

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: P966257

Luminaire Tested: **NAV-SB4B-827-U-5WQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966257
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-827-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20346.2 lumens
Efficiency: N/A
Efficacy: 138.4 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

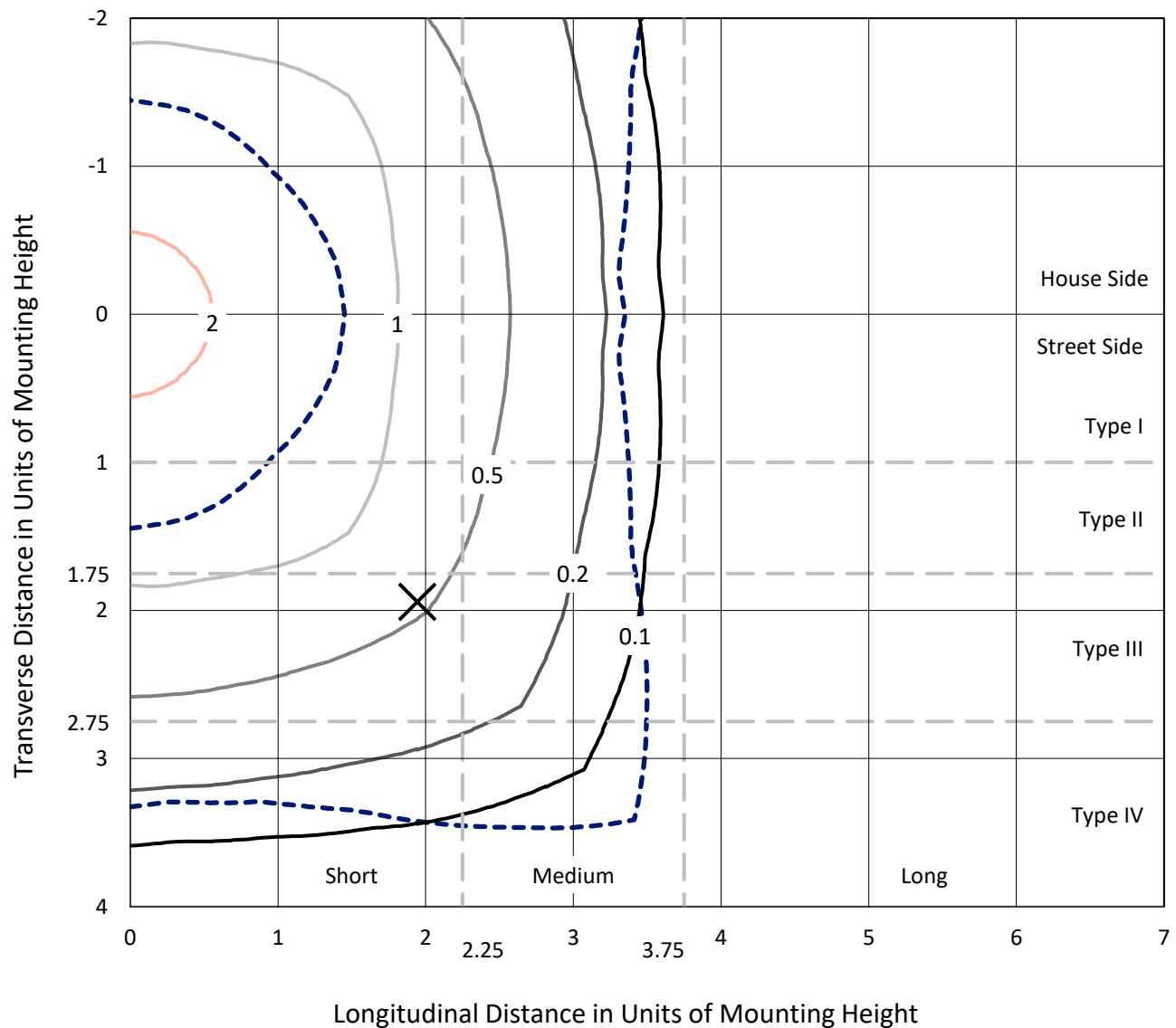


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Iso-Footcandle Lines of Horizontal Illumination

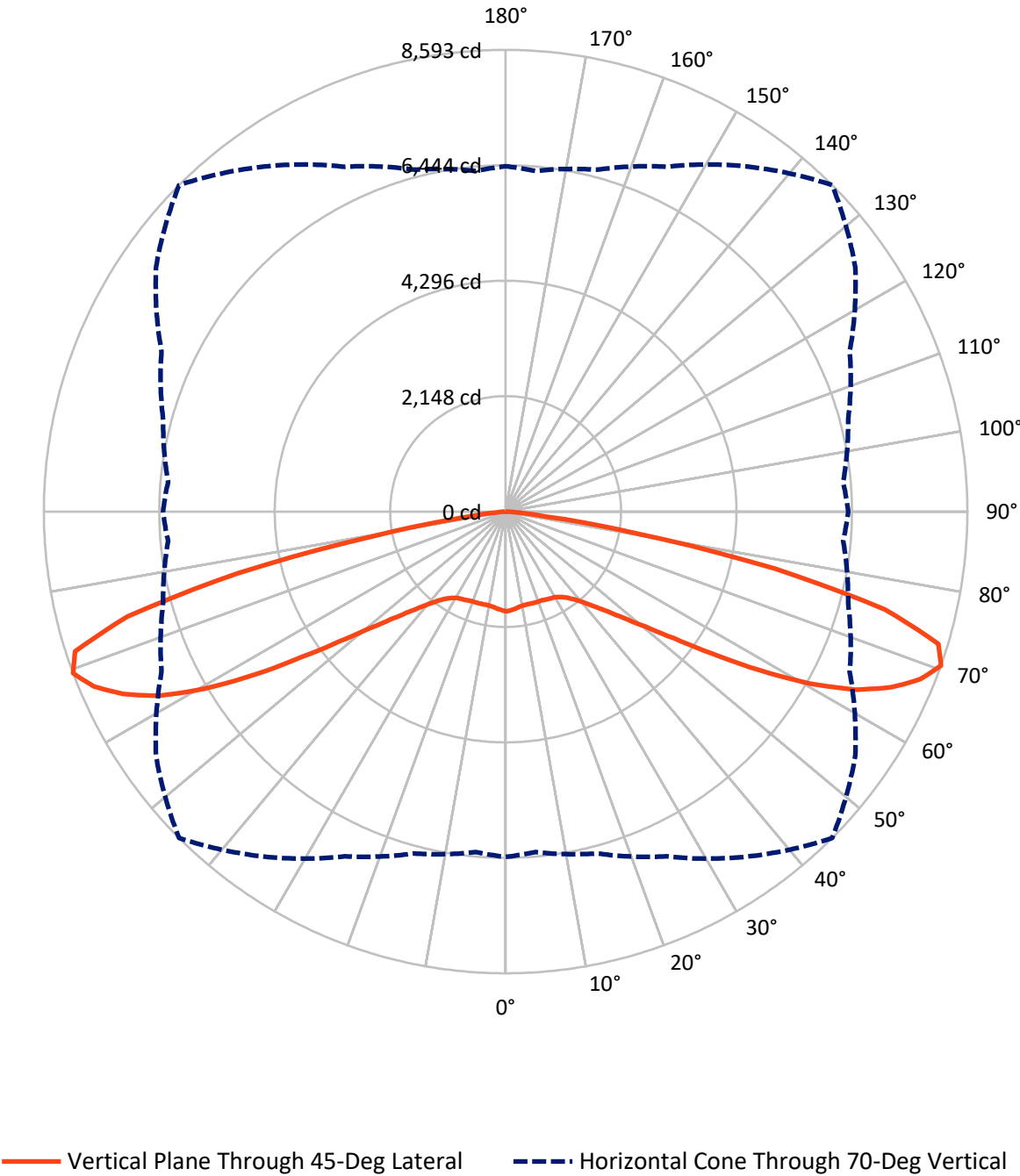
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc
Type V - Short - N/A

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Luminous Intensity Polar Plot



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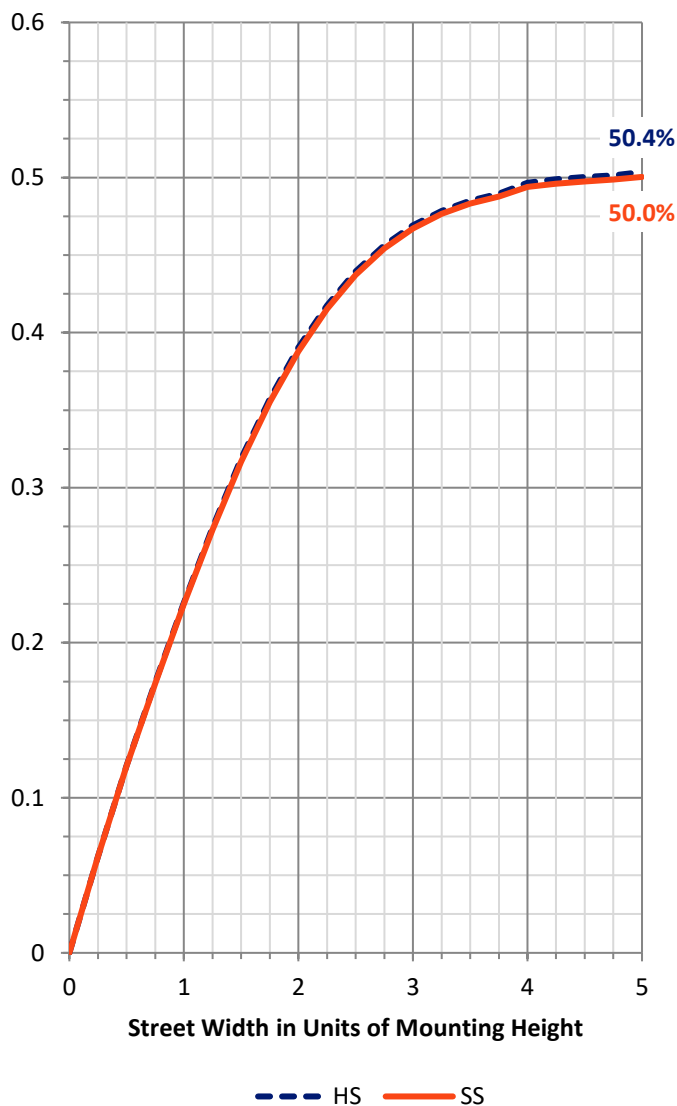
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10173.1	0.0	10173.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10173.1	0.0	10173.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	20346.2	0.0	20346.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.6	0.8
10°-20°	506.9	2.5
20°-30°	843.6	4.1
30°-40°	1275.8	6.3
40°-50°	2120.1	10.4
50°-60°	4000.6	19.7
60°-70°	6755.1	33.2
70°-80°	4438.8	21.8
80°-90°	232.5	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°	20346.2	100.0
0°-180°	20346.2	100.0

Coefficient of Utilization



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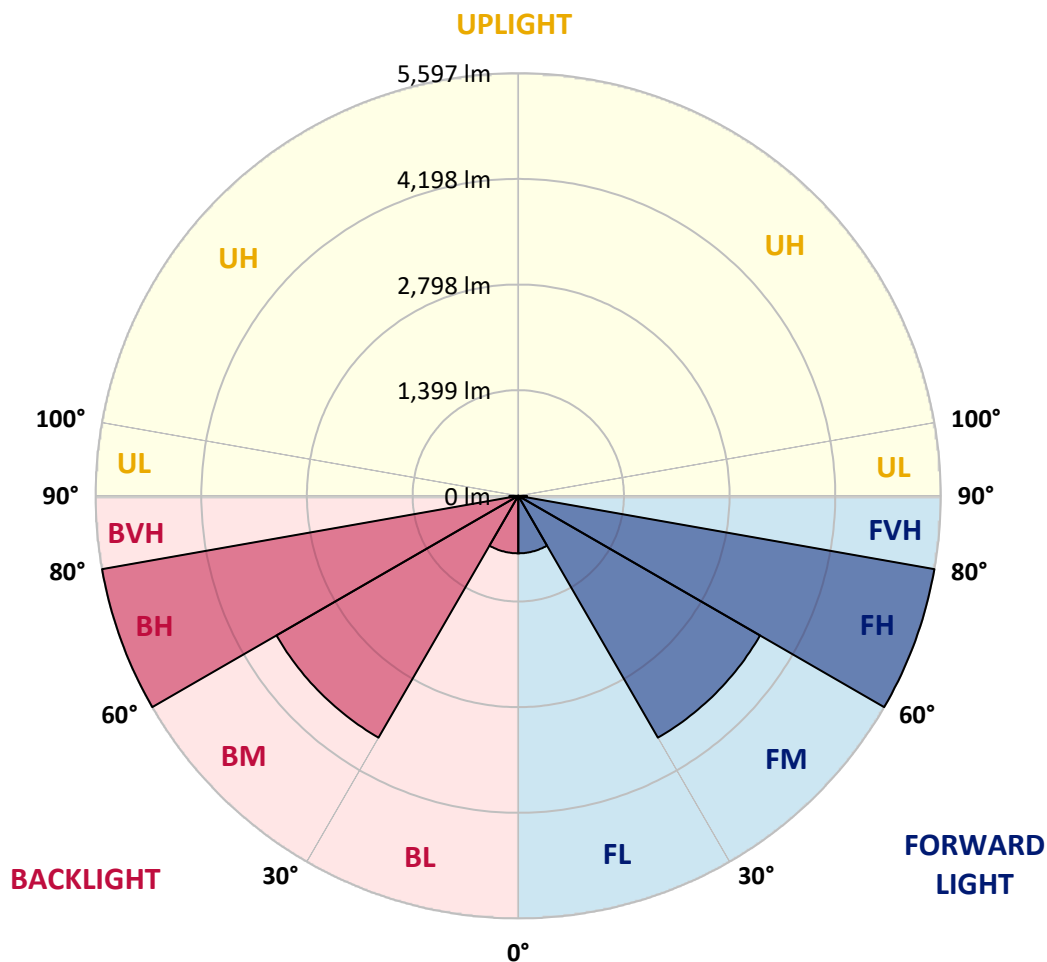
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	761.6	3.7			
FM	(30°-60°)	3698.3	18.2			
FH	(60°-80°)	5597.0	27.5			G3/7500
FVH	(80°-90°)	116.3	0.6			G2/225
BL	(0°-30°)	761.6	3.7	B2/1000		
BM	(30°-60°)	3698.3	18.2	B3/5000		
BH	(60°-80°)	5597.0	27.5	B5		G3/7500
BVH	(80°-90°)	116.3	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1856.0	1856.0	1856.0	1856.0	1856.0	1856.0	1856.0	1856.0	1856.0	1856.0	1856.0
2.5°	1844.4	1849.6	1847.6	1843.3	1843.3	1840.1	1843.3	1845.4	1848.6	1850.7	1849.6
5°	1820.0	1824.3	1823.2	1820.0	1821.1	1817.9	1820.0	1823.2	1825.3	1826.3	1826.3
7.5°	1798.9	1803.1	1801.0	1795.7	1795.7	1792.5	1793.5	1796.7	1799.9	1801.0	1801.0
10°	1793.5	1797.8	1791.5	1783.0	1779.8	1775.6	1776.6	1779.8	1786.2	1789.3	1789.3
12.5°	1795.7	1798.9	1792.5	1779.8	1776.6	1772.4	1772.4	1775.6	1784.1	1788.3	1789.3
15°	1802.1	1805.2	1795.7	1782.0	1778.8	1775.6	1774.6	1778.8	1788.3	1795.7	1796.7
17.5°	1813.6	1816.8	1802.1	1783.0	1778.8	1779.8	1778.8	1782.0	1796.7	1810.6	1810.6
20°	1824.3	1826.3	1806.3	1783.0	1778.8	1779.8	1778.8	1785.1	1804.2	1823.2	1824.3
22.5°	1827.5	1829.5	1810.6	1790.5	1787.3	1788.3	1787.3	1793.5	1811.6	1830.6	1830.6
25°	1828.5	1831.7	1816.8	1801.0	1806.3	1808.4	1806.3	1807.4	1821.1	1838.0	1836.9
27.5°	1844.4	1848.6	1834.9	1821.1	1824.3	1823.2	1826.3	1829.5	1840.1	1857.1	1852.8
30°	1877.2	1880.3	1868.7	1854.9	1852.8	1845.4	1854.9	1865.5	1877.2	1891.9	1888.8
32.5°	1931.1	1937.5	1922.6	1907.8	1898.3	1894.1	1901.5	1919.4	1935.3	1951.2	1944.8
35°	2021.0	2025.2	2011.5	1984.0	1967.1	1967.1	1973.3	1996.6	2022.0	2042.1	2034.7
37.5°	2147.9	2153.1	2128.8	2096.0	2070.7	2070.7	2079.1	2103.4	2141.5	2170.0	2159.5
40°	2302.3	2309.6	2279.0	2245.2	2220.9	2216.6	2227.2	2254.7	2290.7	2326.5	2315.0
42.5°	2488.4	2496.9	2456.7	2427.1	2408.0	2408.0	2413.4	2438.7	2471.5	2515.9	2512.7
45°	2726.3	2741.2	2686.1	2656.6	2638.6	2642.8	2645.9	2668.2	2697.8	2748.5	2746.5
47.5°	3009.8	3024.6	2966.5	2935.7	2932.5	2952.6	2940.0	2955.8	2971.7	3029.9	3013.0
50°	3331.2	3356.7	3316.5	3314.3	3320.7	3357.7	3328.1	3336.6	3318.5	3355.5	3333.4
52.5°	3724.6	3761.6	3754.3	3767.0	3837.8	3914.0	3846.3	3816.7	3749.0	3760.6	3721.5
55°	4201.6	4257.6	4268.2	4344.4	4505.2	4660.6	4516.8	4397.2	4253.4	4227.0	4185.8
57.5°	4744.1	4788.6	4839.3	4994.8	5295.2	5571.2	5295.2	5030.7	4804.4	4750.5	4712.4
60°	5328.0	5382.9	5431.6	5661.1	6107.4	6495.4	6098.9	5679.0	5379.7	5306.7	5243.3
62.5°	5955.0	6025.9	6059.7	6314.6	6834.9	7298.1	6842.3	6333.6	6001.6	5923.3	5859.8
65°	6556.7	6614.9	6653.0	6924.8	7421.8	7886.1	7455.6	6954.4	6612.8	6510.2	6459.4
67.5°	6837.1	6868.7	6961.8	7269.5	7794.1	8323.9	7883.0	7302.3	6920.6	6740.8	6742.9
70°	6426.6	6362.2	6586.3	7079.2	7838.5	8592.6	7940.1	7064.4	6597.0	6305.1	6374.9
72.5°	4966.2	4855.2	5244.3	6087.2	7330.9	8421.2	7381.6	6134.8	5486.5	4894.3	5041.3
75°	2702.0	2576.1	3113.4	4179.4	5846.1	7299.1	5980.4	4299.0	3466.7	2681.9	2856.5
77.5°	762.5	714.9	1148.5	2022.0	3516.4	5124.9	3651.7	2066.4	1362.1	808.0	897.9
80°	233.7	226.3	306.7	609.2	1493.2	2454.6	1435.1	616.5	390.2	246.4	260.1
82.5°	138.6	126.9	152.3	222.1	380.7	770.9	370.1	231.6	186.1	124.7	135.4
85°	79.3	74.0	89.9	107.8	127.9	163.9	106.8	110.0	99.4	66.6	69.8
87.5°	32.8	29.6	34.8	33.8	29.6	38.0	28.6	33.8	40.2	26.4	24.3
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)