

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: STREETWORKS

Report Number: P965732

Luminaire Tested: **NVN-SB4A-827-U-AFL**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P965732  
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: STREETWORKS  
Catalog Number: NVN-SB4A-827-U-AFL  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

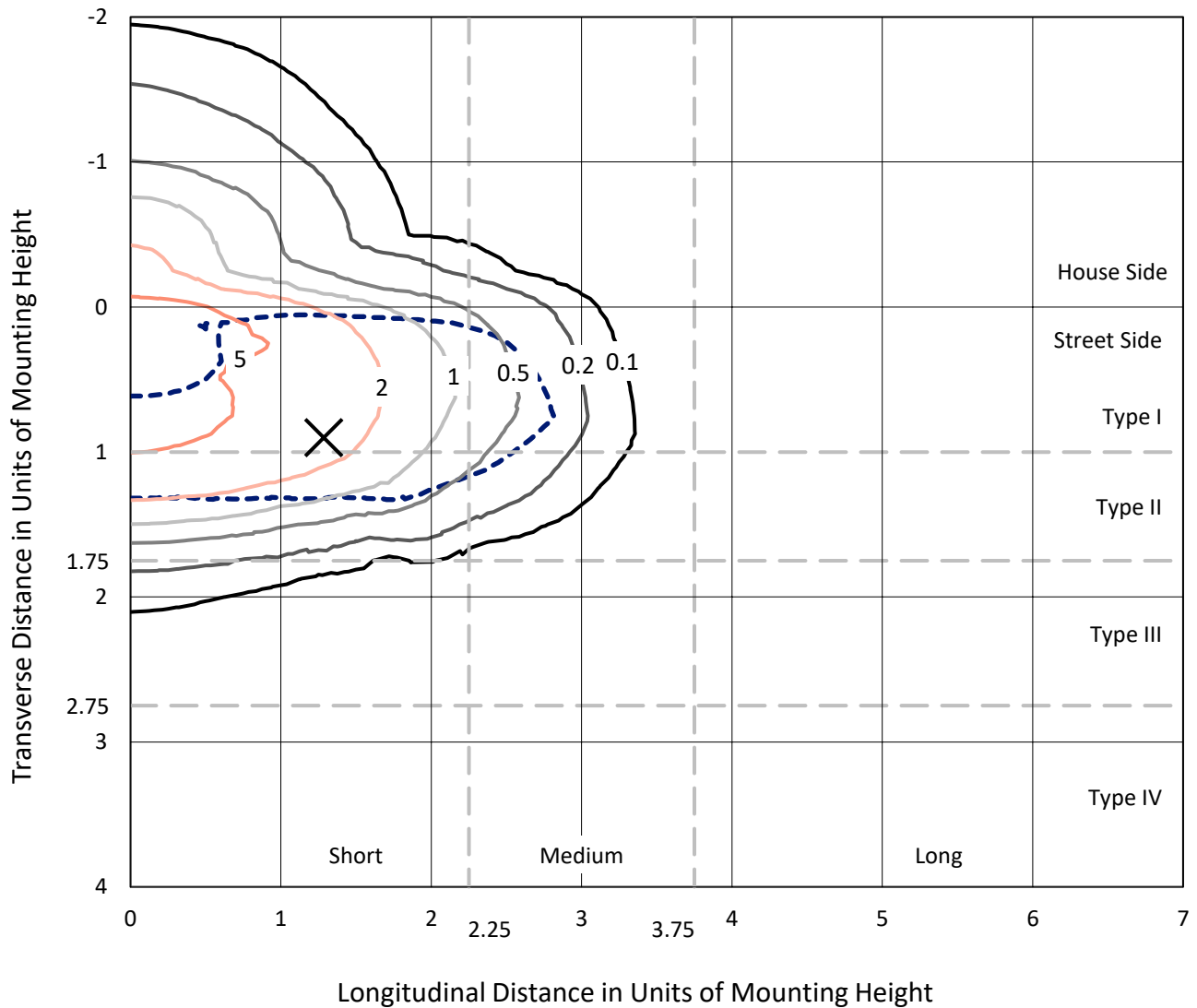
Lumens per Lamp: N/A  
Luminaire Lumens: 16296.5 lumens  
Efficiency: N/A  
Efficacy: 143.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 114  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: P965732  
 CATALOG NUMBER: NVN-SB4A-827-U-AFL

### Iso-Footcandle Lines of Horizontal Illumination

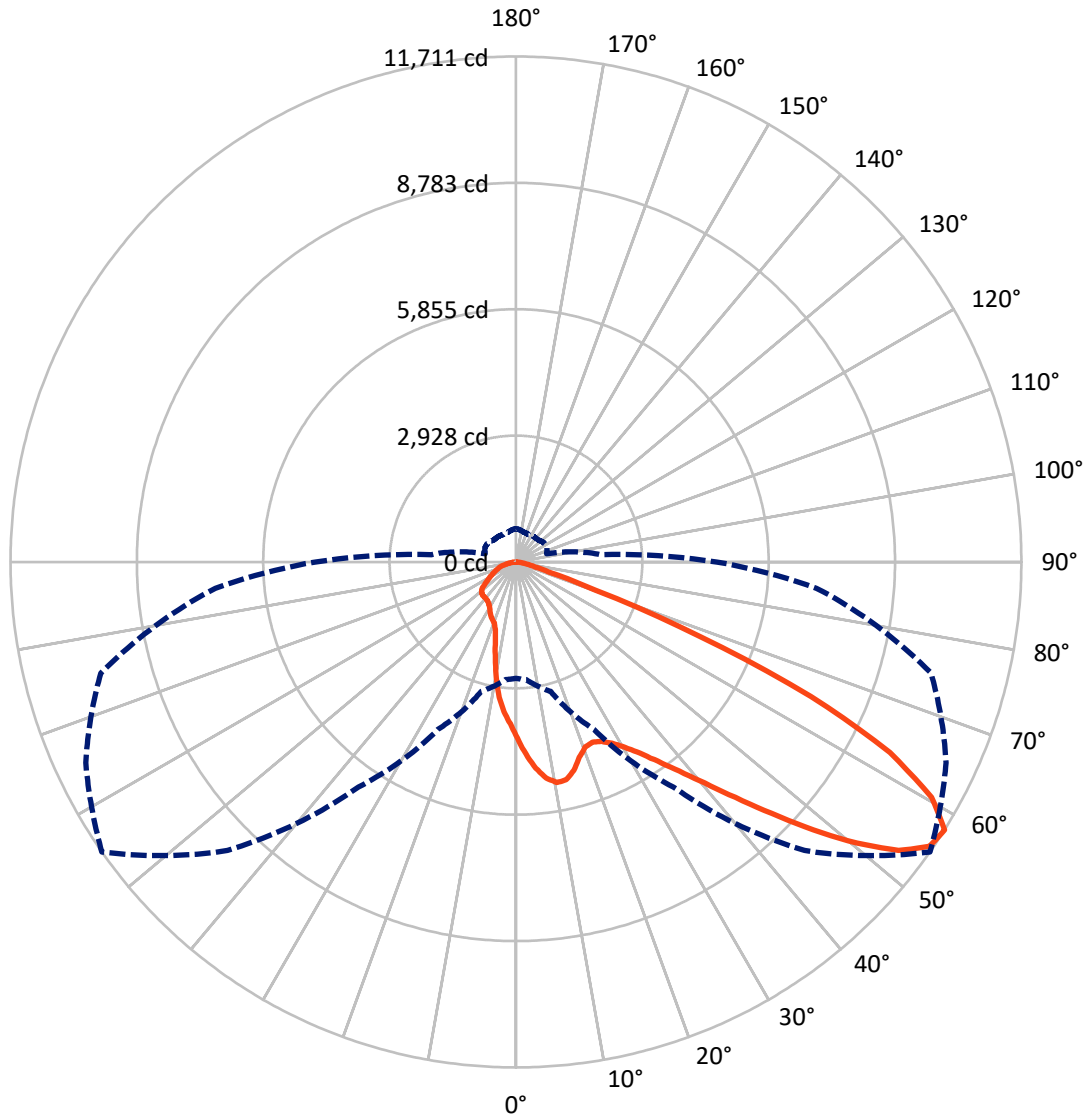
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc  
 Type II - Short - N/A

REPORT NUMBER: P965732  
CATALOG NUMBER: NVN-SB4A-827-U-AFL

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P965732  
 CATALOG NUMBER: NVN-SB4A-827-U-AFL

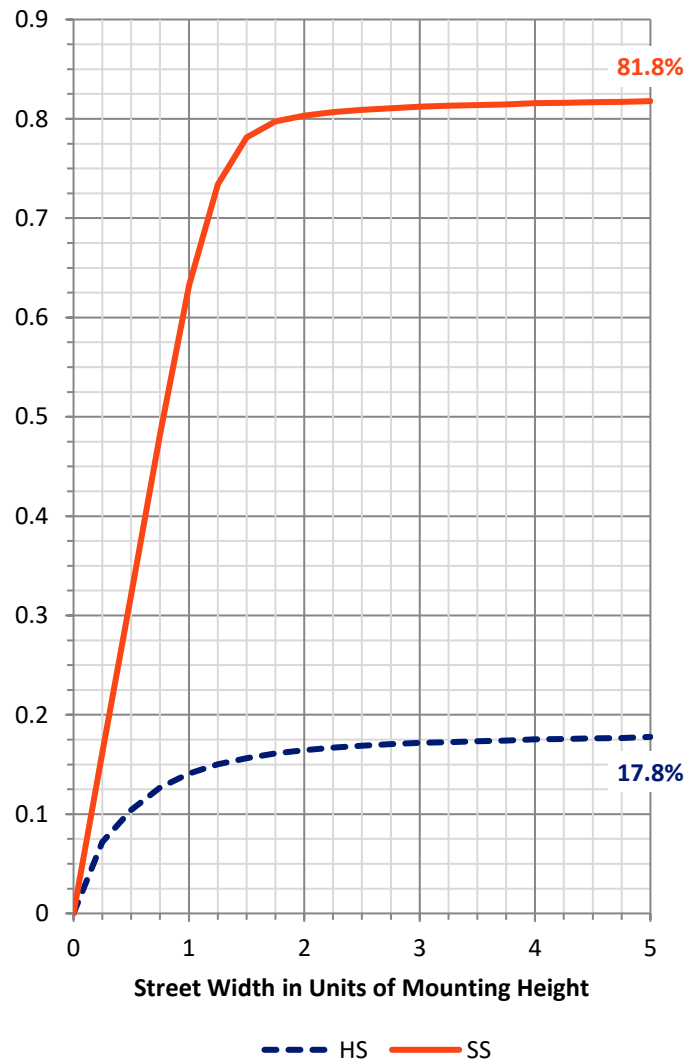
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2948.8	0.0	2948.8
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	13347.7	0.0	13347.7
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	16296.5	0.0	16296.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	378.9	2.3
10°-20°	956.4	5.9
20°-30°	1526.1	9.4
30°-40°	2416.2	14.8
40°-50°	3698.3	22.7
50°-60°	3961.2	24.3
60°-70°	2492.0	15.3
70°-80°	736.9	4.5
80°-90°	130.3	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°	16296.5	100.0
0°-180°	16296.5	100.0



REPORT NUMBER: P965732

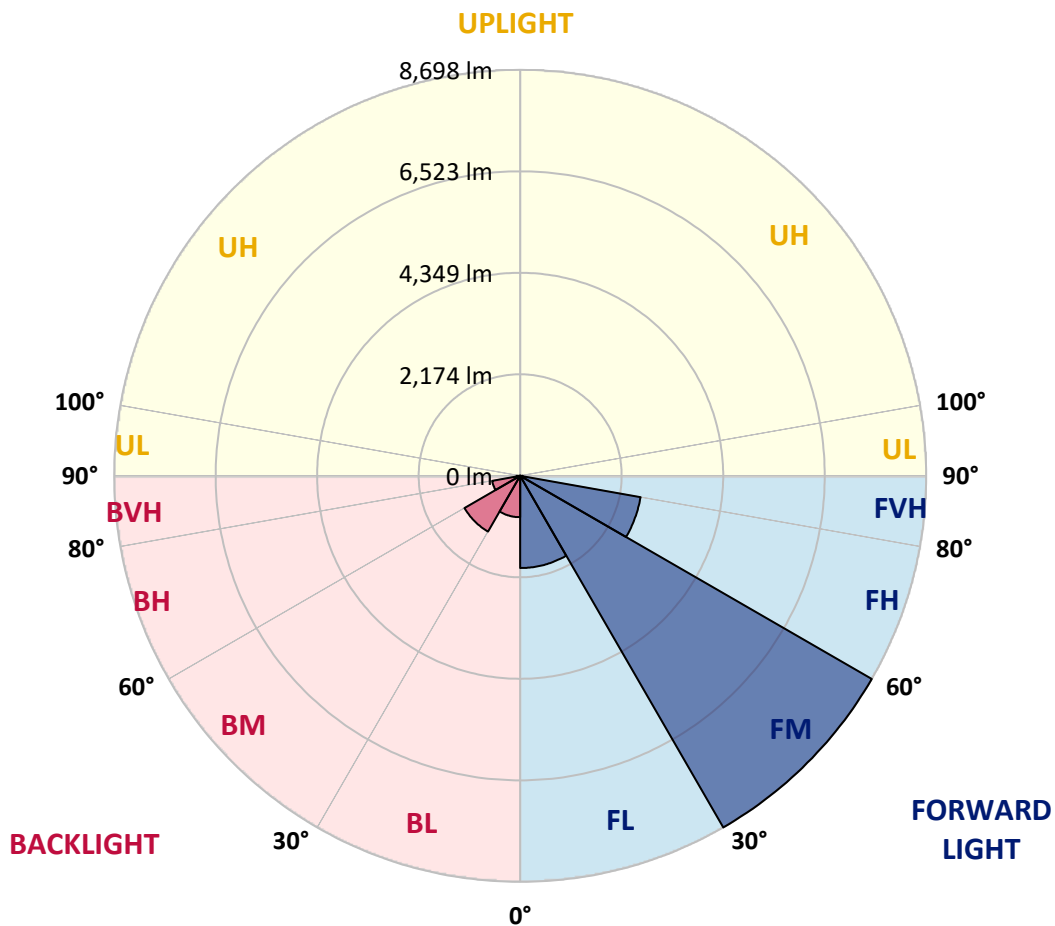
CATALOG NUMBER: NVN-SB4A-827-U-AFL

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1975.1	12.1			
FM (30°-60°)	8697.5	53.4			
FH (60°-80°)	2620.0	16.1			G2/5000
FVH (80°-90°)	55.1	0.3			G1/100
BL (0°-30°)	886.3	5.4	B2/1000		
BM (30°-60°)	1378.2	8.5	B2/2500		
BH (60°-80°)	609.0	3.7	B2/1000		G2/1000
BVH (80°-90°)	75.2	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: P965732  
 CATALOG NUMBER: NVN-SB4A-827-U-AFL

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4083.4	4083.4	4083.4	4083.4	4083.4	4083.4	4083.4	4083.4	4083.4	4083.4	4083.4
2.5°	4684.9	4681.5	4700.0	4636.9	4593.8	4535.7	4459.1	4361.4	4256.1	4144.9	4096.8
5°	5107.0	5077.4	5096.8	5049.7	5002.5	4914.9	4801.1	4641.9	4447.3	4225.8	4107.8
7.5°	5040.4	5020.1	5069.9	5112.0	5147.3	5136.5	5053.0	4886.2	4635.2	4313.4	4142.3
10°	4503.7	4481.0	4550.9	4696.7	4910.7	5096.8	5198.0	5094.4	4827.2	4409.4	4176.1
12.5°	4030.3	4019.3	4065.7	4183.6	4421.2	4778.3	5179.4	5276.3	5026.9	4523.1	4221.6
15°	3828.1	3814.6	3844.2	3903.9	4055.6	4388.3	5010.9	5400.9	5223.2	4654.5	4293.9
17.5°	3783.5	3768.3	3780.9	3812.1	3909.9	4163.4	4756.5	5462.4	5427.9	4801.1	4354.6
20°	3866.0	3853.4	3855.0	3853.4	3921.6	4123.0	4579.6	5438.9	5606.5	4935.9	4413.6
22.5°	4065.7	4044.6	4045.5	4000.8	4037.9	4193.7	4533.3	5375.7	5765.7	5053.9	4458.2
25°	4390.9	4353.0	4360.6	4246.8	4236.7	4352.2	4605.7	5326.8	5924.1	5148.3	4466.6
27.5°	4835.6	4792.7	4769.9	4600.6	4519.7	4577.0	4753.1	5343.6	6074.0	5230.0	4445.6
30°	5391.7	5339.4	5293.1	5053.0	4906.5	4885.4	4982.2	5454.8	6251.0	5315.9	4409.4
32.5°	6073.2	6012.5	5928.3	5609.9	5403.5	5293.1	5278.9	5652.9	6458.2	5425.4	4390.9
35°	6884.5	6805.3	6685.7	6273.7	6012.5	5786.8	5669.7	5938.4	6742.1	5590.6	4411.9
37.5°	7720.2	7630.9	7521.4	7031.1	6710.2	6377.3	6146.5	6326.0	7120.4	5814.6	4467.6
40°	8491.1	8390.9	8288.9	7852.5	7507.9	7106.9	6730.4	6816.2	7582.9	6082.6	4561.9
42.5°	8946.0	8871.9	8833.1	8597.2	8331.0	7924.1	7456.6	7397.5	8102.7	6390.9	4669.7
45°	8925.8	8895.5	9015.1	9112.8	9049.6	8823.8	8307.4	8040.4	8624.1	6657.9	4769.1
47.5°	8449.0	8469.2	8736.3	9285.5	9527.3	9645.2	9276.2	8671.4	9077.4	6857.6	4813.8
50°	7151.6	7168.4	7786.8	8971.3	9650.3	10315.0	10237.5	9287.2	9428.8	6979.7	4803.7
52.5°	6124.6	6135.5	6400.9	8039.5	9244.3	10652.0	11103.5	9867.7	9685.6	7013.5	4747.2
55°	4613.3	4651.1	4948.6	6307.4	8187.8	10384.9	11630.9	10465.8	9848.3	7016.7	4688.2
57.5°	2695.0	2736.2	3103.6	4281.3	6363.9	9454.0	11710.9	10996.5	9958.6	6989.8	4652.9
60°	1320.1	1337.8	1497.8	2250.2	3924.1	7660.4	11067.3	11253.5	10020.1	6975.5	4651.1
62.5°	889.6	887.1	893.8	1110.4	1933.5	4921.6	9726.1	10803.6	9987.3	6920.7	4634.3
65°	765.0	755.6	730.4	779.3	1001.6	2251.0	7514.7	9460.8	9737.1	6783.4	4518.9
67.5°	661.3	662.2	663.0	647.8	715.2	1038.7	4592.2	7452.4	8839.0	6133.1	4074.1
70°	547.6	555.1	558.5	558.5	583.0	681.5	1960.4	5107.8	6972.2	4808.7	3281.3
72.5°	498.8	482.8	484.4	476.0	476.0	519.0	789.4	2895.5	4392.5	2705.1	2002.5
75°	406.9	417.0	418.7	412.8	393.4	396.0	468.4	1214.8	1879.5	1122.2	989.8
77.5°	351.3	351.3	354.6	350.4	335.3	296.5	312.5	470.9	639.4	460.0	494.6
80°	282.2	281.4	295.7	304.1	280.5	219.0	199.7	260.3	283.9	202.2	257.0
82.5°	137.4	145.8	203.1	231.6	213.1	158.4	122.2	161.7	151.6	89.3	115.4
85°	80.1	75.8	91.0	128.9	122.2	87.6	58.9	84.3	79.2	45.5	46.3
87.5°	25.3	23.6	18.6	43.8	35.4	24.4	16.0	24.4	21.9	10.1	10.1
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: P965732  
 CATALOG NUMBER: NVN-SB4A-827-U-AFL

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4083.4	4083.4	4083.4	4083.4	4083.4	4083.4	4083.4	4083.4	4083.4	4083.4
2.5°	4037.1	3937.6	3839.0	3748.9	3694.2	3658.7	3623.4	3583.8	3568.6	3545.9
5°	3996.6	3804.5	3633.5	3486.0	3352.2	3246.8	3140.7	3054.7	3016.0	3042.1
7.5°	3973.0	3695.0	3431.3	3160.9	2900.5	2692.5	2511.4	2384.1	2326.9	2341.2
10°	3952.0	3571.2	3169.3	2742.2	2368.2	2110.4	1925.1	1828.1	1791.9	1799.5
12.5°	3932.6	3432.1	2853.4	2291.5	1893.8	1723.6	1670.5	1671.5	1678.1	1683.3
15°	3929.2	3264.5	2500.4	1897.2	1637.7	1626.8	1684.1	1720.3	1739.6	1745.6
17.5°	3924.1	3064.0	2140.7	1628.4	1575.4	1649.5	1702.6	1726.2	1741.4	1742.2
20°	3903.9	2809.6	1808.7	1500.4	1561.9	1626.0	1658.8	1677.3	1689.9	1694.2
22.5°	3841.6	2526.5	1550.1	1443.1	1508.0	1559.3	1598.2	1619.2	1626.8	1631.8
25°	3729.6	2209.8	1371.6	1388.4	1433.1	1497.8	1529.1	1533.3	1530.7	1538.3
27.5°	3583.0	1870.2	1260.3	1314.3	1371.6	1427.1	1443.9	1441.5	1436.3	1444.8
30°	3406.1	1565.3	1189.5	1230.8	1309.1	1359.8	1374.8	1369.0	1358.8	1368.2
32.5°	3219.0	1315.9	1131.4	1172.7	1257.8	1307.5	1322.7	1316.7	1309.1	1316.7
35°	3044.7	1141.5	1077.5	1134.0	1217.4	1266.2	1285.6	1286.4	1286.4	1295.7
37.5°	2884.6	1039.6	1032.9	1109.5	1189.5	1233.4	1261.2	1262.8	1226.6	1229.2
40°	2736.2	996.6	1012.6	1093.5	1162.6	1204.7	1206.4	1112.0	1045.5	1043.8
42.5°	2615.0	988.2	1018.5	1091.8	1143.2	1144.9	1026.1	952.8	934.3	935.1
45°	2501.2	985.6	1032.0	1091.8	1114.6	989.0	909.0	889.6	891.3	898.1
47.5°	2374.0	975.6	1034.5	1076.7	1032.0	879.6	856.0	847.5	844.1	845.8
50°	2235.0	939.3	1002.6	1046.3	890.5	832.3	802.9	800.3	804.5	807.1
52.5°	2088.4	880.4	947.7	991.6	825.6	791.1	758.2	764.1	782.6	788.5
55°	1992.4	811.3	875.4	882.0	780.1	752.3	724.5	738.0	772.5	783.5
57.5°	1967.1	738.0	792.7	785.2	722.0	718.6	701.7	713.6	757.4	773.4
60°	1959.6	672.3	711.9	706.0	665.5	681.5	677.3	683.3	698.4	703.5
62.5°	1900.6	620.0	639.4	631.0	615.0	642.8	652.9	640.2	652.1	657.9
65°	1750.6	577.9	568.7	562.7	569.5	594.8	615.0	589.7	600.6	617.6
67.5°	1503.0	520.6	495.4	502.1	523.2	536.7	562.7	534.1	543.4	572.1
70°	1215.6	448.2	425.5	444.8	465.0	492.8	497.0	477.6	499.6	531.6
72.5°	860.2	374.8	358.9	398.5	405.2	441.5	432.1	422.9	453.3	464.2
75°	596.4	302.5	293.2	323.5	347.9	379.1	372.4	383.3	447.3	452.4
77.5°	377.4	235.0	229.2	248.6	282.2	316.7	327.7	452.4	764.1	794.5
80°	219.0	175.3	168.5	183.7	213.1	245.2	315.9	555.1	503.8	497.8
82.5°	122.2	120.4	112.0	116.2	142.4	176.9	446.5	390.9	317.6	327.7
85°	57.3	70.7	60.7	58.1	80.1	207.3	298.3	223.2	148.3	144.9
87.5°	15.2	13.5	13.5	15.2	33.7	178.6	118.8	95.2	56.5	54.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)