

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: P881539

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

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881539
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-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: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4071 lumens
Efficiency: N/A
Efficacy: 131.7 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

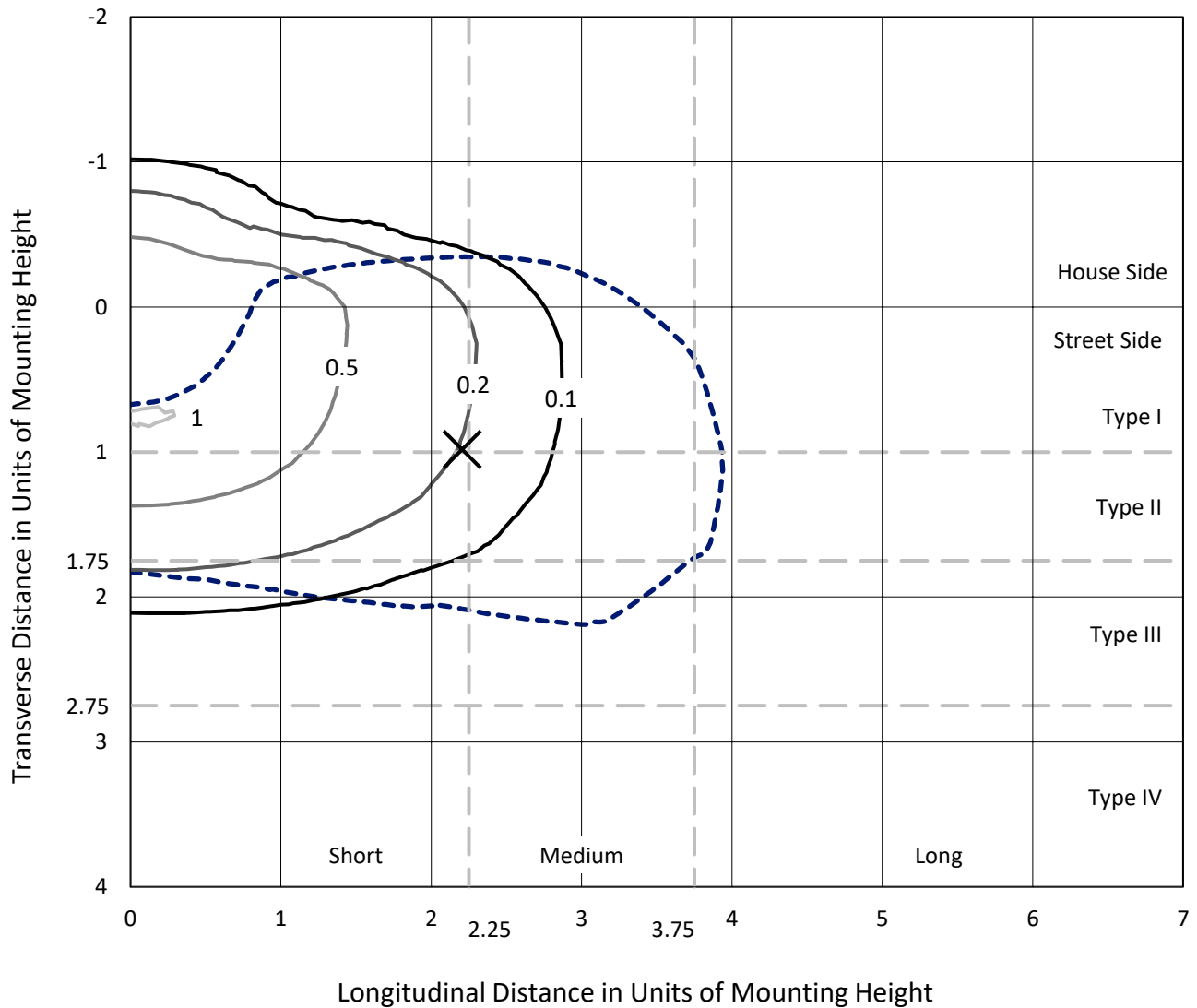
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

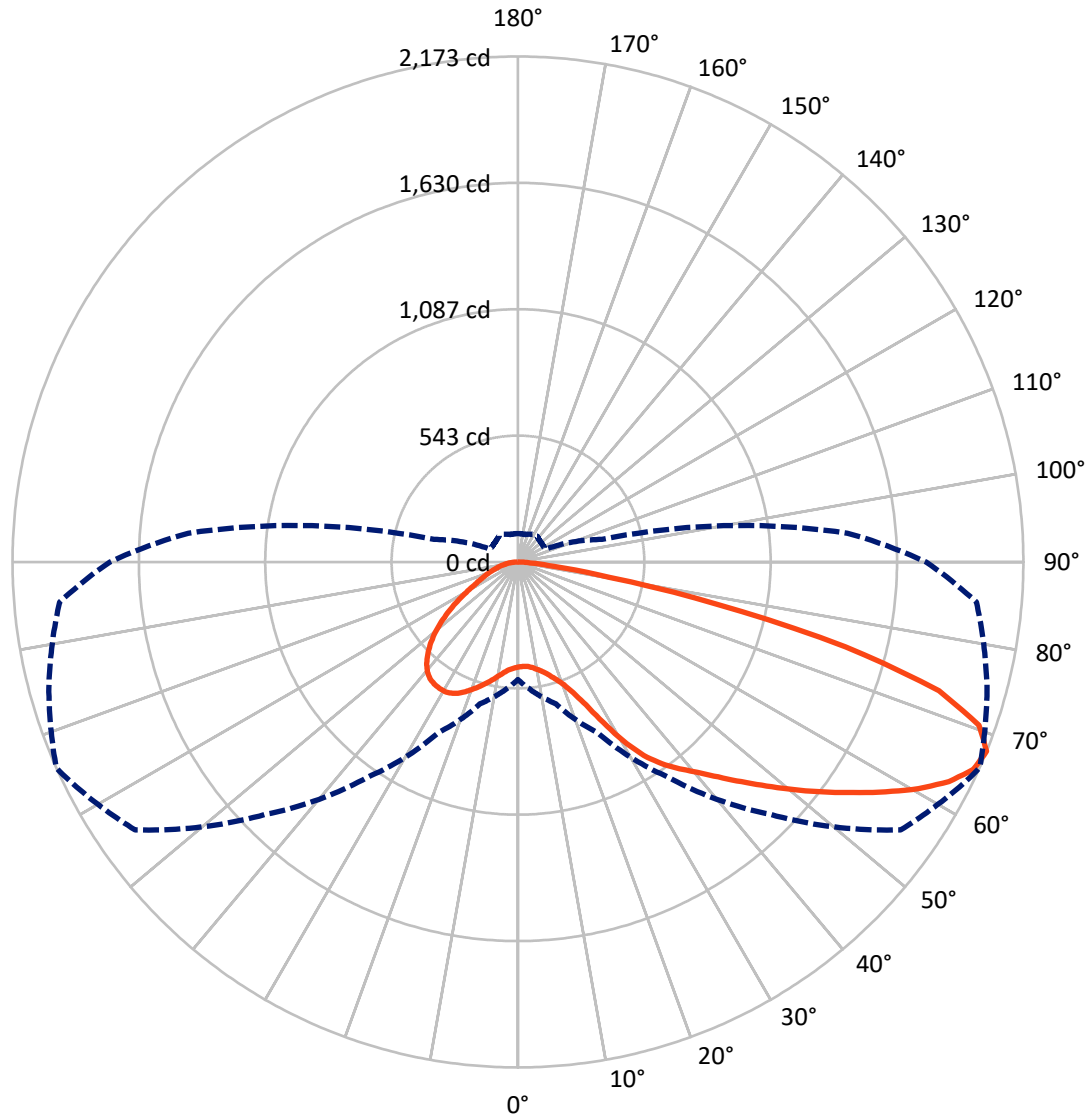
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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

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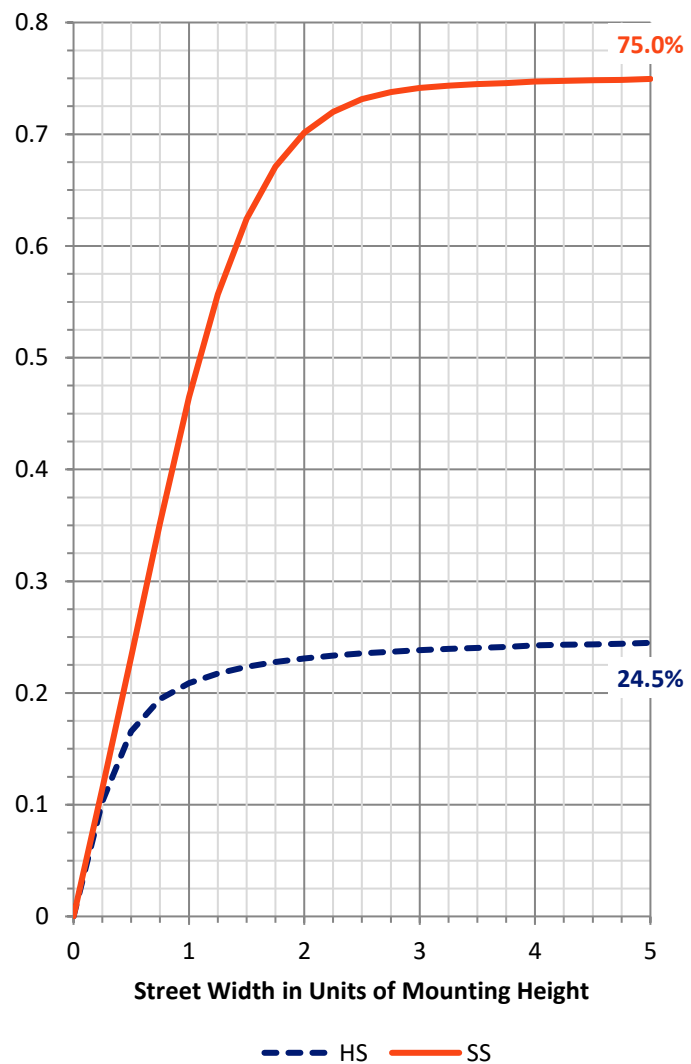
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1012.2	0.0	1012.2
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	3058.8	0.0	3058.8
	% Fixture	75.1	0.0	75.1
Total	Lumens	4071.0	0.0	4071.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.8	1.1
10°-20°	147.9	3.6
20°-30°	285.1	7.0
30°-40°	499.8	12.3
40°-50°	743.1	18.3
50°-60°	942.0	23.1
60°-70°	921.7	22.6
70°-80°	439.7	10.8
80°-90°	47.0	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°	4071.0	100.0
0°-180°	4071.0	100.0

Coefficient of Utilization



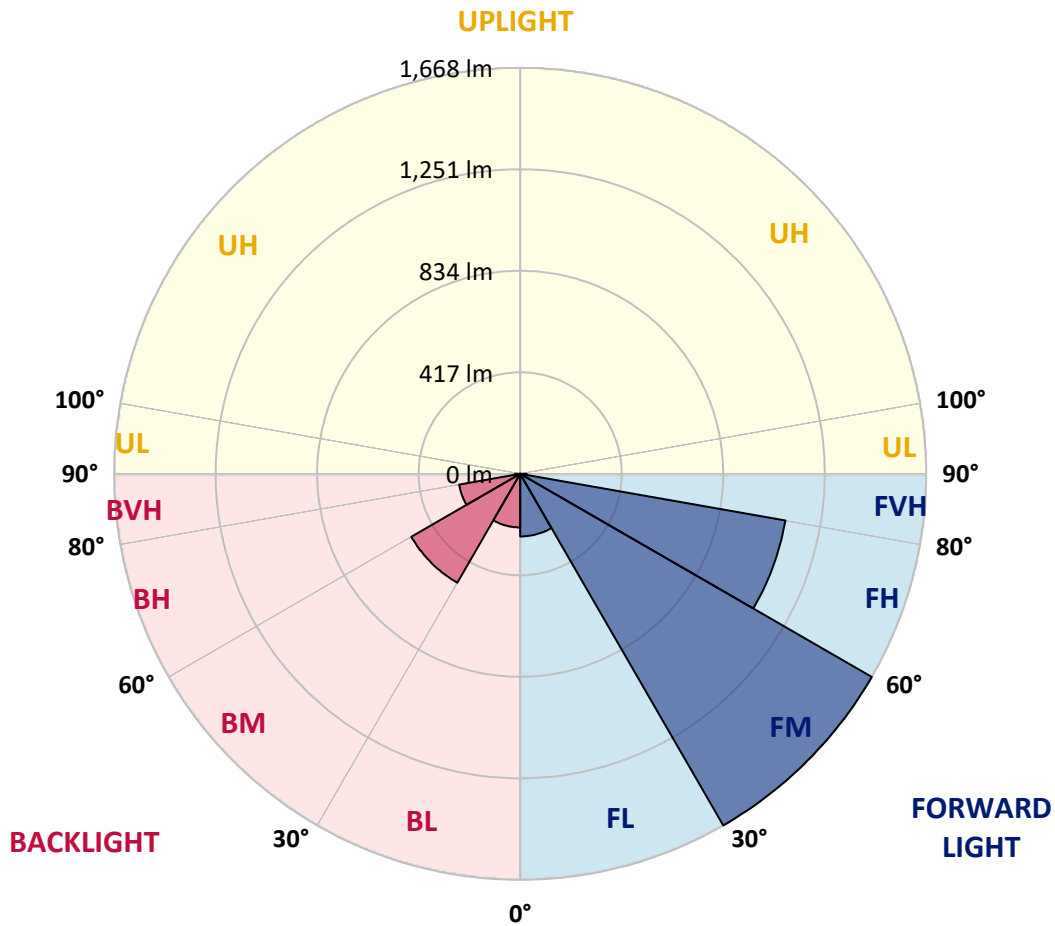
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	257.2	6.3			
FM (30°-60°)	1668.3	41.0			
FH (60°-80°)	1106.6	27.2			G1/1800
FVH (80°-90°)	26.6	0.7			G1/100
BL (0°-30°)	220.5	5.4	B1/500		
BM (30°-60°)	516.7	12.7	B1/1000		
BH (60°-80°)	254.7	6.3	B1/500		G1/500
BVH (80°-90°)	20.3	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°	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5
2.5°	446.8	449.4	448.7	447.7	447.5	447.9	448.5	449.2	449.0	450.0	451.7
5°	445.5	448.1	447.9	447.9	448.7	450.5	451.5	452.6	451.5	452.8	455.2
7.5°	446.4	448.3	449.2	450.0	452.2	455.4	457.9	460.3	459.0	460.5	463.5
10°	457.3	458.8	459.7	459.7	461.2	464.8	467.4	471.6	470.6	472.9	476.8
12.5°	477.2	478.7	478.7	477.8	478.9	481.3	482.1	486.8	484.9	488.7	492.6
15°	501.6	504.6	502.2	500.7	501.2	503.5	503.3	506.9	505.0	508.2	511.6
17.5°	528.5	532.4	528.5	528.3	527.5	530.0	530.2	533.4	530.0	532.4	534.7
20°	560.4	565.7	562.5	563.6	561.7	562.8	563.8	568.5	563.2	564.9	564.2
22.5°	605.3	611.7	608.3	612.4	611.1	610.2	610.0	618.4	610.0	610.7	604.5
25°	670.8	678.5	672.5	678.0	678.0	680.8	684.0	694.7	680.8	676.8	660.7
27.5°	767.4	775.1	763.4	766.8	765.7	772.6	769.2	795.7	780.7	774.1	741.8
30°	883.8	897.5	875.2	874.4	873.3	884.2	889.2	906.7	891.5	884.9	845.9
32.5°	1009.6	1023.9	997.4	989.7	985.6	992.2	988.2	1002.3	991.8	981.6	933.4
35°	1142.6	1156.7	1131.5	1116.5	1100.3	1086.4	1071.8	1075.5	1065.6	1050.0	1000.2
37.5°	1268.4	1294.3	1267.5	1251.5	1221.5	1194.4	1153.7	1136.8	1127.6	1113.3	1063.0
40°	1396.5	1411.3	1390.9	1377.3	1344.7	1302.2	1237.2	1201.4	1189.0	1175.1	1132.6
42.5°	1490.8	1504.9	1494.0	1484.6	1459.2	1409.8	1325.7	1281.0	1263.0	1247.4	1211.3
45°	1565.7	1576.2	1569.3	1572.8	1561.8	1513.9	1417.5	1366.3	1347.7	1328.7	1300.3
47.5°	1595.9	1607.0	1617.9	1638.2	1656.8	1621.5	1516.1	1458.7	1439.1	1419.6	1391.6
50°	1592.4	1603.8	1635.4	1678.6	1736.4	1724.6	1620.0	1557.1	1539.0	1516.7	1490.8
52.5°	1565.1	1577.9	1618.5	1690.4	1782.4	1801.8	1725.9	1658.7	1641.6	1615.1	1589.2
55°	1493.2	1500.9	1561.8	1663.7	1793.3	1855.7	1829.6	1767.0	1749.9	1712.9	1684.6
57.5°	1359.9	1371.1	1459.8	1591.6	1765.9	1892.3	1920.8	1880.8	1864.3	1811.0	1781.5
60°	1186.0	1203.8	1305.4	1470.5	1696.2	1892.1	2003.5	1992.6	1978.9	1907.7	1876.9
62.5°	989.3	1009.8	1107.5	1299.4	1574.3	1838.4	2055.3	2086.3	2079.3	1996.9	1957.5
65°	759.7	773.9	871.2	1078.0	1384.5	1723.1	2061.3	2150.3	2151.5	2064.7	1999.7
67.5°	505.9	546.5	631.0	808.9	1130.4	1534.7	2008.7	2160.7	2173.2	2088.0	1978.5
70°	246.8	300.3	383.1	525.7	808.9	1245.7	1871.1	2074.8	2102.4	2020.0	1852.3
72.5°	102.5	119.8	164.9	259.5	464.4	840.6	1594.8	1841.6	1892.7	1789.9	1557.4
75°	69.1	74.9	94.3	133.0	211.5	414.5	1150.1	1373.2	1455.5	1351.8	1105.0
77.5°	53.3	56.9	68.7	93.0	125.8	156.8	615.6	827.6	870.1	805.5	574.9
80°	41.9	44.7	51.3	67.8	89.2	83.8	209.8	375.0	399.6	335.2	184.8
82.5°	36.4	37.4	36.8	46.0	59.2	49.0	68.9	138.4	152.7	110.8	60.3
85°	26.3	29.3	30.6	28.4	31.4	24.8	28.2	49.0	53.9	48.1	34.0
87.5°	10.7	15.8	19.5	18.4	11.6	7.1	8.8	14.3	16.5	18.0	11.1
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°	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5
2.5°	452.0	453.5	454.5	455.8	456.7	457.9	460.5	462.0	462.2	463.3	463.1
5°	456.0	458.2	460.5	463.9	467.8	471.0	475.9	479.3	480.6	481.7	481.5
7.5°	464.8	467.8	472.1	478.1	483.6	487.9	493.9	497.9	502.0	503.5	503.7
10°	477.8	482.1	488.3	496.4	502.4	508.0	514.2	517.6	521.7	523.4	524.3
12.5°	494.1	498.6	506.7	518.0	523.6	527.5	529.6	528.7	529.6	531.1	531.5
15°	512.7	517.6	526.8	539.0	542.9	539.4	534.7	530.5	529.8	530.2	531.7
17.5°	534.7	538.4	549.1	559.3	556.5	542.4	532.2	525.3	521.9	520.8	522.3
20°	565.5	565.5	574.3	580.7	562.1	538.2	522.1	511.0	503.9	500.9	500.3
22.5°	603.0	599.5	605.1	600.6	561.0	526.2	503.9	484.7	474.0	469.7	469.1
25°	650.4	646.4	644.9	617.1	553.3	507.1	471.0	447.7	438.3	435.9	436.3
27.5°	722.1	711.8	692.4	626.1	539.2	477.2	432.5	410.9	405.5	405.8	406.4
30°	817.5	797.0	749.3	627.6	516.1	434.8	393.1	377.7	375.2	376.2	379.9
32.5°	905.8	886.4	807.4	620.7	480.6	393.3	357.8	347.6	343.7	345.0	346.7
35°	975.1	969.8	861.3	611.1	437.0	354.4	326.2	317.4	309.9	308.2	309.5
37.5°	1040.6	1038.4	901.8	597.6	393.8	326.8	300.7	289.2	278.3	272.3	272.5
40°	1112.5	1110.3	928.3	576.9	355.5	302.9	277.8	262.7	249.2	238.3	239.3
42.5°	1193.3	1180.7	940.9	547.1	323.0	282.6	259.2	238.7	221.0	210.9	211.5
45°	1281.6	1253.2	940.7	509.3	295.6	263.9	239.3	210.3	193.8	184.4	183.9
47.5°	1375.3	1322.5	929.2	467.4	269.1	243.4	208.5	186.3	175.4	169.6	168.3
50°	1472.0	1387.3	909.5	419.2	241.9	220.1	189.3	174.1	165.8	160.4	158.5
52.5°	1562.9	1446.1	885.7	364.7	214.3	197.4	180.7	169.0	160.2	154.2	151.6
55°	1647.4	1496.8	852.1	308.9	191.9	182.2	176.7	166.8	156.8	149.7	146.9
57.5°	1722.5	1529.8	794.2	256.5	175.8	171.8	172.4	163.2	151.6	145.7	141.8
60°	1784.9	1553.9	708.4	207.9	162.8	161.5	165.8	156.4	142.9	136.0	133.0
62.5°	1822.4	1553.5	603.2	170.3	151.6	152.1	157.0	147.8	134.1	127.7	125.8
65°	1819.2	1515.4	487.7	145.7	141.0	141.4	147.8	138.4	126.8	123.0	122.8
67.5°	1754.8	1422.6	374.1	129.6	129.2	131.1	138.6	132.0	122.3	121.9	122.6
70°	1580.5	1229.9	269.5	116.8	117.0	119.8	129.6	127.9	120.0	120.8	120.6
72.5°	1267.3	937.7	181.0	103.3	103.5	108.0	121.1	124.7	117.6	129.0	130.7
75°	844.0	584.8	116.4	89.0	89.2	95.0	113.6	118.5	111.2	128.5	129.6
77.5°	405.5	262.9	84.3	74.9	74.9	80.2	98.2	106.1	94.8	99.9	91.5
80°	140.1	98.8	66.3	60.3	59.0	62.7	82.8	92.0	81.7	75.3	70.6
82.5°	55.2	51.3	53.3	46.8	42.6	44.9	64.4	75.9	60.1	54.3	54.1
85°	31.7	33.4	37.6	31.0	24.6	27.6	47.3	54.5	45.3	40.0	40.9
87.5°	8.6	11.8	17.3	16.0	11.1	11.8	22.5	30.2	26.1	20.1	20.7
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)