

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: P881938

Luminaire Tested: **NAV-SB1C-827-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881938
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4776 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

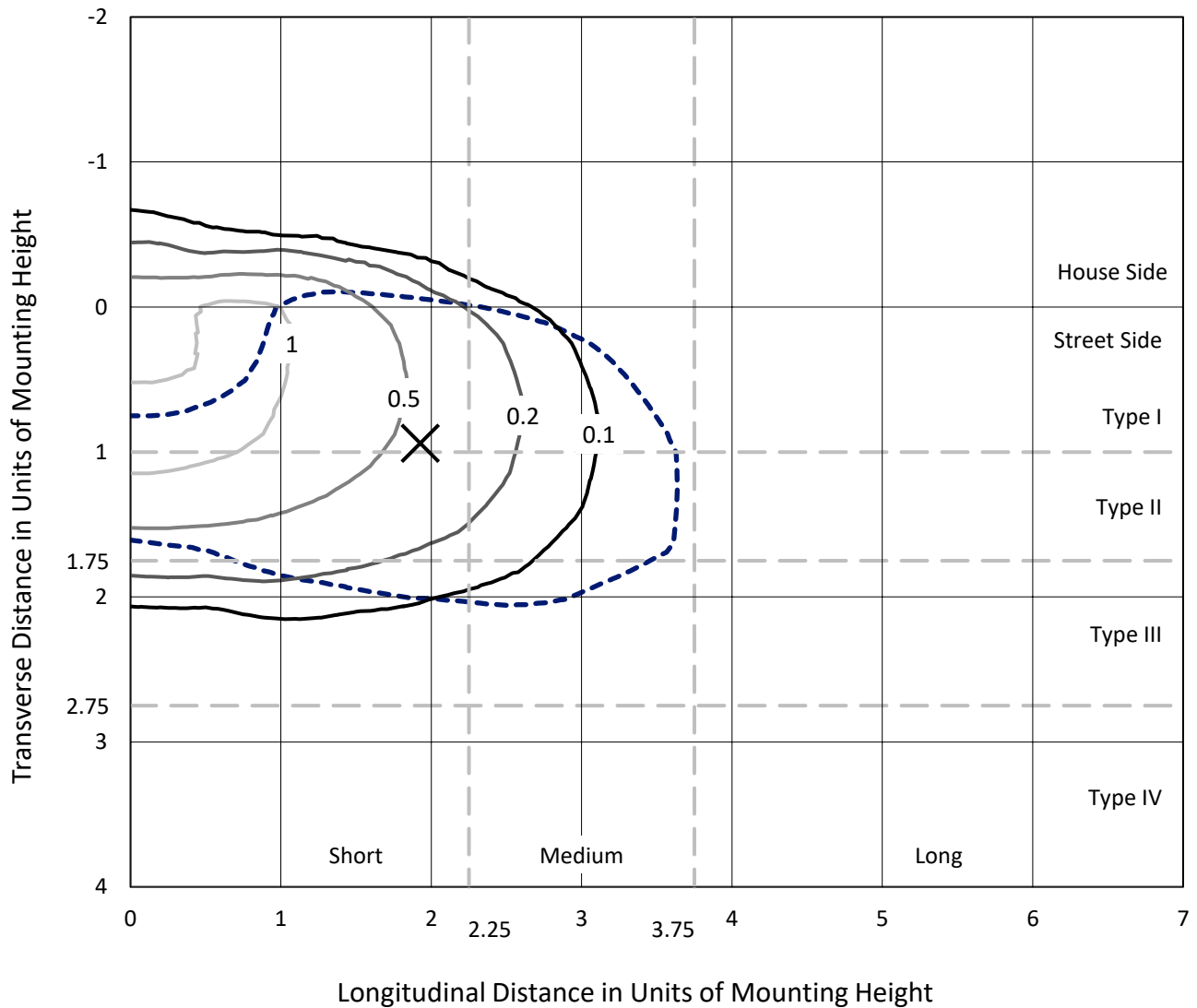
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

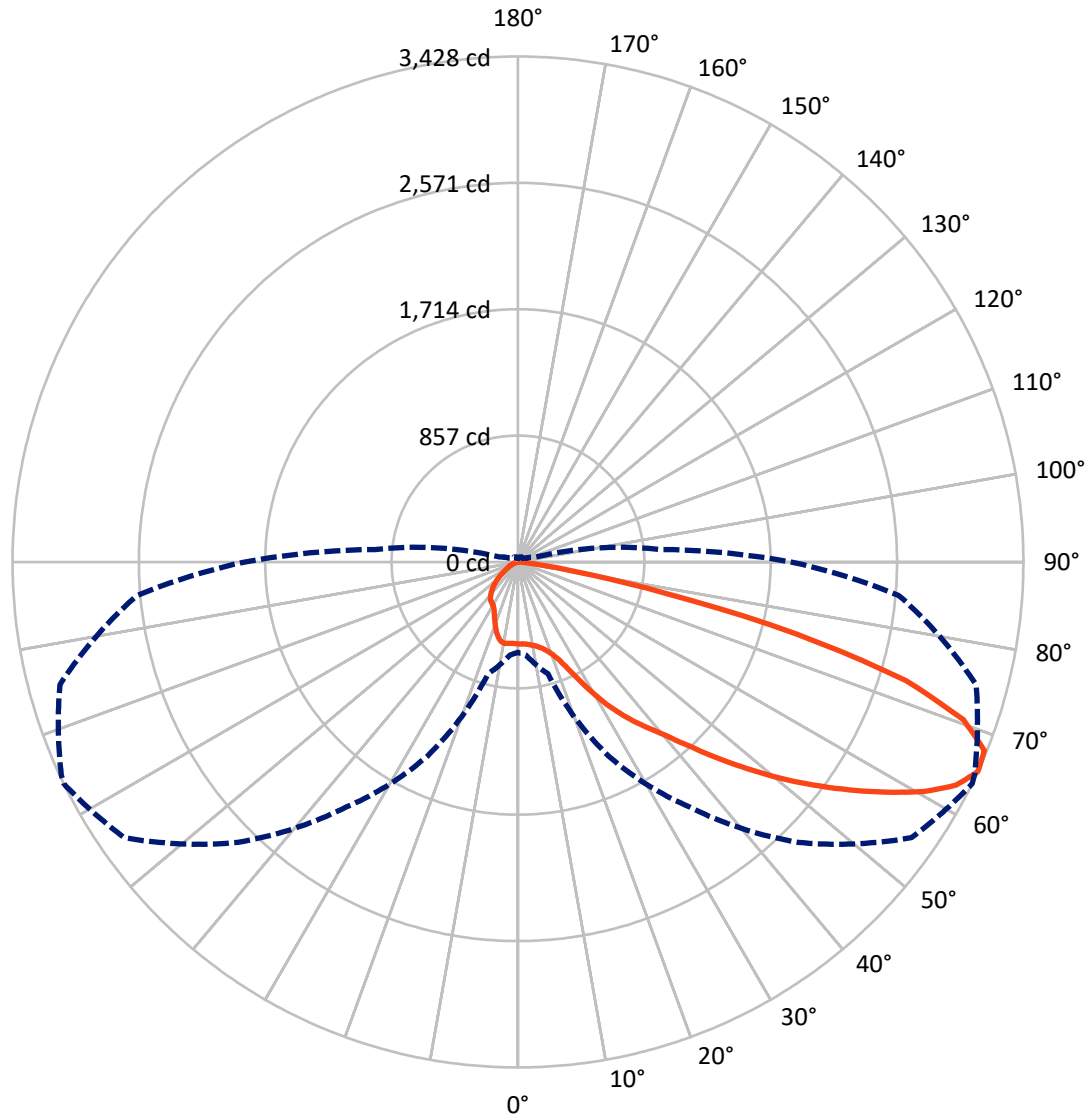
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	638.7	0.0	638.7
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	4137.3	0.0	4137.3
	% Fixture	86.6	0.0	86.6
Total	Lumens	4776.0	0.0	4776.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.3	1.1
10°-20°	139.0	2.9
20°-30°	263.4	5.5
30°-40°	533.0	11.2
40°-50°	908.0	19.0
50°-60°	1234.8	25.9
60°-70°	1159.5	24.3
70°-80°	464.6	9.7
80°-90°	22.5	0.5
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°	4776.0	100.0
0°-180°	4776.0	100.0

Coefficient of Utilization



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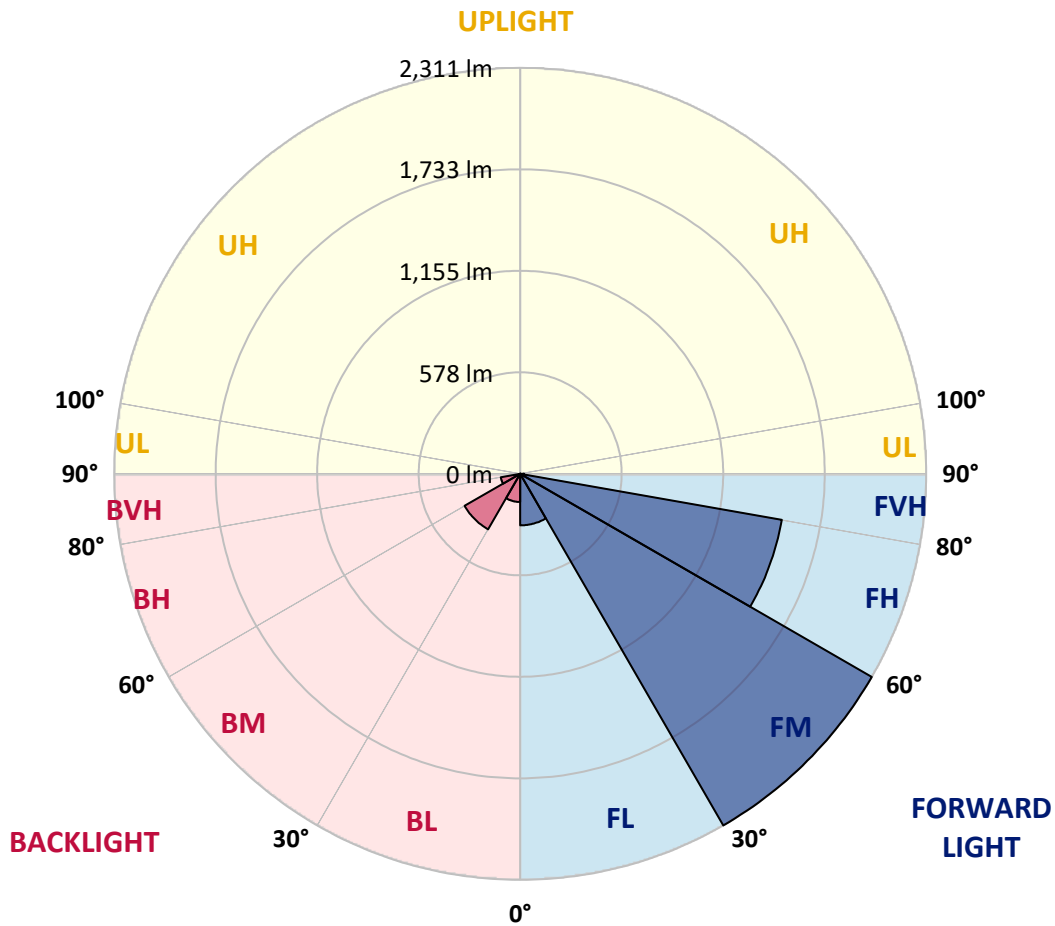
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	293.3	6.1			
FM (30°-60°)	2310.6	48.4			
FH (60°-80°)	1512.0	31.7			G1/1800
FVH (80°-90°)	21.4	0.4			G1/100
BL (0°-30°)	160.4	3.4	B1/500		
BM (30°-60°)	365.1	7.6	B1/1000		
BH (60°-80°)	112.1	2.3	B1/500		G1/500
BVH (80°-90°)	1.1	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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	555.5	555.5	555.5	555.5	555.5	555.5	555.5	555.5	555.5	555.5	555.5
2.5°	553.6	557.4	556.5	555.5	555.2	555.8	556.1	555.8	555.8	555.8	556.1
5°	543.0	546.2	546.2	548.5	551.7	555.5	558.4	559.0	559.7	560.6	560.3
7.5°	522.8	525.4	527.3	534.7	542.7	552.9	561.6	566.1	566.7	570.2	571.5
10°	509.1	512.3	515.5	523.2	534.7	550.1	564.8	575.7	577.3	585.6	589.4
12.5°	508.4	511.6	515.8	524.1	537.6	553.9	571.8	587.5	590.4	602.6	610.6
15°	515.2	519.0	522.8	533.1	547.5	567.3	586.6	606.1	609.0	626.3	634.9
17.5°	528.9	534.0	536.9	547.2	562.5	584.6	609.9	632.3	634.9	655.1	666.0
20°	556.1	562.2	563.2	571.5	586.6	610.2	640.3	668.2	671.4	694.5	706.6
22.5°	612.5	621.1	613.4	617.6	631.1	654.8	687.4	722.6	727.1	753.4	764.3
25°	711.7	723.9	704.1	697.0	702.8	727.4	768.4	812.9	818.0	839.2	844.6
27.5°	906.7	891.0	860.9	831.5	814.2	828.3	874.4	929.5	935.9	956.4	950.0
30°	1120.9	1107.2	1066.5	1001.2	960.2	958.0	1000.5	1062.0	1069.4	1088.9	1069.4
32.5°	1335.4	1322.3	1278.1	1197.8	1126.7	1091.5	1120.9	1189.1	1193.0	1205.4	1176.6
35°	1546.4	1533.0	1488.8	1406.5	1319.1	1239.1	1233.3	1310.1	1311.4	1324.6	1281.6
37.5°	1758.7	1747.5	1700.4	1619.8	1533.6	1423.2	1369.7	1424.8	1426.4	1439.2	1394.7
40°	1910.1	1914.9	1882.6	1820.2	1746.2	1625.5	1522.7	1546.8	1537.1	1558.6	1532.0
42.5°	2040.1	2049.7	2021.6	1990.2	1947.3	1841.0	1712.3	1708.1	1692.7	1704.3	1676.7
45°	2152.5	2160.5	2135.2	2127.9	2126.9	2052.3	1919.4	1894.5	1873.0	1870.8	1837.8
47.5°	2193.8	2209.2	2220.1	2244.7	2292.8	2261.4	2133.6	2094.9	2070.9	2053.3	2001.1
50°	2209.5	2225.8	2263.0	2334.7	2448.4	2461.8	2346.9	2303.3	2273.9	2241.8	2165.0
52.5°	2188.4	2217.5	2267.5	2388.2	2553.1	2622.5	2551.5	2513.4	2479.7	2427.5	2313.6
55°	2063.8	2093.0	2195.1	2387.5	2605.2	2735.2	2744.8	2727.9	2690.1	2607.8	2433.6
57.5°	1801.3	1844.5	2006.2	2306.2	2604.3	2832.2	2934.4	2946.5	2904.3	2786.5	2528.1
60°	1437.6	1496.2	1693.4	2125.9	2523.9	2884.7	3100.5	3161.4	3116.6	2962.6	2604.6
62.5°	1003.1	1071.0	1257.6	1843.6	2340.1	2847.0	3221.9	3334.3	3300.3	3120.1	2634.1
65°	611.8	633.6	784.1	1450.7	2027.6	2688.8	3259.4	3427.8	3416.6	3216.4	2590.5
67.5°	407.6	425.8	469.1	994.8	1574.0	2372.8	3169.7	3411.4	3414.6	3200.8	2431.1
70°	245.6	261.3	289.4	578.6	1020.1	1878.1	2892.1	3203.3	3221.9	2991.0	2128.8
72.5°	101.2	111.7	137.4	262.2	528.3	1192.0	2303.0	2750.3	2793.5	2515.0	1633.8
75°	57.3	62.8	80.7	131.6	229.2	555.5	1395.0	1952.4	2016.1	1733.4	982.9
77.5°	38.1	40.7	52.2	85.2	129.0	189.5	596.2	1017.2	1138.9	946.7	425.5
80°	25.6	27.9	35.9	57.0	83.9	81.3	189.9	376.8	463.6	325.3	103.7
82.5°	17.3	17.6	25.6	37.5	53.1	39.4	56.0	117.2	147.3	94.1	39.4
85°	9.9	9.6	18.9	21.8	23.7	16.3	17.0	35.2	46.1	39.7	22.4
87.5°	1.3	1.9	7.4	5.8	3.2	3.5	3.5	6.1	9.0	9.6	4.8
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°	555.5	555.5	555.5	555.5	555.5	555.5	555.5	555.5	555.5	555.5	555.5
2.5°	556.1	555.8	554.9	553.9	551.7	550.4	551.0	550.4	550.1	550.4	551.7
5°	560.3	559.3	556.8	553.6	549.1	543.7	540.1	535.0	530.2	527.3	528.0
7.5°	571.5	570.5	567.0	558.1	543.7	520.9	500.1	481.9	468.1	460.1	460.4
10°	589.4	587.8	582.4	562.5	524.8	475.1	433.8	399.6	377.2	366.6	365.6
12.5°	610.6	608.6	599.0	558.4	488.9	411.4	354.4	316.3	295.5	286.2	285.3
15°	635.5	633.0	614.1	538.5	436.7	341.0	288.8	260.3	246.9	238.5	238.8
17.5°	666.6	662.1	625.3	508.8	380.0	287.2	248.5	227.0	215.2	207.2	206.5
20°	706.9	699.6	634.3	473.2	327.9	253.3	221.2	203.3	194.3	187.3	186.0
22.5°	763.3	752.7	645.1	434.8	291.0	229.9	201.1	187.9	180.6	172.6	171.3
25°	833.1	820.6	658.6	399.3	265.7	209.7	186.3	175.5	166.8	157.5	156.6
27.5°	930.7	908.3	674.6	370.1	244.0	192.4	172.9	160.7	150.8	143.1	141.5
30°	1039.6	1002.8	688.7	352.5	224.1	176.4	155.3	143.1	133.8	128.4	127.4
32.5°	1142.7	1092.7	698.0	344.8	206.2	158.2	136.1	122.9	115.9	114.3	115.3
35°	1240.0	1174.1	697.0	337.5	190.2	139.9	117.2	103.7	98.3	99.3	99.3
37.5°	1352.1	1260.8	690.3	325.9	177.1	123.3	100.9	89.0	84.2	84.5	85.8
40°	1482.4	1361.1	686.1	304.2	162.6	107.9	87.4	77.8	74.3	73.0	72.7
42.5°	1621.4	1458.1	686.8	279.5	144.7	94.1	78.1	70.1	66.9	66.0	65.6
45°	1760.9	1550.6	687.7	253.9	125.8	83.6	71.4	64.7	62.8	61.5	61.5
47.5°	1892.2	1629.4	669.8	226.4	107.3	75.6	66.0	61.5	59.9	58.3	58.3
50°	2014.5	1681.9	626.6	194.3	92.5	69.2	61.8	58.6	57.0	55.4	55.4
52.5°	2109.6	1690.2	555.2	161.4	82.3	64.4	59.2	56.4	54.4	52.8	52.5
55°	2151.9	1638.0	453.7	130.6	74.3	60.2	56.7	53.8	51.5	49.9	49.6
57.5°	2141.0	1528.2	353.8	105.0	66.6	56.0	53.5	51.5	49.0	46.4	46.1
60°	2087.5	1381.2	266.7	87.4	59.6	51.5	49.9	48.3	44.8	41.0	40.3
62.5°	1995.0	1196.5	190.2	72.4	51.9	46.4	45.8	44.5	39.4	32.3	31.7
65°	1853.5	972.0	128.1	60.2	44.5	40.7	41.0	38.7	32.0	24.0	23.4
67.5°	1646.6	710.8	82.0	49.3	37.1	33.9	34.3	33.0	27.2	20.5	19.5
70°	1383.1	470.7	53.5	37.5	29.8	26.3	28.2	28.5	23.1	16.6	16.0
72.5°	1014.0	277.9	37.5	27.9	21.8	18.2	23.1	23.7	18.6	12.5	11.8
75°	577.9	131.9	28.2	20.2	13.4	12.8	17.9	17.9	12.8	8.3	7.7
77.5°	242.7	55.1	19.9	13.1	7.7	7.4	12.2	11.2	6.4	3.8	3.8
80°	70.1	24.7	10.6	6.4	3.2	2.9	4.8	3.5	1.6	0.6	0.6
82.5°	27.5	10.9	4.2	2.6	1.3	1.3	0.6	0.0	0.0	0.0	0.0
85°	16.3	4.5	1.9	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.2	1.0	0.6	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)