

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: P881941

Luminaire Tested: **NAV-SB1C-827-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881941
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-SB1C-827-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6019 lumens
Efficiency: N/A
Efficacy: 110.6 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

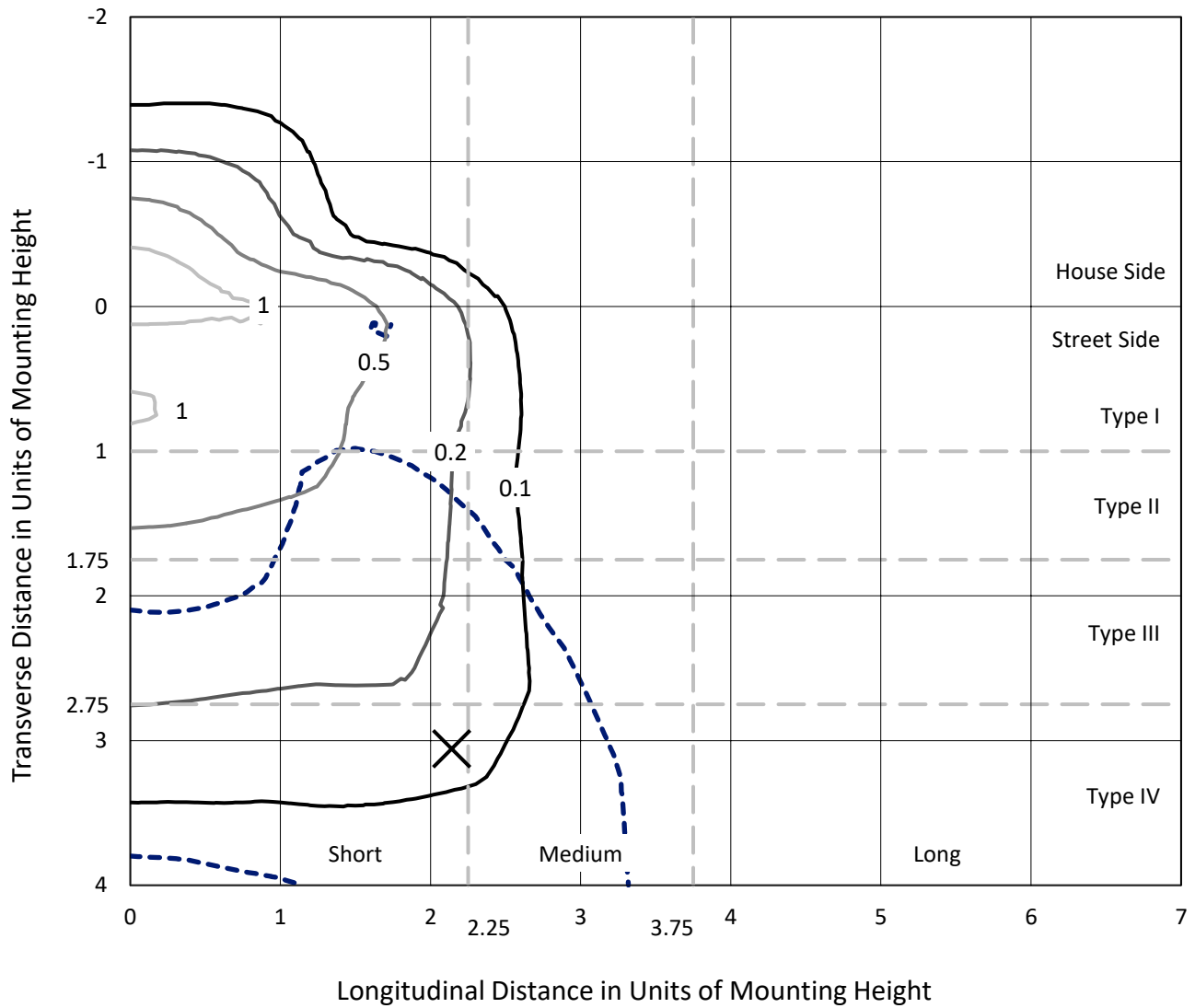
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

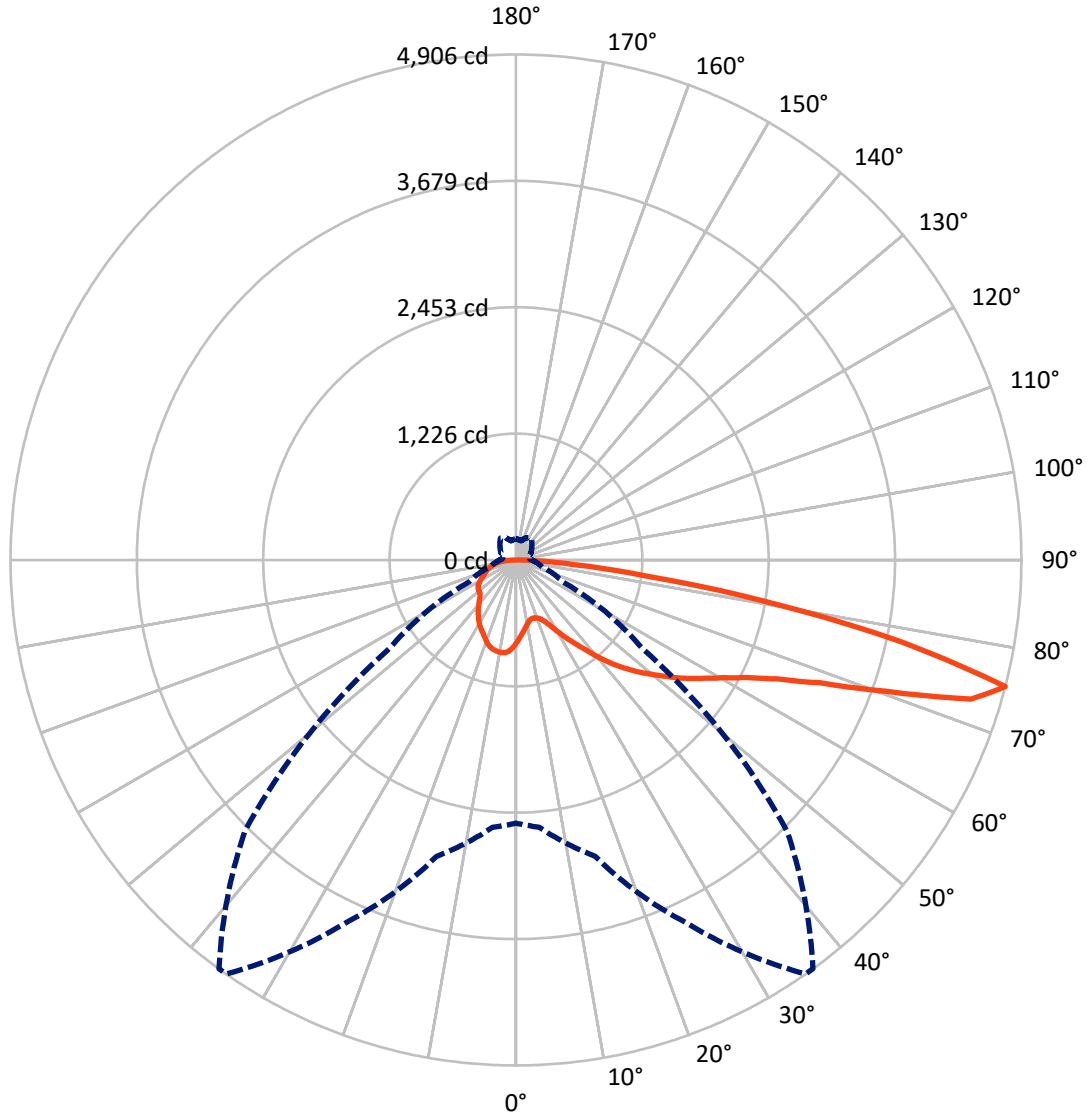
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 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	1432.4	0.0	1432.4
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	4586.6	0.0	4586.6
	% Fixture	76.2	0.0	76.2
Total	Lumens	6019.0	0.0	6019.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.9	1.3
10°-20°	219.0	3.6
20°-30°	367.8	6.1
30°-40°	571.7	9.5
40°-50°	848.5	14.1
50°-60°	1171.4	19.5
60°-70°	1421.2	23.6
70°-80°	1174.5	19.5
80°-90°	168.9	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°	6019.0	100.0
0°-180°	6019.0	100.0

Coefficient of Utilization



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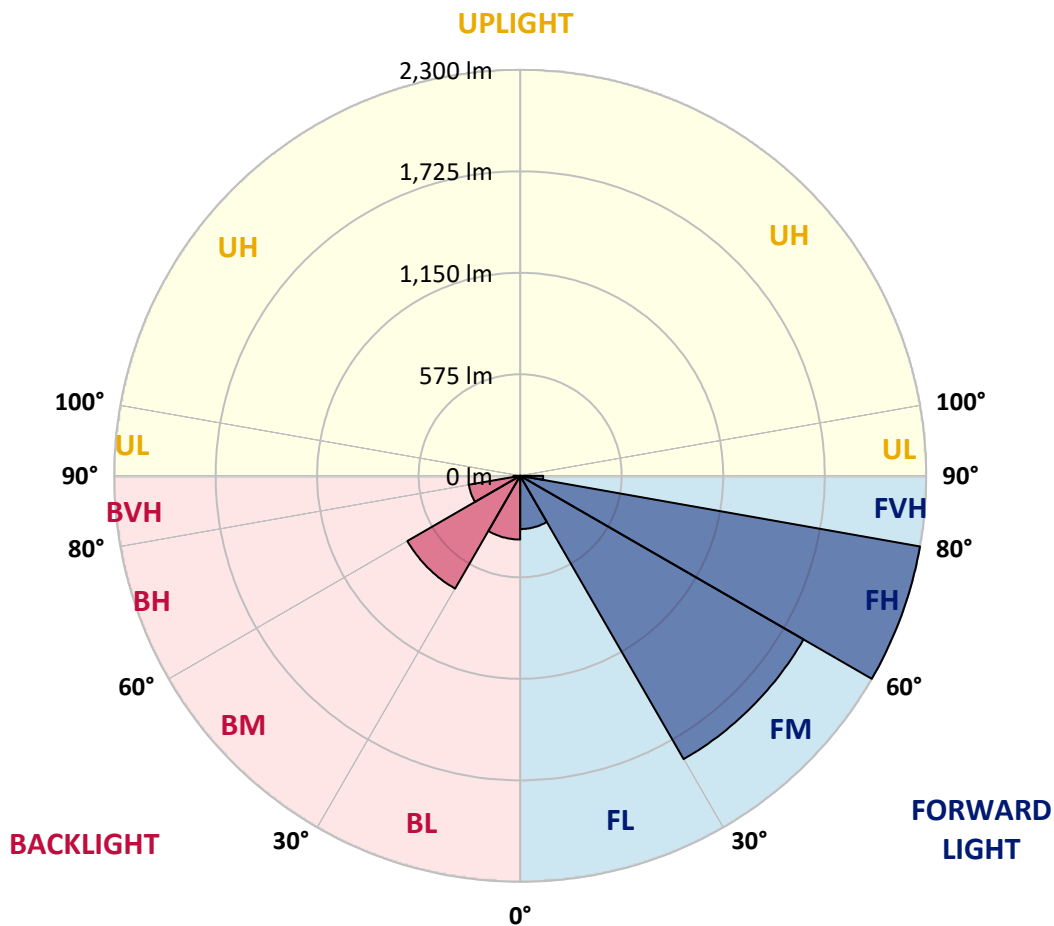
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	301.8	5.0			
FM (30°-60°)	1853.5	30.8			
FH (60°-80°)	2300.4	38.2			G2/5000
FVH (80°-90°)	130.9	2.2			G2/225
BL (0°-30°)	361.0	6.0	B1/500		
BM (30°-60°)	738.0	12.3	B1/1000		
BH (60°-80°)	295.3	4.9	B1/500		G1/500
BVH (80°-90°)	38.0	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°	802.1	802.1	802.1	802.1	802.1	802.1	802.1	802.1	802.1	802.1	802.1
2.5°	739.6	744.2	746.1	745.1	750.0	749.4	756.2	764.7	776.4	787.8	804.4
5°	682.7	687.5	691.8	695.7	705.1	708.0	718.8	735.0	756.5	778.3	805.7
7.5°	629.6	633.8	640.4	647.5	663.5	666.4	684.3	709.7	739.6	771.5	809.2
10°	586.3	590.6	597.4	605.5	625.4	629.0	651.7	685.6	724.6	765.0	813.1
12.5°	567.8	569.1	573.0	581.1	598.4	600.7	625.7	664.4	710.0	760.1	819.0
15°	566.8	569.4	569.7	574.0	588.3	589.3	612.4	650.8	700.9	759.1	827.8
17.5°	576.6	578.5	575.6	578.2	590.2	591.9	610.1	644.3	697.9	763.4	842.7
20°	602.6	604.2	595.5	591.9	600.7	602.0	619.9	648.5	700.9	772.1	863.2
22.5°	657.9	658.9	637.4	622.8	623.4	624.1	639.7	665.7	712.3	788.1	889.3
25°	744.2	743.5	709.3	681.0	664.8	661.2	671.6	693.7	731.5	809.2	922.8
27.5°	845.0	840.1	806.0	763.7	728.2	723.0	720.7	730.2	758.8	837.2	963.8
30°	958.9	954.4	917.6	862.3	813.1	804.7	783.2	778.3	799.5	875.3	1020.7
32.5°	1083.9	1080.9	1037.0	970.0	904.2	894.5	858.4	845.3	861.9	932.9	1100.1
35°	1188.6	1186.0	1149.6	1080.6	1000.2	988.2	951.4	936.8	945.2	1006.7	1203.9
37.5°	1283.3	1282.0	1250.8	1196.4	1113.5	1098.8	1057.5	1052.6	1051.0	1104.0	1329.8
40°	1371.2	1367.9	1335.4	1306.7	1245.2	1231.9	1195.5	1191.2	1178.9	1223.8	1472.4
42.5°	1468.5	1460.0	1412.8	1399.5	1382.9	1371.8	1350.0	1350.7	1323.3	1358.8	1623.3
45°	1547.9	1543.0	1494.5	1486.7	1504.6	1500.0	1518.9	1523.8	1470.7	1500.3	1780.2
47.5°	1633.1	1628.5	1587.6	1582.0	1630.5	1631.8	1698.5	1700.1	1614.6	1647.4	1937.3
50°	1738.2	1731.7	1691.0	1697.9	1752.2	1757.1	1879.1	1868.0	1747.0	1796.8	2093.2
52.5°	1807.5	1811.4	1802.6	1813.7	1887.9	1892.4	2056.8	2028.4	1878.1	1944.2	2246.1
55°	1858.6	1866.4	1893.7	1919.1	2031.0	2035.6	2224.3	2181.1	1986.8	2080.8	2389.9
57.5°	1924.3	1913.3	1964.3	2013.8	2167.1	2179.1	2387.3	2328.1	2083.1	2198.6	2488.5
60°	2018.7	2010.9	2050.6	2123.8	2319.3	2338.5	2559.8	2460.6	2153.7	2292.0	2507.7
62.5°	2210.0	2190.5	2196.7	2261.4	2511.3	2536.7	2754.4	2576.1	2188.9	2328.5	2404.9
65°	2496.0	2462.5	2431.3	2476.2	2781.7	2806.8	2974.0	2666.9	2175.8	2257.8	2131.9
67.5°	2856.2	2823.0	2784.6	2826.9	3180.0	3199.8	3245.1	2717.9	2073.3	1985.8	1649.4
70°	3153.3	3140.9	3186.8	3360.9	3816.1	3816.8	3592.6	2675.6	1792.5	1407.9	954.4
72.5°	3113.9	3106.4	3348.2	3886.4	4617.9	4600.6	3921.5	2355.5	1207.5	635.2	357.6
75°	2554.6	2603.1	2977.6	3877.0	4905.8	4903.5	3720.1	1497.4	499.5	263.2	184.8
77.5°	1369.9	1446.7	1933.1	2862.4	3829.8	3887.4	2615.4	523.9	214.4	168.5	127.9
80°	446.8	513.8	770.5	1457.4	2488.5	2477.8	1120.9	205.6	146.7	119.4	88.5
82.5°	189.7	197.5	344.3	688.2	1277.1	1257.3	356.9	118.1	103.1	81.7	54.7
85°	74.2	83.0	152.0	318.2	553.2	541.1	128.9	58.6	66.1	53.4	32.5
87.5°	24.4	29.6	54.3	109.0	172.1	165.9	31.6	20.2	28.6	24.4	11.7
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°	802.1	802.1	802.1	802.1	802.1	802.1	802.1	802.1	802.1	802.1	802.1
2.5°	808.9	814.1	820.3	829.4	837.2	843.7	850.6	854.8	856.4	861.3	861.0
5°	814.8	826.2	841.4	856.4	871.1	879.8	887.6	891.6	895.1	897.7	898.4
7.5°	824.5	839.2	863.2	882.8	895.1	902.3	907.5	906.2	907.5	908.1	909.1
10°	833.0	853.5	882.1	900.7	910.1	910.4	909.1	904.6	902.3	902.6	903.3
12.5°	843.1	865.8	896.8	912.4	915.0	907.8	902.3	894.5	891.6	890.3	889.6
15°	856.7	882.8	912.7	918.6	912.1	902.9	893.5	880.8	874.3	869.1	870.7
17.5°	873.3	902.0	925.1	920.8	906.8	891.9	876.6	857.4	844.0	838.5	838.8
20°	896.4	922.1	934.5	916.0	894.8	872.0	846.0	822.6	810.2	804.7	804.0
22.5°	924.4	949.1	943.6	907.5	877.6	841.1	808.6	791.3	785.2	781.2	781.9
25°	957.9	979.1	950.1	895.1	849.3	800.1	775.1	769.5	766.6	763.7	763.7
27.5°	1001.5	1012.9	955.0	876.9	805.0	756.5	747.4	748.4	747.4	742.5	743.5
30°	1059.1	1056.8	959.6	847.3	754.2	717.1	717.8	722.0	722.7	719.4	721.1
32.5°	1134.9	1111.8	961.8	808.9	705.8	682.7	683.3	687.9	691.1	685.6	688.2
35°	1226.7	1175.9	958.3	760.7	668.3	649.8	644.9	646.2	647.2	642.0	645.6
37.5°	1333.8	1247.8	942.3	707.4	637.4	617.6	607.2	598.4	593.2	588.3	591.5
40°	1451.2	1326.3	913.0	655.3	602.9	583.4	567.8	551.2	533.6	527.1	530.1
42.5°	1574.2	1407.0	877.6	605.5	563.2	547.3	530.7	506.6	480.3	466.9	468.6
45°	1701.8	1489.6	842.7	556.4	522.6	515.7	496.5	467.6	438.9	422.0	420.7
47.5°	1826.7	1567.7	791.7	506.9	484.5	492.0	477.0	450.3	418.4	391.8	388.8
50°	1946.1	1640.9	708.0	456.8	453.6	484.8	470.5	432.1	395.7	361.5	358.6
52.5°	2064.6	1700.1	601.0	411.3	437.0	482.9	462.0	419.7	375.2	339.4	335.5
55°	2165.1	1730.7	497.8	372.2	412.9	466.3	452.0	405.1	346.2	308.1	304.9
57.5°	2222.4	1706.0	411.9	333.8	379.7	438.9	434.7	373.9	311.7	282.4	278.5
60°	2197.6	1605.8	341.7	300.3	348.2	409.3	404.8	343.0	285.4	257.7	253.8
62.5°	2061.3	1414.8	286.0	271.0	319.5	379.1	374.8	319.2	265.2	238.5	234.3
65°	1786.7	1150.9	242.7	246.6	290.6	342.6	348.8	299.4	249.2	223.2	219.0
67.5°	1362.7	833.6	208.9	225.5	262.3	306.8	324.7	285.0	235.9	211.2	207.3
70°	776.7	473.4	180.3	205.0	237.2	273.6	306.2	273.6	221.6	201.1	198.5
72.5°	294.5	217.4	155.9	184.5	213.1	245.7	285.7	255.8	205.0	189.7	187.1
75°	157.2	132.4	131.1	160.4	185.5	218.3	260.0	238.2	192.6	200.4	206.9
77.5°	107.1	93.7	109.7	137.3	155.2	188.1	232.6	211.5	166.9	166.3	153.3
80°	74.2	66.4	89.2	110.6	120.1	158.1	203.0	181.6	136.0	126.9	121.4
82.5°	44.6	43.3	66.7	82.6	84.9	122.0	168.2	152.3	111.3	97.0	97.6
85°	24.4	25.7	42.6	48.5	49.5	85.3	131.8	117.8	85.6	71.9	72.6
87.5°	6.8	8.8	15.6	19.2	23.8	44.3	78.4	70.0	43.0	29.9	29.9
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)