

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: P840894

Luminaire Tested: **ARCH4-100-740-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P840894
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: ARCH4-100-740-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 845mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18503 lumens
Efficiency: N/A
Efficacy: 179.5 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): 103.1
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

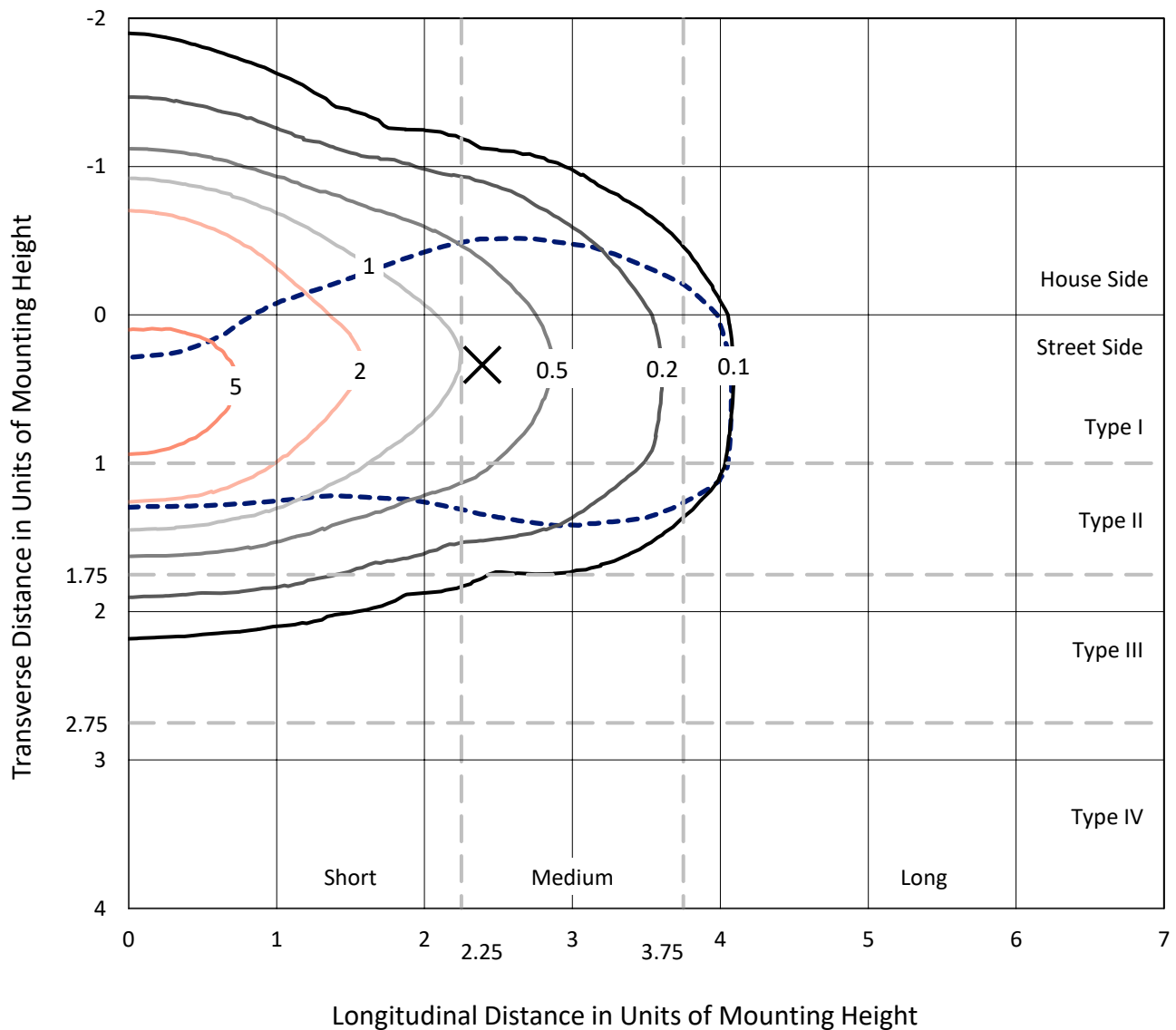


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Iso-Footcandle Lines of Horizontal Illumination

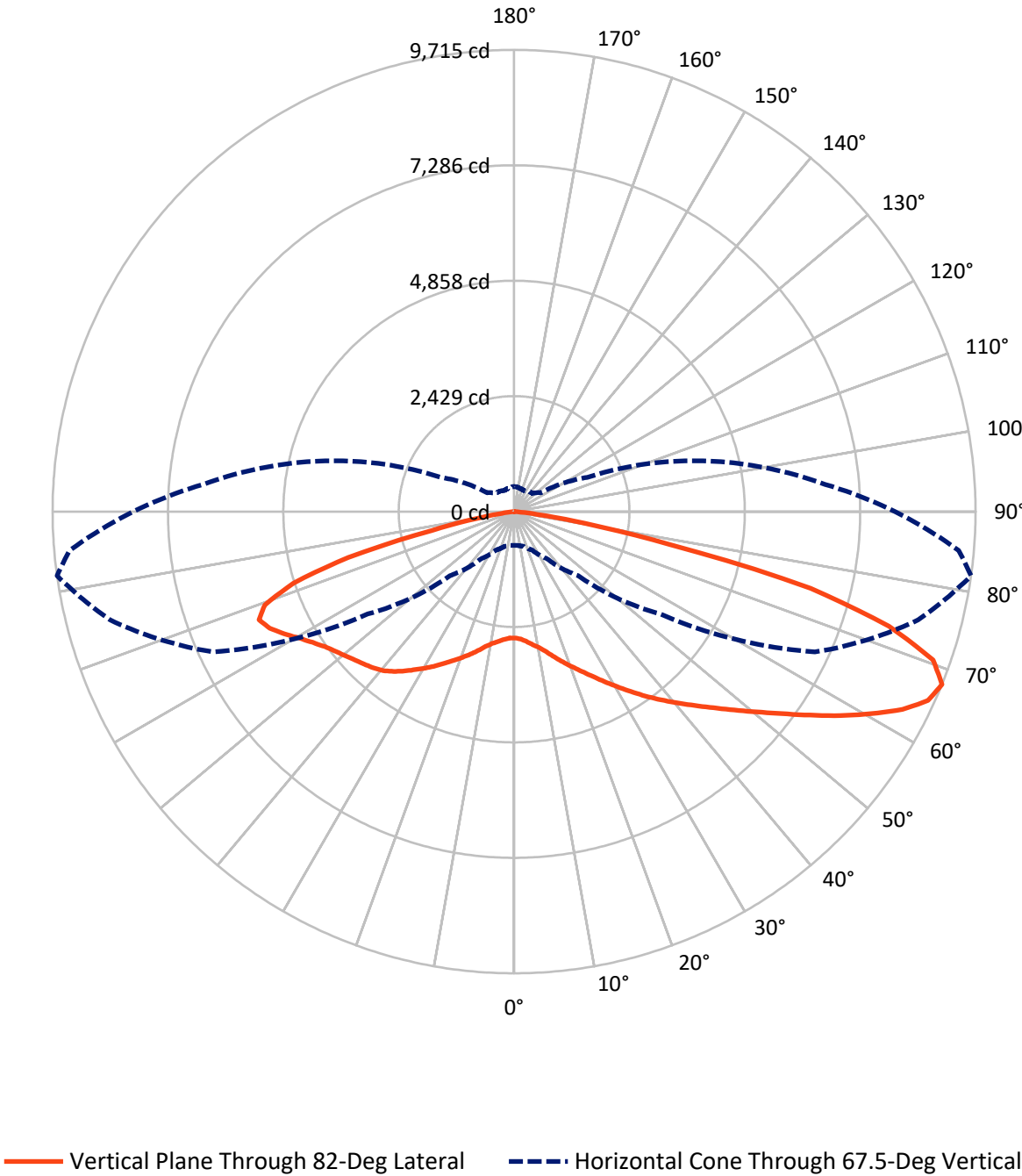
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 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	5634.9	0.0	5634.9
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	12868.1	0.0	12868.1
	% Fixture	69.5	0.0	69.5
Total	Lumens	18503.0	0.0	18503.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.9	1.5
10°-20°	990.1	5.4
20°-30°	1989.9	10.8
30°-40°	3125.9	16.9
40°-50°	3807.9	20.6
50°-60°	3598.0	19.4
60°-70°	2971.1	16.1
70°-80°	1617.9	8.7
80°-90°	127.2	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°	18503.0	100.0
0°-180°	18503.0	100.0

Coefficient of Utilization



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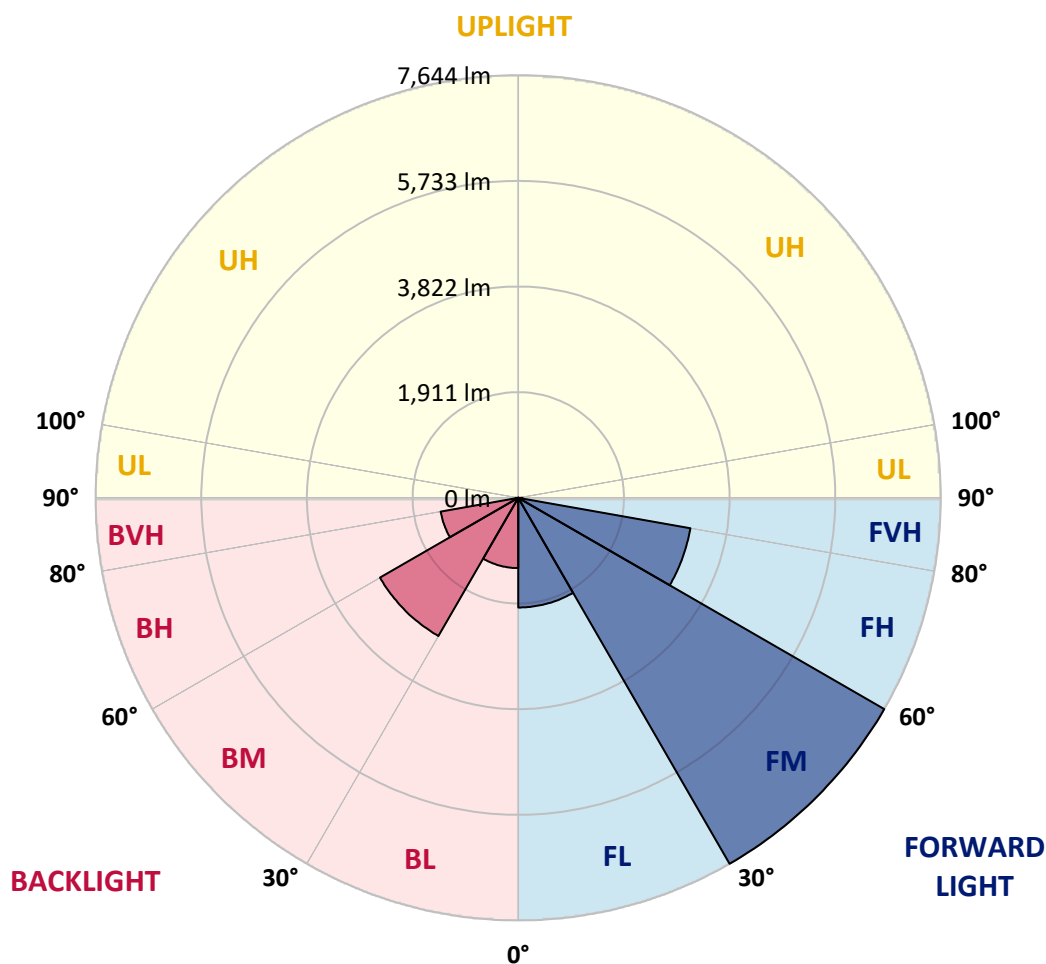
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1984.2	10.7			
FM	(30°-60°)	7644.4	41.3			
FH	(60°-80°)	3162.8	17.1			G2/5000
FVH	(80°-90°)	76.7	0.4			G1/100
BL	(0°-30°)	1270.7	6.9	B3/2500		
BM	(30°-60°)	2887.4	15.6	B3/5000		
BH	(60°-80°)	1426.2	7.7	B3/2500		G3/2500
BVH	(80°-90°)	50.5	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°	2659.8	2659.8	2659.8	2659.8	2659.8	2659.8	2659.8	2659.8	2659.8	2659.8	2659.8
2.5°	2780.7	2780.7	2802.2	2802.2	2783.4	2753.8	2745.8	2713.5	2684.0	2684.0	2686.7
5°	3046.7	3044.0	3060.1	3038.6	2992.9	2933.8	2893.5	2823.7	2764.6	2745.8	2743.1
7.5°	3371.8	3369.1	3377.1	3342.2	3256.2	3159.5	3078.9	2966.1	2869.4	2829.1	2818.3
10°	3734.5	3731.8	3723.7	3664.6	3549.1	3398.6	3277.7	3121.9	2976.8	2912.3	2898.9
12.5°	4150.9	4145.5	4126.7	4040.7	3882.2	3688.8	3514.2	3312.7	3119.2	3030.6	3001.0
15°	4615.7	4607.6	4572.7	4467.9	4255.7	4011.2	3785.5	3527.6	3291.2	3175.6	3135.3
17.5°	5104.7	5104.7	5050.9	4895.1	4658.7	4355.1	4075.7	3747.9	3471.2	3328.8	3280.4
20°	5601.7	5599.0	5531.8	5343.8	5064.4	4715.1	4360.5	4000.4	3656.5	3484.6	3425.5
22.5°	6125.6	6120.2	6036.9	5822.0	5488.9	5093.9	4680.2	4250.3	3860.7	3653.9	3578.6
25°	6727.4	6719.3	6617.3	6354.0	5959.0	5513.0	5040.2	4543.1	4094.5	3841.9	3753.3
27.5°	7366.8	7356.1	7235.2	6928.9	6496.4	5959.0	5437.8	4881.7	4352.4	4051.5	3952.1
30°	7936.4	7928.3	7796.7	7482.4	6985.3	6402.3	5816.6	5220.2	4623.7	4274.5	4150.9
32.5°	8366.3	8366.3	8248.1	7939.1	7423.3	6826.8	6198.1	5539.9	4905.8	4513.6	4368.5
35°	8626.9	8634.9	8532.8	8285.7	7799.4	7227.1	6593.1	5916.0	5206.8	4768.8	4613.0
37.5°	8664.5	8691.4	8632.2	8465.7	8060.0	7560.3	6980.0	6278.7	5518.4	5026.7	4852.1
40°	8489.9	8508.7	8511.3	8446.9	8167.5	7799.4	7321.2	6662.9	5848.9	5298.1	5096.6
42.5°	8140.6	8154.0	8178.2	8197.0	8089.5	7904.2	7581.8	7020.3	6200.8	5574.8	5338.4
45°	7689.2	7686.5	7726.8	7807.4	7802.1	7845.1	7726.8	7345.3	6566.2	5889.2	5607.1
47.5°	7014.9	7001.4	7143.8	7326.5	7417.9	7619.4	7729.5	7600.6	6963.8	6235.7	5913.3
50°	5959.0	5945.6	6257.2	6687.1	6955.8	7262.1	7581.8	7753.7	7380.3	6625.3	6246.5
52.5°	4674.8	4661.4	5056.3	5808.6	6394.3	6840.2	7283.5	7788.6	7775.2	7060.6	6622.6
55°	3476.5	3465.8	3850.0	4664.0	5612.4	6351.3	6918.2	7697.3	8146.0	7560.3	7079.4
57.5°	2450.2	2444.9	2778.0	3452.4	4607.6	5754.8	6566.2	7520.0	8487.2	8103.0	7595.2
60°	1719.5	1711.4	1953.2	2474.4	3484.6	4854.8	6216.9	7283.5	8742.4	8637.6	8143.3
62.5°	1158.0	1152.6	1324.5	1759.8	2474.4	3737.1	5687.7	7125.0	8887.5	9175.0	8696.7
65°	878.5	875.9	953.8	1192.9	1751.7	2684.0	4846.7	7106.2	8906.3	9578.0	9166.9
67.5°	709.3	712.0	755.0	892.0	1211.7	1907.5	3758.6	6988.0	8806.9	9715.0	9395.3
70°	580.3	580.3	599.1	690.5	894.7	1286.9	2624.9	6450.7	8530.2	9357.6	9123.9
72.5°	443.3	446.0	505.1	558.8	674.4	902.7	1681.9	5338.4	7877.3	8250.7	8073.4
75°	352.0	349.3	384.2	459.4	523.9	644.8	1031.7	3828.5	6703.2	6448.0	6335.2
77.5°	252.5	249.9	276.7	341.2	397.6	456.7	615.2	1931.7	3645.8	3350.3	3267.0
80°	171.9	166.6	190.8	236.4	263.3	268.7	300.9	741.5	1590.5	1499.2	1480.4
82.5°	88.7	88.7	102.1	134.3	137.0	139.7	134.3	239.1	526.6	491.7	470.2
85°	34.9	34.9	37.6	45.7	45.7	48.4	48.4	61.8	56.4	53.7	51.0
87.5°	2.7	2.7	5.4	5.4	8.1	8.1	8.1	10.7	13.4	13.4	13.4
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°	2659.8	2659.8	2659.8	2659.8	2659.8	2659.8	2659.8	2659.8	2659.8	2659.8	2659.8
2.5°	2681.3	2670.5	2635.6	2627.6	2622.2	2614.1	2616.8	2598.0	2589.9	2592.6	2581.9
5°	2729.6	2710.8	2667.9	2649.1	2643.7	2635.6	2643.7	2630.2	2616.8	2622.2	2616.8
7.5°	2796.8	2769.9	2716.2	2697.4	2694.7	2686.7	2697.4	2686.7	2675.9	2681.3	2670.5
10°	2866.7	2831.7	2772.6	2753.8	2753.8	2751.1	2761.9	2745.8	2735.0	2737.7	2732.3
12.5°	2968.8	2923.1	2858.6	2842.5	2834.4	2842.5	2845.2	2823.7	2804.9	2807.6	2799.5
15°	3092.3	3041.3	2971.4	2947.3	2941.9	2939.2	2928.5	2901.6	2877.4	2874.7	2866.7
17.5°	3226.7	3162.2	3078.9	3054.7	3030.6	3022.5	2995.6	2960.7	2923.1	2923.1	2912.3
20°	3355.6	3283.1	3183.7	3148.8	3113.8	3081.6	3035.9	2979.5	2931.1	2923.1	2912.3
22.5°	3495.3	3409.4	3293.8	3242.8	3181.0	3116.5	3038.6	2963.4	2901.6	2888.2	2880.1
25°	3651.2	3543.7	3406.7	3331.5	3232.1	3132.6	3017.1	2920.4	2847.9	2826.4	2821.0
27.5°	3823.1	3694.2	3527.6	3417.4	3272.4	3116.5	2968.8	2853.2	2764.6	2737.7	2729.6
30°	3997.8	3844.6	3637.7	3476.5	3272.4	3065.5	2880.1	2745.8	2643.7	2606.1	2600.7
32.5°	4172.4	4000.4	3737.1	3508.8	3240.1	2979.5	2764.6	2606.1	2490.5	2444.9	2455.6
35°	4381.9	4172.4	3828.5	3522.2	3186.4	2874.7	2632.9	2447.6	2329.3	2289.0	2297.1
37.5°	4599.6	4344.3	3901.0	3511.5	3111.2	2756.5	2485.2	2305.2	2157.4	2087.5	2095.6
40°	4787.6	4500.2	3952.1	3473.9	3014.4	2622.2	2340.1	2103.7	1899.5	1832.3	1824.2
42.5°	4965.0	4615.7	3978.9	3417.4	2904.3	2466.4	2133.2	1829.6	1625.4	1542.1	1544.8
45°	5150.3	4728.5	3968.2	3342.2	2767.3	2283.7	1867.2	1561.0	1380.9	1305.7	1308.4
47.5°	5362.6	4849.4	3957.5	3261.6	2600.7	2047.2	1612.0	1324.5	1168.7	1115.0	1109.6
50°	5588.3	4983.8	3944.0	3162.2	2415.3	1783.9	1359.5	1104.2	972.6	937.6	929.6
52.5°	5843.5	5128.8	3936.0	3044.0	2192.3	1504.5	1133.8	910.8	822.1	797.9	795.3
55°	6149.8	5298.1	3946.7	2901.6	1923.7	1241.2	943.0	784.5	725.4	712.0	709.3
57.5°	6523.2	5515.7	3978.9	2735.0	1641.6	1012.9	803.3	706.6	669.0	658.2	658.2
60°	6928.9	5762.9	4038.1	2547.0	1359.5	835.6	712.0	644.8	628.7	642.1	642.1
62.5°	7366.8	6053.1	4142.8	2318.6	1096.2	706.6	639.4	593.8	583.0	609.9	612.6
65°	7772.5	6335.2	4210.0	2044.6	870.5	612.6	583.0	542.7	548.1	574.9	572.3
67.5°	8022.4	6568.9	4116.0	1700.7	690.5	542.7	523.9	489.0	502.4	523.9	526.6
70°	7869.2	6437.2	3651.2	1284.2	540.0	472.9	459.4	437.9	448.7	475.5	486.3
72.5°	7119.7	5765.6	2839.8	867.8	435.2	397.6	403.0	392.3	405.7	429.9	454.0
75°	5779.0	4357.8	1904.8	556.1	343.9	338.5	346.6	338.5	343.9	368.1	381.5
77.5°	3017.1	2125.2	948.4	346.6	255.2	263.3	276.7	279.4	295.5	300.9	306.3
80°	1407.8	956.5	394.9	193.4	169.3	185.4	212.2	214.9	220.3	228.4	231.1
82.5°	459.4	287.5	182.7	104.8	96.7	104.8	137.0	163.9	166.6	182.7	182.7
85°	48.4	29.6	40.3	43.0	37.6	45.7	61.8	59.1	26.9	16.1	16.1
87.5°	13.4	10.7	13.4	13.4	10.7	10.7	8.1	2.7	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)