

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: P198673

Luminaire Tested: **XNV2-AF-02-LED-U-AFL-1200-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198673  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24283)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: XNV2-AF-02-LED-U-AFL-1200-HSS  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11358.8 lumens  
Efficiency: N/A  
Efficacy: 88.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 128  
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

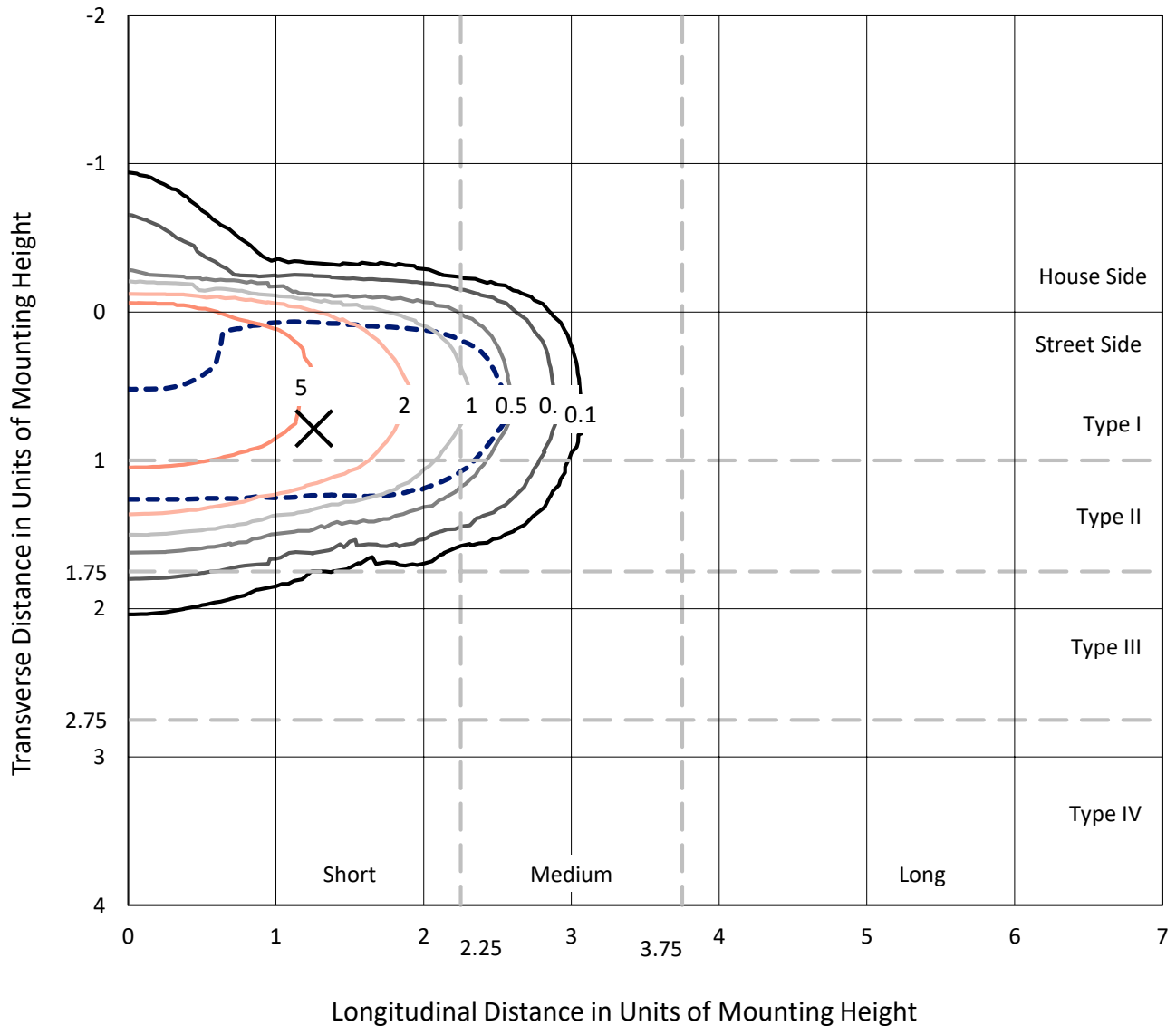


REPORT NUMBER: P198673

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-1200-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

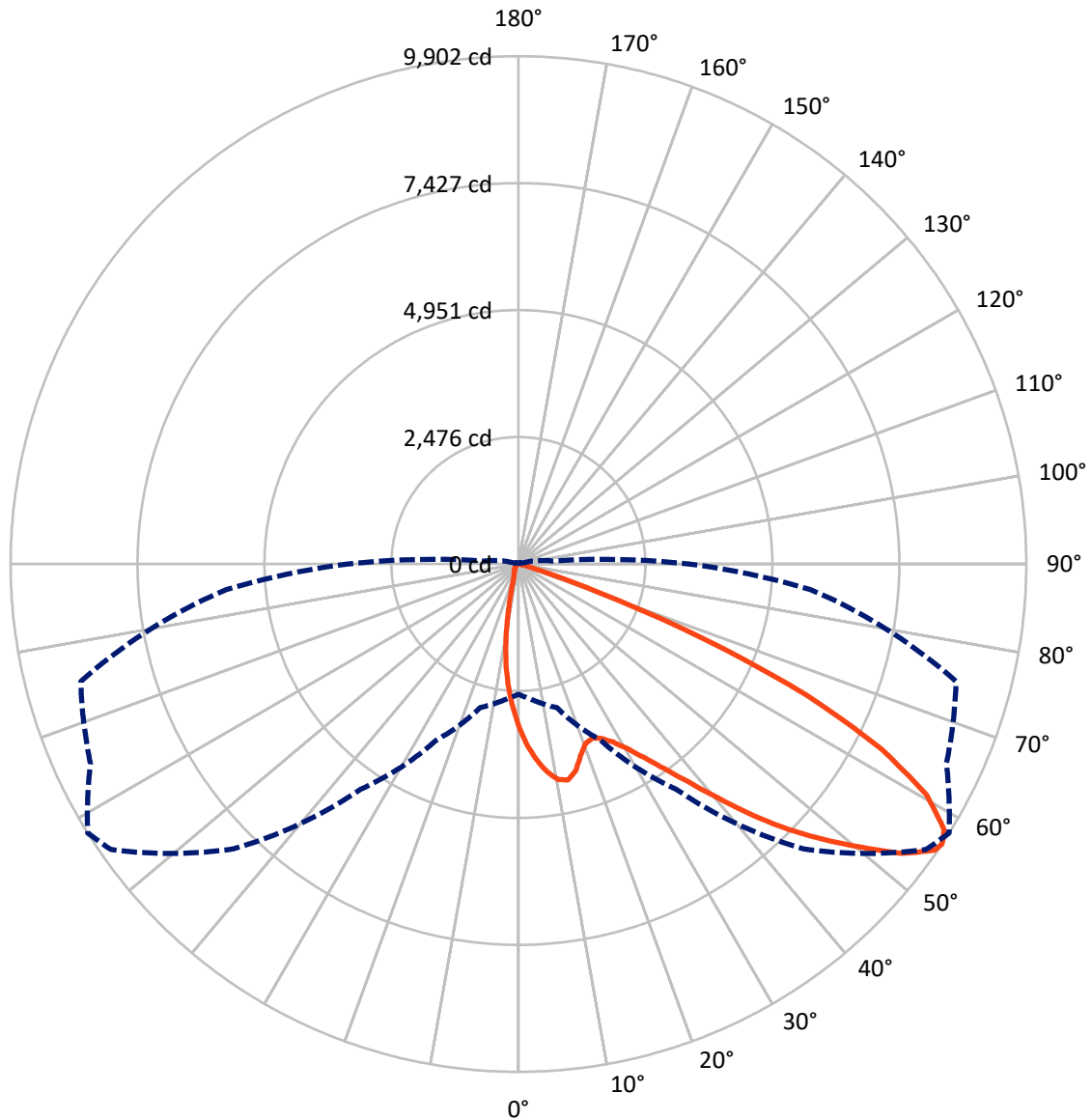


Based on 20 foot mounting height. Maximum calculated value = 10 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P198673

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-1200-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 56-Deg Vertical

REPORT NUMBER: P198673

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-1200-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	709.0	0.0	709.0
	% Fixture	6.2	0.0	6.2
<b>Street Side</b>	Lumens	10649.8	0.0	10649.8
	% Fixture	93.8	0.0	93.8
<b>Total</b>	Lumens	11358.8	0.0	11358.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	274.3	2.4
10°-20°	638.4	5.6
20°-30°	1074.1	9.5
30°-40°	1839.4	16.2
40°-50°	2775.6	24.4
50°-60°	2885.2	25.4
60°-70°	1619.7	14.3
70°-80°	222.0	2.0
80°-90°	30.1	0.3
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°	11358.8	100.0
0°-180°	11358.8	100.0

**Coefficient of Utilization**



REPORT NUMBER: P198673

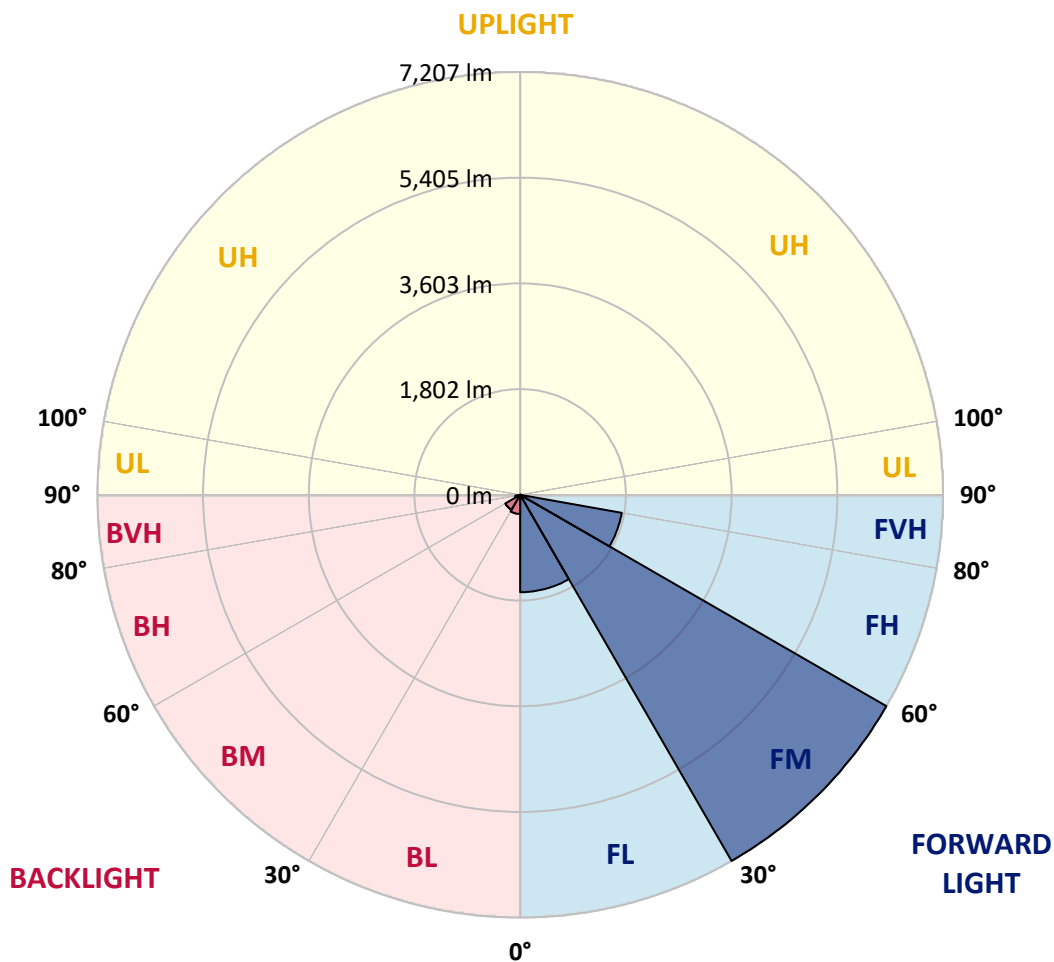
CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-1200-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1659.8	14.6			
FM (30°-60°)	7206.5	63.4			
FH (60°-80°)	1757.6	15.5			G1/1800
FVH (80°-90°)	25.9	0.2			G1/100
BL (0°-30°)	327.1	2.9	B1/500		
BM (30°-60°)	293.7	2.6	B1/1000		
BH (60°-80°)	84.1	0.7	B0/110		G0/110
BVH (80°-90°)	4.2	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-G1**

Type II Short





REPORT NUMBER: P198673

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-1200-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	3216.1	3216.1	3216.1	3216.1	3216.1	3216.1	3216.1	3216.1	3216.1	3216.1	3216.1
2.5°	3869.5	3846.1	3821.8	3776.7	3735.1	3671.0	3582.6	3561.0	3491.6	3377.3	3270.7
5°	4203.1	4198.8	4182.3	4145.9	4100.8	4022.9	3923.2	3856.4	3749.0	3568.8	3363.4
7.5°	4005.6	4041.9	4101.7	4186.6	4243.8	4236.0	4159.8	4101.7	3995.1	3749.0	3454.4
10°	3376.4	3383.3	3465.7	3644.2	3926.7	4190.1	4289.7	4274.2	4176.3	3906.8	3534.1
12.5°	3154.5	3158.9	3177.9	3235.1	3418.8	3786.2	4237.8	4319.2	4311.4	4057.5	3619.0
15°	3171.9	3174.4	3179.6	3197.8	3249.8	3434.5	3974.4	4181.4	4398.1	4200.5	3702.2
17.5°	3308.7	3307.0	3290.5	3273.2	3289.7	3350.4	3705.6	3924.0	4379.9	4320.9	3770.7
20°	3575.7	3584.3	3528.9	3451.7	3411.8	3414.5	3573.1	3736.8	4277.7	4414.5	3821.8
22.5°	3950.9	3957.0	3866.0	3732.5	3615.5	3556.6	3600.8	3687.4	4159.8	4501.2	3863.4
25°	4399.0	4399.0	4271.5	4081.8	3900.6	3771.5	3733.4	3766.3	4114.7	4599.2	3905.0
27.5°	4882.5	4899.8	4733.5	4484.7	4245.6	4056.6	3937.0	3931.0	4149.4	4722.2	3951.8
30°	5408.5	5424.2	5226.6	4922.4	4639.0	4397.3	4213.5	4173.6	4282.0	4887.8	4020.3
32.5°	5932.0	5945.0	5726.7	5416.4	5086.2	4801.9	4560.2	4496.9	4520.3	5129.5	4120.8
35°	6597.6	6600.2	6323.8	5954.6	5601.9	5268.2	4962.2	4899.8	4873.8	5434.6	4265.5
37.5°	7127.1	7106.3	6931.2	6582.0	6177.3	5828.9	5469.2	5387.8	5325.4	5863.6	4489.9
40°	7251.9	7251.9	7225.9	7121.1	6799.6	6464.1	6115.7	5994.4	5856.6	6368.8	4791.5
42.5°	6926.9	6947.7	7119.3	7347.2	7349.8	7134.9	6794.3	6692.0	6449.4	6944.2	5120.9
45°	6199.8	6205.8	6617.6	7232.8	7650.5	7773.6	7522.3	7381.0	7044.8	7542.2	5422.5
47.5°	5938.1	5957.2	6132.2	6884.5	7673.1	8291.0	8220.7	8026.7	7595.9	8088.2	5704.1
50°	5536.0	5559.3	5773.4	6371.4	7470.3	8622.9	8888.9	8681.0	8097.7	8543.2	5843.6
52.5°	4574.0	4610.4	4912.9	5692.8	6963.3	8636.8	9500.8	9376.0	8611.6	8786.6	5827.1
55°	3147.6	3174.4	3527.1	4444.0	5940.7	8213.0	9764.3	9850.0	9070.1	8841.3	5747.4
56°	2539.2	2639.7	2898.0	3786.2	5358.3	7852.5	9703.6	9902.1	9206.1	8832.6	5712.8
57.5°	1678.7	1697.7	1979.4	2743.8	4302.7	7069.9	9429.7	9791.1	9381.2	8788.4	5687.6
60°	789.5	798.2	899.6	1266.1	2328.6	5152.1	8539.7	9139.3	9445.3	8695.7	5686.8
62.5°	514.7	516.5	528.7	604.1	952.4	2806.2	7079.4	7942.6	8914.1	8685.3	5670.3
65°	423.8	428.1	413.4	422.9	498.3	1058.1	4993.4	6192.0	7667.0	8440.9	5484.9
67.5°	373.5	374.4	354.5	343.2	364.9	464.5	2515.8	3905.8	5734.5	7172.1	4517.7
70°	340.5	339.7	317.2	291.2	292.1	308.5	819.8	1622.3	3172.7	4258.5	2593.8
72.5°	302.5	304.2	291.2	254.8	242.6	218.4	308.5	437.6	1079.8	1367.5	683.7
75°	265.1	261.7	248.7	225.4	202.7	146.5	155.1	186.3	281.6	279.1	147.3
77.5°	201.0	197.6	203.7	192.4	158.6	102.3	84.9	97.1	127.4	118.8	59.8
80°	153.4	151.7	138.6	164.7	144.7	77.1	58.1	59.8	69.4	63.2	29.5
82.5°	110.9	110.1	104.9	101.4	91.9	56.4	44.2	46.7	52.0	44.2	21.7
85°	42.5	42.5	82.3	69.4	63.2	38.2	31.2	33.8	39.9	32.0	14.7
87.5°	7.0	7.0	55.4	45.9	28.6	19.0	19.9	21.7	23.4	19.0	11.3
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: P198673

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-1200-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3216.1	3216.1	3216.1	3216.1	3216.1	3216.1	3216.1	3216.1	3216.1	3216.1	3216.1
2.5°	3207.4	3149.3	3021.9	2898.8	2791.4	2673.5	2613.7	2544.4	2518.4	2466.4	2471.7
5°	3240.3	3119.0	2863.3	2593.8	2346.9	2095.5	1917.0	1748.8	1655.2	1562.6	1562.6
7.5°	3274.1	3088.6	2693.4	2262.8	1846.7	1416.1	1111.0	866.6	730.6	639.5	637.0
10°	3297.5	3049.6	2500.2	1878.9	1265.3	729.7	440.3	346.7	312.8	298.1	297.3
12.5°	3327.9	3010.6	2280.1	1426.5	702.9	346.7	274.8	260.0	253.9	250.4	250.4
15°	3353.8	2955.2	2013.2	959.3	369.2	260.0	236.6	231.4	230.5	229.7	230.5
17.5°	3359.9	2876.3	1693.4	561.6	267.8	227.1	216.7	212.4	212.4	211.4	211.4
20°	3346.1	2772.3	1339.8	346.7	231.4	208.9	197.6	192.4	191.5	191.5	191.5
22.5°	3317.4	2639.7	990.5	262.6	210.6	192.4	177.7	172.5	172.5	173.3	174.2
25°	3281.9	2482.9	680.3	226.2	195.0	175.0	160.3	155.1	156.8	158.6	159.5
27.5°	3236.8	2295.7	445.4	195.9	174.2	157.7	144.7	141.3	144.7	148.2	150.0
30°	3191.8	2090.3	301.6	169.8	150.8	138.6	130.8	130.0	135.2	143.0	143.8
32.5°	3162.4	1879.7	227.9	152.5	132.6	122.2	118.8	120.5	128.3	137.0	138.6
35°	3159.7	1674.3	194.2	138.6	120.5	110.9	109.1	114.4	123.1	130.0	131.8
37.5°	3200.4	1481.9	175.9	128.3	110.9	101.4	98.8	108.3	116.1	123.1	124.8
40°	3282.8	1309.5	163.8	118.8	103.1	91.9	90.1	97.9	105.8	113.5	116.1
42.5°	3385.9	1148.3	150.0	109.1	94.4	81.4	79.7	85.8	93.6	104.9	106.6
45°	3475.2	998.3	135.2	98.8	84.9	70.2	69.4	76.3	82.3	92.7	94.4
47.5°	3550.6	873.6	121.3	87.6	72.8	62.4	61.5	65.0	68.4	77.9	79.7
50°	3510.7	767.8	107.5	71.9	58.9	53.7	52.9	52.9	57.2	66.7	68.4
52.5°	3412.8	701.9	94.4	59.8	48.5	45.9	43.4	44.2	48.5	52.9	53.7
55°	3333.9	670.7	83.2	52.9	40.7	38.2	35.5	34.7	35.5	33.8	32.0
56°	3314.9	667.3	80.6	51.1	39.0	35.5	32.0	30.4	29.5	26.0	25.2
57.5°	3306.2	667.3	76.3	47.7	36.4	32.0	27.7	24.2	20.8	18.2	18.2
60°	3299.2	671.7	71.1	41.6	31.2	26.0	19.9	14.7	12.2	12.2	12.2
62.5°	3284.5	669.9	65.0	34.7	26.9	19.9	12.2	9.5	8.7	9.5	10.4
65°	3119.0	622.3	57.2	27.7	20.8	13.9	7.0	7.0	7.8	9.5	10.4
67.5°	2513.2	471.5	46.7	21.7	14.7	10.4	6.0	6.0	7.8	9.5	10.4
70°	1380.6	248.7	39.9	15.5	11.3	8.7	6.0	5.2	7.8	9.5	10.4
72.5°	337.2	104.0	36.4	12.2	10.4	7.8	5.2	5.2	7.8	9.5	10.4
75°	83.2	77.9	29.5	9.5	8.7	7.0	5.2	5.2	7.8	9.5	10.4
77.5°	39.0	103.1	19.9	8.7	7.8	6.0	5.2	5.2	7.8	9.5	9.5
80°	23.4	77.9	12.2	7.8	7.0	6.0	5.2	5.2	7.8	9.5	10.4
82.5°	13.9	22.5	8.7	7.8	7.0	5.2	5.2	5.2	7.8	9.5	10.4
85°	12.2	11.3	8.7	7.8	7.0	6.0	5.2	5.2	8.7	10.4	10.4
87.5°	9.5	8.7	7.8	7.0	7.0	6.0	5.2	5.2	7.8	9.5	10.4
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)