

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: P509872

Luminaire Tested: **VERD-M-CA3-160-722-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509872
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-CA3-160-722-U-T4-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2200K, 1000mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17092 lumens
Efficiency: N/A
Efficacy: 105.1 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

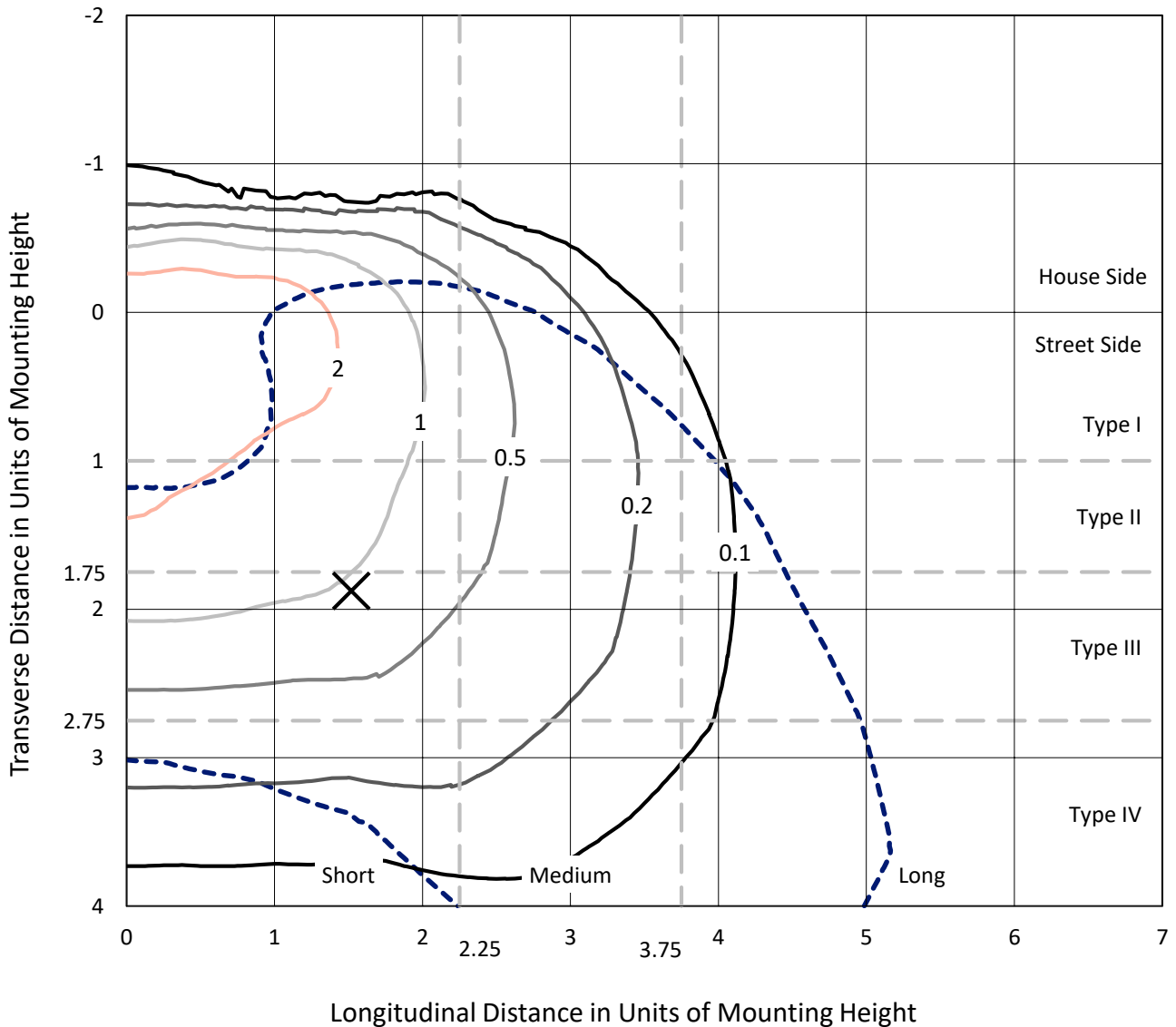
Input Watts (W): 162.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

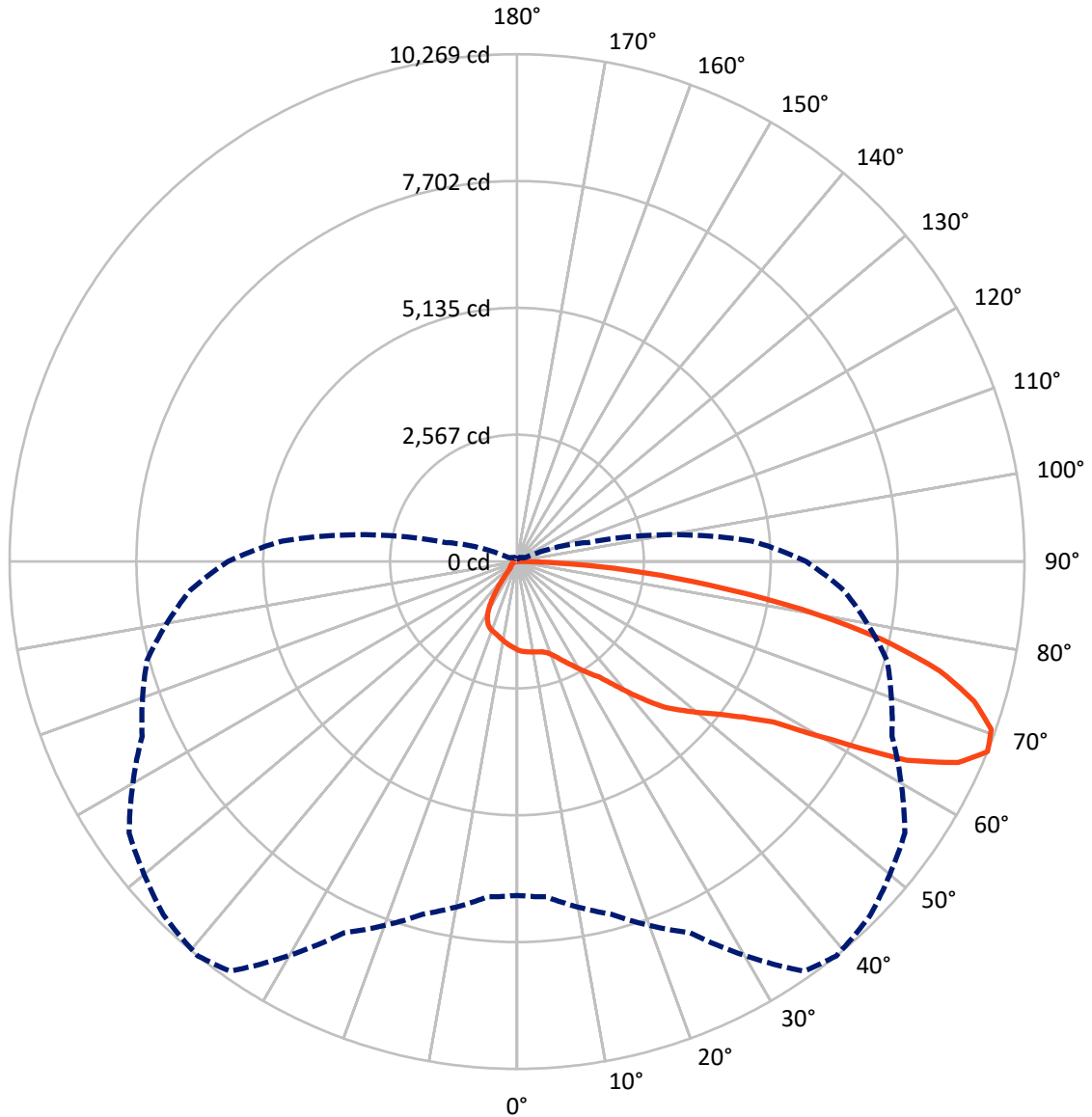
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 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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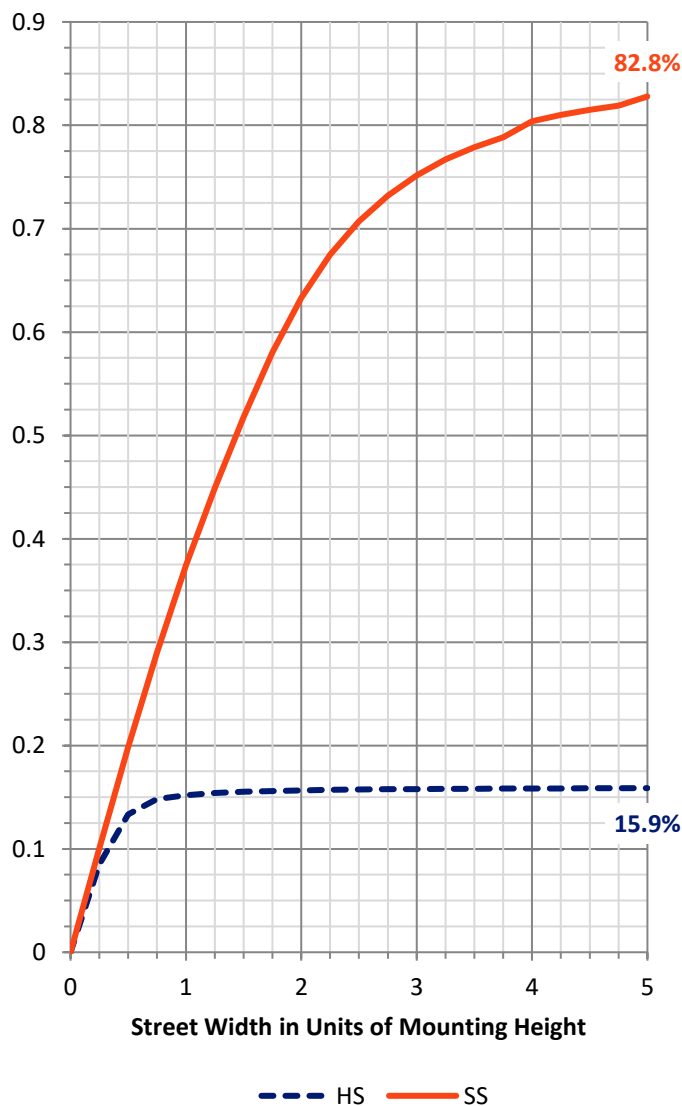
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2744.6	0.0	2744.6
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	14347.4	0.0	14347.4
	% Fixture	83.9	0.0	83.9
Total	Lumens	17092.0	0.0	17092.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.0	1.0
10°-20°	502.9	2.9
20°-30°	890.9	5.2
30°-40°	1427.0	8.3
40°-50°	2289.2	13.4
50°-60°	3346.1	19.6
60°-70°	4458.9	26.1
70°-80°	3346.0	19.6
80°-90°	662.0	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°	17092.0	100.0
0°-180°	17092.0	100.0



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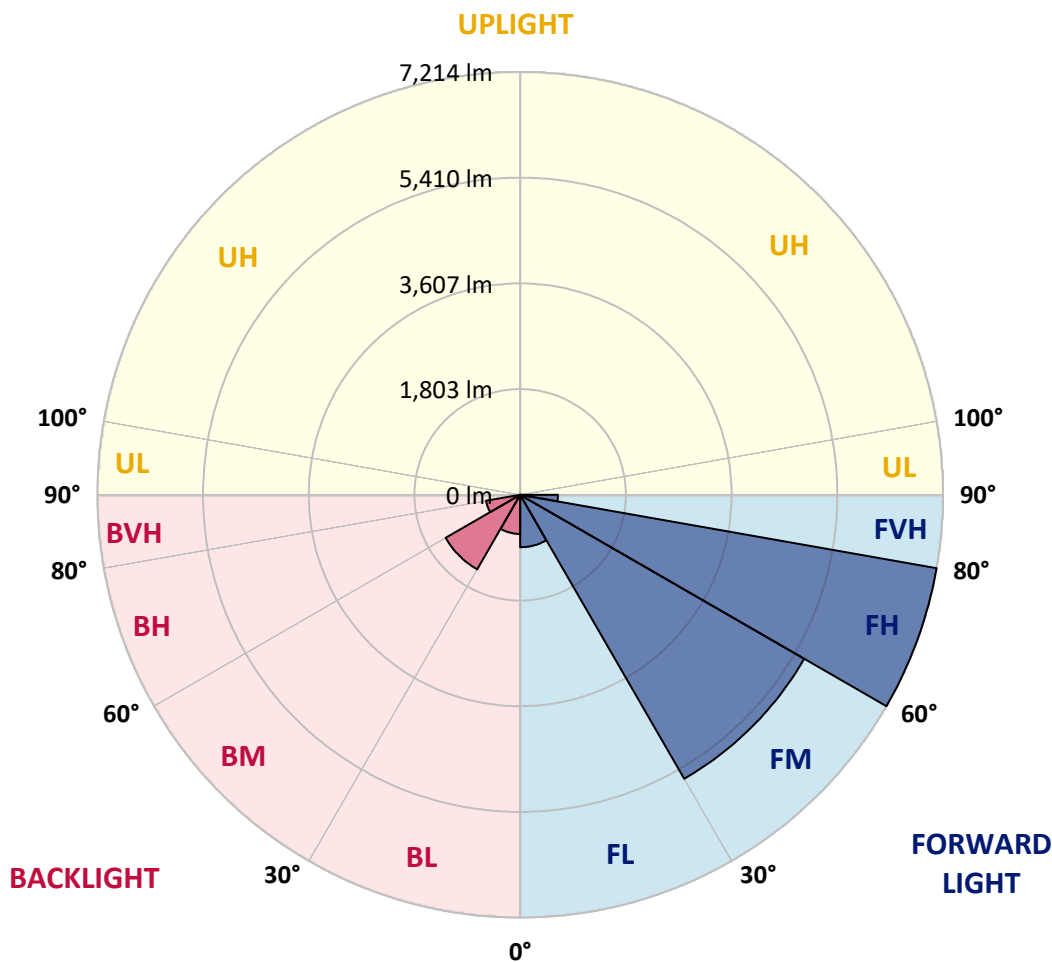
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	894.4	5.2			
FM (30°-60°)	5594.4	32.7			
FH (60°-80°)	7214.0	42.2			G3/7500
FVH (80°-90°)	644.7	3.8			G4/750
BL (0°-30°)	668.3	3.9	B2/1000		
BM (30°-60°)	1467.9	8.6	B2/2500		
BH (60°-80°)	590.9	3.5	B2/1000		G2/1000
BVH (80°-90°)	17.3	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°	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7
2.5°	1791.4	1815.5	1815.5	1808.6	1812.9	1816.3	1790.6	1797.4	1794.9	1794.0	1799.2
5°	1805.2	1831.8	1830.1	1821.5	1824.9	1831.8	1807.7	1818.1	1814.6	1806.0	1807.7
7.5°	1805.2	1827.5	1832.7	1823.2	1839.5	1848.1	1822.3	1831.8	1836.1	1830.1	1824.1
10°	1798.3	1818.1	1824.9	1823.2	1844.7	1858.4	1833.5	1860.1	1863.6	1863.6	1854.1
12.5°	1795.7	1818.1	1827.5	1835.2	1860.1	1874.7	1860.1	1885.9	1903.1	1902.2	1896.2
15°	1797.4	1822.3	1836.9	1849.8	1876.5	1894.5	1888.5	1928.0	1948.6	1954.6	1954.6
17.5°	1840.4	1870.4	1877.3	1891.1	1909.1	1936.6	1928.8	1979.5	2012.1	2022.4	2037.0
20°	1960.6	1983.8	1992.4	1985.5	1993.2	2010.4	1995.0	2043.9	2092.9	2120.3	2144.4
22.5°	2114.3	2131.5	2123.8	2116.9	2112.6	2116.9	2098.0	2130.7	2185.6	2225.1	2266.3
25°	2231.1	2268.9	2262.9	2244.0	2238.0	2243.2	2219.1	2259.5	2310.1	2351.4	2413.2
27.5°	2372.8	2396.0	2379.7	2372.8	2377.1	2376.3	2361.7	2400.3	2446.7	2498.2	2589.2
30°	2526.6	2546.3	2530.0	2523.1	2530.8	2536.0	2519.7	2587.5	2636.5	2692.3	2810.0
32.5°	2779.0	2826.3	2781.6	2692.3	2694.0	2701.7	2703.5	2794.5	2883.8	2927.6	3083.1
35°	3138.9	3176.7	3117.4	3009.2	2874.4	2869.2	2883.0	3018.6	3198.1	3397.4	3579.4
37.5°	3474.7	3529.6	3476.4	3350.1	3186.1	3146.6	3075.3	3236.8	3519.3	3947.8	4174.6
40°	3877.4	3918.7	3813.0	3703.1	3539.1	3483.2	3369.0	3472.1	3859.4	4522.4	4678.7
42.5°	4201.2	4226.1	4138.5	4023.4	3880.9	3838.8	3721.1	3730.6	4222.7	5025.6	5126.1
45°	4500.9	4527.5	4455.4	4357.5	4267.3	4216.7	4130.8	4177.1	4648.6	5556.4	5495.4
47.5°	4728.5	4755.1	4697.6	4628.0	4534.4	4500.1	4501.8	4668.4	5169.9	5980.6	5826.9
50°	5101.2	5090.9	4940.6	4865.0	4792.0	4810.1	4829.0	5066.0	5695.5	6344.7	6133.5
52.5°	5751.3	5700.6	5390.6	5193.1	5102.9	5133.8	5164.8	5479.9	6292.3	6677.1	6368.8
55°	6486.4	6434.9	6171.3	5748.7	5510.0	5559.8	5533.2	5889.6	6793.9	6996.5	6562.9
57.5°	7032.6	7117.6	7017.2	6787.0	6189.3	6124.0	6064.8	6303.5	7199.2	7316.0	6749.2
60°	7507.5	7626.0	7805.5	7742.8	7488.6	7318.6	6775.0	6787.0	7589.1	7537.6	6823.1
62.5°	7971.3	8040.8	8348.3	8416.1	8731.3	8853.2	8301.0	7412.2	7966.1	7691.3	6872.9
65°	7507.5	7596.8	8131.9	8625.7	9644.2	9807.4	9613.3	8544.1	8243.5	7782.3	6815.3
67.5°	6757.8	6811.9	7389.9	8288.2	10121.7	10269.4	10118.2	9583.2	8373.2	7754.9	6636.7
70°	5777.9	5862.9	6430.6	7634.6	10104.5	10183.5	10052.1	9708.6	8324.2	7596.8	6185.9
72.5°	4778.3	4826.4	5307.3	6508.8	9610.7	9676.8	9607.3	9516.2	8159.3	7156.3	5319.3
75°	3591.5	3601.8	4094.7	5139.8	8497.7	8842.9	8928.0	9184.7	7528.1	6134.3	3934.1
77.5°	2408.0	2510.2	2983.4	3928.1	6975.9	7528.1	7930.9	8118.1	6289.8	4578.2	2092.0
80°	1292.5	1318.2	1828.4	2787.6	5301.3	5829.5	6211.6	6215.1	4398.7	2268.1	467.2
82.5°	598.6	573.7	920.6	1764.0	3672.2	3907.5	4163.4	3487.5	1761.4	387.3	119.4
85°	265.4	280.0	416.5	859.6	2037.9	2274.1	2241.4	1544.1	309.2	104.8	73.0
87.5°	98.8	103.9	161.5	347.0	727.4	793.5	713.7	297.1	40.4	36.9	22.3
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°	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7	1789.7
2.5°	1793.1	1793.1	1791.4	1768.2	1763.1	1751.9	1742.5	1749.4	1741.6	1746.8	1741.6
5°	1800.9	1796.6	1786.3	1758.8	1745.9	1721.0	1702.1	1706.4	1696.1	1696.1	1695.2
7.5°	1818.9	1810.3	1792.3	1748.5	1724.4	1688.4	1659.2	1649.7	1639.4	1627.4	1625.7
10°	1848.1	1836.1	1812.0	1751.9	1705.6	1657.5	1606.8	1587.0	1561.3	1542.4	1538.9
12.5°	1888.5	1870.4	1837.8	1764.8	1703.8	1627.4	1559.6	1520.9	1490.0	1462.5	1456.5
15°	1946.9	1928.8	1890.2	1790.6	1704.7	1599.1	1509.7	1445.3	1392.1	1366.3	1367.2
17.5°	2031.9	2019.0	1959.8	1844.7	1721.0	1584.5	1468.5	1366.3	1283.9	1240.9	1234.9
20°	2141.0	2132.4	2060.2	1916.0	1758.8	1587.0	1423.9	1282.2	1161.1	1067.5	1046.9
22.5°	2268.1	2255.2	2166.7	1977.8	1788.0	1580.2	1374.9	1189.4	1007.4	885.4	861.4
25°	2409.8	2402.9	2264.6	2031.9	1791.4	1551.0	1304.5	1069.2	840.8	710.2	689.6
27.5°	2591.0	2550.6	2353.1	2061.1	1783.7	1493.4	1204.0	904.3	668.1	578.0	555.6
30°	2789.3	2707.8	2439.0	2083.4	1745.9	1401.5	1060.6	713.7	497.2	417.4	406.2
32.5°	3009.2	2887.2	2519.7	2081.7	1678.9	1259.8	874.2	495.5	335.8	303.2	292.0
35°	3406.8	3199.8	2616.7	2053.4	1566.4	1091.5	617.5	322.9	249.0	229.3	226.7
37.5°	3959.0	3607.8	2747.3	1999.3	1421.3	895.7	402.8	220.7	213.0	213.8	213.0
40°	4411.6	4062.9	2928.5	1917.7	1238.4	639.8	241.3	196.7	201.0	203.5	204.4
42.5°	4854.7	4433.9	3152.6	1815.5	1046.9	415.7	195.8	188.1	184.6	188.9	190.7
45°	5211.1	4757.7	3363.9	1696.1	822.7	245.6	189.8	174.3	168.3	170.0	172.6
47.5°	5496.2	5015.3	3491.0	1557.0	601.2	185.5	184.6	162.3	153.7	152.0	151.1
50°	5765.0	5236.0	3572.6	1388.7	383.0	178.6	170.9	148.6	138.3	136.5	136.5
52.5°	5948.0	5380.3	3600.0	1189.4	228.4	174.3	161.5	137.4	123.7	126.2	128.0
55°	6126.6	5526.3	3543.4	930.1	175.2	163.2	151.1	123.7	112.5	122.8	126.2
57.5°	6211.6	5547.8	3415.4	646.7	170.0	147.7	136.5	110.8	102.2	108.2	108.2
60°	6280.3	5533.2	3236.8	409.6	165.7	137.4	124.5	100.5	90.2	86.7	84.2
62.5°	6234.8	5474.8	2877.8	267.1	153.7	125.4	113.4	92.7	78.1	68.7	67.8
65°	6137.8	5268.7	2297.3	210.4	142.6	119.4	103.1	83.3	68.7	57.5	56.7
67.5°	5851.8	4767.1	1486.6	174.3	136.5	115.1	95.3	77.3	61.0	49.8	49.0
70°	5166.5	3850.8	456.0	156.3	141.7	110.8	93.6	70.4	54.1	43.8	42.1
72.5°	4085.3	2572.9	169.2	129.7	121.9	106.5	91.0	63.6	46.4	36.9	35.2
75°	2631.3	840.8	143.4	100.5	103.9	101.3	84.2	58.4	39.5	30.1	29.2
77.5°	745.4	176.1	130.5	73.9	91.9	97.9	73.9	49.0	35.2	25.8	24.9
80°	156.3	125.4	119.4	52.4	68.7	63.6	49.8	37.8	33.5	22.3	22.3
82.5°	102.2	99.6	102.2	36.1	45.5	46.4	39.5	32.6	29.2	20.6	20.6
85°	72.1	91.0	49.0	25.8	21.5	19.8	23.2	28.3	25.8	17.2	17.2
87.5°	24.9	14.6	10.3	10.3	9.4	9.4	11.2	12.9	13.7	13.7	12.9
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)