

Response to RT 44891 12/17/13

FCC Question:

The final paragraph of the waiver dated 11/30/2011 states that this device's bandwidth is 13 kHz with an operational frequency of 3.156 MHz. However, block 8(a) does not reflect this frequency range. Please confirm that the external transmitter operates within the bounds of 3,149,500 Hz and 3,162,500 Hz. Also, please verify the data missing from Form 731 Block 8(b) and Block 8(e) (rated RF power output and microprocessor, respectively)

Summary:

The measured occupied bandwidth (OBW) subject of this inquiry was determined utilizing different measurement settings at different times. While the original measurement reported 13kHz, this measurement was performed using a significantly large resolution bandwidth (RBW) setting than the most recent measurement. Good engineering practice for this measurement includes measurement of the OBW using a RBW between 1-5% of the measured OBW. In the case of near CW signals, the measured OBW is directly proportional to the RBW settings. The OBW has been measured again by the applicant and the results are summarized below. The applicant states that the design of the equipment has not changed since the original request for waiver.

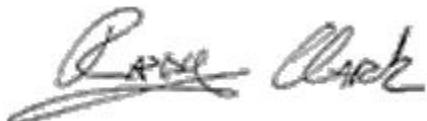
Measurement	RBW	Type	OBW
Original (c. 2010)	9.1 kHz	6 dB	13.0 kHz
12/18/13	10 kHz	6 dB	14.5 kHz
12/18/13	1 kHz	20 dB	3.57 kHz
12/18/13	100 Hz	20 dB	240 Hz
12/18/13	10 Hz	20 dB	25 Hz

Additional measurements performed by Rongching Dai, Second Sight using an HP 8560E S/N3517A01545, calibration date 04/24/2013.

The additional measurements support that the measured OBW is consistent between the waiver request and the provided test report; the difference is accounted for by the changes in measurement settings.

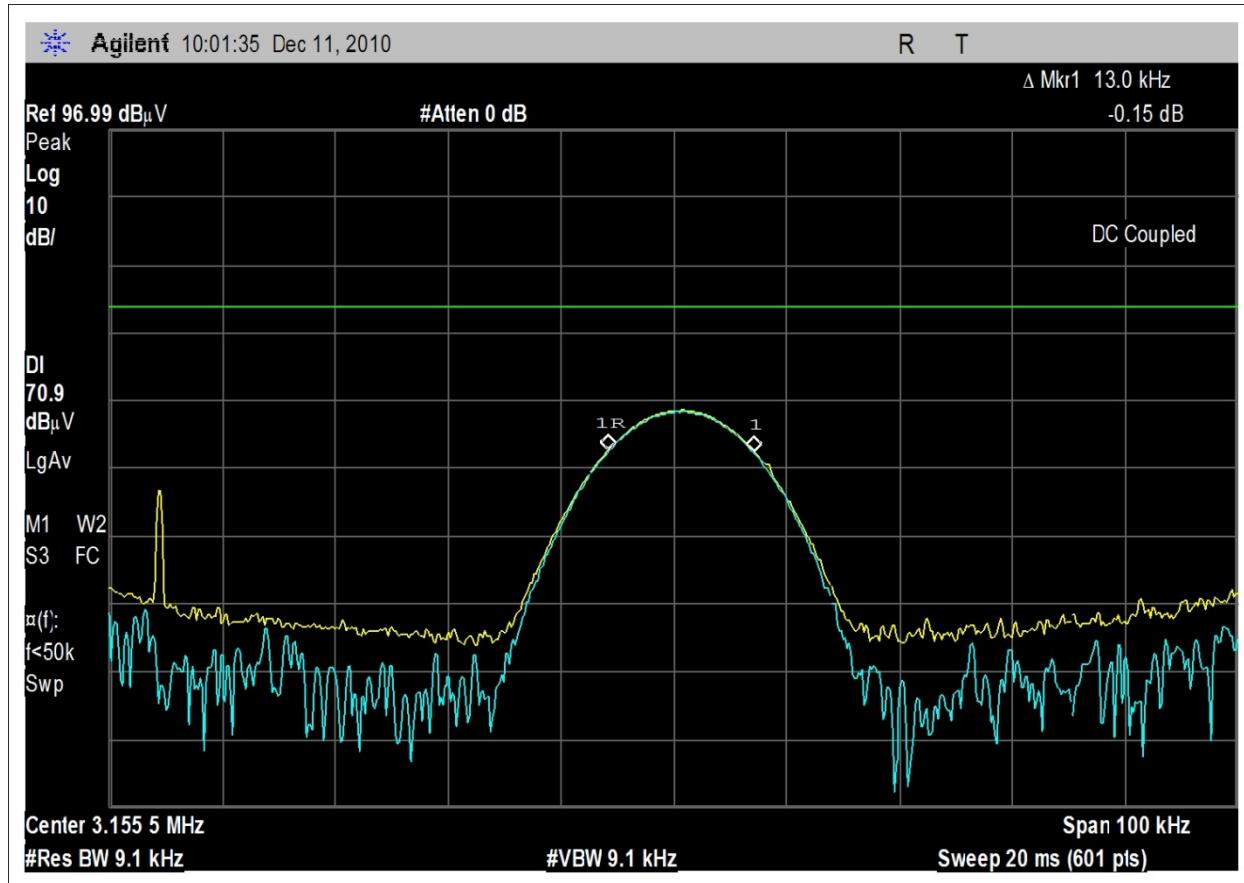
Please note that in accordance with KDB 634817 D01 under Part 15 Unlicensed Transmitters section 3, the application form was submitted utilizing the center frequency of the channel, since the product only operates on a single frequency. Additionally, the remaining equipment specifications were omitted based on FCC guidance and presentation materials. The microprocessor section is an optional field and was omitted at the discretion of the applicant.

Respectfully submitted,



Randy Clark (on behalf of Jim Little)
CKC Certification Services, LLC.

Below is the original plot showing the measured 13kHz OBW. Note that the measurement utilizes a9.1kHz RBW and the reported 13kHz represents the 6dB points.



Additional Measurements by Second Sight 12/18/2013:

