

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: P963129

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963129
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-SB2D-830-U-RW
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND RECTANGULAR
WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19300.8 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
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

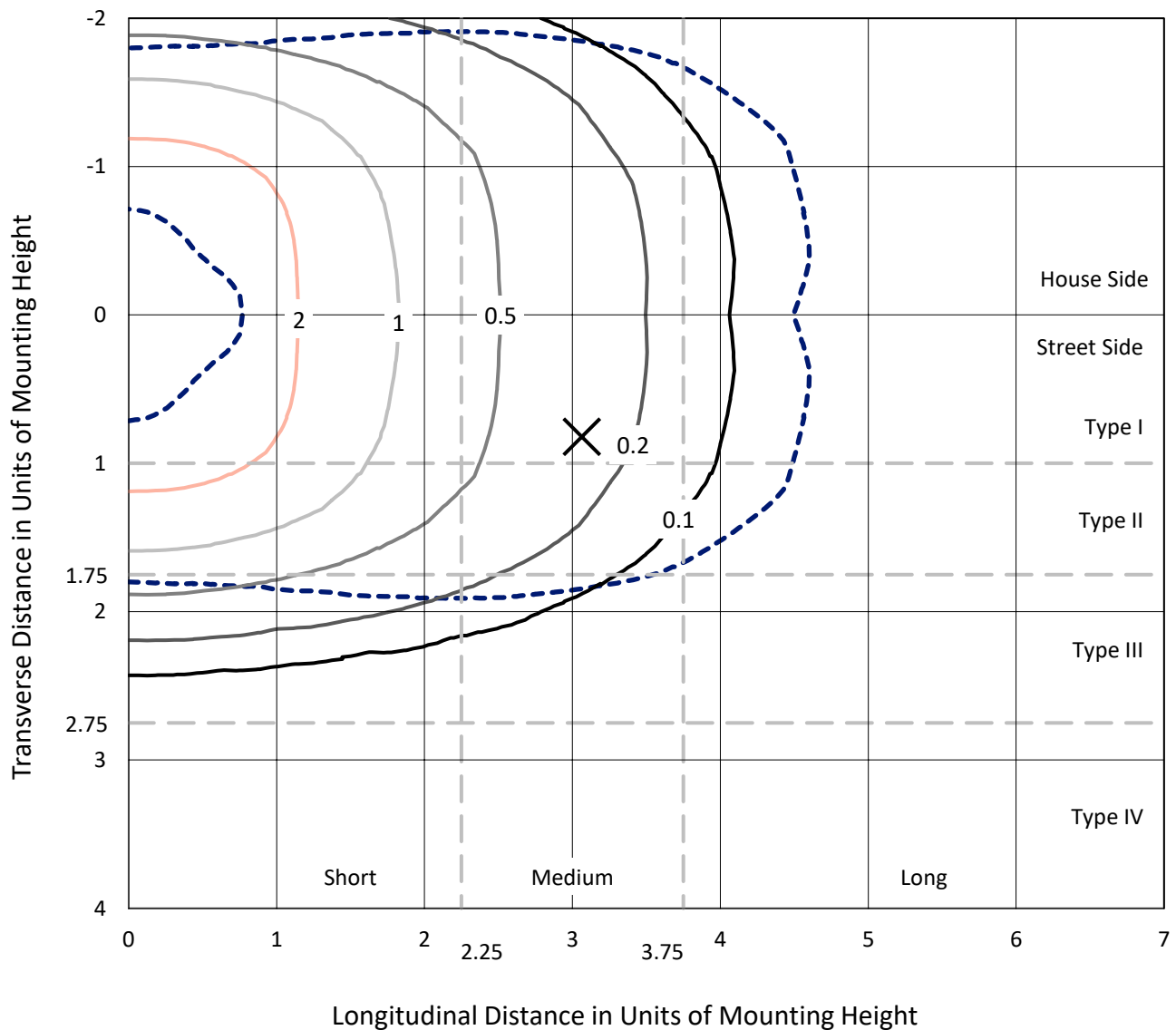


REPORT NUMBER: P963129

CATALOG NUMBER: NAV-SB2D-830-U-RW

Iso-Footcandle Lines of Horizontal Illumination

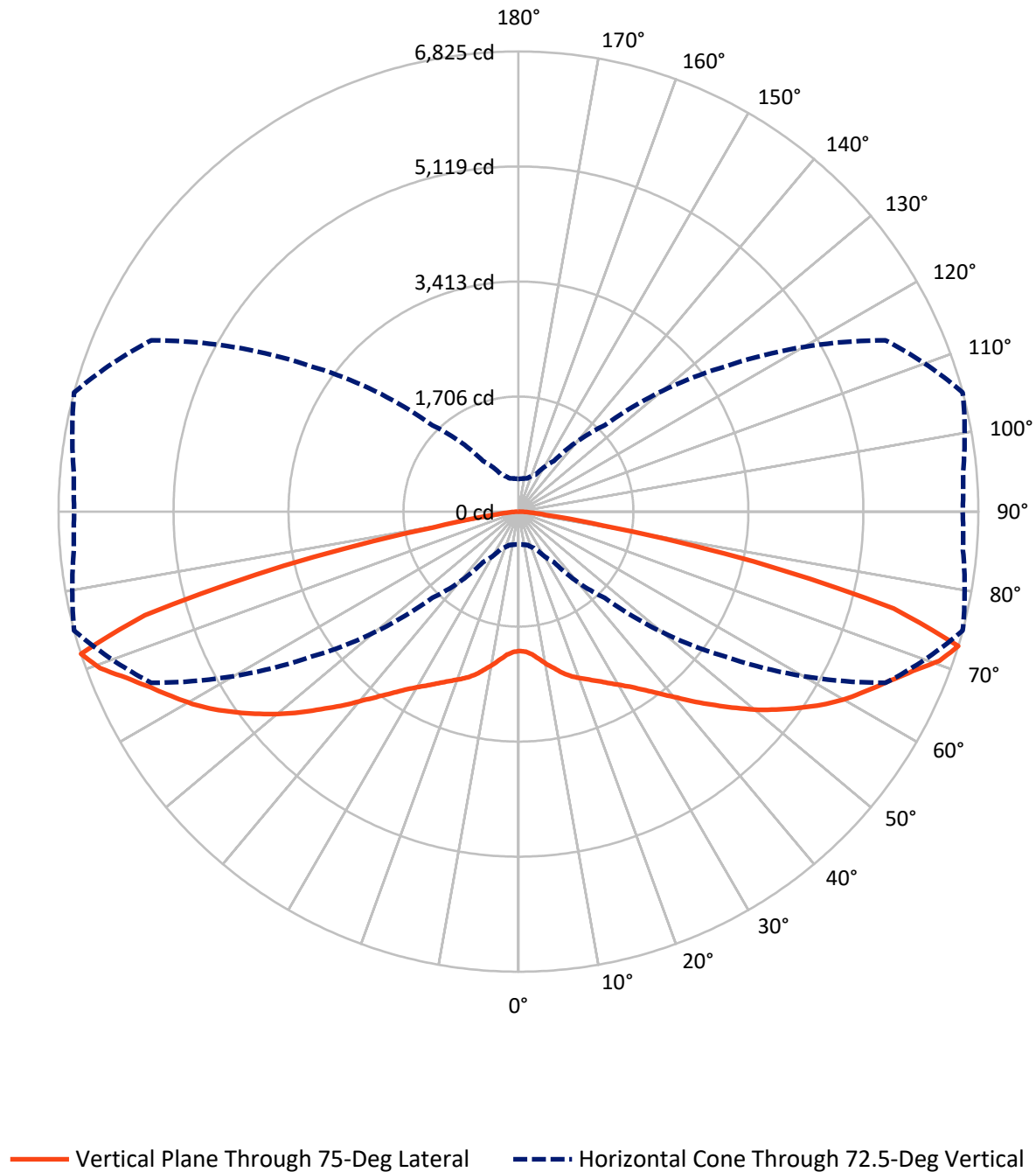
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
Type III - Medium - N/A

REPORT NUMBER: P963129
CATALOG NUMBER: NAV-SB2D-830-U-RW

Luminous Intensity Polar Plot



REPORT NUMBER: P963129

CATALOG NUMBER: NAV-SB2D-830-U-RW

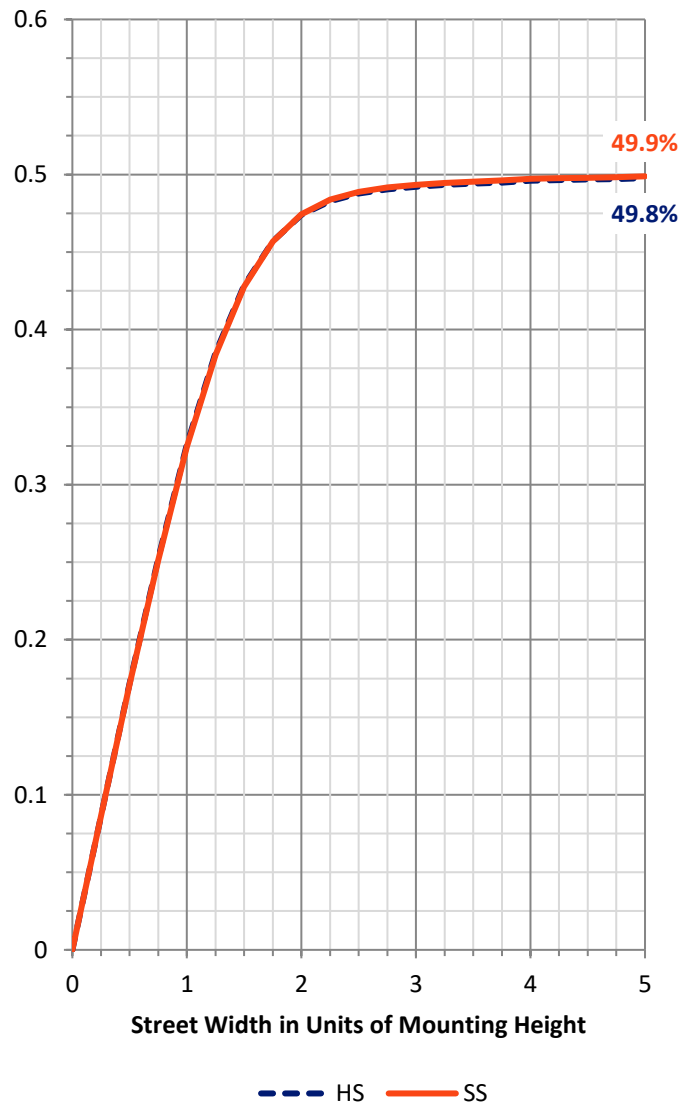
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9650.4	0.0	9650.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9650.4	0.0	9650.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	19300.8	0.0	19300.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.5	1.0
10°-20°	668.0	3.5
20°-30°	1290.7	6.7
30°-40°	2179.4	11.3
40°-50°	3456.3	17.9
50°-60°	4627.6	24.0
60°-70°	4404.0	22.8
70°-80°	2298.1	11.9
80°-90°	174.0	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°	19300.8	100.0
0°-180°	19300.8	100.0

Coefficient of Utilization



REPORT NUMBER: P963129

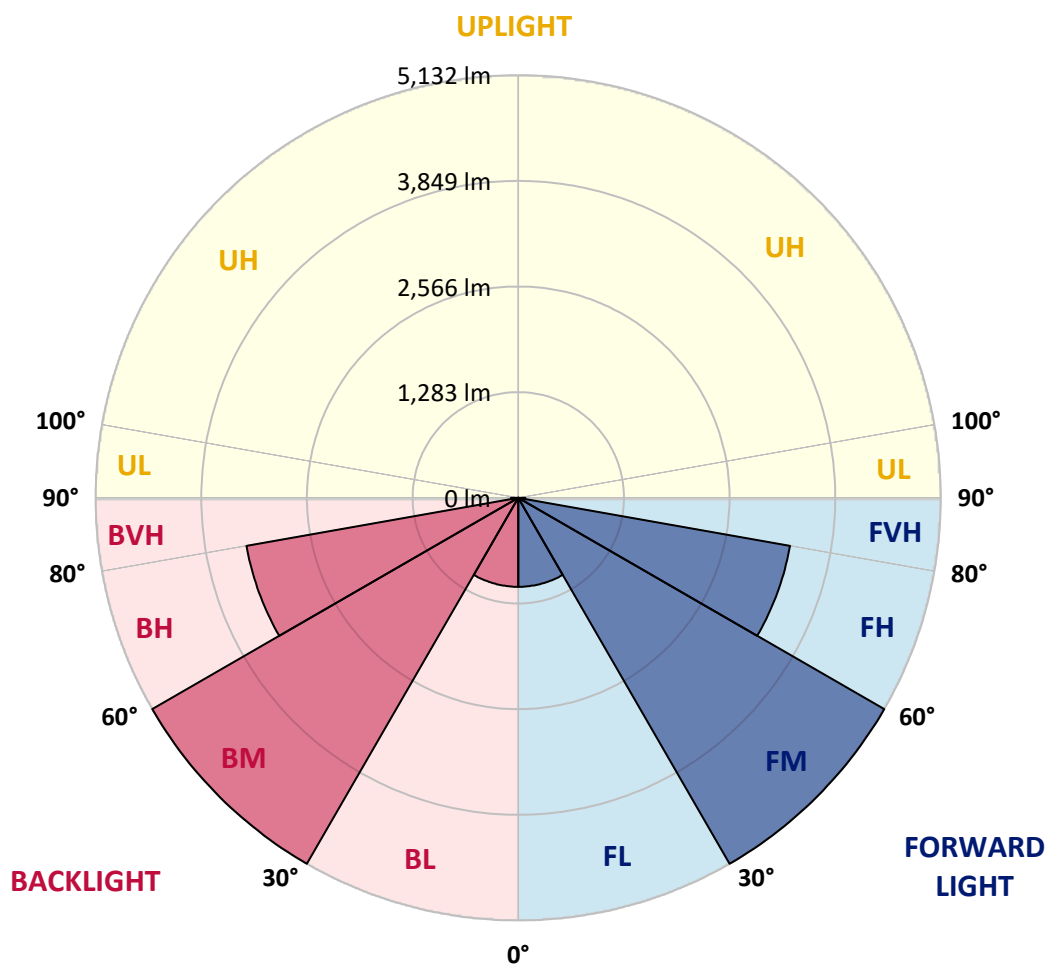
CATALOG NUMBER: NAV-SB2D-830-U-RW

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1080.6	5.6			
FM	(30°-60°)	5131.7	26.6			
FH	(60°-80°)	3351.1	17.4			G2/5000
FVH	(80°-90°)	87.0	0.5			G1/100
BL	(0°-30°)	1080.6	5.6	B3/2500		
BM	(30°-60°)	5131.7	26.6	B4/8500		
BH	(60°-80°)	3351.1	17.4	B4/5000		G4/5000
BVH	(80°-90°)	87.0	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 III Medium



REPORT NUMBER: P963129

CATALOG NUMBER: NAV-SB2D-830-U-RW

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4	2067.4
2.5°	2067.4	2065.5	2067.4	2069.5	2068.4	2068.4	2073.4	2076.3	2082.3	2081.3	2080.2
5°	2053.7	2052.7	2060.6	2069.5	2076.3	2088.1	2102.9	2113.8	2127.6	2130.6	2130.6
7.5°	2046.7	2043.8	2057.6	2073.4	2095.0	2124.6	2153.2	2182.7	2206.4	2214.3	2216.3
10°	2051.6	2052.7	2071.4	2100.9	2135.5	2176.8	2217.3	2267.5	2301.0	2308.9	2316.8
12.5°	2074.4	2072.3	2103.9	2151.2	2198.5	2250.8	2298.0	2353.2	2389.7	2408.4	2416.3
15°	2115.7	2111.8	2156.2	2226.1	2295.1	2356.2	2394.6	2446.9	2489.2	2512.9	2521.7
17.5°	2165.0	2167.0	2225.2	2315.8	2406.5	2475.5	2511.9	2538.5	2571.0	2591.7	2601.6
20°	2251.7	2255.7	2320.7	2428.1	2531.6	2610.5	2640.0	2630.1	2639.0	2654.7	2666.6
22.5°	2368.1	2370.0	2442.9	2559.2	2667.6	2754.3	2774.1	2733.6	2709.0	2719.8	2727.7
25°	2503.0	2515.9	2588.7	2707.9	2819.4	2902.1	2911.0	2849.9	2788.8	2791.8	2796.7
27.5°	2667.6	2679.5	2753.4	2871.5	2984.9	3056.9	3055.8	2974.0	2884.4	2861.7	2868.7
30°	2845.9	2858.7	2934.7	3056.9	3162.3	3225.4	3211.5	3114.0	2985.9	2943.5	2948.4
32.5°	3057.8	3065.7	3142.5	3264.7	3362.3	3412.5	3384.0	3263.8	3104.1	3055.8	3067.7
35°	3314.0	3325.8	3383.0	3498.3	3584.0	3625.4	3577.1	3435.3	3255.9	3201.7	3209.6
37.5°	3606.7	3598.9	3663.9	3766.4	3837.3	3862.9	3796.9	3628.4	3429.3	3365.3	3377.1
40°	3912.2	3908.2	3979.3	4077.8	4116.2	4132.0	4034.4	3850.1	3629.4	3560.4	3583.1
42.5°	4189.1	4186.2	4281.7	4391.1	4437.4	4419.7	4296.5	4085.6	3861.0	3782.1	3801.8
45°	4410.9	4406.9	4524.1	4677.9	4768.5	4739.0	4573.4	4345.8	4095.5	4013.7	4032.5
47.5°	4581.3	4583.3	4709.5	4899.6	5058.3	5069.1	4856.2	4610.9	4353.7	4261.0	4288.6
50°	4704.5	4710.4	4845.4	5056.3	5273.1	5368.6	5145.0	4882.9	4620.7	4516.3	4547.8
52.5°	4735.1	4745.9	4908.5	5155.9	5411.1	5593.3	5438.6	5144.0	4874.0	4774.4	4800.1
55°	4572.4	4594.2	4800.1	5148.0	5495.8	5741.2	5696.8	5409.1	5129.2	5026.7	5055.3
57.5°	4199.0	4229.6	4469.9	4924.2	5477.1	5842.7	5896.9	5663.3	5384.4	5285.9	5308.6
60°	3675.6	3712.1	3942.8	4438.5	5212.9	5880.1	6037.8	5910.7	5618.9	5523.4	5544.1
62.5°	2886.4	2933.7	3209.6	3791.0	4655.2	5705.7	6158.0	6134.4	5829.9	5710.6	5724.4
65°	1851.7	1901.9	2192.6	2879.4	3911.2	5171.6	6195.5	6352.1	6052.6	5886.1	5906.8
67.5°	1116.5	1139.2	1283.1	1745.3	2858.7	4366.5	5878.2	6593.6	6312.8	6105.8	6121.6
70°	714.4	727.2	813.0	1024.9	1616.1	3185.9	5091.8	6638.9	6628.1	6331.4	6329.5
72.5°	484.8	488.8	511.5	607.0	914.5	1810.3	3755.5	6010.2	6825.2	6622.1	6590.6
75°	354.8	376.5	412.9	429.7	519.4	904.7	2152.2	4222.6	5752.0	5840.8	5625.9
77.5°	264.1	265.1	315.3	335.1	370.5	481.9	910.5	2357.2	3571.2	3749.7	3344.6
80°	223.7	211.9	210.8	270.0	278.9	300.5	407.0	814.0	1279.1	775.5	586.3
82.5°	186.2	173.4	156.7	210.8	190.2	184.3	176.4	331.1	407.0	200.1	170.5
85°	130.1	124.1	118.3	138.0	108.4	92.7	84.8	154.7	171.5	84.8	74.9
87.5°	56.2	58.1	59.1	61.1	45.3	32.5	32.5	43.4	43.4	33.5	24.6
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)