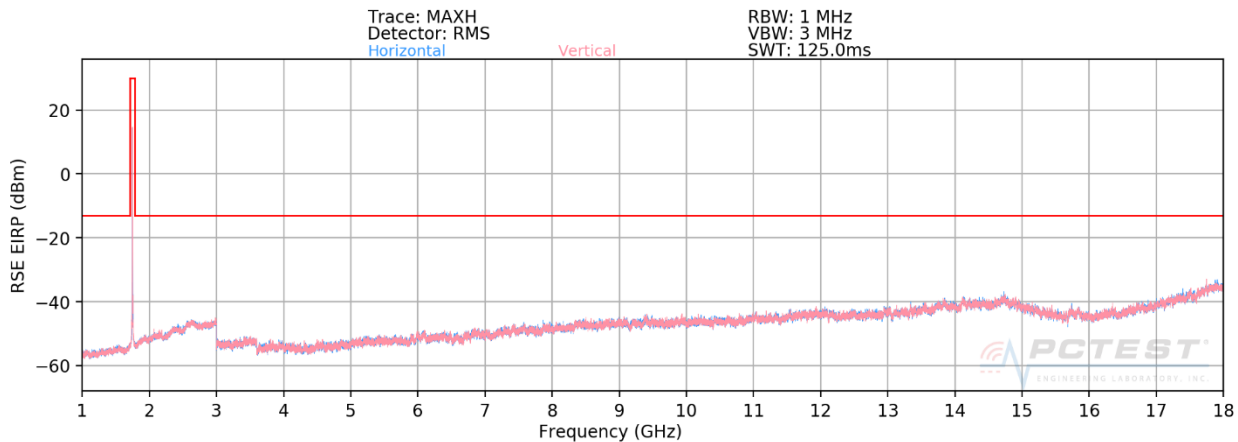
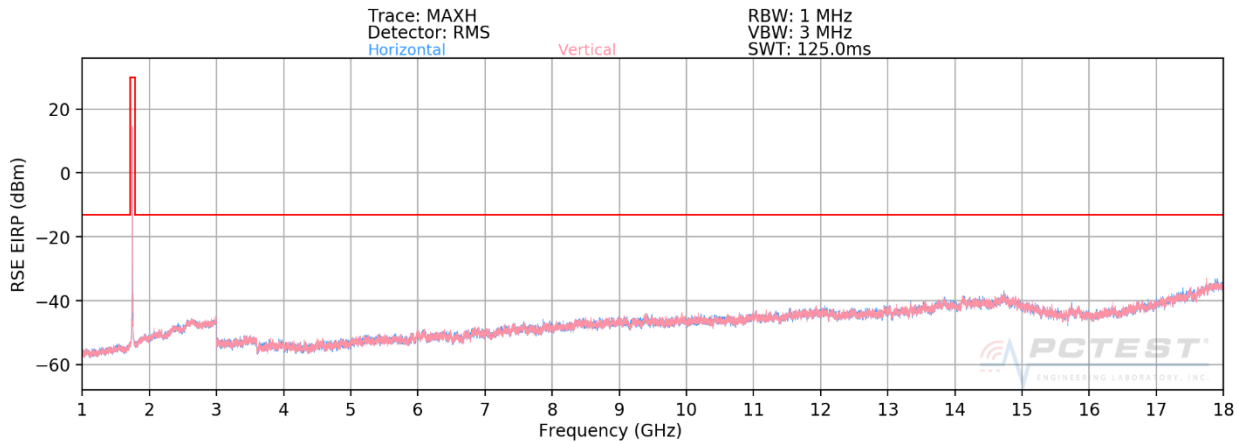


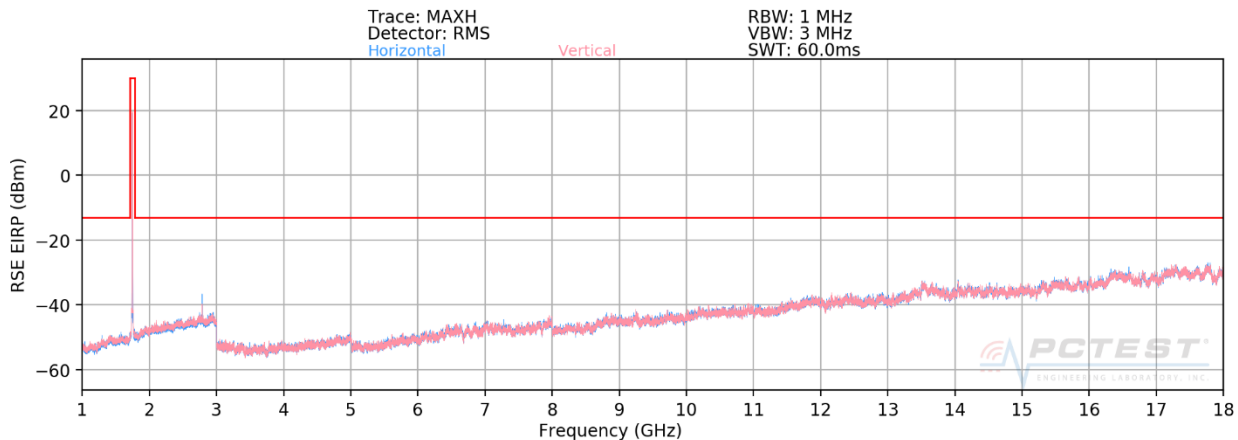
NR Band n66



Plot 7-753. Radiated Spurious Plot above 1GHz (n66)

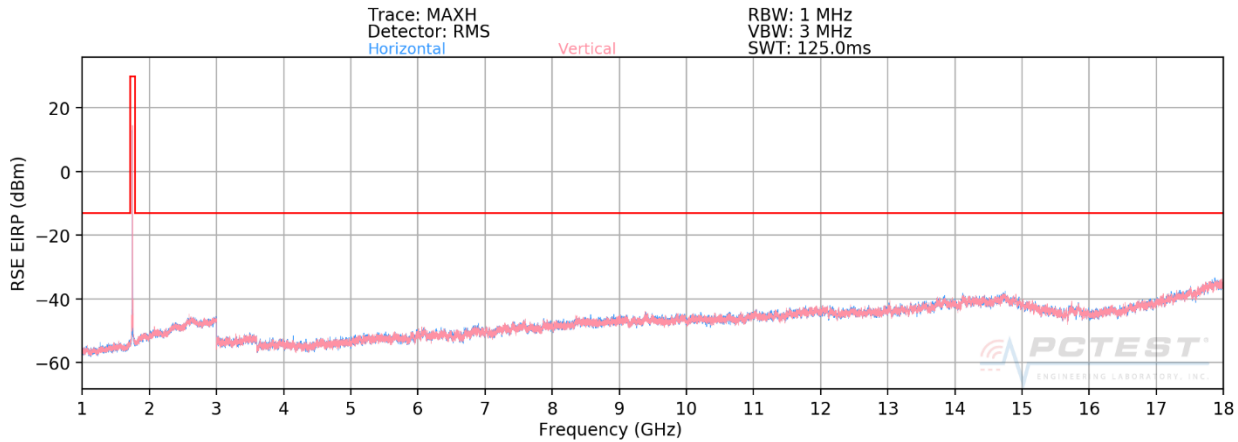


Plot 7-754. Radiated Spurious Plot above 1GHz (n66 ENDC – ANCHOR B5)

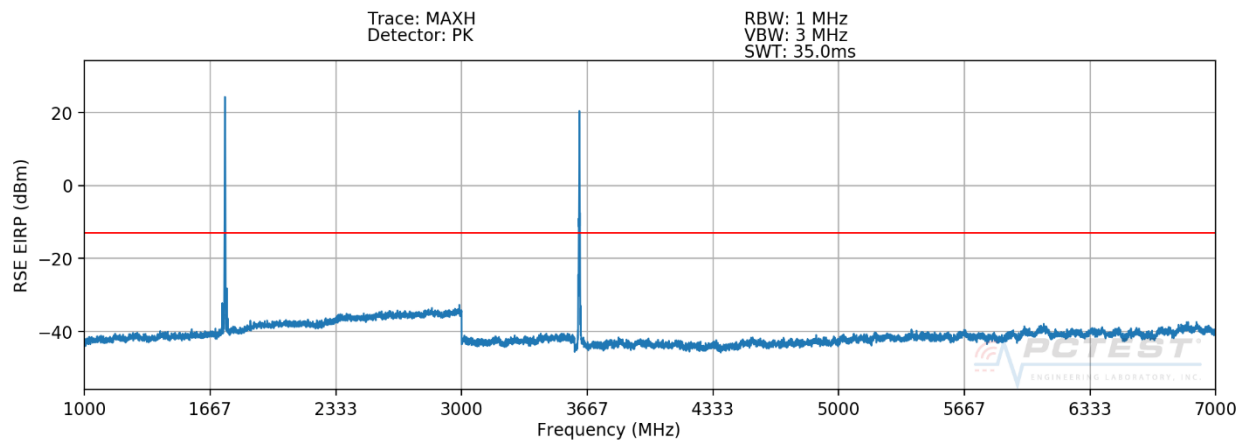


Plot 7-755. Radiated Spurious Plot above 1GHz (n66 ENDC – ANCHOR B12)

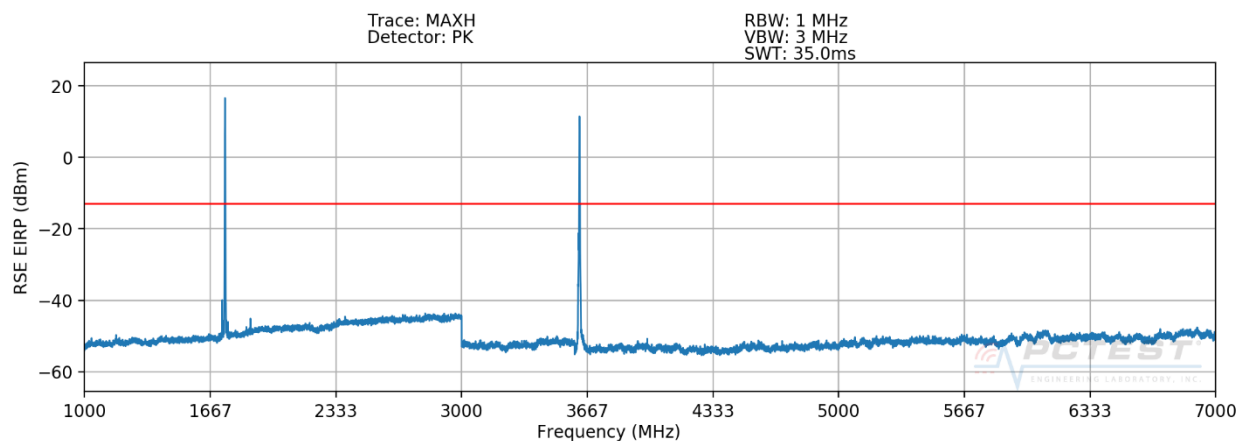
FCC ID: A3LSMG981U	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1910220165-03.A3L	Test Dates: 10/22 - 1/04/2020	EUT Type: Portable Handset		Page 478 of 487



Plot 7-756. Radiated Spurious Plot above 1GHz (n66 ENDC – ANCHOR B13)

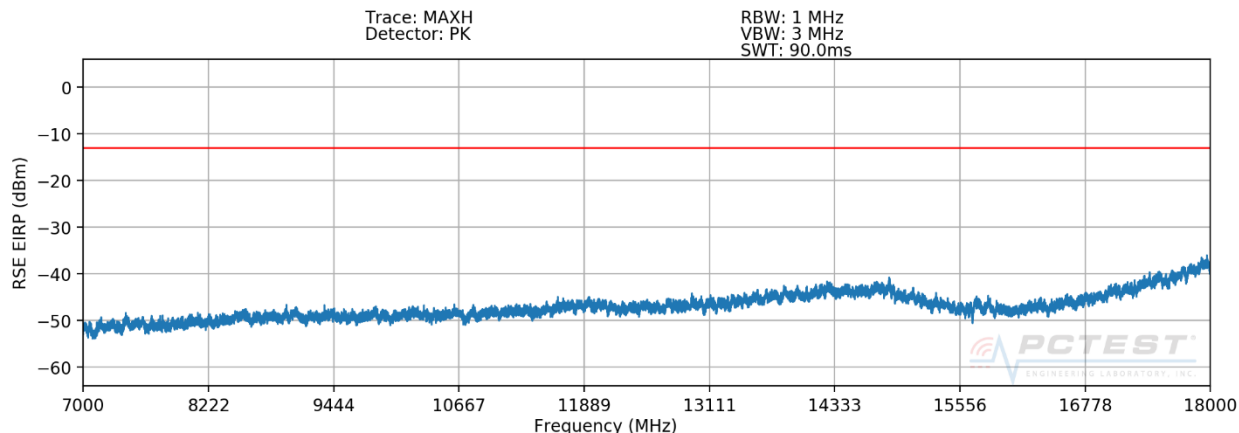


Plot 7-757. Radiated Spurious Plot above 1GHz (n66 ENDC – ANCHOR B48 – H Orientation – 1-7 GHz)

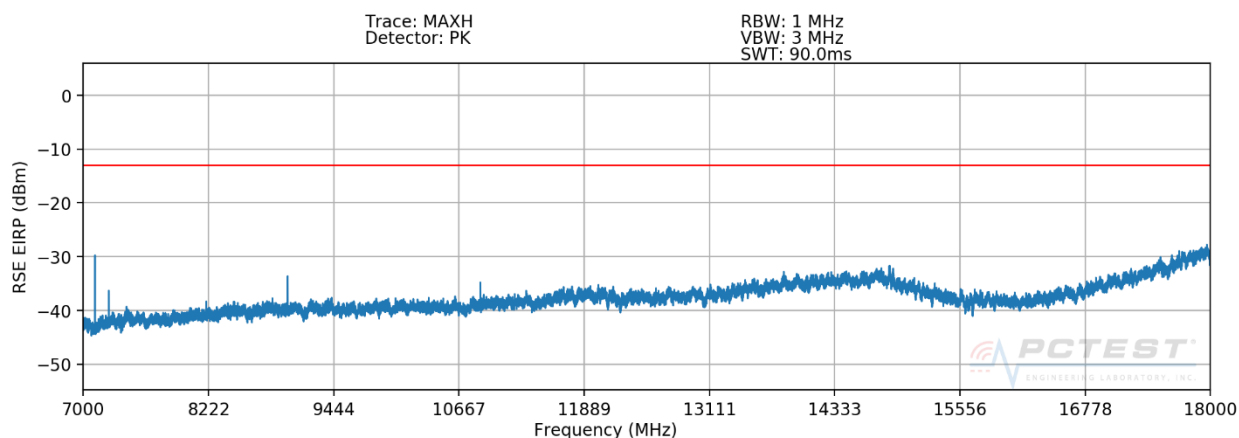


Plot 7-758. Radiated Spurious Plot above 1GHz (n66 ENDC – ANCHOR B48 – V Orientation – 1-7 GHz)

FCC ID: A3LSMG981U	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1910220165-03.A3L	Test Dates: 10/22 - 1/04/2020	EUT Type: Portable Handset		Page 479 of 487



Plot 7-759. Radiated Spurious Plot above 1GHz (n66 ENDC – ANCHOR B48 – H Orientation – 7-18 GHz)



Plot 7-760. Radiated Spurious Plot above 1GHz (n66 ENDC – ANCHOR B48 – V Orientation – 7-18 GHz)

OPERATING FREQUENCY: 1720.00 MHz

MODULATION SIGNAL: QPSK (DFT-s-OFDM)

BANDWIDTH: 20.0 MHz

DISTANCE: 3 meters

LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3440.00	H	-	-	-60.97	9.84	-51.12	-38.1
5160.00	H	-	-	-60.77	10.71	-50.06	-37.1

Table 7-77. Radiated Spurious Data (n66 Standalone – Low Channel)

FCC ID: A3LSMG981U	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)				SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1910220165-03.A3L	Test Dates: 10/22 - 1/04/2020	EUT Type: Portable Handset				Page 480 of 487	

OPERATING FREQUENCY: 1745.00 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3490.00	H	-	-	-61.62	9.91	-51.70	-38.7
5235.00	H	-	-	-61.27	10.73	-50.54	-37.5

Table 7-78. Radiated Spurious Data (n66 Standalone – Mid Channel)

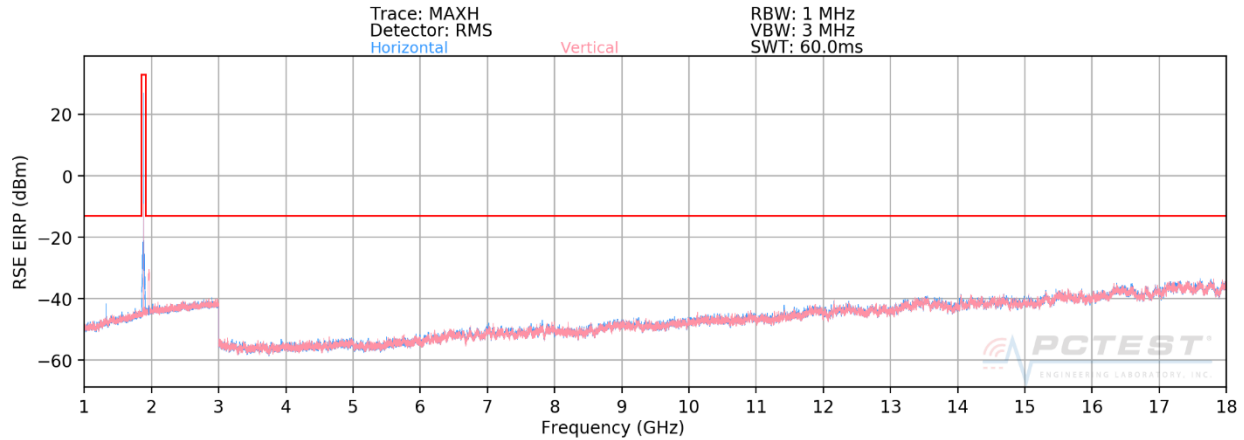
OPERATING FREQUENCY: 1770.00 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 BANDWIDTH: 20.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3540.00	H	-	-	-61.59	9.89	-51.70	-38.7
5310.00	H	-	-	-59.49	10.69	-48.81	-35.8

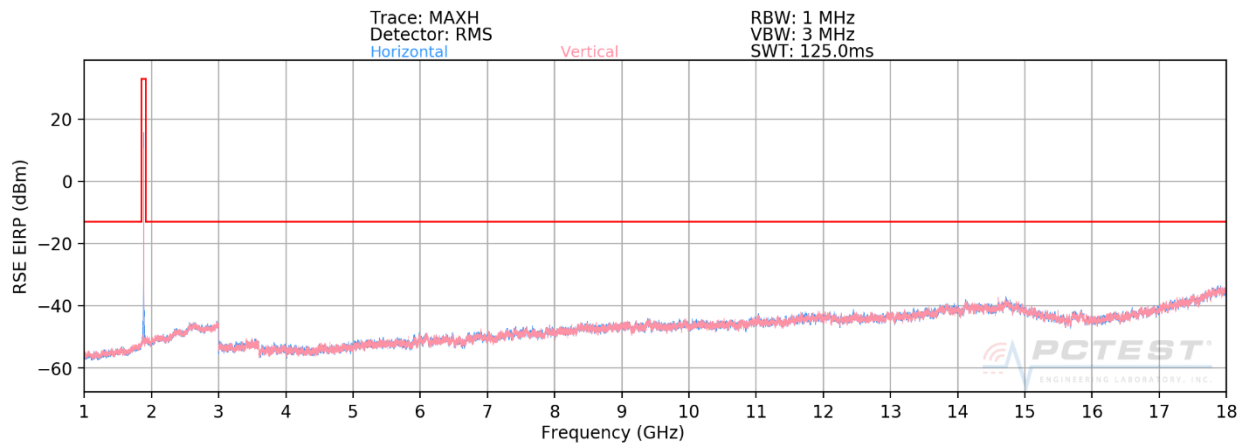
Table 7-79. Radiated Spurious Data (n66 Standalone – High Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1910220165-03.A3L	Test Dates: 10/22 - 1/04/2020	EUT Type: Portable Handset		Page 481 of 487

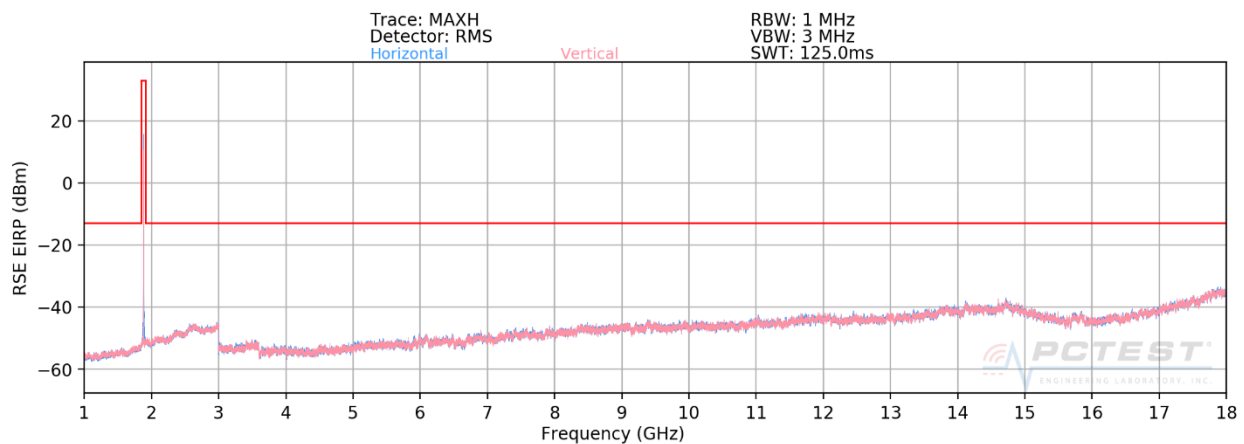
NR Band n2



Plot 7-761. Radiated Spurious Plot above 1GHz (n2)



Plot 7-762. Radiated Spurious Plot above 1GHz (n2 - ANCHOR B13)



Plot 7-763. Radiated Spurious Plot above 1GHz (n2 - ANCHOR B5)

FCC ID: A3LSMG981U	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1910220165-03.A3L	Test Dates: 10/22 - 1/04/2020	EUT Type: Portable Handset		Page 482 of 487

OPERATING FREQUENCY: 1857.50 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 BANDWIDTH: 15.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3715.00	V	-	-	-60.00	6.51	-53.49	-40.5
5572.50	V	-	-	-63.31	11.92	-51.39	-38.4

Table 7-80. Radiated Spurious Data (n2 Standalone – Low Channel)

OPERATING FREQUENCY: 1880.00 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 BANDWIDTH: 15.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3760.00	V	-	-	-59.09	6.83	-52.26	-39.3
5640.00	V	-	-	-64.36	11.99	-52.37	-39.4

Table 7-81. Radiated Spurious Data (n2 Standalone – Mid Channel)

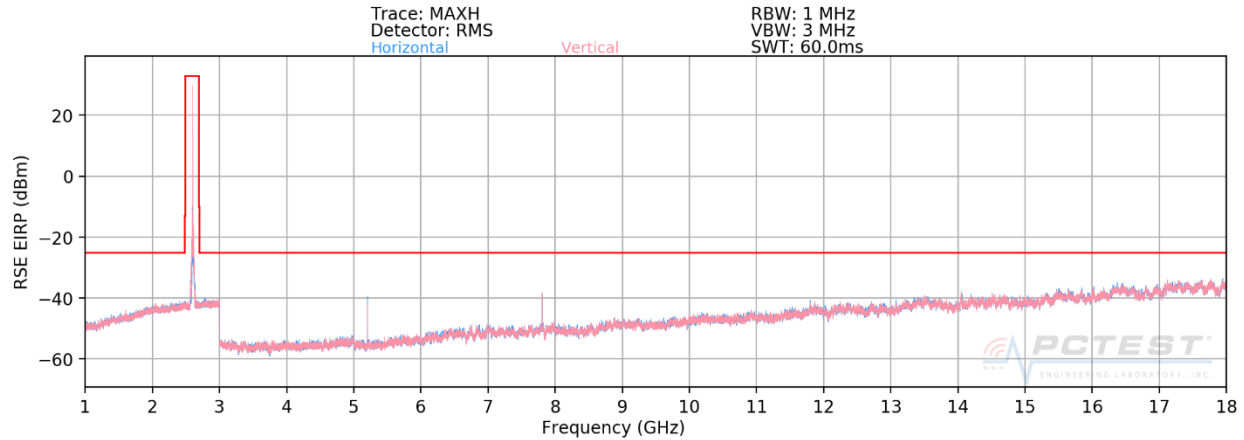
OPERATING FREQUENCY: 1902.50 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 BANDWIDTH: 15.0 MHz
 DISTANCE: 3 meters
 LIMIT: -13 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3805.00	V	-	-	-60.95	6.95	-54.00	-41.0
5707.50	V	-	-	-62.51	12.00	-50.51	-37.5

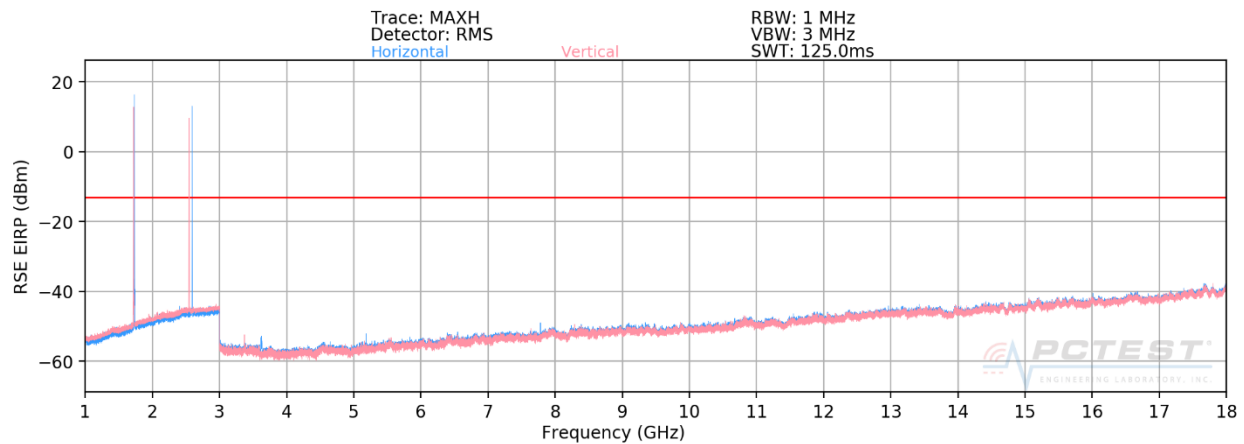
Table 7-82. Radiated Spurious Data (n2 Standalone - High Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)					Approved by: Quality Manager
Test Report S/N: 1M1910220165-03.A3L	Test Dates: 10/22 - 1/04/2020	EUT Type: Portable Handset				Page 483 of 487	

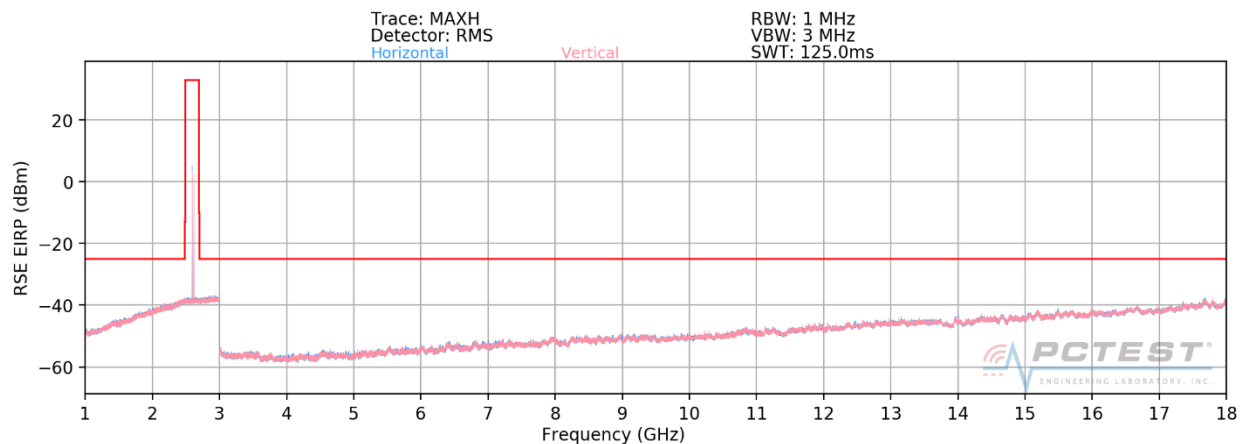
NR Band n41



Plot 7-764. Radiated Spurious Plot above 1GHz (n41)

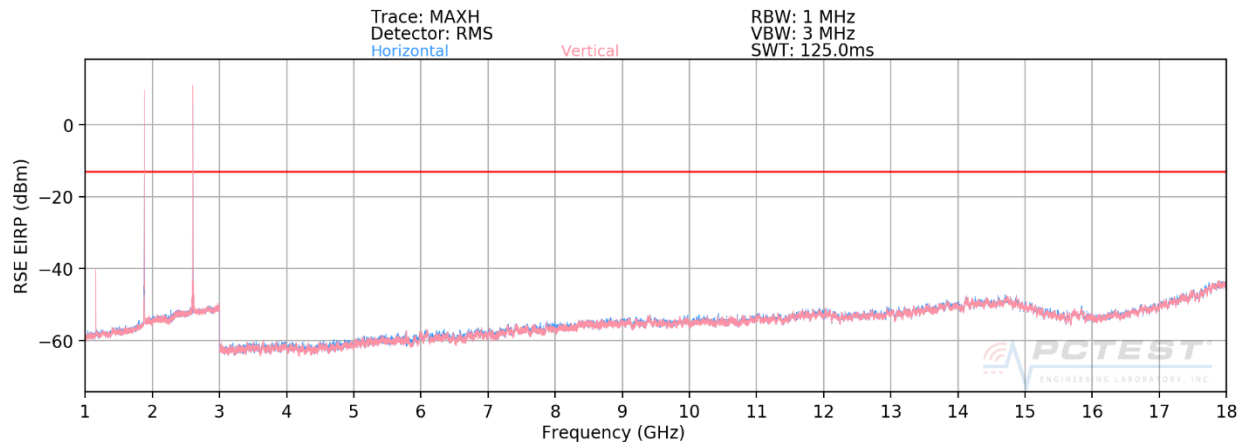


Plot 7-765. Radiated Spurious Plot above 1GHz (n41 - ANCHOR B66)



Plot 7-766. Radiated Spurious Plot above 1GHz (n41 - ANCHOR B41)

FCC ID: A3LSMG981U	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)	SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1910220165-03.A3L	Test Dates: 10/22 - 1/04/2020	EUT Type: Portable Handset		Page 484 of 487



Plot 7-767. Radiated Spurious Plot above 1GHz (n41 - ANCHOR B2)

OPERATING FREQUENCY: 2546.01 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 BANDWIDTH: 100.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5092.02	H	120	324	-71.30	10.69	-60.61	-35.6
7638.03	H	172	346	-61.31	11.33	-49.98	-25.0
10184.04	H	293	287	-65.59	12.09	-53.50	-28.5
12730.05	H	142	17	-64.40	13.64	-50.76	-25.8
15276.06	H	-	-	-67.63	14.89	-52.74	-27.7
17822.07	H	-	-	-54.27	9.93	-44.34	-19.3

Table 7-83. Radiated Spurious Data (n41 Standalone – Low Channel)

FCC ID: A3LSMG981U	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT (CERTIFICATION)		SAMSUNG	Approved by: Quality Manager
Test Report S/N: 1M1910220165-03.A3L	Test Dates: 10/22 - 1/04/2020	EUT Type: Portable Handset			Page 485 of 487

OPERATING FREQUENCY: 2593.02 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 BANDWIDTH: 100.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5186.04	H	113	319	-68.92	10.74	-58.17	-33.2
7779.06	H	178	26	-57.62	11.44	-46.18	-21.2
10372.08	H	397	290	-65.71	12.42	-53.29	-28.3
12965.10	H	259	38	-64.24	13.29	-50.95	-25.9
15558.12	H	-	-	-70.50	16.33	-54.18	-29.2

Table 7-84. Radiated Spurious Data (n41 Standalone – Mid Channel)

OPERATING FREQUENCY: 2640.00 MHz
 MODULATION SIGNAL: QPSK (DFT-s-OFDM)
 BANDWIDTH: 100.0 MHz
 DISTANCE: 3 meters
 LIMIT: -25 dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5280.00	H	115	296	-68.84	10.70	-58.14	-33.1
7920.00	H	235	129	-58.61	11.26	-47.35	-22.3
10560.00	H	248	43	-66.02	12.59	-53.43	-28.4
13200.00	H	245	31	-63.19	13.03	-50.16	-25.2
15840.00	H	-	-	-67.74	16.62	-51.12	-26.1

Table 7-85. Radiated Spurious Data (n41 Standalone - High Channel)

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1910220165-03.A3L	Test Dates: 10/22 - 1/04/2020	EUT Type: Portable Handset		Page 486 of 487

8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSMG981U** complies with all the requirements of Part 22, 24, & 27 of the FCC Rules for LTE and Sub 6GHz NR operation.

FCC ID: A3LSMG981U		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Quality Manager
Test Report S/N: 1M1910220165-03.A3L	Test Dates: 10/22 - 1/04/2020	EUT Type: Portable Handset		Page 487 of 487