

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: P881701

Luminaire Tested: **NAV-SB1B-722-U-T4FT**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881701  
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-SB1B-722-U-T4FT  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 2200K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD  
THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

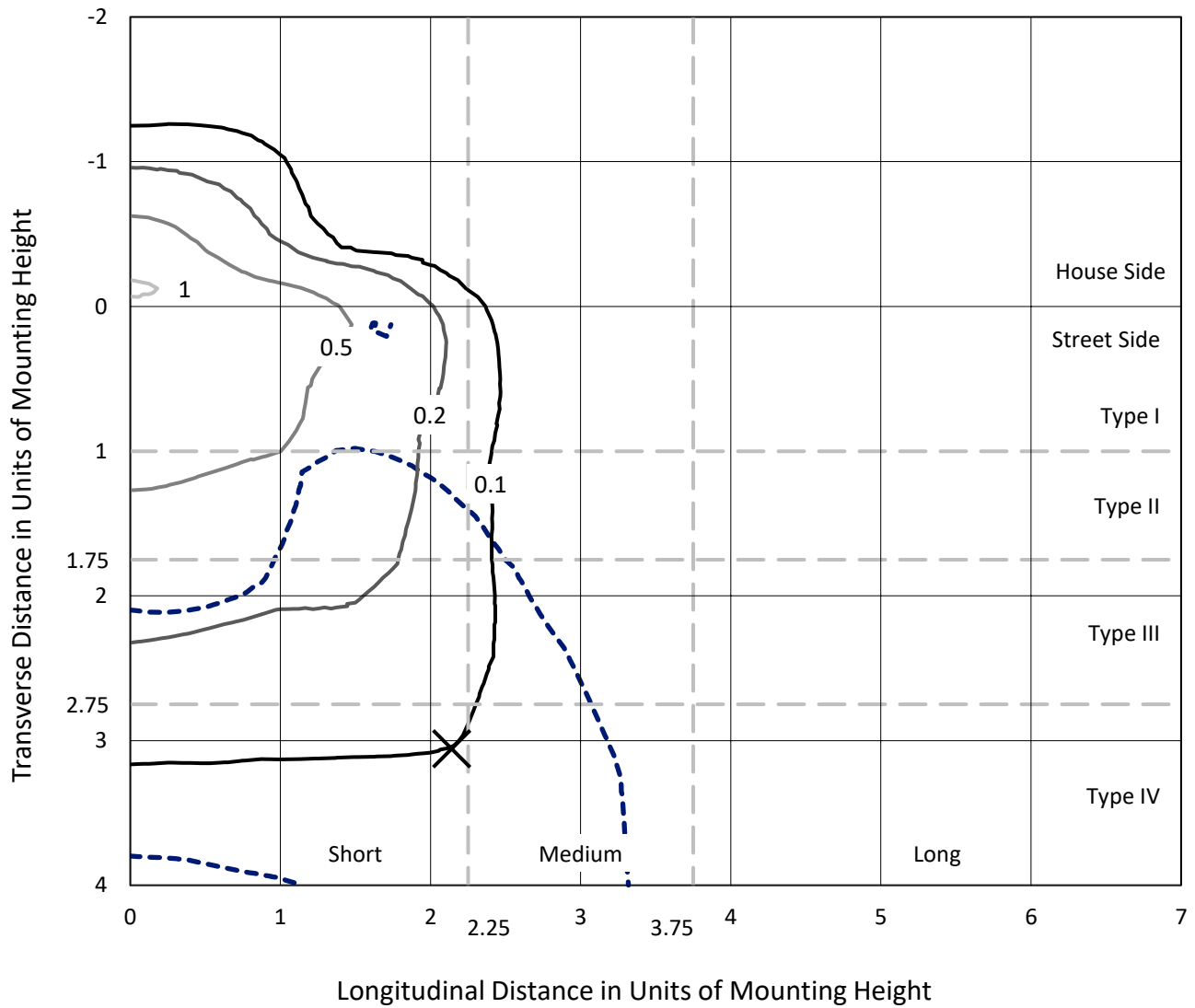
Lumens per Lamp: N/A  
Luminaire Lumens: 4439 lumens  
Efficiency: N/A  
Efficacy: 111.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 39.8  
Input Voltage (V): 120.0  
Input Current (Ain): 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

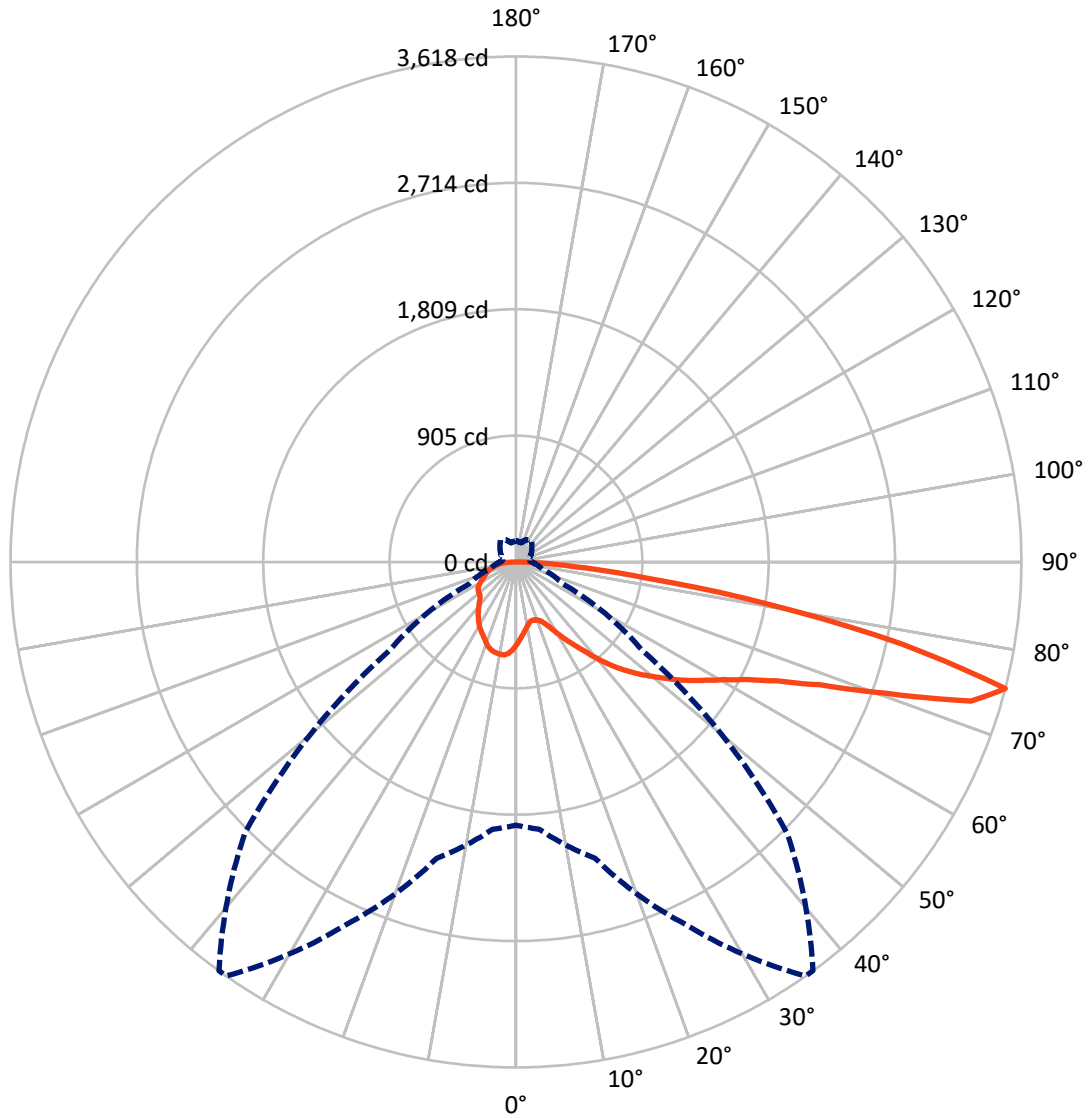
× Max cd  
 - - - 1/2 Max cd



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1056.4	0.0	1056.4
	% Fixture	23.8	0.0	23.8
<b>Street Side</b>	Lumens	3382.6	0.0	3382.6
	% Fixture	76.2	0.0	76.2
<b>Total</b>	Lumens	4439.0	0.0	4439.0
	% 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°	271.3	6.1
30°-40°	421.6	9.5
40°-50°	625.8	14.1
50°-60°	863.9	19.5
60°-70°	1048.1	23.6
70°-80°	866.2	19.5
80°-90°	124.6	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°	4439.0	100.0
0°-180°	4439.0	100.0

**Coefficient of Utilization**



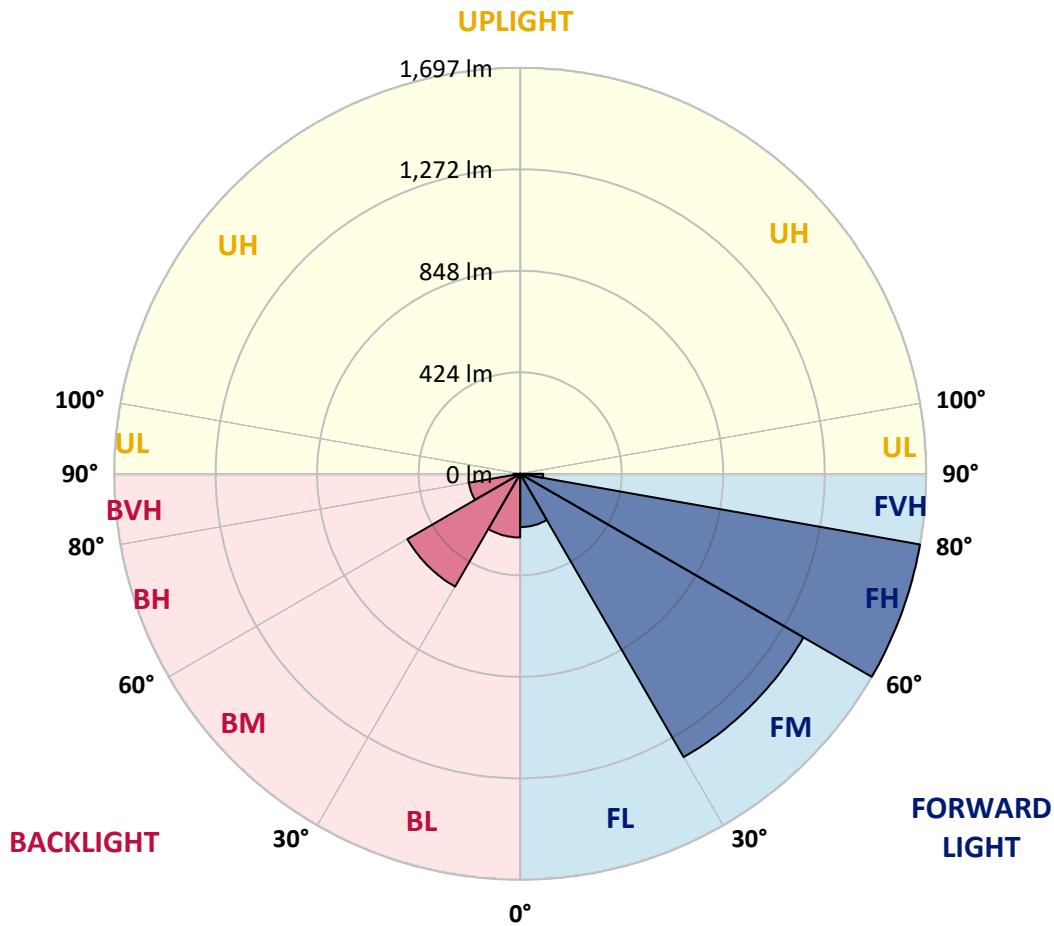
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	222.6	5.0			
FM (30°-60°)	1367.0	30.8			
FH (60°-80°)	1696.5	38.2			G1/1800
FVH (80°-90°)	96.5	2.2			G1/100
BL (0°-30°)	266.2	6.0	B1/500		
BM (30°-60°)	544.3	12.3	B1/1000		
BH (60°-80°)	217.8	4.9	B1/500		G1/500
BVH (80°-90°)	28.1	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°	591.5	591.5	591.5	591.5	591.5	591.5	591.5	591.5	591.5	591.5	591.5
2.5°	545.5	548.8	550.3	549.5	553.1	552.7	557.7	563.9	572.6	581.0	593.2
5°	503.5	507.1	510.2	513.1	520.0	522.2	530.1	542.1	557.9	574.0	594.2
7.5°	464.3	467.5	472.3	477.5	489.3	491.5	504.7	523.4	545.5	569.0	596.8
10°	432.4	435.5	440.6	446.6	461.2	463.9	480.7	505.6	534.4	564.2	599.7
12.5°	418.7	419.7	422.6	428.6	441.3	443.0	461.5	490.0	523.6	560.6	604.0
15°	418.0	419.9	420.2	423.3	433.9	434.6	451.6	479.9	516.9	559.9	610.5
17.5°	425.2	426.7	424.5	426.4	435.3	436.5	449.9	475.1	514.7	563.0	621.5
20°	444.4	445.6	439.1	436.5	443.0	443.9	457.1	478.3	516.9	569.4	636.6
22.5°	485.2	485.9	470.1	459.3	459.8	460.3	471.8	491.0	525.3	581.2	655.8
25°	548.8	548.3	523.1	502.3	490.3	487.6	495.3	511.6	539.5	596.8	680.6
27.5°	623.2	619.6	594.4	563.2	537.1	533.2	531.5	538.5	559.6	617.4	710.8
30°	707.2	703.8	676.7	635.9	599.7	593.4	577.6	574.0	589.6	645.5	752.8
32.5°	799.3	797.2	764.8	715.4	666.9	659.7	633.0	623.4	635.7	688.0	811.3
35°	876.6	874.7	847.8	796.9	737.7	728.8	701.7	690.9	697.1	742.5	887.9
37.5°	946.4	945.5	922.4	882.4	821.2	810.4	779.9	776.3	775.1	814.2	980.8
40°	1011.2	1008.8	984.8	963.7	918.4	908.5	881.7	878.5	869.4	902.5	1085.9
42.5°	1083.0	1076.7	1042.0	1032.1	1019.9	1011.7	995.6	996.1	976.0	1002.1	1197.2
45°	1141.5	1137.9	1102.2	1096.4	1109.6	1106.3	1120.2	1123.8	1084.7	1106.5	1312.9
47.5°	1204.4	1201.1	1170.8	1166.7	1202.5	1203.5	1252.6	1253.8	1190.7	1215.0	1428.8
50°	1281.9	1277.1	1247.1	1252.2	1292.2	1295.8	1385.8	1377.7	1288.4	1325.1	1543.7
52.5°	1333.0	1335.9	1329.4	1337.6	1392.3	1395.7	1516.9	1496.0	1385.1	1433.8	1656.5
55°	1370.7	1376.5	1396.6	1415.3	1497.9	1501.3	1640.4	1608.5	1465.3	1534.6	1762.6
57.5°	1419.2	1411.0	1448.7	1485.2	1598.2	1607.1	1760.7	1717.0	1536.3	1621.5	1835.3
60°	1488.8	1483.0	1512.3	1566.3	1710.5	1724.7	1887.8	1814.7	1588.4	1690.4	1849.5
62.5°	1629.9	1615.5	1620.0	1667.8	1852.1	1870.8	2031.3	1899.8	1614.3	1717.2	1773.6
65°	1840.8	1816.1	1793.1	1826.2	2051.5	2070.0	2193.3	1966.8	1604.7	1665.2	1572.3
67.5°	2106.5	2082.0	2053.7	2084.9	2345.2	2359.9	2393.2	2004.5	1529.1	1464.5	1216.4
70°	2325.6	2316.4	2350.3	2478.7	2814.4	2814.9	2649.5	1973.3	1322.0	1038.4	703.8
72.5°	2296.5	2291.0	2469.3	2866.2	3405.7	3392.9	2892.1	1737.1	890.5	468.4	263.7
75°	1884.0	1919.8	2196.0	2859.2	3618.0	3616.4	2743.6	1104.3	368.4	194.1	136.3
77.5°	1010.3	1066.9	1425.7	2111.0	2824.5	2866.9	1928.9	386.4	158.1	124.3	94.3
80°	329.5	378.9	568.2	1074.8	1835.3	1827.4	826.7	151.7	108.2	88.1	65.3
82.5°	139.9	145.7	253.9	507.5	941.9	927.2	263.2	87.1	76.1	60.2	40.3
85°	54.7	61.2	112.1	234.7	407.9	399.1	95.0	43.2	48.7	39.4	24.0
87.5°	18.0	21.8	40.1	80.4	126.9	122.4	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°	591.5	591.5	591.5	591.5	591.5	591.5	591.5	591.5	591.5	591.5	591.5
2.5°	596.6	600.4	605.0	611.7	617.4	622.2	627.3	630.4	631.6	635.2	635.0
5°	600.9	609.3	620.6	631.6	642.4	648.9	654.6	657.5	660.2	662.1	662.6
7.5°	608.1	618.9	636.6	651.0	660.2	665.4	669.3	668.3	669.3	669.8	670.5
10°	614.3	629.4	650.6	664.2	671.2	671.4	670.5	667.1	665.4	665.7	666.2
12.5°	621.8	638.6	661.4	672.9	674.8	669.5	665.4	659.7	657.5	656.6	656.1
15°	631.8	651.0	673.1	677.4	672.6	665.9	659.0	649.6	644.8	641.0	642.2
17.5°	644.1	665.2	682.2	679.1	668.8	657.8	646.5	632.3	622.5	618.4	618.6
20°	661.1	680.1	689.2	675.5	659.9	643.1	623.9	606.6	597.5	593.4	593.0
22.5°	681.8	700.0	695.9	669.3	647.2	620.3	596.3	583.6	579.0	576.2	576.6
25°	706.5	722.1	700.7	660.2	626.3	590.1	571.6	567.5	565.4	563.2	563.2
27.5°	738.6	747.0	704.3	646.7	593.7	557.9	551.2	551.9	551.2	547.6	548.3
30°	781.1	779.4	707.7	624.9	556.3	528.9	529.4	532.5	533.0	530.6	531.8
32.5°	837.0	820.0	709.4	596.6	520.5	503.5	503.9	507.3	509.7	505.6	507.5
35°	904.7	867.3	706.7	561.1	492.9	479.2	475.6	476.6	477.3	473.5	476.1
37.5°	983.6	920.3	695.0	521.7	470.1	455.5	447.8	441.3	437.5	433.9	436.3
40°	1070.3	978.1	673.4	483.3	444.7	430.3	418.7	406.5	393.6	388.8	390.9
42.5°	1161.0	1037.6	647.2	446.6	415.4	403.6	391.4	373.6	354.2	344.4	345.6
45°	1255.0	1098.6	621.5	410.3	385.4	380.4	366.2	344.8	323.7	311.2	310.3
47.5°	1347.2	1156.2	583.8	373.9	357.3	362.8	351.8	332.1	308.6	288.9	286.8
50°	1435.3	1210.2	522.2	336.9	334.5	357.6	347.0	318.7	291.8	266.6	264.4
52.5°	1522.6	1253.8	443.2	303.3	322.3	356.1	340.8	309.6	276.7	250.3	247.4
55°	1596.8	1276.4	367.2	274.5	304.5	343.9	333.3	298.8	255.3	227.3	224.9
57.5°	1639.0	1258.2	303.8	246.2	280.0	323.7	320.6	275.7	229.9	208.3	205.4
60°	1620.8	1184.3	252.0	221.5	256.8	301.9	298.5	252.9	210.5	190.1	187.2
62.5°	1520.2	1043.4	210.9	199.9	235.7	279.6	276.4	235.4	195.6	175.9	172.8
65°	1317.7	848.8	179.0	181.9	214.3	252.7	257.2	220.8	183.8	164.6	161.5
67.5°	1005.0	614.8	154.1	166.3	193.4	226.3	239.5	210.2	174.0	155.7	152.9
70°	572.8	349.2	132.9	151.2	174.9	201.8	225.8	201.8	163.4	148.3	146.4
72.5°	217.2	160.3	114.9	136.1	157.2	181.2	210.7	188.6	151.2	139.9	138.0
75°	115.9	97.7	96.7	118.3	136.8	161.0	191.7	175.7	142.1	147.8	152.6
77.5°	79.0	69.1	80.9	101.3	114.5	138.7	171.6	156.0	123.1	122.6	113.0
80°	54.7	49.0	65.8	81.6	88.5	116.6	149.7	133.9	100.3	93.6	89.5
82.5°	32.9	31.9	49.2	61.0	62.6	90.0	124.1	112.3	82.1	71.5	72.0
85°	18.0	19.0	31.4	35.8	36.5	62.9	97.2	86.9	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)