

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: P963516

Luminaire Tested: **NAV-SB3A-735-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963516
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-735-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10543.2 lumens
Efficiency: N/A
Efficacy: 124.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

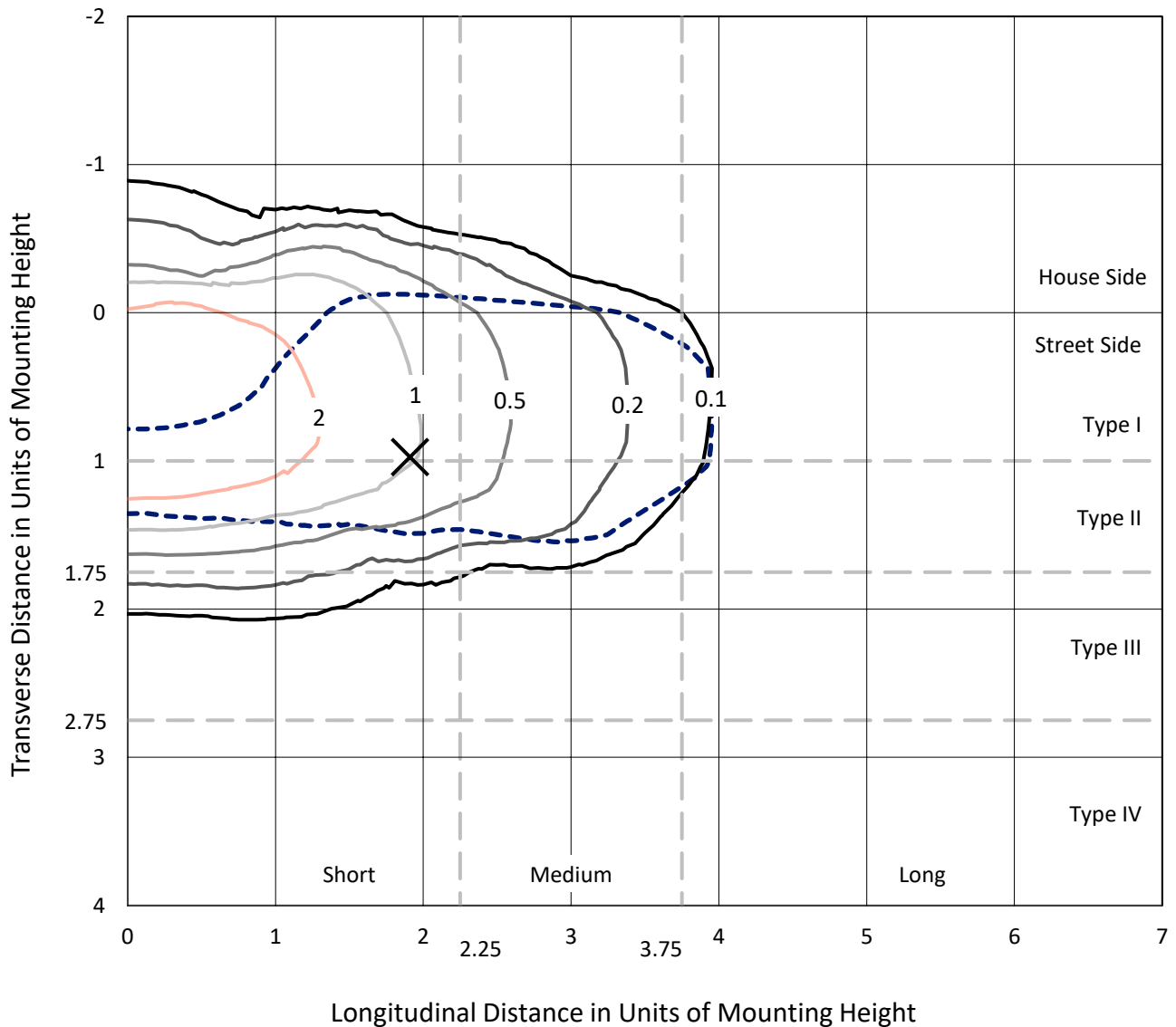
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

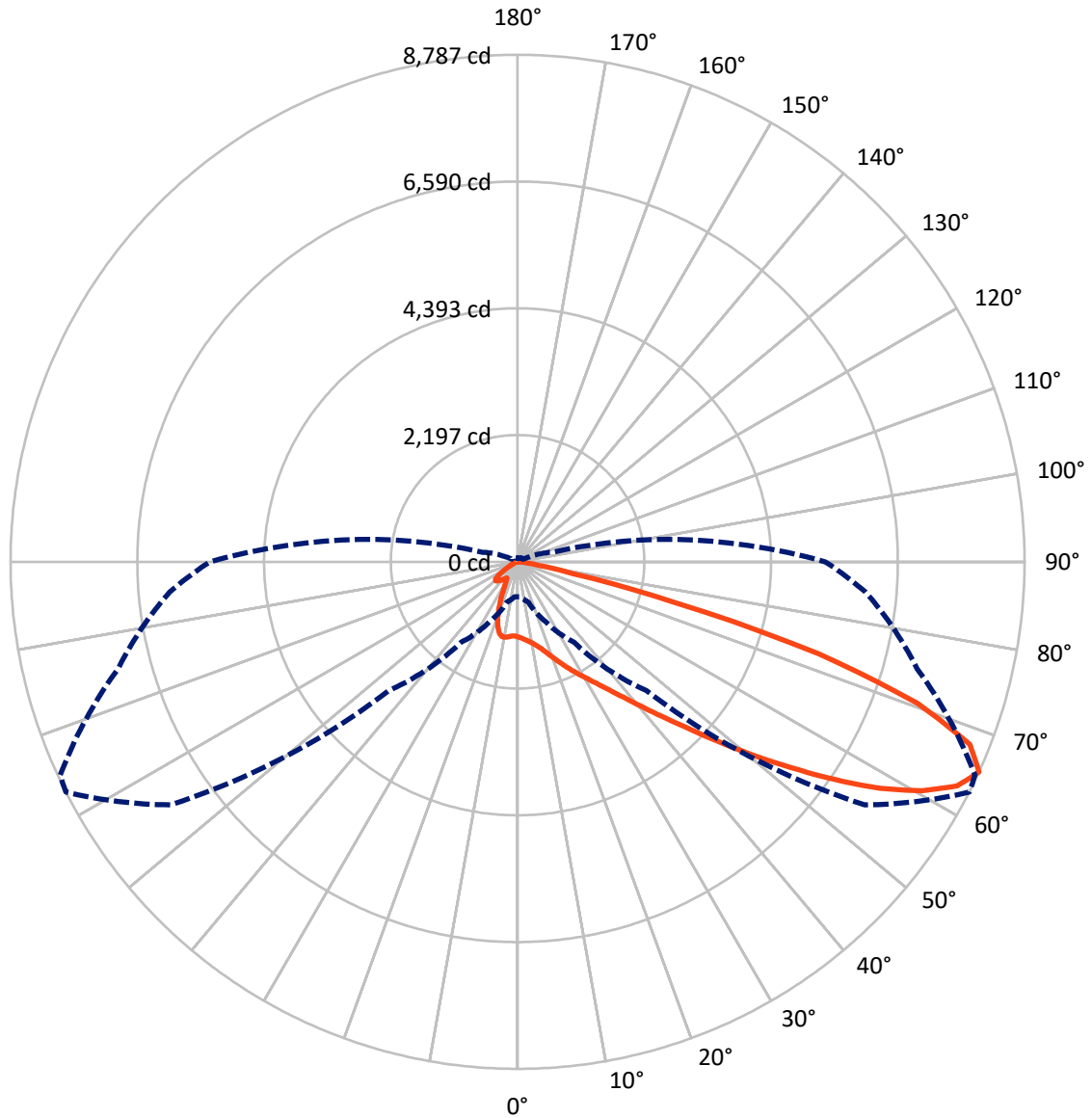
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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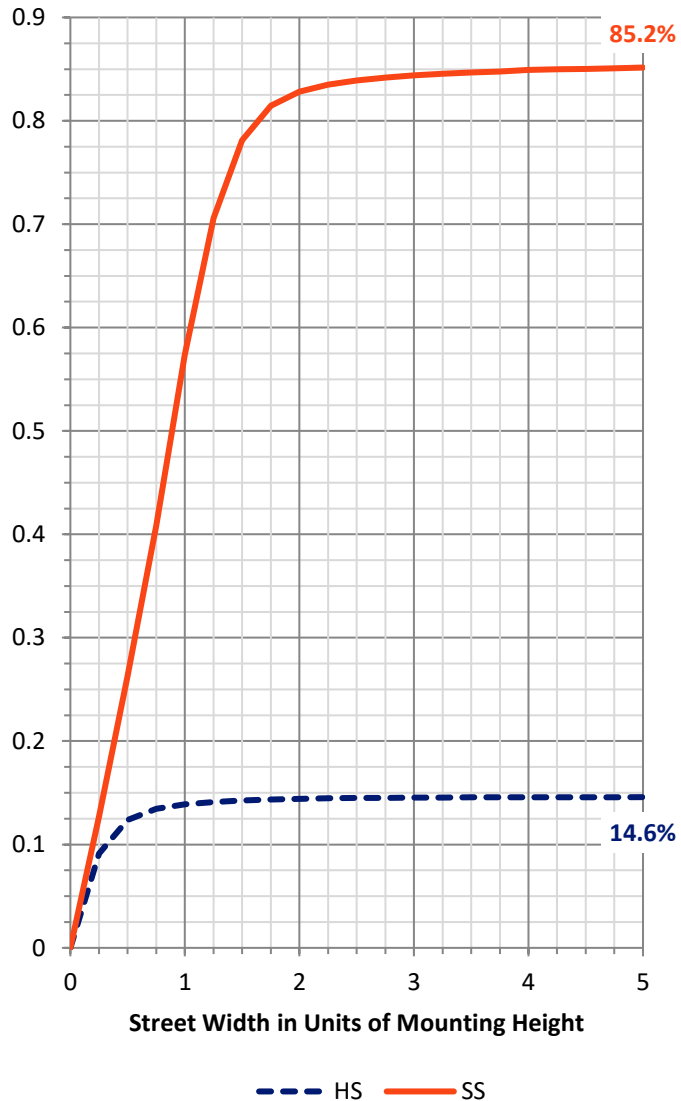
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1549.8	0.0	1549.8
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	8993.4	0.0	8993.4
	% Fixture	85.3	0.0	85.3
Total	Lumens	10543.2	0.0	10543.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.6	1.2
10°-20°	340.2	3.2
20°-30°	592.3	5.6
30°-40°	1067.6	10.1
40°-50°	2117.4	20.1
50°-60°	2884.2	27.4
60°-70°	2302.2	21.8
70°-80°	1041.8	9.9
80°-90°	74.9	0.7
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°	10543.2	100.0
0°-180°	10543.2	100.0

Coefficient of Utilization

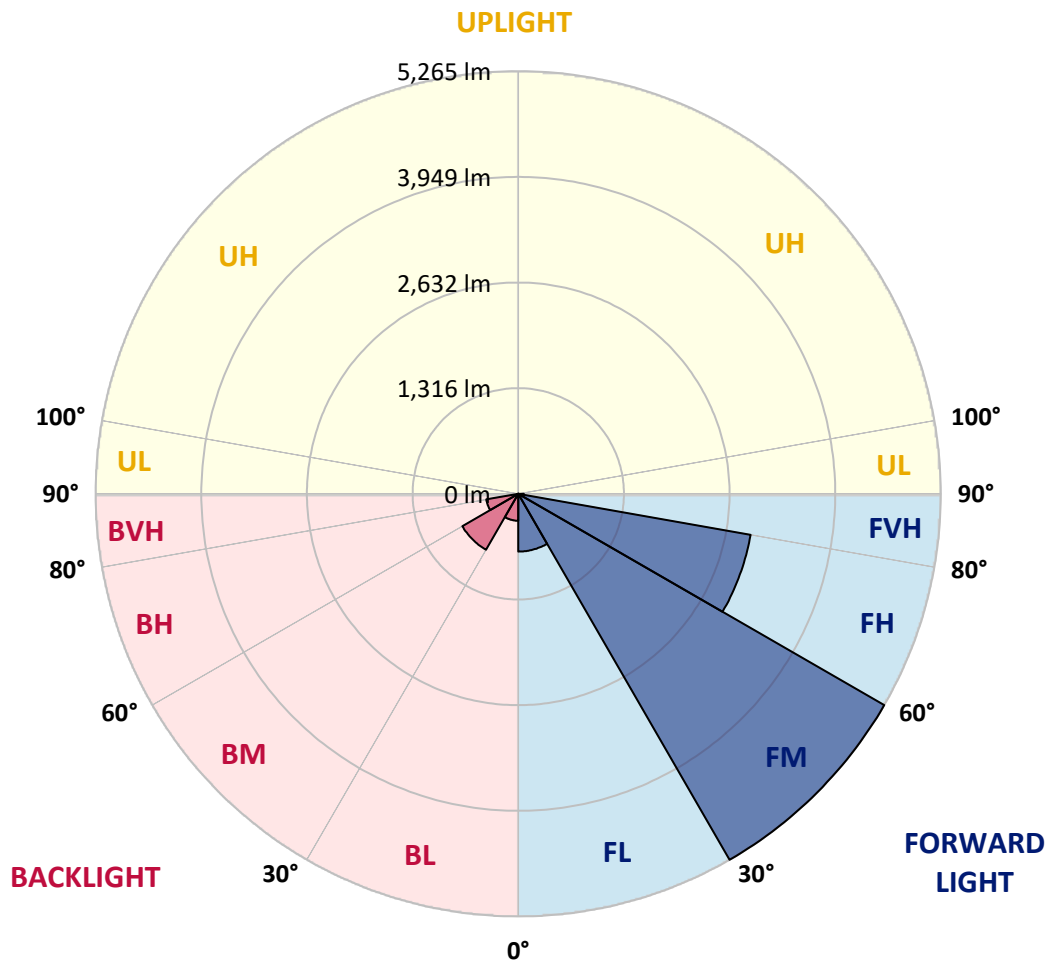


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	719.7	6.8			
FM (30°-60°)	5265.0	49.9			
FH (60°-80°)	2939.4	27.9			G2/5000
FVH (80°-90°)	69.3	0.7			G1/100
BL (0°-30°)	335.4	3.2	B1/500		
BM (30°-60°)	804.2	7.6	B1/1000		
BH (60°-80°)	404.6	3.8	B1/500		G1/500
BVH (80°-90°)	5.6	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
 Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1301.2	1301.2	1301.2	1301.2	1301.2	1301.2	1301.2	1301.2	1301.2	1301.2	1301.2
2.5°	1331.7	1328.1	1333.1	1331.0	1329.5	1326.7	1325.1	1323.7	1320.8	1318.7	1309.9
5°	1335.3	1333.1	1338.2	1342.5	1347.0	1351.3	1353.4	1356.4	1353.4	1347.7	1339.0
7.5°	1304.8	1303.4	1314.3	1327.4	1347.0	1363.6	1381.7	1391.8	1392.6	1390.4	1381.0
10°	1302.7	1299.1	1309.9	1325.8	1351.3	1381.0	1413.0	1434.7	1437.6	1447.0	1436.8
12.5°	1336.8	1333.1	1348.4	1365.8	1391.8	1423.1	1462.3	1492.7	1497.0	1510.1	1502.9
15°	1394.1	1389.0	1406.4	1428.8	1462.3	1497.8	1539.1	1566.7	1570.3	1586.3	1573.2
17.5°	1460.8	1455.7	1476.0	1500.0	1536.3	1584.9	1632.7	1663.2	1667.5	1677.6	1653.7
20°	1546.4	1539.9	1555.8	1577.6	1616.0	1674.0	1731.3	1774.9	1774.2	1774.2	1734.9
22.5°	1645.7	1635.6	1649.3	1666.8	1703.0	1773.5	1849.6	1901.1	1901.1	1880.8	1816.2
25°	1752.3	1742.2	1757.5	1773.5	1805.3	1885.1	1974.4	2038.1	2041.1	2006.2	1903.2
27.5°	1885.8	1872.8	1884.4	1903.2	1922.1	2003.4	2109.2	2183.2	2184.7	2131.0	1985.9
30°	2142.6	2105.6	2069.4	2049.1	2057.7	2138.3	2251.4	2333.3	2340.6	2266.6	2075.8
32.5°	2612.6	2605.3	2477.7	2310.9	2223.8	2283.3	2410.3	2508.9	2513.2	2418.2	2192.7
35°	3343.0	3334.3	3129.0	2811.4	2527.8	2477.7	2603.2	2719.9	2717.1	2609.6	2344.3
37.5°	4214.8	4206.8	3936.3	3511.2	3052.1	2771.5	2852.0	2974.5	2992.7	2852.0	2540.1
40°	4959.8	4930.0	4758.9	4349.0	3748.4	3258.9	3205.9	3287.2	3306.0	3139.2	2788.8
42.5°	5524.0	5498.6	5411.6	5155.5	4591.3	3979.9	3623.0	3654.1	3675.2	3475.1	3074.6
45°	5816.4	5810.5	5845.4	5821.4	5450.0	4864.8	4219.2	4089.3	4097.3	3847.1	3398.9
47.5°	5857.7	5854.8	6013.7	6238.5	6188.4	5862.8	4984.4	4631.9	4603.6	4267.1	3751.4
50°	5613.9	5608.2	5912.8	6334.2	6681.7	6701.2	5853.4	5243.4	5181.0	4701.6	4119.1
52.5°	4835.7	4834.2	5334.7	6036.1	6855.0	7435.2	6712.1	5915.0	5810.5	5161.4	4507.8
55°	3720.9	3747.7	4321.5	5150.5	6538.8	7788.5	7483.1	6660.7	6500.3	5624.2	4866.2
57.5°	2635.8	2674.9	3242.2	3980.6	5558.2	7579.6	8004.6	7407.7	7235.1	6085.4	5229.5
60°	1415.8	1450.7	2018.5	2899.8	4135.1	6800.6	8279.5	8056.1	7892.9	6523.5	5557.4
62.5°	843.6	855.2	1090.2	1872.1	2796.8	5195.4	8162.8	8550.0	8415.9	6891.3	5842.5
65°	605.7	607.8	726.0	1143.1	1698.0	3156.6	7343.8	8786.5	8745.2	7168.3	6053.5
67.5°	509.9	508.4	557.8	759.4	1156.9	1581.2	5628.5	8452.2	8627.6	7343.8	6173.2
70°	437.4	439.5	497.5	556.4	869.6	895.0	2798.2	7359.1	7733.3	7390.2	6166.0
72.5°	325.6	332.9	386.6	507.0	656.4	615.8	966.2	5456.6	6133.3	6963.0	5846.1
75°	229.9	233.6	272.0	426.5	489.5	448.2	493.2	2820.8	3688.3	5338.4	4784.9
77.5°	177.0	183.5	206.0	298.1	482.4	314.8	301.8	976.3	1500.0	3224.8	3280.6
80°	95.7	107.3	148.7	215.5	338.8	222.6	149.4	388.8	508.4	1508.0	1265.0
82.5°	49.3	55.1	103.7	155.2	192.9	194.3	74.0	161.7	209.6	465.7	173.3
85°	19.6	24.0	69.6	85.6	99.3	95.7	33.4	65.3	75.4	129.1	53.0
87.5°	4.3	7.3	25.4	19.6	18.9	20.3	8.0	15.3	14.6	15.3	9.4
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°	1301.2	1301.2	1301.2	1301.2	1301.2	1301.2	1301.2	1301.2	1301.2	1301.2	1301.2
2.5°	1309.2	1306.3	1298.4	1289.7	1279.5	1273.7	1270.1	1269.4	1264.2	1260.6	1264.2
5°	1331.0	1328.1	1312.8	1294.7	1275.1	1259.9	1245.4	1232.4	1213.5	1209.8	1208.4
7.5°	1374.5	1366.5	1341.8	1317.2	1280.2	1235.9	1182.2	1120.6	1065.5	1048.8	1040.8
10°	1428.1	1417.3	1386.1	1342.5	1260.6	1140.2	1010.3	890.0	794.3	767.4	757.3
12.5°	1489.1	1479.7	1438.3	1357.8	1178.6	960.3	761.6	612.1	519.4	496.1	489.5
15°	1561.6	1547.9	1490.6	1334.6	1032.2	729.7	523.0	434.5	401.1	396.8	392.4
17.5°	1638.5	1616.0	1537.0	1251.2	834.9	518.6	404.0	378.6	364.1	359.8	357.6
20°	1708.9	1679.9	1564.6	1124.9	623.8	404.0	361.9	345.2	332.2	327.1	324.2
22.5°	1779.2	1737.9	1564.6	953.0	467.8	358.3	332.2	316.9	301.8	295.2	291.6
25°	1852.5	1797.3	1537.0	761.6	376.5	328.6	303.9	287.2	274.2	266.2	263.3
27.5°	1923.5	1847.4	1473.8	580.3	335.1	302.5	277.8	261.9	249.5	243.7	243.7
30°	1991.0	1896.8	1385.4	440.2	308.2	277.1	253.9	240.1	227.8	221.9	222.6
32.5°	2082.4	1959.1	1291.1	361.2	285.1	253.2	232.1	219.0	208.2	203.8	203.8
35°	2209.3	2051.2	1209.8	354.6	265.5	233.6	212.5	200.2	189.3	185.7	185.7
37.5°	2389.2	2199.9	1167.1	398.2	249.5	216.2	196.6	183.5	173.3	170.5	169.7
40°	2611.2	2401.6	1190.2	441.7	238.6	200.9	182.0	169.0	160.3	156.6	155.9
42.5°	2874.4	2650.3	1318.7	475.1	231.3	187.9	168.3	153.8	148.0	146.5	146.5
45°	3176.9	2923.8	1515.2	510.7	219.8	175.5	154.5	143.6	139.3	138.6	137.8
47.5°	3520.7	3224.0	1742.9	554.8	208.2	163.9	143.6	136.3	132.7	131.3	131.3
50°	3861.6	3526.5	1977.2	579.5	198.7	153.0	134.9	129.1	126.2	125.5	125.5
52.5°	4218.5	3837.7	2166.5	556.4	190.8	144.3	127.6	123.3	120.4	119.7	119.7
55°	4558.6	4089.3	2199.1	472.2	174.8	135.6	119.7	117.5	113.9	113.9	113.2
57.5°	4851.6	4215.5	1968.5	346.7	158.9	122.6	111.7	109.6	106.6	105.9	105.2
60°	5120.8	4179.3	1519.6	233.6	141.4	109.6	101.6	100.1	97.2	93.6	92.9
62.5°	5272.4	4019.7	1039.4	152.3	124.0	95.7	89.9	89.2	82.7	75.4	74.0
65°	5329.7	3691.8	648.4	111.0	103.7	82.0	77.6	76.2	66.7	58.7	58.0
67.5°	5279.6	3152.3	327.1	87.7	82.0	68.2	63.9	63.9	57.3	50.0	49.3
70°	5079.4	2363.1	137.8	70.3	63.1	52.2	52.2	55.1	48.6	40.6	39.9
72.5°	4645.0	1589.9	73.3	53.7	47.2	37.0	42.8	45.0	38.4	30.4	30.4
75°	3692.6	969.8	50.7	39.9	29.7	26.1	32.6	34.1	26.1	20.3	19.6
77.5°	2525.6	557.1	34.1	25.4	18.9	15.3	22.4	21.0	13.7	9.4	10.1
80°	1109.0	232.1	19.6	11.6	7.3	5.8	8.0	5.8	4.3	2.9	2.9
82.5°	129.9	54.4	7.3	4.3	2.9	1.4	0.7	0.0	0.0	0.0	0.0
85°	26.9	6.6	3.6	1.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.1	1.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)