

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: P966164

Luminaire Tested: **NAV-SB4B-740-U-5WQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966164
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-740-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24754.7 lumens
Efficiency: N/A
Efficacy: 168.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

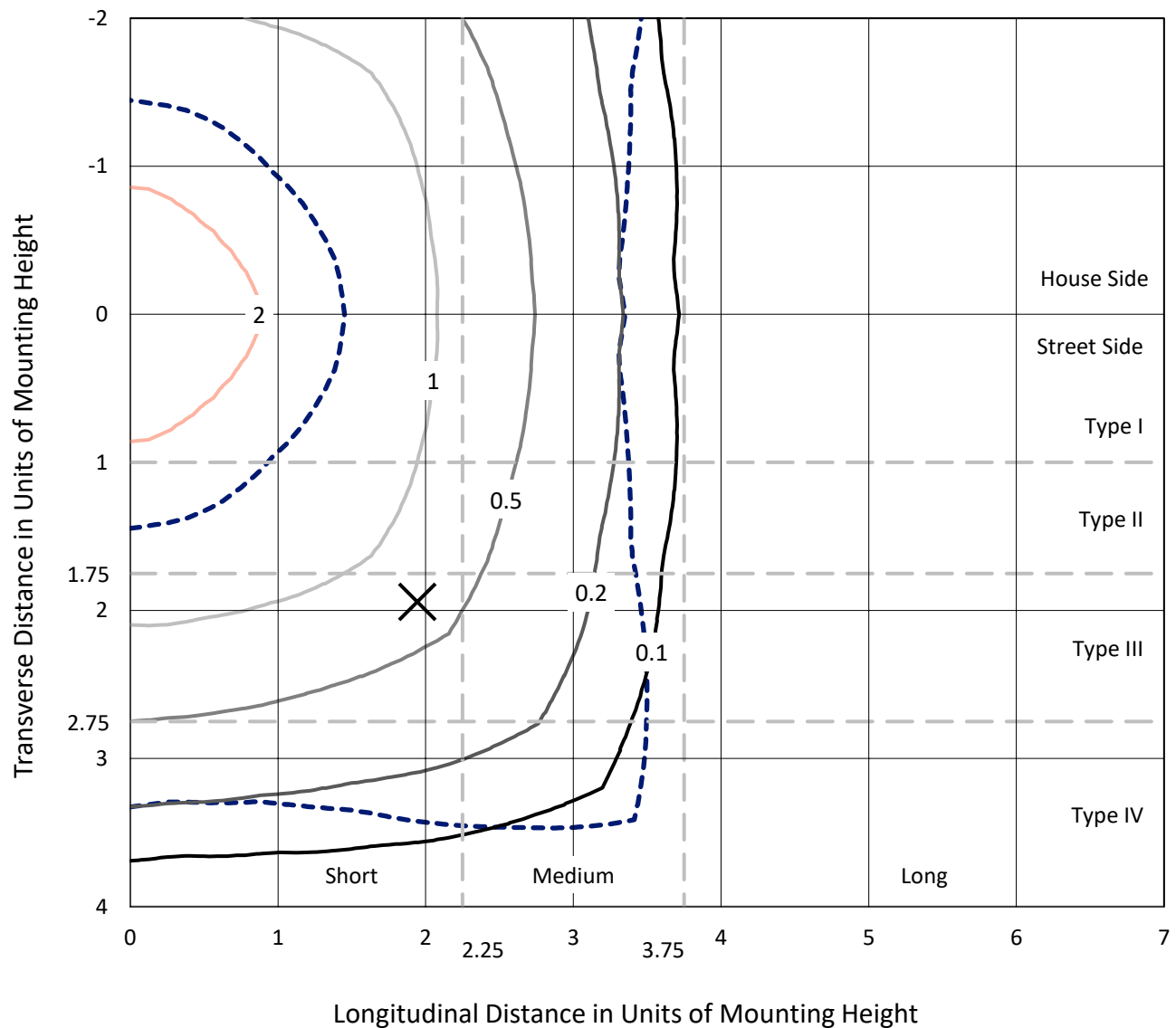
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P966164
CATALOG NUMBER: NAV-SB4B-740-U-5WQ

Iso-Footcandle Lines of Horizontal Illumination

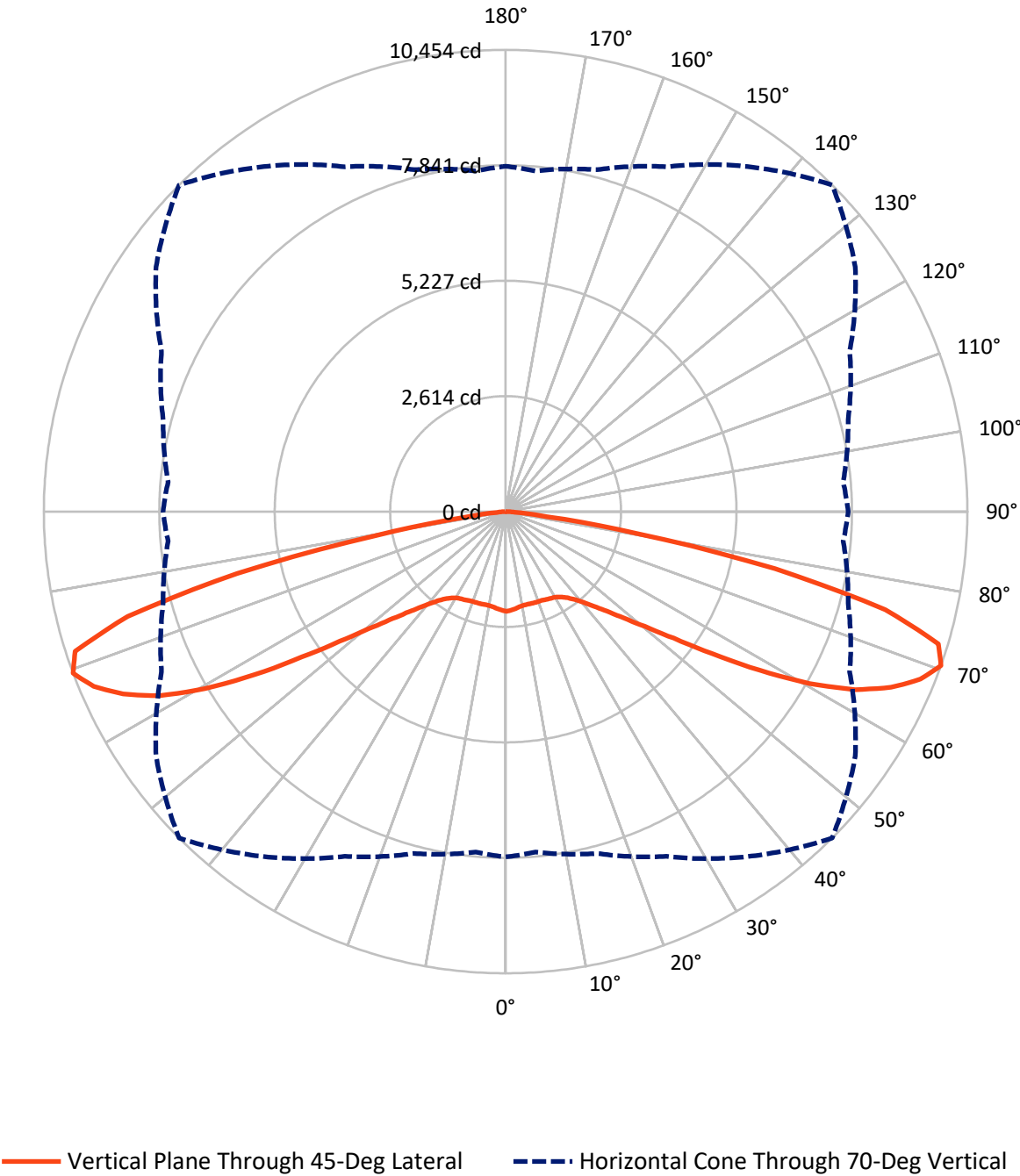
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
Type V - Short - N/A

REPORT NUMBER: P966164
CATALOG NUMBER: NAV-SB4B-740-U-5WQ

Luminous Intensity Polar Plot



REPORT NUMBER: P966164

CATALOG NUMBER: NAV-SB4B-740-U-5WQ

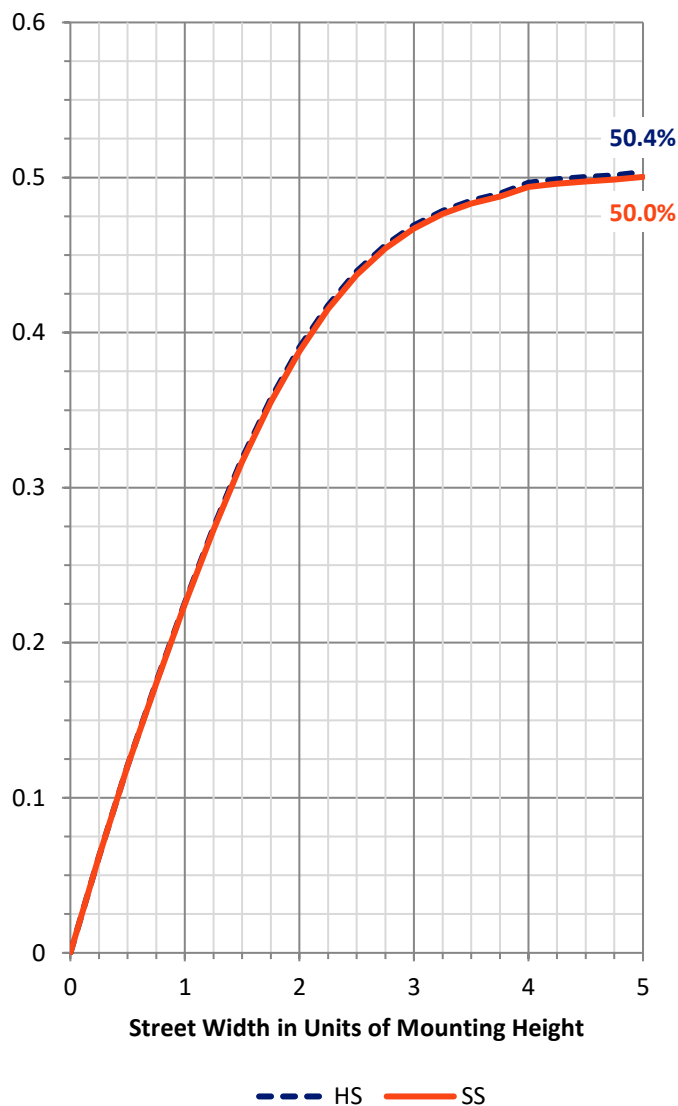
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12377.4	0.0	12377.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	12377.4	0.0	12377.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	24754.7	0.0	24754.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.1	0.8
10°-20°	616.8	2.5
20°-30°	1026.4	4.1
30°-40°	1552.3	6.3
40°-50°	2579.5	10.4
50°-60°	4867.4	19.7
60°-70°	8218.8	33.2
70°-80°	5400.6	21.8
80°-90°	282.9	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°	24754.7	100.0
0°-180°	24754.7	100.0

Coefficient of Utilization



REPORT NUMBER: P966164

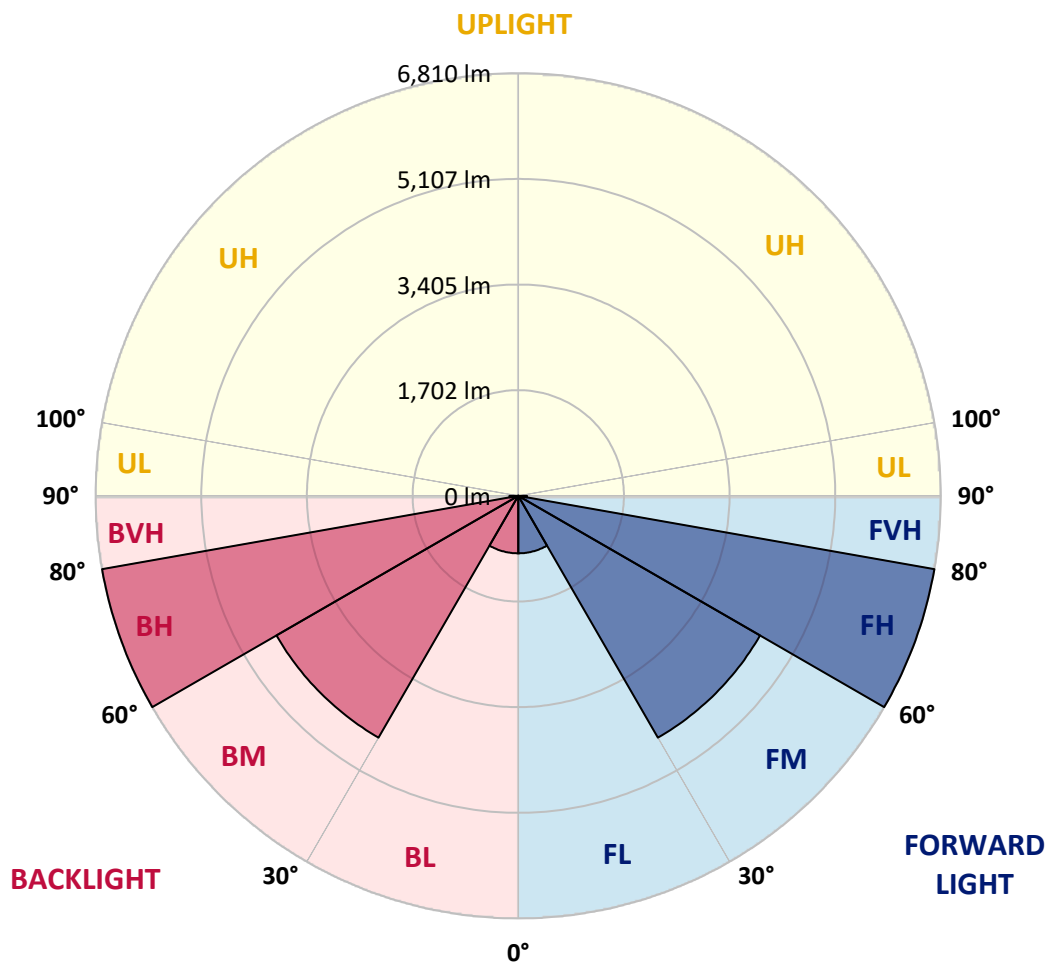
CATALOG NUMBER: NAV-SB4B-740-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	926.6	3.7			
FM	(30°-60°)	4499.6	18.2			
FH	(60°-80°)	6809.7	27.5			G3/7500
FVH	(80°-90°)	141.5	0.6			G2/225
BL	(0°-30°)	926.6	3.7	B2/1000		
BM	(30°-60°)	4499.6	18.2	B3/5000		
BH	(60°-80°)	6809.7	27.5	B5		G3/7500
BVH	(80°-90°)	141.5	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: P966164

CATALOG NUMBER: NAV-SB4B-740-U-5WQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2258.2	2258.2	2258.2	2258.2	2258.2	2258.2	2258.2	2258.2	2258.2	2258.2	2258.2
2.5°	2243.9	2250.4	2247.8	2242.7	2242.7	2238.8	2242.7	2245.3	2249.2	2251.7	2250.4
5°	2214.4	2219.5	2218.2	2214.4	2215.6	2211.8	2214.4	2218.2	2220.9	2222.1	2222.1
7.5°	2188.7	2193.8	2191.2	2184.8	2184.8	2180.9	2182.2	2186.1	2189.9	2191.2	2191.2
10°	2182.2	2187.4	2179.7	2169.3	2165.5	2160.4	2161.6	2165.5	2173.2	2177.1	2177.1
12.5°	2184.8	2188.7	2180.9	2165.5	2161.6	2156.5	2156.5	2160.4	2170.6	2175.8	2177.1
15°	2192.5	2196.4	2184.8	2168.1	2164.2	2160.4	2159.1	2164.2	2175.8	2184.8	2186.1
17.5°	2206.6	2210.5	2192.5	2169.3	2164.2	2165.5	2164.2	2168.1	2186.1	2202.8	2202.8
20°	2219.5	2222.1	2197.7	2169.3	2164.2	2165.5	2164.2	2172.0	2195.0	2218.2	2219.5
22.5°	2223.4	2226.0	2202.8	2178.3	2174.5	2175.8	2174.5	2182.2	2204.1	2227.2	2227.2
25°	2224.7	2228.6	2210.5	2191.2	2197.7	2200.3	2197.7	2198.9	2215.6	2236.2	2235.0
27.5°	2243.9	2249.2	2232.4	2215.6	2219.5	2218.2	2222.1	2226.0	2238.8	2259.4	2254.3
30°	2283.9	2287.7	2273.6	2256.8	2254.3	2245.3	2256.8	2269.8	2283.9	2301.8	2298.0
32.5°	2349.5	2357.2	2339.2	2321.2	2309.6	2304.4	2313.4	2335.4	2354.6	2373.9	2366.2
35°	2458.9	2464.0	2447.3	2413.8	2393.3	2393.3	2401.0	2429.2	2460.1	2484.6	2475.6
37.5°	2613.2	2619.7	2590.1	2550.2	2519.3	2519.3	2529.6	2559.2	2605.5	2640.3	2627.4
40°	2801.1	2810.1	2772.8	2731.6	2702.0	2696.9	2709.8	2743.2	2787.0	2830.7	2816.6
42.5°	3027.5	3037.9	2989.0	2952.9	2929.8	2929.8	2936.2	2967.1	3006.9	3061.1	3057.2
45°	3317.1	3335.0	3268.2	3232.1	3210.3	3215.4	3219.3	3246.3	3282.4	3344.1	3341.5
47.5°	3661.9	3680.0	3609.1	3571.8	3568.0	3592.4	3576.9	3596.3	3615.6	3686.3	3665.8
50°	4053.1	4083.9	4035.0	4032.5	4040.2	4085.2	4049.2	4059.5	4037.6	4082.7	4055.6
52.5°	4531.7	4576.7	4567.7	4583.2	4669.4	4762.0	4679.6	4643.7	4561.4	4575.5	4527.8
55°	5112.0	5180.2	5193.1	5285.7	5481.3	5670.4	5495.4	5350.1	5175.0	5142.8	5092.7
57.5°	5772.1	5826.1	5887.9	6077.0	6442.4	6778.2	6442.4	6120.8	5845.4	5779.8	5733.4
60°	6482.3	6549.2	6608.4	6887.6	7430.6	7902.9	7420.3	6909.5	6545.3	6456.6	6379.4
62.5°	7245.3	7331.5	7372.7	7682.8	8315.8	8879.4	8324.8	7705.9	7301.9	7206.8	7129.5
65°	7977.5	8048.2	8094.5	8425.2	9029.9	9594.8	9071.1	8461.3	8045.6	7920.8	7859.1
67.5°	8318.4	8357.0	8470.3	8844.7	9482.9	10127.5	9590.9	8884.6	8420.1	8201.3	8203.9
70°	7819.2	7740.7	8013.4	8613.1	9536.9	10454.3	9660.4	8595.0	8026.4	7671.2	7756.2
72.5°	6042.3	5907.2	6380.6	7406.1	8919.3	10245.9	8981.0	7464.0	6675.3	5954.7	6133.6
75°	3287.5	3134.3	3788.0	5085.0	7112.8	8880.7	7276.2	5230.4	4217.8	3263.0	3475.4
77.5°	927.7	869.8	1397.4	2460.1	4278.2	6235.3	4443.0	2514.2	1657.2	983.1	1092.4
80°	284.3	275.3	373.1	741.2	1816.8	2986.4	1746.0	750.1	474.8	299.8	316.5
82.5°	168.5	154.4	185.3	270.2	463.2	938.0	450.4	281.8	226.4	151.8	164.7
85°	96.5	90.1	109.4	131.2	155.7	199.5	130.0	133.9	121.0	81.1	85.0
87.5°	39.9	36.0	42.4	41.2	36.0	46.3	34.7	41.2	48.9	32.2	29.6
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)