

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: P881713

Luminaire Tested: **NAV-SB1B-730-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881713
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-730-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3873 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

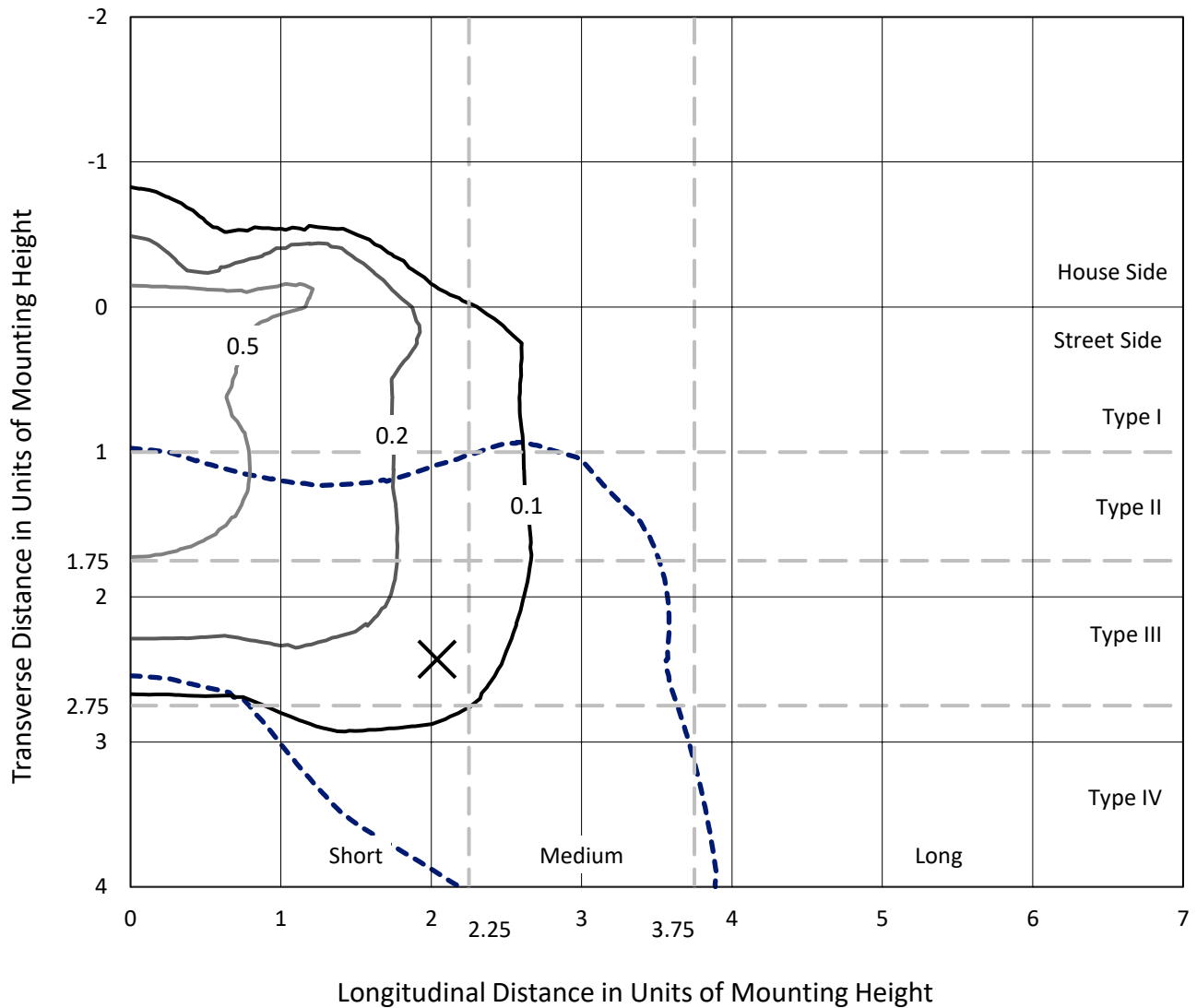
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

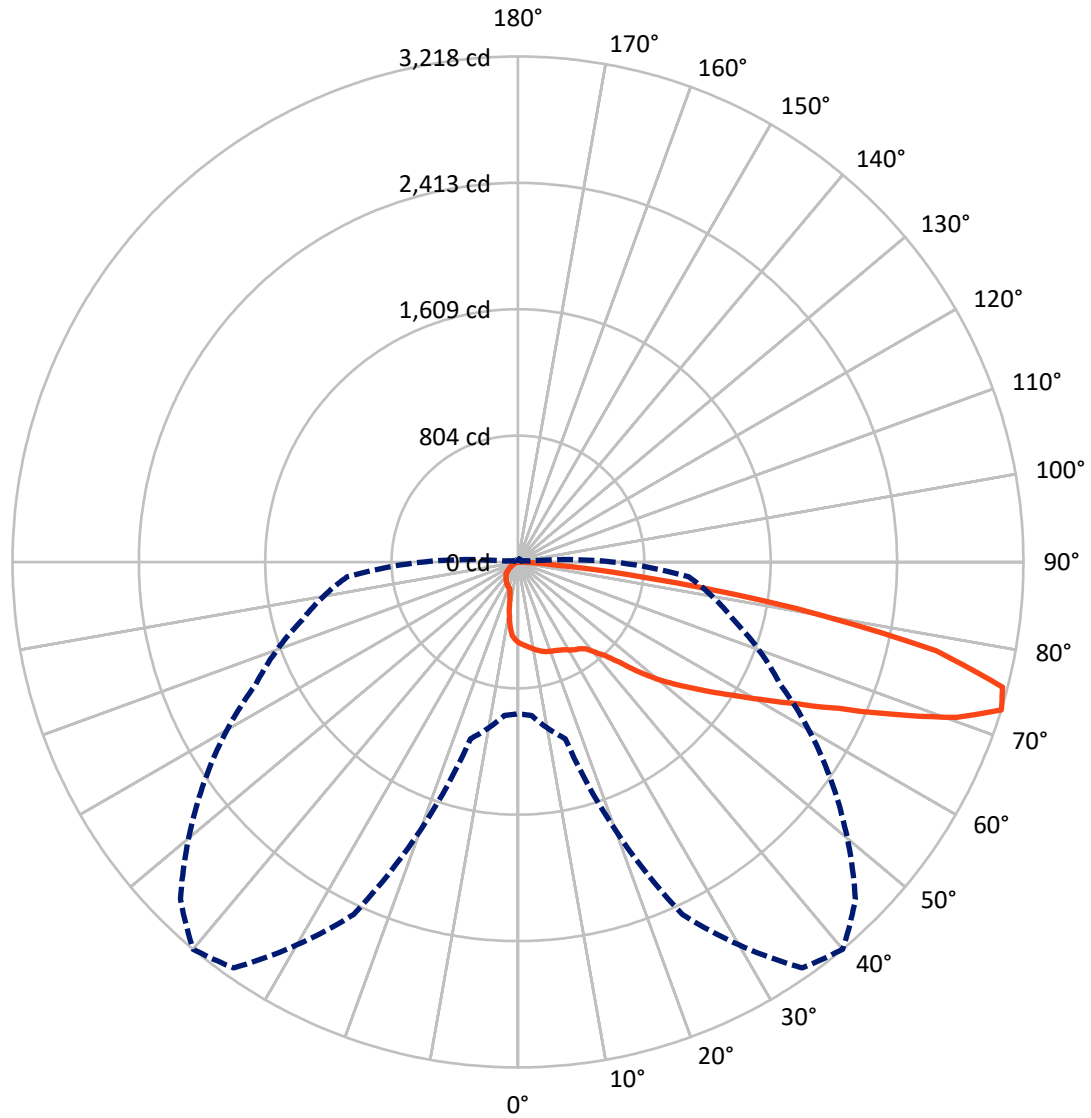
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	500.2	0.0	500.2
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	3372.8	0.0	3372.8
	% Fixture	87.1	0.0	87.1
Total	Lumens	3873.0	0.0	3873.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.8	1.2
10°-20°	127.2	3.3
20°-30°	205.8	5.3
30°-40°	303.8	7.8
40°-50°	511.4	13.2
50°-60°	794.0	20.5
60°-70°	993.5	25.7
70°-80°	813.4	21.0
80°-90°	77.1	2.0
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°	3873.0	100.0
0°-180°	3873.0	100.0

Coefficient of Utilization



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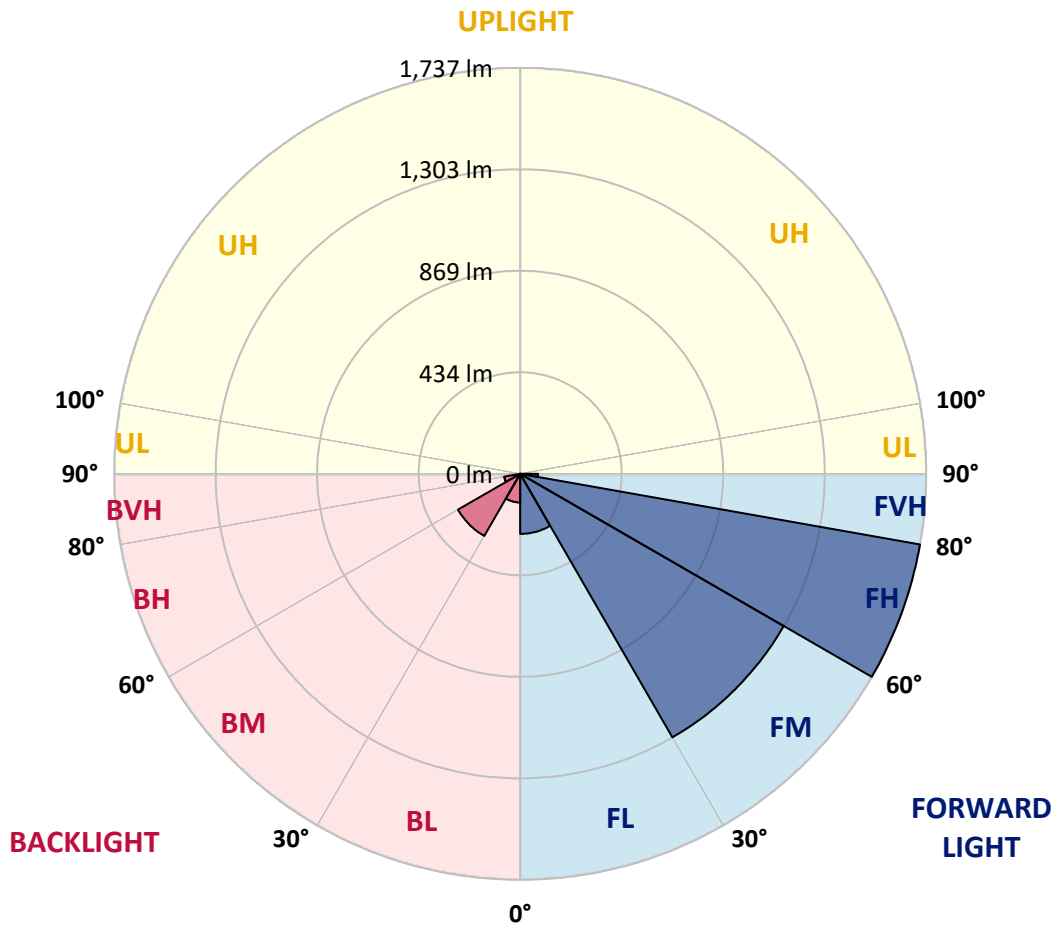
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	257.1	6.6			
FM (30°-60°)	1302.0	33.6			
FH (60°-80°)	1737.2	44.9			G1/1800
FVH (80°-90°)	76.5	2.0			G1/100
BL (0°-30°)	122.8	3.2	B1/500		
BM (30°-60°)	307.1	7.9	B1/1000		
BH (60°-80°)	69.7	1.8	B0/110		G0/110
BVH (80°-90°)	0.6	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-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	512.8	512.8	512.8	512.8	512.8	512.8	512.8	512.8	512.8	512.8	512.8
2.5°	528.3	530.3	529.2	526.8	526.2	525.1	523.6	523.0	521.0	519.2	517.2
5°	543.2	545.2	543.7	540.5	539.1	537.6	535.6	533.8	529.7	525.9	521.3
7.5°	559.5	561.2	559.5	554.8	552.5	550.7	547.8	545.2	540.5	535.0	529.2
10°	577.6	579.0	576.4	570.3	566.5	563.9	561.2	558.3	553.9	547.8	540.8
12.5°	594.5	596.2	592.2	584.9	580.5	577.9	574.9	572.6	568.2	562.4	555.1
15°	610.0	612.6	605.6	597.7	592.7	590.7	587.8	586.3	583.4	579.3	572.6
17.5°	621.6	623.4	616.1	606.7	601.2	599.7	597.7	598.6	598.0	596.0	591.6
20°	631.5	632.7	623.1	611.7	605.6	605.9	605.3	608.2	609.4	609.4	609.1
22.5°	643.8	644.1	631.8	617.5	610.2	612.3	613.2	616.4	618.7	621.0	626.3
25°	659.8	659.3	644.7	625.1	618.7	621.6	623.7	624.8	627.5	631.2	643.2
27.5°	683.8	682.0	663.3	637.4	629.8	632.4	636.2	635.6	634.5	637.4	657.5
30°	714.1	711.8	687.0	654.6	647.6	649.9	651.1	645.8	637.4	640.0	670.0
32.5°	762.2	758.1	723.7	673.8	663.0	665.7	664.2	653.4	640.9	643.5	682.6
35°	845.9	836.0	787.3	714.1	680.5	677.6	674.1	663.6	648.2	645.5	693.1
37.5°	1023.9	1006.4	923.2	792.6	720.2	701.3	690.5	680.0	656.0	645.5	705.0
40°	1224.6	1206.8	1110.8	923.8	786.1	754.1	728.4	699.2	664.2	649.3	723.7
42.5°	1434.0	1414.5	1315.9	1086.6	880.4	814.4	766.6	714.7	677.6	661.0	748.5
45°	1668.0	1643.5	1514.5	1256.4	1017.2	914.8	828.1	746.5	701.0	681.7	782.4
47.5°	1914.7	1883.0	1712.6	1421.2	1164.5	1053.6	940.7	803.4	735.4	712.6	828.1
50°	2133.5	2102.0	1917.1	1593.6	1302.2	1185.8	1069.1	882.1	787.0	756.4	889.7
52.5°	2290.8	2266.8	2103.2	1771.5	1445.4	1309.8	1185.5	973.7	852.4	812.4	962.3
55°	2396.1	2374.2	2235.0	1940.1	1612.0	1446.3	1300.1	1073.2	931.1	879.5	1042.6
57.5°	2459.9	2447.4	2330.4	2090.6	1777.1	1595.6	1431.4	1182.6	1023.9	958.5	1132.1
60°	2482.7	2472.5	2389.6	2234.2	1976.6	1775.0	1585.7	1306.0	1136.5	1048.4	1224.0
62.5°	2422.0	2424.1	2432.2	2404.2	2186.9	1985.0	1770.6	1454.1	1261.3	1150.2	1310.3
65°	2136.4	2153.4	2308.5	2592.7	2465.5	2248.2	2006.1	1635.0	1404.3	1266.0	1378.9
67.5°	1768.9	1793.4	1986.5	2702.9	2762.4	2589.8	2333.9	1865.5	1574.6	1383.8	1404.8
70°	1354.1	1380.3	1614.3	2679.9	3040.4	2963.1	2739.4	2158.6	1751.1	1465.5	1338.6
72.5°	966.4	979.8	1164.2	2474.8	3154.5	3217.5	3038.1	2436.3	1841.2	1420.3	1091.9
75°	679.1	676.8	799.0	1992.9	2976.8	3186.6	2933.4	2286.1	1666.2	1128.3	673.3
77.5°	295.8	296.4	399.1	1210.3	2375.9	2721.6	2438.4	1432.0	1161.6	598.0	284.1
80°	76.7	79.1	146.4	481.9	1430.5	1796.3	1487.1	629.5	536.7	145.9	54.3
82.5°	27.1	28.9	67.4	151.4	527.7	823.8	662.2	201.3	140.0	41.7	14.6
85°	7.9	9.3	36.2	46.4	109.1	232.8	160.7	39.1	34.4	21.6	3.8
87.5°	0.0	1.2	7.3	6.4	6.4	4.4	8.2	4.4	5.5	2.6	1.2
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	512.8	512.8	512.8	512.8	512.8	512.8	512.8	512.8	512.8	512.8	512.8
2.5°	515.4	513.4	509.0	504.4	500.0	495.9	494.7	490.4	488.3	488.6	488.3
5°	518.1	514.3	505.8	495.6	485.1	473.1	463.2	449.2	437.3	435.8	434.9
7.5°	525.1	518.9	505.2	485.4	459.1	426.2	395.6	365.2	348.0	338.7	338.1
10°	535.9	527.7	506.7	468.8	413.1	354.1	307.7	269.5	250.0	240.9	239.2
12.5°	548.7	539.7	509.0	440.5	353.5	276.2	226.1	202.7	198.7	198.1	197.8
15°	566.8	556.9	511.6	402.3	289.1	210.3	187.3	187.6	190.8	192.5	192.2
17.5°	586.9	577.0	507.9	355.6	225.5	179.7	179.1	181.7	186.4	188.1	187.9
20°	607.3	598.0	494.4	300.7	182.3	171.2	173.6	176.5	181.1	183.5	183.5
22.5°	628.3	620.2	473.1	242.4	164.5	165.1	168.0	170.9	176.2	178.8	178.8
25°	650.8	643.8	444.8	194.3	156.9	158.7	162.5	166.0	171.5	174.7	174.7
27.5°	673.5	668.3	412.8	162.2	149.9	152.0	156.4	161.0	166.6	170.4	170.6
30°	698.3	695.4	387.1	150.2	143.2	145.0	149.9	155.2	161.3	166.0	166.6
32.5°	723.7	723.1	374.5	159.0	137.1	138.3	142.6	147.9	155.5	161.3	161.9
35°	748.8	750.0	367.3	183.8	135.1	131.9	134.8	139.4	148.5	155.8	156.9
37.5°	780.9	783.8	367.0	210.6	140.0	125.4	127.5	130.7	138.6	147.0	148.5
40°	828.7	844.2	385.6	233.7	148.8	119.6	120.2	120.8	124.8	131.9	134.2
42.5°	892.3	937.5	453.0	249.4	152.3	114.3	112.3	109.1	108.5	112.3	114.3
45°	971.4	1050.4	571.4	258.2	148.8	108.5	103.0	94.5	91.3	93.9	93.9
47.5°	1064.4	1174.1	711.8	260.2	142.9	101.2	91.3	80.2	77.6	78.5	78.2
50°	1155.2	1266.9	835.2	243.3	133.3	91.9	78.5	69.1	67.4	67.7	67.7
52.5°	1235.4	1298.7	870.2	203.3	120.5	80.5	67.4	61.0	59.8	59.8	59.5
55°	1288.5	1264.2	775.9	155.5	104.4	68.8	57.8	54.5	54.0	53.7	53.1
57.5°	1299.5	1152.2	586.0	112.3	81.7	58.0	51.3	49.6	48.4	47.3	46.7
60°	1259.9	965.5	373.1	78.5	61.3	49.6	45.5	44.3	42.0	39.7	38.8
62.5°	1174.1	729.3	206.5	54.5	49.3	42.3	40.3	38.8	34.4	30.6	29.5
65°	1058.9	484.8	91.3	42.6	40.3	35.6	34.4	32.4	27.1	22.8	21.9
67.5°	943.1	279.2	41.1	34.1	32.4	29.2	28.3	26.8	23.0	19.0	18.4
70°	810.9	141.5	28.3	27.1	25.1	22.2	23.0	22.8	19.0	15.5	14.9
72.5°	603.8	70.3	21.3	20.4	18.1	15.8	19.0	18.7	14.9	11.7	11.1
75°	341.9	34.7	15.5	14.3	10.8	11.7	15.2	14.3	10.2	7.6	7.0
77.5°	135.6	17.8	10.2	8.8	6.4	7.9	11.1	9.6	5.3	3.2	2.9
80°	31.2	8.8	5.3	3.8	2.9	4.7	5.8	3.5	1.5	0.3	0.0
82.5°	8.8	3.8	1.8	1.5	1.5	1.8	1.5	0.6	0.0	0.0	0.0
85°	2.9	1.8	0.6	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0
87.5°	1.2	0.6	0.0	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	0.0

(END OF REPORT)