

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: P967187

Luminaire Tested: **NAV-SB4D-735-U-5WQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967187
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-SB4D-735-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42284.3 lumens
Efficiency: N/A
Efficacy: 144.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G4

Input Watts (W): 293.6
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

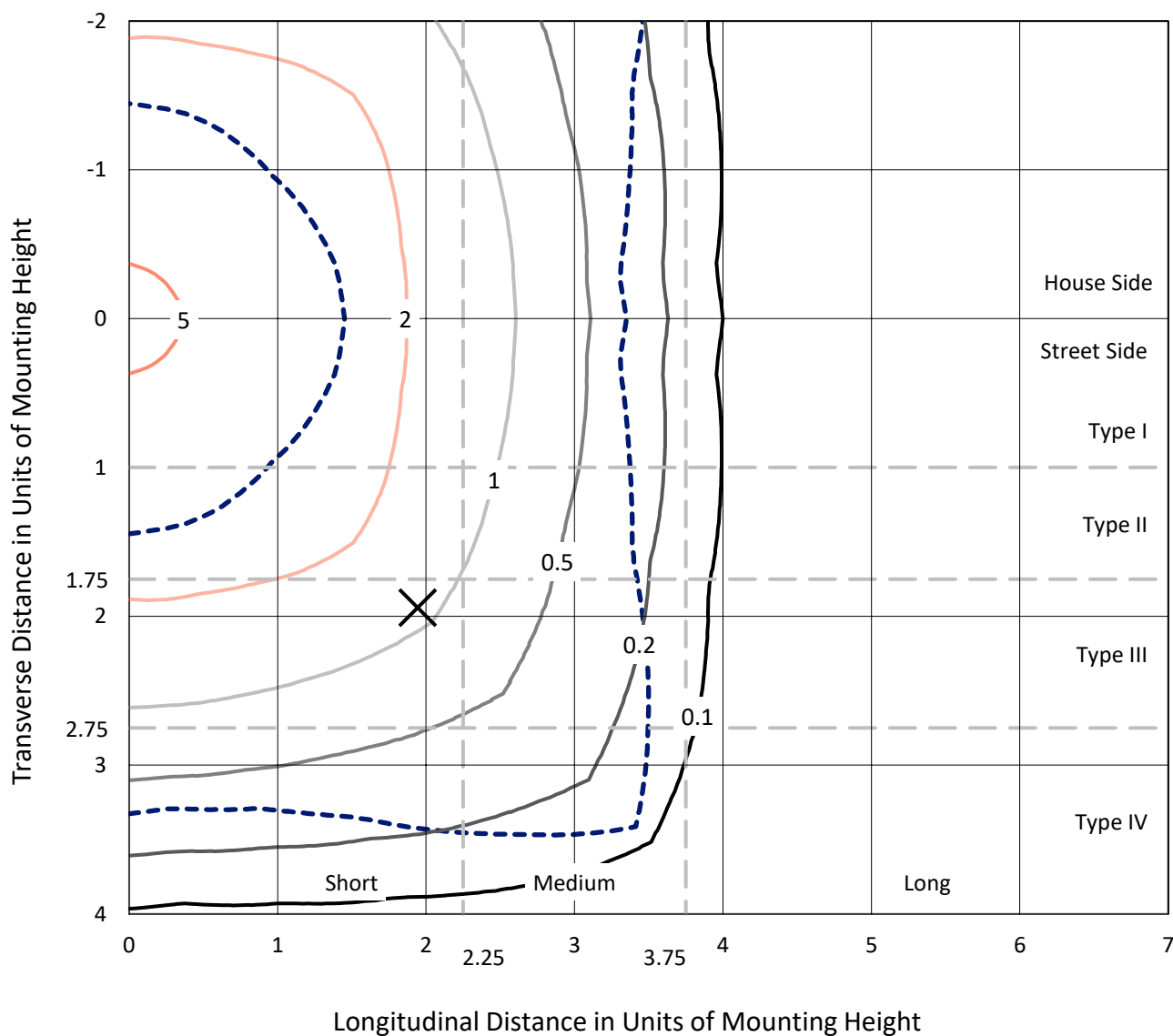


REPORT NUMBER: P967187

CATALOG NUMBER: NAV-SB4D-735-U-5WQ

Iso-Footcandle Lines of Horizontal Illumination

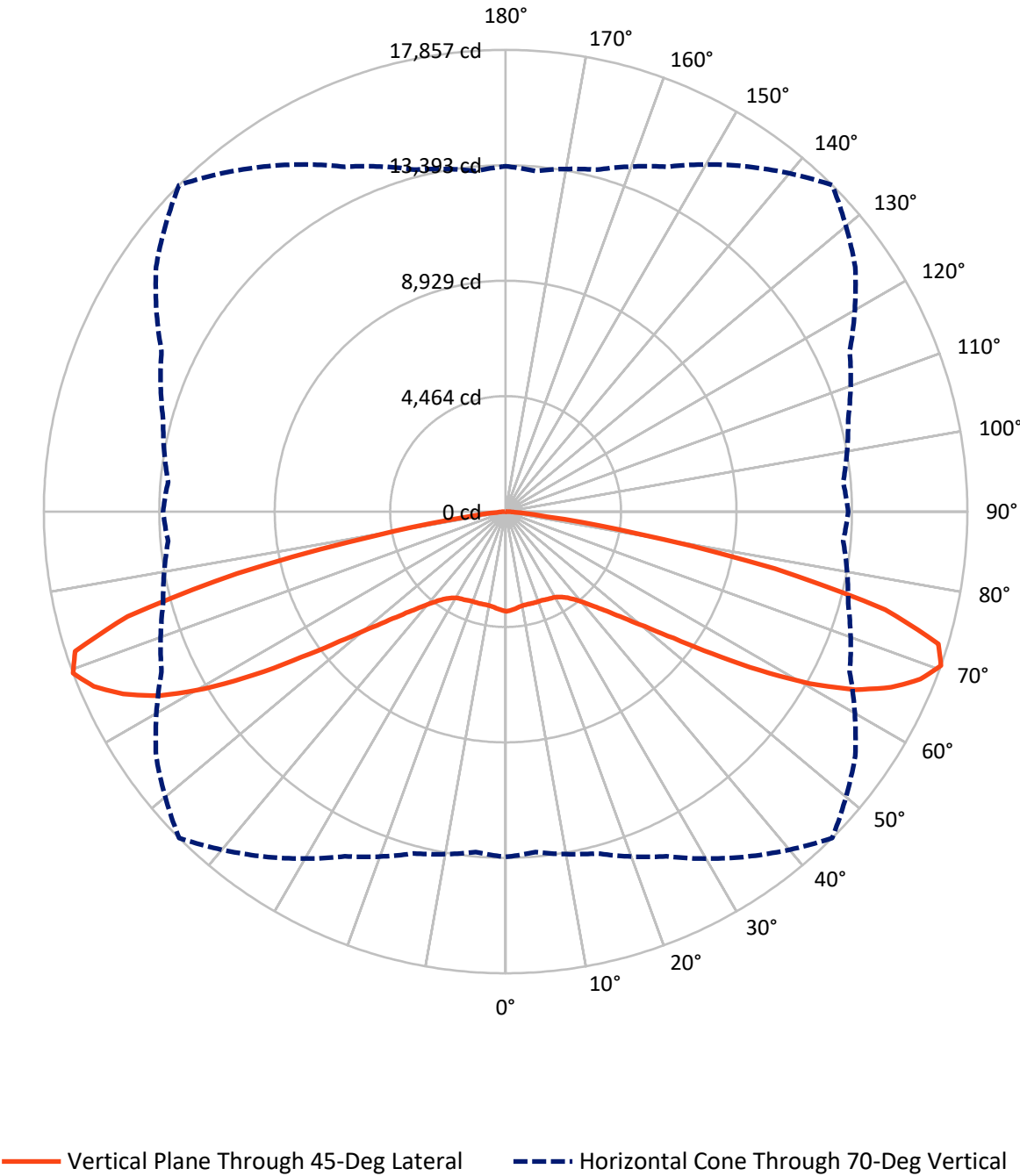
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
Type V - Short - N/A

REPORT NUMBER: P967187
CATALOG NUMBER: NAV-SB4D-735-U-5WQ

Luminous Intensity Polar Plot



REPORT NUMBER: P967187

CATALOG NUMBER: NAV-SB4D-735-U-5WQ

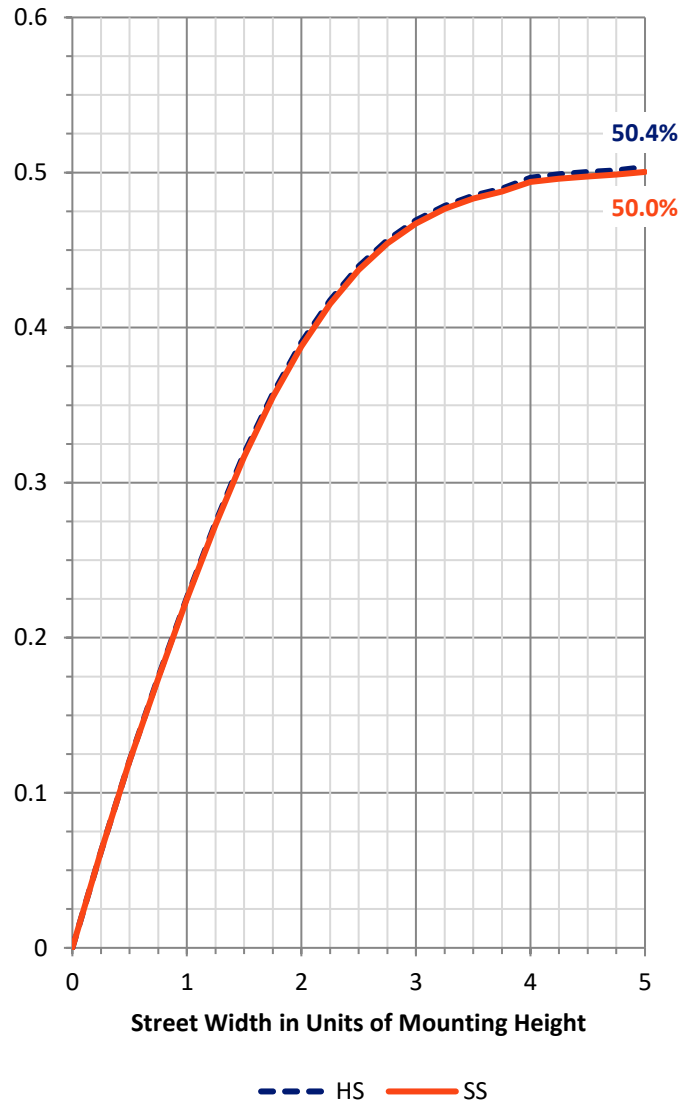
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21142.2	0.0	21142.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	21142.2	0.0	21142.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	42284.3	0.0	42284.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	358.8	0.8
10°-20°	1053.6	2.5
20°-30°	1753.3	4.1
30°-40°	2651.5	6.3
40°-50°	4406.1	10.4
50°-60°	8314.1	19.7
60°-70°	14038.8	33.2
70°-80°	9224.9	21.8
80°-90°	483.3	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°	42284.3	100.0
0°-180°	42284.3	100.0

Coefficient of Utilization



REPORT NUMBER: P967187

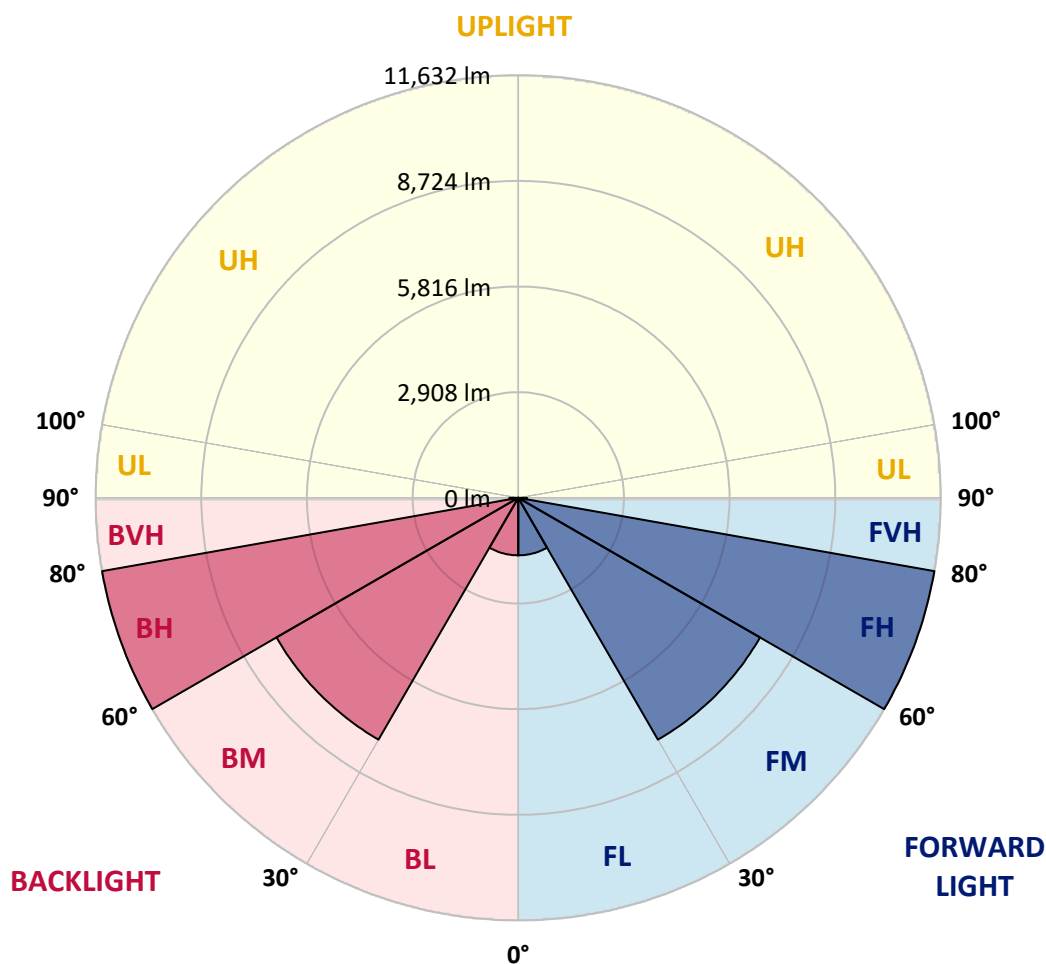
CATALOG NUMBER: NAV-SB4D-735-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1582.8	3.7			
FM	(30°-60°)	7685.9	18.2			
FH	(60°-80°)	11631.8	27.5			G4/12000
FVH	(80°-90°)	241.6	0.6			G3/500
BL	(0°-30°)	1582.8	3.7	B3/2500		
BM	(30°-60°)	7685.9	18.2	B4/8500		
BH	(60°-80°)	11631.8	27.5	B5		G4/12000
BVH	(80°-90°)	241.6	0.6			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G4

Type V Short



REPORT NUMBER: P967187

CATALOG NUMBER: NAV-SB4D-735-U-5WQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3857.2	3857.2	3857.2	3857.2	3857.2	3857.2	3857.2	3857.2	3857.2	3857.2	3857.2
2.5°	3833.0	3844.0	3839.6	3830.8	3830.8	3824.2	3830.8	3835.2	3841.8	3846.2	3844.0
5°	3782.5	3791.3	3789.0	3782.5	3784.6	3778.0	3782.5	3789.0	3793.4	3795.7	3795.7
7.5°	3738.5	3747.3	3742.9	3731.9	3731.9	3725.4	3727.5	3734.1	3740.7	3742.9	3742.9
10°	3727.5	3736.3	3723.1	3705.6	3698.9	3690.1	3692.4	3698.9	3712.1	3718.7	3718.7
12.5°	3731.9	3738.5	3725.4	3698.9	3692.4	3683.5	3683.5	3690.1	3707.7	3716.5	3718.7
15°	3745.0	3751.7	3731.9	3703.3	3696.8	3690.1	3688.0	3696.8	3716.5	3731.9	3734.1
17.5°	3769.2	3775.9	3745.0	3705.6	3696.8	3698.9	3696.8	3703.3	3734.1	3762.7	3762.7
20°	3791.3	3795.7	3753.9	3705.6	3696.8	3698.9	3696.8	3709.9	3749.4	3789.0	3791.3
22.5°	3797.8	3802.2	3762.7	3721.0	3714.3	3716.5	3714.3	3727.5	3764.8	3804.4	3804.4
25°	3800.1	3806.6	3775.9	3742.9	3753.9	3758.3	3753.9	3756.1	3784.6	3819.9	3817.6
27.5°	3833.0	3841.8	3813.2	3784.6	3791.3	3789.0	3795.7	3802.2	3824.2	3859.3	3850.6
30°	3901.2	3907.7	3883.5	3855.0	3850.6	3835.2	3855.0	3877.0	3901.2	3931.9	3925.3
32.5°	4013.2	4026.4	3995.7	3964.9	3945.1	3936.3	3951.7	3989.1	4022.0	4055.0	4041.8
35°	4200.0	4208.9	4180.3	4123.2	4087.9	4087.9	4101.1	4149.5	4202.2	4244.0	4228.6
37.5°	4463.8	4474.7	4424.2	4356.0	4303.4	4303.4	4320.9	4371.5	4450.5	4509.9	4488.0
40°	4784.7	4800.1	4736.3	4666.0	4615.5	4606.7	4628.6	4685.8	4760.5	4835.2	4811.0
42.5°	5171.4	5189.1	5105.5	5044.0	5004.5	5004.5	5015.4	5068.2	5136.3	5228.6	5222.1
45°	5666.0	5696.7	5582.5	5521.0	5483.5	5492.4	5498.9	5545.1	5606.6	5712.1	5707.7
47.5°	6255.0	6285.8	6164.9	6101.2	6094.5	6136.4	6109.9	6142.9	6175.9	6296.8	6261.6
50°	6923.2	6975.9	6892.4	6888.0	6901.1	6978.1	6916.6	6934.1	6896.8	6973.7	6927.6
52.5°	7740.7	7817.7	7802.3	7828.6	7975.9	8134.2	7993.5	7932.0	7791.3	7815.4	7734.1
55°	8732.0	8848.4	8870.5	9028.7	9362.8	9685.8	9386.9	9138.6	8839.6	8784.7	8699.0
57.5°	9859.5	9951.7	10057.2	10380.3	11004.5	11578.1	11004.5	10455.0	9984.7	9872.6	9793.5
60°	11072.7	11187.0	11288.0	11764.9	12692.5	13499.0	12674.8	11802.4	11180.3	11028.7	10896.8
62.5°	12376.0	12523.2	12593.6	13123.2	14204.6	15167.2	14219.9	13162.7	12472.6	12310.0	12178.1
65°	13626.6	13747.4	13826.5	14391.3	15424.3	16389.1	15494.6	14452.9	13743.0	13529.8	13424.3
67.5°	14209.0	14274.9	14468.3	15107.9	16198.0	17299.0	16382.6	15175.9	14382.6	14009.0	14013.3
70°	13356.2	13222.1	13688.1	14712.2	16290.3	17857.3	16501.3	14681.5	13710.0	13103.4	13248.5
72.5°	10321.0	10090.2	10899.0	12650.7	15235.3	17501.3	15340.8	12749.6	11402.3	10171.5	10477.0
75°	5615.5	5353.9	6470.4	8685.8	12149.5	15169.4	12428.7	8934.1	7204.4	5573.6	5936.3
77.5°	1584.6	1485.7	2386.8	4202.2	7307.7	10650.7	7589.1	4294.5	2830.8	1679.2	1865.9
80°	485.7	470.4	637.3	1266.0	3103.3	5101.1	2982.4	1281.4	811.0	512.1	540.7
82.5°	287.9	263.7	316.5	461.6	791.2	1602.2	769.3	481.3	386.8	259.3	281.4
85°	164.8	153.9	186.9	224.2	266.0	340.7	222.0	228.6	206.6	138.5	145.0
87.5°	68.2	61.5	72.6	70.3	61.5	79.1	59.3	70.3	83.5	54.9	50.5
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)