

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: P966133

Luminaire Tested: **NAV-SB4B-735-U-5WQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966133
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-735-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23398.7 lumens
Efficiency: N/A
Efficacy: 159.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

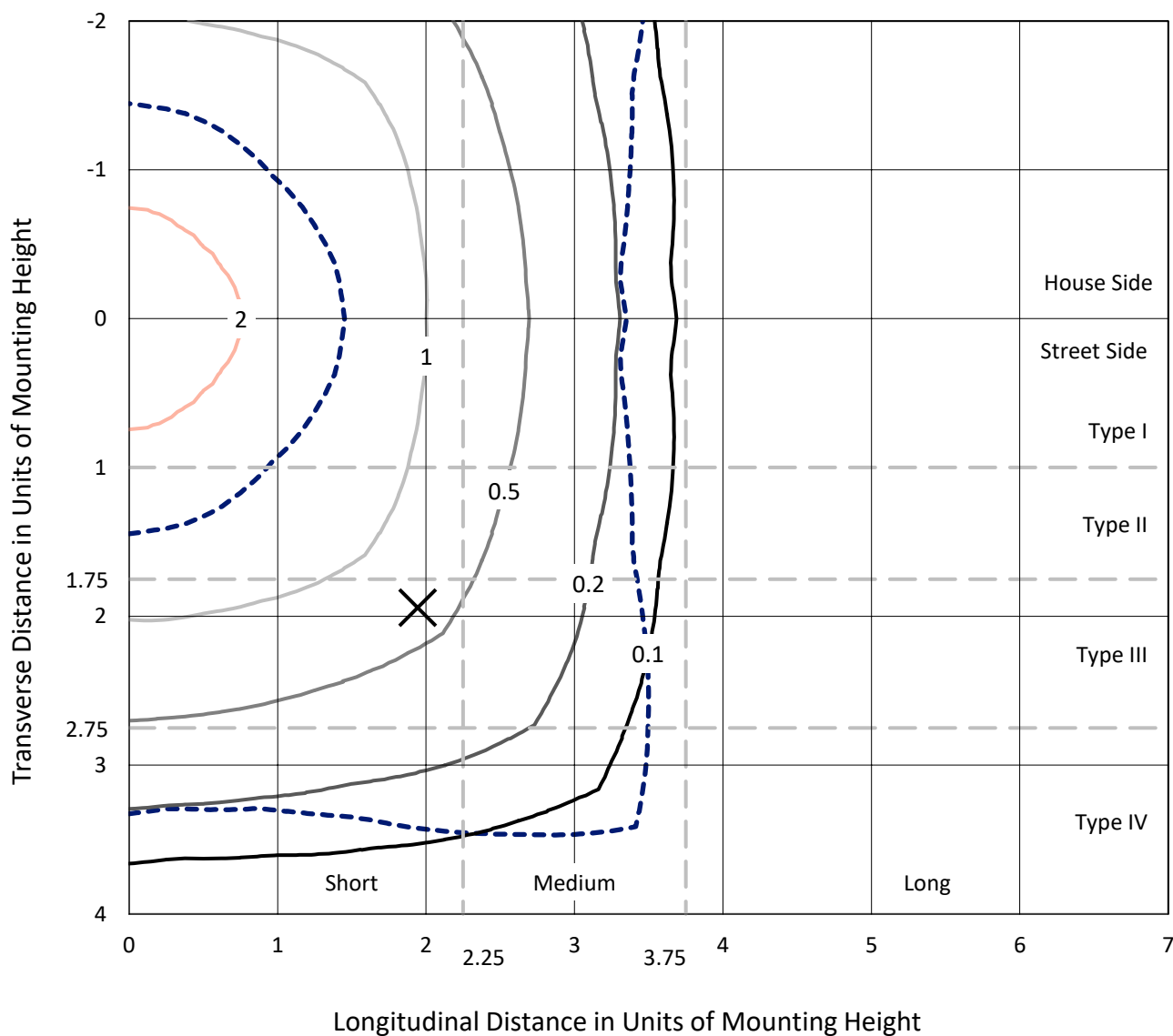
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P966133
 CATALOG NUMBER: NAV-SB4B-735-U-5WQ

Iso-Footcandle Lines of Horizontal Illumination

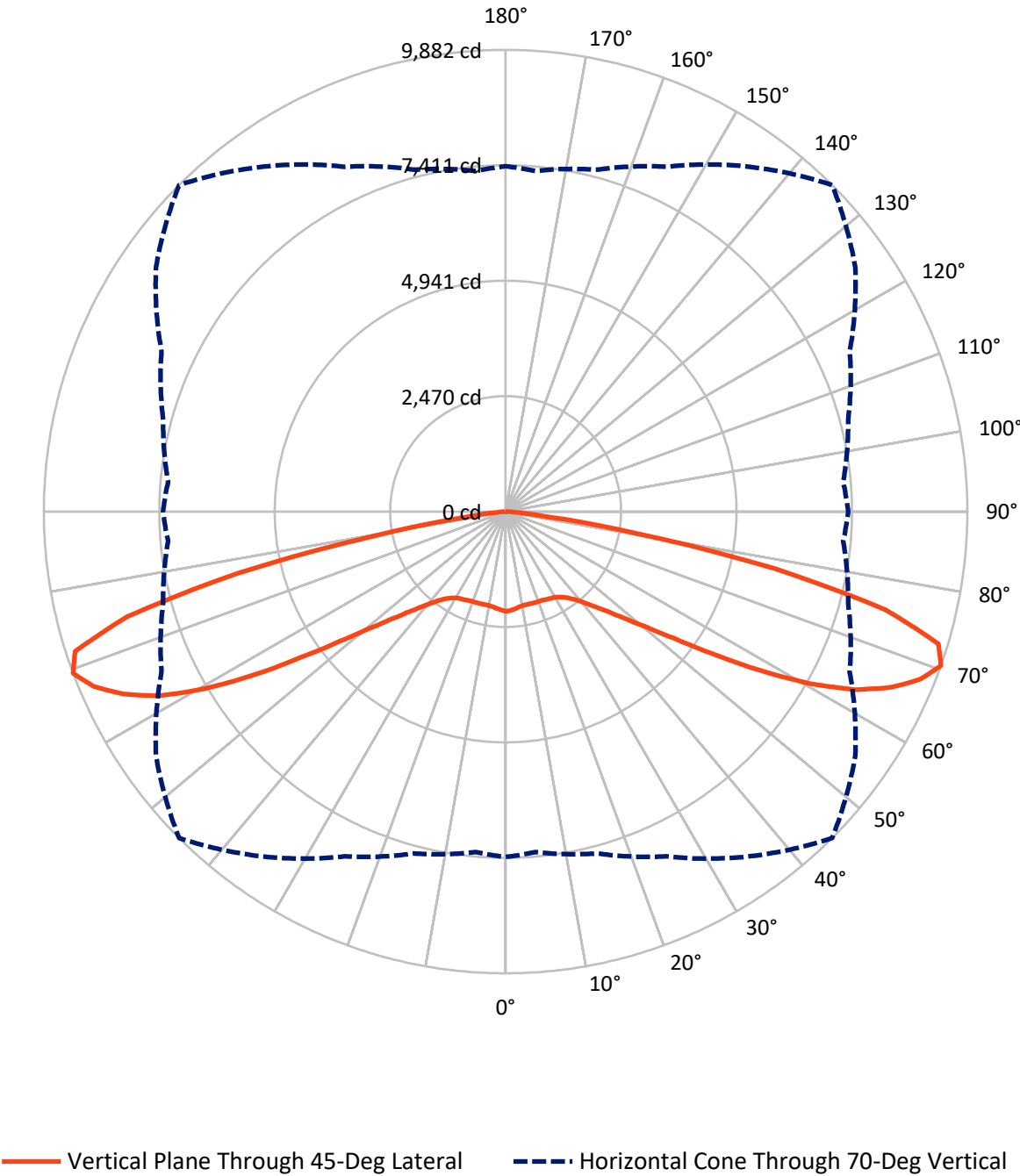
× Max cd
 --- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type V - Short - N/A

REPORT NUMBER: P966133
CATALOG NUMBER: NAV-SB4B-735-U-5WQ

Luminous Intensity Polar Plot



REPORT NUMBER: P966133

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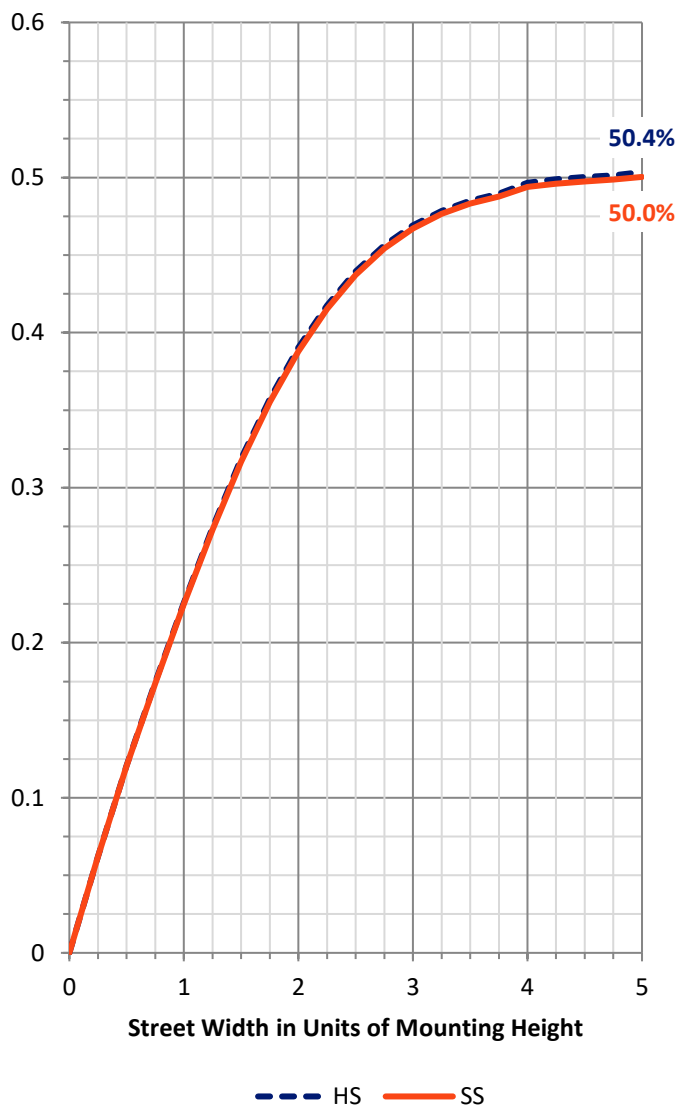
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11699.4	0.0	11699.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	11699.4	0.0	11699.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	23398.7	0.0	23398.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.6	0.8
10°-20°	583.0	2.5
20°-30°	970.2	4.1
30°-40°	1467.2	6.3
40°-50°	2438.2	10.4
50°-60°	4600.8	19.7
60°-70°	7768.6	33.2
70°-80°	5104.8	21.8
80°-90°	267.4	1.1
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°	23398.7	100.0
0°-180°	23398.7	100.0

Coefficient of Utilization



REPORT NUMBER: P966133

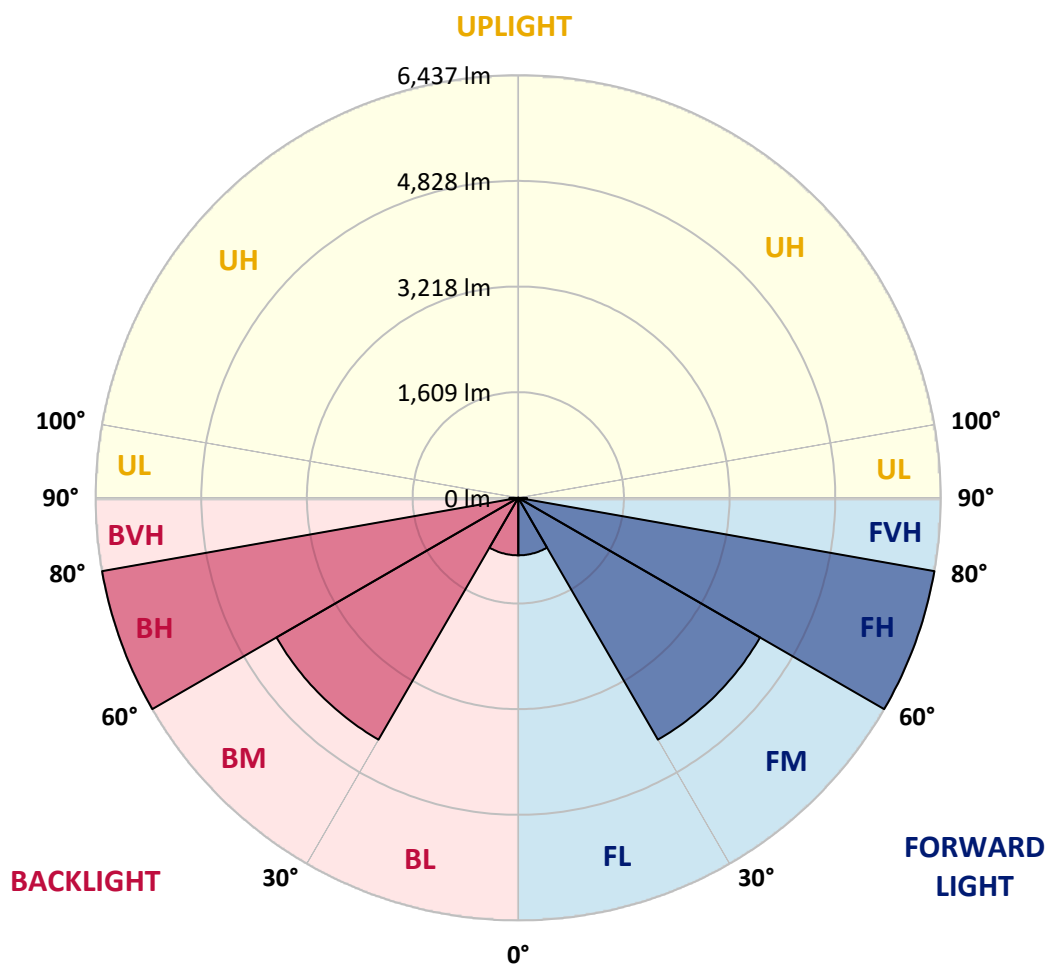
CATALOG NUMBER: NAV-SB4B-735-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	875.9	3.7			
FM	(30°-60°)	4253.1	18.2			
FH	(60°-80°)	6436.7	27.5			G3/7500
FVH	(80°-90°)	133.7	0.6			G2/225
BL	(0°-30°)	875.9	3.7	B2/1000		
BM	(30°-60°)	4253.1	18.2	B3/5000		
BH	(60°-80°)	6436.7	27.5	B5		G3/7500
BVH	(80°-90°)	133.7	0.6			G2/225
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: P966133

CATALOG NUMBER: NAV-SB4B-735-U-5WQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2134.5	2134.5	2134.5	2134.5	2134.5	2134.5	2134.5	2134.5	2134.5	2134.5	2134.5
2.5°	2121.0	2127.2	2124.7	2119.8	2119.8	2116.2	2119.8	2122.3	2126.0	2128.3	2127.2
5°	2093.0	2098.0	2096.7	2093.0	2094.3	2090.7	2093.0	2096.7	2099.2	2100.4	2100.4
7.5°	2068.8	2073.6	2071.2	2065.1	2065.1	2061.5	2062.7	2066.3	2070.0	2071.2	2071.2
10°	2062.7	2067.5	2060.2	2050.5	2046.8	2042.0	2043.2	2046.8	2054.2	2057.8	2057.8
12.5°	2065.1	2068.8	2061.5	2046.8	2043.2	2038.3	2038.3	2042.0	2051.7	2056.6	2057.8
15°	2072.4	2076.0	2065.1	2049.3	2045.7	2042.0	2040.8	2045.7	2056.6	2065.1	2066.3
17.5°	2085.8	2089.5	2072.4	2050.5	2045.7	2046.8	2045.7	2049.3	2066.3	2082.2	2082.2
20°	2098.0	2100.4	2077.3	2050.5	2045.7	2046.8	2045.7	2053.0	2074.8	2096.7	2098.0
22.5°	2101.6	2104.0	2082.2	2059.0	2055.3	2056.6	2055.3	2062.7	2083.3	2105.2	2105.2
25°	2102.8	2106.5	2089.5	2071.2	2077.3	2079.7	2077.3	2078.5	2094.3	2113.8	2112.5
27.5°	2121.0	2126.0	2110.1	2094.3	2098.0	2096.7	2100.4	2104.0	2116.2	2135.7	2130.8
30°	2158.8	2162.4	2149.0	2133.2	2130.8	2122.3	2133.2	2145.4	2158.8	2175.8	2172.2
32.5°	2220.8	2228.0	2211.0	2194.0	2183.0	2178.2	2186.7	2207.4	2225.7	2243.9	2236.5
35°	2324.2	2329.0	2313.2	2281.5	2262.2	2262.2	2269.5	2296.2	2325.4	2348.5	2340.0
37.5°	2470.1	2476.2	2448.2	2410.5	2381.3	2381.3	2391.0	2419.0	2462.8	2495.7	2483.5
40°	2647.7	2656.2	2620.9	2582.0	2554.0	2549.2	2561.3	2592.9	2634.2	2675.7	2662.2
42.5°	2861.7	2871.4	2825.2	2791.2	2769.2	2769.2	2775.4	2804.6	2842.2	2893.4	2889.7
45°	3135.4	3152.4	3089.1	3055.1	3034.4	3039.3	3042.9	3068.4	3102.6	3160.9	3158.4
47.5°	3461.3	3478.3	3411.4	3376.1	3372.6	3395.6	3381.1	3399.3	3417.6	3484.4	3464.9
50°	3831.0	3860.3	3814.0	3811.6	3818.8	3861.5	3827.3	3837.1	3816.5	3859.0	3833.5
52.5°	4283.5	4326.0	4317.5	4332.1	4413.5	4501.2	4423.3	4389.3	4311.5	4324.8	4279.8
55°	4832.0	4896.4	4908.6	4996.2	5181.0	5359.8	5194.4	5056.9	4891.6	4861.2	4813.7
57.5°	5455.9	5506.9	5565.3	5744.1	6089.5	6407.0	6089.5	5785.5	5525.2	5463.1	5419.4
60°	6127.2	6190.5	6246.5	6510.3	7023.6	7469.9	7013.9	6531.0	6186.8	6102.8	6030.0
62.5°	6848.4	6929.9	6968.9	7261.9	7860.3	8393.0	7868.8	7283.9	6901.9	6811.9	6739.0
65°	7540.4	7607.3	7651.1	7963.6	8535.3	9069.2	8574.2	7997.8	7604.9	7486.9	7428.6
67.5°	7862.8	7899.3	8006.3	8360.2	8963.4	9572.7	9065.6	8397.8	7958.8	7752.1	7754.5
70°	7390.9	7316.7	7574.5	8141.3	9014.5	9881.6	9131.2	8124.3	7586.6	7251.0	7331.2
72.5°	5711.3	5583.6	6031.1	7000.4	8430.7	9684.6	8489.0	7055.2	6309.7	5628.6	5797.6
75°	3107.4	2962.7	3580.5	4806.4	6723.2	8394.2	6877.6	4943.9	3986.7	3084.3	3284.9
77.5°	876.9	822.2	1320.8	2325.4	4043.8	5893.7	4199.5	2376.5	1566.5	929.2	1032.6
80°	268.8	260.2	352.7	700.5	1717.3	2822.8	1650.4	709.1	448.7	283.4	299.2
82.5°	159.3	146.0	175.2	255.4	437.9	886.6	425.7	266.4	214.0	143.5	155.7
85°	91.2	85.2	103.4	124.0	147.2	188.5	122.8	126.5	114.3	76.7	80.3
87.5°	37.7	34.0	40.2	38.9	34.0	43.8	32.8	38.9	46.2	30.4	28.0
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)