MAXIMUM MODULATION PERCENTAGE (M%)

LIMIT
§15.35 (c) & IC RSS-Gen Issue 1 §4.3
The measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative(provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 seconds interval during which the field strength is at its maximum value. The exact method of calculating the average field strength shall be submitted with any application for certification or shall be retained in the measurement data file for equipment subject to notification or verification.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer or radiated field strength. The RBW is set to 300 kHz and the VBW is set to 300 kHz. The sweep time is coupled and the span is set to 0 Hz. The number of pulses is measured and calculated in 15.58 ms scan.

CALCULATION

Average Reading = Peak Reading(dBuV/m)+20log (Duty Cycle), Where Duty Cycle is (# of pulses *pulse width)/100 or T (15.58 ms)
                                          = Peak Reading(dBuV/m)-15.6
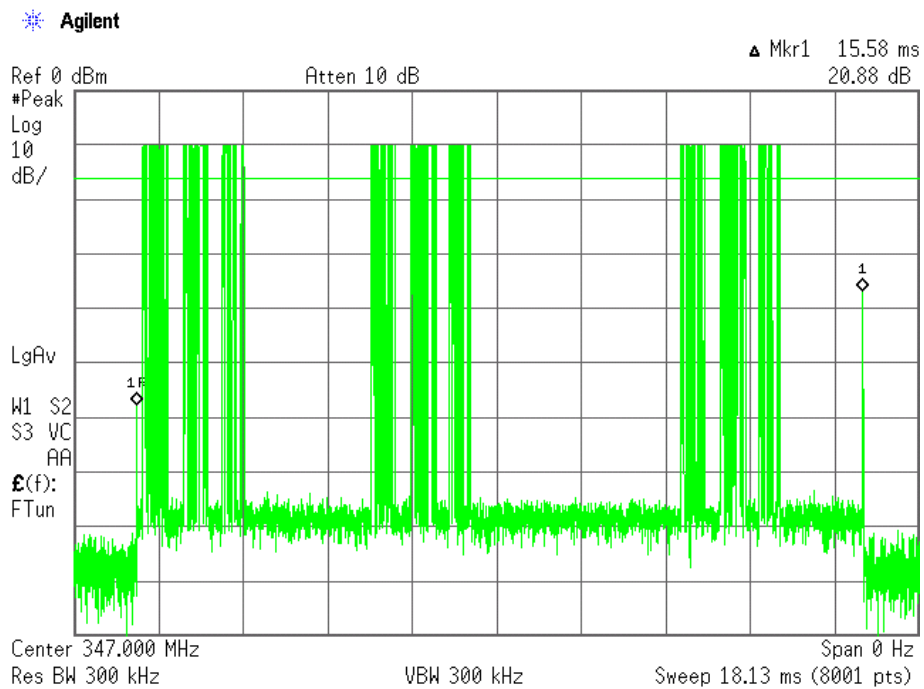
RESULTS

No non-compliance noted:

MAXIMUM MODULATION PERCENTAGE

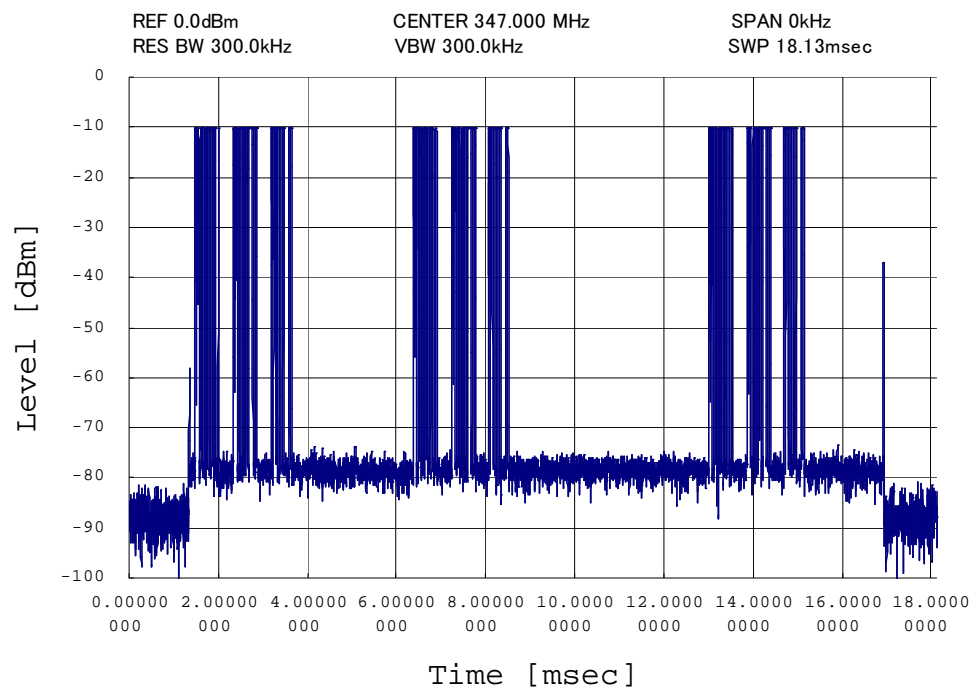| One Period (ms)	Pulse Width(*1 (ms)	# of Pulses (*2	Duty Cycle	% Duty Cycle
15.58	$2.26625 * 10^{-3}$	1142	0.1661	16.61

Note：(1) Pulse width(ms) = Spectrum Analyzer Trace Width per point
                        = 18.13 ms/8000(number of Trace Data)
                        = $2.26625 * 10^{-3}$
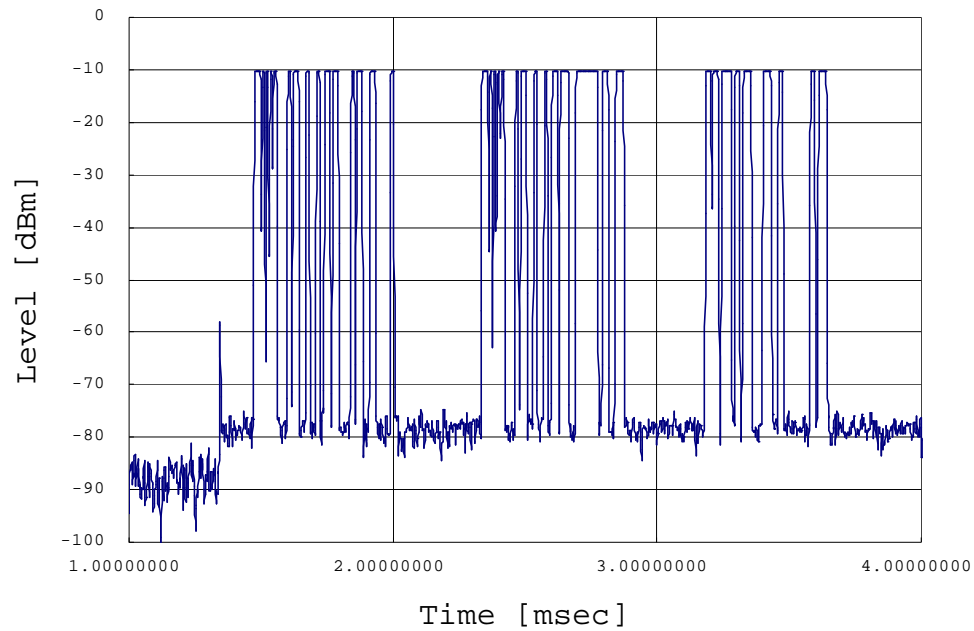(2) # of Pulses : Total number of Tace Data On-time points
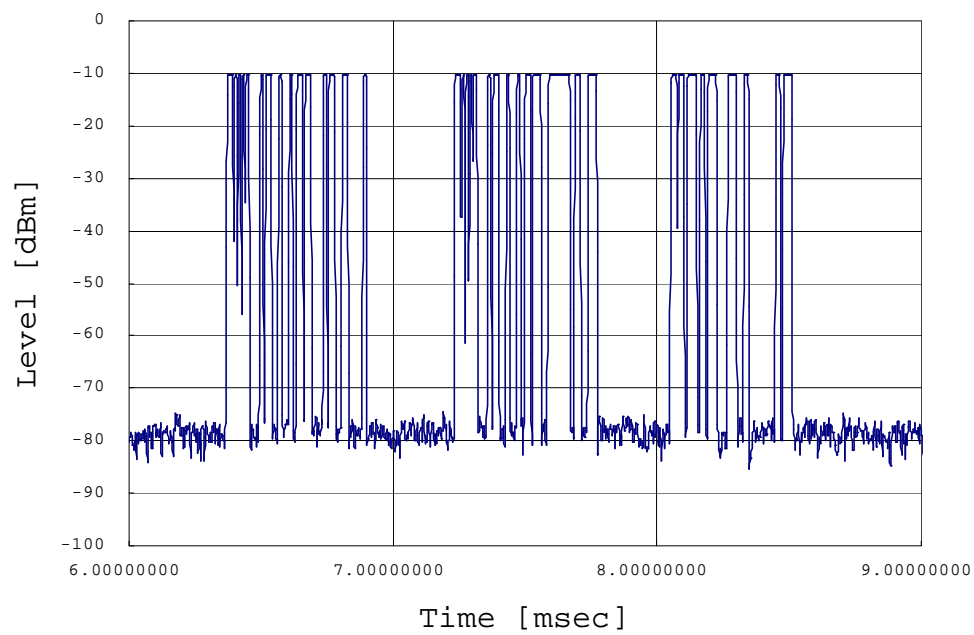
Spectrum Analyzer Screen Copy

Trace Data (Full Data)

Trace Data (1 ms to 4 ms)

Trace Data (6 ms to 9 ms)

Trace Data (12.5 ms to 15.5 ms)