

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: P963988

Luminaire Tested: **NAV-SB3B-727-U-T4FT-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P963988  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3B-727-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12161.6 lumens  
Efficiency: N/A  
Efficacy: 111.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

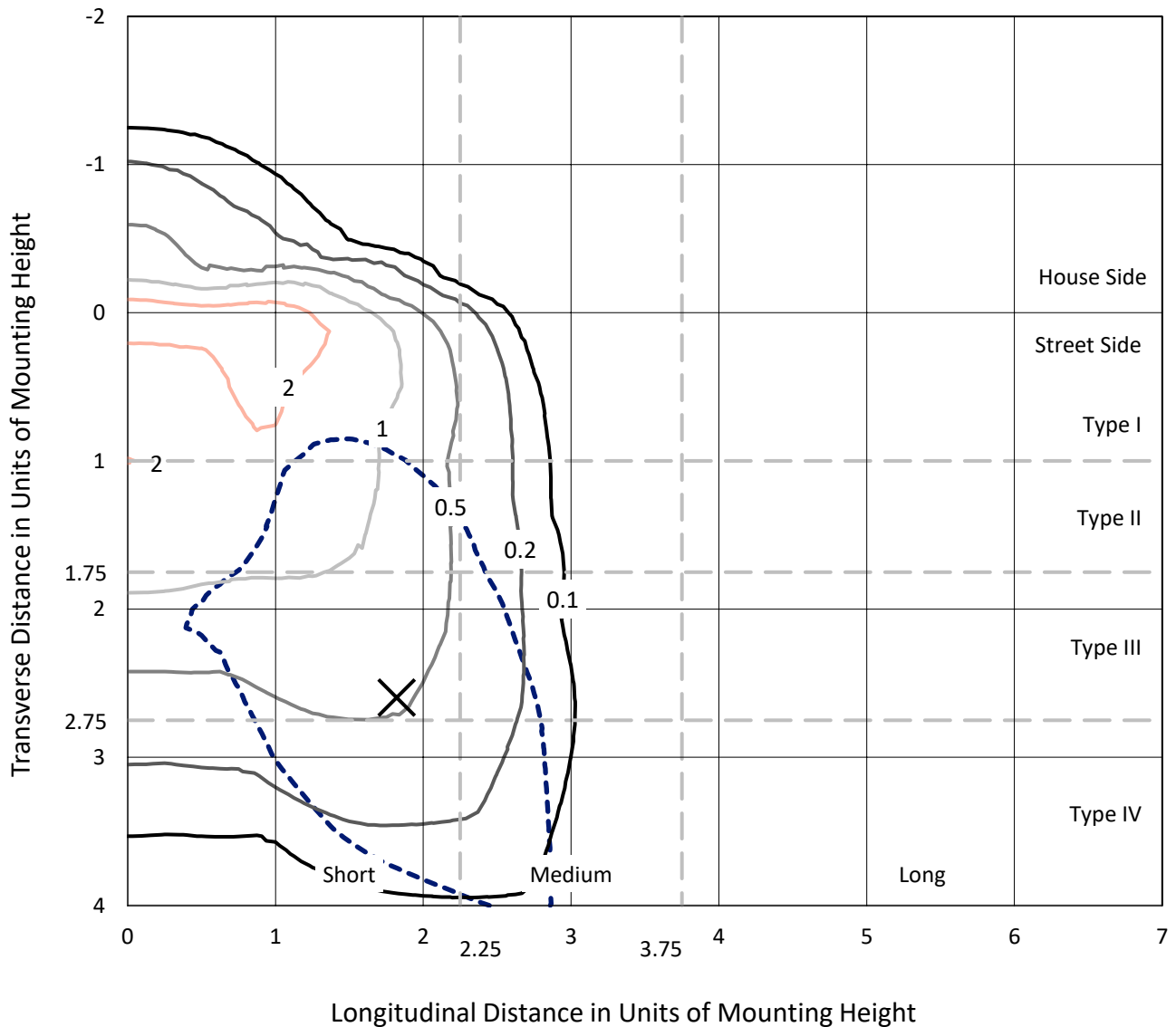
Input Watts (W): 109.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

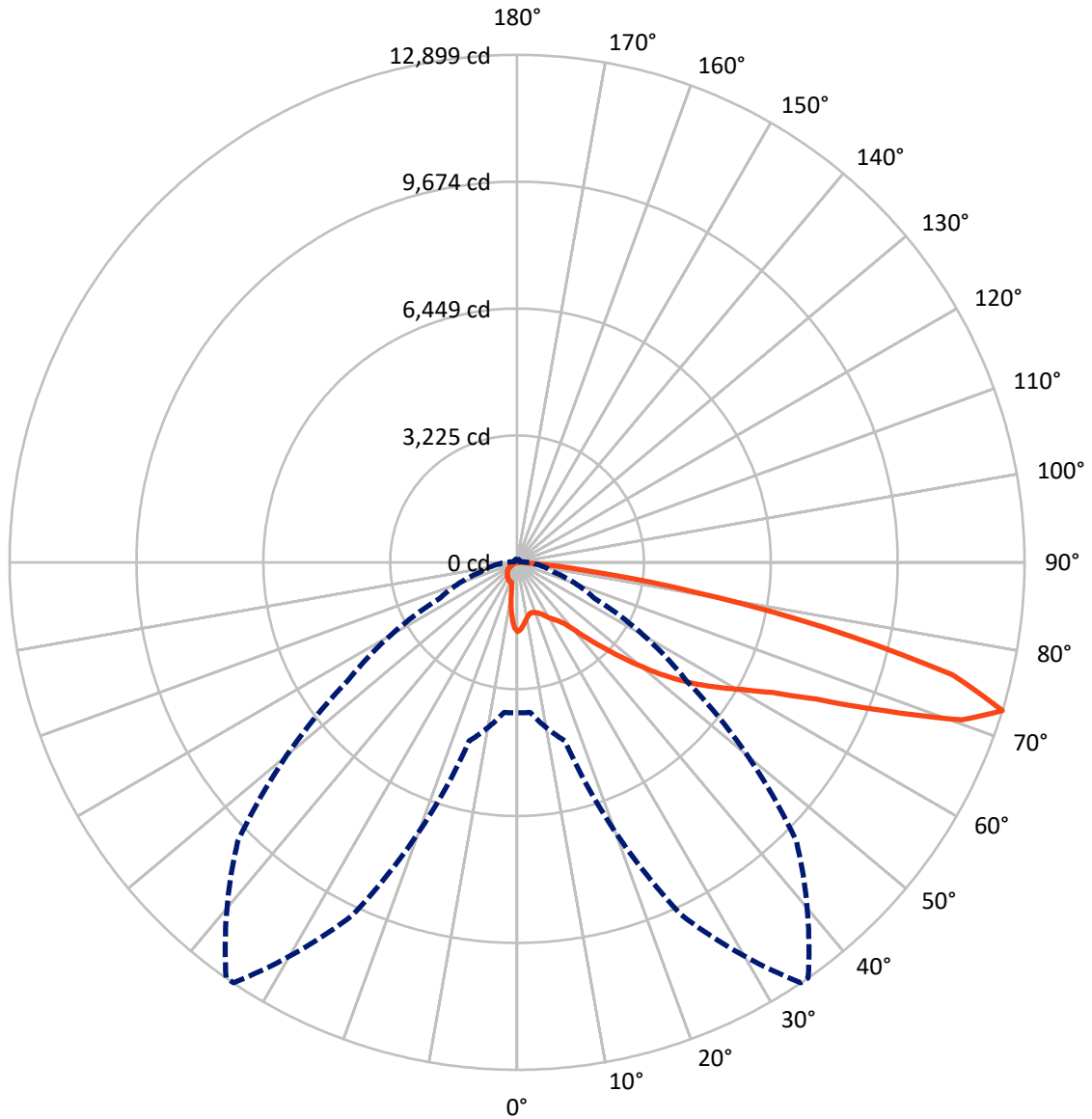
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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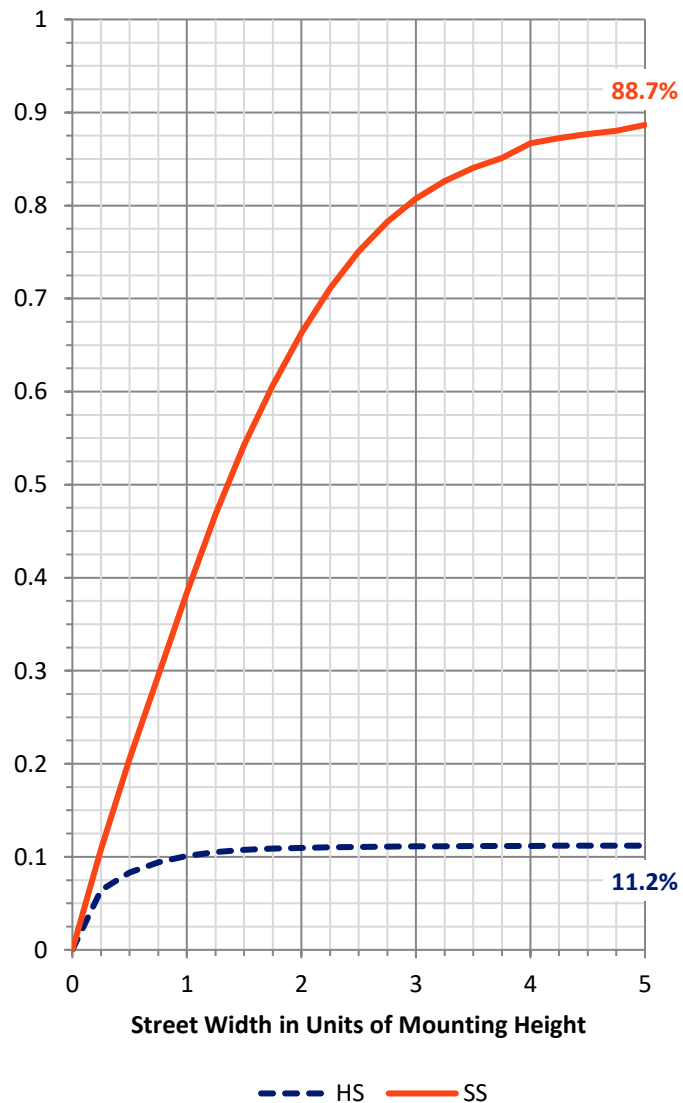
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1368.7	0.0	1368.7
	% Fixture	11.3	0.0	11.3
<b>Street Side</b>	Lumens	10792.9	0.0	10792.9
	% Fixture	88.7	0.0	88.7
<b>Total</b>	Lumens	12161.6	0.0	12161.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.8	1.2
10°-20°	338.8	2.8
20°-30°	550.4	4.5
30°-40°	918.4	7.6
40°-50°	1737.6	14.3
50°-60°	2761.1	22.7
60°-70°	3415.6	28.1
70°-80°	2123.2	17.5
80°-90°	171.6	1.4
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°	12161.6	100.0
0°-180°	12161.6	100.0

**Coefficient of Utilization**



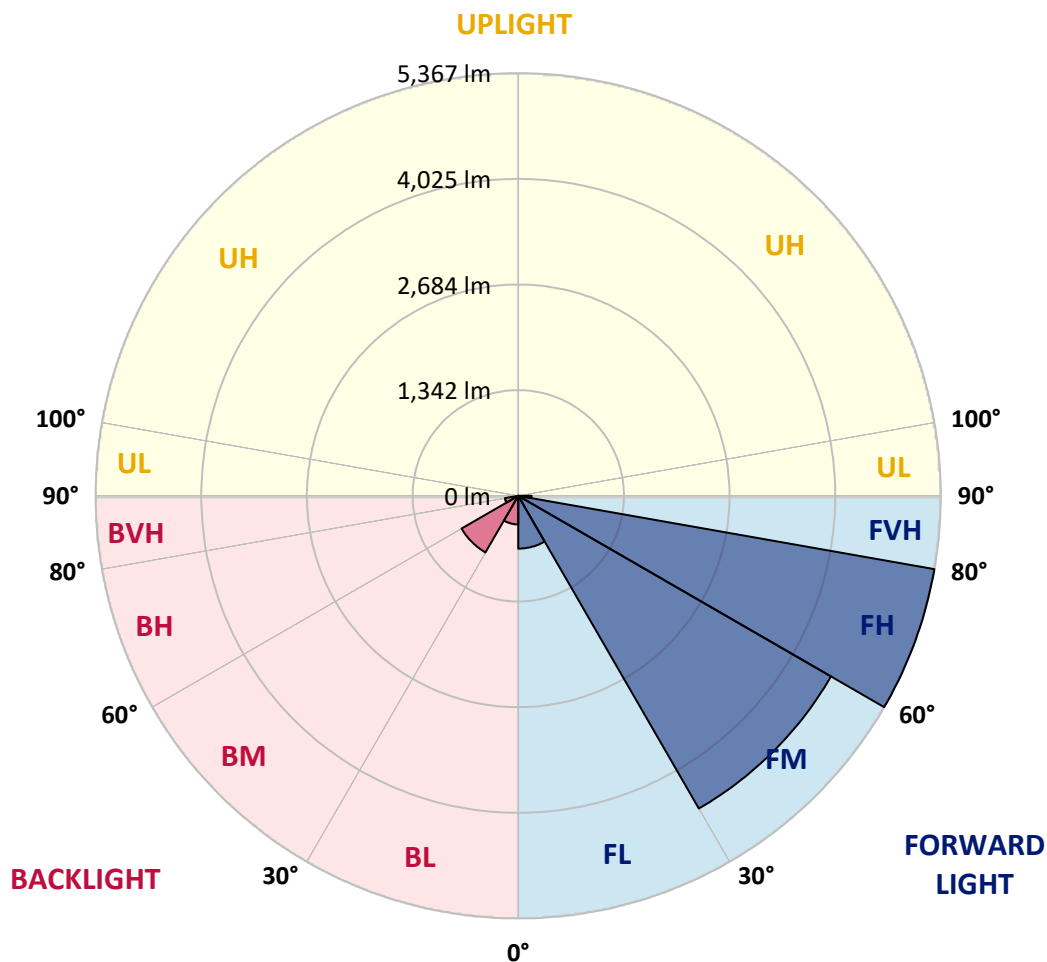
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	670.4	5.5			
FM (30°-60°)	4586.1	37.7			
FH (60°-80°)	5367.1	44.1			G3/7500
FVH (80°-90°)	169.2	1.4			G2/225
BL (0°-30°)	363.7	3.0	B1/500		
BM (30°-60°)	831.0	6.8	B1/1000		
BH (60°-80°)	171.8	1.4	B1/500		G1/500
BVH (80°-90°)	2.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1762.6	1762.6	1762.6	1762.6	1762.6	1762.6	1762.6	1762.6	1762.6	1762.6	1762.6
2.5°	1684.2	1698.4	1701.1	1705.6	1705.6	1710.9	1719.8	1732.4	1752.9	1763.5	1770.7
5°	1552.4	1563.0	1576.3	1587.1	1607.6	1610.3	1645.0	1678.8	1726.1	1761.8	1786.7
7.5°	1419.5	1432.0	1449.9	1475.7	1502.4	1510.4	1563.0	1620.0	1694.9	1761.8	1803.6
10°	1325.9	1326.9	1343.0	1368.8	1411.5	1421.4	1485.5	1566.6	1660.2	1751.0	1819.7
12.5°	1273.4	1279.6	1286.8	1306.4	1347.4	1353.6	1422.2	1517.6	1625.4	1744.8	1838.3
15°	1273.4	1277.9	1282.3	1292.1	1325.1	1330.4	1391.0	1486.4	1607.6	1747.5	1868.7
17.5°	1286.8	1293.9	1290.4	1302.0	1336.7	1340.2	1393.7	1477.4	1606.7	1764.4	1915.0
20°	1318.9	1324.2	1317.0	1324.2	1358.9	1366.1	1421.4	1494.4	1621.9	1793.9	1972.9
22.5°	1369.6	1372.3	1355.4	1360.7	1396.4	1405.3	1469.4	1542.5	1658.3	1841.0	2050.4
25°	1433.8	1439.2	1413.3	1419.5	1453.4	1464.1	1538.1	1614.7	1716.3	1906.1	2149.3
27.5°	1507.8	1510.4	1488.2	1487.3	1530.9	1546.1	1620.9	1703.9	1793.9	1988.1	2274.2
30°	1592.4	1600.4	1579.0	1575.5	1630.8	1643.2	1717.2	1813.4	1907.8	2111.1	2451.5
32.5°	1659.3	1665.5	1653.0	1661.9	1718.1	1727.8	1833.9	1968.5	2087.0	2285.8	2693.0
35°	1755.5	1759.1	1730.5	1746.6	1810.8	1835.7	1993.4	2185.9	2312.4	2504.9	3008.4
37.5°	2103.9	2103.9	1982.8	1903.4	1964.9	1987.2	2211.7	2459.5	2590.5	2799.0	3405.9
40°	2586.0	2578.0	2400.7	2238.5	2230.5	2274.2	2522.7	2804.3	2949.6	3151.9	3853.2
42.5°	3100.2	3087.7	2846.2	2685.8	2659.1	2674.2	2881.9	3229.4	3377.4	3582.3	4334.4
45°	3556.4	3552.9	3331.9	3116.2	3068.1	3116.2	3330.1	3726.7	3832.7	4048.3	4814.7
47.5°	3938.8	3938.8	3777.4	3636.6	3611.7	3640.2	3936.9	4278.2	4268.4	4544.6	5282.5
50°	4378.9	4375.4	4222.1	4161.5	4187.3	4227.4	4635.6	4859.2	4719.3	5032.1	5700.4
52.5°	4687.2	4708.6	4656.1	4646.3	4778.1	4847.6	5344.9	5427.8	5123.1	5494.6	6013.3
55°	4931.5	4956.4	5017.0	5085.6	5339.5	5430.4	6031.9	5966.9	5460.8	5895.6	6193.3
57.5°	5277.2	5241.5	5335.1	5470.5	5881.3	5991.0	6697.7	6475.7	5732.5	6220.9	6212.8
60°	5697.0	5702.3	5718.3	5889.3	6422.2	6563.1	7353.5	6957.0	5907.2	6420.5	5995.4
62.5°	6201.2	6209.2	6242.2	6505.2	7148.6	7281.3	8052.1	7350.8	5987.4	6364.3	5434.0
65°	6166.5	6200.4	6568.4	7467.5	8252.6	8383.6	8867.5	7627.0	5866.2	5851.1	4424.4
67.5°	5617.6	5672.9	6288.6	8617.1	9917.2	10063.3	9853.0	7681.5	5343.1	4550.1	2886.3
70°	4897.6	4917.1	5657.7	9650.8	11844.7	11992.6	10735.2	7083.5	4054.6	2537.9	1293.0
72.5°	3824.7	3829.1	4698.0	9890.5	12890.9	12898.9	10042.8	5258.5	2180.6	974.9	449.2
75°	2732.1	2705.4	3146.5	8020.9	11341.2	11432.1	7529.0	2466.6	833.2	460.7	223.7
77.5°	1465.0	1494.4	1780.4	4756.8	7834.7	7989.8	4108.0	711.1	424.1	313.6	147.9
80°	452.6	477.6	729.8	2177.9	4437.7	4531.3	1522.9	316.3	295.8	223.7	97.2
82.5°	142.6	147.9	340.4	915.2	1841.9	1884.7	441.1	179.1	202.2	147.9	57.0
85°	41.0	41.9	151.5	341.3	455.4	464.2	123.8	69.5	115.8	91.7	29.4
87.5°	4.4	14.2	57.0	57.0	40.1	39.3	13.3	15.2	33.0	11.6	5.3
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°	1762.6	1762.6	1762.6	1762.6	1762.6	1762.6	1762.6	1762.6	1762.6	1762.6	1762.6
2.5°	1766.2	1767.1	1755.5	1735.9	1714.5	1696.7	1674.4	1656.6	1644.1	1640.5	1646.8
5°	1778.7	1772.4	1739.4	1679.8	1608.4	1546.9	1478.4	1424.0	1388.4	1373.2	1378.5
7.5°	1797.3	1779.6	1707.3	1589.8	1453.4	1332.2	1209.3	1113.9	1053.3	1023.0	1027.5
10°	1813.4	1777.8	1653.9	1459.6	1251.1	1067.5	901.8	786.9	722.7	692.4	693.3
12.5°	1828.6	1776.8	1584.4	1305.4	1023.0	798.5	644.3	587.2	569.4	563.1	561.4
15°	1857.1	1779.6	1497.1	1129.0	795.8	603.3	547.1	546.2	549.8	548.1	547.1
17.5°	1896.2	1782.3	1398.2	941.9	614.0	532.0	529.3	537.3	542.7	540.0	539.2
20°	1947.1	1792.9	1293.0	756.6	527.6	514.1	520.4	527.6	532.0	527.6	526.6
22.5°	2018.3	1811.7	1178.0	607.7	499.9	503.5	508.8	516.8	521.3	515.1	514.1
25°	2105.7	1841.0	1064.9	528.4	486.6	491.0	499.1	507.9	513.3	507.1	506.1
27.5°	2218.9	1888.3	960.6	510.7	473.1	475.8	487.5	500.8	507.9	499.9	499.9
30°	2382.8	1965.8	870.6	518.6	465.1	458.9	475.0	493.6	501.7	494.6	493.6
32.5°	2600.3	2075.4	815.4	531.2	461.6	439.3	454.5	478.6	491.9	487.5	487.5
35°	2885.5	2242.1	794.0	545.4	458.9	418.8	429.5	455.4	478.6	483.0	483.0
37.5°	3231.2	2473.7	800.2	551.6	450.9	401.9	407.2	429.5	459.8	474.1	477.6
40°	3624.2	2743.7	835.9	545.4	442.0	387.7	388.6	405.5	432.1	453.6	460.7
42.5°	4029.6	3059.2	901.8	522.2	434.0	375.2	372.5	384.1	401.9	417.1	423.3
45°	4415.5	3383.5	966.9	490.2	424.1	362.6	356.5	360.9	364.5	370.7	374.2
47.5°	4752.3	3611.7	948.1	460.7	410.8	348.4	337.7	336.0	325.2	324.4	323.5
50°	4984.9	3661.6	842.1	431.3	391.2	332.4	315.5	304.7	286.1	277.2	278.0
52.5°	5058.9	3464.7	688.0	401.9	359.2	311.0	286.9	270.0	246.8	238.8	237.9
55°	4960.8	3078.8	549.8	366.2	314.6	282.5	255.7	233.5	214.7	205.0	205.0
57.5°	4721.2	2587.8	434.9	324.4	267.3	250.4	223.7	201.4	185.3	175.6	173.7
60°	4323.7	2054.9	344.0	274.5	228.2	215.7	188.0	173.7	159.5	147.9	145.2
62.5°	3720.4	1466.8	270.0	217.4	190.6	176.4	160.4	149.8	132.7	116.7	114.1
65°	2903.2	897.4	208.5	159.5	153.2	146.2	136.3	126.6	106.1	90.0	87.3
67.5°	1831.3	425.1	148.8	120.3	121.2	117.7	113.2	105.2	90.0	75.7	74.0
70°	806.5	205.8	98.0	91.7	90.0	90.0	93.6	90.9	76.7	63.2	60.6
72.5°	274.5	110.5	73.1	69.5	65.1	64.2	78.4	75.7	61.5	49.0	46.3
75°	143.5	74.0	53.5	49.9	39.3	47.3	62.4	58.8	43.7	32.1	29.4
77.5°	93.6	52.6	36.5	32.1	22.2	31.2	46.3	41.0	25.8	16.0	14.2
80°	58.8	34.7	21.4	15.2	10.7	16.9	24.9	17.8	9.8	3.6	2.7
82.5°	31.2	17.8	8.0	5.3	4.4	5.3	6.3	4.4	1.7	0.0	0.0
85°	12.5	6.3	2.7	1.7	0.9	0.0	1.7	0.9	0.0	0.0	0.0
87.5°	4.4	0.9	0.0	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)