

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: P884248

Luminaire Tested: **NAV-SB5A-722-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884248  
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-SB5A-722-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

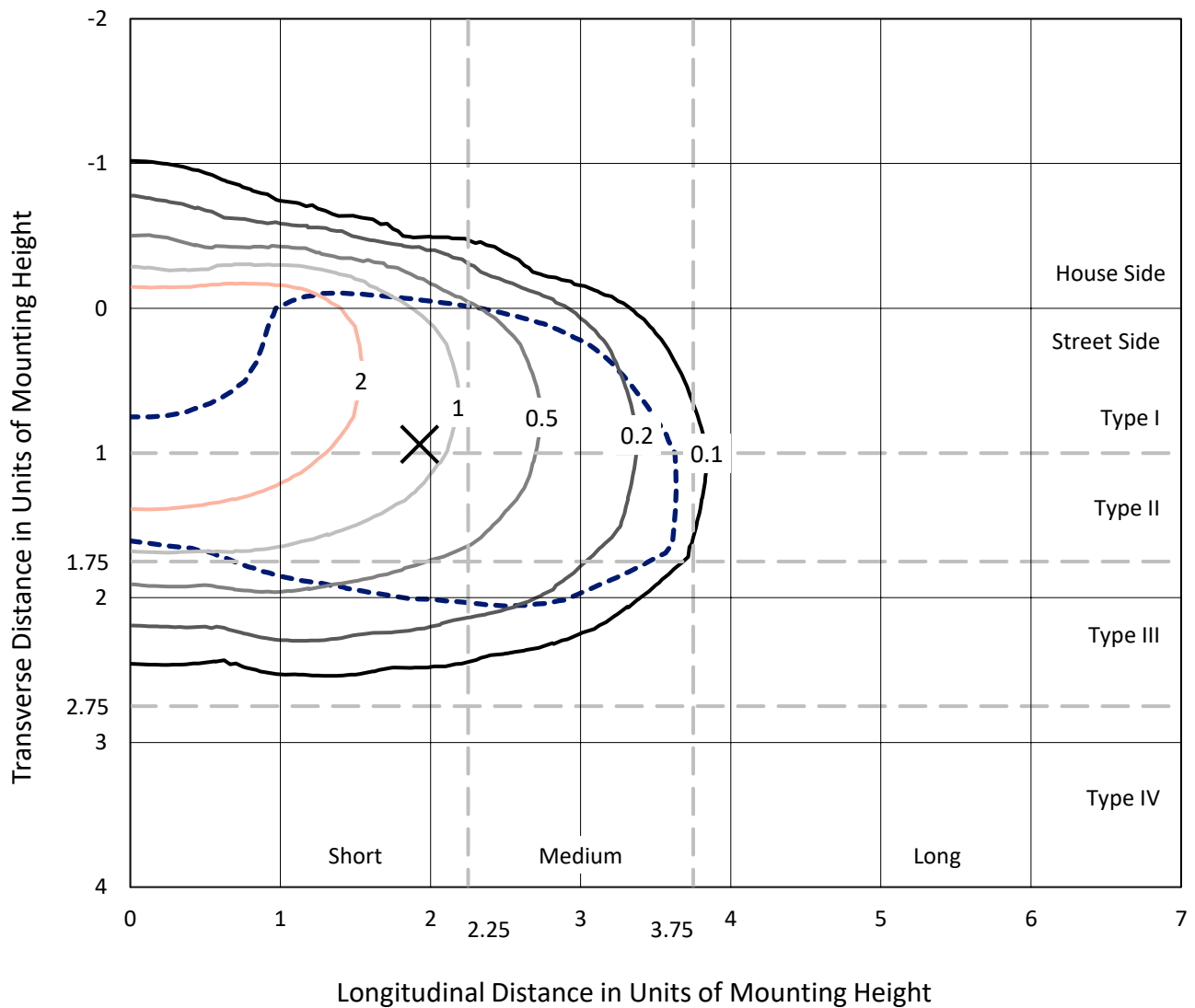
Lumens per Lamp: N/A  
Luminaire Lumens: 14226 lumens  
Efficiency: N/A  
Efficacy: 100.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 141.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.201  
Voltage Rise (V): NR  
Power Factor: 0.992  
Total Harmonic Distortion (THDi): 10.503  
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

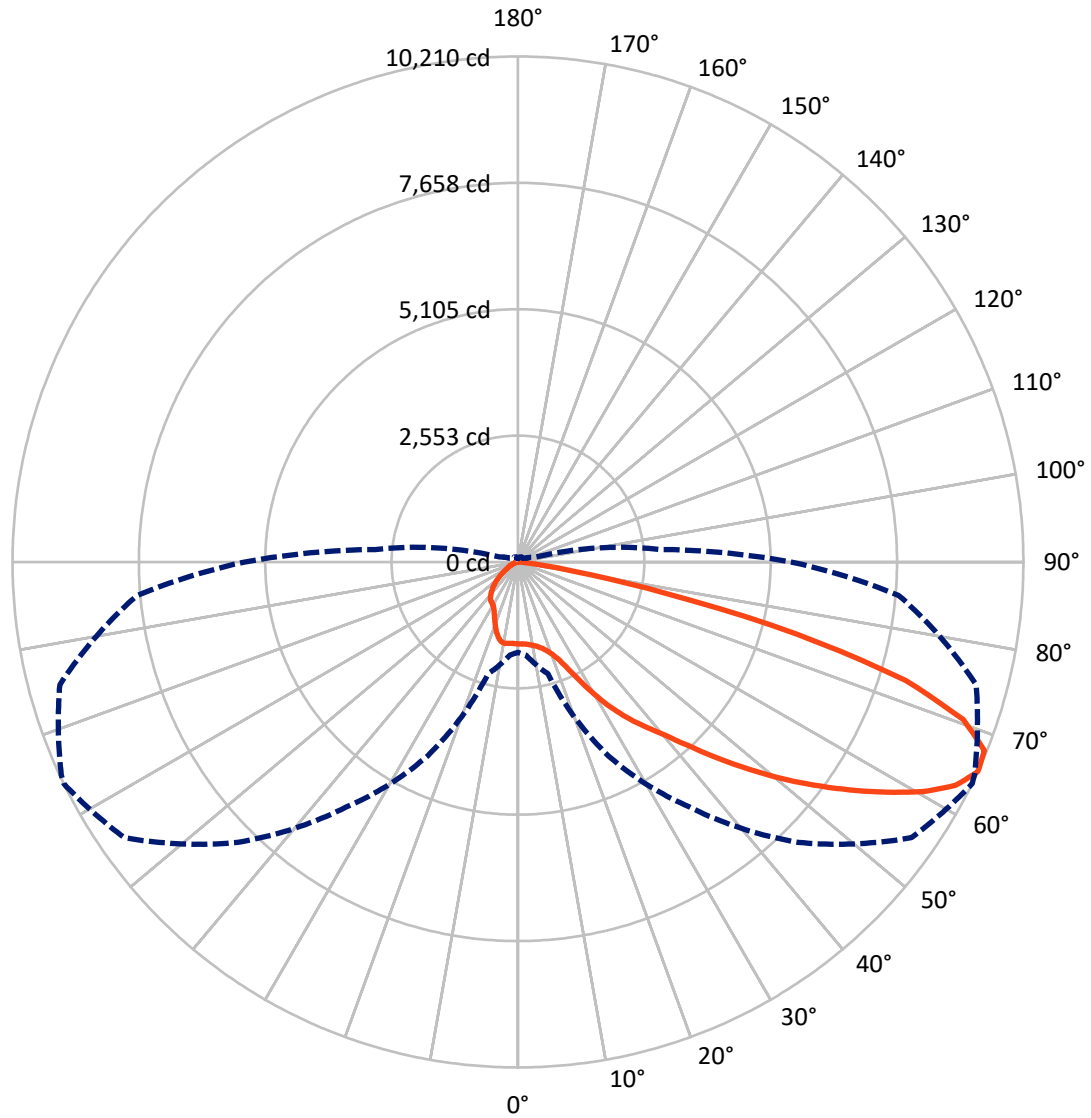
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 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	1902.5	0.0	1902.5
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	12323.5	0.0	12323.5
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	14226.0	0.0	14226.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.7	1.1
10°-20°	414.0	2.9
20°-30°	784.6	5.5
30°-40°	1587.6	11.2
40°-50°	2704.5	19.0
50°-60°	3678.0	25.9
60°-70°	3453.8	24.3
70°-80°	1383.7	9.7
80°-90°	67.0	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°	14226.0	100.0
0°-180°	14226.0	100.0

**Coefficient of Utilization**



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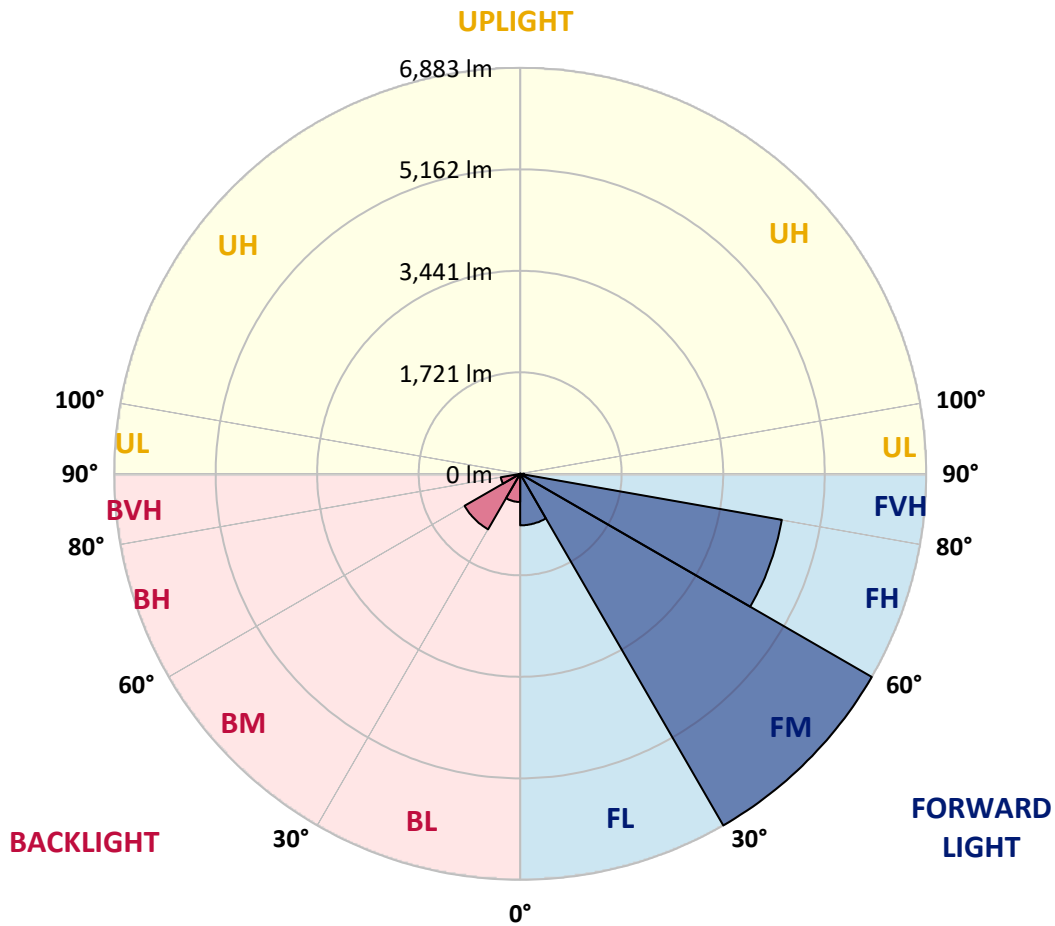
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	873.6	6.1			
FM (30°-60°)	6882.5	48.4			
FH (60°-80°)	4503.6	31.7			G2/5000
FVH (80°-90°)	63.8	0.4			G1/100
BL (0°-30°)	477.6	3.4	B1/500		
BM (30°-60°)	1087.6	7.6	B2/2500		
BH (60°-80°)	333.9	2.3	B1/500		G1/500
BVH (80°-90°)	3.3	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°	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6
2.5°	1648.9	1660.4	1657.5	1654.6	1653.7	1655.6	1656.5	1655.6	1655.6	1655.6	1656.5
5°	1617.4	1627.0	1627.0	1633.7	1643.2	1654.6	1663.2	1665.1	1667.0	1669.9	1668.9
7.5°	1557.4	1565.0	1570.7	1592.6	1616.5	1647.0	1672.8	1686.1	1688.0	1698.5	1702.3
10°	1516.3	1525.9	1535.4	1558.3	1592.6	1638.4	1682.3	1714.7	1719.5	1744.3	1755.7
12.5°	1514.4	1524.0	1536.4	1561.2	1601.2	1649.9	1703.3	1750.0	1758.6	1794.8	1818.7
15°	1534.5	1545.9	1557.4	1587.9	1630.8	1689.9	1747.1	1805.3	1813.9	1865.4	1891.1
17.5°	1575.5	1590.7	1599.3	1629.8	1675.6	1741.4	1816.8	1883.5	1891.1	1951.2	1983.7
20°	1656.5	1674.7	1677.5	1702.3	1747.1	1817.7	1907.4	1990.3	1999.9	2068.5	2104.8
22.5°	1824.4	1850.1	1827.2	1839.6	1879.7	1950.3	2047.5	2152.5	2165.8	2244.0	2276.4
25°	2120.0	2156.3	2097.1	2076.2	2093.3	2166.8	2288.8	2421.4	2436.6	2499.6	2515.8
27.5°	2700.8	2654.1	2564.4	2476.7	2425.2	2467.2	2604.5	2768.5	2787.6	2848.6	2829.6
30°	3338.8	3297.8	3176.7	2982.2	2860.1	2853.4	2980.2	3163.4	3185.3	3243.5	3185.3
32.5°	3977.8	3938.7	3807.1	3567.7	3356.0	3251.1	3338.8	3542.0	3553.4	3590.6	3504.8
35°	4606.3	4566.2	4434.6	4189.5	3929.2	3690.7	3673.6	3902.5	3906.3	3945.4	3817.6
37.5°	5238.6	5205.2	5065.0	4824.7	4568.1	4239.1	4079.8	4243.9	4248.6	4286.8	4154.2
40°	5689.6	5703.9	5607.6	5421.7	5201.4	4841.8	4535.7	4607.2	4578.6	4642.5	4563.3
42.5°	6076.8	6105.4	6021.5	5928.1	5800.3	5483.6	5100.3	5087.9	5042.1	5076.4	4994.4
45°	6411.6	6435.4	6360.1	6338.1	6335.3	6113.1	5717.3	5642.9	5579.0	5572.3	5474.1
47.5°	6534.6	6580.4	6612.8	6686.2	6829.3	6735.8	6355.3	6239.9	6168.4	6115.9	5960.5
50°	6581.3	6630.0	6740.6	6954.2	7292.8	7332.8	6990.5	6860.8	6773.0	6677.7	6448.8
52.5°	6518.4	6605.2	6753.9	7113.5	7604.6	7811.6	7599.9	7486.4	7386.2	7230.8	6891.3
55°	6147.4	6234.2	6538.4	7111.6	7760.1	8147.3	8175.9	8125.3	8012.8	7767.7	7248.9
57.5°	5365.4	5494.1	5975.7	6869.3	7757.2	8436.2	8740.5	8776.7	8650.8	8299.9	7530.2
60°	4282.0	4456.5	5044.0	6332.4	7517.8	8592.6	9235.4	9416.6	9283.1	8824.4	7758.2
62.5°	2987.9	3190.1	3746.0	5491.3	6970.4	8480.1	9596.9	9931.6	9830.5	9293.6	7845.9
65°	1822.5	1887.3	2335.6	4321.1	6039.6	8009.0	9708.4	10210.1	10176.7	9580.7	7716.2
67.5°	1214.0	1268.4	1397.1	2963.1	4688.3	7067.7	9441.4	10161.4	10171.0	9533.9	7241.3
70°	731.5	778.2	862.1	1723.3	3038.4	5594.3	8614.6	9541.5	9596.9	8909.3	6341.0
72.5°	301.4	332.8	409.1	781.1	1573.6	3550.5	6859.8	8192.1	8320.8	7491.1	4866.6
75°	170.7	186.9	240.3	392.0	682.8	1654.6	4155.2	5815.5	6005.3	5163.2	2927.8
77.5°	113.5	121.1	155.4	253.7	384.3	564.6	1775.7	3029.8	3392.2	2820.0	1267.4
80°	76.3	83.0	106.8	169.8	249.9	242.2	565.5	1122.5	1380.9	968.9	309.0
82.5°	51.5	52.5	76.3	111.6	158.3	117.3	166.9	349.0	438.7	280.4	117.3
85°	29.6	28.6	56.3	64.9	70.6	48.6	50.5	104.9	137.3	118.3	66.8
87.5°	3.8	5.7	21.9	17.2	9.5	10.5	10.5	18.1	26.7	28.6	14.3
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°	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6	1654.6
2.5°	1656.5	1655.6	1652.7	1649.9	1643.2	1639.4	1641.3	1639.4	1638.4	1639.4	1643.2
5°	1668.9	1666.1	1658.4	1648.9	1635.6	1619.3	1608.9	1593.6	1579.3	1570.7	1572.6
7.5°	1702.3	1699.5	1689.0	1662.3	1619.3	1551.6	1489.6	1435.3	1394.3	1370.4	1371.4
10°	1755.7	1751.0	1734.7	1675.6	1563.1	1415.3	1292.2	1190.2	1123.4	1092.0	1089.1
12.5°	1818.7	1812.9	1784.3	1663.2	1456.3	1225.5	1055.7	942.2	880.2	852.6	849.7
15°	1893.1	1885.4	1829.2	1604.1	1300.8	1015.7	860.2	775.3	735.3	710.5	711.4
17.5°	1985.6	1972.2	1862.5	1515.4	1132.0	855.4	740.1	676.2	640.9	617.0	615.1
20°	2105.7	2083.8	1889.2	1409.5	976.6	754.4	659.0	605.6	578.9	557.9	554.1
22.5°	2273.6	2242.1	1921.7	1295.1	866.9	684.7	598.9	559.8	537.9	514.0	510.2
25°	2481.5	2444.3	1961.7	1189.2	791.6	624.7	555.0	522.6	496.9	469.2	466.3
27.5°	2772.3	2705.6	2009.4	1102.5	726.7	573.2	515.0	478.7	449.2	426.3	421.5
30°	3096.6	2986.9	2051.4	1050.0	667.6	525.5	462.5	426.3	398.6	382.4	379.6
32.5°	3403.7	3254.9	2079.0	1027.1	614.2	471.1	405.3	366.2	345.2	340.5	343.3
35°	3693.6	3497.1	2076.2	1005.2	566.5	416.8	349.0	309.0	292.8	295.6	295.6
37.5°	4027.4	3755.6	2056.1	970.8	527.4	367.2	300.4	265.1	250.8	251.8	255.6
40°	4415.5	4054.1	2043.7	906.0	484.5	321.4	260.4	231.7	221.3	217.4	216.5
42.5°	4829.4	4343.1	2045.6	832.6	431.1	280.4	232.7	208.9	199.3	196.5	195.5
45°	5245.2	4618.7	2048.5	756.3	374.8	248.9	212.7	192.6	186.9	183.1	183.1
47.5°	5636.2	4853.3	1995.1	674.3	319.5	225.1	196.5	183.1	178.3	173.6	173.6
50°	6000.5	5009.7	1866.3	578.9	275.6	206.0	184.1	174.5	169.8	165.0	165.0
52.5°	6283.8	5034.5	1653.7	480.7	245.1	191.7	176.4	167.8	162.1	157.4	156.4
55°	6409.7	4879.0	1351.4	389.1	221.3	179.3	168.8	160.2	153.5	148.8	147.8
57.5°	6377.2	4551.9	1053.8	312.8	198.4	166.9	159.3	153.5	145.9	138.3	137.3
60°	6218.0	4114.2	794.4	260.4	177.4	153.5	148.8	144.0	133.5	122.1	120.2
62.5°	5942.4	3563.9	566.5	215.5	154.5	138.3	136.4	132.6	117.3	96.3	94.4
65°	5520.8	2895.4	381.5	179.3	132.6	121.1	122.1	115.4	95.4	71.5	69.6
67.5°	4904.8	2117.2	244.1	146.9	110.6	101.1	102.0	98.2	81.1	61.0	58.2
70°	4119.9	1401.9	159.3	111.6	88.7	78.2	83.9	84.9	68.7	49.6	47.7
72.5°	3020.3	827.8	111.6	83.0	64.9	54.4	68.7	70.6	55.3	37.2	35.3
75°	1721.4	392.9	83.9	60.1	40.1	38.1	53.4	53.4	38.1	24.8	22.9
77.5°	722.9	164.0	59.1	39.1	22.9	21.9	36.2	33.4	19.1	11.4	11.4
80°	208.9	73.4	31.5	19.1	9.5	8.6	14.3	10.5	4.8	1.9	1.9
82.5°	82.0	32.4	12.4	7.6	3.8	3.8	1.9	0.0	0.0	0.0	0.0
85°	48.6	13.4	5.7	2.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.4	2.9	1.9	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)