

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: P959244

Luminaire Tested: **NAV-SB1A-727-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959244
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1A-727-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4269.1 lumens
Efficiency: N/A
Efficacy: 138.2 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

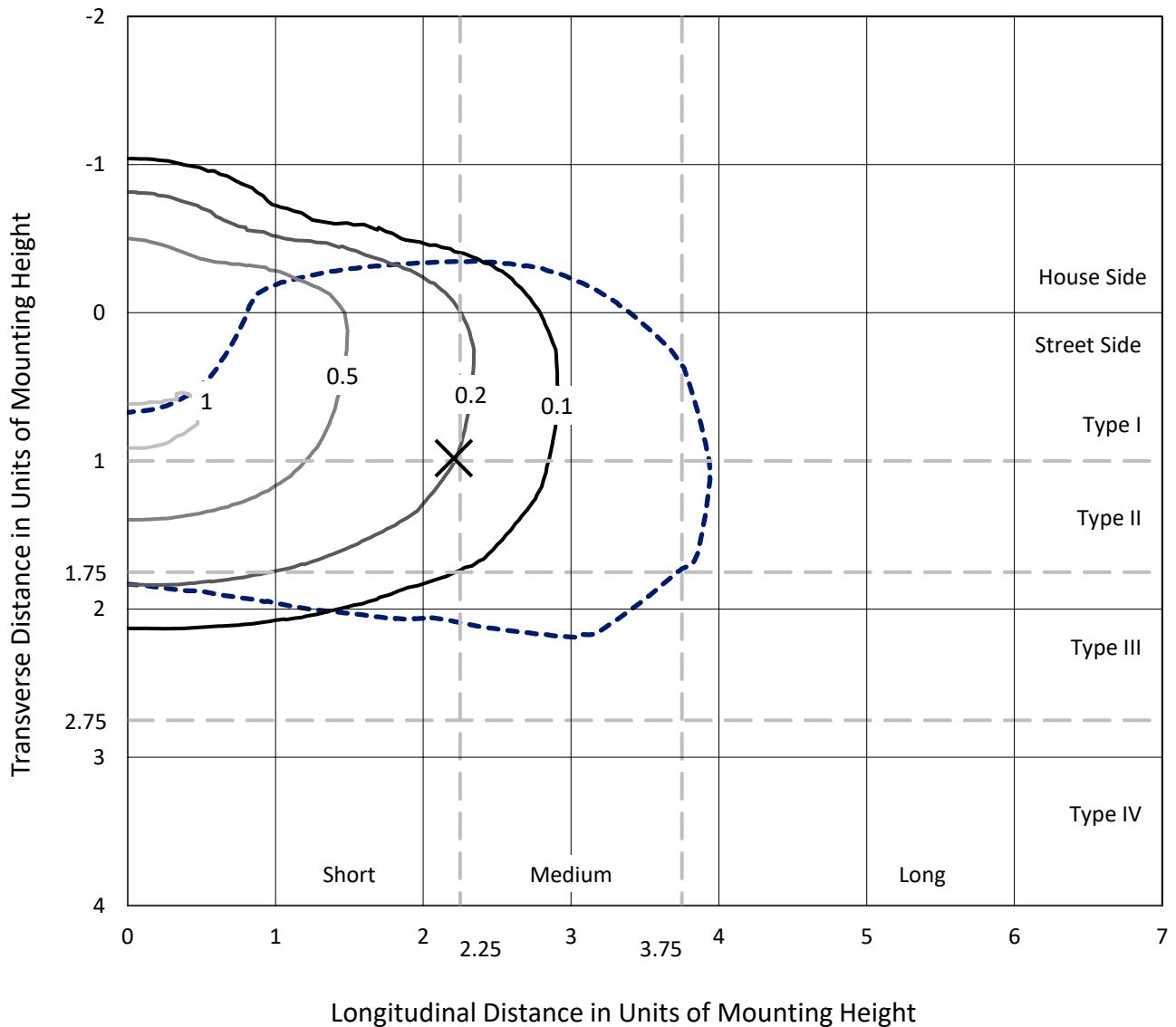
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

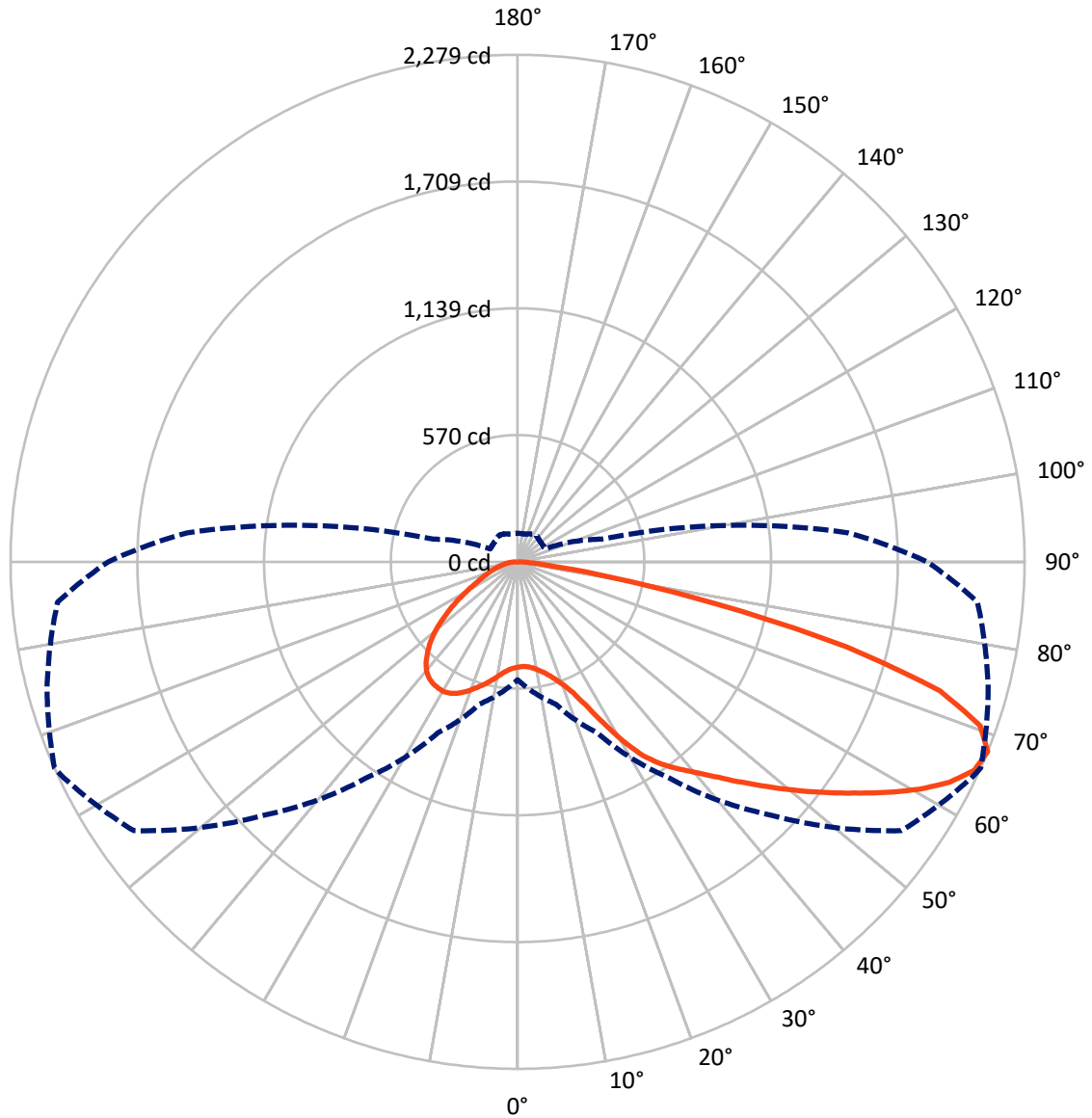
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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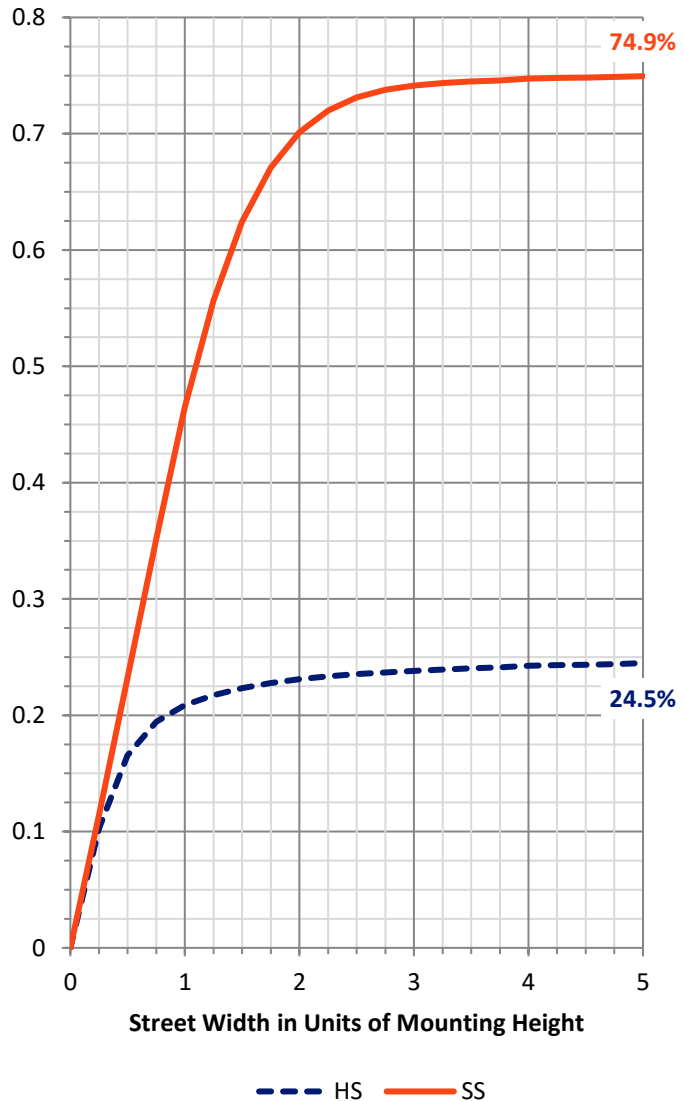
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1061.5	0.0	1061.5
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	3207.6	0.0	3207.6
	% Fixture	75.1	0.0	75.1
Total	Lumens	4269.1	0.0	4269.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.9	1.1
10°-20°	155.1	3.6
20°-30°	299.0	7.0
30°-40°	524.2	12.3
40°-50°	779.3	18.3
50°-60°	987.8	23.1
60°-70°	966.5	22.6
70°-80°	461.0	10.8
80°-90°	49.3	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°	4269.1	100.0
0°-180°	4269.1	100.0

Coefficient of Utilization



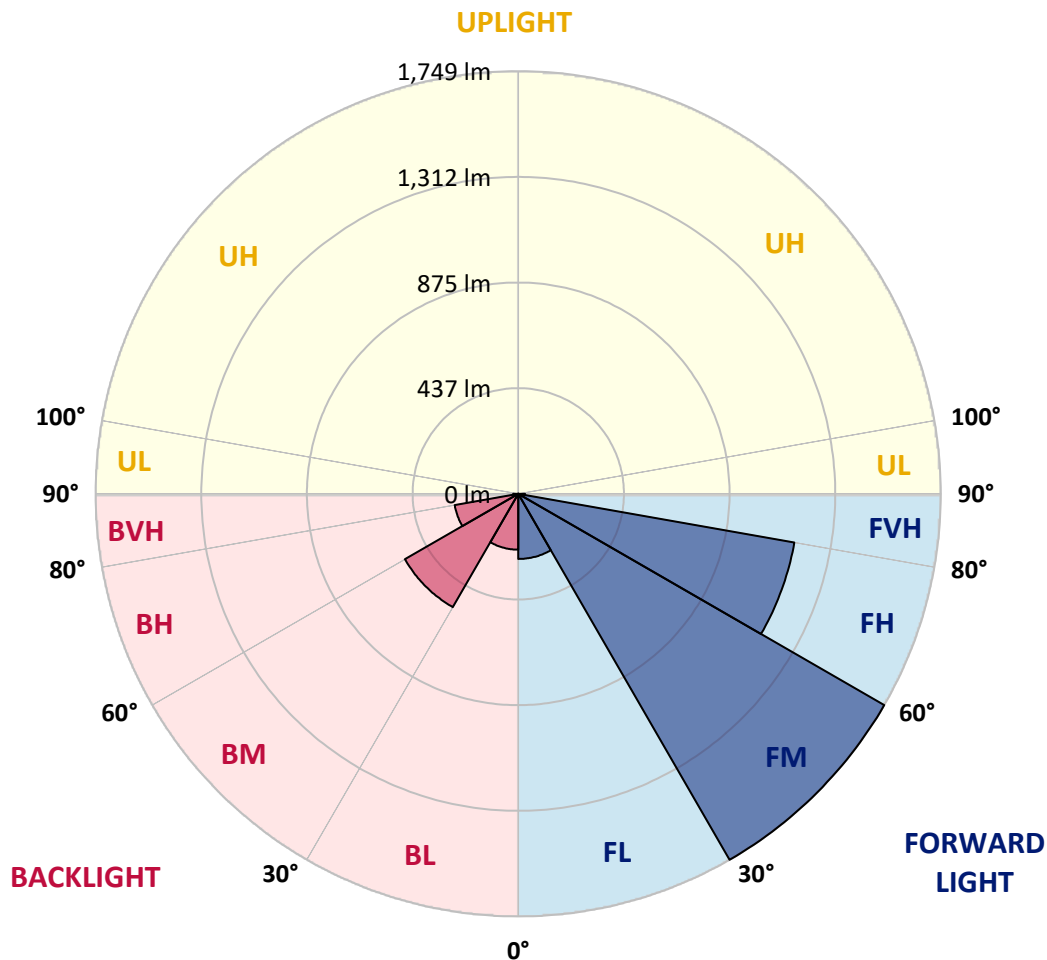
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	269.8	6.3			
FM (30°-60°)	1749.4	41.0			
FH (60°-80°)	1160.5	27.2			G1/1800
FVH (80°-90°)	27.9	0.7			G1/100
BL (0°-30°)	231.2	5.4	B1/500		
BM (30°-60°)	541.8	12.7	B1/1000		
BH (60°-80°)	267.1	6.3	B1/500		G1/500
BVH (80°-90°)	21.3	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°	473.6	473.6	473.6	473.6	473.6	473.6	473.6	473.6	473.6	473.6	473.6
2.5°	468.5	471.3	470.6	469.4	469.2	469.7	470.4	471.0	470.8	471.9	473.8
5°	467.2	470.0	469.7	469.7	470.6	472.4	473.6	474.6	473.6	474.9	477.3
7.5°	468.1	470.2	471.0	471.9	474.2	477.5	480.2	482.7	481.3	482.9	486.1
10°	479.6	481.1	482.1	482.1	483.6	487.4	490.1	494.6	493.4	495.9	500.0
12.5°	500.4	501.9	501.9	501.1	502.2	504.7	505.5	510.6	508.5	512.5	516.6
15°	526.0	529.1	526.6	525.1	525.5	528.0	527.8	531.6	529.6	532.9	536.5
17.5°	554.2	558.3	554.2	554.0	553.1	555.9	556.1	559.4	555.9	558.3	560.8
20°	587.6	593.3	589.9	591.0	589.1	590.1	591.2	596.2	590.6	592.3	591.7
22.5°	634.8	641.5	638.0	642.2	640.8	639.9	639.7	648.4	639.7	640.4	633.9
25°	703.5	711.5	705.2	711.0	711.0	713.9	717.3	728.6	713.9	709.7	692.9
27.5°	804.8	812.8	800.5	804.1	803.0	810.2	806.6	834.5	818.7	811.8	777.9
30°	926.8	941.2	917.9	917.0	915.8	927.2	932.4	950.8	934.9	927.9	887.1
32.5°	1058.7	1073.7	1045.9	1037.8	1033.6	1040.6	1036.3	1051.0	1040.1	1029.3	978.9
35°	1198.2	1213.0	1186.5	1170.9	1153.8	1139.2	1124.0	1127.8	1117.5	1101.1	1048.9
37.5°	1330.1	1357.3	1329.2	1312.4	1280.9	1252.6	1209.9	1192.2	1182.5	1167.5	1114.8
40°	1464.5	1480.0	1458.7	1444.3	1410.2	1365.5	1297.3	1259.9	1246.9	1232.4	1187.7
42.5°	1563.4	1578.2	1566.7	1556.9	1530.2	1478.4	1390.2	1343.4	1324.5	1308.1	1270.2
45°	1641.8	1652.9	1645.7	1649.3	1637.8	1587.6	1486.5	1432.8	1413.4	1393.4	1363.6
47.5°	1673.5	1685.2	1696.6	1717.9	1737.5	1700.5	1589.9	1529.7	1509.1	1488.7	1459.3
50°	1669.9	1681.8	1715.0	1760.3	1820.9	1808.5	1698.8	1632.9	1613.9	1590.5	1563.4
52.5°	1641.2	1654.7	1697.3	1772.6	1869.1	1889.5	1809.9	1739.4	1721.5	1693.7	1666.5
55°	1565.9	1573.9	1637.8	1744.7	1880.6	1946.1	1918.7	1853.0	1835.1	1796.2	1766.6
57.5°	1426.1	1437.8	1530.8	1669.0	1851.9	1984.4	2014.2	1972.3	1955.0	1899.1	1868.2
60°	1243.7	1262.4	1368.9	1542.1	1778.7	1984.2	2101.0	2089.6	2075.2	2000.6	1968.2
62.5°	1037.4	1058.9	1161.4	1362.6	1650.9	1927.9	2155.4	2187.9	2180.5	2094.1	2052.8
65°	796.7	811.5	913.6	1130.5	1451.9	1807.0	2161.6	2254.9	2256.2	2165.2	2097.0
67.5°	530.4	573.1	661.7	848.3	1185.4	1609.4	2106.4	2265.9	2278.9	2189.6	2074.8
70°	258.8	314.9	401.7	551.3	848.3	1306.4	1962.2	2175.8	2204.7	2118.3	1942.5
72.5°	107.4	125.6	172.9	272.0	487.0	881.5	1672.4	1931.2	1984.8	1877.0	1633.1
75°	72.5	78.5	98.9	139.5	221.8	434.7	1206.1	1440.0	1526.3	1417.6	1158.8
77.5°	55.9	59.7	72.0	97.6	131.9	164.4	645.5	867.9	912.5	844.7	602.9
80°	44.0	46.8	53.8	71.1	93.6	87.9	220.1	393.2	419.0	351.5	193.8
82.5°	38.1	39.3	38.5	48.2	62.1	51.4	72.3	145.1	160.1	116.2	63.2
85°	27.6	30.7	32.1	29.8	33.0	26.0	29.6	51.4	56.5	50.4	35.7
87.5°	11.2	16.6	20.4	19.3	12.1	7.4	9.2	15.1	17.3	18.9	11.7
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°	473.6	473.6	473.6	473.6	473.6	473.6	473.6	473.6	473.6	473.6	473.6
2.5°	474.0	475.5	476.6	478.0	478.9	480.2	482.9	484.5	484.7	485.8	485.6
5°	478.2	480.4	482.9	486.5	490.6	493.9	499.1	502.7	504.0	505.1	504.9
7.5°	487.4	490.6	495.1	501.3	507.2	511.7	517.9	522.1	526.4	528.0	528.2
10°	501.1	505.5	512.1	520.6	526.8	532.7	539.3	542.8	547.0	548.9	549.8
12.5°	518.1	522.9	531.4	543.2	549.1	553.1	555.3	554.5	555.3	557.0	557.4
15°	537.6	542.8	552.5	565.3	569.3	565.7	560.8	556.3	555.6	556.1	557.6
17.5°	560.8	564.6	575.7	586.5	583.6	568.9	558.1	550.9	547.2	546.2	547.8
20°	593.1	593.1	602.3	609.0	589.5	564.4	547.6	535.9	528.5	525.3	524.6
22.5°	632.3	628.7	634.6	629.9	588.3	551.8	528.5	508.3	497.0	492.6	491.9
25°	682.1	677.8	676.3	647.1	580.3	531.8	493.9	469.4	459.6	457.2	457.6
27.5°	757.3	746.5	726.1	656.5	565.5	500.4	453.6	430.9	425.3	425.5	426.2
30°	857.3	835.8	785.8	658.2	541.2	456.0	412.3	396.2	393.4	394.5	398.3
32.5°	950.0	929.5	846.8	650.9	504.0	412.5	375.3	364.5	360.5	361.8	363.6
35°	1022.6	1017.0	903.2	640.8	458.3	371.7	342.0	332.8	325.0	323.2	324.5
37.5°	1091.2	1089.0	945.7	626.7	413.0	342.8	315.4	303.3	291.8	285.6	285.8
40°	1166.6	1164.4	973.4	605.0	372.8	317.6	291.4	275.4	261.3	249.9	251.0
42.5°	1251.4	1238.2	986.7	573.8	338.7	296.3	271.8	250.3	231.8	221.2	221.8
45°	1344.0	1314.2	986.5	534.0	310.0	276.8	251.0	220.5	203.3	193.3	192.9
47.5°	1442.3	1386.8	974.4	490.1	282.2	255.2	218.7	195.4	183.9	177.8	176.5
50°	1543.6	1454.8	953.8	439.6	253.7	230.8	198.5	182.6	173.8	168.2	166.3
52.5°	1639.0	1516.5	928.9	382.4	224.8	207.0	189.5	177.2	168.0	161.7	159.1
55°	1727.5	1569.7	893.6	323.9	201.2	191.1	185.3	175.0	164.4	157.0	154.1
57.5°	1806.4	1604.2	832.8	269.0	184.4	180.1	180.8	171.2	159.1	152.7	148.7
60°	1871.8	1629.5	742.9	218.0	170.7	169.3	173.8	164.0	149.9	142.7	139.5
62.5°	1911.0	1629.1	632.5	178.6	159.1	159.5	164.6	155.0	140.6	133.9	131.9
65°	1907.7	1589.2	511.4	152.7	147.8	148.2	155.0	145.1	133.0	128.9	128.7
67.5°	1840.2	1491.8	392.3	135.9	135.5	137.5	145.3	138.4	128.3	127.8	128.5
70°	1657.3	1289.8	282.6	122.5	122.7	125.6	135.9	134.2	125.9	126.7	126.5
72.5°	1329.0	983.4	189.7	108.3	108.5	113.3	127.0	130.8	123.4	135.3	137.0
75°	885.1	613.3	122.0	93.3	93.6	99.6	119.1	124.2	116.6	134.8	135.9
77.5°	425.3	275.6	88.4	78.5	78.5	84.2	102.9	111.2	99.3	104.8	96.0
80°	146.9	103.6	69.5	63.2	61.9	65.7	86.8	96.5	85.7	78.9	74.0
82.5°	57.9	53.8	55.9	49.1	44.6	47.2	67.5	79.6	63.0	57.0	56.8
85°	33.2	35.0	39.5	32.5	25.8	28.9	49.6	57.2	47.6	41.9	42.8
87.5°	9.0	12.3	18.1	16.8	11.7	12.3	23.6	31.7	27.4	21.1	21.7
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)