

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: P509920

Luminaire Tested: **VERD-M-CA3-170-722-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509920
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-CA3-170-722-U-T4-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2200K, 1060mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17908 lumens
Efficiency: N/A
Efficacy: 103.6 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

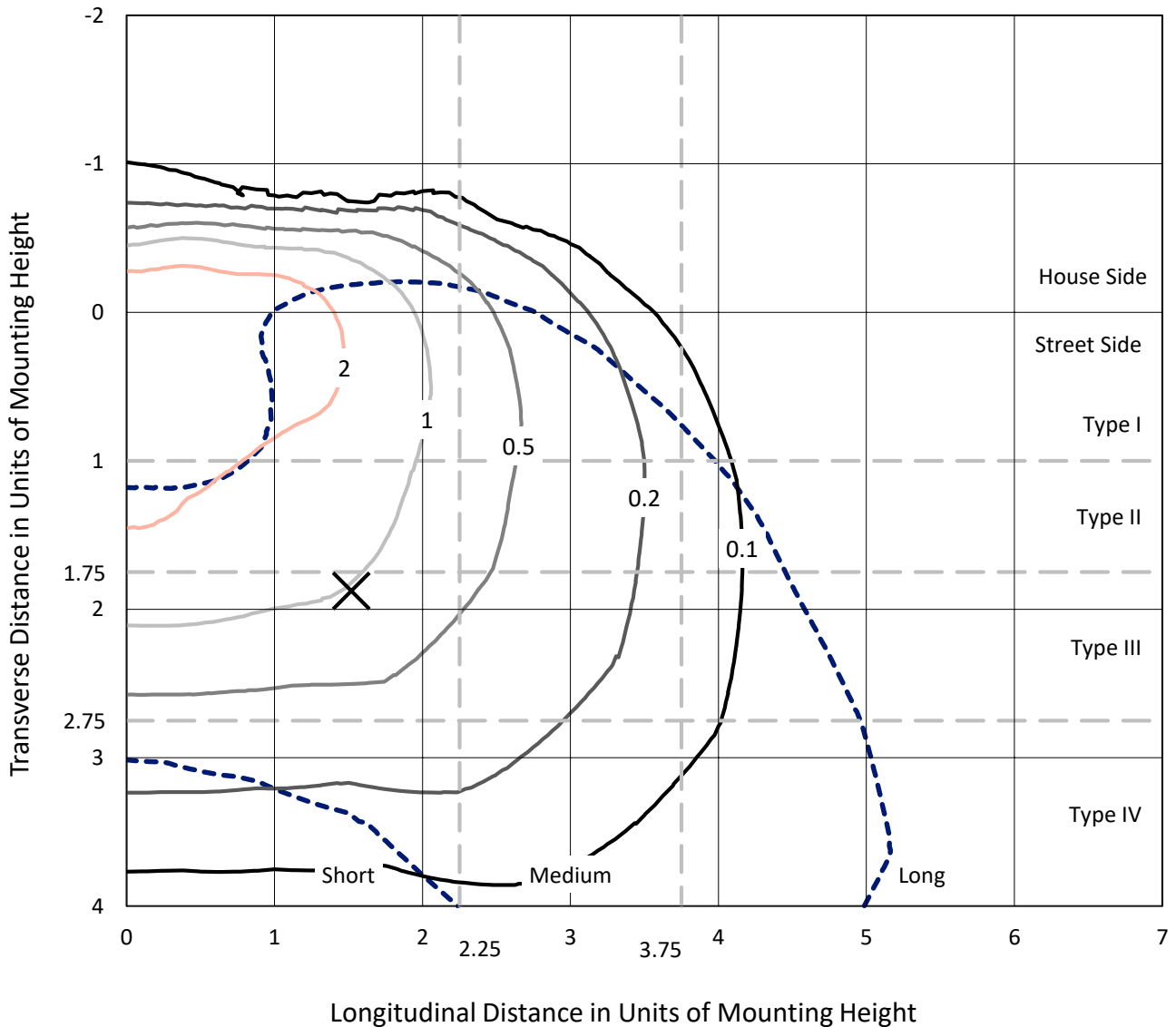
Input Watts (W): 172.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

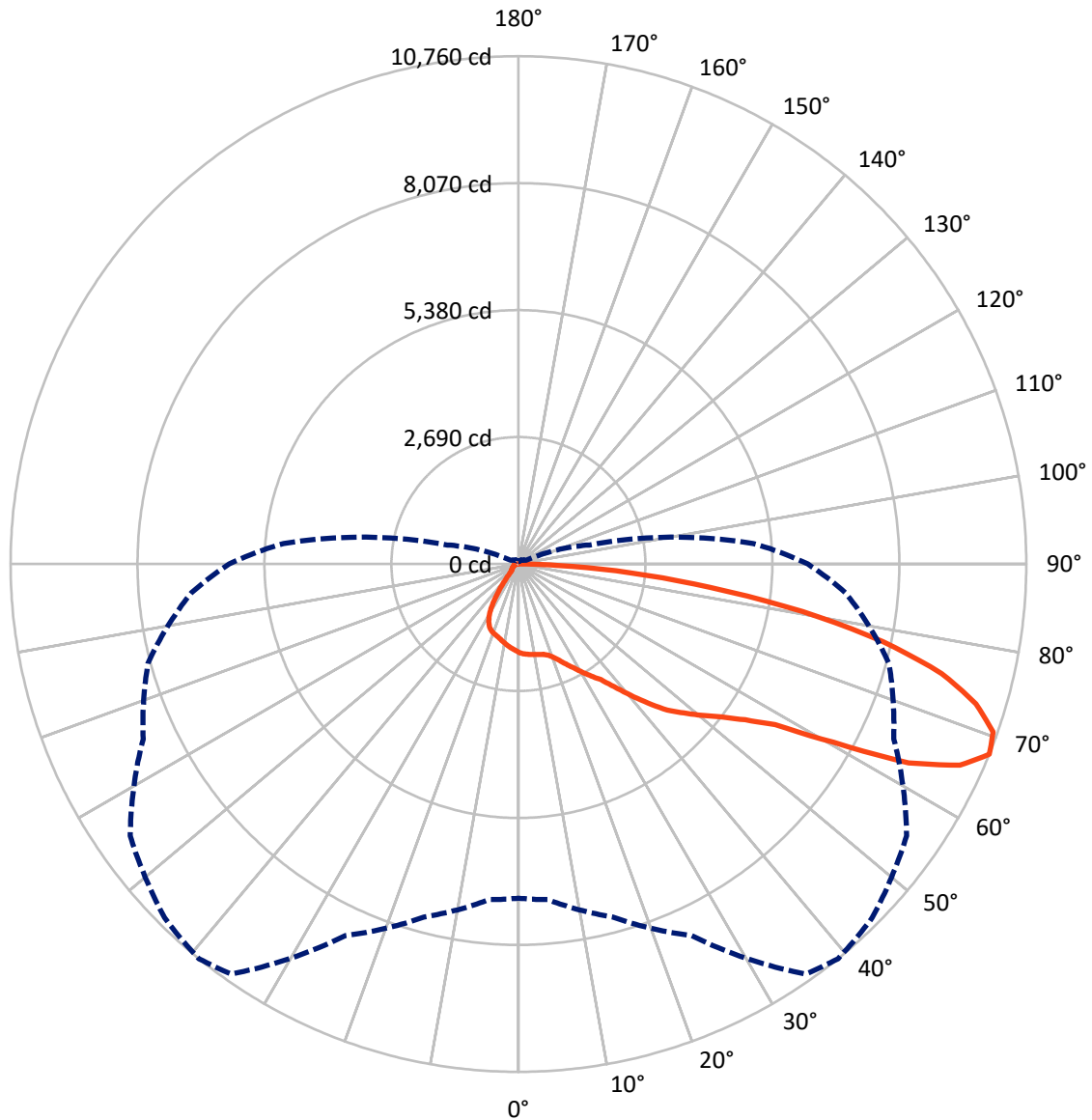
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 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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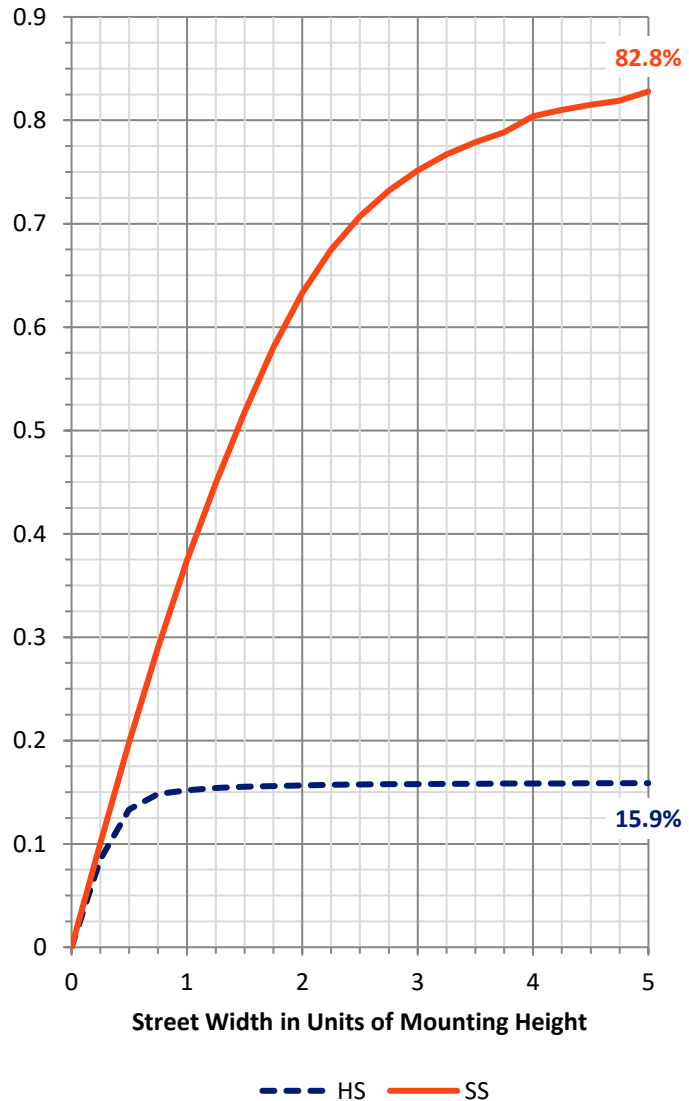
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2875.6	0.0	2875.6
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	15032.4	0.0	15032.4
	% Fixture	83.9	0.0	83.9
Total	Lumens	17908.0	0.0	17908.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.0	1.0
10°-20°	526.9	2.9
20°-30°	933.5	5.2
30°-40°	1495.1	8.3
40°-50°	2398.5	13.4
50°-60°	3505.9	19.6
60°-70°	4671.8	26.1
70°-80°	3505.8	19.6
80°-90°	693.6	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°	17908.0	100.0
0°-180°	17908.0	100.0

Coefficient of Utilization



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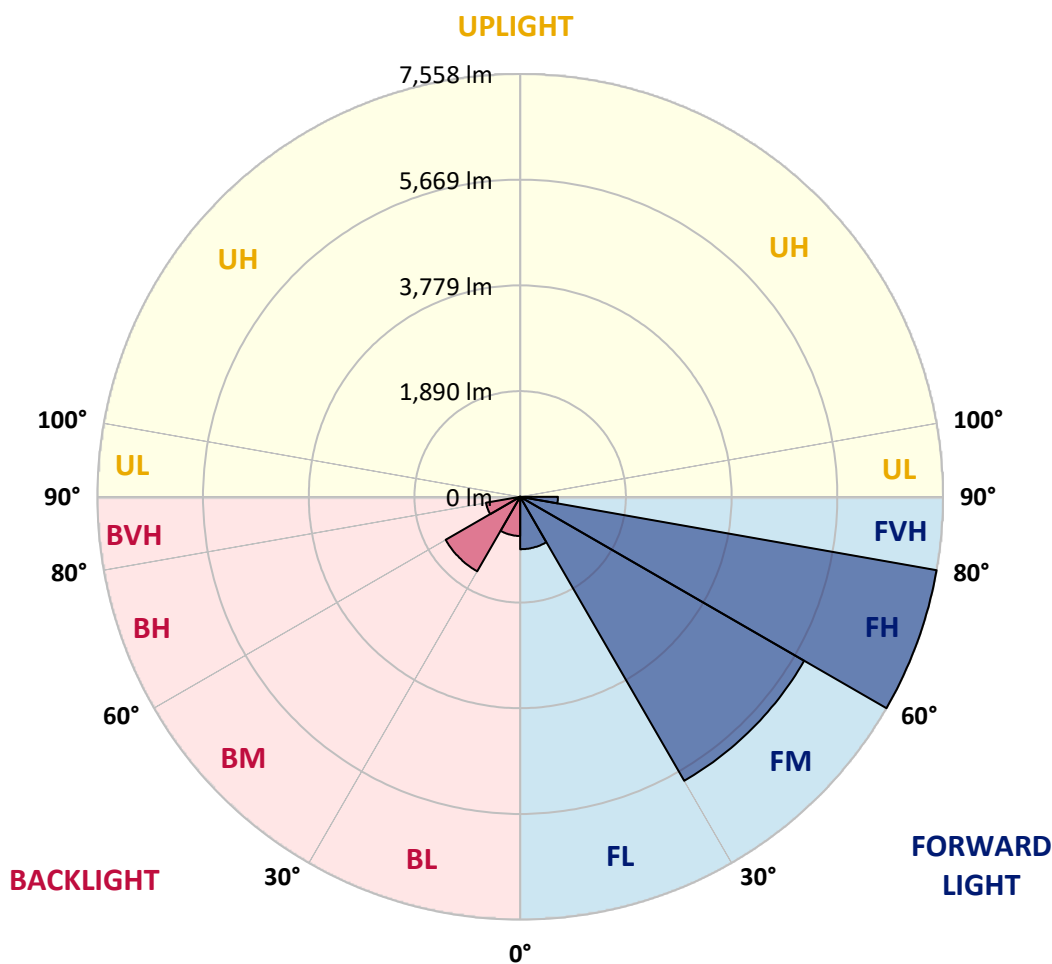
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	937.1	5.2			
FM	(30°-60°)	5861.4	32.7			
FH	(60°-80°)	7558.4	42.2			G4/12000
FVH	(80°-90°)	675.5	3.8			G4/750
BL	(0°-30°)	700.2	3.9	B2/1000		
BM	(30°-60°)	1538.0	8.6	B2/2500		
BH	(60°-80°)	619.2	3.5	B2/1000		G2/1000
BVH	(80°-90°)	18.2	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°	1875.2	1875.2	1875.2	1875.2	1875.2	1875.2	1875.2	1875.2	1875.2	1875.2	1875.2
2.5°	1877.0	1902.2	1902.2	1895.0	1899.5	1903.1	1876.1	1883.3	1880.6	1879.7	1885.1
5°	1891.4	1919.2	1917.4	1908.5	1912.1	1919.2	1894.1	1904.9	1901.3	1892.3	1894.1
7.5°	1891.4	1914.7	1920.1	1910.3	1927.3	1936.3	1909.4	1919.2	1923.7	1917.4	1911.2
10°	1884.2	1904.9	1912.1	1910.3	1932.7	1947.1	1921.0	1948.9	1952.5	1952.5	1942.6
12.5°	1881.5	1904.9	1914.7	1922.8	1948.9	1964.2	1948.9	1975.9	1993.9	1993.0	1986.7
15°	1883.3	1909.4	1924.6	1938.1	1966.0	1984.9	1978.6	2020.0	2041.6	2047.9	2047.9
17.5°	1928.2	1959.7	1966.9	1981.3	2000.2	2029.0	2020.9	2074.0	2108.2	2119.0	2134.3
20°	2054.2	2078.5	2087.5	2080.3	2088.4	2106.4	2090.2	2141.5	2192.8	2221.6	2246.8
22.5°	2215.3	2233.3	2225.2	2218.0	2213.5	2218.0	2198.2	2232.4	2290.0	2331.4	2374.5
25°	2337.6	2377.2	2370.9	2351.1	2344.8	2350.2	2325.1	2367.3	2420.4	2463.6	2528.4
27.5°	2486.1	2510.4	2493.3	2486.1	2490.6	2489.7	2474.4	2514.9	2563.5	2617.5	2712.9
30°	2647.2	2667.9	2650.8	2643.6	2651.7	2657.1	2640.0	2711.1	2762.3	2820.8	2944.1
32.5°	2911.7	2961.2	2914.4	2820.8	2822.6	2830.7	2832.5	2927.9	3021.5	3067.4	3230.2
35°	3288.7	3328.3	3266.2	3152.9	3011.6	3006.2	3020.6	3162.8	3350.8	3559.6	3750.3
37.5°	3640.5	3698.1	3642.3	3510.1	3338.2	3296.8	3222.1	3391.3	3687.3	4136.3	4373.9
40°	4062.5	4105.7	3995.1	3879.9	3708.0	3649.5	3529.9	3637.8	4043.6	4738.3	4902.0
42.5°	4401.8	4427.9	4336.1	4215.5	4066.1	4022.1	3898.8	3908.7	4424.3	5265.6	5370.8
45°	4715.8	4743.7	4668.1	4565.5	4471.0	4418.0	4328.0	4376.6	4870.6	5821.6	5757.7
47.5°	4954.2	4982.1	4921.8	4849.0	4750.9	4714.9	4716.7	4891.2	5416.7	6266.1	6105.1
50°	5344.7	5333.9	5176.5	5097.3	5020.8	5039.7	5059.5	5307.9	5967.4	6647.6	6426.3
52.5°	6025.9	5972.8	5648.0	5441.0	5346.5	5378.9	5411.3	5741.5	6592.7	6995.9	6672.8
55°	6796.1	6742.1	6465.9	6023.2	5773.0	5825.2	5797.3	6170.7	7118.2	7330.6	6876.2
57.5°	7368.4	7457.4	7352.2	7111.0	6484.8	6416.4	6354.3	6604.4	7542.9	7665.3	7071.4
60°	7865.9	7990.1	8178.2	8112.5	7846.2	7668.0	7098.4	7111.0	7951.4	7897.4	7148.8
62.5°	8351.8	8424.7	8746.8	8817.9	9148.1	9275.9	8697.4	7766.1	8346.4	8058.5	7201.0
65°	7865.9	7959.5	8520.1	9037.5	10104.6	10275.6	10072.2	8952.0	8637.1	8153.9	7140.7
67.5°	7080.4	7137.1	7742.7	8683.9	10604.9	10759.7	10601.3	10040.7	8772.9	8125.1	6953.6
70°	6053.8	6142.9	6737.6	7999.1	10586.9	10669.7	10532.0	10172.1	8721.6	7959.5	6481.2
72.5°	5006.4	5056.8	5560.7	6819.5	10069.5	10138.8	10065.9	9970.6	8548.9	7497.9	5573.3
75°	3762.9	3773.7	4290.2	5385.2	8903.4	9265.1	9354.2	9623.2	7887.5	6427.2	4121.9
77.5°	2523.0	2630.1	3125.9	4115.6	7309.0	7887.5	8309.5	8505.7	6590.0	4796.8	2191.9
80°	1354.2	1381.2	1915.6	2920.7	5554.4	6107.8	6508.2	6511.8	4608.7	2376.3	489.5
82.5°	627.2	601.1	964.6	1848.2	3847.5	4094.0	4362.2	3654.0	1845.5	405.8	125.1
85°	278.0	293.3	436.4	900.7	2135.2	2382.6	2348.4	1617.8	323.9	109.8	76.5
87.5°	103.5	108.9	169.2	363.5	762.1	831.4	747.7	311.3	42.3	38.7	23.4
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°	1875.2	1875.2	1875.2	1875.2	1875.2	1875.2	1875.2	1875.2	1875.2	1875.2	1875.2
2.5°	1878.8	1878.8	1877.0	1852.7	1847.3	1835.6	1825.7	1832.9	1824.8	1830.2	1824.8
5°	1886.9	1882.4	1871.6	1842.8	1829.3	1803.2	1783.4	1787.9	1777.1	1777.1	1776.2
7.5°	1905.8	1896.8	1877.9	1832.0	1806.8	1769.0	1738.4	1728.5	1717.7	1705.1	1703.3
10°	1936.3	1923.7	1898.6	1835.6	1787.0	1736.6	1683.5	1662.8	1635.8	1616.0	1612.4
12.5°	1978.6	1959.7	1925.5	1849.1	1785.2	1705.1	1634.0	1593.5	1561.1	1532.3	1526.0
15°	2039.8	2020.9	1980.4	1876.1	1786.1	1675.4	1581.8	1514.3	1458.6	1431.6	1432.5
17.5°	2128.9	2115.4	2053.3	1932.7	1803.2	1660.1	1538.6	1431.6	1345.2	1300.2	1293.9
20°	2243.2	2234.2	2158.6	2007.4	1842.8	1662.8	1491.8	1343.4	1216.5	1118.4	1096.8
22.5°	2376.3	2362.8	2270.2	2072.2	1873.4	1655.6	1440.6	1246.2	1055.5	927.7	902.5
25°	2524.8	2517.6	2372.7	2128.9	1877.0	1625.0	1366.8	1120.2	880.9	744.1	722.5
27.5°	2714.7	2672.4	2465.4	2159.5	1868.9	1564.7	1261.5	947.5	700.0	605.6	582.2
30°	2922.5	2837.0	2555.4	2182.9	1829.3	1468.5	1111.2	747.7	521.0	437.3	425.6
32.5°	3152.9	3025.1	2640.0	2181.1	1759.1	1320.0	916.0	519.2	351.8	317.6	305.9
35°	3569.5	3352.6	2741.7	2151.4	1641.2	1143.6	646.9	338.3	260.9	240.2	237.5
37.5°	4148.0	3780.0	2878.4	2094.7	1489.1	938.5	422.0	231.2	223.1	224.0	223.1
40°	4622.2	4256.9	3068.3	2009.2	1297.5	670.3	252.8	206.1	210.6	213.2	214.1
42.5°	5086.5	4645.6	3303.1	1902.2	1096.8	435.5	205.2	197.1	193.5	198.0	199.8
45°	5459.9	4984.8	3524.5	1777.1	862.0	257.3	198.9	182.7	176.4	178.2	180.9
47.5°	5758.6	5254.8	3657.6	1631.3	629.9	194.4	193.5	170.1	161.1	159.3	158.4
50°	6040.3	5486.0	3743.1	1455.0	401.3	187.2	179.1	155.7	144.9	143.1	143.1
52.5°	6231.9	5637.2	3771.9	1246.2	239.3	182.7	169.2	144.0	129.6	132.3	134.1
55°	6419.1	5790.1	3712.5	974.5	183.6	171.0	158.4	129.6	117.9	128.7	132.3
57.5°	6508.2	5812.6	3578.5	677.5	178.2	154.8	143.1	116.1	107.1	113.4	113.4
60°	6580.2	5797.3	3391.3	429.2	173.7	144.0	130.5	105.3	94.5	90.9	88.2
62.5°	6532.5	5736.2	3015.2	279.8	161.1	131.4	118.8	97.2	81.9	72.0	71.1
65°	6430.8	5520.2	2406.9	220.4	149.4	125.1	108.0	87.3	72.0	60.3	59.4
67.5°	6131.2	4994.7	1557.5	182.7	143.1	120.6	99.9	81.0	63.9	52.2	51.3
70°	5413.1	4034.7	477.8	163.8	148.5	116.1	98.1	73.8	56.7	45.9	44.1
72.5°	4280.3	2695.8	177.3	135.9	127.8	111.6	95.4	66.6	48.6	38.7	36.9
75°	2757.0	880.9	150.3	105.3	108.9	106.2	88.2	61.2	41.4	31.5	30.6
77.5°	781.0	184.5	136.8	77.4	96.3	102.6	77.4	51.3	36.9	27.0	26.1
80°	163.8	131.4	125.1	54.9	72.0	66.6	52.2	39.6	35.1	23.4	23.4
82.5°	107.1	104.4	107.1	37.8	47.7	48.6	41.4	34.2	30.6	21.6	21.6
85°	75.6	95.4	51.3	27.0	22.5	20.7	24.3	29.7	27.0	18.0	18.0
87.5°	26.1	15.3	10.8	10.8	9.9	9.9	11.7	13.5	14.4	14.4	13.5
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)