

Exhibit 17: Measurement of Frequency Stability of FLEXENT™ PCS Modular Cell**Exhibit 17****SECTION 2.1055 MEASUREMENT OF FREQUENCY STABILITY****RESPONSE:**

The frequency stabilization and accuracy of the CDMA signal amplified by the **ULAM** is a function of the input signal which it is provided from the **CBR (FCC ID: AS5CMP-26)**. The Time Frequency Unit (TFU) provides the time and frequency reference used by the **CBR (FCC ID: AS5CMP-26)**. The TFU is highly accurate time and frequency unit which relies upon a signal lock of GPS satellite signals to provide the primary discipline of system timing. In the event of loss of GPS lock the Oscillator Modules (OM) can provides up to 24 hours of freewheel operation. The system provides for automatic timing synchronization upon reacquisition of GPS lock. These units are typically powered by an AC-DC power converter with battery backup to provide immunity to power fluctuations and failures. Additional DC-DC power converter in the Modular Cell and on Circuit packs provide additional immunity to power fluctuations.

This system exceeds the frequency stability requirements necessary for **FLEXENT®** system compliance with FCC Rules for frequency stability. These devices are compliant with FCC Part 15 rules when powered by and installed in a Lucent Technologies Inc. **FLEXENT®** Modular Cell.

The following frequency stability test data for the TFU, CBR and OM was measured as installed and tested, per Figure 17A, in a **FLEXENT®** Modular Cell. The entire Modular Cell was subjected to the FCC specified environments while operating at full rated power. Both carrier center frequency and reference oscillator deviations were measured. Voltage variance was applied to the DC input of the Modular Cell.

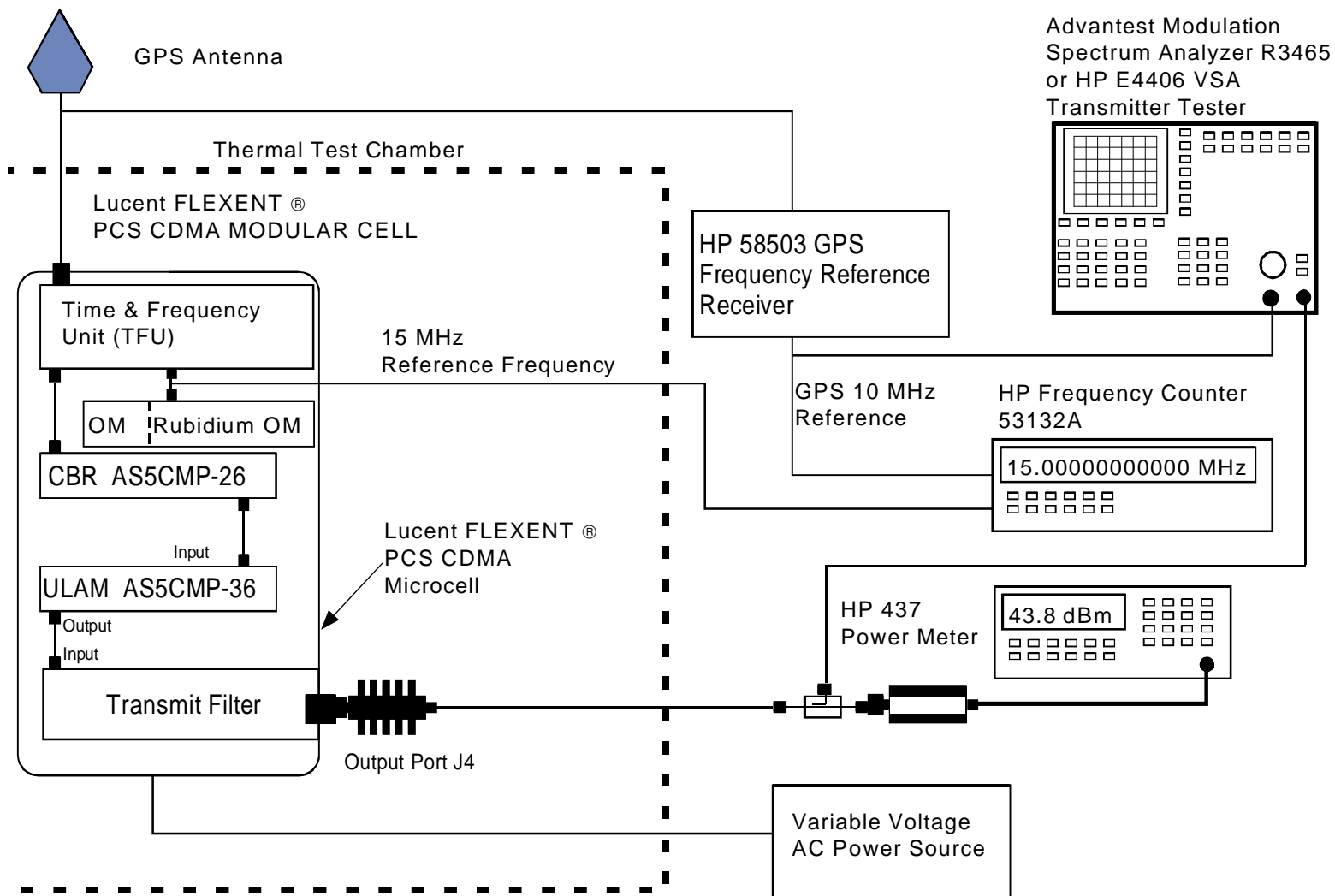
RESULTS:

The frequency stability performance for the CBR / FCC ID AS5CMP-26 when operated with a ULAM / FCC ID: AS5CMP-34 and integrated into a FLEXENT® Modular Cell is equivalent or better to the performance presented in the original filing and is compliant with FCC requirements. The data provided below documents that the worst case frequency stability over temperature and voltage was 0.019 ppm. The average stability was 0.00064 ppm and the standard deviation was 0.0066 ppm.

The measured data is attached below.

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Figure 17A. Test Configuration For Frequency Stability Power Output



EXENT Frequency Stability Test Figure 17A
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Exhibit 17: Measurement of Frequency Stability of FLEXENT™ PCS Modular Cell**PCS Sub- Block Tested: B2, PCS Channel 550, 1957.5MHz**

Baseline Measurement

Reference and Transmit Frequency Deviation From GPS at 25°C at 100% STV, 24VDC		
Time (minutes)	15 MHz Deviation from GPS (x10 ⁻⁴ Hz)	Transmit Carrier Deviation (Hz)
0	-10	-0.33
0.5	-10	-8.38
1	-10	4.48
1.5	-10	9.00
2	-10	-2.78
2.5	-10	14.07
3	-10	-10.28
SPECIFICATION	+/-15.0000 (+/-1ppm)	+/-1957.5 (+/-1ppm)
RESULT	PASS	PASS

The J4 RF Transmit power level at 24VDC = 35.35dBm

Reference and Transmit Frequency Deviation From GPS at 25°C at 85%STV, 20.4VDC		
Time (minutes)	15 MHz Deviation from GPS (x10 ⁻⁴ Hz)	Transmit Carrier Deviation (Hz)
0	-10	-1.94
0.5	-10	8.42
1	-10	12.47
1.5	-10	1.41
2	-10	4.18
2.5	-10	-4.65
3	-10	-0.27
SPECIFICATION	+/-15.0000 (+/-1ppm)	+/-1957.5 (+/-1ppm)
RESULT	PASS	PASS

The J4 RF Transmit power level deviation from 24VDC = 0.01 dB

Reference and Transmit Frequency Deviation From GPS at 25°C at 115%STV, 27.6VDC		
Time (minutes)	15 MHz Deviation from GPS (x10 ⁻⁴ Hz)	Transmit Carrier Deviation (Hz)
0	-10	1.41
0.5	-10	1.14
1	-10	3.07
1.5	-10	-29.45
2	-10	4.25
2.5	-10	4.83
3	-10	3.85
SPECIFICATION	+/-15.0000 (+/-1ppm)	+/-1957.5 (+/-1ppm)
RESULT	PASS	PASS

The J4 RF Transmit power level deviation from 24VDC = 0.02dB

Exhibit 17: Measurement of Frequency Stability of FLEXENT™ PCS Modular Cell

Reference and Transmit Frequency Deviation From GPS at -30°C at 24VDC		
Time (minutes)	15 MHz Deviation from GPS (x10 ⁻⁴ Hz)	Transmit Carrier Deviation. (Hz)
0	-12.00	-29.69
0.5	-12.00	-35.75
1	-12.00	-11.25
1.5	-12.00	-34.05
2	-12.00	-2.83
2.5	-12.00	-14.73
3	-12.00	5.99
SPECIFICATION	+/-15.0000 (+/-1ppm)	+/-1957.5 (+/-1ppm)
RESULT	PASS	PASS

The J4 RF Transmit power level deviation from 25°C = +1.55dB

Reference and Transmit Frequency Deviation From GPS at -20°C at 24VDC		
Time (minutes)	15 MHz Deviation from GPS (x10 ⁻⁴ Hz)	Transmit Carrier Deviation (Hz)
0.5	-12.00	-4.58
1	-12.00	-1.45
1.5	-12.00	6.20
2	-12.00	-17.71
2.5	-12.00	13.95
3	-12.00	-19.62
SPECIFICATION	+/-15.0000 (+/-1ppm)	+/-1957.5 (+/-1ppm)
RESULT	PASS	PASS

The J4 RF Transmit power level deviation from 25°C = +1.55dB

Reference and Transmit Frequency Deviation From GPS at -10°C at 24VDC		
Time (minutes)	15 MHz Deviation from GPS (x10 ⁻⁴ Hz)	Transmit Carrier Deviation (Hz)
0	-12	30.21
0.5	-12	7.63
1	-12	-0.64
1.5	-12	-5.26
2	-12	2.60
2.5	-12	17.49
3	-12	5.60
SPECIFICATION	+/-15.0000 (+/-1ppm)	+/-1957.5 (+/-1ppm)
RESULT	PASS	PASS

The J4 RF Transmit power level deviation from 25°C = +1.29 dB

Exhibit 17: Measurement of Frequency Stability of FLEXENT™ PCS Modular Cell

Reference and Transmit Frequency Deviation From GPS at 0°C at 24VDC		
Time (minutes)	15 MHz Deviation from GPS ($\times 10^{-4}$ Hz)	Transmit Carrier Deviation (Hz)
0	-12	12.54
0.5	-12	0.32
1	-12	-7.32
1.5	-12	1.90
2	-12	17.46
2.5	-12	-0.32
3	-12	-7.56
SPECIFICATION	+/-15.0000 (+/-1ppm)	+/-1957.5 (+/-1ppm)
RESULT	PASS	PASS

The J4 RF Transmit power level deviation from 25°C = +0.93 dB

Reference and Transmit Frequency Deviation From GPS at +10°C at 24VDC		
Time (minutes)	15 MHz Deviation from GPS ($\times 10^{-4}$ Hz)	Transmit Carrier Deviation (Hz)
0	-12.0	-1.75
0.5	-12.0	-0.84
1	-12.0	3.29
1.5	-12.0	-0.26
2	-12.0	-1.32
2.5	-12.0	9.66
3	-12.0	6.24
SPECIFICATION	+/-15.0000 (+/-1ppm)	+/-1957.5 (+/-1ppm)
RESULT	PASS	PASS

The J4 RF Transmit power level deviation from 25°C = 0.48dB

Reference and Transmit Frequency Deviation From GPS at +20°C at 24VDC		
Time (minutes)	15 MHz Deviation from GPS ($\times 10^{-4}$ Hz)	Transmit Carrier Deviation (Hz)
0	-12.0	16.03
0.5	-12.0	-5.44
1	-12.0	8.00
1.5	-12.0	12.29
2	-12.0	-5.25
2.5	-12.0	7.53
3	-12.0	-1.99
SPECIFICATION	+/-15.0000 (+/-1ppm)	+/-1957.5 (+/-1ppm)
RESULT	PASS	PASS

The J4 RF Transmit power level deviation from 25°C = 0.80dB

Exhibit 17: Measurement of Frequency Stability of FLEXENT™ PCS Modular Cell

Reference and Transmit Frequency Deviation From GPS at +30°C at 24VDC		
Time (minutes)	15 MHz Deviation from GPS ($\times 10^{-4}$ Hz)	Transmit Carrier Deviation (Hz)
0	-12.00	-6.05
0.5	-12.00	7.99
1	-12.00	-8.50
1.5	-12.00	23.84
2	-12.00	1.10
2.5	-12.00	6.34
3	-12.00	18.65
SPECIFICATION	+/-15.0000 (+/-1ppm)	+/-1957.5 (+/-1ppm)
RESULT	PASS	PASS

The J4 RF Transmit power level deviation from 25°C = +0.65 dB

Reference and Transmit Frequency Deviation From GPS at 40°C at 24VDC		
Time (minutes)	15 MHz Deviation from GPS ($\times 10^{-4}$ Hz)	Transmit Carrier Deviation (Hz)
0	-12.00	-3.92
0.5	-12.00	-0.87
1	-12.00	22.96
1.5	-12.00	8.38
2	-12.00	4.22
2.5	-12.00	8.82
3	-12.00	-4.33
SPECIFICATION	+/-15.0000 (+/-1ppm)	+/-1957.5 (+/-1ppm)
RESULT	PASS	PASS

The J4 RF Transmit power level deviation from 25°C = 0.40dB

Reference and Transmit Frequency Deviation From GPS at 50°C at 24VDC		
Time (minutes)	15 MHz Deviation. from GPS ($\times 10^{-4}$ Hz)	Transmit Carrier Deviation (Hz)
0	-12.00	13.30
0.5	-12.00	6.78
1	-12.00	30.56
1.5	-12.00	-10.19
2	-12.00	0.56
2.5	-12.00	11.06
3	-12.00	-8.58
SPECIFICATION	+/-15.0000 (+/-1ppm)	+/-1957.5 (+/-1ppm)
RESULT	PASS	PASS

The J4 RF Transmit power level deviation from 25°C = +0.65 dB

Exhibit 17: Measurement of Frequency Stability of FLEXENT™ PCS Modular Cell

Upon return to 25°C and cell reset.

Reference and Transmit Frequency Deviation From GPS at 25°C at 100%STV, 24VDC		
Time (minutes)	15 MHz Deviation from GPS ($\times 10^{-4}$ Hz)	Transmit Carrier Deviation (Hz)
0	-12.00	6.58
0.5	-12.00	5.74
1	-12.00	-7.29
1.5	-12.00	7.17
2	-12.00	0.38
2.5	-12.00	6.71
3	-12.00	6.09
SPECIFICATION	+/-15.0000 (+/-1ppm)	+/-1957.5 (+/-1ppm)
RESULT	PASS	PASS

The J4 RF Transmit power level deviation from Baseline 24VDC= -0.18 dB

Reference and Transmit Frequency Deviation From GPS at 25°C at 85%STV, 20.4VDC		
Time (minutes)	15 MHz Deviation from GPS ($\times 10^{-4}$ Hz)	Transmit Carrier Deviation (Hz)
0	-12.00	10.29
0.5	-12.00	16.46
1	-12.00	2.44
1.5	-12.00	7.08
2	-12.00	9.46
2.5	-12.00	37.92
3	-12.00	4.39
SPECIFICATION	+/-15.0000 (+/-1ppm)	+/-1957.5 (+/-1ppm)
RESULT	PASS	PASS

The J4 RF Transmit power level deviation from Baseline 24.0VDC = -0.23 dB

Reference and Transmit Frequency Deviation From GPS at 25°C at 115%STV, 27.6VDC		
Time (minutes)	15 MHz Deviation from GPS ($\times 10^{-4}$ Hz)	Transmit Carrier Deviation (Hz)
0	-12.00	5.78
0.5	-12.00	4.92
1	-12.00	9.07
1.5	-12.00	6.19
2	-12.00	4.12
2.5	-12.00	5.97
3	-12.00	3.16
SPECIFICATION	+/-15.0000 (+/-1ppm)	+/-1957.5 (+/-1ppm)
RESULT	PASS	PASS

The J4 RF Transmit power level deviation from Baseline 24.0VDC = -0.28 dB