

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: P963094

Luminaire Tested: **NAV-SB2D-827-U-5NQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963094
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-827-U-5NQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19006.6 lumens
Efficiency: N/A
Efficacy: 128.8 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

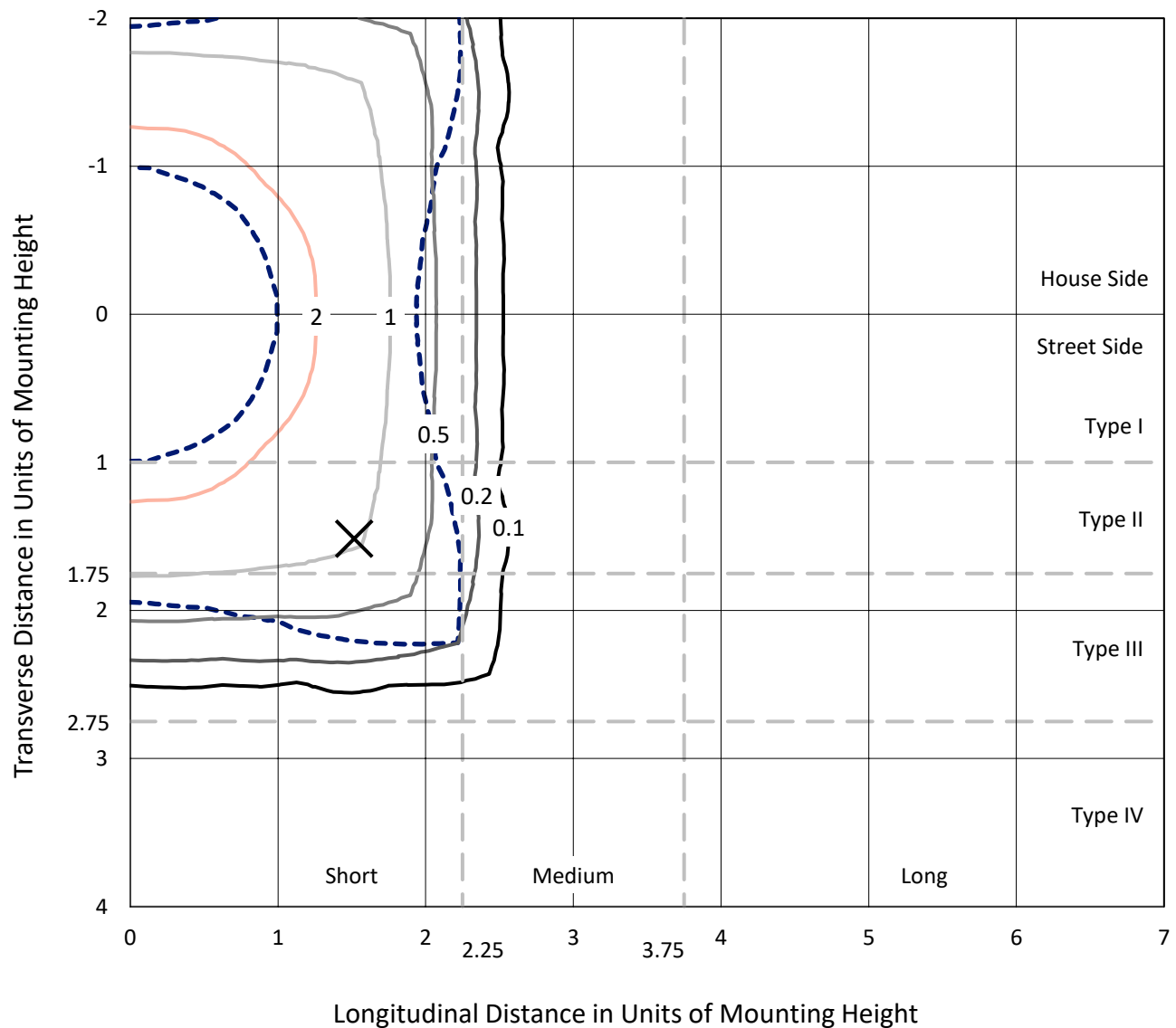


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Iso-Footcandle Lines of Horizontal Illumination

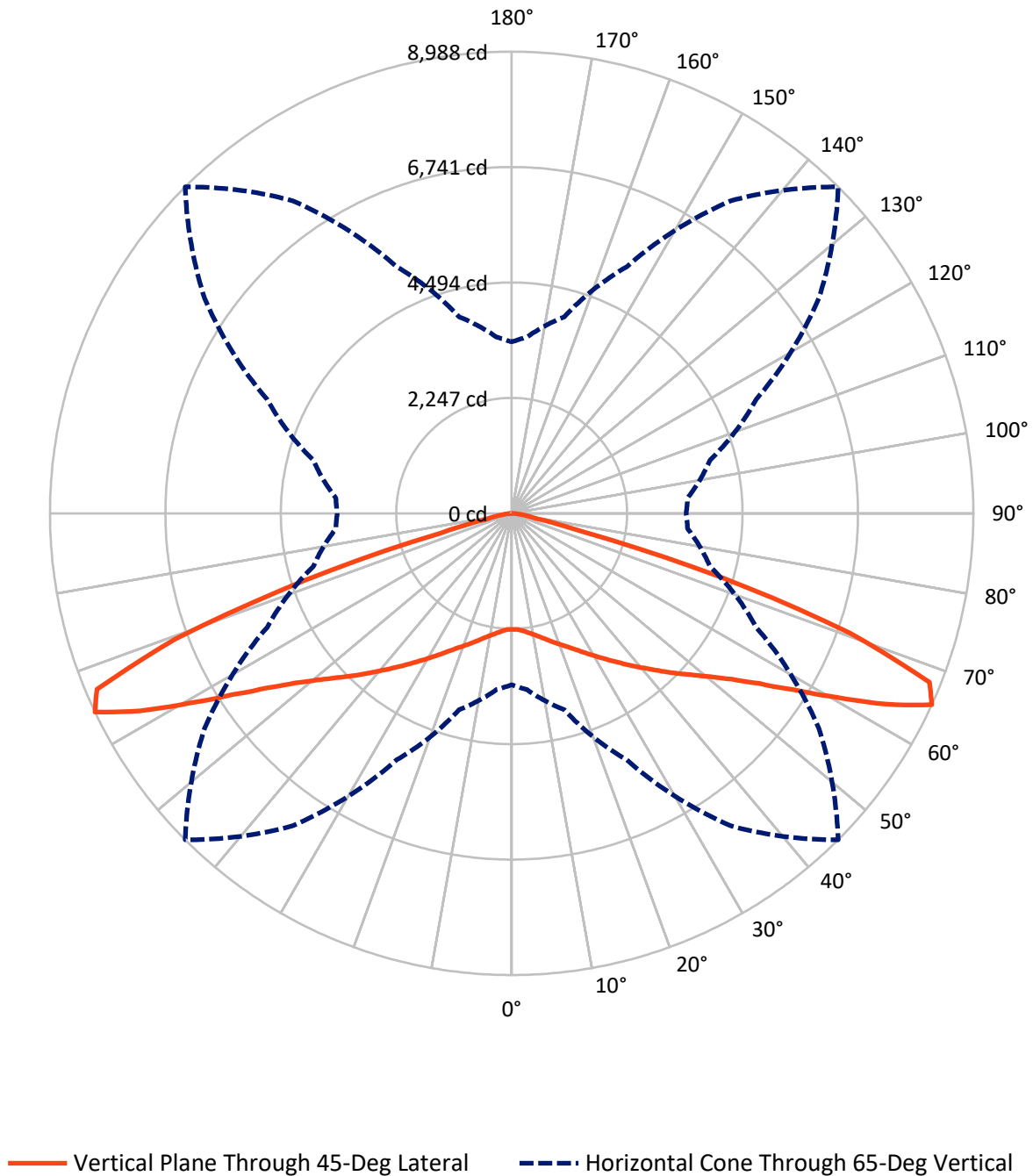
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
Type V - Short - N/A

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Luminous Intensity Polar Plot



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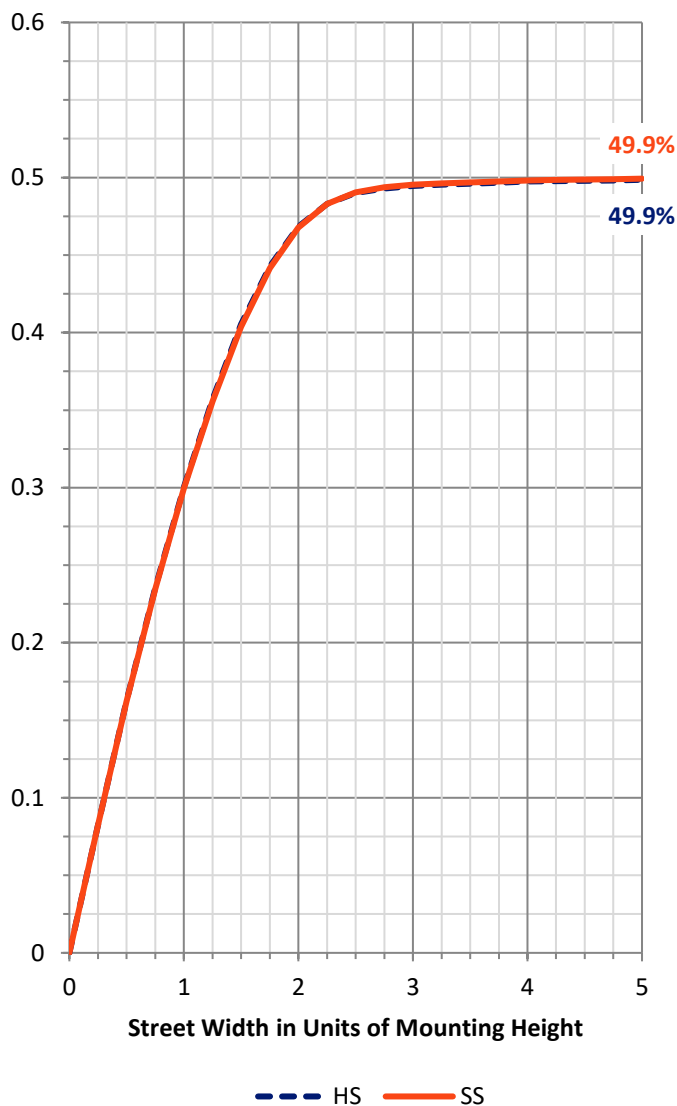
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9503.3	0.0	9503.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9503.3	0.0	9503.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	19006.6	0.0	19006.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.2	1.2
10°-20°	728.4	3.8
20°-30°	1375.4	7.2
30°-40°	2252.1	11.8
40°-50°	3491.9	18.4
50°-60°	5158.3	27.1
60°-70°	4910.2	25.8
70°-80°	792.3	4.2
80°-90°	74.7	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°	19006.6	100.0
0°-180°	19006.6	100.0

Coefficient of Utilization



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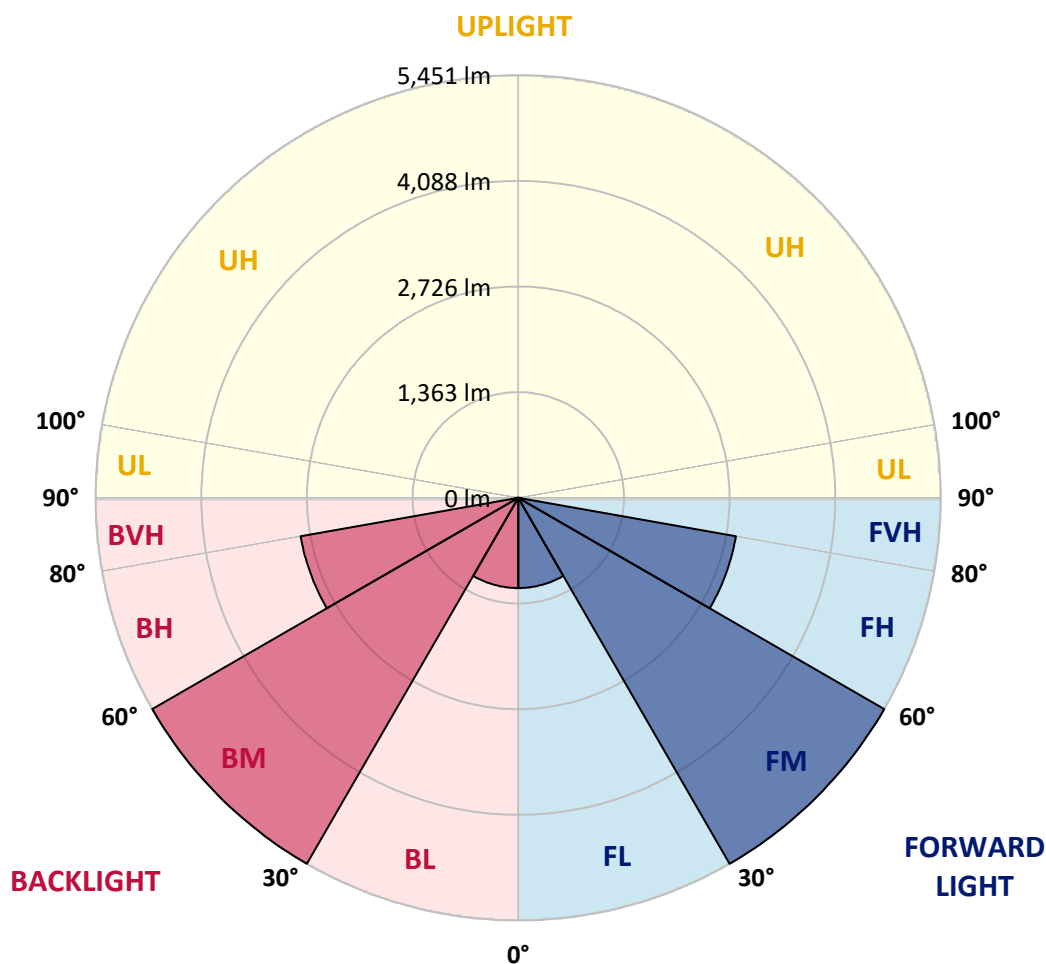
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1163.5	6.1			
FM	(30°-60°)	5451.2	28.7			
FH	(60°-80°)	2851.3	15.0			G2/5000
FVH	(80°-90°)	37.3	0.2			G1/100
BL	(0°-30°)	1163.5	6.1	B3/2500		
BM	(30°-60°)	5451.2	28.7	B4/8500		
BH	(60°-80°)	2851.3	15.0	B4/5000		G2/5000
BVH	(80°-90°)	37.3	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°	2262.0	2262.0	2262.0	2262.0	2262.0	2262.0	2262.0	2262.0	2262.0	2262.0	2262.0
2.5°	2277.2	2269.6	2275.3	2270.6	2266.8	2262.9	2264.8	2271.5	2274.4	2275.3	2275.3
5°	2307.8	2301.0	2303.9	2303.9	2297.2	2295.4	2296.3	2301.0	2306.8	2306.8	2306.8
7.5°	2357.3	2350.6	2357.3	2353.5	2347.8	2345.9	2344.9	2348.8	2357.3	2357.3	2354.4
10°	2417.5	2409.8	2413.6	2411.7	2405.1	2402.2	2401.2	2406.9	2414.6	2413.6	2411.7
12.5°	2483.2	2474.7	2479.4	2473.6	2471.8	2468.9	2468.9	2468.0	2472.7	2468.9	2470.9
15°	2556.7	2550.9	2552.9	2549.0	2551.8	2550.0	2542.3	2538.5	2540.5	2534.7	2535.6
17.5°	2643.4	2630.0	2636.7	2634.9	2634.9	2638.7	2626.3	2621.4	2625.3	2619.6	2624.3
20°	2743.5	2730.2	2733.1	2729.3	2724.4	2728.2	2713.1	2716.9	2719.7	2715.9	2724.4
22.5°	2853.2	2836.1	2835.0	2837.0	2826.5	2827.5	2817.0	2826.5	2832.3	2821.7	2832.3
25°	2965.7	2947.6	2960.0	2955.3	2941.9	2944.7	2937.1	2946.7	2951.4	2938.1	2953.3
27.5°	3084.9	3072.5	3084.0	3086.9	3070.6	3082.1	3070.6	3079.2	3084.0	3063.9	3079.2
30°	3224.1	3211.7	3222.3	3229.9	3210.8	3229.0	3219.4	3225.2	3226.1	3202.2	3216.6
32.5°	3375.8	3356.8	3383.4	3387.2	3366.3	3388.2	3375.8	3383.4	3388.2	3355.7	3377.7
35°	3560.7	3537.0	3567.5	3562.7	3544.6	3562.7	3551.2	3562.7	3574.2	3535.0	3558.9
37.5°	3760.1	3735.3	3767.7	3759.2	3742.0	3754.4	3747.7	3755.3	3773.4	3731.5	3757.2
40°	3979.5	3948.9	3992.8	3977.5	3961.3	3959.4	3963.3	3968.0	3991.9	3945.1	3960.4
42.5°	4214.0	4181.6	4247.4	4223.5	4200.7	4185.4	4197.8	4207.3	4230.3	4177.8	4205.5
45°	4482.0	4444.8	4530.6	4502.0	4465.8	4434.4	4454.3	4468.6	4502.0	4439.1	4471.5
47.5°	4777.6	4735.6	4827.2	4818.6	4759.5	4690.8	4736.6	4777.6	4802.4	4726.1	4751.9
50°	5066.6	5034.1	5154.3	5164.8	5092.3	4996.0	5059.9	5121.8	5128.6	5028.4	5040.8
52.5°	5337.4	5305.0	5479.4	5545.2	5480.5	5366.0	5433.7	5496.7	5446.1	5316.4	5320.3
55°	5553.9	5527.1	5749.3	5919.1	5941.0	5846.6	5886.7	5884.7	5718.8	5519.5	5526.2
57.5°	5606.3	5602.4	5882.9	6242.4	6471.2	6482.7	6403.5	6201.4	5843.7	5575.8	5558.6
60°	5367.9	5391.7	5777.0	6411.2	7021.5	7275.1	6932.8	6355.8	5701.7	5329.8	5285.9
62.5°	4654.6	4717.6	5181.9	6205.1	7465.9	8186.8	7357.1	6121.2	5118.0	4632.7	4604.1
65°	3335.8	3445.4	3958.4	5295.5	7425.8	8987.8	7296.1	5252.5	3996.6	3436.8	3395.8
67.5°	1513.4	1624.9	2060.8	3625.6	6455.0	8770.4	6439.8	3663.8	2163.8	1630.7	1606.8
70°	548.4	567.4	707.6	1451.4	4125.3	6988.0	4301.7	1461.9	752.5	604.5	597.0
72.5°	331.9	334.8	364.3	519.7	1433.3	4242.7	1494.3	536.9	371.9	329.9	335.7
75°	210.7	208.8	259.4	317.5	508.3	1431.4	533.1	317.5	258.4	235.5	237.5
77.5°	151.6	156.4	185.9	237.5	320.4	485.4	314.7	226.9	185.9	152.6	155.4
80°	113.5	116.3	135.4	185.0	225.1	302.3	200.3	167.8	140.2	95.3	98.2
82.5°	82.0	82.0	88.7	134.5	137.4	163.1	108.8	118.3	92.5	67.8	67.8
85°	48.6	47.7	55.4	80.1	71.5	60.1	49.6	72.5	58.2	41.9	41.0
87.5°	17.1	18.1	17.1	22.9	19.1	16.2	15.3	20.0	16.2	14.3	13.3
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)