

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: P960343

Luminaire Tested: **NAV-SB1C-735-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960343
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-735-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7505 lumens
Efficiency: N/A
Efficacy: 138.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

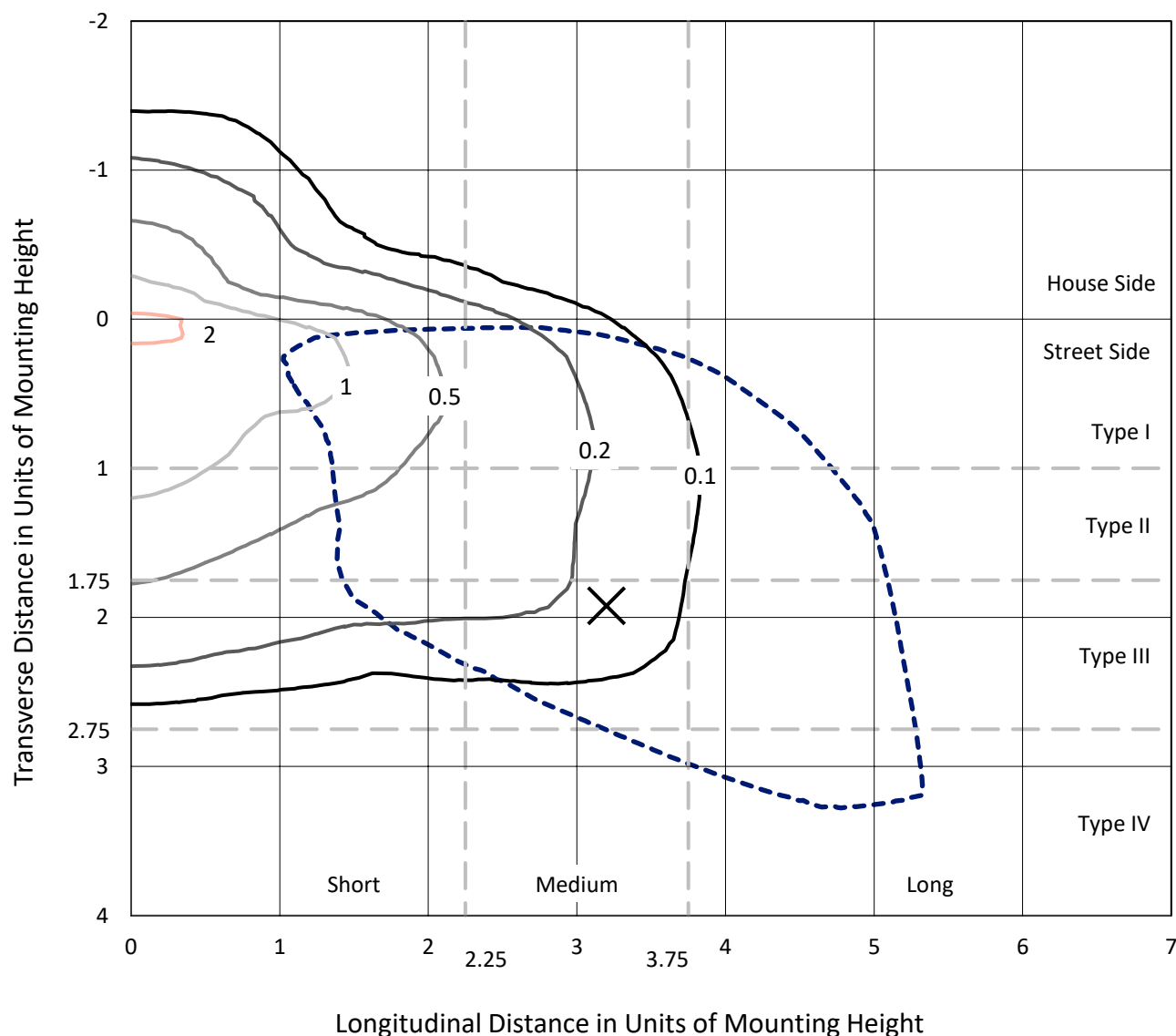
Input Watts (W): 54.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

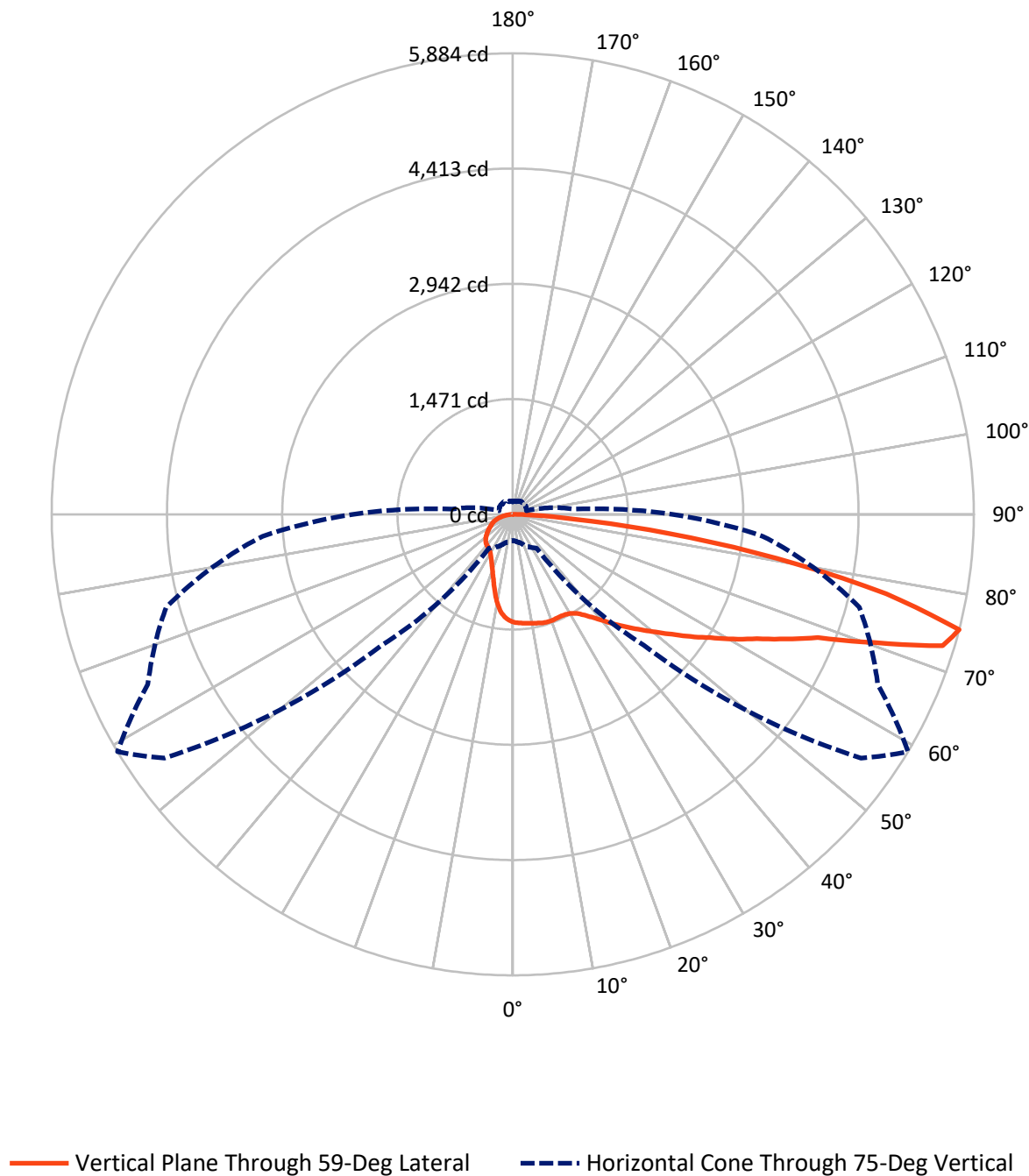
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1407.6	0.0	1407.6
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	6097.4	0.0	6097.4
	% Fixture	81.2	0.0	81.2
Total	Lumens	7505.0	0.0	7505.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.5	1.6
10°-20°	315.7	4.2
20°-30°	479.6	6.4
30°-40°	712.8	9.5
40°-50°	1060.1	14.1
50°-60°	1439.0	19.2
60°-70°	1756.8	23.4
70°-80°	1378.7	18.4
80°-90°	238.8	3.2
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°	7505.0	100.0
0°-180°	7505.0	100.0

Coefficient of Utilization



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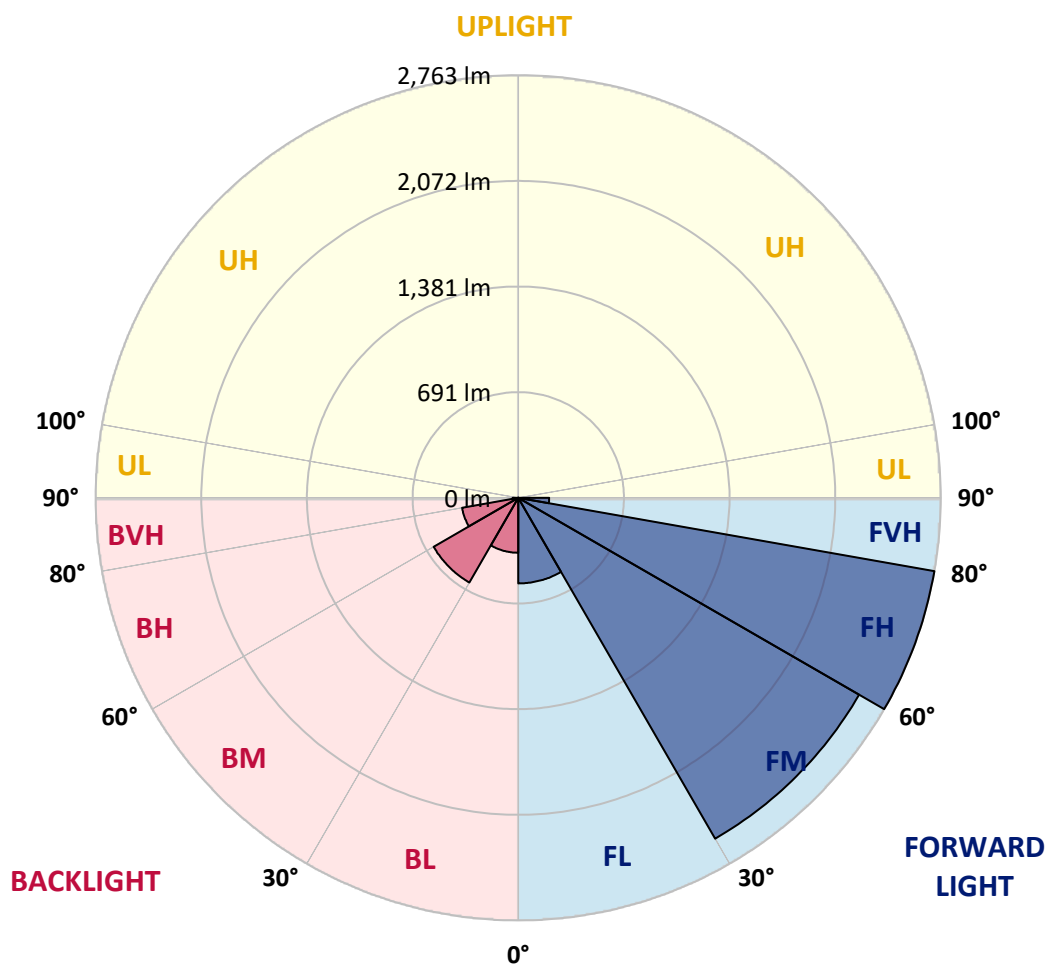
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	559.6	7.5			
FM	(30°-60°)	2573.1	34.3			
FH	(60°-80°)	2762.5	36.8			G2/5000
FVH	(80°-90°)	202.3	2.7			G2/225
BL	(0°-30°)	359.2	4.8	B1/500		
BM	(30°-60°)	638.9	8.5	B1/1000		
BH	(60°-80°)	372.9	5.0	B1/500		G1/500
BVH	(80°-90°)	36.6	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-G2

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5
2.5°	1389.3	1384.4	1389.3	1387.2	1386.4	1384.8	1385.2	1388.1	1386.4	1388.5	1381.6
5°	1380.0	1377.1	1382.0	1380.8	1386.0	1386.8	1392.1	1395.3	1397.3	1397.7	1392.5
7.5°	1364.6	1361.8	1368.7	1374.3	1385.6	1388.9	1399.7	1405.0	1407.8	1412.7	1405.0
10°	1308.5	1307.3	1324.2	1345.6	1372.3	1388.9	1405.4	1414.3	1418.7	1431.6	1422.8
12.5°	1209.2	1210.8	1233.0	1274.2	1327.5	1380.8	1411.8	1424.7	1431.6	1447.8	1443.7
15°	1114.3	1113.9	1138.2	1182.1	1256.9	1345.2	1415.1	1437.3	1449.0	1472.8	1469.5
17.5°	1059.4	1057.8	1074.7	1108.2	1177.7	1290.8	1407.0	1444.1	1469.1	1499.1	1496.2
20°	1049.3	1046.1	1054.9	1071.5	1120.7	1231.0	1386.0	1444.1	1485.3	1524.1	1522.4
22.5°	1086.1	1080.8	1077.2	1075.1	1097.0	1181.7	1362.2	1439.3	1509.1	1560.0	1557.2
25°	1159.9	1151.9	1133.2	1115.1	1108.6	1159.5	1341.2	1438.1	1544.7	1608.4	1598.0
27.5°	1279.4	1269.4	1231.7	1188.2	1149.0	1170.9	1331.9	1445.4	1583.8	1659.8	1638.8
30°	1427.6	1416.7	1369.5	1302.5	1232.2	1212.8	1343.7	1466.8	1634.0	1727.9	1686.8
32.5°	1560.5	1548.4	1508.0	1439.7	1344.8	1285.5	1380.8	1507.6	1712.7	1822.9	1759.1
35°	1678.3	1664.2	1627.8	1564.9	1482.9	1387.6	1447.8	1579.8	1824.5	1977.1	1857.2
37.5°	1793.7	1777.2	1737.7	1671.1	1613.8	1523.7	1540.3	1672.7	1973.0	2164.4	1987.2
40°	1923.0	1899.1	1851.2	1785.3	1729.6	1683.2	1661.7	1786.5	2124.0	2373.6	2149.4
42.5°	2048.2	2025.5	1968.2	1912.0	1842.2	1828.9	1802.7	1919.7	2289.1	2603.3	2314.2
45°	2182.9	2155.9	2086.5	2015.5	1971.4	1925.8	1939.1	2053.0	2451.1	2837.4	2487.0
47.5°	2309.3	2279.1	2197.1	2118.0	2093.8	2007.4	2064.2	2199.5	2619.4	3074.8	2658.1
50°	2377.6	2347.7	2279.5	2208.1	2189.0	2107.9	2200.0	2360.6	2795.9	3311.4	2822.5
52.5°	2434.5	2402.2	2313.0	2273.4	2267.8	2217.3	2367.0	2544.8	2972.3	3520.6	2981.1
55°	2495.1	2459.2	2345.3	2309.7	2335.6	2340.1	2565.3	2753.5	3158.8	3724.4	3131.0
57.5°	2565.0	2519.2	2376.4	2340.5	2401.8	2483.8	2793.0	2969.8	3342.1	3913.3	3264.2
60°	2630.8	2584.7	2436.1	2389.3	2473.2	2650.5	3054.2	3231.9	3549.6	4081.8	3390.2
62.5°	2643.7	2605.7	2483.8	2483.4	2570.2	2845.1	3363.5	3496.3	3730.9	4248.1	3503.1
65°	2419.9	2396.1	2323.9	2479.7	2709.1	3125.3	3707.8	3834.6	3961.4	4393.5	3602.5
67.5°	1841.8	1845.1	1839.8	2140.6	2596.8	3527.8	4206.5	4196.8	4246.1	4556.5	3716.8
70°	842.1	861.2	984.7	1477.6	2080.4	3574.3	5030.9	4905.3	4603.4	4767.7	3815.7
72.5°	455.0	469.6	520.0	715.9	1250.8	3177.8	5647.0	5736.2	5078.6	4909.8	3707.1
75°	333.8	341.9	377.1	455.0	525.2	2361.8	5426.1	5884.0	5137.9	4578.4	3201.2
77.5°	249.9	253.6	282.2	360.5	268.9	1245.1	4335.6	4873.1	4398.3	3761.5	2364.7
80°	181.3	185.3	206.7	270.5	188.5	455.4	2977.1	3420.4	3012.3	2397.8	1178.5
82.5°	125.2	126.8	136.0	184.1	131.6	176.8	1689.2	2005.7	1681.5	841.4	318.2
85°	75.5	77.5	81.6	107.4	74.7	83.9	729.2	754.2	502.7	201.1	98.9
87.5°	31.1	33.1	36.3	45.2	29.5	23.4	120.3	151.0	94.1	58.9	30.6
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°	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5
2.5°	1379.5	1376.7	1369.1	1358.5	1348.9	1336.8	1331.5	1327.1	1323.1	1315.4	1311.7
5°	1388.1	1380.4	1359.8	1333.1	1302.9	1269.8	1237.5	1215.2	1196.3	1182.1	1170.4
7.5°	1401.0	1386.4	1348.9	1294.4	1224.9	1153.8	1089.7	1044.1	1009.7	997.2	975.4
10°	1414.3	1396.9	1331.5	1235.4	1115.5	1006.1	921.0	874.1	846.6	837.7	824.0
12.5°	1430.0	1404.6	1304.4	1153.4	993.2	873.3	799.0	771.5	757.4	752.6	753.8
15°	1453.0	1411.0	1263.7	1050.9	876.5	776.3	728.4	709.4	702.1	701.7	703.3
17.5°	1470.4	1412.2	1200.3	941.1	786.9	717.8	678.2	671.0	675.9	683.2	685.9
20°	1489.7	1401.4	1117.1	841.0	723.9	666.6	650.1	654.9	666.6	677.0	680.7
22.5°	1503.5	1381.6	1016.6	763.0	669.4	637.1	636.3	646.4	652.8	658.0	660.9
25°	1515.6	1348.1	910.0	697.6	624.5	619.3	628.2	624.9	620.5	624.9	627.8
27.5°	1524.5	1295.2	814.8	640.3	593.1	607.2	602.0	594.7	594.3	596.8	600.8
30°	1521.7	1224.6	736.4	585.8	570.9	584.6	572.1	570.9	569.7	570.9	575.3
32.5°	1521.7	1144.2	676.3	548.3	556.8	551.4	550.3	547.5	542.6	542.2	547.5
35°	1530.1	1063.8	624.5	528.1	545.0	532.5	533.3	526.4	516.4	511.6	516.4
37.5°	1547.5	999.3	573.3	518.3	524.5	524.1	520.8	509.1	491.4	476.0	481.2
40°	1589.5	980.3	538.1	513.9	514.8	519.6	511.2	488.5	448.1	423.1	426.3
42.5°	1655.3	1012.2	530.5	503.1	508.3	513.1	496.6	444.1	415.4	400.5	400.5
45°	1738.9	1067.8	547.0	487.3	492.9	501.4	452.2	427.1	414.2	414.6	416.7
47.5°	1844.7	1126.4	577.7	473.6	470.8	475.6	422.7	407.3	389.6	394.0	405.4
50°	1967.0	1185.7	606.8	455.0	446.1	430.4	403.7	389.2	366.5	356.1	359.0
52.5°	2099.4	1243.1	618.5	432.4	419.4	401.3	390.8	373.1	345.6	328.2	327.8
55°	2225.0	1295.2	605.6	405.4	392.9	378.7	377.1	366.2	336.7	312.5	312.5
57.5°	2343.7	1338.8	573.3	377.9	365.8	357.3	368.2	363.0	325.8	294.7	293.2
60°	2444.2	1368.7	526.4	350.0	341.5	337.1	353.6	352.1	310.5	275.7	274.5
62.5°	2524.2	1380.4	474.8	323.4	321.3	313.3	333.4	333.4	291.1	257.2	255.9
65°	2586.7	1369.1	422.3	297.1	301.1	289.0	308.8	306.5	270.5	240.7	239.0
67.5°	2642.0	1331.9	364.2	271.3	280.6	265.3	283.0	277.4	247.8	224.1	222.4
70°	2666.6	1245.5	298.0	245.5	256.8	241.8	257.2	246.7	222.4	206.3	203.1
72.5°	2468.8	1035.1	234.5	218.4	228.1	216.0	229.3	217.2	195.0	187.8	181.6
75°	2042.5	776.7	180.5	188.9	196.2	187.0	195.8	187.0	166.8	172.0	157.0
77.5°	1483.3	524.5	138.1	157.8	161.1	156.2	163.9	153.9	135.6	134.5	128.4
80°	737.6	307.2	108.2	124.7	123.5	120.3	129.1	124.3	109.0	115.5	114.3
82.5°	213.6	131.6	78.7	87.6	85.2	86.0	92.5	94.9	142.1	140.9	144.1
85°	67.0	51.7	47.3	48.9	46.4	47.7	54.5	108.2	100.1	58.5	63.3
87.5°	17.3	17.7	11.7	12.5	12.9	15.4	17.3	65.8	31.5	20.6	21.8
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)