

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: P882928

Luminaire Tested: **NAV-SB3A-740-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882928
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-740-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11377 lumens
Efficiency: N/A
Efficacy: 134.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

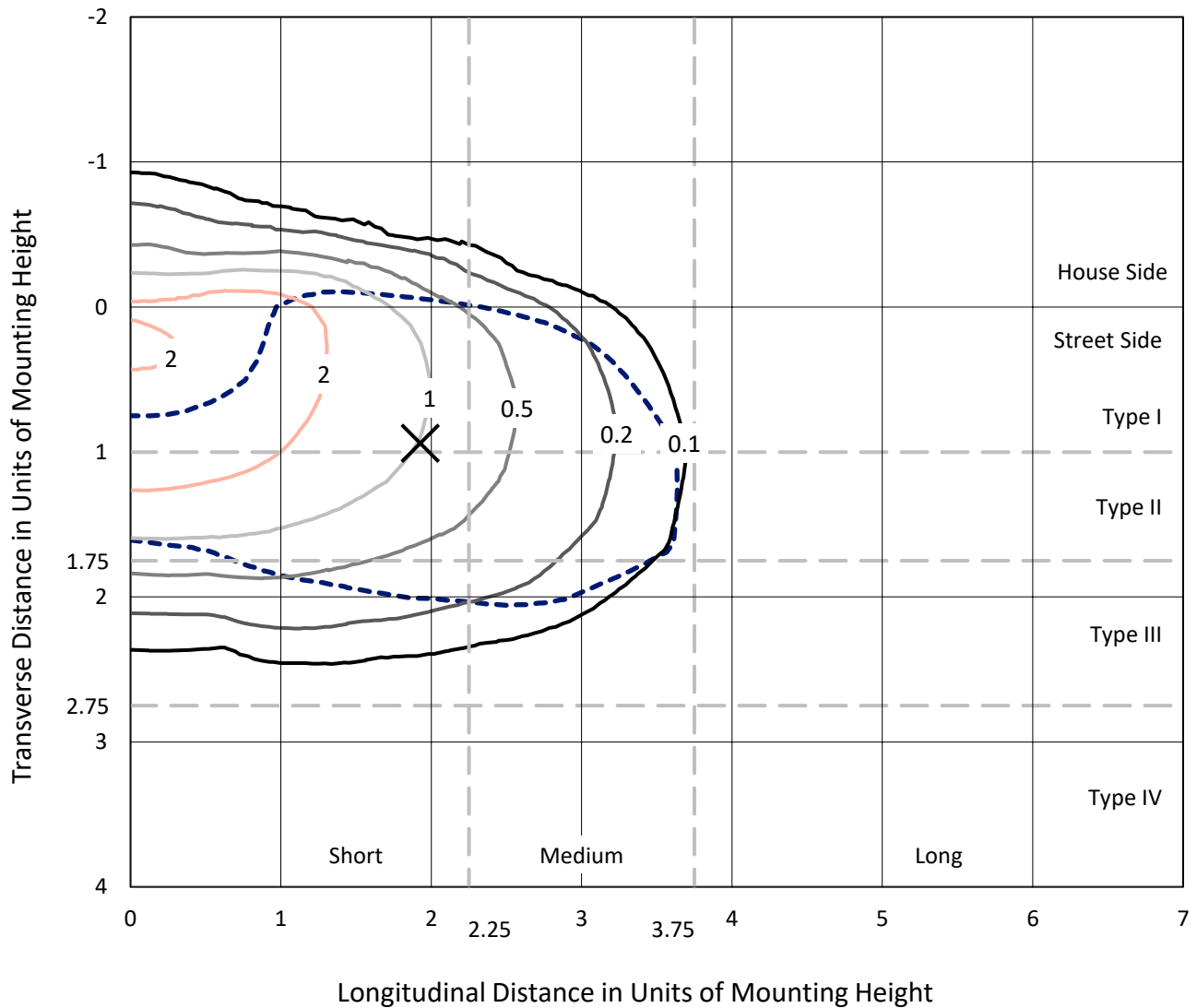
Input Watts (W): 84.7
Input Voltage (V): 120.0
Input Current (Ain): 0.717
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 11.969
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

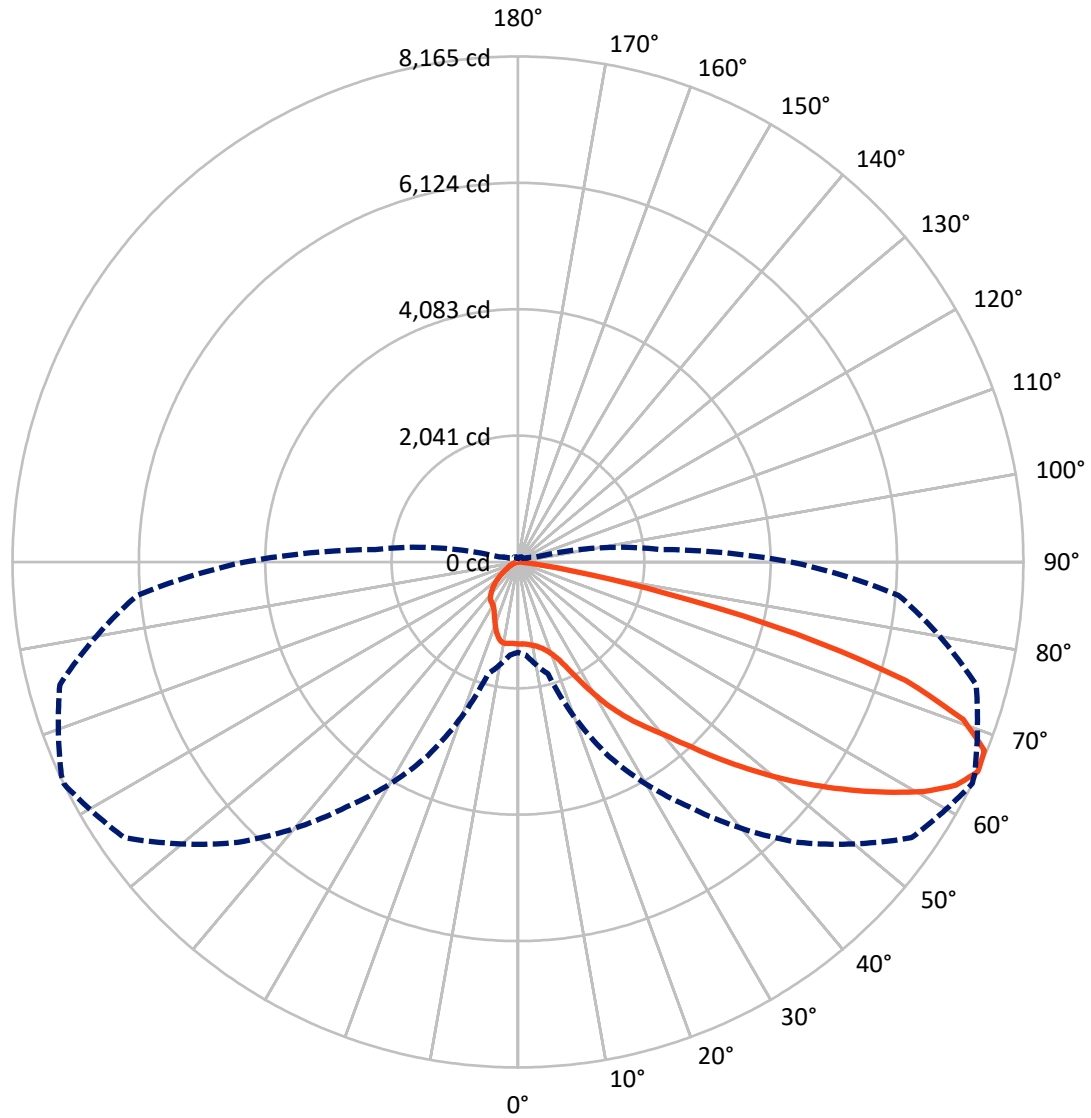
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1521.4	0.0	1521.4
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	9855.6	0.0	9855.6
	% Fixture	86.6	0.0	86.6
Total	Lumens	11377.0	0.0	11377.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.1	1.1
10°-20°	331.1	2.9
20°-30°	627.5	5.5
30°-40°	1269.7	11.2
40°-50°	2162.9	19.0
50°-60°	2941.4	25.9
60°-70°	2762.1	24.3
70°-80°	1106.6	9.7
80°-90°	53.6	0.5
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°	11377.0	100.0
0°-180°	11377.0	100.0

Coefficient of Utilization



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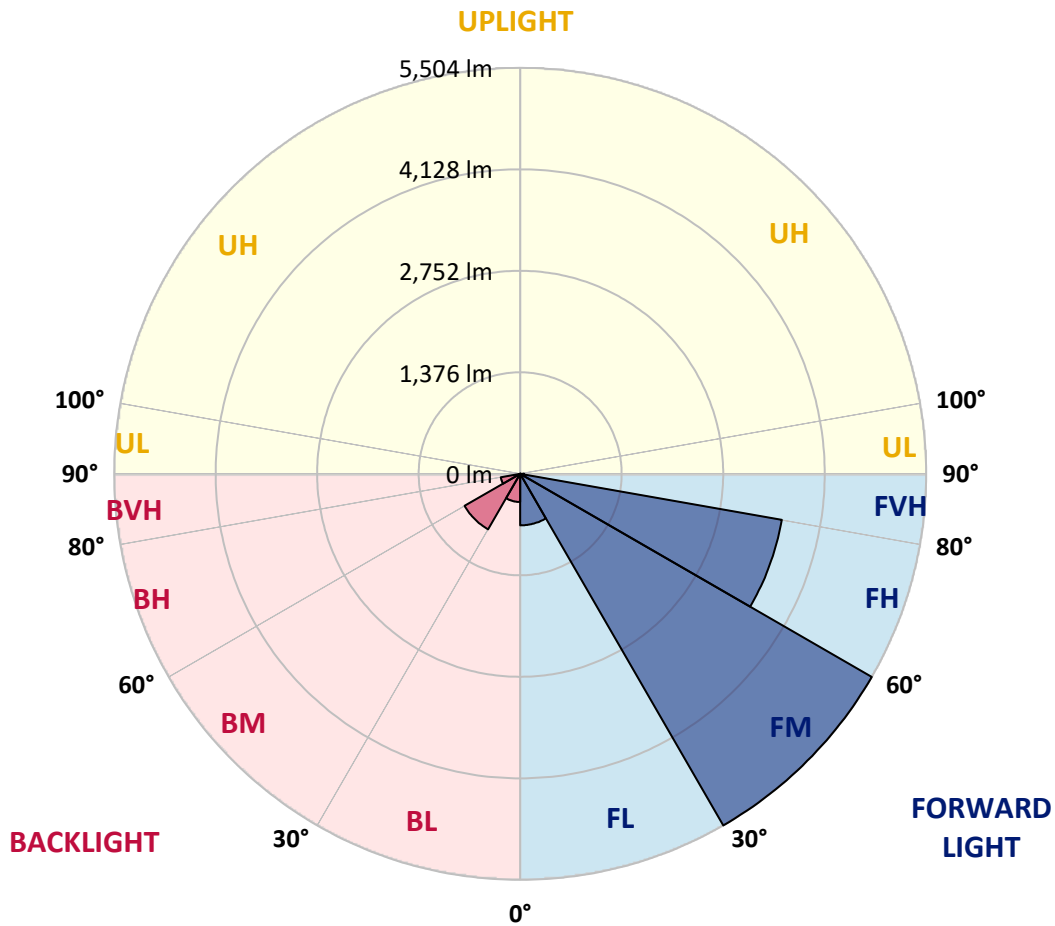
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	698.7	6.1			
FM (30°-60°)	5504.2	48.4			
FH (60°-80°)	3601.7	31.7			G2/5000
FVH (80°-90°)	51.0	0.4			G1/100
BL (0°-30°)	382.0	3.4	B1/500		
BM (30°-60°)	869.8	7.6	B1/1000		
BH (60°-80°)	267.0	2.3	B1/500		G1/500
BVH (80°-90°)	2.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3
2.5°	1318.7	1327.8	1325.6	1323.3	1322.5	1324.0	1324.8	1324.0	1324.0	1324.0	1324.8
5°	1293.5	1301.1	1301.1	1306.5	1314.1	1323.3	1330.1	1331.7	1333.2	1335.5	1334.7
7.5°	1245.5	1251.6	1256.1	1273.7	1292.8	1317.2	1337.8	1348.4	1350.0	1358.3	1361.4
10°	1212.7	1220.3	1227.9	1246.2	1273.7	1310.3	1345.4	1371.3	1375.1	1395.0	1404.1
12.5°	1211.1	1218.8	1228.7	1248.5	1280.6	1319.4	1362.2	1399.5	1406.4	1435.4	1454.4
15°	1227.2	1236.3	1245.5	1269.9	1304.2	1351.5	1397.2	1443.8	1450.6	1491.8	1512.4
17.5°	1260.0	1272.2	1279.0	1303.4	1340.0	1392.7	1452.9	1506.3	1512.4	1560.5	1586.4
20°	1324.8	1339.3	1341.6	1361.4	1397.2	1453.7	1525.4	1591.7	1599.4	1654.3	1683.3
22.5°	1459.0	1479.6	1461.3	1471.2	1503.3	1559.7	1637.5	1721.4	1732.1	1794.6	1820.5
25°	1695.5	1724.4	1677.2	1660.4	1674.1	1732.8	1830.5	1936.5	1948.7	1999.0	2012.0
27.5°	2159.9	2122.6	2050.9	1980.7	1939.5	1973.1	2082.9	2214.1	2229.3	2278.1	2262.9
30°	2670.2	2637.4	2540.5	2384.9	2287.3	2282.0	2383.4	2529.8	2547.4	2593.9	2547.4
32.5°	3181.2	3149.9	3044.6	2853.2	2683.9	2600.0	2670.2	2832.6	2841.8	2871.5	2802.9
35°	3683.8	3651.7	3546.5	3350.5	3142.3	2951.6	2937.9	3120.9	3124.0	3155.2	3053.0
37.5°	4189.4	4162.7	4050.6	3858.4	3653.3	3390.1	3262.8	3394.0	3397.8	3428.3	3322.3
40°	4550.2	4561.6	4484.6	4335.9	4159.7	3872.2	3627.3	3684.5	3661.7	3712.8	3649.5
42.5°	4859.8	4882.7	4815.6	4740.9	4638.7	4385.5	4078.9	4068.9	4032.3	4059.8	3994.2
45°	5127.5	5146.6	5086.4	5068.8	5066.5	4888.8	4572.3	4512.8	4461.7	4456.4	4377.8
47.5°	5225.9	5262.5	5288.5	5347.2	5461.6	5386.9	5082.6	4990.3	4933.1	4891.1	4766.8
50°	5263.3	5302.2	5390.7	5561.5	5832.3	5864.3	5590.5	5486.8	5416.6	5340.3	5157.3
52.5°	5213.0	5282.4	5401.4	5688.9	6081.7	6247.2	6077.9	5987.1	5907.0	5782.7	5511.2
55°	4916.3	4985.7	5229.0	5687.4	6206.0	6515.6	6538.5	6498.1	6408.1	6212.1	5797.2
57.5°	4290.9	4393.8	4779.0	5493.6	6203.7	6746.7	6990.0	7019.0	6918.3	6637.7	6022.2
60°	3424.5	3564.0	4033.9	5064.2	6012.3	6871.8	7385.9	7530.8	7424.0	7057.1	6204.5
62.5°	2389.5	2551.2	2995.8	4391.6	5574.5	6781.8	7674.9	7942.6	7861.8	7432.4	6274.6
65°	1457.5	1509.4	1867.8	3455.7	4830.1	6405.1	7764.2	8165.3	8138.6	7662.0	6170.9
67.5°	970.9	1014.4	1117.3	2369.7	3749.4	5652.3	7550.6	8126.4	8134.1	7624.6	5791.1
70°	585.0	622.4	689.5	1378.2	2429.9	4473.9	6889.4	7630.7	7674.9	7125.0	5071.1
72.5°	241.0	266.2	327.2	624.6	1258.4	2839.5	5486.0	6551.5	6654.5	5990.9	3892.0
75°	136.5	149.5	192.2	313.5	546.1	1323.3	3323.0	4650.9	4802.6	4129.2	2341.5
77.5°	90.8	96.9	124.3	202.9	307.4	451.5	1420.1	2423.1	2712.9	2255.3	1013.6
80°	61.0	66.4	85.4	135.8	199.8	193.7	452.3	897.7	1104.4	774.9	247.1
82.5°	41.2	41.9	61.0	89.2	126.6	93.8	133.5	279.1	350.8	224.2	93.8
85°	23.6	22.9	45.0	51.9	56.4	38.9	40.4	83.9	109.8	94.6	53.4
87.5°	3.1	4.6	17.5	13.7	7.6	8.4	8.4	14.5	21.4	22.9	11.4
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°	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3
2.5°	1324.8	1324.0	1321.7	1319.4	1314.1	1311.1	1312.6	1311.1	1310.3	1311.1	1314.1
5°	1334.7	1332.4	1326.3	1318.7	1308.0	1295.0	1286.7	1274.5	1263.0	1256.1	1257.7
7.5°	1361.4	1359.1	1350.7	1329.4	1295.0	1240.9	1191.3	1147.8	1115.0	1096.0	1096.7
10°	1404.1	1400.3	1387.3	1340.0	1250.0	1131.8	1033.4	951.8	898.4	873.3	871.0
12.5°	1454.4	1449.9	1427.0	1330.1	1164.6	980.1	844.3	753.5	704.0	681.8	679.6
15°	1513.9	1507.8	1462.8	1282.8	1040.3	812.3	687.9	620.1	588.0	568.2	569.0
17.5°	1587.9	1577.2	1489.5	1211.9	905.3	684.1	591.8	540.7	512.5	493.5	491.9
20°	1684.0	1666.5	1510.9	1127.3	781.0	603.3	527.0	484.3	463.0	446.2	443.1
22.5°	1818.2	1793.1	1536.8	1035.7	693.3	547.6	479.0	447.7	430.2	411.1	408.0
25°	1984.5	1954.8	1568.8	951.1	633.0	499.6	443.9	418.0	397.4	375.2	373.0
27.5°	2217.1	2163.7	1607.0	881.7	581.2	458.4	411.9	382.9	359.2	340.9	337.1
30°	2476.4	2388.7	1640.5	839.7	533.9	420.2	369.9	340.9	318.8	305.8	303.5
32.5°	2722.0	2603.1	1662.7	821.4	491.2	376.8	324.1	292.9	276.1	272.3	274.6
35°	2953.9	2796.8	1660.4	803.9	453.0	333.3	279.1	247.1	234.1	236.4	236.4
37.5°	3220.8	3003.5	1644.4	776.4	421.8	293.6	240.2	212.0	200.6	201.3	204.4
40°	3531.2	3242.2	1634.4	724.6	387.4	257.0	208.2	185.3	176.9	173.9	173.1
42.5°	3862.3	3473.3	1636.0	665.8	344.7	224.2	186.1	167.0	159.4	157.1	156.4
45°	4194.8	3693.7	1638.3	604.8	299.7	199.1	170.1	154.1	149.5	146.4	146.4
47.5°	4507.5	3881.3	1595.5	539.2	255.5	180.0	157.1	146.4	142.6	138.8	138.8
50°	4798.8	4006.4	1492.6	463.0	220.4	164.7	147.2	139.6	135.8	131.9	131.9
52.5°	5025.3	4026.2	1322.5	384.4	196.0	153.3	141.1	134.2	129.7	125.8	125.1
55°	5126.0	3901.9	1080.7	311.2	176.9	143.4	135.0	128.1	122.8	119.0	118.2
57.5°	5100.1	3640.3	842.8	250.2	158.6	133.5	127.4	122.8	116.7	110.6	109.8
60°	4972.7	3290.2	635.3	208.2	141.9	122.8	119.0	115.2	106.8	97.6	96.1
62.5°	4752.3	2850.2	453.0	172.4	123.6	110.6	109.1	106.0	93.8	77.0	75.5
65°	4415.2	2315.5	305.1	143.4	106.0	96.9	97.6	92.3	76.3	57.2	55.7
67.5°	3922.5	1693.2	195.2	117.5	88.5	80.8	81.6	78.6	64.8	48.8	46.5
70°	3294.8	1121.2	127.4	89.2	70.9	62.5	67.1	67.9	54.9	39.7	38.1
72.5°	2415.4	662.0	89.2	66.4	51.9	43.5	54.9	56.4	44.2	29.7	28.2
75°	1376.7	314.2	67.1	48.0	32.0	30.5	42.7	42.7	30.5	19.8	18.3
77.5°	578.1	131.2	47.3	31.3	18.3	17.5	29.0	26.7	15.3	9.2	9.2
80°	167.0	58.7	25.2	15.3	7.6	6.9	11.4	8.4	3.8	1.5	1.5
82.5°	65.6	25.9	9.9	6.1	3.1	3.1	1.5	0.0	0.0	0.0	0.0
85°	38.9	10.7	4.6	2.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.9	2.3	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)