

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: P836644

Luminaire Tested: **ARCH3-50-750-U-T3**

Issue Date: 5/16/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P836644  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-50-750-U-T3  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 425mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9330 lumens  
Efficiency: N/A  
Efficacy: 174.1 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G2

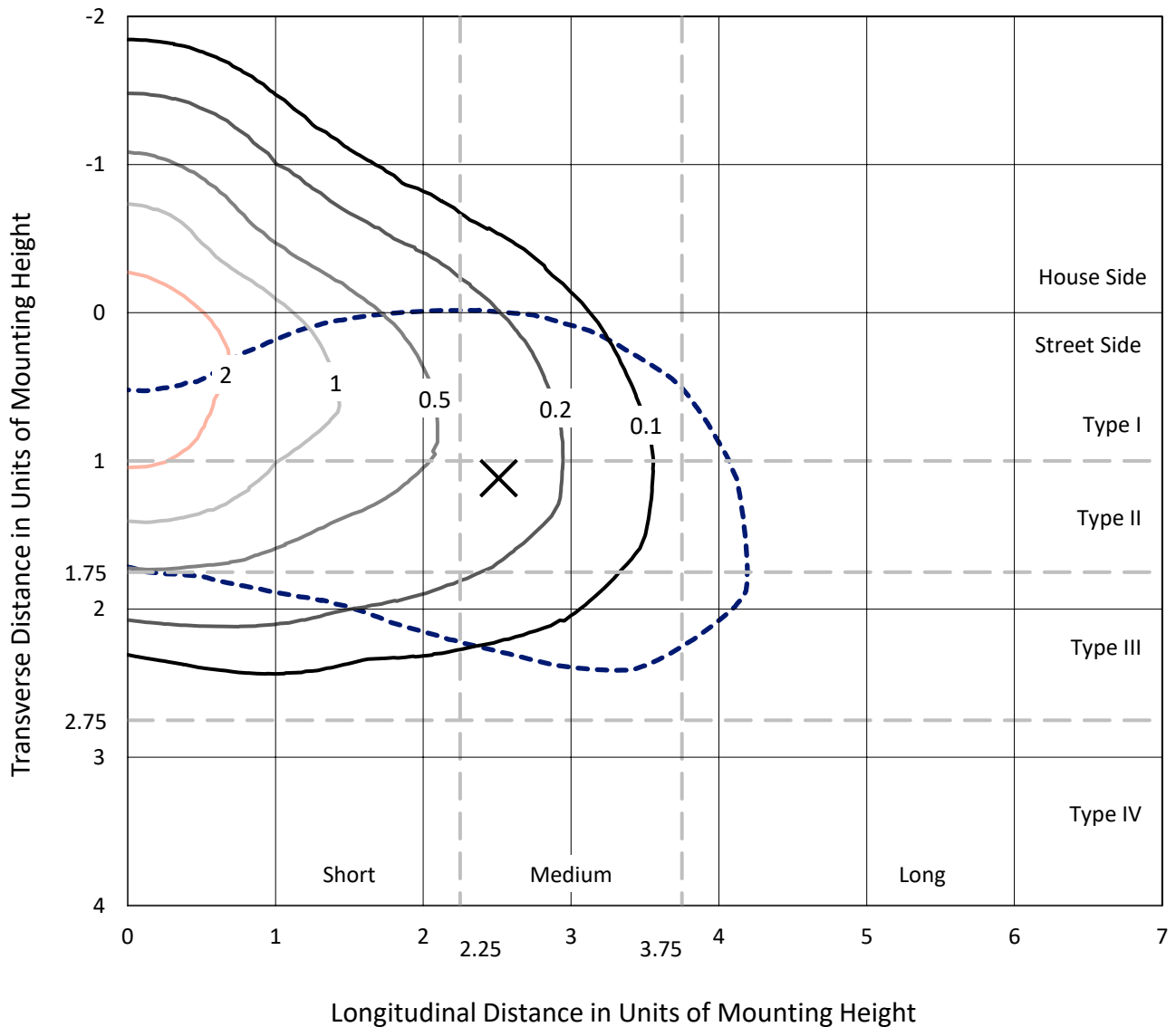
Input Watts (W): 53.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

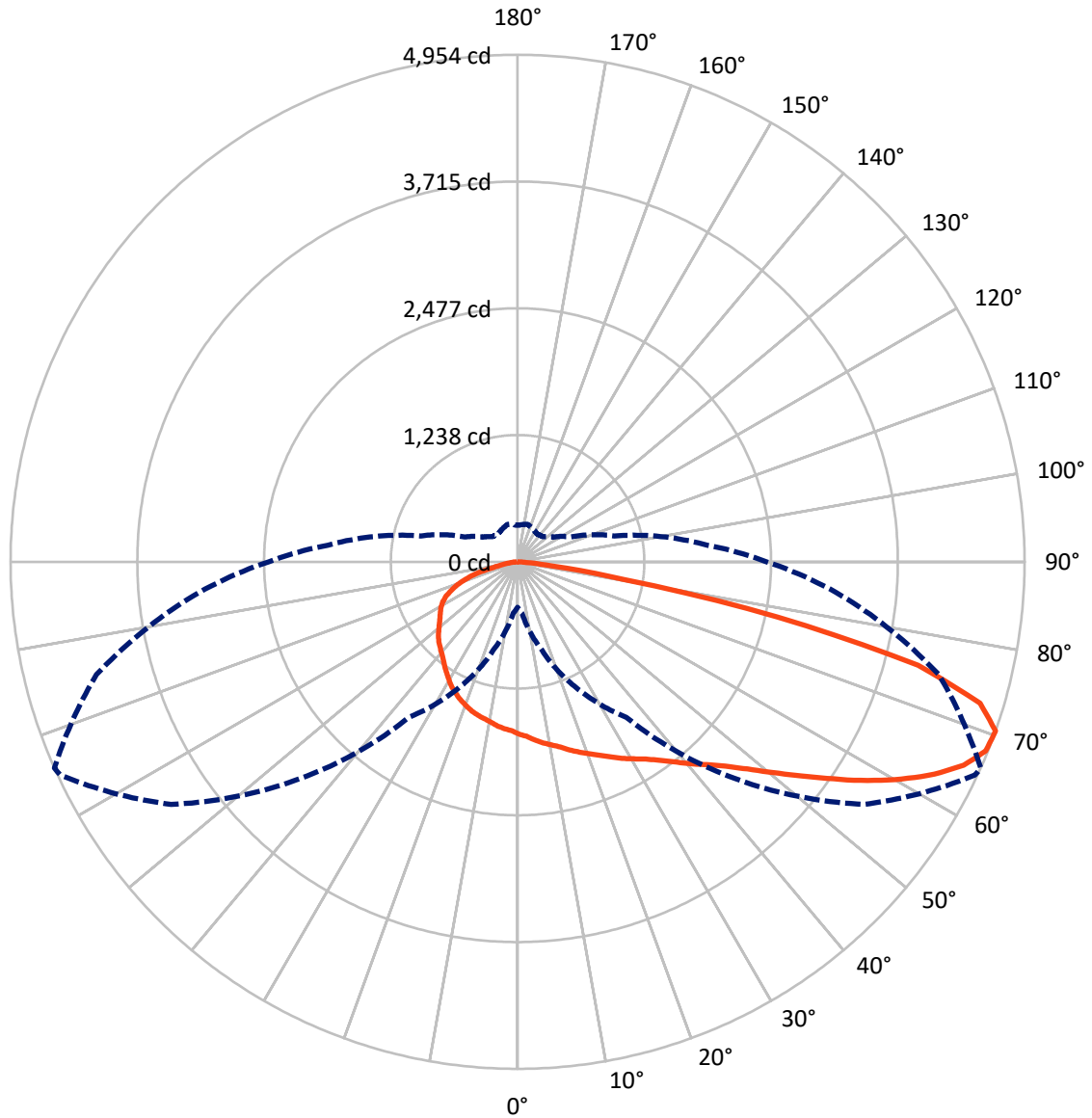
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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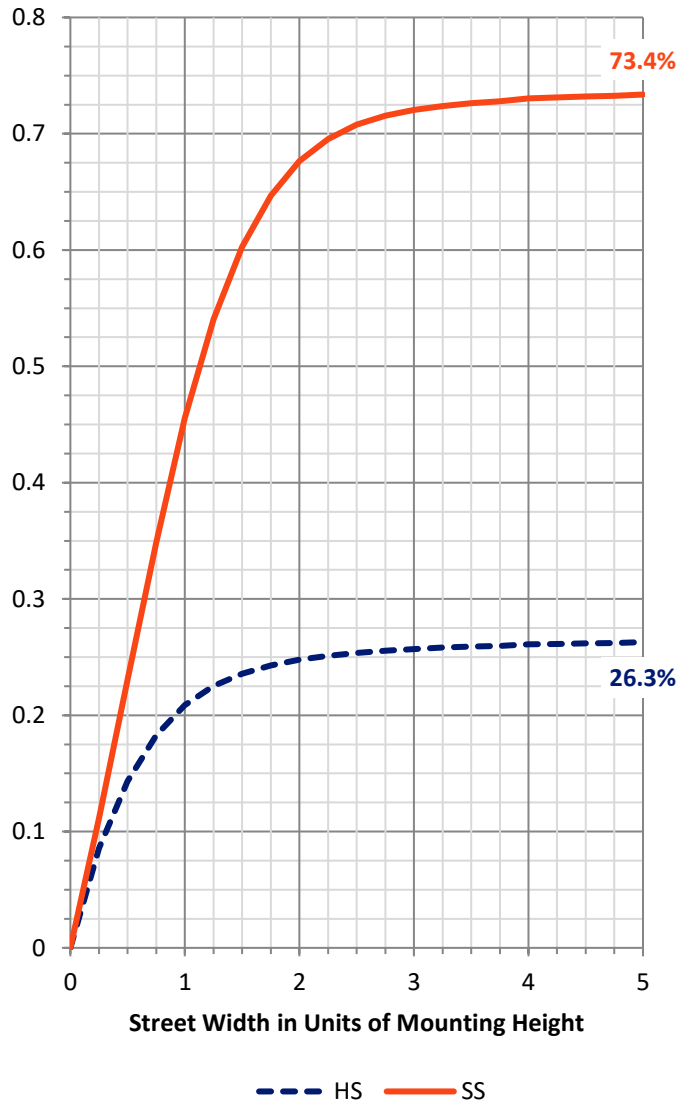
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2472.2	0.0	2472.2
	% Fixture	26.5	0.0	26.5
<b>Street Side</b>	Lumens	6857.8	0.0	6857.8
	% Fixture	73.5	0.0	73.5
<b>Total</b>	Lumens	9330.0	0.0	9330.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	161.8	1.7
10°-20°	485.3	5.2
20°-30°	813.6	8.7
30°-40°	1218.2	13.1
40°-50°	1628.8	17.5
50°-60°	1901.6	20.4
60°-70°	1890.9	20.3
70°-80°	1119.4	12.0
80°-90°	110.3	1.2
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°	9330.0	100.0
0°-180°	9330.0	100.0

**Coefficient of Utilization**

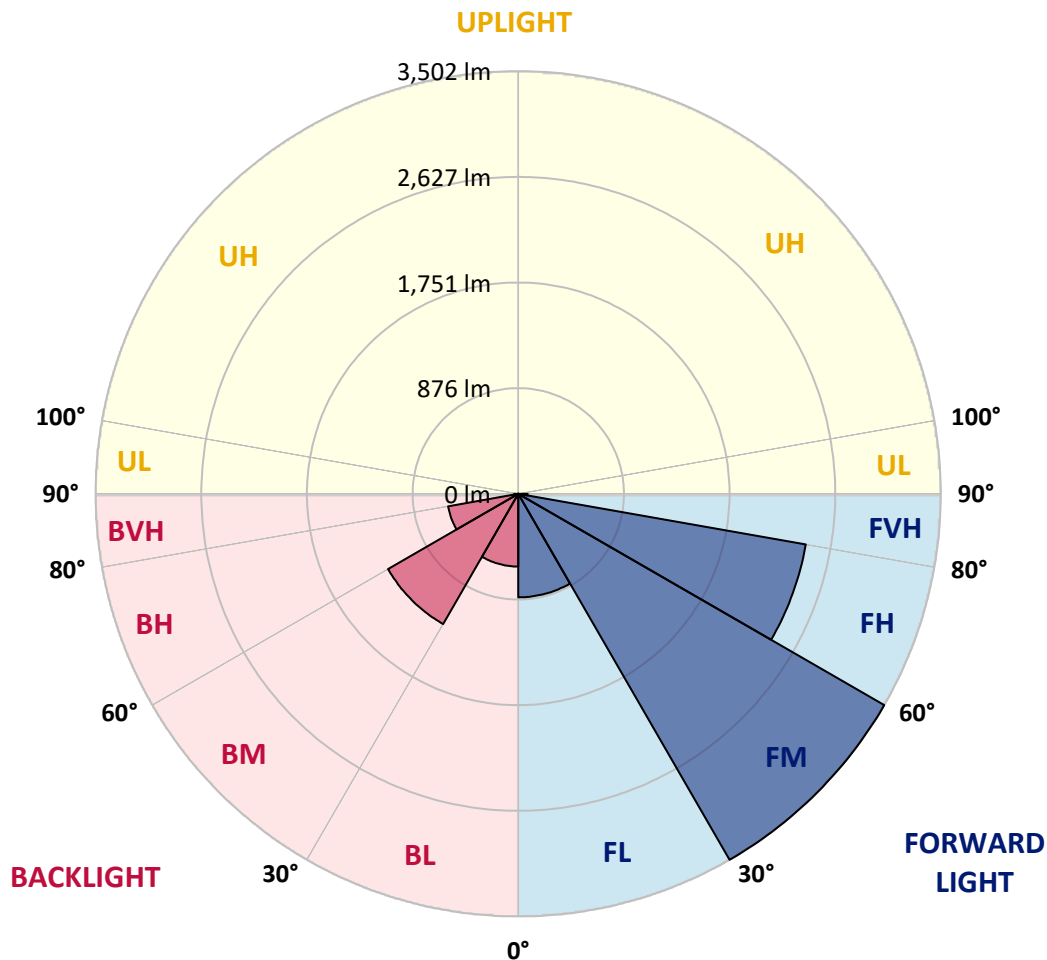


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	858.1	9.2			
FM (30°-60°)	3502.4	37.5			
FH (60°-80°)	2419.7	25.9			G2/5000
FVH (80°-90°)	77.5	0.8			G1/100
BL (0°-30°)	602.6	6.5	B2/1000		
BM (30°-60°)	1246.3	13.4	B2/2500		
BH (60°-80°)	590.6	6.3	B2/1000		G2/1000
BVH (80°-90°)	32.8	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9
2.5°	1745.8	1743.0	1741.6	1736.1	1723.7	1729.3	1716.9	1708.6	1707.2	1688.0	1677.0
5°	1817.3	1815.9	1813.2	1804.9	1785.7	1788.4	1767.8	1752.6	1748.5	1718.2	1694.9
7.5°	1877.8	1875.1	1873.7	1862.7	1842.1	1840.7	1815.9	1793.9	1787.0	1745.8	1710.0
10°	1924.6	1920.5	1923.2	1912.2	1890.2	1886.1	1854.4	1825.5	1818.7	1766.4	1716.9
12.5°	1964.5	1961.7	1965.9	1956.2	1938.4	1934.2	1902.6	1865.4	1857.2	1796.7	1732.0
15°	2008.5	1998.9	2007.1	2003.0	1990.6	1989.3	1960.4	1919.1	1908.1	1835.2	1755.4
17.5°	2031.9	2026.4	2036.0	2037.4	2031.9	2041.5	2014.0	1964.5	1954.9	1870.9	1776.0
20°	2048.4	2040.2	2051.2	2059.4	2063.5	2082.8	2060.8	2012.6	2001.6	1905.3	1795.3
22.5°	2104.8	2086.9	2088.3	2093.8	2096.6	2124.1	2110.3	2063.5	2052.5	1948.0	1818.7
25°	2246.5	2210.7	2187.4	2170.8	2151.6	2175.0	2166.7	2121.3	2111.7	1998.9	1847.6
27.5°	2466.6	2421.2	2374.5	2326.3	2250.6	2241.0	2227.3	2186.0	2175.0	2049.8	1876.5
30°	2717.0	2671.6	2616.6	2539.5	2397.8	2323.6	2291.9	2246.5	2234.1	2095.2	1904.0
32.5°	2966.0	2926.1	2871.1	2777.5	2575.3	2424.0	2356.6	2309.8	2297.4	2144.7	1937.0
35°	3160.0	3135.2	3099.4	2982.5	2751.4	2542.3	2450.1	2393.7	2380.0	2223.1	1997.5
37.5°	3316.8	3298.9	3268.7	3146.2	2879.3	2660.6	2557.4	2492.8	2477.6	2308.4	2062.2
40°	3547.9	3501.1	3476.4	3298.9	2990.8	2767.9	2678.5	2611.1	2594.6	2399.2	2114.4
42.5°	3744.6	3710.3	3680.0	3435.1	3096.7	2860.1	2792.7	2730.8	2708.7	2488.6	2170.8
45°	3777.7	3791.4	3776.3	3502.5	3264.5	2950.9	2908.2	2868.3	2847.7	2609.7	2256.1
47.5°	3779.0	3779.0	3689.6	3541.0	3472.3	3052.7	3032.0	3045.8	3023.8	2763.8	2357.9
50°	3680.0	3697.9	3651.1	3550.7	3527.3	3154.5	3183.4	3257.6	3235.6	2927.5	2468.0
52.5°	3475.0	3534.2	3532.8	3535.5	3447.5	3241.1	3342.9	3512.2	3475.0	3111.8	2584.9
55°	3113.2	3231.5	3337.4	3428.2	3378.7	3293.4	3538.3	3783.2	3744.6	3318.2	2703.2
57.5°	2803.7	2879.3	3011.4	3268.7	3297.5	3338.8	3721.3	4066.6	4032.2	3546.5	2827.1
60°	2450.1	2554.7	2686.7	3052.7	3198.5	3398.0	3922.1	4343.1	4310.1	3777.7	2946.7
62.5°	1906.7	2041.5	2305.7	2721.1	3054.0	3435.1	4080.3	4586.6	4571.4	3996.4	3054.0
65°	1328.9	1448.6	1818.7	2313.9	2824.3	3418.6	4206.9	4803.9	4790.2	4175.2	3129.7
67.5°	775.9	914.8	1333.0	1862.7	2418.5	3304.4	4248.2	4931.9	4931.9	4283.9	3150.3
70°	443.0	507.6	879.1	1357.8	1854.4	2989.4	4132.6	4930.5	4953.9	4259.2	3065.1
72.5°	309.5	338.4	591.5	913.5	1257.4	2418.5	3829.9	4692.5	4724.1	4025.3	2773.4
75°	240.7	261.4	416.8	623.2	792.4	1642.6	3168.2	3956.5	4040.4	3431.0	2242.4
77.5°	183.0	198.1	243.5	389.3	507.6	943.7	2091.1	2594.6	2600.1	2100.7	1202.4
80°	133.4	148.6	162.3	238.0	269.6	441.6	789.6	1084.0	1053.8	1016.6	650.7
82.5°	79.8	94.9	99.1	129.3	132.1	188.5	276.5	349.4	335.7	447.1	305.4
85°	34.4	48.1	50.9	59.2	56.4	77.0	110.1	92.2	82.5	94.9	66.0
87.5°	8.3	13.8	13.8	15.1	12.4	19.3	20.6	15.1	13.8	16.5	16.5
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°	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9	1683.9
2.5°	1674.2	1670.1	1671.5	1648.1	1641.2	1634.3	1630.2	1627.4	1624.7	1628.8	1633.0
5°	1686.6	1677.0	1666.0	1631.6	1617.8	1602.7	1591.7	1582.1	1577.9	1577.9	1582.1
7.5°	1696.2	1679.7	1656.3	1610.9	1586.2	1565.5	1547.7	1535.3	1528.4	1528.4	1532.5
10°	1697.6	1674.2	1637.1	1582.1	1549.0	1518.8	1498.1	1484.4	1474.7	1474.7	1477.5
12.5°	1705.9	1674.2	1626.1	1560.0	1518.8	1481.6	1456.9	1436.2	1432.1	1432.1	1434.9
15°	1719.6	1681.1	1619.2	1540.8	1491.3	1448.6	1421.1	1399.1	1390.8	1396.3	1397.7
17.5°	1732.0	1685.2	1606.8	1516.0	1456.9	1410.1	1379.8	1360.6	1349.6	1361.9	1361.9
20°	1740.3	1685.2	1588.9	1484.4	1419.7	1367.4	1338.6	1315.2	1306.9	1322.0	1323.4
22.5°	1752.6	1683.9	1569.7	1452.7	1379.8	1324.8	1295.9	1278.0	1273.9	1290.4	1295.9
25°	1766.4	1686.6	1549.0	1417.0	1335.8	1282.1	1260.1	1251.9	1254.6	1275.3	1282.1
27.5°	1781.5	1692.1	1528.4	1377.1	1287.7	1239.5	1227.1	1231.2	1242.3	1268.4	1276.6
30°	1795.3	1693.5	1499.5	1330.3	1232.6	1187.2	1192.7	1210.6	1227.1	1253.3	1262.9
32.5°	1813.2	1694.9	1469.2	1279.4	1173.5	1140.5	1165.2	1194.1	1210.6	1235.4	1246.4
35°	1857.2	1718.2	1445.9	1229.9	1118.4	1100.6	1141.8	1179.0	1188.6	1210.6	1220.2
37.5°	1908.1	1756.8	1433.5	1179.0	1064.8	1060.7	1112.9	1150.1	1152.8	1166.6	1176.2
40°	1939.7	1773.3	1419.7	1136.3	1016.6	1019.4	1073.0	1101.9	1096.4	1106.1	1112.9
42.5°	1971.4	1778.8	1390.8	1100.6	971.2	974.0	1015.3	1035.9	1038.7	1059.3	1068.9
45°	2025.0	1793.9	1359.2	1067.5	930.0	920.3	945.1	972.6	1008.4	1048.3	1059.3
47.5°	2096.6	1825.5	1326.2	1027.6	890.1	858.4	868.1	916.2	953.4	990.5	997.4
50°	2169.5	1857.2	1295.9	979.5	850.2	792.4	796.5	840.6	870.8	899.7	903.8
52.5°	2241.0	1884.7	1269.8	934.1	804.8	714.0	730.5	775.9	796.5	810.3	814.4
55°	2312.5	1908.1	1246.4	895.6	752.5	652.1	667.2	709.9	730.5	737.4	740.1
57.5°	2386.8	1935.6	1228.5	862.6	693.4	597.1	606.7	636.9	656.2	664.5	661.7
60°	2448.7	1959.0	1218.9	828.2	634.2	546.2	543.4	570.9	598.4	606.7	603.9
62.5°	2496.9	1974.1	1203.7	784.1	581.9	495.3	481.5	517.3	546.2	551.7	555.8
65°	2523.0	1975.5	1166.6	727.7	528.3	440.2	430.6	466.4	484.2	489.7	489.7
67.5°	2518.9	1953.5	1093.7	652.1	478.7	390.7	382.4	404.5	430.6	434.7	430.6
70°	2433.6	1862.7	976.7	572.3	419.6	346.7	331.5	353.6	378.3	363.2	356.3
72.5°	2191.5	1627.4	804.8	484.2	353.6	291.6	284.8	306.8	308.2	310.9	304.0
75°	1729.3	1212.0	602.6	376.9	286.1	244.9	243.5	239.4	244.9	255.9	247.6
77.5°	908.0	605.3	326.0	231.1	207.7	196.7	187.1	185.7	202.2	209.1	200.9
80°	492.5	339.8	187.1	138.9	126.6	127.9	140.3	137.6	155.5	159.6	152.7
82.5°	214.6	161.0	92.2	83.9	83.9	82.5	86.7	96.3	115.6	115.6	92.2
85°	46.8	39.9	35.8	41.3	46.8	46.8	46.8	46.8	33.0	17.9	12.4
87.5°	15.1	15.1	15.1	16.5	17.9	17.9	15.1	11.0	6.9	1.4	0.0
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)