

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: P509880

Luminaire Tested: **VERD-M-CA3-160-727-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509880
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-7)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA3-160-727-U-T4-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1000mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17758 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

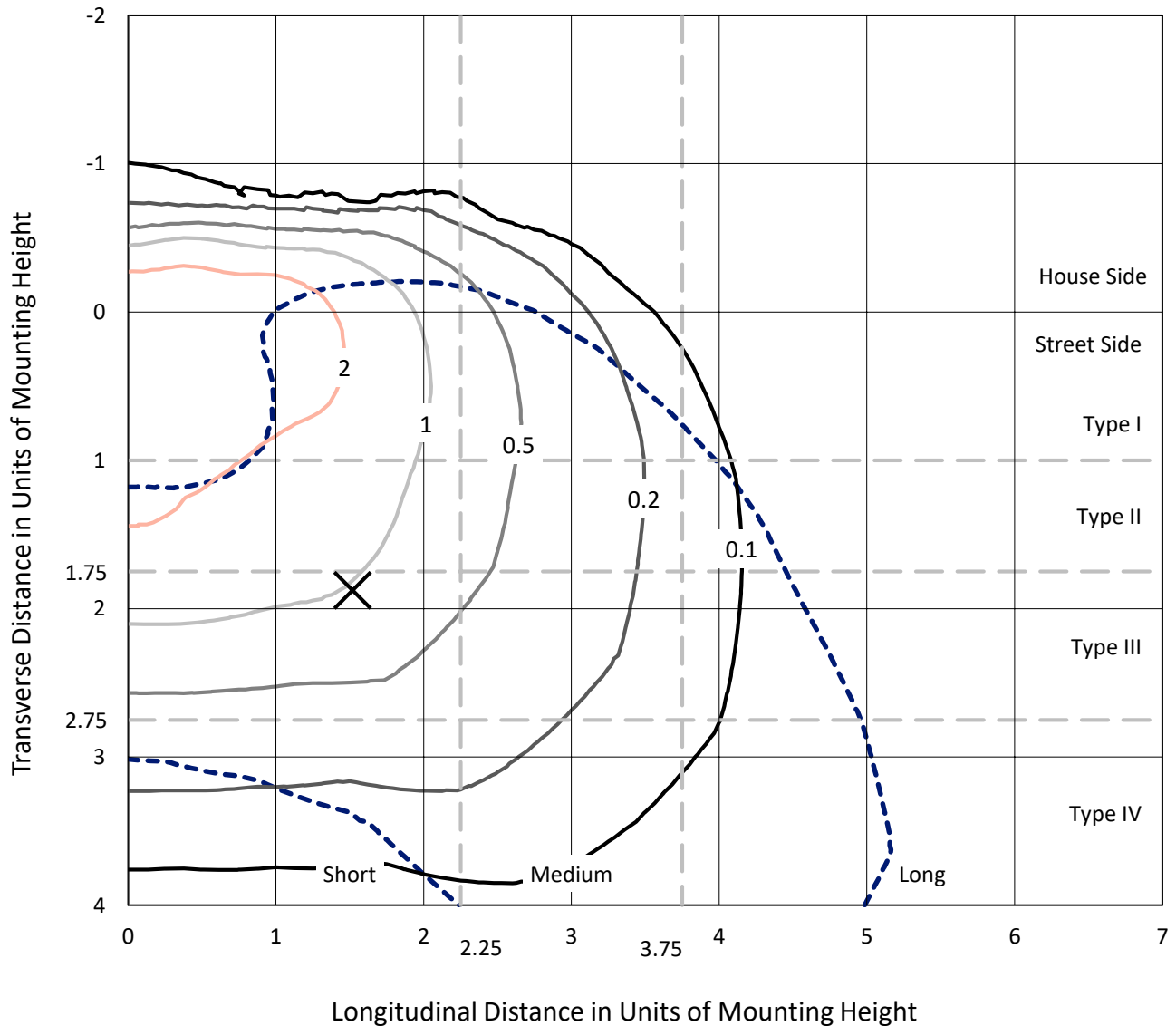
Input Watts (W): 162.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

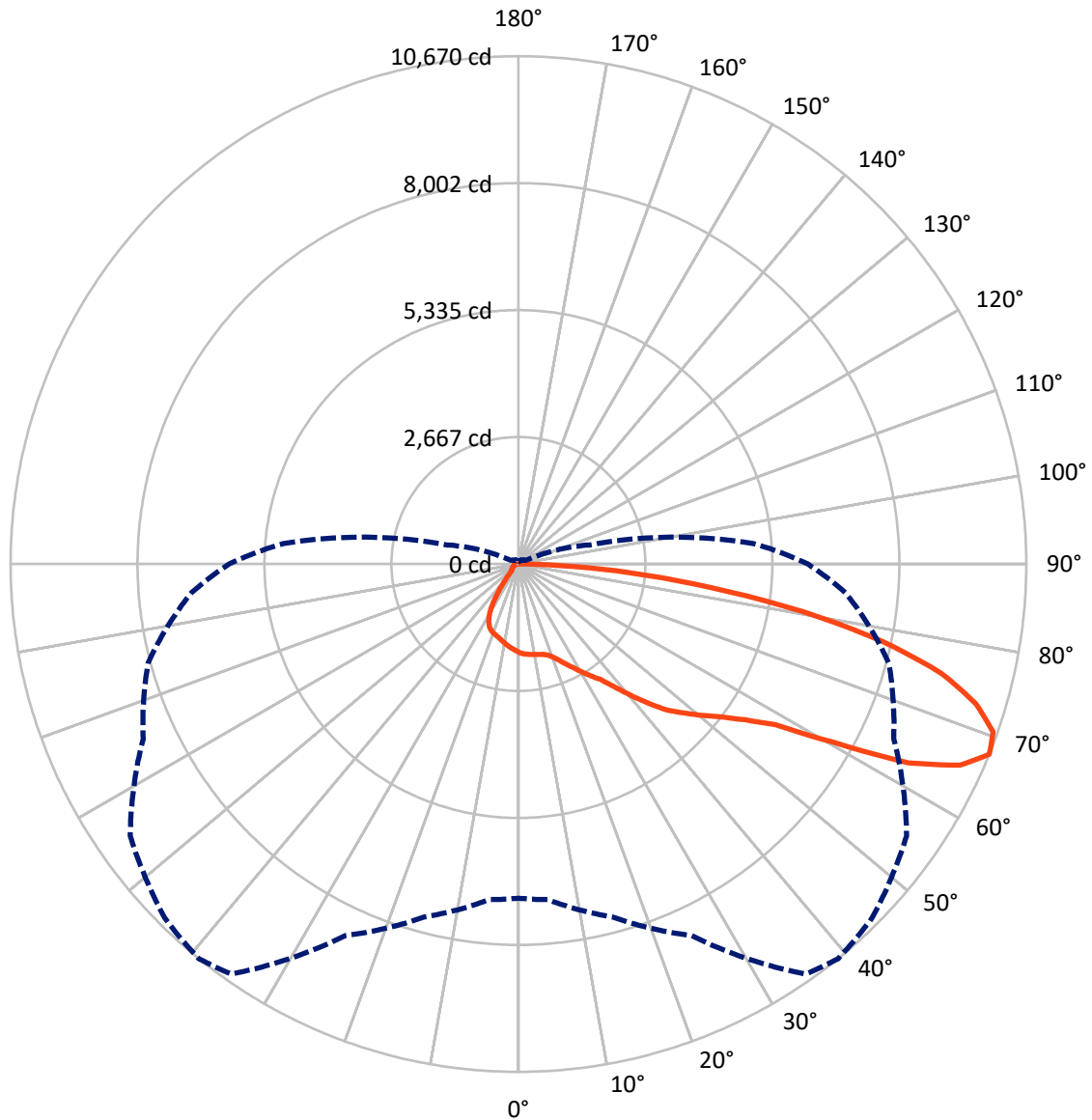
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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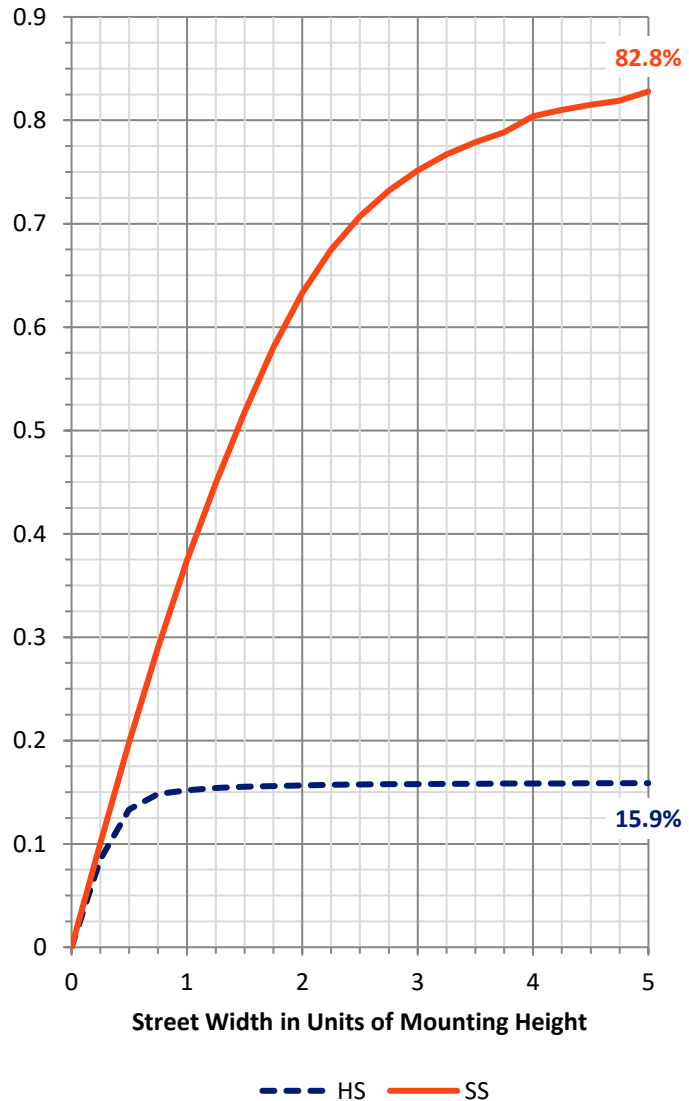
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2851.5	0.0	2851.5
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	14906.5	0.0	14906.5
	% Fixture	83.9	0.0	83.9
Total	Lumens	17758.0	0.0	17758.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.5	1.0
10°-20°	522.5	2.9
20°-30°	925.6	5.2
30°-40°	1482.6	8.3
40°-50°	2378.4	13.4
50°-60°	3476.5	19.6
60°-70°	4632.6	26.1
70°-80°	3476.4	19.6
80°-90°	687.8	3.9
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°	17758.0	100.0
0°-180°	17758.0	100.0

Coefficient of Utilization



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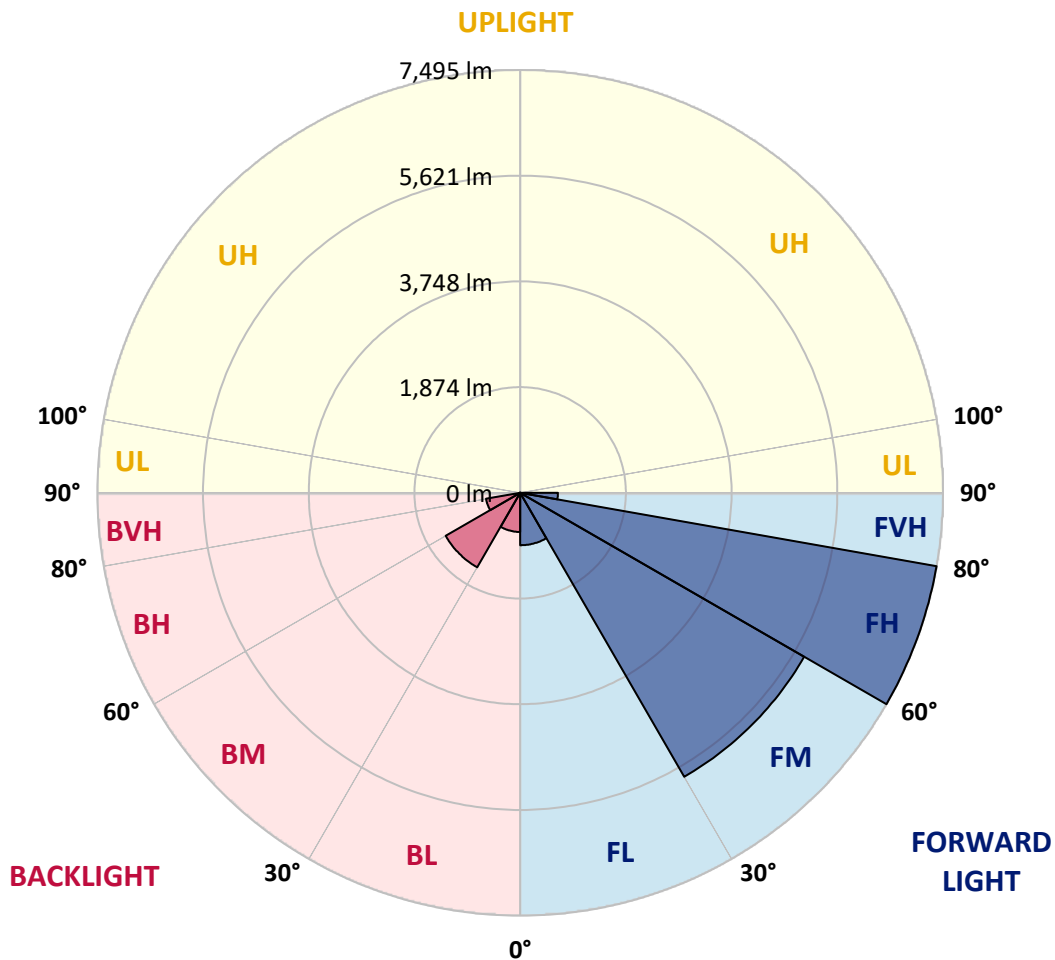
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	929.3	5.2			
FM (30°-60°)	5812.4	32.7			
FH (60°-80°)	7495.1	42.2			G3/7500
FVH (80°-90°)	669.8	3.8			G4/750
BL (0°-30°)	694.4	3.9	B2/1000		
BM (30°-60°)	1525.1	8.6	B2/2500		
BH (60°-80°)	614.0	3.5	B2/1000		G2/1000
BVH (80°-90°)	18.0	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1859.5	1859.5	1859.5	1859.5	1859.5	1859.5	1859.5	1859.5	1859.5	1859.5	1859.5
2.5°	1861.2	1886.2	1886.2	1879.1	1883.5	1887.1	1860.3	1867.5	1864.8	1863.9	1869.3
5°	1875.5	1903.2	1901.4	1892.5	1896.0	1903.2	1878.2	1888.9	1885.3	1876.4	1878.2
7.5°	1875.5	1898.7	1904.1	1894.2	1911.2	1920.1	1893.4	1903.2	1907.6	1901.4	1895.1
10°	1868.4	1888.9	1896.0	1894.2	1916.6	1930.8	1905.0	1932.6	1936.2	1936.2	1926.4
12.5°	1865.7	1888.9	1898.7	1906.7	1932.6	1947.8	1932.6	1959.4	1977.2	1976.3	1970.1
15°	1867.5	1893.4	1908.5	1921.9	1949.6	1968.3	1962.1	2003.1	2024.5	2030.8	2030.8
17.5°	1912.1	1943.3	1950.5	1964.7	1983.5	2012.0	2004.0	2056.6	2090.5	2101.3	2116.4
20°	2037.0	2061.1	2070.0	2062.9	2070.9	2088.8	2072.7	2123.6	2174.4	2203.0	2228.0
22.5°	2196.7	2214.6	2206.5	2199.4	2194.9	2199.4	2179.8	2213.7	2270.8	2311.8	2354.7
25°	2318.1	2357.3	2351.1	2331.5	2325.2	2330.6	2305.6	2347.5	2400.2	2443.0	2507.2
27.5°	2465.3	2489.4	2472.4	2465.3	2469.8	2468.9	2453.7	2493.8	2542.0	2595.6	2690.1
30°	2625.0	2645.5	2628.6	2621.4	2629.5	2634.8	2617.9	2688.4	2739.2	2797.2	2919.4
32.5°	2887.3	2936.4	2890.0	2797.2	2799.0	2807.0	2808.8	2903.4	2996.2	3041.7	3203.2
35°	3261.2	3300.4	3238.9	3126.4	2986.4	2981.0	2995.3	3136.3	3322.7	3529.7	3718.9
37.5°	3610.0	3667.2	3611.8	3480.7	3310.3	3269.2	3195.2	3362.9	3656.4	4101.7	4337.2
40°	4028.5	4071.3	3961.6	3847.4	3677.0	3619.0	3500.3	3607.4	4009.8	4698.6	4861.0
42.5°	4364.9	4390.8	4299.8	4180.2	4032.1	3988.4	3866.1	3875.9	4387.2	5221.5	5325.8
45°	4676.3	4703.9	4629.0	4527.3	4433.6	4381.0	4291.7	4339.9	4829.8	5772.9	5709.5
47.5°	4912.7	4940.4	4880.6	4808.3	4711.1	4675.4	4677.2	4850.3	5371.4	6213.6	6053.9
50°	5300.0	5289.3	5133.1	5054.6	4978.8	4997.5	5017.1	5263.4	5917.4	6592.0	6372.5
52.5°	5975.4	5922.8	5600.7	5395.4	5301.8	5333.9	5366.0	5693.5	6537.5	6937.3	6616.9
55°	6739.2	6685.6	6411.7	5972.7	5724.7	5776.4	5748.8	6119.1	7058.6	7269.2	6818.6
57.5°	7306.6	7395.0	7290.6	7051.5	6430.5	6362.6	6301.1	6549.1	7479.7	7601.1	7012.2
60°	7800.1	7923.2	8109.7	8044.5	7780.4	7603.8	7039.0	7051.5	7884.8	7831.3	7088.9
62.5°	8281.9	8354.2	8673.6	8744.1	9071.5	9198.2	8624.5	7701.0	8276.5	7991.0	7140.7
65°	7800.1	7892.9	8448.7	8961.8	10020.0	10189.5	9987.9	8877.0	8564.7	8085.6	7080.9
67.5°	7021.1	7077.3	7677.8	8611.1	10516.1	10669.5	10512.5	9956.6	8699.5	8057.0	6895.3
70°	6003.1	6091.4	6681.2	7932.1	10498.2	10580.3	10443.8	10086.9	8648.6	7892.9	6426.9
72.5°	4964.5	5014.5	5514.1	6762.4	9985.2	10053.9	9981.6	9887.0	8477.3	7435.1	5526.6
75°	3731.4	3742.1	4254.3	5340.1	8828.8	9187.5	9275.8	9542.6	7821.5	6373.4	4087.4
77.5°	2501.9	2608.1	3099.7	4081.2	7247.8	7821.5	8239.9	8434.5	6534.9	4756.6	2173.5
80°	1342.8	1369.6	1899.6	2896.2	5507.9	6056.6	6453.7	6457.2	4570.1	2356.4	485.4
82.5°	621.9	596.0	956.5	1832.7	3815.3	4059.7	4325.6	3623.4	1830.0	402.4	124.0
85°	275.7	290.9	432.7	893.1	2117.3	2362.7	2328.8	1604.3	321.2	108.9	75.8
87.5°	102.6	108.0	167.7	360.5	755.7	824.4	741.5	308.7	41.9	38.4	23.2
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°	1859.5	1859.5	1859.5	1859.5	1859.5	1859.5	1859.5	1859.5	1859.5	1859.5	1859.5
2.5°	1863.0	1863.0	1861.2	1837.1	1831.8	1820.2	1810.4	1817.5	1809.5	1814.8	1809.5
5°	1871.1	1866.6	1855.9	1827.3	1813.9	1788.1	1768.4	1772.9	1762.2	1762.2	1761.3
7.5°	1889.8	1880.9	1862.1	1816.6	1791.6	1754.2	1723.8	1714.0	1703.3	1690.8	1689.0
10°	1920.1	1907.6	1882.7	1820.2	1772.0	1722.0	1669.4	1648.9	1622.1	1602.5	1598.9
12.5°	1962.1	1943.3	1909.4	1833.6	1770.2	1690.8	1620.3	1580.2	1548.1	1519.5	1513.3
15°	2022.7	2004.0	1963.8	1860.3	1771.1	1661.4	1568.6	1501.7	1446.3	1419.6	1420.5
17.5°	2111.1	2097.7	2036.1	1916.6	1788.1	1646.2	1525.8	1419.6	1333.9	1289.3	1283.1
20°	2224.4	2215.5	2140.5	1990.6	1827.3	1648.9	1479.4	1332.1	1206.3	1109.1	1087.7
22.5°	2356.4	2343.1	2251.2	2054.9	1857.7	1641.7	1428.5	1235.8	1046.6	919.9	894.9
25°	2503.7	2496.5	2352.9	2111.1	1861.2	1611.4	1355.3	1110.9	873.5	737.9	716.5
27.5°	2691.9	2650.0	2444.8	2141.4	1853.2	1551.6	1250.9	939.5	694.2	600.5	577.3
30°	2898.0	2813.3	2534.0	2164.6	1813.9	1456.2	1101.9	741.5	516.6	433.6	422.0
32.5°	3126.4	2999.7	2617.9	2162.8	1744.4	1308.9	908.3	514.8	348.9	315.0	303.4
35°	3539.6	3324.5	2718.7	2133.4	1627.5	1134.1	641.5	335.5	258.8	238.2	235.6
37.5°	4113.3	3748.3	2854.3	2077.2	1476.7	930.6	418.5	229.3	221.3	222.2	221.3
40°	4583.5	4221.2	3042.6	1992.4	1286.6	664.7	250.7	204.3	208.8	211.5	212.4
42.5°	5043.9	4606.7	3275.5	1886.2	1087.7	431.8	203.4	195.4	191.8	196.3	198.1
45°	5414.2	4943.1	3494.9	1762.2	854.8	255.2	197.2	181.1	174.9	176.7	179.3
47.5°	5710.4	5210.7	3627.0	1617.7	624.6	192.7	191.8	168.6	159.7	157.9	157.0
50°	5989.7	5440.1	3711.8	1442.8	397.9	185.6	177.6	154.4	143.7	141.9	141.9
52.5°	6179.7	5590.0	3740.3	1235.8	237.3	181.1	167.7	142.8	128.5	131.2	132.9
55°	6365.3	5741.6	3681.4	966.3	182.0	169.5	157.0	128.5	116.9	127.6	131.2
57.5°	6453.7	5763.9	3548.5	671.9	176.7	153.5	141.9	115.1	106.2	112.4	112.4
60°	6525.0	5748.8	3362.9	425.6	172.2	142.8	129.4	104.4	93.7	90.1	87.4
62.5°	6477.7	5688.1	2989.9	277.5	159.7	130.3	117.8	96.4	81.2	71.4	70.5
65°	6376.9	5474.0	2386.8	218.6	148.1	124.0	107.1	86.5	71.4	59.8	58.9
67.5°	6079.8	4952.9	1544.5	181.1	141.9	119.6	99.0	80.3	63.3	51.8	50.9
70°	5367.8	4000.9	473.8	162.4	147.2	115.1	97.3	73.2	56.2	45.5	43.7
72.5°	4244.4	2673.2	175.8	134.7	126.7	110.6	94.6	66.0	48.2	38.4	36.6
75°	2733.9	873.5	149.0	104.4	108.0	105.3	87.4	60.7	41.0	31.2	30.3
77.5°	774.5	182.9	135.6	76.7	95.5	101.7	76.7	50.9	36.6	26.8	25.9
80°	162.4	130.3	124.0	54.4	71.4	66.0	51.8	39.3	34.8	23.2	23.2
82.5°	106.2	103.5	106.2	37.5	47.3	48.2	41.0	33.9	30.3	21.4	21.4
85°	74.9	94.6	50.9	26.8	22.3	20.5	24.1	29.4	26.8	17.8	17.8
87.5°	25.9	15.2	10.7	10.7	9.8	9.8	11.6	13.4	14.3	14.3	13.4
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)