

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: P399989

Luminaire Tested: **ARCH-L-PA3-220-727-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399989
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-220-727-U-T3
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25886 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

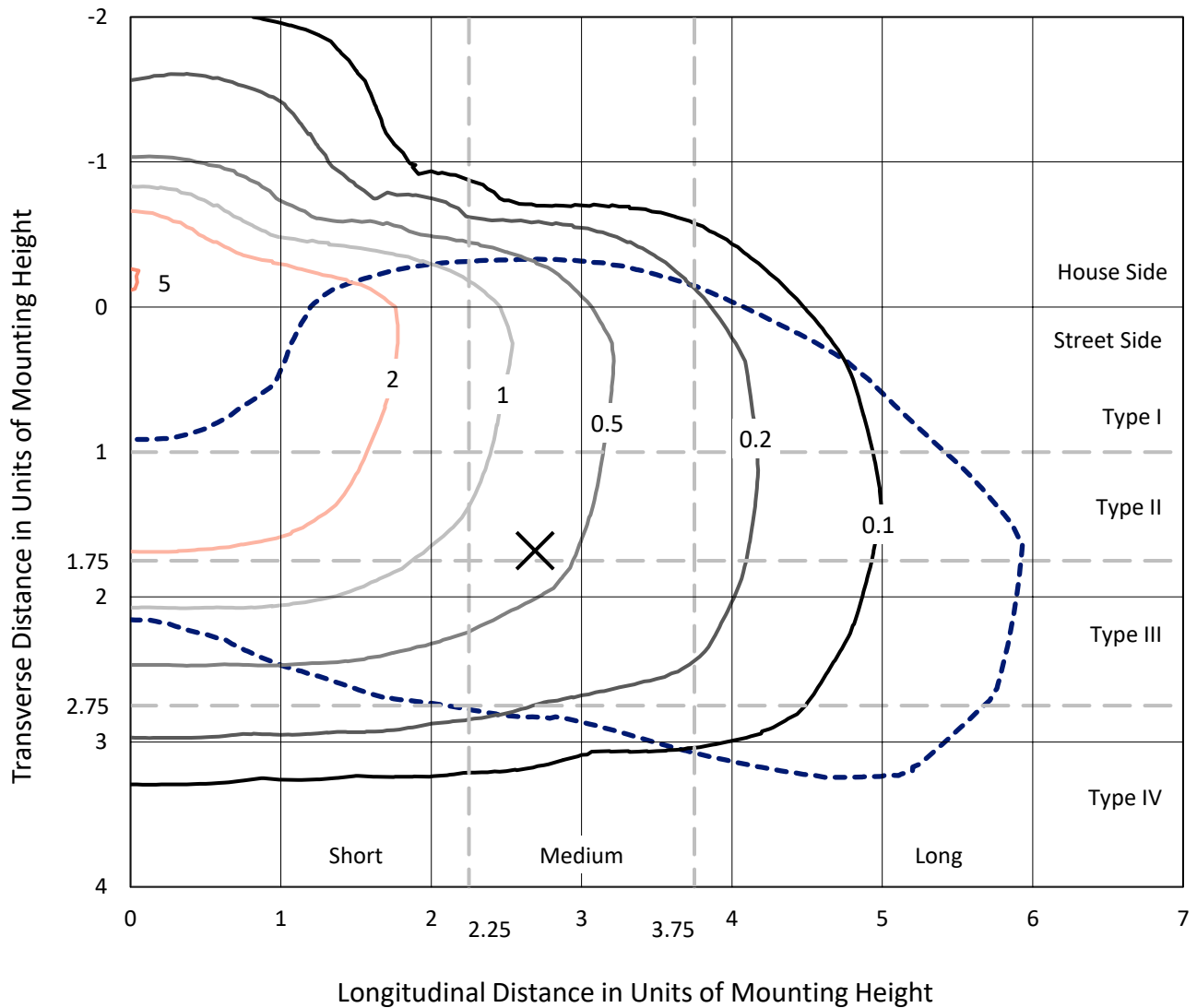
Input Watts (W): 222
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

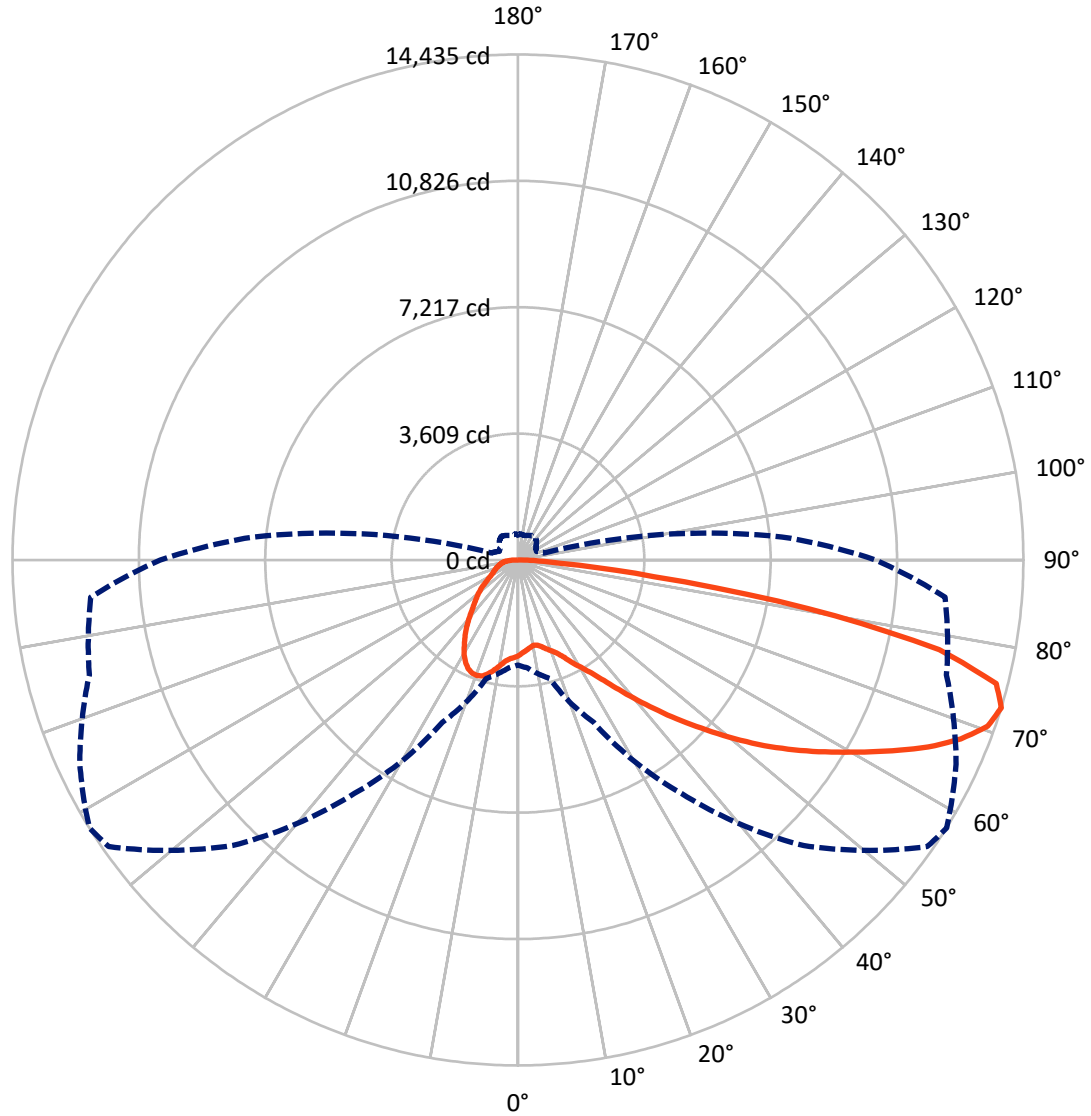
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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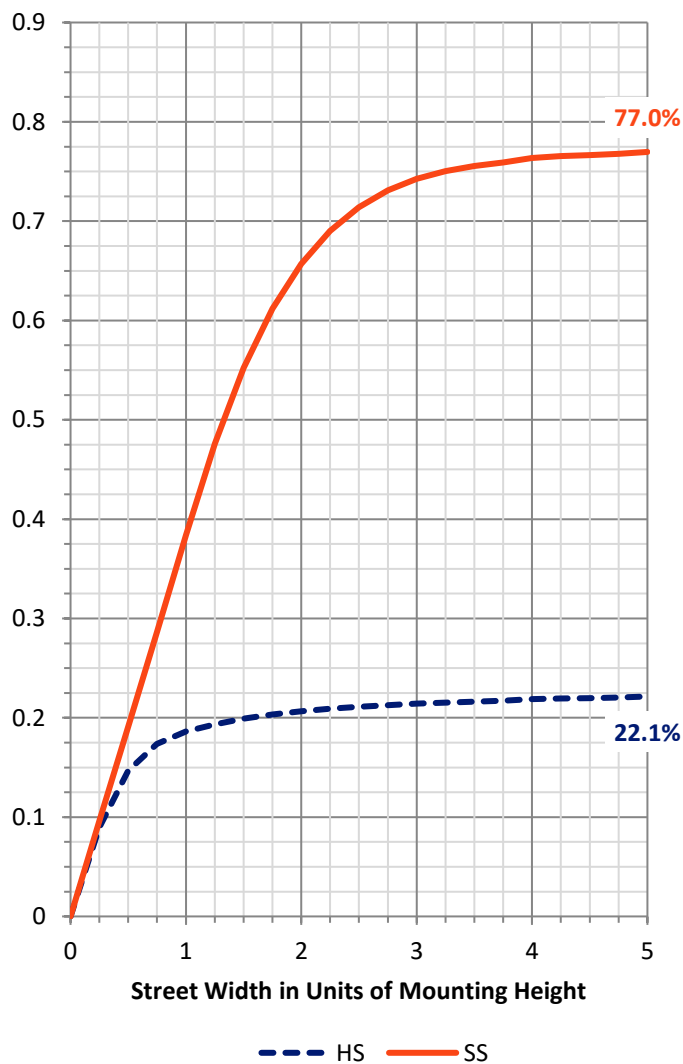
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5870.7	0.0	5870.7
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	20015.3	0.0	20015.3
	% Fixture	77.3	0.0	77.3
Total	Lumens	25886.0	0.0	25886.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.0	1.0
10°-20°	835.3	3.2
20°-30°	1496.3	5.8
30°-40°	2250.9	8.7
40°-50°	3644.9	14.1
50°-60°	5486.8	21.2
60°-70°	6457.4	24.9
70°-80°	4578.9	17.7
80°-90°	872.5	3.4
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°	25886.0	100.0
0°-180°	25886.0	100.0



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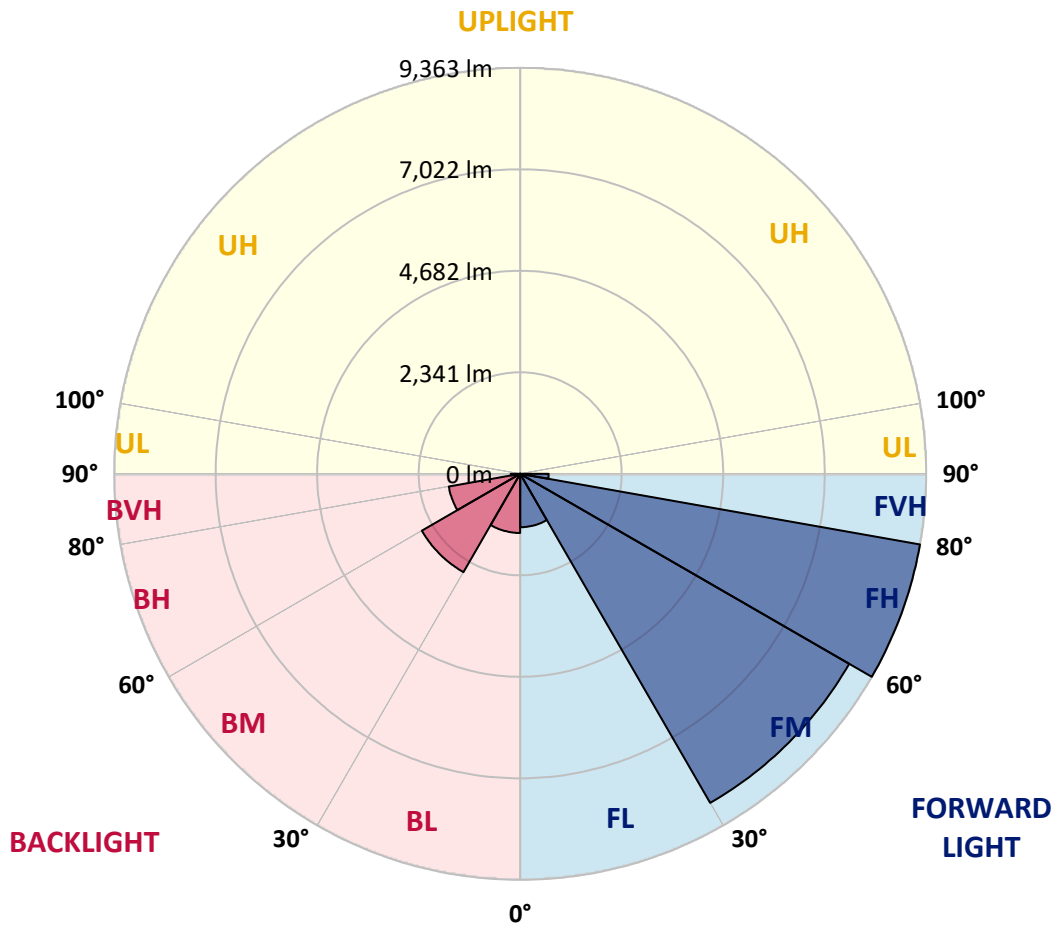
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1231.0	4.8			
FM (30°-60°)	8763.2	33.9			
FH (60°-80°)	9363.1	36.2			G4/12000
FVH (80°-90°)	658.1	2.5			G4/750
BL (0°-30°)	1363.6	5.3	B3/2500		
BM (30°-60°)	2619.4	10.1	B3/5000		
BH (60°-80°)	1673.2	6.5	B3/2500		G3/2500
BVH (80°-90°)	214.4	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2730.4	2730.4	2730.4	2730.4	2730.4	2730.4	2730.4	2730.4	2730.4	2730.4	2730.4
2.5°	2627.9	2614.2	2617.7	2617.7	2631.3	2638.2	2641.6	2651.8	2658.7	2675.7	2699.7
5°	2504.9	2494.6	2498.0	2501.5	2525.4	2549.3	2569.8	2583.5	2604.0	2631.3	2665.5
7.5°	2416.0	2409.2	2412.6	2419.4	2440.0	2467.3	2501.5	2522.0	2552.7	2604.0	2662.1
10°	2351.1	2351.1	2354.5	2368.2	2388.7	2422.9	2450.2	2474.1	2535.6	2627.9	2716.8
12.5°	2299.8	2299.8	2310.1	2337.4	2371.6	2405.8	2470.7	2498.0	2580.1	2706.5	2812.4
15°	2296.4	2299.8	2303.3	2327.2	2364.8	2440.0	2535.6	2576.6	2675.7	2826.1	2949.1
17.5°	2351.1	2354.5	2340.9	2347.7	2392.1	2498.0	2624.5	2672.3	2798.8	2962.8	3089.2
20°	2518.6	2518.6	2477.5	2440.0	2470.7	2586.9	2730.4	2778.3	2918.4	3099.5	3225.9
22.5°	2860.3	2877.4	2781.7	2699.7	2651.8	2716.8	2846.6	2897.9	3055.1	3249.9	3376.3
25°	3273.8	3290.9	3161.0	3044.8	2956.0	2945.7	3031.1	3085.8	3215.7	3417.3	3523.2
27.5°	3673.6	3642.8	3523.2	3413.9	3301.1	3208.8	3273.8	3321.6	3472.0	3625.8	3690.7
30°	3988.0	3964.1	3847.9	3769.3	3663.3	3543.7	3506.1	3557.4	3680.4	3824.0	3858.1
32.5°	4336.6	4319.5	4203.3	4100.8	4011.9	3899.1	3817.1	3841.0	3909.4	4011.9	4032.4
35°	4780.8	4818.4	4695.4	4486.9	4387.8	4278.5	4220.4	4227.2	4278.5	4343.4	4309.2
37.5°	5249.0	5293.4	5300.2	4972.2	4838.9	4739.8	4678.3	4702.2	4763.7	4808.1	4702.2
40°	6117.0	6072.5	5894.8	5652.2	5447.2	5351.5	5266.1	5262.6	5307.1	5385.7	5194.3
42.5°	7268.6	7227.6	6868.8	6554.4	6229.7	6120.4	5952.9	5881.2	5901.7	6000.8	5734.2
45°	8372.4	8355.3	8068.2	7702.6	7313.0	7101.1	6718.4	6544.1	6527.0	6605.6	6287.8
47.5°	9353.2	9278.0	9069.5	8785.9	8744.9	8191.3	7487.3	7251.5	7169.5	7213.9	6858.5
50°	10402.3	10146.0	9858.9	9684.6	9981.9	9465.9	8263.0	8017.0	7815.4	7846.1	7477.1
52.5°	10959.3	10528.7	10340.7	10392.0	10791.8	10593.6	9107.1	8806.4	8481.7	8526.2	8092.2
55°	10480.9	10477.4	10559.5	10877.3	11434.3	11205.3	9910.2	9571.9	9216.5	9226.7	8799.5
57.5°	9824.7	9958.0	10381.8	11082.3	12230.5	11847.8	10699.6	10340.7	10016.1	9964.8	9602.6
60°	9226.7	9373.7	9988.8	11048.1	12507.3	12435.6	11451.4	11137.0	10873.8	10723.5	10446.7
62.5°	8317.7	8427.1	9298.5	10829.4	12274.9	12859.3	12213.4	11998.1	11799.9	11489.0	11355.7
65°	7248.1	7285.7	8204.9	10108.4	11984.5	13023.3	12972.1	12876.4	12685.0	12227.1	12254.4
67.5°	6089.6	6164.8	6971.3	8956.7	11348.9	12948.1	13559.8	13638.4	13412.9	12726.0	12828.5
70°	4856.0	4948.3	5559.9	7364.3	10269.0	12623.5	14103.2	14229.6	13795.6	12890.1	12934.5
72.5°	3003.8	3092.7	3502.7	5115.7	8140.0	11533.4	14270.6	14434.7	13805.9	12671.3	12244.2
75°	1038.9	1049.1	1370.3	2453.6	4832.1	8707.3	13723.9	14110.0	13371.9	11875.1	10655.1
77.5°	475.0	492.1	608.3	1011.5	2142.6	4698.8	11331.8	12298.9	12052.8	10631.2	8201.5
80°	328.1	334.9	420.3	604.9	1237.1	1654.0	7152.4	8413.4	8844.0	8232.3	5255.8
82.5°	246.0	252.9	324.6	410.1	891.9	803.1	2723.6	3909.4	4859.4	4770.6	2197.3
85°	235.8	232.4	252.9	273.4	594.6	478.4	881.7	1209.7	1896.6	1623.2	553.6
87.5°	102.5	112.8	259.7	153.8	311.0	222.1	382.7	447.7	577.5	502.3	198.2
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°	2730.4	2730.4	2730.4	2730.4	2730.4	2730.4	2730.4	2730.4	2730.4	2730.4	2730.4
2.5°	2709.9	2716.8	2737.3	2768.0	2785.1	2819.3	2843.2	2856.9	2867.1	2870.5	2870.5
5°	2686.0	2699.7	2744.1	2795.4	2843.2	2915.0	2979.9	3017.5	3044.8	3055.1	3058.5
7.5°	2692.8	2727.0	2791.9	2867.1	2928.6	3020.9	3099.5	3174.7	3236.2	3260.1	3260.1
10°	2757.8	2805.6	2894.5	2993.6	3072.2	3167.8	3249.9	3314.8	3386.5	3427.6	3434.4
12.5°	2856.9	2915.0	3031.1	3140.5	3229.3	3304.5	3379.7	3427.6	3461.7	3492.5	3499.3
15°	2997.0	3068.7	3184.9	3297.7	3376.3	3424.1	3444.6	3444.6	3441.2	3444.6	3451.5
17.5°	3137.1	3205.4	3321.6	3434.4	3472.0	3444.6	3420.7	3413.9	3410.5	3403.6	3407.0
20°	3273.8	3338.7	3437.8	3523.2	3492.5	3396.8	3366.0	3362.6	3352.4	3345.5	3338.7
22.5°	3410.5	3458.3	3540.3	3571.1	3448.1	3311.4	3273.8	3253.3	3239.6	3222.5	3205.4
25°	3567.7	3581.3	3642.8	3595.0	3338.7	3154.2	3099.5	3068.7	3055.1	3038.0	3024.3
27.5°	3714.6	3714.6	3724.9	3557.4	3178.1	2945.7	2863.7	2809.0	2805.6	2802.2	2798.8
30°	3847.9	3830.8	3796.6	3444.6	2969.6	2689.4	2566.4	2511.7	2532.2	2549.3	2552.7
32.5°	4005.1	3970.9	3875.2	3290.9	2720.2	2402.4	2252.0	2228.1	2252.0	2272.5	2258.8
35°	4251.1	4189.6	3957.2	3113.2	2481.0	2139.2	1995.7	1961.5	1954.7	1951.3	1923.9
37.5°	4603.1	4497.2	4022.2	2921.8	2245.2	1906.9	1800.9	1729.2	1664.2	1595.9	1585.6
40°	5033.7	4852.6	4066.6	2703.1	1995.7	1712.1	1599.3	1507.0	1397.7	1278.1	1264.4
42.5°	5505.3	5235.3	4087.1	2460.5	1777.0	1551.5	1411.3	1295.2	1172.1	1079.9	1062.8
45°	6014.4	5648.8	4070.0	2228.1	1599.3	1414.8	1257.6	1131.1	1032.0	967.1	953.4
47.5°	6510.0	6123.8	4022.2	2043.5	1462.6	1298.6	1138.0	1021.8	946.6	874.8	857.7
50°	7145.6	6578.3	3964.1	1900.0	1312.2	1182.4	1062.8	939.8	854.3	820.2	813.3
52.5°	7849.5	7032.8	3895.7	1718.9	1165.3	1090.1	1014.9	905.6	878.2	813.3	803.1
55°	8611.6	7572.7	3882.1	1489.9	1035.4	1025.2	967.1	936.3	943.2	813.3	796.2
57.5°	9414.7	8150.3	3912.8	1261.0	929.5	967.1	987.6	963.7	953.4	830.4	796.2
60°	10251.9	8707.3	3820.5	1049.1	847.5	919.3	1011.5	950.0	874.8	823.6	799.6
62.5°	11065.2	9175.5	3420.7	898.7	786.0	905.6	997.9	898.7	813.3	813.3	803.1
65°	11656.4	9383.9	2675.7	789.4	745.0	888.5	973.9	864.6	796.2	820.2	806.5
67.5°	11724.8	9168.6	1797.5	704.0	710.8	857.7	919.3	833.8	779.1	840.7	820.2
70°	11304.4	8608.2	1100.4	639.0	666.4	803.1	871.4	803.1	755.2	823.6	792.8
72.5°	10214.3	7562.5	775.7	584.4	618.5	751.8	827.0	775.7	721.1	745.0	714.2
75°	8379.2	5860.7	615.1	533.1	570.7	704.0	789.4	734.7	680.0	669.8	649.3
77.5°	5935.9	3755.6	495.5	492.1	519.4	645.9	738.1	686.9	632.2	611.7	598.0
80°	3413.9	1841.9	427.2	444.2	471.6	587.8	676.6	632.2	580.9	550.2	529.7
82.5°	1305.4	642.5	375.9	386.2	416.9	526.3	615.1	577.5	526.3	553.6	464.8
85°	423.7	352.0	307.6	317.8	348.6	437.4	543.4	512.6	454.5	403.2	372.5
87.5°	188.0	191.4	164.0	181.1	218.7	290.5	396.4	375.9	331.5	276.8	266.5
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)