

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: P798979

Luminaire Tested: **ARCH1-50-727-U-T2R**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P798979
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH1-50-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1470mA LIGHTSQUARE WITH 10 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6329 lumens
Efficiency: N/A
Efficacy: 119.4 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

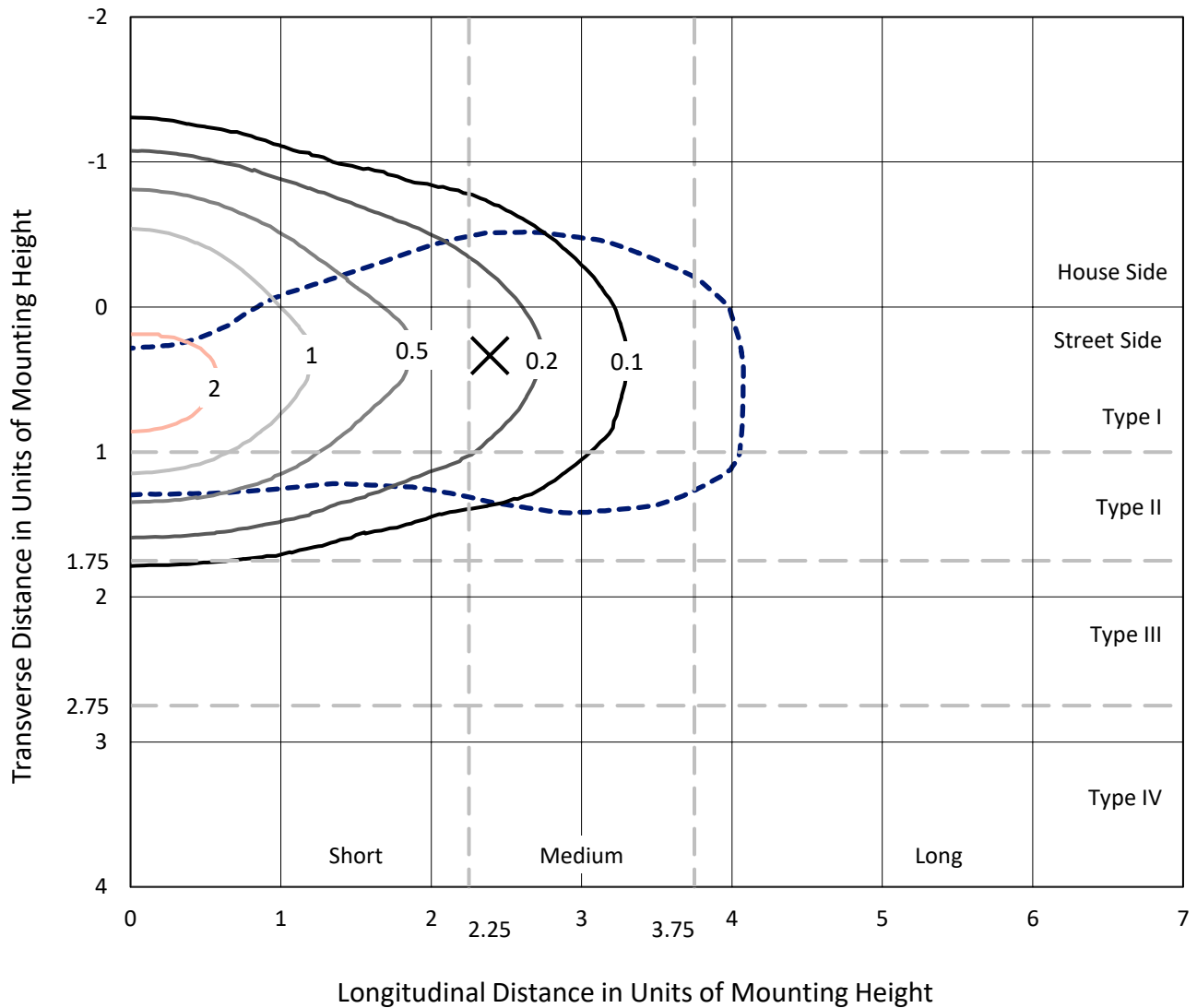
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

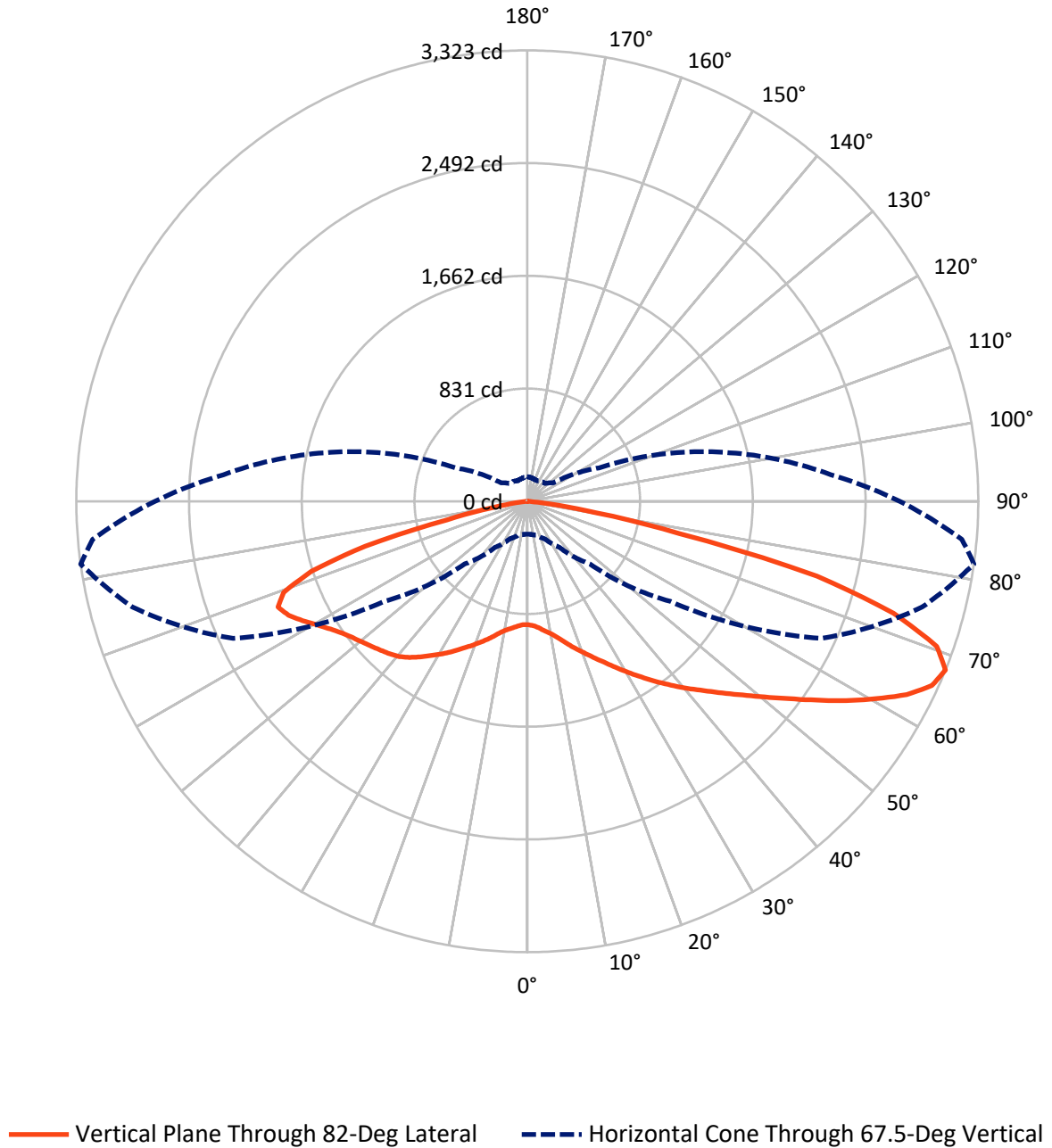
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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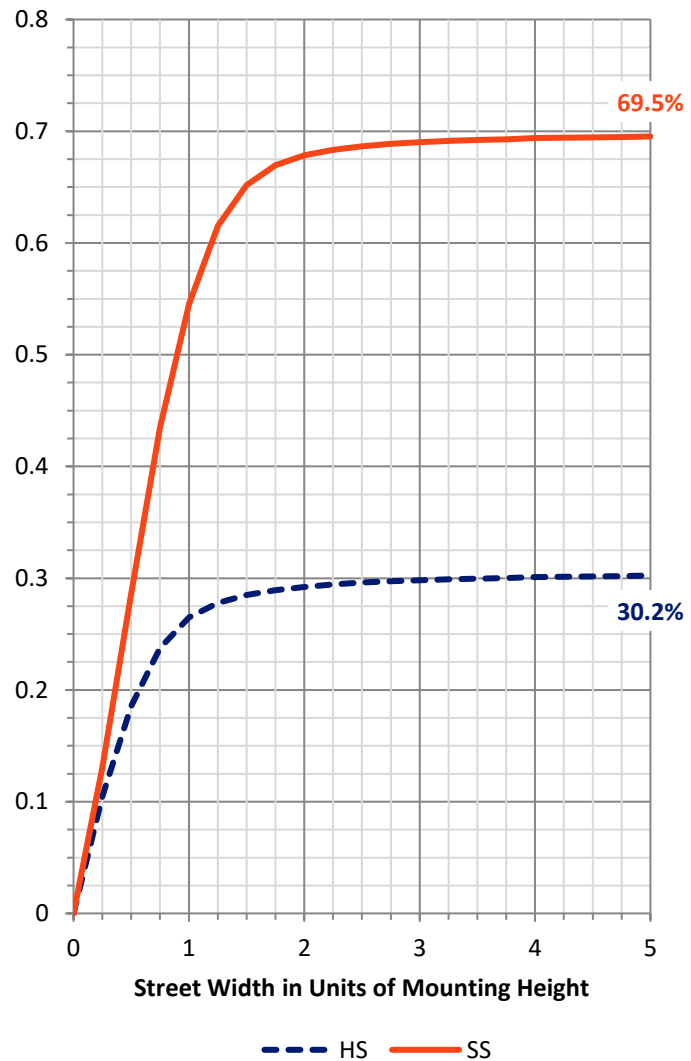
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1927.4	0.0	1927.4
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	4401.6	0.0	4401.6
	% Fixture	69.5	0.0	69.5
Total	Lumens	6329.0	0.0	6329.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.0	1.5
10°-20°	338.7	5.4
20°-30°	680.7	10.8
30°-40°	1069.2	16.9
40°-50°	1302.5	20.6
50°-60°	1230.7	19.4
60°-70°	1016.3	16.1
70°-80°	553.4	8.7
80°-90°	43.5	0.7
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°	6329.0	100.0
0°-180°	6329.0	100.0

Coefficient of Utilization



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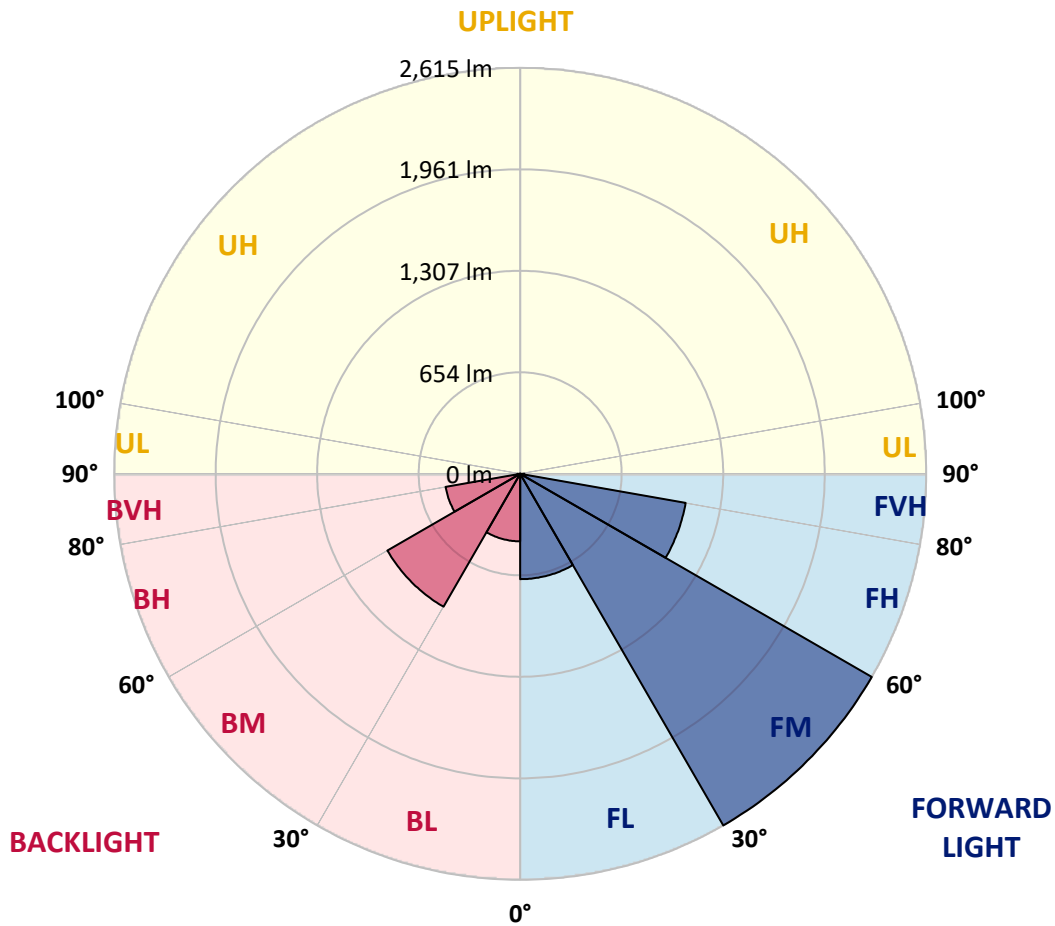
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	678.7	10.7			
FM (30°-60°)	2614.8	41.3			
FH (60°-80°)	1081.9	17.1			G1/1800
FVH (80°-90°)	26.2	0.4			G1/100
BL (0°-30°)	434.7	6.9	B1/500		
BM (30°-60°)	987.7	15.6	B1/1000		
BH (60°-80°)	487.8	7.7	B1/500		G1/500
BVH (80°-90°)	17.3	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	909.8	909.8	909.8	909.8	909.8	909.8	909.8	909.8	909.8	909.8	909.8
2.5°	951.1	951.1	958.5	958.5	952.1	942.0	939.2	928.2	918.1	918.1	919.0
5°	1042.1	1041.2	1046.7	1039.4	1023.7	1003.5	989.7	965.8	945.6	939.2	938.3
7.5°	1153.3	1152.4	1155.2	1143.2	1113.8	1080.7	1053.2	1014.6	981.5	967.7	964.0
10°	1277.4	1276.5	1273.7	1253.5	1214.0	1162.5	1121.2	1067.9	1018.2	996.2	991.6
12.5°	1419.8	1418.0	1411.6	1382.1	1327.9	1261.8	1202.0	1133.1	1066.9	1036.6	1026.5
15°	1578.8	1576.1	1564.1	1528.3	1455.7	1372.0	1294.8	1206.6	1125.8	1086.2	1072.4
17.5°	1746.1	1746.1	1727.7	1674.4	1593.5	1489.7	1394.1	1282.0	1187.3	1138.6	1122.1
20°	1916.1	1915.2	1892.2	1827.9	1732.3	1612.8	1491.5	1368.4	1250.7	1191.9	1171.7
22.5°	2095.3	2093.4	2064.9	1991.4	1877.5	1742.4	1600.9	1453.8	1320.6	1249.8	1224.1
25°	2301.1	2298.4	2263.4	2173.4	2038.3	1885.7	1724.0	1554.0	1400.5	1314.1	1283.8
27.5°	2519.8	2516.2	2474.8	2370.1	2222.1	2038.3	1860.0	1669.8	1488.7	1385.8	1351.8
30°	2714.7	2711.9	2666.9	2559.4	2389.3	2189.9	1989.6	1785.6	1581.6	1462.1	1419.8
32.5°	2861.7	2861.7	2821.3	2715.6	2539.1	2335.1	2120.1	1894.9	1678.1	1543.9	1494.3
35°	2950.8	2953.6	2918.7	2834.1	2667.8	2472.1	2255.2	2023.6	1781.0	1631.2	1577.9
37.5°	2963.7	2972.9	2952.7	2895.7	2756.9	2586.0	2387.5	2147.7	1887.6	1719.4	1659.7
40°	2904.0	2910.4	2911.3	2889.3	2793.7	2667.8	2504.2	2279.1	2000.6	1812.2	1743.3
42.5°	2784.5	2789.1	2797.4	2803.8	2767.0	2703.6	2593.4	2401.3	2121.0	1906.9	1826.0
45°	2630.1	2629.2	2643.0	2670.6	2668.7	2683.4	2643.0	2512.5	2246.0	2014.4	1917.9
47.5°	2399.5	2394.9	2443.6	2506.1	2537.3	2606.2	2643.9	2599.8	2382.0	2133.0	2022.7
50°	2038.3	2033.7	2140.3	2287.3	2379.2	2484.0	2593.4	2652.2	2524.4	2266.2	2136.6
52.5°	1599.0	1594.4	1729.5	1986.8	2187.2	2339.7	2491.4	2664.1	2659.5	2415.1	2265.3
55°	1189.2	1185.5	1316.9	1595.3	1919.7	2172.5	2366.4	2632.9	2786.3	2586.0	2421.5
57.5°	838.1	836.3	950.2	1180.9	1576.1	1968.5	2246.0	2572.2	2903.1	2771.6	2598.0
60°	588.1	585.4	668.1	846.4	1191.9	1660.6	2126.5	2491.4	2990.4	2954.5	2785.4
62.5°	396.1	394.2	453.1	601.9	846.4	1278.3	1945.5	2437.1	3040.0	3138.3	2974.7
65°	300.5	299.6	326.2	408.0	599.2	918.1	1657.8	2430.7	3046.4	3276.2	3135.6
67.5°	242.6	243.5	258.2	305.1	414.5	652.5	1285.7	2390.3	3012.4	3323.0	3213.7
70°	198.5	198.5	204.9	236.2	306.0	440.2	897.8	2206.5	2917.8	3200.8	3120.9
72.5°	151.6	152.6	172.8	191.1	230.7	308.8	575.3	1826.0	2694.5	2822.2	2761.5
75°	120.4	119.5	131.4	157.1	179.2	220.6	352.9	1309.5	2292.9	2205.6	2167.0
77.5°	86.4	85.5	94.7	116.7	136.0	156.2	210.4	660.7	1247.1	1146.0	1117.5
80°	58.8	57.0	65.2	80.9	90.1	91.9	102.9	253.6	544.0	512.8	506.4
82.5°	30.3	30.3	34.9	45.9	46.9	47.8	45.9	81.8	180.1	168.2	160.8
85°	11.9	11.9	12.9	15.6	15.6	16.5	16.5	21.1	19.3	18.4	17.5
87.5°	0.9	0.9	1.8	1.8	2.8	2.8	2.8	3.7	4.6	4.6	4.6
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°	909.8	909.8	909.8	909.8	909.8	909.8	909.8	909.8	909.8	909.8	909.8
2.5°	917.1	913.5	901.5	898.8	896.9	894.2	895.1	888.7	885.9	886.8	883.1
5°	933.7	927.3	912.5	906.1	904.3	901.5	904.3	899.7	895.1	896.9	895.1
7.5°	956.7	947.5	929.1	922.7	921.7	919.0	922.7	919.0	915.3	917.1	913.5
10°	980.6	968.6	948.4	942.0	942.0	941.0	944.7	939.2	935.5	936.4	934.6
12.5°	1015.5	999.9	977.8	972.3	969.5	972.3	973.2	965.8	959.4	960.3	957.6
15°	1057.7	1040.3	1016.4	1008.1	1006.3	1005.4	1001.7	992.5	984.2	983.3	980.6
17.5°	1103.7	1081.6	1053.2	1044.9	1036.6	1033.9	1024.7	1012.7	999.9	999.9	996.2
20°	1147.8	1123.0	1089.0	1077.0	1065.1	1054.1	1038.4	1019.1	1002.6	999.9	996.2
22.5°	1195.6	1166.2	1126.7	1109.2	1088.1	1066.0	1039.4	1013.6	992.5	987.9	985.1
25°	1248.9	1212.1	1165.3	1139.5	1105.5	1071.5	1032.0	998.9	974.1	966.8	964.9
27.5°	1307.7	1263.6	1206.6	1168.9	1119.3	1066.0	1015.5	976.0	945.6	936.4	933.7
30°	1367.4	1315.1	1244.3	1189.2	1119.3	1048.6	985.1	939.2	904.3	891.4	889.6
32.5°	1427.2	1368.4	1278.3	1200.2	1108.3	1019.1	945.6	891.4	851.9	836.3	839.9
35°	1498.9	1427.2	1309.5	1204.8	1089.9	983.3	900.6	837.2	796.8	783.0	785.7
37.5°	1573.3	1486.0	1334.4	1201.1	1064.2	942.9	850.1	788.5	737.9	714.0	716.8
40°	1637.6	1539.3	1351.8	1188.2	1031.1	896.9	800.4	719.6	649.7	626.7	624.0
42.5°	1698.3	1578.8	1361.0	1168.9	993.4	843.6	729.7	625.8	556.0	527.5	528.4
45°	1761.7	1617.4	1357.3	1143.2	946.5	781.1	638.7	533.9	472.4	446.6	447.5
47.5°	1834.3	1658.8	1353.7	1115.6	889.6	700.3	551.4	453.1	399.8	381.4	379.5
50°	1911.5	1704.7	1349.1	1081.6	826.2	610.2	465.0	377.7	332.7	320.7	318.0
52.5°	1998.8	1754.3	1346.3	1041.2	749.9	514.6	387.8	311.5	281.2	272.9	272.0
55°	2103.5	1812.2	1350.0	992.5	658.0	424.6	322.6	268.3	248.1	243.5	242.6
57.5°	2231.3	1886.7	1361.0	935.5	561.5	346.5	274.8	241.7	228.8	225.2	225.2
60°	2370.1	1971.2	1381.2	871.2	465.0	285.8	243.5	220.6	215.0	219.6	219.6
62.5°	2519.8	2070.5	1417.1	793.1	374.9	241.7	218.7	203.1	199.4	208.6	209.5
65°	2658.6	2167.0	1440.0	699.3	297.7	209.5	199.4	185.6	187.5	196.7	195.7
67.5°	2744.1	2246.9	1407.9	581.7	236.2	185.6	179.2	167.3	171.8	179.2	180.1
70°	2691.7	2201.9	1248.9	439.3	184.7	161.7	157.1	149.8	153.5	162.7	166.3
72.5°	2435.3	1972.1	971.4	296.8	148.9	136.0	137.8	134.2	138.8	147.0	155.3
75°	1976.7	1490.6	651.6	190.2	117.6	115.8	118.5	115.8	117.6	125.9	130.5
77.5°	1032.0	726.9	324.4	118.5	87.3	90.1	94.7	95.6	101.1	102.9	104.8
80°	481.5	327.2	135.1	66.2	57.9	63.4	72.6	73.5	75.4	78.1	79.0
82.5°	157.1	98.3	62.5	35.8	33.1	35.8	46.9	56.1	57.0	62.5	62.5
85°	16.5	10.1	13.8	14.7	12.9	15.6	21.1	20.2	9.2	5.5	5.5
87.5°	4.6	3.7	4.6	4.6	3.7	3.7	2.8	0.9	0.0	0.0	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)