

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: P881723

Luminaire Tested: **NAV-SB1B-735-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881723
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-735-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 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: 3934 lumens
Efficiency: N/A
Efficacy: 98.8 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

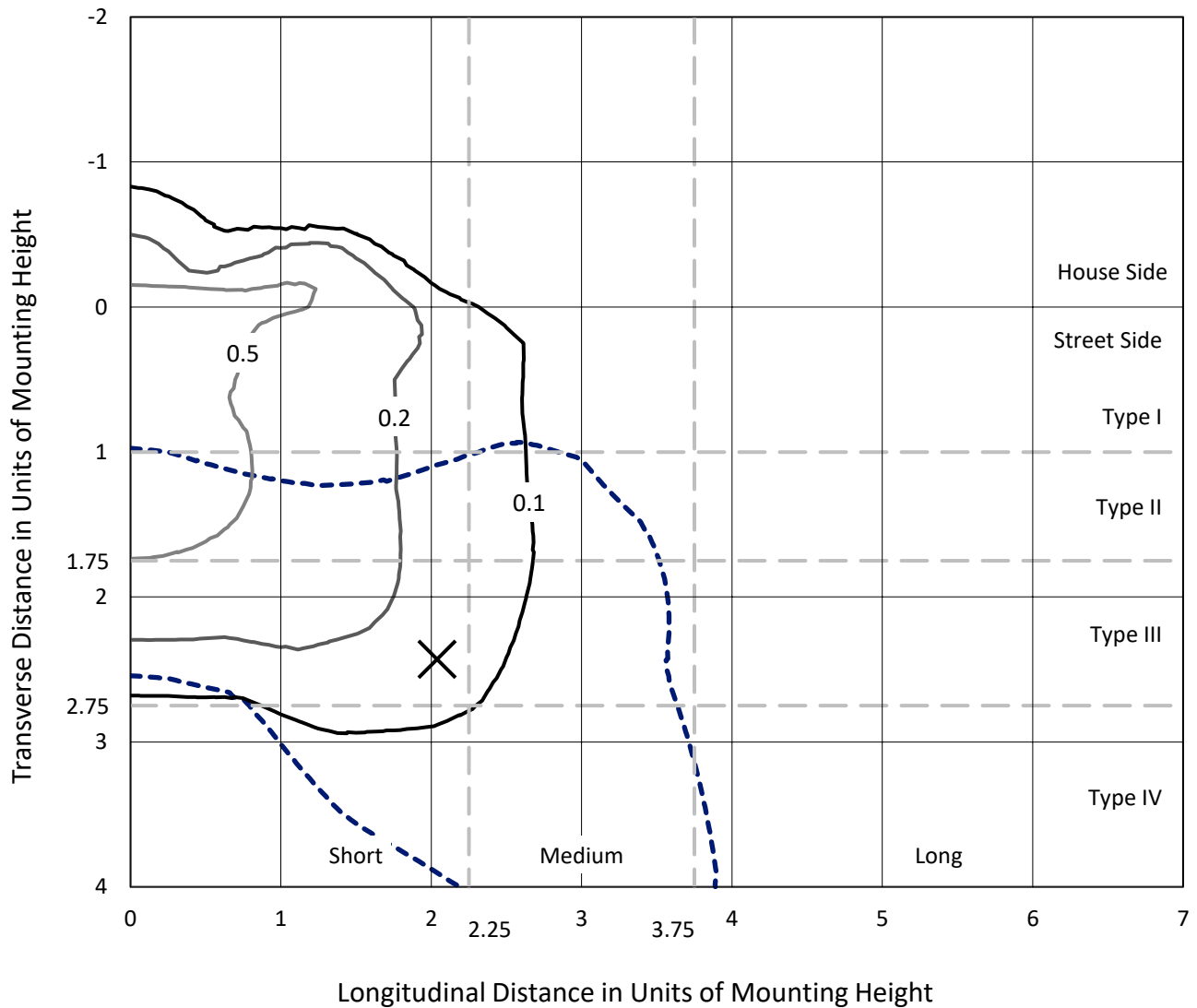
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

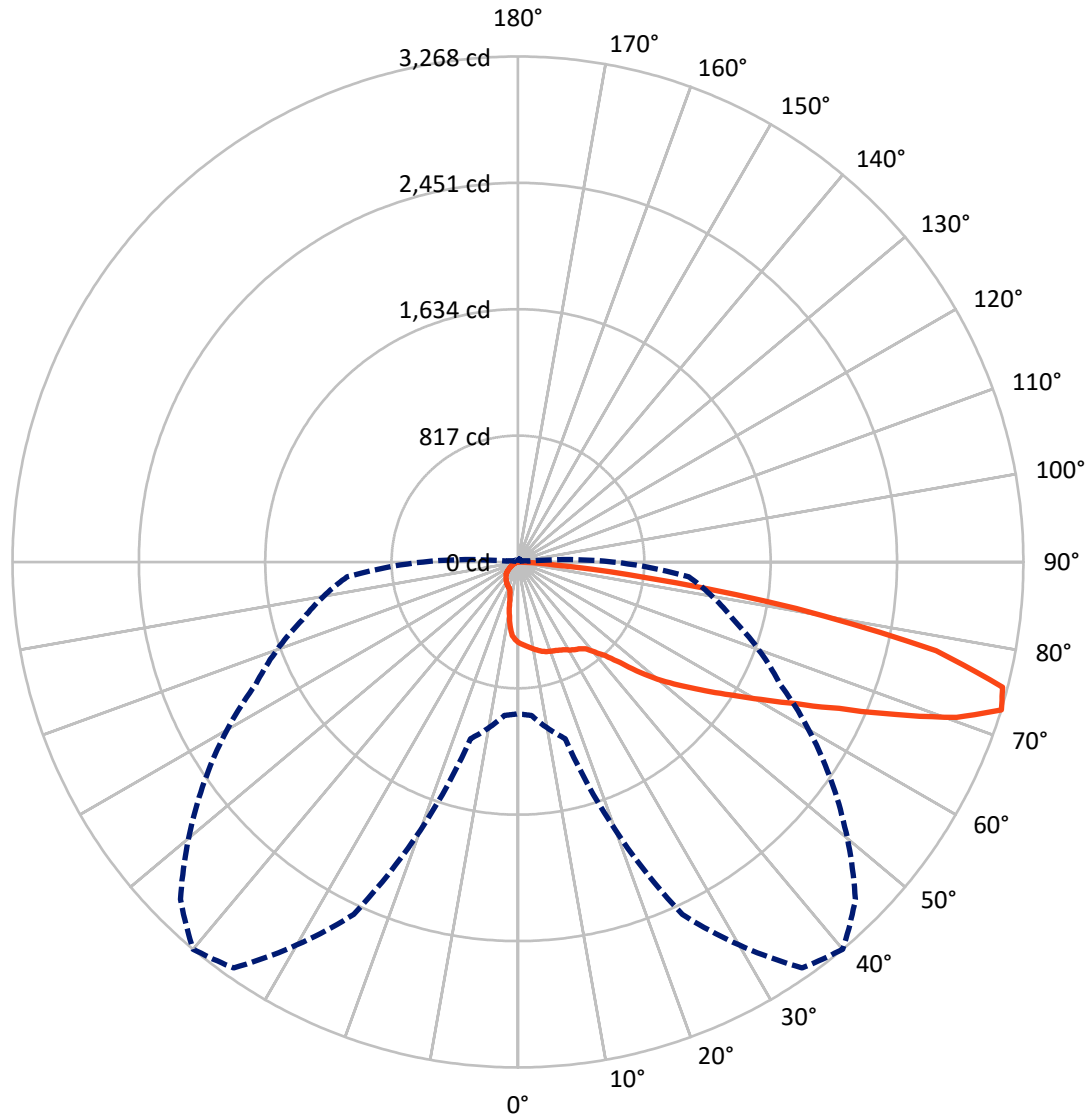
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 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	508.0	0.0	508.0
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	3426.0	0.0	3426.0
	% Fixture	87.1	0.0	87.1
Total	Lumens	3934.0	0.0	3934.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.6	1.2
10°-20°	129.2	3.3
20°-30°	209.0	5.3
30°-40°	308.6	7.8
40°-50°	519.4	13.2
50°-60°	806.5	20.5
60°-70°	1009.2	25.7
70°-80°	826.2	21.0
80°-90°	78.3	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°	3934.0	100.0
0°-180°	3934.0	100.0

Coefficient of Utilization



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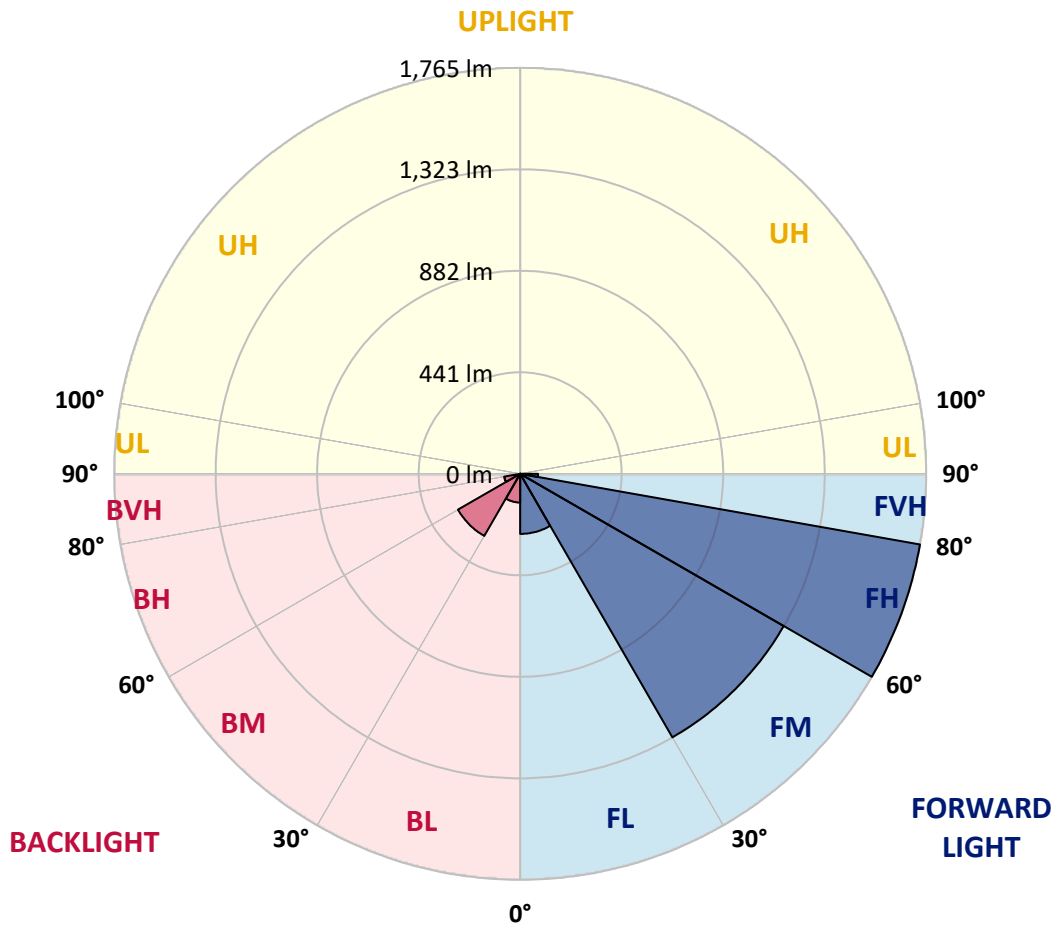
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	261.1	6.6			
FM (30°-60°)	1322.5	33.6			
FH (60°-80°)	1764.6	44.9			G1/1800
FVH (80°-90°)	77.7	2.0			G1/100
BL (0°-30°)	124.7	3.2	B1/500		
BM (30°-60°)	312.0	7.9	B1/1000		
BH (60°-80°)	70.8	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°	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9
2.5°	536.6	538.7	537.5	535.1	534.5	533.3	531.9	531.3	529.2	527.4	525.3
5°	551.7	553.8	552.3	549.0	547.6	546.1	544.0	542.2	538.1	534.2	529.5
7.5°	568.3	570.1	568.3	563.6	561.2	559.4	556.4	553.8	549.0	543.4	537.5
10°	586.7	588.2	585.5	579.3	575.4	572.7	570.1	567.1	562.7	556.4	549.3
12.5°	603.9	605.6	601.5	594.1	589.6	587.0	584.0	581.6	577.2	571.3	563.9
15°	619.6	622.2	615.1	607.1	602.1	600.0	597.0	595.6	592.6	588.4	581.6
17.5°	631.4	633.2	625.8	616.3	610.7	609.2	607.1	608.0	607.4	605.3	600.9
20°	641.5	642.7	632.9	621.3	615.1	615.4	614.8	617.8	619.0	619.0	618.7
22.5°	653.9	654.2	641.8	627.3	619.9	621.9	622.8	626.1	628.5	630.8	636.2
25°	670.2	669.6	654.8	635.0	628.5	631.4	633.5	634.7	637.3	641.2	653.3
27.5°	694.5	692.7	673.8	647.4	639.7	642.4	646.2	645.6	644.5	647.4	667.9
30°	725.3	723.0	697.8	664.9	657.8	660.2	661.3	656.0	647.4	650.1	680.6
32.5°	774.2	770.1	735.1	684.5	673.5	676.2	674.7	663.7	651.0	653.6	693.3
35°	859.3	849.2	799.7	725.3	691.3	688.3	684.7	674.1	658.4	655.7	704.0
37.5°	1040.0	1022.2	937.8	805.0	731.6	712.3	701.3	690.7	666.4	655.7	716.2
40°	1243.9	1225.8	1128.3	938.4	798.5	765.9	739.9	710.2	674.7	659.6	735.1
42.5°	1456.6	1436.8	1336.6	1103.7	894.2	827.3	778.7	725.9	688.3	671.4	760.3
45°	1694.2	1669.3	1538.4	1276.2	1033.2	929.2	841.2	758.2	712.0	692.5	794.7
47.5°	1944.9	1912.6	1739.6	1443.6	1182.8	1070.2	955.6	816.0	747.0	723.9	841.2
50°	2167.1	2135.1	1947.3	1618.7	1322.7	1204.5	1085.9	896.0	799.4	768.3	903.7
52.5°	2326.8	2302.5	2136.3	1799.4	1468.2	1330.4	1204.2	989.0	865.8	825.2	977.5
55°	2433.8	2411.6	2270.2	1970.7	1637.3	1469.1	1320.6	1090.1	945.8	893.3	1059.0
57.5°	2498.7	2485.9	2367.1	2123.6	1805.1	1620.8	1453.9	1201.2	1040.0	973.6	1149.9
60°	2521.8	2511.4	2427.3	2269.4	2007.7	1803.0	1610.7	1326.5	1154.4	1064.9	1243.3
62.5°	2460.2	2462.2	2470.5	2442.1	2221.4	2016.3	1798.5	1477.1	1281.2	1168.3	1331.0
65°	2170.1	2187.3	2344.9	2633.5	2504.3	2283.6	2037.6	1660.8	1426.4	1285.9	1400.6
67.5°	1796.8	1821.6	2017.8	2745.5	2806.0	2630.5	2370.7	1894.8	1599.4	1405.6	1427.0
70°	1375.4	1402.1	1639.7	2722.1	3088.3	3009.8	2782.5	2192.6	1778.7	1488.6	1359.7
72.5°	981.6	995.3	1182.5	2513.8	3204.2	3268.2	3086.0	2474.7	1870.2	1442.7	1109.0
75°	689.8	687.4	811.6	2024.3	3023.7	3236.8	2979.6	2322.1	1692.5	1146.1	683.9
77.5°	300.4	301.0	405.3	1229.3	2413.4	2764.5	2476.8	1454.5	1179.9	607.4	288.6
80°	77.9	80.3	148.7	489.5	1453.0	1824.6	1510.5	639.4	545.2	148.1	55.1
82.5°	27.6	29.3	68.4	153.8	536.0	836.7	672.6	204.4	142.2	42.4	14.8
85°	8.0	9.5	36.7	47.1	110.8	236.4	163.3	39.7	35.0	21.9	3.9
87.5°	0.0	1.2	7.4	6.5	6.5	4.4	8.3	4.4	5.6	2.7	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°	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9	520.9
2.5°	523.6	521.5	517.0	512.3	507.9	503.7	502.5	498.1	496.0	496.3	496.0
5°	526.2	522.4	513.8	503.4	492.7	480.6	470.5	456.3	444.2	442.7	441.8
7.5°	533.3	527.1	513.2	493.0	466.4	432.9	401.8	371.0	353.5	344.0	343.4
10°	544.3	536.0	514.7	476.2	419.6	359.7	312.6	273.8	253.9	244.7	243.0
12.5°	557.3	548.2	517.0	447.4	359.1	280.6	229.6	205.9	201.8	201.2	200.9
15°	575.7	565.6	519.7	408.6	293.6	213.6	190.2	190.5	193.8	195.6	195.3
17.5°	596.2	586.1	515.9	361.2	229.0	182.5	181.9	184.6	189.3	191.1	190.8
20°	616.9	607.4	502.2	305.5	185.2	173.9	176.3	179.3	184.0	186.4	186.4
22.5°	638.2	629.9	480.6	246.2	167.1	167.7	170.7	173.6	179.0	181.6	181.6
25°	661.0	653.9	451.9	197.3	159.4	161.2	165.0	168.6	174.2	177.5	177.5
27.5°	684.2	678.8	419.3	164.7	152.3	154.4	158.8	163.6	169.2	173.0	173.3
30°	709.3	706.4	393.2	152.6	145.5	147.3	152.3	157.6	163.9	168.6	169.2
32.5°	735.1	734.5	380.4	161.5	139.3	140.4	144.9	150.2	157.9	163.9	164.4
35°	760.6	761.8	373.0	186.7	137.2	133.9	136.9	141.6	150.8	158.2	159.4
37.5°	793.2	796.2	372.7	213.9	142.2	127.4	129.5	132.7	140.7	149.3	150.8
40°	841.8	857.5	391.7	237.3	151.1	121.5	122.1	122.7	126.8	133.9	136.3
42.5°	906.4	952.3	460.2	253.3	154.7	116.1	114.1	110.8	110.2	114.1	116.1
45°	986.7	1067.0	580.4	262.2	151.1	110.2	104.6	96.0	92.7	95.4	95.4
47.5°	1081.2	1192.6	723.0	264.3	145.2	102.8	92.7	81.5	78.8	79.7	79.4
50°	1173.3	1286.8	848.3	247.1	135.4	93.3	79.7	70.2	68.4	68.7	68.7
52.5°	1254.8	1319.1	883.9	206.5	122.4	81.8	68.4	61.9	60.7	60.7	60.4
55°	1308.8	1284.2	788.2	157.9	106.1	69.9	58.7	55.4	54.8	54.5	53.9
57.5°	1320.0	1170.4	595.3	114.1	83.0	59.0	52.1	50.4	49.2	48.0	47.4
60°	1279.7	980.7	379.0	79.7	62.2	50.4	46.2	45.0	42.7	40.3	39.4
62.5°	1192.6	740.7	209.8	55.4	50.1	43.0	40.9	39.4	35.0	31.1	29.9
65°	1075.6	492.4	92.7	43.3	40.9	36.1	35.0	32.9	27.6	23.1	22.2
67.5°	957.9	283.6	41.8	34.7	32.9	29.6	28.7	27.3	23.4	19.3	18.7
70°	823.7	143.7	28.7	27.6	25.5	22.5	23.4	23.1	19.3	15.7	15.1
72.5°	613.3	71.4	21.6	20.7	18.4	16.0	19.3	19.0	15.1	11.9	11.3
75°	347.3	35.3	15.7	14.5	11.0	11.9	15.4	14.5	10.4	7.7	7.1
77.5°	137.8	18.1	10.4	8.9	6.5	8.0	11.3	9.8	5.3	3.3	3.0
80°	31.7	8.9	5.3	3.9	3.0	4.7	5.9	3.6	1.5	0.3	0.0
82.5°	8.9	3.9	1.8	1.5	1.5	1.8	1.5	0.6	0.0	0.0	0.0
85°	3.0	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)