

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: P881561

Luminaire Tested: **NAV-SB1A-735-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881561
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-735-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4437 lumens
Efficiency: N/A
Efficacy: 143.6 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

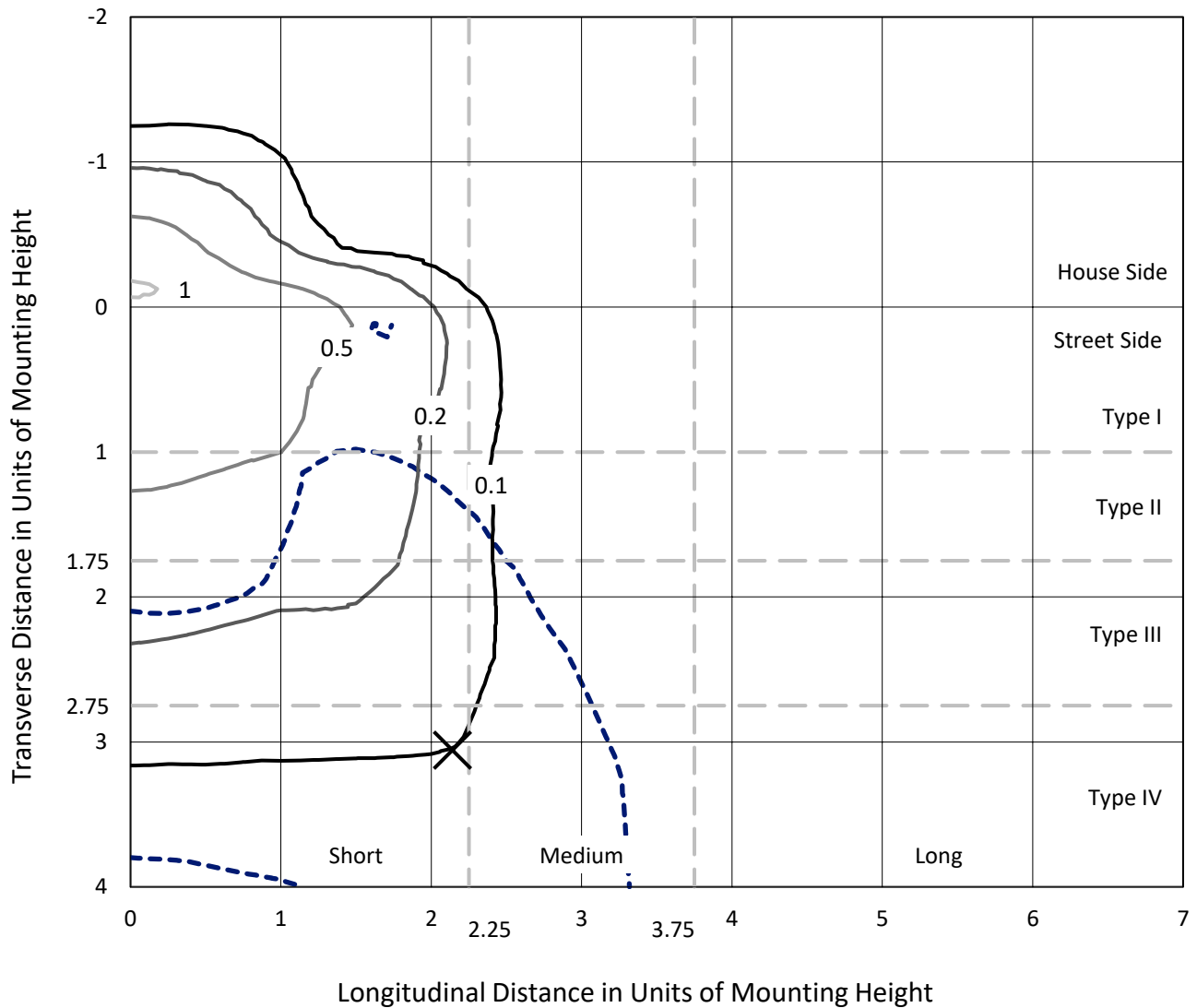
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

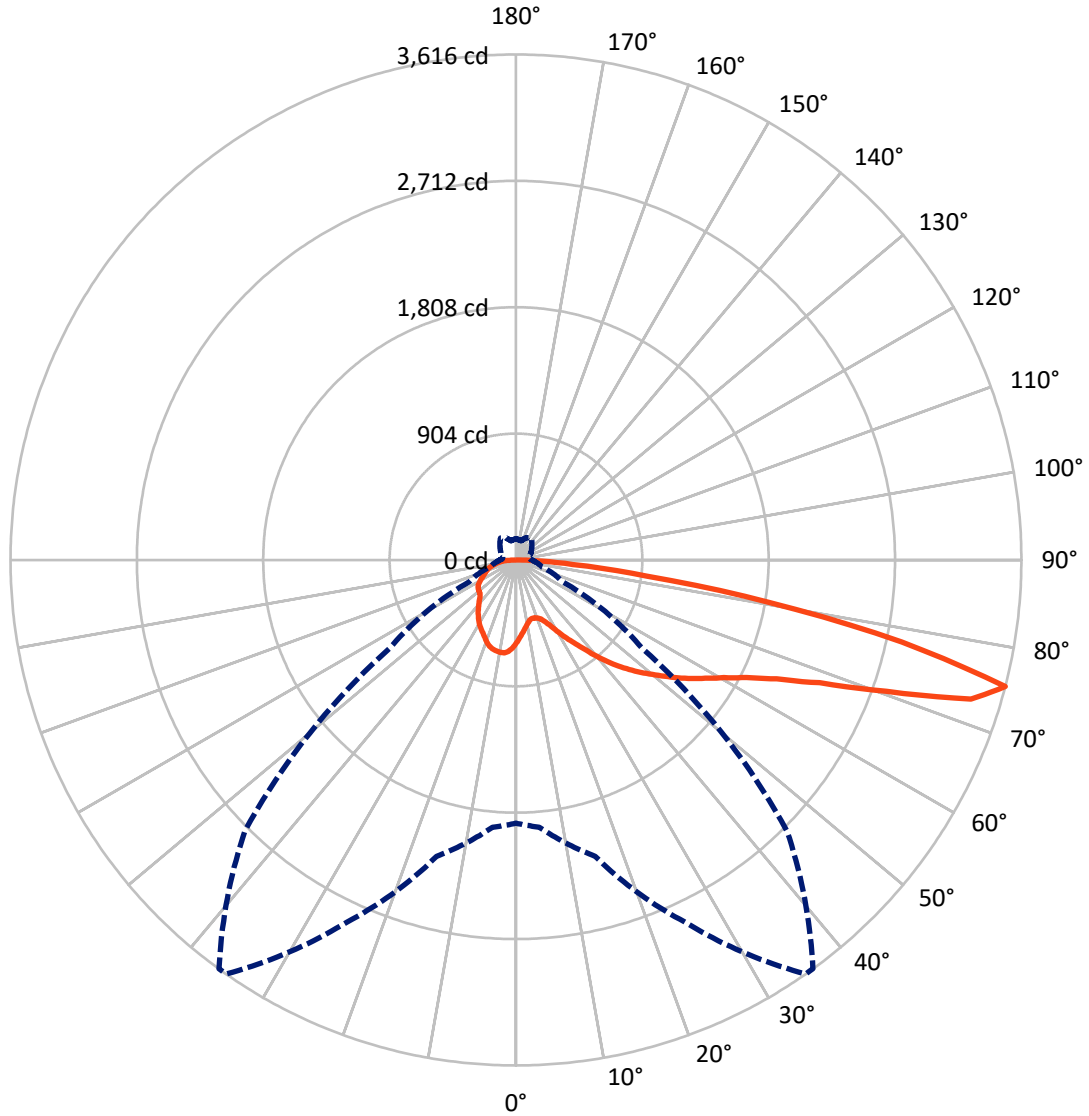
× Max cd
 - - - 1/2 Max cd



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 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1055.9	0.0	1055.9
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	3381.1	0.0	3381.1
	% Fixture	76.2	0.0	76.2
Total	Lumens	4437.0	0.0	4437.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.0	1.3
10°-20°	161.5	3.6
20°-30°	271.2	6.1
30°-40°	421.4	9.5
40°-50°	625.5	14.1
50°-60°	863.5	19.5
60°-70°	1047.6	23.6
70°-80°	865.8	19.5
80°-90°	124.5	2.8
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°	4437.0	100.0
0°-180°	4437.0	100.0

Coefficient of Utilization



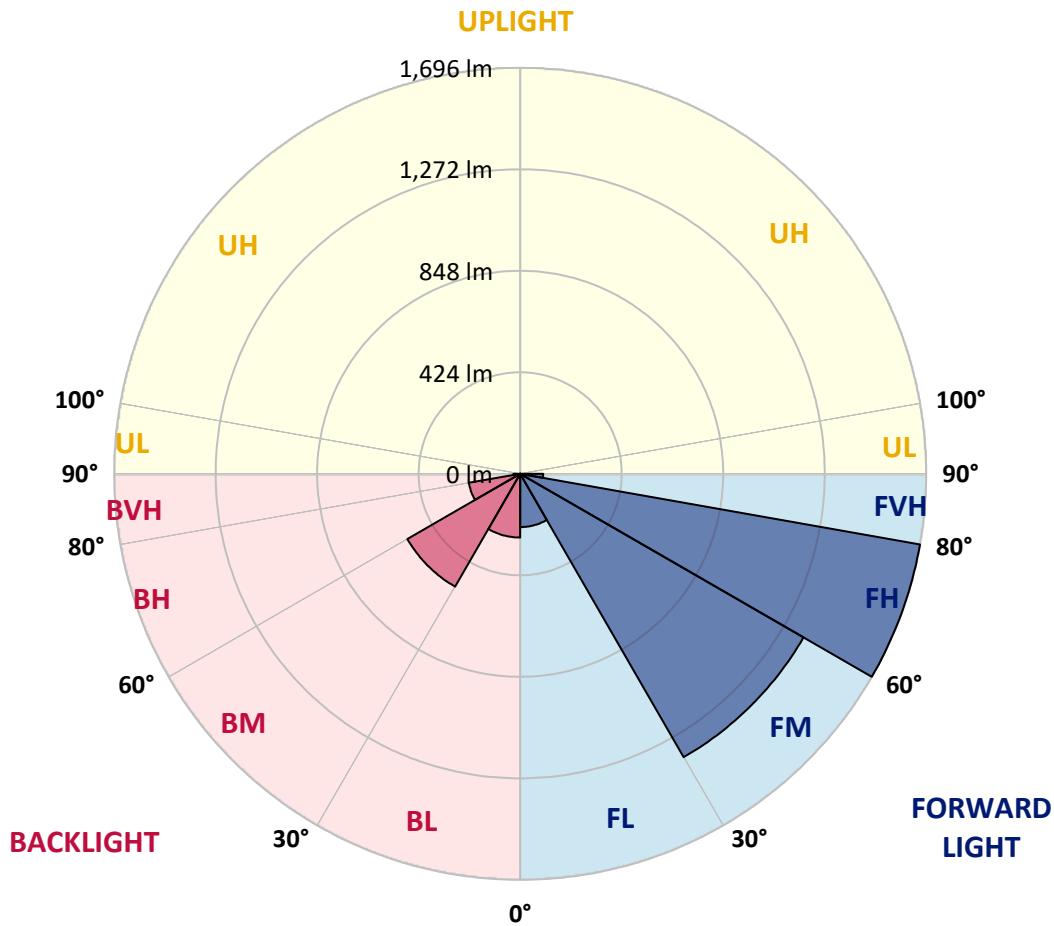
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	222.5	5.0			
FM (30°-60°)	1366.4	30.8			
FH (60°-80°)	1695.8	38.2			G1/1800
FVH (80°-90°)	96.5	2.2			G1/100
BL (0°-30°)	266.1	6.0	B1/500		
BM (30°-60°)	544.1	12.3	B1/1000		
BH (60°-80°)	217.7	4.9	B1/500		G1/500
BVH (80°-90°)	28.0	0.6			G1/100
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°	36°	45°	55°	65°	75°	85°
0°	591.3	591.3	591.3	591.3	591.3	591.3	591.3	591.3	591.3	591.3	591.3
2.5°	545.2	548.6	550.0	549.3	552.9	552.4	557.4	563.7	572.3	580.7	592.9
5°	503.2	506.8	509.9	512.8	519.8	521.9	529.9	541.8	557.7	573.8	593.9
7.5°	464.1	467.3	472.0	477.3	489.1	491.2	504.4	523.1	545.2	568.7	596.5
10°	432.2	435.3	440.4	446.4	461.0	463.7	480.4	505.4	534.2	563.9	599.4
12.5°	418.6	419.5	422.4	428.4	441.1	442.8	461.3	489.8	523.4	560.3	603.7
15°	417.8	419.8	420.0	423.1	433.7	434.4	451.4	479.7	516.7	559.6	610.2
17.5°	425.0	426.5	424.3	426.2	435.1	436.3	449.7	474.9	514.5	562.7	621.2
20°	444.2	445.4	438.9	436.3	442.8	443.7	456.9	478.0	516.7	569.2	636.4
22.5°	485.0	485.7	469.9	459.1	459.6	460.1	471.6	490.8	525.1	580.9	655.5
25°	548.6	548.1	522.9	502.0	490.0	487.4	495.1	511.4	539.2	596.5	680.2
27.5°	622.9	619.3	594.1	563.0	536.8	533.0	531.3	538.3	559.4	617.2	710.5
30°	706.9	703.5	676.4	635.6	599.4	593.2	577.3	573.8	589.3	645.2	752.4
32.5°	799.0	796.8	764.4	715.0	666.6	659.4	632.8	623.2	635.4	687.7	811.0
35°	876.2	874.3	847.4	796.6	737.3	728.5	701.4	690.6	696.8	742.1	887.5
37.5°	946.0	945.1	922.0	882.0	820.8	810.0	779.6	776.0	774.8	813.9	980.3
40°	1010.8	1008.4	984.4	963.3	918.0	908.1	881.3	878.1	869.0	902.1	1085.4
42.5°	1082.5	1076.3	1041.5	1031.6	1019.4	1011.3	995.2	995.7	975.5	1001.7	1196.7
45°	1141.0	1137.4	1101.7	1095.9	1109.1	1105.8	1119.7	1123.3	1084.2	1106.0	1312.3
47.5°	1203.9	1200.5	1170.3	1166.2	1201.9	1202.9	1252.1	1253.3	1190.2	1214.4	1428.1
50°	1281.3	1276.5	1246.6	1251.6	1291.7	1295.3	1385.2	1377.0	1287.8	1324.5	1543.0
52.5°	1332.4	1335.3	1328.8	1337.0	1391.7	1395.0	1516.2	1495.3	1384.5	1433.2	1655.8
55°	1370.1	1375.8	1396.0	1414.7	1497.2	1500.6	1639.7	1607.8	1464.6	1533.9	1761.8
57.5°	1418.5	1410.4	1448.0	1484.5	1597.5	1606.4	1759.9	1716.2	1535.6	1620.7	1834.5
60°	1488.1	1482.3	1511.6	1565.6	1709.7	1723.9	1887.0	1813.8	1587.6	1689.6	1848.6
62.5°	1629.1	1614.8	1619.3	1667.0	1851.3	1870.0	2030.4	1899.0	1613.6	1716.5	1772.8
65°	1840.0	1815.3	1792.3	1825.4	2050.6	2069.1	2192.3	1965.9	1604.0	1664.4	1571.6
67.5°	2105.5	2081.0	2052.7	2083.9	2344.2	2358.8	2392.1	2003.6	1528.4	1463.9	1215.9
70°	2324.5	2315.4	2349.2	2477.5	2813.1	2813.6	2648.3	1972.4	1321.4	1037.9	703.5
72.5°	2295.5	2290.0	2468.2	2864.9	3404.1	3391.4	2890.8	1736.4	890.1	468.2	263.6
75°	1883.2	1918.9	2195.0	2858.0	3616.4	3614.7	2742.3	1103.8	368.2	194.0	136.2
77.5°	1009.8	1066.4	1425.0	2110.1	2823.2	2865.6	1928.0	386.2	158.1	124.2	94.3
80°	329.3	378.7	568.0	1074.3	1834.5	1826.6	826.3	151.6	108.2	88.0	65.2
82.5°	139.8	145.6	253.8	507.3	941.5	926.8	263.1	87.1	76.0	60.2	40.3
85°	54.7	61.2	112.0	234.6	407.8	398.9	95.0	43.2	48.7	39.3	24.0
87.5°	18.0	21.8	40.1	80.4	126.9	122.3	23.3	14.9	21.1	18.0	8.6
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°	591.3	591.3	591.3	591.3	591.3	591.3	591.3	591.3	591.3	591.3	591.3
2.5°	596.3	600.1	604.7	611.4	617.2	622.0	627.0	630.1	631.3	634.9	634.7
5°	600.6	609.0	620.3	631.3	642.1	648.6	654.3	657.2	659.9	661.8	662.3
7.5°	607.8	618.6	636.4	650.7	659.9	665.1	669.0	668.0	669.0	669.5	670.2
10°	614.0	629.2	650.3	663.9	670.9	671.1	670.2	666.8	665.1	665.4	665.9
12.5°	621.5	638.3	661.1	672.6	674.5	669.2	665.1	659.4	657.2	656.3	655.8
15°	631.6	650.7	672.8	677.1	672.3	665.6	658.7	649.3	644.5	640.7	641.9
17.5°	643.8	664.9	681.9	678.8	668.5	657.5	646.2	632.0	622.2	618.1	618.4
20°	660.8	679.8	688.9	675.2	659.6	642.8	623.6	606.4	597.3	593.2	592.7
22.5°	681.4	699.7	695.6	669.0	646.9	620.0	596.1	583.3	578.8	575.9	576.4
25°	706.2	721.7	700.4	659.9	626.0	589.8	571.4	567.3	565.1	563.0	563.0
27.5°	738.3	746.7	704.0	646.4	593.4	557.7	551.0	551.7	551.0	547.4	548.1
30°	780.8	779.1	707.4	624.6	556.0	528.7	529.1	532.3	532.7	530.3	531.5
32.5°	836.6	819.6	709.0	596.3	520.3	503.2	503.7	507.1	509.5	505.4	507.3
35°	904.3	866.9	706.4	560.8	492.7	479.0	475.4	476.4	477.1	473.2	475.9
37.5°	983.2	919.9	694.6	521.5	469.9	455.3	447.6	441.1	437.3	433.7	436.1
40°	1069.8	977.7	673.1	483.1	444.5	430.1	418.6	406.3	393.4	388.6	390.7
42.5°	1160.5	1037.2	646.9	446.4	415.2	403.4	391.2	373.5	354.0	344.2	345.4
45°	1254.5	1098.1	621.2	410.2	385.2	380.2	366.0	344.7	323.6	311.1	310.1
47.5°	1346.6	1155.7	583.6	373.7	357.2	362.7	351.6	332.0	308.5	288.8	286.6
50°	1434.6	1209.6	521.9	336.8	334.4	357.4	346.8	318.5	291.7	266.5	264.3
52.5°	1521.9	1253.3	443.0	303.2	322.1	356.0	340.6	309.4	276.6	250.2	247.3
55°	1596.0	1275.8	367.0	274.4	304.4	343.7	333.2	298.6	255.2	227.1	224.8
57.5°	1638.3	1257.6	303.7	246.1	279.9	323.6	320.5	275.6	229.8	208.2	205.3
60°	1620.0	1183.7	251.9	221.4	256.7	301.7	298.4	252.8	210.4	190.0	187.1
62.5°	1519.5	1042.9	210.8	199.8	235.5	279.4	276.3	235.3	195.5	175.8	172.7
65°	1317.1	848.4	178.9	181.8	214.2	252.6	257.1	220.7	183.7	164.5	161.4
67.5°	1004.5	614.5	154.0	166.2	193.3	226.2	239.4	210.1	173.9	155.7	152.8
70°	572.6	349.0	132.9	151.1	174.9	201.7	225.7	201.7	163.3	148.2	146.3
72.5°	217.1	160.2	114.9	136.0	157.1	181.1	210.6	188.5	151.1	139.8	137.9
75°	115.9	97.6	96.7	118.3	136.7	160.9	191.6	175.6	142.0	147.8	152.6
77.5°	78.9	69.1	80.8	101.2	114.4	138.6	171.5	155.9	123.0	122.6	113.0
80°	54.7	48.9	65.7	81.6	88.5	116.6	149.7	133.8	100.3	93.5	89.5
82.5°	32.9	31.9	49.2	60.9	62.6	89.9	124.0	112.3	82.0	71.5	72.0
85°	18.0	18.9	31.4	35.7	36.5	62.8	97.1	86.8	63.1	53.0	53.5
87.5°	5.0	6.5	11.5	14.2	17.5	32.6	57.8	51.6	31.7	22.1	22.1
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)