

Appendix A

Effective Radiated Power of Transmitter

According to FCC Part 2.1046 & 24.232

Channel 512

GPRS MODE:

Measurement/Instrument Screen									
Control	GSM/GPRS Transmit Power						PDCH Params		
	GMSK Transmit Power 28.81 dBm						Downlink Traffic Power ▾		
							Traffic Band		
							PCS		
							Traffic Channel		
							512		
	Continuous								
	MS TX Level			Value					
	MS TX Level Burst 1			0					
	MS TX Level Burst 2			0			MS TX Level ▾		
							Coding Scheme		
Close Menu							CS-4		
							Return		
		 Background		Active Cell Transferring		Sys Type: GPRS			
						Logging: No Conn.			
				IntRef		Offset			
								1 of 2	

EDGE MODE:

Measurement/Instrument Screen									
Control	EGPRS Transmit Power						PDCH Params		
	EPSK Burst Power		EPSK Est Carrier Power				Downlink Traffic Power ▾		
	25.13 dBm		24.99 dBm				Traffic Band		
							PCS		
							Traffic Channel		
							512		
							MS TX Level ▾		
							Modulation Coding Scheme ▾		
							Return		
Close Menu									
		Background		Active Cell Transferring		Sys Type: EGPRS			
						Logging: No Conn.			
				IntRef		Offset			
								1 of 2	

Channel 661

GPRS MODE:

Measurement/Instrument Screen									
Control	GSM/GPRS Transmit Power						PDCH Params		
	GMSK Transmit Power 29.06 dBm Continuous						Downlink Traffic Power ▾		
							Traffic Band		
							PCS		
							Traffic Channel		
							661		
				MS TX Level ▾					
				Coding Scheme					
				CS-4					
				Return					
Close Menu									
		Background		Active Cell Transferring		Sys Type: GPRS		1 of 2	
				Logging: No Conn.					
			IntRef	Offset					

EDGE MODE:

Measurement/Instrument Screen									
Control	EGPRS Transmit Power						PDCH Params		
	EPSK Burst Power		EPSK Est Carrier Power						Downlink Traffic Power ▾
	24.63 dBm		24.83 dBm						Traffic Band
									PCS
									Traffic Channel
									661
					Continuous				
	MS TX Level			Value					
	MS TX Level Burst 1			0					
	MS TX Level Burst 2			0					
Close Menu									
		Background		Active Cell Transferring		Sys Type: EGPRS			
						Logging: No Conn.			
				IntRef	Offset				1 of 2

Channel 810

GPRS MODE:

Measurement/Instrument Screen									
Control	GSM/GPRS Transmit Power						PDCH Params		
	GMSK Transmit Power 28.93 dBm Continuous						Downlink Traffic Power ▾		
							Traffic Band		
							PCS		
							Traffic Channel		
							810		
				MS TX Level			Value		
	MS TX Level Burst 1			0			MS TX Level ▾		
	MS TX Level Burst 2			0					
Close Menu									
							Return		
		Background		Active Cell Transferring		Sys Type: GPRS		1 of 2	
				Logging: No Conn.					
			IntRef	Offset					

EDGE MODE:

Measurement/Instrument Screen									
Control		EGPRS Transmit Power					PDCH Params		
		EPSK Burst Power		EPSK Est Carrier Power			Downlink Traffic Power ▾		
		25.27 dBm		25.11 dBm			Traffic Band		
							PCS		
							Traffic Channel		
							810		
							MS TX Level ▾		
							Modulation Coding Scheme ▾		
							Return		
		Close Menu							
		Background		Active Cell Transferring		Sys Type: EGPRS			
						Logging: No Conn.			
				IntRef Offset				1 of 2	

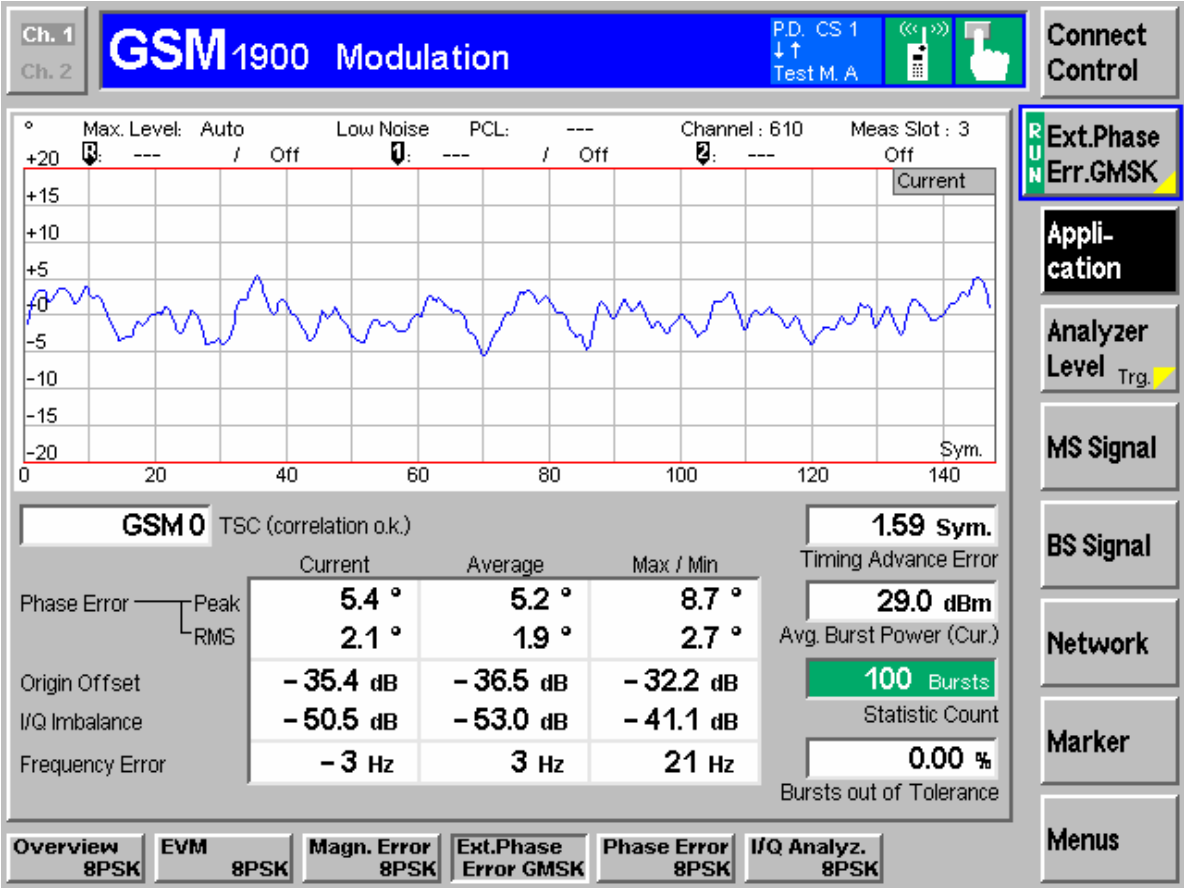
Appendix B

Modulation Characteristics

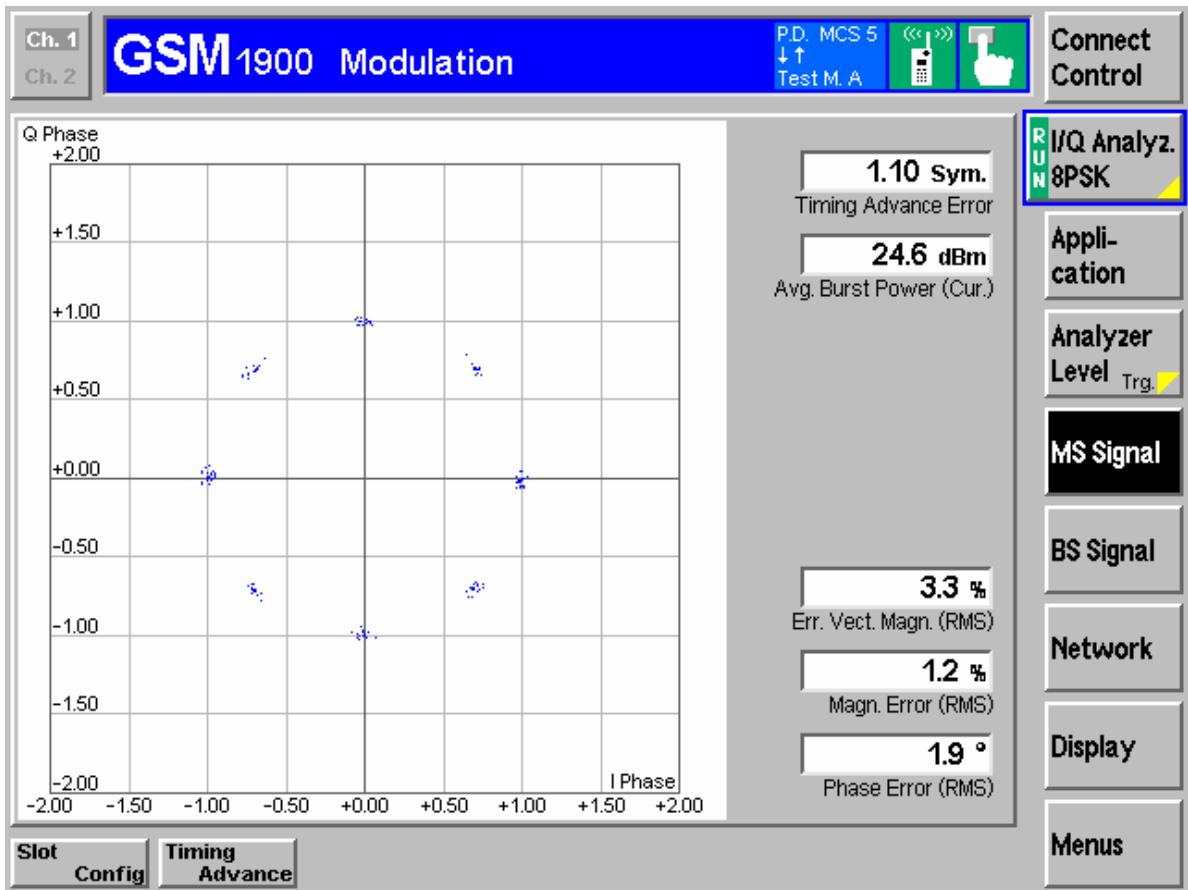
According to FCC Part 2.1047& Part 24 Subpart E



Channel 661(GPRS)



Channel 661(EDGE)



Appendix C

Occupied Bandwidth

According to FCC part 2.1049 & Part 24 Subpart E

99%:

Channel 512(GPRS)



Channel 512(EDGE)



Channel 661(GPRS)



Channel 661(EDGE)



Channel 810(GPRS)

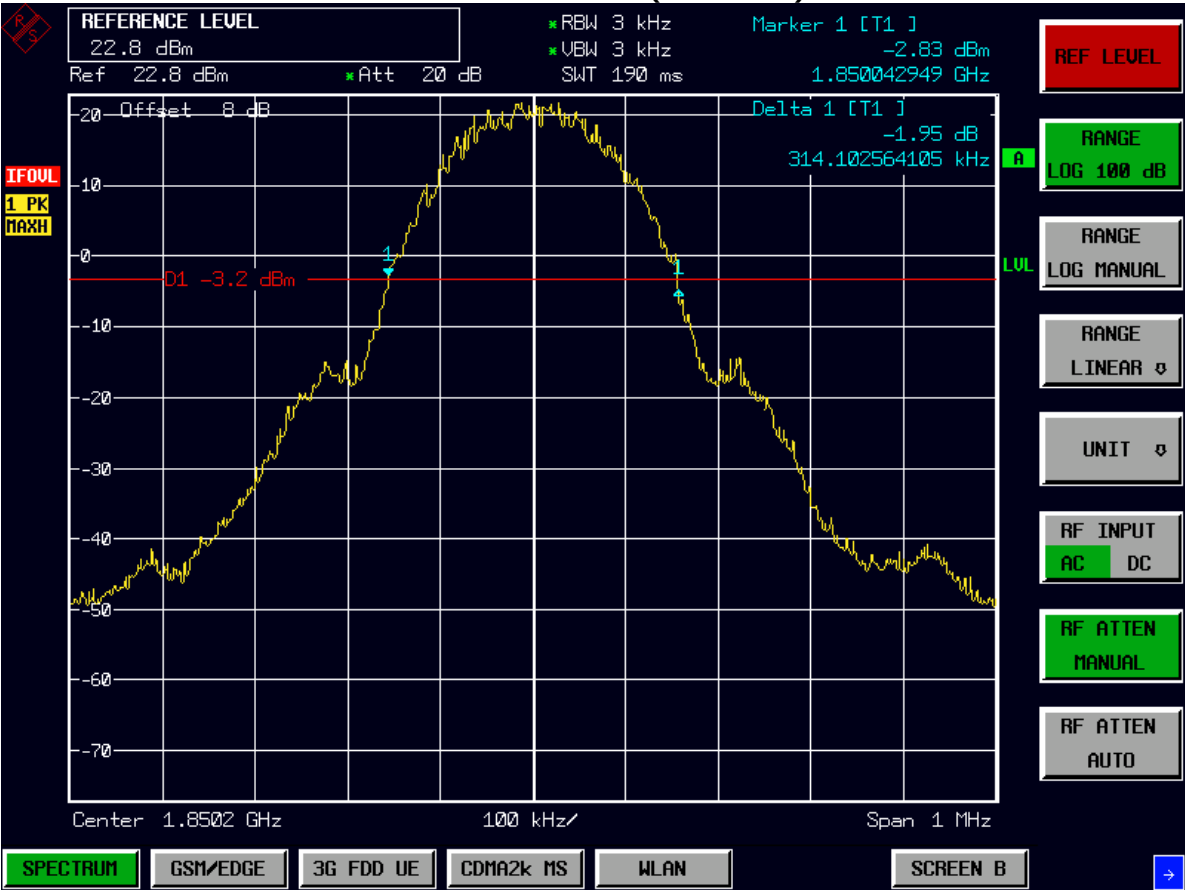


Channel 810(EDGE)



26dBc:

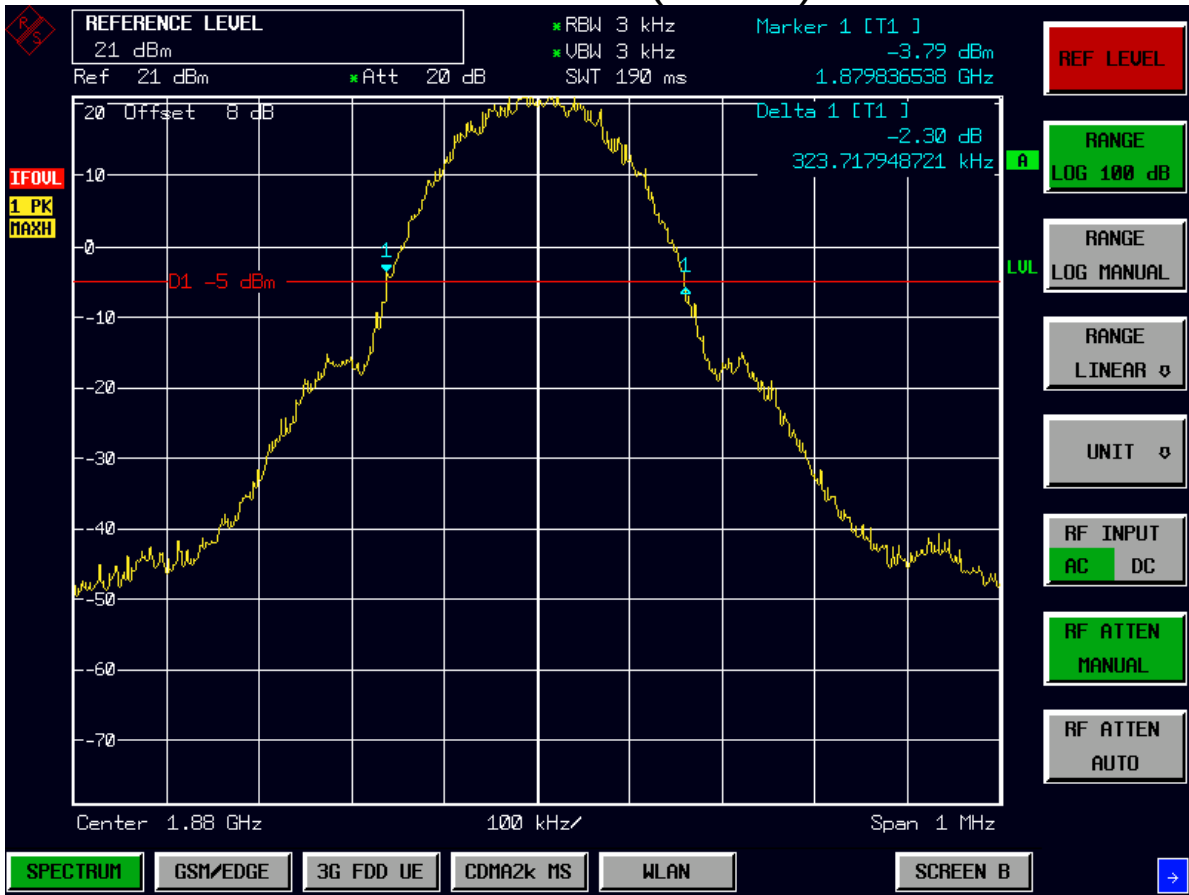
Channel 512(GPRS)



Channel 512(EDGE)



Channel 661(GPRS)



Channel 661(EDGE)



Channel 810(EDGE)

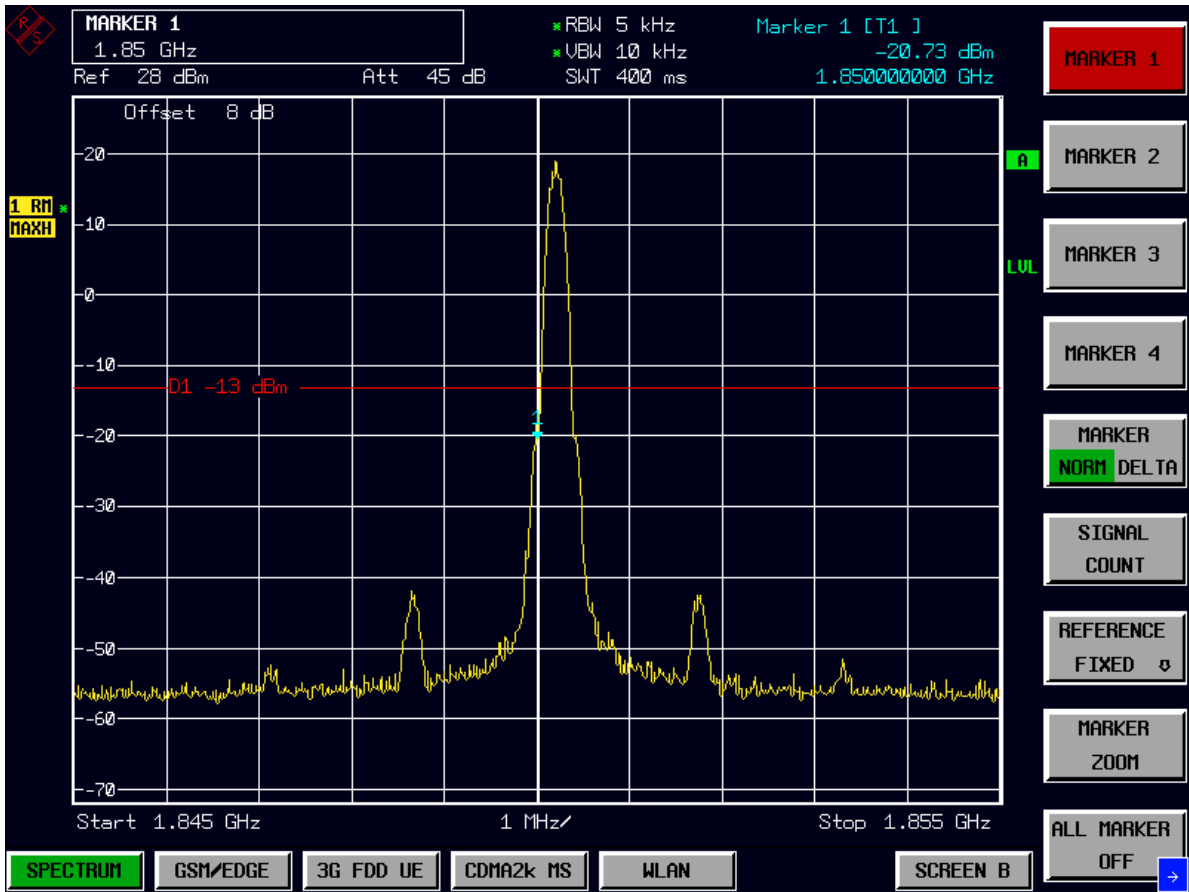


Appendix D

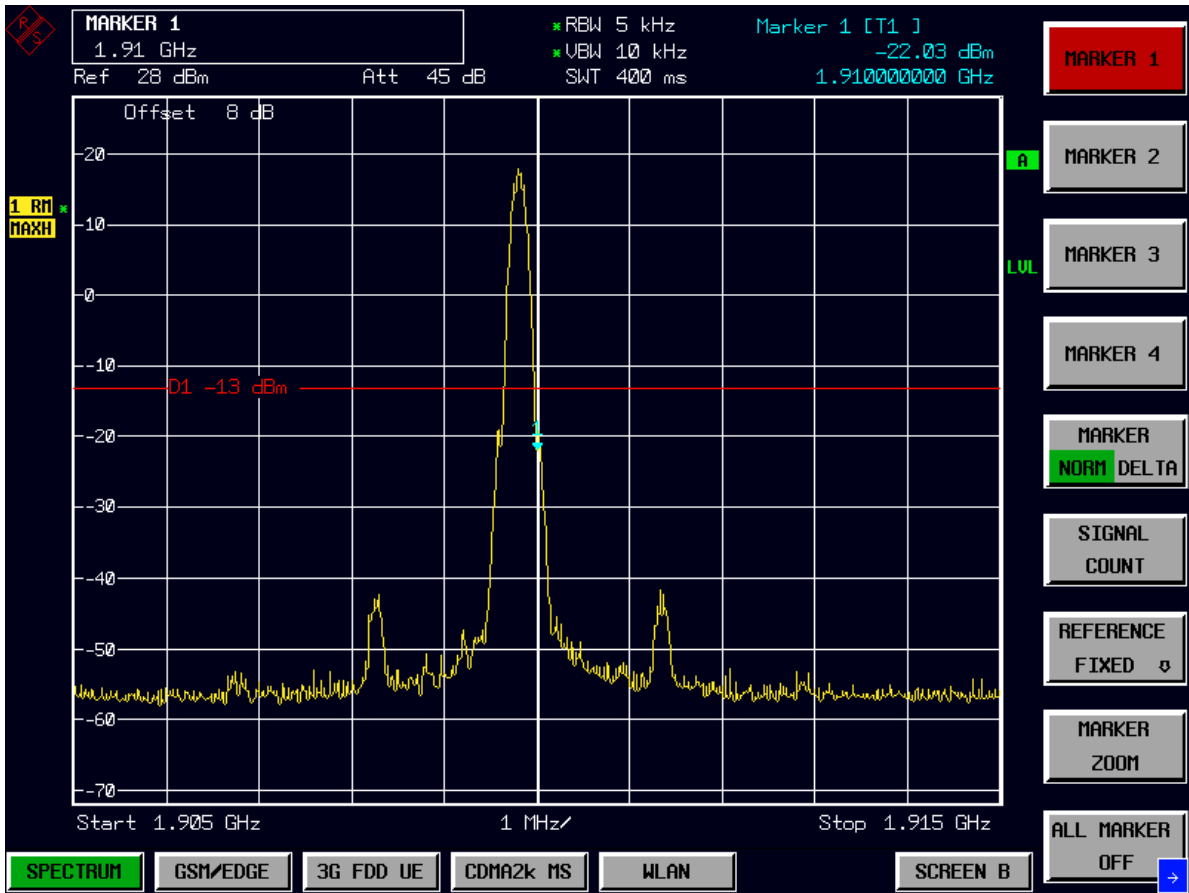
Band Edges Compliance According to FCC Part 2.1051 & 24.238

GPRS

Left Edge
Channel 512

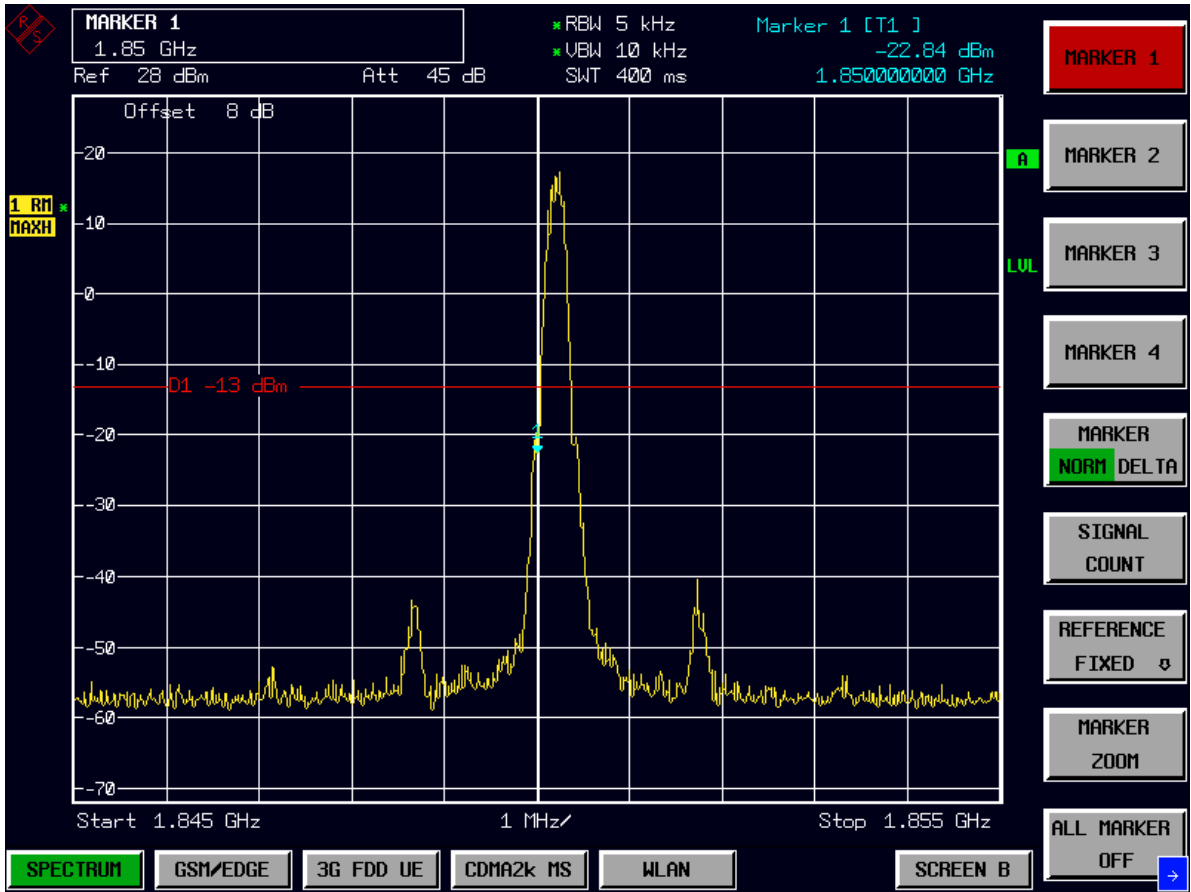


Right Edge
Channel 810

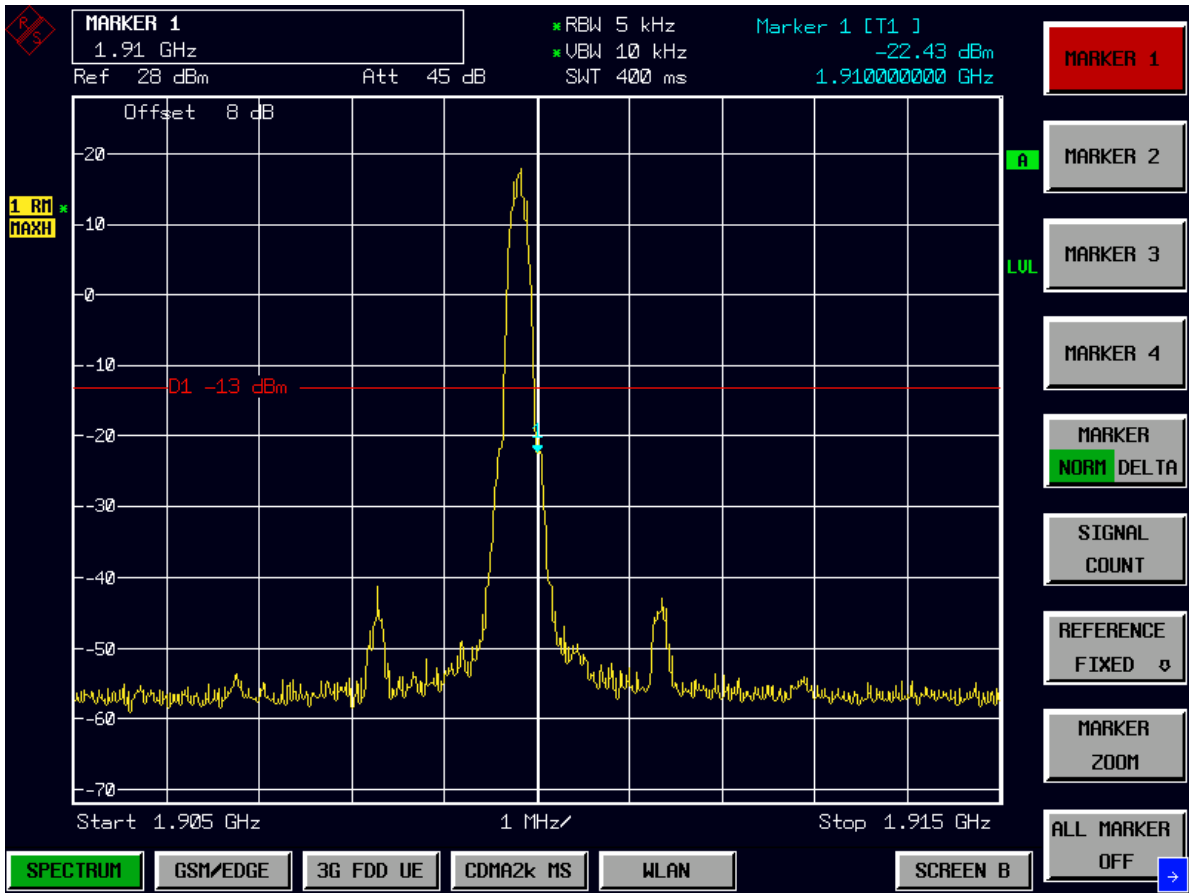


EDGE

Left Edge
Channel 512



Right Edge
Channel 810



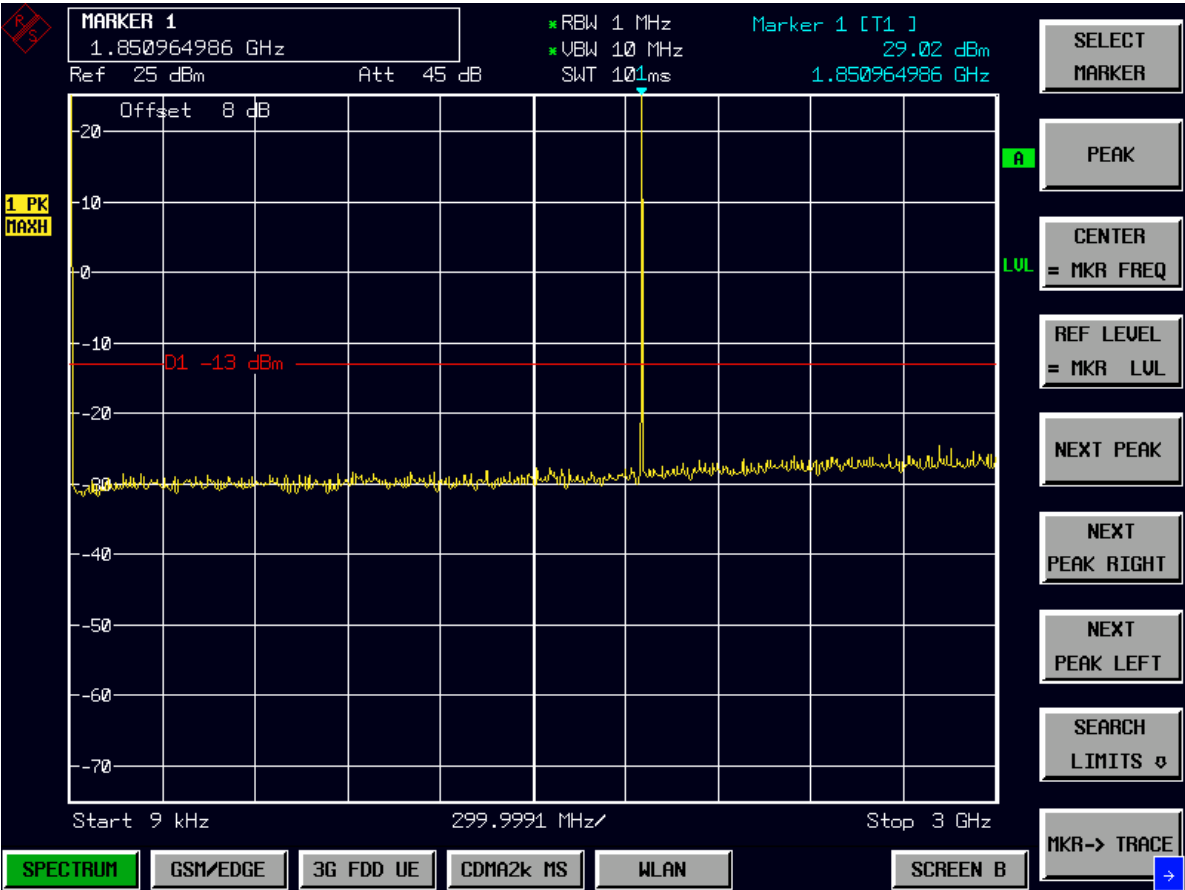
Appendix E

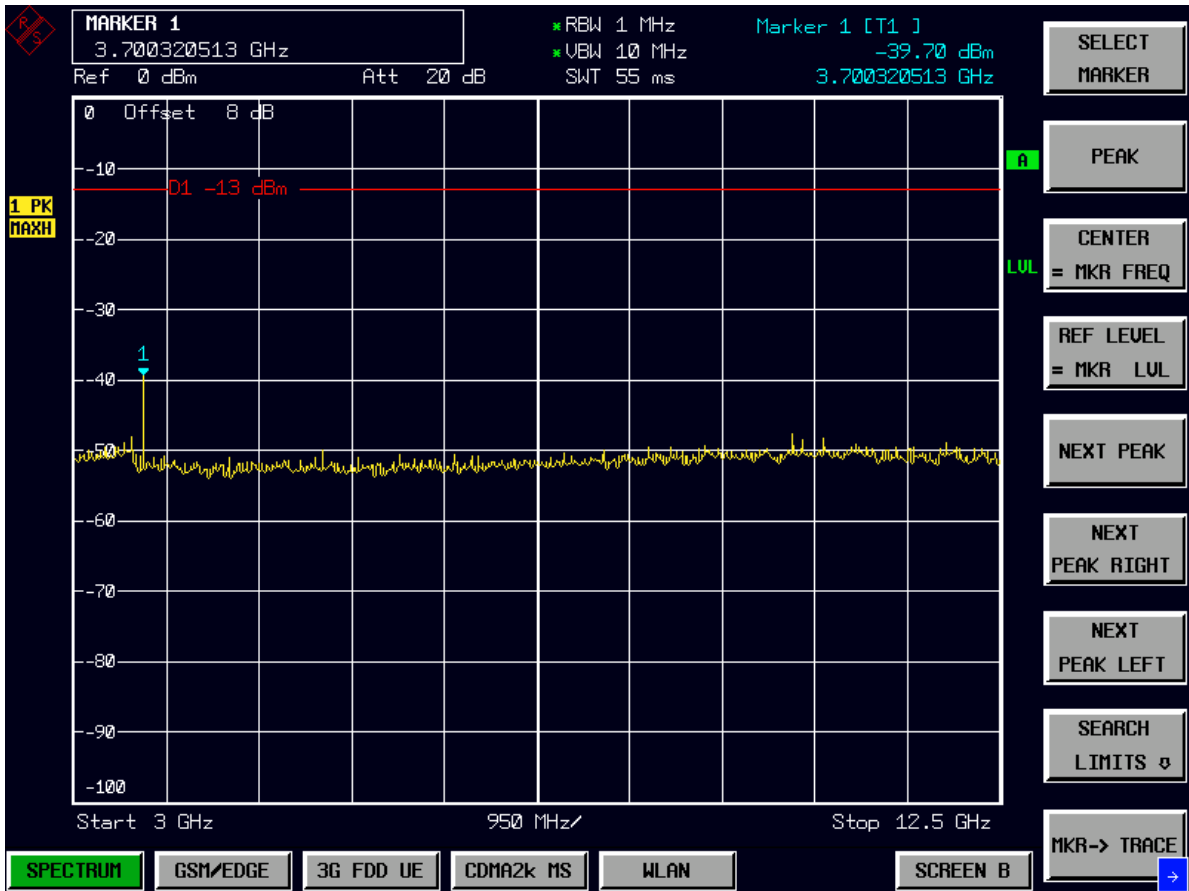
Spurious Emission at Antenna Terminal

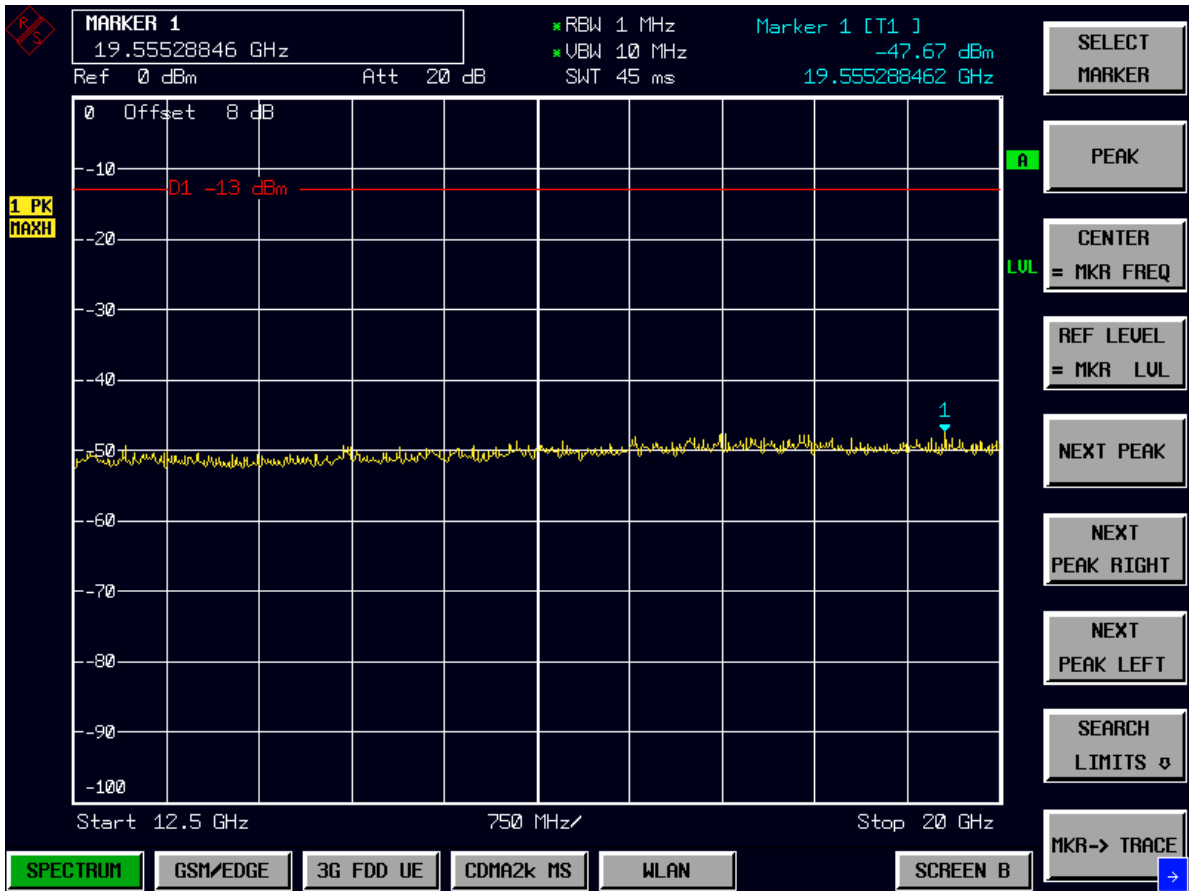
According to FCC Part 2.1051 & 24.238

1.1 GPRS

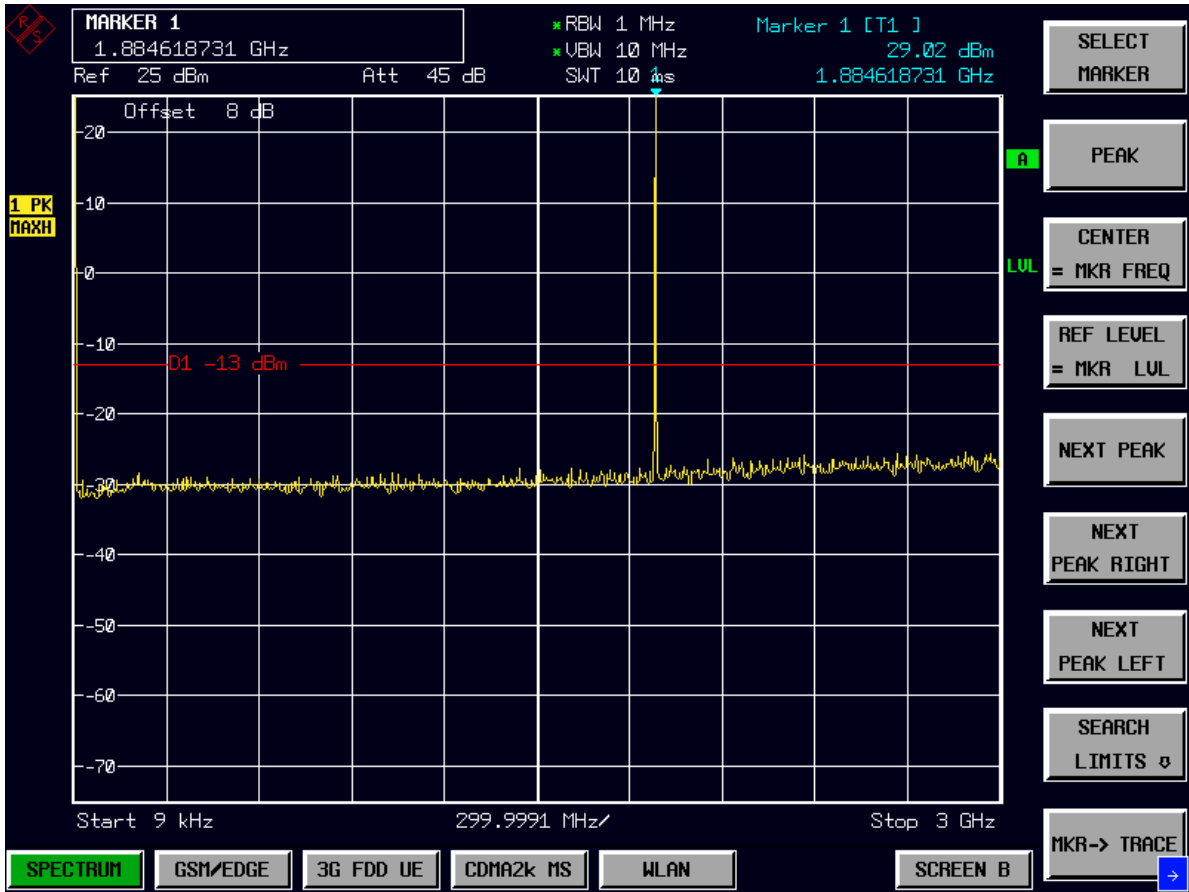
Channel 512

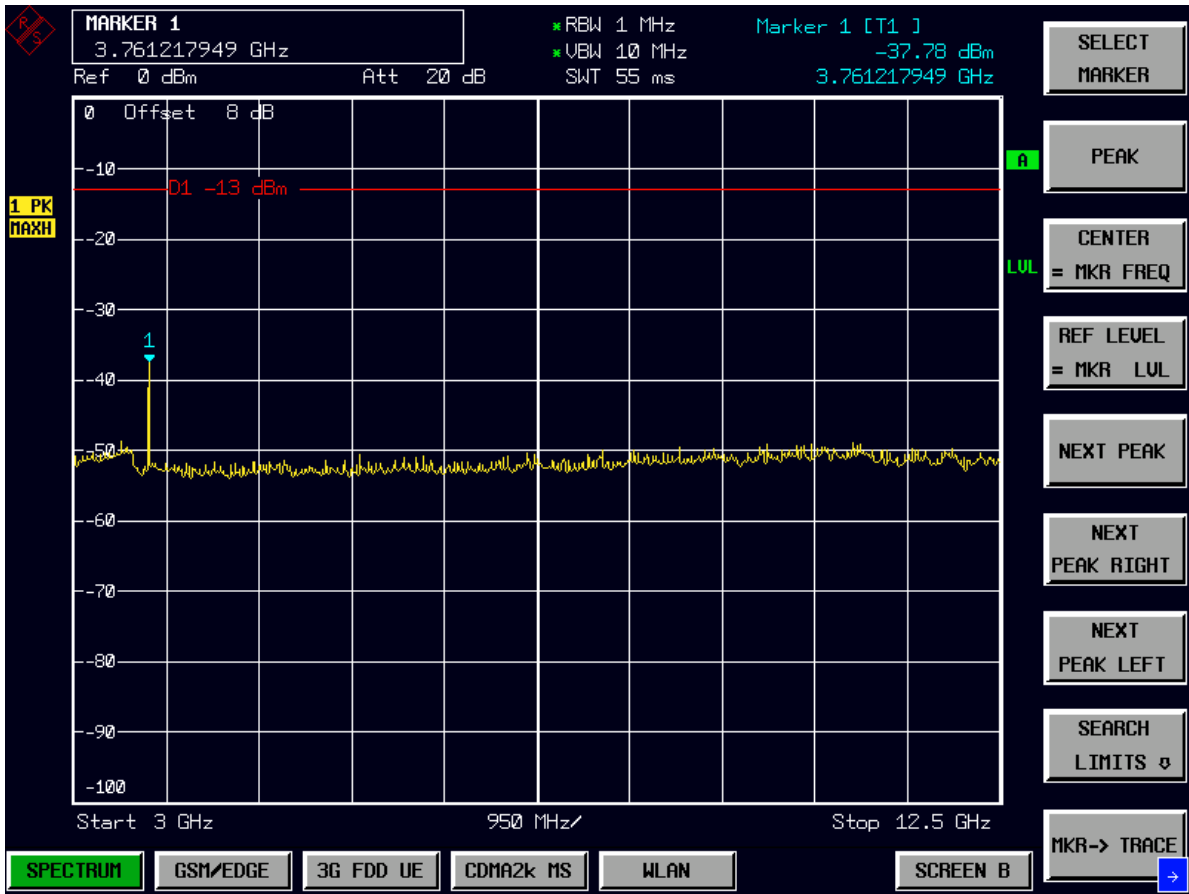


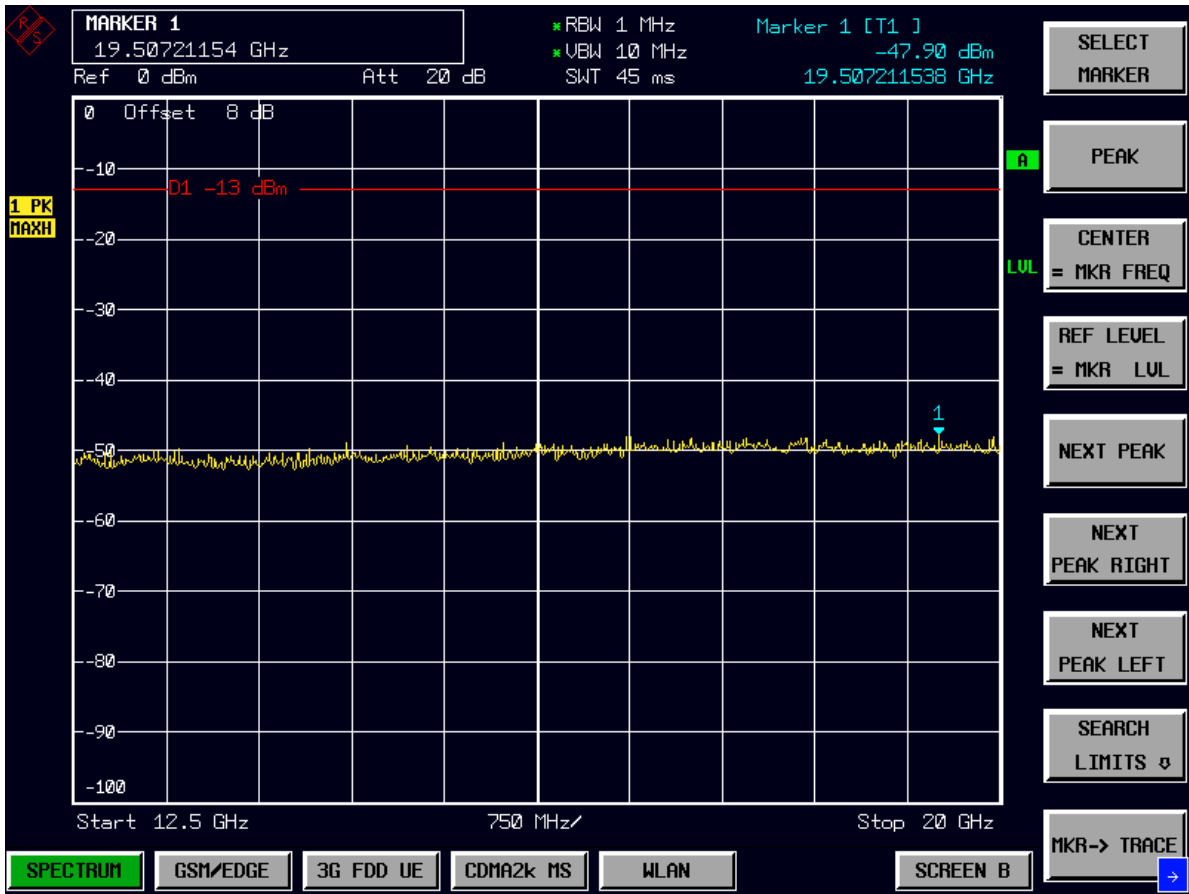




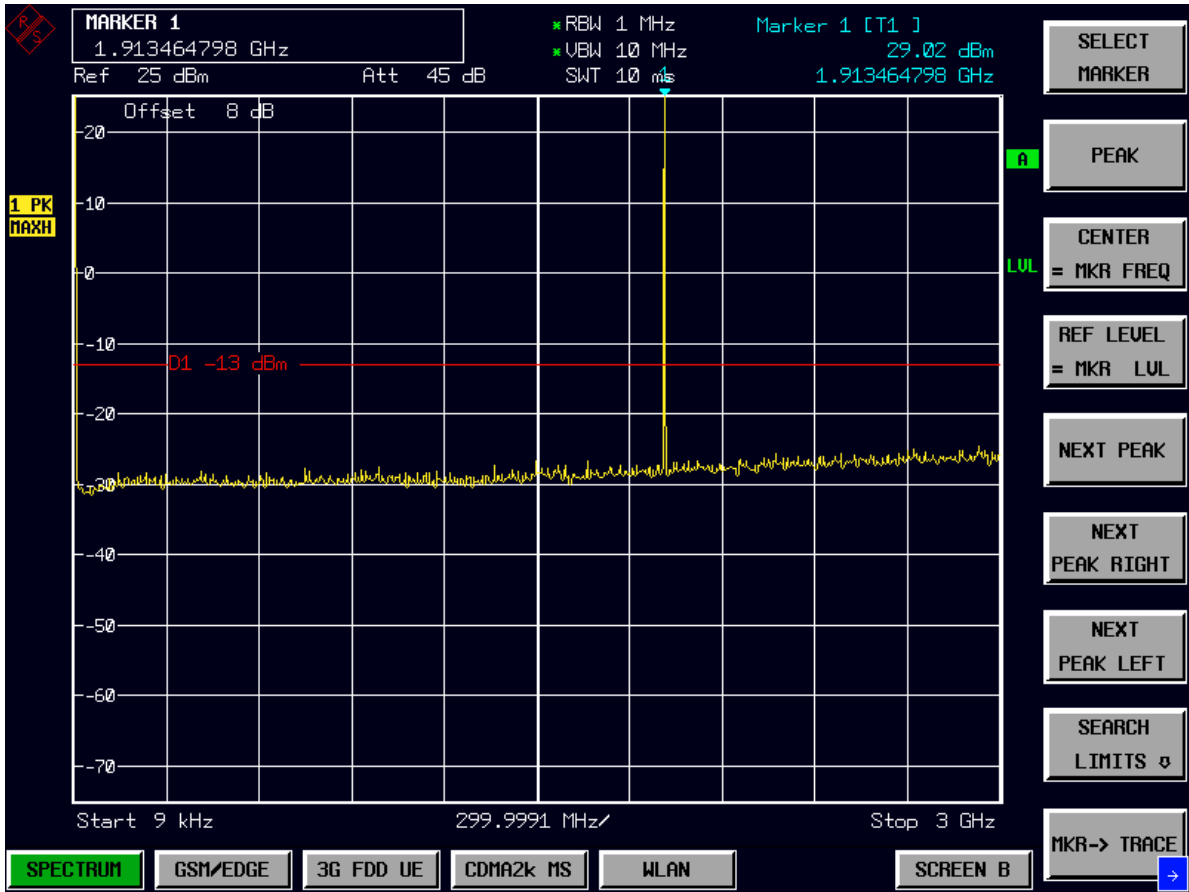
Channel 661

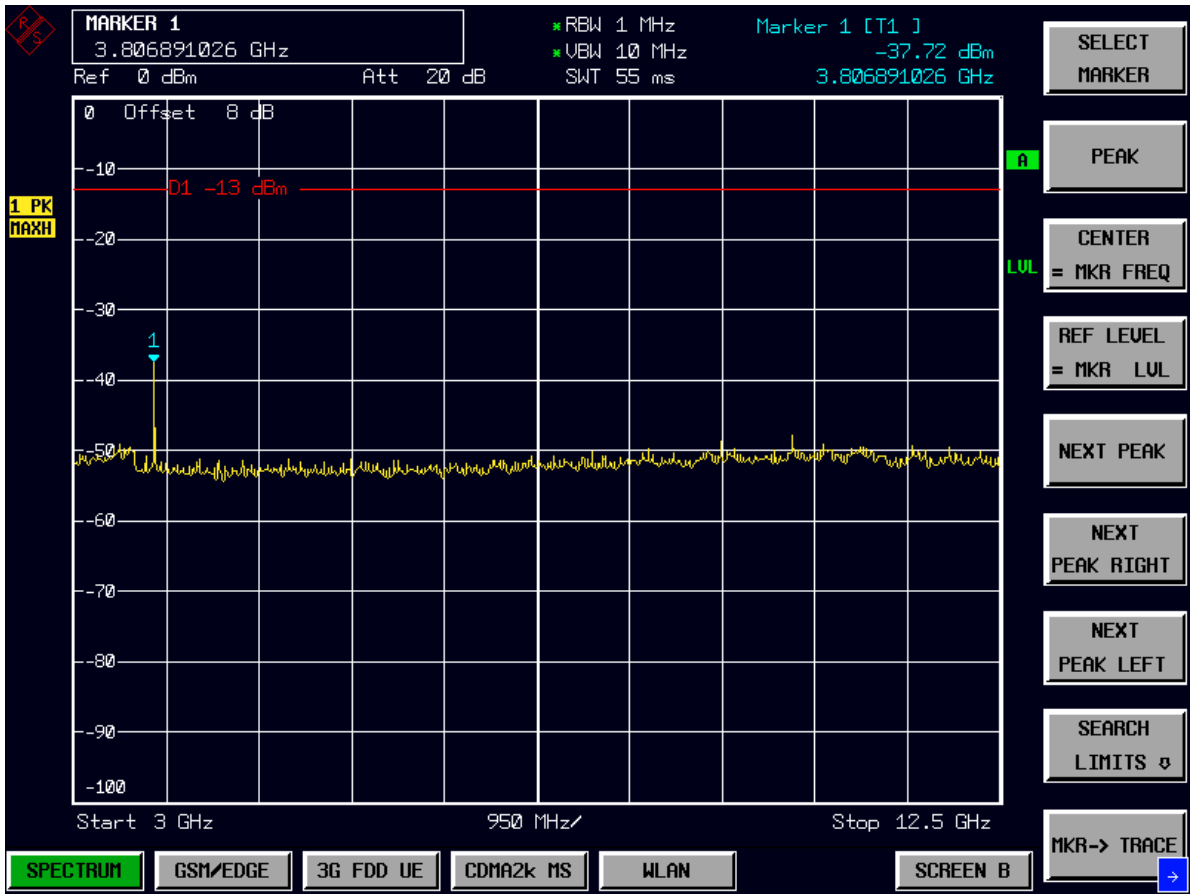


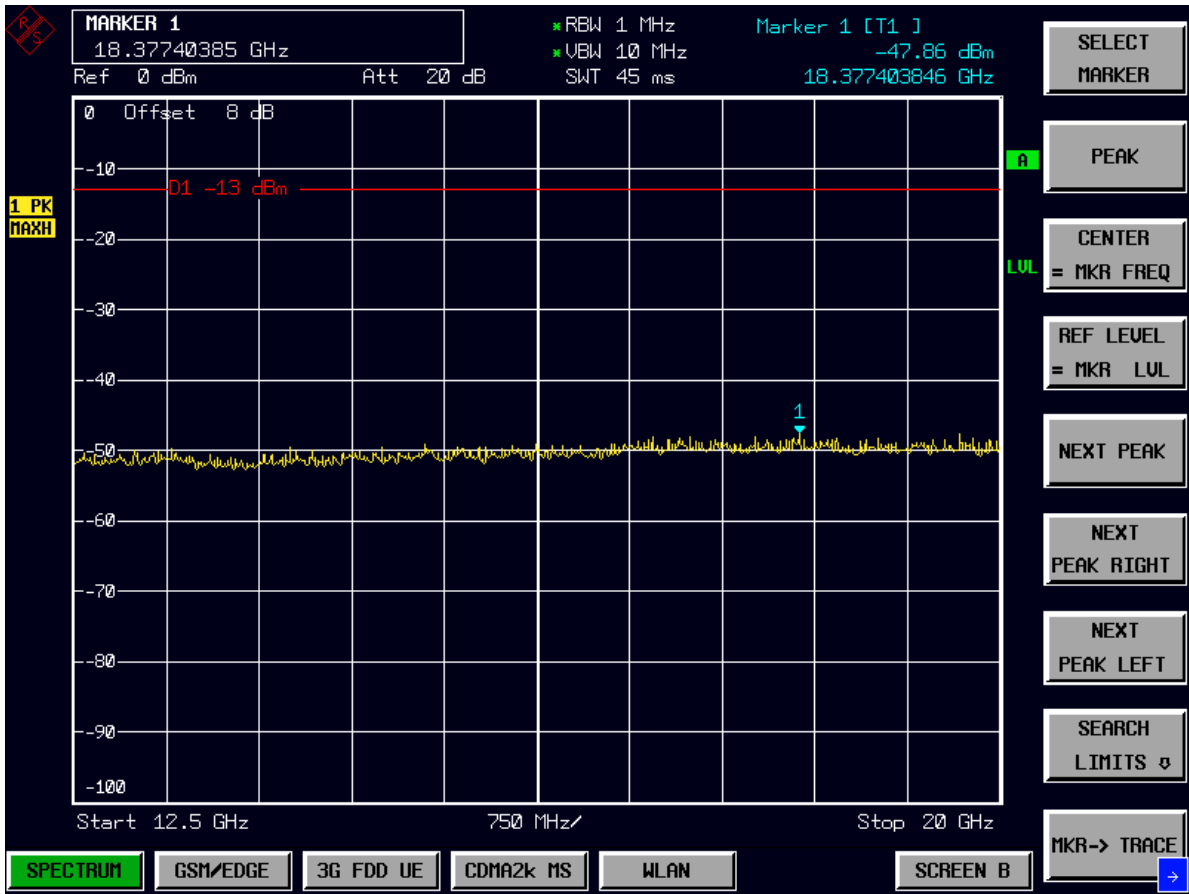




Channel 810

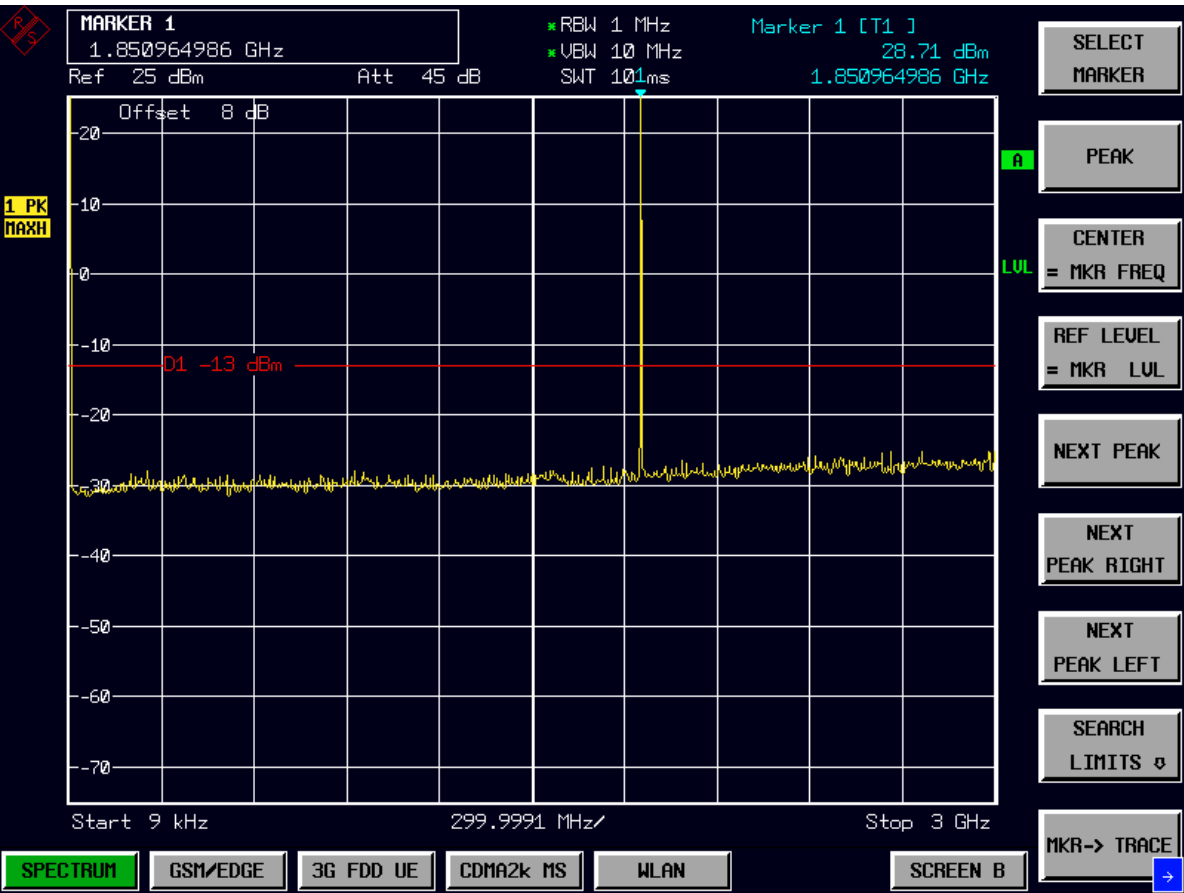


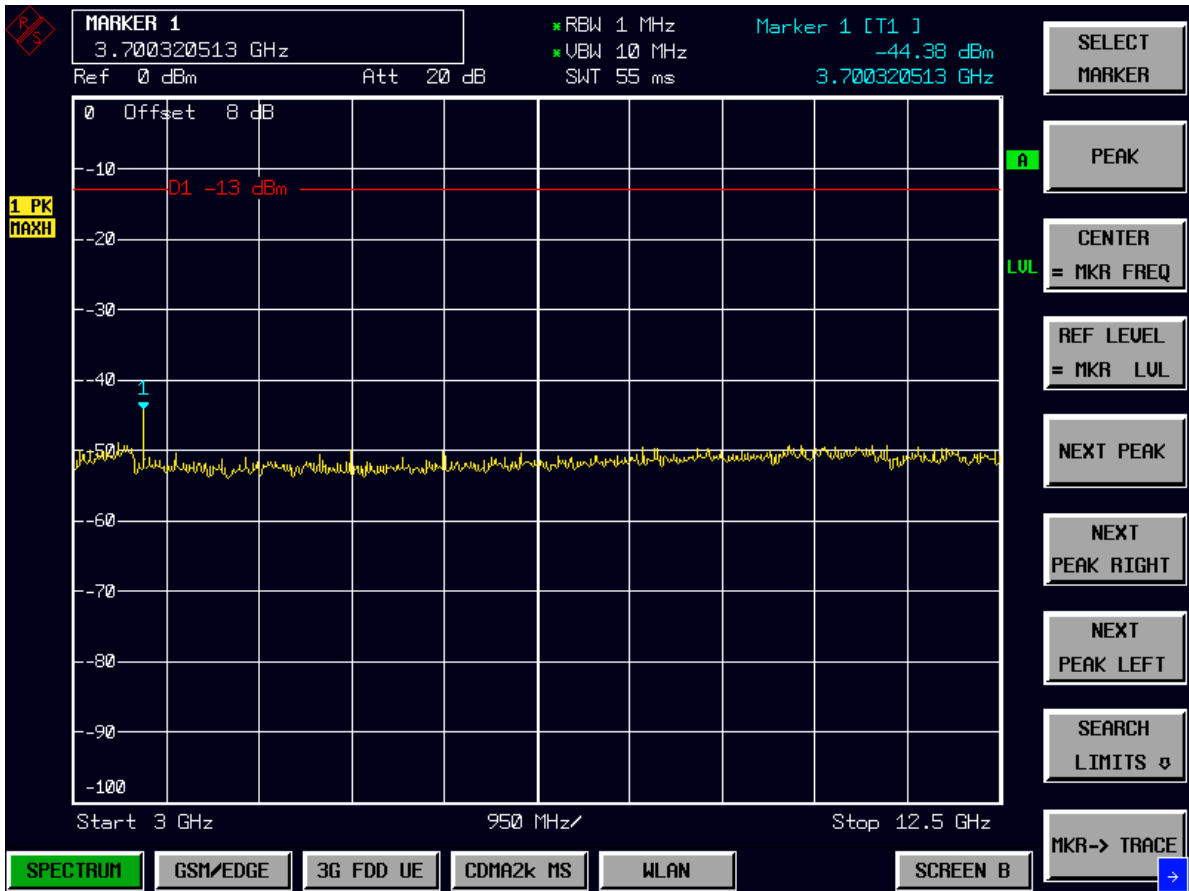


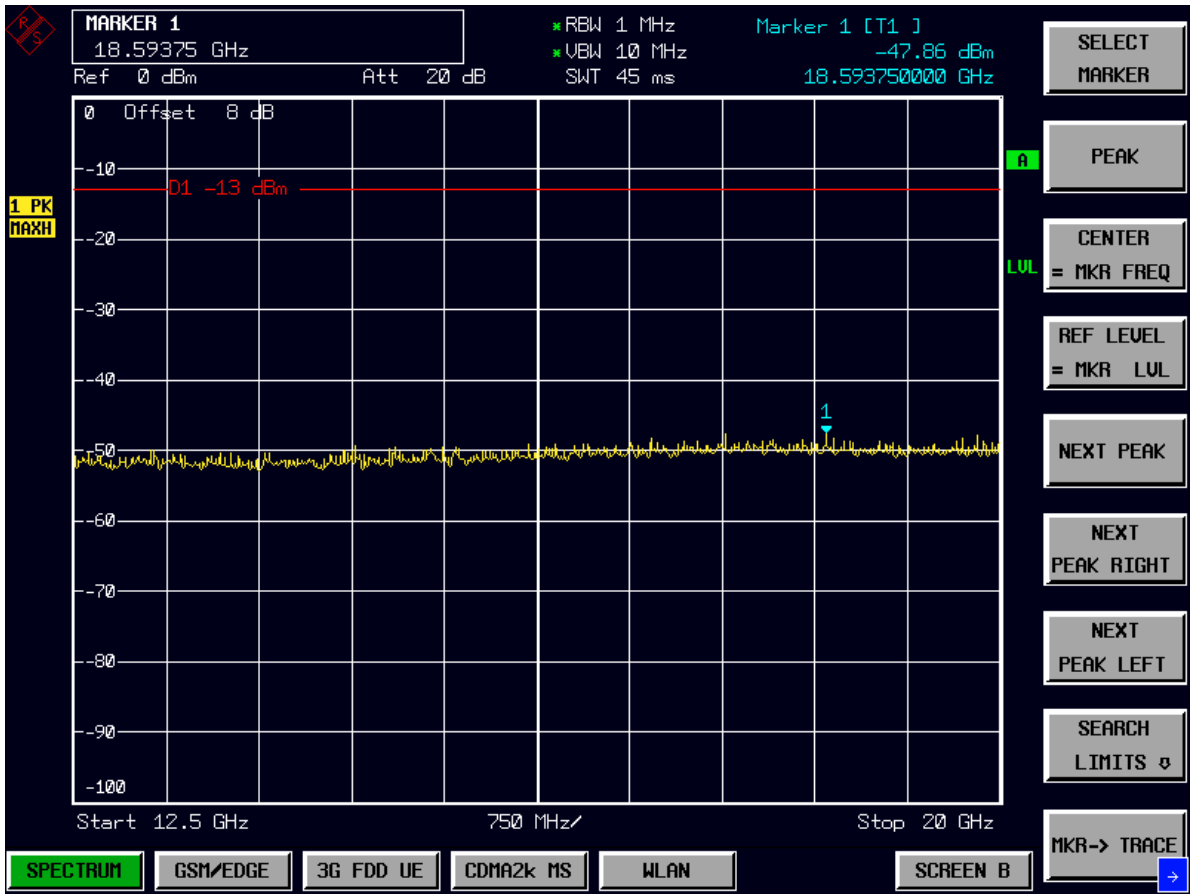


EDGE

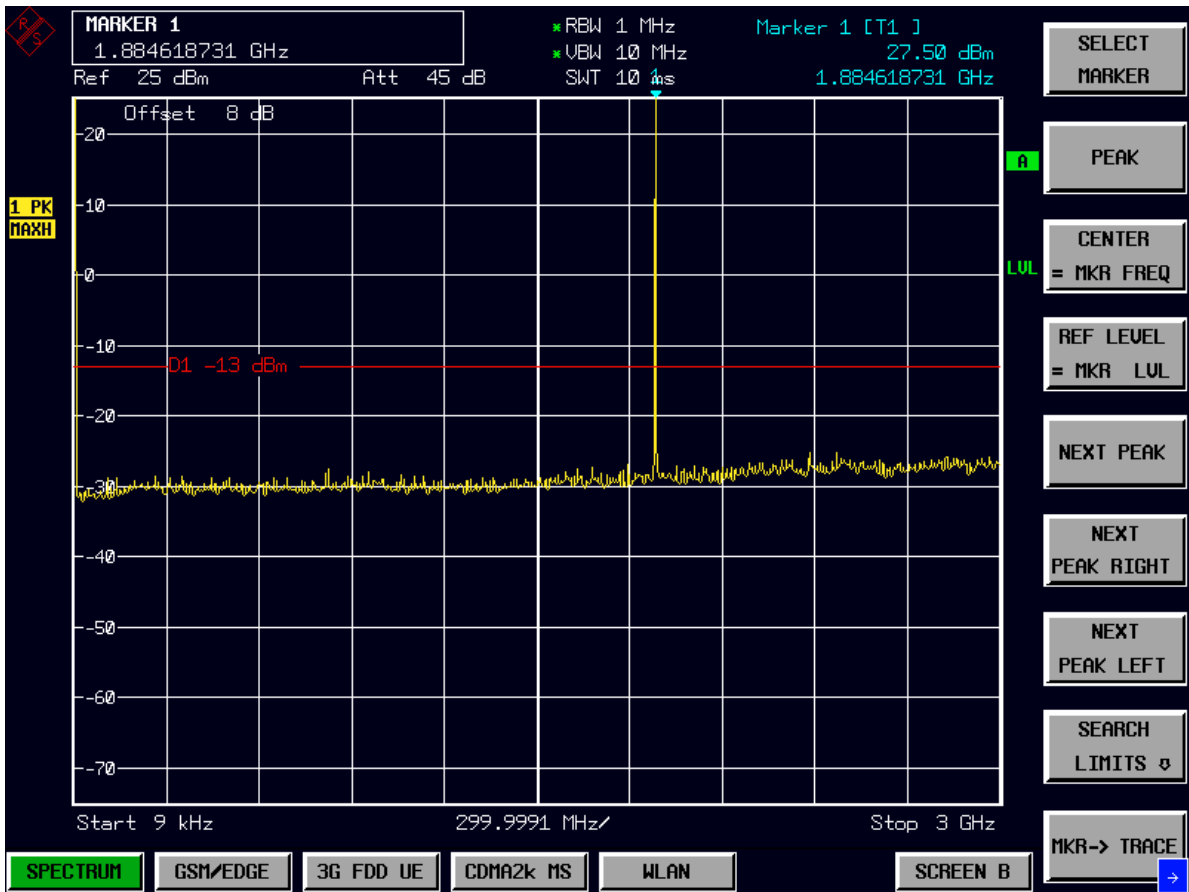
Channel 512

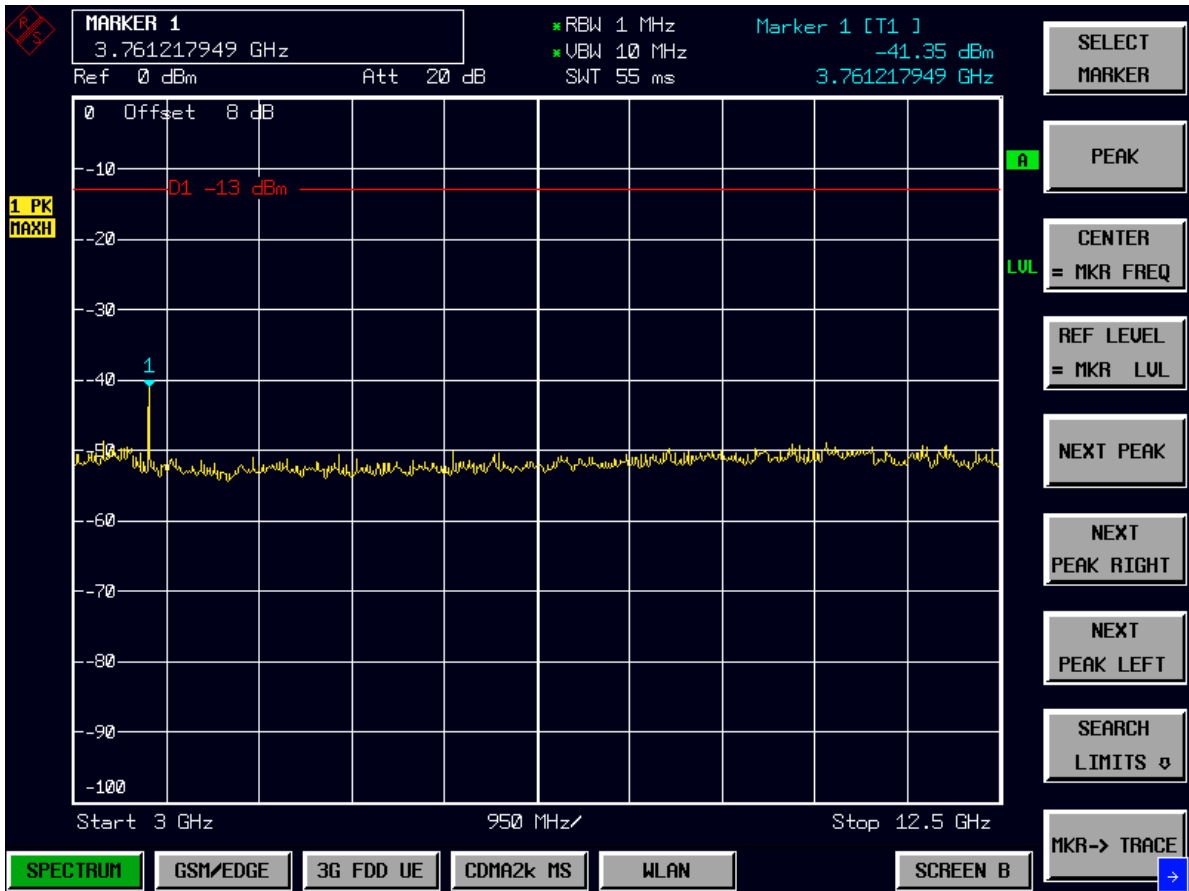


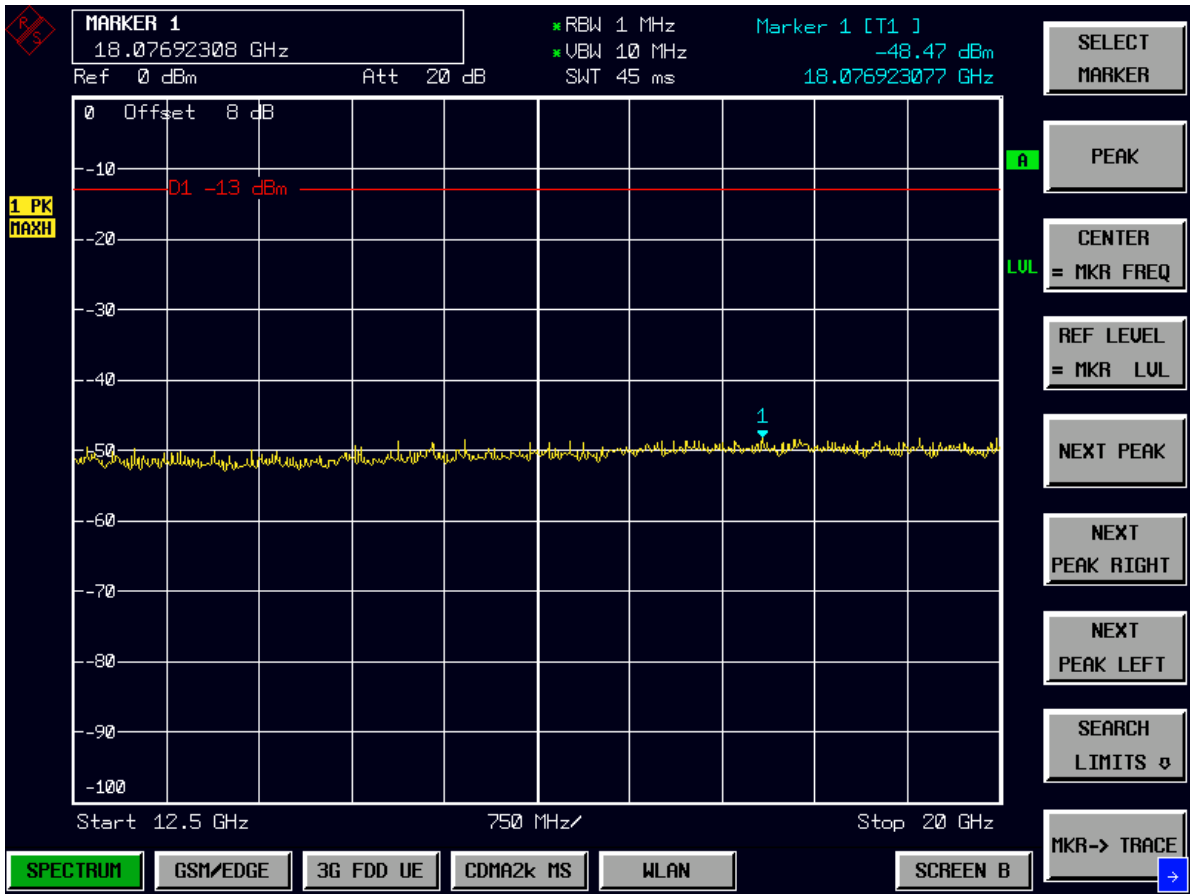




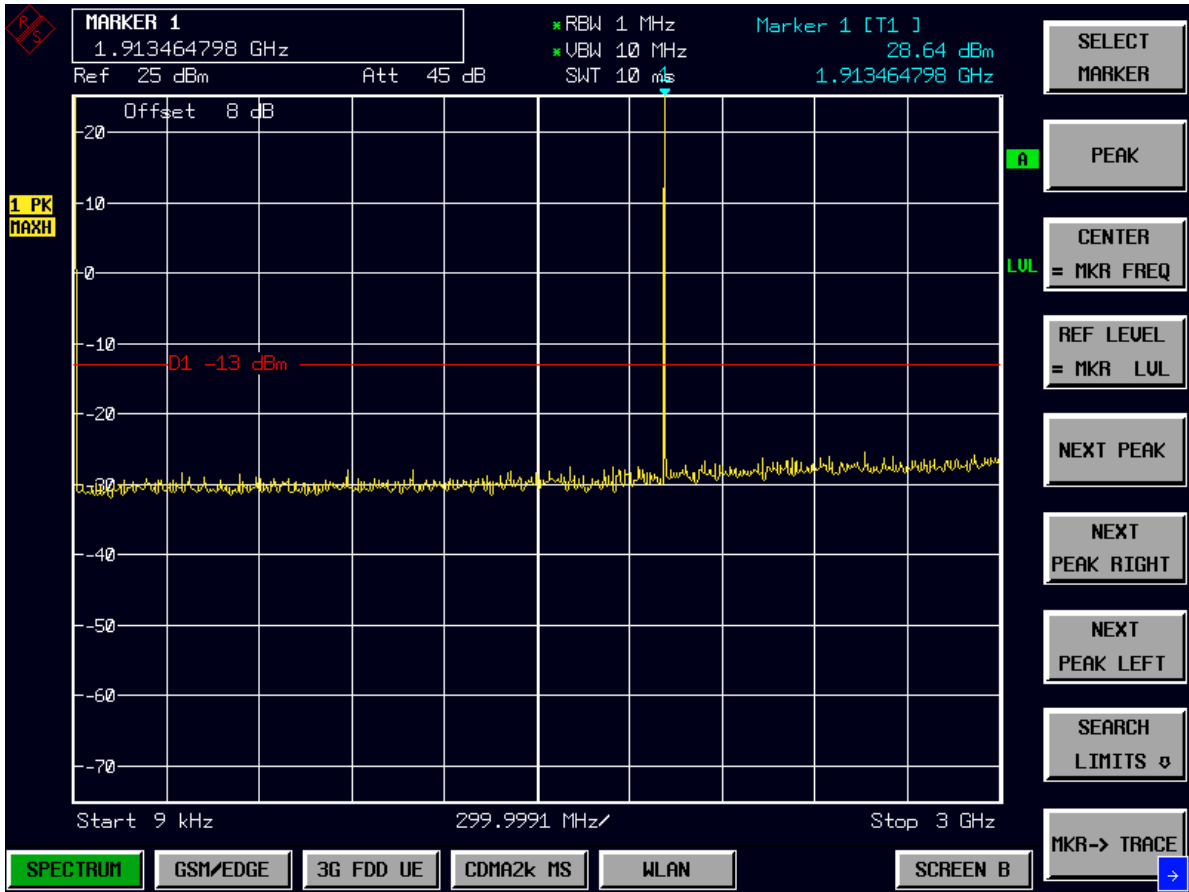
Channel 661

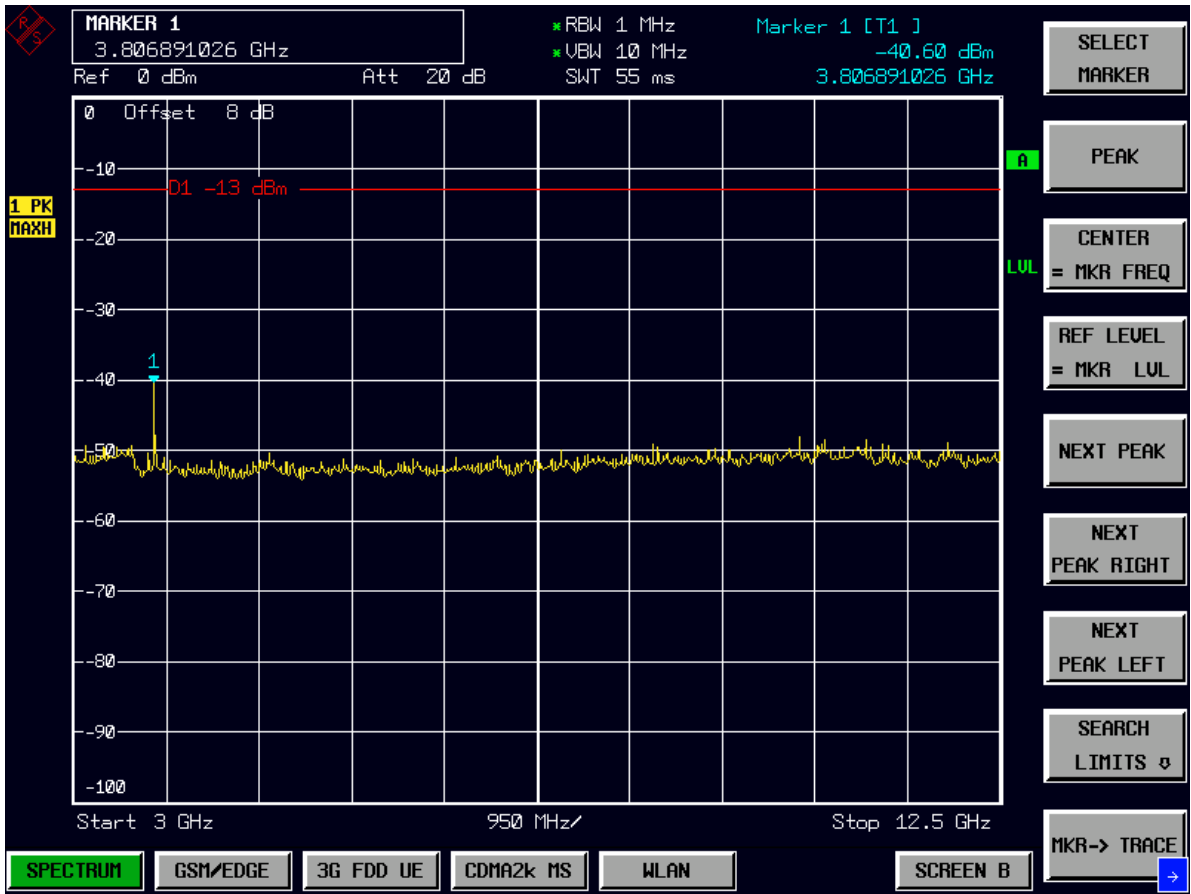


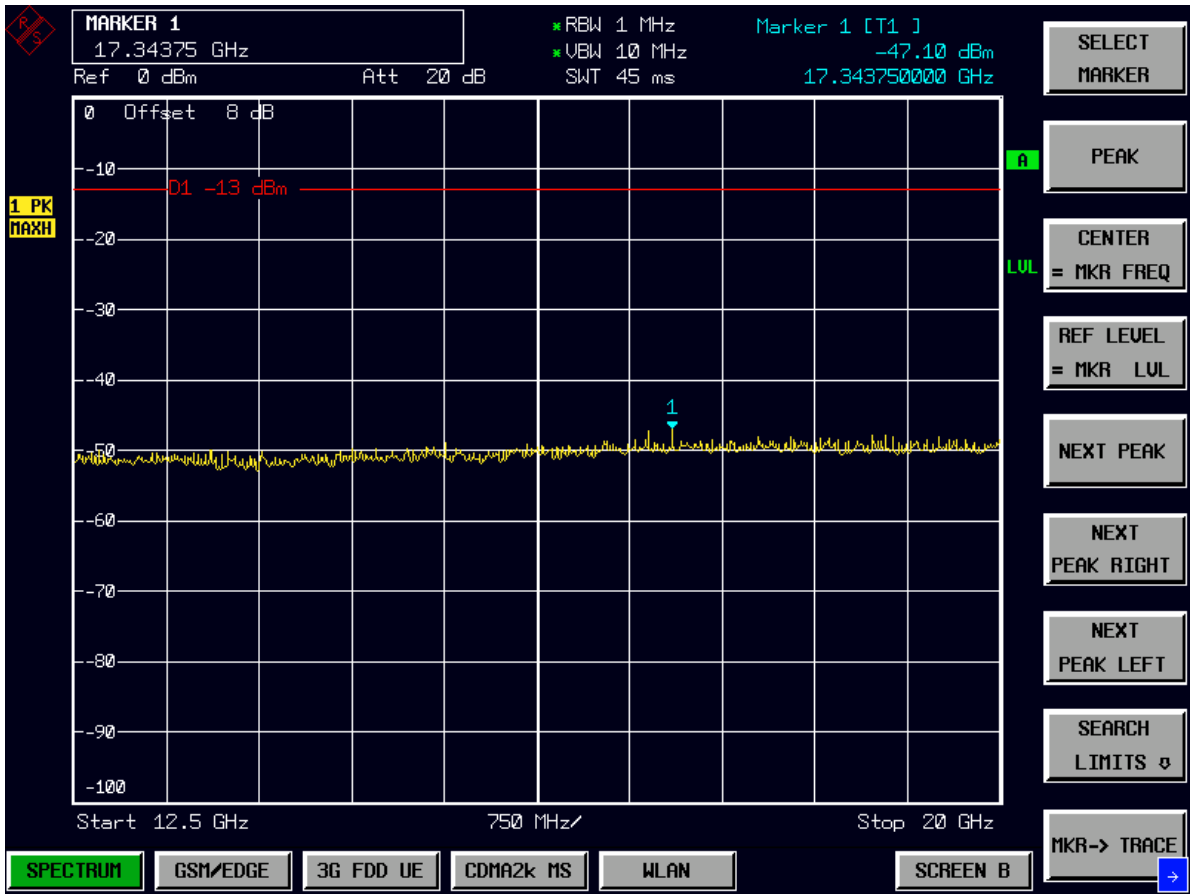




Channel 810



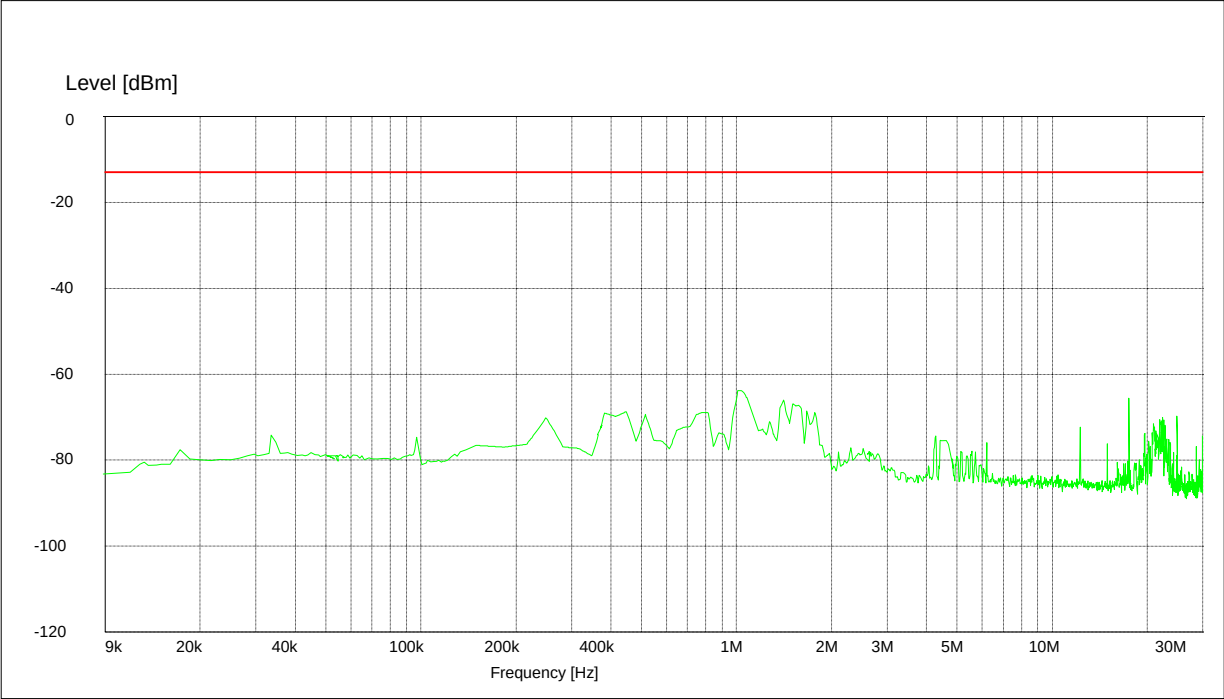




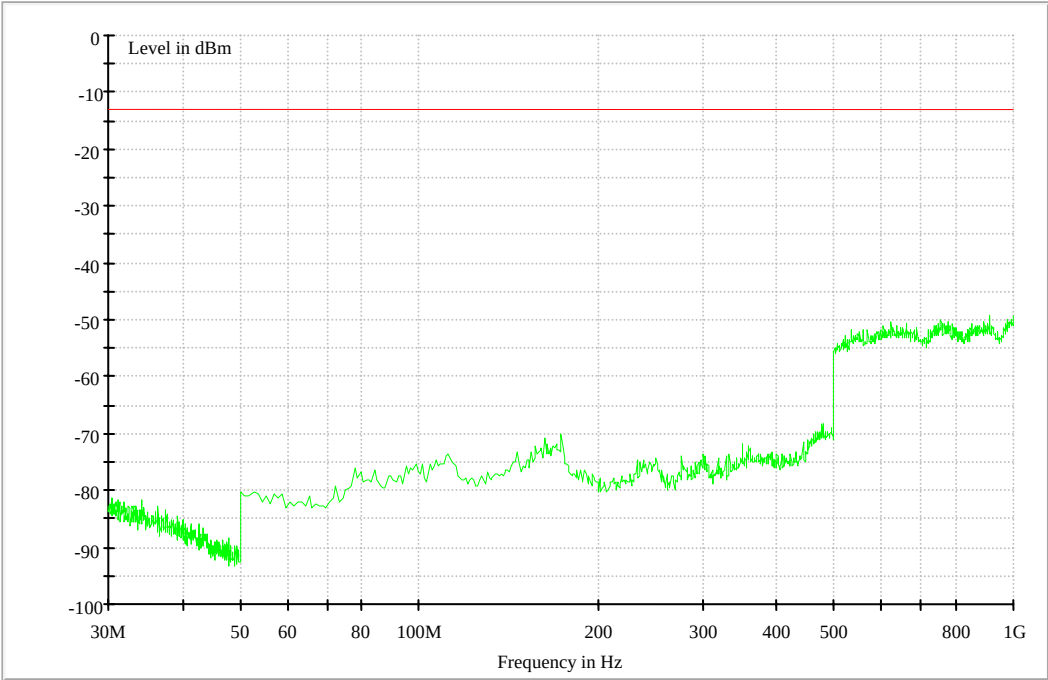
Appendix F

Radiated Spurious Emission According to FCC Part 2.1053 & 24.238

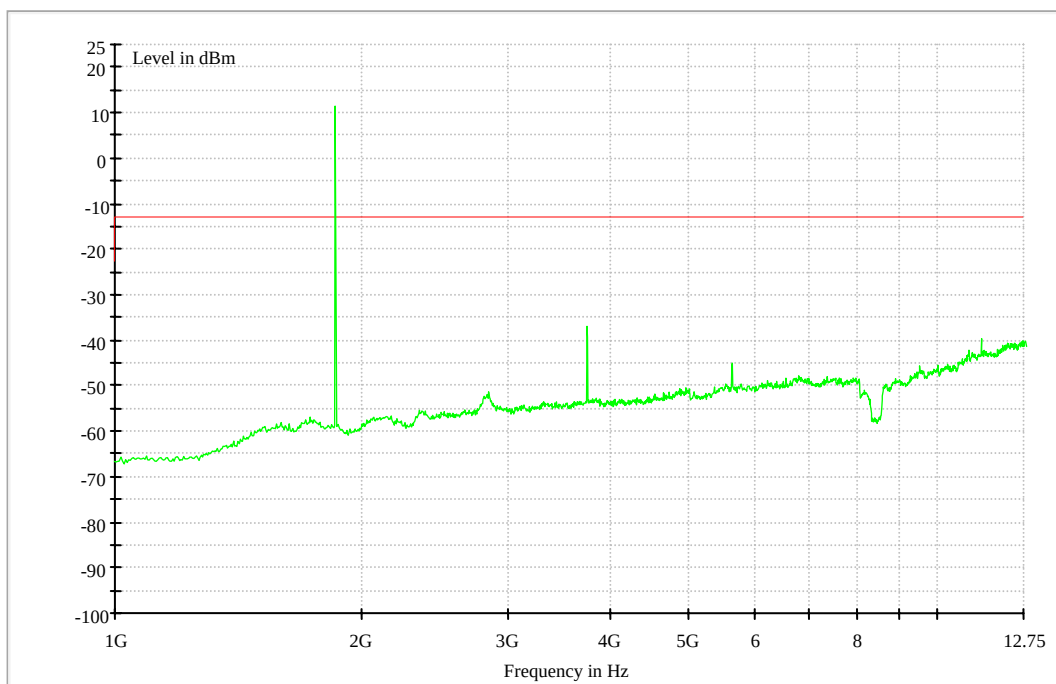
GPRS MODE:
Traffic Mode (9kHz-30MHz)



Traffic Mode (30MHz-1GHz)

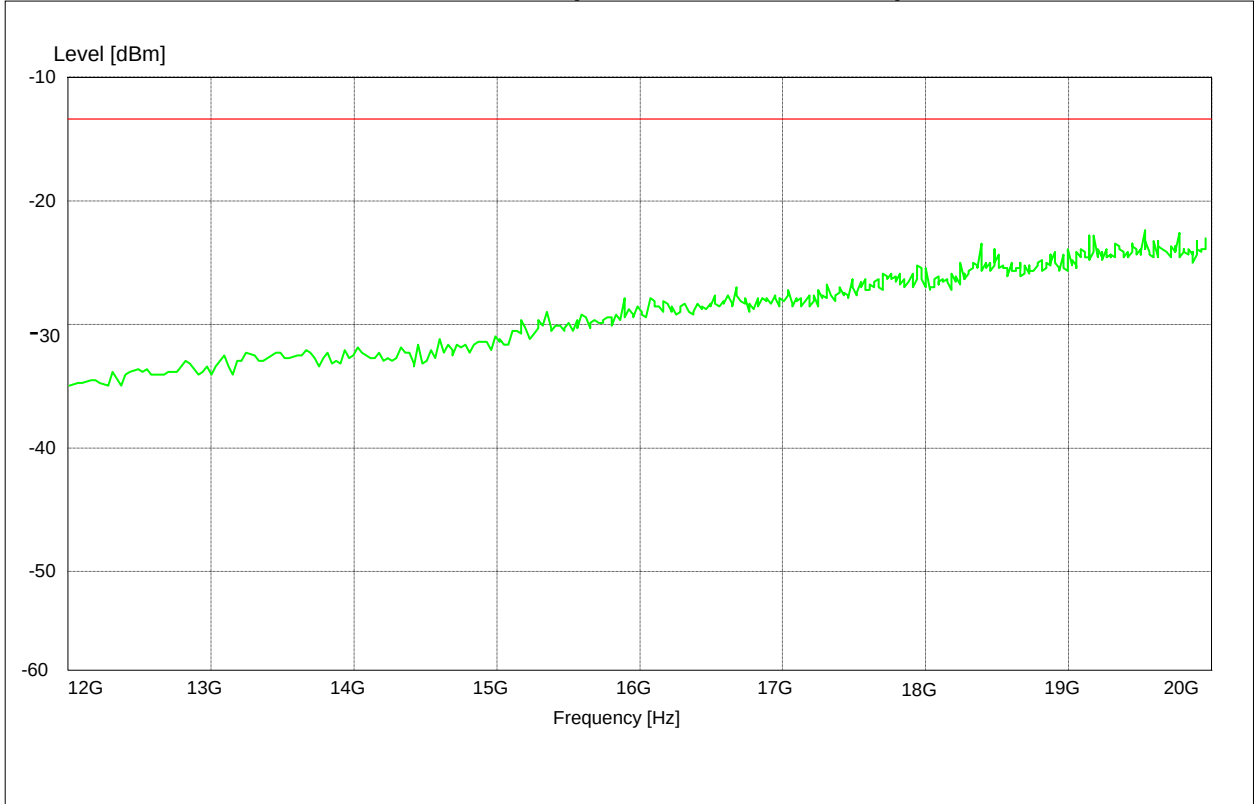


Traffic Mode (1GHz-12.75GHz)

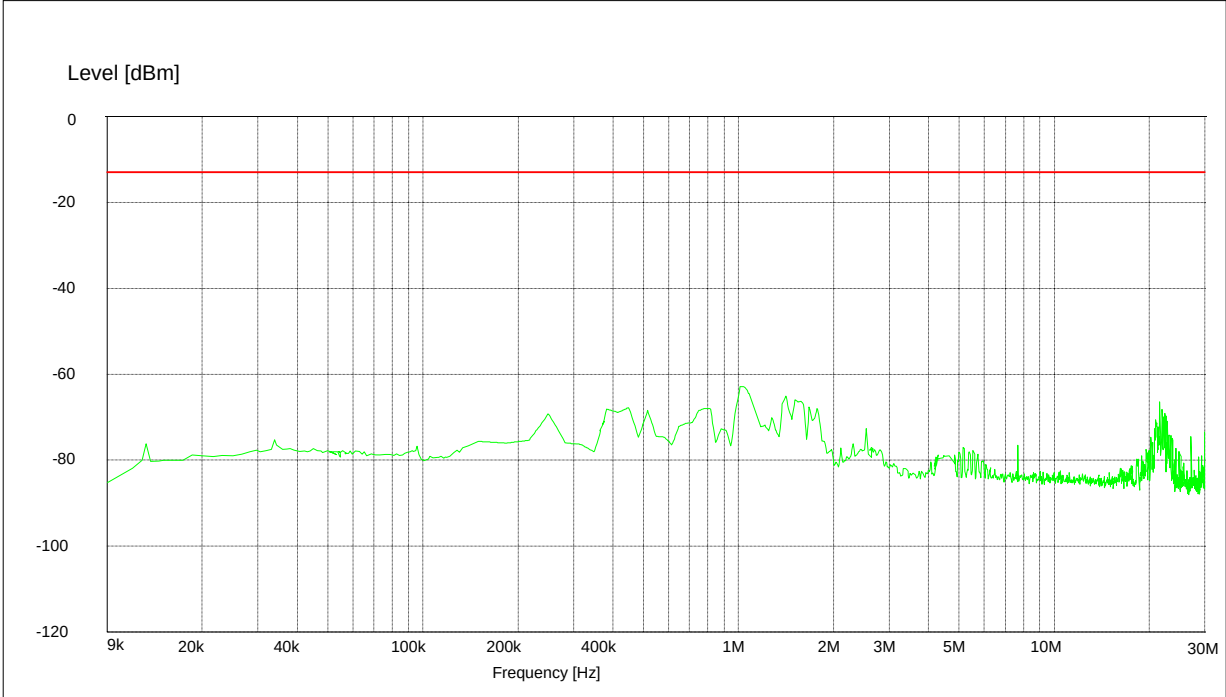


Note: The point which exceeded the limit was the carrier frequency.

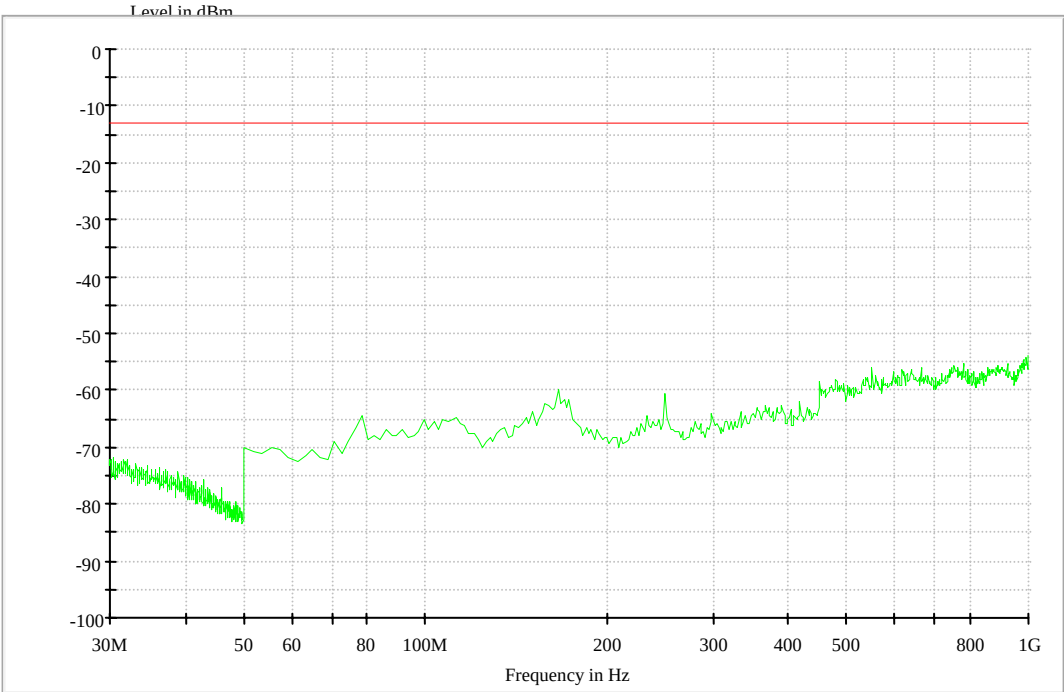
Traffic Mode (12GHz-20GHz)



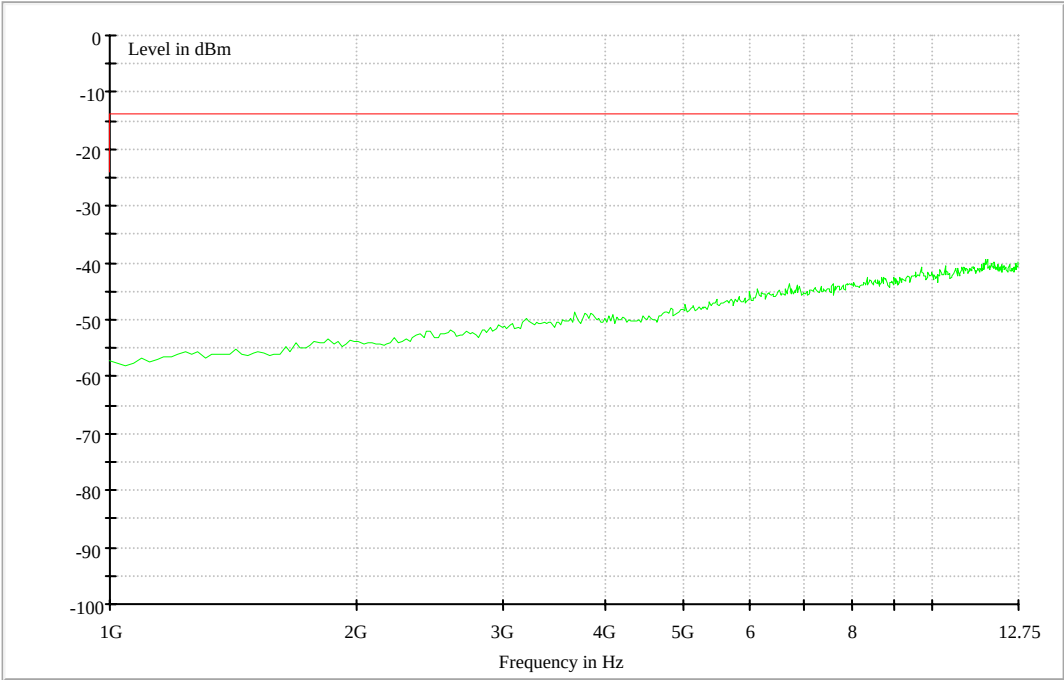
IDLE Mode (9 kHz-30MHz)



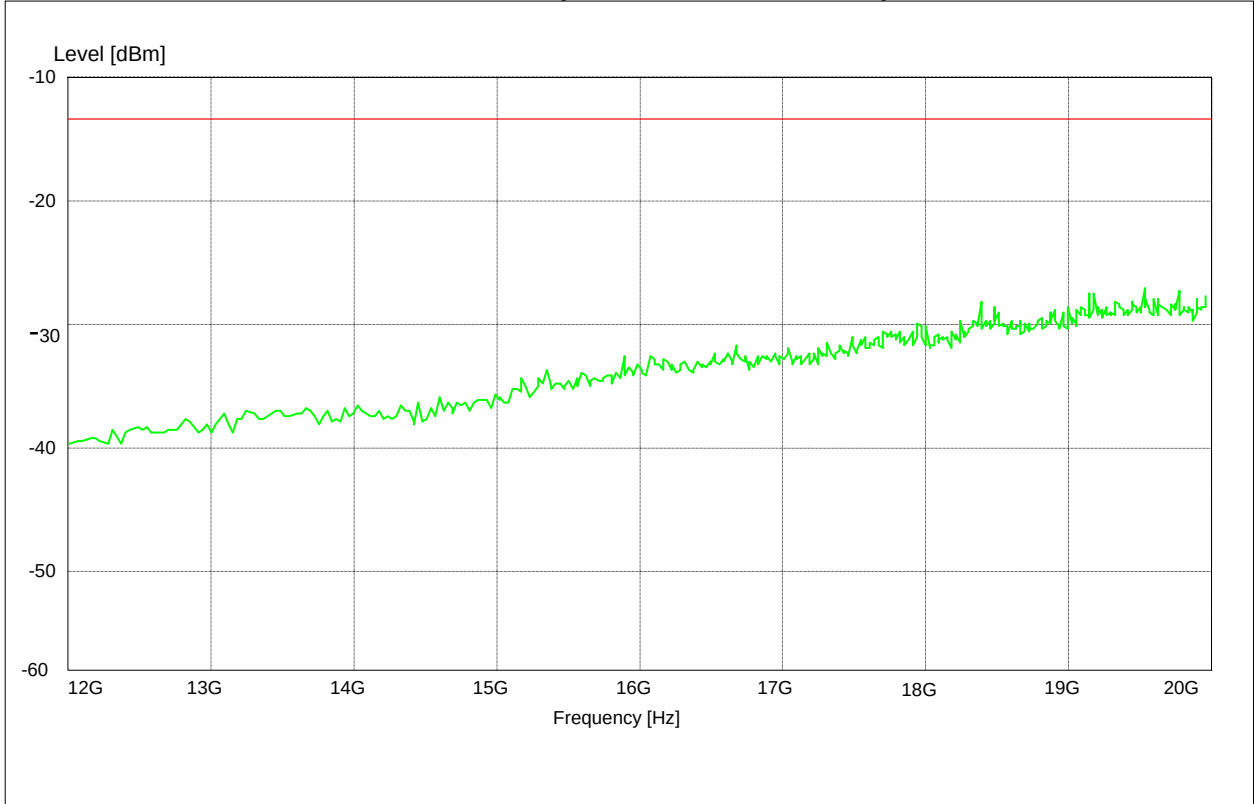
IDLE Mode (30MHz-1GHz)



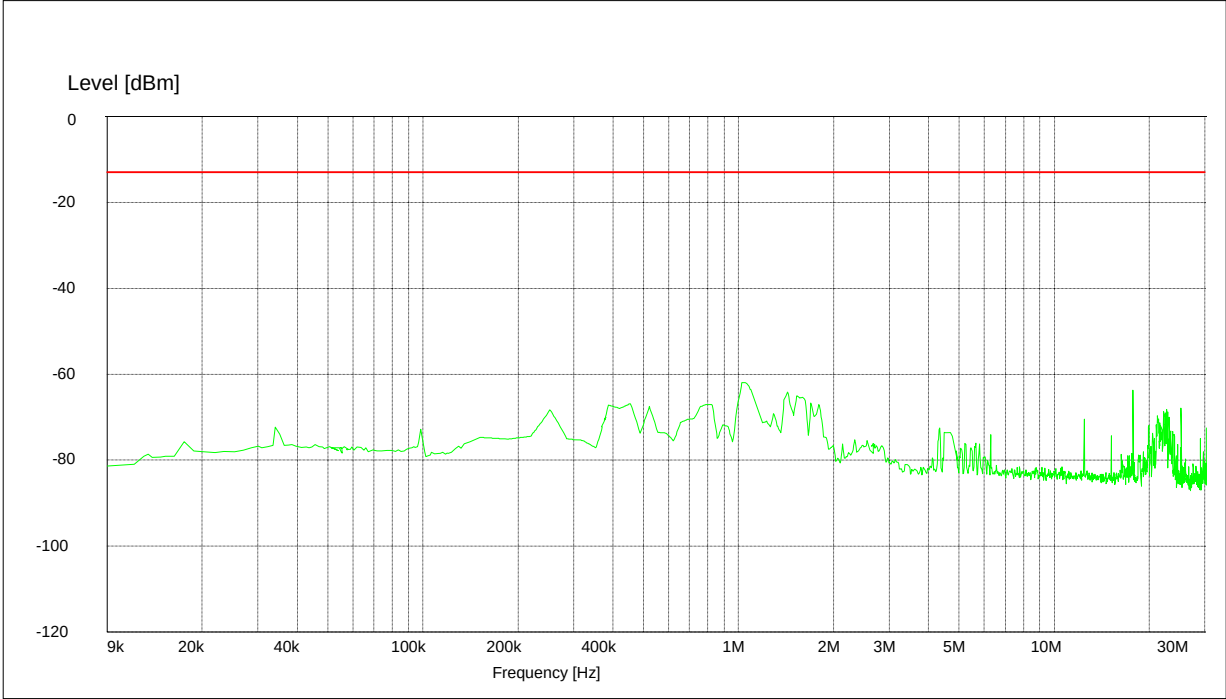
IDLE Mode (1GHz-12.75GHz)



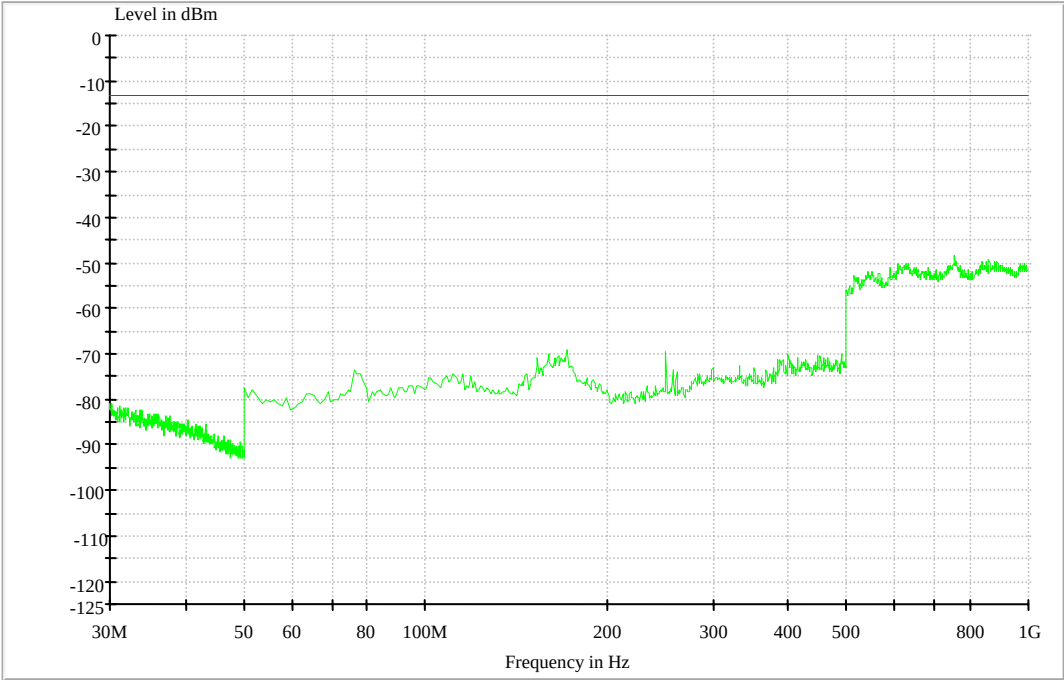
IDLE Mode (12GHz-20GHz)



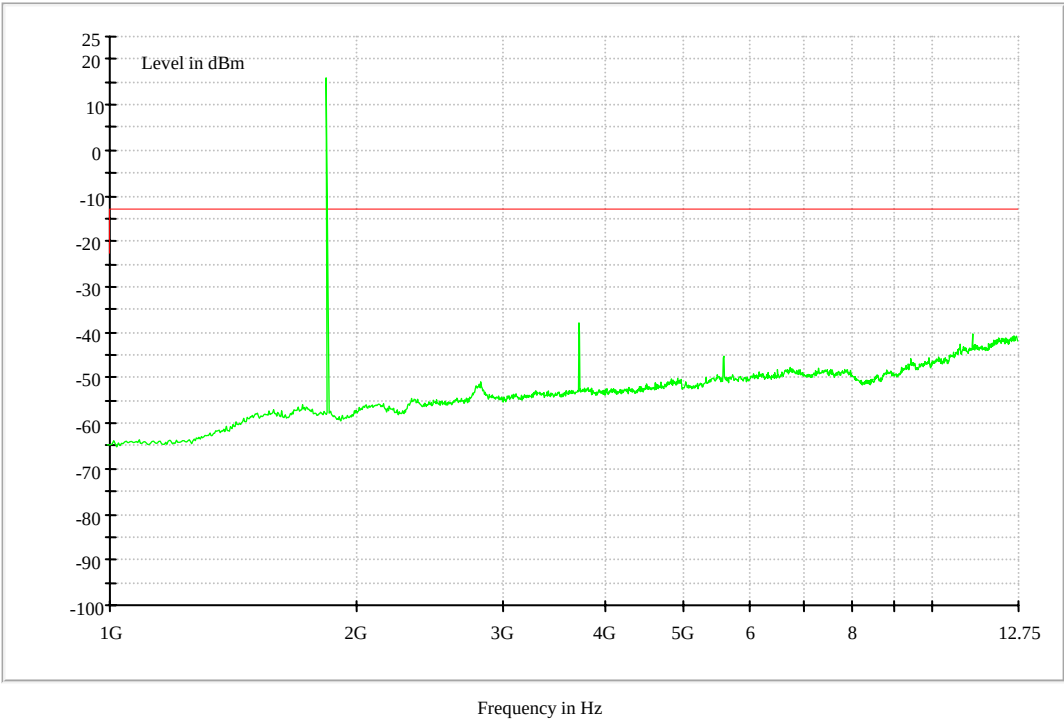
EDGE MODE:
Traffic Mode (9kHz-30MHz)



Traffic Mode (30MHz-1GHz)

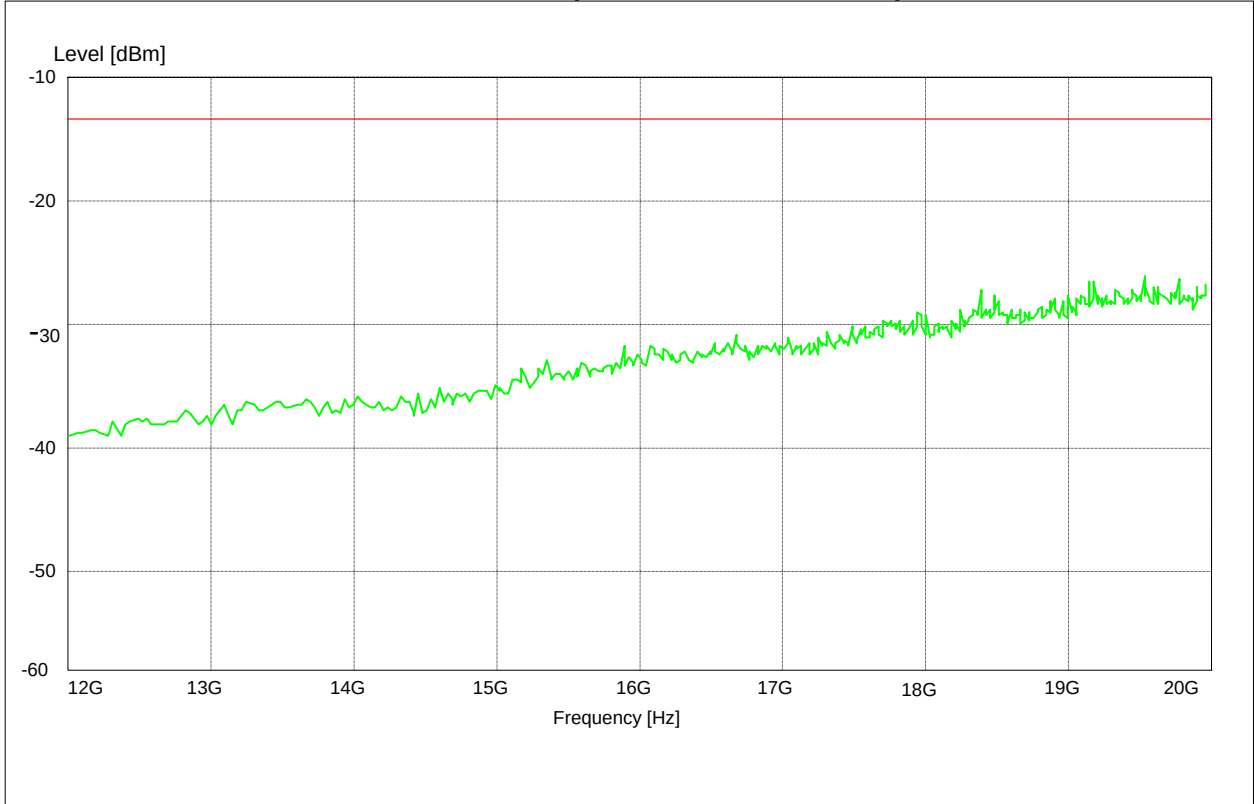


Traffic Mode (1GHz-12.75GHz)

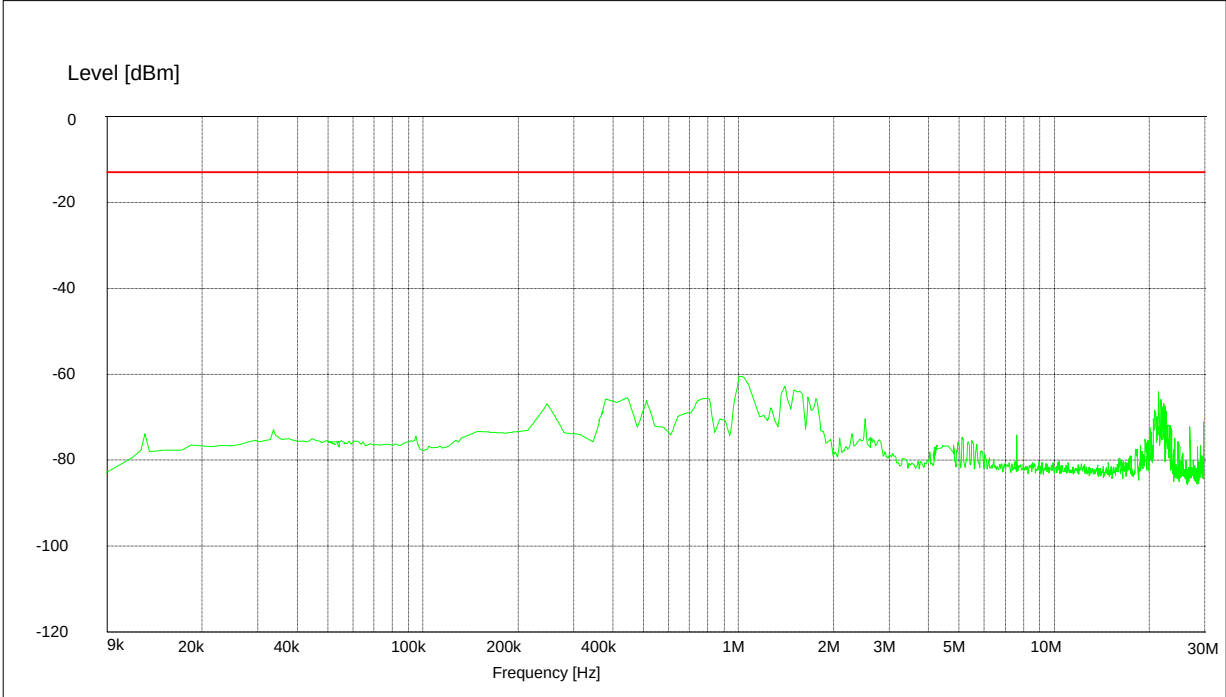


Note: The point which exceeded the limit was the carrier frequency.

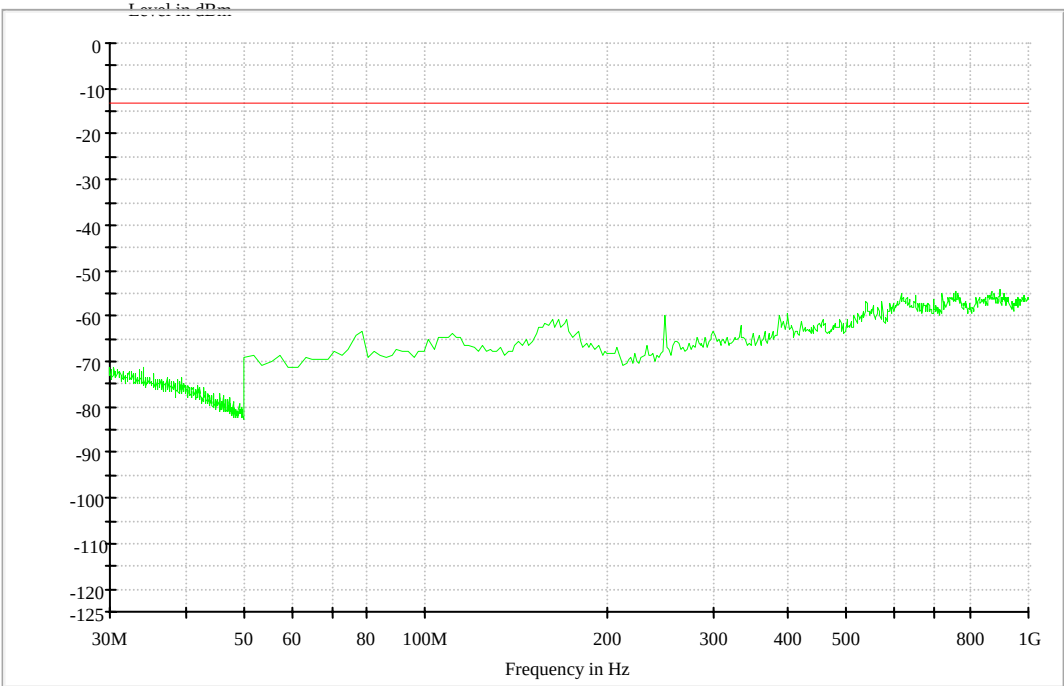
Traffic Mode (12GHz-20GHz)



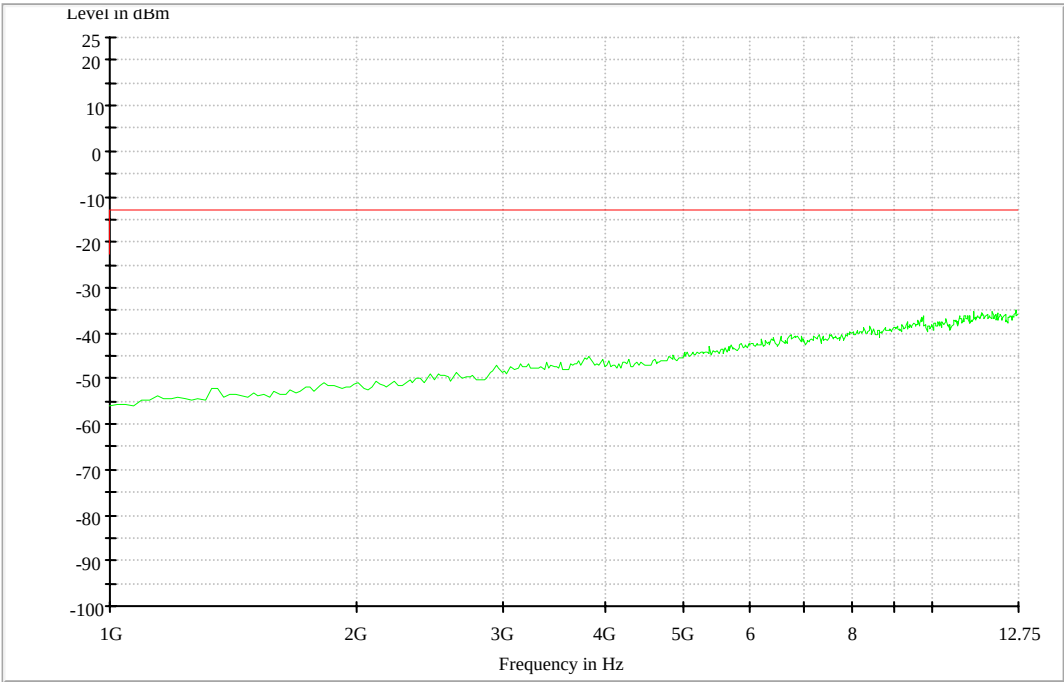
IDLE Mode (9 kHz-30MHz)



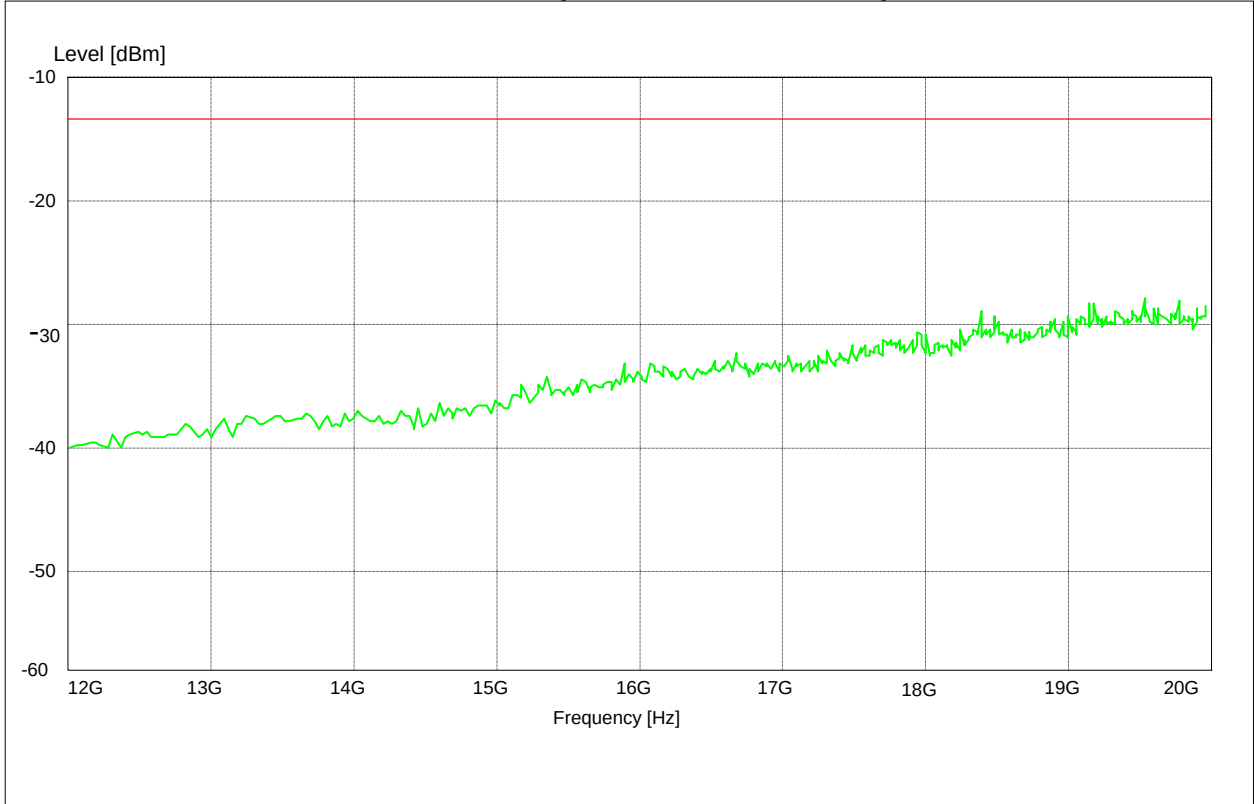
IDLE Mode (30MHz-1GHz)



IDLE Mode (1GHz-12.75GHz)



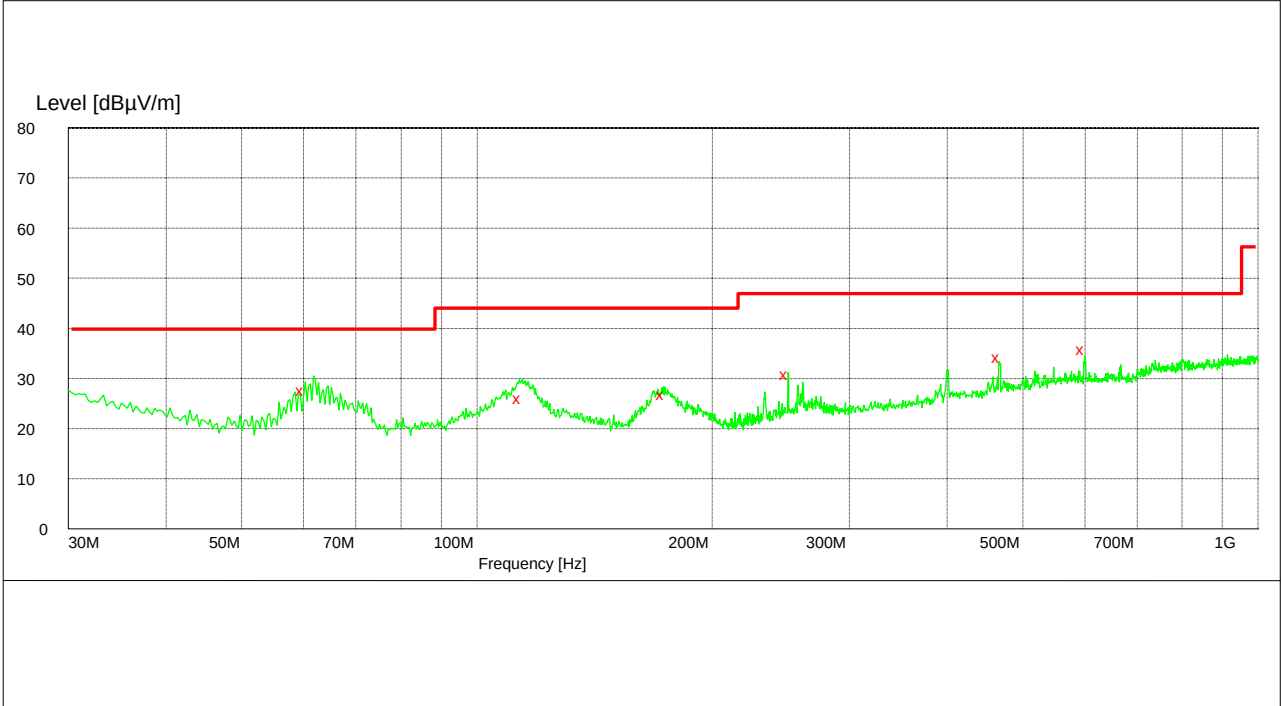
IDLE Mode (12GHz-20GHz)



Appendix G

Radiated Emission of Enclosure in Idle Mode

According to FCC Part 15.109



MEASUREMENT RESULT: QP DECTER

Frequency (MHz)	Level (dBµV/m)	Transd (dB)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Azimuth (deg)	Polarisation
59.980000	27.90	-17.1	40.0	12.1	109.0	0.00	VERTICAL
113.700000	26.20	-10.2	43.5	17.3	262.0	0.00	HORIZONTAL
173.400000	27.00	-12.1	43.5	16.5	165.0	0.00	HORIZONTAL
249.960000	31.00	-8.2	46.0	15.0	161.0	260.00	VERTICAL
466.320000	34.50	-3.6	46.0	11.5	100.0	0.00	VERTICAL
598.140000	36.10	-1.7	46.0	9.9	100.0	0.00	VERTICAL

Appendix H

Photos of Test Setup

2 Radiated Emissions



Radiated Disturbance

3 Radiated Spurious Emissions



Radiated Spurious Emission (below 1GHz)



Radiated Spurious Emission (above 1GHz)

Appendix I

Measurement Results

Maximum Conducted Output Power

Maximum conducted power at 1st minute (dBm)			
Channel	512	661	810
GPRS	29.49	29.53	29.60
EGPRS	25.26	25.64	26.02
Maximum conducted power at 20th minute (dBm)			
Channel	512	661	810
GPRS	29.49	29.56	29.61
EGPRS	25.82	25.30	25.78
Maximum conducted power at 40th minute (dBm)			
Channel	512	661	810
GPRS	29.49	29.55	29.63
EGPRS	25.60	25.78	25.88

Channel 512

1st minute
GPRS

Measurement/Instrument Screen									
Control	GSM/GPRS Transmit Power							PDCH Params	
	GMSK Transmit Power 29.49 dBm Continuous							Downlink Traffic Power ▾	
								Traffic Band PCS	
								Traffic Channel 512	
	MS TX Level				Value				
	MS TX Level Burst 1				0		MS TX Level ▾		
	MS TX Level Burst 2				0				
							Coding Scheme CS-4		
Close Menu							Return		
	Background		Active Cell Transferring			Sys Type: GPRS			1 of 2
						Logging: No Conn.			
			IntRef	Offset					

EGPRS

Measurement/Instrument Screen									
Control		EGPRS Transmit Power					PDCH Params		
			EPSK Burst Power		EPSK Est Carrier Power			Downlink Traffic Power ▾	
			25.26 dBm		25.75 dBm			Traffic Band	
								PCS	
								Traffic Channel	
								512	
								MS TX Level ▾	
								Modulation Coding Scheme ▾	
								Return	
Close Menu									
		Background		Active Cell Transferring		Sys Type: EGPRS			
						Logging: No Conn.			
				IntRef Offset				1 of 2	

EGPRS

Measurement/Instrument Screen										
Control		EGPRS Transmit Power					PDCH Params			
	EPSK Burst Power 25.82 dBm					EPSK Est Carrier Power 25.76 dBm				
						Downlink Traffic Power ▾				
						Traffic Band PCS				
						Traffic Channel 512				
						MS TX Level ▾				
						Modulation Coding Scheme ▾				
						Return				
Close Menu										
		Background		Active Cell Transferring		Sys Type: EGPRS				
						Logging: No Conn.				
				IntRef		Offset				
								1 of 2		

EGPRS

Measurement/Instrument Screen										
Control		EGPRS Transmit Power					PDCH Parms			
	EPSK Burst Power 25.60 dBm					EPSK Est Carrier Power 25.75 dBm				
						Downlink Traffic Power ▾				
						Traffic Band PCS				
						Traffic Channel 512				
						MS TX Level ▾				
						Modulation Coding Scheme ▾				
						Return				
Close Menu										
		Background		Active Cell Transferring		Sys Type: EGPRS				
						Logging: No Conn.				
				IntRef		Offset				
								1 of 2		

Channel 661

1st minute

GPRS

Measurement/Instrument Screen																											
Control	GSM/GPRS Transmit Power						PDTCCH Params																				
	GMSK Transmit Power 29.53 dBm Continuous						Downlink Traffic Power																				
							Traffic Band																				
							PCS																				
							Traffic Channel																				
							661																				
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	MS TX Level	Value																									
	MS TX Level Burst 1	0																									
	MS TX Level Burst 2	0																									
						Coding Scheme																					
						CS-4																					
						Return																					
Close Menu																											
	Background		Active Cell Transferring		Sys Type: GPRS																						
					Logging: No Conn.																						
		IntRef	Offset						1 of 2																		

EGPRS

Measurement/Instrument Screen										
Control		EGPRS Transmit Power					PDCH Parms			
	EPSK Burst Power 25.64 dBm					EPSK Est Carrier Power 25.80 dBm				
						Downlink Traffic Power ▾				
						Traffic Band PCS				
						Traffic Channel 661				
						MS TX Level ▾				
						Modulation Coding Scheme ▾				
						Return				
Close Menu										
		Background		Active Cell Transferring		Sys Type: EGPRS				
						Logging: No Conn.				
				IntRef		Offset				
								1 of 2		

20th minute
GPRS

Measurement/Instrument Screen									
Control		GSM/GPRS Transmit Power				PDCH Params			
		GMSK Transmit Power 29.56 dBm				Downlink Traffic Power ▾			
						Traffic Band PCS			
						Traffic Channel 661			
						MS TX Level ▾			
		MS TX Level Burst 1		0		Coding Scheme CS-4			
		MS TX Level Burst 2		0					
		Close Menu						Return	
		Background		Active Cell Transferring		Sys Type: GPRS			
				IntRef Offset		Logging: No Conn.		1 of 2	

EGPRS

Measurement/Instrument Screen										
Control		EGPRS Transmit Power					PDCH Parms			
	EPSK Burst Power 25.30 dBm					EPSK Est Carrier Power 25.81 dBm				
						Downlink Traffic Power ▾				
						Traffic Band PCS				
						Traffic Channel 661				
						MS TX Level ▾				
						Modulation Coding Scheme ▾				
						Return				
Close Menu										
		Background		Active Cell Transferring		Sys Type: EGPRS				
						Logging: No Conn.				
				IntRef		Offset				
								1 of 2		

40th minute
GPRS

Measurement/Instrument Screen									
Control		GSM/GPRS Transmit Power				PDCH Params			
	GMSK Transmit Power 29.55 dBm				Downlink Traffic Power ▾				
					Traffic Band		PCS		
	Traffic Channel		661						
	Continuous				MS TX Level ▾				
	MS TX Level		Value		Coding Scheme		CS-4		
	MS TX Level Burst 1		0						
	MS TX Level Burst 2		0						
Close Menu						Return			
		Background		Active Cell Transferring		Sys Type: GPRS			
						Logging: No Conn.			
				IntRef Offset				1 of 2	

EGPRS

Measurement/Instrument Screen										
Control		EGPRS Transmit Power					PDCH Params			
	EPSK Burst Power 25.78 dBm					EPSK Est Carrier Power 25.80 dBm				
						Downlink Traffic Power ▾				
						Traffic Band PCS				
						Traffic Channel 661				
						MS TX Level ▾				
						Modulation Coding Scheme ▾				
						Return				
Close Menu										
		Background		Active Cell Transferring			Sys Type: EGPRS			
							Logging: No Conn.			
				IntRef		Offset				
								1 of 2		

Channel 810

1st minute
GPRS

Measurement/Instrument Screen									
Control	GSM/GPRS Transmit Power						PDTCB Parm		
	GMSK Transmit Power 29.60 dBm Continuous						Downlink Traffic Power ▾		
							Traffic Band PCS		
							Traffic Channel 810		
							MS TX Level ▾		
							Coding Scheme CS-4		
							Return		
	Close Menu								
	Background		Active Cell Transferring		Sys Type: GPRS				
					Logging: No Conn.				
		IntRef Offset				1 of 2			

EGPRS

Measurement/Instrument Screen										
Control		EGPRS Transmit Power					PDCH Params			
	EPSK Burst Power 26.02 dBm					EPSK Est Carrier Power 26.07 dBm				
						Continuous				
	MS TX Level					Value				
	MS TX Level Burst 1					0				
	MS TX Level Burst 2					0				
Close Menu							Return			
		Background		Active Cell Transferring			Sys Type: EGPRS			
							Logging: No Conn.			
				IntRef		Offset				
								1 of 2		

20th minute
GPRS

Measurement/Instrument Screen									
Control		GSM/GPRS Transmit Power				PDCH Params			
		GMSK Transmit Power 29.61 dBm				Downlink Traffic Power ▾			
						Traffic Band PCS			
						Traffic Channel 810			
						MS TX Level ▾			
		Continuous				Coding Scheme CS-4			
		Return							
		Close Menu							
		Background		Active Cell Transferring		Sys Type: GPRS			
				IntRef Offset		Logging: No Conn.		1 of 2	

EGPRS

Measurement/Instrument Screen										
Control		EGPRS Transmit Power					PDCH Parms			
	EPSK Burst Power 25.78 dBm					EPSK Est Carrier Power 25.89 dBm				Downlink Traffic Power ▾
										Traffic Band
										PCS
										Traffic Channel
										810
										MS TX Level ▾
										Modulation Coding Scheme ▾
Close Menu							Return			
		Background		Active Cell Transferring		Sys Type: EGPRS				
						Logging: No Conn.				
				IntRef Offset				1 of 2		

40th minute
GPRS

Measurement/Instrument Screen									
Control		GSM/GPRS Transmit Power				PDCH Params			
		GMSK Transmit Power 29.63 dBm				Downlink Traffic Power ▾			
						Traffic Band PCS			
						Traffic Channel 810			
						MS TX Level ▾			
		Continuous				Coding Scheme CS-4			
		Return							
		Close Menu							
Background		Active Cell Transferring		Sys Type: GPRS		Logging: No Conn.		1 of 2	
		IntRef Offset							

EGPRS

Measurement/Instrument Screen									
Control	EGPRS Transmit Power						PDCH Params		
	EPSK Burst Power		EPSK Est Carrier Power				Downlink Traffic Power ▾		
	25.88 dBm		25.88 dBm				Traffic Band		
							PCS		
							Traffic Channel		
							810		
							MS TX Level ▾		
							Modulation Coding Scheme ▾		
Close Menu							Return		
	Background		Active Cell Transferring		Sys Type: EGPRS				
					Logging: No Conn.				
		IntRef	Offset				1 of 2		