

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: P881774

Luminaire Tested: **NAV-SB1B-830-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881774
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-830-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4888 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

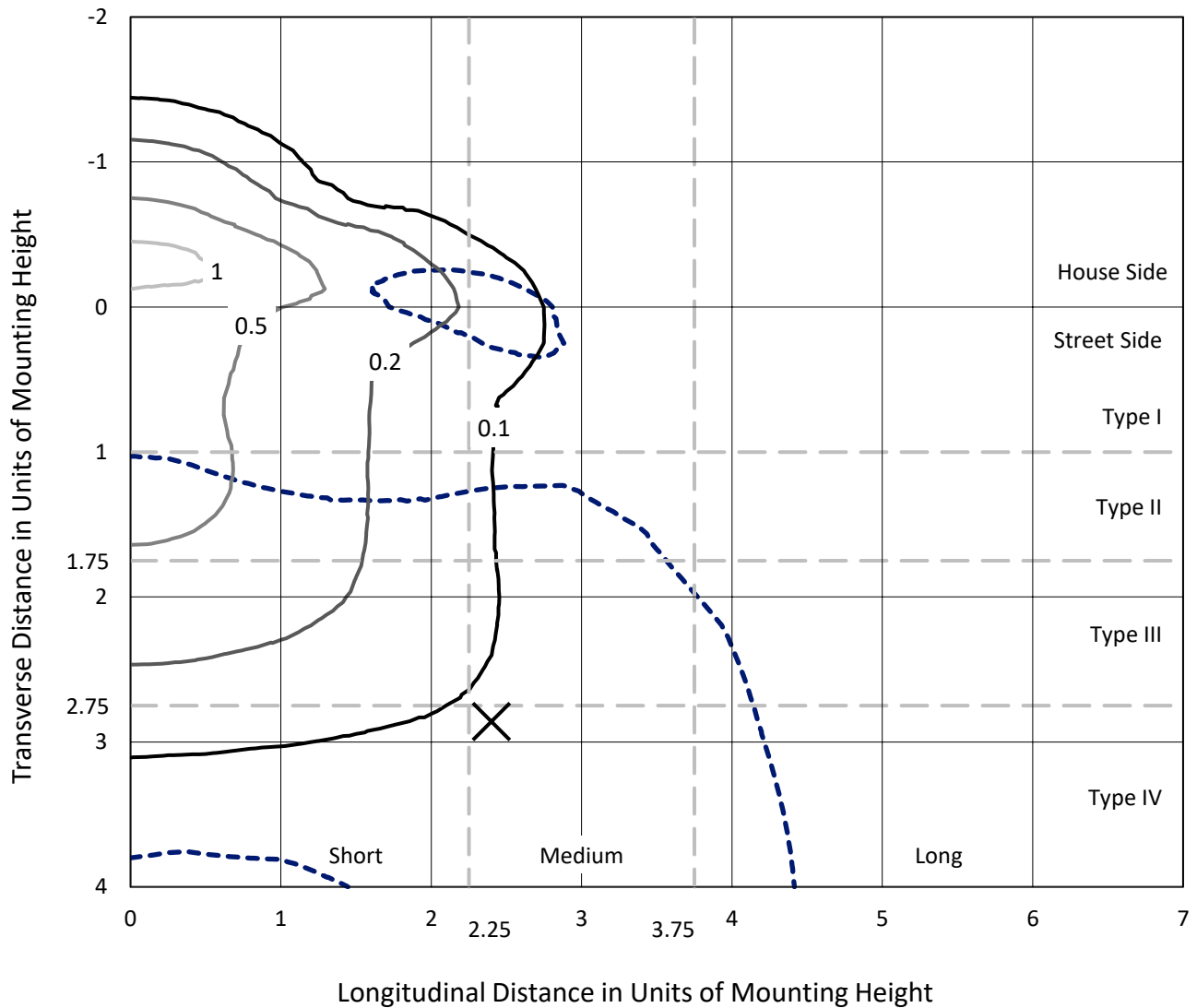
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

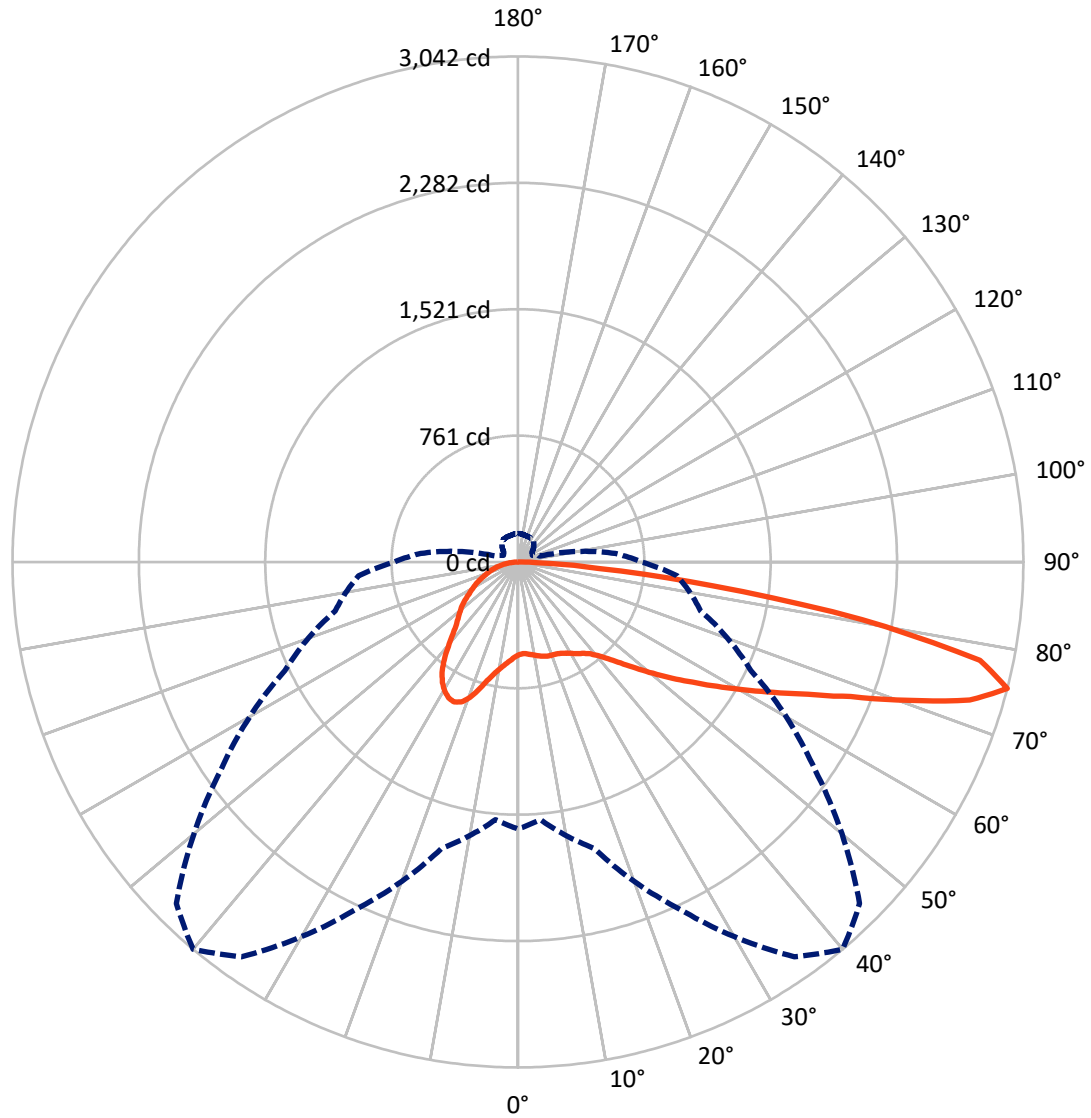
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1514.5	0.0	1514.5
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	3373.5	0.0	3373.5
	% Fixture	69.0	0.0	69.0
Total	Lumens	4888.0	0.0	4888.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.8	1.1
10°-20°	187.3	3.8
20°-30°	342.0	7.0
30°-40°	485.1	9.9
40°-50°	655.0	13.4
50°-60°	881.2	18.0
60°-70°	1118.5	22.9
70°-80°	1015.1	20.8
80°-90°	148.0	3.0
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°	4888.0	100.0
0°-180°	4888.0	100.0

Coefficient of Utilization



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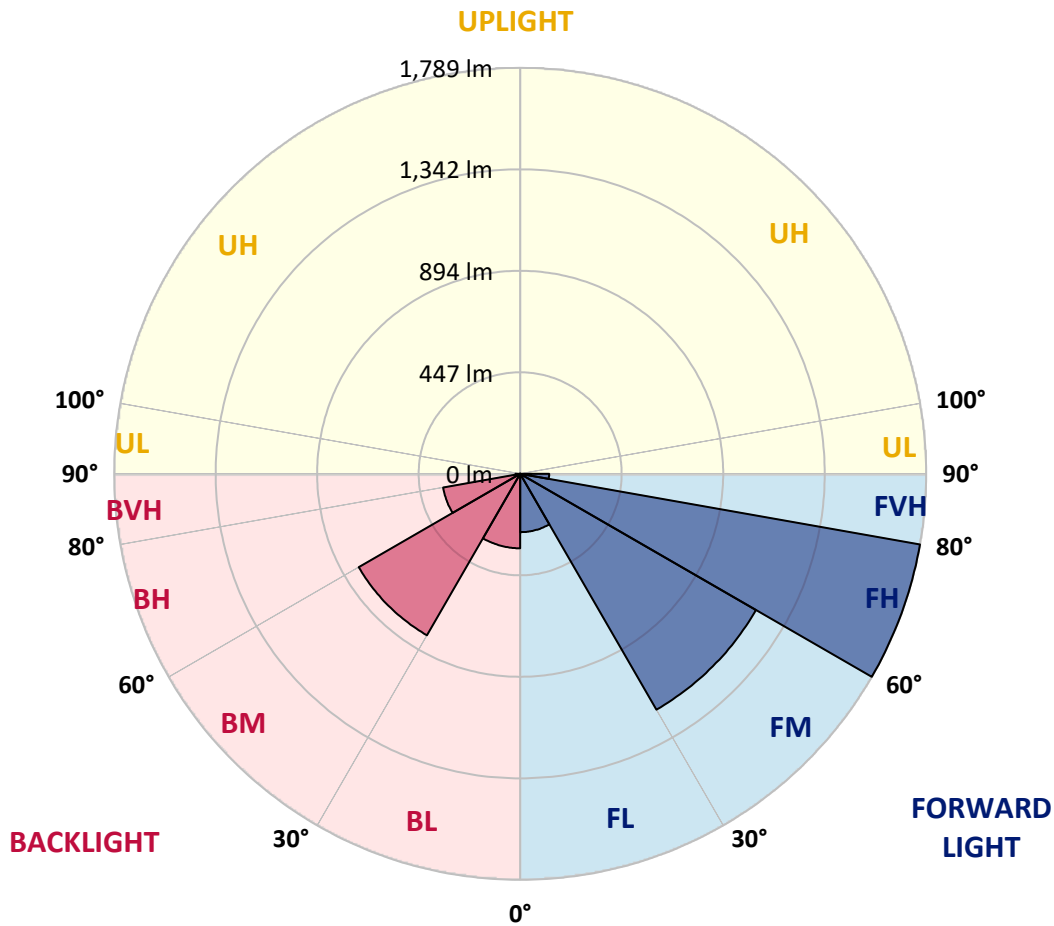
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	257.1	5.3			
FM	(30°-60°)	1199.9	24.5			
FH	(60°-80°)	1788.9	36.6			G1/1800
FVH	(80°-90°)	127.6	2.6			G2/225
BL	(0°-30°)	328.0	6.7	B1/500		
BM	(30°-60°)	821.5	16.8	B1/1000		
BH	(60°-80°)	344.6	7.0	B1/500		G1/500
BVH	(80°-90°)	20.4	0.4			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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	558.9	558.9	558.9	558.9	558.9	558.9	558.9	558.9	558.9	558.9	558.9
2.5°	550.4	553.5	552.7	551.7	551.7	551.9	551.7	553.5	555.3	557.1	560.0
5°	556.1	559.2	557.7	556.4	555.3	555.1	554.3	554.0	555.1	557.4	561.3
7.5°	567.2	570.4	568.0	565.7	563.6	562.6	561.5	560.0	559.2	560.5	565.9
10°	579.7	582.8	579.9	575.8	572.4	571.1	570.1	568.5	567.5	568.3	574.2
12.5°	592.1	595.2	591.4	585.7	581.2	580.5	579.2	578.7	578.4	578.1	584.1
15°	603.8	606.4	601.5	594.7	590.1	588.8	587.5	588.2	589.5	591.1	597.8
17.5°	612.9	615.5	608.2	599.4	595.0	594.5	593.7	596.3	599.9	603.8	612.1
20°	621.2	623.8	614.4	602.5	597.3	597.3	597.6	603.0	608.2	613.9	625.3
22.5°	632.8	634.9	623.5	607.2	599.7	600.2	602.2	607.7	614.2	621.9	637.8
25°	650.2	651.8	637.8	616.0	607.4	609.0	610.8	613.4	619.6	628.7	649.9
27.5°	678.2	679.5	661.1	631.5	618.6	621.2	623.8	621.9	624.8	632.6	659.8
30°	717.6	718.4	695.1	655.9	637.5	638.8	639.3	631.8	626.4	632.6	666.8
32.5°	764.3	764.0	736.3	685.5	659.0	657.7	653.3	638.5	625.8	631.3	673.0
35°	836.6	833.8	798.0	726.9	683.4	675.4	665.0	646.1	628.4	630.0	678.5
37.5°	956.4	947.6	898.1	794.9	719.7	699.2	683.9	658.2	634.1	629.5	684.9
40°	1091.5	1080.3	1025.9	887.9	774.1	741.2	716.6	675.6	643.5	631.8	694.5
42.5°	1251.7	1235.9	1177.3	997.6	843.1	795.4	758.3	697.6	657.2	639.3	707.5
45°	1448.4	1427.4	1344.5	1121.3	929.9	866.4	816.9	731.1	678.2	653.8	726.9
47.5°	1647.3	1652.5	1534.5	1262.8	1034.2	954.1	890.3	781.4	708.8	677.2	758.3
50°	1858.6	1862.2	1723.5	1419.7	1152.4	1053.1	972.7	837.6	751.3	710.4	805.2
52.5°	2023.5	2024.0	1895.1	1583.8	1275.5	1162.0	1061.6	901.9	800.6	754.4	867.7
55°	2126.7	2125.4	2015.4	1739.1	1417.1	1276.3	1160.2	975.1	860.7	806.3	946.3
57.5°	2201.6	2197.7	2098.4	1872.6	1568.0	1411.4	1271.6	1058.0	931.8	868.0	1049.7
60°	2230.1	2227.8	2154.7	1988.0	1726.6	1560.7	1400.2	1150.8	1012.4	940.8	1182.7
62.5°	2241.0	2245.4	2209.9	2099.7	1896.4	1726.1	1541.5	1261.8	1103.1	1023.3	1323.0
65°	2279.4	2287.4	2280.1	2245.9	2088.3	1919.8	1729.0	1393.7	1202.2	1111.7	1469.4
67.5°	2355.3	2363.3	2366.5	2420.9	2322.6	2161.1	1962.8	1558.1	1318.0	1203.5	1579.6
70°	2353.5	2351.2	2406.1	2560.1	2616.1	2495.3	2278.1	1760.3	1456.2	1279.7	1593.6
72.5°	2142.2	2123.5	2253.4	2558.6	2860.3	2844.3	2663.0	2021.1	1575.5	1289.0	1382.9
75°	1607.1	1557.3	1786.8	2305.8	2901.0	3042.3	2907.8	2182.9	1547.2	1138.9	962.3
77.5°	687.3	637.2	907.6	1706.9	2596.4	2844.0	2683.3	1904.5	1235.1	753.1	472.6
80°	179.9	179.7	274.3	773.9	1765.8	2100.2	1842.5	1229.9	705.7	269.1	130.4
82.5°	74.4	72.6	100.8	301.0	862.8	1178.6	961.8	548.6	254.8	72.9	43.3
85°	27.7	27.5	49.0	104.0	304.4	486.1	351.8	140.3	63.5	35.5	19.4
87.5°	7.8	7.5	10.6	36.0	74.1	112.5	60.1	23.1	17.9	14.0	5.7
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°	558.9	558.9	558.9	558.9	558.9	558.9	558.9	558.9	558.9	558.9	558.9
2.5°	560.8	562.1	564.4	566.2	568.5	571.1	574.8	577.1	579.4	581.0	579.9
5°	563.1	565.9	571.9	577.9	584.9	591.4	598.9	604.3	608.7	610.0	610.5
7.5°	568.3	572.9	583.1	593.2	604.3	614.9	625.8	635.2	642.7	645.5	645.8
10°	577.4	583.6	597.8	612.1	626.9	643.2	657.2	670.7	681.3	685.7	686.0
12.5°	588.8	596.5	615.2	634.9	655.4	677.9	696.1	712.7	725.9	731.9	731.9
15°	603.5	613.7	637.5	663.9	694.0	725.4	748.5	766.9	781.6	788.9	788.4
17.5°	619.6	633.1	663.2	703.1	746.1	787.4	814.3	827.8	843.1	850.1	849.8
20°	635.2	651.8	694.8	752.9	810.2	854.0	875.8	879.4	880.4	881.2	883.3
22.5°	651.2	673.5	734.5	815.6	877.1	907.4	910.5	894.9	873.2	863.1	865.9
25°	668.9	698.4	786.3	884.8	934.6	938.2	914.4	876.5	835.3	816.4	819.2
27.5°	686.0	727.2	848.5	950.9	976.1	944.2	892.9	839.2	789.4	769.5	771.8
30°	703.1	760.1	917.2	1008.8	995.0	929.4	858.9	799.0	749.0	728.0	730.3
32.5°	720.5	798.5	996.3	1050.5	991.6	898.1	816.6	753.9	709.8	687.8	690.6
35°	740.2	845.7	1071.2	1073.3	969.1	851.9	760.9	700.0	661.6	644.0	647.9
37.5°	765.8	905.6	1137.3	1079.0	929.7	784.2	691.7	636.2	604.6	596.5	602.2
40°	797.7	977.6	1187.9	1069.9	871.3	702.1	616.0	571.7	553.8	555.6	561.8
42.5°	839.2	1058.3	1223.4	1046.6	790.2	617.3	549.6	529.9	538.5	545.7	552.5
45°	893.1	1142.0	1245.5	1006.9	698.4	545.5	510.5	515.1	521.6	522.4	527.6
47.5°	962.1	1226.8	1260.0	947.1	604.8	494.9	485.6	486.6	485.3	479.9	484.0
50°	1048.2	1309.2	1272.9	867.7	525.2	463.3	450.8	447.2	429.3	411.7	414.0
52.5°	1146.2	1384.9	1278.4	769.2	463.3	436.8	416.6	393.8	360.4	354.9	356.7
55°	1255.0	1454.9	1264.4	648.1	411.2	402.9	372.3	344.8	341.2	336.5	337.3
57.5°	1385.2	1530.4	1235.9	513.1	357.8	363.2	333.4	336.5	330.0	322.8	321.5
60°	1527.5	1608.4	1185.8	389.9	302.5	313.7	323.3	323.0	321.2	315.3	313.2
62.5°	1655.6	1659.7	1087.3	298.7	254.1	275.3	301.5	301.3	299.7	296.3	295.0
65°	1731.8	1652.0	922.9	235.1	214.1	243.7	272.0	274.0	274.3	274.0	274.0
67.5°	1718.3	1561.0	697.4	187.2	181.2	211.6	242.7	245.5	247.6	248.1	248.6
70°	1565.9	1361.1	454.7	149.3	151.9	183.3	214.9	217.8	219.6	221.7	222.7
72.5°	1220.6	1000.7	260.3	120.8	126.3	158.9	187.4	190.8	191.8	195.7	197.3
75°	743.8	588.5	140.5	95.1	103.7	135.8	160.2	164.1	165.9	170.6	171.1
77.5°	353.6	254.8	80.1	74.1	83.5	111.0	135.3	139.7	134.8	137.4	135.3
80°	119.5	94.6	50.6	56.5	63.8	86.6	108.4	112.8	102.4	101.9	100.8
82.5°	41.7	38.4	32.1	37.6	41.2	62.0	81.9	87.6	76.2	76.0	72.3
85°	16.3	15.6	17.9	20.5	24.6	38.1	53.9	56.8	46.9	37.9	37.3
87.5°	3.4	3.6	4.4	4.7	7.5	13.2	19.4	23.9	18.9	16.1	14.8
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)