

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: P882966

Luminaire Tested: **NAV-SB3A-830-U-T2-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882966  
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-SB3A-830-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

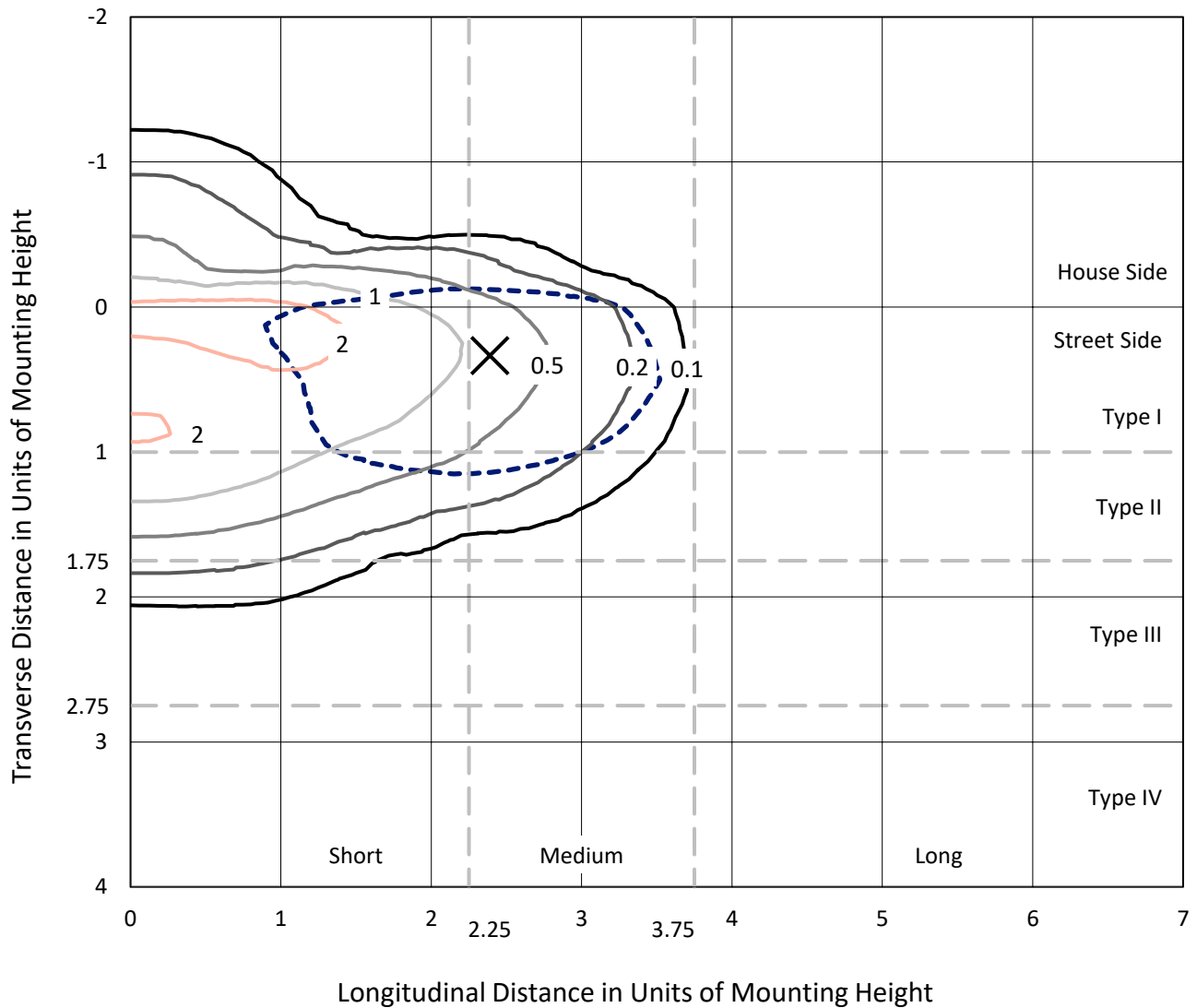
Lumens per Lamp: N/A  
Luminaire Lumens: 8597 lumens  
Efficiency: N/A  
Efficacy: 101.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 84.7  
Input Voltage (V): 120.0  
Input Current (Ain): 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

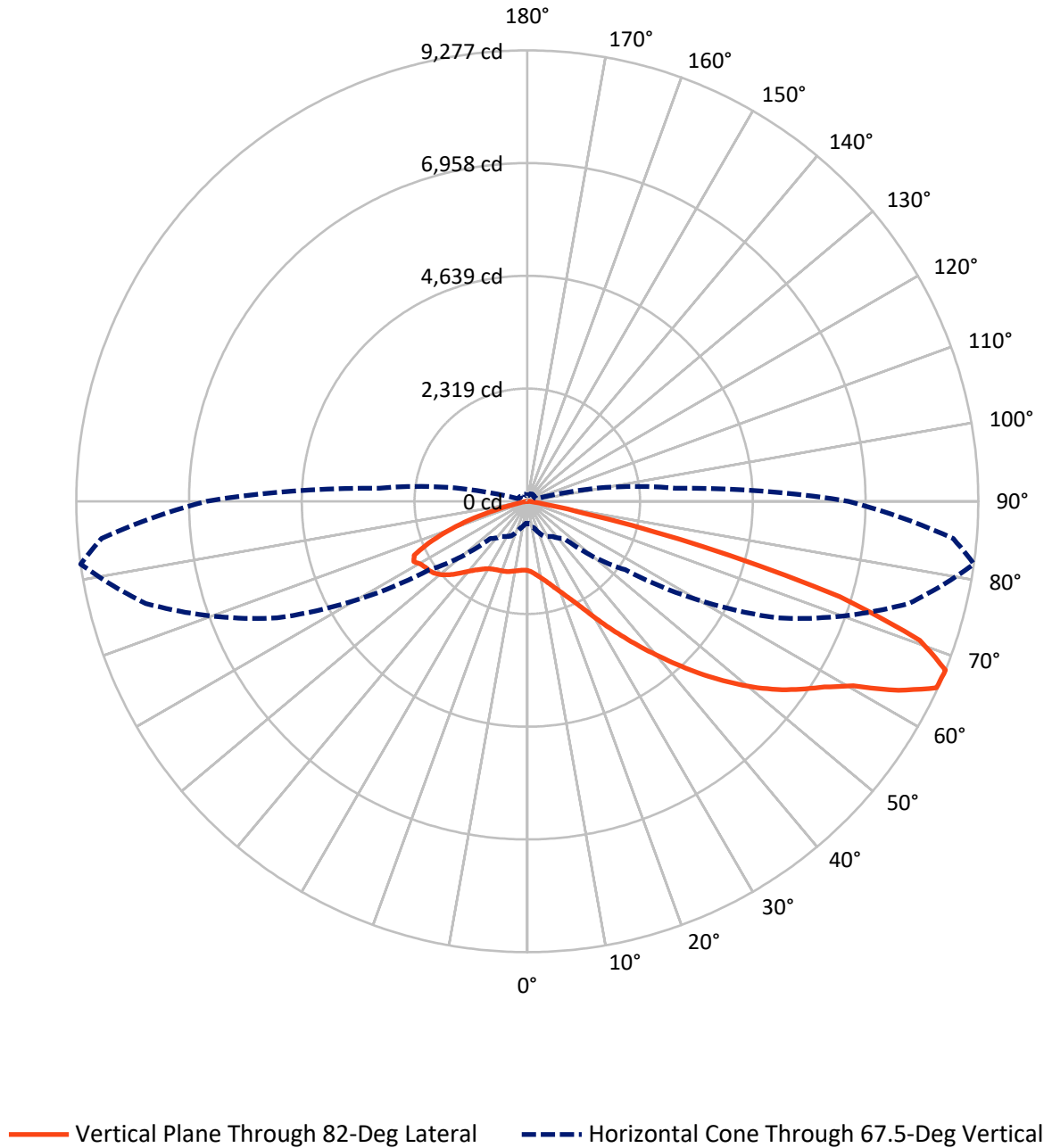
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1557.3	0.0	1557.3
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	7039.7	0.0	7039.7
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	8597.0	0.0	8597.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.9	1.5
10°-20°	329.7	3.8
20°-30°	528.1	6.1
30°-40°	933.9	10.9
40°-50°	1636.3	19.0
50°-60°	2182.3	25.4
60°-70°	2031.6	23.6
70°-80°	779.7	9.1
80°-90°	48.4	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°	8597.0	100.0
0°-180°	8597.0	100.0

**Coefficient of Utilization**



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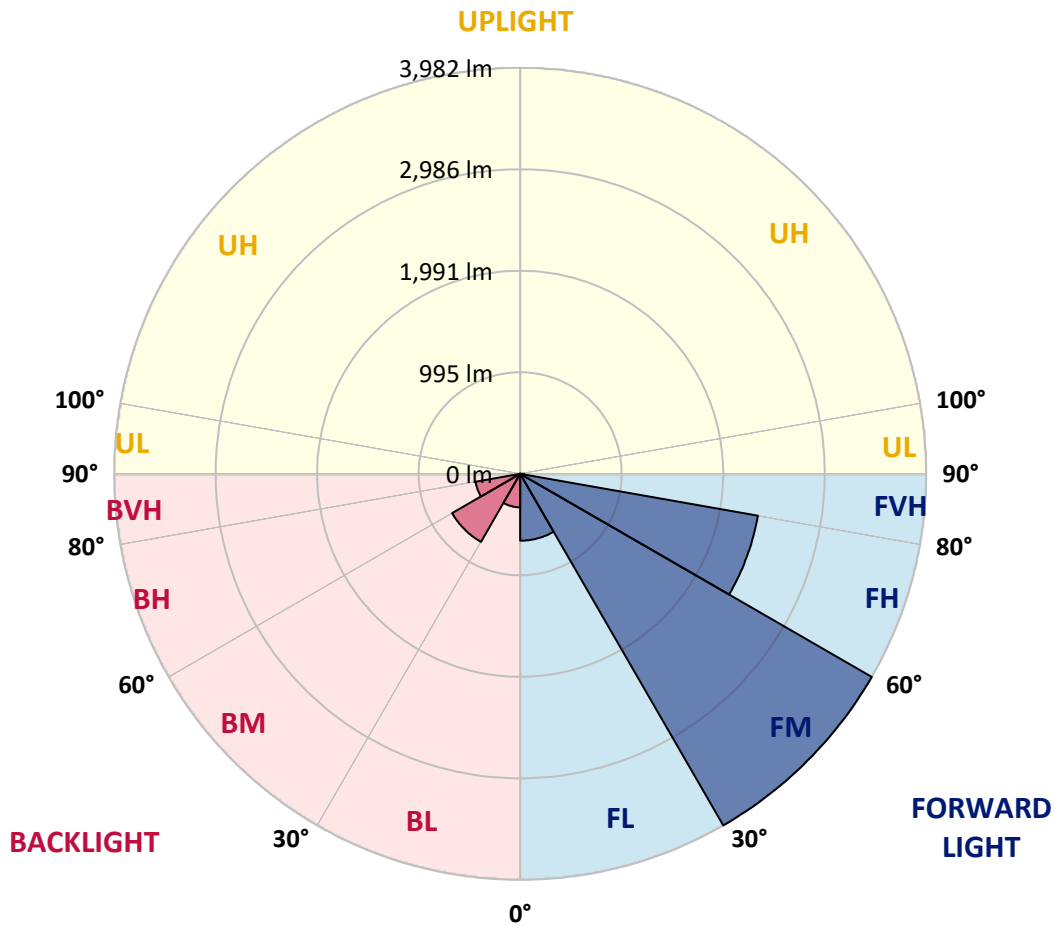
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	655.9	7.6			
FM (30°-60°)	3981.8	46.3			
FH (60°-80°)	2366.9	27.5			G2/5000
FVH (80°-90°)	35.2	0.4			G1/100
BL (0°-30°)	328.9	3.8	B1/500		
BM (30°-60°)	770.7	9.0	B1/1000		
BH (60°-80°)	444.5	5.2	B1/500		G1/500
BVH (80°-90°)	13.2	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°	1424.2	1424.2	1424.2	1424.2	1424.2	1424.2	1424.2	1424.2	1424.2	1424.2	1424.2
2.5°	1505.3	1514.0	1509.0	1506.6	1502.2	1496.0	1491.1	1475.6	1459.5	1449.0	1445.3
5°	1535.6	1544.3	1543.7	1546.2	1549.3	1551.1	1549.9	1532.6	1509.6	1491.7	1481.2
7.5°	1509.6	1519.6	1527.6	1540.0	1561.6	1584.5	1595.7	1592.0	1568.5	1543.7	1530.7
10°	1436.0	1446.5	1465.7	1494.8	1540.6	1590.1	1631.6	1650.8	1635.9	1608.7	1590.7
12.5°	1301.1	1311.6	1349.3	1412.5	1489.2	1575.3	1654.5	1705.9	1709.6	1682.3	1661.3
15°	1149.4	1159.9	1200.2	1279.4	1396.4	1534.4	1666.9	1764.0	1796.8	1773.3	1747.9
17.5°	1055.3	1064.6	1094.9	1158.7	1280.6	1452.7	1662.5	1825.9	1900.8	1882.3	1851.9
20°	1026.9	1034.9	1049.1	1093.7	1195.2	1367.9	1634.1	1884.1	2012.9	2002.3	1968.3
22.5°	1057.2	1064.6	1068.9	1088.8	1152.5	1312.2	1598.2	1943.5	2142.8	2144.1	2102.6
25°	1127.1	1134.6	1129.6	1142.0	1169.8	1294.9	1584.5	2013.5	2306.3	2319.9	2272.8
27.5°	1242.3	1242.9	1231.1	1230.5	1234.8	1320.9	1598.8	2088.4	2512.4	2537.7	2479.6
30°	1473.1	1463.8	1418.7	1369.8	1347.5	1398.9	1638.4	2176.9	2755.6	2800.8	2727.8
32.5°	1829.0	1815.4	1732.5	1615.5	1497.9	1524.5	1709.6	2277.8	3020.5	3102.2	3013.1
35°	2215.3	2211.6	2124.9	1951.0	1745.5	1703.4	1825.3	2410.2	3309.6	3439.6	3333.7
37.5°	2574.3	2572.4	2522.9	2318.0	2068.0	1952.8	2011.0	2583.5	3619.1	3807.2	3682.2
40°	2902.3	2907.9	2858.4	2675.2	2423.2	2272.8	2263.5	2797.7	3963.2	4207.7	4059.2
42.5°	3185.8	3192.0	3141.9	3006.3	2774.2	2626.9	2573.6	3060.1	4299.3	4637.9	4462.1
45°	3378.3	3416.7	3409.2	3300.9	3134.4	2981.5	2946.3	3389.4	4682.4	5094.1	4887.9
47.5°	3432.8	3468.0	3523.8	3538.6	3437.1	3286.7	3328.8	3786.2	5069.9	5550.9	5316.3
50°	3298.4	3331.3	3447.0	3601.1	3671.7	3625.3	3700.8	4211.4	5466.7	6006.4	5736.5
52.5°	3033.5	3067.0	3213.0	3456.9	3744.7	3890.8	4074.0	4630.5	5851.0	6437.8	6134.5
55°	2650.4	2685.7	2873.2	3149.3	3605.5	4000.4	4385.3	5048.9	6203.2	6825.9	6493.5
57.5°	2129.2	2155.2	2350.2	2736.4	3255.1	3891.4	4615.0	5505.7	6535.0	7207.2	6849.4
60°	1387.7	1410.6	1637.2	2068.0	2674.5	3527.5	4660.8	6015.1	6975.7	7703.0	7329.1
62.5°	922.9	938.3	1072.7	1389.0	1883.5	2828.7	4392.8	6421.7	7621.9	8565.8	8151.7
65°	633.2	648.7	783.0	1003.3	1216.9	1871.1	3622.2	6367.9	8207.4	9251.0	8761.4
67.5°	451.8	464.8	578.7	786.7	880.8	1086.9	2455.4	5679.6	8123.3	9277.0	8794.2
70°	323.7	331.1	425.2	612.8	700.0	653.0	1365.4	4343.9	7112.5	8566.4	8124.5
72.5°	226.5	229.0	295.2	466.7	563.9	476.6	649.9	2896.1	5379.4	6723.8	6298.6
75°	153.5	156.6	198.7	342.3	452.5	363.9	344.1	1553.0	3157.9	3721.8	3336.2
77.5°	94.1	95.3	128.1	234.0	338.6	277.3	221.6	658.0	1221.8	1199.5	1022.5
80°	53.2	53.2	81.7	145.5	230.9	178.9	155.4	279.8	386.9	339.8	299.6
82.5°	29.7	30.3	59.4	90.4	152.9	105.8	85.4	129.4	167.1	147.9	128.7
85°	12.4	13.6	36.5	42.7	73.0	52.6	34.7	54.5	61.9	55.1	40.2
87.5°	1.2	1.9	11.1	8.0	8.7	10.5	5.0	10.5	8.7	8.7	6.2
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°	1424.2	1424.2	1424.2	1424.2	1424.2	1424.2	1424.2	1424.2	1424.2	1424.2	1424.2
2.5°	1433.5	1424.2	1400.7	1373.5	1337.6	1320.2	1296.7	1280.6	1267.0	1268.3	1255.9
5°	1461.4	1437.8	1385.2	1319.6	1237.9	1179.7	1117.8	1075.1	1040.5	1033.0	1016.3
7.5°	1499.7	1462.6	1370.4	1252.2	1114.1	1009.5	916.1	856.0	813.3	799.7	786.1
10°	1549.3	1495.4	1351.2	1167.4	968.7	835.6	735.3	688.3	659.2	649.3	641.9
12.5°	1606.8	1533.2	1325.8	1064.0	818.9	690.8	627.0	603.5	594.2	591.1	589.3
15°	1679.2	1580.2	1287.4	941.4	692.0	602.3	575.0	571.9	573.2	571.9	571.3
17.5°	1765.3	1631.6	1224.9	815.2	606.6	557.1	547.2	549.6	552.7	552.1	550.9
20°	1859.4	1682.3	1145.1	703.1	548.4	524.9	519.3	521.8	524.3	523.0	522.4
22.5°	1966.4	1736.8	1056.6	615.9	509.4	495.2	489.0	489.6	489.6	487.1	485.9
25°	2094.6	1796.8	963.7	554.0	479.7	468.6	461.1	458.7	454.9	447.5	446.3
27.5°	2247.5	1860.6	874.6	510.6	456.2	445.7	437.0	430.8	421.5	409.1	407.9
30°	2419.5	1938.0	799.1	483.4	437.6	427.1	417.2	407.9	394.3	378.8	377.6
32.5°	2621.9	2020.9	744.0	465.5	420.9	409.8	398.0	386.9	372.0	356.5	357.1
35°	2863.3	2121.2	711.8	453.1	407.9	393.0	380.0	367.7	356.5	342.9	341.7
37.5°	3125.1	2227.6	701.9	446.9	399.2	376.3	361.5	352.8	351.6	343.5	342.9
40°	3411.7	2353.9	709.3	443.2	389.9	360.2	344.1	342.3	345.4	331.1	331.8
42.5°	3715.0	2503.7	721.7	438.8	376.9	344.1	328.7	328.7	326.2	306.4	306.4
45°	4043.1	2676.4	734.1	428.3	361.5	328.0	316.3	312.0	301.4	282.2	281.6
47.5°	4373.6	2852.2	743.4	409.1	342.9	314.4	303.9	294.0	278.5	261.2	260.6
50°	4687.4	3010.0	733.5	380.7	321.9	301.4	290.3	276.7	260.0	248.2	246.3
52.5°	4967.8	3146.8	691.4	347.2	299.6	287.8	277.9	263.7	250.1	237.7	236.4
55°	5211.7	3257.6	617.1	315.7	279.8	276.1	266.2	248.2	229.6	219.1	217.9
57.5°	5445.6	3341.8	524.3	289.7	261.8	263.1	248.2	232.1	214.8	203.6	202.4
60°	5757.0	3454.4	430.2	265.5	242.6	246.3	230.3	218.5	196.8	182.6	180.7
62.5°	6254.6	3629.6	341.7	235.8	220.4	221.6	214.8	200.5	174.5	157.8	156.6
65°	6649.5	3565.2	269.2	203.6	195.0	196.8	196.8	181.4	153.5	134.3	132.5
67.5°	6604.9	3052.7	214.8	172.1	170.8	172.1	176.4	163.4	136.2	120.7	118.2
70°	6084.4	2428.2	172.1	143.0	148.6	145.5	157.8	149.2	122.6	107.1	105.2
72.5°	4964.7	1749.2	131.2	118.2	113.9	118.8	142.4	134.3	102.1	84.8	82.9
75°	2901.1	933.4	97.8	93.5	82.3	99.0	126.3	114.5	78.0	62.5	60.7
77.5°	944.5	325.6	71.8	68.7	61.3	79.8	107.7	96.6	63.8	49.5	47.7
80°	253.2	98.4	48.9	45.2	39.6	59.4	85.4	76.8	45.8	32.2	31.6
82.5°	101.5	41.5	28.5	25.4	21.7	40.9	67.5	61.9	34.0	20.4	20.4
85°	32.8	13.6	10.5	8.0	9.9	25.4	40.2	42.1	24.1	10.5	8.0
87.5°	4.3	1.9	1.9	2.5	1.9	4.3	12.4	11.8	6.8	1.2	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)