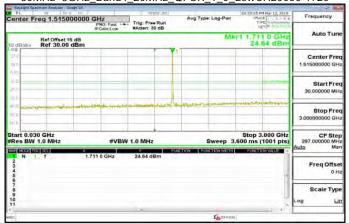
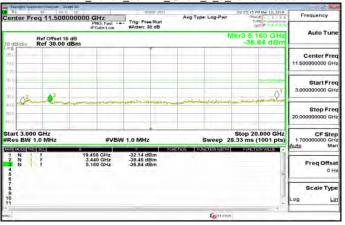


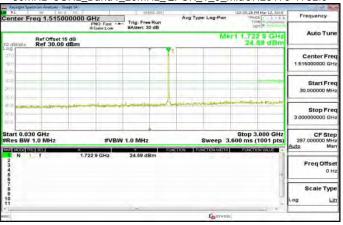
30MHz~3GHz_Band4_20MHz_QPSK_1_0_LowCH20050-1720



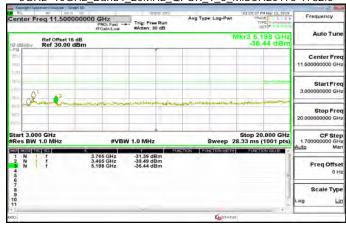
3GHz~10GHz_Band4_20MHz_QPSK_1_0_LowCH20050-1720



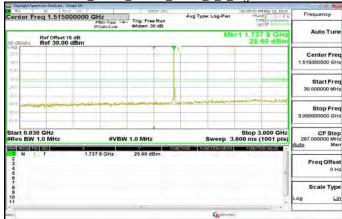
30MHz~3GHz Band4 20MHz QPSK 1 0 MidCH20175-1732.5



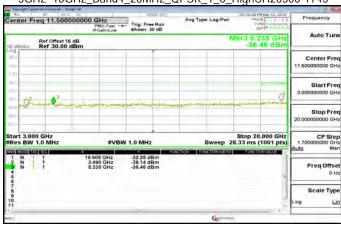
3GHz~10GHz_Band4_20MHz_QPSK_1_0_MidCH20175-1732.5



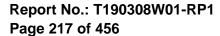
30MHz~3GHz_Band4_20MHz_QPSK_1_0_HighCH20300-1745



3GHz~10GHz Band4 20MHz QPSK 1 0 HighCH20300-1745

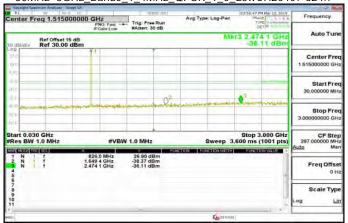


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

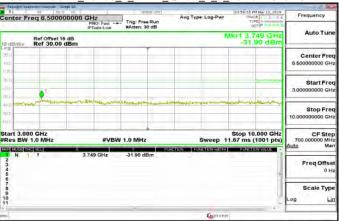




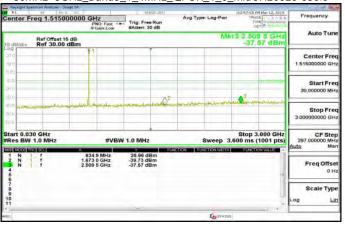
30MHz~3GHz_Band5_1_4MHz_QPSK_1_0_LowCH20407-824.7



3GHz~10GHz_Band5_1_4MHz_QPSK_1_0_LowCH20407-824.7



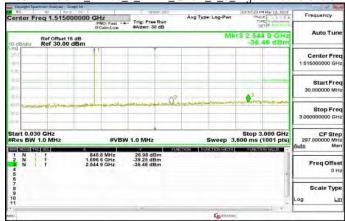
30MHz~3GHz Band5 1 4MHz QPSK 1 0 MidCH20525-836.5



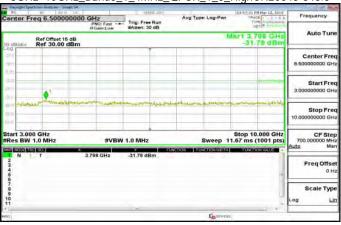
3GHz~10GHz_Band5_1_4MHz_QPSK_1_0_MidCH20525-836.5



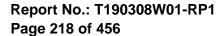
30MHz~3GHz_Band5_1_4MHz_QPSK_1_0_HighCH20643-848.3



3GHz~10GHz Band5 1 4MHz QPSK 1 0 HighCH20643-848.3

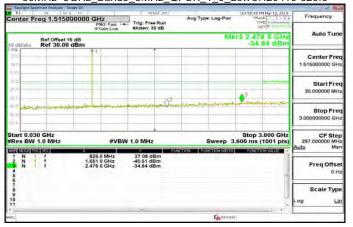


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

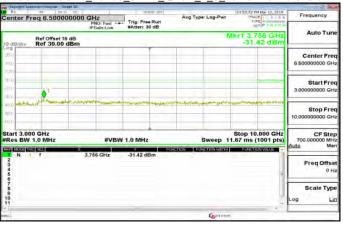




30MHz~3GHz_Band5_3MHz_QPSK_1_0_LowCH20415-825.5



3GHz~10GHz_Band5_3MHz_QPSK_1_0_LowCH20415-825.5



30MHz~3GHz Band5 3MHz QPSK 1 0 MidCH20525-836.5



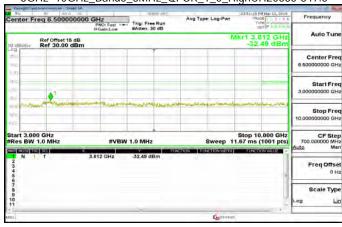
3GHz~10GHz_Band5_3MHz_QPSK_1_0_MidCH20525-836.5



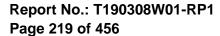
30MHz~3GHz_Band5_3MHz_QPSK_1_0_HighCH20635-847.5



3GHz~10GHz Band5 3MHz QPSK 1 0 HighCH20635-847.5

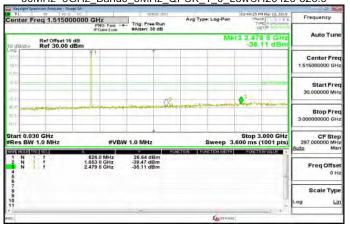


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.





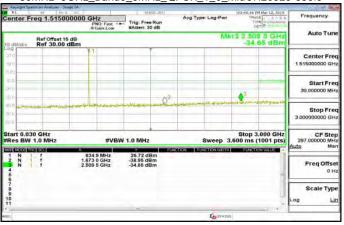
30MHz~3GHz_Band5_5MHz_QPSK_1_0_LowCH20425-826.5



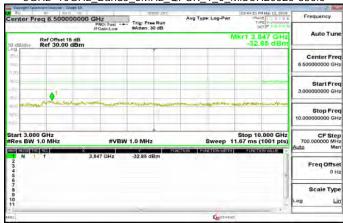
3GHz~10GHz_Band5_5MHz_QPSK_1_0_LowCH20425-826.5



30MHz~3GHz Band5 5MHz QPSK 1 0 MidCH20525-836.5



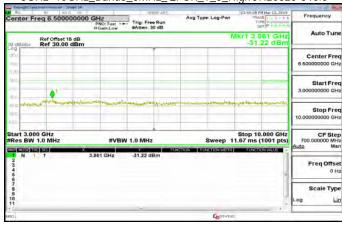
3GHz~10GHz_Band5_5MHz_QPSK_1_0_MidCH20525-836.5



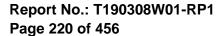
30MHz~3GHz_Band5_5MHz_QPSK_1_0_HighCH20625-846.5



3GHz~10GHz Band5 5MHz QPSK 1 0 HighCH20625-846.5

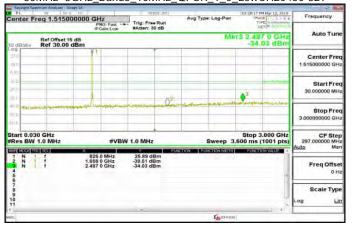


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.





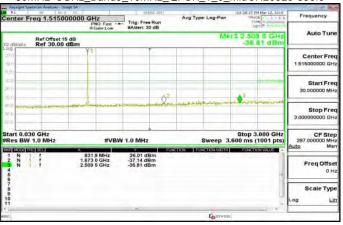
30MHz~3GHz_Band5_10MHz_QPSK_1_0_LowCH20450-829



3GHz~10GHz_Band5_10MHz_QPSK_1_0_LowCH20450-829



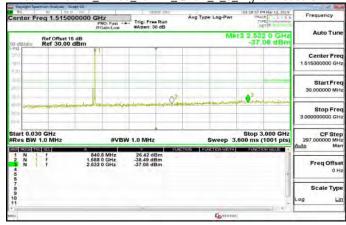
30MHz~3GHz Band5 10MHz QPSK 1 0 MidCH20525-836.5



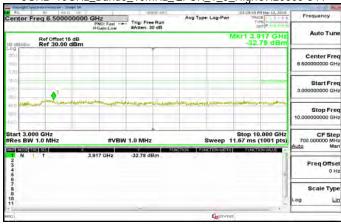
3GHz~10GHz_Band5_10MHz_QPSK_1_0_MidCH20525-836.5



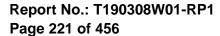
30MHz~3GHz_Band5_10MHz_QPSK_1_0_HighCH20600-844



3GHz~10GHz Band5 10MHz QPSK 1 0 HighCH20600-844

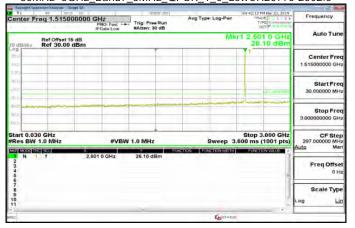


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

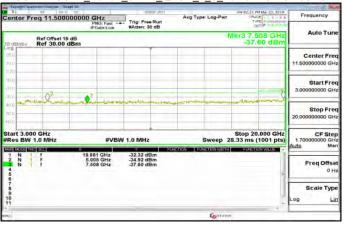




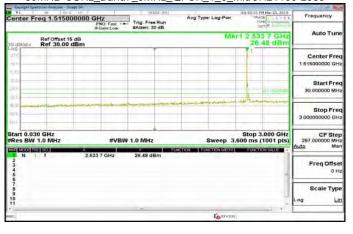
30MHz~3GHz_Band7_5MHz_QPSK_1_0_LowCH20775-2502.5



3GHz~10GHz_Band7_5MHz_QPSK_1_0_LowCH20775-2502.5



30MHz~3GHz Band7 5MHz QPSK 1 0 MidCH21100-2535



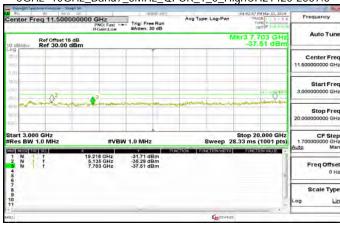
3GHz~10GHz_Band7_5MHz_QPSK_1_0_MidCH21100-2535



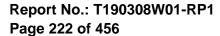
30MHz~3GHz_Band7_5MHz_QPSK_1_0_HighCH21425-2567.5



3GHz~10GHz Band7 5MHz QPSK 1 0 HighCH21425-2567.5

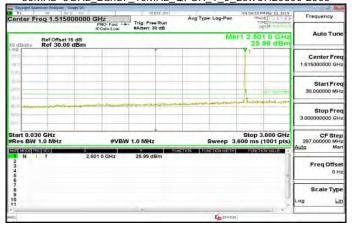


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

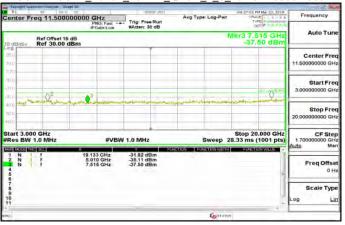




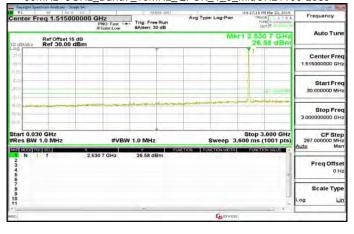
30MHz~3GHz_Band7_10MHz_QPSK_1_0_LowCH20800-2505



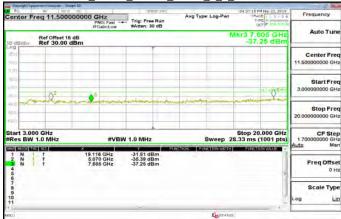
3GHz~10GHz_Band7_10MHz_QPSK_1_0_LowCH20800-2505



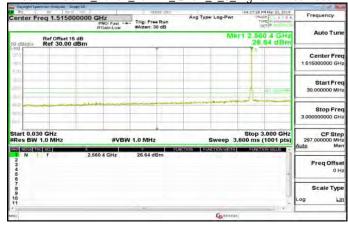
30MHz~3GHz Band7 10MHz QPSK 1 0 MidCH21100-2535



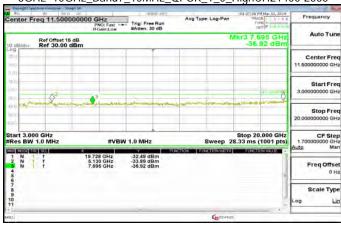
3GHz~10GHz_Band7_10MHz_QPSK_1_0_MidCH21100-2535



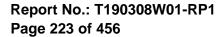
30MHz~3GHz_Band7_10MHz_QPSK_1_0_HighCH21400-2565



3GHz~10GHz Band7 10MHz QPSK 1 0 HighCH21400-2565

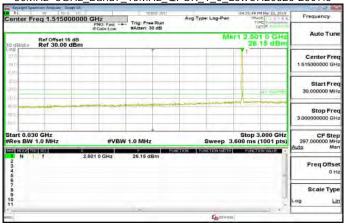


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.





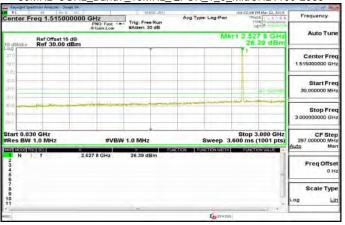
30MHz~3GHz_Band7_15MHz_QPSK_1_0_LowCH20825-2507.5



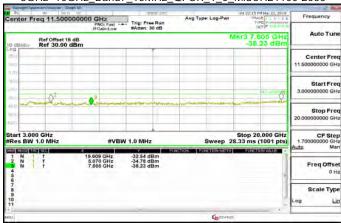
3GHz~10GHz_Band7_15MHz_QPSK_1_0_LowCH20825-2507.5



30MHz~3GHz Band7 15MHz QPSK 1 0 MidCH21100-2535



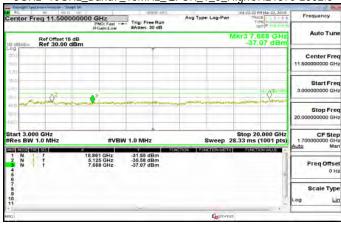
3GHz~10GHz_Band7_15MHz_QPSK_1_0_MidCH21100-2535



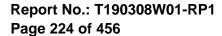
30MHz~3GHz_Band7_15MHz_QPSK_1_0_HighCH21375-2562.5



3GHz~10GHz Band7 15MHz QPSK 1 0 HighCH21375-2562.5

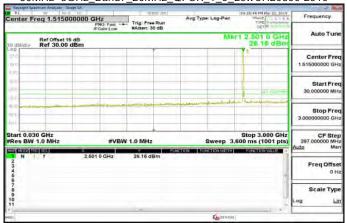


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

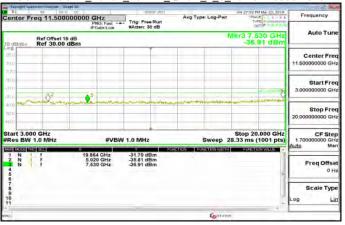




30MHz~3GHz_Band7_20MHz_QPSK_1_0_LowCH20850-2510



3GHz~10GHz_Band7_20MHz_QPSK_1_0_LowCH20850-2510



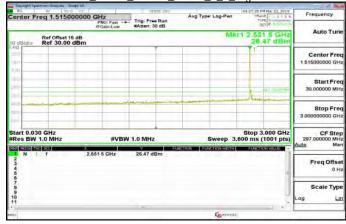
30MHz~3GHz Band7 20MHz QPSK 1 0 MidCH21100-2535



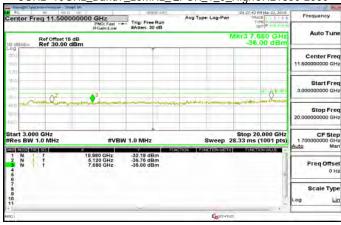
3GHz~10GHz_Band7_20MHz_QPSK_1_0_MidCH21100-2535



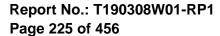
30MHz~3GHz_Band7_20MHz_QPSK_1_0_HighCH21350-2560



3GHz~10GHz Band7 20MHz QPSK 1 0 HighCH21350-2560

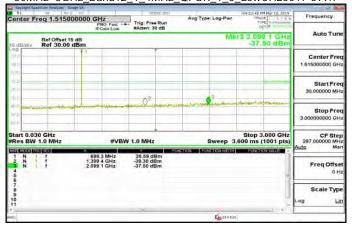


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

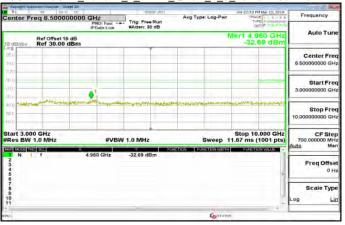




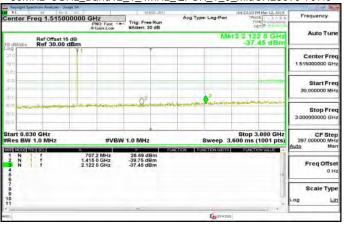
30MHz~3GHz_Band12_1_4MHz_QPSK_1_0_LowCH23017-699.7



3GHz~10GHz_Band12_1_4MHz_QPSK_1_0_LowCH23017-699.7



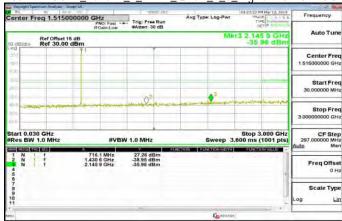
30MHz~3GHz Band12 1 4MHz QPSK 1 0 MidCH23095-707.5



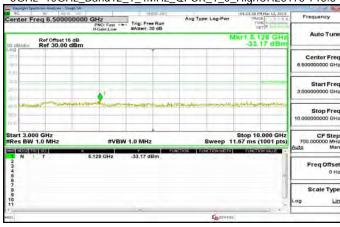
3GHz~10GHz_Band12_1_4MHz_QPSK_1_0_MidCH23095-707.5



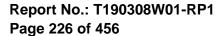
30MHz~3GHz_Band12_1_4MHz_QPSK_1_0_HighCH23173-715.3



3GHz~10GHz Band12 1 4MHz QPSK 1 0 HighCH23173-715.3

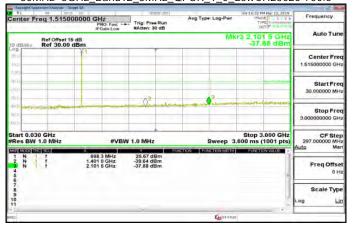


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

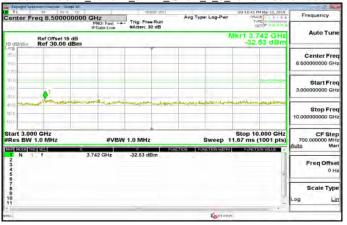




30MHz~3GHz_Band12_3MHz_QPSK_1_0_LowCH23025-700.5



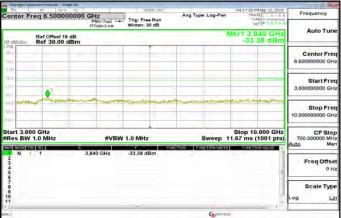
3GHz~10GHz_Band12_3MHz_QPSK_1_0_LowCH23025-700.5



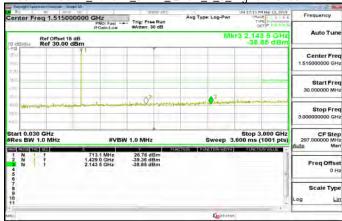
30MHz~3GHz Band12 3MHz QPSK 1 0 MidCH23095-707.5



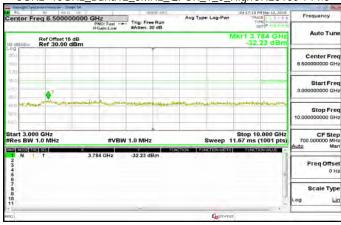
3GHz~10GHz_Band12_3MHz_QPSK_1_0_MidCH23095-707.5



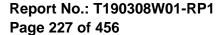
30MHz~3GHz_Band12_3MHz_QPSK_1_0_HighCH23165-714.5



3GHz~10GHz Band12 3MHz QPSK 1 0 HighCH23165-714.5

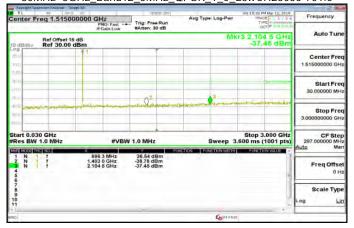


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

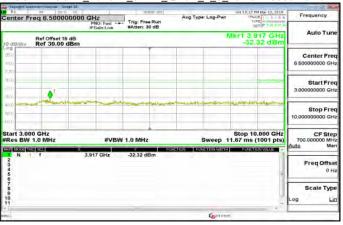




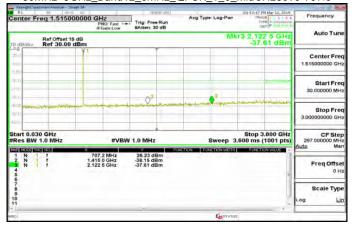
30MHz~3GHz_Band12_5MHz_QPSK_1_0_LowCH23035-701.5



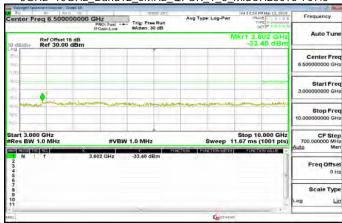
3GHz~10GHz_Band12_5MHz_QPSK_1_0_LowCH23035-701.5



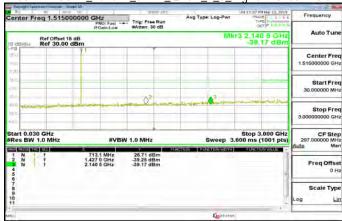
30MHz~3GHz Band12 5MHz QPSK 1 0 MidCH23095-707.5



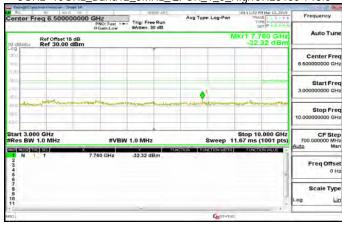
3GHz~10GHz_Band12_5MHz_QPSK_1_0_MidCH23095-707.5



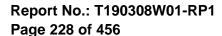
30MHz~3GHz_Band12_5MHz_QPSK_1_0_HighCH23155-713.5



3GHz~10GHz Band12 5MHz QPSK 1 0 HighCH23155-713.5

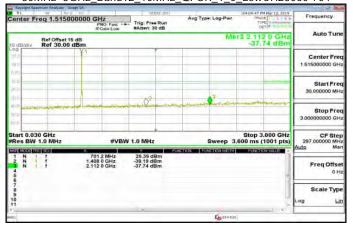


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

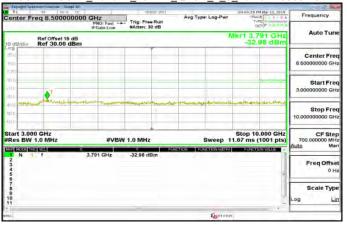




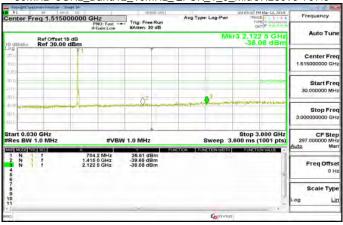
30MHz~3GHz_Band12_10MHz_QPSK_1_0_LowCH23060-704



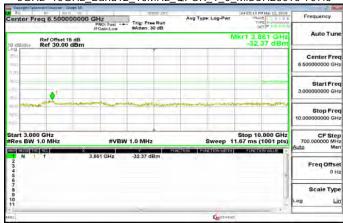
3GHz~10GHz_Band12_10MHz_QPSK_1_0_LowCH23060-704



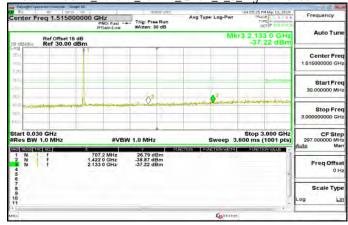
30MHz~3GHz Band12 10MHz QPSK 1 0 MidCH23095-707.5



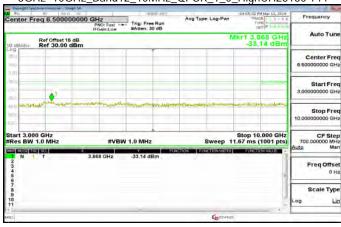
3GHz~10GHz_Band12_10MHz_QPSK_1_0_MidCH23095-707.5



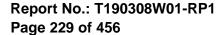
30MHz~3GHz_Band12_10MHz_QPSK_1_0_HighCH23130-711



3GHz~10GHz Band12 10MHz QPSK 1 0 HighCH23130-711

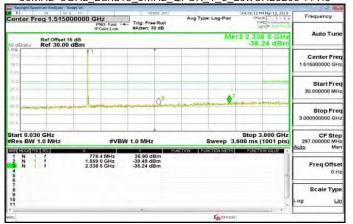


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.





30MHz~3GHz_Band13_5MHz_QPSK_1_0_LowCH23205-779.5



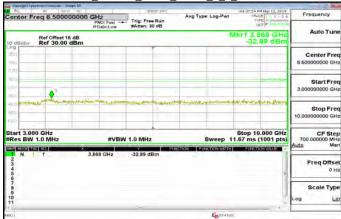
3GHz~10GHz_Band13_5MHz_QPSK_1_0_LowCH23205-779.5



30MHz~3GHz Band13 5MHz QPSK 1 0 MidCH23230-782



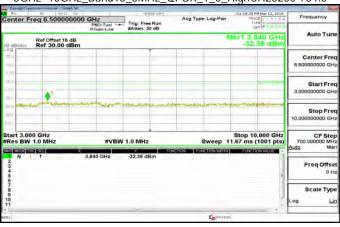
3GHz~10GHz_Band13_5MHz_QPSK_1_0_MidCH23230-782



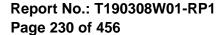
30MHz~3GHz_Band13_5MHz_QPSK_1_0_HighCH23255-784.5



3GHz~10GHz Band13 5MHz QPSK 1 0 HighCH23255-784.5

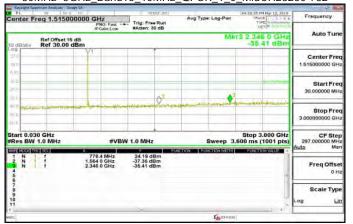


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

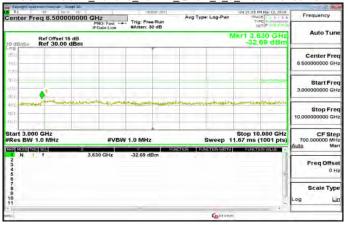




30MHz~3GHz_Band13_10MHz_QPSK_1_0_MidCH23230-782



3GHz~10GHz_Band13_10MHz_QPSK_1_0_MidCH23230-782



Inband-1 Band13 5MHz QPSK 1 0 LowCH23205-779.5



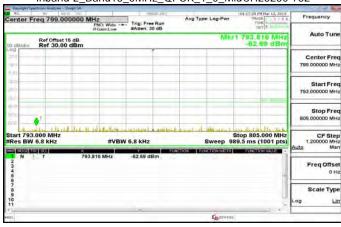
Inband-2_Band13_5MHz_QPSK_1_0_LowCH23205-779.5



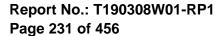
Inband-1_Band13_5MHz_QPSK_1_0_MidCH23230-782



Inband-2 Band13 5MHz QPSK 1 0 MidCH23230-782

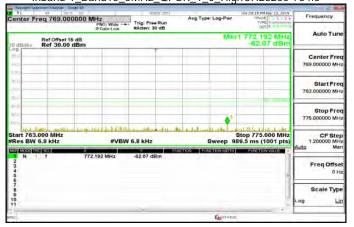


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

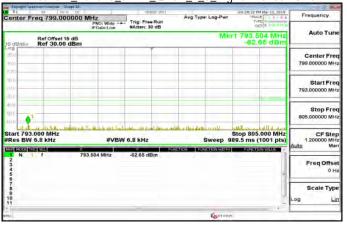




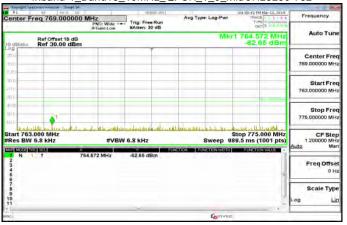
Inband-1_Band13_5MHz_QPSK_1_0_HighCH23255-784.5



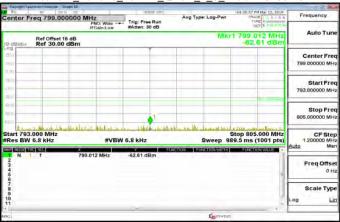
Inband-2_Band13_5MHz_QPSK_1_0_HighCH23255-784.5



Inband-1 Band13 10MHz QPSK 1 0 MidCH23230-782



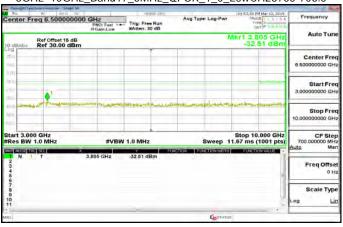
Inband-2_Band13_10MHz_QPSK_1_0_MidCH23230-782



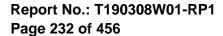
30MHz~3GHz_Band17_5MHz_QPSK_1_0_LowCH23755-706.5



3GHz~10GHz Band17 5MHz QPSK 1 0 LowCH23755-706.5

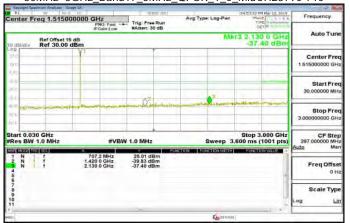


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.





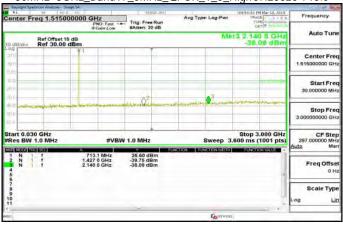
30MHz~3GHz_Band17_5MHz_QPSK_1_0_MidCH23790-710



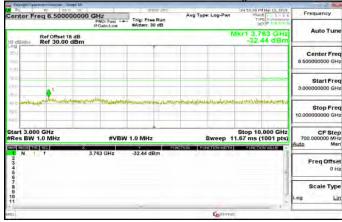
3GHz~10GHz_Band17_5MHz_QPSK_1_0_MidCH23790-710



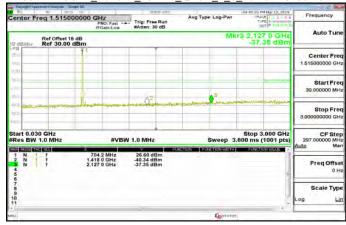
30MHz~3GHz Band17 5MHz QPSK 1 0 HighCH23825-713.5



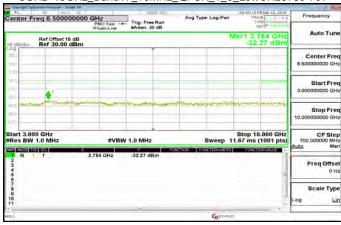
3GHz~10GHz_Band17_5MHz_QPSK_1_0_HighCH23825-713.5



30MHz~3GHz_Band17_10MHz_QPSK_1_0_LowCH23780-709



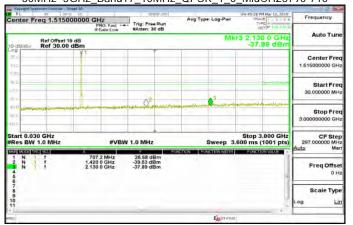
3GHz~10GHz Band17 10MHz QPSK 1 0 LowCH23780-709



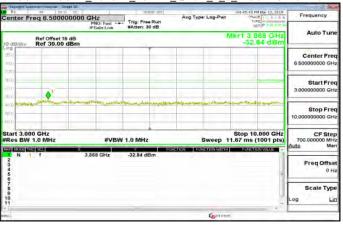
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



30MHz~3GHz_Band17_10MHz_QPSK_1_0_MidCH23790-710



3GHz~10GHz_Band17_10MHz_QPSK_1_0_MidCH23790-710



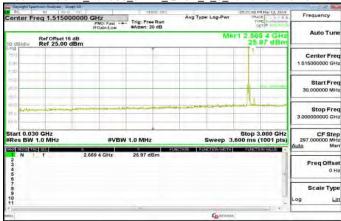
30MHz~3GHz Band17 10MHz QPSK 1 0 HighCH23800-711



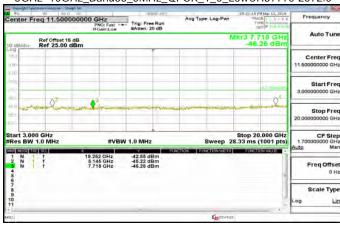
3GHz~10GHz_Band17_10MHz_QPSK_1_0_HighCH23800-711



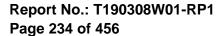
30MHz~3GHz_Band38_5MHz_QPSK_1_0_LowCH37775-2572.5



3GHz~10GHz Band38 5MHz QPSK 1 0 LowCH37775-2572.5

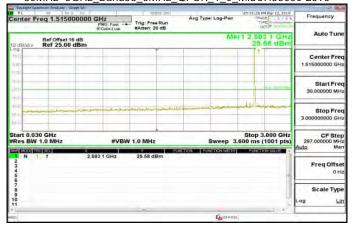


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.





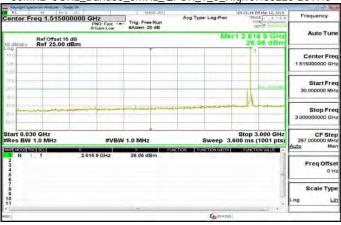
30MHz~3GHz_Band38_5MHz_QPSK_1_0_MidCH38000-2595



3GHz~10GHz_Band38_5MHz_QPSK_1_0_MidCH38000-2595



30MHz~3GHz Band38 5MHz QPSK 1 0 HighCH38225-2617.5



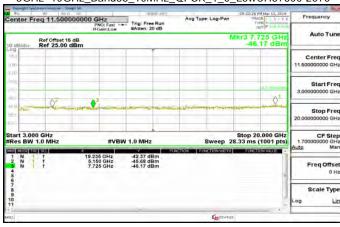
3GHz~10GHz_Band38_5MHz_QPSK_1_0_HighCH38225-2617.5



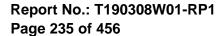
30MHz~3GHz_Band38_10MHz_QPSK_1_0_LowCH37800-2575



3GHz~10GHz Band38 10MHz QPSK 1 0 LowCH37800-2575

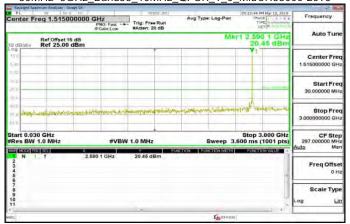


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.





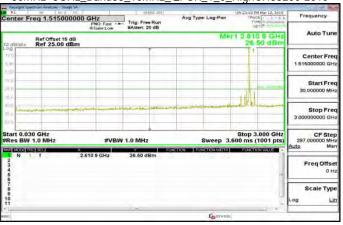
30MHz~3GHz_Band38_10MHz_QPSK_1_0_MidCH38000-2595



3GHz~10GHz_Band38_10MHz_QPSK_1_0_MidCH38000-2595



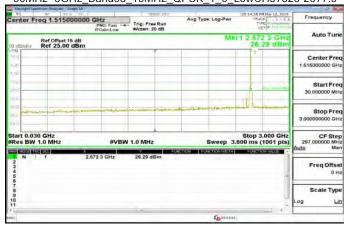
30MHz~3GHz Band38 10MHz QPSK 1 0 HighCH38200-2615



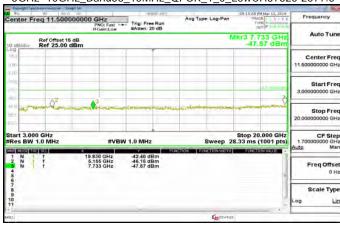
3GHz~10GHz_Band38_10MHz_QPSK_1_0_HighCH38200-2615



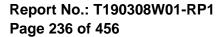
30MHz~3GHz_Band38_15MHz_QPSK_1_0_LowCH37825-2577.5



3GHz~10GHz Band38 15MHz QPSK 1 0 LowCH37825-2577.5

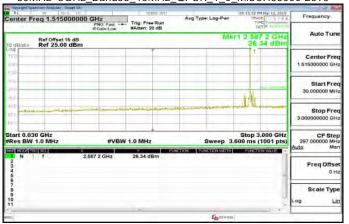


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

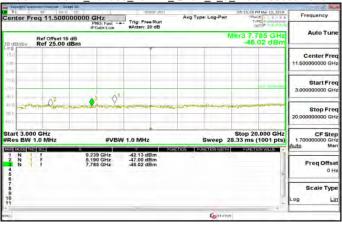




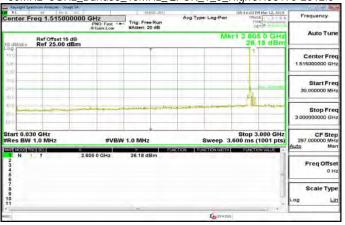
30MHz~3GHz_Band38_15MHz_QPSK_1_0_MidCH38000-2595



3GHz~10GHz_Band38_15MHz_QPSK_1_0_MidCH38000-2595



30MHz~3GHz Band38 15MHz QPSK 1 0 HighCH38175-2612.5



3GHz~10GHz_Band38_15MHz_QPSK_1_0_HighCH38175-2612.5



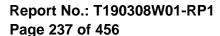
30MHz~3GHz_Band38_20MHz_QPSK_1_0_LowCH37850-2580



3GHz~10GHz Band38 20MHz QPSK 1 0 LowCH37850-2580

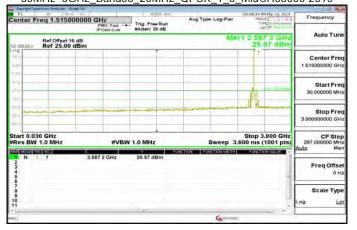


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

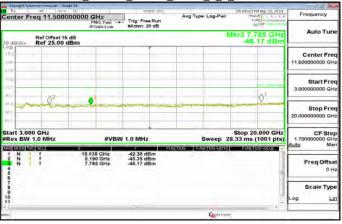




30MHz~3GHz_Band38_20MHz_QPSK_1_0_MidCH38000-2595



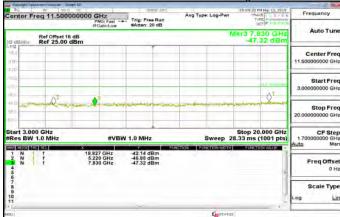
3GHz~10GHz_Band38_20MHz_QPSK_1_0_MidCH38000-2595



30MHz~3GHz Band38 20MHz QPSK 1 0 HighCH38150-2610



3GHz~10GHz_Band38_20MHz_QPSK_1_0_HighCH38150-2610



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. Fex page 18 page 19 page 1 document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Page 238 of 456

FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

9.1. Standard Applicable

According to FCC §2.1053,

FCC §22.917(a), §24.238(a), §27.53 (h), the magnitude of each spurious and harmonic emission that can be detected when the equipment is operated under the conditions specified in the instruction manual and/ or alignment procedure, shall not be less than 43 + 10 log (mean output power in watts) dBc below the mean power output outside a license's frequency block (-13dBm).

- (2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB (-13dBm)
- (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;

§27.53 (f) For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

FCC §27.53(c) (5) & FCC §27.53(g)

Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FCC §27.53(h) (3)

Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 239 of 456

FCC §27.53(m) (4) (6)

For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed; for mobile digital stations, in the 1 megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed, except when the 1 megahertz band is 2495-2496 MHz, in which case a resolution bandwidth of at least one percent may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 megahertz or 1 percent of emission bandwidth, as specified; or 1 megahertz or 2 percent for mobile digital stations, except in the band 2495-2496 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. With respect to television operations, measurements must be made of the separate visual and aural operating powers at sufficiently frequent intervals to ensure compliance with the rules.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 240 of 456

Table 2 — Unwanted Emissions for Mobile, Portable and Low-Power Fixed Subscriber **Equipment**

Frequency (MHz)	Attenuation (dB)
<2200	$43 + 10 \log_{10}(p)$
2200 - 2288	$70 + 10 \log_{10}(p)$
2288 - 2292	$67 + 10 \log_{10}(p)$
2292 - 2296	$61 + 10 \log_{10}(p)$
2296 - 2300	$55 + 10 \log_{10}(p)$
2300 - 2305	$43 + 10 \log_{10}(p)$
2305 - 2320	$43 + 10 \log_{10}(p)^{\text{Note}}$
2320 - 2324	$55 + 10 \log_{10}(p)$
2324 - 2328	$61 + 10 \log_{10}(p)$
2328 - 2337	$67 + 10 \log_{10}(p)$
2337 - 2341	$61 + 10 \log_{10}(p)$
2341 - 2345	$55 + 10 \log_{10}(p)$
2345 - 2360	$43 + 10 \log_{10}(p)^{\text{Note}}$
2360 - 2365	$43 + 10 \log_{10}(p)$
2365 - 2395	$70 + 10 \log_{10}(p)$
>2395	$43 + 10 \log_{10}(p)$

Note: Measured at the edges of the highest and lowest frequency range(s) in which the equipment is designed to operate. See Section 1.2 for the permitted frequency ranges for various equipment types.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

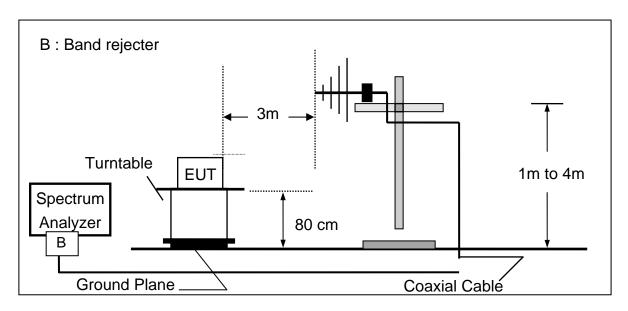


Page 241 of 456

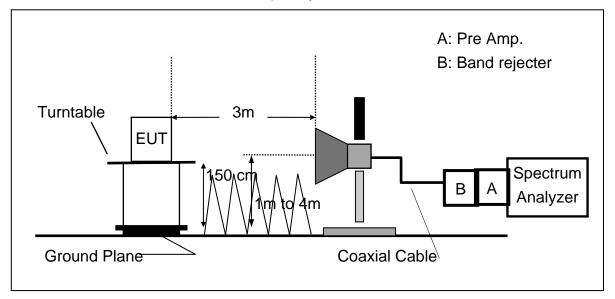


9.2. EUT Setup

Radiated Emission Test Set-Up, Frequency Below 1000MHz



Radiated Emission Test Set-UP Frequency Over 1 GHz



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 242 of 456

9.3. Measurement Procedure:

The EUT was placed on a non-conductive; the measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

The frequency range up to tenth harmonic was investigated for each of three fundamental frequencies (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method.

The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.

ERP (dBm) = SG Level(dBm) + Antenna Gain(dBd) + Cable Loss(dB) EIRP (dBm) = SG Level(dBm) + Antenna Gain(dBi) + Cable Loss(dB)

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 243 of 456

9.4. Measurement Equipment Used:

966A Chamber									
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.				
PSA Series Spectrum Analyzer	Agilent	E4446A	MY46180323	05/31/2018	05/30/2019				
Digital Thermo-Hygro Meter	WISEWIND	1206	D07	01/30/2019	01/29/2020				
Pre-Amplifier	MITEQ	AMF-6F-260400 -40-8P	985646	02/26/2019	02/25/2020				
Pre-Amplifier	EMEC	EM330	060609	02/26/2019	02/25/2020				
Pre-Amplifier	HP	8449B	3008A00965	02/26/2019	02/25/2020				
Horn Antenna	Schwarzbeck	BBHA9170	184	12/27/2018	12/26/2019				
Horn Antenna	ETS LINDGREN	3116	00026370		12/25/2019				
Horn Antenna	SCHWARZBECK	BBHA 9120D	779	03/09/2019	03/08/2020				
Bilog Antenna	Sunol Sciences	JB3	A030105	07/13/2018	07/12/2019				
Bilog Antenna	Sunol Sciences	JB1	A052609	03/06/2019	03/05/2020				
double Ridged Guide Horn Antenna	ETC	MCTD 1209	DRH13M02003	08/20/2018	08/19/2019				
Loop Antenna	ETS.LINDGREN	6502	148045	10/08/2018	10/07/2019				
High Pass Filter	SOLVANG TECHNOLOGY INC.	STI15	9923	02/26/2019	02/25/2020				
High Pass Filters	MICRO TRON- ICS	HPM13195	003	02/26/2019	02/25/2020				
Band Reject Filters	MICRO TRON- ICS	BRM 50702	120	02/26/2019	02/25/2020				
Attenuator	Marvelous	MVE2213-10	RF80	02/26/2019	02/25/2020				
Digital Radio Com- munication Tester	R&S	CMU200	100535	09/17/2018	09/16/2019				
Wideband Radio Communication Tester	R&S	CMW 500	116875	04/20/2018	04/19/2019				
Cable	HUBER SUHNER	SUCOFLEX 104PEA	25157	02/26/2019	02/25/2020				
Cable	HUBER SUHNER	SUCOFLEX 104PEA	20995	02/26/2019	02/25/2020				
Software		e3 V6.1	1-20180413						

Note: WPC wireless charging functions are implemented in field strength of spurious radiation measurement.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 244 of 456

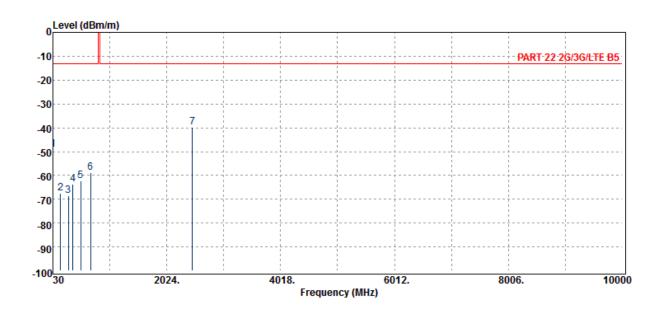
9.5. Measurement Result:

Radiated Spurious Emission Measurement Result: GSM 850 Mode

Operation Band :GSM 850 Test Date :2019-03-28

Fundamental Frequency Temp./Humi. :824.2 MHz :22 deg C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :VERTICAL :E1 Plane Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.18	-18.81	-30.05	-0.45	0.13	-13.00	-36.18
160.95	-67.65	-60.55	-6.17	-1.05	0.12	-13.00	-54.65
299.66	-68.68	-65.39	-1.96	-1.43	0.10	-13.00	-55.68
377.26	-63.55	-60.57	-1.60	-1.61	0.24	-13.00	-50.55
519.85	-62.22	-59.02	-1.45	-1.91	0.16	-13.00	-49.22
687.66	-58.95	-56.27	-1.35	-2.21	0.87	-13.00	-45.95
2472.60	-39.89	-46.50	10.69	-4.46	0.38	-13.00	-26.89

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



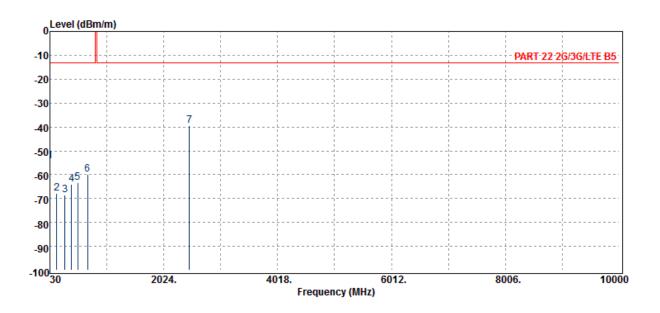
Page 245 of 456

Operation Band :GSM 850 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :824.2 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.41	-24.04	-30.05	-0.45	0.13	-13.00	-41.41
148.34	-67.66	-59.46	-7.31	-1.00	0.12	-13.00	-54.66
294.81	-68.38	-64.91	-2.15	-1.42	0.10	-13.00	-55.38
410.24	-64.14	-60.97	-1.75	-1.68	0.26	-13.00	-51.14
519.85	-63.45	-60.26	-1.45	-1.91	0.16	-13.00	-50.45
687.66	-59.84	-57.15	-1.35	-2.21	0.87	-13.00	-46.84
2472.60	-39.61	-46.22	10.69	-4.46	0.38	-13.00	-26.61

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

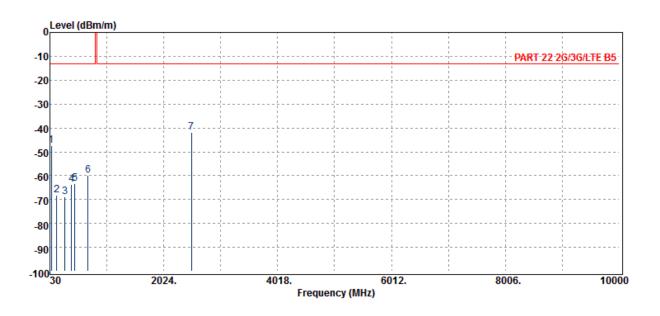


Page 246 of 456

Operation Band :GSM 850 **Test Date** :2019-03-28

Fundamental Frequency :836.6 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
54.25	-47.36	-36.12	-10.75	-0.62	0.14	-13.00	-34.36
148.34	-68.11	-59.92	-7.31	-1.00	0.12	-13.00	-55.11
291.90	-68.74	-65.28	-2.15	-1.41	0.10	-13.00	-55.74
406.36	-63.72	-60.56	-1.75	-1.67	0.27	-13.00	-50.72
469.41	-63.39	-59.44	-2.34	-1.80	0.18	-13.00	-50.39
696.39	-59.86	-57.19	-1.38	-2.22	0.93	-13.00	-46.86
2509.80	-41.82	-48.40	10.80	-4.59	0.37	-13.00	-28.82

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



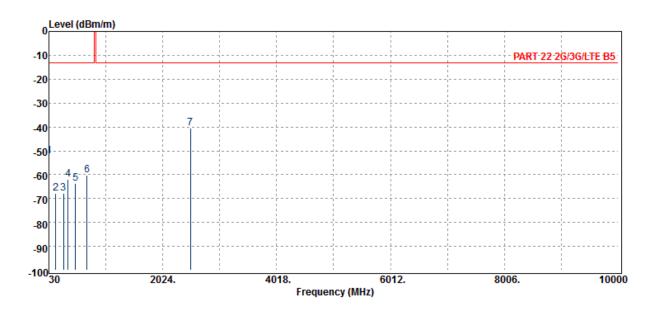
Page 247 of 456

Operation Band :GSM 850 **Test Date** :2019-03-28

Fundamental Frequency :836.6 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-52.38	-22.01	-30.05	-0.45	0.13	-13.00	-39.38
148.34	-67.85	-59.66	-7.31	-1.00	0.12	-13.00	-54.85
288.99	-67.96	-64.44	-2.21	-1.41	0.10	-13.00	-54.96
364.65	-61.99	-58.87	-1.76	-1.58	0.22	-13.00	-48.99
493.66	-63.62	-59.82	-2.10	-1.86	0.15	-13.00	-50.62
696.39	-60.30	-57.63	-1.38	-2.22	0.93	-13.00	-47.30
2509.80	-40.55	-47.13	10.80	-4.59	0.37	-13.00	-27.55

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

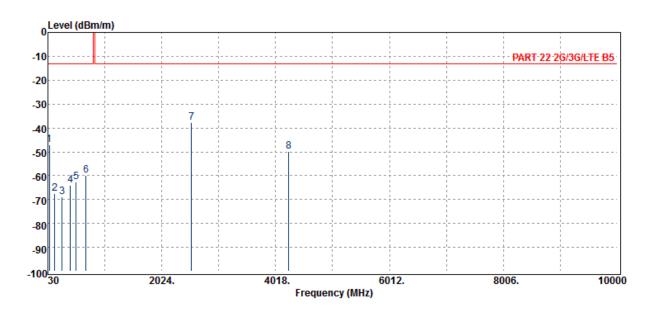


Page 248 of 456

Operation Band :GSM 850 **Test Date** :2019-03-28

Fundamental Frequency :848.8 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			_
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
56.19	-46.92	-35.93	-10.50	-0.63	0.13	-13.00	-33.92
149.31	-67.61	-59.51	-7.22	-1.00	0.12	-13.00	-54.61
280.26	-68.80	-64.97	-2.54	-1.38	0.10	-13.00	-55.80
419.94	-63.85	-60.55	-1.85	-1.70	0.25	-13.00	-50.85
526.64	-62.74	-59.64	-1.35	-1.92	0.17	-13.00	-49.74
697.36	-59.94	-57.26	-1.40	-2.22	0.94	-13.00	-46.94
2546.40	-37.83	-44.39	10.80	-4.59	0.35	-13.00	-24.83
4244.00	-49.71	-56.77	12.81	-6.16	0.40	-13.00	-36.71

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



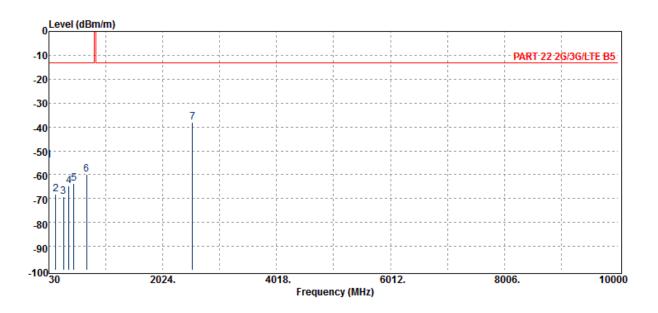
Page 249 of 456

Operation Band :GSM 850 **Test Date** :2019-03-28

Fundamental Frequency :848.8 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.12	-23.75	-30.05	-0.45	0.13	-13.00	-41.12
148.34	-68.29	-60.10	-7.31	-1.00	0.12	-13.00	-55.29
285.11	-69.22	-65.48	-2.44	-1.40	0.10	-13.00	-56.22
379.20	-64.53	-61.60	-1.57	-1.61	0.24	-13.00	-51.53
468.44	-63.61	-59.68	-2.32	-1.80	0.18	-13.00	-50.61
691.54	-60.00	-57.33	-1.35	-2.22	0.90	-13.00	-47.00
2546.40	-38.02	-44.58	10.80	-4.59	0.35	-13.00	-25.02

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



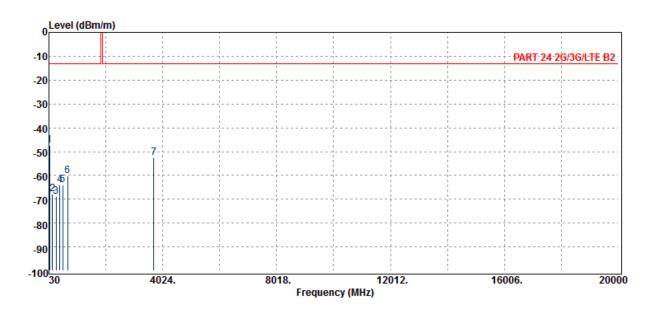
Page 250 of 456

Radiated Spurious Emission Measurement Result: GSM 1900 Mode

Operation Band :GSM 1900 **Test Date** :2019-03-28

Fundamental Frequency :1850.2 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
56.19	-47.24	-36.14	-10.50	-0.63	0.03	-13.00	-34.24
146.40	-67.80	-59.34	-7.51	-1.00	0.04	-13.00	-54.80
289.96	-68.83	-65.30	-2.15	-1.41	0.03	-13.00	-55.83
406.36	-64.03	-60.68	-1.75	-1.67	0.08	-13.00	-51.03
512.09	-63.85	-60.60	-1.57	-1.90	0.21	-13.00	-50.85
689.60	-60.11	-56.85	-1.35	-2.21	0.30	-13.00	-47.11
3700.40	-52.70	-59.61	12.50	-5.72	0.13	-13.00	-39.70

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



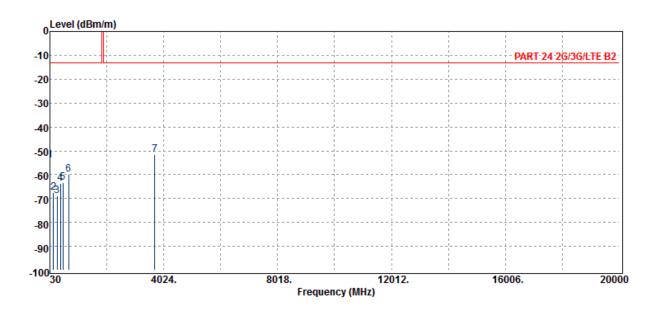
Page 251 of 456

Operation Band :GSM 1900 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :1850.2 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.96	-23.50	-30.05	-0.45	0.04	-13.00	-40.96
156.10	-67.60	-59.97	-6.64	-1.03	0.04	-13.00	-54.60
285.11	-68.86	-65.05	-2.44	-1.40	0.03	-13.00	-55.86
405.39	-63.82	-60.48	-1.75	-1.67	0.08	-13.00	-50.82
487.84	-63.32	-59.39	-2.29	-1.84	0.20	-13.00	-50.32
681.84	-59.92	-56.73	-1.29	-2.20	0.29	-13.00	-46.92
3700.40	-51.50	-58.41	12.50	-5.72	0.13	-13.00	-38.50

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

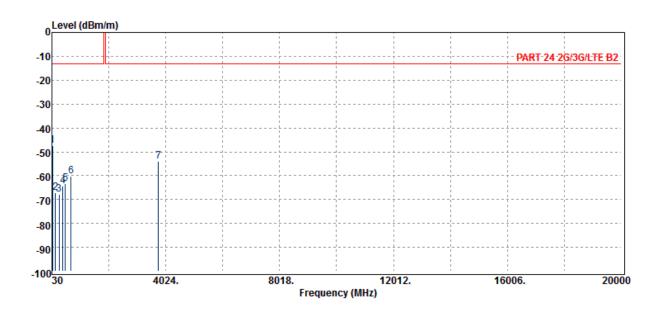


Page 252 of 456

Operation Band :GSM 1900 **Test Date** :2019-03-28

Fundamental Frequency :1880 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Lovel	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
54.25	-47.42	-36.07	-10.75	-0.62	0.03	-13.00	-34.42
146.40	-67.28	-58.82	-7.51	-1.00	0.04	-13.00	-54.28
284.14	-67.77	-63.94	-2.47	-1.39	0.03	-13.00	-54.77
406.36	-64.26	-60.91	-1.75	-1.67	0.08	-13.00	-51.26
495.60	-63.16	-59.47	-2.04	-1.86	0.21	-13.00	-50.16
697.36	-60.31	-57.01	-1.40	-2.22	0.31	-13.00	-47.31
3760.00	-54.08	-60.93	12.42	-5.69	0.12	-13.00	-41.08

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



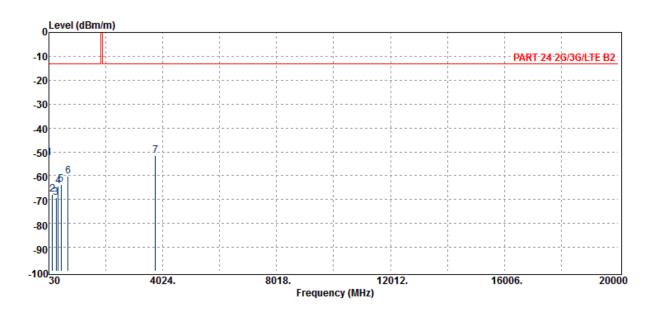
Page 253 of 456

Operation Band :GSM 1900 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :1880 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-52.65	-22.18	-30.05	-0.45	0.04	-13.00	-39.65
153.19	-67.73	-59.86	-6.89	-1.02	0.04	-13.00	-54.73
279.29	-69.08	-65.17	-2.56	-1.38	0.03	-13.00	-56.08
357.86	-64.48	-61.15	-1.81	-1.57	0.05	-13.00	-51.48
454.86	-63.51	-59.85	-2.05	-1.77	0.15	-13.00	-50.51
697.36	-60.15	-56.85	-1.40	-2.22	0.31	-13.00	-47.15
3760.00	-51.51	-58.37	12.42	-5.69	0.12	-13.00	-38.51

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

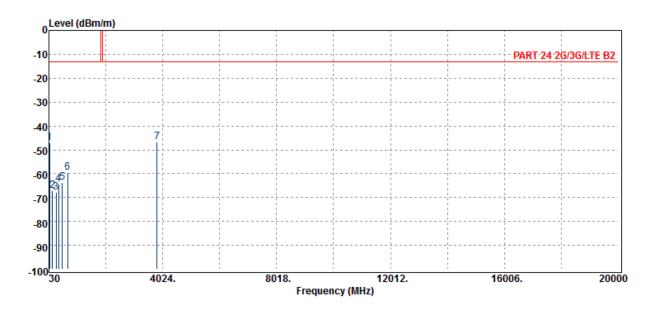


Page 254 of 456

Operation Band :GSM 1900 **Test Date** :2019-03-28

Fundamental Frequency :1909.8 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
56.19	-47.23	-36.13	-10.50	-0.63	0.03	-13.00	-34.23
149.31	-67.12	-58.94	-7.22	-1.00	0.04	-13.00	-54.12
285.11	-67.82	-64.01	-2.44	-1.40	0.03	-13.00	-54.82
364.65	-64.25	-60.97	-1.76	-1.58	0.06	-13.00	-51.25
495.60	-63.66	-59.98	-2.04	-1.86	0.21	-13.00	-50.66
689.60	-59.57	-56.31	-1.35	-2.21	0.30	-13.00	-46.57
3819.60	-46.55	-53.37	12.46	-5.76	0.12	-13.00	-33.55

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



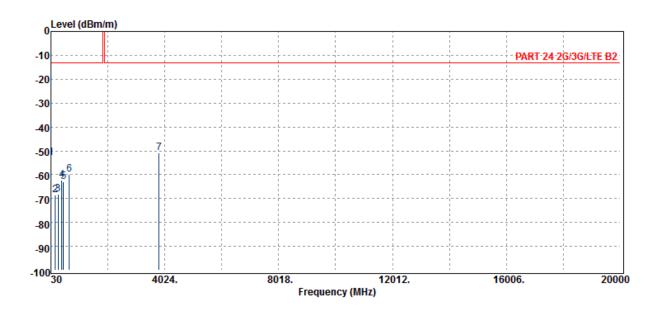
Page 255 of 456

Operation Band :GSM 1900 **Test Date** :2019-03-28

Fundamental Frequency :1909.8 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.08	-22.61	-30.05	-0.45	0.04	-13.00	-40.08
175.50	-68.39	-62.45	-4.90	-1.09	0.05	-13.00	-55.39
289.96	-68.18	-64.65	-2.15	-1.41	0.03	-13.00	-55.18
410.24	-62.20	-58.85	-1.75	-1.68	0.08	-13.00	-49.20
469.41	-62.88	-58.92	-2.34	-1.80	0.18	-13.00	-49.88
679.90	-59.73	-56.57	-1.25	-2.20	0.29	-13.00	-46.73
3819.60	-50.79	-57.61	12.46	-5.76	0.12	-13.00	-37.79

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



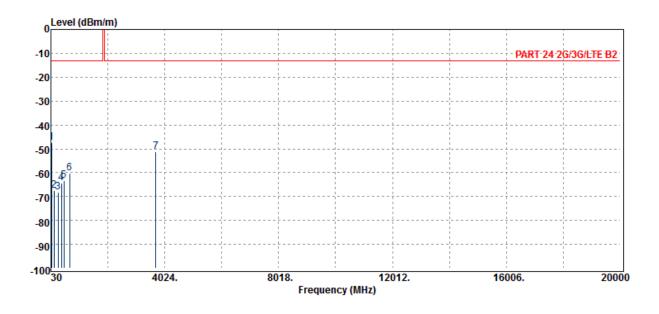
Page 256 of 456

Radiated Spurious Emission Measurement Result: WCDMA Band 2 Mode

Operation Band :WCDMA B2 **Test Date** :2019-03-28

Fundamental Frequency :1852.4 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			_
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
56.19	-47.34	-36.23	-10.50	-0.63	0.03	-13.00	-34.34
141.55	-67.60	-58.39	-8.27	-0.98	0.04	-13.00	-54.60
282.20	-68.09	-64.22	-2.51	-1.39	0.03	-13.00	-55.09
405.39	-64.46	-61.12	-1.75	-1.67	0.08	-13.00	-51.46
483.96	-63.37	-59.36	-2.37	-1.83	0.20	-13.00	-50.37
692.51	-60.05	-56.79	-1.35	-2.22	0.31	-13.00	-47.05
3704.80	-51.32	-58.22	12.49	-5.72	0.13	-13.00	-38.32

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



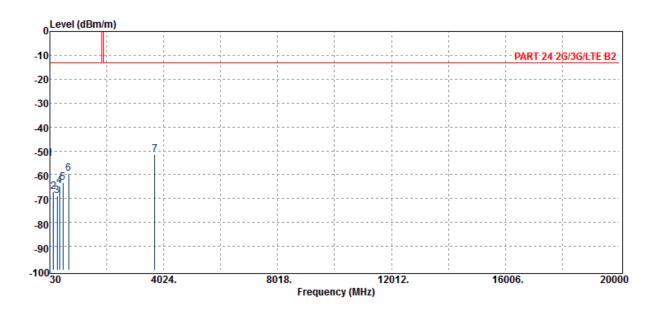
Page 257 of 456

Operation Band Test Date :WCDMA B2 :2019-03-28

Fundamental Frequency :1852.4 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.31	-22.85	-30.05	-0.45	0.04	-13.00	-40.31
146.40	-67.04	-58.58	-7.51	-1.00	0.04	-13.00	-54.04
284.14	-68.98	-65.15	-2.47	-1.39	0.03	-13.00	-55.98
371.44	-64.60	-61.34	-1.72	-1.60	0.06	-13.00	-51.60
488.81	-63.29	-59.37	-2.27	-1.84	0.20	-13.00	-50.29
694.45	-59.34	-56.08	-1.35	-2.22	0.31	-13.00	-46.34
3704.80	-51.60	-58.50	12.49	-5.72	0.13	-13.00	-38.60

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

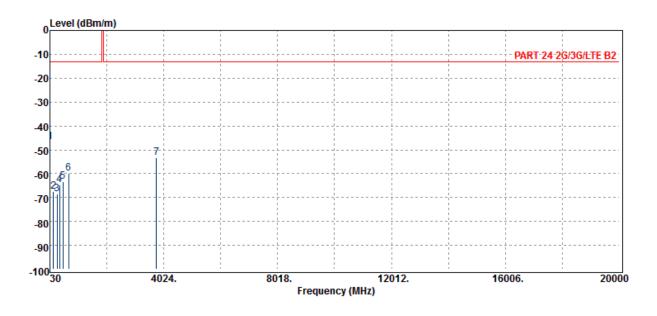


Page 258 of 456

Operation Band :WCDMA B2 **Test Date** :2019-03-28

Fundamental Frequency :1880 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Lovel	Antenna Gain	Cable	Filter	Limit	Margin
N 41 1—	alD.co	Output Level		Loss	٦D	ما ال	٦D
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	<u>dB</u>
31.94	-46.75	-18.22	-28.10	-0.47	0.03	-13.00	-33.75
149.31	-67.31	-59.13	-7.22	-1.00	0.04	-13.00	-54.31
288.99	-68.47	-64.89	-2.21	-1.41	0.03	-13.00	-55.47
364.65	-64.54	-61.26	-1.76	-1.58	0.06	-13.00	-51.54
490.75	-63.30	-59.44	-2.22	-1.85	0.21	-13.00	-50.30
692.51	-59.80	-56.54	-1.35	-2.22	0.31	-13.00	-46.80
3760.00	-53.20	-60.05	12.42	-5.69	0.12	-13.00	-40.20

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



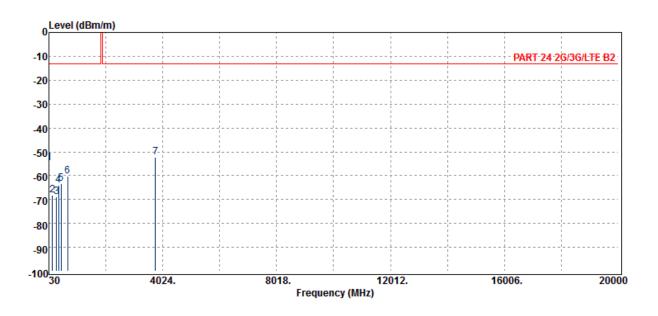
Page 259 of 456

Operation Band :WCDMA B2 **Test Date** :2019-03-28

Fundamental Frequency :1880 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.52	-24.05	-30.05	-0.45	0.04	-13.00	-41.52
151.25	-68.03	-60.01	-7.05	-1.01	0.04	-13.00	-55.03
299.66	-68.97	-65.61	-1.96	-1.43	0.03	-13.00	-55.97
376.29	-64.04	-60.87	-1.62	-1.61	0.06	-13.00	-51.04
458.74	-63.17	-59.50	-2.05	-1.78	0.16	-13.00	-50.17
694.45	-60.21	-56.95	-1.35	-2.22	0.31	-13.00	-47.21
3760.00	-52.30	-59.15	12.42	-5.69	0.12	-13.00	-39.30

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



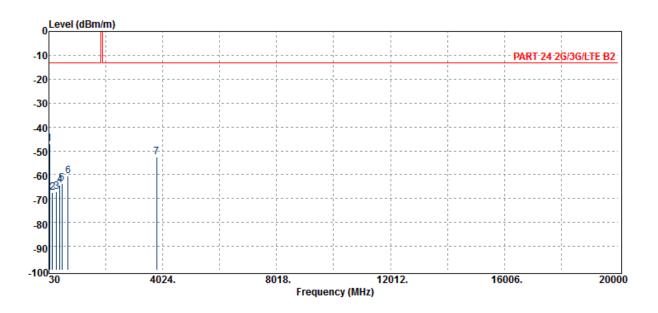
Page 260 of 456

Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:WCDMA B2 :1907.6 MHz :Tx CH HIGH :E1 Plane

Test Date :2019-03-28 Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
52.31	-47.18	-35.31	-11.29	-0.61	0.03	-13.00	-34.18
146.40	-67.61	-59.15	-7.51	-1.00	0.04	-13.00	-54.61
294.81	-67.17	-63.63	-2.15	-1.42	0.03	-13.00	-54.17
408.30	-64.30	-60.95	-1.75	-1.68	0.08	-13.00	-51.30
487.84	-63.64	-59.71	-2.29	-1.84	0.20	-13.00	-50.64
696.39	-60.64	-57.35	-1.38	-2.22	0.31	-13.00	-47.64
3815.20	-52.55	-59.38	12.47	-5.76	0.12	-13.00	-39.55

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



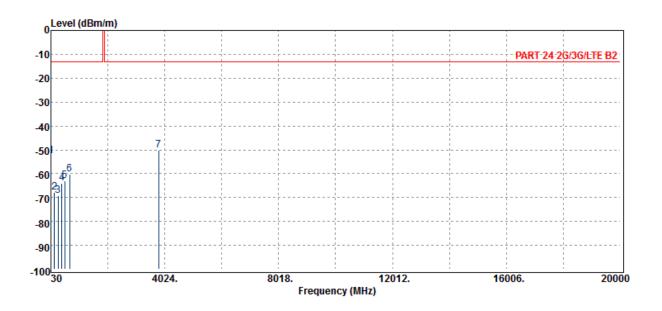
Page 261 of 456

Operation Band Test Date :WCDMA B2 :2019-03-28

Fundamental Frequency :1907.6 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-52.64	-22.18	-30.05	-0.45	0.04	-13.00	-39.64
149.31	-67.81	-59.63	-7.22	-1.00	0.04	-13.00	-54.81
285.11	-69.15	-65.35	-2.44	-1.40	0.03	-13.00	-56.15
413.15	-64.05	-60.64	-1.81	-1.69	0.09	-13.00	-51.05
516.94	-62.90	-59.76	-1.45	-1.90	0.21	-13.00	-49.90
691.54	-60.38	-57.12	-1.35	-2.22	0.30	-13.00	-47.38
3815.20	-50.32	-57.15	12.47	-5.76	0.12	-13.00	-37.32

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



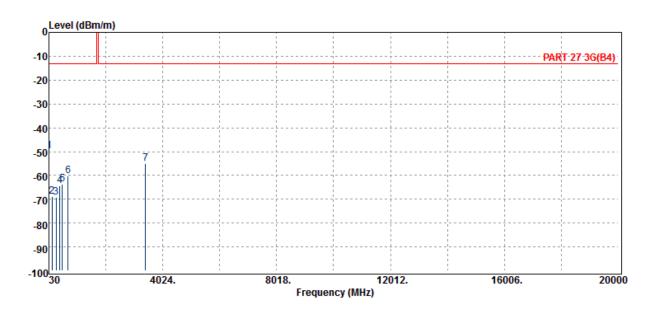
Page 262 of 456

Radiated Spurious Emission Measurement Result: WCDMA Band 4 Mode

Operation Band :WCDMA B4 **Test Date** :2019-03-28

Fundamental Frequency :1712.4 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.85	-19.38	-30.05	-0.45	0.04	-13.00	-36.85
144.46	-68.90	-60.20	-7.75	-0.99	0.04	-13.00	-55.90
279.29	-69.23	-65.32	-2.56	-1.38	0.03	-13.00	-56.23
418.00	-64.31	-60.86	-1.85	-1.70	0.10	-13.00	-51.31
498.51	-63.81	-60.18	-1.98	-1.87	0.22	-13.00	-50.81
697.36	-60.36	-57.05	-1.40	-2.22	0.31	-13.00	-47.36
3424.80	-55.08	-62.53	12.75	-5.48	0.18	-13.00	-42.08

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



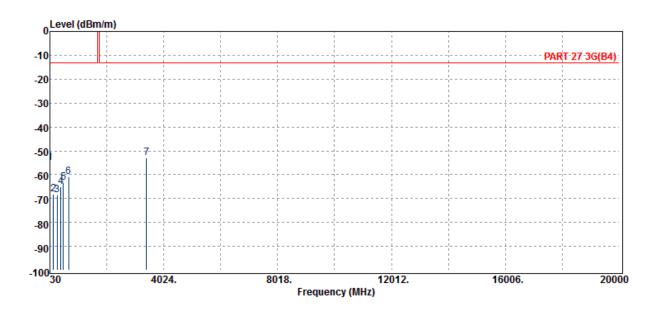
Page 263 of 456

Operation Band Test Date :WCDMA B4 :2019-03-28

Fundamental Frequency :1712.4 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.88	-24.42	-30.05	-0.45	0.04	-13.00	-41.88
148.34	-68.20	-59.93	-7.31	-1.00	0.04	-13.00	-55.20
282.20	-68.37	-64.51	-2.51	-1.39	0.03	-13.00	-55.37
411.21	-65.14	-61.77	-1.77	-1.68	0.09	-13.00	-52.14
502.39	-63.41	-59.85	-1.90	-1.88	0.22	-13.00	-50.41
692.51	-60.97	-57.70	-1.35	-2.22	0.31	-13.00	-47.97
3424.80	-52.91	-60.36	12.75	-5.48	0.18	-13.00	-39.91

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

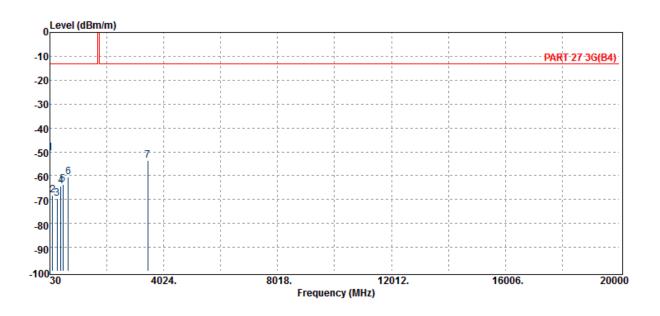


Page 264 of 456

Operation Band Test Date :WCDMA B4 :2019-03-28

Fundamental Frequency Temp./Humi. :1732.6 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.52	-20.05	-30.05	-0.45	0.04	-13.00	-37.52
129.91	-68.02	-56.96	-10.16	-0.94	0.04	-13.00	-55.02
287.05	-69.53	-65.83	-2.33	-1.40	0.03	-13.00	-56.53
411.21	-64.47	-61.10	-1.77	-1.68	0.09	-13.00	-51.47
483.96	-63.54	-59.53	-2.37	-1.83	0.20	-13.00	-50.54
676.99	-60.61	-57.39	-1.31	-2.19	0.29	-13.00	-47.61
3465.20	-53.62	-60.95	12.64	-5.48	0.17	-13.00	-40.62

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



:2019-03-28

:22 deg_C / 61 RH

Page 265 of 456

Operation Band :WCDMA B4

Fundamental Frequency **Operation Mode**

EUT Pol.

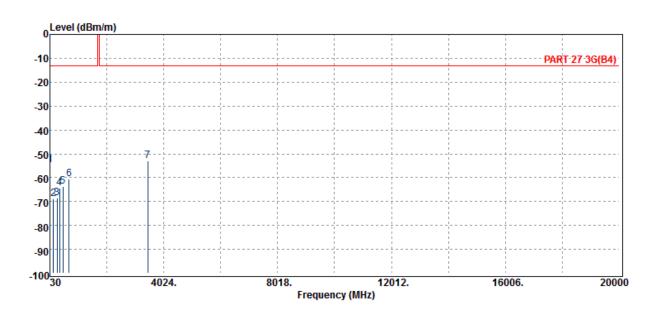
:1732.6 MHz :Tx CH MID

Engineer :E1 Plane

Test Date

Temp./Humi.

:Kane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.54	-24.07	-30.05	-0.45	0.04	-13.00	-41.54
153.19	-68.70	-60.83	-6.89	-1.02	0.04	-13.00	-55.70
288.99	-68.65	-65.07	-2.21	-1.41	0.03	-13.00	-55.65
376.29	-64.37	-61.19	-1.62	-1.61	0.06	-13.00	-51.37
488.81	-63.71	-59.79	-2.27	-1.84	0.20	-13.00	-50.71
697.36	-60.70	-57.39	-1.40	-2.22	0.31	-13.00	-47.70
3465.20	-52.97	-60.29	12.64	-5.48	0.17	-13.00	-39.97

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 266 of 456

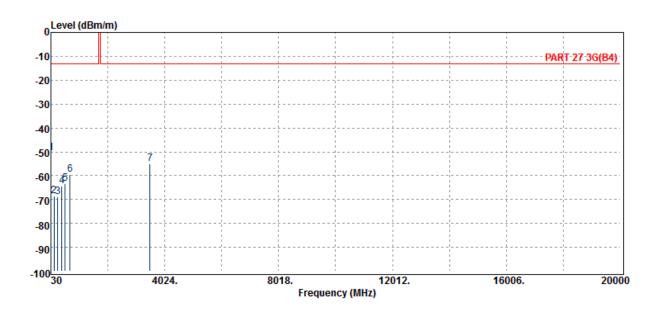
Operation Band Fundamental Frequency **Operation Mode**

EUT Pol.

:WCDMA B4 :1752.6 MHz :Tx CH HIGH :E1 Plane

Test Date :2019-03-28 Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin	
•		Output Level	Gain	Loss			•	
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB	
30.00	-50.55	-20.08	-30.05	-0.45	0.04	-13.00	-37.55	
143.49	-68.48	-59.61	-7.92	-0.99	0.04	-13.00	-55.48	
274.44	-68.96	-64.99	-2.64	-1.37	0.03	-13.00	-55.96	
418.00	-64.46	-61.01	-1.85	-1.70	0.10	-13.00	-51.46	
521.79	-63.26	-60.15	-1.41	-1.91	0.21	-13.00	-50.26	
696.39	-59.56	-56.27	-1.38	-2.22	0.31	-13.00	-46.56	
3505.20	-55.07	-62.16	12.49	-5.55	0.16	-13.00	-42.07	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 267 of 456

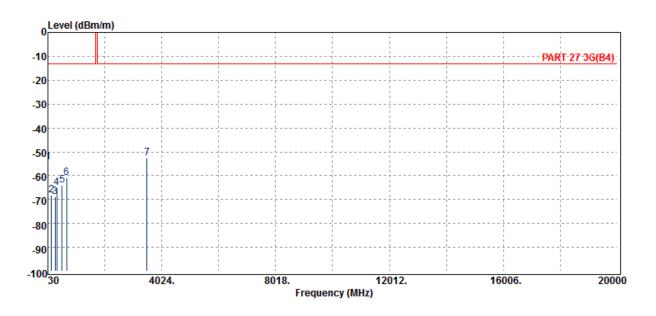
Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:WCDMA B4 :1752.6 MHz :Tx CH HIGH :E1 Plane

Test Date :2019-03-28 Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane

:HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.43	-23.96	-30.05	-0.45	0.04	-13.00	-41.43
153.19	-68.25	-60.38	-6.89	-1.02	0.04	-13.00	-55.25
285.11	-69.02	-65.21	-2.44	-1.40	0.03	-13.00	-56.02
343.31	-64.97	-62.03	-1.45	-1.53	0.05	-13.00	-51.97
524.70	-63.92	-60.86	-1.36	-1.91	0.21	-13.00	-50.92
691.54	-60.93	-57.67	-1.35	-2.22	0.30	-13.00	-47.93
3505.20	-52.56	-59.65	12.49	-5.55	0.16	-13.00	-39.56

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



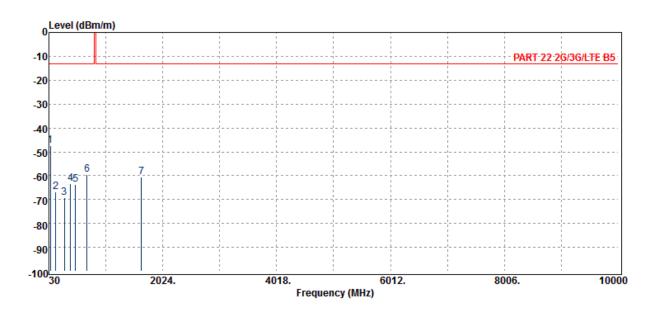
Page 268 of 456

Radiated Spurious Emission Measurement Result: WCDMA Band 5 Mode

Operation Band :WCDMA B5 **Test Date** :2019-03-28

Fundamental Frequency :826.4 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
56.19	-47.36	-36.37	-10.50	-0.63	0.13	-13.00	-34.36
151.25	-66.74	-58.80	-7.05	-1.01	0.12	-13.00	-53.74
298.69	-69.16	-65.82	-2.00	-1.43	0.10	-13.00	-56.16
410.24	-63.49	-60.32	-1.75	-1.68	0.26	-13.00	-50.49
498.51	-63.66	-59.96	-1.98	-1.87	0.15	-13.00	-50.66
696.39	-59.50	-56.83	-1.38	-2.22	0.93	-13.00	-46.50
1652.80	-60.62	-67.20	9.72	-3.55	0.41	-13.00	-47.62

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 269 of 456

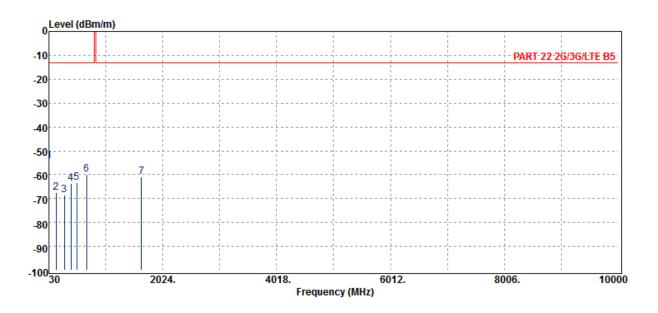
Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:WCDMA B5 :826.4 MHz :Tx CH LOW :E1 Plane

Test Date :2019-03-28 Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane

:HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.41	-24.04	-30.05	-0.45	0.13	-13.00	-41.41
153.19	-67.58	-59.79	-6.89	-1.02	0.12	-13.00	-54.58
299.66	-68.62	-65.33	-1.96	-1.43	0.10	-13.00	-55.62
418.00	-63.58	-60.29	-1.85	-1.70	0.25	-13.00	-50.58
515.00	-63.46	-60.27	-1.45	-1.90	0.16	-13.00	-50.46
686.69	-59.69	-57.00	-1.35	-2.21	0.86	-13.00	-46.69
1652.80	-60.85	-67.43	9.72	-3.55	0.41	-13.00	-47.85

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



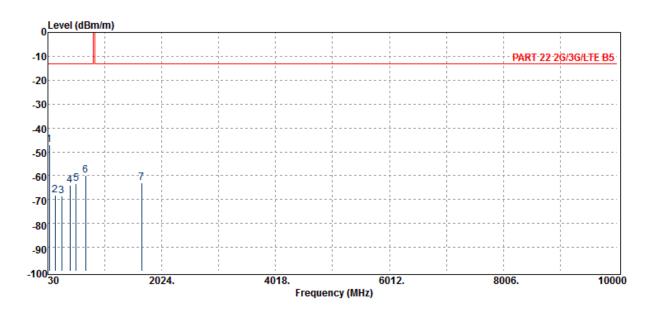
Page 270 of 456

Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:WCDMA B5 :836.6 MHz :Tx CH MID :E1 Plane

Test Date :2019-03-28 Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
56.19	-47.10	-36.11	-10.50	-0.63	0.13	-13.00	-34.10
156.10	-68.22	-60.68	-6.64	-1.03	0.12	-13.00	-55.22
274.44	-68.65	-64.74	-2.64	-1.37	0.10	-13.00	-55.65
416.06	-64.17	-60.88	-1.85	-1.69	0.25	-13.00	-51.17
527.61	-63.34	-60.23	-1.35	-1.92	0.17	-13.00	-50.34
692.51	-59.95	-57.29	-1.35	-2.22	0.90	-13.00	-46.95
1673.20	-63.07	-69.74	9.84	-3.58	0.42	-13.00	-50.07

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 271 of 456

Operation Band Fundamental Frequency

Operation Mode EUT Pol.

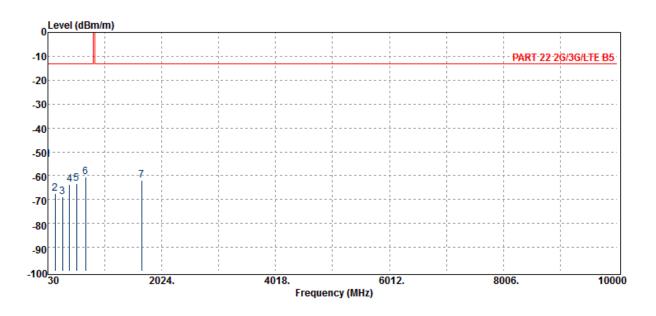
:WCDMA B5 :836.6 MHz :Tx CH MID :E1 Plane

Test Date :2019-03-28

Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane

:HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.20	-22.83	-30.05	-0.45	0.13	-13.00	-40.20
154.16	-67.46	-59.75	-6.82	-1.02	0.12	-13.00	-54.46
285.11	-68.75	-65.01	-2.44	-1.40	0.10	-13.00	-55.75
405.39	-63.52	-60.37	-1.75	-1.67	0.27	-13.00	-50.52
532.46	-63.38	-60.32	-1.30	-1.92	0.17	-13.00	-50.38
691.54	-60.62	-57.95	-1.35	-2.22	0.90	-13.00	-47.62
1673.20	-62.01	-68.69	9.84	-3.58	0.42	-13.00	-49.01

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



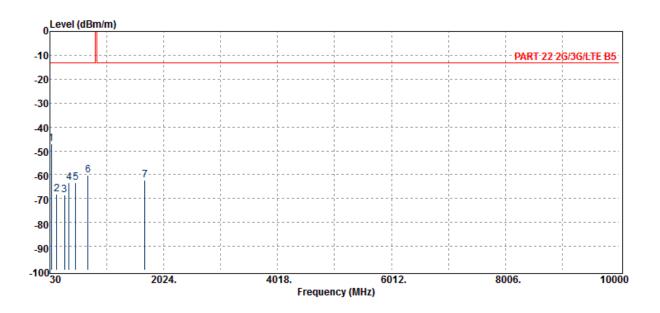
Page 272 of 456

Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:WCDMA B5 :846.6 MHz :Tx CH HIGH :E1 Plane

Test Date :2019-03-28 Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
56.19	-47.15	-36.16	-10.50	-0.63	0.13	-13.00	-34.15
148.34	-68.06	-59.86	-7.31	-1.00	0.12	-13.00	-55.06
284.14	-68.54	-64.78	-2.47	-1.39	0.10	-13.00	-55.54
367.56	-63.40	-60.28	-1.75	-1.59	0.22	-13.00	-50.40
481.05	-63.24	-59.15	-2.43	-1.83	0.17	-13.00	-50.24
694.45	-60.25	-57.60	-1.35	-2.22	0.92	-13.00	-47.25
1693.20	-62.37	-69.16	9.96	-3.59	0.42	-13.00	-49.37

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 273 of 456

Operation Band Fundamental Frequency **Operation Mode**

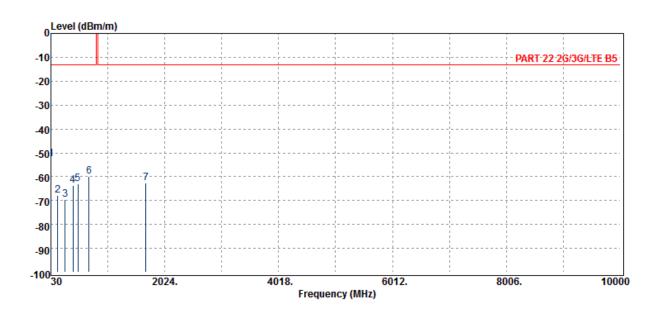
EUT Pol.

:WCDMA B5 :846.6 MHz :Tx CH HIGH :E1 Plane

Test Date :2019-03-28

Temp./Humi. :22 deg_C / 61 RH Engineer :Kane

:HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-52.68	-22.31	-30.05	-0.45	0.13	-13.00	-39.68
146.40	-67.92	-59.54	-7.51	-1.00	0.12	-13.00	-54.92
277.35	-69.39	-65.51	-2.60	-1.38	0.10	-13.00	-56.39
413.15	-63.72	-60.48	-1.81	-1.69	0.26	-13.00	-50.72
502.39	-62.84	-59.21	-1.90	-1.88	0.15	-13.00	-49.84
699.30	-59.95	-57.24	-1.44	-2.23	0.95	-13.00	-46.95
1693.20	-62.62	-69.41	9.96	-3.59	0.42	-13.00	-49.62

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



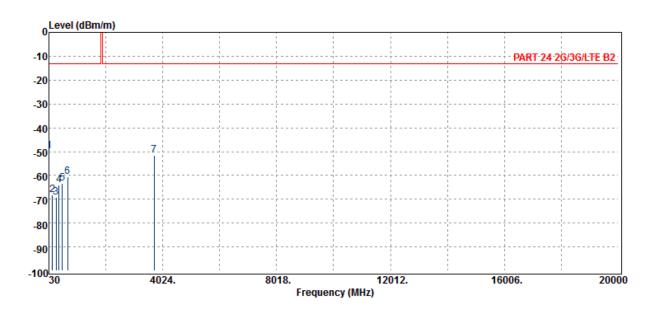
Page 274 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 2 (The Worst Case)

Operation Band :LTE B2 **Test Date** :2019-03-28

Fundamental Frequency :1860 MHz Temp./Humi. :22 deg_C / 61 RH **Operation Mode** :Tx CH LOW Engineer :Kane

EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.78	-19.32	-30.05	-0.45	0.04	-13.00	-36.78
153.19	-68.13	-60.26	-6.89	-1.02	0.04	-13.00	-55.13
277.35	-69.14	-65.20	-2.60	-1.38	0.03	-13.00	-56.14
385.99	-64.10	-61.08	-1.45	-1.63	0.06	-13.00	-51.10
500.45	-63.41	-59.82	-1.94	-1.87	0.22	-13.00	-50.41
691.54	-60.44	-57.18	-1.35	-2.22	0.30	-13.00	-47.44
3720.00	-51.45	-58.33	12.46	-5.71	0.13	-13.00	-38.45

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



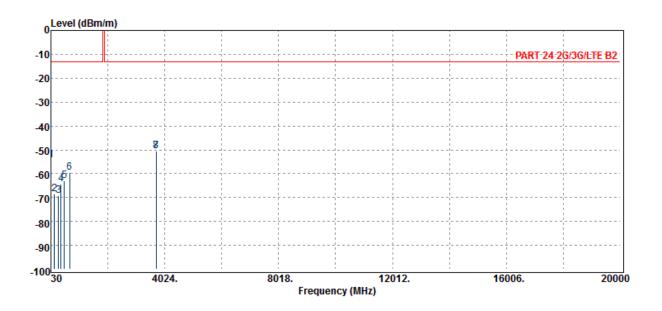
Page 275 of 456

Operation Band :LTE B2 **Test Date** :2019-03-28

Fundamental Frequency :1860 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
-		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-54.45	-23.98	-30.05	-0.45	0.04	-13.00	-41.45
151.25	-68.49	-60.47	-7.05	-1.01	0.04	-13.00	-55.49
296.75	-69.08	-65.61	-2.08	-1.42	0.03	-13.00	-56.08
386.96	-64.36	-61.34	-1.45	-1.63	0.06	-13.00	-51.36
493.66	-62.81	-59.06	-2.10	-1.86	0.21	-13.00	-49.81
689.60	-59.57	-56.31	-1.35	-2.21	0.30	-13.00	-46.57
3720.00	-50.49	-57.37	12.46	-5.71	0.13	-13.00	-37.49
3720.00	-50.41	-57.29	12.46	-5.71	0.13	-13.00	-37.41

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

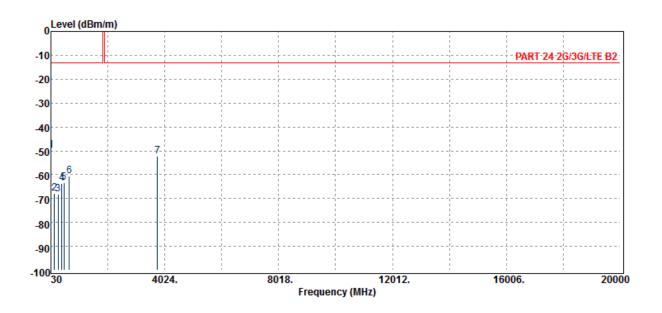


Page 276 of 456

Operation Band :LTE B2 **Test Date** :2019-03-28

Fundamental Frequency :1880 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
-		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.92	-19.46	-30.05	-0.45	0.04	-13.00	-36.92
146.40	-67.89	-59.43	-7.51	-1.00	0.04	-13.00	-54.89
289.96	-68.07	-64.54	-2.15	-1.41	0.03	-13.00	-55.07
411.21	-63.51	-60.14	-1.77	-1.68	0.09	-13.00	-50.51
488.81	-63.43	-59.52	-2.27	-1.84	0.20	-13.00	-50.43
675.05	-60.41	-57.16	-1.35	-2.19	0.28	-13.00	-47.41
3760.00	-52.15	-59.01	12.42	-5.69	0.12	-13.00	-39.15

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



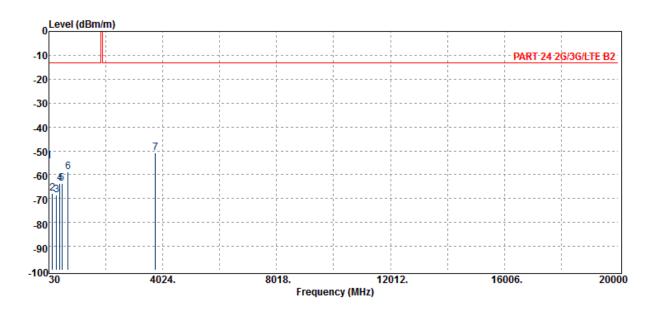
Page 277 of 456

Operation Band :LTE B2 **Test Date** :2019-03-28

Fundamental Frequency :1880 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.26	-23.79	-30.05	-0.45	0.04	-13.00	-41.26
159.01	-67.82	-60.48	-6.35	-1.04	0.04	-13.00	-54.82
291.90	-68.68	-65.15	-2.15	-1.41	0.03	-13.00	-55.68
406.36	-63.82	-60.47	-1.75	-1.67	0.08	-13.00	-50.82
482.99	-63.74	-59.72	-2.39	-1.83	0.20	-13.00	-50.74
696.39	-58.94	-55.65	-1.38	-2.22	0.31	-13.00	-45.94
3760.00	-50.88	-57.73	12.42	-5.69	0.12	-13.00	-37.88

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

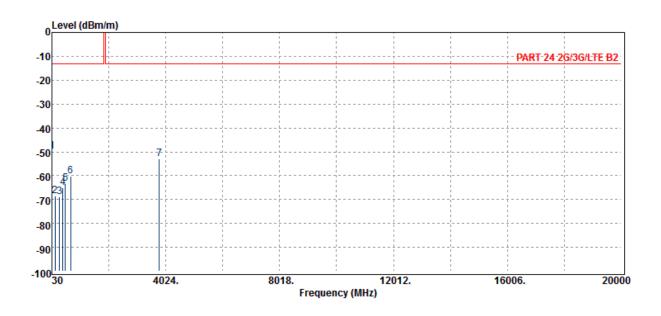


Page 278 of 456

Operation Band :LTE B2 **Test Date** :2019-03-28

Fundamental Frequency :1900 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-49.94	-19.47	-30.05	-0.45	0.04	-13.00	-36.94
144.46	-68.63	-59.93	-7.75	-0.99	0.04	-13.00	-55.63
294.81	-68.98	-65.44	-2.15	-1.42	0.03	-13.00	-55.98
408.30	-65.04	-61.69	-1.75	-1.68	0.08	-13.00	-52.04
502.39	-63.29	-59.73	-1.90	-1.88	0.22	-13.00	-50.29
692.51	-60.12	-56.85	-1.35	-2.22	0.31	-13.00	-47.12
3800.00	-52.79	-59.65	12.50	-5.76	0.12	-13.00	-39.79

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



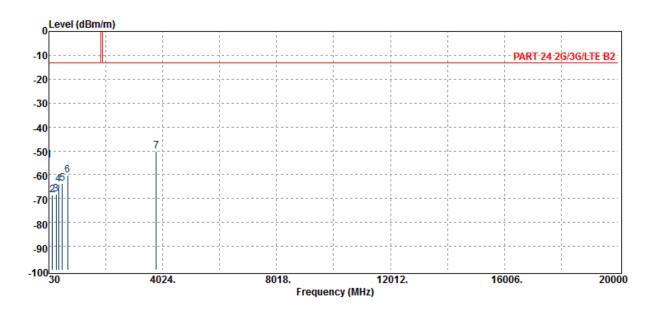
Page 279 of 456

Operation Band :LTE B2 **Test Date** :2019-03-28

Fundamental Frequency :1900 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.82	-23.35	-30.05	-0.45	0.04	-13.00	-40.82
154.16	-68.44	-60.65	-6.82	-1.02	0.04	-13.00	-55.44
285.11	-68.09	-64.29	-2.44	-1.40	0.03	-13.00	-55.09
376.29	-63.97	-60.80	-1.62	-1.61	0.06	-13.00	-50.97
495.60	-63.62	-59.93	-2.04	-1.86	0.21	-13.00	-50.62
691.54	-60.09	-56.83	-1.35	-2.22	0.30	-13.00	-47.09
3800.00	-50.12	-56.98	12.50	-5.76	0.12	-13.00	-37.12

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



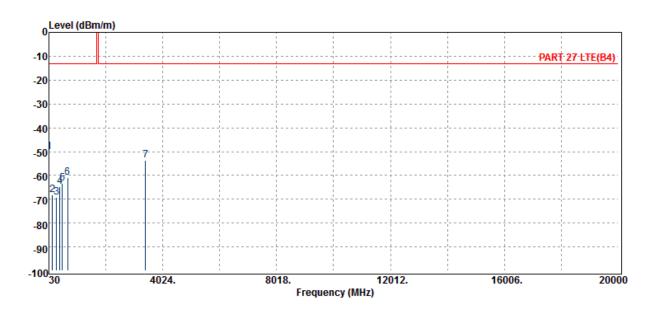
Page 280 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 4 (The Worst Case)

Operation Band :LTE B4 **Test Date** :2019-03-28

Fundamental Frequency :1710.7 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.06	-19.59	-30.05	-0.45	0.04	-13.00	-37.06
156.10	-68.30	-60.68	-6.64	-1.03	0.04	-13.00	-55.30
296.75	-69.38	-65.90	-2.08	-1.42	0.03	-13.00	-56.38
411.21	-64.76	-61.39	-1.77	-1.68	0.09	-13.00	-51.76
493.66	-63.42	-59.67	-2.10	-1.86	0.21	-13.00	-50.42
690.57	-60.80	-57.54	-1.35	-2.21	0.30	-13.00	-47.80
3421.40	-53.73	-61.19	12.76	-5.48	0.18	-13.00	-40.73

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



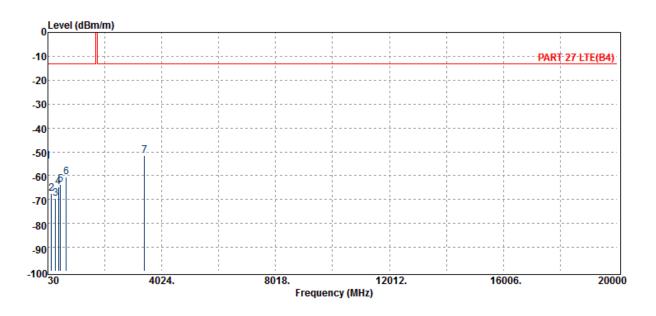
Page 281 of 456

Operation Band :LTE B4 **Test Date** :2019-03-28

Fundamental Frequency :1710.7 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.93	-23.46	-30.05	-0.45	0.04	-13.00	-40.93
149.31	-67.49	-59.31	-7.22	-1.00	0.04	-13.00	-54.49
299.66	-69.56	-66.19	-1.96	-1.43	0.03	-13.00	-56.56
405.39	-64.70	-61.35	-1.75	-1.67	0.08	-13.00	-51.70
471.35	-63.80	-59.83	-2.35	-1.80	0.18	-13.00	-50.80
676.99	-60.72	-57.50	-1.31	-2.19	0.29	-13.00	-47.72
3421.40	-51.48	-58.94	12.76	-5.48	0.18	-13.00	-38.48

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

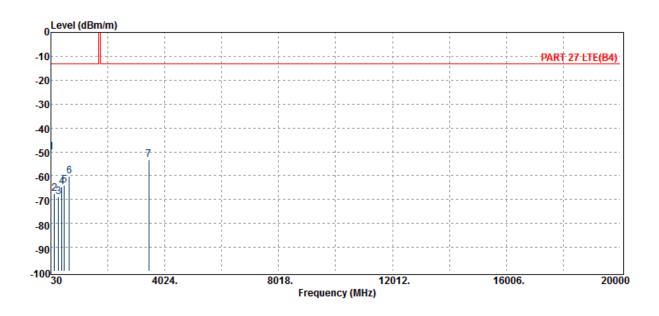


Page 282 of 456

Operation Band :LTE B4 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :1732.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Lovel	Antenna Gain	Cable	Filter	Limit	Margin
N 41 1	ID	Output Level		Loss	ID	ID	ID
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.03	-19.56	-30.05	-0.45	0.04	-13.00	-37.03
159.01	-67.53	-60.19	-6.35	-1.04	0.04	-13.00	-54.53
299.66	-68.69	-65.33	-1.96	-1.43	0.03	-13.00	-55.69
406.36	-64.86	-61.52	-1.75	-1.67	80.0	-13.00	-51.86
502.39	-64.03	-60.47	-1.90	-1.88	0.22	-13.00	-51.03
673.11	-60.37	-57.07	-1.39	-2.19	0.28	-13.00	-47.37
3465.00	-53.38	-60.71	12.64	-5.48	0.17	-13.00	-40.38

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



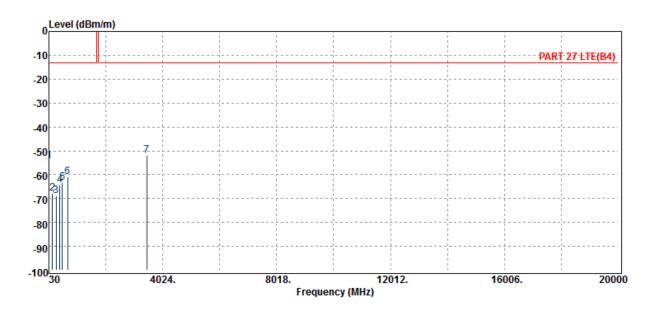
Page 283 of 456

Operation Band :LTE B4 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :1732.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.41	-23.94	-30.05	-0.45	0.04	-13.00	-41.41
153.19	-67.99	-60.12	-6.89	-1.02	0.04	-13.00	-54.99
284.14	-68.84	-65.01	-2.47	-1.39	0.03	-13.00	-55.84
411.21	-64.47	-61.10	-1.77	-1.68	0.09	-13.00	-51.47
497.54	-63.20	-59.55	-2.00	-1.86	0.22	-13.00	-50.20
687.66	-60.81	-57.55	-1.35	-2.21	0.30	-13.00	-47.81
3465.00	-52.07	-59.39	12.64	-5.48	0.17	-13.00	-39.07

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

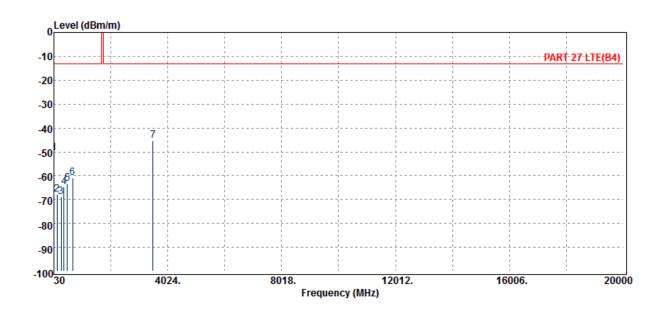


Page 284 of 456

Operation Band :LTE B4 **Test Date** :2019-03-28

Fundamental Frequency :1754.3 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.45	-19.98	-30.05	-0.45	0.04	-13.00	-37.45
143.49	-67.73	-58.87	-7.92	-0.99	0.04	-13.00	-54.73
282.20	-68.69	-64.83	-2.51	-1.39	0.03	-13.00	-55.69
382.11	-64.54	-61.47	-1.51	-1.62	0.06	-13.00	-51.54
492.69	-63.43	-59.64	-2.14	-1.85	0.21	-13.00	-50.43
694.45	-61.04	-57.78	-1.35	-2.22	0.31	-13.00	-48.04
3508.60	-45.34	-52.42	12.48	-5.56	0.15	-13.00	-32.34

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



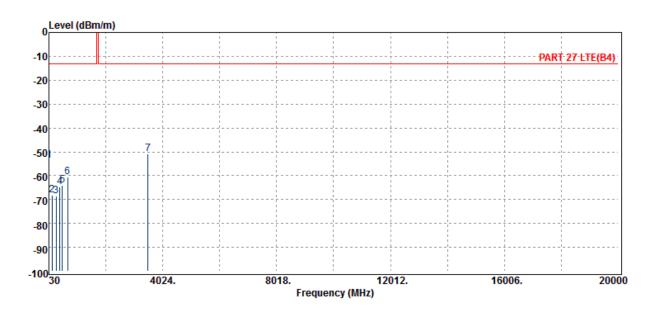
Page 285 of 456

Operation Band :LTE B4 **Test Date** :2019-03-28

Fundamental Frequency :1754.3 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.73	-23.26	-30.05	-0.45	0.04	-13.00	-40.73
144.46	-68.10	-59.40	-7.75	-0.99	0.04	-13.00	-55.10
289.96	-68.63	-65.10	-2.15	-1.41	0.03	-13.00	-55.63
411.21	-64.85	-61.48	-1.77	-1.68	0.09	-13.00	-51.85
502.39	-63.96	-60.40	-1.90	-1.88	0.22	-13.00	-50.96
691.54	-60.55	-57.28	-1.35	-2.22	0.30	-13.00	-47.55
3508.60	-51.02	-58.10	12.48	-5.56	0.15	-13.00	-38.02

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



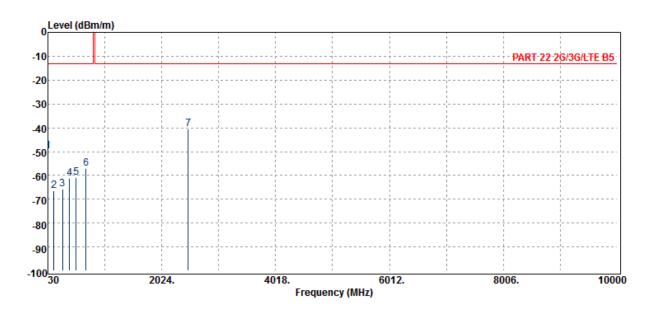
Page 286 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 5 (The Worst Case)

Operation Band :LTE B5 **Test Date** :2019-03-28

Fundamental Frequency :829 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.73	-19.36	-30.05	-0.45	0.13	-13.00	-36.73
136.70	-66.41	-56.50	-9.07	-0.96	0.12	-13.00	-53.41
287.05	-65.84	-62.22	-2.33	-1.40	0.10	-13.00	-52.84
411.21	-61.37	-58.18	-1.77	-1.68	0.26	-13.00	-48.37
522.76	-60.92	-57.78	-1.39	-1.91	0.16	-13.00	-47.92
699.30	-57.26	-54.55	-1.44	-2.23	0.95	-13.00	-44.26
2487.00	-40.40	-47.02	10.75	-4.51	0.38	-13.00	-27.40

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



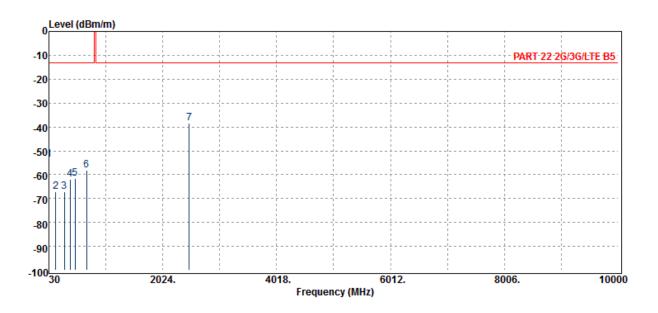
Page 287 of 456

Operation Band :LTE B5 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :829 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.79	-23.42	-30.05	-0.45	0.13	-13.00	-40.79
151.25	-67.20	-59.26	-7.05	-1.01	0.12	-13.00	-54.20
298.69	-67.23	-63.90	-2.00	-1.43	0.10	-13.00	-54.23
403.45	-61.97	-58.85	-1.72	-1.67	0.27	-13.00	-48.97
490.75	-61.42	-57.51	-2.22	-1.85	0.16	-13.00	-48.42
689.60	-58.03	-55.35	-1.35	-2.21	0.88	-13.00	-45.03
2487.00	-38.56	-45.18	10.75	-4.51	0.38	-13.00	-25.56

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

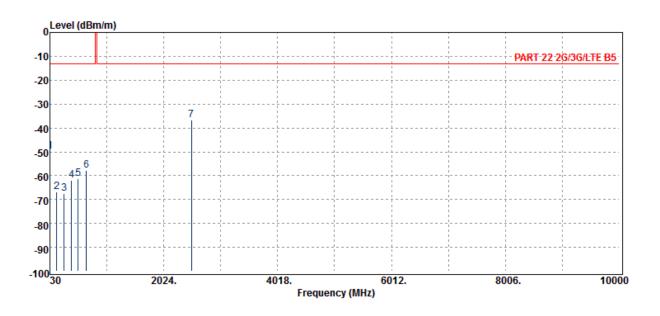


Page 288 of 456

Operation Band :LTE B5 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :836.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.78	-19.41	-30.05	-0.45	0.13	-13.00	-36.78
148.34	-66.72	-58.52	-7.31	-1.00	0.12	-13.00	-53.72
279.29	-67.46	-63.62	-2.56	-1.38	0.10	-13.00	-54.46
406.36	-61.82	-58.66	-1.75	-1.67	0.27	-13.00	-48.82
526.64	-61.32	-58.22	-1.35	-1.92	0.17	-13.00	-48.32
667.29	-57.91	-55.01	-1.45	-2.18	0.73	-13.00	-44.91
2509.50	-36.77	-43.35	10.80	-4.59	0.37	-13.00	-23.77

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



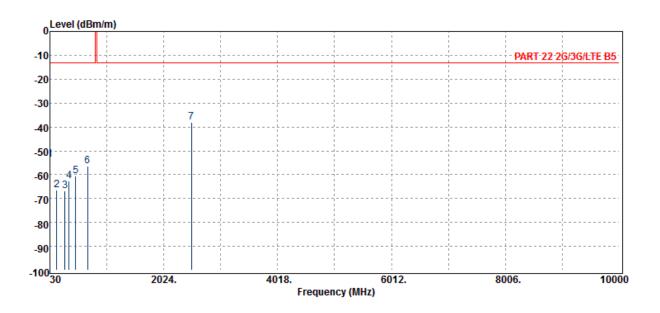
Page 289 of 456

Operation Band :LTE B5 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :836.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.60	-23.23	-30.05	-0.45	0.13	-13.00	-40.60
148.34	-66.27	-58.08	-7.31	-1.00	0.12	-13.00	-53.27
296.75	-66.93	-63.52	-2.08	-1.42	0.10	-13.00	-53.93
364.65	-62.46	-59.34	-1.76	-1.58	0.22	-13.00	-49.46
481.05	-60.46	-56.38	-2.43	-1.83	0.17	-13.00	-47.46
687.66	-56.49	-53.80	-1.35	-2.21	0.87	-13.00	-43.49
2509.50	-38.02	-44.61	10.80	-4.59	0.37	-13.00	-25.02

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

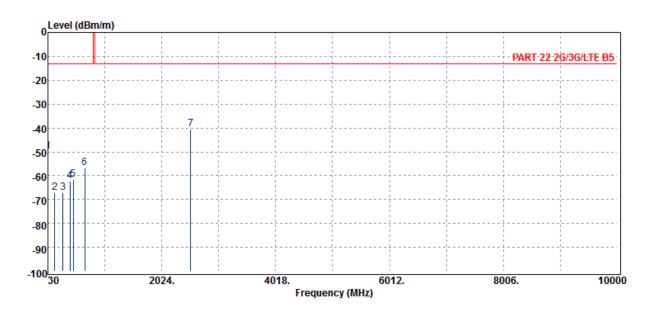


Page 290 of 456

Operation Band :LTE B5 **Test Date** :2019-03-28

Fundamental Frequency :844 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.70	-19.33	-30.05	-0.45	0.13	-13.00	-36.70
148.34	-67.25	-59.06	-7.31	-1.00	0.12	-13.00	-54.25
296.75	-67.20	-63.79	-2.08	-1.42	0.10	-13.00	-54.20
415.09	-62.39	-59.10	-1.85	-1.69	0.25	-13.00	-49.39
473.29	-61.47	-57.49	-2.35	-1.81	0.18	-13.00	-48.47
672.14	-56.59	-53.76	-1.41	-2.19	0.76	-13.00	-43.59
2532.00	-40.49	-47.05	10.80	-4.59	0.36	-13.00	-27.49

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



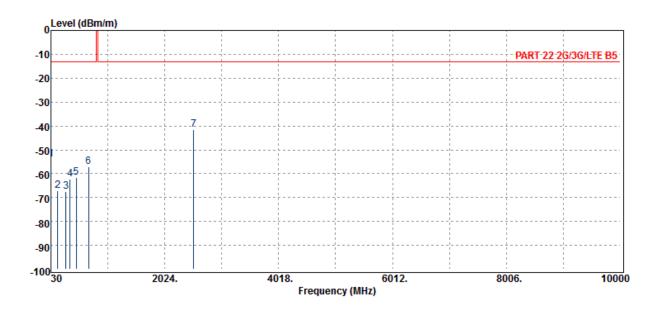
Page 291 of 456

Operation Band :LTE B5 **Test Date** :2019-03-28

Fundamental Frequency :844 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.88	-23.51	-30.05	-0.45	0.13	-13.00	-40.88
151.25	-67.16	-59.22	-7.05	-1.01	0.12	-13.00	-54.16
296.75	-67.34	-63.94	-2.08	-1.42	0.10	-13.00	-54.34
362.71	-62.15	-58.99	-1.80	-1.58	0.21	-13.00	-49.15
474.26	-61.65	-57.66	-2.35	-1.81	0.18	-13.00	-48.65
691.54	-56.99	-54.32	-1.35	-2.22	0.90	-13.00	-43.99
2532.00	-41.45	-48.02	10.80	-4.59	0.36	-13.00	-28.45

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



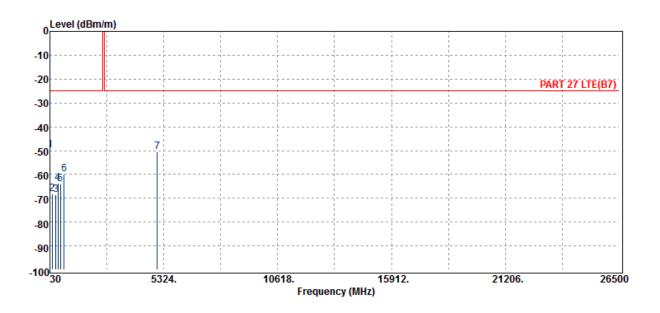
Page 292 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 7 (The Worst Case)

Operation Band :LTE B7 **Test Date** :2019-03-28

Fundamental Frequency :2510 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.71	-19.24	-30.05	-0.45	0.03	-25.00	-24.71
141.55	-68.21	-59.05	-8.27	-0.98	0.09	-25.00	-43.21
298.69	-68.57	-65.25	-2.00	-1.43	0.11	-25.00	-43.57
410.24	-63.75	-60.47	-1.75	-1.68	0.16	-25.00	-38.75
576.11	-64.10	-60.71	-1.43	-2.02	0.05	-25.00	-39.10
697.36	-59.90	-56.49	-1.40	-2.22	0.21	-25.00	-34.90
5020.00	-50.41	-56.79	12.46	-6.61	0.54	-25.00	-25.41

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



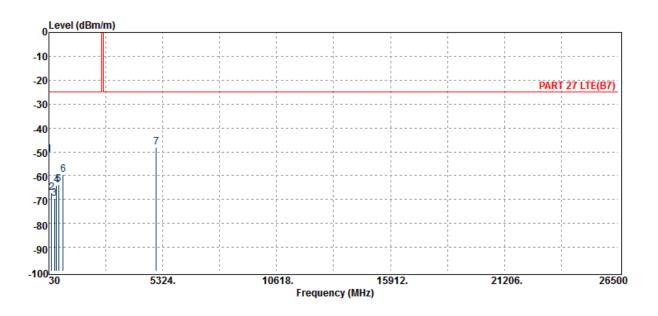
Page 293 of 456

Operation Band :LTE B7 **Test Date** :2019-03-28

Fundamental Frequency :2510 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode Engineer :Tx CH LOW :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-51.13	-20.65	-30.05	-0.45	0.03	-25.00	-26.13
151.25	-67.28	-59.31	-7.05	-1.01	0.09	-25.00	-42.28
287.05	-69.49	-65.89	-2.33	-1.40	0.13	-25.00	-44.49
385.99	-64.14	-61.14	-1.45	-1.63	0.09	-25.00	-39.14
479.11	-63.68	-59.57	-2.43	-1.82	0.14	-25.00	-38.68
686.69	-59.63	-56.33	-1.35	-2.21	0.26	-25.00	-34.63
5020.00	-48.14	-54.52	12.46	-6.61	0.54	-25.00	-23.14

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

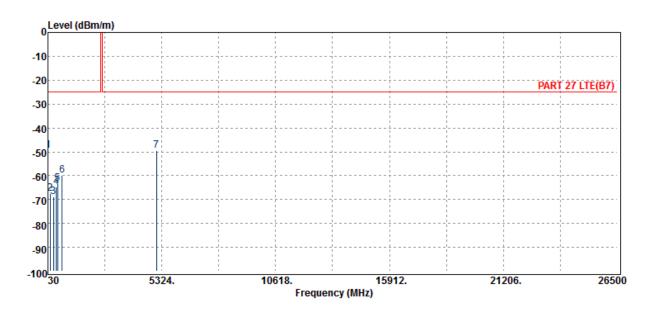


Page 294 of 456

Operation Band :LTE B7 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :2535 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.56	-19.09	-30.05	-0.45	0.03	-25.00	-24.56
134.76	-67.34	-57.08	-9.39	-0.96	0.08	-25.00	-42.34
282.20	-68.69	-64.93	-2.51	-1.39	0.14	-25.00	-43.69
418.00	-64.65	-61.29	-1.85	-1.70	0.18	-25.00	-39.65
485.90	-63.44	-59.37	-2.33	-1.84	0.10	-25.00	-38.44
691.54	-60.03	-56.71	-1.35	-2.22	0.24	-25.00	-35.03
5070.00	-49.38	-55.58	12.48	-6.75	0.46	-25.00	-24.38

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



:2019-03-28

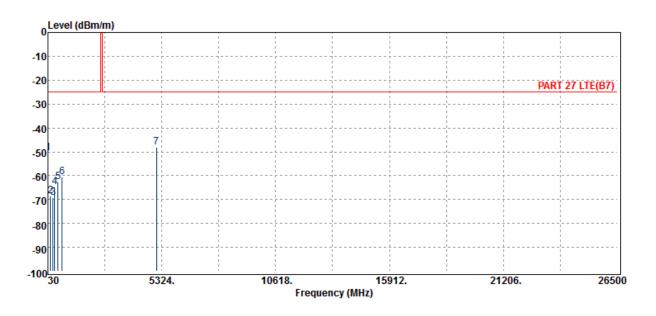
Page 295 of 456

Operation Band :LTE B7 **Test Date**

Fundamental Frequency Temp./Humi. :2535 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.57	-20.10	-30.05	-0.45	0.03	-25.00	-25.57
146.40	-68.65	-60.24	-7.51	-1.00	0.09	-25.00	-43.65
277.35	-69.18	-65.34	-2.60	-1.38	0.15	-25.00	-44.18
353.01	-64.60	-61.44	-1.67	-1.55	0.07	-25.00	-39.60
492.69	-62.48	-58.56	-2.14	-1.85	0.07	-25.00	-37.48
691.54	-60.57	-57.25	-1.35	-2.22	0.24	-25.00	-35.57
5070.00	-48.06	-54.26	12.48	-6.75	0.46	-25.00	-23.06

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



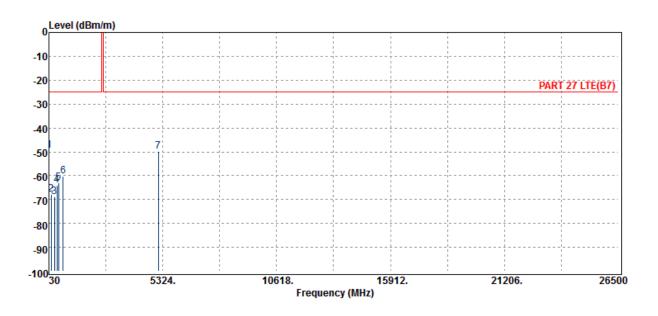
Page 296 of 456

Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:LTE B7 :2560 MHz :Tx CH HIGH :E1 Plane

Test Date :2019-03-28 Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-49.34	-18.87	-30.05	-0.45	0.03	-25.00	-24.34
141.55	-67.76	-58.60	-8.27	-0.98	0.09	-25.00	-42.76
284.14	-68.84	-65.11	-2.47	-1.39	0.13	-25.00	-43.84
401.51	-64.15	-60.93	-1.68	-1.66	0.13	-25.00	-39.15
478.14	-62.98	-58.89	-2.41	-1.82	0.14	-25.00	-37.98
692.51	-60.19	-56.86	-1.35	-2.22	0.24	-25.00	-35.19
5120.00	-49.69	-56.24	12.64	-6.75	0.65	-25.00	-24.69

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 297 of 456

Operation Band :LTE B7

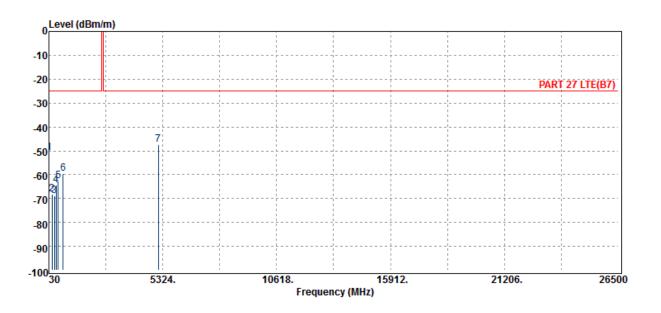
Fundamental Frequency :2560 MHz **Operation Mode** :Tx CH HIGH

EUT Pol. :E1 Plane **Test Date** :2019-03-28

Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane

:HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-50.74	-20.27	-30.05	-0.45	0.03	-25.00	-25.74
172.59	-68.08	-61.89	-5.19	-1.08	0.08	-25.00	-43.08
289.96	-68.81	-65.37	-2.15	-1.41	0.12	-25.00	-43.81
374.35	-64.45	-61.26	-1.66	-1.60	0.08	-25.00	-39.45
456.80	-62.66	-59.09	-2.05	-1.77	0.25	-25.00	-37.66
697.36	-59.66	-56.26	-1.40	-2.22	0.21	-25.00	-34.66
5120.00	-47.46	-54.00	12.64	-6.75	0.65	-25.00	-22.46

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



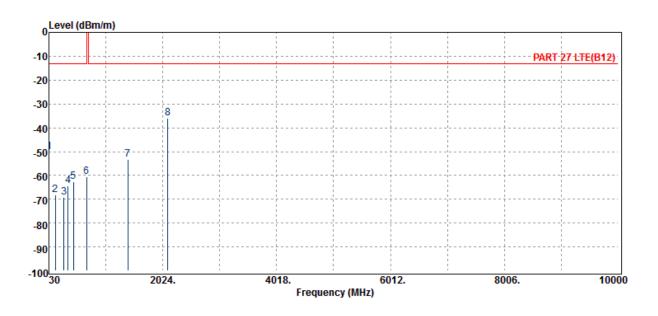
Page 298 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 12 (The Worst Case)

Operation Band :LTE B12 **Test Date** :2019-03-28

Fundamental Frequency :704 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			-
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.32	-19.86	-30.05	-0.45	0.04	-13.00	-37.32
144.46	-68.14	-59.46	-7.75	-0.99	0.05	-13.00	-55.14
296.75	-69.13	-65.96	-2.08	-1.42	0.33	-13.00	-56.13
362.71	-64.49	-61.48	-1.80	-1.58	0.36	-13.00	-51.49
461.65	-62.80	-59.14	-2.12	-1.78	0.24	-13.00	-49.80
689.60	-60.40	-56.84	-1.35	-2.21	0.00	-13.00	-47.40
1408.00	-53.13	-58.44	8.05	-3.25	0.51	-13.00	-40.13
2112.00	-35.83	-42.73	9.70	-4.09	1.29	-13.00	-22.83

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



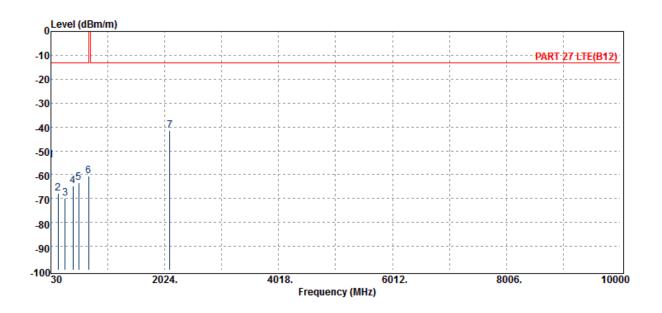
Page 299 of 456

Operation Band :LTE B12 **Test Date** :2019-03-28

Fundamental Frequency :704 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			_
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.04	-23.58	-30.05	-0.45	0.04	-13.00	-41.04
153.19	-67.79	-59.94	-6.89	-1.02	0.06	-13.00	-54.79
280.26	-69.76	-66.08	-2.54	-1.38	0.25	-13.00	-56.76
413.15	-64.60	-61.36	-1.81	-1.69	0.26	-13.00	-51.60
517.91	-63.29	-60.16	-1.45	-1.90	0.22	-13.00	-50.29
692.51	-60.67	-57.10	-1.35	-2.22	0.00	-13.00	-47.67
2112.00	-41.43	-48.33	9.70	-4.09	1.29	-13.00	-28.43

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

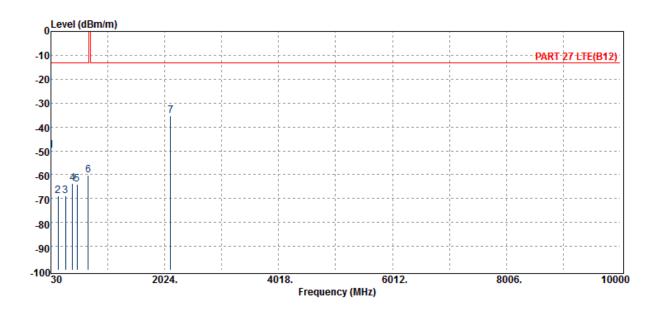


Page 300 of 456

Operation Band :LTE B12 **Test Date** :2019-03-28

Fundamental Frequency :707.5 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-49.98	-19.52	-30.05	-0.45	0.04	-13.00	-36.98
158.04	-68.73	-61.33	-6.44	-1.04	0.08	-13.00	-55.73
288.99	-68.87	-65.55	-2.21	-1.41	0.29	-13.00	-55.87
408.30	-63.84	-60.68	-1.75	-1.68	0.26	-13.00	-50.84
490.75	-64.17	-60.33	-2.22	-1.85	0.23	-13.00	-51.17
684.75	-60.23	-56.72	-1.35	-2.21	0.04	-13.00	-47.23
2122.50	-35.33	-42.04	9.62	-4.11	1.20	-13.00	-22.33

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



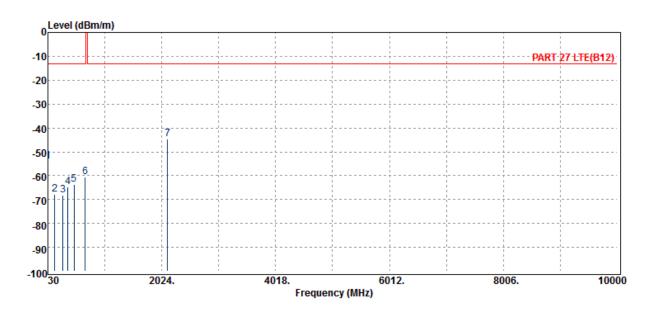
Page 301 of 456

Operation Band :LTE B12 **Test Date** :2019-03-28

Fundamental Frequency :707.5 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.13	-23.67	-30.05	-0.45	0.04	-13.00	-41.13
151.25	-67.69	-59.68	-7.05	-1.01	0.05	-13.00	-54.69
289.96	-68.04	-64.78	-2.15	-1.41	0.30	-13.00	-55.04
377.26	-64.83	-61.93	-1.60	-1.61	0.31	-13.00	-51.83
488.81	-63.62	-59.73	-2.27	-1.84	0.23	-13.00	-50.62
684.75	-60.64	-57.13	-1.35	-2.21	0.04	-13.00	-47.64
2122.50	-44.65	-51.37	9.62	-4.11	1.20	-13.00	-31.65

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

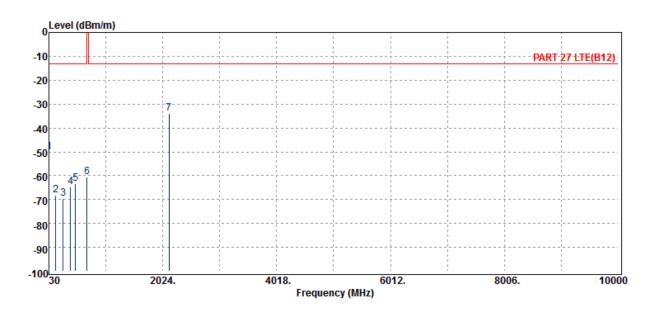


Page 302 of 456

Operation Band :LTE B12 **Test Date** :2019-03-28

Fundamental Frequency :711 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.09	-19.63	-30.05	-0.45	0.04	-13.00	-37.09
146.40	-68.29	-59.84	-7.51	-1.00	0.05	-13.00	-55.29
279.29	-69.59	-65.89	-2.56	-1.38	0.24	-13.00	-56.59
406.36	-64.62	-61.46	-1.75	-1.67	0.26	-13.00	-51.62
493.66	-63.41	-59.67	-2.10	-1.86	0.23	-13.00	-50.41
700.27	-60.65	-56.97	-1.45	-2.23	0.00	34.77	-95.42
2133.00	-33.85	-40.40	9.53	-4.12	1.14	-13.00	-20.85

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



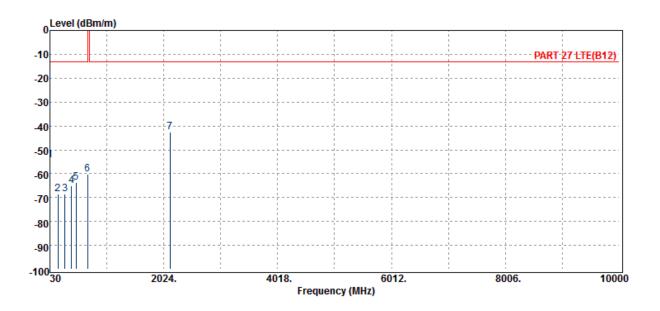
Page 303 of 456

Operation Band :LTE B12 **Test Date** :2019-03-28

Fundamental Frequency :711 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.29	-23.83	-30.05	-0.45	0.04	-13.00	-41.29
170.65	-68.41	-62.09	-5.38	-1.08	0.14	-13.00	-55.41
294.81	-68.56	-65.31	-2.15	-1.42	0.32	-13.00	-55.56
411.21	-65.10	-61.90	-1.77	-1.68	0.26	-13.00	-52.10
488.81	-63.83	-59.94	-2.27	-1.84	0.23	-13.00	-50.83
692.51	-60.22	-56.65	-1.35	-2.22	0.00	-13.00	-47.22
2133.00	-42.64	-49.19	9.53	-4.12	1.14	-13.00	-29.64

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



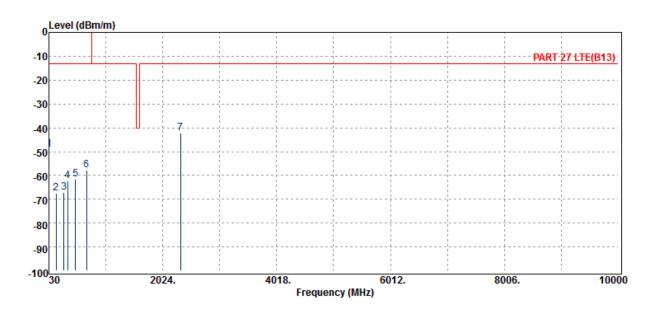
Page 304 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 13 (The Worst Case)

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :779.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG Output Lovel	Antenna Gain	Cable	Filter	Limit	Margin
B 41 1	ID	Output Level		Loss	ID	ID	ID
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.22	-18.85	-30.05	-0.45	0.13	-13.00	-36.22
153.19	-67.39	-59.60	-6.89	-1.02	0.12	-13.00	-54.39
293.84	-67.05	-63.58	-2.15	-1.42	0.10	-13.00	-54.05
361.74	-62.15	-58.97	-1.82	-1.58	0.21	-13.00	-49.15
492.69	-61.53	-57.69	-2.14	-1.85	0.16	-13.00	-48.53
692.51	-57.81	-55.15	-1.35	-2.22	0.90	-13.00	-44.81
2338.50	-42.32	-48.18	9.81	-4.36	0.41	-13.00	-29.32

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



:2019-03-28

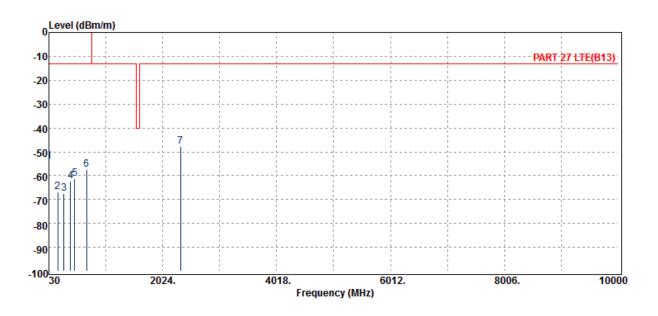
Page 305 of 456

Operation Band :LTE B13 **Test Date**

Fundamental Frequency Temp./Humi. :779.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.04	-23.67	-30.05	-0.45	0.13	-13.00	-41.04
182.29	-66.86	-61.60	-4.27	-1.11	0.12	-13.00	-53.86
294.81	-67.36	-63.89	-2.15	-1.42	0.10	-13.00	-54.36
410.24	-62.19	-59.01	-1.75	-1.68	0.26	-13.00	-49.19
481.05	-61.30	-57.21	-2.43	-1.83	0.17	-13.00	-48.30
691.54	-57.49	-54.82	-1.35	-2.22	0.90	-13.00	-44.49
2338.50	-47.60	-53.46	9.81	-4.36	0.41	-13.00	-34.60

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

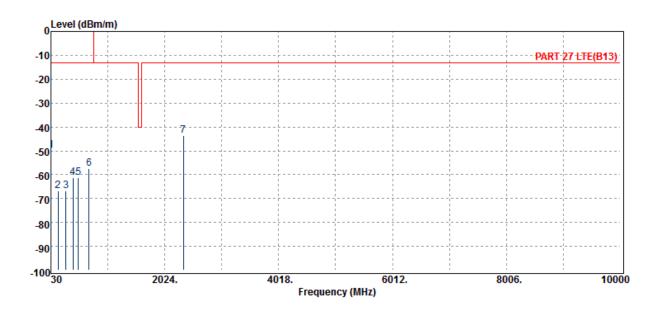


Page 306 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :782 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Lovel	Antenna Gain	Cable	Filter	Limit	Margin
N 41 1—	JD	Output Level		Loss	-ID	-ID	-ID
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.74	-19.37	-30.05	-0.45	0.13	-13.00	-36.74
159.01	-66.67	-59.40	-6.35	-1.04	0.12	-13.00	-53.67
296.75	-66.95	-63.54	-2.08	-1.42	0.10	-13.00	-53.95
413.15	-61.33	-58.09	-1.81	-1.69	0.26	-13.00	-48.33
507.24	-61.25	-57.76	-1.76	-1.89	0.15	-13.00	-48.25
697.36	-57.42	-54.74	-1.40	-2.22	0.94	-13.00	-44.42
2346.00	-43.53	-49.44	9.87	-4.36	0.41	-13.00	-30.53

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



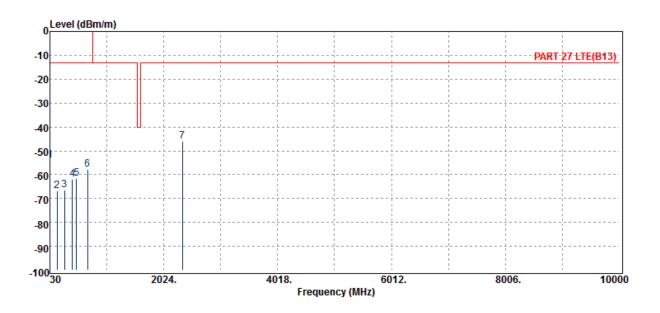
Page 307 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :782 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.92	-23.55	-30.05	-0.45	0.13	-13.00	-40.92
154.16	-66.71	-59.00	-6.82	-1.02	0.12	-13.00	-53.71
287.05	-66.52	-62.89	-2.33	-1.40	0.10	-13.00	-53.52
419.94	-61.87	-58.56	-1.85	-1.70	0.25	-13.00	-48.87
498.51	-61.76	-58.07	-1.98	-1.87	0.15	-13.00	-48.76
686.69	-57.70	-55.01	-1.35	-2.21	0.86	-13.00	-44.70
2346.00	-46.17	-52.08	9.87	-4.36	0.41	-13.00	-33.17

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



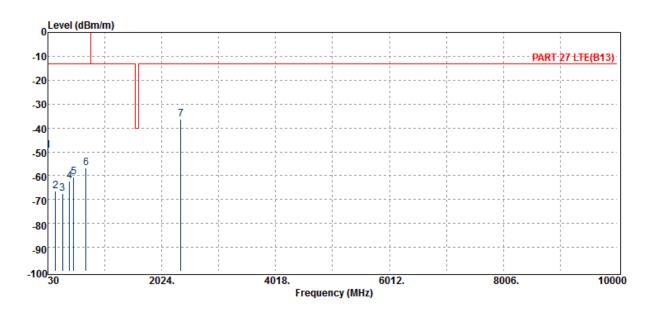
Page 308 of 456

Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:LTE B13 :784.5 MHz :Tx CH HIGH :E1 Plane

Test Date :2019-03-28 Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.50	-19.13	-30.05	-0.45	0.13	-13.00	-36.50
165.80	-66.57	-59.84	-5.79	-1.06	0.12	-13.00	-53.57
287.05	-67.50	-63.88	-2.33	-1.40	0.10	-13.00	-54.50
406.36	-62.41	-59.26	-1.75	-1.67	0.27	-13.00	-49.41
478.14	-60.57	-56.51	-2.41	-1.82	0.17	-13.00	-47.57
699.30	-56.68	-53.97	-1.44	-2.23	0.95	-13.00	-43.68
2353.50	-36.22	-42.18	9.93	-4.37	0.41	-13.00	-23.22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 309 of 456

Operation Band :LTE B13

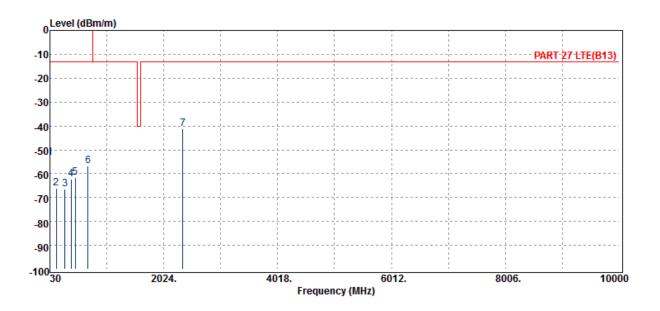
Fundamental Frequency :784.5 MHz **Operation Mode** :Tx CH HIGH

EUT Pol. :E1 Plane **Test Date** :2019-03-28

Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane

:HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.41	-23.04	-30.05	-0.45	0.13	-13.00	-40.41
143.49	-66.20	-57.42	-7.92	-0.99	0.12	-13.00	-53.20
291.90	-66.45	-62.98	-2.15	-1.41	0.10	-13.00	-53.45
403.45	-62.44	-59.33	-1.72	-1.67	0.27	-13.00	-49.44
471.35	-61.64	-57.67	-2.35	-1.80	0.18	-13.00	-48.64
694.45	-56.90	-54.25	-1.35	-2.22	0.92	-13.00	-43.90
2353.50	-41.03	-46.99	9.93	-4.37	0.41	-13.00	-28.03

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



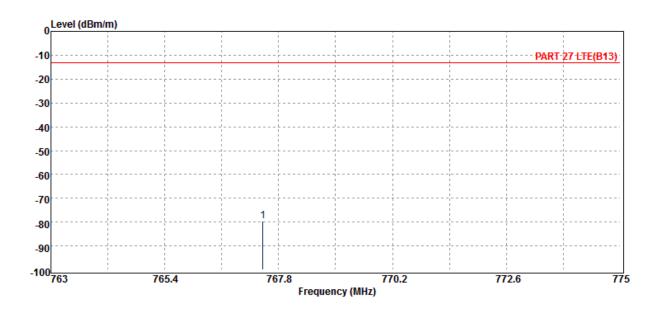
Page 310 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 13 (763~775MHz)

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :779.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
767.46	-79.60	-75.92	-1.35	-2.33	0.00	-13.00	-66.60

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



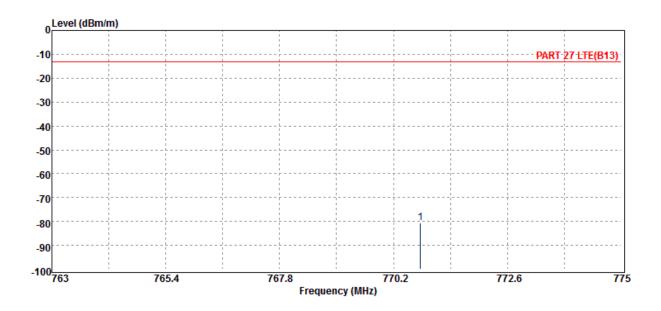
Page 311 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :779.5 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
770.76	-80.75	-77.05	-1.37	-2.33	0.00	-13.00	-67.75

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

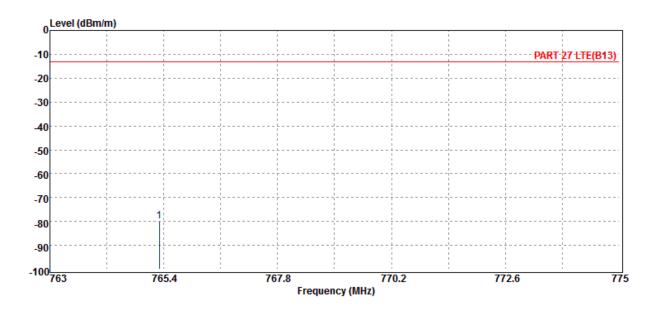


Page 312 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :782 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
765.30	-79.88	-76.20	-1.35	-2.33	0.00	-13.00	-66.88

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



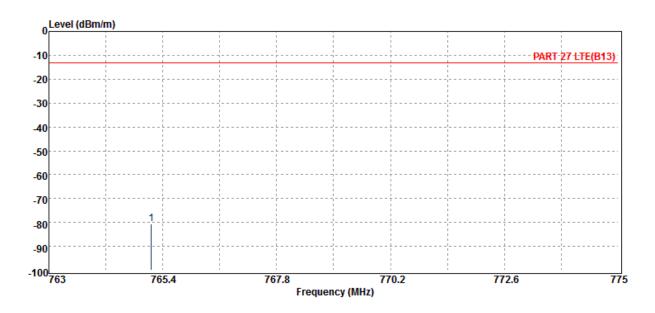
Page 313 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :782 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
765.16	-80.78	-77.10	-1.35	-2.33	0.00	-13.00	-67.78

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 314 of 456

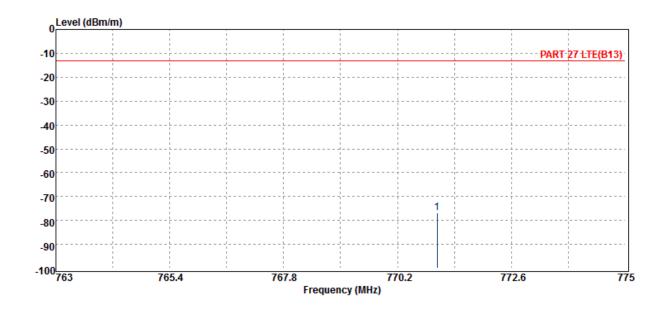
Operation Band :LTE B13 Fundamental Frequency

:784.5 MHz **Operation Mode** :Tx CH HIGH EUT Pol. :E1 Plane

Test Date :2019-03-28

Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
771.04	-76.87	-73.16	-1.37	-2.33	0.00	-13.00	-63.87

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



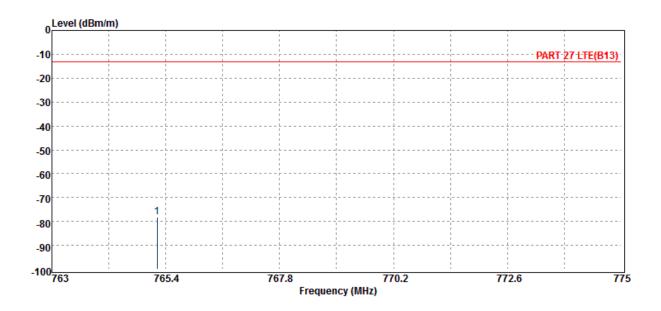
Page 315 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :784.5 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin	
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB	
765.22	-78.35	-74.67	-1.35	-2.33	0.00	-13.00	-65.35	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



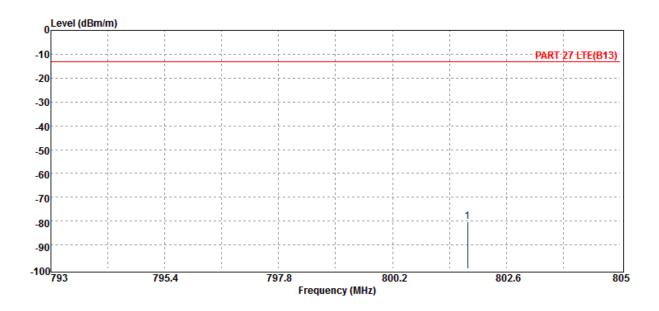
Page 316 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 13 (793~805MHz)

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :779.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
801.78	-80.22	-76.52	-1.32	-2.38	0.00	-13.00	-67.22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



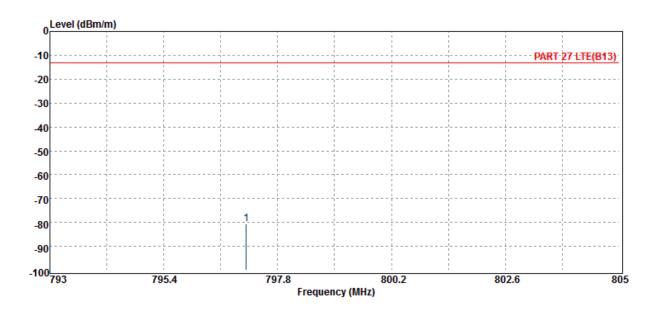
Page 317 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :779.5 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
797.14	-80.73	-77.11	-1.25	-2.37	0.00	-13.00	-67.73

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

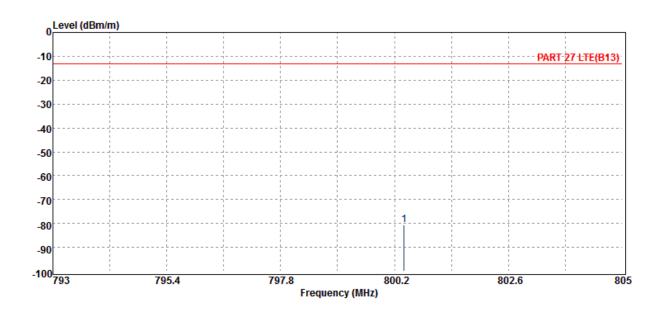


Page 318 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :782 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
800.40	-80.62	-76.98	-1.27	-2.38	0.00	-13.00	-67.62

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



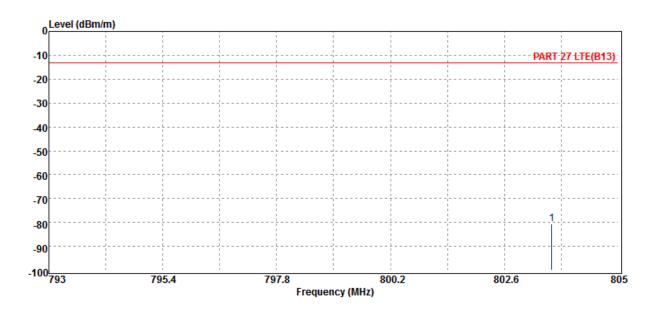
Page 319 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :782 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
803.60	-80.77	-76.99	-1.39	-2.38	0.00	-13.00	-67.77

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

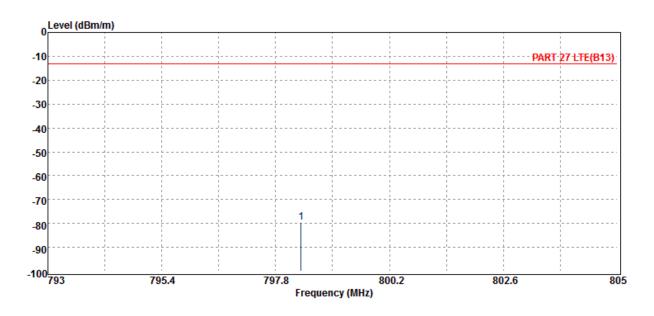


Page 320 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :784.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
798.34	-79.48	-75.85	-1.25	-2.37	0.00	-13.00	-66.48

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



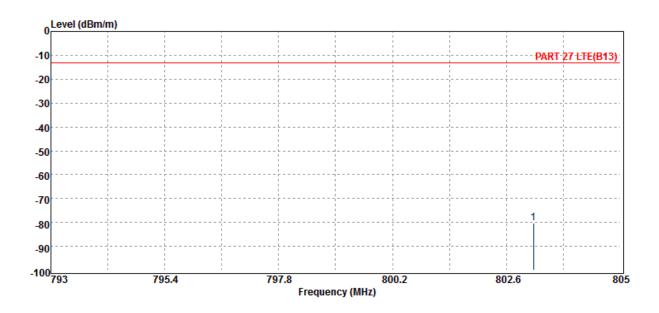
Page 321 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :784.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
803.18	-80.27	-76.51	-1.38	-2.38	0.00	-13.00	-67.27

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



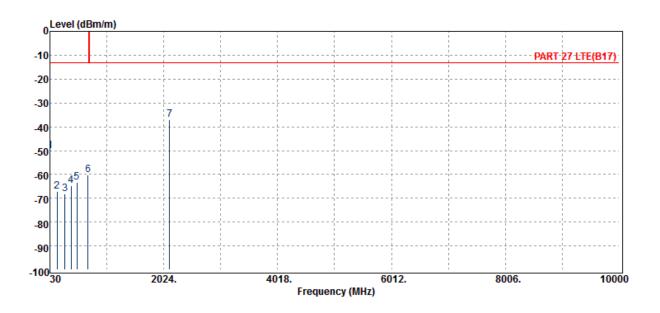
Page 322 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 17 (The Worst Case)

Operation Band :LTE B17 **Test Date** :2019-03-28

Fundamental Frequency :709 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.08	-19.71	-30.05	-0.45	0.13	-13.00	-37.08
158.04	-67.10	-59.74	-6.44	-1.04	0.12	-13.00	-54.10
289.96	-68.06	-64.60	-2.15	-1.41	0.10	-13.00	-55.06
400.54	-64.65	-61.60	-1.66	-1.66	0.27	-13.00	-51.65
500.45	-63.24	-59.58	-1.94	-1.87	0.15	-13.00	-50.24
696.39	-60.15	-57.48	-1.38	-2.22	0.93	-13.00	-47.15
2127.00	-37.06	-43.69	9.58	-4.11	1.16	-13.00	-24.06

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



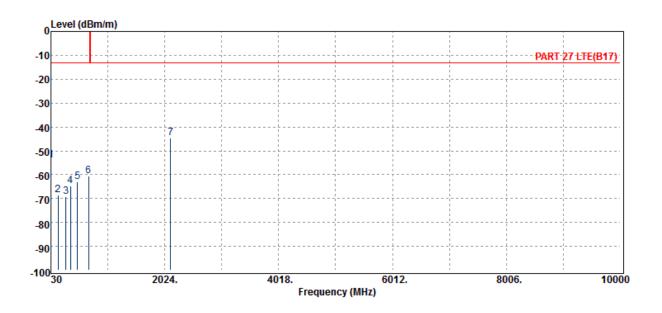
Page 323 of 456

Operation Band :LTE B17 **Test Date** :2019-03-28

Fundamental Frequency :709 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.87	-23.49	-30.05	-0.45	0.13	-13.00	-40.87
153.19	-68.46	-60.67	-6.89	-1.02	0.12	-13.00	-55.46
294.81	-69.24	-65.77	-2.15	-1.42	0.10	-13.00	-56.24
372.41	-64.77	-61.70	-1.70	-1.60	0.23	-13.00	-51.77
493.66	-62.98	-59.18	-2.10	-1.86	0.15	-13.00	-49.98
692.51	-60.51	-57.85	-1.35	-2.22	0.90	-13.00	-47.51
2127.00	-44.67	-51.30	9.58	-4.11	1.16	-13.00	-31.67

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

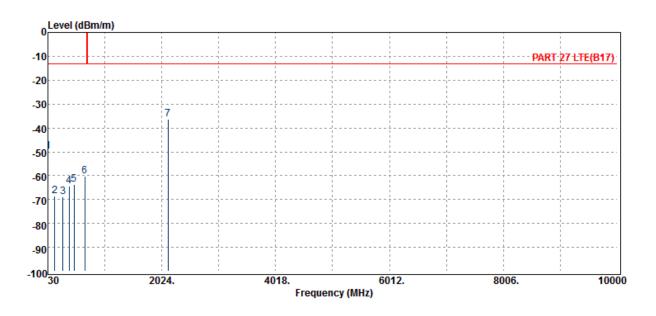


Page 324 of 456

Operation Band :LTE B17 **Test Date** :2019-03-28

Fundamental Frequency :710 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.75	-19.38	-30.05	-0.45	0.13	-13.00	-36.75
151.25	-68.48	-60.54	-7.05	-1.01	0.12	-13.00	-55.48
296.75	-68.85	-65.44	-2.08	-1.42	0.10	-13.00	-55.85
403.45	-64.52	-61.40	-1.72	-1.67	0.27	-13.00	-51.52
488.81	-63.62	-59.67	-2.27	-1.84	0.16	-13.00	-50.62
673.11	-60.31	-57.50	-1.39	-2.19	0.77	-13.00	-47.31
2130.00	-36.25	-42.83	9.56	-4.12	1.13	-13.00	-23.25

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



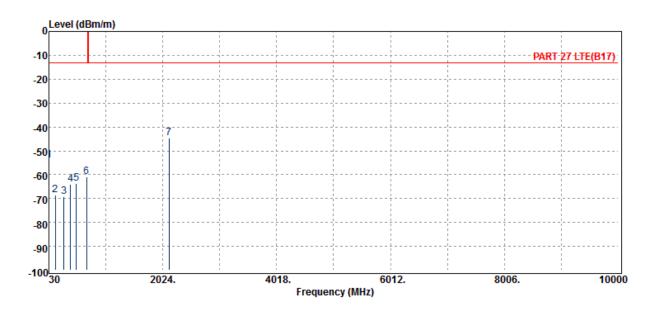
Page 325 of 456

Operation Band :LTE B17 **Test Date** :2019-03-28

Fundamental Frequency :710 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.07	-23.70	-30.05	-0.45	0.13	-13.00	-41.07
144.46	-68.46	-59.84	-7.75	-0.99	0.12	-13.00	-55.46
293.84	-69.30	-65.84	-2.15	-1.42	0.10	-13.00	-56.30
411.21	-63.91	-60.72	-1.77	-1.68	0.26	-13.00	-50.91
507.24	-63.62	-60.12	-1.76	-1.89	0.15	-13.00	-50.62
691.54	-60.80	-58.13	-1.35	-2.22	0.90	-13.00	-47.80
2130.00	-44.50	-51.07	9.56	-4.12	1.13	-13.00	-31.50

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

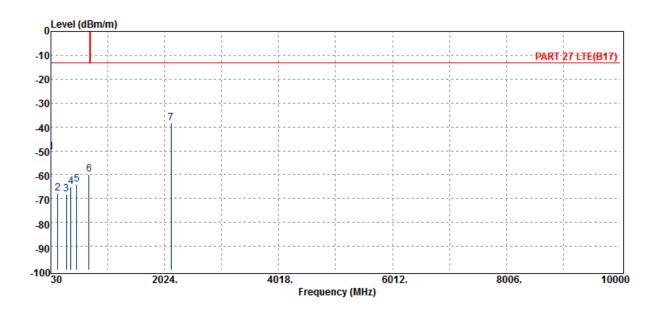


Page 326 of 456

Operation Band :LTE B17 **Test Date** :2019-03-28

Fundamental Frequency :711 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E1 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.46	-20.09	-30.05	-0.45	0.13	-13.00	-37.46
151.25	-67.89	-59.95	-7.05	-1.01	0.12	-13.00	-54.89
298.69	-68.22	-64.89	-2.00	-1.43	0.10	-13.00	-55.22
376.29	-64.97	-61.98	-1.62	-1.61	0.24	-13.00	-51.97
478.14	-63.90	-59.84	-2.41	-1.82	0.17	-13.00	-50.90
697.36	-59.80	-57.11	-1.40	-2.22	0.94	-13.00	-46.80
2133.00	-38.33	-44.89	9.53	-4.12	1.14	-13.00	-25.33

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



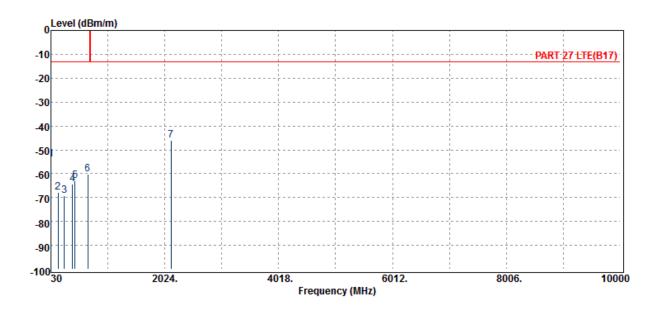
Page 327 of 456

Operation Band :LTE B17 **Test Date** :2019-03-28

Fundamental Frequency :711 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-54.10	-23.73	-30.05	-0.45	0.13	-13.00	-41.10
156.10	-67.70	-60.15	-6.64	-1.03	0.12	-13.00	-54.70
267.65	-69.30	-65.60	-2.46	-1.35	0.10	-13.00	-56.30
406.36	-64.36	-61.21	-1.75	-1.67	0.27	-13.00	-51.36
454.86	-63.02	-59.40	-2.05	-1.77	0.20	-13.00	-50.02
675.05	-60.32	-57.56	-1.35	-2.19	0.78	-13.00	-47.32
2133.00	-45.90	-52.45	9.53	-4.12	1.14	-13.00	-32.90

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



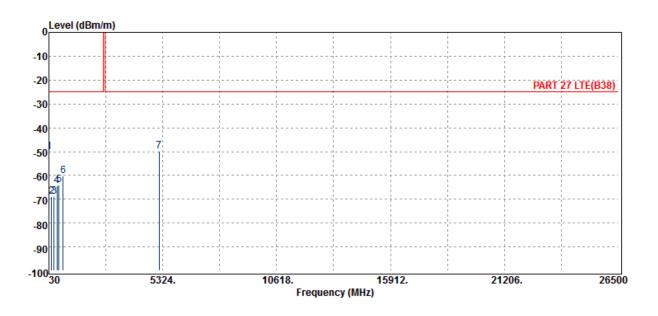
Page 328 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 38 (The Worst Case)

Operation Band :LTE B38 **Test Date** :2019-03-28

Fundamental Frequency :2575 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E1 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-50.19	-19.72	-30.05	-0.45	0.03	-25.00	-25.19
148.34	-68.88	-60.65	-7.31	-1.00	0.09	-25.00	-43.88
277.35	-68.72	-64.88	-2.60	-1.38	0.15	-25.00	-43.72
395.69	-64.31	-61.20	-1.56	-1.65	0.11	-25.00	-39.31
500.45	-63.85	-60.08	-1.94	-1.87	0.04	-25.00	-38.85
691.54	-60.32	-56.99	-1.35	-2.22	0.24	-25.00	-35.32
5150.00	-49.94	-56.53	12.70	-6.77	0.67	-25.00	-24.94

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 329 of 456

Operation Band Fundamental Frequency

Operation Mode EUT Pol.

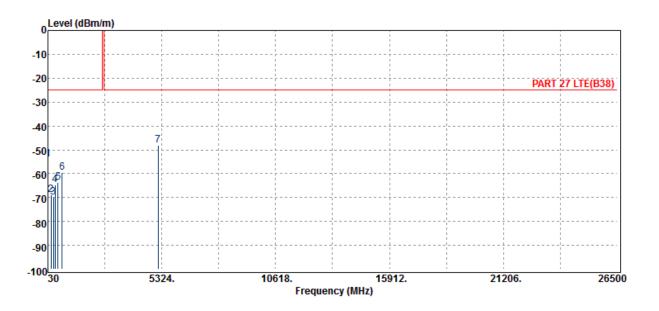
:LTE B38 :2575 MHz :Tx CH LOW :E1 Plane

Test Date :2019-03-28

Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane

:HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.94	-23.47	-30.05	-0.45	0.03	-25.00	-28.94
167.74	-68.71	-62.10	-5.63	-1.07	0.08	-25.00	-43.71
291.90	-69.76	-66.32	-2.15	-1.41	0.12	-25.00	-44.76
367.56	-64.59	-61.33	-1.75	-1.59	0.08	-25.00	-39.59
508.21	-63.50	-59.89	-1.72	-1.89	0.00	-25.00	-38.50
697.36	-59.50	-56.10	-1.40	-2.22	0.21	-25.00	-34.50
5150.00	-48.09	-54.69	12.70	-6.77	0.67	-25.00	-23.09

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 330 of 456

Operation Band Fundamental Frequency

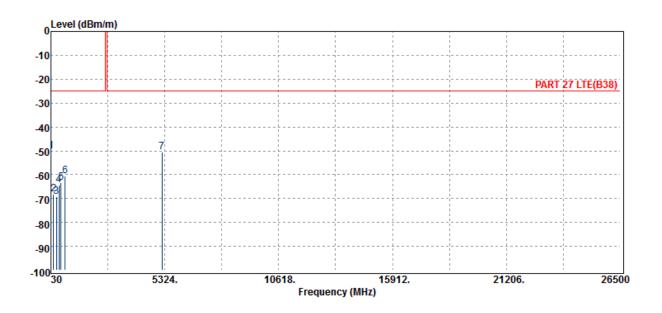
Operation Mode EUT Pol.

:LTE B38 :2595 MHz :Tx CH MID :E1 Plane

Test Date :2019-03-28

Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
•							_
30.00	-50.07	-19.60	-30.05	-0.45	0.03	-25.00	-25.07
156.10	-68.12	-60.54	-6.64	-1.03	0.09	-25.00	-43.12
296.75	-69.33	-65.94	-2.08	-1.42	0.11	-25.00	-44.33
411.21	-64.31	-61.01	-1.77	-1.68	0.16	-25.00	-39.31
500.45	-63.27	-59.50	-1.94	-1.87	0.04	-25.00	-38.27
692.51	-60.59	-57.26	-1.35	-2.22	0.24	-25.00	-35.59
5190.00	-50.53	-57.42	12.94	-6.66	0.62	-25.00	-25.53

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



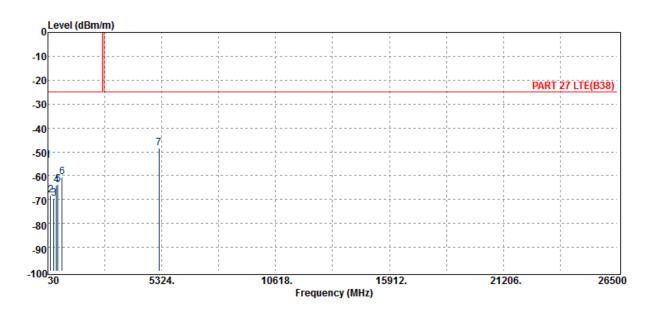
Page 331 of 456

Operation Band :LTE B38 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :2595 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.54	-23.06	-30.05	-0.45	0.03	-25.00	-28.54
151.25	-68.08	-60.11	-7.05	-1.01	0.09	-25.00	-43.08
298.69	-69.65	-66.32	-2.00	-1.43	0.11	-25.00	-44.65
415.09	-64.00	-60.64	-1.85	-1.69	0.17	-25.00	-39.00
505.30	-63.56	-59.85	-1.84	-1.88	0.01	-25.00	-38.56
694.45	-60.60	-57.26	-1.35	-2.22	0.23	-25.00	-35.60
5190.00	-48.56	-55.45	12.94	-6.66	0.62	-25.00	-23.56

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 332 of 456

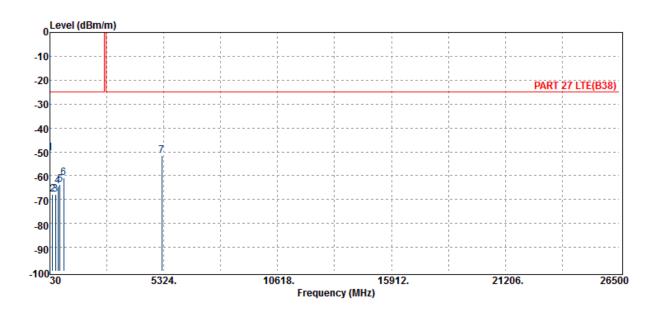
Operation Band Fundamental Frequency

:LTE B38 :2615 MHz **Operation Mode** :Tx CH HIGH EUT Pol. :E1 Plane

Test Date :2019-03-28

Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.60	-20.13	-30.05	-0.45	0.03	-25.00	-25.60
146.40	-67.91	-59.50	-7.51	-1.00	0.09	-25.00	-42.91
289.96	-67.79	-64.35	-2.15	-1.41	0.12	-25.00	-42.79
398.60	-64.39	-61.23	-1.62	-1.66	0.12	-25.00	-39.39
500.45	-63.71	-59.93	-1.94	-1.87	0.04	-25.00	-38.71
673.11	-61.04	-57.77	-1.39	-2.19	0.30	-25.00	-36.04
5230.00	-51.45	-58.45	13.12	-6.79	0.67	-25.00	-26.45

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



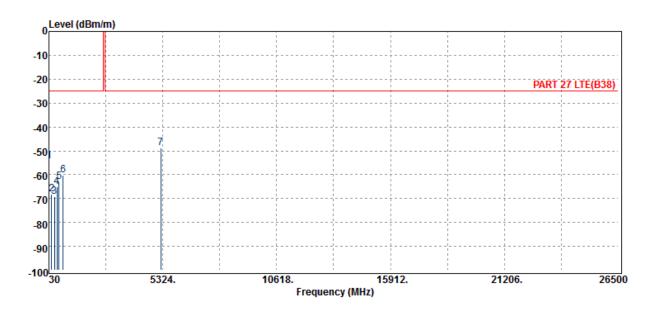
Page 333 of 456

Operation Band :LTE B38 **Test Date** :2019-03-28

Fundamental Frequency :2615 MHz Temp./Humi. :22 deg_C / 61 RH

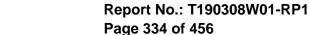
Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E1 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.46	-23.99	-30.05	-0.45	0.03	-25.00	-29.46
149.31	-68.03	-59.90	-7.22	-1.00	0.09	-25.00	-43.03
279.29	-69.22	-65.42	-2.56	-1.38	0.14	-25.00	-44.22
411.21	-65.00	-61.70	-1.77	-1.68	0.16	-25.00	-40.00
500.45	-62.87	-59.09	-1.94	-1.87	0.04	-25.00	-37.87
691.54	-60.22	-56.90	-1.35	-2.22	0.24	-25.00	-35.22
5230.00	-48.91	-55.91	13.12	-6.79	0.67	-25.00	-23.91

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.





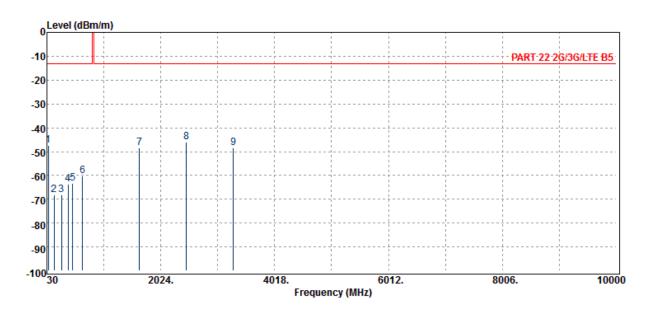
9.6. Measurement Result (Wireless Charging Mode):

Radiated Spurious Emission Measurement Result: GSM 850 Mode

:2019-03-28 **Operation Band** :GSM 850 Test Date

Fundamental Frequency :824.2 MHz Temp./Humi. :22 deg C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
56.19	-47.30	-36.30	-10.50	-0.63	0.13	-13.00	-34.30
158.04	-68.14	-60.78	-6.44	-1.04	0.12	-13.00	-55.14
287.05	-68.07	-64.44	-2.33	-1.40	0.10	-13.00	-55.07
400.54	-63.72	-60.67	-1.66	-1.66	0.27	-13.00	-50.72
483.96	-63.21	-59.17	-2.37	-1.83	0.17	-13.00	-50.21
652.74	-60.32	-57.14	-1.65	-2.15	0.62	-13.00	-47.32
1648.40	-48.42	-54.98	9.70	-3.55	0.41	-13.00	-35.42
2472.60	-45.85	-52.46	10.69	-4.46	0.38	-13.00	-32.85
3296.80	-48.40	-55.80	12.57	-5.35	0.17	-13.00	-35.40

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



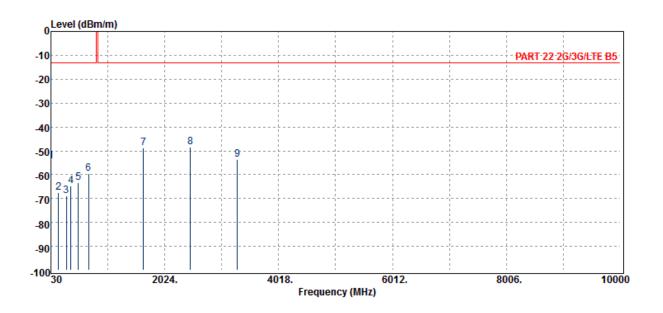
Page 335 of 456

Operation Band :GSM 850 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :824.2 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
-		Output Level	Gain	Loss			_
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.43	-24.06	-30.05	-0.45	0.13	-13.00	-41.43
160.95	-67.53	-60.44	-6.17	-1.05	0.12	-13.00	-54.53
298.69	-68.96	-65.62	-2.00	-1.43	0.10	-13.00	-55.96
381.14	-64.56	-61.66	-1.53	-1.62	0.24	-13.00	-51.56
512.09	-63.31	-60.00	-1.57	-1.90	0.16	-13.00	-50.31
687.66	-59.60	-56.91	-1.35	-2.21	0.87	-13.00	-46.60
1648.40	-48.82	-55.38	9.70	-3.55	0.41	-13.00	-35.82
2472.60	-48.52	-55.13	10.69	-4.46	0.38	-13.00	-35.52
3296.80	-53.60	-60.99	12.57	-5.35	0.17	-13.00	-40.60

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

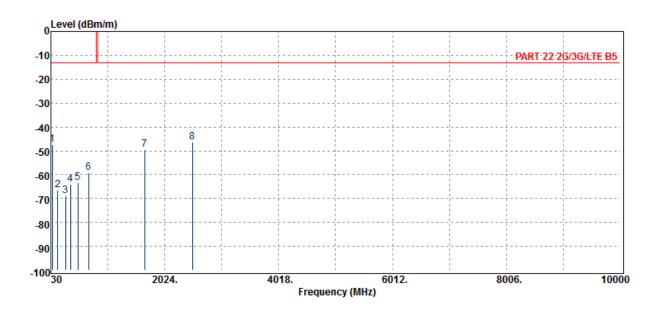


Page 336 of 456

Operation Band :GSM 850 **Test Date** :2019-03-28

Fundamental Frequency :836.6 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			_
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
56.19	-47.53	-36.54	-10.50	-0.63	0.13	-13.00	-34.53
151.25	-66.60	-58.66	-7.05	-1.01	0.12	-13.00	-53.60
287.05	-68.82	-65.20	-2.33	-1.40	0.10	-13.00	-55.82
369.50	-64.07	-60.95	-1.75	-1.59	0.23	-13.00	-51.07
502.39	-63.37	-59.74	-1.90	-1.88	0.15	-13.00	-50.37
692.51	-59.22	-56.55	-1.35	-2.22	0.90	-13.00	-46.22
1673.20	-49.55	-56.22	9.84	-3.58	0.42	-13.00	-36.55
2509.80	-46.45	-53.03	10.80	-4.59	0.37	-13.00	-33.45

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



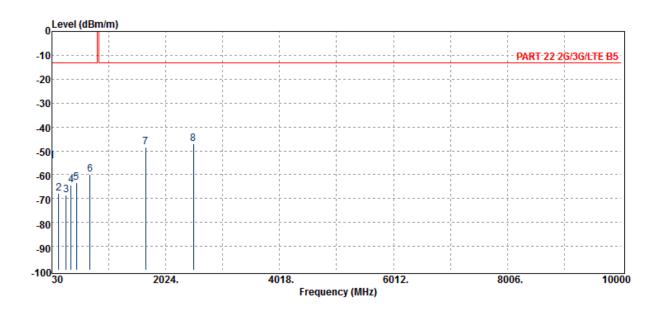
Page 337 of 456

Operation Band :GSM 850 **Test Date** :2019-03-28

Fundamental Frequency :836.6 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
•		Output Level	Gain	Loss			•
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.49	-24.12	-30.05	-0.45	0.13	-13.00	-41.49
149.31	-67.81	-59.71	-7.22	-1.00	0.12	-13.00	-54.81
282.20	-68.36	-64.56	-2.51	-1.39	0.10	-13.00	-55.36
362.71	-64.51	-61.35	-1.80	-1.58	0.21	-13.00	-51.51
458.74	-63.32	-59.69	-2.05	-1.78	0.20	-13.00	-50.32
696.39	-59.89	-57.22	-1.38	-2.22	0.93	-13.00	-46.89
1673.20	-48.30	-54.98	9.84	-3.58	0.42	-13.00	-35.30
2509.80	-47.08	-53.66	10.80	-4.59	0.37	-13.00	-34.08

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 338 of 456

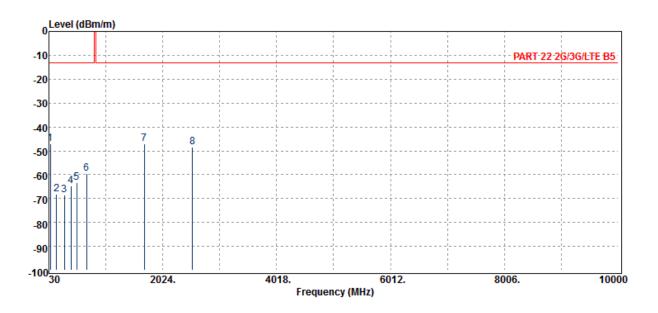
Operation Band Fundamental Frequency **Operation Mode**

EUT Pol.

:GSM 850 :848.8 MHz :Tx CH HIGH :E2 Plane

Test Date :2019-03-28 Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
56.19	-46.91	-35.92	-10.50	-0.63	0.13	-13.00	-33.91
163.86	-68.16	-61.28	-5.94	-1.05	0.12	-13.00	-55.16
298.69	-68.45	-65.12	-2.00	-1.43	0.10	-13.00	-55.45
413.15	-64.87	-61.62	-1.81	-1.69	0.26	-13.00	-51.87
516.94	-63.40	-60.20	-1.45	-1.90	0.16	-13.00	-50.40
692.51	-59.52	-56.86	-1.35	-2.22	0.90	-13.00	-46.52
1697.60	-47.05	-53.87	9.99	-3.60	0.43	-13.00	-34.05
2546.40	-48.50	-55.06	10.80	-4.59	0.35	-13.00	-35.50

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 339 of 456

Operation Band :GSM 850

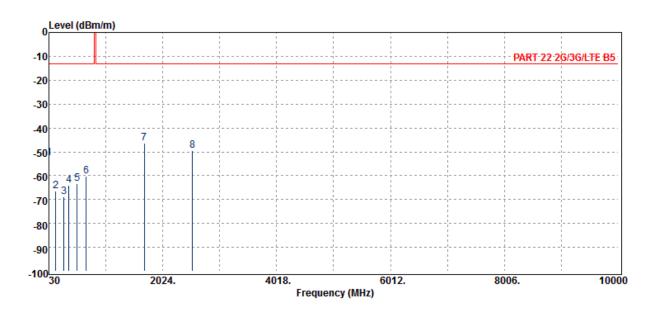
Fundamental Frequency :848.8 MHz **Operation Mode** :Tx CH HIGH

EUT Pol. :E2 Plane **Test Date** :2019-03-28

Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane

:HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
-		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-52.65	-22.28	-30.05	-0.45	0.13	-13.00	-39.65
146.40	-66.33	-57.95	-7.51	-1.00	0.12	-13.00	-53.33
289.96	-68.95	-65.49	-2.15	-1.41	0.10	-13.00	-55.95
376.29	-63.88	-60.88	-1.62	-1.61	0.24	-13.00	-50.88
527.61	-63.44	-60.34	-1.35	-1.92	0.17	-13.00	-50.44
682.81	-60.33	-57.66	-1.31	-2.20	0.84	-13.00	-47.33
1697.60	-46.32	-53.13	9.99	-3.60	0.43	-13.00	-33.32
2546.40	-49.47	-56.03	10.80	-4.59	0.35	-13.00	-36.47

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



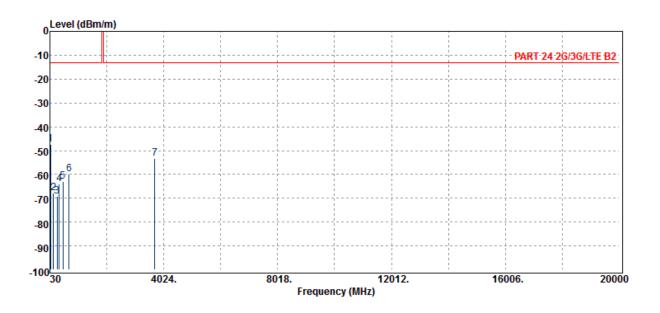
Page 340 of 456

Radiated Spurious Emission Measurement Result: GSM 1900 Mode

Operation Band :GSM 1900 **Test Date** :2019-03-28

Fundamental Frequency :1850.2 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
56.19	-47.52	-36.42	-10.50	-0.63	0.03	-13.00	-34.52
146.40	-67.81	-59.35	-7.51	-1.00	0.04	-13.00	-54.81
289.96	-69.11	-65.58	-2.15	-1.41	0.03	-13.00	-56.11
357.86	-63.95	-60.63	-1.81	-1.57	0.05	-13.00	-50.95
488.81	-62.98	-59.07	-2.27	-1.84	0.20	-13.00	-49.98
696.39	-59.77	-56.48	-1.38	-2.22	0.31	-13.00	-46.77
3700.40	-53.38	-60.29	12.50	-5.72	0.13	-13.00	-40.38

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



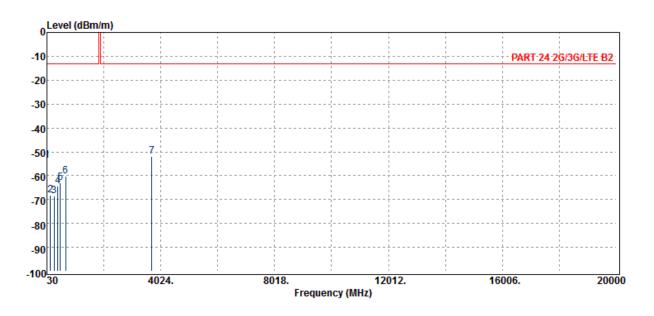
Page 341 of 456

Operation Band :GSM 1900 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :1850.2 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.80	-23.33	-30.05	-0.45	0.04	-13.00	-40.80
156.10	-68.24	-60.62	-6.64	-1.03	0.04	-13.00	-55.24
287.05	-68.40	-64.70	-2.33	-1.40	0.03	-13.00	-55.40
406.36	-64.48	-61.14	-1.75	-1.67	0.08	-13.00	-51.48
492.69	-62.81	-59.03	-2.14	-1.85	0.21	-13.00	-49.81
681.84	-60.34	-57.15	-1.29	-2.20	0.29	-13.00	-47.34
3700.40	-51.80	-58.72	12.50	-5.72	0.13	-13.00	-38.80

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

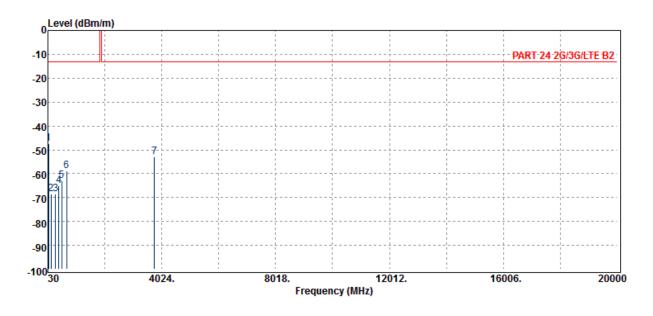


Page 342 of 456

Operation Band :GSM 1900 **Test Date** :2019-03-28

Fundamental Frequency :1880 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
54.25	-47.44	-36.10	-10.75	-0.62	0.03	-13.00	-34.44
143.49	-68.45	-59.59	-7.92	-0.99	0.04	-13.00	-55.45
296.75	-68.55	-65.08	-2.08	-1.42	0.03	-13.00	-55.55
416.06	-65.08	-61.63	-1.85	-1.69	0.09	-13.00	-52.08
516.94	-63.07	-59.93	-1.45	-1.90	0.21	-13.00	-50.07
684.75	-58.94	-55.69	-1.35	-2.21	0.30	-13.00	-45.94
3760.00	-53.11	-59.96	12.42	-5.69	0.12	-13.00	-40.11

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



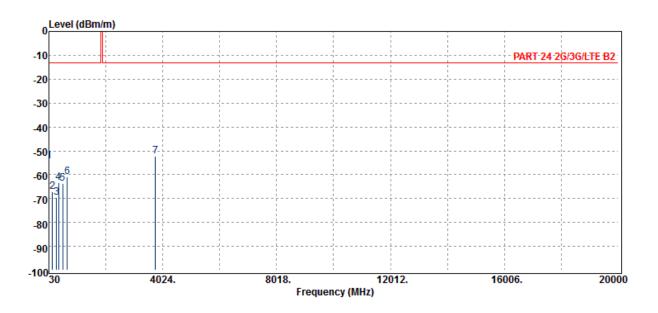
Page 343 of 456

Operation Band :GSM 1900 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :1880 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.30	-23.83	-30.05	-0.45	0.04	-13.00	-41.30
156.10	-67.06	-59.43	-6.64	-1.03	0.04	-13.00	-54.06
298.69	-69.51	-66.11	-2.00	-1.43	0.03	-13.00	-56.51
371.44	-63.37	-60.11	-1.72	-1.60	0.06	-13.00	-50.37
507.24	-63.82	-60.39	-1.76	-1.89	0.22	-13.00	-50.82
675.05	-60.73	-57.47	-1.35	-2.19	0.28	-13.00	-47.73
3760.00	-52.35	-59.20	12.42	-5.69	0.12	-13.00	-39.35

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

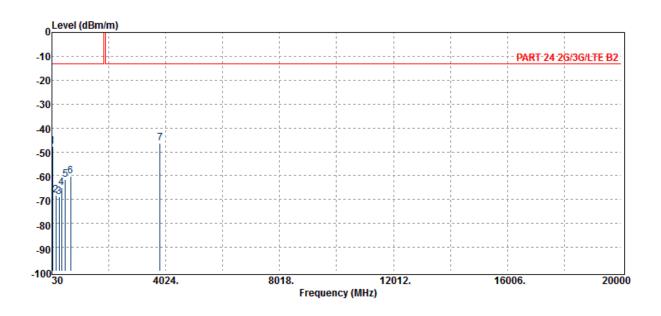


Page 344 of 456

Operation Band :GSM 1900 **Test Date** :2019-03-28

Fundamental Frequency :1909.8 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
56.19	-47.70	-36.60	-10.50	-0.63	0.03	-13.00	-34.70
163.86	-68.11	-61.16	-5.94	-1.05	0.05	-13.00	-55.11
279.29	-68.97	-65.06	-2.56	-1.38	0.03	-13.00	-55.97
366.59	-64.95	-61.67	-1.75	-1.59	0.06	-13.00	-51.95
495.60	-61.72	-58.03	-2.04	-1.86	0.21	-13.00	-48.72
682.81	-60.34	-57.12	-1.31	-2.20	0.29	-13.00	-47.34
3819.60	-46.26	-53.08	12.46	-5.76	0.12	-13.00	-33.26

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



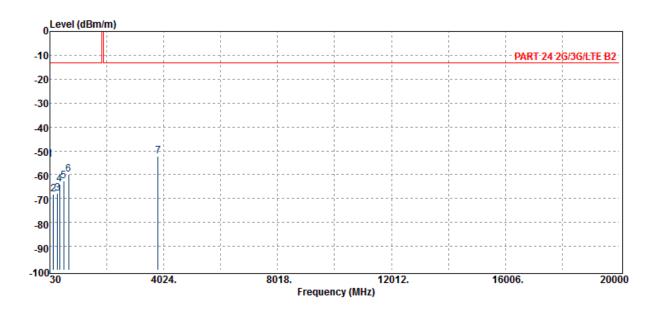
Page 345 of 456

Operation Band :GSM 1900 **Test Date** :2019-03-28

Fundamental Frequency :1909.8 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.55	-23.08	-30.05	-0.45	0.04	-13.00	-40.55
151.25	-68.09	-60.07	-7.05	-1.01	0.04	-13.00	-55.09
299.66	-67.84	-64.47	-1.96	-1.43	0.03	-13.00	-54.84
371.44	-64.05	-60.79	-1.72	-1.60	0.06	-13.00	-51.05
512.09	-62.51	-59.26	-1.57	-1.90	0.21	-13.00	-49.51
692.51	-59.96	-56.70	-1.35	-2.22	0.31	-13.00	-46.96
3819.60	-52.22	-59.04	12.46	-5.76	0.12	-13.00	-39.22

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



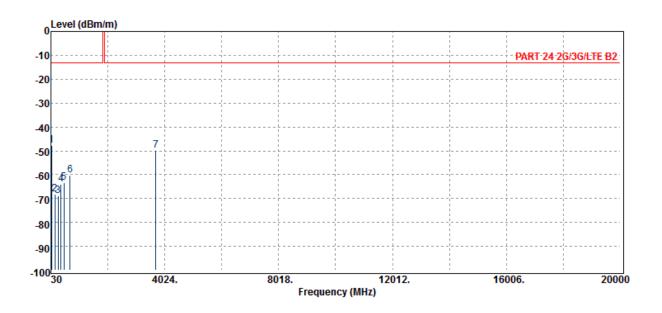
Page 346 of 456

Radiated Spurious Emission Measurement Result: WCDMA Band 2 Mode

Operation Band :WCDMA B2 **Test Date** :2019-03-28

Fundamental Frequency :1852.4 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
54.25	-47.60	-36.25	-10.75	-0.62	0.03	-13.00	-34.60
168.71	-68.19	-61.62	-5.55	-1.07	0.05	-13.00	-55.19
277.35	-68.75	-64.80	-2.60	-1.38	0.03	-13.00	-55.75
384.05	-64.14	-61.11	-1.47	-1.62	0.06	-13.00	-51.14
481.05	-63.33	-59.27	-2.43	-1.83	0.19	-13.00	-50.33
696.39	-60.10	-56.80	-1.38	-2.22	0.31	-13.00	-47.10
3704.80	-49.80	-56.70	12.49	-5.72	0.13	-13.00	-36.80

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



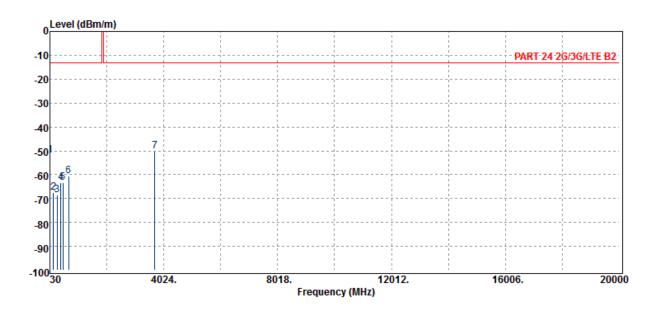
Page 347 of 456

Operation Band Test Date :WCDMA B2 :2019-03-28

Fundamental Frequency :1852.4 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-51.89	-21.42	-30.05	-0.45	0.04	-13.00	-38.89
146.40	-67.34	-58.87	-7.51	-1.00	0.04	-13.00	-54.34
289.96	-68.60	-65.07	-2.15	-1.41	0.03	-13.00	-55.60
408.30	-63.21	-59.87	-1.75	-1.68	0.08	-13.00	-50.21
487.84	-63.30	-59.37	-2.29	-1.84	0.20	-13.00	-50.30
684.75	-60.48	-57.23	-1.35	-2.21	0.30	-13.00	-47.48
3704.80	-50.11	-57.01	12.49	-5.72	0.13	-13.00	-37.11

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

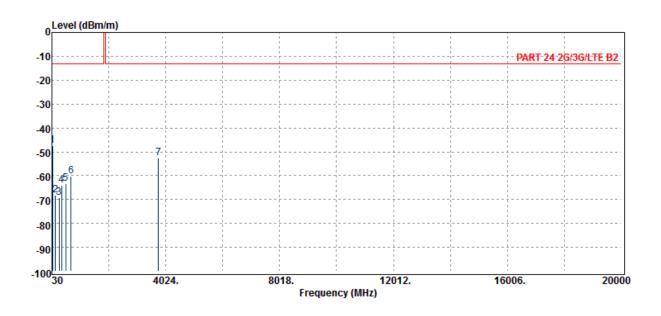


Page 348 of 456

Operation Band Test Date :WCDMA B2 :2019-03-28

Fundamental Frequency :1880 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
54.25	-47.56	-36.22	-10.75	-0.62	0.03	-13.00	-34.56
148.34	-68.13	-59.86	-7.31	-1.00	0.04	-13.00	-55.13
285.11	-69.09	-65.28	-2.44	-1.40	0.03	-13.00	-56.09
362.71	-64.17	-60.85	-1.80	-1.58	0.05	-13.00	-51.17
513.06	-63.42	-60.21	-1.53	-1.90	0.21	-13.00	-50.42
699.30	-60.34	-56.99	-1.44	-2.23	0.31	-13.00	-47.34
3760.00	-52.66	-59.51	12.42	-5.69	0.12	-13.00	-39.66

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



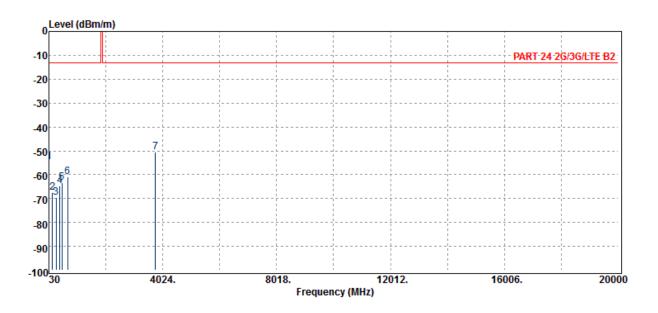
Page 349 of 456

Operation Band Test Date :WCDMA B2 :2019-03-28

Fundamental Frequency :1880 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.54	-24.08	-30.05	-0.45	0.04	-13.00	-41.54
154.16	-67.33	-59.53	-6.82	-1.02	0.04	-13.00	-54.33
289.96	-69.43	-65.90	-2.15	-1.41	0.03	-13.00	-56.43
416.06	-64.55	-61.10	-1.85	-1.69	0.09	-13.00	-51.55
483.96	-63.24	-59.23	-2.37	-1.83	0.20	-13.00	-50.24
681.84	-60.79	-57.60	-1.29	-2.20	0.29	-13.00	-47.79
3760.00	-50.36	-57.21	12.42	-5.69	0.12	-13.00	-37.36

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

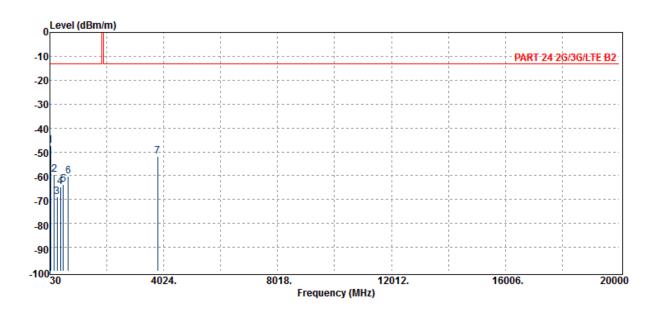


Page 350 of 456

Operation Band Test Date :WCDMA B2 :2019-03-28

Fundamental Frequency :1907.6 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
54.25	-47.56	-36.21	-10.75	-0.62	0.03	-13.00	-34.56
185.20	-59.53	-54.41	-4.05	-1.12	0.05	-13.00	-46.53
287.05	-68.72	-65.03	-2.33	-1.40	0.03	-13.00	-55.72
405.39	-64.69	-61.35	-1.75	-1.67	0.08	-13.00	-51.69
493.66	-63.67	-59.92	-2.10	-1.86	0.21	-13.00	-50.67
676.99	-60.06	-56.84	-1.31	-2.19	0.29	-13.00	-47.06
3815.20	-51.75	-58.58	12.47	-5.76	0.12	-13.00	-38.75

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



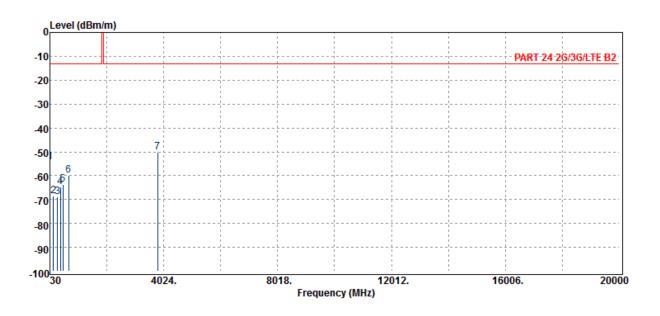
Page 351 of 456

Operation Band Test Date :WCDMA B2 :2019-03-28

Fundamental Frequency :1907.6 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.47	-24.00	-30.05	-0.45	0.04	-13.00	-41.47
159.01	-68.56	-61.22	-6.35	-1.04	0.04	-13.00	-55.56
296.75	-68.82	-65.34	-2.08	-1.42	0.03	-13.00	-55.82
401.51	-64.61	-61.34	-1.68	-1.66	0.07	-13.00	-51.61
485.90	-63.59	-59.62	-2.33	-1.84	0.20	-13.00	-50.59
687.66	-59.84	-56.58	-1.35	-2.21	0.30	-13.00	-46.84
3815.20	-50.19	-57.01	12.47	-5.76	0.12	-13.00	-37.19

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



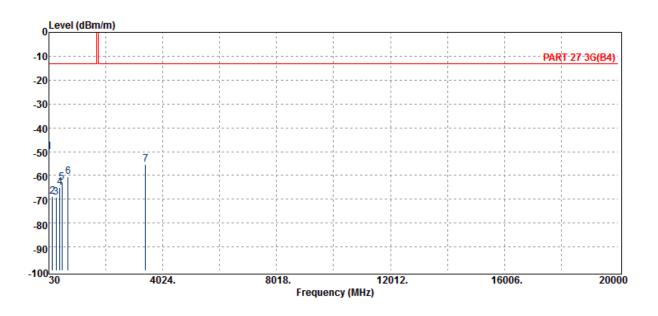
Page 352 of 456

Radiated Spurious Emission Measurement Result: WCDMA Band 4 Mode

Operation Band :WCDMA B4 **Test Date** :2019-03-28

Fundamental Frequency :1712.4 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.28	-19.81	-30.05	-0.45	0.04	-13.00	-37.28
149.31	-68.86	-60.68	-7.22	-1.00	0.04	-13.00	-55.86
277.35	-69.10	-65.16	-2.60	-1.38	0.03	-13.00	-56.10
408.30	-64.89	-61.54	-1.75	-1.68	0.08	-13.00	-51.89
487.84	-63.06	-59.13	-2.29	-1.84	0.20	-13.00	-50.06
699.30	-60.54	-57.19	-1.44	-2.23	0.31	-13.00	-47.54
3424.80	-55.49	-62.94	12.75	-5.48	0.18	-13.00	-42.49

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



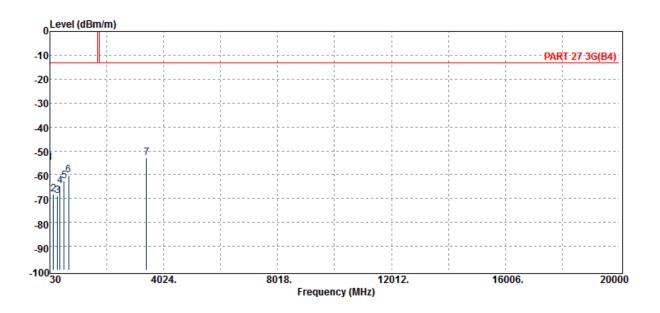
Page 353 of 456

Operation Band Test Date :WCDMA B4 :2019-03-28

Fundamental Frequency :1712.4 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-55.12	-24.65	-30.05	-0.45	0.04	-13.00	-42.12
146.40	-68.32	-59.86	-7.51	-1.00	0.04	-13.00	-55.32
294.81	-68.90	-65.35	-2.15	-1.42	0.03	-13.00	-55.90
381.14	-64.84	-61.76	-1.53	-1.62	0.06	-13.00	-51.84
522.76	-62.58	-59.49	-1.39	-1.91	0.21	-13.00	-49.58
691.54	-60.10	-56.84	-1.35	-2.22	0.30	-13.00	-47.10
3424.80	-52.81	-60.26	12.75	-5.48	0.18	-13.00	-39.81

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

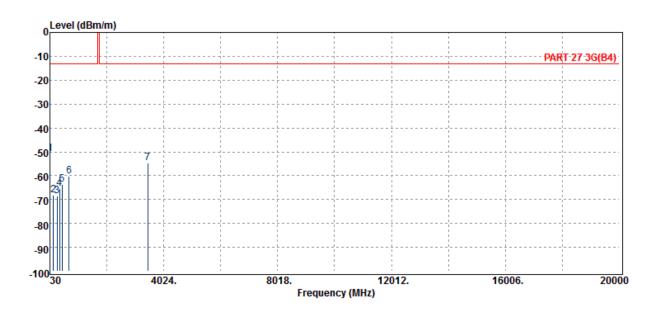


Page 354 of 456

Operation Band Test Date :WCDMA B4 :2019-03-28

Fundamental Frequency :1732.6 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.82	-20.36	-30.05	-0.45	0.04	-13.00	-37.82
151.25	-68.02	-60.00	-7.05	-1.01	0.04	-13.00	-55.02
287.05	-68.55	-64.85	-2.33	-1.40	0.03	-13.00	-55.55
362.71	-65.37	-62.06	-1.80	-1.58	0.05	-13.00	-52.37
461.65	-63.59	-59.86	-2.12	-1.78	0.16	-13.00	-50.59
697.36	-60.11	-56.80	-1.40	-2.22	0.31	-13.00	-47.11
3465.20	-54.58	-61.91	12.64	-5.48	0.17	-13.00	-41.58

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



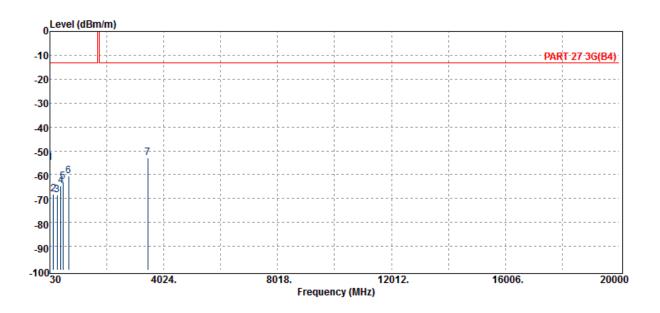
Page 355 of 456

Operation Band Test Date :WCDMA B4 :2019-03-28

Fundamental Frequency :1732.6 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.94	-24.47	-30.05	-0.45	0.04	-13.00	-41.94
153.19	-68.14	-60.27	-6.89	-1.02	0.04	-13.00	-55.14
279.29	-68.57	-64.66	-2.56	-1.38	0.03	-13.00	-55.57
418.00	-64.75	-61.30	-1.85	-1.70	0.10	-13.00	-51.75
478.14	-62.85	-58.80	-2.41	-1.82	0.19	-13.00	-49.85
691.54	-60.64	-57.38	-1.35	-2.22	0.30	-13.00	-47.64
3465.20	-53.02	-60.35	12.64	-5.48	0.17	-13.00	-40.02

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 356 of 456

Operation Band Fundamental Frequency

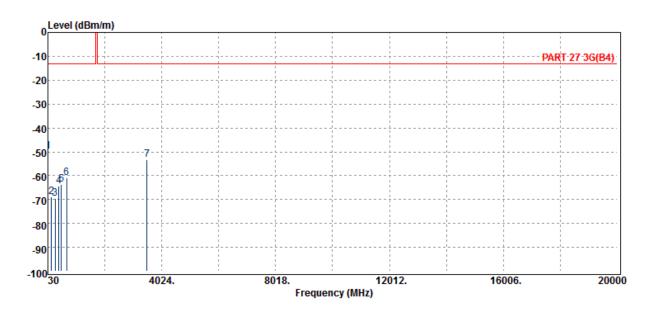
Operation Mode EUT Pol.

:WCDMA B4 :1752.6 MHz :Tx CH HIGH :E2 Plane

Test Date :2019-03-28

Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.95	-19.49	-30.05	-0.45	0.04	-13.00	-36.95
146.40	-68.94	-60.48	-7.51	-1.00	0.04	-13.00	-55.94
284.14	-69.53	-65.70	-2.47	-1.39	0.03	-13.00	-56.53
413.15	-64.44	-61.03	-1.81	-1.69	0.09	-13.00	-51.44
493.66	-63.55	-59.80	-2.10	-1.86	0.21	-13.00	-50.55
694.45	-60.80	-57.54	-1.35	-2.22	0.31	-13.00	-47.80
3505.20	-53.46	-60.55	12.49	-5.55	0.16	-13.00	-40.46

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



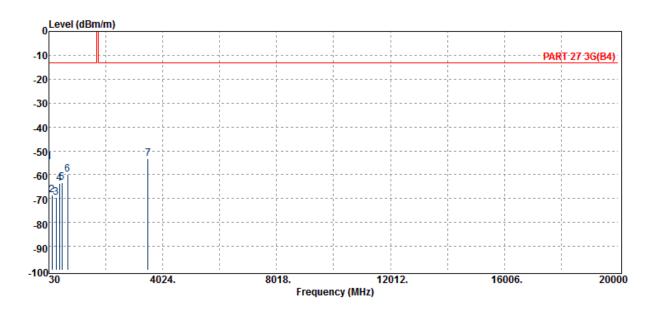
Page 357 of 456

Operation Band Test Date :WCDMA B4 :2019-03-28

Fundamental Frequency :1752.6 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.80	-24.34	-30.05	-0.45	0.04	-13.00	-41.80
141.55	-68.61	-59.41	-8.27	-0.98	0.04	-13.00	-55.61
285.11	-69.42	-65.62	-2.44	-1.40	0.03	-13.00	-56.42
403.45	-63.64	-60.33	-1.72	-1.67	0.07	-13.00	-50.64
483.96	-63.32	-59.32	-2.37	-1.83	0.20	-13.00	-50.32
694.45	-59.87	-56.61	-1.35	-2.22	0.31	-13.00	-46.87
3505.20	-53.23	-60.33	12.49	-5.55	0.16	-13.00	-40.23

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



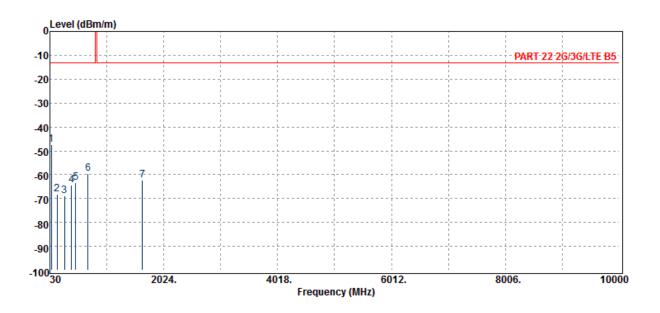
Page 358 of 456

Radiated Spurious Emission Measurement Result: WCDMA Band 5 Mode

Operation Band :WCDMA B5 **Test Date** :2019-03-28

Fundamental Frequency :826.4 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
IVITZ	UDIII	UDIII	иви/иві	uБ	uБ	UDIII	uБ
54.25	-47.51	-36.28	-10.75	-0.62	0.14	-13.00	-34.51
158.04	-68.18	-60.82	-6.44	-1.04	0.12	-13.00	-55.18
288.99	-68.71	-65.19	-2.21	-1.41	0.10	-13.00	-55.71
408.30	-64.50	-61.34	-1.75	-1.68	0.26	-13.00	-51.50
481.05	-63.28	-59.20	-2.43	-1.83	0.17	-13.00	-50.28
699.30	-59.58	-56.87	-1.44	-2.23	0.95	-13.00	-46.58
1652.80	-62.24	-68.82	9.72	-3.55	0.41	-13.00	-49.24

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



:2019-03-28

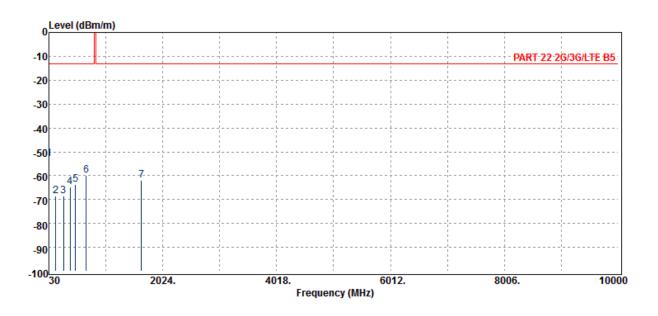
Page 359 of 456

Operation Band Test Date :WCDMA B5

Fundamental Frequency Temp./Humi. :826.4 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-52.88	-22.51	-30.05	-0.45	0.13	-13.00	-39.88
149.31	-68.35	-60.25	-7.22	-1.00	0.12	-13.00	-55.35
285.11	-68.69	-64.95	-2.44	-1.40	0.10	-13.00	-55.69
398.60	-64.64	-61.63	-1.62	-1.66	0.27	-13.00	-51.64
492.69	-63.61	-59.77	-2.14	-1.85	0.16	-13.00	-50.61
679.90	-59.85	-57.21	-1.25	-2.20	0.82	-13.00	-46.85
1652.80	-61.89	-68.46	9.72	-3.55	0.41	-13.00	-48.89

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



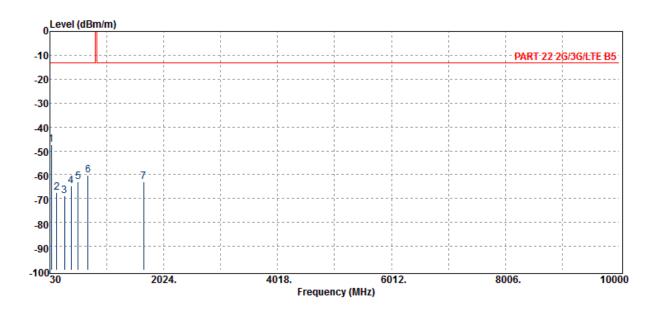
Page 360 of 456

Operation Band Fundamental Frequency **Operation Mode** EUT Pol.

:WCDMA B5 :836.6 MHz :Tx CH MID :E2 Plane

Test Date :2019-03-28 Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
56.19	-47.30	-36.30	-10.50	-0.63	0.13	-13.00	-34.30
146.40	-67.34	-58.95	-7.51	-1.00	0.12	-13.00	-54.34
287.05	-68.72	-65.09	-2.33	-1.40	0.10	-13.00	-55.72
403.45	-64.57	-61.46	-1.72	-1.67	0.27	-13.00	-51.57
521.79	-63.06	-59.89	-1.41	-1.91	0.16	-13.00	-50.06
694.45	-60.17	-57.51	-1.35	-2.22	0.92	-13.00	-47.17
1673.20	-63.08	-69.76	9.84	-3.58	0.42	-13.00	-50.08

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



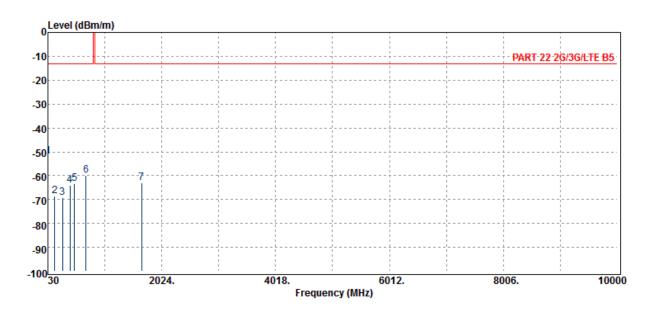
Page 361 of 456

Operation Band Test Date :WCDMA B5 :2019-03-28

Fundamental Frequency Temp./Humi. :836.6 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-51.93	-21.56	-30.05	-0.45	0.13	-13.00	-38.93
146.40	-68.51	-60.13	-7.51	-1.00	0.12	-13.00	-55.51
284.14	-69.15	-65.39	-2.47	-1.39	0.10	-13.00	-56.15
413.15	-64.15	-60.91	-1.81	-1.69	0.26	-13.00	-51.15
495.60	-63.35	-59.60	-2.04	-1.86	0.15	-13.00	-50.35
694.45	-59.77	-57.12	-1.35	-2.22	0.92	-13.00	-46.77
1673.20	-62.96	-69.63	9.84	-3.58	0.42	-13.00	-49.96

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 362 of 456

Operation Band Fundamental Frequency **Operation Mode**

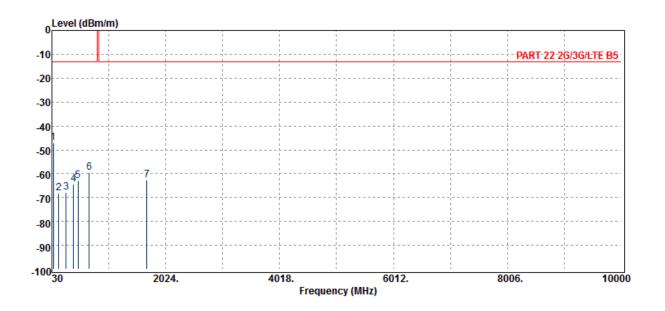
EUT Pol.

:WCDMA B5 :846.6 MHz :Tx CH HIGH :E2 Plane

Test Date :2019-03-28

Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
56.19	-47.00	-36.01	-10.50	-0.63	0.13	-13.00	-34.00
146.40	-68.01	-59.63	-7.51	-1.00	0.12	-13.00	-55.01
280.26	-67.98	-64.16	-2.54	-1.38	0.10	-13.00	-54.98
411.21	-64.34	-61.14	-1.77	-1.68	0.26	-13.00	-51.34
487.84	-63.02	-59.05	-2.29	-1.84	0.16	-13.00	-50.02
681.84	-59.62	-56.96	-1.29	-2.20	0.83	-13.00	-46.62
1693.20	-62.53	-69.32	9.96	-3.59	0.42	-13.00	-49.53

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 363 of 456

Operation Band Fundamental Frequency

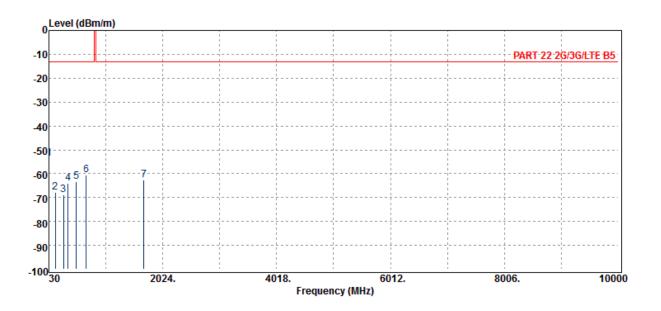
Operation Mode EUT Pol.

:WCDMA B5 :846.6 MHz :Tx CH HIGH :E2 Plane

Test Date :2019-03-28 Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane

:HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.48	-23.11	-30.05	-0.45	0.13	-13.00	-40.48
144.46	-67.97	-59.35	-7.75	-0.99	0.12	-13.00	-54.97
285.11	-68.78	-65.04	-2.44	-1.40	0.10	-13.00	-55.78
366.59	-63.96	-60.85	-1.75	-1.59	0.22	-13.00	-50.96
513.06	-63.40	-60.13	-1.53	-1.90	0.16	-13.00	-50.40
684.75	-60.43	-57.73	-1.35	-2.21	0.85	-13.00	-47.43
1693.20	-62.76	-69.55	9.96	-3.59	0.42	-13.00	-49.76

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



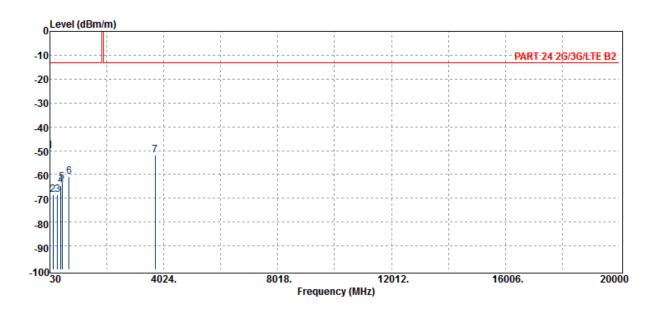
Page 364 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 2 (The Worst Case)

Operation Band :LTE B2 **Test Date** :2019-03-28

Fundamental Frequency :1860 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.01	-19.55	-30.05	-0.45	0.04	-13.00	-37.01
143.49	-68.50	-59.64	-7.92	-0.99	0.04	-13.00	-55.50
298.69	-68.53	-65.13	-2.00	-1.43	0.03	-13.00	-55.53
411.21	-64.73	-61.36	-1.77	-1.68	0.09	-13.00	-51.73
454.86	-63.37	-59.70	-2.05	-1.77	0.15	-13.00	-50.37
697.36	-61.07	-57.76	-1.40	-2.22	0.31	-13.00	-48.07
3720.00	-51.77	-58.65	12.46	-5.71	0.13	-13.00	-38.77

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



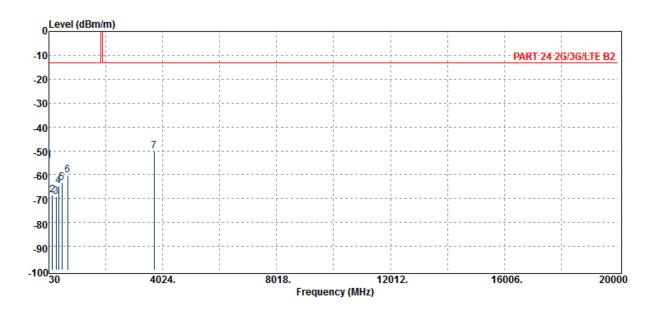
Page 365 of 456

Operation Band :LTE B2 **Test Date** :2019-03-28

Fundamental Frequency :1860 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.08	-23.61	-30.05	-0.45	0.04	-13.00	-41.08
146.40	-68.40	-59.94	-7.51	-1.00	0.04	-13.00	-55.40
284.14	-69.14	-65.31	-2.47	-1.39	0.03	-13.00	-56.14
371.44	-64.71	-61.45	-1.72	-1.60	0.06	-13.00	-51.71
490.75	-63.43	-59.57	-2.22	-1.85	0.21	-13.00	-50.43
692.51	-60.13	-56.87	-1.35	-2.22	0.31	-13.00	-47.13
3720.00	-50.07	-56.95	12.46	-5.71	0.13	-13.00	-37.07

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

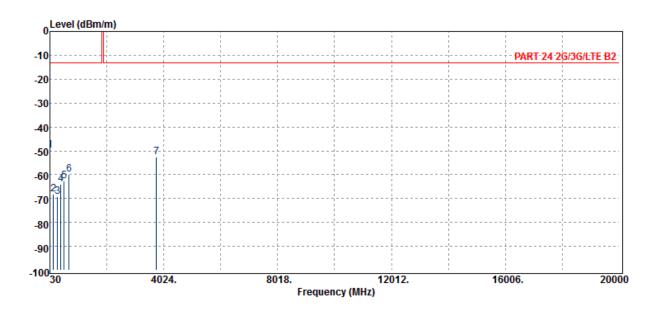


Page 366 of 456

Operation Band :LTE B2 **Test Date** :2019-03-28

Fundamental Frequency :1880 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-49.75	-19.28	-30.05	-0.45	0.04	-13.00	-36.75
156.10	-68.18	-60.55	-6.64	-1.03	0.04	-13.00	-55.18
294.81	-69.20	-65.66	-2.15	-1.42	0.03	-13.00	-56.20
415.09	-64.17	-60.72	-1.85	-1.69	0.09	-13.00	-51.17
524.70	-62.59	-59.53	-1.36	-1.91	0.21	-13.00	-49.59
697.36	-60.02	-56.71	-1.40	-2.22	0.31	-13.00	-47.02
3760.00	-52.67	-59.52	12.42	-5.69	0.12	-13.00	-39.67

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



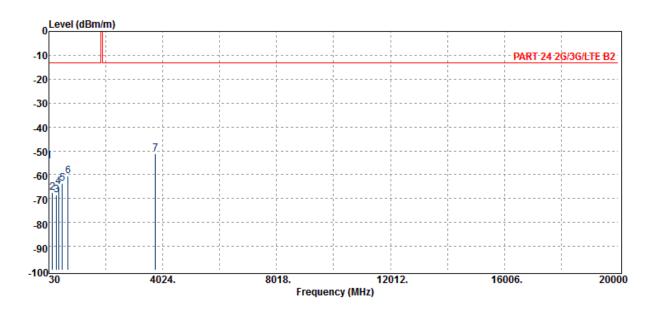
Page 367 of 456

Operation Band :LTE B2 **Test Date** :2019-03-28

Fundamental Frequency :1880 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.22	-23.75	-30.05	-0.45	0.04	-13.00	-41.22
151.25	-67.51	-59.49	-7.05	-1.01	0.04	-13.00	-54.51
293.84	-68.50	-64.96	-2.15	-1.42	0.03	-13.00	-55.50
369.50	-64.90	-61.61	-1.75	-1.59	0.06	-13.00	-51.90
497.54	-63.71	-60.07	-2.00	-1.86	0.22	-13.00	-50.71
696.39	-60.58	-57.29	-1.38	-2.22	0.31	-13.00	-47.58
3760.00	-51.10	-57.95	12.42	-5.69	0.12	-13.00	-38.10

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

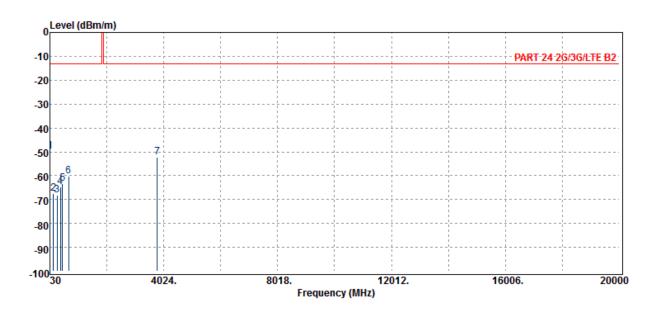


Page 368 of 456

Operation Band :LTE B2 **Test Date** :2019-03-28

Fundamental Frequency :1900 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.82	-19.36	-30.05	-0.45	0.04	-13.00	-36.82
146.40	-67.36	-58.90	-7.51	-1.00	0.04	-13.00	-54.36
287.05	-68.28	-64.58	-2.33	-1.40	0.03	-13.00	-55.28
398.60	-64.59	-61.38	-1.62	-1.66	0.07	-13.00	-51.59
476.20	-63.21	-59.21	-2.37	-1.81	0.19	-13.00	-50.21
691.54	-60.38	-57.12	-1.35	-2.22	0.30	-13.00	-47.38
3800.00	-52.32	-59.19	12.50	-5.76	0.12	-13.00	-39.32

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



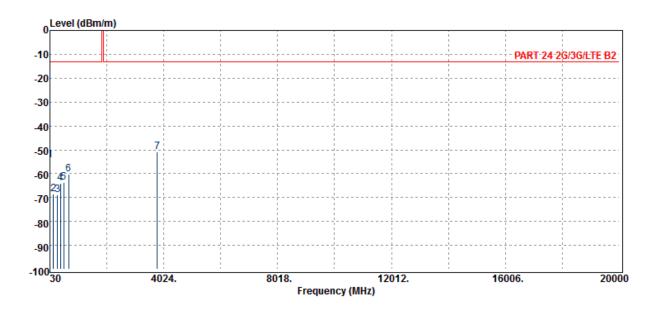
Page 369 of 456

Operation Band :LTE B2 **Test Date** :2019-03-28

Fundamental Frequency :1900 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.23	-23.77	-30.05	-0.45	0.04	-13.00	-41.23
158.04	-68.57	-61.14	-6.44	-1.04	0.04	-13.00	-55.57
293.84	-68.77	-65.23	-2.15	-1.42	0.03	-13.00	-55.77
396.66	-64.13	-60.96	-1.58	-1.65	0.07	-13.00	-51.13
507.24	-63.69	-60.26	-1.76	-1.89	0.22	-13.00	-50.69
689.60	-60.35	-57.09	-1.35	-2.21	0.30	-13.00	-47.35
3800.00	-50.71	-57.57	12.50	-5.76	0.12	-13.00	-37.71

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



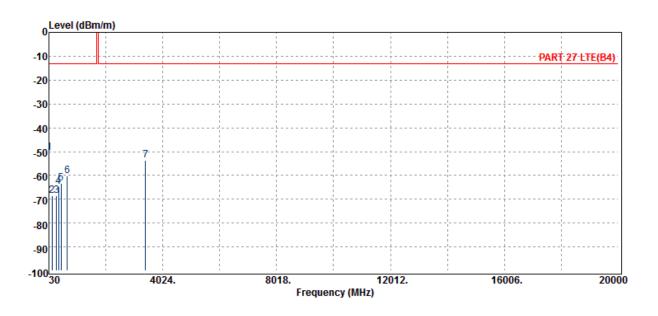
Page 370 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 4 (The Worst Case)

Operation Band :LTE B4 **Test Date** :2019-03-28

Fundamental Frequency :1710.7 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
IVII IZ	ubiii .	uDIII	ubu/ubi	ub_	ub	abili	<u> </u>
30.00	-50.60	-20.13	-30.05	-0.45	0.04	-13.00	-37.60
144.46	-68.60	-59.90	-7.75	-0.99	0.04	-13.00	-55.60
293.84	-68.66	-65.13	-2.15	-1.42	0.03	-13.00	-55.66
364.65	-64.82	-61.53	-1.76	-1.58	0.06	-13.00	-51.82
458.74	-63.26	-59.59	-2.05	-1.78	0.16	-13.00	-50.26
672.14	-60.31	-57.00	-1.41	-2.19	0.28	-13.00	-47.31
3421.40	-53.57	-61.03	12.76	-5.48	0.18	-13.00	-40.57

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



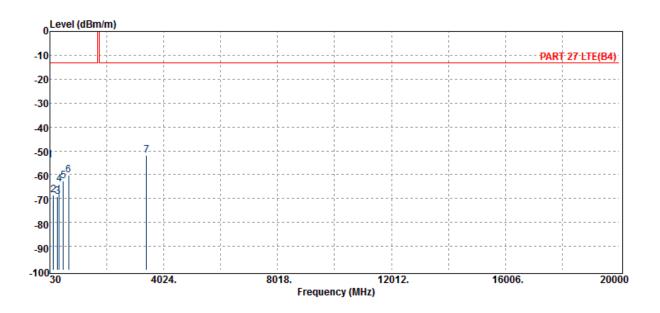
Page 371 of 456

Operation Band :LTE B4 **Test Date** :2019-03-28

Fundamental Frequency :1710.7 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.88	-23.41	-30.05	-0.45	0.04	-13.00	-40.88
148.34	-68.60	-60.33	-7.31	-1.00	0.04	-13.00	-55.60
294.81	-69.22	-65.67	-2.15	-1.42	0.03	-13.00	-56.22
361.74	-63.85	-60.52	-1.82	-1.58	0.05	-13.00	-50.85
497.54	-62.74	-59.10	-2.00	-1.86	0.22	-13.00	-49.74
692.51	-60.34	-57.08	-1.35	-2.22	0.31	-13.00	-47.34
3421.40	-51.76	-59.22	12.76	-5.48	0.18	-13.00	-38.76

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

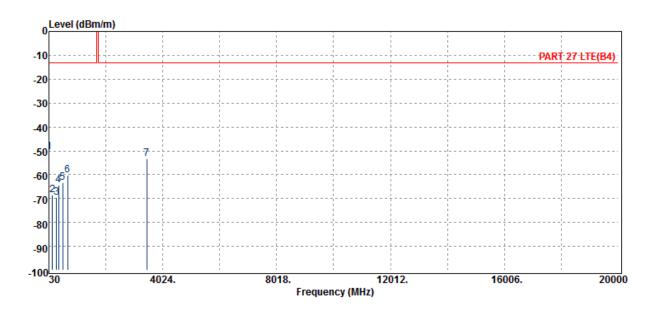


Page 372 of 456

Operation Band :LTE B4 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :1732.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
NAL 1-	JD	•			-ID	-ID	-ID
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.45	-19.98	-30.05	-0.45	0.04	-13.00	-37.45
154.16	-68.50	-60.70	-6.82	-1.02	0.04	-13.00	-55.50
293.84	-69.64	-66.10	-2.15	-1.42	0.03	-13.00	-56.64
369.50	-64.31	-61.02	-1.75	-1.59	0.06	-13.00	-51.31
510.15	-63.16	-59.84	-1.64	-1.89	0.21	-13.00	-50.16
687.66	-60.35	-57.09	-1.35	-2.21	0.30	-13.00	-47.35
3465.00	-53.37	-60.70	12.64	-5.48	0.17	-13.00	-40.37

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



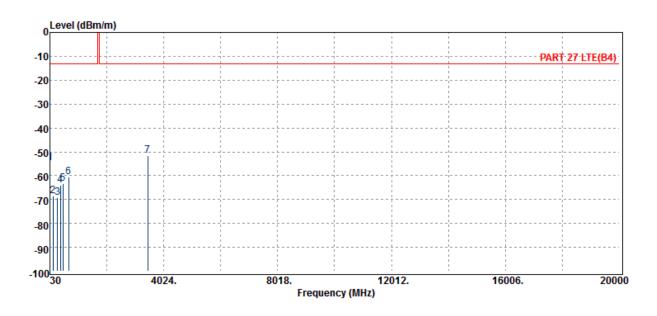
Page 373 of 456

Operation Band :LTE B4 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :1732.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.55	-24.08	-30.05	-0.45	0.04	-13.00	-41.55
143.49	-68.53	-59.67	-7.92	-0.99	0.04	-13.00	-55.53
299.66	-69.28	-65.91	-1.96	-1.43	0.03	-13.00	-56.28
401.51	-63.85	-60.57	-1.68	-1.66	0.07	-13.00	-50.85
488.81	-63.47	-59.56	-2.27	-1.84	0.20	-13.00	-50.47
694.45	-60.68	-57.41	-1.35	-2.22	0.31	-13.00	-47.68
3465.00	-51.65	-58.98	12.64	-5.48	0.17	-13.00	-38.65

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

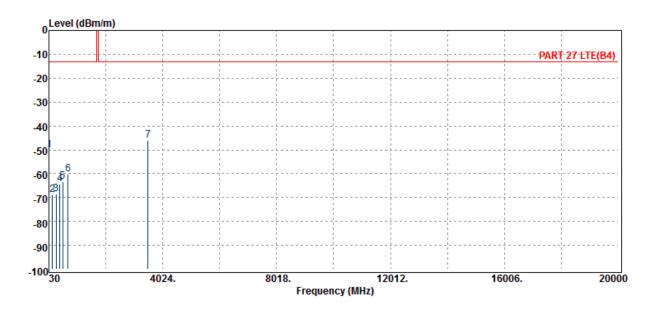


Page 374 of 456

Operation Band :LTE B4 **Test Date** :2019-03-28

Fundamental Frequency :1754.3 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin	
•		Output Level	Gain	Loss				
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB	
								-
30.00	-50.27	-19.80	-30.05	-0.45	0.04	-13.00	-37.27	
159.01	-68.75	-61.41	-6.35	-1.04	0.04	-13.00	-55.75	
288.99	-68.64	-65.05	-2.21	-1.41	0.03	-13.00	-55.64	
410.24	-64.50	-61.15	-1.75	-1.68	0.08	-13.00	-51.50	
519.85	-63.46	-60.32	-1.45	-1.91	0.21	-13.00	-50.46	
697.36	-60.16	-56.85	-1.40	-2.22	0.31	-13.00	-47.16	
3508.60	-45.86	-52.94	12.48	-5.56	0.15	-13.00	-32.86	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



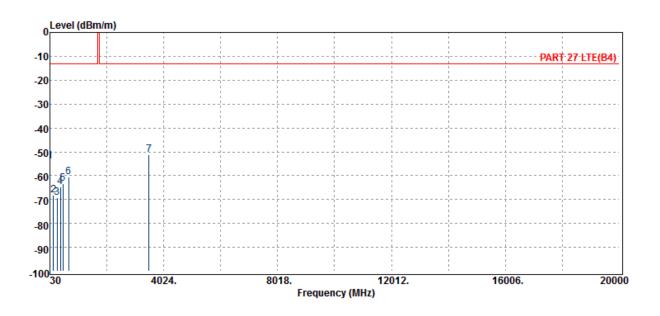
Page 375 of 456

Operation Band :LTE B4 **Test Date** :2019-03-28

Fundamental Frequency :1754.3 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.88	-23.41	-30.05	-0.45	0.04	-13.00	-40.88
151.25	-68.06	-60.04	-7.05	-1.01	0.04	-13.00	-55.06
288.99	-69.21	-65.62	-2.21	-1.41	0.03	-13.00	-56.21
403.45	-64.77	-61.46	-1.72	-1.67	0.07	-13.00	-51.77
485.90	-63.29	-59.32	-2.33	-1.84	0.20	-13.00	-50.29
681.84	-60.61	-57.42	-1.29	-2.20	0.29	-13.00	-47.61
3508.60	-51.31	-58.39	12.48	-5.56	0.15	-13.00	-38.31

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



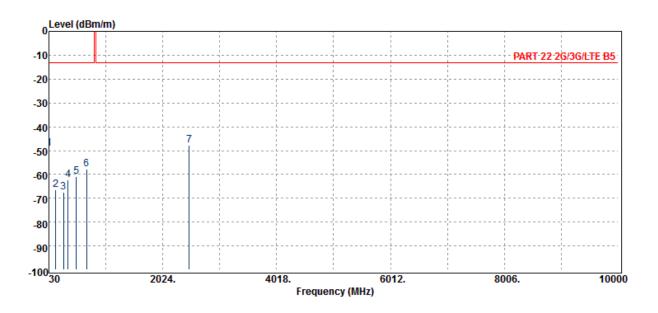
Page 376 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 5 (The Worst Case)

Operation Band :LTE B5 **Test Date** :2019-03-28

Fundamental Frequency :829 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.21	-18.84	-30.05	-0.45	0.13	-13.00	-36.21
151.25	-66.50	-58.56	-7.05	-1.01	0.12	-13.00	-53.50
285.11	-67.34	-63.60	-2.44	-1.40	0.10	-13.00	-54.34
362.71	-62.30	-59.14	-1.80	-1.58	0.21	-13.00	-49.30
508.21	-60.81	-57.35	-1.72	-1.89	0.15	-13.00	-47.81
686.69	-57.74	-55.05	-1.35	-2.21	0.86	-13.00	-44.74
2487.00	-47.74	-54.35	10.75	-4.51	0.38	-13.00	-34.74

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



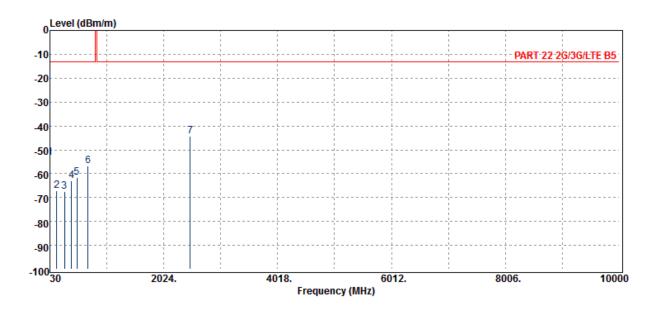
Page 377 of 456

Operation Band :LTE B5 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :829 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.25	-22.88	-30.05	-0.45	0.13	-13.00	-40.25
148.34	-67.18	-58.99	-7.31	-1.00	0.12	-13.00	-54.18
288.99	-67.35	-63.83	-2.21	-1.41	0.10	-13.00	-54.35
411.21	-62.82	-59.62	-1.77	-1.68	0.26	-13.00	-49.82
502.39	-61.56	-57.93	-1.90	-1.88	0.15	-13.00	-48.56
694.45	-56.91	-54.25	-1.35	-2.22	0.92	-13.00	-43.91
2487.00	-44.14	-50.75	10.75	-4.51	0.38	-13.00	-31.14

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

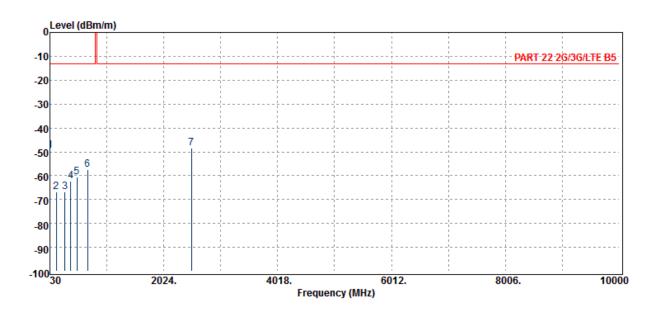


Page 378 of 456

Operation Band :LTE B5 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :836.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.49	-19.12	-30.05	-0.45	0.13	-13.00	-36.49
141.55	-66.90	-57.78	-8.27	-0.98	0.12	-13.00	-53.90
296.75	-66.64	-63.23	-2.08	-1.42	0.10	-13.00	-53.64
396.66	-62.24	-59.27	-1.58	-1.65	0.27	-13.00	-49.24
502.39	-60.70	-57.07	-1.90	-1.88	0.15	-13.00	-47.70
686.69	-57.60	-54.90	-1.35	-2.21	0.86	-13.00	-44.60
2509.50	-48.54	-55.12	10.80	-4.59	0.37	-13.00	-35.54

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



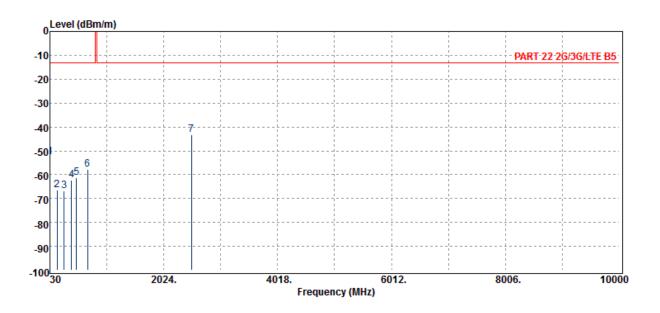
Page 379 of 456

Operation Band :LTE B5 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :836.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-52.58	-22.21	-30.05	-0.45	0.13	-13.00	-39.58
154.16	-66.50	-58.78	-6.82	-1.02	0.12	-13.00	-53.50
275.41	-66.87	-62.96	-2.64	-1.37	0.10	-13.00	-53.87
411.21	-62.43	-59.23	-1.77	-1.68	0.26	-13.00	-49.43
493.66	-61.26	-57.45	-2.10	-1.86	0.15	-13.00	-48.26
691.54	-57.92	-55.25	-1.35	-2.22	0.90	-13.00	-44.92
2509.50	-43.24	-49.82	10.80	-4.59	0.37	-13.00	-30.24

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

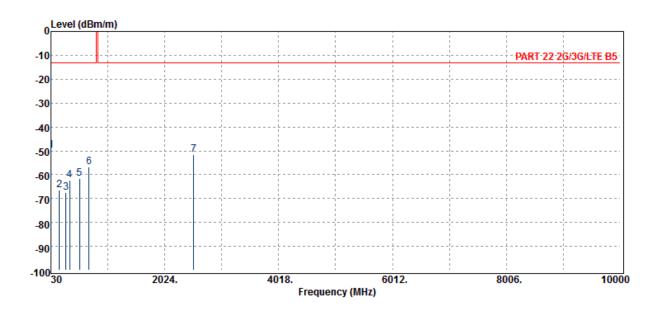


Page 380 of 456

Operation Band :LTE B5 **Test Date** :2019-03-28

Fundamental Frequency :844 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.74	-19.37	-30.05	-0.45	0.13	-13.00	-36.74
175.50	-66.37	-60.49	-4.90	-1.09	0.12	-13.00	-53.37
289.96	-67.47	-64.01	-2.15	-1.41	0.10	-13.00	-54.47
359.80	-62.24	-59.04	-1.85	-1.57	0.21	-13.00	-49.24
529.55	-61.53	-58.42	-1.35	-1.92	0.17	-13.00	-48.53
697.36	-56.85	-54.17	-1.40	-2.22	0.94	-13.00	-43.85
2532.00	-51.59	-58.16	10.80	-4.59	0.36	-13.00	-38.59

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



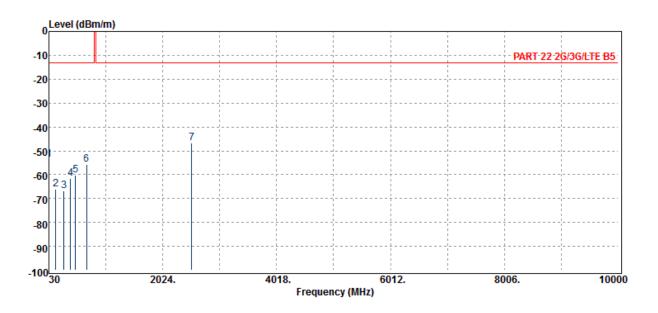
Page 381 of 456

Operation Band :LTE B5 **Test Date** :2019-03-28

Fundamental Frequency :844 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.70	-23.33	-30.05	-0.45	0.13	-13.00	-40.70
151.25	-66.10	-58.16	-7.05	-1.01	0.12	-13.00	-53.10
296.75	-66.79	-63.38	-2.08	-1.42	0.10	-13.00	-53.79
405.39	-61.59	-58.44	-1.75	-1.67	0.27	-13.00	-48.59
492.69	-60.09	-56.25	-2.14	-1.85	0.16	-13.00	-47.09
689.60	-55.86	-53.18	-1.35	-2.21	0.88	-13.00	-42.86
2532.00	-46.82	-53.39	10.80	-4.59	0.36	-13.00	-33.82

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



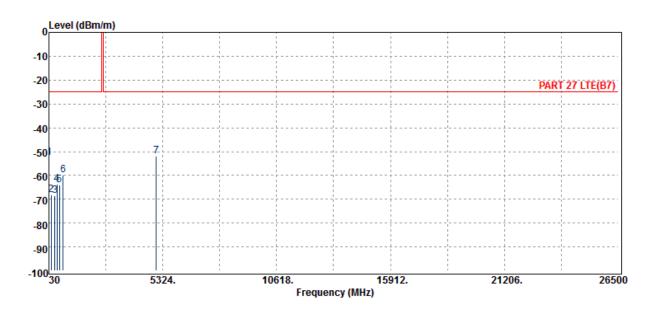
Page 382 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 7 (The Worst Case)

Operation Band :LTE B7 **Test Date** :2019-03-28

Fundamental Frequency :2510 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
-		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-52.71	-22.24	-30.05	-0.45	0.03	-25.00	-27.71
141.55	-68.21	-59.05	-8.27	-0.98	0.09	-25.00	-43.21
298.69	-68.57	-65.25	-2.00	-1.43	0.11	-25.00	-43.57
410.24	-63.75	-60.47	-1.75	-1.68	0.16	-25.00	-38.75
582.90	-63.07	-59.90	-1.23	-2.03	0.10	-25.00	-38.07
697.36	-59.90	-56.49	-1.40	-2.22	0.21	-25.00	-34.90
5020.00	-52.01	-58.40	12.46	-6.61	0.54	-25.00	-27.01

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



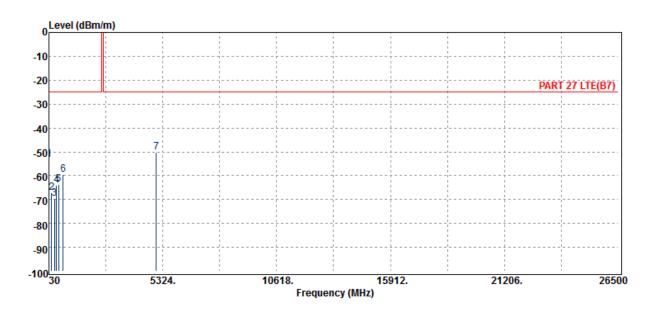
Page 383 of 456

Operation Band :LTE B7 **Test Date** :2019-03-28

Fundamental Frequency :2510 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode Engineer :Tx CH LOW :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.13	-22.65	-30.05	-0.45	0.03	-25.00	-28.13
151.25	-67.28	-59.31	-7.05	-1.01	0.09	-25.00	-42.28
287.05	-69.49	-65.89	-2.33	-1.40	0.13	-25.00	-44.49
385.99	-64.14	-61.14	-1.45	-1.63	0.09	-25.00	-39.14
479.11	-63.68	-59.57	-2.43	-1.82	0.14	-25.00	-38.68
686.69	-59.63	-56.33	-1.35	-2.21	0.26	-25.00	-34.63
5020.00	-50.02	-56.40	12.46	-6.61	0.54	-25.00	-25.02

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

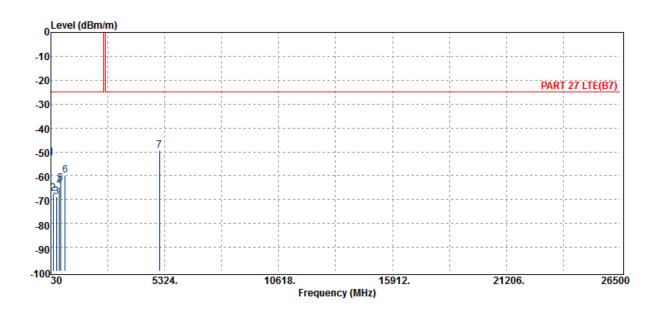


Page 384 of 456

Operation Band :LTE B7 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :2535 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-52.56	-22.09	-30.05	-0.45	0.03	-25.00	-27.56
134.76	-67.34	-57.08	-9.39	-0.96	0.08	-25.00	-42.34
282.20	-68.69	-64.93	-2.51	-1.39	0.14	-25.00	-43.69
418.00	-64.65	-61.29	-1.85	-1.70	0.18	-25.00	-39.65
485.90	-63.44	-59.37	-2.33	-1.84	0.10	-25.00	-38.44
691.54	-60.03	-56.71	-1.35	-2.22	0.24	-25.00	-35.03
5070.00	-49.46	-55.66	12.48	-6.75	0.46	-25.00	-24.46

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



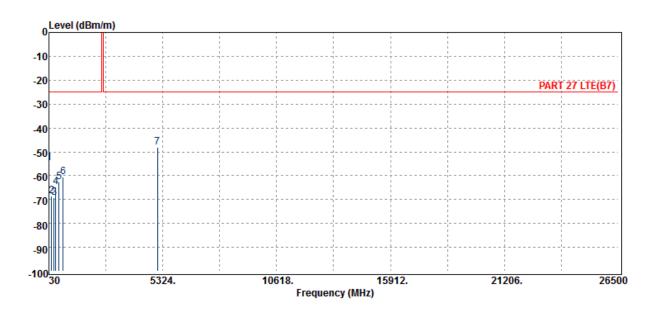
Page 385 of 456

Operation Band :LTE B7 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :2535 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-54.57	-24.10	-30.05	-0.45	0.03	-25.00	-29.57
146.40	-68.65	-60.24	-7.51	-1.00	0.09	-25.00	-43.65
277.35	-69.18	-65.34	-2.60	-1.38	0.15	-25.00	-44.18
353.01	-64.60	-61.44	-1.67	-1.55	0.07	-25.00	-39.60
492.69	-62.48	-58.56	-2.14	-1.85	0.07	-25.00	-37.48
691.54	-60.57	-57.25	-1.35	-2.22	0.24	-25.00	-35.57
5070.00	-48.26	-54.46	12.48	-6.75	0.46	-25.00	-23.26

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 386 of 456

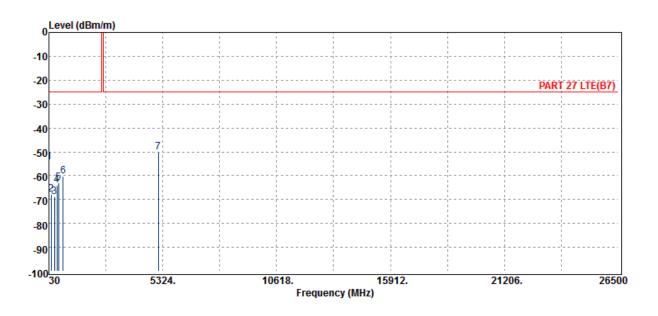
Operation Band Fundamental Frequency

Operation Mode EUT Pol.

:LTE B7 :2560 MHz :Tx CH HIGH :E2 Plane

Test Date :2019-03-28 Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
•							_
30.00	-54.34	-23.87	-30.05	-0.45	0.03	-25.00	-29.34
141.55	-67.76	-58.60	-8.27	-0.98	0.09	-25.00	-42.76
284.14	-68.84	-65.11	-2.47	-1.39	0.13	-25.00	-43.84
401.51	-64.15	-60.93	-1.68	-1.66	0.13	-25.00	-39.15
478.14	-62.98	-58.89	-2.41	-1.82	0.14	-25.00	-37.98
692.51	-60.19	-56.86	-1.35	-2.22	0.24	-25.00	-35.19
5120.00	-50.26	-56.80	12.64	-6.75	0.65	-25.00	-25.26

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 387 of 456

Operation Band :LTE B7

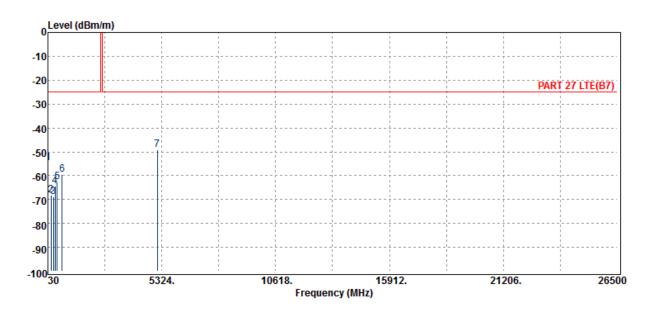
Fundamental Frequency :2560 MHz **Operation Mode** :Tx CH HIGH

EUT Pol. :E2 Plane **Test Date** :2019-03-28

Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane

:HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.74	-24.27	-30.05	-0.45	0.03	-25.00	-29.74
172.59	-68.08	-61.89	-5.19	-1.08	0.08	-25.00	-43.08
289.96	-68.81	-65.37	-2.15	-1.41	0.12	-25.00	-43.81
374.35	-64.45	-61.26	-1.66	-1.60	0.08	-25.00	-39.45
456.80	-62.66	-59.09	-2.05	-1.77	0.25	-25.00	-37.66
697.36	-59.66	-56.26	-1.40	-2.22	0.21	-25.00	-34.66
5120.00	-48.97	-55.51	12.64	-6.75	0.65	-25.00	-23.97

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



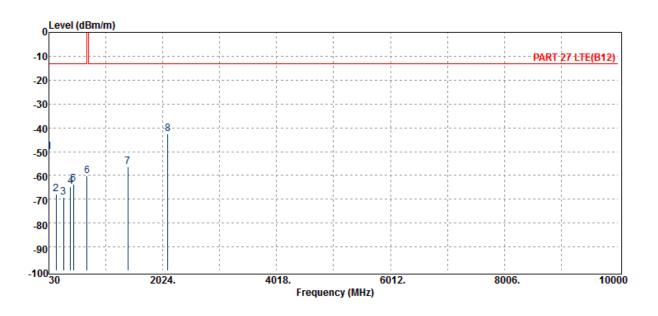
Page 388 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 12 (The Worst Case)

Operation Band :LTE B12 **Test Date** :2019-03-28

Fundamental Frequency :704 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
-		Output Level	Gain	Loss			_
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.23	-19.77	-30.05	-0.45	0.04	-13.00	-37.23
153.19	-67.84	-59.99	-6.89	-1.02	0.06	-13.00	-54.84
285.11	-69.18	-65.62	-2.44	-1.40	0.27	-13.00	-56.18
411.21	-64.66	-61.46	-1.77	-1.68	0.26	-13.00	-51.66
461.65	-63.72	-60.06	-2.12	-1.78	0.24	-13.00	-50.72
694.45	-60.17	-56.60	-1.35	-2.22	0.00	-13.00	-47.17
1408.00	-56.38	-61.69	8.05	-3.25	0.51	-13.00	-43.38
2112.00	-42.54	-49.44	9.70	-4.09	1.29	-13.00	-29.54

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



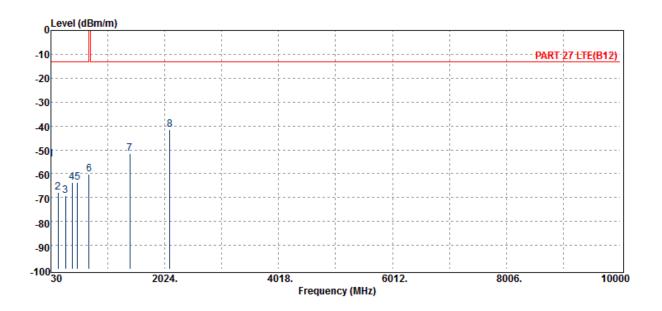
Page 389 of 456

Operation Band :LTE B12 **Test Date** :2019-03-28

Fundamental Frequency :704 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
•		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.94	-23.48	-30.05	-0.45	0.04	-13.00	-40.94
153.19	-67.85	-60.00	-6.89	-1.02	0.06	-13.00	-54.85
285.11	-69.15	-65.58	-2.44	-1.40	0.27	-13.00	-56.15
403.45	-63.78	-60.65	-1.72	-1.67	0.26	-13.00	-50.78
492.69	-63.69	-59.92	-2.14	-1.85	0.23	-13.00	-50.69
696.39	-60.12	-56.52	-1.38	-2.22	0.00	-13.00	-47.12
1408.00	-51.66	-56.97	8.05	-3.25	0.51	-13.00	-38.66
2112.00	-41.45	-48.35	9.70	-4.09	1.29	-13.00	-28.45

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 390 of 456

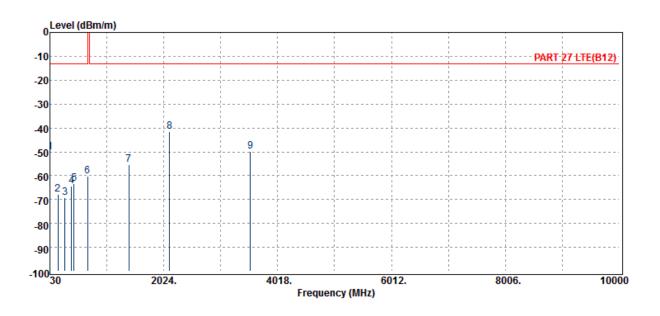
Operation Band Fundamental Frequency **Operation Mode**

EUT Pol.

:LTE B12 :707.5 MHz :Tx CH MID :E2 Plane

Test Date :2019-03-28 Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			_
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-50.31	-19.85	-30.05	-0.45	0.04	-13.00	-37.31
172.59	-67.86	-61.74	-5.19	-1.08	0.15	-13.00	-54.86
293.84	-69.07	-65.82	-2.15	-1.42	0.32	-13.00	-56.07
411.21	-64.39	-61.19	-1.77	-1.68	0.26	-13.00	-51.39
453.89	-63.42	-59.85	-2.05	-1.77	0.25	-13.00	-50.42
692.51	-60.36	-56.80	-1.35	-2.22	0.00	-13.00	-47.36
1415.00	-55.29	-60.65	8.09	-3.26	0.53	-13.00	-42.29
2122.50	-41.61	-48.33	9.62	-4.11	1.20	-13.00	-28.61
3537.50	-49.98	-64.33	12.42	-5.60	7.51	-13.00	-36.98

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



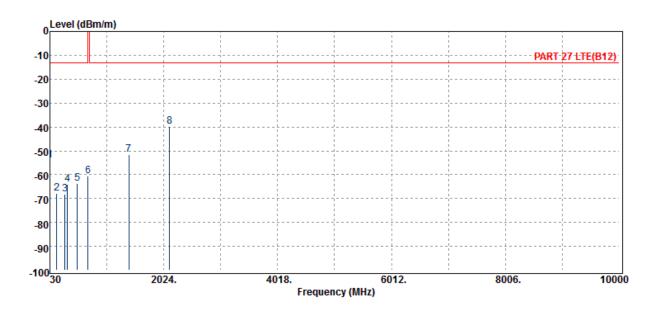
Page 391 of 456

Operation Band :LTE B12 **Test Date** :2019-03-28

Fundamental Frequency :707.5 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
-		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.11	-23.65	-30.05	-0.45	0.04	-13.00	-41.11
151.25	-67.96	-59.96	-7.05	-1.01	0.05	-13.00	-54.96
291.90	-68.28	-65.03	-2.15	-1.41	0.31	-13.00	-55.28
338.46	-63.96	-61.38	-1.51	-1.52	0.45	-13.00	-50.96
508.21	-63.71	-60.32	-1.72	-1.89	0.22	-13.00	-50.71
694.45	-60.56	-56.99	-1.35	-2.22	0.00	-13.00	-47.56
1415.00	-51.52	-56.88	8.09	-3.26	0.53	-13.00	-38.52
2122.50	-39.76	-46.47	9.62	-4.11	1.20	-13.00	-26.76

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

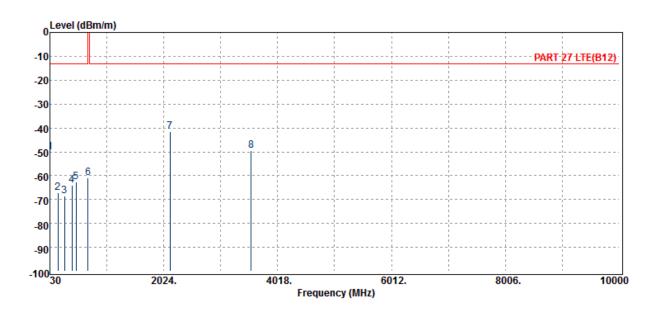


Page 392 of 456

Operation Band :LTE B12 **Test Date** :2019-03-28

Fundamental Frequency :711 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.27	-19.81	-30.05	-0.45	0.04	-13.00	-37.27
170.65	-67.28	-60.95	-5.38	-1.08	0.14	-13.00	-54.28
287.05	-68.55	-65.11	-2.33	-1.40	0.28	-13.00	-55.55
416.06	-64.14	-60.86	-1.85	-1.69	0.26	-13.00	-51.14
487.84	-62.66	-58.76	-2.29	-1.84	0.23	-13.00	-49.66
697.36	-60.97	-57.35	-1.40	-2.22	0.00	-13.00	-47.97
2133.00	-41.51	-48.07	9.53	-4.12	1.14	-13.00	-28.51
3555.00	-49.56	-62.51	12.40	-5.61	6.17	-13.00	-36.56

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



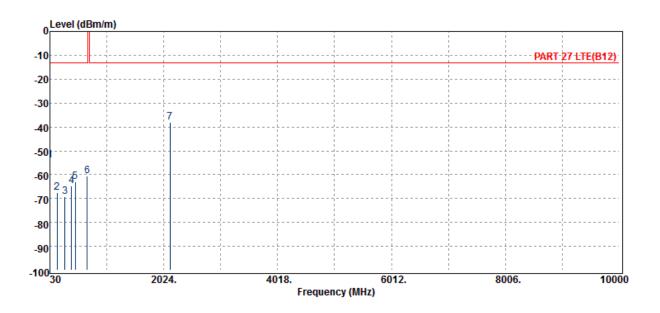
Page 393 of 456

Operation Band :LTE B12 **Test Date** :2019-03-28

Fundamental Frequency :711 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.94	-23.48	-30.05	-0.45	0.04	-13.00	-40.94
154.16	-67.43	-59.66	-6.82	-1.02	0.07	-13.00	-54.43
294.81	-69.32	-66.07	-2.15	-1.42	0.32	-13.00	-56.32
410.24	-64.58	-61.40	-1.75	-1.68	0.26	-13.00	-51.58
474.26	-63.06	-59.14	-2.35	-1.81	0.24	-13.00	-50.06
682.81	-60.62	-57.16	-1.31	-2.20	0.05	-13.00	-47.62
2133.00	-38.14	-44.69	9.53	-4.12	1.14	-13.00	-25.14

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



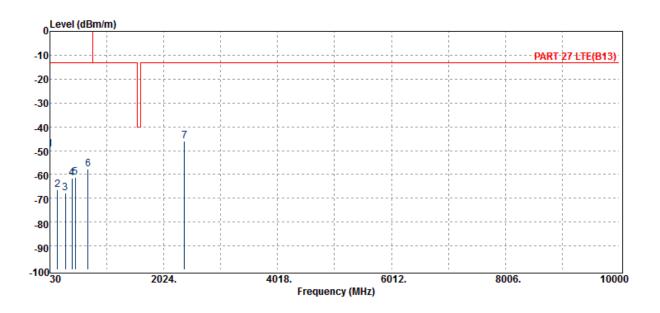
Page 394 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 13 (The Worst Case)

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :779.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-49.59	-19.22	-30.05	-0.45	0.13	-13.00	-36.59
160.95	-66.60	-59.50	-6.17	-1.05	0.12	-13.00	-53.60
299.66	-67.65	-64.35	-1.96	-1.43	0.10	-13.00	-54.65
415.09	-61.72	-58.44	-1.85	-1.69	0.25	-13.00	-48.72
474.26	-61.19	-57.21	-2.35	-1.81	0.18	-13.00	-48.19
694.45	-57.70	-55.05	-1.35	-2.22	0.92	-13.00	-44.70
2388.50	-46.10	-52.29	10.21	-4.41	0.40	-13.00	-33.10

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



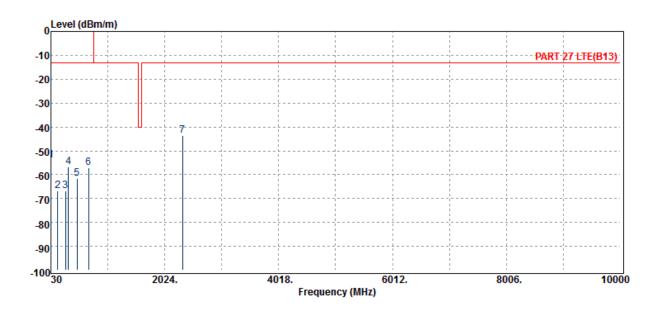
Page 395 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :779.5 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.01	-23.63	-30.05	-0.45	0.13	-13.00	-41.01
149.31	-66.76	-58.65	-7.22	-1.00	0.12	-13.00	-53.76
288.99	-66.89	-63.37	-2.21	-1.41	0.10	-13.00	-53.89
333.61	-56.92	-53.92	-1.65	-1.51	0.16	-13.00	-43.92
485.90	-61.52	-57.51	-2.33	-1.84	0.16	-13.00	-48.52
687.66	-56.99	-54.30	-1.35	-2.21	0.87	-13.00	-43.99
2338.50	-43.56	-49.42	9.81	-4.36	0.41	-13.00	-30.56

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

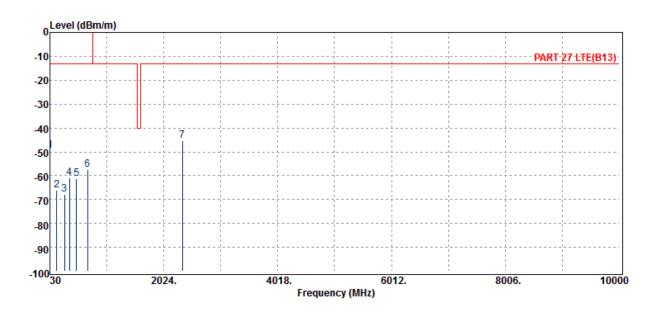


Page 396 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :782 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin	
•		Output Level	Gain	Loss				
MHz	dBm	[.] dBm	dBd/dBi	dB	dB	dBm	dB	
								•
30.00	-49.53	-19.16	-30.05	-0.45	0.13	-13.00	-36.53	
146.40	-66.21	-57.82	-7.51	-1.00	0.12	-13.00	-53.21	
284.14	-67.82	-64.06	-2.47	-1.39	0.10	-13.00	-54.82	
371.44	-61.07	-57.98	-1.72	-1.60	0.23	-13.00	-48.07	
492.69	-61.33	-57.49	-2.14	-1.85	0.16	-13.00	-48.33	
692.51	-57.27	-54.61	-1.35	-2.22	0.90	-13.00	-44.27	
2346.00	-45.43	-51.34	9.87	-4.36	0.41	-13.00	-32.43	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



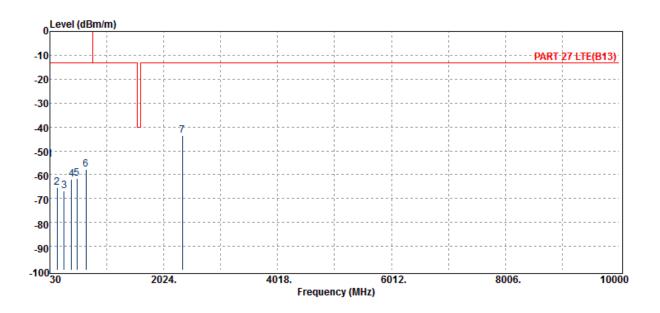
Page 397 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :782 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.60	-23.23	-30.05	-0.45	0.13	-13.00	-40.60
158.04	-65.51	-58.15	-6.44	-1.04	0.12	-13.00	-52.51
280.26	-66.66	-62.83	-2.54	-1.38	0.10	-13.00	-53.66
406.36	-61.82	-58.66	-1.75	-1.67	0.27	-13.00	-48.82
505.30	-61.47	-57.90	-1.84	-1.88	0.15	-13.00	-48.47
663.41	-57.85	-54.93	-1.45	-2.17	0.70	-13.00	-44.85
2346.00	-43.57	-49.48	9.87	-4.36	0.41	-13.00	-30.57

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



:2019-03-28

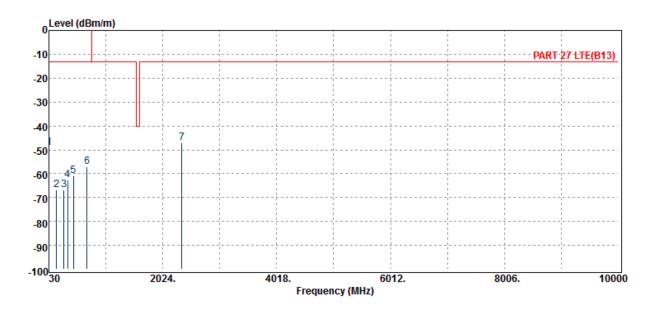
Page 398 of 456

Operation Band :LTE B13

Fundamental Frequency :784.5 MHz Temp./Humi. :22 deg_C / 61 RH

Test Date

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.04	-18.67	-30.05	-0.45	0.13	-13.00	-36.04
165.80	-66.91	-60.19	-5.79	-1.06	0.12	-13.00	-53.91
289.96	-66.72	-63.26	-2.15	-1.41	0.10	-13.00	-53.72
361.74	-62.79	-59.61	-1.82	-1.58	0.21	-13.00	-49.79
461.65	-60.78	-57.07	-2.12	-1.78	0.19	-13.00	-47.78
694.45	-57.07	-54.41	-1.35	-2.22	0.92	-13.00	-44.07
2353.50	-46.93	-52.89	9.93	-4.37	0.41	-13.00	-33.93

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



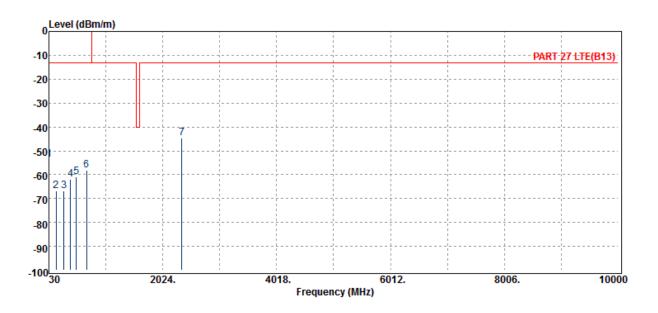
Page 399 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :784.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-53.63	-23.26	-30.05	-0.45	0.13	-13.00	-40.63
154.16	-66.72	-59.00	-6.82	-1.02	0.12	-13.00	-53.72
294.81	-66.83	-63.36	-2.15	-1.42	0.10	-13.00	-53.83
408.30	-61.92	-58.76	-1.75	-1.68	0.26	-13.00	-48.92
512.09	-60.90	-57.60	-1.57	-1.90	0.16	-13.00	-47.90
689.60	-58.11	-55.43	-1.35	-2.21	0.88	-13.00	-45.11
2353.50	-44.75	-50.71	9.93	-4.37	0.41	-13.00	-31.75

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



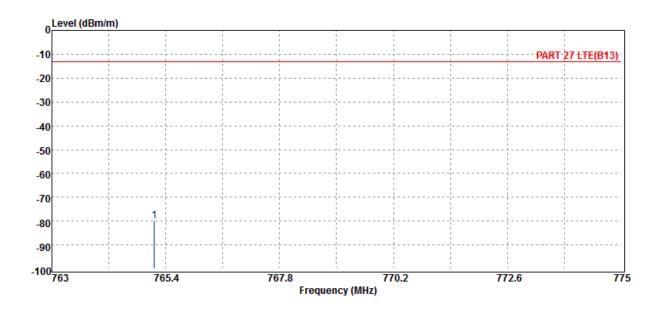
Page 400 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 13 (763~775MHz)

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :779.5 MHz :22 deg_C / 61 RH **Operation Mode** :Tx CH LOW Engineer :Kane

EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin	
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB	
765.16	-79.89	-76.22	-1.35	-2.33	0.00	-13.00	-66.89	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



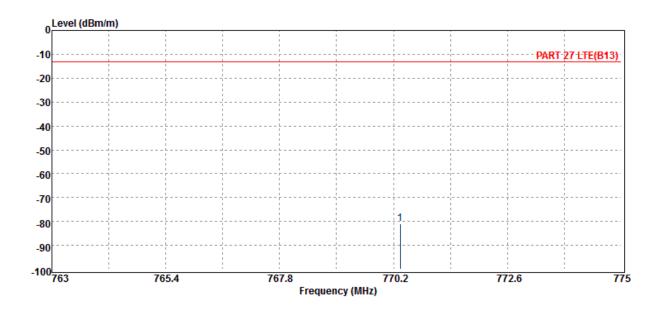
Page 401 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :779.5 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
770.34	-80.96	-77.27	-1.36	-2.33	0.00	-13.00	-67.96

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

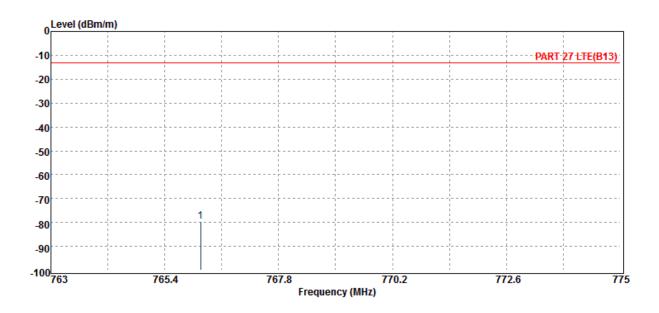


Page 402 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :782 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
766.16	-79.54	-75.86	-1.35	-2.33	0.00	-13.00	-66.54

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



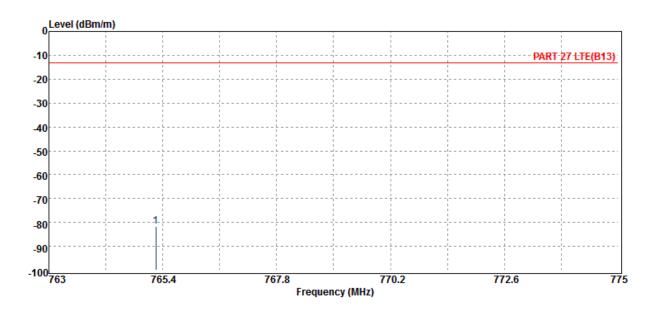
Page 403 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :782 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin	
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB	
765.26	-81.62	-77.94	-1.35	-2.33	0.00	-13.00	-68.62	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

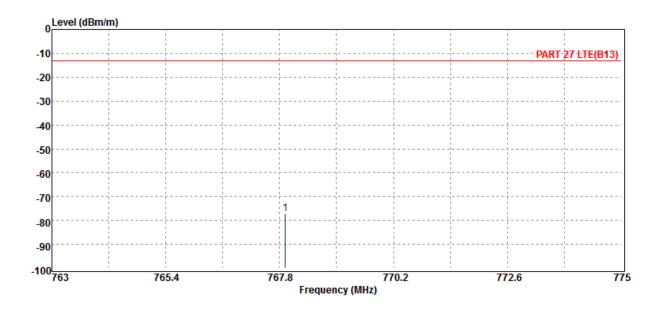


Page 404 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :784.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
767.92	-77.18	-73.50	-1.35	-2.33	0.00	-13.00	-64.18

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



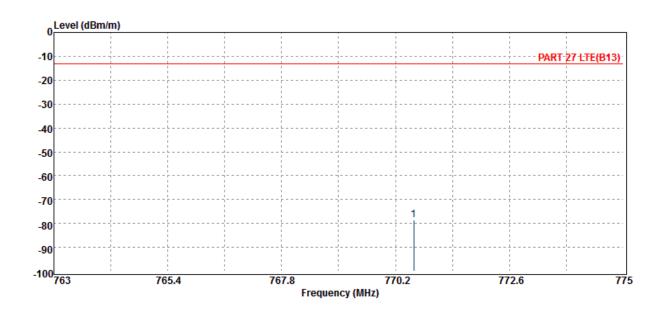
Page 405 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :784.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
770.58	-78.55	-74.85	-1.36	-2.33	0.00	-13.00	-65.55

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



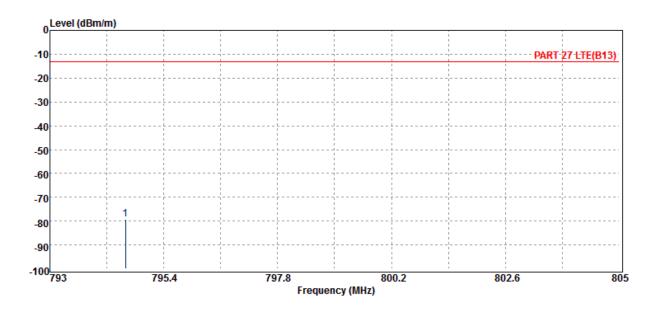
Page 406 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 13 (793~805MHz)

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :779.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
794.60	-79.23	-75.62	-1.25	-2.36	0.00	-13.00	-66.23

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



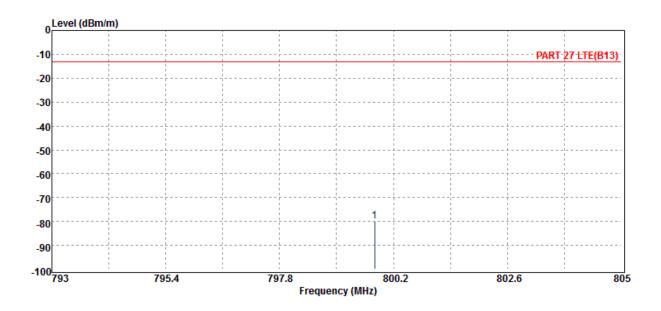
Page 407 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :779.5 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
799.80	-80.00	-76.37	-1.25	-2.38	0.00	-13.00	-67.00

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

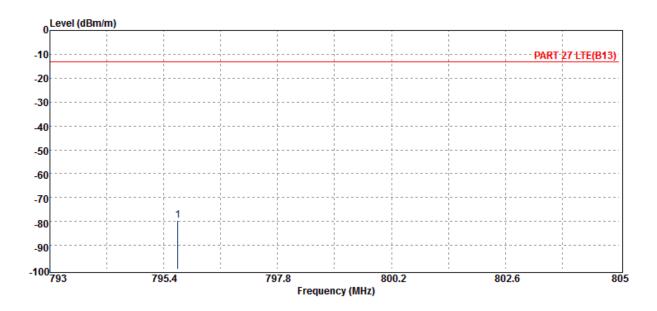


Page 408 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :782 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin	
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB	
795.70	-79.44	-75.82	-1.25	-2.37	0.00	-13.00	-66.44	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



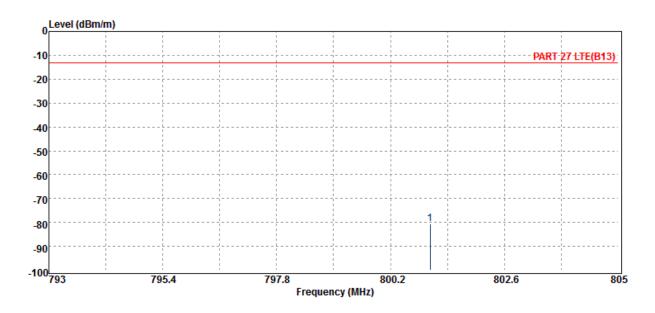
Page 409 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :782 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
801.04	-80.62	-76.95	-1.29	-2.38	0.00	-13.00	-67.62

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

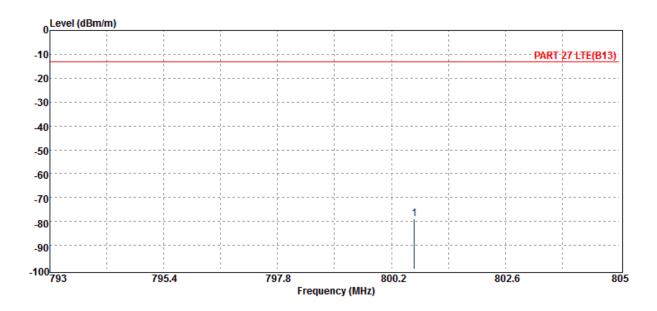


Page 410 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :784.5 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin	
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB	
800.68	-78.98	-75.32	-1.28	-2.38	0.00	-13.00	-65.98	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



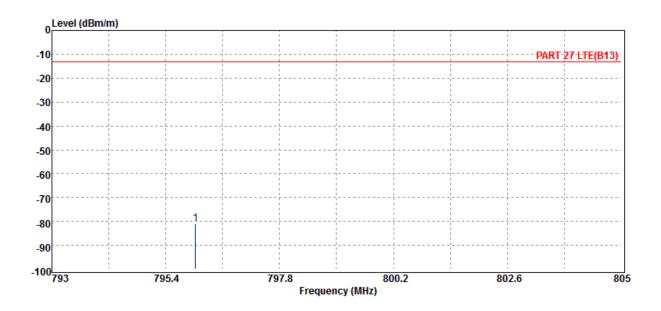
Page 411 of 456

Operation Band :LTE B13 **Test Date** :2019-03-28

Fundamental Frequency :784.5 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin	
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB	_
796.02	-80.83	-77.22	-1.25	-2.37	0.00	-13.00	-67.83	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



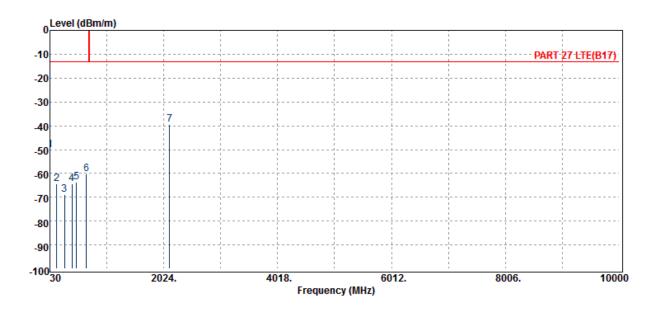
Page 412 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 17 (The Worst Case)

Operation Band :LTE B17 **Test Date** :2019-03-28

Fundamental Frequency :709 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.08	-19.71	-30.05	-0.45	0.13	-13.00	-37.08
146.40	-64.23	-55.85	-7.51	-1.00	0.12	-13.00	-51.23
287.05	-68.97	-65.34	-2.33	-1.40	0.10	-13.00	-55.97
413.15	-64.37	-61.13	-1.81	-1.69	0.26	-13.00	-51.37
495.60	-63.66	-59.91	-2.04	-1.86	0.15	-13.00	-50.66
668.26	-60.10	-57.21	-1.45	-2.18	0.73	-13.00	-47.10
2127.00	-39.37	-46.01	9.58	-4.11	1.16	-13.00	-26.37

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



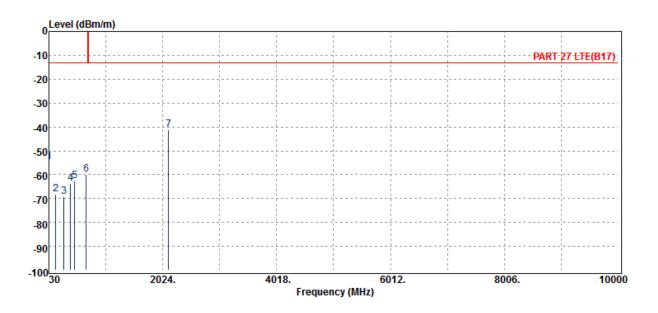
Page 413 of 456

Operation Band :LTE B17 **Test Date** :2019-03-28

Fundamental Frequency :709 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.60	-24.23	-30.05	-0.45	0.13	-13.00	-41.60
151.25	-68.11	-60.17	-7.05	-1.01	0.12	-13.00	-55.11
294.81	-69.38	-65.90	-2.15	-1.42	0.10	-13.00	-56.38
411.21	-63.76	-60.57	-1.77	-1.68	0.26	-13.00	-50.76
479.11	-62.72	-58.63	-2.43	-1.82	0.17	-13.00	-49.72
682.81	-59.70	-57.03	-1.31	-2.20	0.84	-13.00	-46.70
2127.00	-41.15	-47.78	9.58	-4.11	1.16	-13.00	-28.15

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

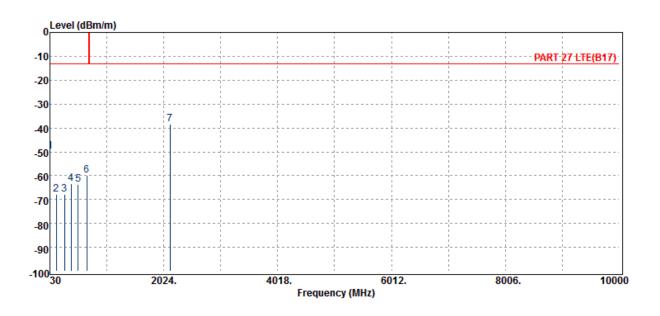


Page 414 of 456

Operation Band :LTE B17 **Test Date** :2019-03-28

Fundamental Frequency :710 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-49.97	-19.60	-30.05	-0.45	0.13	-13.00	-36.97
143.49	-67.74	-58.96	-7.92	-0.99	0.12	-13.00	-54.74
288.99	-67.93	-64.41	-2.21	-1.41	0.10	-13.00	-54.93
400.54	-63.43	-60.39	-1.66	-1.66	0.27	-13.00	-50.43
521.79	-63.63	-60.46	-1.41	-1.91	0.16	-13.00	-50.63
672.14	-60.01	-57.17	-1.41	-2.19	0.76	-13.00	-47.01
2130.00	-38.35	-44.93	9.56	-4.12	1.13	-13.00	-25.35

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



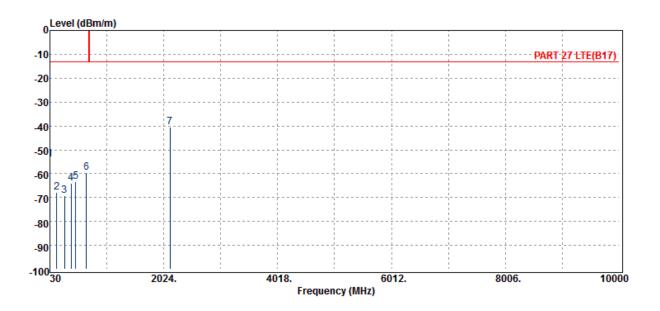
Page 415 of 456

Operation Band :LTE B17 **Test Date** :2019-03-28

Fundamental Frequency :710 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.01	-23.64	-30.05	-0.45	0.13	-13.00	-41.01
151.25	-67.83	-59.89	-7.05	-1.01	0.12	-13.00	-54.83
288.99	-69.08	-65.56	-2.21	-1.41	0.10	-13.00	-56.08
398.60	-63.94	-60.93	-1.62	-1.66	0.27	-13.00	-50.94
482.99	-63.33	-59.28	-2.39	-1.83	0.17	-13.00	-50.33
665.35	-59.66	-56.75	-1.45	-2.17	0.71	-13.00	-46.66
2130.00	-40.59	-47.16	9.56	-4.12	1.13	-13.00	-27.59

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

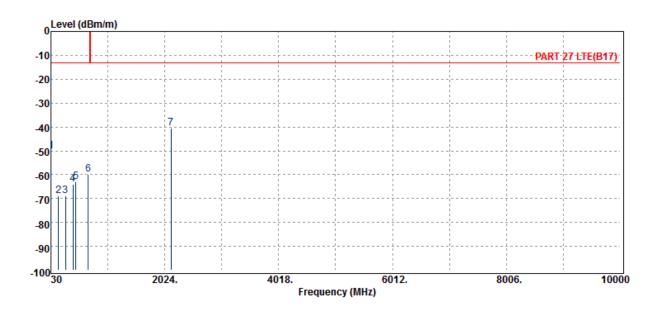


Page 416 of 456

Operation Band :LTE B17 **Test Date** :2019-03-28

Fundamental Frequency :711 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane EUT Pol. :E2 Plane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.18	-19.81	-30.05	-0.45	0.13	-13.00	-37.18
162.89	-68.69	-61.74	-6.02	-1.05	0.12	-13.00	-55.69
287.05	-68.93	-65.31	-2.33	-1.40	0.10	-13.00	-55.93
413.15	-64.08	-60.84	-1.81	-1.69	0.26	-13.00	-51.08
466.50	-62.81	-58.92	-2.28	-1.79	0.19	-13.00	-49.81
682.81	-59.96	-57.29	-1.31	-2.20	0.84	-13.00	-46.96
2133.00	-40.60	-47.16	9.53	-4.12	1.14	-13.00	-27.60

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



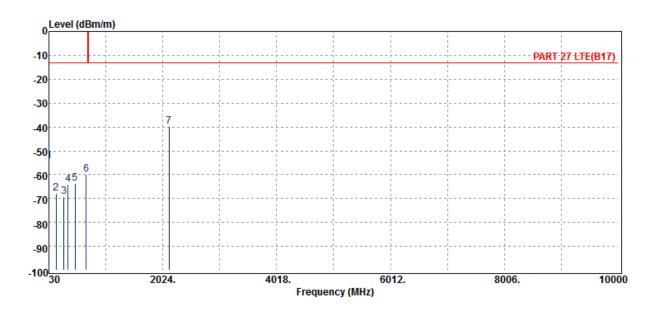
Page 417 of 456

Operation Band :LTE B17 **Test Date** :2019-03-28

Fundamental Frequency :711 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.29	-23.91	-30.05	-0.45	0.13	-13.00	-41.29
159.01	-67.73	-60.46	-6.35	-1.04	0.12	-13.00	-54.73
293.84	-69.05	-65.59	-2.15	-1.42	0.10	-13.00	-56.05
366.59	-64.00	-60.88	-1.75	-1.59	0.22	-13.00	-51.00
488.81	-63.60	-59.64	-2.27	-1.84	0.16	-13.00	-50.60
684.75	-59.78	-57.08	-1.35	-2.21	0.85	-13.00	-46.78
2133.00	-39.90	-46.45	9.53	-4.12	1.14	-13.00	-26.90

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



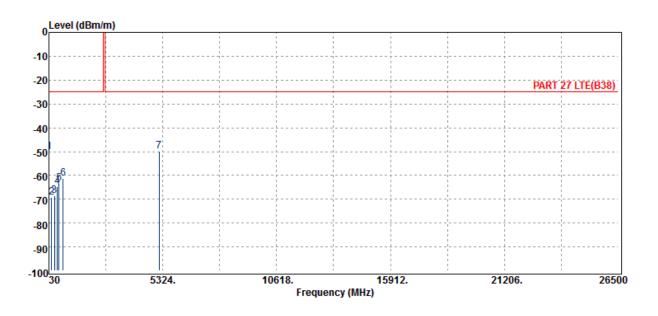
Page 418 of 456

Radiated Spurious Emission Measurement Result: LTE-Band 38 (The Worst Case)

Operation Band :LTE B38 **Test Date** :2019-03-28

Fundamental Frequency :2575 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH LOW Engineer :Kane EUT Pol. :E2 Plane Measurement Antenna Pol. :VERTICAL



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-50.27	-19.80	-30.05	-0.45	0.03	-25.00	-25.27
153.19	-69.10	-61.27	-6.89	-1.02	0.09	-25.00	-44.10
285.11	-68.54	-64.83	-2.44	-1.40	0.13	-25.00	-43.54
415.09	-64.81	-61.44	-1.85	-1.69	0.17	-25.00	-39.81
497.54	-63.49	-59.68	-2.00	-1.86	0.05	-25.00	-38.49
697.36	-61.21	-57.80	-1.40	-2.22	0.21	-25.00	-36.21
5150.00	-49.99	-56.58	12.70	-6.77	0.67	-25.00	-24.99

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 419 of 456

Operation Band Fundamental Frequency

Operation Mode EUT Pol.

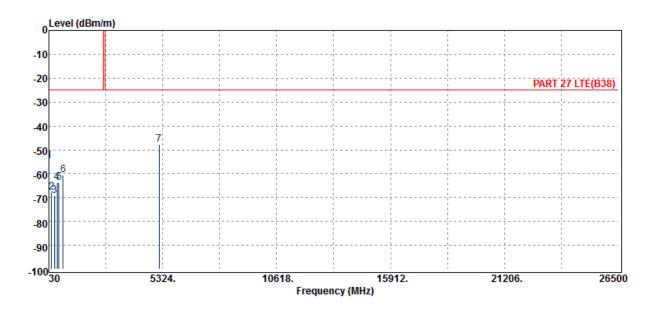
:LTE B38 :2575 MHz :Tx CH LOW :E2 Plane

Test Date :2019-03-28

Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane

:HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.53	-24.06	-30.05	-0.45	0.03	-25.00	-29.53
151.25	-67.88	-59.91	-7.05	-1.01	0.09	-25.00	-42.88
289.96	-69.26	-65.83	-2.15	-1.41	0.12	-25.00	-44.26
405.39	-63.79	-60.51	-1.75	-1.67	0.14	-25.00	-38.79
492.69	-63.77	-59.85	-2.14	-1.85	0.07	-25.00	-38.77
694.45	-60.42	-57.08	-1.35	-2.22	0.23	-25.00	-35.42
5150.00	-47.62	-54.22	12.70	-6.77	0.67	-25.00	-22.62

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 420 of 456

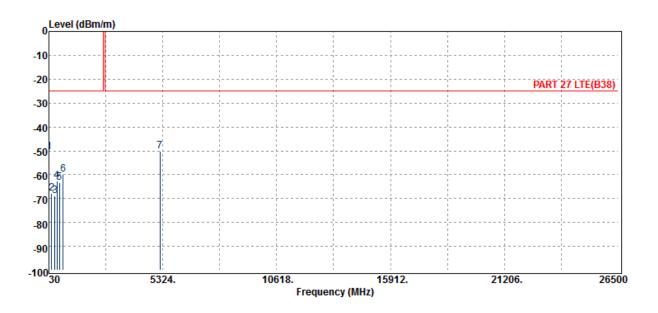
Operation Band Fundamental Frequency **Operation Mode**

EUT Pol.

:LTE B38 :2595 MHz :Tx CH MID :E2 Plane

Test Date :2019-03-28 Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
							_
30.00	-50.51	-20.04	-30.05	-0.45	0.03	-25.00	-25.51
160.95	-67.74	-60.60	-6.17	-1.05	0.08	-25.00	-42.74
298.69	-68.81	-65.49	-2.00	-1.43	0.11	-25.00	-43.81
406.36	-62.67	-59.40	-1.75	-1.67	0.14	-25.00	-37.67
585.81	-62.55	-59.51	-1.13	-2.04	0.13	-25.00	-37.55
684.75	-59.84	-56.56	-1.35	-2.21	0.27	-25.00	-34.84
5190.00	-50.30	-57.20	12.94	-6.66	0.62	-25.00	-25.30

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



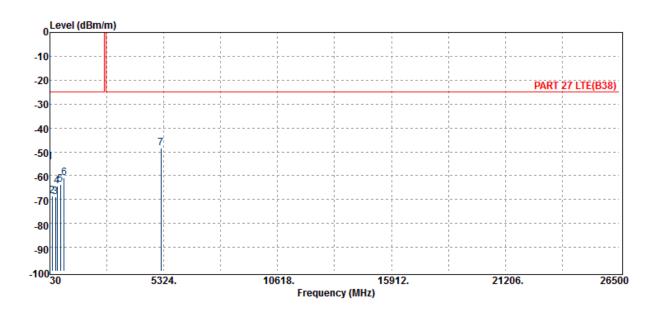
Page 421 of 456

Operation Band :LTE B38 **Test Date** :2019-03-28

Fundamental Frequency Temp./Humi. :2595 MHz :22 deg_C / 61 RH

Operation Mode :Tx CH MID Engineer :Kane EUT Pol.

:E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin	
•		Output Level	Gain	Loss			•	
MHz	dBm	[.] dBm	dBd/dBi	dB	dB	dBm	dB	
								_
30.00	-54.18	-23.71	-30.05	-0.45	0.03	-25.00	-29.18	
139.61	-68.67	-59.17	-8.61	-0.97	0.09	-25.00	-43.67	
294.81	-68.90	-65.45	-2.15	-1.42	0.12	-25.00	-43.90	
372.41	-64.25	-61.03	-1.70	-1.60	0.08	-25.00	-39.25	
512.09	-63.65	-60.18	-1.57	-1.90	-0.01	-25.00	-38.65	
694.45	-60.98	-57.64	-1.35	-2.22	0.23	-25.00	-35.98	
5190.00	-48.61	-55.51	12.94	-6.66	0.62	-25.00	-23.61	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 422 of 456

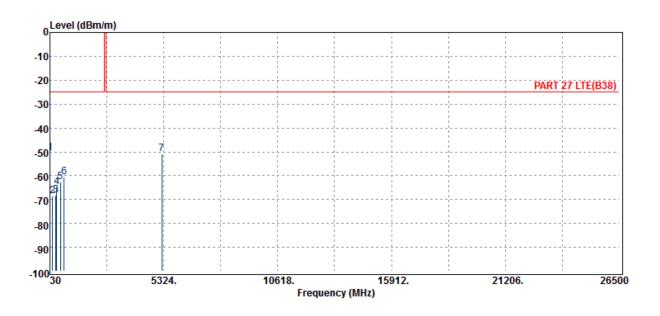
Operation Band Fundamental Frequency

Operation Mode EUT Pol.

:LTE B38 :2615 MHz :Tx CH HIGH :E2 Plane

Test Date :2019-03-28 Temp./Humi. :22 deg_C / 61 RH

Engineer :Kane :VERTICAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG	Antenna	Cable	Filter	Limit	Margin
		Output Level	Gain	Loss			
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-50.55	-20.07	-30.05	-0.45	0.03	-25.00	-25.55
149.31	-68.57	-60.44	-7.22	-1.00	0.09	-25.00	-43.57
299.66	-68.14	-64.85	-1.96	-1.43	0.11	-25.00	-43.14
338.46	-64.83	-61.86	-1.51	-1.52	0.06	-25.00	-39.83
578.05	-62.93	-59.59	-1.39	-2.02	0.07	-25.00	-37.93
686.69	-60.51	-57.21	-1.35	-2.21	0.26	-25.00	-35.51
5230.00	-50.93	-57.93	13.12	-6.79	0.67	-25.00	-25.93

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



:2019-03-28

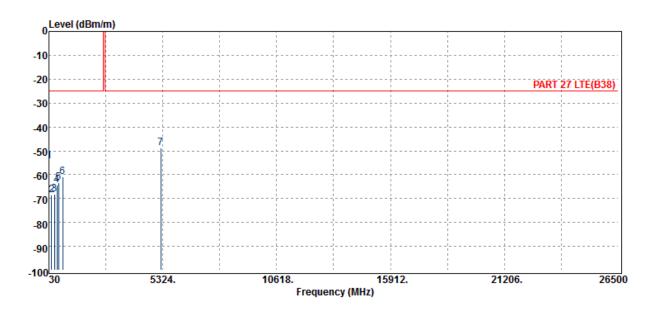
Page 423 of 456

Operation Band :LTE B38 **Test Date**

Fundamental Frequency :2615 MHz Temp./Humi. :22 deg_C / 61 RH

Operation Mode :Tx CH HIGH Engineer :Kane

EUT Pol. :E2 Plane :HORIZONTAL Measurement Antenna Pol.



Freq.	ERP/EIRP	SG Output Level	Antenna Gain	Cable Loss	Filter	Limit	Margin
MHz	dBm	dBm	dBd/dBi	dB	dB	dBm	dB
30.00	-54.31	-23.84	-30.05	-0.45	0.03	-25.00	-29.31
149.31	-68.48	-60.35	-7.22	-1.00	0.09	-25.00	-43.48
284.14	-68.01	-64.29	-2.47	-1.39	0.13	-25.00	-43.01
401.51	-64.38	-61.17	-1.68	-1.66	0.13	-25.00	-39.38
488.81	-63.30	-59.27	-2.27	-1.84	0.09	-25.00	-38.30
679.90	-60.84	-57.67	-1.25	-2.20	0.28	-25.00	-35.84
5230.00	-48.88	-55.88	13.12	-6.79	0.67	-25.00	-23.88

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 424 of 456

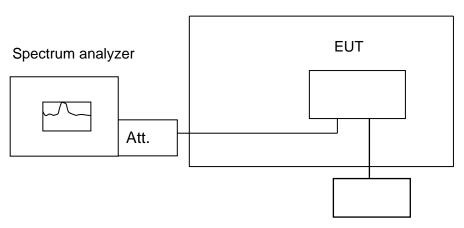
FREQUENCY STABILITY MEASUREMENT

10.1. Standard Applicabl

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

10.2. Test Set-up

Temperature Chamber



Variable DC Power Supply

Note: Measurement setup for testing on Antenna connector

10.3. Measurement Procedure

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

Set chamber temperature to 25°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency. Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint as declared by the manufacturer, record the maximum frequency change.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

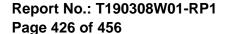
transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law



Page 425 of 456

10.4. Measurement Equipment Used

101-1 Mode and Morte Equipment 6004								
EQUIPMENT TYPE	MFR	MFR MODEL SERIAL NUMBER NUMBER		LAST CAL.	CAL DUE.			
EXA Spectrum Analyzer	Agilent	N9010A	MY53400256	11/21/2018	11/20/2019			
Digital Radio Communication Tester	R&S	CMU200	CMU200 100535 (09/16/2019			
DC Power Supply	Agilent	E3640A	KR93300208	08/15/2018	08/14/2019			
Thermostatic/Hrgrosatic Chamber	TAICHY	MHG-150LF	930619	10/08/2018	10/07/2019			
Attenuator	Mini-Circuit	BW-S10W2+	1	02/26/2019	02/25/2020			
DC Block	Mini-Circuits	BLK-18-S+	31129(1)	02/26/2019	02/25/2020			
Splitter	RF-LAMBAD	RFLT2W1G18G	11-JSPD022-013	02/26/2019	02/25/2020			
Coaxial Cables	Woken	00100A1F1A185C	RF12	02/26/2019	02/25/2020			
Wideband Radio Communication Tester	R&S	CMW 500	116875	04/20/2018	04/19/2019			

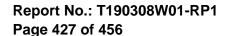




10.5. Measurement Result

lient Kesuit	GPRS 85	0 Mid Channel	836.6	MHz			
		it: +/- 2.5 ppm	030.0	IVII IZ			
Vdc							
	FREQUENCY ERROR vs. VOLTAGE						
4	20	836.600006	6	2091			
3.85	20	836.600009	9	2091			
3.7	20	836.600005	5	2091			
3.2 (End point)	20	836.600009	9	2091			
3.2 (Liid poliit)		CY ERROR vs.		2071			
3.85	50	836.600001	1	2091			
3.85	40	836.600008	8	2091			
3.85	30	836.599991	-9	2091			
3.85	20	836.600001	1	2091			
3.85	10	836.600001	1	2091			
3.85	0	836.599991	-9	2091			
3.85	-10	836.600007	7	2091			
3.85	-20	836.6	0	2091			
3.85	-30	836.599999	-1	2091			
	GPRS 1900 Mid Channel 1880 MHz						
	Lim	it: +/- 2.5 ppm					
Vdc	Temp. (°C)	Freq. (MHz)	Delta (Hz)	Limit (Hz)			
	FREQUENCY	ERROR vs. V	OLTAGE	=			
4	20	1880.000005	5	4700			
3.85	20	1879.999993	-7	4700			
3.7	20	1879.999999	-1	4700			
3.2 (End point)	20	1879.99999	-10	4700			
	FREQUEN	CY ERROR vs.	Temp.				
3.85	50	1879.999997	-3	4700			
3.85	40	1880.000004	4	4700			
3.85	30	1880.000009	9	4700			
3.85	20	1879.999994	-6	4700			
3.85	10	1880.000006	6	4700			
3.85	0	1880.000007	7	4700			
3.85	-10	1879.999997	-3	4700			
3.85	-20	1880.000008	8	4700			
3.85	-30	1879.999998	-2	4700			

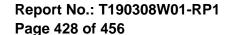
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.





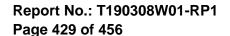
WCDMA II Mid Channel 1880 MHz								
Limit: +/- 2.5 ppm								
Vdc	Temp. (°℃)	Freq. (MHz)	Delta (Hz)	Limit (Hz)				
	FREQUENCY	ERROR vs. V	OLTAGE					
4	20	1880.000004	4	4700				
3.85	20	1879.999994	-6	4700				
3.7	20	1880.000002	2	4700				
3.2 (End point)	20	1880	0	4700				
	FREQUENCY ERROR vs. Temp.							
3.85	50	1879.999992	-8	4700				
3.85	40	1879.999994	-6	4700				
3.85	30	1880	0	4700				
3.85	20	1880.000008	8	4700				
3.85	10	1879.999997	-3	4700				
3.85	0	1880.000003	3	4700				
3.85	-10	1880.000004	4	4700				
3.85	-20	1880.000006	6	4700				
3.85	-30	1880.000003	3	4700				

WCDMA IV Mid Channel 1732.6 MHz							
Limit: +/- 2.5 ppm							
Vdc	Temp. (°℃)	Freq. (MHz)	Delta (Hz)	Limit (Hz)			
	FREQUENCY	ERROR vs. V	OLTAGE	-			
4	20	1732.6	0	4331			
3.85	20	1732.599992	-8	4331			
3.7	20	1732.60001	10	4331			
3.2 (End point)	20	1732.599992	-8	4331			
	FREQUENC	CY ERROR vs.	Temp.				
3.85	50	1732.599995	-5	4331			
3.85	40	1732.599996	-4	4331			
3.85	30	1732.600006	6	4331			
3.85	20	1732.599998	-2	4331			
3.85	10	1732.599992	-8	4331			
3.85	0	1732.599998	-2	4331			
3.85	-10	1732.599998	-2	4331			
3.85	-20	1732.599994	-6	4331			
3.85	-30	1732.599994	-6	4331			





WCDMA V Mid Channel 836.6 MHz								
Limit: +/- 2.5 ppm								
Vdc	Temp. (°C)	Freq. (MHz)	Delta (Hz)	Limit (Hz)				
	FREQUENCY	ERROR vs. V	OLTAGE					
4	20	836.599998	-2	2091				
3.85	20	836.600007	7	2091				
3.7	20	836.59999	-10	2091				
3.2 (End point)	20	836.599995	-5	2091				
	FREQUENC	CY ERROR vs.	Temp.					
3.85	50	836.599997	-3	2091				
3.85	40	836.600008	8	2091				
3.85	30	836.599994	-6	2091				
3.85	20	836.599995	-5	2091				
3.85	10	836.599993	-7	2091				
3.85	0	836.599998	-2	2091				
3.85	-10	836.600005	5	2091				
3.85	-20	836.599997	-3	2091				
3.85	-30	836.600005	5	2091				





Reference Freq.:	LTE B2 Mid Channel		1880	MHz 20M QPSK CH 18900
Power Supply Vdc	Temp.(°℃)	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
_		Freq. ERROR vs	. VOLTAGE	
4	25	1879.999999	-1	4700
3.85	25	1879.999996	-4	4700
3.7	25	1879.999998	-2	4700
3.2 (End Point)	25	1880.000003	3	4700
,		Freq. ERROR	vs. Temp.	
3.85	-30	1880.000007	7	4700
3.85	-20	1880.000007	7	4700
3.85	-10	1879.999994	-6	4700
3.85	0	1879.999997	-3	4700
3.85	10	1879.999997	-3	4700
3.85	20	1880.000000	0	4700
3.85	30	1880.000009	9	4700
3.85	40	1880.000004	4	4700
3.85	50	1880.000002	2	4700
Reference Freq.:		B4 Mid annel	1732.5	MHz 20M QPSK CH 20175
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
	F	req. ERROR vs	. VOLTAGE	
4	25	1732.500004	4	4331
3.85	25	1732.500000	0	4331
3.7	25	1732.500007	7	4331
3.2 (End Point)	25	1732.500005	5	4331
		Freq. ERROR	vs. Temp.	
3.85	-30	1732.499992	-8	4331
3.85	-20	1732.499997	-3	4331
3.85	-10	1732.499994	-6	4331
3.85	0	1732.499999	-1	4331
3.85	10	1732.500001	1	4331
3.85	20	1732.500003	3	4331
3.85	30	1732.499994	-6	4331
2.05	40	1722 400004	4	4221

40

50

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. 除非另有說明,此根告结果僅對測試之樣品負責,同時此樣品僅保留90天。本報告未經本公司書面許可,不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's object responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

1732.499996

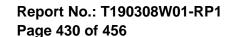
1732.500001

3.85

3.85

4331

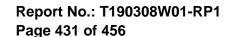
4331





Reference Freq.:	LTE B5 Mid Channel		836.5	MHz 10M QPSK CH 20525
Power Supply Vdc	Temp.(°C)	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
		Freq. ERROR vs	s. VOLTAGE	
4	25	836.500008	8	2091
3.85	25	836.500008	8	2091
3.7	25	836.499997	-3	2091
3.2 (End Point)	25	836.499999	-1	2091
		Freq. ERROR	vs. Temp.	
3.85	-30	836.499993	-7	2091
3.85	-20	836.500005	5	2091
3.85	-10	836.500002	2	2091
3.85	0	836.500004	4	2091
3.85	10	836.499992	-8	2091
3.85	20	836.499992	-8	2091
3.85	30	836.500008	8	2091
3.85	40	836.499996	-4	2091
3.85	50	836.499992	-8	2091

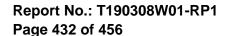
Reference Freq.:	LTE B7 Mid Channel		2535	MHz 10M QPSK CH 21100
Power Supply Vdc	Temp.(°C)	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
	F	req. ERROR vs	. VOLTAGE	
4	25	2535.000003	3	6338
3.85	25	2534.999996	-4	6338
3.7	25	2535.000002	2	6338
3.2 (End Point)	25	2535.000003	3	6338
		Freq. ERROR	vs. Temp.	
3.85	-30	2535.000008	8	6338
3.85	-20	2534.999995	-5	6338
3.85	-10	2535.000008	8	6338
3.85	0	2535.000006	6	6338
3.85	10	2535.000001	1	6338
3.85	20	2535.000008	8	6338
3.85	30	2534.999994	-6	6338
3.85	40	2534.999992	-8	6338
3.85	50	2534.999995	-5	6338





Reference Freq.:	LTE B12 Mid Channel		707.5	MHz 10M QPSK CH 23095			
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)			
Freq. ERROR vs. VOLTAGE							
4	25	707.500005	5	1769			
3.85	25	707.499992	-8	1769			
3.7	25	707.499995	-5	1769			
3.2 (End Point)	25	707.500000	0	1769			
Freq. ERROR vs. Temp.							
3.85	-30	707.500001	1	1769			
3.85	-20	707.500008	8	1769			
3.85	-10	707.499999	-1	1769			
3.85	0	707.499991	-9	1769			
3.85	10	707.499994	-6	1769			
3.85	20	707.499996	-4	1769			
3.85	30	707.499998	-2	1769			
3.85	40	707.499995	-5	1769			
3.85	50	707.499997	-3	1769			

Reference Freq.:	LTE B13 Mid Channel		782	MHz 10M QPSK CH 23230				
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)				
Freq. ERROR vs. VOLTAGE								
4	25	782.000008	8	1955				
3.85	25	781.999996	-4	1955				
3.7	25	781.999996	-4	1955				
3.2 (End Point)	25	782.000004	4	1955				
Freq. ERROR vs. Temp.								
3.85	-30	781.999996	-4	1955				
3.85	-20	782.000003	3	1955				
3.85	-10	781.999996	-4	1955				
3.85	0	781.999998	-2	1955				
3.85	10	781.999995	-5	1955				
3.85	20	781.999996	-4	1955				
3.85	30	781.999997	-3	1955				
3.85	40	781.999995	-5	1955				
3.85	50	781.999992	-8	1955				





Reference Freq.:		B17 Mid annel	710	MHz 10M QPSK CH 23790
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
	F	req. ERROR vs	. VOLTAGE	
4	25	709.999992	-8	1775
3.85	25	709.999997	-3	1775
3.7	25	709.999999	-1	1775
3.2 (End Point)	25	710.000002	2	1775
,		Freq. ERROR	vs. Temp.	
3.85	-30	710.000010	10	1775
3.85	-20	710.000007	7	1775
3.85	-10	709.999997	-3	1775
3.85	0	709.999997	-3	1775
3.85	10	710.000000	0	1775
3.85	20	709.999996	-4	1775
3.85	30	710.000006	6	1775
3.85	40	710.000003	3	1775
3.85	50	710.000009	9	1775
Reference Freq.:		B38 Mid annel	2595	MHz 10M QPSK CH 38000
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
	F	req. ERROR vs	. VOLTAGE	
4	25	2594.999992	-8	6488
3.85	25	2594.999998	-2	6488
3.7	25	2595.000006	6	6488
3.2 (End Point)	25	2595.000004	4	6488
		Freq. ERROR	vs. Temp.	
3.85	-30	2594.999998	-2	6488
3.85	-20	2595.000008	8	6488
3.85	-10	2594.999995	-5	6488
3.85	0	2595.000007	7	6488
3.85	10	2594.999992	-8	6488
3.00	10	20711777772		
3.85	20	2595.000000	0	6488
			0 5	6488 6488
3.85	20	2595.000000		

Note: The battery is rated 3.85Vdc.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Report No.: T190308W01-RP1

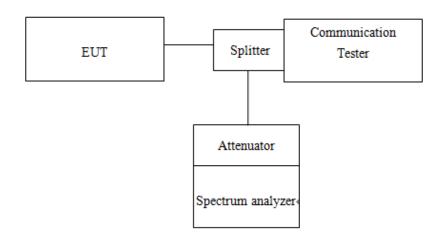
Page 433 of 456

PEAK TO AVERAGE RATIO 11.

11.1. Standard Applicable

The peak-to-average ratio (PAR) of the transmission may not exceed 13dB.

11.2. Test SET-UP



11.3. Measurement Procedure

- 1. KDB 971168 D01 is employed as the following procedure is proper adjusted accordingly:
- 2. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth; & internal =1ms
- Set the number of counts to a value that stabilizes the measured CCDF curve.

11.4. Measurement Equipment Used

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
EXA Spectrum Analyzer	Agilent	N9010A	MY53400256	11/21/2018	11/20/2019
Digital Radio Communication Tester	R&S	CMU200	100535	09/17/2018	09/16/2019
DC Power Supply	Agilent	E3640A	KR93300208	08/15/2018	08/14/2019
Attenuator	Mini-Circuit	BW-S10W2+	1	02/26/2019	02/25/2020
DC Block	Mini-Circuits	BLK-18-S+	31129(1)	02/26/2019	02/25/2020
Splitter	RF-LAMBAD	RFLT2W1G18G	11-JSPD022-013	02/26/2019	02/25/2020
Coaxial Cables	Woken	00100A1F1A185C	RF12	02/26/2019	02/25/2020
Wideband Radio Communication Tester	R&S	CMW 500	116875	04/20/2018	04/19/2019

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Report No.: T190308W01-RP1

Page 434 of 456

11.5. Measurement Result

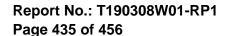
Tabular Results:

Eroa		Peak-to-Average			
Freq. (MHz)	СН	GSM	GPRS		
(IVII IZ)		1900	1900		
1850.2	512	9.83	8.03		
1880	661	9.29	9.85		
1909.8	810	10.38	9.74		

Freq.		Peak-to-	Average R	atio (dB)
(MHz)	CH	WCDMA	HSDPA	HSUPA
(IVII IZ)		II	II	II
1852.4	9262	3.49	3.54	3.58
1880	9400	3.64	3.64	3.64
1907.6	9538	3.67	3.61	3.73

Eroa		Peak-to-	Average R	atio (dB)
Freq. (MHz)	CH	WCDMA	HSDPA	HSUPA
(IVIITZ)		IV	IV	IV
1712.4	1312	3.46	3.39	3.39
1732.6	1413	3.47	3.64	3.57
1752.6	1513	3.56	3.59	3.42

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.





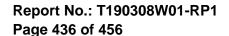
	LTE BAND 2									
Chan	nel band	width: 1.4l	VIHz	Char	nnel band	lwidth: 3N	1Hz			
Freq.	СН	PAPR	(dB)	Freq.	СН	PAPR	(dB)			
(MHz)	СП	64QAM	Limit	(MHz)	СП	64QAM	Limit			
1850.7	18607	6.02	13	1851.5	18615	5.98	13			
1880.0	18900	5.55	13	1880.0	18900	5.79	13			
1909.3	19193	5.63	13	1908.5	19185	5.64	13			

	LTE BAND 2									
Char	nnel band	dwidth: 5N	1Hz	Chan	nel band	width: 101	ИНz			
Freq.	СН	PAPR	(dB)	Freq.	СН	PAPR	(dB)			
(MHz)	СП	64QAM	Limit	(MHz)	СП	64QAM	Limit			
1852.5	18625	5.70	13	1855.0	18650	5.87	13			
1880.0	18900	5.70	13	1880.0	18900	5.89	13			
1907.5	19175	5.67	13	1905.0	19150	5.89	13			

LTE BAND 2									
Chan	Channel bandwidth: 15MHz				nel band	width: 201	ИНz		
Freq.	СН	PAPR	(dB)	Freq.	СН	PAPR	(dB)		
(MHz)	СП	64QAM	Limit	(MHz)	СН	64QAM	Limit		
1857.5	18675	6.11	13	1860.0	18700	6.60	13		
1880.0	18900	6.14	13	1880.0	18900	6.58	13		
1902.5	19125	6.14	13	1900.0	19100	6.87	13		

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

Member of the SGS Group (SGS SA)





LTE BAND 4										
Channel bandwidth: 1.4MHz				Channel bandwidth: 3MHz						
Freq.	СН	PAPR	(dB)	Freq.	СН	PAPR	(dB)			
(MHz)	СП	64QAM	Limit	(MHz)	СН	64QAM	Limit			
1710.7	19957	6.10	13	1711.5	19965	6.00	13			
1732.5	20175	5.90	13	1732.5	20175	5.98	13			
1754.3	20393	6.06	13	1753.5	20385	6.06	13			

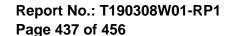
	LTE BAND 4									
Chan	nel ban	dwidth: 5N	/lHz	Chani	nel band	lwidth: 10	MHz			
Freq.	СН	PAPR	(dB)	Freq.	СН	PAPR	(dB)			
(MHz)	СП	64QAM	Limit	(MHz)	СП	64QAM	Limit			
1712.5	19957	5.86	13	1715.0	20000	5.89	13			
1732.5	20175	5.88	13	1732.5	20175	5.95	13			
1752.5	20375	5.87	13	1750.0	20350	6.08	13			

	LTE BAND 4										
Chani	nel band	lwidth: 15	MHz	Channel bandwidth: 20MHz							
Freq.	СН	PAPR	(dB)	Freq.	СН	PAPR	(dB)				
(MHz)	СП	64QAM	Limit	(MHz)	СП	64QAM	Limit				
1717.5	20025	6.12	13	1720.0	20050	6.60	13				
1732.5	20175	6.21	13	1732.5	20175	6.75	13				
1747.5	20325	6.12	13	1745.0	20300	6.81	13				

LTE BAND 7										
Chan	nel band	dwidth: 5N	ЛHz	Chani	nel band	lwidth: 10	MHz			
Freq.	СН	PAPR	(dB)	Freq.	СН	PAPR	(dB)			
(MHz)	Сп	64QAM	Limit	(MHz)	Сп	64QAM	Limit			
2502.5	20775	6.09	13	2505.0	20800	6.05	13			
2535.0	21100	6.18	13	2535.0	21100	5.75	13			
2567.5	21375	6.10	13	2565.0	21350	6.08	13			

LTE BAND 7										
Chani	nel band	lwidth: 15	MHz	Channel bandwidth: 20MHz						
Freq. CH		PAPR	(dB)	Freq. CH		PAPR (dB)				
(MHz)	СП	64QAM	Limit	(MHz)	СП	64QAM	Limit			
2507.5	20825	6.25	13	2510	20850	6.70	13			
2535.0	21100	6.22	13	2535	21100	6.73	13			
2562.5	21375	6.24	13	2560	21350	6.65	13			

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.





LTE BAND 12 Channel bandwidth: 1.4MHz Channel bandwidth: 3MHz Freq. PAPR (dB) Freq. PAPR (dB) CH CH (MHz) 64QAM (MHz) 64QAM Limit Limit 699.7 23017 5.98 13 13 700.5 23025 5.83 707.5 23095 5.58 13 707.5 23095 13 5.86 715.3 23173 5.80 13 5.91 13 714.5 23165

LTE BAND 12										
Char	nnel band	dwidth: 5N	1Hz	Channel bandwidth: 10MHz						
Freq. CH		PAPR	(dB)	Freq.	СН	PAPR (dB)				
(MHz)	СП	64QAM	Limit	(MHz)	СП	64QAM	Limit			
701.5	23035	5.76	13	704.0	23060	5.79	13			
707.5	23095	5.71	13	707.5	23095	5.84	13			
713.5	23155	5.70	13	711.0	23130	5.95	13			

LTE BAND 13										
Chan	nel band	dwidth: 5N	ЛHz	Channel bandwidth: 10MHz						
Freq. CH	PAPR	(dB)	Freq.	СН	PAPR (dB)					
(MHz)	СП	64QAM	Limit	(MHz)	CII	64QAM	Limit			
779.5	23205	6.17	13							
782.0	23230	6.17	13	782.0	23230	6.21	13			
784.5	23255	5.91	13							

LTE BAND 17										
Chan	nel bandv	width: 1.4l	VIHz	Channel bandwidth: 3MHz						
Freq. CH		PAPR	(dB)	Freq.	СН	PAPR (dB)				
(MHz)	СП	64QAM	Limit	(MHz)	СП	64QAM	Limit			
706.5	23755	5.43	13	709.0	23780	5.85	13			
710.0	23790	5.53	13	710.0	23790	5.80	13			
713.5	23825	5.62	13	711.0	23800	5.80	13			

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



Page 438 of 456



LTE BAND 38										
Char	nnel band	lwidth: 5N	1Hz	Channel bandwidth: 10MHz						
Freq. CH	PAPR	(dB)	Freq.	СН	PAPR (dB)					
(MHz)	СП	64QAM	Limit	(MHz)	СП	64QAM	Limit			
2572.5	37775	7.79	13	2575	37800	8.97	13			
2595.0	38000	7.07	13	2595	38000	8.99	13			
2617.5	38225	9.76	13	2615	38200	9.20	13			

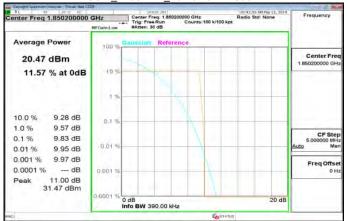
LTE BAND 38									
Chan	nel band	width: 15N	ИHz	Channel bandwidth: 20MHz					
Freq. CH		PAPR	(dB)	Freq.	СН	PAPR (dB)			
(MHz)	Сп	64QAM	Limit	(MHz)	Сп	64QAM	Limit		
2577.5	37825	9.35	13	2580.0	37850	10.12	13		
2595.0	38000	11.29	13	2595.0	38000	11.79	13		
2612.5	38175	9.18	13	2610.0	38150	11.13	13		

Please refer to next page for test plots.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



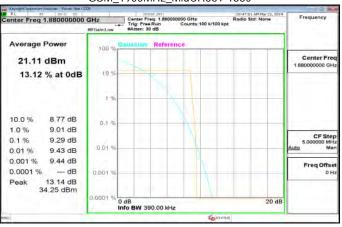
GSM_1900MHz_LowCH512-1850.2



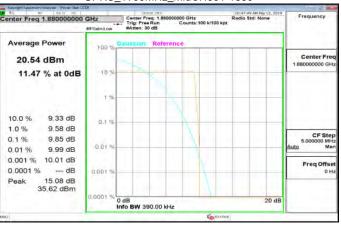
GPRS_1900MHz_LowCH512-1850.2



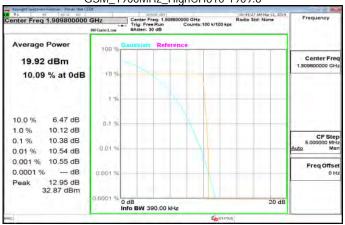
GSM 1900MHz MidCH661-1880



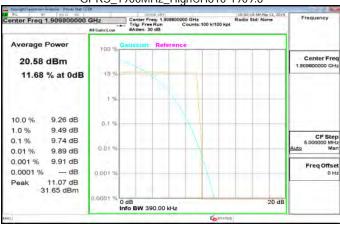
GPRS 1900MHz MidCH661-1880



GSM_1900MHz_HighCH810-1909.8



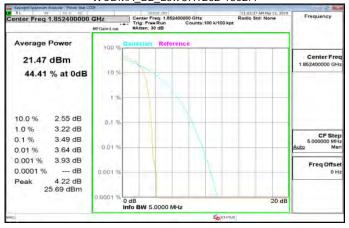
GPRS_1900MHz_HighCH810-1909.8



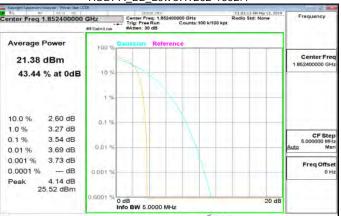
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



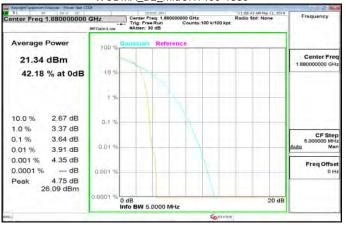
WCDMA_B2_LowCH9262-1852.4



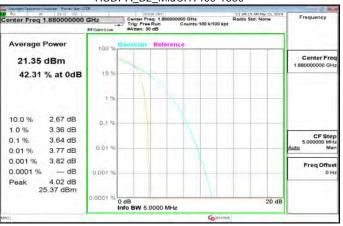
HSDPA_B2_LowCH9262-1852.4



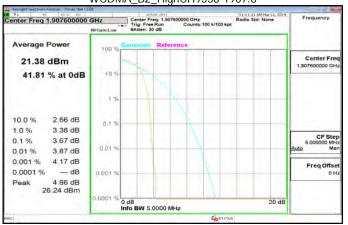
WCDMA B2 MidCH9400-1880



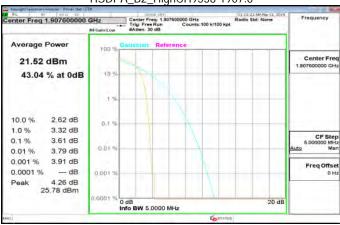
HSDPA B2 MidCH9400-1880



WCDMA_B2_HighCH9538-1907.6



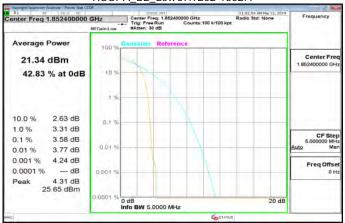
HSDPA_B2_HighCH9538-1907.6



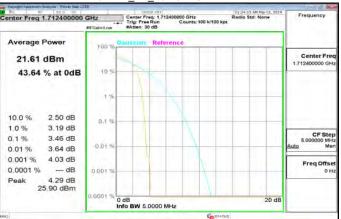
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



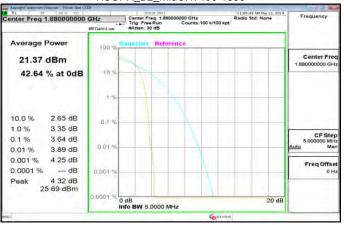
HSUPA_B2_LowCH9262-1852.4



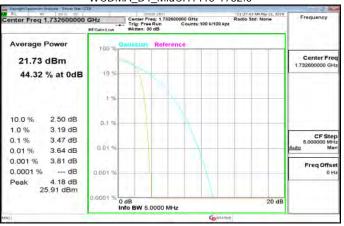
WCDMA_B4_LowCH1312-1712.4



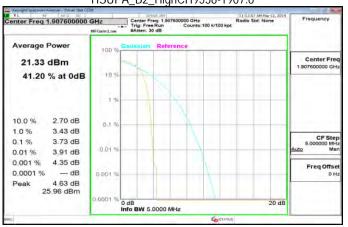
HSUPA B2 MidCH9400-1880



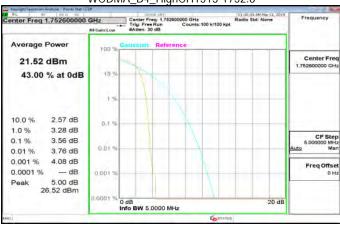
WCDMA B4 MidCH1413-1732.6



HSUPA_B2_HighCH9538-1907.6



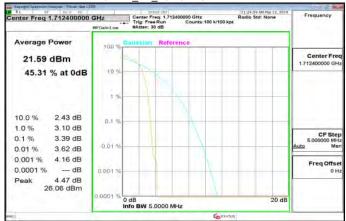
WCDMA_B4_HighCH1513-1752.6



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



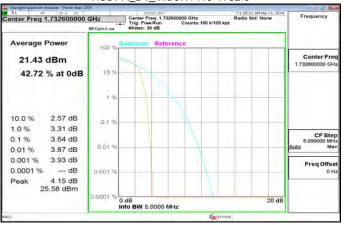
HSDPA_B4_LowCH1312-1712.4



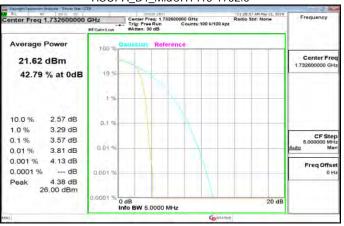
HSUPA_B4_LowCH1312-1712.4



HSDPA B4 MidCH1413-1732.6



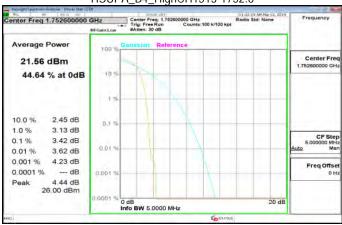
HSUPA B4 MidCH1413-1732.6



HSDPA_B4_HighCH1513-1752.6



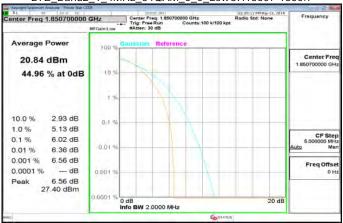
HSUPA_B4_HighCH1513-1752.6

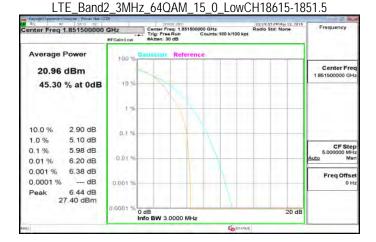


Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

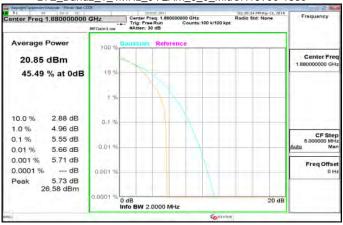


LTE_Band2_1_4MHz_64QAM_6_0_LowCH18607-1850.7

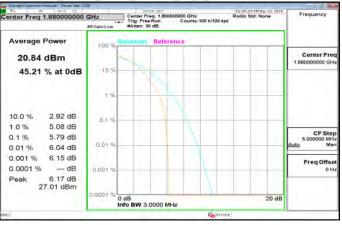




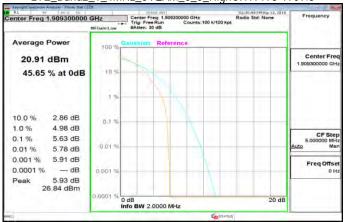
LTE Band2 1 4MHz 64QAM 6 0 MidCH18900-1880



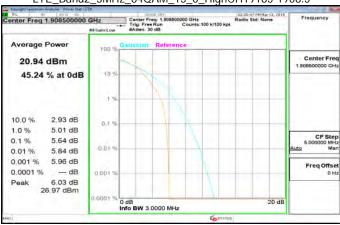
LTE Band2 3MHz 64QAM 15 0 MidCH18900-1880



LTE_Band2_1_4MHz_64QAM_6_0_HighCH19193-1909.3



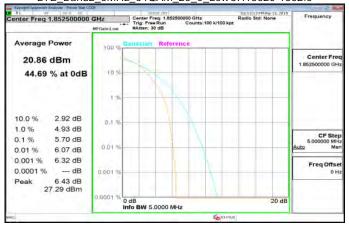
LTE_Band2_3MHz_64QAM_15_0_HighCH19185-1908.5



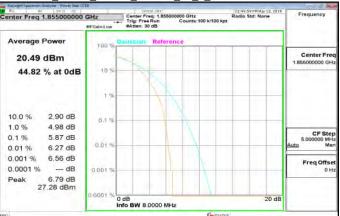
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



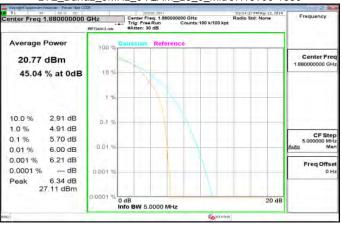
LTE_Band2_5MHz_64QAM_25_0_LowCH18625-1852.5



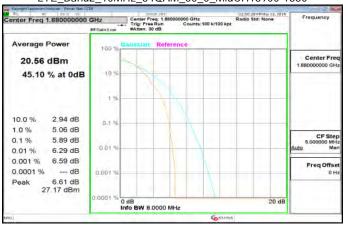
LTE_Band2_10MHz_64QAM_50_0_LowCH18650-1855



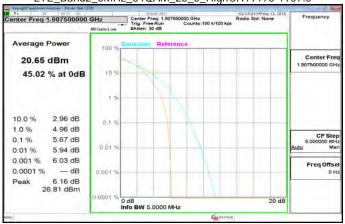
LTE Band2 5MHz 64QAM 25 0 MidCH18900-1880



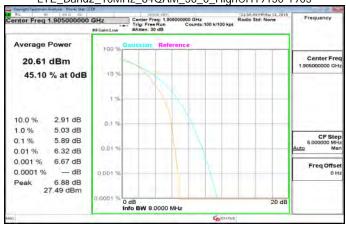
LTE Band2 10MHz 64QAM 50 0 MidCH18900-1880



LTE_Band2_5MHz_64QAM_25_0_HighCH19175-1907.5



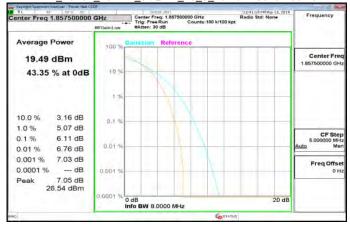
LTE_Band2_10MHz_64QAM_50_0_HighCH19150-1905



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



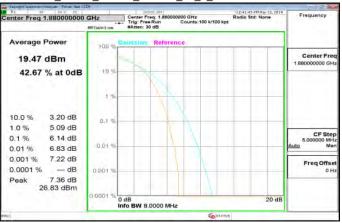
LTE_Band2_15MHz_64QAM_75_0_LowCH18675-1857.5



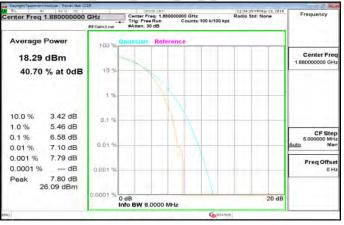
LTE_Band2_20MHz_64QAM_100_0_LowCH18700-1860



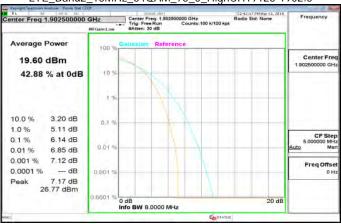
LTE Band2 15MHz 64QAM 75 0 MidCH18900-1880



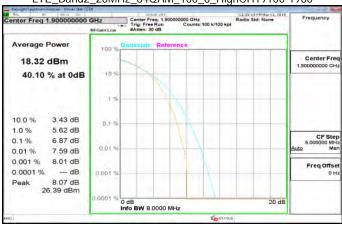
LTE Band2 20MHz 64QAM 100 0 MidCH18900-1880



LTE_Band2_15MHz_64QAM_75_0_HighCH19125-1902.5



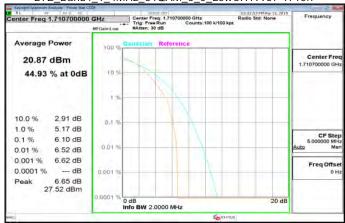
LTE_Band2_20MHz_64QAM_100_0_HighCH19100-1900



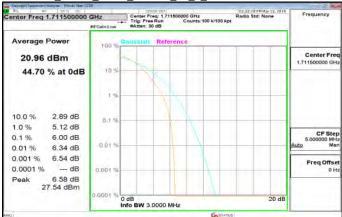
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



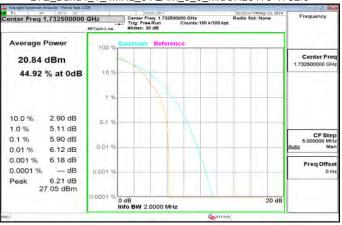
LTE_Band4_1_4MHz_64QAM_6_0_LowCH19957-1710.7



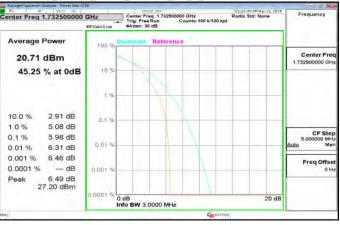
LTE_Band4_3MHz_64QAM_15_0_LowCH19965-1711.5



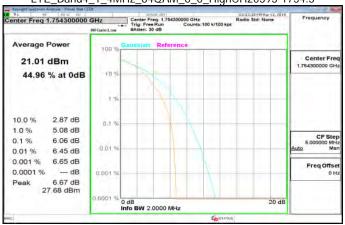
LTE Band4 1 4MHz 64QAM 6 0 MidCH20175-1732.5



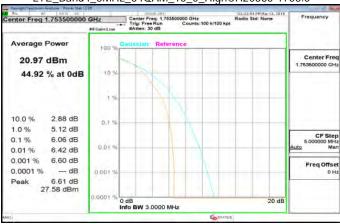
LTE Band4 3MHz 64QAM 15 0 MidCH20175-1732.5



LTE_Band4_1_4MHz_64QAM_6_0_HighCH20393-1754.3



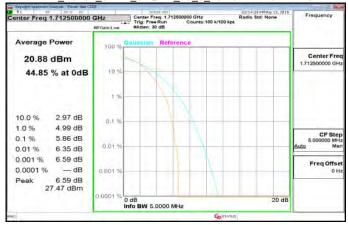
LTE_Band4_3MHz_64QAM_15_0_HighCH20385-1753.5



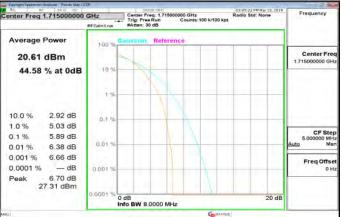
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.



LTE_Band4_5MHz_64QAM_25_0_LowCH19975-1712.5



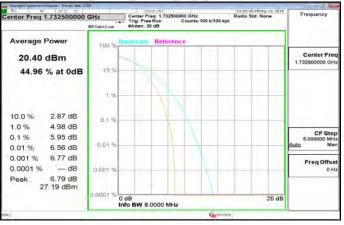
LTE_Band4_10MHz_64QAM_50_0_LowCH20000-1715



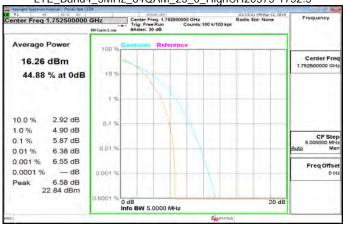
LTE Band4 5MHz 64QAM 25 0 MidCH20175-1732.5



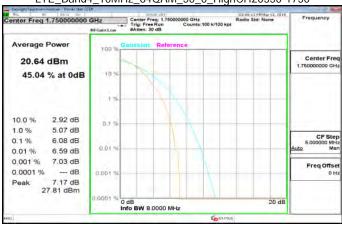
LTE Band4 10MHz 64QAM 50 0 MidCH20175-1732.5



LTE_Band4_5MHz_64QAM_25_0_HighCH20375-1752.5



LTE_Band4_10MHz_64QAM_50_0_HighCH20350-1750



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.