

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: P881609

Luminaire Tested: **NAV-SB1A-830-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881609
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-SB1A-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3931 lumens
Efficiency: N/A
Efficacy: 127.2 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

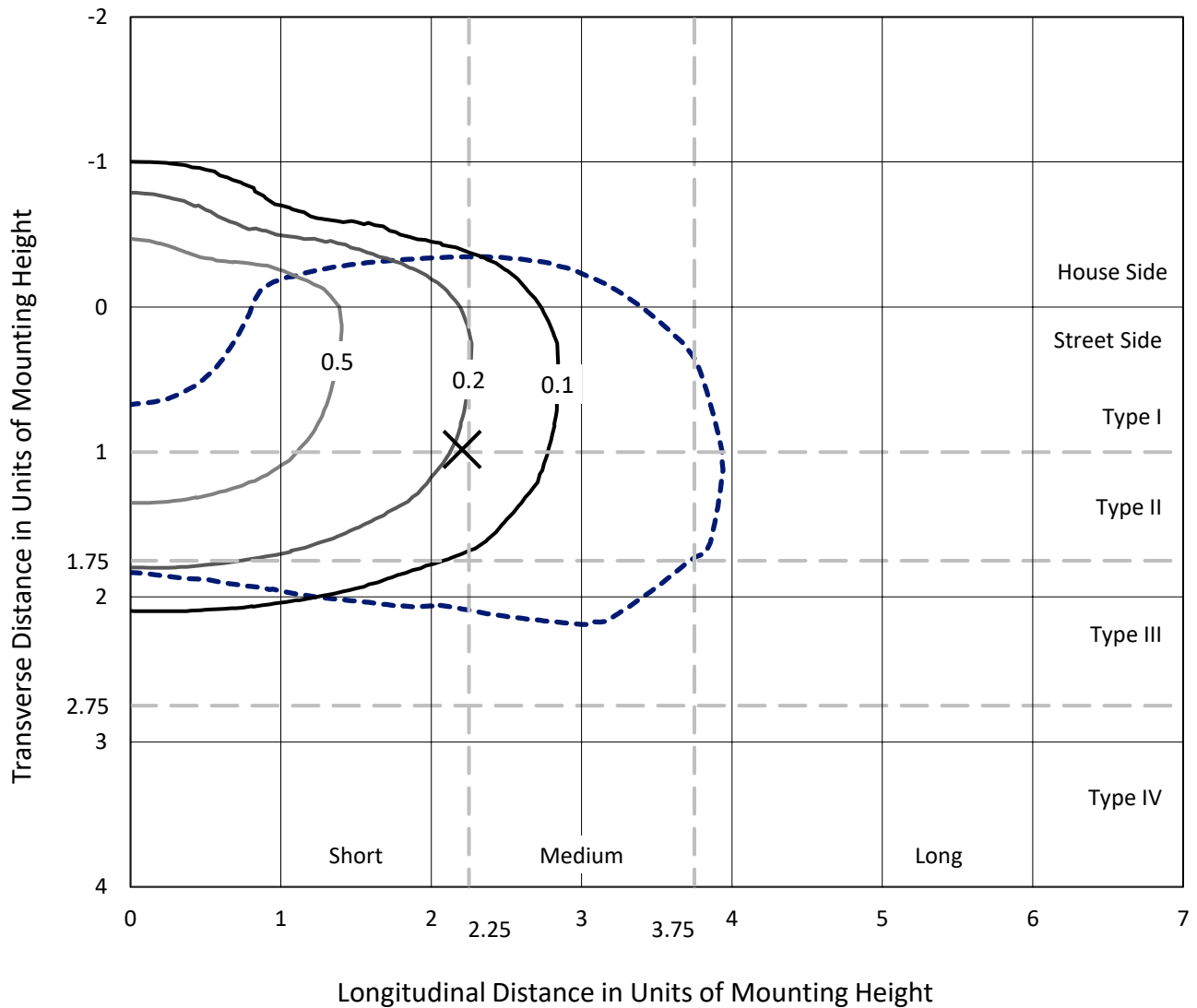
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

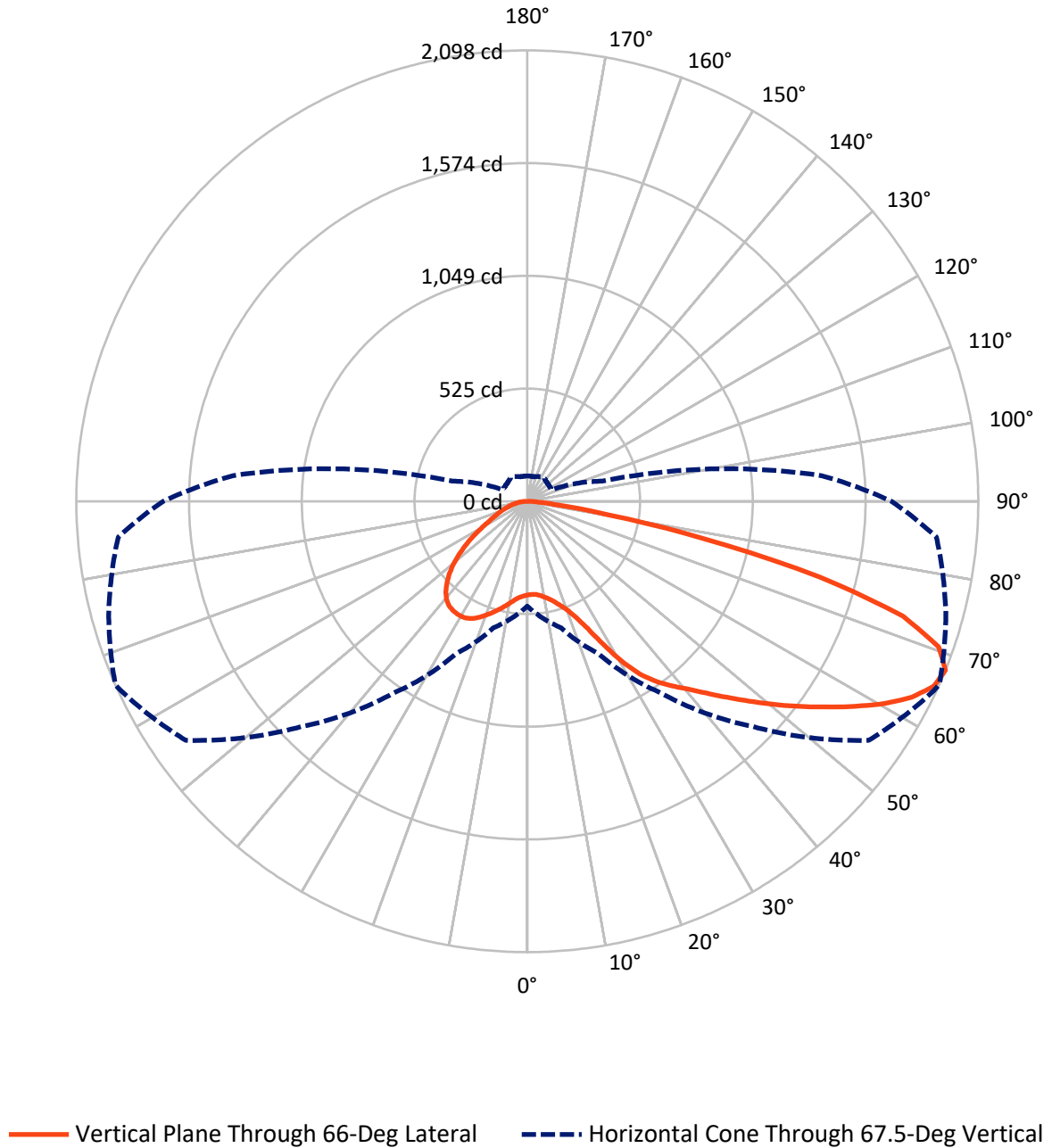
✕ Max cd
 - - - 1/2 Max cd



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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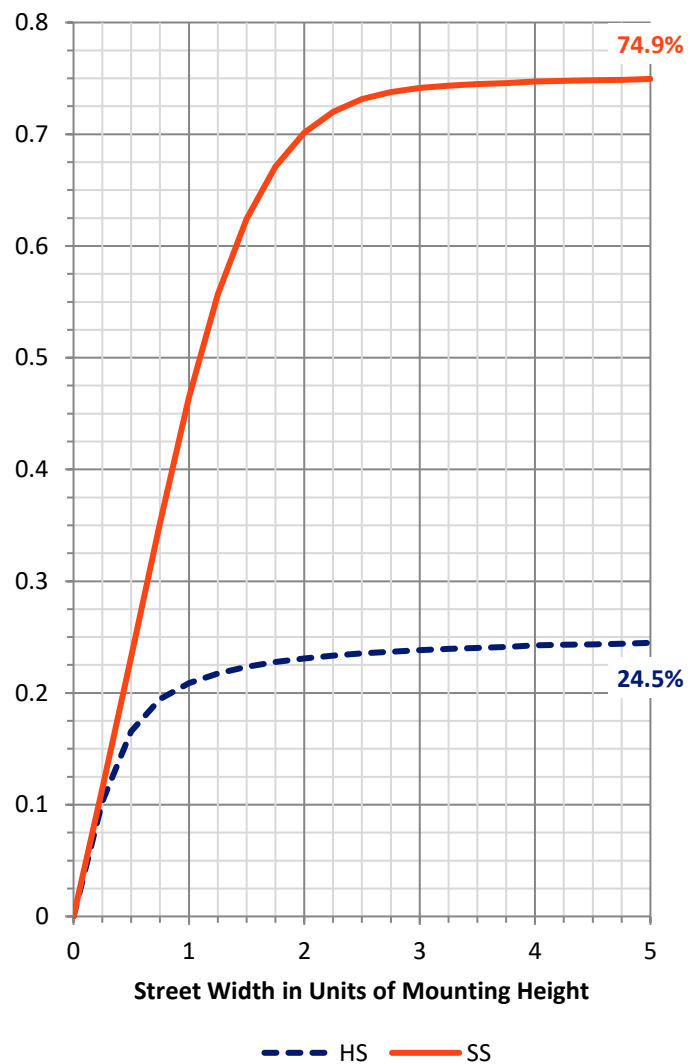
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	977.4	0.0	977.4
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	2953.6	0.0	2953.6
	% Fixture	75.1	0.0	75.1
Total	Lumens	3931.0	0.0	3931.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.2	1.1
10°-20°	142.8	3.6
20°-30°	275.3	7.0
30°-40°	482.7	12.3
40°-50°	717.6	18.3
50°-60°	909.6	23.1
60°-70°	890.0	22.6
70°-80°	424.5	10.8
80°-90°	45.4	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°	3931.0	100.0
0°-180°	3931.0	100.0

Coefficient of Utilization



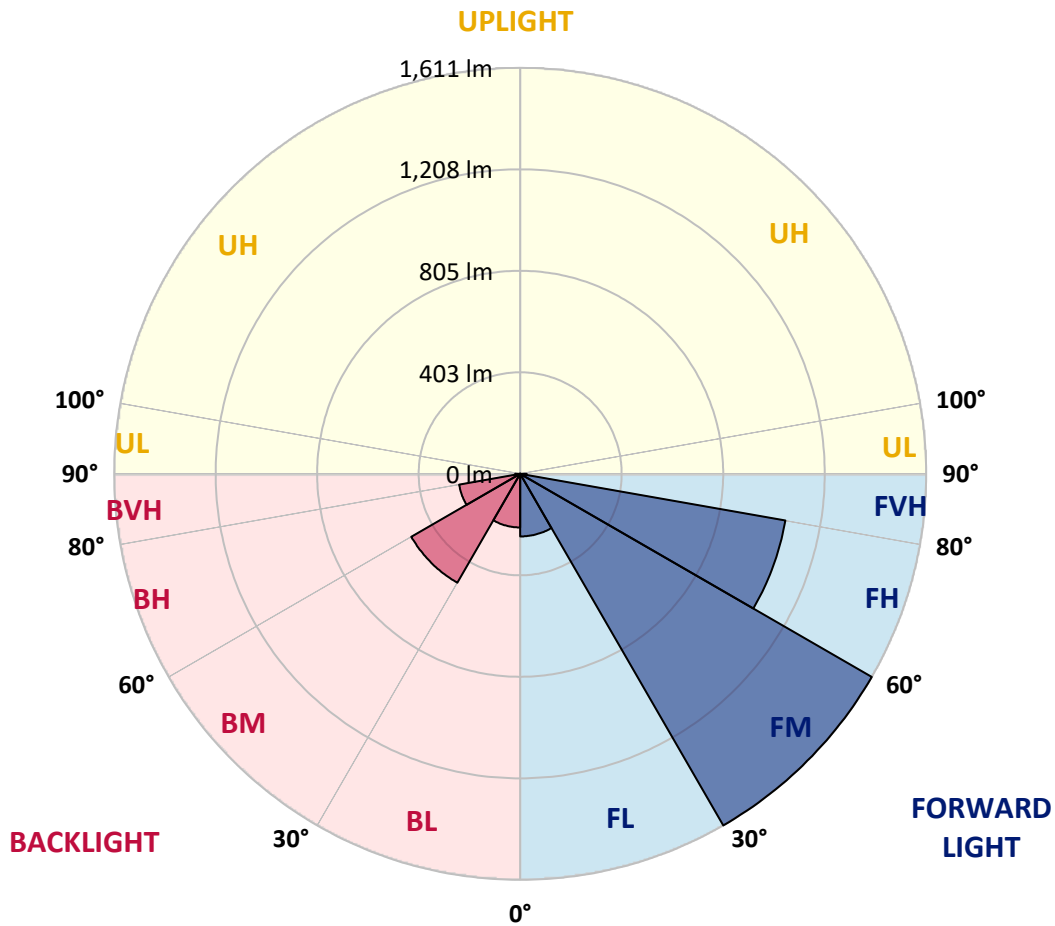
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	248.4	6.3			
FM (30°-60°)	1610.9	41.0			
FH (60°-80°)	1068.6	27.2			G1/1800
FVH (80°-90°)	25.7	0.7			G1/100
BL (0°-30°)	212.9	5.4	B1/500		
BM (30°-60°)	498.9	12.7	B1/1000		
BH (60°-80°)	246.0	6.3	B1/500		G1/500
BVH (80°-90°)	19.6	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°	436.0	436.0	436.0	436.0	436.0	436.0	436.0	436.0	436.0	436.0	436.0
2.5°	431.5	433.9	433.3	432.3	432.1	432.5	433.1	433.7	433.5	434.6	436.2
5°	430.2	432.7	432.5	432.5	433.3	435.0	436.0	437.0	436.0	437.2	439.5
7.5°	431.0	432.9	433.7	434.6	436.6	439.7	442.2	444.5	443.2	444.7	447.6
10°	441.6	443.0	443.8	443.8	445.3	448.8	451.3	455.4	454.4	456.7	460.4
12.5°	460.8	462.2	462.2	461.4	462.4	464.7	465.5	470.1	468.2	471.9	475.7
15°	484.3	487.2	484.9	483.5	483.9	486.2	486.0	489.5	487.6	490.7	494.0
17.5°	510.4	514.1	510.4	510.1	509.3	511.8	512.0	515.1	511.8	514.1	516.3
20°	541.1	546.3	543.2	544.2	542.4	543.4	544.4	549.0	543.8	545.5	544.8
22.5°	584.5	590.7	587.4	591.3	590.1	589.3	589.0	597.1	589.0	589.7	583.7
25°	647.7	655.1	649.4	654.7	654.7	657.4	660.5	670.8	657.4	653.5	638.0
27.5°	741.1	748.5	737.1	740.4	739.4	746.0	742.7	768.3	753.9	747.5	716.3
30°	853.4	866.6	845.1	844.3	843.3	853.8	858.6	875.5	860.8	854.4	816.9
32.5°	974.9	988.7	963.1	955.6	951.7	958.1	954.2	967.8	957.7	947.8	901.3
35°	1103.3	1117.0	1092.6	1078.1	1062.4	1049.0	1035.0	1038.5	1029.0	1013.9	965.8
37.5°	1224.8	1249.8	1223.9	1208.4	1179.5	1153.3	1114.1	1097.7	1088.9	1075.0	1026.5
40°	1348.5	1362.7	1343.1	1329.9	1298.5	1257.4	1194.6	1160.1	1148.1	1134.7	1093.6
42.5°	1439.6	1453.2	1442.7	1433.6	1409.0	1361.3	1280.1	1237.0	1219.6	1204.5	1169.6
45°	1511.9	1522.0	1515.4	1518.7	1508.1	1461.9	1368.7	1319.4	1301.4	1283.0	1255.5
47.5°	1541.0	1551.7	1562.2	1581.9	1599.8	1565.8	1463.9	1408.6	1389.6	1370.8	1343.7
50°	1537.7	1548.6	1579.2	1620.9	1676.7	1665.3	1564.3	1503.6	1486.0	1464.6	1439.6
52.5°	1511.2	1523.6	1562.9	1632.3	1721.1	1739.9	1666.5	1601.7	1585.2	1559.6	1534.6
55°	1441.8	1449.3	1508.1	1606.4	1731.6	1791.9	1766.7	1706.2	1689.7	1653.9	1626.7
57.5°	1313.2	1323.9	1409.6	1536.8	1705.2	1827.2	1854.7	1816.1	1800.2	1748.7	1720.2
60°	1145.2	1162.4	1260.5	1419.9	1637.8	1827.0	1934.6	1924.1	1910.9	1842.1	1812.4
62.5°	955.2	975.1	1069.4	1254.7	1520.1	1775.2	1984.6	2014.6	2007.7	1928.2	1890.2
65°	733.6	747.3	841.2	1040.9	1336.9	1663.9	1990.4	2076.3	2077.6	1993.7	1930.9
67.5°	488.5	527.7	609.3	781.1	1091.5	1481.9	1939.6	2086.4	2098.4	2016.2	1910.5
70°	238.3	290.0	369.9	507.7	781.1	1202.9	1806.8	2003.4	2030.1	1950.5	1788.6
72.5°	98.9	115.7	159.2	250.5	448.4	811.7	1539.9	1778.3	1827.6	1728.3	1503.8
75°	66.7	72.3	91.1	128.5	204.3	400.3	1110.6	1326.0	1405.5	1305.3	1067.0
77.5°	51.4	54.9	66.3	89.8	121.4	151.4	594.4	799.1	840.2	777.8	555.2
80°	40.5	43.2	49.6	65.5	86.1	81.0	202.6	362.1	385.8	323.6	178.4
82.5°	35.1	36.1	35.5	44.4	57.2	47.3	66.5	133.6	147.5	107.0	58.2
85°	25.4	28.3	29.5	27.5	30.4	24.0	27.3	47.3	52.0	46.5	32.8
87.5°	10.3	15.3	18.8	17.8	11.2	6.8	8.5	13.8	15.9	17.3	10.7
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°	436.0	436.0	436.0	436.0	436.0	436.0	436.0	436.0	436.0	436.0	436.0
2.5°	436.4	437.9	438.9	440.1	441.0	442.2	444.7	446.1	446.3	447.4	447.2
5°	440.3	442.4	444.7	448.0	451.7	454.8	459.5	462.8	464.1	465.1	464.9
7.5°	448.8	451.7	455.8	461.6	467.0	471.1	476.9	480.8	484.7	486.2	486.4
10°	461.4	465.5	471.5	479.4	485.2	490.5	496.5	499.8	503.7	505.4	506.2
12.5°	477.1	481.4	489.3	500.2	505.6	509.3	511.4	510.6	511.4	512.8	513.2
15°	495.1	499.8	508.7	520.5	524.2	520.9	516.3	512.2	511.6	512.0	513.5
17.5°	516.3	519.9	530.2	540.1	537.4	523.8	513.9	507.3	504.0	502.9	504.4
20°	546.1	546.1	554.6	560.7	542.8	519.6	504.2	493.4	486.6	483.7	483.1
22.5°	582.2	578.9	584.3	580.0	541.7	508.1	486.6	468.0	457.7	453.6	452.9
25°	628.1	624.2	622.7	595.9	534.3	489.7	454.8	432.3	423.2	420.9	421.3
27.5°	697.3	687.4	668.6	604.5	520.7	460.8	417.6	396.8	391.6	391.8	392.4
30°	789.4	769.6	723.5	606.0	498.4	419.9	379.6	364.7	362.3	363.3	366.8
32.5°	874.7	855.9	779.7	599.4	464.1	379.8	345.5	335.6	331.9	333.1	334.8
35°	941.6	936.4	831.7	590.1	422.0	342.2	315.0	306.5	299.3	297.6	298.9
37.5°	1004.8	1002.7	870.8	577.1	380.2	315.6	290.4	279.2	268.7	262.9	263.1
40°	1074.2	1072.1	896.4	557.0	343.3	292.5	268.3	253.6	240.6	230.1	231.1
42.5°	1152.3	1140.1	908.6	528.3	311.9	272.8	250.3	230.5	213.4	203.6	204.3
45°	1237.6	1210.1	908.4	491.8	285.4	254.9	231.1	203.0	187.1	178.0	177.6
47.5°	1328.0	1277.0	897.2	451.3	259.8	235.0	201.4	179.9	169.4	163.8	162.5
50°	1421.4	1339.6	878.2	404.8	233.6	212.5	182.8	168.1	160.1	154.9	153.0
52.5°	1509.2	1396.4	855.3	352.1	207.0	190.6	174.5	163.2	154.7	148.9	146.4
55°	1590.7	1445.3	822.8	298.2	185.3	176.0	170.6	161.1	151.4	144.6	141.9
57.5°	1663.2	1477.2	766.9	247.6	169.8	165.8	166.5	157.6	146.4	140.7	136.9
60°	1723.6	1500.5	684.1	200.8	157.2	155.9	160.1	151.0	138.0	131.4	128.5
62.5°	1759.7	1500.1	582.4	164.4	146.4	146.8	151.6	142.7	129.5	123.3	121.4
65°	1756.6	1463.3	470.9	140.7	136.1	136.5	142.7	133.6	122.5	118.8	118.6
67.5°	1694.4	1373.7	361.2	125.2	124.7	126.6	133.8	127.4	118.1	117.7	118.3
70°	1526.1	1187.6	260.2	112.8	113.0	115.7	125.2	123.5	115.9	116.7	116.5
72.5°	1223.7	905.5	174.7	99.8	100.0	104.3	116.9	120.4	113.6	124.5	126.2
75°	815.0	564.7	112.4	85.9	86.1	91.7	109.7	114.4	107.4	124.1	125.2
77.5°	391.6	253.8	81.4	72.3	72.3	77.5	94.8	102.4	91.5	96.5	88.4
80°	135.3	95.4	64.0	58.2	57.0	60.5	79.9	88.8	78.9	72.7	68.2
82.5°	53.3	49.6	51.4	45.2	41.1	43.4	62.2	73.3	58.0	52.5	52.3
85°	30.6	32.2	36.4	29.9	23.8	26.6	45.6	52.7	43.8	38.6	39.4
87.5°	8.3	11.4	16.7	15.5	10.7	11.4	21.7	29.1	25.2	19.4	20.0
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)