

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: P963681

Luminaire Tested: **NAV-SB3A-830-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963681
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-830-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12371.8 lumens
Efficiency: N/A
Efficacy: 146.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

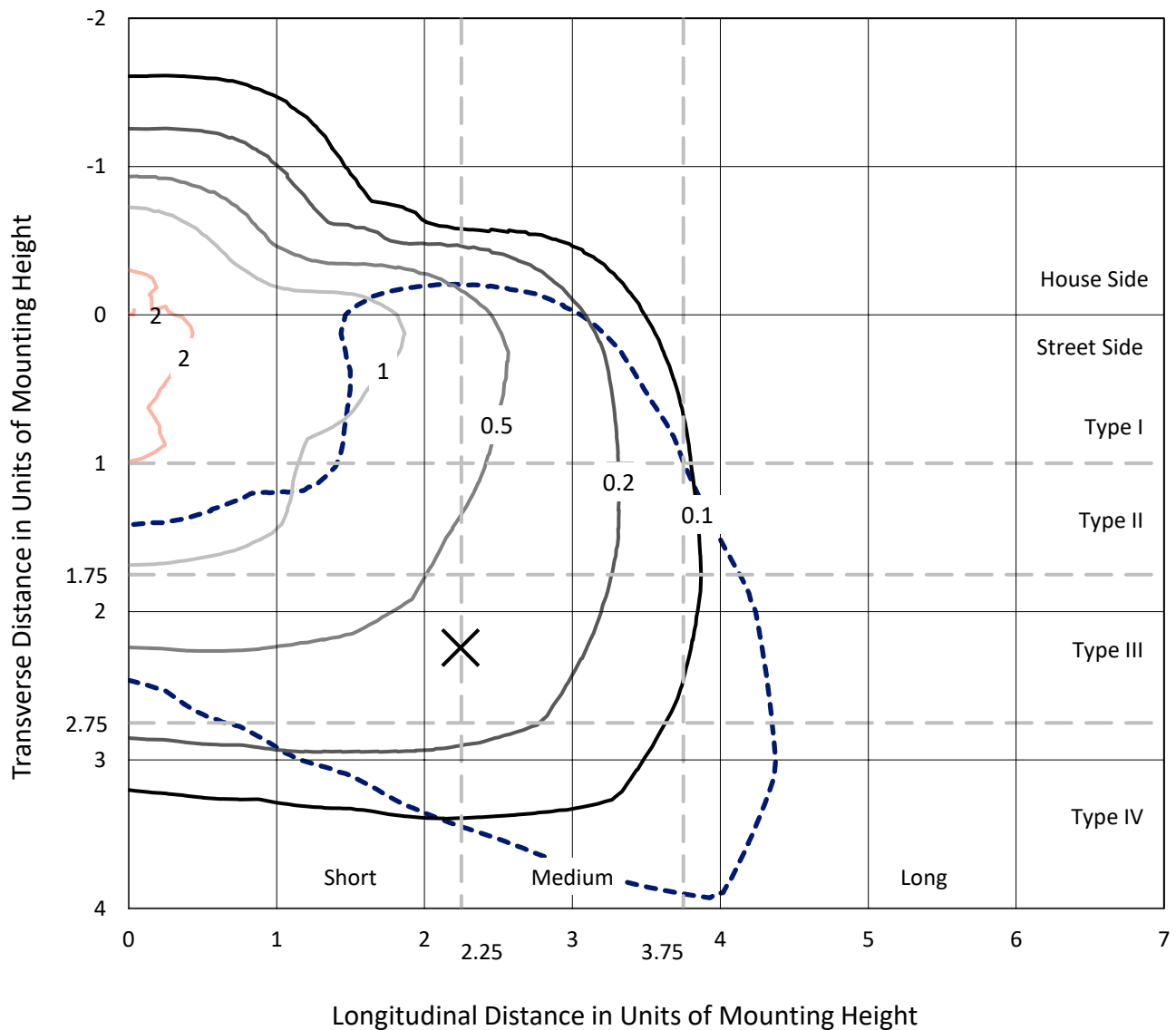
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

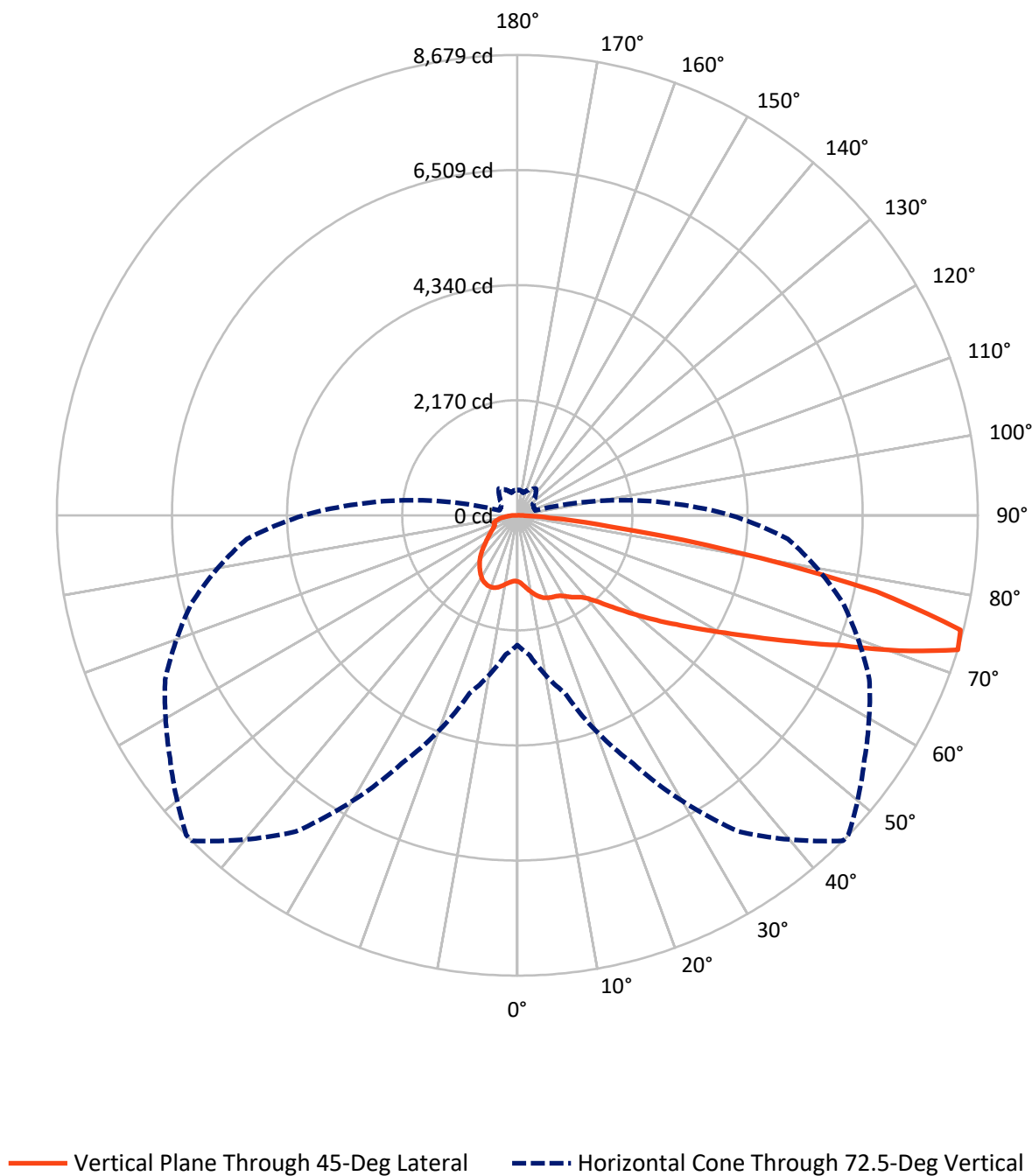
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2796.8	0.0	2796.8
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	9574.9	0.0	9574.9
	% Fixture	77.4	0.0	77.4
Total	Lumens	12371.8	0.0	12371.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.0	1.0
10°-20°	423.5	3.4
20°-30°	736.8	6.0
30°-40°	1056.2	8.5
40°-50°	1487.2	12.0
50°-60°	2277.9	18.4
60°-70°	3299.9	26.7
70°-80°	2635.1	21.3
80°-90°	328.2	2.7
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°	12371.8	100.0
0°-180°	12371.8	100.0

Coefficient of Utilization



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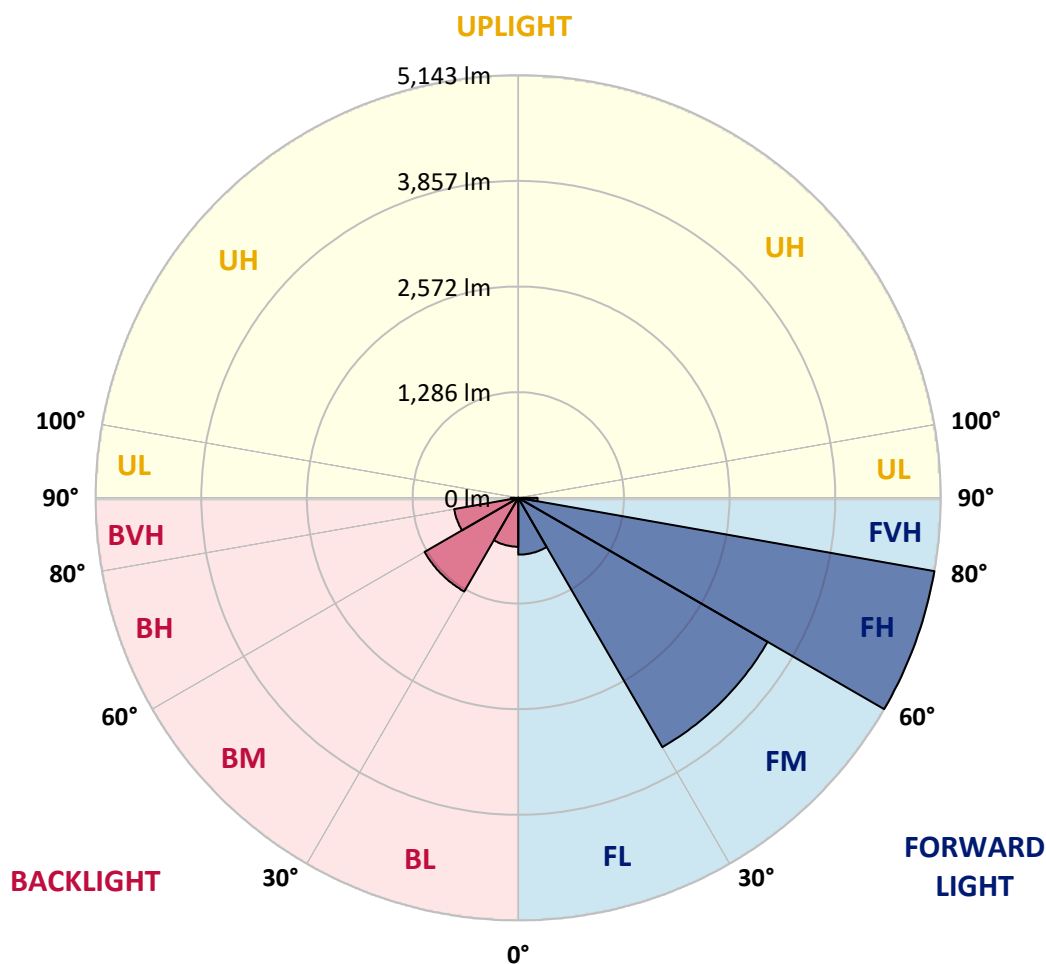
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	691.8	5.6			
FM	(30°-60°)	3504.3	28.3			
FH	(60°-80°)	5143.3	41.6			G3/7500
FVH	(80°-90°)	235.4	1.9			G3/500
BL	(0°-30°)	595.5	4.8	B2/1000		
BM	(30°-60°)	1316.9	10.6	B2/2500		
BH	(60°-80°)	791.7	6.4	B2/1000		G2/1000
BVH	(80°-90°)	92.7	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1248.0	1248.0	1248.0	1248.0	1248.0	1248.0	1248.0	1248.0	1248.0	1248.0	1248.0
2.5°	1296.9	1305.4	1297.6	1290.5	1287.2	1278.7	1278.1	1272.8	1269.6	1260.4	1257.9
5°	1387.5	1398.6	1385.6	1371.2	1358.2	1337.3	1334.8	1319.8	1302.8	1283.3	1272.2
7.5°	1489.8	1499.7	1484.6	1463.2	1440.3	1405.8	1405.2	1377.8	1351.1	1317.8	1298.9
10°	1579.1	1592.2	1571.9	1542.6	1513.9	1474.9	1470.3	1439.0	1405.2	1362.1	1333.4
12.5°	1658.0	1667.2	1647.6	1611.7	1578.5	1539.3	1533.5	1499.0	1461.1	1412.3	1375.9
15°	1720.6	1732.4	1706.2	1667.8	1632.6	1594.2	1589.0	1557.7	1519.9	1468.3	1421.5
17.5°	1761.7	1771.4	1744.7	1701.7	1667.8	1635.9	1631.9	1605.9	1572.7	1520.5	1470.3
20°	1777.2	1787.7	1759.7	1716.1	1684.7	1660.0	1658.0	1639.1	1616.3	1568.8	1517.9
22.5°	1792.9	1802.7	1766.2	1720.6	1693.2	1677.5	1676.9	1664.5	1655.4	1616.3	1566.8
25°	1856.2	1858.7	1809.8	1744.0	1704.9	1691.2	1690.6	1689.9	1693.8	1663.3	1619.6
27.5°	1910.9	1910.2	1868.5	1806.6	1746.0	1717.3	1716.7	1723.2	1735.5	1710.1	1674.3
30°	1991.1	1983.9	1934.4	1869.8	1814.5	1770.1	1766.2	1760.3	1770.1	1749.9	1729.1
32.5°	2161.1	2138.4	2058.2	1943.5	1871.1	1837.2	1832.0	1795.5	1799.4	1787.1	1776.6
35°	2404.9	2374.9	2268.0	2082.9	1941.6	1893.3	1890.7	1844.4	1836.6	1825.5	1829.4
37.5°	2694.9	2657.7	2533.3	2284.9	2062.7	1958.5	1954.6	1912.9	1880.9	1869.2	1891.3
40°	2986.2	2939.3	2836.4	2531.3	2241.3	2067.3	2054.9	1991.7	1955.2	1935.6	1982.6
42.5°	3269.1	3230.0	3142.0	2807.7	2461.6	2226.3	2198.9	2090.8	2063.4	2045.2	2129.8
45°	3519.3	3484.2	3419.6	3102.9	2719.6	2442.7	2415.9	2239.3	2230.9	2230.9	2353.4
47.5°	3722.7	3714.9	3646.4	3404.0	3024.1	2689.1	2642.8	2446.0	2468.8	2504.0	2670.8
50°	3948.2	3926.7	3853.7	3700.6	3381.9	2971.3	2933.4	2699.4	2784.8	2881.3	3129.6
52.5°	4155.5	4167.1	4085.8	4009.5	3785.9	3286.0	3219.5	2998.6	3183.0	3342.7	3667.3
55°	4368.5	4369.3	4346.4	4336.0	4209.6	3634.0	3561.1	3358.4	3651.7	3849.8	4294.2
57.5°	4568.6	4570.0	4603.9	4695.7	4701.0	4035.5	3952.8	3800.3	4172.4	4374.4	4940.8
60°	4747.2	4756.3	4848.9	5064.0	5133.1	4495.6	4417.4	4322.3	4710.7	4914.1	5620.6
62.5°	4807.1	4840.5	5046.4	5352.0	5559.9	5060.0	4983.1	4926.5	5276.4	5465.4	6188.8
65°	4705.5	4781.7	5179.9	5589.9	5999.2	5730.7	5654.4	5592.5	5864.3	6042.2	6655.5
67.5°	4455.9	4554.3	5172.2	5839.5	6532.3	6537.6	6466.5	6321.2	6494.5	6563.0	6807.3
70°	3798.3	3945.6	4716.6	5932.7	7144.2	7641.0	7572.5	7198.4	7123.4	6792.4	6379.8
72.5°	2447.3	2645.4	3473.1	5165.6	7280.5	8679.1	8675.2	7990.3	7322.2	6346.6	5116.8
75°	892.9	1014.1	1613.7	3242.4	6111.3	8626.3	8651.7	7854.7	6684.1	4902.4	3187.6
77.5°	325.2	355.9	526.6	1246.1	3758.6	6921.4	6974.2	6279.5	4757.6	2460.3	1263.1
80°	170.8	187.7	269.8	483.6	1610.5	4110.5	4193.3	3731.8	2236.1	741.0	378.6
82.5°	94.5	102.3	151.2	262.6	725.4	1757.8	1807.3	1474.3	786.7	314.2	156.4
85°	50.8	54.1	71.0	143.4	354.5	609.4	623.1	440.5	313.4	184.4	75.6
87.5°	15.0	18.2	23.5	45.6	138.8	136.8	140.1	87.3	123.8	93.2	24.8
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°	1248.0	1248.0	1248.0	1248.0	1248.0	1248.0	1248.0	1248.0	1248.0	1248.0	1248.0
2.5°	1254.0	1251.9	1244.8	1241.6	1237.7	1237.0	1240.2	1240.9	1241.6	1242.2	1244.8
5°	1265.7	1259.1	1252.7	1248.8	1250.0	1250.7	1257.2	1261.8	1265.1	1267.6	1268.9
7.5°	1288.4	1283.3	1272.2	1271.5	1273.5	1279.3	1287.8	1298.3	1304.1	1308.7	1309.9
10°	1322.4	1312.6	1299.6	1301.5	1305.4	1313.8	1331.5	1340.0	1349.7	1358.2	1356.3
12.5°	1356.9	1348.4	1333.4	1334.8	1341.3	1356.3	1373.2	1383.6	1390.1	1396.7	1399.2
15°	1401.9	1386.9	1370.6	1370.6	1382.3	1398.6	1406.4	1414.9	1418.8	1426.0	1428.6
17.5°	1448.1	1428.6	1407.1	1405.8	1420.1	1427.9	1432.5	1433.8	1435.1	1442.9	1445.6
20°	1494.4	1472.9	1442.3	1439.7	1442.9	1441.7	1440.9	1439.7	1441.7	1451.4	1455.3
22.5°	1540.1	1515.3	1472.9	1461.1	1452.0	1439.7	1439.0	1438.4	1439.7	1449.5	1456.0
25°	1593.5	1563.5	1506.9	1471.6	1440.9	1424.0	1426.0	1426.6	1427.9	1435.7	1446.2
27.5°	1651.5	1618.3	1538.1	1468.3	1413.0	1401.2	1398.0	1399.9	1404.5	1416.9	1429.3
30°	1709.5	1670.4	1566.8	1455.3	1377.8	1361.5	1351.1	1355.6	1369.9	1382.3	1396.0
32.5°	1762.3	1723.2	1589.6	1426.6	1332.8	1307.4	1293.7	1299.6	1313.8	1318.5	1334.8
35°	1824.2	1779.9	1599.3	1381.0	1283.9	1244.8	1226.5	1218.1	1225.3	1220.7	1235.0
37.5°	1893.3	1847.0	1598.1	1321.0	1226.5	1181.6	1156.2	1124.2	1109.3	1093.6	1103.4
40°	1995.6	1929.2	1582.4	1248.8	1155.5	1114.5	1068.9	1014.7	980.8	950.3	952.2
42.5°	2135.1	2043.1	1553.7	1169.2	1075.3	1036.9	975.0	911.7	858.3	807.5	803.0
45°	2342.9	2192.5	1517.9	1084.4	988.7	950.9	883.8	812.7	752.1	687.0	679.1
47.5°	2642.8	2393.2	1484.0	988.0	897.4	862.8	802.3	736.5	664.8	601.6	594.4
50°	3054.7	2681.2	1452.7	894.2	807.5	781.5	733.2	666.0	593.7	542.9	539.7
52.5°	3578.7	3073.0	1439.7	803.6	723.4	713.6	675.2	612.6	544.2	501.2	497.9
55°	4180.3	3541.5	1439.7	716.9	649.7	653.0	626.3	568.3	509.0	470.6	466.7
57.5°	4794.1	4016.0	1413.6	636.7	587.2	600.9	583.9	533.1	479.7	439.9	433.4
60°	5359.8	4413.5	1308.0	563.8	531.8	553.3	542.2	498.6	433.4	400.2	394.9
62.5°	5794.5	4637.7	1104.6	505.7	486.2	511.0	505.1	452.9	425.0	411.2	406.7
65°	6012.2	4601.2	844.6	454.3	447.7	486.2	473.9	471.8	449.7	434.1	428.9
67.5°	5878.7	4287.1	612.6	416.5	425.6	463.4	511.0	518.8	477.8	447.1	441.9
70°	5292.7	3718.8	456.2	380.6	397.6	464.0	582.6	542.9	468.6	432.8	426.9
72.5°	4026.4	2773.1	353.9	342.9	361.1	467.3	614.6	531.8	442.5	478.4	474.5
75°	2302.6	1522.4	284.1	296.5	315.4	436.6	598.3	503.2	422.3	439.3	439.3
77.5°	877.9	585.3	234.6	250.9	253.5	381.3	572.3	501.2	402.1	392.4	357.8
80°	304.3	228.8	194.2	199.5	196.2	338.9	548.8	436.0	329.1	294.6	284.8
82.5°	124.4	114.1	153.9	147.3	139.5	263.3	443.2	356.5	269.2	237.9	235.2
85°	54.1	72.4	101.7	89.3	80.8	182.4	355.2	301.8	227.4	196.2	195.6
87.5°	11.1	27.4	43.0	40.4	41.7	121.9	252.3	214.4	161.0	120.5	94.5
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)