

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: P399609

Luminaire Tested: **ARCH-L-PA3-160-830-U-T2U**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399609
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-160-830-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19745 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

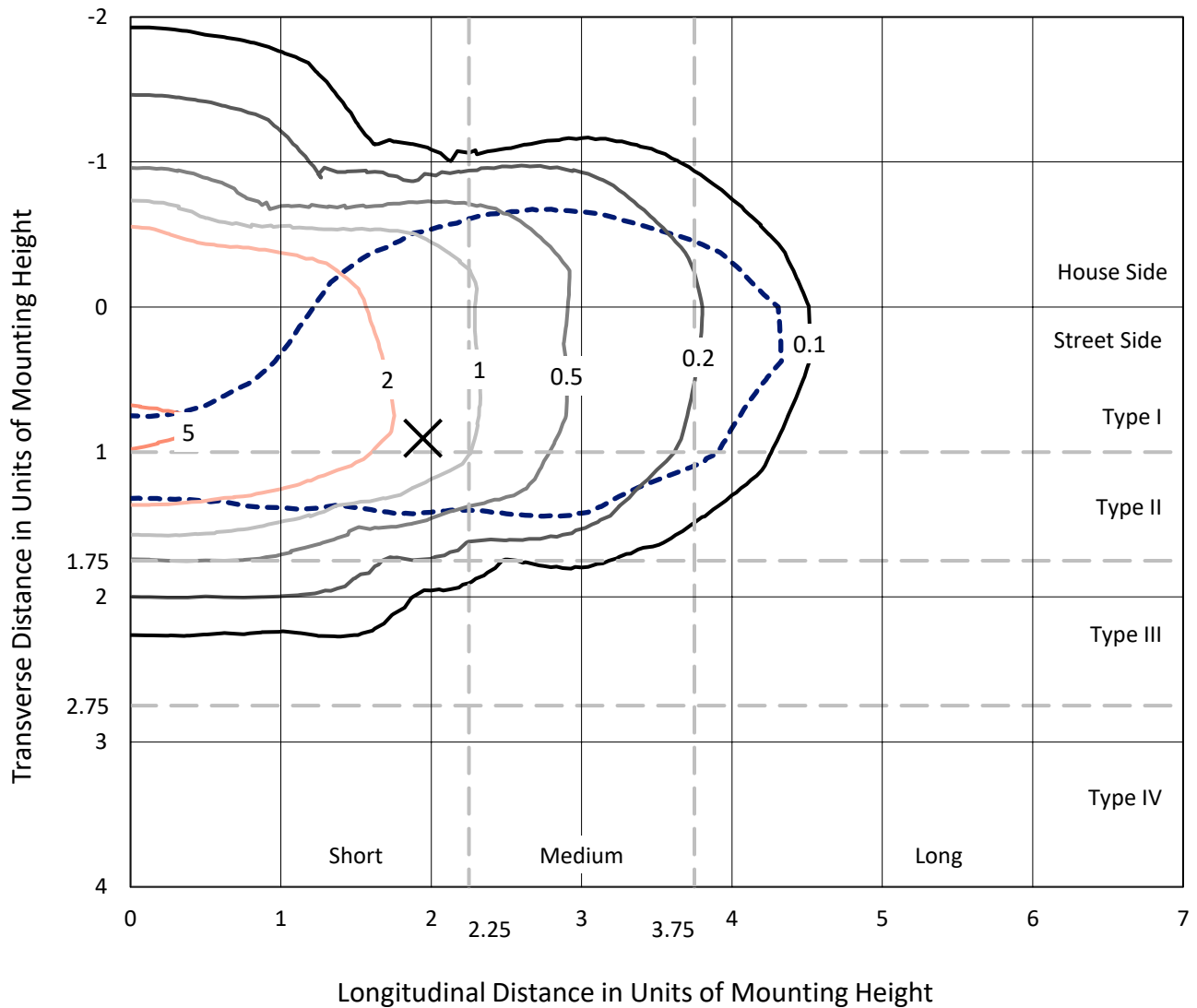
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

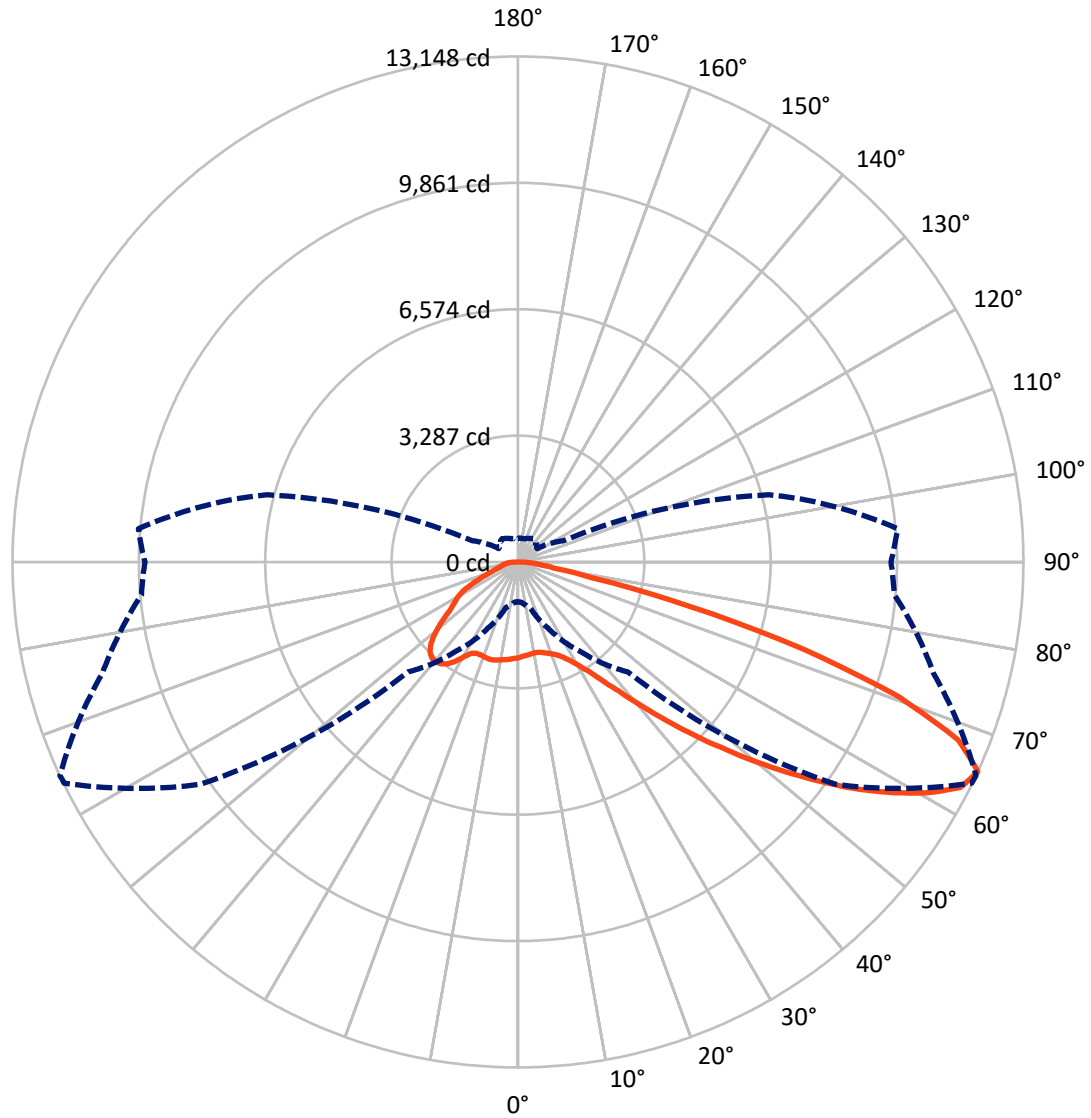
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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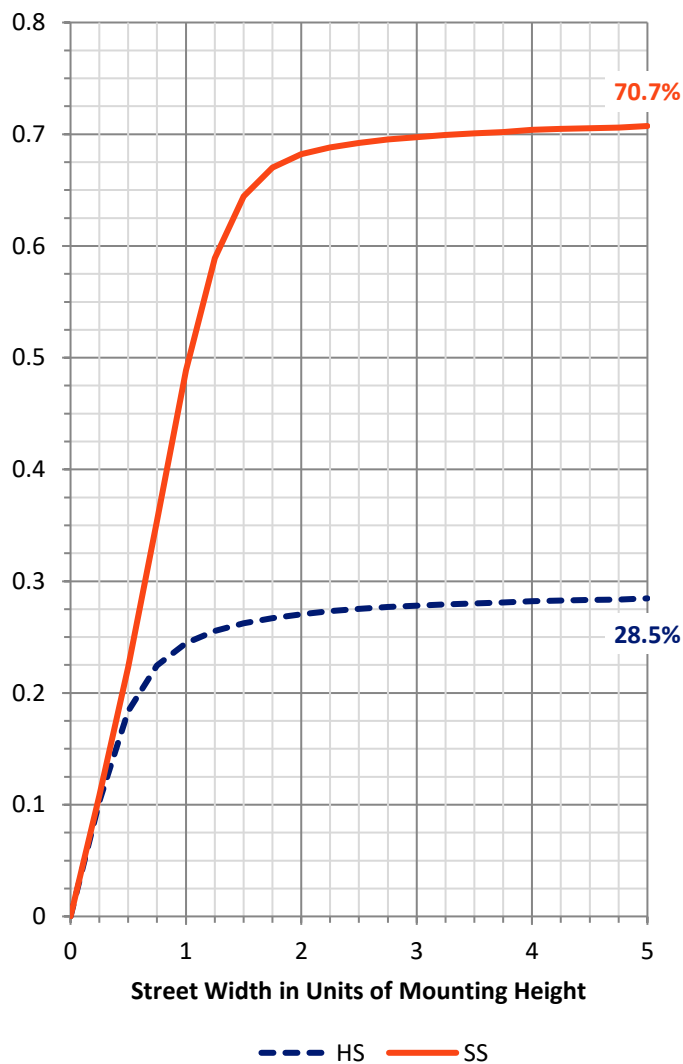
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5708.6	0.0	5708.6
	% Fixture	28.9	0.0	28.9
Street Side	Lumens	14036.4	0.0	14036.4
	% Fixture	71.1	0.0	71.1
Total	Lumens	19745.0	0.0	19745.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.7	1.2
10°-20°	709.7	3.6
20°-30°	1260.6	6.4
30°-40°	2132.6	10.8
40°-50°	3712.4	18.8
50°-60°	4797.7	24.3
60°-70°	4198.2	21.3
70°-80°	2283.5	11.6
80°-90°	412.6	2.1
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°	19745.0	100.0
0°-180°	19745.0	100.0

Coefficient of Utilization



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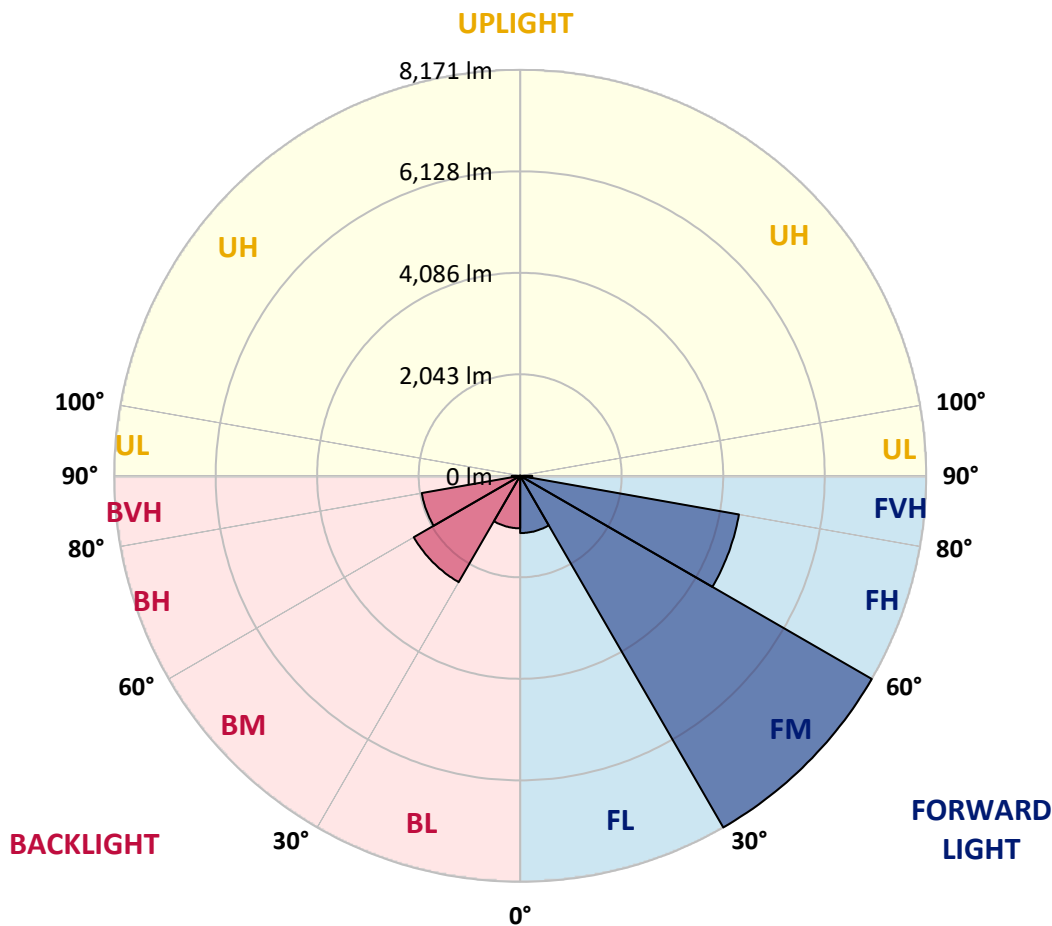
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1152.1	5.8			
FM (30°-60°)	8171.0	41.4			
FH (60°-80°)	4470.6	22.6			G2/5000
FVH (80°-90°)	242.8	1.2			G3/500
BL (0°-30°)	1055.9	5.3	B3/2500		
BM (30°-60°)	2471.7	12.5	B2/2500		
BH (60°-80°)	2011.2	10.2	B3/2500		G3/2500
BVH (80°-90°)	169.8	0.9			G2/225
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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2495.0	2495.0	2495.0	2495.0	2495.0	2495.0	2495.0	2495.0	2495.0	2495.0	2495.0
2.5°	2450.8	2448.2	2443.0	2448.2	2450.8	2456.0	2453.4	2458.6	2456.0	2463.8	2476.8
5°	2388.4	2383.2	2380.6	2393.6	2401.4	2414.4	2419.6	2437.8	2435.2	2448.2	2469.0
7.5°	2318.2	2318.2	2315.6	2331.2	2341.6	2365.0	2383.2	2414.4	2417.0	2440.4	2463.8
10°	2263.7	2266.3	2263.7	2276.7	2292.3	2320.8	2352.0	2396.2	2398.8	2432.6	2456.0
12.5°	2242.9	2242.9	2242.9	2261.1	2281.9	2320.8	2357.2	2404.0	2409.2	2445.6	2466.4
15°	2271.5	2274.1	2268.9	2287.1	2310.4	2357.2	2391.0	2440.4	2445.6	2479.4	2492.4
17.5°	2372.8	2383.2	2370.2	2380.6	2375.4	2411.8	2443.0	2492.4	2495.0	2523.6	2528.8
20°	2572.9	2583.3	2562.5	2549.5	2502.8	2500.2	2513.2	2552.1	2552.1	2570.3	2557.3
22.5°	2882.2	2892.6	2856.2	2806.8	2695.1	2640.5	2611.9	2630.1	2627.5	2635.3	2601.5
25°	3292.8	3290.2	3246.1	3155.1	2975.8	2843.2	2773.1	2744.5	2744.5	2728.9	2687.3
27.5°	3802.2	3763.2	3685.3	3576.1	3326.6	3142.1	2991.4	2918.6	2905.6	2858.8	2780.9
30°	4345.4	4316.8	4205.1	4046.5	3758.0	3521.5	3272.1	3126.5	3118.7	3017.4	2900.4
32.5°	4984.7	4938.0	4813.2	4623.5	4277.8	3945.2	3633.3	3412.4	3399.4	3238.3	3077.1
35°	5806.0	5767.0	5525.3	5335.6	4891.2	4454.6	4085.5	3791.8	3781.4	3583.9	3378.6
37.5°	6791.0	6689.6	6455.7	6099.7	5631.9	5114.7	4646.9	4277.8	4264.8	4046.5	3786.6
40°	7669.4	7578.5	7370.6	7043.1	6541.5	5967.1	5333.0	4886.0	4873.0	4607.9	4280.4
42.5°	8319.2	8256.8	8121.7	7931.9	7573.3	7225.0	6208.8	5621.5	5598.1	5255.0	4847.0
45°	8696.0	8646.6	8568.7	8615.4	8610.2	8545.3	7253.6	6497.3	6422.0	5977.5	5478.5
47.5°	8605.1	8560.9	8592.1	8955.9	9457.5	9834.3	8469.9	7394.0	7292.6	6713.0	6151.7
50°	7947.5	7965.7	8129.4	8826.0	9951.3	10788.2	9818.8	8415.3	8280.2	7453.7	6791.0
52.5°	6749.4	6793.6	7191.2	8165.8	9896.7	11406.7	11037.6	9470.5	9291.2	8176.2	7373.2
55°	5361.6	5473.3	5987.9	7011.9	9184.6	11450.9	11957.7	10530.9	10333.3	8854.5	7879.9
57.5°	3966.0	4132.3	4727.5	5668.3	7820.2	10751.8	12417.7	11544.4	11305.3	9527.7	8415.3
60°	2515.8	2617.1	3303.2	4413.0	5985.3	9041.7	12357.9	12407.3	12199.4	10198.2	8974.1
62.5°	1606.1	1655.5	2001.2	3147.3	4184.3	6694.8	11705.6	13059.6	12919.3	10808.9	9504.3
65°	1031.8	1052.6	1229.3	1936.2	2848.4	4041.3	10081.2	13129.8	13148.0	11191.0	9831.7
67.5°	839.5	849.8	914.8	1195.5	2014.2	2232.5	7022.3	12131.8	12352.7	11092.2	9720.0
70°	764.1	777.1	844.7	953.8	1559.4	1541.2	3399.4	10151.4	10512.7	10523.1	9223.6
72.5°	644.5	662.7	753.7	901.8	1205.9	1216.3	1439.8	7230.2	7763.0	9405.5	8477.7
75°	538.0	548.4	626.3	795.3	1021.4	972.0	1011.0	3833.4	4602.7	7542.1	7685.0
77.5°	436.6	447.0	504.2	634.1	907.0	756.3	795.3	1587.9	1962.2	5119.9	6281.6
80°	311.9	322.3	387.2	493.8	686.1	680.9	590.0	875.8	951.2	2767.9	4080.3
82.5°	223.5	231.3	293.7	353.5	475.6	683.5	444.4	595.2	623.7	1226.7	1645.1
85°	150.7	150.7	202.7	233.9	306.7	431.4	358.7	402.8	421.0	582.2	444.4
87.5°	65.0	65.0	109.2	119.6	161.1	200.1	267.7	202.7	207.9	314.5	181.9
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°	2495.0	2495.0	2495.0	2495.0	2495.0	2495.0	2495.0	2495.0	2495.0	2495.0	2495.0
2.5°	2484.6	2487.2	2492.4	2508.0	2518.4	2534.0	2541.8	2552.1	2552.1	2546.9	2549.5
5°	2479.4	2487.2	2505.4	2534.0	2552.1	2580.7	2601.5	2617.1	2622.3	2617.1	2619.7
7.5°	2476.8	2489.8	2521.0	2562.5	2588.5	2624.9	2653.5	2671.7	2684.7	2679.5	2682.1
10°	2469.0	2489.8	2528.8	2580.7	2619.7	2656.1	2682.1	2689.9	2697.7	2692.5	2689.9
12.5°	2479.4	2502.8	2544.4	2606.7	2650.9	2679.5	2687.3	2674.3	2656.1	2645.7	2643.1
15°	2500.2	2523.6	2565.1	2630.1	2669.1	2679.5	2661.3	2619.7	2578.1	2554.7	2552.1
17.5°	2528.8	2544.4	2578.1	2635.3	2666.5	2653.5	2617.1	2567.7	2536.6	2518.4	2521.0
20°	2546.9	2546.9	2572.9	2617.1	2643.1	2632.7	2588.5	2534.0	2484.6	2461.2	2453.4
22.5°	2572.9	2559.9	2562.5	2601.5	2637.9	2622.3	2528.8	2432.6	2362.4	2336.4	2333.8
25°	2643.1	2606.7	2583.3	2606.7	2692.5	2565.1	2378.0	2266.3	2201.3	2177.9	2180.5
27.5°	2728.9	2679.5	2630.1	2669.1	2736.7	2435.2	2185.7	2058.4	2019.4	2001.2	2009.0
30°	2814.6	2749.7	2684.7	2825.0	2705.5	2232.5	1938.8	1814.1	1780.3	1767.3	1777.7
32.5°	2973.2	2866.6	2788.6	3032.9	2609.3	2001.2	1671.1	1556.8	1525.6	1510.0	1504.8
35°	3238.3	3103.1	3025.2	3214.9	2474.2	1743.9	1426.8	1346.2	1312.5	1278.7	1273.5
37.5°	3620.3	3456.6	3386.4	3318.8	2284.5	1489.2	1239.7	1185.1	1135.7	1083.8	1081.2
40°	4077.7	3864.6	3812.6	3365.6	2022.0	1250.1	1109.7	1057.8	995.4	946.0	948.6
42.5°	4605.3	4332.4	4220.7	3352.6	1697.1	1122.7	1016.2	959.0	904.4	860.2	857.6
45°	5169.3	4860.0	4602.7	3261.7	1374.8	1034.4	959.0	891.4	836.9	787.5	782.3
47.5°	5793.0	5447.4	4956.2	3084.9	1135.7	972.0	925.2	829.1	779.7	748.5	748.5
50°	6422.0	6008.7	5281.0	2817.2	995.4	925.2	875.8	795.3	756.3	730.3	730.3
52.5°	6959.9	6593.5	5548.7	2497.6	907.0	886.2	842.1	779.7	738.1	714.7	712.1
55°	7482.3	7136.7	5787.8	2180.5	834.3	834.3	834.3	766.7	719.9	699.1	696.5
57.5°	8002.1	7708.4	6037.3	1972.6	769.3	790.1	818.7	751.1	704.3	686.1	683.5
60°	8589.5	8394.5	6325.8	1827.0	712.1	743.3	797.9	732.9	678.3	662.7	660.1
62.5°	9213.2	9213.2	6588.3	1621.7	660.1	704.3	766.7	709.5	654.9	641.9	639.3
65°	9701.8	9912.3	6757.2	1315.1	608.1	665.3	730.3	678.3	623.7	621.1	615.9
67.5°	9759.0	10089.0	6650.7	992.8	561.4	623.7	693.9	644.5	592.6	592.6	584.8
70°	9348.3	9683.6	6318.0	743.3	527.6	582.2	647.1	603.0	553.6	558.8	545.8
72.5°	8662.2	8745.4	5491.5	587.4	488.6	538.0	590.0	556.2	512.0	512.0	493.8
75°	7757.8	7295.2	3989.4	491.2	441.8	486.0	532.8	504.2	465.2	452.2	441.8
77.5°	6175.1	5286.2	2318.2	423.6	402.8	436.6	467.8	447.0	413.2	384.6	384.6
80°	3763.2	3097.9	1024.0	366.4	356.1	382.0	402.8	379.4	350.9	322.3	314.5
82.5°	1432.0	1195.5	496.4	314.5	311.9	327.5	343.1	319.7	298.9	285.9	246.9
85°	392.4	361.3	340.5	262.5	257.3	254.7	272.9	262.5	233.9	192.3	171.5
87.5°	148.1	168.9	184.5	161.1	171.5	158.5	181.9	166.3	148.1	96.2	85.8
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)