



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

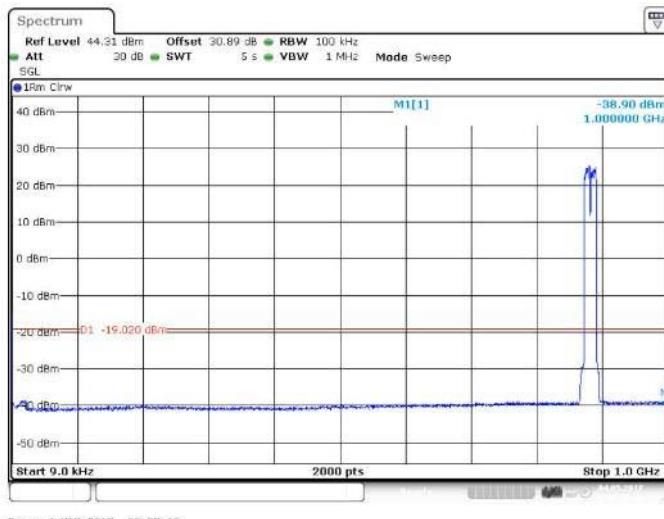


Figure 394 Spurious Emissions (9kHz – 1GHz) – 16QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)

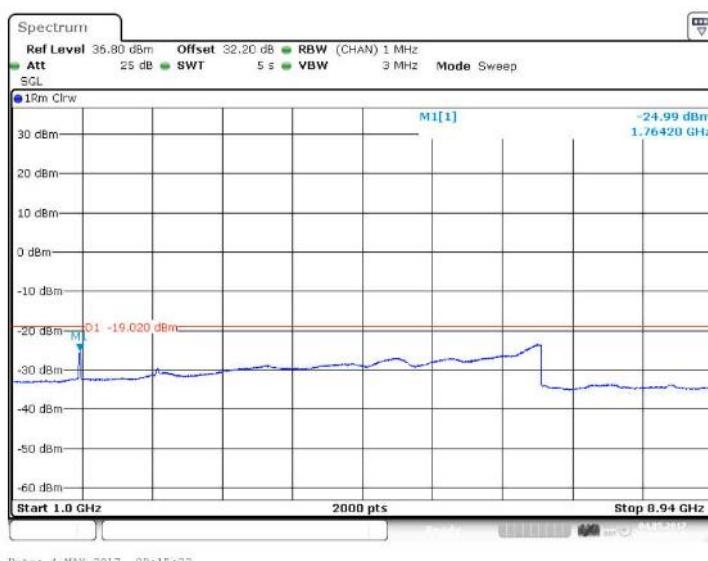


Figure 395 Spurious Emissions (1 GHz – 8.94 GHz) – 16QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

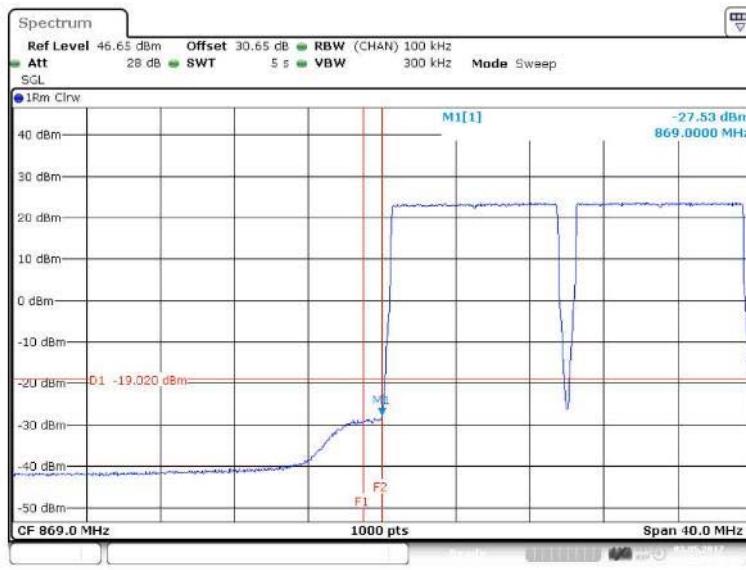


Figure 396 Spurious Emissions (Lower Band Edge) – 64QAM (874 MHz, 884, 2 X 5 MHz Channel BW)

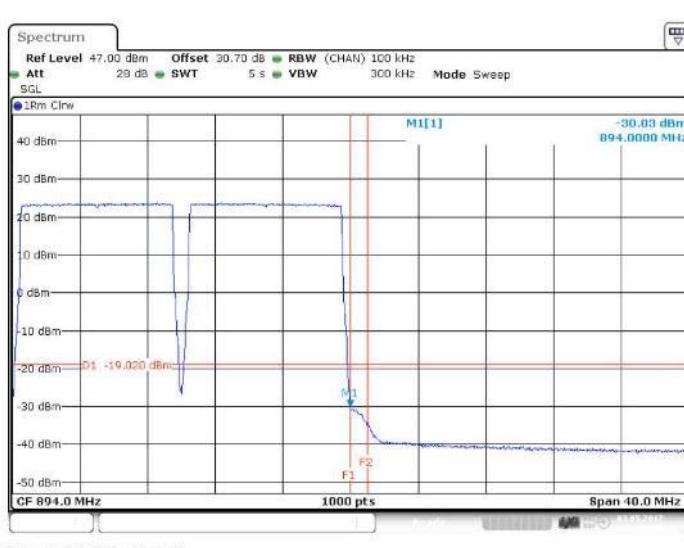


Figure 397 Spurious Emissions (Upper Band Edge) – 64QAM (879,0 MHz, 889.0 MHz, 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

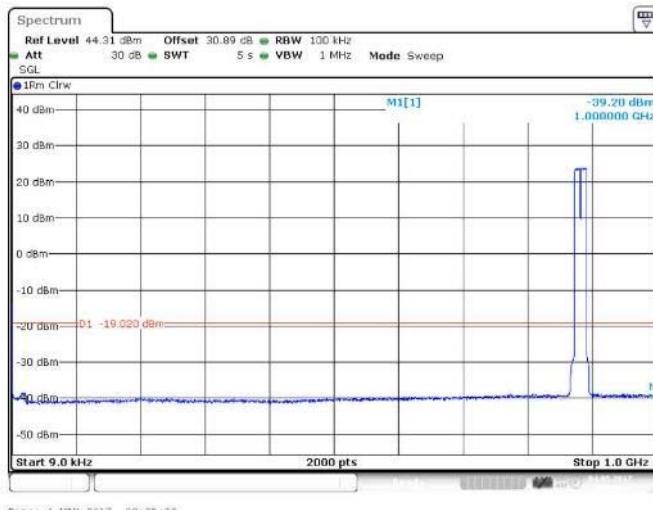


Figure 398 Spurious Emissions (9kHz – 1GHz) – 64QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)

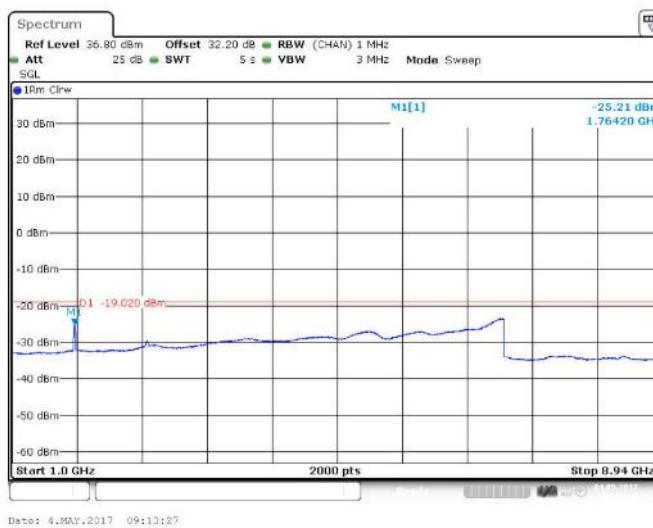


Figure 399 Spurious Emissions (1 GHz – 8.94 GHz) 64QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

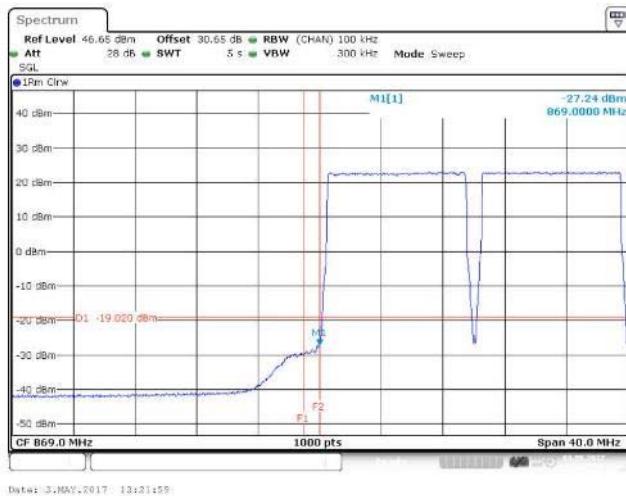


Figure 400 Spurious Emissions (Lower Band Edge) – 256QAM (874 MHz, 884, 2 X 5 MHz Channel BW)

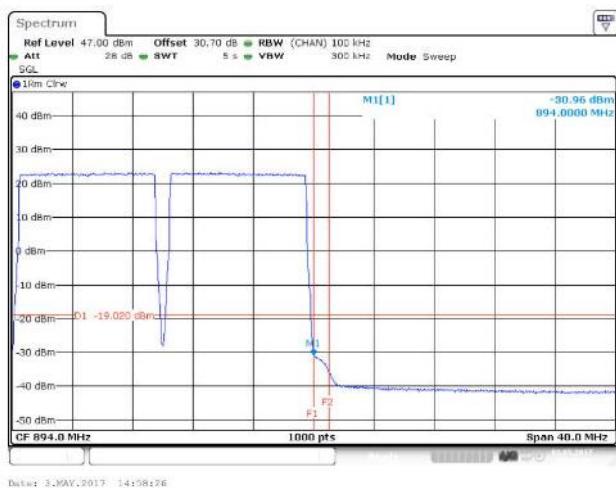


Figure 401 Spurious Emissions (Upper Band Edge) – 256QAM QPSK (879,0 MHz, 889.0 MHz, 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

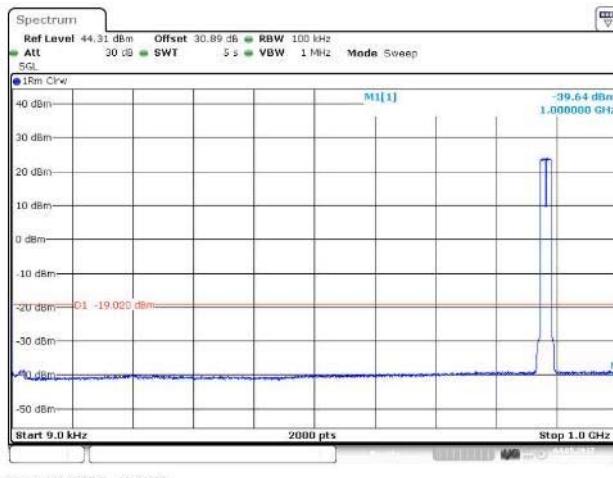


Figure 402 Spurious Emissions (9kHz – 1GHz) – 256QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)



Figure 403 Spurious Emissions (1 GHz – 8.94 GHz) – 256QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

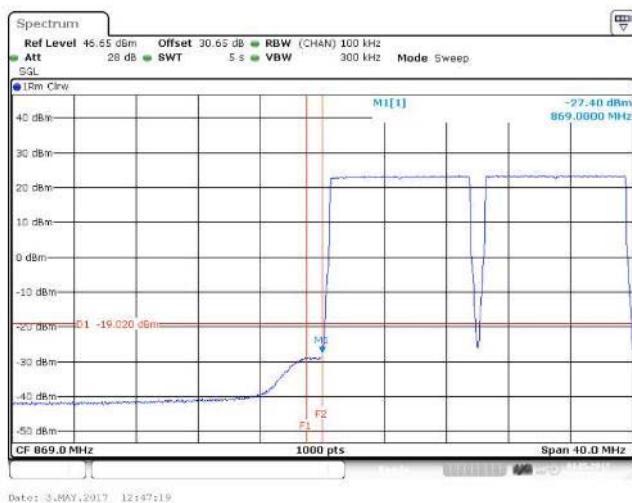
Config E ANT2:

Figure 404 Spurious Emissions (Lower Band Edge) – QPSK (874 MHz, 884, 2 X 5 MHz Channel BW)

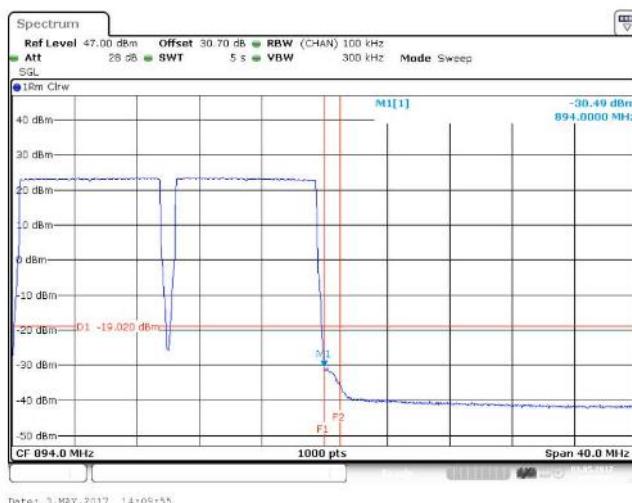


Figure 405 Spurious Emissions (Upper Band Edge) – QPSK (879,0 MHz, 889.0 MHz, 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

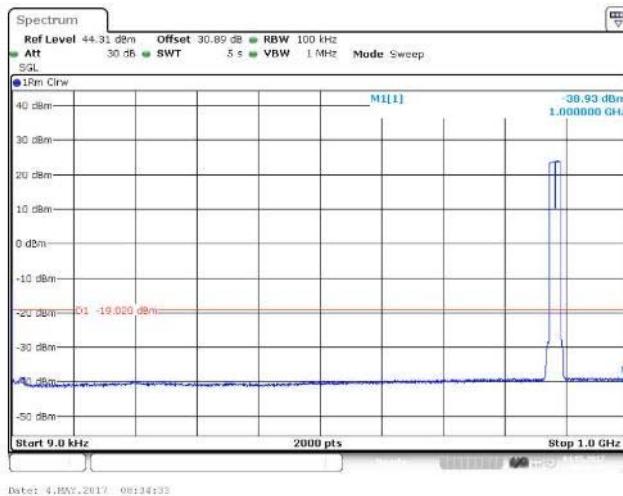


Figure 406 Spurious Emissions (9kHz – 1GHz) – QPSK (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)

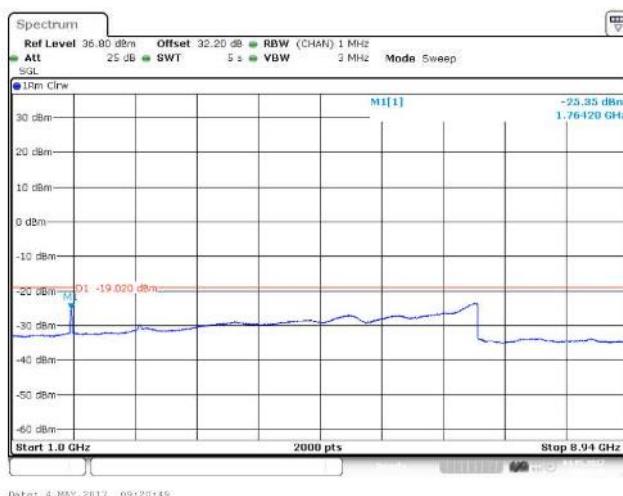


Figure 407 Spurious Emissions (1 GHz – 8.94 GHz) – QPSK (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

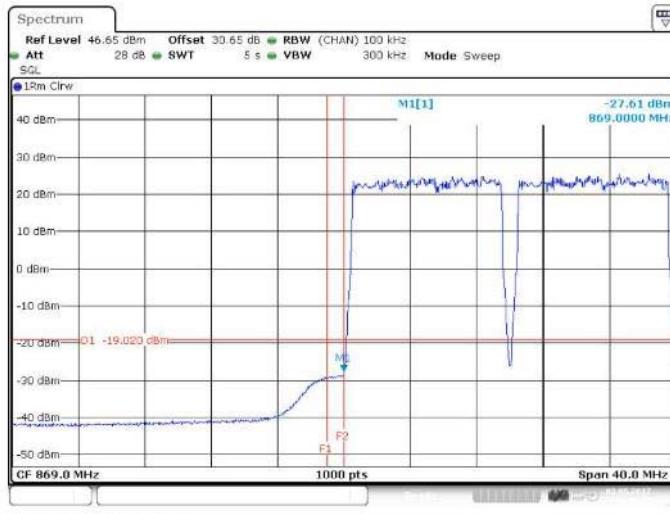


Figure 408 Spurious Emissions (Lower Band Edge) – 16QAM (874 MHz, 884, 2 X 5 MHz Channel BW)

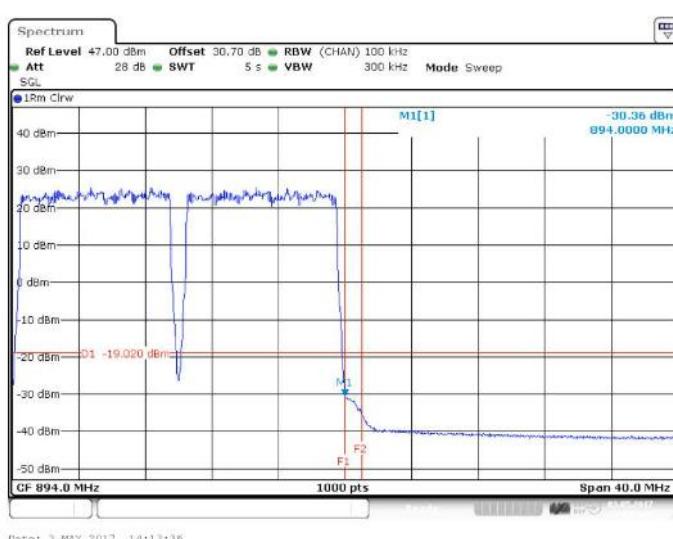


Figure 409 Spurious Emissions (Upper Band Edge) 16QAM (879,0 MHz, 889.0 MHz, 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

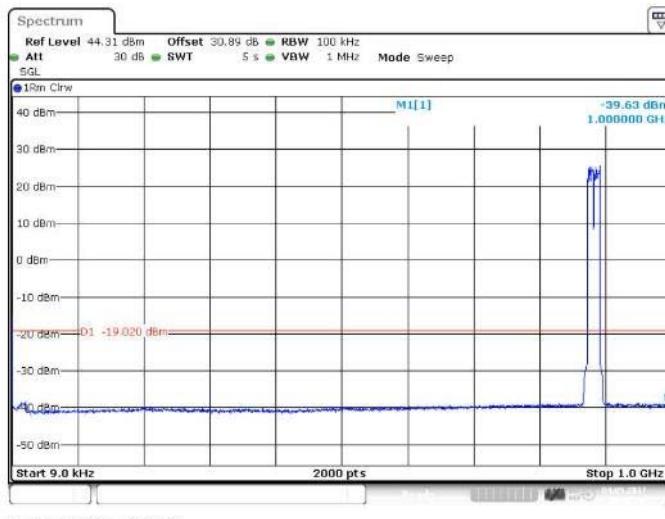


Figure 410 Spurious Emissions (9kHz – 1GHz) – 16QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)

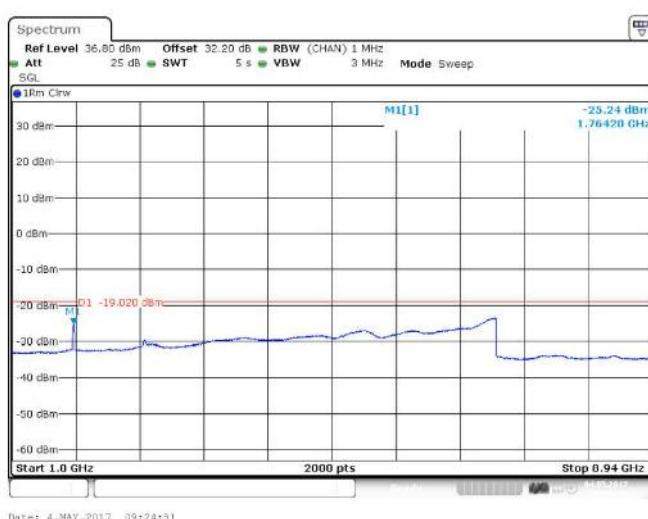


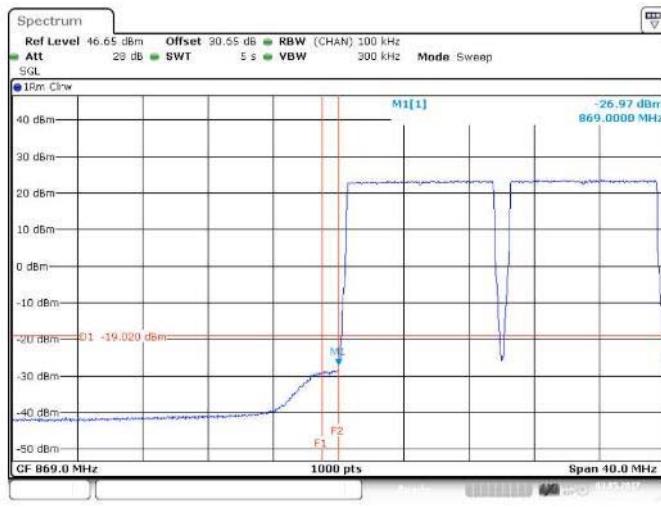
Figure 411 Spurious Emissions (1 GHz – 8.94 GHz) – 16QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736



Date: 3.MAY.2017 12:49:01

Figure 412 Spurious Emissions (Lower Band Edge) – 64QAM (874 MHz, 884, 2 X 5 MHz Channel BW)



Date: 3.MAY.2017 14:12:02

Figure 413 Spurious Emissions (Upper Band Edge) – 64QAM (879,0 MHz, 889,0 MHz, 2 X 5 MHz Channel BW)

FCC 47 CFR part 22
(2016)

23. May 2017

Page 297 of 427



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

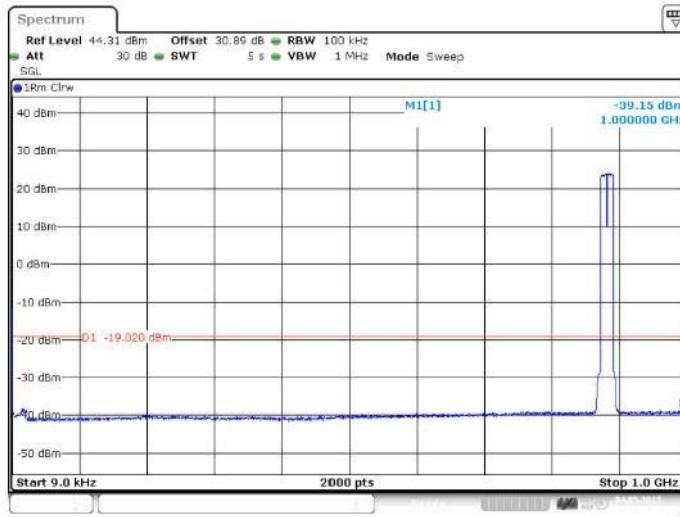


Figure 414 Spurious Emissions (9kHz – 1GHz) – 64QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)

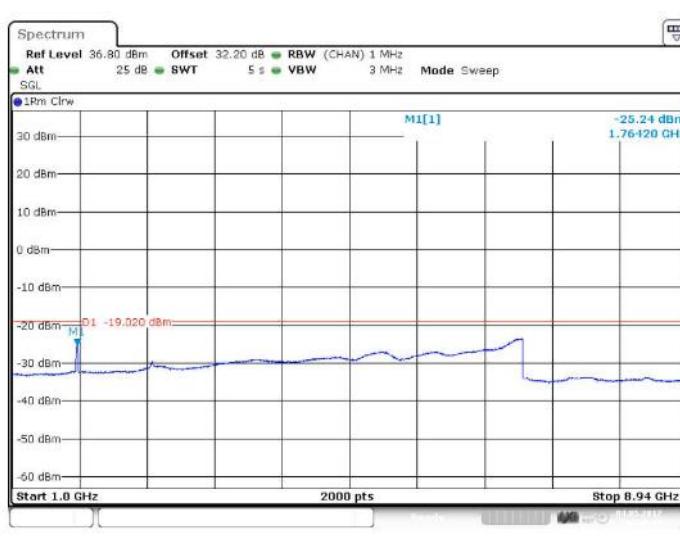


Figure 415 Spurious Emissions (1 GHz – 8.94 GHz) 64QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

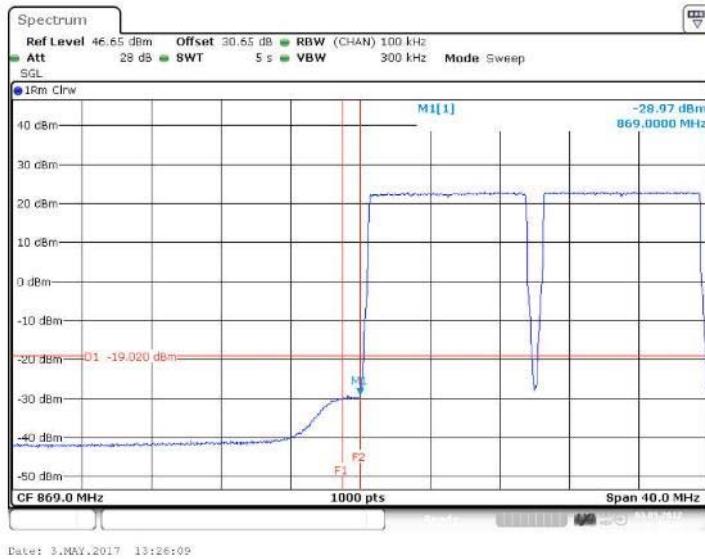


Figure 416 Spurious Emissions (Lower Band Edge) – 256QAM (874 MHz, 884, 2 X 5 MHz Channel BW)

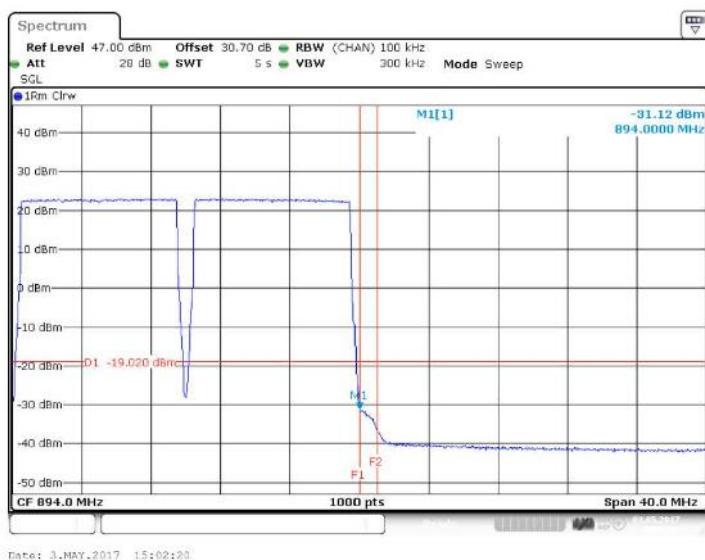


Figure 417 Spurious Emissions (Upper Band Edge) – 256QAM QPSK (879,0 MHz, 889.0 MHz, 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

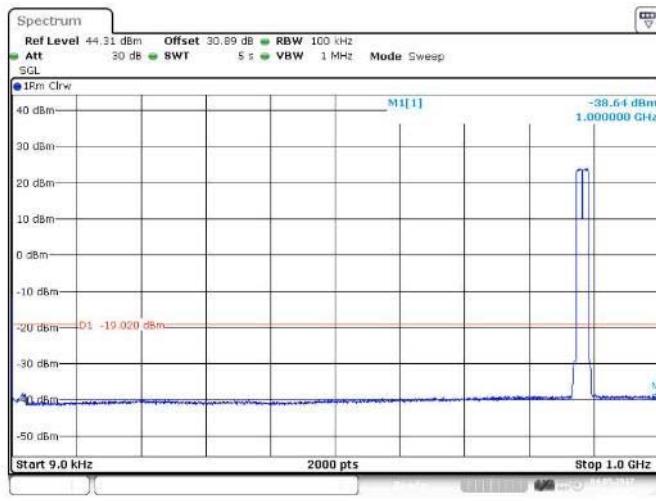


Figure 418 Spurious Emissions (9kHz – 1GHz) – 256QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)

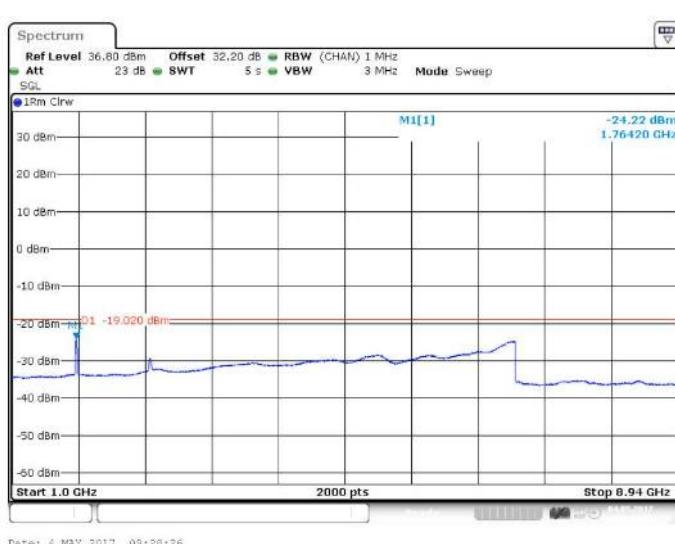


Figure 419 Spurious Emissions (1 GHz – 8.94 GHz) – 256QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

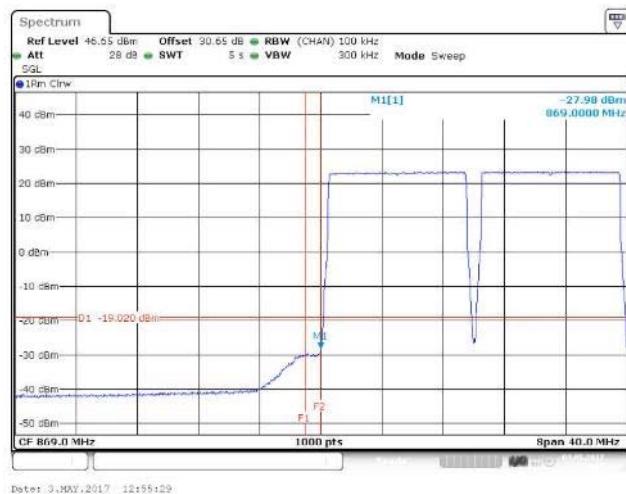
Config E ANT3:

Figure 420 Spurious Emissions (Lower Band Edge) – QPSK (874 MHz, 884, 2 X 5 MHz Channel BW)

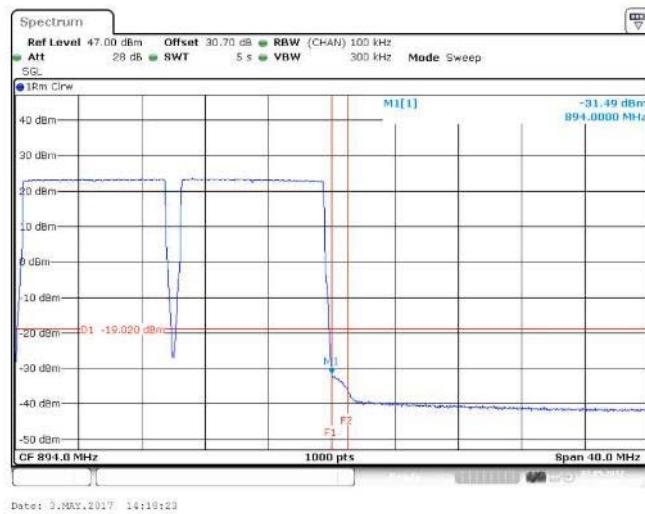


Figure 421 Spurious Emissions (Upper Band Edge) – QPSK (879,0 MHz, 889.0 MHz, 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

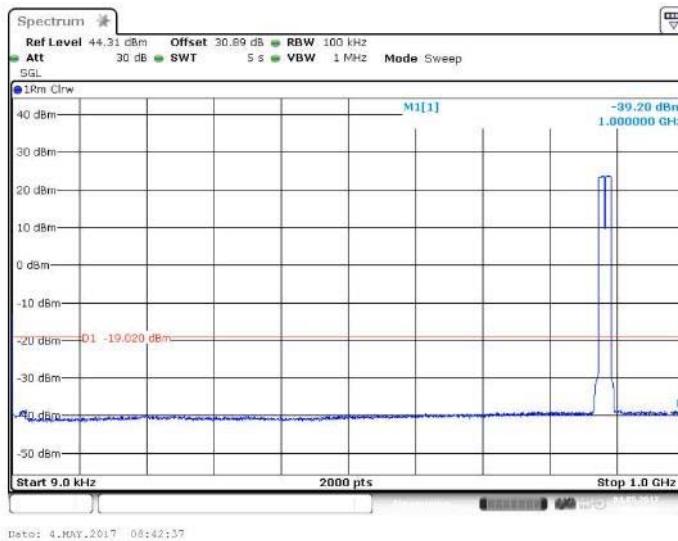


Figure 422 Spurious Emissions (9kHz – 1GHz) – QPSK (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)

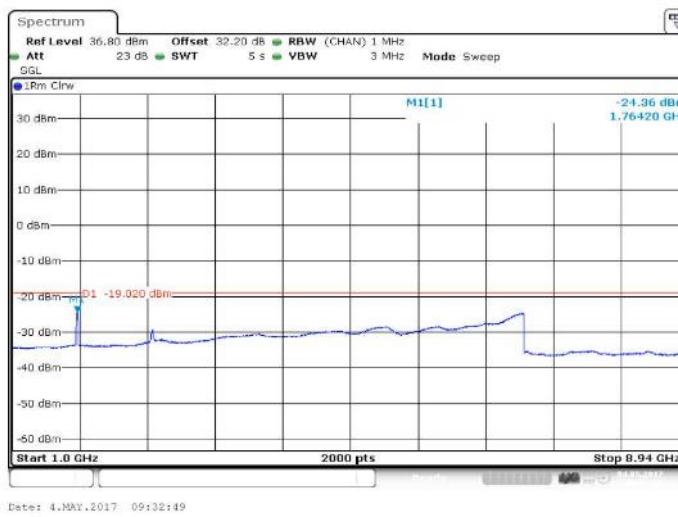


Figure 423 Spurious Emissions (1 GHz – 8.94 GHz) – QPSK (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

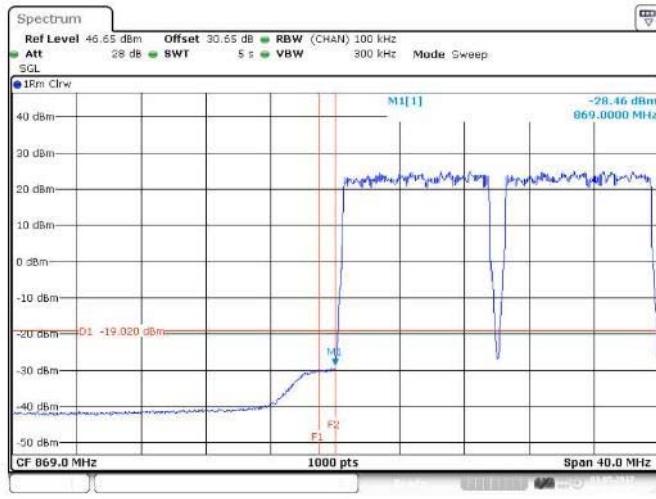


Figure 424 Spurious Emissions (Lower Band Edge) – 16QAM (874 MHz, 884, 2 X 5 MHz Channel BW)

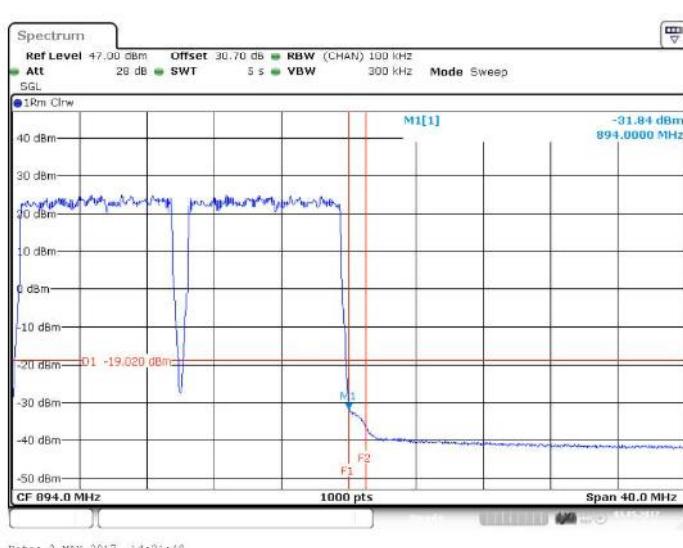


Figure 425 Spurious Emissions (Upper Band Edge) 16QAM (879,0 MHz, 889.0 MHz, 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

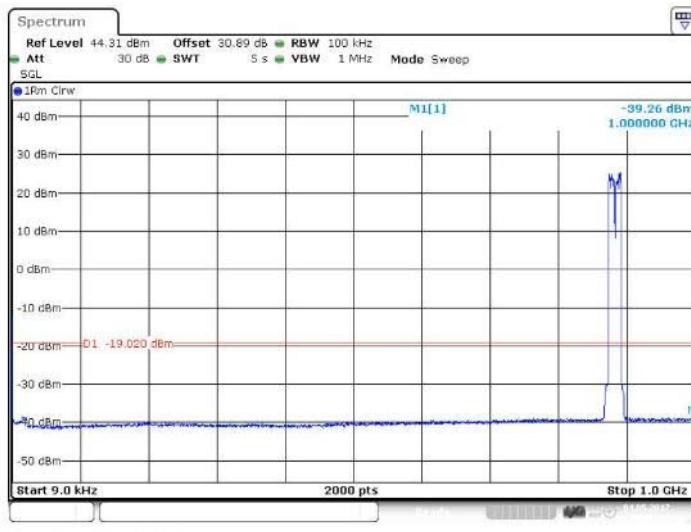


Figure 426 Spurious Emissions (9kHz – 1GHz) – 16QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)

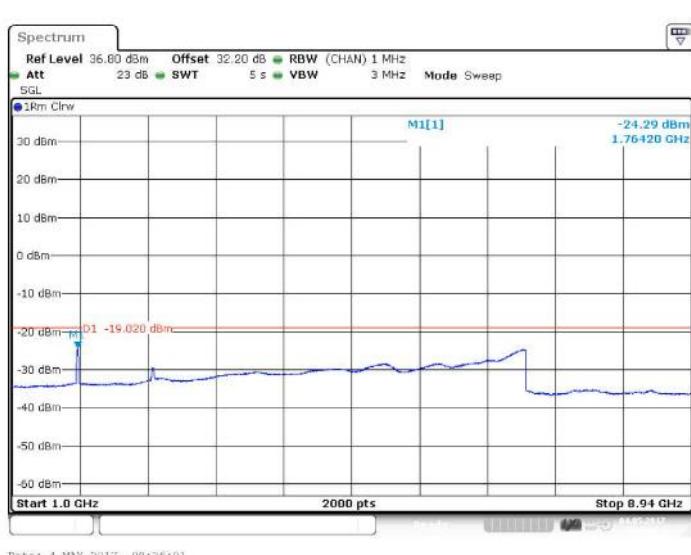


Figure 427 Spurious Emissions (1 GHz – 8.94 GHz) – 16QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

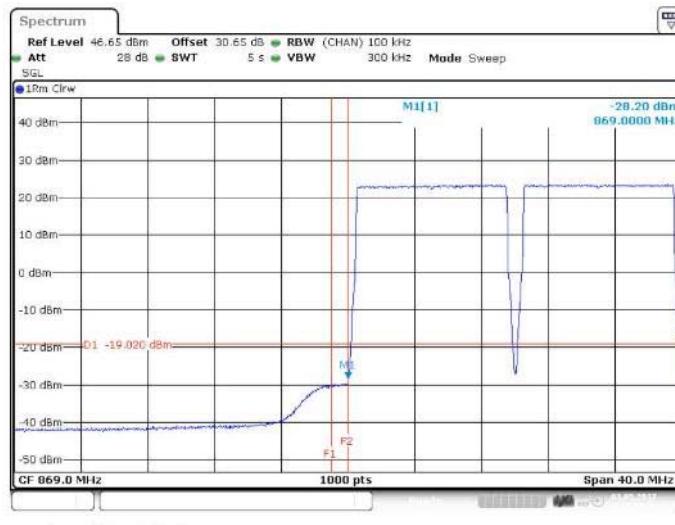


Figure 428 Spurious Emissions (Lower Band Edge) – 64QAM (874 MHz, 884, 2 X 5 MHz Channel BW)

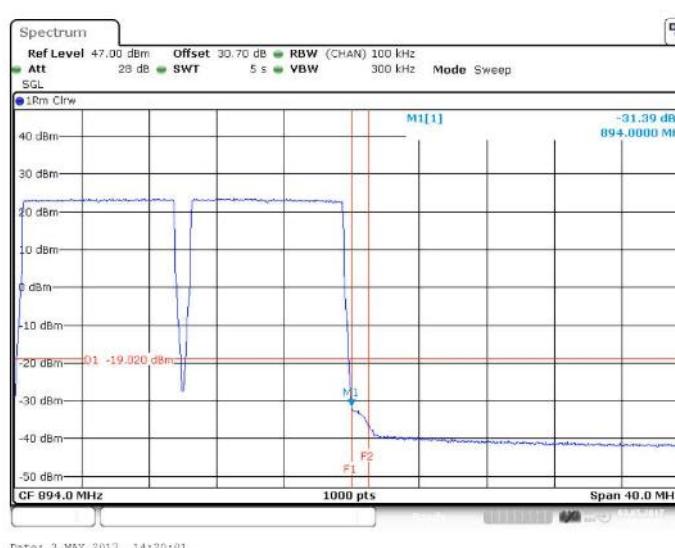


Figure 429 Spurious Emissions (Upper Band Edge) – 64QAM (879,0 MHz, 889,0 MHz, 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

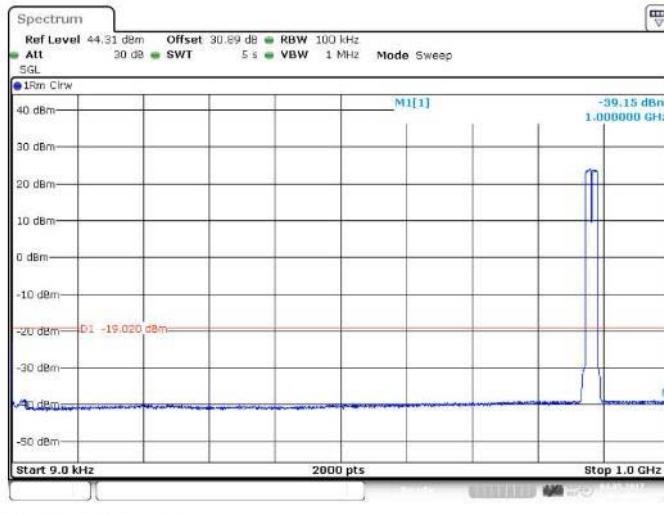


Figure 430 Spurious Emissions (9kHz – 1GHz) – 64QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)

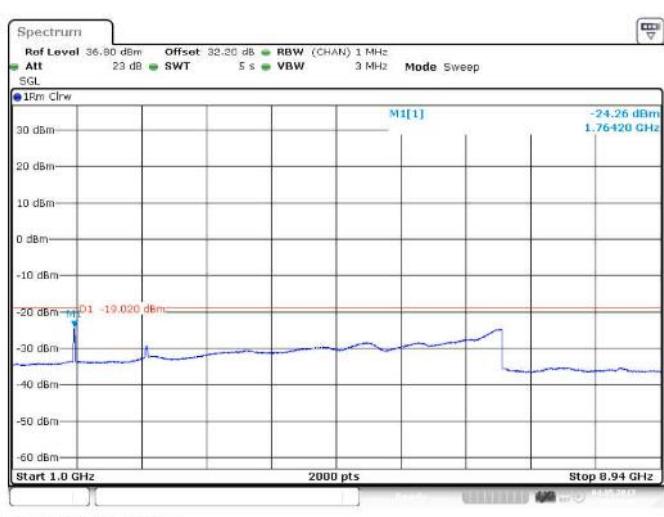


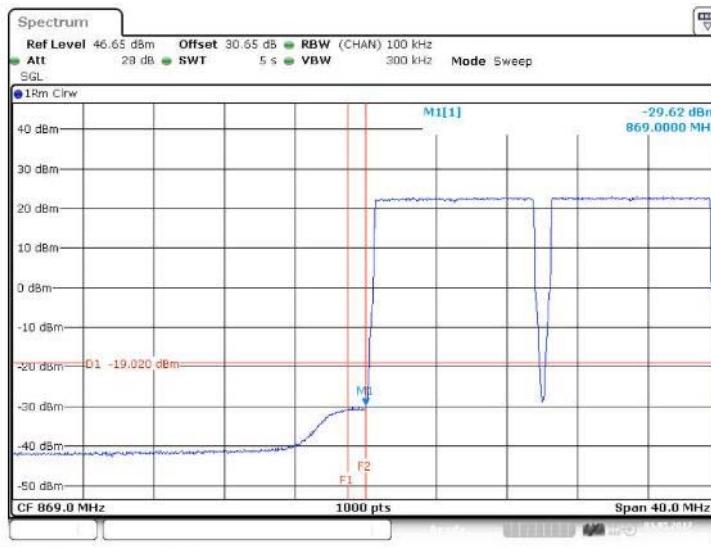
Figure 431 Spurious Emissions (1 GHz – 8.94 GHz) 64QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736



Date: 3.MAY.2017 13:29:59

Figure 432 Spurious Emissions (Lower Band Edge) – 256QAM (874 MHz, 884, 2 X 5 MHz Channel BW)



Date: 3.MAY.2017 15:05:45

Figure 433 Spurious Emissions (Upper Band Edge) – 256QAM QPSK (879,0 MHz, 889.0 MHz, 2 X 5 MHz Channel BW)

FCC 47 CFR part 22
(2016)

23. May 2017

Page 307 of 427



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

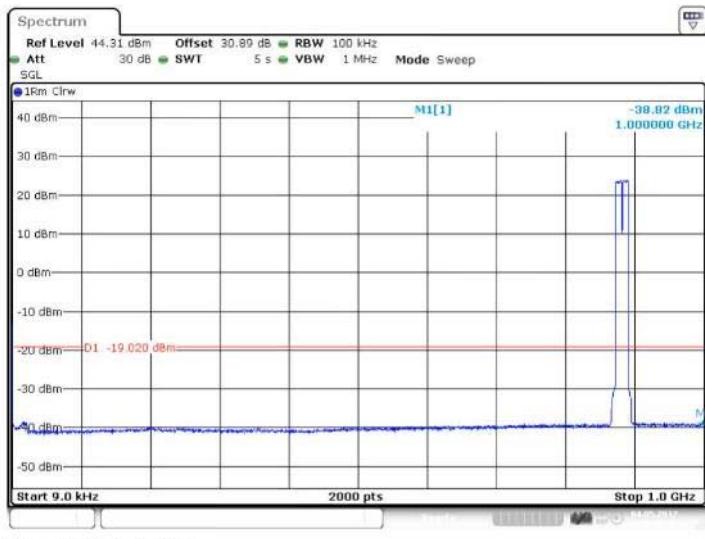


Figure 434 Spurious Emissions (9kHz – 1GHz) – 256QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)

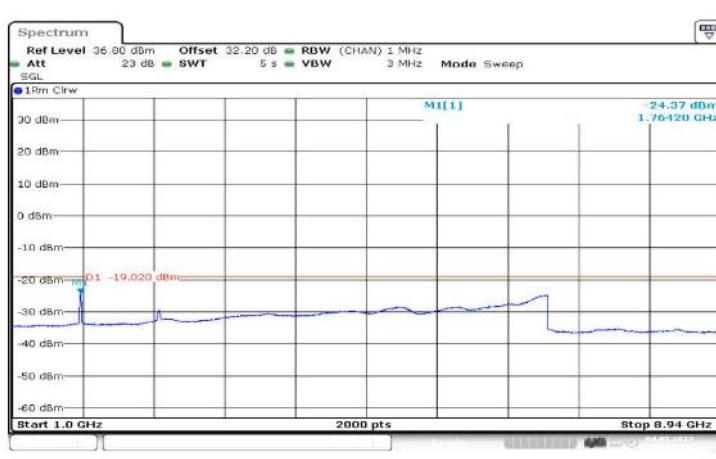


Figure 435 Spurious Emissions (1 GHz – 8.94 GHz) – 256QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

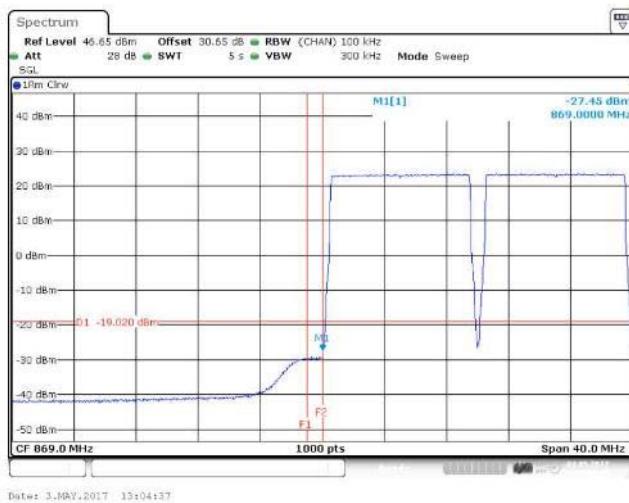
Config E ANT4:

Figure 436 Spurious Emissions (Lower Band Edge) – QPSK (874 MHz, 884, 2 X 5 MHz Channel BW)

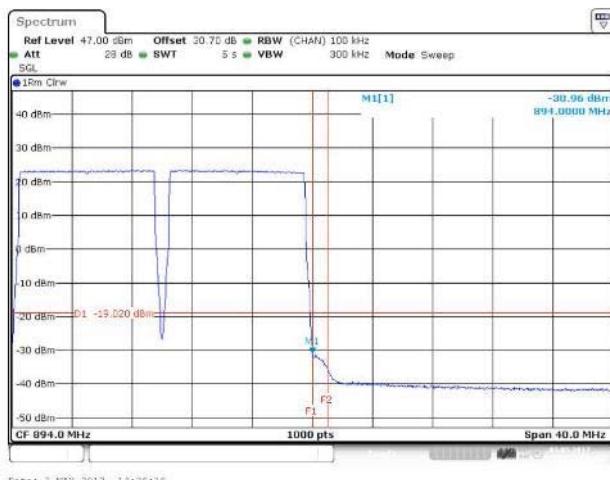


Figure 437 Spurious Emissions (Upper Band Edge) – QPSK (879,0 MHz, 889.0 MHz, 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

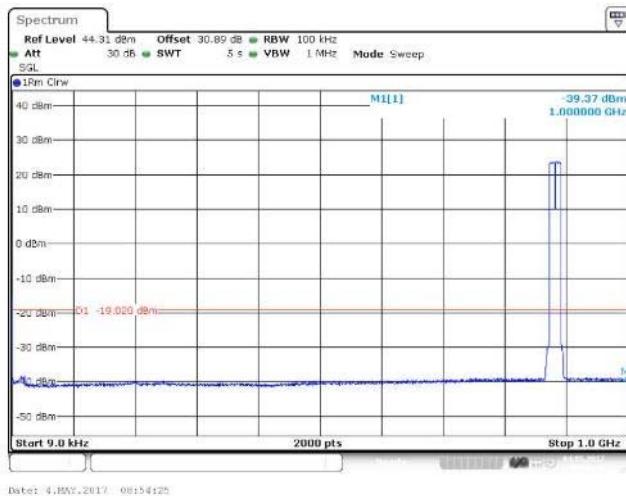


Figure 438 Spurious Emissions (9kHz – 1GHz) – QPSK (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)

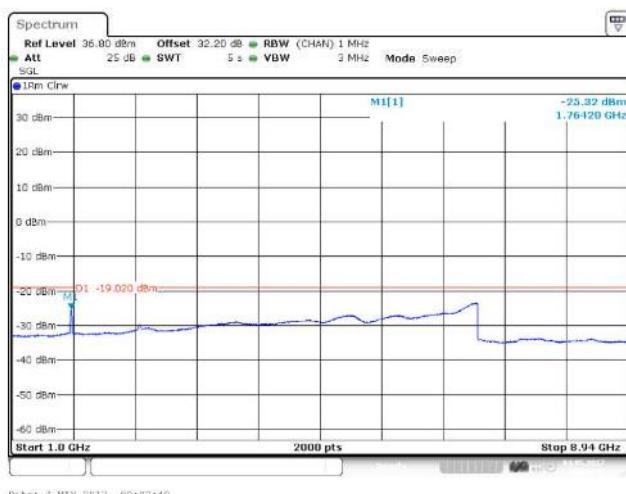


Figure 439 Spurious Emissions (1 GHz – 8.94 GHz) – QPSK (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

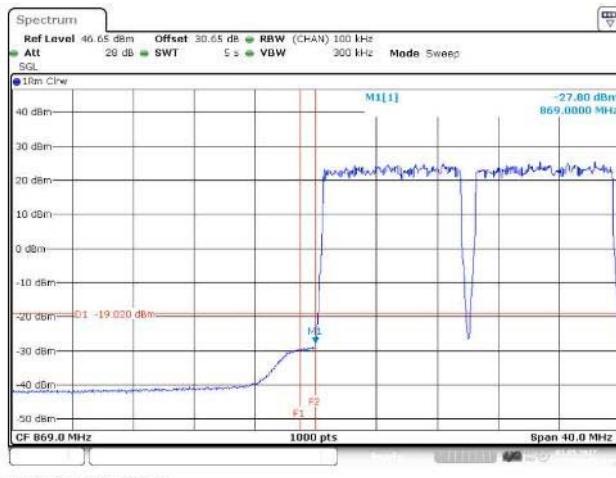


Figure 440 Spurious Emissions (Lower Band Edge) – 16QAM (874 MHz, 884, 2 X 5 MHz Channel BW)

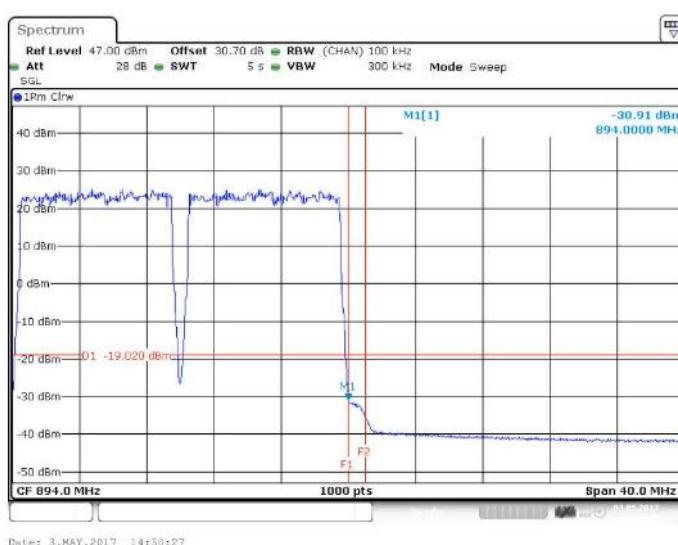


Figure 441 Spurious Emissions (Upper Band Edge) 16QAM (879,0 MHz, 889.0 MHz, 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

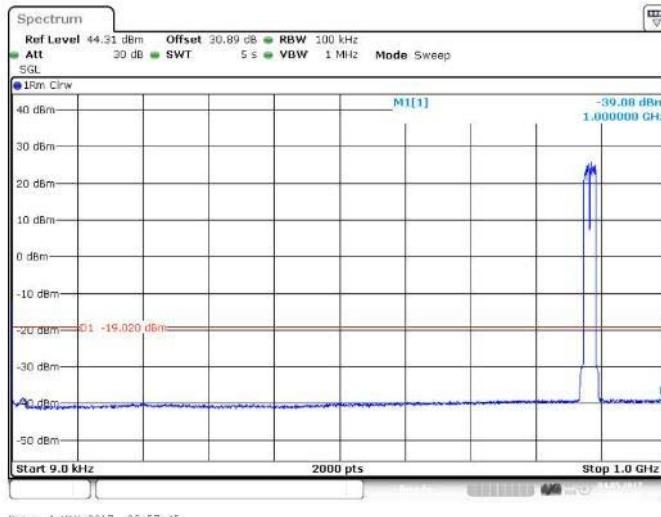


Figure 442 Spurious Emissions (9kHz – 1GHz) – 16QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)

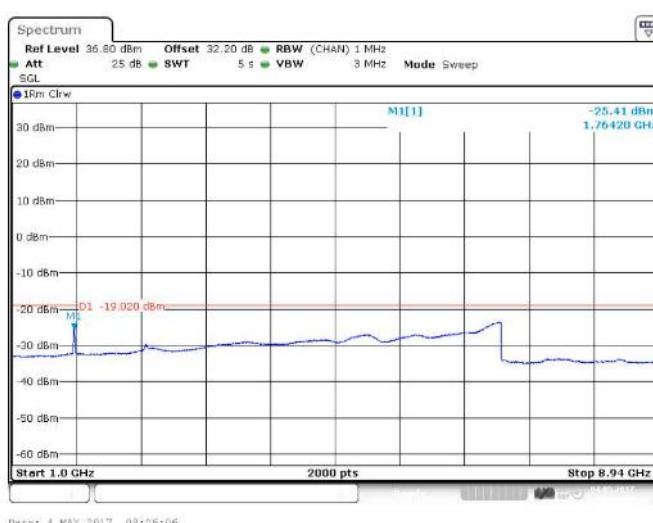


Figure 443 Spurious Emissions (1 GHz – 8.94 GHz) – 16QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

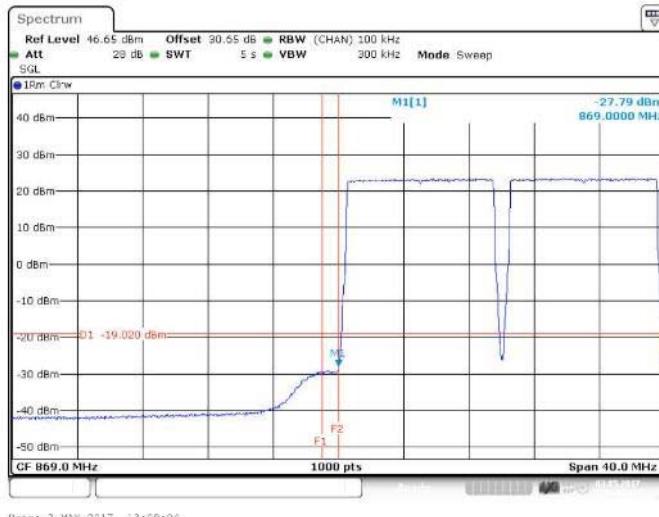


Figure 444 Spurious Emissions (Lower Band Edge) – 64QAM (874 MHz, 884, 2 X 5 MHz Channel BW)

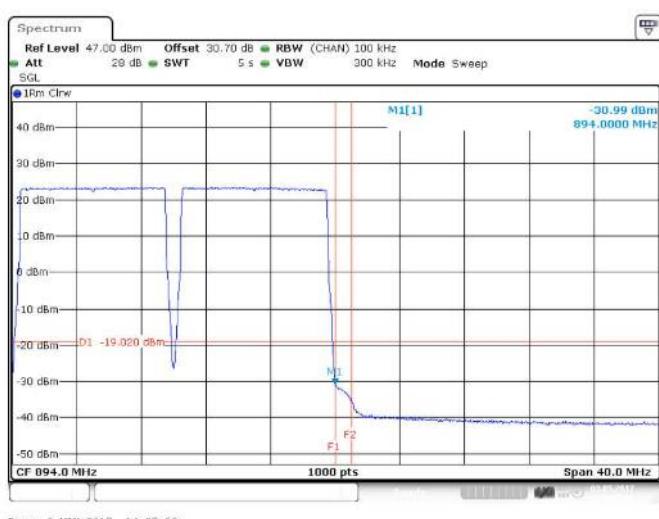


Figure 445 Spurious Emissions (Upper Band Edge) – 64QAM (879,0 MHz, 889,0 MHz, 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

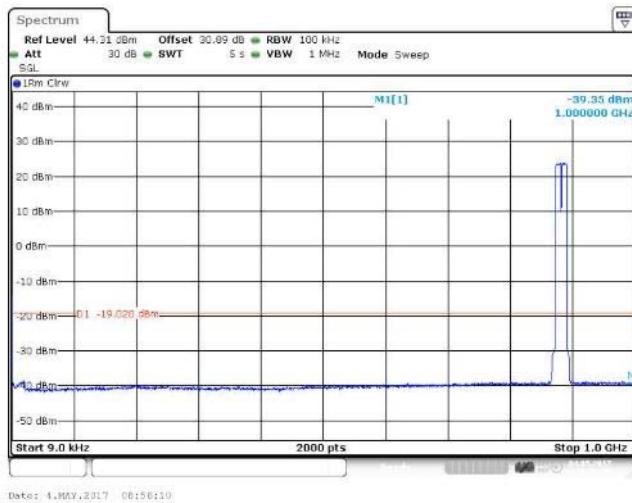


Figure 446 Spurious Emissions (9kHz – 1GHz) – 64QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)

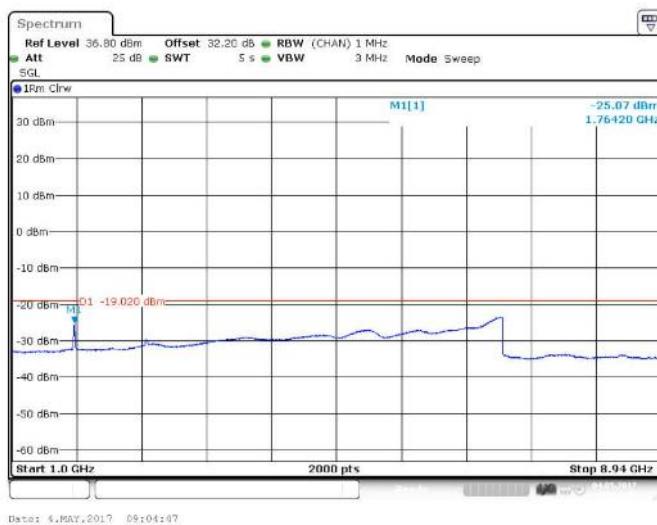


Figure 447 Spurious Emissions (1 GHz – 8.94 GHz) 64QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

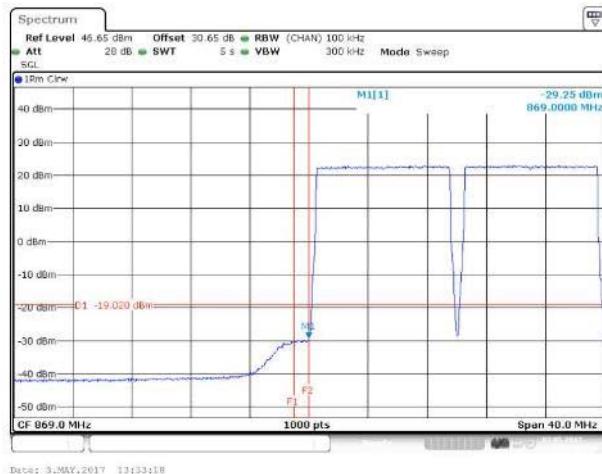


Figure 448 Spurious Emissions (Lower Band Edge) – 256QAM (874 MHz, 884, 2 X 5 MHz Channel BW)

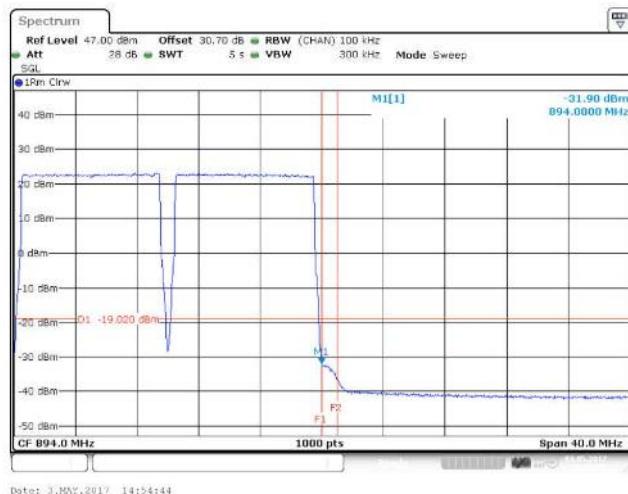


Figure 449 Spurious Emissions (Upper Band Edge) – 256QAM QPSK (879,0 MHz, 889.0 MHz, 2 X 5 MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

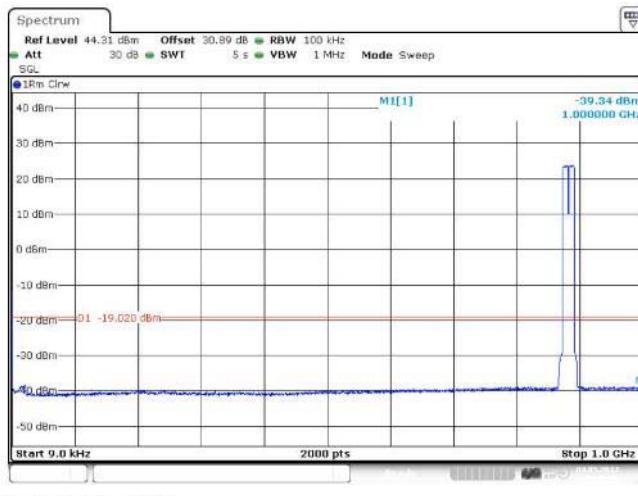


Figure 450 Spurious Emissions (9kHz – 1GHz) – 256QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)

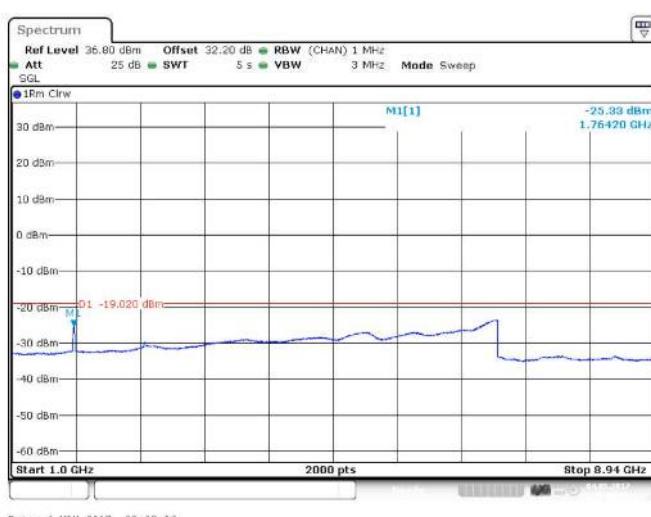


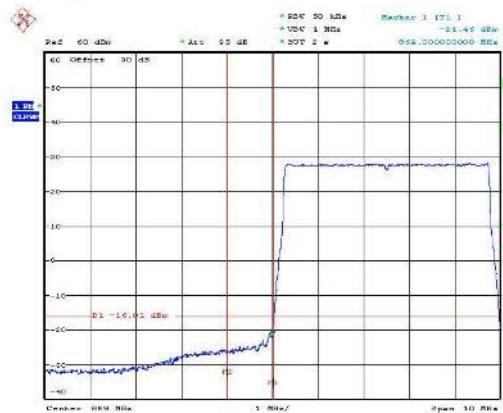
Figure 451 Spurious Emissions (1 GHz – 8.94 GHz) – 256QAM (876.5 MHz, 886.5 MHz 2 X 5 MHz Channel BW)



Product Service

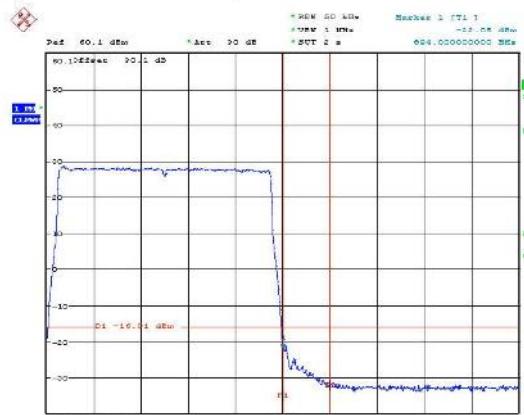
FCC ID:
VBNAHCA-01

Test Report No:
D555647736

Config F ANT1:

Date: 31.APR.2017 13:33:05

Figure 452 Spurious Emissions (Lower Band Edge) – QPSK (871.5 MHz) (5MHz Channel BW)



Date: 26.APR.2017 14:55:06

Figure 453 Spurious Emissions (Upper Band Edge) – QPSK (891.5 MHz) (5MHz Channel BW)



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736

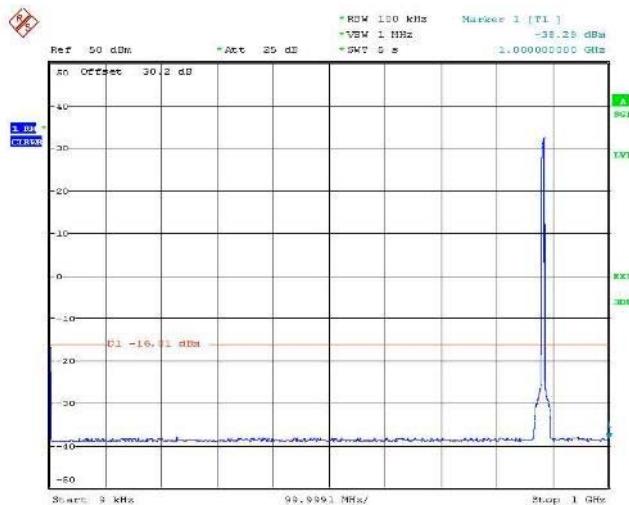


Figure 454 Spurious Emissions (9kHz – 1GHz) - QPSK (881.5 MHz) (5MHz Channel BW)



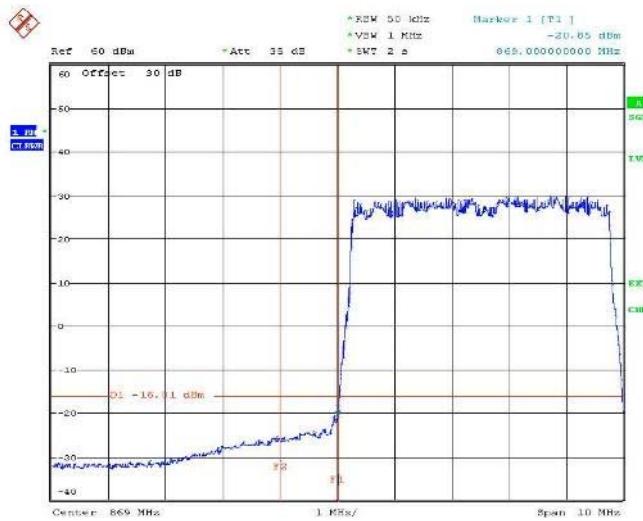
Figure 455 Spurious Emissions (1GHz – 8.94GHz) – QPSK (881.5 MHz) (5MHz Channel BW)



Product Service

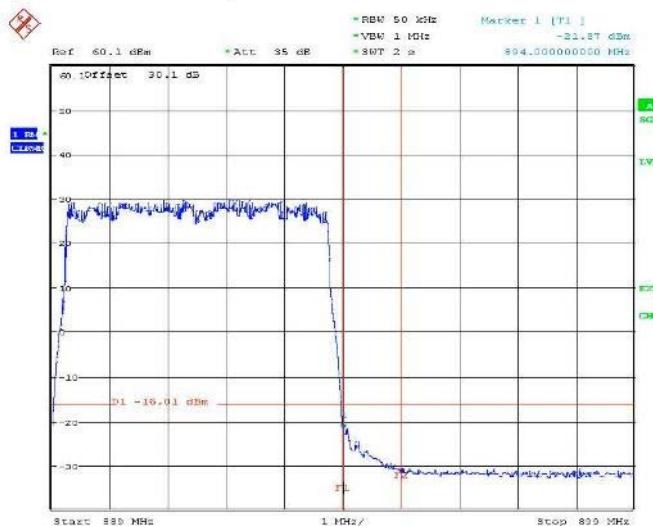
FCC ID:
VBNAHCA-01

Test Report No:
D555647736



Date: 21.APR.2017 13:35:50

Figure 456 Spurious Emissions (Lower Band Edge) – 16QAM (871.5 MHz) (SMHz Channel BW)



Date: 25.APR.2017 00:03:31

Figure 457 Spurious Emissions (Upper Band Edge) – 16QAM (891.5 MHz) (SMHz Channel BW)

FCC 47 CFR part 22
(2016)

23. May 2017

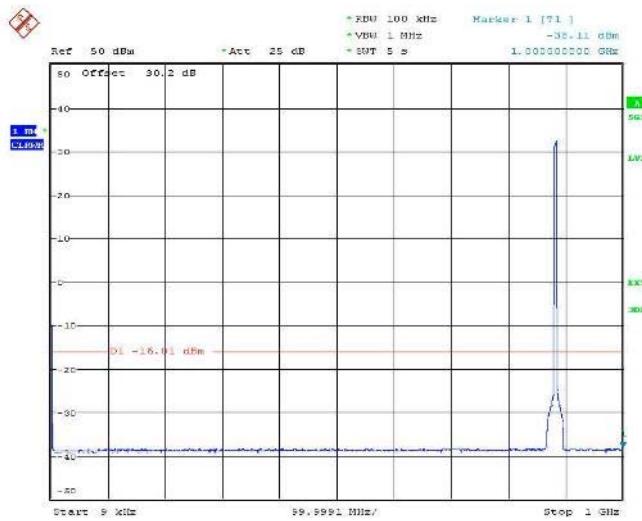
Page 319 of 427



Product Service

FCC ID:
VBNAHCA-01

Test Report No:
D555647736



Date: 24.APR.2017 14:22:33

Figure 458 Spurious Emissions (9kHz – 1GHz) - 16QAM (881.5 MHz) (5MHz Channel BW)



Date: 24.APR.2017 14:23:39

Figure 459 Spurious Emissions (1GHz – 8.94GHz) – 16QAM (881.5 MHz) (SMHz Channel BW)

FCC 47 CFR part 22
(2016)

23. May 2017

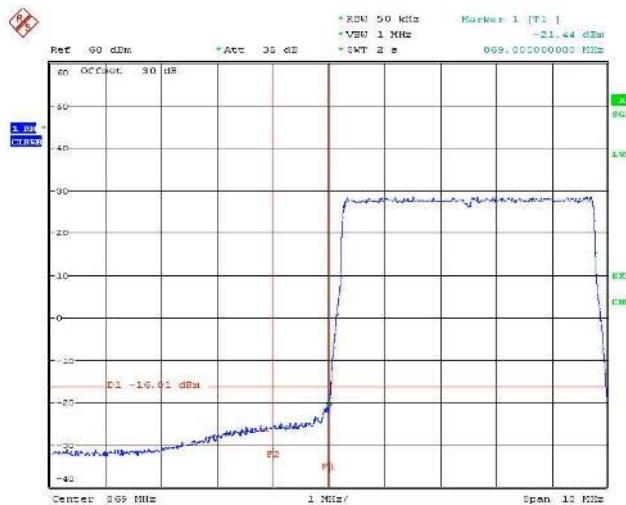
Page 320 of 427



Product Service

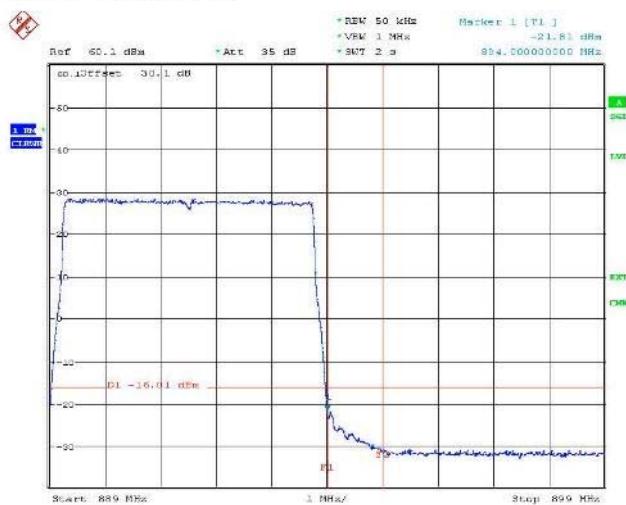
FCC ID:
VBNAHCA-01

Test Report No:
D555647736



Date: 21.APR.2017 13:28:54

Figure 460 Spurious Emissions (Lower Band Edge) – 64QAM (871.5 MHz) (5MHz Channel BW)



Date: 25.APR.2017 00:09:40

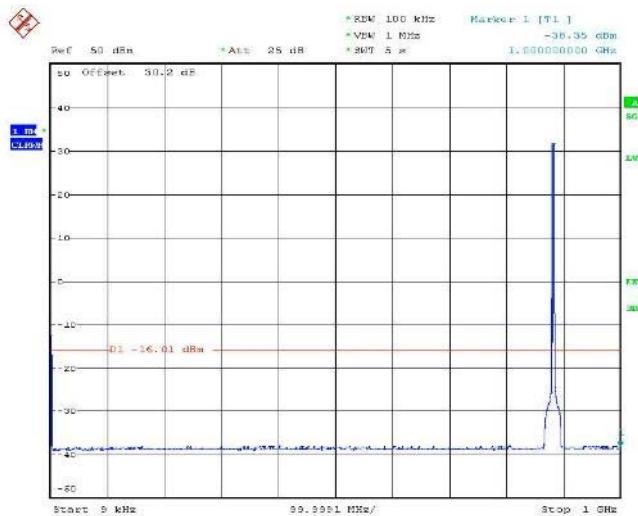
Figure 461 Spurious Emissions (Upper Band Edge) – 64QAM (891.5 MHz) (5MHz Channel BW)



Product Service

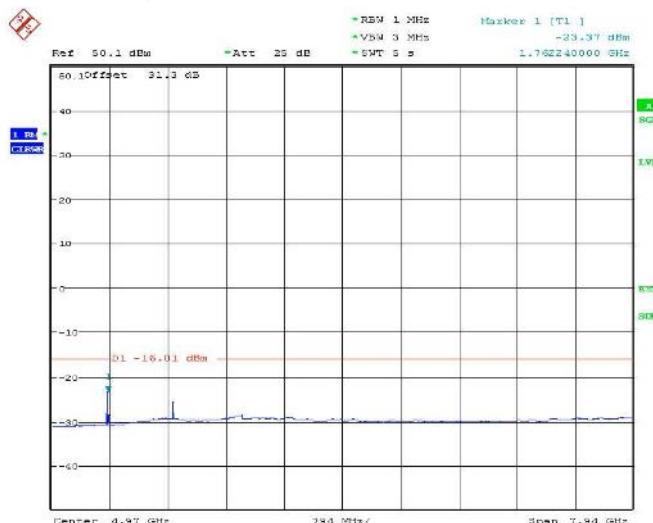
FCC ID:
VBNAHCA-01

Test Report No:
D555647736



Date: 24.APR.2017 14:31:05

Figure 462 Spurious Emissions (9kHz – 1GHz) - 64QAM (881.5 MHz) (5MHz Channel BW)



Date: 24.APR.2017 14:31:51

Figure 463 Spurious Emissions (1GHz – 8.94GHz) – 64QAM (881.5 MHz) (5MHz Channel BW)

FCC 47 CFR part 22
(2016)

23. May 2017

Page 322 of 427