

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: P237337

Luminaire Tested: **ARCH-L-AF72-240-D-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237337
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-240-D-U-T4W
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28121.9 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G5

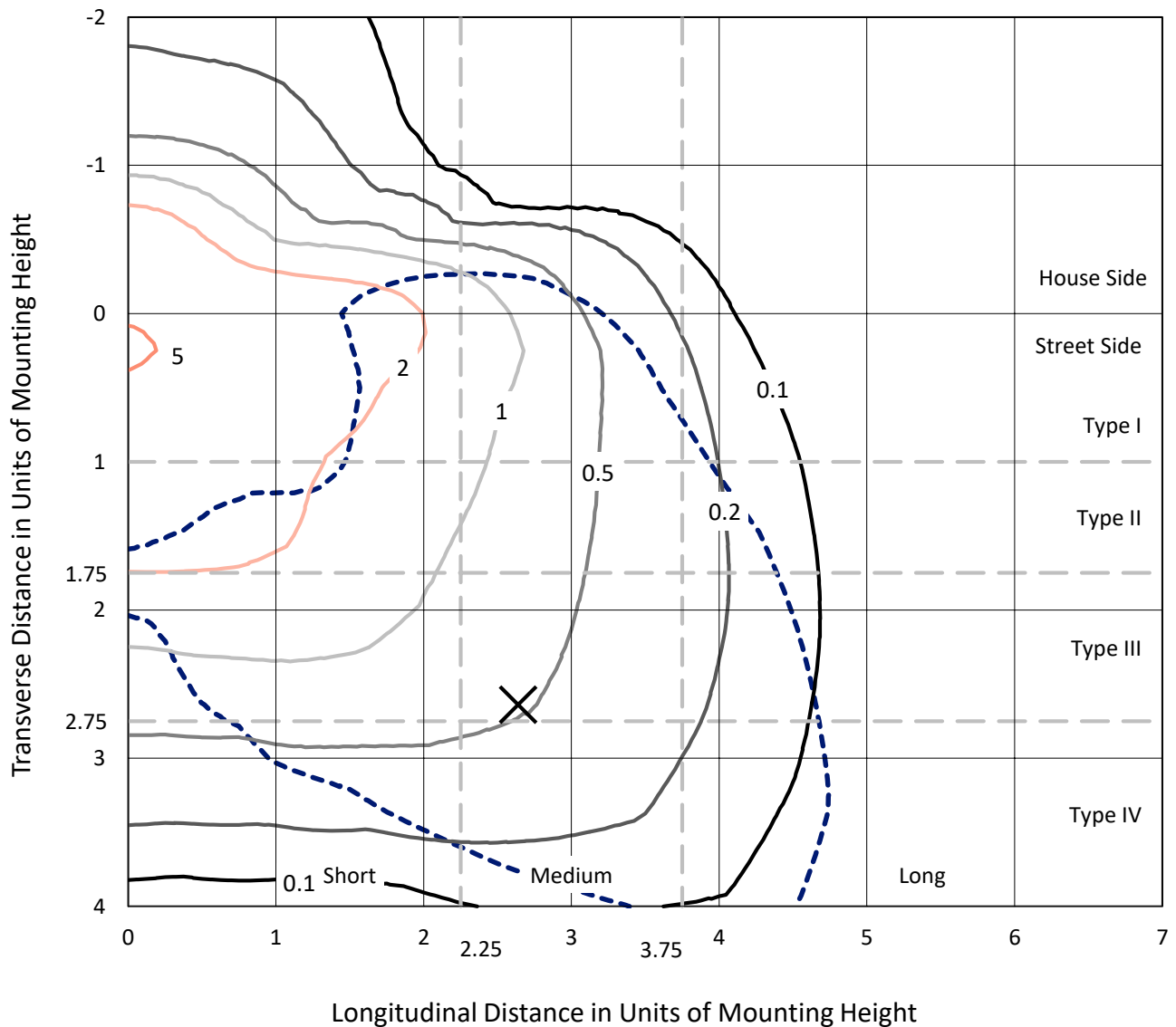
Input Watts (W): 242
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

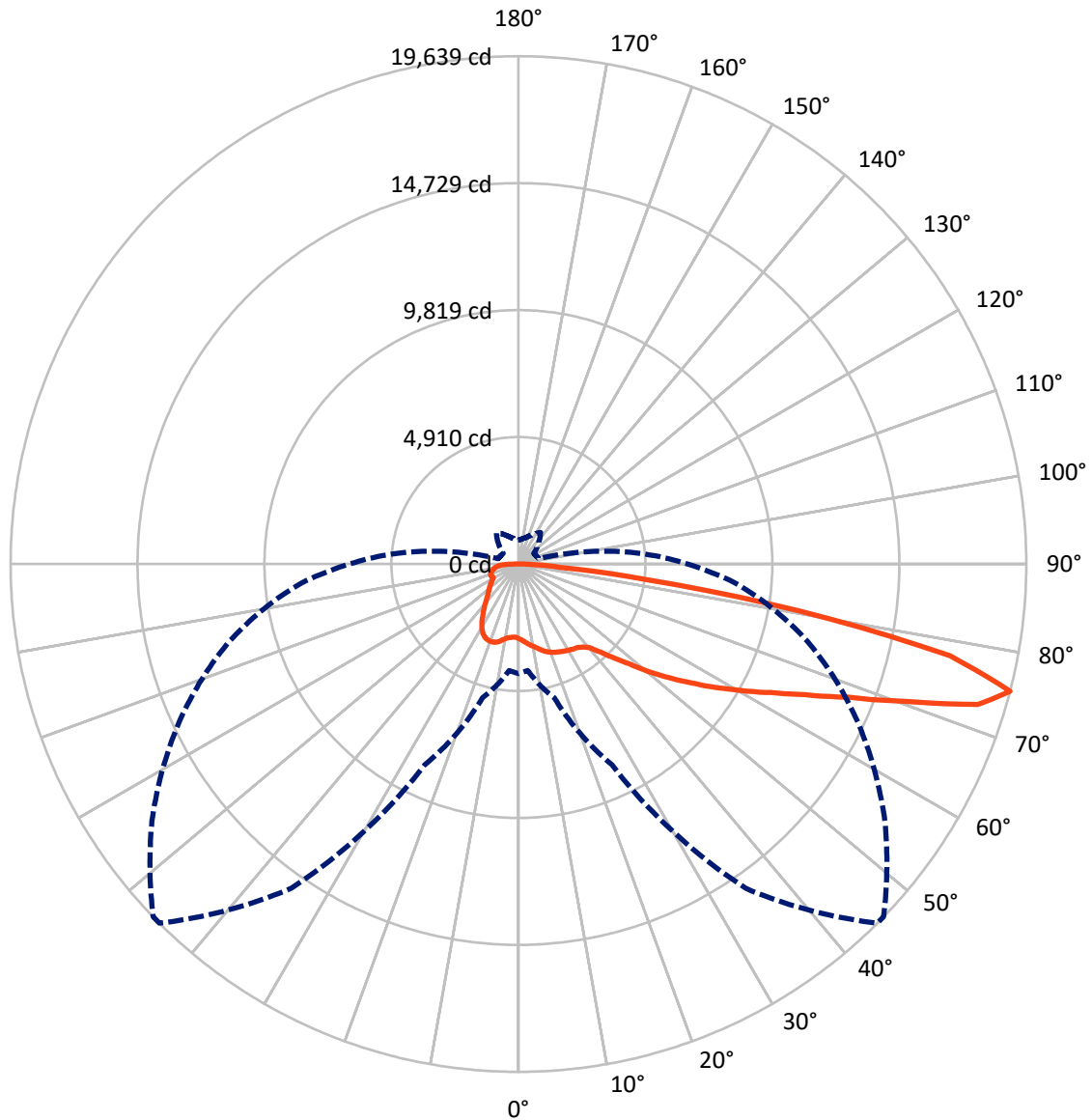
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6514.7	0.0	6514.7
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	21607.3	0.0	21607.3
	% Fixture	76.8	0.0	76.8
Total	Lumens	28121.9	0.0	28121.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.7	1.0
10°-20°	925.8	3.3
20°-30°	1588.7	5.6
30°-40°	2222.0	7.9
40°-50°	3259.4	11.6
50°-60°	5077.3	18.1
60°-70°	7305.9	26.0
70°-80°	6364.2	22.6
80°-90°	1093.0	3.9
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°	28121.9	100.0
0°-180°	28121.9	100.0



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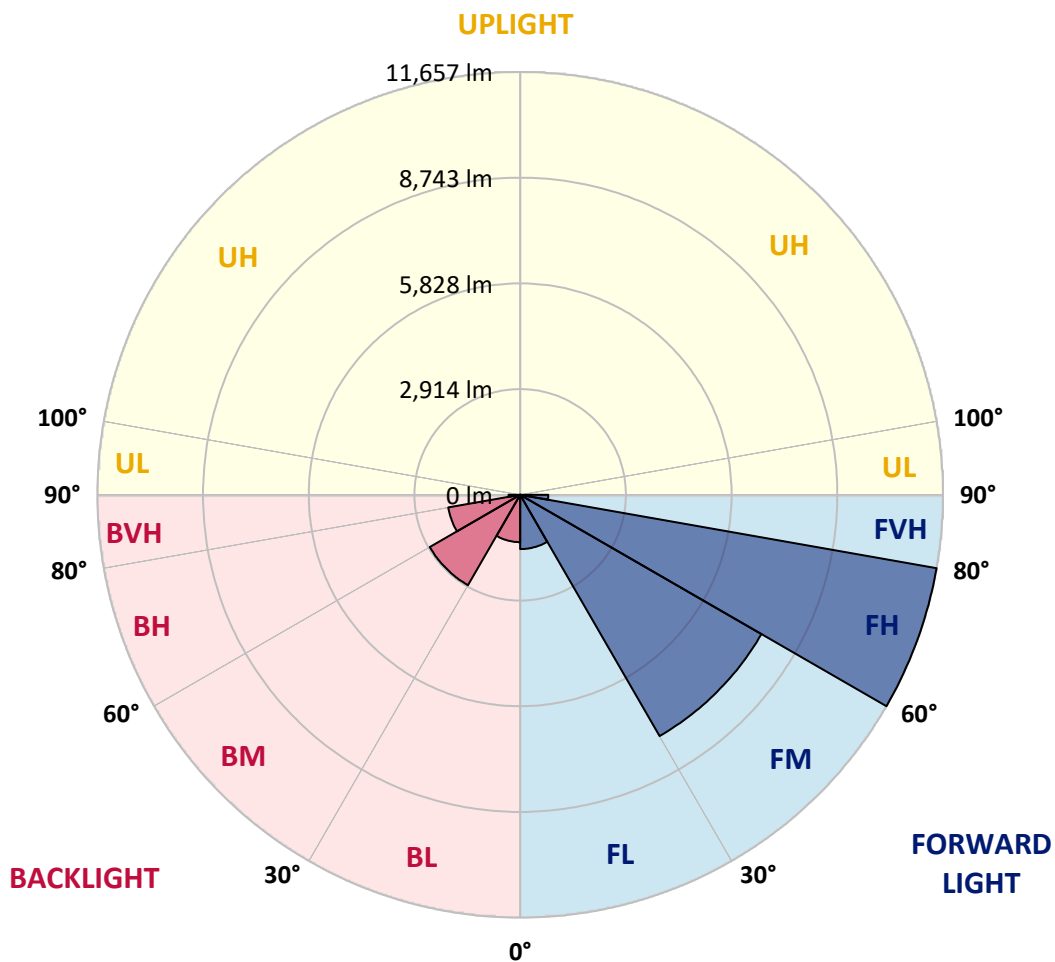
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1495.4	5.3			
FM	(30°-60°)	7679.6	27.3			
FH	(60°-80°)	11656.8	41.5			G4/12000
FVH	(80°-90°)	775.5	2.8			G5
BL	(0°-30°)	1304.8	4.6	B3/2500		
BM	(30°-60°)	2879.1	10.2	B3/5000		
BH	(60°-80°)	2013.2	7.2	B3/2500		G3/2500
BVH	(80°-90°)	317.5	1.1			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2882.9	2882.9	2882.9	2882.9	2882.9	2882.9	2882.9	2882.9	2882.9	2882.9	2882.9
2.5°	3025.2	3003.3	3003.3	2986.8	2986.8	2959.5	2948.6	2943.0	2915.7	2899.3	2882.9
5°	3200.2	3172.8	3167.4	3129.1	3112.6	3052.5	3047.0	3008.7	2959.5	2910.3	2871.9
7.5°	3358.9	3342.4	3315.1	3276.7	3227.5	3151.0	3145.5	3085.3	3003.3	2937.6	2882.9
10°	3473.7	3462.8	3424.4	3375.2	3320.5	3244.0	3238.5	3172.8	3074.4	2997.8	2921.2
12.5°	3610.5	3594.0	3544.8	3479.2	3419.0	3347.9	3342.4	3287.7	3178.3	3079.8	2981.4
15°	3741.7	3719.9	3659.7	3594.0	3528.4	3468.2	3468.2	3408.1	3293.2	3178.3	3063.4
17.5°	3807.4	3796.5	3736.3	3665.1	3610.5	3566.7	3561.2	3506.6	3391.7	3271.3	3145.5
20°	3829.3	3834.7	3780.0	3703.5	3665.1	3643.2	3637.8	3599.6	3473.7	3358.9	3238.5
22.5°	3823.8	3840.3	3796.5	3714.4	3703.5	3703.5	3703.5	3659.7	3561.2	3446.3	3326.0
25°	3845.7	3867.6	3834.7	3736.3	3736.3	3758.1	3758.1	3736.3	3648.8	3550.3	3430.0
27.5°	3922.3	3938.7	3911.4	3774.6	3780.0	3812.8	3807.4	3812.8	3758.1	3665.1	3544.8
30°	4015.3	4037.2	4004.3	3834.7	3829.3	3862.0	3862.0	3889.5	3851.2	3752.7	3654.2
32.5°	4266.9	4261.4	4157.5	3900.4	3883.9	3916.8	3916.8	3944.2	3922.3	3845.7	3752.7
35°	5016.3	4934.3	4704.6	4113.7	3949.6	3966.1	3966.1	4015.3	4026.2	3966.1	3883.9
37.5°	5782.2	5754.8	5579.8	4682.7	4190.3	4070.0	4064.5	4135.6	4184.9	4135.6	4081.0
40°	6553.5	6531.6	6493.4	5443.0	4693.6	4256.0	4239.5	4299.8	4387.2	4354.4	4321.7
42.5°	7270.1	7259.2	7297.5	6192.5	5333.7	4655.3	4606.0	4534.9	4660.8	4649.8	4649.8
45°	7833.7	7861.0	7882.9	6892.7	6028.4	5169.5	5109.3	4868.6	5038.2	5082.0	5114.9
47.5°	8150.9	8172.8	8249.4	7576.5	6723.1	5765.8	5722.1	5328.1	5552.5	5683.7	5776.7
50°	8605.0	8544.7	8610.4	8243.9	7560.1	6542.6	6422.3	5946.3	6230.8	6460.5	6679.4
52.5°	9042.6	8944.1	8998.8	9015.2	8512.0	7302.9	7177.1	6673.8	7029.4	7390.5	7778.9
55°	9436.4	9431.0	9485.6	9764.7	9431.0	8118.0	7975.8	7478.1	7992.2	8380.6	9037.1
57.5°	9753.7	9808.5	10049.2	10634.5	10492.2	9004.3	8845.7	8413.5	9020.7	9409.1	10497.7
60°	10125.7	10213.2	10612.6	11373.0	11460.5	9934.3	9770.1	9458.3	10076.5	10470.3	12188.0
62.5°	10251.5	10377.3	11197.9	12149.8	12472.5	10951.7	10804.0	10596.1	11187.0	11542.6	13873.0
65°	9414.5	9655.2	11520.7	12549.0	13561.2	12177.1	12051.3	11870.7	12292.0	12527.2	15016.2
67.5°	9184.8	9294.2	10891.6	13123.4	14584.1	13752.6	13626.7	13314.9	13325.9	13227.4	15388.2
70°	8862.0	8982.4	10246.1	13555.6	16050.1	15907.9	15754.8	14835.8	14272.2	13676.0	14655.2
72.5°	7549.2	7510.8	8829.2	12390.5	16755.8	18577.5	18397.0	16471.3	14972.4	13287.6	12368.6
75°	4239.5	4130.2	5355.6	8572.1	15300.7	19638.7	19633.3	17297.4	14480.2	11575.4	8419.0
77.5°	1230.8	1198.0	1766.9	3594.0	10300.7	17062.2	17270.1	15601.5	12084.1	8315.0	4622.5
80°	579.9	590.8	760.4	1187.0	4398.2	11011.9	11608.1	10273.4	7220.9	3834.7	1909.1
82.5°	366.5	371.9	519.7	765.9	1859.9	5000.0	5492.3	4622.5	2861.0	1657.5	842.4
85°	229.8	229.8	344.6	503.3	1110.5	1597.3	1734.1	1575.4	1225.4	902.7	459.5
87.5°	125.8	125.8	207.9	289.9	607.2	514.2	530.6	629.1	765.9	552.5	229.8
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°	2882.9	2882.9	2882.9	2882.9	2882.9	2882.9	2882.9	2882.9	2882.9	2882.9	2882.9
2.5°	2877.5	2866.5	2850.0	2844.6	2839.1	2833.7	2839.1	2850.0	2839.1	2839.1	2844.6
5°	2861.0	2850.0	2828.2	2828.2	2833.7	2839.1	2866.5	2882.9	2888.4	2888.4	2888.4
7.5°	2861.0	2844.6	2828.2	2833.7	2844.6	2866.5	2910.3	2937.6	2959.5	2964.9	2964.9
10°	2888.4	2866.5	2855.6	2866.5	2899.3	2915.7	2959.5	3003.3	3030.6	3041.5	3041.5
12.5°	2937.6	2915.7	2915.7	2937.6	2981.4	3003.3	3041.5	3074.4	3107.2	3123.6	3123.6
15°	3019.6	2992.3	2997.8	3036.1	3085.3	3107.2	3134.5	3145.5	3172.8	3194.7	3194.7
17.5°	3096.3	3068.9	3079.8	3123.6	3156.4	3167.4	3183.7	3178.3	3189.3	3205.6	3211.1
20°	3183.7	3156.4	3161.8	3189.3	3194.7	3183.7	3183.7	3167.4	3161.8	3189.3	3200.2
22.5°	3271.3	3244.0	3238.5	3222.1	3194.7	3167.4	3151.0	3134.5	3123.6	3151.0	3161.8
25°	3375.2	3337.0	3309.6	3238.5	3167.4	3118.2	3096.3	3085.3	3079.8	3107.2	3118.2
27.5°	3490.1	3451.8	3369.8	3216.6	3101.7	3019.6	3003.3	3003.3	3014.2	3030.6	3041.5
30°	3599.6	3561.2	3413.5	3167.4	2986.8	2866.5	2850.0	2866.5	2893.8	2910.3	2926.7
32.5°	3708.9	3670.7	3440.9	3090.7	2817.2	2664.1	2653.1	2680.5	2724.2	2735.2	2746.1
35°	3856.6	3818.4	3473.7	2981.4	2603.9	2439.8	2428.9	2445.3	2483.5	2500.0	2516.4
37.5°	4064.5	4042.6	3522.9	2861.0	2407.0	2226.5	2193.6	2182.7	2204.6	2199.1	2221.0
40°	4338.0	4354.4	3610.5	2702.3	2215.5	2029.5	1958.4	1925.6	1903.7	1859.9	1881.8
42.5°	4737.4	4748.3	3708.9	2521.9	2051.4	1843.6	1750.6	1690.3	1646.5	1575.4	1586.4
45°	5322.7	5229.7	3823.8	2330.4	1903.7	1695.8	1586.4	1515.3	1455.1	1395.0	1400.4
47.5°	6099.4	5815.1	3949.6	2171.7	1756.0	1575.4	1477.0	1395.0	1323.8	1274.6	1280.1
50°	7056.8	6542.6	4075.4	2024.0	1608.3	1482.5	1395.0	1307.4	1236.3	1187.0	1181.6
52.5°	8320.5	7417.8	4157.5	1859.9	1460.6	1400.4	1323.8	1241.8	1154.3	1094.0	1088.6
55°	9633.3	8435.4	4228.6	1663.0	1318.4	1307.4	1269.2	1176.1	1072.2	995.6	984.7
57.5°	11077.5	9524.0	4283.3	1471.5	1208.9	1230.8	1219.9	1110.5	995.6	924.5	919.0
60°	12390.5	10650.9	4108.3	1301.9	1110.5	1154.3	1165.2	1072.2	1012.0	1028.5	1033.9
62.5°	13714.3	11520.7	3440.9	1176.1	1044.8	1105.0	1198.0	1192.6	1165.2	1192.6	1198.0
65°	14190.2	11701.1	2439.8	1072.2	979.2	1126.9	1301.9	1291.0	1165.2	1115.9	1105.0
67.5°	13922.2	11165.1	1641.1	990.1	930.0	1154.3	1411.4	1291.0	1121.5	1055.8	1033.9
70°	12647.6	9846.7	1203.5	908.1	886.2	1148.8	1471.5	1285.5	1099.6	1028.5	1001.1
72.5°	10087.4	7598.4	968.2	831.5	820.5	1121.5	1504.4	1274.6	1077.7	1001.1	968.2
75°	6531.6	4726.4	815.1	754.9	722.1	1077.7	1488.0	1241.8	1050.4	951.9	930.0
77.5°	3030.6	2035.0	694.8	667.4	629.1	1012.0	1438.7	1176.1	990.1	897.1	869.8
80°	1411.4	962.8	585.3	579.9	563.4	957.3	1373.1	1099.6	919.0	842.4	798.7
82.5°	754.9	579.9	475.9	475.9	492.3	891.7	1291.0	1006.6	826.0	787.8	672.9
85°	399.4	333.7	344.6	371.9	421.3	787.8	1181.6	908.1	722.1	601.7	585.3
87.5°	202.4	213.4	213.4	251.6	322.7	640.1	973.7	749.4	612.6	492.3	481.4
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)