

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: P842491

Luminaire Tested: **ARCH4-50-750-U-T3**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842491
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-50-750-U-T3
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9827 lumens
Efficiency: N/A
Efficacy: 184.7 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

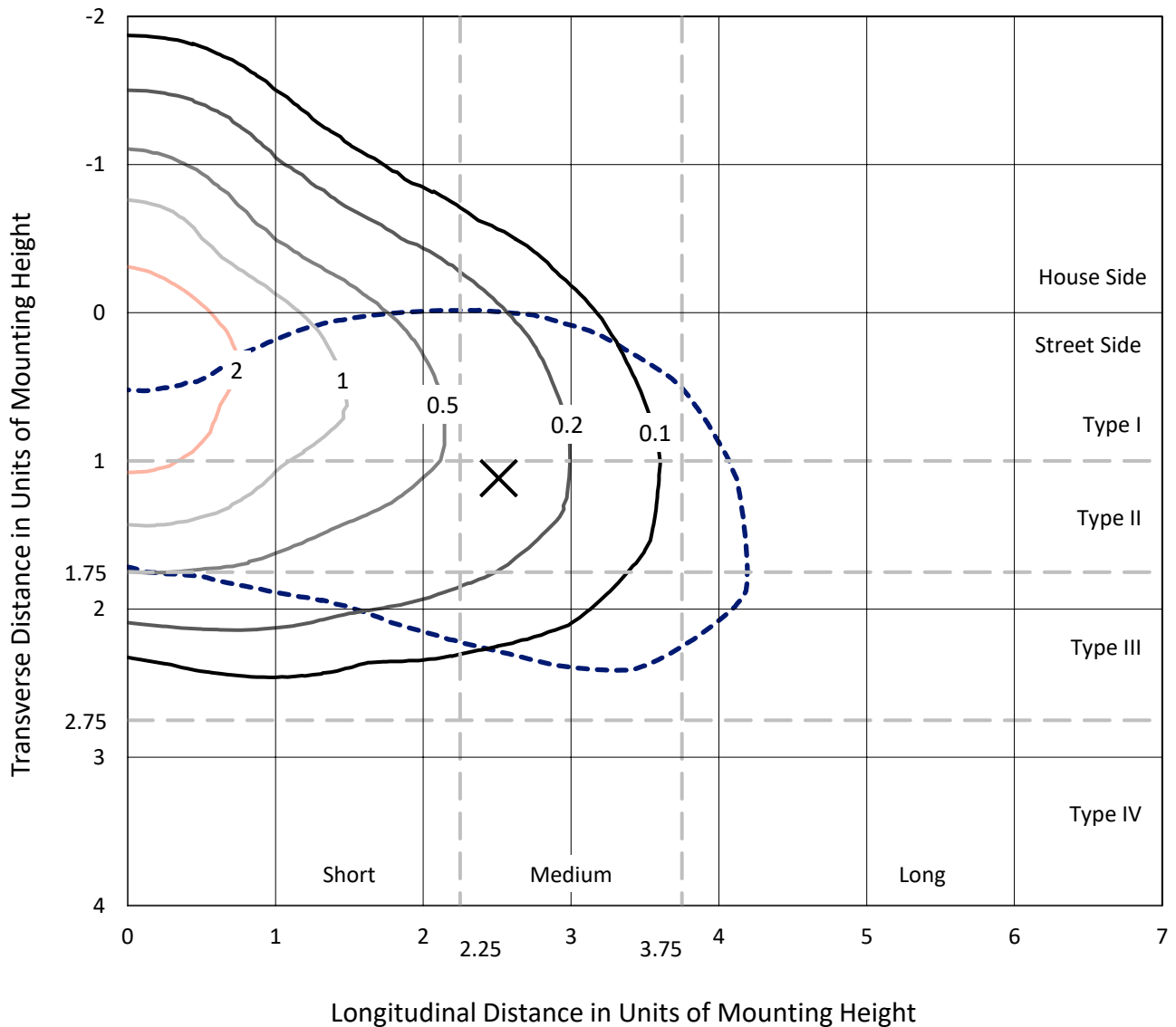
Input Watts (W): 53.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

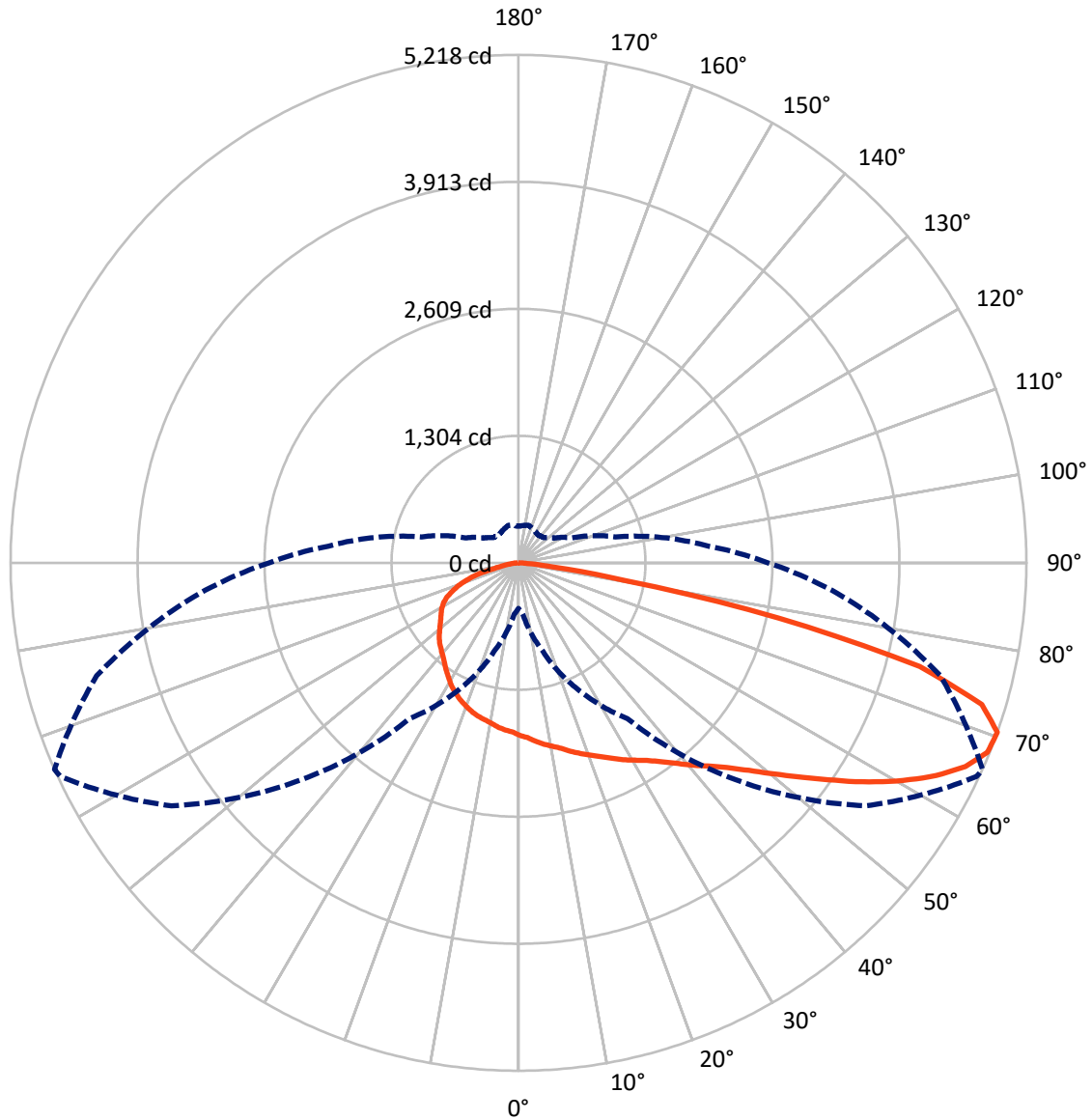
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 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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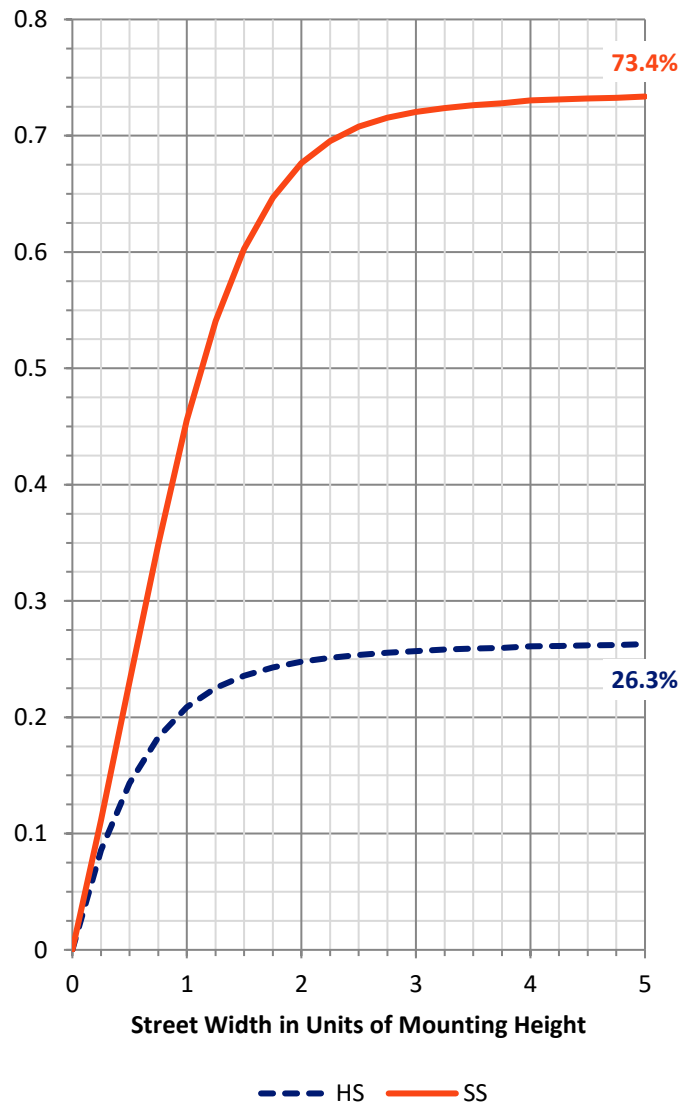
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2603.9	0.0	2603.9
	% Fixture	26.5	0.0	26.5
Street Side	Lumens	7223.1	0.0	7223.1
	% Fixture	73.5	0.0	73.5
Total	Lumens	9827.0	0.0	9827.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.4	1.7
10°-20°	511.2	5.2
20°-30°	856.9	8.7
30°-40°	1283.1	13.1
40°-50°	1715.5	17.5
50°-60°	2002.9	20.4
60°-70°	1991.6	20.3
70°-80°	1179.1	12.0
80°-90°	116.2	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°	9827.0	100.0
0°-180°	9827.0	100.0

Coefficient of Utilization

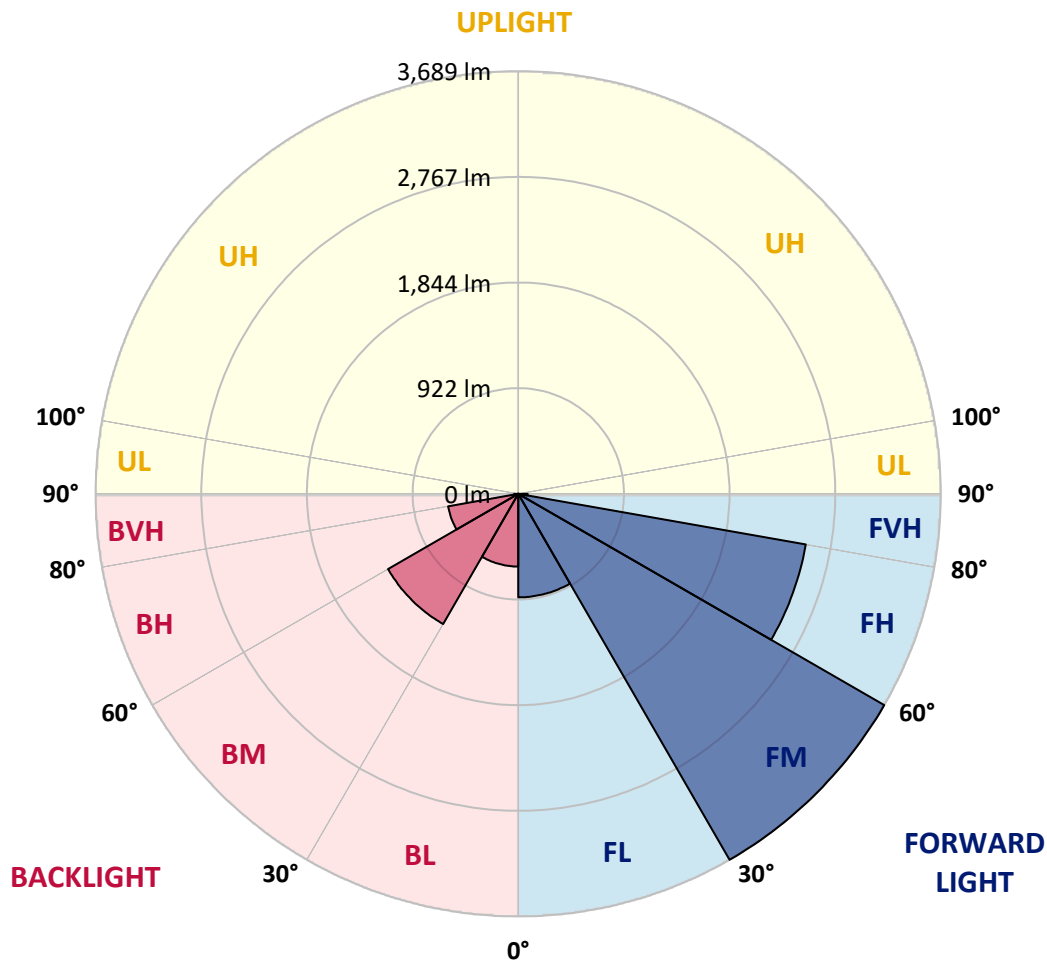


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	903.8	9.2			
FM (30°-60°)	3688.9	37.5			
FH (60°-80°)	2548.7	25.9			G2/5000
FVH (80°-90°)	81.7	0.8			G1/100
BL (0°-30°)	634.7	6.5	B2/1000		
BM (30°-60°)	1312.7	13.4	B2/2500		
BH (60°-80°)	622.0	6.3	B2/1000		G2/1000
BVH (80°-90°)	34.5	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°	1773.5	1773.5	1773.5	1773.5	1773.5	1773.5	1773.5	1773.5	1773.5	1773.5	1773.5
2.5°	1838.8	1835.9	1834.4	1828.6	1815.6	1821.4	1808.3	1799.6	1798.2	1777.9	1766.3
5°	1914.1	1912.7	1909.8	1901.1	1880.8	1883.7	1861.9	1846.0	1841.7	1809.8	1785.1
7.5°	1977.9	1975.0	1973.5	1961.9	1940.2	1938.7	1912.7	1889.5	1882.2	1838.8	1801.1
10°	2027.1	2022.8	2025.7	2014.1	1990.9	1986.5	1953.2	1922.8	1915.5	1860.5	1808.3
12.5°	2069.1	2066.2	2070.6	2060.4	2041.6	2037.3	2003.9	1964.8	1956.1	1892.4	1824.3
15°	2115.5	2105.4	2114.1	2109.7	2096.7	2095.2	2064.8	2021.3	2009.7	1932.9	1848.9
17.5°	2140.1	2134.3	2144.5	2145.9	2140.1	2150.3	2121.3	2069.1	2059.0	1970.6	1870.6
20°	2157.5	2148.8	2160.4	2169.1	2173.5	2193.8	2170.6	2119.9	2108.3	2006.8	1890.9
22.5°	2216.9	2198.1	2199.5	2205.3	2208.2	2237.2	2222.7	2173.5	2161.9	2051.8	1915.5
25°	2366.2	2328.5	2303.9	2286.5	2266.2	2290.8	2282.1	2234.3	2224.2	2105.4	1946.0
27.5°	2598.0	2550.2	2500.9	2450.2	2370.5	2360.4	2345.9	2302.4	2290.8	2159.0	1976.4
30°	2861.7	2813.9	2756.0	2674.8	2525.6	2447.3	2414.0	2366.2	2353.1	2206.8	2005.4
32.5°	3124.0	3082.0	3024.0	2925.5	2712.5	2553.1	2482.1	2432.8	2419.8	2259.0	2040.2
35°	3328.3	3302.2	3264.5	3141.4	2898.0	2677.7	2580.6	2521.2	2506.7	2341.5	2103.9
37.5°	3493.5	3474.7	3442.8	3313.8	3032.7	2802.3	2693.7	2625.5	2609.6	2431.4	2172.0
40°	3736.9	3687.7	3661.6	3474.7	3150.1	2915.3	2821.2	2750.2	2732.8	2527.0	2227.1
42.5°	3944.1	3907.9	3876.0	3618.1	3261.7	3012.4	2941.4	2876.2	2853.0	2621.2	2286.5
45°	3978.9	3993.4	3977.4	3689.1	3438.4	3108.1	3063.1	3021.1	2999.4	2748.7	2376.3
47.5°	3980.3	3980.3	3886.2	3729.7	3657.2	3215.3	3193.5	3208.0	3184.9	2911.0	2483.5
50°	3876.0	3894.9	3845.6	3739.8	3715.2	3322.5	3352.9	3431.2	3408.0	3083.4	2599.5
52.5°	3660.1	3722.4	3721.0	3723.9	3631.1	3413.8	3521.0	3699.2	3660.1	3277.6	2722.6
55°	3279.0	3403.7	3515.2	3610.9	3558.7	3468.9	3726.8	3984.7	3944.1	3494.9	2847.2
57.5°	2953.0	3032.7	3171.8	3442.8	3473.2	3516.7	3919.5	4283.2	4247.0	3735.5	2977.7
60°	2580.6	2690.8	2829.9	3215.3	3368.9	3579.0	4131.0	4574.4	4539.6	3978.9	3103.7
62.5°	2008.3	2150.3	2428.5	2866.1	3216.7	3618.1	4297.7	4830.9	4815.0	4209.3	3216.7
65°	1399.7	1525.8	1915.5	2437.2	2974.8	3600.7	4431.0	5059.8	5045.3	4397.6	3296.4
67.5°	817.2	963.6	1404.1	1961.9	2547.3	3480.4	4474.4	5194.6	5194.6	4512.1	3318.2
70°	466.6	534.7	925.9	1430.1	1953.2	3148.6	4352.7	5193.1	5217.8	4486.0	3228.3
72.5°	326.0	356.4	623.1	962.1	1324.4	2547.3	4034.0	4942.5	4975.8	4239.7	2921.1
75°	253.6	275.3	439.0	656.4	834.6	1730.1	3337.0	4167.3	4255.6	3613.8	2361.8
77.5°	192.7	208.7	256.5	410.1	534.7	994.0	2202.4	2732.8	2738.6	2212.6	1266.4
80°	140.6	156.5	171.0	250.7	284.0	465.1	831.7	1141.8	1109.9	1070.8	685.4
82.5°	84.0	100.0	104.3	136.2	139.1	198.5	291.2	368.0	353.6	470.9	321.7
85°	36.2	50.7	53.6	62.3	59.4	81.1	115.9	97.1	86.9	100.0	69.6
87.5°	8.7	14.5	14.5	15.9	13.0	20.3	21.7	15.9	14.5	17.4	17.4
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°	1773.5	1773.5	1773.5	1773.5	1773.5	1773.5	1773.5	1773.5	1773.5	1773.5	1773.5
2.5°	1763.4	1759.1	1760.5	1735.9	1728.6	1721.4	1717.0	1714.1	1711.2	1715.6	1719.9
5°	1776.4	1766.3	1754.7	1718.5	1704.0	1688.1	1676.5	1666.3	1662.0	1662.0	1666.3
7.5°	1786.6	1769.2	1744.6	1696.8	1670.7	1648.9	1630.1	1617.1	1609.8	1609.8	1614.2
10°	1788.0	1763.4	1724.3	1666.3	1631.5	1599.7	1577.9	1563.4	1553.3	1553.3	1556.2
12.5°	1796.7	1763.4	1712.7	1643.1	1599.7	1560.5	1534.5	1512.7	1508.4	1508.4	1511.3
15°	1811.2	1770.7	1705.4	1622.9	1570.7	1525.8	1496.8	1473.6	1464.9	1470.7	1472.2
17.5°	1824.3	1775.0	1692.4	1596.8	1534.5	1485.2	1453.3	1433.0	1421.4	1434.5	1434.5
20°	1833.0	1775.0	1673.6	1563.4	1495.3	1440.3	1409.9	1385.2	1376.5	1392.5	1393.9
22.5°	1846.0	1773.5	1653.3	1530.1	1453.3	1395.4	1364.9	1346.1	1341.8	1359.1	1364.9
25°	1860.5	1776.4	1631.5	1492.4	1407.0	1350.4	1327.3	1318.6	1321.5	1343.2	1350.4
27.5°	1876.4	1782.2	1609.8	1450.4	1356.2	1305.5	1292.5	1296.8	1308.4	1336.0	1344.7
30°	1890.9	1783.7	1579.4	1401.2	1298.3	1250.5	1256.3	1275.1	1292.5	1320.0	1330.2
32.5°	1909.8	1785.1	1547.5	1347.6	1236.0	1201.2	1227.3	1257.7	1275.1	1301.2	1312.8
35°	1956.1	1809.8	1522.9	1295.4	1178.0	1159.2	1202.7	1241.8	1251.9	1275.1	1285.2
37.5°	2009.7	1850.3	1509.8	1241.8	1121.5	1117.2	1172.2	1211.3	1214.2	1228.7	1238.9
40°	2043.1	1867.7	1495.3	1196.9	1070.8	1073.7	1130.2	1160.6	1154.8	1165.0	1172.2
42.5°	2076.4	1873.5	1464.9	1159.2	1023.0	1025.9	1069.3	1091.1	1094.0	1115.7	1125.9
45°	2132.9	1889.5	1431.6	1124.4	979.5	969.4	995.4	1024.4	1062.1	1104.1	1115.7
47.5°	2208.2	1922.8	1396.8	1082.4	937.5	904.2	914.3	965.0	1004.1	1043.3	1050.5
50°	2285.0	1956.1	1364.9	1031.7	895.5	834.6	839.0	885.3	917.2	947.6	952.0
52.5°	2360.4	1985.1	1337.4	983.9	847.7	752.0	769.4	817.2	839.0	853.4	857.8
55°	2435.7	2009.7	1312.8	943.3	792.6	686.8	702.8	747.7	769.4	776.7	779.6
57.5°	2514.0	2038.7	1293.9	908.5	730.3	628.9	639.0	670.9	691.2	699.9	697.0
60°	2579.2	2063.3	1283.8	872.3	668.0	575.2	572.3	601.3	630.3	639.0	636.1
62.5°	2629.9	2079.3	1267.9	825.9	612.9	521.6	507.1	544.8	575.2	581.0	585.4
65°	2657.4	2080.7	1228.7	766.5	556.4	463.7	453.5	491.2	510.0	515.8	515.8
67.5°	2653.1	2057.5	1151.9	686.8	504.2	411.5	402.8	426.0	453.5	457.9	453.5
70°	2563.2	1961.9	1028.8	602.8	441.9	365.1	349.2	372.4	398.5	382.5	375.3
72.5°	2308.2	1714.1	847.7	510.0	372.4	307.2	299.9	323.1	324.6	327.5	320.2
75°	1821.4	1276.6	634.7	397.0	301.4	257.9	256.5	252.1	257.9	269.5	260.8
77.5°	956.3	637.6	343.4	243.4	218.8	207.2	197.1	195.6	213.0	220.2	211.6
80°	518.7	357.9	197.1	146.3	133.3	134.8	147.8	144.9	163.7	168.1	160.8
82.5°	226.0	169.5	97.1	88.4	88.4	86.9	91.3	101.4	121.7	121.7	97.1
85°	49.3	42.0	37.7	43.5	49.3	49.3	49.3	49.3	34.8	18.8	13.0
87.5°	15.9	15.9	15.9	17.4	18.8	18.8	15.9	11.6	7.2	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)