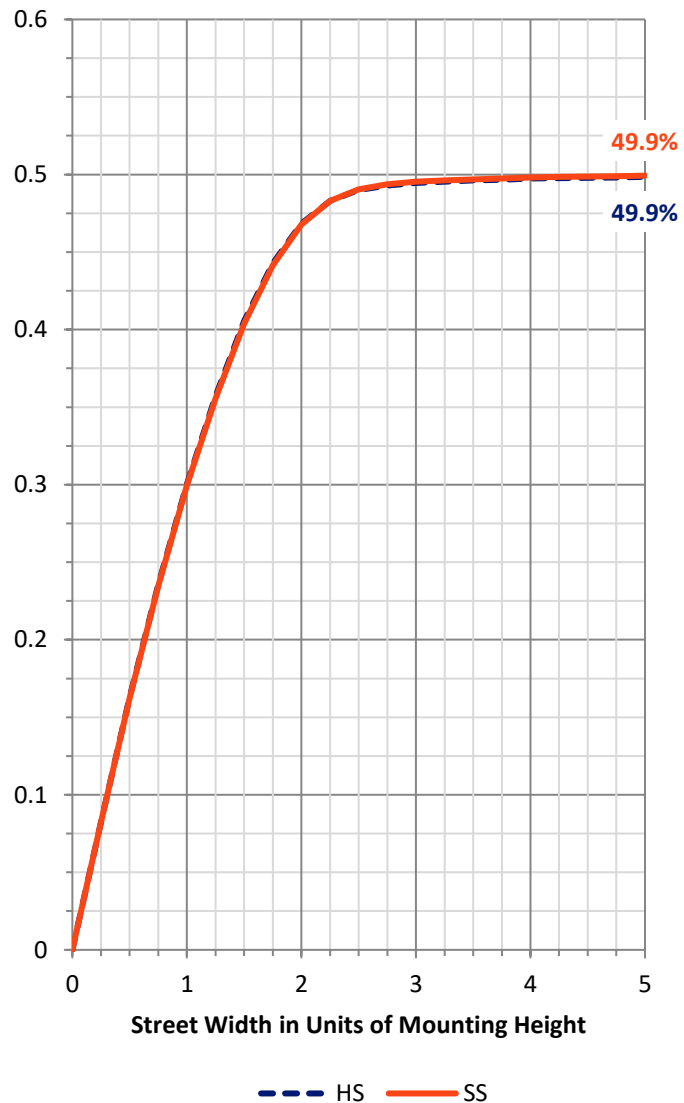
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10137.2	0.0	10137.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10137.2	0.0	10137.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	20274.5	0.0	20274.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.1	1.2
10°-20°	777.0	3.8
20°-30°	1467.1	7.2
30°-40°	2402.3	11.8
40°-50°	3724.9	18.4
50°-60°	5502.4	27.1
60°-70°	5237.8	25.8
70°-80°	845.2	4.2
80°-90°	79.7	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°	20274.5	100.0
0°-180°	20274.5	100.0

Coefficient of Utilization



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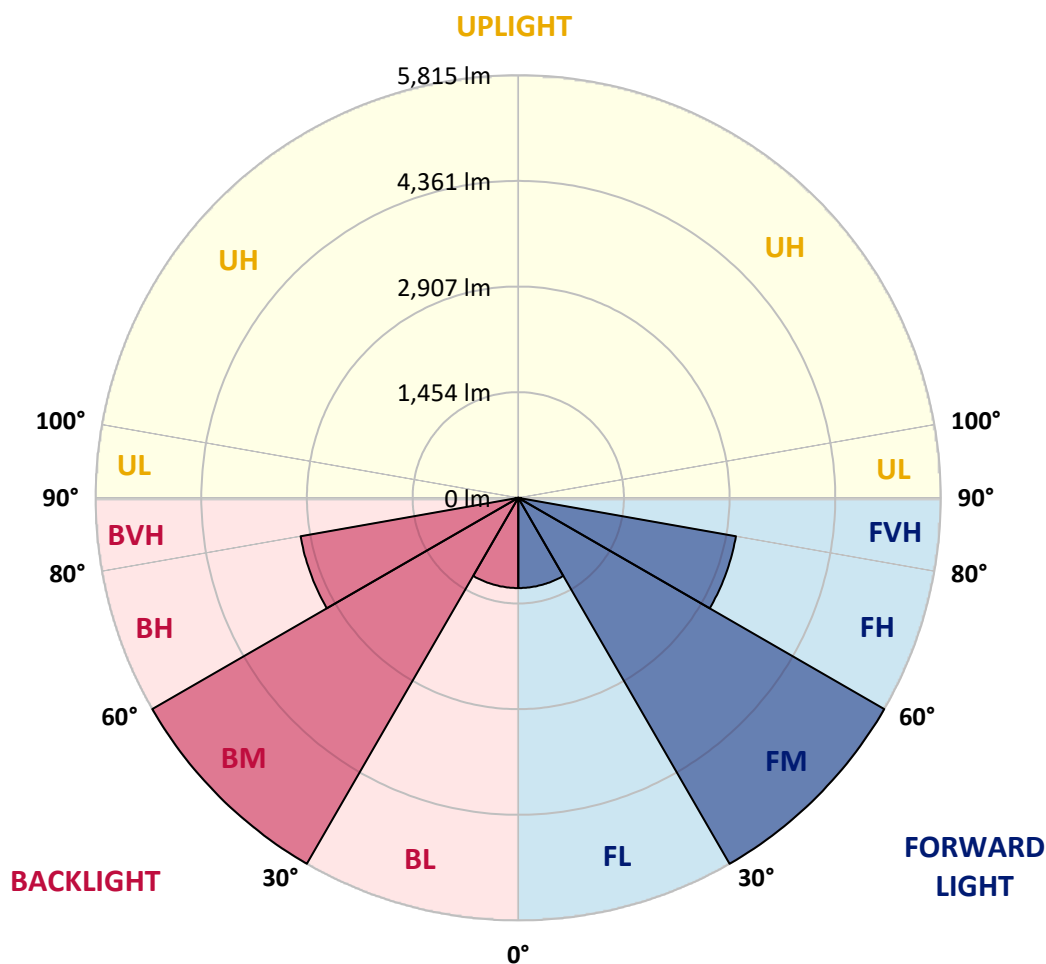
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1241.1	6.1			
FM	(30°-60°)	5814.8	28.7			
FH	(60°-80°)	3041.5	15.0			G2/5000
FVH	(80°-90°)	39.8	0.2			G1/100
BL	(0°-30°)	1241.1	6.1	B3/2500		
BM	(30°-60°)	5814.8	28.7	B4/8500		
BH	(60°-80°)	3041.5	15.0	B4/5000		G2/5000
BVH	(80°-90°)	39.8	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°	2412.8	2412.8	2412.8	2412.8	2412.8	2412.8	2412.8	2412.8	2412.8	2412.8	2412.8
2.5°	2429.1	2421.0	2427.1	2422.0	2418.0	2413.9	2415.9	2423.0	2426.1	2427.1	2427.1
5°	2461.7	2454.6	2457.6	2457.6	2450.5	2448.5	2449.4	2454.6	2460.7	2460.7	2460.7
7.5°	2514.6	2507.5	2514.6	2510.5	2504.4	2502.4	2501.4	2505.4	2514.6	2514.6	2511.6
10°	2578.7	2570.5	2574.6	2572.5	2565.5	2562.4	2561.4	2567.5	2575.6	2574.6	2572.5
12.5°	2648.9	2639.7	2644.8	2638.7	2636.7	2633.6	2633.6	2632.6	2637.6	2633.6	2635.7
15°	2727.2	2721.1	2723.1	2719.0	2722.1	2720.0	2711.9	2707.8	2709.9	2703.7	2704.8
17.5°	2819.8	2805.5	2812.6	2810.7	2810.7	2814.6	2801.4	2796.4	2800.4	2794.4	2799.4
20°	2926.6	2912.3	2915.4	2911.3	2906.2	2910.3	2894.0	2898.1	2901.2	2897.1	2906.2
22.5°	3043.5	3025.3	3024.3	3026.2	3015.0	3016.1	3004.9	3015.0	3021.2	3010.0	3021.2
25°	3163.6	3144.3	3157.5	3152.4	3138.1	3141.2	3133.1	3143.3	3148.3	3134.0	3150.3
27.5°	3290.8	3277.5	3289.7	3292.8	3275.5	3287.7	3275.5	3284.6	3289.7	3268.3	3284.6
30°	3439.3	3426.1	3437.2	3445.3	3425.0	3444.3	3434.2	3440.3	3441.3	3415.8	3431.1
32.5°	3601.0	3580.6	3609.1	3613.2	3590.8	3614.3	3601.0	3609.1	3614.3	3579.6	3603.0
35°	3798.3	3772.9	3805.4	3800.4	3781.0	3800.4	3788.2	3800.4	3812.6	3770.9	3796.3
37.5°	4010.9	3984.5	4019.0	4009.9	3991.7	4004.9	3997.7	4005.8	4025.2	3980.4	4007.9
40°	4244.9	4212.3	4259.2	4242.9	4225.6	4223.5	4227.6	4232.7	4258.2	4208.2	4224.5
42.5°	4495.1	4460.6	4530.7	4505.3	4480.9	4464.6	4477.8	4488.1	4512.5	4456.5	4486.0
45°	4781.0	4741.3	4832.9	4802.3	4763.7	4730.1	4751.5	4766.8	4802.3	4735.2	4769.8
47.5°	5096.3	5051.6	5149.2	5140.1	5077.0	5003.7	5052.5	5096.3	5122.7	5041.4	5068.8
50°	5404.5	5370.0	5498.1	5509.3	5432.0	5329.3	5397.4	5463.6	5470.6	5363.8	5377.0
52.5°	5693.5	5658.8	5845.0	5915.2	5846.0	5723.9	5796.2	5863.3	5809.4	5671.0	5675.1
55°	5924.3	5895.9	6132.9	6313.9	6337.4	6236.6	6279.4	6277.3	6100.3	5887.7	5894.9
57.5°	5980.3	5976.3	6275.3	6658.8	6903.0	6915.2	6830.7	6615.0	6233.5	5947.8	5929.4
60°	5726.0	5751.4	6162.4	6838.8	7489.9	7760.5	7395.3	6779.9	6082.0	5685.3	5638.5
62.5°	4965.1	5032.2	5527.6	6619.1	7963.8	8732.9	7847.9	6529.6	5459.5	4941.7	4911.2
65°	3558.3	3675.2	4222.5	5648.7	7921.2	9587.3	7782.8	5602.9	4263.2	3666.1	3622.4
67.5°	1614.4	1733.4	2198.2	3867.5	6885.6	9355.5	6869.3	3908.2	2308.1	1739.4	1714.0
70°	584.9	605.3	754.8	1548.3	4400.5	7454.2	4588.7	1559.4	802.6	644.9	636.8
72.5°	354.0	357.0	388.6	554.4	1528.9	4525.7	1594.0	572.7	396.7	352.0	358.0
75°	224.8	222.7	276.6	338.8	542.2	1526.8	568.7	338.8	275.6	251.2	253.3
77.5°	161.7	166.9	198.3	253.3	341.8	517.7	335.7	242.1	198.3	162.8	165.8
80°	121.1	124.1	144.4	197.3	240.1	322.5	213.6	179.1	149.5	101.7	104.8
82.5°	87.4	87.4	94.6	143.4	146.5	173.9	115.9	126.2	98.7	72.3	72.3
85°	51.9	50.8	59.0	85.5	76.3	64.1	52.9	77.3	62.0	44.8	43.8
87.5°	18.3	19.4	18.3	24.4	20.3	17.3	16.3	21.3	17.3	15.3	14.2
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)