

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: P882296

Luminaire Tested: **NAV-SB2A-835-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882296
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-835-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5633 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

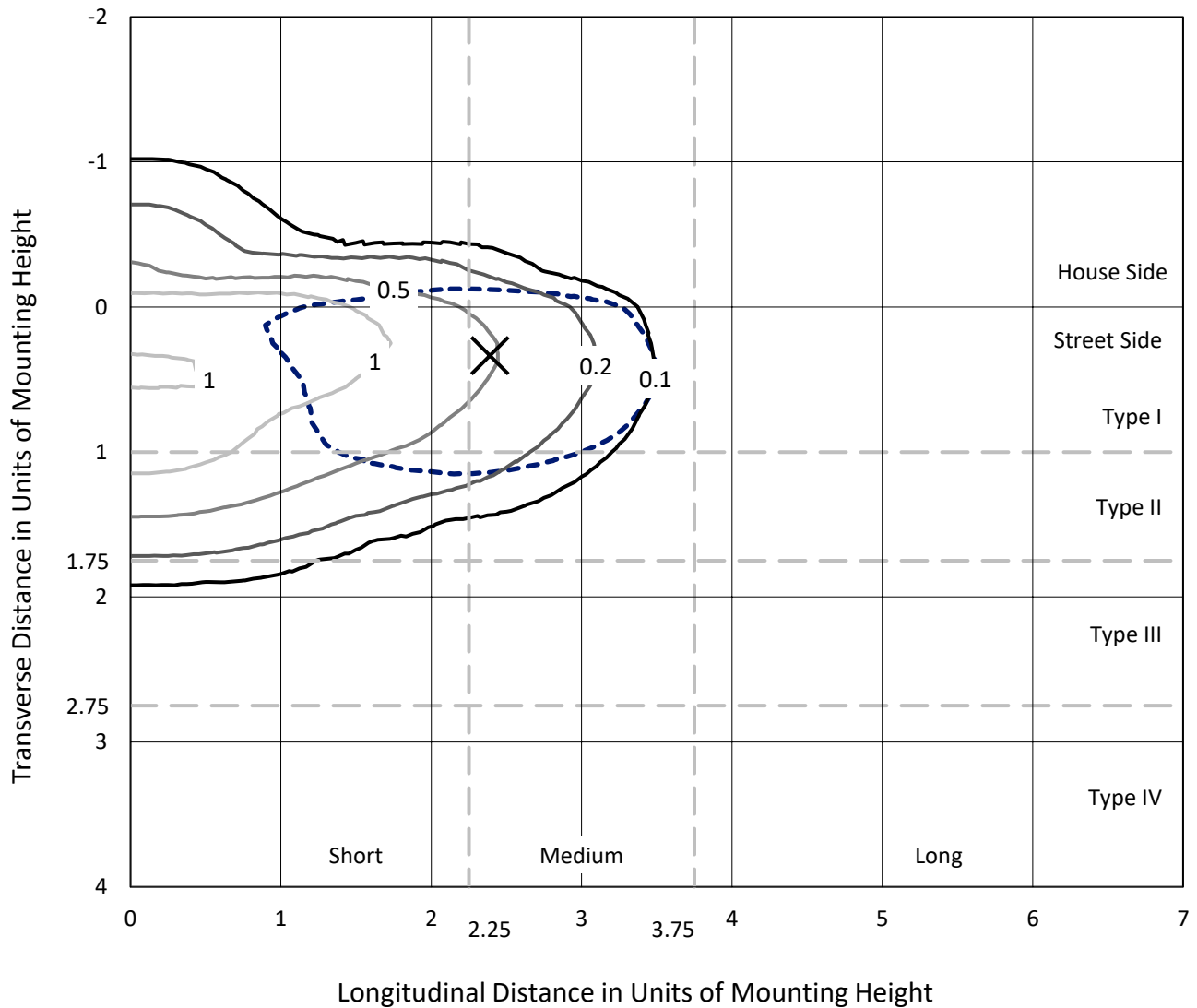
Input Watts (W): 57.3
Input Voltage (V): 120.0
Input Current (Ain): 0.484
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.038
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

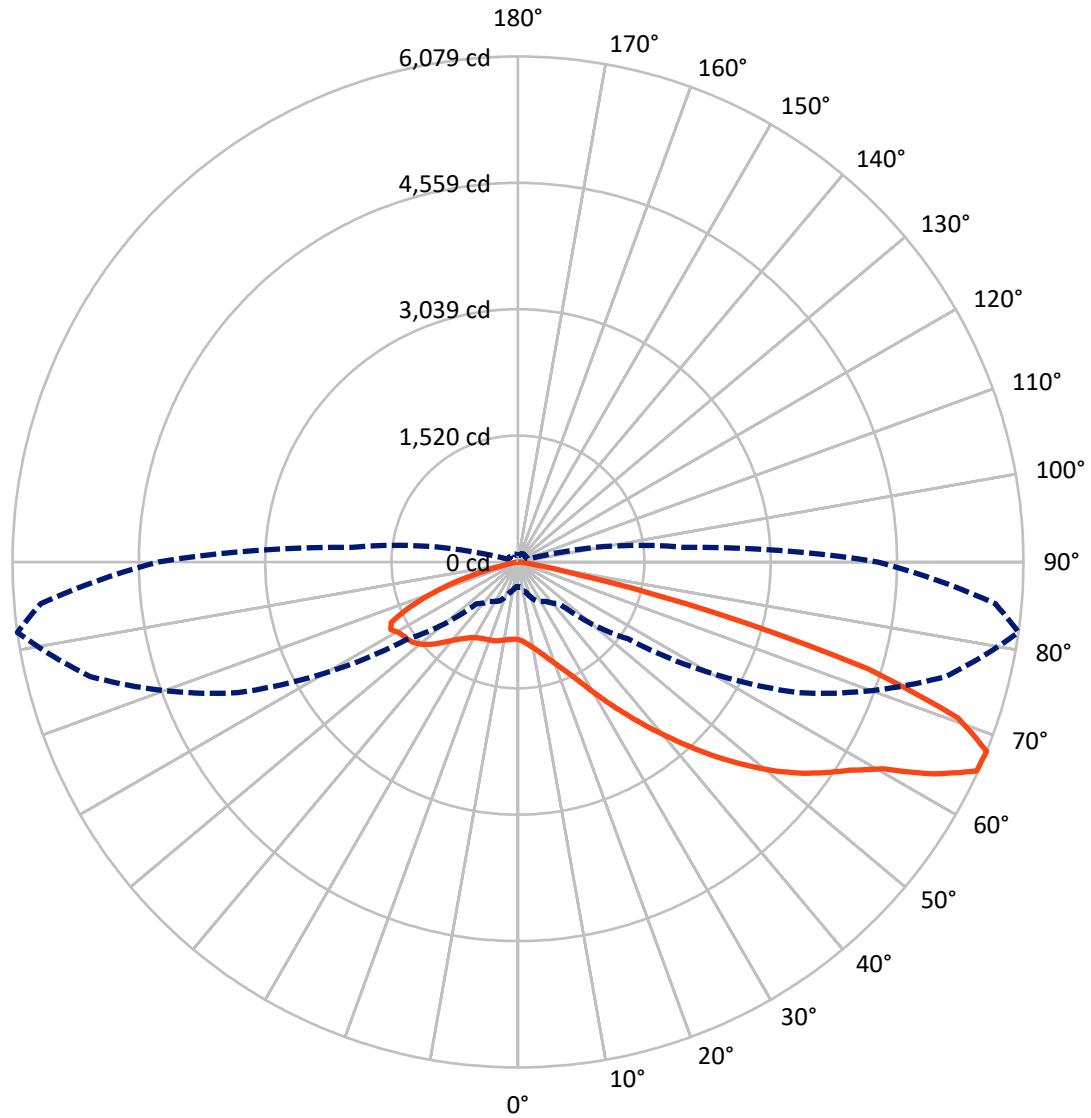
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1020.4	0.0	1020.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	4612.6	0.0	4612.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	5633.0	0.0	5633.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.1	1.5
10°-20°	216.1	3.8
20°-30°	346.0	6.1
30°-40°	611.9	10.9
40°-50°	1072.1	19.0
50°-60°	1429.9	25.4
60°-70°	1331.2	23.6
70°-80°	510.9	9.1
80°-90°	31.7	0.6
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°	5633.0	100.0
0°-180°	5633.0	100.0

Coefficient of Utilization



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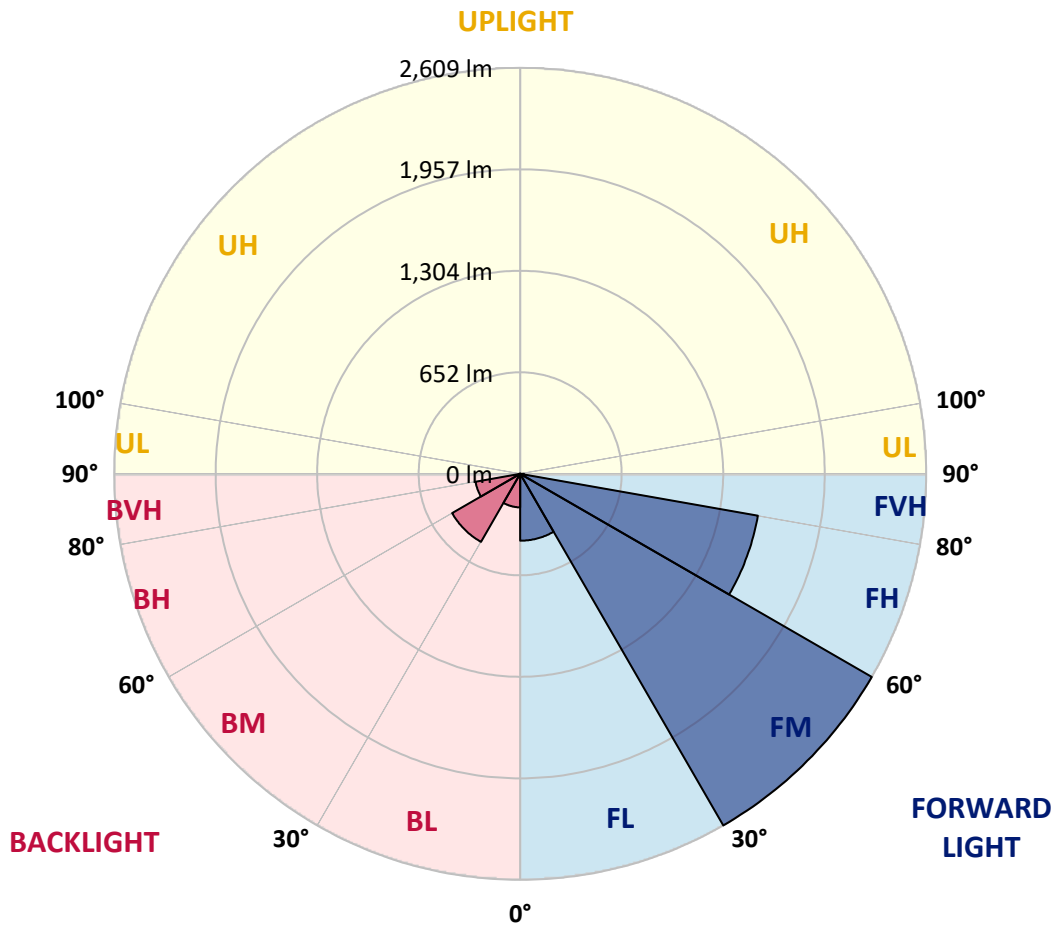
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	429.7	7.6			
FM (30°-60°)	2609.0	46.3			
FH (60°-80°)	1550.9	27.5			G1/1800
FVH (80°-90°)	23.1	0.4			G1/100
BL (0°-30°)	215.5	3.8	B1/500		
BM (30°-60°)	505.0	9.0	B1/1000		
BH (60°-80°)	291.2	5.2	B1/500		G1/500
BVH (80°-90°)	8.7	0.2			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	933.2	933.2	933.2	933.2	933.2	933.2	933.2	933.2	933.2	933.2	933.2
2.5°	986.3	992.0	988.8	987.1	984.3	980.2	977.0	966.9	956.3	949.4	947.0
5°	1006.2	1011.9	1011.5	1013.1	1015.1	1016.3	1015.5	1004.2	989.2	977.4	970.5
7.5°	989.2	995.7	1000.9	1009.0	1023.2	1038.2	1045.5	1043.1	1027.7	1011.5	1003.0
10°	940.9	947.8	960.4	979.4	1009.4	1041.9	1069.1	1081.6	1071.9	1054.1	1042.3
12.5°	852.5	859.4	884.1	925.5	975.8	1032.2	1084.1	1117.7	1120.2	1102.3	1088.5
15°	753.1	760.0	786.4	838.3	914.9	1005.4	1092.2	1155.9	1177.3	1161.9	1145.3
17.5°	691.5	697.6	717.4	759.2	839.1	951.9	1089.3	1196.4	1245.5	1233.3	1213.4
20°	672.8	678.1	687.4	716.6	783.1	896.3	1070.7	1234.5	1318.9	1312.0	1289.7
22.5°	692.7	697.6	700.4	713.4	755.2	859.8	1047.2	1273.5	1404.1	1404.9	1377.7
25°	738.5	743.4	740.2	748.3	766.5	848.4	1038.2	1319.3	1511.1	1520.0	1489.2
27.5°	814.0	814.4	806.7	806.3	809.1	865.5	1047.6	1368.4	1646.2	1662.8	1624.7
30°	965.2	959.2	929.5	897.5	882.9	916.6	1073.5	1426.4	1805.6	1835.2	1787.3
32.5°	1198.4	1189.5	1135.2	1058.5	981.5	998.9	1120.2	1492.5	1979.1	2032.7	1974.3
35°	1451.5	1449.1	1392.3	1278.3	1143.7	1116.1	1196.0	1579.3	2168.5	2253.7	2184.4
37.5°	1686.7	1685.5	1653.1	1518.8	1355.0	1279.5	1317.7	1692.8	2371.3	2494.6	2412.7
40°	1901.7	1905.3	1872.9	1752.8	1587.8	1489.2	1483.1	1833.1	2596.8	2757.0	2659.7
42.5°	2087.4	2091.5	2058.6	1969.8	1817.7	1721.2	1686.3	2005.1	2817.0	3038.9	2923.7
45°	2213.6	2238.7	2233.8	2162.9	2053.8	1953.6	1930.5	2220.9	3068.1	3337.8	3202.7
47.5°	2249.2	2272.4	2308.9	2318.6	2252.1	2153.5	2181.1	2480.8	3322.0	3637.1	3483.4
50°	2161.2	2182.7	2258.6	2359.6	2405.8	2375.4	2424.9	2759.4	3581.9	3935.6	3758.7
52.5°	1987.7	2009.6	2105.3	2265.1	2453.6	2549.4	2669.4	3034.0	3833.8	4218.2	4019.5
55°	1736.6	1759.7	1882.6	2063.5	2362.4	2621.1	2873.4	3308.2	4064.5	4472.5	4254.7
57.5°	1395.1	1412.2	1539.9	1793.0	2132.8	2549.8	3023.9	3607.5	4281.9	4722.4	4487.9
60°	909.3	924.3	1072.7	1355.0	1752.4	2311.3	3053.9	3941.2	4570.7	5047.2	4802.3
62.5°	604.7	614.8	702.8	910.1	1234.1	1853.4	2878.3	4207.7	4994.1	5612.6	5341.2
65°	414.9	425.0	513.0	657.4	797.3	1226.0	2373.3	4172.4	5377.7	6061.5	5740.7
67.5°	296.1	304.6	379.2	515.5	577.1	712.2	1608.9	3721.4	5322.6	6078.6	5762.2
70°	212.1	217.0	278.6	401.5	458.7	427.9	894.7	2846.2	4660.3	5613.0	5323.4
72.5°	148.4	150.1	193.5	305.8	369.5	312.3	425.8	1897.6	3524.7	4405.6	4127.0
75°	100.6	102.6	130.2	224.3	296.5	238.5	225.5	1017.6	2069.2	2438.6	2186.0
77.5°	61.6	62.5	84.0	153.3	221.8	181.7	145.2	431.1	800.6	786.0	670.0
80°	34.9	34.9	53.5	95.3	151.3	117.2	101.8	183.3	253.5	222.7	196.3
82.5°	19.5	19.9	38.9	59.2	100.2	69.4	56.0	84.8	109.5	96.9	84.4
85°	8.1	8.9	23.9	28.0	47.9	34.5	22.7	35.7	40.6	36.1	26.4
87.5°	0.8	1.2	7.3	5.3	5.7	6.9	3.2	6.9	5.7	5.7	4.1
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°	933.2	933.2	933.2	933.2	933.2	933.2	933.2	933.2	933.2	933.2	933.2
2.5°	939.3	933.2	917.8	899.9	876.4	865.1	849.7	839.1	830.2	831.0	822.9
5°	957.5	942.1	907.6	864.7	811.1	773.0	732.4	704.5	681.7	676.9	665.9
7.5°	982.7	958.3	897.9	820.5	730.0	661.5	600.2	560.9	532.9	524.0	515.1
10°	1015.1	979.8	885.3	764.9	634.7	547.5	481.8	451.0	431.9	425.4	420.6
12.5°	1052.8	1004.6	868.7	697.2	536.6	452.6	410.8	395.4	389.3	387.3	386.1
15°	1100.3	1035.4	843.6	616.9	453.4	394.6	376.8	374.7	375.6	374.7	374.3
17.5°	1156.7	1069.1	802.6	534.1	397.5	365.0	358.5	360.1	362.2	361.8	360.9
20°	1218.3	1102.3	750.3	460.7	359.3	343.9	340.3	341.9	343.5	342.7	342.3
22.5°	1288.5	1138.0	692.3	403.5	333.8	324.4	320.4	320.8	320.8	319.2	318.4
25°	1372.4	1177.3	631.5	363.0	314.3	307.0	302.1	300.5	298.1	293.2	292.4
27.5°	1472.6	1219.1	573.1	334.6	298.9	292.0	286.3	282.3	276.2	268.1	267.3
30°	1585.3	1269.8	523.6	316.7	286.7	279.8	273.3	267.3	258.3	248.2	247.4
32.5°	1718.0	1324.2	487.5	305.0	275.8	268.5	260.8	253.5	243.7	233.6	234.0
35°	1876.1	1389.9	466.4	296.9	267.3	257.5	249.0	240.9	233.6	224.7	223.9
37.5°	2047.7	1459.6	459.9	292.8	261.6	246.6	236.8	231.2	230.4	225.1	224.7
40°	2235.5	1542.4	464.8	290.4	255.5	236.0	225.5	224.3	226.3	217.0	217.4
42.5°	2434.2	1640.5	472.9	287.5	247.0	225.5	215.4	215.4	213.7	200.8	200.8
45°	2649.1	1753.6	481.0	280.6	236.8	214.9	207.2	204.4	197.5	184.9	184.5
47.5°	2865.7	1868.8	487.1	268.1	224.7	206.0	199.1	192.6	182.5	171.1	170.7
50°	3071.3	1972.2	480.6	249.4	210.9	197.5	190.2	181.3	170.3	162.6	161.4
52.5°	3255.0	2061.9	453.0	227.5	196.3	188.6	182.1	172.8	163.8	155.7	154.9
55°	3414.8	2134.5	404.3	206.8	183.3	180.9	174.4	162.6	150.5	143.6	142.8
57.5°	3568.1	2189.6	343.5	189.8	171.6	172.4	162.6	152.1	140.7	133.4	132.6
60°	3772.1	2263.4	281.9	174.0	159.0	161.4	150.9	143.2	129.0	119.6	118.4
62.5°	4098.2	2378.2	223.9	154.5	144.4	145.2	140.7	131.4	114.4	103.4	102.6
65°	4356.9	2336.0	176.4	133.4	127.8	129.0	129.0	118.8	100.6	88.0	86.8
67.5°	4327.7	2000.2	140.7	112.7	111.9	112.7	115.6	107.1	89.2	79.1	77.5
70°	3986.7	1591.0	112.7	93.7	97.3	95.3	103.4	97.7	80.3	70.2	68.9
72.5°	3253.0	1146.1	86.0	77.5	74.6	77.9	93.3	88.0	66.9	55.6	54.3
75°	1900.9	611.6	64.1	61.2	53.9	64.9	82.7	75.0	51.1	41.0	39.7
77.5°	618.9	213.3	47.0	45.0	40.2	52.3	70.6	63.3	41.8	32.4	31.2
80°	165.9	64.5	32.0	29.6	26.0	38.9	56.0	50.3	30.0	21.1	20.7
82.5°	66.5	27.2	18.7	16.6	14.2	26.8	44.2	40.6	22.3	13.4	13.4
85°	21.5	8.9	6.9	5.3	6.5	16.6	26.4	27.6	15.8	6.9	5.3
87.5°	2.8	1.2	1.2	1.6	1.2	2.8	8.1	7.7	4.5	0.8	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)