

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: P963095

Luminaire Tested: **NAV-SB2D-827-U-5WQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963095
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-SB2D-827-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18347.5 lumens
Efficiency: N/A
Efficacy: 124.3 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



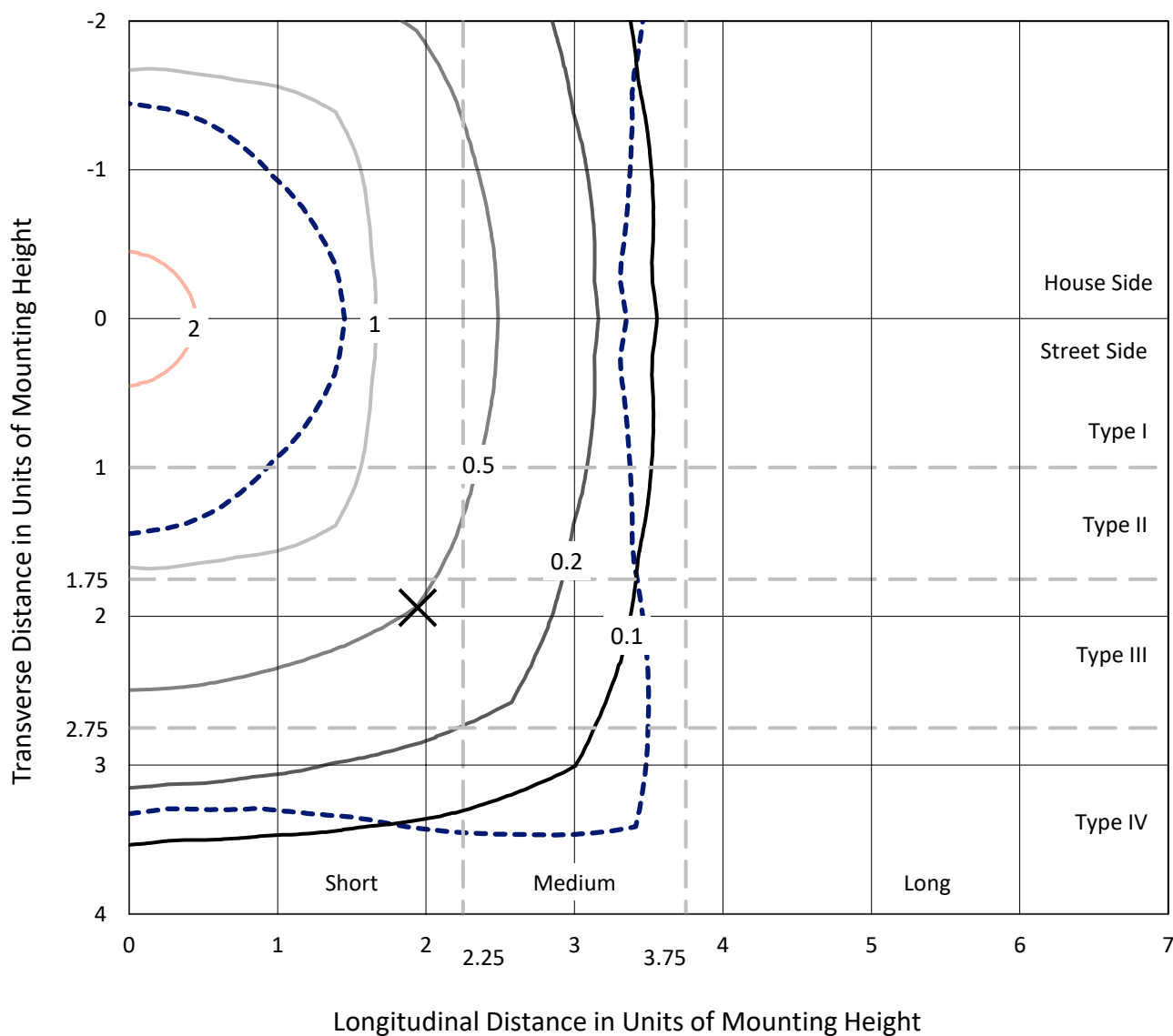
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

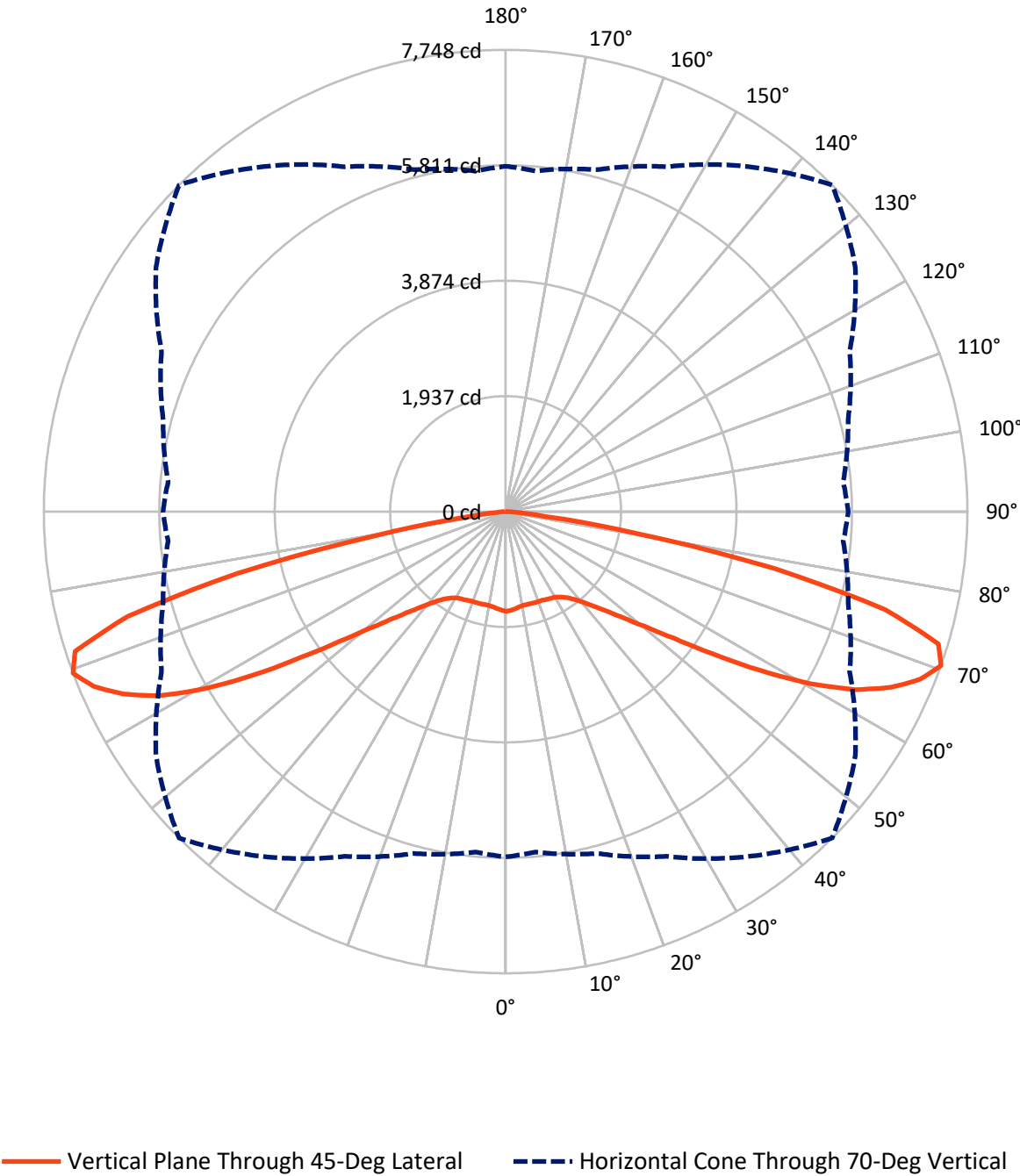


Based on 25 foot mounting height. Maximum calculated value = 2.7 fc

Type V - Short - N/A

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Luminous Intensity Polar Plot



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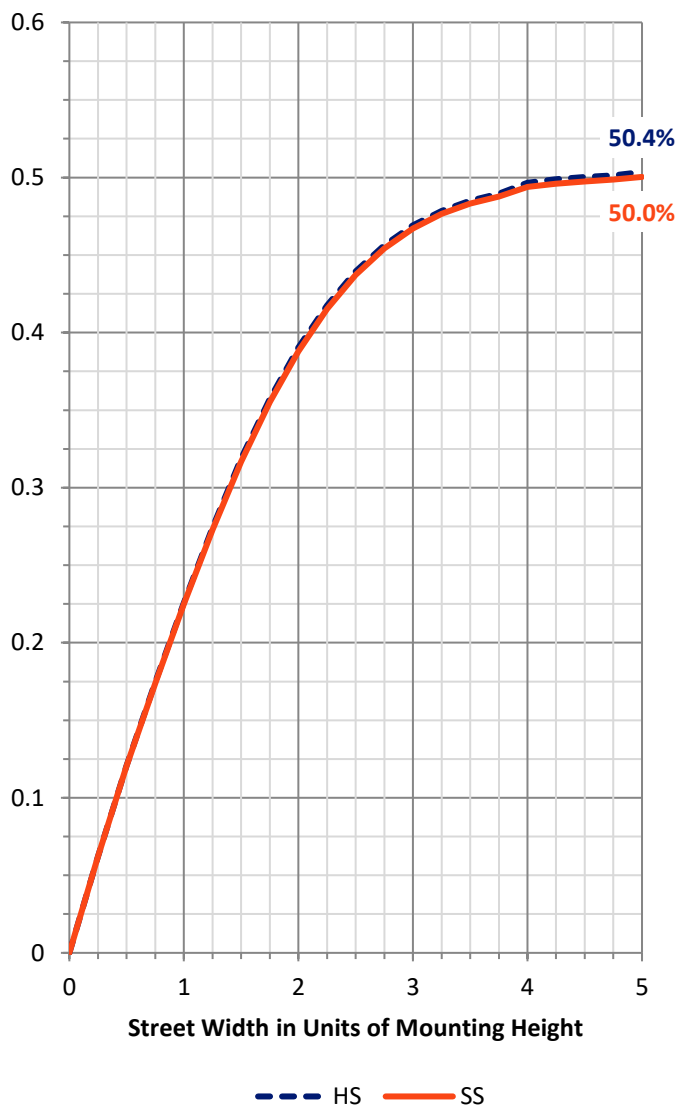
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9173.7	0.0	9173.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9173.7	0.0	9173.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	18347.5	0.0	18347.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.7	0.8
10°-20°	457.1	2.5
20°-30°	760.7	4.1
30°-40°	1150.5	6.3
40°-50°	1911.8	10.4
50°-60°	3607.6	19.7
60°-70°	6091.5	33.2
70°-80°	4002.8	21.8
80°-90°	209.7	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°	18347.5	100.0
0°-180°	18347.5	100.0

Coefficient of Utilization



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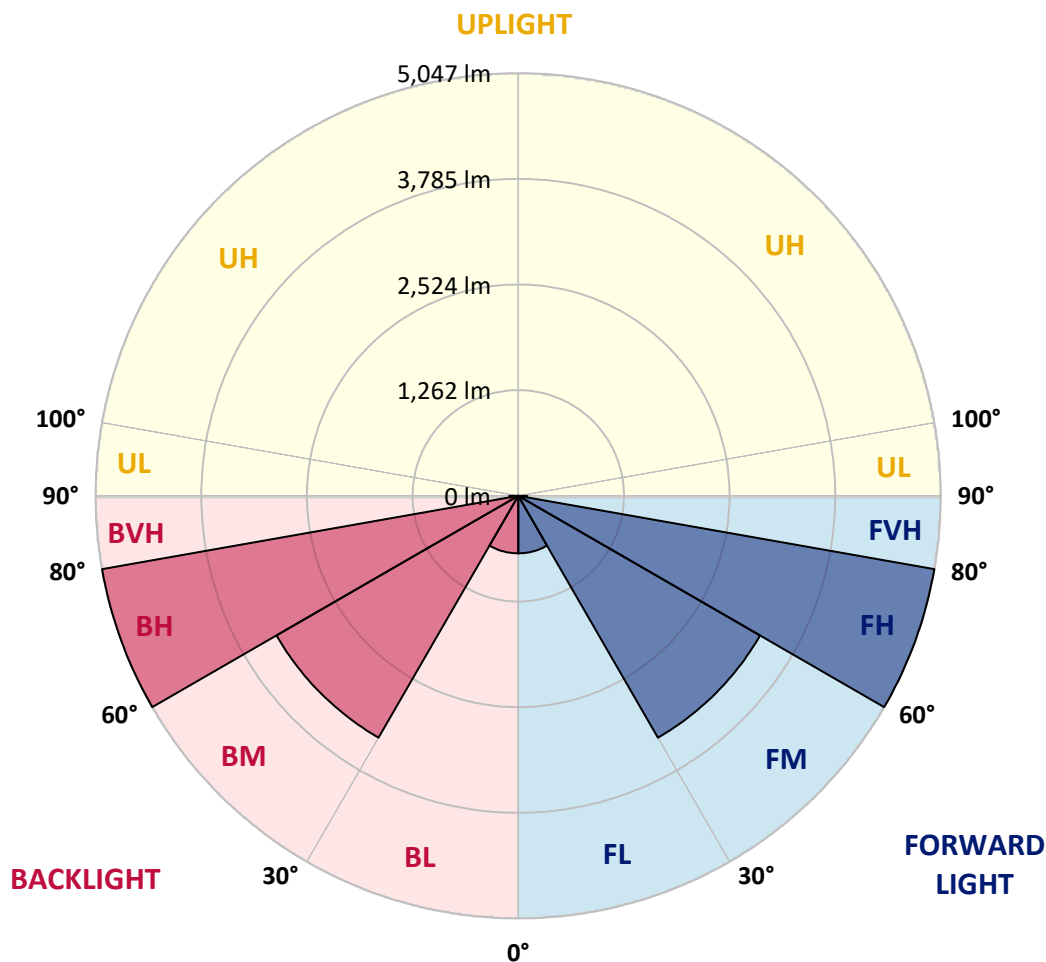
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	686.8	3.7			
FM	(30°-60°)	3335.0	18.2			
FH	(60°-80°)	5047.1	27.5			G3/7500
FVH	(80°-90°)	104.9	0.6			G2/225
BL	(0°-30°)	686.8	3.7	B2/1000		
BM	(30°-60°)	3335.0	18.2	B3/5000		
BH	(60°-80°)	5047.1	27.5	B5		G3/7500
BVH	(80°-90°)	104.9	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°	1673.6	1673.6	1673.6	1673.6	1673.6	1673.6	1673.6	1673.6	1673.6	1673.6	1673.6
2.5°	1663.2	1668.0	1666.0	1662.2	1662.2	1659.4	1662.2	1664.1	1667.0	1668.9	1668.0
5°	1641.2	1645.0	1644.1	1641.2	1642.2	1639.3	1641.2	1644.1	1646.0	1647.0	1647.0
7.5°	1622.2	1626.0	1624.1	1619.3	1619.3	1616.4	1617.3	1620.2	1623.1	1624.1	1624.1
10°	1617.3	1621.2	1615.5	1607.8	1605.0	1601.2	1602.2	1605.0	1610.7	1613.6	1613.6
12.5°	1619.3	1622.2	1616.4	1605.0	1602.2	1598.3	1598.3	1601.2	1608.8	1612.6	1613.6
15°	1625.0	1627.9	1619.3	1606.9	1604.0	1601.2	1600.2	1604.0	1612.6	1619.3	1620.2
17.5°	1635.5	1638.4	1625.0	1607.8	1604.0	1605.0	1604.0	1606.9	1620.2	1632.6	1632.6
20°	1645.0	1647.0	1628.8	1607.8	1604.0	1605.0	1604.0	1609.8	1627.0	1644.1	1645.0
22.5°	1647.9	1649.8	1632.6	1614.6	1611.7	1612.6	1611.7	1617.3	1633.6	1650.8	1650.8
25°	1648.9	1651.7	1638.4	1624.1	1628.8	1630.8	1628.8	1629.7	1642.2	1657.4	1656.5
27.5°	1663.2	1667.0	1654.6	1642.2	1645.0	1644.1	1647.0	1649.8	1659.4	1674.6	1670.7
30°	1692.7	1695.6	1685.1	1672.7	1670.7	1664.1	1672.7	1682.2	1692.7	1706.1	1703.2
32.5°	1741.4	1747.1	1733.8	1720.4	1711.9	1708.0	1714.6	1730.9	1745.2	1759.5	1753.8
35°	1822.4	1826.2	1813.8	1789.0	1773.8	1773.8	1779.5	1800.5	1823.4	1841.5	1834.9
37.5°	1936.8	1941.7	1919.7	1890.1	1867.2	1867.2	1874.9	1896.9	1931.1	1956.9	1947.4
40°	2076.1	2082.8	2055.1	2024.6	2002.6	1998.9	2008.4	2033.2	2065.6	2098.1	2087.5
42.5°	2243.9	2251.6	2215.3	2188.7	2171.5	2171.5	2176.3	2199.1	2228.7	2268.7	2265.9
45°	2458.6	2471.9	2422.3	2395.5	2379.3	2383.2	2386.0	2406.1	2432.7	2478.6	2476.6
47.5°	2714.1	2727.4	2675.0	2647.4	2644.5	2662.6	2651.2	2665.4	2679.8	2732.2	2717.0
50°	3004.0	3026.9	2990.6	2988.8	2994.4	3027.8	3001.1	3008.8	2992.6	3025.9	3005.9
52.5°	3358.7	3392.1	3385.5	3397.0	3460.8	3529.5	3468.4	3441.7	3380.7	3391.2	3356.0
55°	3788.9	3839.4	3849.0	3917.7	4062.6	4202.7	4073.0	3965.3	3835.6	3811.8	3774.6
57.5°	4278.0	4318.1	4363.9	4504.1	4775.0	5023.8	4775.0	4536.5	4332.5	4283.8	4249.4
60°	4804.5	4854.1	4898.0	5104.9	5507.3	5857.4	5499.7	5121.1	4851.2	4785.4	4728.2
62.5°	5370.0	5433.9	5464.5	5694.3	6163.4	6581.1	6170.1	5711.4	5412.0	5341.4	5284.2
65°	5912.6	5965.1	5999.4	6244.5	6692.7	7111.3	6723.3	6271.3	5963.1	5870.7	5824.9
67.5°	6165.4	6194.0	6277.9	6555.4	7028.4	7506.2	7108.6	6585.0	6240.7	6078.6	6080.5
70°	5795.3	5737.1	5939.4	6383.8	7068.5	7748.4	7160.0	6370.4	5948.9	5685.7	5748.6
72.5°	4478.3	4378.2	4729.1	5489.2	6610.7	7593.9	6656.5	5532.1	4947.6	4413.5	4546.1
75°	2436.6	2323.1	2807.6	3768.8	5271.8	6582.1	5392.9	3876.6	3126.0	2418.5	2575.8
77.5°	687.6	644.6	1035.7	1823.4	3170.9	4621.4	3292.9	1863.4	1228.3	728.6	809.6
80°	210.7	204.1	276.5	549.3	1346.5	2213.4	1294.1	556.0	351.9	222.2	234.6
82.5°	124.9	114.4	137.4	200.3	343.3	695.3	333.7	208.9	167.8	112.5	122.1
85°	71.5	66.7	81.1	97.3	115.4	147.8	96.4	99.2	89.7	60.1	62.9
87.5°	29.5	26.8	31.5	30.5	26.8	34.3	25.7	30.5	36.3	23.9	21.9
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)