

WXKO, LLC.

W226BZ – Macon, GA

November 2016

Spurious Emission Measurements

The following report is prepared on behalf of WXKO, LLC., licensee of FM translator W226BZ.

The construction permit did not hold a condition that the spurious emissions of the facility be measured to show compliance of 47 C.F.R Sections 73.317(b) and 73.317 (d). Since the station is combined into a common antenna system with W286CE and W234CQ and as a precaution, the applicant completed the attached study.

The combiner used is a Kintronic Labs, Inc FMC4X1.2K four port combiner and a Shively Labs 6832 2 bay broadband antenna.

Attached is a listing of the frequencies in play with the present operation

All the frequencies listed were measured a 11/22 2016 at approximately 10:00 AM EST.

It was noted that none of the frequencies could be detected. The engineer employed a Agilent 4411A spectrum analyzer. Since W226BZ operation on 93.1 MHz has the highest power output, it was used as the benchmark of 0 db. The sample employed was a FM calibrated whip type antenna manufactured by Automat.

After all measurements were complete it is believed that WXKO, LLC is in full compliance with 47 C.F.R Sections 73.317(b) and 73.317 (d)

/s/ Clyde Scott, Jr.

EME Communications

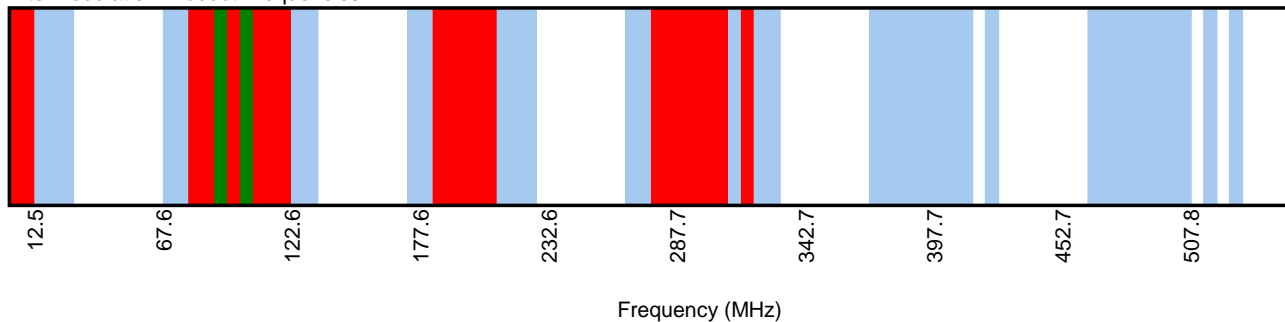
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Intermodulation Product Frequencies



---- Transmitters Considered ----

ID	Freq (MHz)	ERP (kW)
W226BZ.C	93.1	0.25
W234CQ	94.7	0.099
W286CE	105.1	0.25

Intermodulation Products:

--- 93.1 MHz --- Order = 1
W226BZ.C: (1) * 93.1

--- 94.7 MHz --- Order = 1
W234CQ: (1) * 94.7

--- 105.1 MHz --- Order = 1
W286CE: (1) * 105.1

--- 1.6 MHz --- Order = 2
W234CQ: (1) * 94.7; W226BZ.C: (-1) * 93.1

--- 10.4 MHz --- Order = 2
W286CE: (1) * 105.1; W234CQ: (-1) * 94.7

--- 12.0 MHz --- Order = 2
W286CE: (1) * 105.1; W226BZ.C: (-1) * 93.1

--- 186.2 MHz --- Order = 2
W226BZ.C: (2) * 93.1

--- 187.8 MHz --- Order = 2
W234CQ: (1) * 94.7; W226BZ.C: (1) * 93.1

--- 189.4 MHz --- Order = 2
W234CQ: (2) * 94.7

--- 198.2 MHz --- Order = 2
W286CE: (1) * 105.1; W226BZ.C: (1) * 93.1

--- 199.8 MHz --- Order = 2
W286CE: (1) * 105.1; W234CQ: (1) * 94.7

--- 210.2 MHz --- Order = 2
W286CE: (2) * 105.1

--- 81.1 MHz --- Order = 3
W286CE: (-1) * 105.1; W226BZ.C: (2) * 93.1

--- 82.7 MHz --- Order = 3
W286CE: (-1) * 105.1; W234CQ: (1) * 94.7; W226BZ.C: (1) * 93.1

--- 84.3 MHz --- Order = 3
W286CE: (-1) * 105.1; W234CQ: (2) * 94.7

--- 91.5 MHz --- Order = 3
W234CQ: (-1) * 94.7; W226BZ.C: (2) * 93.1

--- 96.3 MHz --- Order = 3
W234CQ: (2) * 94.7; W226BZ.C: (-1) * 93.1

--- 103.5 MHz --- Order = 3
W286CE: (1) * 105.1; W234CQ: (-1) * 94.7; W226BZ.C: (1) * 93.1

--- 106.7 MHz --- Order = 3
W286CE: (1) * 105.1; W234CQ: (1) * 94.7; W226BZ.C: (-1) * 93.1

--- 115.5 MHz --- Order = 3
W286CE: (2) * 105.1; W234CQ: (-1) * 94.7

--- 117.1 MHz --- Order = 3
W286CE: (2) * 105.1; W226BZ.C: (-1) * 93.1

--- 279.3 MHz --- Order = 3
W226BZ.C: (3) * 93.1

--- 280.9 MHz --- Order = 3
W234CQ: (1) * 94.7; W226BZ.C: (2) * 93.1

--- 282.5 MHz --- Order = 3
W234CQ: (2) * 94.7; W226BZ.C: (1) * 93.1

--- 284.1 MHz --- Order = 3
W234CQ: (3) * 94.7

--- 291.3 MHz --- Order = 3
W286CE: (1) * 105.1; W226BZ.C: (2) * 93.1

--- 292.9 MHz --- Order = 3
W286CE: (1) * 105.1; W234CQ: (1) * 94.7; W226BZ.C: (1) * 93.1

--- 294.5 MHz --- Order = 3
W286CE: (1) * 105.1; W234CQ: (2) * 94.7

--- 303.3 MHz --- Order = 3
W286CE: (2) * 105.1; W226BZ.C: (1) * 93.1

--- 304.9 MHz --- Order = 3
W286CE: (2) * 105.1; W234CQ: (1) * 94.7

--- 315.3 MHz --- Order = 3
W286CE: (3) * 105.1

--- 3.2 MHz --- Order = 4
W234CQ: (2) * 94.7; W226BZ.C: (-2) * 93.1

--- 8.8 MHz --- Order = 4
W286CE: (1) * 105.1; W234CQ: (-2) * 94.7; W226BZ.C: (1) * 93.1

--- 13.6 MHz --- Order = 4
W286CE: (1) * 105.1; W234CQ: (1) * 94.7; W226BZ.C: (-2) * 93.1

--- 20.8 MHz --- Order = 4
W286CE: (2) * 105.1; W234CQ: (-2) * 94.7

--- 22.4 MHz --- Order = 4
W286CE: (2) * 105.1; W234CQ: (-1) * 94.7; W226BZ.C: (-1) * 93.1

--- 24.0 MHz --- Order = 4
W286CE: (2) * 105.1; W226BZ.C: (-2) * 93.1

--- 174.2 MHz --- Order = 4
W286CE: (-1) * 105.1; W226BZ.C: (3) * 93.1

--- 175.8 MHz --- Order = 4
W286CE: (-1) * 105.1; W234CQ: (1) * 94.7; W226BZ.C: (2) * 93.1

--- 177.4 MHz --- Order = 4
W286CE: (-1) * 105.1; W234CQ: (2) * 94.7; W226BZ.C: (1) * 93.1

--- 179.0 MHz --- Order = 4
W286CE: (-1) * 105.1; W234CQ: (3) * 94.7

--- 184.6 MHz --- Order = 4
W234CQ: (-1) * 94.7; W226BZ.C: (3) * 93.1

--- 191.0 MHz --- Order = 4
W234CQ: (3) * 94.7; W226BZ.C: (-1) * 93.1

--- 196.6 MHz --- Order = 4
W286CE: (1) * 105.1; W234CQ: (-1) * 94.7; W226BZ.C: (2) * 93.1

--- 201.4 MHz --- Order = 4
W286CE: (1) * 105.1; W234CQ: (2) * 94.7; W226BZ.C: (-1) * 93.1

--- 208.6 MHz --- Order = 4
W286CE: (2) * 105.1; W234CQ: (-1) * 94.7; W226BZ.C: (1) * 93.1

--- 211.8 MHz --- Order = 4
W286CE: (2) * 105.1; W234CQ: (1) * 94.7; W226BZ.C: (-1) * 93.1

--- 220.6 MHz --- Order = 4
W286CE: (3) * 105.1; W234CQ: (-1) * 94.7

--- 222.2 MHz --- Order = 4
W286CE: (3) * 105.1; W226BZ.C: (-1) * 93.1

--- 372.4 MHz --- Order = 4
W226BZ.C: (4) * 93.1

--- 374.0 MHz --- Order = 4
W234CQ: (1) * 94.7; W226BZ.C: (3) * 93.1

--- 375.6 MHz --- Order = 4
W234CQ: (2) * 94.7; W226BZ.C: (2) * 93.1

--- 377.2 MHz --- Order = 4
W234CQ: (3) * 94.7; W226BZ.C: (1) * 93.1

--- 378.8 MHz --- Order = 4
W234CQ: (4) * 94.7

--- 384.4 MHz --- Order = 4
W286CE: (1) * 105.1; W226BZ.C: (3) * 93.1

--- 386.0 MHz --- Order = 4
W286CE: (1) * 105.1; W234CQ: (1) * 94.7; W226BZ.C: (2) * 93.1

--- 387.6 MHz --- Order = 4
W286CE: (1) * 105.1; W234CQ: (2) * 94.7; W226BZ.C: (1) * 93.1

--- 389.2 MHz --- Order = 4
W286CE: (1) * 105.1; W234CQ: (3) * 94.7

--- 396.4 MHz --- Order = 4
W286CE: (2) * 105.1; W226BZ.C: (2) * 93.1

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--- 398.0 MHz --- Order = 4
W286CE: (2) * 105.1; W234CQ: (1) * 94.7; W226BZ.C: (1) * 93.1

--- 399.6 MHz --- Order = 4
W286CE: (2) * 105.1; W234CQ: (2) * 94.7

--- 408.4 MHz --- Order = 4
W286CE: (3) * 105.1; W226BZ.C: (1) * 93.1

--- 410.0 MHz --- Order = 4
W286CE: (3) * 105.1; W234CQ: (1) * 94.7

--- 420.4 MHz --- Order = 4
W286CE: (4) * 105.1

--- 69.1 MHz --- Order = 5
W286CE: (-2) * 105.1; W226BZ.C: (3) * 93.1

--- 70.7 MHz --- Order = 5
W286CE: (-2) * 105.1; W234CQ: (1) * 94.7; W226BZ.C: (2) * 93.1

--- 72.3 MHz --- Order = 5
W286CE: (-2) * 105.1; W234CQ: (2) * 94.7; W226BZ.C: (1) * 93.1

--- 73.9 MHz --- Order = 5
W286CE: (-2) * 105.1; W234CQ: (3) * 94.7

--- 79.5 MHz --- Order = 5
W286CE: (-1) * 105.1; W234CQ: (-1) * 94.7; W226BZ.C: (3) * 93.1

--- 85.9 MHz --- Order = 5
W286CE: (-1) * 105.1; W234CQ: (3) * 94.7; W226BZ.C: (-1) * 93.1

--- 89.9 MHz --- Order = 5
W234CQ: (-2) * 94.7; W226BZ.C: (3) * 93.1

--- 97.9 MHz --- Order = 5
W234CQ: (3) * 94.7; W226BZ.C: (-2) * 93.1

--- 101.9 MHz --- Order = 5
W286CE: (1) * 105.1; W234CQ: (-2) * 94.7; W226BZ.C: (2) * 93.1

--- 108.3 MHz --- Order = 5
W286CE: (1) * 105.1; W234CQ: (2) * 94.7; W226BZ.C: (-2) * 93.1

--- 113.9 MHz --- Order = 5
W286CE: (2) * 105.1; W234CQ: (-2) * 94.7; W226BZ.C: (1) * 93.1

--- 118.7 MHz --- Order = 5
W286CE: (2) * 105.1; W234CQ: (1) * 94.7; W226BZ.C: (-2) * 93.1

--- 125.9 MHz --- Order = 5
W286CE: (3) * 105.1; W234CQ: (-2) * 94.7

--- 127.5 MHz --- Order = 5
W286CE: (3) * 105.1; W234CQ: (-1) * 94.7; W226BZ.C: (-1) * 93.1

--- 129.1 MHz --- Order = 5
W286CE: (3) * 105.1; W226BZ.C: (-2) * 93.1

--- 267.3 MHz --- Order = 5
W286CE: (-1) * 105.1; W226BZ.C: (4) * 93.1

--- 268.9 MHz --- Order = 5
W286CE: (-1) * 105.1; W234CQ: (1) * 94.7; W226BZ.C: (3) * 93.1

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--- 270.5 MHz --- Order = 5
W286CE: (-1) * 105.1; W234CQ: (2) * 94.7; W226BZ.C: (2) * 93.1

--- 272.1 MHz --- Order = 5
W286CE: (-1) * 105.1; W234CQ: (3) * 94.7; W226BZ.C: (1) * 93.1

--- 273.7 MHz --- Order = 5
W286CE: (-1) * 105.1; W234CQ: (4) * 94.7

--- 277.7 MHz --- Order = 5
W234CQ: (-1) * 94.7; W226BZ.C: (4) * 93.1

--- 285.7 MHz --- Order = 5
W234CQ: (4) * 94.7; W226BZ.C: (-1) * 93.1

--- 289.7 MHz --- Order = 5
W286CE: (1) * 105.1; W234CQ: (-1) * 94.7; W226BZ.C: (3) * 93.1

--- 296.1 MHz --- Order = 5
W286CE: (1) * 105.1; W234CQ: (3) * 94.7; W226BZ.C: (-1) * 93.1

--- 301.7 MHz --- Order = 5
W286CE: (2) * 105.1; W234CQ: (-1) * 94.7; W226BZ.C: (2) * 93.1

--- 306.5 MHz --- Order = 5
W286CE: (2) * 105.1; W234CQ: (2) * 94.7; W226BZ.C: (-1) * 93.1

--- 313.7 MHz --- Order = 5
W286CE: (3) * 105.1; W234CQ: (-1) * 94.7; W226BZ.C: (1) * 93.1

--- 316.9 MHz --- Order = 5
W286CE: (3) * 105.1; W234CQ: (1) * 94.7; W226BZ.C: (-1) * 93.1

--- 325.7 MHz --- Order = 5
W286CE: (4) * 105.1; W234CQ: (-1) * 94.7

--- 327.3 MHz --- Order = 5
W286CE: (4) * 105.1; W226BZ.C: (-1) * 93.1

--- 465.5 MHz --- Order = 5
W226BZ.C: (5) * 93.1

--- 467.1 MHz --- Order = 5
W234CQ: (1) * 94.7; W226BZ.C: (4) * 93.1

--- 468.7 MHz --- Order = 5
W234CQ: (2) * 94.7; W226BZ.C: (3) * 93.1

--- 470.3 MHz --- Order = 5
W234CQ: (3) * 94.7; W226BZ.C: (2) * 93.1

--- 471.9 MHz --- Order = 5
W234CQ: (4) * 94.7; W226BZ.C: (1) * 93.1

--- 473.5 MHz --- Order = 5
W234CQ: (5) * 94.7

--- 477.5 MHz --- Order = 5
W286CE: (1) * 105.1; W226BZ.C: (4) * 93.1

--- 479.1 MHz --- Order = 5
W286CE: (1) * 105.1; W234CQ: (1) * 94.7; W226BZ.C: (3) * 93.1

--- 480.7 MHz --- Order = 5
W286CE: (1) * 105.1; W234CQ: (2) * 94.7; W226BZ.C: (2) * 93.1

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--- 482.3 MHz --- Order = 5
W286CE: (1) * 105.1; W234CQ: (3) * 94.7; W226BZ.C: (1) * 93.1

--- 483.9 MHz --- Order = 5
W286CE: (1) * 105.1; W234CQ: (4) * 94.7

--- 489.5 MHz --- Order = 5
W286CE: (2) * 105.1; W226BZ.C: (3) * 93.1

--- 491.1 MHz --- Order = 5
W286CE: (2) * 105.1; W234CQ: (1) * 94.7; W226BZ.C: (2) * 93.1

--- 492.7 MHz --- Order = 5
W286CE: (2) * 105.1; W234CQ: (2) * 94.7; W226BZ.C: (1) * 93.1

--- 494.3 MHz --- Order = 5
W286CE: (2) * 105.1; W234CQ: (3) * 94.7

--- 501.5 MHz --- Order = 5
W286CE: (3) * 105.1; W226BZ.C: (2) * 93.1

--- 503.1 MHz --- Order = 5
W286CE: (3) * 105.1; W234CQ: (1) * 94.7; W226BZ.C: (1) * 93.1

--- 504.7 MHz --- Order = 5
W286CE: (3) * 105.1; W234CQ: (2) * 94.7

--- 513.5 MHz --- Order = 5
W286CE: (4) * 105.1; W226BZ.C: (1) * 93.1

--- 515.1 MHz --- Order = 5
W286CE: (4) * 105.1; W234CQ: (1) * 94.7

--- 525.5 MHz --- Order = 5
W286CE: (5) * 105.1
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