

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: P965050

Luminaire Tested: **NAV-SB3D-730-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965050
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-730-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31828.3 lumens
Efficiency: N/A
Efficacy: 145.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

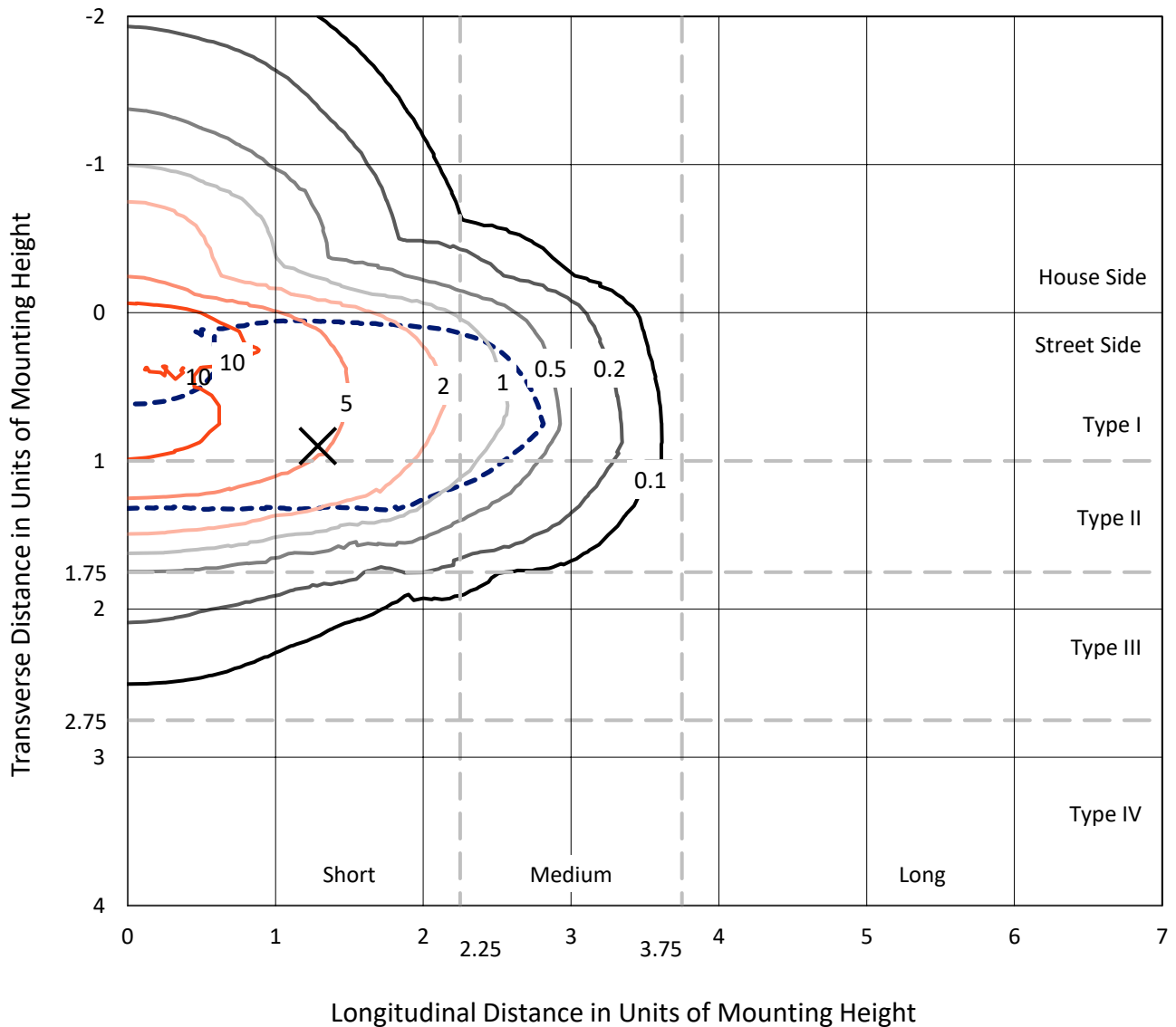
Input Watts (W): 218.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

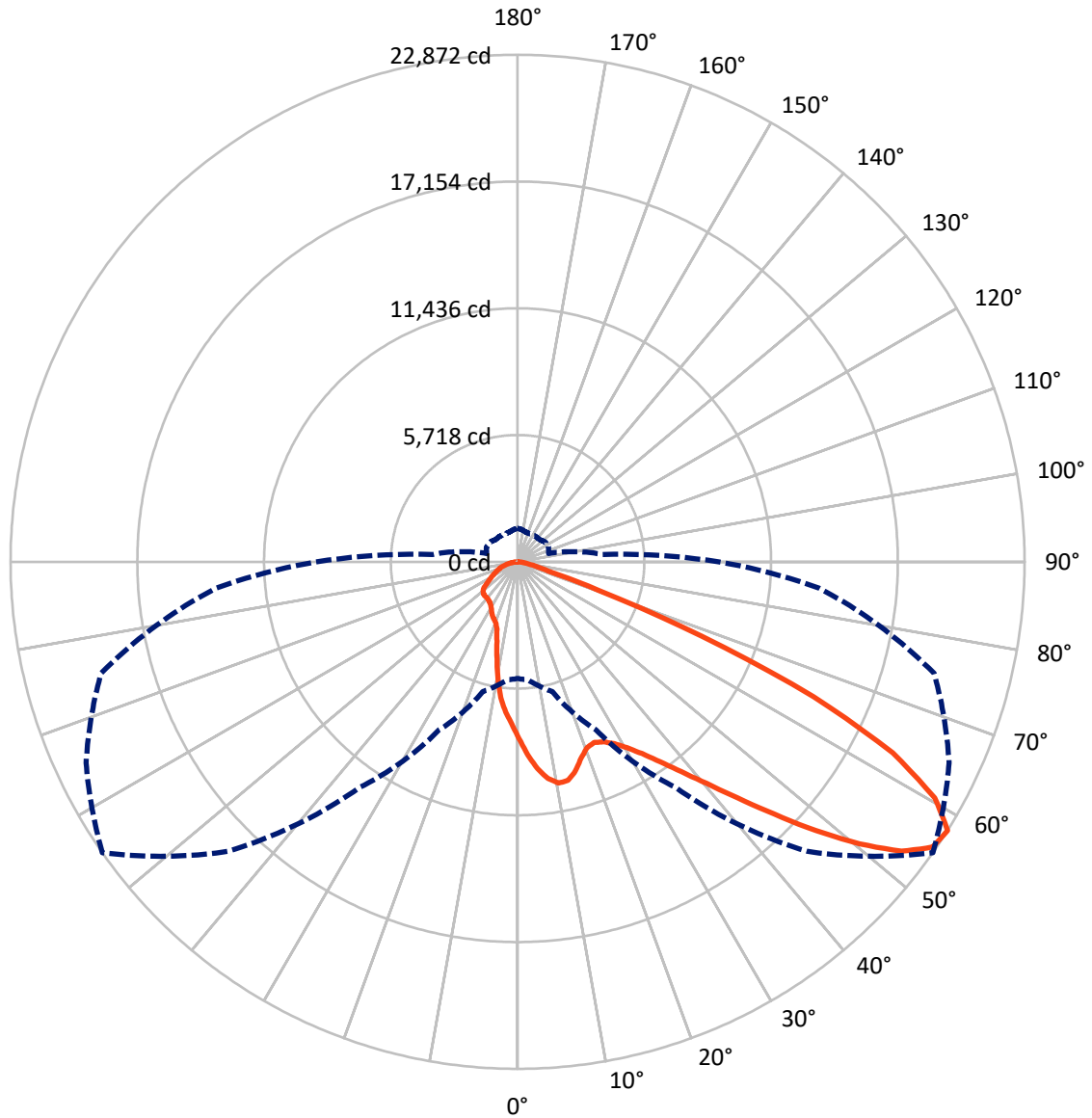
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5759.2	0.0	5759.2
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	26069.1	0.0	26069.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	31828.3	0.0	31828.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	740.0	2.3
10°-20°	1867.9	5.9
20°-30°	2980.7	9.4
30°-40°	4719.1	14.8
40°-50°	7223.1	22.7
50°-60°	7736.6	24.3
60°-70°	4867.1	15.3
70°-80°	1439.3	4.5
80°-90°	254.5	0.8
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°	31828.3	100.0
0°-180°	31828.3	100.0

Coefficient of Utilization



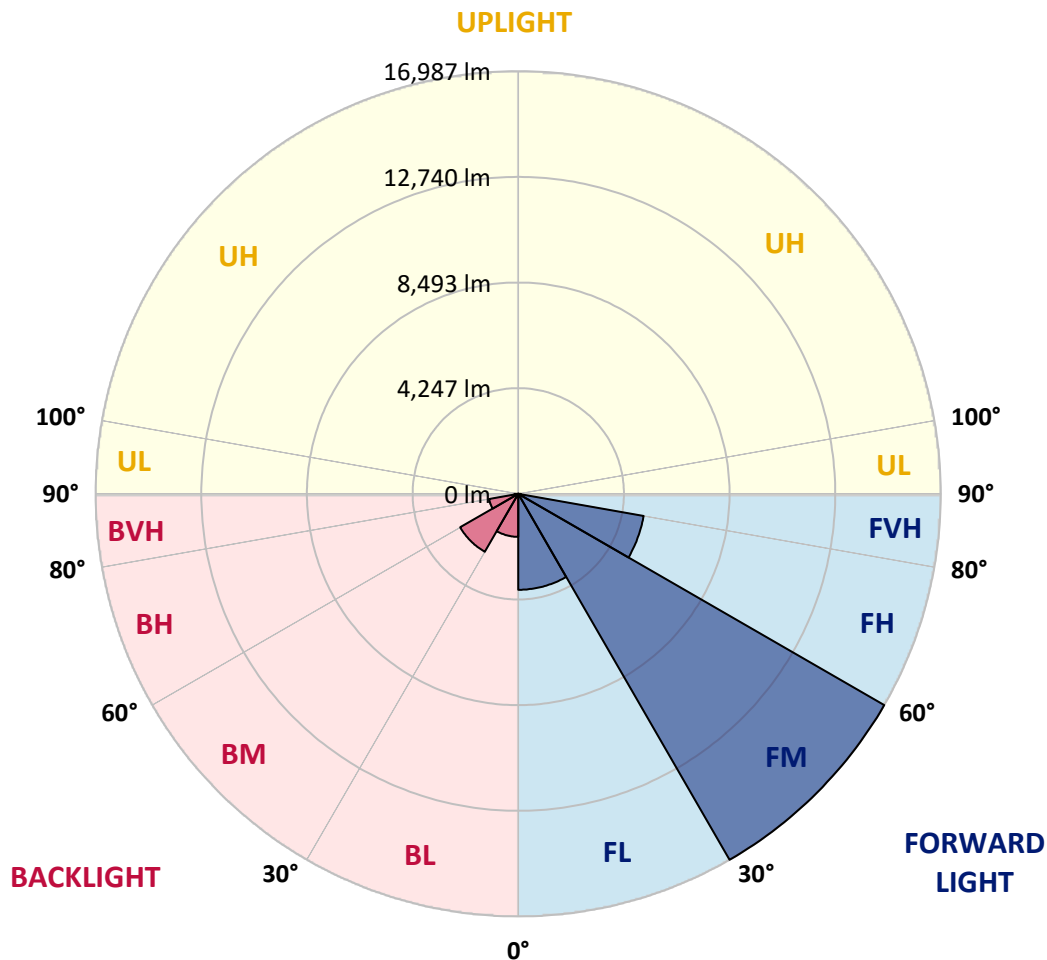
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3857.6	12.1			
FM (30°-60°)	16987.0	53.4			
FH (60°-80°)	5117.0	16.1			G3/7500
FVH (80°-90°)	107.5	0.3			G2/225
BL (0°-30°)	1731.0	5.4	B3/2500		
BM (30°-60°)	2691.8	8.5	B3/5000		
BH (60°-80°)	1189.4	3.7	B3/2500		G3/2500
BVH (80°-90°)	147.0	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7975.1	7975.1	7975.1	7975.1	7975.1	7975.1	7975.1	7975.1	7975.1	7975.1	7975.1
2.5°	9150.0	9143.3	9179.6	9056.2	8972.2	8858.7	8709.0	8518.2	8312.4	8095.2	8001.5
5°	9974.3	9916.7	9954.5	9862.3	9770.2	9599.1	9377.0	9066.0	8686.0	8253.2	8022.9
7.5°	9844.3	9804.8	9901.9	9984.1	10053.2	10031.9	9869.0	9543.2	9052.9	8424.4	8090.3
10°	8796.1	8751.8	8888.3	9172.9	9590.9	9954.5	10152.0	9949.6	9428.1	8611.9	8156.1
12.5°	7871.5	7850.1	7940.6	8170.9	8634.9	9332.6	10115.7	10305.0	9818.0	8834.1	8245.0
15°	7476.6	7450.3	7507.8	7624.7	7920.9	8570.7	9786.7	10548.5	10201.3	9090.7	8386.4
17.5°	7389.4	7359.8	7384.4	7445.3	7636.1	8131.4	9289.8	10668.6	10601.2	9377.0	8504.9
20°	7550.7	7526.0	7529.2	7526.0	7659.2	8052.5	8944.3	10622.6	10950.0	9640.2	8620.1
22.5°	7940.6	7899.5	7901.1	7813.9	7886.2	8190.7	8853.7	10499.2	11261.0	9870.6	8707.4
25°	8575.7	8501.7	8516.4	8294.3	8274.6	8500.0	8995.3	10403.8	11570.3	10054.9	8723.8
27.5°	9444.5	9360.5	9316.1	8985.4	8827.4	8939.3	9283.2	10436.7	11863.1	10214.5	8682.7
30°	10530.4	10428.3	10337.9	9869.0	9582.6	9541.5	9730.7	10653.8	12208.7	10382.3	8611.9
32.5°	11861.5	11743.0	11578.5	10956.5	10553.4	10337.9	10310.0	11040.5	12613.4	10596.2	8575.7
35°	13446.1	13291.4	13057.7	12253.2	11743.0	11302.1	11073.4	11598.3	13168.0	10918.7	8616.9
37.5°	15078.3	14903.8	14689.9	13732.3	13105.4	12455.5	12004.7	12355.1	13906.7	11356.4	8725.4
40°	16583.8	16387.9	16188.8	15336.6	14663.5	13880.3	13144.9	13312.7	14810.0	11879.6	8909.7
42.5°	17472.3	17327.4	17251.8	16791.0	16271.2	15476.4	14563.2	14448.1	15825.2	12481.8	9120.3
45°	17432.8	17373.5	17607.1	17798.0	17674.6	17233.6	16225.0	15703.5	16843.7	13003.5	9314.5
47.5°	16501.5	16540.9	17062.6	18135.3	18607.5	18838.0	18117.3	16935.9	17728.9	13393.4	9401.7
50°	13967.6	14000.5	15208.2	17521.7	18847.8	20146.0	19994.6	18138.6	18415.0	13632.0	9381.9
52.5°	11961.9	11983.3	12501.6	15701.9	18054.8	20804.1	21686.0	19272.3	18916.9	13697.8	9271.7
55°	9010.1	9084.2	9664.9	12319.0	15991.4	20282.6	22716.0	20440.6	19234.4	13704.4	9156.5
57.5°	5263.6	5344.1	6061.5	8361.8	12429.2	18464.5	22872.4	21477.1	19450.0	13651.7	9087.4
60°	2578.3	2612.8	2925.5	4394.8	7664.1	14961.4	21615.3	21979.0	19570.1	13623.7	9084.2
62.5°	1737.5	1732.6	1745.8	2168.6	3776.1	9612.2	18995.9	21100.3	19506.0	13516.8	9051.3
65°	1494.0	1475.9	1426.5	1522.0	1956.3	4396.4	14676.8	18477.6	19017.2	13248.5	8825.8
67.5°	1291.6	1293.2	1294.9	1265.3	1397.0	2028.8	8969.0	14555.0	17263.3	11978.4	7957.1
70°	1069.5	1084.3	1090.9	1090.9	1138.6	1331.1	3828.8	9975.9	13617.1	9391.8	6408.7
72.5°	974.1	942.8	946.1	929.7	929.7	1013.5	1541.7	5655.1	8578.9	5283.3	3911.1
75°	794.7	814.5	817.7	806.3	768.3	773.4	914.8	2372.7	3670.8	2191.7	1933.4
77.5°	686.1	686.1	692.7	684.5	654.9	579.1	610.4	919.7	1248.9	898.4	965.9
80°	551.2	549.6	577.5	594.0	547.9	427.8	389.9	508.4	554.5	394.9	501.8
82.5°	268.2	284.6	396.6	452.4	416.3	309.3	238.6	315.9	296.1	174.5	225.4
85°	156.3	148.1	177.7	251.7	238.6	171.1	115.2	164.5	154.7	88.9	90.5
87.5°	49.4	46.0	36.2	85.6	69.1	47.8	31.3	47.8	42.7	19.8	19.8
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7975.1	7975.1	7975.1	7975.1	7975.1	7975.1	7975.1	7975.1	7975.1	7975.1
2.5°	7884.6	7690.5	7498.0	7321.9	7215.0	7145.9	7076.8	6999.4	6969.8	6925.4
5°	7805.7	7430.5	7096.5	6808.6	6547.0	6341.3	6134.0	5966.1	5890.5	5941.4
7.5°	7759.6	7216.6	6701.7	6173.5	5665.1	5258.7	4904.8	4656.4	4544.5	4572.5
10°	7718.5	6974.7	6189.9	5355.7	4625.1	4121.6	3759.7	3570.5	3499.8	3514.5
12.5°	7680.6	6703.3	5572.9	4475.5	3698.8	3366.4	3262.8	3264.4	3277.5	3287.5
15°	7674.1	6375.8	4883.5	3705.4	3198.6	3177.2	3289.1	3359.8	3397.7	3409.3
17.5°	7664.1	5984.3	4180.9	3180.5	3076.8	3221.7	3325.3	3371.3	3401.0	3402.6
20°	7624.7	5487.3	3532.7	2930.4	3050.5	3175.6	3239.7	3275.9	3300.6	3308.8
22.5°	7502.9	4934.5	3027.5	2818.5	2945.2	3045.6	3121.3	3162.4	3177.2	3187.1
25°	7284.1	4315.9	2678.6	2711.5	2798.8	2925.5	2986.3	2994.5	2989.6	3004.5
27.5°	6997.8	3652.7	2461.4	2566.8	2678.6	2787.3	2820.2	2815.3	2805.3	2821.8
30°	6652.2	3057.1	2323.3	2403.9	2557.0	2655.7	2685.3	2673.7	2654.0	2672.1
32.5°	6286.9	2570.1	2209.7	2290.4	2456.5	2553.6	2583.2	2571.7	2557.0	2571.7
35°	5946.4	2229.5	2104.4	2214.7	2377.6	2473.0	2510.8	2512.5	2512.5	2530.6
37.5°	5633.8	2030.4	2017.2	2167.0	2323.3	2408.9	2463.2	2466.5	2395.6	2400.7
40°	5344.1	1946.5	1977.7	2135.7	2270.6	2352.9	2356.2	2171.9	2041.9	2038.6
42.5°	5107.3	1930.1	1989.2	2132.4	2232.8	2236.0	2004.1	1860.9	1824.7	1826.3
45°	4885.2	1925.1	2015.6	2132.4	2176.8	1931.7	1775.4	1737.5	1740.8	1754.0
47.5°	4636.7	1905.4	2020.5	2102.8	2015.6	1717.8	1671.7	1655.3	1648.7	1652.0
50°	4365.2	1834.5	1958.0	2043.5	1739.1	1625.6	1568.0	1563.1	1571.3	1576.2
52.5°	4078.9	1719.4	1851.0	1936.6	1612.4	1545.0	1480.8	1492.4	1528.6	1540.1
55°	3891.3	1584.5	1709.5	1722.7	1523.7	1469.3	1415.0	1441.4	1508.8	1530.2
57.5°	3841.9	1441.4	1548.3	1533.5	1410.1	1403.5	1370.6	1393.6	1479.2	1510.4
60°	3827.1	1313.0	1390.3	1378.8	1299.8	1331.1	1322.9	1334.4	1364.0	1373.9
62.5°	3711.9	1211.0	1248.9	1232.4	1201.1	1255.4	1275.2	1250.5	1273.6	1285.0
65°	3419.1	1128.7	1110.6	1099.1	1112.2	1161.6	1201.1	1151.8	1173.1	1206.0
67.5°	2935.4	1016.8	967.5	980.6	1021.8	1048.1	1099.1	1043.1	1061.3	1117.2
70°	2374.3	875.4	830.9	868.8	908.3	962.6	970.8	933.0	975.7	1038.2
72.5°	1680.0	732.2	700.9	778.3	791.4	862.1	844.1	825.9	885.2	906.6
75°	1164.9	590.7	572.6	631.8	679.6	740.5	727.2	748.7	873.7	883.6
77.5°	737.1	459.1	447.5	485.3	551.2	618.7	640.0	883.6	1492.4	1551.5
80°	427.8	342.2	329.0	358.6	416.3	478.8	617.0	1084.3	983.9	972.4
82.5°	238.6	235.3	218.8	227.0	278.1	345.5	872.1	763.4	620.3	640.0
85°	111.9	138.2	118.5	113.6	156.3	404.8	582.5	436.0	289.6	283.0
87.5°	29.6	26.3	26.3	29.6	65.8	348.8	232.0	185.9	110.3	106.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)