

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: P237341

Luminaire Tested: **ARCH-L-AF72-280-D-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237341
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-AF72-280-D-U-T4W
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30706.9 lumens
Efficiency: N/A
Efficacy: 110.1 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

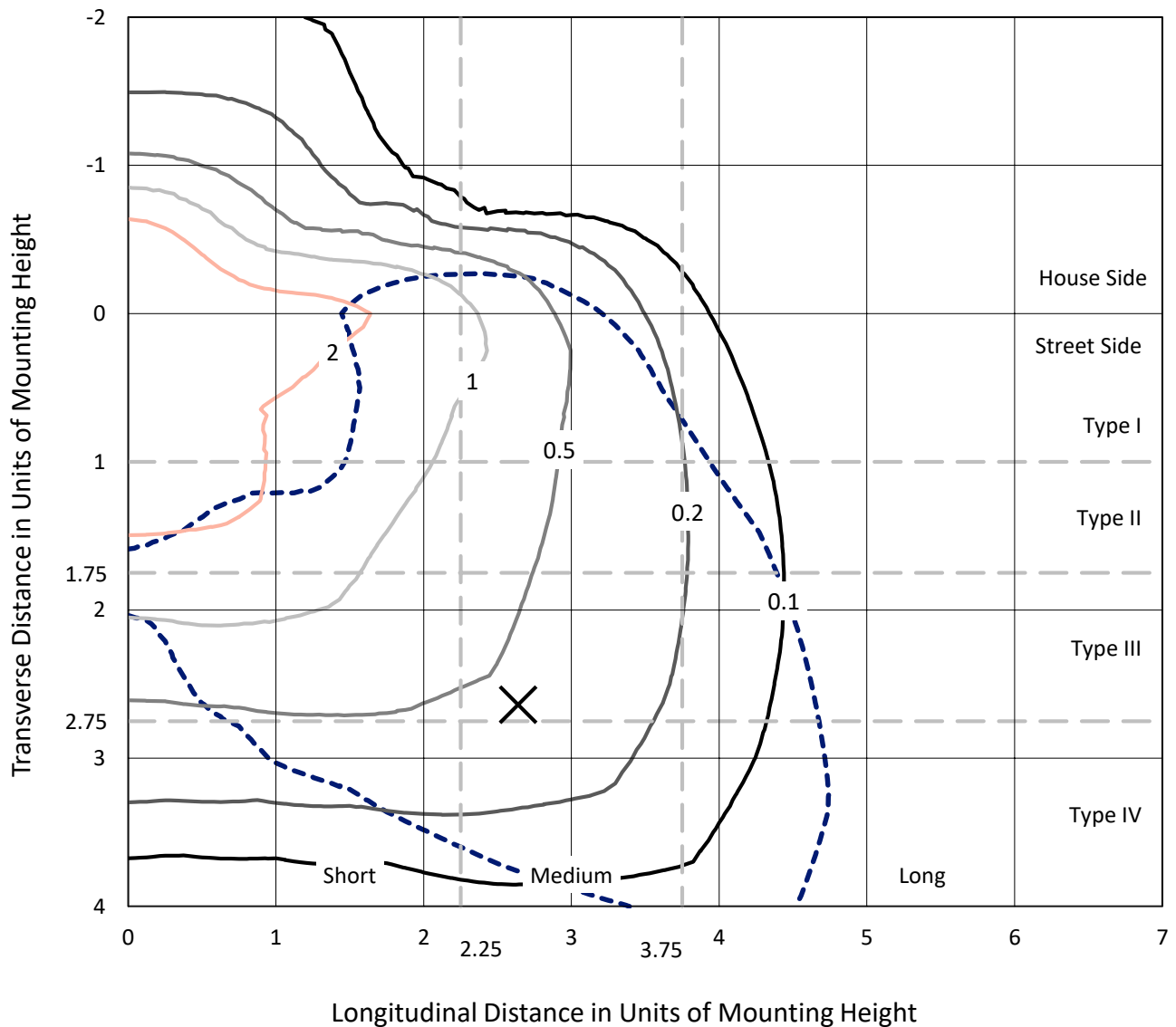
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

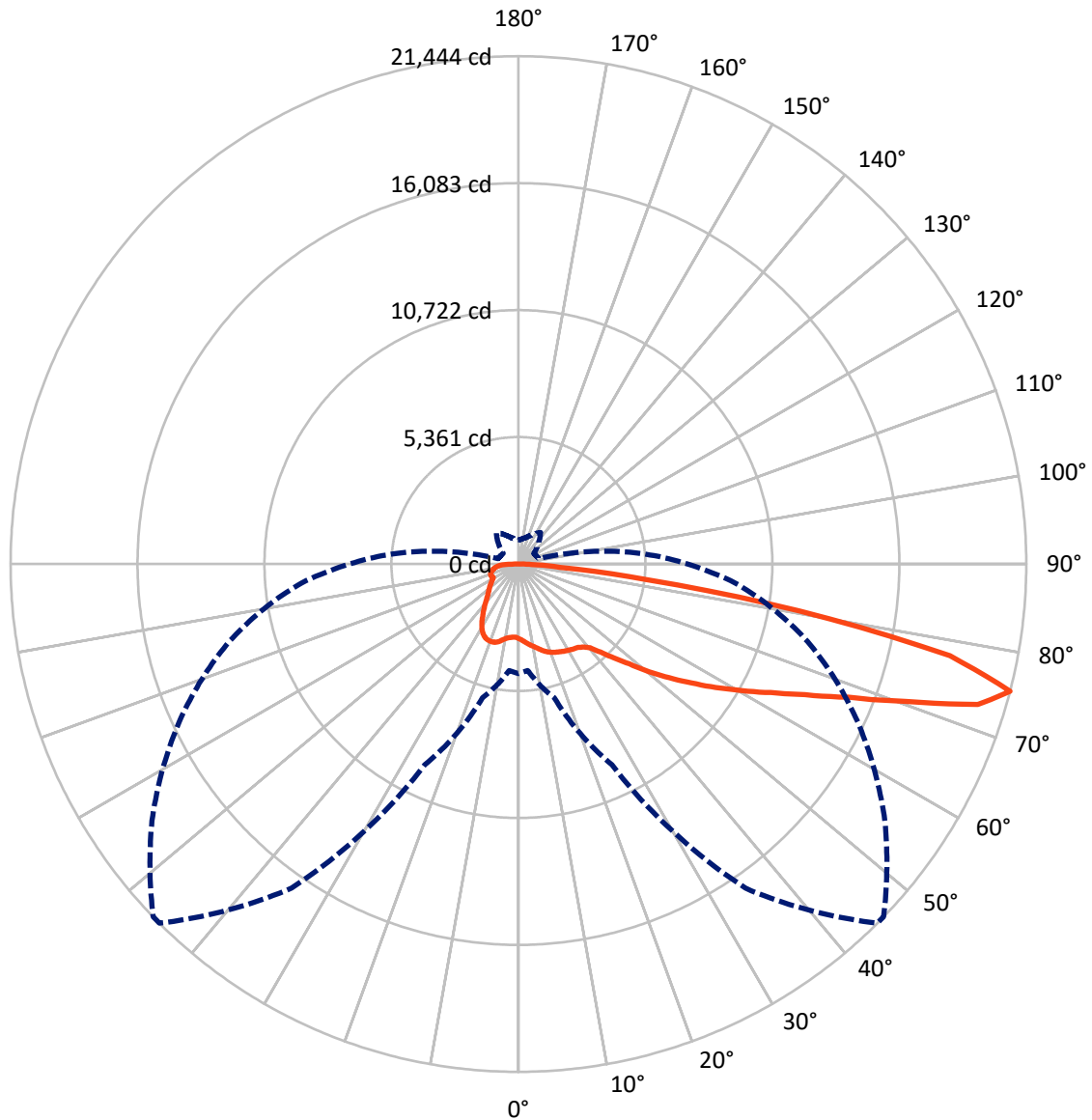


Based on 30 foot mounting height. Maximum calculated value = 4.1 fc
 Type IV - Medium - Non-Cutoff

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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	7113.5	0.0	7113.5
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	23593.4	0.0	23593.4
	% Fixture	76.8	0.0	76.8
Total	Lumens	30706.9	0.0	30706.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.0	1.0
10°-20°	1010.9	3.3
20°-30°	1734.7	5.6
30°-40°	2426.2	7.9
40°-50°	3559.0	11.6
50°-60°	5544.0	18.1
60°-70°	7977.4	26.0
70°-80°	6949.2	22.6
80°-90°	1193.4	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°	30706.9	100.0
0°-180°	30706.9	100.0



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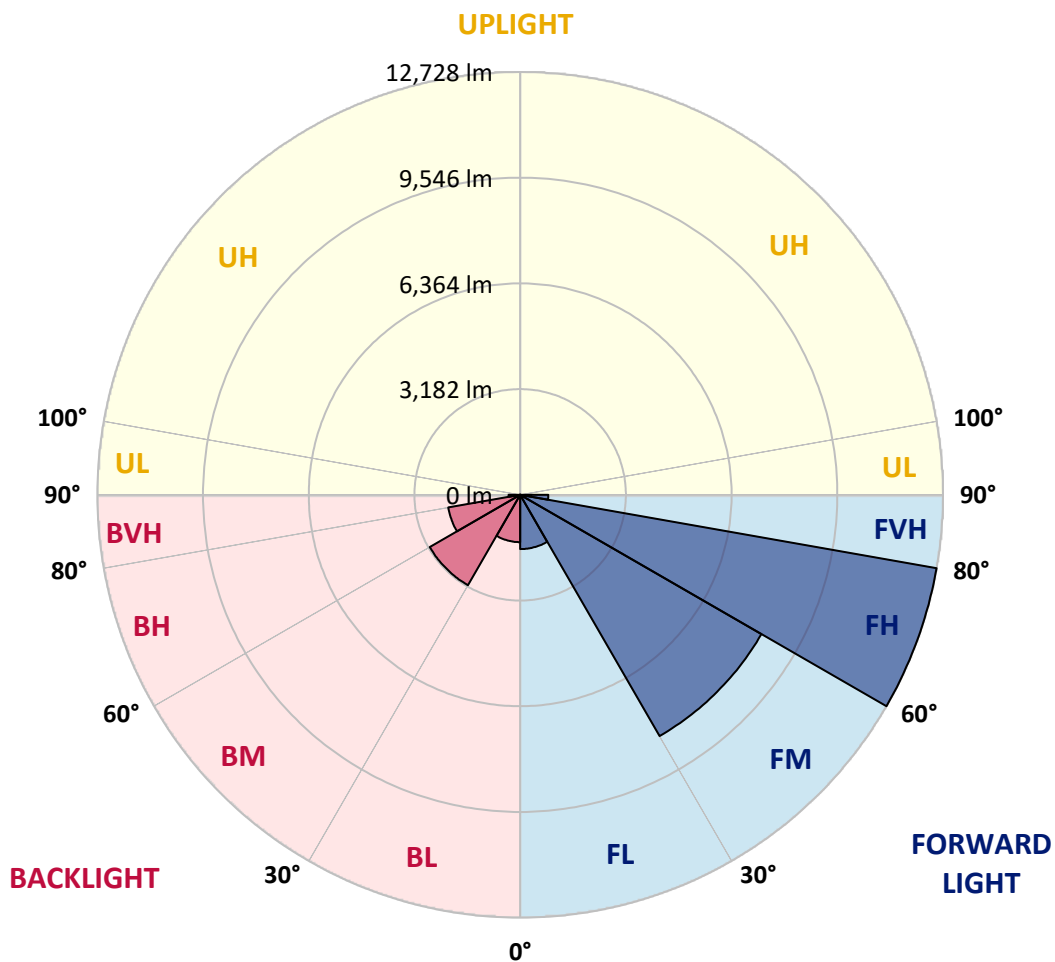
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1632.9	5.3			
FM	(30°-60°)	8385.5	27.3			
FH	(60°-80°)	12728.3	41.5			G5
FVH	(80°-90°)	846.7	2.8			G5
BL	(0°-30°)	1424.7	4.6	B3/2500		
BM	(30°-60°)	3143.8	10.2	B3/5000		
BH	(60°-80°)	2198.3	7.2	B3/2500		G3/2500
BVH	(80°-90°)	346.7	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°	3147.9	3147.9	3147.9	3147.9	3147.9	3147.9	3147.9	3147.9	3147.9	3147.9	3147.9
2.5°	3303.2	3279.3	3279.3	3261.4	3261.4	3231.5	3219.5	3213.6	3183.7	3165.8	3147.9
5°	3494.3	3464.4	3458.5	3416.7	3398.8	3333.1	3327.0	3285.3	3231.5	3177.8	3136.0
7.5°	3667.6	3649.7	3619.8	3578.0	3524.2	3440.6	3434.7	3368.9	3279.3	3207.7	3147.9
10°	3793.0	3781.0	3739.3	3685.5	3625.7	3542.2	3536.1	3464.4	3356.9	3273.3	3189.7
12.5°	3942.4	3924.4	3870.6	3798.9	3733.3	3655.6	3649.7	3589.9	3470.5	3363.0	3255.4
15°	4085.7	4061.8	3996.1	3924.4	3852.7	3787.1	3787.1	3721.3	3595.9	3470.5	3345.0
17.5°	4157.4	4145.4	4079.7	4002.1	3942.4	3894.6	3888.5	3828.8	3703.4	3572.0	3434.7
20°	4181.3	4187.2	4127.5	4043.9	4002.1	3978.2	3972.2	3930.4	3793.0	3667.6	3536.1
22.5°	4175.3	4193.2	4145.4	4055.8	4043.9	4043.9	4043.9	3996.1	3888.5	3763.1	3631.7
25°	4199.2	4223.0	4187.2	4079.7	4079.7	4103.6	4103.6	4079.7	3984.2	3876.7	3745.2
27.5°	4282.8	4300.7	4270.8	4121.6	4127.5	4163.3	4157.4	4163.3	4103.6	4002.1	3870.6
30°	4384.4	4408.2	4372.4	4187.2	4181.3	4217.1	4217.1	4247.0	4205.1	4097.6	3990.1
32.5°	4659.1	4653.2	4539.7	4259.0	4240.9	4276.9	4276.9	4306.7	4282.8	4199.2	4097.6
35°	5477.5	5387.9	5137.0	4491.9	4312.7	4330.6	4330.6	4384.4	4396.3	4330.6	4240.9
37.5°	6313.8	6283.9	6092.7	5113.1	4575.5	4444.1	4438.1	4515.8	4569.5	4515.8	4456.1
40°	7156.0	7132.0	7090.3	5943.3	5125.1	4647.2	4629.3	4694.9	4790.6	4754.7	4718.9
42.5°	7938.4	7926.4	7968.3	6761.7	5823.9	5083.2	5029.4	4951.8	5089.2	5077.2	5077.2
45°	8553.7	8583.6	8607.4	7526.3	6582.5	5644.7	5579.0	5316.2	5501.3	5549.1	5585.0
47.5°	8900.1	8924.0	9007.6	8272.9	7341.1	6295.8	6248.0	5817.9	6062.8	6206.2	6307.7
50°	9395.9	9330.2	9401.8	9001.7	8255.0	7144.0	7012.5	6492.9	6803.5	7054.4	7293.3
52.5°	9873.7	9766.2	9826.0	9843.9	9294.3	7974.3	7836.9	7287.4	7675.6	8069.9	8494.0
55°	10303.9	10297.8	10357.6	10662.2	10297.8	8864.3	8709.0	8165.4	8726.9	9151.0	9867.8
57.5°	10650.2	10710.0	10972.9	11612.0	11456.6	9832.0	9658.7	9186.8	9849.9	10274.0	11462.7
60°	11056.5	11152.0	11588.1	12418.3	12514.0	10847.4	10668.3	10327.7	11002.8	11432.8	13308.4
62.5°	11193.8	11331.2	12227.2	13266.5	13619.0	11958.4	11797.2	11570.2	12215.3	12603.6	15148.2
65°	10279.9	10542.7	12579.6	13702.6	14807.6	13296.4	13159.0	12961.9	13421.8	13678.7	16396.6
67.5°	10029.1	10148.5	11892.7	14329.8	15924.7	15016.7	14879.3	14538.9	14550.8	14443.2	16802.7
70°	9676.6	9808.1	11187.9	14801.7	17525.5	17370.2	17203.0	16199.4	15584.1	14933.1	16002.3
72.5°	8243.0	8201.3	9640.8	13529.3	18296.0	20285.1	20088.0	17985.4	16348.8	14509.0	13505.5
75°	4629.3	4509.8	5847.8	9360.1	16707.1	21443.9	21438.0	18887.4	15811.1	12639.4	9192.8
77.5°	1344.0	1308.1	1929.4	3924.4	11247.7	18630.5	18857.5	17035.7	13194.8	9079.3	5047.3
80°	633.2	645.1	830.3	1296.2	4802.4	12024.2	12675.2	11217.8	7884.7	4187.2	2084.7
82.5°	400.2	406.2	567.4	836.3	2030.9	5459.6	5997.2	5047.3	3124.0	1809.9	919.8
85°	250.8	250.8	376.3	549.5	1212.6	1744.2	1893.5	1720.3	1338.0	985.6	501.8
87.5°	137.4	137.4	227.0	316.6	663.1	561.5	579.4	686.9	836.3	603.3	250.8
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°	3147.9	3147.9	3147.9	3147.9	3147.9	3147.9	3147.9	3147.9	3147.9	3147.9	3147.9
2.5°	3141.9	3130.0	3112.0	3106.1	3100.2	3094.1	3100.2	3112.0	3100.2	3100.2	3106.1
5°	3124.0	3112.0	3088.2	3088.2	3094.1	3100.2	3130.0	3147.9	3153.9	3153.9	3153.9
7.5°	3124.0	3106.1	3088.2	3094.1	3106.1	3130.0	3177.8	3207.7	3231.5	3237.5	3237.5
10°	3153.9	3130.0	3118.1	3130.0	3165.8	3183.7	3231.5	3279.3	3309.1	3321.1	3321.1
12.5°	3207.7	3183.7	3183.7	3207.7	3255.4	3279.3	3321.1	3356.9	3392.8	3410.7	3410.7
15°	3297.3	3267.4	3273.3	3315.2	3368.9	3392.8	3422.7	3434.7	3464.4	3488.4	3488.4
17.5°	3380.9	3351.0	3363.0	3410.7	3446.5	3458.5	3476.4	3470.5	3482.4	3500.3	3506.3
20°	3476.4	3446.5	3452.6	3482.4	3488.4	3476.4	3476.4	3458.5	3452.6	3482.4	3494.3
22.5°	3572.0	3542.2	3536.1	3518.2	3488.4	3458.5	3440.6	3422.7	3410.7	3440.6	3452.6
25°	3685.5	3643.6	3613.8	3536.1	3458.5	3404.8	3380.9	3368.9	3363.0	3392.8	3404.8
27.5°	3810.9	3769.2	3679.6	3512.3	3386.8	3297.3	3279.3	3279.3	3291.2	3309.1	3321.1
30°	3930.4	3888.5	3727.3	3458.5	3261.4	3130.0	3112.0	3130.0	3159.8	3177.8	3195.7
32.5°	4049.9	4008.0	3757.2	3374.9	3076.2	2909.0	2897.0	2926.9	2974.6	2986.6	2998.6
35°	4211.2	4169.3	3793.0	3255.4	2843.3	2664.1	2652.1	2670.0	2711.8	2729.7	2747.6
37.5°	4438.1	4414.2	3846.8	3124.0	2628.3	2431.1	2395.2	2383.4	2407.2	2401.3	2425.1
40°	4736.8	4754.7	3942.4	2950.8	2419.2	2216.1	2138.4	2102.6	2078.6	2030.9	2054.8
42.5°	5172.9	5184.7	4049.9	2753.7	2240.0	2013.0	1911.5	1845.7	1797.9	1720.3	1732.3
45°	5812.0	5710.4	4175.3	2544.6	2078.6	1851.7	1732.3	1654.6	1588.8	1523.2	1529.1
47.5°	6660.1	6349.6	4312.7	2371.4	1917.4	1720.3	1612.8	1523.2	1445.5	1391.7	1397.8
50°	7705.5	7144.0	4450.0	2210.1	1756.1	1618.7	1523.2	1427.6	1350.0	1296.2	1290.2
52.5°	9085.3	8099.7	4539.7	2030.9	1594.9	1529.1	1445.5	1355.9	1260.4	1194.6	1188.7
55°	10518.9	9210.8	4617.3	1815.8	1439.6	1427.6	1385.8	1284.2	1170.8	1087.1	1075.2
57.5°	12095.8	10399.4	4677.0	1606.9	1320.1	1344.0	1332.0	1212.6	1087.1	1009.4	1003.5
60°	13529.3	11629.9	4485.9	1421.6	1212.6	1260.4	1272.3	1170.8	1105.1	1123.0	1128.9
62.5°	14974.9	12579.6	3757.2	1284.2	1140.9	1206.6	1308.1	1302.2	1272.3	1302.2	1308.1
65°	15494.5	12776.8	2664.1	1170.8	1069.2	1230.5	1421.6	1409.7	1272.3	1218.5	1206.6
67.5°	15201.9	12191.4	1792.0	1081.2	1015.5	1260.4	1541.1	1409.7	1224.5	1152.9	1128.9
70°	13810.1	10751.8	1314.1	991.5	967.7	1254.3	1606.9	1403.7	1200.6	1123.0	1093.1
72.5°	11014.6	8296.8	1057.2	908.0	896.0	1224.5	1642.7	1391.7	1176.7	1093.1	1057.2
75°	7132.0	5160.9	890.0	824.3	788.5	1176.7	1624.8	1355.9	1146.8	1039.3	1015.5
77.5°	3309.1	2222.1	758.6	728.8	686.9	1105.1	1570.9	1284.2	1081.2	979.6	949.7
80°	1541.1	1051.3	639.1	633.2	615.2	1045.4	1499.2	1200.6	1003.5	919.8	872.1
82.5°	824.3	633.2	519.7	519.7	537.6	973.6	1409.7	1099.1	901.9	860.1	734.7
85°	436.1	364.4	376.3	406.2	459.9	860.1	1290.2	991.5	788.5	657.0	639.1
87.5°	221.1	232.9	232.9	274.8	352.4	698.9	1063.3	818.4	669.0	537.6	525.7
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)