

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: P198681

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198681  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24160)  
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  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13865.1 lumens  
Efficiency: N/A  
Efficacy: 108.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

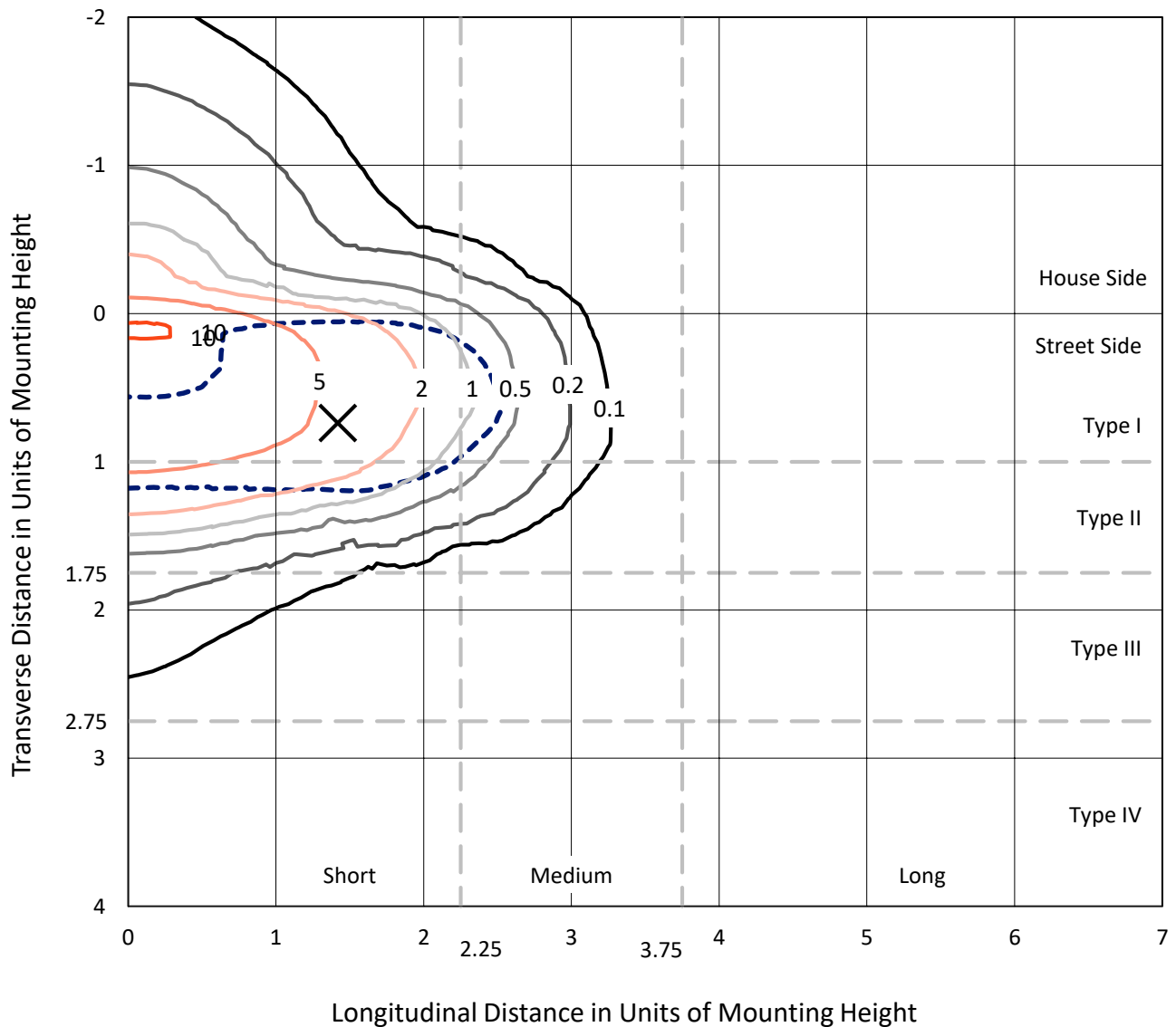
Input Watts (W): 128  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

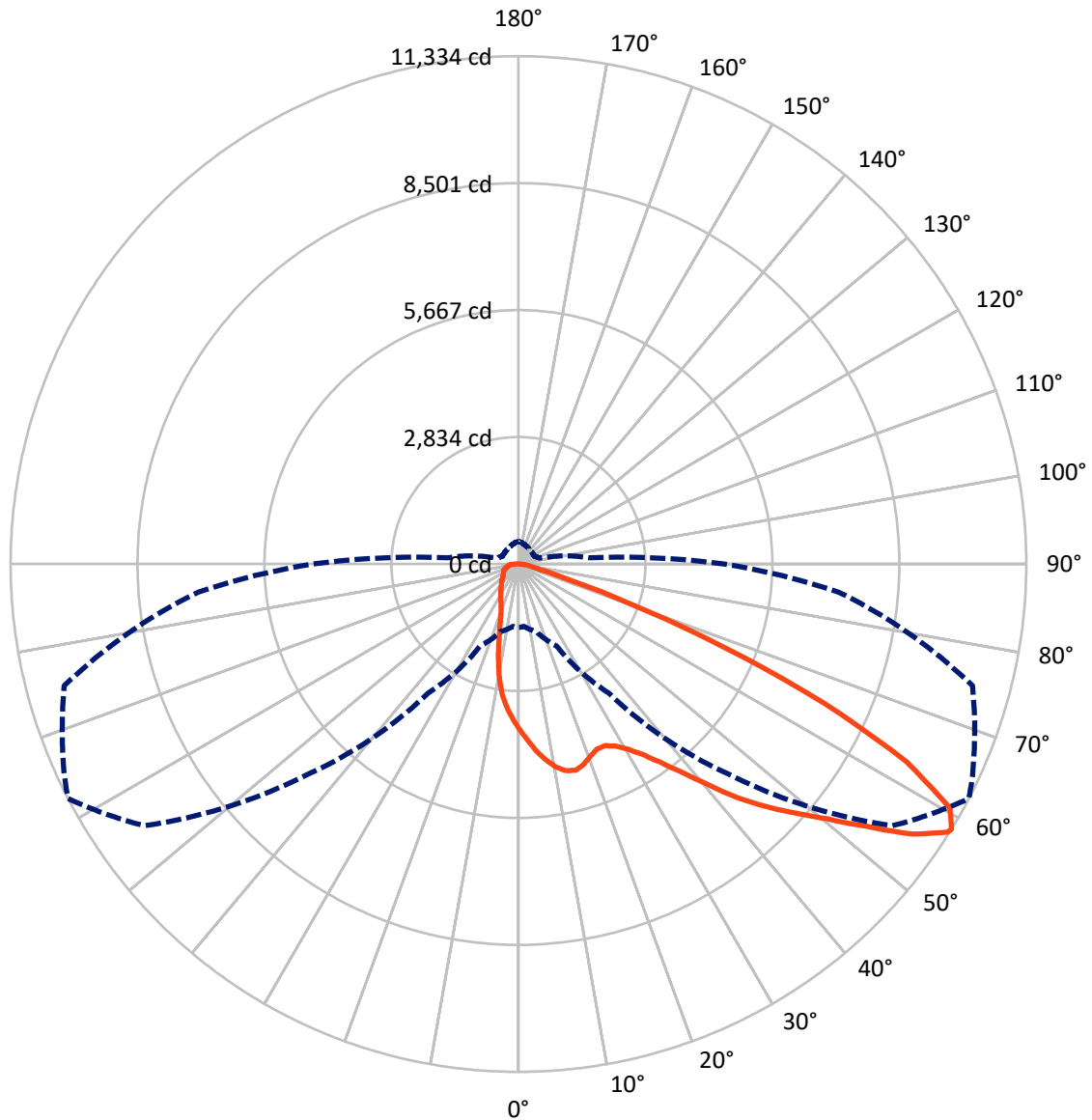
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 10.8 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2128.8	0.0	2128.8
	% Fixture	15.4	0.0	15.4
<b>Street Side</b>	Lumens	11736.3	0.0	11736.3
	% Fixture	84.6	0.0	84.6
<b>Total</b>	Lumens	13865.1	0.0	13865.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	330.9	2.4
10°-20°	835.1	6.0
20°-30°	1353.3	9.8
30°-40°	2160.7	15.6
40°-50°	3142.8	22.7
50°-60°	3288.7	23.7
60°-70°	2004.9	14.5
70°-80°	560.7	4.0
80°-90°	187.9	1.4
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°	13865.1	100.0
0°-180°	13865.1	100.0

**Coefficient of Utilization**



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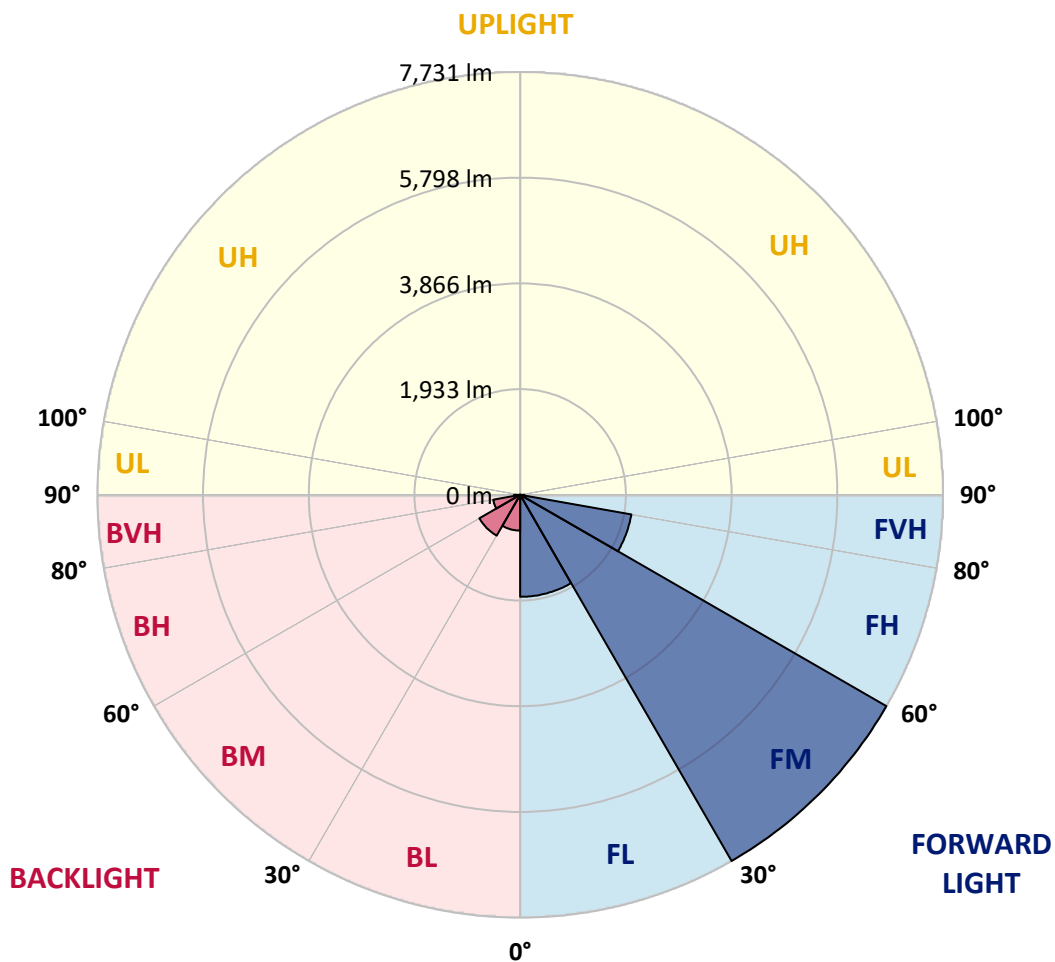
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1864.9	13.5			
FM	(30°-60°)	7731.3	55.8			
FH	(60°-80°)	2064.4	14.9			G2/5000
FVH	(80°-90°)	75.6	0.5			G1/100
BL	(0°-30°)	654.4	4.7	B2/1000		
BM	(30°-60°)	860.9	6.2	B1/1000		
BH	(60°-80°)	501.2	3.6	B2/1000		G2/1000
BVH	(80°-90°)	112.3	0.8			G2/225
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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	3701.9	3701.9	3701.9	3701.9	3701.9	3701.9	3701.9	3701.9	3701.9	3701.9	3701.9
2.5°	4201.9	4199.3	4163.7	4140.4	4112.7	4048.5	3984.4	3936.7	3912.5	3819.7	3729.6
5°	4549.4	4538.9	4519.0	4493.9	4457.5	4376.9	4275.5	4188.1	4153.4	3988.7	3823.2
7.5°	4365.6	4382.1	4443.7	4513.0	4585.8	4591.0	4519.0	4415.1	4376.9	4156.9	3914.2
10°	3857.0	3850.1	3927.2	4062.3	4302.4	4539.9	4658.5	4607.5	4567.6	4316.2	4005.2
12.5°	3702.8	3701.0	3714.0	3748.7	3899.5	4225.3	4623.0	4733.9	4720.1	4485.2	4102.2
15°	3749.5	3751.3	3750.4	3754.7	3796.4	3951.5	4424.6	4776.4	4819.7	4652.5	4201.1
17.5°	3899.5	3893.4	3874.3	3853.6	3859.6	3915.0	4210.6	4703.6	4833.5	4801.5	4284.2
20°	4130.8	4130.8	4079.7	4021.6	3983.5	3995.6	4121.3	4578.8	4769.5	4928.1	4346.6
22.5°	4421.1	4425.5	4350.1	4244.3	4157.7	4124.7	4172.4	4486.2	4691.5	5045.0	4402.1
25°	4781.6	4780.8	4670.7	4519.0	4382.1	4303.2	4302.4	4490.4	4667.2	5182.0	4460.1
27.5°	5227.9	5187.2	5058.9	4843.2	4649.9	4529.4	4474.8	4599.6	4718.4	5350.0	4538.1
30°	5731.3	5689.8	5521.6	5244.4	4982.6	4806.7	4716.6	4788.5	4874.4	5564.1	4656.0
32.5°	6229.6	6239.2	6041.5	5728.7	5392.5	5144.7	5011.2	5055.4	5115.3	5825.8	4815.4
35°	6959.2	6958.3	6700.1	6309.4	5909.9	5566.7	5397.7	5421.1	5475.8	6194.9	5039.0
37.5°	7503.4	7494.8	7328.4	6982.7	6532.9	6121.2	5877.0	5880.3	5927.2	6658.5	5333.6
40°	7558.9	7557.2	7556.2	7506.9	7199.2	6811.0	6505.1	6441.9	6461.0	7150.7	5646.4
42.5°	7135.2	7198.4	7380.4	7659.4	7745.2	7541.5	7252.1	7110.8	7069.3	7715.7	5977.4
45°	6531.1	6563.3	6882.1	7509.5	8019.8	8227.9	8010.3	7712.2	7641.2	8265.1	6247.0
47.5°	6250.4	6236.5	6421.1	7104.8	7993.0	8773.7	8789.4	8300.6	8180.2	8739.1	6476.6
50°	5648.1	5629.9	5863.0	6509.4	7700.2	9045.0	9589.2	8941.9	8719.2	9189.7	6684.6
52.5°	4448.0	4430.6	4743.4	5576.2	7045.1	8943.7	10263.4	9728.7	9349.2	9623.8	6878.6
55°	2894.2	2896.0	3194.1	4052.8	5701.0	8352.6	10579.7	10637.8	10212.2	10058.0	7035.4
57.5°	1593.6	1578.8	1791.2	2318.9	3922.0	7010.4	10316.3	11292.9	11071.0	10430.6	7149.0
58°	1416.8	1399.5	1563.3	2018.2	3516.4	6631.7	10183.7	11334.4	11181.1	10492.1	7165.5
60°	1009.6	980.1	954.9	1137.7	2026.0	4781.6	9299.7	11065.0	11213.1	10615.2	7149.9
62.5°	851.0	817.1	727.0	720.1	954.1	2338.8	7354.4	9717.4	10132.5	10331.8	6898.6
65°	790.3	756.5	637.8	595.4	647.3	1009.6	4547.6	7503.4	8058.0	9346.6	6266.0
67.5°	747.0	707.1	579.7	524.3	534.7	604.0	1929.8	4907.3	5550.2	7288.5	5026.9
70°	708.0	663.8	533.8	469.6	461.0	459.3	753.9	2562.4	3182.0	4769.5	3367.3
72.5°	663.8	620.4	493.1	424.6	405.5	372.7	453.2	1059.0	1451.5	2338.0	1543.3
75°	599.7	564.2	448.1	387.4	354.5	302.4	334.5	507.8	625.6	895.2	716.7
77.5°	527.7	499.1	402.1	356.2	312.0	246.9	255.6	344.0	386.5	504.3	415.1
80°	373.5	383.9	351.0	313.7	274.7	199.3	196.7	252.2	277.3	338.8	279.1
82.5°	257.4	265.1	285.9	247.9	221.9	155.1	144.7	175.0	188.0	204.5	135.1
85°	183.7	178.5	198.5	177.7	163.0	98.8	92.7	110.9	118.8	124.8	65.0
87.5°	111.8	110.9	114.4	91.9	84.9	50.2	45.9	52.9	56.4	54.6	31.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3701.9	3701.9	3701.9	3701.9	3701.9	3701.9	3701.9	3701.9	3701.9	3701.9	3701.9
2.5°	3695.8	3653.4	3560.7	3486.1	3405.5	3344.0	3282.4	3247.8	3209.7	3188.0	3185.5
5°	3736.5	3649.9	3452.4	3268.6	3079.7	2909.9	2743.5	2620.4	2519.9	2462.8	2459.3
7.5°	3781.6	3645.6	3340.5	3022.5	2686.3	2351.8	2056.3	1847.4	1713.1	1650.7	1646.4
10°	3816.2	3627.4	3204.5	2709.7	2176.7	1734.8	1466.2	1343.1	1302.4	1292.0	1290.2
12.5°	3857.9	3614.4	3032.9	2308.5	1663.7	1320.6	1239.2	1231.3	1240.0	1245.2	1246.1
15°	3896.8	3589.2	2801.6	1863.9	1302.4	1180.3	1182.0	1198.4	1215.8	1223.6	1224.5
17.5°	3915.0	3527.7	2497.4	1468.8	1139.5	1117.0	1136.9	1158.6	1174.1	1180.3	1180.3
20°	3915.0	3428.9	2144.7	1189.8	1054.6	1059.0	1083.2	1099.7	1103.2	1097.9	1095.3
22.5°	3898.6	3306.7	1801.5	1038.1	985.3	1001.8	1020.8	1009.6	968.8	937.6	931.5
25°	3883.8	3162.0	1471.4	945.4	924.6	946.2	938.5	861.3	798.9	766.9	761.7
27.5°	3859.6	2987.0	1195.8	869.1	865.7	883.0	805.9	731.4	700.2	682.8	679.3
30°	3853.6	2797.3	1000.9	801.6	807.6	783.4	695.0	670.7	663.8	654.3	649.9
32.5°	3873.5	2607.4	878.7	746.1	752.2	672.5	638.6	642.1	641.3	629.1	624.8
35°	3928.0	2422.9	800.7	695.8	678.5	602.2	606.6	616.9	616.9	602.2	597.1
37.5°	4023.4	2251.3	751.3	653.4	593.6	565.9	577.1	591.0	591.0	580.6	576.2
40°	4124.7	2084.1	714.0	619.6	539.8	540.7	552.0	562.4	566.7	568.5	565.0
42.5°	4216.6	1910.8	674.1	583.2	515.6	521.7	526.8	534.7	552.9	565.0	563.2
45°	4270.3	1736.6	630.9	538.2	499.1	501.8	500.0	513.8	535.5	553.7	553.7
47.5°	4319.7	1593.6	595.4	493.1	482.6	482.6	477.5	491.3	511.3	533.0	534.7
50°	4366.6	1500.9	570.2	458.4	461.9	459.3	457.6	470.6	497.4	523.4	527.7
52.5°	4414.1	1469.7	547.7	433.3	440.2	436.7	438.4	456.6	487.0	513.8	518.2
55°	4480.9	1489.6	524.3	415.9	419.4	418.6	425.4	446.3	473.1	500.0	501.8
57.5°	4563.3	1562.4	504.3	402.9	399.5	404.7	415.9	435.9	461.9	493.9	496.5
58°	4579.6	1579.7	500.8	399.5	395.2	402.9	414.2	433.3	460.1	493.9	496.5
60°	4604.8	1641.2	492.2	392.5	380.4	394.2	408.2	427.2	456.6	498.3	503.5
62.5°	4483.5	1653.4	489.6	384.7	364.8	382.2	398.6	420.2	453.2	513.0	524.3
65°	4063.3	1528.6	471.4	371.7	351.8	372.7	389.9	415.1	463.6	557.2	562.4
67.5°	3261.7	1269.5	427.2	351.8	337.1	361.3	383.0	415.1	467.9	564.2	567.6
70°	2242.6	954.1	371.7	330.1	319.8	347.5	380.4	424.6	453.2	533.8	523.4
72.5°	1171.6	663.8	325.8	305.0	299.0	335.3	405.5	415.1	435.9	498.3	487.8
75°	590.1	451.4	286.8	276.4	275.6	331.0	454.1	399.5	417.7	468.8	491.3
77.5°	348.3	353.5	255.6	249.6	253.9	323.3	454.9	383.9	396.9	431.6	455.8
80°	238.3	292.1	231.4	229.7	233.1	297.3	419.4	364.8	372.7	408.2	434.1
82.5°	134.3	161.2	202.7	214.0	212.3	243.5	362.2	331.8	341.5	482.6	510.4
85°	65.0	97.1	169.8	200.2	181.1	162.0	294.6	294.6	297.3	345.8	350.1
87.5°	24.2	43.4	114.4	158.6	126.5	97.1	200.2	208.9	232.2	239.2	244.4
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)