

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: P959749

Luminaire Tested: **NAV-SB1B-727-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959749
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1B-727-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 450mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5446.8 lumens
Efficiency: N/A
Efficacy: 136.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

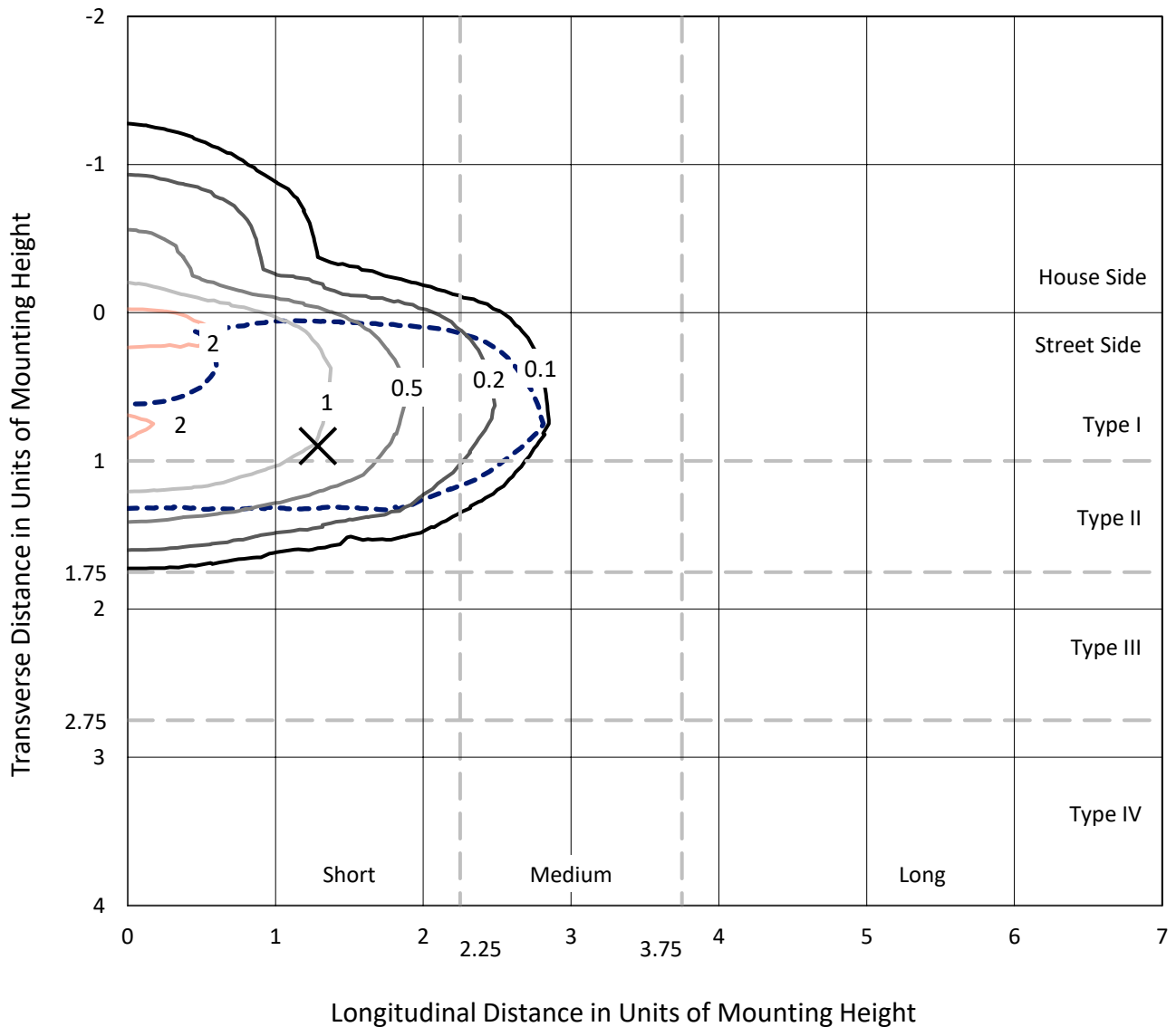
Input Watts (W): 39.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P959749
 CATALOG NUMBER: NAV-SB1B-727-U-AFL

Iso-Footcandle Lines of Horizontal Illumination

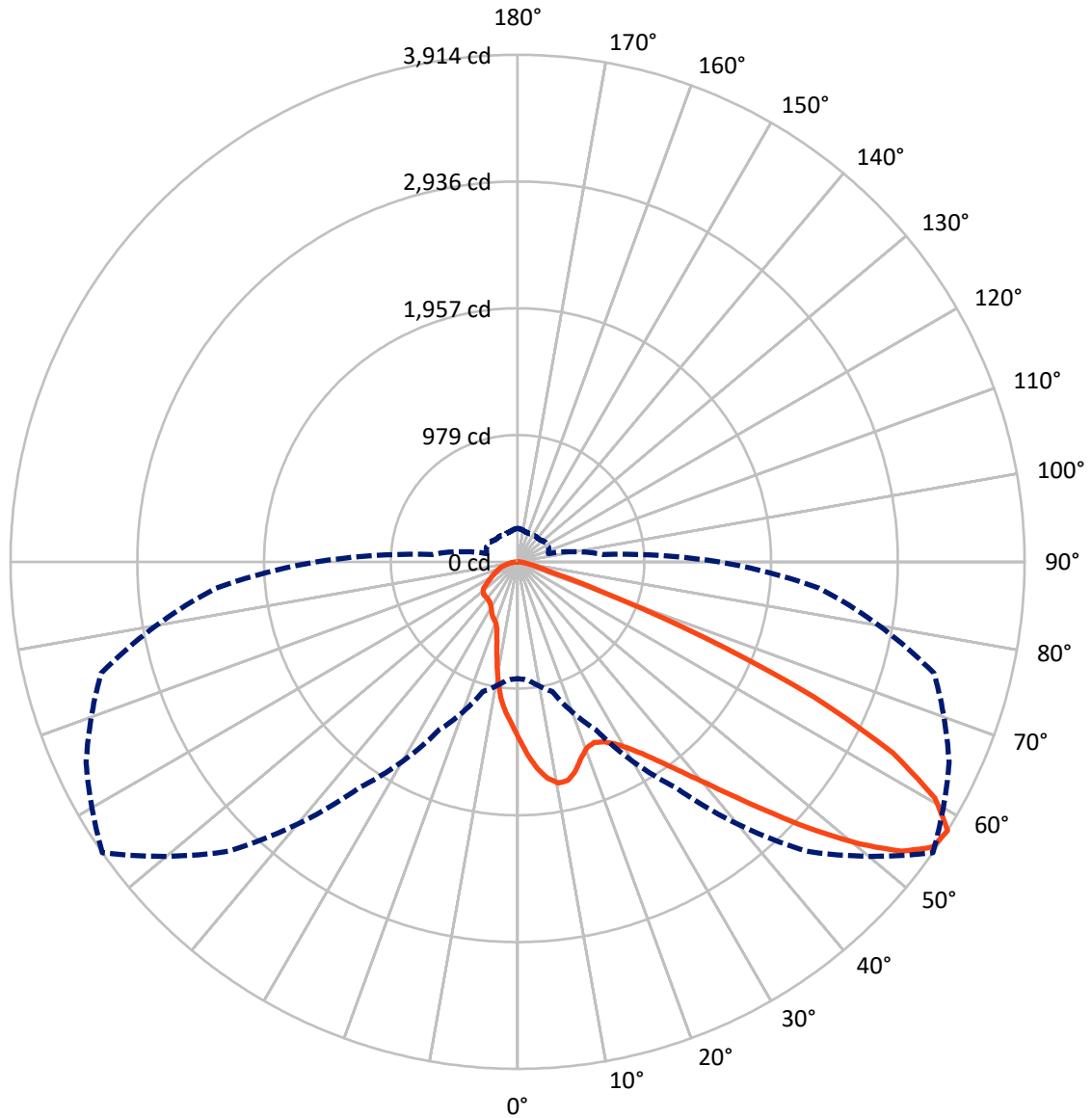
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc
 Type II - Short - N/A

REPORT NUMBER: P959749
CATALOG NUMBER: NAV-SB1B-727-U-AFL

Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P959749
 CATALOG NUMBER: NAV-SB1B-727-U-AFL

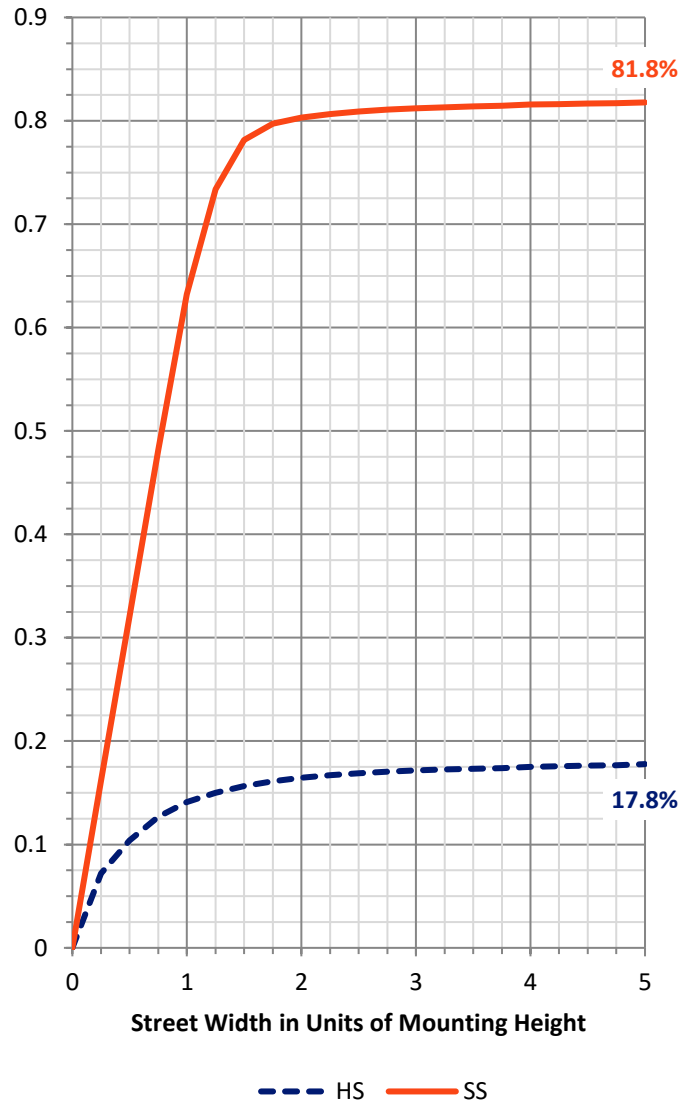
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	985.6	0.0	985.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	4461.3	0.0	4461.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	5446.8	0.0	5446.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.6	2.3
10°-20°	319.7	5.9
20°-30°	510.1	9.4
30°-40°	807.6	14.8
40°-50°	1236.1	22.7
50°-60°	1324.0	24.3
60°-70°	832.9	15.3
70°-80°	246.3	4.5
80°-90°	43.5	0.8
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°	5446.8	100.0
0°-180°	5446.8	100.0

Coefficient of Utilization



REPORT NUMBER: P959749

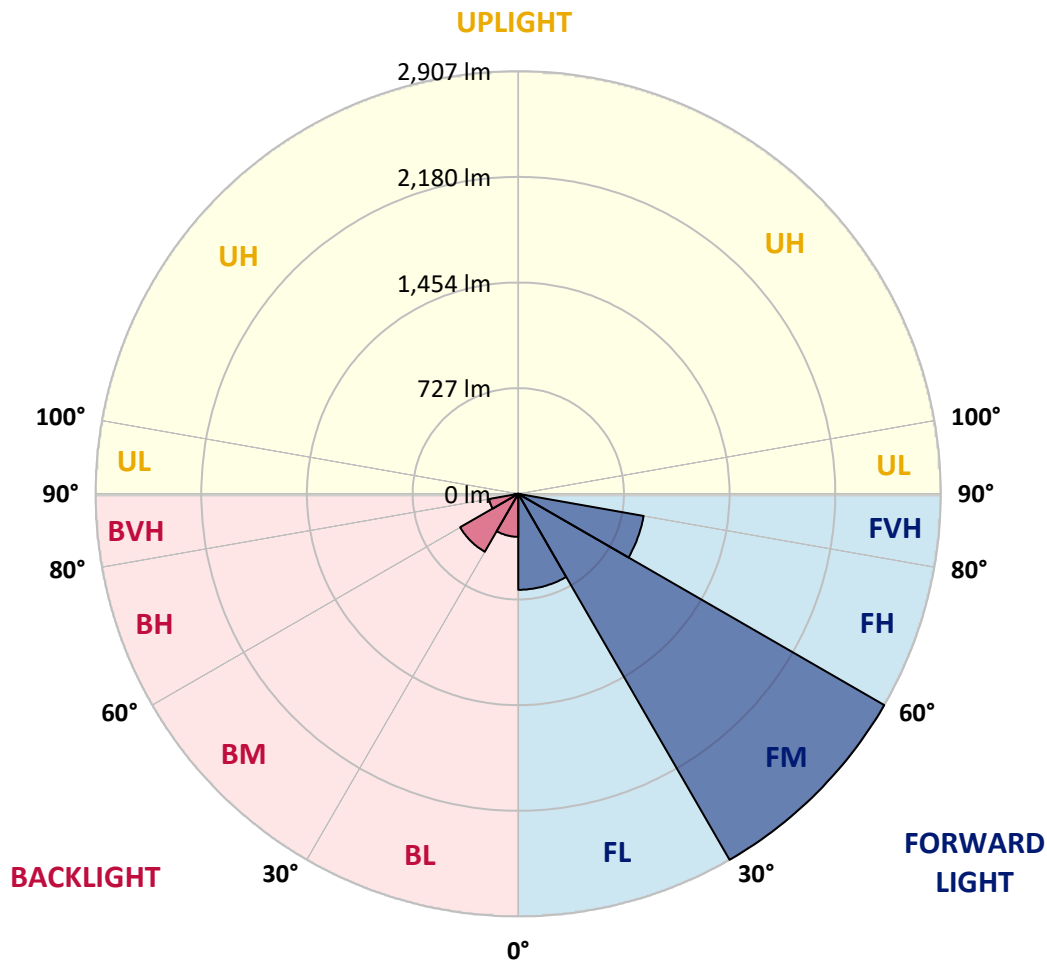
CATALOG NUMBER: NAV-SB1B-727-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	660.2	12.1			
FM (30°-60°)	2907.0	53.4			
FH (60°-80°)	875.7	16.1			G1/1800
FVH (80°-90°)	18.4	0.3			G1/100
BL (0°-30°)	296.2	5.4	B1/500		
BM (30°-60°)	460.6	8.5	B1/1000		
BH (60°-80°)	203.5	3.7	B1/500		G1/500
BVH (80°-90°)	25.1	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 II Short



REPORT NUMBER: P959749
 CATALOG NUMBER: NAV-SB1B-727-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1364.8	1364.8	1364.8	1364.8	1364.8	1364.8	1364.8	1364.8	1364.8	1364.8	1364.8
2.5°	1565.9	1564.8	1570.9	1549.8	1535.4	1516.0	1490.4	1457.8	1422.5	1385.4	1369.3
5°	1706.9	1697.1	1703.6	1687.8	1672.0	1642.8	1604.7	1551.4	1486.5	1412.3	1373.0
7.5°	1684.7	1677.9	1694.5	1708.6	1720.5	1716.8	1688.9	1633.1	1549.3	1441.7	1384.5
10°	1505.3	1497.7	1521.1	1569.8	1641.3	1703.6	1737.4	1702.7	1613.5	1473.7	1395.7
12.5°	1347.1	1343.4	1358.8	1398.3	1477.7	1597.2	1731.1	1763.5	1680.2	1511.8	1411.0
15°	1279.5	1275.0	1284.8	1304.8	1355.6	1466.8	1674.8	1805.2	1745.8	1555.7	1435.2
17.5°	1264.5	1259.5	1263.7	1274.2	1306.8	1391.5	1589.8	1825.7	1814.2	1604.7	1455.5
20°	1292.1	1287.9	1288.5	1287.9	1310.8	1378.0	1530.6	1817.8	1873.9	1649.7	1475.2
22.5°	1358.8	1351.9	1352.2	1337.2	1349.6	1401.7	1515.2	1796.7	1927.1	1689.2	1490.1
25°	1467.6	1454.9	1457.4	1419.4	1416.0	1454.6	1539.3	1780.4	1980.1	1720.7	1492.9
27.5°	1616.2	1601.9	1594.3	1537.7	1510.6	1529.8	1588.6	1786.1	2030.2	1748.0	1485.8
30°	1802.1	1784.6	1769.2	1688.9	1639.9	1632.8	1665.2	1823.2	2089.3	1776.7	1473.7
32.5°	2029.9	2009.6	1981.4	1875.0	1806.0	1769.2	1764.3	1889.4	2158.5	1813.3	1467.6
35°	2301.0	2274.6	2234.6	2096.9	2009.6	1934.2	1895.0	1984.8	2253.5	1868.6	1474.7
37.5°	2580.3	2550.5	2513.9	2350.0	2242.8	2131.5	2054.4	2114.4	2379.8	1943.4	1493.2
40°	2838.0	2804.5	2770.5	2624.6	2509.4	2375.3	2249.6	2278.3	2534.5	2033.0	1524.8
42.5°	2990.0	2965.3	2952.3	2873.5	2784.5	2648.5	2492.3	2472.5	2708.3	2136.0	1560.8
45°	2983.3	2973.2	3013.2	3045.8	3024.7	2949.2	2776.6	2687.3	2882.5	2225.3	1594.0
47.5°	2824.0	2830.7	2919.9	3103.5	3184.4	3223.7	3100.4	2898.3	3034.0	2292.0	1608.9
50°	2390.3	2395.9	2602.6	2998.5	3225.5	3447.6	3421.8	3104.1	3151.4	2332.9	1605.6
52.5°	2047.0	2050.7	2139.4	2687.1	3089.8	3560.2	3711.2	3298.1	3237.3	2344.2	1586.7
55°	1541.9	1554.6	1653.9	2108.1	2736.6	3471.0	3887.4	3498.0	3291.7	2345.3	1567.0
57.5°	900.8	914.6	1037.3	1431.0	2127.1	3159.9	3914.2	3675.4	3328.5	2336.3	1555.1
60°	441.3	447.1	500.6	752.0	1311.6	2560.3	3699.1	3761.3	3349.1	2331.5	1554.6
62.5°	297.4	296.5	298.8	371.2	646.3	1645.0	3250.8	3611.0	3338.1	2313.1	1549.0
65°	255.6	252.6	244.2	260.5	334.8	752.3	2511.7	3162.1	3254.5	2267.3	1510.3
67.5°	221.0	221.3	221.6	216.6	239.0	347.2	1534.8	2490.9	2954.3	2049.9	1361.7
70°	183.1	185.5	186.7	186.7	194.9	227.8	655.2	1707.2	2330.3	1607.2	1096.8
72.5°	166.7	161.3	162.0	159.1	159.1	173.4	263.8	967.8	1468.1	904.2	669.3
75°	136.0	139.4	139.9	138.0	131.5	132.3	156.5	406.0	628.2	375.0	330.9
77.5°	117.5	117.5	118.6	117.2	112.0	99.1	104.4	157.4	213.7	153.8	165.3
80°	94.3	94.1	98.8	101.7	93.8	73.2	66.7	87.0	94.9	67.5	85.9
82.5°	45.9	48.7	67.9	77.4	71.2	52.9	40.8	54.0	50.6	29.8	38.5
85°	26.8	25.3	30.4	43.0	40.8	29.3	19.7	28.2	26.4	15.2	15.5
87.5°	8.4	7.9	6.1	14.7	11.8	8.2	5.3	8.2	7.3	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P959749
 CATALOG NUMBER: NAV-SB1B-727-U-AFL

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1364.8	1364.8	1364.8	1364.8	1364.8	1364.8	1364.8	1364.8	1364.8	1364.8
2.5°	1349.3	1316.1	1283.2	1253.1	1234.7	1222.9	1211.0	1197.8	1192.8	1185.2
5°	1335.8	1271.6	1214.4	1165.1	1120.4	1085.2	1049.7	1021.0	1008.1	1016.8
7.5°	1327.9	1235.0	1146.9	1056.5	969.4	900.0	839.4	796.8	777.7	782.5
10°	1320.9	1193.6	1059.3	916.6	791.5	705.3	643.4	611.0	598.9	601.5
12.5°	1314.4	1147.2	953.7	765.9	632.9	576.2	558.3	558.6	560.9	562.6
15°	1313.2	1091.1	835.7	634.1	547.3	543.8	562.8	575.0	581.5	583.4
17.5°	1311.6	1024.1	715.4	544.3	526.5	551.3	569.1	577.0	582.0	582.3
20°	1304.8	939.1	604.5	501.5	522.0	543.5	554.4	560.6	564.9	566.2
22.5°	1284.0	844.5	518.1	482.4	504.0	521.2	534.1	541.2	543.8	545.4
25°	1246.5	738.6	458.4	464.0	479.0	500.6	511.1	512.5	511.6	514.1
27.5°	1197.5	625.1	421.3	439.2	458.4	477.0	482.7	481.7	480.1	482.9
30°	1138.4	523.2	397.6	411.4	437.6	454.5	459.5	457.6	454.2	457.3
32.5°	1075.9	439.8	378.1	392.0	420.4	437.0	442.1	440.1	437.6	440.1
35°	1017.6	381.5	360.2	379.0	406.9	423.2	429.7	430.0	430.0	433.1
37.5°	964.1	347.5	345.2	370.8	397.6	412.3	421.5	422.1	410.0	410.8
40°	914.6	333.1	338.5	365.5	388.6	402.6	403.2	371.7	349.4	348.9
42.5°	874.0	330.3	340.4	364.9	382.1	382.6	343.0	318.5	312.3	312.5
45°	836.0	329.4	344.9	364.9	372.5	330.6	303.8	297.4	297.9	300.1
47.5°	793.5	326.1	345.7	359.9	344.9	294.0	286.1	283.3	282.2	282.7
50°	747.0	314.0	335.1	349.7	297.7	278.2	268.3	267.5	268.9	269.8
52.5°	698.0	294.3	316.7	331.4	275.9	264.4	253.4	255.4	261.6	263.5
55°	665.9	271.1	292.5	294.8	260.8	251.4	242.1	246.6	258.2	261.9
57.5°	657.4	246.6	265.0	262.4	241.3	240.2	234.5	238.5	253.2	258.5
60°	655.0	224.7	237.9	236.0	222.4	227.8	226.4	228.4	233.4	235.1
62.5°	635.2	207.3	213.7	210.9	205.5	214.8	218.2	214.0	217.9	219.9
65°	585.1	193.2	190.0	188.1	190.3	198.7	205.5	197.1	200.8	206.4
67.5°	502.4	174.0	165.5	167.8	174.9	179.4	188.1	178.6	181.6	191.2
70°	406.3	149.8	142.2	148.6	155.4	164.7	166.2	159.7	167.0	177.6
72.5°	287.5	125.3	119.9	133.1	135.4	147.5	144.4	141.3	151.5	155.2
75°	199.4	101.1	98.0	108.1	116.3	126.7	124.4	128.1	149.5	151.2
77.5°	126.2	78.5	76.6	83.0	94.3	105.9	109.6	151.2	255.4	265.6
80°	73.2	58.5	56.3	61.4	71.2	81.9	105.6	185.5	168.4	166.5
82.5°	40.8	40.3	37.4	38.8	47.6	59.1	149.2	130.7	106.2	109.6
85°	19.2	23.7	20.3	19.5	26.8	69.3	99.6	74.6	49.5	48.4
87.5°	5.0	4.5	4.5	5.0	11.3	59.7	39.7	31.8	18.9	18.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)