

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: P959300

Luminaire Tested: **NAV-SB1A-735-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959300
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3514.7 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

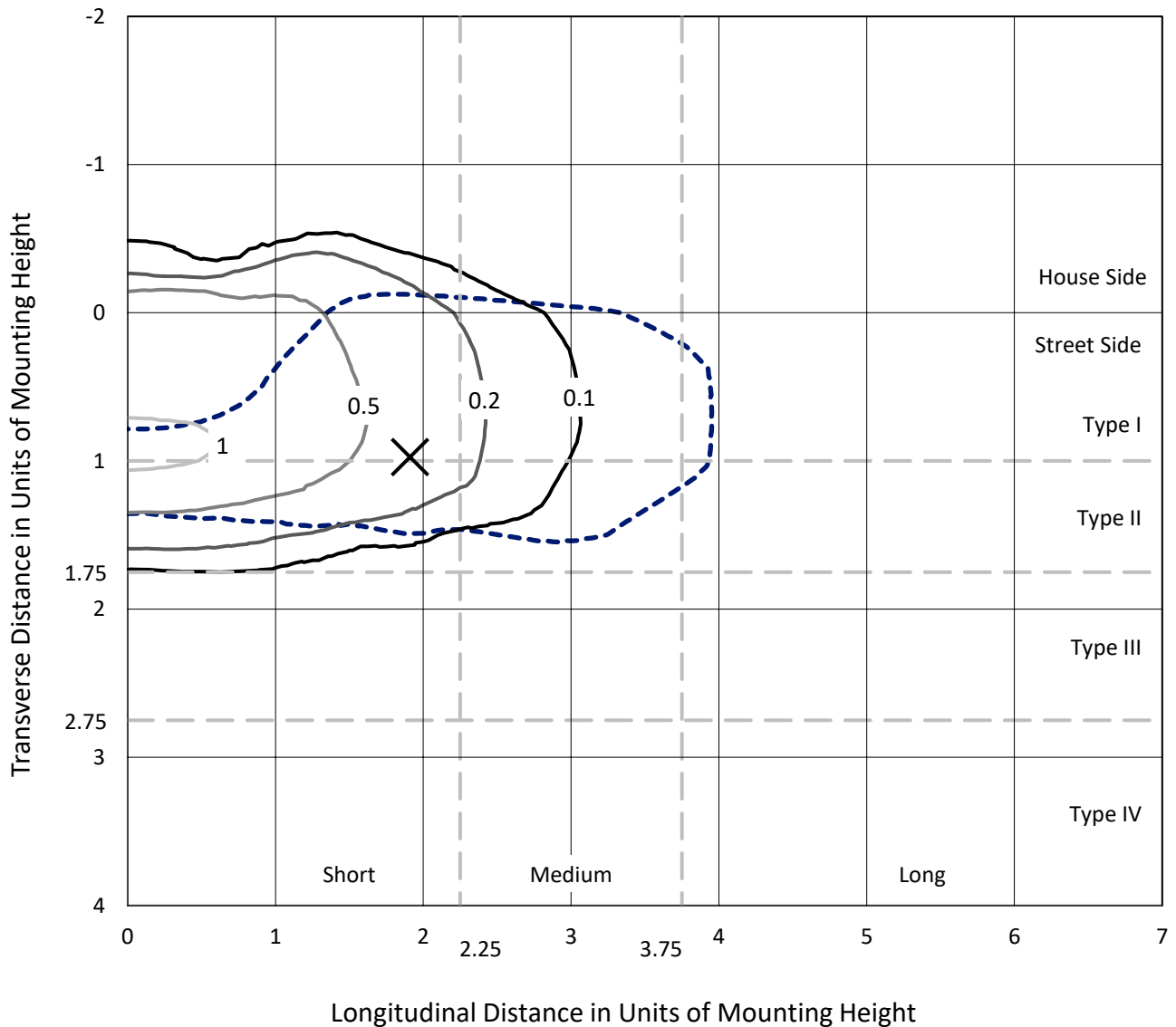
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

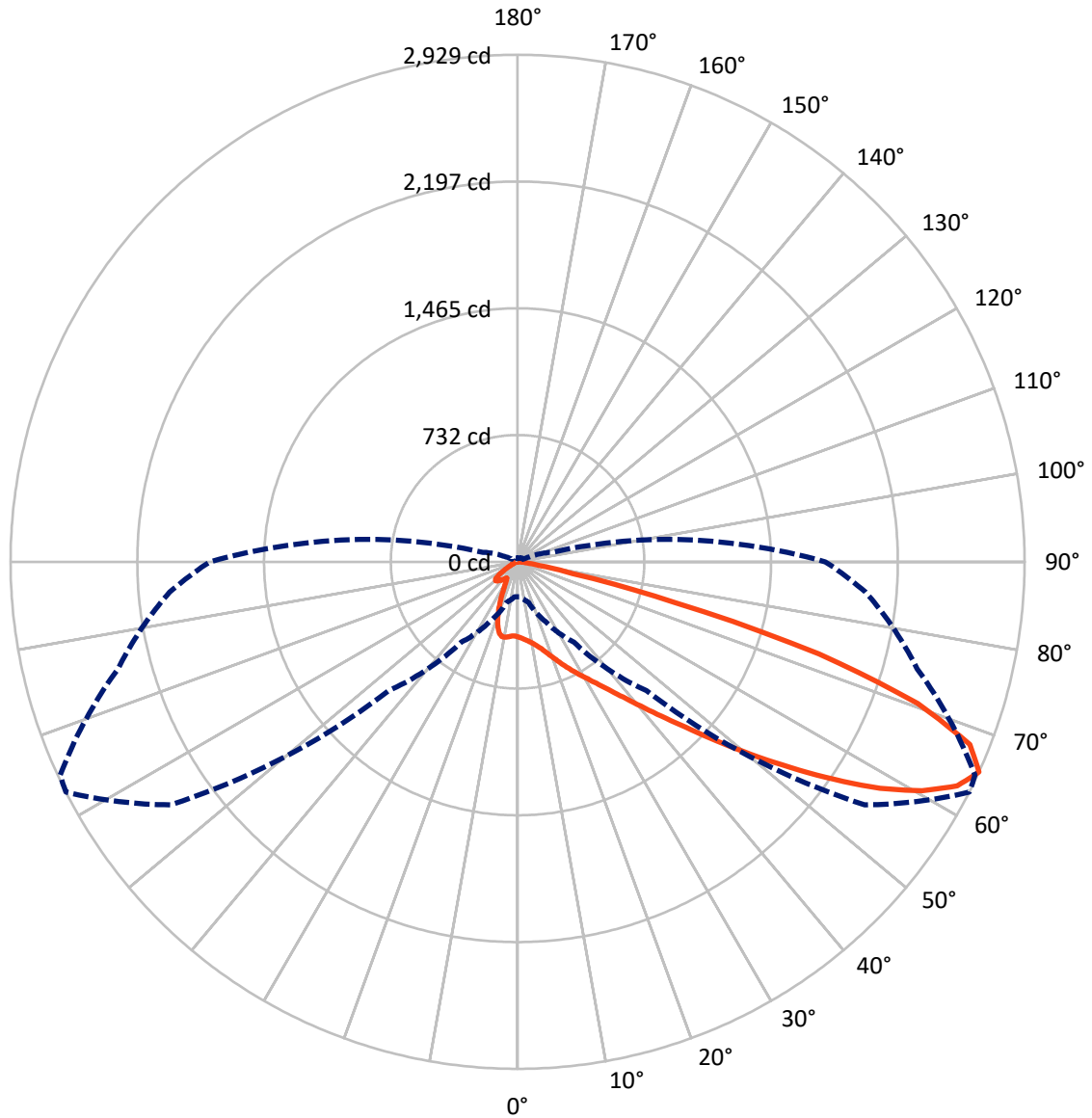
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	516.6	0.0	516.6
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	2998.1	0.0	2998.1
	% Fixture	85.3	0.0	85.3
Total	Lumens	3514.7	0.0	3514.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.9	1.2
10°-20°	113.4	3.2
20°-30°	197.5	5.6
30°-40°	355.9	10.1
40°-50°	705.9	20.1
50°-60°	961.5	27.4
60°-70°	767.5	21.8
70°-80°	347.3	9.9
80°-90°	25.0	0.7
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°	3514.7	100.0
0°-180°	3514.7	100.0

Coefficient of Utilization



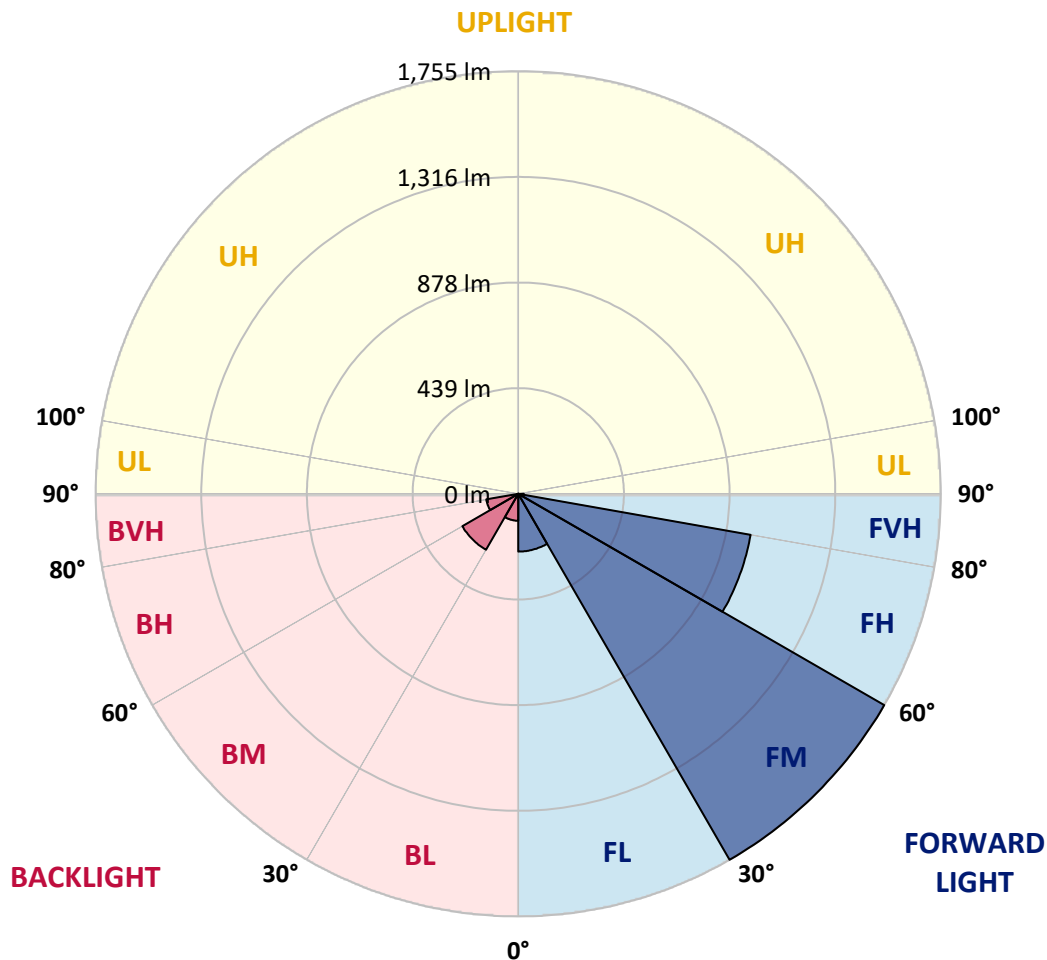
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	239.9	6.8			
FM (30°-60°)	1755.2	49.9			
FH (60°-80°)	979.9	27.9			G1/1800
FVH (80°-90°)	23.1	0.7			G1/100
BL (0°-30°)	111.8	3.2	B1/500		
BM (30°-60°)	268.1	7.6	B1/1000		
BH (60°-80°)	134.9	3.8	B1/500		G1/500
BVH (80°-90°)	1.9	0.1			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8
2.5°	443.9	442.7	444.4	443.7	443.2	442.3	441.8	441.3	440.3	439.6	436.6
5°	445.2	444.4	446.1	447.5	449.1	450.5	451.2	452.1	451.2	449.3	446.4
7.5°	435.0	434.5	438.1	442.5	449.1	454.6	460.6	464.0	464.2	463.5	460.4
10°	434.3	433.1	436.6	442.0	450.5	460.4	471.0	478.3	479.3	482.4	479.0
12.5°	445.7	444.4	449.5	455.3	464.0	474.4	487.5	497.6	499.1	503.4	501.0
15°	464.7	463.0	468.8	476.3	487.5	499.3	513.1	522.2	523.5	528.8	524.5
17.5°	487.0	485.2	492.1	500.0	512.1	528.3	544.3	554.4	555.9	559.2	551.3
20°	515.5	513.3	518.6	525.9	538.7	558.1	577.2	591.6	591.4	591.4	578.4
22.5°	548.7	545.3	549.8	555.7	567.7	591.2	616.5	633.8	633.8	627.0	605.5
25°	584.1	580.8	585.9	591.2	601.9	628.4	658.2	679.5	680.4	668.8	634.5
27.5°	628.6	624.3	628.2	634.5	640.7	667.9	703.2	727.9	728.3	710.4	662.0
30°	714.2	701.9	689.8	683.1	685.9	712.8	750.5	777.9	780.2	755.6	692.0
32.5°	870.9	868.6	825.9	770.4	741.4	761.2	803.5	836.4	837.8	806.2	730.9
35°	1114.5	1111.5	1043.1	937.2	842.7	825.9	867.8	906.7	905.8	870.0	781.5
37.5°	1405.1	1402.4	1312.2	1170.6	1017.5	923.9	950.8	991.6	997.6	950.8	846.8
40°	1653.4	1643.5	1586.4	1449.9	1249.6	1086.4	1068.8	1095.8	1102.1	1046.5	929.7
42.5°	1841.5	1833.1	1804.0	1718.7	1530.5	1326.8	1207.8	1218.2	1225.2	1158.5	1025.0
45°	1939.0	1937.0	1948.6	1940.6	1816.8	1621.8	1406.5	1363.2	1365.9	1282.5	1133.0
47.5°	1952.7	1951.8	2004.7	2079.7	2063.0	1954.5	1661.6	1544.2	1534.7	1422.5	1250.6
50°	1871.5	1869.6	1971.2	2111.6	2227.4	2234.0	1951.3	1747.9	1727.1	1567.3	1373.2
52.5°	1612.0	1611.6	1778.4	2012.3	2285.2	2478.7	2237.6	1971.9	1937.0	1720.7	1502.8
55°	1240.5	1249.4	1440.6	1717.0	2179.8	2596.4	2494.6	2220.5	2167.0	1874.9	1622.2
57.5°	878.7	891.7	1080.9	1327.0	1852.9	2526.7	2668.5	2469.4	2411.9	2028.7	1743.3
60°	472.0	483.6	672.9	966.7	1378.5	2267.1	2760.1	2685.6	2631.3	2174.7	1852.7
62.5°	281.3	285.1	363.5	624.1	932.3	1731.9	2721.2	2850.3	2805.5	2297.3	1947.7
65°	201.9	202.6	242.0	381.1	566.0	1052.3	2448.2	2929.1	2915.3	2389.7	2018.0
67.5°	169.9	169.5	185.9	253.2	385.7	527.2	1876.4	2817.6	2876.1	2448.2	2057.9
70°	145.8	146.6	165.8	185.4	289.9	298.4	932.9	2453.2	2578.1	2463.7	2055.5
72.5°	108.5	111.0	128.8	169.0	218.8	205.3	322.1	1819.1	2044.7	2321.2	1948.8
75°	76.7	77.9	90.7	142.2	163.2	149.4	164.4	940.3	1229.5	1779.6	1595.1
77.5°	59.0	61.2	68.7	99.4	160.8	105.0	100.6	325.4	500.0	1075.0	1093.7
80°	31.9	35.8	49.6	71.9	113.0	74.2	49.8	129.6	169.5	502.7	421.7
82.5°	16.4	18.3	34.5	51.8	64.3	64.8	24.7	53.9	69.9	155.2	57.8
85°	6.6	8.0	23.2	28.5	33.1	31.9	11.2	21.7	25.1	43.0	17.6
87.5°	1.4	2.5	8.5	6.6	6.3	6.8	2.7	5.1	4.8	5.1	3.2
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°	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8
2.5°	436.4	435.5	432.9	429.9	426.5	424.6	423.4	423.1	421.5	420.2	421.5
5°	443.7	442.7	437.7	431.6	425.1	420.0	415.1	410.8	404.6	403.3	402.8
7.5°	458.2	455.5	447.3	439.1	426.8	412.0	394.1	373.6	355.2	349.6	347.0
10°	476.1	472.4	462.1	447.5	420.2	380.1	336.8	296.6	264.8	255.8	252.5
12.5°	496.4	493.2	479.5	452.6	392.9	320.1	253.9	204.1	173.1	165.4	163.2
15°	520.6	516.0	496.9	445.0	344.1	243.2	174.4	144.8	133.8	132.2	130.8
17.5°	546.2	538.7	512.4	417.1	278.3	172.9	134.7	126.2	121.4	119.9	119.2
20°	569.7	560.0	521.5	375.0	208.0	134.7	120.6	115.1	110.7	109.1	108.0
22.5°	593.2	579.3	521.5	317.8	156.0	119.4	110.7	105.7	100.6	98.4	97.2
25°	617.6	599.2	512.4	253.9	125.5	109.6	101.3	95.7	91.4	88.8	87.7
27.5°	641.2	615.8	491.3	193.4	111.7	100.9	92.6	87.3	83.1	81.3	81.3
30°	663.7	632.3	461.9	146.8	102.8	92.4	84.7	80.1	76.0	74.0	74.2
32.5°	694.2	653.1	430.4	120.4	95.0	84.4	77.4	73.0	69.4	68.0	68.0
35°	736.5	683.8	403.3	118.3	88.5	77.9	70.8	66.7	63.1	61.9	61.9
37.5°	796.5	733.4	389.1	132.7	83.1	72.1	65.5	61.2	57.8	56.8	56.6
40°	870.4	800.6	396.8	147.3	79.5	66.9	60.7	56.4	53.4	52.3	52.0
42.5°	958.3	883.6	439.6	158.4	77.2	62.6	56.1	51.2	49.3	48.9	48.9
45°	1059.0	974.7	505.1	170.3	73.3	58.5	51.5	47.9	46.4	46.2	45.9
47.5°	1173.7	1074.8	581.1	185.0	69.4	54.6	47.9	45.4	44.3	43.8	43.8
50°	1287.3	1175.6	659.2	193.2	66.2	51.0	45.0	43.0	42.0	41.8	41.8
52.5°	1406.3	1279.3	722.2	185.4	63.6	48.1	42.5	41.1	40.2	39.9	39.9
55°	1519.7	1363.2	733.1	157.4	58.3	45.2	39.9	39.2	37.9	37.9	37.7
57.5°	1617.3	1405.3	656.2	115.6	53.0	40.9	37.2	36.5	35.6	35.3	35.1
60°	1707.0	1393.3	506.6	77.9	47.2	36.5	33.8	33.4	32.4	31.2	31.0
62.5°	1757.7	1340.1	346.4	50.7	41.3	31.9	30.0	29.7	27.6	25.1	24.7
65°	1776.7	1230.7	216.2	37.0	34.5	27.4	25.8	25.4	22.2	19.6	19.4
67.5°	1760.0	1050.8	109.1	29.2	27.4	22.8	21.3	21.3	19.1	16.7	16.4
70°	1693.3	787.8	45.9	23.5	21.0	17.4	17.4	18.3	16.2	13.5	13.3
72.5°	1548.5	530.0	24.4	17.9	15.7	12.3	14.2	15.0	12.8	10.1	10.1
75°	1231.0	323.3	16.9	13.3	9.9	8.7	10.9	11.4	8.7	6.8	6.6
77.5°	841.9	185.7	11.4	8.5	6.3	5.1	7.5	7.0	4.6	3.2	3.4
80°	369.7	77.4	6.6	3.9	2.5	1.9	2.7	1.9	1.4	0.9	0.9
82.5°	43.3	18.1	2.5	1.4	0.9	0.5	0.2	0.0	0.0	0.0	0.0
85°	8.9	2.2	1.2	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	0.5	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	0.0

(END OF REPORT)