

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: P967623

Luminaire Tested: **NAV-SB5A-722-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967623
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-SB5A-722-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19512.9 lumens
Efficiency: N/A
Efficacy: 137.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

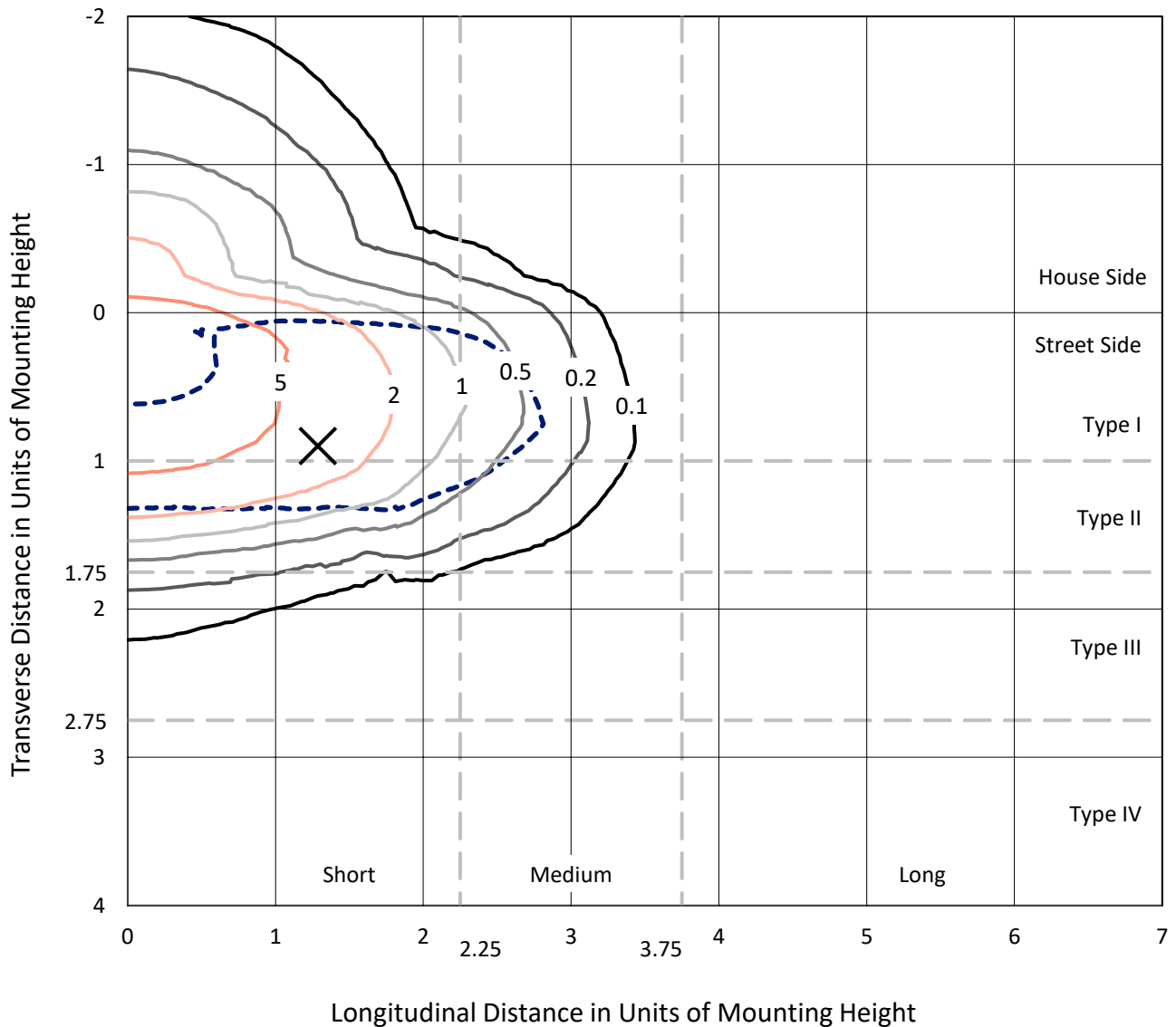
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

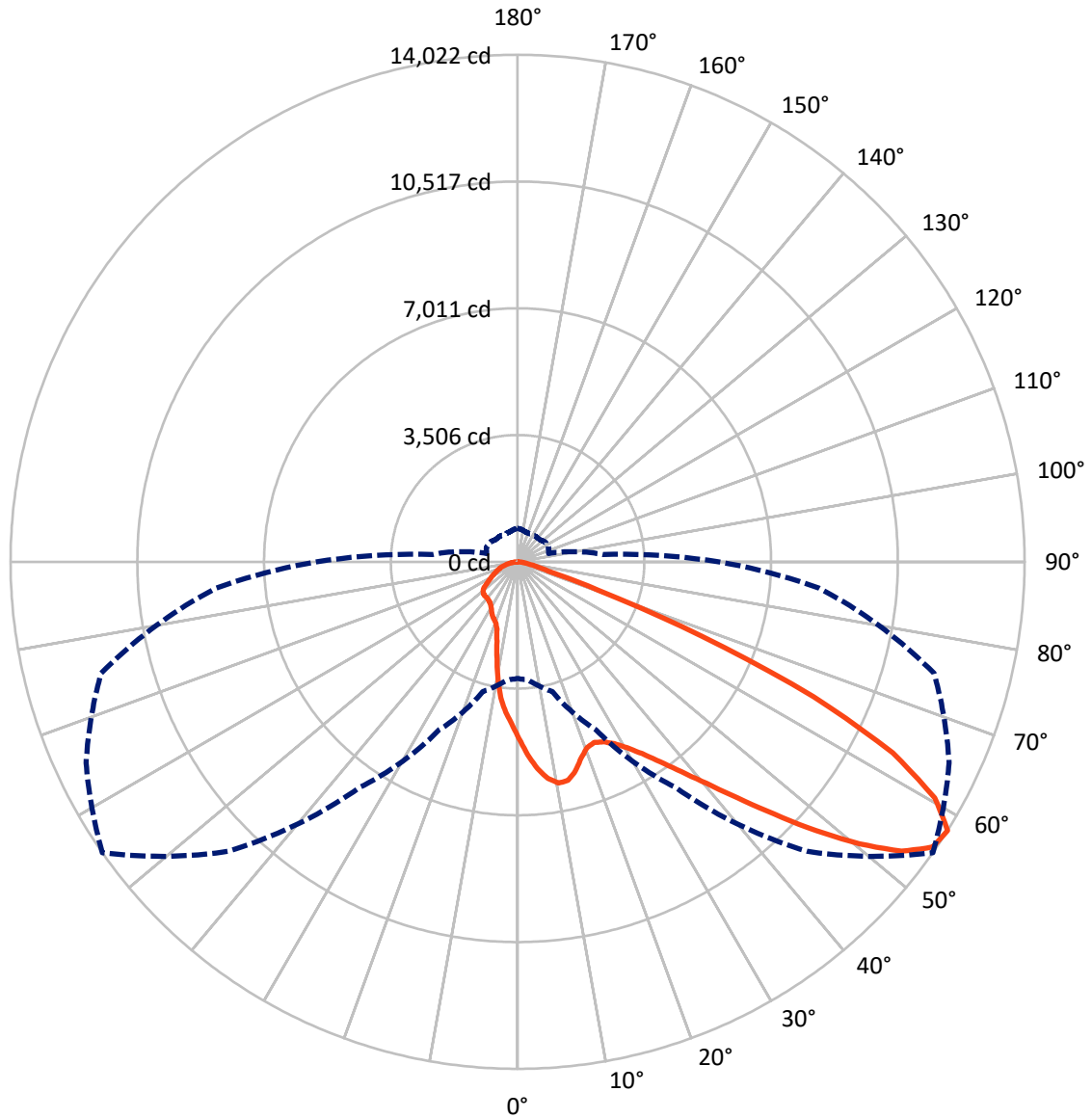
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 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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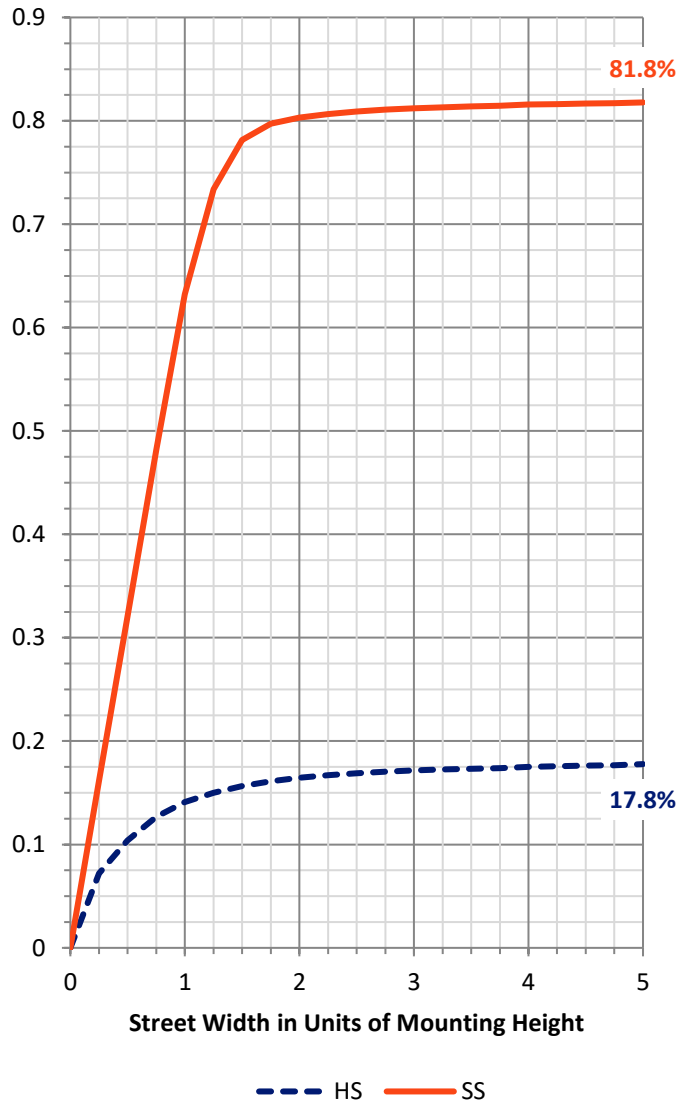
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3530.8	0.0	3530.8
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	15982.2	0.0	15982.2
	% Fixture	81.9	0.0	81.9
Total	Lumens	19512.9	0.0	19512.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	453.7	2.3
10°-20°	1145.2	5.9
20°-30°	1827.3	9.4
30°-40°	2893.1	14.8
40°-50°	4428.2	22.7
50°-60°	4743.1	24.3
60°-70°	2983.9	15.3
70°-80°	882.4	4.5
80°-90°	156.0	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°	19512.9	100.0
0°-180°	19512.9	100.0

Coefficient of Utilization

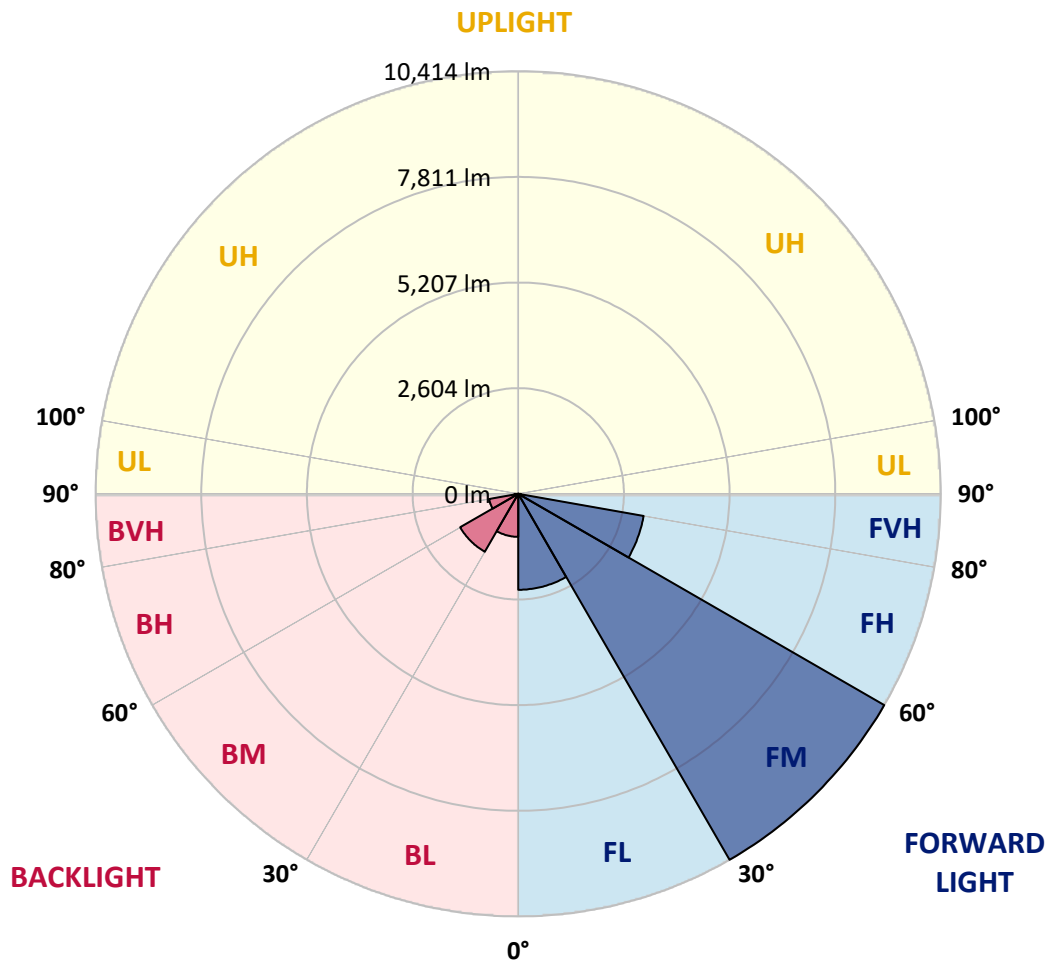


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2365.0	12.1			
FM (30°-60°)	10414.2	53.4			
FH (60°-80°)	3137.1	16.1			G2/5000
FVH (80°-90°)	65.9	0.3			G1/100
BL (0°-30°)	1061.2	5.4	B3/2500		
BM (30°-60°)	1650.3	8.5	B2/2500		
BH (60°-80°)	729.2	3.7	B2/1000		G2/1000
BVH (80°-90°)	90.1	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2
 Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4889.4	4889.4	4889.4	4889.4	4889.4	4889.4	4889.4	4889.4	4889.4	4889.4	4889.4
2.5°	5609.5	5605.5	5627.7	5552.0	5500.6	5431.0	5339.2	5222.2	5096.1	4962.9	4905.4
5°	6114.9	6079.6	6102.8	6046.3	5989.8	5884.9	5748.7	5558.1	5325.1	5059.8	4918.6
7.5°	6035.2	6011.0	6070.6	6121.0	6163.3	6150.2	6050.4	5850.6	5550.1	5164.7	4959.9
10°	5392.6	5365.5	5449.1	5623.7	5879.9	6102.8	6223.9	6099.8	5780.0	5279.7	5000.3
12.5°	4825.8	4812.7	4868.1	5009.4	5293.8	5721.5	6201.7	6317.7	6019.1	5415.9	5054.8
15°	4583.7	4567.5	4602.9	4674.4	4856.0	5254.5	5999.9	6466.9	6254.1	5573.2	5141.5
17.5°	4530.2	4512.0	4527.2	4564.5	4681.5	4985.1	5695.3	6540.6	6499.2	5748.7	5214.1
20°	4629.0	4613.9	4616.0	4613.9	4695.6	4936.7	5483.4	6512.3	6713.1	5910.2	5284.7
22.5°	4868.1	4842.9	4843.9	4790.4	4834.8	5021.5	5428.0	6436.7	6903.8	6051.4	5338.2
25°	5257.5	5212.1	5221.1	5085.0	5072.9	5211.1	5514.7	6378.2	7093.4	6164.3	5348.2
27.5°	5790.1	5738.7	5711.4	5508.7	5411.8	5480.5	5691.2	6398.4	7272.9	6262.1	5323.0
30°	6455.9	6393.3	6337.9	6050.4	5874.8	5849.6	5965.6	6531.5	7484.8	6365.0	5279.7
32.5°	7272.0	7199.3	7098.4	6717.1	6470.0	6337.9	6320.7	6768.6	7732.9	6496.2	5257.5
35°	8243.4	8148.5	8005.2	7512.0	7199.3	6929.0	6788.8	7110.5	8072.9	6694.0	5282.7
37.5°	9244.0	9137.1	9006.0	8418.8	8034.6	7636.0	7359.7	7574.5	8525.7	6962.2	5349.3
40°	10167.0	10046.9	9924.9	9402.3	8989.8	8509.7	8058.8	8161.7	9079.6	7283.0	5462.2
42.5°	10711.7	10622.9	10576.6	10294.1	9975.3	9488.1	8928.3	8857.6	9701.9	7652.2	5591.4
45°	10687.5	10651.2	10794.4	10911.4	10835.8	10565.4	9947.1	9627.3	10326.4	7971.9	5710.4
47.5°	10116.5	10140.7	10460.5	11118.2	11407.7	11548.9	11107.1	10382.8	10869.0	8211.1	5763.9
50°	8563.1	8583.2	9323.7	10741.9	11555.0	12350.8	12258.1	11120.2	11289.7	8357.3	5751.8
52.5°	7333.5	7346.6	7664.3	9626.3	11068.8	12754.4	13295.1	11815.3	11597.4	8397.6	5684.1
55°	5523.8	5569.2	5925.3	7552.3	9803.8	12434.6	13926.5	12531.4	11792.0	8401.7	5613.6
57.5°	3226.9	3276.3	3716.1	5126.3	7620.0	11320.0	14022.3	13166.9	11924.1	8369.4	5571.2
60°	1580.7	1601.9	1793.5	2694.3	4698.7	9172.3	13251.7	13474.5	11997.8	8352.3	5569.2
62.5°	1065.2	1062.2	1070.3	1329.5	2315.1	5893.0	11645.7	12935.9	11958.5	8286.7	5549.0
65°	915.9	904.9	874.5	933.1	1199.4	2695.3	8997.9	11328.0	11658.9	8122.3	5410.8
67.5°	791.8	792.8	793.9	775.7	856.4	1243.7	5498.6	8923.2	10583.5	7343.5	4878.2
70°	655.7	664.7	668.8	668.8	698.0	816.1	2347.4	6116.0	8348.2	5757.8	3929.0
72.5°	597.2	578.0	580.0	569.9	569.9	621.4	945.2	3467.0	5259.5	3239.0	2397.8
75°	487.2	499.3	501.3	494.3	471.1	474.1	560.9	1454.6	2250.5	1343.7	1185.2
77.5°	420.7	420.7	424.7	419.6	401.5	355.1	374.2	563.9	765.7	550.7	592.1
80°	337.9	336.9	354.0	364.2	335.9	262.3	239.0	311.7	340.0	242.1	307.7
82.5°	164.4	174.6	243.1	277.4	255.2	189.6	146.3	193.7	181.5	106.9	138.2
85°	95.8	90.8	109.0	154.4	146.3	104.9	70.6	100.9	94.8	54.4	55.5
87.5°	30.2	28.3	22.2	52.5	42.3	29.2	19.2	29.2	26.2	12.1	12.1
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°	4889.4	4889.4	4889.4	4889.4	4889.4	4889.4	4889.4	4889.4	4889.4	4889.4
2.5°	4833.8	4714.8	4596.8	4488.9	4423.3	4381.0	4338.5	4291.2	4273.0	4245.8
5°	4785.4	4555.4	4350.6	4174.1	4013.7	3887.6	3760.5	3657.6	3611.3	3642.5
7.5°	4757.1	4424.3	4108.5	3784.7	3473.0	3223.9	3007.0	2854.7	2786.2	2803.3
10°	4731.9	4276.0	3794.9	3283.4	2835.6	2526.8	2304.9	2189.0	2145.5	2154.7
12.5°	4708.7	4109.5	3416.5	2743.7	2267.6	2063.8	2000.3	2001.3	2009.4	2015.5
15°	4704.8	3908.8	2993.9	2271.6	1960.9	1947.8	2016.5	2059.8	2083.0	2090.1
17.5°	4698.7	3668.8	2563.2	1949.9	1886.3	1975.1	2038.6	2066.9	2085.1	2086.1
20°	4674.4	3364.2	2165.7	1796.5	1870.2	1946.9	1986.1	2008.4	2023.6	2028.6
22.5°	4599.8	3025.2	1856.1	1727.9	1805.6	1867.1	1913.6	1938.8	1947.8	1954.0
25°	4465.6	2645.9	1642.3	1662.3	1715.8	1793.5	1830.9	1835.9	1832.9	1841.9
27.5°	4290.1	2239.4	1509.1	1573.6	1642.3	1708.8	1729.0	1725.9	1719.8	1730.0
30°	4078.3	1874.2	1424.3	1473.7	1567.5	1628.1	1646.3	1639.2	1627.1	1638.2
32.5°	3854.3	1575.6	1354.7	1404.1	1506.0	1565.6	1583.7	1576.7	1567.5	1576.7
35°	3645.5	1366.8	1290.2	1357.7	1457.7	1516.1	1539.3	1540.4	1540.4	1551.4
37.5°	3453.8	1244.8	1236.7	1328.5	1424.3	1476.8	1510.0	1512.1	1468.7	1471.7
40°	3276.3	1193.3	1212.5	1309.3	1392.1	1442.5	1444.5	1331.5	1251.8	1249.8
42.5°	3131.1	1183.3	1219.5	1307.3	1368.9	1370.8	1228.7	1140.8	1118.7	1119.7
45°	2994.9	1180.2	1235.7	1307.3	1334.6	1184.3	1088.4	1065.2	1067.2	1075.3
47.5°	2842.6	1168.1	1238.7	1289.1	1235.7	1053.1	1024.9	1014.7	1010.8	1012.8
50°	2676.2	1124.7	1200.4	1252.9	1066.2	996.6	961.3	958.3	963.3	966.4
52.5°	2500.6	1054.1	1134.8	1187.3	988.5	947.2	907.8	914.9	937.2	944.1
55°	2385.7	971.4	1048.1	1056.2	934.1	900.8	867.5	883.7	925.0	938.1
57.5°	2355.3	883.7	949.3	940.1	864.5	860.5	840.3	854.4	906.8	926.0
60°	2346.3	804.9	852.4	845.3	796.9	816.1	811.0	818.1	836.2	842.2
62.5°	2275.7	742.4	765.7	755.5	736.4	769.7	781.8	766.6	780.7	787.8
65°	2096.1	692.0	680.9	673.8	681.9	712.2	736.4	706.1	719.2	739.4
67.5°	1799.6	623.4	593.2	601.2	626.4	642.6	673.8	639.5	650.7	684.9
70°	1455.6	536.7	509.4	532.6	556.8	590.1	595.1	571.9	598.2	636.5
72.5°	1029.9	448.8	429.7	477.1	485.2	528.6	517.5	506.4	542.7	555.9
75°	714.2	362.1	351.1	387.3	416.6	454.0	445.9	459.0	535.7	541.7
77.5°	451.9	281.5	274.4	297.6	337.9	379.2	392.4	541.7	914.9	951.2
80°	262.3	209.8	201.7	219.9	255.2	293.6	378.2	664.7	603.2	596.1
82.5°	146.3	144.2	134.2	139.2	170.5	211.9	534.6	468.0	380.3	392.4
85°	68.6	84.8	72.7	69.6	95.8	248.2	357.1	267.3	177.5	173.5
87.5°	18.1	16.1	16.1	18.1	40.4	213.8	142.3	114.0	67.5	65.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)