

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: P881721

Luminaire Tested: **NAV-SB1B-730-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881721
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-730-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 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: 5483 lumens
Efficiency: N/A
Efficacy: 137.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

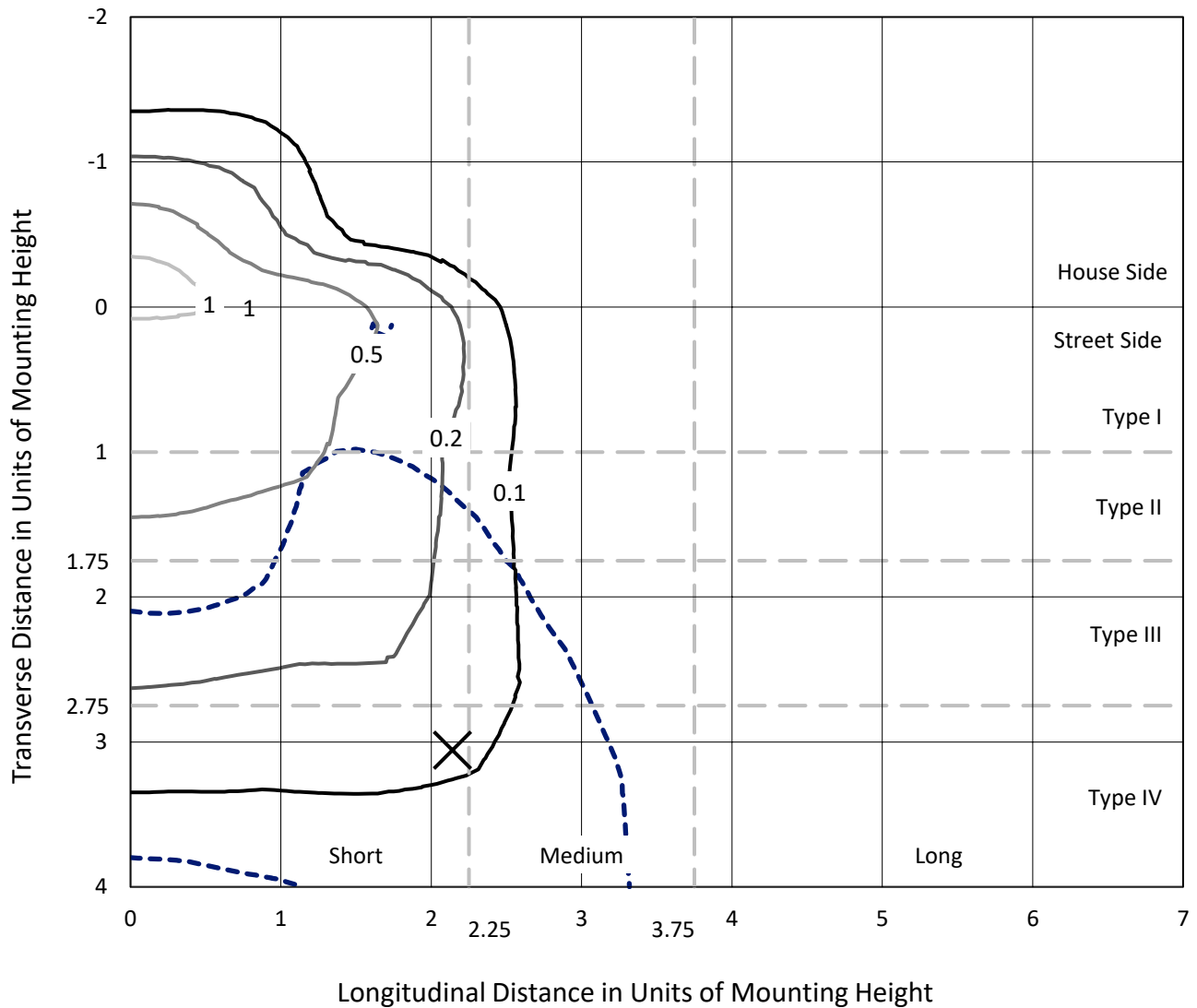
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

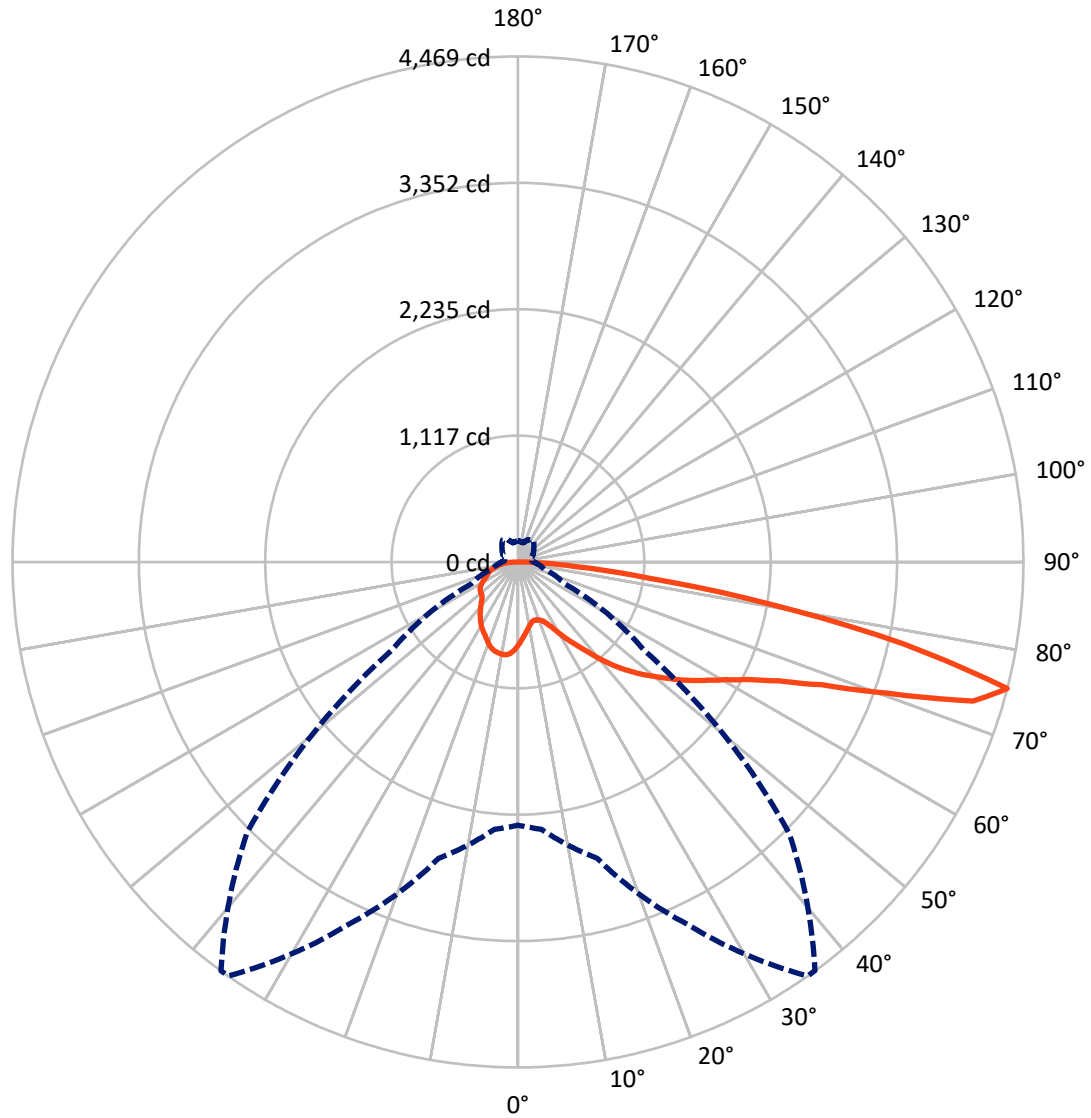
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 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	1304.8	0.0	1304.8
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	4178.2	0.0	4178.2
	% Fixture	76.2	0.0	76.2
Total	Lumens	5483.0	0.0	5483.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.2	1.3
10°-20°	199.5	3.6
20°-30°	335.1	6.1
30°-40°	520.8	9.5
40°-50°	772.9	14.1
50°-60°	1067.1	19.5
60°-70°	1294.6	23.6
70°-80°	1069.9	19.5
80°-90°	153.9	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°	5483.0	100.0
0°-180°	5483.0	100.0



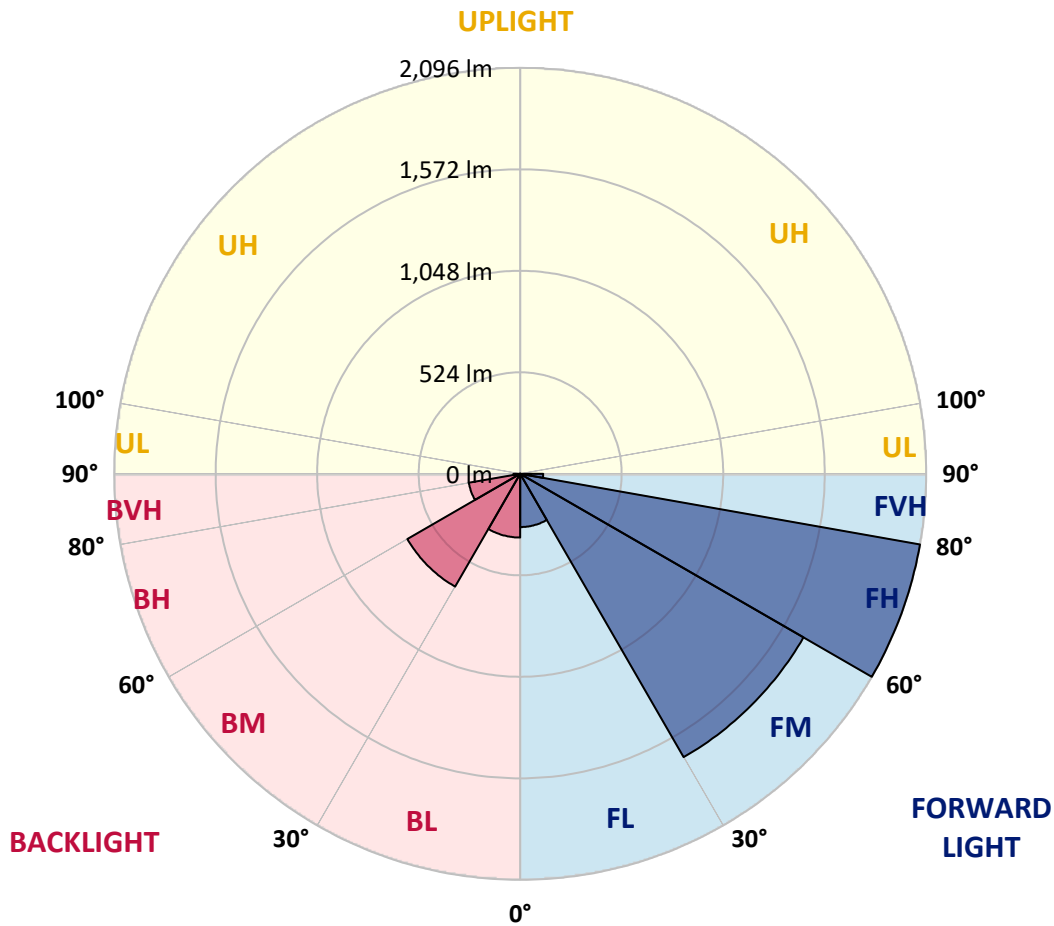
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	275.0	5.0			
FM (30°-60°)	1688.5	30.8			
FH (60°-80°)	2095.5	38.2			G2/5000
FVH (80°-90°)	119.2	2.2			G2/225
BL (0°-30°)	328.8	6.0	B1/500		
BM (30°-60°)	672.3	12.3	B1/1000		
BH (60°-80°)	269.0	4.9	B1/500		G1/500
BVH (80°-90°)	34.7	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-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	730.6	730.6	730.6	730.6	730.6	730.6	730.6	730.6	730.6	730.6	730.6
2.5°	673.7	677.9	679.7	678.8	683.2	682.6	688.9	696.6	707.2	717.6	732.7
5°	621.9	626.3	630.2	633.7	642.3	645.0	654.8	669.6	689.1	709.0	733.9
7.5°	573.6	577.4	583.3	589.9	604.4	607.0	623.3	646.5	673.7	702.8	737.2
10°	534.1	538.0	544.2	551.6	569.7	573.0	593.7	624.5	660.1	696.9	740.7
12.5°	517.2	518.4	522.0	529.4	545.1	547.2	570.0	605.3	646.8	692.4	746.1
15°	516.3	518.7	519.0	522.9	535.9	536.8	557.8	592.8	638.5	691.5	754.1
17.5°	525.2	527.0	524.3	526.7	537.7	539.2	555.8	586.9	635.8	695.4	767.7
20°	548.9	550.4	542.4	539.2	547.2	548.4	564.7	590.7	638.5	703.4	786.4
22.5°	599.3	600.2	580.7	567.3	567.9	568.5	582.7	606.5	648.8	717.9	810.1
25°	677.9	677.3	646.2	620.4	605.6	602.3	611.8	631.9	666.3	737.2	840.6
27.5°	769.8	765.3	734.2	695.7	663.4	658.6	656.5	665.1	691.2	762.7	878.0
30°	873.5	869.4	835.9	785.5	740.7	733.0	713.5	709.0	728.3	797.3	929.8
32.5°	987.3	984.7	944.7	883.6	823.7	814.8	781.9	770.1	785.2	849.8	1002.2
35°	1082.8	1080.4	1047.2	984.4	911.2	900.2	866.7	853.4	861.1	917.1	1096.7
37.5°	1169.0	1167.8	1139.4	1089.9	1014.3	1001.0	963.3	958.9	957.4	1005.7	1211.4
40°	1249.1	1246.1	1216.5	1190.4	1134.4	1122.2	1089.0	1085.2	1073.9	1114.8	1341.2
42.5°	1337.7	1330.0	1287.0	1274.9	1259.7	1249.7	1229.8	1230.4	1205.5	1237.8	1478.8
45°	1410.0	1405.6	1361.4	1354.3	1370.6	1366.4	1383.6	1388.1	1339.8	1366.7	1621.7
47.5°	1487.7	1483.5	1446.2	1441.1	1485.3	1486.5	1547.3	1548.7	1470.8	1500.7	1764.8
50°	1583.4	1577.5	1540.4	1546.7	1596.2	1600.6	1711.8	1701.7	1591.4	1636.8	1906.8
52.5°	1646.5	1650.1	1642.1	1652.2	1719.8	1723.9	1873.6	1847.8	1710.9	1771.0	2046.1
55°	1693.1	1700.2	1725.1	1748.2	1850.2	1854.3	2026.2	1986.8	1809.9	1895.5	2177.1
57.5°	1753.0	1742.9	1789.4	1834.5	1974.1	1985.0	2174.7	2120.8	1897.6	2002.8	2266.9
60°	1838.9	1831.8	1868.0	1934.7	2112.8	2130.3	2331.8	2241.4	1961.9	2087.9	2284.4
62.5°	2013.2	1995.4	2001.1	2060.0	2287.7	2310.8	2509.1	2346.7	1993.9	2121.1	2190.8
65°	2273.7	2243.2	2214.8	2255.7	2534.0	2556.8	2709.2	2429.4	1982.1	2056.8	1942.1
67.5°	2601.9	2571.6	2536.7	2575.2	2896.8	2914.9	2956.1	2475.9	1888.7	1809.0	1502.5
70°	2872.5	2861.2	2903.0	3061.6	3476.3	3476.9	3272.6	2437.4	1632.9	1282.6	869.4
72.5°	2836.6	2829.8	3050.0	3540.3	4206.6	4190.9	3572.3	2145.7	1100.0	578.6	325.8
75°	2327.1	2371.3	2712.4	3531.7	4469.0	4466.9	3388.8	1364.1	455.0	239.8	168.4
77.5°	1247.9	1317.8	1761.0	2607.5	3488.7	3541.2	2382.5	477.2	195.3	153.5	116.5
80°	407.0	468.0	701.9	1327.6	2266.9	2257.2	1021.1	187.3	133.7	108.8	80.6
82.5°	172.8	179.9	313.6	626.9	1163.4	1145.3	325.2	107.6	94.0	74.4	49.8
85°	67.6	75.6	138.4	289.9	503.9	492.9	117.4	53.4	60.2	48.6	29.6
87.5°	22.2	27.0	49.5	99.3	156.8	151.2	28.8	18.4	26.1	22.2	10.7
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°	730.6	730.6	730.6	730.6	730.6	730.6	730.6	730.6	730.6	730.6	730.6
2.5°	736.9	741.6	747.2	755.5	762.7	768.6	774.8	778.7	780.1	784.6	784.3
5°	742.2	752.6	766.5	780.1	793.5	801.5	808.6	812.2	815.4	817.8	818.4
7.5°	751.1	764.4	786.4	804.2	815.4	821.9	826.7	825.5	826.7	827.3	828.2
10°	758.8	777.5	803.6	820.5	829.1	829.4	828.2	824.0	821.9	822.2	822.8
12.5°	768.0	788.7	816.9	831.1	833.5	827.0	821.9	814.8	812.2	811.0	810.4
15°	780.4	804.2	831.4	836.8	830.8	822.5	813.9	802.4	796.4	791.7	793.2
17.5°	795.6	821.6	842.7	838.8	826.1	812.5	798.5	781.0	768.9	763.8	764.1
20°	816.6	840.0	851.3	834.4	815.1	794.4	770.7	749.3	738.1	733.0	732.4
22.5°	842.1	864.6	859.6	826.7	799.4	766.2	736.6	720.9	715.2	711.7	712.3
25°	872.6	891.9	865.5	815.4	773.6	728.9	706.0	701.0	698.3	695.7	695.7
27.5°	912.3	922.7	870.0	798.8	733.3	689.1	680.9	681.7	680.9	676.4	677.3
30°	964.8	962.7	874.1	771.8	687.1	653.3	653.9	657.7	658.3	655.4	656.8
32.5°	1033.9	1012.8	876.2	736.9	642.9	621.9	622.5	626.6	629.6	624.5	626.9
35°	1117.5	1071.2	872.9	693.0	608.8	591.9	587.5	588.7	589.6	584.8	588.1
37.5°	1215.0	1136.7	858.4	644.4	580.7	562.6	553.1	545.1	540.4	535.9	538.9
40°	1322.0	1208.2	831.7	597.0	549.2	531.5	517.2	502.1	486.1	480.2	482.8
42.5°	1434.0	1281.7	799.4	551.6	513.1	498.6	483.4	461.5	437.5	425.3	426.8
45°	1550.2	1357.0	767.7	506.9	476.0	469.8	452.3	425.9	399.9	384.4	383.3
47.5°	1664.0	1428.1	721.2	461.8	441.4	448.2	434.5	410.2	381.2	356.9	354.2
50°	1772.8	1494.8	645.0	416.2	413.2	441.6	428.6	393.6	360.4	329.3	326.6
52.5°	1880.7	1548.7	547.5	374.7	398.1	439.9	420.9	382.4	341.8	309.2	305.6
55°	1972.3	1576.6	453.5	339.1	376.1	424.8	411.7	369.0	315.4	280.7	277.7
57.5°	2024.5	1554.1	375.3	304.1	345.9	399.9	396.0	340.6	284.0	257.3	253.7
60°	2001.9	1462.8	311.2	273.6	317.2	372.9	368.7	312.4	260.0	234.8	231.2
62.5°	1877.7	1288.8	260.5	246.9	291.1	345.3	341.5	290.8	241.6	217.3	213.4
65°	1627.6	1048.4	221.1	224.7	264.7	312.1	317.7	272.7	227.0	203.3	199.5
67.5°	1241.4	759.4	190.3	205.4	238.9	279.5	295.8	259.7	214.9	192.4	188.8
70°	707.5	431.3	164.2	186.7	216.1	249.3	278.9	249.3	201.9	183.2	180.8
72.5°	268.2	198.0	142.0	168.1	194.1	223.8	260.2	233.0	186.7	172.8	170.4
75°	143.2	120.6	119.5	146.1	169.0	198.9	236.8	217.0	175.5	182.6	188.5
77.5°	97.5	85.4	99.9	125.1	141.4	171.3	211.9	192.7	152.1	151.5	139.6
80°	67.6	60.5	81.2	100.8	109.4	144.1	185.0	165.4	123.9	115.6	110.6
82.5°	40.6	39.4	60.8	75.3	77.4	111.2	153.2	138.7	101.4	88.3	88.9
85°	22.2	23.4	38.8	44.2	45.1	77.7	120.0	107.3	78.0	65.5	66.1
87.5°	6.2	8.0	14.2	17.5	21.6	40.3	71.4	63.7	39.1	27.3	27.3
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)