

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: P964148

Luminaire Tested: **NAV-SB3B-827-U-5NQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964148
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-SB3B-827-U-5NQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15779.9 lumens
Efficiency: N/A
Efficacy: 144.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G2

Input Watts (W): 109.2
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

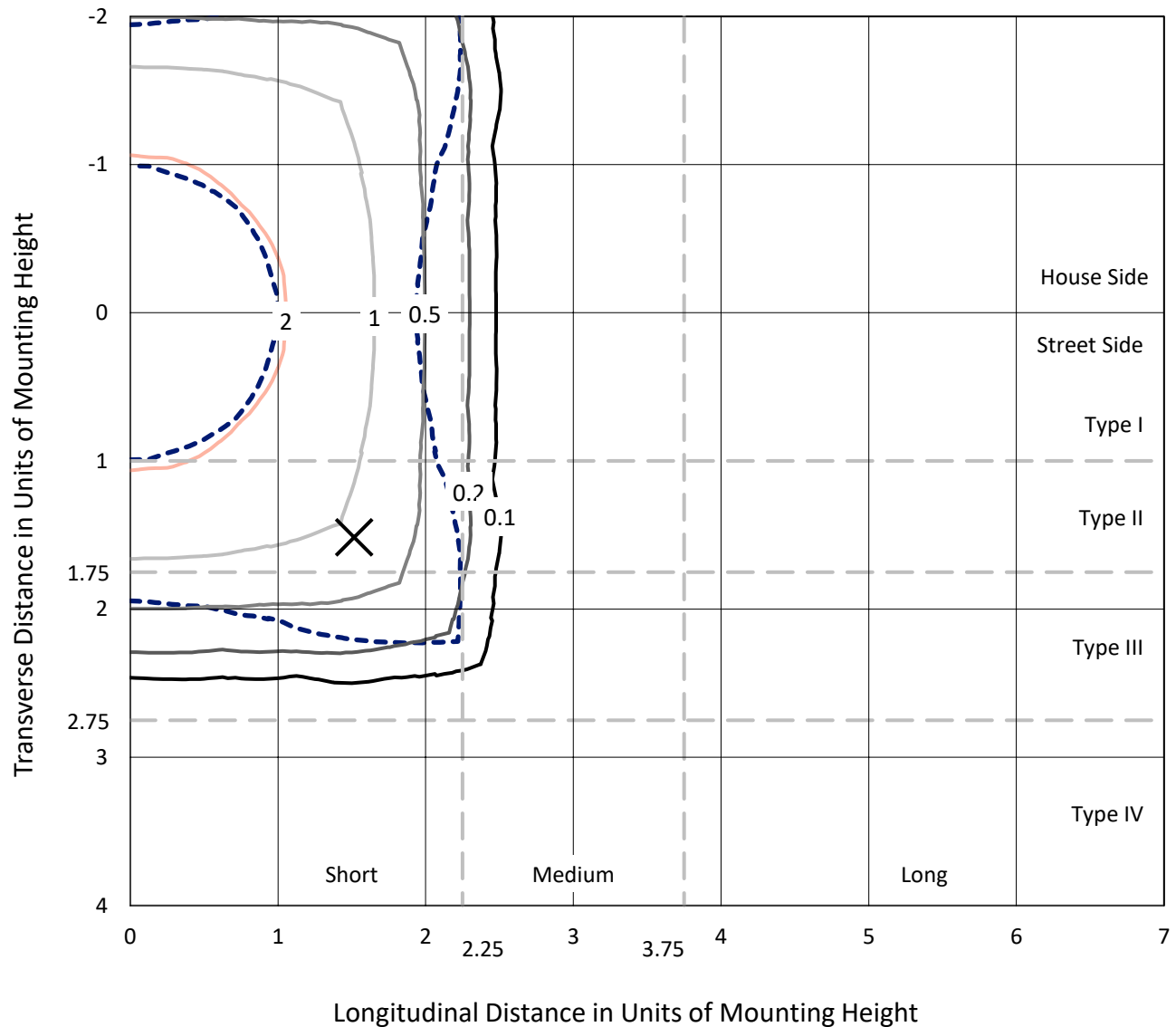


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Iso-Footcandle Lines of Horizontal Illumination

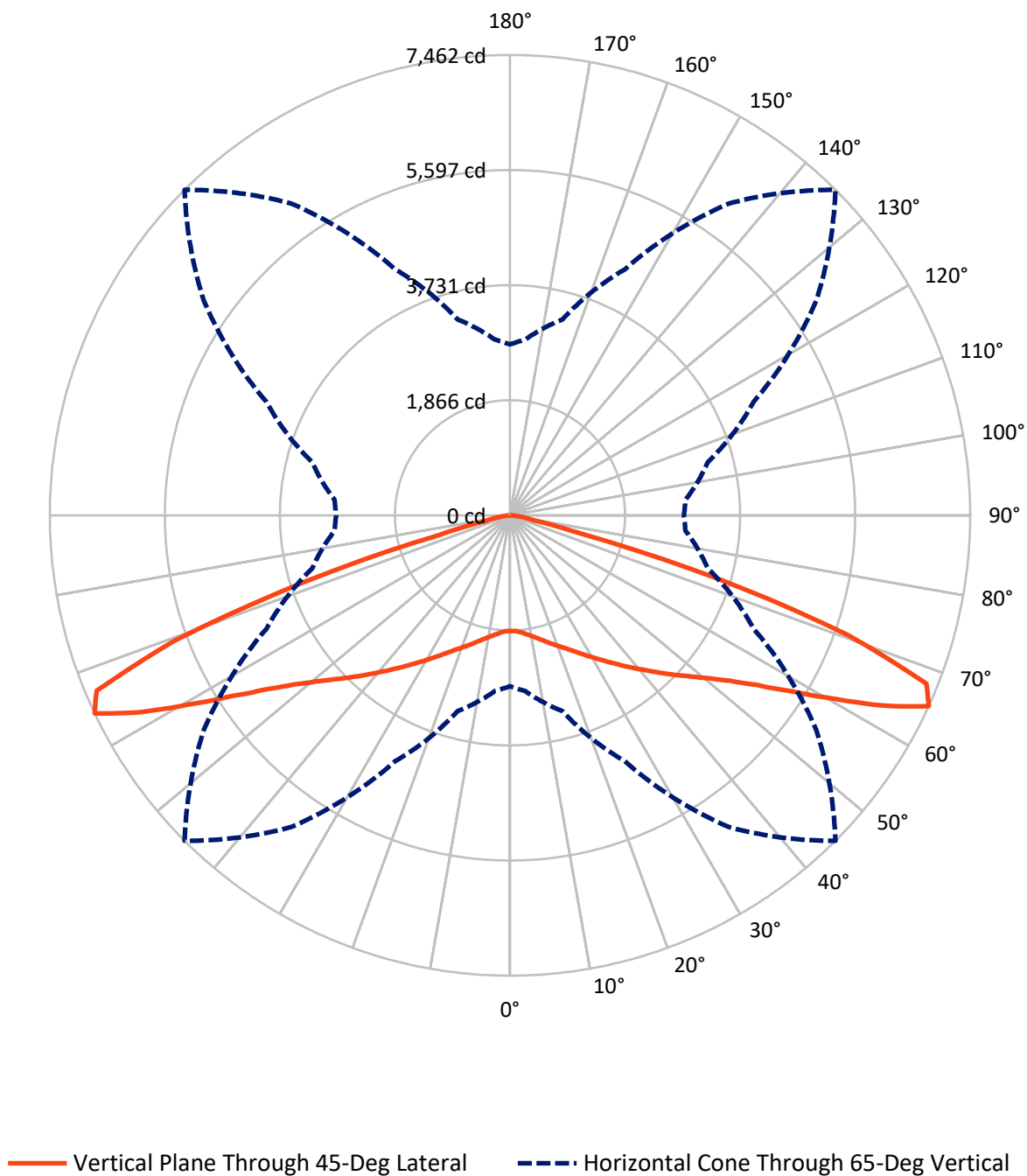
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
Type V - Short - N/A

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Luminous Intensity Polar Plot



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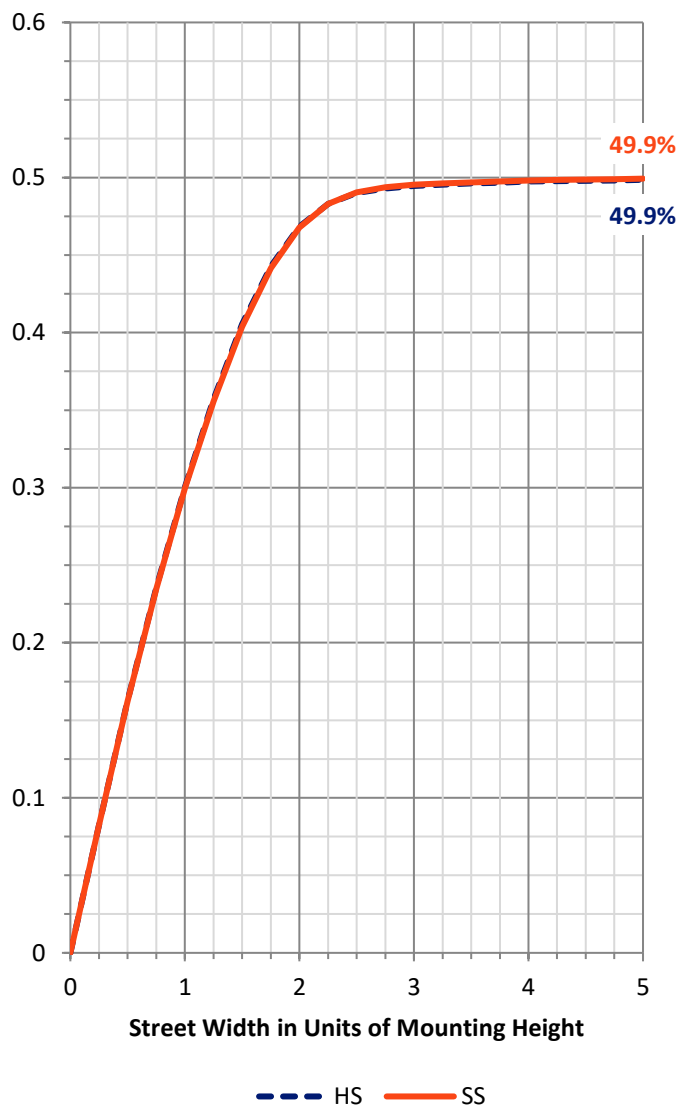
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7889.9	0.0	7889.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	7889.9	0.0	7889.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	15779.9	0.0	15779.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.3	1.2
10°-20°	604.8	3.8
20°-30°	1141.9	7.2
30°-40°	1869.8	11.8
40°-50°	2899.1	18.4
50°-60°	4282.6	27.1
60°-70°	4076.6	25.8
70°-80°	657.8	4.2
80°-90°	62.0	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°	15779.9	100.0
0°-180°	15779.9	100.0

Coefficient of Utilization



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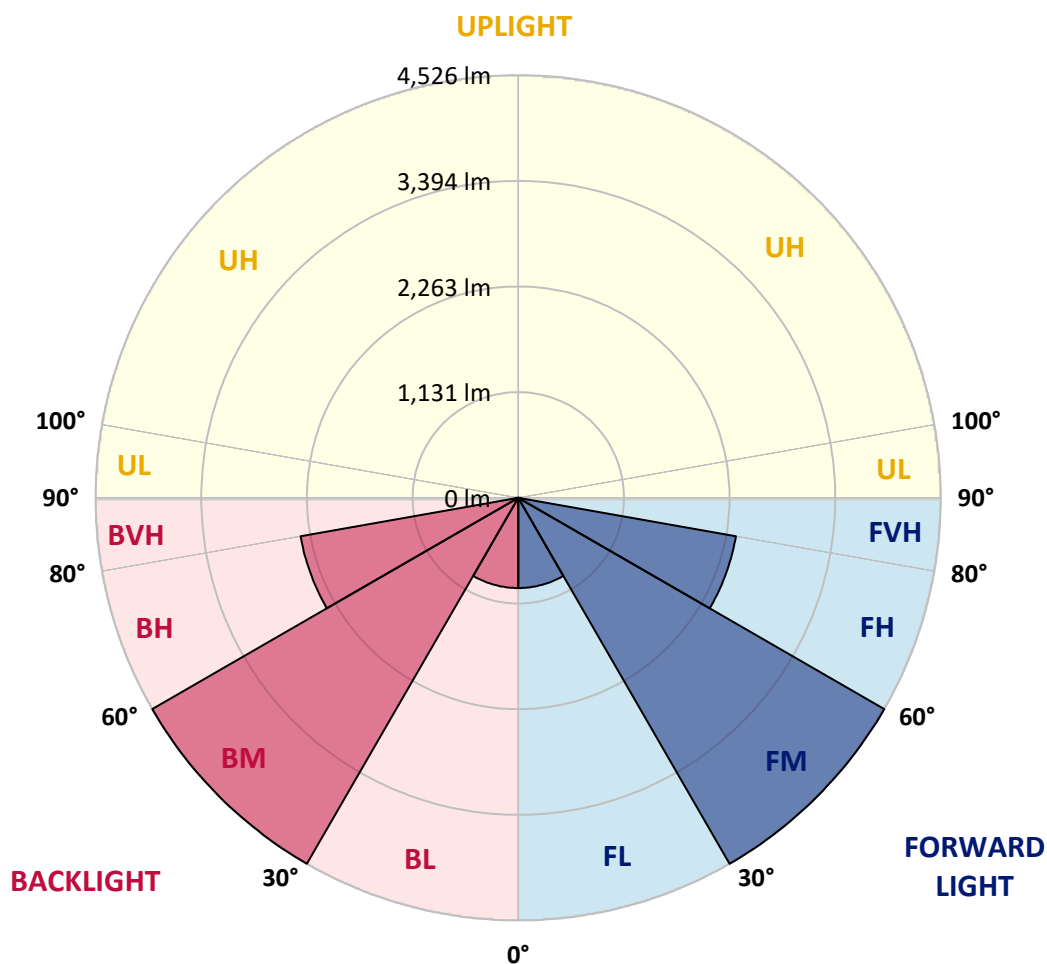
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	966.0	6.1			
FM	(30°-60°)	4525.7	28.7			
FH	(60°-80°)	2367.2	15.0			G2/5000
FVH	(80°-90°)	31.0	0.2			G1/100
BL	(0°-30°)	966.0	6.1	B2/1000		
BM	(30°-60°)	4525.7	28.7	B3/5000		
BH	(60°-80°)	2367.2	15.0	B3/2500		G2/5000
BVH	(80°-90°)	31.0	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0	1878.0
2.5°	1890.6	1884.3	1889.1	1885.1	1881.9	1878.7	1880.4	1885.9	1888.3	1889.1	1889.1
5°	1915.9	1910.4	1912.8	1912.8	1907.2	1905.7	1906.5	1910.4	1915.2	1915.2	1915.2
7.5°	1957.1	1951.6	1957.1	1954.0	1949.2	1947.6	1946.9	1950.0	1957.1	1957.1	1954.8
10°	2007.1	2000.7	2003.9	2002.2	1996.7	1994.3	1993.5	1998.3	2004.6	2003.9	2002.2
12.5°	2061.7	2054.5	2058.5	2053.7	2052.2	2049.8	2049.8	2049.0	2053.0	2049.8	2051.3
15°	2122.6	2117.9	2119.4	2116.3	2118.7	2117.0	2110.7	2107.6	2109.1	2104.4	2105.1
17.5°	2194.6	2183.6	2189.1	2187.6	2187.6	2190.7	2180.4	2176.5	2179.6	2174.8	2178.8
20°	2277.8	2266.7	2269.0	2265.9	2262.0	2265.1	2252.4	2255.6	2258.0	2254.8	2262.0
22.5°	2368.9	2354.6	2353.8	2355.3	2346.6	2347.5	2338.7	2346.6	2351.5	2342.7	2351.5
25°	2462.3	2447.2	2457.5	2453.5	2442.5	2444.8	2438.5	2446.5	2450.4	2439.3	2452.0
27.5°	2561.2	2550.9	2560.4	2562.8	2549.4	2558.8	2549.4	2556.5	2560.4	2543.8	2556.5
30°	2676.8	2666.5	2675.2	2681.6	2665.7	2680.8	2672.9	2677.6	2678.4	2658.6	2670.4
32.5°	2802.7	2786.9	2809.0	2812.2	2794.8	2813.0	2802.7	2809.0	2813.0	2786.1	2804.3
35°	2956.3	2936.5	2961.8	2957.8	2942.9	2957.8	2948.4	2957.8	2967.4	2934.9	2954.7
37.5°	3121.7	3101.1	3128.1	3120.9	3106.7	3117.0	3111.5	3117.8	3132.8	3098.0	3119.4
40°	3303.9	3278.6	3315.0	3302.2	3288.8	3287.3	3290.4	3294.4	3314.1	3275.4	3288.0
42.5°	3498.6	3471.7	3526.3	3506.5	3487.6	3474.9	3485.2	3493.1	3512.1	3468.5	3491.5
45°	3721.1	3690.2	3761.4	3737.8	3707.6	3681.5	3698.1	3710.0	3737.8	3685.5	3712.3
47.5°	3966.5	3931.7	4007.6	4000.6	3951.5	3894.5	3932.5	3966.5	3987.1	3923.8	3945.1
50°	4206.4	4179.5	4279.3	4288.0	4227.8	4147.9	4200.9	4252.3	4257.8	4174.7	4185.1
52.5°	4431.3	4404.3	4549.3	4603.9	4550.0	4455.1	4511.2	4563.5	4521.5	4413.9	4417.0
55°	4611.0	4588.8	4773.3	4914.3	4932.4	4854.1	4887.3	4885.7	4747.9	4582.5	4588.0
57.5°	4654.5	4651.3	4884.1	5182.6	5372.6	5382.2	5316.4	5148.6	4851.6	4629.2	4615.0
60°	4456.6	4476.4	4796.3	5322.7	5829.5	6040.0	5755.8	5276.8	4733.7	4424.9	4388.5
62.5°	3864.4	3916.6	4302.2	5151.8	6198.4	6796.9	6108.2	5082.1	4249.1	3846.2	3822.4
65°	2769.4	2860.5	3286.5	4396.4	6165.2	7462.0	6057.4	4360.8	3318.1	2853.4	2819.4
67.5°	1256.4	1349.1	1710.9	3010.1	5359.2	7281.5	5346.5	3041.8	1796.4	1353.8	1334.0
70°	455.2	471.1	587.4	1205.0	3425.0	5801.7	3571.4	1213.7	624.6	501.9	495.6
72.5°	275.5	277.9	302.5	431.5	1189.9	3522.4	1240.7	445.8	308.7	274.0	278.7
75°	175.0	173.4	215.4	263.6	422.0	1188.4	442.6	263.6	214.5	195.6	197.1
77.5°	125.9	129.9	154.4	197.1	266.0	403.0	261.3	188.4	154.4	126.7	129.0
80°	94.2	96.6	112.4	153.5	186.9	251.0	166.3	139.3	116.3	79.1	81.6
82.5°	68.1	68.1	73.6	111.6	114.0	135.4	90.3	98.2	76.8	56.2	56.2
85°	40.4	39.6	45.9	66.5	59.3	49.9	41.2	60.2	48.3	34.8	34.0
87.5°	14.2	15.1	14.2	19.0	15.8	13.4	12.7	16.6	13.4	11.9	11.1
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)