

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: P966291

Luminaire Tested: **NAV-SB4B-830-U-RW**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966291
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-19)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-830-U-RW
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND RECTANGULAR
WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21404 lumens
Efficiency: N/A
Efficacy: 145.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G4

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

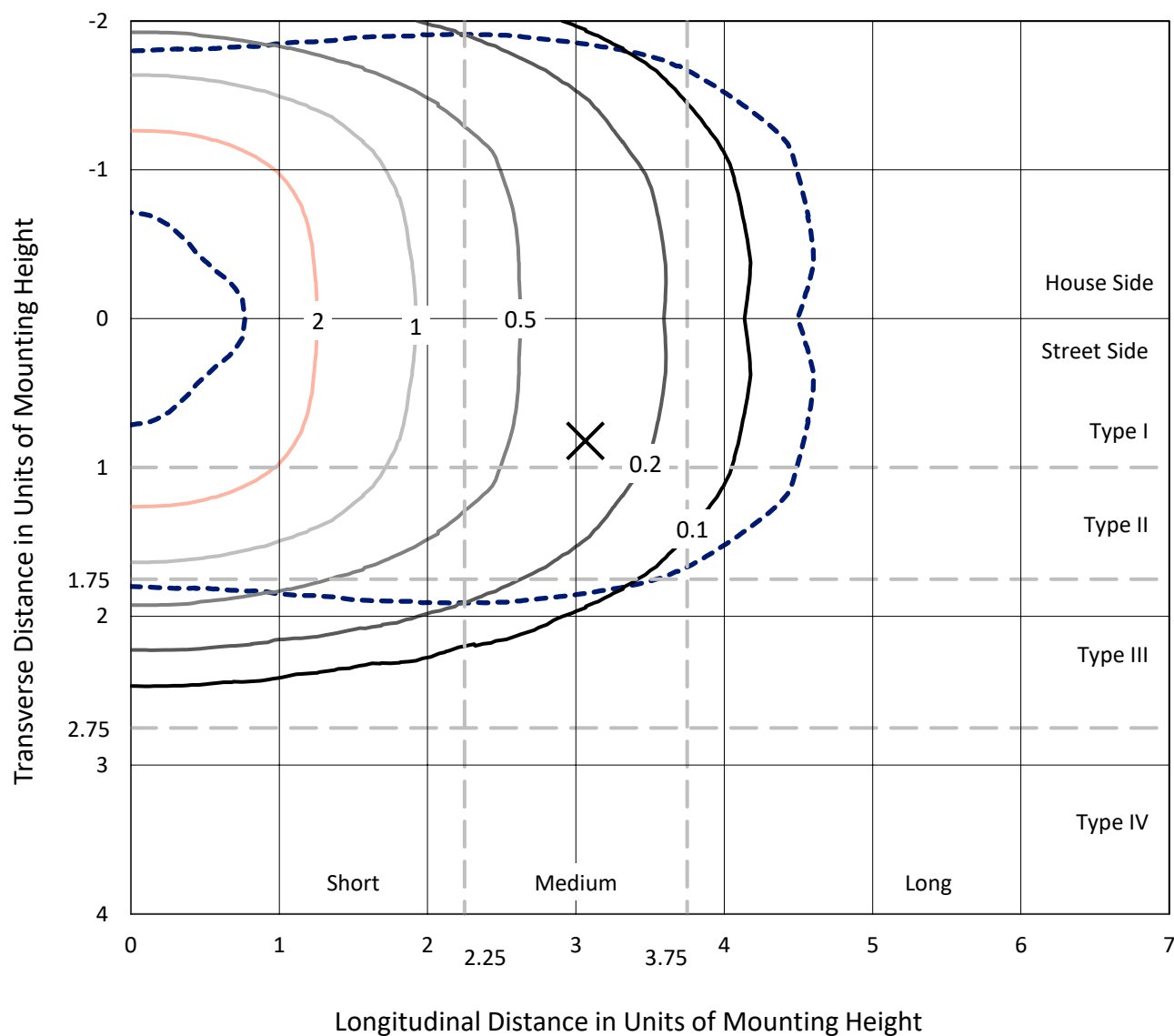


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Iso-Footcandle Lines of Horizontal Illumination

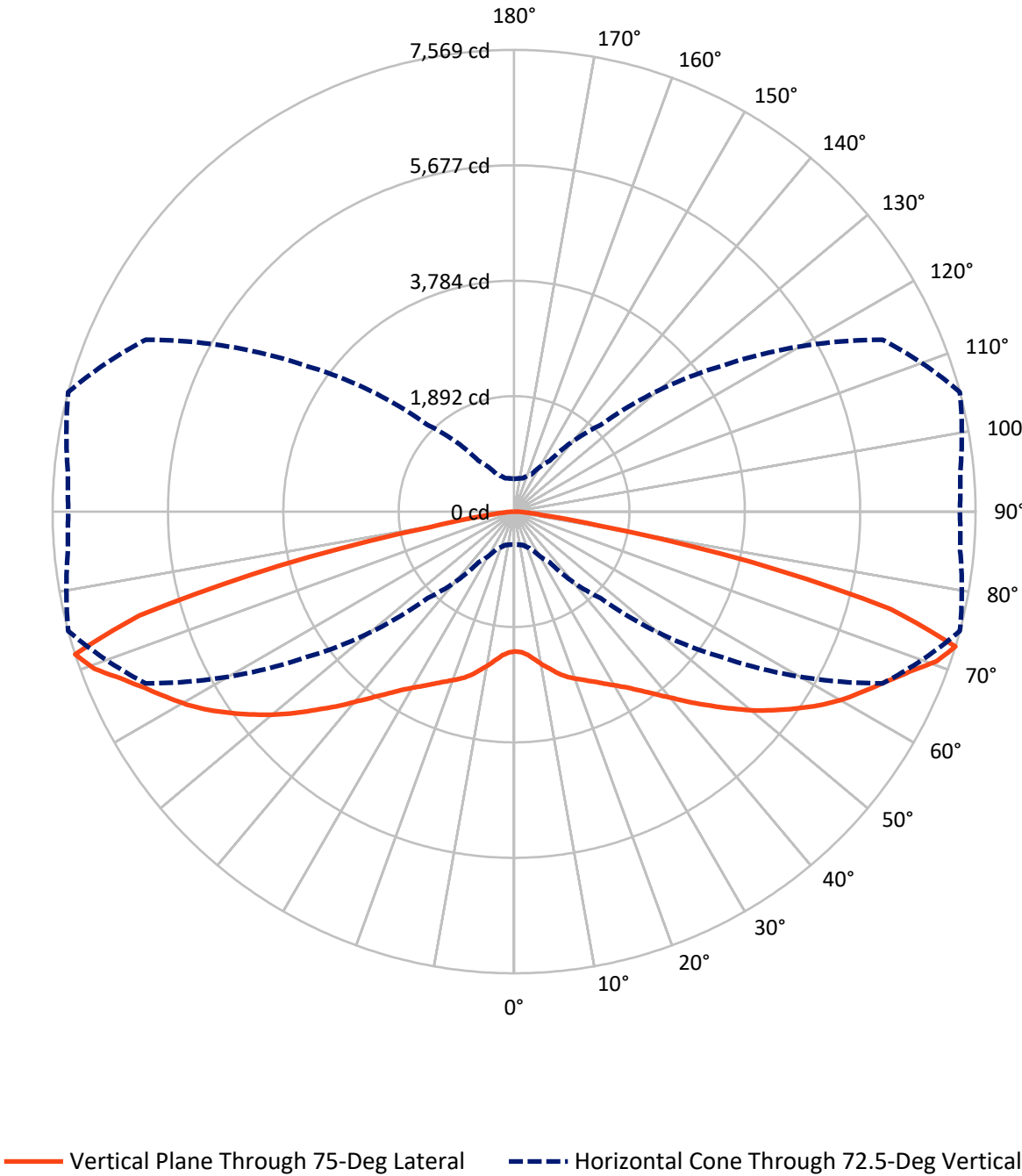
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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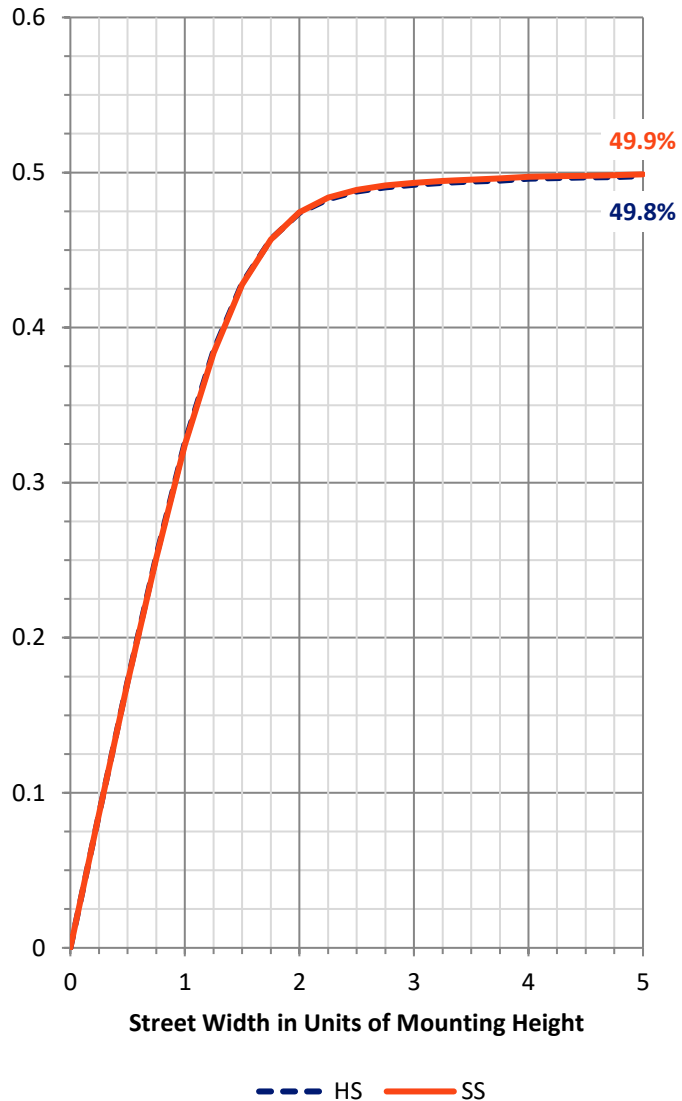
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10702.0	0.0	10702.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10702.0	0.0	10702.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	21404.0	0.0	21404.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.6	1.0
10°-20°	740.8	3.5
20°-30°	1431.4	6.7
30°-40°	2416.9	11.3
40°-50°	3833.0	17.9
50°-60°	5132.0	24.0
60°-70°	4884.0	22.8
70°-80°	2548.5	11.9
80°-90°	192.9	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°	21404.0	100.0
0°-180°	21404.0	100.0

Coefficient of Utilization



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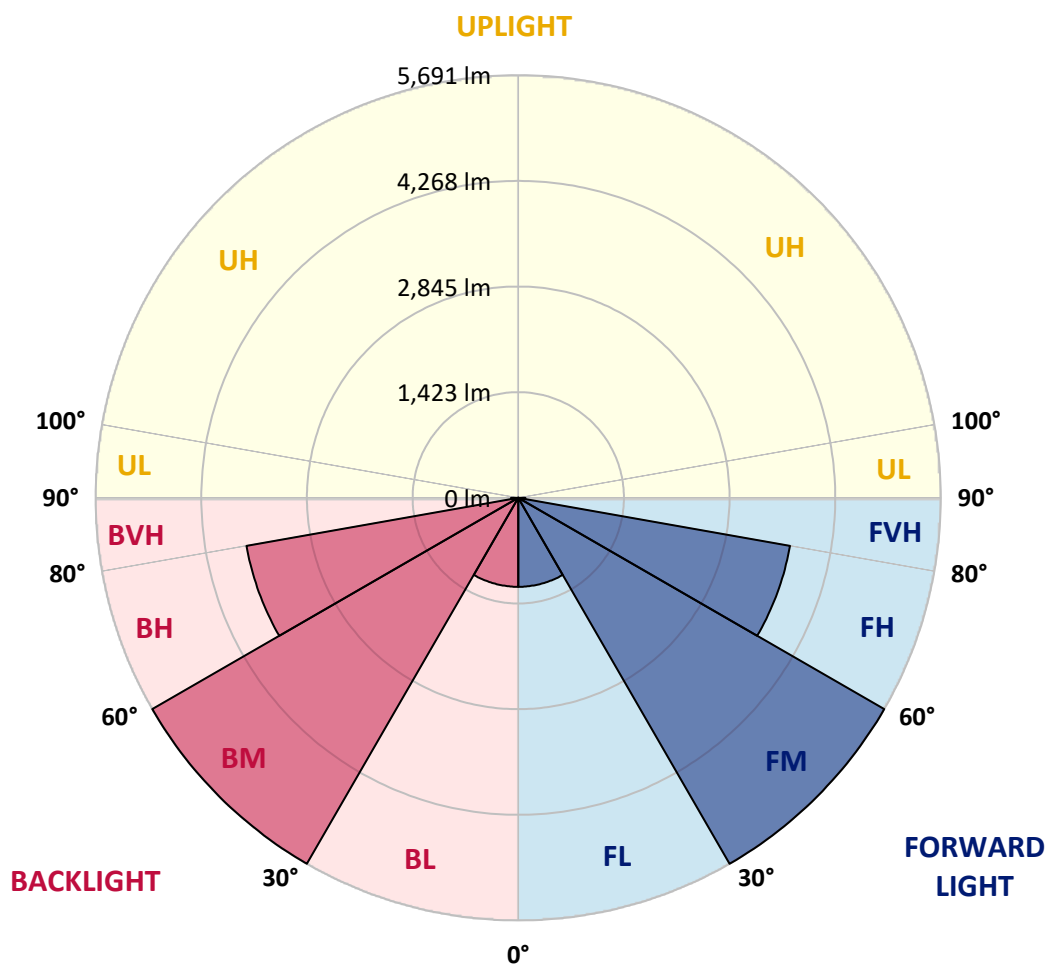
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1198.4	5.6			
FM	(30°-60°)	5691.0	26.6			
FH	(60°-80°)	3716.3	17.4			G2/5000
FVH	(80°-90°)	96.5	0.5			G1/100
BL	(0°-30°)	1198.4	5.6	B3/2500		
BM	(30°-60°)	5691.0	26.6	B4/8500		
BH	(60°-80°)	3716.3	17.4	B4/5000		G4/5000
BVH	(80°-90°)	96.5	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2292.7	2292.7	2292.7	2292.7	2292.7	2292.7	2292.7	2292.7	2292.7	2292.7	2292.7
2.5°	2292.7	2290.6	2292.7	2295.0	2293.8	2293.8	2299.3	2302.6	2309.1	2308.1	2307.0
5°	2277.4	2276.3	2285.1	2295.0	2302.6	2315.7	2332.1	2344.1	2359.4	2362.7	2362.7
7.5°	2269.8	2266.5	2281.9	2299.3	2323.4	2356.2	2387.8	2420.6	2446.9	2455.6	2457.7
10°	2275.3	2276.3	2297.1	2329.9	2368.2	2414.1	2458.9	2514.6	2551.7	2560.4	2569.3
12.5°	2300.4	2298.3	2333.2	2385.7	2438.1	2496.0	2548.5	2609.6	2650.1	2670.8	2679.7
15°	2346.3	2341.9	2391.1	2468.7	2545.2	2612.9	2655.6	2713.5	2760.5	2786.7	2796.5
17.5°	2401.0	2403.1	2467.6	2568.1	2668.7	2745.2	2785.6	2815.2	2851.2	2874.1	2885.1
20°	2497.1	2501.5	2573.6	2692.8	2807.5	2894.9	2927.7	2916.7	2926.6	2944.1	2957.2
22.5°	2626.0	2628.3	2709.1	2838.1	2958.3	3054.5	3076.3	3031.5	3004.2	3016.2	3025.0
25°	2775.8	2789.9	2870.8	3003.1	3126.6	3218.4	3228.2	3160.5	3092.7	3096.0	3101.4
27.5°	2958.3	2971.4	3053.4	3184.5	3310.1	3390.0	3388.9	3298.1	3198.7	3173.6	3181.2
30°	3156.1	3170.3	3254.5	3390.0	3506.9	3576.8	3561.6	3453.3	3311.3	3264.3	3269.7
32.5°	3391.0	3399.8	3485.0	3620.5	3728.7	3784.5	3752.7	3619.5	3442.5	3388.9	3402.0
35°	3675.1	3688.3	3751.7	3879.5	3974.6	4020.6	3967.0	3809.6	3610.7	3550.6	3559.3
37.5°	3999.8	3991.0	4063.1	4176.8	4255.5	4283.9	4210.7	4023.8	3803.1	3732.0	3745.1
40°	4338.5	4334.2	4412.8	4522.1	4564.7	4582.3	4474.0	4269.6	4024.9	3948.4	3973.5
42.5°	4645.6	4642.3	4748.3	4869.7	4921.0	4901.3	4764.7	4530.9	4281.7	4194.3	4216.1
45°	4891.5	4887.1	5017.2	5187.6	5288.2	5255.4	5071.8	4819.3	4541.8	4451.1	4471.9
47.5°	5080.5	5082.8	5222.7	5433.5	5609.5	5621.5	5385.5	5113.3	4828.2	4725.4	4756.0
50°	5217.1	5223.7	5373.5	5607.3	5847.7	5953.7	5705.7	5415.0	5124.3	5008.5	5043.4
52.5°	5251.1	5263.1	5443.4	5717.7	6000.8	6202.9	6031.3	5704.5	5405.1	5294.7	5323.1
55°	5070.8	5094.8	5323.1	5708.9	6094.8	6366.8	6317.7	5998.5	5688.1	5574.6	5606.2
57.5°	4656.6	4690.4	4957.1	5460.9	6073.9	6479.4	6539.5	6280.5	5971.2	5862.0	5887.1
60°	4076.2	4116.7	4372.4	4922.2	5781.1	6520.9	6695.8	6554.8	6231.3	6125.3	6148.3
62.5°	3200.9	3253.4	3559.3	4204.1	5162.5	6327.5	6829.1	6802.8	6465.2	6333.0	6348.2
65°	2053.4	2109.1	2431.5	3193.3	4337.5	5735.2	6870.6	7044.4	6712.1	6527.5	6550.5
67.5°	1238.2	1263.3	1422.9	1935.4	3170.3	4842.3	6518.7	7312.1	7000.6	6771.2	6788.7
70°	792.3	806.5	901.6	1136.5	1792.2	3533.1	5646.6	7362.4	7350.4	7021.5	7019.2
72.5°	537.7	542.0	567.1	673.2	1014.1	2007.6	4164.8	6665.2	7568.9	7343.8	7308.9
75°	393.4	417.5	457.9	476.5	575.9	1003.2	2386.7	4682.8	6378.9	6477.2	6239.0
77.5°	292.8	294.0	349.7	371.6	410.9	534.4	1009.7	2614.1	3960.4	4158.2	3709.1
80°	248.0	234.9	233.9	299.4	309.2	333.3	451.3	902.7	1418.5	860.1	650.3
82.5°	206.5	192.3	173.7	233.9	210.9	204.4	195.6	367.2	451.3	221.8	189.0
85°	144.2	137.7	131.1	153.0	120.2	102.7	94.0	171.6	190.1	94.0	83.0
87.5°	62.3	64.5	65.6	67.8	50.2	36.1	36.1	48.1	48.1	37.1	27.4
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)