

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: P196897

Luminaire Tested: **NAV-AF-01-D-UNV-5NQ-8030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P196897  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24130)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-AF-01-D-UNV-5NQ-8030-600  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3377 lumens  
Efficiency: N/A  
Efficacy: 99.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B2 - U0 - G0

Input Watts (W): 34  
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: 25 FT

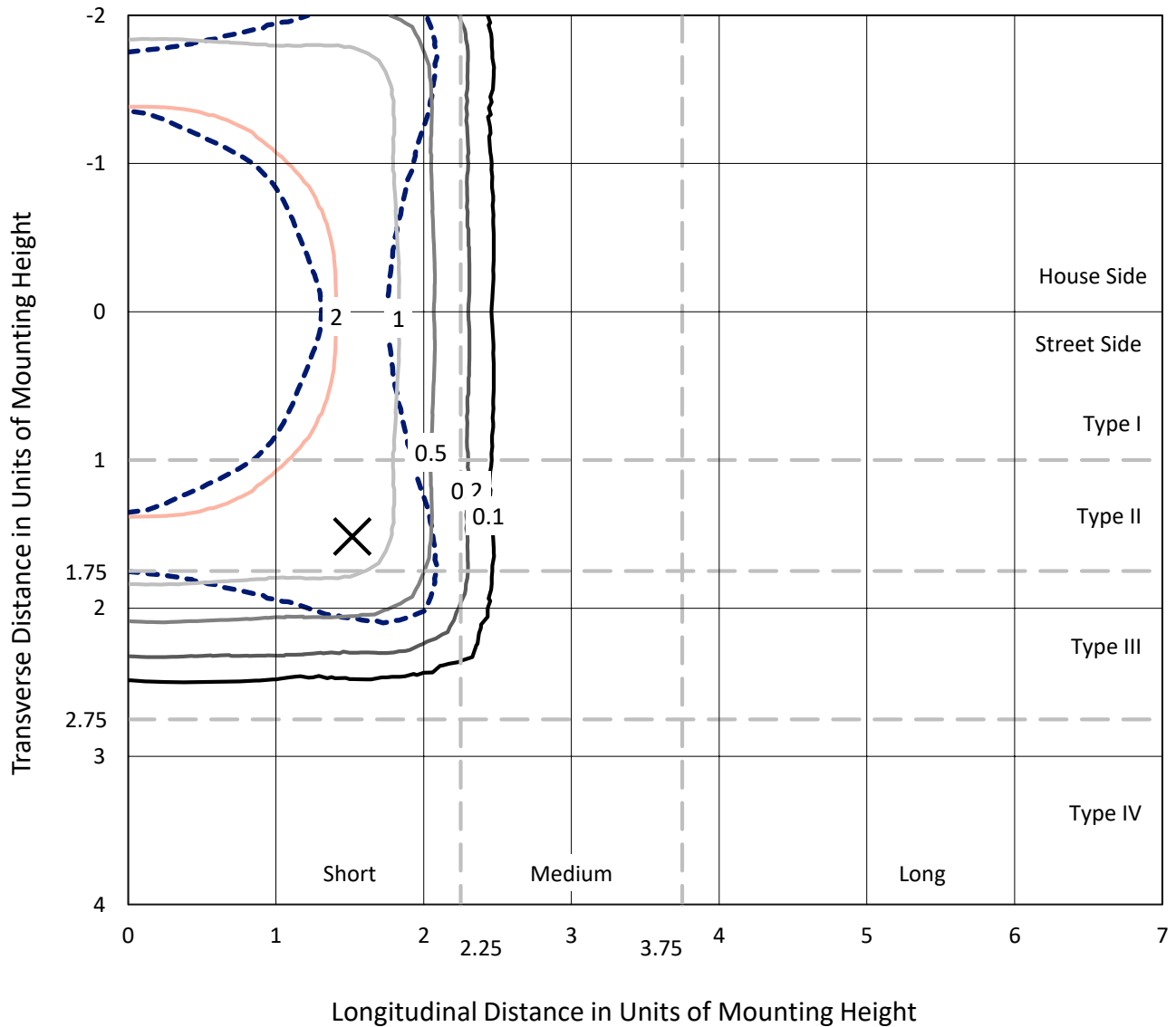


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### Iso-Footcandle Lines of Horizontal Illumination

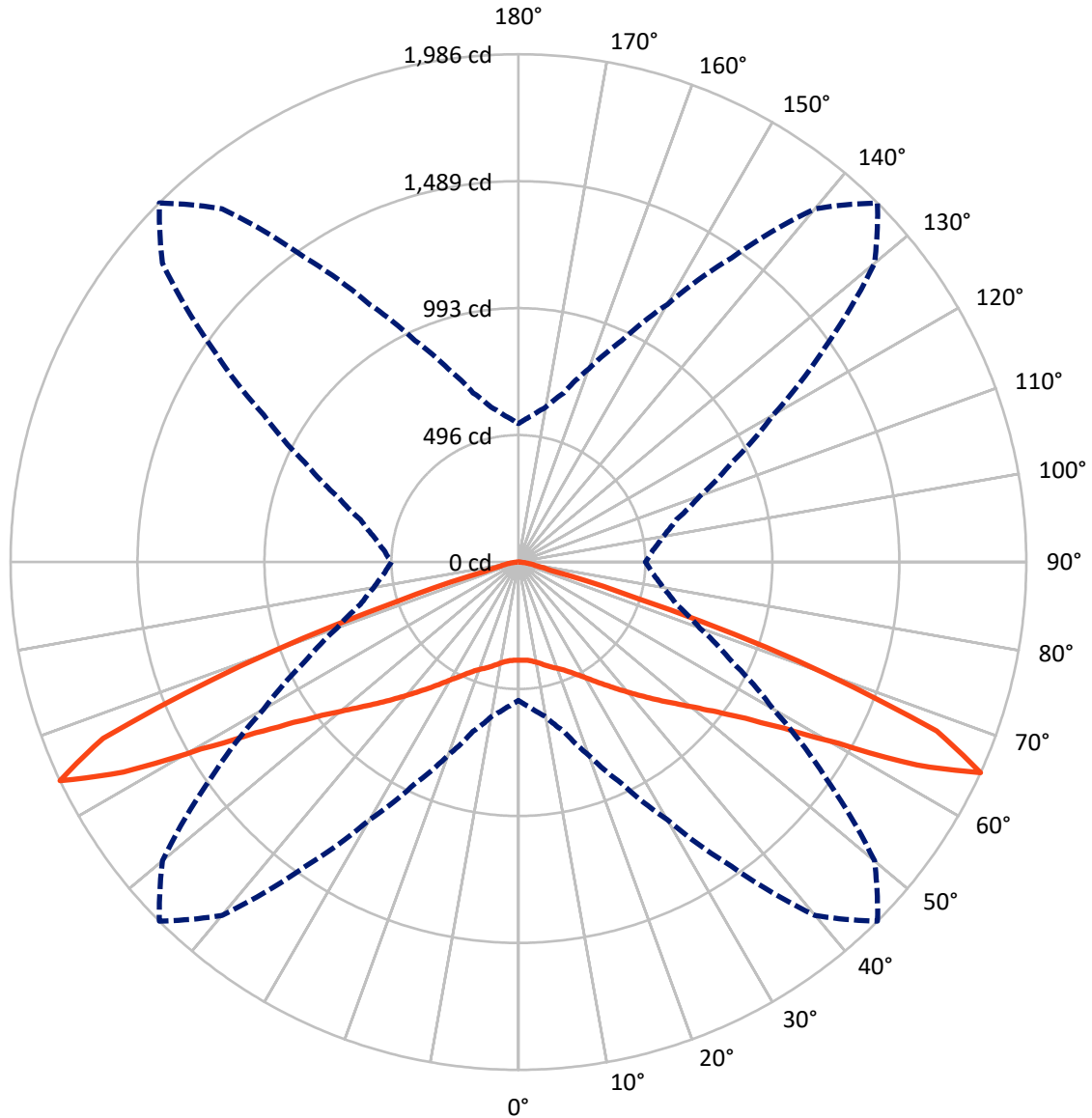
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.8 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1688.5	0.0	1688.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	1688.5	0.0	1688.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	3377.0	0.0	3377.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.4	1.1
10°-20°	119.9	3.6
20°-30°	223.7	6.6
30°-40°	377.1	11.2
40°-50°	612.5	18.1
50°-60°	959.7	28.4
60°-70°	906.0	26.8
70°-80°	122.1	3.6
80°-90°	18.6	0.6
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°	3377.0	100.0
0°-180°	3377.0	100.0

**Coefficient of Utilization**



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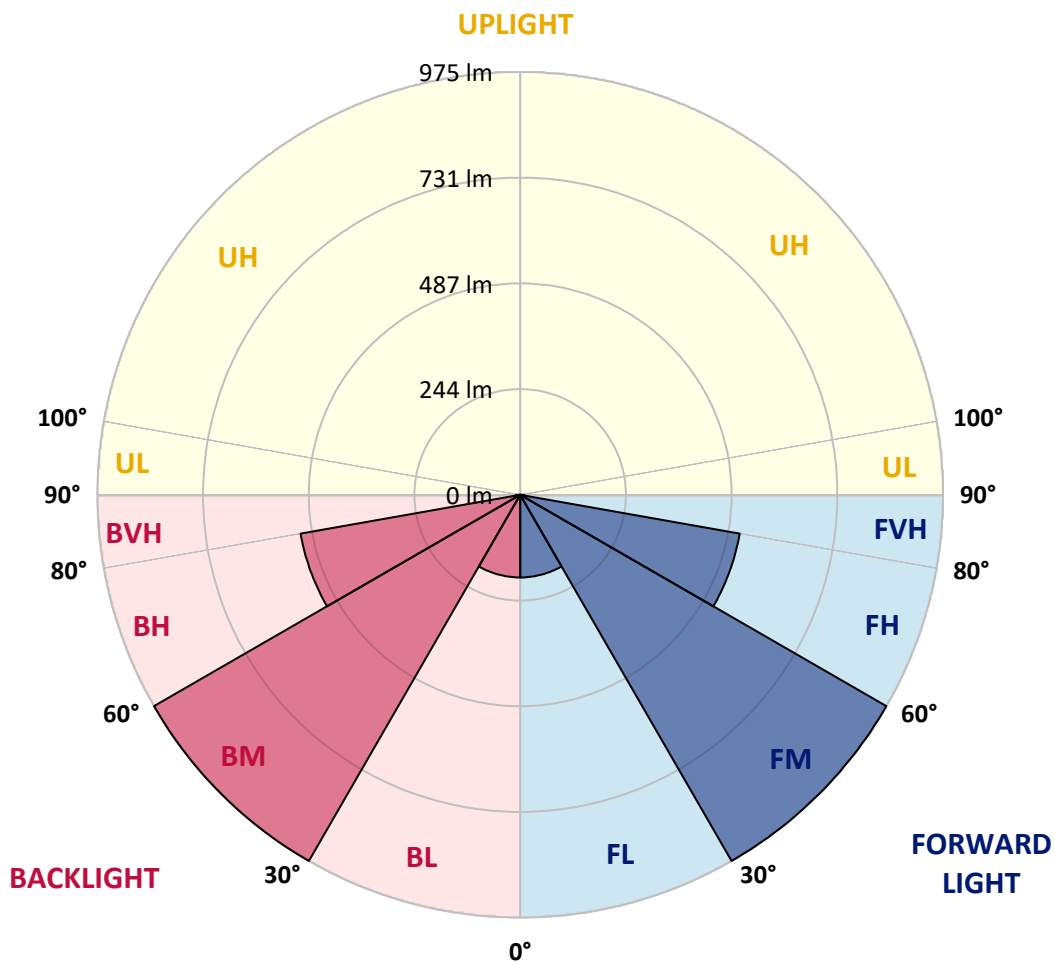
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	190.5	5.6			
FM	(30°-60°)	974.7	28.9			
FH	(60°-80°)	514.0	15.2			G0/660
FVH	(80°-90°)	9.3	0.3			G0/10
BL	(0°-30°)	190.5	5.6	B1/500		
BM	(30°-60°)	974.7	28.9	B1/1000		
BH	(60°-80°)	514.0	15.2	B2/1000		G0/660
BVH	(80°-90°)	9.3	0.3			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G0**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	384.1	384.1	384.1	384.1	384.1	384.1	384.1	384.1	384.1	384.1	384.1
2.5°	387.3	387.3	387.9	387.7	386.9	386.2	385.6	384.8	384.3	383.9	383.7
5°	389.4	389.4	390.0	389.8	389.2	388.3	387.9	387.3	386.7	386.2	386.4
7.5°	394.6	394.9	395.1	394.9	394.2	393.6	392.8	392.5	391.7	391.1	391.5
10°	402.6	402.6	402.9	403.1	402.6	401.2	401.2	400.7	399.9	399.1	399.3
12.5°	411.5	411.5	411.7	411.7	411.7	410.8	411.1	410.8	409.8	409.4	409.8
15°	420.1	420.3	420.3	420.7	420.7	420.9	421.8	421.8	421.4	421.2	421.2
17.5°	430.2	430.6	430.8	431.5	431.7	432.1	432.9	433.1	433.4	432.7	432.9
20°	443.7	443.9	444.5	444.7	445.6	445.6	446.0	445.8	445.3	444.5	444.5
22.5°	458.8	459.2	460.5	460.5	461.5	460.9	461.1	460.5	459.4	459.0	458.6
25°	478.6	479.2	480.3	479.8	480.3	479.2	479.2	479.2	478.6	478.0	477.7
27.5°	503.6	502.6	503.6	502.8	502.6	501.7	501.9	501.5	500.9	500.7	499.8
30°	529.7	528.4	529.1	529.3	528.9	528.7	527.8	527.2	526.1	526.3	525.7
32.5°	559.6	558.3	558.9	559.2	558.7	559.2	558.9	557.5	556.2	557.1	557.1
35°	595.1	594.3	596.0	596.6	595.3	594.7	593.9	592.2	590.3	591.6	591.8
37.5°	637.8	636.8	638.0	639.7	637.4	636.1	632.8	630.3	629.0	629.6	630.5
40°	682.2	682.4	686.0	686.4	683.9	682.4	679.1	675.3	671.7	671.7	672.8
42.5°	728.9	729.6	733.8	735.2	734.4	731.7	727.0	722.4	717.8	718.6	719.9
45°	781.7	780.9	785.3	788.9	788.2	787.4	783.0	774.6	770.4	770.2	772.3
47.5°	837.3	838.9	843.6	849.7	849.5	847.4	841.7	833.9	826.1	826.7	829.3
50°	902.1	904.4	912.2	918.3	919.1	918.5	911.7	902.7	891.7	892.4	895.7
52.5°	960.1	963.5	972.5	985.1	992.9	996.5	992.1	983.7	972.5	973.2	976.7
55°	1012.7	1018.0	1031.4	1048.7	1064.2	1078.8	1085.3	1085.1	1076.9	1078.8	1083.4
57.5°	1045.7	1053.1	1073.5	1101.3	1132.2	1161.4	1186.7	1210.5	1215.7	1225.6	1225.6
60°	1001.3	1018.6	1045.7	1093.3	1154.1	1219.7	1290.8	1360.0	1404.6	1439.8	1420.8
62.5°	836.2	861.7	899.7	962.4	1057.1	1174.3	1317.1	1478.0	1645.9	1748.6	1673.3
65°	541.1	573.0	614.5	685.0	804.2	955.1	1163.1	1452.4	1803.7	1985.9	1817.6
67.5°	214.4	236.0	261.3	311.3	414.8	562.9	796.4	1153.2	1592.7	1764.6	1575.9
70°	102.4	106.0	110.9	121.6	147.5	199.0	320.0	568.2	976.7	1157.9	953.4
72.5°	74.0	74.7	77.0	80.6	88.1	98.7	119.9	173.8	336.8	489.7	337.2
75°	56.2	57.0	58.3	60.2	64.2	69.2	77.2	92.6	115.3	133.0	115.1
77.5°	42.7	43.5	44.6	46.5	48.6	52.2	55.1	61.2	70.9	74.7	74.3
80°	31.1	32.6	34.3	36.0	37.4	39.1	39.3	42.3	47.8	51.3	50.3
82.5°	19.8	21.0	25.5	27.3	27.6	28.0	27.8	28.0	30.9	33.4	32.6
85°	12.6	13.5	15.8	17.9	17.5	18.3	18.3	17.9	16.6	14.3	17.0
87.5°	6.3	6.5	7.6	9.5	9.0	8.0	7.8	7.8	5.7	4.8	5.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	384.1	384.1	384.1	384.1	384.1	384.1	384.1	384.1
2.5°	383.1	383.5	382.9	382.9	382.7	383.1	382.4	382.4
5°	386.0	386.7	386.4	386.4	386.9	387.3	387.1	386.9
7.5°	391.3	391.7	392.1	392.3	392.8	392.5	393.0	392.8
10°	399.3	398.9	399.5	398.9	399.1	398.6	398.9	398.9
12.5°	409.4	408.7	408.3	407.9	407.9	407.1	407.1	407.3
15°	420.9	419.9	419.1	418.6	418.2	418.2	417.6	418.0
17.5°	432.3	431.3	429.8	429.8	429.1	428.7	428.3	429.4
20°	444.3	443.2	442.4	442.2	440.9	440.5	440.7	442.0
22.5°	458.2	457.5	457.5	457.1	456.3	455.7	455.7	457.1
25°	476.9	475.6	475.8	476.1	475.6	475.6	475.2	476.3
27.5°	499.8	498.8	499.4	499.8	499.4	500.0	499.4	500.3
30°	526.8	526.1	526.8	527.4	526.3	526.3	525.9	526.5
32.5°	558.9	558.1	558.5	558.5	557.1	555.8	554.1	555.4
35°	594.3	593.2	594.1	594.7	593.0	591.8	589.2	590.3
37.5°	633.2	633.6	634.7	637.4	637.0	634.9	633.0	633.8
40°	676.7	678.9	683.5	685.4	685.0	682.9	680.3	680.7
42.5°	726.0	728.7	733.5	736.7	735.2	732.3	729.1	730.4
45°	779.6	783.8	790.1	793.3	791.4	788.2	783.8	786.1
47.5°	836.4	844.8	853.2	857.5	856.8	852.4	846.7	847.4
50°	904.4	915.5	926.2	930.5	927.3	920.6	912.6	912.4
52.5°	988.9	1000.9	1009.8	1008.7	1000.9	990.4	981.4	980.9
55°	1094.5	1098.5	1097.3	1088.2	1074.6	1058.1	1046.6	1044.7
57.5°	1222.2	1208.8	1189.0	1161.6	1130.9	1099.8	1078.8	1071.0
60°	1378.3	1317.5	1246.8	1172.4	1104.4	1053.5	1021.3	1001.8
62.5°	1507.3	1331.2	1173.2	1043.8	938.0	875.1	831.2	804.0
65°	1463.1	1150.1	921.2	754.4	638.9	573.9	527.4	496.5
67.5°	1130.3	768.5	534.8	370.7	281.1	237.9	207.8	188.3
70°	569.9	294.7	178.6	126.0	107.7	100.1	95.1	92.1
72.5°	167.2	111.7	92.8	82.0	75.5	70.9	67.9	66.5
75°	92.6	75.5	66.7	60.6	56.4	53.2	51.3	50.1
77.5°	63.7	54.9	50.5	46.5	43.1	40.8	39.3	38.1
80°	44.6	40.2	38.3	36.2	33.7	31.8	29.7	28.8
82.5°	29.7	27.8	27.3	25.7	24.2	22.1	18.3	17.0
85°	17.5	17.3	17.3	16.6	15.6	13.7	10.9	10.9
87.5°	6.1	6.3	6.5	6.9	6.7	5.7	4.6	4.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)