

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: P966288

Luminaire Tested: **NAV-SB4B-830-U-5WQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966288
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-830-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21024.8 lumens
Efficiency: N/A
Efficacy: 143.0 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



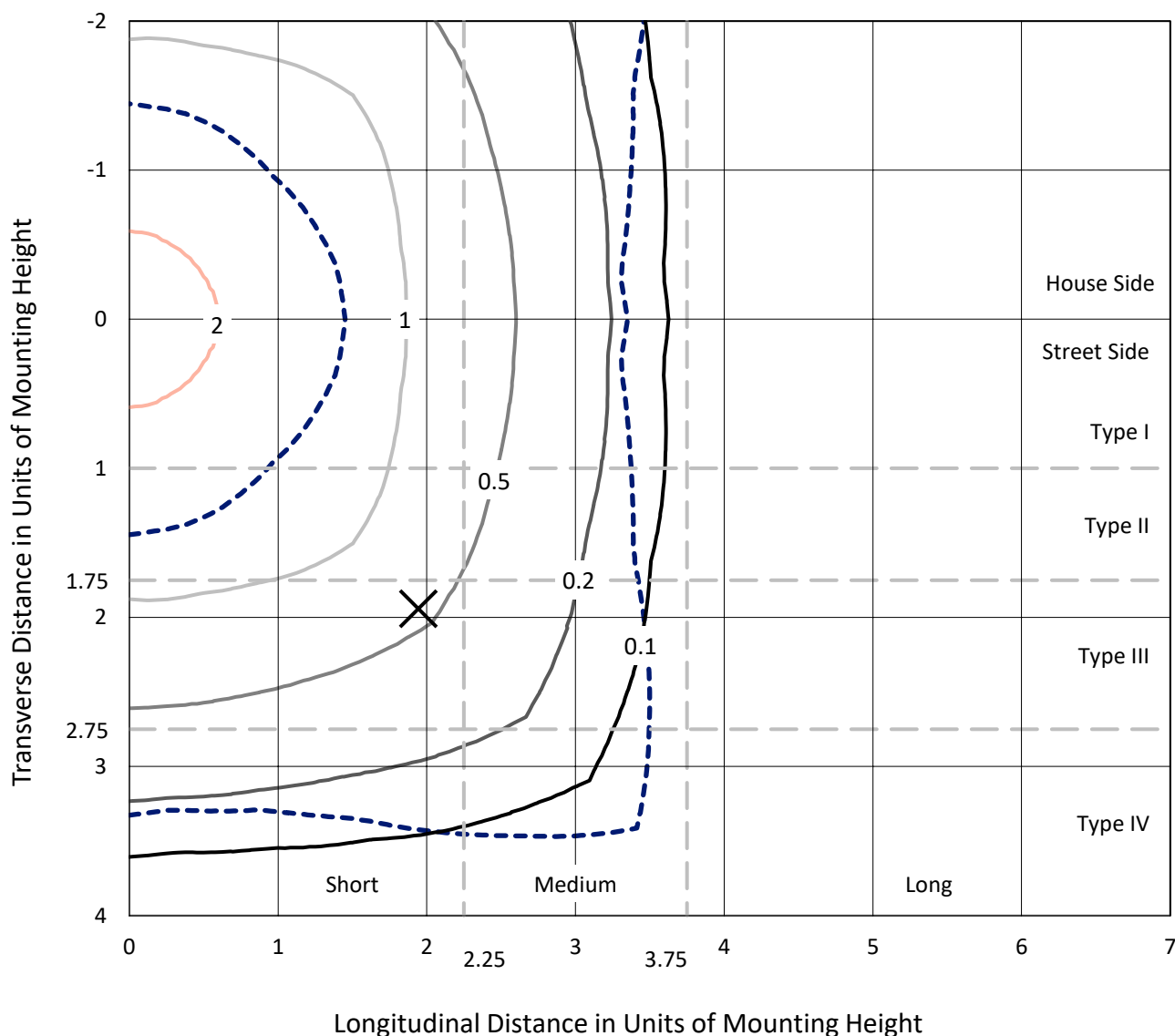
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

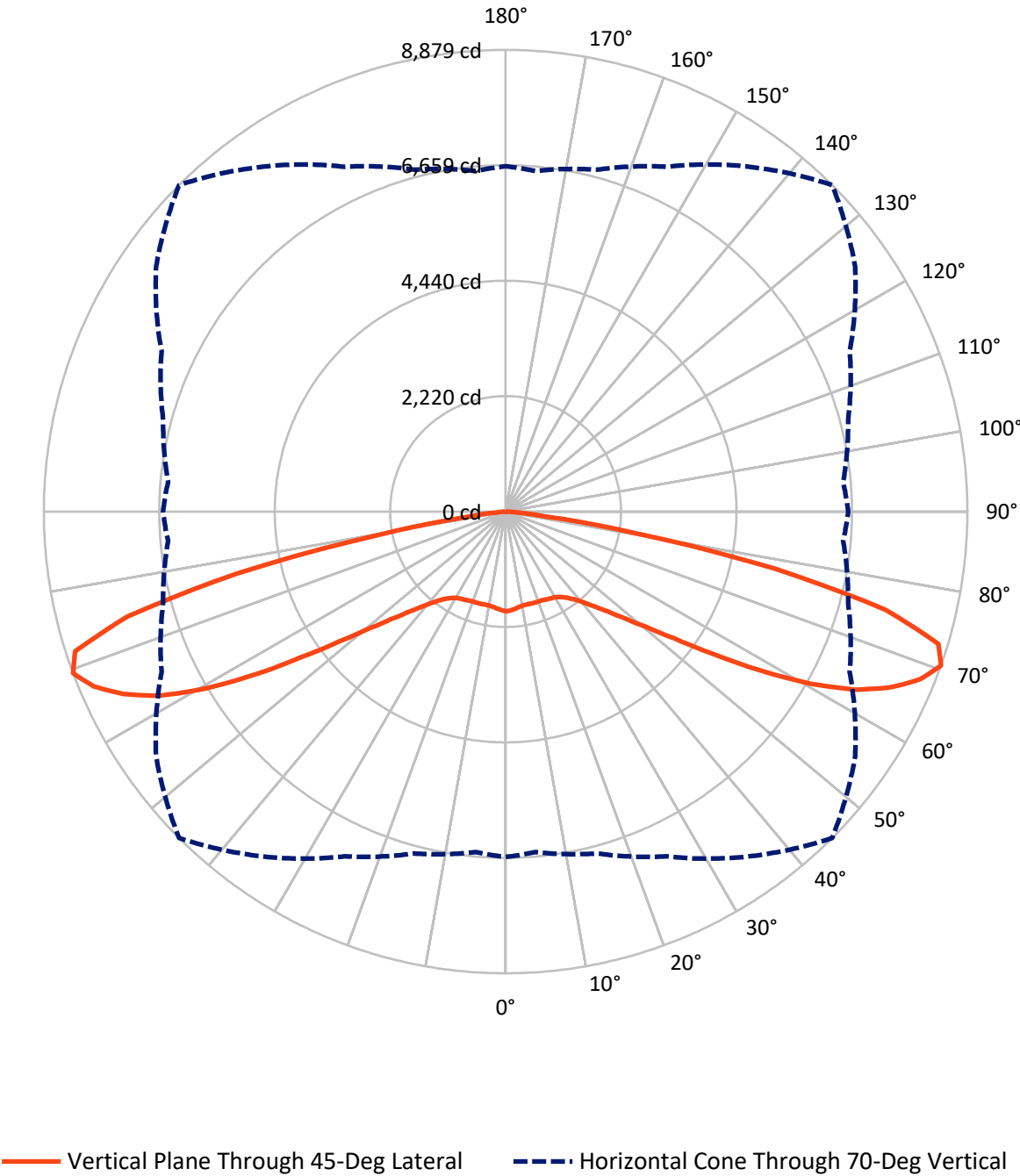


Based on 25 foot mounting height. Maximum calculated value = 3.1 fc

Type V - Short - N/A

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Luminous Intensity Polar Plot



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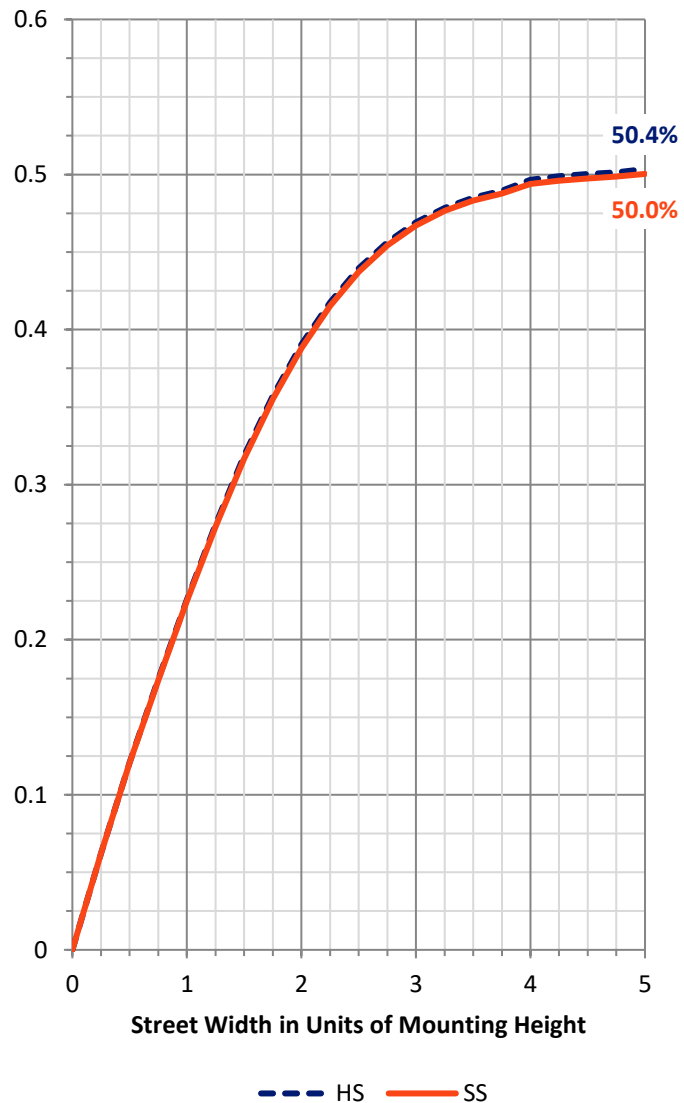
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10512.4	0.0	10512.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10512.4	0.0	10512.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	21024.8	0.0	21024.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.4	0.8
10°-20°	523.9	2.5
20°-30°	871.8	4.1
30°-40°	1318.4	6.3
40°-50°	2190.8	10.4
50°-60°	4134.0	19.7
60°-70°	6980.4	33.2
70°-80°	4586.9	21.8
80°-90°	240.3	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°	21024.8	100.0
0°-180°	21024.8	100.0

Coefficient of Utilization



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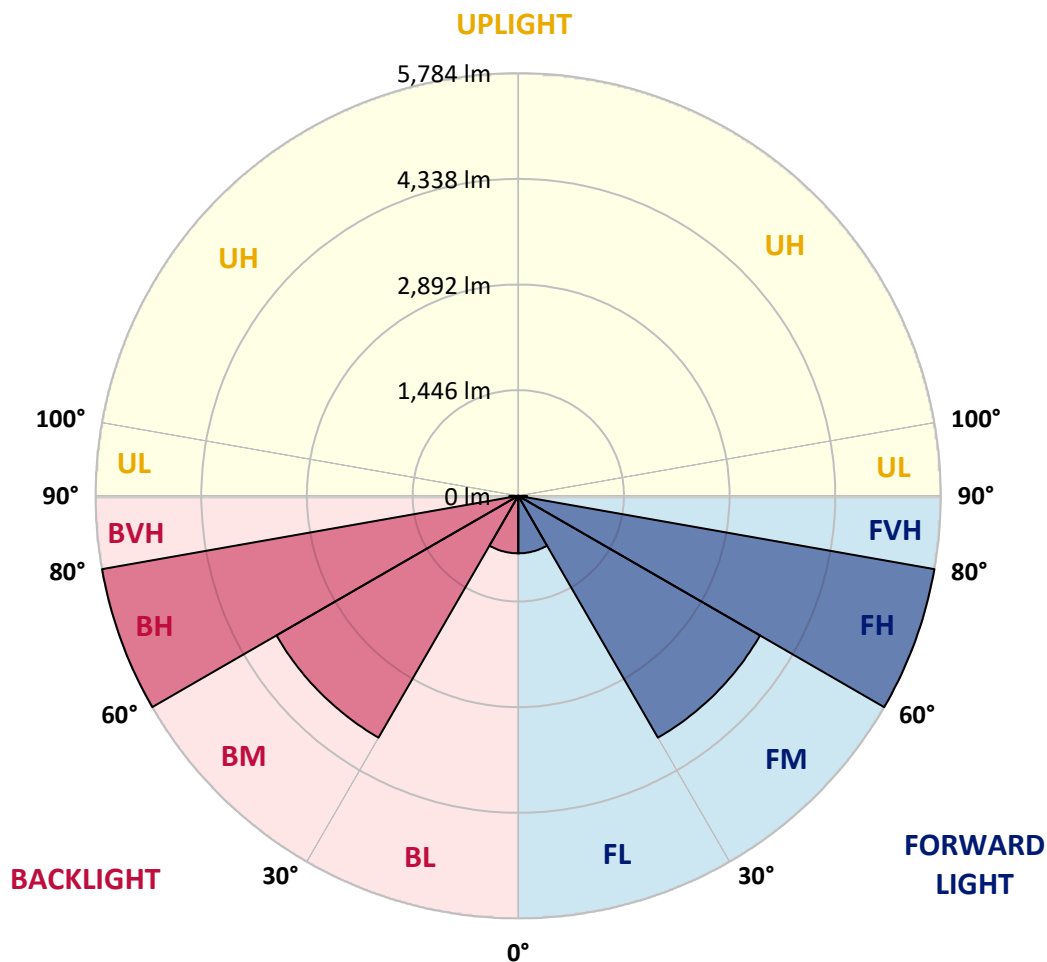
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	787.0	3.7			
FM	(30°-60°)	3821.6	18.2			
FH	(60°-80°)	5783.6	27.5			G3/7500
FVH	(80°-90°)	120.2	0.6			G2/225
BL	(0°-30°)	787.0	3.7	B2/1000		
BM	(30°-60°)	3821.6	18.2	B3/5000		
BH	(60°-80°)	5783.6	27.5	B5		G3/7500
BVH	(80°-90°)	120.2	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°	1917.9	1917.9	1917.9	1917.9	1917.9	1917.9	1917.9	1917.9	1917.9	1917.9	1917.9
2.5°	1905.9	1911.3	1909.2	1904.8	1904.8	1901.5	1904.8	1906.9	1910.2	1912.4	1911.3
5°	1880.8	1885.1	1884.1	1880.8	1881.8	1878.5	1880.8	1884.1	1886.2	1887.3	1887.3
7.5°	1858.8	1863.2	1861.1	1855.6	1855.6	1852.3	1853.4	1856.7	1860.0	1861.1	1861.1
10°	1853.4	1857.8	1851.3	1842.4	1839.2	1834.9	1835.9	1839.2	1845.7	1849.0	1849.0
12.5°	1855.6	1858.8	1852.3	1839.2	1835.9	1831.6	1831.6	1834.9	1843.6	1848.0	1849.0
15°	1862.1	1865.4	1855.6	1841.4	1838.1	1834.9	1833.7	1838.1	1848.0	1855.6	1856.7
17.5°	1874.2	1877.5	1862.1	1842.4	1838.1	1839.2	1838.1	1841.4	1856.7	1870.9	1870.9
20°	1885.1	1887.3	1866.5	1842.4	1838.1	1839.2	1838.1	1844.7	1864.4	1884.1	1885.1
22.5°	1888.4	1890.6	1870.9	1850.1	1846.8	1848.0	1846.8	1853.4	1872.0	1891.6	1891.6
25°	1889.5	1892.8	1877.5	1861.1	1866.5	1868.7	1866.5	1867.7	1881.8	1899.3	1898.2
27.5°	1905.9	1910.2	1896.0	1881.8	1885.1	1884.1	1887.3	1890.6	1901.5	1919.0	1914.6
30°	1939.7	1943.0	1931.0	1916.7	1914.6	1906.9	1916.7	1927.7	1939.7	1955.1	1951.8
32.5°	1995.5	2002.0	1986.8	1971.4	1961.6	1957.2	1964.9	1983.5	1999.9	2016.3	2009.7
35°	2088.3	2092.7	2078.5	2050.1	2032.7	2032.7	2039.2	2063.2	2089.5	2110.3	2102.6
37.5°	2219.5	2225.0	2199.9	2165.9	2139.7	2139.7	2148.5	2173.6	2213.0	2242.5	2231.5
40°	2379.0	2386.7	2355.0	2320.1	2294.9	2290.6	2301.4	2329.8	2367.0	2404.1	2392.1
42.5°	2571.4	2580.1	2538.6	2508.0	2488.3	2488.3	2493.8	2520.1	2553.9	2599.8	2596.5
45°	2817.3	2832.6	2775.7	2745.2	2726.6	2730.9	2734.2	2757.1	2787.8	2840.2	2838.0
47.5°	3110.2	3125.4	3065.4	3033.7	3030.4	3051.1	3038.0	3054.4	3070.8	3130.9	3113.4
50°	3442.4	3468.6	3427.1	3424.8	3431.4	3469.7	3439.1	3447.8	3429.2	3467.5	3444.5
52.5°	3848.9	3887.1	3879.5	3892.6	3965.8	4044.5	3974.5	3944.0	3874.0	3886.1	3845.6
55°	4341.7	4399.7	4410.6	4489.3	4655.3	4816.1	4667.4	4543.9	4395.3	4367.9	4325.4
57.5°	4902.4	4948.3	5000.7	5161.4	5471.8	5756.9	5471.8	5198.5	4964.7	4908.9	4869.6
60°	5505.6	5562.4	5612.7	5849.8	6311.0	6712.0	6302.2	5868.4	5559.1	5483.7	5418.2
62.5°	6153.6	6226.9	6261.8	6525.2	7062.9	7541.5	7070.4	6544.8	6201.7	6120.9	6055.3
65°	6775.5	6835.5	6874.9	7155.7	7669.4	8149.1	7704.3	7186.4	6833.4	6727.4	6674.9
67.5°	7065.0	7097.8	7194.0	7512.0	8054.0	8601.5	8145.8	7545.8	7151.3	6965.6	6967.7
70°	6641.0	6574.4	6806.0	7315.3	8100.0	8879.1	8204.8	7299.9	6817.0	6515.3	6587.5
72.5°	5131.9	5017.1	5419.3	6290.2	7575.4	8702.0	7627.8	6339.4	5669.5	5057.6	5209.5
75°	2792.1	2662.1	3217.3	4318.8	6041.0	7542.6	6179.8	4442.2	3582.3	2771.4	2951.7
77.5°	787.9	738.7	1186.7	2089.5	3633.6	5295.8	3773.4	2135.4	1407.5	834.9	927.8
80°	241.5	233.9	316.9	629.5	1543.0	2536.5	1483.0	637.1	403.2	254.6	268.9
82.5°	143.2	131.1	157.3	229.5	393.4	796.6	382.5	239.3	192.3	128.9	139.9
85°	82.0	76.5	92.9	111.4	132.2	169.4	110.4	113.7	102.7	68.9	72.2
87.5°	33.9	30.6	36.1	35.0	30.6	39.4	29.5	35.0	41.5	27.4	25.1
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)