

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: P882048

Luminaire Tested: **NAV-SB1D-727-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882048
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-SB1D-727-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 900mA 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: 7239 lumens
Efficiency: N/A
Efficacy: 90.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

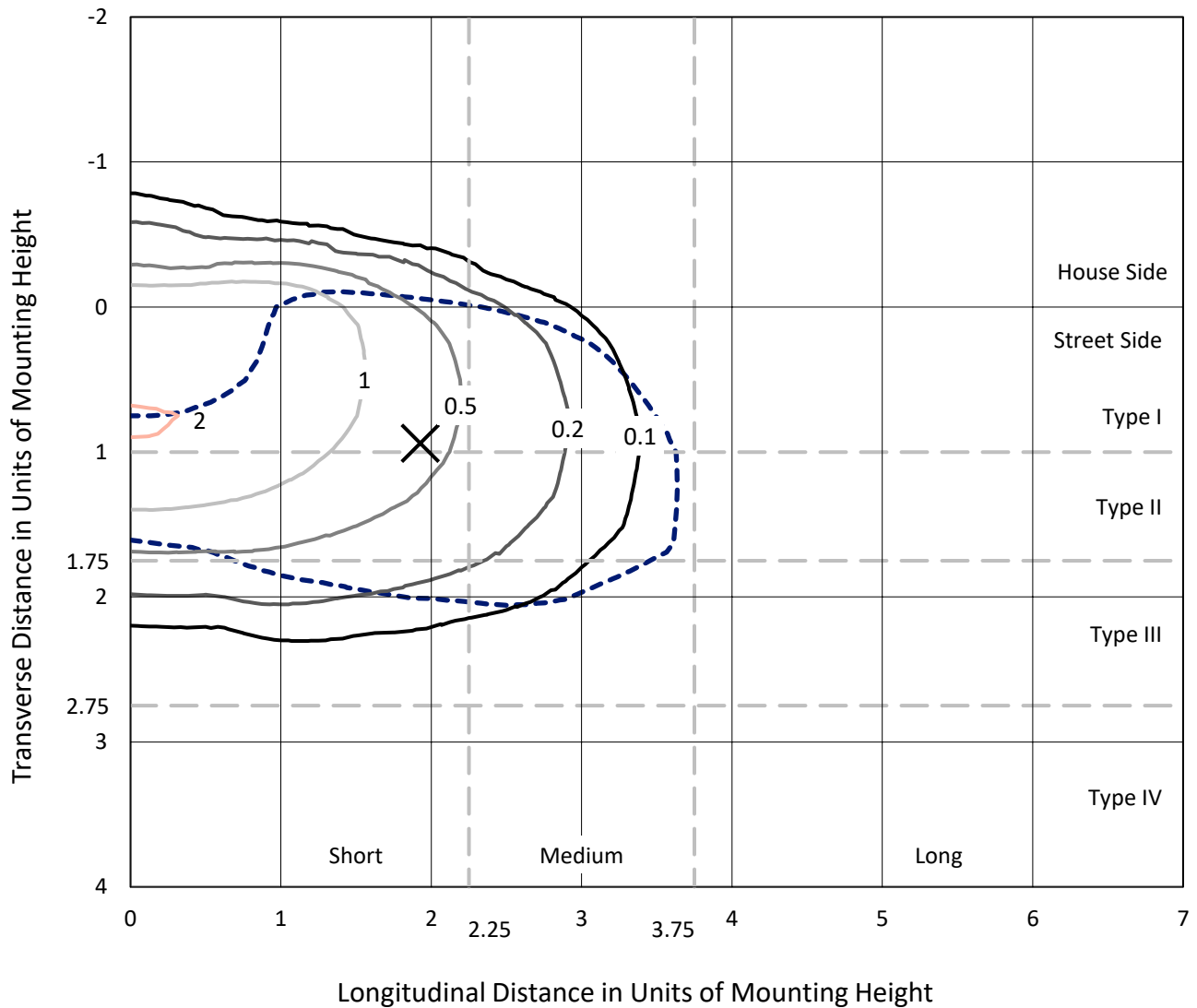
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882048
 CATALOG NUMBER: NAV-SB1D-727-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

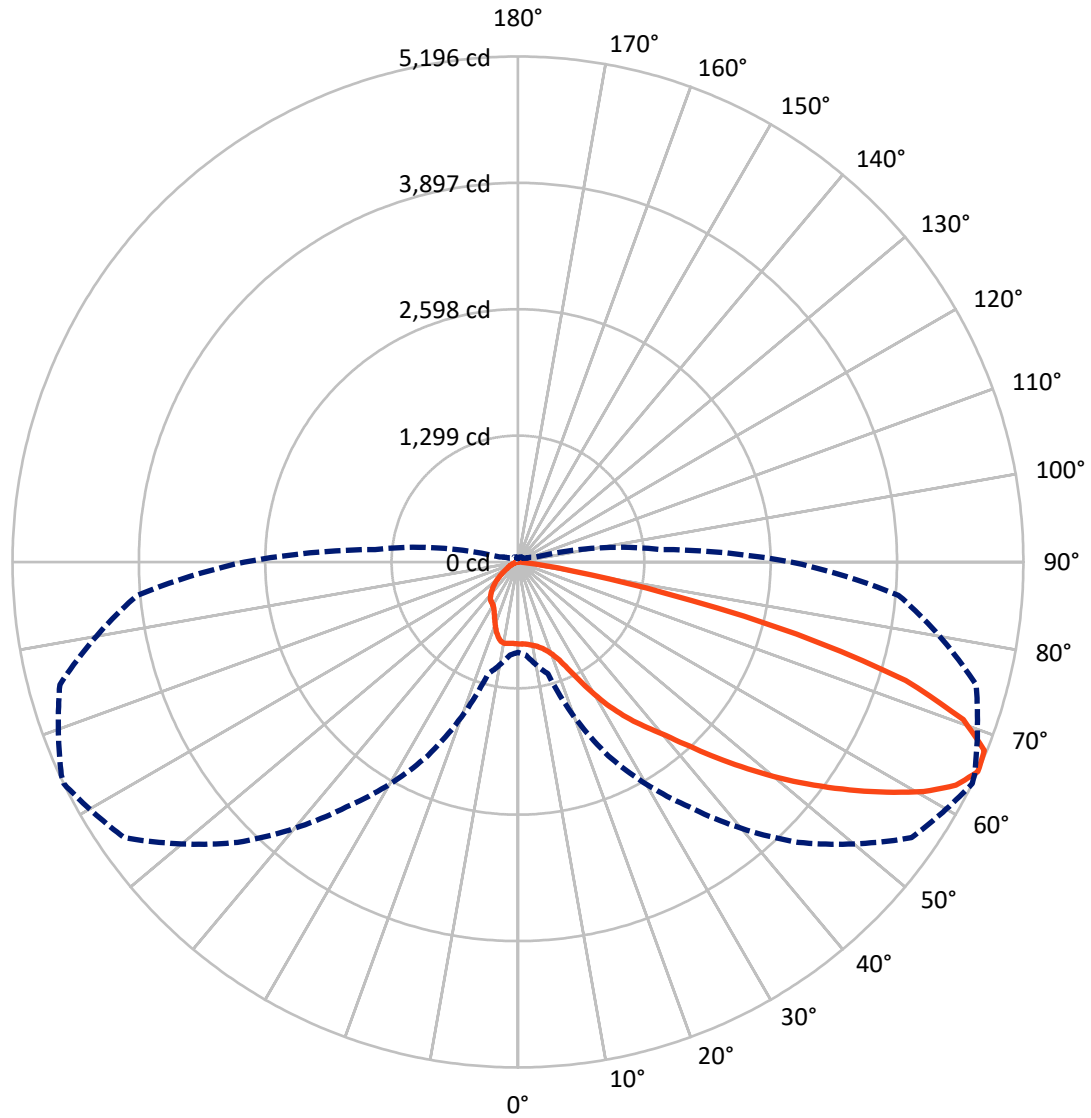
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type III - Short - N/A

REPORT NUMBER: P882048
CATALOG NUMBER: NAV-SB1D-727-U-T3-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P882048

CATALOG NUMBER: NAV-SB1D-727-U-T3-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	968.1	0.0	968.1
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	6270.9	0.0	6270.9
	% Fixture	86.6	0.0	86.6
Total	Lumens	7239.0	0.0	7239.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.7	1.1
10°-20°	210.7	2.9
20°-30°	399.2	5.5
30°-40°	807.9	11.2
40°-50°	1376.2	19.0
50°-60°	1871.6	25.9
60°-70°	1757.5	24.3
70°-80°	704.1	9.7
80°-90°	34.1	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°	7239.0	100.0
0°-180°	7239.0	100.0

Coefficient of Utilization



REPORT NUMBER: P882048

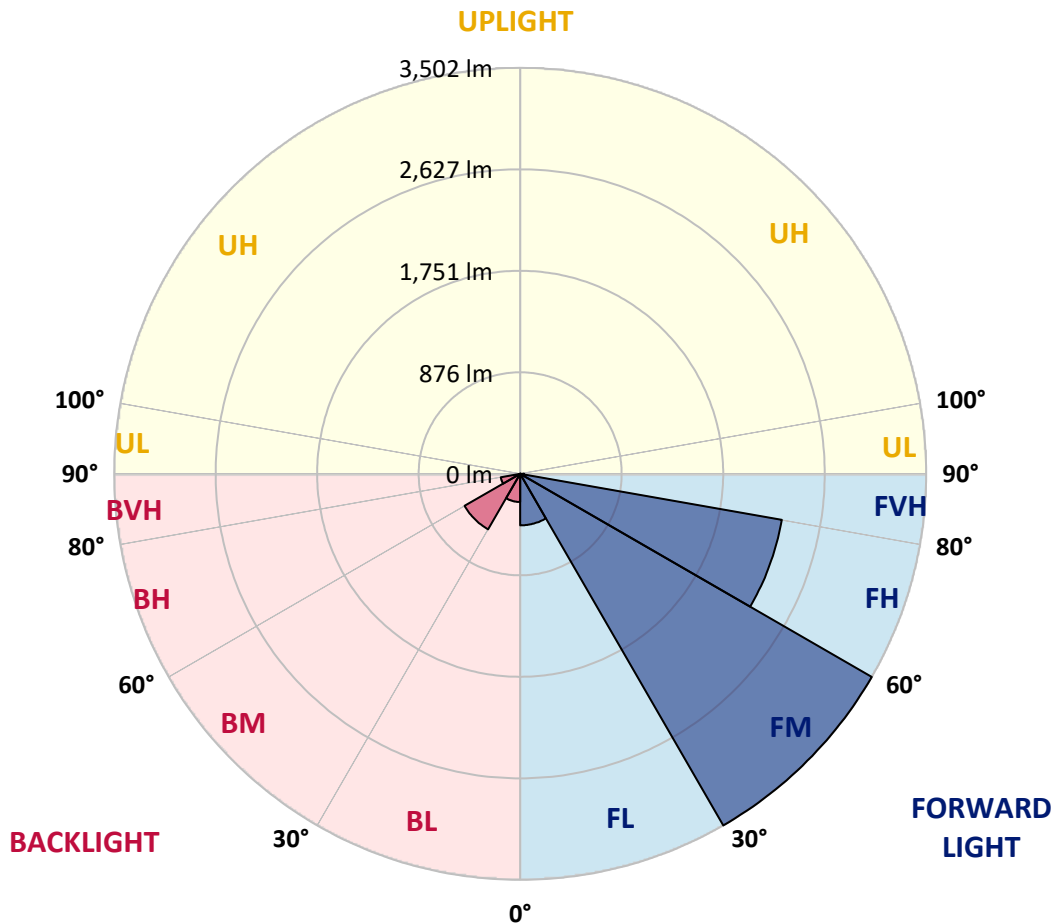
CATALOG NUMBER: NAV-SB1D-727-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	444.6	6.1			
FM (30°-60°)	3502.2	48.4			
FH (60°-80°)	2291.7	31.7			G2/5000
FVH (80°-90°)	32.4	0.4			G1/100
BL (0°-30°)	243.1	3.4	B1/500		
BM (30°-60°)	553.4	7.6	B1/1000		
BH (60°-80°)	169.9	2.3	B1/500		G1/500
BVH (80°-90°)	1.7	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-G2

Type III Short



REPORT NUMBER: P882048

CATALOG NUMBER: NAV-SB1D-727-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0
2.5°	839.1	844.9	843.4	842.0	841.5	842.5	842.9	842.5	842.5	842.5	842.9
5°	823.0	827.9	827.9	831.3	836.1	842.0	846.3	847.3	848.3	849.7	849.3
7.5°	792.5	796.4	799.3	810.4	822.6	838.1	851.2	858.0	859.0	864.3	866.2
10°	771.6	776.5	781.3	793.0	810.4	833.7	856.0	872.5	875.0	887.6	893.4
12.5°	770.6	775.5	781.8	794.4	814.8	839.5	866.7	890.5	894.9	913.3	925.4
15°	780.8	786.6	792.5	808.0	829.8	859.9	889.0	918.6	923.0	949.2	962.3
17.5°	801.7	809.5	813.8	829.4	852.6	886.1	924.5	958.4	962.3	992.9	1009.4
20°	842.9	852.2	853.6	866.2	889.0	925.0	970.6	1012.8	1017.6	1052.6	1071.0
22.5°	928.4	941.5	929.8	936.1	956.5	992.4	1041.9	1095.3	1102.1	1141.9	1158.4
25°	1078.8	1097.2	1067.1	1056.5	1065.2	1102.6	1164.7	1232.1	1239.9	1271.9	1280.2
27.5°	1374.3	1350.6	1304.9	1260.3	1234.1	1255.4	1325.3	1408.8	1418.5	1449.5	1439.8
30°	1699.0	1678.1	1616.5	1517.5	1455.4	1452.0	1516.5	1609.7	1620.9	1650.5	1620.9
32.5°	2024.1	2004.2	1937.3	1815.5	1707.7	1654.3	1699.0	1802.4	1808.2	1827.1	1783.4
35°	2343.9	2323.5	2256.6	2131.9	1999.4	1878.1	1869.3	1985.8	1987.7	2007.6	1942.6
37.5°	2665.7	2648.7	2577.4	2455.1	2324.5	2157.1	2076.1	2159.5	2161.9	2181.4	2113.9
40°	2895.2	2902.5	2853.5	2758.8	2646.7	2463.8	2308.0	2344.4	2329.9	2362.4	2322.1
42.5°	3092.2	3106.8	3064.1	3016.5	2951.5	2790.4	2595.3	2589.0	2565.7	2583.2	2541.4
45°	3262.6	3274.7	3236.4	3225.2	3223.8	3110.7	2909.3	2871.4	2838.9	2835.5	2785.5
47.5°	3325.2	3348.5	3365.0	3402.3	3475.1	3427.6	3233.9	3175.2	3138.8	3112.1	3033.0
50°	3349.0	3373.7	3430.0	3538.7	3711.0	3731.4	3557.1	3491.1	3446.5	3398.0	3281.5
52.5°	3316.9	3361.1	3436.8	3619.7	3869.7	3975.0	3867.2	3809.5	3758.5	3679.4	3506.7
55°	3128.2	3172.3	3327.1	3618.8	3948.8	4145.8	4160.4	4134.6	4077.4	3952.7	3688.7
57.5°	2730.2	2795.7	3040.8	3495.5	3947.3	4292.8	4447.6	4466.1	4402.0	4223.4	3831.8
60°	2178.9	2267.7	2566.7	3222.3	3825.5	4372.4	4699.5	4791.7	4723.8	4490.3	3947.8
62.5°	1520.4	1623.3	1906.2	2794.3	3547.0	4315.2	4883.4	5053.8	5002.3	4729.1	3992.4
65°	927.4	960.4	1188.5	2198.8	3073.3	4075.4	4940.2	5195.5	5178.5	4875.2	3926.4
67.5°	617.8	645.4	710.9	1507.8	2385.7	3596.5	4804.3	5170.7	5175.6	4851.4	3684.8
70°	372.2	396.0	438.7	876.9	1546.1	2846.7	4383.6	4855.3	4883.4	4533.5	3226.7
72.5°	153.4	169.4	208.2	397.4	800.7	1806.7	3490.7	4168.6	4234.1	3811.9	2476.4
75°	86.9	95.1	122.3	199.5	347.5	842.0	2114.4	2959.3	3055.8	2627.3	1489.8
77.5°	57.7	61.6	79.1	129.1	195.6	287.3	903.6	1541.8	1726.2	1435.0	644.9
80°	38.8	42.2	54.4	86.4	127.1	123.3	287.8	571.2	702.7	493.1	157.2
82.5°	26.2	26.7	38.8	56.8	80.6	59.7	84.9	177.6	223.2	142.7	59.7
85°	15.0	14.6	28.6	33.0	35.9	24.7	25.7	53.4	69.9	60.2	34.0
87.5°	1.9	2.9	11.2	8.7	4.9	5.3	5.3	9.2	13.6	14.6	7.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P882048

CATALOG NUMBER: NAV-SB1D-727-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0
2.5°	842.9	842.5	841.0	839.5	836.1	834.2	835.2	834.2	833.7	834.2	836.1
5°	849.3	847.8	843.9	839.1	832.3	824.0	818.7	810.9	803.6	799.3	800.2
7.5°	866.2	864.8	859.4	845.9	824.0	789.6	758.0	730.4	709.5	697.4	697.8
10°	893.4	891.0	882.7	852.6	795.4	720.2	657.6	605.6	571.7	555.7	554.2
12.5°	925.4	922.5	908.0	846.3	741.0	623.6	537.2	479.5	447.9	433.8	432.4
15°	963.3	959.4	930.8	816.3	661.9	516.8	437.7	394.5	374.2	361.5	362.0
17.5°	1010.4	1003.6	947.8	771.1	576.0	435.3	376.6	344.1	326.1	314.0	313.0
20°	1071.5	1060.3	961.4	717.3	496.9	383.9	335.3	308.2	294.6	283.9	282.0
22.5°	1156.9	1140.9	977.9	659.0	441.1	348.4	304.8	284.9	273.7	261.6	259.6
25°	1262.7	1243.8	998.2	605.2	402.8	317.9	282.4	265.9	252.8	238.8	237.3
27.5°	1410.7	1376.8	1022.5	561.0	369.8	291.7	262.1	243.6	228.6	216.9	214.5
30°	1575.7	1519.9	1043.8	534.3	339.7	267.4	235.4	216.9	202.8	194.6	193.1
32.5°	1732.0	1656.3	1057.9	522.7	312.5	239.7	206.2	186.3	175.7	173.2	174.7
35°	1879.5	1779.5	1056.5	511.5	288.3	212.1	177.6	157.2	149.0	150.4	150.4
37.5°	2049.4	1911.1	1046.3	494.0	268.4	186.8	152.9	134.9	127.6	128.1	130.1
40°	2246.9	2062.9	1040.0	461.0	246.5	163.5	132.5	117.9	112.6	110.6	110.2
42.5°	2457.5	2210.0	1040.9	423.7	219.3	142.7	118.4	106.3	101.4	100.0	99.5
45°	2669.1	2350.2	1042.4	384.8	190.7	126.7	108.2	98.0	95.1	93.2	93.2
47.5°	2868.0	2469.6	1015.2	343.1	162.6	114.5	100.0	93.2	90.7	88.3	88.3
50°	3053.4	2549.2	949.7	294.6	140.2	104.8	93.7	88.8	86.4	84.0	84.0
52.5°	3197.5	2561.8	841.5	244.6	124.7	97.5	89.8	85.4	82.5	80.1	79.6
55°	3261.6	2482.7	687.6	198.0	112.6	91.2	85.9	81.5	78.1	75.7	75.2
57.5°	3245.1	2316.3	536.2	159.2	100.9	84.9	81.0	78.1	74.2	70.4	69.9
60°	3164.1	2093.5	404.2	132.5	90.3	78.1	75.7	73.3	67.9	62.1	61.1
62.5°	3023.8	1813.5	288.3	109.7	78.6	70.4	69.4	67.5	59.7	49.0	48.0
65°	2809.3	1473.3	194.1	91.2	67.5	61.6	62.1	58.7	48.5	36.4	35.4
67.5°	2495.8	1077.3	124.2	74.7	56.3	51.4	51.9	50.0	41.2	31.1	29.6
70°	2096.4	713.4	81.0	56.8	45.1	39.8	42.7	43.2	34.9	25.2	24.3
72.5°	1536.9	421.2	56.8	42.2	33.0	27.7	34.9	35.9	28.1	18.9	18.0
75°	875.9	199.9	42.7	30.6	20.4	19.4	27.2	27.2	19.4	12.6	11.6
77.5°	367.8	83.5	30.1	19.9	11.6	11.2	18.4	17.0	9.7	5.8	5.8
80°	106.3	37.4	16.0	9.7	4.9	4.4	7.3	5.3	2.4	1.0	1.0
82.5°	41.7	16.5	6.3	3.9	1.9	1.9	1.0	0.0	0.0	0.0	0.0
85°	24.7	6.8	2.9	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.3	1.5	1.0	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)