

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: P963140

Luminaire Tested: **NAV-SB2D-830-U-T1**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963140
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-830-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18542.2 lumens
Efficiency: N/A
Efficacy: 125.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

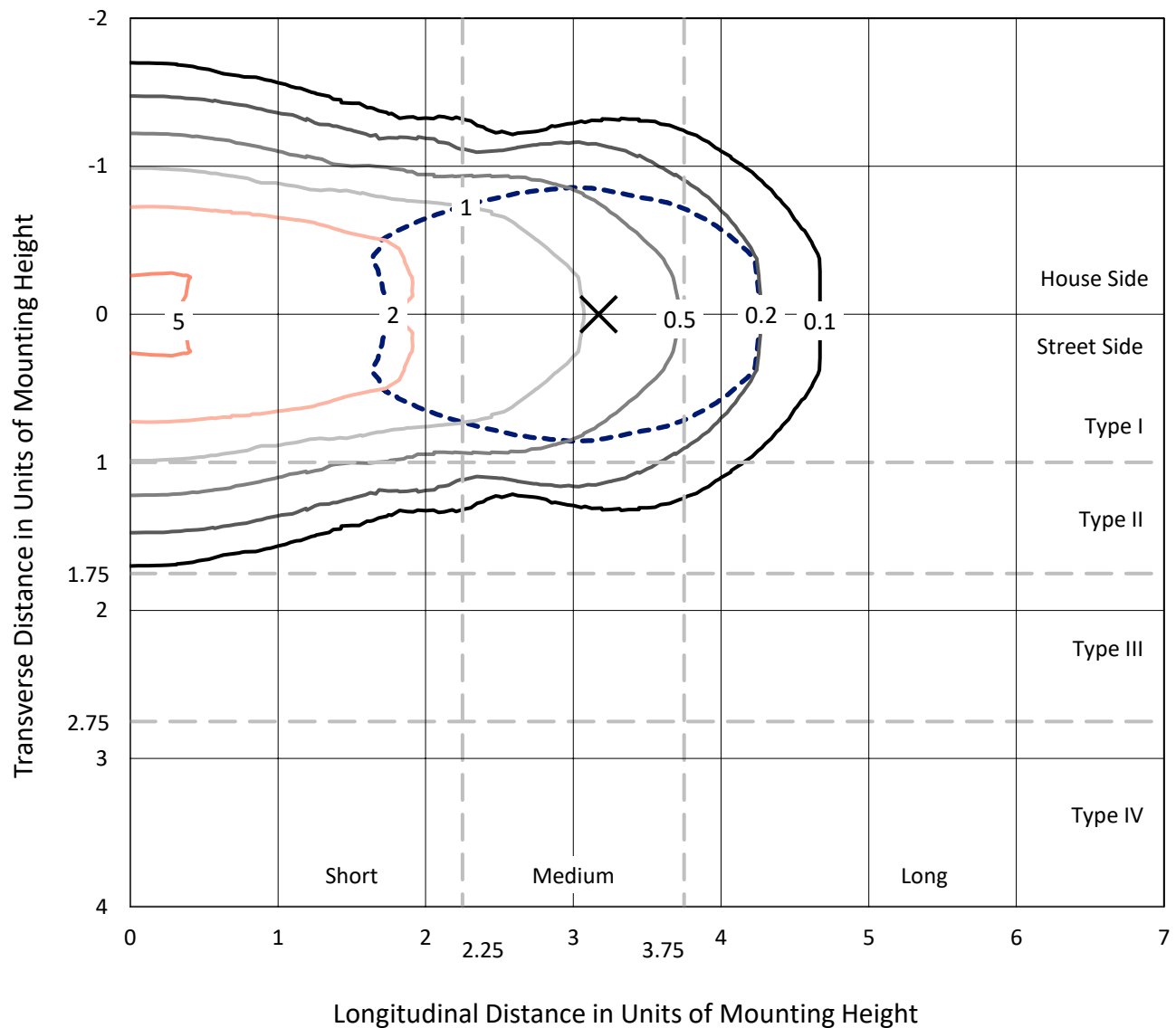
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

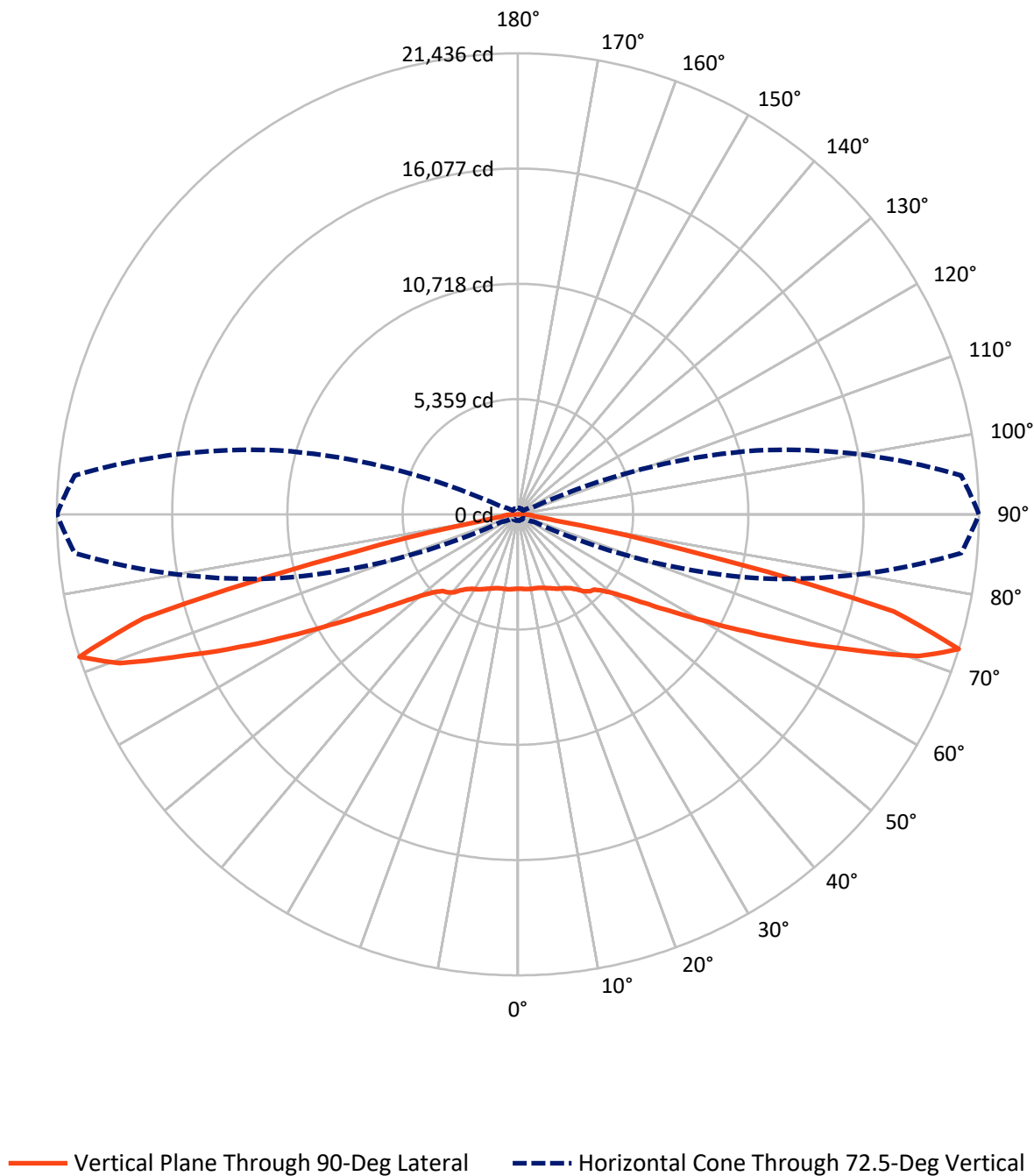
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
Type I - Short - N/A

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Luminous Intensity Polar Plot



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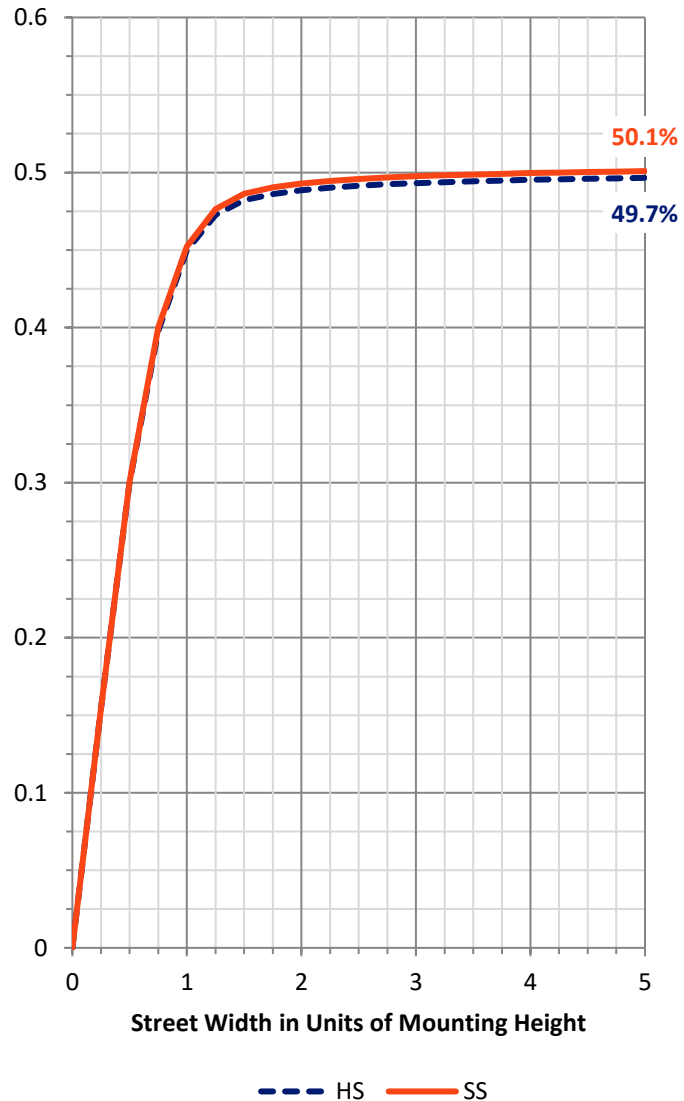
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9271.1	0.0	9271.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9271.1	0.0	9271.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	18542.2	0.0	18542.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	336.0	1.8
10°-20°	1027.2	5.5
20°-30°	1712.8	9.2
30°-40°	2355.6	12.7
40°-50°	2876.9	15.5
50°-60°	3327.4	17.9
60°-70°	3967.4	21.4
70°-80°	2769.0	14.9
80°-90°	170.1	0.9
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°	18542.2	100.0
0°-180°	18542.2	100.0

Coefficient of Utilization



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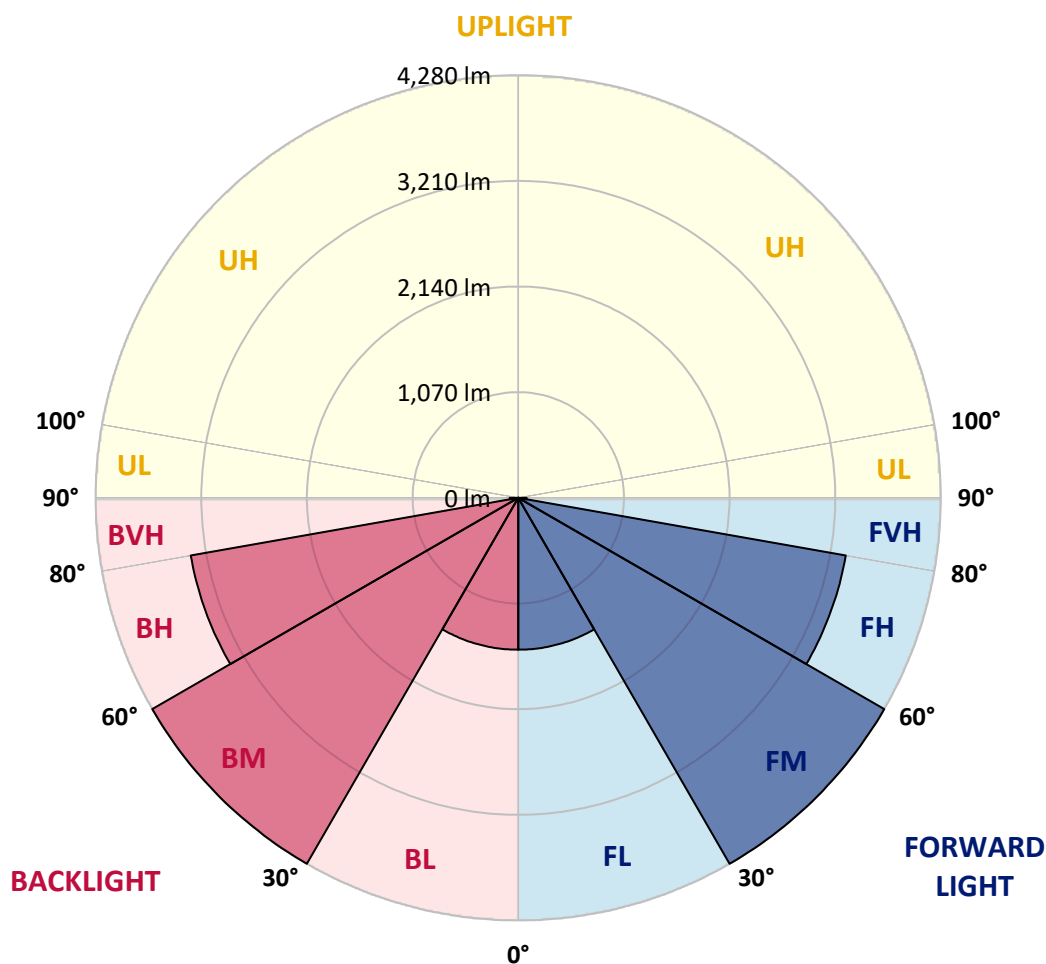
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1538.0	8.3			
FM	(30°-60°)	4279.9	23.1			
FH	(60°-80°)	3368.2	18.2			G2/5000
FVH	(80°-90°)	85.0	0.5			G1/100
BL	(0°-30°)	1538.0	8.3	B3/2500		
BM	(30°-60°)	4279.9	23.1	B3/5000		
BH	(60°-80°)	3368.2	18.2	B4/5000		G4/5000
BVH	(80°-90°)	85.0	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type I Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3464.8	3464.8	3464.8	3464.8	3464.8	3464.8	3464.8	3464.8	3464.8	3464.8	3464.8
2.5°	3467.8	3471.7	3471.7	3468.8	3475.7	3469.7	3469.7	3466.8	3469.7	3466.8	3466.8
5°	3485.5	3490.4	3492.4	3491.5	3500.3	3495.4	3495.4	3491.5	3492.4	3489.4	3489.4
7.5°	3519.0	3525.9	3529.9	3534.8	3547.6	3541.7	3537.8	3525.9	3521.0	3513.1	3513.1
10°	3529.9	3537.8	3550.5	3576.1	3605.7	3606.8	3594.9	3565.4	3542.7	3525.0	3522.0
12.5°	3496.4	3507.1	3533.8	3586.1	3652.1	3678.6	3660.0	3610.7	3566.3	3534.8	3529.9
15°	3453.9	3465.8	3506.2	3585.0	3682.6	3744.6	3742.7	3677.7	3606.8	3557.5	3549.6
17.5°	3387.9	3399.8	3457.9	3568.3	3706.3	3808.7	3836.4	3769.3	3669.8	3603.8	3592.9
20°	3268.7	3279.6	3360.4	3515.0	3714.1	3876.8	3948.7	3889.6	3765.3	3675.6	3658.9
22.5°	3114.0	3130.8	3225.4	3423.4	3695.4	3947.7	4076.7	4036.3	3876.8	3752.5	3729.9
25°	2948.4	2966.1	3076.5	3311.1	3647.2	3998.9	4228.5	4202.9	4002.8	3848.2	3816.6
27.5°	2805.5	2824.3	2944.5	3199.7	3572.2	4018.6	4378.3	4391.1	4155.7	3953.6	3920.1
30°	2693.2	2710.9	2839.0	3110.1	3475.7	3998.9	4509.4	4598.0	4311.4	4045.3	3997.0
32.5°	2570.0	2592.7	2727.7	3000.7	3361.4	3951.6	4623.7	4821.8	4491.7	4143.8	4082.7
35°	2414.3	2435.0	2577.0	2850.9	3211.5	3875.7	4719.3	5070.1	4749.8	4293.6	4225.6
37.5°	2225.2	2244.9	2385.8	2663.7	3062.8	3769.3	4792.2	5350.0	5057.2	4509.4	4418.7
40°	2034.9	2053.7	2185.7	2454.8	2884.4	3633.3	4817.8	5624.0	5410.1	4806.0	4709.5
42.5°	1860.5	1877.3	1998.4	2248.7	2684.4	3459.9	4784.3	5862.4	5726.4	5013.0	4888.7
45°	1699.9	1714.6	1822.0	2055.6	2476.4	3249.0	4683.8	6118.6	6102.8	5160.8	4993.2
47.5°	1516.6	1531.4	1642.8	1868.4	2268.5	3001.6	4513.3	6370.9	6626.1	5495.8	5302.6
50°	1292.9	1305.7	1420.0	1652.6	2052.7	2738.6	4276.8	6568.9	7286.3	6003.3	5760.9
52.5°	1027.8	1041.6	1152.9	1385.5	1796.4	2455.7	3965.4	6698.1	8049.1	6744.4	6445.8
55°	764.8	774.6	871.1	1080.0	1479.2	2133.4	3575.2	6734.6	8914.3	7757.4	7383.9
57.5°	554.8	560.7	622.8	778.5	1121.5	1730.4	3101.1	6640.0	9944.1	9056.2	8586.1
60°	449.4	451.3	470.1	539.0	779.5	1275.2	2528.7	6314.7	11061.6	10730.5	10138.3
62.5°	408.0	408.0	412.9	431.6	527.3	841.5	1835.9	5640.7	12259.9	12846.2	12053.0
65°	379.4	379.4	381.4	390.2	415.8	536.1	1158.9	4542.9	13270.0	15324.6	14321.4
67.5°	353.7	354.8	353.7	356.7	371.6	396.2	672.1	3137.6	13813.9	17892.7	16809.7
70°	327.2	329.1	324.2	324.2	336.0	337.0	420.8	1720.6	13362.6	20044.9	19760.1
72.5°	295.6	298.6	290.7	288.7	297.6	293.7	316.3	825.8	11472.5	20687.4	21436.3
75°	268.0	271.9	254.2	249.3	249.3	246.4	257.2	423.7	7446.0	16875.7	18050.4
77.5°	243.4	251.3	222.7	206.9	203.0	194.1	209.9	259.2	3256.9	7922.9	7758.4
80°	201.0	211.9	183.3	164.6	157.6	147.8	165.5	181.3	968.7	1839.8	1762.0
82.5°	149.8	154.7	130.1	117.3	111.3	104.4	124.1	126.2	315.4	651.4	736.2
85°	95.6	97.6	79.8	69.0	66.0	63.0	78.8	69.0	120.2	478.9	695.8
87.5°	33.5	38.4	30.5	27.6	29.5	24.6	36.5	20.7	33.5	338.0	418.8
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)