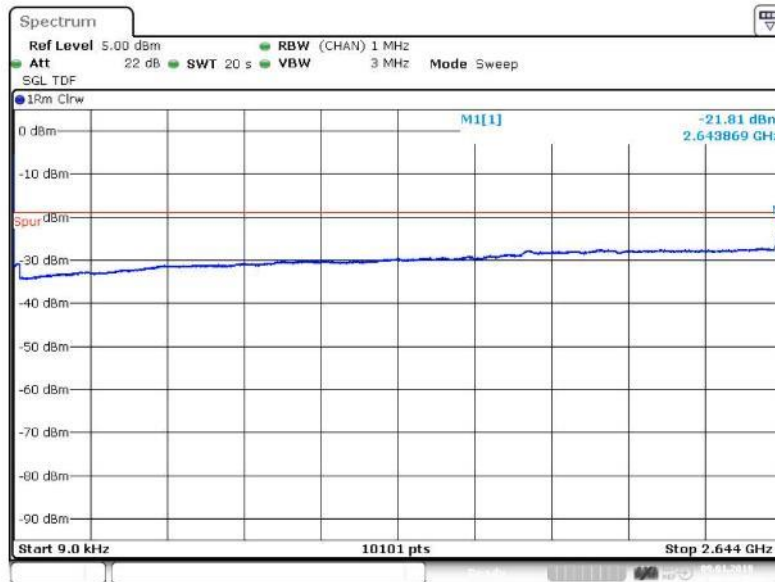




Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794



Date: 9 JAN 2019 09:23:45

Figure 131 Spurious Emissions (9kHz – 2.644GHz) – 16QAM (2650 MHz, 2660 MHz, 2x10 MHz Channel BW)

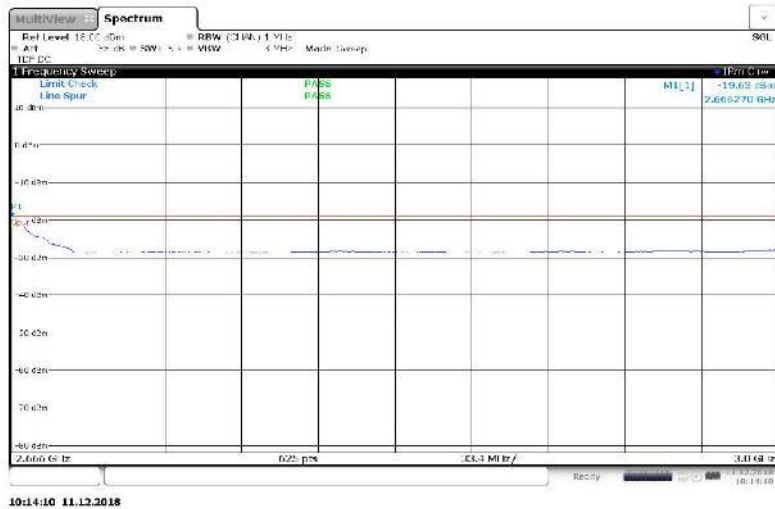


Figure 132 Spurious Emissions (2.666 GHz – 3 GHz) – 16QAM (2650 MHz, 2660 MHz, 2x10 Channel BW)



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

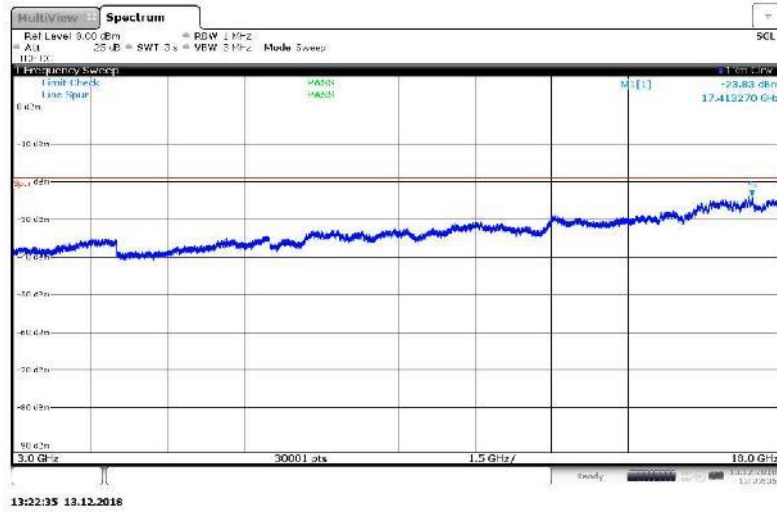


Figure 133 Spurious Emissions (3 GHz – 18GHz) – 16QAM (2650 MHz, 2660 MHz, 2x10 Channel BW)

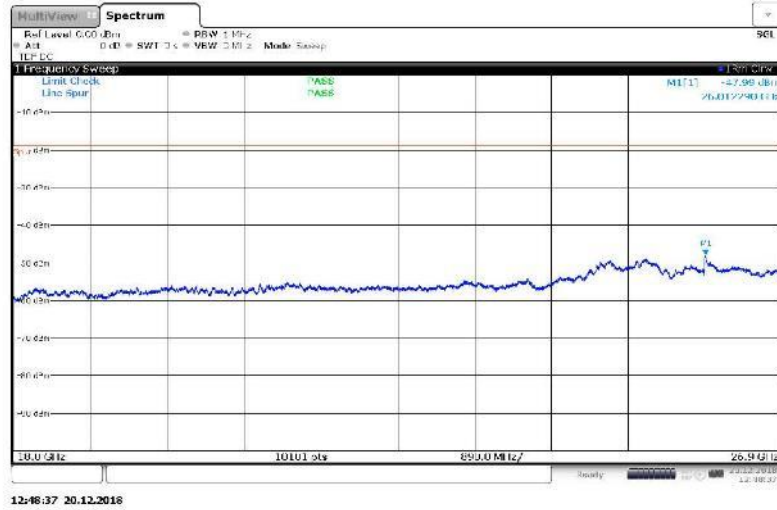


Figure 134 Spurious Emissions (18GHz – 26.9GHz) – 16QAM (2650 MHz, 2660 MHz, 2x10 Channel BW)



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

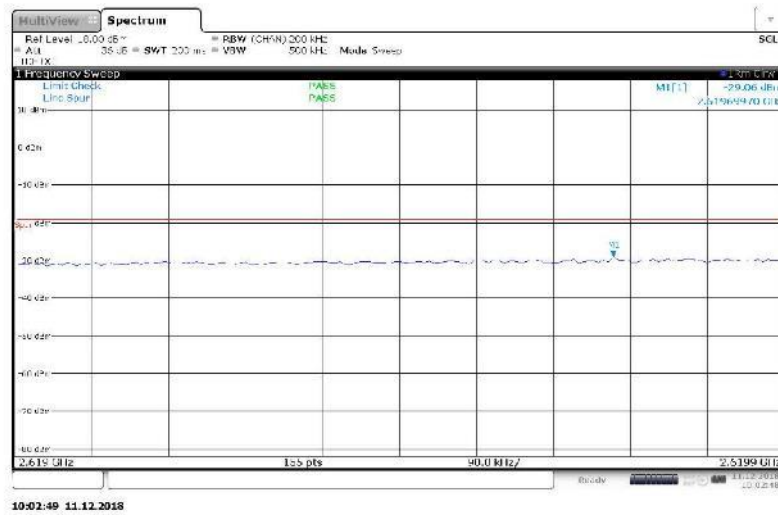


Figure 135 Spurious Emissions (Lower Band Edge) – 64QAM (2625 MHz, 2635 MHz, 2x10 MHz Channel BW)

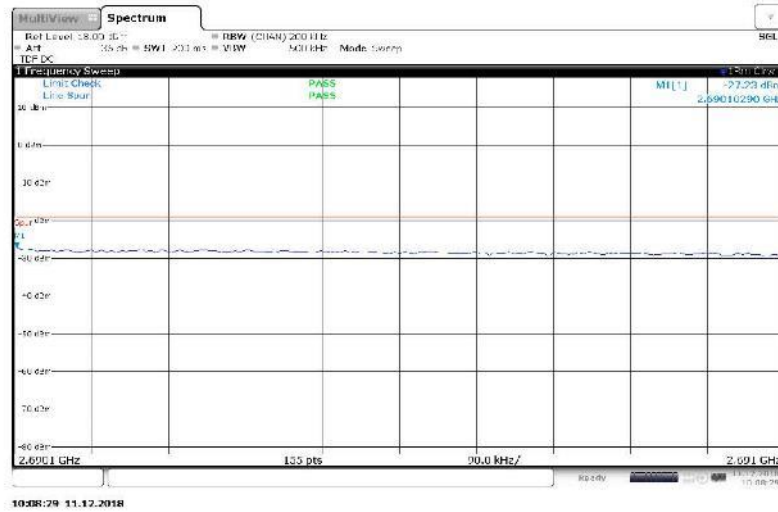


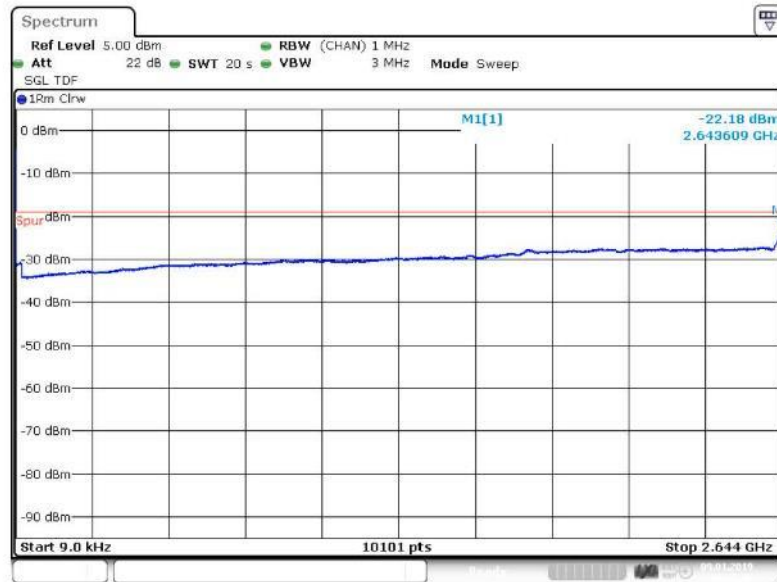
Figure 136 Spurious Emissions (Upper Band Edge) – 64QAM (2675 MHz, 2685 MHz, 2x10 MHz Channel BW)



Product Service

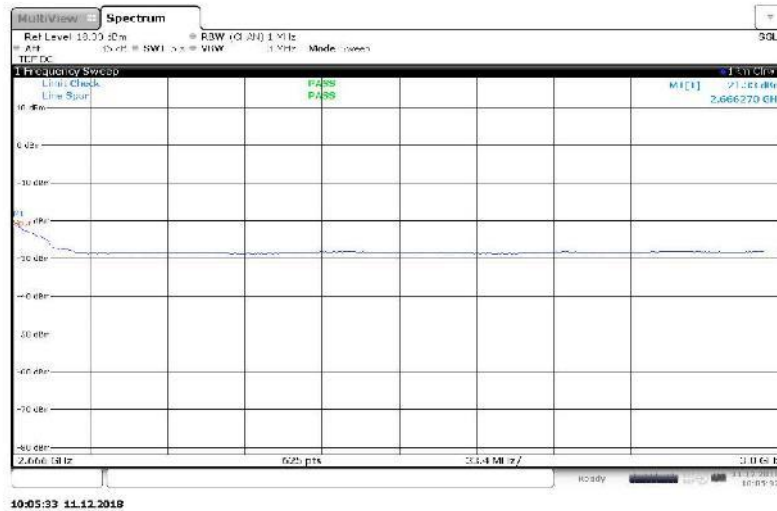
FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794



Date: 9 JAN 2019 08:48:08

Figure 137 Spurious Emissions (9kHz – 2.644GHz) – 64QAM (2650 MHz, 2660 MHz, 2x10 MHz Channel BW)



10:05:33 11.12.2018

Figure 138 Spurious Emissions (2.666 GHz – 3 GHz) – 64QAM (2650 MHz, 2660 MHz, 2x10 Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

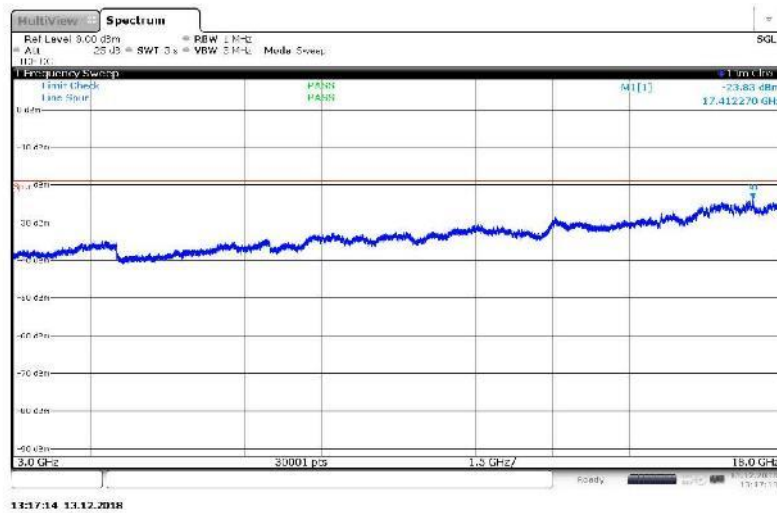


Figure 139 Spurious Emissions (3 GHz – 18GHz) – 64QAM (2650 MHz, 2660 MHz, 2x10 Channel BW)

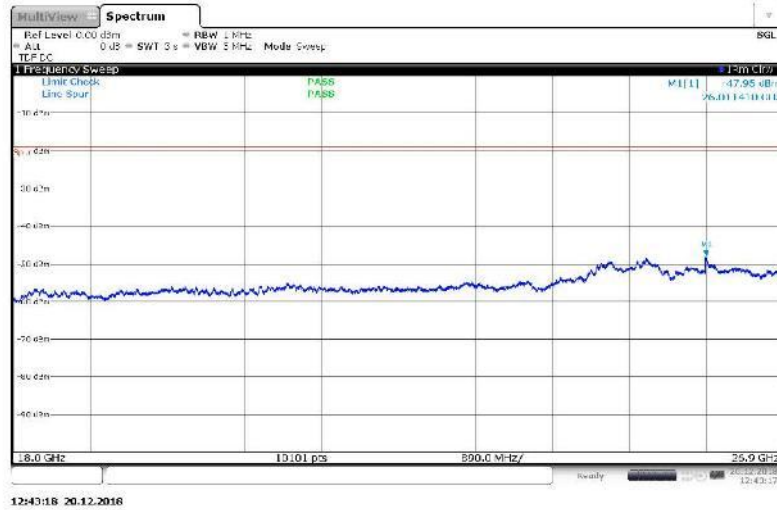


Figure 140 Spurious Emissions (18GHz – 26.9GHz) – 64QAM (2650 MHz, 2660 MHz, 2x10 Channel BW)



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

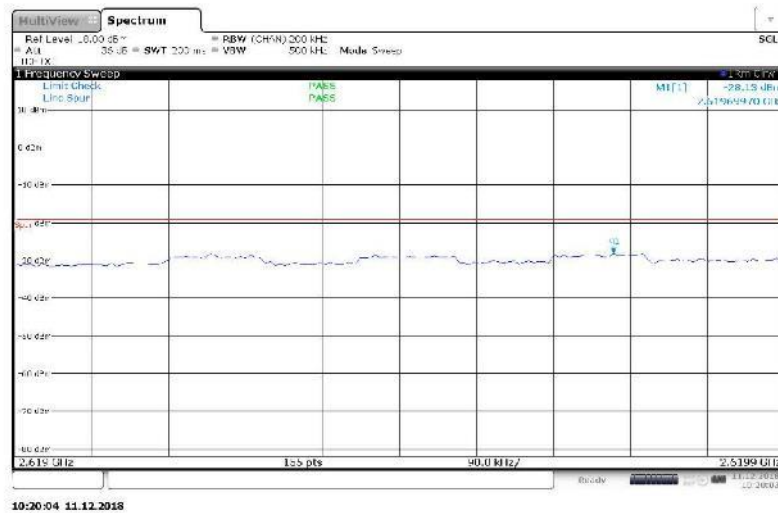


Figure 141 Spurious Emissions (Lower Band Edge) – 256QAM (2625 MHz, 2635 MHz, 2x10 MHz Channel BW)

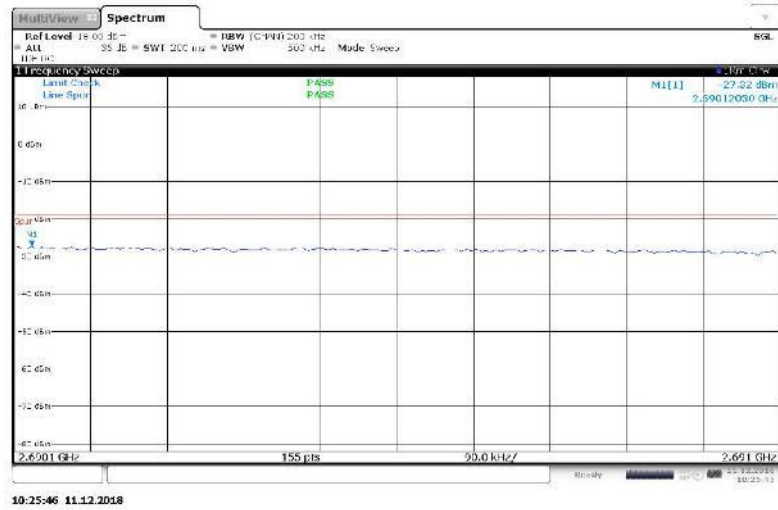
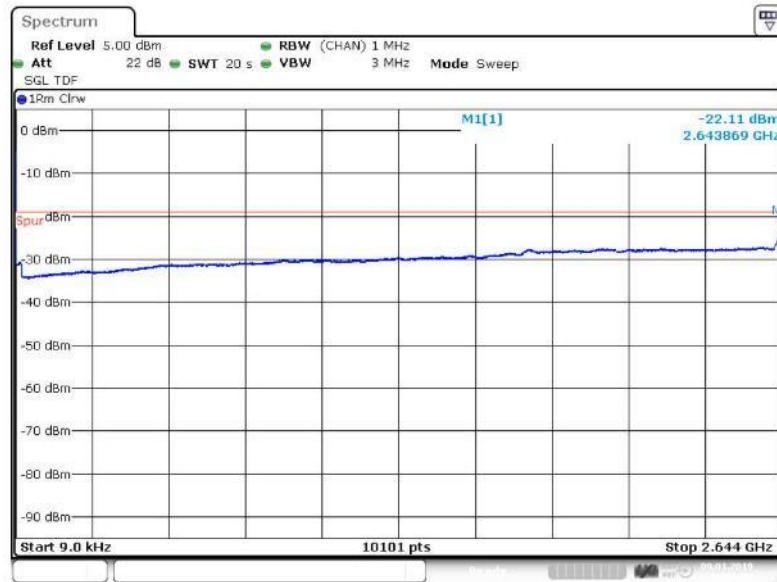


Figure 142 Spurious Emissions (Upper Band Edge) – 256QAM (2675 MHz, 2685 MHz, 2x10 MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794



Date: 9 JAN 2019 09:35:07

Figure 143 Spurious Emissions (9kHz – 2.644GHz) – 256QAM (2650 MHz, 2660 MHz, 2x10 MHz Channel BW)



10:22:49 11.12.2018

Figure 144 Spurious Emissions (2.666 GHz – 3 GHz) – 256QAM (2650 MHz, 2660 MHz, 2x10 Channel BW)



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

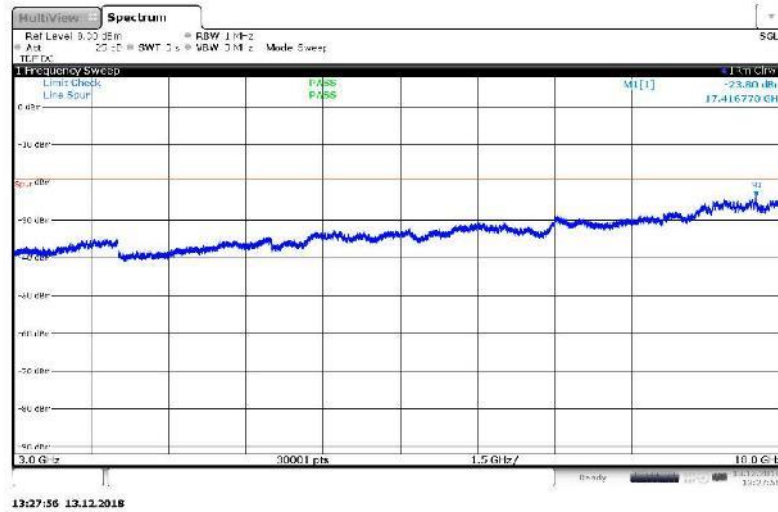


Figure 145 Spurious Emissions (3 GHz – 18GHz) – 256QAM (2650 MHz, 2660 MHz, 2x10 Channel BW)

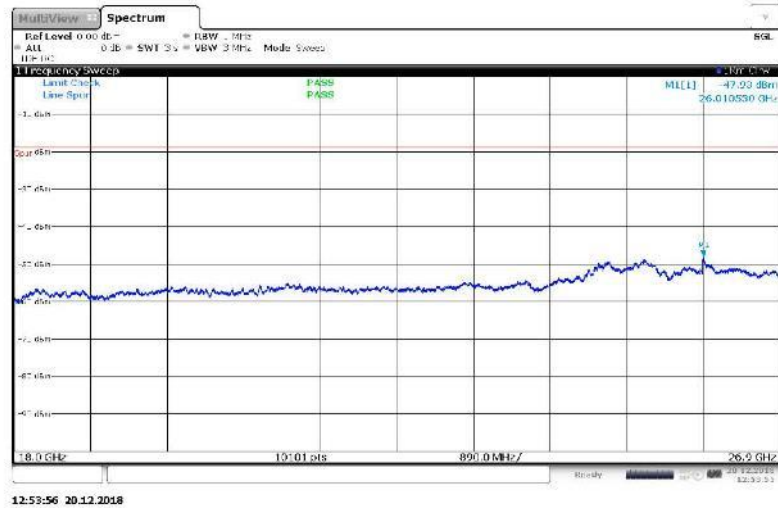


Figure 146 Spurious Emissions (18GHz – 26.9GHz) – 256QAM (2650 MHz, 2660 MHz, 2x10 Channel BW)

Config G ANT2:



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794



Figure 147 Spurious Emissions (Lower Band Edge) – QPSK (2627.5 MHz, 2642.5 MHz, 2x15 MHz Channel BW)

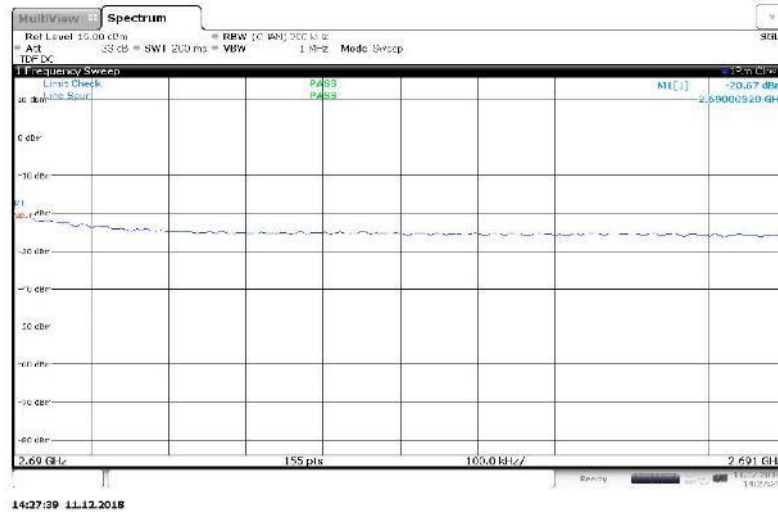


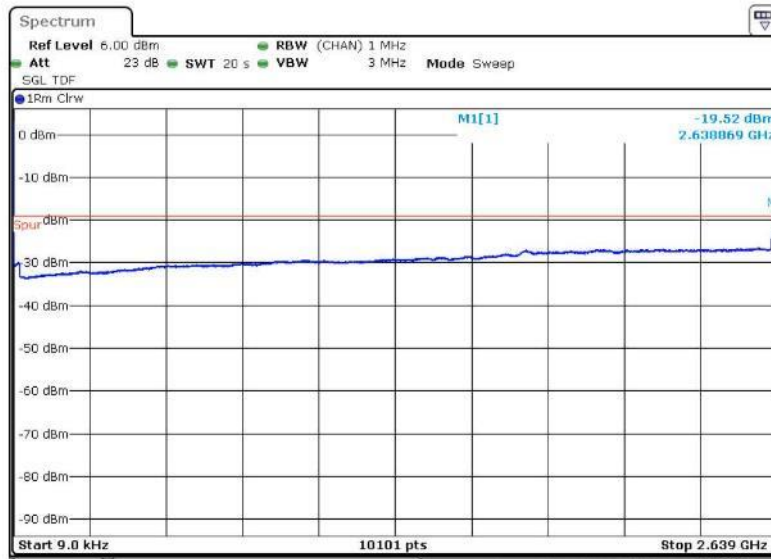
Figure 148 Spurious Emissions (Upper Band Edge) – QPSK (2667.5 MHz, 2682.5 MHz, 2x15 MHz Channel BW)



Product Service

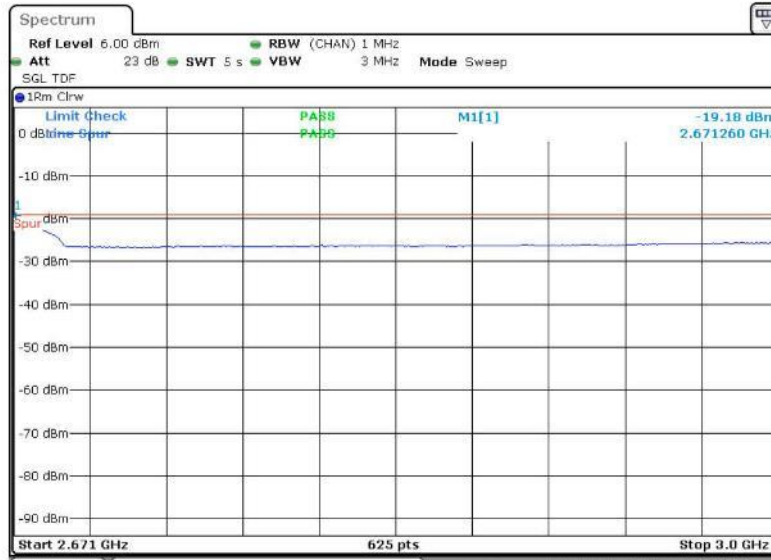
FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794



Date: 10. JAN. 2019 08:49:33

Figure 149 Spurious Emissions (9kHz – 2.639GHz) – QPSK (2647.5 MHz, 2662.5 MHz, 2x15 MHz Channel BW)



Date: 30. JAN. 2019 10:15:31

FCC 47 CFR part 27 (2018)
Industry Canada RSS-199
(2016)

11. Feb 2018
Page 135 of 230



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

Figure 150 Spurious Emissions (2.671 GHz – 3 GHz) – QPSK (2647.5 MHz, 2662.5 MHz, 2x15 Channel BW)

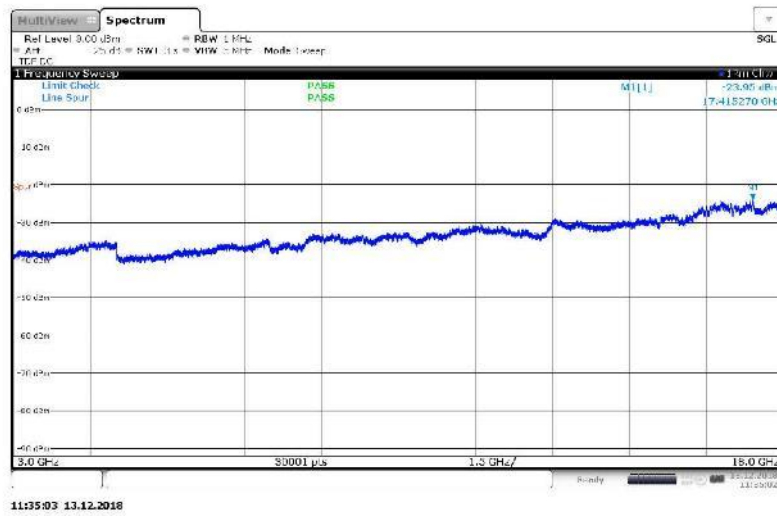


Figure 151 Spurious Emissions (3 GHz – 18GHz) – QPSK (2647.5 MHz, 2662.5 MHz, 2x15 Channel BW)

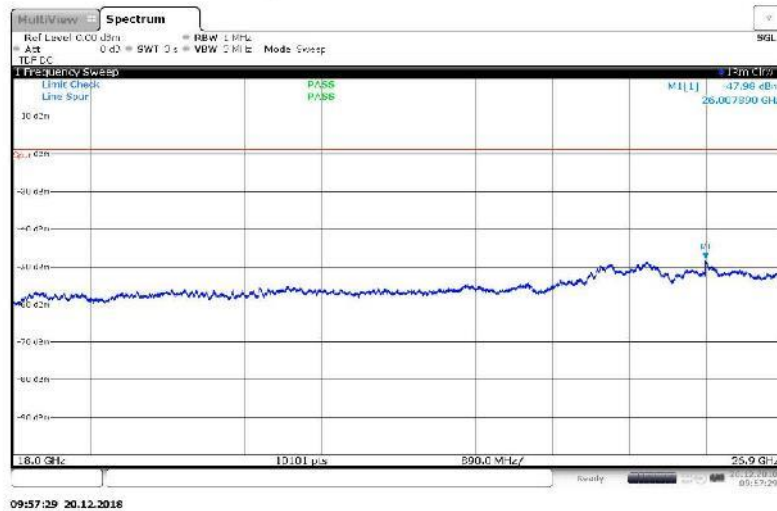


Figure 152 Spurious Emissions (18GHz – 26.9GHz) – QPSK (2647.5 MHz, 2662.5 MHz, 2x15 Channel BW)

FCC 47 CFR part 27 (2018)
Industry Canada RSS-199
(2016)

11. Feb 2018
Page 136 of 230



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

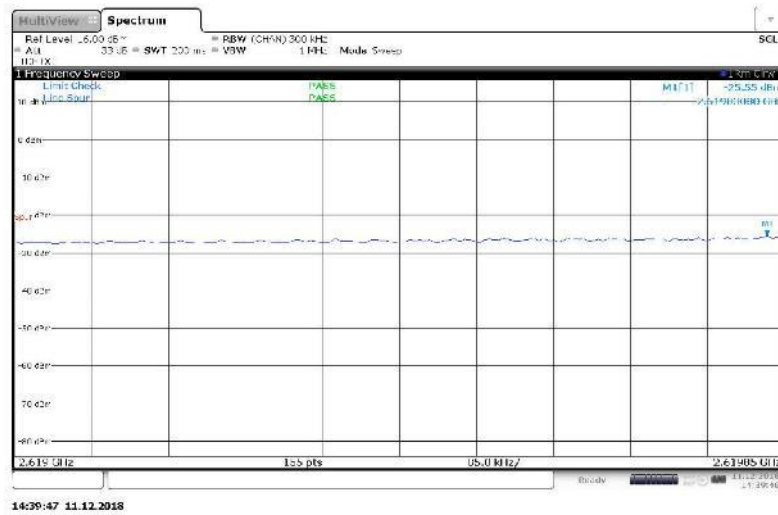


Figure 153 Spurious Emissions (Lower Band Edge) – 16QAM (2627.5 MHz, 2642.5 MHz, 2x15 MHz Channel BW)

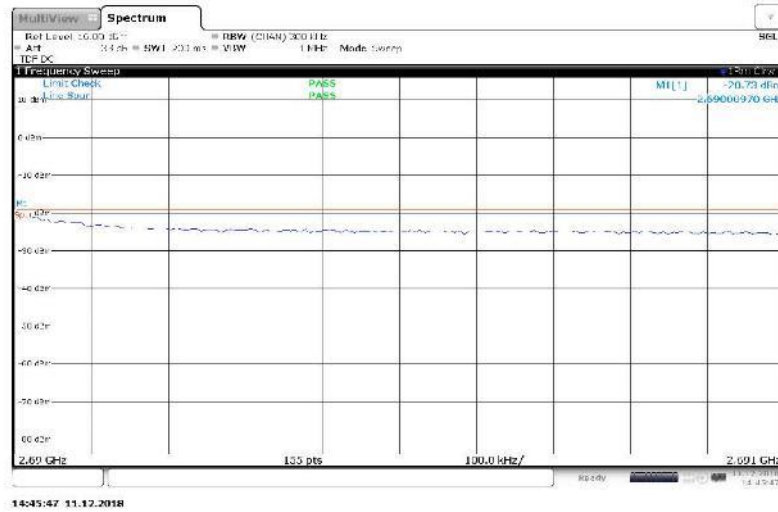


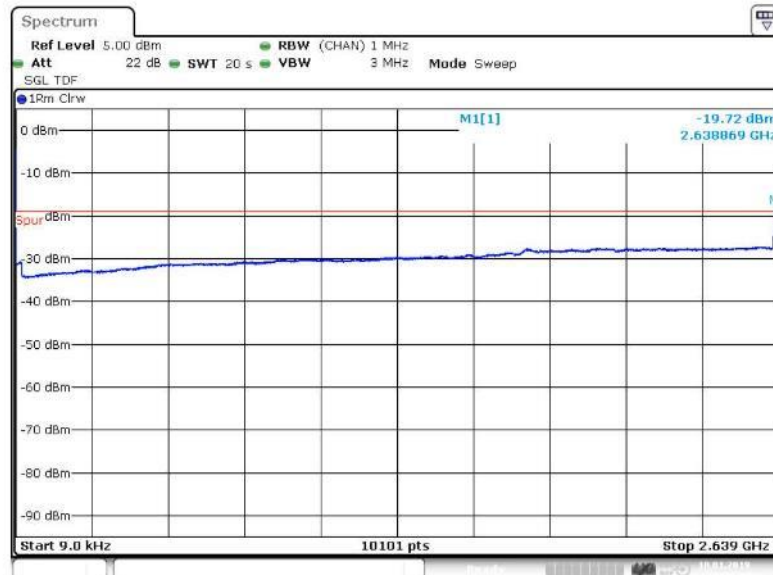
Figure 154 Spurious Emissions (Upper Band Edge) – 16QAM (2667.5 MHz, 2682.5 MHz, 2x15 MHz Channel BW)



Product Service

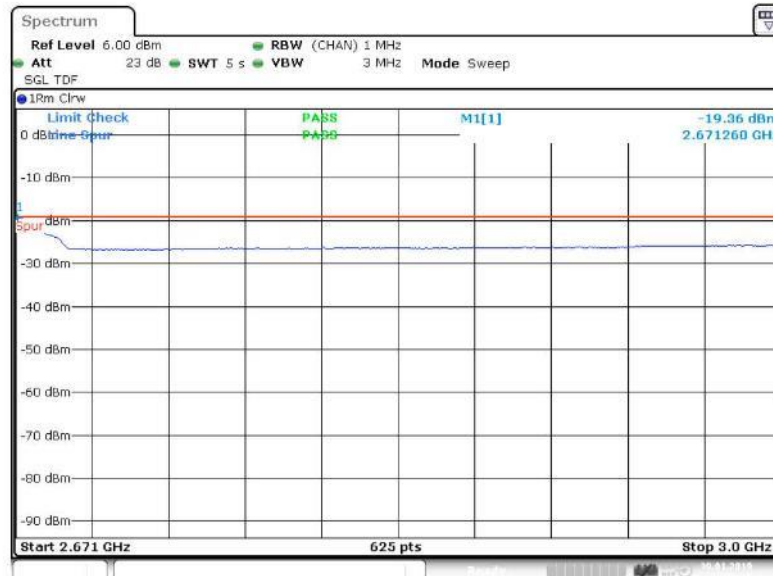
FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794



Date: 10.JAN.2019 10:12:14

Figure 155 Spurious Emissions (9kHz – 2.639GHz) – 16QAM (2647.5 MHz, 2662.5 MHz, 2x15 MHz Channel BW)



Date: 30.JAN.2019 10:20:15

FCC 47 CFR part 27 (2018)
Industry Canada RSS-199
(2016)

11. Feb 2018
Page 138 of 230



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

Figure 156 Spurious Emissions (2.671 GHz – 3 GHz) – 16QAM (2647.5 MHz, 2662.5 MHz, 2x15 Channel BW)

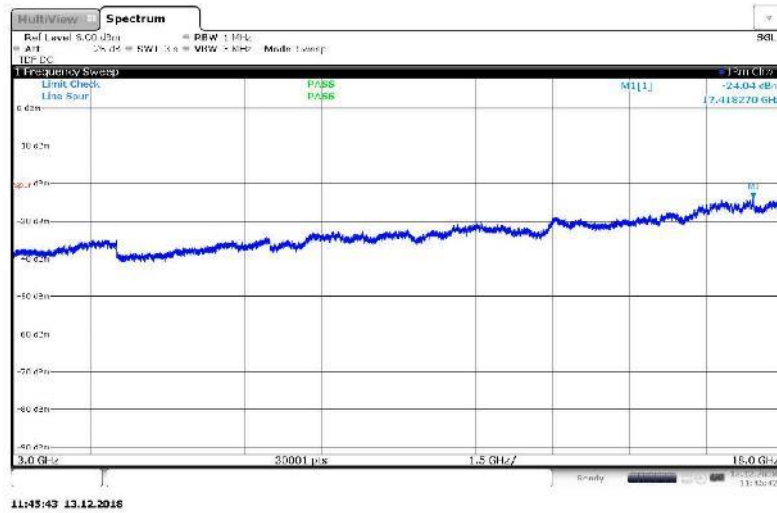


Figure 157 Spurious Emissions (3 GHz – 18GHz) – 16QAM (2647.5 MHz, 2662.5 MHz, 2x15 Channel BW)

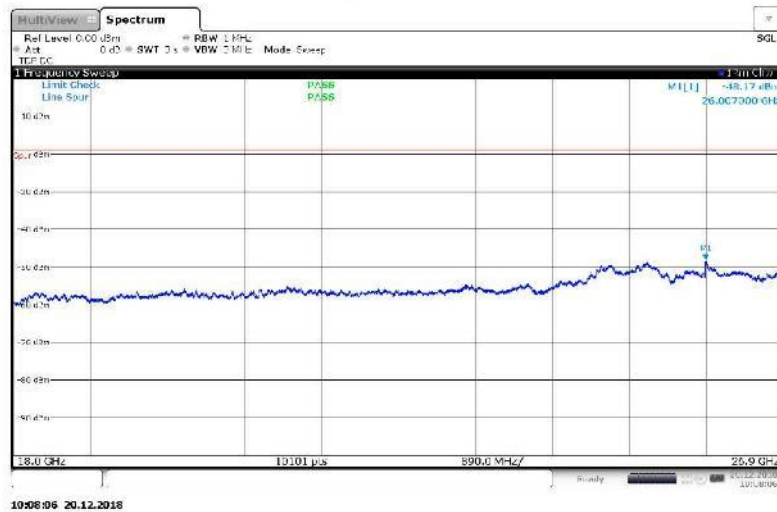


Figure 158 Spurious Emissions (18GHz – 26.9GHz) – 16QAM (2647.5 MHz, 2662.5 MHz, 2x15 Channel BW)



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

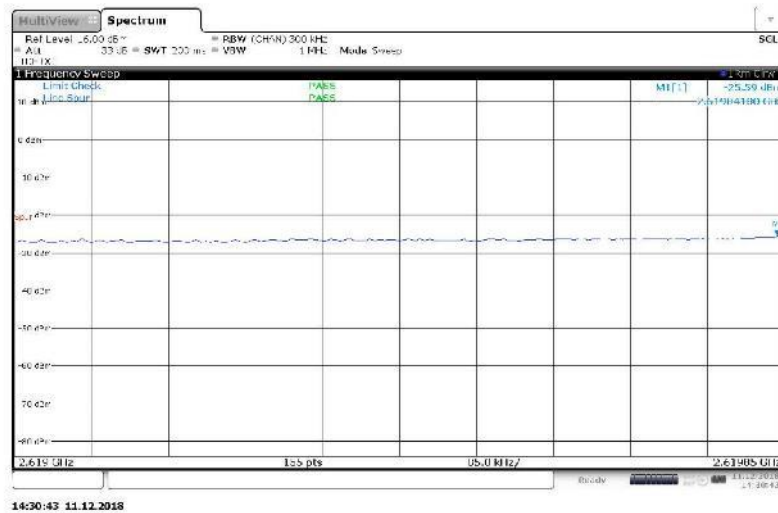


Figure 159 Spurious Emissions (Lower Band Edge) – 64QAM (2627.5 MHz, 2642.5 MHz, 2x15 MHz Channel BW)

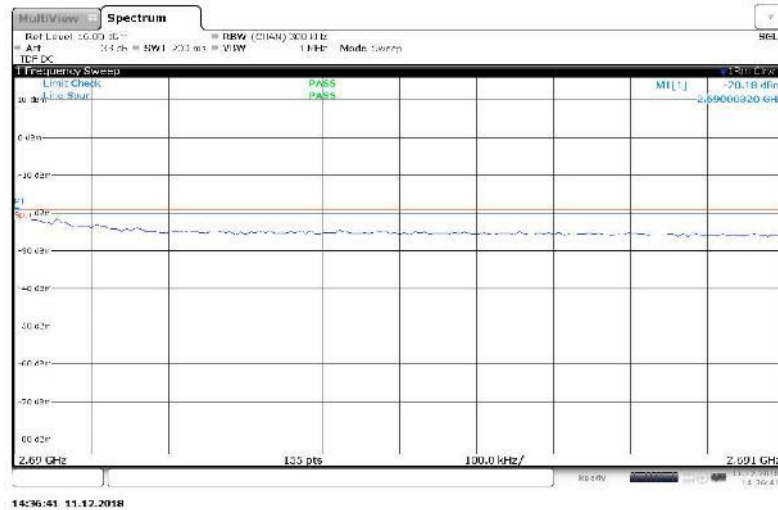


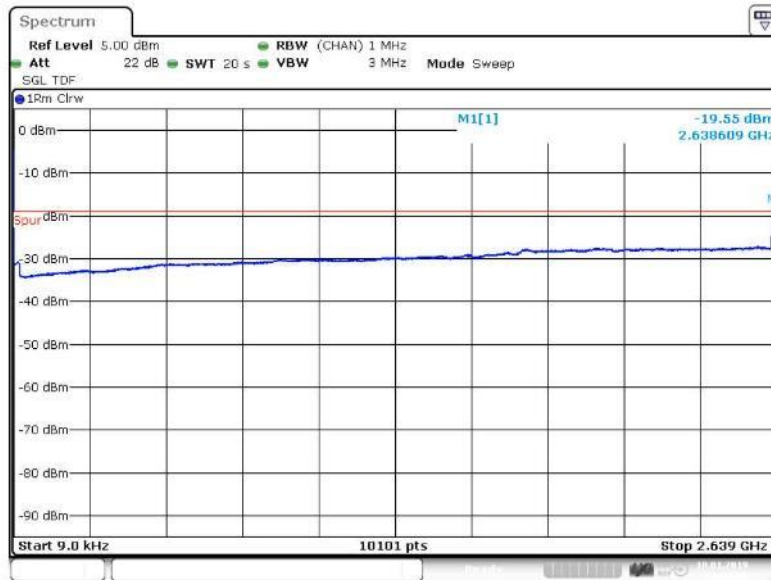
Figure 160 Spurious Emissions (Upper Band Edge) – 64QAM (2667.5 MHz, 2682.5 MHz, 2x15 MHz Channel BW)



Product Service

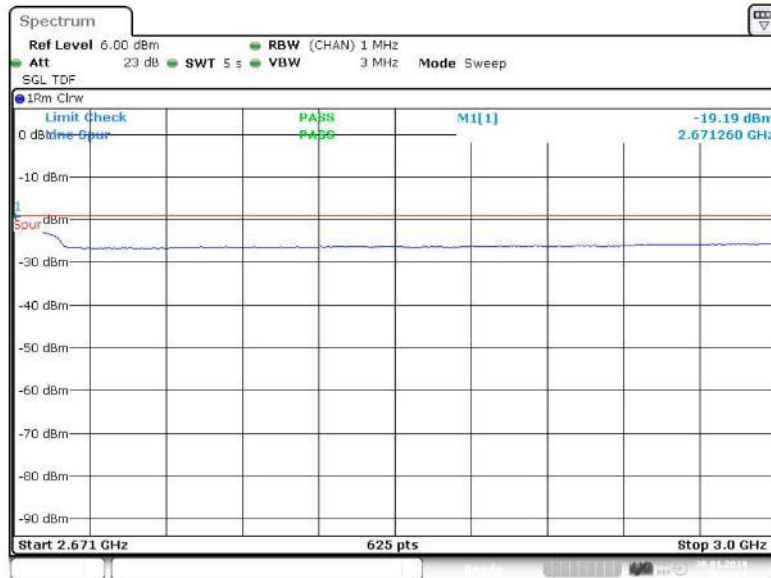
FCC ID: VBNAHHB-01
IC ID: 661A1-AHBB

Test Report No:
D568352794



Date: 10.JAN.2019 09:00:58

Figure 161 Spurious Emissions (9kHz – 2.639GHz) – 64QAM (2647.5 MHz, 2662.5 MHz, 2x15 MHz Channel BW)



Date: 30.JAN.2019 10:17:58

FCC 47 CFR part 27 (2018)
Industry Canada RSS-199
(2016)

11. Feb 2018
Page 141 of 230



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

Figure 162 Spurious Emissions (2.671 GHz – 3 GHz) – 64QAM (2647.5 MHz, 2662.5 MHz, 2x15 Channel BW)

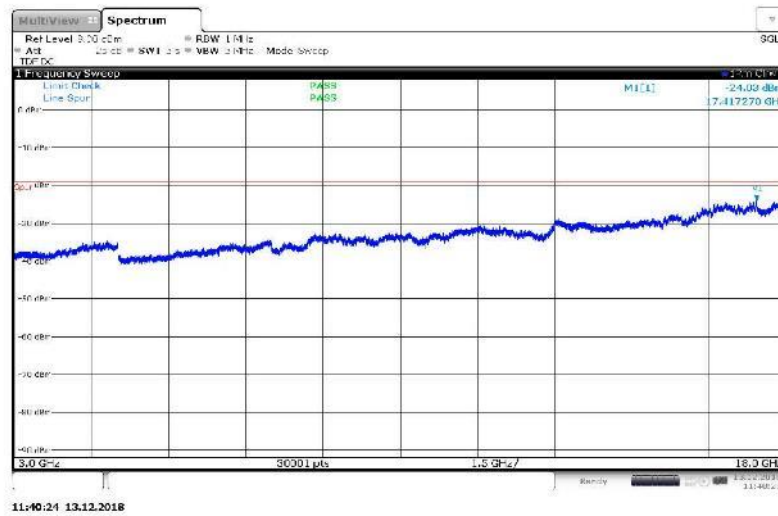


Figure 163 Spurious Emissions (3 GHz – 18GHz) – 64QAM (2647.5 MHz, 2662.5 MHz, 2x15 Channel BW)

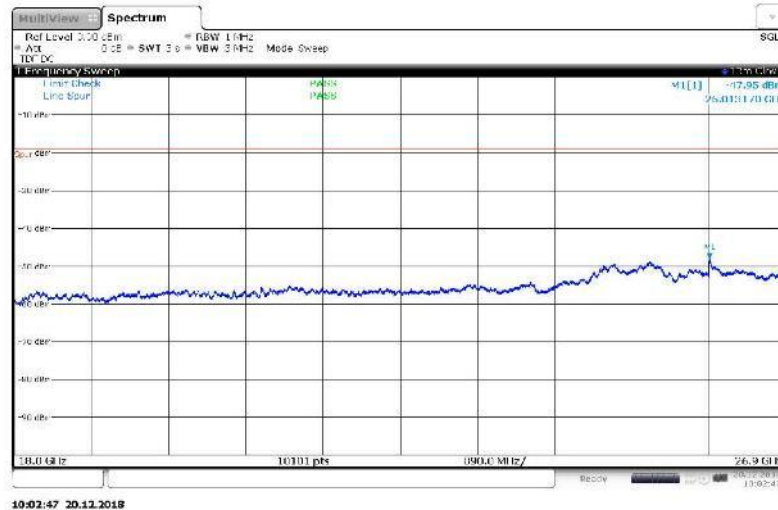


Figure 164 Spurious Emissions (18GHz – 26.9GHz) – 64QAM (2647.5 MHz, 2662.5 MHz, 2x15 Channel BW)



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

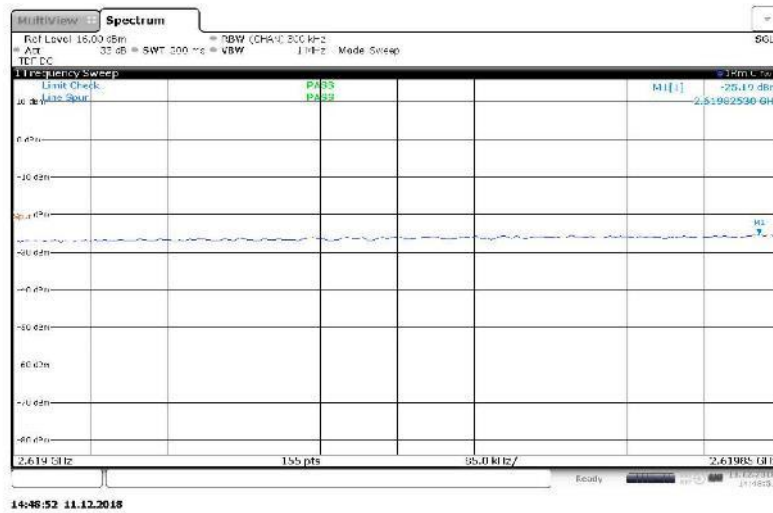


Figure 165 Spurious Emissions (Lower Band Edge) – 256QAM (2627.5 MHz, 2642.5 MHz, 2x15 MHz Channel BW)

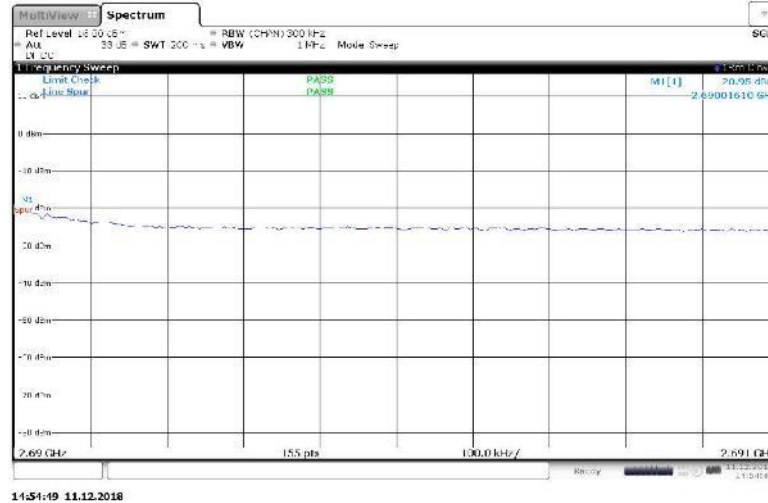


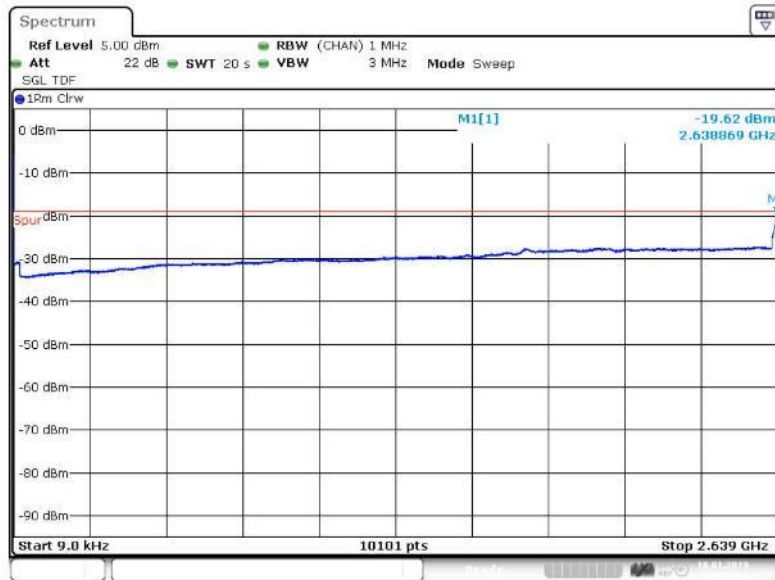
Figure 166 Spurious Emissions (Upper Band Edge) – 256QAM (2667.5 MHz, 2682.5 MHz, 2x15 MHz Channel BW)



Product Service

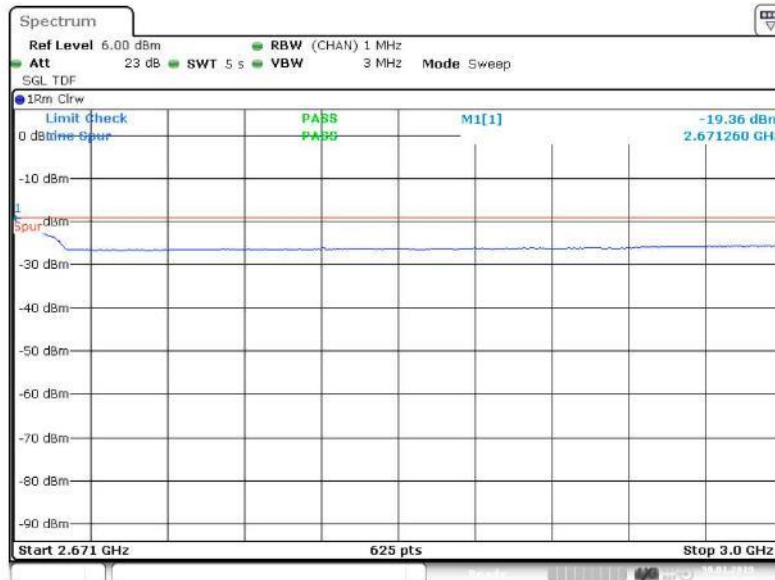
FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794



Date: 10.JAN.2019 10:52:12

Figure 167 Spurious Emissions (9kHz – 2.639GHz) – 256QAM (2647.5 MHz, 2662.5 MHz, 2x15 MHz Channel BW)



Date: 30.JAN.2019 10:22:52

FCC 47 CFR part 27 (2018)
Industry Canada RSS-199
(2016)

11. Feb 2018
Page 144 of 230



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

Figure 168 Spurious Emissions (2.671 GHz – 3 GHz) – 256QAM (2647.5 MHz, 2662.5 MHz, 2x15 Channel BW)

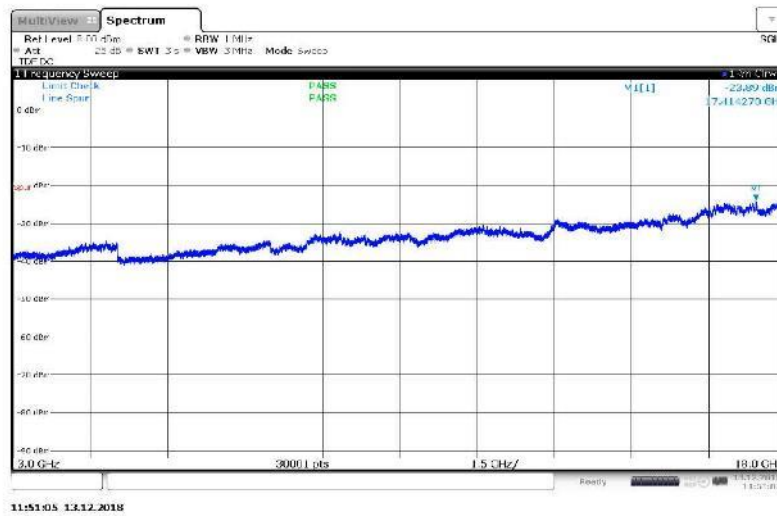


Figure 169 Spurious Emissions (3 GHz – 18GHz) – 256QAM (2647.5 MHz, 2662.5 MHz, 2x15 Channel BW)

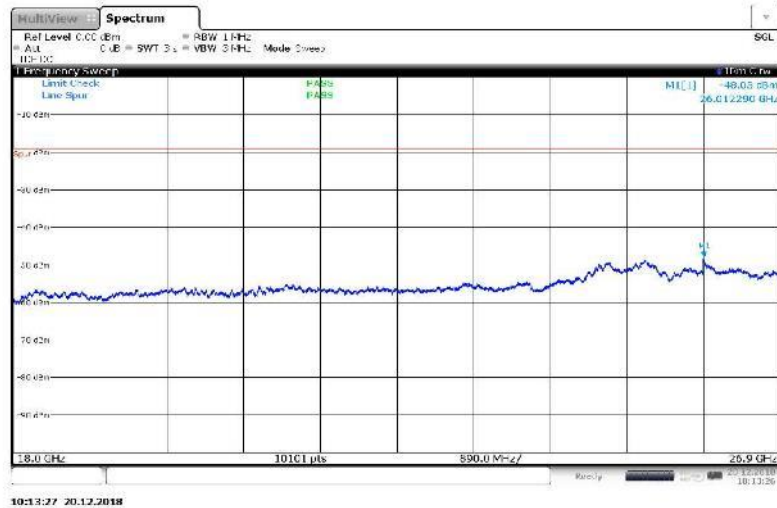


Figure 170 Spurious Emissions (18GHz – 26.9GHz) – 256QAM (2647.5 MHz, 2662.5 MHz, 2x15 Channel BW)

Config H ANT2:

FCC 47 CFR part 27 (2018)
Industry Canada RSS-199
(2016)

11. Feb 2018
Page 145 of 230



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

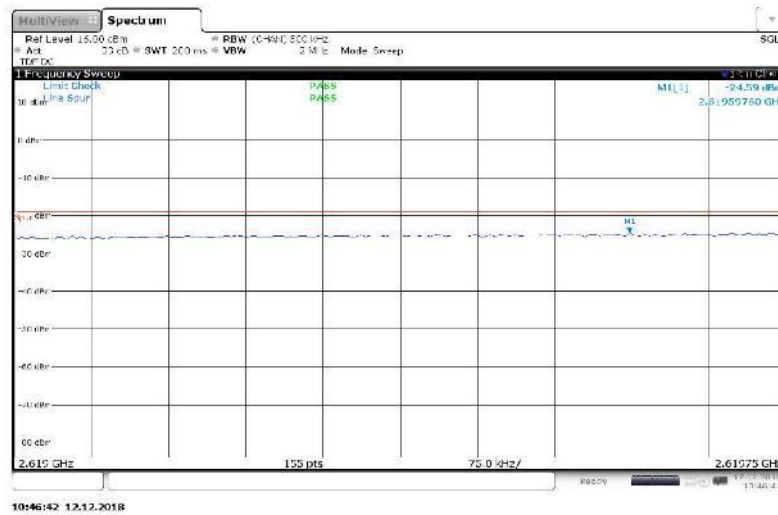


Figure 171 Spurious Emissions (Lower Band Edge) – QPSK (2630 MHz, 2650 MHz, 2x20 MHz Channel BW)

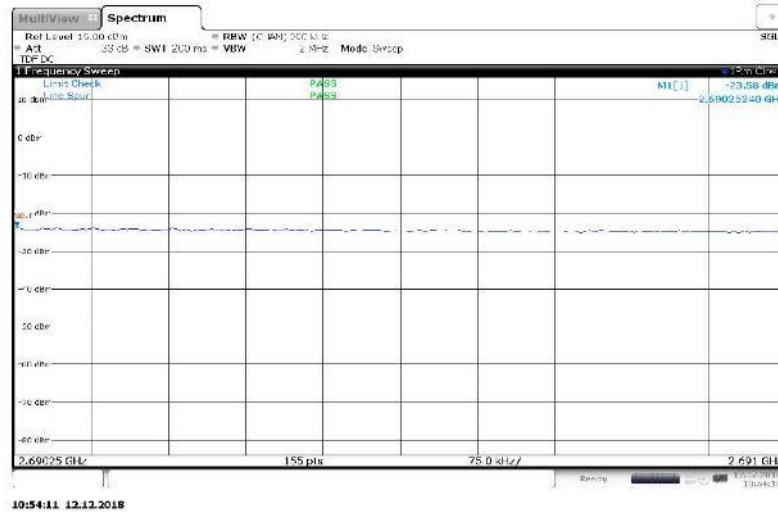


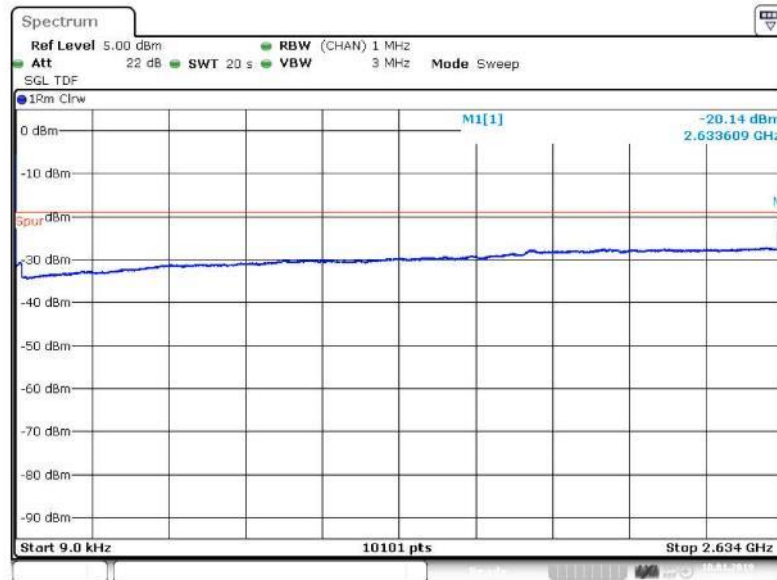
Figure 172 Spurious Emissions (Upper Band Edge) – QPSK (2660 MHz, 2680 MHz, 2x20 MHz Channel BW)



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794



Date: 10.JAN.2019 14:36:39

Figure 173 Spurious Emissions (9kHz – 2.634GHz) – QPSK (2645 MHz, 2665 MHz, 2x20 MHz Channel BW)



12:46:27 12.12.2018

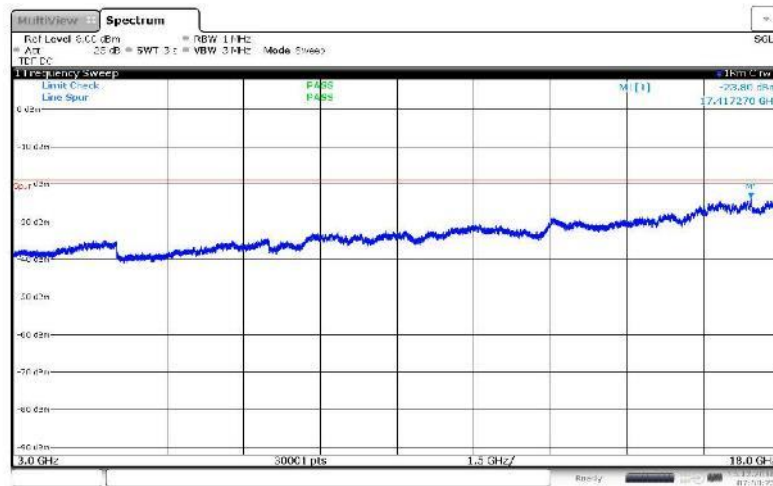
Figure 174 Spurious Emissions (2.676 GHz – 3 GHz) – QPSK (2645 MHz, 2665 MHz, 2x20 MHz Channel BW)



Product Service

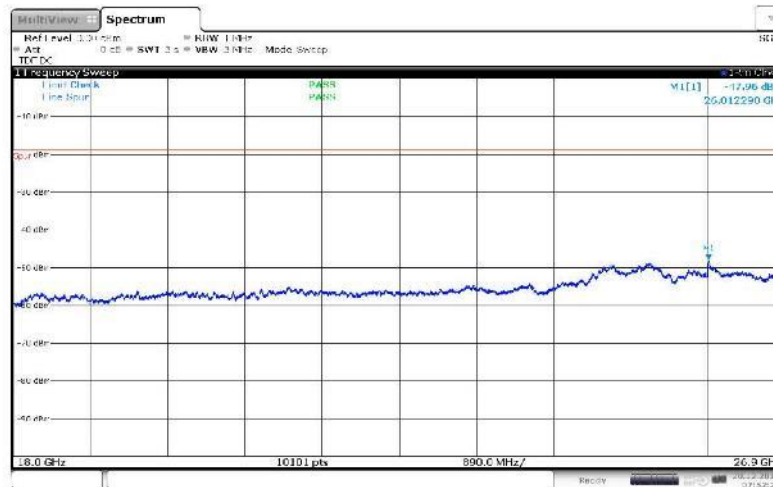
FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794



07:50:23 13.12.2018

Figure 175 Spurious Emissions (3 GHz – 18GHz) – QPSK (2645 MHz, 2665 MHz, 2x20 MHz Channel BW)



07:52:27 20.12.2018

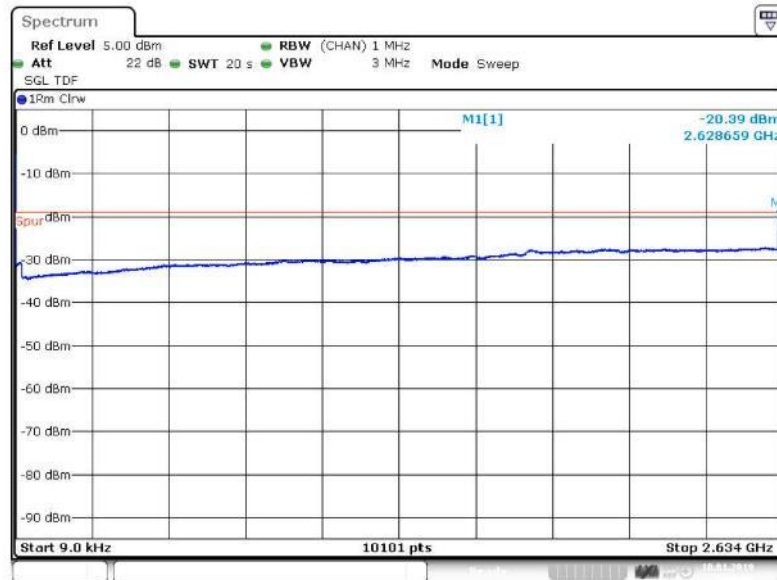
Figure 176 Spurious Emissions (18GHz – 26.9GHz) – QPSK (2645 MHz, 2665 MHz, 2x20 MHz Channel BW)



Product Service

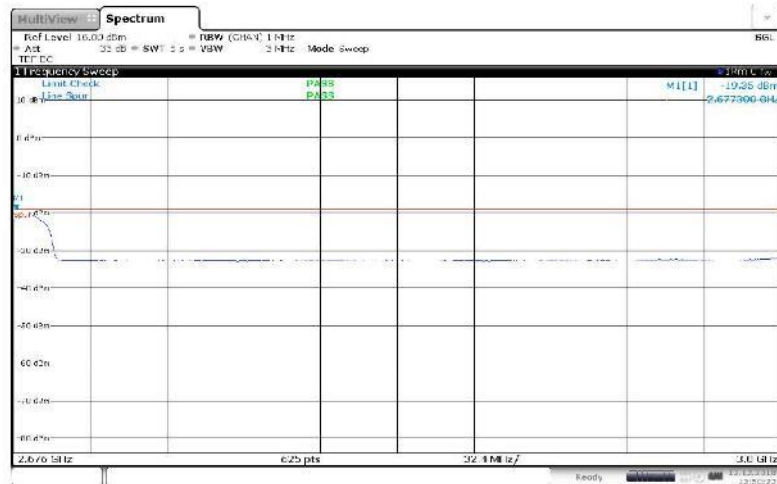
FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794



Date: 10.JAN.2019 15:05:09

Figure 179 Spurious Emissions (9kHz – 2.634GHz) – 16QAM (2645 MHz, 2665 MHz, 2x20 MHz Channel BW)



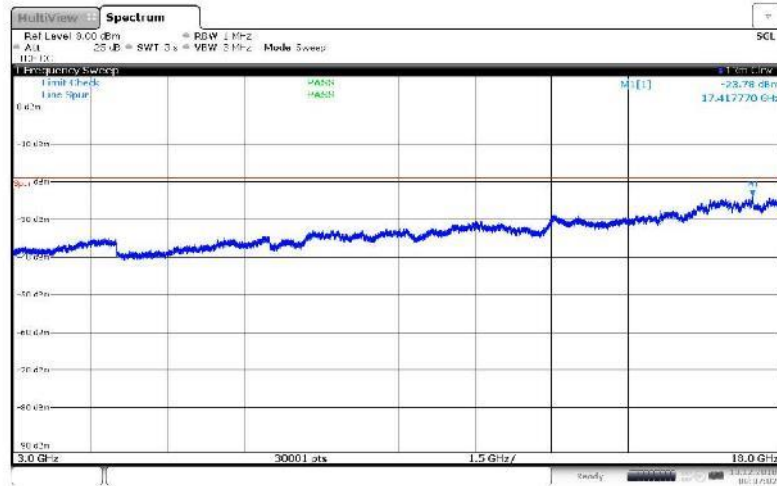
12:50:23 12.12.2018

Figure 180 Spurious Emissions (2.676 GHz – 3 GHz) – 16QAM (2645 MHz, 2665 MHz, 2x20 MHz Channel BW)



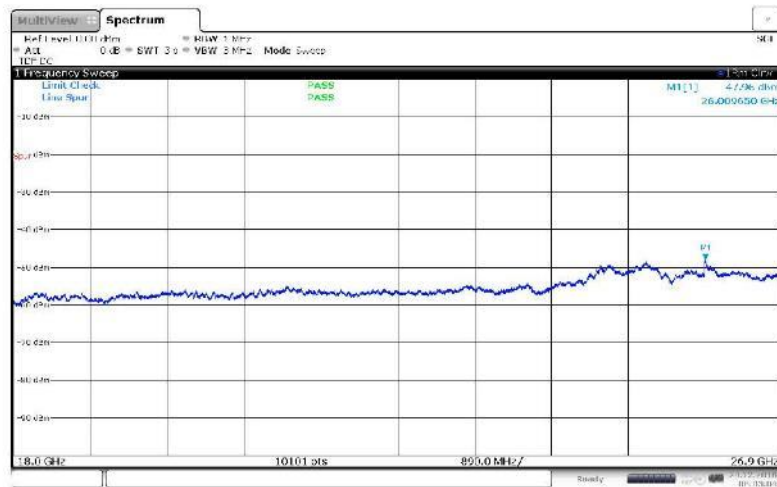
FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794



08:07:03 13.12.2018

Figure 181 Spurious Emissions (3 GHz – 18GHz) – 16QAM (2645 MHz, 2665 MHz, 2x20 MHz Channel BW)



08:03:04 20.12.2018

Figure 182 Spurious Emissions (18GHz – 26.9GHz) – 16QAM (2645 MHz, 2665 MHz, 2x20 MHz Channel BW)



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794



Figure 183 Spurious Emissions (Lower Band Edge) – 64QAM (2630 MHz, 2650 MHz, 2x20 MHz Channel BW)

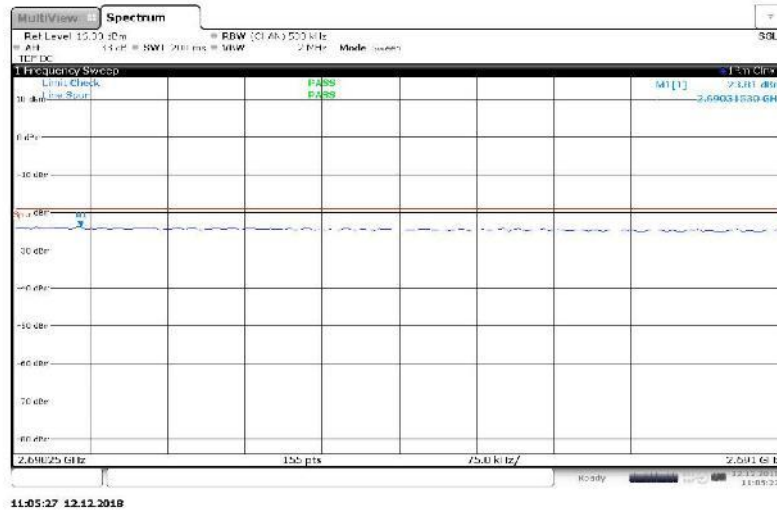


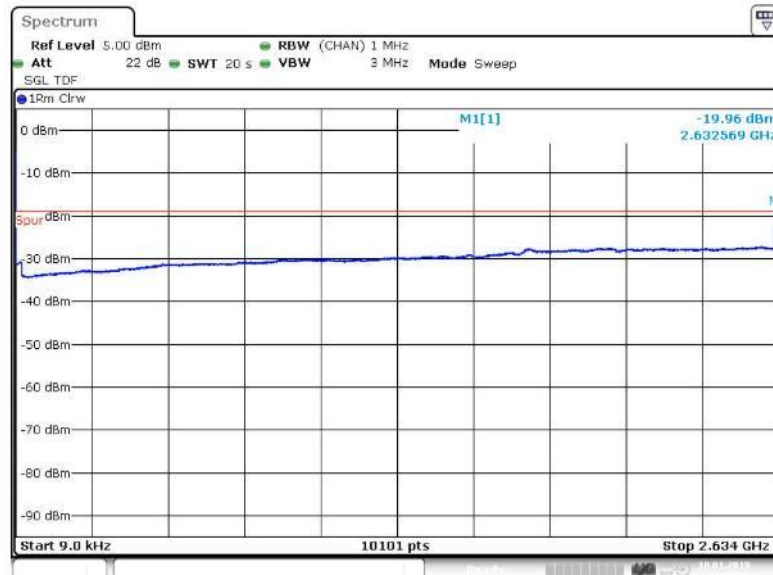
Figure 184 Spurious Emissions (Upper Band Edge) – 64QAM (2660 MHz, 2680 MHz, 2x20 MHz Channel BW)



Product Service

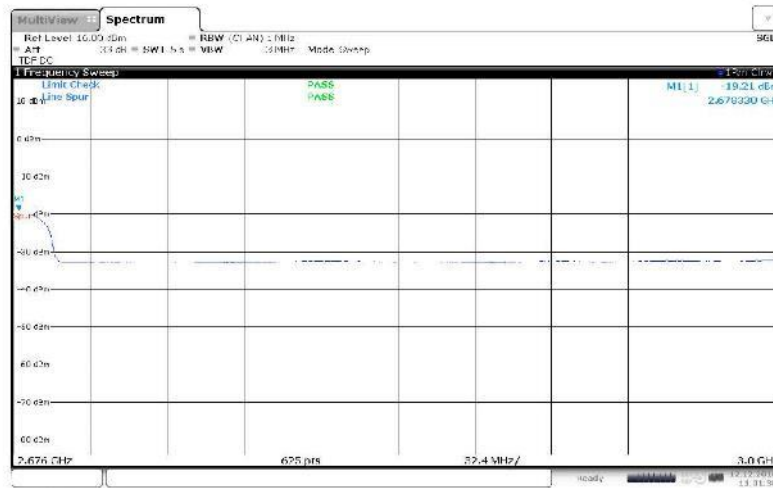
FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794



Date: 10. JAN. 2019 14:48:41

Figure 185 Spurious Emissions (9kHz – 2.634GHz) – 64QAM (2645 MHz, 2665 MHz, 2x20 MHz Channel BW)



11:01:38 12.12.2018

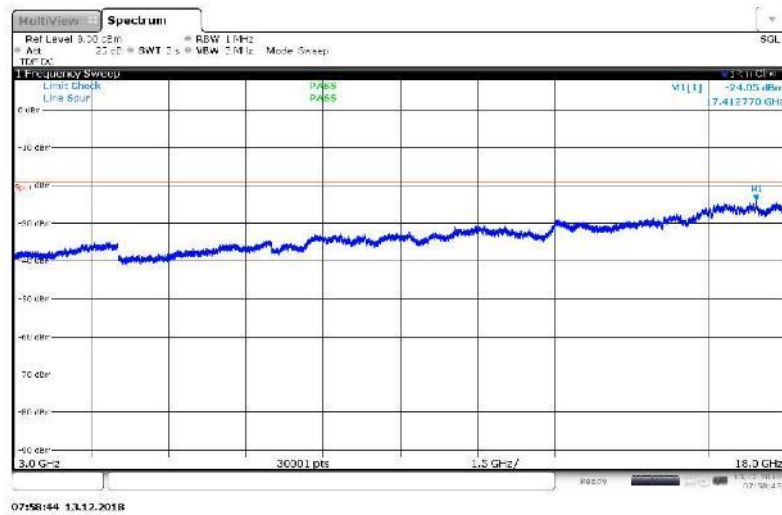
Figure 186 Spurious Emissions (2.676 GHz – 3 GHz) – 64QAM (2645 MHz, 2665 MHz, 2x20 MHz Channel BW)



Product Service

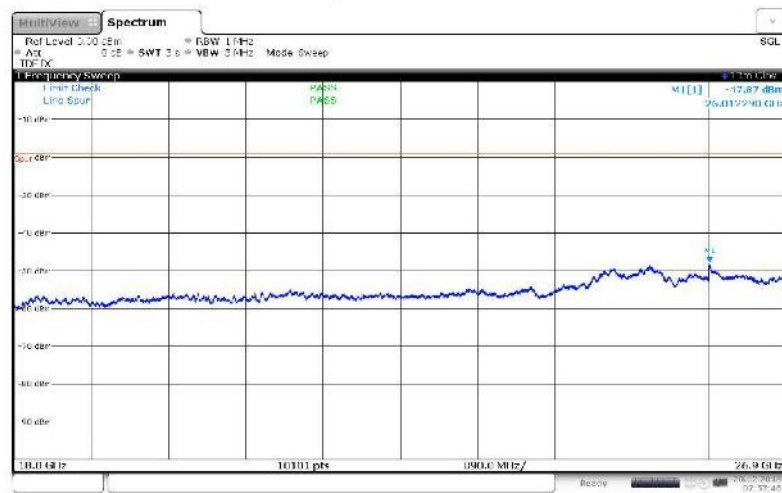
FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794



07:58:44 13.12.2018

Figure 187 Spurious Emissions (3 GHz – 18GHz) – 64QAM (2645 MHz, 2665 MHz, 2x20 MHz Channel BW)



07:57:46 20.12.2018

Figure 188 Spurious Emissions (18GHz – 26.9GHz) – 256QAM (2645 MHz, 2665 MHz, 2x20 MHz Channel BW)



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

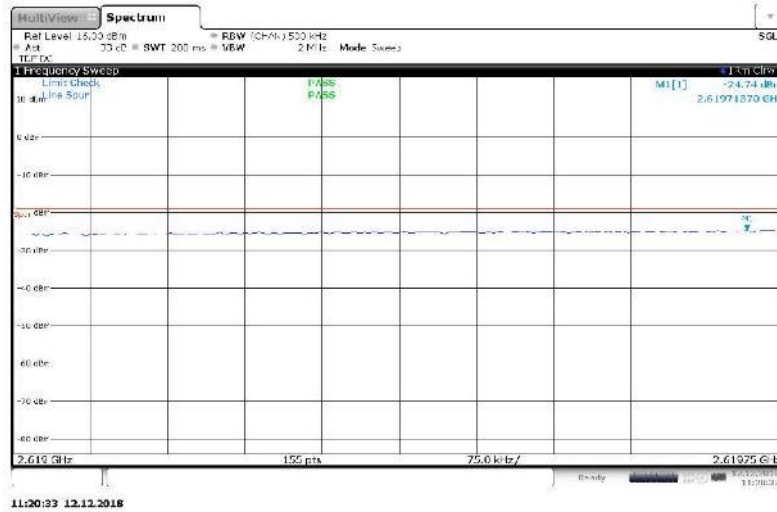


Figure 189 Spurious Emissions (Lower Band Edge) – 256QAM (2630 MHz, 2650 MHz, 2x20 MHz Channel BW)



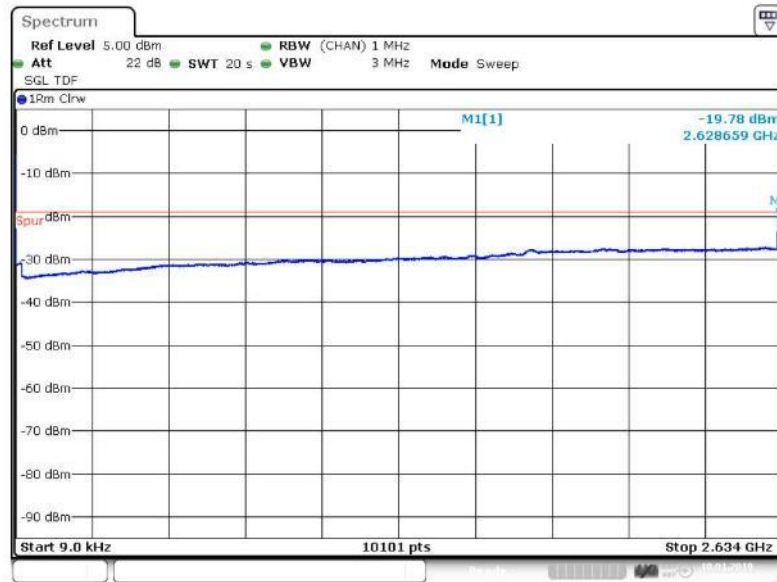
Figure 190 Spurious Emissions (Upper Band Edge) – 256QAM (2660 MHz, 2680 MHz, 2x20 MHz Channel BW)



Product Service

FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794



Date: 10.JAN.2019 15:20:26

Figure 191 Spurious Emissions (9kHz – 2.634GHz) – 256QAM (2645 MHz, 2665 MHz, 2x20 MHz Channel BW)



11:24:11 12.12.2018

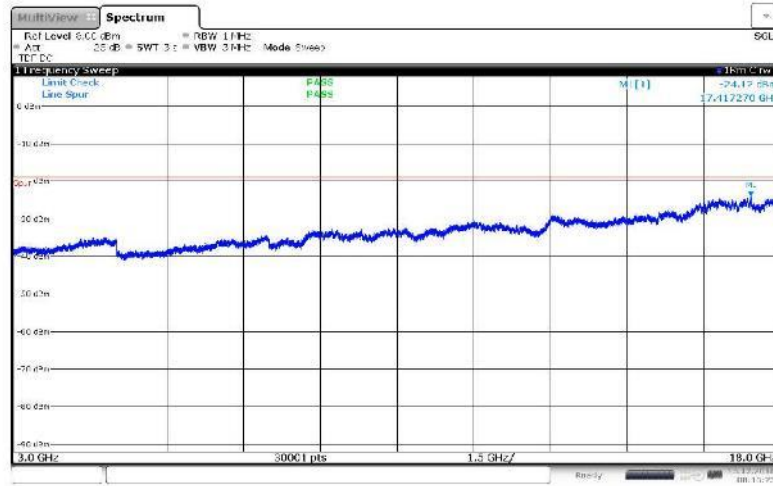
Figure 192 Spurious Emissions (2.676 GHz – 3 GHz) – 256QAM (2645 MHz, 2665 MHz, 2x20 MHz Channel BW)



Product Service

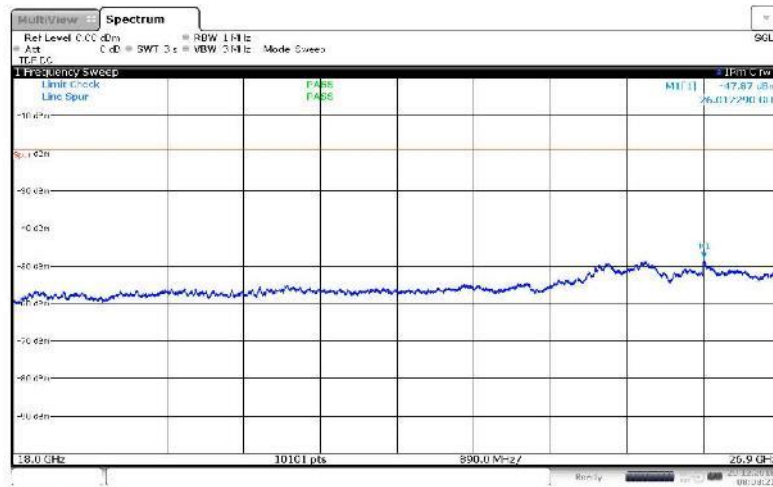
FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794



08:15:24 13.12.2018

Figure 193 Spurious Emissions (3 GHz – 18GHz) – 256QAM (2645 MHz, 2665 MHz, 2x20 MHz Channel BW)



08:08:22 20.12.2018

Figure 194 Spurious Emissions (18GHz – 26.9GHz) – 256QAM (2645 MHz, 2665 MHz, 2x20 MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

5.2.2. Test No. 3: Field Strength of Spurious Radiation

Config A, B, C, D, E, F, G, H:

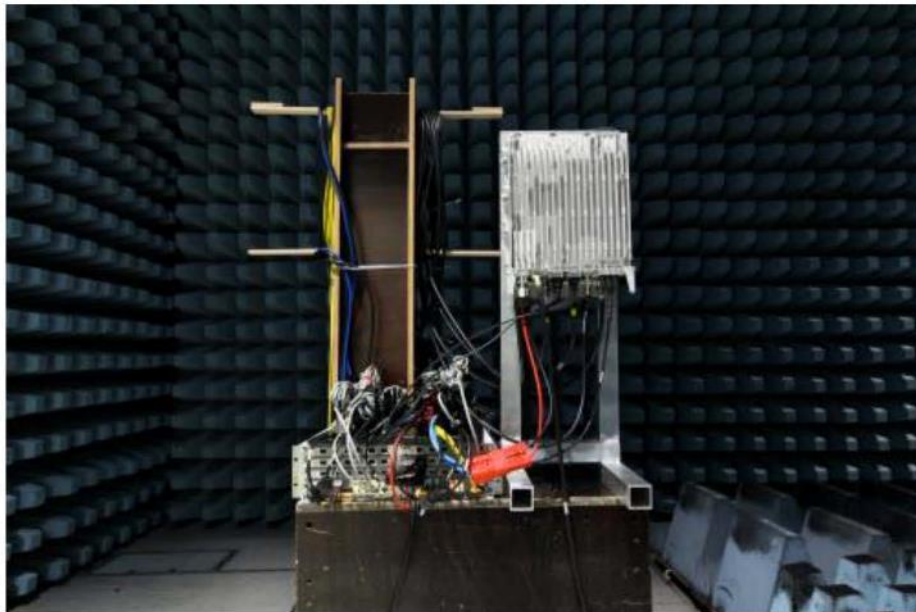


Figure 195 Photograph of the anechoic chamber with the EUT



FCC ID: VBNAHHB-01
IC ID: 661A1-AHBB

Test Report No:
D568352794

FCC 47 CFR part 27

Config A:

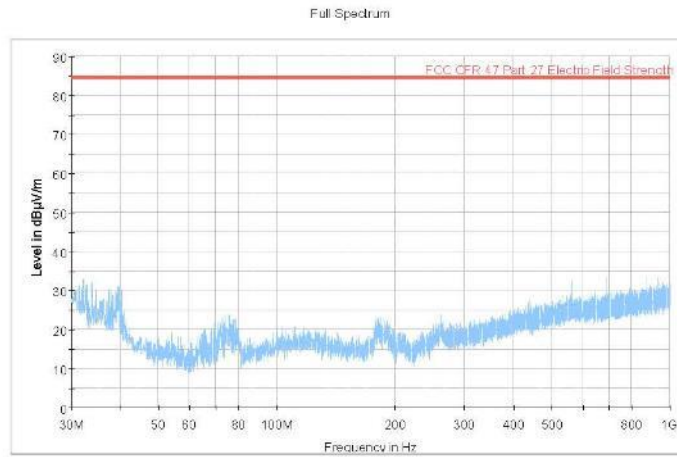


Figure 196 Radiated Emission 30 MHz – 1 GHz (2622.5MHz) (5MHz Channel BW)

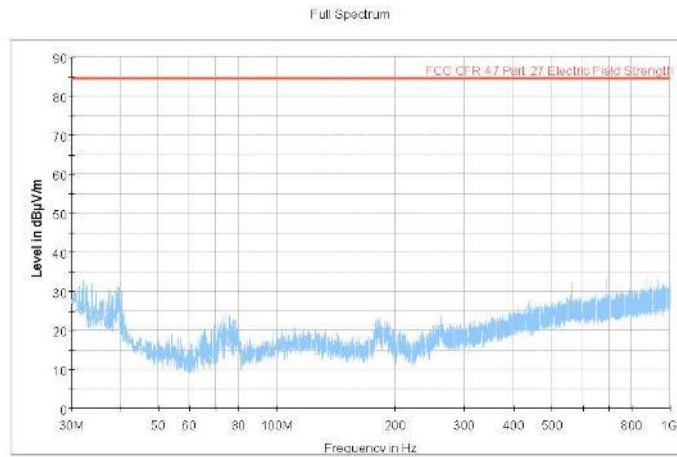


Figure 197 Radiated Emission 30 MHz – 1 GHz (2655MHz) (5MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

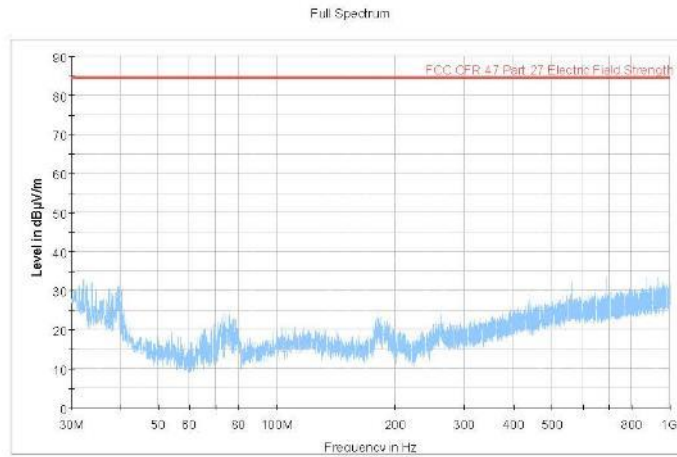


Figure 198 Radiated Emission 30 MHz – 1 GHz (2687.5 MHz) (5MHz Channel BW)

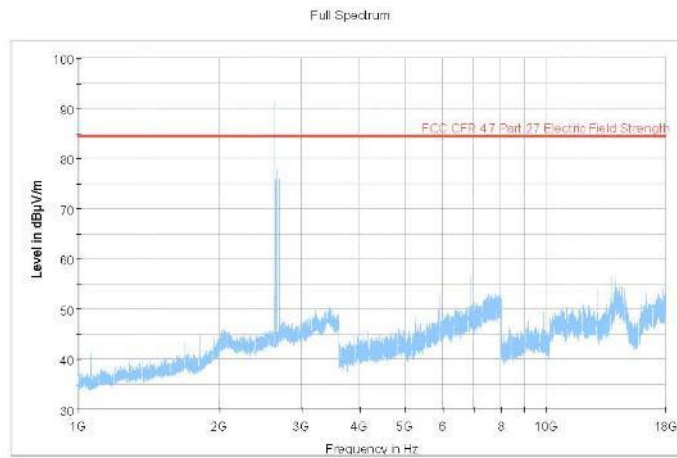


Figure 199 Radiated Emission 1 GHz – 18 GHz (2622.5MHz) (5MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

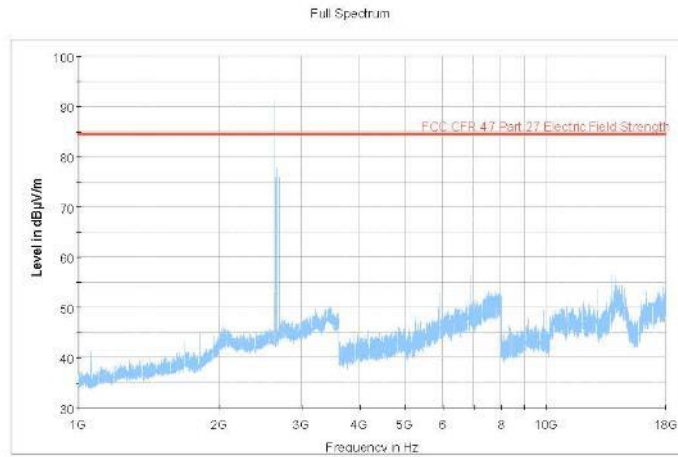


Figure 200 Radiated Emission 1 GHz – 18 GHz (2655MHz) (5MHz Channel BW)

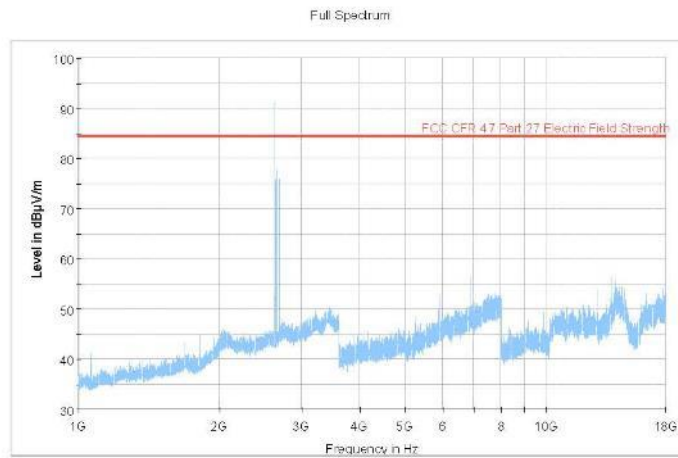


Figure 201 Radiated Emission 1 GHz – 18 GHz (2687.5MHz) (5MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHBB

Test Report No:
D568352794

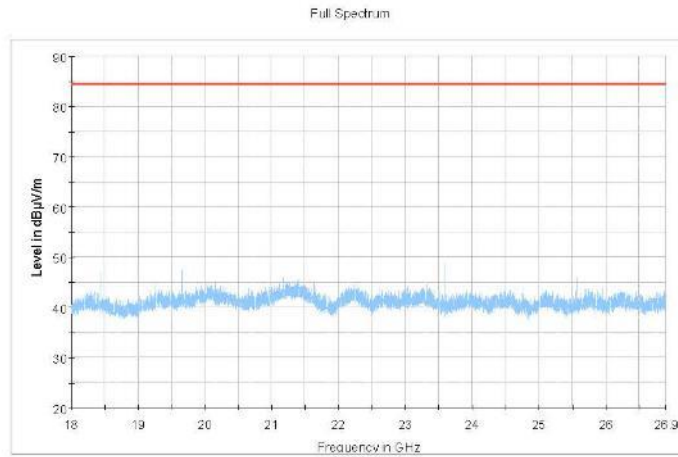


Figure 202 Radiated Emission 18 GHz – 26.9 GHz (2622.5MHz) (5MHz Channel BW)

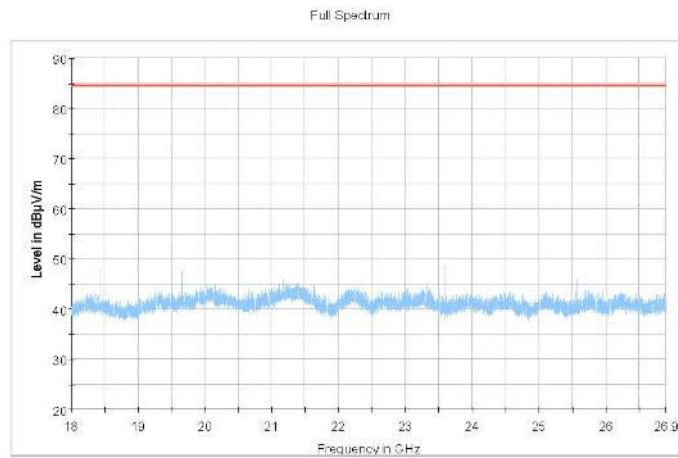


Figure 203 Radiated Emission 18 GHz – 26.9GHz (2655MHz) (5MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

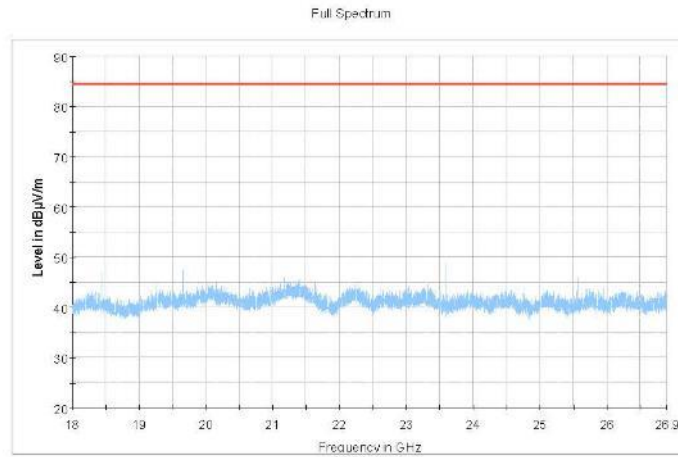


Figure 204 Radiated Emission 18 GHz – 26.9 GHz (2687.5MHz) (5MHz Channel BW)

Config B:

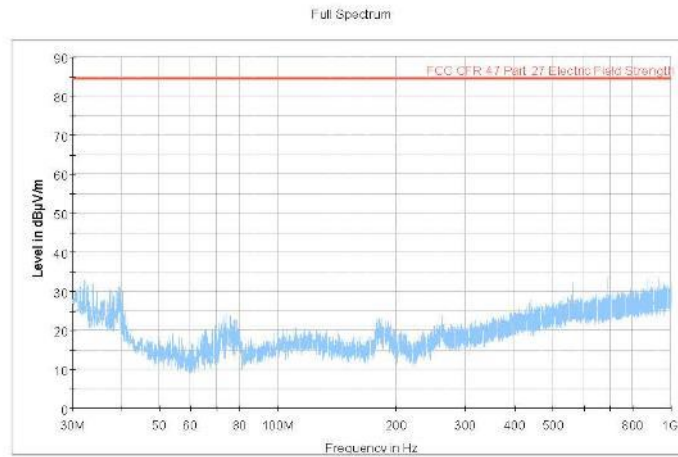


Figure 205 Radiated Emission 30 MHz – 1 GHz (2625MHz) (10MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHBB

Test Report No:
D568352794

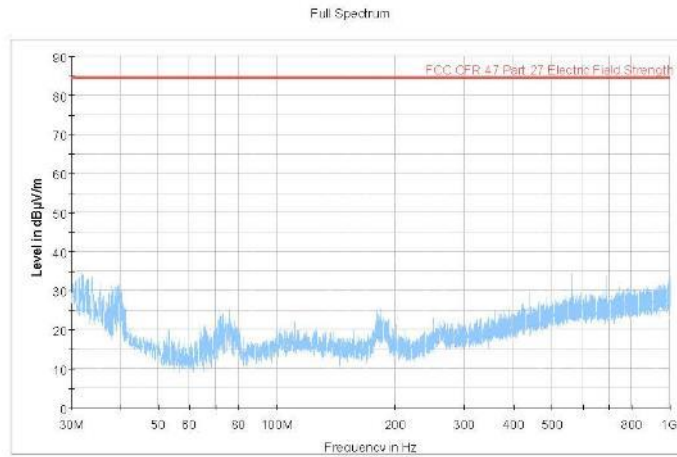


Figure 206 Radiated Emission 30 MHz – 1 GHz (2655MHz) (10MHz Channel BW)

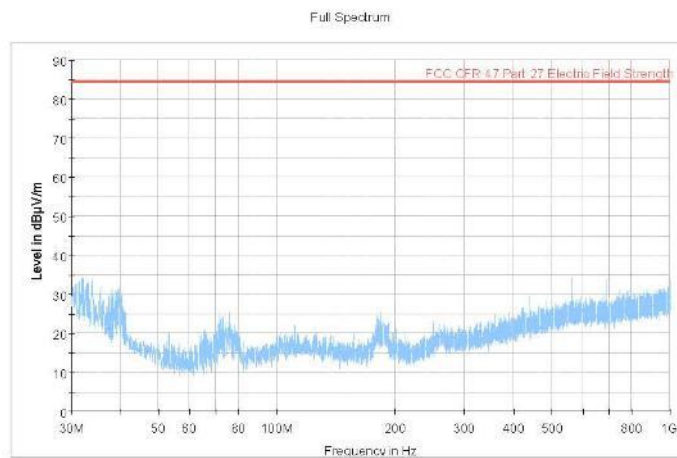


Figure 207 Radiated Emission 30 MHz – 1 GHz (2685MHz) (10MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

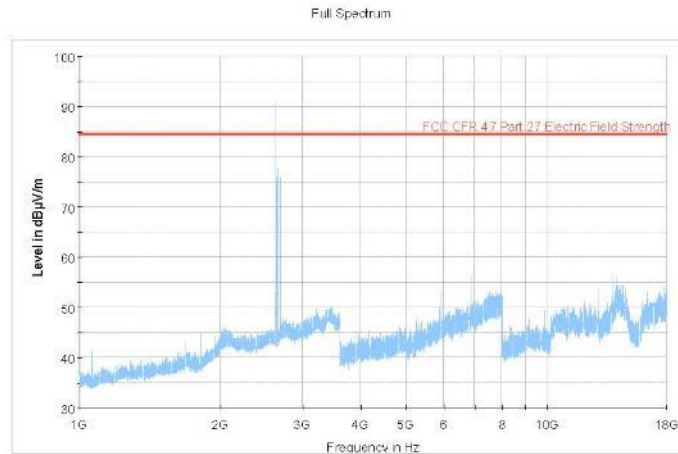


Figure 208 Radiated Emission 1GHz – 18GHz (2625MHz) (10MHz Channel BW)

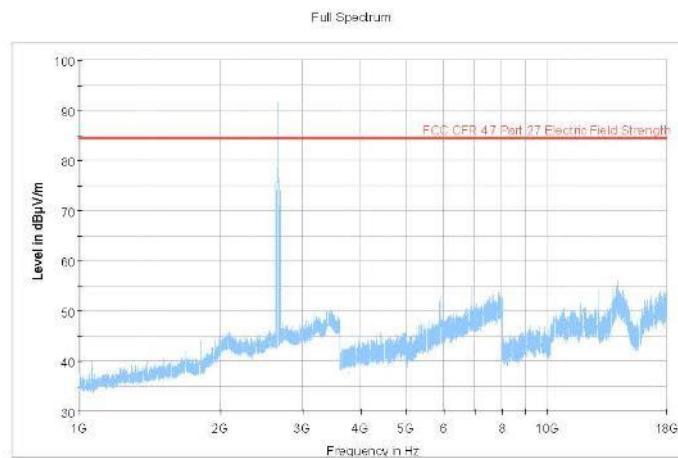


Figure 209 Radiated Emission 1GHz – 18GHz (2655MHz) (10MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

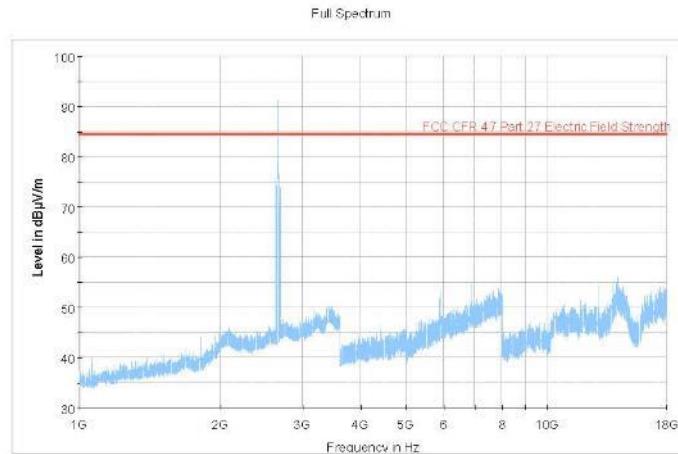


Figure 210 Radiated Emission 1GHz – 18GHz (2685MHz) (10MHz Channel BW)

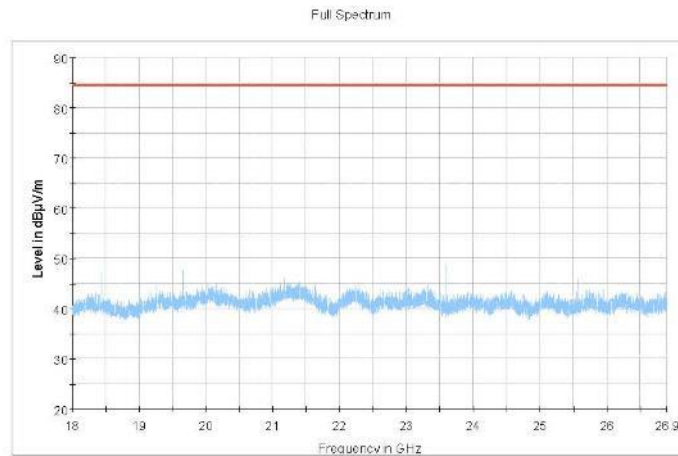


Figure 211 Radiated Emission 18 GHz – 26.9 GHz (2625MHz) (10MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

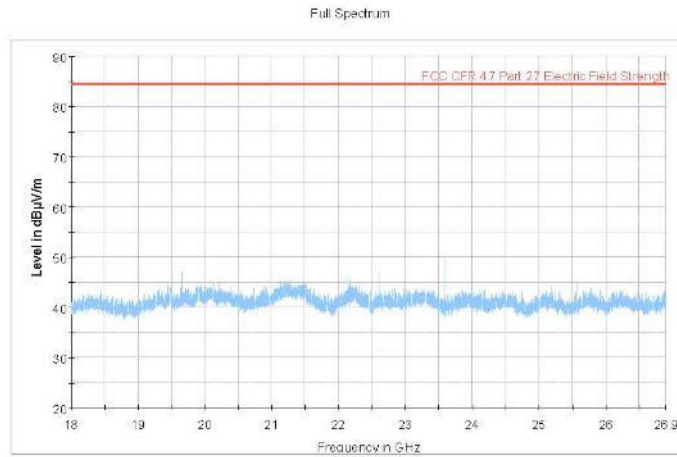


Figure 212 Radiated Emission 18 GHz – 26.9 GHz (2655MHz) (10MHz Channel BW)

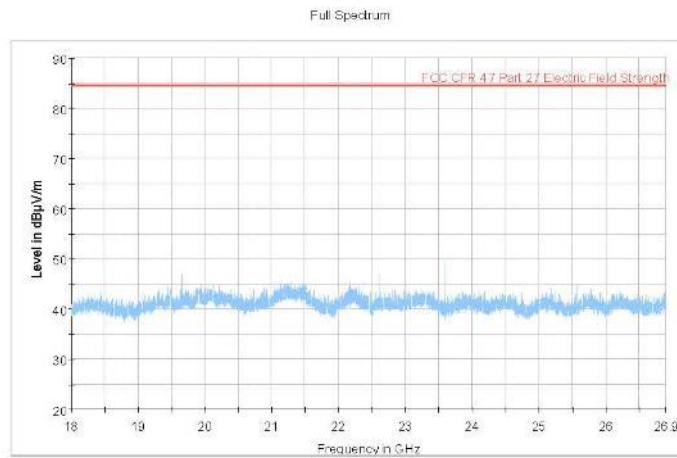


Figure 213 Radiated Emission 18 GHz – 26.9 GHz (2685MHz) (10MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHBB

Test Report No:
D568352794

Config C:

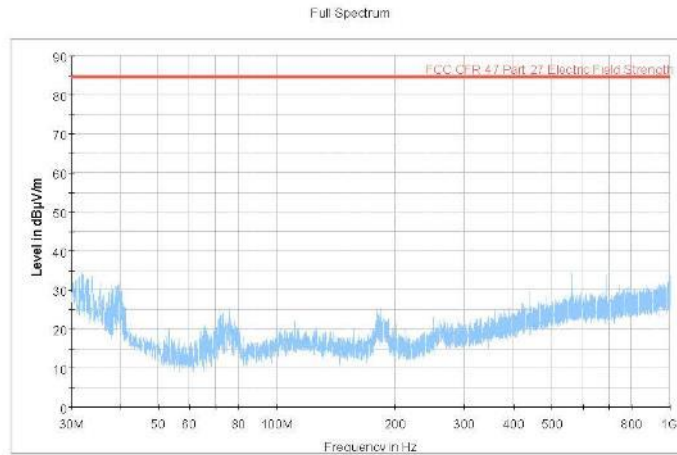


Figure 214 Radiated Emission 30 MHz – 1 GHz (2627.5MHz) (15MHz Channel BW)

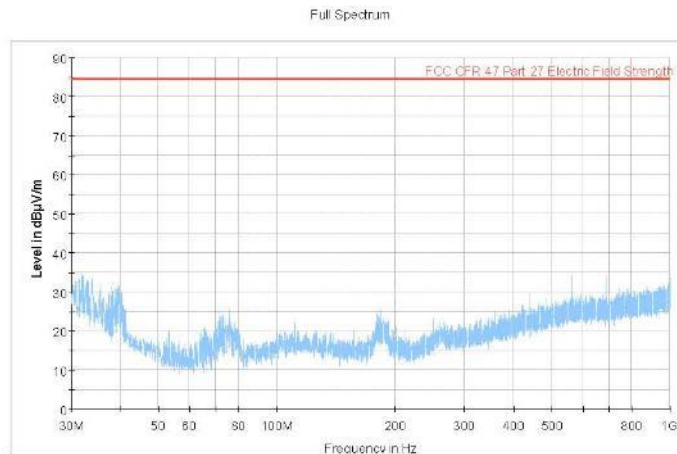


Figure 215 Radiated Emission 30 MHz – 1 GHz (2655MHz) (15MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

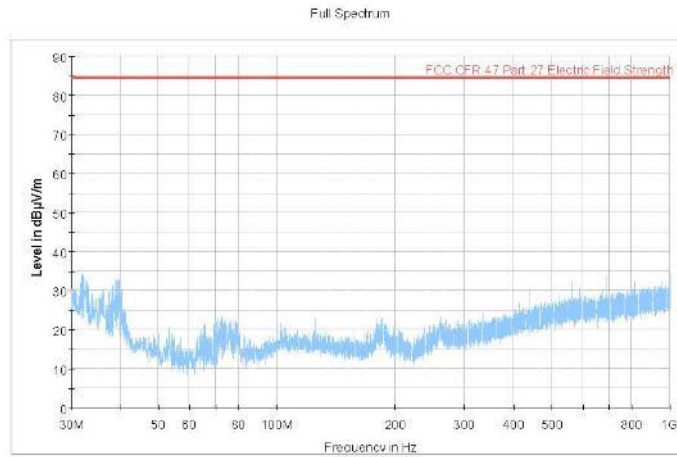


Figure 216 Radiated Emission 30 MHz – 1 GHz (2682.5MHz) (15MHz Channel BW)

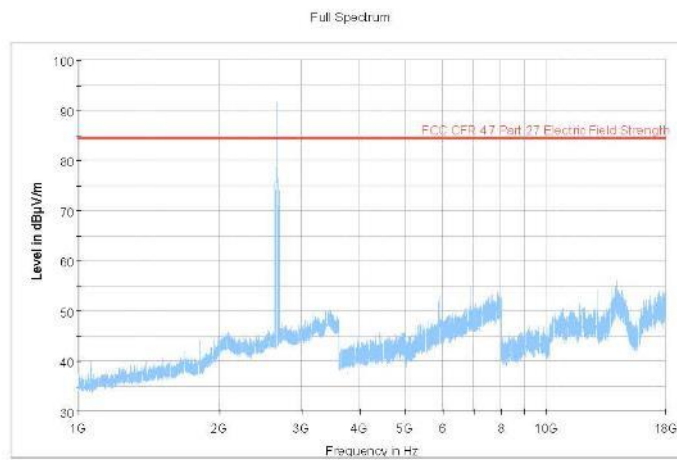


Figure 217 Radiated Emission 1 GHz – 18 GHz (2627.5MHz) (15MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

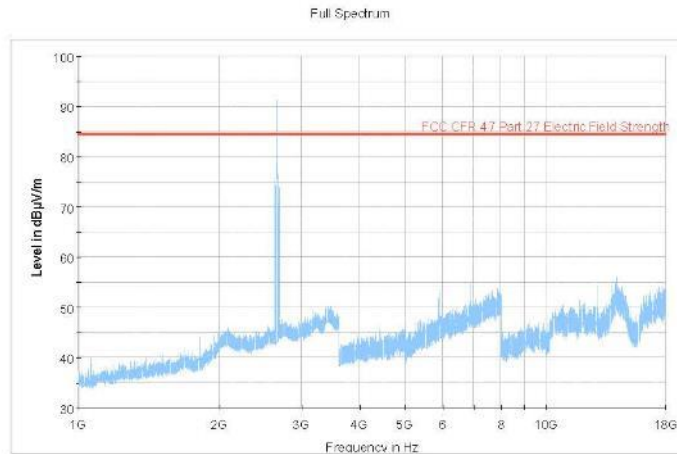


Figure 218 Radiated Emission 1 GHz – 18 GHz (2655MHz) (15MHz Channel BW)

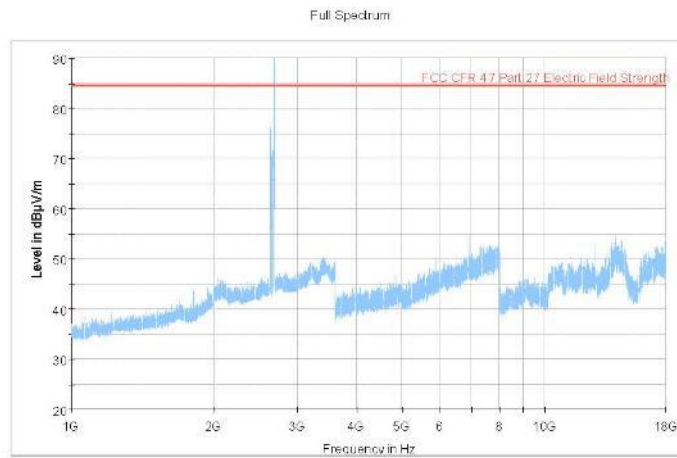


Figure 219 Radiated Emission 1 GHz – 18 GHz (2682.5MHz) (15MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

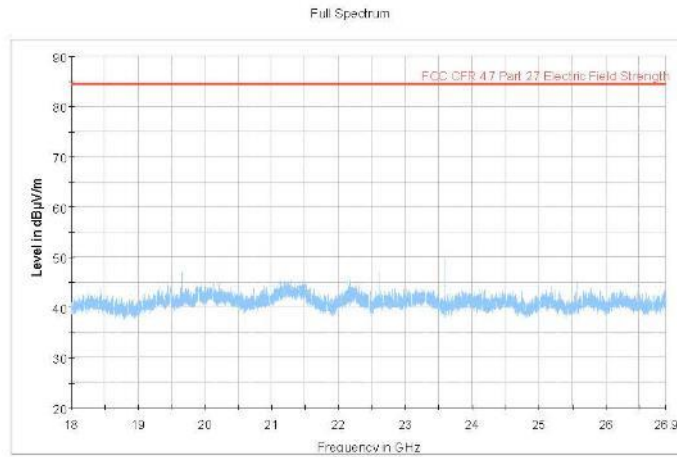


Figure 220 Radiated Emission 18 GHz – 26.9 GHz (2627.5MHz) (15MHz Channel BW)

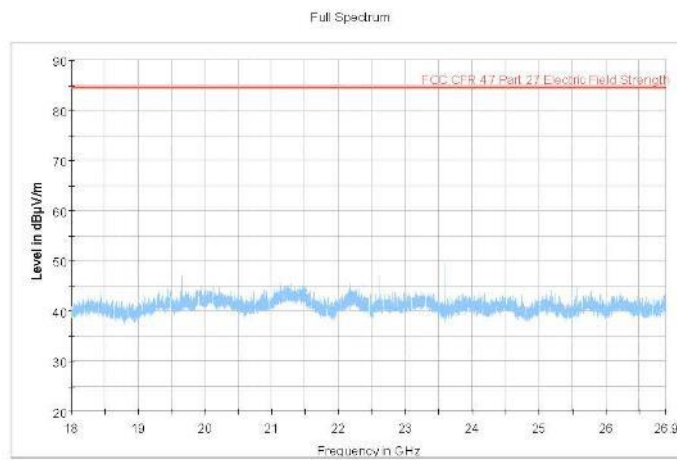


Figure 221 Radiated Emission 18 GHz – 26.9 GHz (2655MHz) (15MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

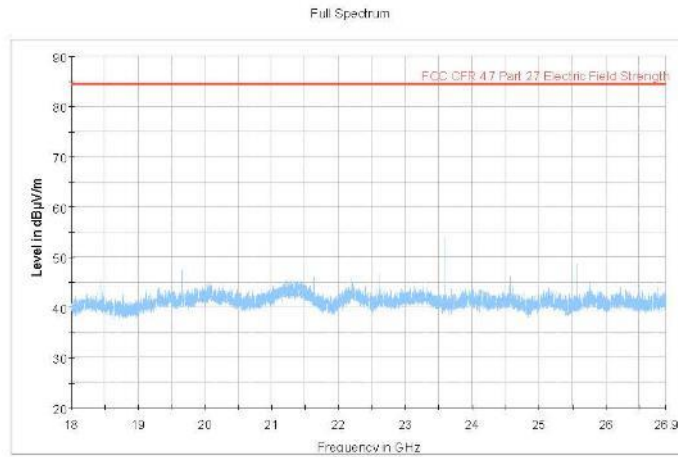


Figure 222 Radiated Emission 18 GHz – 26.9 GHz (2682.5 MHz) (15MHz Channel BW)

Config D:

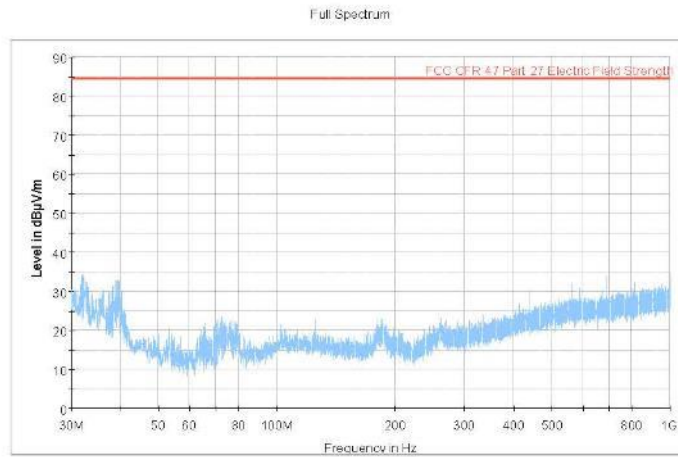


Figure 223 Radiated Emission 30 MHz – 1 GHz (2630MHz) (20MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHBB

Test Report No:
D568352794

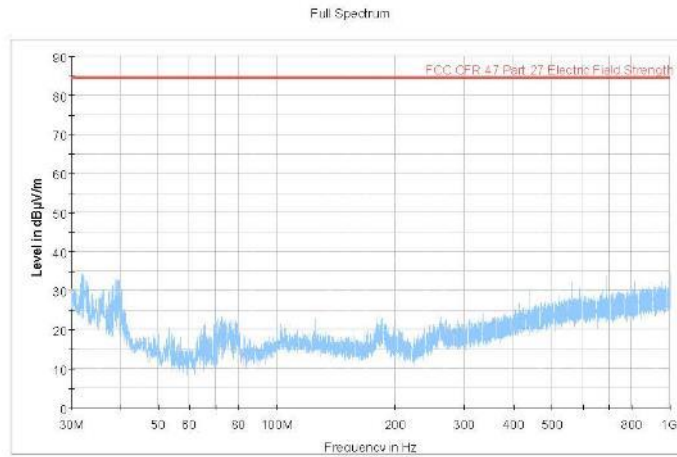


Figure 224 Radiated Emission 30 MHz – 1 GHz (2655MHz) (20MHz Channel BW)

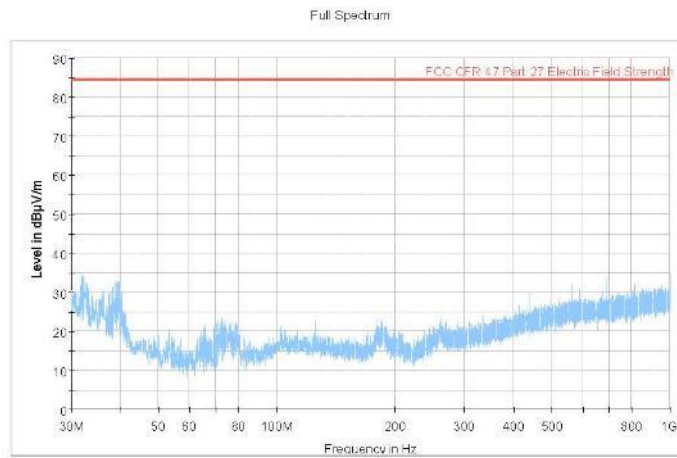


Figure 225 Radiated Emission 30 MHz – 1 GHz (2680MHz) (20MHz Channel BW)



FCC ID: VBNAHHB-01
IC ID: 661A1-AHHB

Test Report No:
D568352794

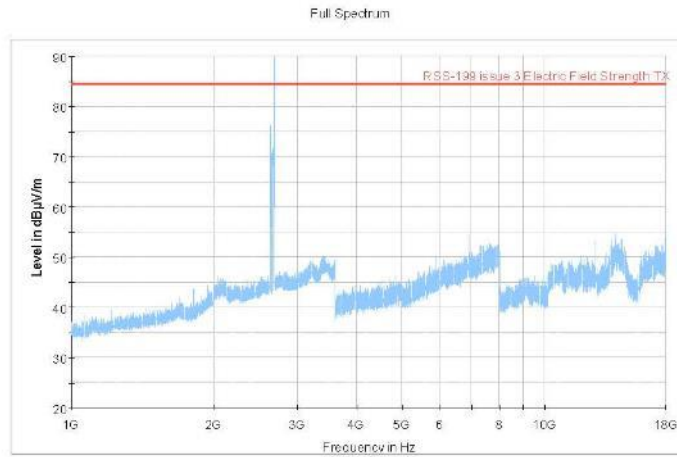


Figure 226 Radiated Emission 1 GHz – 18 GHz (2630MHz) (20MHz Channel BW)

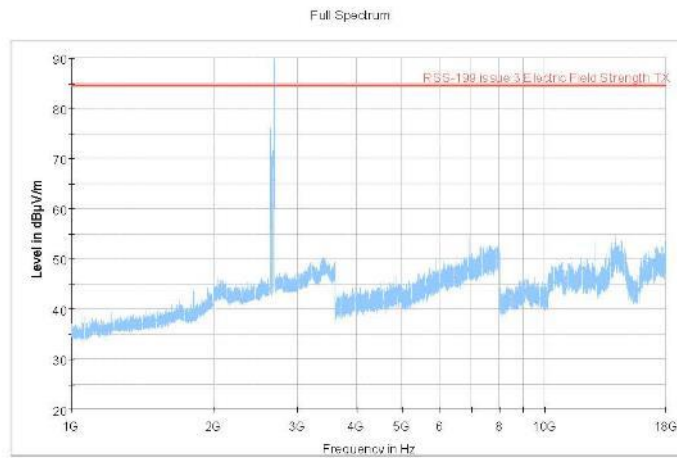


Figure 227 Radiated Emission 1 GHz – 18 GHz (2655MHz) (20MHz Channel BW)