

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: P965731

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

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P965731  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)  
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-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

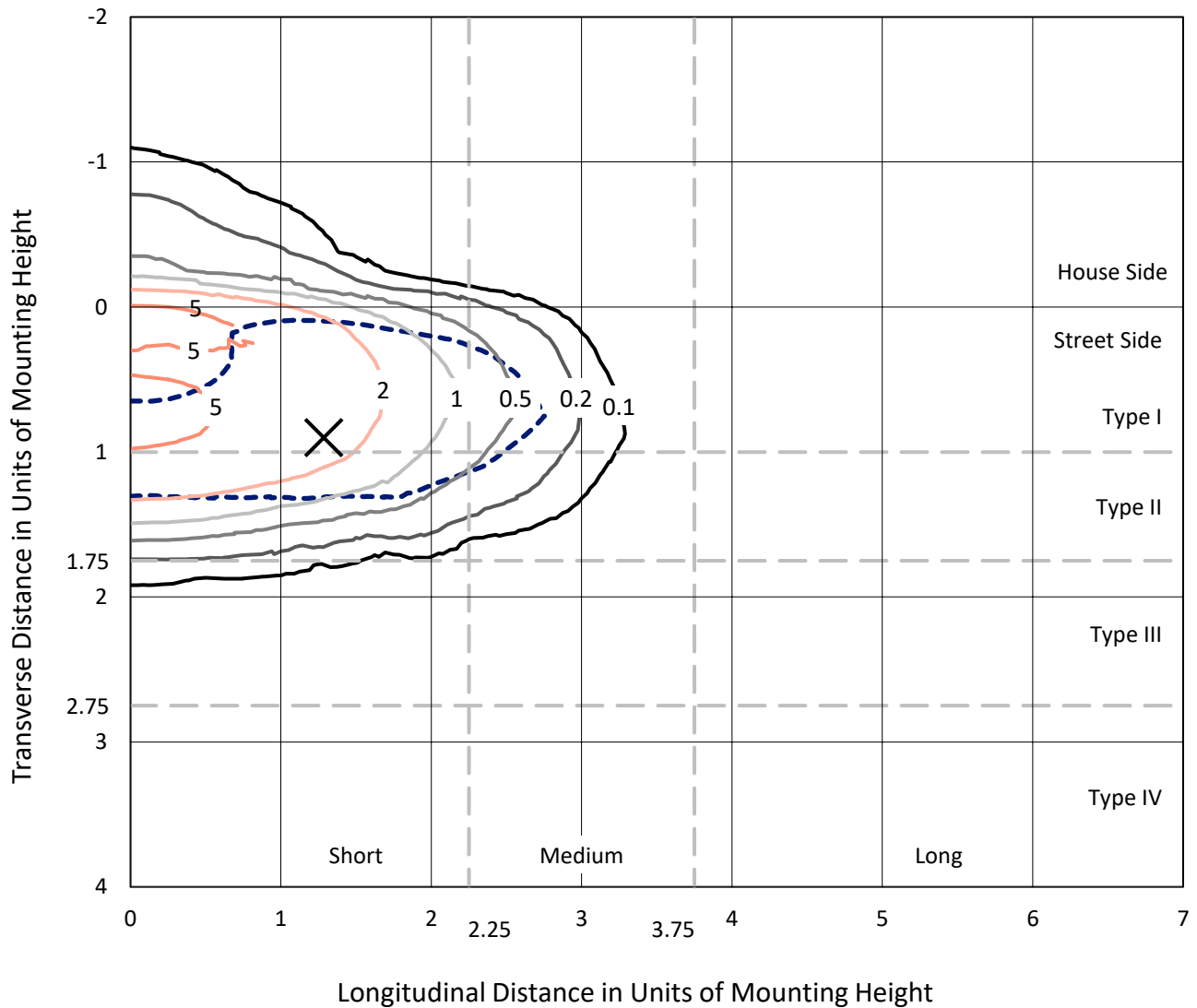
Lumens per Lamp: N/A  
Luminaire Lumens: 13662.2 lumens  
Efficiency: N/A  
Efficacy: 119.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 114  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: P965731  
 CATALOG NUMBER: NVN-SB4A-827-U-AFL-HSS

### Iso-Footcandle Lines of Horizontal Illumination

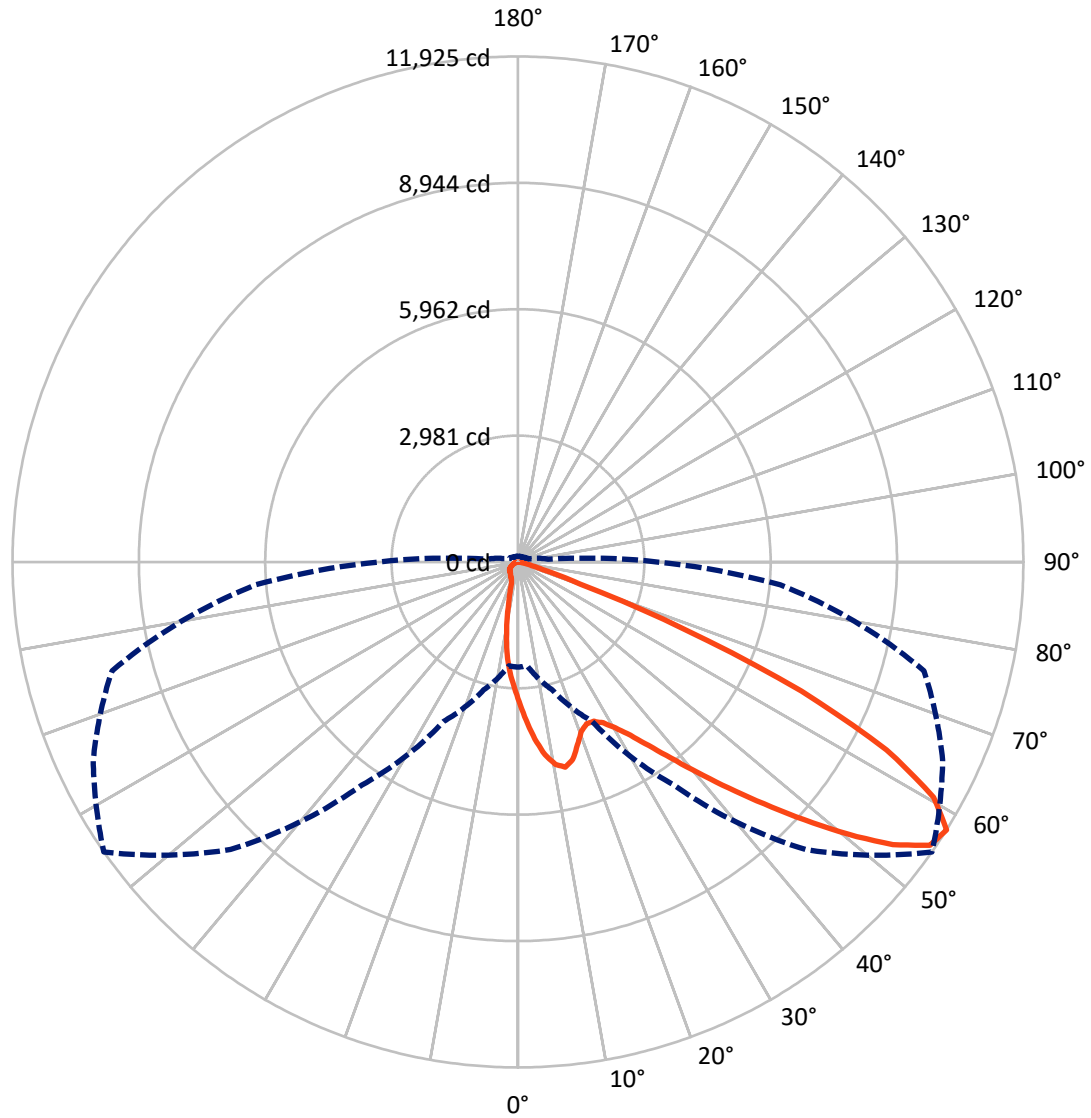
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc  
 Type II - Short - N/A

REPORT NUMBER: P965731  
CATALOG NUMBER: NVN-SB4A-827-U-AFL-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P965731  
 CATALOG NUMBER: NVN-SB4A-827-U-AFL-HSS

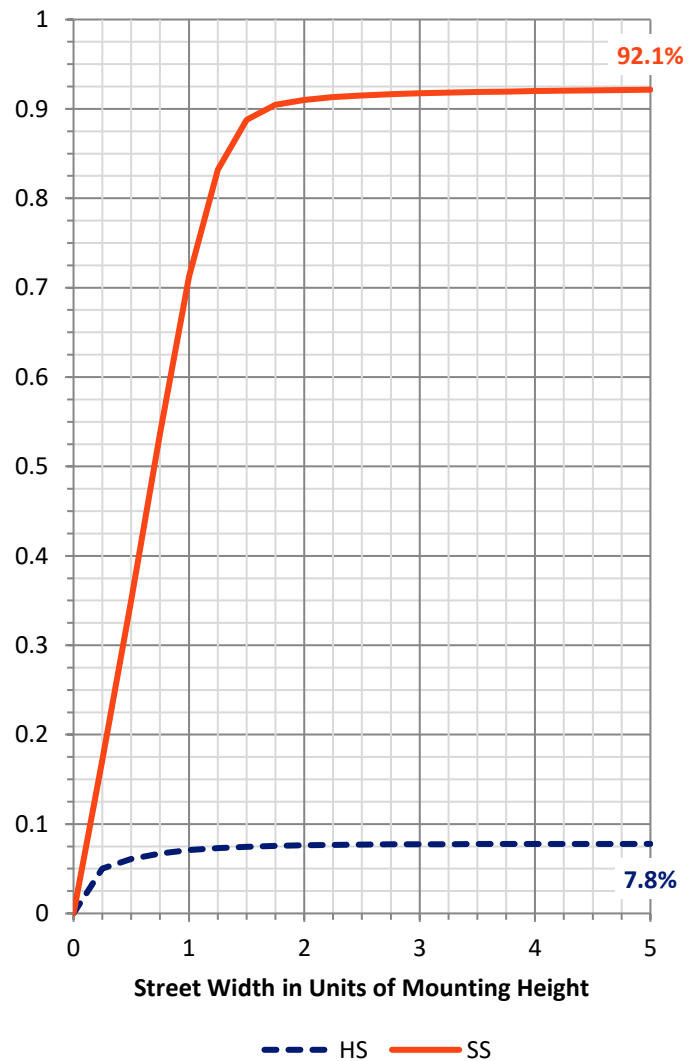
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1067.0	0.0	1067.0
	% Fixture	7.8	0.0	7.8
<b>Street Side</b>	Lumens	12595.3	0.0	12595.3
	% Fixture	92.2	0.0	92.2
<b>Total</b>	Lumens	13662.2	0.0	13662.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	306.3	2.2
10°-20°	739.9	5.4
20°-30°	1183.9	8.7
30°-40°	2003.8	14.7
40°-50°	3289.8	24.1
50°-60°	3615.7	26.5
60°-70°	2074.0	15.2
70°-80°	423.8	3.1
80°-90°	25.0	0.2
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°	13662.2	100.0
0°-180°	13662.2	100.0

**Coefficient of Utilization**



REPORT NUMBER: P965731

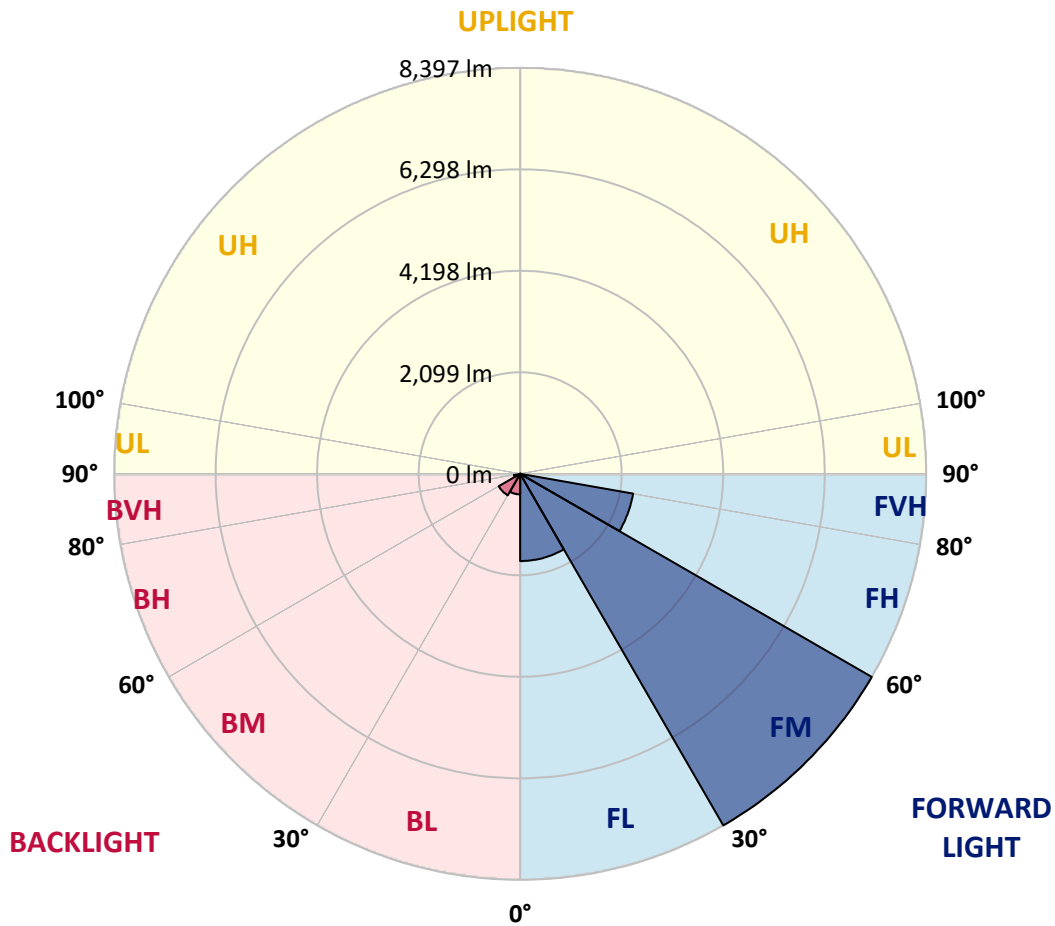
CATALOG NUMBER: NVN-SB4A-827-U-AFL-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1804.2	13.2			
FM (30°-60°)	8396.9	61.5			
FH (60°-80°)	2370.9	17.4			G2/5000
FVH (80°-90°)	23.3	0.2			G1/100
BL (0°-30°)	426.0	3.1	B1/500		
BM (30°-60°)	512.4	3.8	B1/1000		
BH (60°-80°)	126.9	0.9	B1/500		G1/500
BVH (80°-90°)	1.7	0.0			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



REPORT NUMBER: P965731  
 CATALOG NUMBER: NVN-SB4A-827-U-AFL-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3292.3	3292.3	3292.3	3292.3	3292.3	3292.3	3292.3	3292.3	3292.3	3292.3	3292.3
2.5°	4085.0	4033.6	4026.0	4016.0	3918.2	3844.9	3738.8	3622.5	3491.9	3358.8	3299.9
5°	4719.3	4678.9	4671.3	4624.2	4513.0	4388.2	4199.5	3961.1	3717.7	3431.3	3308.3
7.5°	4842.3	4834.7	4869.3	4867.6	4852.5	4753.8	4594.7	4310.7	3945.1	3520.6	3330.1
10°	4293.9	4313.3	4416.1	4506.2	4749.6	4891.2	4856.7	4622.4	4179.3	3622.5	3354.6
12.5°	3794.3	3771.6	3844.9	3946.9	4229.9	4651.1	4965.3	4882.8	4447.3	3737.9	3390.8
15°	3481.0	3471.7	3513.0	3560.1	3775.8	4200.4	4839.0	5094.2	4705.1	3874.4	3445.5
17.5°	3380.8	3373.2	3385.8	3397.6	3537.4	3866.0	4538.2	5224.0	4951.9	4030.2	3506.2
20°	3462.4	3452.3	3450.7	3441.3	3499.5	3723.6	4266.2	5233.2	5173.4	4171.8	3558.5
22.5°	3700.9	3689.1	3647.8	3610.7	3615.8	3743.0	4144.8	5140.6	5340.2	4304.1	3591.3
25°	4133.0	4113.6	4027.7	3903.0	3823.9	3877.8	4163.3	5018.4	5499.4	4407.6	3575.3
27.5°	4673.9	4648.6	4538.2	4352.9	4171.8	4106.0	4297.3	4934.1	5631.8	4486.8	3540.8
30°	5203.7	5170.9	5062.3	4918.2	4653.6	4446.4	4539.1	4971.2	5789.3	4569.4	3495.2
32.5°	5775.8	5744.6	5600.5	5421.9	5202.9	4924.1	4870.2	5152.4	5982.2	4684.9	3463.3
35°	6499.4	6450.5	6245.8	6002.4	5769.8	5487.6	5318.3	5464.9	6239.1	4860.9	3481.0
37.5°	7323.3	7257.6	7036.9	6700.7	6397.5	6081.6	5864.2	5894.6	6615.7	5096.8	3535.7
40°	8100.1	8040.3	7836.4	7519.6	7138.8	6755.6	6523.8	6456.5	7135.4	5384.0	3631.8
42.5°	8565.9	8512.0	8426.1	8292.1	7971.2	7580.3	7288.0	7142.2	7750.4	5727.8	3748.8
45°	8592.1	8544.9	8660.3	8816.1	8753.0	8492.6	8136.2	7869.2	8368.0	6050.4	3870.2
47.5°	8174.2	8142.2	8492.6	9036.9	9308.1	9417.6	9089.1	8535.6	8877.6	6282.1	3919.9
50°	7035.2	7023.4	7744.6	8743.7	9519.6	10228.1	10094.1	9155.6	9272.8	6401.7	3872.7
52.5°	6100.1	6057.1	6477.5	7805.2	9212.1	10654.4	11076.5	9763.8	9549.1	6424.5	3762.4
55°	4626.6	4588.8	5116.2	6234.9	8220.5	10502.7	11795.0	10391.6	9747.0	6366.4	3564.3
57.5°	2481.8	2458.3	3124.6	4149.8	6426.1	9592.9	11924.7	11055.3	9913.8	6212.1	3287.2
60°	966.3	962.1	1211.4	2013.4	3905.6	7804.4	11270.2	11453.9	10018.3	6022.6	3055.5
62.5°	584.7	597.3	637.8	903.9	1725.3	4848.2	9761.4	11000.6	10088.3	5849.1	2864.3
65°	483.6	484.4	489.4	620.8	826.5	2028.6	7348.6	9509.4	9915.5	5539.9	2593.0
67.5°	414.5	422.1	441.5	492.8	583.0	889.6	4230.8	7366.3	8865.0	4820.5	2170.1
70°	326.9	337.0	361.4	405.2	449.9	556.9	1563.5	4901.3	6772.4	3633.4	1641.0
72.5°	275.5	274.6	287.3	329.4	357.2	391.8	601.5	2746.4	3935.9	1734.6	812.1
75°	213.1	221.6	237.6	275.5	292.3	283.9	326.1	1003.4	1410.3	525.7	276.3
77.5°	166.8	173.5	187.9	224.9	241.8	201.3	187.9	358.9	453.3	188.7	124.6
80°	74.9	80.9	128.0	165.9	197.1	139.0	101.9	183.7	201.3	85.9	63.1
82.5°	13.5	22.8	74.9	87.6	101.1	90.1	53.1	95.2	98.6	34.5	21.9
85°	0.8	1.6	26.1	32.0	40.5	29.5	16.0	37.9	32.9	11.8	8.4
87.5°	0.0	0.0	0.0	0.8	0.8	4.2	5.0	6.8	5.0	4.2	3.4
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: P965731

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

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3292.3	3292.3	3292.3	3292.3	3292.3	3292.3	3292.3	3292.3	3292.3	3292.3
2.5°	3239.2	3119.6	3003.4	2908.1	2852.5	2758.2	2695.9	2685.7	2659.6	2682.3
5°	3176.9	2962.9	2746.4	2552.6	2393.4	2187.9	2034.5	1969.6	1913.2	1932.5
7.5°	3147.4	2809.5	2472.6	2141.5	1801.1	1472.6	1228.3	1126.4	1048.9	1059.7
10°	3107.8	2650.3	2122.2	1616.6	1160.9	836.5	668.1	605.7	571.1	572.1
12.5°	3077.5	2459.9	1715.2	1096.0	706.8	534.1	481.9	466.7	456.6	457.5
15°	3062.3	2235.8	1313.3	730.4	505.4	452.4	439.7	433.1	426.3	425.5
17.5°	3037.0	1986.4	961.2	533.3	442.3	423.7	412.8	405.2	396.8	395.1
20°	2999.0	1703.4	702.6	450.7	414.5	400.2	385.0	374.8	364.8	363.1
22.5°	2929.1	1404.4	540.0	417.0	394.2	378.2	359.7	347.9	337.8	336.1
25°	2799.5	1123.8	454.9	396.0	376.6	357.2	337.0	320.9	311.7	310.1
27.5°	2635.2	882.8	412.8	376.6	353.8	336.1	313.3	298.3	289.8	288.1
30°	2441.3	679.9	388.4	354.6	326.9	311.7	291.5	278.8	273.8	273.8
32.5°	2232.4	543.4	378.2	332.7	303.3	286.4	270.4	265.4	263.7	262.8
35°	2036.2	471.8	373.2	315.1	282.2	266.2	259.4	260.3	263.7	263.7
37.5°	1861.8	449.1	370.6	302.5	263.7	249.4	253.6	261.2	257.8	257.8
40°	1704.3	451.5	369.0	293.2	248.6	240.1	248.6	242.6	234.2	233.4
42.5°	1583.8	472.6	365.6	285.6	239.2	233.4	230.0	220.7	219.9	221.6
45°	1496.2	491.2	364.8	282.2	229.2	218.2	214.0	204.7	221.6	225.8
47.5°	1392.6	491.2	364.8	270.4	212.3	208.1	201.3	191.3	208.1	212.3
50°	1258.6	460.0	350.4	257.0	198.8	196.3	184.5	171.9	168.5	171.0
52.5°	1089.3	403.5	314.3	238.4	185.3	180.3	165.9	156.7	154.2	154.2
55°	896.4	337.8	265.4	211.5	171.0	161.7	151.6	147.4	144.9	143.2
57.5°	728.7	277.2	213.1	187.9	157.5	145.8	142.4	137.4	133.1	130.6
60°	598.1	218.2	176.1	166.8	144.0	133.1	132.2	125.6	114.6	112.9
62.5°	461.7	160.1	148.3	144.9	130.6	121.4	119.6	106.2	89.3	85.9
65°	326.1	124.6	119.6	127.2	116.2	107.8	103.6	83.4	65.7	63.1
67.5°	229.2	104.4	94.4	111.2	101.1	90.1	87.6	70.7	54.7	53.1
70°	163.4	85.1	77.5	95.2	80.9	79.2	74.1	58.9	44.7	42.9
72.5°	115.4	64.9	59.9	82.5	55.6	68.3	60.7	45.5	33.7	32.0
75°	85.1	46.3	42.1	48.0	40.5	51.4	42.9	30.3	21.0	20.2
77.5°	62.3	29.5	25.3	23.6	23.6	32.0	23.6	12.6	9.2	8.4
80°	43.8	13.5	11.8	10.1	9.2	7.6	3.4	1.6	0.8	0.8
82.5°	26.1	5.9	5.9	4.2	2.6	0.0	0.0	0.0	0.0	0.0
85°	5.9	2.6	2.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	0.8	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

(END OF REPORT)