

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: P961943

Luminaire Tested: **NAV-SB2B-735-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961943
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-735-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11408.3 lumens
Efficiency: N/A
Efficacy: 154.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

Input Watts (W): 73.9
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

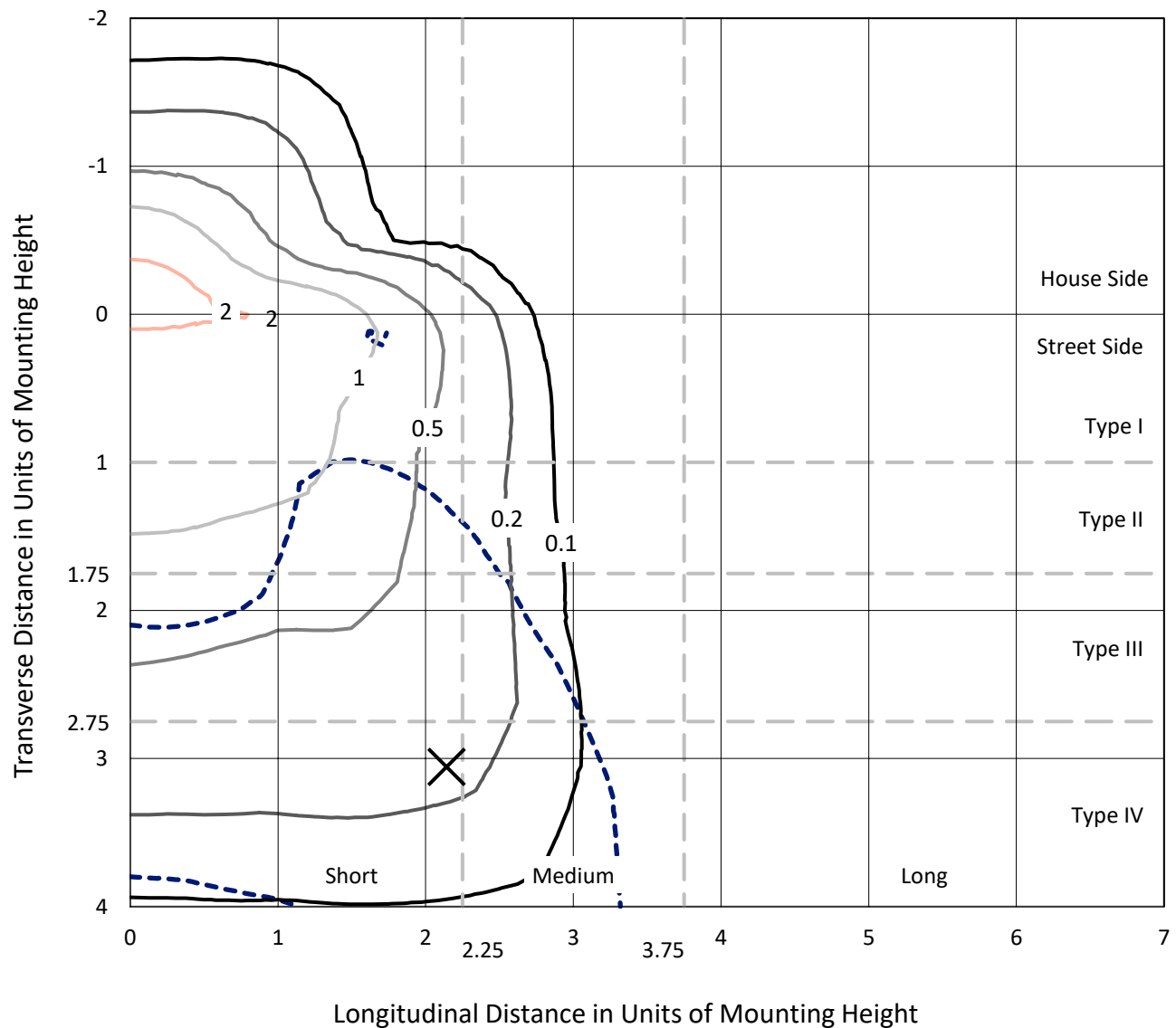


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Iso-Footcandle Lines of Horizontal Illumination

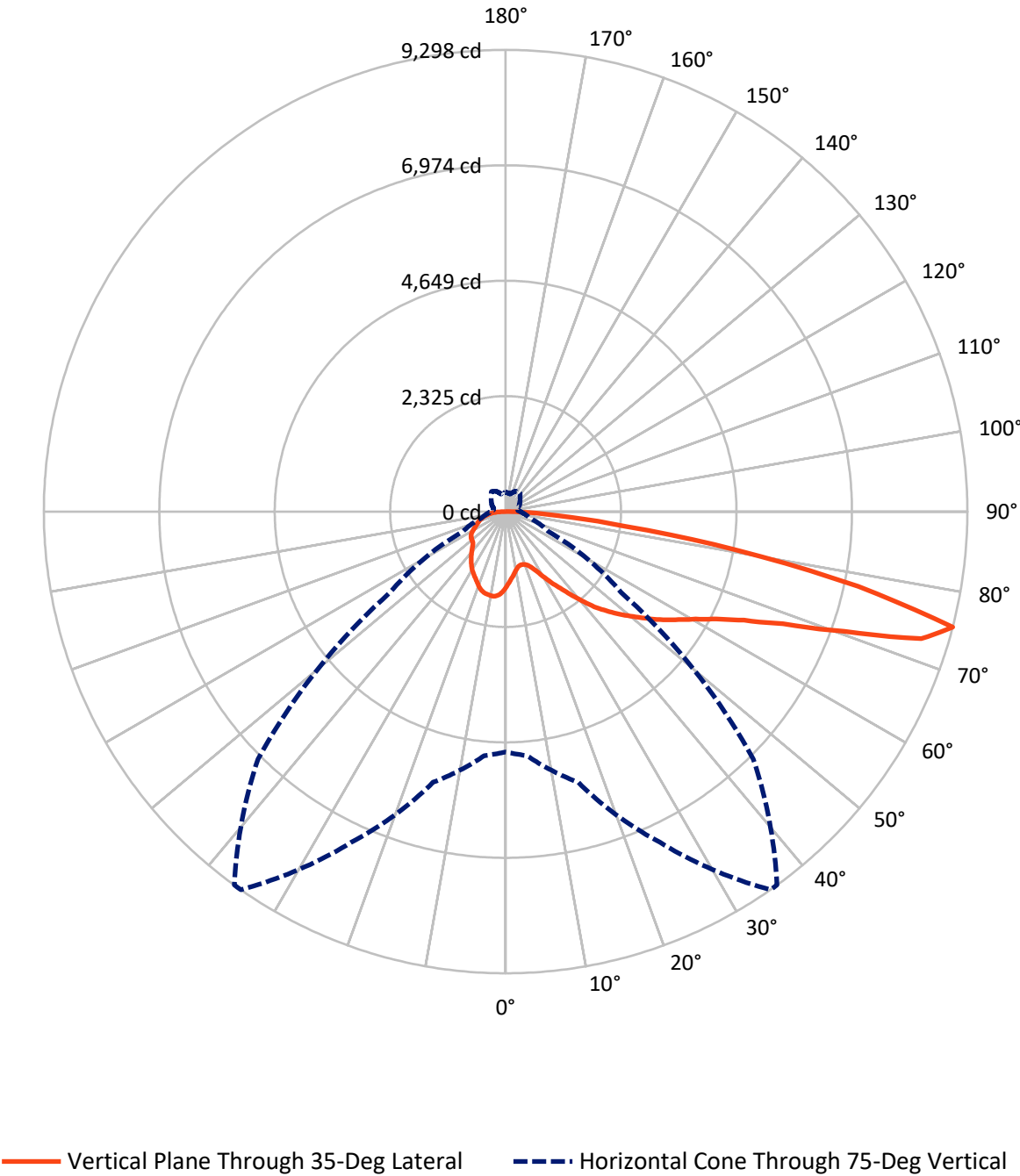
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 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	2714.9	0.0	2714.9
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	8693.4	0.0	8693.4
	% Fixture	76.2	0.0	76.2
Total	Lumens	11408.3	0.0	11408.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.9	1.3
10°-20°	415.2	3.6
20°-30°	697.2	6.1
30°-40°	1083.5	9.5
40°-50°	1608.2	14.1
50°-60°	2220.3	19.5
60°-70°	2693.7	23.6
70°-80°	2226.1	19.5
80°-90°	320.2	2.8
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°	11408.3	100.0
0°-180°	11408.3	100.0

Coefficient of Utilization



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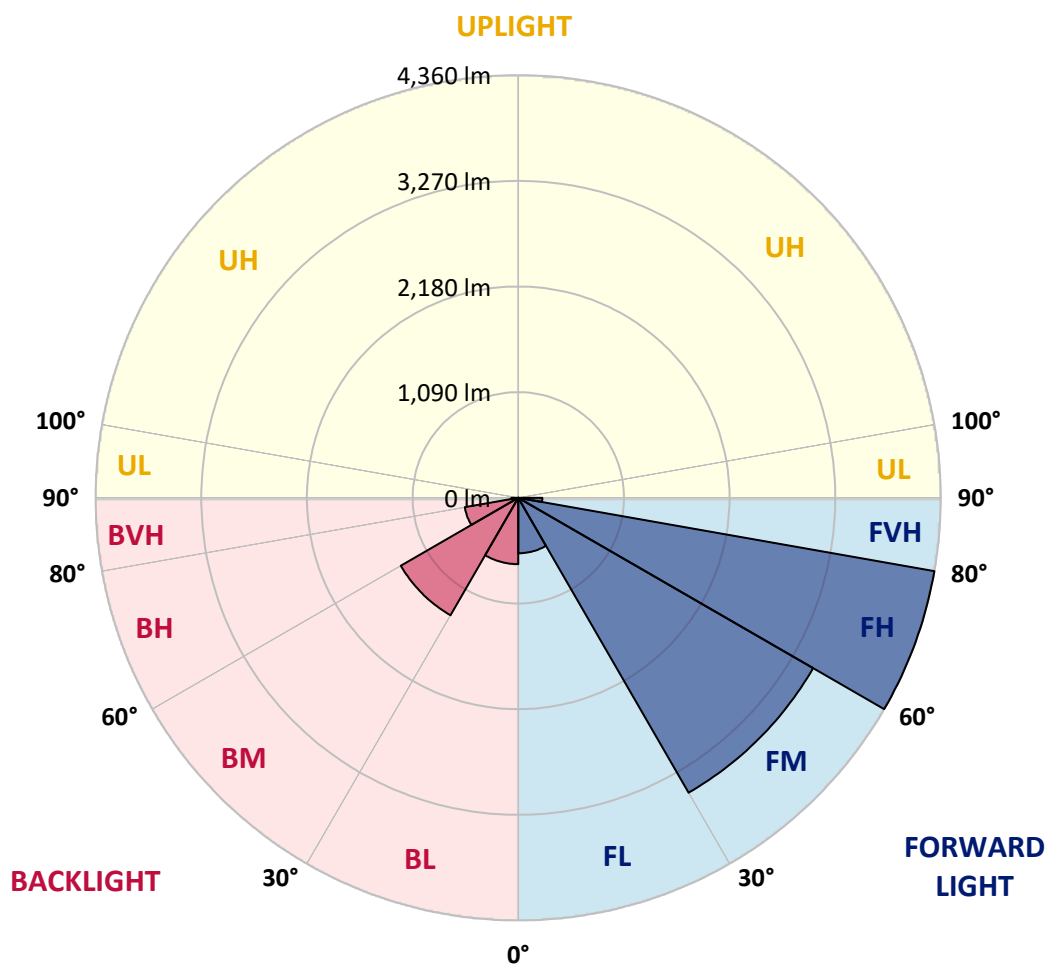
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	572.1	5.0			
FM	(30°-60°)	3513.1	30.8			
FH	(60°-80°)	4360.1	38.2			G2/5000
FVH	(80°-90°)	248.1	2.2			G3/500
BL	(0°-30°)	684.2	6.0	B2/1000		
BM	(30°-60°)	1398.9	12.3	B2/2500		
BH	(60°-80°)	559.7	4.9	B2/1000		G2/1000
BVH	(80°-90°)	72.1	0.6			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°	36°	45°	55°	65°	75°	85°
0°	1520.2	1520.2	1520.2	1520.2	1520.2	1520.2	1520.2	1520.2	1520.2	1520.2	1520.2
2.5°	1401.8	1410.4	1414.2	1412.3	1421.6	1420.3	1433.3	1449.4	1471.5	1493.1	1524.6
5°	1293.9	1303.2	1311.2	1318.6	1336.4	1342.0	1362.3	1393.2	1433.9	1475.2	1527.0
7.5°	1193.4	1201.4	1213.7	1227.2	1257.5	1263.0	1296.9	1345.1	1401.8	1462.3	1533.8
10°	1111.3	1119.4	1132.3	1147.7	1185.3	1192.2	1235.3	1299.4	1373.4	1450.0	1541.2
12.5°	1076.1	1078.6	1086.1	1101.5	1134.2	1138.5	1185.9	1259.3	1345.7	1440.6	1552.3
15°	1074.3	1079.2	1079.8	1087.9	1115.0	1116.8	1160.7	1233.5	1328.4	1438.8	1569.0
17.5°	1092.9	1096.5	1091.0	1095.9	1118.8	1121.9	1156.4	1221.1	1322.9	1446.8	1597.4
20°	1142.2	1145.2	1128.6	1121.9	1138.5	1140.9	1174.9	1229.2	1328.4	1463.5	1636.2
22.5°	1247.0	1248.9	1208.2	1180.4	1181.6	1182.8	1212.5	1261.8	1350.0	1493.7	1685.5
25°	1410.4	1409.2	1344.5	1290.8	1259.9	1253.2	1272.9	1314.9	1386.4	1533.8	1749.1
27.5°	1601.7	1592.3	1527.7	1447.4	1380.3	1370.3	1366.0	1384.0	1438.2	1586.8	1826.8
30°	1817.5	1808.8	1739.1	1634.4	1541.2	1525.2	1484.5	1475.2	1515.3	1659.0	1934.7
32.5°	2054.3	2048.8	1965.5	1838.4	1713.9	1695.4	1626.9	1602.3	1633.7	1768.1	2085.2
35°	2252.8	2247.9	2178.8	2048.2	1895.8	1873.0	1803.3	1775.5	1791.6	1908.1	2281.9
37.5°	2432.3	2429.9	2370.7	2267.7	2110.5	2082.7	2004.4	1995.1	1992.0	2092.5	2520.6
40°	2598.9	2592.7	2531.0	2476.8	2360.2	2335.0	2265.9	2257.9	2234.4	2319.5	2790.7
42.5°	2783.3	2767.3	2677.8	2652.5	2621.1	2600.1	2558.8	2560.0	2508.2	2575.4	3076.8
45°	2933.8	2924.5	2832.6	2817.8	2851.8	2843.1	2878.9	2888.1	2787.6	2843.8	3374.1
47.5°	3095.3	3086.7	3009.0	2998.5	3090.4	3092.8	3219.3	3222.4	3060.1	3122.5	3672.0
50°	3294.6	3282.3	3205.1	3218.1	3321.1	3330.3	3561.6	3540.7	3311.2	3405.6	3967.4
52.5°	3425.9	3433.3	3416.6	3437.6	3578.3	3586.9	3898.3	3844.7	3559.7	3685.0	4257.2
55°	3522.7	3537.6	3589.3	3637.4	3849.6	3858.2	4215.9	4133.9	3765.7	3944.0	4529.9
57.5°	3647.4	3626.3	3723.2	3816.9	4107.4	4130.2	4524.9	4412.6	3948.3	4167.2	4716.7
60°	3826.1	3811.4	3886.6	4025.4	4396.0	4432.4	4851.7	4663.6	4082.1	4344.3	4753.1
62.5°	4188.8	4151.8	4163.5	4286.2	4759.9	4808.0	5220.5	4882.6	4148.7	4413.2	4558.2
65°	4730.9	4667.3	4608.2	4693.3	5272.4	5319.9	5636.9	5054.7	4124.1	4279.5	4040.8
67.5°	5413.6	5350.7	5277.9	5358.1	6027.2	6064.8	6150.6	5151.5	3929.7	3763.9	3126.1
70°	5976.7	5953.2	6040.2	6370.2	7232.9	7234.1	6809.3	5071.3	3397.6	2668.6	1808.8
72.5°	5902.1	5887.9	6346.1	7366.2	8752.6	8719.9	7432.8	4464.5	2288.6	1203.9	677.7
75°	4841.9	4933.8	5643.6	7348.2	9298.4	9294.1	7051.0	2838.1	946.7	499.0	350.3
77.5°	2596.4	2742.0	3664.0	5425.3	7258.8	7368.0	4957.2	992.9	406.4	319.5	242.4
80°	846.8	973.9	1460.4	2762.3	4716.7	4696.3	2124.6	389.8	278.2	226.3	167.8
82.5°	359.6	374.3	652.5	1304.4	2420.6	2383.0	676.5	223.9	195.5	154.8	103.6
85°	140.6	157.2	288.0	603.1	1048.5	1025.6	244.3	111.0	125.2	101.2	61.7
87.5°	46.2	56.2	103.0	206.6	326.3	314.6	59.9	38.2	54.2	46.2	22.2
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°	1520.2	1520.2	1520.2	1520.2	1520.2	1520.2	1520.2	1520.2	1520.2	1520.2	1520.2
2.5°	1533.2	1543.0	1554.7	1572.0	1586.8	1599.2	1612.1	1620.1	1623.2	1632.5	1631.9
5°	1544.3	1565.9	1594.9	1623.2	1651.0	1667.6	1682.4	1689.8	1696.6	1701.5	1702.7
7.5°	1562.8	1590.5	1636.2	1673.2	1696.6	1710.2	1720.1	1717.6	1720.1	1721.3	1723.1
10°	1578.8	1617.7	1672.0	1707.1	1725.0	1725.6	1723.1	1714.5	1710.2	1710.8	1712.1
12.5°	1598.0	1641.1	1699.7	1729.3	1734.2	1720.7	1710.2	1695.4	1689.8	1687.4	1686.1
15°	1623.8	1673.2	1729.9	1741.1	1728.7	1711.4	1693.5	1669.5	1657.1	1647.3	1650.4
17.5°	1655.3	1709.6	1753.4	1745.4	1718.8	1690.4	1661.4	1625.0	1599.8	1589.3	1589.9
20°	1699.0	1747.8	1771.2	1736.0	1696.0	1652.8	1603.5	1559.1	1535.7	1525.2	1524.0
22.5°	1752.1	1799.0	1788.5	1720.1	1663.3	1594.2	1532.6	1499.9	1488.2	1480.7	1481.9
25°	1815.7	1855.8	1800.8	1696.6	1609.7	1516.5	1469.0	1458.6	1453.0	1447.4	1447.4
27.5°	1898.3	1919.8	1810.0	1662.0	1525.8	1433.9	1416.7	1418.5	1416.7	1407.3	1409.2
30°	2007.5	2003.2	1818.8	1606.0	1429.6	1359.3	1360.5	1368.5	1369.7	1363.6	1366.6
32.5°	2151.2	2107.3	1823.1	1533.2	1337.6	1293.9	1295.1	1303.8	1309.9	1299.4	1304.4
35°	2325.0	2228.9	1816.3	1441.9	1266.8	1231.6	1222.3	1224.8	1226.6	1216.8	1223.5
37.5°	2528.0	2365.2	1786.1	1340.8	1208.2	1170.6	1150.8	1134.2	1124.3	1115.0	1121.2
40°	2750.6	2513.8	1730.5	1242.1	1142.8	1105.8	1076.1	1044.8	1011.5	999.1	1004.6
42.5°	2983.7	2666.7	1663.3	1147.7	1067.5	1037.3	1005.8	960.2	910.3	885.0	888.1
45°	3225.5	2823.4	1597.4	1054.6	990.5	977.5	941.2	886.2	832.0	799.9	797.4
47.5°	3462.2	2971.4	1500.5	960.8	918.3	932.4	904.2	853.5	793.1	742.5	737.0
50°	3688.7	3110.2	1342.0	865.9	859.7	918.9	891.7	819.0	749.9	685.2	679.7
52.5°	3913.1	3222.4	1139.1	779.5	828.3	915.2	875.8	795.6	711.0	643.3	635.8
55°	4103.7	3280.4	943.6	705.5	782.6	883.8	856.6	767.8	656.2	584.0	577.9
57.5°	4212.2	3233.5	780.7	632.7	719.8	832.0	823.9	708.6	590.8	535.4	527.9
60°	4165.4	3043.5	647.6	569.3	659.9	775.8	767.2	650.1	540.9	488.4	481.0
62.5°	3907.0	2681.5	542.1	513.7	605.7	718.5	710.4	605.1	502.7	452.0	444.0
65°	3386.4	2181.4	460.1	467.5	550.7	649.4	661.1	567.3	472.4	423.1	415.0
67.5°	2582.8	1580.0	396.0	427.4	497.1	581.6	615.5	540.3	447.1	400.3	392.9
70°	1472.1	897.3	341.6	388.6	449.6	518.6	580.4	518.6	419.9	381.1	376.2
72.5°	558.1	411.9	295.4	349.7	404.0	465.7	541.5	484.7	388.6	359.6	354.6
75°	297.9	251.0	248.6	304.0	351.6	413.8	492.7	451.4	365.1	379.9	392.3
77.5°	203.0	177.6	207.9	260.2	294.2	356.5	441.0	400.9	316.4	315.2	290.5
80°	140.6	125.8	169.0	209.7	227.6	299.7	384.8	344.1	257.8	240.6	230.0
82.5°	84.5	82.0	126.4	156.6	160.9	231.2	318.9	288.6	210.9	183.8	185.0
85°	46.2	48.7	80.8	91.9	93.8	161.5	249.8	223.2	162.2	136.3	137.6
87.5°	12.9	16.6	29.6	36.4	45.0	83.8	148.6	132.6	81.4	56.8	56.8
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)