



Report No.: 220801336SHA-001

5 Unwanted Emissions at Band Edge

Test result: Pass

5.1 Limit

The power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) in watts by at least the following amounts:

For 900 MHz broadband operations in the 936.5–939.5 MHz band, by at least 50 + 10 log (P) dB.

5.2 Measurement Procedure

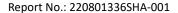
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 50 + 10log(P) dB.

For MIMO mode configurations, the limit was adjusted with a correction of -6.02dB [10Log(1/4)]¹ by using the Measure and Add 10Log(N) dB technique according to KDB 662911 D01 Multiple Transmitter Output accounting for simultaneous transmission from antenna ports . Then the limit was adjusted to -26.02dBm.

In the 100 kHz 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 and a RBW of 100kHz for measurements of emissions > 100kHz away from the band edges.

Spectrum analyzer detector was set as RMS.

Note: For MIMO mode, -6.02dB [10Log(1/4)] is used as correction by manufactory's requirement.

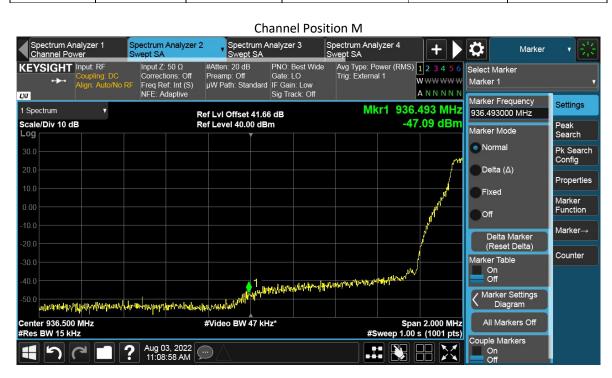


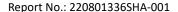


5.3 Measurement result

LTE-1C 20W with Filter Unit

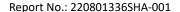
	Antenna	Channel	Modulation	Channel Bandwidth	RBW	Limit
	Port	Position		(MHz)	(kHz)	(dBm)
	В	M	64QAM	1.4	15	-26.02
					100	-26.02















LTE-1C 60W with Filter Unit

Antenna	Channel	Modulation	Channel Bandwidth	RBW	Limit
Port	Position		(MHz)	(kHz)	(dBm)
В	М	64QAM	3	30	-26.02
				100	-26.02

Channel Position M

Spectrum Analyzer 2 Swept SA Spectrum Analyzer 3 Swept SA Spectrum Analyzer 4 Marker Swept SA Avg Type: Power (RMS) 1 2 3 4 5 6 Trig: External 1 KEYSIGHT Input: RF #Atten: 20 dB #PNO: Fast Select Marker Corrections: Off Freq Ref: Int (S) Preamp: Off Gate: LO µW Path: Standard IF Gain: Low wwwww Marker 1 AAAAAA ĻXI NFE: Adaptive Sig Track: Off Marker Frequency Settings Mkr1 936.485 MHz 1 Spectrum 936.485000 MHz Ref LvI Offset 41.66 dB Ref Level 50.00 dBm -32.87 dBm Scale/Div 10 dB Peak Search Marker Mode Normal Pk Search Config Delta (Δ) Properties Fixed Marker **Function** Off Marker→ Delta Marker (Reset Delta) Counter Marker Table On Off Marker Settings printerproduktigerer/yapitalisharrontegetingapapapapapapapalarer Diagram Center 936.490 MHz #Video BW 91 kHz* Span 2.000 MHz All Markers Off

Aug 03, 2022

?

#Res BW 30 kHz

7 6

#Sweep 1.00 s (1001 pts)

X

Couple Markers

