

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: P271228

Luminaire Tested: **XNV-AF-01-LED-U-SL2-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271228  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24257)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: XNV-AF-01-LED-U-SL2-7027-800  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4162.5 lumens  
Efficiency: N/A  
Efficacy: 94.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

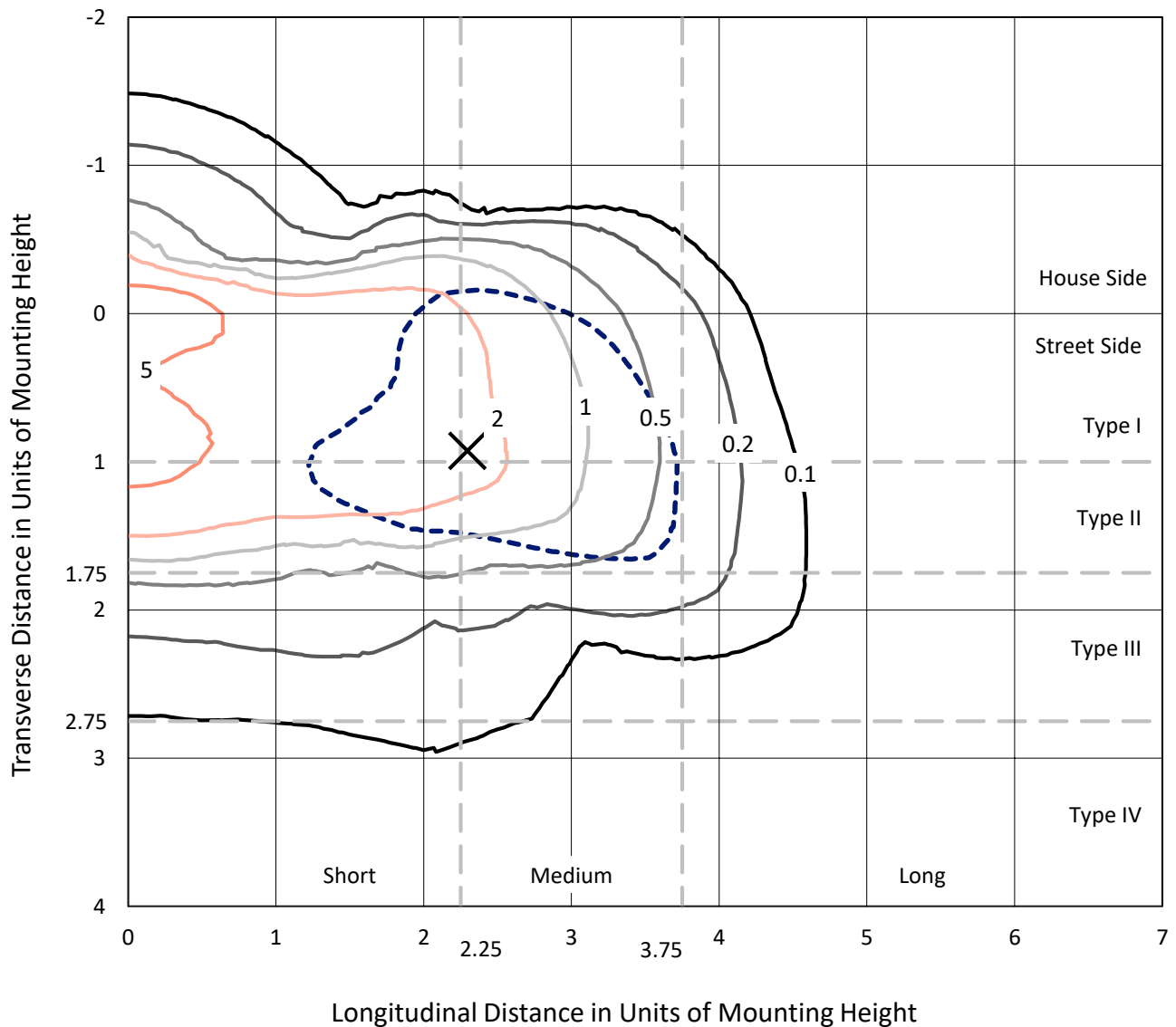
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P271228  
 CATALOG NUMBER: XNV-AF-01-LED-U-SL2-7027-800

### Iso-Footcandle Lines of Horizontal Illumination

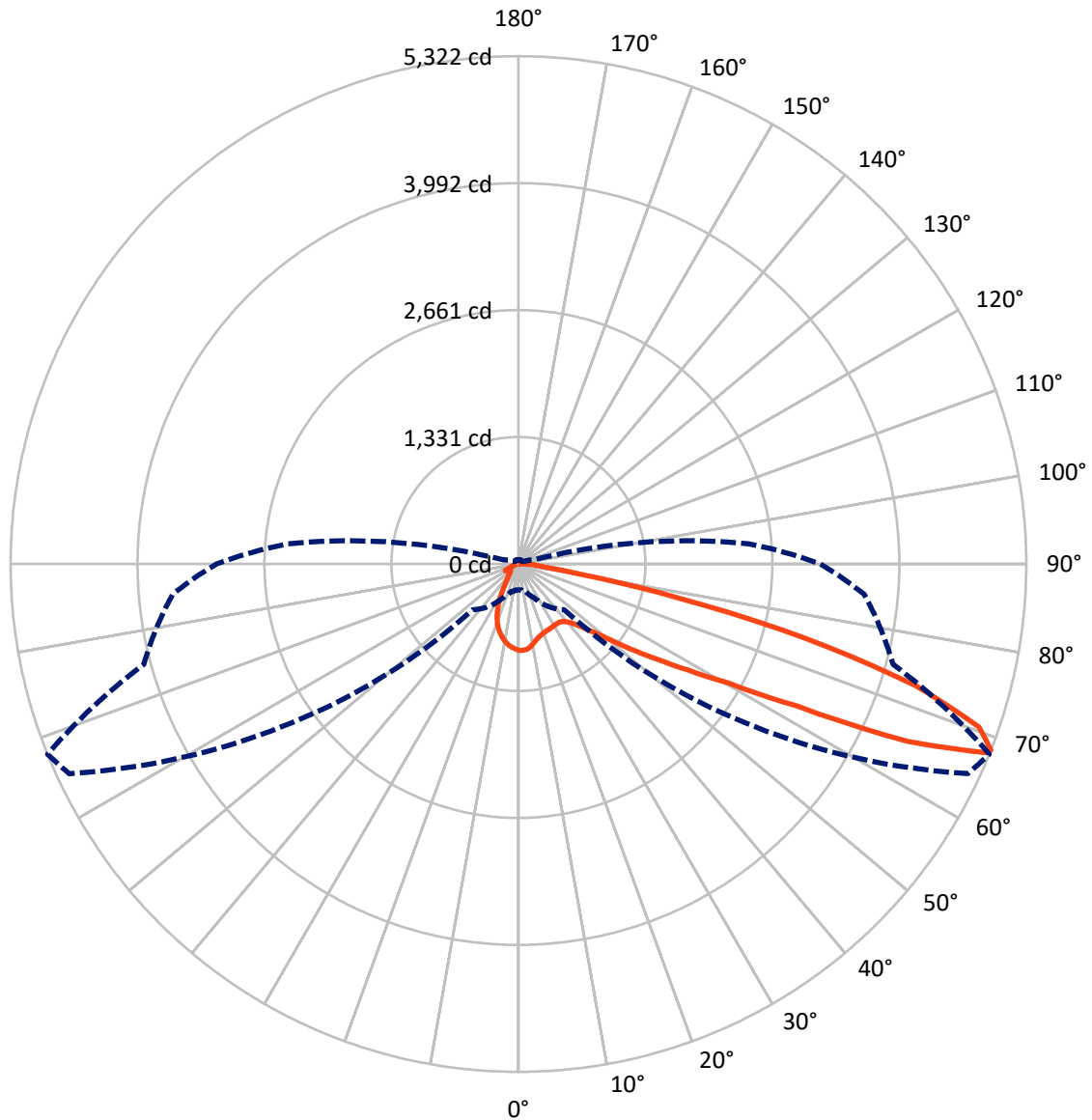
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.1 fc  
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P271228  
CATALOG NUMBER: XNV-AF-01-LED-U-SL2-7027-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral    - - - Horizontal Cone Through 68-Deg Vertical



REPORT NUMBER: P271228

CATALOG NUMBER: XNV-AF-01-LED-U-SL2-7027-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	681.0	0.0	681.0
	% Fixture	16.4	0.0	16.4
<b>Street Side</b>	Lumens	3481.5	0.0	3481.5
	% Fixture	83.6	0.0	83.6
<b>Total</b>	Lumens	4162.5	0.0	4162.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.6	1.9
10°-20°	180.0	4.3
20°-30°	243.4	5.8
30°-40°	343.2	8.2
40°-50°	564.4	13.6
50°-60°	874.9	21.0
60°-70°	1134.3	27.3
70°-80°	650.9	15.6
80°-90°	93.6	2.2
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°	4162.5	100.0
0°-180°	4162.5	100.0



REPORT NUMBER: P271228

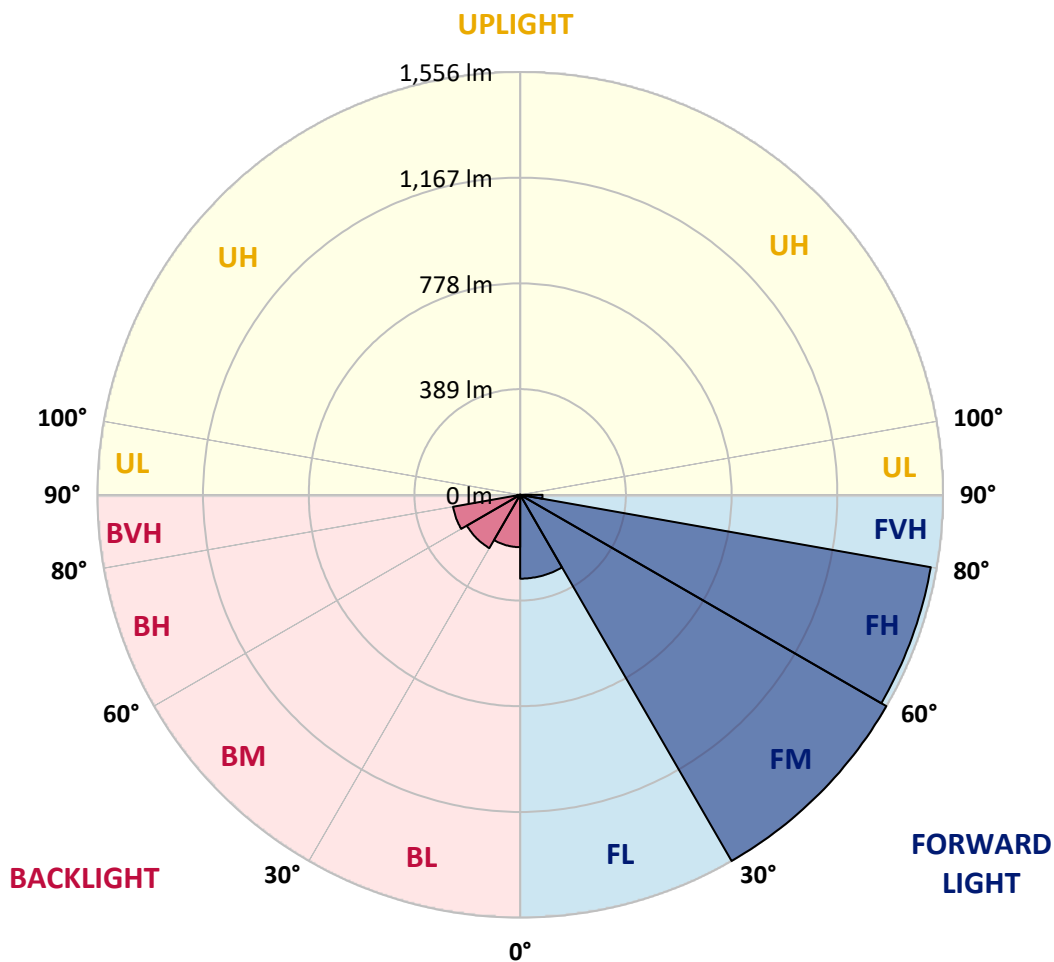
CATALOG NUMBER: XNV-AF-01-LED-U-SL2-7027-800

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	308.5	7.4			
FM	(30°-60°)	1556.0	37.4			
FH	(60°-80°)	1534.5	36.9			G1/1800
FVH	(80°-90°)	82.5	2.0			G1/100
BL	(0°-30°)	192.5	4.6	B1/500		
BM	(30°-60°)	226.5	5.4	B1/1000		
BH	(60°-80°)	250.8	6.0	B1/500		G1/500
BVH	(80°-90°)	11.2	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Medium





REPORT NUMBER: P271228

CATALOG NUMBER: XNV-AF-01-LED-U-SL2-7027-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	905.8	905.8	905.8	905.8	905.8	905.8	905.8	905.8	905.8	905.8	905.8
2.5°	881.4	888.7	888.7	893.8	898.3	902.2	905.4	905.4	905.4	903.2	901.4
5°	788.8	798.4	799.8	812.7	829.9	850.8	874.2	894.8	898.9	906.5	909.5
7.5°	724.4	727.4	732.5	741.6	758.9	784.7	821.4	867.7	878.8	902.7	915.3
10°	678.7	681.2	685.4	694.4	710.2	733.6	769.8	829.9	848.3	890.8	915.6
12.5°	645.3	647.0	651.2	659.4	675.4	696.4	733.3	795.9	818.7	878.8	919.3
15°	619.1	622.3	625.7	633.6	649.8	670.0	707.4	771.1	795.9	869.3	926.4
17.5°	608.8	610.4	610.9	615.1	629.7	650.2	687.7	753.7	779.3	861.7	931.8
20°	615.2	615.6	610.2	607.4	615.9	634.7	671.0	740.7	766.8	854.8	934.0
22.5°	643.8	643.8	629.7	617.8	612.0	623.8	660.0	731.7	760.0	849.6	934.0
25°	698.3	695.7	673.8	650.2	624.9	619.9	652.9	726.0	754.8	847.0	930.5
27.5°	769.8	767.6	739.6	704.5	658.8	628.2	650.5	721.3	749.6	842.9	922.9
30°	856.8	854.8	823.0	777.2	709.8	654.0	656.1	718.0	745.6	836.1	910.1
32.5°	943.5	942.4	917.1	870.1	779.8	697.8	671.0	717.6	743.3	828.0	894.5
35°	1030.7	1030.7	1015.3	975.6	874.2	763.5	702.4	727.5	747.5	823.6	881.2
37.5°	1159.7	1154.5	1125.7	1084.7	992.9	848.9	752.9	748.8	763.2	830.9	876.8
40°	1359.2	1344.4	1272.2	1203.2	1122.7	958.2	826.9	789.9	798.7	855.9	887.3
42.5°	1568.1	1544.5	1449.0	1338.6	1256.8	1093.1	923.9	856.5	856.3	904.4	920.1
45°	1747.3	1735.0	1631.7	1491.6	1409.8	1244.8	1046.5	955.4	945.6	979.4	983.5
47.5°	1851.3	1843.2	1781.0	1653.7	1591.4	1424.0	1202.1	1092.8	1074.4	1094.5	1088.1
50°	1822.7	1830.4	1812.5	1747.6	1786.6	1675.8	1400.3	1281.0	1245.9	1266.0	1250.8
52.5°	1670.8	1692.0	1708.0	1720.7	1898.9	2012.7	1649.4	1515.9	1486.8	1483.2	1468.5
55°	1397.7	1431.3	1481.8	1573.8	1868.8	2283.2	2084.4	1800.1	1757.7	1735.3	1741.1
57.5°	951.1	1002.2	1111.3	1286.2	1711.9	2398.5	2727.8	2167.2	2095.2	2015.8	2034.4
60°	523.9	566.7	696.4	872.6	1353.8	2381.3	3297.9	2763.6	2537.7	2327.1	2365.2
62.5°	339.1	348.4	444.8	596.0	830.9	2102.4	3614.7	3760.8	3281.9	2737.9	2791.4
65°	272.5	279.0	326.3	480.8	578.9	1352.5	3628.9	4795.1	4479.4	3295.7	3297.4
67.5°	266.2	269.2	296.6	404.3	542.9	736.3	3136.7	5203.0	5276.0	3954.2	3635.9
68°	270.0	273.5	301.3	391.8	542.8	678.7	2899.0	5196.6	5322.0	4064.4	3635.9
70°	238.2	242.5	307.2	405.5	519.6	583.4	1985.2	4920.6	5122.4	4317.6	3449.9
72.5°	124.5	121.0	152.1	320.1	584.8	608.1	1048.7	4111.0	4346.4	3998.6	2980.7
75°	97.0	88.4	85.1	126.4	514.5	630.5	609.1	2921.8	3099.7	2882.4	1992.3
77.5°	91.4	80.8	74.5	74.7	226.6	656.1	492.7	1719.5	1719.5	1375.0	635.7
80°	73.4	63.6	59.6	68.0	109.4	604.6	514.2	783.6	668.3	355.4	175.1
82.5°	48.4	43.2	43.5	55.2	83.0	403.8	595.4	386.9	290.7	157.5	103.0
85°	30.7	26.4	29.4	38.5	62.1	180.0	589.5	269.0	192.4	88.4	51.5
87.5°	15.5	11.9	14.7	20.1	37.8	51.7	485.4	240.0	142.7	36.7	27.9
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: P271228

CATALOG NUMBER: XNV-AF-01-LED-U-SL2-7027-800

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	905.8	905.8	905.8	905.8	905.8	905.8	905.8	905.8	905.8	905.8	905.8
2.5°	901.4	895.4	892.3	887.4	881.4	875.6	871.4	869.6	868.4	869.0	868.8
5°	907.8	900.0	887.3	869.0	850.2	830.5	815.2	803.4	796.2	793.9	793.5
7.5°	912.8	901.4	877.5	844.2	812.2	777.4	747.7	724.0	708.0	700.7	700.4
10°	912.0	897.2	859.5	810.5	763.5	712.4	666.0	626.2	597.4	583.4	583.0
12.5°	912.8	892.6	837.5	771.1	703.7	630.5	561.5	499.7	456.8	436.3	435.6
15°	916.0	887.7	814.9	727.1	633.8	530.4	431.7	354.3	315.1	301.8	301.8
17.5°	915.8	879.6	788.8	676.0	550.9	412.5	294.7	246.9	243.1	255.3	257.3
20°	910.3	866.5	755.0	615.2	453.6	285.5	199.9	193.0	223.5	257.3	261.0
22.5°	901.9	849.6	716.2	544.9	340.2	185.9	154.1	164.5	205.8	247.8	253.7
25°	890.2	829.3	671.7	463.0	226.3	133.8	128.5	141.5	170.5	198.4	202.8
27.5°	873.2	803.4	623.0	374.5	144.4	110.1	112.0	121.0	133.5	145.4	148.0
30°	851.7	773.4	570.0	276.3	109.6	98.5	101.7	107.2	112.6	120.2	121.8
32.5°	829.9	742.5	514.6	189.8	95.7	92.2	95.4	98.5	103.0	108.2	109.4
35°	810.4	714.1	457.9	132.4	89.7	88.2	89.7	91.6	96.3	101.4	102.0
37.5°	796.2	690.6	398.6	104.7	86.1	84.6	85.3	86.1	91.6	99.3	100.0
40°	794.2	675.2	338.5	94.1	83.5	81.2	80.8	81.2	88.4	97.0	97.8
42.5°	812.7	676.0	279.8	89.7	81.2	78.8	76.6	77.8	84.0	90.8	91.4
45°	856.5	695.0	229.0	87.9	79.4	77.6	74.2	74.7	77.8	81.2	81.8
47.5°	933.7	736.6	190.0	86.7	77.8	76.1	72.0	70.4	70.6	72.7	72.7
50°	1057.1	806.1	166.4	85.7	76.4	73.4	68.8	65.5	64.7	65.8	66.0
52.5°	1241.3	925.6	155.0	83.5	74.0	69.9	64.7	61.4	60.0	61.2	61.2
55°	1490.1	1116.1	149.6	80.5	71.0	65.5	60.9	58.2	57.1	57.9	57.9
57.5°	1773.7	1363.8	158.8	76.4	67.2	60.9	57.6	55.8	54.9	55.8	56.1
60°	2110.5	1687.9	222.4	71.2	63.2	56.9	54.9	53.9	53.3	54.1	54.1
62.5°	2558.4	2119.2	344.2	67.2	58.7	53.0	52.6	51.9	51.5	52.2	52.2
65°	3041.8	2511.7	354.3	64.7	54.9	49.8	50.0	50.0	49.4	50.3	50.3
67.5°	3195.7	2477.5	197.9	61.8	50.3	46.5	47.6	47.6	47.3	48.1	47.9
68°	3163.0	2423.7	172.4	60.9	49.4	45.6	46.8	47.0	46.8	47.6	47.3
70°	2920.0	2127.9	113.4	56.2	46.0	42.9	44.6	44.8	44.6	45.6	45.5
72.5°	2410.4	1596.1	83.7	49.1	41.6	39.4	41.1	41.3	41.6	42.7	42.4
75°	1530.8	881.4	66.0	42.0	37.3	35.4	37.0	37.8	38.4	40.0	39.2
77.5°	419.2	267.5	53.5	35.7	32.1	31.4	32.3	33.4	34.0	35.9	34.6
80°	146.9	118.2	44.6	30.3	26.6	26.4	27.5	28.6	29.0	30.7	29.0
82.5°	89.2	77.3	35.7	23.6	20.9	20.8	22.0	23.0	23.6	23.6	22.5
85°	46.5	40.9	26.1	16.6	14.5	13.7	16.0	17.3	17.6	17.3	16.6
87.5°	26.1	23.0	13.8	7.8	6.5	6.7	8.4	10.3	11.1	10.9	10.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)