

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: P881599

Luminaire Tested: **NAV-SB1A-827-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881599  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB1A-827-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

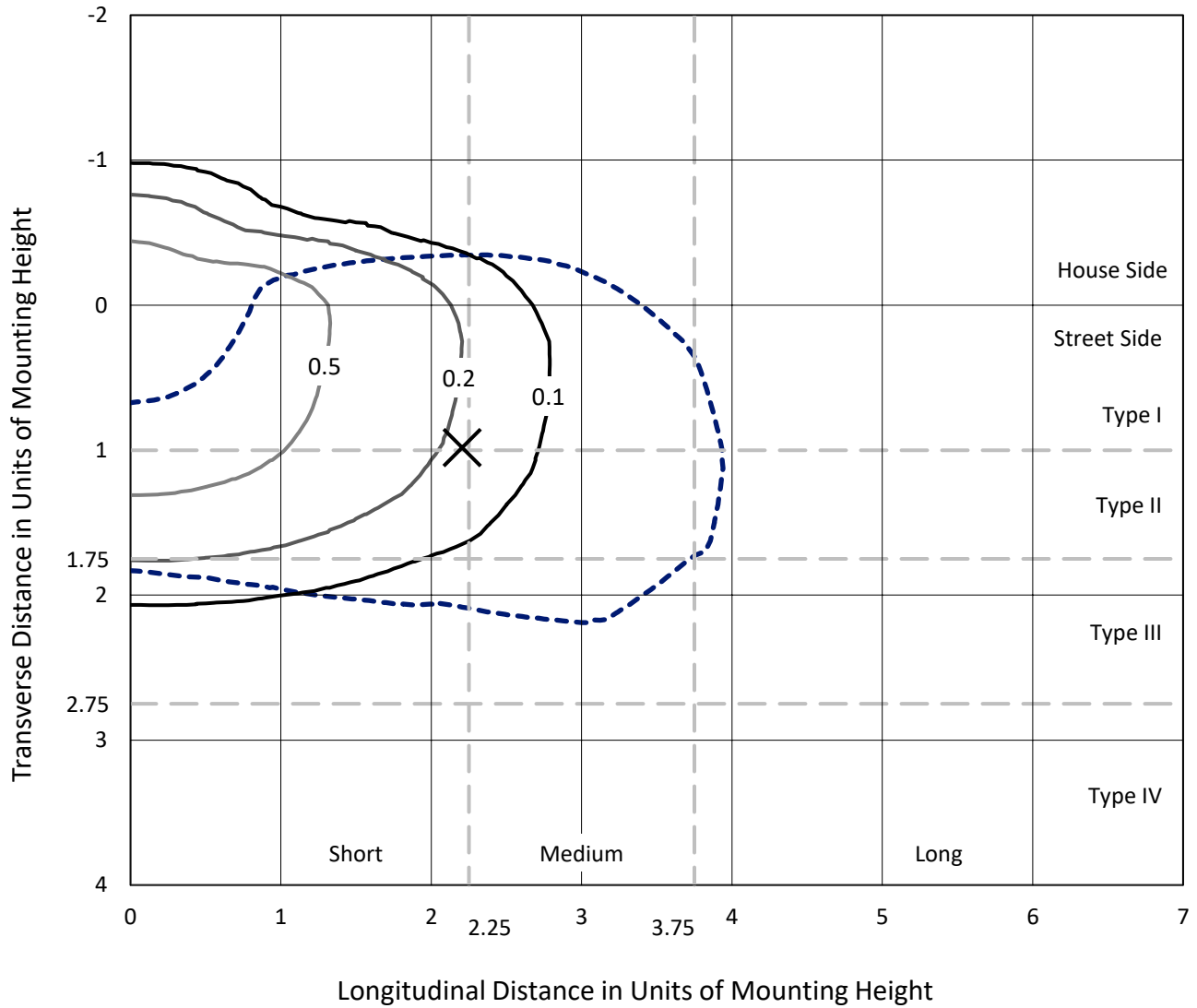
Lumens per Lamp: N/A  
Luminaire Lumens: 3650 lumens  
Efficiency: N/A  
Efficacy: 118.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): 120.0  
Input Current (Ain): 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



REPORT NUMBER: P881599  
 CATALOG NUMBER: NAV-SB1A-827-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

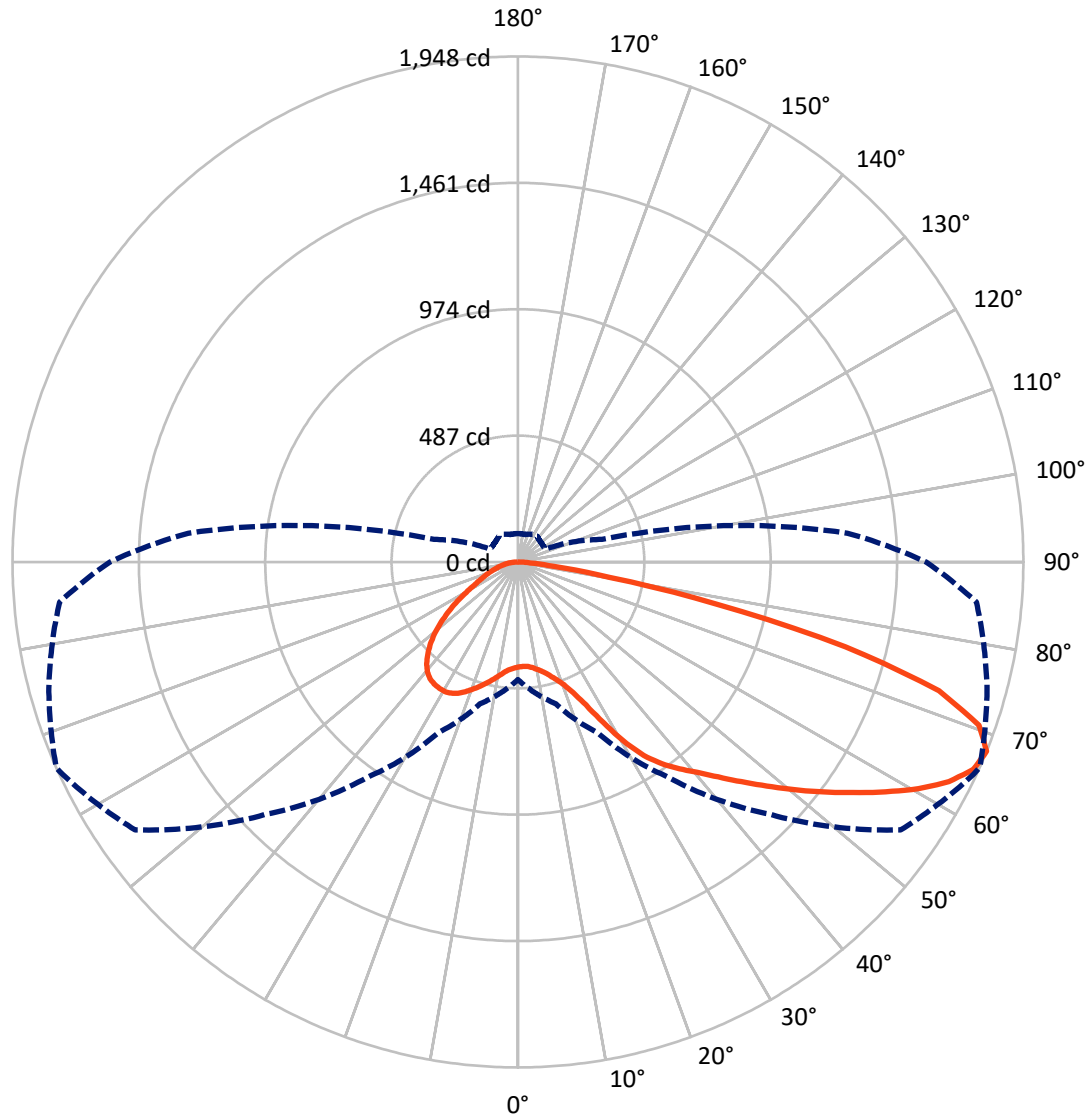
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc  
 Type III - Short - N/A

REPORT NUMBER: P881599  
CATALOG NUMBER: NAV-SB1A-827-U-T3

### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P881599  
 CATALOG NUMBER: NAV-SB1A-827-U-T3

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	907.6	0.0	907.6
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	2742.4	0.0	2742.4
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	3650.0	0.0	3650.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.1	1.1
10°-20°	132.6	3.6
20°-30°	255.6	7.0
30°-40°	448.2	12.3
40°-50°	666.3	18.3
50°-60°	844.5	23.1
60°-70°	826.4	22.6
70°-80°	394.2	10.8
80°-90°	42.1	1.2
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°	3650.0	100.0
0°-180°	3650.0	100.0



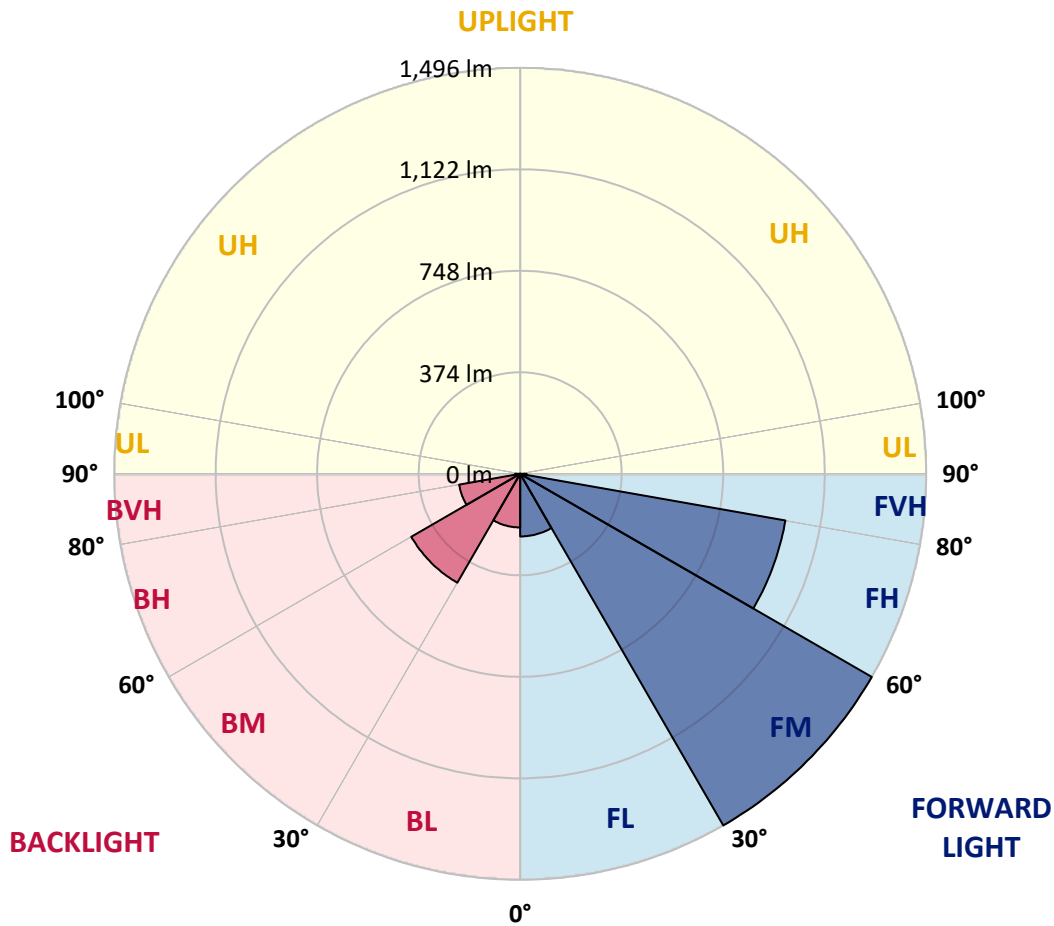
REPORT NUMBER: P881599  
 CATALOG NUMBER: NAV-SB1A-827-U-T3

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	230.6	6.3			
FM (30°-60°)	1495.7	41.0			
FH (60°-80°)	992.2	27.2			G1/1800
FVH (80°-90°)	23.9	0.7			G1/100
BL (0°-30°)	197.7	5.4	B1/500		
BM (30°-60°)	463.2	12.7	B1/1000		
BH (60°-80°)	228.4	6.3	B1/500		G1/500
BVH (80°-90°)	18.2	0.5			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 III Short



REPORT NUMBER: P881599  
 CATALOG NUMBER: NAV-SB1A-827-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	404.8	404.8	404.8	404.8	404.8	404.8	404.8	404.8	404.8	404.8	404.8
2.5°	400.6	402.9	402.3	401.4	401.2	401.6	402.1	402.7	402.5	403.5	405.0
5°	399.5	401.8	401.6	401.6	402.3	403.9	404.8	405.8	404.8	406.0	408.1
7.5°	400.2	402.0	402.7	403.5	405.4	408.3	410.6	412.7	411.5	412.9	415.6
10°	410.0	411.4	412.1	412.1	413.5	416.7	419.0	422.9	421.9	424.0	427.5
12.5°	427.8	429.2	429.2	428.4	429.4	431.5	432.3	436.5	434.7	438.2	441.7
15°	449.7	452.4	450.3	448.9	449.3	451.4	451.2	454.5	452.8	455.7	458.7
17.5°	473.9	477.3	473.9	473.7	472.9	475.2	475.4	478.3	475.2	477.3	479.4
20°	502.4	507.2	504.4	505.3	503.6	504.6	505.5	509.7	504.9	506.5	505.9
22.5°	542.7	548.5	545.4	549.0	547.9	547.1	546.9	554.4	546.9	547.5	542.0
25°	601.4	608.3	602.9	607.9	607.9	610.4	613.3	622.9	610.4	606.8	592.4
27.5°	688.1	695.0	684.4	687.5	686.5	692.7	689.6	713.4	700.0	694.0	665.1
30°	792.4	804.7	784.7	784.0	783.0	792.8	797.2	812.9	799.3	793.4	758.5
32.5°	905.2	918.0	894.2	887.3	883.7	889.6	886.0	898.6	889.3	880.0	836.9
35°	1024.5	1037.1	1014.5	1001.1	986.5	974.0	961.0	964.2	955.4	941.4	896.7
37.5°	1137.2	1160.4	1136.4	1122.1	1095.2	1070.9	1034.4	1019.3	1011.0	998.2	953.1
40°	1252.1	1265.3	1247.1	1234.8	1205.7	1167.5	1109.2	1077.2	1066.1	1053.6	1015.4
42.5°	1336.7	1349.3	1339.5	1331.1	1308.3	1264.0	1188.6	1148.5	1132.4	1118.4	1086.0
45°	1403.8	1413.2	1407.0	1410.1	1400.3	1357.4	1270.9	1225.0	1208.4	1191.3	1165.8
47.5°	1430.8	1440.8	1450.6	1468.8	1485.5	1453.8	1359.3	1307.9	1290.3	1272.8	1247.7
50°	1427.8	1437.9	1466.3	1505.0	1556.8	1546.3	1452.5	1396.1	1379.8	1359.9	1336.7
52.5°	1403.2	1414.7	1451.1	1515.6	1598.0	1615.5	1547.4	1487.2	1471.9	1448.1	1424.9
55°	1338.8	1345.7	1400.3	1491.6	1607.8	1663.8	1640.4	1584.2	1568.9	1535.7	1510.4
57.5°	1219.3	1229.3	1308.9	1427.0	1583.3	1696.6	1722.1	1686.3	1671.5	1623.7	1597.3
60°	1063.4	1079.3	1170.4	1318.4	1520.8	1696.4	1796.3	1786.6	1774.3	1710.4	1682.8
62.5°	887.0	905.4	993.0	1165.0	1411.5	1648.3	1842.7	1870.6	1864.2	1790.4	1755.1
65°	681.2	693.8	781.1	966.5	1241.3	1544.9	1848.1	1927.9	1929.0	1851.2	1792.9
67.5°	453.5	490.0	565.7	725.3	1013.5	1376.0	1800.9	1937.3	1948.4	1872.1	1773.9
70°	221.3	269.2	343.5	471.4	725.3	1116.9	1677.6	1860.2	1884.9	1811.1	1660.8
72.5°	91.9	107.4	147.9	232.6	416.3	753.7	1429.9	1651.2	1697.0	1604.8	1396.3
75°	61.9	67.1	84.6	119.3	189.7	371.7	1031.2	1231.2	1305.0	1212.0	990.7
77.5°	47.8	51.0	61.6	83.4	112.8	140.6	551.9	742.0	780.1	722.2	515.5
80°	37.6	40.1	46.0	60.8	80.0	75.2	188.1	336.2	358.2	300.5	165.7
82.5°	32.6	33.6	33.0	41.2	53.1	43.9	61.8	124.1	136.9	99.3	54.1
85°	23.6	26.3	27.4	25.5	28.2	22.2	25.3	43.9	48.3	43.1	30.5
87.5°	9.6	14.2	17.5	16.5	10.4	6.3	7.9	12.8	14.8	16.1	10.0
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: P881599  
 CATALOG NUMBER: NAV-SB1A-827-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	404.8	404.8	404.8	404.8	404.8	404.8	404.8	404.8	404.8	404.8	404.8
2.5°	405.2	406.6	407.5	408.7	409.4	410.6	412.9	414.2	414.4	415.4	415.2
5°	408.9	410.8	412.9	416.0	419.4	422.3	426.7	429.8	430.9	431.9	431.7
7.5°	416.7	419.4	423.2	428.6	433.6	437.4	442.8	446.4	450.1	451.4	451.6
10°	428.4	432.3	437.8	445.1	450.5	455.5	461.0	464.1	467.7	469.3	470.0
12.5°	443.0	447.0	454.3	464.5	469.5	472.9	474.8	474.1	474.8	476.2	476.6
15°	459.7	464.1	472.3	483.3	486.7	483.7	479.4	475.6	475.0	475.4	476.7
17.5°	479.4	482.7	492.3	501.5	499.0	486.3	477.1	471.0	467.9	467.0	468.3
20°	507.0	507.0	514.9	520.7	504.0	482.5	468.1	458.1	451.8	449.1	448.6
22.5°	540.6	537.5	542.5	538.5	503.0	471.8	451.8	434.6	425.0	421.1	420.6
25°	583.2	579.5	578.2	553.3	496.1	454.7	422.3	401.4	392.9	390.8	391.2
27.5°	647.4	638.2	620.8	561.3	483.5	427.8	387.8	368.4	363.6	363.8	364.4
30°	733.0	714.5	671.8	562.7	462.7	389.9	352.5	338.7	336.4	337.3	340.6
32.5°	812.2	794.7	723.9	556.5	430.9	352.7	320.8	311.6	308.2	309.3	310.9
35°	874.3	869.5	772.3	547.9	391.8	317.8	292.5	284.6	277.9	276.3	277.5
37.5°	933.0	931.1	808.5	535.8	353.1	293.0	269.6	259.3	249.5	244.1	244.3
40°	997.4	995.5	832.3	517.2	318.7	271.6	249.1	235.5	223.4	213.6	214.6
42.5°	1069.9	1058.6	843.6	490.6	289.6	253.3	232.4	214.0	198.1	189.1	189.7
45°	1149.1	1123.6	843.4	456.6	265.0	236.6	214.6	188.5	173.7	165.3	164.9
47.5°	1233.1	1185.7	833.1	419.0	241.3	218.2	187.0	167.0	157.3	152.1	150.9
50°	1319.8	1243.8	815.4	375.9	216.9	197.3	169.7	156.1	148.6	143.8	142.1
52.5°	1401.3	1296.6	794.1	327.0	192.2	177.0	162.0	151.5	143.6	138.3	136.0
55°	1477.0	1342.0	764.0	276.9	172.0	163.4	158.4	149.6	140.6	134.2	131.7
57.5°	1544.3	1371.6	712.1	229.9	157.6	154.0	154.6	146.3	136.0	130.6	127.1
60°	1600.3	1393.2	635.2	186.4	145.9	144.8	148.6	140.2	128.1	122.0	119.3
62.5°	1633.9	1392.8	540.8	152.7	136.0	136.4	140.8	132.5	120.2	114.5	112.8
65°	1631.0	1358.7	437.2	130.6	126.4	126.8	132.5	124.1	113.7	110.3	110.1
67.5°	1573.3	1275.5	335.4	116.2	115.8	117.6	124.3	118.3	109.7	109.3	109.9
70°	1417.0	1102.7	241.6	104.7	104.9	107.4	116.2	114.7	107.6	108.4	108.2
72.5°	1136.3	840.7	162.2	92.6	92.8	96.8	108.5	111.8	105.5	115.6	117.2
75°	756.7	524.3	104.3	79.8	80.0	85.1	101.8	106.2	99.7	115.3	116.2
77.5°	363.6	235.7	75.6	67.1	67.1	71.9	88.0	95.1	85.0	89.6	82.1
80°	125.6	88.6	59.4	54.1	52.9	56.2	74.2	82.5	73.3	67.5	63.3
82.5°	49.5	46.0	47.8	42.0	38.2	40.3	57.7	68.1	53.9	48.7	48.5
85°	28.4	29.9	33.8	27.8	22.1	24.7	42.4	48.9	40.7	35.9	36.6
87.5°	7.7	10.5	15.5	14.4	10.0	10.5	20.1	27.0	23.4	18.0	18.6
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)