

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: P962880

Luminaire Tested: **NAV-SB2D-722-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962880
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-SB2D-722-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2200K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17524.4 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

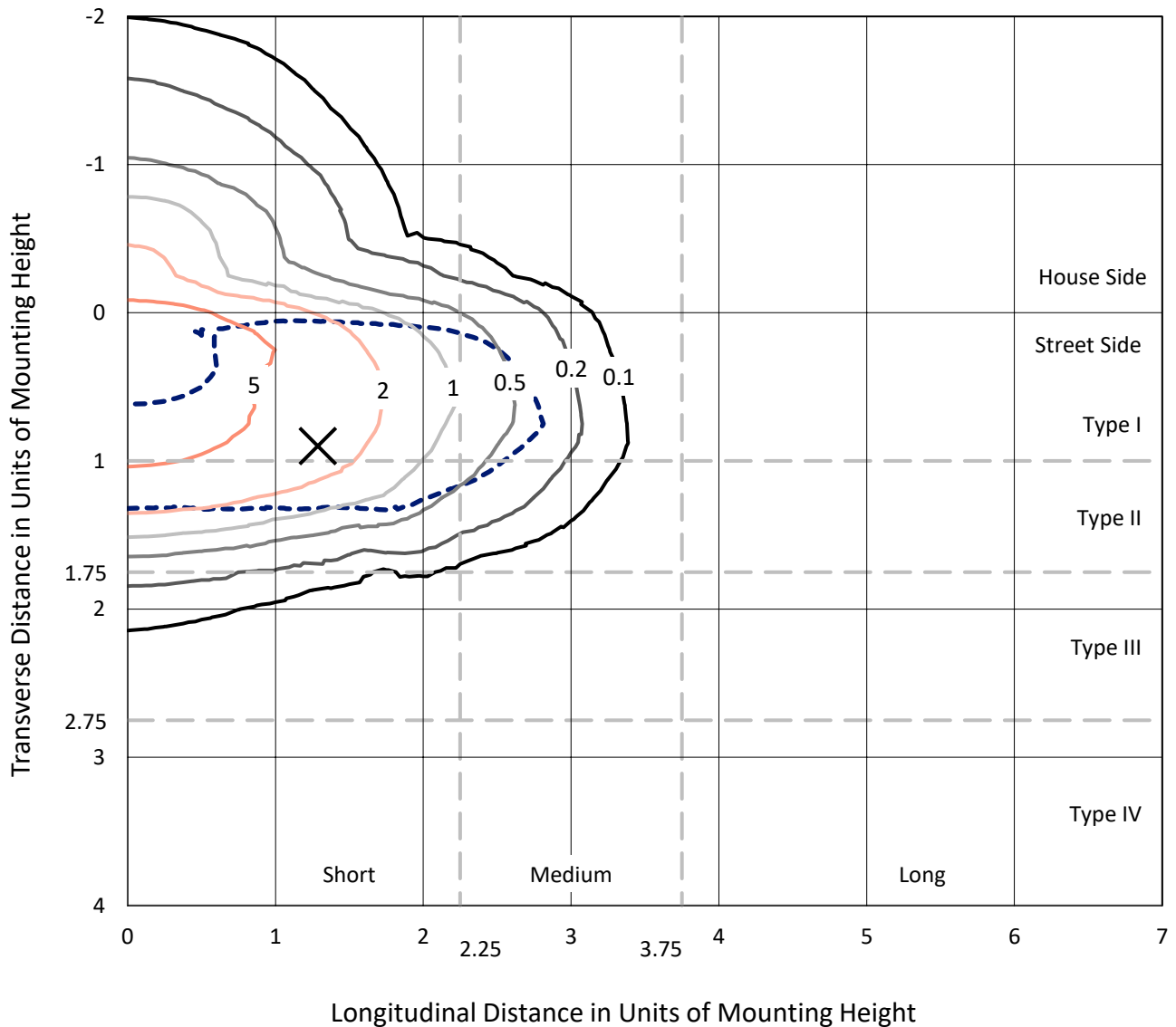
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P962880
 CATALOG NUMBER: NAV-SB2D-722-U-AFL

Iso-Footcandle Lines of Horizontal Illumination

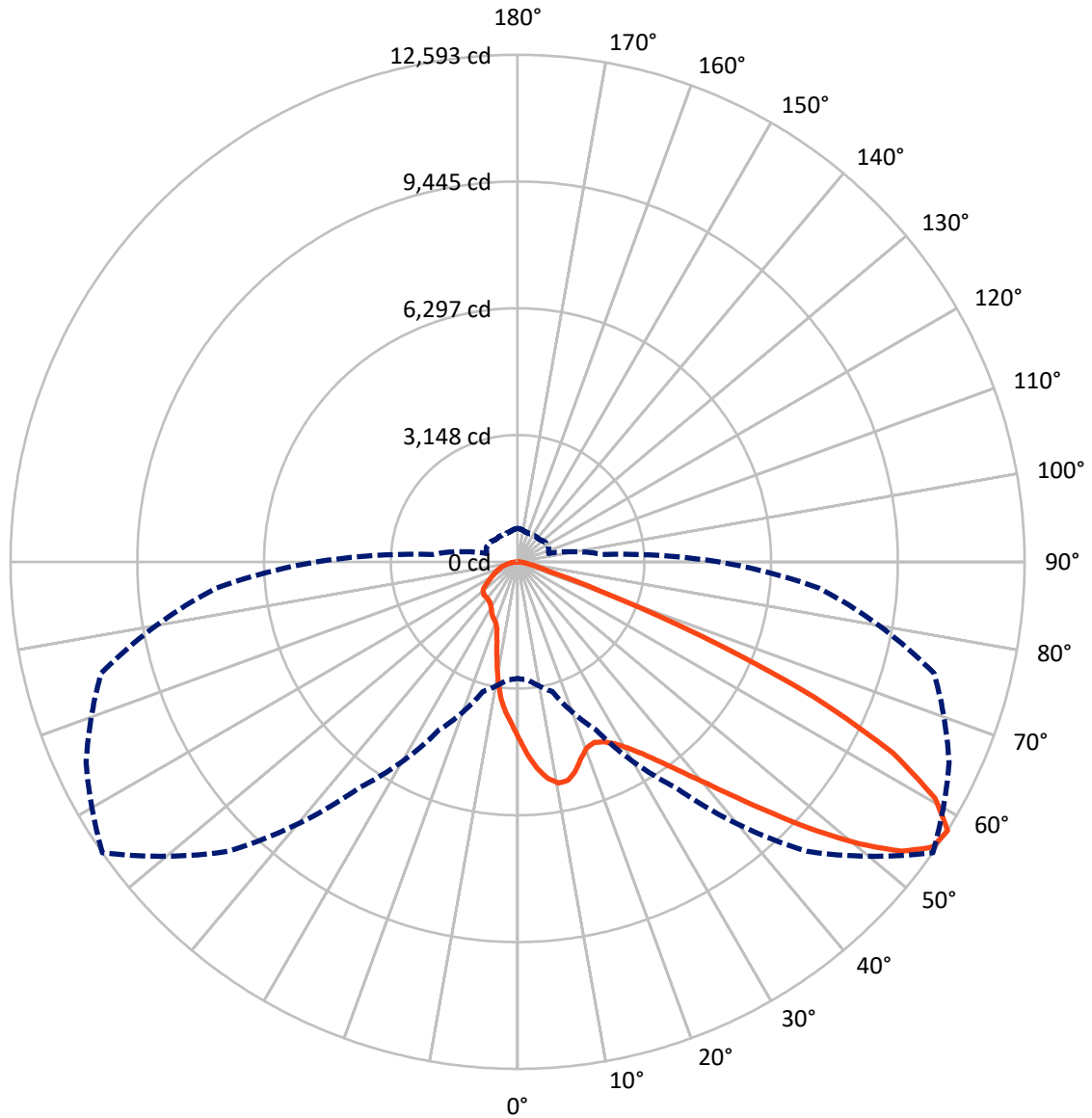
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc
 Type II - Short - N/A

REPORT NUMBER: P962880
CATALOG NUMBER: NAV-SB2D-722-U-AFL

Luminous Intensity Polar Plot



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

REPORT NUMBER: P962880
 CATALOG NUMBER: NAV-SB2D-722-U-AFL

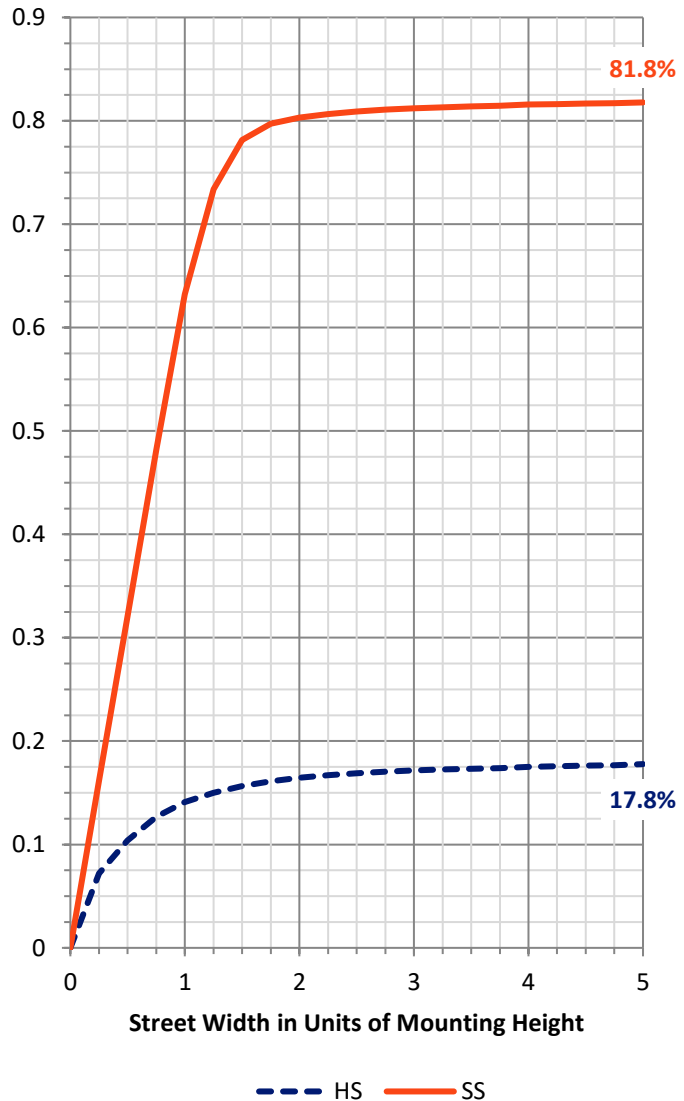
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3171.0	0.0	3171.0
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	14353.5	0.0	14353.5
	% Fixture	81.9	0.0	81.9
Total	Lumens	17524.4	0.0	17524.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	407.5	2.3
10°-20°	1028.5	5.9
20°-30°	1641.1	9.4
30°-40°	2598.3	14.8
40°-50°	3977.0	22.7
50°-60°	4259.7	24.3
60°-70°	2679.8	15.3
70°-80°	792.5	4.5
80°-90°	140.1	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°	17524.4	100.0
0°-180°	17524.4	100.0

Coefficient of Utilization



REPORT NUMBER: P962880

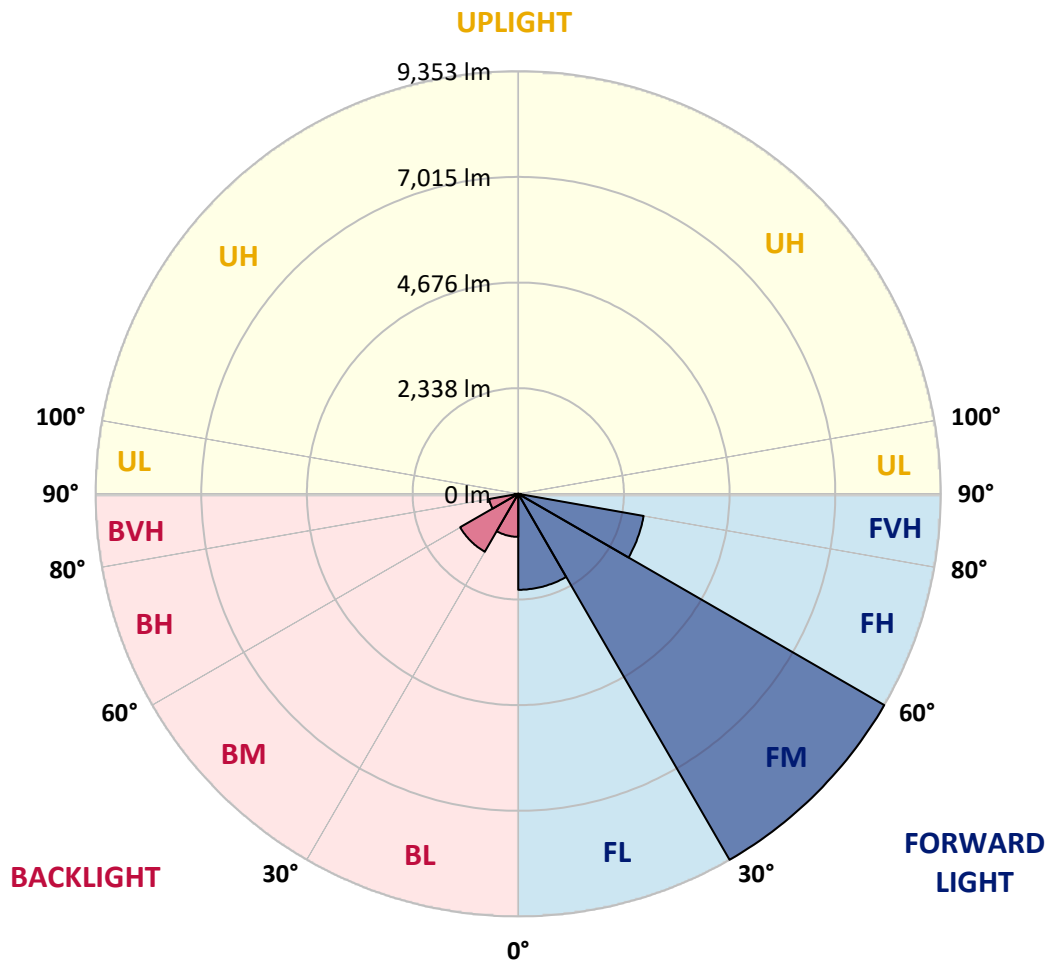
CATALOG NUMBER: NAV-SB2D-722-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2124.0	12.1			
FM (30°-60°)	9352.9	53.4			
FH (60°-80°)	2817.4	16.1			G2/5000
FVH (80°-90°)	59.2	0.3			G1/100
BL (0°-30°)	953.1	5.4	B2/1000		
BM (30°-60°)	1482.1	8.5	B2/2500		
BH (60°-80°)	654.9	3.7	B2/1000		G2/1000
BVH (80°-90°)	80.9	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



REPORT NUMBER: P962880

CATALOG NUMBER: NAV-SB2D-722-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4391.1	4391.1	4391.1	4391.1	4391.1	4391.1	4391.1	4391.1	4391.1	4391.1	4391.1
2.5°	5037.9	5034.3	5054.2	4986.2	4940.1	4877.6	4795.1	4690.0	4576.7	4457.2	4405.6
5°	5491.7	5460.1	5480.9	5430.1	5379.4	5285.2	5162.9	4991.6	4782.4	4544.1	4417.3
7.5°	5420.2	5398.5	5451.9	5497.2	5535.2	5523.4	5433.7	5254.4	4984.5	4638.3	4454.4
10°	4843.1	4818.6	4893.9	5050.6	5280.7	5480.9	5589.6	5478.2	5191.0	4741.6	4490.7
12.5°	4334.0	4322.2	4372.0	4498.8	4754.4	5138.4	5569.6	5673.9	5405.6	4863.9	4539.6
15°	4116.6	4102.0	4133.7	4198.1	4361.2	4719.0	5388.5	5808.0	5616.8	5005.3	4617.5
17.5°	4068.5	4052.2	4065.9	4099.4	4204.4	4477.1	5114.9	5874.1	5837.0	5162.9	4682.7
20°	4157.3	4143.8	4145.5	4143.8	4217.2	4433.6	4924.6	5848.6	6028.9	5307.9	4746.2
22.5°	4372.0	4349.4	4350.3	4302.2	4342.1	4509.7	4874.8	5780.8	6200.2	5434.7	4794.2
25°	4721.8	4681.0	4689.1	4566.8	4555.9	4680.0	4952.7	5728.2	6370.5	5536.1	4803.3
27.5°	5200.0	5153.8	5129.4	4947.3	4860.3	4921.9	5111.3	5746.4	6531.8	5624.1	4780.6
30°	5798.0	5741.8	5691.9	5433.7	5276.2	5253.5	5357.7	5865.9	6722.1	5716.4	4741.6
32.5°	6530.9	6465.6	6375.1	6032.6	5810.6	5691.9	5676.6	6078.8	6944.9	5834.2	4721.8
35°	7403.3	7318.1	7189.5	6746.4	6465.6	6222.9	6096.9	6386.0	7250.1	6011.7	4744.3
37.5°	8302.0	8205.9	8088.2	7560.9	7215.8	6857.9	6609.7	6802.6	7657.0	6252.7	4804.2
40°	9130.9	9023.1	8913.5	8444.2	8073.6	7642.4	7237.5	7329.9	8154.3	6540.8	4905.6
42.5°	9620.1	9540.4	9498.7	9245.0	8958.8	8521.2	8018.4	7955.0	8713.2	6872.4	5021.6
45°	9598.3	9565.7	9694.3	9799.5	9731.6	9488.7	8933.4	8646.2	9274.0	7159.6	5128.5
47.5°	9085.6	9107.3	9394.5	9985.1	10245.2	10372.0	9975.2	9324.7	9761.4	7374.3	5176.5
50°	7690.5	7708.6	8373.5	9647.3	10377.4	11092.2	11008.9	9987.0	10139.2	7505.7	5165.6
52.5°	6586.1	6597.9	6883.3	8645.3	9940.8	11454.6	11940.2	10611.2	10415.5	7541.8	5104.9
55°	4960.9	5001.7	5321.5	6782.7	8804.8	11167.4	12507.3	11254.4	10590.3	7545.5	5041.5
57.5°	2898.1	2942.5	3337.5	4604.0	6843.4	10166.4	12593.4	11825.1	10709.0	7516.5	5003.4
60°	1419.6	1438.6	1610.8	2419.7	4219.8	8237.6	11901.3	12101.5	10775.1	7501.2	5001.7
62.5°	956.6	954.0	961.2	1194.0	2079.1	5292.5	10459.0	11617.7	10739.8	7442.2	4983.5
65°	822.6	812.6	785.5	837.9	1077.2	2420.6	8080.9	10173.6	10470.8	7294.5	4859.4
67.5°	711.1	712.1	713.0	696.7	769.2	1117.0	4938.2	8013.9	9505.0	6595.2	4381.1
70°	588.9	597.0	600.6	600.6	626.9	732.9	2108.1	5492.7	7497.5	5171.0	3528.6
72.5°	536.3	519.1	520.9	511.9	511.9	558.0	848.9	3113.6	4723.5	2909.0	2153.4
75°	437.6	448.4	450.3	443.9	423.1	425.8	503.7	1306.4	2021.1	1206.7	1064.5
77.5°	377.8	377.8	381.4	376.9	360.6	318.9	336.1	506.5	687.6	494.7	531.8
80°	303.5	302.6	318.0	327.1	301.7	235.5	214.7	279.9	305.3	217.4	276.3
82.5°	147.7	156.7	218.3	249.2	229.2	170.4	131.4	173.9	163.1	96.0	124.1
85°	86.1	81.5	97.9	138.6	131.4	94.2	63.4	90.6	85.2	48.9	49.8
87.5°	27.2	25.3	19.9	47.2	38.0	26.2	17.2	26.2	23.6	10.9	10.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P962880
 CATALOG NUMBER: NAV-SB2D-722-U-AFL

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4391.1	4391.1	4391.1	4391.1	4391.1	4391.1	4391.1	4391.1	4391.1	4391.1
2.5°	4341.2	4234.3	4128.3	4031.4	3972.5	3934.5	3896.4	3853.8	3837.5	3813.1
5°	4297.7	4091.2	3907.3	3748.7	3604.7	3491.5	3377.3	3284.9	3243.2	3271.3
7.5°	4272.4	3973.4	3689.9	3399.1	3119.1	2895.3	2700.6	2563.8	2502.2	2517.6
10°	4249.8	3840.3	3408.1	2948.8	2546.6	2269.4	2070.1	1965.8	1926.9	1935.1
12.5°	4228.8	3690.7	3068.4	2464.1	2036.6	1853.5	1796.4	1797.3	1804.6	1810.0
15°	4225.3	3510.5	2688.8	2040.2	1761.2	1749.4	1811.0	1849.9	1870.7	1877.1
17.5°	4219.8	3294.9	2301.9	1751.2	1694.1	1773.9	1830.9	1856.3	1872.6	1873.5
20°	4198.1	3021.3	1945.0	1613.5	1679.6	1748.4	1783.8	1803.7	1817.3	1821.8
22.5°	4131.1	2716.9	1667.0	1551.8	1621.7	1676.9	1718.5	1741.2	1749.4	1754.8
25°	4010.5	2376.3	1474.9	1493.0	1541.0	1610.8	1644.3	1648.8	1646.0	1654.2
27.5°	3853.0	2011.2	1355.3	1413.3	1474.9	1534.6	1552.8	1550.0	1544.6	1553.7
30°	3662.6	1683.3	1279.2	1323.6	1407.8	1462.2	1478.5	1472.1	1461.2	1471.2
32.5°	3461.5	1415.1	1216.7	1261.1	1352.6	1406.0	1422.3	1415.9	1407.8	1415.9
35°	3274.1	1227.5	1158.7	1219.3	1309.0	1361.6	1382.4	1383.3	1383.3	1393.3
37.5°	3102.0	1118.0	1110.7	1193.1	1279.2	1326.2	1356.2	1358.0	1319.1	1321.7
40°	2942.5	1071.7	1089.0	1175.9	1250.2	1295.5	1297.3	1195.9	1124.2	1122.5
42.5°	2812.0	1062.6	1095.3	1174.1	1229.4	1231.1	1103.4	1024.6	1004.7	1005.6
45°	2689.7	1060.0	1109.8	1174.1	1198.5	1063.5	977.5	956.6	958.5	965.8
47.5°	2552.9	1049.1	1112.5	1157.7	1109.8	945.8	920.4	911.3	907.7	909.6
50°	2403.4	1010.1	1078.1	1125.1	957.6	895.0	863.4	860.6	865.2	867.9
52.5°	2245.8	946.7	1019.2	1066.3	887.9	850.6	815.4	821.6	841.6	848.0
55°	2142.6	872.4	941.3	948.5	838.9	809.0	779.1	793.6	830.8	842.6
57.5°	2115.4	793.6	852.5	844.3	776.3	772.7	754.6	767.3	814.5	831.7
60°	2107.2	722.9	765.5	759.2	715.7	732.9	728.4	734.7	751.0	756.4
62.5°	2043.7	666.8	687.6	678.6	661.3	691.3	702.1	688.5	701.2	707.6
65°	1882.5	621.5	611.5	605.2	612.4	639.6	661.3	634.2	646.0	664.1
67.5°	1616.2	559.9	532.7	540.0	562.6	577.1	605.2	574.4	584.4	615.1
70°	1307.3	482.0	457.5	478.4	500.1	529.9	534.5	513.6	537.2	571.6
72.5°	925.0	403.1	385.9	428.6	435.7	474.7	464.7	454.8	487.4	499.2
75°	641.4	325.2	315.3	347.9	374.1	407.6	400.5	412.2	481.0	486.5
77.5°	405.9	252.8	246.4	267.2	303.5	340.6	352.4	486.5	821.6	854.3
80°	235.5	188.4	181.2	197.5	229.2	263.6	339.7	597.0	541.7	535.4
82.5°	131.4	129.6	120.5	125.0	153.1	190.2	480.1	420.4	341.5	352.4
85°	61.6	76.1	65.2	62.5	86.1	222.8	320.7	240.1	159.5	155.8
87.5°	16.3	14.5	14.5	16.3	36.3	192.1	127.7	102.4	60.7	58.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)