

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: P882409

Luminaire Tested: **NAV-SB2B-735-U-T3**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882409  
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-SB2B-735-U-T3  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

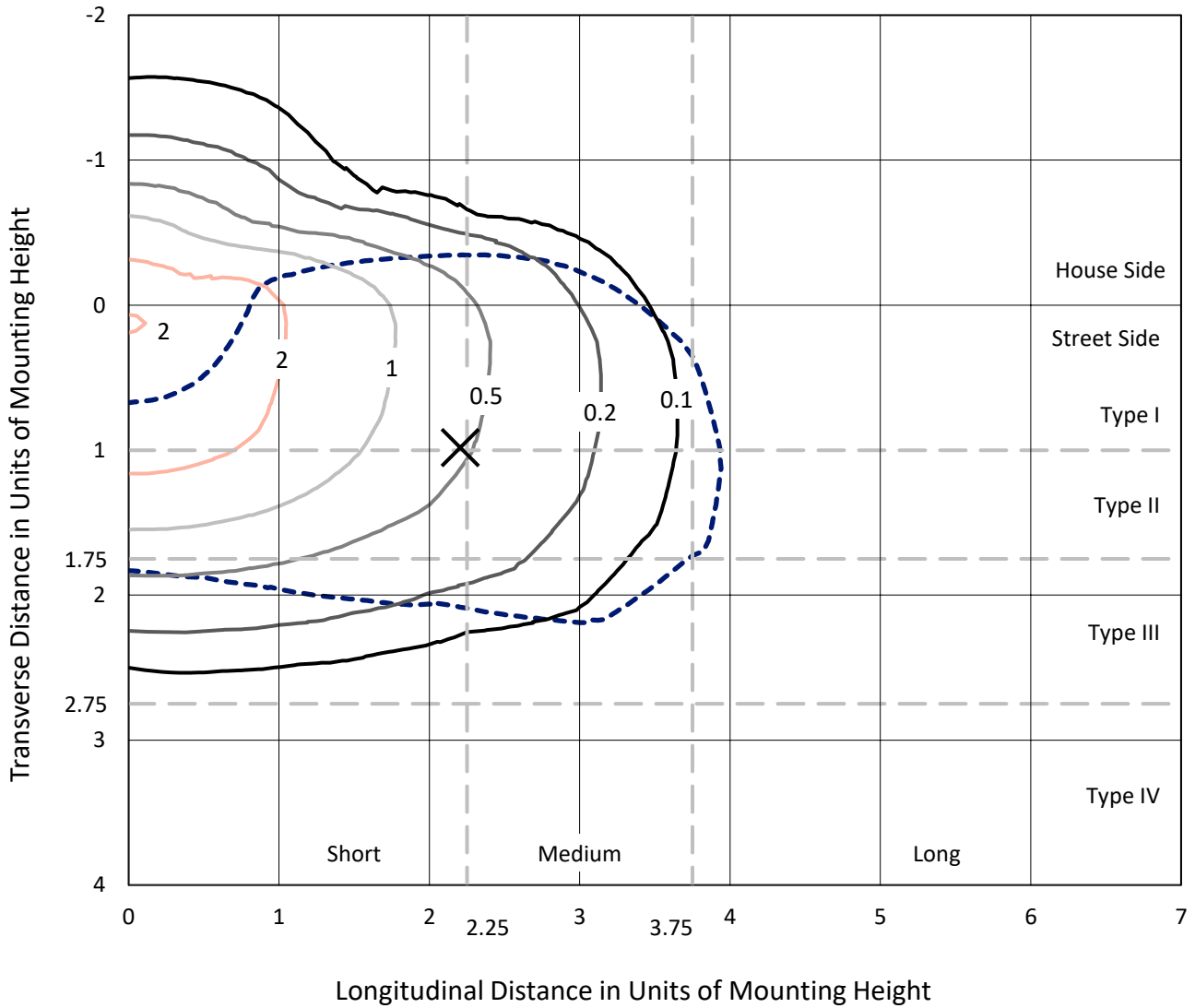
Lumens per Lamp: N/A  
Luminaire Lumens: 11484 lumens  
Efficiency: N/A  
Efficacy: 155.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 73.9  
Input Voltage (V): 120.0  
Input Current (Ain): 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

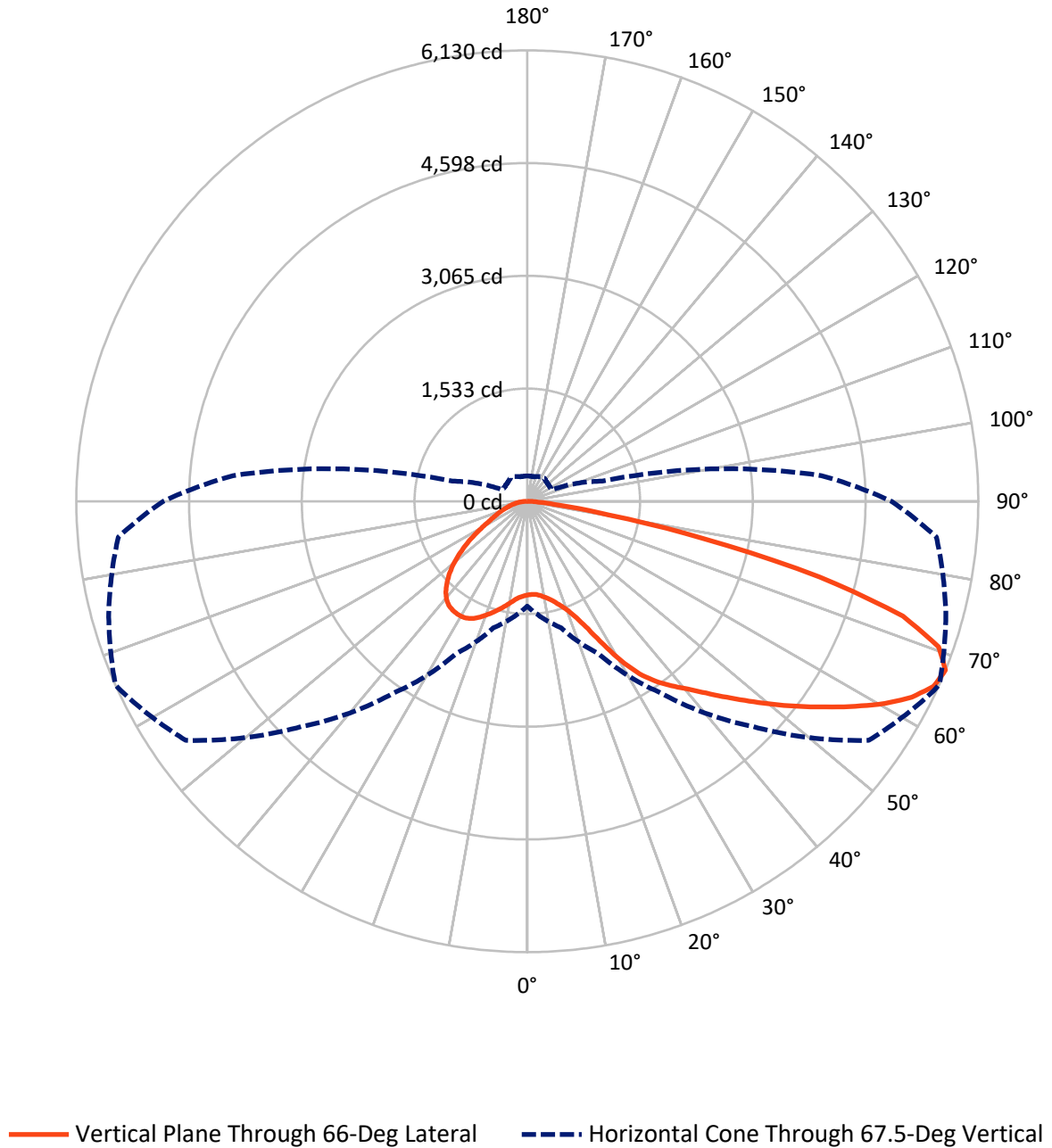
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2855.5	0.0	2855.5
	% Fixture	24.9	0.0	24.9
<b>Street Side</b>	Lumens	8628.5	0.0	8628.5
	% Fixture	75.1	0.0	75.1
<b>Total</b>	Lumens	11484.0	0.0	11484.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.3	1.1
10°-20°	417.2	3.6
20°-30°	804.2	7.0
30°-40°	1410.0	12.3
40°-50°	2096.3	18.3
50°-60°	2657.2	23.1
60°-70°	2600.0	22.6
70°-80°	1240.2	10.8
80°-90°	132.5	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°	11484.0	100.0
0°-180°	11484.0	100.0

**Coefficient of Utilization**



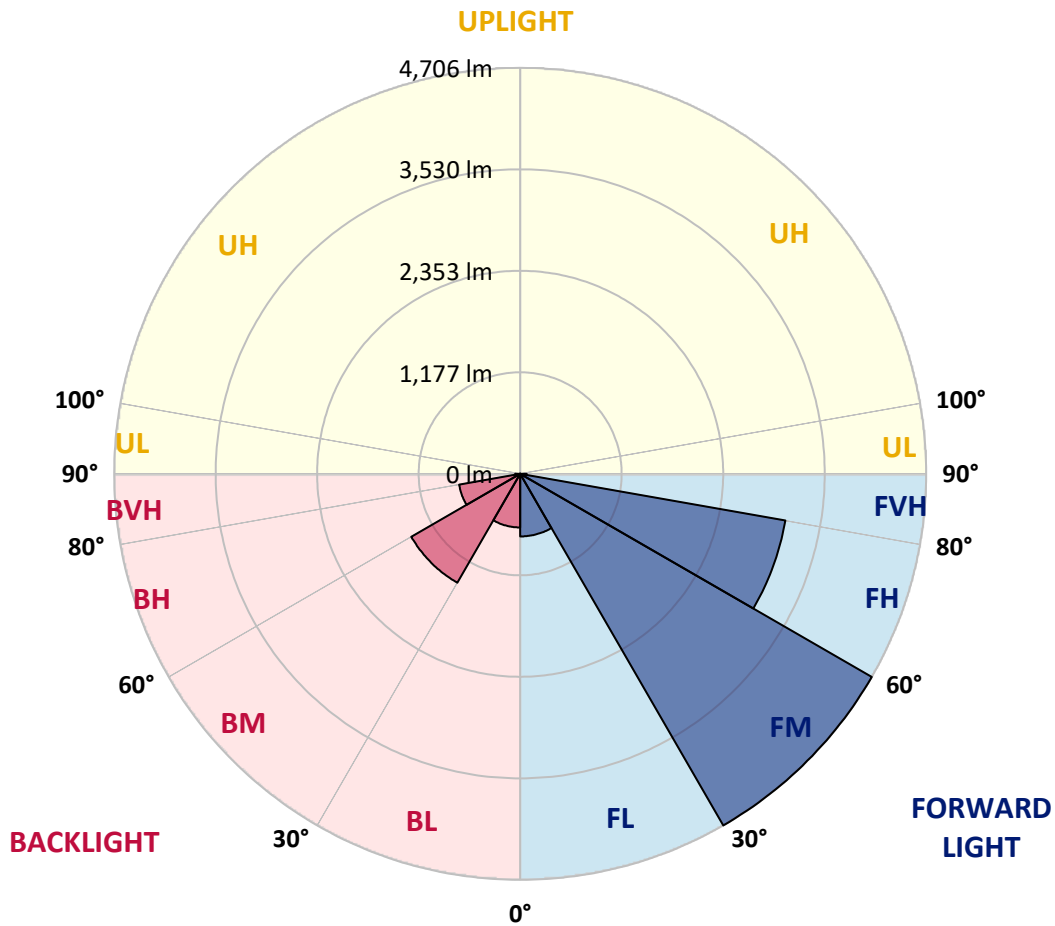
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	725.7	6.3			
FM (30°-60°)	4706.0	41.0			
FH (60°-80°)	3121.7	27.2			G2/5000
FVH (80°-90°)	75.1	0.7			G1/100
BL (0°-30°)	622.0	5.4	B2/1000		
BM (30°-60°)	1457.5	12.7	B2/2500		
BH (60°-80°)	718.6	6.3	B2/1000		G2/1000
BVH (80°-90°)	57.4	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°	1273.7	1273.7	1273.7	1273.7	1273.7	1273.7	1273.7	1273.7	1273.7	1273.7	1273.7
2.5°	1260.5	1267.7	1265.9	1262.9	1262.3	1263.5	1265.3	1267.1	1266.5	1269.5	1274.3
5°	1256.8	1264.1	1263.5	1263.5	1265.9	1270.7	1273.7	1276.7	1273.7	1277.3	1284.0
7.5°	1259.2	1264.7	1267.1	1269.5	1275.5	1284.6	1291.8	1298.5	1294.8	1299.1	1307.5
10°	1290.0	1294.2	1296.7	1296.7	1300.9	1311.1	1318.4	1330.4	1327.4	1334.1	1344.9
12.5°	1346.1	1350.4	1350.4	1347.9	1351.0	1357.6	1360.0	1373.3	1367.9	1378.7	1389.6
15°	1414.9	1423.4	1416.7	1412.5	1413.7	1420.3	1419.7	1430.0	1424.6	1433.6	1443.3
17.5°	1490.9	1501.8	1490.9	1490.3	1487.9	1495.2	1495.8	1504.8	1495.2	1501.8	1508.4
20°	1580.8	1595.9	1586.9	1589.9	1584.5	1587.5	1590.5	1603.8	1588.7	1593.5	1591.7
22.5°	1707.6	1725.7	1716.0	1727.5	1723.8	1721.4	1720.8	1744.4	1720.8	1722.6	1705.1
25°	1892.2	1913.9	1897.0	1912.7	1912.7	1920.5	1929.6	1959.8	1920.5	1909.1	1863.8
27.5°	2164.9	2186.6	2153.5	2163.1	2160.1	2179.4	2169.7	2244.6	2202.3	2183.6	2092.5
30°	2493.2	2531.8	2469.0	2466.6	2463.6	2494.4	2508.2	2557.7	2514.9	2496.2	2386.4
32.5°	2847.9	2888.4	2813.5	2791.8	2780.4	2799.1	2787.6	2827.4	2797.9	2768.9	2633.1
35°	3223.2	3263.1	3191.9	3149.6	3103.8	3064.5	3023.5	3033.8	3006.0	2962.0	2821.4
37.5°	3578.0	3651.0	3575.6	3530.4	3445.9	3369.3	3254.6	3206.9	3181.0	3140.6	2998.8
40°	3939.4	3981.1	3923.8	3885.1	3793.4	3673.4	3489.9	3389.2	3354.2	3314.9	3194.9
42.5°	4205.5	4245.4	4214.6	4188.0	4116.2	3976.9	3739.7	3613.6	3562.9	3518.9	3416.9
45°	4416.7	4446.3	4427.0	4436.6	4405.9	4270.7	3998.6	3854.4	3801.9	3748.2	3667.9
47.5°	4501.8	4533.2	4563.9	4621.3	4673.8	4574.2	4276.7	4115.0	4059.5	4004.6	3925.6
50°	4492.1	4524.1	4613.4	4735.3	4898.2	4865.0	4570.0	4392.6	4341.3	4278.5	4205.5
52.5°	4414.9	4451.1	4565.7	4768.5	5027.9	5082.8	4868.6	4679.2	4630.9	4556.1	4483.1
55°	4212.2	4233.9	4405.9	4693.1	5058.7	5234.9	5161.3	4984.5	4936.2	4831.8	4752.2
57.5°	3836.3	3867.6	4118.0	4489.7	4981.5	5338.1	5418.3	5305.5	5259.0	5108.8	5025.5
60°	3345.7	3395.8	3682.4	4148.2	4784.8	5337.5	5651.8	5621.1	5582.4	5381.5	5294.6
62.5°	2790.6	2848.5	3124.3	3665.5	4440.8	5186.0	5797.8	5885.3	5865.4	5633.1	5522.1
65°	2143.2	2183.0	2457.6	3041.0	3905.7	4860.8	5814.7	6065.7	6069.4	5824.4	5641.0
67.5°	1427.0	1541.6	1780.0	2282.0	3188.8	4329.2	5666.3	6095.3	6130.3	5890.2	5581.2
70°	696.3	847.1	1080.6	1483.1	2282.0	3514.1	5278.3	5852.8	5930.6	5698.3	5225.2
72.5°	289.0	337.9	465.2	731.9	1309.9	2371.3	4498.8	5195.1	5339.3	5049.1	4393.2
75°	194.9	211.2	266.1	375.3	596.7	1169.3	3244.4	3873.7	4106.0	3813.3	3117.0
77.5°	150.2	160.5	193.7	262.5	354.8	442.3	1736.5	2334.5	2454.5	2272.3	1621.9
80°	118.3	126.1	144.8	191.3	251.6	236.5	591.9	1057.7	1127.1	945.5	521.3
82.5°	102.6	105.6	103.8	129.7	167.1	138.2	194.3	390.4	430.8	312.5	170.2
85°	74.2	82.7	86.3	80.2	88.7	70.0	79.6	138.2	152.1	135.8	95.9
87.5°	30.2	44.6	54.9	51.9	32.6	19.9	24.7	40.4	46.5	50.7	31.4
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°	1273.7	1273.7	1273.7	1273.7	1273.7	1273.7	1273.7	1273.7	1273.7	1273.7	1273.7
2.5°	1274.9	1279.2	1282.2	1285.8	1288.2	1291.8	1299.1	1303.3	1303.9	1306.9	1306.3
5°	1286.4	1292.4	1299.1	1308.7	1319.6	1328.6	1342.5	1352.2	1355.8	1358.8	1358.2
7.5°	1311.1	1319.6	1331.7	1348.5	1364.2	1376.3	1393.2	1404.7	1416.1	1420.3	1421.0
10°	1347.9	1360.0	1377.5	1400.4	1417.3	1433.0	1450.5	1460.2	1471.6	1476.5	1478.9
12.5°	1393.8	1406.5	1429.4	1461.4	1477.1	1487.9	1494.0	1491.5	1494.0	1498.2	1499.4
15°	1446.3	1460.2	1486.1	1520.5	1531.4	1521.7	1508.4	1496.4	1494.6	1495.8	1500.0
17.5°	1508.4	1518.7	1548.9	1577.8	1570.0	1530.2	1501.2	1481.9	1472.2	1469.2	1473.4
20°	1595.3	1595.3	1620.1	1638.2	1585.7	1518.1	1472.8	1441.5	1421.6	1413.1	1411.3
22.5°	1700.9	1691.3	1707.0	1694.3	1582.7	1484.3	1421.6	1367.3	1337.1	1325.0	1323.2
25°	1834.9	1823.4	1819.2	1740.7	1560.9	1430.6	1328.6	1262.9	1236.3	1229.7	1230.9
27.5°	2037.0	2008.0	1953.1	1766.1	1521.1	1346.1	1220.0	1159.1	1144.0	1144.6	1146.4
30°	2306.1	2248.2	2113.6	1770.3	1455.9	1226.7	1109.0	1065.6	1058.3	1061.3	1071.6
32.5°	2555.3	2500.4	2277.7	1751.0	1355.8	1109.6	1009.4	980.5	969.6	973.2	978.1
35°	2750.8	2735.7	2429.8	1723.8	1232.7	999.8	920.1	895.4	874.3	869.5	873.1
37.5°	2935.4	2929.4	2543.8	1685.8	1110.8	922.0	848.3	815.8	785.0	768.1	768.7
40°	3138.2	3132.1	2618.7	1627.3	1002.8	854.4	783.8	740.9	702.9	672.2	675.2
42.5°	3366.2	3330.6	2654.3	1543.4	911.1	797.1	731.3	673.4	623.3	594.9	596.7
45°	3615.4	3535.2	2653.6	1436.6	833.9	744.6	675.2	593.1	546.7	520.1	518.9
47.5°	3879.7	3730.7	2621.1	1318.4	759.0	686.6	588.3	525.5	494.8	478.5	474.9
50°	4152.4	3913.5	2565.6	1182.6	682.4	620.9	534.0	491.1	467.6	452.5	447.1
52.5°	4408.9	4079.4	2498.6	1028.8	604.6	556.9	509.9	476.7	451.9	435.0	427.8
55°	4647.2	4222.4	2403.9	871.3	541.2	514.1	498.4	470.6	442.3	422.4	414.5
57.5°	4859.0	4315.3	2240.3	723.4	496.0	484.5	486.3	460.4	427.8	410.9	400.0
60°	5035.2	4383.5	1998.4	586.5	459.2	455.5	467.6	441.1	403.1	383.7	375.3
62.5°	5140.8	4382.3	1701.5	480.3	427.8	429.0	442.9	416.9	378.3	360.2	354.8
65°	5131.7	4274.9	1375.7	410.9	397.6	398.8	416.9	390.4	357.8	346.9	346.3
67.5°	4950.1	4013.1	1055.3	365.6	364.4	369.9	391.0	372.3	345.1	343.9	345.7
70°	4458.3	3469.4	760.3	329.4	330.0	337.9	365.6	360.8	338.5	340.9	340.3
72.5°	3575.0	2645.2	510.5	291.4	292.0	304.7	341.5	351.8	331.9	363.8	368.7
75°	2380.9	1649.6	328.2	251.0	251.6	267.9	320.4	334.3	313.8	362.6	365.6
77.5°	1144.0	741.5	237.7	211.2	211.2	226.3	276.9	299.3	267.3	281.8	258.2
80°	395.2	278.8	187.0	170.2	166.5	176.8	233.5	259.5	230.5	212.4	199.1
82.5°	155.7	144.8	150.2	132.1	120.1	126.7	181.6	214.2	169.5	153.3	152.7
85°	89.3	94.1	106.2	87.5	69.4	77.8	133.3	153.9	127.9	112.8	115.2
87.5°	24.1	33.2	48.9	45.3	31.4	33.2	63.4	85.1	73.6	56.7	58.5
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)