Appendix A

Modulation Characteristic Measurement

According to FCC part 2.1047 and part 27 subpart C

CHANNEL BANDWIDTH: 10MHz

TM2.0: 64QAM

Single Carrier

No.5090 (M)
737MHz

TM3.1: 64QAM

Single Carrier

No.5090 (M)
737MHz

TM3.2: 16QAM

Single Carrier

No.5090 (M)
737MHz

TM3.3: QPSK

Single Carrier

No.5090 (M)
737MHz

CHANNEL BANDWIDTH: 5M

TM2.0: 64QAM

Single Carrier

No.5090 (M)
737MHz

TM3.1: 64QAM

Single Carrier

No.5090 (M)
737MHz

TM3.2: 16QAM

Single Carrier

No.5090 (M)
737MHz

TM3.3: QPSK

Single Carrier

No.5090 (M)
737MHz

Appendix B

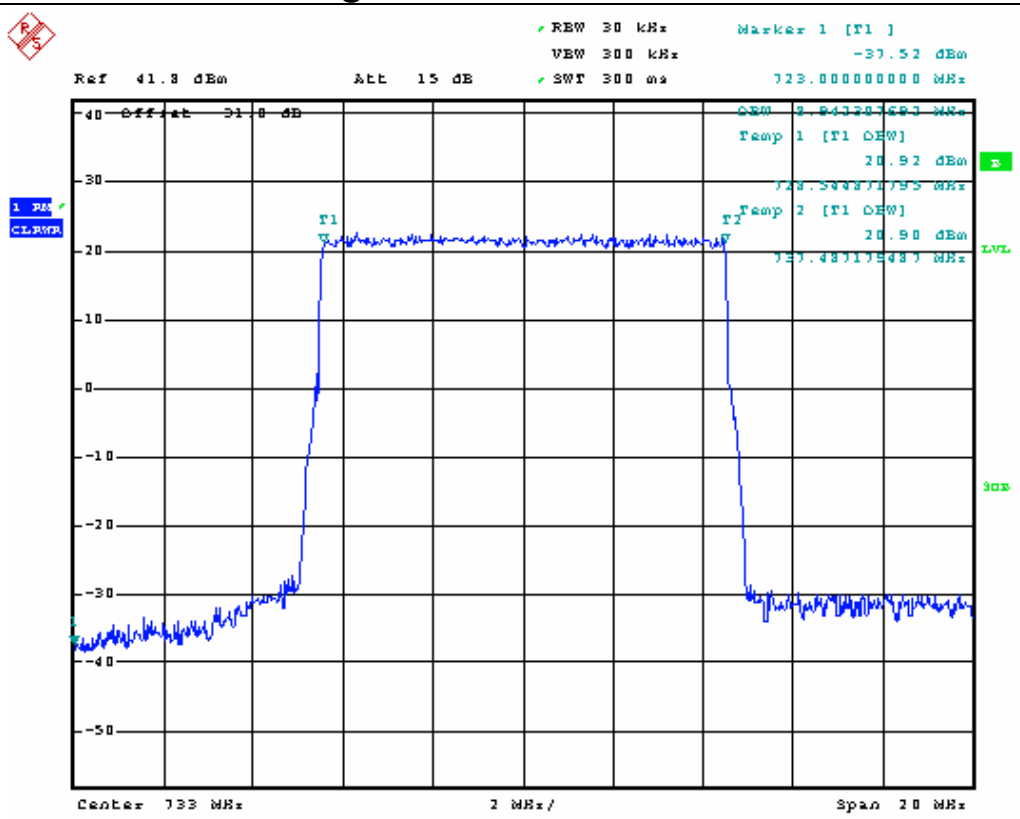
Occupied Bandwidth Measurement

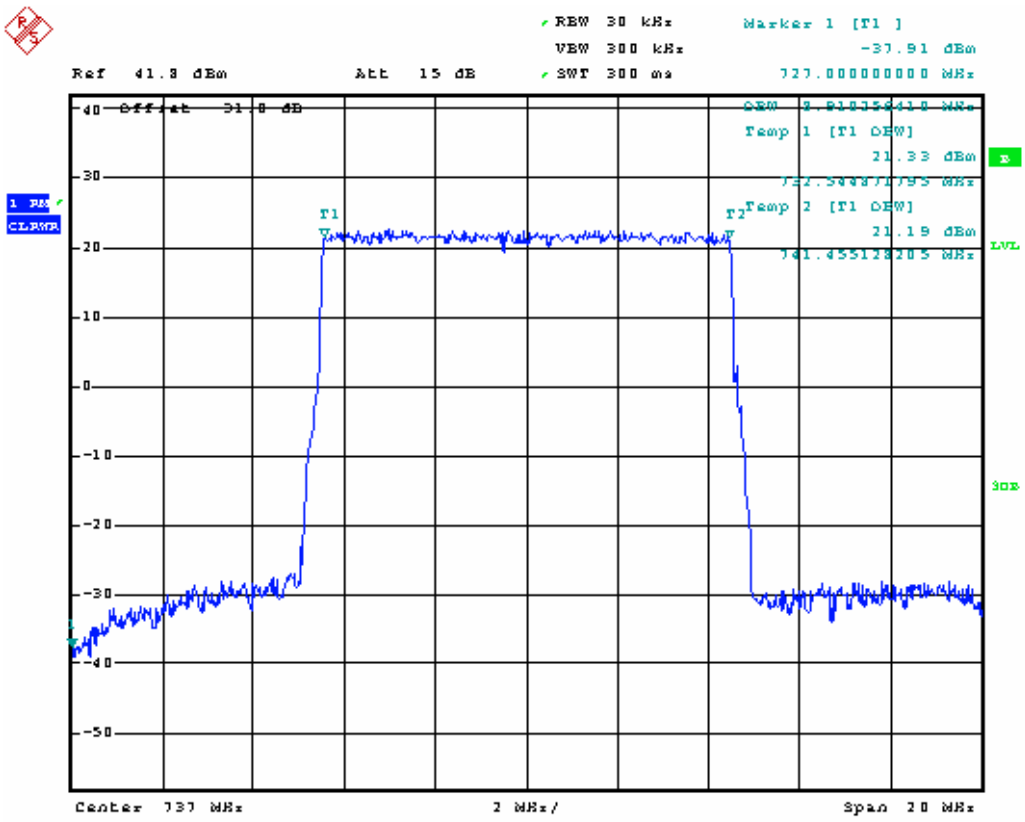
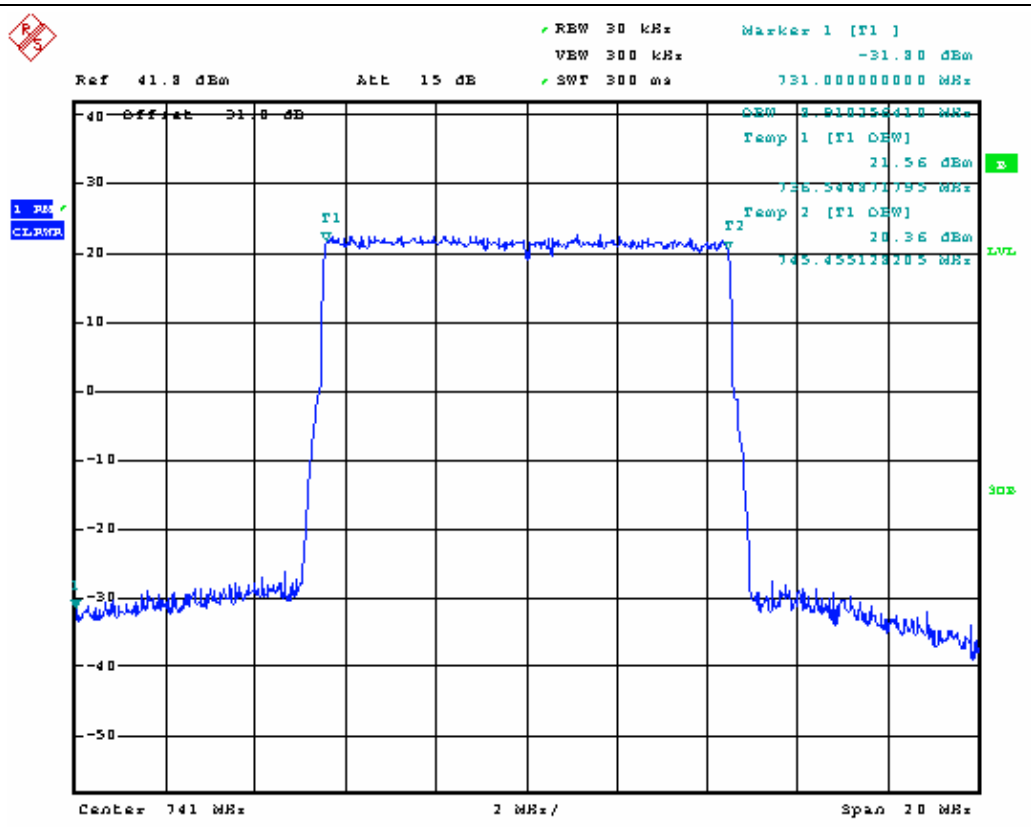
According to FCC part 2.1049 and part 27 subpart C

CHANNEL BANDWIDTH: 10M

TM1.1:

Single Carrier

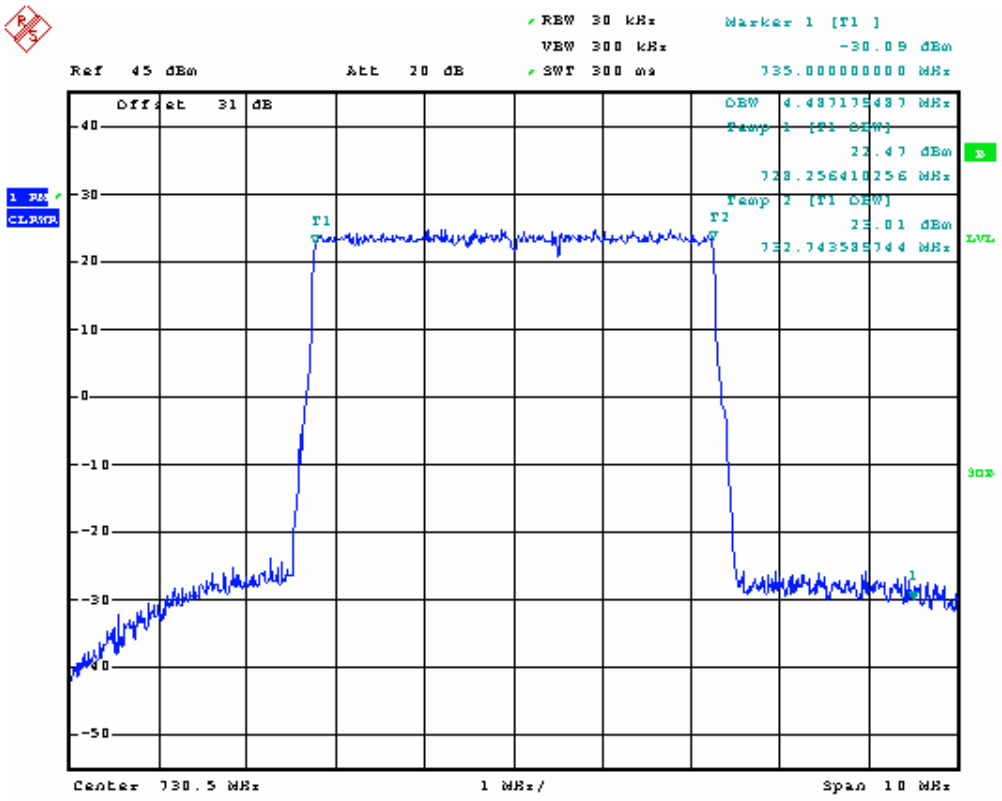
No.5050(B) 733MMHz	

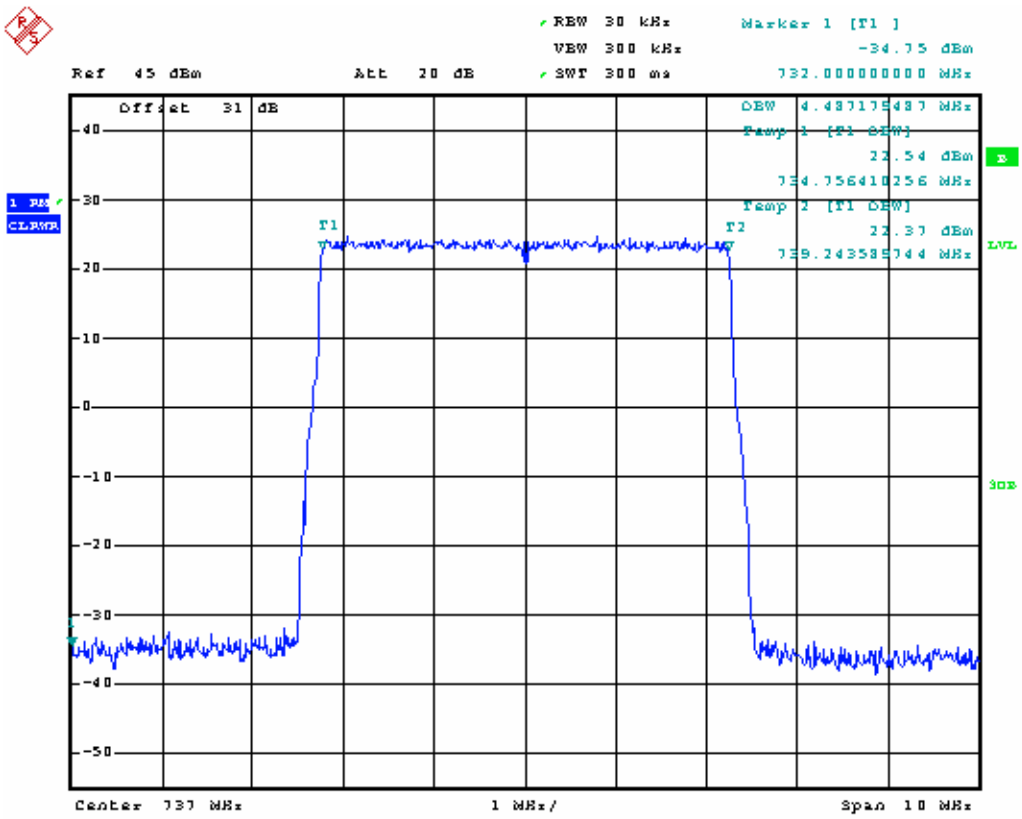
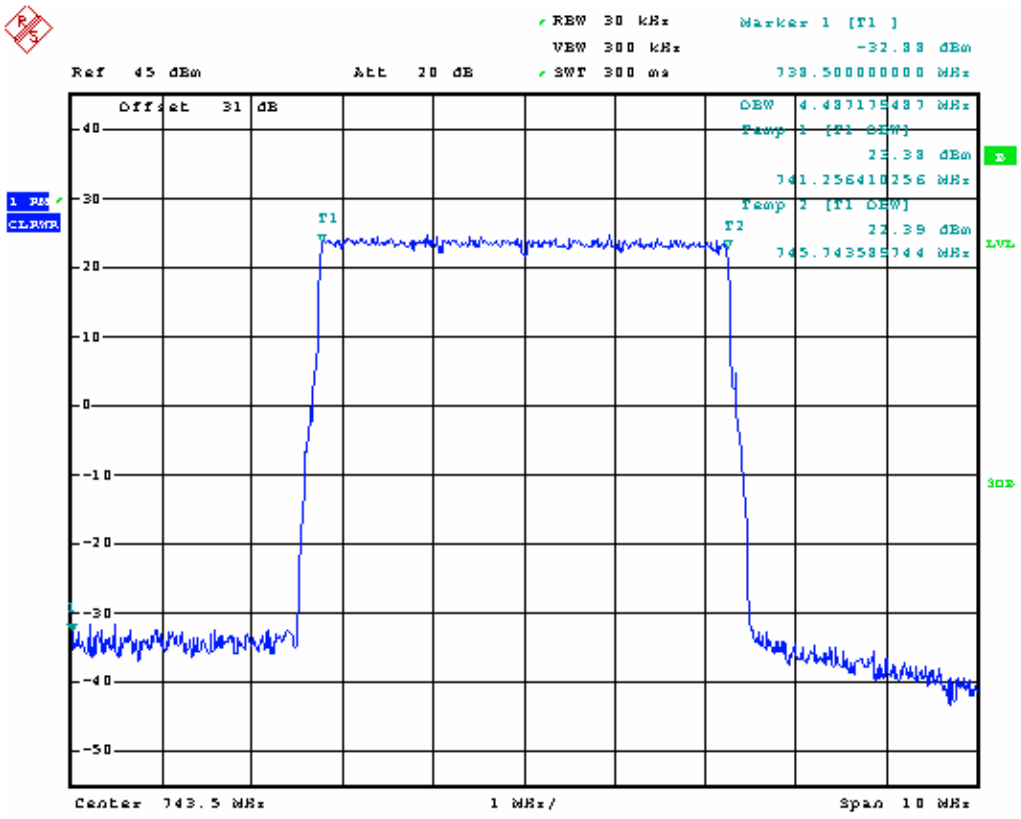
No.5090 (M) 737MHz	
No.5130 (T) 741MHz	

CHANNEL BANDWIDTH: 5M

TM1.1:

Single Carrier

No.5025(B) 730.5MHz	

No.5090 (M) 737MHz	
No.5155 (T) 743.5MHz	

Appendix C

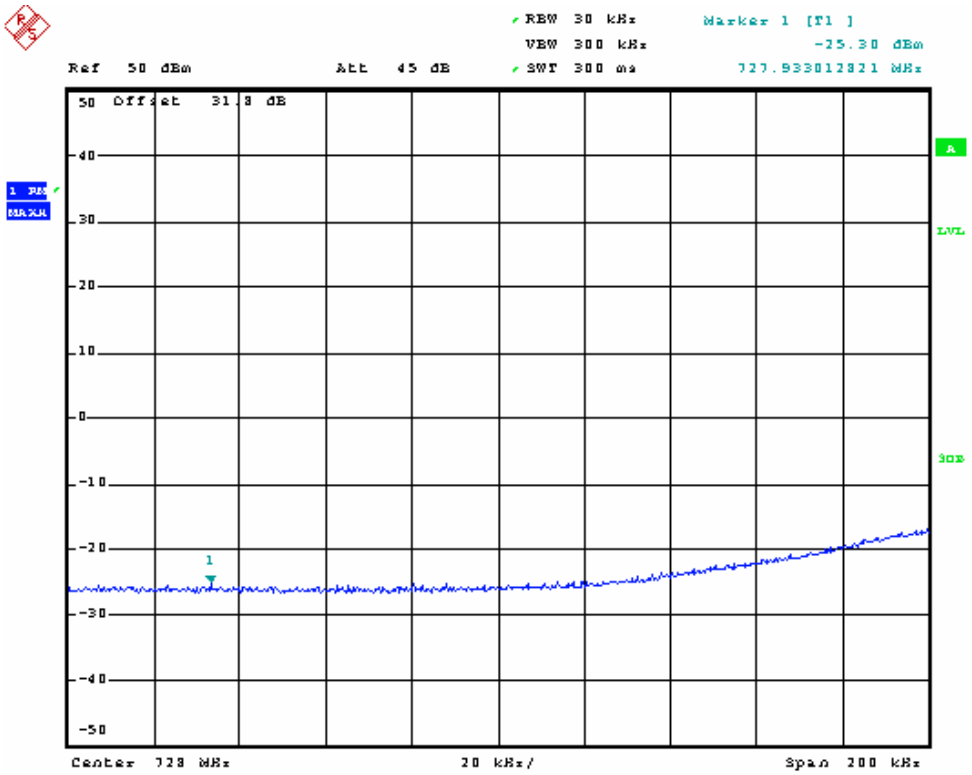
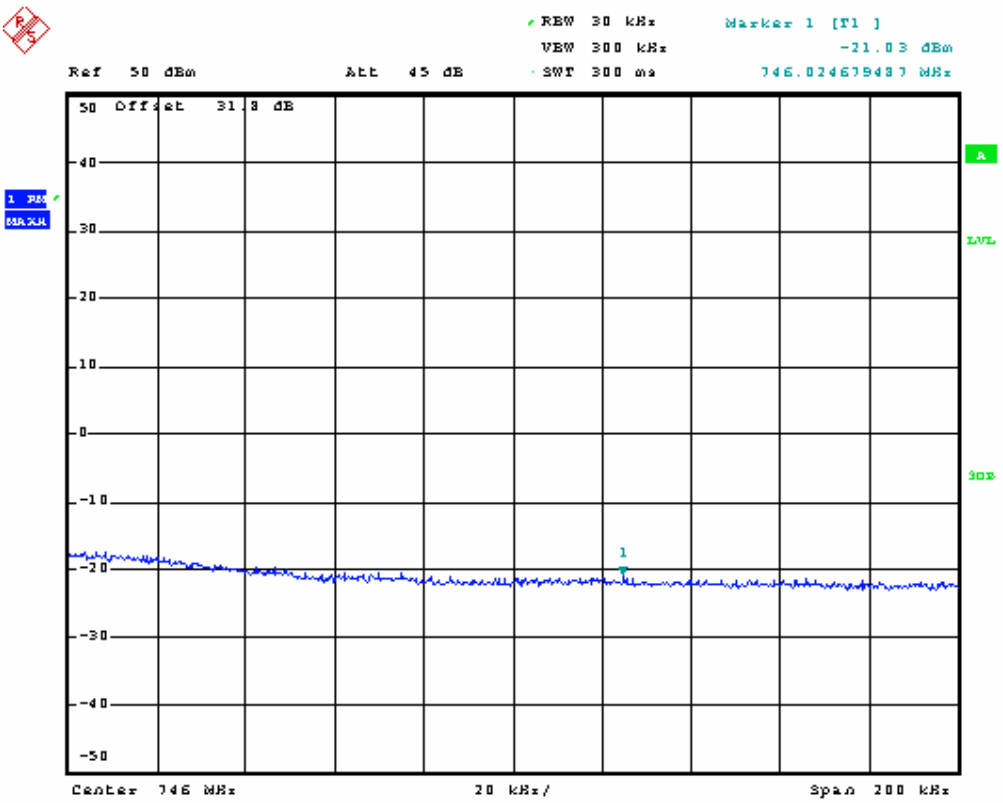
Band Edge Measurement

According to FCC part 2.1051 and part 27.53(g)

CHANNEL BANDWIDTH: 10M

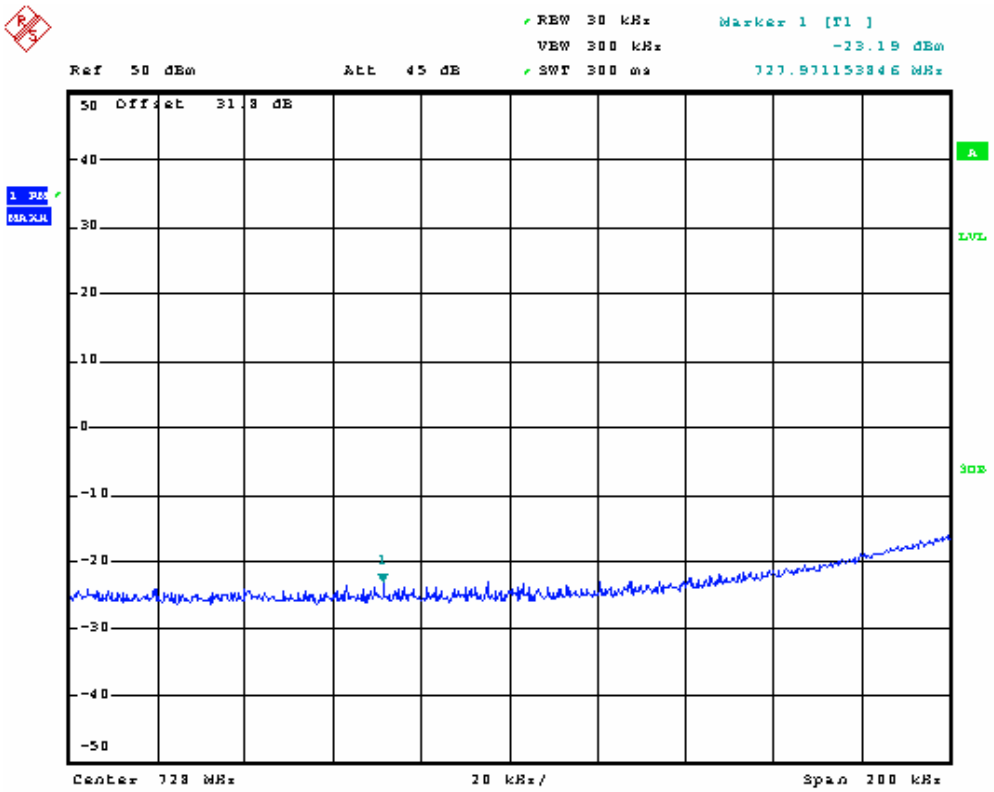
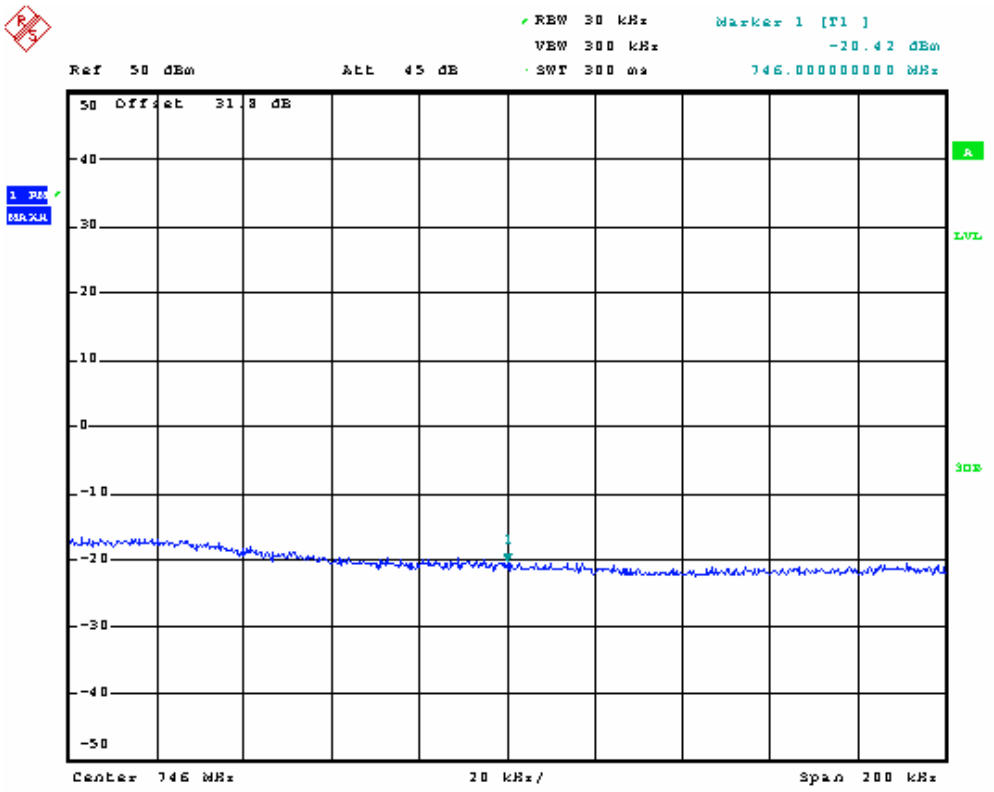
TM1.1:

Single Carrier

No.5050 (B) 733MHz	
No.5130 (T) 741MHz	

TM1.2:

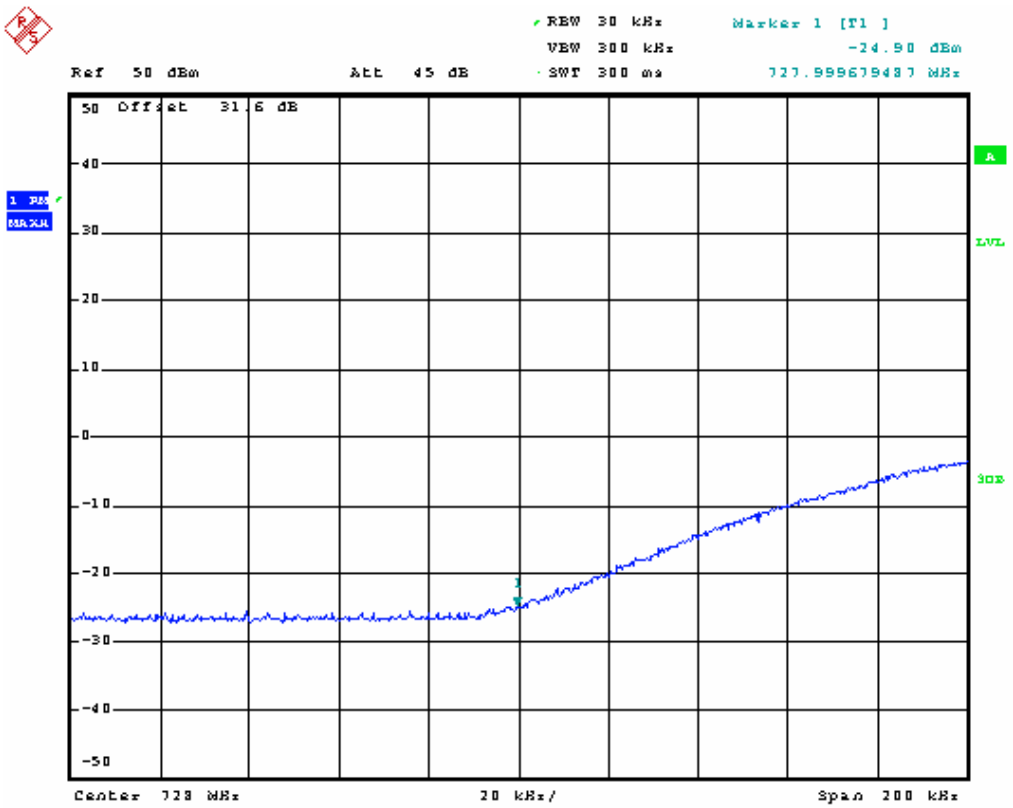
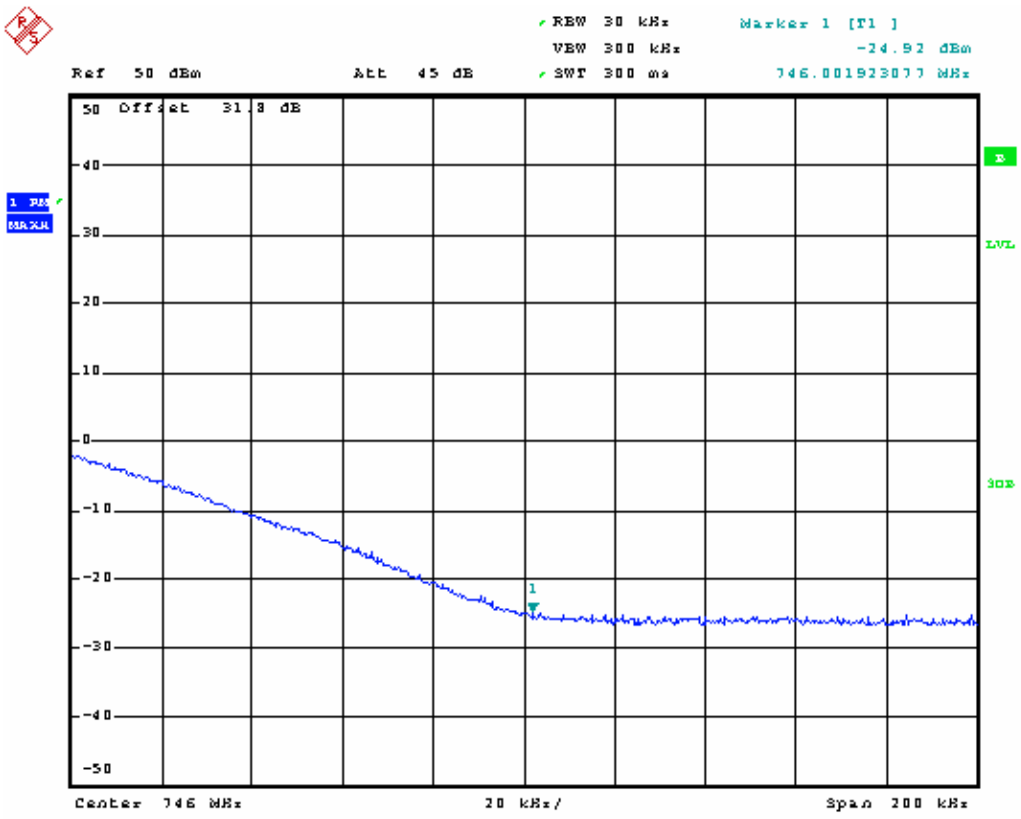
Single Carrier

No.5050 (B) 733MHz	
No.5130 (T) 741MHz	

CHANNEL BANDWIDTH: 5M

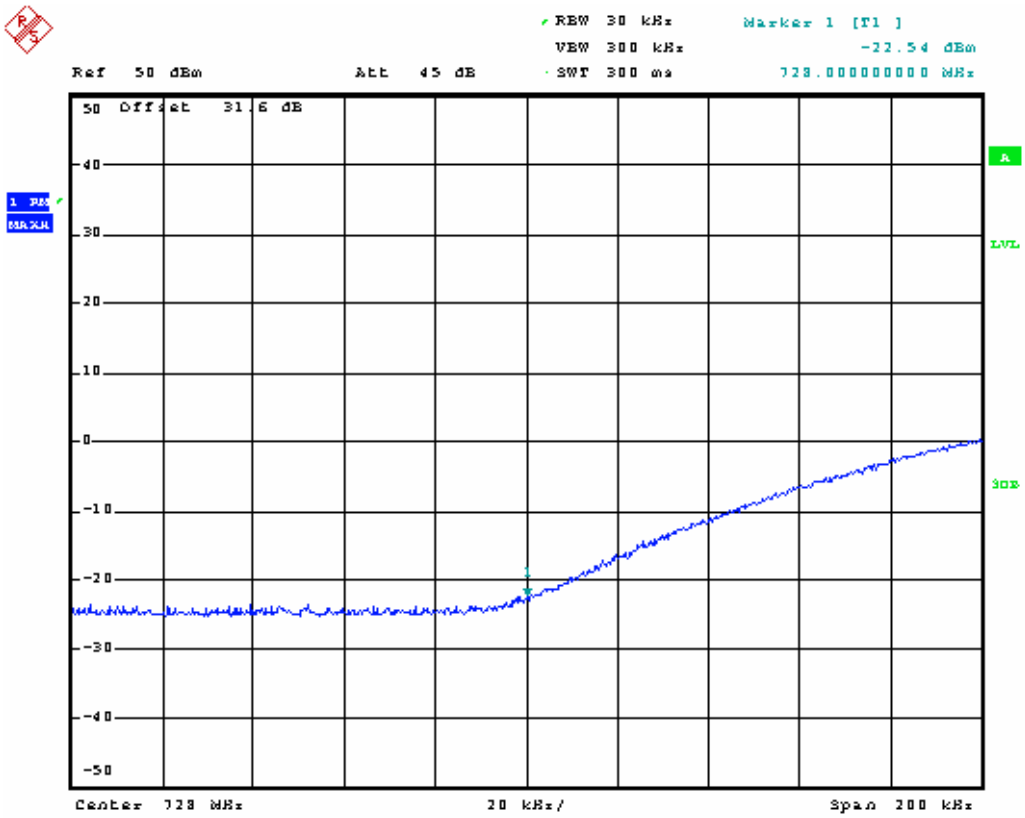
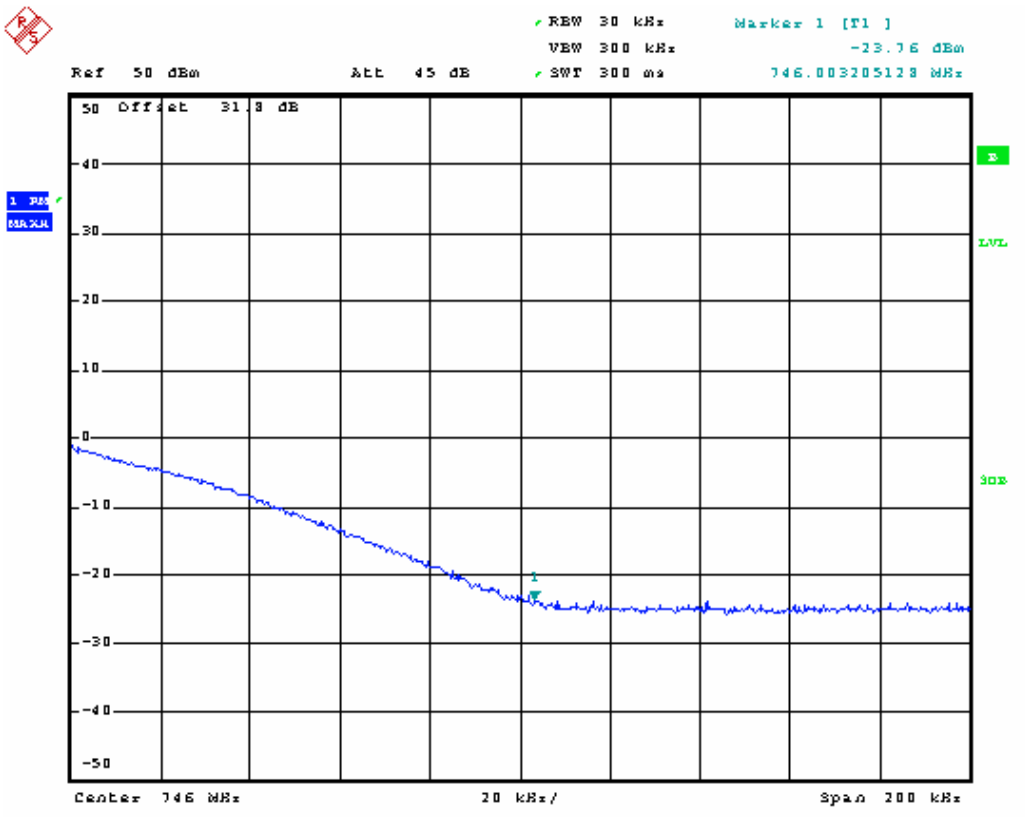
TM1.1:

Single Carrier

No.5025 (B) 730.5MHz	
No.5155 (T) 743.5MHz	

TM1.2:

Single Carrier

No.5025 (B) 730.5MHz	
No.5155 (T) 743.5MHz	

Appendix D

Spurious Emission at Antenna Terminal Measurement

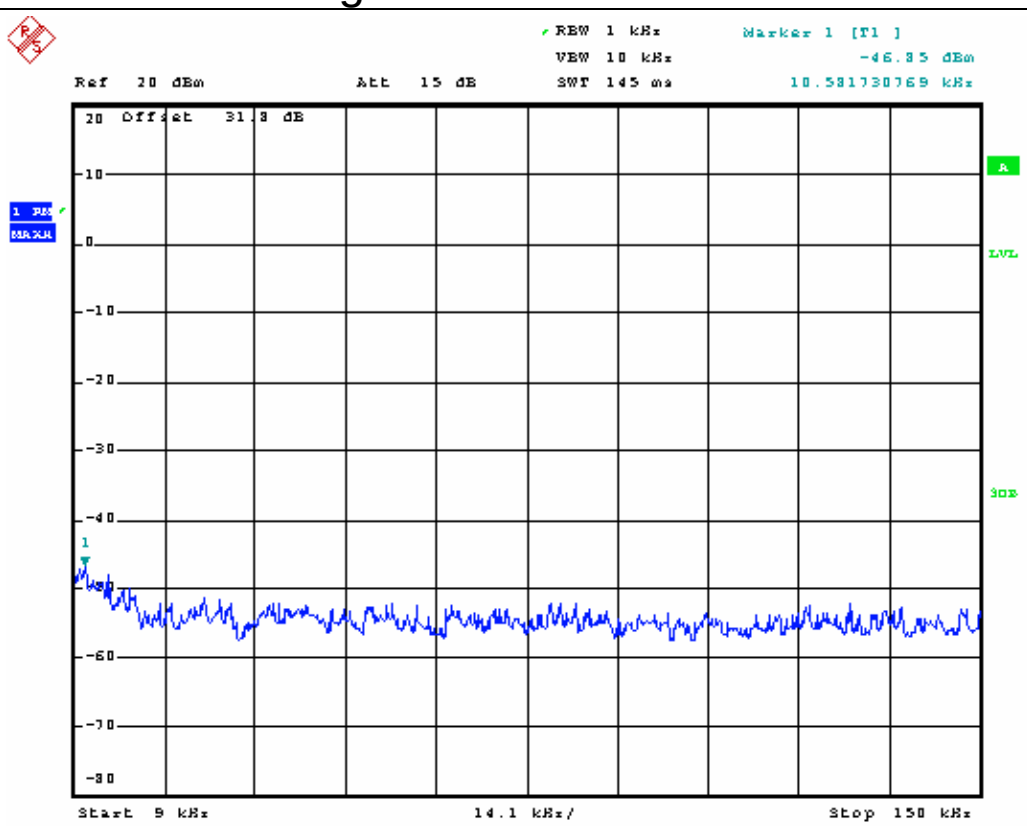
According to FCC part 2.1051 and part 27.53(g)

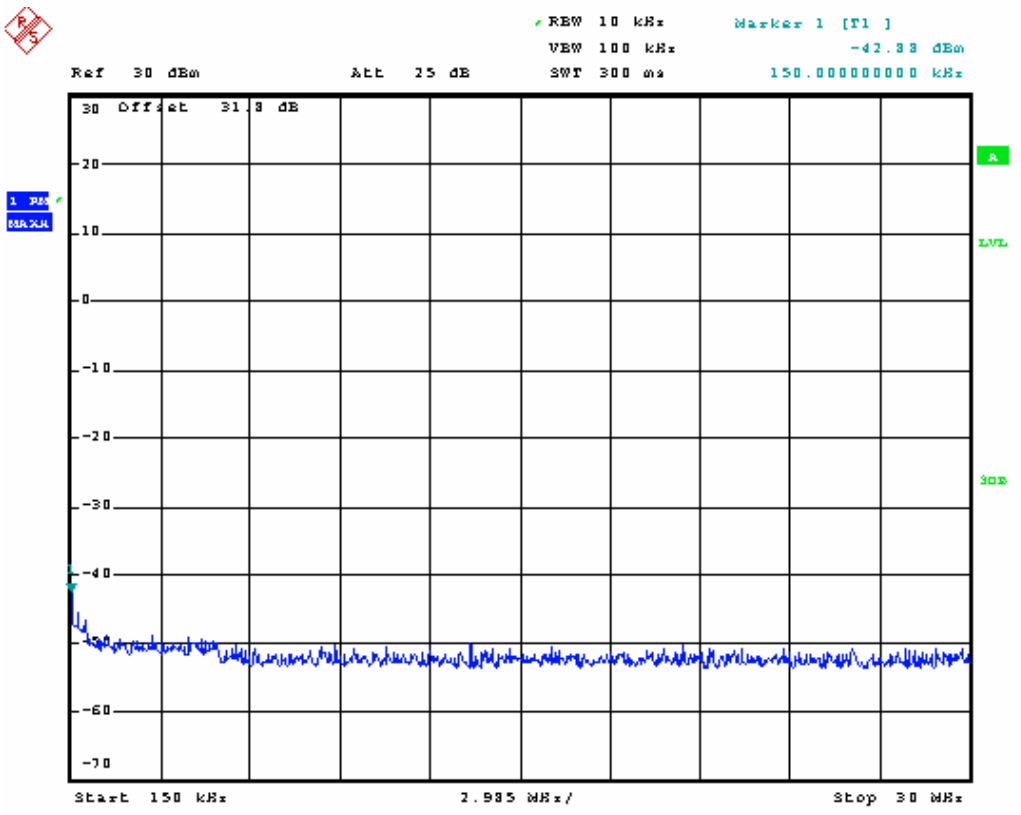
CHANNEL BANDWIDTH: 10M

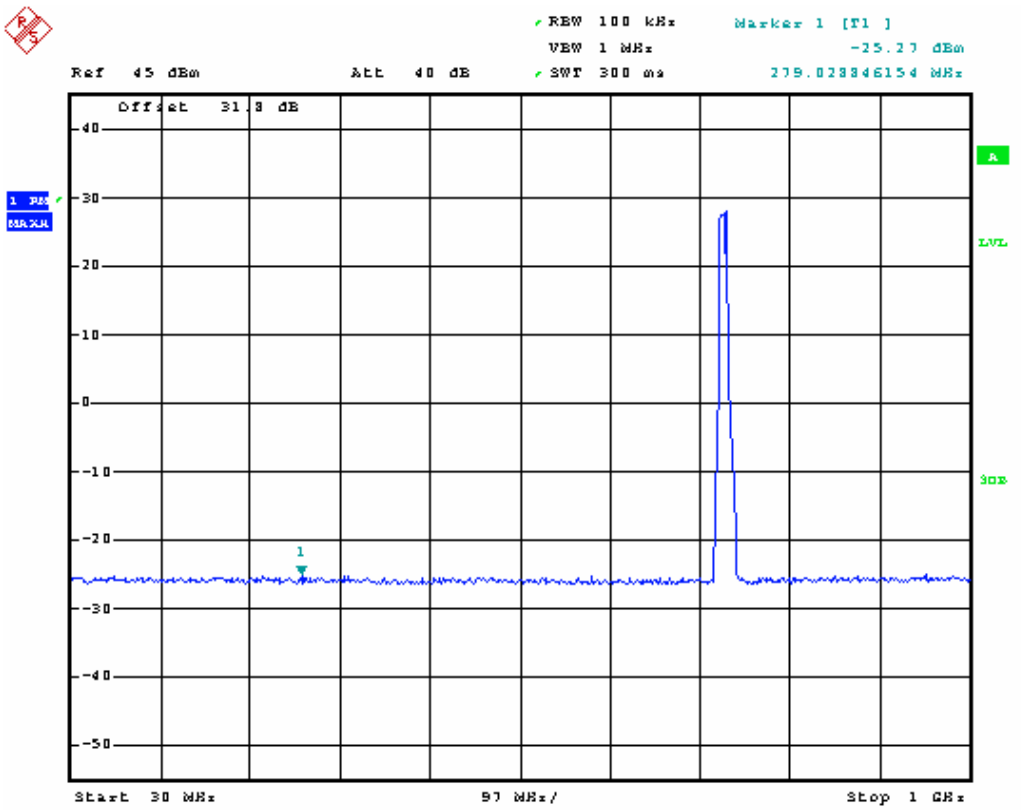
TM1.1:

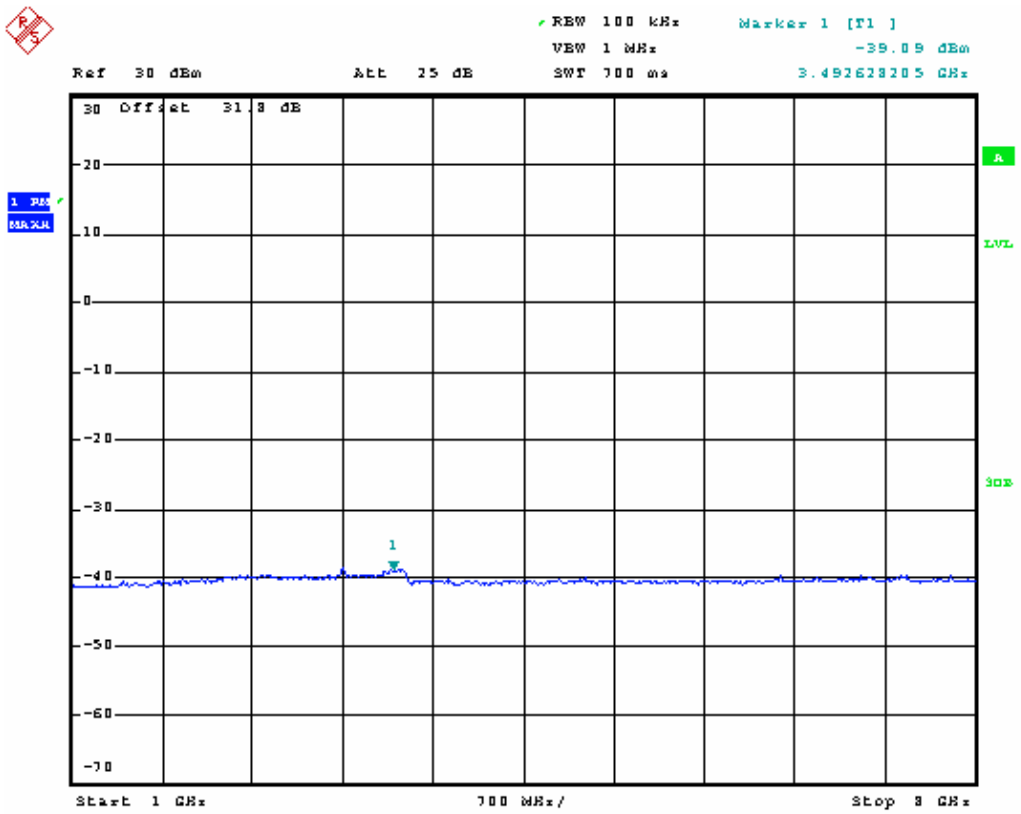
Single Carrier

No.5050 (B)
733MHz

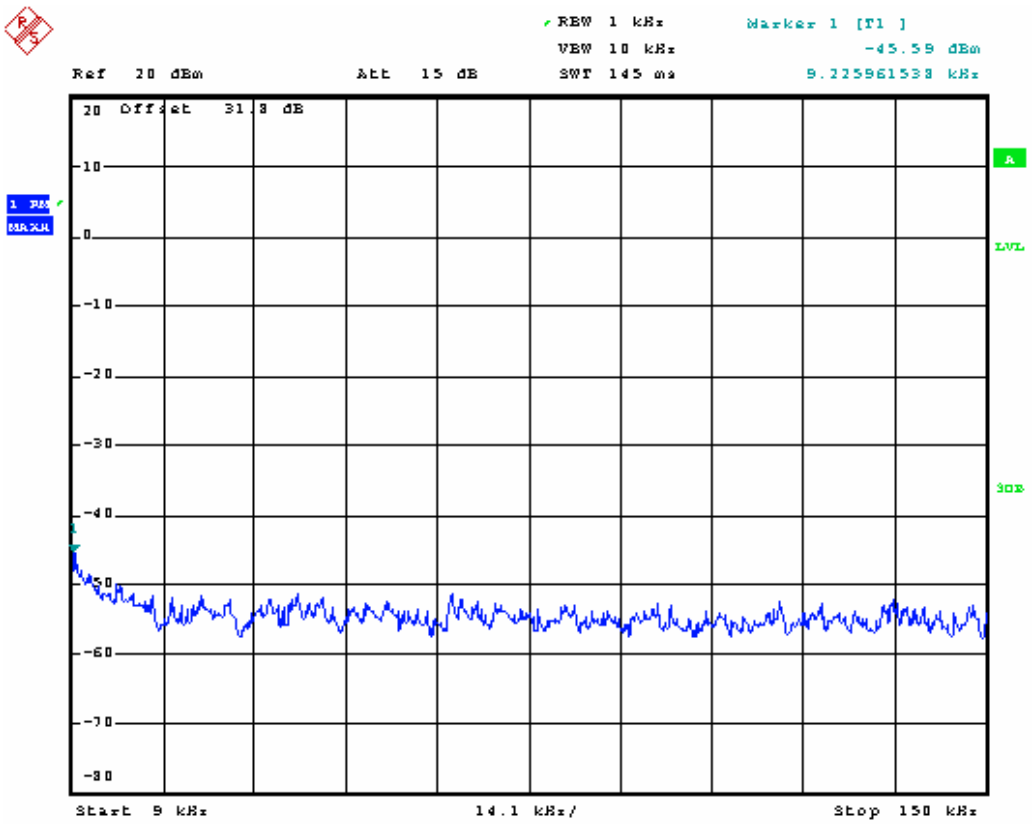


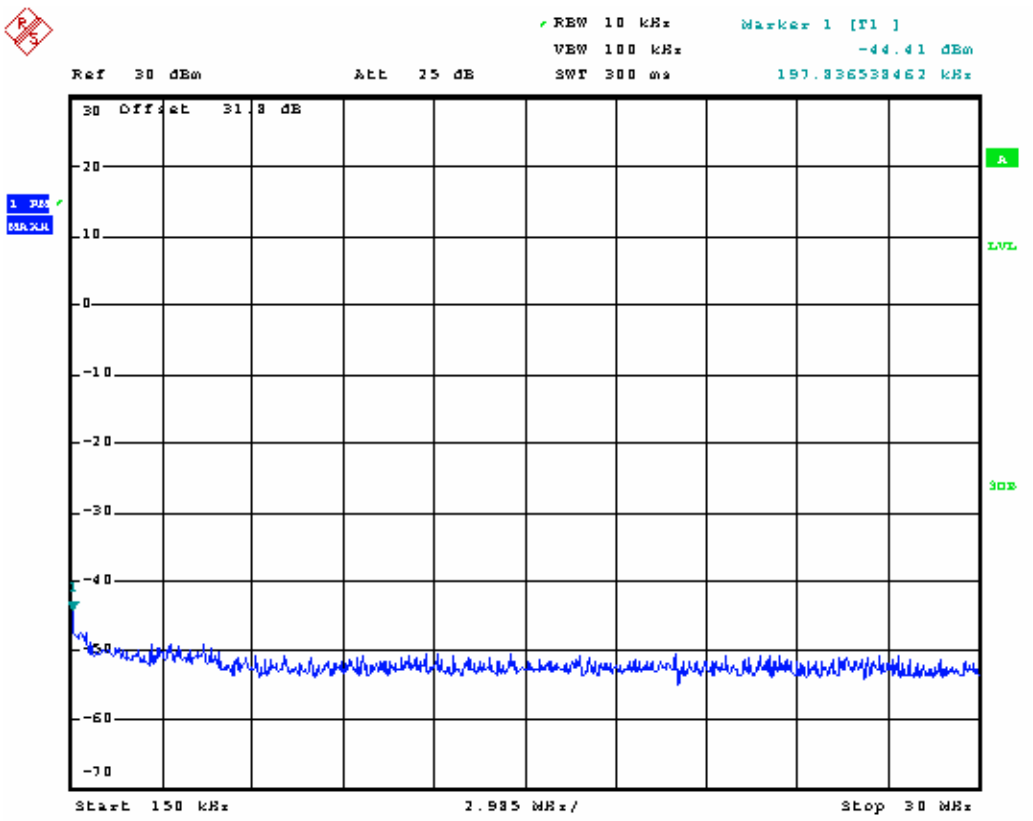


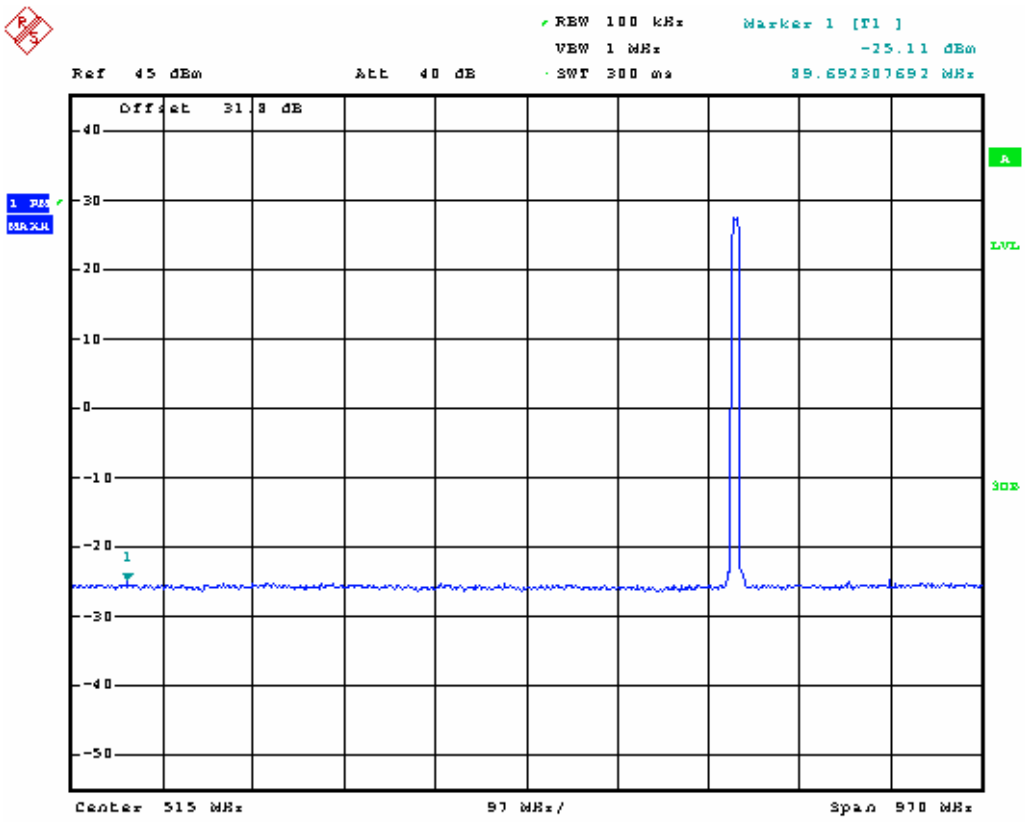

RBW 100 kHz
VBW 1 MHz
SWT 300 ms
Marker 1 [T1]
-25.27 dBm
279.028846154 MHz
Ref 45 dBm
Att 40 dB
Offset 31.8 dB
Start 30 MHz
97 MHz/
Stop 1 GHz

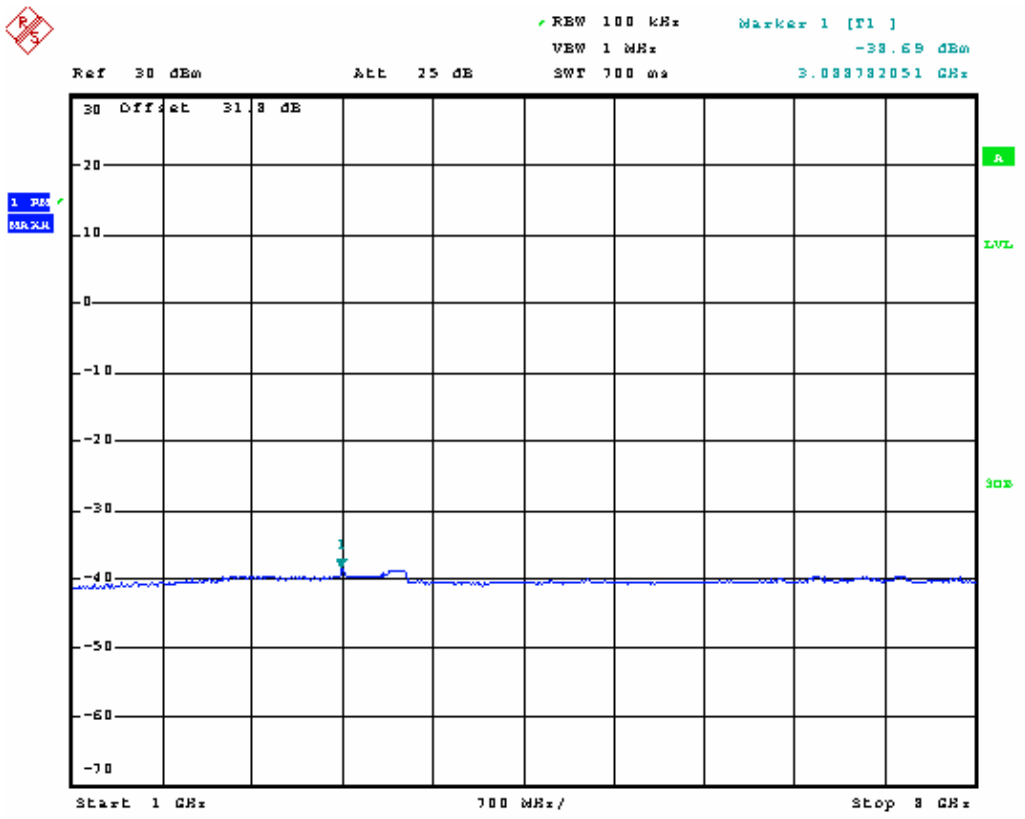

RBW 100 kHz
VBW 1 MHz
SWT 700 ms
Marker 1 [T1]
-39.09 dBm
3.492628205 GHz
Ref 30 dBm
Att 25 dB
Offset 31.8 dB
Start 1 GHz
700 MHz/
Stop 8 GHz

No.5090 (M)
737MHz

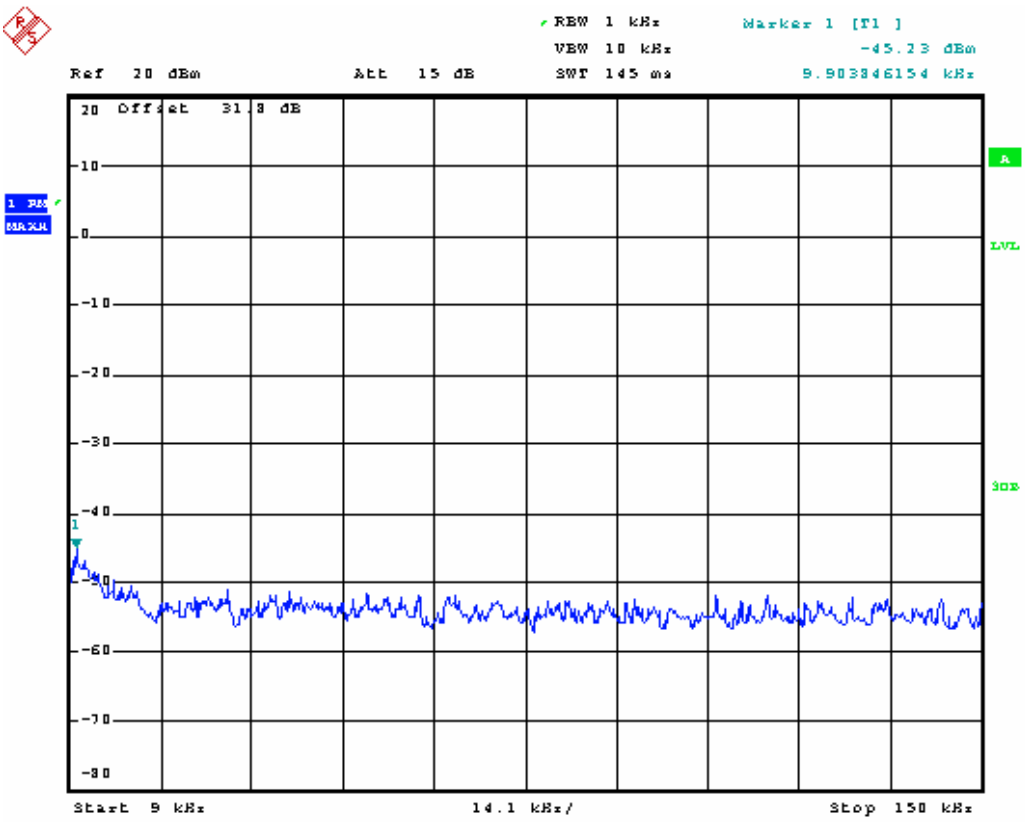


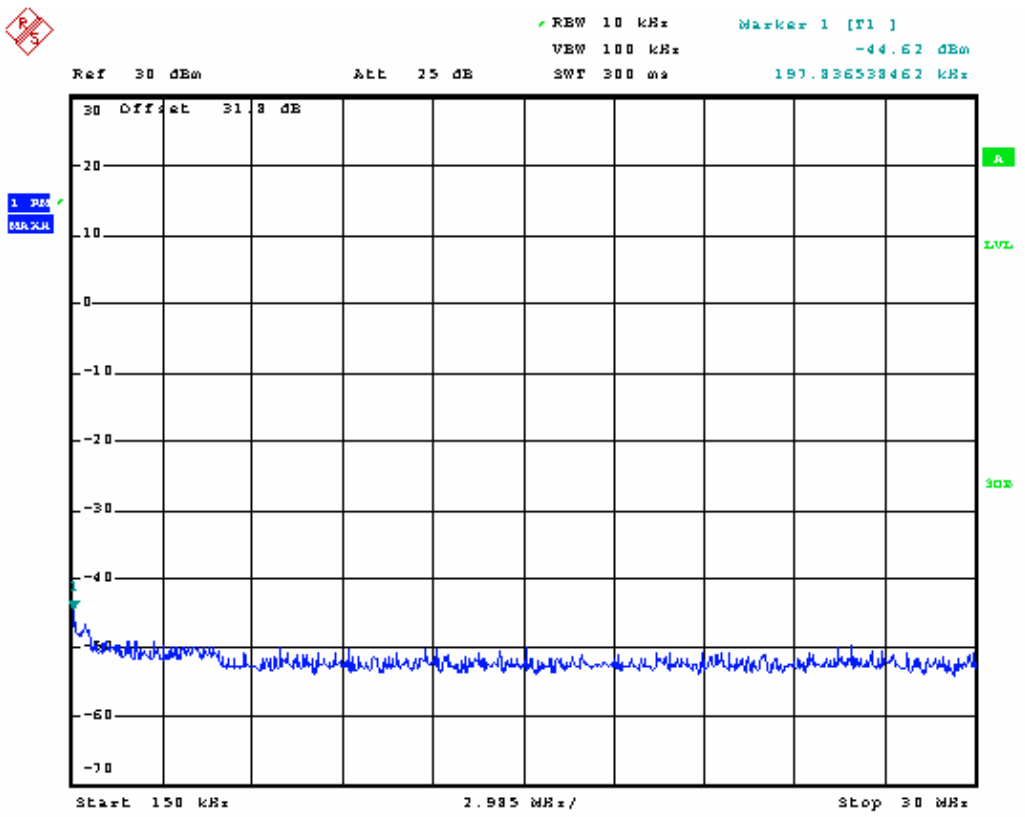


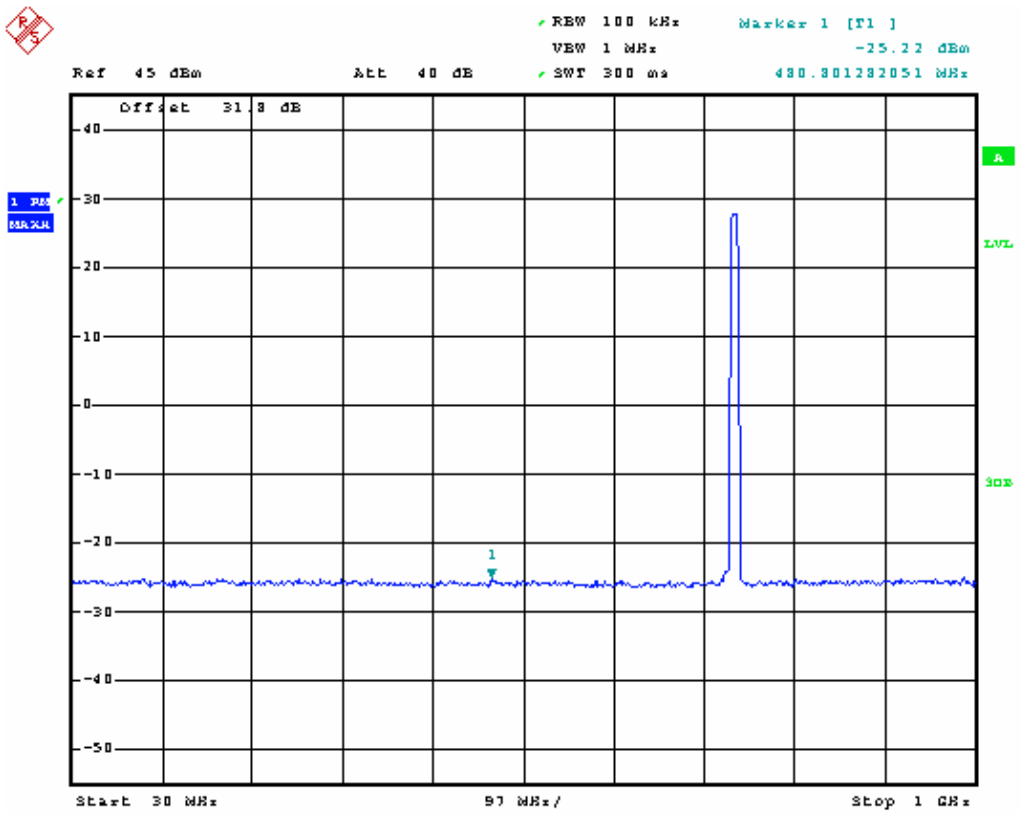

RBW 100 kHz
VBW 1 MHz
SWT 300 ms
Marker 1 [T1]
-25.11 dBm
89.692307692 MHz
Ref 45 dBm
Att 40 dB
Offset 31.8 dB
1 PM
MAXH
A
LVL
3DB
Center 515 MHz
97 MHz/
Span 970 MHz

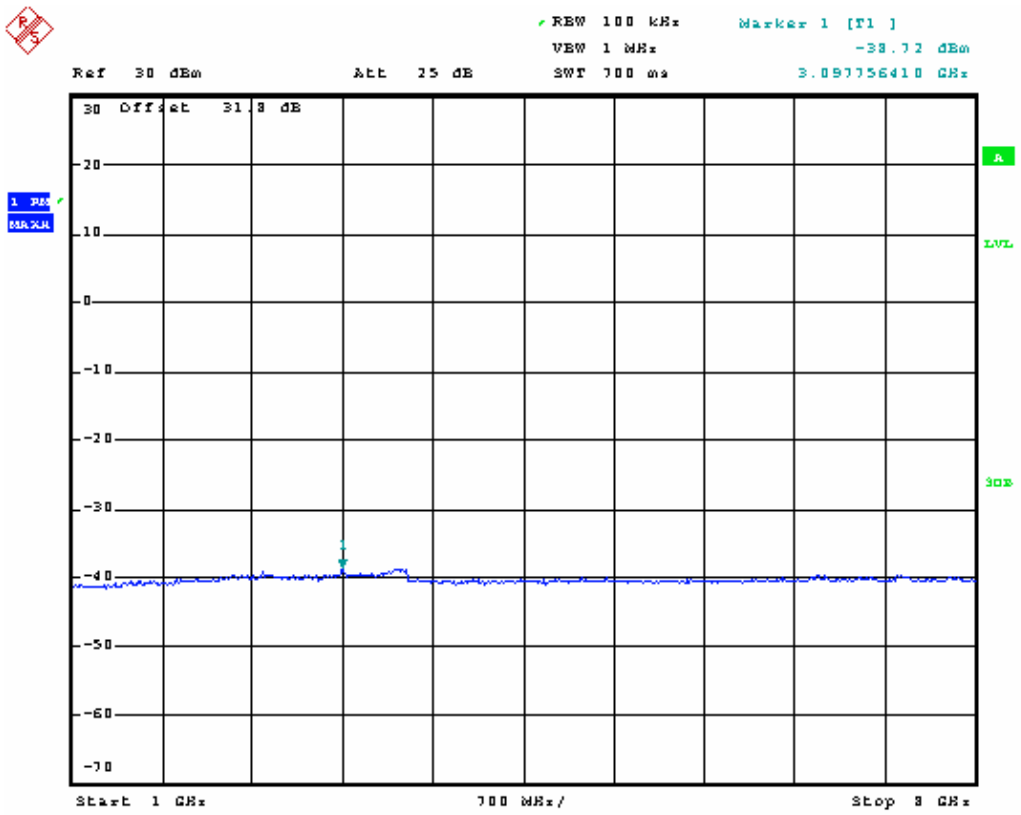

RBW 100 kHz
VBW 1 MHz
SWT 700 ms
Marker 1 [T1]
-38.69 dBm
3.088782051 GHz
Ref 30 dBm
Att 25 dB
Offset 31.8 dB
1 PM
MAXH
A
LVL
3DB
Start 1 GHz
700 MHz/
Stop 8 GHz

No.5130 (T)
741MHz






RBW 100 kHz
VBW 1 MHz
SWT 300 ms
Marker 1 [T1]
-25.22 dBm
480.801282051 MHz
Ref 45 dBm
Att 40 dB
Offset 31.8 dB
Start 30 MHz
97 MHz/
Stop 1 GHz

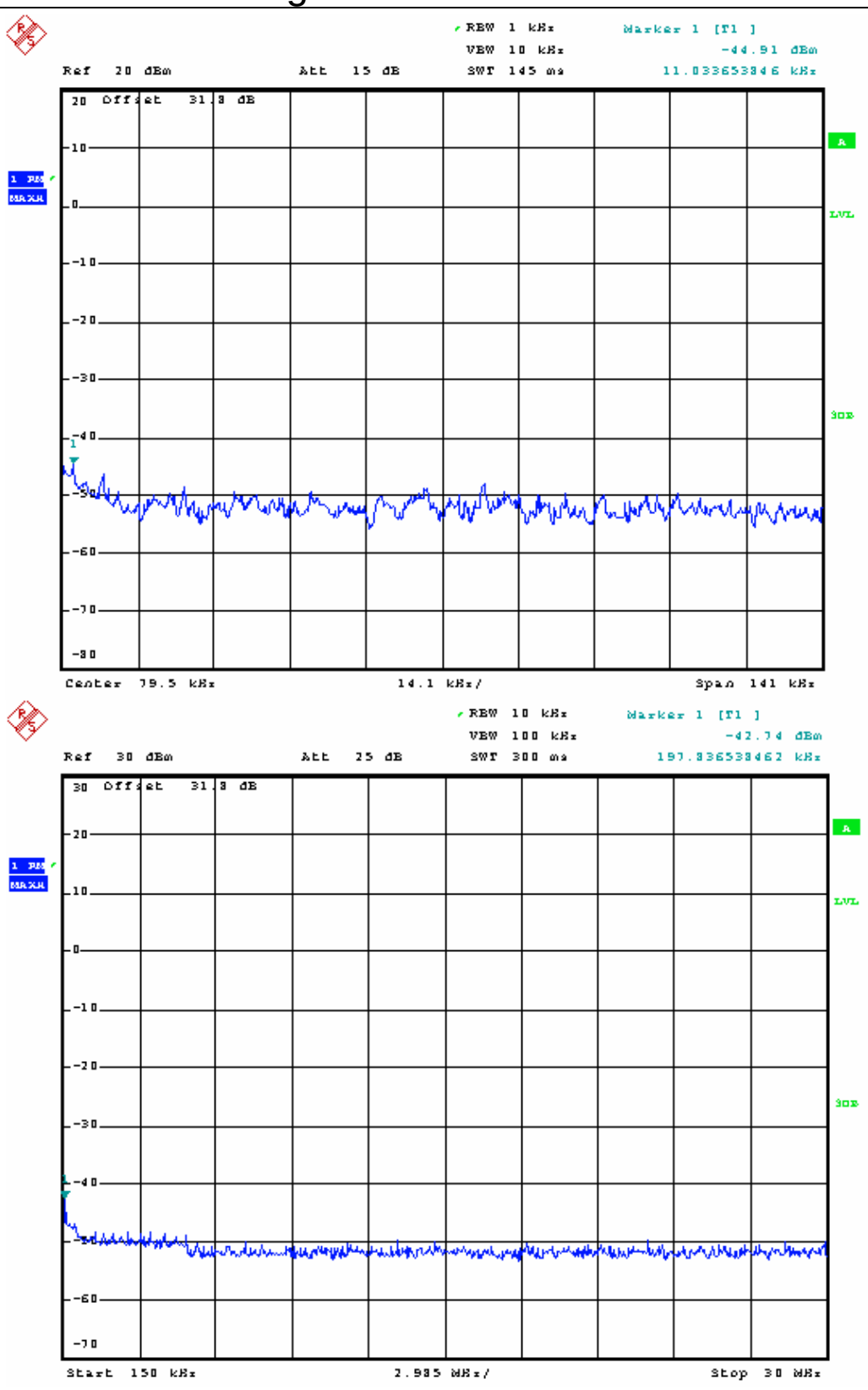

RBW 100 kHz
VBW 1 MHz
SWT 700 ms
Marker 1 [T1]
-38.72 dBm
3.097756410 GHz
Ref 30 dBm
Att 25 dB
Offset 31.8 dB
Start 1 GHz
700 MHz/
Stop 8 GHz

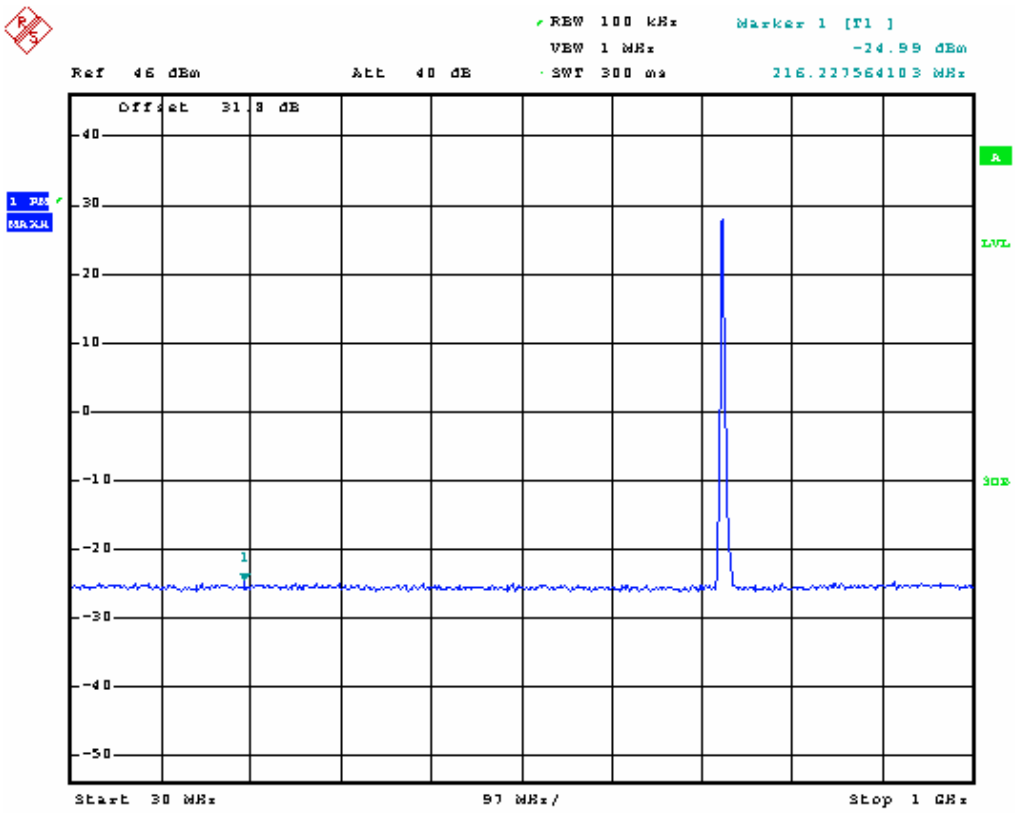
CHANNEL BANDWIDTH: 5M

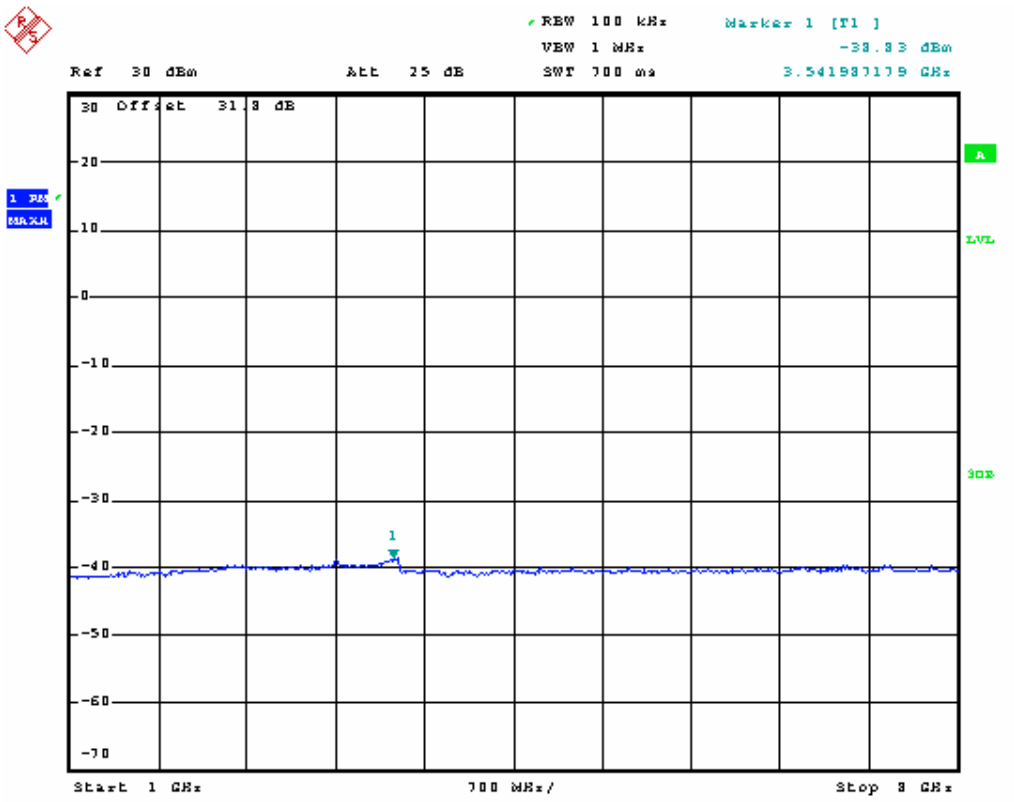
TM1.1:

Single Carrier

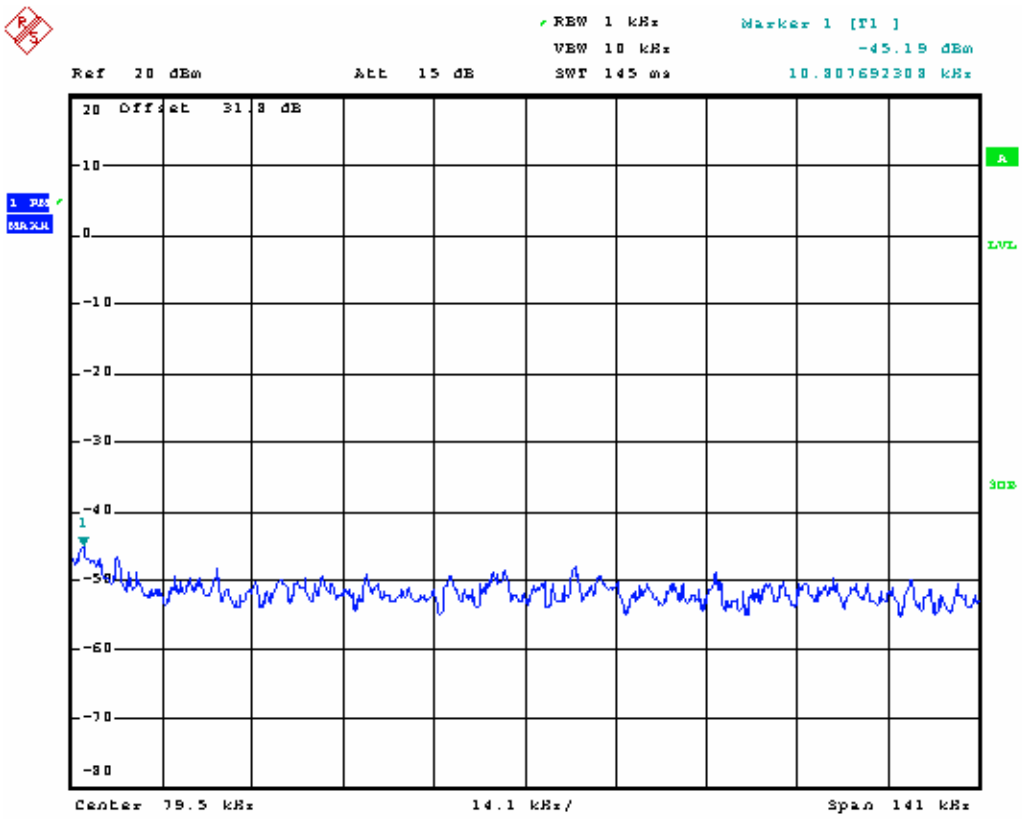
No.5025 (B)
730.5MHz

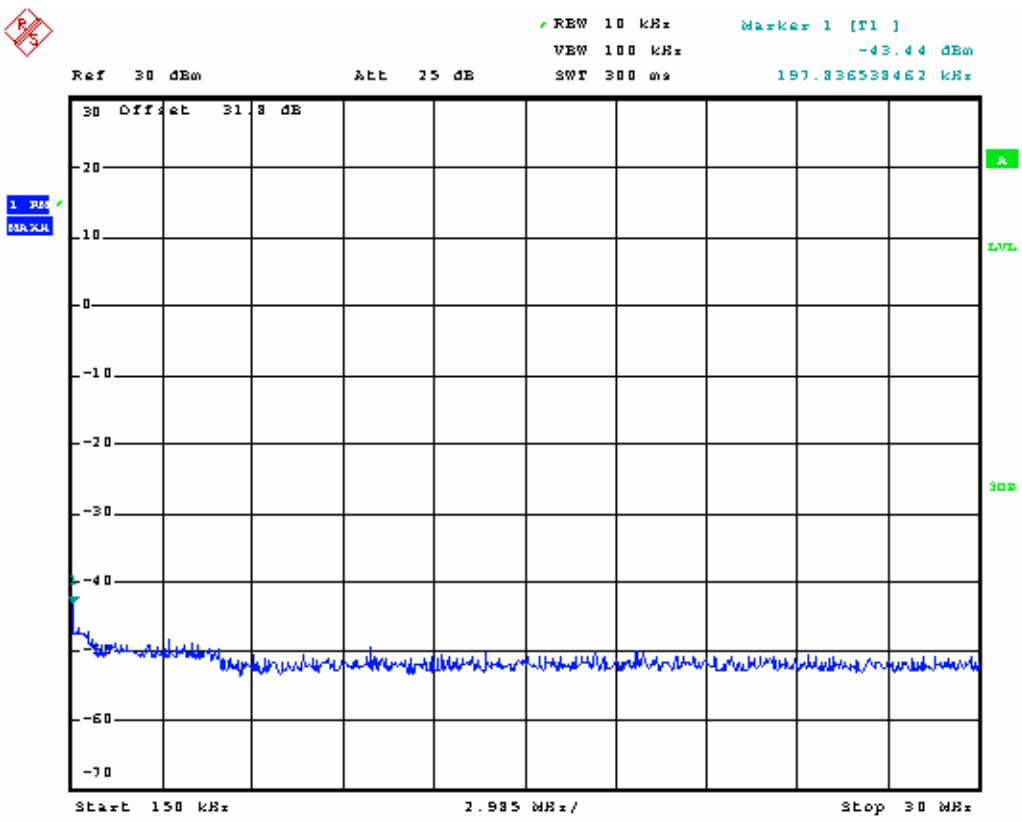


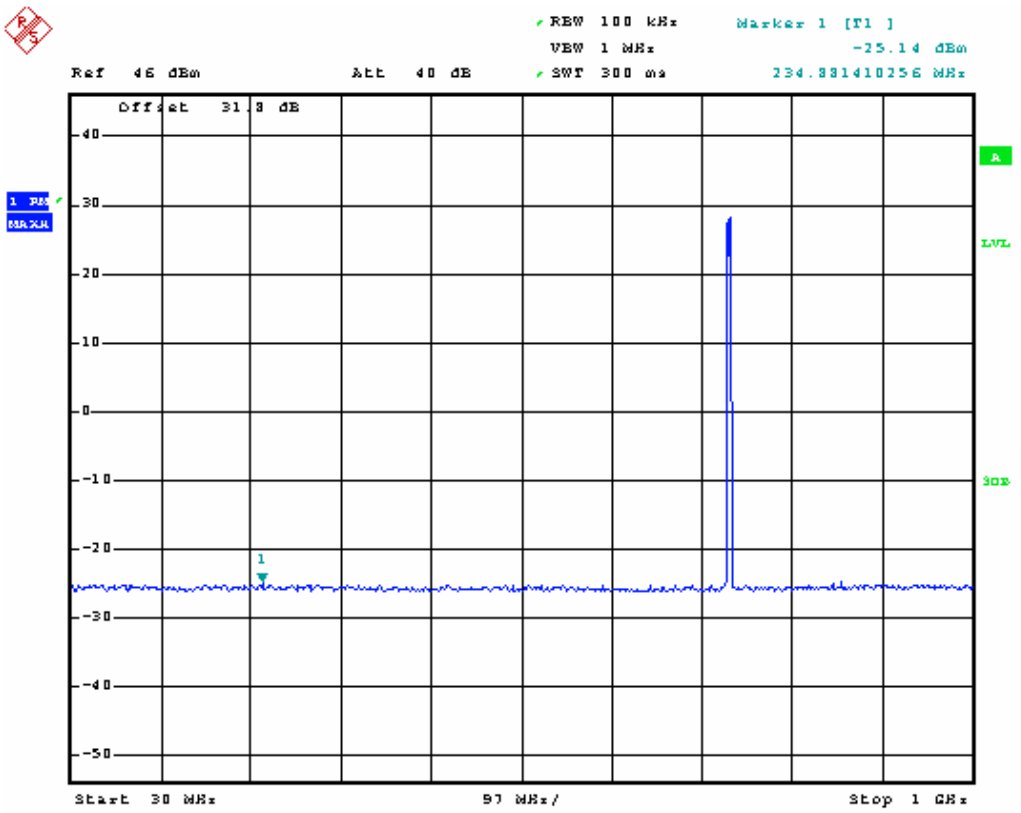

RBW 100 kHz
VBW 1 MHz
SWT 300 ms
Marker 1 [T1]
-24.99 dBm
216.227564103 MHz
Ref 46 dBm
Att 40 dB
Offset 31.8 dB
1 PK
MAXH
A
LVL
3DB
Start 30 MHz
97 MHz/
Stop 1 GHz

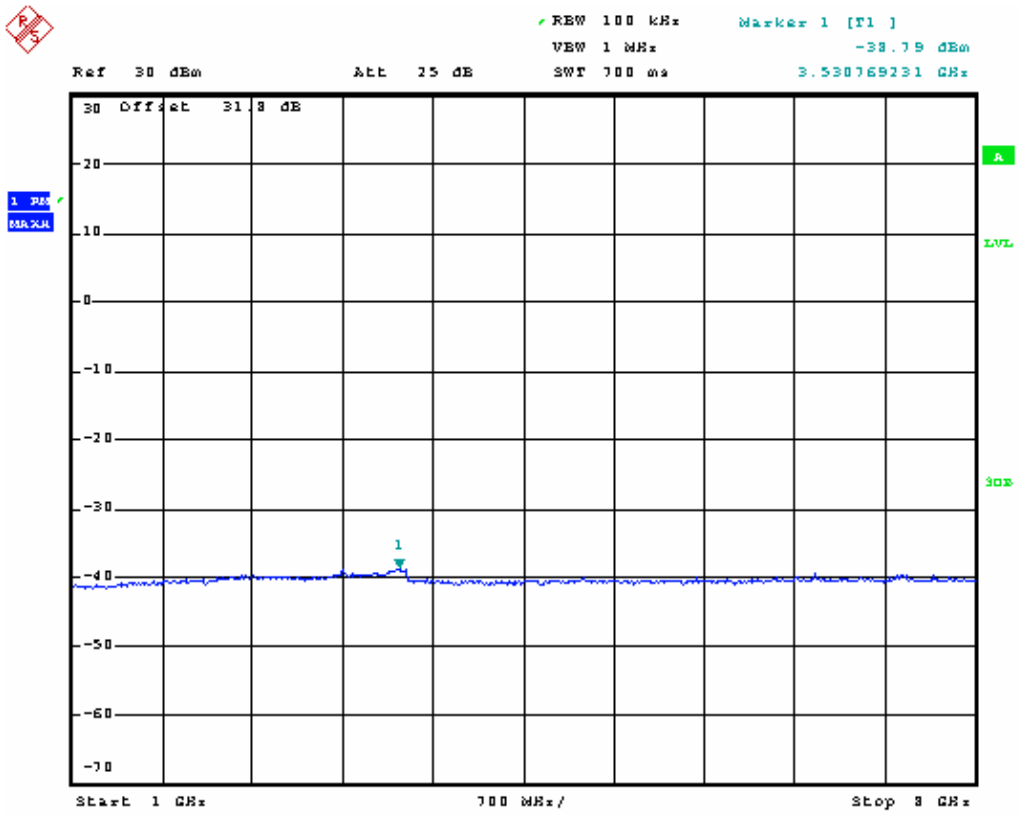

RBW 100 kHz
VBW 1 MHz
SWT 700 ms
Marker 1 [T1]
-38.83 dBm
3.541987179 GHz
Ref 30 dBm
Att 25 dB
Offset 31.8 dB
1 PK
MAXH
A
LVL
3DB
Start 1 GHz
700 MHz/
Stop 8 GHz

No.5090 (M)
737MHz

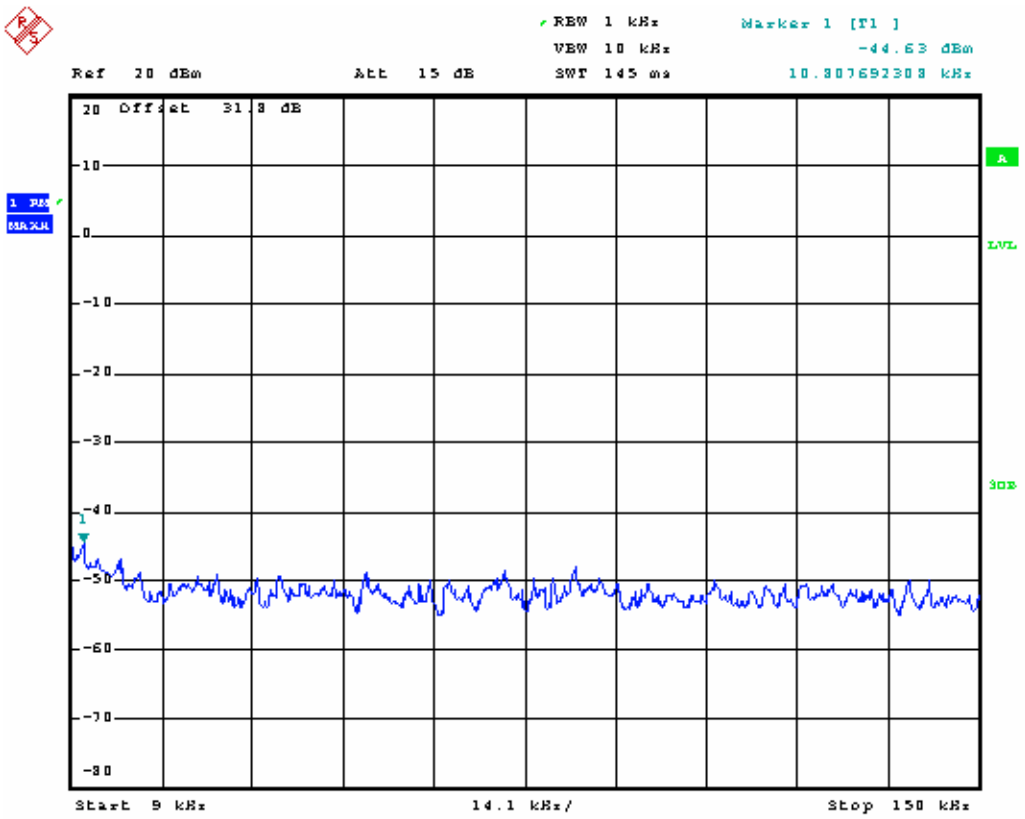


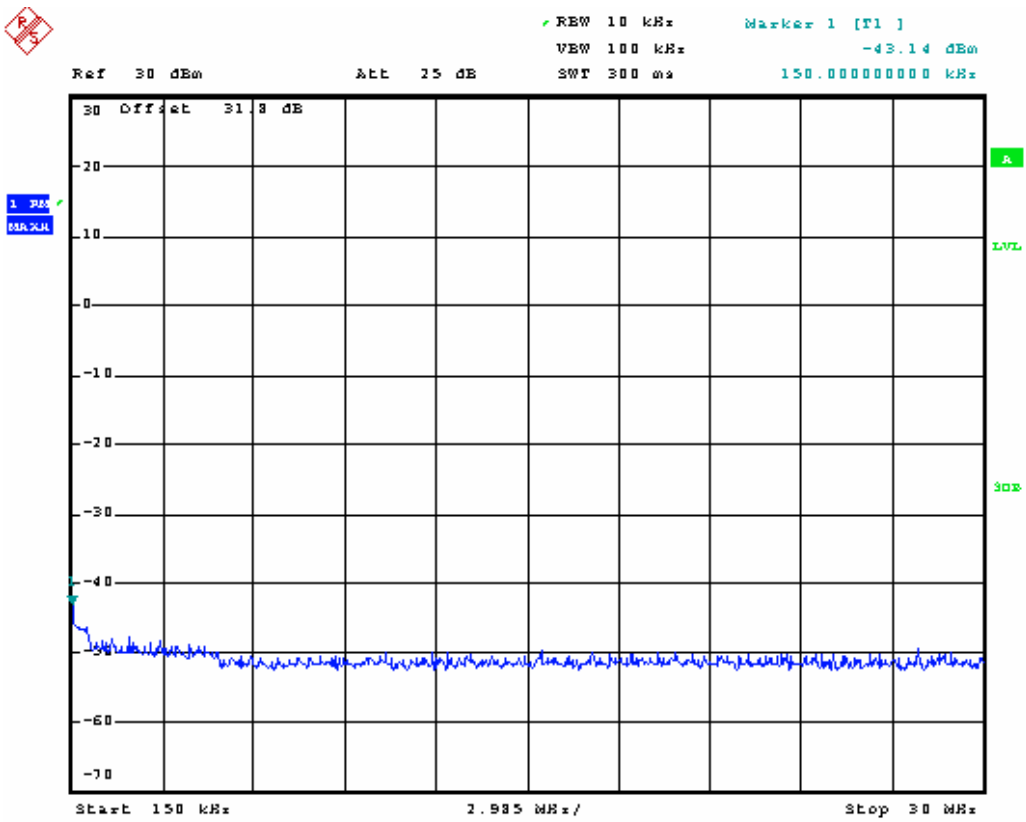


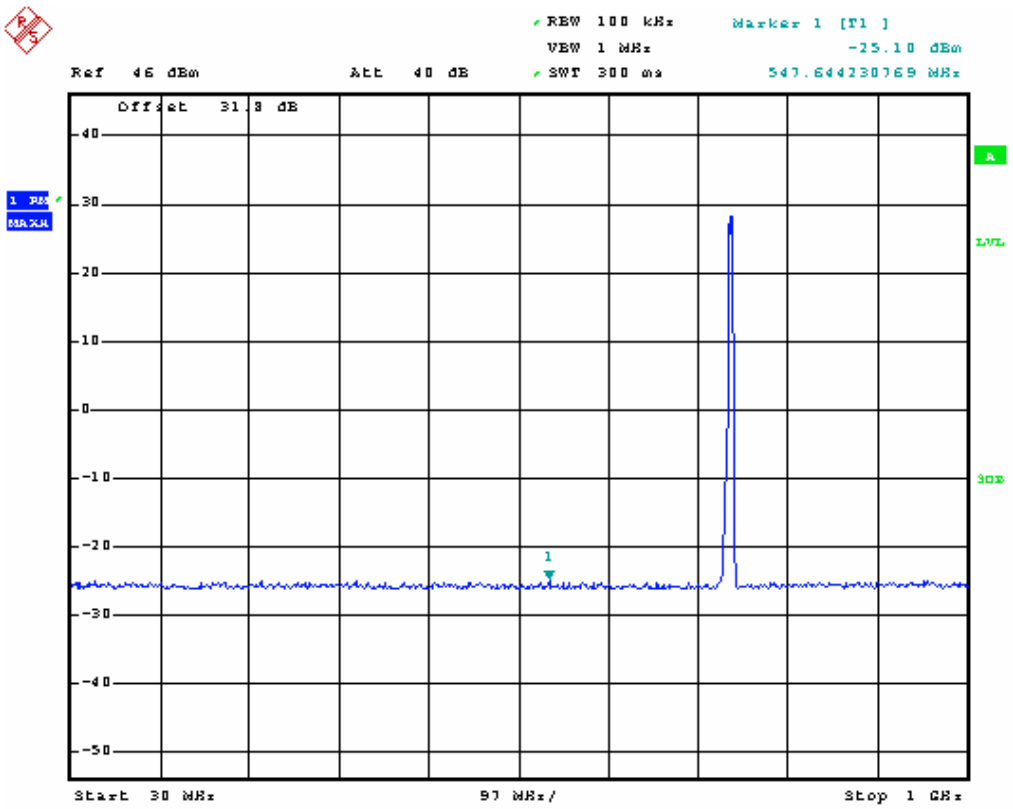

RBW 100 kHz
VBW 1 MHz
SWT 300 ms
Marker 1 [T1]
-25.14 dBm
234.881410256 MHz
Ref 46 dBm
Att 40 dB
Offset 31.8 dB
1 PK
MAXH
A
LVL
3DB
Start 30 MHz
97 MHz/
Stop 1 GHz

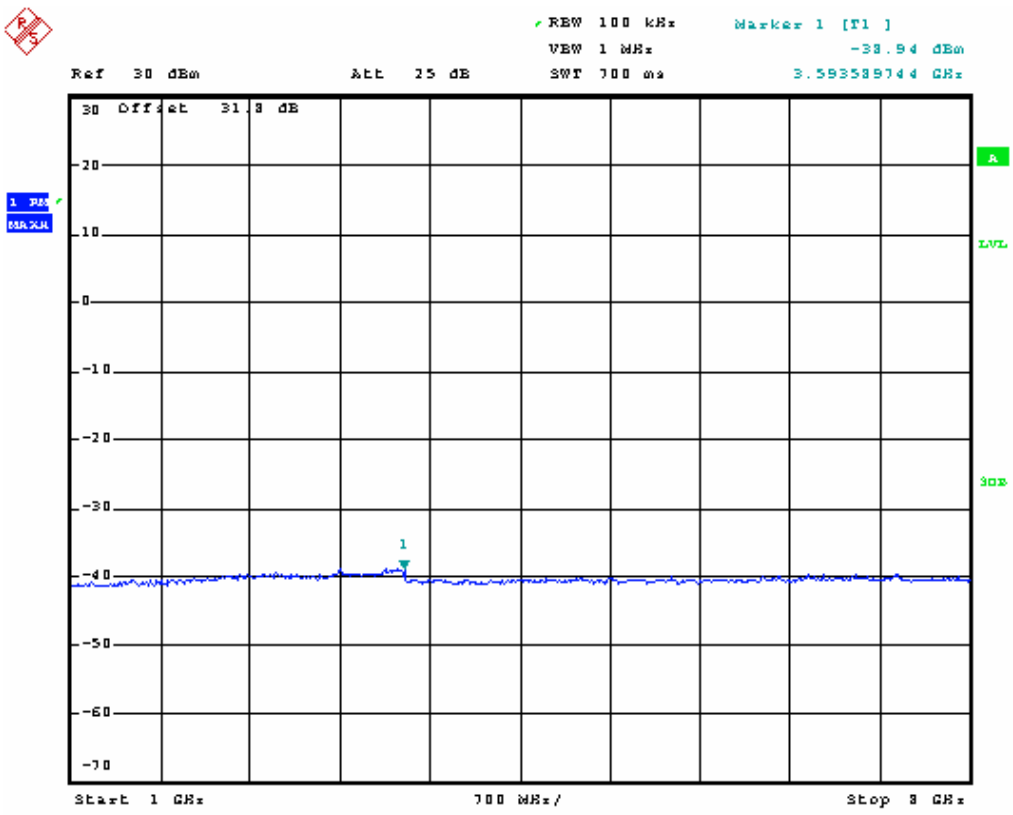

RBW 100 kHz
VBW 1 MHz
SWT 700 ms
Marker 1 [T1]
-38.79 dBm
3.530769231 GHz
Ref 30 dBm
Att 25 dB
Offset 31.8 dB
1 PK
MAXH
A
LVL
3DB
Start 1 GHz
700 MHz/
Stop 8 GHz

No.5155 (T)
743.5MHz






RBW 100 kHz
VBW 1 MHz
SWT 300 ms
Marker 1 [T1]
-25.10 dBm
547.644230769 MHz
Ref 46 dBm
Att 40 dB
Offset 31.8 dB
1 PK
MAXH
A
LVL
30dB
Start 30 MHz
97 MHz/
Stop 1 GHz


RBW 100 kHz
VBW 1 MHz
SWT 700 ms
Marker 1 [T1]
-38.94 dBm
3.593589744 GHz
Ref 30 dBm
Att 25 dB
Offset 31.8 dB
1 PK
MAXH
A
LVL
30dB
Start 1 GHz
700 MHz/
Stop 8 GHz

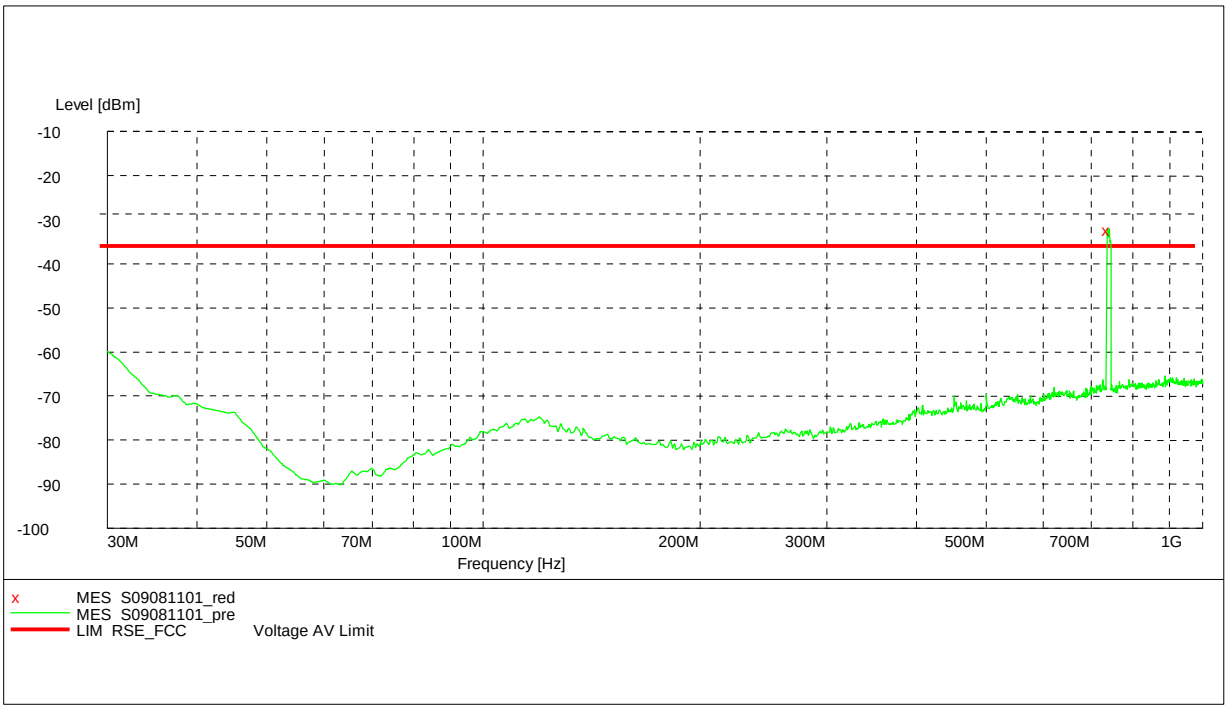
Appendix E

Field Strength of Spurious Radiation Measurement

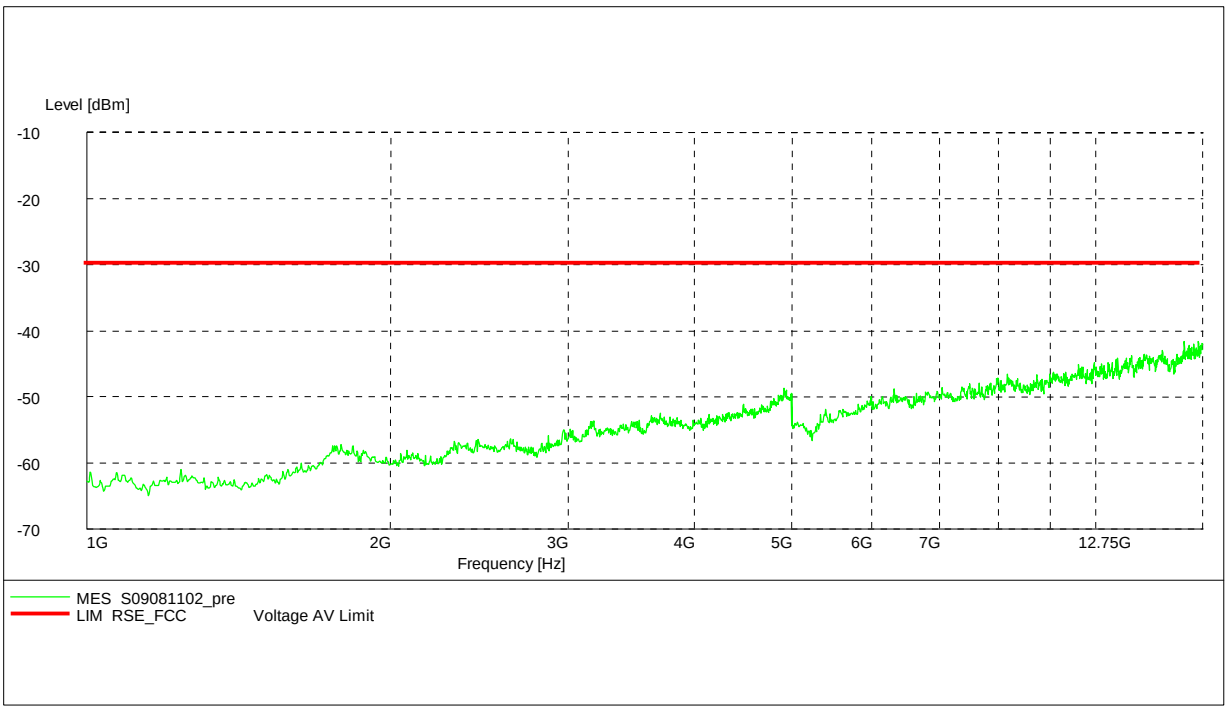
According to FCC part 2.1053 and part 27.53(g)

Note: a more stringent limit line than FCC required is used in this test.

Below 1GHz:



Above 1GHz:

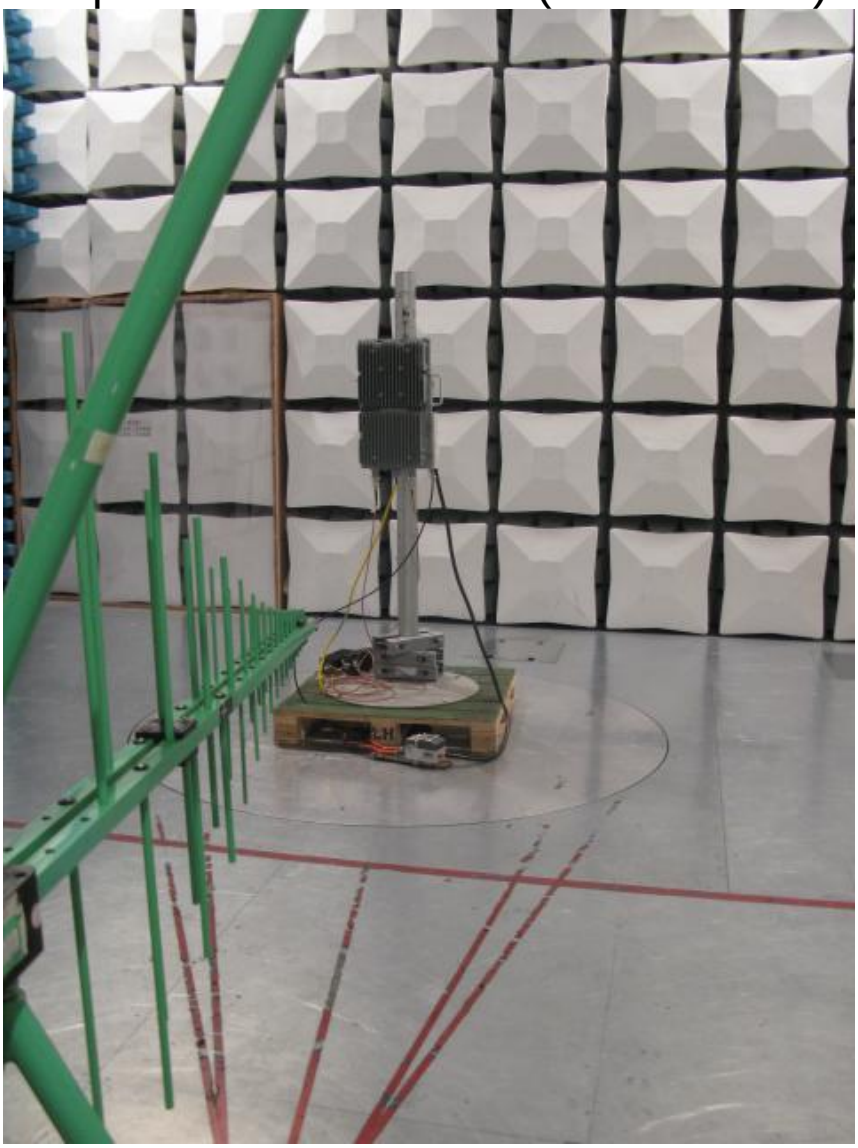

Level [dBm]
-10
-20
-30
-40
-50
-60
-70
1G
2G
3G
4G
5G
6G
7G
12.75G
Frequency [Hz]
MES S09081102_pre
LIM RSE_FCC
Voltage AV Limit

Appendix F

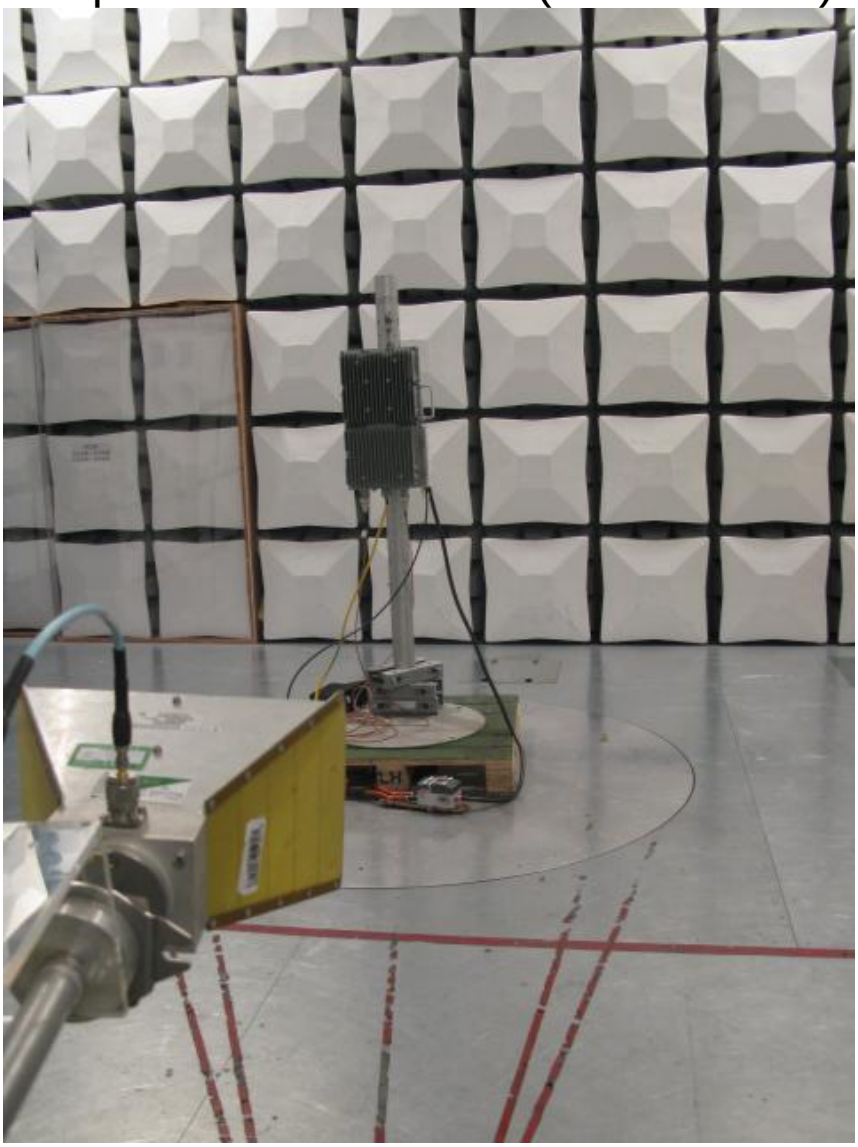
Photos of Test Setup

1. Photos for Radiated Spurious Emissions:

1) Radiated Spurious Disturbance (below 1GHz)



2) Radiated Spurious Disturbance (above 1GHz)



END