

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: P882446

Luminaire Tested: **NAV-SB2B-827-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882446
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-SB2B-827-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 450mA 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: 6809 lumens
Efficiency: N/A
Efficacy: 92.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

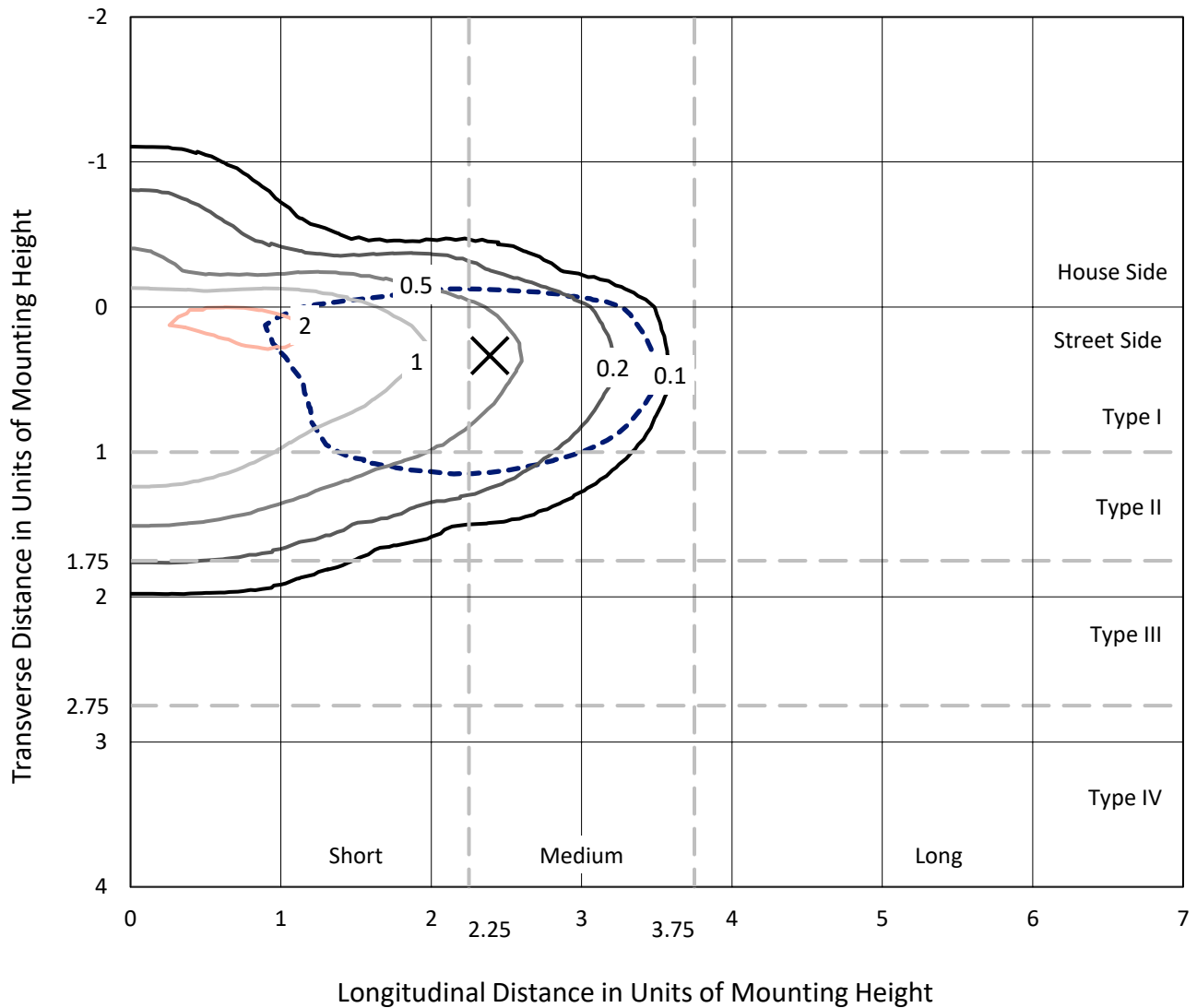
Input Watts (W): 73.9
Input Voltage (V): 120.0
Input Current (Ain): 0.627
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

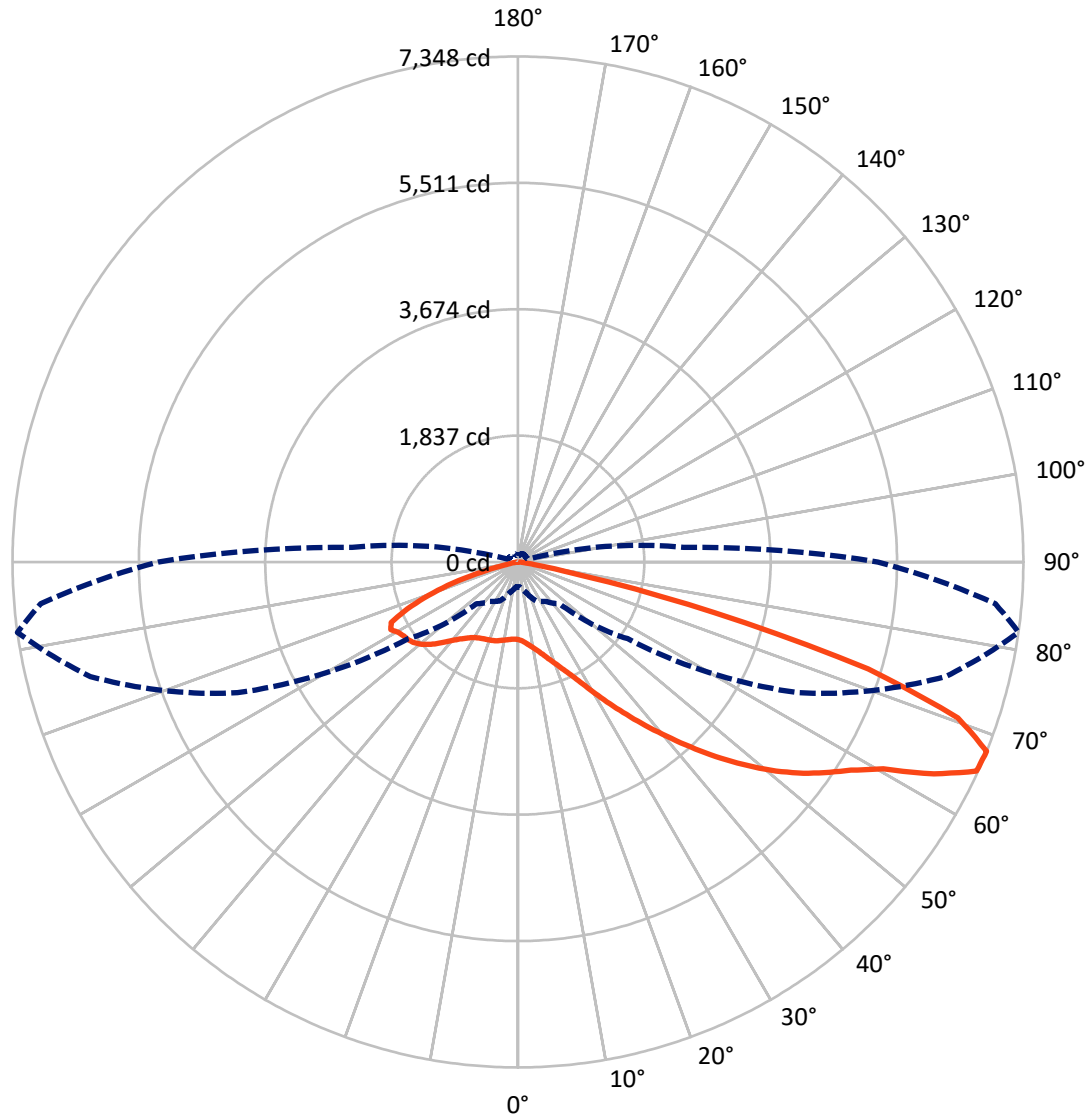
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 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	1233.4	0.0	1233.4
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	5575.6	0.0	5575.6
	% Fixture	81.9	0.0	81.9
Total	Lumens	6809.0	0.0	6809.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.5	1.5
10°-20°	261.2	3.8
20°-30°	418.3	6.1
30°-40°	739.7	10.9
40°-50°	1296.0	19.0
50°-60°	1728.4	25.4
60°-70°	1609.1	23.6
70°-80°	617.6	9.1
80°-90°	38.4	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°	6809.0	100.0
0°-180°	6809.0	100.0

Coefficient of Utilization



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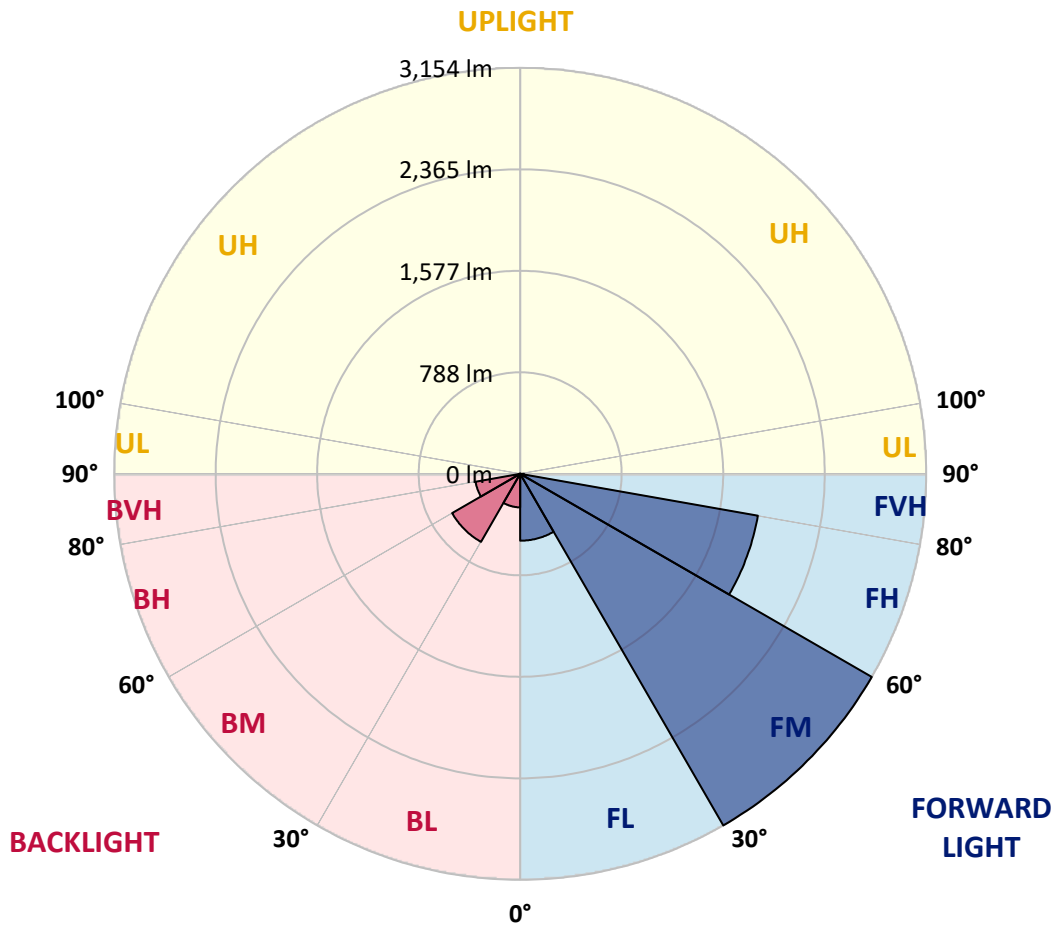
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	519.5	7.6			
FM (30°-60°)	3153.7	46.3			
FH (60°-80°)	1874.6	27.5			G2/5000
FVH (80°-90°)	27.9	0.4			G1/100
BL (0°-30°)	260.5	3.8	B1/500		
BM (30°-60°)	610.4	9.0	B1/1000		
BH (60°-80°)	352.0	5.2	B1/500		G1/500
BVH (80°-90°)	10.5	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°	1128.0	1128.0	1128.0	1128.0	1128.0	1128.0	1128.0	1128.0	1128.0	1128.0	1128.0
2.5°	1192.2	1199.1	1195.2	1193.2	1189.8	1184.9	1181.0	1168.7	1156.0	1147.6	1144.7
5°	1216.3	1223.1	1222.6	1224.6	1227.0	1228.5	1227.5	1213.8	1195.7	1181.5	1173.1
7.5°	1195.7	1203.5	1209.9	1219.7	1236.9	1255.0	1263.8	1260.9	1242.2	1222.6	1212.3
10°	1137.3	1145.7	1160.9	1183.9	1220.2	1259.4	1292.2	1307.4	1295.7	1274.1	1259.9
12.5°	1030.5	1038.8	1068.7	1118.7	1179.5	1247.6	1310.4	1351.1	1354.0	1332.4	1315.8
15°	910.4	918.7	950.6	1013.3	1106.0	1215.3	1320.2	1397.2	1423.1	1404.5	1384.4
17.5°	835.8	843.2	867.2	917.7	1014.3	1150.6	1316.8	1446.2	1505.5	1490.8	1466.8
20°	813.3	819.7	830.9	866.2	946.6	1083.4	1294.2	1492.3	1594.2	1585.9	1558.9
22.5°	837.3	843.2	846.6	862.3	912.8	1039.3	1265.8	1539.3	1697.2	1698.2	1665.3
25°	892.7	898.6	894.7	904.5	926.5	1025.6	1255.0	1594.7	1826.6	1837.4	1800.1
27.5°	983.9	984.4	975.1	974.6	978.0	1046.2	1266.3	1654.0	1989.8	2009.9	1963.9
30°	1166.7	1159.4	1123.6	1084.9	1067.2	1107.9	1297.6	1724.1	2182.5	2218.3	2160.4
32.5°	1448.6	1437.8	1372.2	1279.5	1186.4	1207.4	1354.0	1804.0	2392.3	2457.0	2386.4
35°	1754.5	1751.6	1683.0	1545.2	1382.5	1349.1	1445.7	1909.0	2621.3	2724.2	2640.4
37.5°	2038.9	2037.4	1998.2	1835.9	1637.9	1546.7	1592.8	2046.2	2866.4	3015.4	2916.4
40°	2298.7	2303.1	2263.9	2118.8	1919.3	1800.1	1792.8	2215.8	3138.9	3332.6	3214.9
42.5°	2523.2	2528.1	2488.4	2381.1	2197.2	2080.5	2038.4	2423.7	3405.1	3673.3	3534.1
45°	2675.7	2706.1	2700.2	2614.4	2482.5	2361.4	2333.5	2684.5	3708.6	4034.6	3871.4
47.5°	2718.8	2746.8	2790.9	2802.6	2722.3	2603.1	2636.5	2998.7	4015.5	4396.4	4210.6
50°	2612.4	2638.4	2730.1	2852.2	2908.0	2871.3	2931.1	3335.5	4329.7	4757.2	4543.5
52.5°	2402.6	2429.1	2544.8	2737.9	2965.9	3081.6	3226.7	3667.4	4634.2	5098.9	4858.7
55°	2099.2	2127.1	2275.7	2494.3	2855.6	3168.4	3473.3	3998.8	4913.1	5406.3	5143.0
57.5°	1686.4	1707.0	1861.4	2167.3	2578.1	3082.1	3655.2	4360.6	5175.9	5708.2	5424.9
60°	1099.1	1117.2	1296.7	1637.9	2118.3	2793.8	3691.4	4764.1	5524.9	6100.9	5804.8
62.5°	730.9	743.2	849.6	1100.1	1491.8	2240.4	3479.2	5086.1	6036.7	6784.3	6456.3
65°	501.5	513.8	620.1	794.7	963.8	1482.0	2868.8	5043.5	6500.5	7327.0	6939.2
67.5°	357.9	368.2	458.4	623.1	697.6	860.8	1944.7	4498.4	6433.8	7347.6	6965.2
70°	256.4	262.3	336.8	485.3	554.5	517.2	1081.4	3440.4	5633.2	6784.8	6434.8
72.5°	179.4	181.4	233.8	369.6	446.6	377.5	514.7	2293.8	4260.6	5325.4	4988.6
75°	121.6	124.0	157.4	271.1	358.4	288.3	272.6	1230.0	2501.2	2947.8	2642.3
77.5°	74.5	75.5	101.5	185.3	268.2	219.6	175.5	521.1	967.7	950.1	809.9
80°	42.2	42.2	64.7	115.2	182.9	141.7	123.0	221.6	306.4	269.1	237.3
82.5°	23.5	24.0	47.1	71.6	121.1	83.8	67.7	102.5	132.4	117.2	102.0
85°	9.8	10.8	28.9	33.8	57.8	41.7	27.5	43.1	49.0	43.6	31.9
87.5°	1.0	1.5	8.8	6.4	6.9	8.3	3.9	8.3	6.9	6.9	4.9
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°	1128.0	1128.0	1128.0	1128.0	1128.0	1128.0	1128.0	1128.0	1128.0	1128.0	1128.0
2.5°	1135.4	1128.0	1109.4	1087.8	1059.4	1045.7	1027.0	1014.3	1003.5	1004.5	994.7
5°	1157.4	1138.8	1097.1	1045.2	980.5	934.4	885.4	851.5	824.1	818.2	805.0
7.5°	1187.8	1158.4	1085.4	991.7	882.4	799.6	725.5	678.0	644.2	633.4	622.6
10°	1227.0	1184.4	1070.2	924.6	767.2	661.8	582.4	545.1	522.1	514.3	508.4
12.5°	1272.6	1214.3	1050.1	842.7	648.6	547.1	496.6	478.0	470.6	468.2	466.7
15°	1330.0	1251.6	1019.7	745.6	548.1	477.0	455.4	453.0	454.0	453.0	452.5
17.5°	1398.1	1292.2	970.2	645.6	480.4	441.2	433.4	435.3	437.8	437.3	436.3
20°	1472.7	1332.4	906.9	556.9	434.3	415.7	411.3	413.3	415.2	414.2	413.8
22.5°	1557.5	1375.6	836.8	487.8	403.5	392.2	387.3	387.8	387.8	385.8	384.8
25°	1658.9	1423.1	763.3	438.8	379.9	371.1	365.2	363.3	360.3	354.4	353.5
27.5°	1780.0	1473.6	692.7	404.4	361.3	353.0	346.1	341.2	333.8	324.0	323.1
30°	1916.3	1534.9	632.9	382.9	346.6	338.3	330.4	323.1	312.3	300.0	299.0
32.5°	2076.6	1600.6	589.3	368.7	333.4	324.5	315.2	306.4	294.6	282.4	282.9
35°	2267.8	1680.0	563.8	358.8	323.1	311.3	301.0	291.2	282.4	271.6	270.6
37.5°	2475.2	1764.3	555.9	353.9	316.2	298.1	286.3	279.4	278.5	272.1	271.6
40°	2702.2	1864.3	561.8	351.0	308.8	285.3	272.6	271.1	273.5	262.3	262.8
42.5°	2942.4	1983.0	571.6	347.6	298.6	272.6	260.3	260.3	258.4	242.7	242.7
45°	3202.2	2119.8	581.4	339.2	286.3	259.8	250.5	247.1	238.7	223.5	223.1
47.5°	3464.0	2259.0	588.8	324.0	271.6	249.0	240.7	232.9	220.6	206.9	206.4
50°	3712.5	2384.0	580.9	301.5	254.9	238.7	229.9	219.1	205.9	196.6	195.1
52.5°	3934.6	2492.3	547.6	275.0	237.3	228.0	220.1	208.8	198.1	188.2	187.3
55°	4127.7	2580.1	488.8	250.0	221.6	218.6	210.8	196.6	181.9	173.5	172.6
57.5°	4313.0	2646.8	415.2	229.4	207.4	208.3	196.6	183.8	170.1	161.3	160.3
60°	4559.6	2736.0	340.7	210.3	192.2	195.1	182.4	173.1	155.9	144.6	143.1
62.5°	4953.8	2874.7	270.6	186.8	174.5	175.5	170.1	158.8	138.2	125.0	124.0
65°	5266.5	2823.7	213.3	161.3	154.4	155.9	155.9	143.6	121.6	106.4	104.9
67.5°	5231.3	2417.8	170.1	136.3	135.3	136.3	139.7	129.4	107.9	95.6	93.6
70°	4819.0	1923.2	136.3	113.2	117.7	115.2	125.0	118.1	97.1	84.8	83.3
72.5°	3932.1	1385.4	103.9	93.6	90.2	94.1	112.8	106.4	80.9	67.2	65.7
75°	2297.7	739.3	77.5	74.0	65.2	78.4	100.0	90.7	61.8	49.5	48.0
77.5°	748.1	257.9	56.9	54.4	48.5	63.2	85.3	76.5	50.5	39.2	37.7
80°	200.5	77.9	38.7	35.8	31.4	47.1	67.7	60.8	36.3	25.5	25.0
82.5°	80.4	32.8	22.6	20.1	17.2	32.4	53.4	49.0	27.0	16.2	16.2
85°	26.0	10.8	8.3	6.4	7.8	20.1	31.9	33.3	19.1	8.3	6.4
87.5°	3.4	1.5	1.5	2.0	1.5	3.4	9.8	9.3	5.4	1.0	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)