

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: P299995

Luminaire Tested: **GAA-AF-04-LED-U-SL3-7030-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299995  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAA-AF-04-LED-U-SL3-7030-800-HSS  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI  
3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III w/Spill  
Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14561.2 lumens  
Efficiency: N/A  
Efficacy: 85.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G3

Input Watts (W): 171  
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

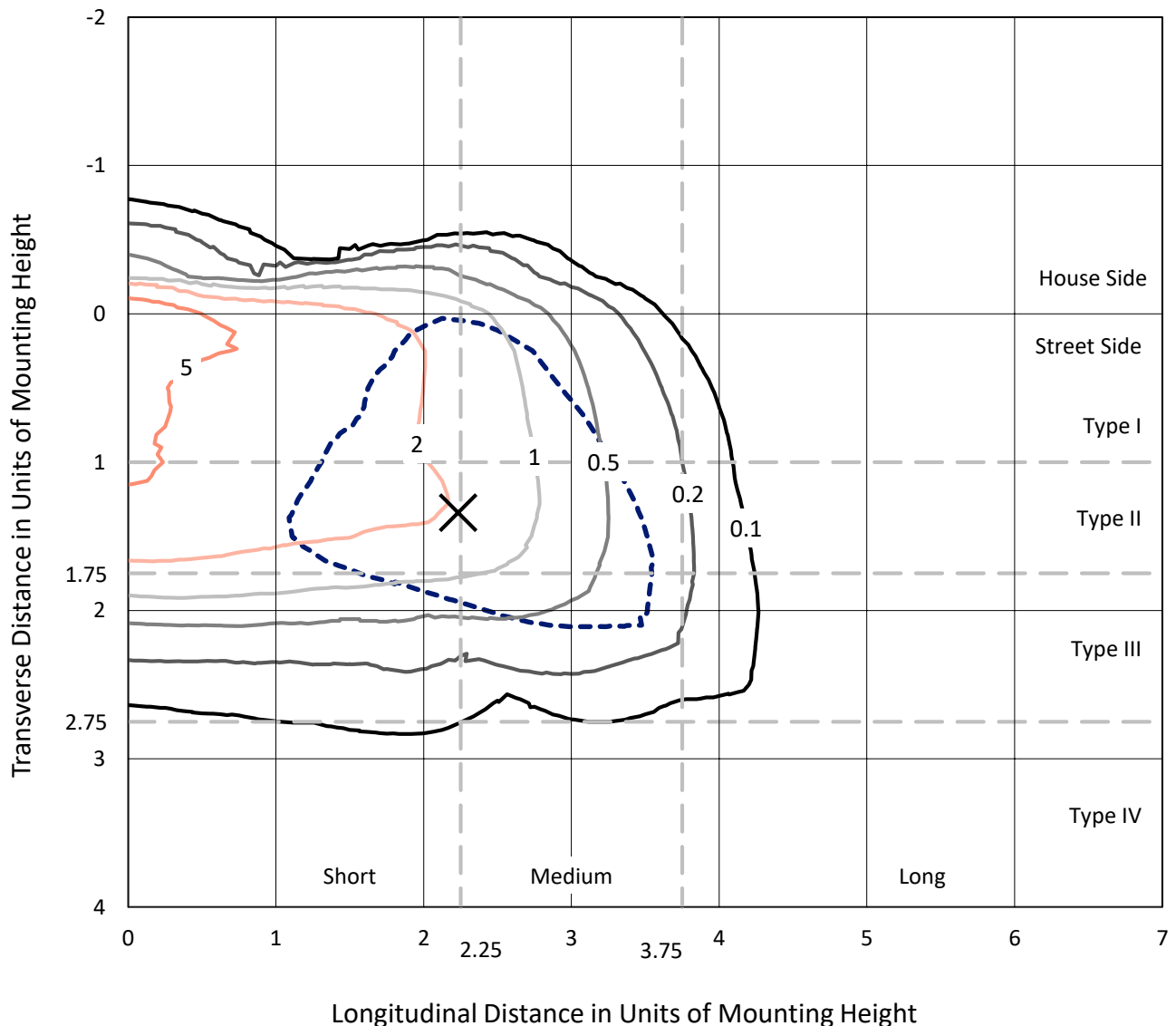


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

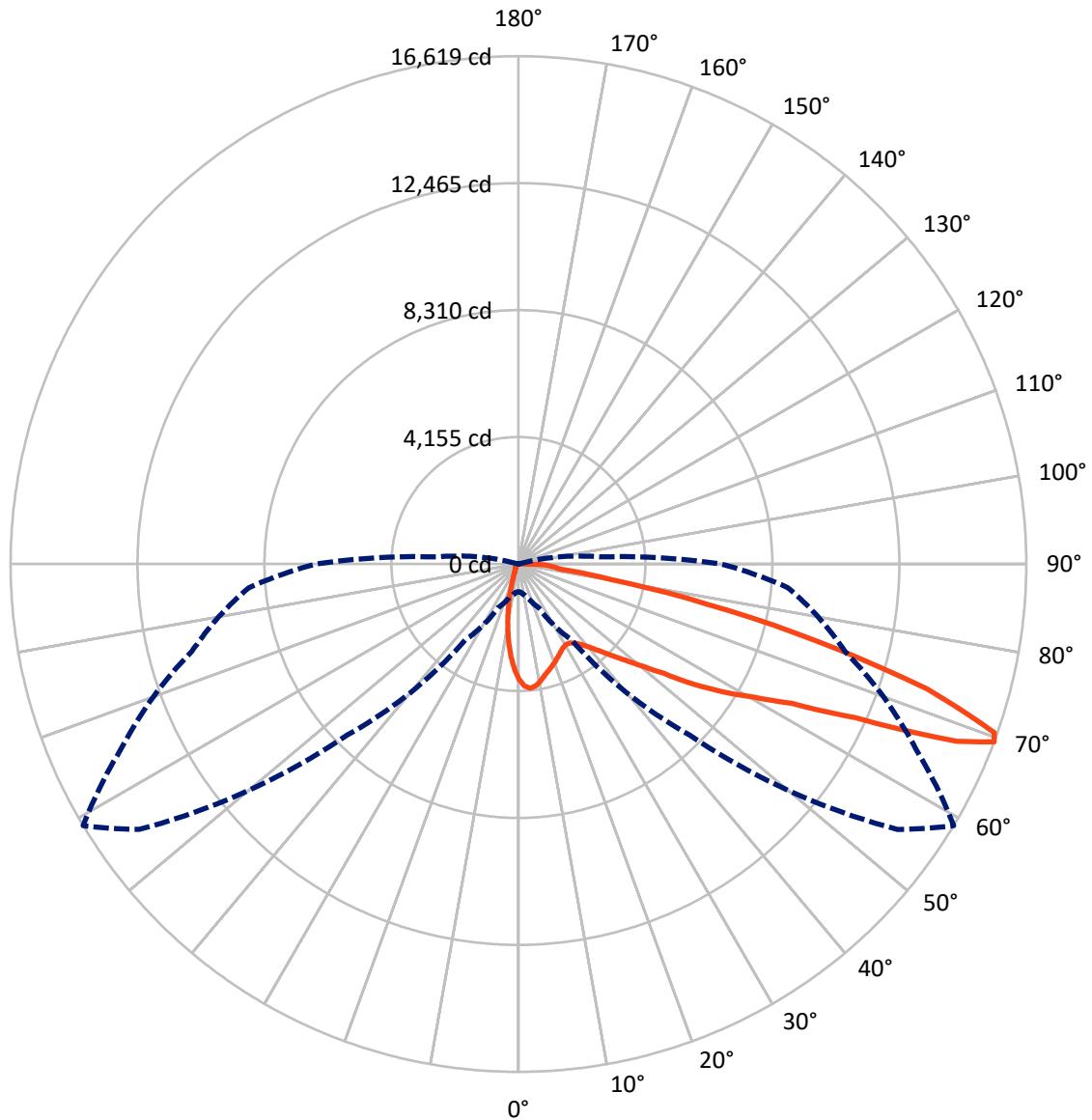


Based on 20 foot mounting height. Maximum calculated value = 9.5 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1185.8	0.0	1185.8
	% Fixture	8.1	0.0	8.1
<b>Street Side</b>	Lumens	13375.4	0.0	13375.4
	% Fixture	91.9	0.0	91.9
<b>Total</b>	Lumens	14561.2	0.0	14561.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	307.6	2.1
10°-20°	635.7	4.4
20°-30°	855.4	5.9
30°-40°	1242.0	8.5
40°-50°	2068.0	14.2
50°-60°	3226.0	22.2
60°-70°	3991.9	27.4
70°-80°	2023.1	13.9
80°-90°	211.7	1.5
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°	14561.2	100.0
0°-180°	14561.2	100.0



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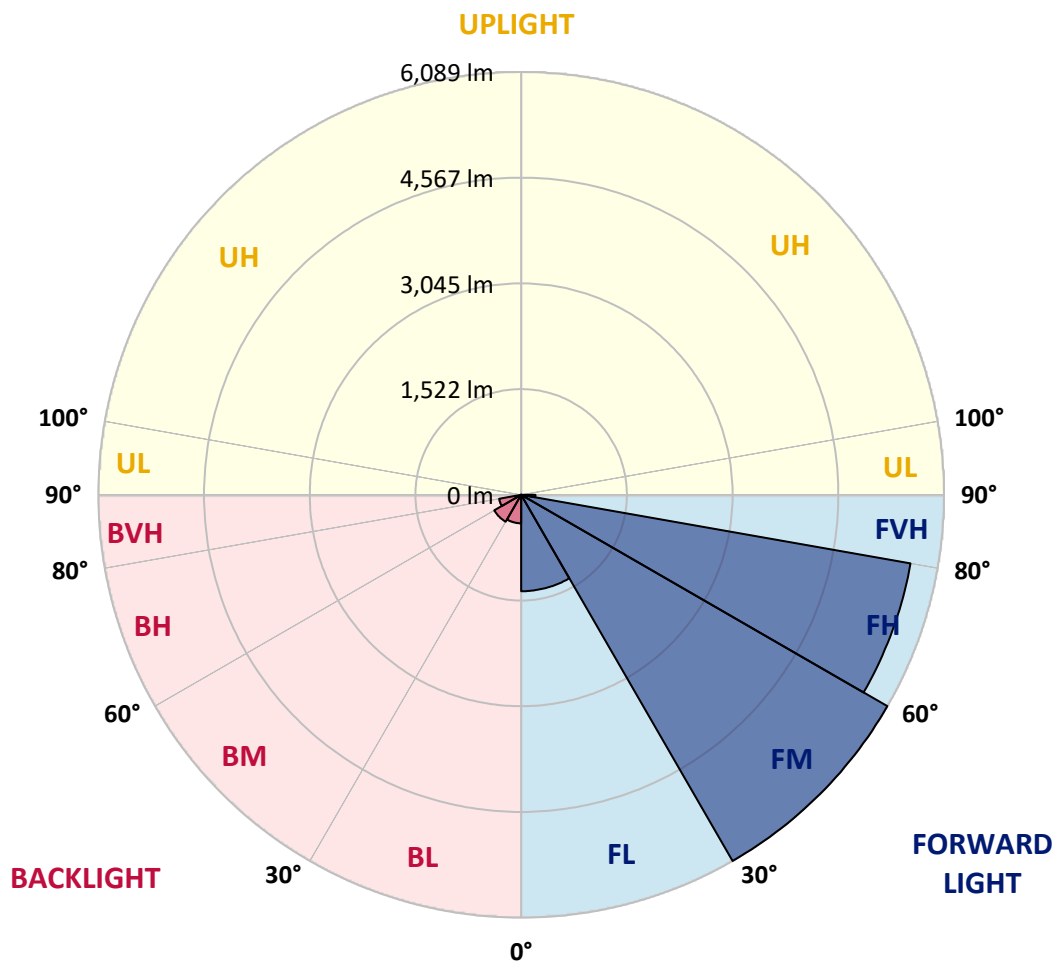
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1388.3	9.5			
FM	(30°-60°)	6089.1	41.8			
FH	(60°-80°)	5692.9	39.1			G3/7500
FVH	(80°-90°)	205.2	1.4			G2/225
BL	(0°-30°)	410.4	2.8	B1/500		
BM	(30°-60°)	446.8	3.1	B1/1000		
BH	(60°-80°)	322.0	2.2	B1/500		G1/500
BVH	(80°-90°)	6.5	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-G3**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	3790.0	3790.0	3790.0	3790.0	3790.0	3790.0	3790.0	3790.0	3790.0	3790.0	3790.0
2.5°	4154.0	4152.5	4134.3	4126.1	4111.1	4079.9	4031.3	4005.9	3964.8	3893.0	3796.7
5°	4116.1	4136.0	4146.5	4147.5	4158.2	4146.5	4102.9	4081.7	4024.8	3909.4	3736.7
7.5°	3859.3	3866.5	3897.2	3923.4	3974.5	4023.1	4038.8	4029.6	3995.9	3872.5	3642.7
10°	3584.3	3591.6	3628.0	3662.4	3731.7	3806.5	3885.5	3902.2	3916.1	3819.7	3552.2
12.5°	3347.0	3354.5	3391.6	3436.8	3517.5	3609.8	3732.4	3759.6	3821.4	3769.6	3479.6
15°	3142.8	3146.1	3182.5	3238.3	3334.8	3453.2	3592.6	3636.2	3730.9	3734.2	3416.3
17.5°	2969.1	2977.3	2999.7	3053.1	3158.5	3305.1	3467.4	3530.0	3640.9	3704.5	3354.5
20°	2862.9	2871.1	2870.4	2900.0	2994.8	3151.1	3342.3	3417.1	3552.2	3674.1	3299.4
22.5°	2842.4	2842.4	2821.0	2816.8	2872.9	3003.7	3212.1	3303.4	3472.2	3660.9	3260.8
25°	2915.7	2912.2	2858.9	2815.3	2817.8	2895.8	3086.0	3194.7	3404.8	3669.8	3240.1
27.5°	3070.5	3066.3	2998.8	2915.7	2848.9	2848.2	2990.5	3107.4	3351.3	3712.7	3248.3
30°	3284.4	3282.9	3209.7	3104.9	2984.0	2872.9	2957.6	3063.8	3316.6	3790.0	3267.2
32.5°	3518.3	3515.8	3460.7	3350.5	3197.2	2984.0	2992.3	3081.3	3326.6	3893.0	3313.4
35°	3766.3	3762.1	3738.2	3641.9	3473.2	3189.0	3105.9	3175.0	3389.1	4047.0	3403.9
37.5°	4034.6	4038.8	4056.0	3963.8	3786.8	3476.4	3296.2	3343.0	3515.0	4256.2	3551.2
40°	4430.7	4429.9	4435.7	4314.5	4144.3	3827.9	3561.9	3576.9	3725.9	4533.6	3775.3
42.5°	5149.4	5099.3	4947.0	4699.9	4528.7	4229.8	3897.2	3881.5	3983.7	4876.9	4088.9
45°	6115.4	6008.2	5613.1	5139.7	4920.6	4682.7	4309.5	4259.4	4324.5	5289.5	4476.1
47.5°	6946.1	6834.9	6276.0	5597.4	5336.4	5112.5	4792.9	4702.4	4723.9	5751.4	4966.7
50°	7228.5	7174.2	6686.0	5996.0	5739.0	5653.5	5353.8	5243.4	5213.0	6285.7	5535.6
52.5°	7130.5	7126.6	6801.2	6254.5	6107.9	6213.4	6059.3	5931.7	5819.8	6849.1	6114.4
55°	6973.2	6993.9	6848.1	6480.9	6475.9	6724.7	7024.3	6918.1	6593.8	7460.9	6613.5
57.5°	6539.5	6627.5	6821.9	6909.2	7111.6	7366.1	7828.1	7890.6	7507.0	7929.3	7027.6
60°	5306.0	5499.4	6135.1	6970.7	7931.0	8565.0	8798.1	8851.4	8256.1	8318.7	7586.7
62.5°	3766.3	3963.8	4770.0	6183.7	7943.2	10140.0	10243.0	10033.1	9081.3	8896.0	8551.0
65°	1999.1	2151.7	2810.3	4463.6	6887.0	10505.7	12770.1	12144.3	10536.9	10031.3	9796.7
67.5°	1022.6	1068.7	1330.7	2184.6	4734.6	9331.6	15035.1	15475.6	13045.8	11157.9	9736.7
69°	904.9	932.1	1105.9	1579.3	3031.7	7903.8	15145.6	16619.4	14359.3	11063.9	8848.2
70°	876.0	899.9	1058.0	1429.4	2369.8	6628.2	14723.0	16518.9	14695.1	10706.7	8184.6
72.5°	743.6	764.1	942.1	1263.2	1926.0	3290.2	11959.9	13997.8	13186.6	8919.0	5924.2
75°	497.3	564.9	904.2	1184.1	1791.7	1869.2	7884.9	10115.3	9396.6	6015.7	3086.0
77.5°	119.4	128.4	255.3	942.1	1638.6	1645.1	4055.3	6288.2	5129.0	2144.2	729.4
80°	64.3	61.8	71.5	187.0	1525.7	1543.9	1825.6	3052.3	1831.3	355.7	240.3
82.5°	45.4	42.9	46.1	78.3	480.1	1406.3	1320.8	1381.6	759.1	136.6	107.9
85°	16.5	15.7	25.4	70.8	150.6	808.5	1356.9	1139.5	615.0	62.6	79.0
87.5°	5.7	5.0	10.0	38.6	46.1	344.3	837.4	861.3	242.1	37.9	37.1
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°	3790.0	3790.0	3790.0	3790.0	3790.0	3790.0	3790.0	3790.0	3790.0	3790.0	3790.0
2.5°	3756.4	3705.2	3611.5	3515.0	3426.0	3319.1	3265.5	3212.9	3190.7	3182.5	3143.8
5°	3647.7	3561.2	3362.0	3161.8	2977.3	2781.4	2652.2	2548.5	2487.4	2457.8	2410.9
7.5°	3508.6	3367.0	3064.6	2755.9	2468.5	2185.3	1975.4	1813.9	1702.7	1649.3	1600.7
10°	3373.4	3185.0	2755.2	2334.4	1944.0	1568.6	1278.6	1068.7	934.6	872.8	833.4
12.5°	3252.5	3008.0	2456.3	1923.5	1433.4	993.9	699.0	532.0	448.7	419.8	405.8
15°	3144.6	2844.9	2173.8	1533.2	970.7	568.1	382.2	325.3	312.1	312.1	310.4
17.5°	3042.4	2685.1	1901.1	1166.7	609.3	347.5	290.7	283.2	283.2	286.4	286.4
20°	2944.4	2532.8	1637.6	837.4	383.7	275.7	262.8	261.0	262.8	266.7	266.7
22.5°	2860.4	2394.5	1391.6	574.6	284.9	248.5	242.1	239.6	240.3	242.8	244.6
25°	2797.8	2277.5	1159.5	389.4	245.3	226.4	219.1	214.9	211.7	211.7	213.1
27.5°	2758.4	2178.8	934.6	283.2	220.6	205.9	194.2	187.7	180.2	176.3	177.7
30°	2729.5	2084.8	723.7	231.3	197.7	182.7	168.0	157.3	146.6	141.6	143.3
32.5°	2718.8	2009.1	541.0	204.2	177.0	160.5	142.3	128.4	116.9	112.7	113.7
35°	2747.7	1949.0	396.1	184.5	160.5	139.9	119.4	103.7	94.7	92.2	93.0
37.5°	2823.5	1916.8	296.4	168.0	145.8	122.7	99.7	84.8	79.0	79.0	79.8
40°	2966.6	1916.1	238.1	156.6	132.6	106.2	82.3	71.5	68.3	70.1	70.8
42.5°	3175.7	1959.7	207.4	145.8	121.2	90.5	68.3	60.8	60.1	61.8	62.6
45°	3461.4	2039.5	191.0	136.6	108.7	75.8	57.6	52.6	52.6	55.1	56.1
47.5°	3811.4	2156.4	177.0	127.6	96.2	63.3	49.4	46.1	46.9	49.4	50.1
50°	4233.0	2304.0	163.0	117.7	87.3	52.6	42.9	40.4	41.1	44.4	45.4
52.5°	4713.1	2502.4	151.6	108.7	75.8	43.6	36.1	34.7	36.1	39.6	40.4
55°	5124.7	2680.2	137.6	101.2	60.8	36.1	29.7	29.7	31.4	35.4	36.1
57.5°	5520.9	2866.1	125.1	87.3	47.9	28.9	24.7	25.4	27.9	32.2	32.9
60°	6102.2	3181.5	110.4	73.3	36.1	22.9	20.7	21.4	24.7	28.9	29.7
62.5°	7089.4	3661.6	95.5	60.8	27.9	18.2	16.5	18.2	22.2	27.2	27.9
65°	7980.4	3856.8	78.3	51.1	21.4	14.0	14.0	16.5	21.4	26.4	27.2
67.5°	7483.8	3246.5	60.8	40.4	16.5	10.7	11.5	15.7	20.7	26.4	27.2
69°	6618.5	2654.7	51.9	32.2	14.0	10.0	10.7	15.7	20.7	25.4	26.4
70°	5944.2	2241.4	46.1	27.2	12.5	10.0	10.7	14.7	20.7	25.4	26.4
72.5°	3981.2	1210.3	37.1	19.7	11.5	9.0	9.0	14.7	19.7	24.7	25.4
75°	1710.9	334.3	29.7	14.0	10.0	8.2	8.2	14.0	18.9	23.9	25.4
77.5°	312.9	84.8	23.9	12.5	10.0	8.2	7.5	13.2	18.2	22.9	23.9
80°	124.4	41.9	18.9	10.7	9.0	7.5	6.5	12.5	17.2	22.2	22.9
82.5°	75.0	23.9	15.7	10.0	9.0	6.5	5.7	10.7	16.5	21.4	22.2
85°	60.8	16.5	12.5	10.0	8.2	6.5	5.0	10.0	14.7	20.7	21.4
87.5°	29.7	11.5	11.5	9.0	8.2	6.5	5.0	9.0	14.0	19.7	20.7
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)