

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: P959221

Luminaire Tested: **NAV-SB1A-727-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959221
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-727-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3637.7 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G0

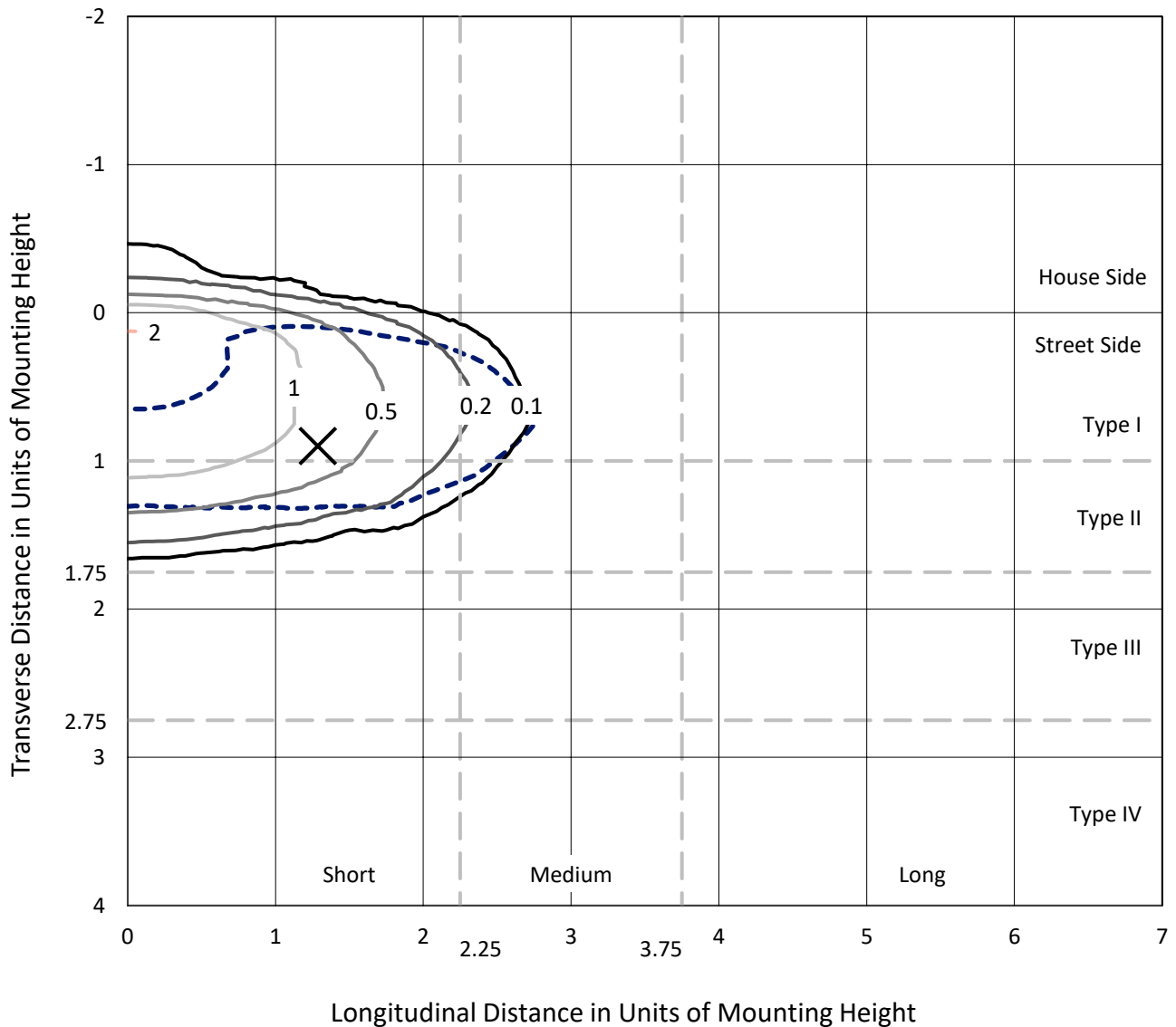
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

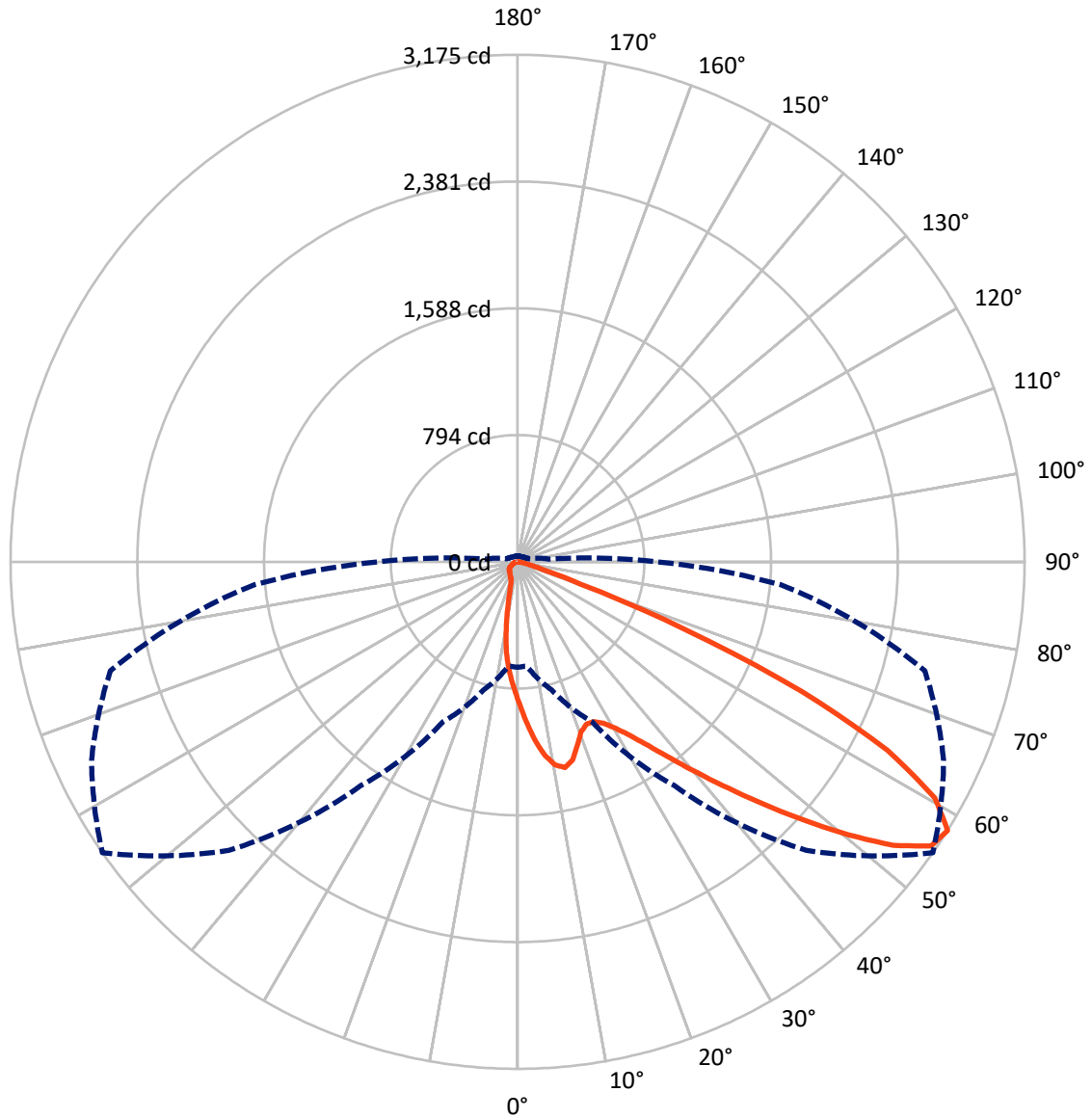
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	284.1	0.0	284.1
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	3353.6	0.0	3353.6
	% Fixture	92.2	0.0	92.2
Total	Lumens	3637.7	0.0	3637.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.6	2.2
10°-20°	197.0	5.4
20°-30°	315.2	8.7
30°-40°	533.5	14.7
40°-50°	876.0	24.1
50°-60°	962.7	26.5
60°-70°	552.2	15.2
70°-80°	112.8	3.1
80°-90°	6.7	0.2
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°	3637.7	100.0
0°-180°	3637.7	100.0

Coefficient of Utilization

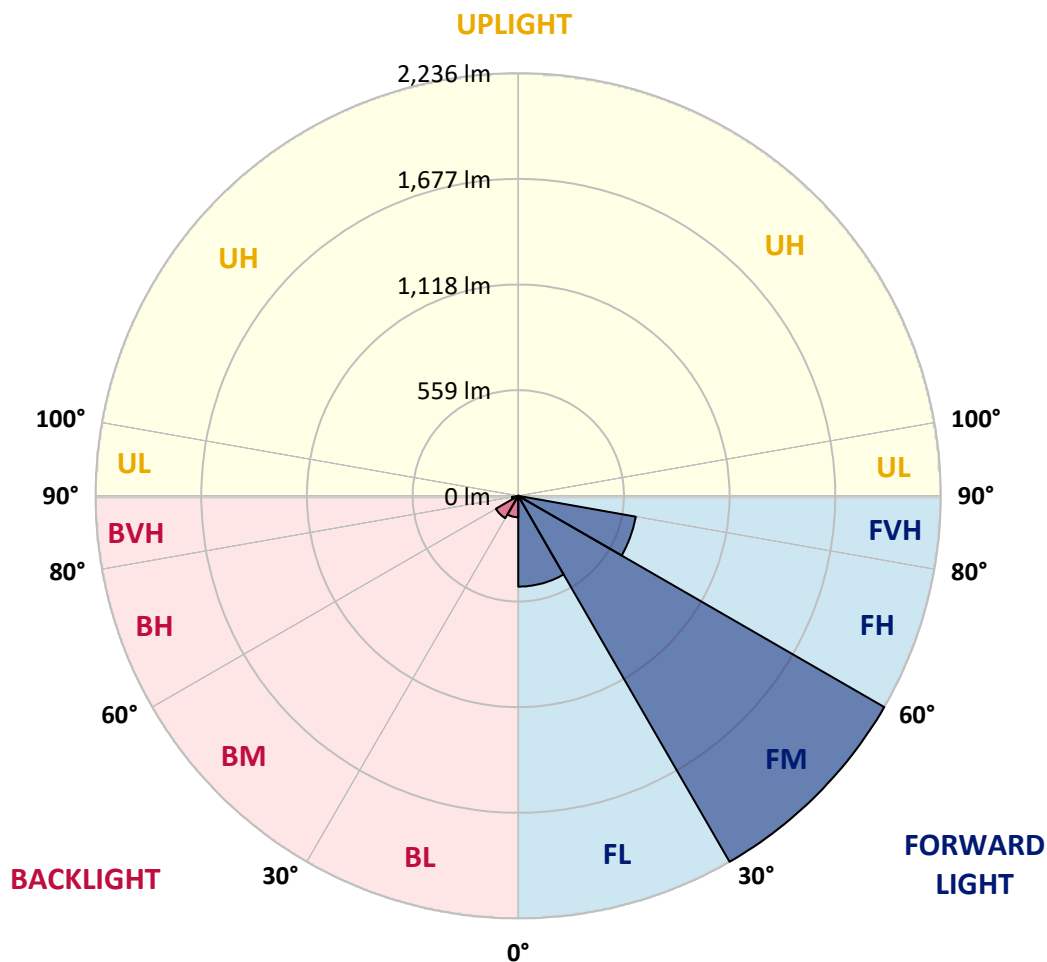


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	480.4	13.2			
FM (30°-60°)	2235.8	61.5			
FH (60°-80°)	631.3	17.4			G0/660
FVH (80°-90°)	6.2	0.2			G0/10
BL (0°-30°)	113.4	3.1	B1/500		
BM (30°-60°)	136.4	3.8	B0/220		
BH (60°-80°)	33.8	0.9	B0/110		G0/110
BVH (80°-90°)	0.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G0
 Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	876.6	876.6	876.6	876.6	876.6	876.6	876.6	876.6	876.6	876.6	876.6
2.5°	1087.6	1074.0	1071.9	1069.3	1043.2	1023.8	995.5	964.5	929.8	894.3	878.6
5°	1256.5	1245.8	1243.8	1231.2	1201.6	1168.4	1118.2	1054.7	989.8	913.6	880.9
7.5°	1289.3	1287.3	1296.5	1296.0	1292.0	1265.8	1223.3	1147.8	1050.4	937.4	886.7
10°	1143.3	1148.5	1175.9	1199.9	1264.6	1302.4	1293.1	1230.8	1112.8	964.5	893.2
12.5°	1010.2	1004.2	1023.8	1050.9	1126.3	1238.4	1322.0	1300.1	1184.1	995.3	902.8
15°	926.8	924.3	935.4	947.9	1005.3	1118.4	1288.4	1356.4	1252.8	1031.6	917.5
17.5°	900.2	898.1	901.5	904.7	941.9	1029.4	1208.4	1390.9	1318.5	1073.1	933.6
20°	921.9	919.2	918.8	916.4	931.8	991.5	1135.9	1393.4	1377.5	1110.8	947.5
22.5°	985.4	982.3	971.3	961.3	962.8	996.6	1103.6	1368.8	1421.9	1145.9	956.2
25°	1100.4	1095.3	1072.5	1039.2	1018.1	1032.5	1108.5	1336.2	1464.3	1173.6	952.0
27.5°	1244.5	1237.8	1208.4	1159.0	1110.8	1093.3	1144.2	1313.7	1499.5	1194.6	942.8
30°	1385.6	1376.8	1347.9	1309.5	1239.1	1183.9	1208.6	1323.7	1541.5	1216.7	930.7
32.5°	1537.9	1529.6	1491.2	1443.6	1385.3	1311.1	1296.7	1371.9	1592.8	1247.4	922.1
35°	1730.5	1717.5	1663.1	1598.2	1536.3	1461.1	1416.0	1455.1	1661.2	1294.3	926.8
37.5°	1950.0	1932.4	1873.7	1784.1	1703.4	1619.3	1561.4	1569.5	1761.5	1357.1	941.5
40°	2156.7	2140.8	2086.5	2002.2	1900.8	1798.8	1737.1	1719.1	1899.9	1433.6	967.0
42.5°	2280.8	2266.4	2243.5	2207.8	2122.5	2018.3	1940.5	1901.7	2063.6	1525.1	998.1
45°	2287.7	2275.2	2305.9	2347.4	2330.5	2261.3	2166.3	2095.3	2228.0	1611.0	1030.4
47.5°	2176.5	2168.0	2261.3	2406.2	2478.3	2507.6	2420.1	2272.7	2363.8	1672.7	1043.8
50°	1873.2	1870.1	2062.1	2328.1	2534.7	2723.3	2687.7	2437.8	2469.0	1704.6	1031.1
52.5°	1624.2	1612.8	1724.8	2078.2	2452.8	2836.9	2949.2	2599.7	2542.5	1710.6	1001.7
55°	1231.9	1221.8	1362.2	1660.1	2188.8	2796.5	3140.6	2766.9	2595.3	1695.1	949.0
57.5°	660.8	654.6	832.0	1104.9	1711.0	2554.2	3175.1	2943.6	2639.7	1654.0	875.2
60°	257.3	256.1	322.6	536.1	1039.9	2078.0	3000.8	3049.7	2667.5	1603.6	813.5
62.5°	155.7	159.1	169.8	240.7	459.4	1290.9	2599.1	2929.0	2686.1	1557.4	762.7
65°	128.7	128.9	130.3	165.3	220.1	540.2	1956.6	2532.1	2640.1	1475.1	690.4
67.5°	110.4	112.3	117.6	131.2	155.2	236.9	1126.5	1961.3	2360.4	1283.5	577.8
70°	87.0	89.7	96.2	107.9	119.8	148.3	416.4	1305.0	1803.2	967.5	437.0
72.5°	73.4	73.1	76.5	87.7	95.1	104.3	160.2	731.2	1048.0	461.9	216.3
75°	56.8	59.0	63.2	73.4	77.8	75.5	86.8	267.1	375.5	140.0	73.6
77.5°	44.4	46.2	50.0	59.9	64.4	53.6	50.0	95.5	120.6	50.2	33.2
80°	20.0	21.5	34.1	44.2	52.5	37.0	27.2	48.9	53.6	22.9	16.8
82.5°	3.6	6.0	20.0	23.4	27.0	24.0	14.1	25.3	26.2	9.2	5.8
85°	0.2	0.4	7.0	8.5	10.8	7.9	4.3	10.0	8.7	3.2	2.3
87.5°	0.0	0.0	0.0	0.2	0.2	1.1	1.3	1.8	1.3	1.1	0.9
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	876.6	876.6	876.6	876.6	876.6	876.6	876.6	876.6	876.6	876.6
2.5°	862.4	830.7	799.7	774.3	759.5	734.4	717.8	715.1	708.2	714.2
5°	845.8	788.9	731.2	679.7	637.2	582.5	541.7	524.4	509.4	514.6
7.5°	838.0	748.0	658.4	570.2	479.6	392.1	327.1	299.9	279.3	282.2
10°	827.5	705.7	565.1	430.5	309.1	222.7	177.8	161.2	152.1	152.3
12.5°	819.4	655.0	456.7	291.8	188.2	142.2	128.3	124.2	121.6	121.8
15°	815.4	595.3	349.7	194.4	134.6	120.4	117.1	115.3	113.5	113.3
17.5°	808.6	528.9	255.9	142.0	117.8	112.9	109.9	107.9	105.7	105.2
20°	798.6	453.6	187.1	120.0	110.4	106.5	102.5	99.8	97.2	96.7
22.5°	779.9	373.9	143.8	111.0	105.0	100.8	95.7	92.7	90.0	89.5
25°	745.4	299.2	121.2	105.5	100.2	95.1	89.7	85.5	83.0	82.5
27.5°	701.6	235.0	109.9	100.2	94.2	89.5	83.4	79.4	77.2	76.7
30°	650.1	181.0	103.4	94.4	87.0	83.0	77.6	74.2	72.9	72.9
32.5°	594.4	144.7	100.8	88.6	80.8	76.3	72.0	70.6	70.2	70.0
35°	542.1	125.6	99.3	83.8	75.1	70.9	69.1	69.3	70.2	70.2
37.5°	495.7	119.5	98.7	80.6	70.2	66.4	67.5	69.5	68.7	68.7
40°	453.8	120.2	98.3	78.1	66.2	64.0	66.2	64.6	62.3	62.1
42.5°	421.7	125.9	97.4	76.1	63.8	62.1	61.2	58.7	58.5	59.0
45°	398.4	130.8	97.2	75.1	61.0	58.1	57.0	54.5	59.0	60.1
47.5°	370.7	130.8	97.2	72.0	56.5	55.5	53.6	50.9	55.5	56.5
50°	335.1	122.5	93.3	68.4	52.9	52.3	49.1	45.7	44.9	45.5
52.5°	290.1	107.4	83.6	63.4	49.3	48.0	44.2	41.7	41.0	41.0
55°	238.6	90.0	70.6	56.3	45.5	43.0	40.4	39.3	38.5	38.1
57.5°	194.0	73.8	56.8	50.0	41.9	38.8	37.9	36.6	35.5	34.7
60°	159.3	58.1	46.8	44.4	38.3	35.5	35.3	33.4	30.5	30.0
62.5°	122.9	42.6	39.5	38.5	34.7	32.3	31.9	28.3	23.8	22.9
65°	86.8	33.2	31.9	33.8	31.0	28.7	27.6	22.2	17.5	16.8
67.5°	61.0	27.8	25.1	29.6	27.0	24.0	23.4	18.9	14.6	14.1
70°	43.6	22.7	20.6	25.3	21.5	21.1	19.8	15.7	11.9	11.5
72.5°	30.7	17.3	15.9	21.9	14.8	18.1	16.2	12.1	9.0	8.5
75°	22.7	12.3	11.2	12.8	10.8	13.6	11.5	8.1	5.6	5.4
77.5°	16.6	7.9	6.8	6.3	6.3	8.5	6.3	3.4	2.5	2.3
80°	11.7	3.6	3.2	2.7	2.5	2.0	0.9	0.4	0.2	0.2
82.5°	7.0	1.5	1.5	1.1	0.7	0.0	0.0	0.0	0.0	0.0
85°	1.5	0.7	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)