

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: P836390

Luminaire Tested: **ARCH3-180-727-U-T2U**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836390
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-180-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23269 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

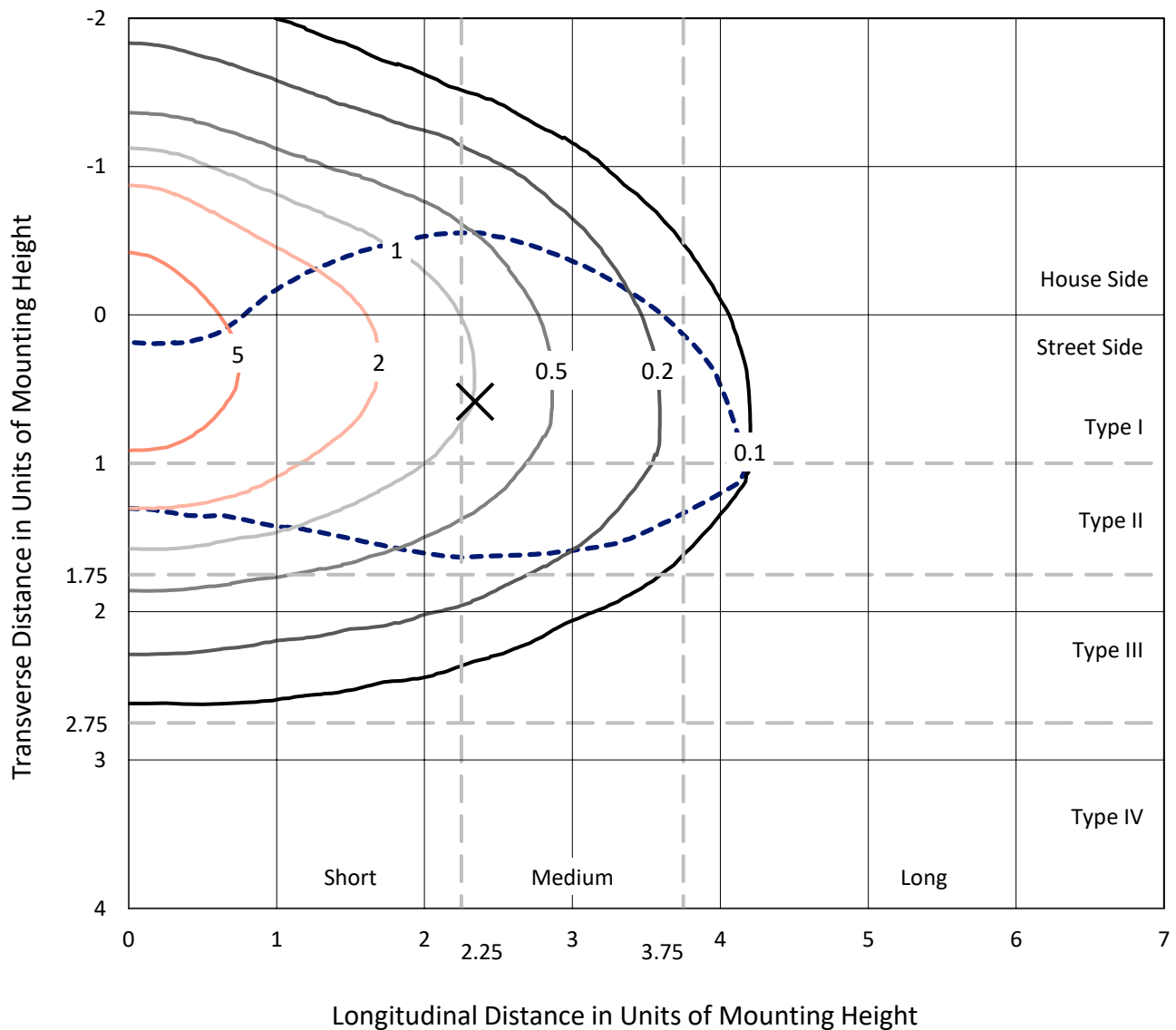
Input Watts (W): 180.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

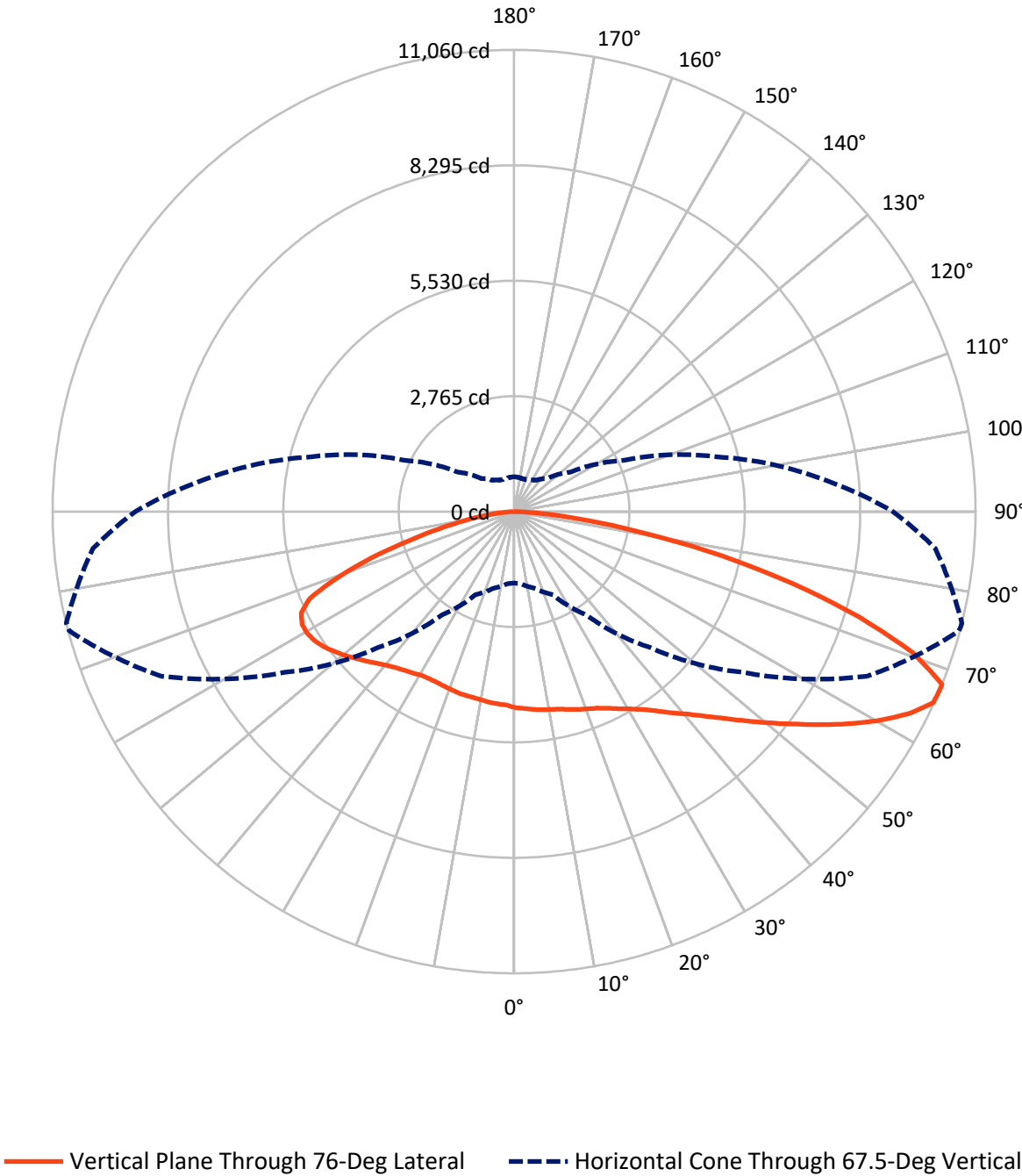
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7862.7	0.0	7862.7
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	15406.3	0.0	15406.3
	% Fixture	66.2	0.0	66.2
Total	Lumens	23269.0	0.0	23269.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	453.2	1.9
10°-20°	1385.6	6.0
20°-30°	2354.2	10.1
30°-40°	3349.8	14.4
40°-50°	4230.6	18.2
50°-60°	4580.4	19.7
60°-70°	4260.3	18.3
70°-80°	2288.2	9.8
80°-90°	366.7	1.6
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°	23269.0	100.0
0°-180°	23269.0	100.0

Coefficient of Utilization



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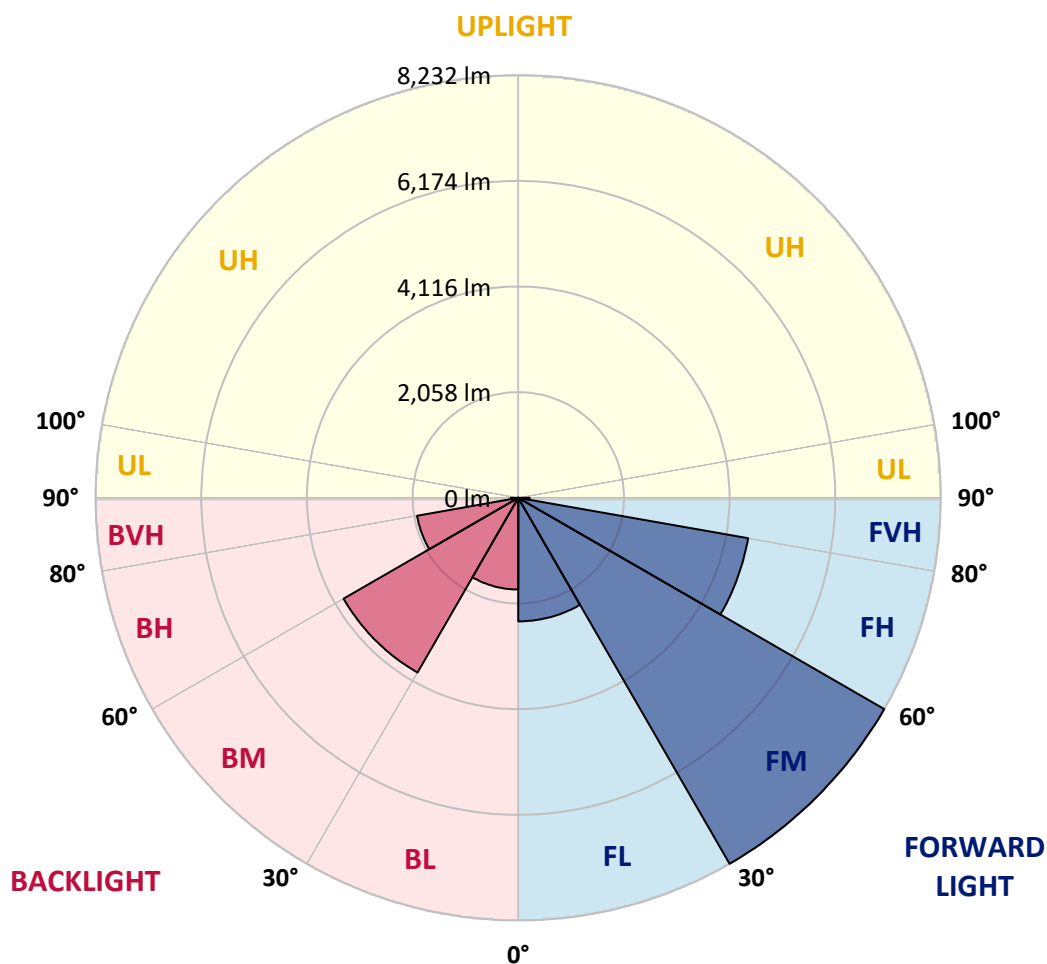
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2406.3	10.3			
FM	(30°-60°)	8231.7	35.4			
FH	(60°-80°)	4546.5	19.5			G2/5000
FVH	(80°-90°)	221.8	1.0			G2/225
BL	(0°-30°)	1786.8	7.7	B3/2500		
BM	(30°-60°)	3929.1	16.9	B3/5000		
BH	(60°-80°)	2001.9	8.6	B3/2500		G3/2500
BVH	(80°-90°)	144.9	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	4700.3	4700.3	4700.3	4700.3	4700.3	4700.3	4700.3	4700.3	4700.3	4700.3	4700.3
2.5°	4842.9	4834.2	4799.6	4804.0	4804.0	4799.6	4747.8	4726.2	4726.2	4721.9	4674.4
5°	5015.7	5002.7	4963.8	4955.2	4937.9	4916.3	4834.2	4786.7	4765.1	4760.8	4696.0
7.5°	5218.7	5201.4	5153.9	5128.0	5084.8	5028.6	4924.9	4851.5	4799.6	4795.3	4704.6
10°	5421.7	5404.5	5348.3	5300.8	5240.3	5149.6	5015.7	4907.7	4825.6	4816.9	4708.9
12.5°	5663.7	5646.4	5577.3	5516.8	5426.1	5305.1	5128.0	4981.1	4868.8	4855.8	4721.9
15°	5918.6	5892.6	5823.5	5754.4	5642.1	5486.5	5274.9	5080.5	4937.9	4916.3	4760.8
17.5°	6130.2	6095.7	6039.5	5970.4	5845.1	5663.7	5421.7	5179.8	5002.7	4985.4	4799.6
20°	6311.7	6285.8	6225.3	6160.5	6026.6	5827.8	5560.0	5279.2	5063.2	5041.6	4829.9
22.5°	6484.5	6449.9	6415.4	6367.9	6221.0	6000.6	5719.8	5400.1	5140.9	5115.0	4868.8
25°	6683.2	6644.3	6631.4	6605.5	6432.7	6208.0	5914.2	5551.3	5248.9	5218.7	4937.9
27.5°	6929.5	6886.3	6860.3	6860.3	6653.0	6419.7	6121.6	5728.5	5374.2	5348.3	5024.3
30°	7188.7	7136.8	7098.0	7098.0	6864.7	6631.4	6324.7	5905.6	5516.8	5486.5	5136.6
32.5°	7417.6	7365.8	7322.6	7318.3	7076.4	6843.1	6536.3	6100.0	5689.6	5650.7	5274.9
35°	7594.8	7547.2	7508.4	7517.0	7288.0	7059.1	6773.9	6359.2	5905.6	5862.4	5456.3
37.5°	7702.8	7685.5	7663.9	7694.1	7482.4	7266.4	7020.2	6609.8	6151.8	6113.0	5681.0
40°	7758.9	7746.0	7832.4	7871.3	7646.6	7452.2	7266.4	6869.0	6419.7	6376.5	5940.2
42.5°	7841.0	7949.0	7983.6	7974.9	7767.6	7594.8	7491.1	7149.8	6735.1	6696.2	6251.2
45°	7547.2	7521.3	7711.4	7815.1	7776.2	7685.5	7702.8	7486.8	7102.3	7063.4	6609.8
47.5°	7154.1	7119.6	7227.6	7482.4	7633.6	7720.0	7892.9	7836.7	7525.6	7491.1	7028.8
50°	6324.7	6372.2	6773.9	7115.2	7413.3	7711.4	8052.7	8212.5	7992.2	7957.7	7478.1
52.5°	5404.5	5452.0	5871.0	6657.3	7145.5	7646.6	8169.3	8588.4	8497.7	8458.8	7957.7
55°	4734.8	4838.5	5313.7	5884.0	6765.3	7443.6	8238.5	8972.9	9042.0	9007.4	8480.4
57.5°	4069.5	4147.3	4505.9	5011.3	6246.9	7089.3	8234.1	9331.5	9612.3	9577.7	9011.8
60°	3287.6	3387.0	3672.1	4216.4	5555.7	6665.9	8113.2	9612.3	10160.9	10135.0	9525.9
62.5°	2751.9	2782.2	2985.2	3456.1	4665.7	6130.2	7841.0	9763.5	10657.7	10640.4	9988.1
65°	2216.2	2220.5	2406.3	2799.4	3806.0	5464.9	7378.8	9707.3	11033.6	11042.2	10320.8
67.5°	1710.8	1732.4	1900.9	2198.9	3024.1	4600.9	6717.8	9327.1	11037.9	11059.5	10130.7
70°	1183.7	1201.0	1455.9	1745.3	2337.2	3667.8	5823.5	8320.5	10130.7	10148.0	9080.9
72.5°	833.8	842.4	1114.6	1395.4	1827.4	2764.9	4393.6	6881.9	8635.9	8648.9	7638.0
75°	622.1	630.7	786.3	1058.4	1399.7	1913.8	3002.5	5270.5	6899.2	6899.2	6030.9
77.5°	440.7	445.0	509.8	730.1	933.1	1291.7	1805.8	3451.8	5063.2	5071.8	4393.6
80°	298.1	302.4	332.6	492.5	583.2	699.9	980.7	1810.1	3192.6	3205.5	2790.8
82.5°	155.5	164.2	185.8	250.6	293.8	388.8	505.5	920.2	1766.9	1801.5	1676.2
85°	60.5	60.5	69.1	82.1	108.0	151.2	233.3	349.9	799.2	825.1	738.7
87.5°	21.6	21.6	25.9	25.9	30.2	34.6	38.9	51.8	90.7	90.7	86.4
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°	4700.3	4700.3	4700.3	4700.3	4700.3	4700.3	4700.3	4700.3	4700.3	4700.3	4700.3
2.5°	4657.1	4657.1	4635.5	4644.1	4639.8	4631.2	4622.5	4635.5	4622.5	4592.3	4588.0
5°	4665.7	4657.1	4622.5	4618.2	4605.2	4588.0	4566.4	4575.0	4553.4	4527.5	4523.2
7.5°	4670.0	4652.8	4605.2	4588.0	4562.0	4527.5	4492.9	4492.9	4462.7	4436.8	4432.4
10°	4661.4	4639.8	4575.0	4540.4	4492.9	4441.1	4393.6	4380.6	4346.0	4315.8	4315.8
12.5°	4665.7	4635.5	4553.4	4497.2	4432.4	4367.6	4307.2	4289.9	4259.6	4229.4	4225.1
15°	4691.6	4648.4	4544.8	4471.3	4376.3	4302.8	4238.0	4225.1	4199.2	4177.6	4177.6
17.5°	4717.6	4661.4	4531.8	4428.1	4311.5	4229.4	4168.9	4168.9	4151.6	4138.7	4138.7
20°	4730.5	4665.7	4505.9	4367.6	4233.7	4147.3	4091.2	4099.8	4095.5	4091.2	4091.2
22.5°	4760.8	4674.4	4484.3	4311.5	4151.6	4060.9	4009.1	4022.0	4017.7	4017.7	4022.0
25°	4808.3	4696.0	4467.0	4259.6	4073.9	3974.5	3918.3	3927.0	3927.0	3927.0	3927.0
27.5°	4873.1	4739.2	4462.7	4212.1	3996.1	3883.8	3814.7	3814.7	3797.4	3801.7	3806.0
30°	4972.5	4821.2	4471.3	4168.9	3914.0	3771.5	3689.4	3676.4	3672.1	3680.7	3685.1
32.5°	5093.4	4933.6	4523.2	4138.7	3827.6	3646.2	3542.5	3538.2	3525.2	3525.2	3525.2
35°	5244.6	5041.6	4570.7	4134.4	3741.2	3512.3	3399.9	3387.0	3356.7	3343.8	3343.8
37.5°	5439.0	5210.1	4626.8	4104.1	3667.8	3382.7	3248.7	3205.5	3171.0	3166.6	3166.6
40°	5676.6	5400.1	4708.9	4069.5	3590.0	3248.7	3071.6	2998.2	3002.5	3019.8	3019.8
42.5°	5957.4	5633.4	4812.6	4052.3	3477.7	3110.5	2864.2	2777.8	2808.1	2825.4	2829.7
45°	6285.8	5909.9	4929.3	4030.7	3374.0	2955.0	2643.9	2535.9	2548.9	2553.2	2557.5
47.5°	6665.9	6216.6	5050.2	4013.4	3257.4	2760.6	2402.0	2259.4	2255.1	2229.2	2237.8
50°	7063.4	6540.7	5175.5	3983.1	3114.8	2531.6	2147.1	1978.6	1944.1	1905.2	1909.5
52.5°	7486.8	6873.3	5292.1	3935.6	2937.7	2298.3	1905.2	1723.7	1654.6	1611.4	1620.0
55°	7953.3	7214.6	5404.5	3862.2	2751.9	2065.0	1689.2	1503.4	1417.0	1382.4	1386.8
57.5°	8381.0	7542.9	5486.5	3771.5	2548.9	1853.3	1499.1	1317.6	1261.5	1257.2	1261.5
60°	8795.8	7819.4	5521.1	3646.2	2341.5	1658.9	1322.0	1183.7	1144.8	1166.4	1170.8
62.5°	9145.7	7996.5	5503.8	3477.7	2129.8	1473.2	1179.4	1080.0	1054.1	1097.3	1101.6
65°	9348.7	8052.7	5382.9	3235.8	1900.9	1291.7	1045.5	937.5	924.5	950.4	963.4
67.5°	9080.9	7702.8	5054.5	2903.1	1646.0	1123.2	915.9	829.5	807.9	829.5	829.5
70°	8048.4	6674.6	4276.9	2376.1	1365.2	959.1	794.9	734.4	717.1	734.4	730.1
72.5°	6704.8	5551.3	3369.7	1853.3	1075.7	807.9	691.2	635.1	617.8	600.5	591.9
75°	5201.4	4216.4	2445.2	1360.8	812.2	648.0	578.9	527.1	483.9	501.1	492.5
77.5°	3810.3	2959.3	1732.4	941.8	583.2	501.1	453.6	414.7	384.5	419.1	414.7
80°	2453.8	1913.8	1157.8	630.7	401.8	349.9	332.6	311.0	341.3	445.0	453.6
82.5°	1499.1	1214.0	691.2	410.4	263.5	233.3	216.0	216.0	349.9	384.5	388.8
85°	669.6	643.7	375.9	211.7	146.9	133.9	121.0	155.5	142.6	103.7	108.0
87.5°	108.0	112.3	82.1	73.4	56.2	56.2	43.2	30.2	21.6	13.0	13.0
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)