

Spectrum Emission Compliance W279BC / W212BY

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Tests were conducted to determine compliance with 47 C.F.R. 73.317(b) through 73.317(d) for W279BC, Brunswick, GA FAC# 151451 and W212BY, Cypress Mills, GA FAC# 142658 to share a common transmit Antenna located ASRN 1027583 using a transmit combiner.

Method used for gathering data

Signals were measured with a transmitter for each station connected to the proper port of a Telewave combiner designated for each proper operating frequency. A Bird Wattmeter model 43 serial number 219174 was connected directly between the antenna port of the combiner and the antenna feedline for the antenna system. A Bird 50 dB sample port element 50db 25mhz to 1000mhz was used for obtaining a test signal for making measurements.

The measurement data was gathered using a Rohde & Swartz model FSH3 Spectrum Analyzer serial number 105325. I used software Program FSH View Utility to transfer the spectrum screen shots from the Rohde & Schwarz Spectrum analyzer via optical USB port to a HP DV6000 notebook computer.

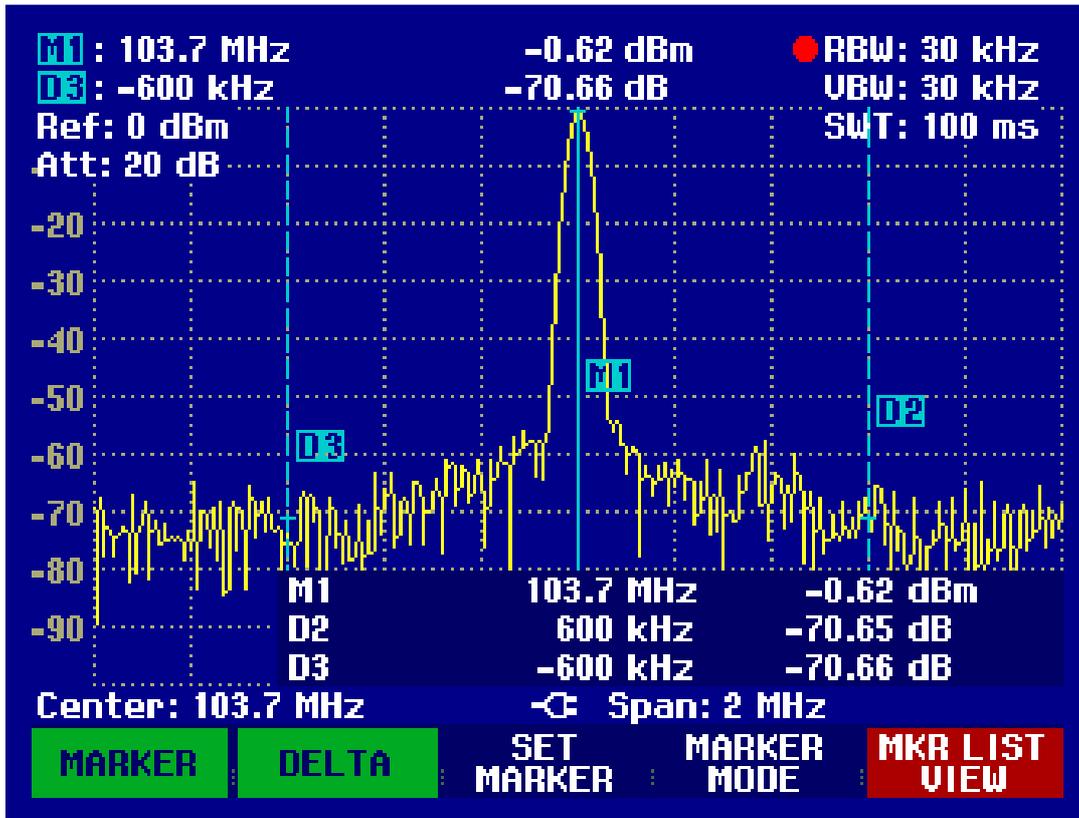


Fig1 channel 279, 103.7MHz W279BC

According to 47 C.F.R. 73.317(d) the limits for emissions more than 600 KHz from the assigned carrier frequency is equal to “43 + 10 Log₁₀ (Power, in watts) dB below the level of the unmodulated carrier, or 80 dB, whichever is the lesser attenuation.” Therefore the limit is 43 + 10 Log₁₀(250 Watts) = 43 + 23.98 = 66.98 dB below the unmodulated reference carrier.

Reference above in fig.1 for channel 279, 103.7MHz W279BC

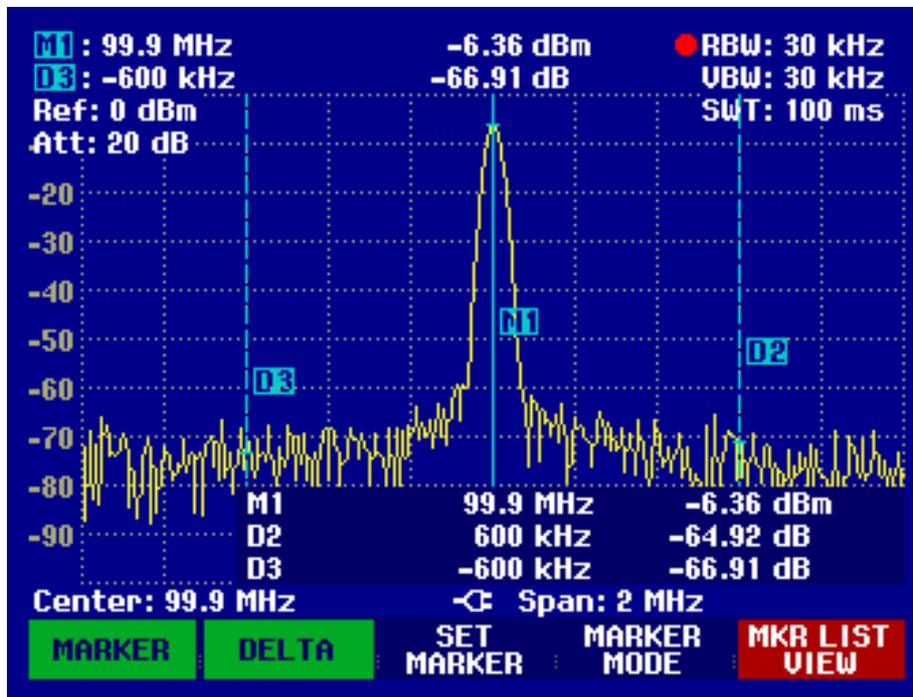


Fig2 W212BY, 90.3 MHz, Cypress Mills, GA FAC# 142658

According to 47 C.F.R. 73.317(d) the limits for emissions more than 600 KHz from the assigned carrier frequency is equal to “43 + 10 Log₁₀ (Power, in watts) dB below the level of the unmodulated carrier, or 80 dB, whichever is the lesser attenuation.” Therefore the limit is 43 + 10 Log₁₀(38 Watts) = 43 + 15.80 = 58.80 dB below the unmodulated reference carrier.

Reference above in fig. 2

Per rule 73.317, measurements were made for any spurious emissions at between 120 kHz and 240 kHz either side of the stations operating frequency.

Further measurements were made at between 240 kHz and 600 kHz either side of the carrier frequency. These measurements were conducted with no modulation present; and no spurious emissions were noted. Measurements were then made at the second and third harmonic frequencies of the described stations operating frequency. Again, no spurious signals were present. A close scan of Aviation spectrum between 108 MHz & 136 MHz also showed no signs of spurious emissions. A scan of the spectrum, up to and including 500 MHz, was made to look for any other spurious emissions from the W279BC / W212BY combined transmission system; and none could be found.

According to all measurements observed, including but not limited to that presented herein, W279BC / W212BY is in full compliance with all FCC

Requirements of 47 C.F.R. 73.317(b) through 73.317(d)

Certification

I certify that I personally conducted all measurements and

Prepared all statements within this document as represented herein and that

All such work was done using good engineering practice.

Broadcast Engineer



Victor M. Vickers