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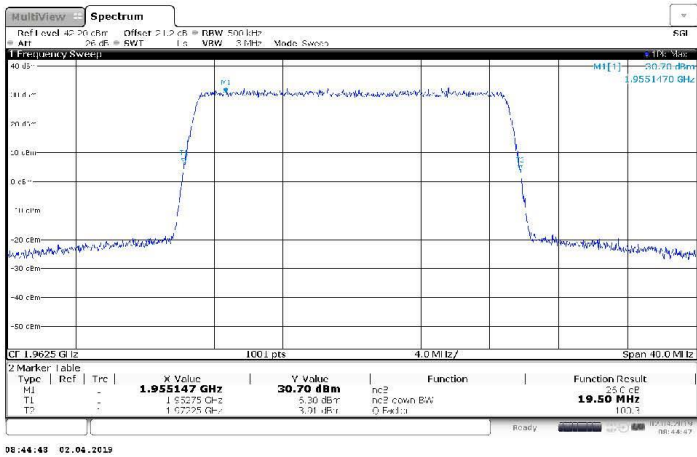


Figure 25 Occupied Bandwidth – 64QAM (1962.5 MHz) (20MHz Channel BW)

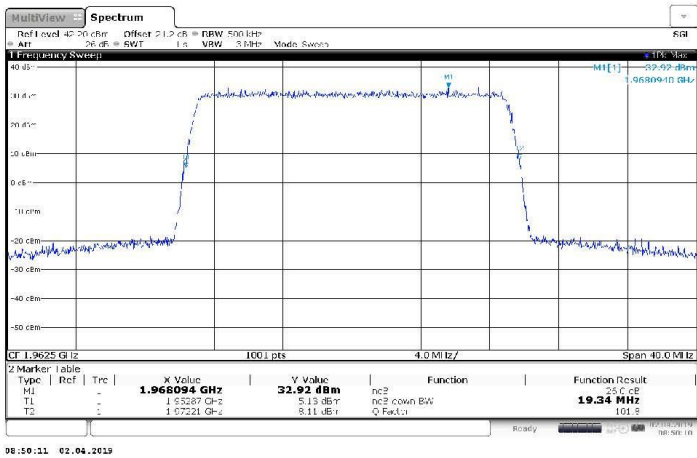


Figure 26 Occupied Bandwidth – 256QAM (1962.5 MHz) (20MHz Channel BW)



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5.2.3. Test No. 4: Spurious Emissions at the Antenna Terminals

Screenshots of highest power and emission antenna in this unit it was antenna port 1. The external attenuation (connection loss of the set up) is already added in the results. Limit line is set fixed to level -19.02dB.

Config A ANT1:

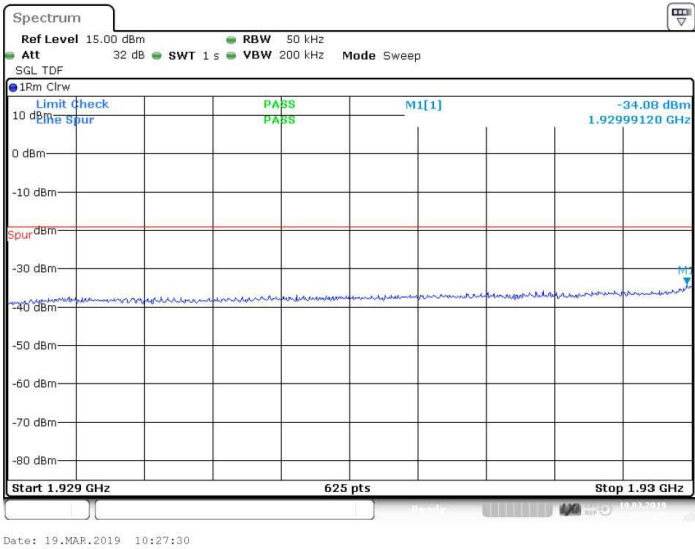


Figure 27 Spurious Emissions (Lower Band Edge) – QPSK (1932.5 MHz) (5MHz Channel BW)



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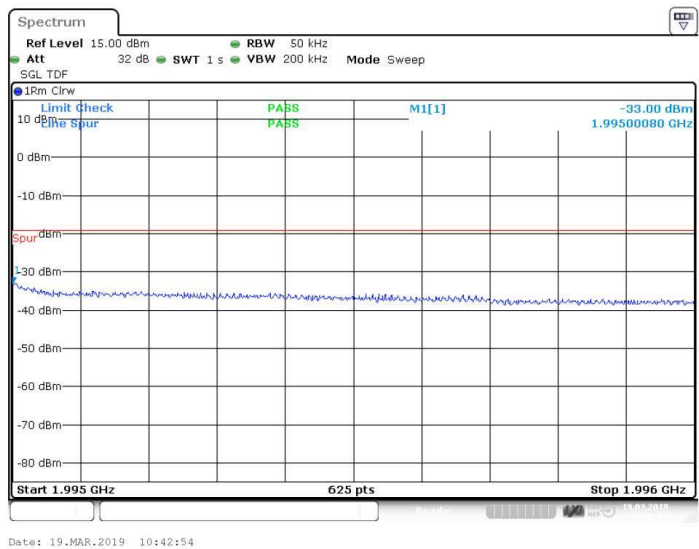


Figure 28 Spurious Emissions (Upper Band Edge) – QPSK (1992.5 MHz) (5MHz Channel BW)

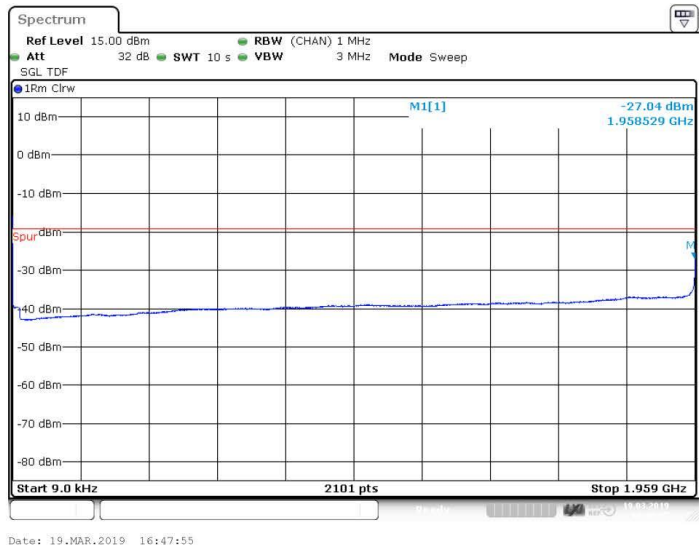


Figure 29 Spurious Emissions (9kHz – 1959Hz) - QPSK (1962.5MHz) (5MHz Channel BW)



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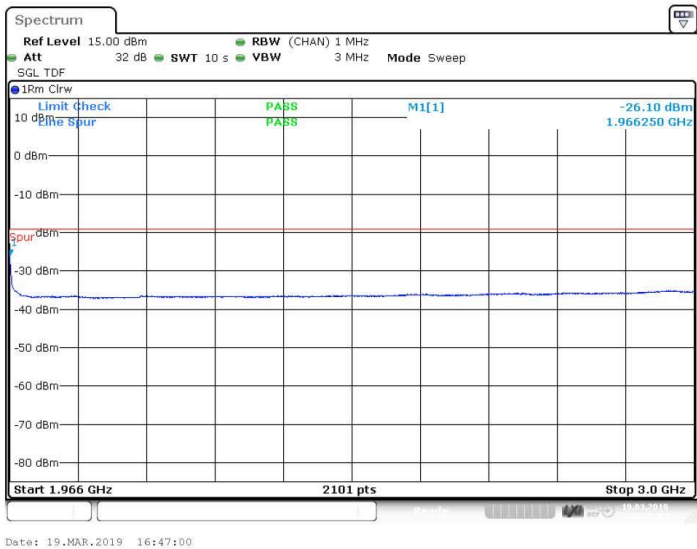


Figure 30 Spurious Emissions (1966MHz – 3GHz) - QPSK (1962.5MHz) (5MHz Channel BW)

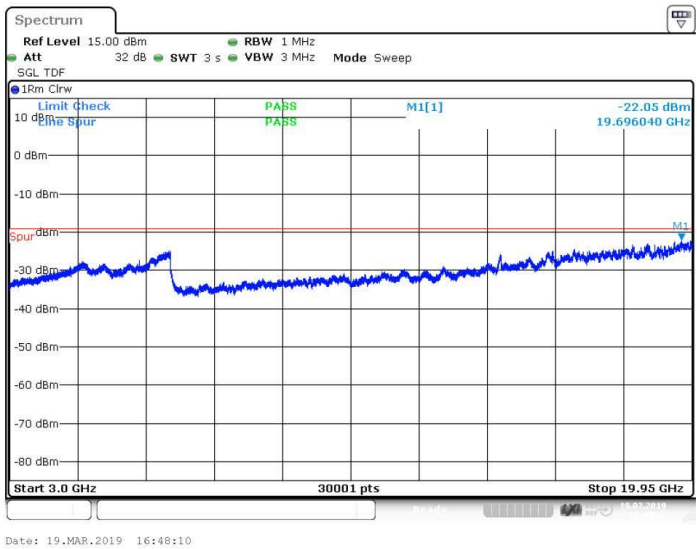
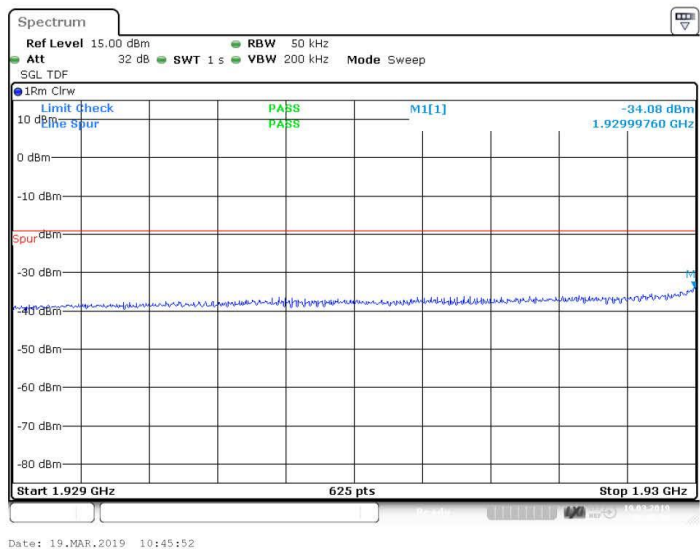


Figure 31 Spurious Emissions (3GHz – 19.950GHz) – QPSK (1962.5 MHz) (5MHz Channel BW)

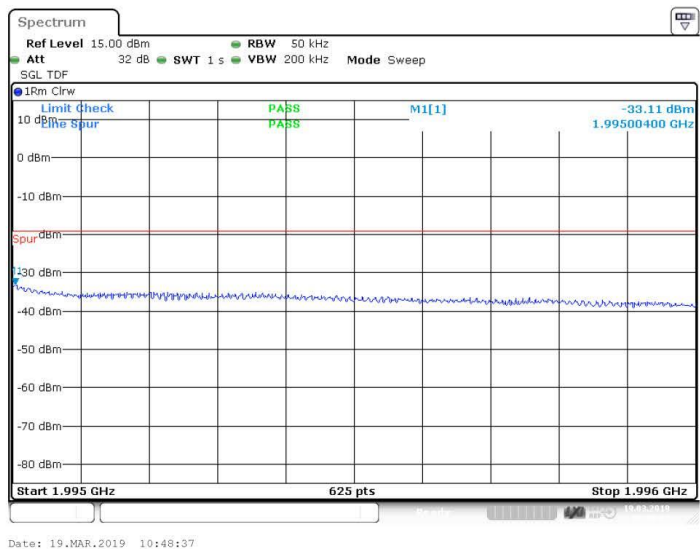


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**Figure 32 Spurious Emissions (Lower Band Edge) – 16QAM (1932.5 MHz)
(5MHz Channel BW)**



**Figure 33 Spurious Emissions (Upper Band Edge) – 16QAM (1992.5 MHz)
(5MHz Channel BW)**



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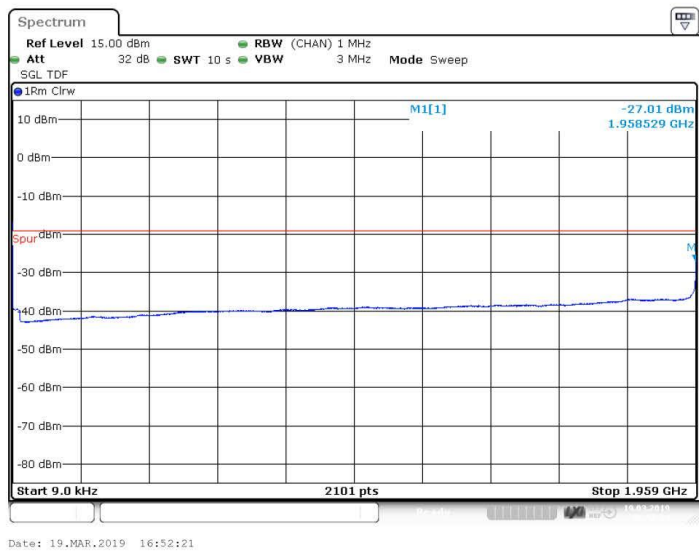


Figure 34 Spurious Emissions (9kHz – 1959MHz) – 16QAM (1962.5 MHz) (5MHz Channel BW)

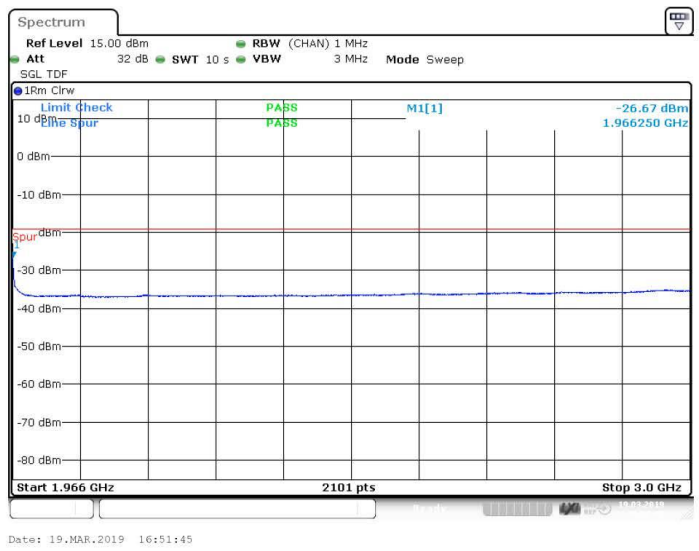
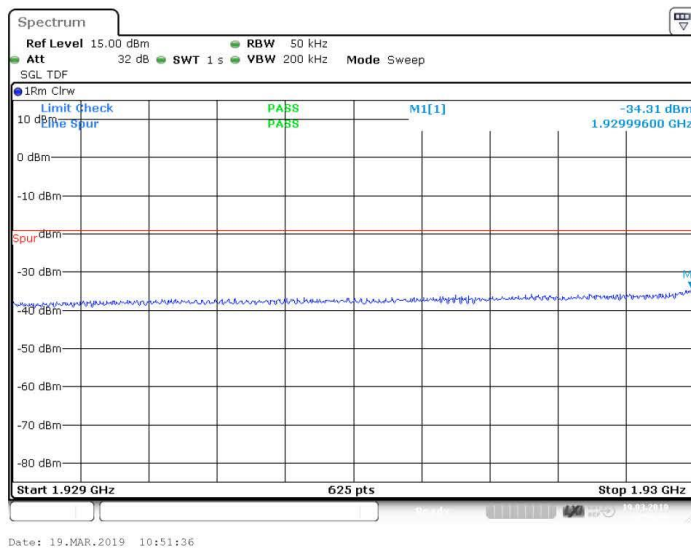
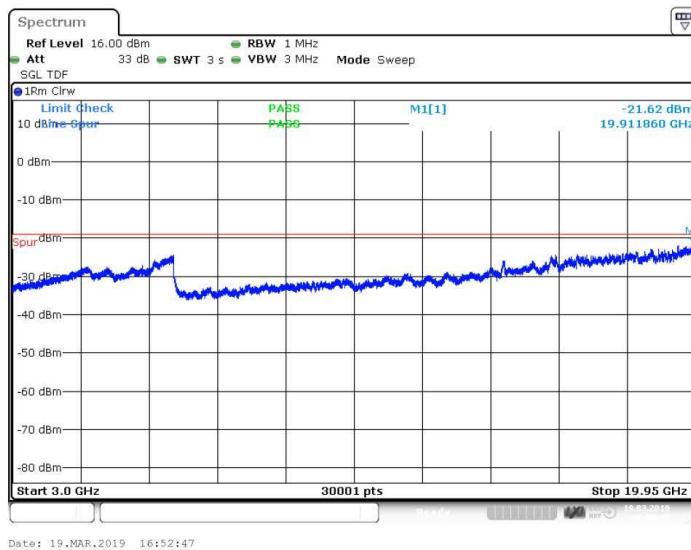


Figure 35 Spurious Emissions (1966MHz – 3GHz) – 16QAM (1962.5 MHz) (5MHz Channel BW)

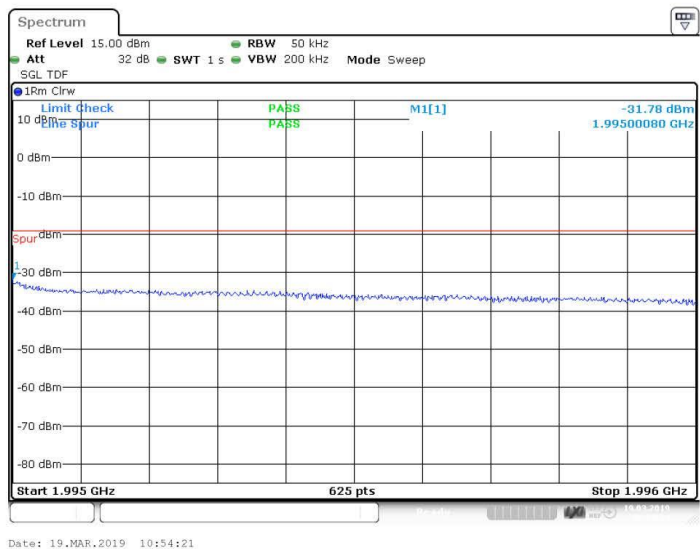
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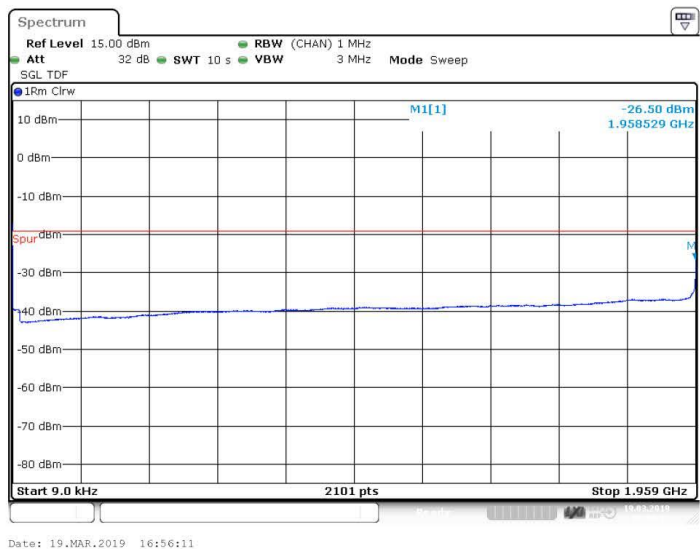


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**Figure 38 Spurious Emissions (Upper Band Edge) – 64QAM (1992.5 MHz)
(5MHz Channel BW)**



**Figure 39 Spurious Emissions (9kHz – 1959MHz) – 64QAM (1962.5 MHz)
(5MHz Channel BW)**



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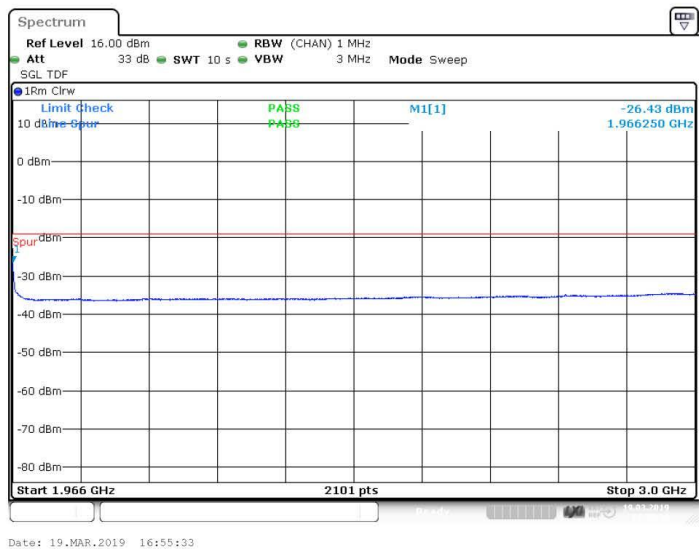


Figure 40 Spurious Emissions (1966MHz – 3GHz) – 64QAM (1962.5 MHz) (5MHz Channel BW)

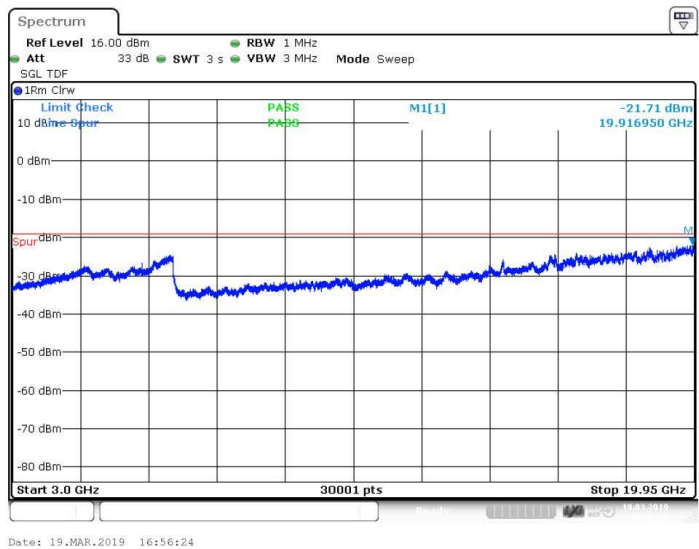
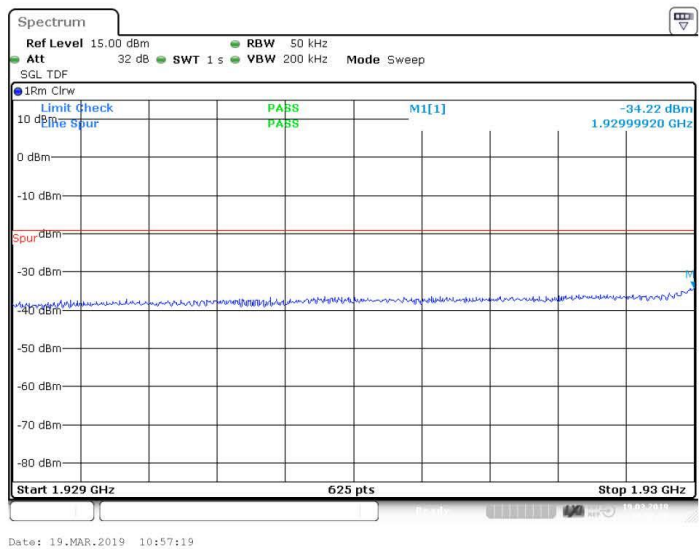


Figure 41 Spurious Emissions (3GHz – 19.950GHz) – 64QAM (1962.5 MHz) (5MHz Channel BW)

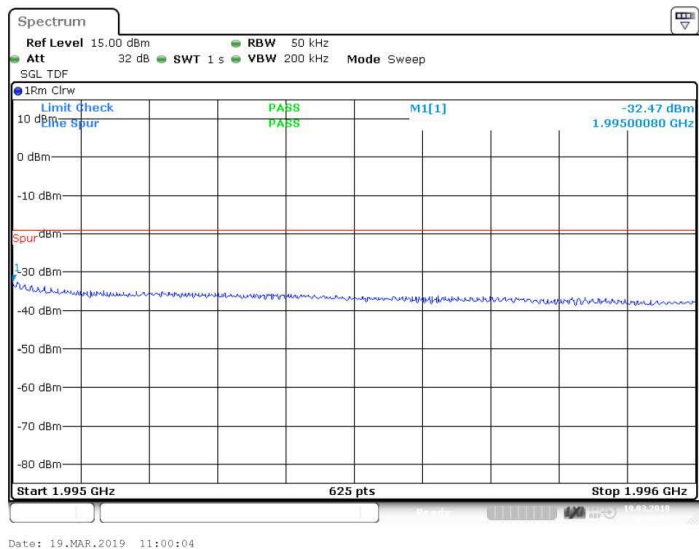


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**Figure 42 Spurious Emissions (Lower Band Edge) – 256QAM (1932.5 MHz)
(5MHz Channel BW)**

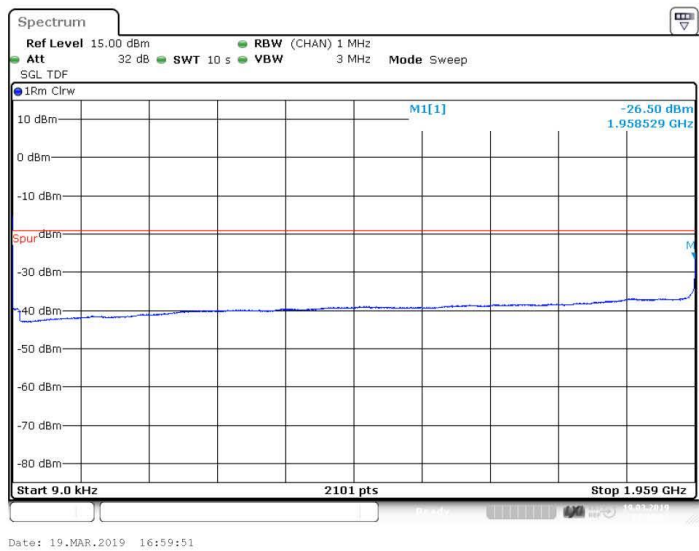


**Figure 43 Spurious Emissions (Upper Band Edge) – 256QAM (1992.5 MHz)
(5MHz Channel BW)**

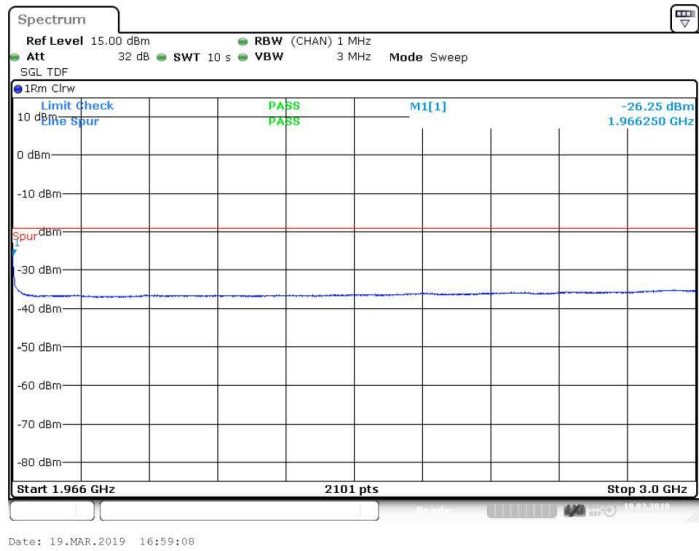


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**Figure 44 Spurious Emissions (9kHz – 1959MHz) – 256QAM (1962.5 MHz)
(5MHz Channel BW)**



**Figure 45 Spurious Emissions (1966MHz – 3GHz) – 256QAM (1962.5 MHz)
(5MHz Channel BW)**



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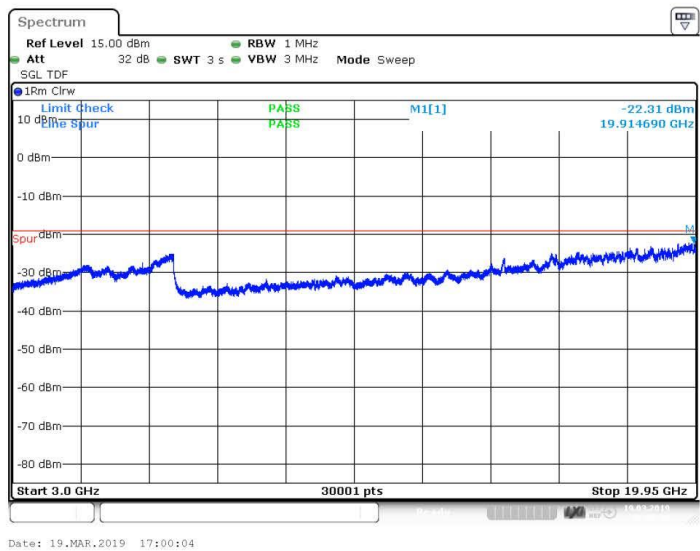


Figure 46 Spurious Emissions (3GHz – 19.950GHz) – 256QAM (1962.5 MHz) (5MHz Channel BW)



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Config B ANT1:

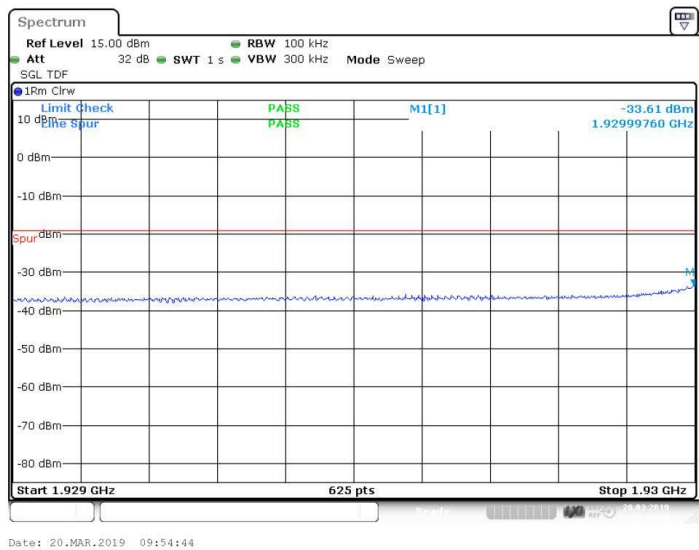


Figure 47 Spurious Emissions (Lower Band Edge) – QPSK (1935.0 MHz)
(10MHz Channel BW)

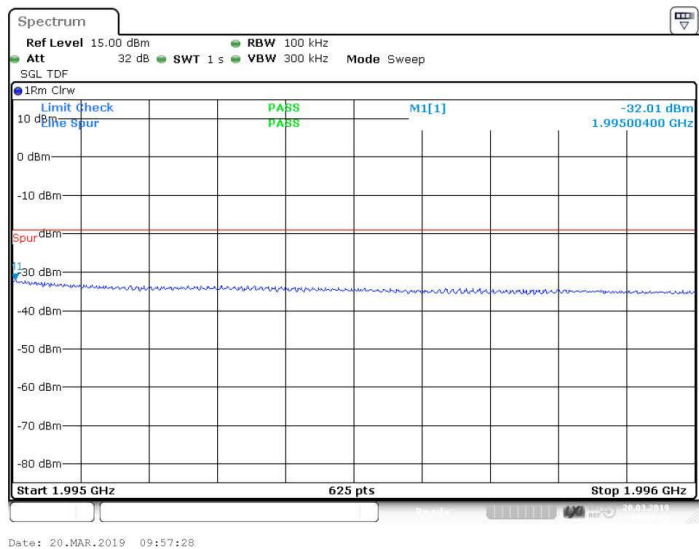


Figure 48 Spurious Emissions (Upper Band Edge) – QPSK (1990.0 MHz)
(10MHz Channel BW)



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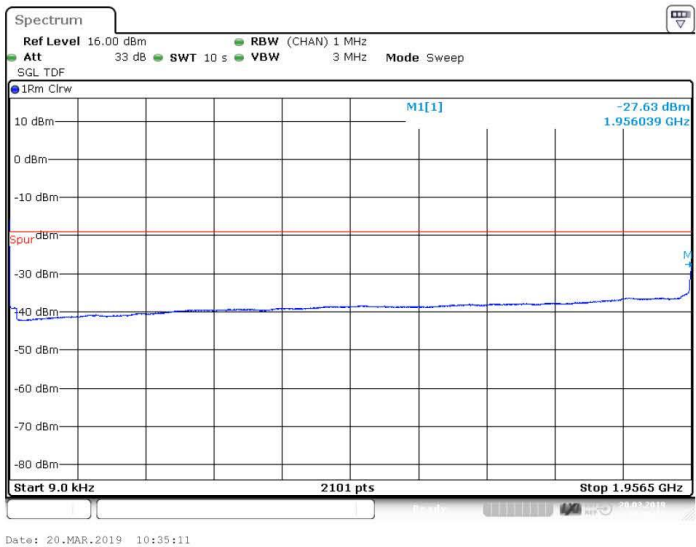


Figure 49 Spurious Emissions (9kHz – 1956.5MHz) - QPSK (1962.5 MHz)
(10MHz Channel BW)

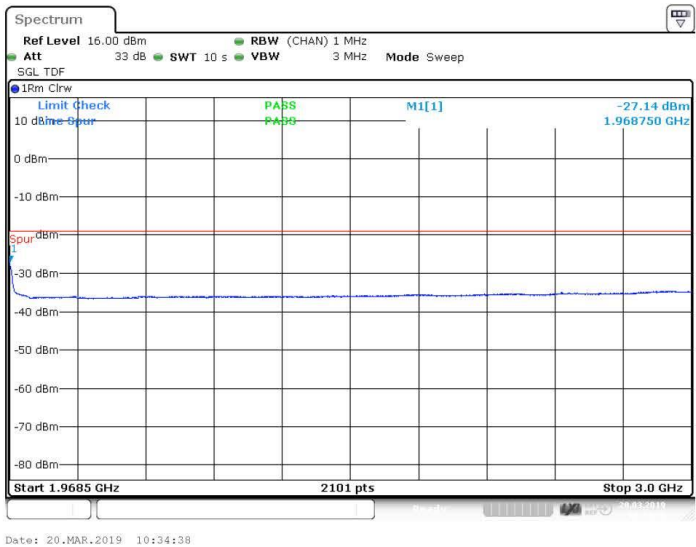


Figure 50 Spurious Emissions (1968.5MHz – 3GHz) – QPSK (1962.5 MHz)
(10MHz Channel BW)



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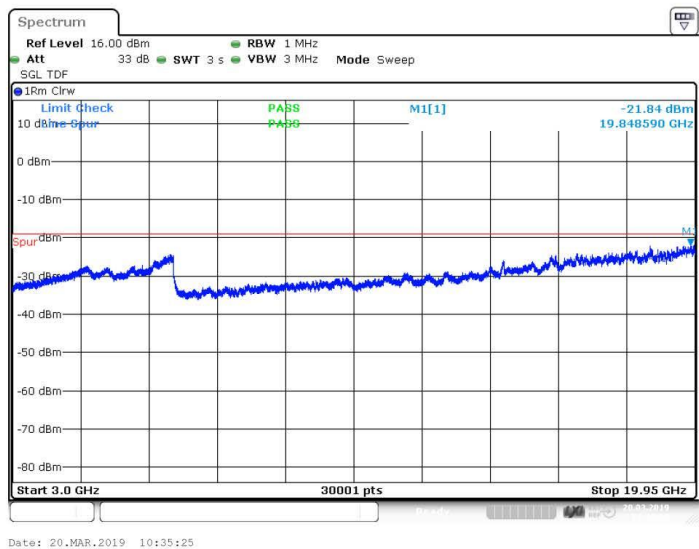


Figure 51 Spurious Emissions (3GHz – 19.950GHz) – QPSK (1962.5 MHz)
(10MHz Channel BW)

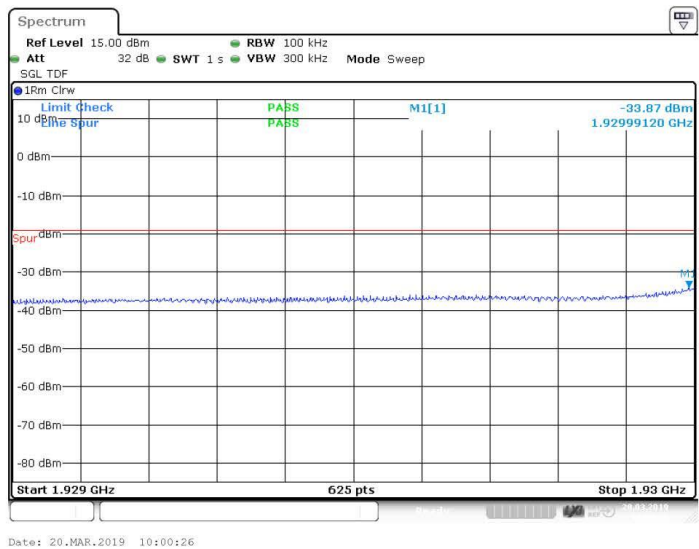


Figure 52 Spurious Emissions (Lower Band Edge) – 16QAM (1935.0 MHz)
(10MHz Channel BW)



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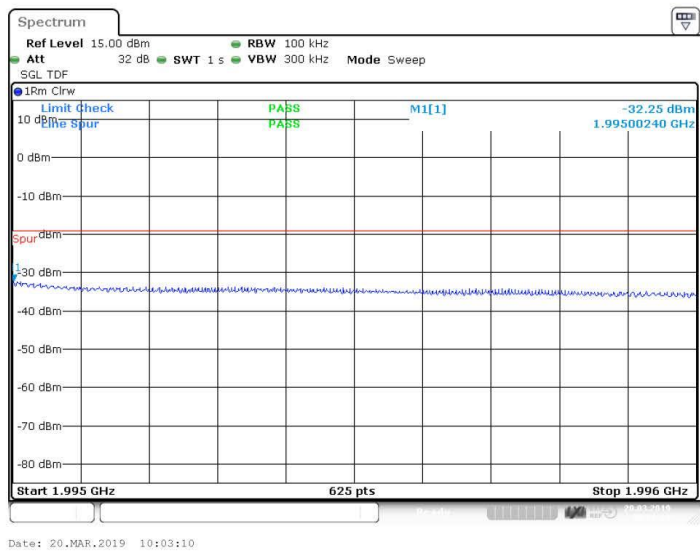


Figure 53 Spurious Emissions (Upper Band Edge) – 16QAM (1990.0 MHz)
(10MHz Channel BW)

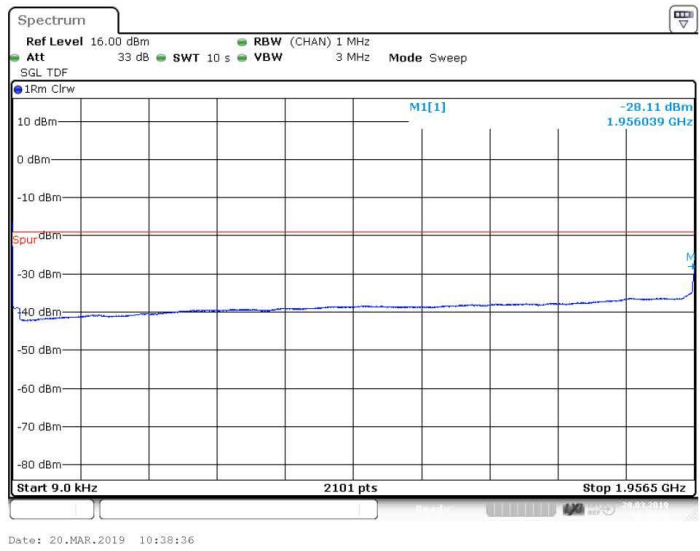


Figure 54 Spurious Emissions (9kHz – 1956.5Hz) – 16QAM (1962.5 MHz)
(10MHz Channel BW)



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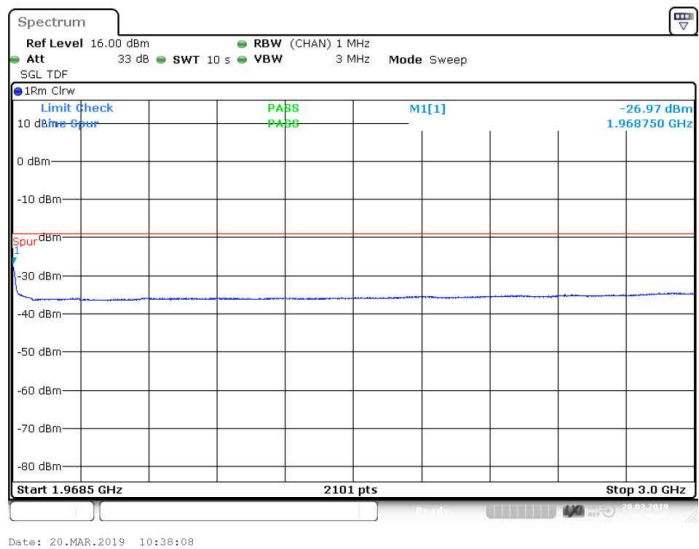


Figure 55 Spurious Emissions (1968.5Hz – 3GHz) – 16QAM (1962.5 MHz)
(10MHz Channel BW)

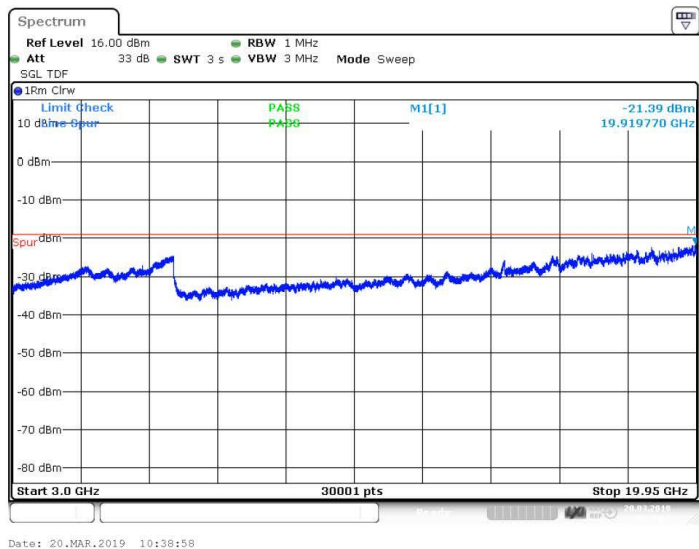


Figure 56 Spurious Emissions (3GHz – 19.950GHz) – 16QAM (1962.5 MHz)
(10MHz Channel BW)



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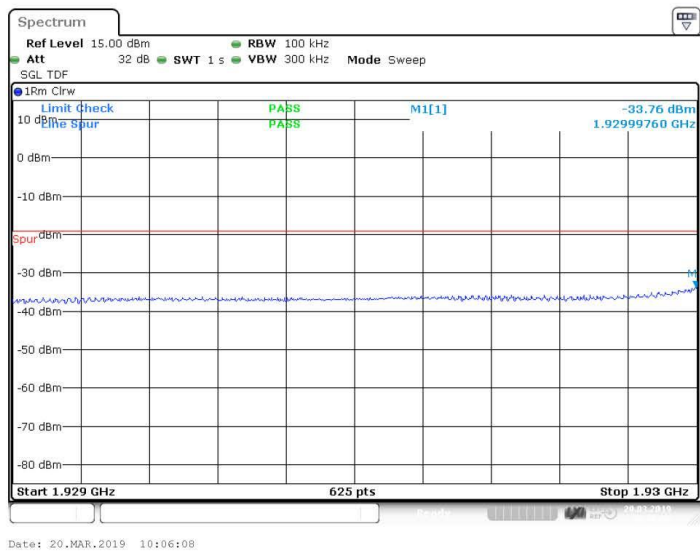


Figure 57 Spurious Emissions (Lower Band Edge) – 64QAM (1935.0 MHz)
(10MHz Channel BW)

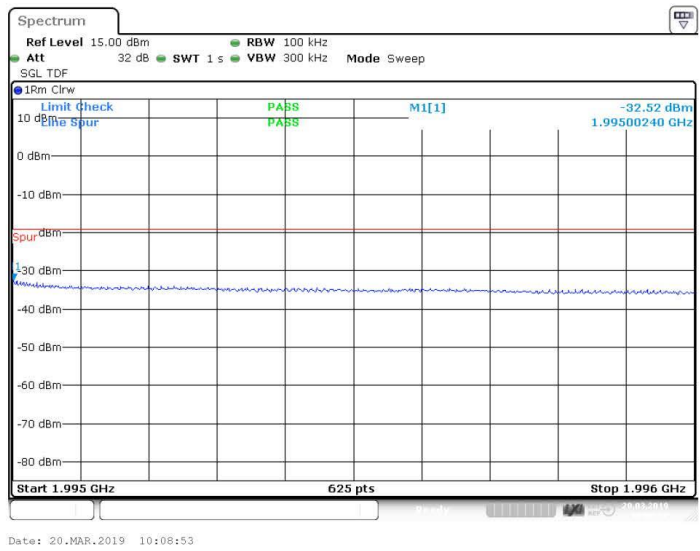


Figure 58 Spurious Emissions (Upper Band Edge) – 64QAM (1990.0 MHz)
(10MHz Channel BW)



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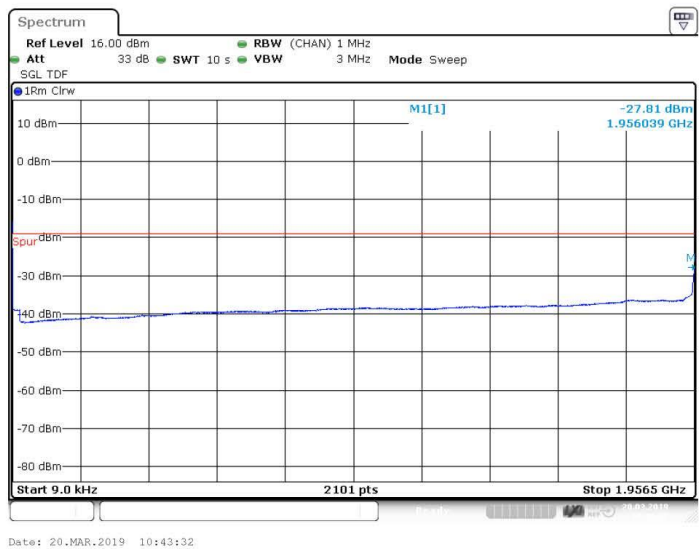


Figure 59 Spurious Emissions (9kHz – 1956.5MHz) – 64QAM (1962.5 MHz)
(10MHz Channel BW)

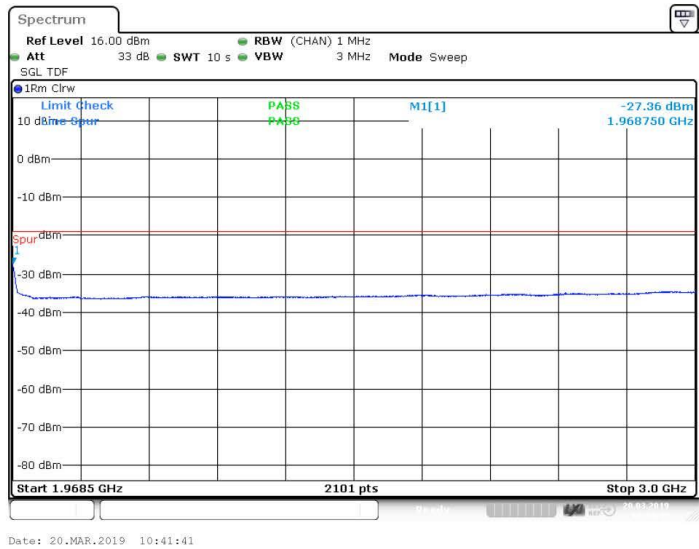
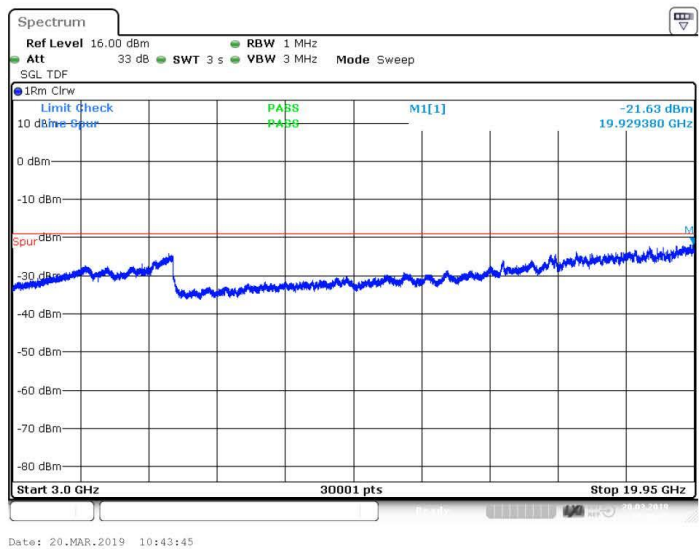


Figure 60 Spurious Emissions (1968.5MHz – 3GHz) – 64QAM (1962.5 MHz)
(10MHz Channel BW)

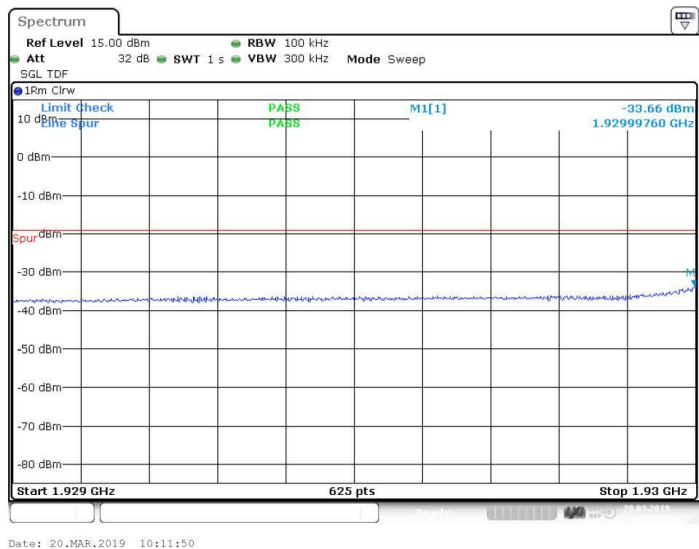


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**Figure 61 Spurious Emissions (3GHz – 19.950GHz) – 64QAM (1962.5 MHz)
(10MHz Channel BW)**



**Figure 62 Spurious Emissions (Lower Band Edge) – 256QAM (1935.0 MHz)
(10MHz Channel BW)**



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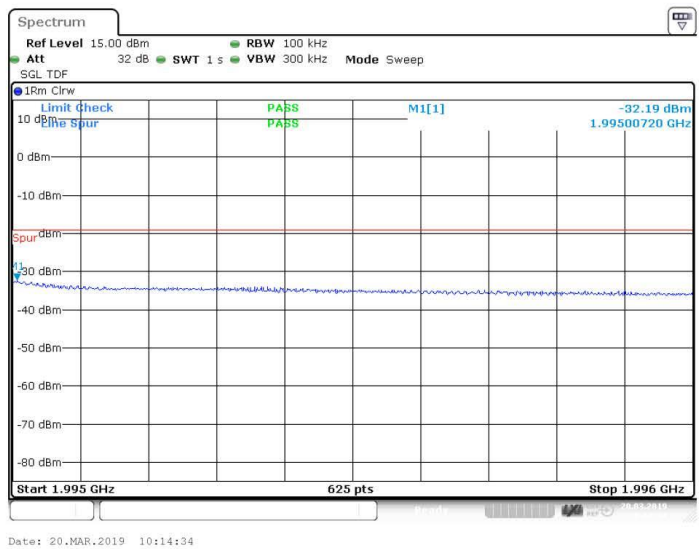


Figure 63 Spurious Emissions (Upper Band Edge) – 256QAM (1990.0 MHz) (10MHz Channel BW)

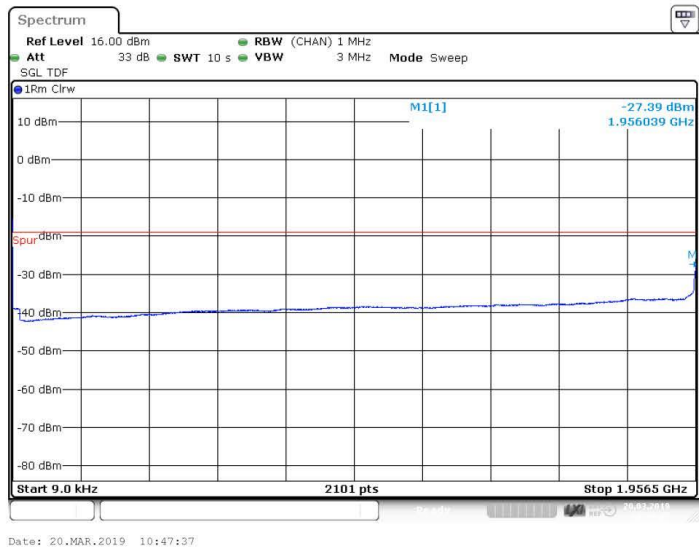


Figure 64 Spurious Emissions (9kHz – 1956.5MHz) – 256QAM (1962.5 MHz) (10MHz Channel BW)



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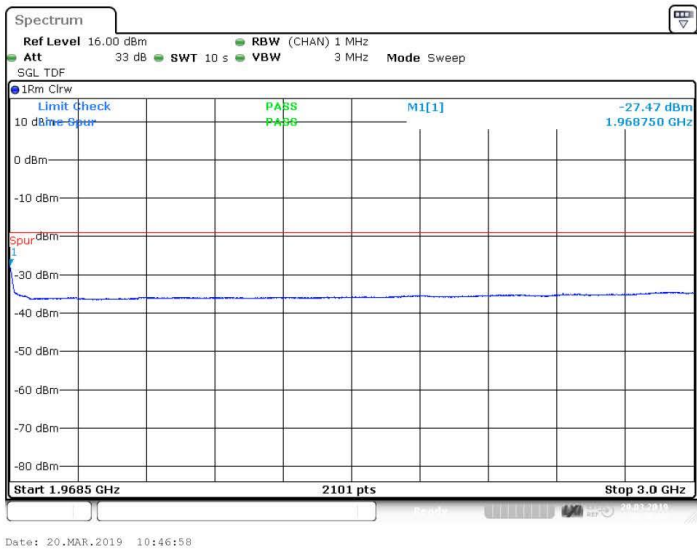


Figure 65 Spurious Emissions (1986.5Hz – 3GHz) – 256QAM (1962.5 MHz) (10MHz Channel BW)

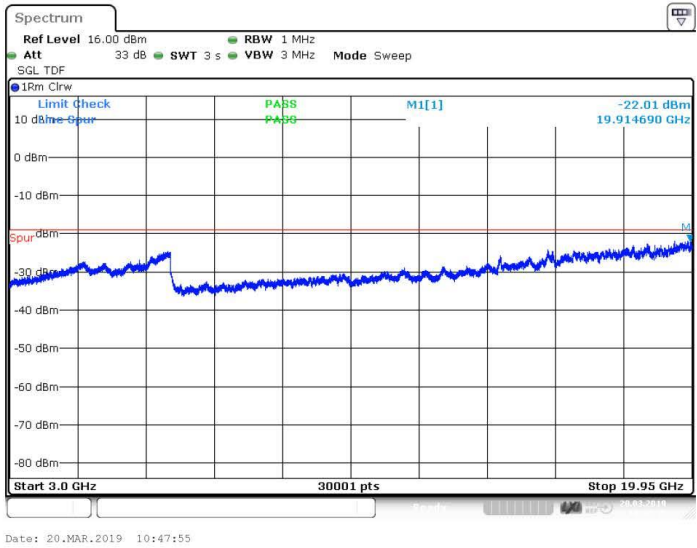


Figure 66 Spurious Emissions (3GHz – 19.950GHz) – 256QAM (1962.5 MHz) (10MHz Channel BW)

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Spectrum

Ref Level 15.00 dBm
 Att 32 dB ● SWT 200 ms ● RBW 200 kHz
 SGL TDF ● VBW 500 kHz Mode Sweep

● 1Rm Clrw

Limit Check
 Blue Spur

PASS
 PASS

M1[1]

-30.46 dBm
 1.92999680 GHz

Spur

Start 1.929 GHz 155 pts Stop 1.93 GHz

Date: 21.MAR.2019 14:22:55

Spectrum

Ref Level 15.00 dBm **RBW** 200 kHz **Att** 32 dB **SWT** 200 ms **VBW** 500 kHz **Mode** Sweep

SGL TDF

1Rm Clrw

Limit check **PASS** **M1[1]** **-29.73 dBm** **1.99500320 GHz**

Spur

Start 1.995 GHz **155 pts** **Stop 1.996 GHz**

Date: 21.MAR.2019 14:42:31

10. Apr 2019
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