

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: P882918

Luminaire Tested: **NAV-SB3A-735-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882918  
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-735-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

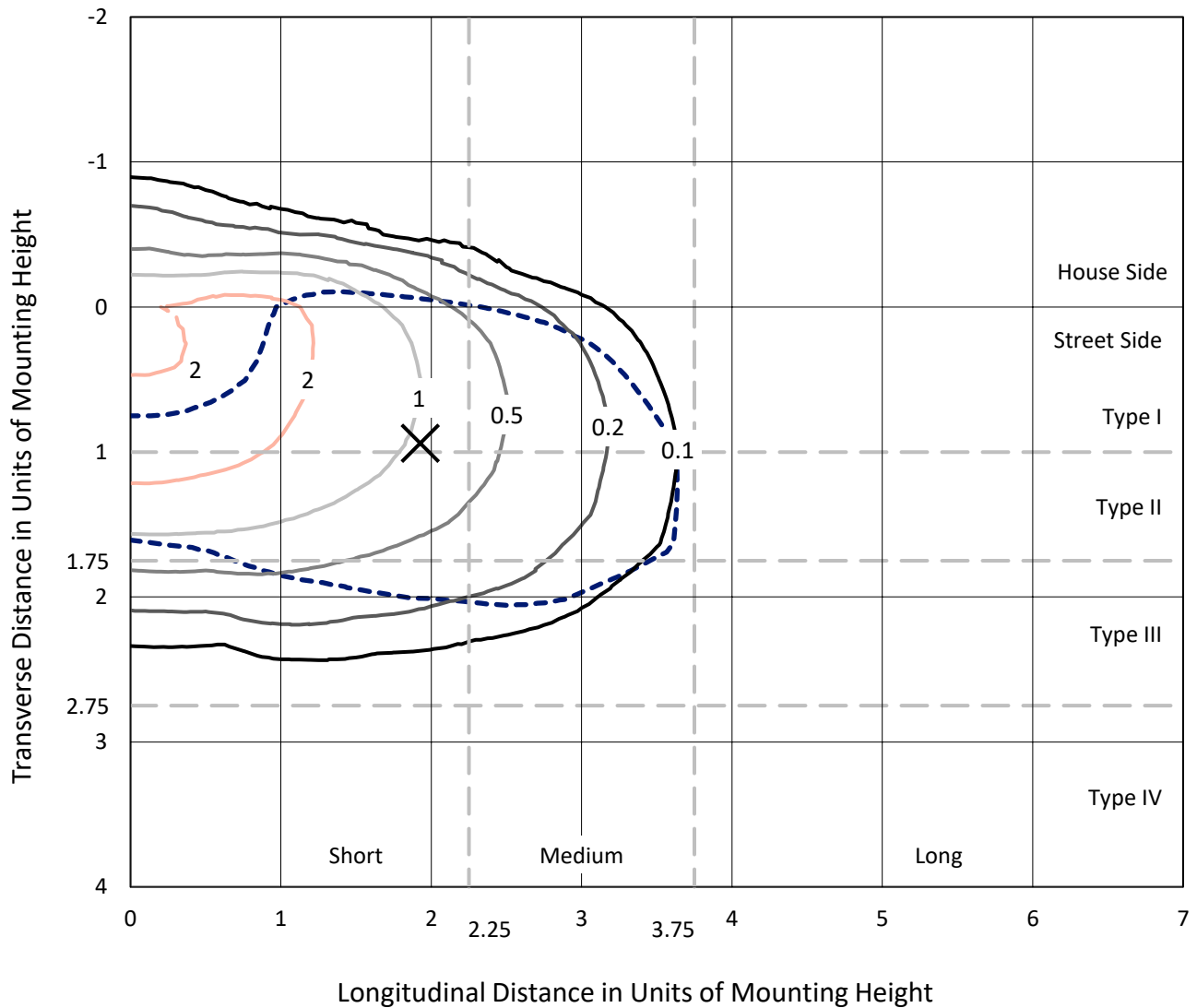
Lumens per Lamp: N/A  
Luminaire Lumens: 10552 lumens  
Efficiency: N/A  
Efficacy: 124.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 84.7  
Input Voltage (V): 120.0  
Input Current (Ain): 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

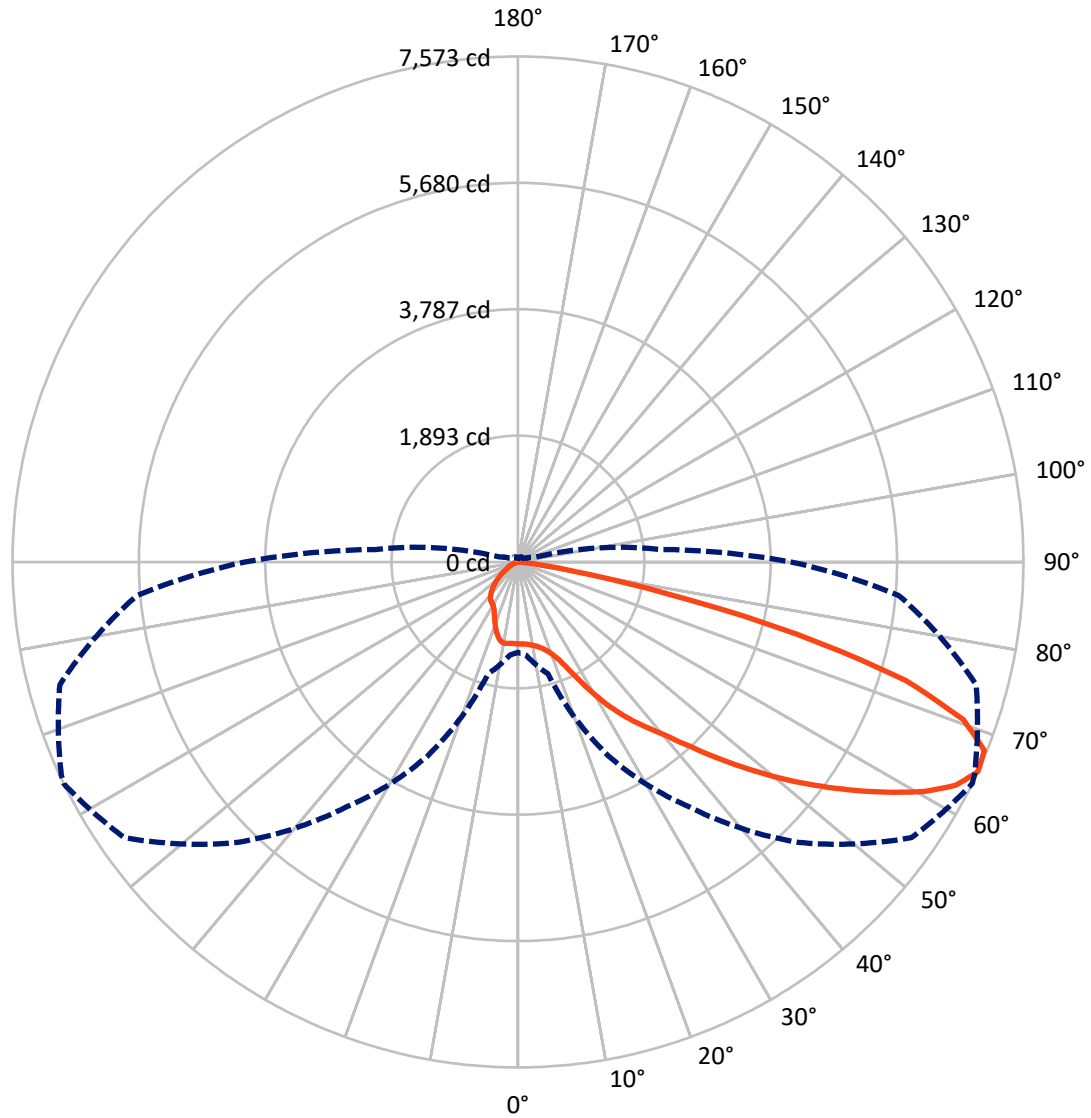
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 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
<b>House Side</b>	Lumens	1411.1	0.0	1411.1
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	9140.9	0.0	9140.9
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	10552.0	0.0	10552.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.2	1.1
10°-20°	307.1	2.9
20°-30°	582.0	5.5
30°-40°	1177.6	11.2
40°-50°	2006.1	19.0
50°-60°	2728.1	25.9
60°-70°	2561.8	24.3
70°-80°	1026.4	9.7
80°-90°	49.7	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°	10552.0	100.0
0°-180°	10552.0	100.0

**Coefficient of Utilization**



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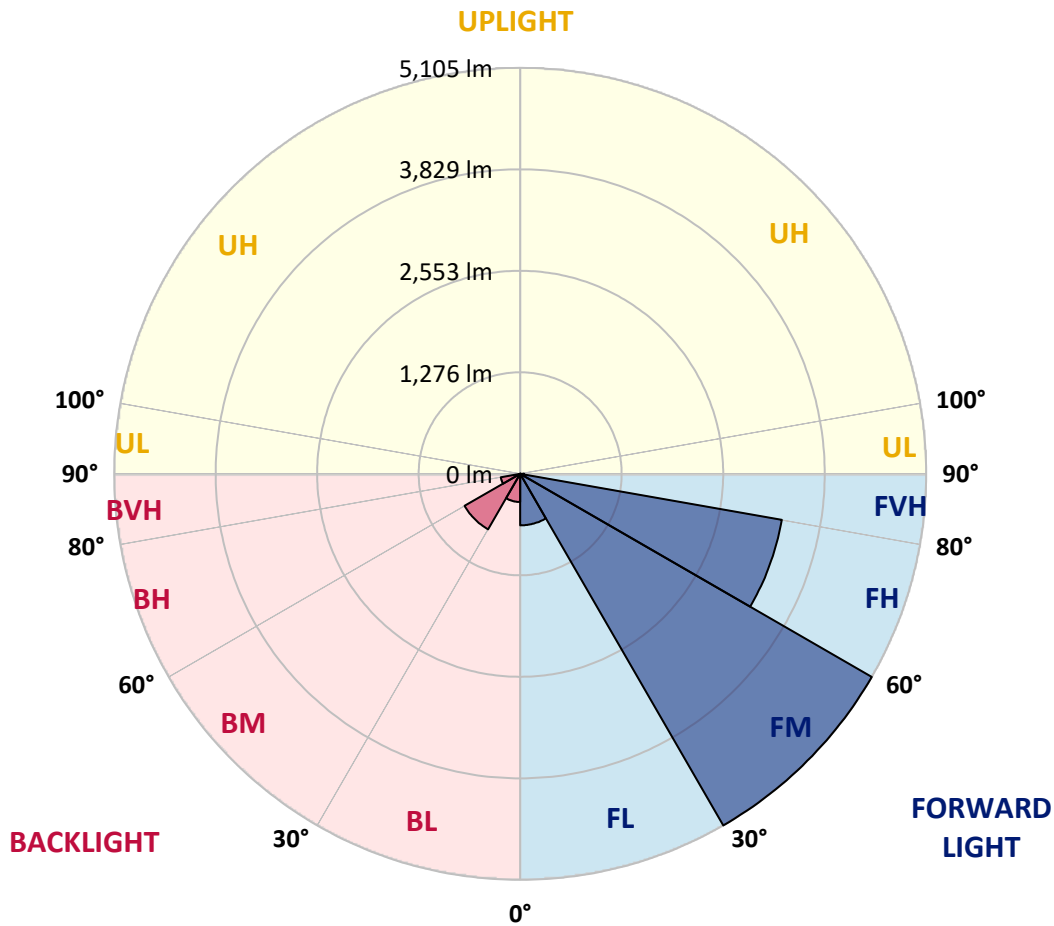
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	648.0	6.1			
FM (30°-60°)	5105.0	48.4			
FH (60°-80°)	3340.5	31.7			G2/5000
FVH (80°-90°)	47.3	0.4			G1/100
BL (0°-30°)	354.3	3.4	B1/500		
BM (30°-60°)	806.7	7.6	B1/1000		
BH (60°-80°)	247.7	2.3	B1/500		G1/500
BVH (80°-90°)	2.4	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°	1227.3	1227.3	1227.3	1227.3	1227.3	1227.3	1227.3	1227.3	1227.3	1227.3	1227.3
2.5°	1223.1	1231.6	1229.4	1227.3	1226.6	1228.0	1228.7	1228.0	1228.0	1228.0	1228.7
5°	1199.7	1206.8	1206.8	1211.7	1218.8	1227.3	1233.7	1235.1	1236.5	1238.6	1237.9
7.5°	1155.2	1160.8	1165.1	1181.3	1199.0	1221.6	1240.7	1250.7	1252.1	1259.8	1262.7
10°	1124.7	1131.8	1138.9	1155.9	1181.3	1215.3	1247.8	1271.9	1275.4	1293.8	1302.3
12.5°	1123.3	1130.4	1139.6	1158.0	1187.7	1223.8	1263.4	1298.0	1304.4	1331.3	1349.0
15°	1138.2	1146.7	1155.2	1177.8	1209.6	1253.5	1295.9	1339.1	1345.4	1383.6	1402.7
17.5°	1168.6	1179.9	1186.3	1208.9	1242.9	1291.7	1347.6	1397.1	1402.7	1447.3	1471.4
20°	1228.7	1242.2	1244.3	1262.7	1295.9	1348.3	1414.8	1476.3	1483.4	1534.3	1561.2
22.5°	1353.2	1372.3	1355.3	1364.5	1394.2	1446.6	1518.7	1596.6	1606.5	1664.5	1688.5
25°	1572.5	1599.4	1555.5	1540.0	1552.7	1607.2	1697.7	1796.0	1807.4	1854.0	1866.1
27.5°	2003.3	1968.6	1902.1	1837.1	1798.9	1830.0	1931.9	2053.5	2067.7	2112.9	2098.8
30°	2476.5	2446.1	2356.3	2212.0	2121.4	2116.5	2210.6	2346.4	2362.7	2405.8	2362.7
32.5°	2950.5	2921.5	2823.9	2646.3	2489.3	2411.5	2476.5	2627.2	2635.7	2663.3	2599.6
35°	3416.7	3386.9	3289.3	3107.5	2914.4	2737.6	2724.8	2894.6	2897.4	2926.4	2831.6
37.5°	3885.6	3860.9	3756.9	3578.6	3388.4	3144.3	3026.2	3147.8	3151.4	3179.7	3081.4
40°	4220.2	4230.8	4159.4	4021.5	3858.1	3591.4	3364.3	3417.4	3396.1	3443.5	3384.8
42.5°	4507.4	4528.7	4466.4	4397.1	4302.3	4067.4	3783.1	3773.9	3739.9	3765.4	3704.6
45°	4755.7	4773.4	4717.5	4701.3	4699.1	4534.3	4240.8	4185.6	4138.2	4133.2	4060.4
47.5°	4847.0	4880.9	4905.0	4959.5	5065.6	4996.2	4714.0	4628.4	4575.3	4536.4	4421.1
50°	4881.6	4917.7	4999.8	5158.2	5409.3	5439.1	5185.1	5088.9	5023.8	4953.1	4783.3
52.5°	4835.0	4899.3	5009.7	5276.4	5640.7	5794.2	5637.1	5552.9	5478.7	5363.4	5111.5
55°	4559.8	4624.2	4849.8	5274.9	5756.0	6043.2	6064.4	6026.9	5943.4	5761.6	5376.8
57.5°	3979.7	4075.2	4432.5	5095.3	5753.8	6257.5	6483.2	6510.0	6416.7	6156.3	5585.5
60°	3176.1	3305.6	3741.3	4697.0	5576.3	6373.5	6850.3	6984.7	6885.7	6545.4	5754.5
62.5°	2216.2	2366.2	2778.6	4073.1	5170.3	6290.0	7118.4	7366.7	7291.7	6893.4	5819.6
65°	1351.8	1399.9	1732.4	3205.1	4479.8	5940.6	7201.1	7573.2	7548.5	7106.4	5723.4
67.5°	900.5	940.8	1036.3	2197.8	3477.5	5242.4	7003.1	7537.2	7544.2	7071.7	5371.1
70°	542.6	577.2	639.5	1278.2	2253.7	4149.5	6389.8	7077.4	7118.4	6608.4	4703.4
72.5°	223.5	246.9	303.5	579.3	1167.2	2633.6	5088.2	6076.4	6171.9	5556.5	3609.8
75°	126.6	138.6	178.3	290.7	506.5	1227.3	3082.1	4313.6	4454.4	3829.8	2171.7
77.5°	84.2	89.8	115.3	188.2	285.1	418.8	1317.1	2247.4	2516.2	2091.7	940.1
80°	56.6	61.5	79.2	125.9	185.3	179.7	419.5	832.6	1024.3	718.7	229.2
82.5°	38.2	38.9	56.6	82.8	117.4	87.0	123.8	258.9	325.4	208.0	87.0
85°	21.9	21.2	41.7	48.1	52.3	36.1	37.5	77.8	101.9	87.7	49.5
87.5°	2.8	4.2	16.3	12.7	7.1	7.8	7.8	13.4	19.8	21.2	10.6
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°	1227.3	1227.3	1227.3	1227.3	1227.3	1227.3	1227.3	1227.3	1227.3	1227.3	1227.3
2.5°	1228.7	1228.0	1225.9	1223.8	1218.8	1216.0	1217.4	1216.0	1215.3	1216.0	1218.8
5°	1237.9	1235.8	1230.1	1223.1	1213.2	1201.1	1193.4	1182.0	1171.4	1165.1	1166.5
7.5°	1262.7	1260.6	1252.8	1233.0	1201.1	1150.9	1104.9	1064.6	1034.2	1016.5	1017.2
10°	1302.3	1298.8	1286.7	1242.9	1159.4	1049.8	958.5	882.8	833.3	810.0	807.8
12.5°	1349.0	1344.7	1323.5	1233.7	1080.2	909.0	783.1	698.9	652.9	632.4	630.3
15°	1404.2	1398.5	1356.8	1189.8	964.9	753.4	638.1	575.1	545.4	527.0	527.7
17.5°	1472.8	1462.9	1381.5	1124.0	839.7	634.5	548.9	501.5	475.4	457.7	456.3
20°	1561.9	1545.6	1401.3	1045.5	724.4	559.5	488.8	449.2	429.4	413.8	411.0
22.5°	1686.4	1663.1	1425.4	960.6	643.0	507.9	444.2	415.2	399.0	381.3	378.4
25°	1840.6	1813.0	1455.1	882.1	587.1	463.3	411.7	387.6	368.5	348.0	345.9
27.5°	2056.4	2006.8	1490.5	817.7	539.0	425.1	382.0	355.1	333.2	316.2	312.7
30°	2296.9	2215.5	1521.6	778.8	495.2	389.8	343.1	316.2	295.7	283.7	281.5
32.5°	2524.6	2414.3	1542.1	761.9	455.6	349.4	300.6	271.6	256.1	252.5	254.7
35°	2739.7	2594.0	1540.0	745.6	420.2	309.1	258.9	229.2	217.2	219.3	219.3
37.5°	2987.3	2785.7	1525.1	720.1	391.2	272.3	222.8	196.7	186.0	186.7	189.6
40°	3275.2	3007.1	1515.9	672.0	359.3	238.4	193.1	171.9	164.1	161.3	160.6
42.5°	3582.2	3221.4	1517.3	617.5	319.7	208.0	172.6	154.9	147.8	145.7	145.0
45°	3890.6	3425.8	1519.5	561.0	278.0	184.6	157.7	142.9	138.6	135.8	135.8
47.5°	4180.6	3599.9	1479.8	500.1	237.0	166.9	145.7	135.8	132.3	128.7	128.7
50°	4450.8	3715.9	1384.3	429.4	204.4	152.8	136.5	129.5	125.9	122.4	122.4
52.5°	4660.9	3734.3	1226.6	356.5	181.8	142.2	130.9	124.5	120.3	116.7	116.0
55°	4754.3	3619.0	1002.4	288.6	164.1	133.0	125.2	118.8	113.9	110.4	109.6
57.5°	4730.3	3376.3	781.7	232.0	147.1	123.8	118.1	113.9	108.2	102.6	101.9
60°	4612.1	3051.6	589.2	193.1	131.6	113.9	110.4	106.8	99.0	90.5	89.1
62.5°	4407.7	2643.5	420.2	159.9	114.6	102.6	101.2	98.3	87.0	71.4	70.0
65°	4095.0	2147.6	283.0	133.0	98.3	89.8	90.5	85.6	70.7	53.1	51.6
67.5°	3638.1	1570.4	181.1	108.9	82.1	75.0	75.7	72.9	60.1	45.3	43.2
70°	3055.9	1039.9	118.1	82.8	65.8	58.0	62.2	63.0	50.9	36.8	35.4
72.5°	2240.3	614.0	82.8	61.5	48.1	40.3	50.9	52.3	41.0	27.6	26.2
75°	1276.8	291.4	62.2	44.6	29.7	28.3	39.6	39.6	28.3	18.4	17.0
77.5°	536.2	121.7	43.9	29.0	17.0	16.3	26.9	24.8	14.1	8.5	8.5
80°	154.9	54.5	23.3	14.1	7.1	6.4	10.6	7.8	3.5	1.4	1.4
82.5°	60.8	24.1	9.2	5.7	2.8	2.8	1.4	0.0	0.0	0.0	0.0
85°	36.1	9.9	4.2	2.1	0.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.2	2.1	1.4	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)