

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: P961583

Luminaire Tested: **NAV-SB2A-835-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961583
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-SB2A-835-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8335.3 lumens
Efficiency: N/A
Efficacy: 145.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 57.3
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

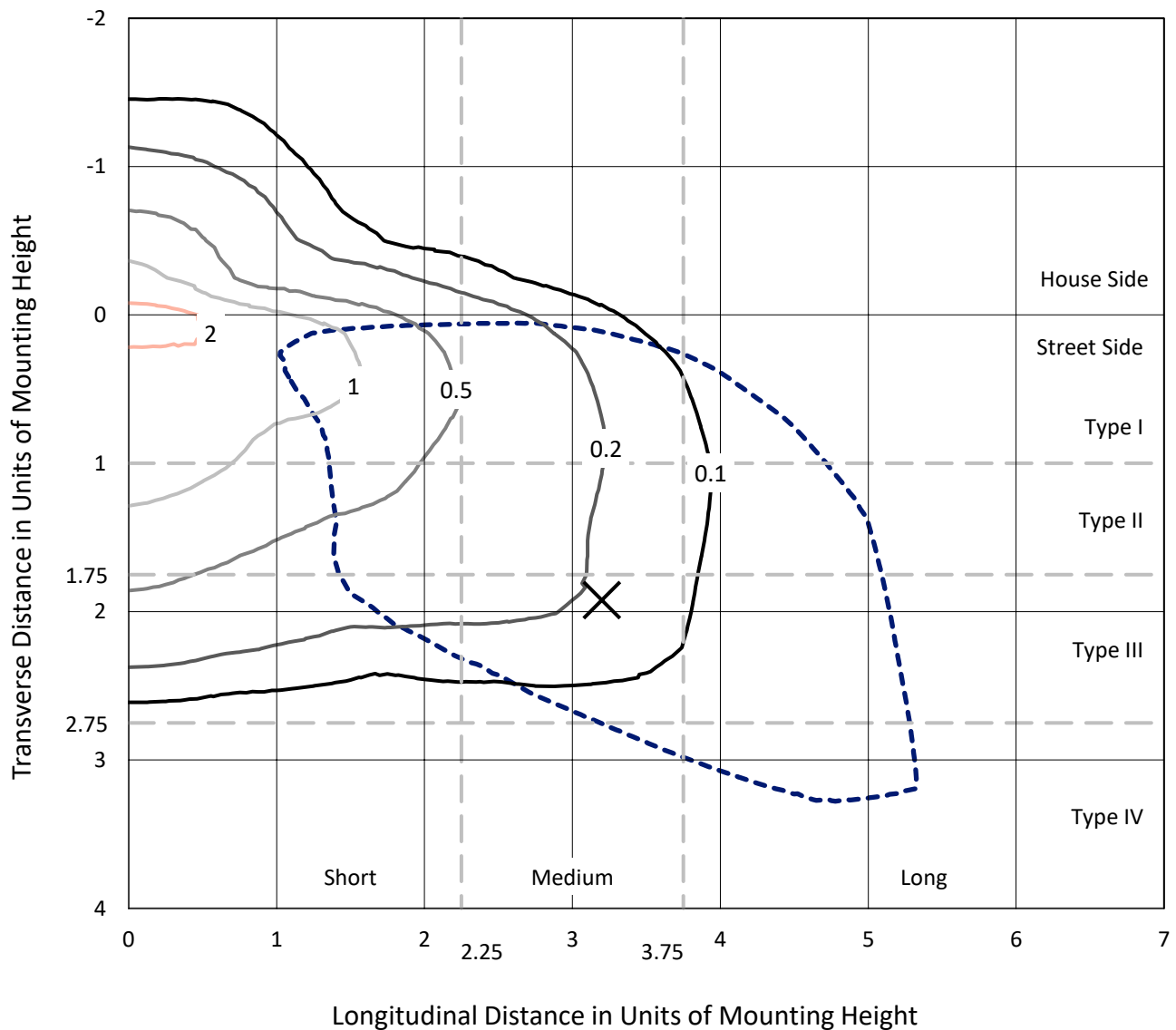


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Iso-Footcandle Lines of Horizontal Illumination

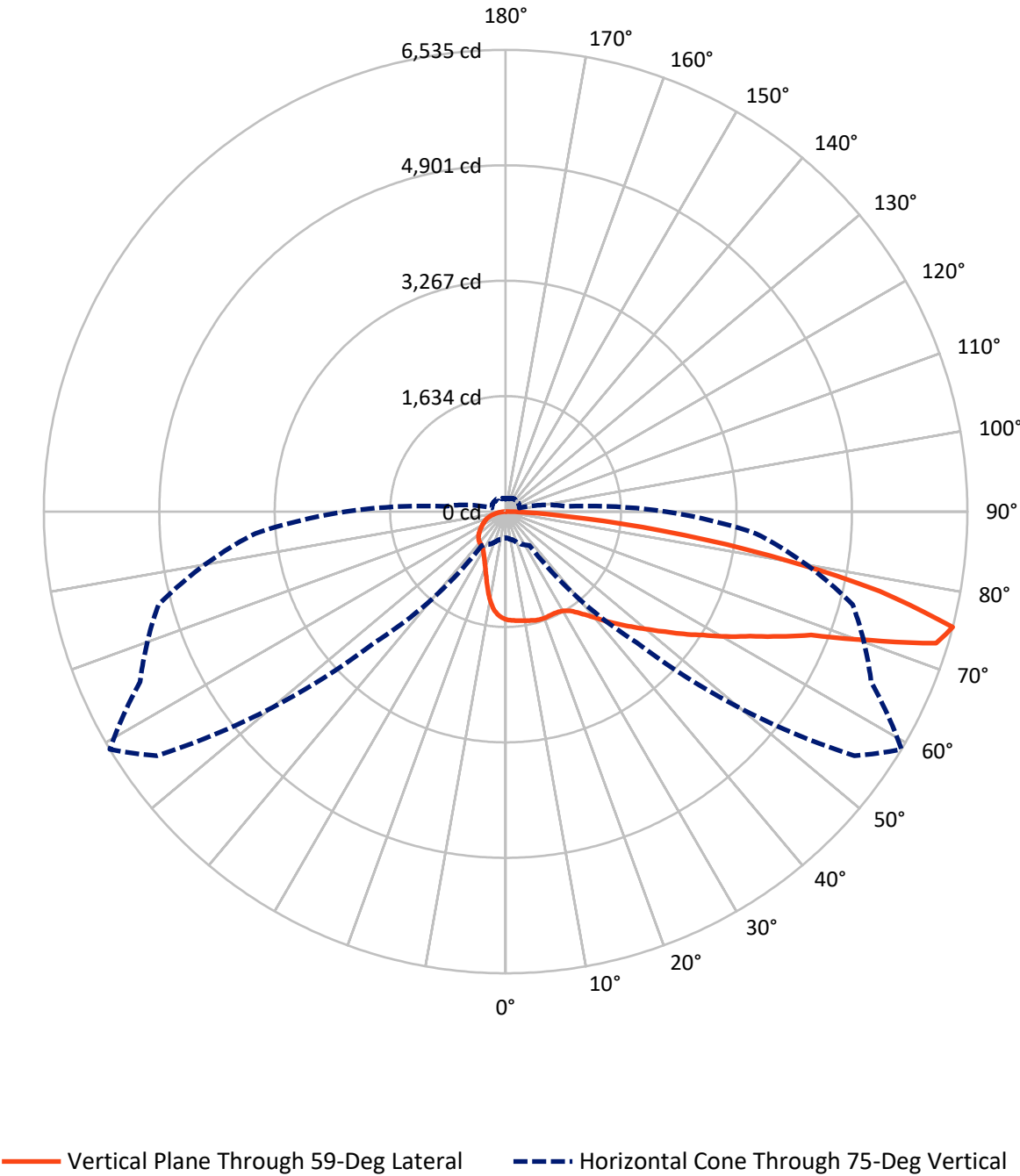
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 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	1563.3	0.0	1563.3
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	6772.0	0.0	6772.0
	% Fixture	81.2	0.0	81.2
Total	Lumens	8335.3	0.0	8335.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.2	1.6
10°-20°	350.6	4.2
20°-30°	532.6	6.4
30°-40°	791.7	9.5
40°-50°	1177.4	14.1
50°-60°	1598.2	19.2
60°-70°	1951.1	23.4
70°-80°	1531.2	18.4
80°-90°	265.2	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°	8335.3	100.0
0°-180°	8335.3	100.0

Coefficient of Utilization



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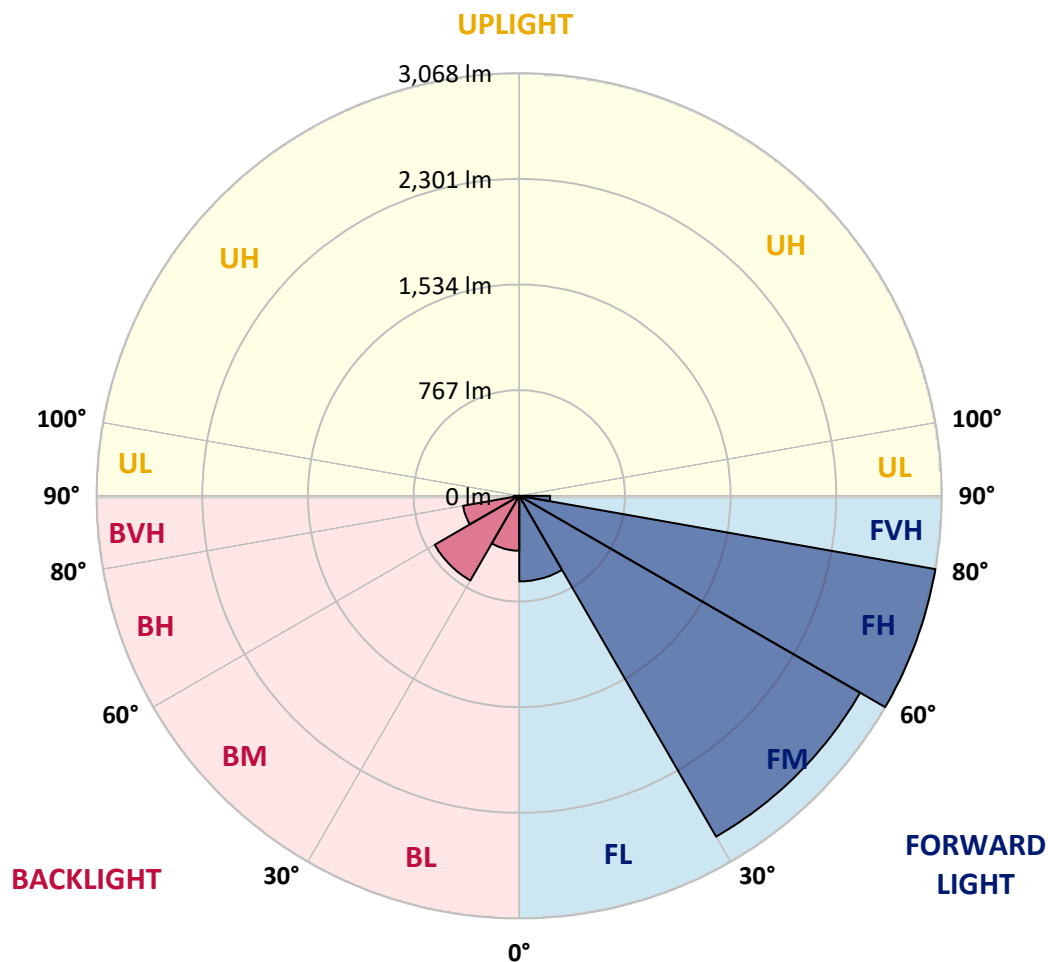
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	621.5	7.5			
FM	(30°-60°)	2857.7	34.3			
FH	(60°-80°)	3068.1	36.8			G2/5000
FVH	(80°-90°)	224.6	2.7			G2/225
BL	(0°-30°)	398.9	4.8	B1/500		
BM	(30°-60°)	709.6	8.5	B1/1000		
BH	(60°-80°)	414.2	5.0	B1/500		G1/500
BVH	(80°-90°)	40.6	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°	1529.9	1529.9	1529.9	1529.9	1529.9	1529.9	1529.9	1529.9	1529.9	1529.9	1529.9
2.5°	1542.9	1537.5	1542.9	1540.7	1539.8	1538.0	1538.4	1541.6	1539.8	1542.0	1534.4
5°	1532.6	1529.5	1534.8	1533.5	1539.3	1540.3	1546.1	1549.7	1551.8	1552.4	1546.5
7.5°	1515.6	1512.4	1520.1	1526.3	1538.9	1542.5	1554.6	1560.5	1563.5	1569.0	1560.5
10°	1453.2	1451.9	1470.8	1494.6	1524.1	1542.5	1560.9	1570.7	1575.6	1590.0	1580.1
12.5°	1343.0	1344.7	1369.4	1415.1	1474.4	1533.5	1568.0	1582.4	1590.0	1607.9	1603.5
15°	1237.6	1237.1	1264.0	1312.9	1395.8	1494.0	1571.6	1596.3	1609.2	1635.8	1632.2
17.5°	1176.6	1174.8	1193.6	1230.8	1308.0	1433.6	1562.6	1603.9	1631.7	1664.9	1661.7
20°	1165.4	1161.8	1171.7	1190.0	1244.8	1367.1	1539.3	1603.9	1649.6	1692.7	1690.9
22.5°	1206.2	1200.4	1196.3	1194.1	1218.3	1312.4	1512.9	1598.5	1676.1	1732.6	1729.5
25°	1288.2	1279.3	1258.6	1238.5	1231.3	1287.8	1489.5	1597.2	1715.5	1786.4	1774.8
27.5°	1421.0	1409.8	1368.1	1319.6	1276.1	1300.3	1479.3	1605.3	1759.1	1843.4	1820.0
30°	1585.6	1573.4	1521.0	1446.5	1368.5	1347.0	1492.3	1629.0	1814.7	1919.1	1873.4
32.5°	1733.1	1719.6	1674.7	1599.0	1493.6	1427.7	1533.5	1674.3	1902.1	2024.5	1953.6
35°	1864.0	1848.3	1807.9	1738.0	1647.0	1541.1	1607.9	1754.6	2026.3	2195.8	2062.6
37.5°	1992.2	1973.8	1929.9	1855.9	1792.2	1692.3	1710.6	1857.7	2191.3	2403.8	2207.0
40°	2135.7	2109.2	2055.9	1982.8	1921.0	1869.4	1845.6	1984.2	2359.0	2636.1	2387.2
42.5°	2274.7	2249.6	2185.9	2123.6	2046.0	2031.2	2002.1	2132.1	2542.4	2891.2	2570.2
45°	2424.4	2394.4	2317.3	2238.4	2189.5	2138.9	2153.6	2280.1	2722.2	3151.4	2762.1
47.5°	2564.9	2531.2	2440.2	2352.3	2325.4	2229.4	2292.6	2442.9	2909.2	3415.0	2952.2
50°	2640.6	2607.4	2531.6	2452.3	2431.2	2341.1	2443.3	2621.7	3105.1	3677.7	3134.8
52.5°	2703.8	2668.0	2568.9	2524.9	2518.6	2462.6	2628.9	2826.2	3301.1	3910.0	3311.0
55°	2771.1	2731.2	2604.7	2565.3	2594.0	2598.9	2849.1	3058.1	3508.3	4136.5	3477.3
57.5°	2848.7	2797.9	2639.3	2599.4	2667.5	2758.5	3102.0	3298.3	3711.8	4346.3	3625.3
60°	2921.8	2870.6	2705.6	2653.6	2746.9	2943.7	3392.1	3589.4	3942.3	4533.3	3765.1
62.5°	2936.1	2894.0	2758.5	2758.1	2854.5	3159.9	3735.6	3883.1	4143.7	4718.0	3890.7
65°	2687.7	2661.2	2581.0	2754.1	3008.8	3471.1	4118.0	4258.9	4399.6	4879.4	4001.0
67.5°	2045.6	2049.2	2043.3	2377.4	2884.0	3918.1	4671.8	4661.1	4715.8	5060.6	4127.9
70°	935.3	956.4	1093.7	1641.1	2310.6	3969.6	5587.5	5448.0	5112.6	5295.2	4237.8
72.5°	505.3	521.5	577.5	795.0	1389.1	3529.3	6271.7	6370.8	5640.4	5452.9	4117.1
75°	370.8	379.8	418.8	505.3	583.3	2623.1	6026.5	6534.9	5706.3	5084.8	3555.3
77.5°	277.6	281.6	313.4	400.5	298.6	1382.8	4815.3	5412.1	4884.8	4177.7	2626.3
80°	201.3	205.8	229.6	300.4	209.4	505.8	3306.4	3798.9	3345.5	2663.1	1308.8
82.5°	139.0	140.8	151.1	204.5	146.2	196.4	1876.1	2227.6	1867.5	934.5	353.3
85°	83.8	86.1	90.6	119.3	82.9	93.3	809.9	837.6	558.2	223.3	109.9
87.5°	34.5	36.8	40.4	50.2	32.7	26.0	133.7	167.7	104.4	65.5	34.0
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°	1529.9	1529.9	1529.9	1529.9	1529.9	1529.9	1529.9	1529.9	1529.9	1529.9	1529.9
2.5°	1532.2	1529.0	1520.5	1508.8	1498.1	1484.6	1478.8	1473.8	1469.4	1460.8	1456.8
5°	1541.6	1533.1	1510.2	1480.6	1447.0	1410.2	1374.3	1349.7	1328.6	1312.9	1299.9
7.5°	1555.9	1539.8	1498.1	1437.6	1360.5	1281.6	1210.2	1159.6	1121.5	1107.5	1083.3
10°	1570.7	1551.4	1478.8	1372.1	1238.9	1117.4	1022.7	970.8	940.3	930.4	915.2
12.5°	1588.2	1559.9	1448.7	1281.0	1103.0	969.9	887.3	856.9	841.2	835.8	837.1
15°	1613.8	1567.1	1403.4	1167.2	973.4	862.2	808.9	787.8	779.7	779.3	781.2
17.5°	1633.0	1568.5	1333.1	1045.2	873.9	797.2	753.3	745.3	750.6	758.7	761.8
20°	1654.6	1556.4	1240.7	934.0	804.0	740.3	721.9	727.3	740.3	751.9	756.0
22.5°	1669.8	1534.4	1129.0	847.5	743.4	707.6	706.6	717.9	725.1	730.9	734.0
25°	1683.3	1497.2	1010.6	774.8	693.6	687.9	697.7	694.1	689.2	694.1	697.2
27.5°	1693.1	1438.5	904.9	711.1	658.7	674.3	668.6	660.5	660.0	662.8	667.2
30°	1690.0	1360.0	817.8	650.7	634.1	649.2	635.4	634.1	632.7	634.1	639.0
32.5°	1690.0	1270.8	751.0	609.0	618.4	612.5	611.2	608.0	602.6	602.2	608.0
35°	1699.4	1181.5	693.6	586.5	605.4	591.4	592.3	584.7	573.5	568.2	573.5
37.5°	1718.7	1109.8	636.7	575.7	582.5	582.0	578.4	565.4	545.7	528.7	534.5
40°	1765.4	1088.8	597.7	570.8	571.7	577.1	567.6	542.5	497.7	470.0	473.6
42.5°	1838.4	1124.1	589.2	558.7	564.6	569.9	551.6	493.2	461.4	444.8	444.8
45°	1931.2	1186.0	607.6	541.2	547.5	556.9	502.2	474.4	460.0	460.5	462.8
47.5°	2048.8	1251.0	641.6	525.9	522.9	528.2	469.4	452.4	432.7	437.7	450.2
50°	2184.6	1316.9	673.9	505.3	495.5	478.0	448.4	432.2	407.1	395.4	398.6
52.5°	2331.7	1380.6	687.0	480.2	465.9	445.7	434.1	414.3	383.9	364.6	364.1
55°	2471.1	1438.5	672.6	450.2	436.2	420.6	418.8	406.7	373.9	347.1	347.1
57.5°	2603.0	1486.9	636.7	419.7	406.2	396.9	409.0	403.1	361.8	327.3	325.5
60°	2714.6	1520.1	584.7	388.8	379.4	374.4	392.8	391.0	344.8	306.3	304.9
62.5°	2803.4	1533.1	527.4	359.2	356.9	348.0	370.3	370.3	323.3	285.7	284.2
65°	2872.9	1520.5	469.0	330.0	334.5	321.0	343.1	340.3	300.4	267.2	265.5
67.5°	2934.3	1479.3	404.5	301.3	311.6	294.6	314.4	308.0	275.3	248.9	247.0
70°	2961.6	1383.3	330.9	272.6	285.2	268.5	285.7	274.0	247.0	229.1	225.5
72.5°	2742.0	1149.6	260.6	242.6	253.4	239.8	254.7	241.3	216.6	208.5	201.8
75°	2268.4	862.7	200.4	209.8	217.9	207.6	217.5	207.6	185.2	191.1	174.5
77.5°	1647.4	582.5	153.3	175.3	178.9	173.5	182.0	170.9	150.7	149.3	142.6
80°	819.2	341.2	120.1	138.6	137.2	133.7	143.5	138.1	121.1	128.2	126.9
82.5°	237.2	146.2	87.4	97.3	94.6	95.5	102.7	105.4	157.8	156.5	160.1
85°	74.4	57.4	52.5	54.2	51.6	52.9	60.6	120.1	111.2	65.0	70.4
87.5°	19.3	19.7	13.0	13.9	14.3	17.0	19.3	73.1	35.0	22.9	24.2
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)