

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: P882979

Luminaire Tested: **NAV-SB3A-835-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882979  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3A-835-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

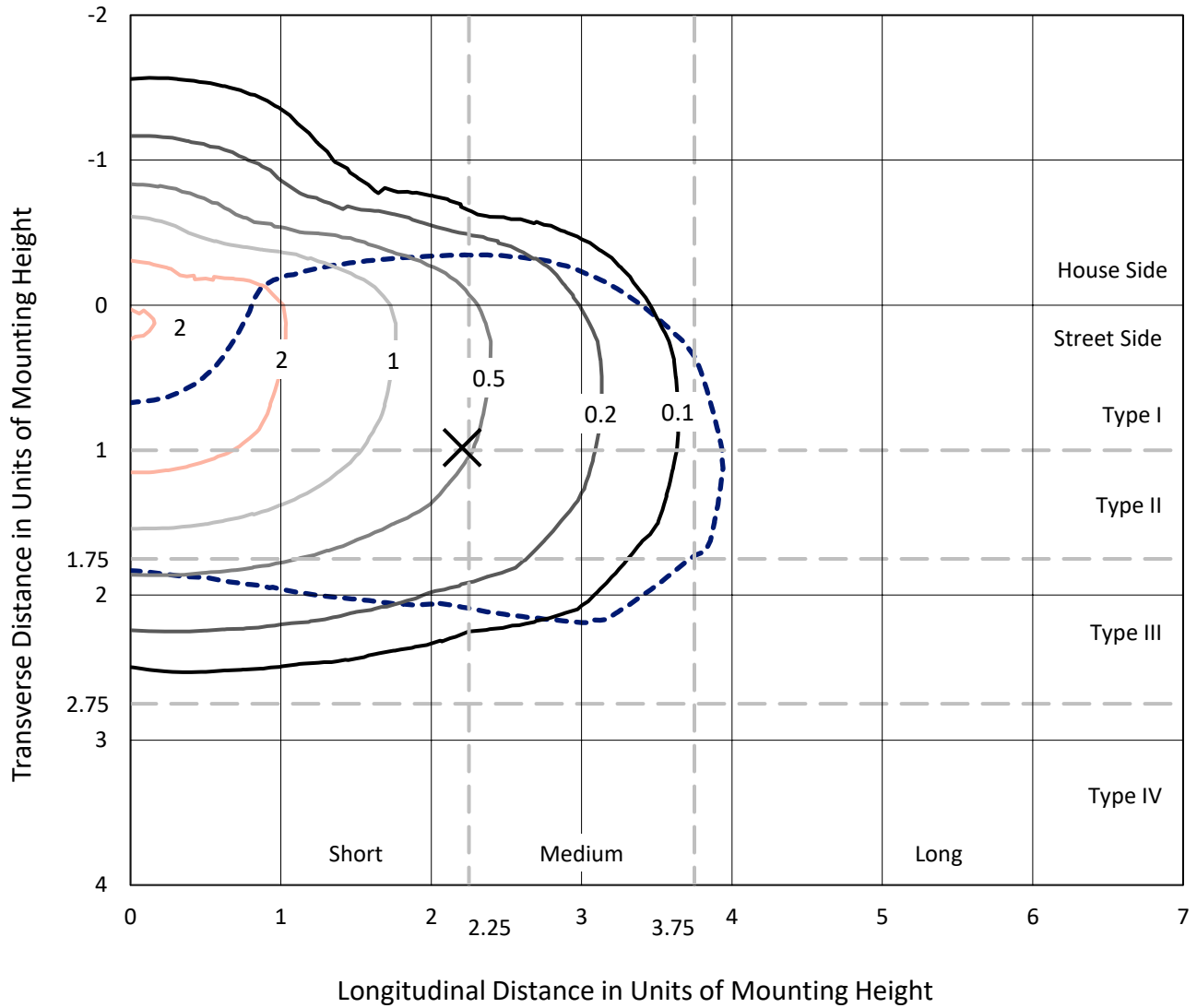
Lumens per Lamp: N/A  
Luminaire Lumens: 11360 lumens  
Efficiency: N/A  
Efficacy: 134.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 84.7  
Input Voltage (V): 120.0  
Input Current (Ain): 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

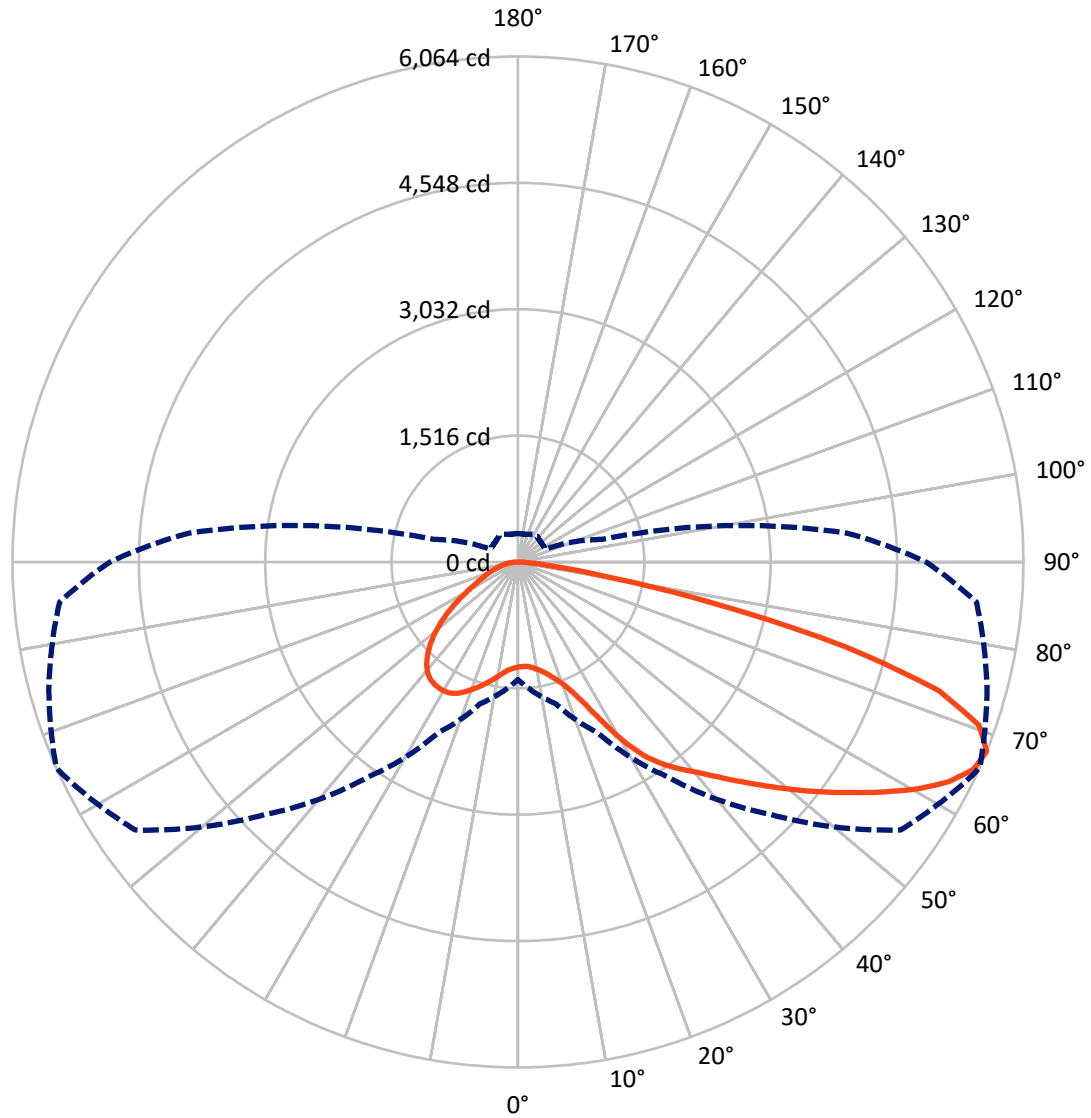
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2824.6	0.0	2824.6
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	8535.4	0.0	8535.4
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	11360.0	0.0	11360.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.9	1.1
10°-20°	412.7	3.6
20°-30°	795.5	7.0
30°-40°	1394.8	12.3
40°-50°	2073.6	18.3
50°-60°	2628.5	23.1
60°-70°	2571.9	22.6
70°-80°	1226.8	10.8
80°-90°	131.1	1.2
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°	11360.0	100.0
0°-180°	11360.0	100.0

**Coefficient of Utilization**



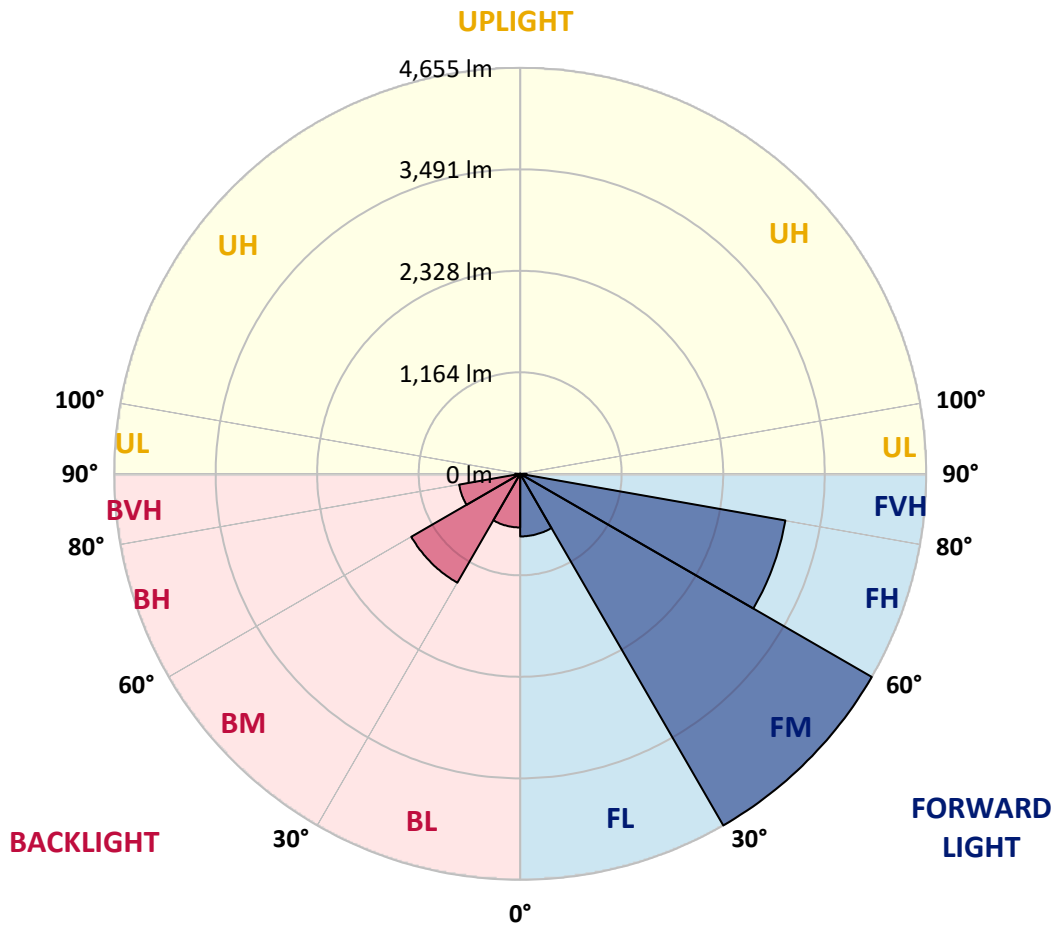
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	717.8	6.3			
FM (30°-60°)	4655.2	41.0			
FH (60°-80°)	3088.0	27.2			G2/5000
FVH (80°-90°)	74.3	0.7			G1/100
BL (0°-30°)	615.3	5.4	B2/1000		
BM (30°-60°)	1441.7	12.7	B2/2500		
BH (60°-80°)	710.8	6.3	B2/1000		G2/1000
BVH (80°-90°)	56.8	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0
2.5°	1246.8	1254.0	1252.2	1249.2	1248.6	1249.8	1251.6	1253.4	1252.8	1255.8	1260.6
5°	1243.3	1250.4	1249.8	1249.8	1252.2	1257.0	1260.0	1263.0	1260.0	1263.6	1270.1
7.5°	1245.6	1251.0	1253.4	1255.8	1261.8	1270.7	1277.9	1284.4	1280.9	1285.0	1293.4
10°	1276.1	1280.3	1282.7	1282.7	1286.8	1297.0	1304.1	1316.1	1313.1	1319.7	1330.4
12.5°	1331.6	1335.8	1335.8	1333.4	1336.4	1342.9	1345.3	1358.5	1353.1	1363.8	1374.6
15°	1399.6	1408.0	1401.4	1397.3	1398.4	1405.0	1404.4	1414.6	1409.2	1418.1	1427.7
17.5°	1474.8	1485.6	1474.8	1474.2	1471.9	1479.0	1479.6	1488.6	1479.0	1485.6	1492.2
20°	1563.8	1578.7	1569.7	1572.7	1567.4	1570.3	1573.3	1586.5	1571.5	1576.3	1574.5
22.5°	1689.1	1707.0	1697.5	1708.8	1705.2	1702.8	1702.2	1725.5	1702.2	1704.0	1686.7
25°	1871.8	1893.2	1876.5	1892.1	1892.1	1899.8	1908.8	1938.6	1899.8	1888.5	1843.7
27.5°	2141.5	2163.0	2130.2	2139.7	2136.8	2155.9	2146.3	2220.3	2178.5	2160.0	2069.9
30°	2466.2	2504.4	2442.4	2440.0	2437.0	2467.4	2481.2	2530.1	2487.7	2469.2	2360.6
32.5°	2817.2	2857.2	2783.2	2761.7	2750.3	2768.8	2757.5	2796.9	2767.6	2739.0	2604.7
35°	3188.4	3227.8	3157.4	3115.6	3070.3	3031.5	2990.9	3001.0	2973.6	2930.0	2790.9
37.5°	3539.4	3611.6	3537.0	3492.2	3408.7	3332.9	3219.5	3172.3	3146.7	3106.7	2966.4
40°	3896.9	3938.1	3881.4	3843.2	3752.5	3633.7	3452.2	3352.6	3318.0	3279.2	3160.4
42.5°	4160.1	4199.5	4169.1	4142.8	4071.8	3933.9	3699.3	3574.6	3524.5	3480.9	3380.0
45°	4369.0	4398.3	4379.2	4388.7	4358.3	4224.6	3955.4	3812.7	3760.8	3707.7	3628.3
47.5°	4453.2	4484.2	4514.7	4571.4	4623.3	4524.8	4230.6	4070.6	4015.7	3961.4	3883.2
50°	4443.6	4475.3	4563.6	4684.2	4845.3	4812.5	4520.6	4345.1	4294.4	4232.3	4160.1
52.5°	4367.2	4403.0	4516.4	4717.0	4973.6	5028.0	4816.1	4628.7	4580.9	4506.9	4434.7
55°	4166.7	4188.2	4358.3	4642.4	5004.1	5178.4	5105.6	4930.7	4882.9	4779.7	4700.9
57.5°	3794.8	3825.9	4073.6	4441.2	4927.7	5280.4	5359.8	5248.2	5202.2	5053.6	4971.3
60°	3309.6	3359.1	3642.6	4103.4	4733.1	5279.8	5590.8	5560.4	5522.2	5323.4	5237.5
62.5°	2760.5	2817.8	3090.5	3625.9	4392.9	5130.0	5735.2	5821.8	5802.1	5572.3	5462.5
65°	2120.1	2159.4	2431.0	3008.2	3863.5	4808.3	5752.0	6000.2	6003.8	5761.5	5580.1
67.5°	1411.6	1525.0	1760.7	2257.3	3154.4	4282.5	5605.1	6029.5	6064.1	5826.6	5521.0
70°	688.8	838.0	1069.0	1467.1	2257.3	3476.1	5221.3	5789.6	5866.5	5636.8	5168.8
72.5°	285.9	334.2	460.2	724.0	1295.8	2345.7	4450.2	5139.0	5281.6	4994.5	4345.7
75°	192.8	208.9	263.2	371.2	590.3	1156.7	3209.3	3831.8	4061.6	3772.2	3083.4
77.5°	148.6	158.8	191.6	259.6	351.0	437.5	1717.8	2309.3	2428.0	2247.8	1604.4
80°	117.0	124.7	143.2	189.2	248.9	234.0	585.5	1046.3	1114.9	935.3	515.7
82.5°	101.5	104.5	102.7	128.3	165.3	136.7	192.2	386.2	426.2	309.2	168.3
85°	73.4	81.8	85.4	79.4	87.7	69.2	78.8	136.7	150.4	134.3	94.9
87.5°	29.8	44.2	54.3	51.3	32.2	19.7	24.5	40.0	46.0	50.1	31.0
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°	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0	1260.0
2.5°	1261.2	1265.3	1268.3	1271.9	1274.3	1277.9	1285.0	1289.2	1289.8	1292.8	1292.2
5°	1272.5	1278.5	1285.0	1294.6	1305.3	1314.3	1328.0	1337.6	1341.1	1344.1	1343.5
7.5°	1297.0	1305.3	1317.3	1334.0	1349.5	1361.4	1378.2	1389.5	1400.8	1405.0	1405.6
10°	1333.4	1345.3	1362.6	1385.3	1402.0	1417.5	1434.9	1444.4	1455.7	1460.5	1462.9
12.5°	1378.7	1391.3	1414.0	1445.6	1461.1	1471.9	1477.8	1475.4	1477.8	1482.0	1483.2
15°	1430.7	1444.4	1470.1	1504.1	1514.8	1505.3	1492.2	1480.2	1478.4	1479.6	1483.8
17.5°	1492.2	1502.3	1532.1	1560.8	1553.0	1513.6	1485.0	1465.9	1456.3	1453.4	1457.5
20°	1578.1	1578.1	1602.6	1620.5	1568.6	1501.7	1456.9	1425.9	1406.2	1397.8	1396.1
22.5°	1682.6	1673.0	1688.5	1676.0	1565.6	1468.3	1406.2	1352.5	1322.6	1310.7	1308.9
25°	1815.1	1803.7	1799.5	1721.9	1544.1	1415.2	1314.3	1249.2	1223.0	1216.4	1217.6
27.5°	2015.0	1986.4	1932.0	1747.0	1504.7	1331.6	1206.9	1146.6	1131.6	1132.2	1134.0
30°	2281.2	2223.9	2090.8	1751.2	1440.2	1213.4	1097.0	1054.1	1046.9	1049.9	1060.0
32.5°	2527.7	2473.4	2253.2	1732.1	1341.1	1097.6	998.5	969.9	959.2	962.7	967.5
35°	2721.1	2706.2	2403.6	1705.2	1219.4	989.0	910.2	885.7	864.9	860.1	863.7
37.5°	2903.7	2897.8	2516.4	1667.6	1098.8	912.0	839.2	807.0	776.5	759.8	760.4
40°	3104.3	3098.3	2590.4	1609.7	992.0	845.2	775.3	732.9	695.3	664.9	667.9
42.5°	3329.9	3294.7	2625.6	1526.8	901.3	788.5	723.4	666.1	616.6	588.5	590.3
45°	3576.4	3497.0	2625.0	1421.1	824.9	736.5	667.9	586.7	540.8	514.5	513.3
47.5°	3837.8	3690.4	2592.8	1304.1	750.9	679.2	581.9	519.9	489.4	473.3	469.7
50°	4107.6	3871.2	2537.9	1169.8	675.1	614.2	528.2	485.8	462.6	447.6	442.3
52.5°	4361.3	4035.4	2471.6	1017.6	598.1	550.9	504.3	471.5	447.0	430.3	423.2
55°	4597.0	4176.8	2377.9	861.9	535.4	508.5	493.0	465.6	437.5	417.8	410.0
57.5°	4806.5	4268.8	2216.1	715.6	490.6	479.3	481.1	455.4	423.2	406.5	395.7
60°	4980.8	4336.2	1976.8	580.1	454.2	450.6	462.6	436.3	398.7	379.6	371.2
62.5°	5085.3	4335.0	1683.1	475.1	423.2	424.4	438.1	412.4	374.2	356.3	351.0
65°	5076.3	4228.8	1360.8	406.5	393.3	394.5	412.4	386.2	353.9	343.2	342.6
67.5°	4896.6	3969.7	1043.9	361.7	360.5	365.9	386.8	368.3	341.4	340.2	342.0
70°	4410.2	3432.0	752.0	325.9	326.5	334.2	361.7	356.9	334.8	337.2	336.6
72.5°	3536.4	2616.6	504.9	288.3	288.9	301.4	337.8	348.0	328.3	359.9	364.7
75°	2355.2	1631.8	324.7	248.3	248.9	265.0	316.9	330.7	310.4	358.7	361.7
77.5°	1131.6	733.5	235.2	208.9	208.9	223.8	274.0	296.0	264.4	278.7	255.5
80°	390.9	275.7	185.0	168.3	164.7	174.9	231.0	256.7	228.0	210.1	197.0
82.5°	154.0	143.2	148.6	130.7	118.8	125.3	179.7	211.9	167.7	151.6	151.0
85°	88.3	93.1	105.0	86.5	68.6	77.0	131.9	152.2	126.5	111.6	114.0
87.5°	23.9	32.8	48.3	44.8	31.0	32.8	62.7	84.2	72.8	56.1	57.9
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)