

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: P967221

Luminaire Tested: **NAV-SB4D-740-U-RW**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967221
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-SB4D-740-U-RW
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND RECTANGULAR
WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 45541.8 lumens
Efficiency: N/A
Efficacy: 155.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B5 - U0 - G5

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

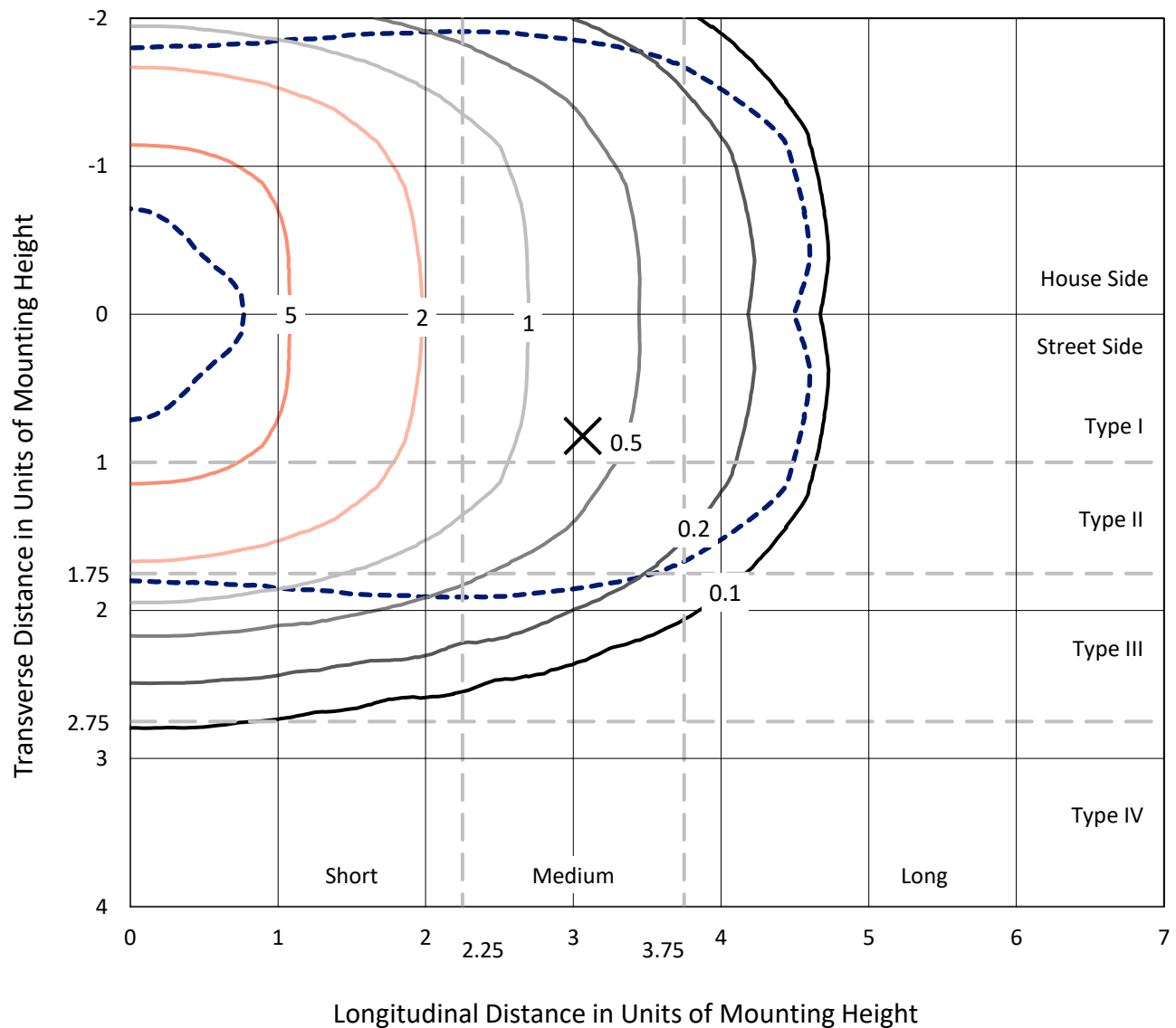


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Iso-Footcandle Lines of Horizontal Illumination

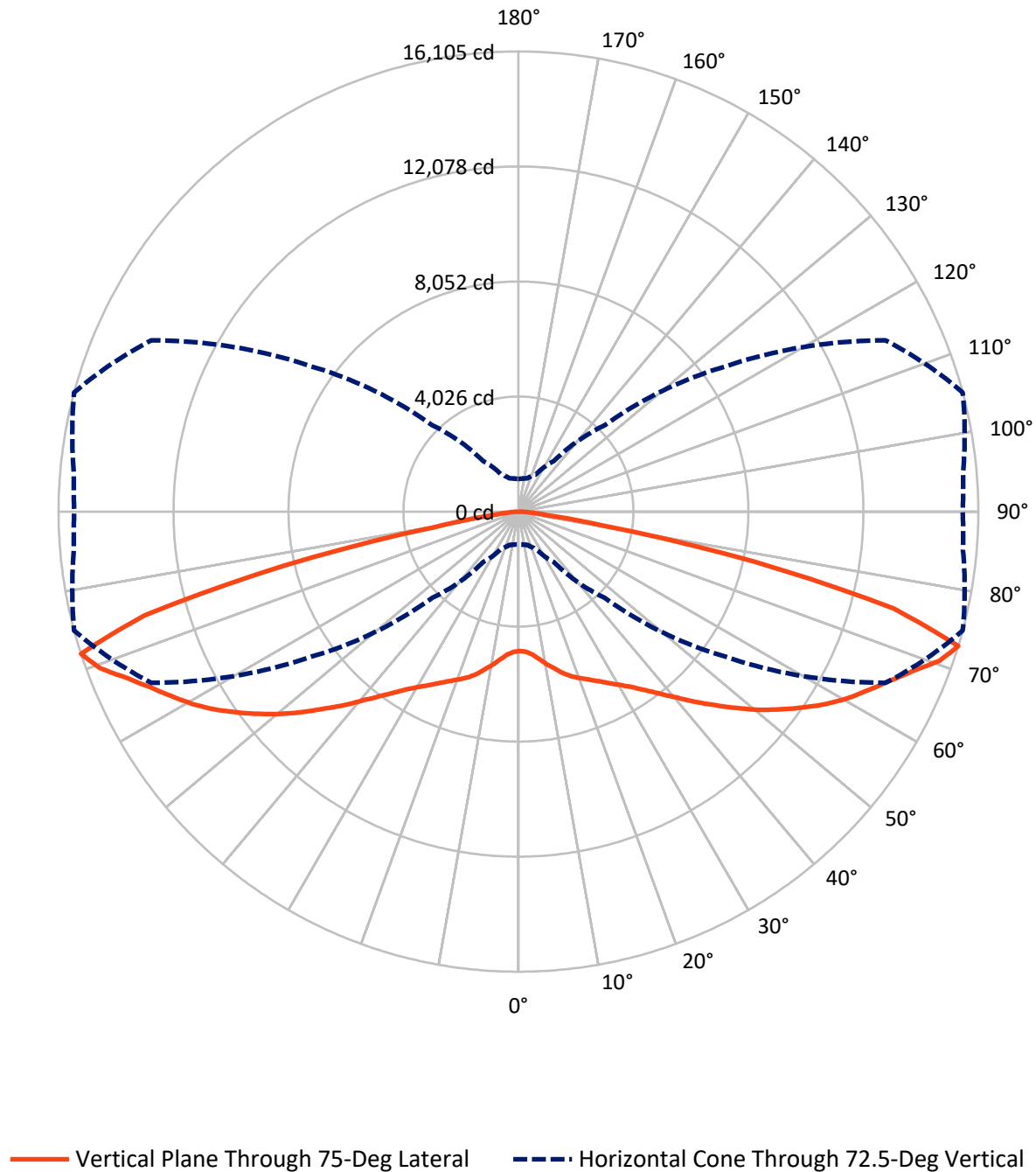
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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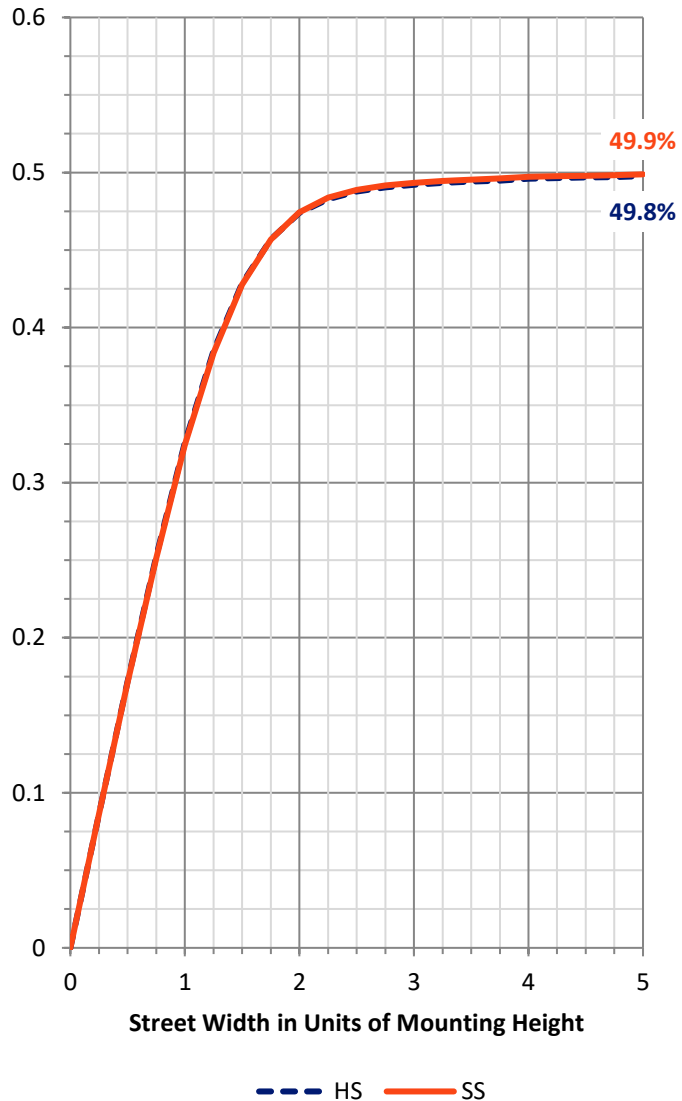
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	22770.9	0.0	22770.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	22770.9	0.0	22770.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	45541.8	0.0	45541.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	477.9	1.0
10°-20°	1576.1	3.5
20°-30°	3045.5	6.7
30°-40°	5142.6	11.3
40°-50°	8155.6	17.9
50°-60°	10919.3	24.0
60°-70°	10391.7	22.8
70°-80°	5422.6	11.9
80°-90°	410.5	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°	45541.8	100.0
0°-180°	45541.8	100.0

Coefficient of Utilization



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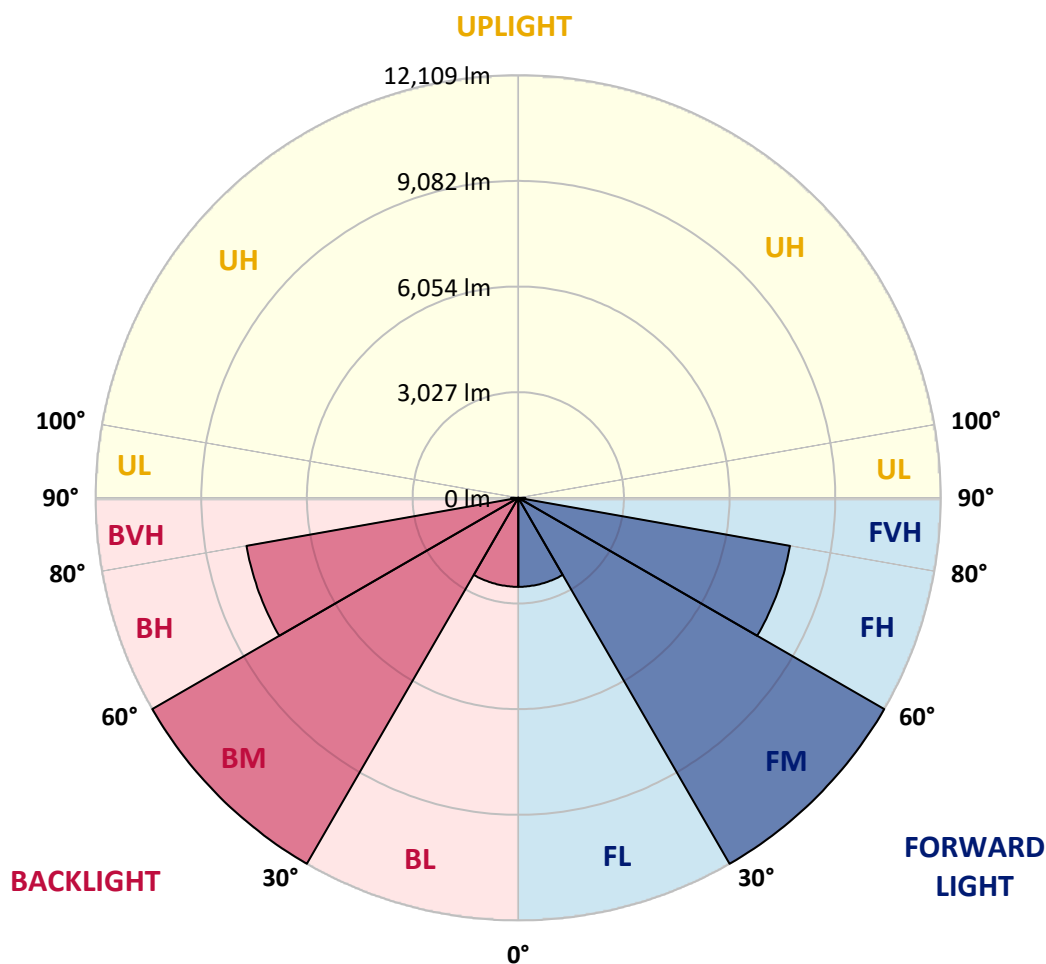
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2549.8	5.6			
FM	(30°-60°)	12108.7	26.6			
FH	(60°-80°)	7907.1	17.4			G4/12000
FVH	(80°-90°)	205.2	0.5			G2/225
BL	(0°-30°)	2549.8	5.6	B4/5000		
BM	(30°-60°)	12108.7	26.6	B5		
BH	(60°-80°)	7907.1	17.4	B5		G5
BVH	(80°-90°)	205.2	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4878.4	4878.4	4878.4	4878.4	4878.4	4878.4	4878.4	4878.4	4878.4	4878.4	4878.4
2.5°	4878.4	4873.7	4878.4	4883.0	4880.6	4880.6	4892.3	4899.3	4913.2	4910.9	4908.5
5°	4845.8	4843.4	4862.1	4883.0	4899.3	4927.2	4962.0	4987.6	5020.1	5027.1	5027.1
7.5°	4829.5	4822.5	4855.1	4892.3	4943.5	5013.2	5080.6	5150.4	5206.2	5224.8	5229.4
10°	4841.2	4843.4	4887.6	4957.4	5038.8	5136.5	5231.8	5350.4	5429.4	5448.0	5466.6
12.5°	4894.6	4890.0	4964.4	5076.0	5187.6	5310.8	5422.5	5552.6	5638.7	5682.9	5701.5
15°	4992.3	4982.9	5087.6	5252.7	5415.5	5559.6	5650.3	5773.5	5873.6	5929.3	5950.2
17.5°	5108.5	5113.2	5250.4	5464.3	5678.2	5841.0	5927.1	5989.8	6066.6	6115.4	6138.6
20°	5313.2	5322.4	5476.0	5729.3	5973.5	6159.5	6229.3	6206.1	6227.0	6264.2	6292.1
22.5°	5587.6	5592.2	5764.3	6038.6	6294.4	6499.0	6545.5	6450.2	6392.1	6417.6	6436.3
25°	5906.0	5936.3	6108.4	6389.7	6652.5	6847.8	6868.7	6724.6	6580.4	6587.4	6599.1
27.5°	6294.4	6322.3	6496.7	6775.8	7043.1	7212.8	7210.6	7017.6	6806.0	6752.5	6768.8
30°	6715.3	6745.5	6924.6	7212.8	7461.7	7610.5	7577.9	7347.7	7045.4	6945.5	6957.1
32.5°	7215.2	7233.8	7415.2	7703.5	7933.7	8052.3	7984.9	7701.1	7324.4	7210.6	7238.4
35°	7819.7	7847.7	7982.5	8254.5	8456.9	8554.5	8440.6	8105.8	7682.6	7554.7	7573.3
37.5°	8510.4	8491.7	8645.3	8887.1	9054.4	9114.9	8959.1	8561.5	8091.9	7940.7	7968.6
40°	9231.2	9221.9	9389.3	9621.8	9712.5	9749.7	9519.5	9084.7	8563.9	8401.1	8454.5
42.5°	9884.6	9877.6	10103.1	10361.2	10470.5	10428.7	10138.0	9640.4	9110.3	8924.3	8970.8
45°	10407.7	10398.4	10675.2	11037.9	11251.8	11182.0	10791.4	10254.3	9663.7	9470.7	9514.9
47.5°	10810.1	10814.7	11112.3	11561.1	11935.4	11961.0	11458.8	10879.8	10272.9	10054.3	10119.4
50°	11100.6	11114.6	11433.2	11930.8	12442.4	12667.9	12140.0	11521.5	10903.0	10656.5	10730.9
52.5°	11172.7	11198.3	11582.0	12165.6	12767.8	13198.0	12833.0	12137.7	11500.6	11265.8	11326.2
55°	10789.0	10840.2	11326.2	12147.0	12967.8	13546.8	13442.2	12763.2	12102.8	11861.0	11928.4
57.5°	9907.9	9979.9	10547.2	11619.2	12923.6	13786.4	13914.2	13363.1	12705.1	12472.5	12526.0
60°	8673.1	8759.1	9303.2	10472.8	12300.5	13874.7	14246.7	13946.8	13258.5	13033.0	13081.8
62.5°	6810.6	6922.2	7573.3	8945.2	10984.4	13463.1	14530.4	14474.5	13756.1	13474.8	13507.2
65°	4369.1	4487.7	5173.7	6794.3	9228.9	12202.8	14618.8	14988.5	14281.6	13888.6	13937.4
67.5°	2634.5	2688.0	3027.4	4117.9	6745.5	10303.1	13870.0	15558.2	14895.4	14407.2	14444.3
70°	1685.8	1716.1	1918.3	2418.3	3813.4	7517.5	12014.4	15665.1	15639.6	14939.6	14935.0
72.5°	1144.0	1153.3	1206.8	1432.3	2157.8	4271.5	8861.4	14181.6	16104.6	15625.6	15551.2
75°	837.1	888.3	974.3	1013.8	1225.4	2134.6	5078.3	9963.6	13572.4	13781.6	13274.8
77.5°	623.2	625.5	744.0	790.6	874.3	1137.0	2148.5	5562.0	8426.6	8847.5	7891.9
80°	527.9	499.9	497.6	637.1	658.0	709.2	960.3	1920.6	3018.1	1829.9	1383.5
82.5°	439.5	409.3	369.7	497.6	448.7	434.8	416.3	781.3	960.3	472.0	402.3
85°	306.9	292.9	279.0	325.5	255.7	218.5	200.0	365.1	404.6	200.0	176.7
87.5°	132.5	137.1	139.5	144.1	107.0	76.8	76.8	102.3	102.3	79.0	58.1
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)