

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: P399431

Luminaire Tested: **ARCH-L-PA3-140-740-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399431
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-PA3-140-740-U-T3
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22476 lumens
Efficiency: N/A
Efficacy: 157.2 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

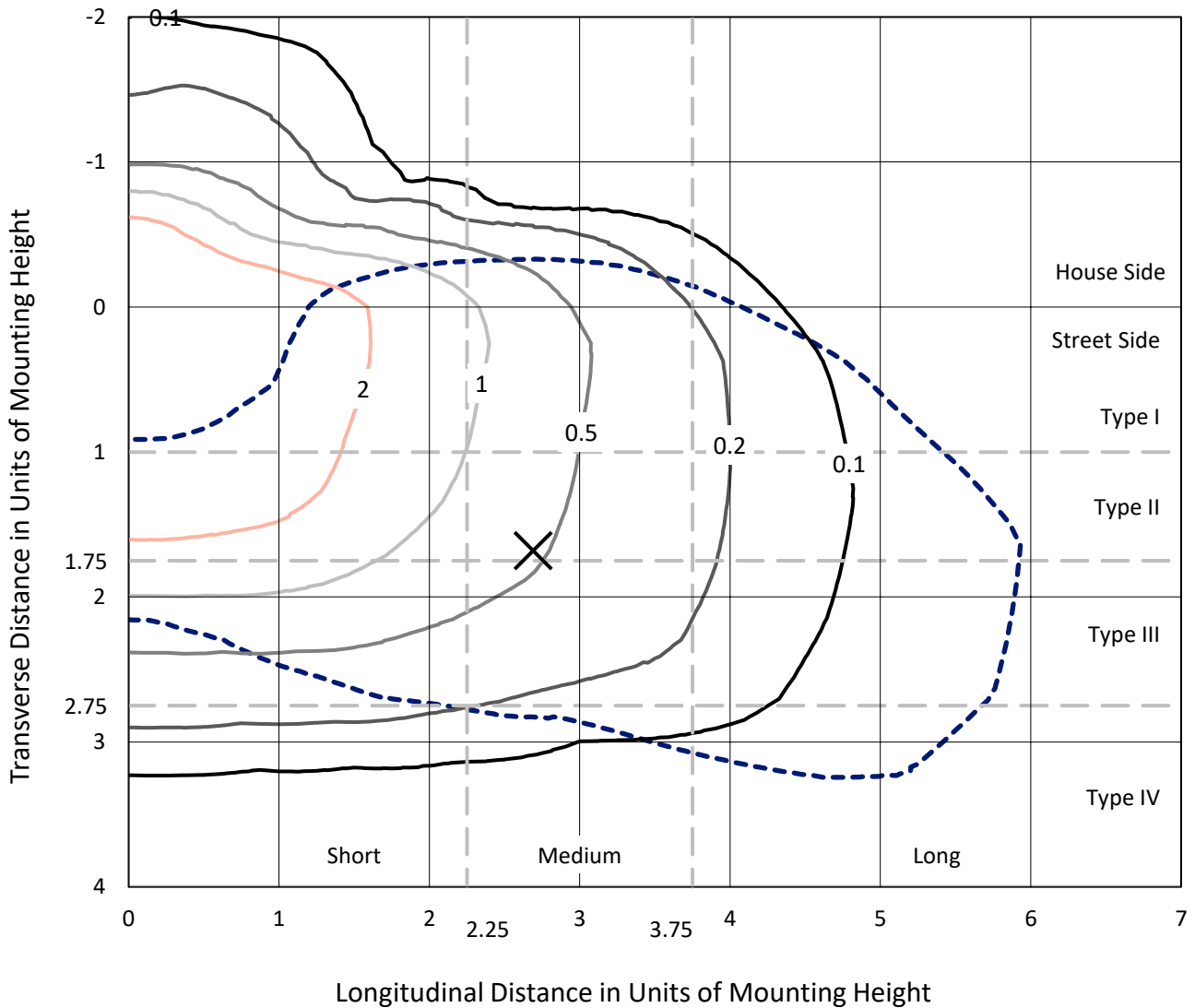
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399431
 CATALOG NUMBER: ARCH-L-PA3-140-740-U-T3

Iso-Footcandle Lines of Horizontal Illumination

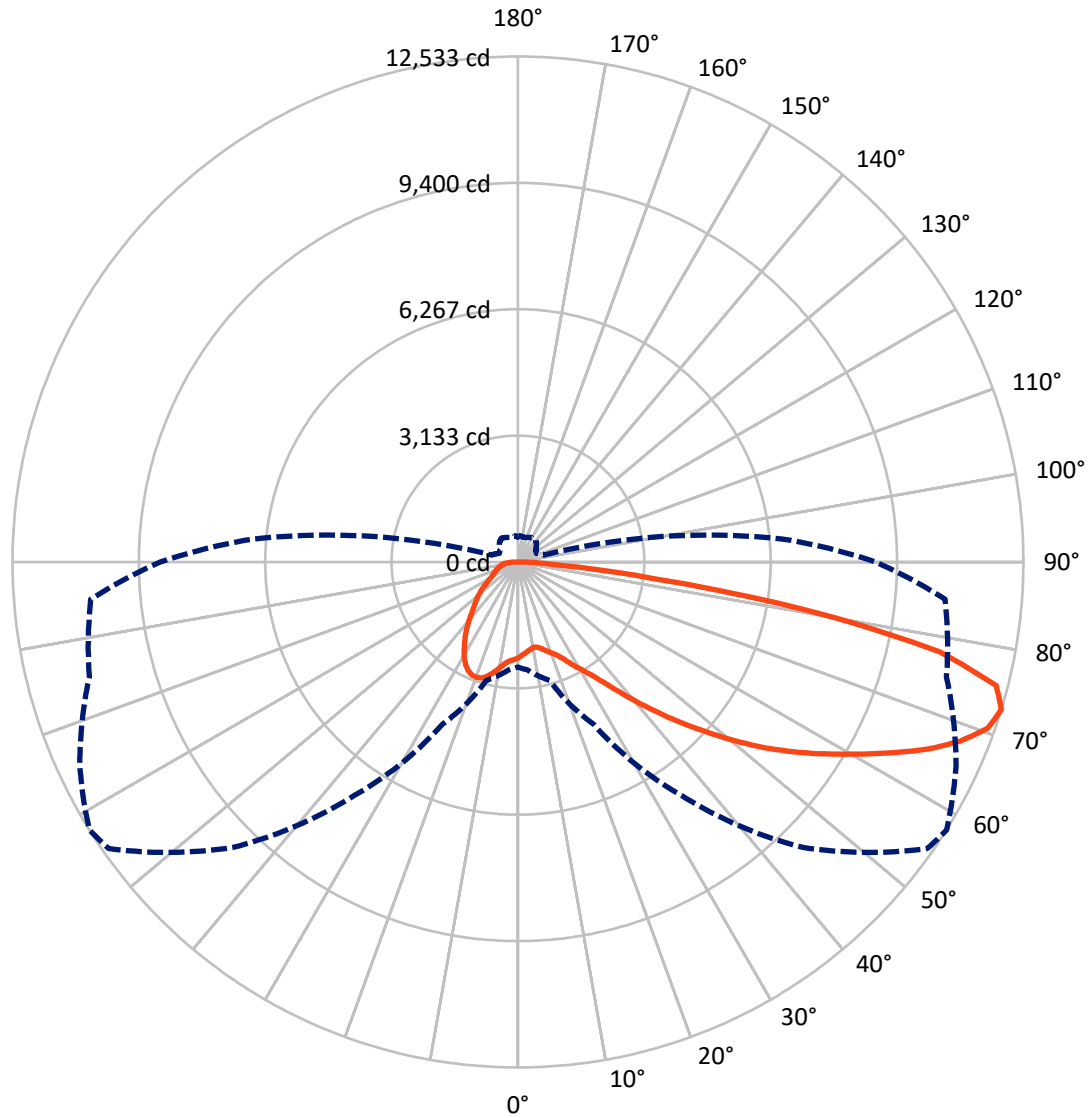
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
 Type IV - Medium - N/A

REPORT NUMBER: P399431
CATALOG NUMBER: ARCH-L-PA3-140-740-U-T3

Luminous Intensity Polar Plot



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

REPORT NUMBER: P399431
 CATALOG NUMBER: ARCH-L-PA3-140-740-U-T3

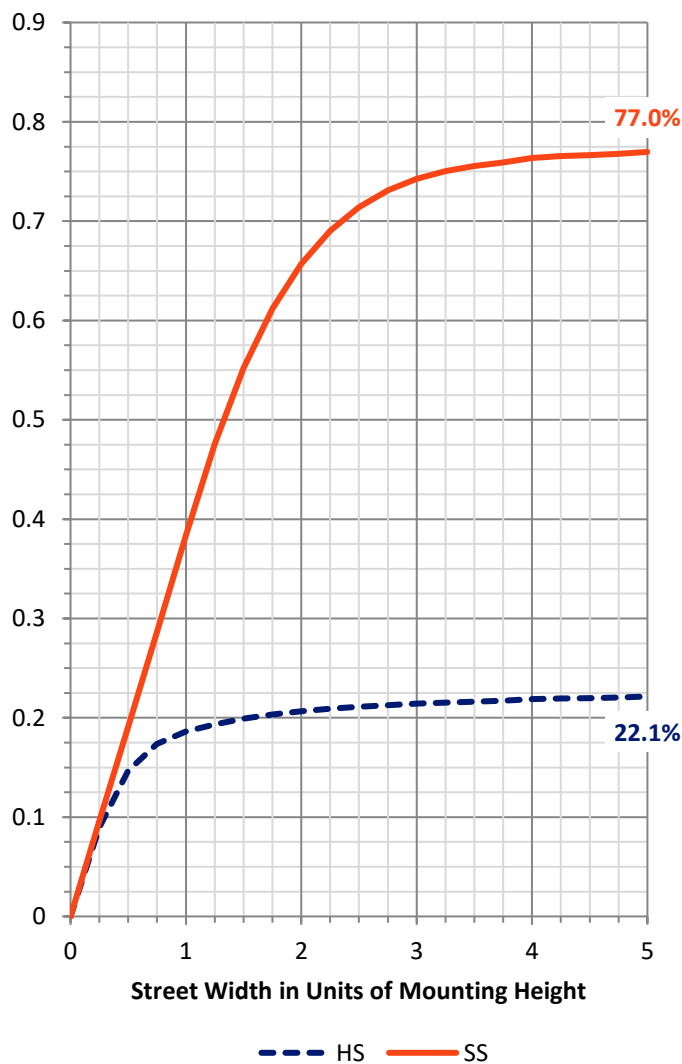
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5097.3	0.0	5097.3
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	17378.7	0.0	17378.7
	% Fixture	77.3	0.0	77.3
Total	Lumens	22476.0	0.0	22476.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.4	1.0
10°-20°	725.3	3.2
20°-30°	1299.2	5.8
30°-40°	1954.3	8.7
40°-50°	3164.8	14.1
50°-60°	4764.0	21.2
60°-70°	5606.7	24.9
70°-80°	3975.7	17.7
80°-90°	757.6	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°	22476.0	100.0
0°-180°	22476.0	100.0



REPORT NUMBER: P399431

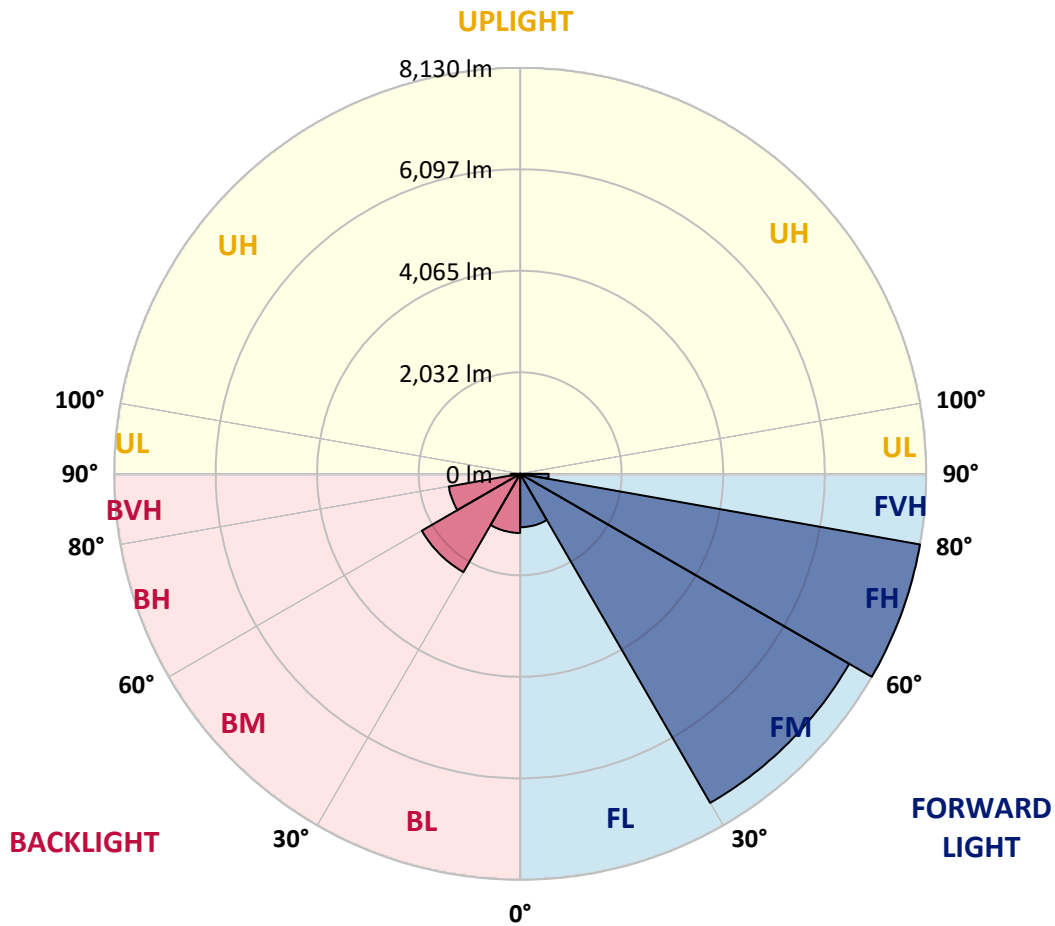
CATALOG NUMBER: ARCH-L-PA3-140-740-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1068.8	4.8			
FM (30°-60°)	7608.8	33.9			
FH (60°-80°)	8129.7	36.2			G4/12000
FVH (80°-90°)	571.4	2.5			G4/750
BL (0°-30°)	1184.0	5.3	B3/2500		
BM (30°-60°)	2274.4	10.1	B2/2500		
BH (60°-80°)	1452.8	6.5	B3/2500		G3/2500
BVH (80°-90°)	186.1	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





REPORT NUMBER: P399431

CATALOG NUMBER: ARCH-L-PA3-140-740-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7
2.5°	2281.7	2269.9	2272.8	2272.8	2284.7	2290.6	2293.6	2302.5	2308.4	2323.3	2344.0
5°	2174.9	2166.0	2169.0	2171.9	2192.7	2213.5	2231.3	2243.2	2261.0	2284.7	2314.4
7.5°	2097.8	2091.8	2094.8	2100.7	2118.5	2142.3	2171.9	2189.7	2216.4	2261.0	2311.4
10°	2041.4	2041.4	2044.4	2056.2	2074.0	2103.7	2127.4	2148.2	2201.6	2281.7	2358.9
12.5°	1996.9	1996.9	2005.8	2029.5	2059.2	2088.9	2145.2	2169.0	2240.2	2350.0	2442.0
15°	1993.9	1996.9	1999.8	2020.6	2053.3	2118.5	2201.6	2237.2	2323.3	2453.8	2560.6
17.5°	2041.4	2044.4	2032.5	2038.4	2077.0	2169.0	2278.8	2320.3	2430.1	2572.5	2682.3
20°	2186.8	2186.8	2151.2	2118.5	2145.2	2246.1	2370.7	2412.3	2533.9	2691.2	2801.0
22.5°	2483.5	2498.3	2415.2	2344.0	2302.5	2358.9	2471.6	2516.1	2652.6	2821.7	2931.5
25°	2842.5	2857.4	2744.6	2643.7	2566.6	2557.7	2631.8	2679.3	2792.1	2967.1	3059.1
27.5°	3189.7	3163.0	3059.1	2964.2	2866.3	2786.1	2842.5	2884.1	3014.6	3148.1	3204.5
30°	3462.6	3441.9	3341.0	3272.7	3180.8	3076.9	3044.3	3088.8	3195.6	3320.2	3349.9
32.5°	3765.3	3750.5	3649.6	3560.6	3483.4	3385.5	3314.3	3335.1	3394.4	3483.4	3501.2
35°	4151.0	4183.7	4076.8	3895.8	3809.8	3714.9	3664.4	3670.3	3714.9	3771.2	3741.6
37.5°	4557.5	4596.1	4602.0	4317.2	4201.5	4115.4	4062.0	4082.8	4136.2	4174.8	4082.8
40°	5311.2	5272.6	5118.3	4907.6	4729.6	4646.5	4572.4	4569.4	4608.0	4676.2	4510.0
42.5°	6311.1	6275.5	5963.9	5691.0	5409.1	5314.1	5168.7	5106.4	5124.2	5210.3	4978.9
45°	7269.5	7254.6	7005.4	6687.9	6349.7	6165.7	5833.4	5682.1	5667.2	5735.5	5459.5
47.5°	8121.0	8055.8	7874.8	7628.5	7592.9	7112.2	6501.0	6296.3	6225.0	6263.6	5955.0
50°	9032.0	8809.4	8560.2	8408.9	8667.0	8219.0	7174.5	6960.9	6785.8	6812.5	6492.1
52.5°	9515.6	9141.7	8978.5	9023.1	9370.2	9198.1	7907.4	7646.3	7364.4	7403.0	7026.2
55°	9100.2	9097.2	9168.4	9444.4	9928.0	9729.2	8604.7	8310.9	8002.4	8011.3	7640.4
57.5°	8530.5	8646.2	9014.2	9622.4	10619.4	10287.1	9290.1	8978.5	8696.7	8652.2	8337.6
60°	8011.3	8138.8	8672.9	9592.7	10859.7	10797.4	9942.9	9669.9	9441.4	9310.9	9070.5
62.5°	7222.0	7317.0	8073.6	9402.8	10657.9	11165.3	10604.5	10417.6	10245.5	9975.5	9859.8
65°	6293.3	6325.9	7124.1	8776.8	10405.7	11307.7	11263.2	11180.2	11014.0	10616.4	10640.1
67.5°	5287.4	5352.7	6053.0	7776.9	9853.9	11242.5	11773.6	11841.8	11646.0	11049.6	11138.6
70°	4216.3	4296.4	4827.5	6394.2	8916.2	10960.6	12245.4	12355.1	11978.3	11192.0	11230.6
72.5°	2608.1	2685.3	3041.3	4441.8	7067.7	10014.1	12390.8	12533.2	11987.2	11002.1	10631.2
75°	902.0	910.9	1189.8	2130.4	4195.5	7560.3	11916.0	12251.3	11610.4	10310.8	9251.5
77.5°	412.4	427.3	528.1	878.3	1860.4	4079.8	9839.0	10678.7	10465.1	9230.8	7121.1
80°	284.8	290.8	365.0	525.2	1074.1	1436.1	6210.2	7305.1	7678.9	7147.8	4563.5
82.5°	213.6	219.6	281.9	356.1	774.4	697.3	2364.8	3394.4	4219.3	4142.1	1907.9
85°	204.7	201.8	219.6	237.4	516.3	415.4	765.5	1050.4	1646.8	1409.4	480.7
87.5°	89.0	97.9	225.5	133.5	270.0	192.9	332.3	388.7	501.4	436.2	172.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P399431
 CATALOG NUMBER: ARCH-L-PA3-140-740-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7	2370.7
2.5°	2352.9	2358.9	2376.7	2403.4	2418.2	2447.9	2468.7	2480.5	2489.4	2492.4	2492.4
5°	2332.2	2344.0	2382.6	2427.1	2468.7	2531.0	2587.3	2620.0	2643.7	2652.6	2655.6
7.5°	2338.1	2367.8	2424.1	2489.4	2542.8	2622.9	2691.2	2756.5	2809.9	2830.6	2830.6
10°	2394.5	2436.0	2513.2	2599.2	2667.5	2750.5	2821.7	2878.1	2940.4	2976.0	2982.0
12.5°	2480.5	2531.0	2631.8	2726.8	2803.9	2869.2	2934.5	2976.0	3005.7	3032.4	3038.3
15°	2602.2	2664.5	2765.4	2863.3	2931.5	2973.1	2990.9	2990.9	2987.9	2990.9	2996.8
17.5°	2723.8	2783.2	2884.1	2982.0	3014.6	2990.9	2970.1	2964.2	2961.2	2955.3	2958.2
20°	2842.5	2898.9	2984.9	3059.1	3032.4	2949.3	2922.6	2919.7	2910.8	2904.8	2898.9
22.5°	2961.2	3002.7	3074.0	3100.7	2993.8	2875.2	2842.5	2824.7	2812.8	2798.0	2783.2
25°	3097.7	3109.6	3163.0	3121.4	2898.9	2738.7	2691.2	2664.5	2652.6	2637.8	2625.9
27.5°	3225.3	3225.3	3234.2	3088.8	2759.4	2557.7	2486.5	2439.0	2436.0	2433.1	2430.1
30°	3341.0	3326.2	3296.5	2990.9	2578.4	2335.1	2228.3	2180.8	2198.6	2213.5	2216.4
32.5°	3477.5	3447.8	3364.7	2857.4	2361.8	2085.9	1955.3	1934.6	1955.3	1973.1	1961.3
35°	3691.1	3637.7	3435.9	2703.1	2154.1	1857.4	1732.8	1703.1	1697.2	1694.2	1670.5
37.5°	3996.7	3904.7	3492.3	2536.9	1949.4	1655.7	1563.7	1501.4	1445.0	1385.7	1376.8
40°	4370.6	4213.3	3530.9	2347.0	1732.8	1486.5	1388.6	1308.5	1213.6	1109.7	1097.8
42.5°	4780.1	4545.6	3548.7	2136.3	1542.9	1347.1	1225.4	1124.5	1017.7	937.6	922.8
45°	5222.2	4904.7	3533.9	1934.6	1388.6	1228.4	1091.9	982.1	896.1	839.7	827.8
47.5°	5652.4	5317.1	3492.3	1774.3	1269.9	1127.5	988.1	887.2	821.9	759.6	744.8
50°	6204.3	5711.7	3441.9	1649.7	1139.4	1026.6	922.8	816.0	741.8	712.1	706.2
52.5°	6815.5	6106.4	3382.5	1492.5	1011.8	946.5	881.2	786.3	762.6	706.2	697.3
55°	7477.2	6575.2	3370.7	1293.7	899.0	890.1	839.7	813.0	818.9	706.2	691.3
57.5°	8174.5	7076.6	3397.4	1094.9	807.1	839.7	857.5	836.7	827.8	721.0	691.3
60°	8901.4	7560.3	3317.3	910.9	735.8	798.2	878.3	824.9	759.6	715.1	694.3
62.5°	9607.6	7966.8	2970.1	780.4	682.4	786.3	866.4	780.4	706.2	706.2	697.3
65°	10120.9	8147.8	2323.3	685.4	646.8	771.5	845.6	750.7	691.3	712.1	700.2
67.5°	10180.2	7960.8	1560.7	611.2	617.2	744.8	798.2	724.0	676.5	729.9	712.1
70°	9815.3	7474.2	955.4	554.9	578.6	697.3	756.6	697.3	655.7	715.1	688.4
72.5°	8868.8	6566.3	673.5	507.4	537.1	652.8	718.0	673.5	626.1	646.8	620.1
75°	7275.4	5088.6	534.1	462.9	495.5	611.2	685.4	637.9	590.5	581.6	563.8
77.5°	5153.9	3260.9	430.2	427.3	451.0	560.8	640.9	596.4	548.9	531.1	519.2
80°	2964.2	1599.3	370.9	385.7	409.5	510.3	587.5	548.9	504.4	477.7	459.9
82.5°	1133.4	557.8	326.4	335.3	362.0	456.9	534.1	501.4	456.9	480.7	403.5
85°	367.9	305.6	267.0	275.9	302.6	379.8	471.8	445.1	394.6	350.1	323.4
87.5°	163.2	166.2	142.4	157.3	189.9	252.2	344.2	326.4	287.8	240.3	231.4
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)