

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: P881559

Luminaire Tested: **NAV-SB1A-735-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881559
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-735-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4493 lumens
Efficiency: N/A
Efficacy: 145.4 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

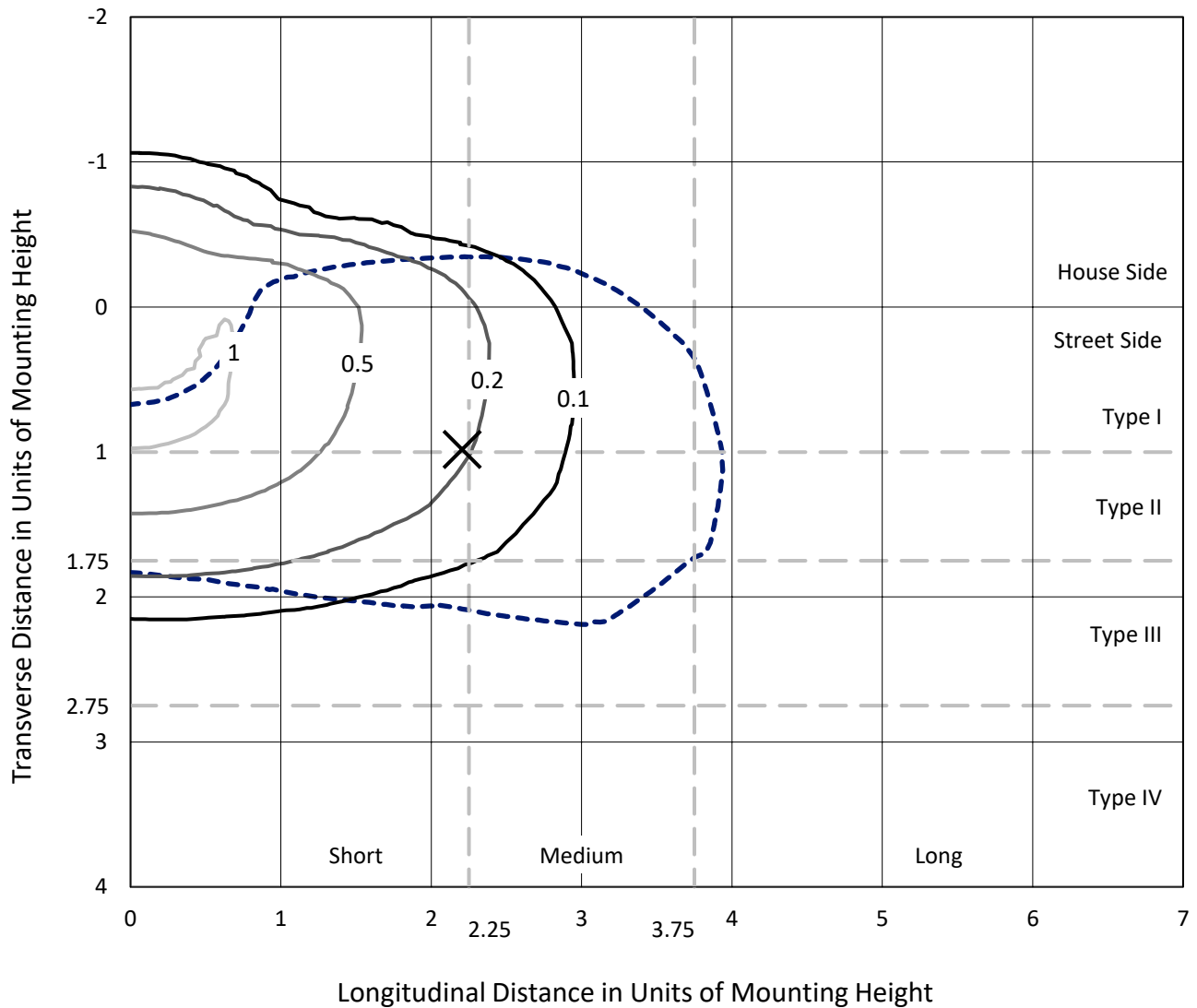
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

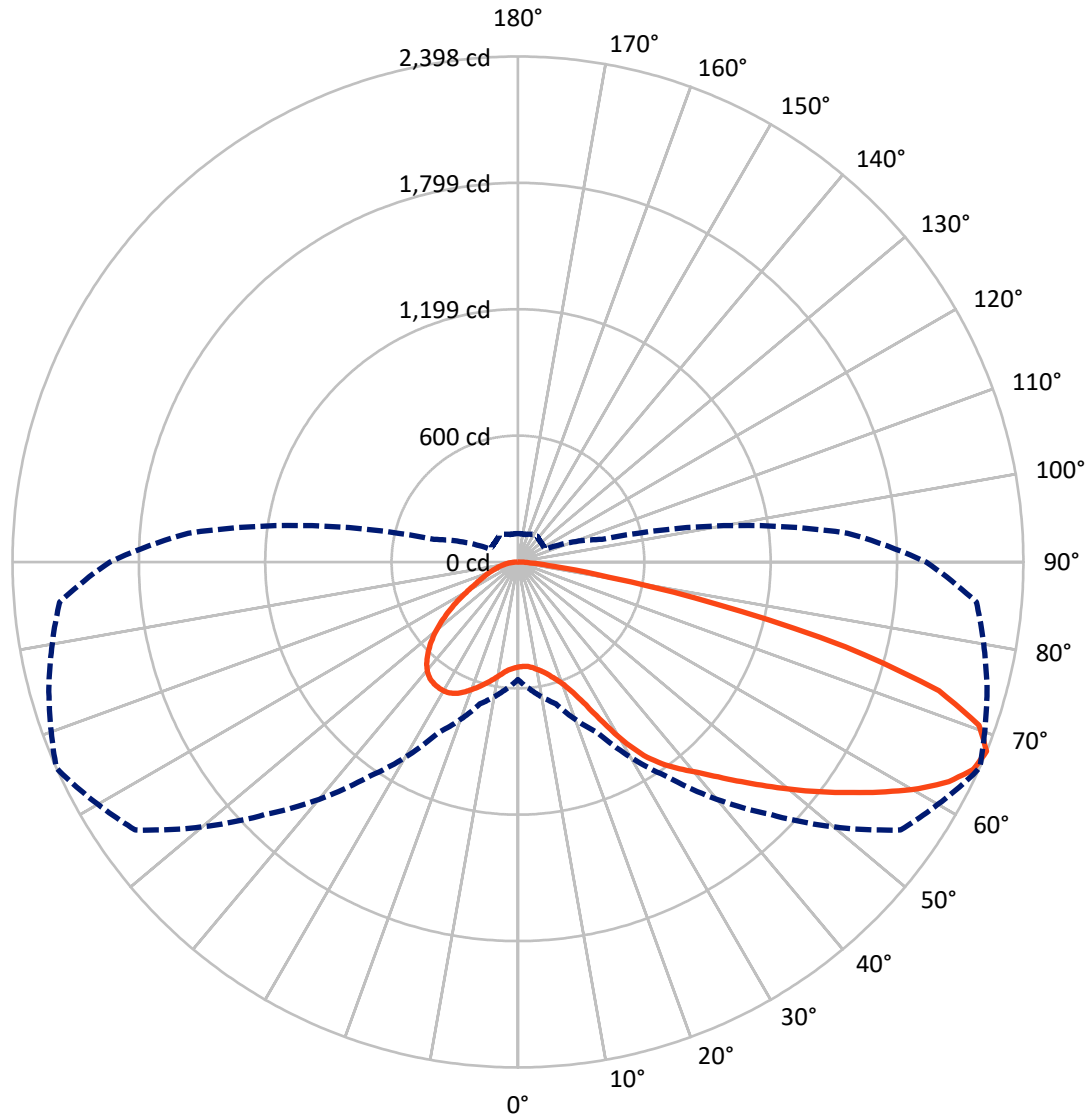
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 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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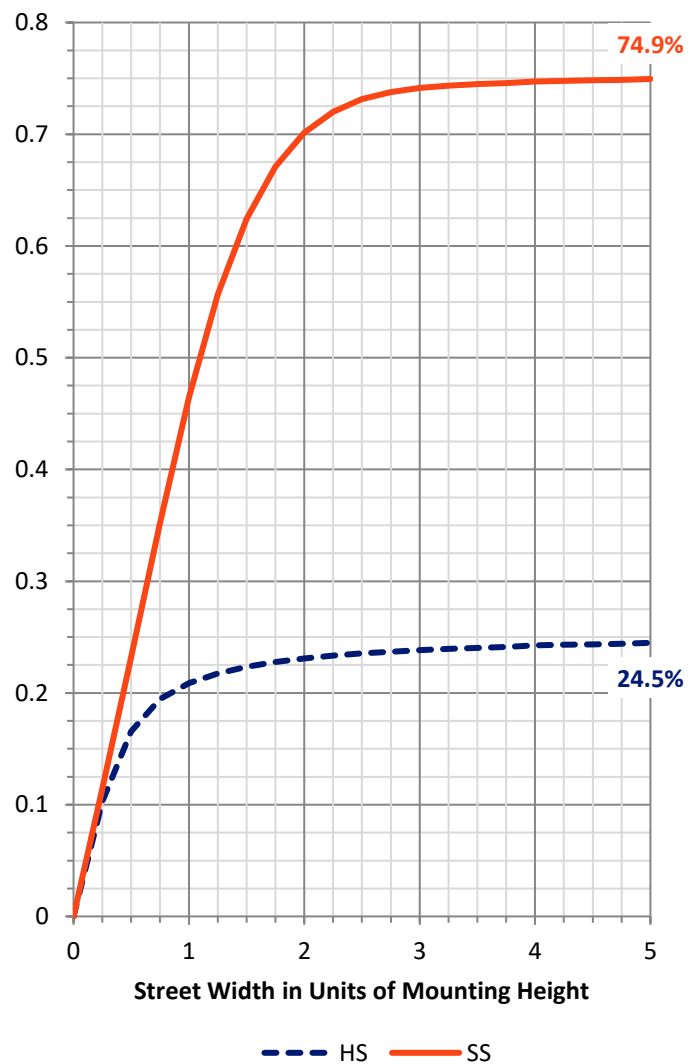
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1117.2	0.0	1117.2
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	3375.8	0.0	3375.8
	% Fixture	75.1	0.0	75.1
Total	Lumens	4493.0	0.0	4493.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.4	1.1
10°-20°	163.2	3.6
20°-30°	314.6	7.0
30°-40°	551.7	12.3
40°-50°	820.1	18.3
50°-60°	1039.6	23.1
60°-70°	1017.2	22.6
70°-80°	485.2	10.8
80°-90°	51.9	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°	4493.0	100.0
0°-180°	4493.0	100.0

Coefficient of Utilization

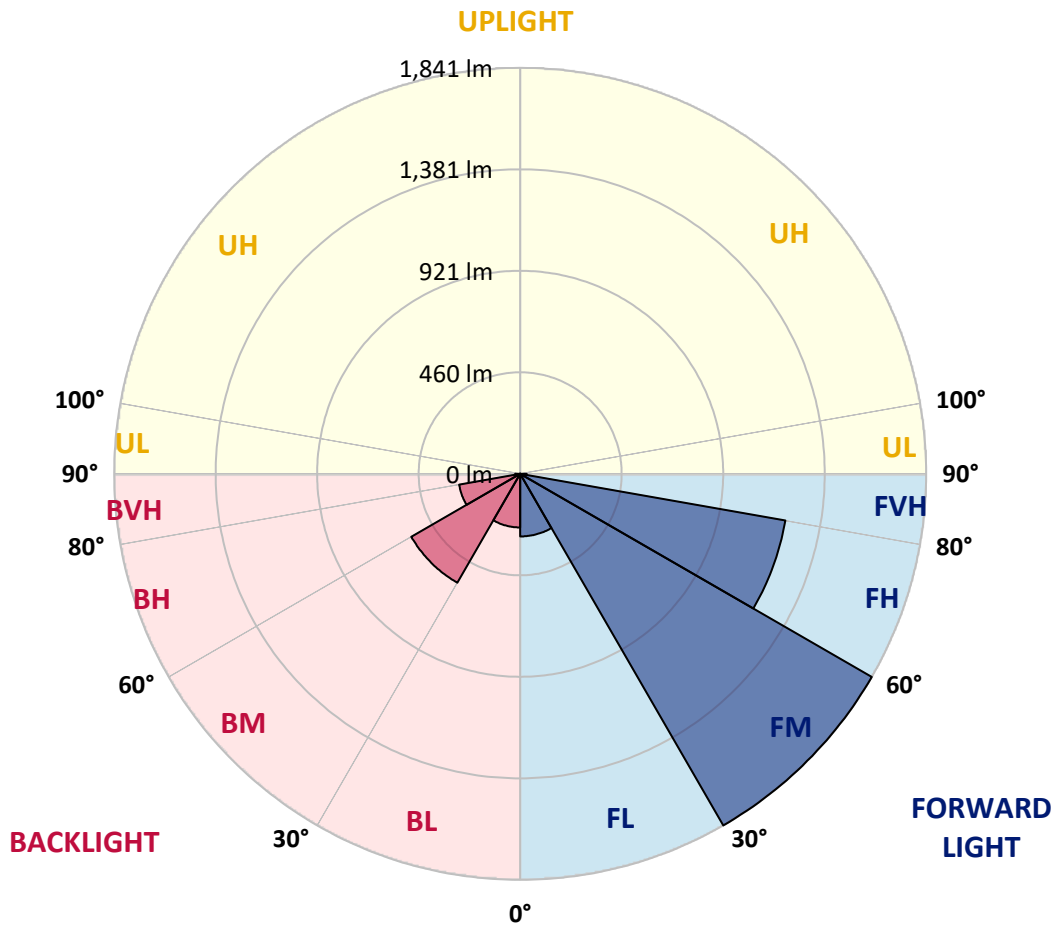


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	283.9	6.3			
FM (30°-60°)	1841.2	41.0			
FH (60°-80°)	1221.3	27.2			G1/1800
FVH (80°-90°)	29.4	0.7			G1/100
BL (0°-30°)	243.4	5.4	B1/500		
BM (30°-60°)	570.2	12.7	B1/1000		
BH (60°-80°)	281.1	6.3	B1/500		G1/500
BVH (80°-90°)	22.5	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°	498.3	498.3	498.3	498.3	498.3	498.3	498.3	498.3	498.3	498.3	498.3
2.5°	493.1	496.0	495.3	494.1	493.8	494.3	495.0	495.7	495.5	496.7	498.6
5°	491.7	494.6	494.3	494.3	495.3	497.2	498.3	499.5	498.3	499.7	502.3
7.5°	492.7	494.8	495.7	496.7	499.0	502.6	505.4	508.0	506.6	508.2	511.6
10°	504.7	506.4	507.3	507.3	509.0	513.0	515.8	520.5	519.3	521.9	526.2
12.5°	526.7	528.3	528.3	527.4	528.5	531.1	532.1	537.3	535.2	539.4	543.7
15°	553.6	556.9	554.3	552.6	553.1	555.7	555.5	559.5	557.3	560.9	564.7
17.5°	583.3	587.6	583.3	583.1	582.1	585.0	585.2	588.7	585.0	587.6	590.2
20°	618.5	624.4	620.9	622.0	619.9	621.1	622.3	627.5	621.6	623.4	622.7
22.5°	668.1	675.1	671.4	675.9	674.4	673.5	673.3	682.5	673.3	674.0	667.1
25°	740.3	748.8	742.2	748.3	748.3	751.4	754.9	766.7	751.4	746.9	729.2
27.5°	847.0	855.5	842.5	846.3	845.1	852.7	848.9	878.2	861.6	854.3	818.7
30°	975.4	990.5	966.0	965.0	963.9	975.9	981.3	1000.7	983.9	976.6	933.6
32.5°	1114.2	1130.0	1100.8	1092.3	1087.8	1095.1	1090.6	1106.2	1094.6	1083.3	1030.2
35°	1261.1	1276.6	1248.8	1232.3	1214.3	1199.0	1182.9	1186.9	1176.1	1158.8	1103.8
37.5°	1399.9	1428.4	1398.9	1381.2	1348.2	1318.2	1273.3	1254.7	1244.5	1228.7	1173.2
40°	1541.3	1557.6	1535.1	1520.0	1484.1	1437.2	1365.4	1326.0	1312.3	1296.9	1250.0
42.5°	1645.4	1661.0	1648.9	1638.5	1610.4	1555.9	1463.1	1413.8	1394.0	1376.7	1336.8
45°	1728.0	1739.6	1732.0	1735.8	1723.7	1670.9	1564.4	1508.0	1487.4	1466.4	1435.0
47.5°	1761.3	1773.6	1785.6	1808.0	1828.6	1789.6	1673.2	1610.0	1588.2	1566.8	1535.8
50°	1757.5	1770.0	1805.0	1852.6	1916.4	1903.4	1788.0	1718.6	1698.5	1673.9	1645.4
52.5°	1727.3	1741.5	1786.3	1865.6	1967.1	1988.6	1904.8	1830.7	1811.8	1782.5	1754.0
55°	1648.0	1656.5	1723.7	1836.1	1979.2	2048.1	2019.3	1950.1	1931.2	1890.4	1859.2
57.5°	1500.9	1513.2	1611.1	1756.6	1949.0	2088.5	2119.9	2075.7	2057.5	1998.8	1966.2
60°	1309.0	1328.6	1440.7	1622.9	1872.0	2088.2	2211.2	2199.2	2184.1	2105.5	2071.5
62.5°	1091.8	1114.5	1222.3	1434.1	1737.4	2029.0	2268.3	2302.6	2294.8	2203.9	2160.5
65°	838.5	854.1	961.5	1189.8	1528.0	1901.7	2275.0	2373.2	2374.6	2278.7	2207.0
67.5°	558.3	603.1	696.4	892.8	1247.6	1693.8	2216.9	2384.7	2398.4	2304.5	2183.6
70°	272.4	331.4	422.8	580.2	892.8	1374.8	2065.1	2289.8	2320.3	2229.4	2044.3
72.5°	113.1	132.2	182.0	286.3	512.5	927.7	1760.1	2032.5	2088.9	1975.4	1718.8
75°	76.2	82.6	104.1	146.8	233.5	457.5	1269.3	1515.5	1606.4	1491.9	1219.5
77.5°	58.8	62.8	75.8	102.7	138.8	173.0	679.4	913.3	960.3	889.0	634.5
80°	46.3	49.3	56.7	74.8	98.4	92.5	231.6	413.8	441.0	369.9	204.0
82.5°	40.1	41.3	40.6	50.8	65.4	54.1	76.0	152.7	168.6	122.3	66.6
85°	29.0	32.3	33.8	31.4	34.7	27.4	31.2	54.1	59.5	53.1	37.5
87.5°	11.8	17.5	21.5	20.3	12.7	7.8	9.7	15.8	18.2	19.8	12.3
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°	498.3	498.3	498.3	498.3	498.3	498.3	498.3	498.3	498.3	498.3	498.3
2.5°	498.8	500.5	501.6	503.1	504.0	505.4	508.2	509.9	510.1	511.3	511.1
5°	503.3	505.7	508.2	512.0	516.3	519.8	525.2	529.0	530.4	531.6	531.4
7.5°	513.0	516.3	521.0	527.6	533.7	538.5	545.1	549.6	554.0	555.7	555.9
10°	527.4	532.1	538.9	547.9	554.5	560.7	567.5	571.3	575.8	577.7	578.6
12.5°	545.3	550.3	559.2	571.7	577.9	582.1	584.5	583.6	584.5	586.1	586.6
15°	565.8	571.3	581.4	594.9	599.1	595.4	590.2	585.4	584.7	585.2	586.9
17.5°	590.2	594.2	606.0	617.3	614.2	598.7	587.3	579.8	576.0	574.8	576.5
20°	624.2	624.2	633.8	640.9	620.4	593.9	576.2	564.0	556.2	552.9	552.2
22.5°	665.5	661.7	667.8	662.9	619.2	580.7	556.2	534.9	523.1	518.4	517.7
25°	717.9	713.4	711.7	681.0	610.7	559.7	519.8	494.1	483.7	481.1	481.6
27.5°	797.0	785.6	764.1	691.0	595.1	526.7	477.3	453.5	447.6	447.8	448.5
30°	902.2	879.6	826.9	692.6	569.6	479.9	433.9	416.9	414.1	415.2	419.3
32.5°	999.7	978.3	891.1	685.1	530.4	434.1	394.9	383.6	379.4	380.8	382.7
35°	1076.2	1070.3	950.6	674.4	482.3	391.2	360.0	350.3	342.1	340.2	341.6
37.5°	1148.5	1146.1	995.2	659.6	434.6	360.7	331.9	319.2	307.1	300.5	300.7
40°	1227.8	1225.4	1024.5	636.7	392.3	334.3	306.6	289.9	275.0	263.0	264.2
42.5°	1317.0	1303.1	1038.4	603.9	356.5	311.8	286.1	263.4	243.9	232.8	233.5
45°	1414.5	1383.1	1038.2	562.1	326.2	291.3	264.2	232.1	213.9	203.5	203.0
47.5°	1517.9	1459.6	1025.5	515.8	297.0	268.6	230.2	205.6	193.6	187.2	185.8
50°	1624.6	1531.1	1003.7	462.7	267.0	242.9	208.9	192.2	183.0	177.0	174.9
52.5°	1724.9	1596.0	977.5	402.5	236.5	217.9	199.5	186.5	176.8	170.2	167.4
55°	1818.2	1652.0	940.5	340.9	211.8	201.1	195.0	184.1	173.0	165.2	162.2
57.5°	1901.0	1688.3	876.5	283.0	194.0	189.6	190.3	180.1	167.4	160.8	156.5
60°	1970.0	1715.0	781.8	229.5	179.6	178.2	183.0	172.6	157.7	150.1	146.8
62.5°	2011.3	1714.5	665.7	187.9	167.4	167.8	173.3	163.1	148.0	140.9	138.8
65°	2007.7	1672.5	538.2	160.8	155.6	156.0	163.1	152.7	140.0	135.7	135.5
67.5°	1936.7	1570.1	412.9	143.1	142.6	144.7	153.0	145.7	135.0	134.6	135.3
70°	1744.3	1357.4	297.4	128.9	129.1	132.2	143.1	141.2	132.4	133.4	133.1
72.5°	1398.7	1034.9	199.7	114.0	114.3	119.2	133.6	137.6	129.8	142.3	144.2
75°	931.5	645.4	128.4	98.2	98.4	104.8	125.4	130.8	122.8	141.9	143.1
77.5°	447.6	290.1	93.0	82.6	82.6	88.5	108.4	117.1	104.6	110.2	101.0
80°	154.6	109.1	73.2	66.6	65.2	69.2	91.4	101.5	90.2	83.1	77.9
82.5°	60.9	56.7	58.8	51.7	47.0	49.6	71.1	83.8	66.3	60.0	59.7
85°	34.9	36.8	41.5	34.2	27.1	30.5	52.2	60.2	50.0	44.1	45.1
87.5°	9.4	13.0	19.1	17.7	12.3	13.0	24.8	33.3	28.8	22.2	22.9
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)