

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: P842448

Luminaire Tested: **ARCH4-50-722-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842448
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-50-722-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2200K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7983 lumens
Efficiency: N/A
Efficacy: 150.1 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

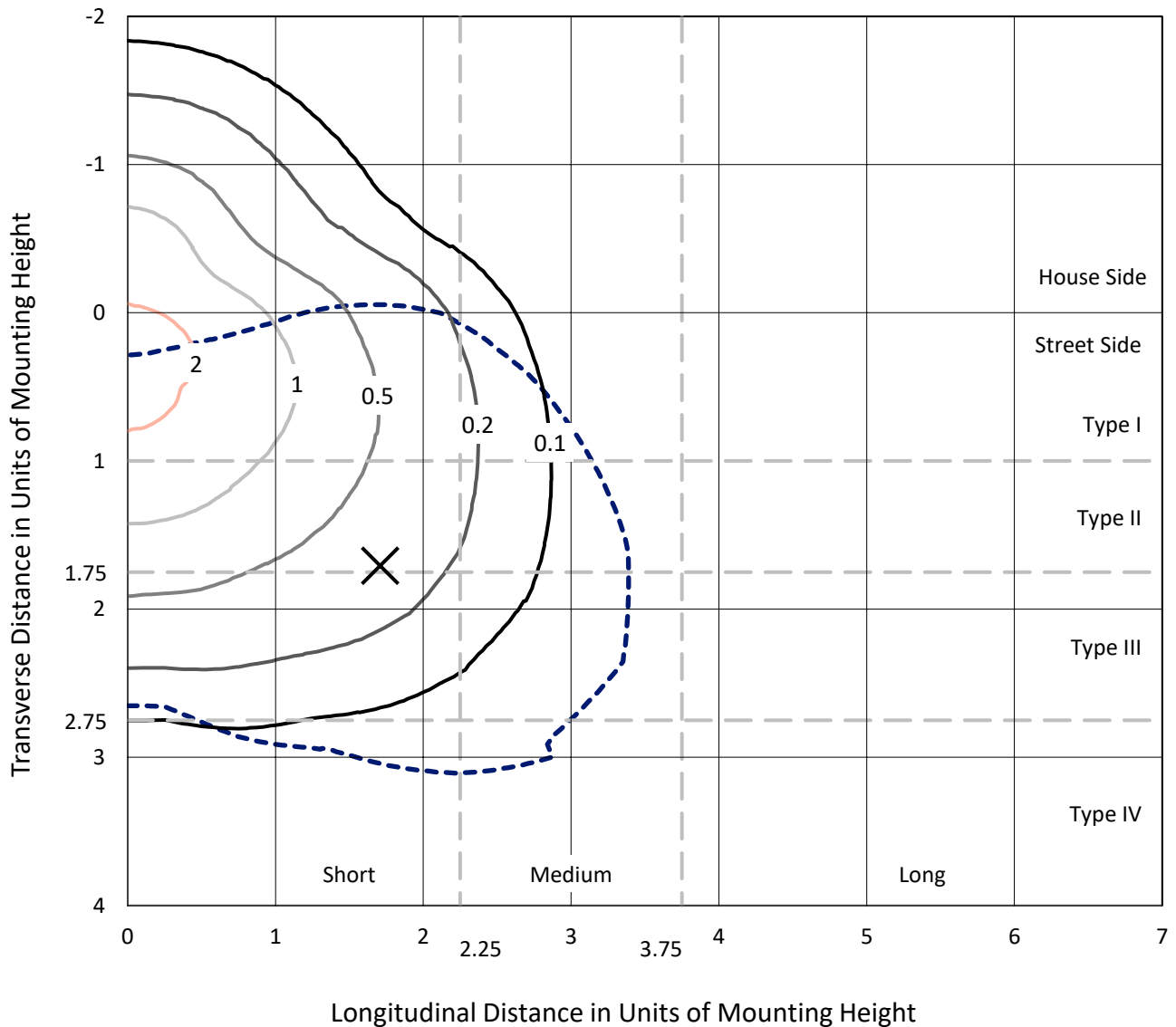
Input Watts (W): 53.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

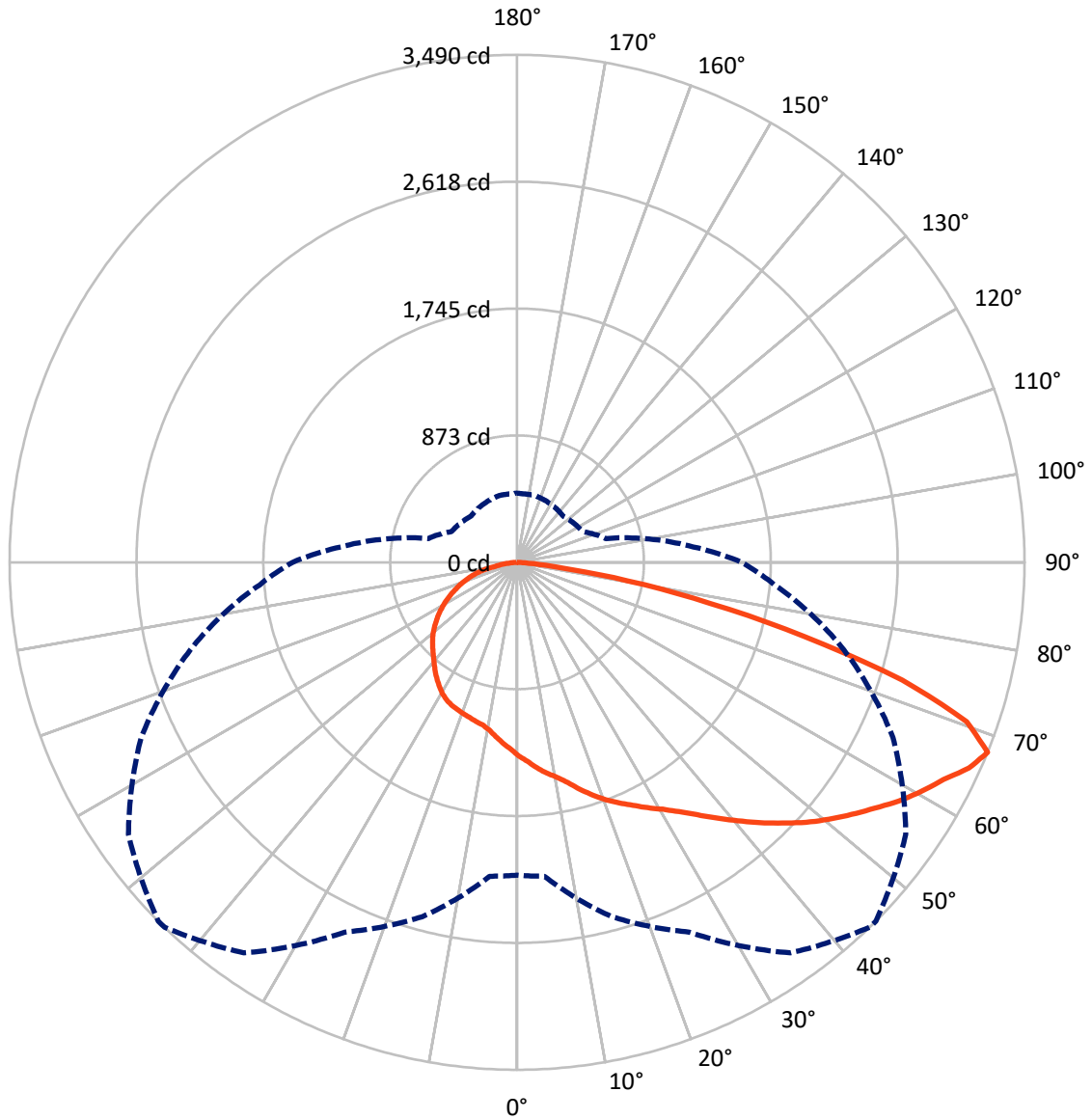
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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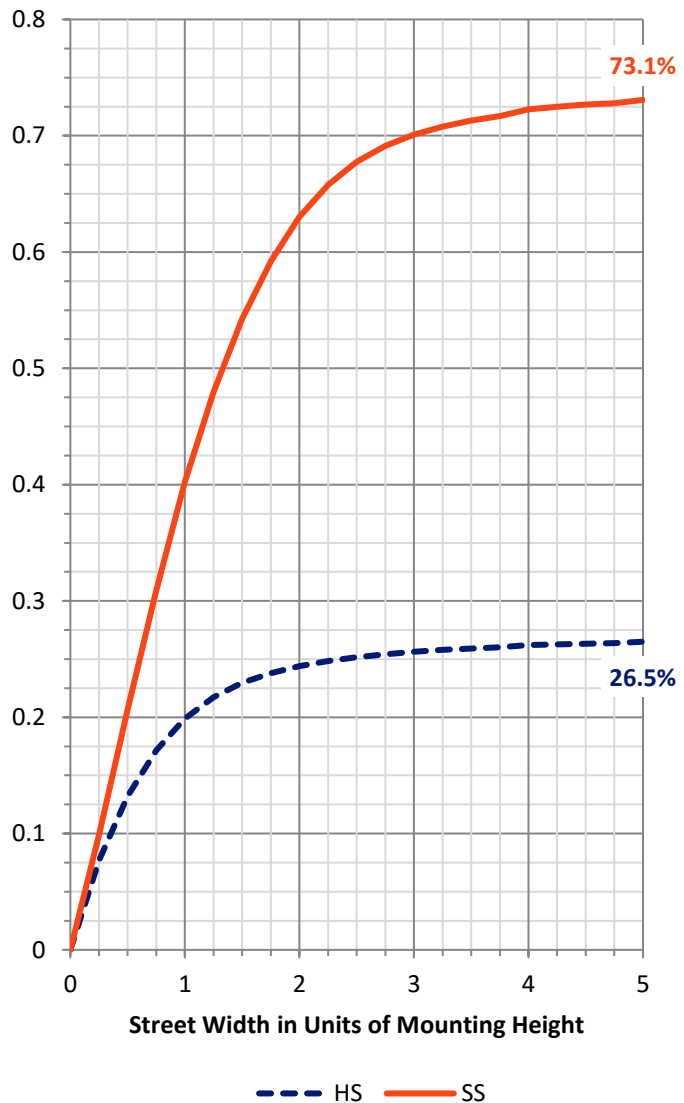
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2132.7	0.0	2132.7
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	5850.3	0.0	5850.3
	% Fixture	73.3	0.0	73.3
Total	Lumens	7983.0	0.0	7983.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.5	1.6
10°-20°	393.8	4.9
20°-30°	679.7	8.5
30°-40°	1002.4	12.6
40°-50°	1358.0	17.0
50°-60°	1659.8	20.8
60°-70°	1711.8	21.4
70°-80°	937.6	11.7
80°-90°	112.4	1.4
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°	7983.0	100.0
0°-180°	7983.0	100.0

Coefficient of Utilization



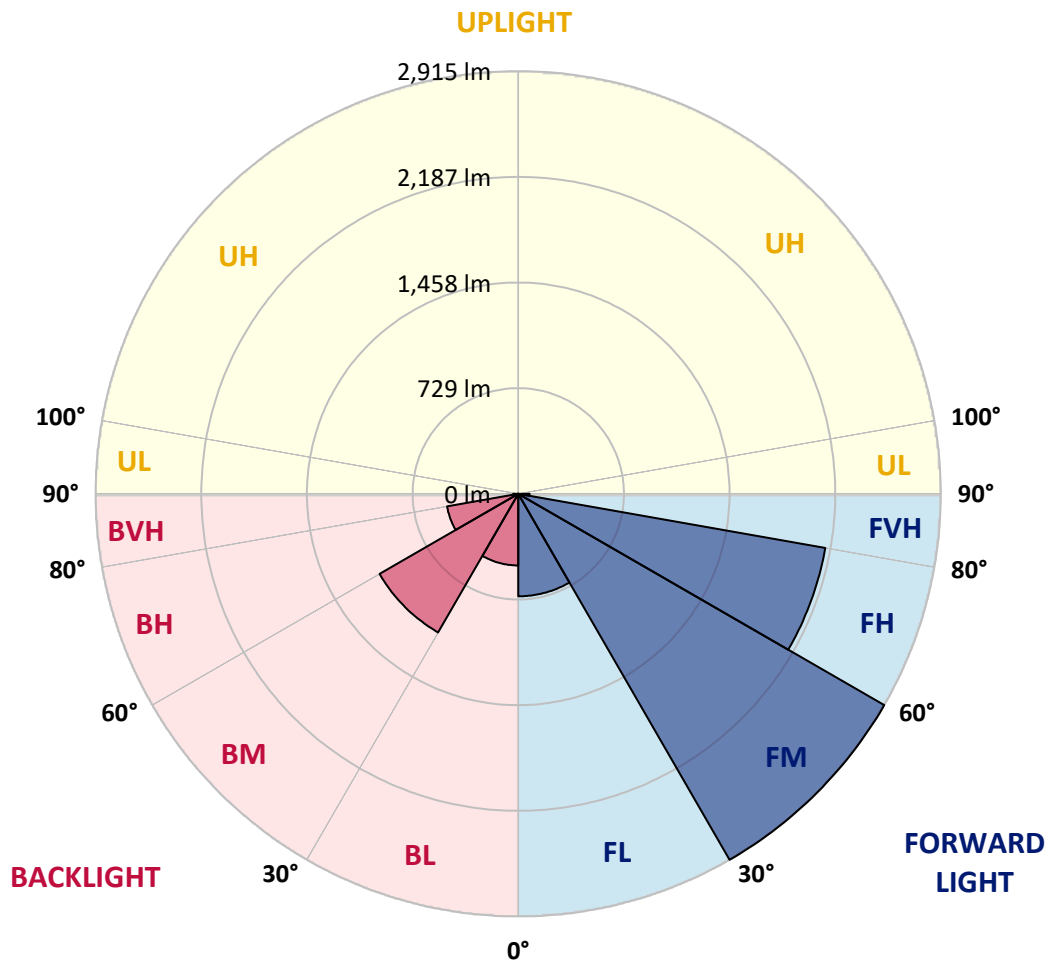
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	706.7	8.9			
FM (30°-60°)	2915.5	36.5			
FH (60°-80°)	2150.7	26.9			G2/5000
FVH (80°-90°)	77.4	1.0			G1/100
BL (0°-30°)	494.3	6.2	B1/500		
BM (30°-60°)	1104.7	13.8	B2/2500		
BH (60°-80°)	498.7	6.2	B1/500		G1/500
BVH (80°-90°)	35.0	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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1331.4	1331.4	1331.4	1331.4	1331.4	1331.4	1331.4	1331.4	1331.4	1331.4	1331.4
2.5°	1389.7	1388.5	1390.9	1382.4	1371.5	1370.3	1370.3	1363.0	1354.5	1337.5	1324.1
5°	1455.3	1452.9	1454.1	1442.0	1427.4	1420.1	1418.9	1403.1	1383.6	1356.9	1332.6
7.5°	1516.1	1513.6	1512.4	1499.1	1477.2	1465.0	1463.8	1440.7	1417.7	1376.4	1341.1
10°	1573.2	1570.7	1568.3	1550.1	1523.4	1505.1	1502.7	1473.5	1444.4	1393.4	1348.4
12.5°	1646.0	1641.2	1638.8	1616.9	1578.0	1558.6	1554.9	1516.1	1479.6	1417.7	1363.0
15°	1722.6	1718.9	1715.3	1694.6	1650.9	1625.4	1619.3	1570.7	1520.9	1449.2	1384.9
17.5°	1779.7	1776.0	1776.0	1757.8	1717.7	1688.6	1683.7	1625.4	1563.4	1478.4	1401.9
20°	1814.9	1811.3	1814.9	1804.0	1773.6	1749.3	1744.4	1680.1	1606.0	1505.1	1416.4
22.5°	1840.4	1836.8	1842.8	1838.0	1816.1	1801.5	1797.9	1734.7	1649.7	1533.1	1431.0
25°	1885.4	1885.4	1885.4	1876.9	1856.2	1851.3	1851.3	1796.7	1705.6	1569.5	1452.9
27.5°	1975.3	1970.4	1964.3	1940.0	1904.8	1903.6	1910.9	1859.8	1770.0	1616.9	1479.6
30°	2107.7	2105.2	2082.2	2031.1	1971.6	1965.5	1970.4	1927.9	1839.2	1666.7	1510.0
32.5°	2279.0	2270.4	2223.1	2146.5	2061.5	2033.6	2043.3	1998.3	1912.1	1717.7	1539.1
35°	2400.4	2402.9	2368.8	2299.6	2198.8	2124.7	2132.0	2077.3	1991.0	1774.8	1575.6
37.5°	2540.1	2548.6	2497.6	2445.4	2351.8	2225.5	2232.8	2158.7	2070.0	1846.5	1614.5
40°	2733.3	2716.3	2630.0	2568.1	2464.8	2331.2	2337.3	2249.8	2161.1	1914.5	1659.4
42.5°	2894.9	2864.5	2760.0	2681.0	2557.1	2442.9	2449.0	2348.2	2253.4	1989.8	1709.2
45°	3126.9	3043.1	2892.4	2853.5	2651.9	2552.3	2558.4	2452.7	2350.6	2070.0	1762.7
47.5°	3261.7	3128.1	3032.1	3011.5	2756.4	2665.3	2672.5	2563.2	2455.1	2161.1	1818.5
50°	3253.2	3167.0	3139.0	3088.0	2848.7	2770.9	2778.2	2677.4	2560.8	2251.0	1872.0
52.5°	3197.3	3213.1	3198.5	3113.5	2941.0	2873.0	2881.5	2790.4	2668.9	2334.8	1921.8
55°	3283.6	3294.5	3266.6	3154.8	3043.1	2975.0	2984.7	2909.4	2775.8	2408.9	1964.3
57.5°	3386.8	3348.0	3320.0	3227.7	3148.7	3085.6	3096.5	3030.9	2868.1	2468.5	1997.1
60°	3382.0	3300.6	3328.5	3232.6	3220.4	3187.6	3197.3	3130.5	2938.6	2512.2	2010.5
62.5°	3133.0	3089.2	3230.1	3197.3	3278.7	3278.7	3290.9	3191.3	2981.1	2530.4	2003.2
65°	2700.5	2702.9	2950.7	3086.8	3348.0	3403.8	3413.6	3228.9	2956.8	2477.0	1935.2
67.5°	2151.4	2167.2	2523.1	2806.2	3278.7	3488.9	3490.1	3262.9	2852.3	2326.3	1777.2
70°	1574.4	1586.5	2006.8	2350.6	2951.9	3300.6	3281.2	3167.0	2625.2	2063.9	1530.6
72.5°	1064.2	1075.1	1507.6	1805.2	2422.3	2811.0	2768.5	2798.9	2237.6	1695.9	1230.6
75°	715.5	728.9	1072.7	1291.3	1782.1	2134.4	2039.6	2119.8	1731.1	1284.0	897.7
77.5°	450.7	459.2	681.5	846.7	1217.2	1452.9	1358.1	1359.4	997.3	691.2	482.3
80°	286.7	289.1	413.0	488.3	704.6	873.4	772.6	628.0	449.5	366.9	287.9
82.5°	166.4	162.8	246.6	275.8	335.3	331.6	274.5	260.0	196.8	183.4	147.0
85°	66.8	62.0	108.1	100.8	102.0	108.1	80.2	80.2	64.4	49.8	36.4
87.5°	13.4	13.4	14.6	13.4	13.4	14.6	10.9	10.9	9.7	9.7	9.7
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°	1331.4	1331.4	1331.4	1331.4	1331.4	1331.4	1331.4	1331.4	1331.4	1331.4	1331.4
2.5°	1321.7	1319.3	1313.2	1297.4	1288.9	1284.0	1276.7	1274.3	1273.1	1274.3	1278.0
5°	1325.3	1316.8	1299.8	1274.3	1257.3	1246.4	1234.2	1229.4	1225.7	1225.7	1229.4
7.5°	1327.8	1314.4	1285.3	1247.6	1223.3	1206.3	1191.7	1185.6	1184.4	1188.1	1189.3
10°	1329.0	1309.5	1268.2	1220.9	1189.3	1167.4	1152.8	1149.2	1152.8	1160.1	1161.3
12.5°	1337.5	1310.8	1258.5	1202.6	1165.0	1143.1	1132.2	1132.2	1141.9	1155.3	1156.5
15°	1352.1	1319.3	1253.7	1188.1	1149.2	1129.8	1126.1	1132.2	1146.8	1167.4	1169.8
17.5°	1363.0	1324.1	1242.7	1168.6	1128.5	1116.4	1122.5	1137.0	1157.7	1185.6	1188.1
20°	1370.3	1324.1	1226.9	1145.5	1107.9	1105.5	1122.5	1145.5	1167.4	1200.2	1203.9
22.5°	1377.6	1321.7	1208.7	1117.6	1084.8	1092.1	1123.7	1152.8	1174.7	1209.9	1216.0
25°	1390.9	1325.3	1190.5	1089.7	1060.5	1081.2	1122.5	1157.7	1180.8	1217.2	1226.9
27.5°	1409.2	1333.8	1177.1	1064.2	1036.2	1064.2	1114.0	1156.5	1180.8	1216.0	1226.9
30°	1428.6	1343.6	1161.3	1036.2	1008.3	1039.9	1095.7	1143.1	1171.1	1203.9	1217.2
32.5°	1449.2	1354.5	1148.0	1005.8	974.3	1007.1	1069.0	1122.5	1152.8	1183.2	1197.8
35°	1477.2	1373.9	1140.7	981.6	943.9	973.0	1035.0	1095.7	1128.5	1156.5	1173.5
37.5°	1511.2	1398.2	1137.0	957.3	911.1	935.4	998.6	1062.9	1098.2	1121.3	1137.0
40°	1550.1	1428.6	1135.8	934.2	878.3	896.5	960.9	1025.3	1059.3	1077.5	1090.9
42.5°	1593.8	1462.6	1133.4	911.1	845.5	860.1	924.5	987.6	1016.8	1032.6	1044.7
45°	1640.0	1496.6	1128.5	883.2	810.3	827.3	886.8	942.7	973.0	986.4	999.8
47.5°	1686.1	1530.6	1118.8	851.6	778.7	794.5	846.7	895.3	919.6	931.7	945.1
50°	1731.1	1561.0	1095.7	815.1	745.9	760.5	800.5	833.3	851.6	861.3	874.7
52.5°	1771.2	1581.7	1062.9	772.6	713.1	720.4	747.1	775.0	789.6	790.8	803.0
55°	1805.2	1592.6	1015.6	728.9	677.9	679.1	693.6	715.5	721.6	716.7	725.2
57.5°	1824.6	1586.5	963.3	683.9	641.4	636.6	647.5	658.4	659.6	647.5	656.0
60°	1829.5	1558.6	895.3	639.0	605.0	591.6	595.2	592.8	590.4	585.5	592.8
62.5°	1805.2	1499.1	820.0	595.2	566.1	545.4	544.2	543.0	546.7	547.9	549.1
65°	1716.5	1387.3	730.1	550.3	524.8	496.9	495.6	510.2	515.1	507.8	510.2
67.5°	1545.2	1216.0	631.7	498.1	472.6	448.3	458.0	466.5	475.0	472.6	475.0
70°	1302.3	998.6	541.8	439.8	415.5	402.1	413.0	420.3	421.5	419.1	421.5
72.5°	1024.1	779.9	458.0	380.2	358.4	352.3	365.7	371.7	382.7	387.5	388.7
75°	739.8	575.8	375.4	315.8	297.6	297.6	309.8	320.7	330.4	324.3	320.7
77.5°	413.0	343.8	269.7	217.4	221.1	238.1	243.0	255.1	264.8	263.6	261.2
80°	250.2	215.0	182.2	140.9	139.7	153.1	184.6	205.3	210.2	199.2	198.0
82.5°	130.0	113.0	97.2	79.0	87.5	102.0	106.9	128.8	142.1	137.3	143.3
85°	32.8	31.6	35.2	36.4	44.9	49.8	54.7	64.4	42.5	20.7	20.7
87.5°	9.7	9.7	12.1	12.1	15.8	19.4	18.2	18.2	9.7	1.2	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)