

Exhibit 6: Test Report

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Exhibit 6



FCC ID: AZ489FT4926/ IC: 109U-89FT4926

EXHIBIT 6A: RF Power Output -- Pursuant 47 CFR 2.1046 & 90.205

(Test Conducted at Motorola EME accredited lab in May 2015)

A. Conducted Transmit Power

Test Frequency (MHz)	Transmit Power (W)
450.0000	1.00
460.0000	0.996
470.0000	1.00

Table 1. RF Power Output

B. Effective Radiated Power

Please see attached TIMCO ERP test report as part of the package for full test details

EXHIBIT 6A

EXHIBIT 6B: Modulation Characteristics -- Pursuant 47 CFR 2.1047 & 90.207

According to CFR 47 section 2.1047(a), for Voice Modulation Communication Equipment, the frequency response of the audio modulation circuit over a range of 100 to 5000Hz shall be measured. *(Measured in June 2015 @ MSI Plantation Eng. Lab)*

A. Modulation Limiting for 12.5 KHz band.

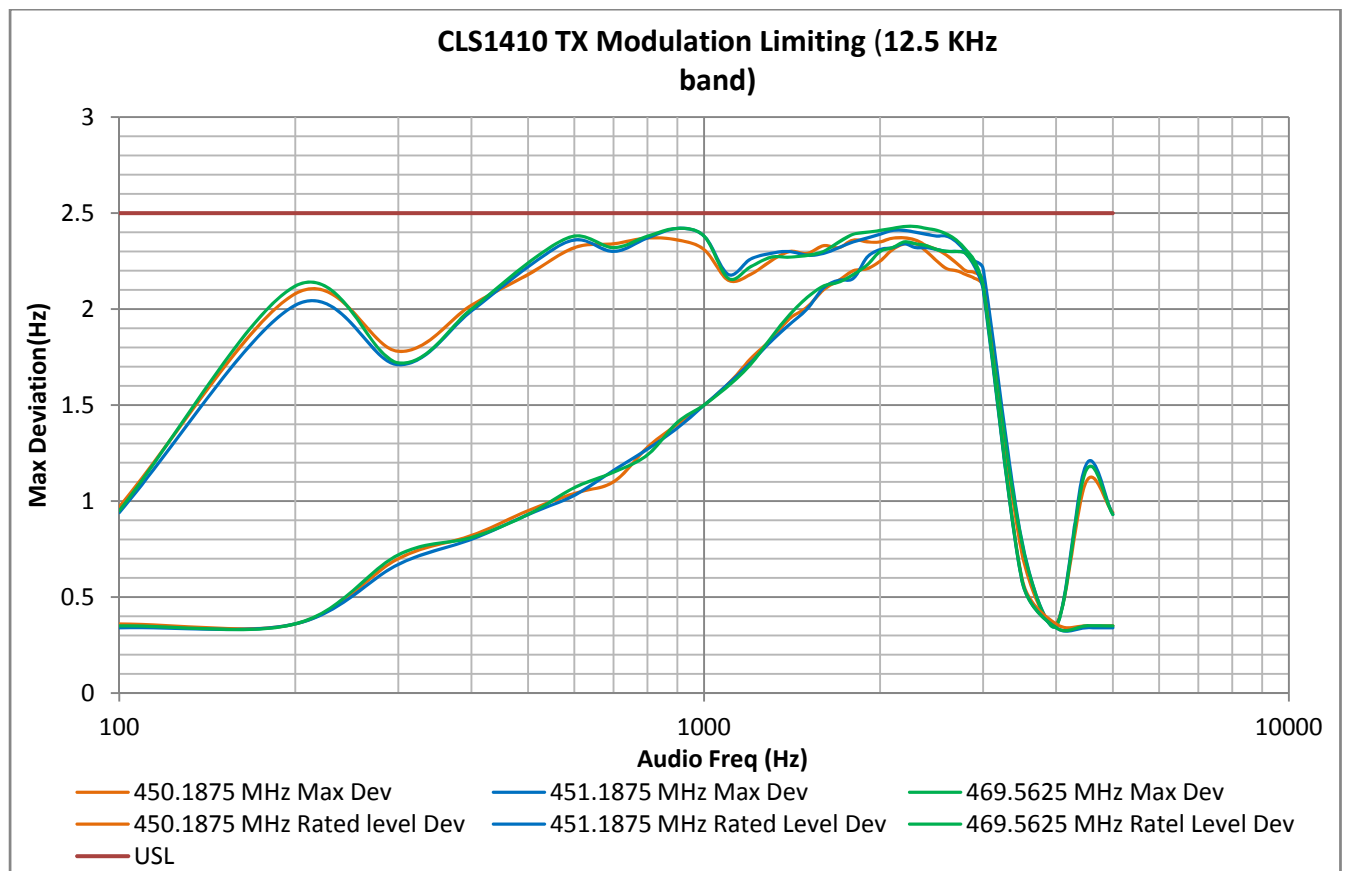


Figure 6B-1: Modulation limiting for 12.5 KHz band.

EXHIBIT 6B-1

B. Audio Response for 12.5 KHz band.

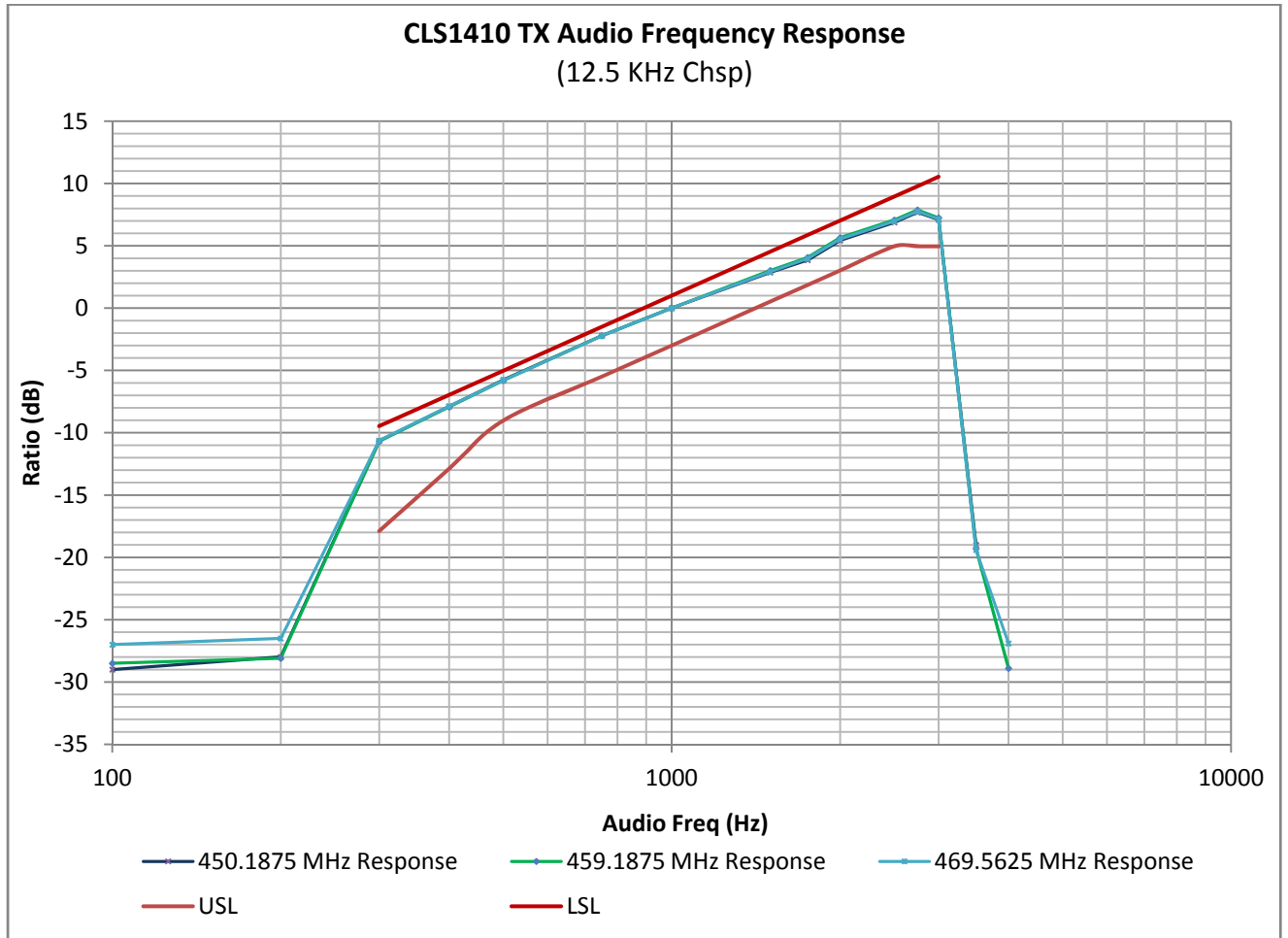


Figure 6B-2: Audio Response for 12.5 KHz band.

EXHIBIT 6B-2

EXHIBIT 6C: Occupied Bandwidth and Emission Mask – Pursuant 47 CFR 2.1049 & 90.209, 90.210 (Measured in June 2015 @ MSI Plantation Eng. Lab)

A. Occupied Bandwidth Spectrum

According to FCC Part 90.209, equipment with 12.5KHz channel bandwidth will be authorized 11.25 KHz bandwidth.

- a. 450.1875 MHz, 12.5KHz Band, 99% Occupied BW = 10.016 KHz

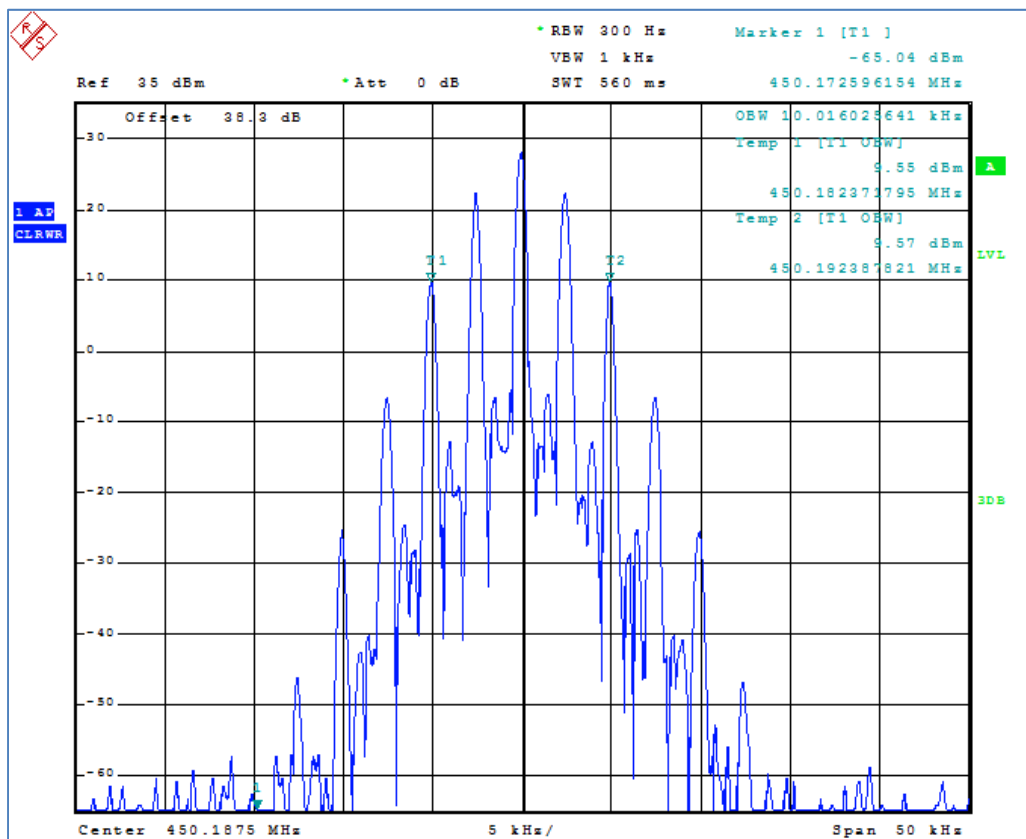


Figure 6C-1: 450.1875 MHz channel occupied bandwidth

EXHIBIT 6C-1

b. 459.1875 MHz, 12.5KHz Band, 99% Occupied BW = 10.096 KHz

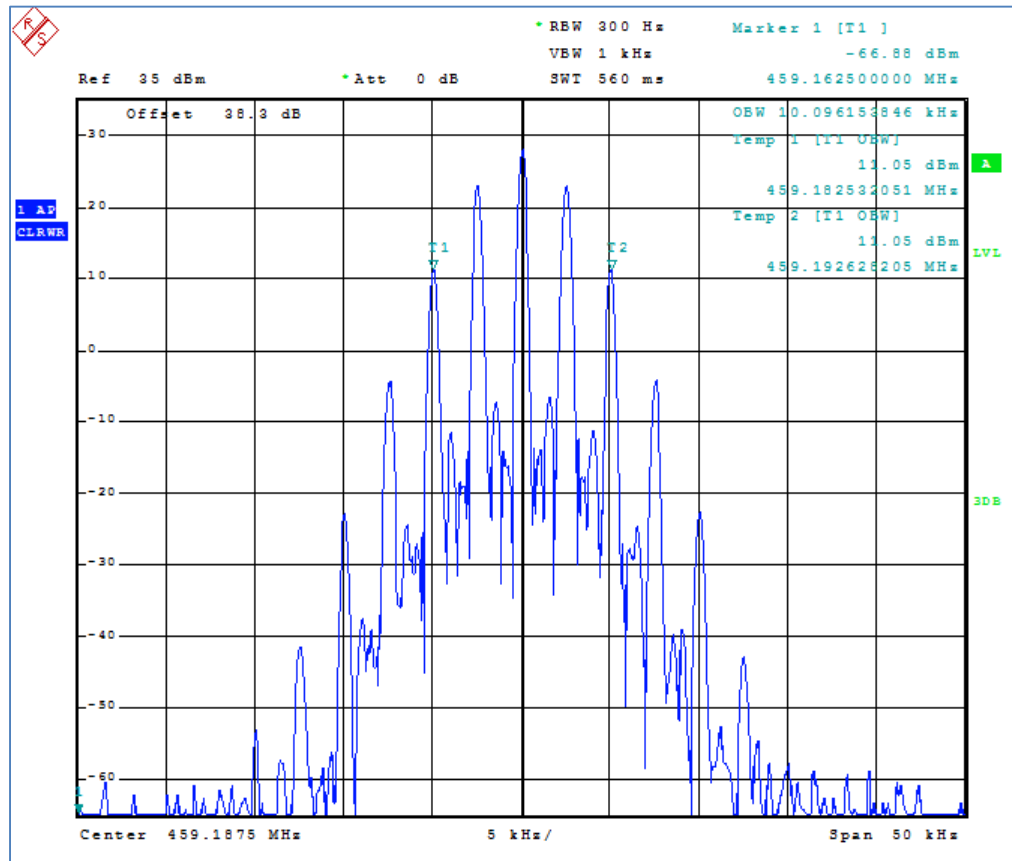


Figure 6C-2: 459.1875 MHz channel occupied bandwidth

EXHIBIT 6C-2

c. 469.5625 MHz, 12.5KHz Band, 99% Occupied BW = 10.016 KHz

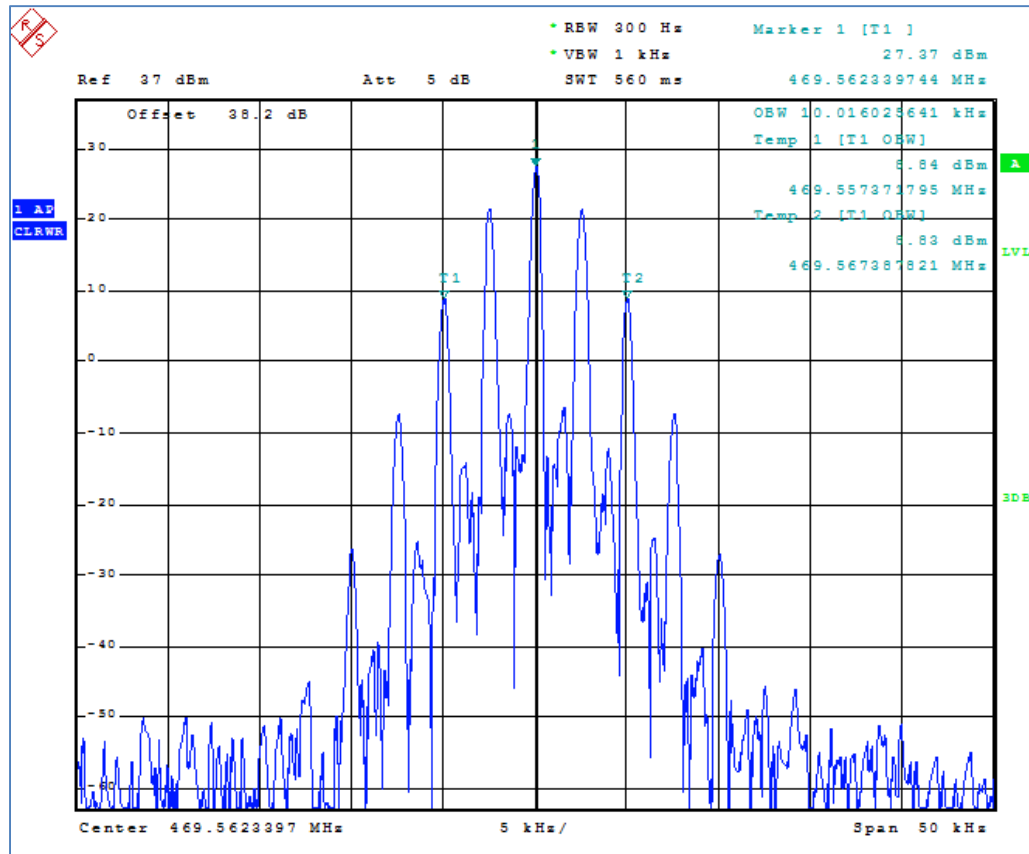


Figure 6C-3: 469.5625 MHz occupied bandwidth

EXHIBIT 6C-3

B. Emission Mask Spectrum Per FCC 47 CFR, 90.210:

Emission Mask D, 12.5 kHz channel bandwidth equipment: For transmitters designed to operate with a 12.5 kHz channel bandwidth, any emission must be attenuated below the power (P) of the highest emission contained within the authorized bandwidth as follows: (1) On any frequency from the center of the authorized bandwidth f0 to 5.625 kHz removed from f0: Zero dB. (2) On any frequency removed from the centre of the authorized bandwidth by a displacement frequency (fd in kHz) of more than 5.625 kHz but no more than 12.5 kHz: At least $7.27(f_d - 2.88 \text{ kHz}) \text{ dB}$. (3) On any frequency removed from the center of the authorized bandwidth by a displacement frequency (fd in kHz) of more than 12.5 kHz: At least $50 + 10 \log (P) \text{ dB}$ or 70 dB, whichever is the lesser attenuation.

Emission Type (Carson's Rule): 11K0F3E

$BW = 2(3 \text{ KHz maximum modulation frequency} + 2.5 \text{ KHz Deviation}) = 11\text{K}$

a. 450.1875 MHz, 12.5 KHz Channel. Without PL

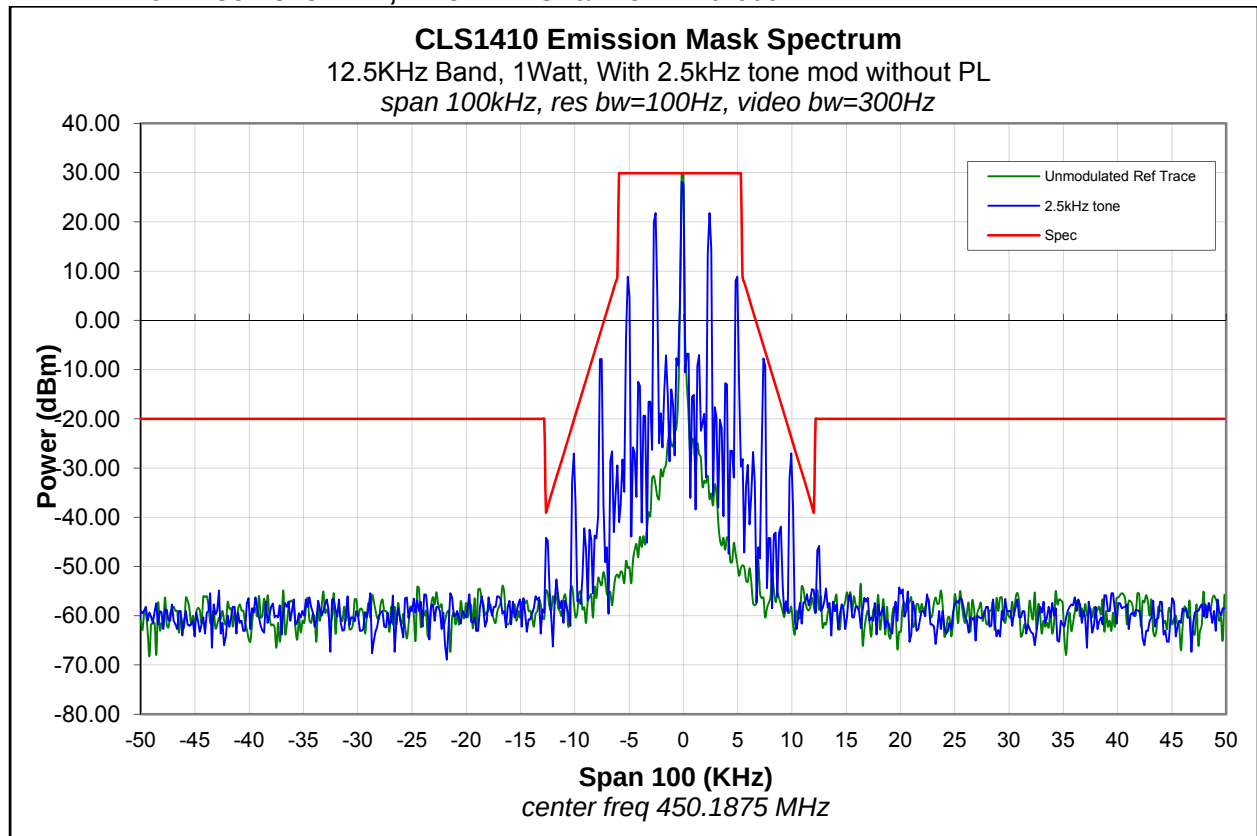


Figure 6C-4: 450.1875 MHz Emission Mask Spectrum without PL

EXHIBIT 6C-4

b. 450.1875 MHz, 12.5 KHz Channel. With PL

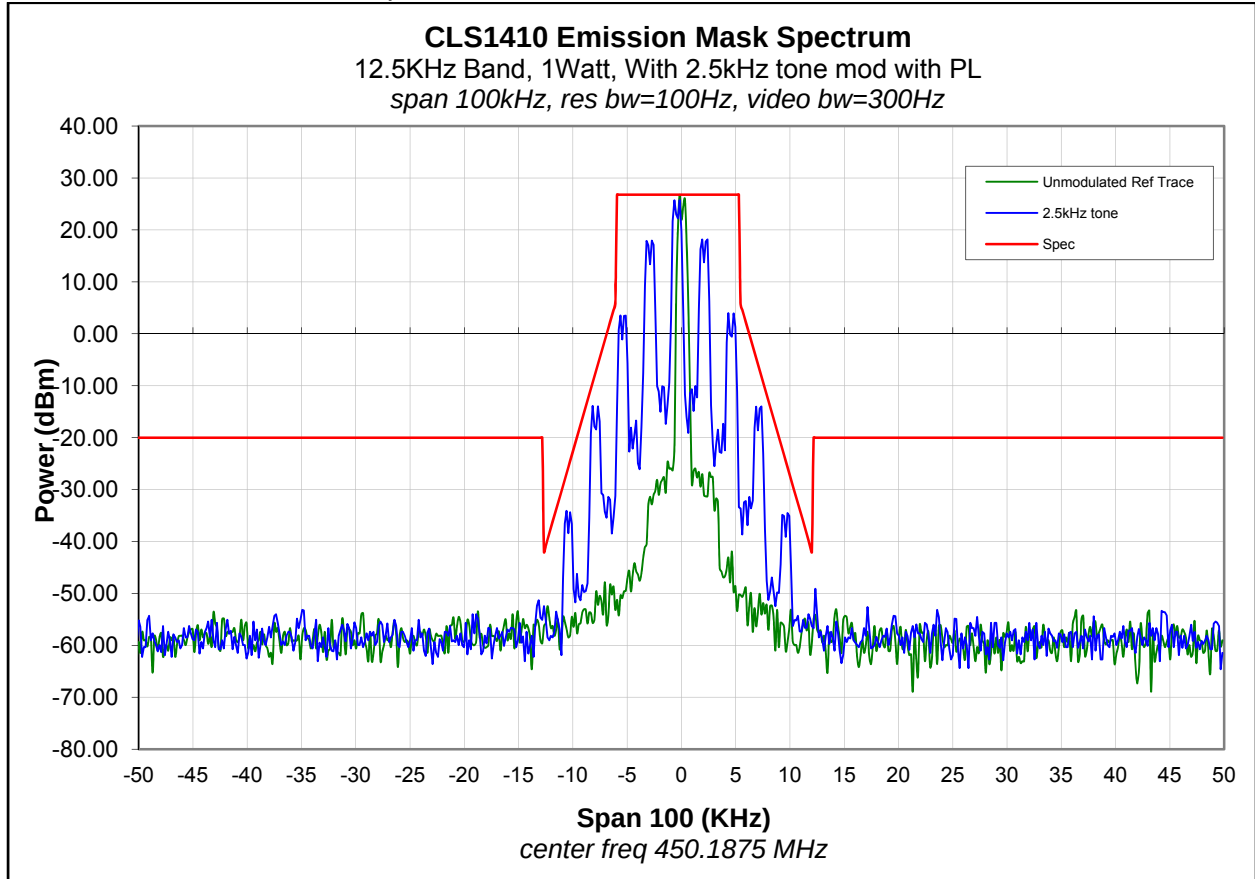


Figure 6C-5: 450.1875 MHz Emission Mask Spectrum with PL

EXHIBIT 6C-5

c. 459.1875 MHz, 12.5 KHz Channel. Without PL

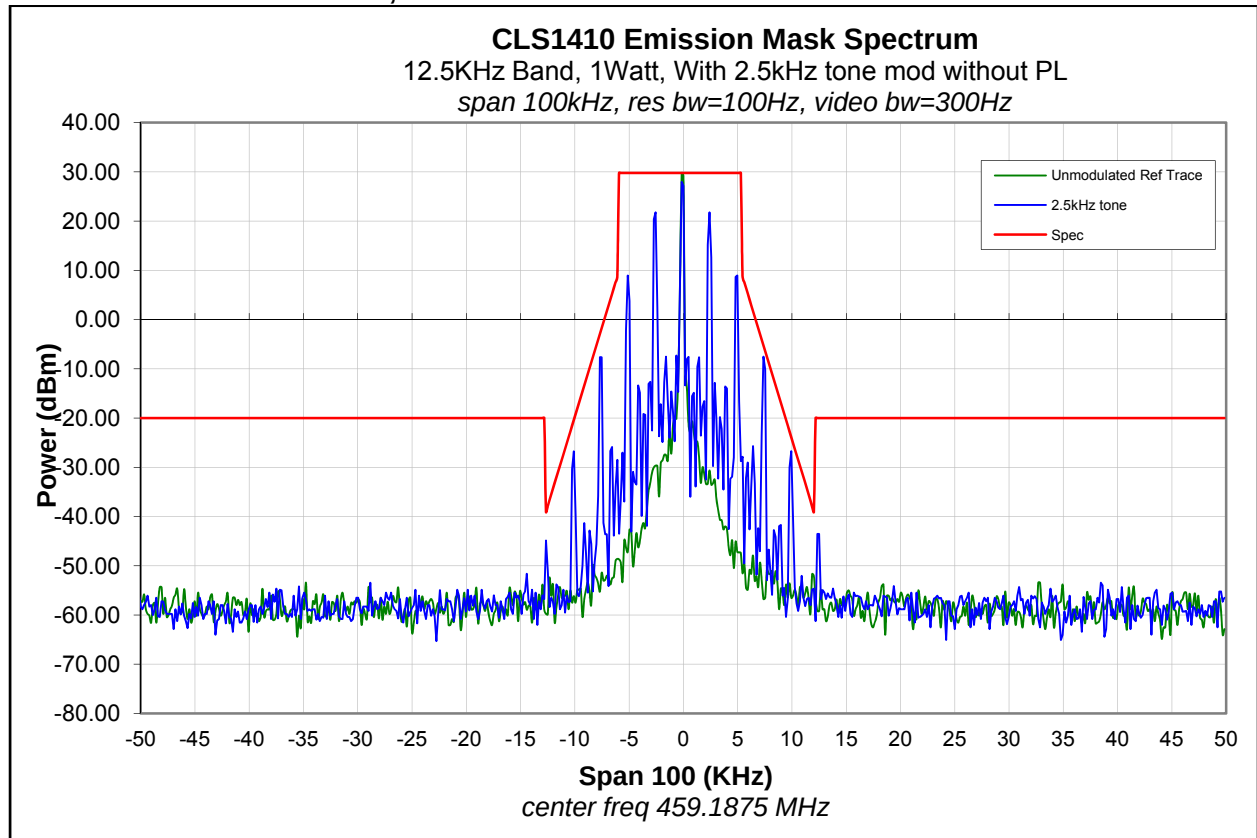


Figure 6C-6: 459.1875 MHz Emission Mask Spectrum without PL

EXHIBIT 6C-6

d. 459.1875 MHz, 12.5 KHz Channel. With PL

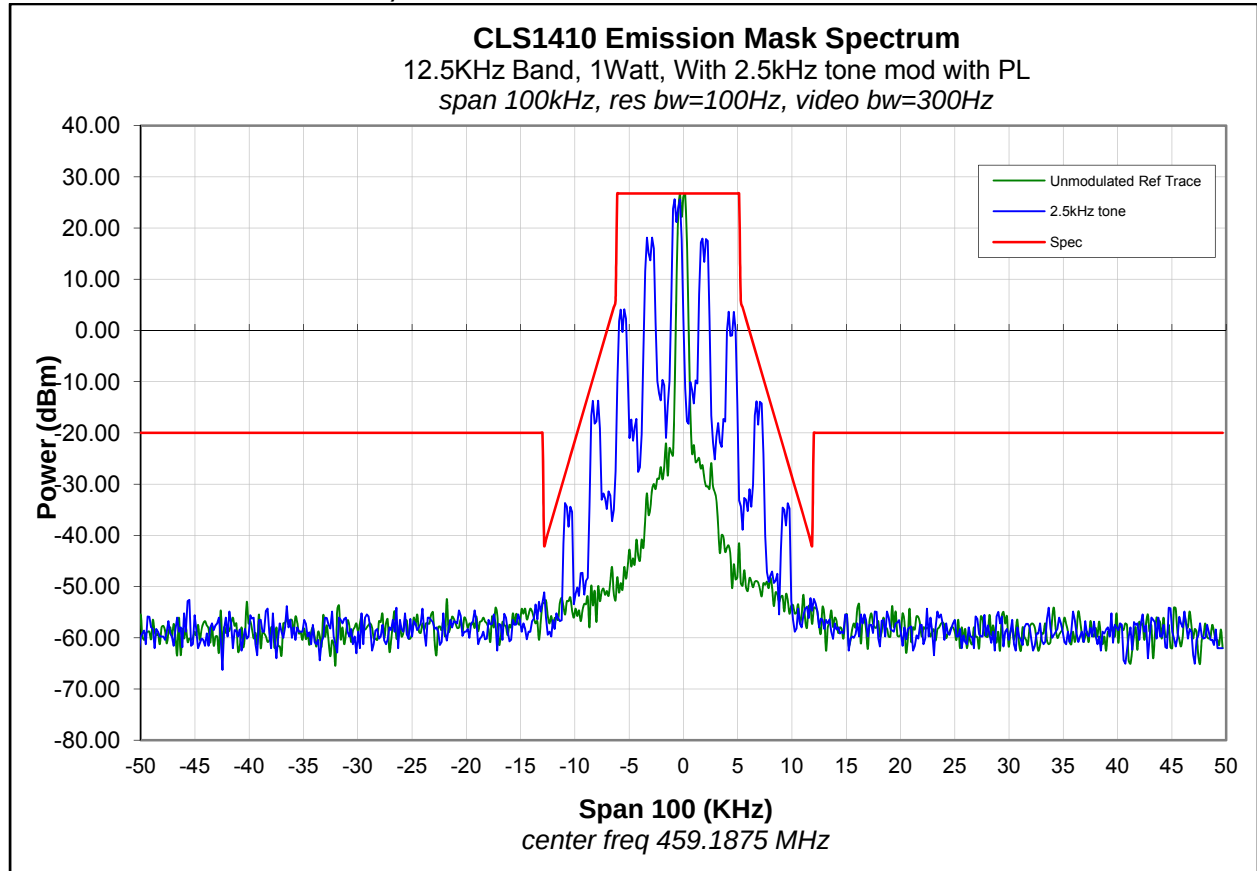


Figure 6C-7: 459.1875 MHz Emission Mask Spectrum with PL

EXHIBIT 6C-7

e. 469.5625 MHz, 12.5 KHz Channel. Without PL

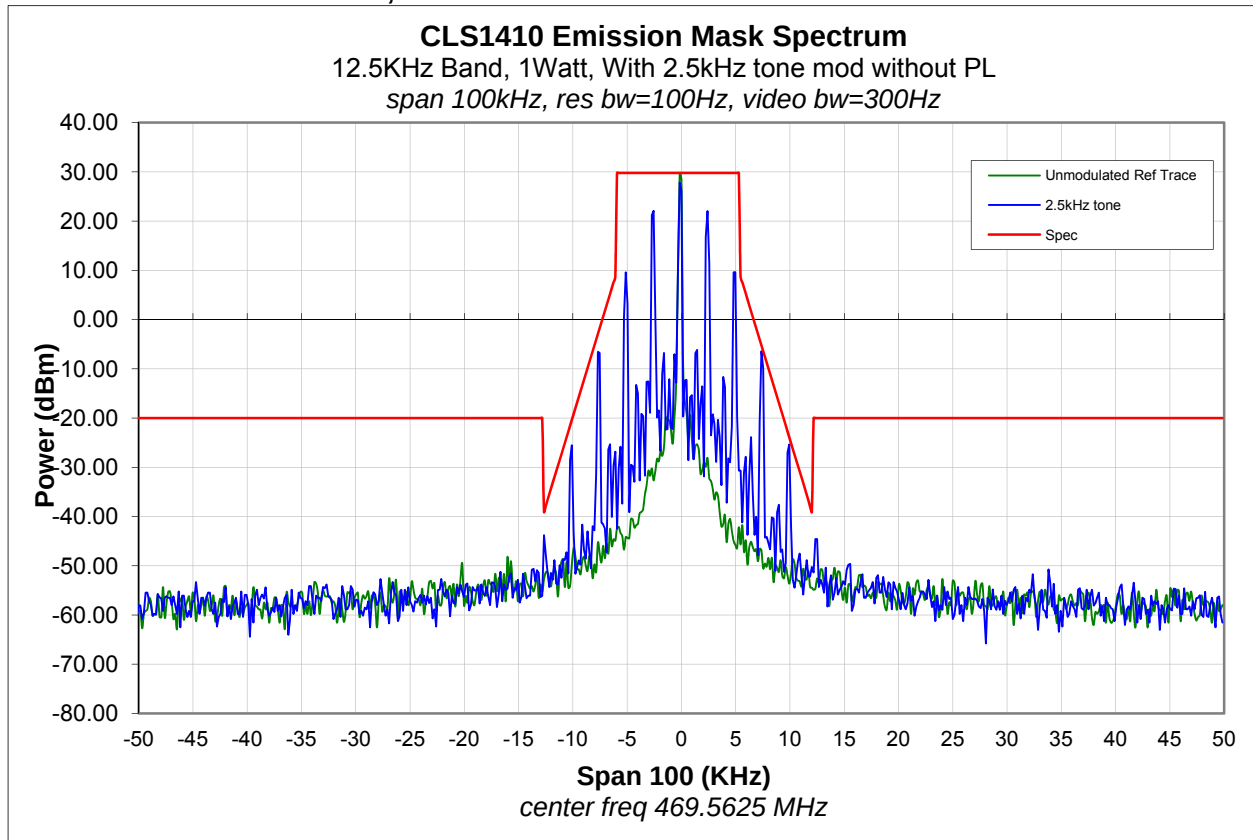


Figure 6C-8: 469.5625 MHz Emission Mask Spectrum without PL

EXHIBIT 6C-8

f. **469.5625 MHz, 12.5 KHz Channel. With PL**

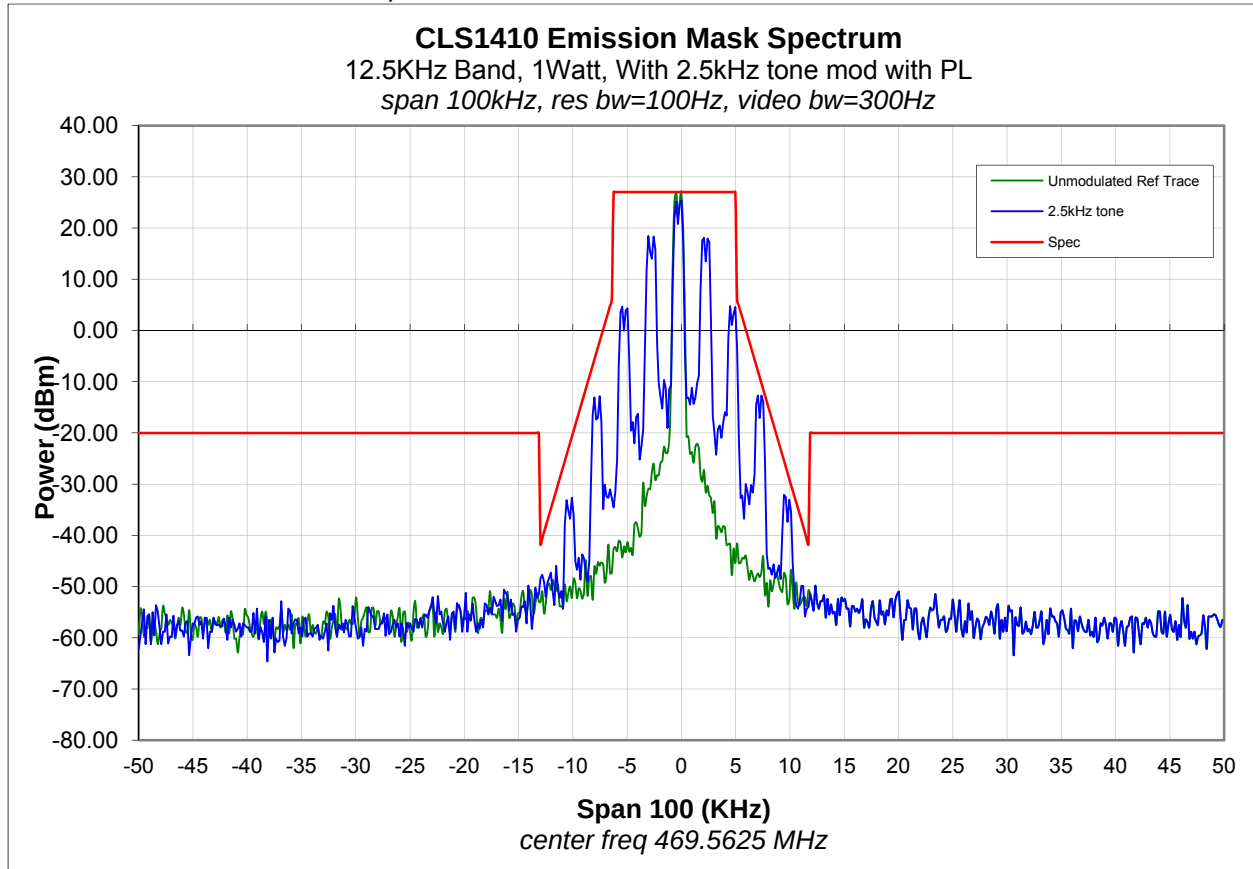


Figure 6C-9: 469.5625 MHz Emission Mask Spectrum with PL

EXHIBIT 6C-9



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Exhibit 6D Transmit Radiated Spurious Emissions -- Pursuant 47 CFR 2.1051, 2.1053, 90.210. (Test Conducted at Timco Engineering Inc in June 2015)

Please see attached TIMCO Radiated Emissions Test report (1075AUT15TestReport) as part of the package for full test details.

EXHIBIT 6D

Exhibit 6E Frequency Stability -- Pursuant 47 CFR 2.1055, 90.213.

(Measured in June 2015 @ MSI Plantation Eng. Lab)

According to FCC Part 2 Section 2.1055 (a)(1), the frequency stability shall be measured with variation of ambient temperature from -30° to +50° centigrade.

According to FCC Part 2 Section 2.1055 (a) (2), for battery powered equipment, the frequency stability shall be measured with reducing primary supply voltage to the battery operating end point, which is specified by the manufacture.

According to §90.213, the frequency stability limit is 2.5 ppm for 12.5 KHz channel separation

A. Frequency Stability vs. Temperature

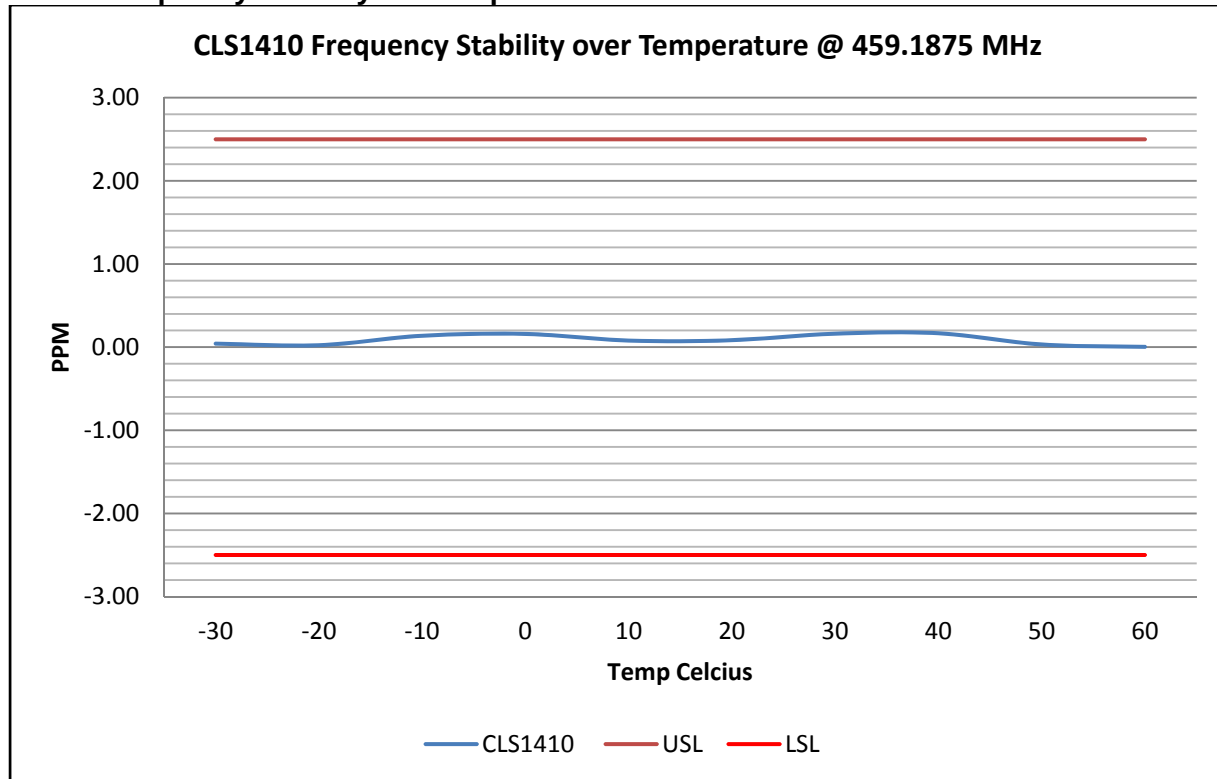


Figure 6E-1: Frequency Stability over Temperature

EXHIBIT 6E-1

B. Frequency Stability vs. Voltage

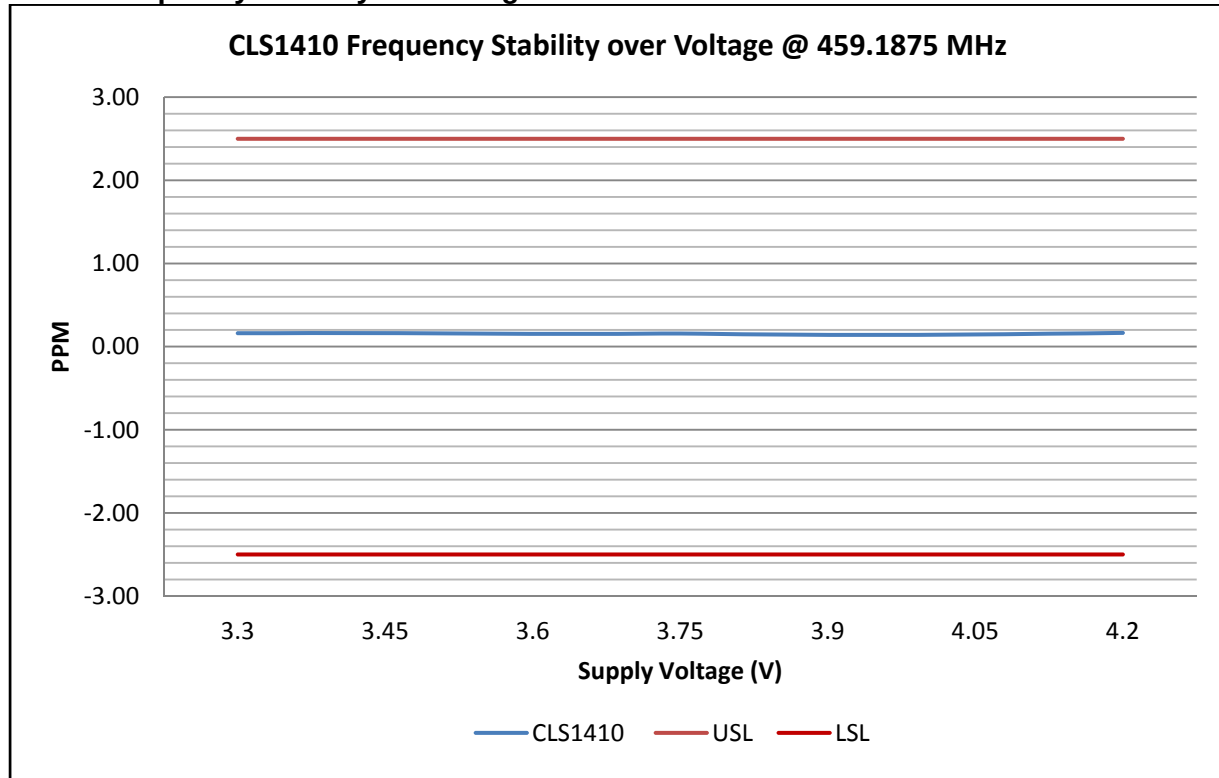


Figure 6E-2: Frequency Stability over Supply Voltage

EXHIBIT 6E-2

Exhibit 6F Transient Frequency Behaviour -- Pursuant 47, 90.214

Transient frequency behavior is a measure of the difference, as a function in time, of the actual transmitter frequency to the assigned transmitter frequency when the transmitted RF output power is switched on or off. Transmitters designed to operate in the 421-512 MHz frequency bands must maintain transient frequencies within the maximum frequency difference limits during the time intervals indicated in 90.214.

A. Transient Frequency Behavior Off to On @459.1875 MHz

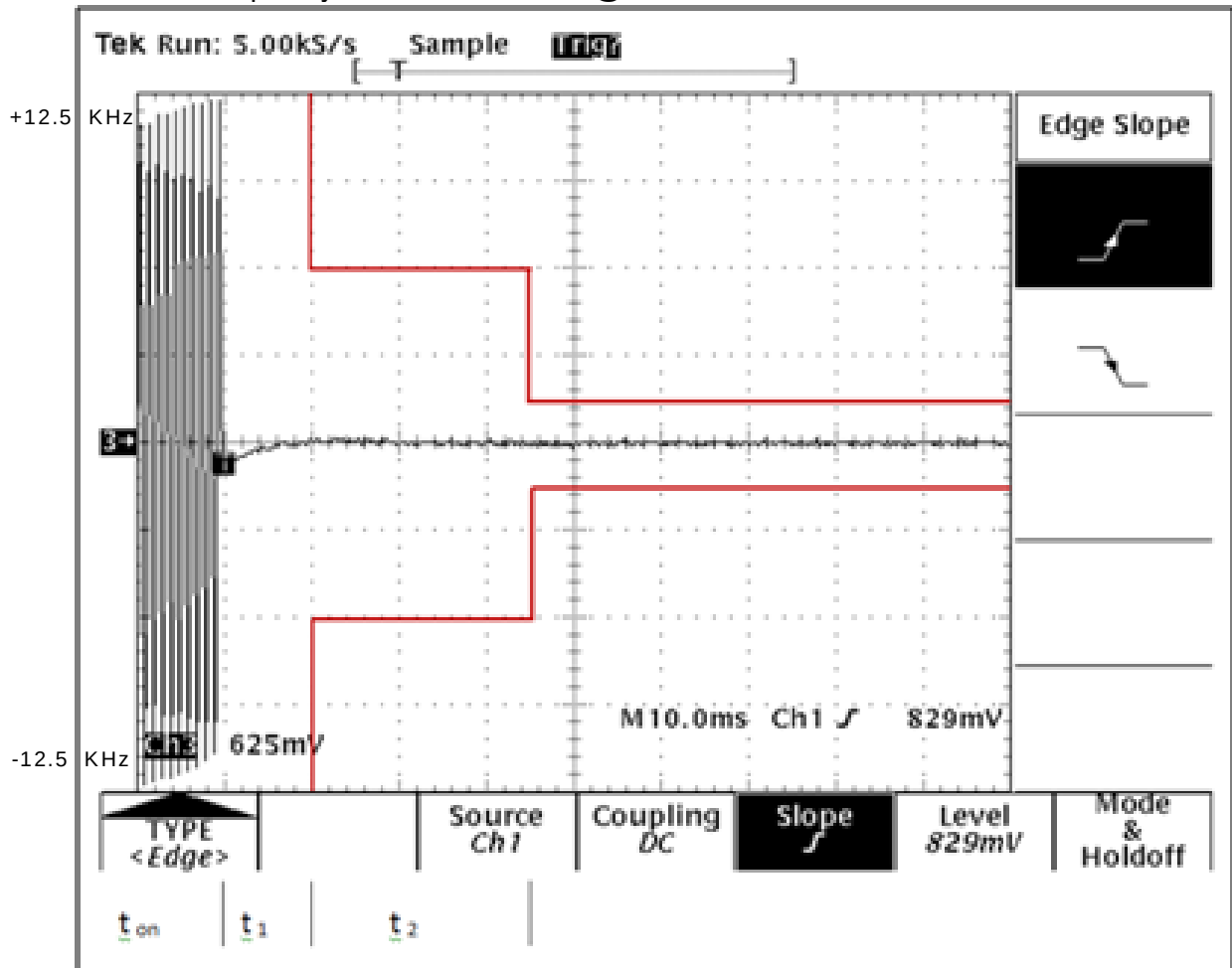


Figure 6F-1: Transient Frequency Behavior Off to On

EXHIBIT 6F-1

B. Transient Frequency Behavior On to Off @459.1875 MHz

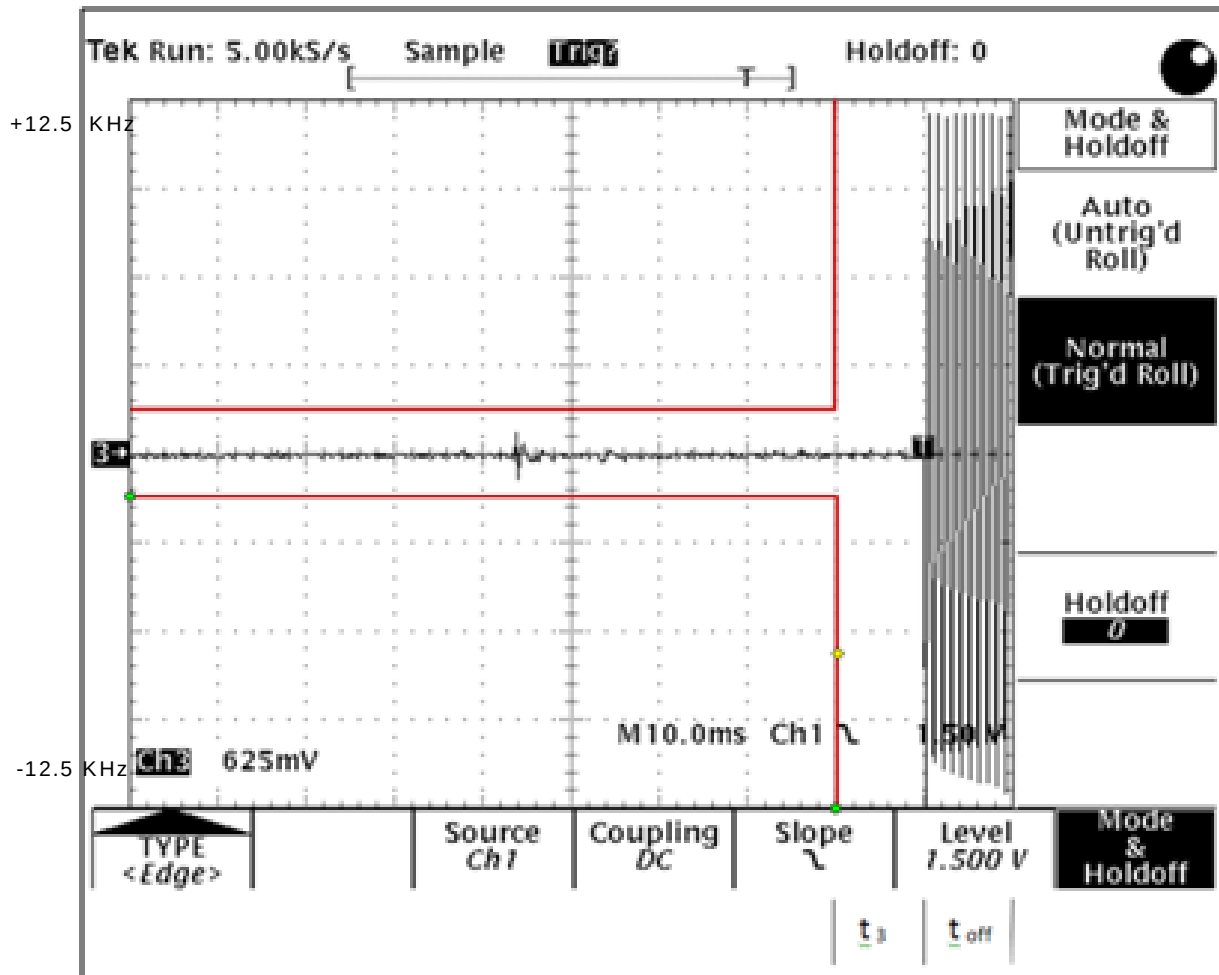


Figure 6F-2: Transient Frequency Behavior On to Off

EXHIBIT 6F-2