

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: P881769

Luminaire Tested: **NAV-SB1B-827-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881769
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-827-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4582 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

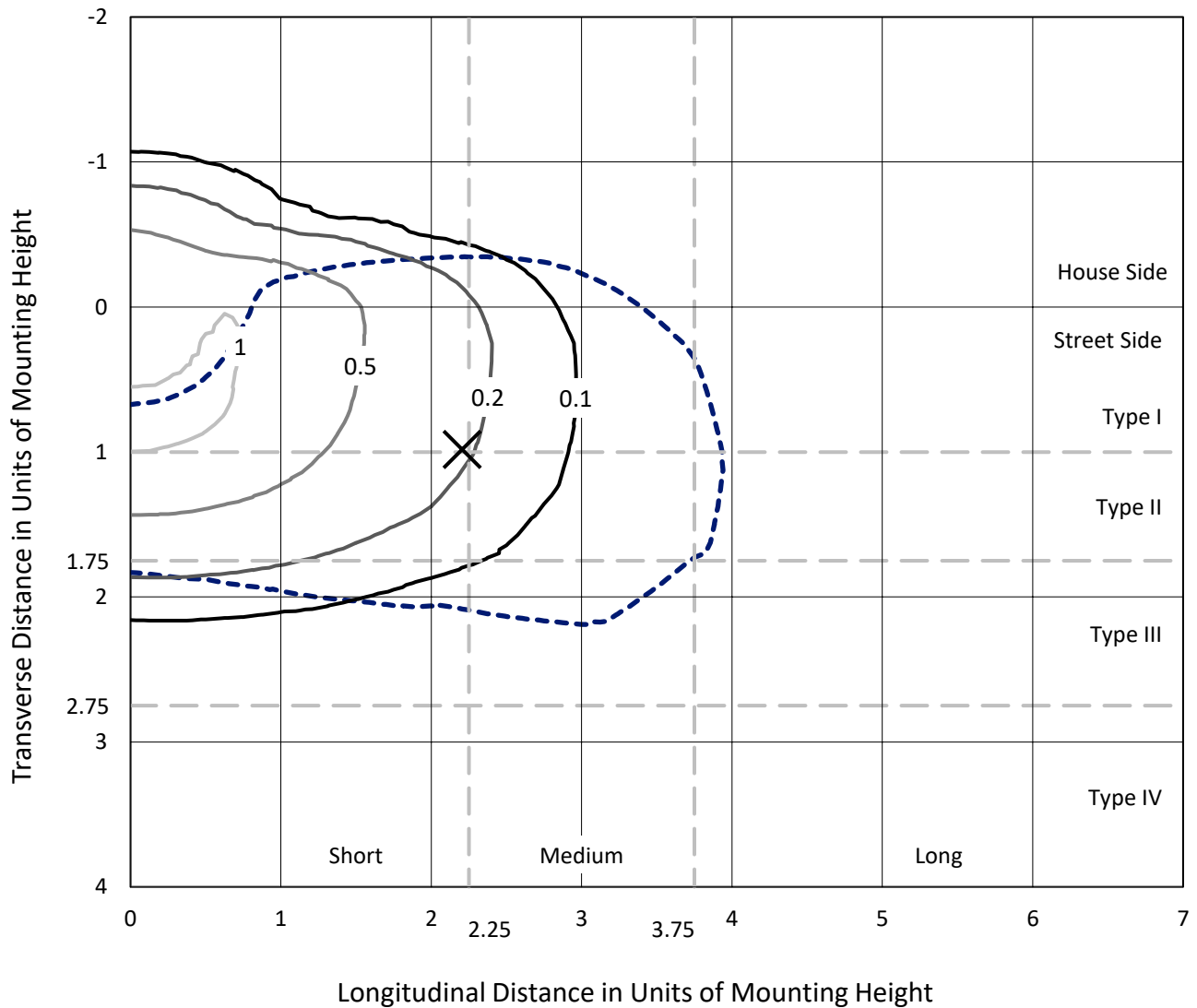
Input Watts (W): 39.8
Input Voltage (V): 120.0
Input Current (Ain): 0.33
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 5.305
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

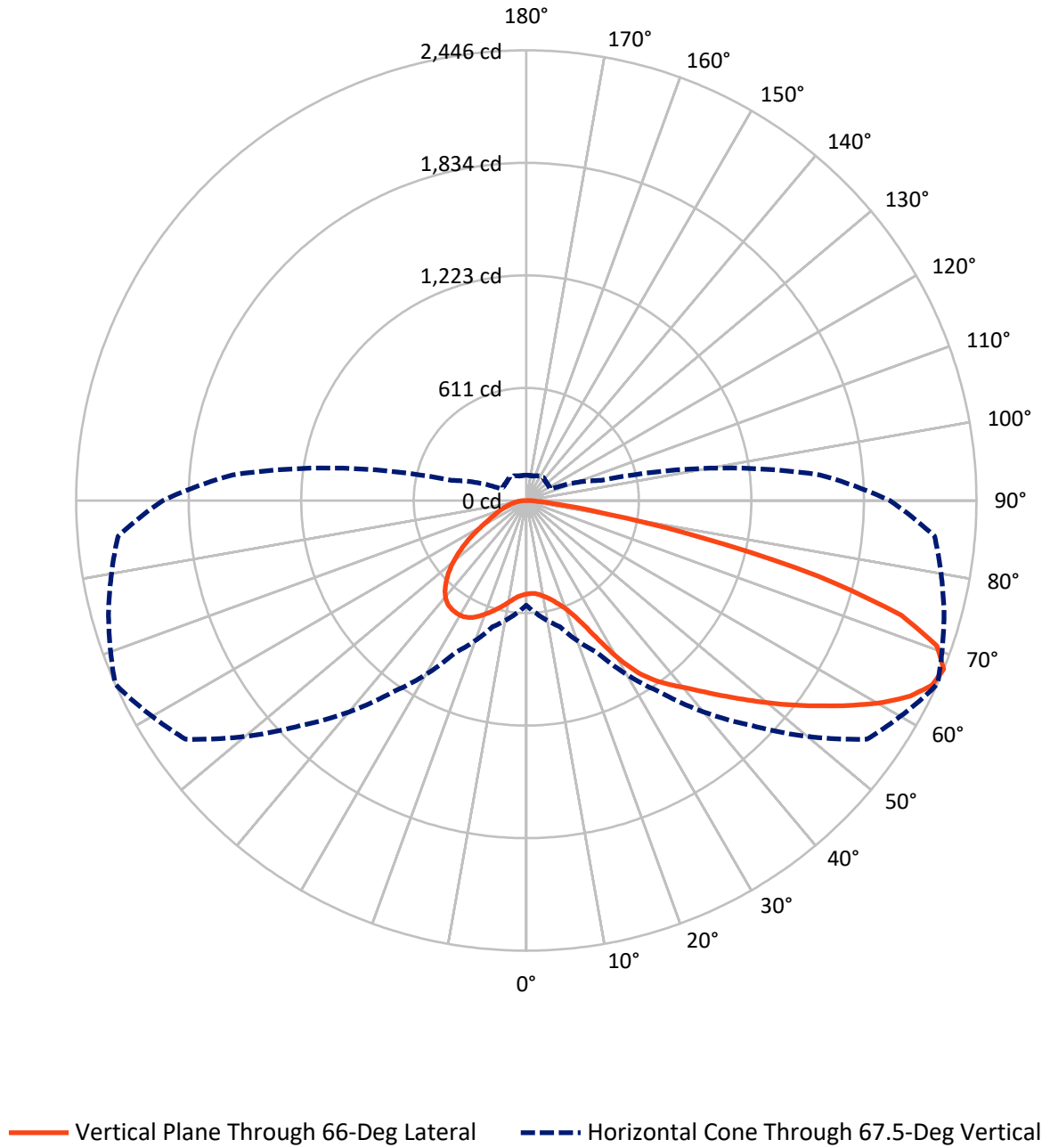
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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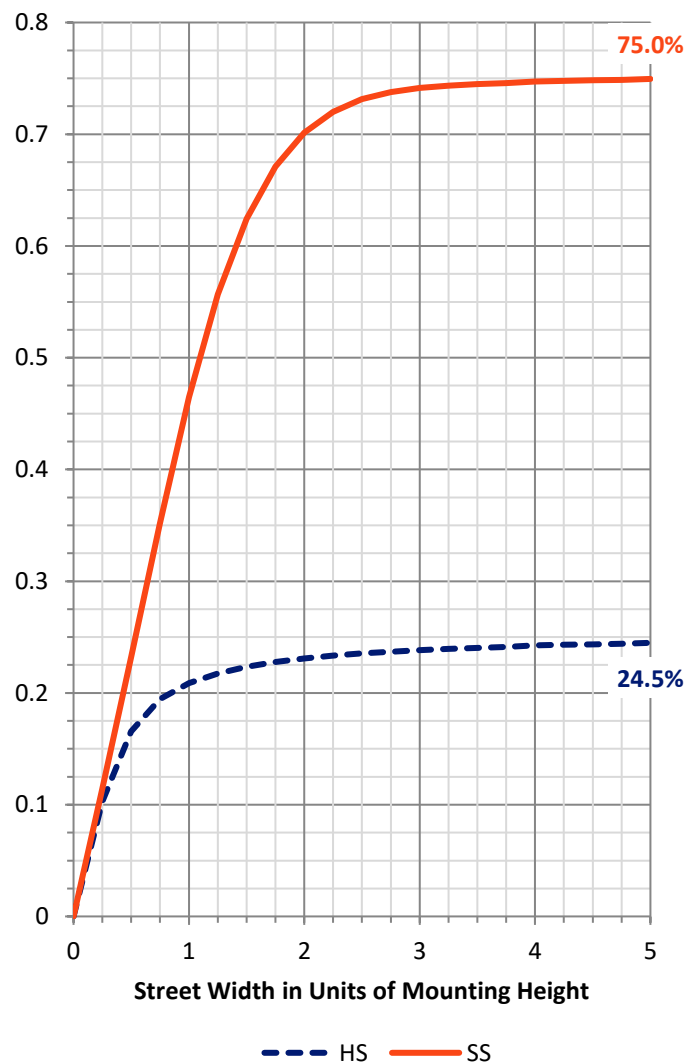
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1139.3	0.0	1139.3
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	3442.7	0.0	3442.7
	% Fixture	75.1	0.0	75.1
Total	Lumens	4582.0	0.0	4582.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.4	1.1
10°-20°	166.5	3.6
20°-30°	320.9	7.0
30°-40°	562.6	12.3
40°-50°	836.4	18.3
50°-60°	1060.2	23.1
60°-70°	1037.4	22.6
70°-80°	494.8	10.8
80°-90°	52.9	1.2
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°	4582.0	100.0
0°-180°	4582.0	100.0

Coefficient of Utilization



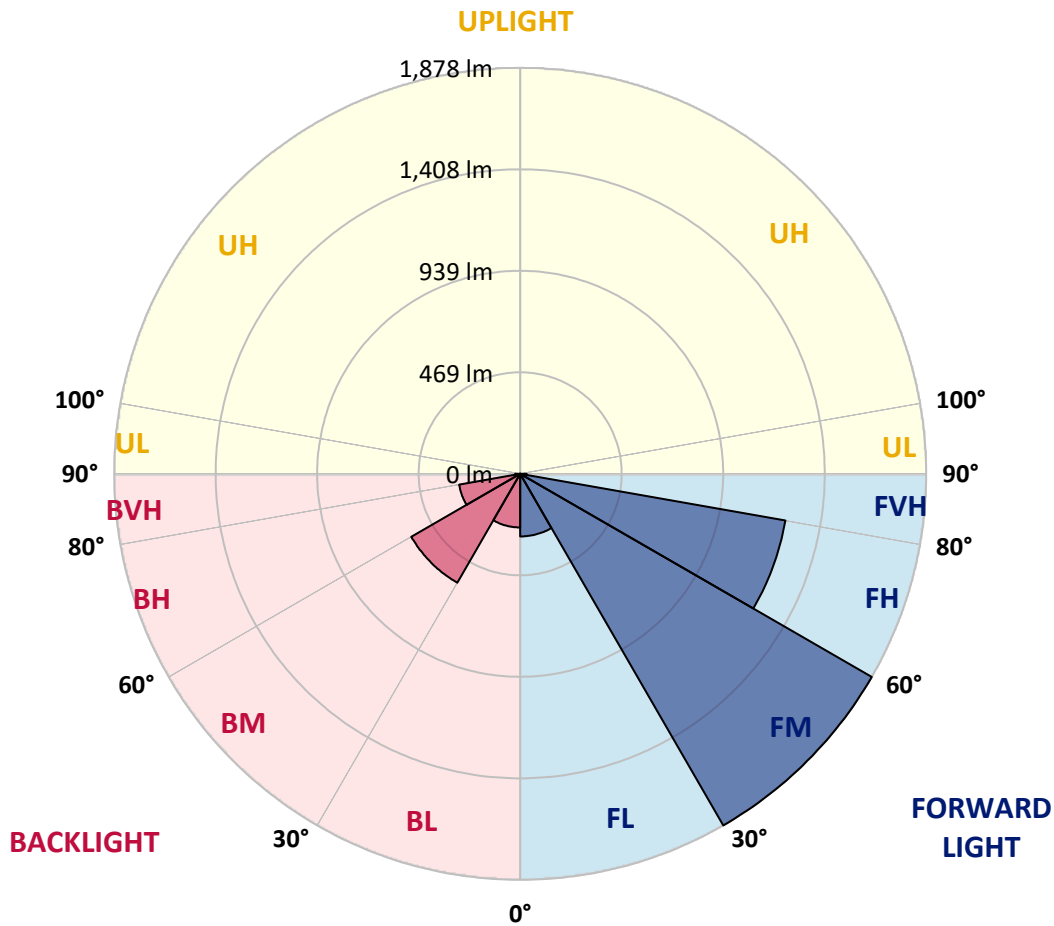
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	289.5	6.3			
FM (30°-60°)	1877.7	41.0			
FH (60°-80°)	1245.5	27.2			G1/1800
FVH (80°-90°)	30.0	0.7			G1/100
BL (0°-30°)	248.2	5.4	B1/500		
BM (30°-60°)	581.5	12.7	B1/1000		
BH (60°-80°)	286.7	6.3	B1/500		G1/500
BVH (80°-90°)	22.9	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	508.2	508.2	508.2	508.2	508.2	508.2	508.2	508.2	508.2	508.2	508.2
2.5°	502.9	505.8	505.1	503.9	503.6	504.1	504.8	505.6	505.3	506.5	508.4
5°	501.5	504.4	504.1	504.1	505.1	507.0	508.2	509.4	508.2	509.6	512.3
7.5°	502.4	504.6	505.6	506.5	508.9	512.5	515.4	518.1	516.6	518.3	521.7
10°	514.7	516.4	517.4	517.4	519.0	523.1	526.0	530.8	529.6	532.3	536.6
12.5°	537.1	538.8	538.8	537.8	539.0	541.7	542.6	547.9	545.8	550.1	554.4
15°	564.5	567.9	565.3	563.6	564.1	566.7	566.5	570.6	568.4	572.0	575.9
17.5°	594.9	599.2	594.9	594.6	593.7	596.6	596.8	600.4	596.6	599.2	601.9
20°	630.7	636.8	633.1	634.4	632.2	633.4	634.6	639.9	633.9	635.8	635.1
22.5°	681.3	688.5	684.7	689.2	687.8	686.8	686.6	696.0	686.6	687.3	680.3
25°	755.0	763.6	756.9	763.1	763.1	766.3	769.9	781.9	766.3	761.7	743.6
27.5°	863.8	872.4	859.2	863.1	861.9	869.6	865.7	895.6	878.7	871.2	834.9
30°	994.7	1010.1	985.1	984.1	982.9	995.2	1000.8	1020.5	1003.4	995.9	952.1
32.5°	1136.3	1152.4	1122.6	1113.9	1109.3	1116.8	1112.2	1128.1	1116.3	1104.8	1050.6
35°	1286.0	1301.9	1273.5	1256.7	1238.4	1222.7	1206.4	1210.4	1199.4	1181.8	1125.7
37.5°	1427.6	1456.7	1426.6	1408.6	1374.9	1344.3	1298.6	1279.5	1269.2	1253.1	1196.5
40°	1571.8	1588.4	1565.5	1550.1	1513.5	1465.6	1392.4	1352.2	1338.3	1322.6	1274.7
42.5°	1678.0	1693.9	1681.6	1671.0	1642.3	1586.7	1492.1	1441.8	1421.6	1404.0	1363.3
45°	1762.2	1774.0	1766.3	1770.2	1757.9	1704.0	1595.4	1537.9	1516.9	1495.5	1463.5
47.5°	1796.2	1808.7	1821.0	1843.8	1864.8	1825.1	1706.4	1641.9	1619.7	1597.8	1566.3
50°	1792.3	1805.1	1840.7	1889.3	1954.3	1941.1	1823.4	1752.6	1732.1	1707.1	1678.0
52.5°	1761.5	1775.9	1821.7	1902.6	2006.1	2028.0	1942.5	1866.9	1847.7	1817.8	1788.7
55°	1680.6	1689.3	1757.9	1872.5	2018.4	2088.7	2059.3	1988.8	1969.5	1927.9	1896.1
57.5°	1530.6	1543.2	1643.1	1791.4	1987.6	2129.8	2161.9	2116.8	2098.3	2038.4	2005.1
60°	1334.9	1354.9	1469.2	1655.1	1909.1	2129.6	2255.0	2242.7	2227.3	2147.2	2112.5
62.5°	1113.4	1136.5	1246.6	1462.5	1771.9	2069.2	2313.3	2348.2	2340.2	2247.6	2203.3
65°	855.1	871.0	980.5	1213.3	1558.3	1939.4	2320.0	2420.2	2421.6	2323.9	2250.7
67.5°	569.4	615.1	710.2	910.5	1272.3	1727.3	2260.8	2432.0	2445.9	2350.1	2226.9
70°	277.8	338.0	431.2	591.7	910.5	1402.1	2106.0	2335.2	2366.2	2273.6	2084.8
72.5°	115.3	134.8	185.6	292.0	522.6	946.1	1795.0	2072.8	2130.3	2014.5	1752.8
75°	77.8	84.3	106.2	149.7	238.1	466.6	1294.5	1545.6	1638.2	1521.5	1243.7
77.5°	59.9	64.0	77.3	104.7	141.6	176.5	692.9	931.4	979.3	906.6	647.1
80°	47.2	50.3	57.8	76.3	100.4	94.4	236.2	422.0	449.7	377.2	208.0
82.5°	40.9	42.1	41.4	51.8	66.7	55.1	77.5	155.8	171.9	124.7	67.9
85°	29.6	33.0	34.4	32.0	35.4	27.9	31.8	55.1	60.7	54.2	38.3
87.5°	12.0	17.8	21.9	20.7	13.0	7.9	9.9	16.1	18.5	20.2	12.5
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°	508.2	508.2	508.2	508.2	508.2	508.2	508.2	508.2	508.2	508.2	508.2
2.5°	508.7	510.4	511.6	513.0	514.0	515.4	518.3	520.0	520.2	521.4	521.2
5°	513.3	515.7	518.3	522.2	526.5	530.1	535.6	539.5	540.9	542.1	541.9
7.5°	523.1	526.5	531.3	538.1	544.3	549.1	555.9	560.4	565.0	566.7	566.9
10°	537.8	542.6	549.6	558.8	565.5	571.8	578.7	582.6	587.2	589.1	590.1
12.5°	556.1	561.2	570.3	583.1	589.3	593.7	596.1	595.1	596.1	597.8	598.2
15°	577.1	582.6	592.9	606.7	611.0	607.1	601.9	597.0	596.3	596.8	598.5
17.5°	601.9	605.9	618.0	629.5	626.4	610.5	599.0	591.3	587.4	586.2	587.9
20°	636.5	636.5	646.4	653.6	632.7	605.7	587.6	575.1	567.2	563.8	563.1
22.5°	678.6	674.8	681.1	676.0	631.5	592.2	567.2	545.5	533.5	528.7	527.9
25°	732.1	727.5	725.8	694.5	622.8	570.8	530.1	503.9	493.3	490.6	491.1
27.5°	812.7	801.2	779.3	704.6	606.9	537.1	486.8	462.5	456.4	456.7	457.4
30°	920.1	897.0	843.3	706.3	580.9	489.4	442.5	425.1	422.3	423.5	427.6
32.5°	1019.5	997.6	908.8	698.6	540.9	442.7	402.8	391.2	386.9	388.3	390.2
35°	1097.5	1091.5	969.5	687.8	491.8	398.9	367.1	357.3	348.8	346.9	348.4
37.5°	1171.2	1168.8	1015.0	672.6	443.2	367.9	338.5	325.5	313.2	306.5	306.7
40°	1252.1	1249.7	1044.8	649.3	400.1	340.9	312.7	295.6	280.5	268.2	269.4
42.5°	1343.1	1328.9	1059.0	615.8	363.5	318.0	291.8	268.7	248.7	237.4	238.1
45°	1442.5	1410.5	1058.8	573.2	332.7	297.1	269.4	236.6	218.1	207.5	207.0
47.5°	1548.0	1488.5	1045.8	526.0	302.9	274.0	234.7	209.7	197.4	190.9	189.5
50°	1656.8	1561.4	1023.6	471.9	272.3	247.7	213.1	196.0	186.6	180.6	178.4
52.5°	1759.1	1627.7	996.9	410.5	241.2	222.2	203.4	190.2	180.3	173.6	170.7
55°	1854.2	1684.7	959.1	347.6	215.9	205.1	198.9	187.8	176.5	168.5	165.4
57.5°	1938.7	1721.8	893.9	288.6	197.9	193.3	194.0	183.7	170.7	163.9	159.6
60°	2009.0	1749.0	797.3	234.0	183.2	181.8	186.6	176.0	160.8	153.1	149.7
62.5°	2051.1	1748.5	678.9	191.6	170.7	171.2	176.7	166.4	150.9	143.7	141.6
65°	2047.5	1705.7	548.9	163.9	158.6	159.1	166.4	155.8	142.8	138.4	138.2
67.5°	1975.0	1601.2	421.1	145.9	145.4	147.6	156.0	148.5	137.7	137.2	137.9
70°	1778.8	1384.3	303.3	131.4	131.7	134.8	145.9	144.0	135.1	136.0	135.8
72.5°	1426.4	1055.4	203.7	116.3	116.5	121.6	136.3	140.4	132.4	145.2	147.1
75°	950.0	658.2	131.0	100.1	100.4	106.9	127.8	133.4	125.2	144.7	145.9
77.5°	456.4	295.9	94.9	84.3	84.3	90.3	110.5	119.4	106.6	112.4	103.0
80°	157.7	111.2	74.6	67.9	66.4	70.5	93.2	103.5	92.0	84.7	79.4
82.5°	62.1	57.8	59.9	52.7	47.9	50.6	72.5	85.5	67.6	61.1	60.9
85°	35.6	37.6	42.4	34.9	27.7	31.1	53.2	61.4	51.0	45.0	46.0
87.5°	9.6	13.2	19.5	18.1	12.5	13.2	25.3	33.9	29.4	22.6	23.4
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)