

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: P399456

Luminaire Tested: **ARCH-L-PA3-140-827-U-T2U**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399456
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-PA3-140-827-U-T2U
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16473 lumens
Efficiency: N/A
Efficacy: 115.2 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

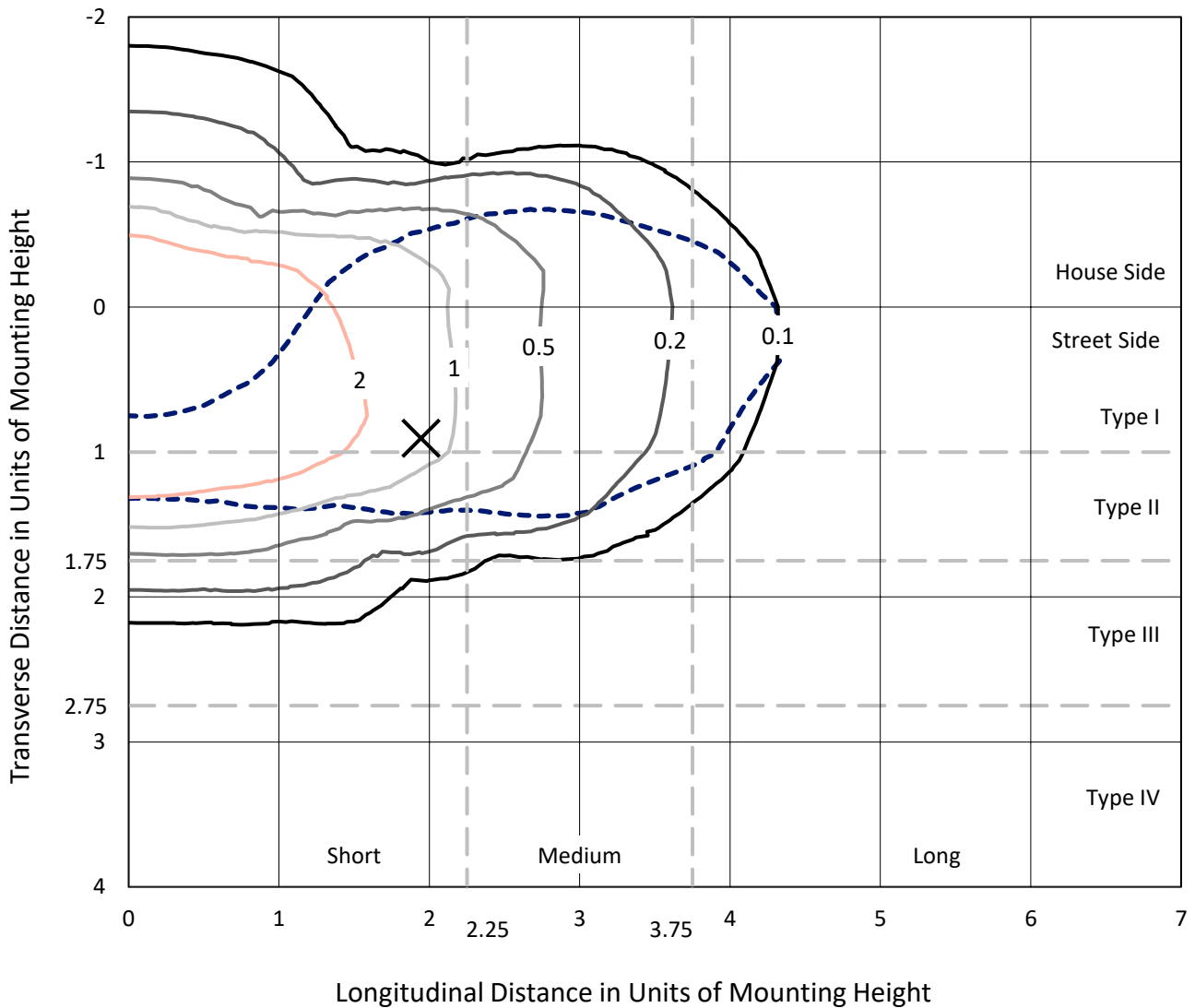
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

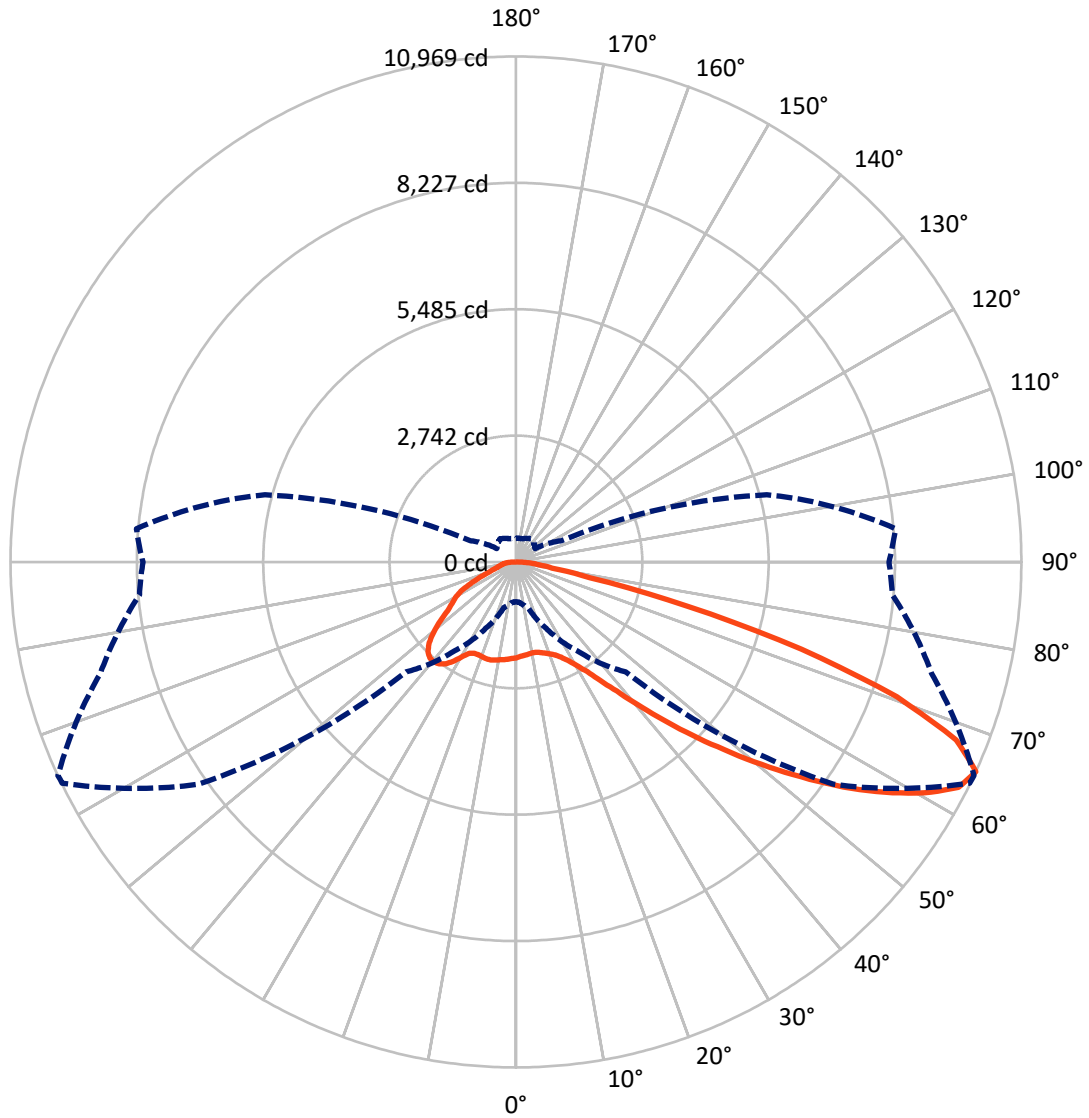
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 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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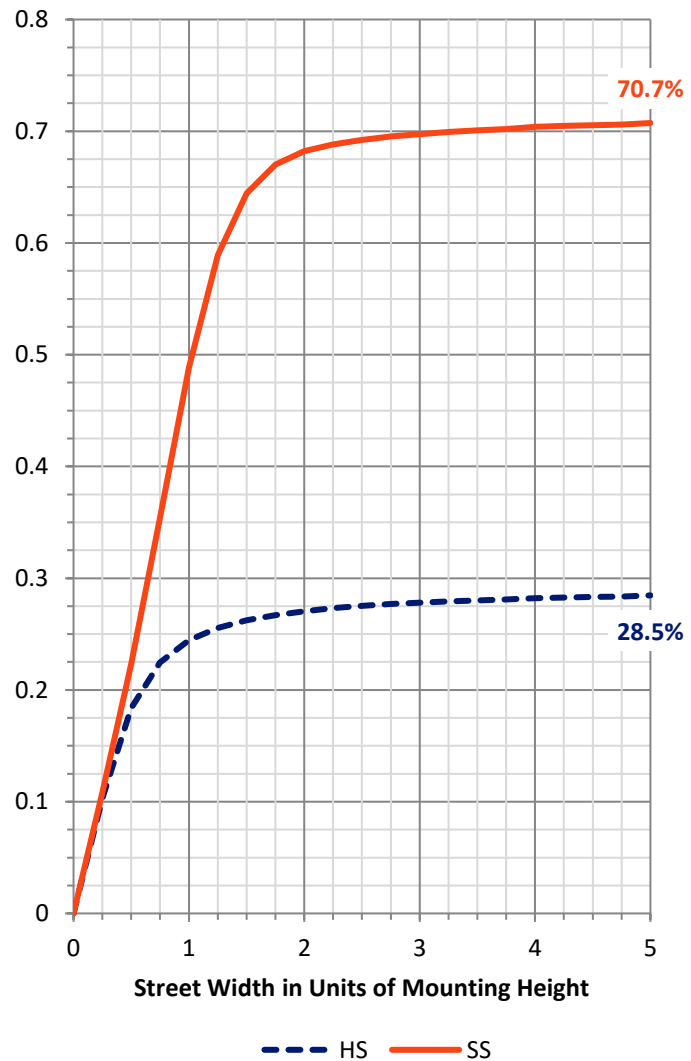
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4762.6	0.0	4762.6
	% Fixture	28.9	0.0	28.9
Street Side	Lumens	11710.4	0.0	11710.4
	% Fixture	71.1	0.0	71.1
Total	Lumens	16473.0	0.0	16473.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.3	1.2
10°-20°	592.1	3.6
20°-30°	1051.7	6.4
30°-40°	1779.2	10.8
40°-50°	3097.3	18.8
50°-60°	4002.6	24.3
60°-70°	3502.5	21.3
70°-80°	1905.1	11.6
80°-90°	344.2	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°	16473.0	100.0
0°-180°	16473.0	100.0



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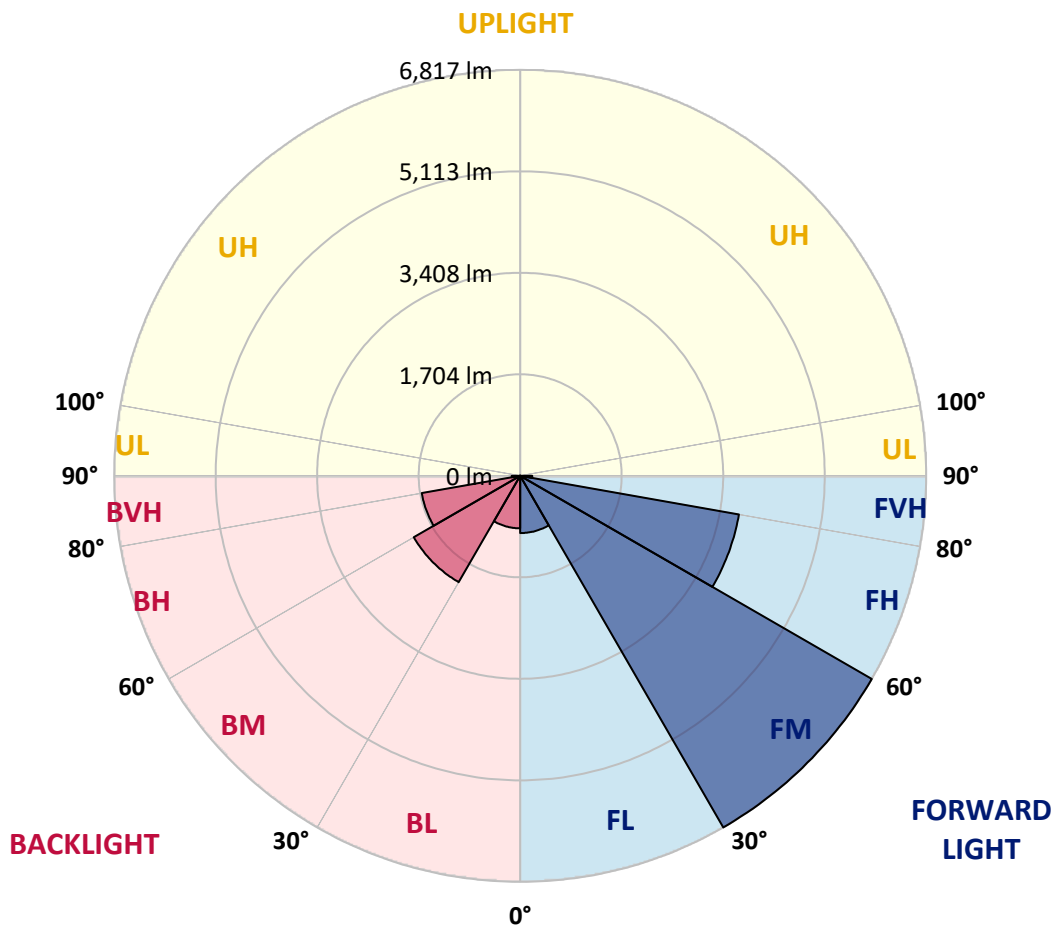
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	961.2	5.8			
FM (30°-60°)	6817.0	41.4			
FH (60°-80°)	3729.7	22.6			G2/5000
FVH (80°-90°)	202.6	1.2			G2/225
BL (0°-30°)	880.9	5.3	B2/1000		
BM (30°-60°)	2062.1	12.5	B2/2500		
BH (60°-80°)	1677.9	10.2	B3/2500		G3/2500
BVH (80°-90°)	141.7	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°	2081.5	2081.5	2081.5	2081.5	2081.5	2081.5	2081.5	2081.5	2081.5	2081.5	2081.5
2.5°	2044.7	2042.5	2038.2	2042.5	2044.7	2049.0	2046.8	2051.2	2049.0	2055.5	2066.3
5°	1992.6	1988.3	1986.1	1997.0	2003.5	2014.3	2018.6	2033.8	2031.7	2042.5	2059.8
7.5°	1934.1	1934.1	1931.9	1944.9	1953.6	1973.1	1988.3	2014.3	2016.5	2036.0	2055.5
10°	1888.5	1890.7	1888.5	1899.4	1912.4	1936.2	1962.3	1999.1	2001.3	2029.5	2049.0
12.5°	1871.2	1871.2	1871.2	1886.4	1903.7	1936.2	1966.6	2005.6	2010.0	2040.3	2057.7
15°	1895.1	1897.2	1892.9	1908.1	1927.6	1966.6	1994.8	2036.0	2040.3	2068.5	2079.4
17.5°	1979.6	1988.3	1977.4	1986.1	1981.8	2012.1	2038.2	2079.4	2081.5	2105.4	2109.7
20°	2146.6	2155.2	2137.9	2127.1	2088.0	2085.9	2096.7	2129.2	2129.2	2144.4	2133.6
22.5°	2404.6	2413.3	2382.9	2341.7	2248.5	2202.9	2179.1	2194.3	2192.1	2198.6	2170.4
25°	2747.2	2745.0	2708.1	2632.3	2482.6	2372.1	2313.5	2289.7	2289.7	2276.7	2242.0
27.5°	3172.2	3139.6	3074.6	2983.5	2775.4	2621.4	2495.7	2434.9	2424.1	2385.1	2320.0
30°	3625.3	3601.5	3508.2	3376.0	3135.3	2938.0	2729.8	2608.4	2601.9	2517.3	2419.8
32.5°	4158.7	4119.7	4015.6	3857.3	3568.9	3291.4	3031.2	2846.9	2836.1	2701.6	2567.2
35°	4843.9	4811.4	4609.7	4451.4	4080.7	3716.4	3408.5	3163.5	3154.8	2990.0	2818.7
37.5°	5665.6	5581.1	5385.9	5088.9	4698.6	4267.1	3876.8	3568.9	3558.1	3376.0	3159.1
40°	6398.5	6322.6	6149.2	5876.0	5457.5	4978.3	4449.3	4076.3	4065.5	3844.3	3571.1
42.5°	6940.6	6888.5	6775.8	6617.5	6318.3	6027.7	5180.0	4689.9	4670.4	4384.2	4043.8
45°	7255.0	7213.8	7148.7	7187.8	7183.4	7129.2	6051.6	5420.6	5357.8	4987.0	4570.7
47.5°	7179.1	7142.2	7168.2	7471.8	7890.3	8204.7	7066.3	6168.7	6084.1	5600.6	5132.3
50°	6630.5	6645.7	6782.3	7363.4	8302.2	9000.4	8191.7	7020.8	6908.1	6218.5	5665.6
52.5°	5631.0	5667.8	5999.6	6812.6	8256.7	9516.5	9208.6	7901.1	7751.5	6821.3	6151.3
55°	4473.1	4566.3	4995.7	5849.9	7662.6	9553.3	9976.1	8785.8	8621.0	7387.2	6574.1
57.5°	3308.8	3447.5	3944.1	4729.0	6524.3	8970.1	10359.9	9631.4	9431.9	7948.8	7020.8
60°	2098.9	2183.4	2755.8	3681.7	4993.5	7543.3	10310.0	10351.2	10177.8	8508.2	7487.0
62.5°	1340.0	1381.2	1669.6	2625.8	3490.9	5585.4	9765.8	10895.5	10778.4	9017.8	7929.3
65°	860.8	878.1	1025.6	1615.3	2376.4	3371.6	8410.7	10954.0	10969.2	9336.5	8202.5
67.5°	700.3	709.0	763.2	997.4	1680.4	1862.5	5858.6	10121.4	10305.7	9254.1	8109.3
70°	637.5	648.3	704.7	795.7	1301.0	1285.8	2836.1	8469.2	8770.6	8779.3	7695.1
72.5°	537.7	552.9	628.8	752.4	1006.1	1014.7	1201.2	6032.1	6476.6	7846.9	7072.8
75°	448.8	457.5	522.5	663.5	852.1	810.9	843.5	3198.2	3840.0	6292.3	6411.5
77.5°	364.3	372.9	420.6	529.1	756.7	631.0	663.5	1324.8	1637.0	4271.5	5240.7
80°	260.2	268.9	323.1	412.0	572.4	568.1	492.2	730.7	793.6	2309.2	3404.2
82.5°	186.5	193.0	245.0	294.9	396.8	570.3	370.8	496.5	520.4	1023.4	1372.5
85°	125.8	125.8	169.1	195.1	255.9	359.9	299.2	336.1	351.3	485.7	370.8
87.5°	54.2	54.2	91.1	99.7	134.4	167.0	223.3	169.1	173.5	262.4	151.8
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°	2081.5	2081.5	2081.5	2081.5	2081.5	2081.5	2081.5	2081.5	2081.5	2081.5	2081.5
2.5°	2072.8	2075.0	2079.4	2092.4	2101.0	2114.0	2120.6	2129.2	2129.2	2124.9	2127.1
5°	2068.5	2075.0	2090.2	2114.0	2129.2	2153.1	2170.4	2183.4	2187.8	2183.4	2185.6
7.5°	2066.3	2077.2	2103.2	2137.9	2159.6	2189.9	2213.8	2229.0	2239.8	2235.5	2237.6
10°	2059.8	2077.2	2109.7	2153.1	2185.6	2216.0	2237.6	2244.1	2250.6	2246.3	2244.1
12.5°	2068.5	2088.0	2122.7	2174.8	2211.6	2235.5	2242.0	2231.1	2216.0	2207.3	2205.1
15°	2085.9	2105.4	2140.1	2194.3	2226.8	2235.5	2220.3	2185.6	2150.9	2131.4	2129.2
17.5°	2109.7	2122.7	2150.9	2198.6	2224.6	2213.8	2183.4	2142.2	2116.2	2101.0	2103.2
20°	2124.9	2124.9	2146.6	2183.4	2205.1	2196.4	2159.6	2114.0	2072.8	2053.3	2046.8
22.5°	2146.6	2135.7	2137.9	2170.4	2200.8	2187.8	2109.7	2029.5	1970.9	1949.3	1947.1
25°	2205.1	2174.8	2155.2	2174.8	2246.3	2140.1	1984.0	1890.7	1836.5	1817.0	1819.2
27.5°	2276.7	2235.5	2194.3	2226.8	2283.2	2031.7	1823.5	1717.3	1684.7	1669.6	1676.1
30°	2348.2	2294.0	2239.8	2356.9	2257.2	1862.5	1617.5	1513.4	1485.3	1474.4	1483.1
32.5°	2480.5	2391.6	2326.5	2530.4	2176.9	1669.6	1394.2	1298.8	1272.8	1259.8	1255.4
35°	2701.6	2588.9	2523.8	2682.1	2064.2	1454.9	1190.4	1123.2	1095.0	1066.8	1062.4
37.5°	3020.4	2883.8	2825.2	2768.9	1905.9	1242.4	1034.3	988.7	947.5	904.2	902.0
40°	3402.0	3224.2	3180.8	2807.9	1686.9	1042.9	925.8	882.5	830.4	789.2	791.4
42.5°	3842.1	3614.5	3521.2	2797.0	1415.9	936.7	847.8	800.1	754.6	717.7	715.5
45°	4312.7	4054.6	3840.0	2721.2	1147.0	863.0	800.1	743.7	698.2	657.0	652.6
47.5°	4833.0	4544.7	4134.9	2573.7	947.5	810.9	771.9	691.7	650.5	624.5	624.5
50°	5357.8	5013.0	4405.9	2350.4	830.4	771.9	730.7	663.5	631.0	609.3	609.3
52.5°	5806.6	5500.9	4629.2	2083.7	756.7	739.4	702.5	650.5	615.8	596.3	594.1
55°	6242.4	5954.0	4828.7	1819.2	696.0	696.0	696.0	639.6	600.6	583.3	581.1
57.5°	6676.0	6431.0	5036.9	1645.7	641.8	659.1	683.0	626.6	587.6	572.4	570.3
60°	7166.1	7003.5	5277.5	1524.3	594.1	620.1	665.7	611.4	565.9	552.9	550.7
62.5°	7686.5	7686.5	5496.5	1353.0	550.7	587.6	639.6	591.9	546.4	535.6	533.4
65°	8094.1	8269.7	5637.5	1097.1	507.4	555.1	609.3	565.9	520.4	518.2	513.9
67.5°	8141.8	8417.2	5548.6	828.3	468.3	520.4	578.9	537.7	494.4	494.4	487.9
70°	7799.2	8078.9	5271.0	620.1	440.2	485.7	539.9	503.0	461.8	466.2	455.3
72.5°	7226.8	7296.2	4581.5	490.0	407.6	448.8	492.2	464.0	427.1	427.1	412.0
75°	6472.2	6086.3	3328.3	409.8	368.6	405.5	444.5	420.6	388.1	377.3	368.6
77.5°	5151.8	4410.2	1934.1	353.4	336.1	364.3	390.3	372.9	344.8	320.9	320.9
80°	3139.6	2584.6	854.3	305.7	297.1	318.7	336.1	316.6	292.7	268.9	262.4
82.5°	1194.7	997.4	414.1	262.4	260.2	273.2	286.2	266.7	249.3	238.5	206.0
85°	327.4	301.4	284.0	219.0	214.7	212.5	227.7	219.0	195.1	160.5	143.1
87.5°	123.6	140.9	153.9	134.4	143.1	132.3	151.8	138.8	123.6	80.2	71.6
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)