

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: P959430

Luminaire Tested: **NAV-SB1A-827-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P959430
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-827-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4002.6 lumens
Efficiency: N/A
Efficacy: 129.5 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

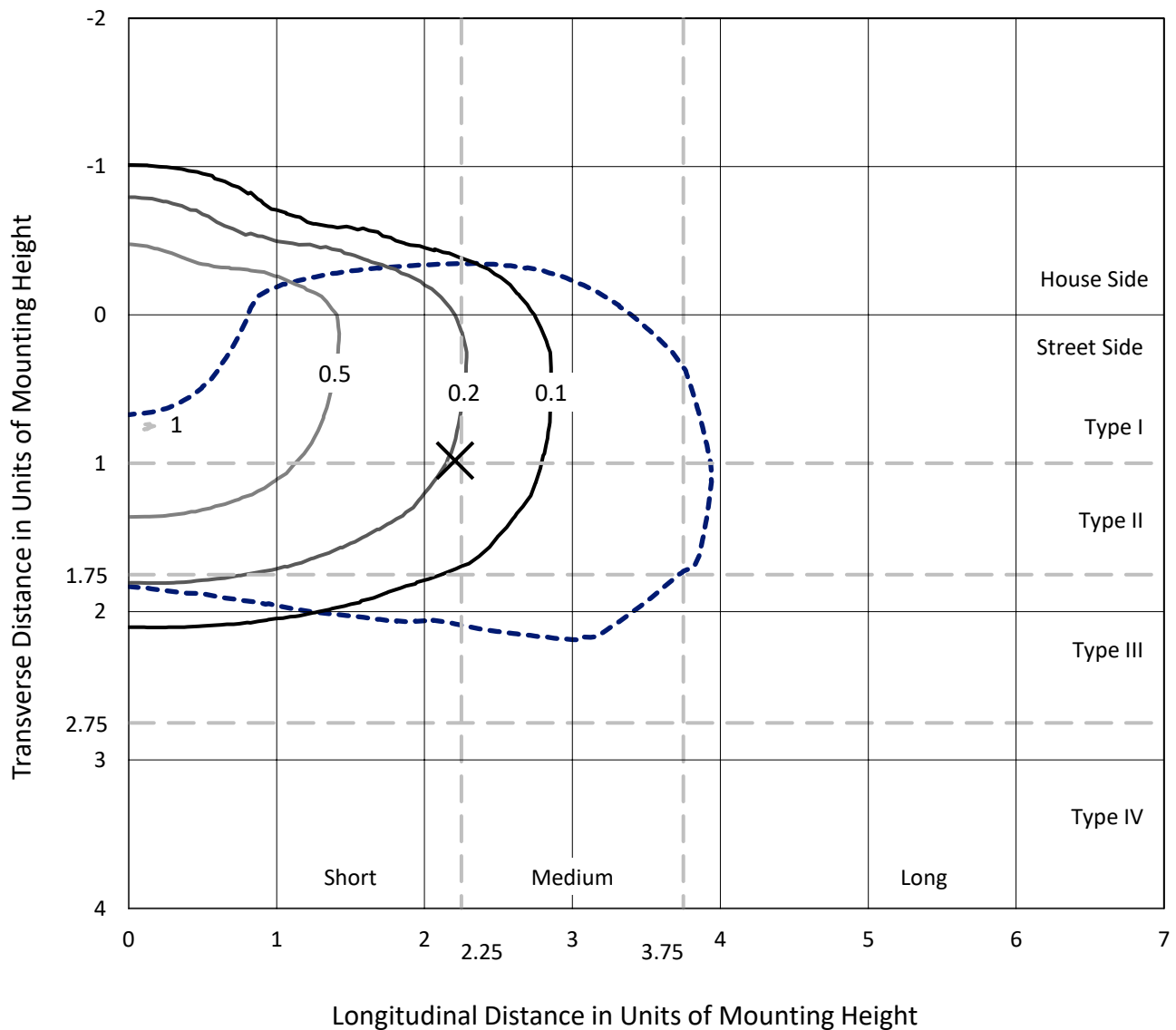
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

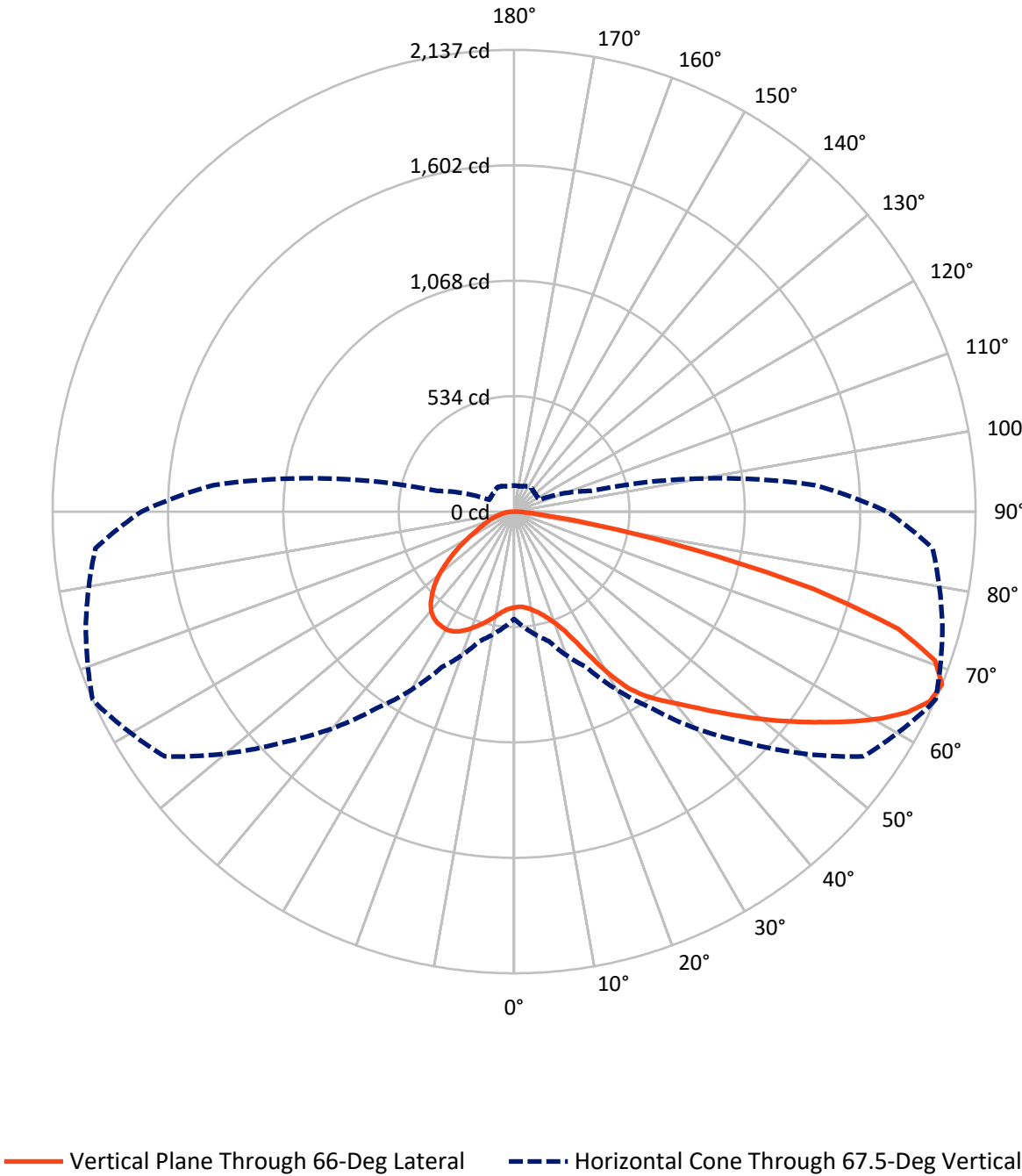
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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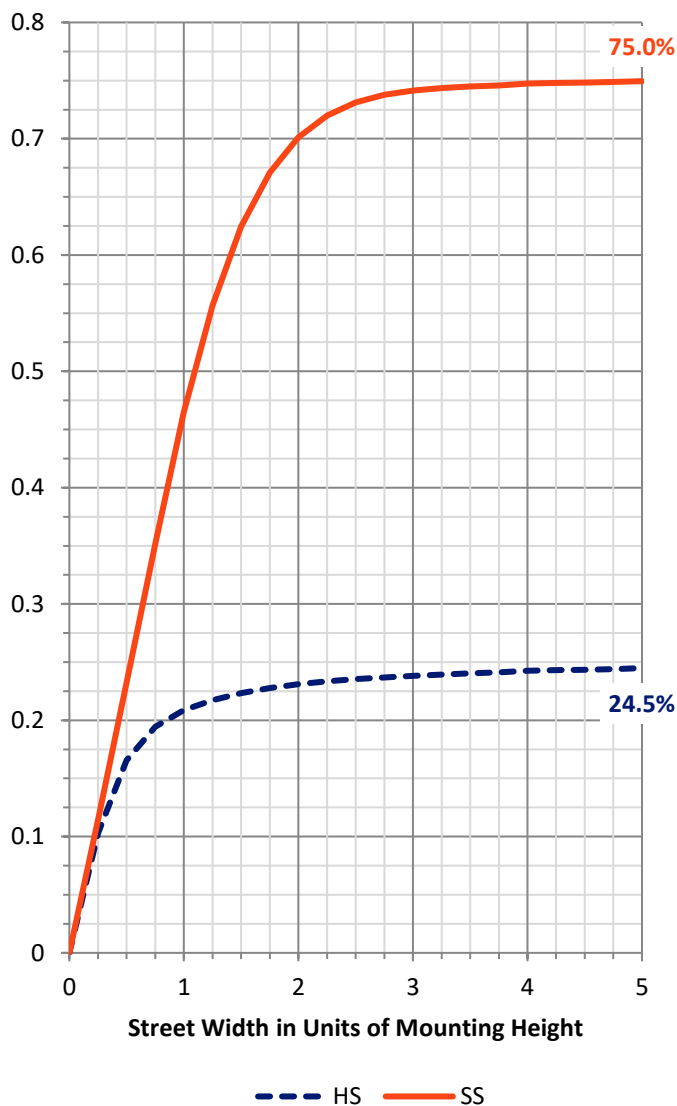
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	995.2	0.0	995.2
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	3007.4	0.0	3007.4
	% Fixture	75.1	0.0	75.1
Total	Lumens	4002.6	0.0	4002.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.0	1.1
10°-20°	145.4	3.6
20°-30°	280.3	7.0
30°-40°	491.5	12.3
40°-50°	730.6	18.3
50°-60°	926.1	23.1
60°-70°	906.2	22.6
70°-80°	432.3	10.8
80°-90°	46.2	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°	4002.6	100.0
0°-180°	4002.6	100.0

Coefficient of Utilization



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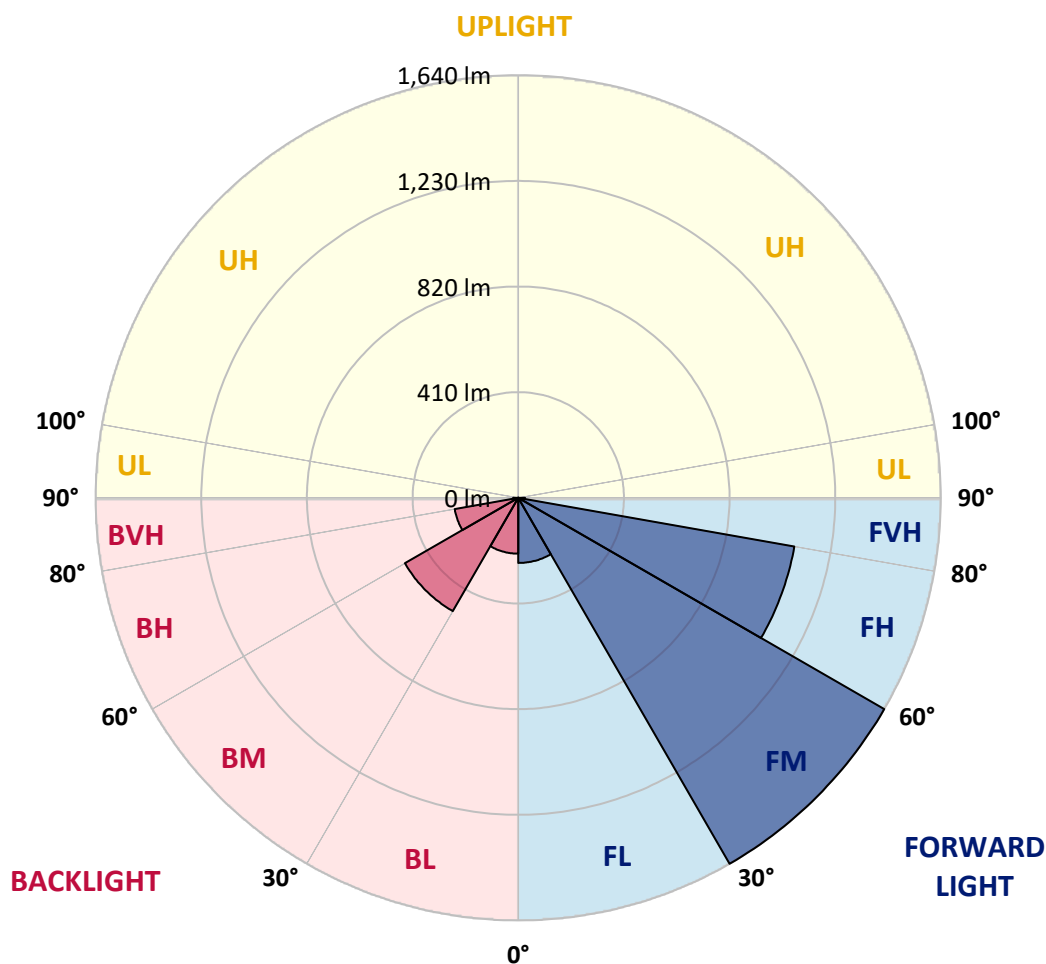
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	252.9	6.3			
FM	(30°-60°)	1640.2	41.0			
FH	(60°-80°)	1088.0	27.2			G1/1800
FVH	(80°-90°)	26.2	0.7			G1/100
BL	(0°-30°)	216.8	5.4	B1/500		
BM	(30°-60°)	508.0	12.7	B1/1000		
BH	(60°-80°)	250.5	6.3	B1/500		G1/500
BVH	(80°-90°)	20.0	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°	443.9	443.9	443.9	443.9	443.9	443.9	443.9	443.9	443.9	443.9	443.9
2.5°	439.3	441.9	441.2	440.1	439.9	440.3	441.0	441.7	441.5	442.5	444.1
5°	438.1	440.5	440.3	440.3	441.2	442.9	443.9	445.0	443.9	445.2	447.5
7.5°	438.9	440.7	441.7	442.5	444.5	447.7	450.3	452.5	451.3	452.7	455.7
10°	449.7	451.1	451.9	451.9	453.4	456.9	459.5	463.7	462.7	464.9	468.7
12.5°	469.1	470.7	470.7	469.9	470.9	473.1	474.1	478.7	476.7	480.5	484.3
15°	493.1	496.1	493.7	492.3	492.7	495.1	494.9	498.5	496.5	499.7	503.1
17.5°	519.7	523.5	519.7	519.5	518.6	521.1	521.3	524.5	521.1	523.5	525.7
20°	550.9	556.3	553.1	554.1	552.3	553.3	554.3	558.9	553.7	555.4	554.7
22.5°	595.1	601.5	598.1	602.1	600.9	600.0	599.7	607.9	599.7	600.4	594.3
25°	659.5	667.1	661.2	666.7	666.7	669.4	672.5	683.1	669.4	665.4	649.6
27.5°	754.6	762.1	750.6	753.9	752.9	759.6	756.2	782.3	767.6	761.1	729.3
30°	869.0	882.4	860.6	859.7	858.6	869.4	874.2	891.4	876.6	870.0	831.8
32.5°	992.6	1006.8	980.6	973.0	969.0	975.6	971.6	985.4	975.2	965.0	917.8
35°	1123.4	1137.3	1112.5	1097.8	1081.8	1068.2	1053.8	1057.4	1047.8	1032.4	983.4
37.5°	1247.1	1272.5	1246.2	1230.5	1201.0	1174.3	1134.4	1117.8	1108.7	1094.6	1045.2
40°	1373.1	1387.5	1367.6	1354.1	1322.1	1280.3	1216.4	1181.2	1169.0	1155.4	1113.6
42.5°	1465.7	1479.7	1468.9	1459.7	1434.7	1386.1	1303.5	1259.5	1241.8	1226.5	1190.9
45°	1539.4	1549.7	1542.9	1546.3	1535.7	1488.5	1393.7	1343.4	1325.1	1306.4	1278.4
47.5°	1569.1	1580.0	1590.7	1610.7	1629.0	1594.3	1490.7	1434.3	1414.9	1395.7	1368.2
50°	1565.7	1576.9	1607.9	1650.5	1707.2	1695.7	1592.8	1530.9	1513.1	1491.3	1465.7
52.5°	1538.7	1551.3	1591.3	1662.0	1752.4	1771.6	1696.9	1630.9	1614.1	1587.9	1562.5
55°	1468.1	1475.7	1535.7	1635.7	1763.2	1824.6	1798.9	1737.3	1720.5	1684.1	1656.3
57.5°	1337.1	1348.0	1435.3	1564.9	1736.2	1860.5	1888.5	1849.2	1833.0	1780.6	1751.6
60°	1166.1	1183.6	1283.5	1445.9	1667.7	1860.3	1969.8	1959.2	1945.7	1875.6	1845.4
62.5°	972.6	992.8	1089.0	1277.6	1547.9	1807.5	2020.8	2051.2	2044.4	1963.4	1924.6
65°	747.0	760.9	856.6	1060.0	1361.3	1694.2	2026.6	2114.2	2115.4	2030.0	1966.1
67.5°	497.3	537.3	620.4	795.4	1111.4	1508.9	1975.0	2124.4	2136.6	2053.0	1945.2
70°	242.7	295.3	376.7	516.9	795.4	1224.8	1839.7	2040.0	2067.0	1986.0	1821.2
72.5°	100.8	117.8	162.2	255.1	456.5	826.5	1568.0	1810.7	1861.0	1759.8	1531.2
75°	68.0	73.6	92.8	130.8	208.0	407.5	1130.8	1350.1	1431.1	1329.1	1086.4
77.5°	52.4	56.0	67.5	91.4	123.6	154.2	605.3	813.6	855.5	792.0	565.3
80°	41.2	44.0	50.4	66.6	87.7	82.4	206.3	368.7	392.9	329.5	181.7
82.5°	35.8	36.8	36.2	45.2	58.2	48.2	67.8	136.0	150.2	109.0	59.3
85°	25.8	28.8	30.0	28.0	31.0	24.4	27.8	48.2	53.0	47.4	33.4
87.5°	10.6	15.6	19.2	18.0	11.4	7.0	8.6	14.0	16.2	17.6	11.0
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°	443.9	443.9	443.9	443.9	443.9	443.9	443.9	443.9	443.9	443.9	443.9
2.5°	444.3	445.9	446.9	448.1	449.0	450.3	452.7	454.3	454.5	455.5	455.3
5°	448.3	450.5	452.7	456.1	459.9	463.1	467.9	471.3	472.5	473.6	473.3
7.5°	456.9	459.9	464.1	470.1	475.5	479.7	485.5	489.5	493.5	495.1	495.3
10°	469.9	474.1	480.1	488.1	493.9	499.5	505.5	508.9	512.9	514.7	515.5
12.5°	485.7	490.3	498.3	509.3	514.9	518.6	520.7	519.9	520.7	522.1	522.6
15°	504.1	508.9	517.9	529.9	533.7	530.3	525.7	521.5	520.9	521.3	522.9
17.5°	525.7	529.3	539.9	549.9	547.2	533.3	523.3	516.5	513.1	512.1	513.5
20°	556.1	556.1	564.7	570.9	552.7	529.1	513.3	502.5	495.5	492.5	491.9
22.5°	592.9	589.5	594.9	590.5	551.7	517.3	495.5	476.5	466.1	461.9	461.1
25°	639.5	635.5	634.1	606.7	544.1	498.7	463.1	440.1	430.9	428.6	429.0
27.5°	710.0	699.9	680.7	615.5	530.1	469.1	425.3	404.0	398.7	398.9	399.5
30°	803.8	783.6	736.7	617.0	507.5	427.5	386.5	371.4	368.9	369.9	373.5
32.5°	890.6	871.5	793.9	610.3	472.5	386.7	351.9	341.7	337.9	339.2	340.9
35°	958.8	953.5	846.9	600.9	429.7	348.5	320.7	312.1	304.7	303.1	304.3
37.5°	1023.2	1021.0	886.6	587.5	387.1	321.3	295.7	284.3	273.6	267.7	267.9
40°	1093.8	1091.6	912.7	567.1	349.5	297.8	273.2	258.3	245.0	234.3	235.3
42.5°	1173.2	1160.8	925.1	537.9	317.5	277.8	254.9	234.7	217.2	207.4	208.0
45°	1260.1	1232.2	924.9	500.7	290.6	259.5	235.3	206.7	190.5	181.3	180.8
47.5°	1352.2	1300.3	913.6	459.5	264.6	239.3	205.0	183.2	172.4	166.8	165.5
50°	1447.3	1364.0	894.2	412.2	237.8	216.4	186.1	171.2	163.0	157.7	155.8
52.5°	1536.7	1421.9	870.8	358.5	210.7	194.1	177.7	166.2	157.5	151.6	149.1
55°	1619.7	1471.7	837.8	303.7	188.6	179.2	173.7	164.0	154.2	147.2	144.5
57.5°	1693.5	1504.1	780.8	252.2	172.9	168.9	169.5	160.4	149.1	143.2	139.4
60°	1755.0	1527.9	696.5	204.4	160.0	158.8	163.0	153.8	140.5	133.8	130.8
62.5°	1791.8	1527.5	593.1	167.4	149.1	149.5	154.4	145.3	131.8	125.6	123.6
65°	1788.6	1489.9	479.5	143.2	138.6	139.0	145.3	136.0	124.7	121.0	120.7
67.5°	1725.3	1398.7	367.8	127.4	127.0	128.9	136.3	129.8	120.3	119.8	120.5
70°	1553.9	1209.2	265.0	114.8	115.0	117.8	127.4	125.8	118.0	118.8	118.6
72.5°	1246.0	922.0	177.9	101.6	101.8	106.2	119.0	122.6	115.6	126.8	128.5
75°	829.8	574.9	114.4	87.5	87.7	93.4	111.6	116.5	109.4	126.4	127.4
77.5°	398.7	258.5	82.8	73.6	73.6	78.8	96.6	104.3	93.2	98.2	90.0
80°	137.8	97.2	65.2	59.3	58.0	61.6	81.4	90.4	80.4	74.0	69.4
82.5°	54.2	50.4	52.4	46.0	41.8	44.2	63.3	74.6	59.1	53.4	53.2
85°	31.2	32.8	37.0	30.4	24.2	27.2	46.4	53.6	44.6	39.4	40.2
87.5°	8.4	11.6	17.0	15.8	11.0	11.6	22.0	29.6	25.6	19.8	20.4
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)