

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: P835848

Luminaire Tested: **ARCH3-100-750-U-T2R**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P835848
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-100-750-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 805mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16698 lumens
Efficiency: N/A
Efficacy: 162.7 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): 102.6
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



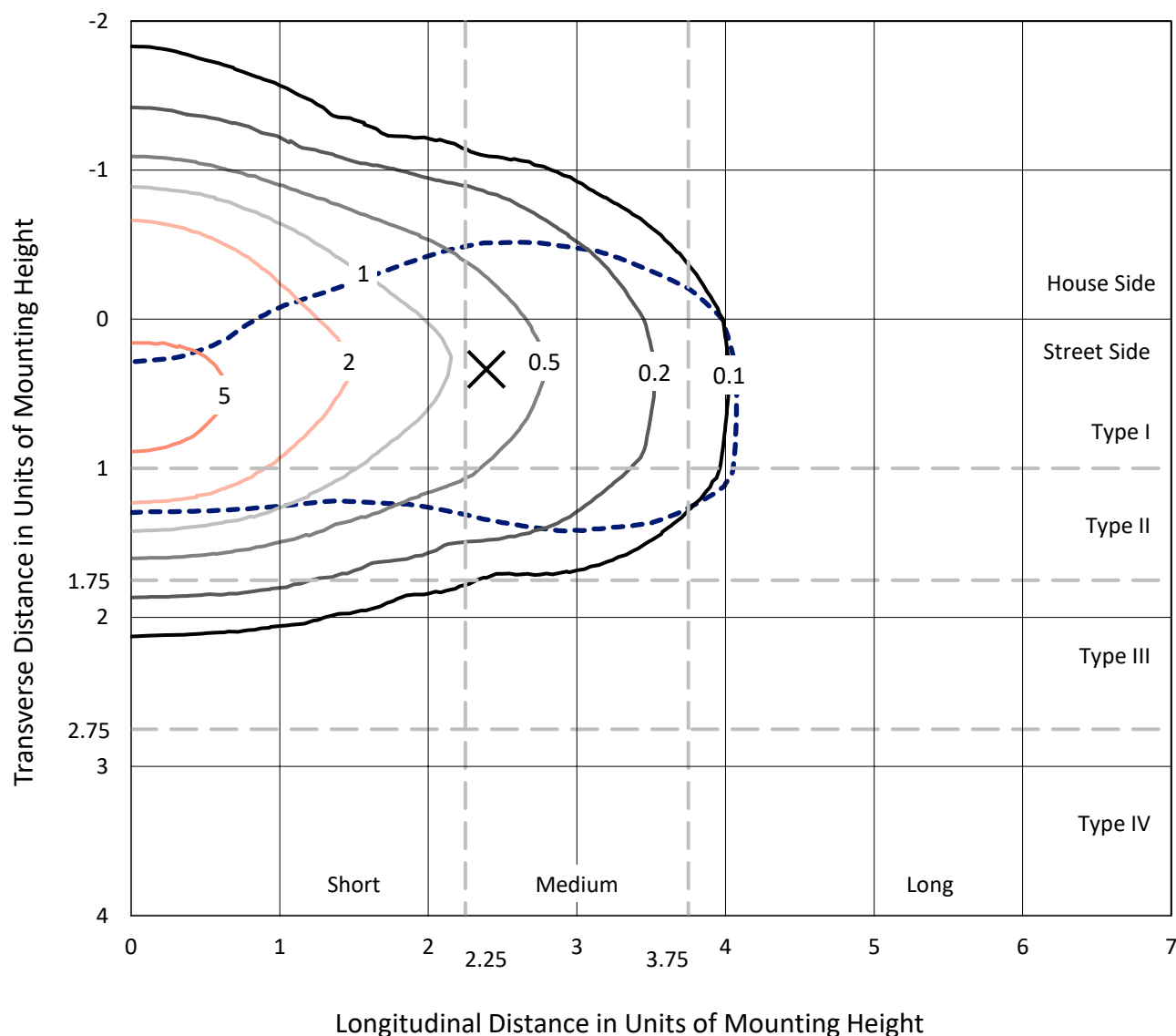
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

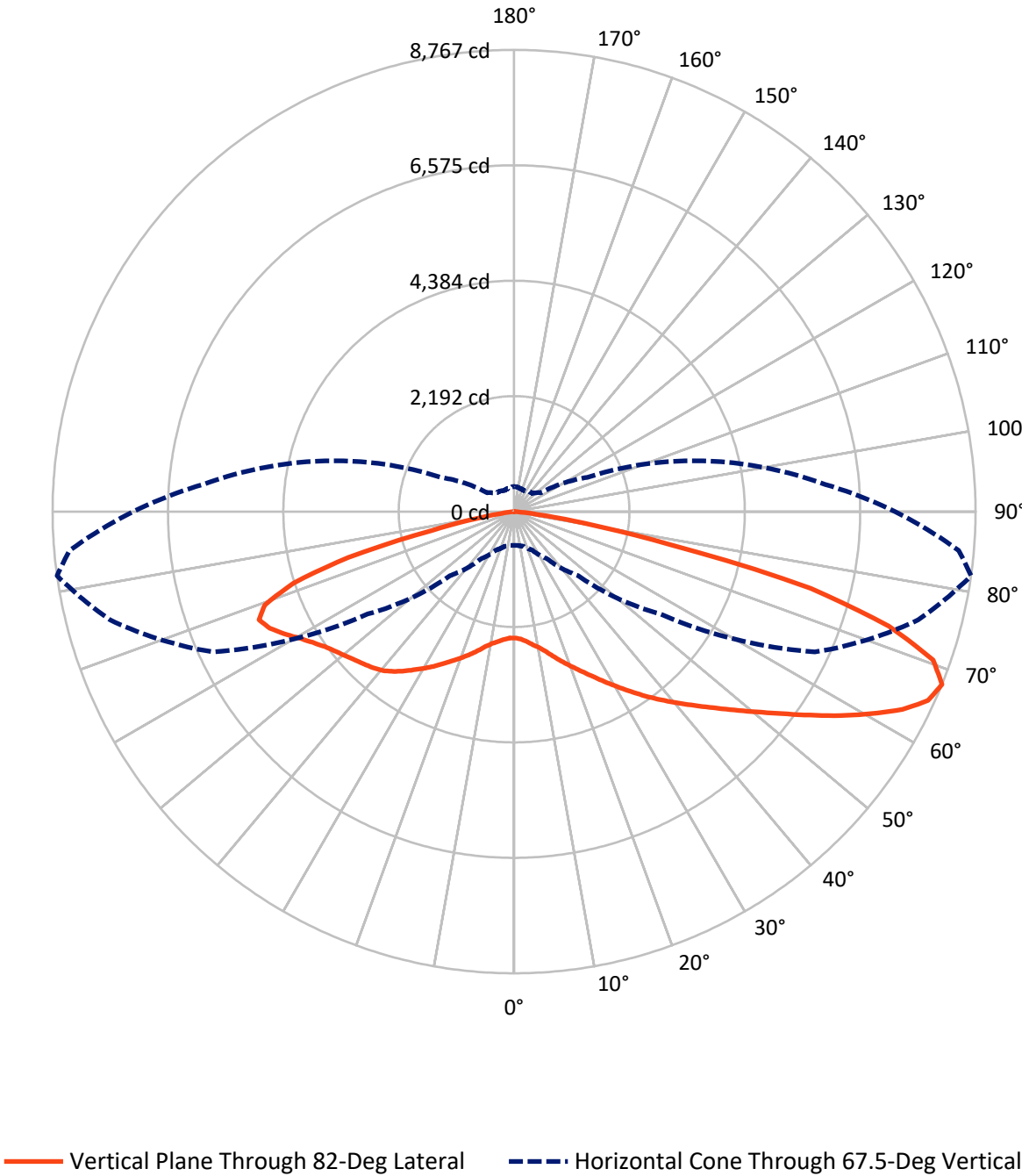
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 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	5085.2	0.0	5085.2
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	11612.8	0.0	11612.8
	% Fixture	69.5	0.0	69.5
Total	Lumens	16698.0	0.0	16698.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.1	1.5
10°-20°	893.5	5.4
20°-30°	1795.8	10.8
30°-40°	2820.9	16.9
40°-50°	3436.5	20.6
50°-60°	3247.0	19.4
60°-70°	2681.3	16.1
70°-80°	1460.1	8.7
80°-90°	114.8	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°	16698.0	100.0
0°-180°	16698.0	100.0

Coefficient of Utilization



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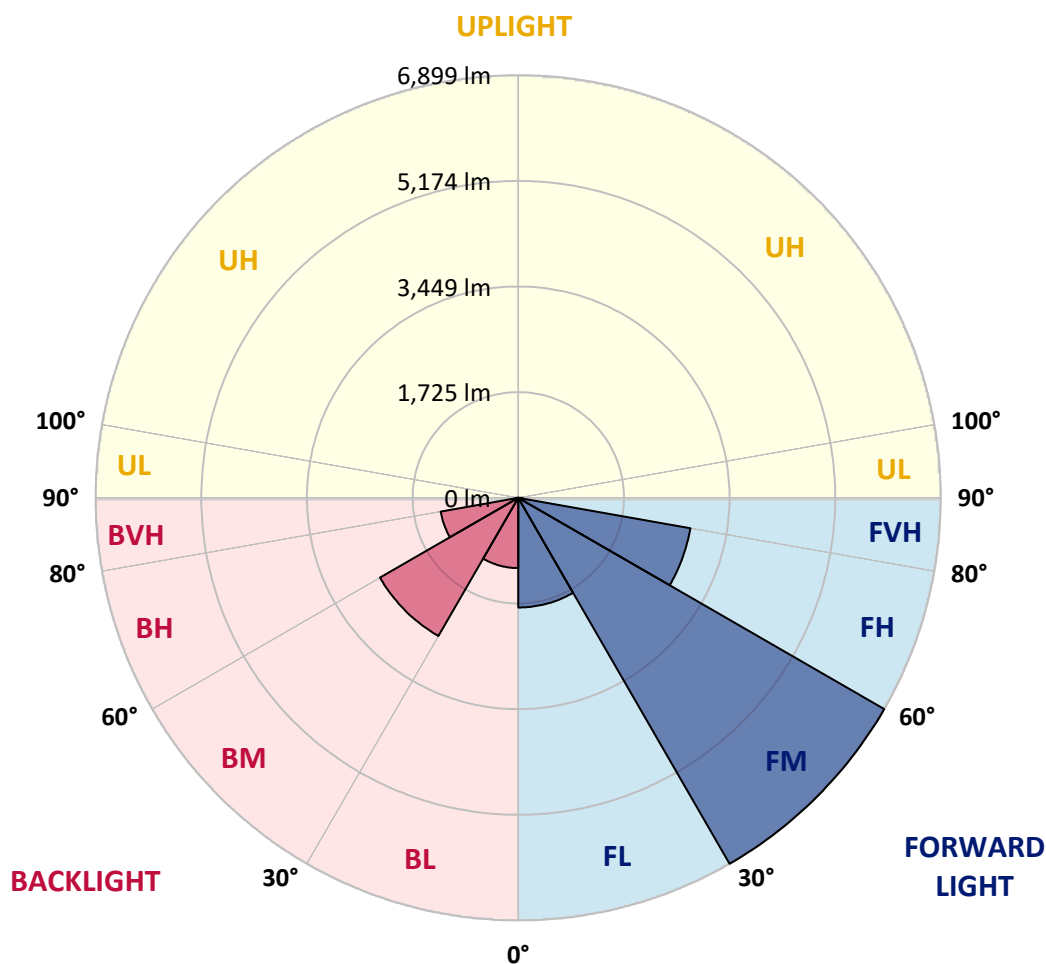
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1790.6	10.7			
FM	(30°-60°)	6898.7	41.3			
FH	(60°-80°)	2854.3	17.1			G2/5000
FVH	(80°-90°)	69.2	0.4			G1/100
BL	(0°-30°)	1146.8	6.9	B3/2500		
BM	(30°-60°)	2605.8	15.6	B3/5000		
BH	(60°-80°)	1287.1	7.7	B3/2500		G3/2500
BVH	(80°-90°)	45.6	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°	2400.3	2400.3	2400.3	2400.3	2400.3	2400.3	2400.3	2400.3	2400.3	2400.3	2400.3
2.5°	2509.4	2509.4	2528.8	2528.8	2511.9	2485.2	2477.9	2448.8	2422.2	2422.2	2424.6
5°	2749.5	2747.0	2761.6	2742.2	2701.0	2647.6	2611.3	2548.2	2494.9	2477.9	2475.5
7.5°	3042.8	3040.4	3047.7	3016.2	2938.6	2851.3	2778.6	2676.7	2589.4	2553.1	2543.4
10°	3370.2	3367.7	3360.5	3307.1	3202.9	3067.1	2958.0	2817.4	2686.4	2628.2	2616.1
12.5°	3746.0	3741.1	3724.1	3646.6	3503.5	3328.9	3171.3	2989.5	2814.9	2734.9	2708.2
15°	4165.4	4158.1	4126.6	4032.1	3840.5	3619.9	3416.2	3183.5	2970.1	2865.8	2829.5
17.5°	4606.7	4606.7	4558.2	4417.6	4204.2	3930.2	3678.1	3382.3	3132.6	3004.0	2960.4
20°	5055.2	5052.8	4992.2	4822.5	4570.3	4255.1	3935.1	3610.2	3299.8	3144.7	3091.3
22.5°	5528.0	5523.2	5448.0	5254.1	4953.4	4597.0	4223.6	3835.7	3484.1	3297.4	3229.5
25°	6071.1	6063.9	5971.7	5734.1	5377.7	4975.2	4548.5	4100.0	3695.1	3467.1	3387.1
27.5°	6648.2	6638.5	6529.4	6253.0	5862.6	5377.7	4907.3	4405.5	3927.8	3656.3	3566.5
30°	7162.2	7154.9	7036.1	6752.4	6303.9	5777.8	5249.2	4710.9	4172.7	3857.5	3746.0
32.5°	7550.1	7550.1	7443.4	7164.6	6699.1	6160.8	5593.5	4999.5	4427.3	4073.3	3942.4
35°	7785.3	7792.6	7700.4	7477.4	7038.5	6522.1	5949.9	5338.9	4698.8	4303.6	4163.0
37.5°	7819.3	7843.5	7790.2	7639.8	7273.7	6822.8	6299.0	5666.2	4980.1	4536.4	4378.8
40°	7661.7	7678.6	7681.1	7622.9	7370.7	7038.5	6607.0	6012.9	5278.3	4781.3	4599.4
42.5°	7346.5	7358.6	7380.4	7397.4	7300.4	7133.1	6842.1	6335.4	5595.9	5031.0	4817.6
45°	6939.1	6936.7	6973.1	7045.8	7041.0	7079.8	6973.1	6628.8	5925.7	5314.7	5060.1
47.5°	6330.6	6318.4	6446.9	6611.8	6694.3	6876.1	6975.5	6859.1	6284.5	5627.4	5336.5
50°	5377.7	5365.6	5646.8	6034.8	6277.2	6553.6	6842.1	6997.3	6660.3	5979.0	5637.1
52.5°	4218.8	4206.6	4563.0	5241.9	5770.5	6173.0	6573.0	7028.8	7016.7	6371.8	5976.6
55°	3137.4	3127.7	3474.4	4209.1	5064.9	5731.7	6243.3	6946.4	7351.3	6822.8	6388.8
57.5°	2211.2	2206.4	2507.0	3115.6	4158.1	5193.4	5925.7	6786.4	7659.2	7312.5	6854.3
60°	1551.7	1544.5	1762.7	2233.0	3144.7	4381.2	5610.5	6573.0	7889.6	7795.0	7348.9
62.5°	1045.0	1040.1	1195.3	1588.1	2233.0	3372.6	5132.8	6430.0	8020.5	8279.9	7848.3
65°	792.8	790.4	860.7	1076.5	1580.8	2422.2	4373.9	6413.0	8037.5	8643.6	8272.6
67.5°	640.1	642.5	681.3	805.0	1093.5	1721.4	3392.0	6306.3	7947.8	8767.3	8478.7
70°	523.7	523.7	540.7	623.1	807.4	1161.4	2368.8	5821.4	7698.0	8444.8	8233.9
72.5°	400.1	402.5	455.8	504.3	608.6	814.7	1517.8	4817.6	7108.9	7445.9	7285.8
75°	317.6	315.2	346.7	414.6	472.8	581.9	931.0	3455.0	6049.3	5819.0	5717.1
77.5°	227.9	225.5	249.7	307.9	358.8	412.2	555.2	1743.3	3290.1	3023.4	2948.3
80°	155.2	150.3	172.1	213.4	237.6	242.5	271.6	669.2	1435.3	1352.9	1335.9
82.5°	80.0	80.0	92.1	121.2	123.7	126.1	121.2	215.8	475.2	443.7	424.3
85°	31.5	31.5	33.9	41.2	41.2	43.6	43.6	55.8	50.9	48.5	46.1
87.5°	2.4	2.4	4.8	4.8	7.3	7.3	7.3	9.7	12.1	12.1	12.1
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°	2400.3	2400.3	2400.3	2400.3	2400.3	2400.3	2400.3	2400.3	2400.3	2400.3	2400.3
2.5°	2419.7	2410.0	2378.5	2371.2	2366.4	2359.1	2361.5	2344.6	2337.3	2339.7	2330.0
5°	2463.4	2446.4	2407.6	2390.6	2385.8	2378.5	2385.8	2373.7	2361.5	2366.4	2361.5
7.5°	2524.0	2499.7	2451.2	2434.3	2431.8	2424.6	2434.3	2424.6	2414.9	2419.7	2410.0
10°	2587.0	2555.5	2502.2	2485.2	2485.2	2482.8	2492.5	2477.9	2468.2	2470.6	2465.8
12.5°	2679.2	2637.9	2579.7	2565.2	2557.9	2565.2	2567.6	2548.2	2531.3	2533.7	2526.4
15°	2790.7	2744.6	2681.6	2659.8	2654.9	2652.5	2642.8	2618.5	2596.7	2594.3	2587.0
17.5°	2911.9	2853.7	2778.6	2756.7	2734.9	2727.6	2703.4	2671.9	2637.9	2637.9	2628.2
20°	3028.3	2962.8	2873.1	2841.6	2810.1	2781.0	2739.8	2688.9	2645.2	2637.9	2628.2
22.5°	3154.4	3076.8	2972.5	2926.5	2870.7	2812.5	2742.2	2674.3	2618.5	2606.4	2599.1
25°	3295.0	3198.0	3074.4	3006.5	2916.8	2827.1	2722.8	2635.5	2570.0	2550.7	2545.8
27.5°	3450.2	3333.8	3183.5	3084.1	2953.1	2812.5	2679.2	2574.9	2494.9	2470.6	2463.4
30°	3607.8	3469.6	3282.9	3137.4	2953.1	2766.4	2599.1	2477.9	2385.8	2351.8	2347.0
32.5°	3765.4	3610.2	3372.6	3166.5	2924.0	2688.9	2494.9	2351.8	2247.6	2206.4	2216.1
35°	3954.5	3765.4	3455.0	3178.6	2875.5	2594.3	2376.1	2208.8	2102.1	2065.7	2073.0
37.5°	4150.9	3920.5	3520.5	3168.9	2807.7	2487.6	2242.7	2080.3	1946.9	1883.9	1891.2
40°	4320.6	4061.2	3566.5	3135.0	2720.4	2366.4	2111.8	1898.4	1714.2	1653.6	1646.3
42.5°	4480.6	4165.4	3590.8	3084.1	2621.0	2225.8	1925.1	1651.1	1466.9	1391.7	1394.1
45°	4647.9	4267.3	3581.1	3016.2	2497.3	2060.9	1685.1	1408.7	1246.2	1178.3	1180.8
47.5°	4839.5	4376.4	3571.4	2943.4	2347.0	1847.5	1454.7	1195.3	1054.7	1006.2	1001.3
50°	5043.1	4497.6	3559.3	2853.7	2179.7	1609.9	1226.8	996.5	877.7	846.2	838.9
52.5°	5273.4	4628.5	3552.0	2747.0	1978.5	1357.8	1023.2	821.9	741.9	720.1	717.7
55°	5549.9	4781.3	3561.7	2618.5	1736.0	1120.2	851.0	708.0	654.6	642.5	640.1
57.5°	5886.9	4977.7	3590.8	2468.2	1481.4	914.1	724.9	637.7	603.7	594.0	594.0
60°	6253.0	5200.7	3644.1	2298.5	1226.8	754.0	642.5	581.9	567.4	579.5	579.5
62.5°	6648.2	5462.6	3738.7	2092.4	989.2	637.7	577.0	535.8	526.1	550.4	552.8
65°	7014.3	5717.1	3799.3	1845.1	785.6	552.8	526.1	489.8	494.6	518.9	516.4
67.5°	7239.8	5928.1	3714.4	1534.8	623.1	489.8	472.8	441.3	453.4	472.8	475.2
70°	7101.6	5809.3	3295.0	1158.9	487.3	426.7	414.6	395.2	404.9	429.1	438.8
72.5°	6425.1	5203.1	2562.8	783.1	392.8	358.8	363.7	354.0	366.1	387.9	409.8
75°	5215.3	3932.7	1719.0	501.9	310.3	305.5	312.8	305.5	310.3	332.2	344.3
77.5°	2722.8	1917.8	855.9	312.8	230.3	237.6	249.7	252.2	266.7	271.6	276.4
80°	1270.5	863.1	356.4	174.6	152.7	167.3	191.5	194.0	198.8	206.1	208.5
82.5°	414.6	259.4	164.9	94.6	87.3	94.6	123.7	147.9	150.3	164.9	164.9
85°	43.6	26.7	36.4	38.8	33.9	41.2	55.8	53.3	24.2	14.5	14.5
87.5°	12.1	9.7	12.1	12.1	9.7	9.7	7.3	2.4	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)