

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: P271300

Luminaire Tested: **XNV2-AF-02-LED-U-AFL-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271300
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-7027-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1050mA 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: 8794.1 lumens
Efficiency: N/A
Efficacy: 79.2 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): 111
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

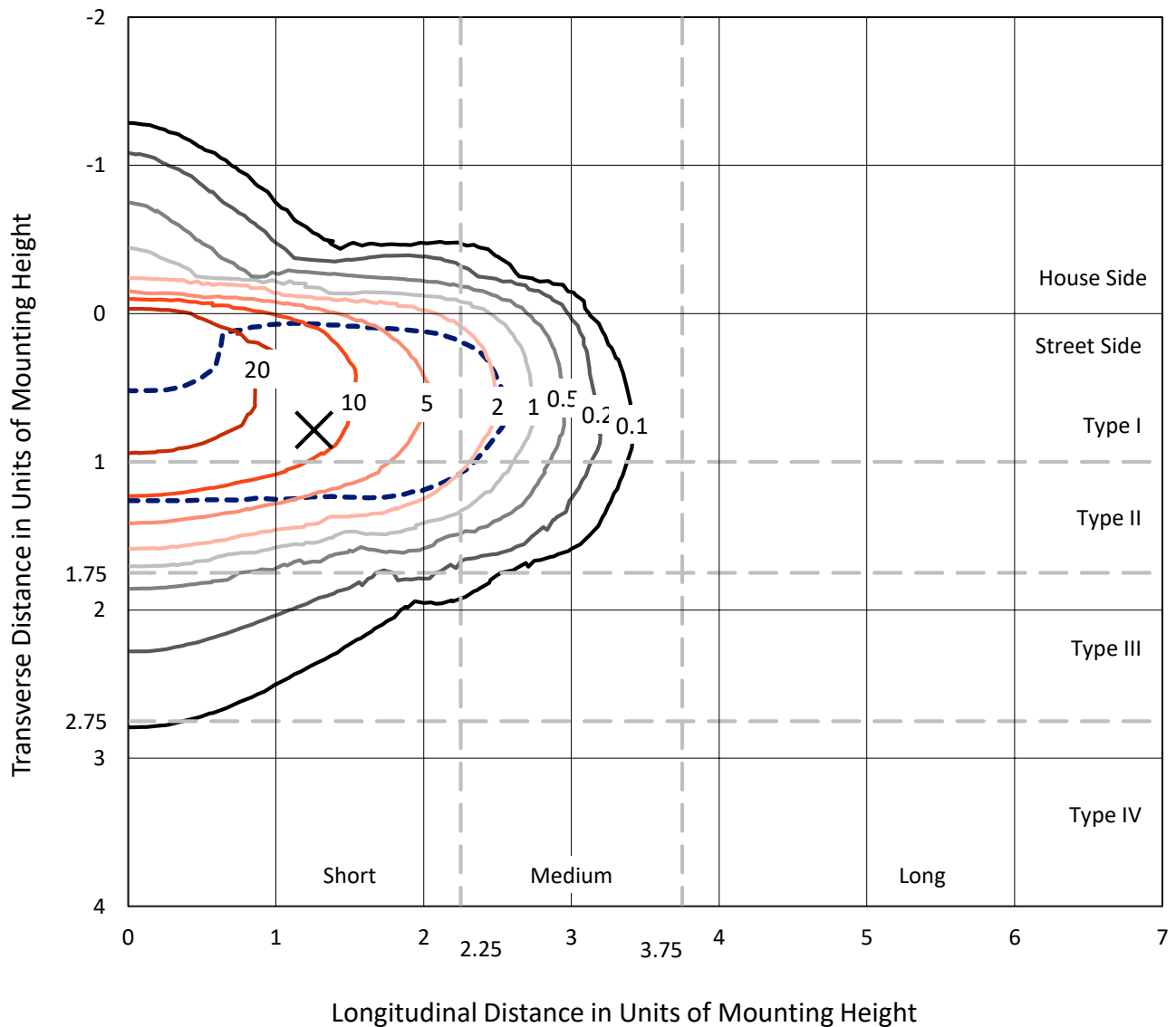


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

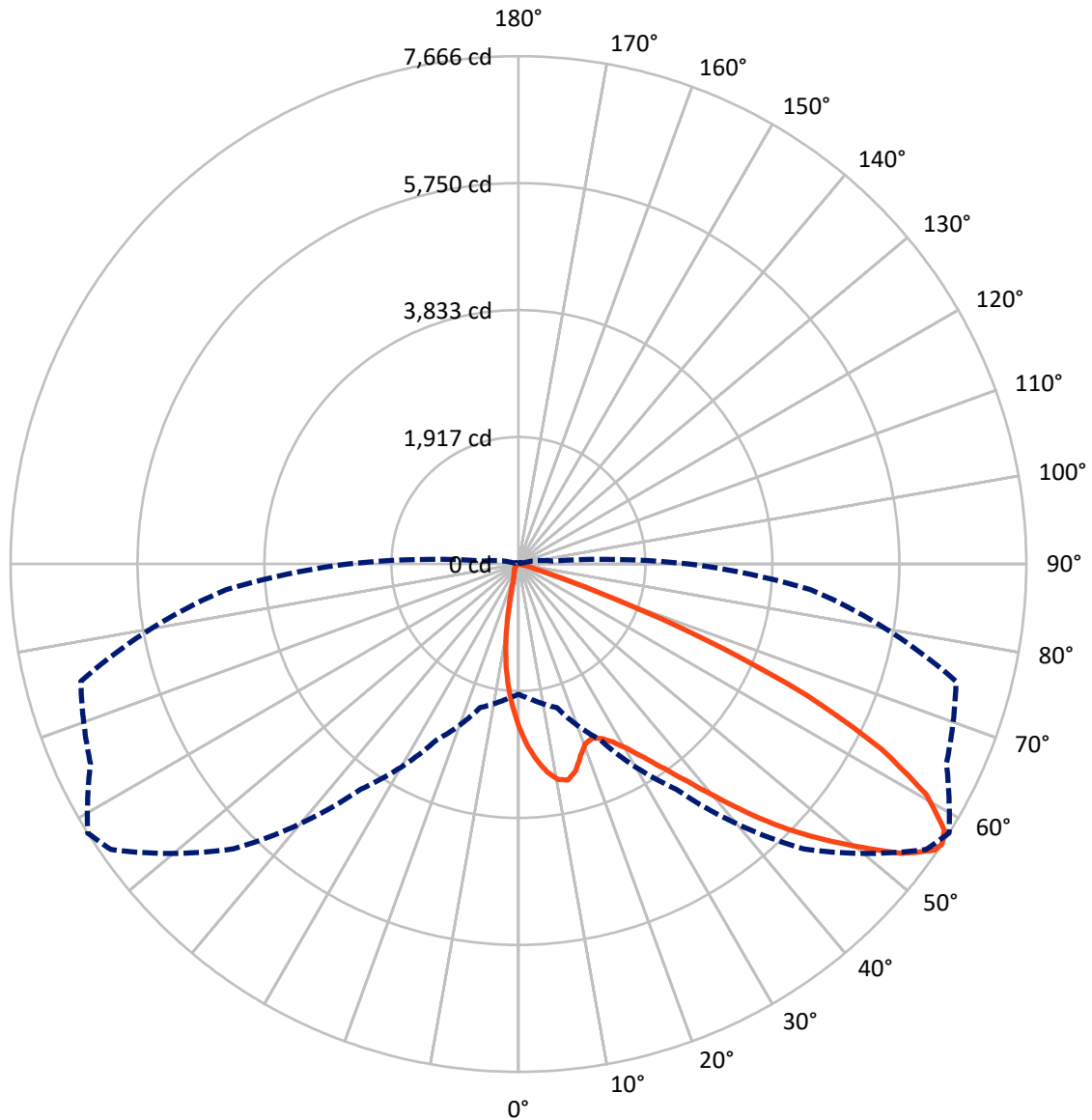


Based on 10 foot mounting height. Maximum calculated value = 30.9 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	548.9	0.0	548.9
	% Fixture	6.2	0.0	6.2
Street Side	Lumens	8245.2	0.0	8245.2
	% Fixture	93.8	0.0	93.8
Total	Lumens	8794.1	0.0	8794.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.4	2.4
10°-20°	494.2	5.6
20°-30°	831.6	9.5
30°-40°	1424.0	16.2
40°-50°	2148.9	24.4
50°-60°	2233.7	25.4
60°-70°	1254.0	14.3
70°-80°	171.9	2.0
80°-90°	23.3	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°	8794.1	100.0
0°-180°	8794.1	100.0

Coefficient of Utilization



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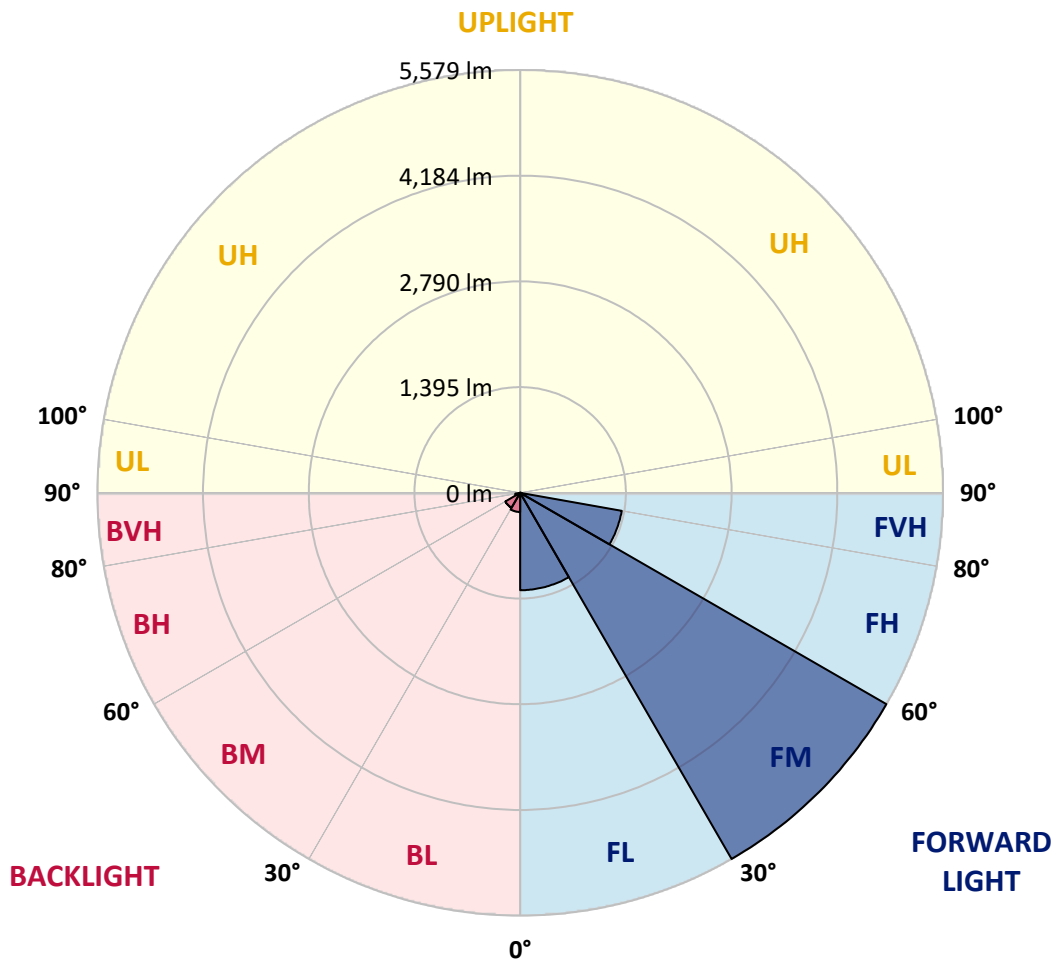
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1285.0	14.6			
FM	(30°-60°)	5579.3	63.4			
FH	(60°-80°)	1360.8	15.5			G1/1800
FVH	(80°-90°)	20.1	0.2			G1/100
BL	(0°-30°)	253.2	2.9	B1/500		
BM	(30°-60°)	227.4	2.6	B1/1000		
BH	(60°-80°)	65.1	0.7	B0/110		G0/110
BVH	(80°-90°)	3.2	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2489.8	2489.8	2489.8	2489.8	2489.8	2489.8	2489.8	2489.8	2489.8	2489.8	2489.8
2.5°	2995.8	2977.6	2958.8	2924.0	2891.7	2842.1	2773.6	2756.9	2703.2	2614.6	2532.1
5°	3254.1	3250.7	3238.0	3209.9	3174.9	3114.6	3037.3	2985.6	2902.6	2762.9	2603.9
7.5°	3101.0	3129.2	3175.6	3241.4	3285.6	3279.5	3220.6	3175.6	3093.0	2902.6	2674.3
10°	2614.0	2619.4	2683.1	2821.2	3040.0	3244.0	3321.2	3309.0	3233.3	3024.7	2736.1
12.5°	2442.2	2445.5	2460.4	2504.7	2646.9	2931.3	3280.9	3344.0	3337.9	3141.4	2801.9
15°	2455.6	2457.7	2461.6	2475.8	2516.1	2659.0	3077.0	3237.3	3405.0	3252.0	2866.2
17.5°	2561.6	2560.3	2547.6	2534.2	2547.0	2593.9	2868.9	3038.0	3390.9	3345.3	2919.3
20°	2768.2	2775.0	2732.0	2672.4	2641.5	2643.5	2766.3	2893.1	3311.8	3417.8	2958.8
22.5°	3058.8	3063.5	2993.1	2889.8	2799.2	2753.6	2787.8	2854.9	3220.6	3484.9	2991.0
25°	3405.7	3405.7	3307.1	3160.1	3019.9	2919.9	2890.4	2915.9	3185.6	3560.7	3023.2
27.5°	3780.1	3793.5	3664.6	3472.0	3287.0	3140.7	3048.0	3043.4	3212.5	3655.9	3059.4
30°	4187.4	4199.4	4046.4	3811.0	3591.6	3404.3	3262.1	3231.3	3315.1	3784.1	3112.4
32.5°	4592.7	4602.6	4433.6	4193.4	3937.8	3717.6	3530.5	3481.6	3499.6	3971.2	3190.3
35°	5107.9	5109.9	4895.9	4610.0	4336.9	4078.7	3841.8	3793.5	3773.4	4207.5	3302.3
37.5°	5517.7	5501.7	5366.1	5095.8	4782.4	4512.7	4234.3	4171.3	4123.0	4539.7	3476.1
40°	5614.4	5614.4	5594.4	5513.2	5264.2	5004.5	4734.8	4641.0	4534.3	4930.7	3709.6
42.5°	5362.8	5379.0	5511.8	5688.2	5690.3	5523.9	5260.1	5181.1	4993.1	5376.3	3964.6
45°	4800.0	4804.7	5123.4	5599.7	5923.1	6018.4	5823.8	5714.4	5454.1	5839.3	4198.0
47.5°	4597.3	4612.1	4747.6	5330.0	5940.5	6418.8	6364.5	6214.2	5880.8	6261.9	4416.2
50°	4286.0	4304.0	4469.8	4932.8	5783.5	6675.8	6881.8	6720.8	6269.4	6614.1	4524.1
52.5°	3541.3	3569.4	3803.6	4407.4	5391.0	6686.7	7355.5	7258.9	6667.2	6802.7	4511.4
55°	2436.8	2457.7	2730.8	3440.6	4599.3	6358.6	7559.4	7625.9	7022.1	6844.9	4449.7
56°	1965.9	2043.7	2243.6	2931.3	4148.5	6079.4	7512.5	7666.1	7127.4	6838.3	4422.9
57.5°	1299.6	1314.4	1532.4	2124.2	3331.3	5473.6	7300.5	7580.3	7262.9	6804.0	4403.4
60°	611.2	617.9	696.5	980.2	1802.8	3988.7	6611.4	7075.8	7312.7	6732.3	4402.8
62.5°	398.6	399.8	409.3	467.7	737.4	2172.6	5480.9	6149.2	6901.3	6724.3	4389.9
65°	328.2	331.5	320.1	327.4	385.8	819.3	3865.9	4793.9	5935.8	6535.0	4246.4
67.5°	289.2	289.9	274.4	265.7	282.4	359.6	1947.7	3024.0	4439.7	5552.8	3497.6
70°	263.7	263.1	245.5	225.5	226.2	238.9	634.7	1256.0	2456.3	3297.0	2008.2
72.5°	234.2	235.4	225.5	197.3	187.8	169.2	238.9	338.8	836.1	1058.7	529.5
75°	205.4	202.6	192.5	174.5	157.1	113.4	120.2	144.3	218.1	216.0	114.1
77.5°	155.6	153.0	157.7	148.9	122.8	79.2	65.8	75.2	98.6	91.9	46.4
80°	118.8	117.4	107.3	127.5	112.1	59.6	44.9	46.4	53.7	49.0	22.7
82.5°	85.9	85.2	81.1	78.5	71.1	43.6	34.2	36.2	40.2	34.2	16.8
85°	32.9	32.9	63.7	53.7	49.0	29.6	24.2	26.2	30.8	24.9	11.4
87.5°	5.4	5.4	42.9	35.6	22.2	14.7	15.5	16.8	18.1	14.7	8.8
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°	2489.8	2489.8	2489.8	2489.8	2489.8	2489.8	2489.8	2489.8	2489.8	2489.8	2489.8
2.5°	2483.2	2438.2	2339.5	2244.2	2161.1	2069.9	2023.5	1970.0	1949.7	1909.4	1913.5
5°	2508.6	2414.7	2216.7	2008.2	1816.9	1622.2	1484.1	1353.9	1281.5	1209.7	1209.7
7.5°	2534.7	2391.3	2085.2	1751.9	1429.8	1096.3	860.1	670.9	565.7	495.1	493.1
10°	2553.0	2361.0	1935.7	1454.5	979.6	564.9	340.8	268.4	242.3	230.9	230.1
12.5°	2576.3	2330.8	1765.3	1104.3	544.2	268.4	212.7	201.3	196.5	193.9	193.9
15°	2596.6	2288.0	1558.6	742.7	285.8	201.3	183.2	179.1	178.5	177.9	178.5
17.5°	2601.2	2226.9	1311.0	434.8	207.2	175.8	167.8	164.4	164.4	163.8	163.8
20°	2590.5	2146.3	1037.3	268.4	179.1	161.7	153.0	148.9	148.3	148.3	148.3
22.5°	2568.3	2043.7	767.0	203.2	163.0	148.9	137.5	133.5	133.5	134.1	134.8
25°	2540.9	1922.3	526.6	175.1	150.9	135.6	124.1	120.2	121.5	122.8	123.4
27.5°	2506.0	1777.3	344.9	151.6	134.8	122.1	112.1	109.4	112.1	114.8	116.2
30°	2471.1	1618.2	233.5	131.5	116.7	107.3	101.2	100.6	104.7	110.8	111.4
32.5°	2448.3	1455.3	176.4	118.0	102.6	94.6	91.9	93.2	99.4	106.0	107.3
35°	2446.3	1296.3	150.2	107.3	93.2	85.9	84.5	88.6	95.3	100.6	102.0
37.5°	2477.7	1147.3	136.3	99.4	85.9	78.5	76.4	83.9	89.9	95.3	96.6
40°	2541.6	1013.7	126.8	91.9	79.8	71.1	69.8	75.7	81.8	87.9	89.9
42.5°	2621.3	889.1	116.2	84.5	73.1	63.2	61.8	66.5	72.5	81.1	82.6
45°	2690.5	772.9	104.7	76.4	65.8	54.3	53.7	59.1	63.7	71.8	73.1
47.5°	2748.9	676.3	94.0	67.7	56.4	48.2	47.6	50.3	53.0	60.4	61.8
50°	2718.0	594.5	83.3	55.7	45.6	41.6	41.0	41.0	44.2	51.7	53.0
52.5°	2642.2	543.5	73.1	46.4	37.5	35.6	33.5	34.2	37.5	41.0	41.6
55°	2581.1	519.3	64.4	41.0	31.5	29.6	27.5	26.8	27.5	26.2	24.9
56°	2566.4	516.6	62.4	39.5	30.3	27.5	24.9	23.4	22.7	20.1	19.5
57.5°	2559.6	516.6	59.1	36.9	28.1	24.9	21.5	18.8	16.1	14.2	14.2
60°	2554.3	519.9	55.1	32.2	24.2	20.1	15.5	11.4	9.4	9.4	9.4
62.5°	2542.9	518.6	50.3	26.8	20.8	15.5	9.4	7.4	6.6	7.4	8.1
65°	2414.7	481.8	44.2	21.5	16.1	10.7	5.4	5.4	6.1	7.4	8.1
67.5°	1945.6	365.0	36.2	16.8	11.4	8.1	4.8	4.8	6.1	7.4	8.1
70°	1068.9	192.5	30.8	12.0	8.8	6.6	4.8	4.0	6.1	7.4	8.1
72.5°	261.0	80.5	28.1	9.4	8.1	6.1	4.0	4.0	6.1	7.4	8.1
75°	64.4	60.4	22.7	7.4	6.6	5.4	4.0	4.0	6.1	7.4	8.1
77.5°	30.3	79.8	15.5	6.6	6.1	4.8	4.0	4.0	6.1	7.4	7.4
80°	18.1	60.4	9.4	6.1	5.4	4.8	4.0	4.0	6.1	7.4	8.1
82.5°	10.7	17.4	6.6	6.1	5.4	4.0	4.0	4.0	6.1	7.4	8.1
85°	9.4	8.8	6.6	6.1	5.4	4.8	4.0	4.0	6.6	8.1	8.1
87.5°	7.4	6.6	6.1	5.4	5.4	4.8	4.0	4.0	6.1	7.4	8.1
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)