

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: P399746

Luminaire Tested: **ARCH-L-PA3-180-827-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399746
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-PA3-180-827-U-T3
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19661 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G3

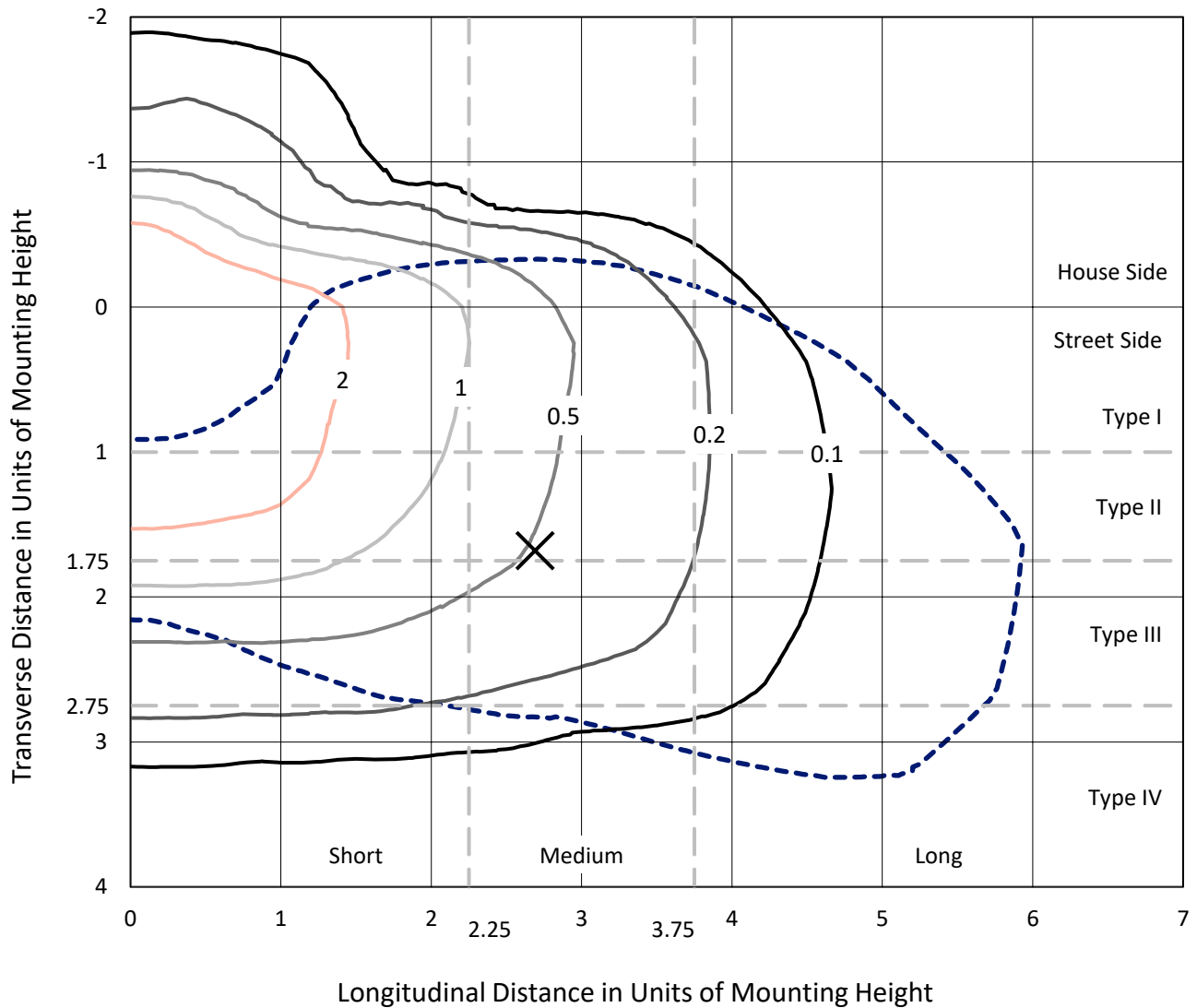
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

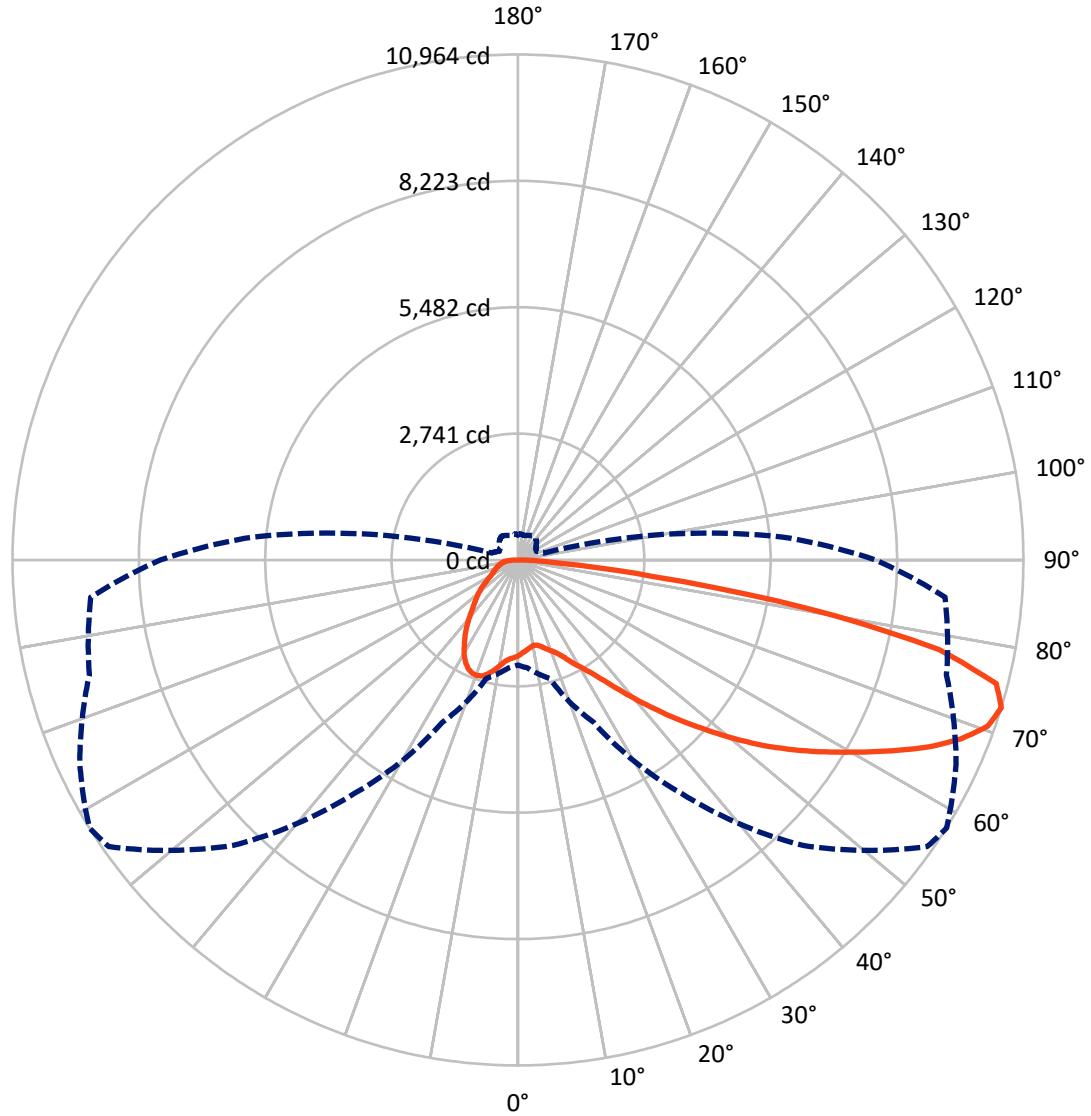
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 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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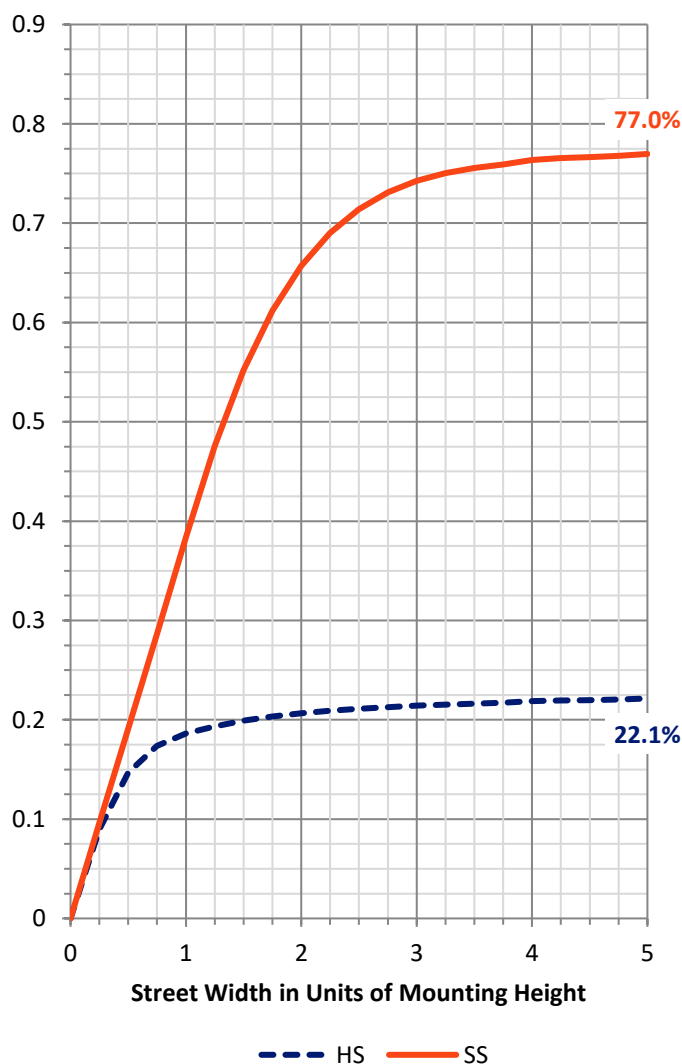
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4458.9	0.0	4458.9
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	15202.1	0.0	15202.1
	% Fixture	77.3	0.0	77.3
Total	Lumens	19661.0	0.0	19661.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.8	1.0
10°-20°	634.4	3.2
20°-30°	1136.5	5.8
30°-40°	1709.6	8.7
40°-50°	2768.4	14.1
50°-60°	4167.4	21.2
60°-70°	4904.5	24.9
70°-80°	3477.8	17.7
80°-90°	662.7	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°	19661.0	100.0
0°-180°	19661.0	100.0

Coefficient of Utilization



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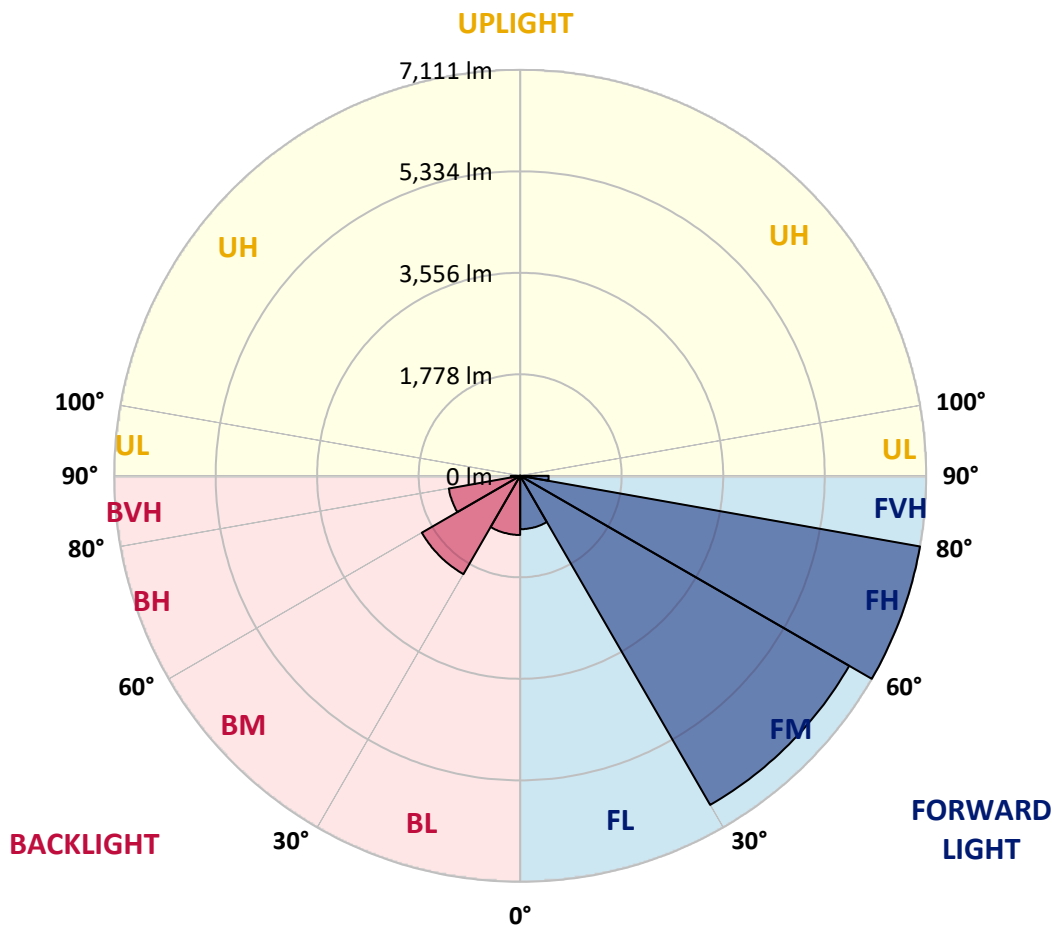
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	935.0	4.8			
FM (30°-60°)	6655.8	33.9			
FH (60°-80°)	7111.5	36.2			G3/7500
FVH (80°-90°)	499.9	2.5			G3/500
BL (0°-30°)	1035.7	5.3	B3/2500		
BM (30°-60°)	1989.5	10.1	B2/2500		
BH (60°-80°)	1270.8	6.5	B3/2500		G3/2500
BVH (80°-90°)	162.8	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2073.8	2073.8	2073.8	2073.8	2073.8	2073.8	2073.8	2073.8	2073.8	2073.8	2073.8
2.5°	1996.0	1985.6	1988.2	1988.2	1998.5	2003.7	2006.3	2014.1	2019.3	2032.3	2050.5
5°	1902.5	1894.7	1897.3	1899.9	1918.1	1936.3	1951.8	1962.2	1977.8	1998.5	2024.5
7.5°	1835.0	1829.8	1832.4	1837.6	1853.2	1874.0	1899.9	1915.5	1938.9	1977.8	2021.9
10°	1785.7	1785.7	1788.3	1798.7	1814.3	1840.2	1861.0	1879.2	1925.9	1996.0	2063.4
12.5°	1746.8	1746.8	1754.6	1775.3	1801.3	1827.2	1876.6	1897.3	1959.6	2055.6	2136.1
15°	1744.2	1746.8	1749.4	1767.5	1796.1	1853.2	1925.9	1957.0	2032.3	2146.5	2239.9
17.5°	1785.7	1788.3	1777.9	1783.1	1816.9	1897.3	1993.4	2029.7	2125.7	2250.3	2346.3
20°	1912.9	1912.9	1881.7	1853.2	1876.6	1964.8	2073.8	2110.2	2216.6	2354.1	2450.2
22.5°	2172.4	2185.4	2112.8	2050.5	2014.1	2063.4	2162.1	2201.0	2320.4	2468.3	2564.4
25°	2486.5	2499.5	2400.9	2312.6	2245.1	2237.3	2302.2	2343.8	2442.4	2595.5	2676.0
27.5°	2790.2	2766.8	2676.0	2592.9	2507.3	2437.2	2486.5	2522.8	2637.0	2753.8	2803.2
30°	3029.0	3010.8	2922.6	2862.9	2782.4	2691.6	2663.0	2701.9	2795.4	2904.4	2930.3
32.5°	3293.7	3280.7	3192.5	3114.6	3047.1	2961.5	2899.2	2917.4	2969.3	3047.1	3062.7
35°	3631.1	3659.7	3566.2	3407.9	3332.6	3249.6	3205.5	3210.7	3249.6	3298.9	3272.9
37.5°	3986.7	4020.5	4025.6	3776.5	3675.3	3600.0	3553.3	3571.4	3618.1	3651.9	3571.4
40°	4646.0	4612.2	4477.3	4293.0	4137.3	4064.6	3999.7	3997.1	4030.8	4090.5	3945.2
42.5°	5520.7	5489.5	5217.0	4978.2	4731.6	4648.6	4521.4	4466.9	4482.5	4557.7	4355.3
45°	6359.0	6346.0	6128.0	5850.3	5554.4	5393.5	5102.8	4970.4	4957.4	5017.1	4775.8
47.5°	7103.9	7046.8	6888.5	6673.1	6641.9	6221.5	5686.8	5507.7	5445.4	5479.1	5209.2
50°	7900.8	7706.1	7488.1	7355.7	7581.5	7189.6	6276.0	6089.1	5935.9	5959.3	5679.0
52.5°	8323.8	7996.8	7854.0	7893.0	8196.6	8046.1	6917.1	6688.6	6442.1	6475.8	6146.2
55°	7960.4	7957.9	8020.1	8261.5	8684.6	8510.7	7527.0	7270.0	7000.1	7007.9	6683.5
57.5°	7462.1	7563.3	7885.2	8417.3	9289.4	8998.7	8126.6	7854.0	7607.5	7568.5	7293.4
60°	7007.9	7119.5	7586.7	8391.3	9499.6	9445.1	8697.6	8458.8	8258.9	8144.7	7934.5
62.5°	6317.5	6400.5	7062.4	8225.2	9323.1	9766.9	9276.4	9112.9	8962.3	8726.1	8624.9
65°	5505.1	5533.6	6231.8	7677.5	9102.5	9891.5	9852.6	9779.9	9634.6	9286.8	9307.5
67.5°	4625.2	4682.3	5294.9	6802.8	8619.7	9834.4	10299.0	10358.7	10187.4	9665.7	9743.6
70°	3688.2	3758.3	4222.9	5593.3	7799.5	9587.8	10711.7	10807.7	10478.1	9790.3	9824.0
72.5°	2281.5	2348.9	2660.4	3885.5	6182.5	8759.9	10838.9	10963.5	10485.9	9624.2	9299.7
75°	789.0	796.8	1040.8	1863.6	3670.1	6613.4	10423.6	10716.9	10156.3	9019.4	8092.8
77.5°	360.8	373.8	462.0	768.3	1627.4	3568.8	8606.7	9341.3	9154.4	8074.7	6229.2
80°	249.2	254.4	319.2	459.4	939.6	1256.2	5432.4	6390.2	6717.2	6252.6	3991.9
82.5°	186.9	192.1	246.6	311.5	677.4	609.9	2068.6	2969.3	3690.8	3623.3	1668.9
85°	179.1	176.5	192.1	207.6	451.6	363.4	669.6	918.8	1440.5	1232.9	420.5
87.5°	77.9	85.7	197.3	116.8	236.2	168.7	290.7	340.0	438.6	381.5	150.5
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°	2073.8	2073.8	2073.8	2073.8	2073.8	2073.8	2073.8	2073.8	2073.8	2073.8	2073.8
2.5°	2058.2	2063.4	2079.0	2102.4	2115.3	2141.3	2159.5	2169.9	2177.6	2180.2	2180.2
5°	2040.1	2050.5	2084.2	2123.1	2159.5	2214.0	2263.3	2291.8	2312.6	2320.4	2323.0
7.5°	2045.3	2071.2	2120.5	2177.6	2224.4	2294.4	2354.1	2411.2	2458.0	2476.1	2476.1
10°	2094.6	2130.9	2198.4	2273.7	2333.4	2406.0	2468.3	2517.7	2572.2	2603.3	2608.5
12.5°	2169.9	2214.0	2302.2	2385.3	2452.8	2509.9	2567.0	2603.3	2629.3	2652.6	2657.8
15°	2276.3	2330.8	2419.0	2504.7	2564.4	2600.7	2616.3	2616.3	2613.7	2616.3	2621.5
17.5°	2382.7	2434.6	2522.8	2608.5	2637.0	2616.3	2598.1	2592.9	2590.3	2585.1	2587.7
20°	2486.5	2535.8	2611.1	2676.0	2652.6	2579.9	2556.6	2554.0	2546.2	2541.0	2535.8
22.5°	2590.3	2626.7	2689.0	2712.3	2618.9	2515.1	2486.5	2470.9	2460.5	2447.6	2434.6
25°	2709.7	2720.1	2766.8	2730.5	2535.8	2395.7	2354.1	2330.8	2320.4	2307.4	2297.0
27.5°	2821.3	2821.3	2829.1	2701.9	2413.8	2237.3	2175.0	2133.5	2130.9	2128.3	2125.7
30°	2922.6	2909.6	2883.6	2616.3	2255.5	2042.7	1949.2	1907.7	1923.3	1936.3	1938.9
32.5°	3041.9	3016.0	2943.3	2499.5	2066.0	1824.6	1710.4	1692.3	1710.4	1726.0	1715.6
35°	3228.8	3182.1	3005.6	2364.5	1884.3	1624.8	1515.8	1489.8	1484.6	1482.0	1461.3
37.5°	3496.2	3415.7	3054.9	2219.2	1705.3	1448.3	1367.8	1313.3	1264.0	1212.1	1204.3
40°	3823.2	3685.6	3088.7	2053.1	1515.8	1300.4	1214.7	1144.6	1061.6	970.7	960.3
42.5°	4181.4	3976.3	3104.2	1868.8	1349.7	1178.4	1071.9	983.7	890.3	820.2	807.2
45°	4568.1	4290.4	3091.3	1692.3	1214.7	1074.5	955.2	859.1	783.8	734.5	724.1
47.5°	4944.5	4651.2	3054.9	1552.1	1110.9	986.3	864.3	776.1	719.0	664.5	651.5
50°	5427.2	4996.4	3010.8	1443.1	996.7	898.0	807.2	713.8	648.9	622.9	617.7
52.5°	5961.9	5341.6	2958.9	1305.5	885.1	828.0	770.9	687.8	667.0	617.7	609.9
55°	6540.7	5751.7	2948.5	1131.6	786.4	778.7	734.5	711.2	716.4	617.7	604.8
57.5°	7150.6	6190.3	2971.9	957.7	706.0	734.5	750.1	731.9	724.1	630.7	604.8
60°	7786.5	6613.4	2901.8	796.8	643.7	698.2	768.3	721.6	664.5	625.5	607.4
62.5°	8404.3	6969.0	2598.1	682.6	597.0	687.8	757.9	682.6	617.7	617.7	609.9
65°	8853.3	7127.3	2032.3	599.6	565.8	674.8	739.7	656.7	604.8	622.9	612.5
67.5°	8905.2	6963.8	1365.2	534.7	539.9	651.5	698.2	633.3	591.8	638.5	622.9
70°	8586.0	6538.1	835.8	485.4	506.1	609.9	661.9	609.9	573.6	625.5	602.2
72.5°	7758.0	5743.9	589.2	443.8	469.8	571.0	628.1	589.2	547.7	565.8	542.5
75°	6364.2	4451.3	467.2	404.9	433.5	534.7	599.6	558.0	516.5	508.7	493.1
77.5°	4508.4	2852.5	376.3	373.8	394.5	490.6	560.6	521.7	480.2	464.6	454.2
80°	2592.9	1399.0	324.4	337.4	358.2	446.4	513.9	480.2	441.2	417.9	402.3
82.5°	991.5	488.0	285.5	293.3	316.7	399.7	467.2	438.6	399.7	420.5	353.0
85°	321.8	267.3	233.6	241.4	264.7	332.2	412.7	389.3	345.2	306.3	282.9
87.5°	142.8	145.3	124.6	137.6	166.1	220.6	301.1	285.5	251.8	210.2	202.5
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)