

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: P799763

Luminaire Tested: **ARCH2-50-730-U-T2R**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799763
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: ARCH2-50-730-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 410mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7741 lumens
Efficiency: N/A
Efficacy: 143.4 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 54
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

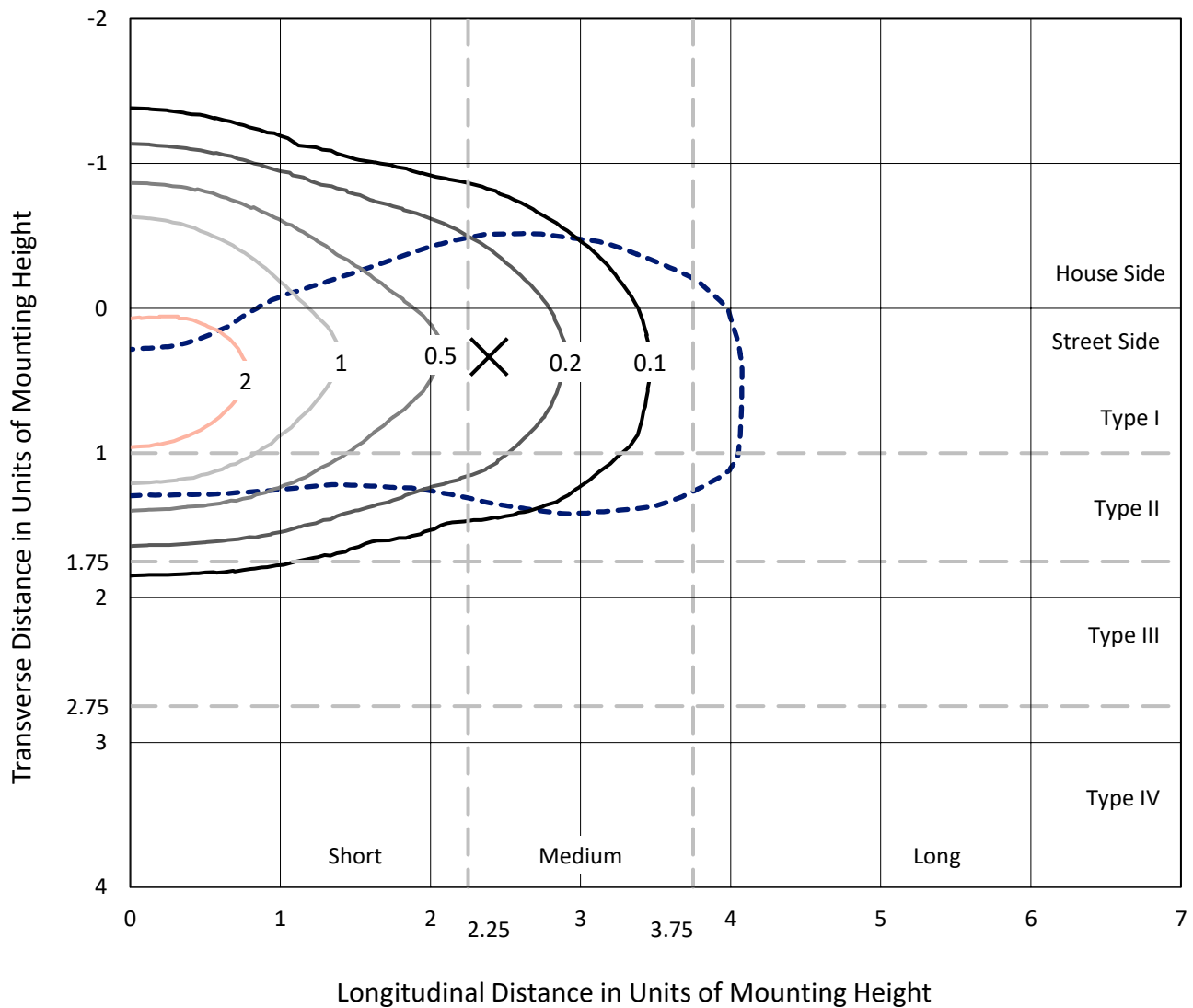


REPORT NUMBER: P799763

CATALOG NUMBER: ARCH2-50-730-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

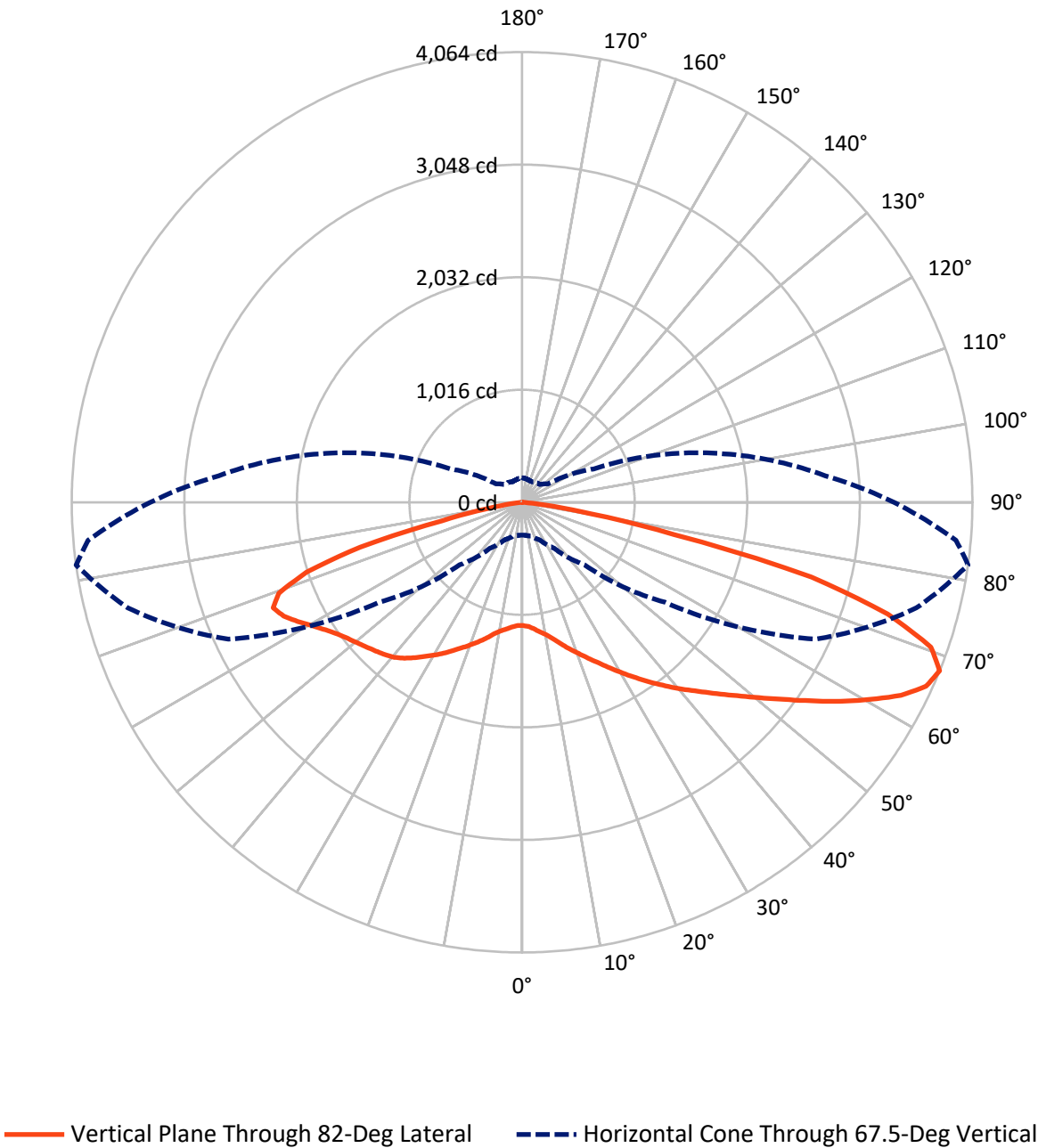
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
Type II - Medium - N/A

REPORT NUMBER: P799763
CATALOG NUMBER: ARCH2-50-730-U-T2R

Luminous Intensity Polar Plot



REPORT NUMBER: P799763

CATALOG NUMBER: ARCH2-50-730-U-T2R

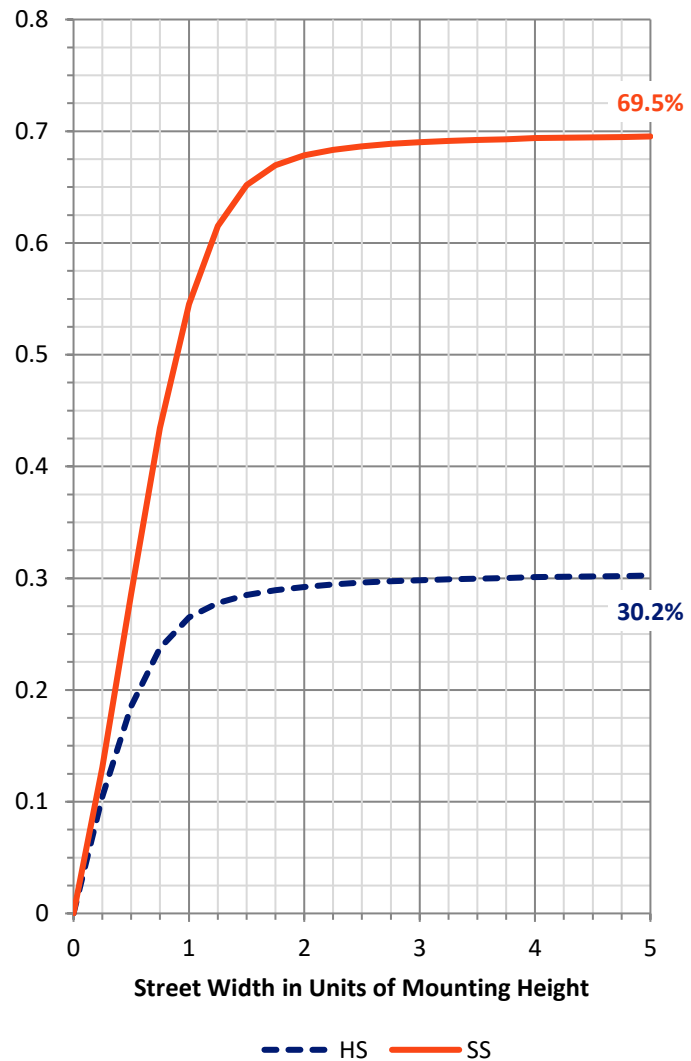
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2357.4	0.0	2357.4
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	5383.5	0.0	5383.5
	% Fixture	69.5	0.0	69.5
Total	Lumens	7741.0	0.0	7741.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.0	1.5
10°-20°	414.2	5.4
20°-30°	832.5	10.8
30°-40°	1307.8	16.9
40°-50°	1593.1	20.6
50°-60°	1505.3	19.4
60°-70°	1243.0	16.1
70°-80°	676.9	8.7
80°-90°	53.2	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°	7741.0	100.0
0°-180°	7741.0	100.0

Coefficient of Utilization



REPORT NUMBER: P799763

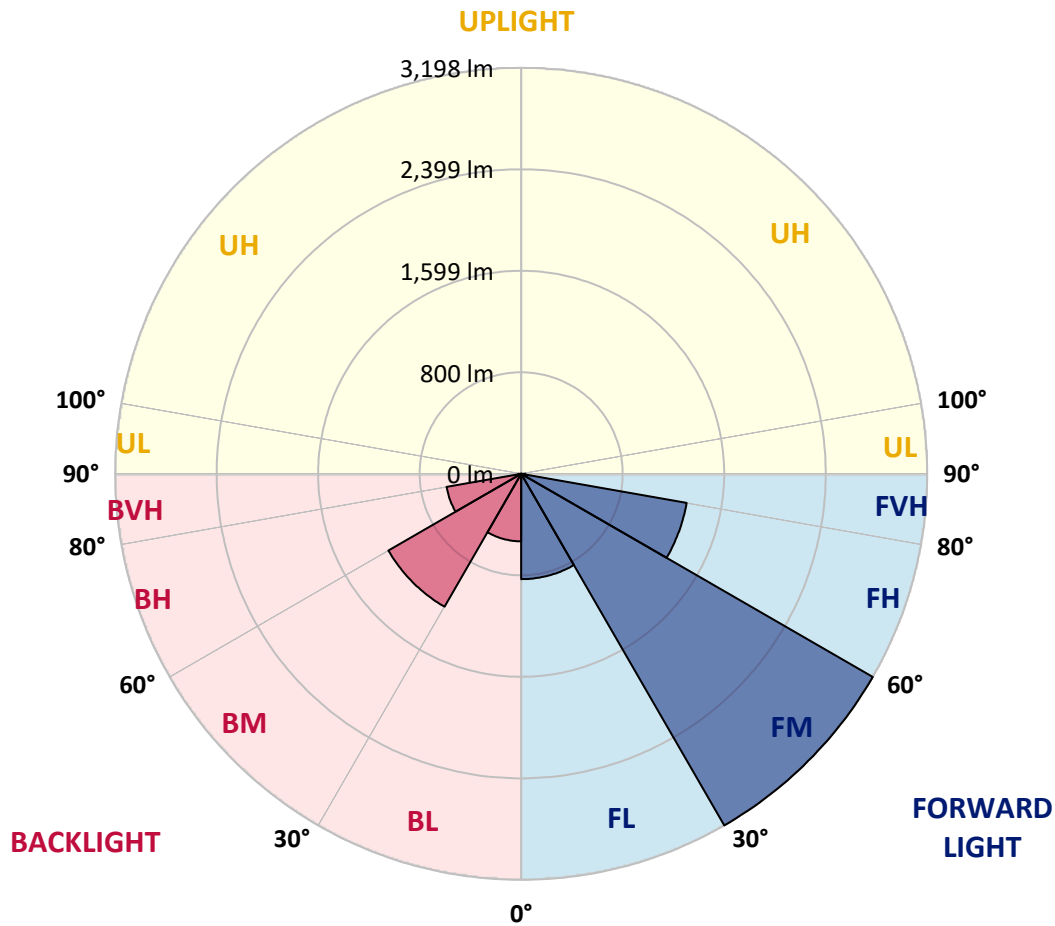
CATALOG NUMBER: ARCH2-50-730-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	830.1	10.7			
FM	(30°-60°)	3198.1	41.3			
FH	(60°-80°)	1323.2	17.1			G1/1800
FVH	(80°-90°)	32.1	0.4			G1/100
BL	(0°-30°)	531.6	6.9	B2/1000		
BM	(30°-60°)	1208.0	15.6	B2/2500		
BH	(60°-80°)	596.7	7.7	B2/1000		G2/1000
BVH	(80°-90°)	21.1	0.3			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 II Medium



REPORT NUMBER: P799763

CATALOG NUMBER: ARCH2-50-730-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1112.8	1112.8	1112.8	1112.8	1112.8	1112.8	1112.8	1112.8	1112.8	1112.8	1112.8
2.5°	1163.3	1163.3	1172.3	1172.3	1164.5	1152.1	1148.7	1135.2	1122.9	1122.9	1124.0
5°	1274.6	1273.5	1280.2	1271.2	1252.1	1227.4	1210.6	1181.3	1156.6	1148.7	1147.6
7.5°	1410.6	1409.5	1412.9	1398.3	1362.3	1321.8	1288.1	1240.9	1200.4	1183.6	1179.1
10°	1562.4	1561.2	1557.9	1533.1	1484.8	1421.9	1371.3	1306.1	1245.4	1218.4	1212.8
12.5°	1736.6	1734.3	1726.5	1690.5	1624.2	1543.3	1470.2	1385.9	1305.0	1267.9	1255.5
15°	1931.0	1927.7	1913.1	1869.2	1780.4	1678.1	1583.7	1475.8	1376.9	1328.6	1311.7
17.5°	2135.6	2135.6	2113.1	2047.9	1949.0	1822.0	1705.1	1568.0	1452.2	1392.6	1372.4
20°	2343.5	2342.4	2314.3	2235.6	2118.7	1972.6	1824.3	1673.6	1529.8	1457.8	1433.1
22.5°	2562.7	2560.5	2525.6	2435.7	2296.3	2131.1	1958.0	1778.2	1615.2	1528.6	1497.2
25°	2814.5	2811.1	2768.4	2658.3	2493.0	2306.5	2108.6	1900.7	1713.0	1607.3	1570.2
27.5°	3082.0	3077.5	3026.9	2898.8	2717.8	2493.0	2275.0	2042.3	1820.9	1695.0	1653.4
30°	3320.3	3316.9	3261.9	3130.4	2922.4	2678.5	2433.5	2183.9	1934.4	1788.3	1736.6
32.5°	3500.2	3500.2	3450.7	3321.4	3105.6	2856.1	2593.1	2317.7	2052.4	1888.3	1827.6
35°	3609.2	3612.6	3569.8	3466.4	3263.0	3023.6	2758.3	2475.1	2178.3	1995.1	1929.9
37.5°	3624.9	3636.2	3611.4	3541.7	3372.0	3162.9	2920.2	2626.8	2308.7	2103.0	2030.0
40°	3551.9	3559.7	3560.8	3533.9	3417.0	3263.0	3062.9	2787.5	2447.0	2216.5	2132.2
42.5°	3405.7	3411.4	3421.5	3429.3	3384.4	3306.8	3171.9	2937.0	2594.2	2332.3	2233.4
45°	3216.9	3215.8	3232.6	3266.4	3264.1	3282.1	3232.6	3073.0	2747.1	2463.8	2345.8
47.5°	2934.8	2929.2	2988.7	3065.2	3103.4	3187.7	3233.8	3179.8	2913.4	2608.8	2473.9
50°	2493.0	2487.4	2617.8	2797.6	2910.0	3038.2	3171.9	3243.9	3087.6	2771.8	2613.3
52.5°	1955.8	1950.1	2115.4	2430.1	2675.1	2861.7	3047.2	3258.5	3252.9	2953.9	2770.7
55°	1454.5	1450.0	1610.7	1951.3	2348.0	2657.1	2894.3	3220.3	3408.0	3162.9	2961.8
57.5°	1025.1	1022.8	1162.2	1444.3	1927.7	2407.6	2747.1	3146.1	3550.7	3390.0	3177.6
60°	719.4	716.0	817.2	1035.2	1457.8	2031.1	2600.9	3047.2	3657.5	3613.7	3406.9
62.5°	484.4	482.2	554.1	736.2	1035.2	1563.5	2379.5	2980.9	3718.2	3838.5	3638.4
65°	367.5	366.4	399.0	499.1	732.9	1122.9	2027.7	2973.0	3726.1	4007.1	3835.1
67.5°	296.7	297.9	315.8	373.2	506.9	798.0	1572.5	2923.5	3684.5	4064.4	3930.6
70°	242.8	242.8	250.7	288.9	374.3	538.4	1098.2	2698.7	3568.7	3914.9	3817.1
72.5°	185.5	186.6	211.3	233.8	282.1	377.7	703.6	2233.4	3295.6	3451.8	3377.6
75°	147.2	146.1	160.7	192.2	219.2	269.8	431.6	1601.7	2804.4	2697.6	2650.4
77.5°	105.7	104.5	115.8	142.7	166.4	191.1	257.4	808.2	1525.3	1401.6	1366.8
80°	71.9	69.7	79.8	98.9	110.2	112.4	125.9	310.2	665.4	627.2	619.3
82.5°	37.1	37.1	42.7	56.2	57.3	58.4	56.2	100.0	220.3	205.7	196.7
85°	14.6	14.6	15.7	19.1	19.1	20.2	20.2	25.9	23.6	22.5	21.4
87.5°	1.1	1.1	2.2	2.2	3.4	3.4	3.4	4.5	5.6	5.6	5.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P799763

CATALOG NUMBER: ARCH2-50-730-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1112.8	1112.8	1112.8	1112.8	1112.8	1112.8	1112.8	1112.8	1112.8	1112.8	1112.8
2.5°	1121.8	1117.3	1102.6	1099.3	1097.0	1093.7	1094.8	1086.9	1083.5	1084.7	1080.2
5°	1142.0	1134.1	1116.1	1108.3	1106.0	1102.6	1106.0	1100.4	1094.8	1097.0	1094.8
7.5°	1170.1	1158.8	1136.4	1128.5	1127.4	1124.0	1128.5	1124.0	1119.5	1121.8	1117.3
10°	1199.3	1184.7	1160.0	1152.1	1152.1	1151.0	1155.5	1148.7	1144.2	1145.4	1143.1
12.5°	1242.0	1222.9	1195.9	1189.2	1185.8	1189.2	1190.3	1181.3	1173.5	1174.6	1171.2
15°	1293.7	1272.4	1243.1	1233.0	1230.8	1229.7	1225.2	1213.9	1203.8	1202.7	1199.3
17.5°	1349.9	1323.0	1288.1	1278.0	1267.9	1264.5	1253.3	1238.7	1222.9	1222.9	1218.4
20°	1403.9	1373.5	1331.9	1317.3	1302.7	1289.2	1270.1	1246.5	1226.3	1222.9	1218.4
22.5°	1462.3	1426.4	1378.0	1356.7	1330.8	1303.8	1271.2	1239.8	1213.9	1208.3	1204.9
25°	1527.5	1482.6	1425.2	1393.8	1352.2	1310.6	1262.3	1221.8	1191.4	1182.5	1180.2
27.5°	1599.5	1545.5	1475.8	1429.7	1369.0	1303.8	1242.0	1193.7	1156.6	1145.4	1142.0
30°	1672.5	1608.5	1521.9	1454.5	1369.0	1282.5	1204.9	1148.7	1106.0	1090.3	1088.0
32.5°	1745.6	1673.6	1563.5	1468.0	1355.5	1246.5	1156.6	1090.3	1042.0	1022.8	1027.3
35°	1833.3	1745.6	1601.7	1473.6	1333.1	1202.7	1101.5	1024.0	974.5	957.7	961.0
37.5°	1924.3	1817.5	1632.1	1469.1	1301.6	1153.2	1039.7	964.4	902.6	873.4	876.7
40°	2003.0	1882.7	1653.4	1453.3	1261.1	1097.0	979.0	880.1	794.7	766.6	763.2
42.5°	2077.2	1931.0	1664.7	1429.7	1215.0	1031.8	892.5	765.4	680.0	645.2	646.3
45°	2154.7	1978.2	1660.2	1398.3	1157.7	955.4	781.2	653.0	577.7	546.3	547.4
47.5°	2243.5	2028.8	1655.7	1364.5	1088.0	856.5	674.4	554.1	488.9	466.5	464.2
50°	2337.9	2085.0	1650.0	1323.0	1010.5	746.3	568.7	462.0	406.9	392.3	388.9
52.5°	2444.7	2145.7	1646.7	1273.5	917.2	629.4	474.3	381.0	343.9	333.8	332.7
55°	2572.8	2216.5	1651.2	1213.9	804.8	519.3	394.5	328.2	303.5	297.9	296.7
57.5°	2729.1	2307.6	1664.7	1144.2	686.8	423.7	336.1	295.6	279.9	275.4	275.4
60°	2898.8	2411.0	1689.4	1065.6	568.7	349.6	297.9	269.8	263.0	268.6	268.6
62.5°	3082.0	2532.4	1733.2	970.0	458.6	295.6	267.5	248.4	243.9	255.1	256.3
65°	3251.7	2650.4	1761.3	855.4	364.2	256.3	243.9	227.0	229.3	240.5	239.4
67.5°	3356.3	2748.2	1722.0	711.5	288.9	227.0	219.2	204.6	210.2	219.2	220.3
70°	3292.2	2693.1	1527.5	537.3	225.9	197.8	192.2	183.2	187.7	198.9	203.4
72.5°	2978.6	2412.1	1188.1	363.1	182.1	166.4	168.6	164.1	169.7	179.8	190.0
75°	2417.7	1823.1	796.9	232.7	143.9	141.6	145.0	141.6	143.9	154.0	159.6
77.5°	1262.3	889.1	396.8	145.0	106.8	110.2	115.8	116.9	123.6	125.9	128.1
80°	589.0	400.1	165.2	80.9	70.8	77.6	88.8	89.9	92.2	95.5	96.7
82.5°	192.2	120.3	76.4	43.8	40.5	43.8	57.3	68.6	69.7	76.4	76.4
85°	20.2	12.4	16.9	18.0	15.7	19.1	25.9	24.7	11.2	6.7	6.7
87.5°	5.6	4.5	5.6	5.6	4.5	4.5	3.4	1.1	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)