

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: P883308

Luminaire Tested: **NAV-SB3C-830-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883308  
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-SB3C-830-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

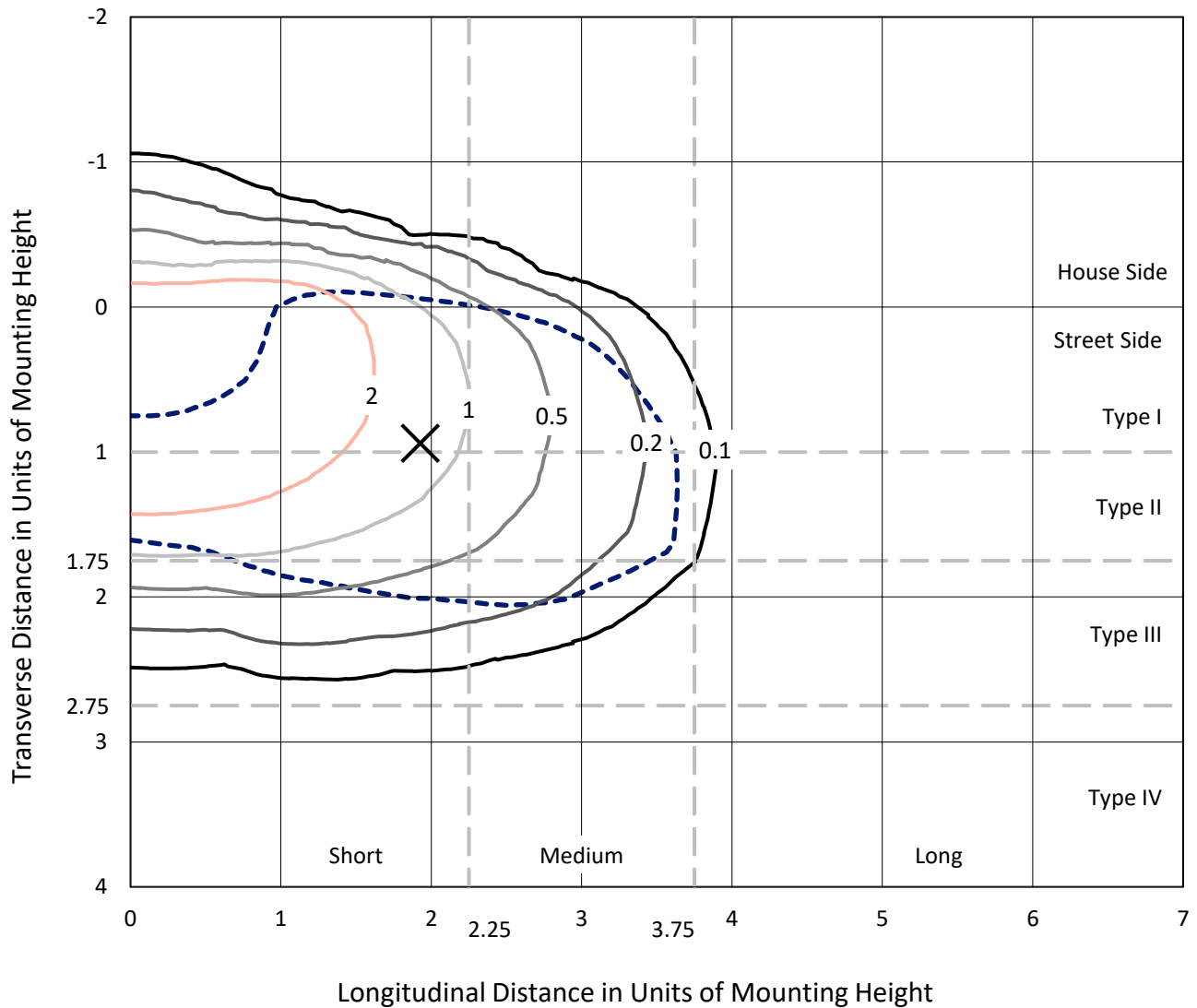
Lumens per Lamp: N/A  
Luminaire Lumens: 15415 lumens  
Efficiency: N/A  
Efficacy: 103.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 149.1  
Input Voltage (V): 120.0  
Input Current (Ain): 1.259  
Voltage Rise (V): NR  
Power Factor: 0.997  
Total Harmonic Distortion (THDi): 6.297  
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

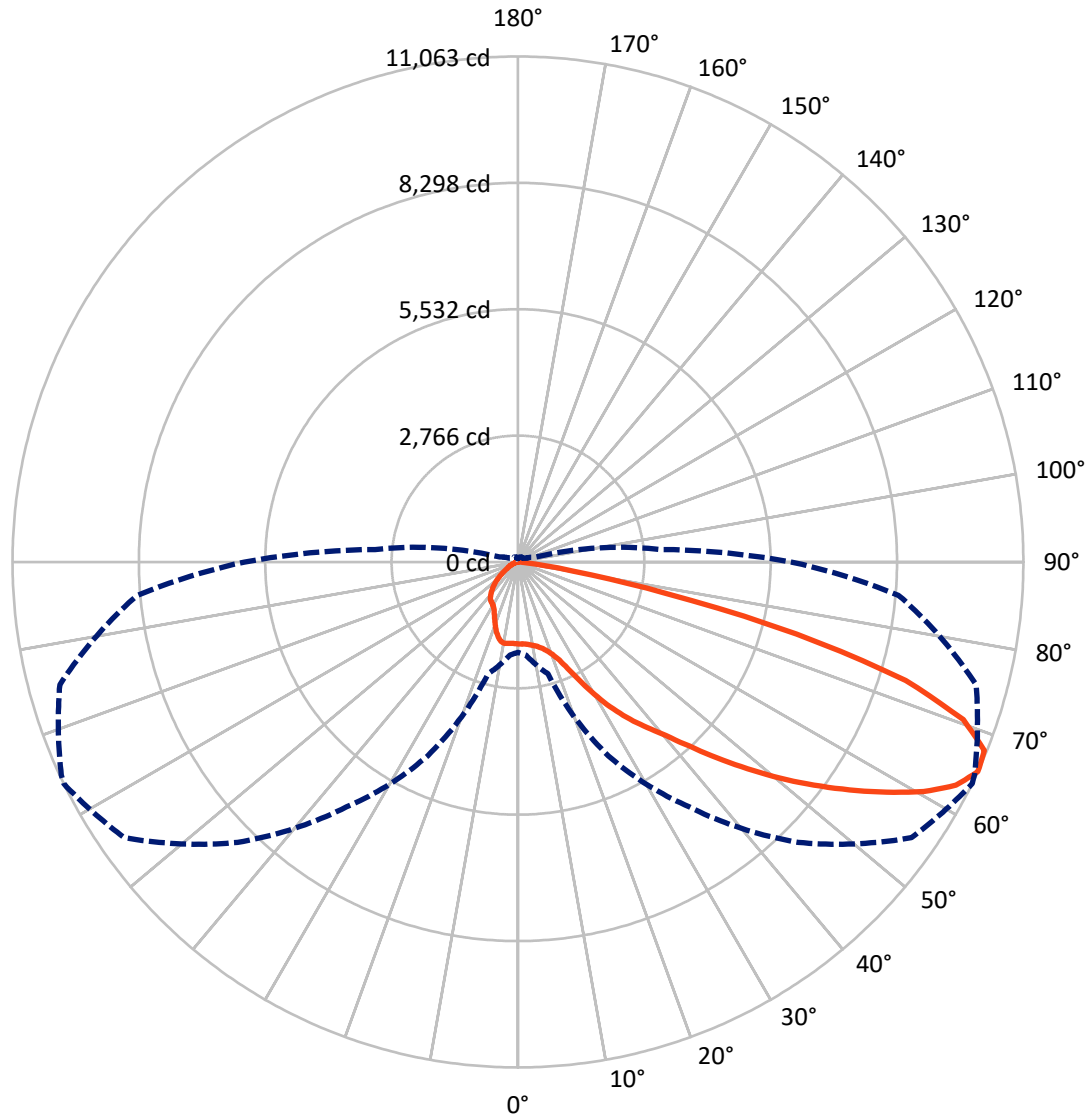
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 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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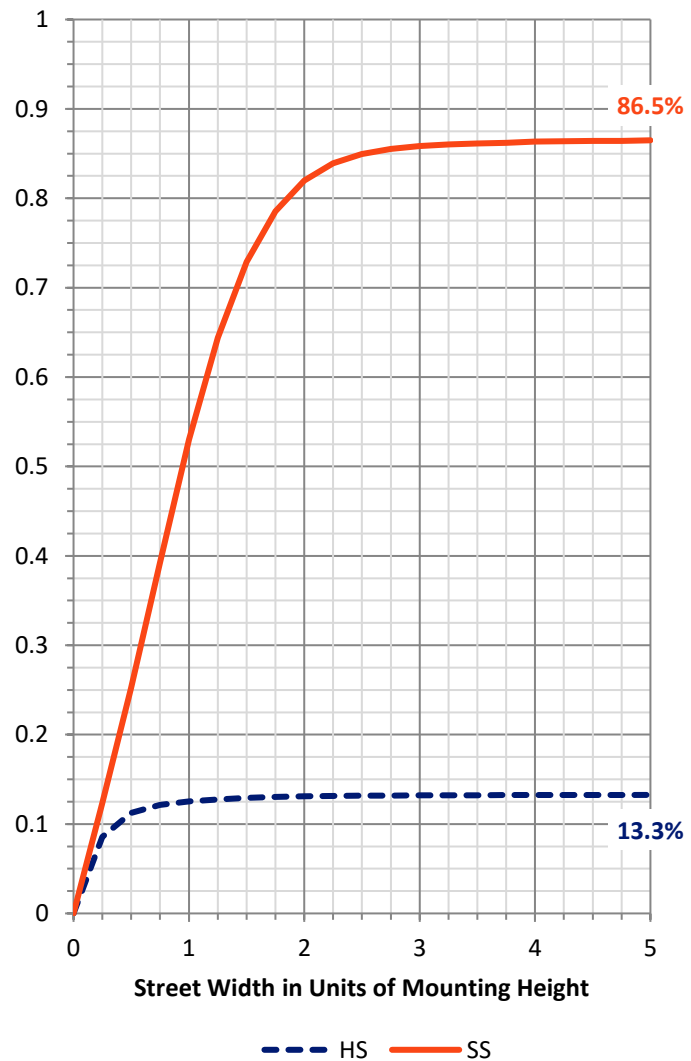
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2061.4	0.0	2061.4
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	13353.5	0.0	13353.5
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	15415.0	0.0	15415.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.4	1.1
10°-20°	448.7	2.9
20°-30°	850.2	5.5
30°-40°	1720.3	11.2
40°-50°	2930.6	19.0
50°-60°	3985.4	25.9
60°-70°	3742.5	24.3
70°-80°	1499.4	9.7
80°-90°	72.6	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°	15415.0	100.0
0°-180°	15415.0	100.0

**Coefficient of Utilization**



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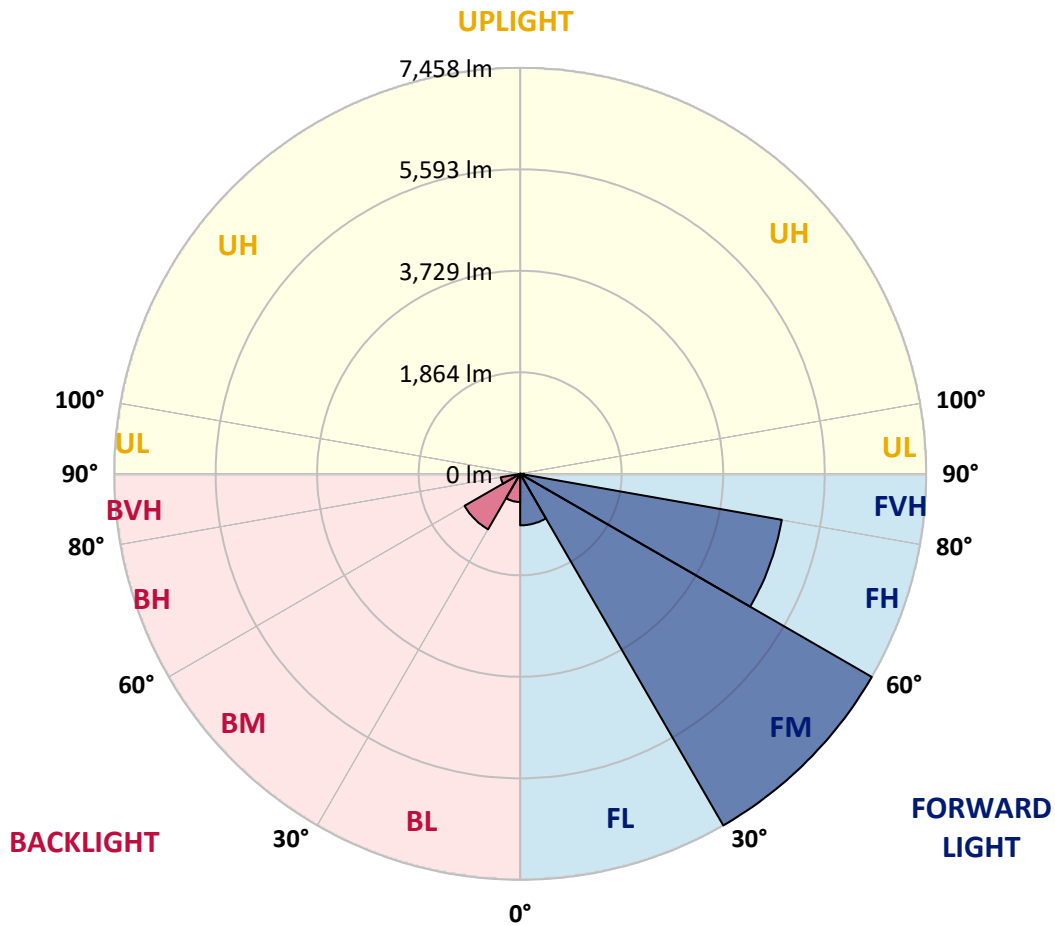
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	946.7	6.1			
FM (30°-60°)	7457.8	48.4			
FH (60°-80°)	4880.0	31.7			G2/5000
FVH (80°-90°)	69.1	0.4			G1/100
BL (0°-30°)	517.6	3.4	B2/1000		
BM (30°-60°)	1178.5	7.6	B2/2500		
BH (60°-80°)	361.8	2.3	B1/500		G1/500
BVH (80°-90°)	3.5	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°	1792.9	1792.9	1792.9	1792.9	1792.9	1792.9	1792.9	1792.9	1792.9	1792.9	1792.9
2.5°	1786.7	1799.1	1796.0	1792.9	1791.9	1794.0	1795.0	1794.0	1794.0	1794.0	1795.0
5°	1752.6	1763.0	1763.0	1770.2	1780.5	1792.9	1802.2	1804.3	1806.4	1809.5	1808.4
7.5°	1687.5	1695.8	1702.0	1725.8	1751.6	1784.7	1812.6	1827.0	1829.1	1840.5	1844.6
10°	1643.1	1653.4	1663.8	1688.6	1725.8	1775.4	1822.9	1858.0	1863.2	1890.1	1902.5
12.5°	1641.0	1651.4	1664.8	1691.7	1735.1	1787.8	1845.6	1896.3	1905.6	1944.8	1970.7
15°	1662.7	1675.1	1687.5	1720.6	1767.1	1831.2	1893.2	1956.2	1965.5	2021.3	2049.2
17.5°	1707.2	1723.7	1733.0	1766.1	1815.7	1887.0	1968.6	2040.9	2049.2	2114.3	2149.4
20°	1795.0	1814.6	1817.7	1844.6	1893.2	1969.6	2066.8	2156.7	2167.0	2241.4	2280.7
22.5°	1976.9	2004.8	1980.0	1993.4	2036.8	2113.3	2218.7	2332.4	2346.8	2431.6	2466.7
25°	2297.2	2336.5	2272.4	2249.7	2268.3	2347.9	2480.1	2623.8	2640.3	2708.5	2726.1
27.5°	2926.5	2875.9	2778.8	2683.7	2627.9	2673.4	2822.2	2999.9	3020.6	3086.7	3066.1
30°	3617.9	3573.4	3442.2	3231.4	3099.1	3091.9	3229.3	3427.7	3451.5	3514.5	3451.5
32.5°	4310.3	4267.9	4125.3	3865.9	3636.5	3522.8	3617.9	3838.0	3850.4	3890.7	3797.7
35°	4991.3	4947.9	4805.2	4539.7	4257.5	3999.2	3980.6	4228.6	4232.7	4275.1	4136.6
37.5°	5676.4	5640.2	5488.3	5227.9	4949.9	4593.4	4420.8	4598.6	4603.7	4645.1	4501.4
40°	6165.2	6180.7	6076.3	5874.8	5636.1	5246.5	4914.8	4992.3	4961.3	5030.5	4944.8
42.5°	6584.7	6615.7	6524.8	6423.5	6285.1	5942.0	5526.5	5513.1	5463.5	5500.7	5411.8
45°	6947.5	6973.3	6891.7	6867.9	6864.8	6624.0	6195.1	6114.5	6045.3	6038.1	5931.6
47.5°	7080.8	7130.4	7165.5	7245.1	7400.1	7298.8	6886.5	6761.4	6683.9	6627.1	6458.7
50°	7131.4	7184.1	7304.0	7535.5	7902.3	7945.7	7574.7	7434.2	7339.1	7235.8	6987.8
52.5°	7063.2	7157.2	7318.4	7708.0	8240.2	8464.5	8235.1	8112.1	8003.6	7835.1	7467.2
55°	6661.2	6755.2	7084.9	7706.0	8408.7	8828.2	8859.2	8804.4	8682.5	8416.9	7854.8
57.5°	5813.8	5953.3	6475.2	7443.5	8405.6	9141.3	9471.0	9510.3	9373.8	8993.6	8159.6
60°	4639.9	4829.0	5465.6	6861.7	8146.2	9310.8	10007.3	10203.7	10059.0	9561.9	8406.6
62.5°	3237.6	3456.7	4059.1	5950.2	7553.0	9188.9	10399.0	10761.7	10652.1	10070.3	8501.7
65°	1974.8	2045.1	2530.8	4682.3	6544.4	8678.4	10519.9	11063.4	11027.3	10381.4	8361.1
67.5°	1315.5	1374.4	1513.9	3210.7	5080.1	7658.4	10230.5	11010.7	11021.1	10330.8	7846.5
70°	792.6	843.2	934.2	1867.3	3292.4	6061.8	9334.6	10339.0	10399.0	9653.9	6871.0
72.5°	326.5	360.7	443.3	846.3	1705.1	3847.3	7433.1	8876.8	9016.3	8117.2	5273.4
75°	185.0	202.5	260.4	424.7	739.9	1792.9	4502.5	6301.6	6507.2	5594.8	3172.5
77.5°	123.0	131.2	168.4	274.9	416.5	611.8	1924.2	3283.1	3675.8	3055.7	1373.4
80°	82.7	89.9	115.7	183.9	270.7	262.5	612.8	1216.3	1496.3	1049.9	334.8
82.5°	55.8	56.8	82.7	120.9	171.5	127.1	180.8	378.2	475.4	303.8	127.1
85°	32.0	31.0	61.0	70.3	76.5	52.7	54.8	113.7	148.8	128.1	72.3
87.5°	4.1	6.2	23.8	18.6	10.3	11.4	11.4	19.6	28.9	31.0	15.5
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°	1792.9	1792.9	1792.9	1792.9	1792.9	1792.9	1792.9	1792.9	1792.9	1792.9	1792.9
2.5°	1795.0	1794.0	1790.9	1787.8	1780.5	1776.4	1778.5	1776.4	1775.4	1776.4	1780.5
5°	1808.4	1805.3	1797.1	1786.7	1772.3	1754.7	1743.3	1726.8	1711.3	1702.0	1704.1
7.5°	1844.6	1841.5	1830.1	1801.2	1754.7	1681.3	1614.1	1555.2	1510.8	1485.0	1486.0
10°	1902.5	1897.3	1879.7	1815.7	1693.7	1533.5	1400.2	1289.7	1217.3	1183.2	1180.1
12.5°	1970.7	1964.5	1933.5	1802.2	1578.0	1327.9	1144.0	1021.0	953.8	923.8	920.7
15°	2051.3	2043.0	1982.0	1738.2	1409.5	1100.6	932.1	840.1	796.7	769.9	770.9
17.5°	2151.5	2137.0	2018.2	1642.1	1226.6	926.9	801.9	732.7	694.4	668.6	666.5
20°	2281.7	2257.9	2047.1	1527.3	1058.2	817.4	714.1	656.2	627.3	604.5	600.4
22.5°	2463.6	2429.5	2082.3	1403.3	939.3	742.0	649.0	606.6	582.8	557.0	552.9
25°	2688.9	2648.6	2125.7	1288.6	857.7	676.9	601.4	566.3	538.4	508.4	505.3
27.5°	3004.1	2931.7	2177.3	1194.6	787.4	621.1	558.0	518.8	486.7	461.9	456.8
30°	3355.4	3236.6	2222.8	1137.8	723.4	569.4	501.2	461.9	432.0	414.4	411.3
32.5°	3688.2	3526.9	2252.8	1113.0	665.5	510.5	439.2	396.8	374.1	368.9	372.0
35°	4002.3	3789.4	2249.7	1089.2	613.8	451.6	378.2	334.8	317.2	320.3	320.3
37.5°	4364.0	4069.5	2228.0	1052.0	571.5	397.9	325.5	287.3	271.8	272.8	276.9
40°	4784.6	4392.9	2214.5	981.7	525.0	348.3	282.1	251.1	239.7	235.6	234.6
42.5°	5233.1	4706.0	2216.6	902.1	467.1	303.8	252.1	226.3	216.0	212.9	211.8
45°	5683.6	5004.7	2219.7	819.5	406.1	269.7	230.4	208.7	202.5	198.4	198.4
47.5°	6107.3	5258.9	2161.8	730.6	346.2	243.9	212.9	198.4	193.2	188.1	188.1
50°	6502.1	5428.4	2022.3	627.3	298.6	223.2	199.4	189.1	183.9	178.8	178.8
52.5°	6809.0	5455.2	1791.9	520.8	265.6	207.7	191.2	181.9	175.7	170.5	169.5
55°	6945.4	5286.8	1464.3	421.6	239.7	194.3	182.9	173.6	166.4	161.2	160.2
57.5°	6910.3	4932.4	1141.9	339.0	214.9	180.8	172.6	166.4	158.1	149.8	148.8
60°	6737.7	4458.0	860.8	282.1	192.2	166.4	161.2	156.0	144.7	132.3	130.2
62.5°	6439.0	3861.8	613.8	233.5	167.4	149.8	147.8	143.6	127.1	104.4	102.3
65°	5982.3	3137.4	413.4	194.3	143.6	131.2	132.3	125.0	103.3	77.5	75.4
67.5°	5314.7	2294.1	264.5	159.1	119.9	109.5	110.6	106.4	87.8	66.1	63.0
70°	4464.2	1519.1	172.6	120.9	96.1	84.7	90.9	92.0	74.4	53.7	51.7
72.5°	3272.7	897.0	120.9	89.9	70.3	58.9	74.4	76.5	59.9	40.3	38.2
75°	1865.3	425.8	90.9	65.1	43.4	41.3	57.9	57.9	41.3	26.9	24.8
77.5°	783.3	177.7	64.1	42.4	24.8	23.8	39.3	36.2	20.7	12.4	12.4
80°	226.3	79.6	34.1	20.7	10.3	9.3	15.5	11.4	5.2	2.1	2.1
82.5°	88.9	35.1	13.4	8.3	4.1	4.1	2.1	0.0	0.0	0.0	0.0
85°	52.7	14.5	6.2	3.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	13.4	3.1	2.1	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)