

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: P399553

Luminaire Tested: **ARCH-L-PA3-160-727-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399553
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-160-727-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20988 lumens
Efficiency: N/A
Efficacy: 129.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G3

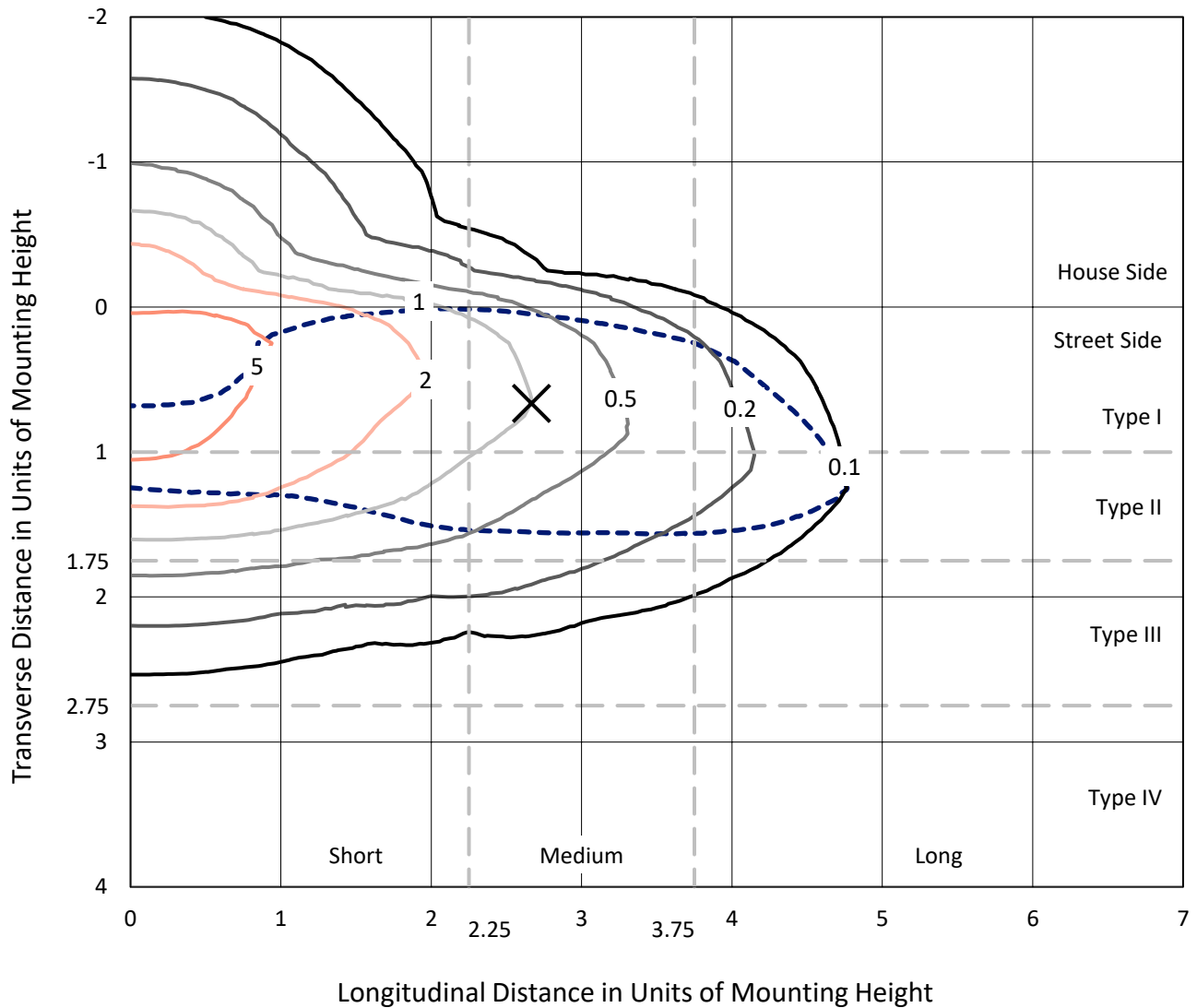
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

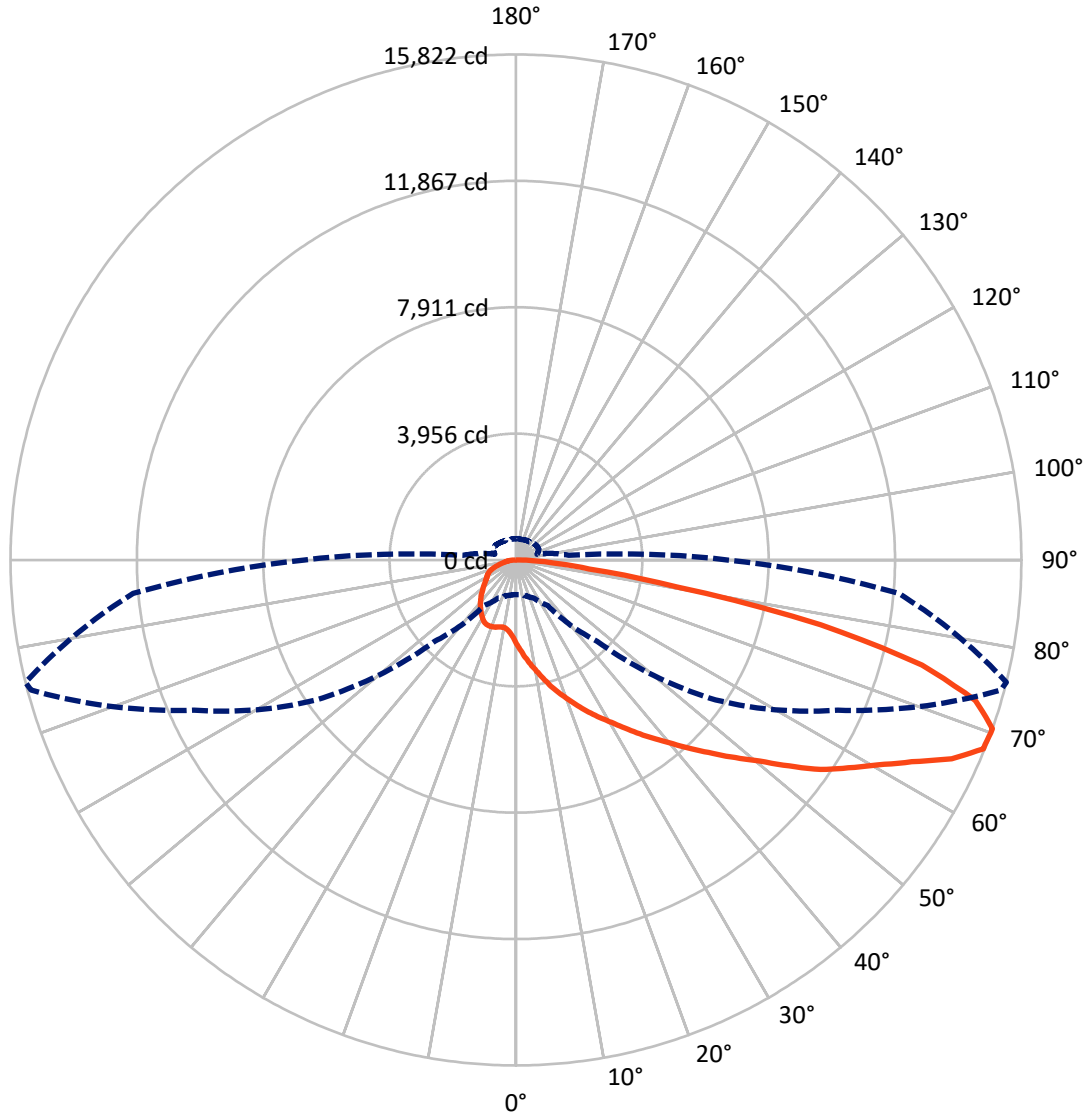
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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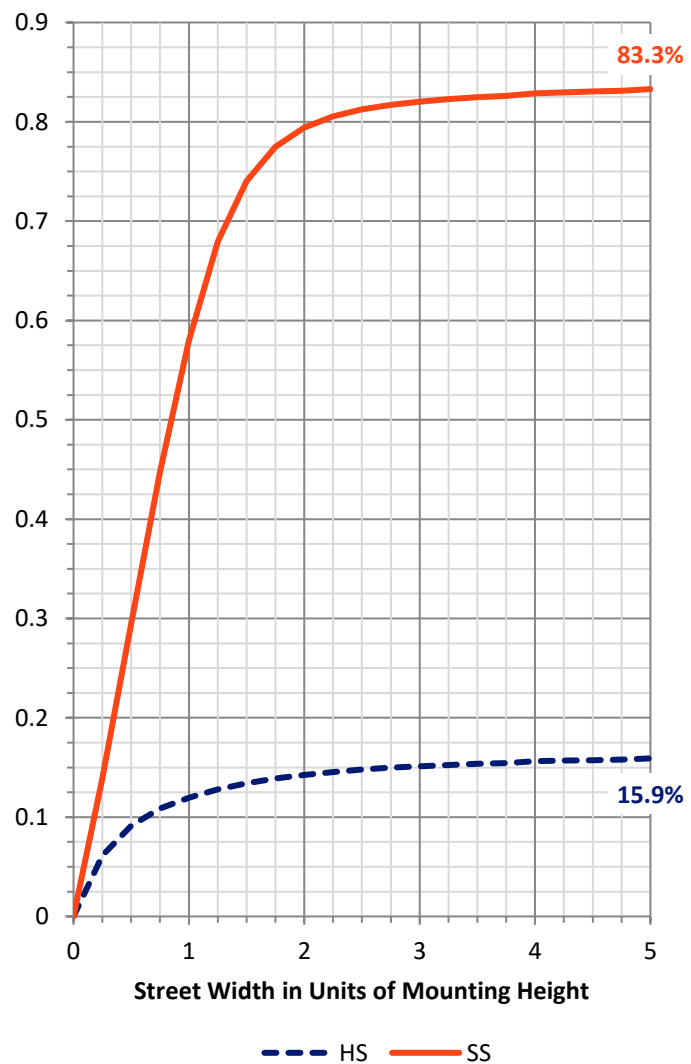
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3426.5	0.0	3426.5
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	17561.5	0.0	17561.5
	% Fixture	83.7	0.0	83.7
Total	Lumens	20988.0	0.0	20988.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.7	1.3
10°-20°	926.9	4.4
20°-30°	1658.3	7.9
30°-40°	2682.5	12.8
40°-50°	3880.6	18.5
50°-60°	4441.6	21.2
60°-70°	4085.8	19.5
70°-80°	2526.6	12.0
80°-90°	513.1	2.4
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°	20988.0	100.0
0°-180°	20988.0	100.0

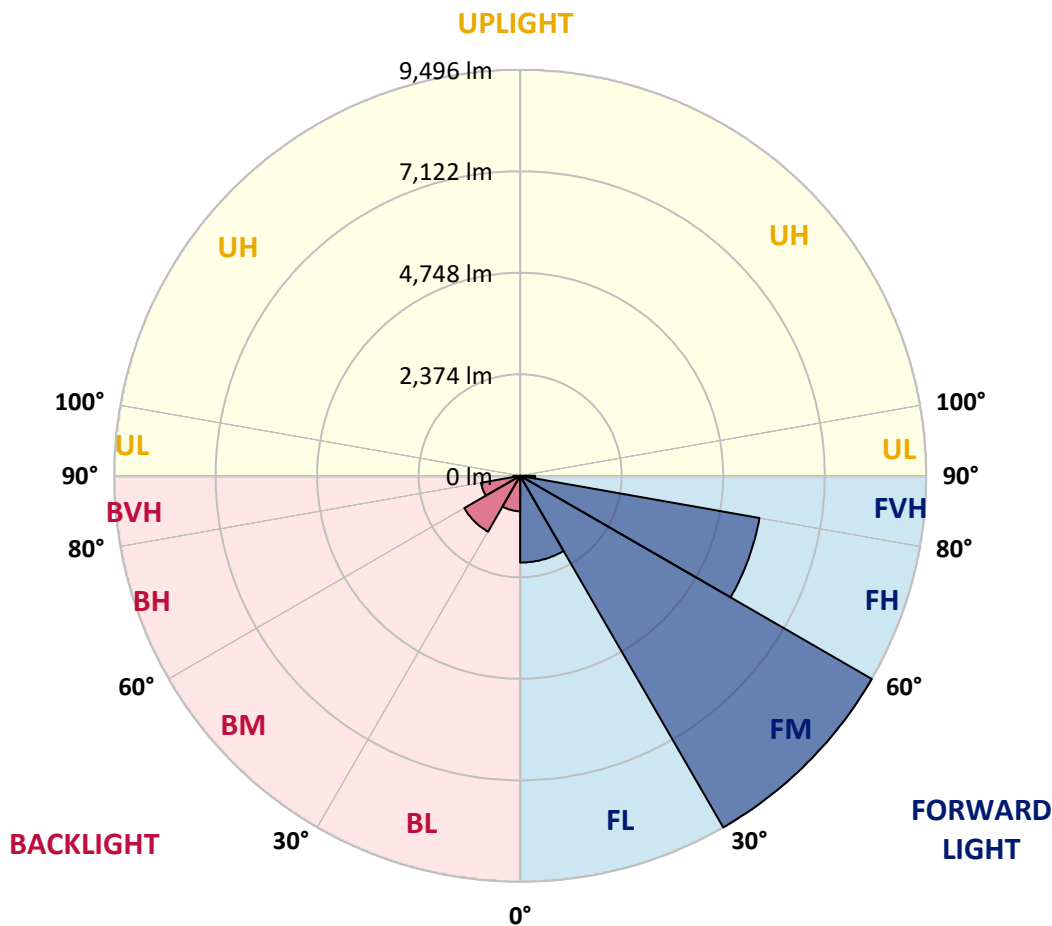


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2030.2	9.7			
FM (30°-60°)	9496.1	45.2			
FH (60°-80°)	5683.0	27.1			G3/7500
FVH (80°-90°)	352.2	1.7			G3/500
BL (0°-30°)	827.6	3.9	B2/1000		
BM (30°-60°)	1508.7	7.2	B2/2500		
BH (60°-80°)	929.4	4.4	B2/1000		G2/1000
BVH (80°-90°)	160.8	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
 Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2624.6	2624.6	2624.6	2624.6	2624.6	2624.6	2624.6	2624.6	2624.6	2624.6	2624.6
2.5°	3345.0	3320.1	3317.4	3278.7	3242.9	3146.3	3077.3	2955.8	2834.4	2831.6	2710.2
5°	3866.6	3841.7	3827.9	3781.0	3720.3	3593.4	3469.2	3281.5	3074.5	3060.7	2831.6
7.5°	4219.8	4197.8	4170.2	4150.8	4092.9	3979.7	3827.9	3604.4	3320.1	3292.5	2972.4
10°	4457.2	4443.4	4437.9	4424.1	4388.2	4297.1	4150.8	3913.5	3565.8	3535.4	3121.4
12.5°	4559.3	4553.8	4578.6	4617.3	4631.1	4595.2	4454.4	4230.9	3836.2	3803.1	3300.8
15°	4440.6	4446.2	4509.6	4642.1	4782.9	4860.1	4777.3	4559.3	4142.6	4095.7	3510.6
17.5°	4385.4	4393.7	4437.9	4564.8	4763.5	5003.6	5042.3	4871.2	4437.9	4371.6	3731.3
20°	4482.0	4493.1	4526.2	4625.5	4763.5	5020.2	5221.7	5169.2	4727.7	4658.7	3943.9
22.5°	4727.7	4741.5	4738.7	4802.2	4896.0	5072.6	5321.0	5450.7	5031.2	4954.0	4164.6
25°	5252.0	5241.0	5147.2	5116.8	5141.6	5254.8	5453.5	5721.2	5348.6	5271.4	4396.5
27.5°	5964.1	5950.3	5779.2	5624.6	5486.6	5536.3	5641.2	5939.2	5671.5	5583.2	4617.3
30°	6725.8	6709.3	6510.5	6259.4	5953.0	5881.3	5867.5	6129.7	5997.2	5903.4	4851.9
32.5°	7468.2	7454.4	7241.9	6949.4	6527.1	6311.8	6179.4	6342.2	6367.0	6276.0	5108.5
35°	8144.4	8144.4	7962.2	7614.5	7137.0	6811.4	6593.3	6604.4	6792.0	6687.2	5401.1
37.5°	8746.0	8743.3	8544.6	8202.3	7744.2	7371.6	7101.2	6921.8	7197.7	7106.7	5707.4
40°	9223.5	9204.2	9057.9	8759.8	8298.9	7929.1	7655.9	7294.3	7650.4	7567.6	6033.1
42.5°	9571.2	9560.2	9460.8	9201.4	8762.6	8414.9	8227.2	7763.5	8163.7	8080.9	6413.9
45°	9706.5	9728.6	9728.6	9482.9	9135.2	8817.8	8735.0	8279.6	8718.4	8635.6	6822.4
47.5°	9488.4	9546.4	9665.1	9681.6	9375.3	9160.0	9187.6	8798.5	9289.7	9245.6	7269.5
50°	8806.8	8914.4	9173.8	9643.0	9471.9	9422.2	9574.0	9328.4	9902.4	9888.6	7813.2
52.5°	7048.7	7310.9	8119.5	8961.3	9405.6	9543.6	9957.6	9924.5	10691.7	10713.8	8522.5
55°	5406.6	5505.9	6441.5	7873.9	8999.9	9505.0	10214.3	10506.8	11547.3	11574.9	9173.8
57.5°	4371.6	4437.9	4948.5	6441.5	8075.4	9295.3	10415.8	10846.3	12204.2	12275.9	9753.4
60°	3463.6	3560.2	3902.5	4929.1	6781.0	8790.2	10556.5	11224.4	12910.7	13018.3	10446.1
62.5°	2575.0	2621.9	2944.8	3651.3	5368.0	7882.2	10482.0	11635.6	13777.3	13907.0	11279.6
65°	1832.6	1874.0	2103.0	2597.0	3968.7	6654.1	10048.7	11942.0	14864.7	14997.1	12118.6
67.5°	1371.7	1388.2	1517.9	1816.0	2674.3	5169.2	9171.1	11889.5	15659.5	15778.2	12455.3
70°	1084.6	1090.1	1153.6	1313.7	1738.7	3598.9	7633.8	11119.5	15717.5	15822.4	12030.3
72.5°	899.7	897.0	932.8	1010.1	1211.6	2276.9	5655.0	9689.9	14972.3	15044.1	10843.5
75°	742.4	747.9	772.8	816.9	924.6	1501.4	3665.1	7730.4	13208.8	13131.5	9099.3
77.5°	623.7	621.0	632.0	670.6	747.9	1079.1	2147.2	5586.0	9789.3	9750.6	5972.4
80°	502.3	507.8	524.4	557.5	629.3	822.4	1269.5	3485.7	5252.0	5111.3	2853.7
82.5°	336.7	389.1	422.3	460.9	543.7	607.2	805.9	1771.8	2348.7	2312.8	1294.4
85°	160.1	212.5	314.6	358.8	441.6	380.9	546.5	844.5	1175.7	1161.9	466.4
87.5°	33.1	33.1	168.4	201.5	273.2	162.8	303.6	367.1	568.5	532.7	190.4
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°	2624.6	2624.6	2624.6	2624.6	2624.6	2624.6	2624.6	2624.6	2624.6	2624.6	2624.6
2.5°	2638.4	2563.9	2414.9	2296.2	2174.8	2105.8	2020.2	1978.8	1970.5	1948.5	1965.0
5°	2685.4	2539.1	2257.6	2072.7	1948.5	1887.8	1857.4	1846.4	1843.6	1838.1	1838.1
7.5°	2748.8	2525.3	2158.2	1970.5	1890.5	1871.2	1879.5	1896.0	1898.8	1904.3	1901.6
10°	2826.1	2528.0	2103.0	1945.7	1907.1	1909.8	1937.4	1959.5	1970.5	1978.8	1976.1
12.5°	2933.7	2561.2	2094.7	1962.3	1945.7	1956.7	1984.3	2006.4	2017.5	2020.2	2020.2
15°	3074.5	2630.2	2114.1	1998.1	1984.3	1992.6	2009.2	2017.5	2020.2	2017.5	2017.5
17.5°	3229.1	2713.0	2141.7	2020.2	1998.1	1989.9	1984.3	1976.1	1959.5	1948.5	1948.5
20°	3378.1	2787.5	2155.5	2017.5	1978.8	1945.7	1912.6	1871.2	1843.6	1821.5	1821.5
22.5°	3527.1	2856.5	2155.5	1987.1	1926.4	1862.9	1793.9	1727.7	1686.3	1658.7	1658.7
25°	3684.4	2922.7	2138.9	1934.7	1843.6	1752.5	1658.7	1575.9	1534.5	1506.9	1501.4
27.5°	3816.9	2961.3	2094.7	1860.2	1741.5	1625.6	1517.9	1432.4	1402.0	1377.2	1377.2
30°	3957.7	2986.2	2011.9	1763.6	1625.6	1493.1	1382.7	1313.7	1280.6	1244.7	1241.9
32.5°	4115.0	3002.7	1918.1	1661.4	1506.9	1366.1	1272.3	1217.1	1145.3	1106.7	1101.2
35°	4297.1	3024.8	1818.8	1545.5	1388.2	1261.3	1206.1	1115.0	1046.0	1012.9	1010.1
37.5°	4490.3	3041.4	1711.1	1443.4	1280.6	1192.3	1137.1	1029.4	968.7	919.0	913.5
40°	4694.5	3041.4	1600.7	1344.1	1195.0	1161.9	1057.0	960.4	858.3	833.5	828.0
42.5°	4920.9	3035.9	1490.3	1247.5	1115.0	1092.9	1010.1	908.0	855.6	833.5	828.0
45°	5161.0	3016.5	1385.5	1137.1	1032.2	988.0	924.6	897.0	874.9	874.9	874.9
47.5°	5434.2	3000.0	1266.8	1037.7	971.5	921.8	874.9	858.3	855.6	863.8	872.1
50°	5784.7	2994.5	1167.4	966.0	924.6	866.6	861.1	847.3	850.0	850.0	850.0
52.5°	6209.7	2944.8	1073.6	913.5	877.6	808.6	825.2	839.0	844.5	841.8	839.0
55°	6521.6	2856.5	993.6	877.6	844.5	786.6	808.6	830.7	836.2	828.0	828.0
57.5°	6803.1	2732.3	930.1	850.0	822.4	772.8	797.6	819.7	814.2	811.4	808.6
60°	7126.0	2613.6	880.4	836.2	800.4	767.2	789.3	803.1	794.8	789.3	786.6
62.5°	7476.5	2497.7	844.5	836.2	783.8	764.5	781.0	786.6	770.0	764.5	764.5
65°	7639.3	2315.5	805.9	836.2	775.5	759.0	764.5	759.0	742.4	742.4	739.6
67.5°	7371.6	2014.7	756.2	825.2	786.6	750.7	739.6	731.4	712.0	712.0	706.5
70°	6632.0	1655.9	684.4	789.3	789.3	747.9	706.5	687.2	665.1	673.4	662.4
72.5°	5666.0	1313.7	596.1	728.6	772.8	745.2	670.6	640.3	621.0	629.3	612.7
75°	4589.7	1018.4	491.3	632.0	731.4	731.4	634.8	593.4	571.3	571.3	552.0
77.5°	2925.5	753.4	400.2	524.4	656.8	712.0	604.4	540.9	507.8	499.5	485.7
80°	1448.9	529.9	328.4	416.7	560.3	667.9	582.3	480.2	433.3	416.7	391.9
82.5°	770.0	367.1	262.2	325.7	447.1	601.7	554.7	414.0	356.0	331.2	303.6
85°	345.0	226.3	209.8	248.4	339.5	494.0	499.5	339.5	273.2	325.7	240.1
87.5°	127.0	102.1	102.1	127.0	196.0	207.0	353.3	218.0	173.9	118.7	93.8
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)