

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: P965233

Luminaire Tested: **NAV-SB3D-830-U-5NQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965233
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-18)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-830-U-5NQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29466.7 lumens
Efficiency: N/A
Efficacy: 135.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

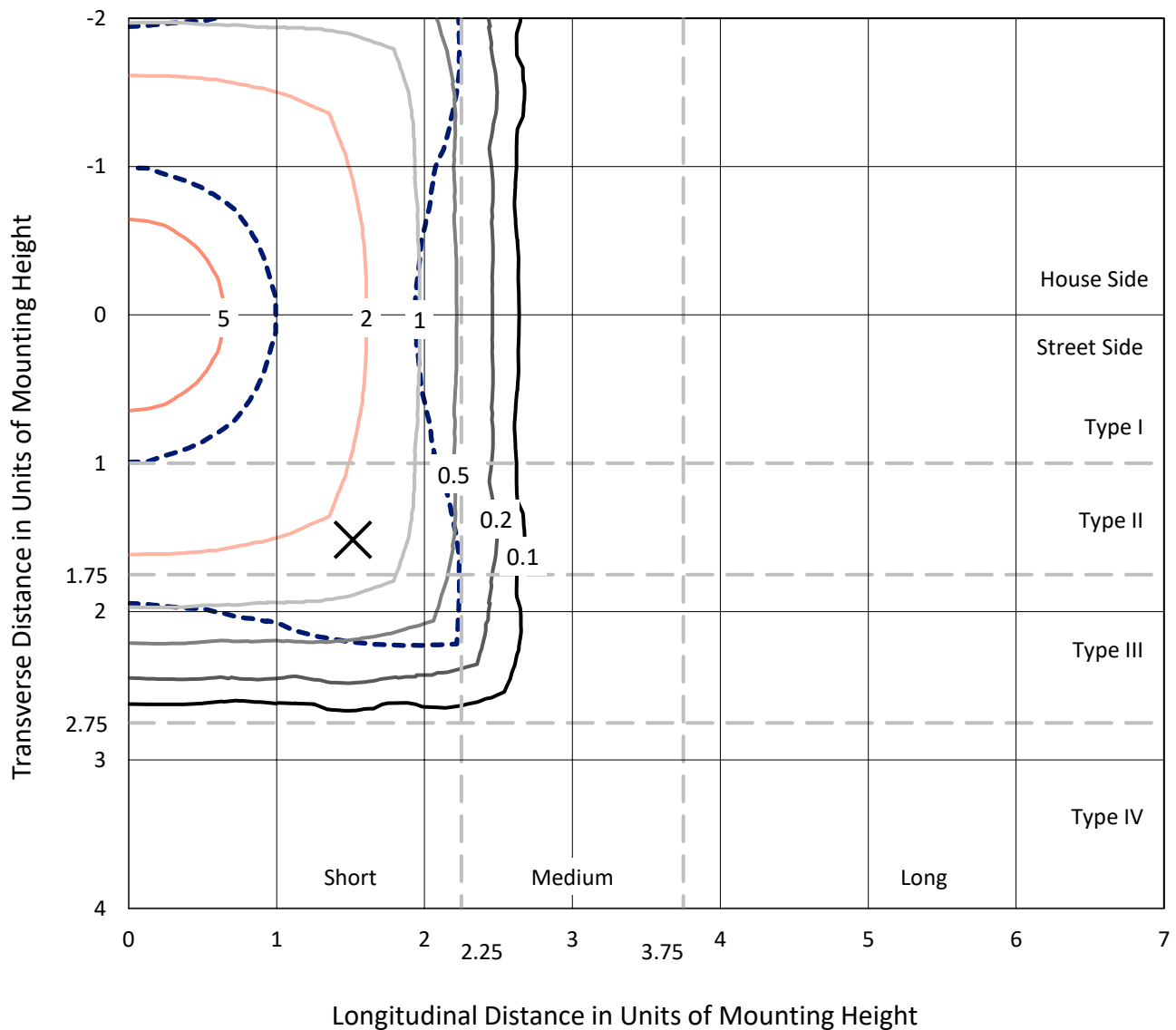
Input Watts (W): 218.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

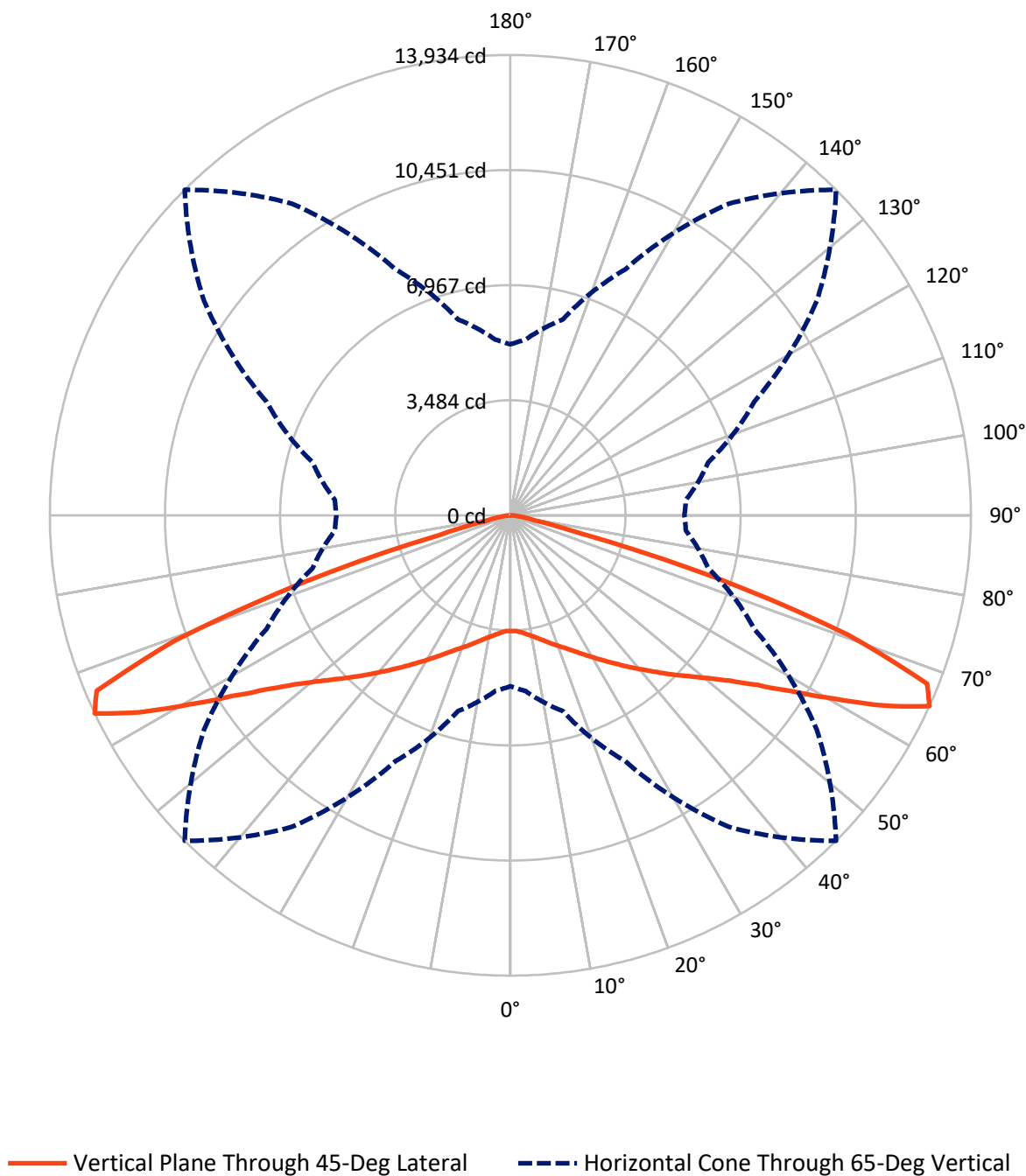
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
Type V - Short - N/A

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Luminous Intensity Polar Plot



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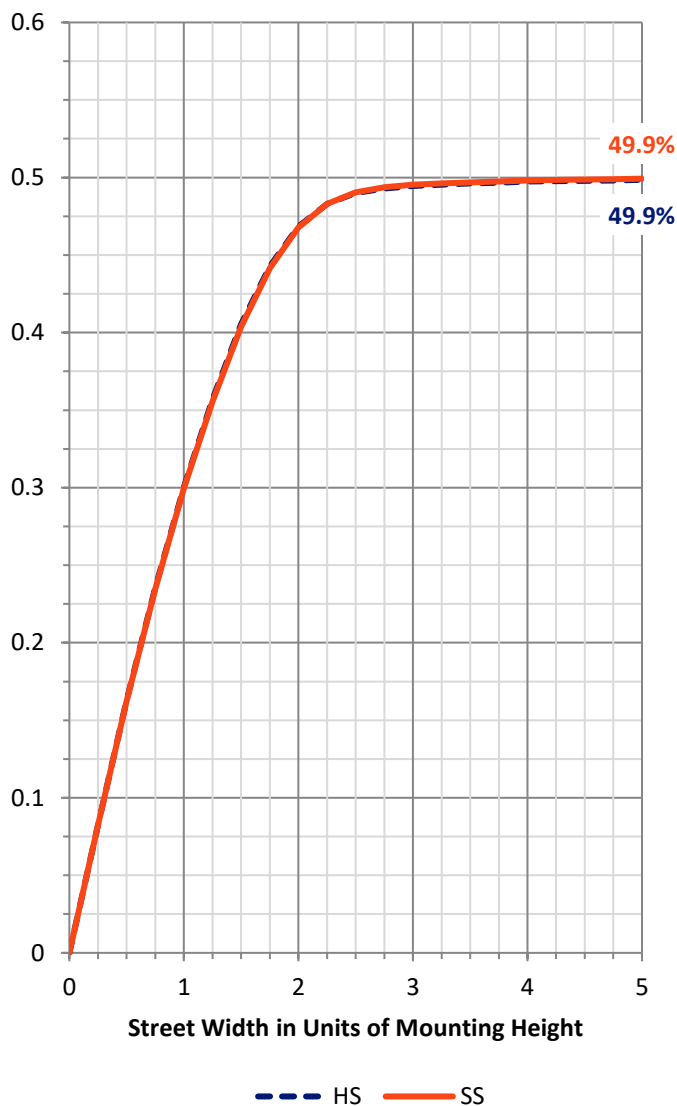
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14733.3	0.0	14733.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	14733.3	0.0	14733.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	29466.7	0.0	29466.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	346.1	1.2
10°-20°	1129.3	3.8
20°-30°	2132.3	7.2
30°-40°	3491.5	11.8
40°-50°	5413.7	18.4
50°-60°	7997.1	27.1
60°-70°	7612.5	25.8
70°-80°	1228.4	4.2
80°-90°	115.8	0.4
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°	29466.7	100.0
0°-180°	29466.7	100.0

Coefficient of Utilization



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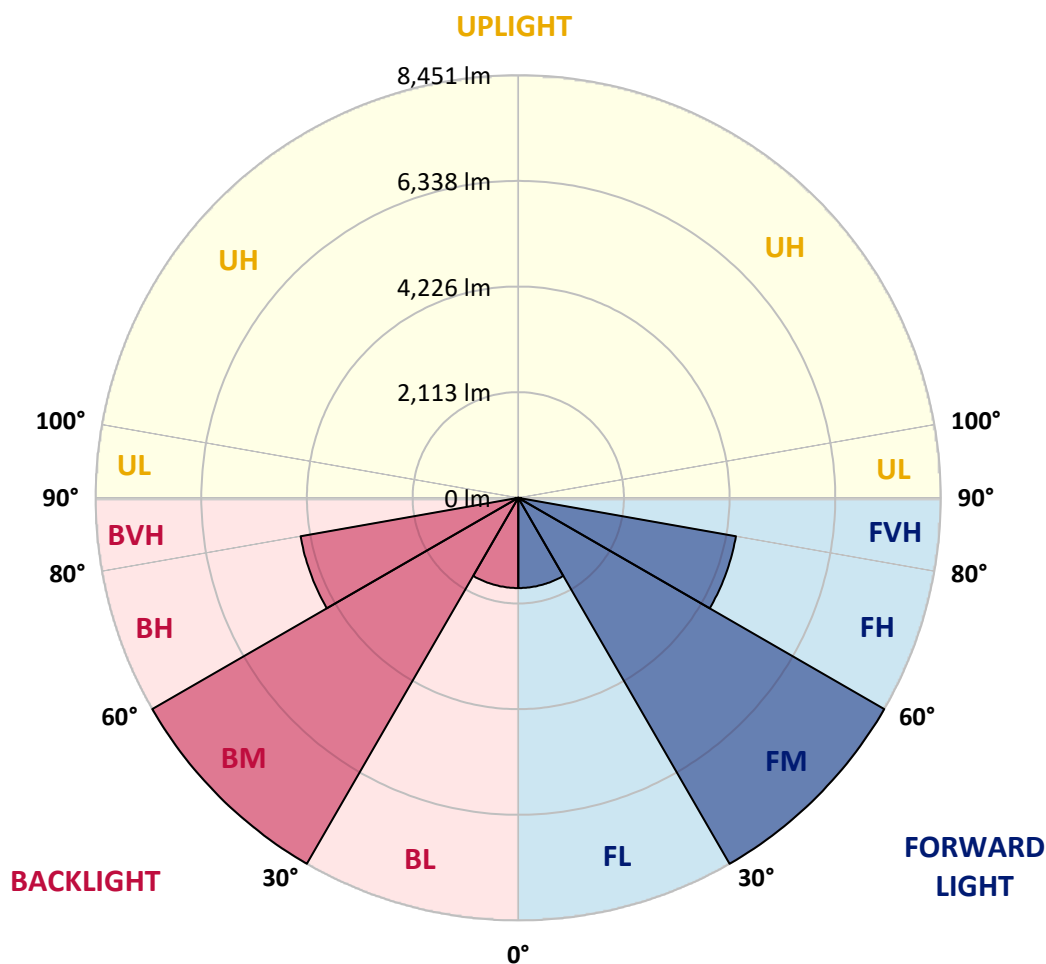
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1803.8	6.1			
FM	(30°-60°)	8451.2	28.7			
FH	(60°-80°)	4420.5	15.0			G2/5000
FVH	(80°-90°)	57.9	0.2			G1/100
BL	(0°-30°)	1803.8	6.1	B3/2500		
BM	(30°-60°)	8451.2	28.7	B4/8500		
BH	(60°-80°)	4420.5	15.0	B4/5000		G2/5000
BVH	(80°-90°)	57.9	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3506.8	3506.8	3506.8	3506.8	3506.8	3506.8	3506.8	3506.8	3506.8	3506.8	3506.8
2.5°	3530.5	3518.6	3527.5	3520.2	3514.2	3508.3	3511.2	3521.6	3526.1	3527.5	3527.5
5°	3577.8	3567.4	3571.9	3571.9	3561.6	3558.6	3560.0	3567.4	3576.3	3576.3	3576.3
7.5°	3654.6	3644.3	3654.6	3648.8	3639.9	3636.9	3635.5	3641.4	3654.6	3654.6	3650.2
10°	3747.8	3736.0	3741.9	3739.0	3728.6	3724.1	3722.7	3731.5	3743.4	3741.9	3739.0
12.5°	3849.8	3836.5	3844.0	3835.0	3832.1	3827.7	3827.7	3826.2	3833.6	3827.7	3830.6
15°	3963.7	3954.8	3957.7	3951.9	3956.3	3953.3	3941.5	3935.6	3938.6	3929.6	3931.2
17.5°	4098.2	4077.6	4087.9	4084.9	4084.9	4090.8	4071.6	4064.2	4070.1	4061.3	4068.6
20°	4253.4	4232.7	4237.1	4231.3	4223.8	4229.8	4206.1	4212.0	4216.4	4210.6	4223.8
22.5°	4423.5	4396.8	4395.4	4398.3	4382.1	4383.5	4367.3	4382.1	4390.9	4374.7	4390.9
25°	4597.9	4569.9	4589.0	4581.6	4560.9	4565.3	4553.6	4568.3	4575.7	4555.0	4578.7
27.5°	4782.8	4763.5	4781.2	4785.6	4760.5	4778.2	4760.5	4773.8	4781.2	4750.2	4773.8
30°	4998.5	4979.3	4995.6	5007.4	4977.9	5006.0	4991.1	5000.1	5001.5	4964.6	4986.7
32.5°	5233.6	5204.0	5245.4	5251.4	5218.9	5252.8	5233.6	5245.4	5252.8	5202.6	5236.6
35°	5520.4	5483.4	5530.8	5523.4	5495.3	5523.4	5505.7	5523.4	5541.2	5480.6	5517.5
37.5°	5829.5	5791.0	5841.3	5827.9	5801.4	5820.6	5810.2	5822.0	5850.2	5785.1	5825.0
40°	6169.5	6122.2	6190.2	6166.5	6141.4	6138.4	6144.4	6151.7	6188.7	6116.3	6140.0
42.5°	6533.1	6482.9	6584.9	6548.0	6512.4	6488.9	6508.0	6522.8	6558.3	6477.0	6519.8
45°	6948.6	6891.0	7024.0	6979.6	6923.5	6874.7	6905.7	6927.9	6979.6	6882.1	6932.4
47.5°	7407.0	7341.9	7483.8	7470.5	7378.9	7272.4	7343.3	7407.0	7445.4	7327.1	7367.0
50°	7854.9	7804.7	7990.9	8007.2	7894.9	7745.5	7844.5	7940.7	7951.0	7795.7	7815.0
52.5°	8274.7	8224.5	8495.1	8597.1	8496.5	8319.1	8424.1	8521.6	8443.3	8242.2	8248.2
55°	8610.4	8569.0	8913.4	9176.6	9210.6	9064.3	9126.3	9123.4	8866.1	8557.1	8567.5
57.5°	8691.7	8685.7	9120.4	9677.7	10032.6	10050.3	9927.6	9614.2	9059.8	8644.3	8617.8
60°	8322.1	8359.1	8956.3	9939.4	10885.7	11278.9	10748.2	9853.7	8839.5	8262.9	8195.0
62.5°	7216.2	7313.8	8033.7	9620.1	11574.6	12692.3	11406.1	9490.1	7934.7	7182.2	7137.9
65°	5171.5	5341.6	6137.0	8209.7	11512.5	13934.2	11311.5	8143.2	6196.1	5328.3	5264.7
67.5°	2346.2	2519.2	3194.9	5621.0	10007.5	13597.1	9983.8	5680.1	3354.5	2528.2	2491.2
70°	850.1	879.7	1097.0	2250.2	6395.7	10833.9	6669.2	2266.5	1166.4	937.4	925.5
72.5°	514.4	519.0	564.8	805.8	2222.1	6577.5	2316.7	832.4	576.6	511.6	520.4
75°	326.8	323.8	402.1	492.3	788.0	2219.1	826.5	492.3	400.7	365.2	368.1
77.5°	235.0	242.4	288.3	368.1	496.7	752.6	487.9	351.9	288.3	236.6	241.0
80°	175.9	180.4	209.9	286.8	348.9	468.6	310.5	260.2	217.3	147.8	152.3
82.5°	127.1	127.1	137.5	208.5	212.9	252.8	168.5	183.4	143.4	105.0	105.0
85°	75.4	73.9	85.8	124.2	110.9	93.2	76.9	112.3	90.2	65.1	63.6
87.5°	26.6	28.1	26.6	35.5	29.5	25.1	23.7	31.1	25.1	22.1	20.7
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)