

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: P841191

Luminaire Tested: **ARCH4-140-750-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841191
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-140-750-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24597 lumens
Efficiency: N/A
Efficacy: 174.1 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

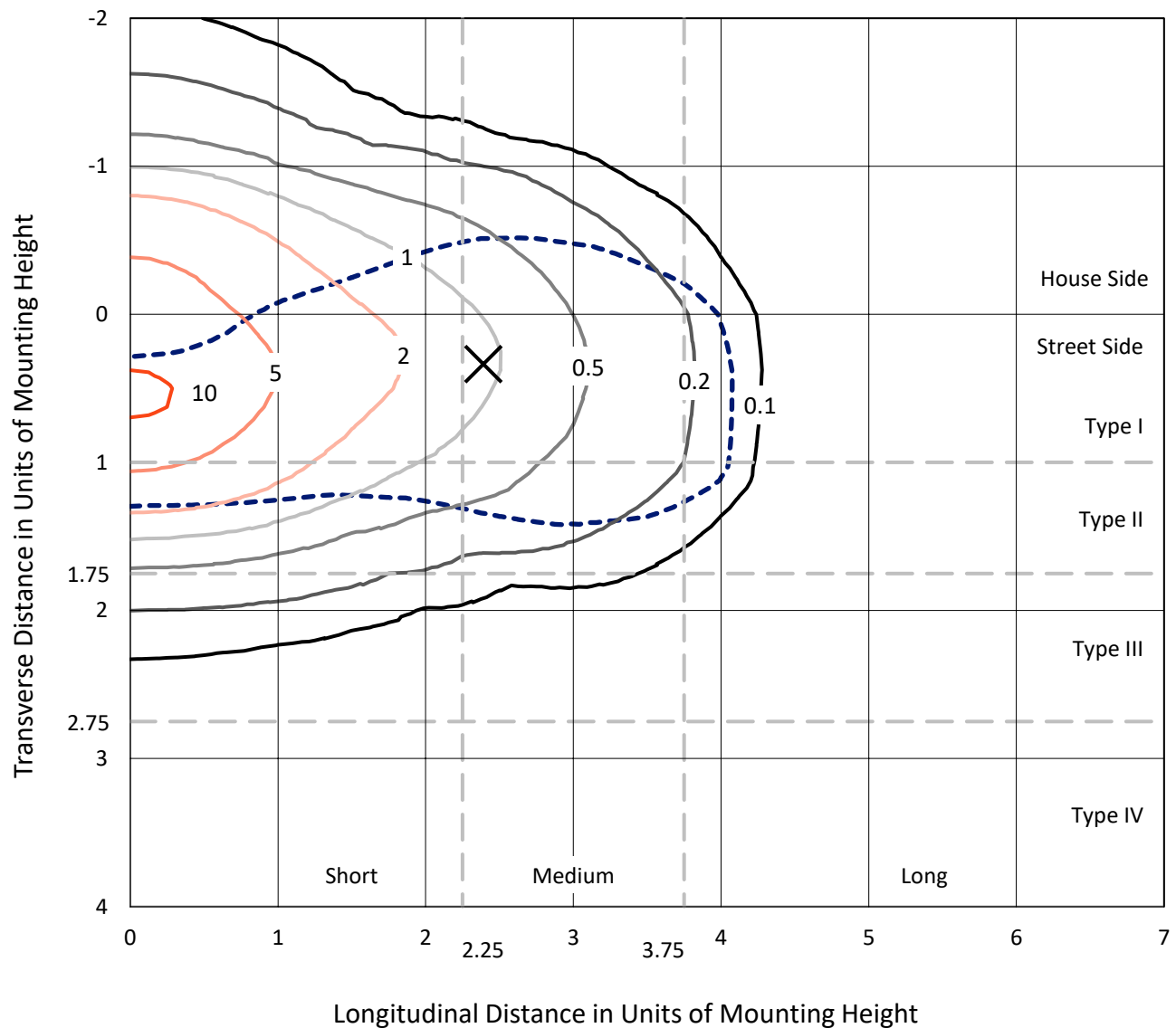
Input Watts (W): 141.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

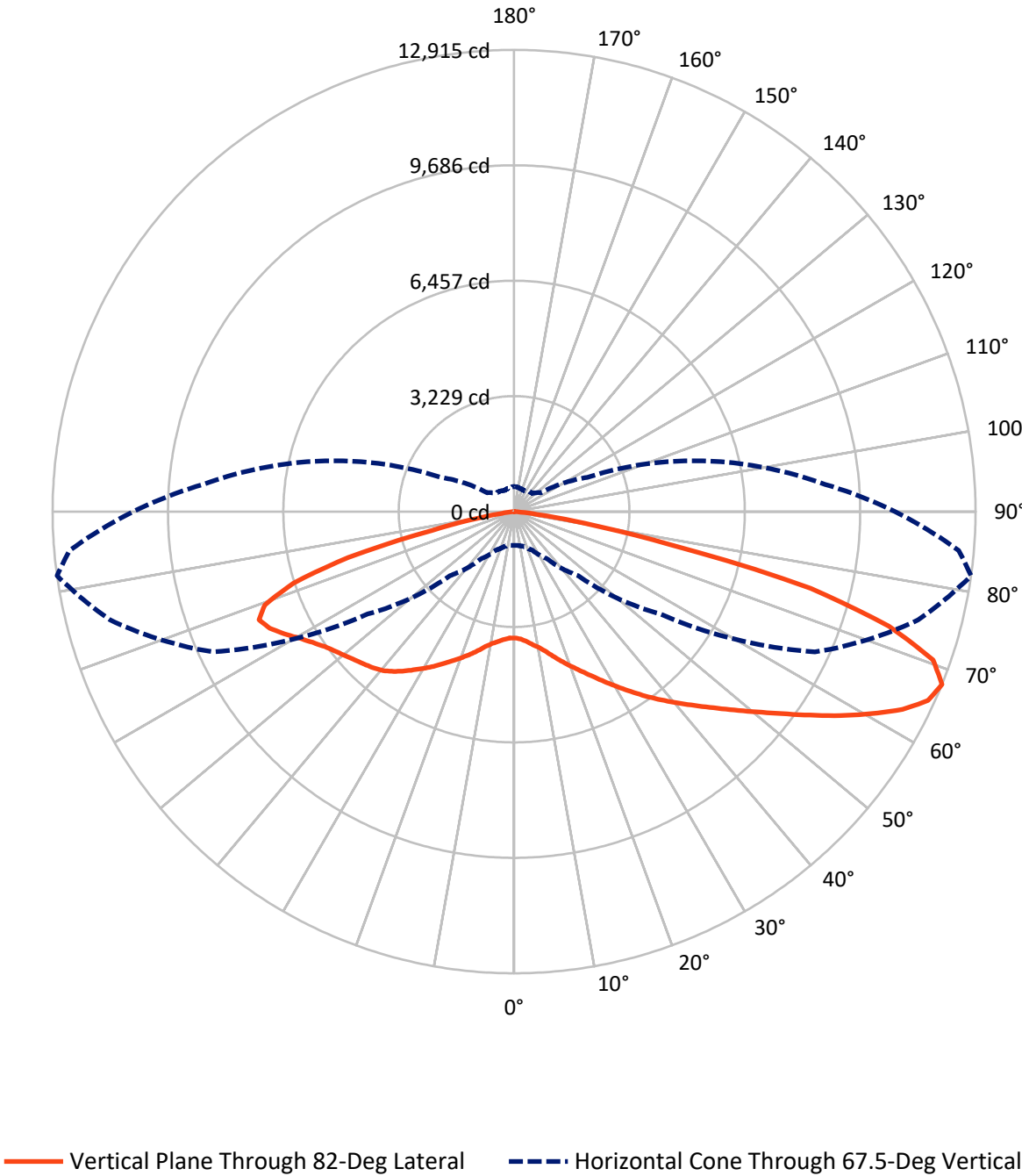
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.8 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	7490.8	0.0	7490.8
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	17106.2	0.0	17106.2
	% Fixture	69.5	0.0	69.5
Total	Lumens	24597.0	0.0	24597.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	365.4	1.5
10°-20°	1316.2	5.4
20°-30°	2645.3	10.8
30°-40°	4155.4	16.9
40°-50°	5062.1	20.6
50°-60°	4783.0	19.4
60°-70°	3949.7	16.1
70°-80°	2150.8	8.7
80°-90°	169.1	0.7
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°	24597.0	100.0
0°-180°	24597.0	100.0

Coefficient of Utilization



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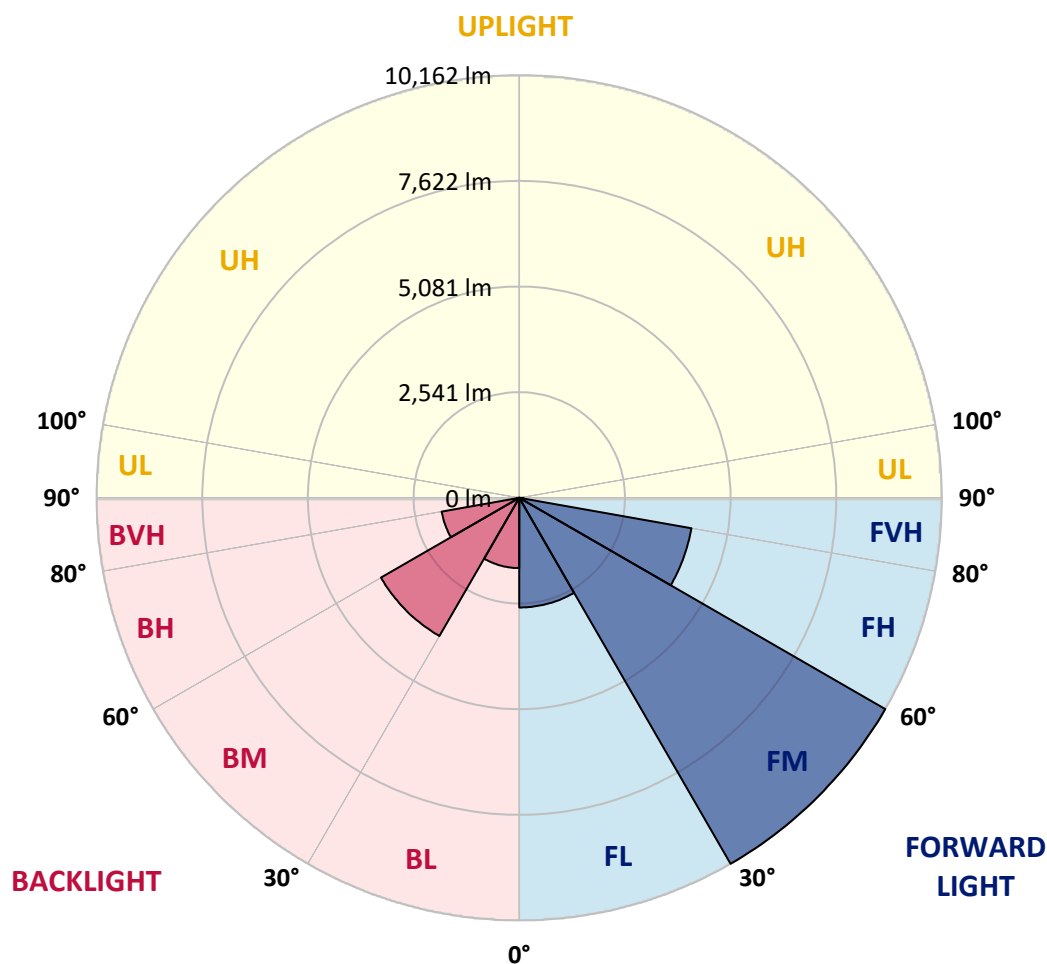
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2637.7	10.7			
FM	(30°-60°)	10162.1	41.3			
FH	(60°-80°)	4204.5	17.1			G2/5000
FVH	(80°-90°)	101.9	0.4			G2/225
BL	(0°-30°)	1689.2	6.9	B3/2500		
BM	(30°-60°)	3838.4	15.6	B3/5000		
BH	(60°-80°)	1895.9	7.7	B3/2500		G3/2500
BVH	(80°-90°)	67.2	0.3			G1/100
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°	82°	85°
0°	3535.8	3535.8	3535.8	3535.8	3535.8	3535.8	3535.8	3535.8	3535.8	3535.8	3535.8
2.5°	3696.5	3696.5	3725.1	3725.1	3700.1	3660.8	3650.1	3607.2	3567.9	3567.9	3571.5
5°	4050.1	4046.5	4068.0	4039.4	3978.7	3900.1	3846.5	3753.7	3675.1	3650.1	3646.5
7.5°	4482.3	4478.7	4489.4	4443.0	4328.7	4200.1	4093.0	3943.0	3814.4	3760.8	3746.5
10°	4964.4	4960.8	4950.1	4871.6	4718.0	4518.0	4357.3	4150.1	3957.2	3871.5	3853.7
12.5°	5518.0	5510.9	5485.9	5371.6	5160.8	4903.7	4671.5	4403.7	4146.5	4028.7	3989.4
15°	6135.9	6125.2	6078.7	5939.4	5657.3	5332.3	5032.3	4689.4	4375.1	4221.5	4168.0
17.5°	6785.9	6785.9	6714.5	6507.3	6193.0	5789.4	5418.0	4982.3	4614.4	4425.1	4360.8
20°	7446.6	7443.1	7353.8	7103.8	6732.3	6268.0	5796.6	5318.0	4860.8	4632.3	4553.7
22.5°	8143.1	8135.9	8025.2	7739.5	7296.6	6771.6	6221.6	5650.1	5132.3	4857.3	4757.3
25°	8943.1	8932.4	8796.7	8446.6	7921.6	7328.8	6700.2	6039.4	5443.0	5107.3	4989.4
27.5°	9793.1	9778.8	9618.1	9211.0	8635.9	7921.6	7228.8	6489.5	5785.9	5385.9	5253.7
30°	10550.3	10539.6	10364.6	9946.7	9286.0	8510.9	7732.3	6939.5	6146.6	5682.3	5518.0
32.5°	11121.7	11121.7	10964.6	10553.8	9868.1	9075.2	8239.5	7364.5	6521.6	6000.2	5807.3
35°	11468.2	11478.9	11343.2	11014.6	10368.1	9607.4	8764.5	7864.5	6921.6	6339.5	6132.3
37.5°	11518.2	11553.9	11475.3	11253.9	10714.6	10050.3	9278.8	8346.6	7335.9	6682.3	6450.2
40°	11286.0	11311.0	11314.6	11228.9	10857.4	10368.1	9732.4	8857.4	7775.2	7043.0	6775.2
42.5°	10821.7	10839.6	10871.7	10896.7	10753.9	10507.4	10078.8	9332.4	8243.1	7410.9	7096.6
45°	10221.7	10218.1	10271.7	10378.8	10371.7	10428.8	10271.7	9764.5	8728.8	7828.8	7453.8
47.5°	9325.2	9307.4	9496.7	9739.5	9861.0	10128.8	10275.3	10103.8	9257.4	8289.5	7860.9
50°	7921.6	7903.8	8318.1	8889.5	9246.7	9653.8	10078.8	10307.4	9811.0	8807.4	8303.8
52.5°	6214.4	6196.6	6721.6	7721.6	8500.2	9093.1	9682.4	10353.8	10336.0	9386.0	8803.8
55°	4621.5	4607.3	5118.0	6200.2	7460.9	8443.1	9196.7	10232.4	10828.9	10050.3	9411.0
57.5°	3257.2	3250.1	3693.0	4589.4	6125.2	7650.2	8728.8	9996.7	11282.4	10771.7	10096.7
60°	2285.8	2275.1	2596.5	3289.4	4632.3	6453.7	8264.5	9682.4	11621.7	11482.4	10825.3
62.5°	1539.3	1532.2	1760.8	2339.3	3289.4	4968.0	7560.9	9471.7	11814.6	12196.7	11561.0
65°	1167.9	1164.3	1267.9	1585.8	2328.6	3567.9	6443.0	9446.7	11839.6	12732.5	12186.0
67.5°	942.9	946.5	1003.6	1185.7	1610.8	2535.8	4996.6	9289.5	11707.4	12914.6	12489.6
70°	771.4	771.4	796.4	917.9	1189.3	1710.8	3489.4	8575.2	11339.6	12439.6	12128.9
72.5°	589.3	592.9	671.4	742.9	896.5	1200.0	2235.8	7096.6	10471.7	10968.1	10732.4
75°	467.9	464.3	510.7	610.7	696.4	857.2	1371.5	5089.4	8910.9	8571.7	8421.6
77.5°	335.7	332.2	367.9	453.6	528.6	607.2	817.9	2567.9	4846.6	4453.7	4343.0
80°	228.6	221.4	253.6	314.3	350.0	357.2	400.0	985.7	2114.3	1992.9	1967.9
82.5°	117.9	117.9	135.7	178.6	182.1	185.7	178.6	317.9	700.0	653.6	625.0
85°	46.4	46.4	50.0	60.7	60.7	64.3	64.3	82.1	75.0	71.4	67.9
87.5°	3.6	3.6	7.1	7.1	10.7	10.7	10.7	14.3	17.9	17.9	17.9
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°	3535.8	3535.8	3535.8	3535.8	3535.8	3535.8	3535.8	3535.8	3535.8	3535.8	3535.8
2.5°	3564.4	3550.1	3503.7	3492.9	3485.8	3475.1	3478.7	3453.7	3442.9	3446.5	3432.2
5°	3628.7	3603.7	3546.5	3521.5	3514.4	3503.7	3514.4	3496.5	3478.7	3485.8	3478.7
7.5°	3718.0	3682.2	3610.8	3585.8	3582.2	3571.5	3585.8	3571.5	3557.2	3564.4	3550.1
10°	3810.8	3764.4	3685.8	3660.8	3660.8	3657.2	3671.5	3650.1	3635.8	3639.4	3632.2
12.5°	3946.5	3885.8	3800.1	3778.7	3768.0	3778.7	3782.2	3753.7	3728.7	3732.2	3721.5
15°	4110.8	4043.0	3950.1	3918.0	3910.8	3907.2	3893.0	3857.2	3825.1	3821.5	3810.8
17.5°	4289.4	4203.7	4093.0	4060.8	4028.7	4018.0	3982.2	3935.8	3885.8	3885.8	3871.5
20°	4460.8	4364.4	4232.3	4185.8	4139.4	4096.5	4035.8	3960.8	3896.5	3885.8	3871.5
22.5°	4646.5	4532.3	4378.7	4310.8	4228.7	4143.0	4039.4	3939.4	3857.2	3839.4	3828.7
25°	4853.7	4710.8	4528.7	4428.7	4296.5	4164.4	4010.8	3882.2	3785.8	3757.2	3750.1
27.5°	5082.3	4910.8	4689.4	4543.0	4350.1	4143.0	3946.5	3793.0	3675.1	3639.4	3628.7
30°	5314.4	5110.8	4835.8	4621.5	4350.1	4075.1	3828.7	3650.1	3514.4	3464.4	3457.2
32.5°	5546.6	5318.0	4968.0	4664.4	4307.3	3960.8	3675.1	3464.4	3310.8	3250.1	3264.4
35°	5825.2	5546.6	5089.4	4682.3	4235.8	3821.5	3500.1	3253.7	3096.5	3042.9	3053.7
37.5°	6114.4	5775.1	5185.8	4668.0	4135.8	3664.4	3303.7	3064.4	2867.9	2775.1	2785.8
40°	6364.5	5982.3	5253.7	4618.0	4007.2	3485.8	3110.8	2796.5	2525.1	2435.8	2425.1
42.5°	6600.2	6135.9	5289.4	4543.0	3860.8	3278.7	2835.8	2432.2	2160.8	2050.1	2053.6
45°	6846.6	6285.9	5275.1	4443.0	3678.7	3035.8	2482.2	2075.1	1835.8	1735.8	1739.3
47.5°	7128.8	6446.6	5260.9	4335.8	3457.2	2721.5	2142.9	1760.8	1553.6	1482.2	1475.0
50°	7428.8	6625.2	5243.0	4203.7	3210.8	2371.5	1807.2	1467.9	1292.9	1246.5	1235.7
52.5°	7768.1	6818.0	5232.3	4046.5	2914.4	2000.1	1507.2	1210.7	1092.9	1060.7	1057.2
55°	8175.2	7043.0	5246.6	3857.2	2557.2	1650.0	1253.6	1042.9	964.3	946.5	942.9
57.5°	8671.7	7332.3	5289.4	3635.8	2182.2	1346.5	1067.9	939.3	889.3	875.0	875.0
60°	9211.0	7660.9	5368.0	3385.8	1807.2	1110.7	946.5	857.2	835.7	853.6	853.6
62.5°	9793.1	8046.6	5507.3	3082.2	1457.2	939.3	850.0	789.3	775.0	810.7	814.3
65°	10332.4	8421.6	5596.6	2717.9	1157.2	814.3	775.0	721.4	728.6	764.3	760.7
67.5°	10664.6	8732.4	5471.6	2260.8	917.9	721.4	696.4	650.0	667.9	696.4	700.0
70°	10461.0	8557.4	4853.7	1707.2	717.9	628.6	610.7	582.2	596.4	632.2	646.4
72.5°	9464.5	7664.5	3775.1	1153.6	578.6	528.6	535.7	521.4	539.3	571.4	603.6
75°	7682.3	5793.0	2532.2	739.3	457.2	450.0	460.7	450.0	457.2	489.3	507.2
77.5°	4010.8	2825.1	1260.7	460.7	339.3	350.0	367.9	371.4	392.9	400.0	407.2
80°	1871.5	1271.5	525.0	257.1	225.0	246.4	282.2	285.7	292.9	303.6	307.2
82.5°	610.7	382.2	242.9	139.3	128.6	139.3	182.1	217.9	221.4	242.9	242.9
85°	64.3	39.3	53.6	57.1	50.0	60.7	82.1	78.6	35.7	21.4	21.4
87.5°	17.9	14.3	17.9	17.9	14.3	14.3	10.7	3.6	0.0	0.0	0.0
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)