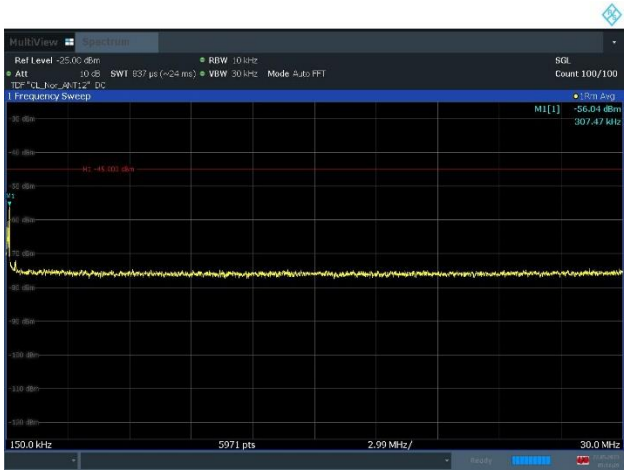
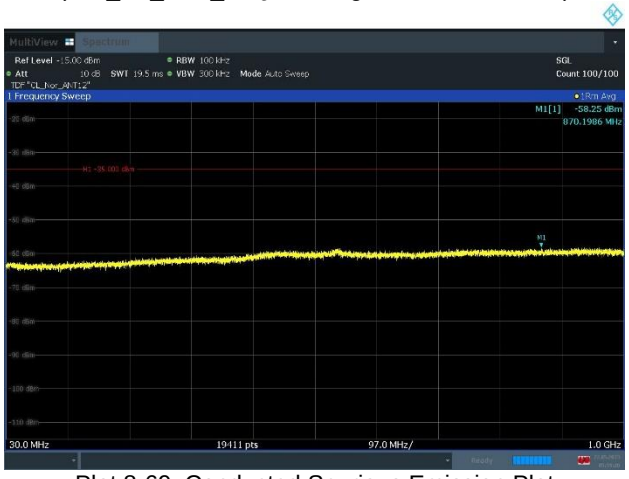
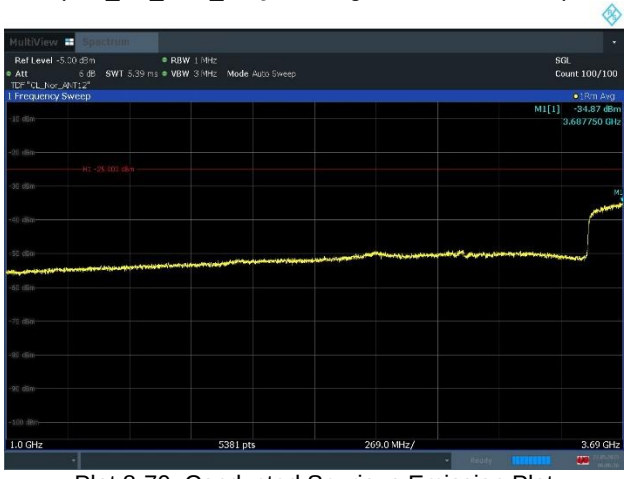
Plot 8-67. Conducted Spurious Emission Plot
(9KHz to 150KHz)
(n77_1C_80M_16QAM - High Channel, Port 12)



Plot 8-68. Conducted Spurious Emission Plot
(150KHz to 30MHz)
(n77_1C_80M_16QAM - High Channel, Port 12)

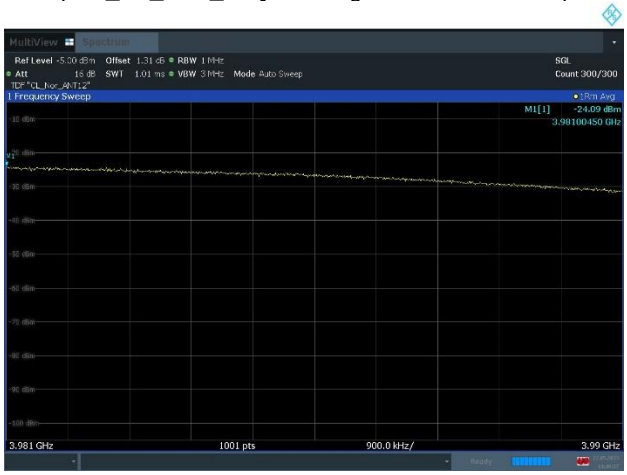


Plot 8-69. Conducted Spurious Emission Plot
(30MHz to 1000MHz)
(n77_1C_80M_16QAM - High Channel, Port 12)



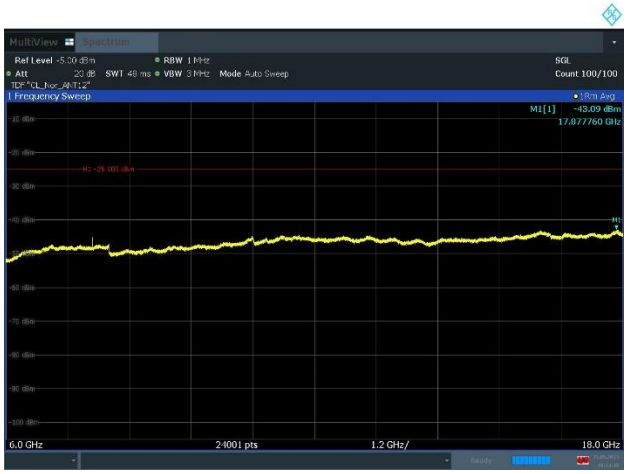
Plot 8-70. Conducted Spurious Emission Plot
(1000MHz to 3690MHz)
(n77_1C_80M_16QAM - High Channel, Port 12)

Plot 8-71. Conducted Spurious Emission Plot
(3690MHz to 3699MHz)
(n77_1C_80M_16QAM - High Channel, Port 12)



Plot 8-72. Conducted Spurious Emission Plot
(3981MHz to 3990GHz)
(n77_1C_80M_16QAM - High Channel, Port 12)

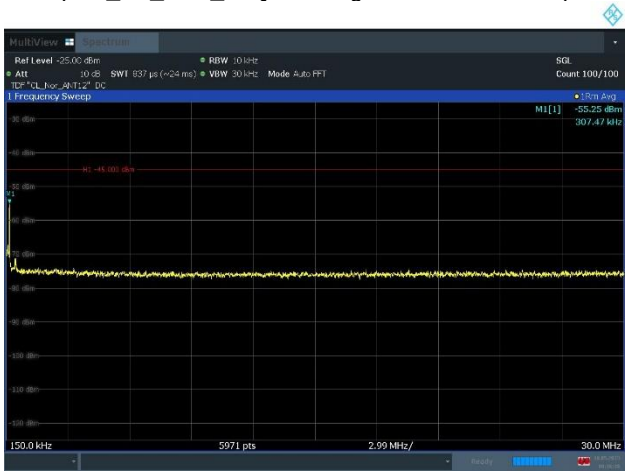
Plot 8-73. Conducted Spurious Emission Plot
(3990MHz to 6GHz)
(n77_1C_80M_16QAM - High Channel, Port 12)



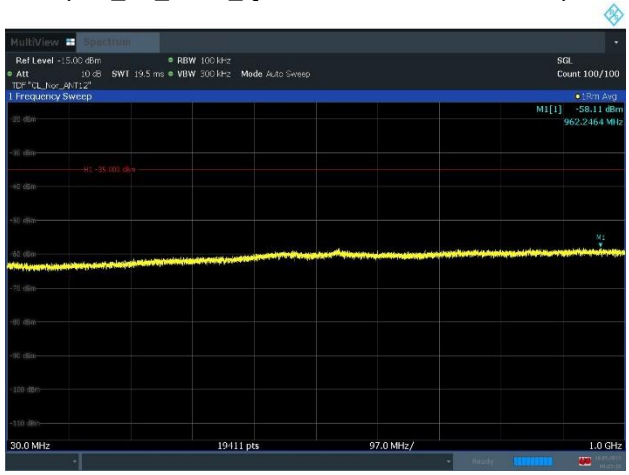
Plot 8-74. Conducted Spurious Emission Plot
(6GHz to 18GHz)
(n77_1C_80M_16QAM - High Channel, Port 12)

Plot 8-75. Conducted Spurious Emission Plot
(18GHz to 40GHz)
(n77_1C_80M_16QAM - High Channel, Port 12)

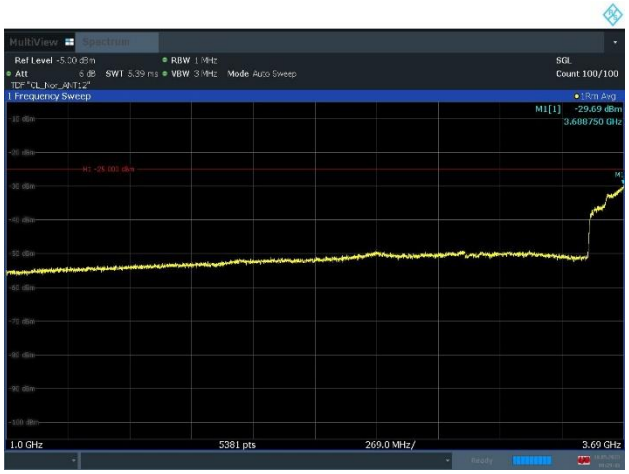
Plot 8-76. Conducted Spurious Emission Plot
(9KHz to 150KHz)
(n77_1C_100M_QPSK - Low Channel, Port 12)



Plot 8-77. Conducted Spurious Emission Plot
(150KHz to 30MHz)
(n77_1C_100M_QPSK - Low Channel, Port 12)

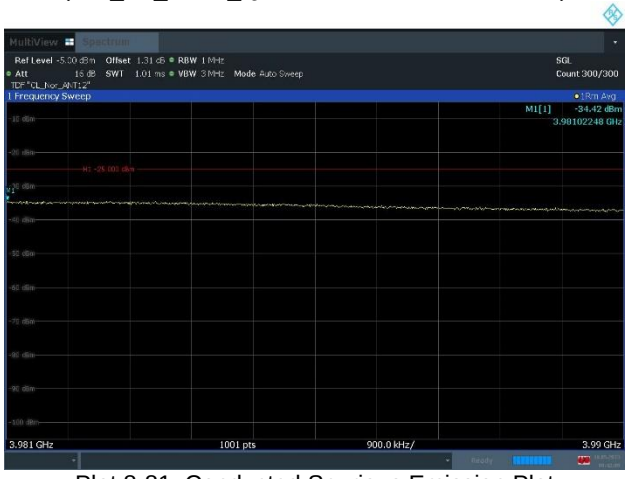


Plot 8-78. Conducted Spurious Emission Plot
(30MHz to 1000MHz)
(n77_1C_100M_QPSK - Low Channel, Port 12)



Plot 8-79. Conducted Spurious Emission Plot
(1000MHz to 3690MHz)
(n77_1C_100M_QPSK - Low Channel, Port 12)

Plot 8-80. Conducted Spurious Emission Plot
(3690MHz to 3699MHz)
(n77_1C_100M_QPSK - Low Channel, Port 12)



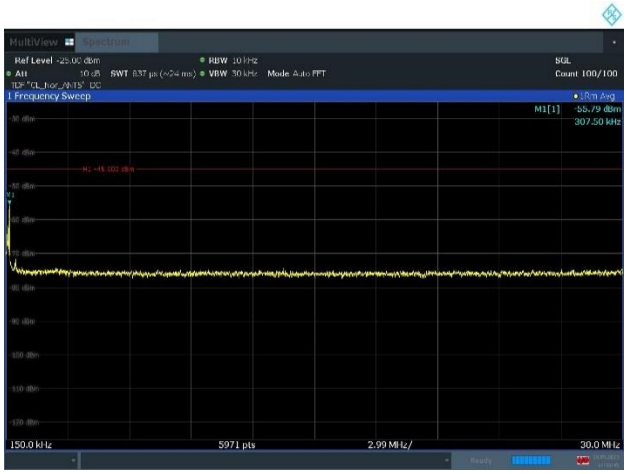
Plot 8-81. Conducted Spurious Emission Plot
(3981MHz to 3990GHz)
(n77_1C_100M_QPSK - Low Channel, Port 12)

Plot 8-82. Conducted Spurious Emission Plot
(3990MHz to 6GHz)
(n77_1C_100M_QPSK - Low Channel, Port 12)

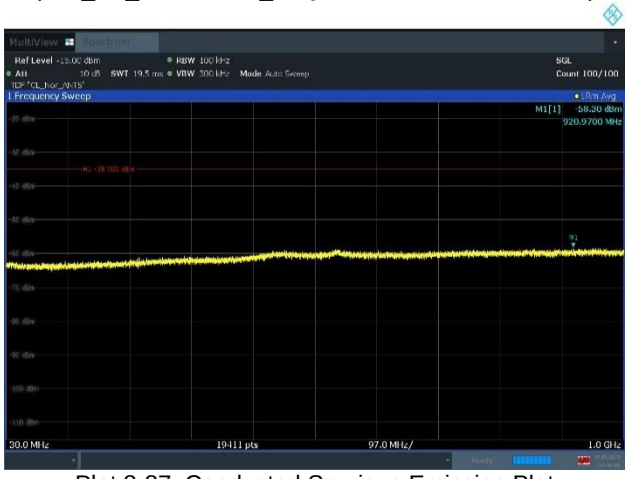
Plot 8-83. Conducted Spurious Emission Plot
(6GHz to 18GHz)
(n77_1C_100M_QPSK - Low Channel, Port 12)

Plot 8-84. Conducted Spurious Emission Plot
(18GHz to 40GHz)
(n77_1C_100M_QPSK - Low Channel, Port 12)

Plot 8-85. Conducted Spurious Emission Plot
(9KHz to 150KHz)
(n77_2C_100M+40M_16QAM - Mid Channel, Port 5)

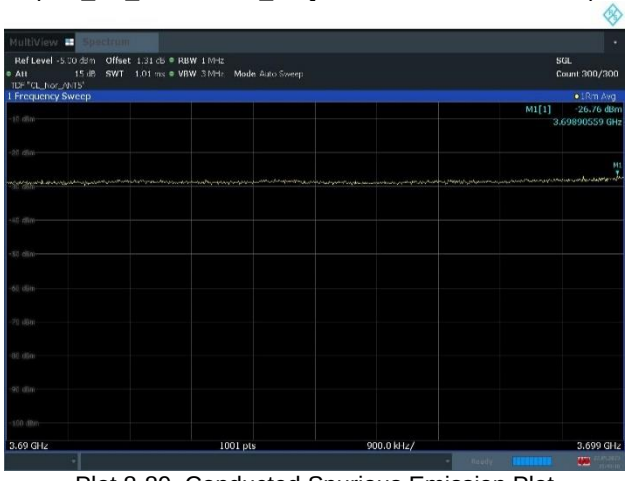


Plot 8-86. Conducted Spurious Emission Plot
(150KHz to 30MHz)
(n77_2C_100M+40M_16QAM - Mid Channel, Port 5)



Plot 8-87. Conducted Spurious Emission Plot
(30MHz to 1000MHz)
(n77_2C_100M+40M_16QAM - Mid Channel, Port 5)

Plot 8-88. Conducted Spurious Emission Plot
(1000MHz to 3690MHz)
(n77_2C_100M+40M_16QAM - Mid Channel, Port 5)



Plot 8-89. Conducted Spurious Emission Plot
(3690MHz to 3699MHz)
(n77_2C_100M+40M_16QAM - Mid Channel, Port 5)

Plot 8-90. Conducted Spurious Emission Plot
(3981MHz to 3990GHz)
(n77_2C_100M+40M_16QAM - Mid Channel, Port 5)

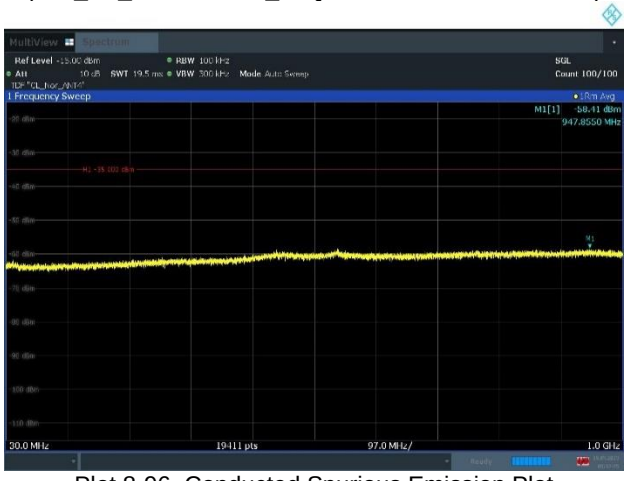
Plot 8-91. Conducted Spurious Emission Plot
(3990MHz to 6GHz)
(n77_2C_100M+40M_16QAM - Mid Channel, Port 5)

Plot 8-92. Conducted Spurious Emission Plot
(6GHz to 18GHz)
(n77_2C_100M+40M_16QAM - Mid Channel, Port 5)

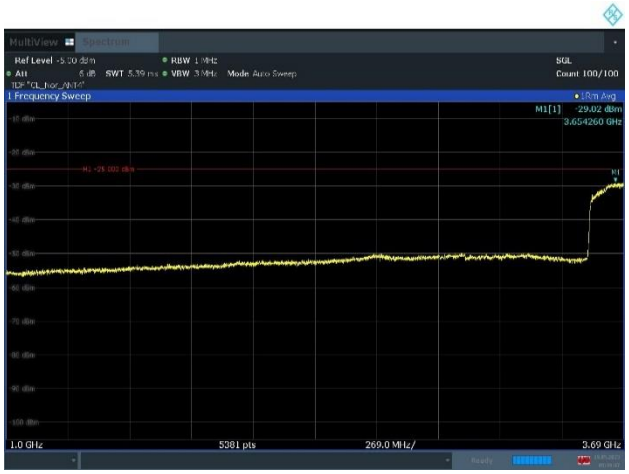
Plot 8-93. Conducted Spurious Emission Plot
(18GHz to 40GHz)
(n77_2C_100M+40M_16QAM - Mid Channel, Port 5)

Plot 8-94. Conducted Spurious Emission Plot
(9KHz to 150KHz)
(n77_2C_100M+100M_16QAM - Mid Channel, Port 4)

Plot 8-95. Conducted Spurious Emission Plot
(150KHz to 30MHz)
(n77_2C_100M+100M_16QAM - Mid Channel, Port 4)



Plot 8-96. Conducted Spurious Emission Plot
(30MHz to 1000MHz)
(n77_2C_100M+100M_16QAM - Mid Channel, Port 4)



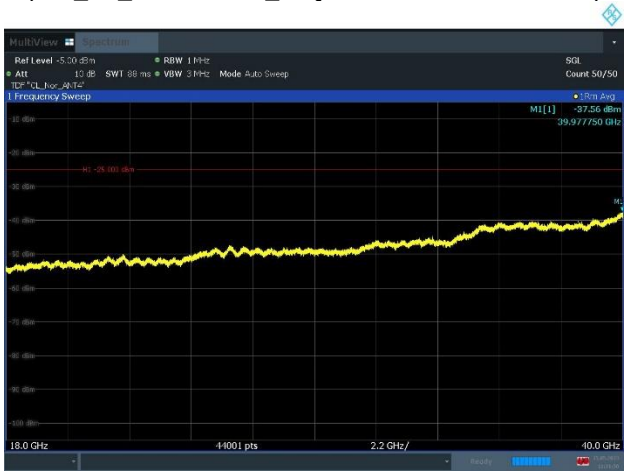
Plot 8-97. Conducted Spurious Emission Plot
(1000MHz to 3690MHz)
(n77_2C_100M+100M_16QAM - Mid Channel, Port 4)

Plot 8-98. Conducted Spurious Emission Plot
(3690MHz to 3699MHz)
(n77_2C_100M+100M_16QAM - Mid Channel, Port 4)

Plot 8-99. Conducted Spurious Emission Plot
(3981MHz to 3990GHz)
(n77_2C_100M+100M_16QAM - Mid Channel, Port 4)

Plot 8-100. Conducted Spurious Emission Plot
(3990MHz to 6GHz)
(n77_2C_100M+100M_16QAM - Mid Channel, Port 4)

Plot 8-101. Conducted Spurious Emission Plot
(6GHz to 18GHz)
(n77_2C_100M+100M_16QAM - Mid Channel, Port 4)



Plot 8-102. Conducted Spurious Emission Plot
(18GHz to 40GHz)
(n77_2C_100M+100M_16QAM - Mid Channel, Port 4)

8.7 Frequency Stability

Test Overview and Limit

Frequency stability testing is performed in accordance with the guidelines of KDB 971168 D01 v03r01.
The frequency stability of the transmitter is measured by:

a.) **Temperature:** The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.

b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the nominal value for DC powered equipment.

Test Description

1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).

2. The equipment is turned on in a "standby" condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.

   Frequency measurements are made -30°C to +50°C in 10°C increments. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

Limit

§ 27.54
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

Test Setup

The EUT was connected via an RF cable to a spectrum analyzer with the EUT placed inside an environmental chamber.

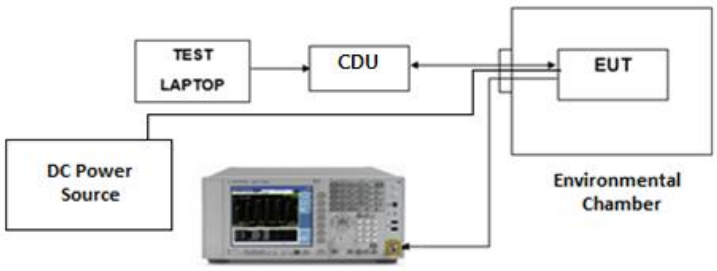


Figure 8-6. Test Instrument & Measurement Setup

Test Notes

None.

OPERATING FREQUENCY: 3840,000,000 Hz
REFERENCE VOLTAGE: -48.00 VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	-48.00	+ 20 (Ref)	3,839,999,999	0	0.0000000
100 %		- 30	3,840,000,000	1	0.0000000
100 %		- 20	3,839,999,999	0	0.0000000
100 %		- 10	3,840,000,000	1	0.0000000
100 %		0	3,839,999,998	-1	0.0000000
100 %		+ 10	3,839,999,999	0	0.0000000
100 %		+ 30	3,840,000,003	4	0.0000001
100 %		+ 40	3,840,000,001	2	0.0000001
100 %		+ 50	3,839,999,998	-1	0.0000000
85 %	-37.40	+ 20	3,839,999,997	-2	-0.0000001
115 %	-50.60	+ 20	3,839,999,998	-1	0.0000000

Table 8-30. Frequency Stability Summary Data (n77_1C_40M)

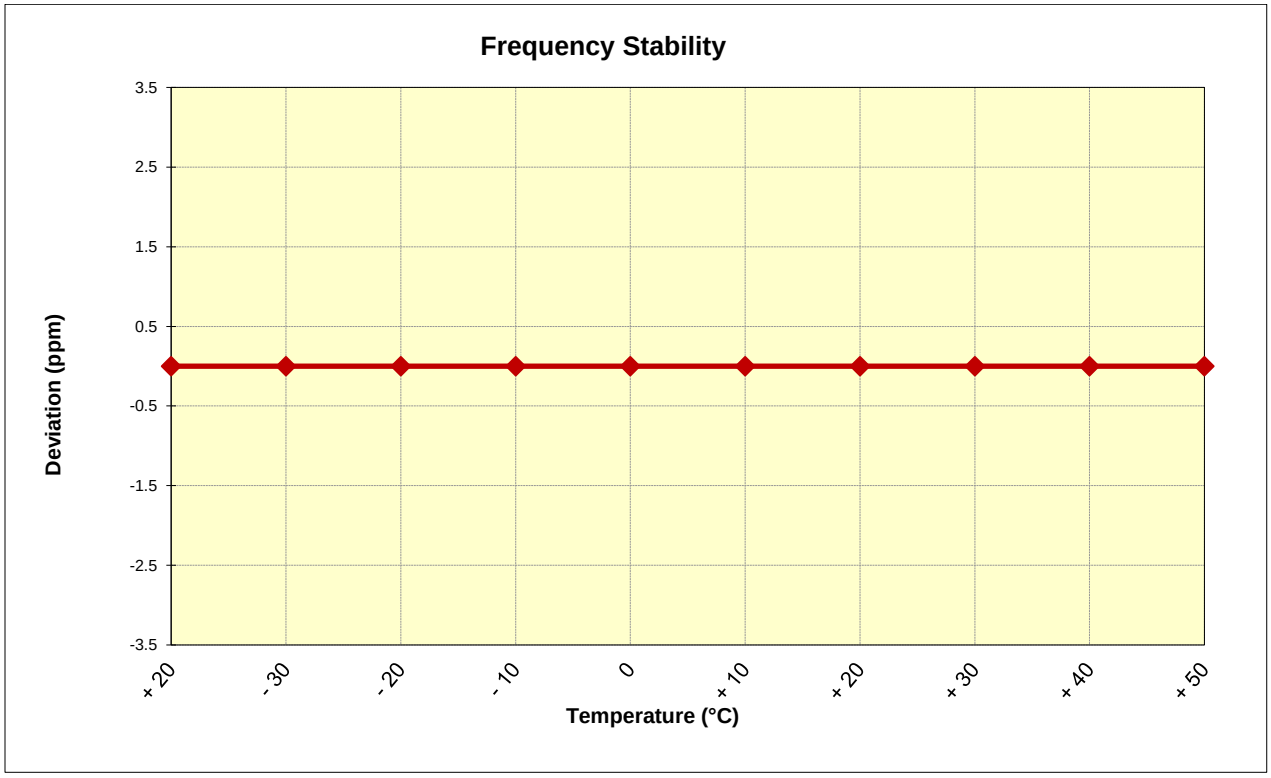


Figure 8-7. Frequency Stability Graph (n77_1C_40M)

8.8 Radiated spurious emission

Test Overview

Radiated spurious emissions measurements are performed using the field strength method described in ANSI C63.26-2015 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using vertically and horizontally polarized broadband tri-log antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas.

Test Procedure Used

ANSI C63.26 - Section 5.5.3.2

Test Setting

1. Start frequency was set to 30 MHz and stop frequency was set to at least 10 * the fundamental frequency
2. RBW = 100 kHz for emissions below 1 GHz and 1 MHz for emissions above 1GHz
3. VBW ≥ 3 x RBW
4. No. of sweep points ≥ 2 x span / RBW
5. Detector = Peak for the pre-scan, (In cases where the level is within 2 dB of the limit, the final measurement is taken using RMS detector.)
6. Trace mode = Max Hold (In cases where the level is within 2 dB of the limit, the final measurement is taken using triggering/gating and trace averaging.)
7. The trace was allowed to stabilize.

Limit

§ 27.53 (l)(1)
For base station operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz.

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

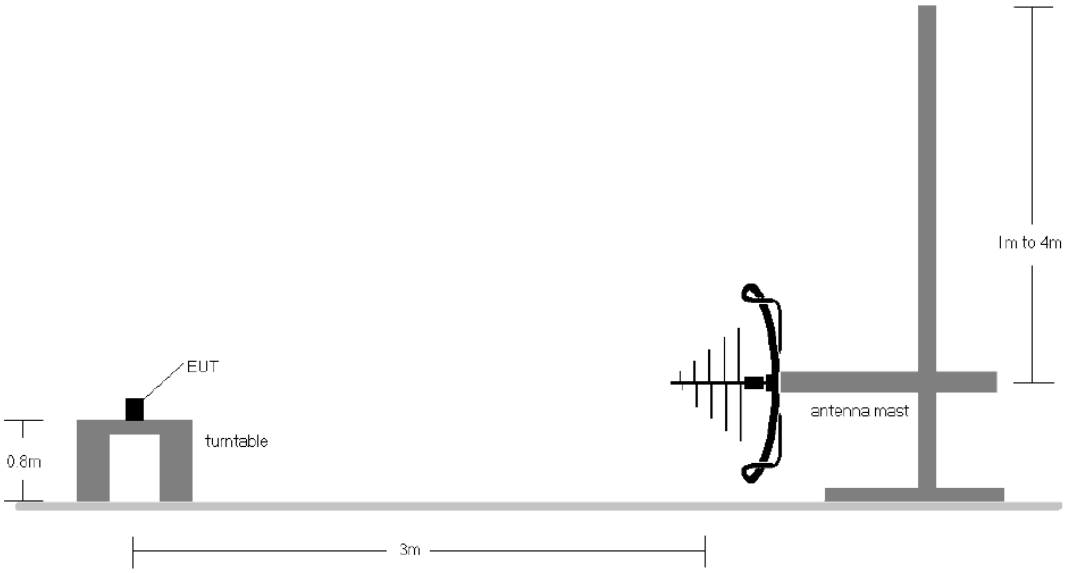


Figure 8-8. Test Instrument & Measurement Setup < 1 GHz

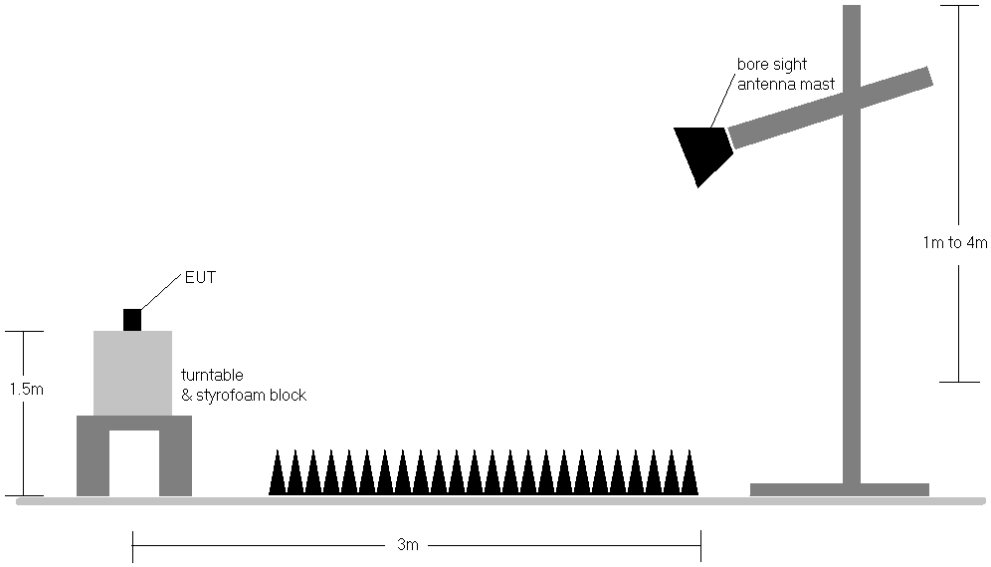


Figure 8-9. Test Instrument & Measurement Setup > 1 GHz

Test Notes

1. The average EIRP reported below is calculated per 5.2.7 of ANSI C63.26-2015 which states:

   The measured e.i.r.p is converted to E-field in V/m. Then the distance correction is applied before converted back to calculated e.i.r.p.as explained in KDB 971168 D01 D01 v03r01.

Effective Isotropic Radiated Power Sample Calculation

Field Strength [dBµV/m] = Measured Value [dBm] + 107 + AFCL [dB/m]

= -64.31 [dBm] + 107 + 24.44 [dB/m] = 67.13 dBµV/m

e.i.r.p. [dBm] = E[dB μV/m] + 20 $\log_{10}$(d[m]) - 104.8

= 67.13 dB[μV/m] + (20*log (3)) - 104.8

= -28.13 dBm

*AFCL (dB/m) contains measurement antenna factor(dB/m) and cable loss(dB) as below:

Frequency [MHz]	Antenna Factor (dB/m)	Chamber measurement cable loss + amplifier [dB]	AFCL (dB/m)
981.25	23.03	-30.33	-7.30
17895.35	47.46	-23.04	24.72

Table 8-31. Adopted AFCL value in the calculation

2. The EUT was tested in both horizontal and vertical antenna polarizations and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, channel bandwidth configurations shown in the tables below.

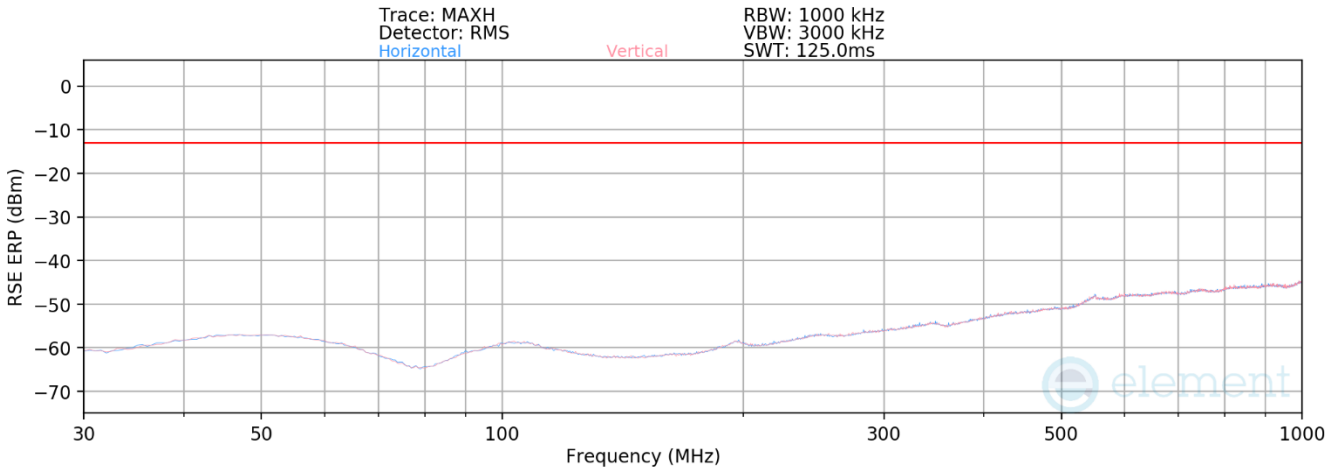
3. The spectrum is measured from 30 MHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.

4. All emissions were measured at a 3-meter test distance.

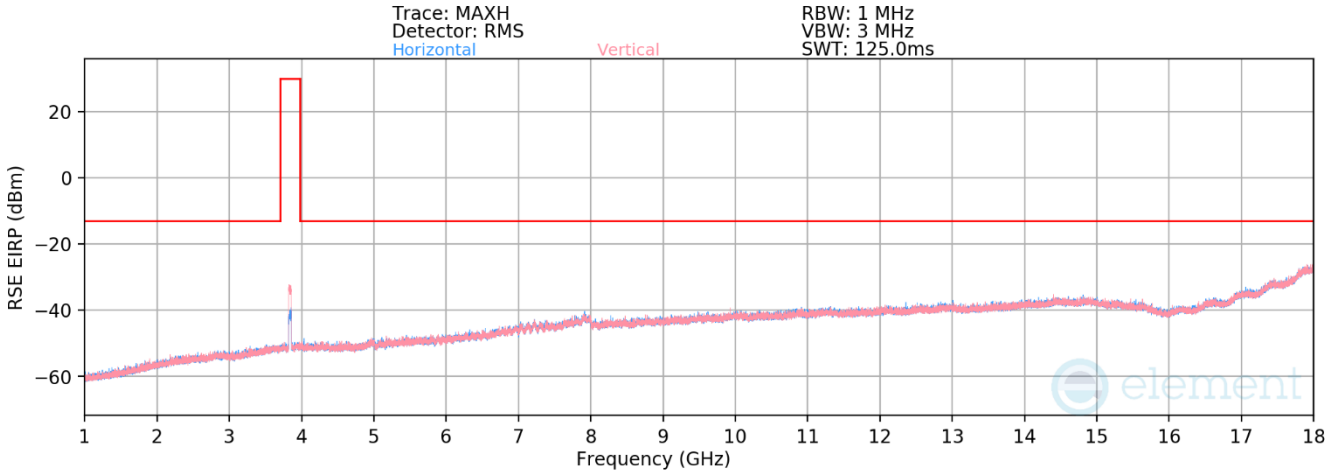
5. Spurious emissions were measured with all EUT antennas transmitting simultaneously and all antenna ports terminated.

6. The "-" shown in the following RSE tables are used to denote a noise floor measurement.

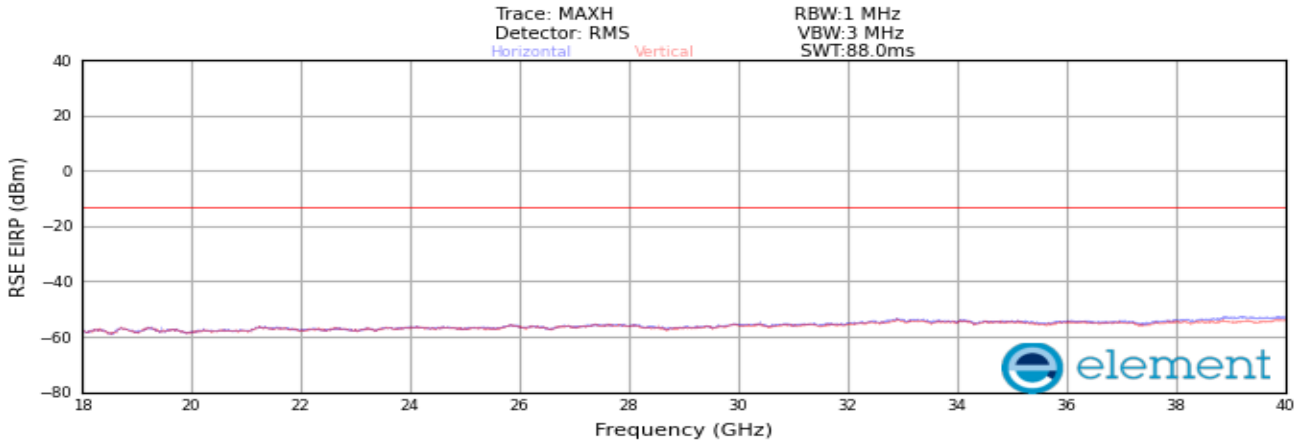
7. All modes of operation were investigated and the worst case configuration results are reported in this section.



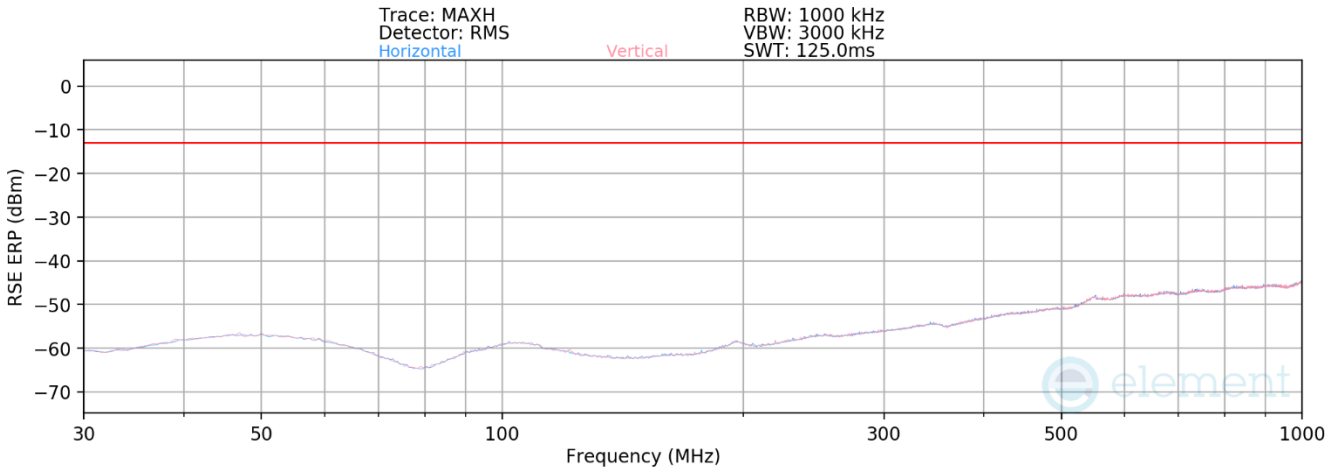
Plot 8-103. Radiated spurious emission Plot_30 MHz to 1000 MHz (n77_1C_40M_Mid Channel)



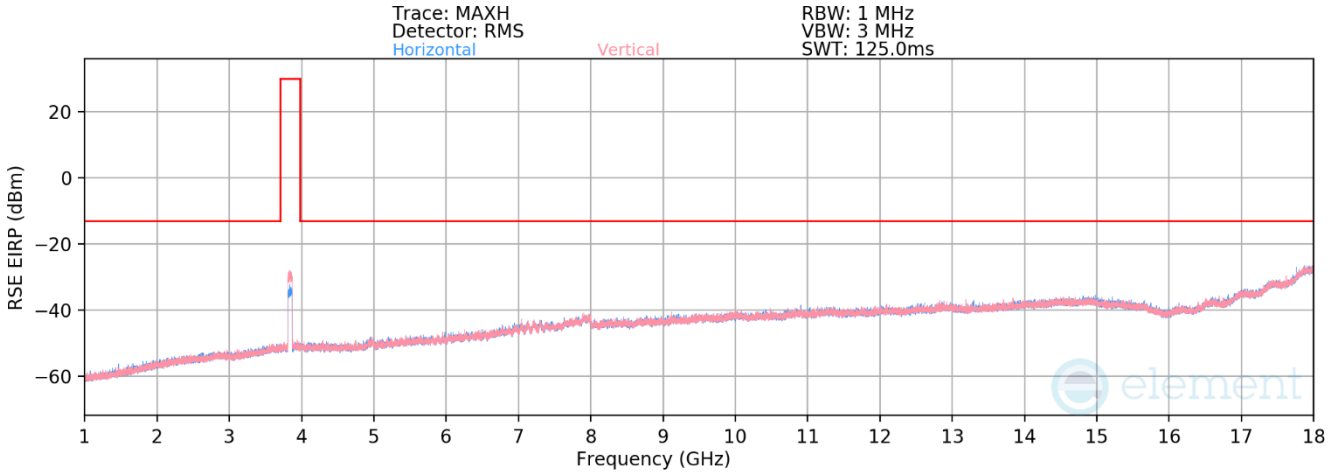
Plot 8-104. Radiated spurious emission Plot_1 GHz to 18 GHz (n77_1C_40M_Mid Channel)



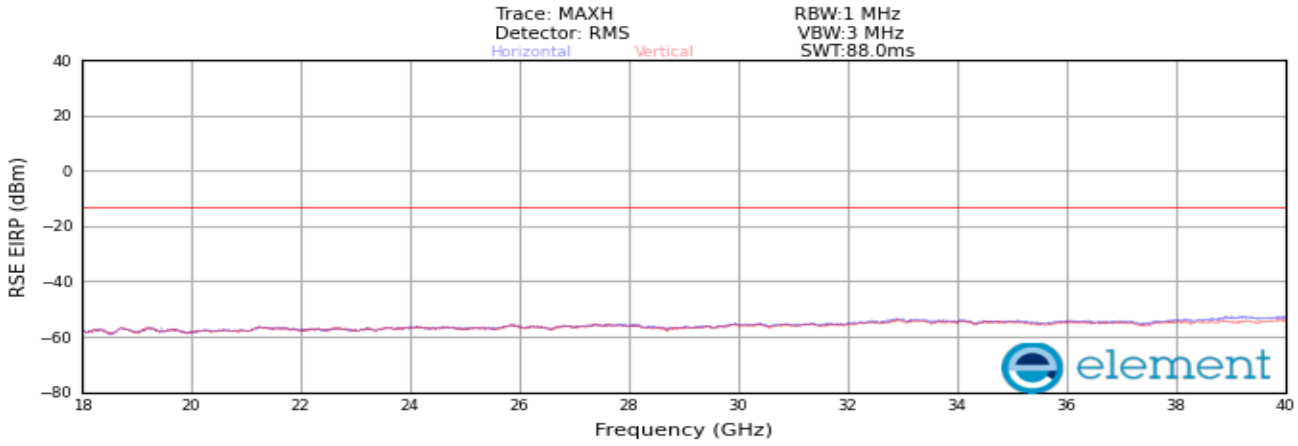
Plot 8-105. Radiated spurious emission Plot_18 GHz to 40 GHz (n77_1C_40M_Mid Channel)



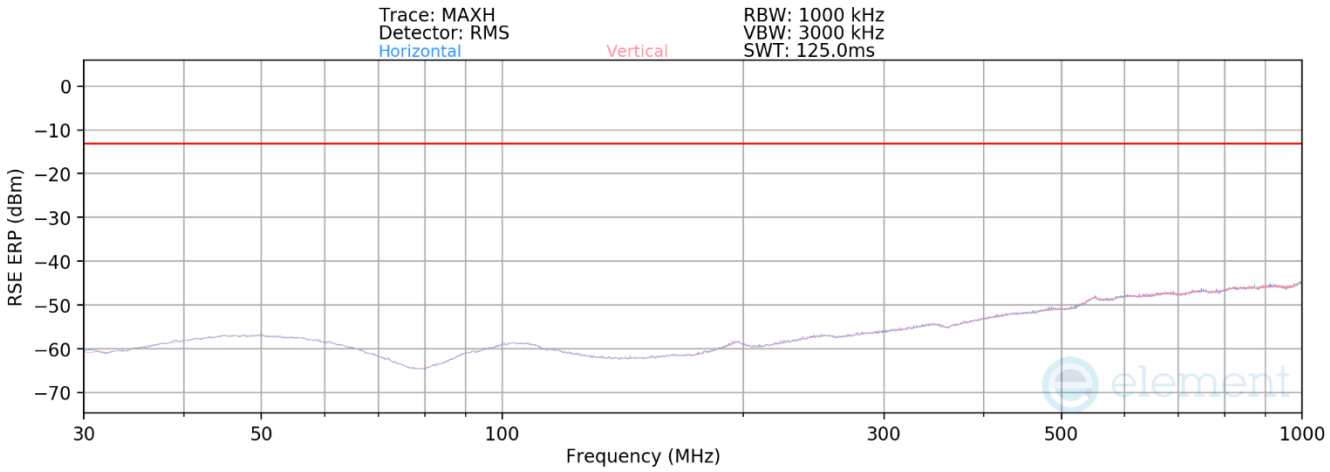
Plot 8-106. Radiated spurious emission Plot_30 MHz to 1000 MHz (n77_1C_60M_Mid Channel)



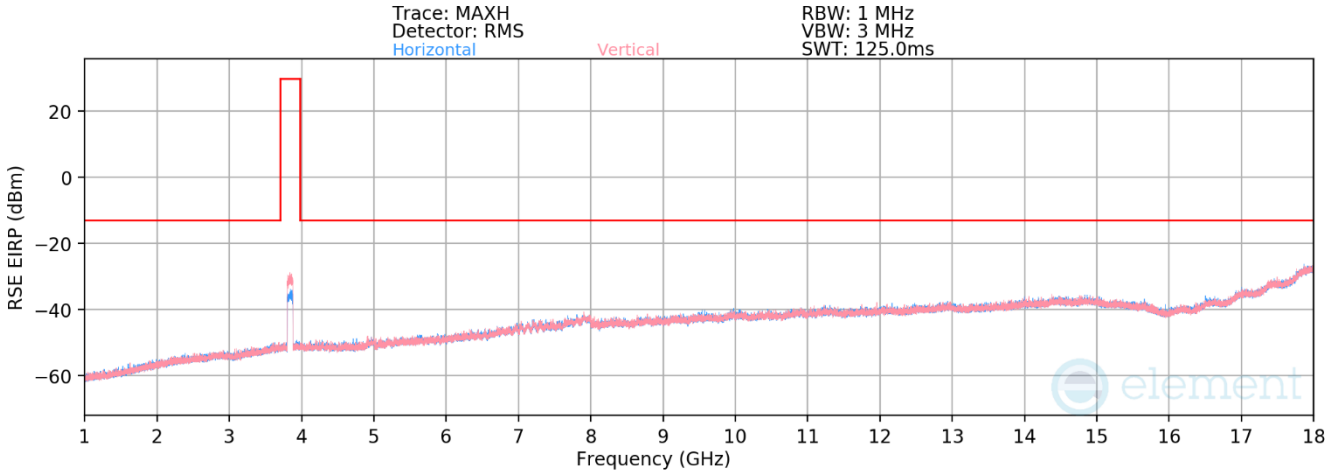
Plot 8-107. Radiated spurious emission Plot_1 GHz to 18 GHz (n77_1C_60M_Mid Channel)



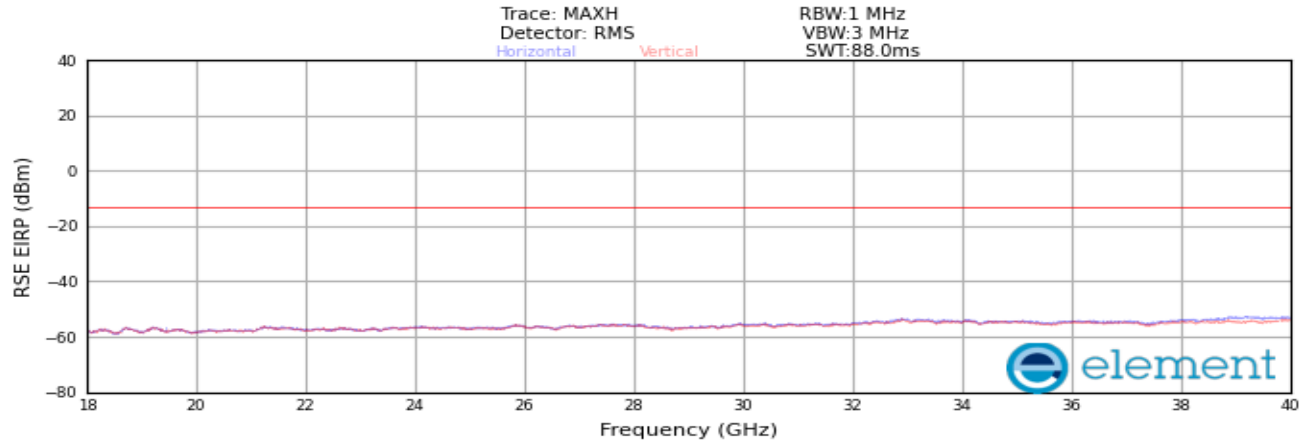
Plot 8-108. Radiated spurious emission Plot_18 GHz to 40 GHz (n77_1C_60M_Mid Channel)



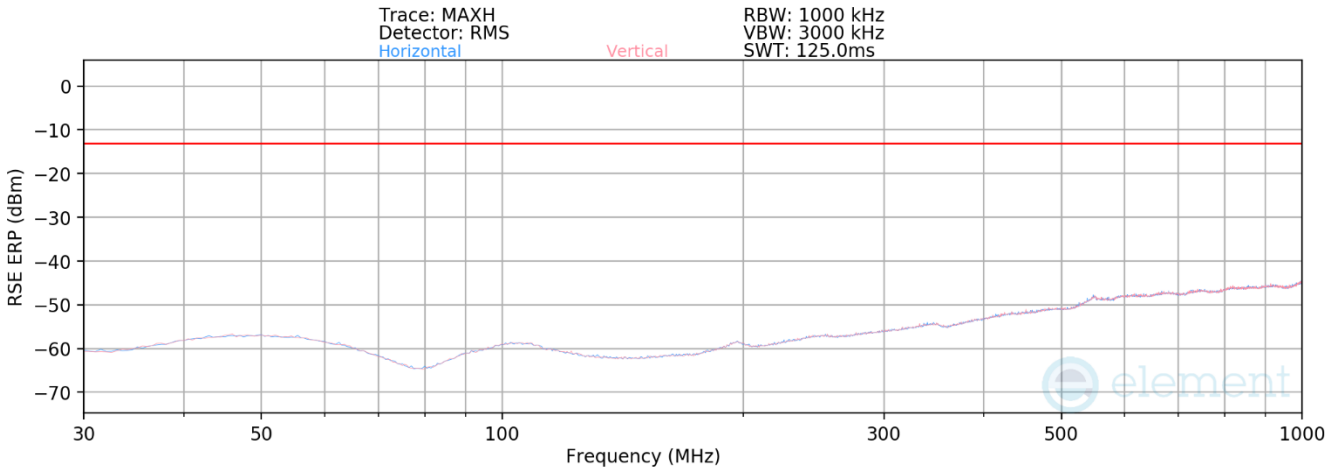
Plot 8-109. Radiated spurious emission Plot_30 MHz to 1000 MHz (n77_1C_80M_Mid Channel)



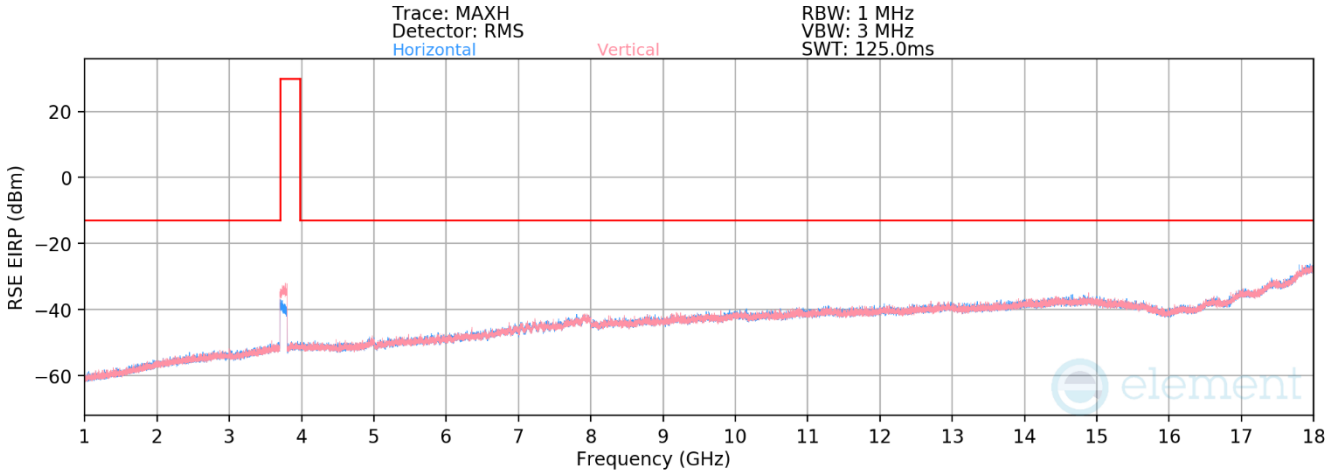
Plot 8-110. Radiated spurious emission Plot_1 GHz to 18 GHz (n77_1C_80M_Mid Channel)



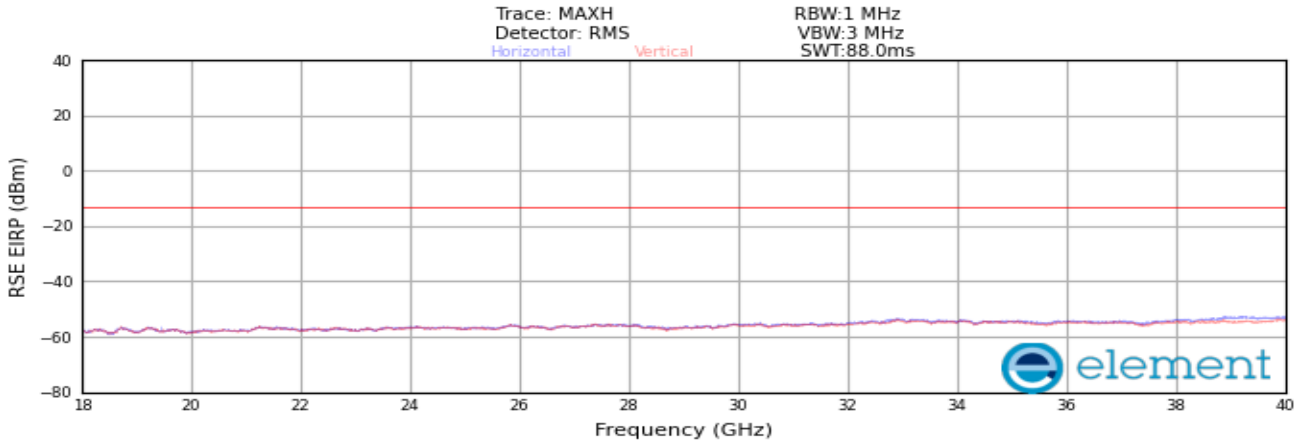
Plot 8-111. Radiated spurious emission Plot_18 GHz to 40 GHz (n77_1C_80M_Mid Channel)



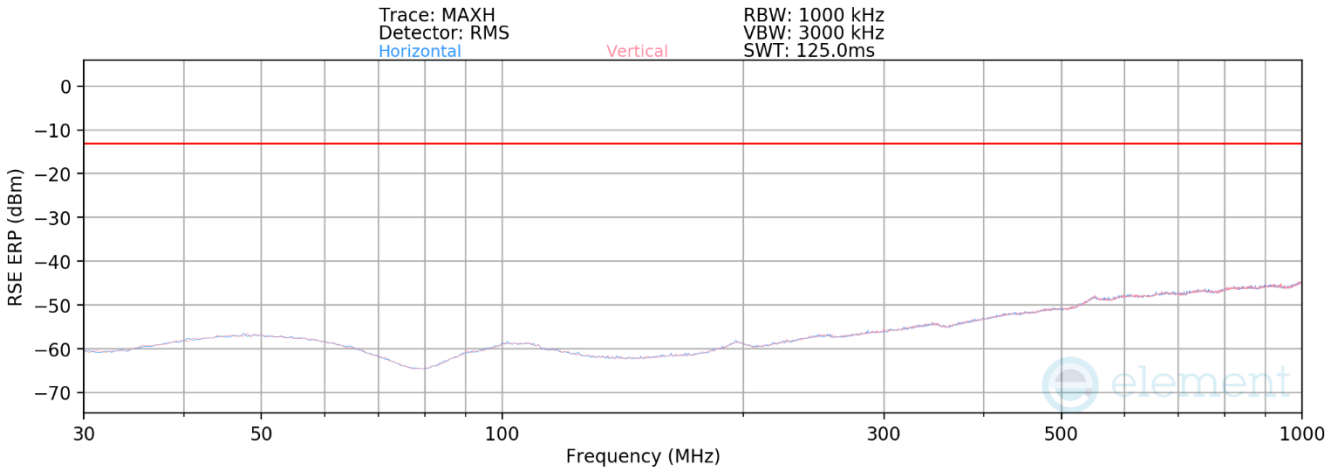
Plot 8-112. Radiated spurious emission Plot_30 MHz to 1000 MHz (n77_1C_100M_Low Channel)



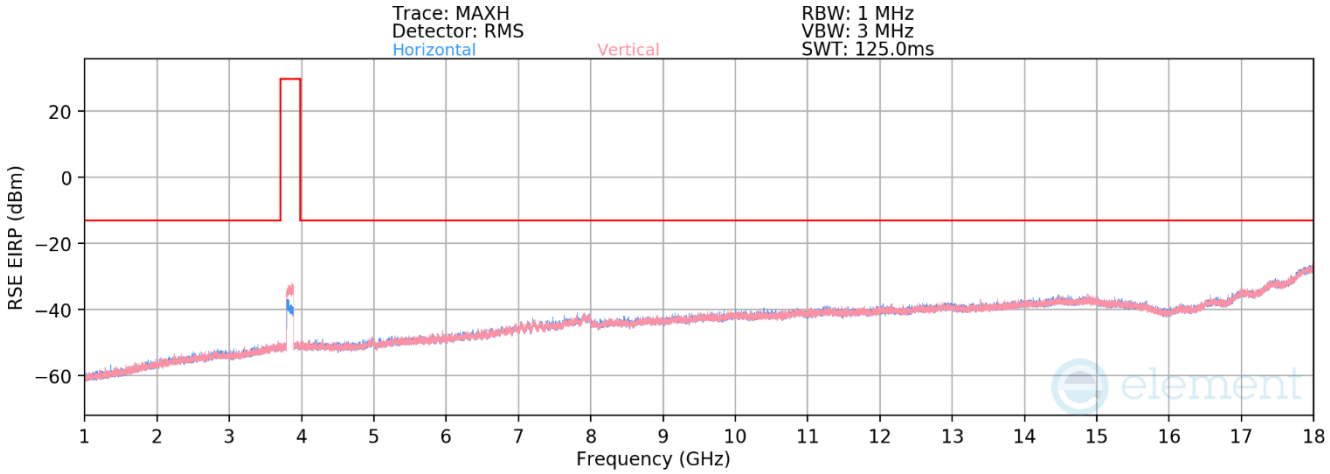
Plot 8-113. Radiated spurious emission Plot_1 GHz to 18 GHz (n77_1C_100M_Low Channel)



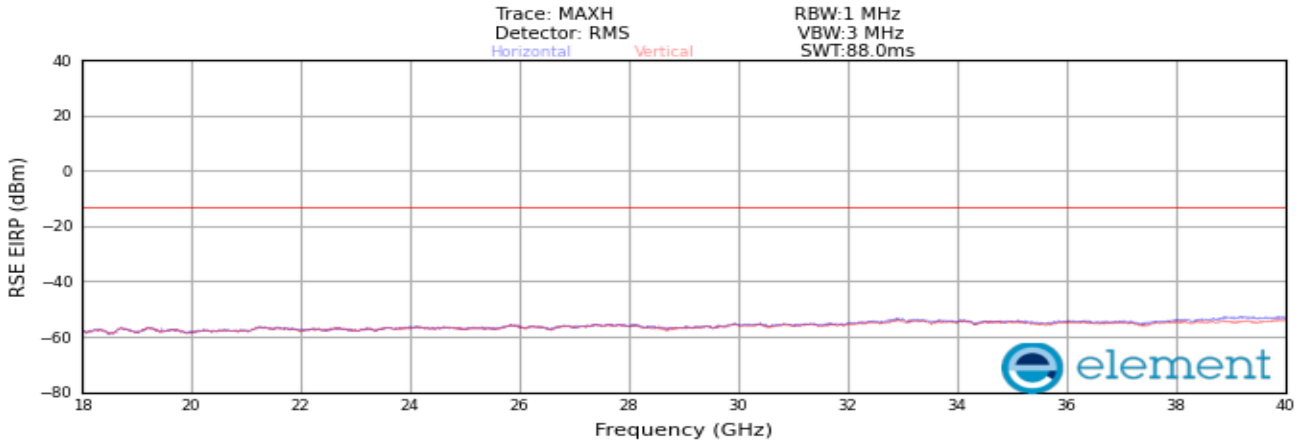
Plot 8-114. Radiated spurious emission Plot_18 GHz to 40 GHz (n77_1C_100M_Low Channel)



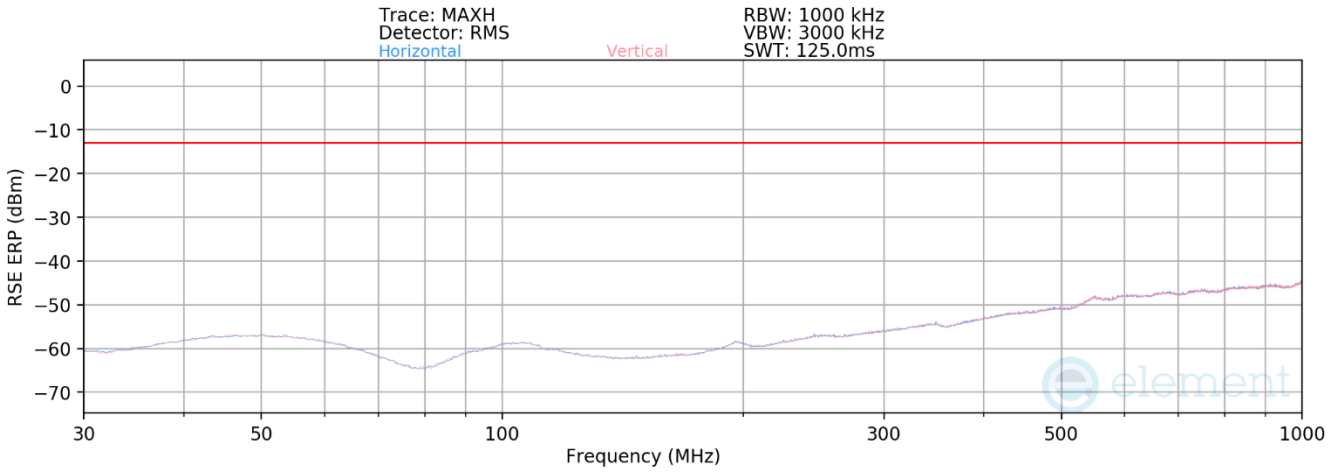
Plot 8-115. Radiated spurious emission Plot_30 MHz to 1000 MHz (n77_1C_100M_Mid Channel)



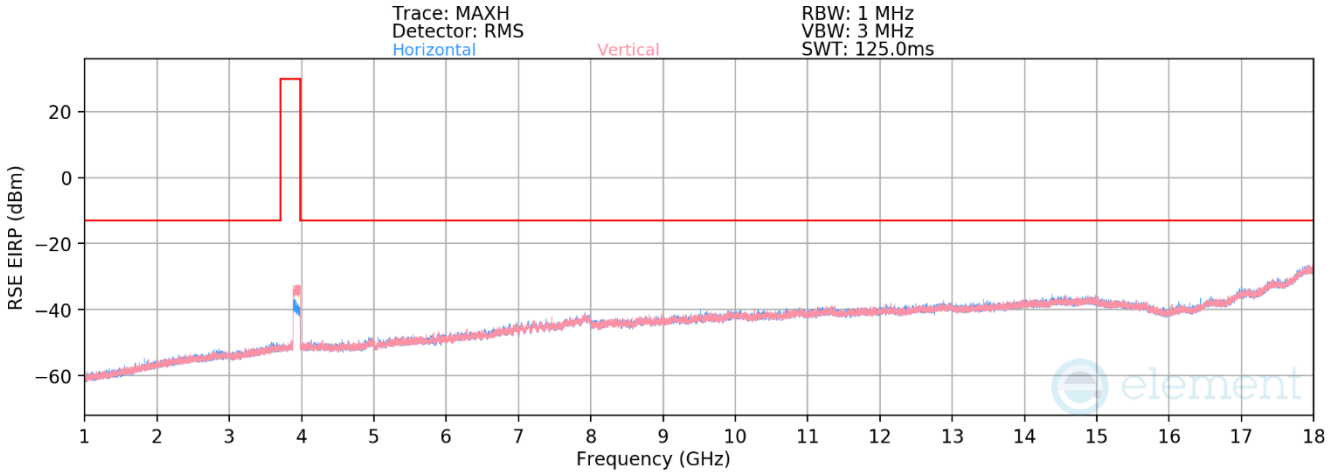
Plot 8-116. Radiated spurious emission Plot_1 GHz to 18 GHz (n77_1C_100M_Mid Channel)



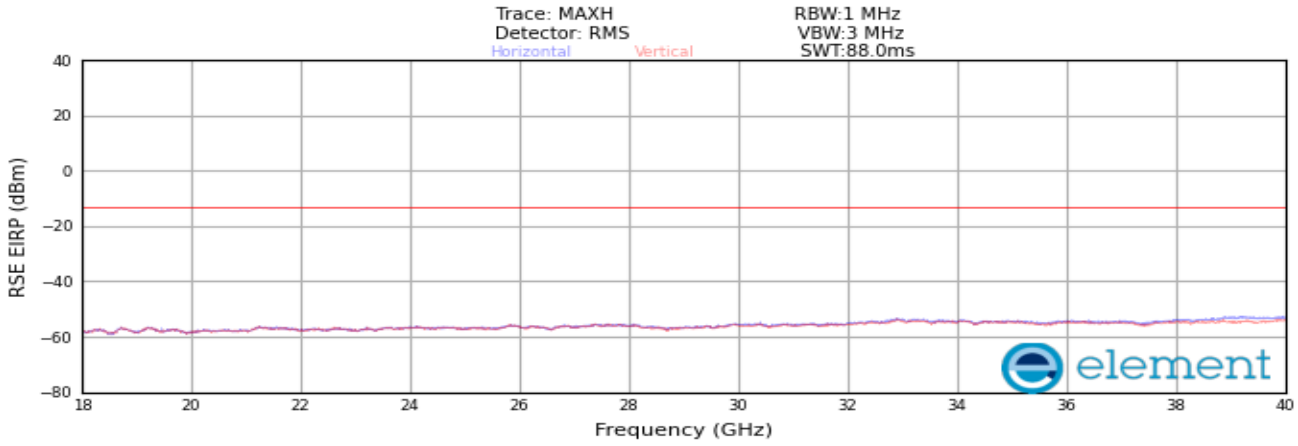
Plot 8-117. Radiated spurious emission Plot_18 GHz to 40 GHz (n77_1C_100M_Mid Channel)



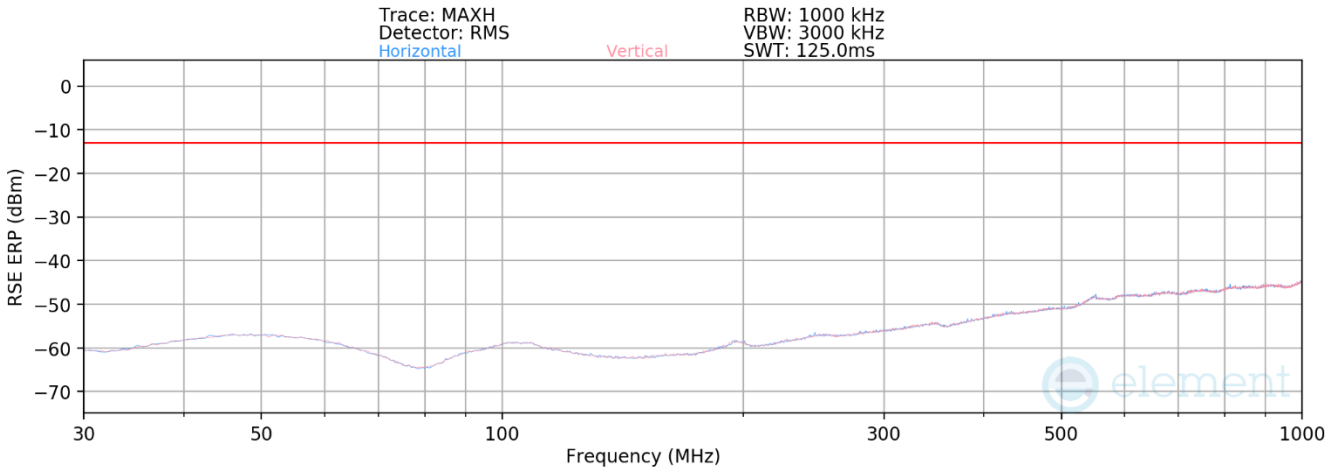
Plot 8-118. Radiated spurious emission Plot_30 MHz to 1000 MHz (n77_1C_100M_High Channel)



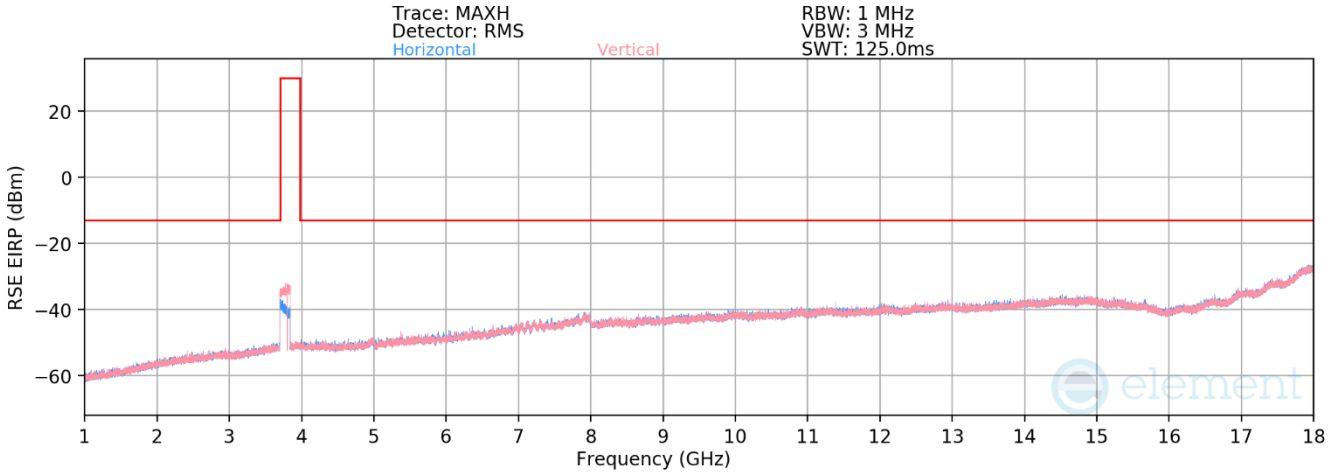
Plot 8-119. Radiated spurious emission Plot_1 GHz to 18 GHz (n77_1C_100M_High Channel)



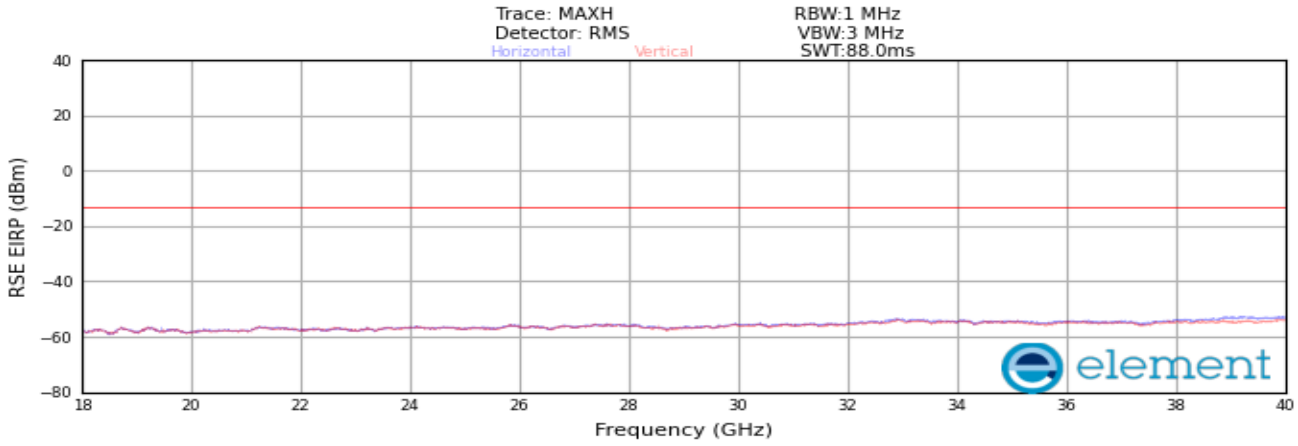
Plot 8-120. Radiated spurious emission Plot_18 GHz to 40 GHz (n77_1C_100M_High Channel)



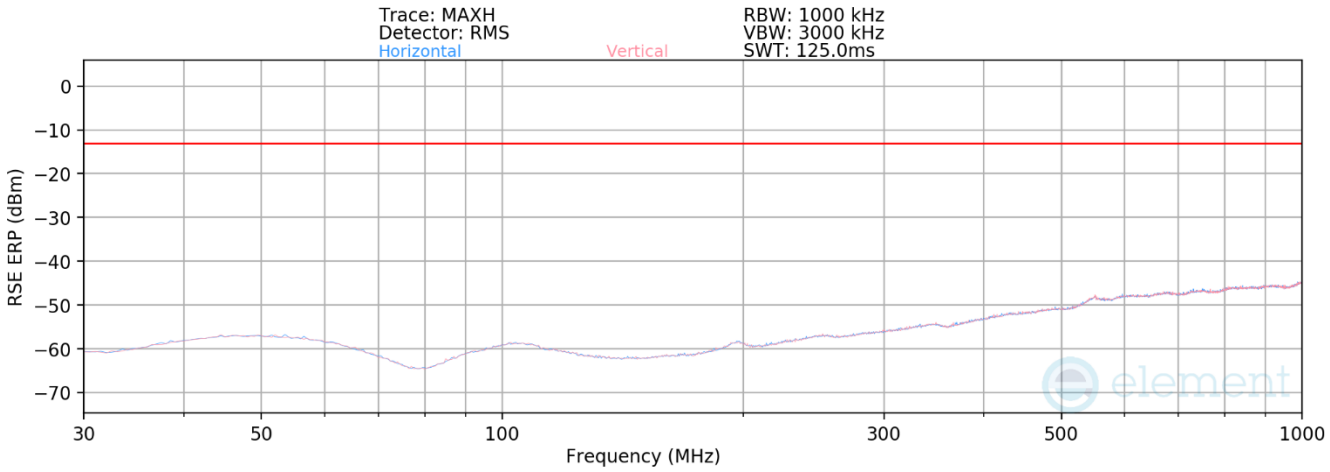
Plot 8-121. Radiated spurious emission Plot_30 MHz to 1000 MHz (n77_2C_100M+40M_Mid Channel)



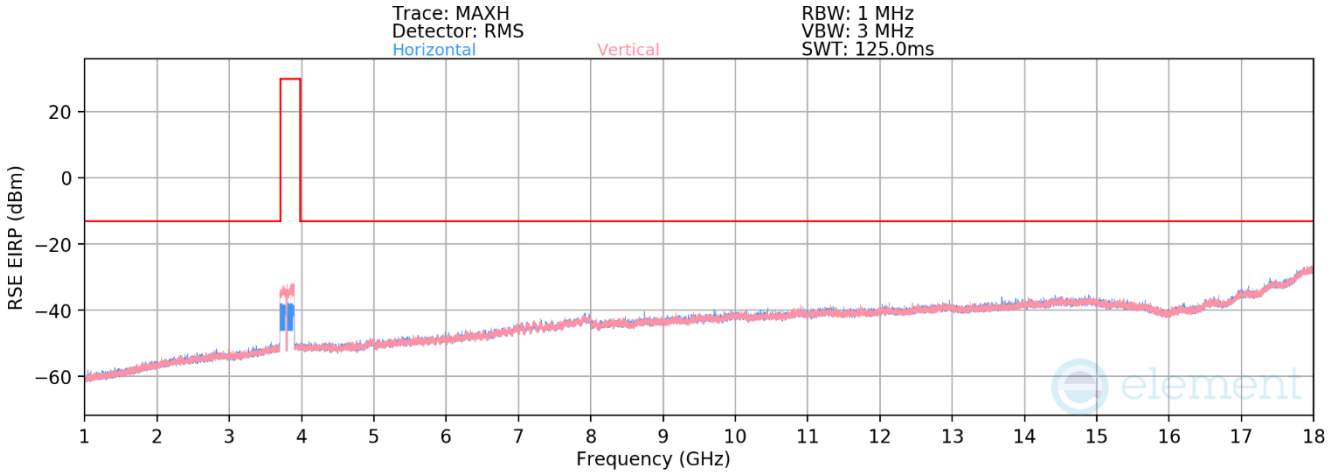
Plot 8-122. Radiated spurious emission Plot_1 GHz to 18 GHz (n77_2C_100M+40M_Mid Channel)



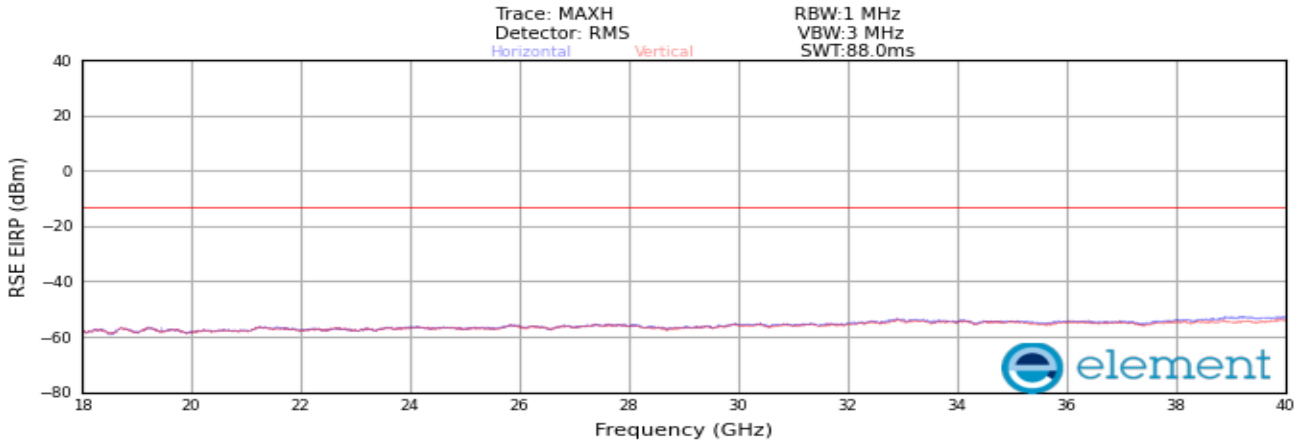
Plot 8-123. Radiated spurious emission Plot_18 GHz to 40 GHz (n77_2C_100M+40M_Mid Channel)



Plot 8-124. Radiated spurious emission Plot_30 MHz to 1000 MHz (n77_2C_100M+100M_Mid Channel)



Plot 8-125. Radiated spurious emission Plot_1 GHz to 18 GHz (n77_2C_100M+100M_Mid Channel)



Plot 8-126. Radiated spurious emission Plot_18 GHz to 40 GHz (n77_2C_100M+100M_Mid Channel)

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Heigh [cm]	Turntable azimuth [degree]	Analyzer Level [dBm/MHz]	AFCL [dBm]	Field Strength [dBμV/m]	RSE EIRP [dBm/MHz]	Limit [dBm/MHz]	Margin [dB]
982.72	H	100	20	-50.27	-7.31	49.42	-45.84	-13.0	-32.84
988.25	V	100	40	-49.35	-7.27	50.38	-44.87	-13.0	-31.87
17873.15	H	150	80	-64.31	24.44	67.31	-28.13	-13.0	-15.13
17789.32	V	150	20	-65.28	24.72	66.44	-28.82	-13.0	-15.82

Table 8-32. Radiated spurious emission Worst mode Summary Data (n77_2C_100M+40M_Middle Channel)

9.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Samsung MMU(MT1602d) FCC ID: A3LMT1602D-48A** complies with all of the requirements of Part 27 FCC Rules.

10.0 APPENDIX. A

10.1 Conducted Average Output Power

Test Overview

A transmitter port of EUT is connected to the input of a signal analyzer. All measurements are performed as RMS average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

Test Description

KDB 971168 D01 v03r01 – Section 5
KDB 662911 D01 v02r01 – Section E)1) In-Band Power Measurements
ANSI C63.26-2015 – Section 5.2.4.4.1

The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The spectrum analyzer settings were as follows:

1. Conducted power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation.
2. RBW = 1 ~ 5% of the expected OBW
3. VBW ≥ 3 x RBW
4. Span = 2 ~ 3 x OBW
5. No. of sweep points ≥ 2 x span / RBW
6. Detector = RMS
7. Trigger Settings is set to "RF Power" for signals with non-continuous operation with the sweep times set to "auto". Refer test note 3 for details.
8. Trace mode = Trace-Averaging (RMS) set to average over 100 sweeps
9. The trace was allowed to stabilize

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

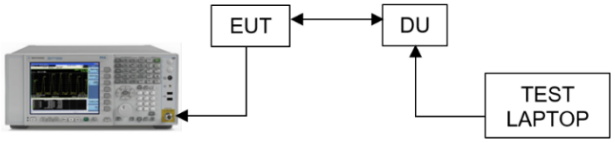


Figure 10-1. Test Instrument & Measurement Setup

Limit

N/A

Note

1. Result for reference maximum average power level of RF EXPOSURE calculation is under section 10.1.

2. MIMO Calculations are done considering output channel power for all ports and respective margins are calculated according to procedures in section 6.4 of ANSI C63.26 and section D of KDB 971168 D01 v03r01.

3. Periodic trigger was used with gating ON. Gate sweep time, Gate delay and gate length were set accordingly to capture ON time of the transmission.

4. Consider the following factors for MIMO Power:
   Conducted power for each port is measured in dBm.
   Powers are summed up in linear using the measure-and-sum technique defined in KDB 971168 D01 v03r01-Section D.
   Conducted power per port (dBm) is converted to a linear value (mW). A summation of linear powers for all ports gives us the total MIMO conducted power in milliWatts (mW).

5. Sample Calculation:
   Let us assume the following numbers:
   c) Total MIMO Conducted Power as 60534.44 milliWatts
   d)

Factors		Value	Unit
Summed MIMO Conducted Power (linear sum)		60534.44	mW
Summed MIMO Conducted Power (dBm)	= 10 * log (60534.44) =	47.82	dBm
Antenna Gain		20.70	dBi
Total e.i.r.p	= 47.82 + 20.70	68.52	dBm

Channel	Port	Output Power (dBm)			
		QPSK	16QAM	64QAM	256QAM
Low	0	35.67	35.72	35.63	35.63
	1	35.97	36.02	35.96	35.94
	2	35.79	35.83	35.72	35.77
	3	35.72	35.75	35.70	35.67
	4	35.79	35.82	35.74	35.75
	5	35.92	36.01	35.94	35.91
	6	35.82	35.91	35.79	35.78
	7	35.84	35.89	35.81	35.84
	8	35.79	35.83	35.76	35.76
	9	35.87	35.93	35.86	35.88
	10	35.80	35.87	35.74	35.78
	11	35.72	35.77	35.70	35.71
	12	35.58	35.65	35.53	35.55
	13	35.87	35.91	35.89	35.93
	14	35.72	35.66	35.57	35.58
	15	35.57	35.63	35.54	35.55
Total MIMO Power (mW)		60534.44	61203.72	60056.25	60185.10
Total MIMO Power (dBm)		47.82	47.87	47.79	47.79
Antenna Gain (dBi)		20.70	20.70	20.70	20.70
EIRP (dBm)		68.52	68.57	68.49	68.49

Channel	Port	Output Power (dBm)			
		QPSK	16QAM	64QAM	256QAM
Mid	0	36.02	35.96	35.83	35.84
	1	36.55	36.48	36.40	36.46
	2	36.13	36.06	35.96	36.03
	3	36.24	36.10	36.03	36.11
	4	36.08	35.97	35.86	35.92
	5	36.43	36.33	36.20	36.26
	6	36.16	36.08	35.96	36.07
	7	36.11	35.99	35.93	35.96
	8	36.04	35.95	35.85	35.90
	9	36.42	36.28	36.21	36.23
	10	36.14	36.00	35.85	35.93
	11	36.35	36.24	36.15	36.20
	12	35.99	35.91	35.82	35.85
	13	36.34	36.18	36.14	36.13
	14	35.98	35.90	35.80	35.84
	15	36.01	35.91	35.81	35.86
Total MIMO Power (mW)		66551.60	64986.04	63566.72	64294.21
Total MIMO Power (dBm)		48.23	48.13	48.03	48.08
Antenna Gain (dBi)		20.70	20.70	20.70	20.70
EIRP (dBm)		68.93	68.83	68.73	68.78

Channel	Port	Output Power (dBm)			
		QPSK	16QAM	64QAM	256QAM
High	0	36.06	35.89	35.77	35.83
	1	36.09	36.03	35.93	35.99
	2	36.14	35.93	35.83	35.93
	3	36.16	36.07	35.94	35.99
	4	36.11	35.97	35.86	35.94
	5	36.16	36.08	35.92	36.01
	6	36.19	36.07	35.93	36.02
	7	36.06	35.97	35.84	35.91
	8	36.08	35.93	35.82	35.90
	9	36.17	36.07	35.93	36.02
	10	36.06	35.97	35.85	35.91
	11	36.14	36.02	35.91	36.00
	12	36.00	35.84	35.76	35.79
	13	36.10	36.01	35.91	35.95
	14	35.99	35.87	35.75	35.83
	15	35.93	35.82	35.71	35.80
Total MIMO Power (mW)		65039.33	63288.25	61596.47	62634.25
Total MIMO Power (dBm)		48.13	48.01	47.90	47.97
Antenna Gain (dBi)		20.70	20.70	20.70	20.70
EIRP (dBm)		68.83	68.71	68.60	68.67

Table 10-1. Output Power Table (n77_1C_40M)

Channel	Port	Output Power (dBm)			
		QPSK	16QAM	64QAM	256QAM
Low	0	37.60	37.84	37.62	37.69
	1	38.02	38.21	38.03	38.09
	2	37.73	37.93	37.76	37.81
	3	37.73	37.91	37.73	37.78
	4	37.80	37.97	37.80	37.83
	5	37.93	38.14	37.94	37.99
	6	37.91	38.06	37.87	37.87
	7	37.86	38.04	37.85	37.90
	8	37.77	37.92	37.72	37.76
	9	37.93	38.11	37.89	37.94
	10	37.79	37.95	37.75	37.85
	11	37.76	37.97	37.76	37.82
	12	37.63	37.76	37.60	37.66
	13	37.94	38.12	37.91	37.99
	14	37.59	37.75	37.56	37.61
	15	37.61	37.80	37.63	37.65
Total MIMO Power (mW)		96176.49	100248.33	95926.20	97066.21
Total MIMO Power (dBm)		49.83	50.01	49.82	49.87
Antenna Gain (dBi)		20.70	20.70	20.70	20.70
EIRP (dBm)		70.53	70.71	70.52	70.57

Channel	Port	Output Power (dBm)			
		QPSK	16QAM	64QAM	256QAM
Mid	0	37.85	37.93	37.79	37.85
	1	38.40	38.48	38.35	38.41
	2	37.97	38.02	37.90	37.98
	3	38.04	38.15	38.05	38.08
	4	37.91	37.98	37.89	37.94
	5	38.23	38.31	38.20	38.26
	6	38.03	38.07	37.96	38.07
	7	37.94	38.04	37.91	37.98
	8	37.84	37.92	37.81	37.86
	9	38.20	38.27	38.16	38.22
	10	37.94	37.99	37.90	37.94
	11	38.19	38.29	38.16	38.23
	12	37.85	37.89	37.80	37.86
	13	38.22	38.24	38.12	38.24
	14	37.87	37.92	37.80	37.85
	15	37.89	37.96	37.86	37.91
Total MIMO Power (mW)		101568.08	103177.69	100535.15	102027.22
Total MIMO Power (dBm)		50.07	50.14	50.02	50.09
Antenna Gain (dBi)		20.70	20.70	20.70	20.70
EIRP (dBm)		70.77	70.84	70.72	70.79

Channel	Port	Output Power (dBm)			
		QPSK	16QAM	64QAM	256QAM
High	0	37.90	37.98	37.80	37.87
	1	38.01	38.16	37.95	38.02
	2	37.97	38.07	37.89	37.91
	3	38.04	38.17	37.95	37.96
	4	37.98	38.06	37.90	37.95
	5	38.08	38.14	37.96	38.00
	6	38.09	38.17	37.97	38.02
	7	37.98	38.05	37.86	37.89
	8	37.92	37.99	37.83	37.87
	9	38.07	38.12	37.96	37.98
	10	38.00	38.05	37.89	37.92
	11	38.08	38.16	37.99	38.02
	12	37.96	38.10	37.88	37.89
	13	38.04	38.15	37.94	37.96
	14	37.98	38.01	37.84	37.89
	15	37.87	37.95	37.75	37.80
Total MIMO Power (mW)		100920.63	102917.93	98609.81	99449.54
Total MIMO Power (dBm)		50.04	50.12	49.94	49.98
Antenna Gain (dBi)		20.70	20.70	20.70	20.70
EIRP (dBm)		70.74	70.82	70.64	70.68

Table 10-2. Output Power Table (n77_1C_60M)

Channel	Port	Output Power (dBm)			
		QPSK	16QAM	64QAM	256QAM
Low	0	37.80	37.57	37.73	37.76
	1	38.26	37.97	38.14	38.19
	2	37.88	37.72	37.84	37.90
	3	37.92	37.69	37.85	37.87
	4	37.95	37.74	37.88	37.91
	5	38.15	37.93	38.07	38.14
	6	38.04	37.81	37.96	38.02
	7	38.02	37.78	37.92	37.97
	8	37.90	37.73	37.82	37.88
	9	38.14	37.88	38.04	38.08
	10	37.97	37.79	37.87	37.93
	11	38.04	37.83	37.90	37.94
	12	37.78	37.66	37.68	37.74
	13	38.10	37.94	38.00	38.03
	14	37.81	37.59	37.67	37.71
	15	37.81	37.62	37.71	37.76
Total MIMO Power (mW)		100381.53	95686.00	98249.79	99317.61
Total MIMO Power (dBm)		50.02	49.81	49.92	49.97
Antenna Gain (dBi)		20.70	20.70	20.70	20.70
EIRP (dBm)		70.72	70.51	70.62	70.67
Channel	Port	Output Power (dBm)			
		QPSK	16QAM	64QAM	256QAM
Mid	0	37.96	37.93	37.89	37.91
	1	38.52	38.54	38.45	38.51
	2	38.13	38.07	38.00	38.06
	3	38.19	38.16	38.11	38.14
	4	38.09	38.06	37.97	38.03
	5	38.40	38.39	38.31	38.35
	6	38.21	38.16	38.06	38.09
	7	38.13	38.10	38.03	38.07
	8	38.02	37.96	37.88	37.91
	9	38.33	38.32	38.24	38.28
	10	38.05	38.03	37.96	37.98
	11	38.37	38.33	38.27	38.30
	12	38.02	37.95	37.90	37.93
	13	38.32	38.30	38.27	38.29
	14	38.01	37.98	37.90	37.94
	15	38.06	38.03	37.96	37.99
Total MIMO Power (mW)		105192.27	104451.60	102794.02	103659.17
Total MIMO Power (dBm)		50.22	50.19	50.12	50.16
Antenna Gain (dBi)		20.70	20.70	20.70	20.70
EIRP (dBm)		70.92	70.89	70.82	70.86

Channel	Port	Output Power (dBm)			
		QPSK	16QAM	64QAM	256QAM
High	0	38.02	38.03	37.98	38.04
	1	38.25	38.25	38.17	38.21
	2	38.12	38.11	38.05	38.07
	3	38.19	38.20	38.16	38.22
	4	38.11	38.13	38.09	38.12
	5	38.30	38.27	38.16	38.21
	6	38.25	38.22	38.15	38.22
	7	38.18	38.14	38.06	38.10
	8	38.08	38.09	37.99	38.06
	9	38.24	38.22	38.14	38.21
	10	38.14	38.12	38.02	38.11
	11	38.28	38.27	38.19	38.26
	12	38.17	38.11	38.04	38.10
	13	38.22	38.22	38.19	38.18
	14	38.10	38.10	38.03	38.09
	15	38.08	38.03	37.97	38.00
Total MIMO Power (mW)		105015.79	104682.87	103008.67	104216.30
Total MIMO Power (dBm)		50.21	50.20	50.13	50.18
Antenna Gain (dBi)		20.70	20.70	20.70	20.70
EIRP (dBm)		70.91	70.90	70.83	70.88

Table 10-3. Output Power Table (n77_1C_80M)

Channel	Port	Output Power (dBm)			
		QPSK	16QAM	64QAM	256QAM
Low	0	37.46	37.49	37.63	37.50
	1	37.94	37.98	38.12	37.99
	2	37.58	37.60	37.69	37.60
	3	37.60	37.63	37.75	37.63
	4	37.62	37.62	37.73	37.61
	5	37.77	37.81	37.93	37.79
	6	37.67	37.69	37.78	37.69
	7	37.64	37.70	37.80	37.70
	8	37.61	37.60	37.72	37.57
	9	37.81	37.81	37.96	37.80
	10	37.63	37.63	37.74	37.62
	11	37.64	37.67	37.79	37.66
	12	37.43	37.41	37.52	37.41
	13	37.78	37.78	37.87	37.74
	14	37.44	37.44	37.54	37.42
	15	37.42	37.46	37.58	37.46
Total MIMO Power (mW)		92705.37	93083.70	95571.88	92909.32
Total MIMO Power (dBm)		49.67	49.69	49.80	49.68
Antenna Gain (dBi)		20.70	20.70	20.70	20.70
EIRP (dBm)		70.37	70.39	70.50	70.38

Channel	Port	Output Power (dBm)			
		QPSK	16QAM	64QAM	256QAM
Mid	0	37.60	37.67	37.86	37.67
	1	38.18	38.27	38.43	38.28
	2	37.72	37.79	37.96	37.80
	3	37.82	37.91	38.08	37.93
	4	37.67	37.75	37.91	37.76
	5	37.99	38.09	38.22	38.08
	6	37.79	37.86	37.99	37.84
	7	37.75	37.84	37.98	37.84
	8	37.63	37.69	37.82	37.68
	9	37.93	38.06	38.18	38.06
	10	37.72	37.75	37.92	37.75
	11	37.97	38.05	38.20	38.07
	12	37.55	37.60	37.76	37.62
	13	37.93	38.02	38.18	38.04
	14	37.59	37.65	37.82	37.67
	15	37.64	37.72	37.88	37.73
Total MIMO Power (mW)		96042.09	97784.42	101316.82	97925.40
Total MIMO Power (dBm)		49.82	49.90	50.06	49.91
Antenna Gain (dBi)		20.70	20.70	20.70	20.70
EIRP (dBm)		70.52	70.60	70.76	70.61

Channel	Port	Output Power (dBm)			
		QPSK	16QAM	64QAM	256QAM
High	0	37.96	38.03	38.07	37.86
	1	38.21	38.29	38.34	38.15
	2	38.02	38.12	38.17	37.97
	3	38.11	38.22	38.30	38.06
	4	38.02	38.13	38.13	37.92
	5	38.17	38.24	38.30	38.11
	6	38.14	38.21	38.24	38.05
	7	38.05	38.13	38.18	37.98
	8	37.97	38.06	38.10	37.89
	9	38.15	38.21	38.27	38.06
	10	38.01	38.07	38.13	37.94
	11	38.17	38.26	38.35	38.12
	12	37.99	38.07	38.09	37.86
	13	38.15	38.24	38.29	38.08
	14	38.02	38.08	38.11	37.88
	15	37.97	38.02	38.09	37.84
Total MIMO Power (mW)		102597.30	104491.38	105675.87	100647.00
Total MIMO Power (dBm)		50.11	50.19	50.24	50.03
Antenna Gain (dBi)		20.70	20.70	20.70	20.70
EIRP (dBm)		70.81	70.89	70.94	70.73

Table 10-4. Output Power Table (n77_1C_100M)

Channel	Port	Output Power (dBm)	
		QPSK	16QAM
Mid	0	37.75	37.68
	1	38.30	38.20
	2	37.87	37.84
	3	37.94	37.90
	4	37.91	37.80
	5	38.16	38.10
	6	37.95	37.92
	7	38.04	37.98
	8	37.84	37.77
	9	38.16	38.07
	10	37.95	37.86
	11	38.08	37.98
	12	37.73	37.68
	13	38.11	38.06
	14	37.74	37.66
	15	37.82	37.76
Total MIMO Power (mW)		100084.73	98522.50
Total MIMO Power (dBm)		50.00	49.94
Antenna Gain (dBi)		20.70	20.70
EIRP (dBm)		70.70	70.64

Table 10-5. Output Power Table (n77_2C_100M+40M)

Channel	Port	Output Power (dBm)	
		QPSK	16QAM
Mid	0	37.86	37.77
	1	38.36	38.28
	2	37.98	37.90
	3	38.03	37.95
	4	37.97	37.87
	5	38.21	38.12
	6	38.05	37.96
	7	38.03	37.96
	8	37.89	37.82
	9	38.17	38.09
	10	37.99	37.89
	11	38.16	38.05
	12	37.82	37.72
	13	38.16	38.07
	14	37.87	37.77
	15	37.87	37.78
Total MIMO Power (mW)		101623.87	99569.73
Total MIMO Power (dBm)		50.07	49.98
Antenna Gain (dBi)		20.70	20.70
EIRP (dBm)		70.77	70.68

Table 10-6. Output Power Table (n77_2C_100M+100M)