

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: P400178

Luminaire Tested: **ARCH-L-PA3-240-827-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400178
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-PA3-240-827-U-T3
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24115 lumens
Efficiency: N/A
Efficacy: 99.6 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

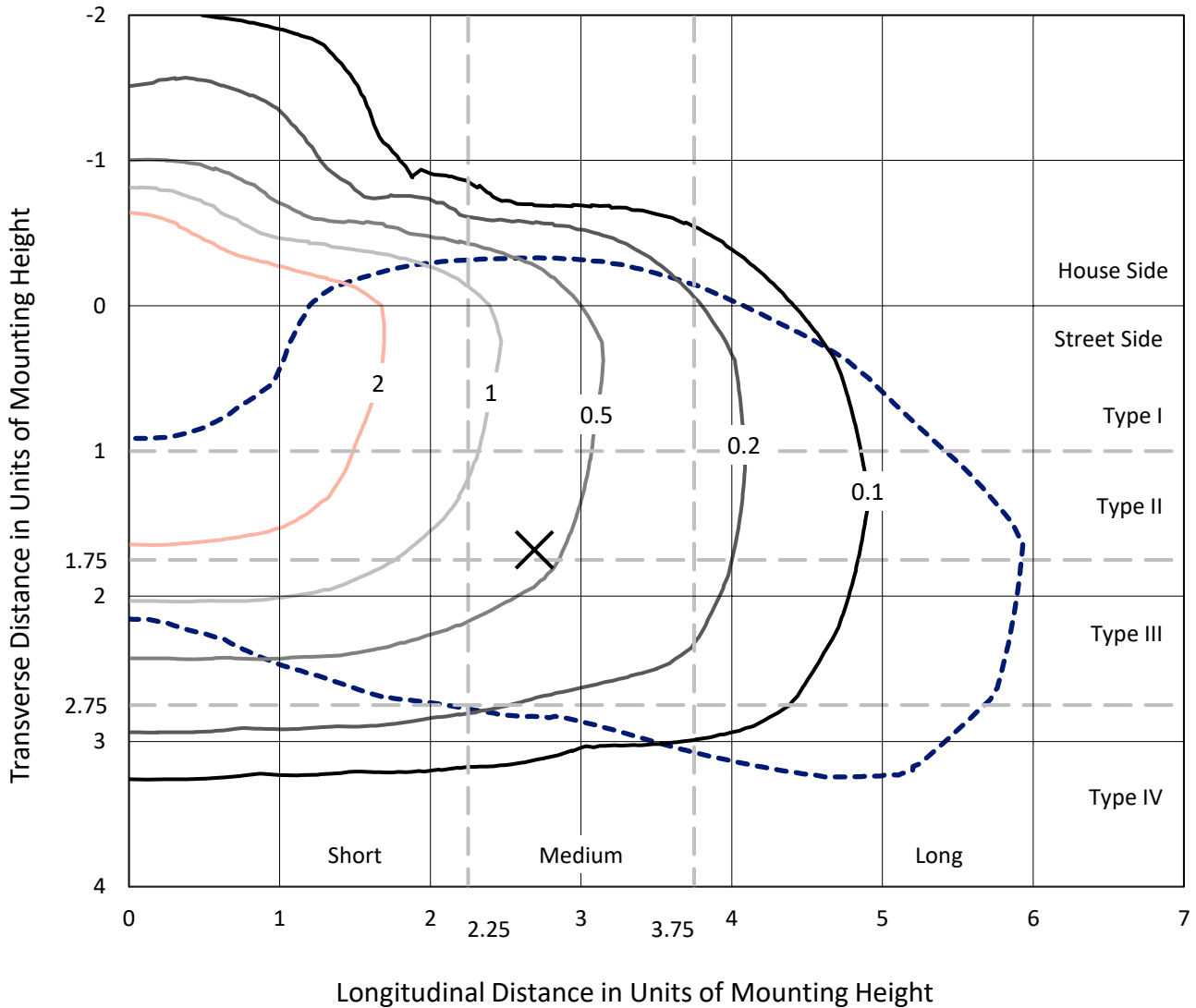
Input Watts (W): 242
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

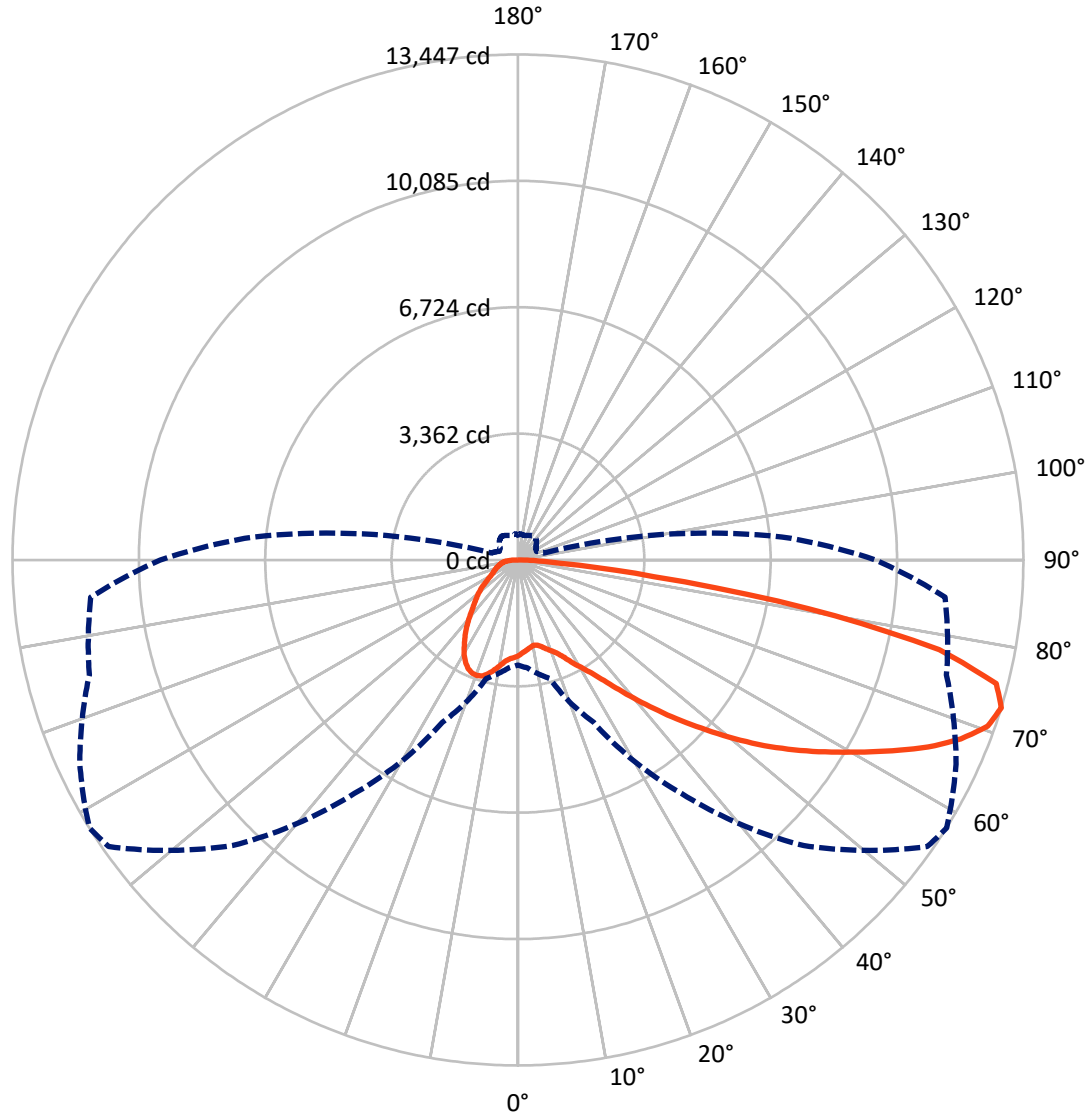
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 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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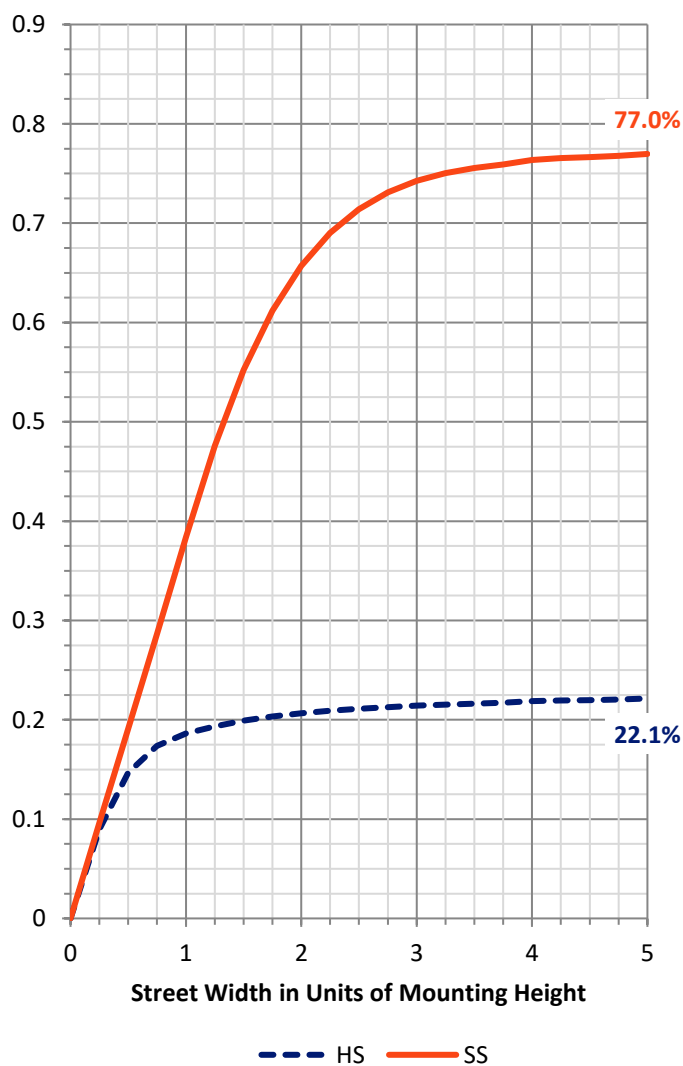
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5469.0	0.0	5469.0
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	18646.0	0.0	18646.0
	% Fixture	77.3	0.0	77.3
Total	Lumens	24115.0	0.0	24115.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.0	1.0
10°-20°	778.2	3.2
20°-30°	1393.9	5.8
30°-40°	2096.9	8.7
40°-50°	3395.6	14.1
50°-60°	5111.4	21.2
60°-70°	6015.6	24.9
70°-80°	4265.6	17.7
80°-90°	812.8	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°	24115.0	100.0
0°-180°	24115.0	100.0

Coefficient of Utilization



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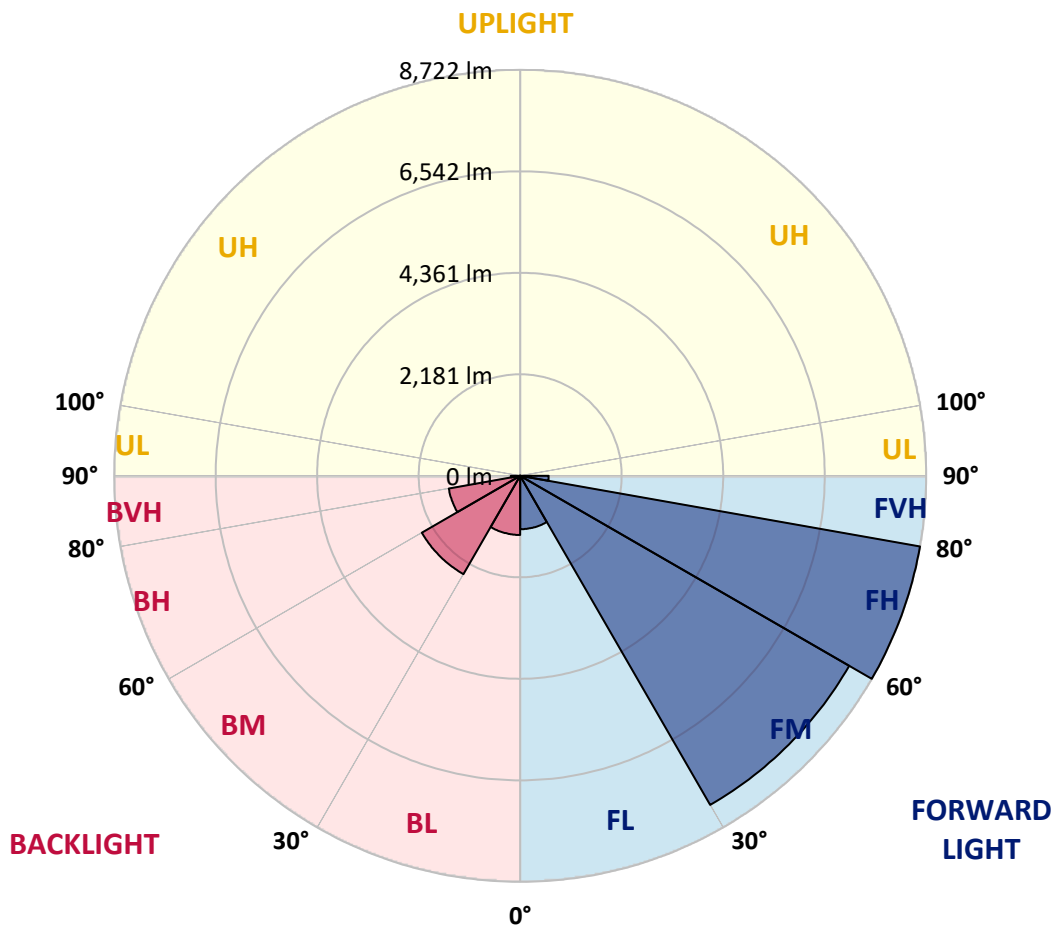
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1146.8	4.8			
FM (30°-60°)	8163.6	33.9			
FH (60°-80°)	8722.5	36.2			G4/12000
FVH (80°-90°)	613.1	2.5			G4/750
BL (0°-30°)	1270.4	5.3	B3/2500		
BM (30°-60°)	2440.2	10.1	B2/2500		
BH (60°-80°)	1558.7	6.5	B3/2500		G3/2500
BVH (80°-90°)	199.7	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°	2543.6	2543.6	2543.6	2543.6	2543.6	2543.6	2543.6	2543.6	2543.6	2543.6	2543.6
2.5°	2448.1	2435.4	2438.6	2438.6	2451.3	2457.7	2460.8	2470.4	2476.8	2492.7	2515.0
5°	2333.5	2324.0	2327.1	2330.3	2352.6	2374.9	2394.0	2406.7	2425.8	2451.3	2483.1
7.5°	2250.7	2244.4	2247.6	2253.9	2273.0	2298.5	2330.3	2349.4	2378.1	2425.8	2479.9
10°	2190.3	2190.3	2193.4	2206.2	2225.3	2257.1	2282.6	2304.9	2362.2	2448.1	2530.9
12.5°	2142.5	2142.5	2152.0	2177.5	2209.4	2241.2	2301.7	2327.1	2403.5	2521.3	2620.0
15°	2139.3	2142.5	2145.7	2168.0	2203.0	2273.0	2362.2	2400.4	2492.7	2632.8	2747.4
17.5°	2190.3	2193.4	2180.7	2187.1	2228.5	2327.1	2444.9	2489.5	2607.3	2760.1	2877.9
20°	2346.2	2346.2	2308.0	2273.0	2301.7	2409.9	2543.6	2588.2	2718.7	2887.4	3005.2
22.5°	2664.6	2680.5	2591.4	2515.0	2470.4	2530.9	2651.9	2699.6	2846.1	3027.5	3145.3
25°	3049.8	3065.7	2944.7	2836.5	2753.7	2744.2	2823.8	2874.7	2995.7	3183.5	3282.2
27.5°	3422.3	3393.6	3282.2	3180.3	3075.3	2989.3	3049.8	3094.4	3234.4	3377.7	3438.2
30°	3715.1	3692.9	3584.6	3511.4	3412.7	3301.3	3266.3	3314.0	3428.6	3562.3	3594.2
32.5°	4039.9	4023.9	3915.7	3820.2	3737.4	3632.4	3556.0	3578.3	3641.9	3737.4	3756.5
35°	4453.7	4488.7	4374.1	4179.9	4087.6	3985.7	3931.6	3938.0	3985.7	4046.2	4014.4
37.5°	4889.9	4931.2	4937.6	4632.0	4507.8	4415.5	4358.2	4380.5	4437.8	4479.2	4380.5
40°	5698.5	5657.1	5491.5	5265.5	5074.5	4985.4	4905.8	4902.6	4944.0	5017.2	4838.9
42.5°	6771.3	6733.1	6398.8	6106.0	5803.5	5701.7	5545.7	5478.8	5497.9	5590.2	5341.9
45°	7799.6	7783.7	7516.3	7175.6	6812.7	6615.3	6258.8	6096.4	6080.5	6153.7	5857.6
47.5°	8713.3	8643.2	8449.0	8184.8	8146.6	7630.9	6975.1	6755.4	6679.0	6720.4	6389.3
50°	9690.6	9451.8	9184.4	9022.1	9299.0	8818.3	7697.7	7468.5	7280.7	7309.3	6965.5
52.5°	10209.5	9808.4	9633.3	9681.0	10053.5	9868.9	8484.0	8203.9	7901.5	7942.8	7538.5
55°	9763.8	9760.6	9837.0	10133.1	10652.0	10438.7	9232.2	8917.0	8585.9	8595.5	8197.5
57.5°	9152.6	9276.7	9671.5	10324.1	11393.8	11037.2	9967.6	9633.3	9330.9	9283.1	8945.6
60°	8595.5	8732.4	9305.4	10292.3	11651.6	11584.8	10667.9	10375.0	10129.9	9989.8	9732.0
62.5°	7748.6	7850.5	8662.3	10088.5	11435.1	11979.5	11377.8	11177.3	10992.6	10702.9	10578.8
65°	6752.2	6787.2	7643.6	9416.8	11164.5	12132.3	12084.6	11995.4	11817.2	11390.6	11416.0
67.5°	5673.0	5743.0	6494.3	8344.0	10572.4	12062.3	12632.1	12705.4	12495.3	11855.4	11950.9
70°	4523.8	4609.7	5179.6	6860.5	9566.4	11759.9	13138.3	13256.1	12851.8	12008.2	12049.6
72.5°	2798.3	2881.1	3263.1	4765.7	7583.1	10744.3	13294.3	13447.1	12861.4	11804.4	11406.5
75°	967.8	977.3	1276.6	2285.8	4501.5	8111.6	12785.0	13144.7	12457.1	11062.7	9926.2
77.5°	442.5	458.4	566.7	942.3	1996.1	4377.3	10556.5	11457.4	11228.2	9903.9	7640.4
80°	305.6	312.0	391.6	563.5	1152.4	1540.8	6663.1	7837.8	8238.9	7669.1	4896.2
82.5°	229.2	235.6	302.4	382.0	830.9	748.1	2537.3	3641.9	4526.9	4444.2	2047.0
85°	219.7	216.5	235.6	254.7	553.9	445.7	821.3	1127.0	1766.8	1512.2	515.7
87.5°	95.5	105.1	241.9	143.3	289.7	206.9	356.6	417.0	538.0	468.0	184.6
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°	2543.6	2543.6	2543.6	2543.6	2543.6	2543.6	2543.6	2543.6	2543.6	2543.6	2543.6
2.5°	2524.5	2530.9	2550.0	2578.6	2594.6	2626.4	2648.7	2661.4	2671.0	2674.1	2674.1
5°	2502.2	2515.0	2556.4	2604.1	2648.7	2715.5	2776.0	2811.0	2836.5	2846.1	2849.2
7.5°	2508.6	2540.4	2600.9	2671.0	2728.3	2814.2	2887.4	2957.5	3014.8	3037.1	3037.1
10°	2569.1	2613.7	2696.4	2788.7	2862.0	2951.1	3027.5	3088.0	3154.9	3193.1	3199.4
12.5°	2661.4	2715.5	2823.8	2925.6	3008.4	3078.4	3148.5	3193.1	3224.9	3253.5	3259.9
15°	2791.9	2858.8	2967.0	3072.1	3145.3	3189.9	3209.0	3209.0	3205.8	3209.0	3215.3
17.5°	2922.5	2986.1	3094.4	3199.4	3234.4	3209.0	3186.7	3180.3	3177.1	3170.8	3174.0
20°	3049.8	3110.3	3202.6	3282.2	3253.5	3164.4	3135.8	3132.6	3123.0	3116.7	3110.3
22.5°	3177.1	3221.7	3298.1	3326.8	3212.2	3084.8	3049.8	3030.7	3018.0	3002.0	2986.1
25°	3323.6	3336.3	3393.6	3349.0	3110.3	2938.4	2887.4	2858.8	2846.1	2830.1	2817.4
27.5°	3460.5	3460.5	3470.0	3314.0	2960.7	2744.2	2667.8	2616.8	2613.7	2610.5	2607.3
30°	3584.6	3568.7	3536.9	3209.0	2766.5	2505.4	2390.8	2339.9	2359.0	2374.9	2378.1
32.5°	3731.1	3699.2	3610.1	3065.7	2534.1	2238.0	2097.9	2075.6	2097.9	2117.0	2104.3
35°	3960.3	3903.0	3686.5	2900.2	2311.2	1992.9	1859.2	1827.3	1821.0	1817.8	1792.3
37.5°	4288.2	4189.5	3747.0	2721.9	2091.6	1776.4	1677.7	1610.9	1550.4	1486.7	1477.1
40°	4689.3	4520.6	3788.4	2518.2	1859.2	1594.9	1489.9	1403.9	1302.1	1190.6	1177.9
42.5°	5128.6	4877.1	3807.5	2292.1	1655.4	1445.3	1314.8	1206.5	1091.9	1006.0	990.1
45°	5603.0	5262.3	3791.6	2075.6	1489.9	1318.0	1171.5	1053.7	961.4	900.9	888.2
47.5°	6064.6	5704.8	3747.0	1903.7	1362.5	1209.7	1060.1	951.9	881.8	815.0	799.1
50°	6656.7	6128.2	3692.9	1770.0	1222.5	1101.5	990.1	875.5	795.9	764.0	757.7
52.5°	7312.5	6551.7	3629.2	1601.3	1085.6	1015.5	945.5	843.6	818.2	757.7	748.1
55°	8022.4	7054.6	3616.5	1388.0	964.6	955.1	900.9	872.3	878.6	757.7	741.8
57.5°	8770.6	7592.7	3645.1	1174.7	865.9	900.9	920.0	897.7	888.2	773.6	741.8
60°	9550.5	8111.6	3559.2	977.3	789.5	856.4	942.3	885.0	815.0	767.2	744.9
62.5°	10308.2	8547.7	3186.7	837.3	732.2	843.6	929.6	837.3	757.7	757.7	748.1
65°	10858.9	8741.9	2492.7	735.4	694.0	827.7	907.3	805.4	741.8	764.0	751.3
67.5°	10922.6	8541.3	1674.5	655.8	662.2	799.1	856.4	776.8	725.8	783.1	764.0
70°	10531.0	8019.2	1025.1	595.3	620.8	748.1	811.8	748.1	703.6	767.2	738.6
72.5°	9515.5	7045.1	722.7	544.4	576.2	700.4	770.4	722.7	671.7	694.0	665.4
75°	7806.0	5459.7	573.0	496.6	531.6	655.8	735.4	684.5	633.5	624.0	604.9
77.5°	5529.7	3498.7	461.6	458.4	483.9	601.7	687.6	639.9	588.9	569.8	557.1
80°	3180.3	1715.9	397.9	413.9	439.3	547.6	630.3	588.9	541.2	512.5	493.4
82.5°	1216.1	598.5	350.2	359.7	388.4	490.3	573.0	538.0	490.3	515.7	433.0
85°	394.8	327.9	286.5	296.1	324.7	407.5	506.2	477.5	423.4	375.7	347.0
87.5°	175.1	178.3	152.8	168.7	203.7	270.6	369.3	350.2	308.8	257.9	248.3
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)