

Cumulus Licensing, LLC.

WBLX, WABD, Mobile, AL.

WDLT, Saraland, AL.

October, 2019

Spurious Emission Measurements

The following report is prepared on behalf of Cumulus Licensing, LLC., licensee of FM stations WABD and WBLX, Mobile, AL and WDLT, Saraland, AL.

As a condition two (2) of the auxiliary construction permit, Cumulus is required to measure the spurious emissions of the facility 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 WABD, WDLT and WBLX..

The combiner used is a Shivley Labs, Inc three port combiner and a Shively Labs 6832 4 bay broadband antenna.

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

All the frequencies listed were measured on October 15, 2019 at approximately 11:50PM EST.

It was noted that none of the frequencies could be detected or were greater the -80 dB below the reference. The engineer employed a Agilent E4411B spectrum analyzer. Since all stations operate at the same power level (4.7 kW ERP), 92.9, WBLX 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 Cumulus Licensing, LLC., is in full compliance with condition 2 of the underlying construction permits and 47 C.F.R Sections 73.317(b) and 73.317 (d)

/s/ Clyde Scott, Jr.

EME Communications

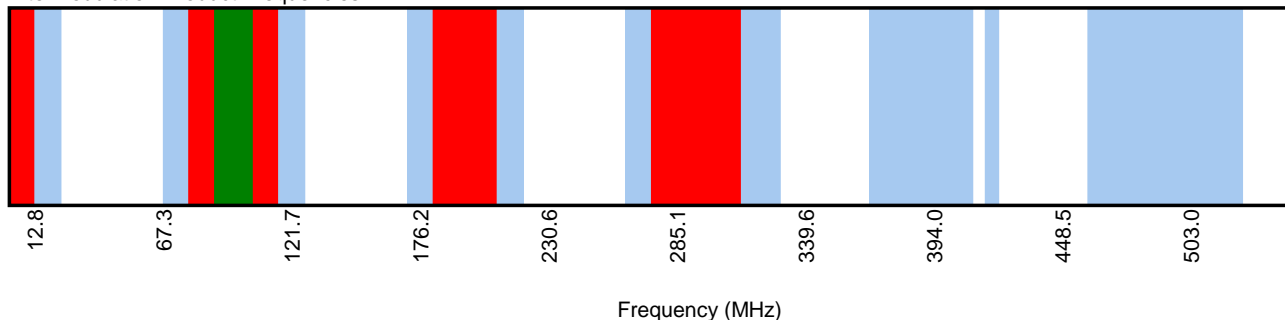
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Intermodulation Product Frequencies



---- Transmitters Considered ----

| ID | Freq (MHz) | ERP (kW) |
|----------|------------|----------|
| WBLX-FM | 92.9 | 4.7 |
| WABD.AXL | 97.5 | 4.7 |
| WDLT-FM | 104.1 | 4.7 |

Intermodulation Products:

--- 92.9 MHz --- Order = 1
WBLX-FM: (1) * 92.9

--- 97.5 MHz --- Order = 1
WABD.AXL: (1) * 97.5

--- 104.1 MHz --- Order = 1
WDLT-FM: (1) * 104.1

--- 4.6 MHz --- Order = 2
WABD.AXL: (1) * 97.5; WBLX-FM: (-1) * 92.9

--- 6.6 MHz --- Order = 2
WDLT-FM: (1) * 104.1; WABD.AXL: (-1) * 97.5

--- 11.2 MHz --- Order = 2
WDLT-FM: (1) * 104.1; WBLX-FM: (-1) * 92.9

--- 185.8 MHz --- Order = 2
WBLX-FM: (2) * 92.9

--- 190.4 MHz --- Order = 2
WABD.AXL: (1) * 97.5; WBLX-FM: (1) * 92.9

--- 195.0 MHz --- Order = 2
WABD.AXL: (2) * 97.5

--- 197.0 MHz --- Order = 2
WDLT-FM: (1) * 104.1; WBLX-FM: (1) * 92.9

--- 201.6 MHz --- Order = 2
WDLT-FM: (1) * 104.1; WABD.AXL: (1) * 97.5

--- 208.2 MHz --- Order = 2
WDLT-FM: (2) * 104.1

--- 81.7 MHz --- Order = 3
WDLT-FM: (-1) * 104.1; WBLX-FM: (2) * 92.9

--- 86.3 MHz --- Order = 3
WDLT-FM: (-1) * 104.1; WABD.AXL: (1) * 97.5; WBLX-FM: (1) * 92.9

--- 88.3 MHz --- Order = 3
WABD.AXL: (-1) * 97.5; WBLX-FM: (2) * 92.9

--- 90.9 MHz --- Order = 3
WDLT-FM: (-1) * 104.1; WABD.AXL: (2) * 97.5

--- 99.5 MHz --- Order = 3
WDLT-FM: (1) * 104.1; WABD.AXL: (-1) * 97.5; WBLX-FM: (1) * 92.9

--- 102.1 MHz --- Order = 3
WABD.AXL: (2) * 97.5; WBLX-FM: (-1) * 92.9

--- 108.7 MHz --- Order = 3
WDLT-FM: (1) * 104.1; WABD.AXL: (1) * 97.5; WBLX-FM: (-1) * 92.9

--- 110.7 MHz --- Order = 3
WDLT-FM: (2) * 104.1; WABD.AXL: (-1) * 97.5

--- 115.3 MHz --- Order = 3
WDLT-FM: (2) * 104.1; WBLX-FM: (-1) * 92.9

--- 278.7 MHz --- Order = 3
WBLX-FM: (3) * 92.9

--- 283.3 MHz --- Order = 3
WABD.AXL: (1) * 97.5; WBLX-FM: (2) * 92.9

--- 287.9 MHz --- Order = 3
WABD.AXL: (2) * 97.5; WBLX-FM: (1) * 92.9

--- 289.9 MHz --- Order = 3
WDLT-FM: (1) * 104.1; WBLX-FM: (2) * 92.9

--- 292.5 MHz --- Order = 3
WABD.AXL: (3) * 97.5

--- 294.5 MHz --- Order = 3
WDLT-FM: (1) * 104.1; WABD.AXL: (1) * 97.5; WBLX-FM: (1) * 92.9

--- 299.1 MHz --- Order = 3
WDLT-FM: (1) * 104.1; WABD.AXL: (2) * 97.5

--- 301.1 MHz --- Order = 3
WDLT-FM: (2) * 104.1; WBLX-FM: (1) * 92.9

--- 305.7 MHz --- Order = 3
WDLT-FM: (2) * 104.1; WABD.AXL: (1) * 97.5

--- 312.3 MHz --- Order = 3
WDLT-FM: (3) * 104.1

--- 2.0 MHz --- Order = 4
WDLT-FM: (1) * 104.1; WABD.AXL: (-2) * 97.5; WBLX-FM: (1) * 92.9

--- 9.2 MHz --- Order = 4
WABD.AXL: (2) * 97.5; WBLX-FM: (-2) * 92.9

--- 13.2 MHz --- Order = 4
WDLT-FM: (2) * 104.1; WABD.AXL: (-2) * 97.5

--- 15.8 MHz --- Order = 4
WDLT-FM: (1) * 104.1; WABD.AXL: (1) * 97.5; WBLX-FM: (-2) * 92.9

--- 17.8 MHz --- Order = 4
WDLT-FM: (2) * 104.1; WABD.AXL: (-1) * 97.5; WBLX-FM: (-1) * 92.9

--- 22.4 MHz --- Order = 4
WDLT-FM: (2) * 104.1; WBLX-FM: (-2) * 92.9

--- 174.6 MHz --- Order = 4
WDLT-FM: (-1) * 104.1; WBLX-FM: (3) * 92.9

--- 179.2 MHz --- Order = 4
WDLT-FM: (-1) * 104.1; WABD.AXL: (1) * 97.5; WBLX-FM: (2) * 92.9

--- 181.2 MHz --- Order = 4
WABD.AXL: (-1) * 97.5; WBLX-FM: (3) * 92.9

--- 183.8 MHz --- Order = 4
WDLT-FM: (-1) * 104.1; WABD.AXL: (2) * 97.5; WBLX-FM: (1) * 92.9

--- 188.4 MHz --- Order = 4
WDLT-FM: (-1) * 104.1; WABD.AXL: (3) * 97.5

--- 192.4 MHz --- Order = 4
WDLT-FM: (1) * 104.1; WABD.AXL: (-1) * 97.5; WBLX-FM: (2) * 92.9

--- 199.6 MHz --- Order = 4
WABD.AXL: (3) * 97.5; WBLX-FM: (-1) * 92.9

--- 203.6 MHz --- Order = 4
WDLT-FM: (2) * 104.1; WABD.AXL: (-1) * 97.5; WBLX-FM: (1) * 92.9

--- 206.2 MHz --- Order = 4
WDLT-FM: (1) * 104.1; WABD.AXL: (2) * 97.5; WBLX-FM: (-1) * 92.9

--- 212.8 MHz --- Order = 4
WDLT-FM: (2) * 104.1; WABD.AXL: (1) * 97.5; WBLX-FM: (-1) * 92.9

--- 214.8 MHz --- Order = 4
WDLT-FM: (3) * 104.1; WABD.AXL: (-1) * 97.5

--- 219.4 MHz --- Order = 4
WDLT-FM: (3) * 104.1; WBLX-FM: (-1) * 92.9

--- 371.6 MHz --- Order = 4
WBLX-FM: (4) * 92.9

--- 376.2 MHz --- Order = 4
WABD.AXL: (1) * 97.5; WBLX-FM: (3) * 92.9

--- 380.8 MHz --- Order = 4
WABD.AXL: (2) * 97.5; WBLX-FM: (2) * 92.9

--- 382.8 MHz --- Order = 4
WDLT-FM: (1) * 104.1; WBLX-FM: (3) * 92.9

--- 385.4 MHz --- Order = 4
WABD.AXL: (3) * 97.5; WBLX-FM: (1) * 92.9

--- 387.4 MHz --- Order = 4
WDLT-FM: (1) * 104.1; WABD.AXL: (1) * 97.5; WBLX-FM: (2) * 92.9

--- 390.0 MHz --- Order = 4
WABD.AXL: (4) * 97.5

--- 392.0 MHz --- Order = 4
WDLT-FM: (1) * 104.1; WABD.AXL: (2) * 97.5; WBLX-FM: (1) * 92.9

--- 394.0 MHz --- Order = 4
WDLT-FM: (2) * 104.1; WBLX-FM: (2) * 92.9

--- 396.6 MHz --- Order = 4
WDLT-FM: (1) * 104.1; WABD.AXL: (3) * 97.5

--- 398.6 MHz --- Order = 4
WDLT-FM: (2) * 104.1; WABD.AXL: (1) * 97.5; WBLX-FM: (1) * 92.9

--- 403.2 MHz --- Order = 4
WDLT-FM: (2) * 104.1; WABD.AXL: (2) * 97.5

--- 405.2 MHz --- Order = 4
WDLT-FM: (3) * 104.1; WBLX-FM: (1) * 92.9

--- 409.8 MHz --- Order = 4
WDLT-FM: (3) * 104.1; WABD.AXL: (1) * 97.5

--- 416.4 MHz --- Order = 4
WDLT-FM: (4) * 104.1

--- 70.5 MHz --- Order = 5
WDLT-FM: (-2) * 104.1; WBLX-FM: (3) * 92.9

--- 75.1 MHz --- Order = 5
WDLT-FM: (-2) * 104.1; WABD.AXL: (1) * 97.5; WBLX-FM: (2) * 92.9

--- 77.1 MHz --- Order = 5
WDLT-FM: (-1) * 104.1; WABD.AXL: (-1) * 97.5; WBLX-FM: (3) * 92.9

--- 79.7 MHz --- Order = 5
WDLT-FM: (-2) * 104.1; WABD.AXL: (2) * 97.5; WBLX-FM: (1) * 92.9

--- 83.7 MHz --- Order = 5
WABD.AXL: (-2) * 97.5; WBLX-FM: (3) * 92.9

--- 84.3 MHz --- Order = 5
WDLT-FM: (-2) * 104.1; WABD.AXL: (3) * 97.5

--- 94.9 MHz --- Order = 5
WDLT-FM: (1) * 104.1; WABD.AXL: (-2) * 97.5; WBLX-FM: (2) * 92.9

--- 95.5 MHz --- Order = 5
WDLT-FM: (-1) * 104.1; WABD.AXL: (3) * 97.5; WBLX-FM: (-1) * 92.9

--- 106.1 MHz --- Order = 5
WDLT-FM: (2) * 104.1; WABD.AXL: (-2) * 97.5; WBLX-FM: (1) * 92.9

--- 106.7 MHz --- Order = 5
WABD.AXL: (3) * 97.5; WBLX-FM: (-2) * 92.9

--- 113.3 MHz --- Order = 5
WDLT-FM: (1) * 104.1; WABD.AXL: (2) * 97.5; WBLX-FM: (-2) * 92.9

--- 117.3 MHz --- Order = 5
WDLT-FM: (3) * 104.1; WABD.AXL: (-2) * 97.5

--- 119.9 MHz --- Order = 5
WDLT-FM: (2) * 104.1; WABD.AXL: (1) * 97.5; WBLX-FM: (-2) * 92.9

--- 121.9 MHz --- Order = 5
WDLT-FM: (3) * 104.1; WABD.AXL: (-1) * 97.5; WBLX-FM: (-1) * 92.9

--- 126.5 MHz --- Order = 5
WDLT-FM: (3) * 104.1; WBLX-FM: (-2) * 92.9

--- 267.5 MHz --- Order = 5
WDLT-FM: (-1) * 104.1; WBLX-FM: (4) * 92.9

--- 272.1 MHz --- Order = 5
WDLT-FM: (-1) * 104.1; WABD.AXL: (1) * 97.5; WBLX-FM: (3) * 92.9

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--- 274.1 MHz --- Order = 5
WABD.AXL: (-1) * 97.5; WBLX-FM: (4) * 92.9

--- 276.7 MHz --- Order = 5
WDLT-FM: (-1) * 104.1; WABD.AXL: (2) * 97.5; WBLX-FM: (2) * 92.9

--- 281.3 MHz --- Order = 5
WDLT-FM: (-1) * 104.1; WABD.AXL: (3) * 97.5; WBLX-FM: (1) * 92.9

--- 285.3 MHz --- Order = 5
WDLT-FM: (1) * 104.1; WABD.AXL: (-1) * 97.5; WBLX-FM: (3) * 92.9

--- 285.9 MHz --- Order = 5
WDLT-FM: (-1) * 104.1; WABD.AXL: (4) * 97.5

--- 296.5 MHz --- Order = 5
WDLT-FM: (2) * 104.1; WABD.AXL: (-1) * 97.5; WBLX-FM: (2) * 92.9

--- 297.1 MHz --- Order = 5
WABD.AXL: (4) * 97.5; WBLX-FM: (-1) * 92.9

--- 303.7 MHz --- Order = 5
WDLT-FM: (1) * 104.1; WABD.AXL: (3) * 97.5; WBLX-FM: (-1) * 92.9

--- 307.7 MHz --- Order = 5
WDLT-FM: (3) * 104.1; WABD.AXL: (-1) * 97.5; WBLX-FM: (1) * 92.9

--- 310.3 MHz --- Order = 5
WDLT-FM: (2) * 104.1; WABD.AXL: (2) * 97.5; WBLX-FM: (-1) * 92.9

--- 316.9 MHz --- Order = 5
WDLT-FM: (3) * 104.1; WABD.AXL: (1) * 97.5; WBLX-FM: (-1) * 92.9

--- 318.9 MHz --- Order = 5
WDLT-FM: (4) * 104.1; WABD.AXL: (-1) * 97.5

--- 323.5 MHz --- Order = 5
WDLT-FM: (4) * 104.1; WBLX-FM: (-1) * 92.9

--- 464.5 MHz --- Order = 5
WBLX-FM: (5) * 92.9

--- 469.1 MHz --- Order = 5
WABD.AXL: (1) * 97.5; WBLX-FM: (4) * 92.9

--- 473.7 MHz --- Order = 5
WABD.AXL: (2) * 97.5; WBLX-FM: (3) * 92.9

--- 475.7 MHz --- Order = 5
WDLT-FM: (1) * 104.1; WBLX-FM: (4) * 92.9

--- 478.3 MHz --- Order = 5
WABD.AXL: (3) * 97.5; WBLX-FM: (2) * 92.9

--- 480.3 MHz --- Order = 5
WDLT-FM: (1) * 104.1; WABD.AXL: (1) * 97.5; WBLX-FM: (3) * 92.9

--- 482.9 MHz --- Order = 5
WABD.AXL: (4) * 97.5; WBLX-FM: (1) * 92.9

--- 484.9 MHz --- Order = 5
WDLT-FM: (1) * 104.1; WABD.AXL: (2) * 97.5; WBLX-FM: (2) * 92.9

--- 486.9 MHz --- Order = 5
WDLT-FM: (2) * 104.1; WBLX-FM: (3) * 92.9

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--- 487.5 MHz --- Order = 5
WABD.AXL: (5) * 97.5

--- 489.5 MHz --- Order = 5
WDLT-FM: (1) * 104.1; WABD.AXL: (3) * 97.5; WBLX-FM: (1) * 92.9

--- 491.5 MHz --- Order = 5
WDLT-FM: (2) * 104.1; WABD.AXL: (1) * 97.5; WBLX-FM: (2) * 92.9

--- 494.1 MHz --- Order = 5
WDLT-FM: (1) * 104.1; WABD.AXL: (4) * 97.5

--- 496.1 MHz --- Order = 5
WDLT-FM: (2) * 104.1; WABD.AXL: (2) * 97.5; WBLX-FM: (1) * 92.9

--- 498.1 MHz --- Order = 5
WDLT-FM: (3) * 104.1; WBLX-FM: (2) * 92.9

--- 500.7 MHz --- Order = 5
WDLT-FM: (2) * 104.1; WABD.AXL: (3) * 97.5

--- 502.7 MHz --- Order = 5
WDLT-FM: (3) * 104.1; WABD.AXL: (1) * 97.5; WBLX-FM: (1) * 92.9

--- 507.3 MHz --- Order = 5
WDLT-FM: (3) * 104.1; WABD.AXL: (2) * 97.5

--- 509.3 MHz --- Order = 5
WDLT-FM: (4) * 104.1; WBLX-FM: (1) * 92.9

--- 513.9 MHz --- Order = 5
WDLT-FM: (4) * 104.1; WABD.AXL: (1) * 97.5

--- 520.5 MHz --- Order = 5
WDLT-FM: (5) * 104.1