

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: P963000

Luminaire Tested: **NAV-SB2D-740-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963000
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-SB2D-740-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 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: 23110.7 lumens
Efficiency: N/A
Efficacy: 156.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

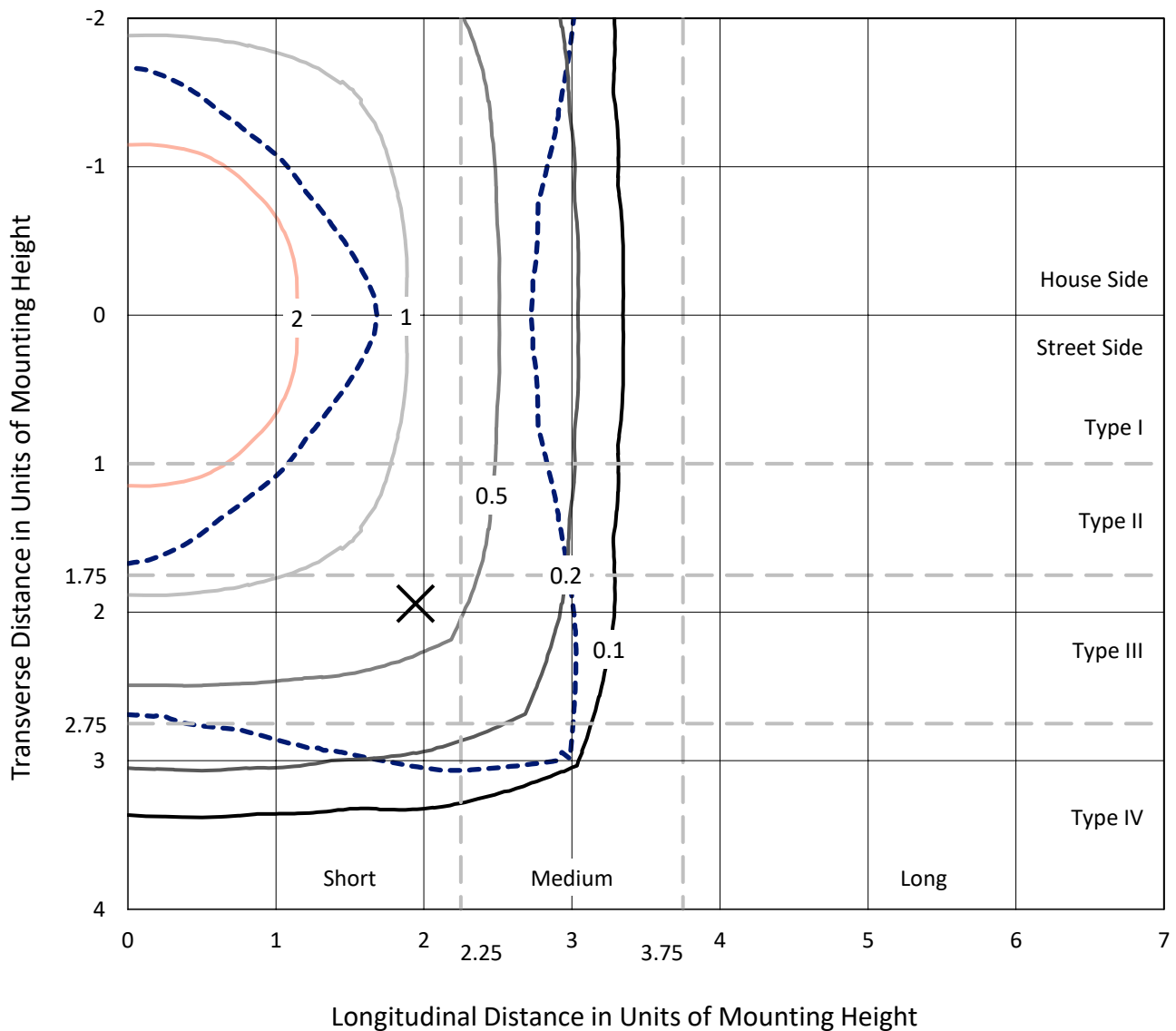
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P963000
CATALOG NUMBER: NAV-SB2D-740-U-5MQ

Iso-Footcandle Lines of Horizontal Illumination

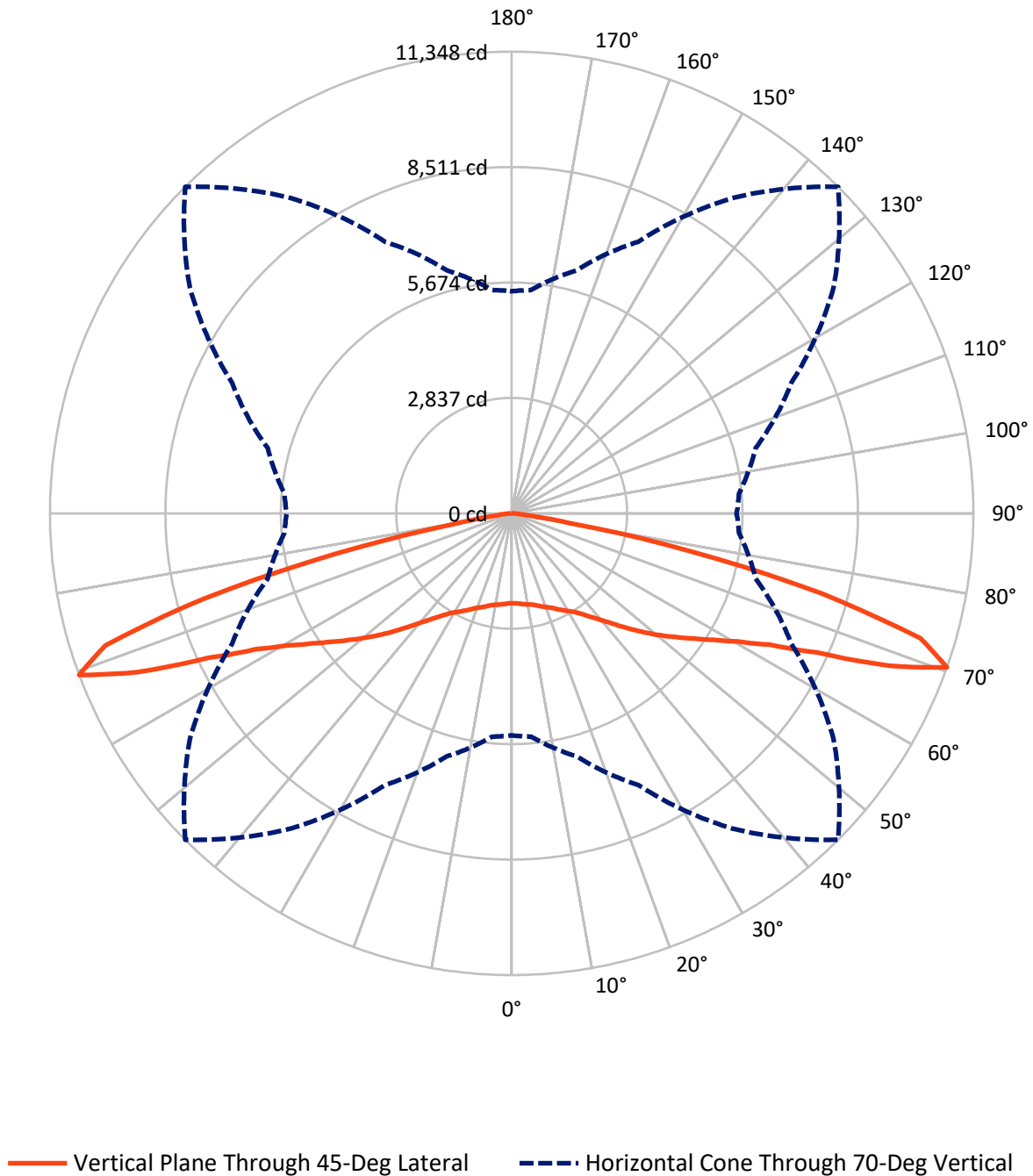
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
Type V - Short - N/A

REPORT NUMBER: P963000
CATALOG NUMBER: NAV-SB2D-740-U-5MQ

Luminous Intensity Polar Plot



REPORT NUMBER: P963000

CATALOG NUMBER: NAV-SB2D-740-U-5MQ

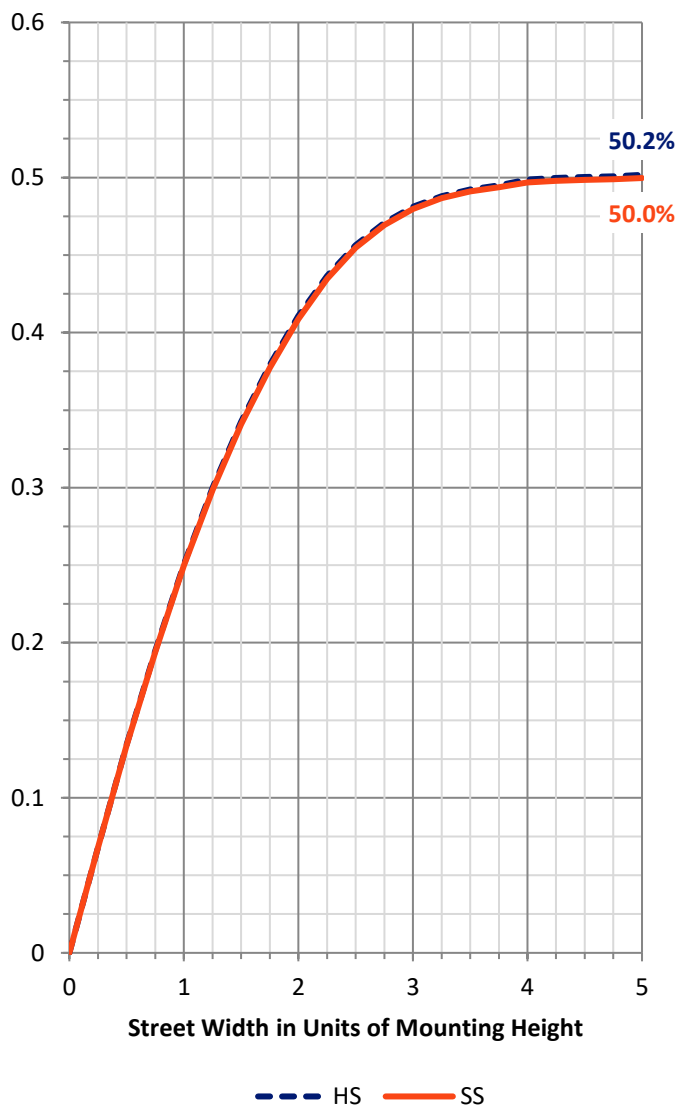
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11555.3	0.0	11555.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	11555.3	0.0	11555.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	23110.7	0.0	23110.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.1	0.9
10°-20°	666.9	2.9
20°-30°	1191.8	5.2
30°-40°	1931.9	8.4
40°-50°	3146.8	13.6
50°-60°	4797.8	20.8
60°-70°	7137.6	30.9
70°-80°	3890.2	16.8
80°-90°	132.5	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°	23110.7	100.0
0°-180°	23110.7	100.0

Coefficient of Utilization



REPORT NUMBER: P963000

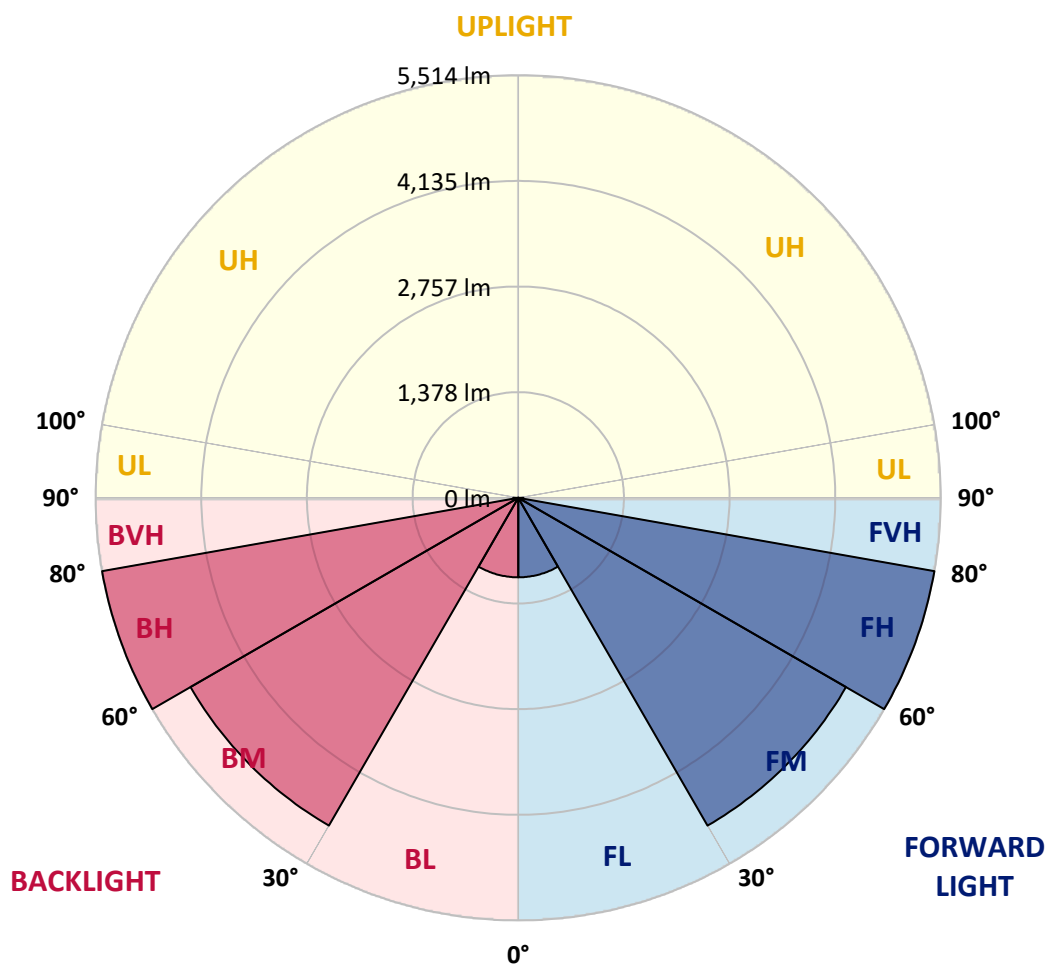
CATALOG NUMBER: NAV-SB2D-740-U-5MQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1036.9	4.5			
FM	(30°-60°)	4938.3	21.4			
FH	(60°-80°)	5513.9	23.9			G3/7500
FVH	(80°-90°)	66.2	0.3			G1/100
BL	(0°-30°)	1036.9	4.5	B3/2500		
BM	(30°-60°)	4938.3	21.4	B3/5000		
BH	(60°-80°)	5513.9	23.9	B5		G3/7500
BVH	(80°-90°)	66.2	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short



REPORT NUMBER: P963000

CATALOG NUMBER: NAV-SB2D-740-U-5MQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2213.8	2213.8	2213.8	2213.8	2213.8	2213.8	2213.8	2213.8	2213.8	2213.8	2213.8
2.5°	2224.2	2226.5	2221.9	2219.5	2217.3	2213.8	2214.9	2220.8	2225.4	2224.2	2225.4
5°	2242.8	2245.1	2241.6	2240.4	2235.8	2234.6	2234.6	2240.4	2243.9	2241.6	2242.8
7.5°	2263.6	2267.1	2261.4	2260.1	2257.9	2255.5	2254.4	2260.1	2263.6	2263.6	2263.6
10°	2283.4	2286.9	2282.3	2278.8	2276.4	2276.4	2274.1	2278.8	2284.5	2283.4	2283.4
12.5°	2304.3	2306.6	2301.9	2299.6	2299.6	2303.1	2299.6	2301.9	2306.6	2304.3	2303.1
15°	2329.8	2331.0	2329.8	2333.3	2339.0	2350.6	2340.3	2337.9	2340.3	2334.4	2334.4
17.5°	2364.6	2366.9	2371.5	2379.6	2387.8	2408.6	2390.1	2384.4	2384.4	2372.7	2372.7
20°	2407.5	2411.0	2418.0	2431.9	2442.4	2462.0	2443.5	2435.4	2431.9	2416.8	2416.8
22.5°	2452.8	2458.6	2469.0	2487.6	2506.1	2524.7	2506.1	2492.2	2481.8	2462.0	2460.9
25°	2505.0	2512.0	2528.2	2558.4	2583.9	2610.6	2588.5	2560.7	2539.7	2512.0	2510.7
27.5°	2579.2	2587.4	2607.1	2644.2	2676.7	2700.0	2679.0	2643.1	2614.1	2580.4	2579.2
30°	2683.7	2691.8	2715.0	2754.5	2776.5	2791.6	2777.6	2749.8	2715.0	2676.7	2676.7
32.5°	2818.2	2828.7	2854.2	2891.3	2896.0	2898.3	2893.7	2879.7	2854.2	2807.8	2809.0
35°	2988.8	3000.4	3029.4	3059.6	3054.9	3059.6	3052.7	3047.9	3029.4	2976.1	2976.1
37.5°	3197.7	3211.6	3241.8	3264.9	3253.4	3247.5	3248.7	3249.9	3239.4	3180.3	3180.3
40°	3440.1	3458.8	3480.8	3505.1	3485.4	3468.0	3479.6	3488.9	3479.6	3419.3	3419.3
42.5°	3689.6	3716.3	3739.5	3774.3	3758.1	3736.0	3752.2	3762.7	3743.0	3678.0	3682.6
45°	3967.0	3992.5	4022.6	4074.8	4063.2	4040.0	4063.2	4065.6	4031.8	3955.3	3963.5
47.5°	4253.4	4280.2	4325.4	4395.0	4390.4	4364.9	4395.0	4378.8	4335.9	4244.2	4238.4
50°	4525.0	4562.1	4631.8	4729.1	4738.5	4707.1	4747.8	4716.4	4644.5	4529.7	4527.3
52.5°	4780.3	4819.7	4929.9	5062.2	5095.8	5055.2	5109.7	5055.2	4947.4	4800.0	4786.0
55°	5048.2	5092.3	5223.5	5396.3	5463.7	5433.4	5484.5	5402.2	5249.0	5070.3	5046.0
57.5°	5363.8	5390.6	5547.2	5752.5	5866.3	5873.2	5896.4	5757.2	5571.5	5368.5	5340.7
60°	5706.2	5743.3	5913.8	6159.7	6339.6	6397.6	6373.2	6166.7	5950.9	5717.8	5680.5
62.5°	6144.7	6185.3	6389.5	6684.2	6968.5	7112.4	7017.3	6717.8	6451.0	6171.4	6122.6
65°	6507.8	6553.1	6922.0	7447.6	7965.2	8254.0	8015.0	7463.9	6983.5	6589.1	6524.1
67.5°	6244.5	6300.2	6879.2	7844.4	9131.2	9993.2	9175.3	7962.8	7021.9	6487.0	6407.0
70°	5457.8	5510.1	6185.3	7365.2	9459.5	11348.4	9656.8	7582.2	6207.4	5608.7	5528.6
72.5°	3623.5	3791.7	4475.0	5890.6	8446.6	10501.4	8530.2	5771.1	4151.4	3615.4	3498.1
75°	1202.0	1336.6	1803.1	3053.8	5657.4	7853.8	5385.9	2702.2	1428.2	1028.0	972.3
77.5°	302.8	349.2	481.5	873.7	2256.7	4471.7	2031.7	713.6	388.7	271.5	242.5
80°	147.4	162.5	232.1	291.2	565.1	1421.3	530.2	273.8	183.3	141.6	130.0
82.5°	81.2	82.4	131.1	164.7	210.0	367.8	218.1	160.1	105.6	85.9	85.9
85°	49.9	48.7	69.6	88.1	88.1	131.1	104.4	88.1	60.4	53.4	55.7
87.5°	19.7	19.7	25.5	27.9	24.4	33.6	26.6	29.0	23.2	22.0	23.2
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)