

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: P882066

Luminaire Tested: **NAV-SB1D-735-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882066
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-SB1D-735-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH
HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7437 lumens
Efficiency: N/A
Efficacy: 93.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

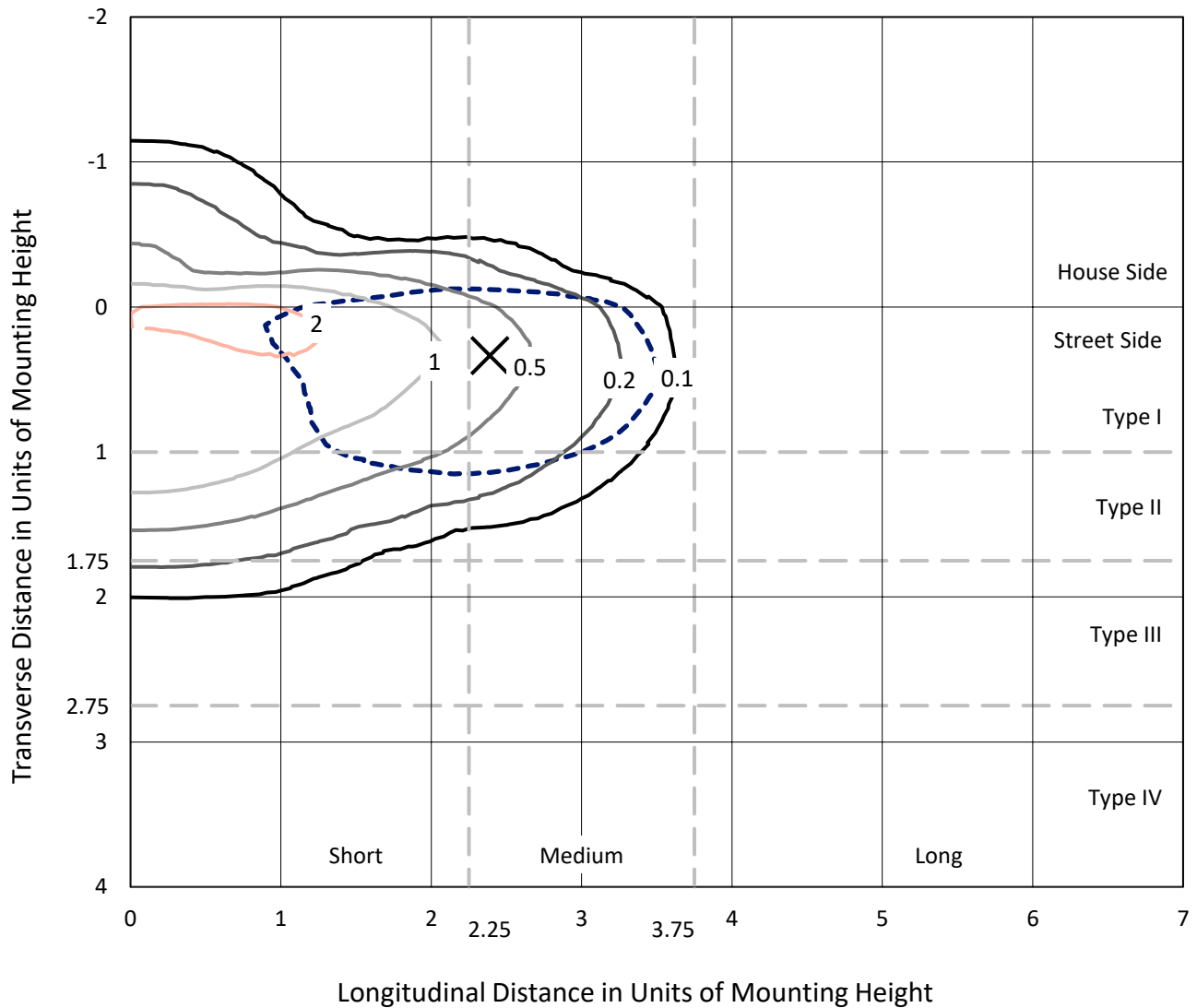
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

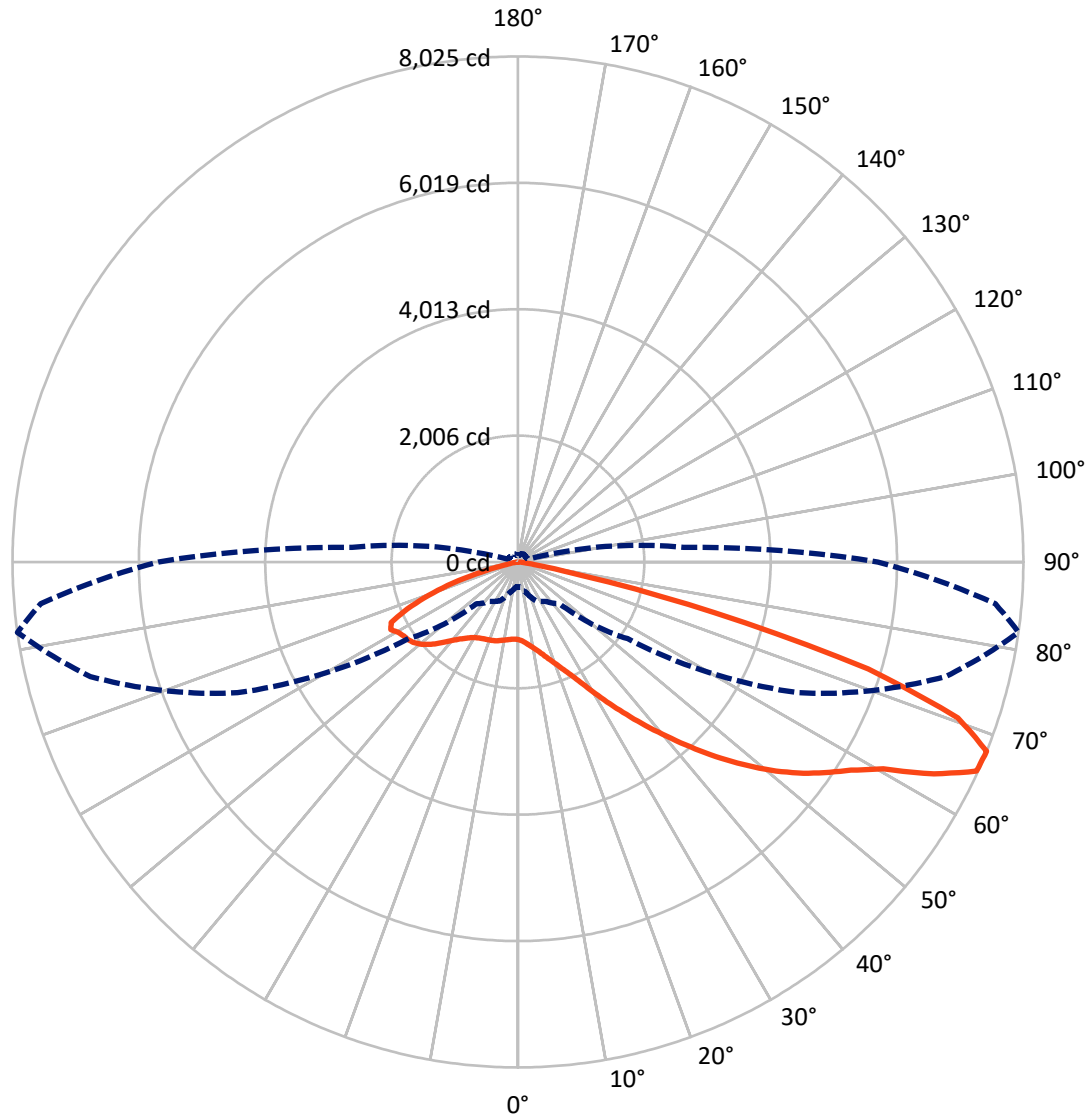
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 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	1347.2	0.0	1347.2
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	6089.9	0.0	6089.9
	% Fixture	81.9	0.0	81.9
Total	Lumens	7437.0	0.0	7437.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.8	1.5
10°-20°	285.2	3.8
20°-30°	456.9	6.1
30°-40°	807.9	10.9
40°-50°	1415.5	19.0
50°-60°	1887.9	25.4
60°-70°	1757.5	23.6
70°-80°	674.5	9.1
80°-90°	41.9	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°	7437.0	100.0
0°-180°	7437.0	100.0

Coefficient of Utilization



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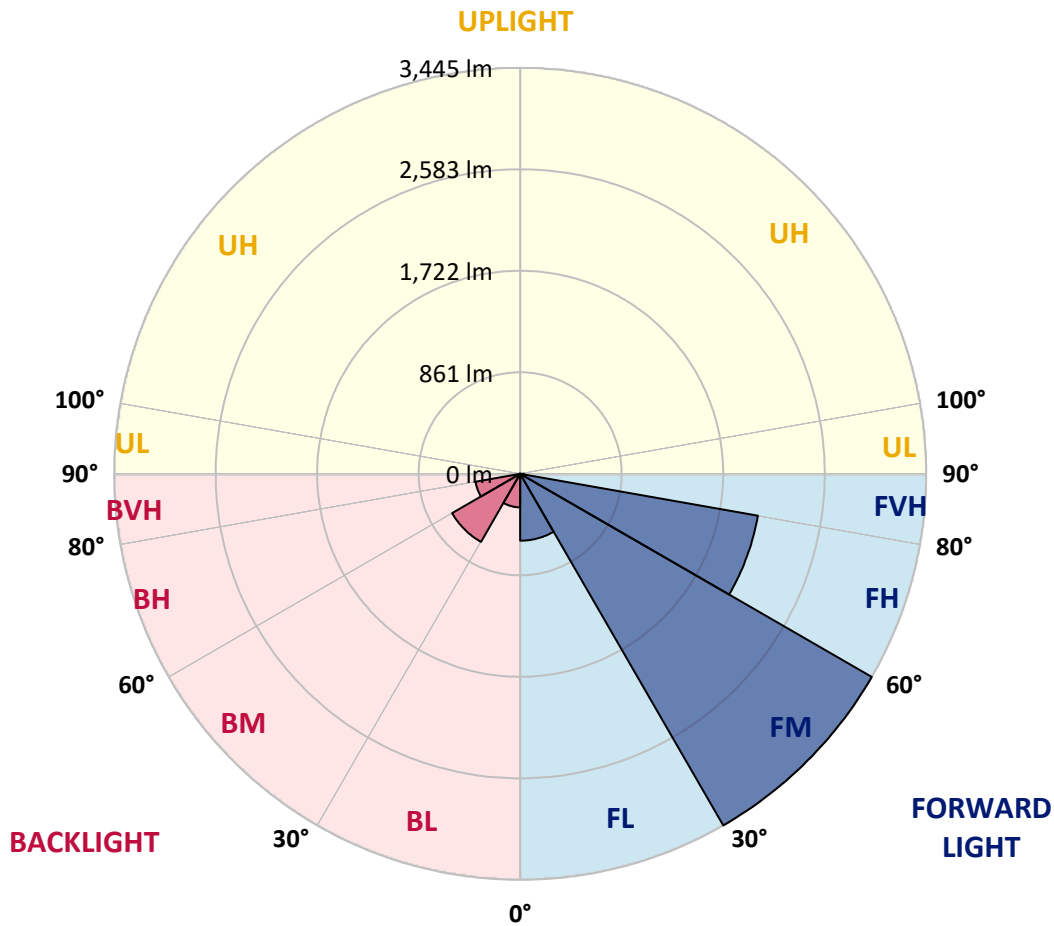
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	567.4	7.6			
FM (30°-60°)	3444.5	46.3			
FH (60°-80°)	2047.5	27.5			G2/5000
FVH (80°-90°)	30.5	0.4			G1/100
BL (0°-30°)	284.5	3.8	B1/500		
BM (30°-60°)	666.7	9.0	B1/1000		
BH (60°-80°)	384.5	5.2	B1/500		G1/500
BVH (80°-90°)	11.4	0.2			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1232.1	1232.1	1232.1	1232.1	1232.1	1232.1	1232.1	1232.1	1232.1	1232.1	1232.1
2.5°	1302.2	1309.7	1305.4	1303.3	1299.5	1294.2	1289.9	1276.5	1262.6	1253.5	1250.3
5°	1328.4	1335.9	1335.4	1337.5	1340.2	1341.8	1340.8	1325.8	1306.0	1290.4	1281.3
7.5°	1306.0	1314.5	1321.5	1332.2	1350.9	1370.7	1380.4	1377.2	1356.8	1335.4	1324.2
10°	1242.2	1251.3	1267.9	1293.1	1332.7	1375.6	1411.4	1428.0	1415.2	1391.6	1376.1
12.5°	1125.5	1134.6	1167.3	1221.9	1288.3	1362.7	1431.2	1475.7	1478.9	1455.3	1437.1
15°	994.3	1003.4	1038.2	1106.8	1208.0	1327.4	1442.0	1526.0	1554.4	1534.1	1512.1
17.5°	912.9	921.0	947.2	1002.4	1107.8	1256.7	1438.2	1579.6	1644.4	1628.3	1602.1
20°	888.3	895.3	907.6	946.1	1033.9	1183.3	1413.6	1629.9	1741.3	1732.2	1702.7
22.5°	914.5	921.0	924.7	941.8	997.0	1135.1	1382.5	1681.3	1853.7	1854.8	1818.9
25°	975.0	981.5	977.2	987.9	1012.0	1120.2	1370.7	1741.8	1995.1	2006.8	1966.2
27.5°	1074.6	1075.2	1065.0	1064.5	1068.2	1142.6	1383.1	1806.6	2173.4	2195.3	2145.0
30°	1274.4	1266.3	1227.2	1184.9	1165.7	1210.1	1417.3	1883.2	2383.8	2422.9	2359.7
32.5°	1582.2	1570.5	1498.7	1397.5	1295.8	1318.8	1478.9	1970.4	2613.0	2683.7	2606.5
35°	1916.4	1913.1	1838.2	1687.7	1510.0	1473.5	1579.0	2085.0	2863.0	2975.5	2883.9
37.5°	2226.9	2225.3	2182.5	2005.2	1788.9	1689.3	1739.7	2234.9	3130.7	3293.5	3185.4
40°	2510.7	2515.5	2472.7	2314.2	2096.3	1966.2	1958.1	2420.2	3428.5	3640.0	3511.4
42.5°	2755.9	2761.3	2717.9	2600.7	2399.9	2272.4	2226.4	2647.2	3719.2	4012.1	3860.0
45°	2922.5	2955.7	2949.2	2855.5	2711.5	2579.2	2548.7	2932.1	4050.6	4406.7	4228.4
47.5°	2969.6	3000.1	3048.3	3061.1	2973.3	2843.2	2879.6	3275.3	4385.8	4801.9	4598.9
50°	2853.4	2881.8	2981.9	3115.2	3176.3	3136.1	3201.4	3643.2	4729.1	5196.0	4962.5
52.5°	2624.2	2653.1	2779.5	2990.5	3239.4	3365.8	3524.3	4005.7	5061.6	5569.2	5306.8
55°	2292.8	2323.3	2485.5	2724.3	3119.0	3460.6	3793.6	4367.6	5366.2	5904.9	5617.4
57.5°	1841.9	1864.4	2033.1	2367.2	2815.9	3366.3	3992.3	4762.8	5653.2	6234.7	5925.2
60°	1200.5	1220.3	1416.3	1788.9	2313.7	3051.5	4031.9	5203.5	6034.5	6663.6	6340.2
62.5°	798.3	811.7	927.9	1201.5	1629.4	2447.0	3800.1	5555.2	6593.5	7410.0	7051.8
65°	547.8	561.1	677.3	868.0	1052.7	1618.7	3133.4	5508.7	7100.0	8002.8	7579.2
67.5°	390.9	402.1	500.6	680.6	761.9	940.2	2124.1	4913.2	7027.2	8025.3	7607.6
70°	280.0	286.5	367.9	530.1	605.6	564.9	1181.2	3757.8	6152.8	7410.6	7028.3
72.5°	196.0	198.1	255.4	403.7	487.8	412.3	562.2	2505.3	4653.6	5816.5	5448.7
75°	132.8	135.5	171.9	296.1	391.4	314.8	297.7	1343.4	2731.8	3219.6	2886.0
77.5°	81.4	82.5	110.8	202.4	292.9	239.9	191.7	569.2	1057.0	1037.7	884.6
80°	46.0	46.0	70.7	125.8	199.7	154.7	134.4	242.0	334.7	294.0	259.2
82.5°	25.7	26.2	51.4	78.2	132.3	91.6	73.9	111.9	144.6	128.0	111.4
85°	10.7	11.8	31.6	36.9	63.2	45.5	30.0	47.1	53.5	47.7	34.8
87.5°	1.1	1.6	9.6	7.0	7.5	9.1	4.3	9.1	7.5	7.5	5.4
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°	1232.1	1232.1	1232.1	1232.1	1232.1	1232.1	1232.1	1232.1	1232.1	1232.1	1232.1
2.5°	1240.1	1232.1	1211.7	1188.2	1157.1	1142.1	1121.8	1107.8	1096.1	1097.1	1086.4
5°	1264.2	1243.8	1198.3	1141.6	1070.9	1020.6	967.0	930.1	900.1	893.7	879.2
7.5°	1297.4	1265.3	1185.5	1083.2	963.8	873.3	792.5	740.5	703.6	691.8	680.0
10°	1340.2	1293.6	1168.9	1009.8	838.0	722.9	636.1	595.4	570.2	561.7	555.3
12.5°	1390.0	1326.3	1146.9	920.4	708.4	597.6	542.4	522.1	514.0	511.4	509.7
15°	1452.7	1367.0	1113.7	814.4	598.6	521.0	497.4	494.8	495.8	494.8	494.2
17.5°	1527.1	1411.4	1059.6	705.2	524.7	481.9	473.3	475.5	478.2	477.6	476.5
20°	1608.5	1455.3	990.6	608.3	474.4	454.1	449.2	451.4	453.5	452.5	451.9
22.5°	1701.1	1502.5	914.0	532.8	440.7	428.4	423.0	423.5	423.5	421.4	420.3
25°	1811.9	1554.4	833.7	479.2	415.0	405.3	398.9	396.8	393.6	387.1	386.1
27.5°	1944.2	1609.5	756.6	441.7	394.6	385.5	378.0	372.7	364.6	353.9	352.9
30°	2093.1	1676.5	691.3	418.2	378.6	369.5	360.9	352.9	341.1	327.7	326.6
32.5°	2268.1	1748.2	643.6	402.7	364.1	354.5	344.3	334.7	321.8	308.4	309.0
35°	2477.0	1835.0	615.8	391.9	352.9	340.0	328.8	318.1	308.4	296.6	295.6
37.5°	2703.5	1927.1	607.2	386.6	345.4	325.6	312.7	305.2	304.1	297.2	296.6
40°	2951.4	2036.3	613.6	383.4	337.3	311.6	297.7	296.1	298.8	286.5	287.0
42.5°	3213.7	2165.9	624.3	379.6	326.1	297.7	284.3	284.3	282.2	265.0	265.0
45°	3497.5	2315.3	635.0	370.5	312.7	283.8	273.6	269.9	260.8	244.2	243.6
47.5°	3783.5	2467.3	643.1	353.9	296.6	272.0	262.9	254.3	241.0	226.0	225.4
50°	4054.9	2603.9	634.5	329.3	278.4	260.8	251.1	239.3	224.9	214.7	213.1
52.5°	4297.5	2722.2	598.1	300.4	259.2	249.0	240.4	228.1	216.3	205.6	204.5
55°	4508.4	2818.0	533.8	273.1	242.0	238.8	230.2	214.7	198.7	189.5	188.5
57.5°	4710.8	2890.9	453.5	250.6	226.5	227.6	214.7	200.8	185.8	176.2	175.1
60°	4980.2	2988.3	372.1	229.7	209.9	213.1	199.2	189.0	170.3	158.0	156.3
62.5°	5410.7	3139.9	295.6	204.0	190.6	191.7	185.8	173.5	151.0	136.5	135.5
65°	5752.3	3084.2	232.9	176.2	168.7	170.3	170.3	156.9	132.8	116.2	114.6
67.5°	5713.7	2640.8	185.8	148.9	147.8	148.9	152.6	141.4	117.8	104.4	102.3
70°	5263.4	2100.6	148.9	123.7	128.5	125.8	136.5	129.0	106.0	92.6	91.0
72.5°	4294.8	1513.2	113.5	102.3	98.5	102.8	123.2	116.2	88.3	73.4	71.7
75°	2509.6	807.5	84.6	80.9	71.2	85.7	109.2	99.1	67.5	54.1	52.5
77.5°	817.1	281.6	62.1	59.4	53.0	69.1	93.2	83.5	55.2	42.8	41.2
80°	219.0	85.1	42.3	39.1	34.3	51.4	73.9	66.4	39.6	27.8	27.3
82.5°	87.8	35.9	24.6	22.0	18.7	35.3	58.4	53.5	29.4	17.7	17.7
85°	28.4	11.8	9.1	7.0	8.6	22.0	34.8	36.4	20.9	9.1	7.0
87.5°	3.7	1.6	1.6	2.1	1.6	3.7	10.7	10.2	5.9	1.1	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)