

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: P883088

Luminaire Tested: **NAV-SB3B-735-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883088  
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-SB3B-735-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

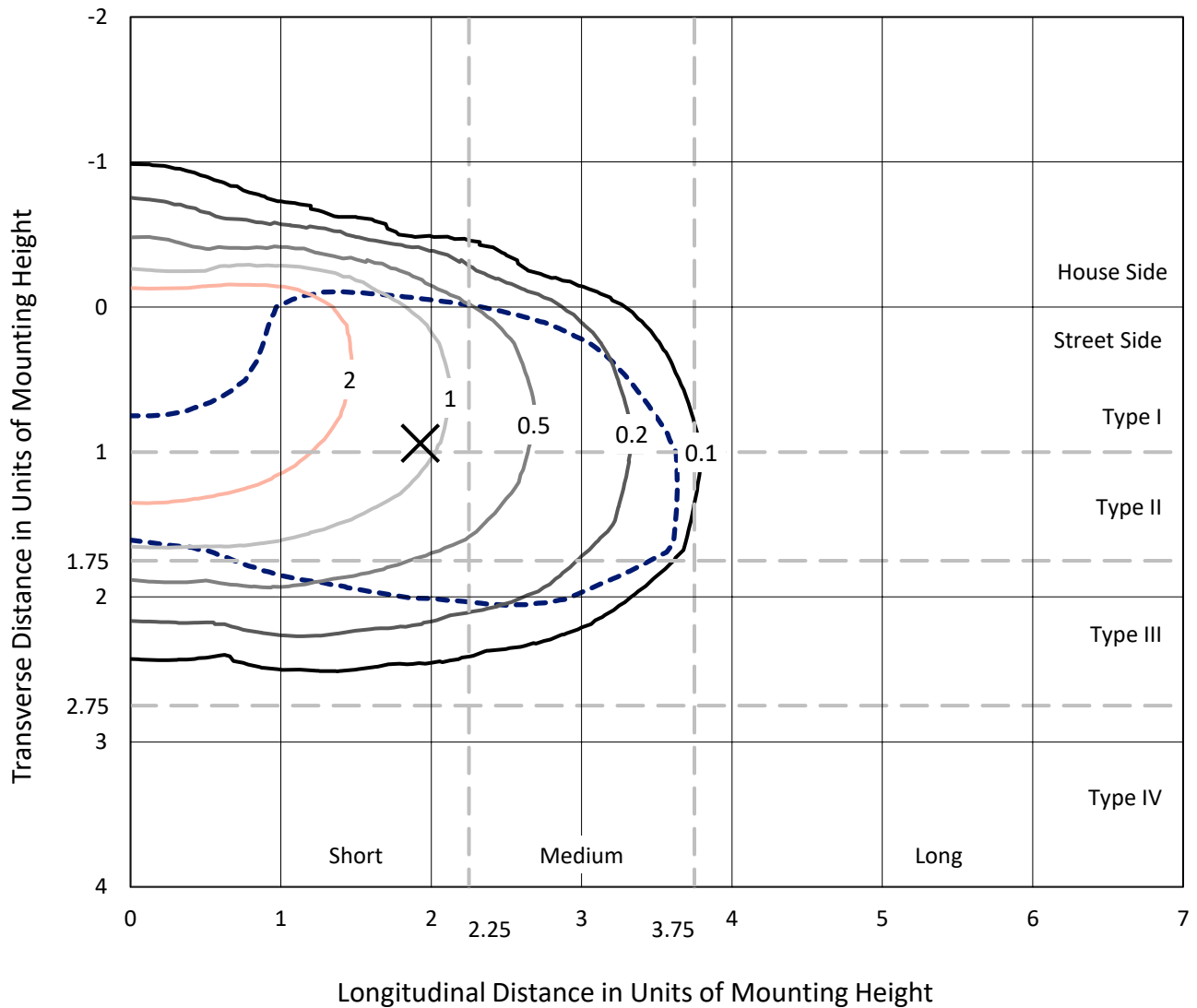
Lumens per Lamp: N/A  
Luminaire Lumens: 13247 lumens  
Efficiency: N/A  
Efficacy: 121.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 109.2  
Input Voltage (V): 120.0  
Input Current (Ain): 0.919  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 8.657  
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

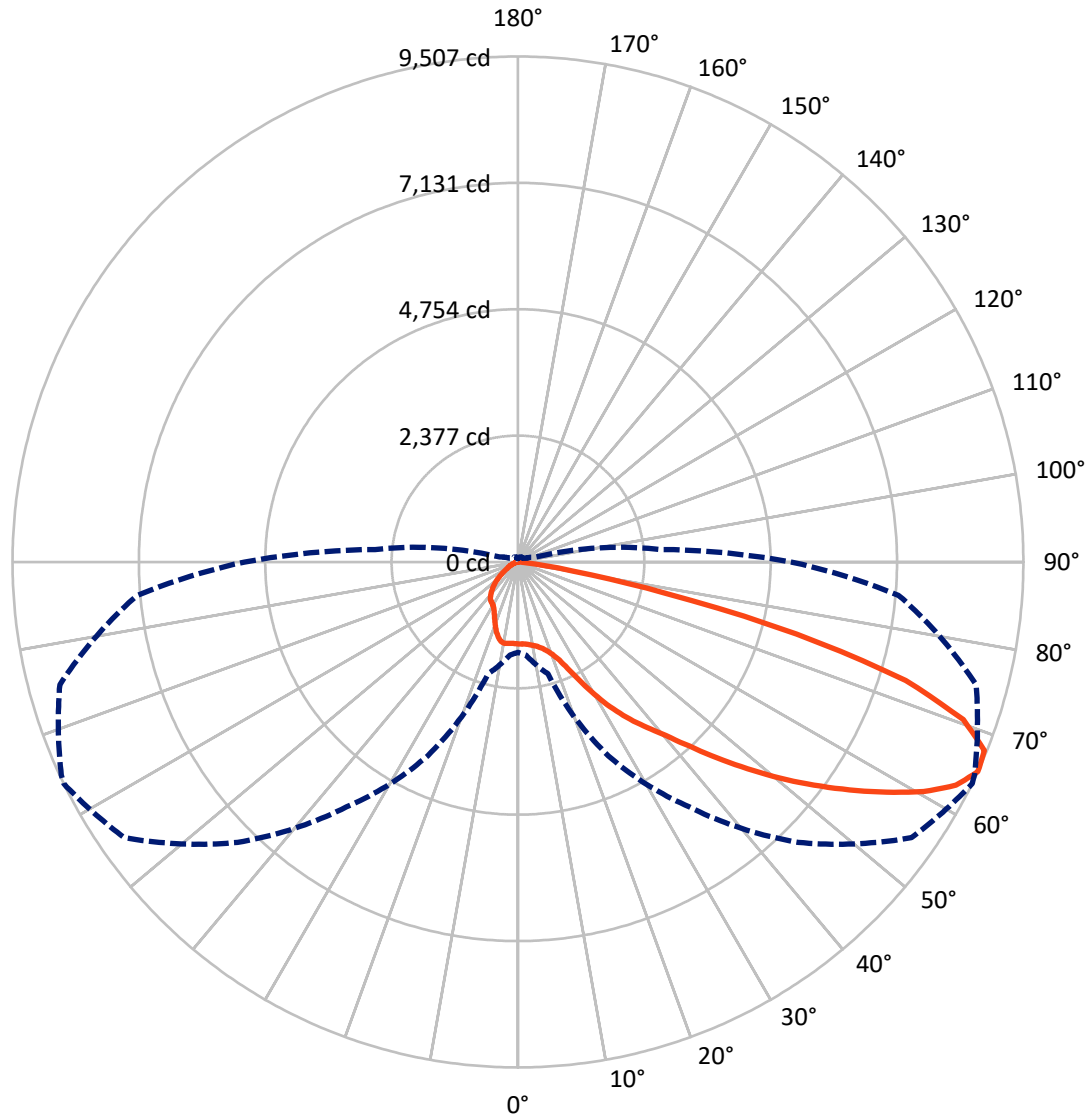
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 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	1771.5	0.0	1771.5
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	11475.5	0.0	11475.5
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	13247.0	0.0	13247.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.2	1.1
10°-20°	385.6	2.9
20°-30°	730.6	5.5
30°-40°	1478.4	11.2
40°-50°	2518.4	19.0
50°-60°	3424.9	25.9
60°-70°	3216.1	24.3
70°-80°	1288.5	9.7
80°-90°	62.4	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°	13247.0	100.0
0°-180°	13247.0	100.0

**Coefficient of Utilization**



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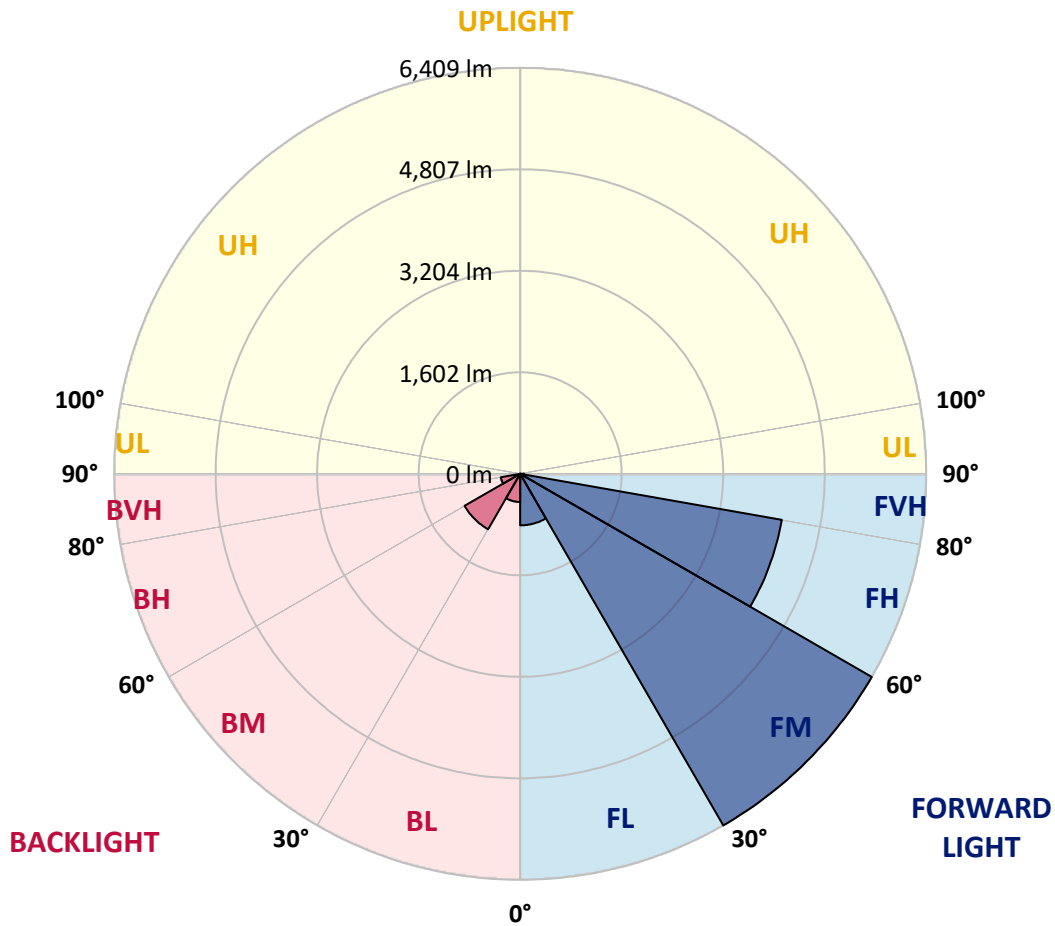
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	813.5	6.1			
FM (30°-60°)	6408.9	48.4			
FH (60°-80°)	4193.7	31.7			G2/5000
FVH (80°-90°)	59.4	0.4			G1/100
BL (0°-30°)	444.8	3.4	B1/500		
BM (30°-60°)	1012.8	7.6	B2/2500		
BH (60°-80°)	310.9	2.3	B1/500		G1/500
BVH (80°-90°)	3.1	0.0			G0/10
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°	64°	65°	75°	85°
0°	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8
2.5°	1535.4	1546.1	1543.4	1540.8	1539.9	1541.7	1542.5	1541.7	1541.7	1541.7	1542.5
5°	1506.1	1515.0	1515.0	1521.2	1530.1	1540.8	1548.8	1550.5	1552.3	1555.0	1554.1
7.5°	1450.2	1457.3	1462.6	1483.0	1505.2	1533.7	1557.6	1570.1	1571.8	1581.6	1585.2
10°	1412.0	1420.9	1429.8	1451.1	1483.0	1525.7	1566.5	1596.7	1601.2	1624.2	1634.9
12.5°	1410.2	1419.1	1430.6	1453.7	1491.0	1536.3	1586.1	1629.6	1637.6	1671.3	1693.5
15°	1428.9	1439.5	1450.2	1478.6	1518.6	1573.6	1626.9	1681.1	1689.1	1737.0	1761.0
17.5°	1467.1	1481.3	1489.3	1517.7	1560.3	1621.6	1691.7	1753.9	1761.0	1816.9	1847.1
20°	1542.5	1559.4	1562.1	1585.2	1626.9	1692.6	1776.1	1853.4	1862.2	1926.2	1959.9
22.5°	1698.8	1722.8	1701.5	1713.0	1750.3	1816.1	1906.6	2004.3	2016.8	2089.6	2119.8
25°	1974.1	2007.9	1952.8	1933.3	1949.3	2017.6	2131.3	2254.8	2269.0	2327.6	2342.7
27.5°	2515.0	2471.4	2388.0	2306.3	2258.3	2297.4	2425.3	2578.0	2595.8	2652.6	2634.8
30°	3109.1	3070.9	2958.1	2776.9	2663.3	2657.0	2775.2	2945.7	2966.1	3020.3	2966.1
32.5°	3704.0	3667.6	3545.1	3322.2	3125.0	3027.4	3109.1	3298.2	3308.9	3343.5	3263.6
35°	4289.3	4252.0	4129.4	3901.2	3658.8	3436.7	3420.8	3633.9	3637.4	3673.9	3554.9
37.5°	4878.0	4847.0	4716.4	4492.6	4253.8	3947.4	3799.1	3951.8	3956.3	3991.8	3868.3
40°	5298.1	5311.4	5221.7	5048.6	4843.4	4508.6	4223.6	4290.2	4263.5	4323.0	4249.3
42.5°	5658.6	5685.3	5607.1	5520.1	5401.1	5106.3	4749.3	4737.7	4695.1	4727.1	4650.7
45°	5970.3	5992.5	5922.4	5902.0	5899.3	5692.4	5323.8	5254.6	5195.1	5188.9	5097.4
47.5°	6084.9	6127.5	6157.7	6226.1	6359.3	6272.3	5918.0	5810.5	5743.9	5695.1	5550.3
50°	6128.4	6173.7	6276.7	6475.6	6790.9	6828.2	6509.4	6388.6	6306.9	6218.1	6005.0
52.5°	6069.8	6150.6	6289.2	6624.0	7081.3	7274.0	7076.9	6971.2	6877.9	6733.2	6417.0
55°	5724.4	5805.2	6088.5	6622.2	7226.0	7586.6	7613.2	7566.2	7461.4	7233.2	6750.1
57.5°	4996.2	5116.0	5564.5	6396.6	7223.4	7855.7	8139.0	8172.7	8055.5	7728.7	7012.0
60°	3987.3	4149.8	4696.9	5896.6	7000.5	8001.3	8599.9	8768.6	8644.3	8217.1	7224.3
62.5°	2782.3	2970.5	3488.3	5113.4	6490.7	7896.5	8936.4	9248.1	9154.0	8654.0	7306.0
65°	1697.1	1757.4	2174.8	4023.7	5624.0	7457.8	9040.3	9507.4	9476.4	8921.3	7185.2
67.5°	1130.5	1181.1	1301.0	2759.2	4365.6	6581.3	8791.7	9462.2	9471.0	8877.8	6743.0
70°	681.1	724.6	802.8	1604.7	2829.3	5209.3	8021.7	8884.9	8936.4	8296.1	5904.6
72.5°	280.6	309.9	381.0	727.3	1465.3	3306.2	6387.7	7628.3	7748.2	6975.6	4531.7
75°	159.0	174.1	223.8	365.0	635.8	1540.8	3869.2	5415.3	5592.0	4807.9	2726.3
77.5°	105.7	112.8	144.8	236.2	357.9	525.7	1653.5	2821.3	3158.8	2626.0	1180.2
80°	71.0	77.3	99.5	158.1	232.7	225.6	526.6	1045.2	1285.9	902.3	287.7
82.5°	48.0	48.8	71.0	103.9	147.4	109.2	155.4	325.0	408.5	261.1	109.2
85°	27.5	26.6	52.4	60.4	65.7	45.3	47.1	97.7	127.9	110.1	62.2
87.5°	3.6	5.3	20.4	16.0	8.9	9.8	9.8	16.9	24.9	26.6	13.3
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°	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8	1540.8
2.5°	1542.5	1541.7	1539.0	1536.3	1530.1	1526.6	1528.3	1526.6	1525.7	1526.6	1530.1
5°	1554.1	1551.4	1544.3	1535.4	1523.0	1507.9	1498.1	1483.9	1470.6	1462.6	1464.4
7.5°	1585.2	1582.5	1572.7	1547.9	1507.9	1444.9	1387.1	1336.5	1298.3	1276.1	1277.0
10°	1634.9	1630.5	1615.4	1560.3	1455.5	1317.9	1203.3	1108.3	1046.1	1016.8	1014.2
12.5°	1693.5	1688.2	1661.5	1548.8	1356.0	1141.1	983.1	877.4	819.7	793.9	791.3
15°	1762.8	1755.7	1703.3	1493.7	1211.3	945.8	801.0	722.0	684.7	661.6	662.5
17.5°	1848.9	1836.5	1734.4	1411.1	1054.1	796.6	689.1	629.6	596.8	574.6	572.8
20°	1960.8	1940.4	1759.2	1312.5	909.4	702.4	613.6	563.9	539.0	519.5	516.0
22.5°	2117.1	2087.8	1789.4	1206.0	807.2	637.6	557.7	521.3	500.9	478.7	475.1
25°	2310.7	2276.1	1826.7	1107.4	737.1	581.7	516.8	486.7	462.7	436.9	434.3
27.5°	2581.6	2519.4	1871.1	1026.6	676.7	533.7	479.5	445.8	418.3	397.0	392.5
30°	2883.5	2781.4	1910.2	977.7	621.6	489.3	430.7	397.0	371.2	356.1	353.4
32.5°	3169.4	3030.9	1935.9	956.4	571.9	438.7	377.4	341.0	321.5	317.0	319.7
35°	3439.4	3256.5	1933.3	936.0	527.5	388.1	325.0	287.7	272.6	275.3	275.3
37.5°	3750.2	3497.1	1914.6	904.0	491.1	341.9	279.7	246.9	233.6	234.4	238.0
40°	4111.7	3775.1	1903.1	843.6	451.1	299.3	242.4	215.8	206.0	202.5	201.6
42.5°	4497.1	4044.2	1904.9	775.3	401.4	261.1	216.7	194.5	185.6	182.9	182.0
45°	4884.3	4300.8	1907.5	704.2	349.0	231.8	198.0	179.4	174.1	170.5	170.5
47.5°	5248.4	4519.3	1857.8	627.9	297.5	209.6	182.9	170.5	166.1	161.6	161.6
50°	5587.6	4664.9	1737.9	539.0	256.6	191.8	171.4	162.5	158.1	153.6	153.6
52.5°	5851.3	4688.0	1539.9	447.6	228.2	178.5	164.3	156.3	151.0	146.5	145.6
55°	5968.6	4543.3	1258.4	362.3	206.0	167.0	157.2	149.2	143.0	138.5	137.6
57.5°	5938.4	4238.7	981.3	291.3	184.7	155.4	148.3	143.0	135.9	128.8	127.9
60°	5790.1	3831.0	739.7	242.4	165.2	143.0	138.5	134.1	124.3	113.7	111.9
62.5°	5533.4	3318.6	527.5	200.7	143.9	128.8	127.0	123.4	109.2	89.7	87.9
65°	5140.9	2696.1	355.2	167.0	123.4	112.8	113.7	107.5	88.8	66.6	64.8
67.5°	4567.2	1971.5	227.3	136.8	103.0	94.1	95.0	91.5	75.5	56.8	54.2
70°	3836.4	1305.4	148.3	103.9	82.6	72.8	78.1	79.0	63.9	46.2	44.4
72.5°	2812.4	770.8	103.9	77.3	60.4	50.6	63.9	65.7	51.5	34.6	32.9
75°	1602.9	365.9	78.1	55.9	37.3	35.5	49.7	49.7	35.5	23.1	21.3
77.5°	673.1	152.7	55.1	36.4	21.3	20.4	33.7	31.1	17.8	10.7	10.7
80°	194.5	68.4	29.3	17.8	8.9	8.0	13.3	9.8	4.4	1.8	1.8
82.5°	76.4	30.2	11.5	7.1	3.6	3.6	1.8	0.0	0.0	0.0	0.0
85°	45.3	12.4	5.3	2.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.5	2.7	1.8	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)