

RE: FCC ID: AFJ278100_ATCB001845 Reply:

1. Please provide the MPE calculation report as a separate exhibit.

[Pl find a separate MPE Exhibit uploaded](#)

2. Please note that the OBW plot on pages 33 through 38 shows that there part of the fundamental modulation is still outside the marked 99%BW designation. This means that the measured 99%BW may not be correct. For example, the 99% BW on the plot on page 33 would more appropriately appear to be 10.5 kHz rather than the 6.7 kHz stated on the plot. Please note that the emissions mask plots would also seem to indicate this also. Please explain why the upper and lower modulation products that are over the 26dB point (23dB for actual 99% BW) were not included in the 99% BW measurements.

3. In reference to item 2, there also appear to be minor 99% BW errors (i.e. not all of the signal was considered) on pages 40, 41, 45, 46 and 47 of the report. Please explain.

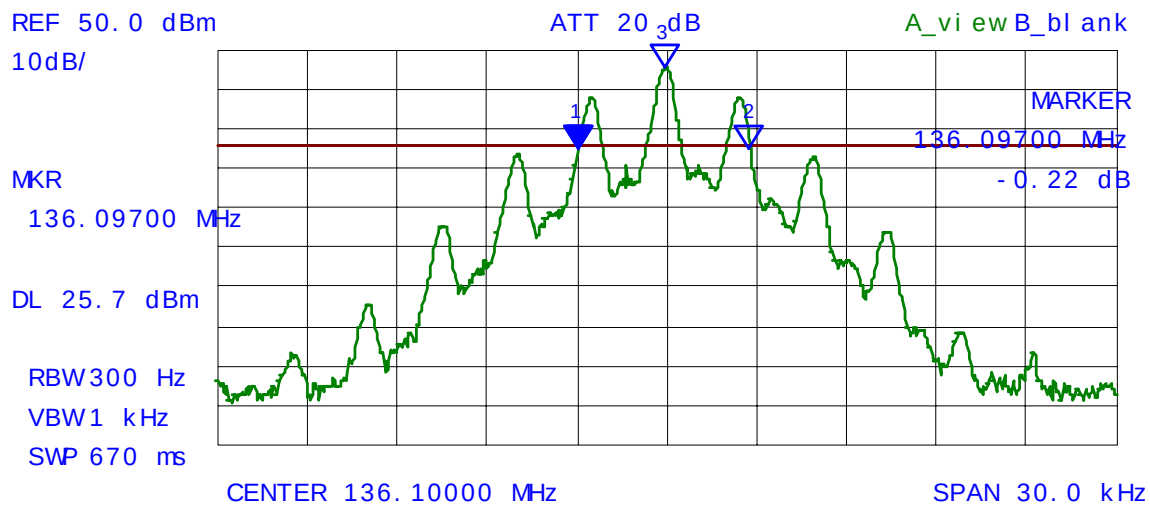
[We have measured occupied bandwidth as per FCC rule part Sec. 2.1049, which recommends 99% BW measurement. 99% BW measurement is an automatic feature of the analyzer, hence once the full spectrum is displayed on the analyzer, we select 99% BW measurement and the analyzer calculates the BW, which contains 99% power and displays results automatically. There is no human control on these measurements.](#)

[We have again performed measurement for Plot-1, with increased span of 30 KHz to cover full spectrum and the result is similar to our previous measurement, shown below for your reference.](#)

[Also theoretically \$99\% BW = 10 \log\(0.01\) = -20\text{dB}\$. We have also measured 20 dB OBW, which is only 5.74 KHz, less than the 99% measurement, shown below for the comparison.](#)

Plot # 1: **20dB Bandwidth, Carrier Frequency: 136.1 MHz**
Channel Spacing: 12.5 kHz, Power: 50 W
Modulation: FM with 2.5 kHz sine wave

Measured 20dB BW = 5.74 kHz



*** Multi Marker List ***

No. 1:	136.09700 MHz	-0.22 dB	A
No. 2:	136.10274 MHz	-0.47 dB	A
No. 3:	136.09991 MHz	20.00 dB	A
No. 4:			
No. 5:			
No. 6:			
No. 7:			
No. 8:			

Plot # 1: **99% Occupied Bandwidth, Carrier Frequency: 136.1 MHz**
Channel Spacing: 12.5 kHz, Power: 50 W
Modulation: FM with 2.5 kHz sine wave

