4.5 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

Frequency Band	Limit
5.15 ~ 5.25GHz	4dBm
5.25 ~ 5.35GHz	11dBm
5.47 – 5.725GHz	11dBm
5.725 ~ 5.825GHz	17dBm

4.5.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSP40	100037	Aug. 03, 2009	Aug. 02, 2010

NOTE:

1.The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.5.3 TEST PROCEDURES

1. The transmitter output was connected to the spectrum analyzer.
2. Set RBW=1MHz, VBW=3MHz. The PPSD is the highest level found across the emission in any 1MHz band.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP

4.5.6 EUT OPERATING CONDITIONS

Same as 4.3.6

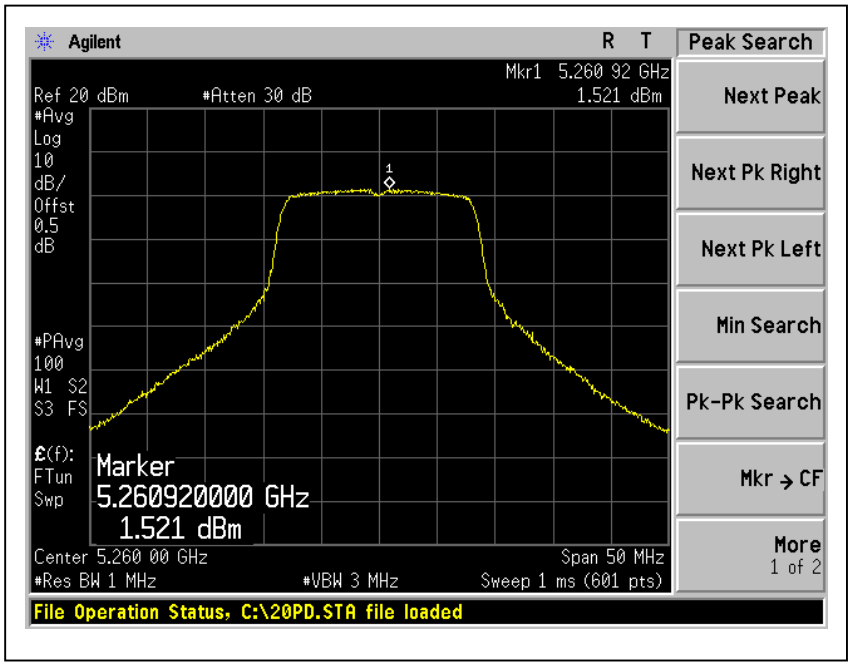
4.5.7 TEST RESULTS-ANTENNA 4

802.11a OFDM modulation

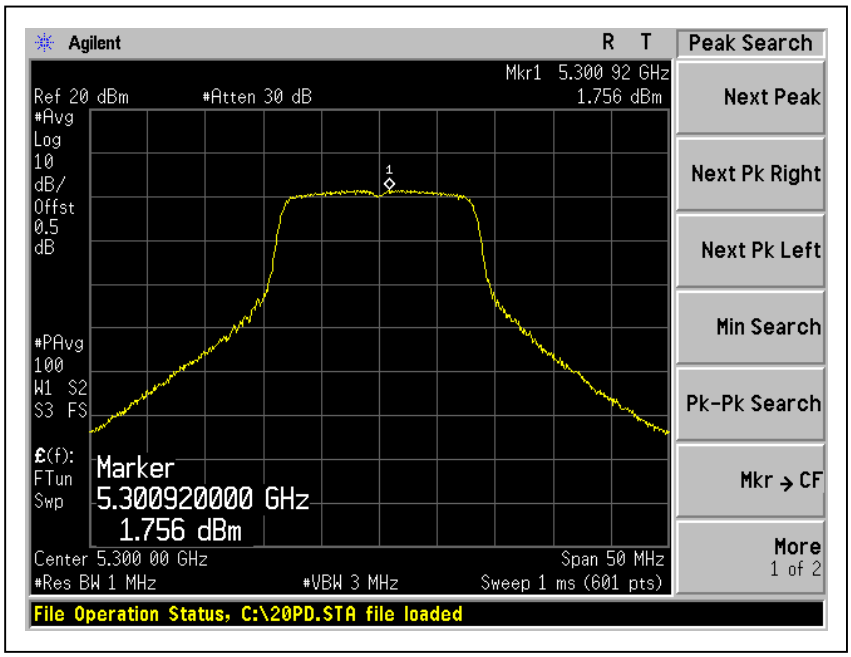
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL OUTPUT POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
		Chain (0)	Chain(1)	Chain(2)			
5	5260	1.521	-0.318	0.780	5.496	11	PASS
7	5300	1.756	-0.126	0.639	5.597	11	PASS
8	5320	1.817	0.563	0.517	5.778	11	PASS
9	5500	0.313	1.285	0.297	5.428	11	PASS
14	5600	0.572	0.401	0.848	5.383	11	PASS
19	5700	1.156	0.200	0.389	5.373	11	PASS

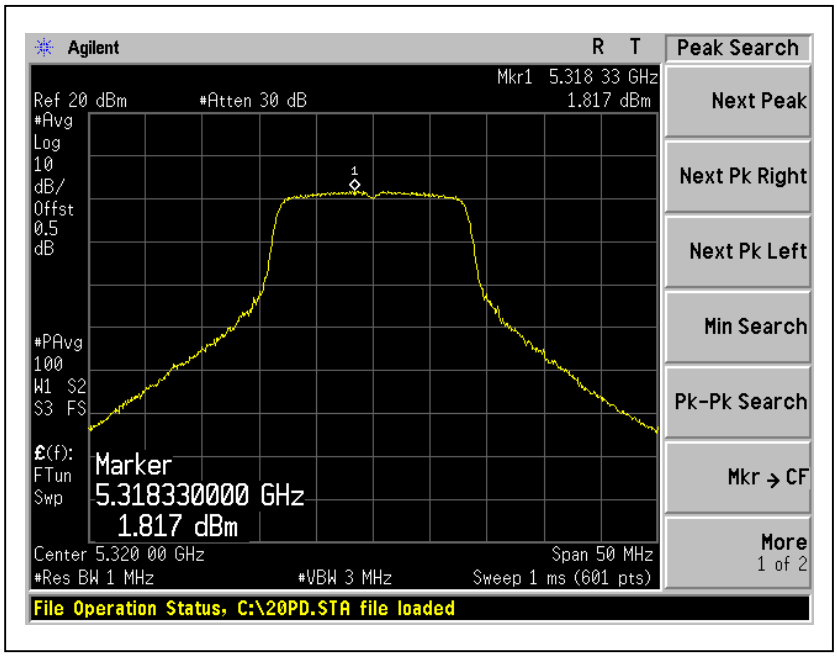
For Chain (0) : CH5



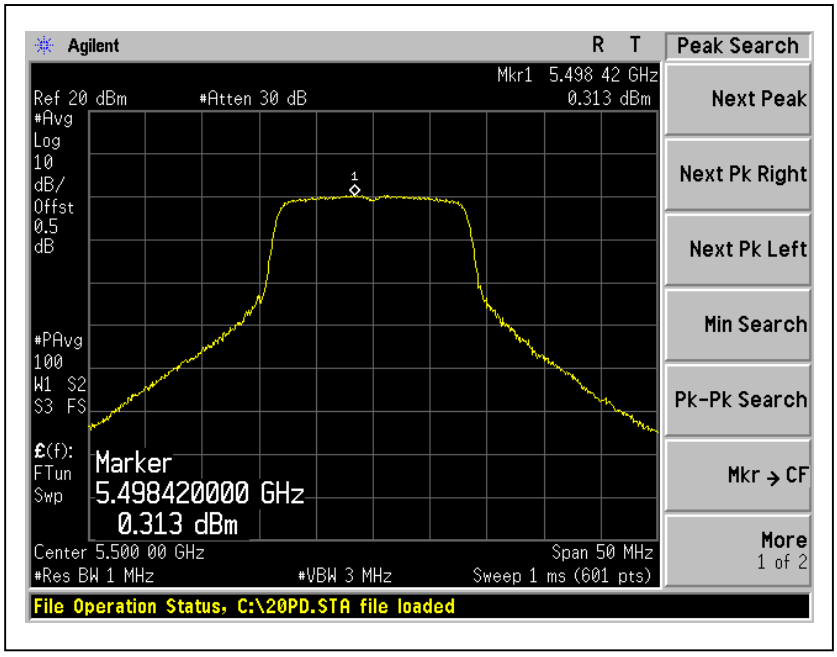
CH7



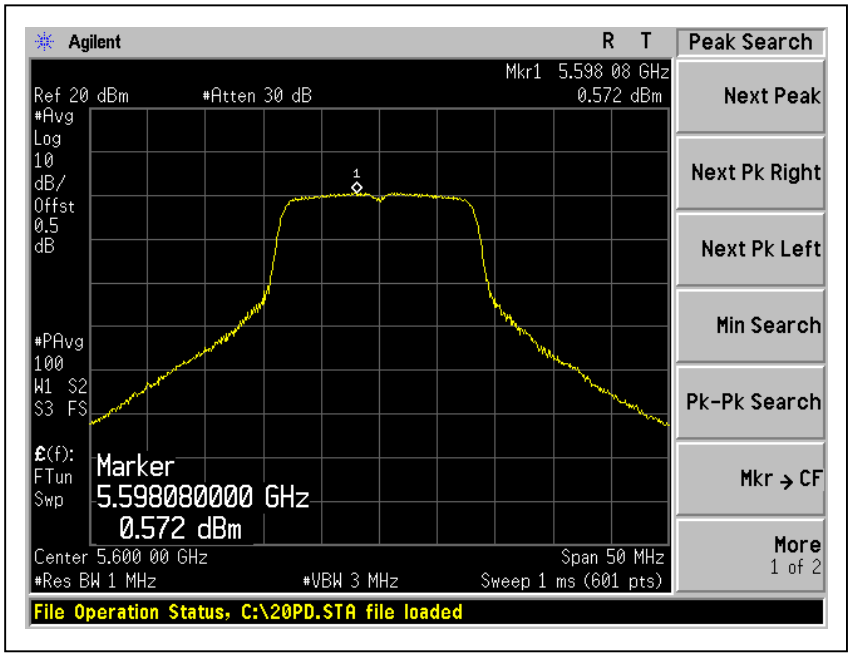
CH8


Agilent
R T
Peak Search
Mkr1 5.318 33 GHz
Ref 20 dBm
#Atten 30 dB
1.817 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.318330000 GHz
1.817 dBm
Mkr → CF
More
1 of 2
Center 5.320 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

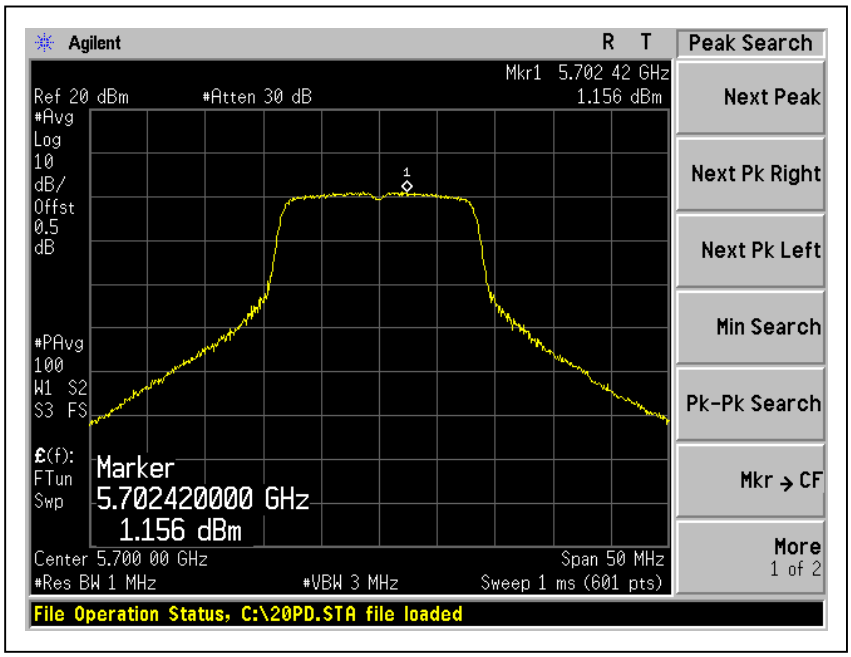
CH9


Agilent
R T
Peak Search
Mkr1 5.498 42 GHz
Ref 20 dBm
#Atten 30 dB
0.313 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.498420000 GHz
0.313 dBm
Mkr → CF
More
1 of 2
Center 5.500 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

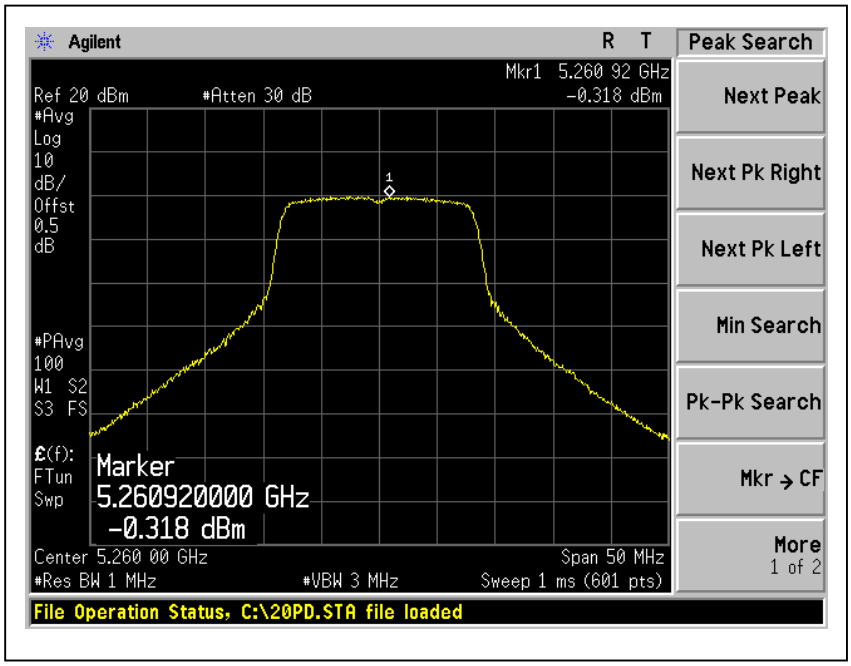
CH14


Agilent
R T
Peak Search
Mkr1 5.598 08 GHz
Ref 20 dBm
#Atten 30 dB
0.572 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.598080000 GHz
0.572 dBm
Mkr → CF
More
1 of 2
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

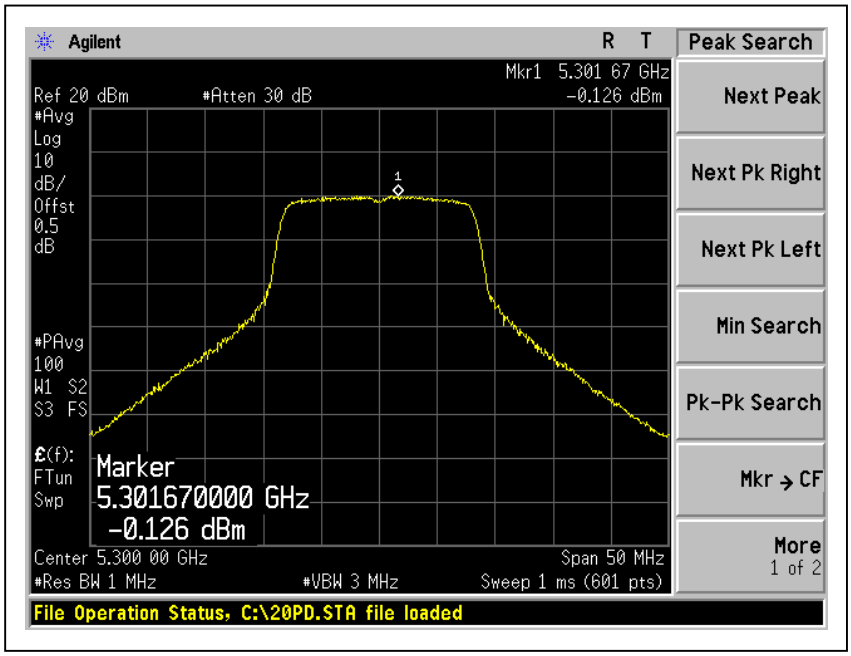
CH19


Agilent
R T
Peak Search
Mkr1 5.702 42 GHz
Ref 20 dBm
#Atten 30 dB
1.156 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.702420000 GHz
1.156 dBm
Mkr → CF
More
1 of 2
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

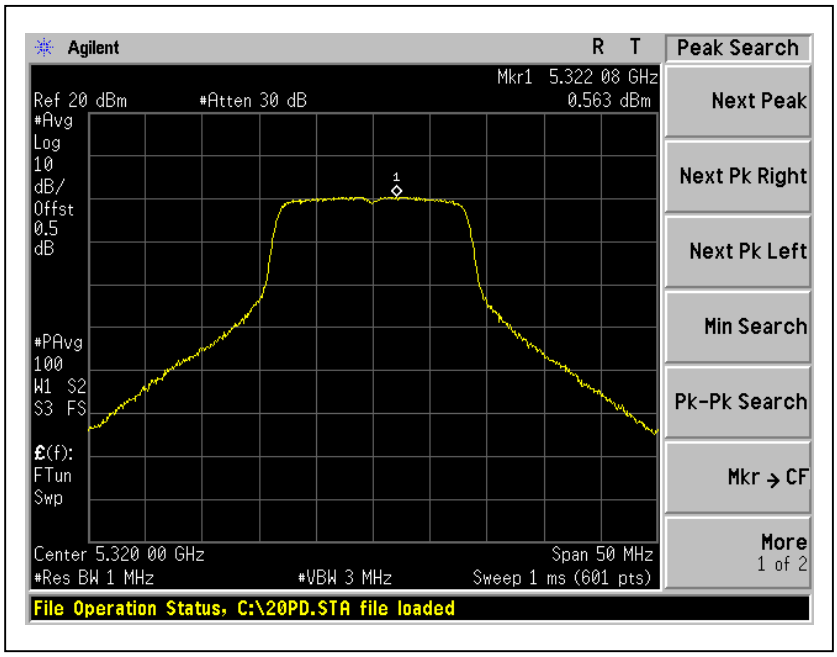
For Chain (1) : CH5



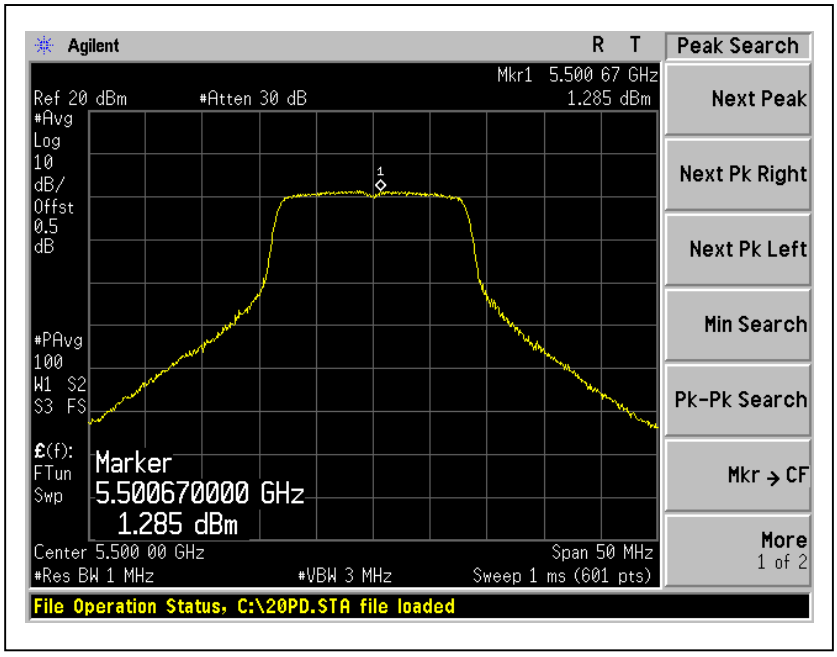
CH7



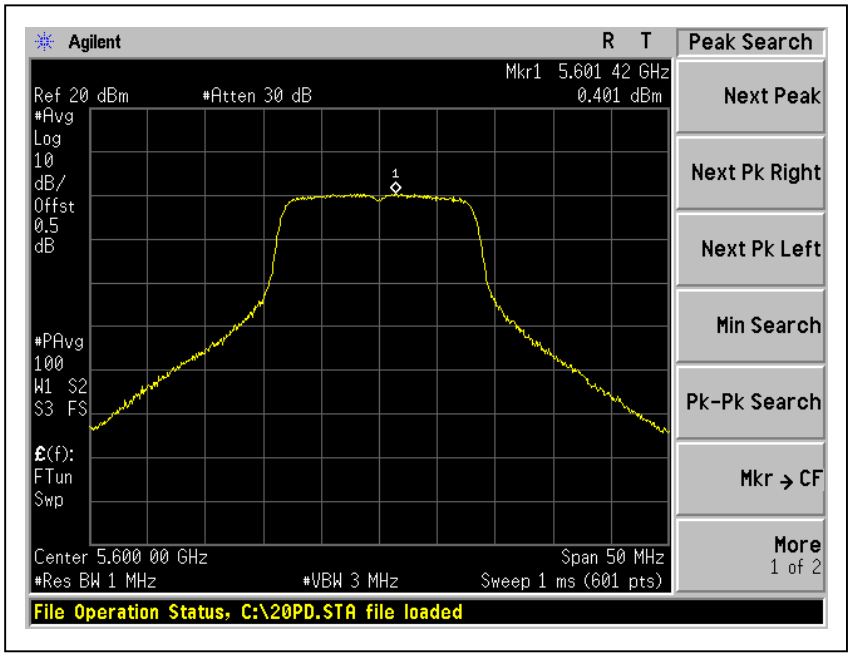
CH8


Agilent
R T
Peak Search
Mkr1 5.322 08 GHz
Ref 20 dBm
#Atten 30 dB
0.563 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Mkr → CF
Center 5.320 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

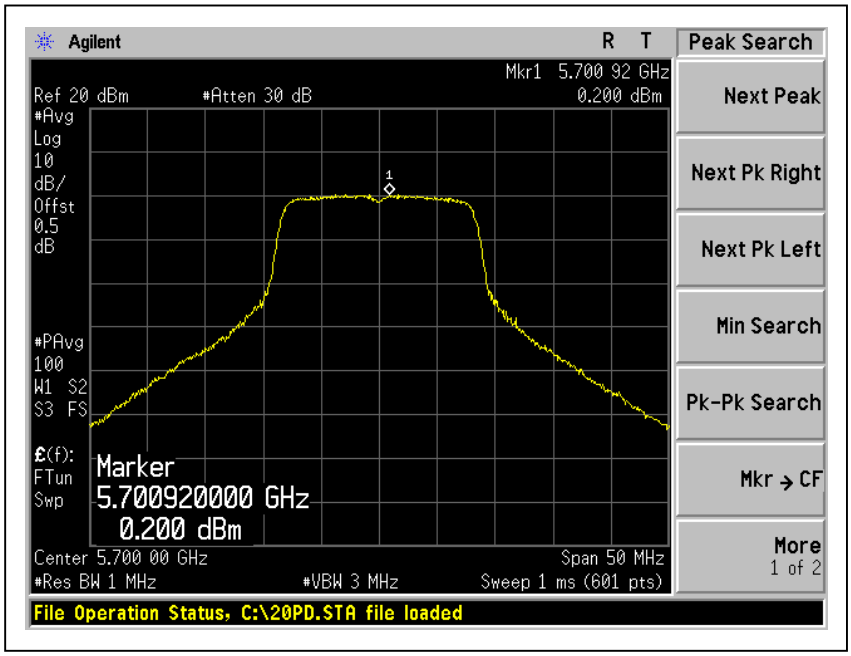
CH9


Agilent
R T
Peak Search
Mkr1 5.500 67 GHz
Ref 20 dBm
#Atten 30 dB
1.285 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.500670000 GHz
1.285 dBm
Mkr → CF
Center 5.500 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

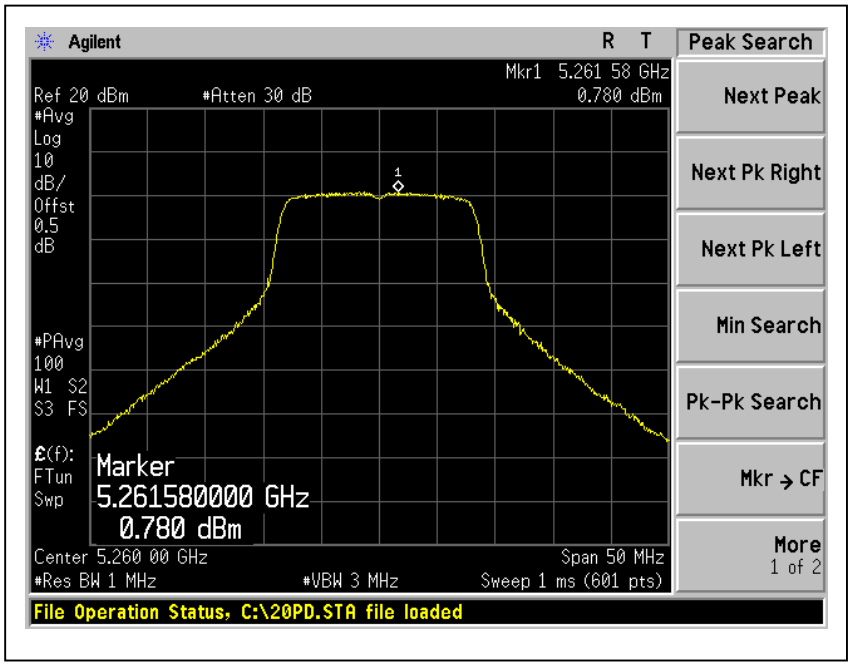
CH14


Agilent
R T
Peak Search
Mkr1 5.601 42 GHz
Ref 20 dBm
#Atten 30 dB
0.401 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Mkr → CF
Center 5.600 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

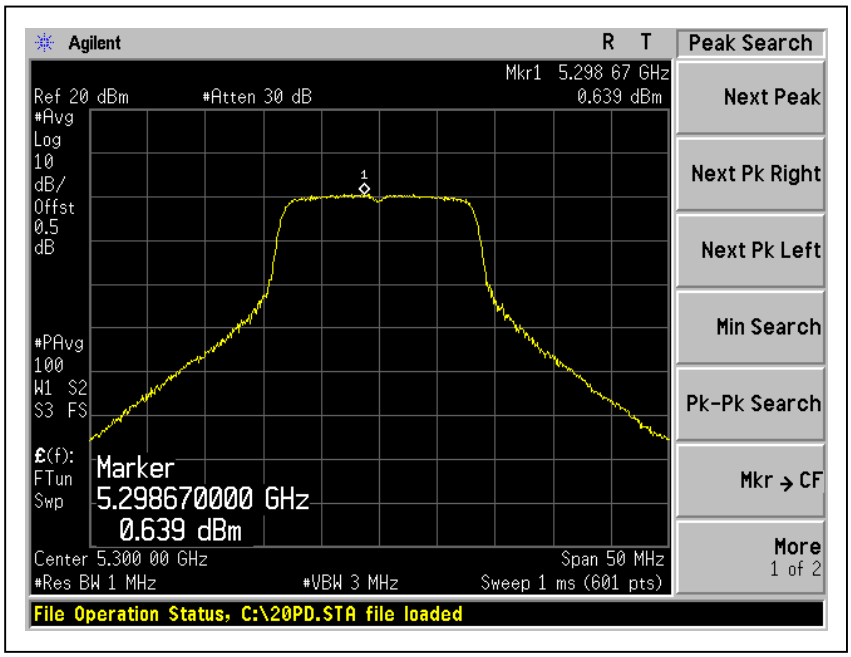
CH19


Agilent
R T
Peak Search
Mkr1 5.700 92 GHz
Ref 20 dBm
#Atten 30 dB
0.200 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.700920000 GHz
0.200 dBm
Mkr → CF
Center 5.700 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

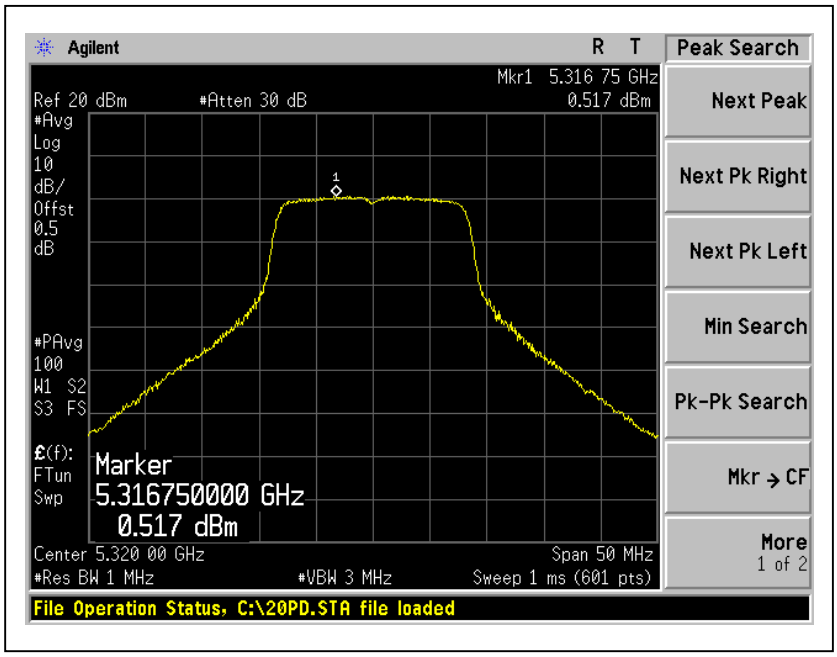
For Chain (2) : CH5



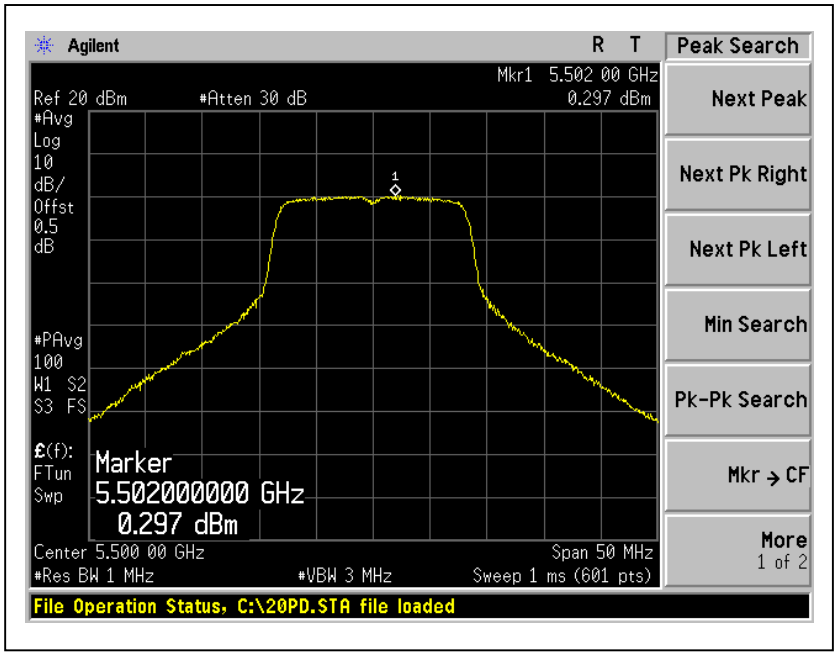
CH7



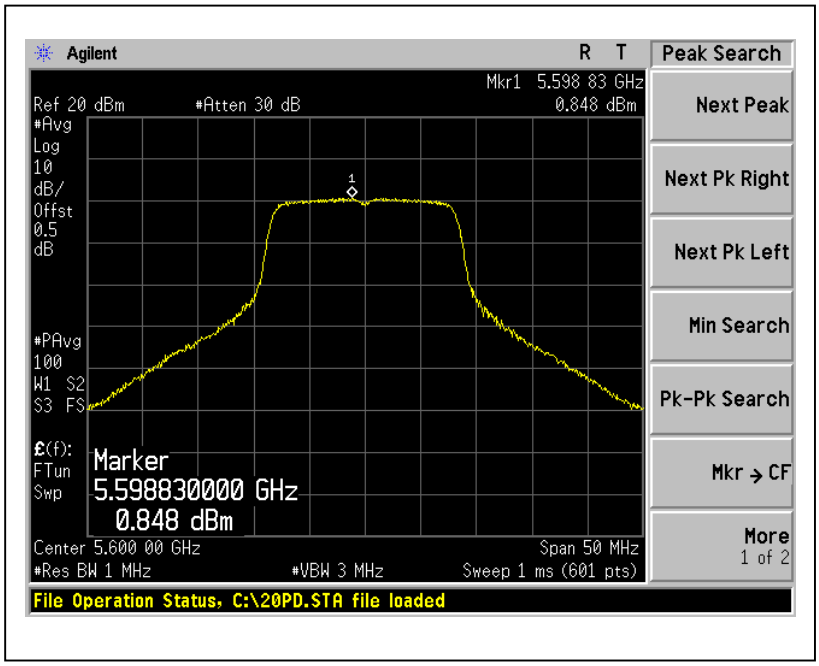
CH8


Agilent
R T
Peak Search
Mkr1 5.316 75 GHz
0.517 dBm
Ref 20 dBm
#Atten 30 dB
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.316750000 GHz
0.517 dBm
Mkr → CF
More
1 of 2
Center 5.320 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

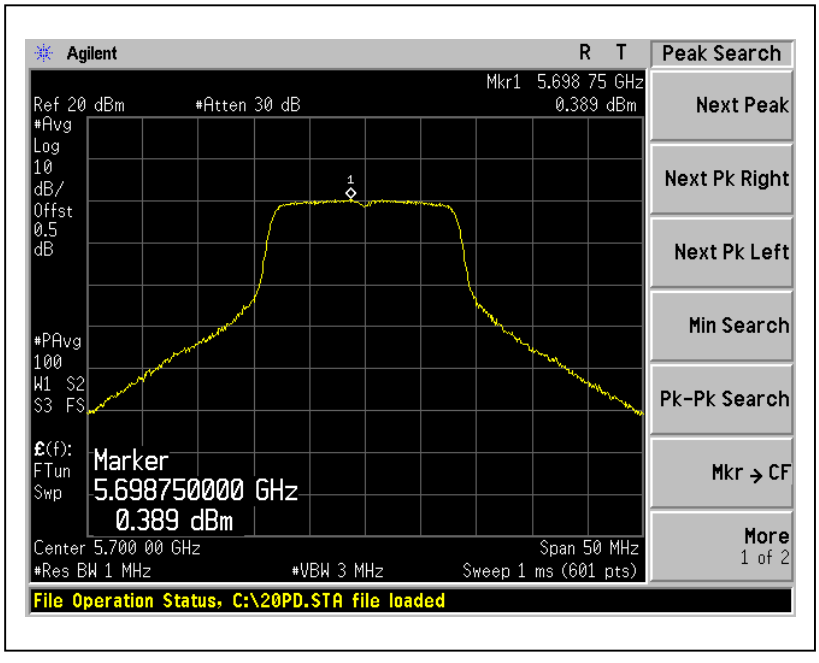
CH9


Agilent
R T
Peak Search
Mkr1 5.502 00 GHz
0.297 dBm
Ref 20 dBm
#Atten 30 dB
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.502000000 GHz
0.297 dBm
Mkr → CF
More
1 of 2
Center 5.500 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH14


Agilent
R T
Peak Search
Mkr1 5.598 83 GHz
0.848 dBm
Ref 20 dBm
#Atten 30 dB
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.598830000 GHz
0.848 dBm
Mkr → CF
More
1 of 2
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH19

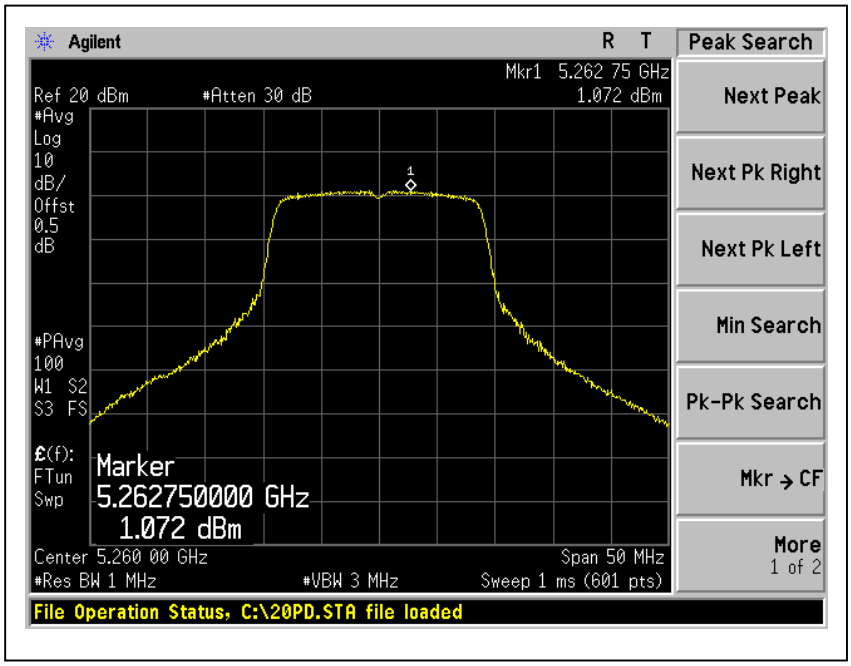

Agilent
R T
Peak Search
Mkr1 5.698 75 GHz
0.389 dBm
Ref 20 dBm
#Atten 30 dB
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.698750000 GHz
0.389 dBm
Mkr → CF
More
1 of 2
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

DRAFT 802.11n (20MHz) OFDM MODULATION:

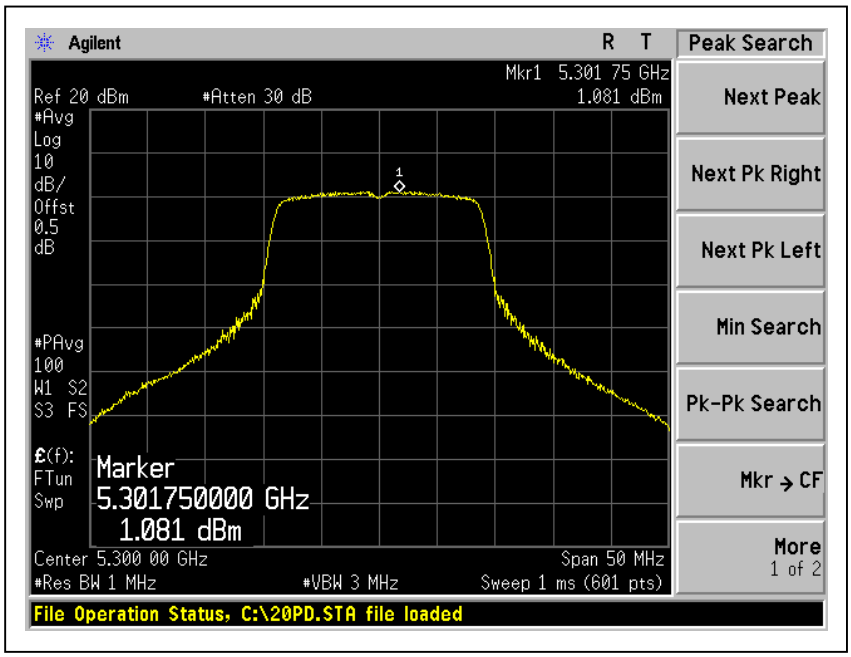
MODULATION TYPE	BPSK	**TRANSFER RATE**	6.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	23deg.C, 54%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL OUTPUT POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
		Chain (0)	Chain(1)	Chain(2)			
5	5260	1.072	-0.583	0.613	5.193	11	PASS
7	5300	1.081	-0.050	0.381	5.269	11	PASS
8	5320	1.171	-0.155	0.031	5.160	11	PASS
9	5500	-0.070	1.234	0.225	5.271	11	PASS
14	5600	0.042	0.006	0.241	4.869	11	PASS
19	5700	0.629	0.162	0.178	5.100	11	PASS

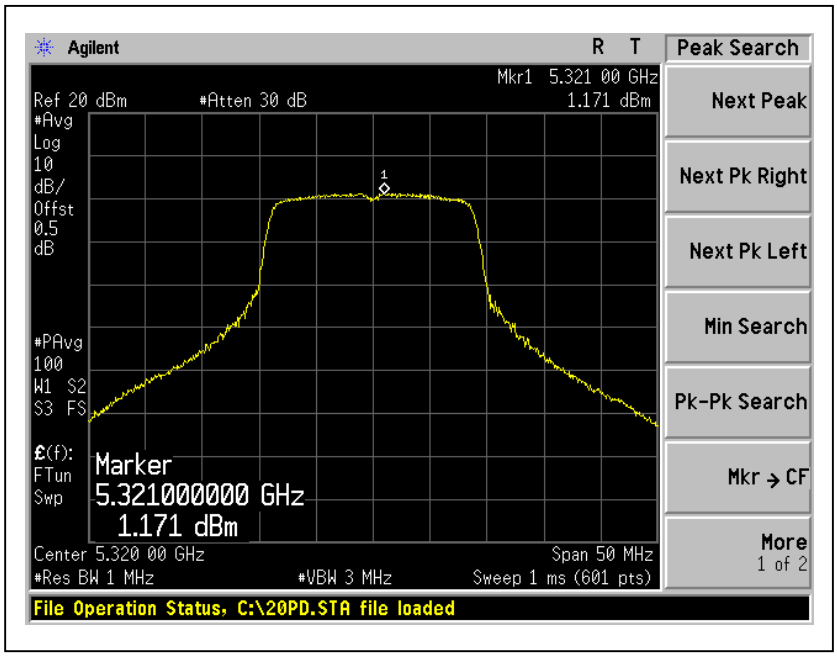
For Chain (0) : CH5



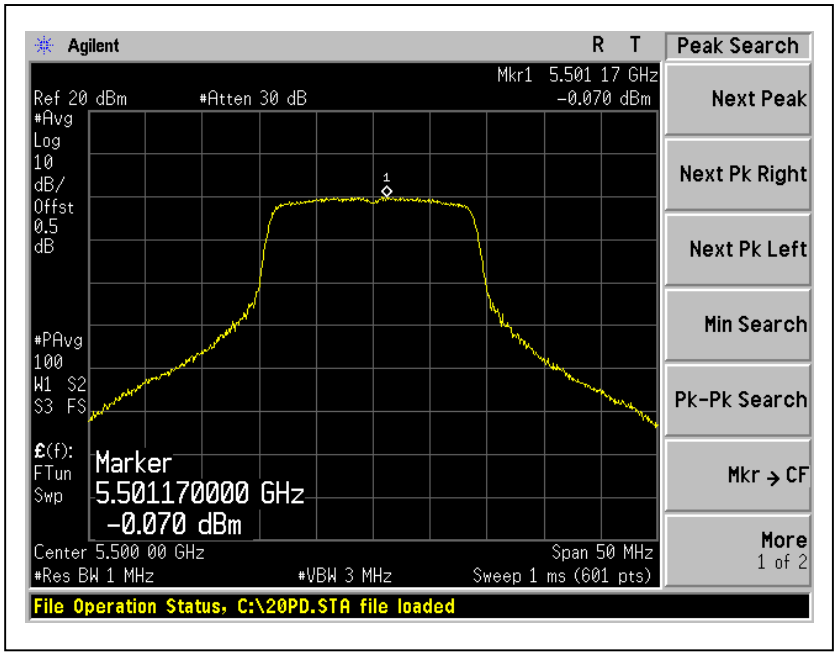
CH7



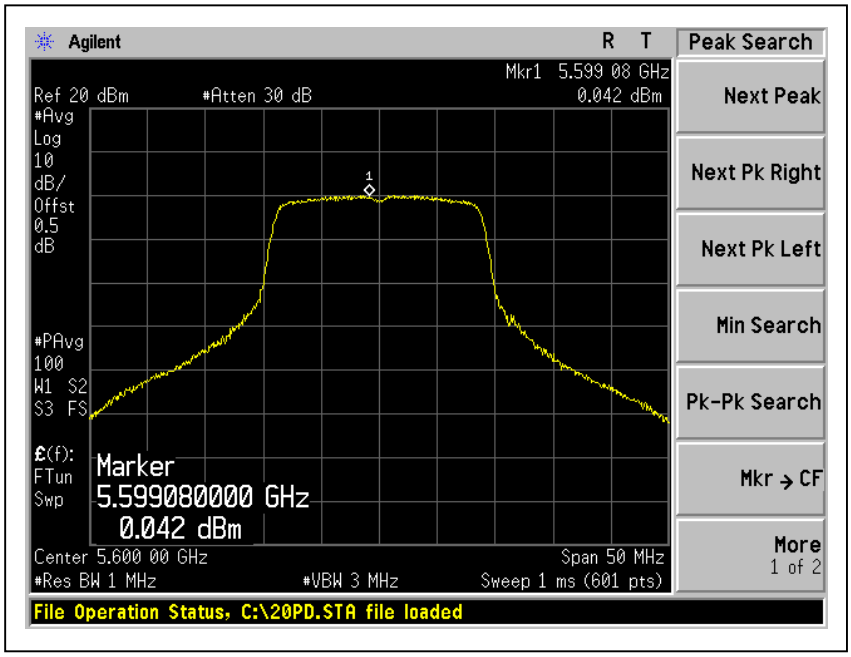
CH8


Agilent
R T
Peak Search
Mkr1 5.321 00 GHz
Ref 20 dBm
#Atten 30 dB
1.171 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.321000000 GHz
1.171 dBm
Mkr → CF
More
1 of 2
Center 5.320 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

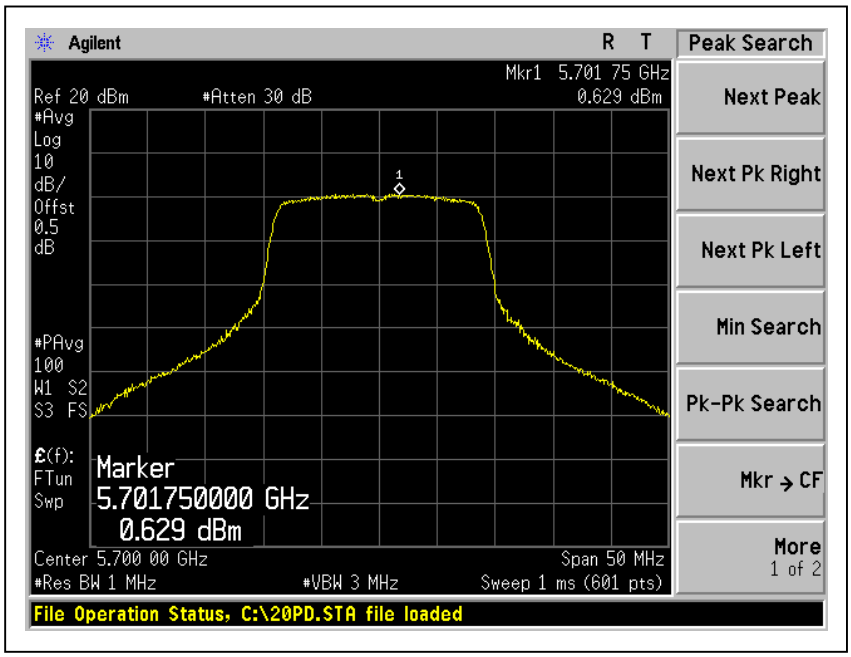
CH9


Agilent
R T
Peak Search
Mkr1 5.501 17 GHz
Ref 20 dBm
#Atten 30 dB
-0.070 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.501170000 GHz
-0.070 dBm
Mkr → CF
More
1 of 2
Center 5.500 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

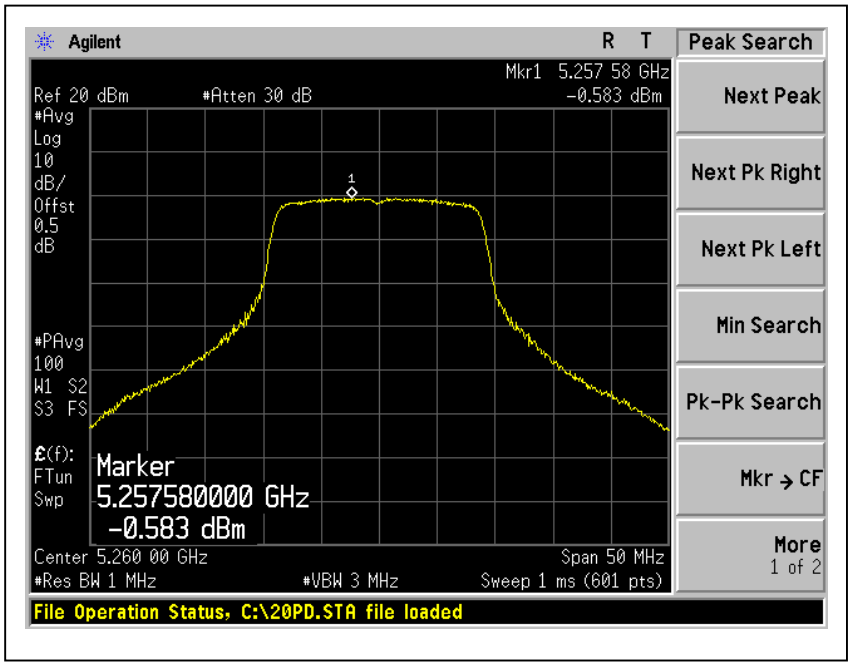
CH14


Agilent
R T
Peak Search
Mkr1 5.599 08 GHz
Ref 20 dBm
#Atten 30 dB
0.042 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.599080000 GHz
0.042 dBm
Mkr → CF
More
1 of 2
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

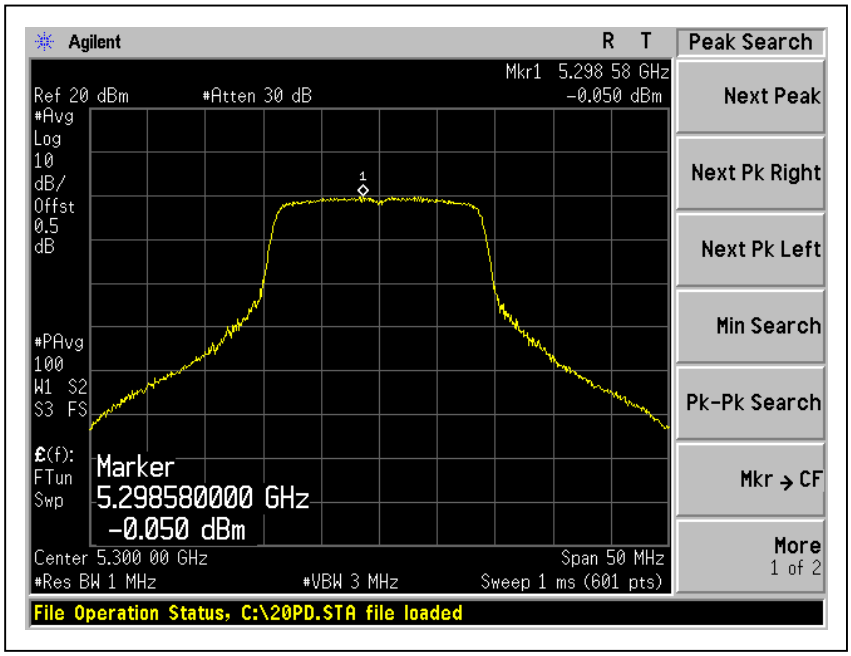
CH19


Agilent
R T
Peak Search
Mkr1 5.701 75 GHz
Ref 20 dBm
#Atten 30 dB
0.629 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.701750000 GHz
0.629 dBm
Mkr → CF
More
1 of 2
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

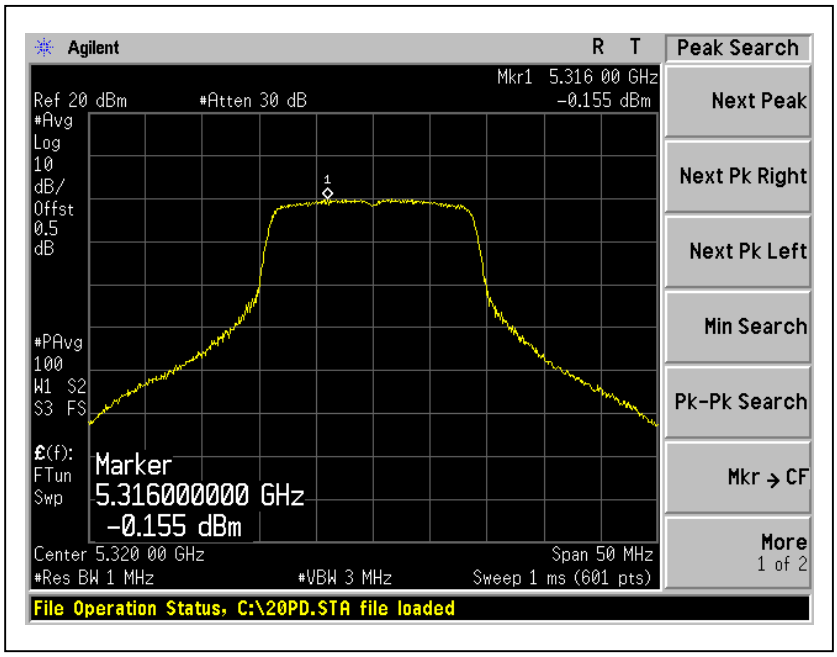
For Chain (1) : CH5



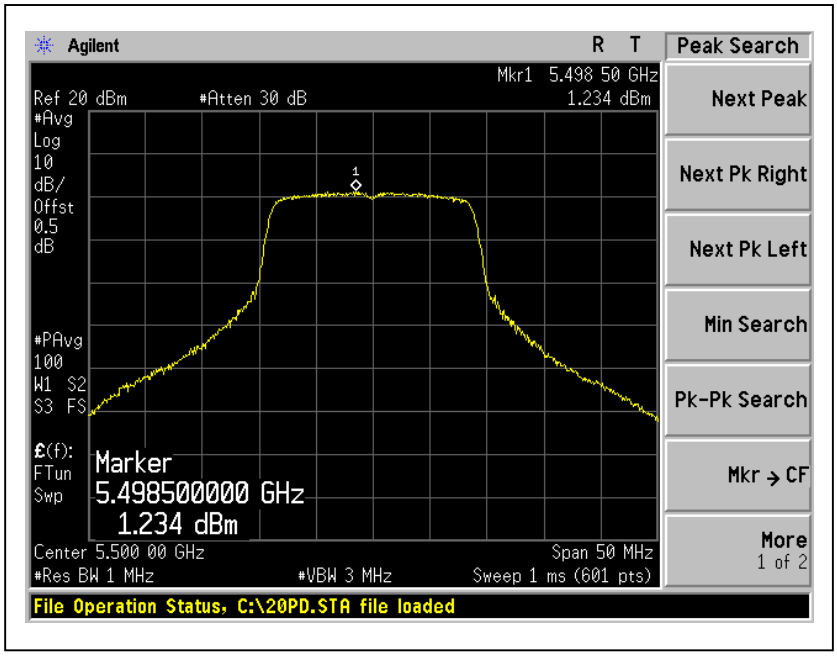
CH7



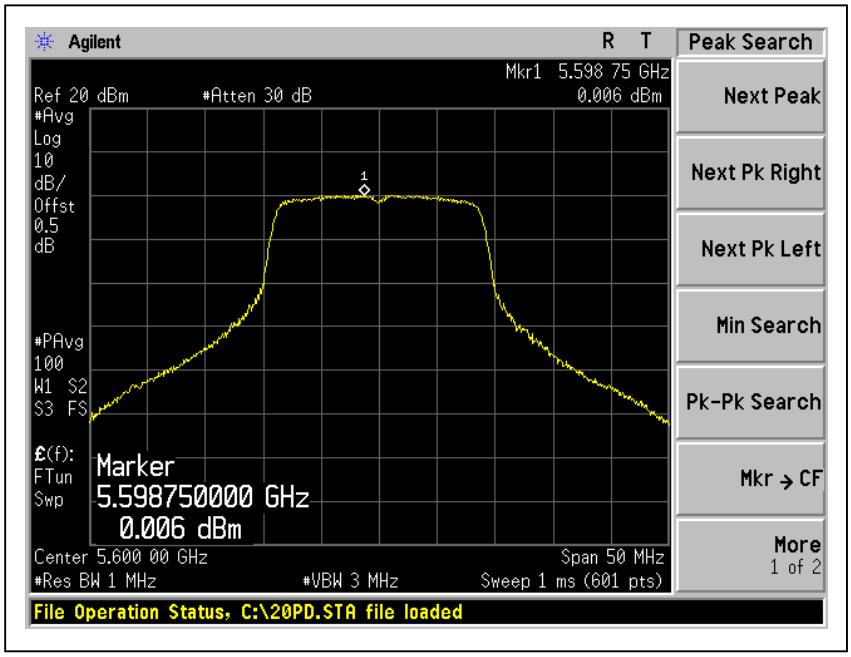
CH8


Agilent
R T
Peak Search
Mkr1 5.316 00 GHz
Ref 20 dBm
#Atten 30 dB
-0.155 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.316000000 GHz
-0.155 dBm
Mkr → CF
More
1 of 2
Center 5.320 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

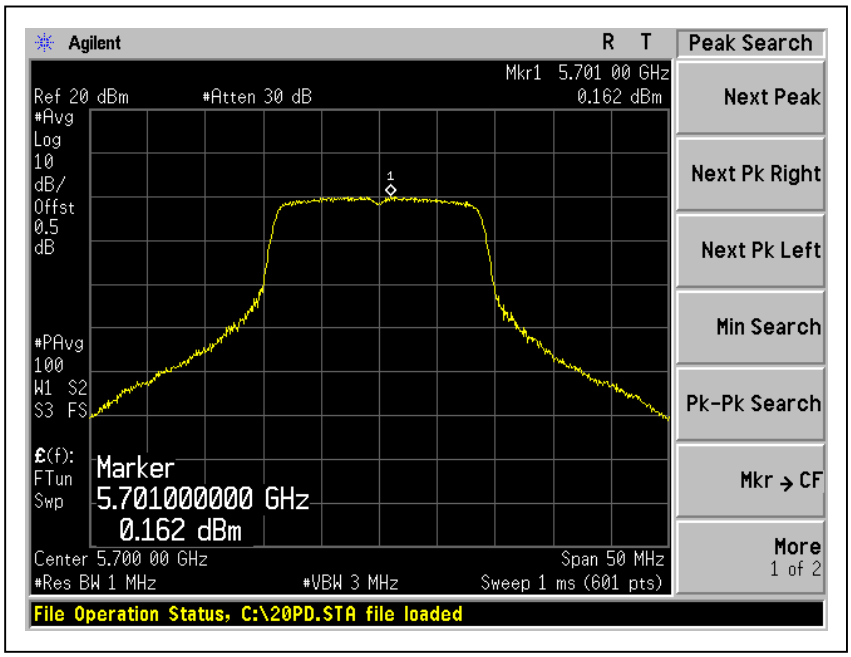
CH9


Agilent
R T
Peak Search
Mkr1 5.498 50 GHz
Ref 20 dBm
#Atten 30 dB
1.234 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.498500000 GHz
1.234 dBm
Mkr → CF
More
1 of 2
Center 5.500 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

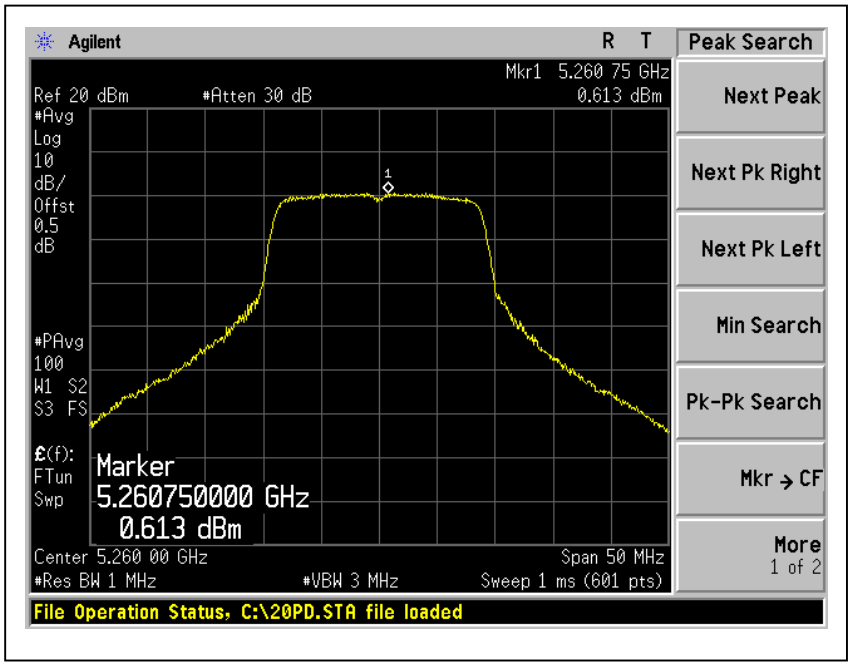
CH14


Agilent
R T
Peak Search
Mkr1 5.598 75 GHz
Ref 20 dBm
#Atten 30 dB
0.006 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.598750000 GHz
0.006 dBm
Mkr → CF
More
1 of 2
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

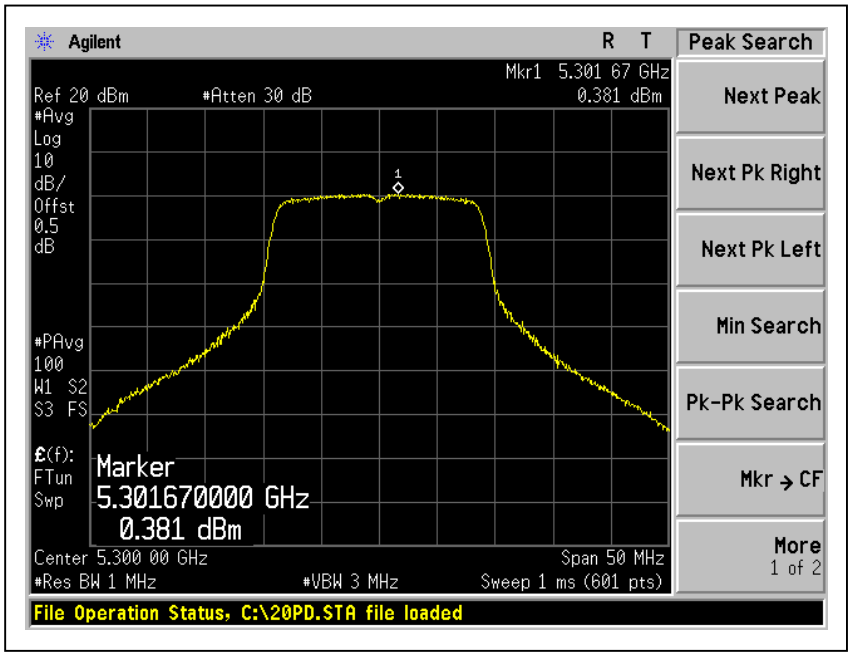
CH19


Agilent
R T
Peak Search
Mkr1 5.701 00 GHz
Ref 20 dBm
#Atten 30 dB
0.162 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.701000000 GHz
0.162 dBm
Mkr → CF
More
1 of 2
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

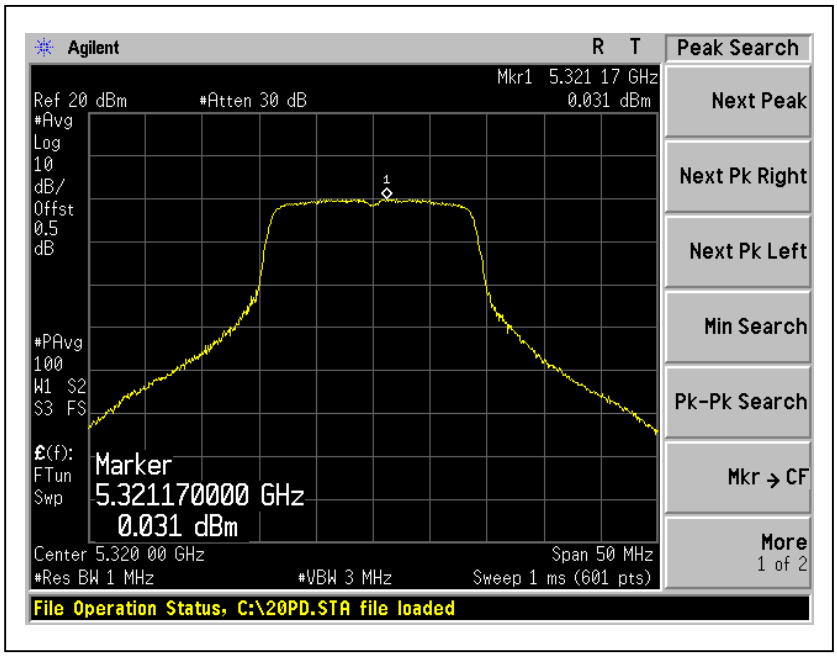
For Chain (2) : CH5



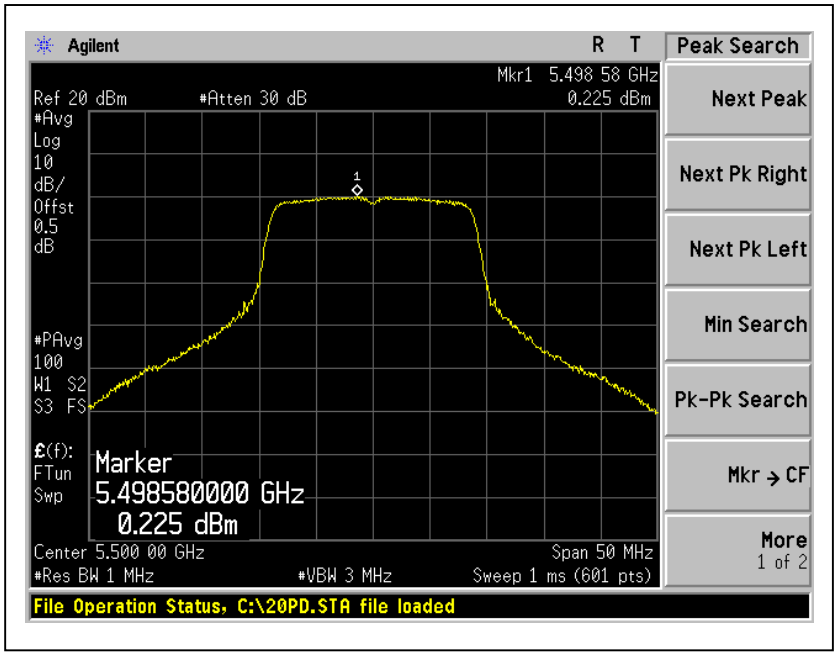
CH7



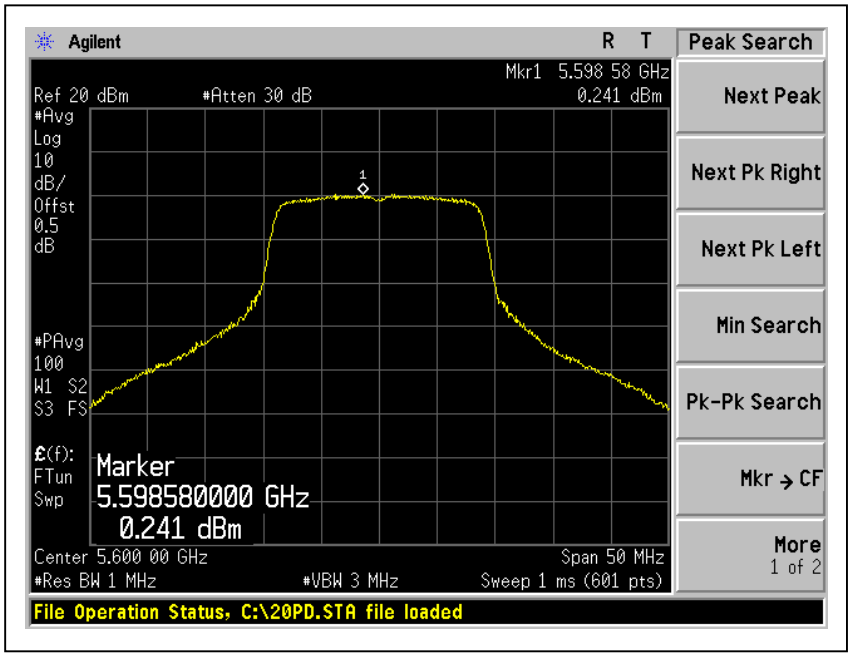
CH8


Agilent
R T
Peak Search
Mkr1 5.321 17 GHz
Ref 20 dBm
#Atten 30 dB
0.031 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.321170000 GHz
0.031 dBm
Mkr → CF
More
1 of 2
Center 5.320 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

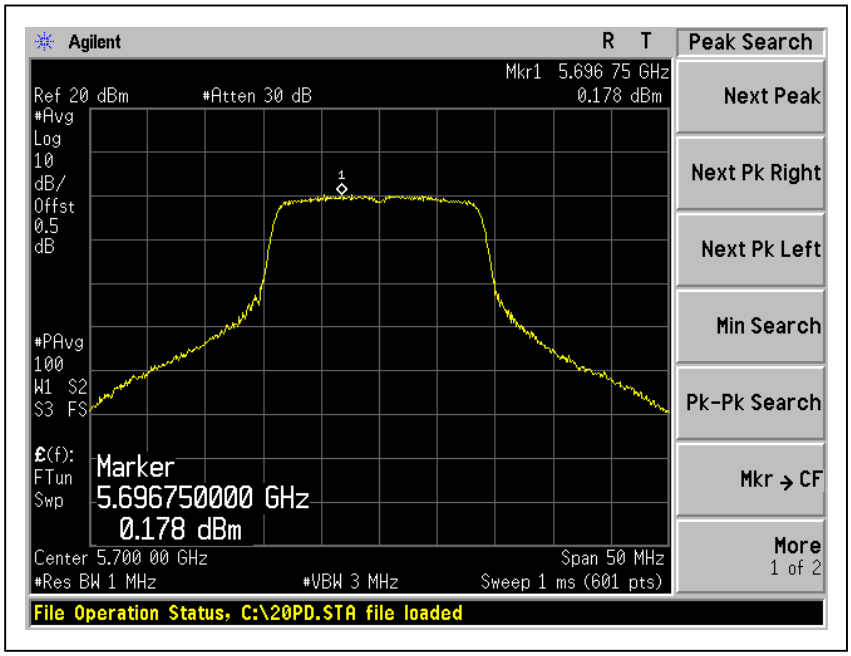
CH9


Agilent
R T
Peak Search
Mkr1 5.498 58 GHz
Ref 20 dBm
#Atten 30 dB
0.225 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.498580000 GHz
0.225 dBm
Mkr → CF
More
1 of 2
Center 5.500 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH14


Agilent
R T
Peak Search
Mkr1 5.598 58 GHz
Ref 20 dBm
#Atten 30 dB
0.241 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.598580000 GHz
0.241 dBm
Mkr → CF
More
1 of 2
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH19

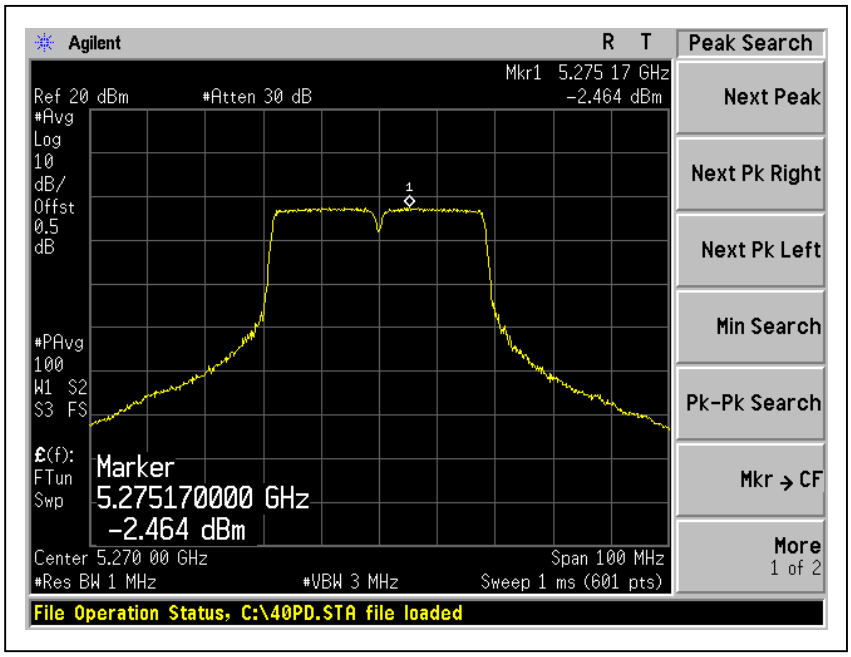

Agilent
R T
Peak Search
Mkr1 5.696 75 GHz
Ref 20 dBm
#Atten 30 dB
0.178 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.696750000 GHz
0.178 dBm
Mkr → CF
More
1 of 2
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

DRAFT 802.11n (40MHz) OFDM MODULATION:

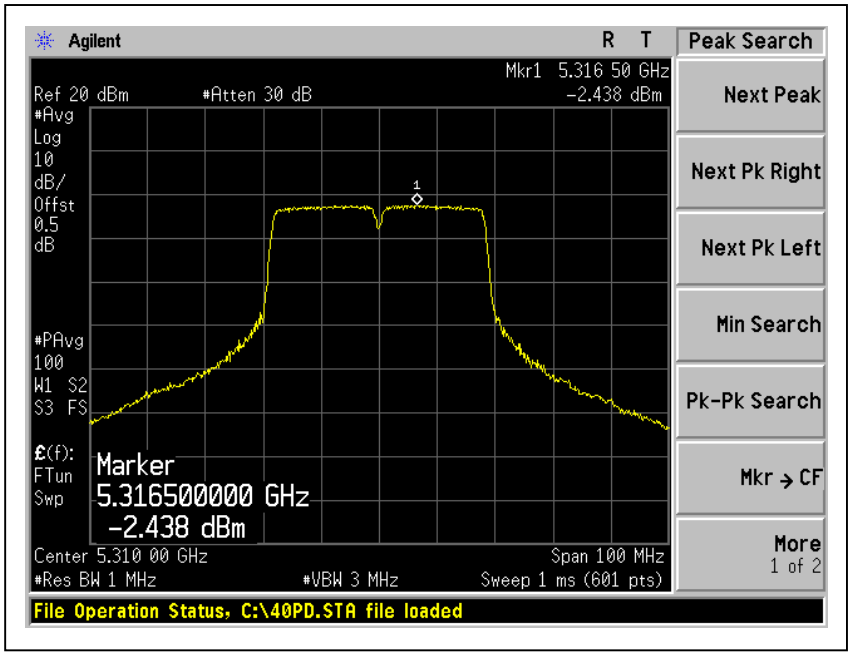
MODULATION TYPE	BPSK	**TRANSFER RATE**	13.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	26deg.C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL OUTPUT POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
		Chain (0)	Chain(1)	Chain(2)			
3	5270	-2.464	-3.700	-3.409	1.614	11	PASS
4	5310	-2.438	-3.277	-3.491	1.726	11	PASS
5	5510	-6.866	-6.744	-6.477	-1.918	11	PASS
7	5590	-3.607	-2.857	-3.556	1.446	11	PASS
9	5670	-2.752	-3.670	-3.643	1.440	11	PASS

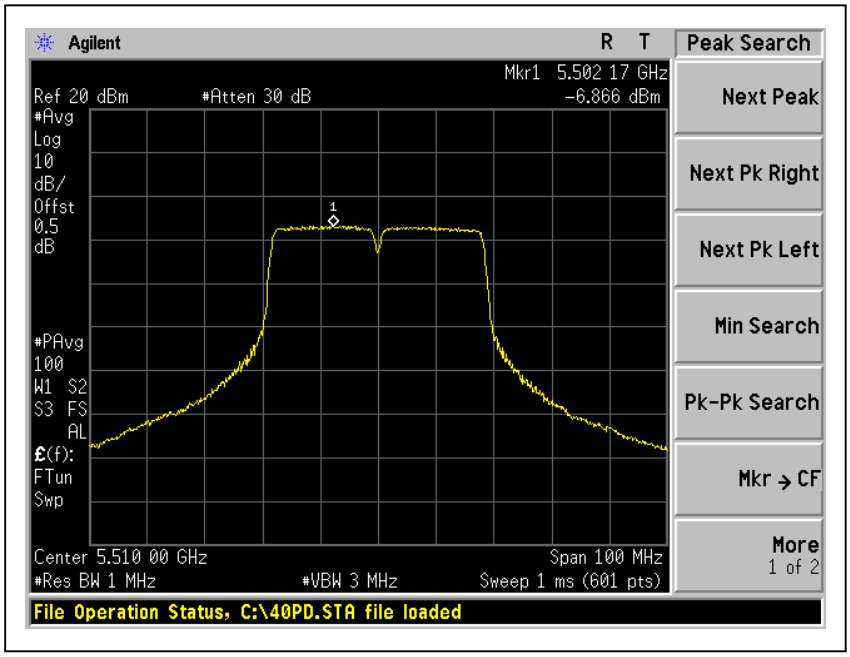
For Chain (0):CH3



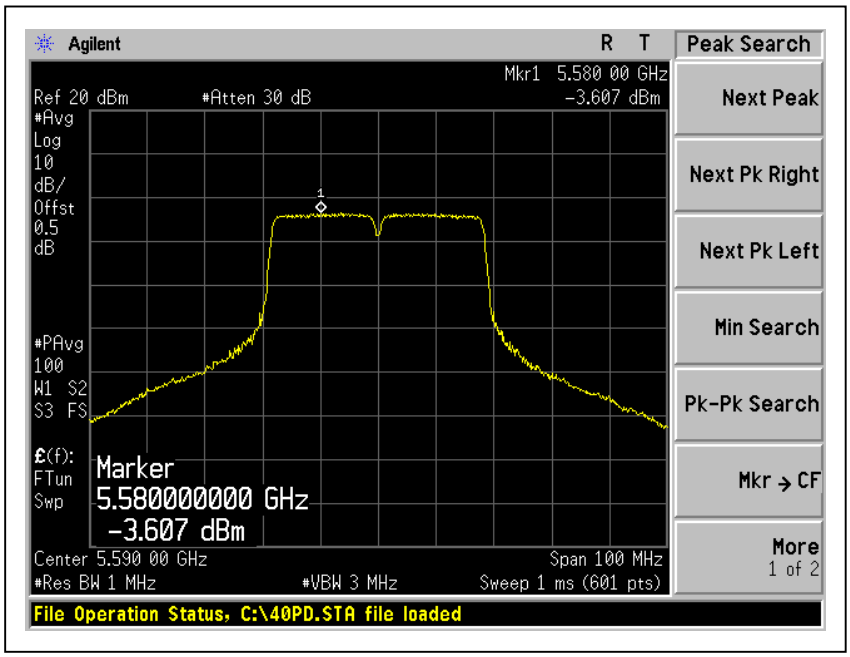
CH4



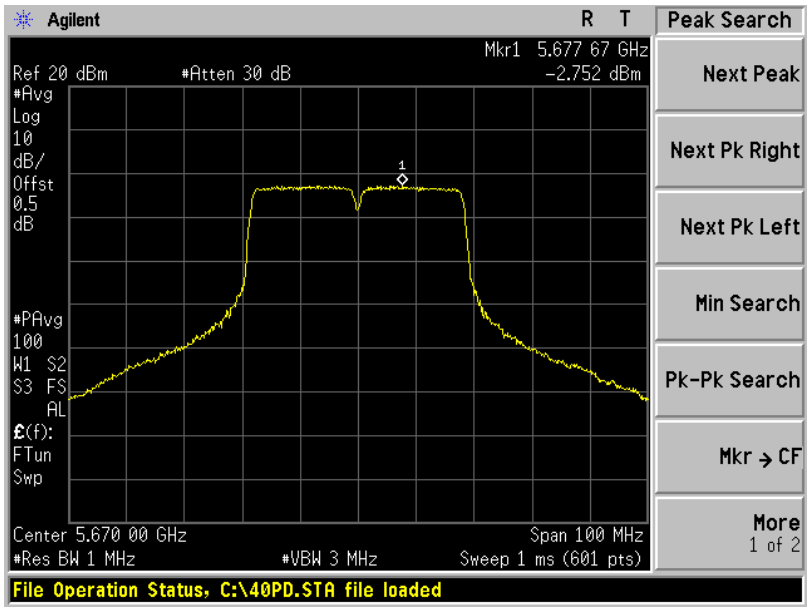
CH5


Agilent
R T
Peak Search
Mkr1 5.502 17 GHz
Ref 20 dBm
#Atten 30 dB
-6.866 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
#Avg
Log
10
dB/
Offst
0.5
dB
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Center 5.510 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

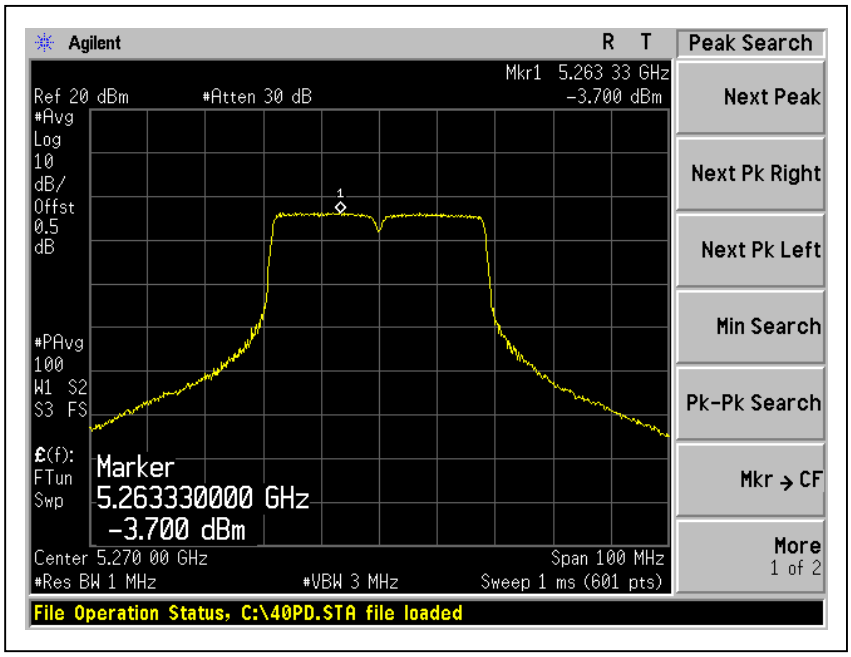
CH7


Agilent
R T
Peak Search
Mkr1 5.580 00 GHz
Ref 20 dBm
#Atten 30 dB
-3.607 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
#Avg
Log
10
dB/
Offst
0.5
dB
#PAvg
100
W1 S2
S3 FS
£(f):
FTun
Swp
Marker
5.580000000 GHz
-3.607 dBm
Center 5.590 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

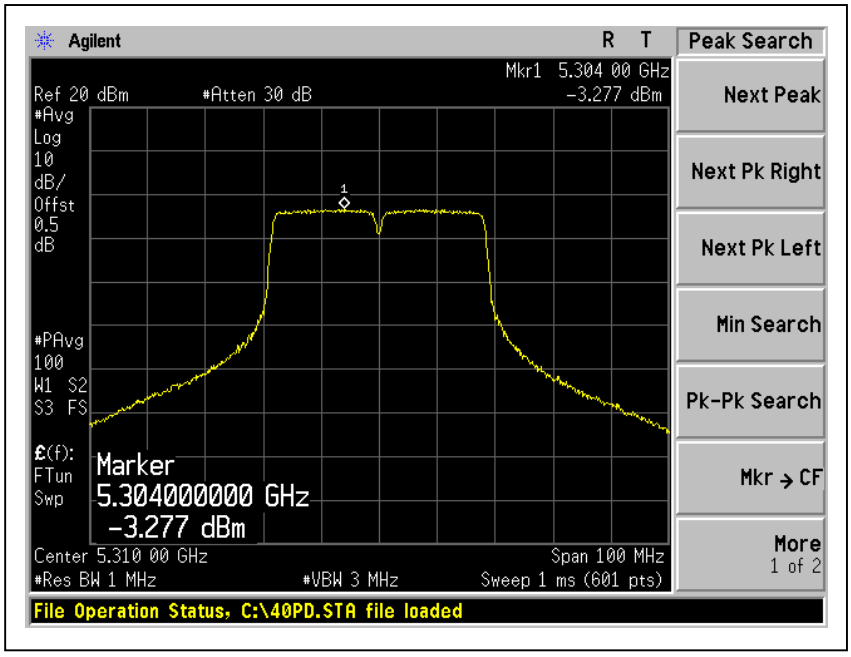
CH9


Agilent
R T
Peak Search
Mkr1 5.677 67 GHz
Ref 20 dBm
#Atten 30 dB
-2.752 dBm
#Avg
Log
10
dB/
Offst
0.5
dB
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 5.670 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

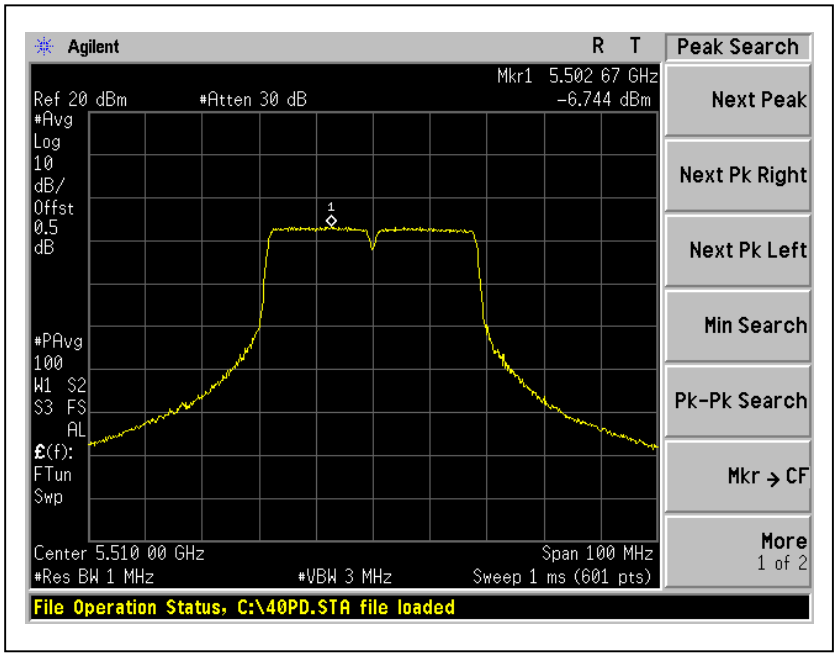
For Chain (1) : CH3



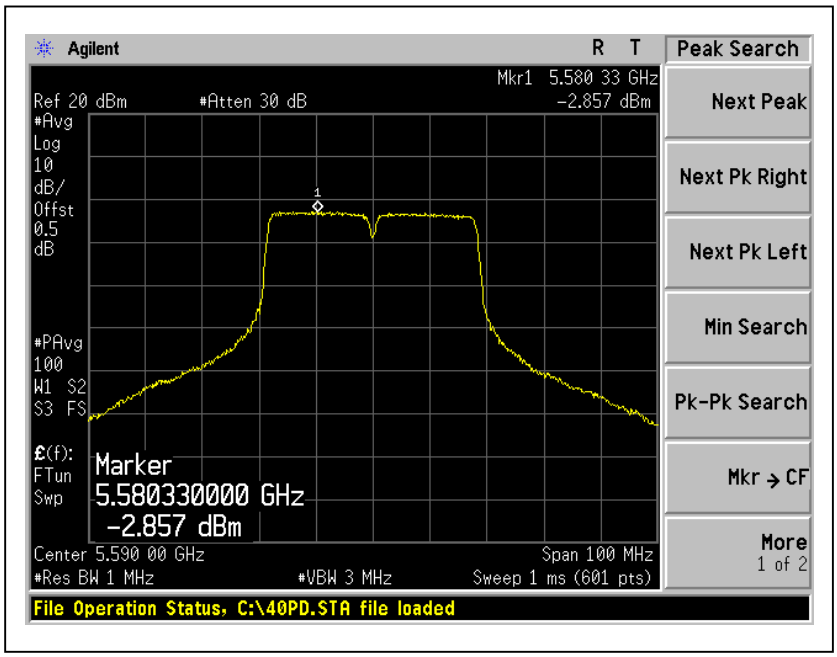
CH4



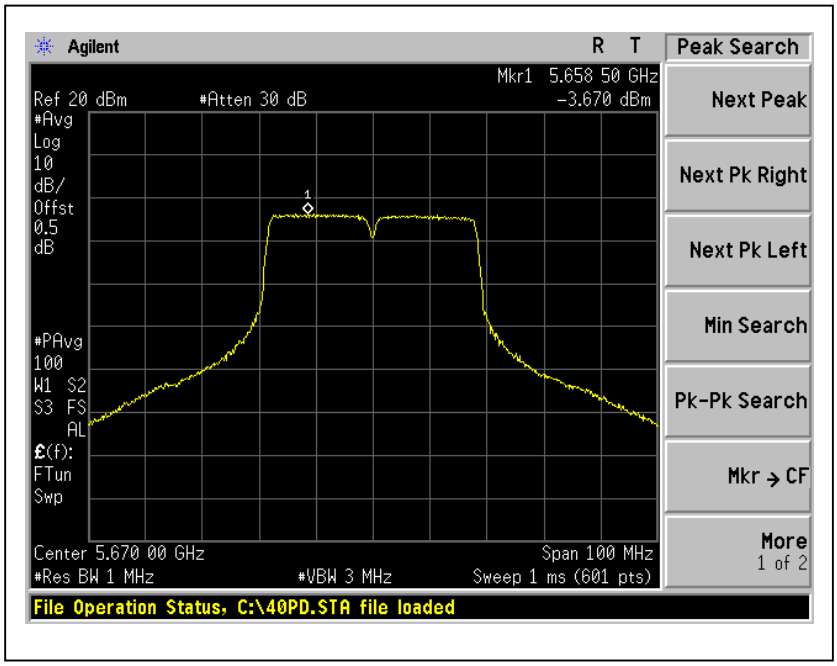
CH5


Agilent
R T
Peak Search
Mkr1 5.502 67 GHz
Ref 20 dBm
#Atten 30 dB
-6.744 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
Pk-Pk Search
£(f):
FTun
Swp
Mkr → CF
More
1 of 2
Center 5.510 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

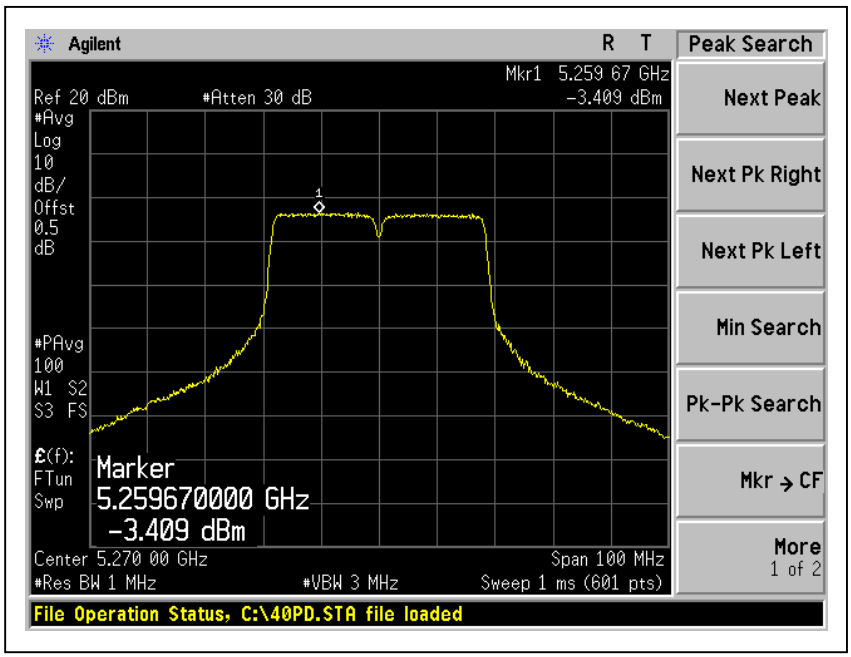
CH7


Agilent
R T
Peak Search
Mkr1 5.580 33 GHz
Ref 20 dBm
#Atten 30 dB
-2.857 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.580330000 GHz
-2.857 dBm
Mkr → CF
More
1 of 2
Center 5.590 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

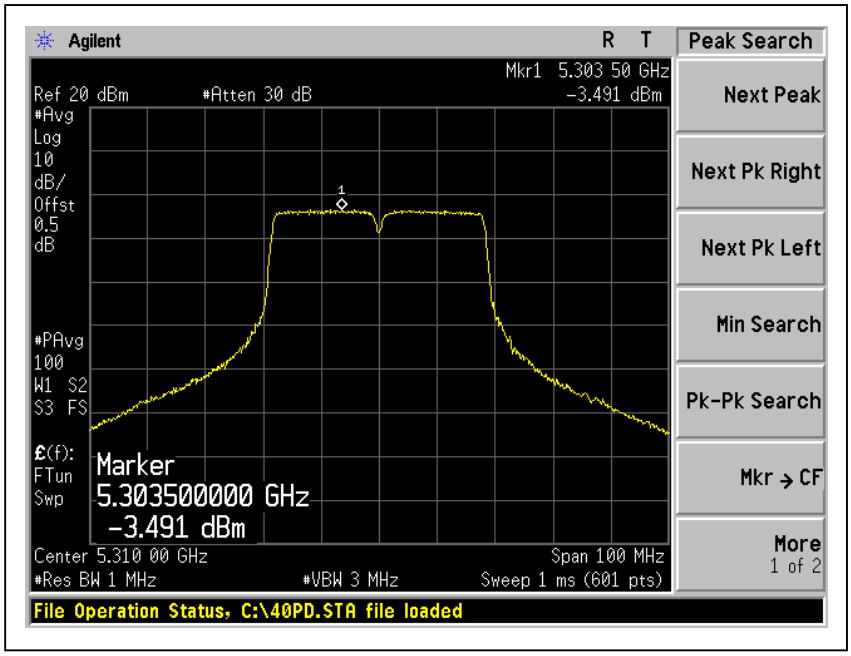
CH9


Agilent
R T
Peak Search
Mkr1 5.658 50 GHz
Ref 20 dBm
#Atten 30 dB
-3.670 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 5.670 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

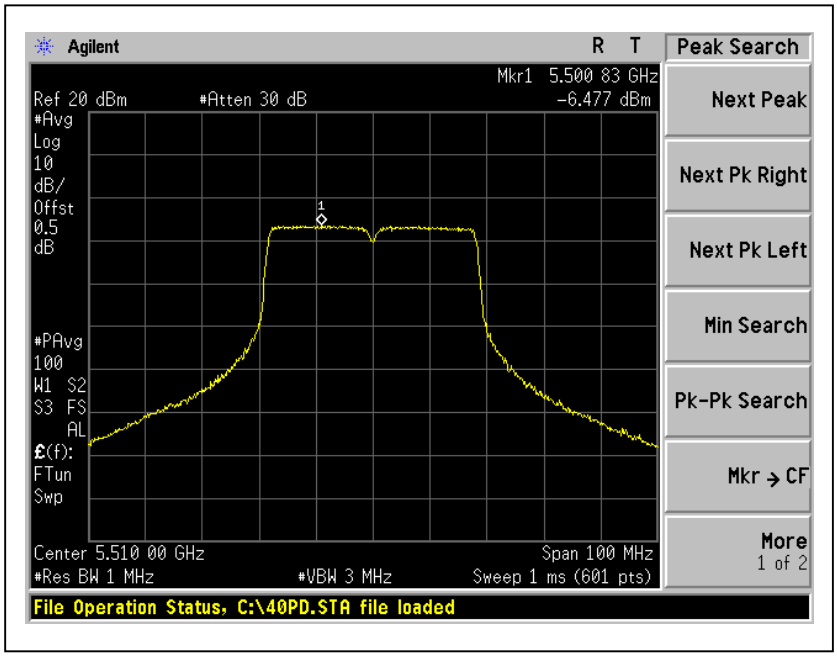
For Chain (2) :CH3



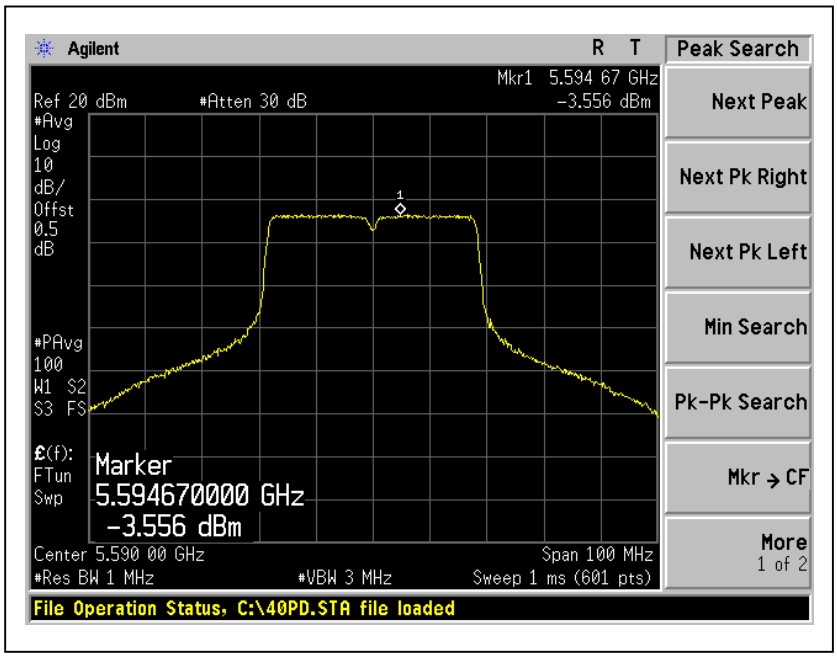
CH4



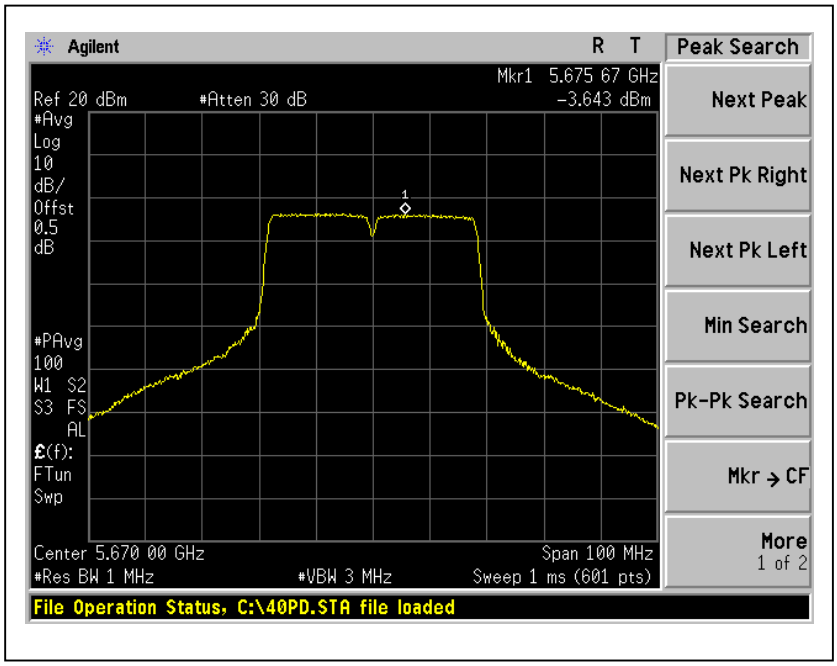
CH5


Agilent
R T
Peak Search
Mkr1 5.500 83 GHz
Ref 20 dBm
#Atten 30 dB
-6.477 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.510 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

CH7


Agilent
R T
Peak Search
Mkr1 5.594 67 GHz
Ref 20 dBm
#Atten 30 dB
-3.556 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
£(f):
FTun
Swp
Marker
5.594670000 GHz
-3.556 dBm
Pk-Pk Search
Mkr → CF
Center 5.590 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

CH9


Agilent
R T
Peak Search
Mkr1 5.675 67 GHz
Ref 20 dBm
#Atten 30 dB
-3.643 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.670 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

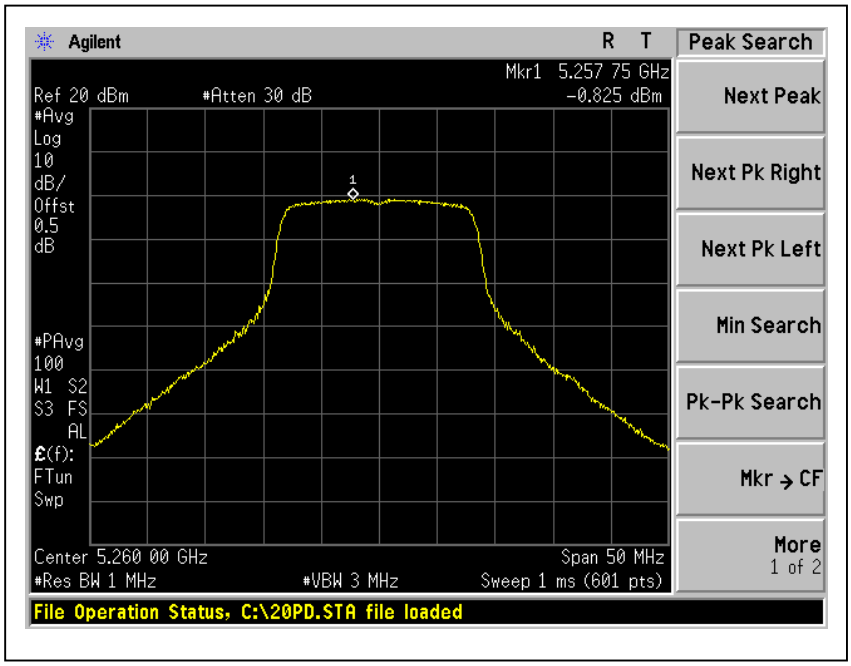
4.5.8 TEST RESULTS-ANTENNA 5

802.11a OFDM modulation

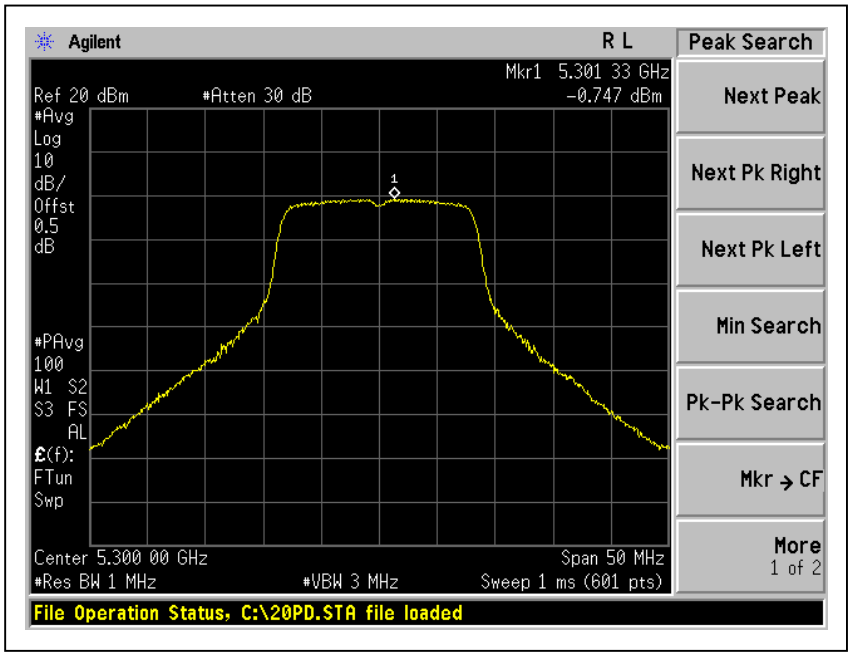
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL OUTPUT POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
		Chain (0)	Chain(1)	Chain(2)			
5	5260	-0.825	-1.968	-0.974	3.545	4	PASS
7	5300	-0.747	-2.012	-0.766	3.634	4	PASS
8	5320	-0.804	-1.842	-0.713	3.681	4	PASS
9	5500	-1.348	-1.292	-0.231	3.845	4	PASS
14	5600	-1.082	-1.390	-1.039	3.602	4	PASS
19	5700	-1.805	-2.114	-2.878	2.529	4	PASS

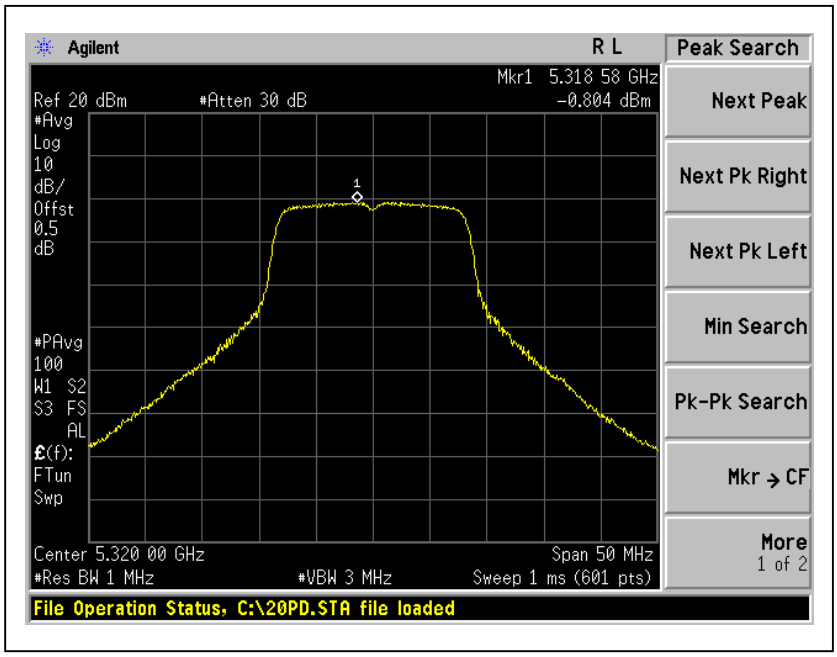
For Chain (0) : CH5



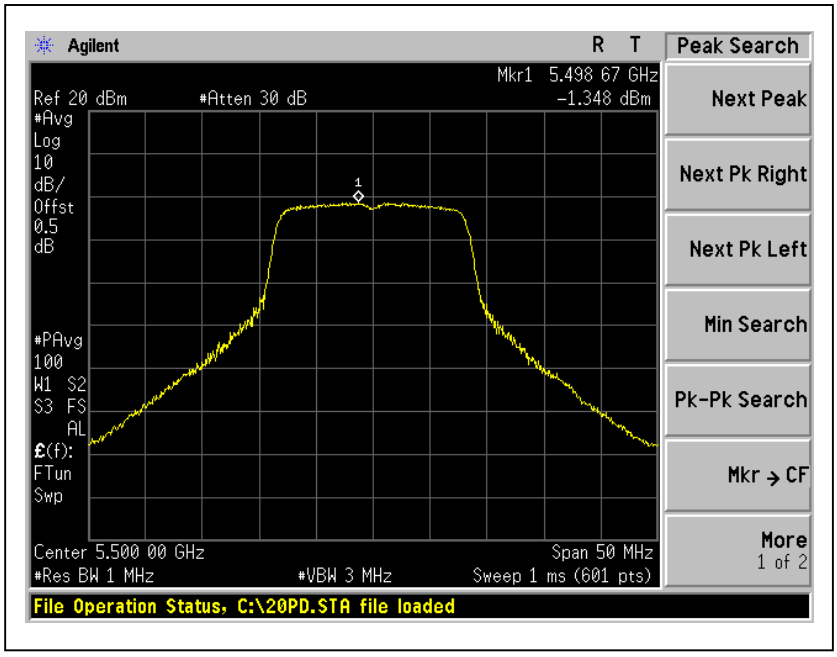
CH7



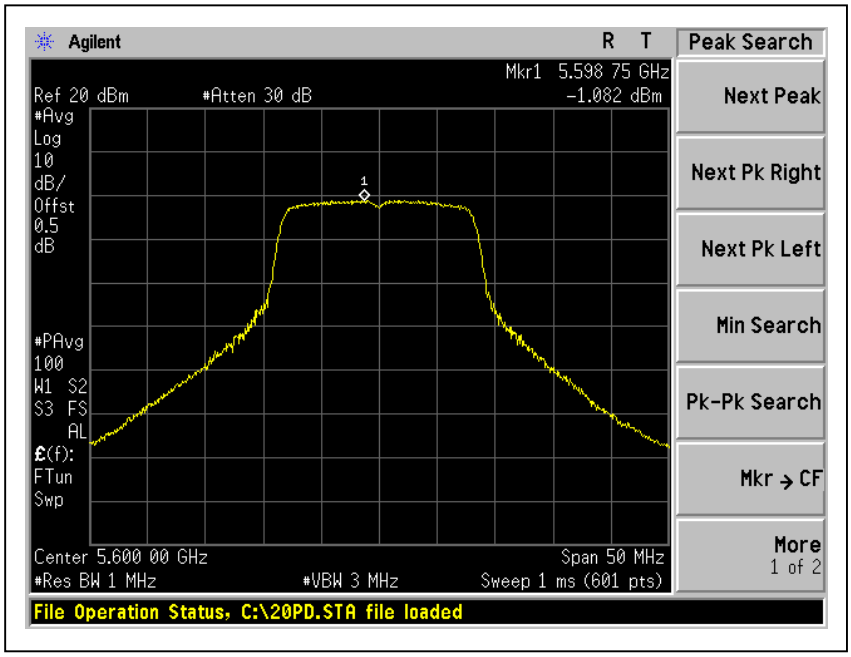
CH8


Agilent
R L
Peak Search
Mkr1 5.318 58 GHz
Ref 20 dBm
#Atten 30 dB
-0.804 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.320 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

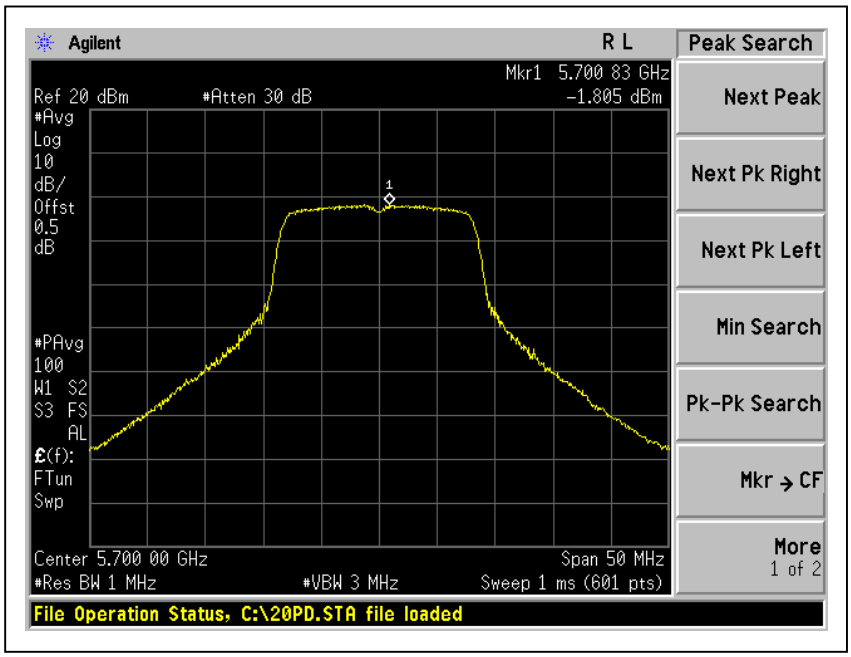
CH9


Agilent
R T
Peak Search
Mkr1 5.498 67 GHz
Ref 20 dBm
#Atten 30 dB
-1.348 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.500 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

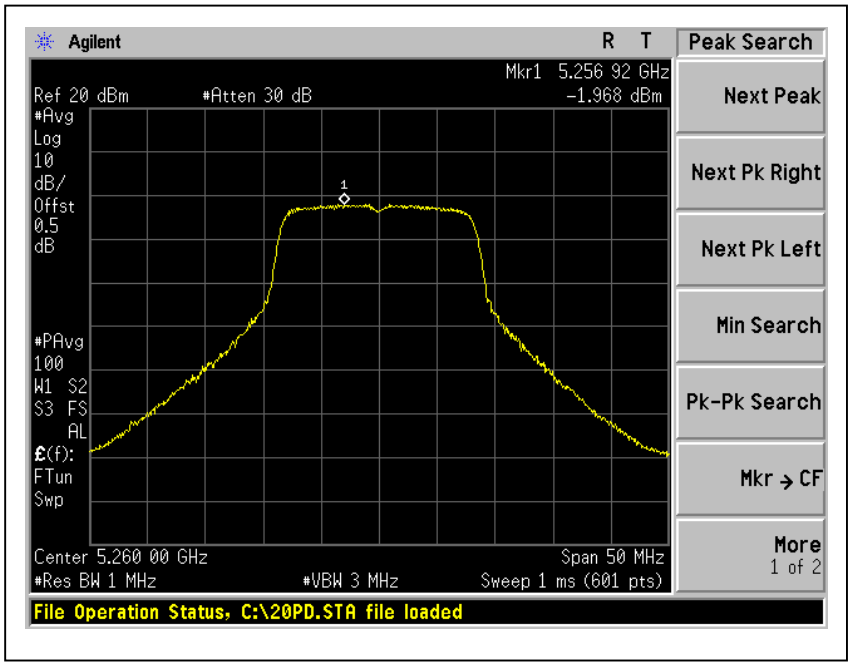
CH14


Agilent
R T
Peak Search
Mkr1 5.598 75 GHz
Ref 20 dBm
#Atten 30 dB
-1.082 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.600 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

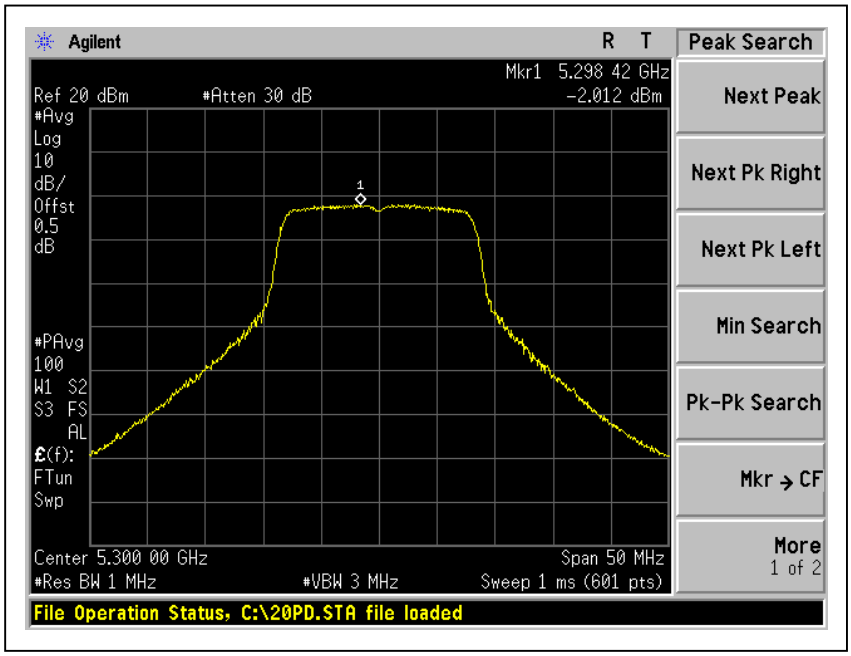
CH19


Agilent
R L
Peak Search
Mkr1 5.700 83 GHz
Ref 20 dBm
#Atten 30 dB
-1.805 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.700 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

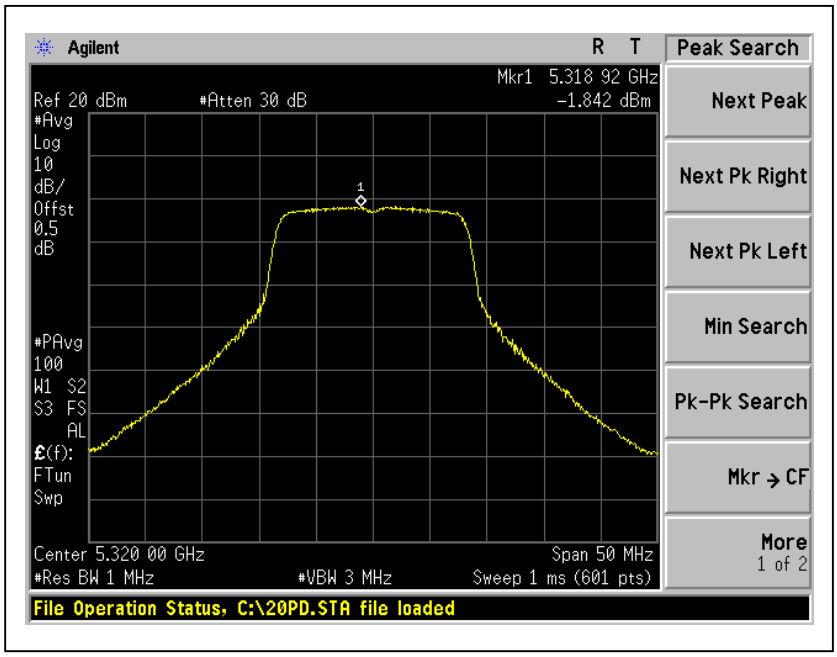
For Chain (1) : CH5



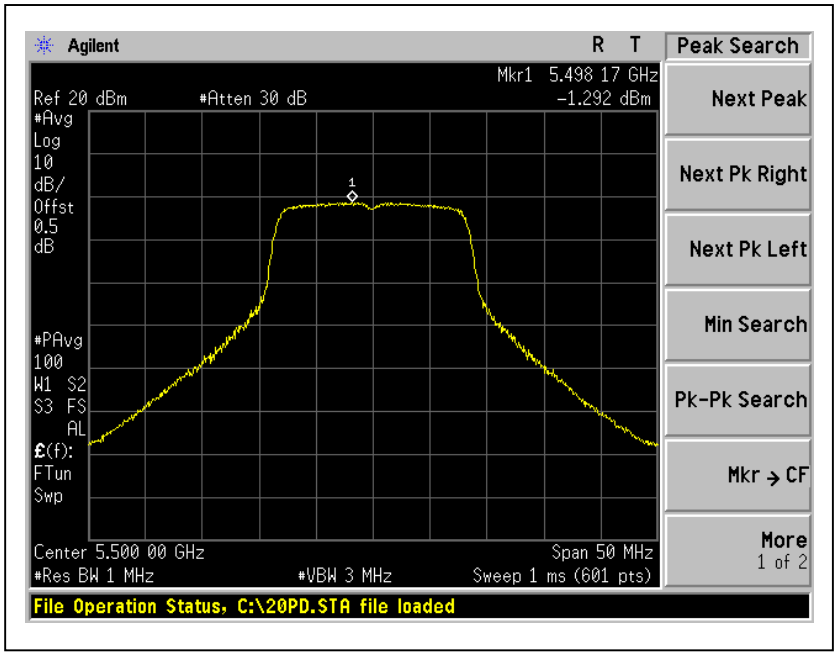
CH7



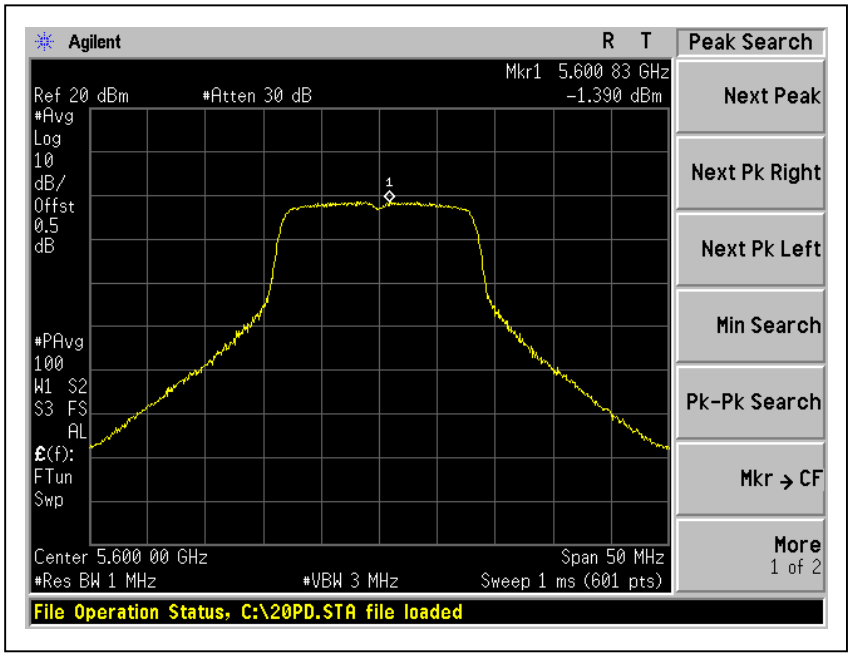
CH8


Agilent
R T
Peak Search
Mkr1 5.318 92 GHz
Ref 20 dBm
#Atten 30 dB
-1.842 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.320 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

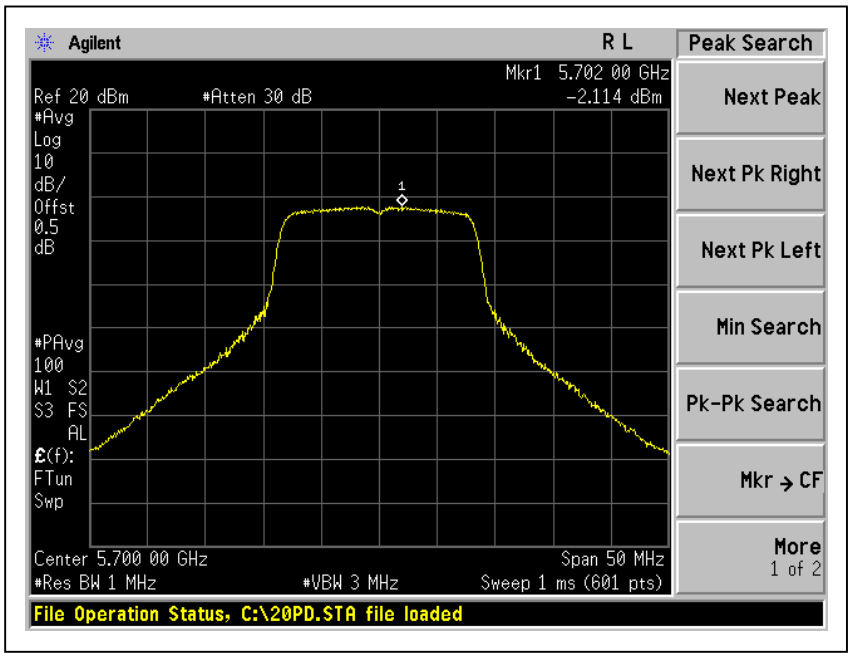
CH9


Agilent
R T
Peak Search
Mkr1 5.498 17 GHz
Ref 20 dBm
#Atten 30 dB
-1.292 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.500 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

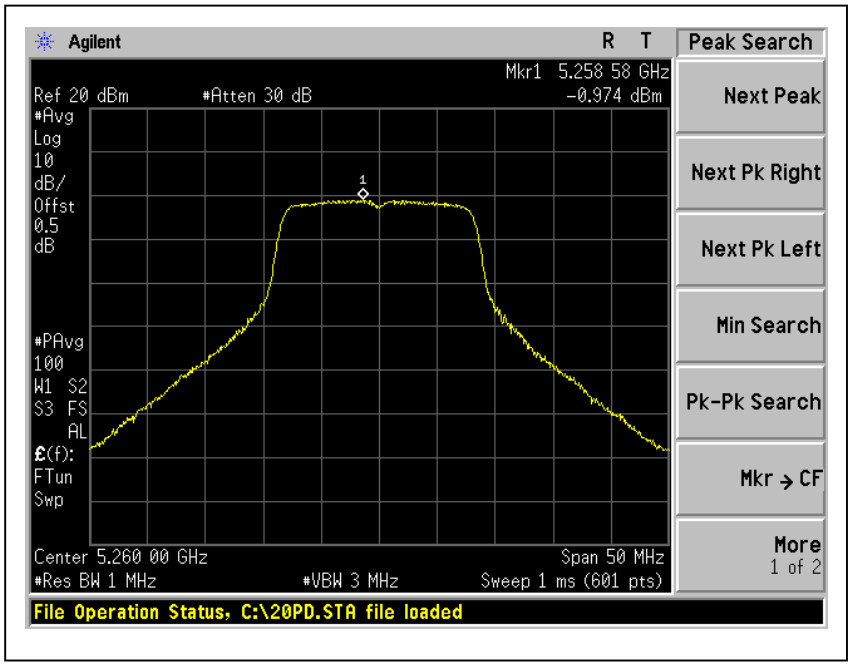
CH14


Agilent
R T
Peak Search
Mkr1 5.600 83 GHz
Ref 20 dBm
#Atten 30 dB
-1.390 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.600 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

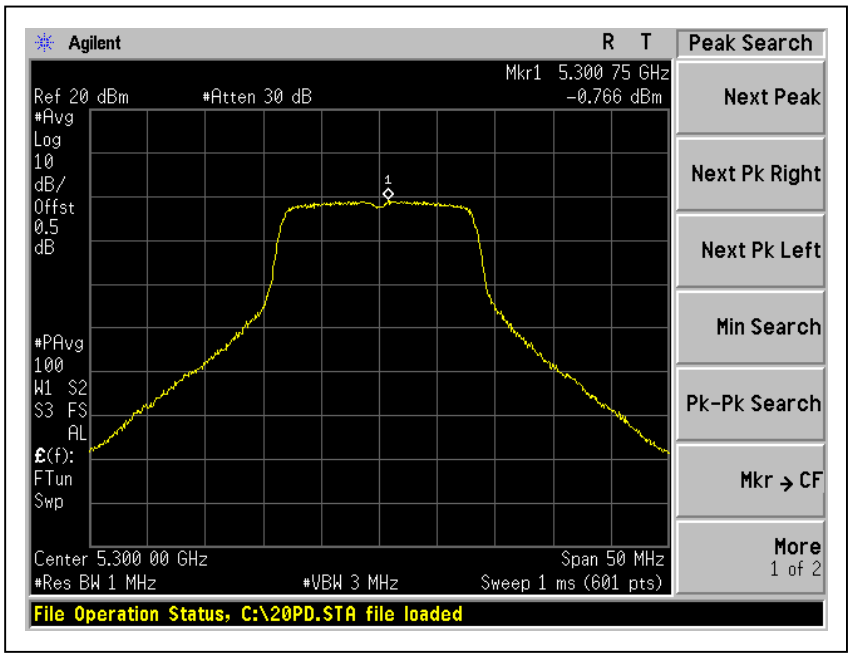
CH19


Agilent
R L
Peak Search
Mkr1 5.702 00 GHz
Ref 20 dBm
#Atten 30 dB
-2.114 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.700 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

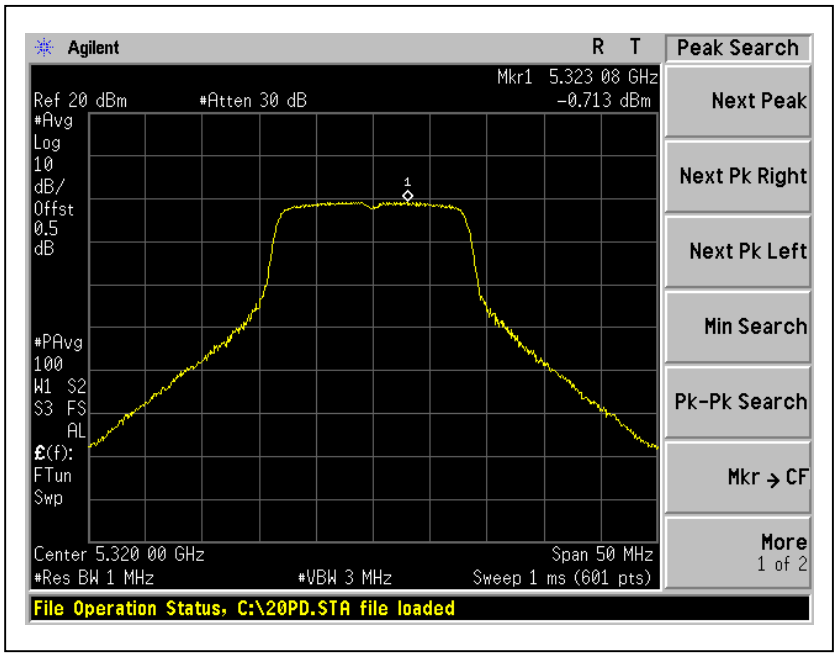
For Chain (2) : CH5



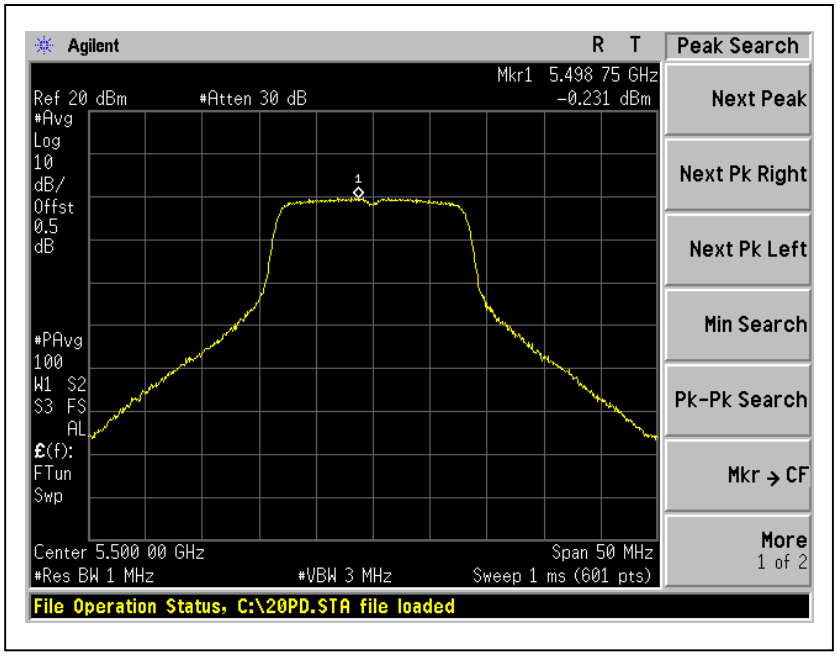
CH7



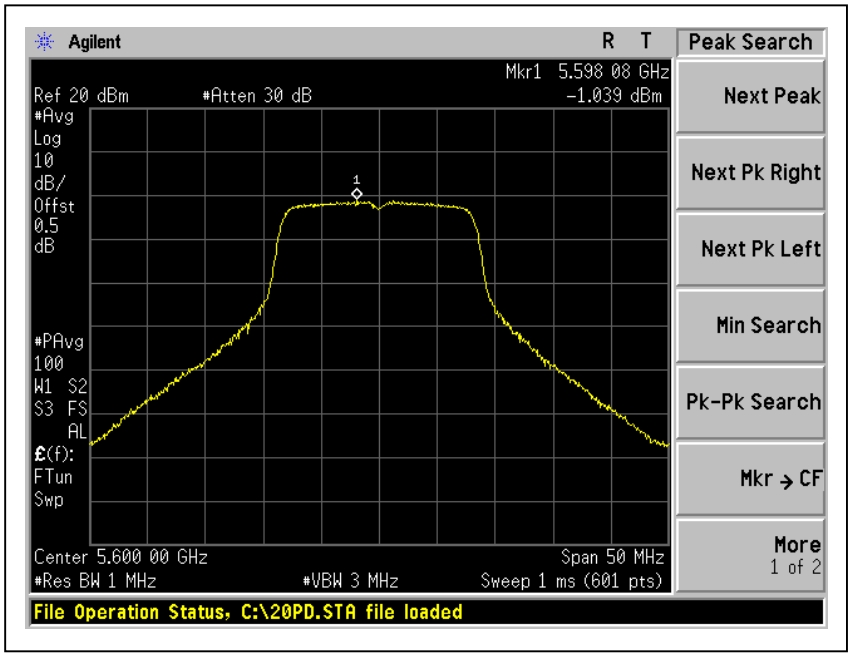
CH8


Agilent
R T
Peak Search
Mkr1 5.323 08 GHz
Ref 20 dBm
#Atten 30 dB
-0.713 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.320 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

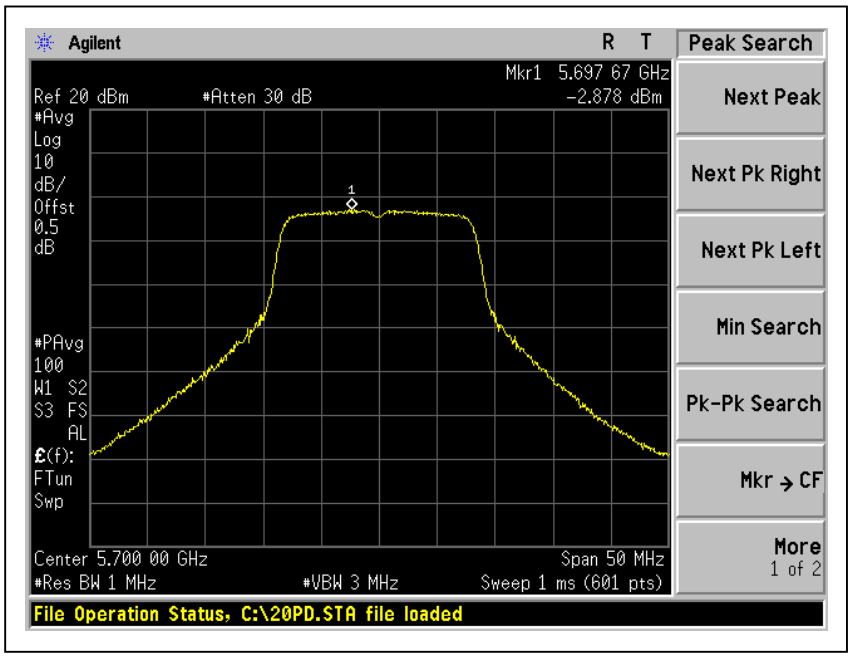
CH9


Agilent
R T
Peak Search
Mkr1 5.498 75 GHz
Ref 20 dBm
#Atten 30 dB
-0.231 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.500 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH14


Agilent
R T
Peak Search
Mkr1 5.598 08 GHz
Ref 20 dBm
#Atten 30 dB
-1.039 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
#Avg
Log
10
dB/
Offst
0.5
dB
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH19

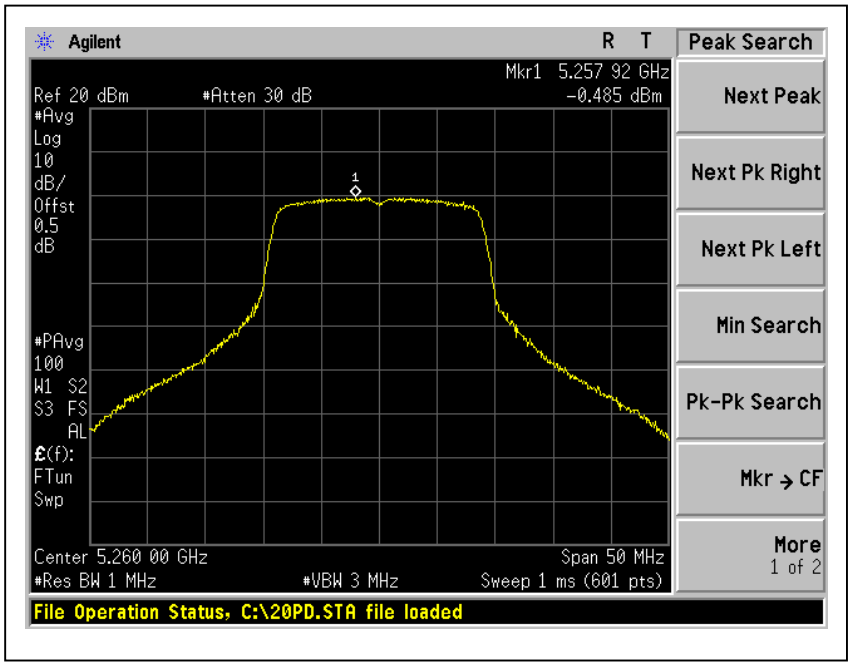

Agilent
R T
Peak Search
Mkr1 5.697 67 GHz
Ref 20 dBm
#Atten 30 dB
-2.878 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
#Avg
Log
10
dB/
Offst
0.5
dB
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

DRAFT 802.11n (20MHz) OFDM MODULATION:

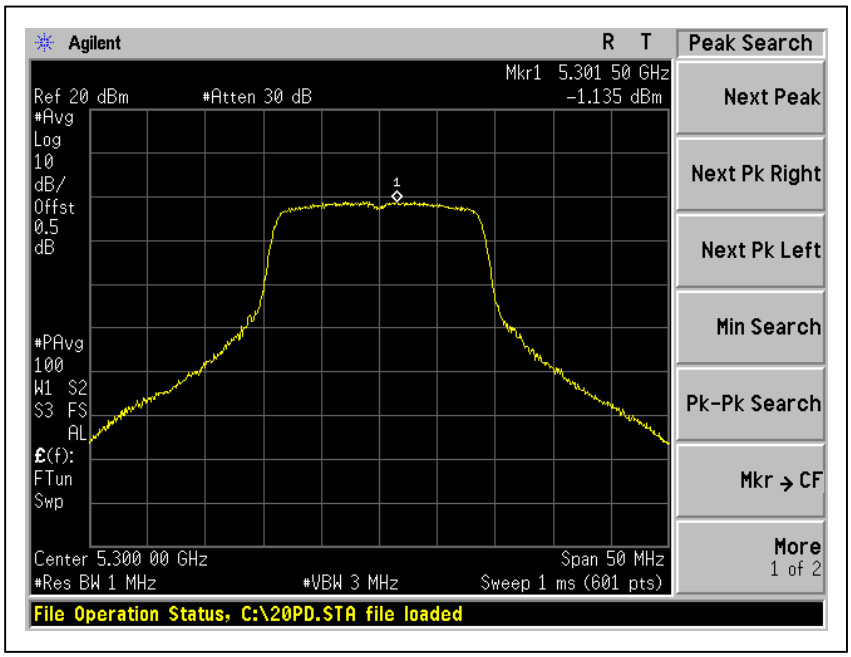
MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL OUTPUT POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
		Chain (0)	Chain(1)	Chain(2)			
5	5260	-0.485	-1.475	-0.728	3.895	4	PASS
7	5300	-1.135	-2.052	-0.942	3.420	4	PASS
8	5320	-0.777	-1.395	-0.474	3.906	4	PASS
9	5500	-1.727	-1.572	-0.384	3.585	4	PASS
14	5600	-1.020	-1.055	-0.980	3.753	4	PASS
19	5700	-2.173	-2.389	-3.153	2.219	4	PASS

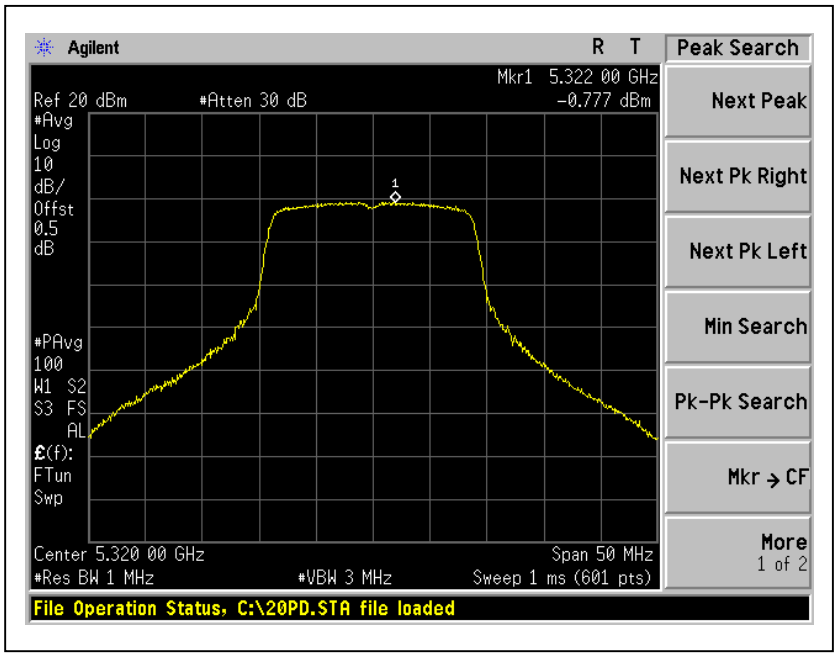
For Chain (0) : CH5



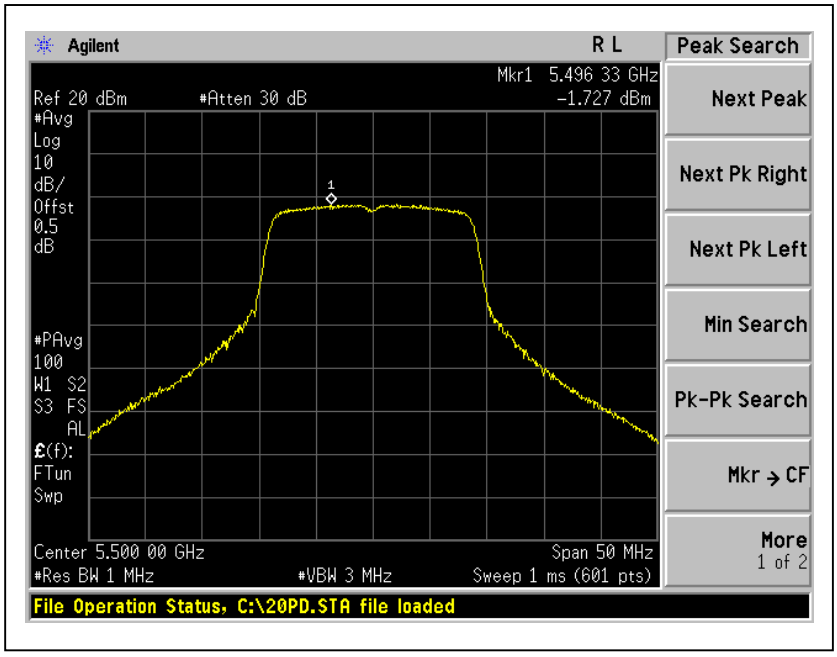
CH7



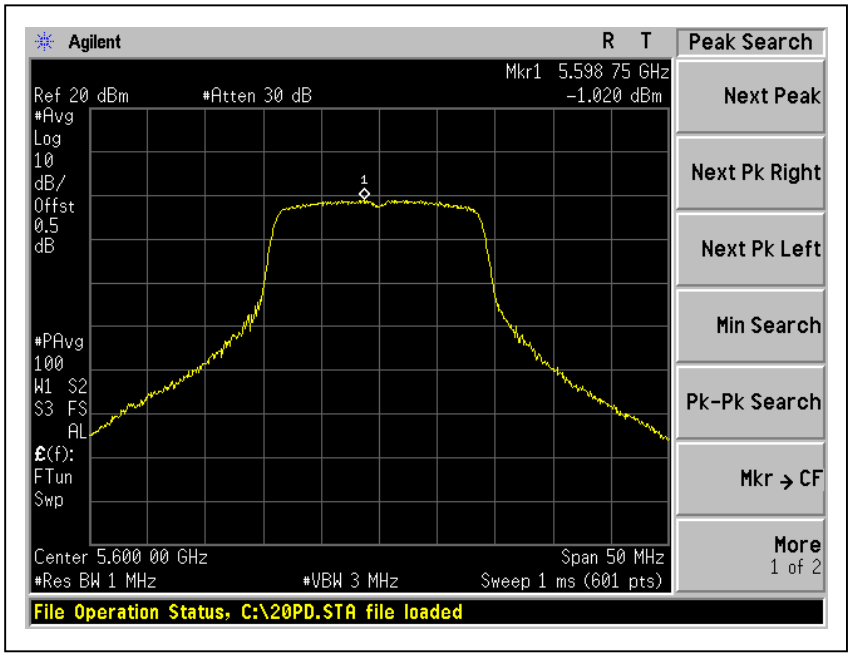
CH8


Agilent
R T
Peak Search
Mkr1 5.322 00 GHz
Ref 20 dBm
#Atten 30 dB
-0.777 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.320 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

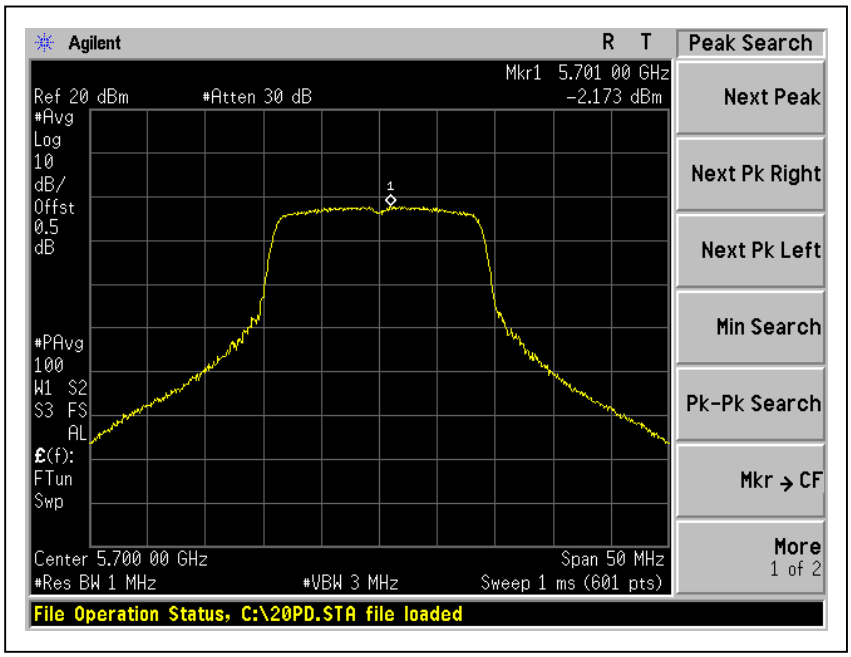
CH9


Agilent
R L
Peak Search
Mkr1 5.496 33 GHz
Ref 20 dBm
#Atten 30 dB
-1.727 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.500 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

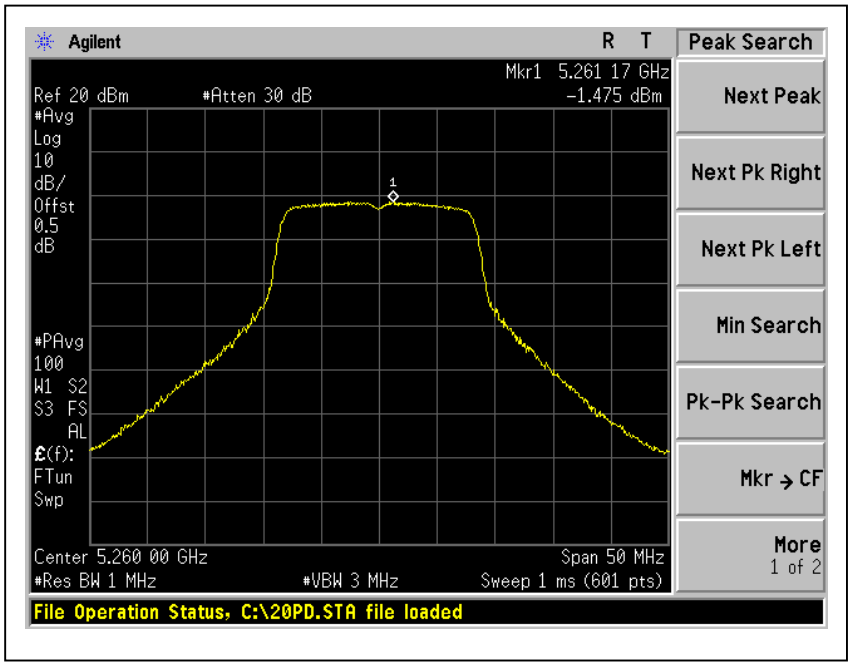
CH14


Agilent
R T
Peak Search
Mkr1 5.598 75 GHz
Ref 20 dBm
#Atten 30 dB
-1.020 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.600 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

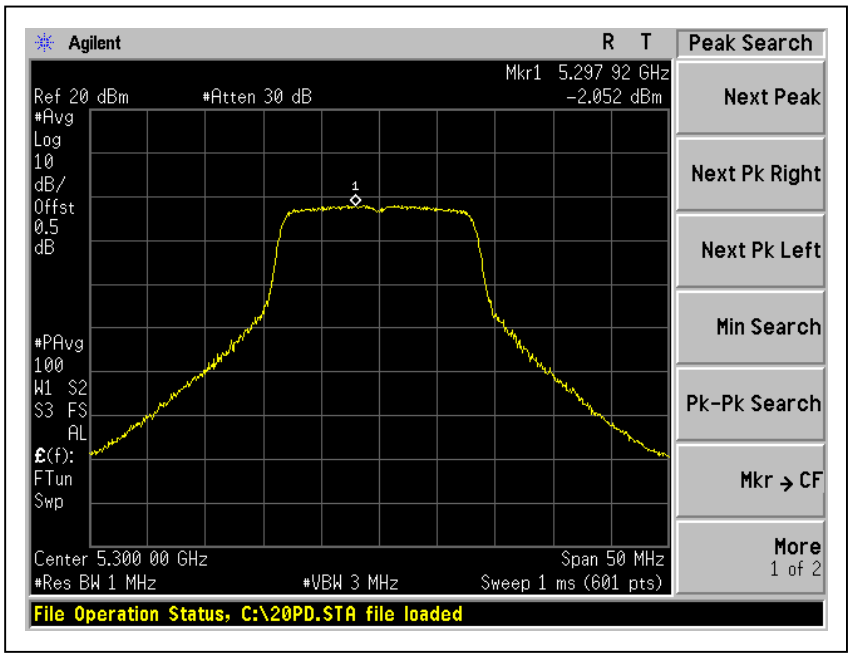
CH19


Agilent
R T
Peak Search
Mkr1 5.701 00 GHz
Ref 20 dBm
#Atten 30 dB
-2.173 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.700 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

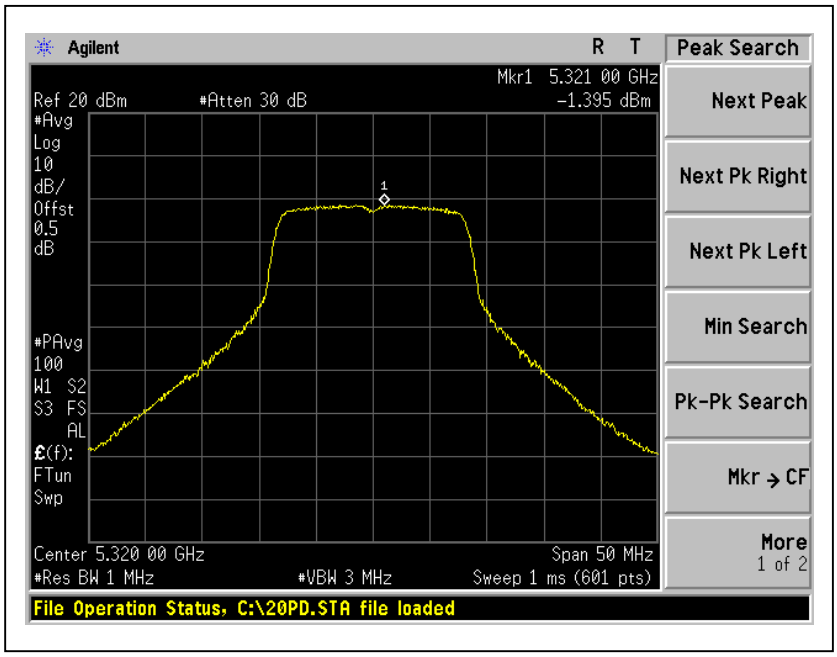
For Chain (1) : CH5



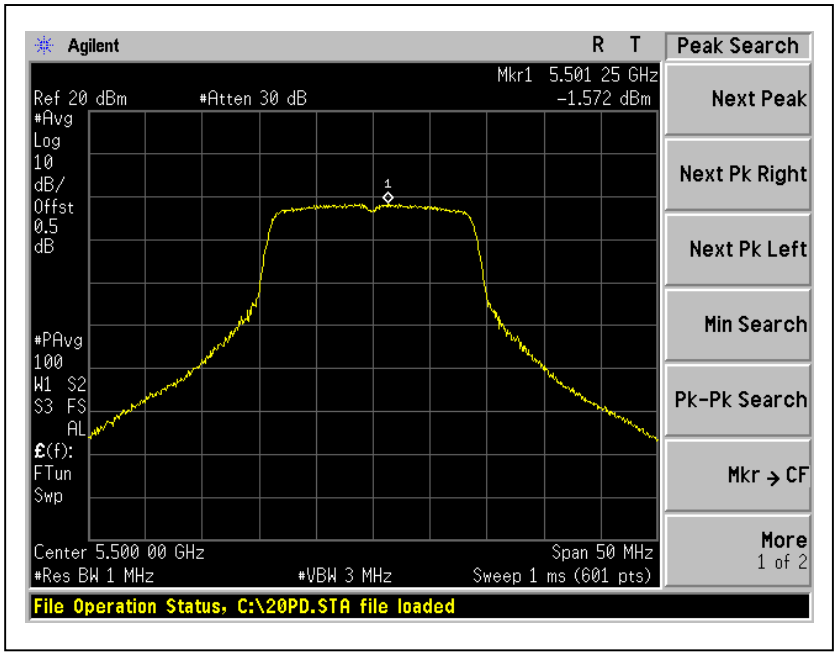
CH7



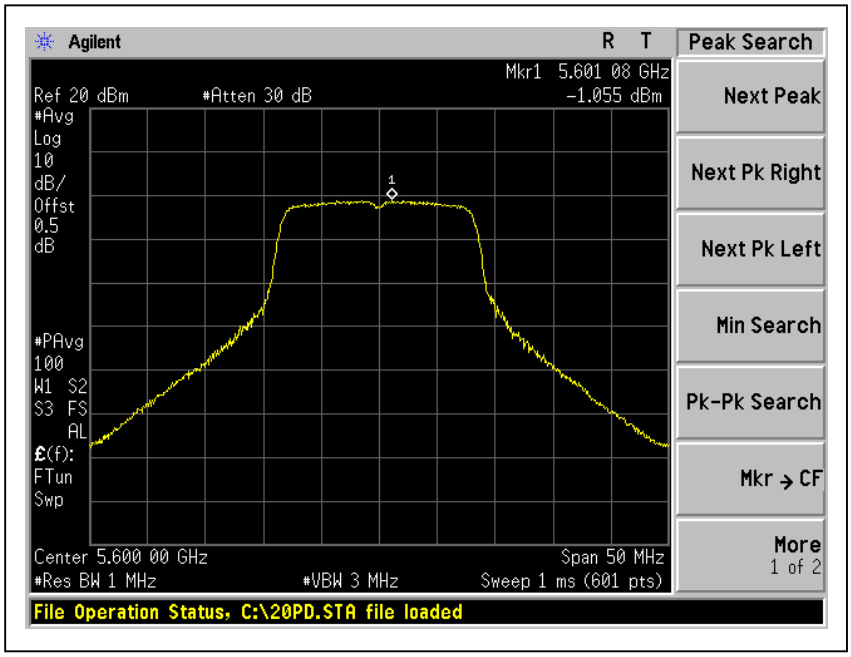
CH8


Agilent
R T
Peak Search
Mkr1 5.321 00 GHz
Ref 20 dBm
#Atten 30 dB
-1.395 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.320 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

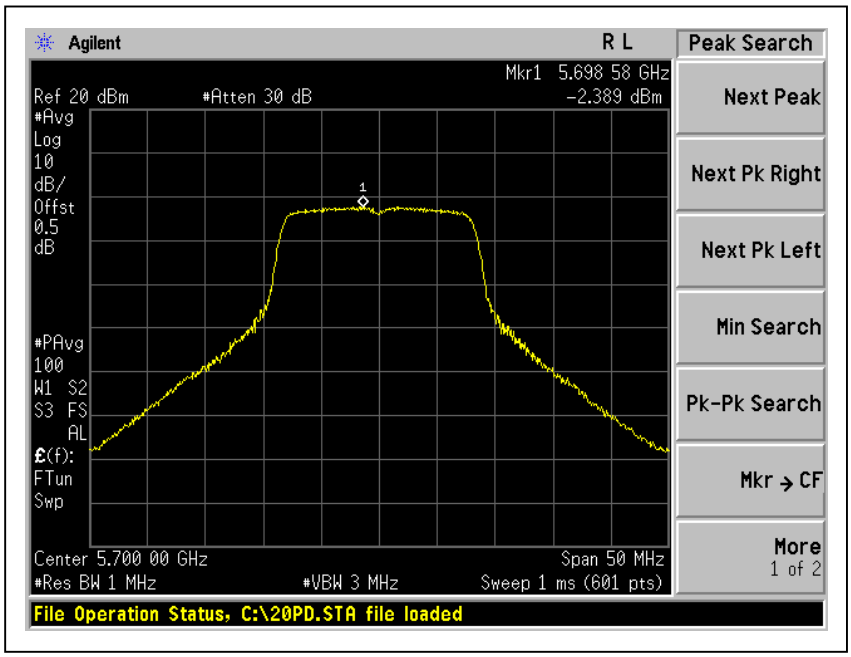
CH9


Agilent
R T
Peak Search
Mkr1 5.501 25 GHz
Ref 20 dBm
#Atten 30 dB
-1.572 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.500 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

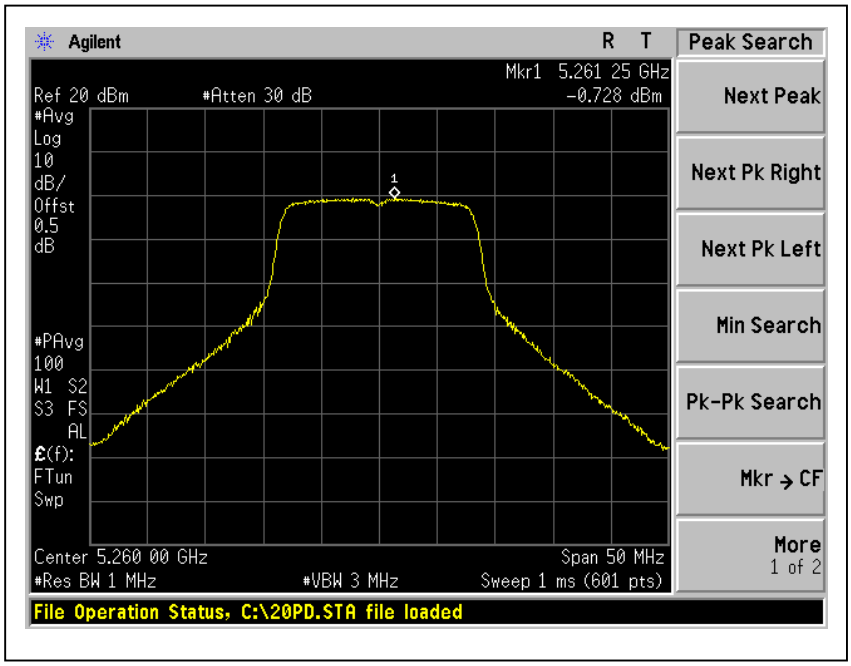
CH14


Agilent
R T
Peak Search
Mkr1 5.601 08 GHz
Ref 20 dBm
#Atten 30 dB
-1.055 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.600 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

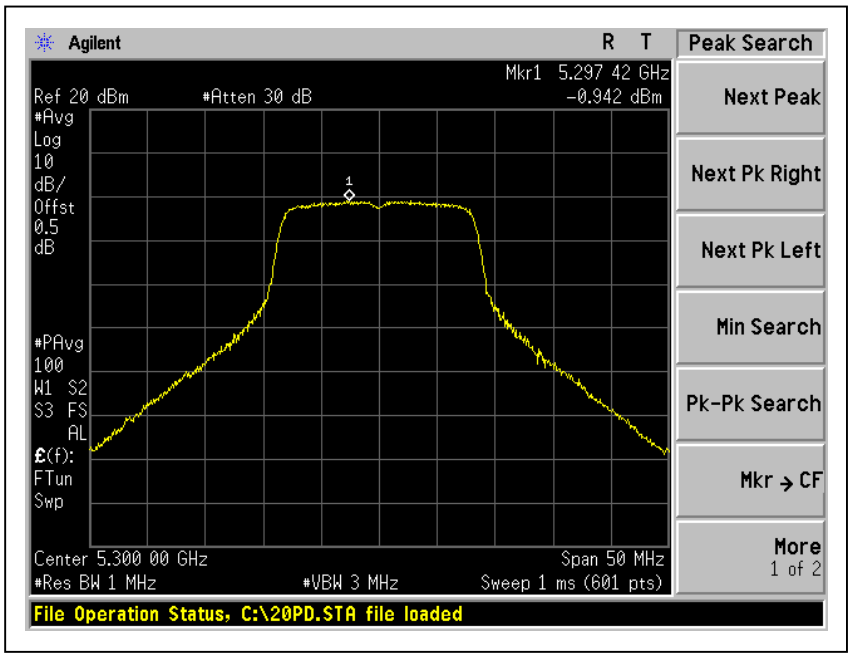
CH19


Agilent
R L
Peak Search
Mkr1 5.698 58 GHz
Ref 20 dBm
#Atten 30 dB
-2.389 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.700 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

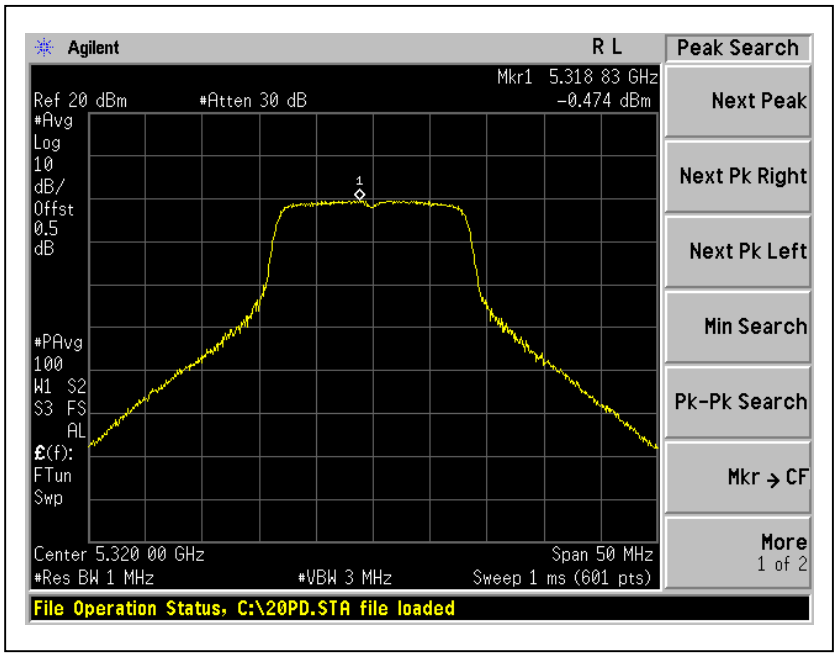
For Chain (2) : CH5



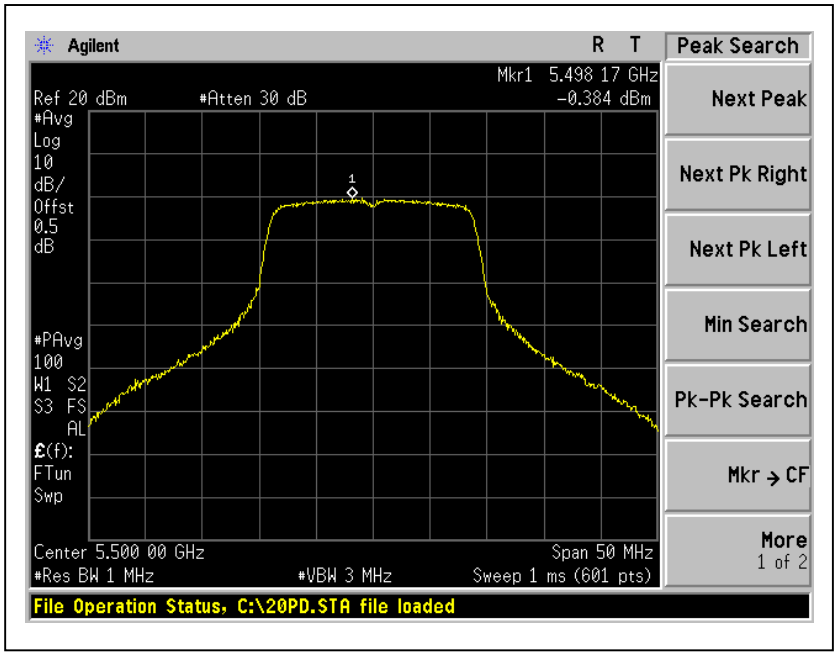
CH7



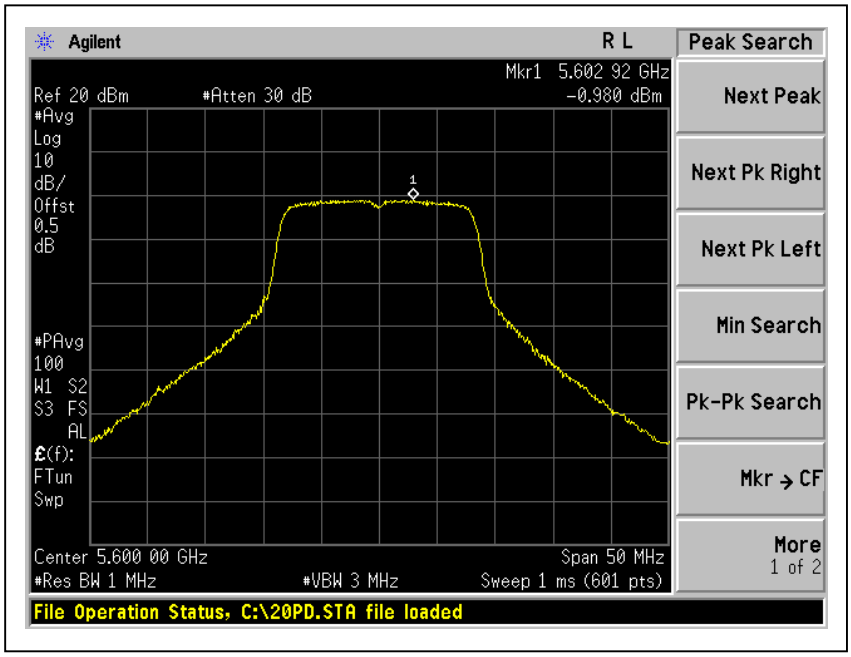
CH8


Agilent
R L
Peak Search
Mkr1 5.318 83 GHz
Ref 20 dBm
#Atten 30 dB
-0.474 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.320 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

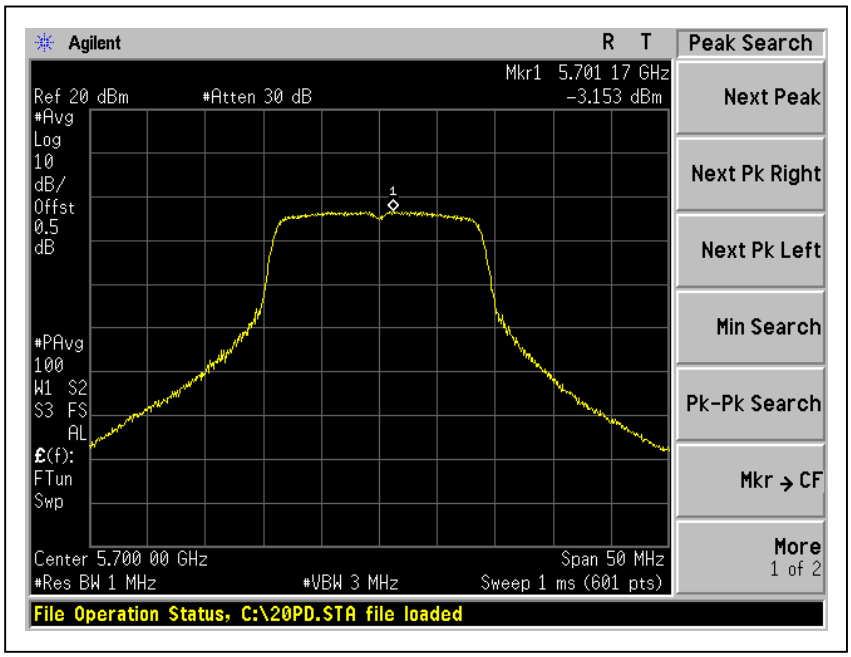
CH9


Agilent
R T
Peak Search
Mkr1 5.498 17 GHz
Ref 20 dBm
#Atten 30 dB
-0.384 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.500 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH14


Agilent
R L
Peak Search
Mkr1 5.602 92 GHz
Ref 20 dBm
#Atten 30 dB
-0.980 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.600 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH19

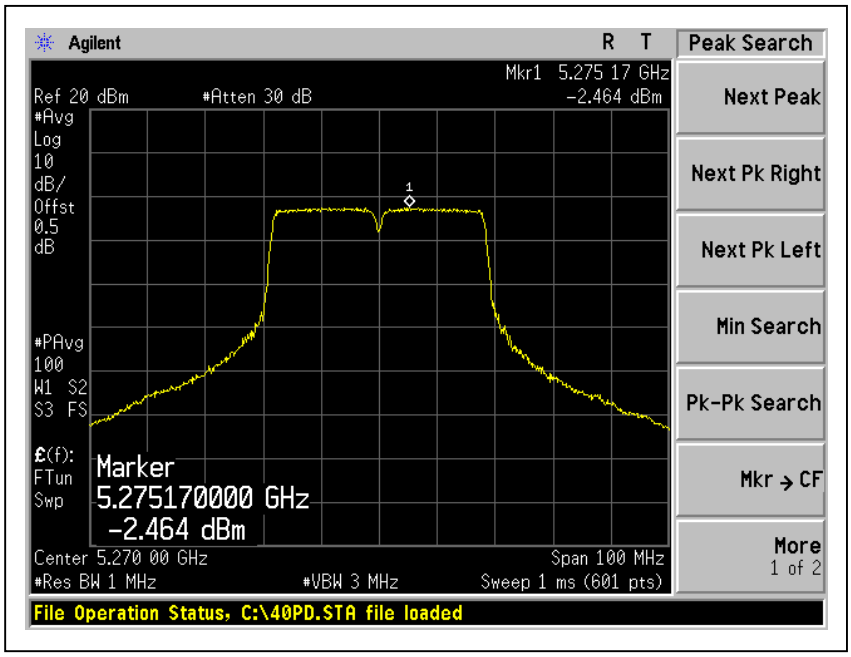

Agilent
R T
Peak Search
Mkr1 5.701 17 GHz
Ref 20 dBm
#Atten 30 dB
-3.153 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.700 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

DRAFT 802.11n (40MHz) OFDM MODULATION:

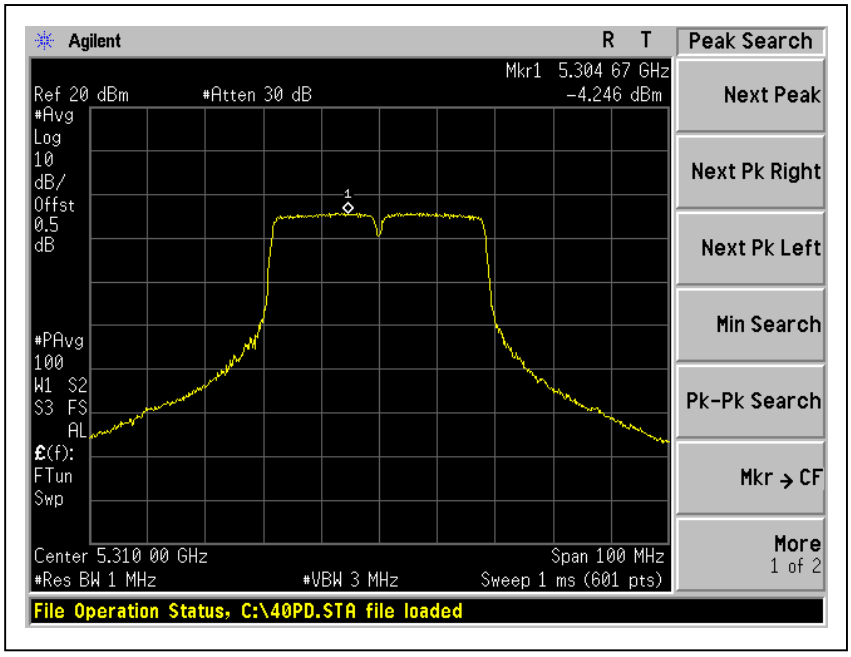
MODULATION TYPE	BPSK	**TRANSFER RATE**	13.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	26deg.C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL OUTPUT POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
		Chain (0)	Chain(1)	Chain(2)			
3	5270	-2.464	-3.700	-3.409	1.614	4	PASS
4	5310	-4.246	-5.522	-5.105	-0.155	4	PASS
5	5510	-10.373	-10.713	-9.522	-5.391	4	PASS
7	5590	-3.607	-2.857	-3.556	1.446	4	PASS
9	5670	-2.752	-3.670	-3.643	1.440	4	PASS

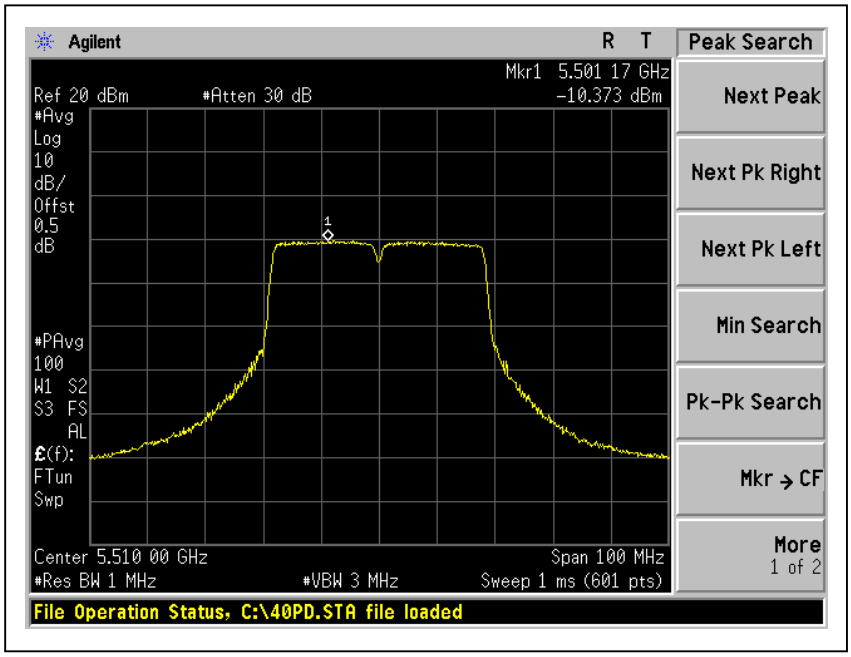
For Chain (0) :CH3



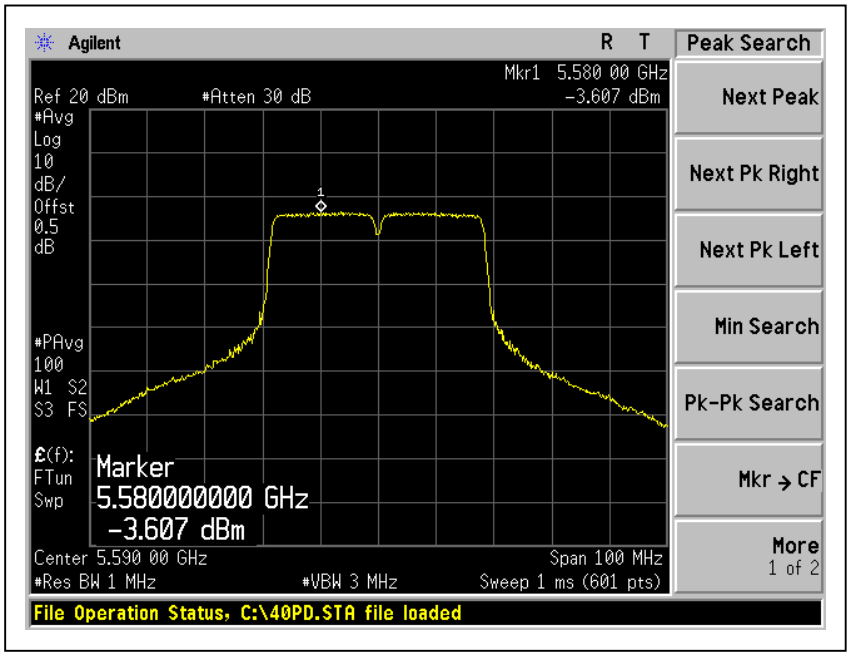
CH4



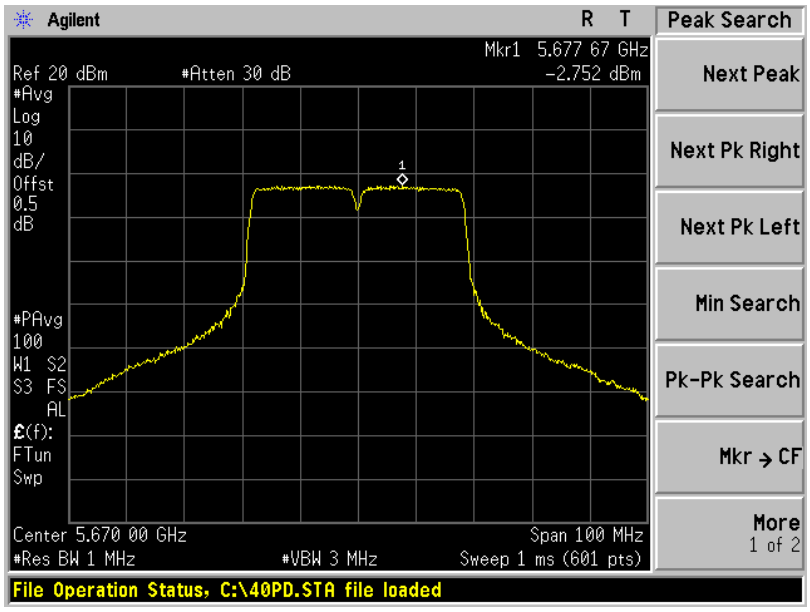
CH5


Agilent
R T
Peak Search
Mkr1 5.501 17 GHz
Ref 20 dBm
#Atten 30 dB
-10.373 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 5.510 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

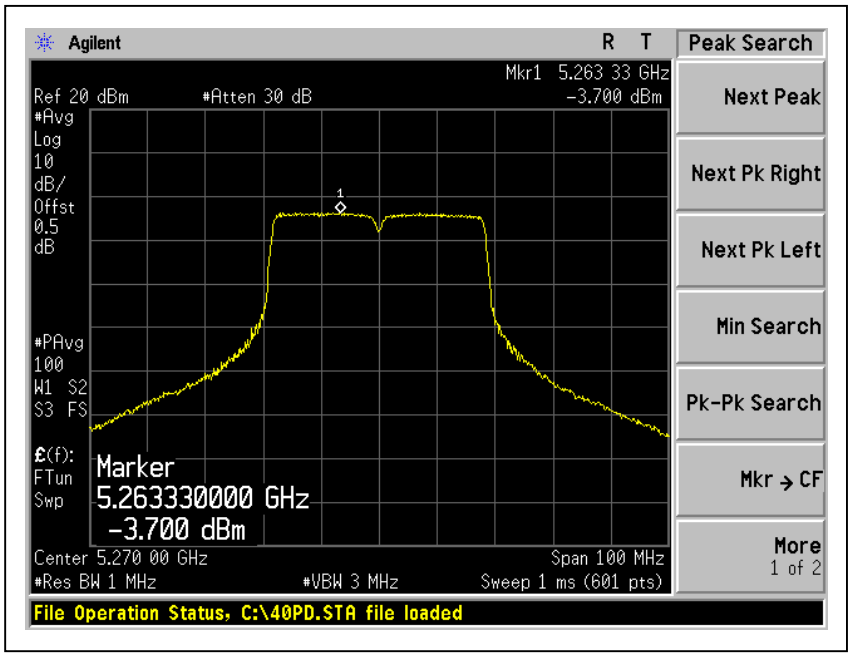
CH7


Agilent
R T
Peak Search
Mkr1 5.580 00 GHz
Ref 20 dBm
#Atten 30 dB
-3.607 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
£(f):
FTun
Swp
Marker
5.580000000 GHz
-3.607 dBm
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 5.590 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

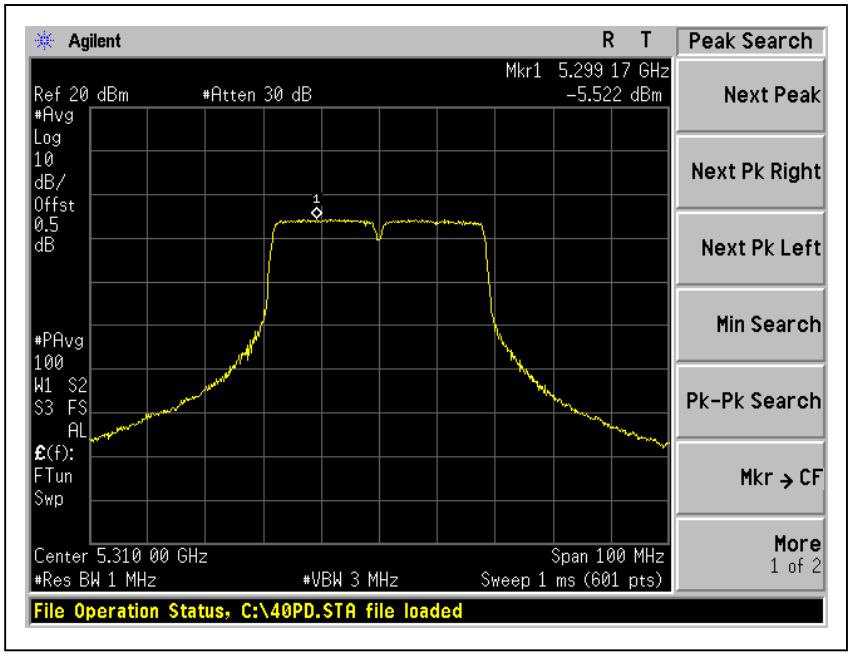
CH9


Agilent
R T
Peak Search
Mkr1 5.677 67 GHz
Ref 20 dBm
#Atten 30 dB
-2.752 dBm
#Avg
Log
10
dB/
Offst
0.5
dB
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 5.670 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

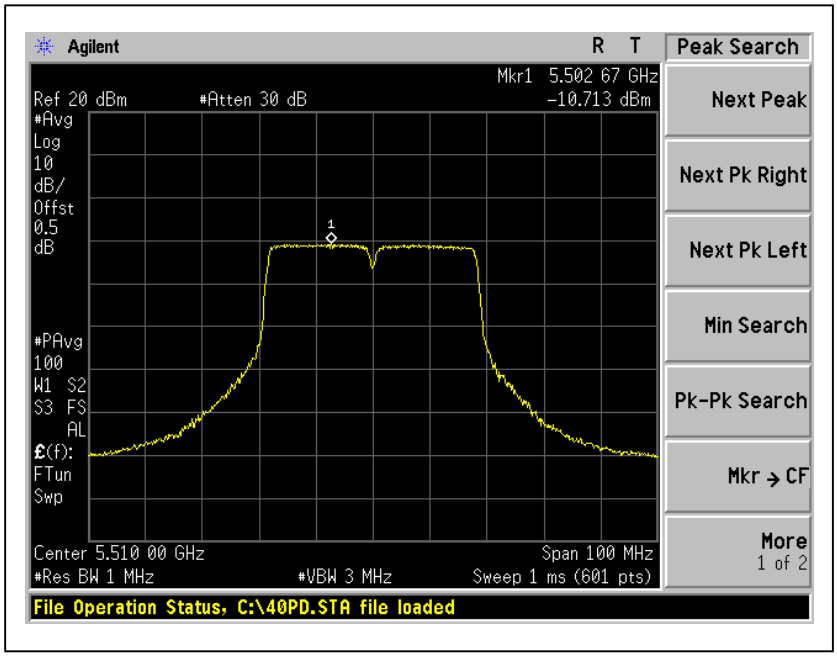
For Chain (1) :CH3



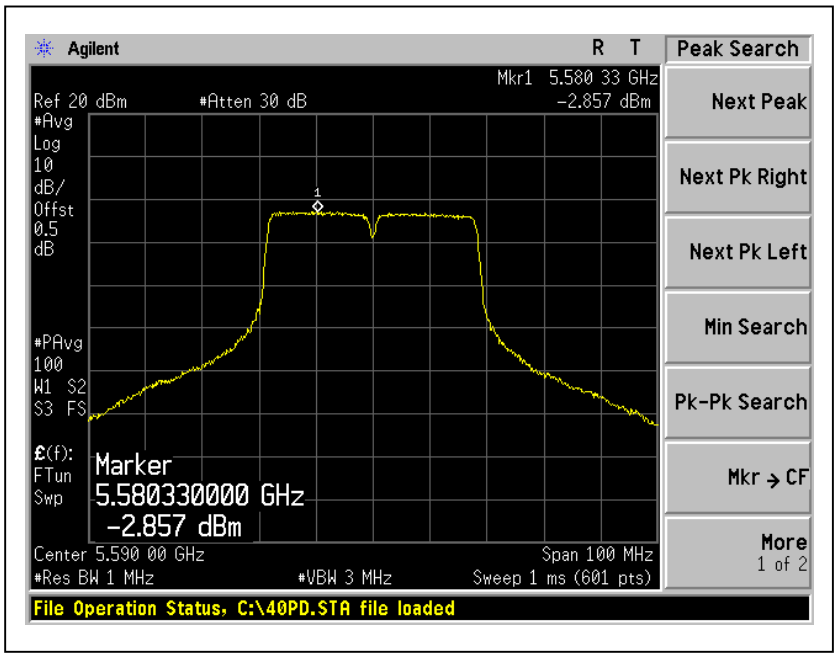
CH4



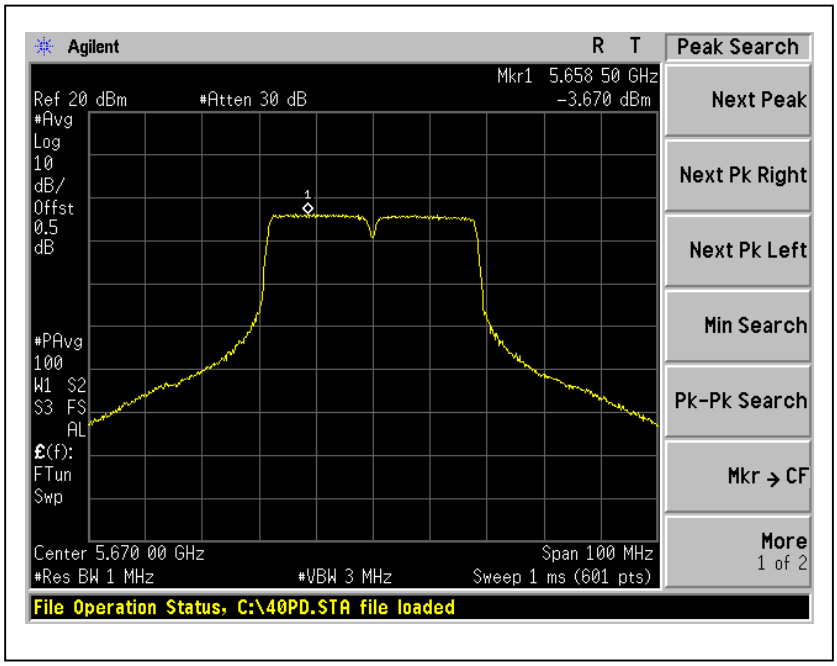
CH5


Agilent
R T
Peak Search
Mkr1 5.502 67 GHz
Ref 20 dBm
#Atten 30 dB
-10.713 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.510 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

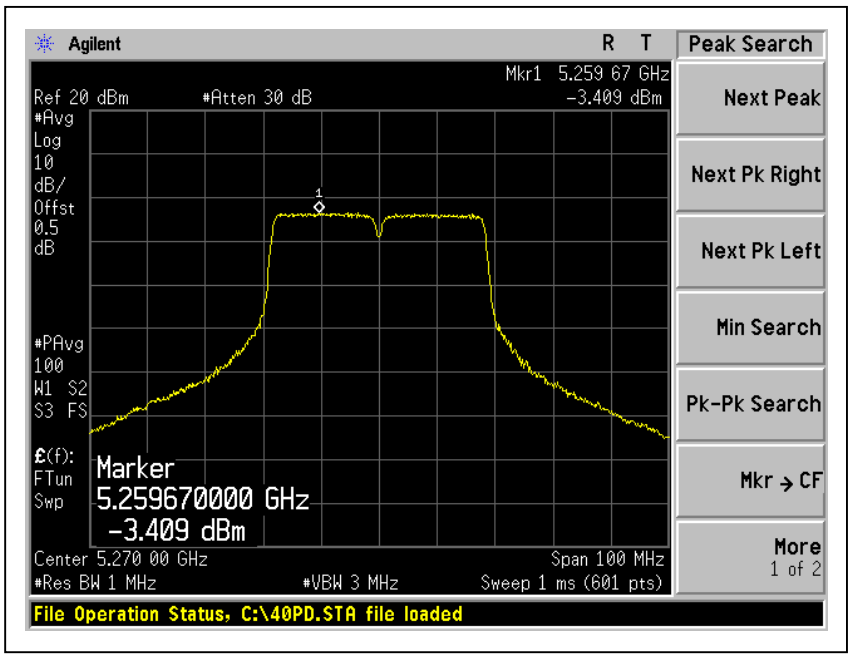
CH7


Agilent
R T
Peak Search
Mkr1 5.580 33 GHz
Ref 20 dBm
#Atten 30 dB
-2.857 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
£(f):
FTun
Swp
Marker
5.580330000 GHz
-2.857 dBm
Pk-Pk Search
Mkr → CF
Center 5.590 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

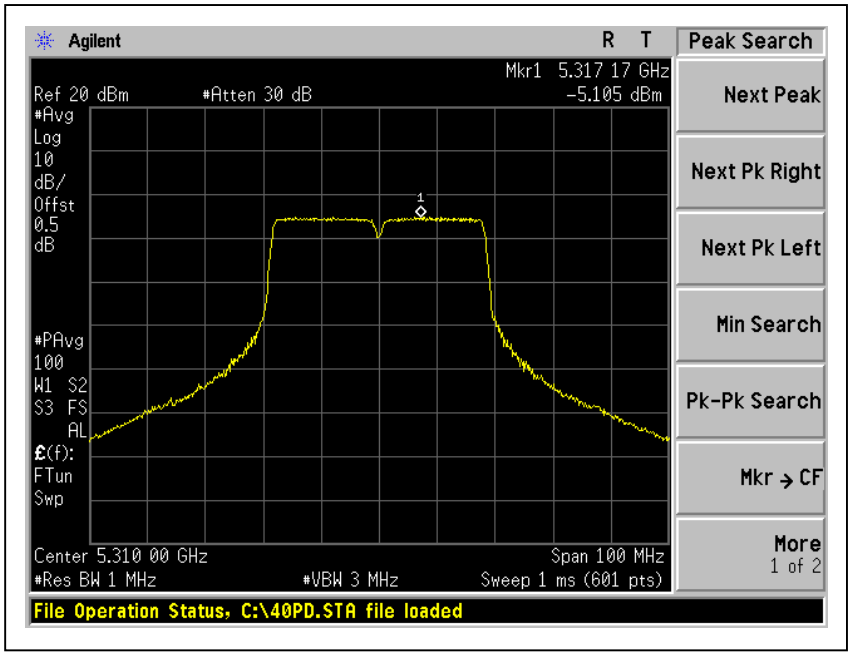
CH9


Agilent
R T
Peak Search
Mkr1 5.658 50 GHz
Ref 20 dBm
#Atten 30 dB
-3.670 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 5.670 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

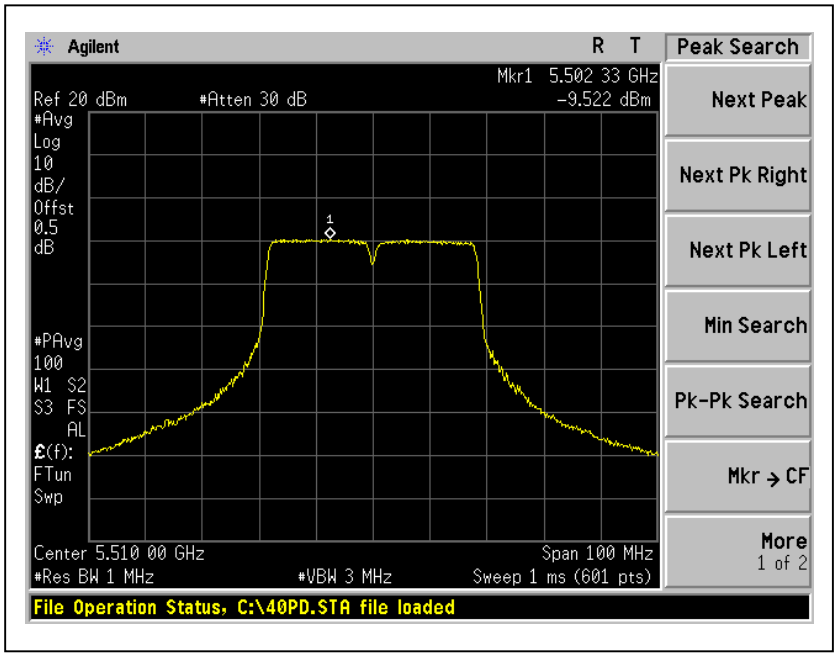
For Chain (2) : CH3



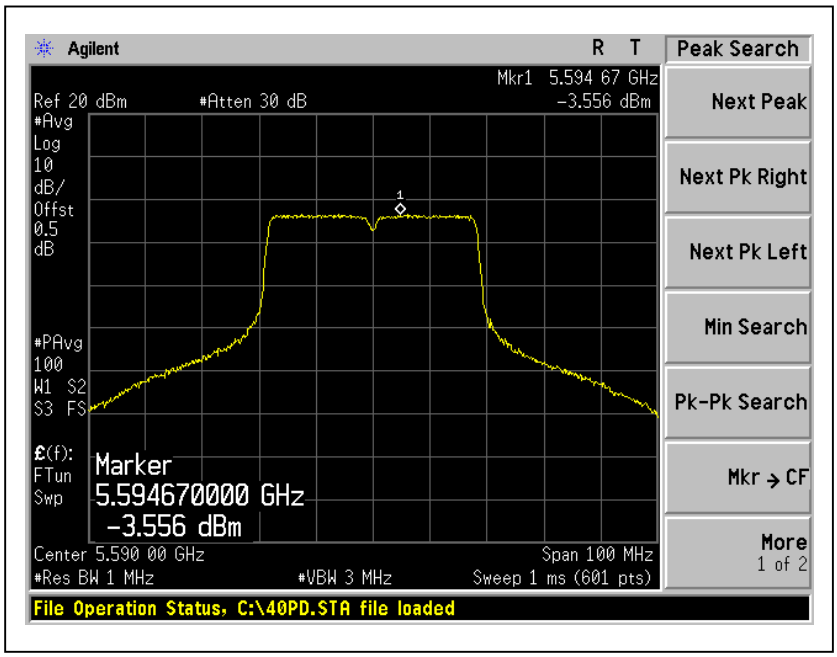
CH4



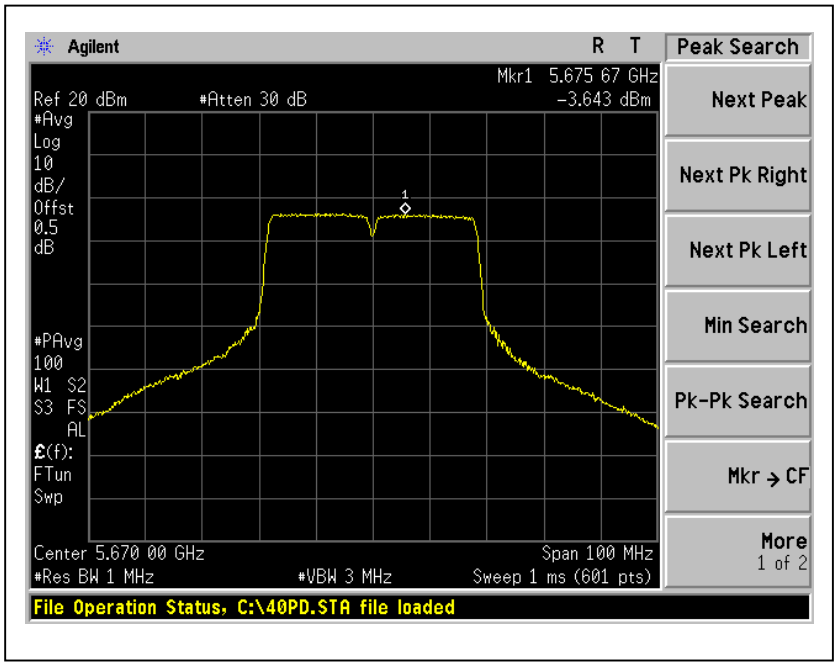
CH5


Agilent
R T
Peak Search
Mkr1 5.502 33 GHz
Ref 20 dBm
#Atten 30 dB
-9.522 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.510 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

CH7


Agilent
R T
Peak Search
Mkr1 5.594 67 GHz
Ref 20 dBm
#Atten 30 dB
-3.556 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
£(f):
FTun
Swp
Marker
5.594670000 GHz
-3.556 dBm
Pk-Pk Search
Mkr → CF
Center 5.590 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

CH9


Agilent
R T
Peak Search
Mkr1 5.675 67 GHz
Ref 20 dBm
#Atten 30 dB
-3.643 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 5.670 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

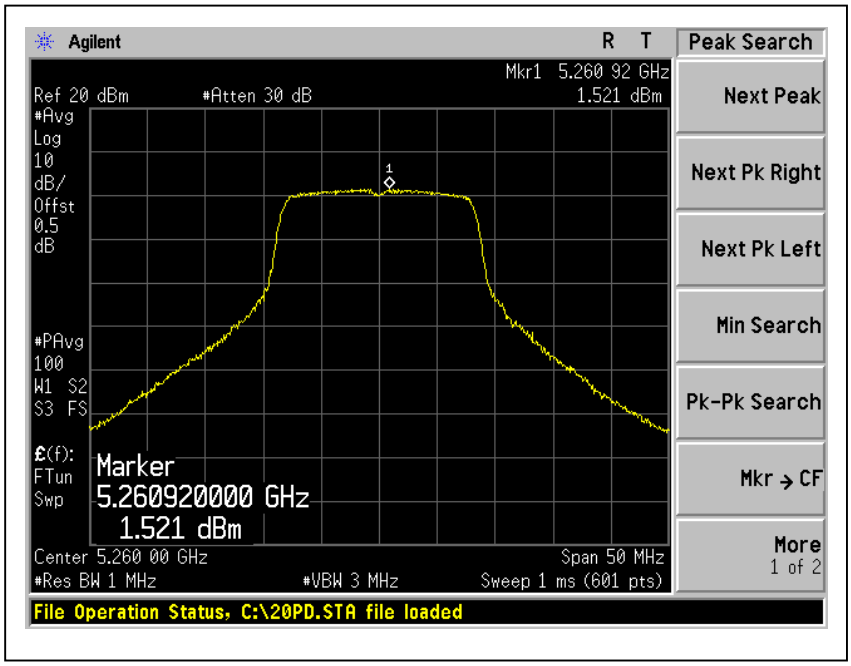
4.5.9 TEST RESULTS-ANTENNA 7

802.11a OFDM modulation

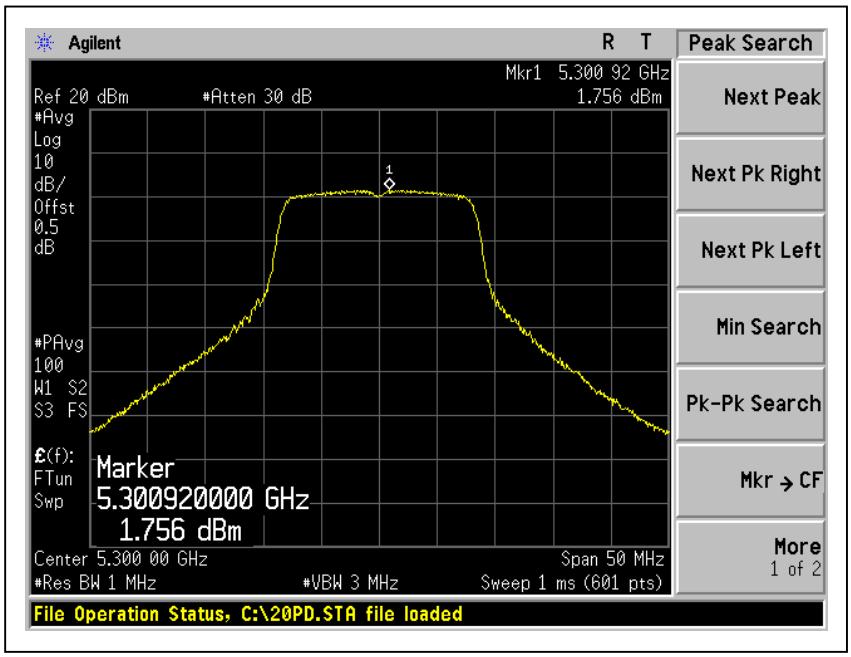
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL OUTPUT POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
		Chain (0)	Chain(1)	Chain(2)			
5	5260	1.521	-0.318	0.780	5.496	11	PASS
7	5300	1.756	-0.126	0.639	5.597	11	PASS
8	5320	1.817	0.563	0.517	5.778	11	PASS
9	5500	0.313	1.285	0.297	5.428	11	PASS
14	5600	0.572	0.401	0.848	5.383	11	PASS
19	5700	1.156	0.200	0.389	5.373	11	PASS

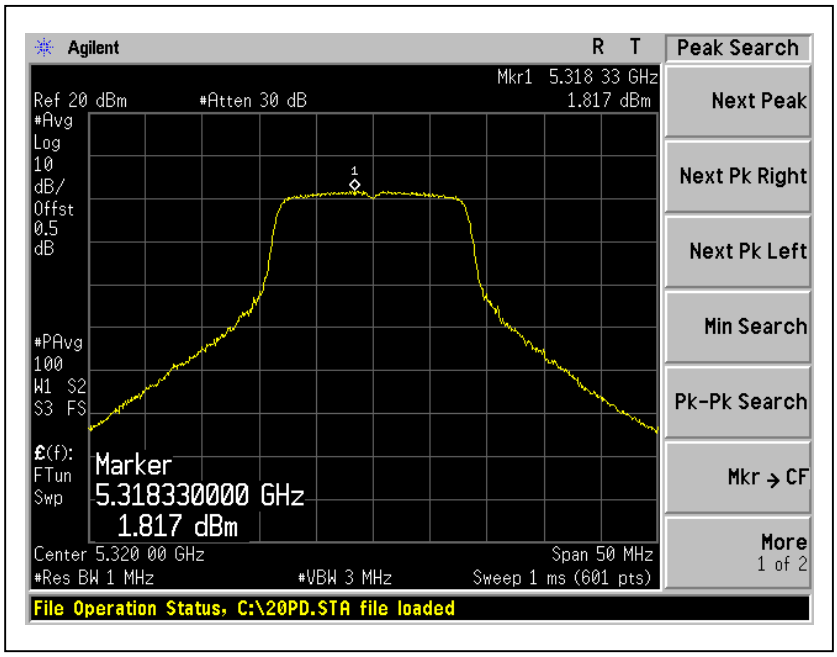
For Chain (0) : CH5



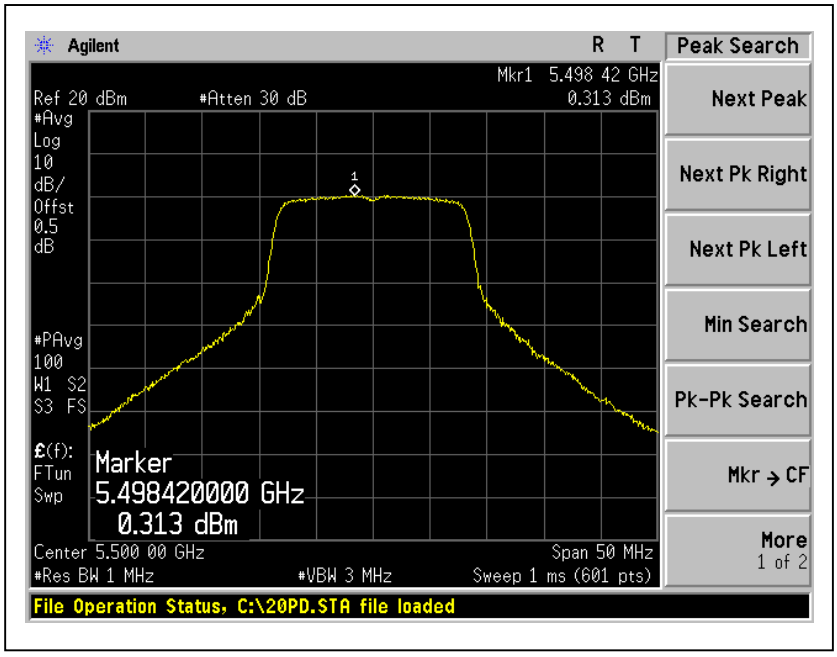
CH7



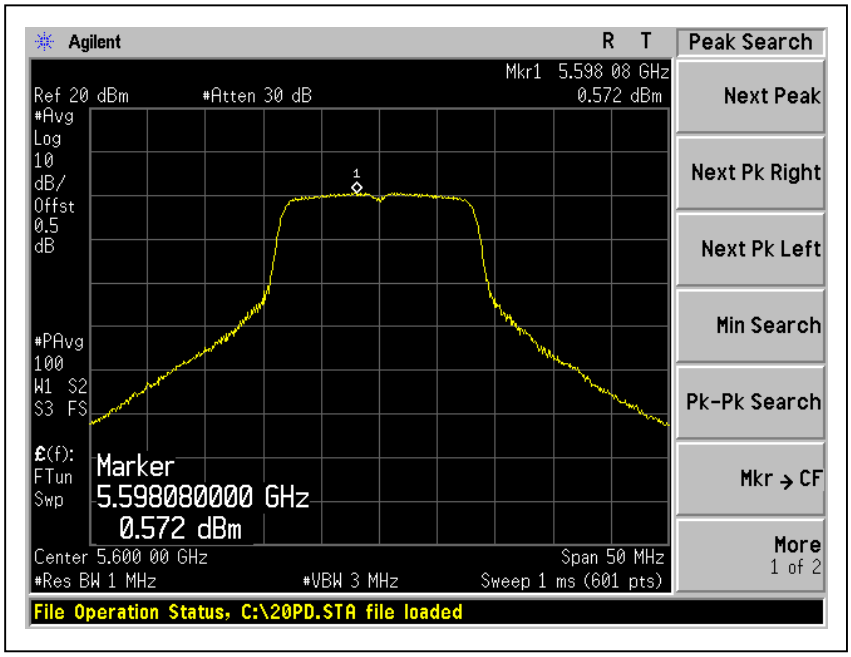
CH8


Agilent
R T
Peak Search
Mkr1 5.318 33 GHz
Ref 20 dBm
#Atten 30 dB
1.817 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.318330000 GHz
1.817 dBm
Mkr → CF
More
1 of 2
Center 5.320 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

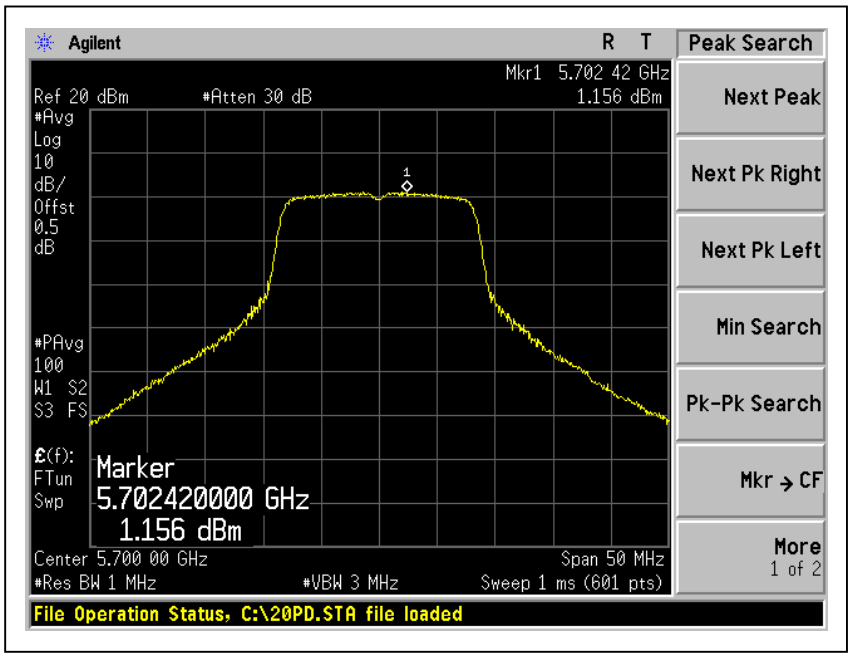
CH9


Agilent
R T
Peak Search
Mkr1 5.498 42 GHz
Ref 20 dBm
#Atten 30 dB
0.313 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.498420000 GHz
0.313 dBm
Mkr → CF
More
1 of 2
Center 5.500 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

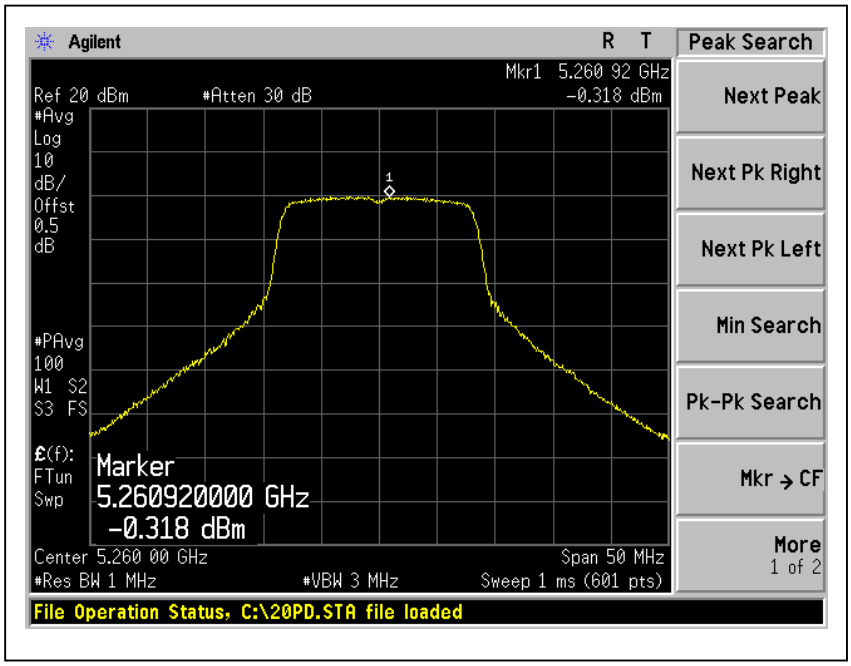
CH14


Agilent
R T
Peak Search
Mkr1 5.598 08 GHz
Ref 20 dBm
#Atten 30 dB
0.572 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.598080000 GHz
0.572 dBm
Mkr → CF
More
1 of 2
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

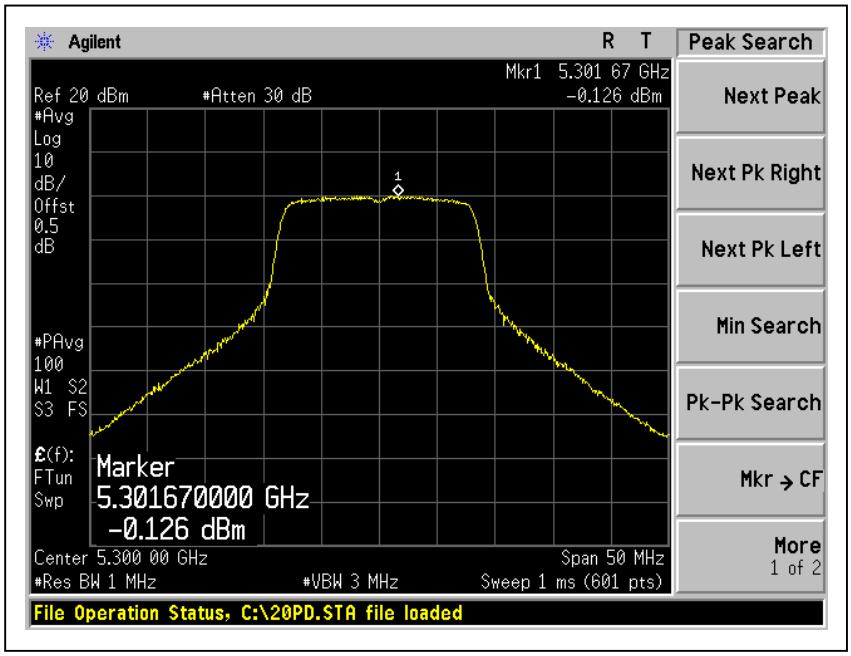
CH19


Agilent
R T
Peak Search
Mkr1 5.702 42 GHz
Ref 20 dBm
#Atten 30 dB
1.156 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.702420000 GHz
1.156 dBm
Mkr → CF
More
1 of 2
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

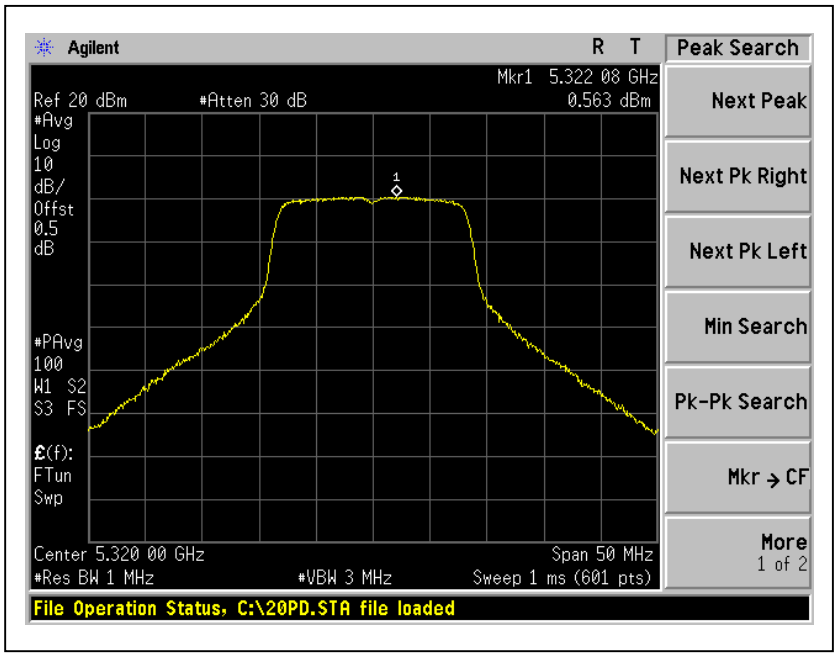
For Chain (1) : CH5



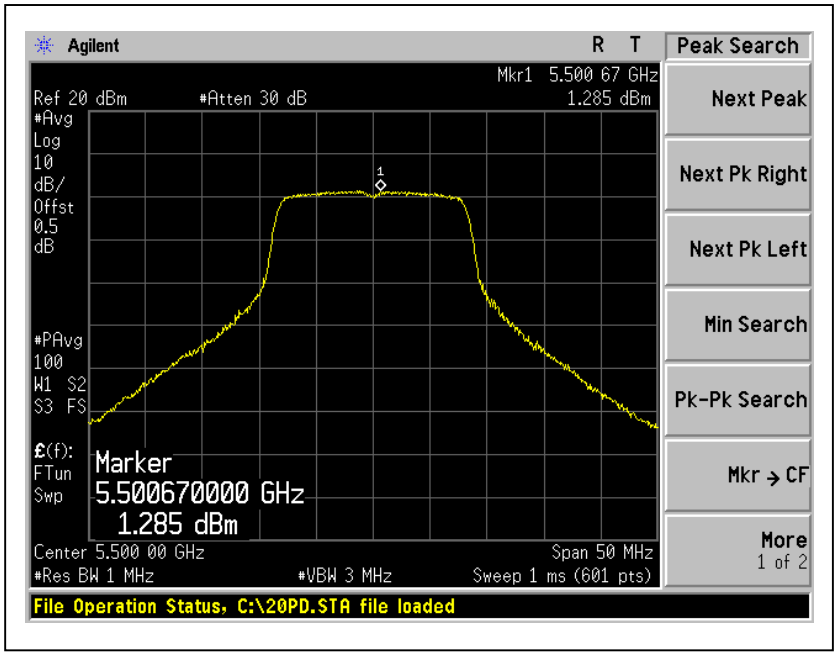
CH7



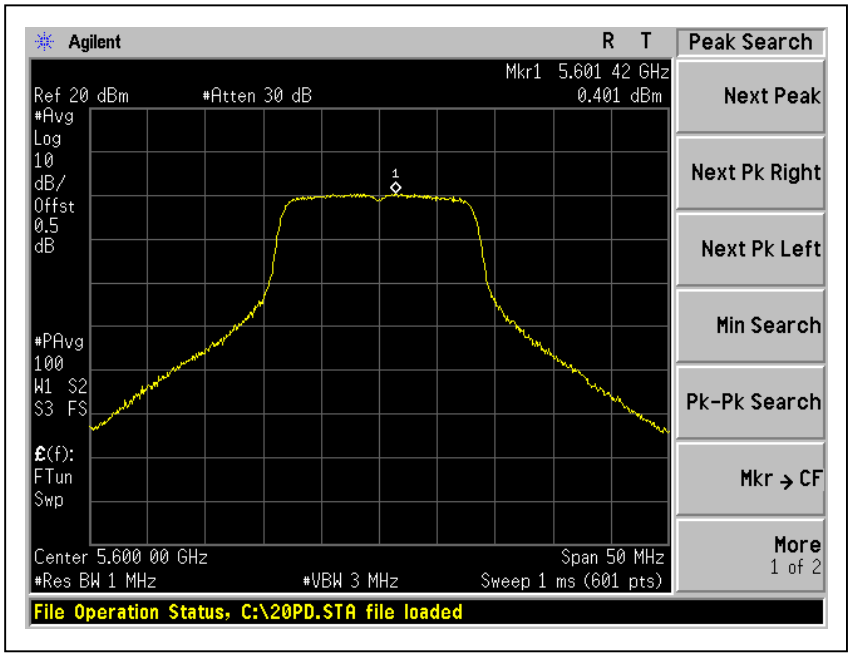
CH8


Agilent
R T
Peak Search
Mkr1 5.322 08 GHz
Ref 20 dBm
#Atten 30 dB
0.563 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Mkr → CF
Center 5.320 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

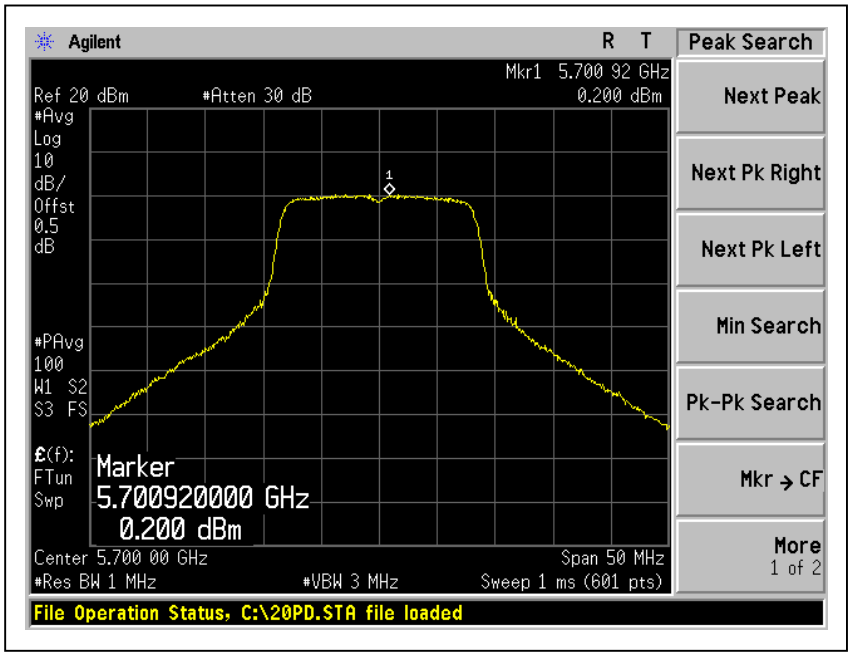
CH9


Agilent
R T
Peak Search
Mkr1 5.500 67 GHz
Ref 20 dBm
#Atten 30 dB
1.285 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.500670000 GHz
1.285 dBm
Mkr → CF
Center 5.500 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

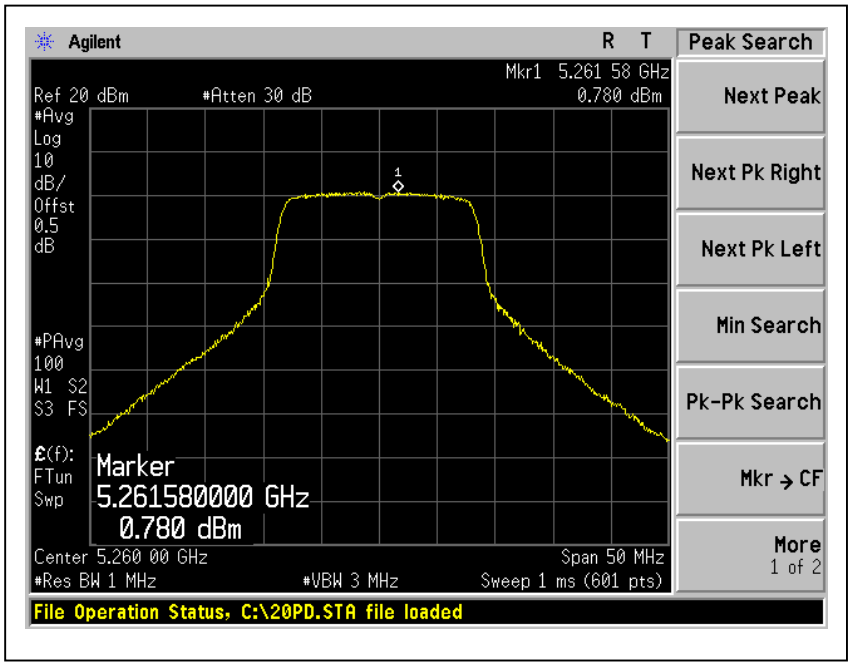
CH14


Agilent
R T
Peak Search
Mkr1 5.601 42 GHz
Ref 20 dBm
#Atten 30 dB
0.401 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Mkr → CF
Center 5.600 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

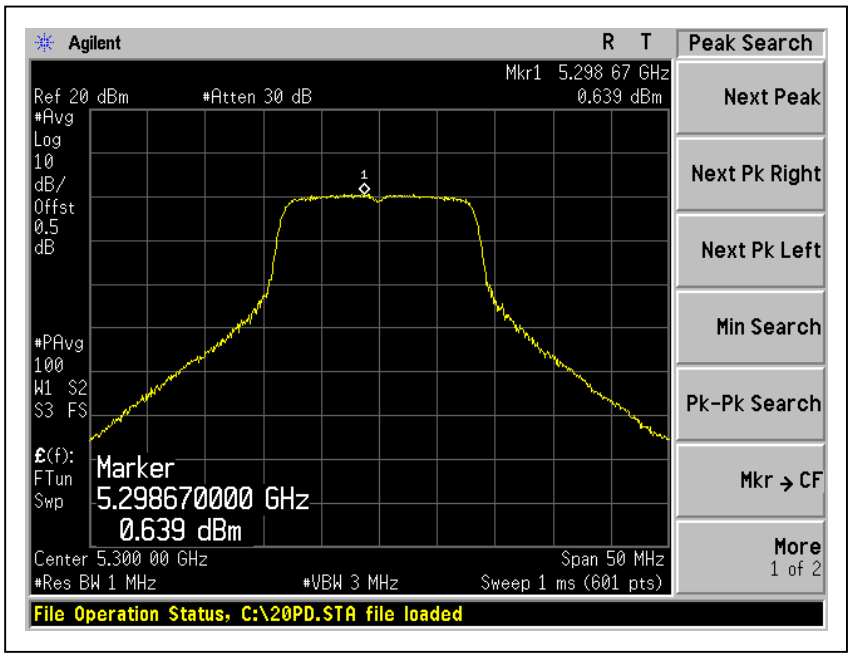
CH19


Agilent
R T
Peak Search
Mkr1 5.700 92 GHz
Ref 20 dBm
#Atten 30 dB
0.200 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.700920000 GHz
0.200 dBm
Mkr → CF
Center 5.700 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

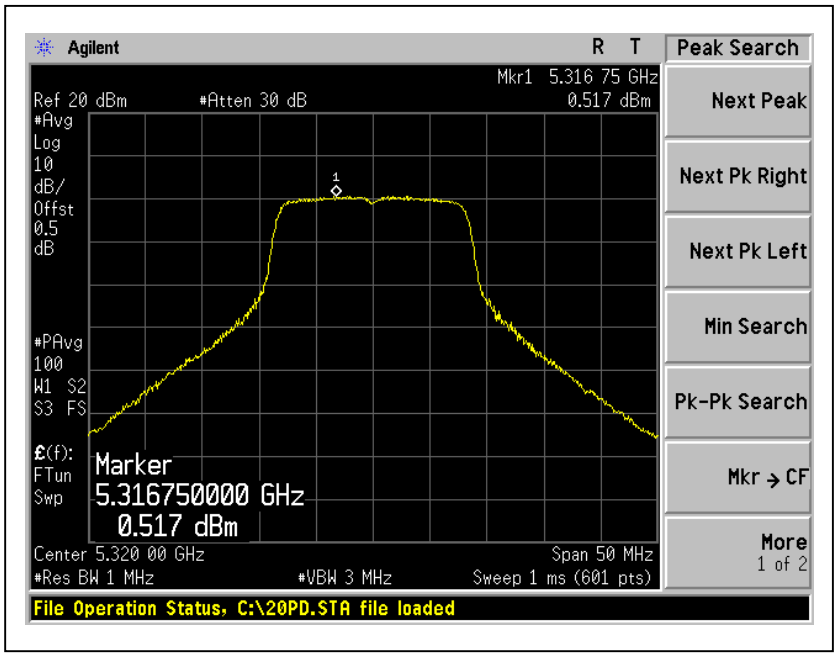
For Chain (2) : CH5



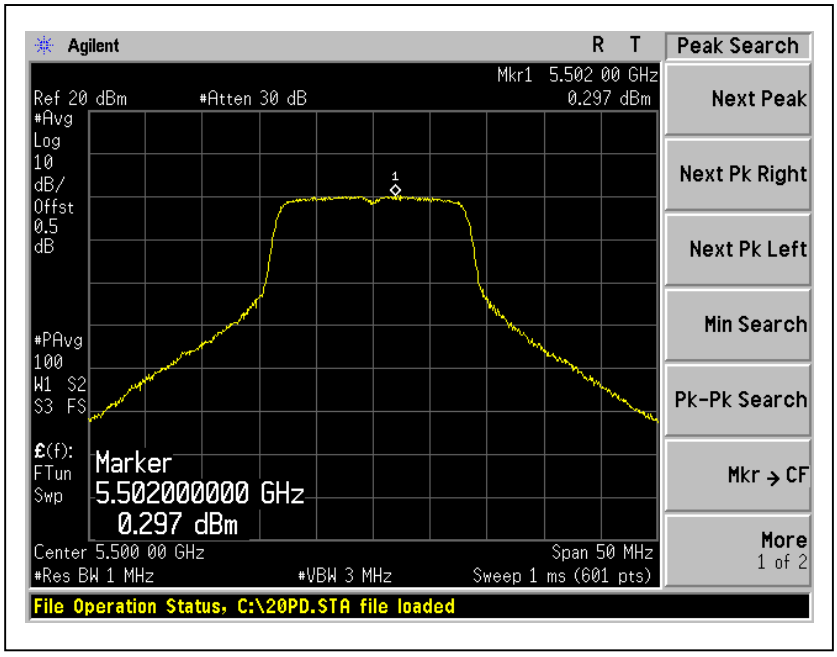
CH7



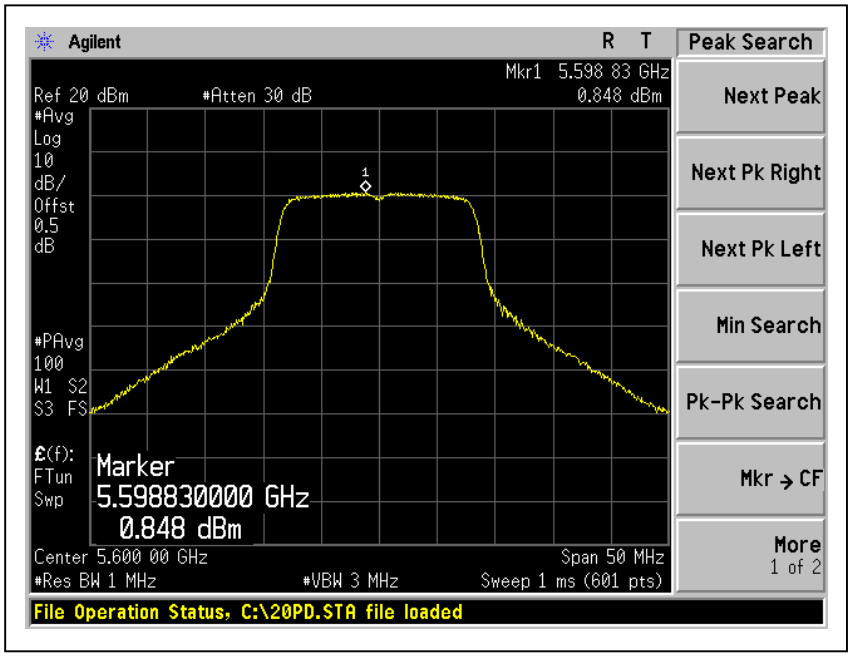
CH8


Agilent
R T
Peak Search
Mkr1 5.316 75 GHz
0.517 dBm
Ref 20 dBm
#Atten 30 dB
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.316750000 GHz
0.517 dBm
Mkr → CF
More
1 of 2
Center 5.320 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

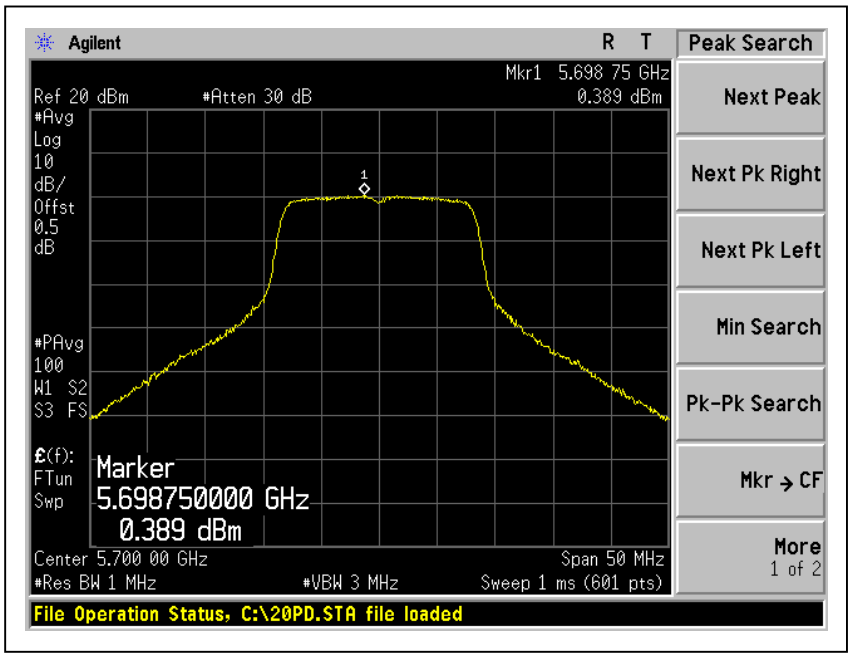
CH9


Agilent
R T
Peak Search
Mkr1 5.502 00 GHz
0.297 dBm
Ref 20 dBm
#Atten 30 dB
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.502000000 GHz
0.297 dBm
Mkr → CF
More
1 of 2
Center 5.500 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH14


Agilent
R T
Peak Search
Mkr1 5.598 83 GHz
0.848 dBm
Ref 20 dBm
#Atten 30 dB
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.598830000 GHz
0.848 dBm
Mkr → CF
More
1 of 2
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH19

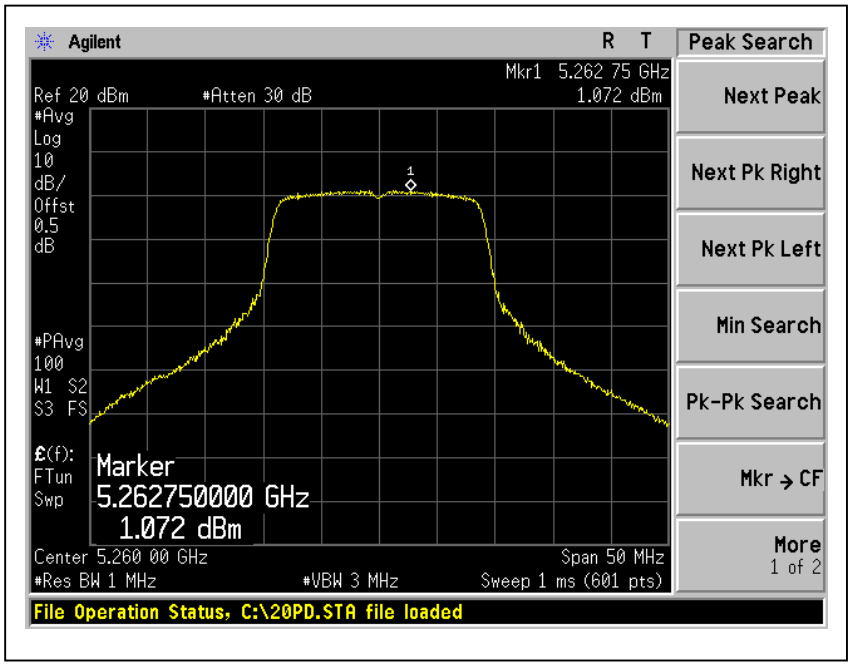

Agilent
R T
Peak Search
Mkr1 5.698 75 GHz
0.389 dBm
Ref 20 dBm
#Atten 30 dB
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.698750000 GHz
0.389 dBm
Mkr → CF
More
1 of 2
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

DRAFT 802.11n (20MHz) OFDM MODULATION:

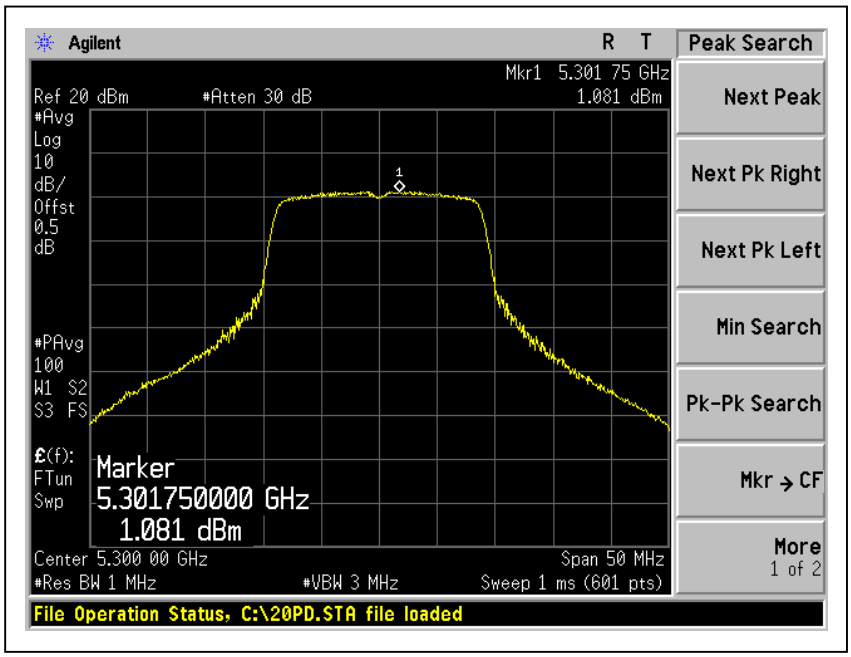
MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL OUTPUT POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
		Chain (0)	Chain(1)	Chain(2)			
5	5260	1.072	-0.583	0.613	5.193	11	PASS
7	5300	1.081	-0.050	0.381	5.269	11	PASS
8	5320	1.171	-0.155	0.031	5.160	11	PASS
9	5500	-0.070	1.234	0.225	5.271	11	PASS
14	5600	0.042	0.006	0.241	4.869	11	PASS
19	5700	0.629	0.162	0.178	5.100	11	PASS

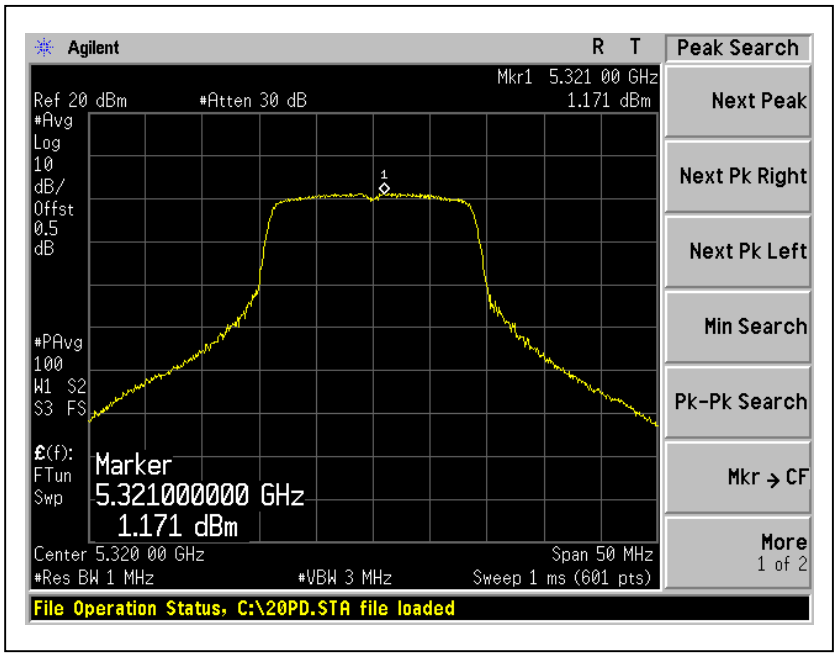
For Chain (0) : CH5



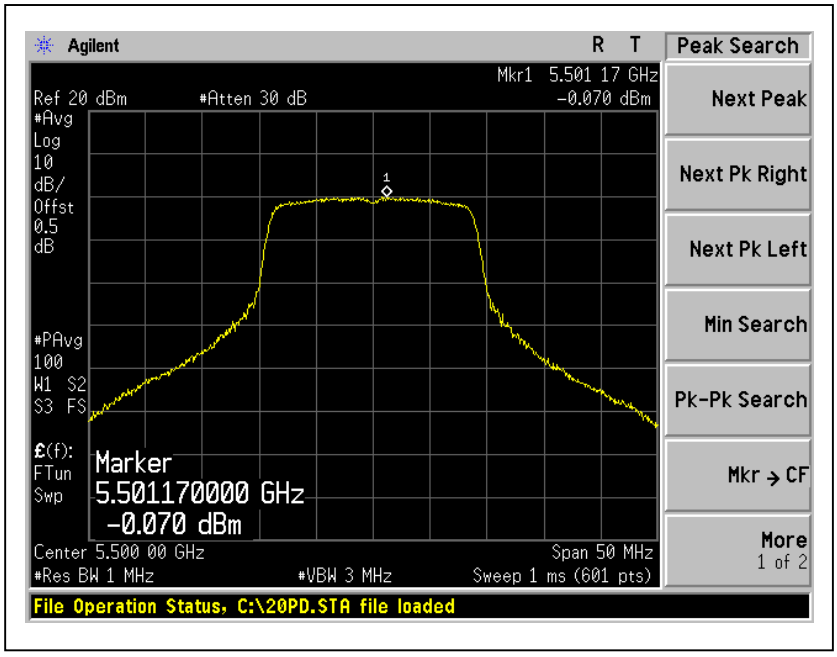
CH7



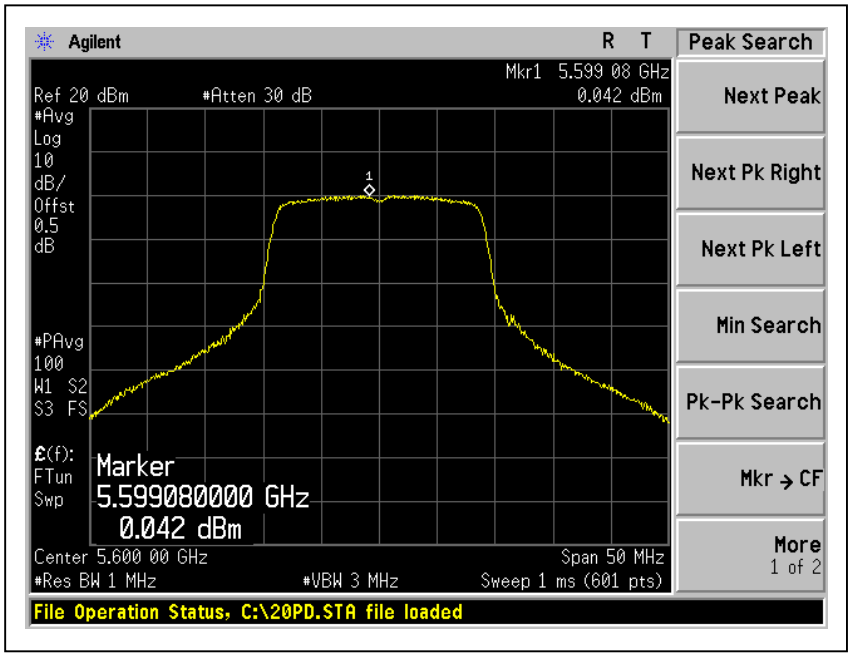
CH8


Agilent
R T
Peak Search
Mkr1 5.321 00 GHz
Ref 20 dBm
#Atten 30 dB
1.171 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.321000000 GHz
1.171 dBm
Mkr → CF
More
1 of 2
Center 5.320 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

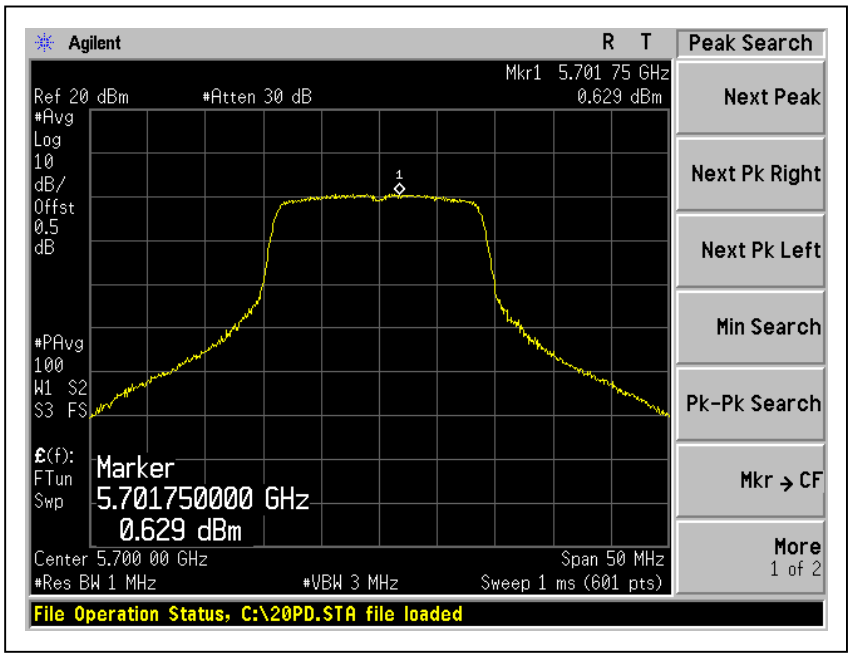
CH9


Agilent
R T
Peak Search
Mkr1 5.501 17 GHz
Ref 20 dBm
#Atten 30 dB
-0.070 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.501170000 GHz
-0.070 dBm
Mkr → CF
More
1 of 2
Center 5.500 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

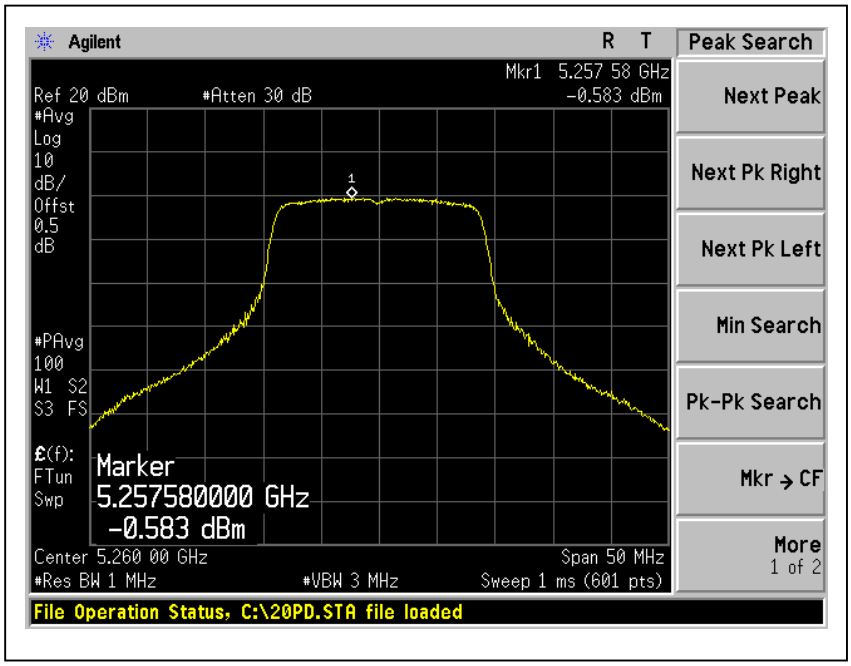
CH14


Agilent
R T
Peak Search
Mkr1 5.599 08 GHz
Ref 20 dBm
#Atten 30 dB
0.042 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.599080000 GHz
0.042 dBm
Mkr → CF
More
1 of 2
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

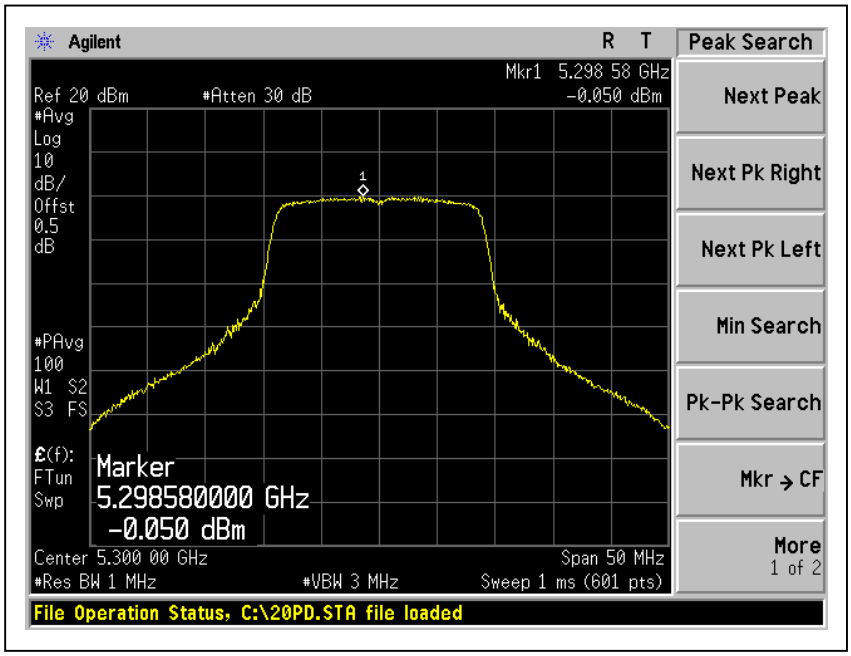
CH19


Agilent
R T
Peak Search
Mkr1 5.701 75 GHz
Ref 20 dBm
#Atten 30 dB
0.629 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.701750000 GHz
0.629 dBm
Mkr → CF
More
1 of 2
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

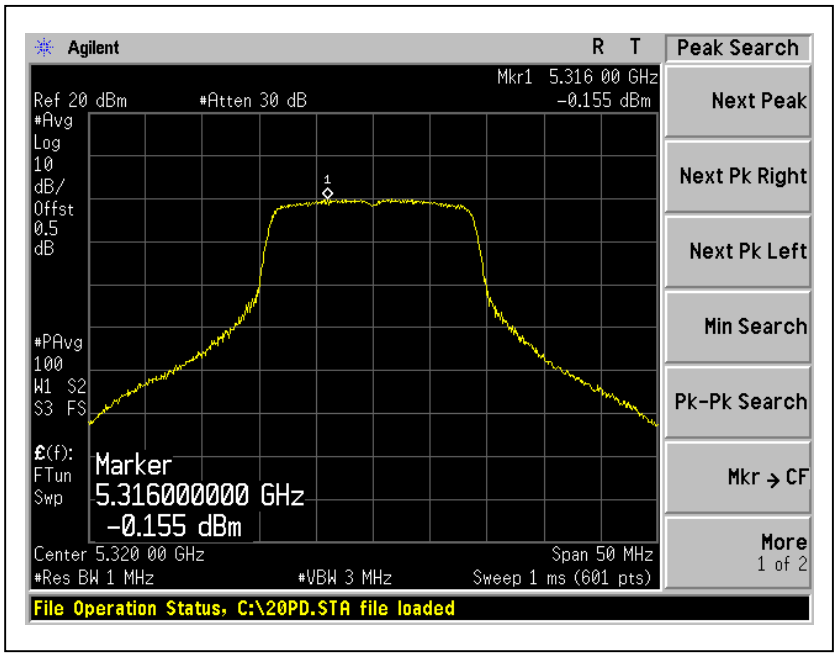
For Chain (1) : CH5



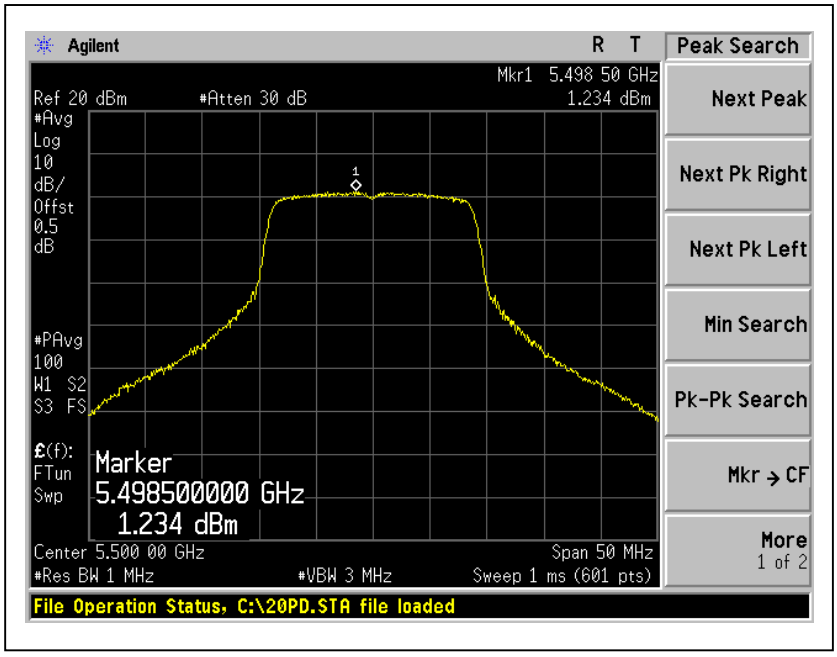
CH7



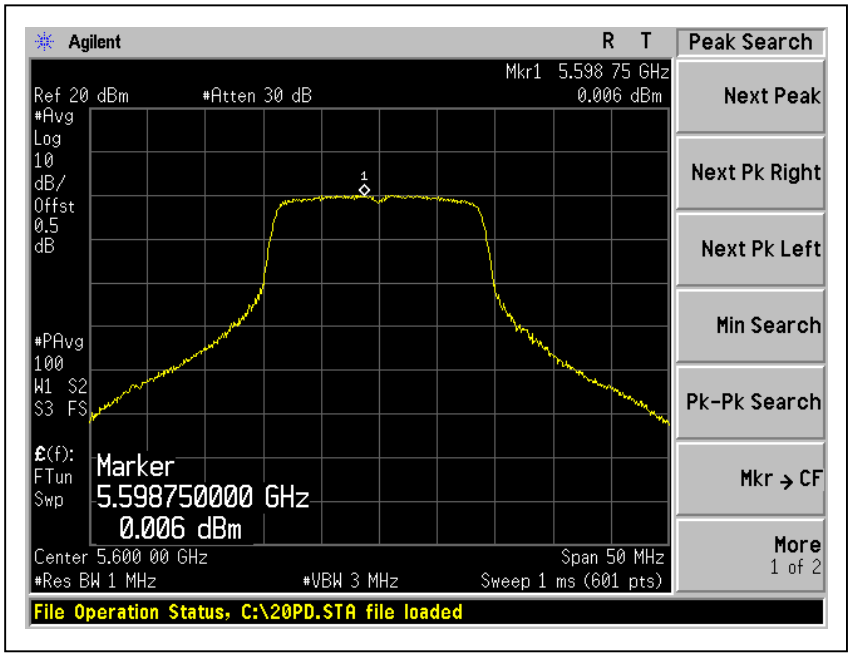
CH8


Agilent
R T
Peak Search
Mkr1 5.316 00 GHz
Ref 20 dBm
#Atten 30 dB
-0.155 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.316000000 GHz
-0.155 dBm
Mkr → CF
More
1 of 2
Center 5.320 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

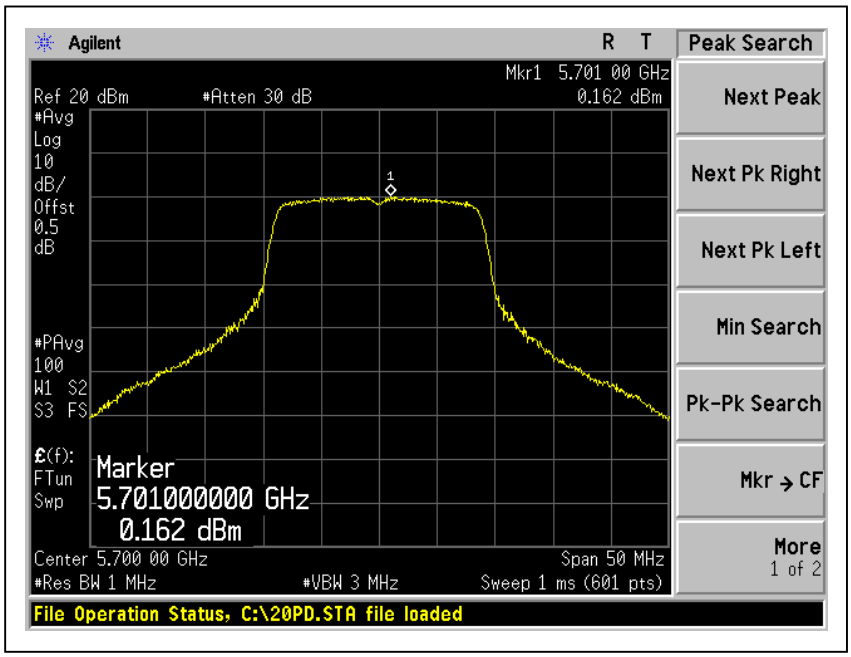
CH9


Agilent
R T
Peak Search
Mkr1 5.498 50 GHz
Ref 20 dBm
#Atten 30 dB
1.234 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.498500000 GHz
1.234 dBm
Mkr → CF
More
1 of 2
Center 5.500 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

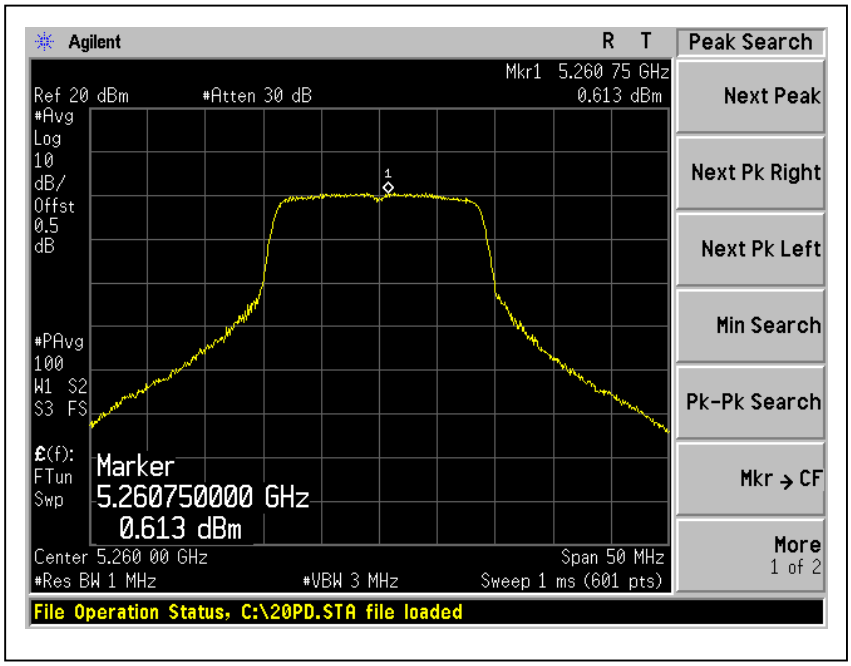
CH14


Agilent
R T
Peak Search
Mkr1 5.598 75 GHz
Ref 20 dBm
#Atten 30 dB
0.006 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.598750000 GHz
0.006 dBm
Mkr → CF
More
1 of 2
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

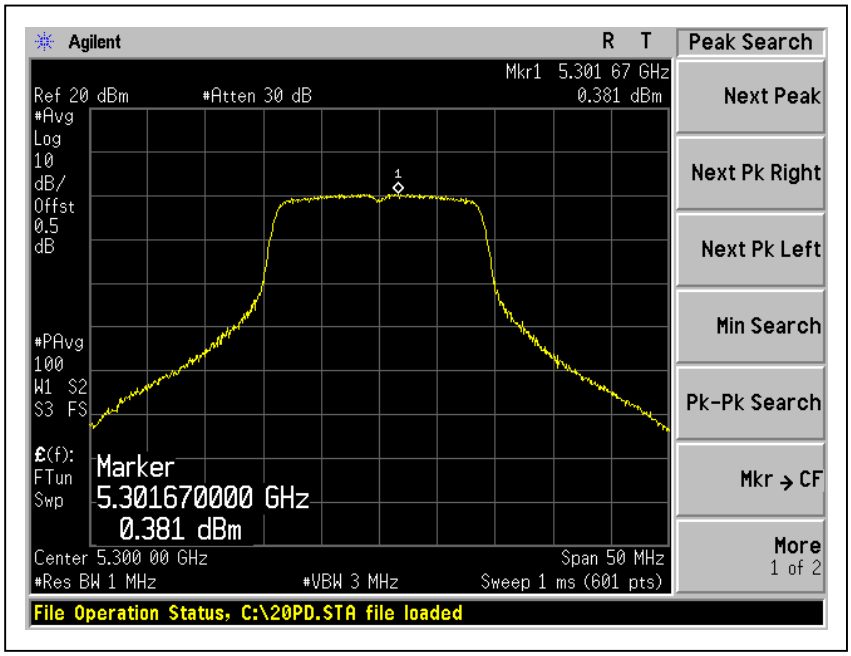
CH19


Agilent
R T
Peak Search
Mkr1 5.701 00 GHz
Ref 20 dBm
#Atten 30 dB
0.162 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.701000000 GHz
0.162 dBm
Mkr → CF
More
1 of 2
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

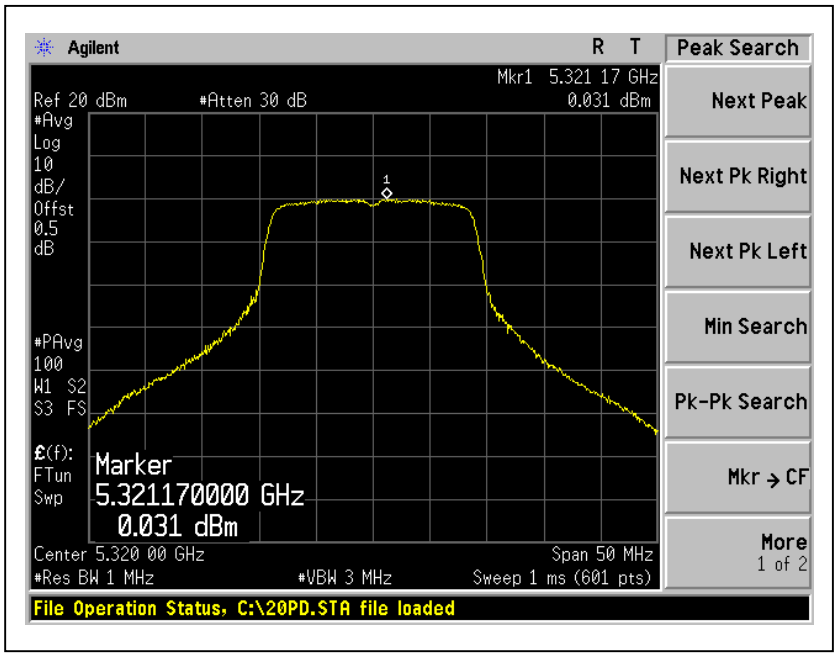
For Chain (2) : CH5



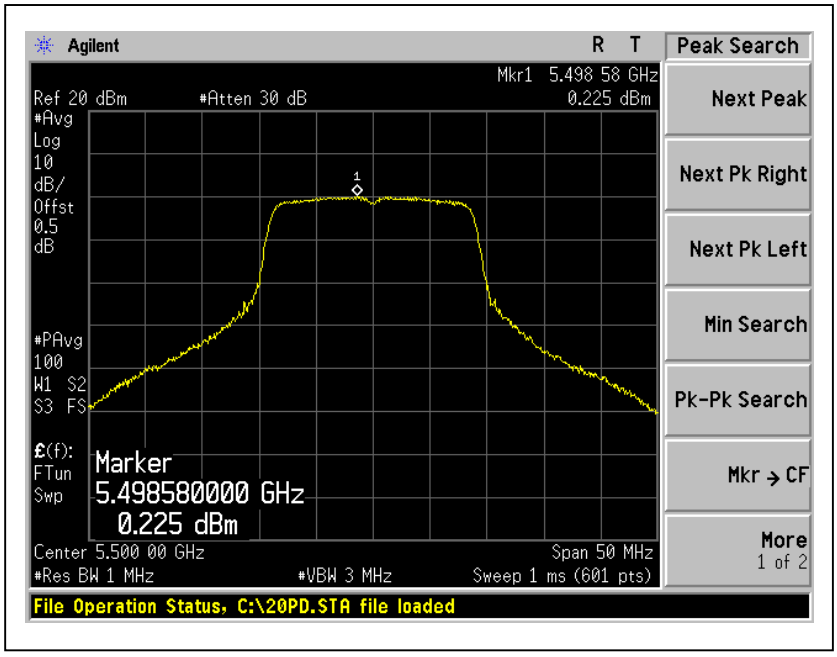
CH7



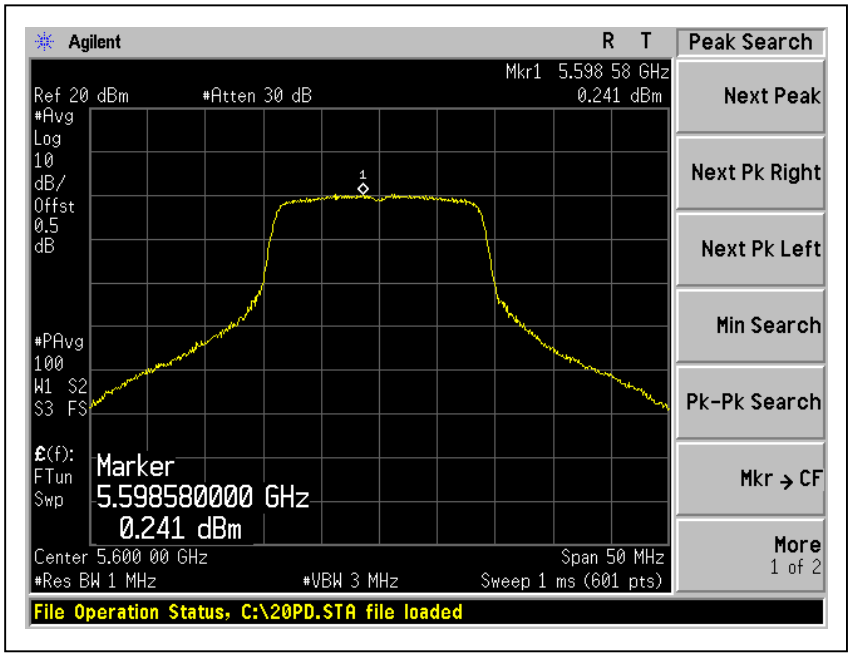
CH8


Agilent
R T
Peak Search
Mkr1 5.321 17 GHz
Ref 20 dBm
#Atten 30 dB
0.031 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.321170000 GHz
0.031 dBm
Mkr → CF
More
1 of 2
Center 5.320 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

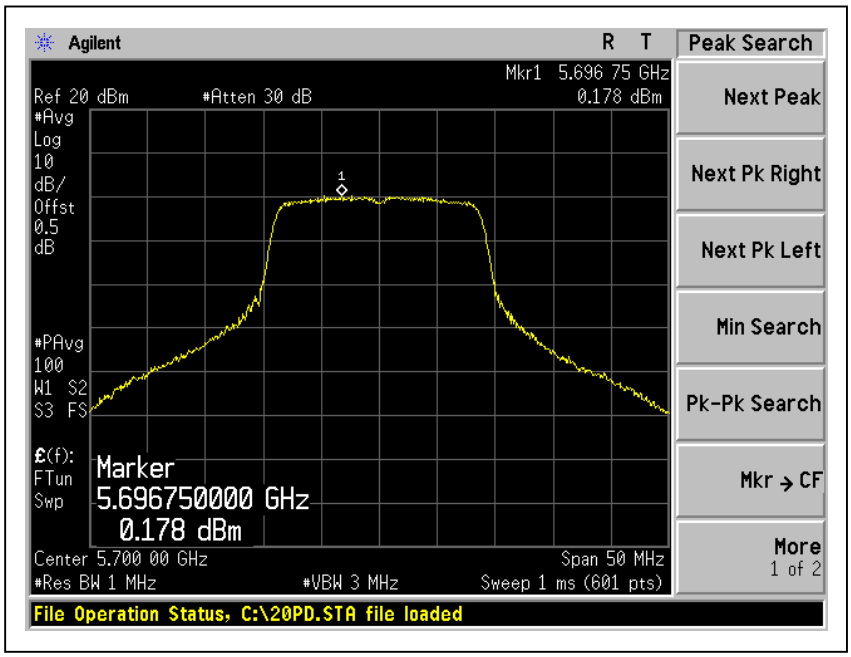
CH9


Agilent
R T
Peak Search
Mkr1 5.498 58 GHz
Ref 20 dBm
#Atten 30 dB
0.225 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.498580000 GHz
0.225 dBm
Mkr → CF
More
1 of 2
Center 5.500 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH14


Agilent
R T
Peak Search
Mkr1 5.598 58 GHz
Ref 20 dBm
#Atten 30 dB
0.241 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.598580000 GHz
0.241 dBm
Mkr → CF
More
1 of 2
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH19

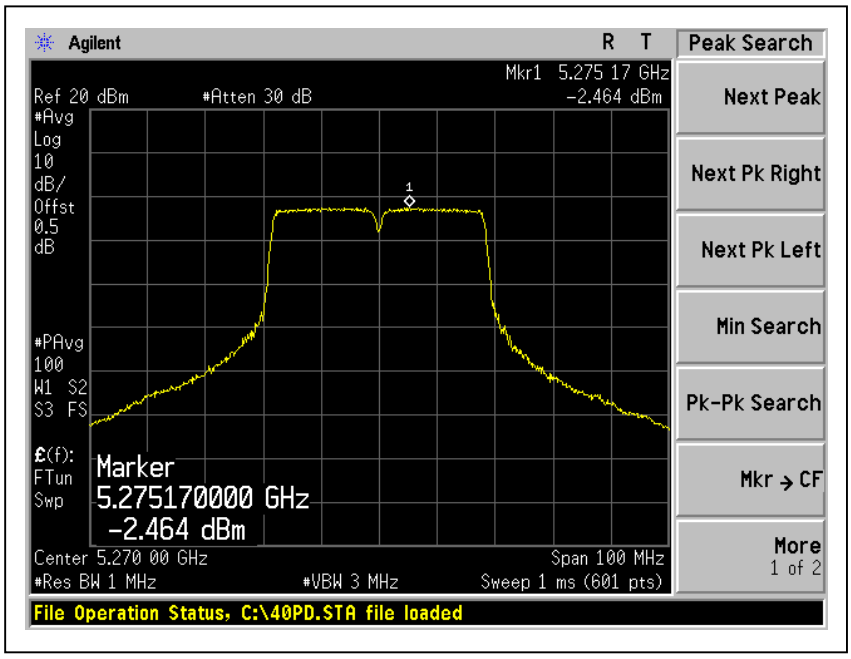

Agilent
R T
Peak Search
Mkr1 5.696 75 GHz
Ref 20 dBm
#Atten 30 dB
0.178 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.696750000 GHz
0.178 dBm
Mkr → CF
More
1 of 2
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

DRAFT 802.11n (40MHz) OFDM MODULATION:

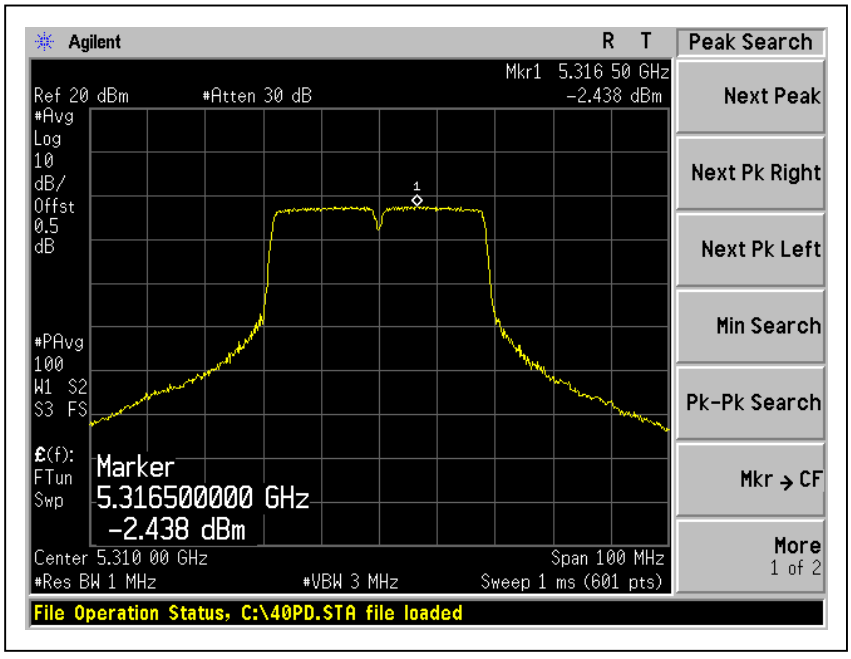
MODULATION TYPE	BPSK	**TRANSFER RATE**	13.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	26deg.C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL OUTPUT POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
		Chain (0)	Chain(1)	Chain(2)			
3	5270	-2.464	-3.700	-3.409	1.614	11	PASS
4	5310	-2.438	-3.277	-3.491	1.726	11	PASS
5	5510	-7.817	-7.956	-7.283	-2.907	11	PASS
7	5590	-3.607	-2.857	-3.556	1.446	11	PASS
9	5670	-2.752	-3.670	-3.643	1.440	11	PASS

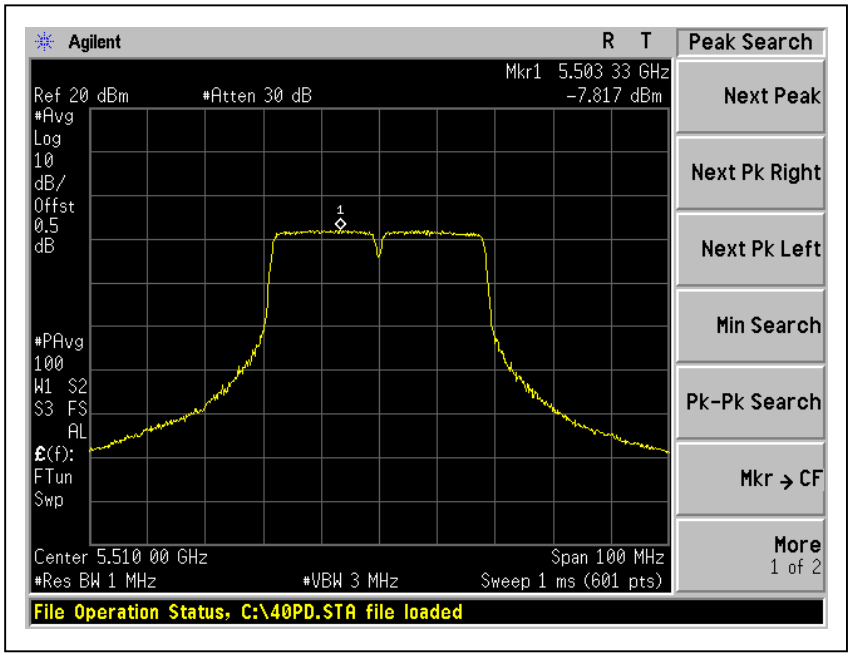
For Chain (0) : CH3



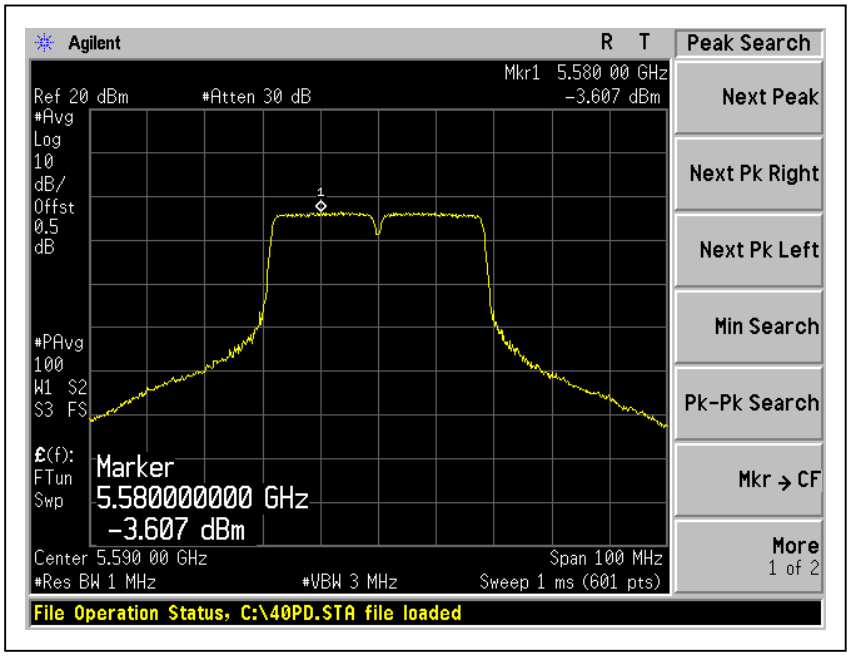
CH4



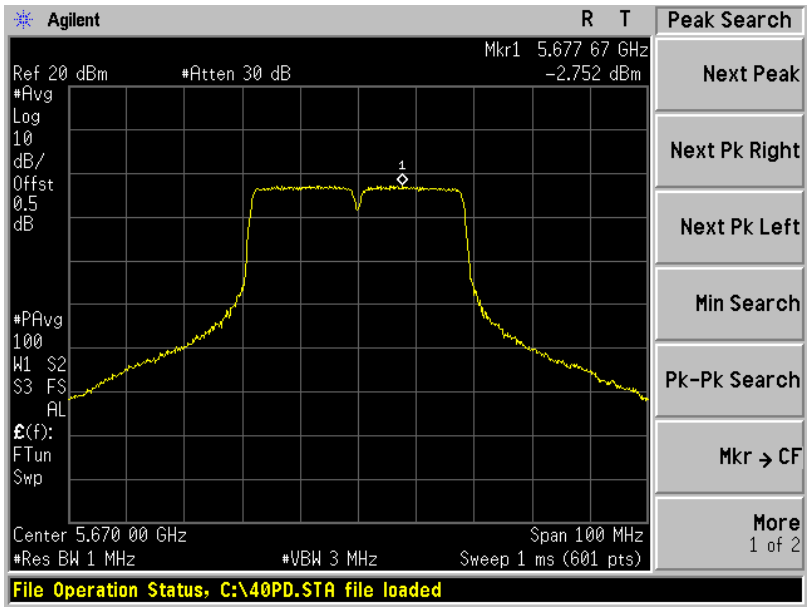
CH5


Agilent
R T
Peak Search
Mkr1 5.503 33 GHz
Ref 20 dBm
#Atten 30 dB
-7.817 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.510 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

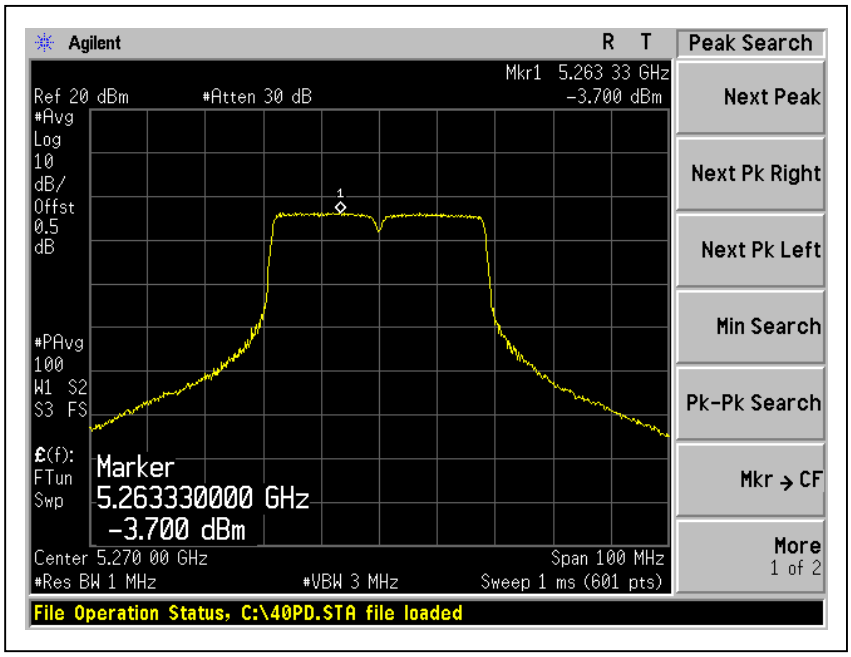
CH7


Agilent
R T
Peak Search
Mkr1 5.580 00 GHz
Ref 20 dBm
#Atten 30 dB
-3.607 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
£(f):
FTun
Swp
Marker
5.580000000 GHz
-3.607 dBm
Pk-Pk Search
Mkr → CF
Center 5.590 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

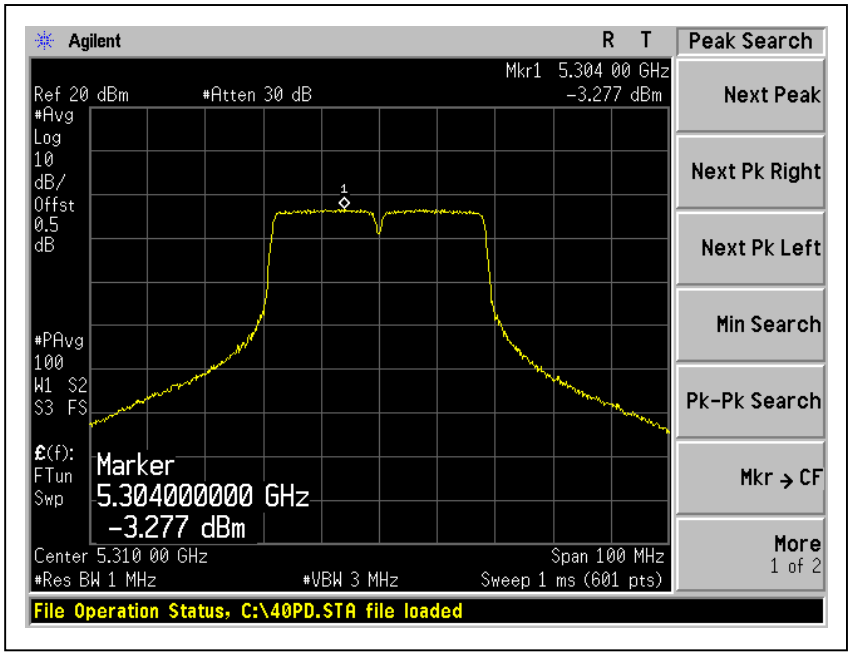
CH9


Agilent
R T
Peak Search
Mkr1 5.677 67 GHz
Ref 20 dBm
#Atten 30 dB
-2.752 dBm
#Avg
Log
10
dB/
Offst
0.5
dB
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 5.670 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

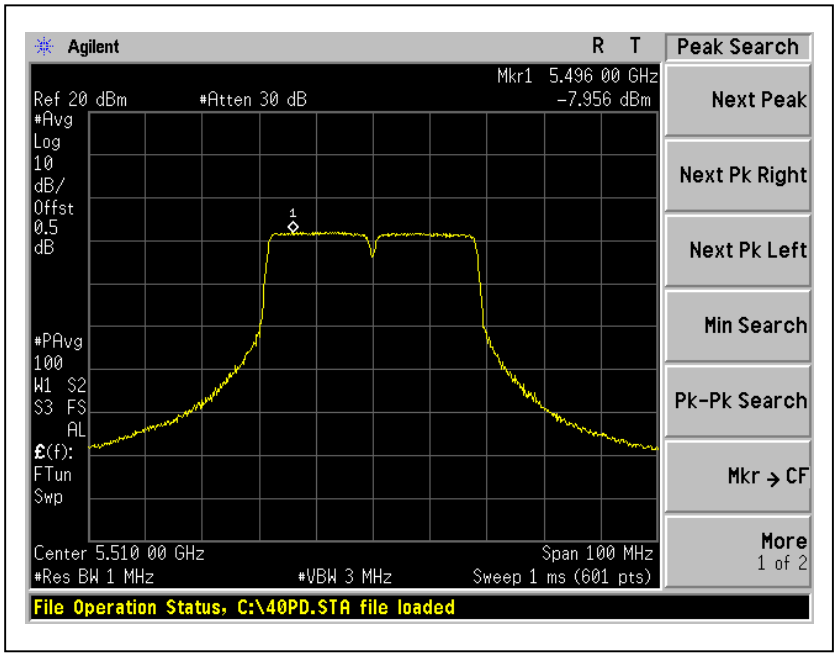
For Chain (1) :CH3



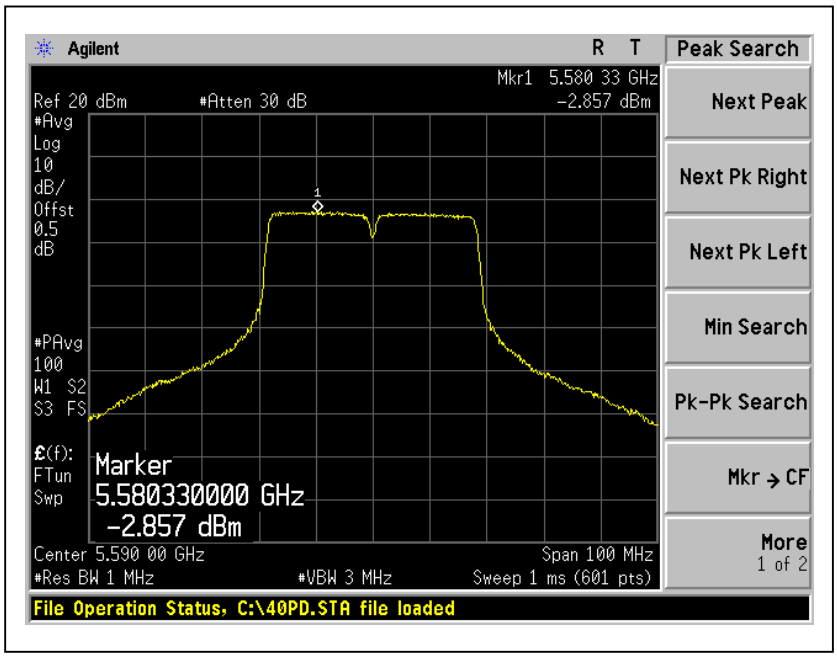
CH4



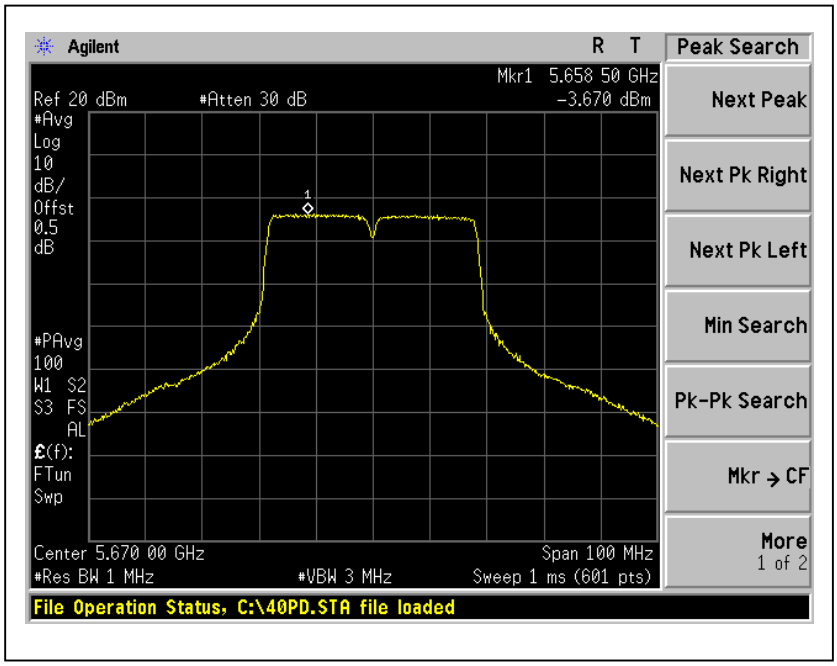
CH5


Agilent
R T
Peak Search
Mkr1 5.496 00 GHz
Ref 20 dBm
#Atten 30 dB
-7.956 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.510 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

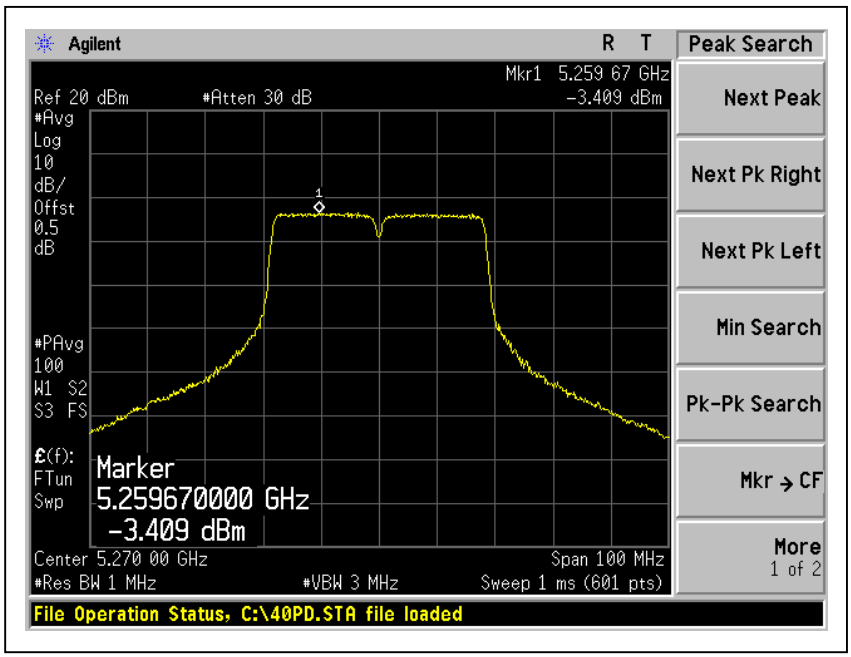
CH7


Agilent
R T
Peak Search
Mkr1 5.580 33 GHz
Ref 20 dBm
#Atten 30 dB
-2.857 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
£(f):
FTun
Swp
Marker
5.580330000 GHz
-2.857 dBm
Pk-Pk Search
Mkr → CF
Center 5.590 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

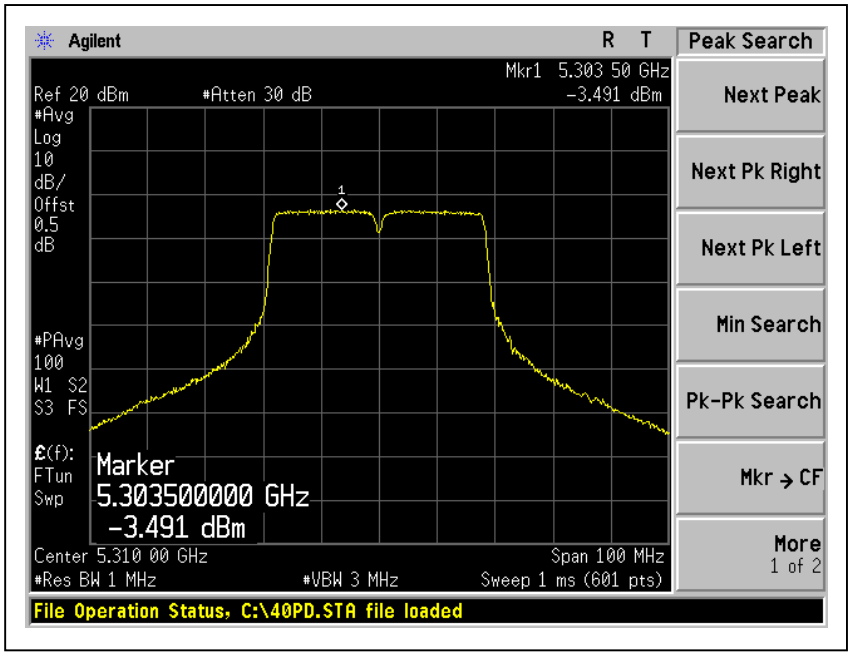
CH9


Agilent
R T
Peak Search
Mkr1 5.658 50 GHz
Ref 20 dBm
#Atten 30 dB
-3.670 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 5.670 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

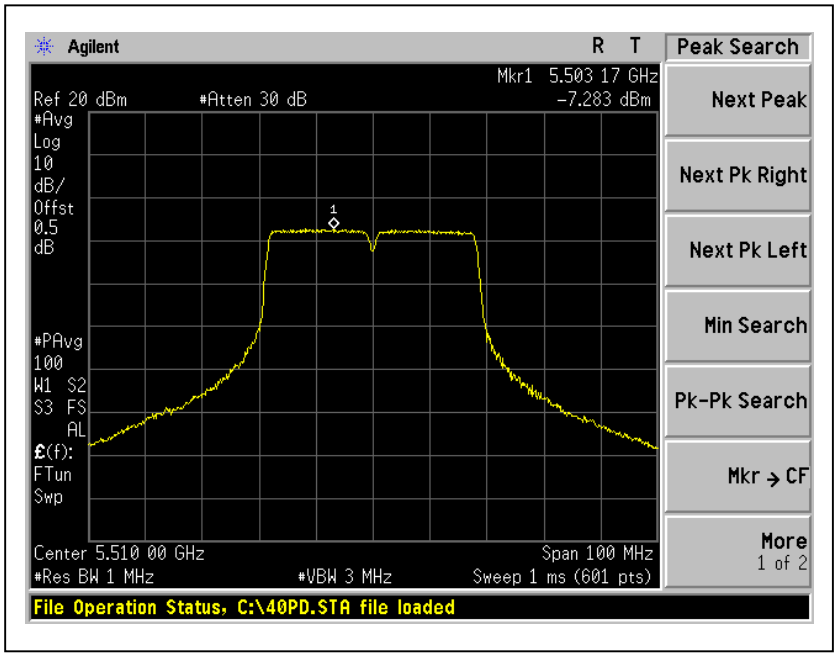
For Chain (2) :CH3



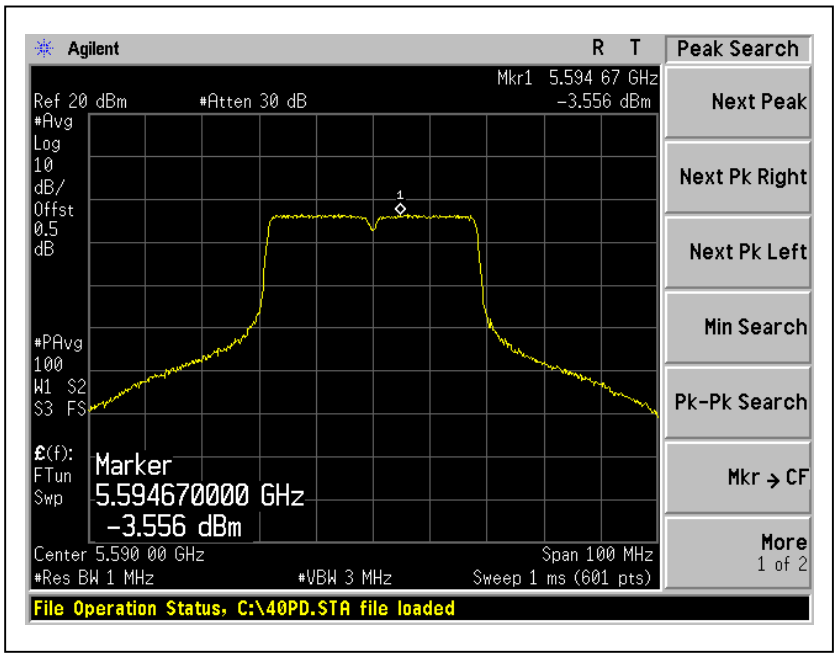
CH4



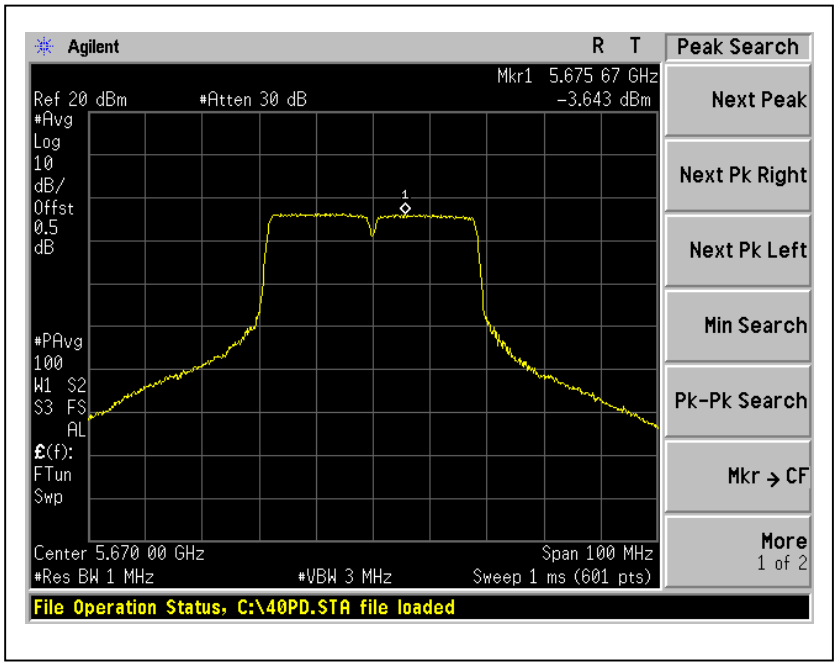
CH5


Agilent
R T
Peak Search
Mkr1 5.503 17 GHz
Ref 20 dBm
#Atten 30 dB
-7.283 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.510 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

CH7


Agilent
R T
Peak Search
Mkr1 5.594 67 GHz
Ref 20 dBm
#Atten 30 dB
-3.556 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
£(f):
FTun
Swp
Marker
5.594670000 GHz
-3.556 dBm
Pk-Pk Search
Mkr → CF
Center 5.590 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

CH9


Agilent
R T
Peak Search
Mkr1 5.675 67 GHz
Ref 20 dBm
#Atten 30 dB
-3.643 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.670 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

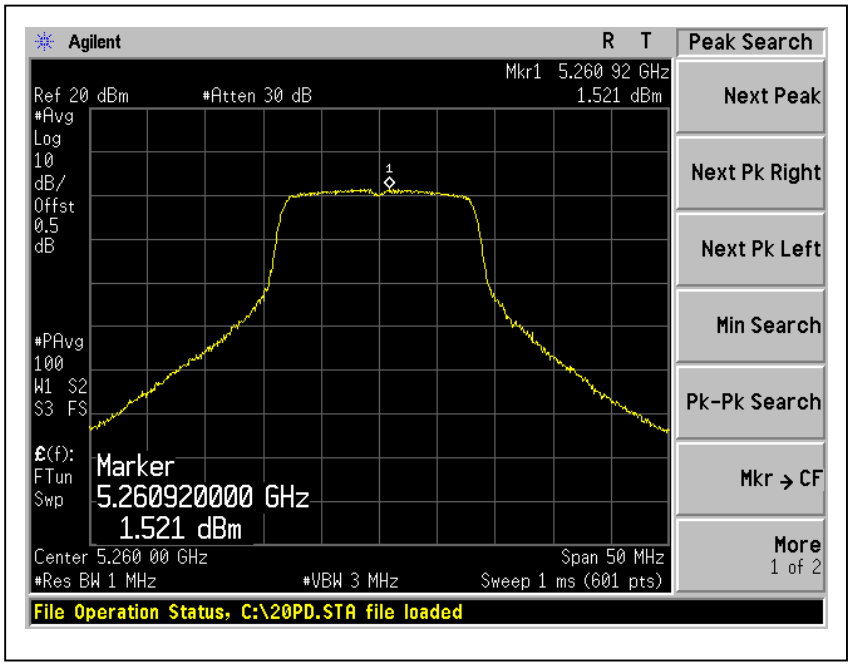
4.5.10 TEST RESULTS-ANTENNA 8

802.11a OFDM modulation

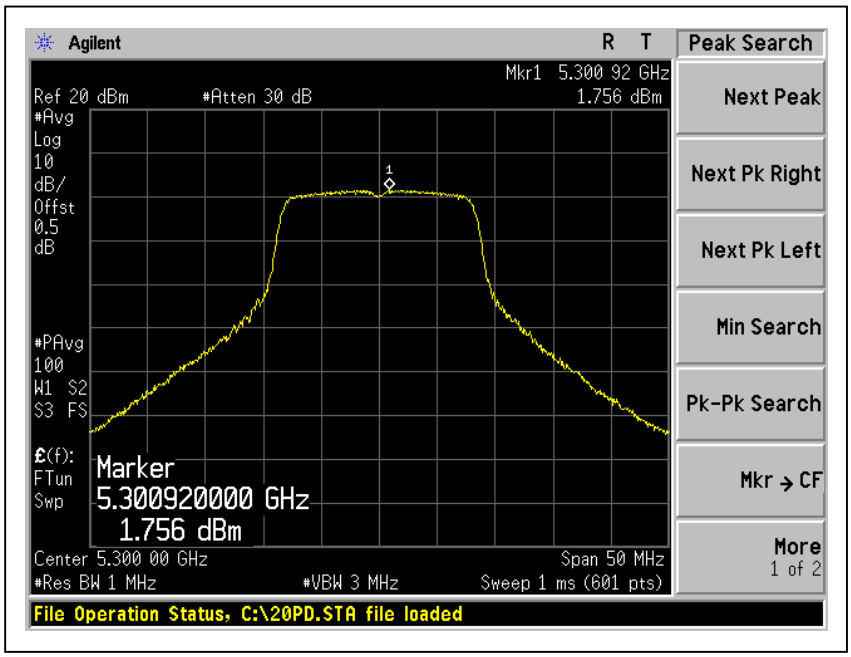
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL OUTPUT POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
		Chain (0)	Chain(1)	Chain(2)			
5	5260	1.521	-0.318	0.780	5.496	11	PASS
7	5300	1.756	-0.126	0.639	5.597	11	PASS
8	5320	1.817	0.563	0.517	5.778	11	PASS
9	5500	0.313	1.285	0.297	5.428	11	PASS
14	5600	0.572	0.401	0.848	5.383	11	PASS
19	5700	1.156	0.200	0.389	5.373	11	PASS

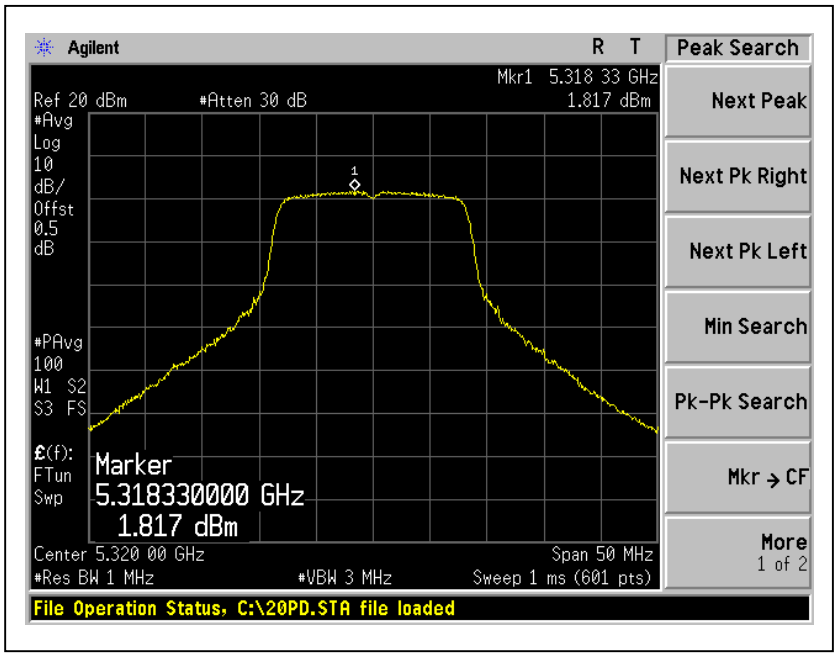
For Chain (0) : CH5



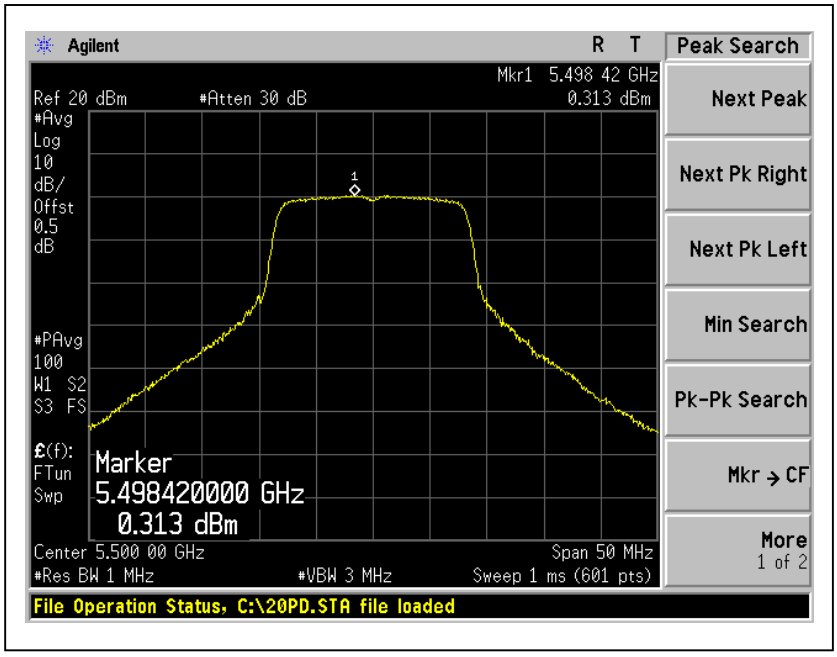
CH7



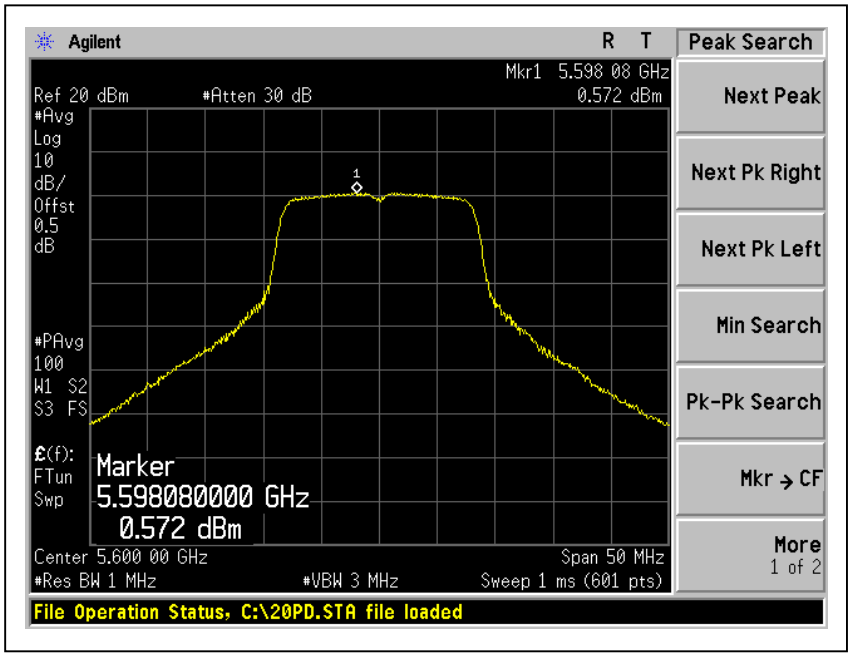
CH8


Agilent
R T
Peak Search
Mkr1 5.318 33 GHz
Ref 20 dBm
#Atten 30 dB
1.817 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.318330000 GHz
1.817 dBm
Mkr → CF
More
1 of 2
Center 5.320 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

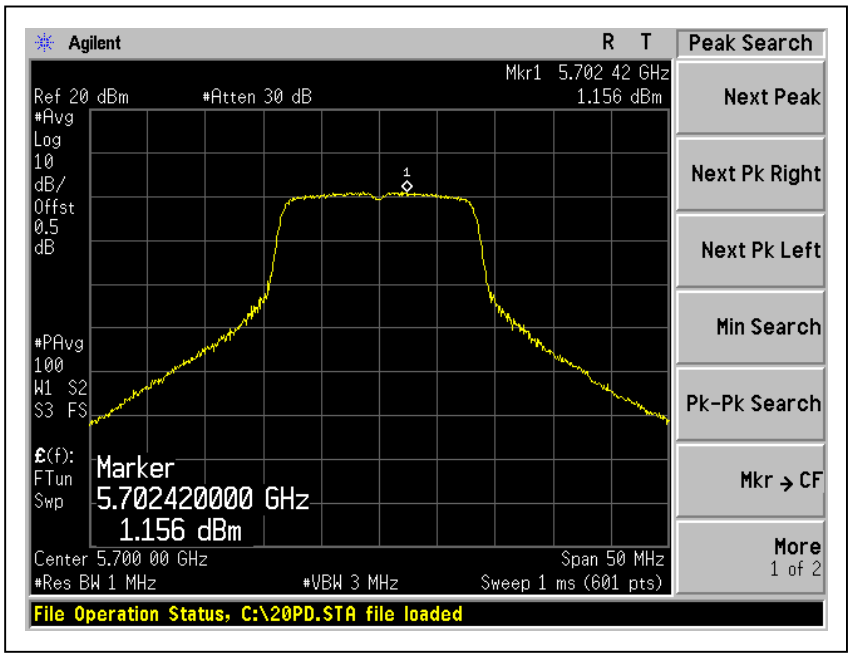
CH9


Agilent
R T
Peak Search
Mkr1 5.498 42 GHz
Ref 20 dBm
#Atten 30 dB
0.313 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.498420000 GHz
0.313 dBm
Mkr → CF
More
1 of 2
Center 5.500 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

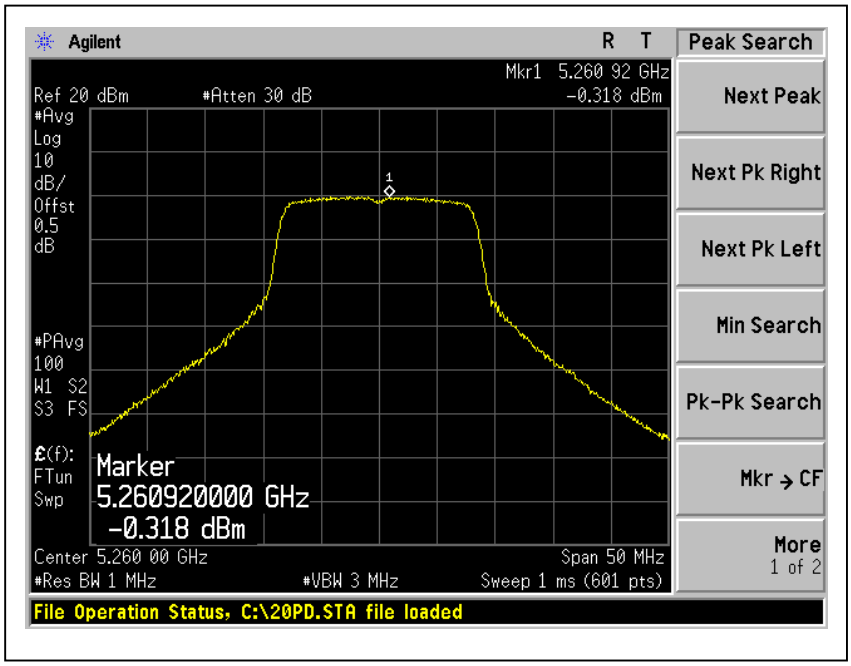
CH14


Agilent
R T
Peak Search
Mkr1 5.598 08 GHz
Ref 20 dBm
#Atten 30 dB
0.572 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.598080000 GHz
0.572 dBm
Mkr → CF
More
1 of 2
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

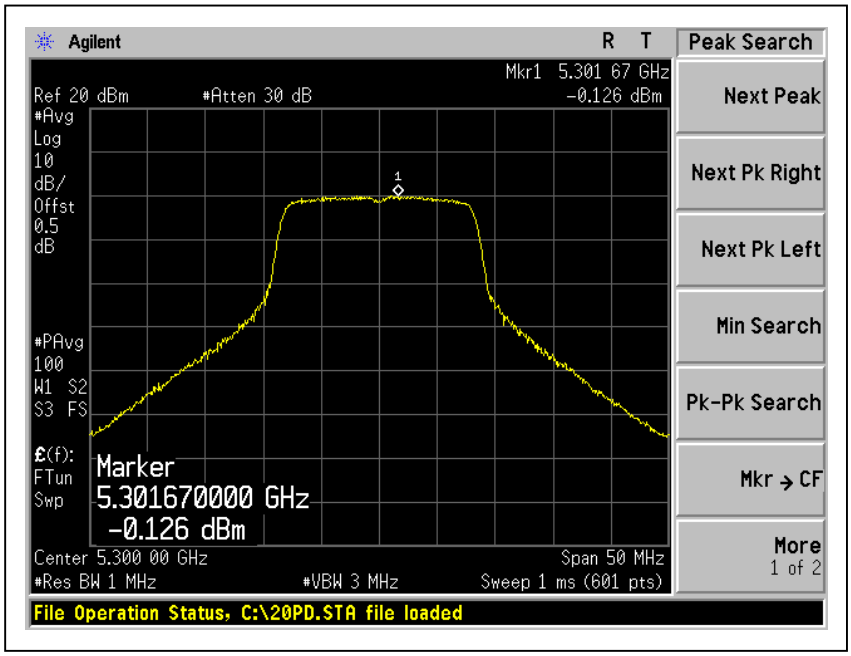
CH19


Agilent
R T
Peak Search
Mkr1 5.702 42 GHz
Ref 20 dBm
#Atten 30 dB
1.156 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.702420000 GHz
1.156 dBm
Mkr → CF
More
1 of 2
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

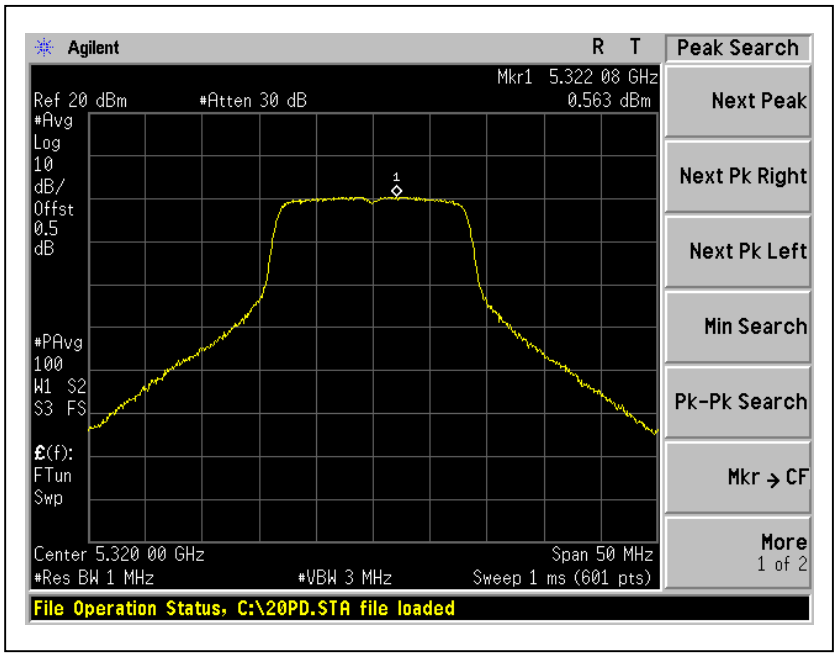
For Chain (1) : CH5



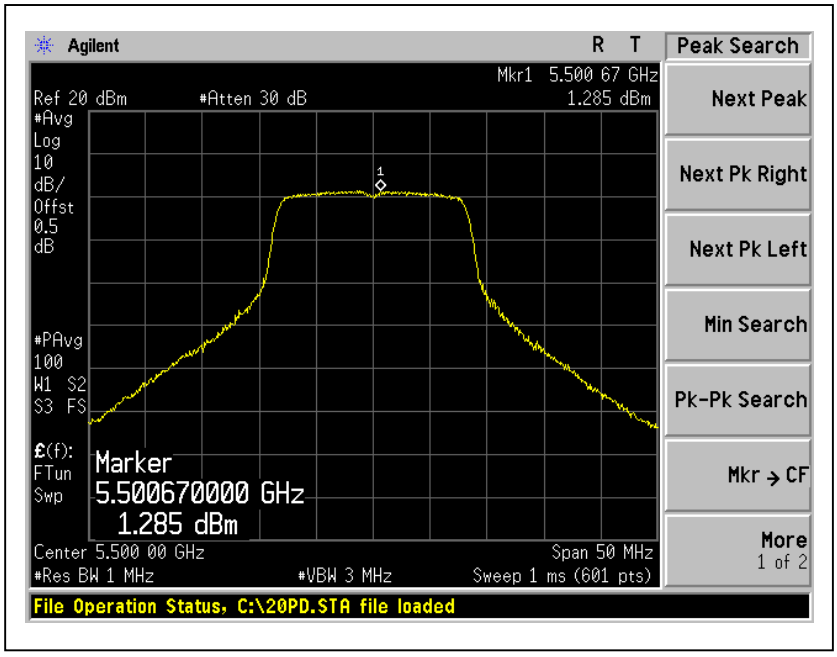
CH7



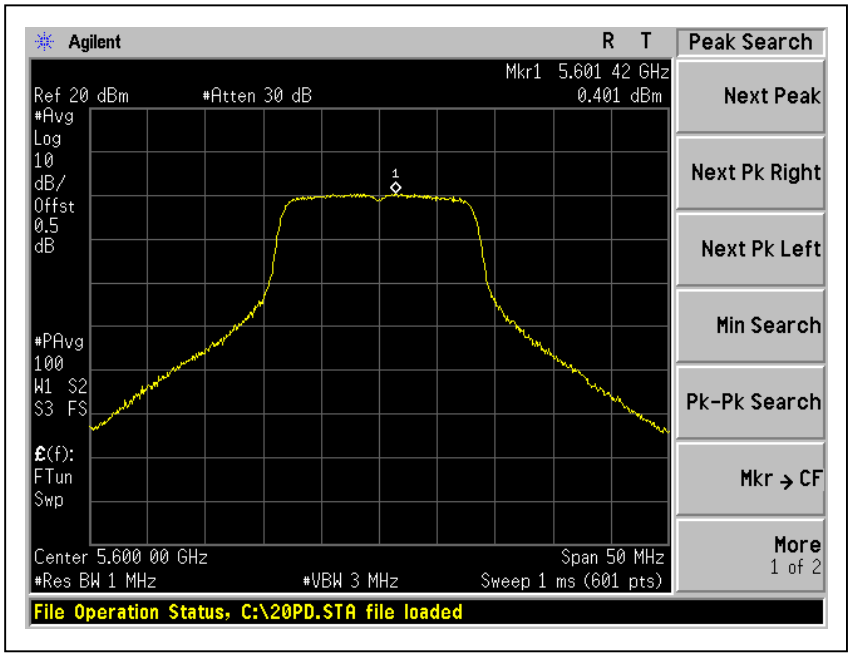
CH8


Agilent
R T
Peak Search
Mkr1 5.322 08 GHz
Ref 20 dBm
#Atten 30 dB
0.563 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Mkr → CF
More
1 of 2
Center 5.320 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

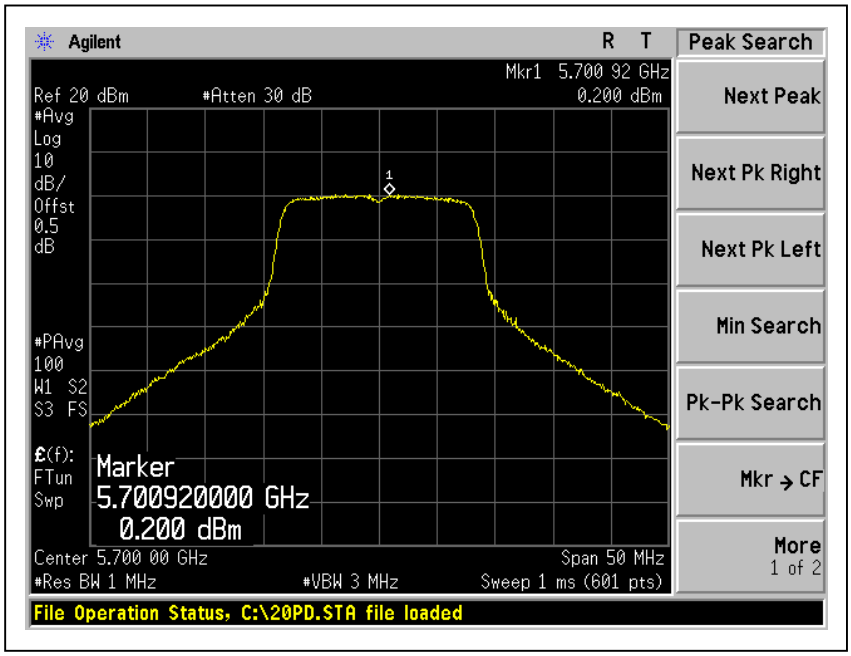
CH9


Agilent
R T
Peak Search
Mkr1 5.500 67 GHz
Ref 20 dBm
#Atten 30 dB
1.285 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.500670000 GHz
1.285 dBm
Mkr → CF
More
1 of 2
Center 5.500 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

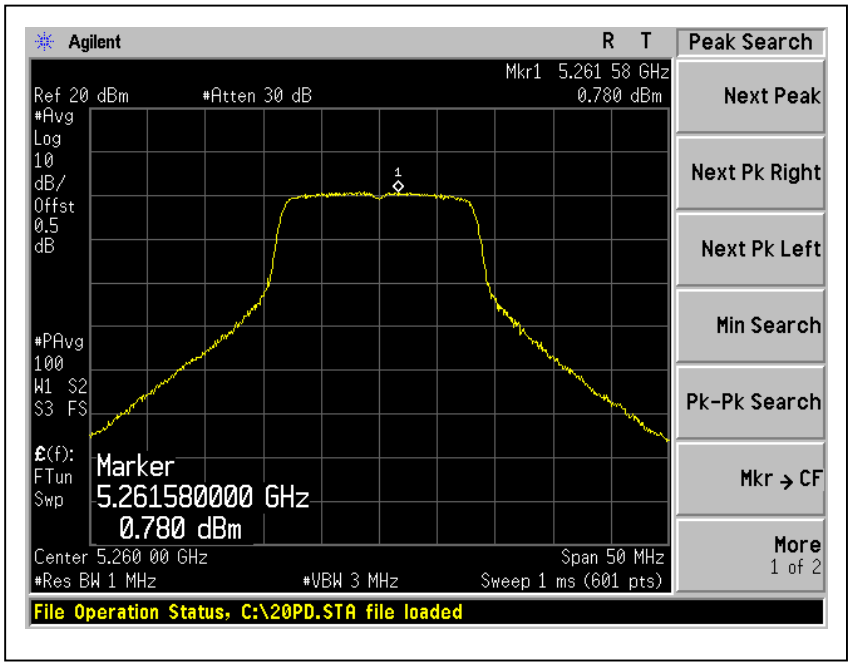
CH14


Agilent
R T
Peak Search
Mkr1 5.601 42 GHz
Ref 20 dBm
#Atten 30 dB
0.401 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Mkr → CF
Center 5.600 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

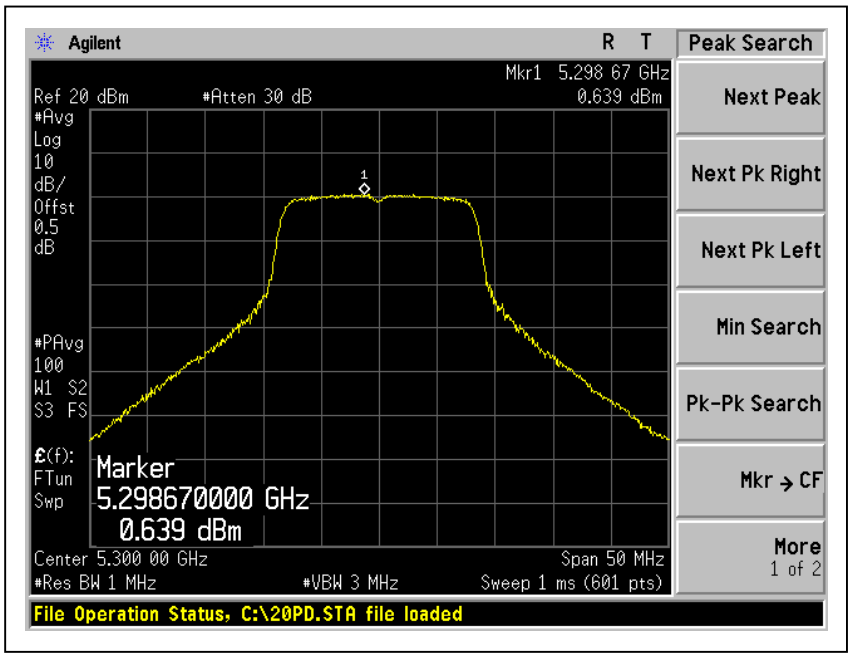
CH19


Agilent
R T
Peak Search
Mkr1 5.700 92 GHz
Ref 20 dBm
#Atten 30 dB
0.200 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.700920000 GHz
0.200 dBm
Mkr → CF
Center 5.700 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

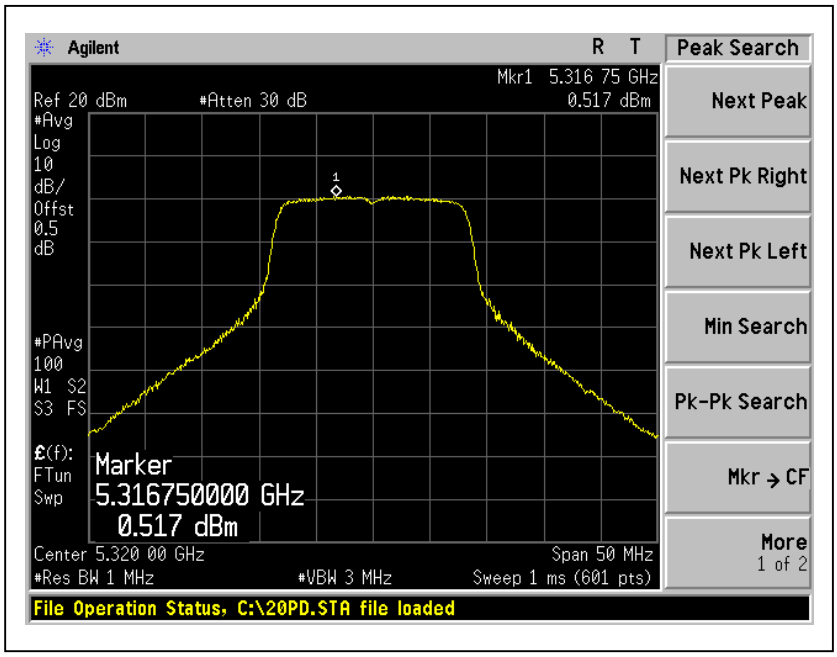
For Chain (2) : CH5



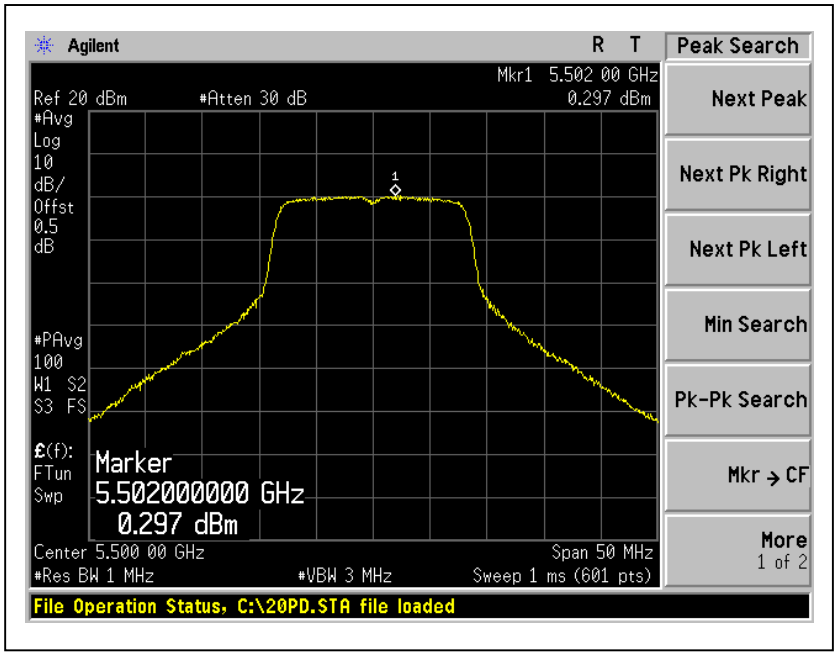
CH7



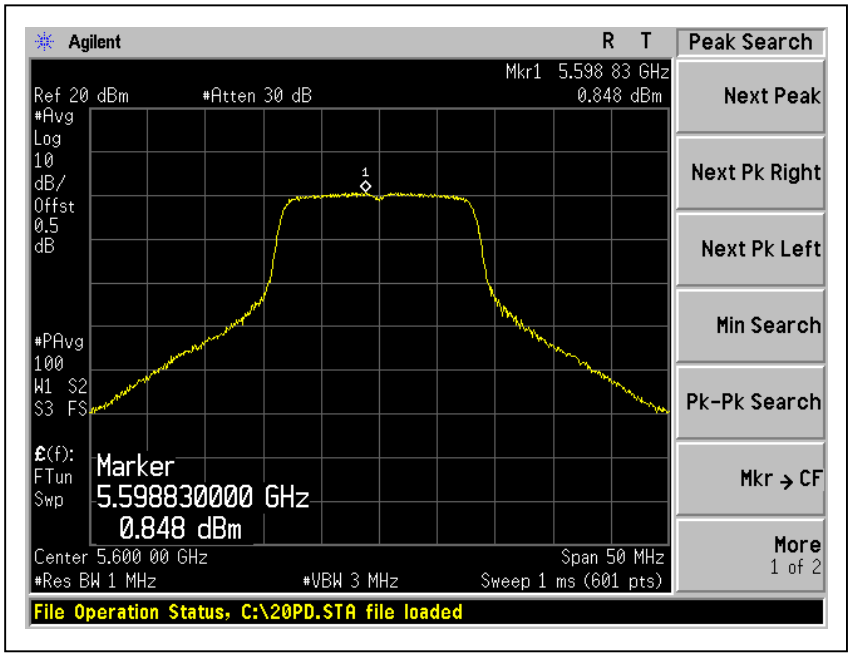
CH8


Agilent
R T
Peak Search
Mkr1 5.316 75 GHz
0.517 dBm
Ref 20 dBm
#Atten 30 dB
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.316750000 GHz
0.517 dBm
Mkr → CF
More
1 of 2
Center 5.320 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

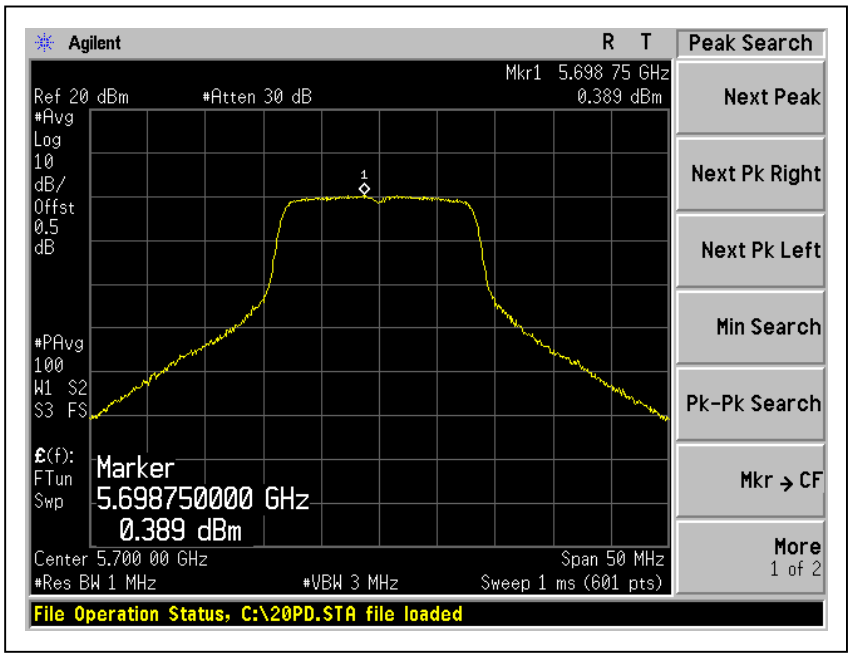
CH9


Agilent
R T
Peak Search
Mkr1 5.502 00 GHz
0.297 dBm
Ref 20 dBm
#Atten 30 dB
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.502000000 GHz
0.297 dBm
Mkr → CF
More
1 of 2
Center 5.500 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH14


Agilent
R T
Peak Search
Mkr1 5.598 83 GHz
0.848 dBm
Ref 20 dBm
#Atten 30 dB
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.598830000 GHz
0.848 dBm
Mkr → CF
More
1 of 2
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH19

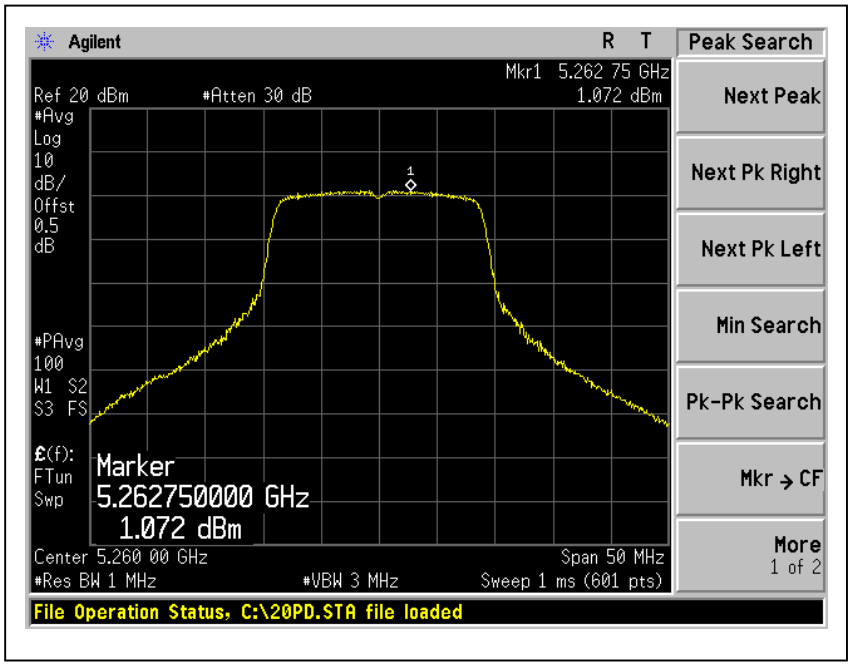

Agilent
R T
Peak Search
Mkr1 5.698 75 GHz
0.389 dBm
Ref 20 dBm
#Atten 30 dB
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.698750000 GHz
0.389 dBm
Mkr → CF
More
1 of 2
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

DRAFT 802.11n (20MHz) OFDM MODULATION:

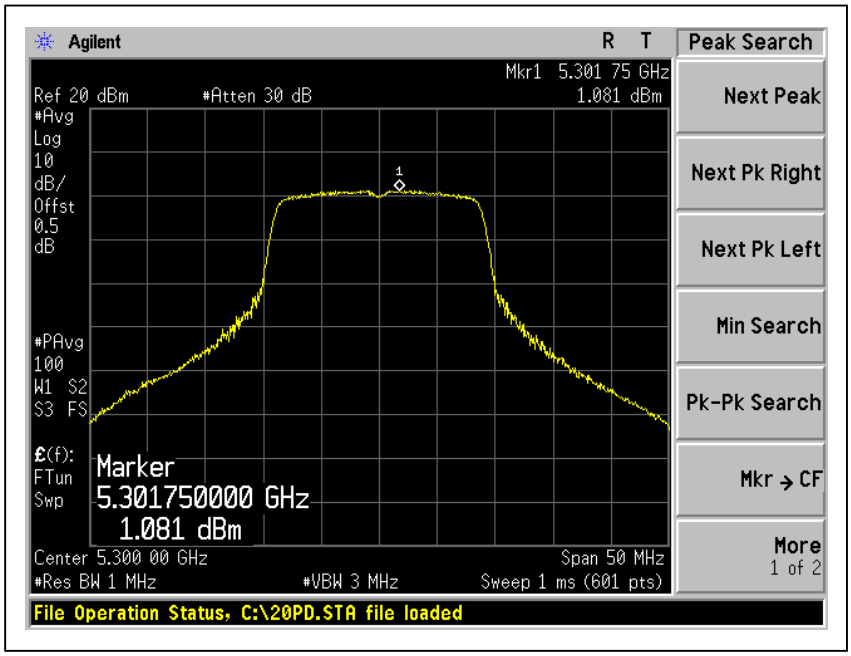
MODULATION TYPE	BPSK	**TRANSFER RATE**	6.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	26deg.C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL OUTPUT POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
		Chain (0)	Chain(1)	Chain(2)			
5	5260	1.072	-0.583	0.613	5.193	11	PASS
7	5300	1.081	-0.050	0.381	5.269	11	PASS
8	5320	1.171	-0.155	0.031	5.160	11	PASS
9	5500	-0.070	1.234	0.225	5.271	11	PASS
14	5600	0.042	0.006	0.241	4.869	11	PASS
19	5700	0.629	0.162	0.178	5.100	11	PASS

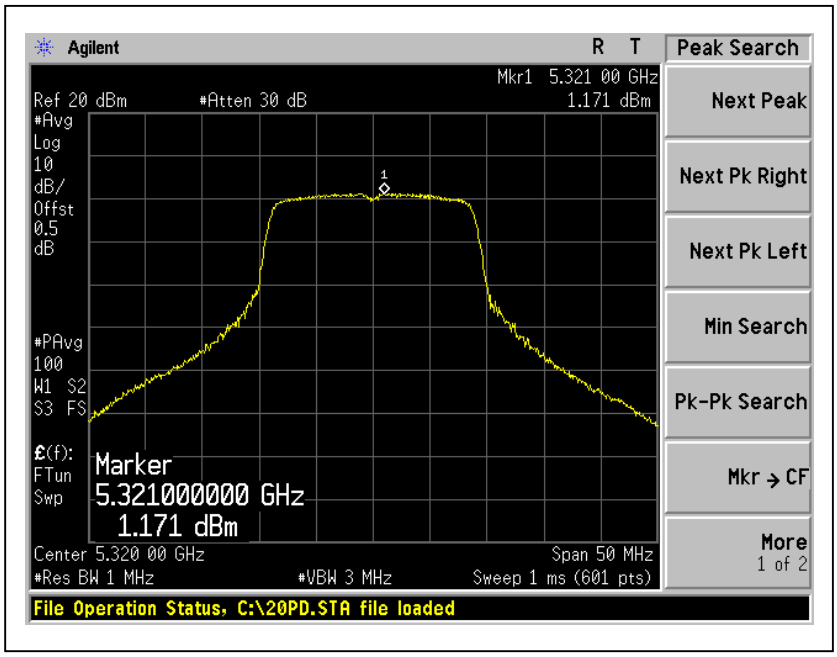
For Chain (0) : CH5



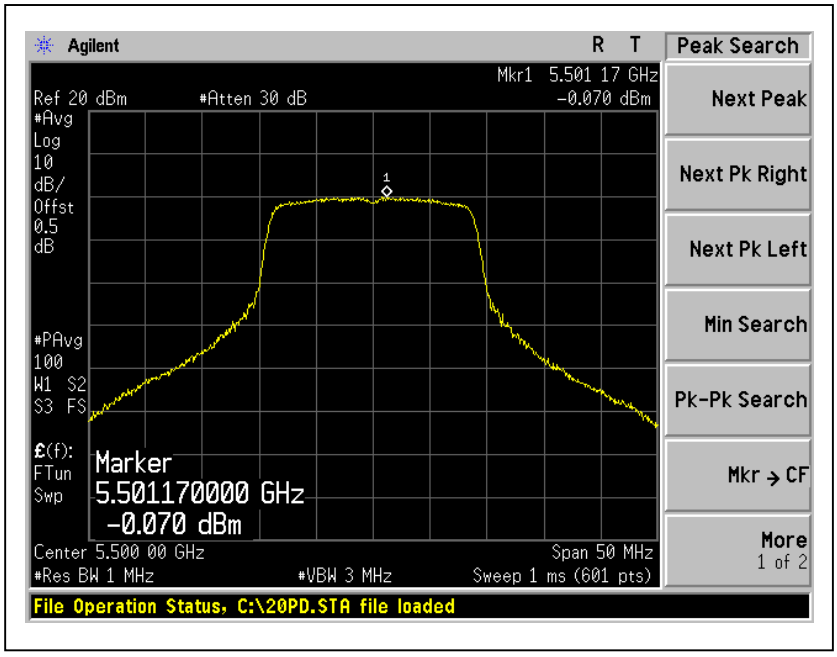
CH7



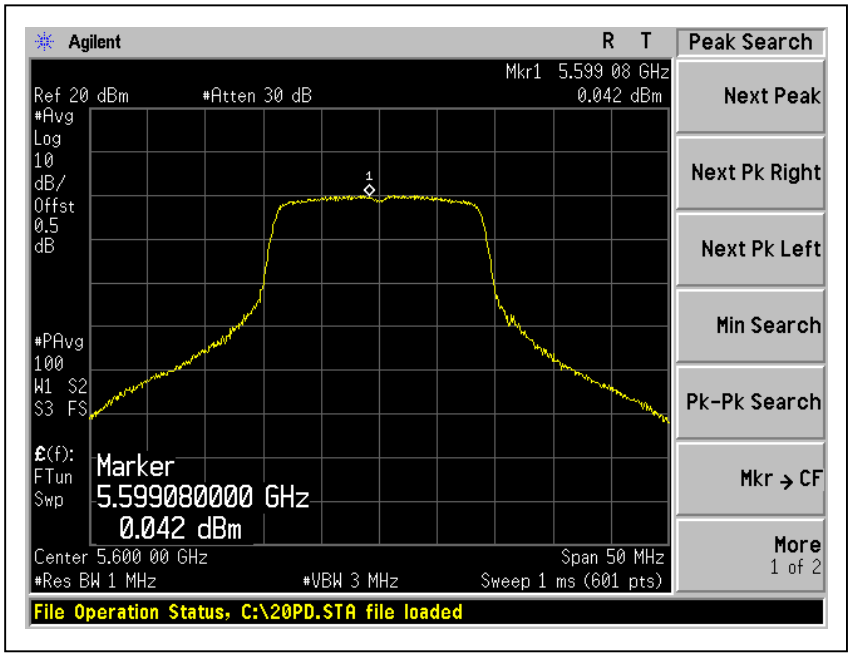
CH8


Agilent
R T
Peak Search
Mkr1 5.321 00 GHz
Ref 20 dBm
#Atten 30 dB
1.171 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.321000000 GHz
1.171 dBm
Mkr → CF
More
1 of 2
Center 5.320 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

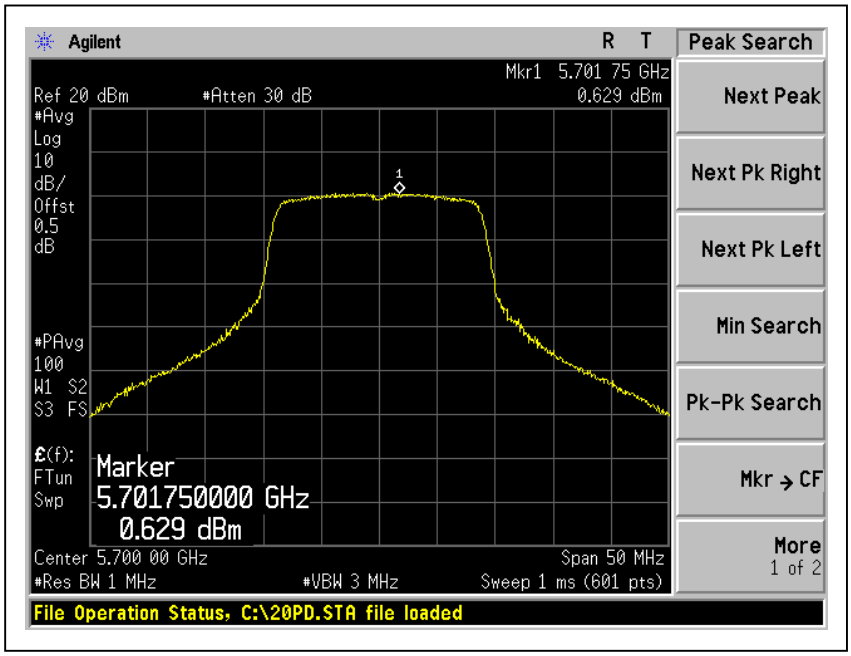
CH9


Agilent
R T
Peak Search
Mkr1 5.501 17 GHz
Ref 20 dBm
#Atten 30 dB
-0.070 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.501170000 GHz
-0.070 dBm
Mkr → CF
More
1 of 2
Center 5.500 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

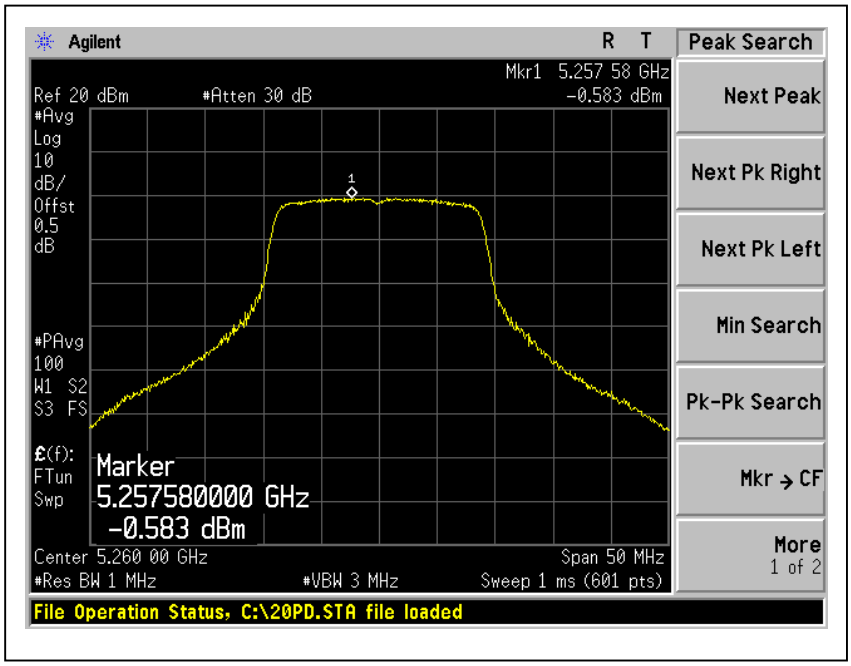
CH14


Agilent
R T
Peak Search
Mkr1 5.599 08 GHz
Ref 20 dBm
#Atten 30 dB
0.042 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.599080000 GHz
0.042 dBm
Mkr → CF
More
1 of 2
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

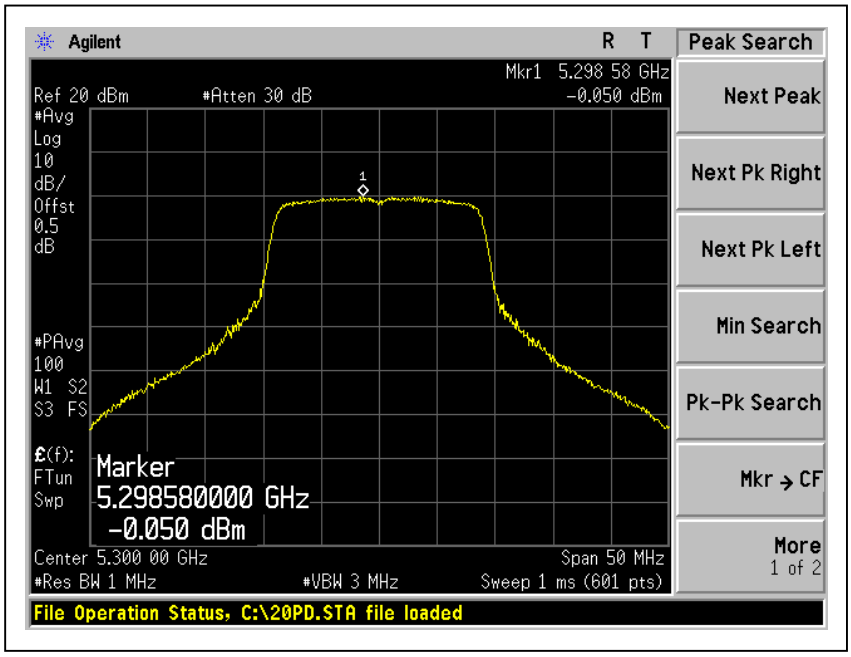
CH19


Agilent
R T
Peak Search
Mkr1 5.701 75 GHz
Ref 20 dBm
#Atten 30 dB
0.629 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.701750000 GHz
0.629 dBm
Mkr → CF
More
1 of 2
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

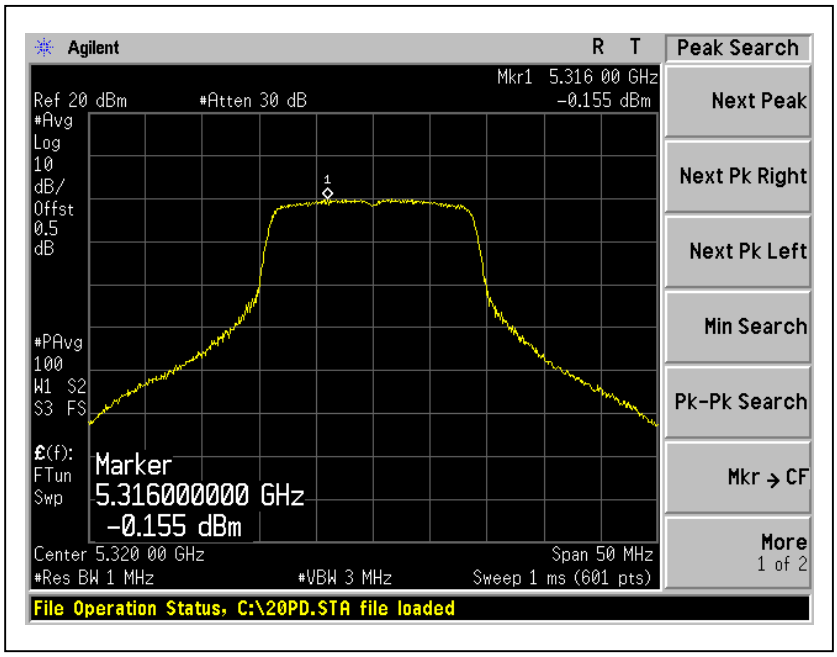
For Chain (1) : CH5



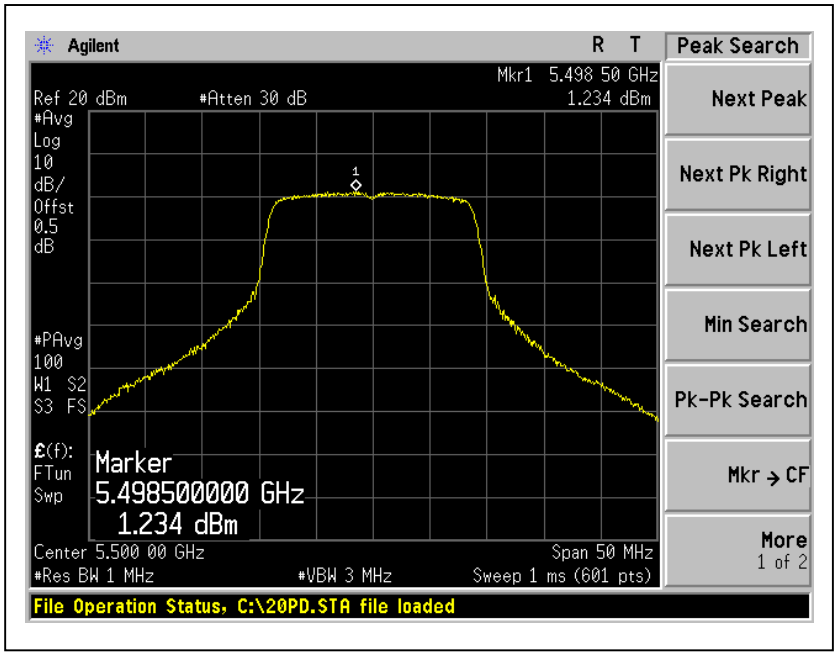
CH7



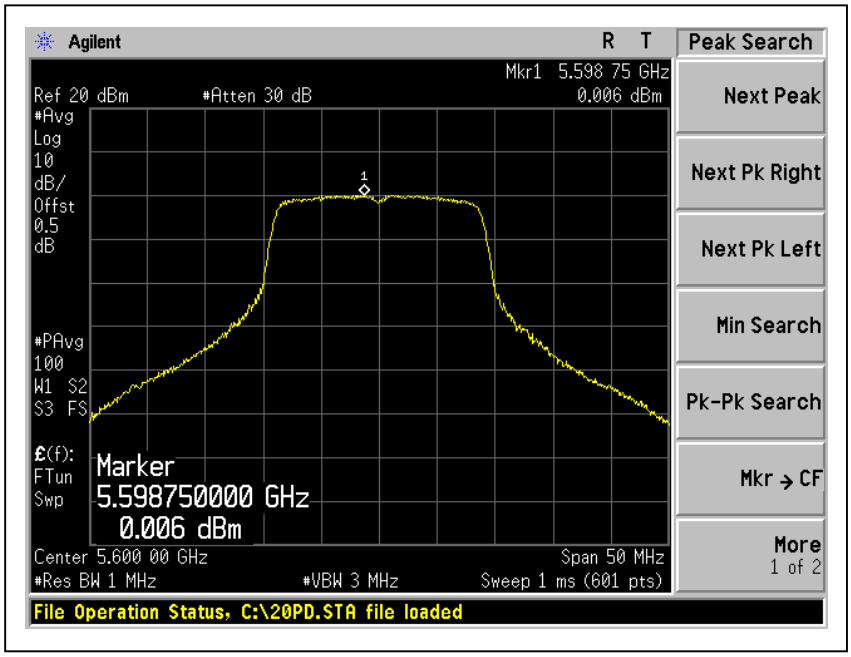
CH8


Agilent
R T
Peak Search
Mkr1 5.316 00 GHz
Ref 20 dBm
#Atten 30 dB
-0.155 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.316000000 GHz
-0.155 dBm
Mkr → CF
More
1 of 2
Center 5.320 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

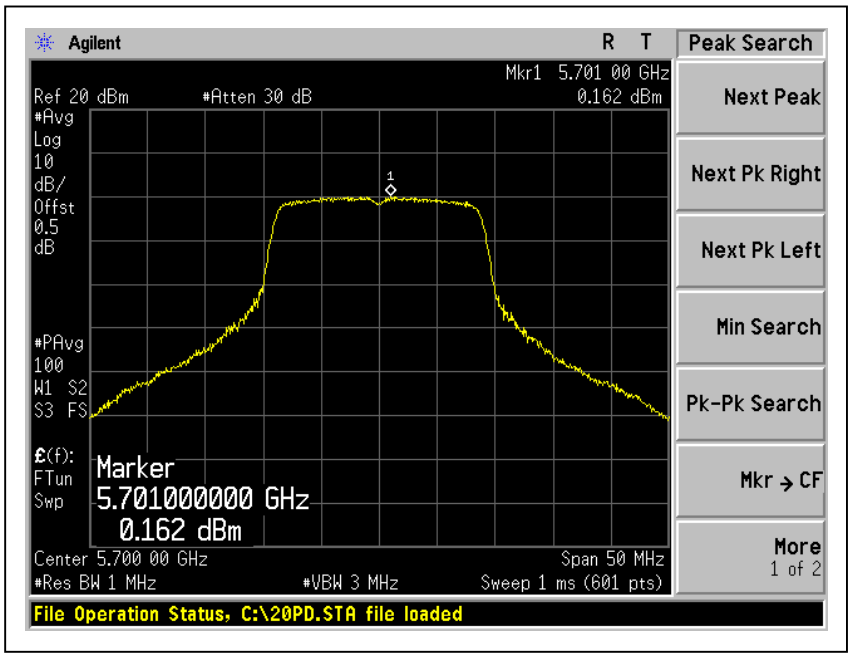
CH9


Agilent
R T
Peak Search
Mkr1 5.498 50 GHz
Ref 20 dBm
#Atten 30 dB
1.234 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.498500000 GHz
1.234 dBm
Mkr → CF
More
1 of 2
Center 5.500 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

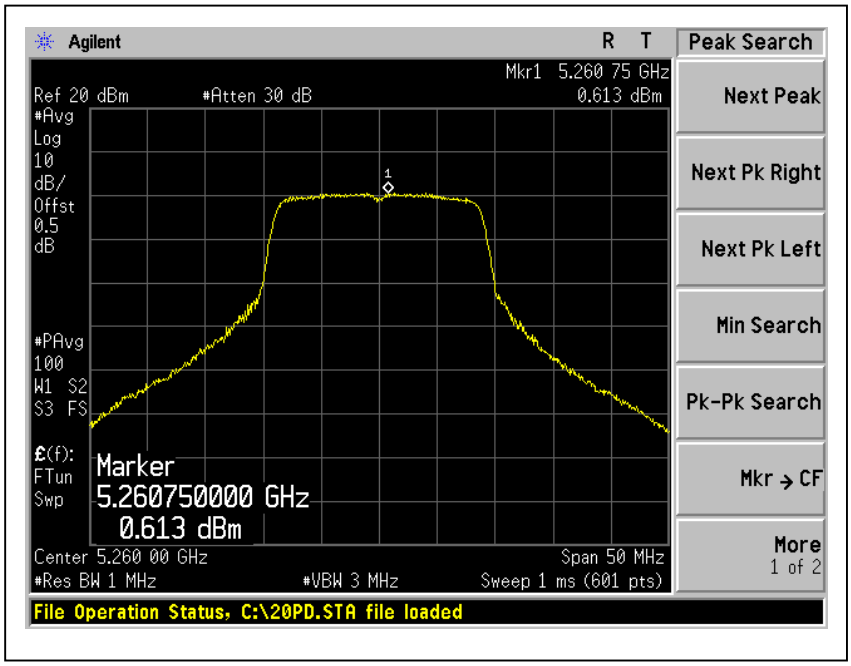
CH14


Agilent
R T
Peak Search
Mkr1 5.598 75 GHz
Ref 20 dBm
#Atten 30 dB
0.006 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.598750000 GHz
0.006 dBm
Mkr → CF
More
1 of 2
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

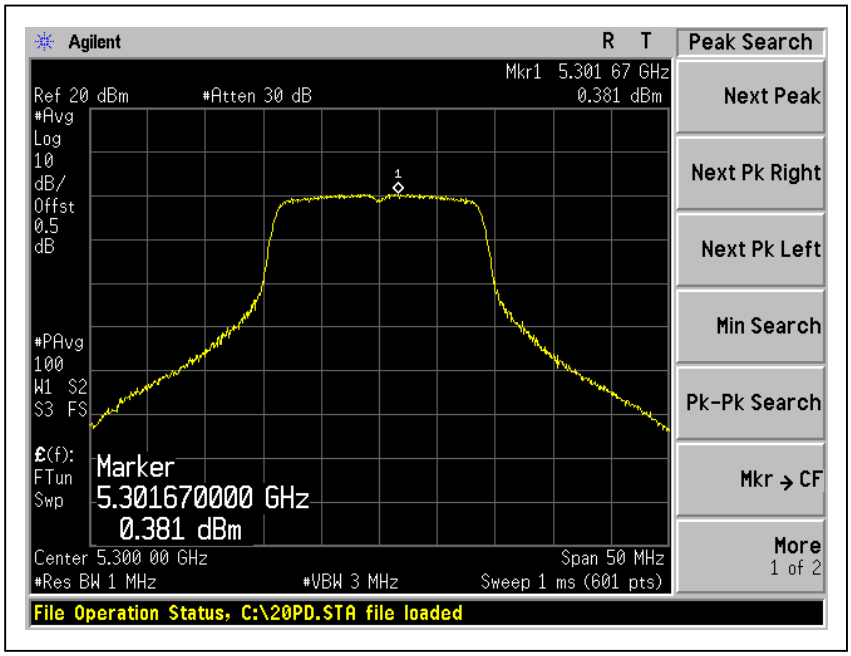
CH19


Agilent
R T
Peak Search
Mkr1 5.701 00 GHz
Ref 20 dBm
#Atten 30 dB
0.162 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.701000000 GHz
0.162 dBm
Mkr → CF
More
1 of 2
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

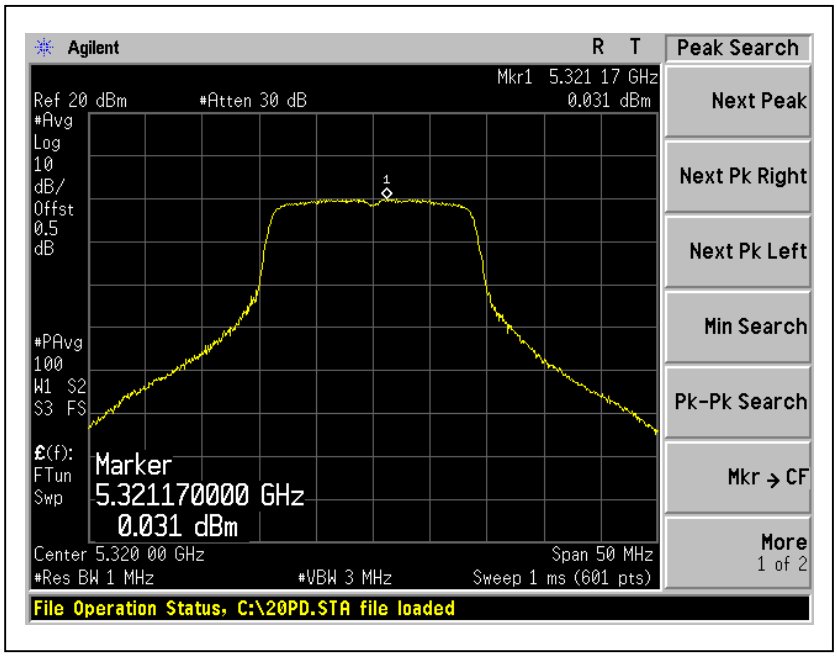
For Chain (2) : CH5



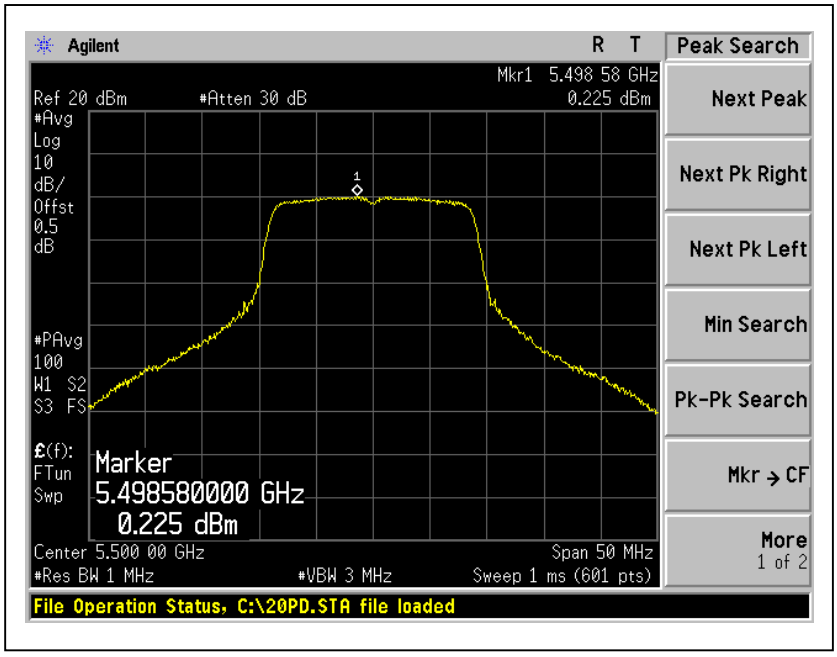
CH7



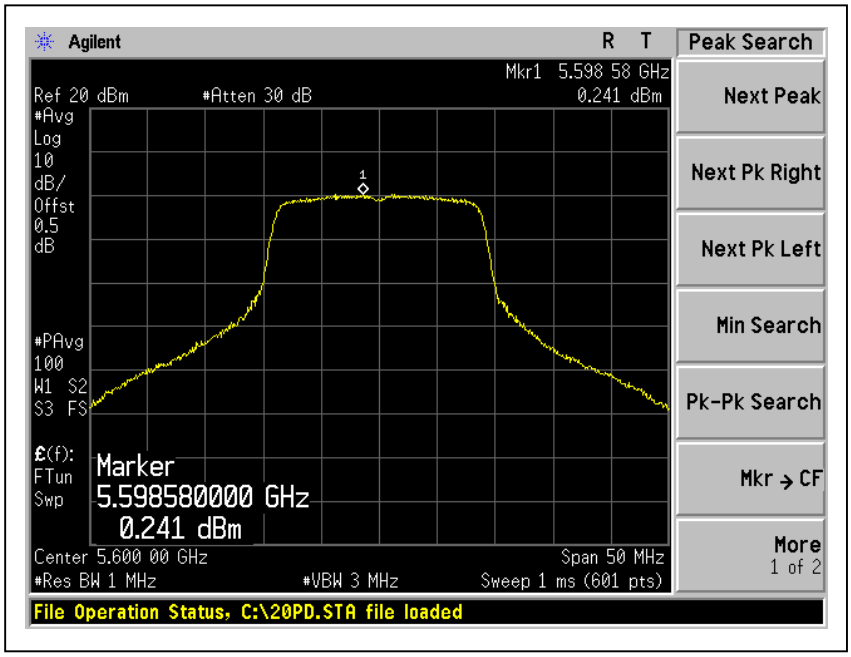
CH8


Agilent
R T
Peak Search
Mkr1 5.321 17 GHz
Ref 20 dBm
#Atten 30 dB
0.031 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.321170000 GHz
0.031 dBm
Mkr → CF
More
1 of 2
Center 5.320 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

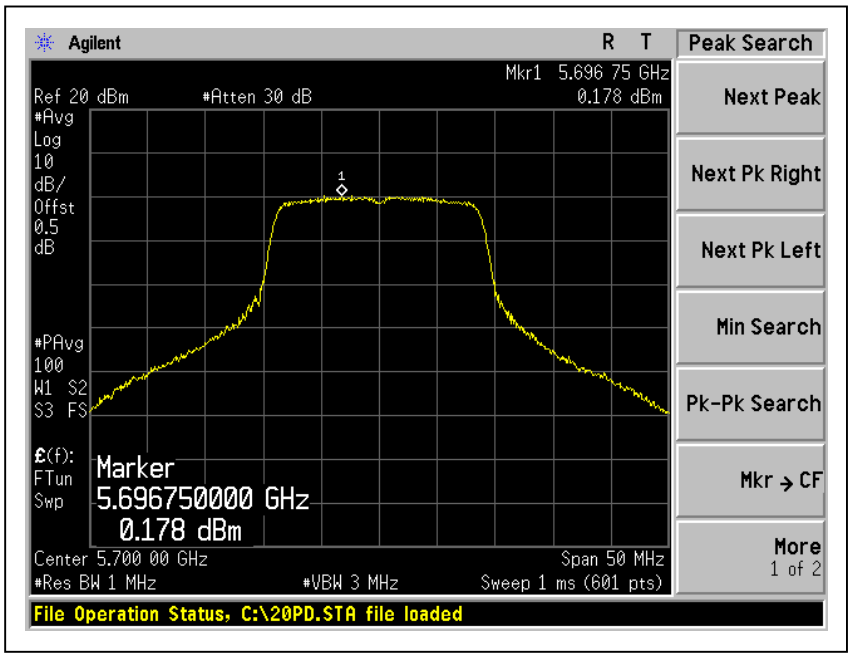
CH9


Agilent
R T
Peak Search
Mkr1 5.498 58 GHz
Ref 20 dBm
#Atten 30 dB
0.225 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.498580000 GHz
0.225 dBm
Mkr → CF
More
1 of 2
Center 5.500 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH14


Agilent
R T
Peak Search
Mkr1 5.598 58 GHz
0.241 dBm
Ref 20 dBm
#Atten 30 dB
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.598580000 GHz
0.241 dBm
Mkr → CF
More
1 of 2
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH19

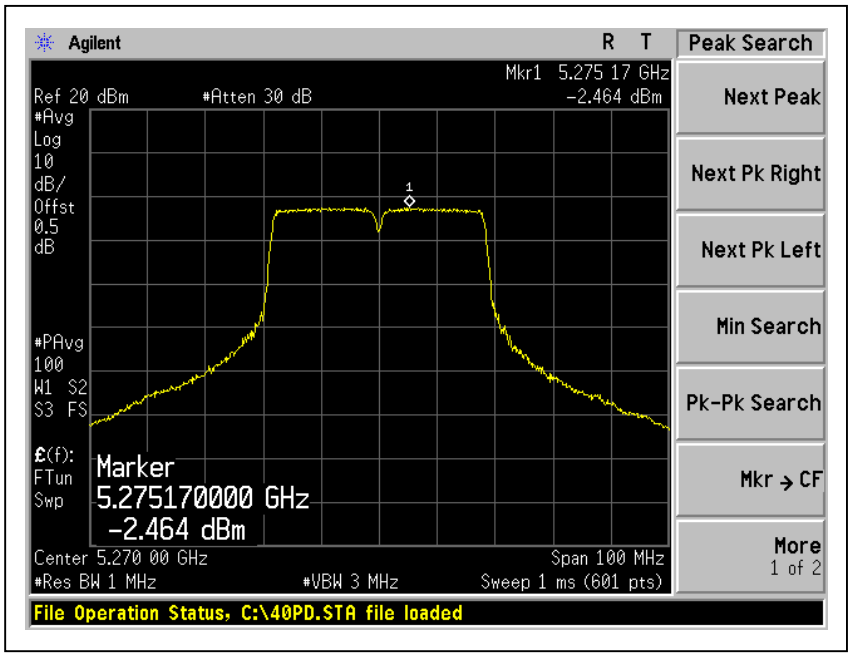

Agilent
R T
Peak Search
Mkr1 5.696 75 GHz
0.178 dBm
Ref 20 dBm
#Atten 30 dB
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.696750000 GHz
0.178 dBm
Mkr → CF
More
1 of 2
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

DRAFT 802.11n (40MHz) OFDM MODULATION:

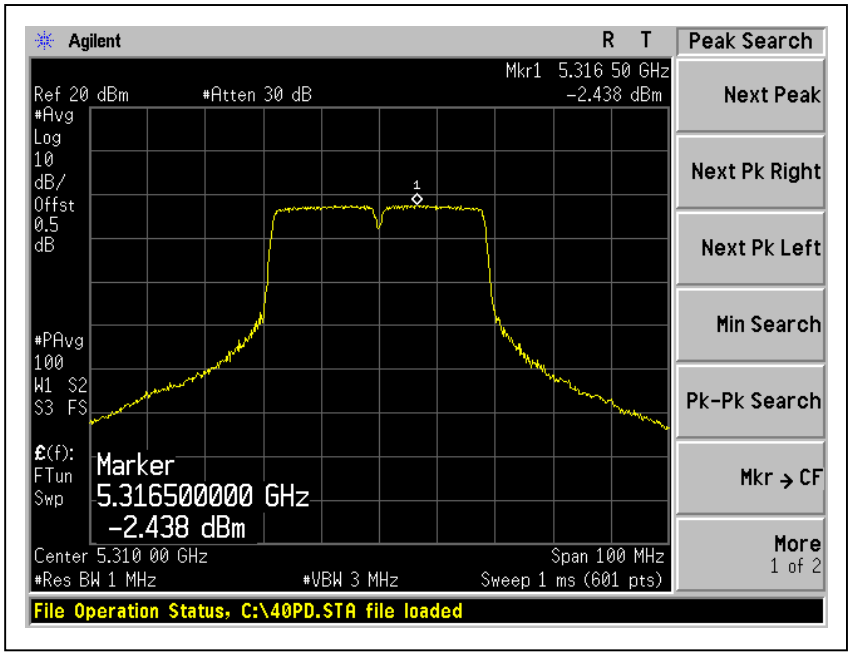
MODULATION TYPE	BPSK	**TRANSFER RATE**	13.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	26deg.C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL OUTPUT POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
		Chain (0)	Chain(1)	Chain(2)			
3	5270	-2.464	-3.700	-3.409	1.614	11	PASS
4	5310	-2.438	-3.277	-3.491	1.726	11	PASS
5	5510	-6.866	-6.744	-6.477	-1.918	11	PASS
7	5590	-3.607	-2.857	-3.556	1.446	11	PASS
9	5670	-2.752	-3.670	-3.643	1.440	11	PASS

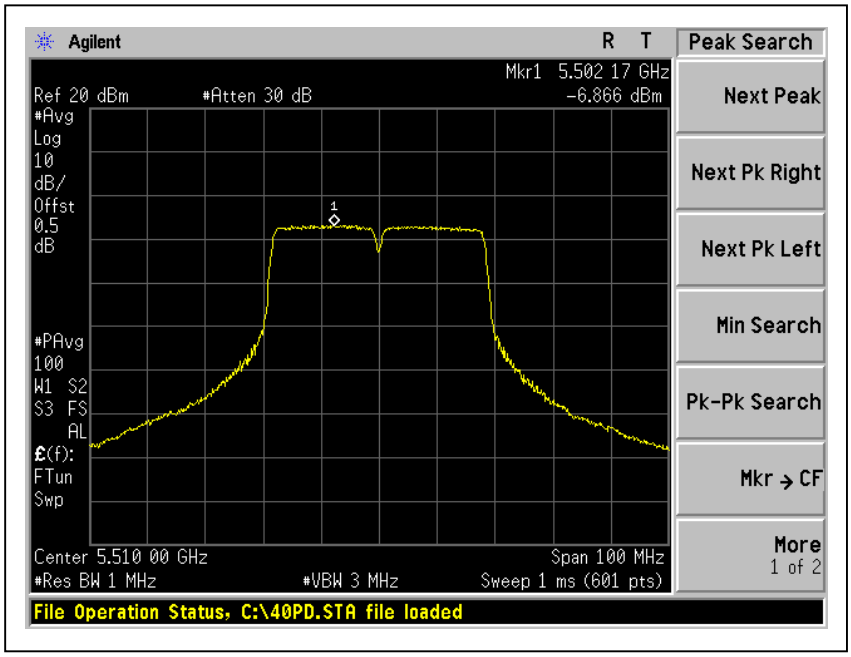
For Chain (0) : CH3



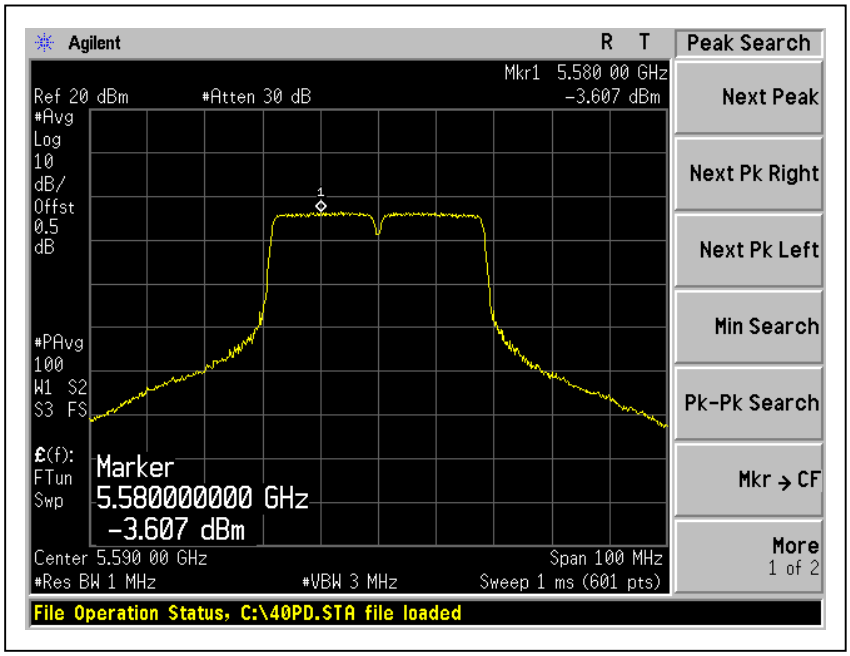
CH4



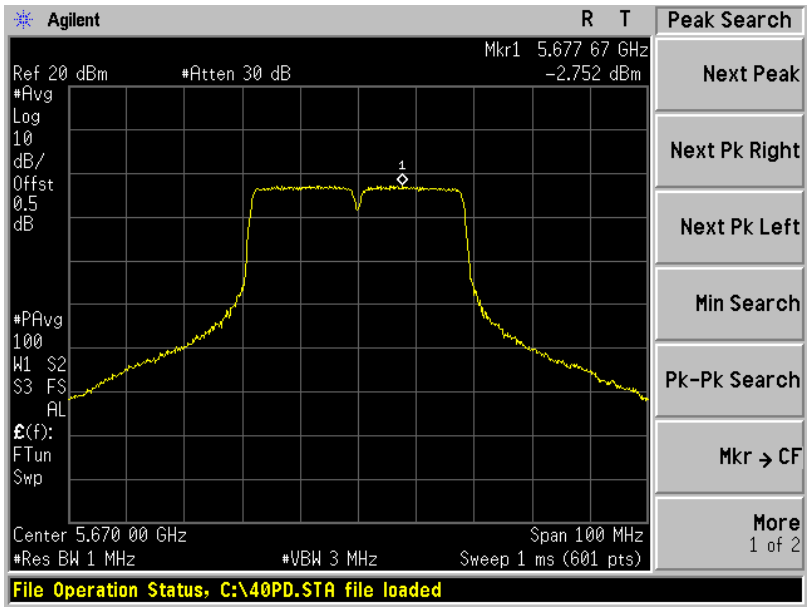
CH5


Agilent
R T
Peak Search
Mkr1 5.502 17 GHz
Ref 20 dBm
#Atten 30 dB
-6.866 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.510 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

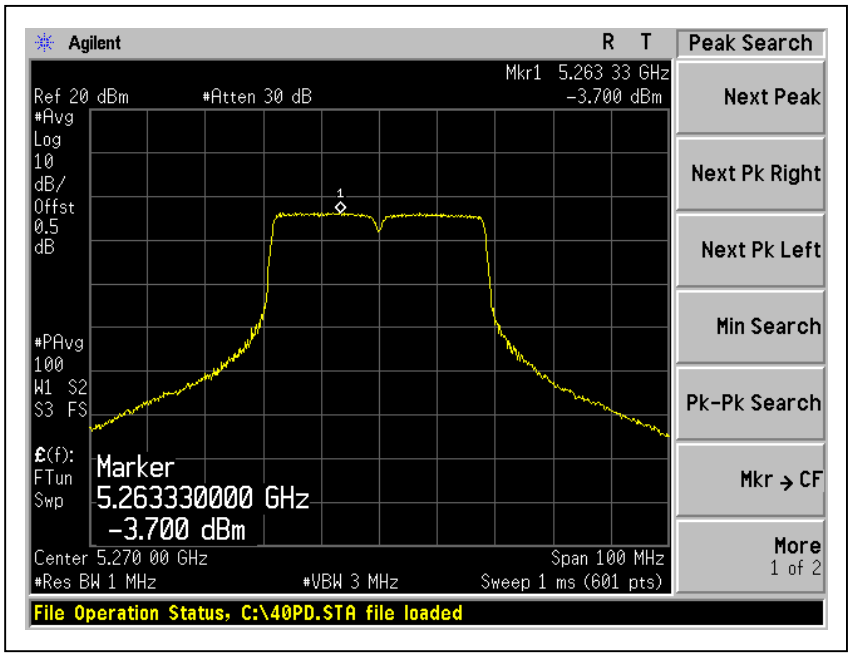
CH7


Agilent
R T
Peak Search
Mkr1 5.580 00 GHz
Ref 20 dBm
#Atten 30 dB
-3.607 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
£(f):
FTun
Swp
Marker
5.580000000 GHz
-3.607 dBm
Pk-Pk Search
Mkr → CF
Center 5.590 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

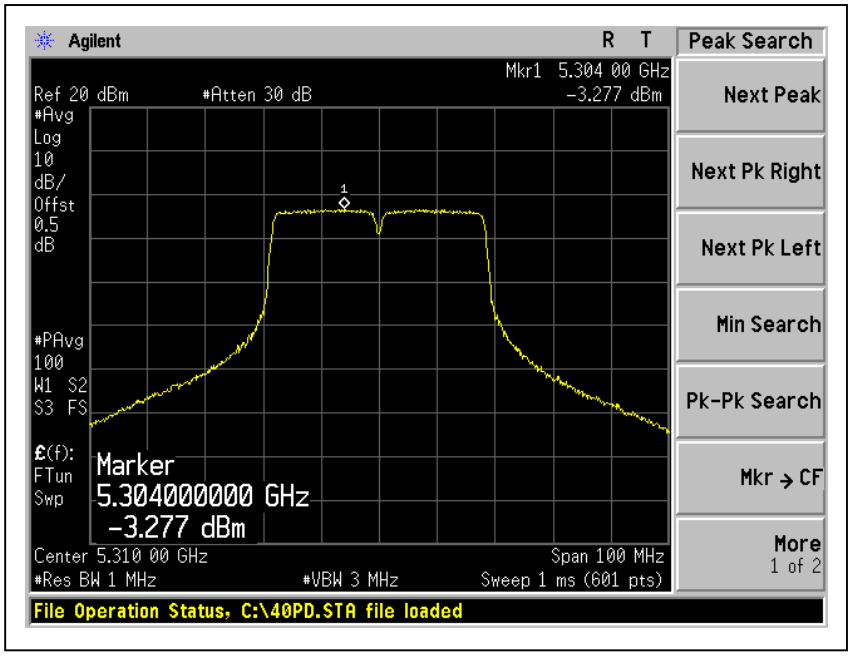
CH9


Agilent
R T
Peak Search
Mkr1 5.677 67 GHz
Ref 20 dBm
#Atten 30 dB
-2.752 dBm
#Avg
Log
10
dB/
Offst
0.5
dB
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 5.670 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

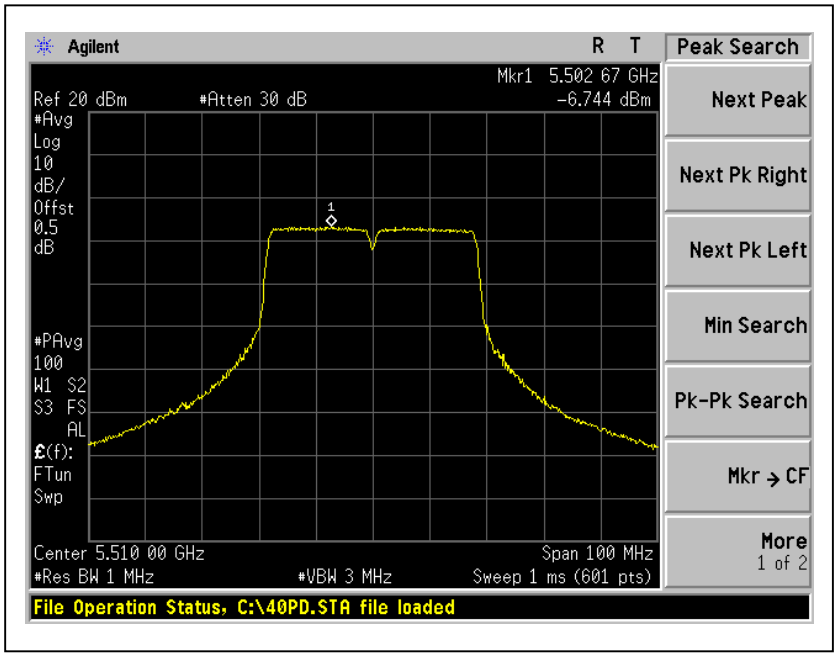
For Chain (1) :CH3



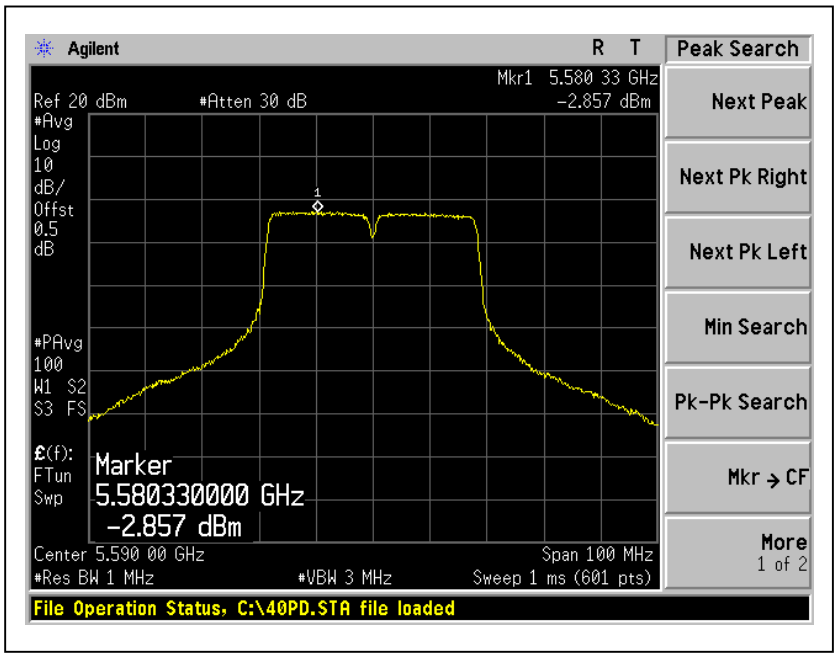
CH4



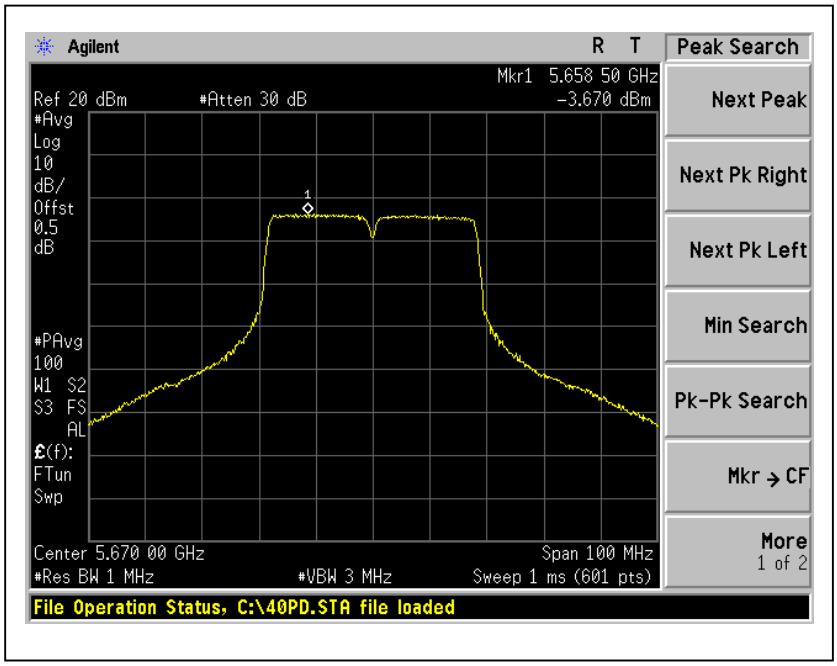
CH5


Agilent
R T
Peak Search
Mkr1 5.502 67 GHz
Ref 20 dBm
#Atten 30 dB
-6.744 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
Pk-Pk Search
£(f):
FTun
Swp
Mkr → CF
More
1 of 2
Center 5.510 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

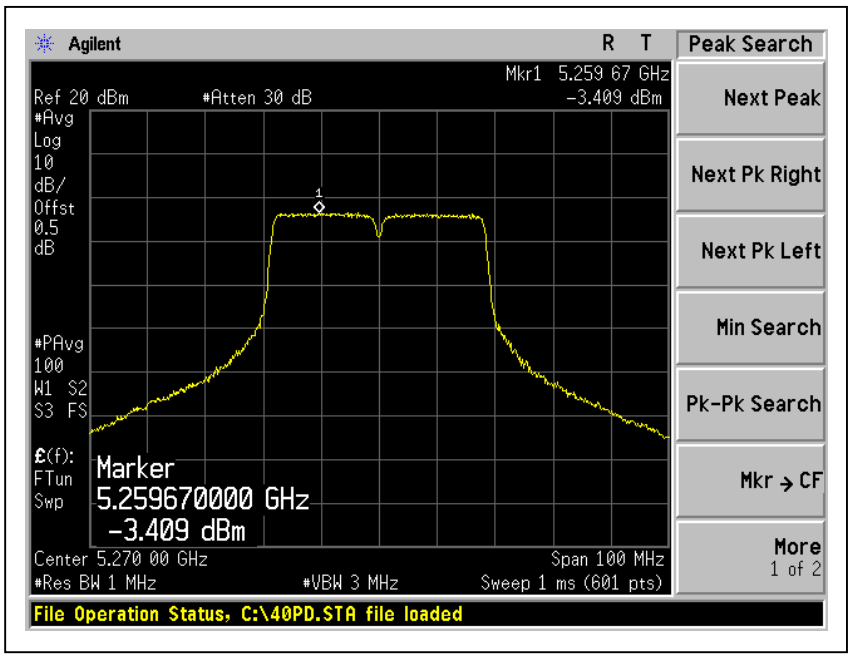
CH7


Agilent
R T
Peak Search
Mkr1 5.580 33 GHz
Ref 20 dBm
#Atten 30 dB
-2.857 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
Pk-Pk Search
£(f):
FTun
Swp
Marker
5.580330000 GHz
-2.857 dBm
Mkr → CF
More
1 of 2
Center 5.590 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

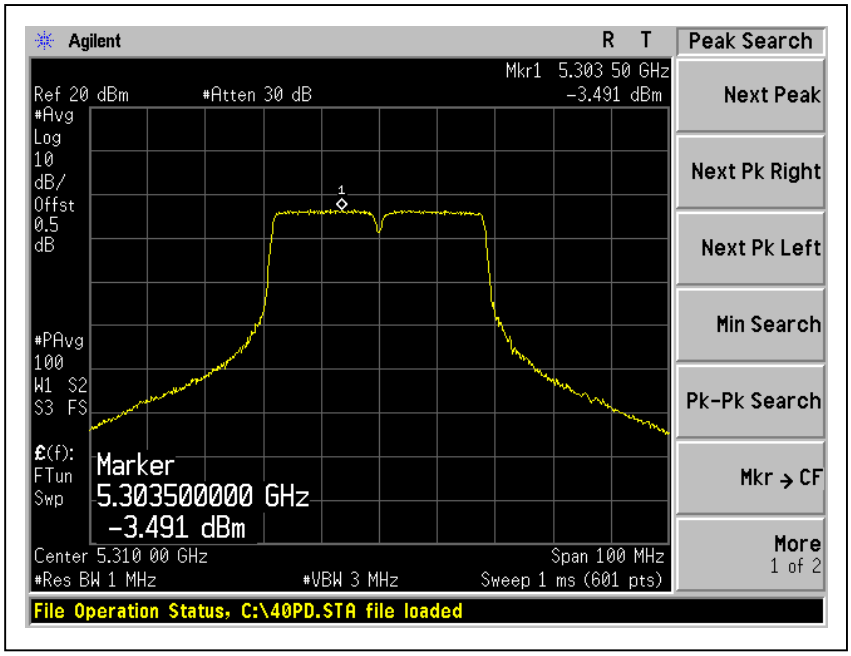
CH9


Agilent
R T
Peak Search
Mkr1 5.658 50 GHz
Ref 20 dBm
#Atten 30 dB
-3.670 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 5.670 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

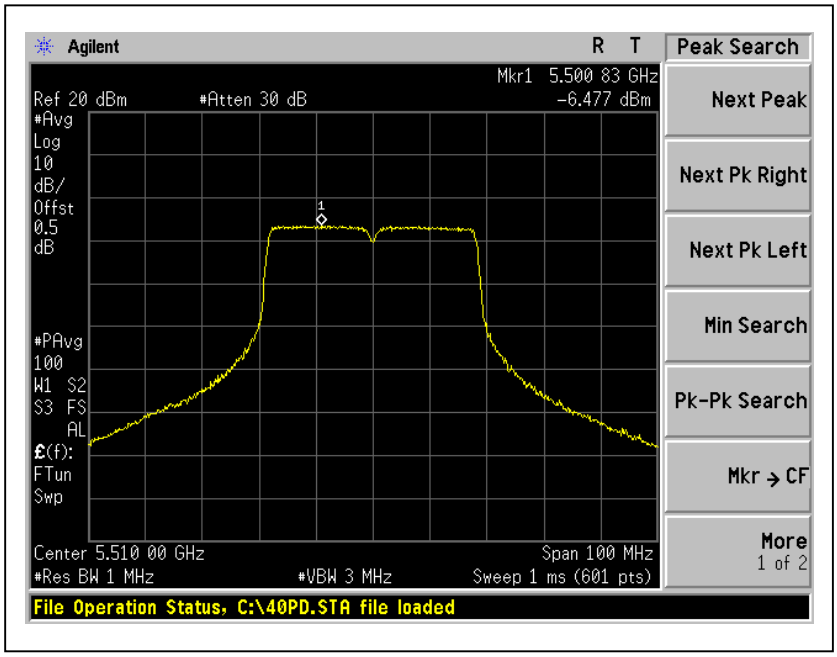
For Chain (2) :CH3



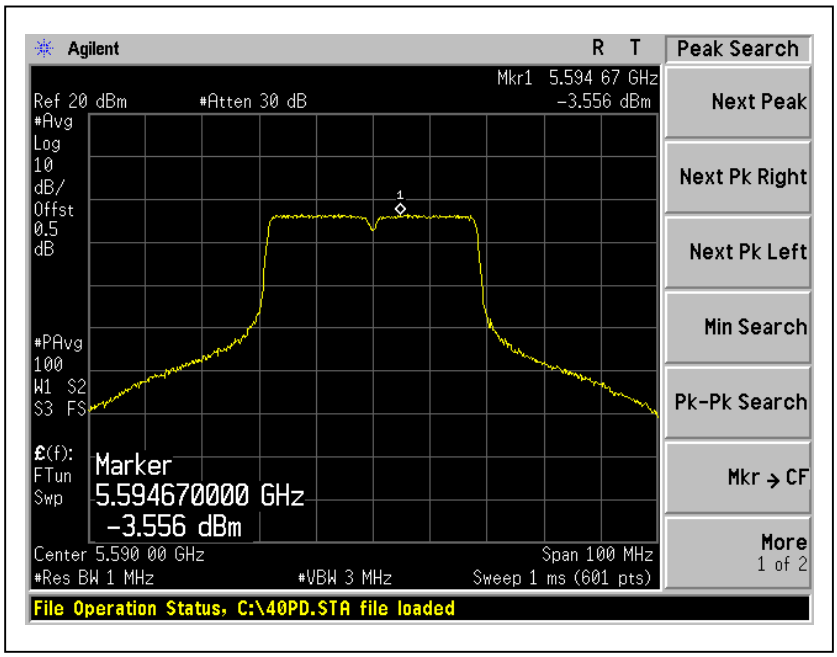
CH4



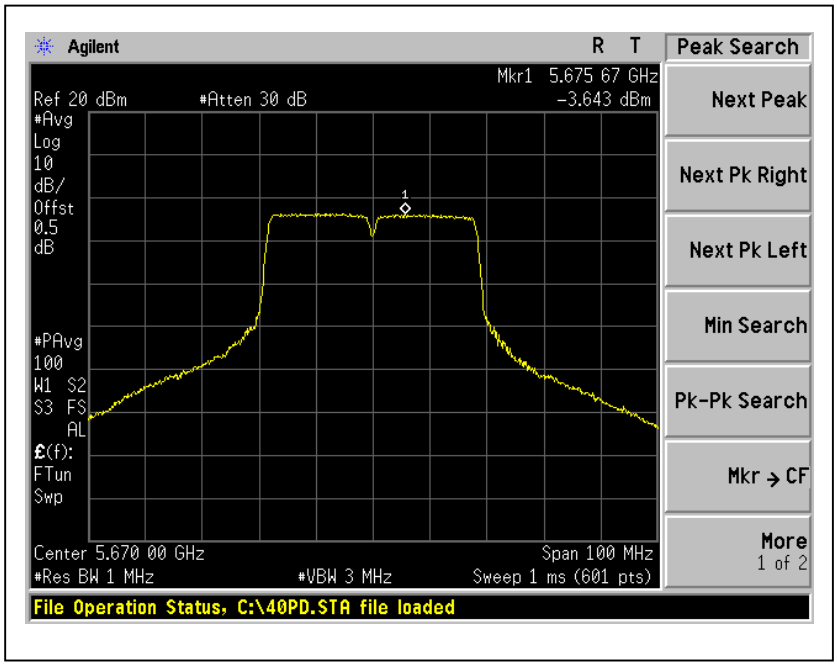
CH5


Agilent
R T
Peak Search
Mkr1 5.500 83 GHz
Ref 20 dBm
#Atten 30 dB
-6.477 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.510 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

CH7


Agilent
R T
Peak Search
Mkr1 5.594 67 GHz
Ref 20 dBm
#Atten 30 dB
-3.556 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
£(f):
FTun
Swp
Marker
5.594670000 GHz
-3.556 dBm
Pk-Pk Search
Mkr → CF
Center 5.590 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

CH9


Agilent
R T
Peak Search
Mkr1 5.675 67 GHz
Ref 20 dBm
#Atten 30 dB
-3.643 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.670 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

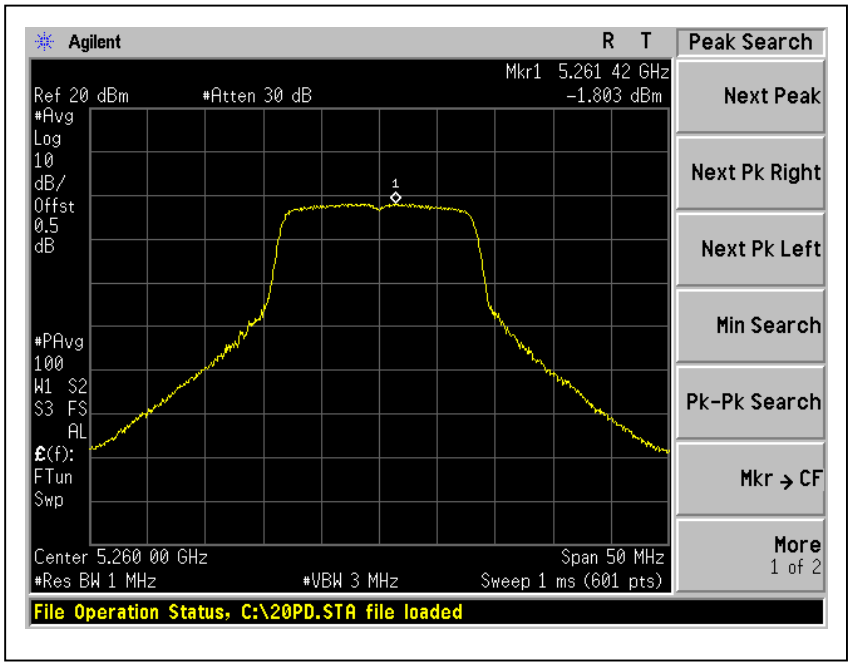
4.5.11 TEST RESULTS-ANTENNA 11

802.11a OFDM modulation

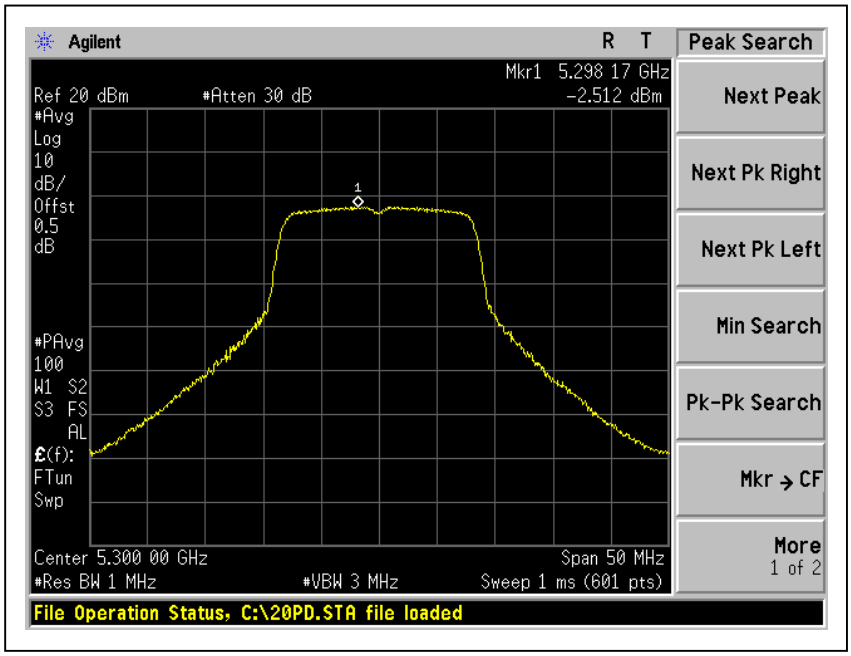
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL OUTPUT POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
		Chain (0)	Chain(1)	Chain(2)			
5	5260	-1.803	-3.126	-2.306	2.393	2.5	PASS
7	5300	-2.512	-3.601	-2.465	1.942	2.5	PASS
8	5320	-2.502	-3.294	-2.357	2.071	2.5	PASS
9	5500	-3.049	-3.154	-1.735	2.177	2.5	PASS
14	5600	-2.730	-2.722	-2.443	2.140	2.5	PASS
19	5700	-1.776	-2.346	-3.024	2.418	2.5	PASS

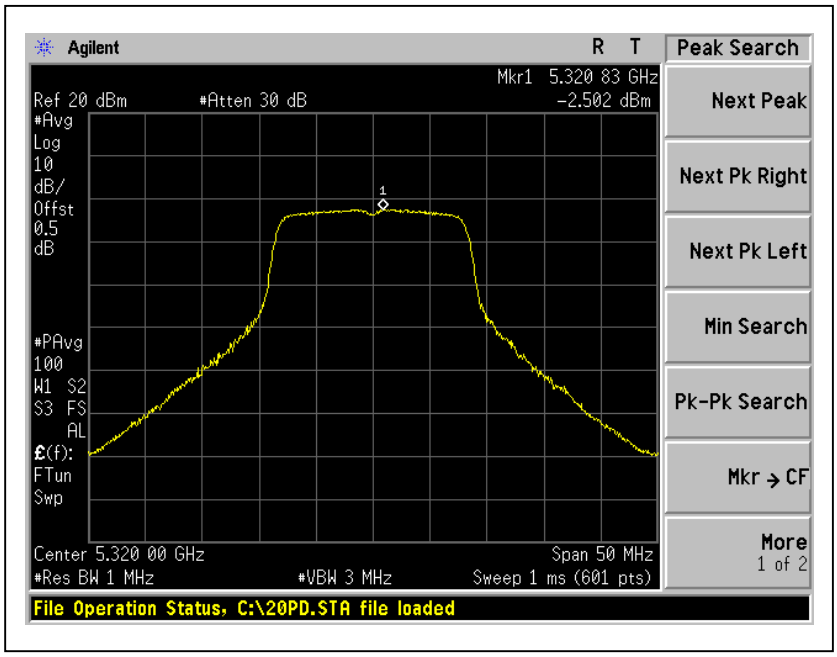
For Chain (0) : CH5



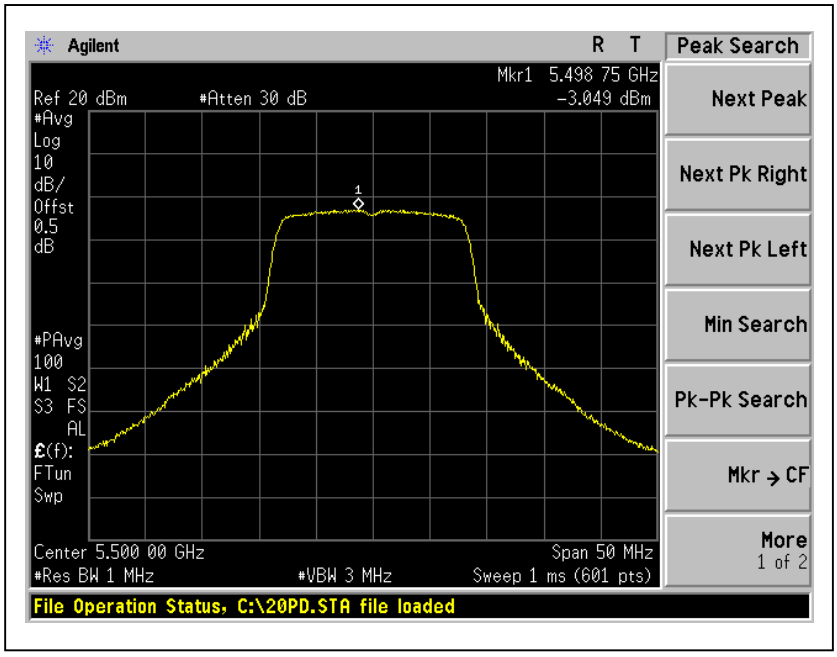
CH7



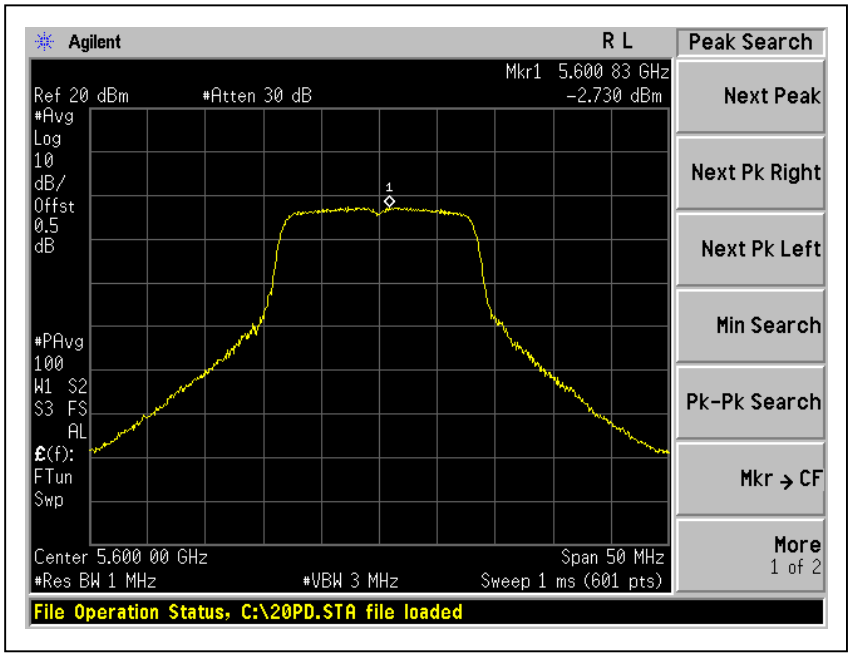
CH8


Agilent
R T
Peak Search
Mkr1 5.320 83 GHz
Ref 20 dBm
#Atten 30 dB
-2.502 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.320 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

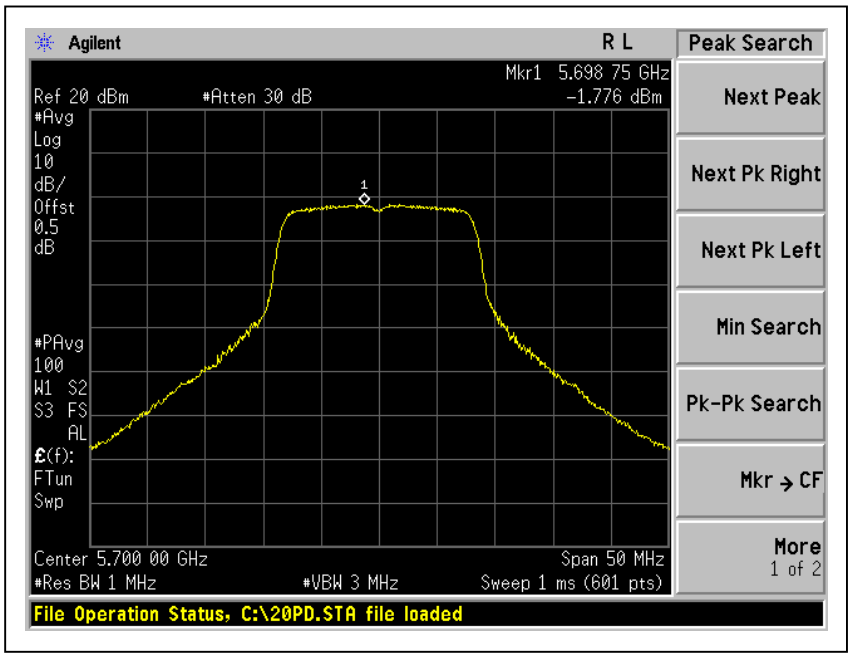
CH9


Agilent
R T
Peak Search
Mkr1 5.498 75 GHz
Ref 20 dBm
#Atten 30 dB
-3.049 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.500 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

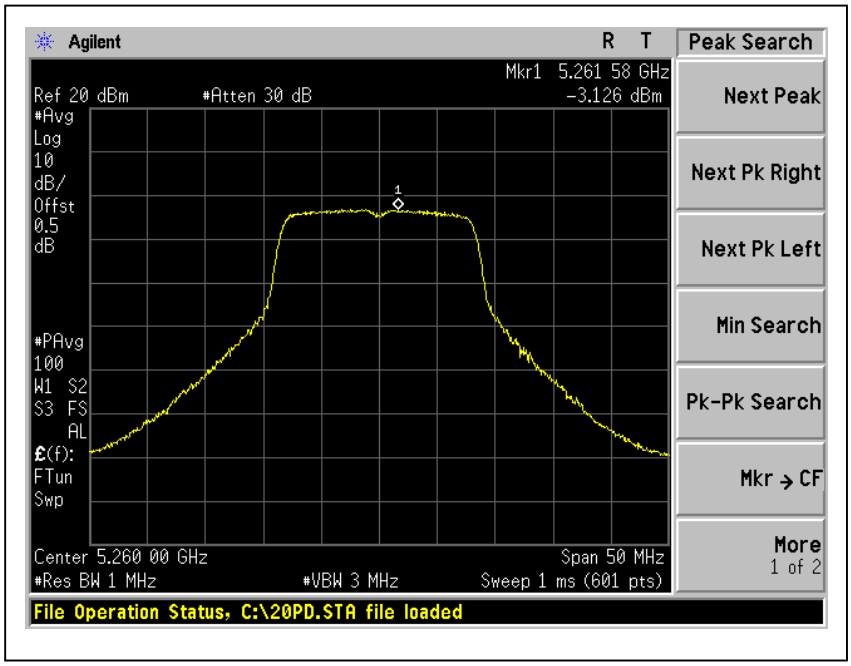
CH14


Agilent
R L
Peak Search
Mkr1 5.600 83 GHz
Ref 20 dBm
#Atten 30 dB
-2.730 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.600 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

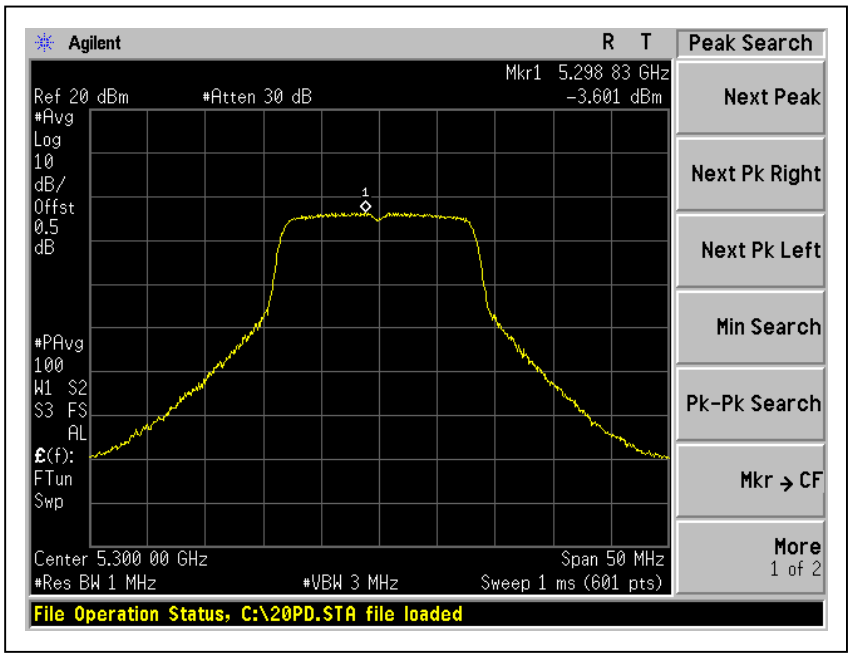
CH19


Agilent
R L
Peak Search
Mkr1 5.698 75 GHz
Ref 20 dBm
#Atten 30 dB
-1.776 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.700 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

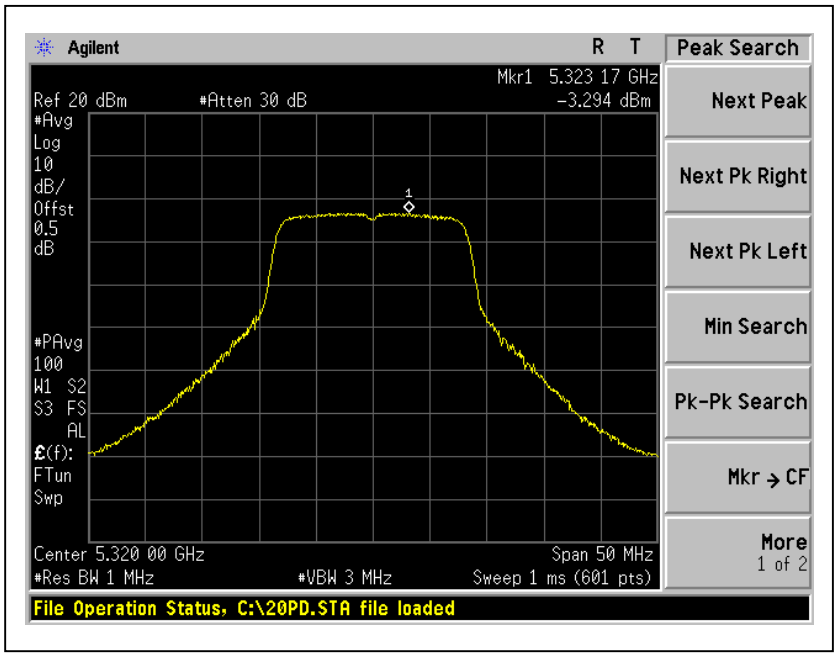
For Chain (1) : CH5



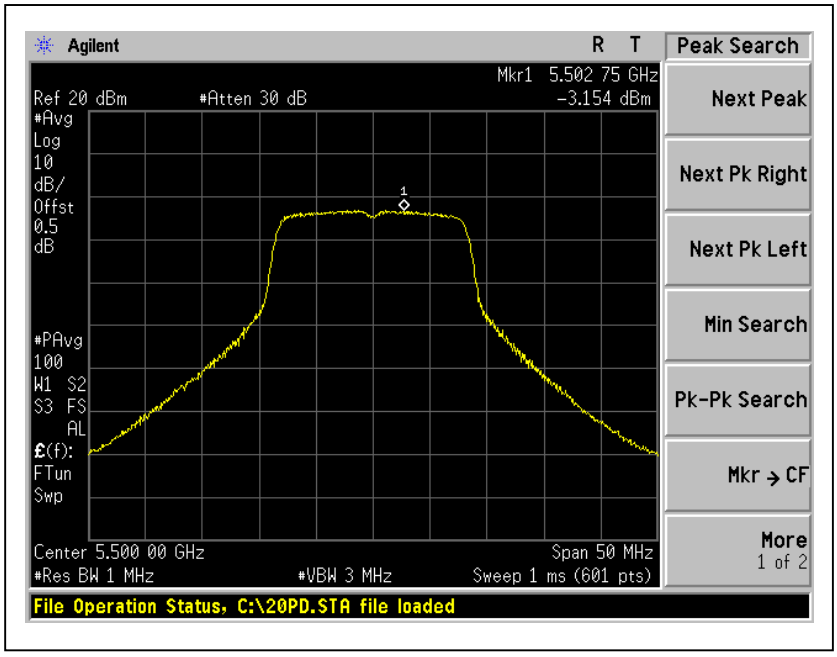
CH7



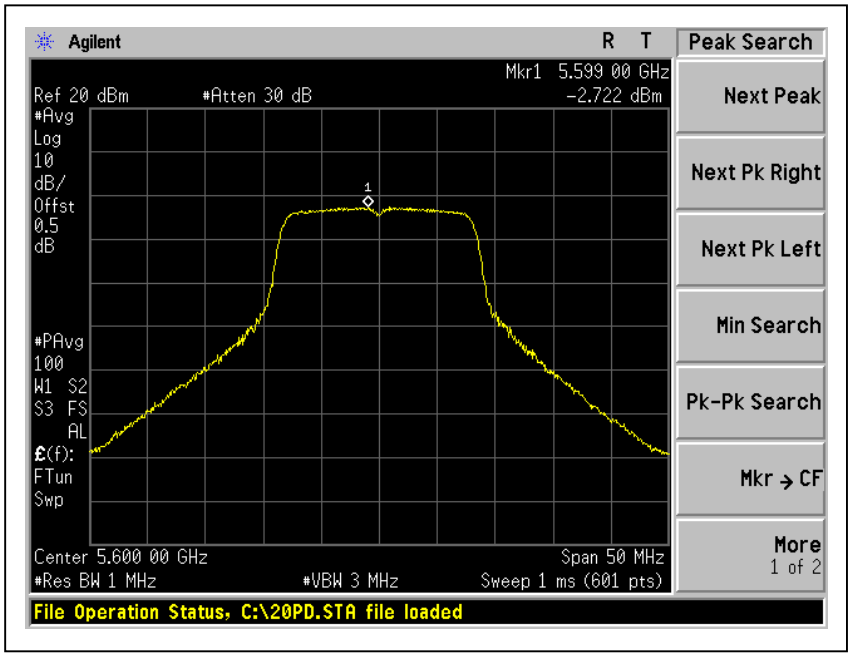
CH8


Agilent
R T
Peak Search
Mkr1 5.323 17 GHz
Ref 20 dBm
#Atten 30 dB
-3.294 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.320 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

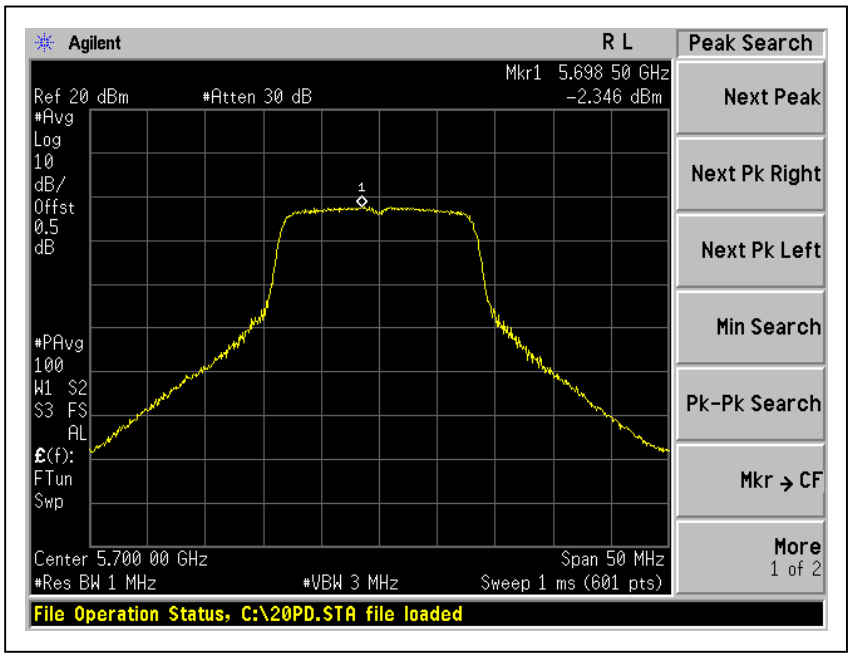
CH9


Agilent
R T
Peak Search
Mkr1 5.502 75 GHz
Ref 20 dBm
#Atten 30 dB
-3.154 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.500 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

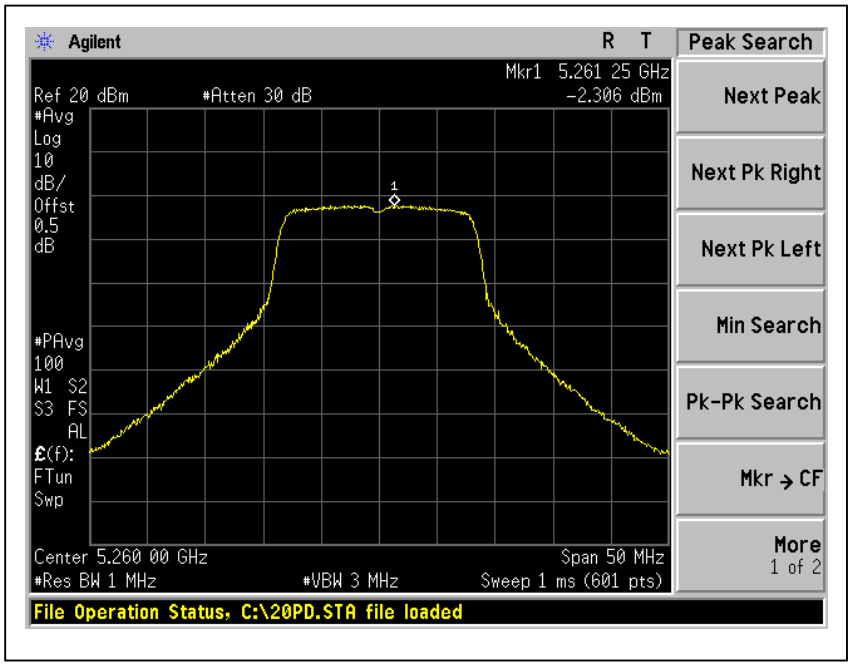
CH14


Agilent
R T
Peak Search
Mkr1 5.599 00 GHz
Ref 20 dBm
#Atten 30 dB
-2.722 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.600 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

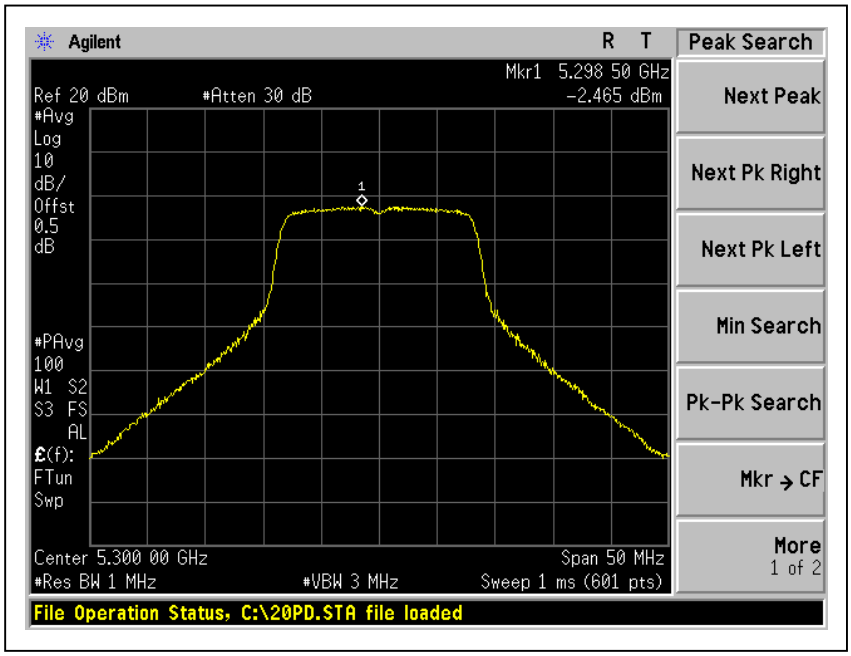
CH19


Agilent
R L
Peak Search
Mkr1 5.698 50 GHz
Ref 20 dBm
#Atten 30 dB
-2.346 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.700 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

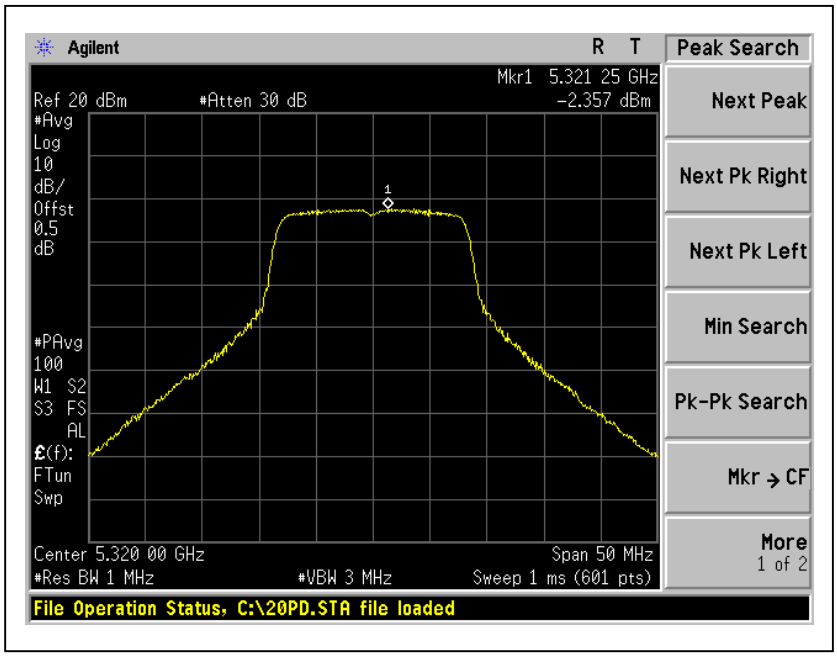
For Chain (2) : CH5



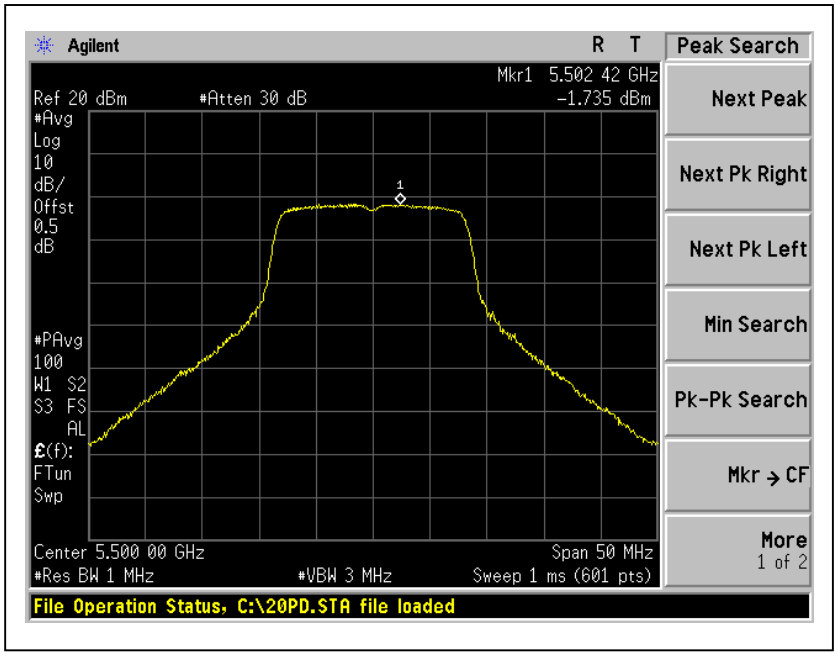
CH7



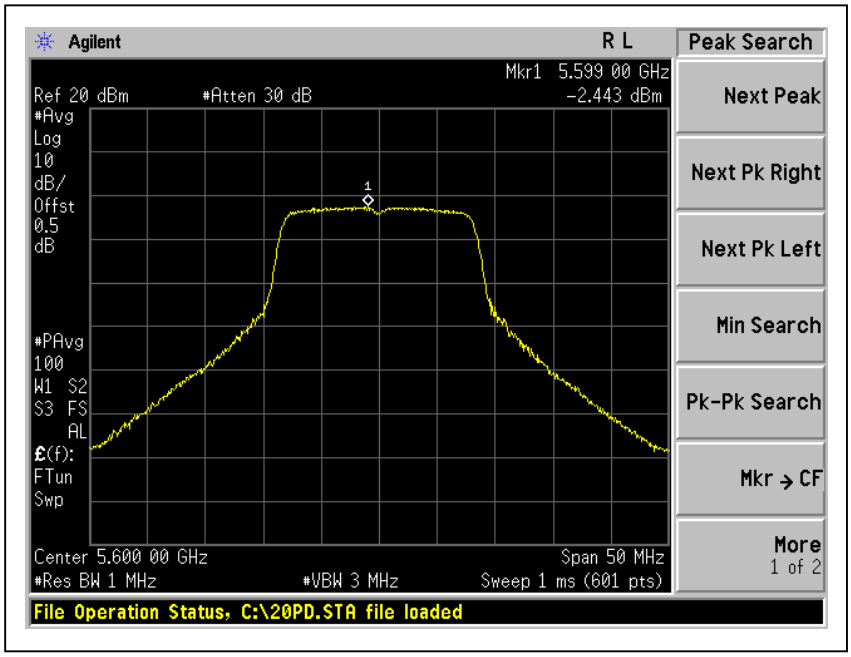
CH8


Agilent
R T
Peak Search
Mkr1 5.321 25 GHz
Ref 20 dBm
#Atten 30 dB
-2.357 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.320 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

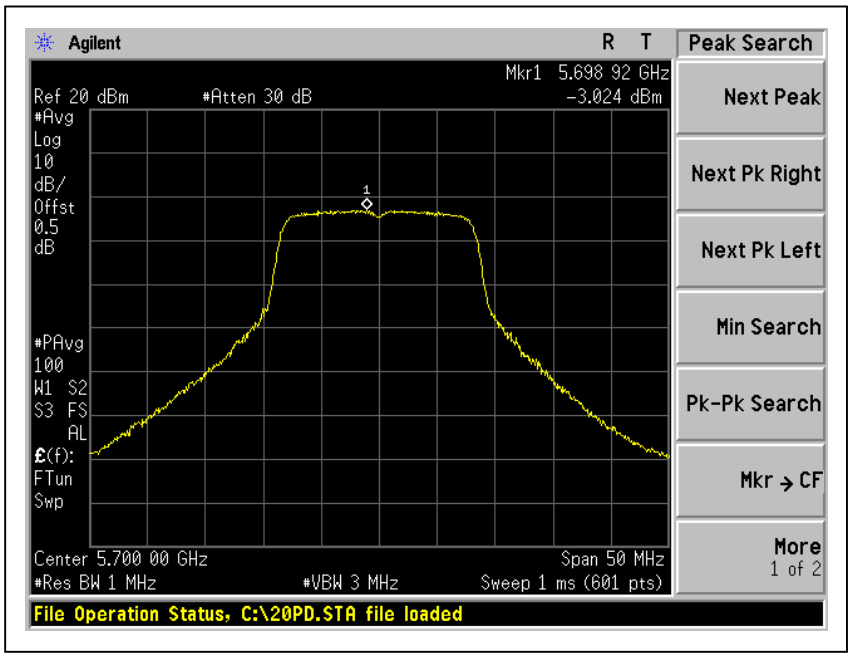
CH9


Agilent
R T
Peak Search
Mkr1 5.502 42 GHz
Ref 20 dBm
#Atten 30 dB
-1.735 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.500 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH14


Agilent
R L
Peak Search
Mkr1 5.599 00 GHz
Ref 20 dBm
#Atten 30 dB
-2.443 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
#Avg
Log
10
dB/
Offst
0.5
dB
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH19

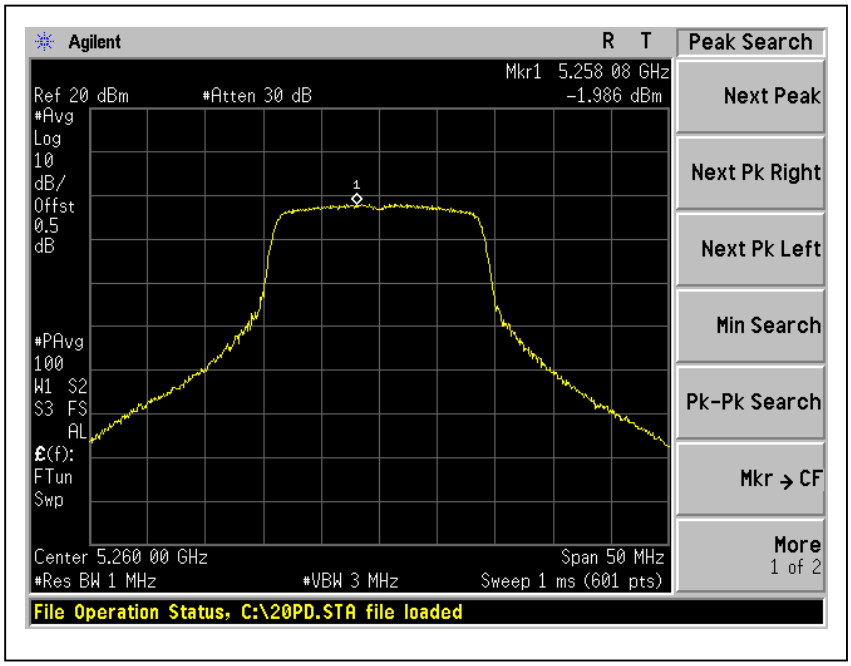

Agilent
R T
Peak Search
Mkr1 5.698 92 GHz
Ref 20 dBm
#Atten 30 dB
-3.024 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
#Avg
Log
10
dB/
Offst
0.5
dB
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

DRAFT 802.11n (20MHz) OFDM MODULATION:

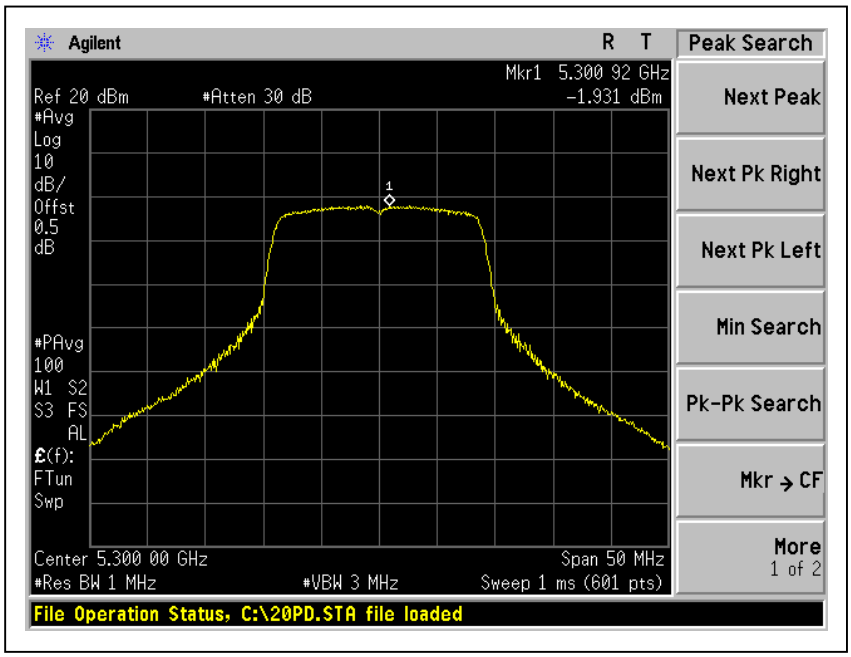
MODULATION TYPE	BPSK	TRANSFER RATE	6.5Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL OUTPUT POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
		Chain (0)	Chain(1)	Chain(2)			
5	5260	-1.986	-3.349	-2.314	2.258	2.5	PASS
7	5300	-1.931	-3.392	-2.188	2.312	2.5	PASS
8	5320	-2.365	-3.078	-2.226	2.230	2.5	PASS
9	5500	-2.904	-2.831	-1.418	2.440	2.5	PASS
14	5600	-2.631	-2.640	-2.477	2.191	2.5	PASS
19	5700	-2.056	-2.440	-3.148	2.245	2.5	PASS

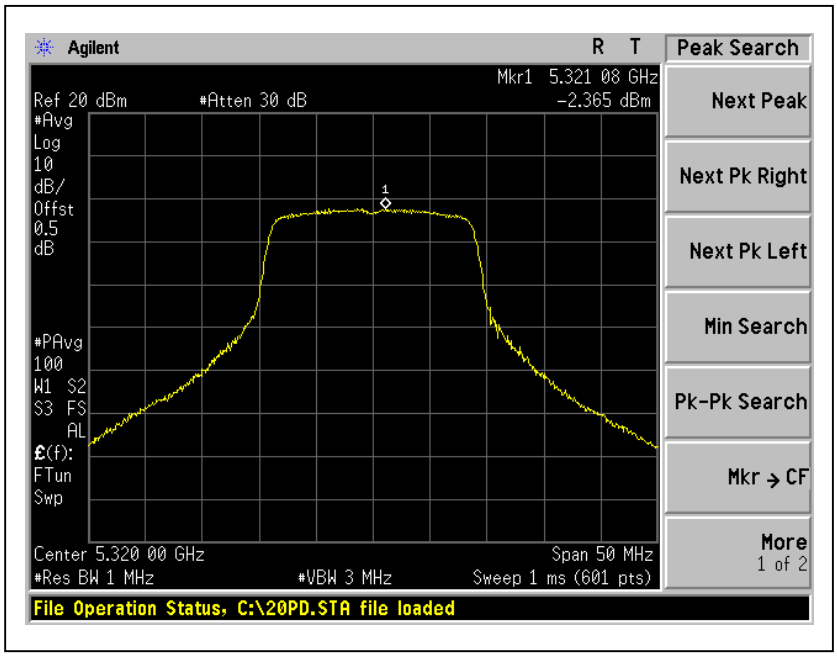
For Chain (0) : CH5



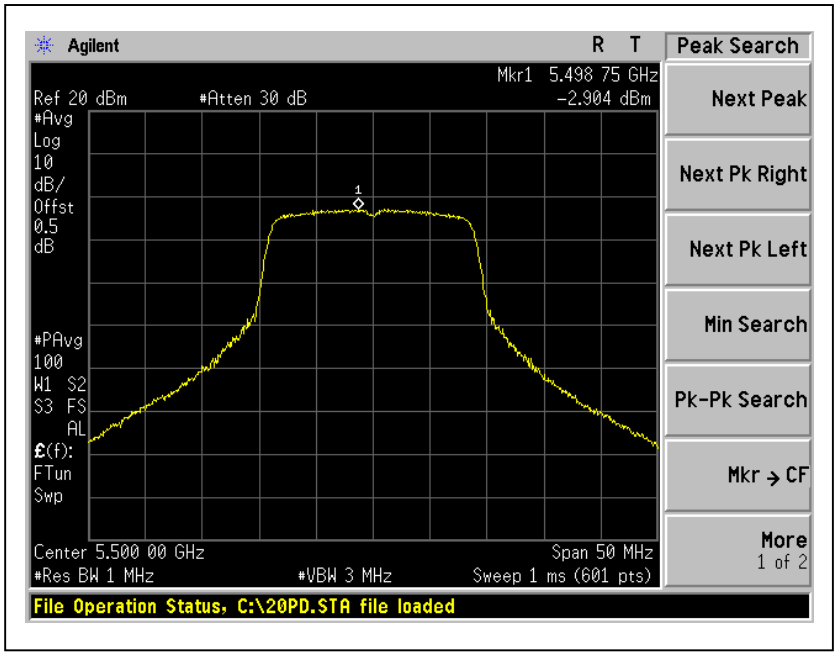
CH7



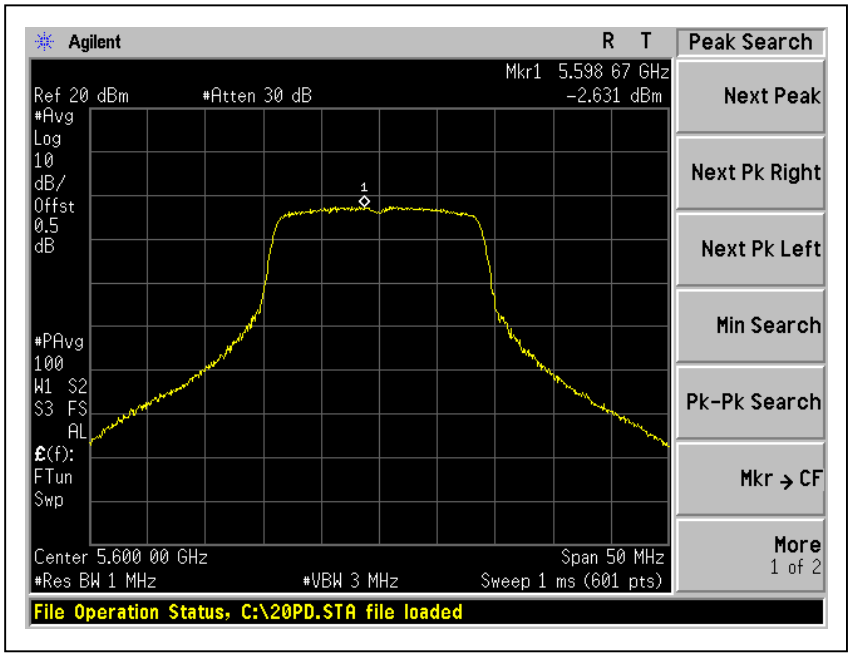
CH8


Agilent
R T
Peak Search
Mkr1 5.321 08 GHz
Ref 20 dBm
#Atten 30 dB
-2.365 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.320 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

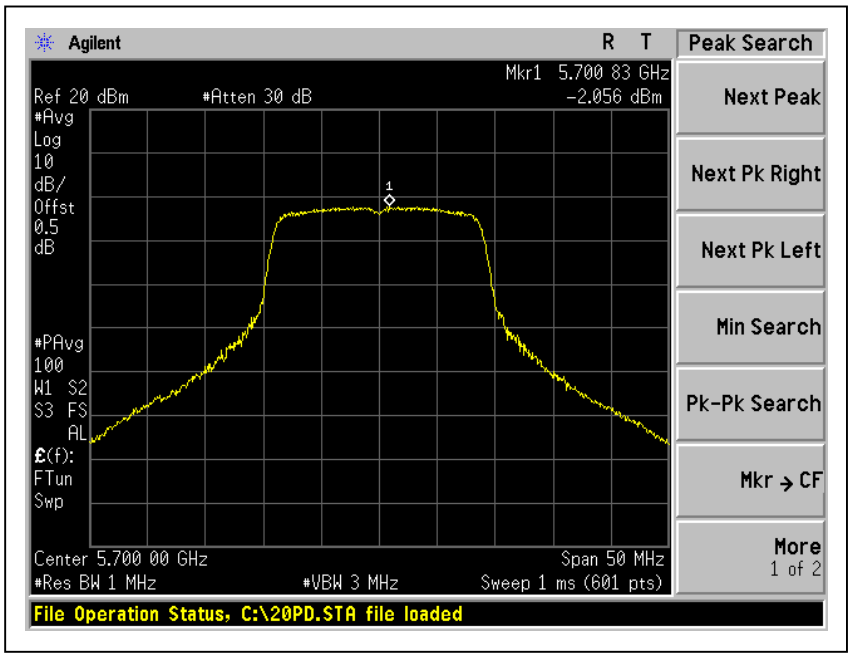
CH9


Agilent
R T
Peak Search
Mkr1 5.498 75 GHz
Ref 20 dBm
#Atten 30 dB
-2.904 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.500 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

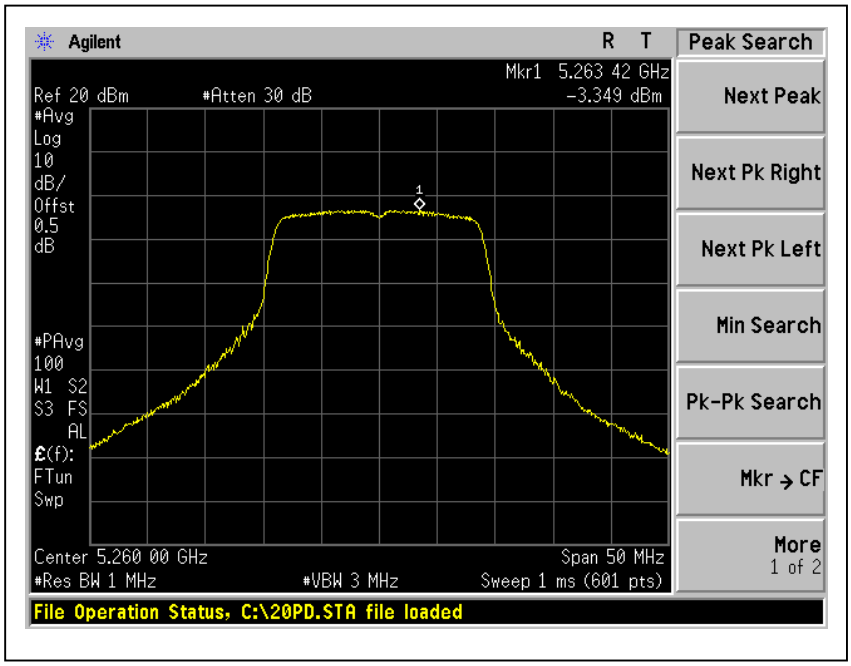
CH14


Agilent
R T
Peak Search
Mkr1 5.598 67 GHz
Ref 20 dBm
#Atten 30 dB
-2.631 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.600 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

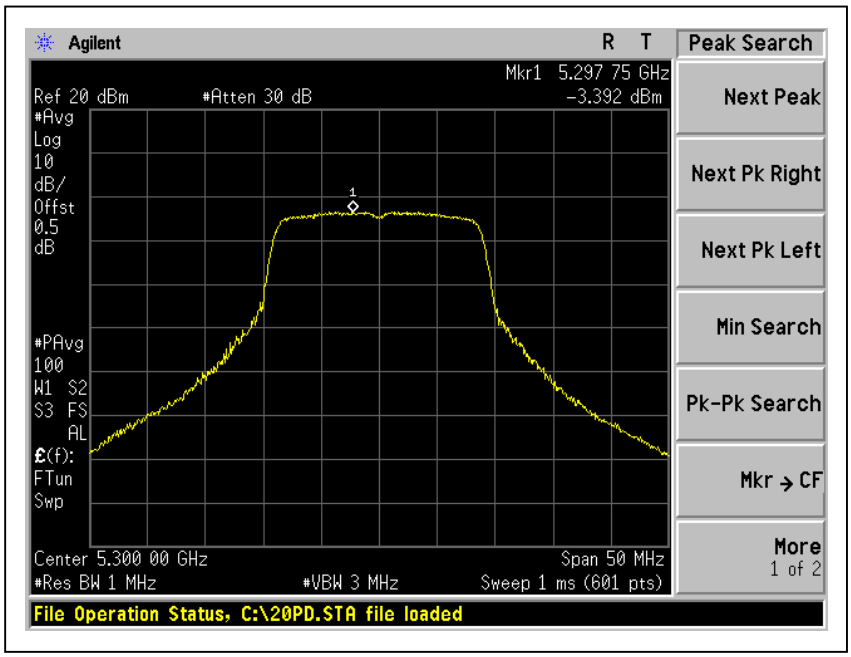
CH19


Agilent
R T
Peak Search
Mkr1 5.700 83 GHz
Ref 20 dBm
#Atten 30 dB
-2.056 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.700 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

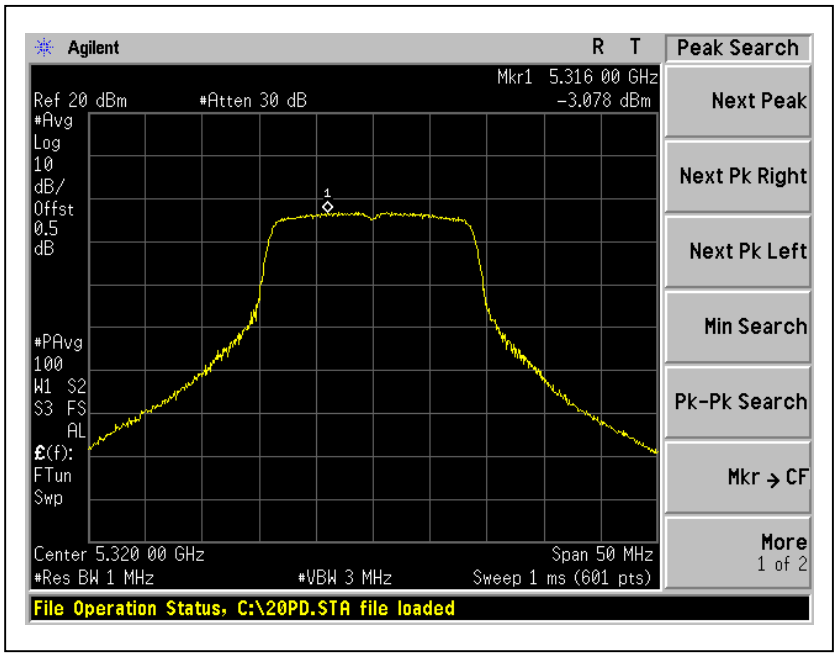
For Chain (1) : CH5



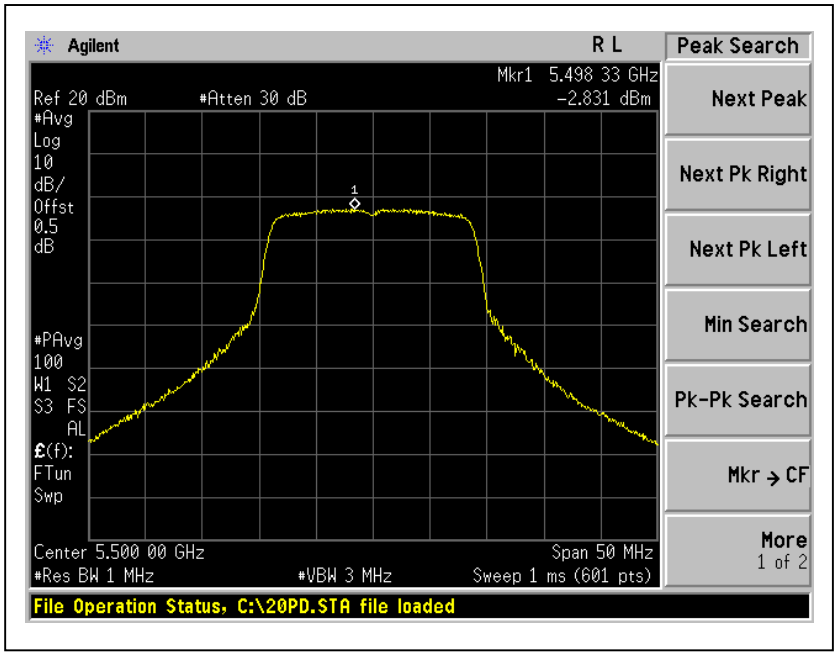
CH7



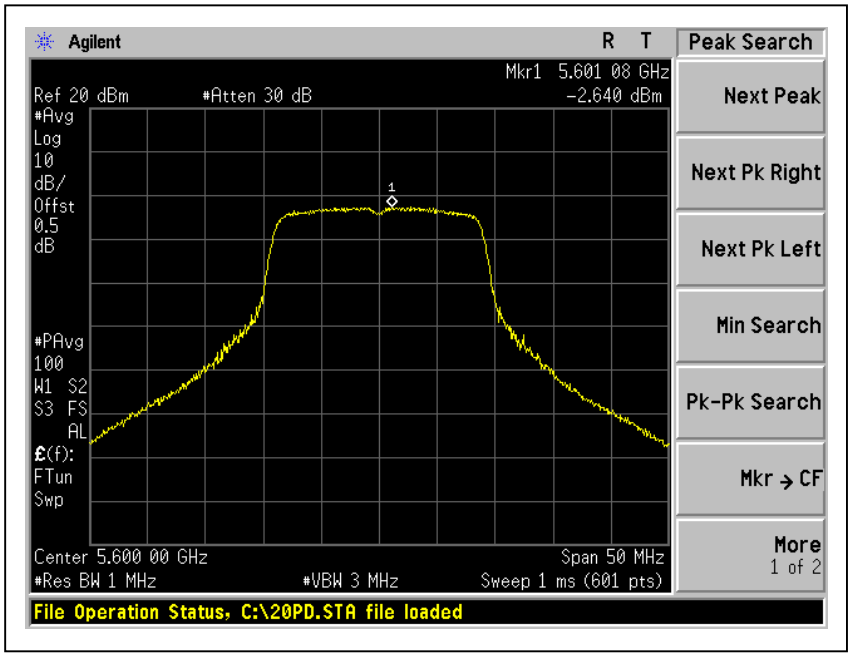
CH8


Agilent
R T
Peak Search
Mkr1 5.316 00 GHz
Ref 20 dBm
#Atten 30 dB
-3.078 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.320 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

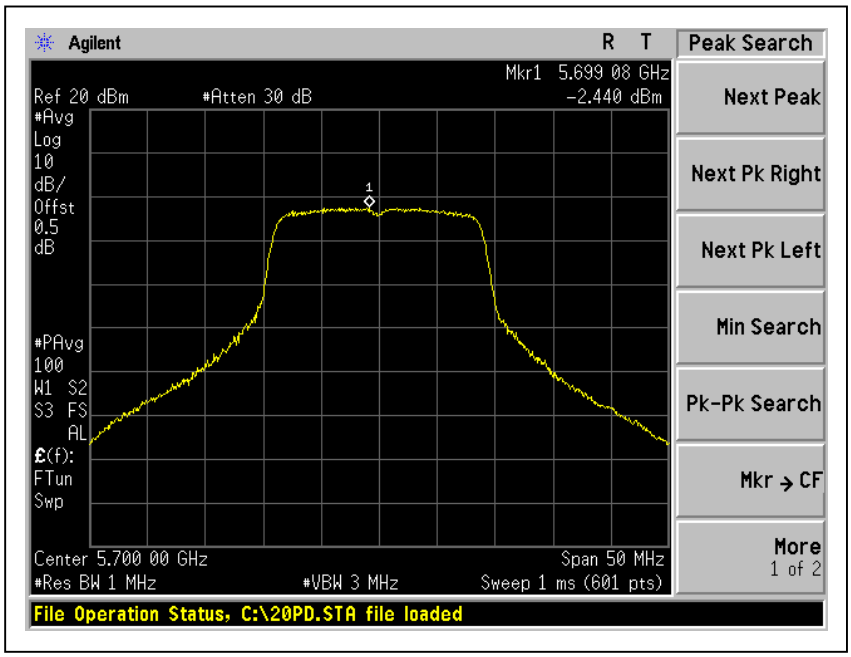
CH9


Agilent
R L
Peak Search
Mkr1 5.498 33 GHz
Ref 20 dBm
#Atten 30 dB
-2.831 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.500 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

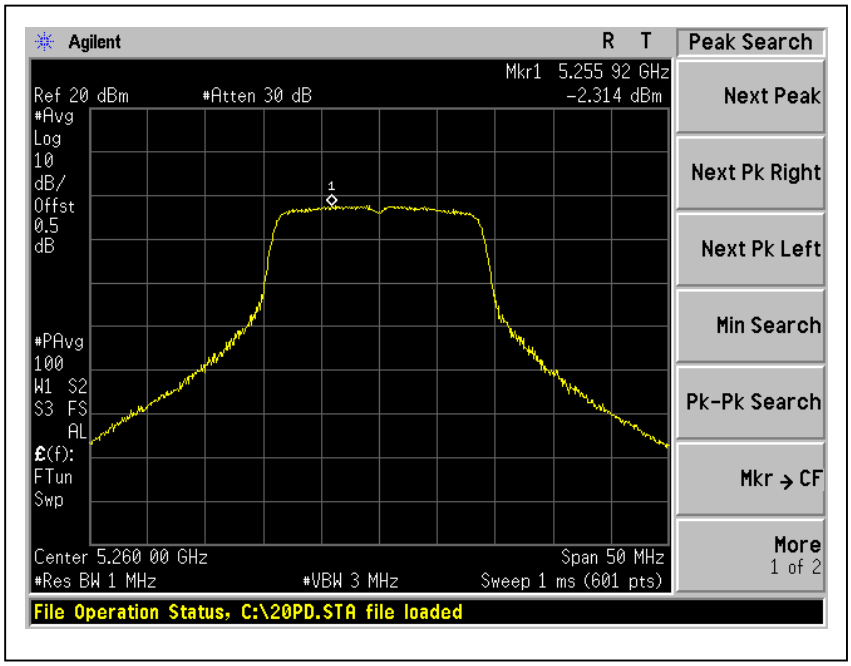
CH14


Agilent
R T
Peak Search
Mkr1 5.601 08 GHz
Ref 20 dBm
#Atten 30 dB
-2.640 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
#Avg
Log
10
dB/
Offst
0.5
dB
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Center 5.600 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

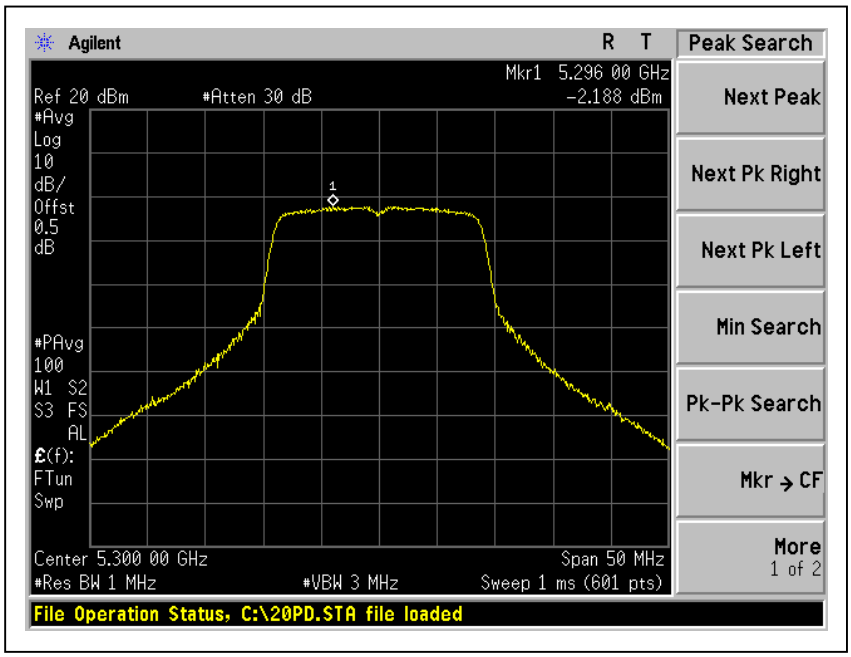
CH19


Agilent
R T
Peak Search
Mkr1 5.699 08 GHz
Ref 20 dBm
#Atten 30 dB
-2.440 dBm
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
#Avg
Log
10
dB/
Offst
0.5
dB
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Center 5.700 00 GHz
Span 50 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

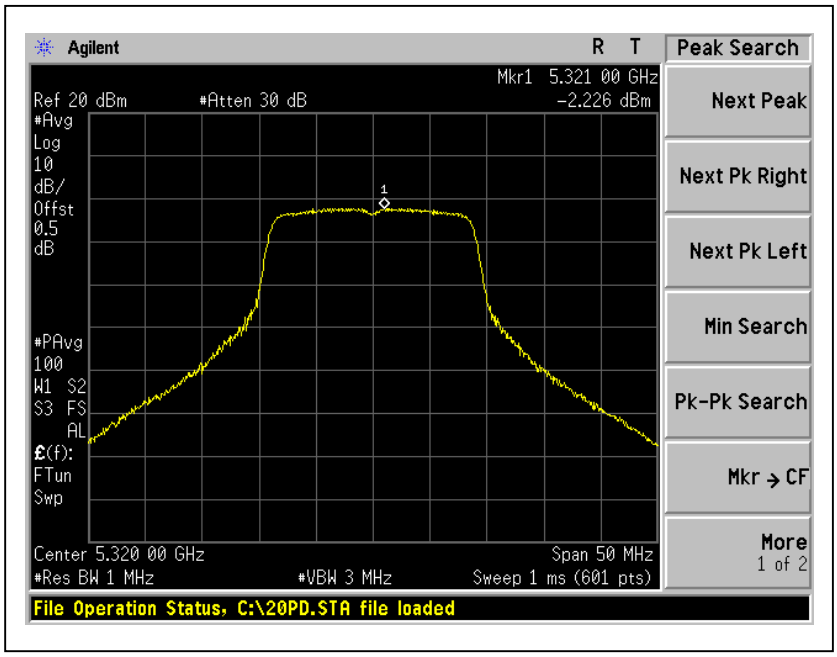
For Chain (2) : CH5



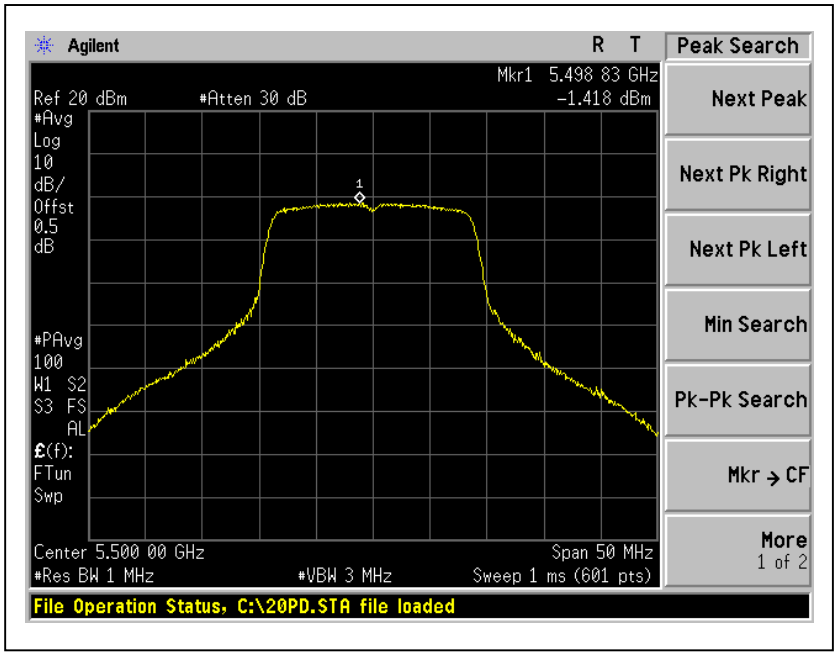
CH7



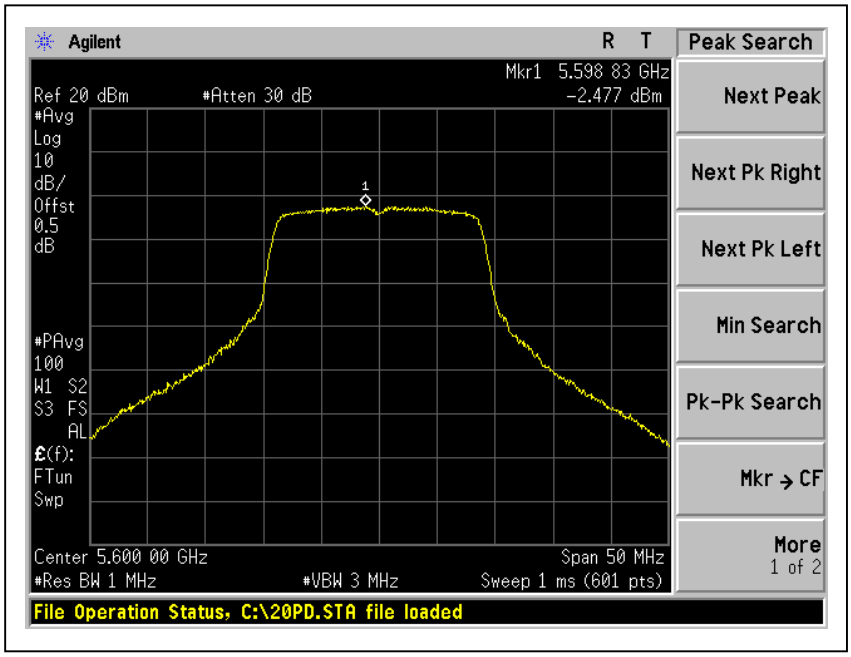
CH8


Agilent
R T
Peak Search
Mkr1 5.321 00 GHz
Ref 20 dBm
#Atten 30 dB
-2.226 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.320 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

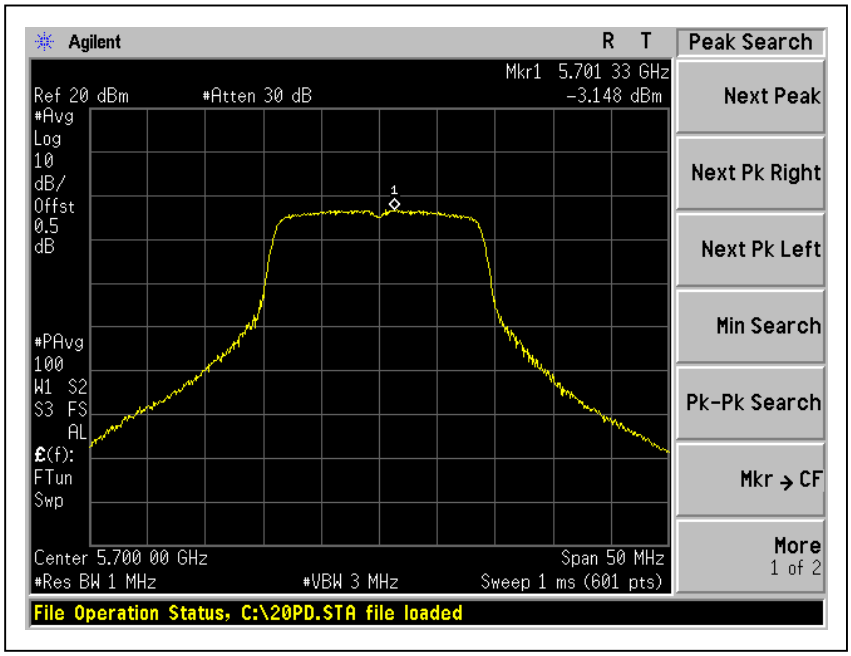
CH9


Agilent
R T
Peak Search
Mkr1 5.498 83 GHz
Ref 20 dBm
#Atten 30 dB
-1.418 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.500 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH14


Agilent
R T
Peak Search
Mkr1 5.598 83 GHz
Ref 20 dBm
#Atten 30 dB
-2.477 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.600 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH19

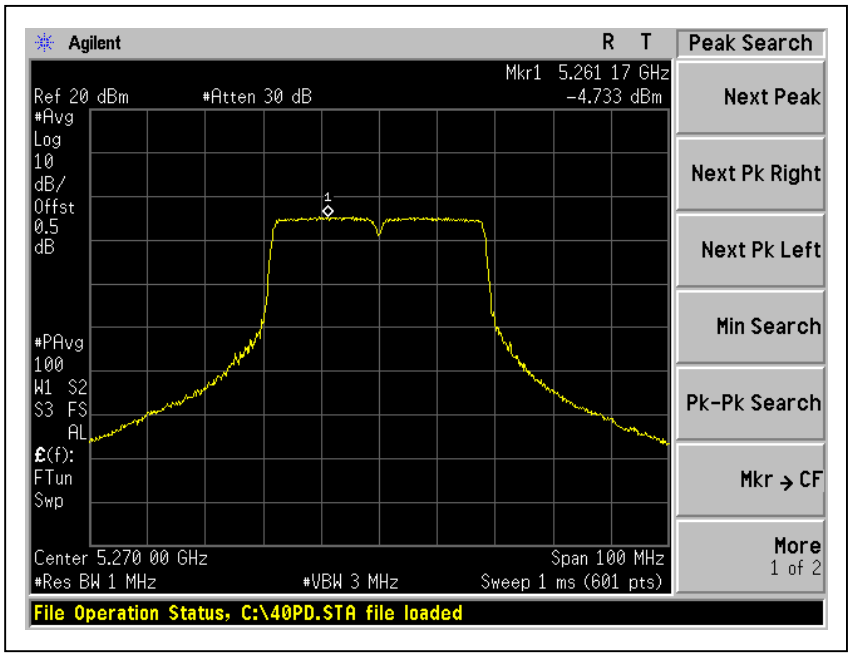

Agilent
R T
Peak Search
Mkr1 5.701 33 GHz
Ref 20 dBm
#Atten 30 dB
-3.148 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.700 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

DRAFT 802.11n (40MHz) OFDM MODULATION:

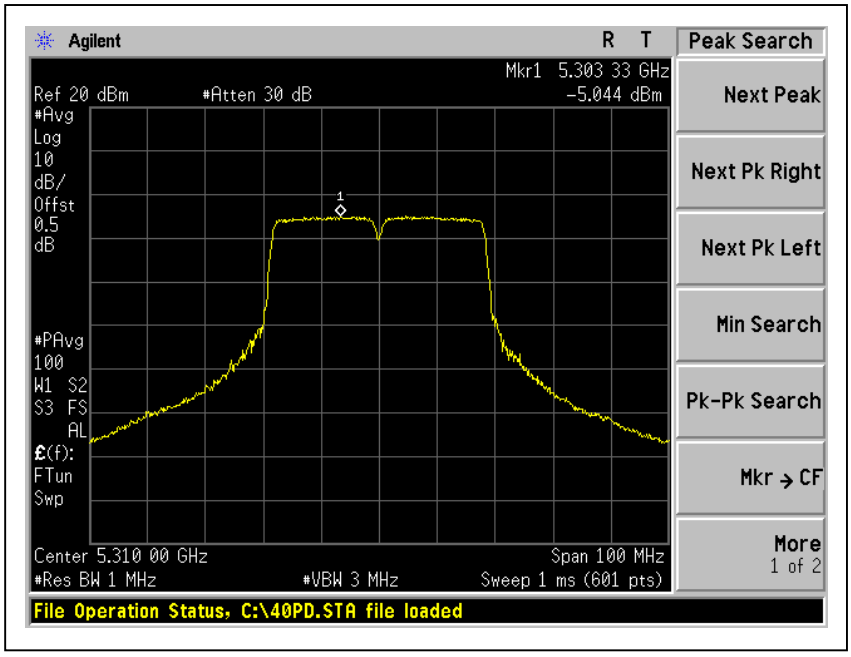
MODULATION TYPE	BPSK	**TRANSFER RATE**	13.5Mbps
INPUT POWER	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	26deg.C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)			TOTAL OUTPUT POWER DENSITY (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
		Chain (0)	Chain(1)	Chain(2)			
3	5270	-4.733	-5.971	-5.224	-0.511	2.5	PASS
4	5310	-5.044	-6.268	-5.192	-0.696	2.5	PASS
5	5510	-11.888	-10.999	-10.329	-6.253	2.5	PASS
7	5590	-5.987	-5.045	-5.084	-0.580	2.5	PASS
9	5670	-4.106	-4.762	-4.902	0.195	2.5	PASS

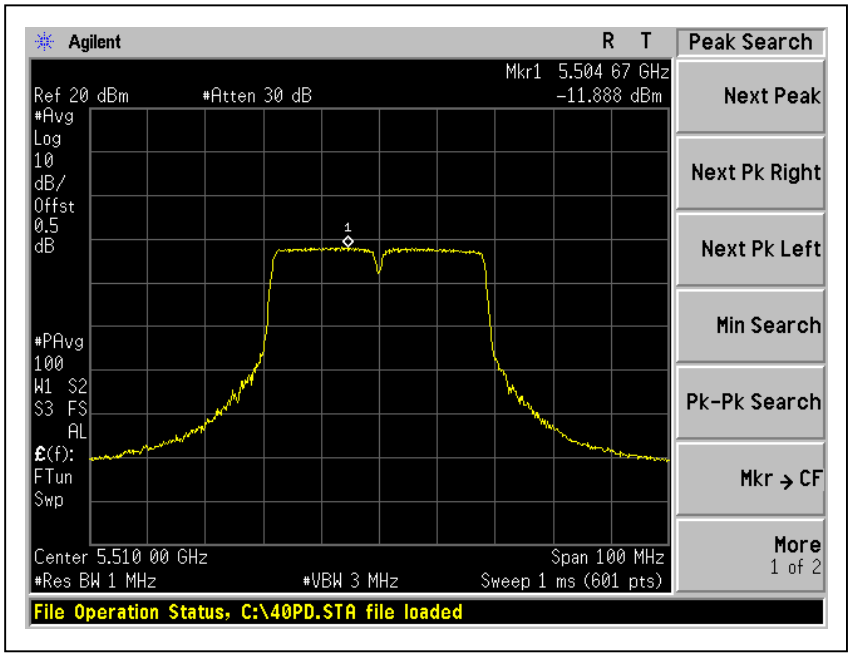
For Chain (0) : CH3



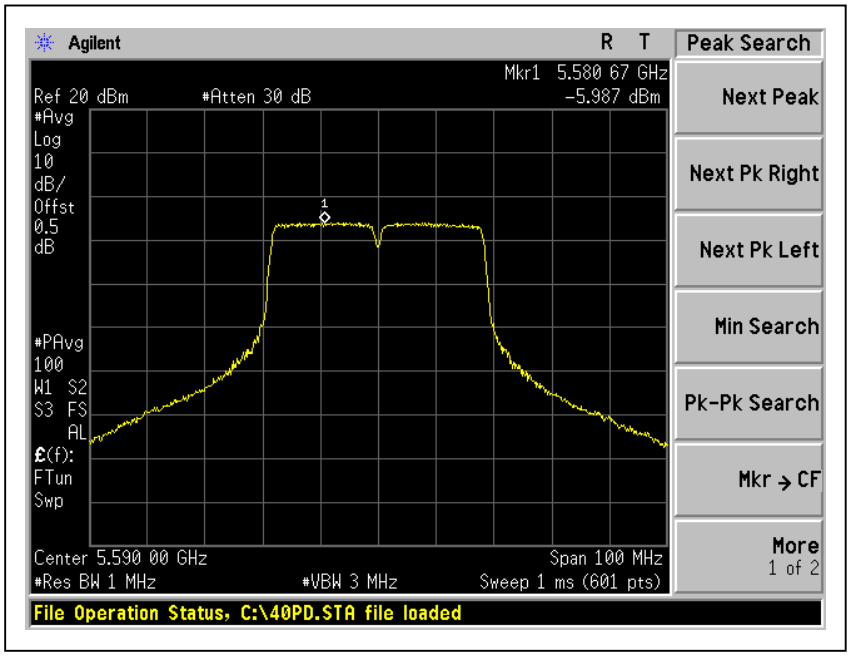
CH4



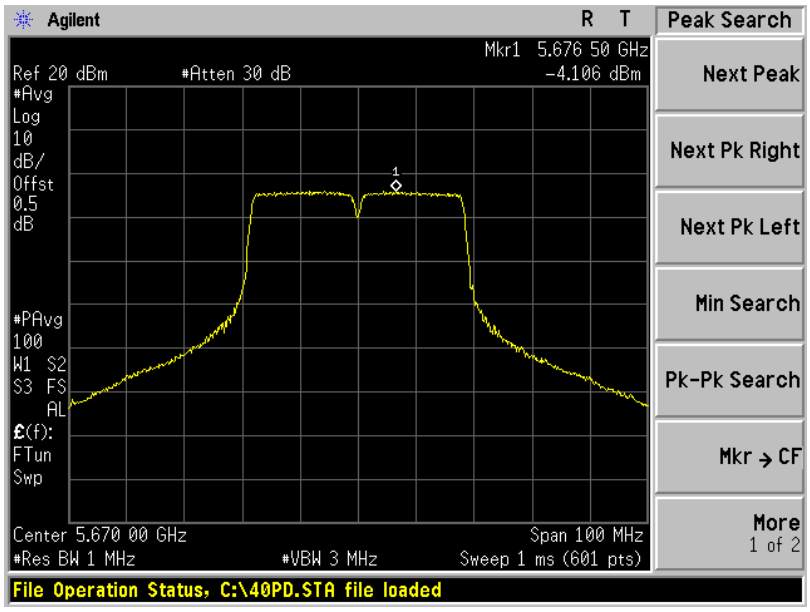
CH5


Agilent
R T
Peak Search
Mkr1 5.504 67 GHz
Ref 20 dBm
#Atten 30 dB
-11.888 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.510 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

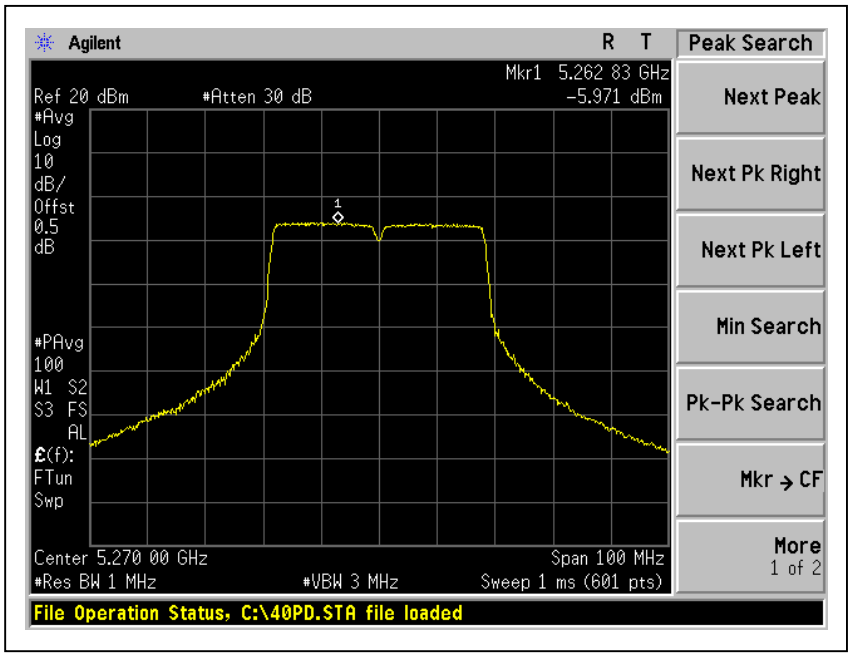
CH7


Agilent
R T
Peak Search
Mkr1 5.580 67 GHz
Ref 20 dBm
#Atten 30 dB
-5.987 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.590 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

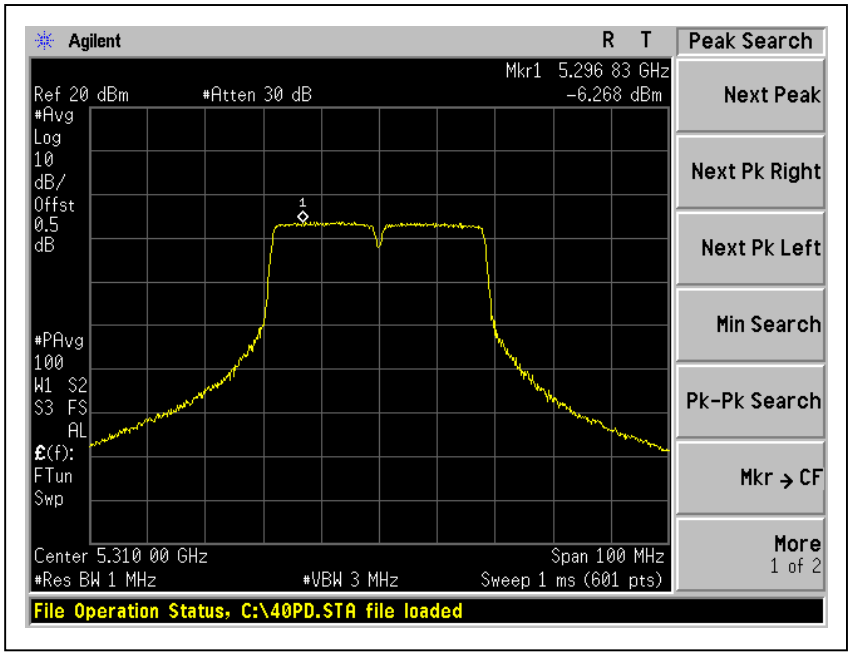
CH9


Agilent
R T
Peak Search
Mkr1 5.676 50 GHz
Ref 20 dBm
#Atten 30 dB
-4.106 dBm
#Avg
Log
10
dB/
Offst
0.5
dB
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
Mkr → CF
More
1 of 2
Center 5.670 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

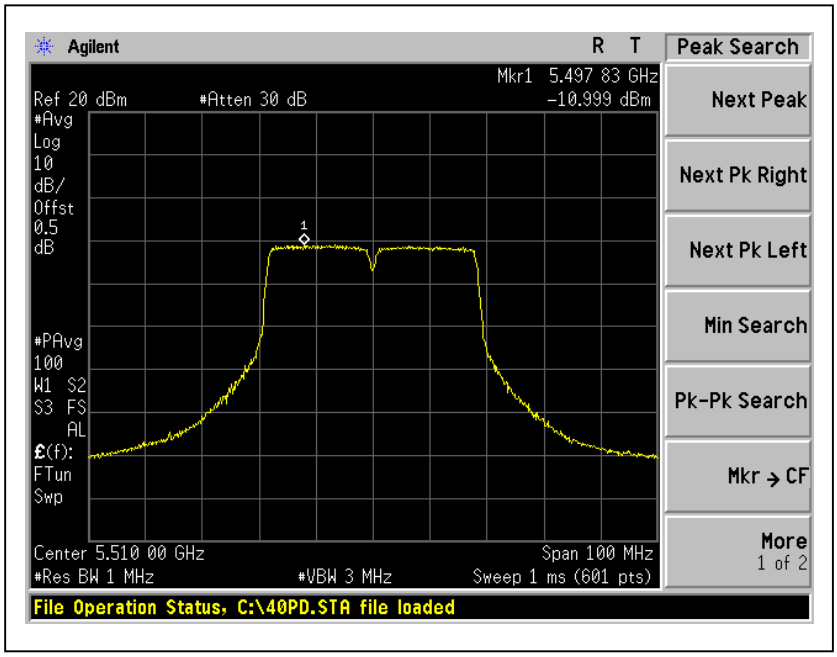
For Chain (1) :CH3



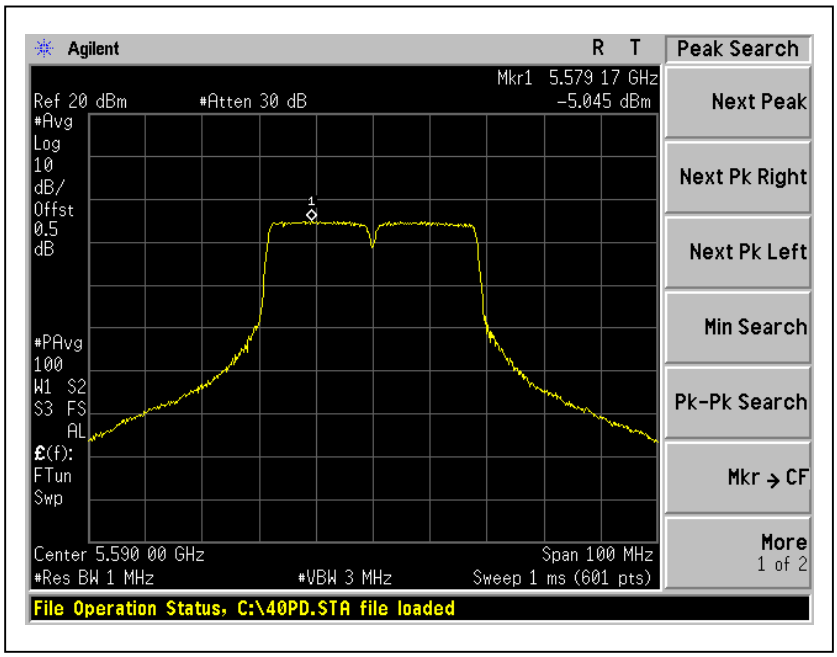
CH4



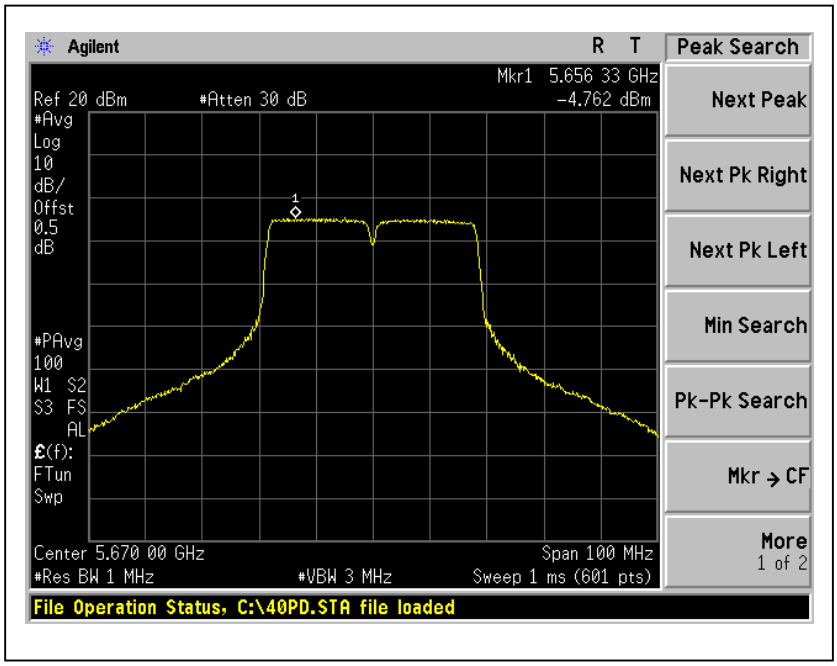
CH5


Agilent
R T
Peak Search
Mkr1 5.497 83 GHz
Ref 20 dBm
#Atten 30 dB
-10.999 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.510 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

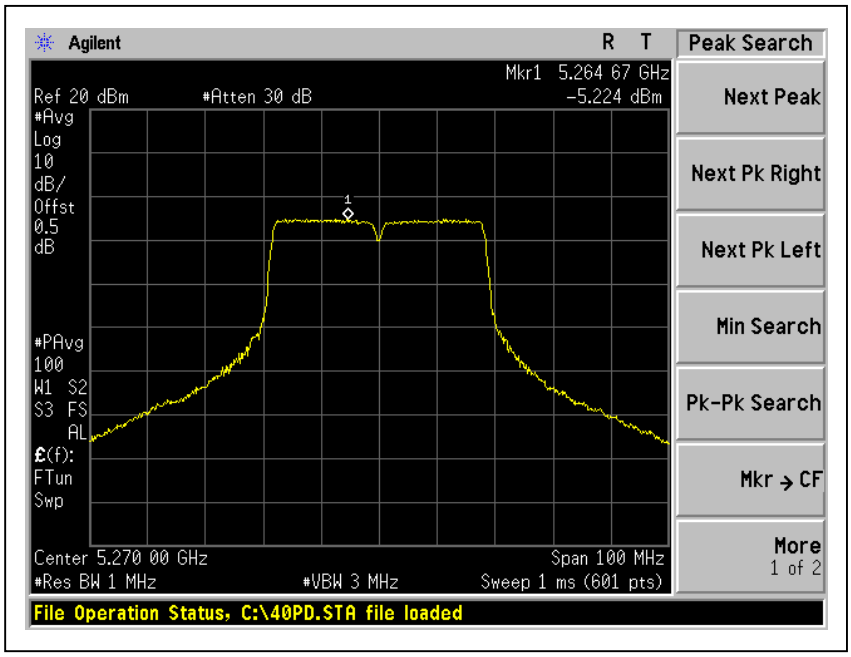
CH7


Agilent
R T
Peak Search
Mkr1 5.579 17 GHz
Ref 20 dBm
#Atten 30 dB
-5.045 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.590 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

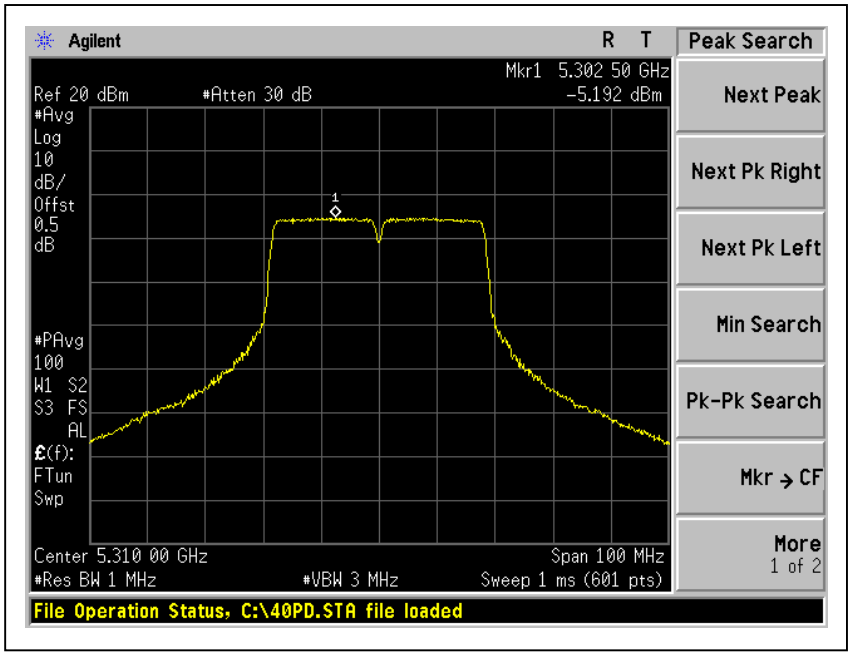
CH9


Agilent
R T
Peak Search
Mkr1 5.656 33 GHz
Ref 20 dBm
#Atten 30 dB
-4.762 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.670 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

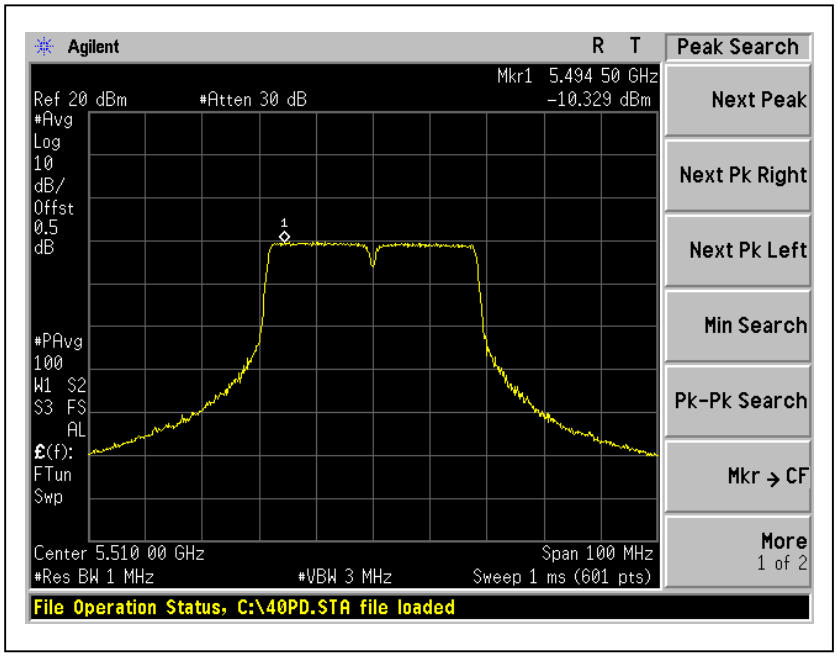
For Chain (2) :CH3



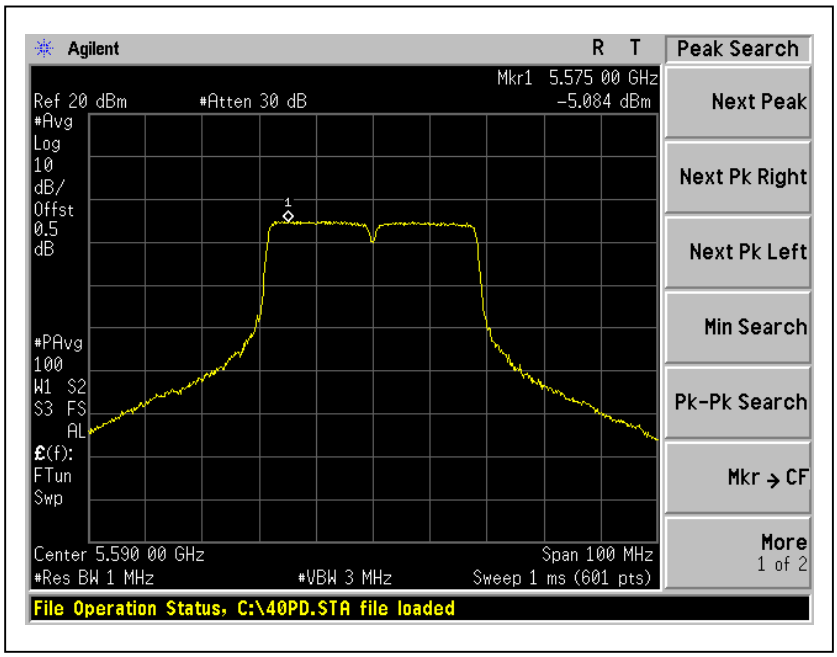
CH4



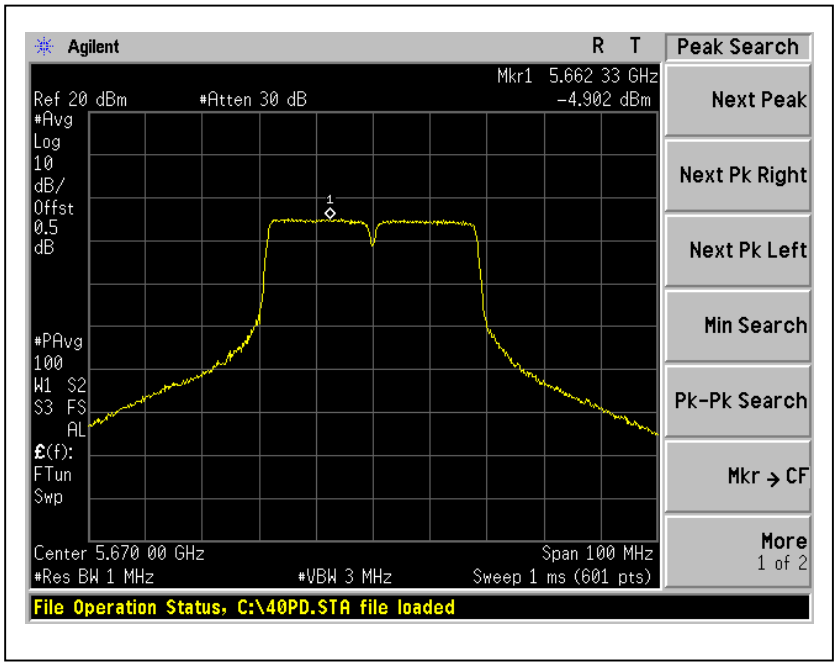
CH5


Agilent
R T
Peak Search
Mkr1 5.494 50 GHz
Ref 20 dBm
#Atten 30 dB
-10.329 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.510 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

CH7


Agilent
R T
Peak Search
Mkr1 5.575 00 GHz
Ref 20 dBm
#Atten 30 dB
-5.084 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.590 00 GHz
Span 100 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\40PD.STA file loaded

CH9


Agilent
R T
Peak Search
Mkr1 5.662 33 GHz
Ref 20 dBm
#Atten 30 dB
-4.902 dBm
Next Peak
#Avg
Log
10
dB/
Offst
0.5
dB
Next Pk Right
Next Pk Left
Min Search
#PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.670 00 GHz
Span 100 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
More
1 of 2
File Operation Status, C:\40PD.STA file loaded

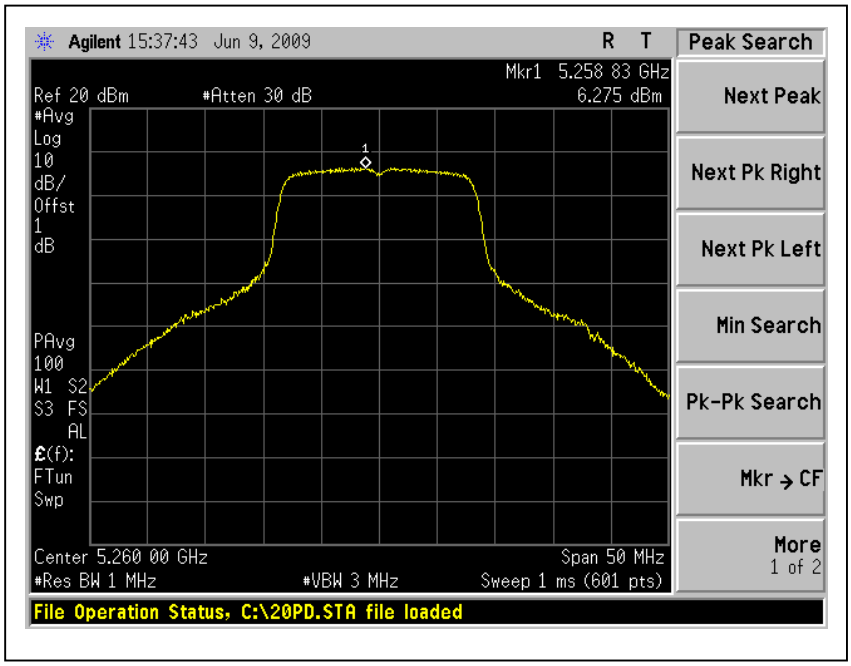
4.5.12 TEST RESULTS-ANTENNA 12

802.11a OFDM modulation

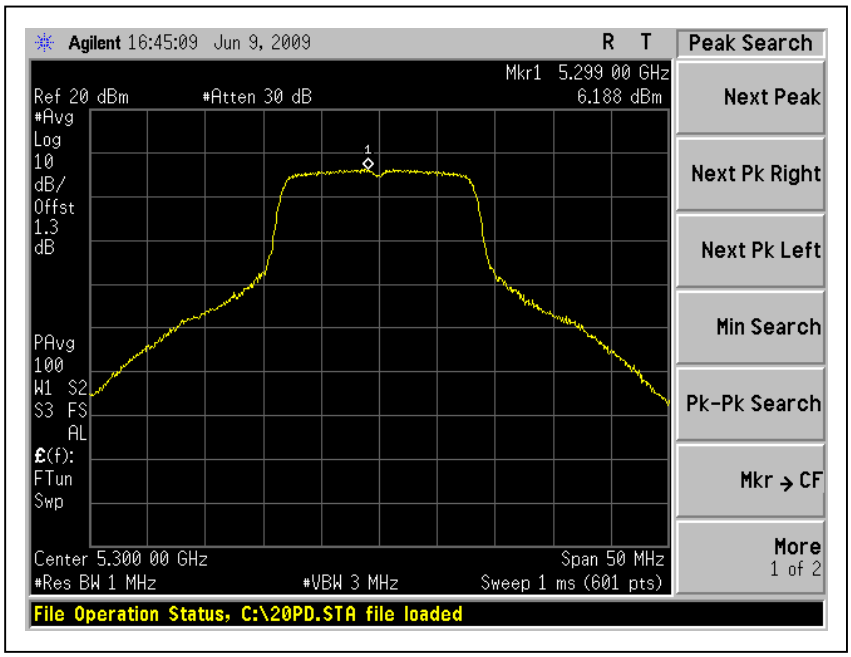
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 63%RH, 965hPa
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 1MHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
5	5260	6.275	11	PASS
7	5300	6.188	11	PASS
8	5320	6.297	11	PASS
9	5500	5.749	11	PASS
14	5600	6.367	11	PASS
19	5700	6.127	11	PASS

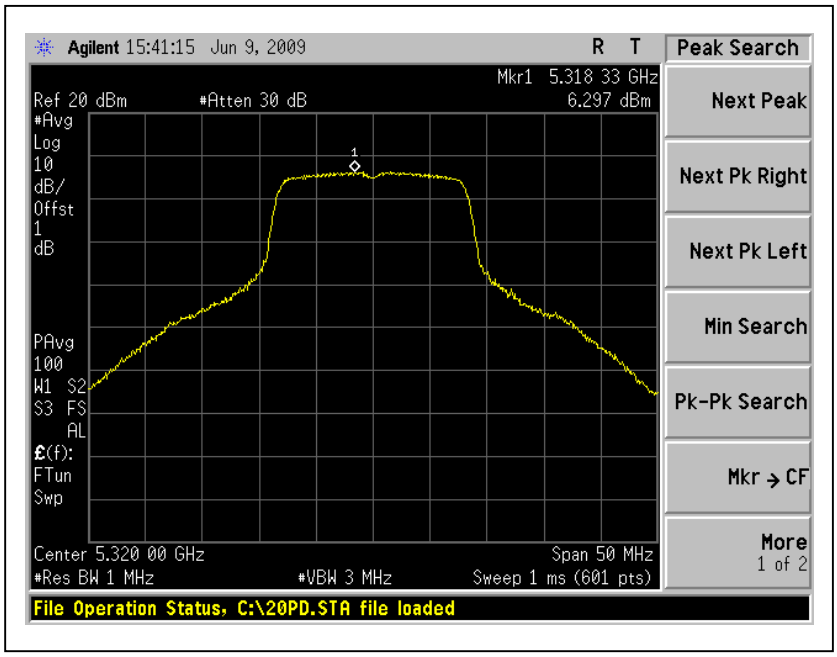
CH5


Agilent 15:37:43 Jun 9, 2009
R T
Peak Search
Mkr1 5.258 83 GHz
Ref 20 dBm
#Atten 30 dB
6.275 dBm
Next Peak
#Avg
Log
10
dB/
Offst
1
dB
Next Pk Right
Next Pk Left
Min Search
PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.260 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

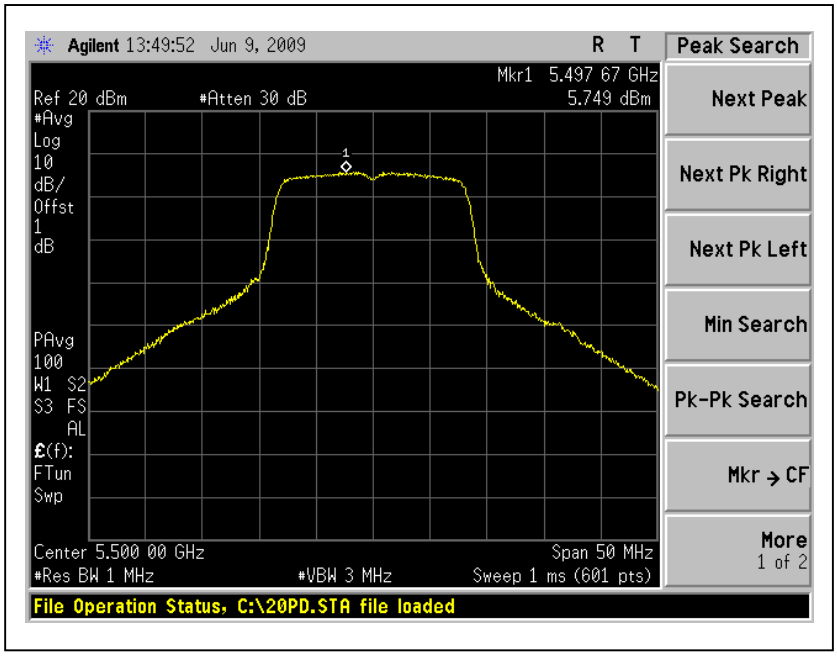
CH7


Agilent 16:45:09 Jun 9, 2009
R T
Peak Search
Mkr1 5.299 00 GHz
Ref 20 dBm
#Atten 30 dB
6.188 dBm
Next Peak
#Avg
Log
10
dB/
Offst
1.3
dB
Next Pk Right
Next Pk Left
Min Search
PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.300 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

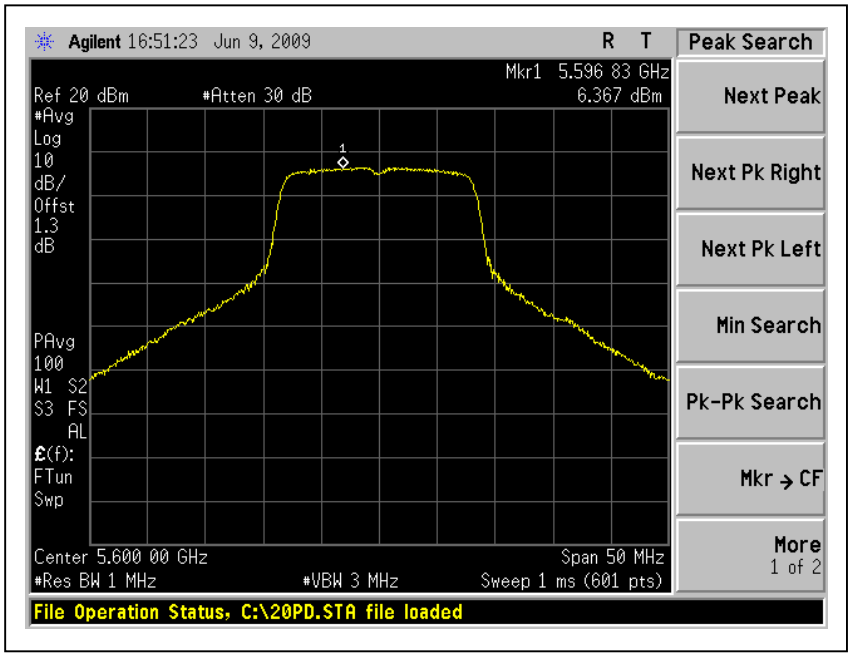
CH8


Agilent 15:41:15 Jun 9, 2009
R T
Peak Search
Mkr1 5.318 33 GHz
6.297 dBm
Ref 20 dBm
#Atten 30 dB
Next Peak
#Avg
Log
10
dB/
Offst
1
dB
Next Pk Right
Next Pk Left
Min Search
PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.320 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

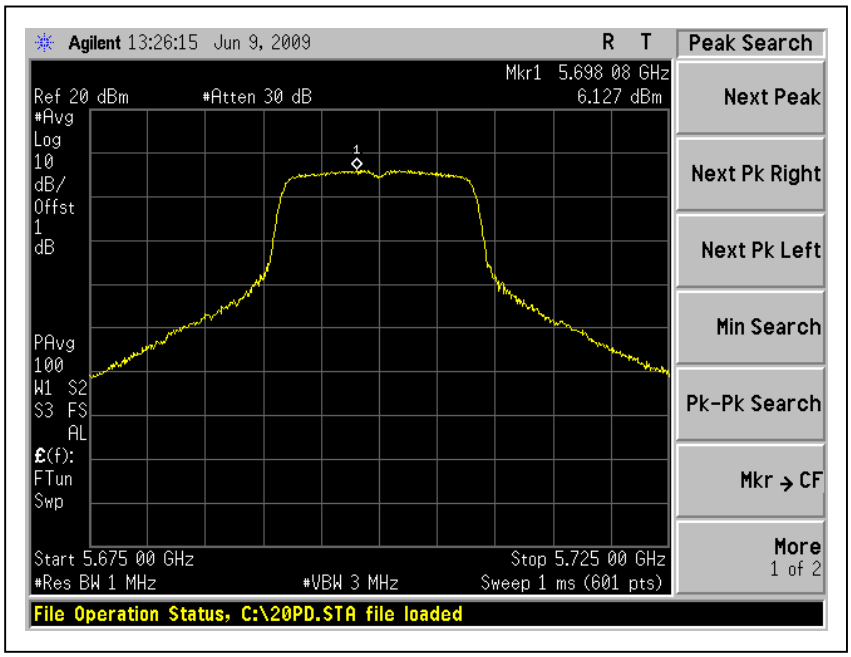
CH9


Agilent 13:49:52 Jun 9, 2009
R T
Peak Search
Mkr1 5.497 67 GHz
5.749 dBm
Ref 20 dBm
#Atten 30 dB
Next Peak
#Avg
Log
10
dB/
Offst
1
dB
Next Pk Right
Next Pk Left
Min Search
PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.500 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH14


Agilent 16:51:23 Jun 9, 2009
R T
Peak Search
Mkr1 5.596 83 GHz
Ref 20 dBm
#Atten 30 dB
6.367 dBm
Next Peak
#Avg
Log
10
dB/
Offst
1.3
dB
Next Pk Right
Next Pk Left
Min Search
PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Center 5.600 00 GHz
Span 50 MHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

CH19


Agilent 13:26:15 Jun 9, 2009
R T
Peak Search
Mkr1 5.698 08 GHz
Ref 20 dBm
#Atten 30 dB
6.127 dBm
Next Peak
#Avg
Log
10
dB/
Offst
1
dB
Next Pk Right
Next Pk Left
Min Search
PAvg
100
W1 S2
S3 FS
AL
£(f):
FTun
Swp
Pk-Pk Search
Mkr → CF
Start 5.675 00 GHz
Stop 5.725 00 GHz
More
1 of 2
#Res BW 1 MHz
#VBW 3 MHz
Sweep 1 ms (601 pts)
File Operation Status, C:\20PD.STA file loaded

4.6 FREQUENCY STABILITY

4.6.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

The frequency tolerance of the carrier signal shall be maintained within +/- 0.02% of the operating frequency over a temperature variation of –30 degrees to 50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

4.6.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSP40	100037	Aug. 03, 2009	Aug. 02, 2010

NOTE:

1.The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

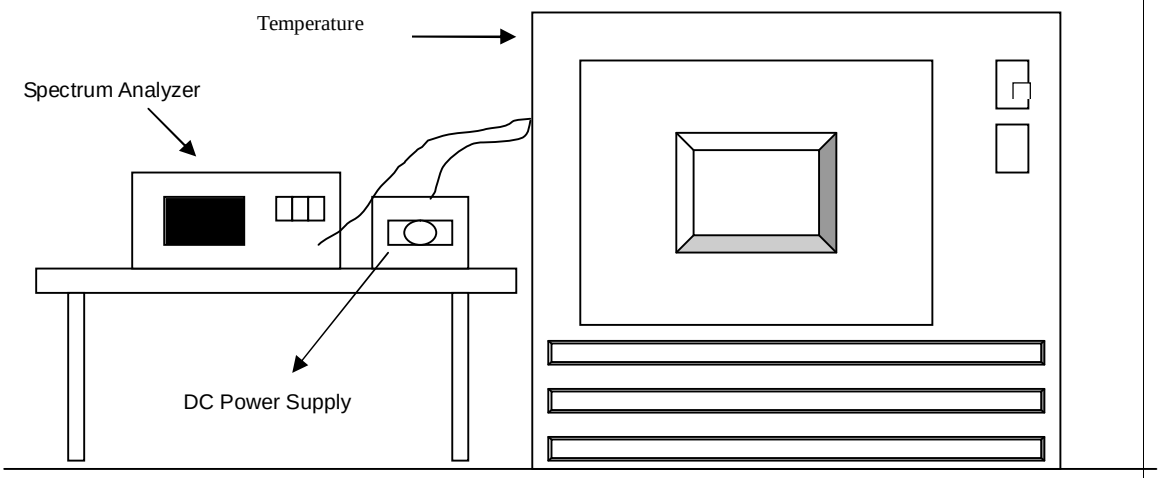
4.6.3 TEST PROCEDURE

1. The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
2. Turn the EUT on and couple its output to a spectrum analyzer.
3. Turn the EUT off and set the chamber to the highest temperature specified.
4. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
5. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
6. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 TEST SETUP



4.6.6 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

4.6.7 TEST RESULTS

Operating frequency: 5320MHz				Limit : ± 0.02%			
Temp. (℃)	Power supply (VAC)	2 minute		5 minute		10 minute	
		(MHz)	(%)	(MHz)	(%)	(MHz)	(%)
50	126.5	5319.9744	0.000481	5319.9756	0.000459	5319.9763	0.000445
	110	5319.9746	0.000477	5319.9758	0.000455	5319.9763	0.000445
	93.5	5319.9748	0.000474	5319.9757	0.000457	5319.9766	0.000440
40	126.5	5319.9768	0.000436	5319.9779	0.000415	5319.9788	0.000398
	110	5319.9766	0.000440	5319.9777	0.000419	5319.9785	0.000404
	93.5	5319.9768	0.000436	5319.9782	0.000410	5319.9789	0.000397
30	126.5	5319.9943	0.000107	5319.9938	0.000117	5319.9941	0.000111
	110	5319.9944	0.000105	5319.9942	0.000109	5319.9945	0.000103
	93.5	5319.9943	0.000107	5319.9938	0.000117	5319.9941	0.000111
20	126.5	5319.9766	0.000440	5319.9777	0.000419	5319.9888	0.000211
	110	5319.9768	0.000436	5319.9778	0.000417	5319.9885	0.000216
	93.5	5319.9766	0.000440	5319.9775	0.000423	5319.9881	0.000224
10	126.5	5319.9753	0.000464	5319.9846	0.000289	5319.9849	0.000284
	110	5319.9754	0.000462	5319.9846	0.000289	5319.9851	0.000280
	93.5	5319.9853	0.000276	5319.9849	0.000284	5319.9848	0.000286
0	126.5	5319.9988	0.000023	5319.9981	0.000036	5319.9984	0.000030
	110	5319.9788	0.000398	5319.9766	0.000440	5319.9753	0.000464
	93.5	5319.9768	0.000436	5319.9777	0.000419	5319.9775	0.000423
-10	126.5	5319.9896	0.000195	5319.9892	0.000203	5319.9895	0.000197
	110	5319.9896	0.000195	5319.9882	0.000222	5319.9897	0.000194
	93.5	5319.9896	0.000195	5319.9891	0.000205	5319.9894	0.000199
-20	126.5	5319.9836	0.000308	5319.9842	0.000297	5319.9848	0.000286
	110	5319.9832	0.000316	5319.9845	0.000291	5319.9850	0.000282
	93.5	5319.9838	0.000305	5319.9844	0.000293	5319.9852	0.000278
-30	126.5	5319.9976	0.000045	5319.9983	0.000032	5319.9987	0.000024
	110	5319.9977	0.000043	5319.9983	0.000032	5319.9980	0.000038
	93.5	5319.9975	0.000047	5319.9978	0.000041	5319.9982	0.000034

4.7 CONDUCTED OUT-BAND EMISSION MEASUREMENT

4.7.1 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSP40	100037	Aug. 03, 2009	Aug. 02, 2010

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.7.2 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set RBW of spectrum analyzer to 1MHz with suitable frequency span including 100 MHz bandwidth from band edge. The band edges was measured and recorded.

4.7.3 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

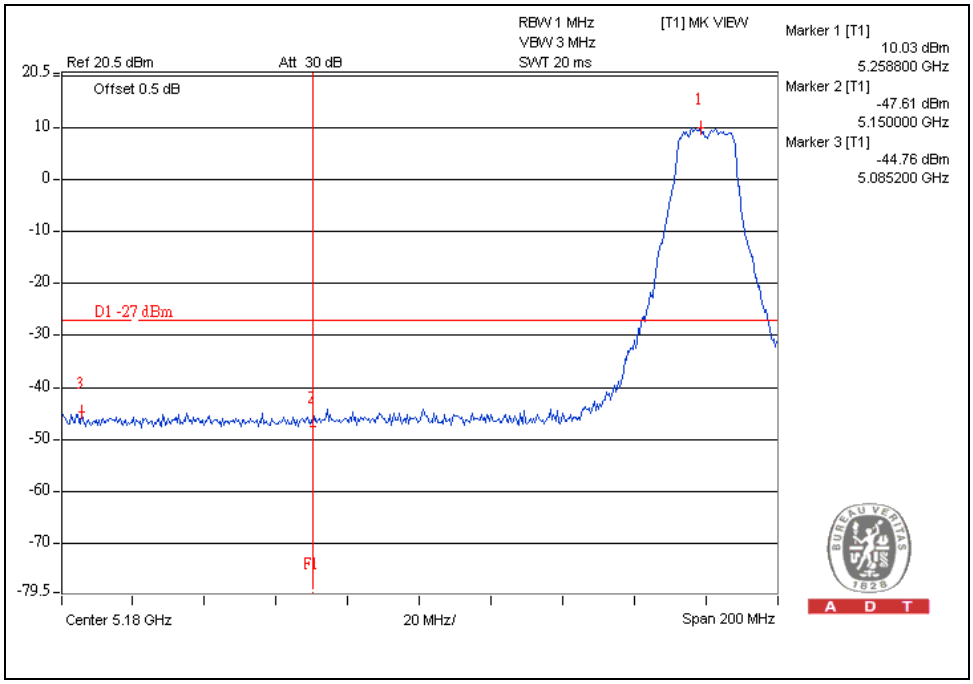
4.7.4 TEST RESULTS-ANTENNA 4

For 5.25 to 5.35GHz band:

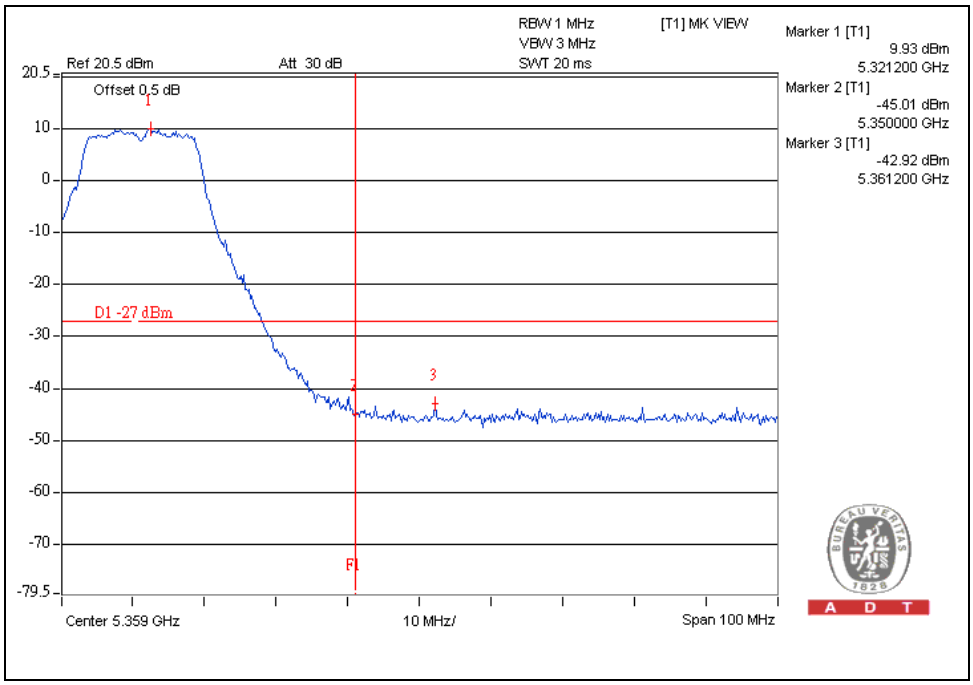
The spectrum plots (Peak RBW=1MHz, VBW=3MHz) are attached on the following pages.

802.11a OFDM modulation

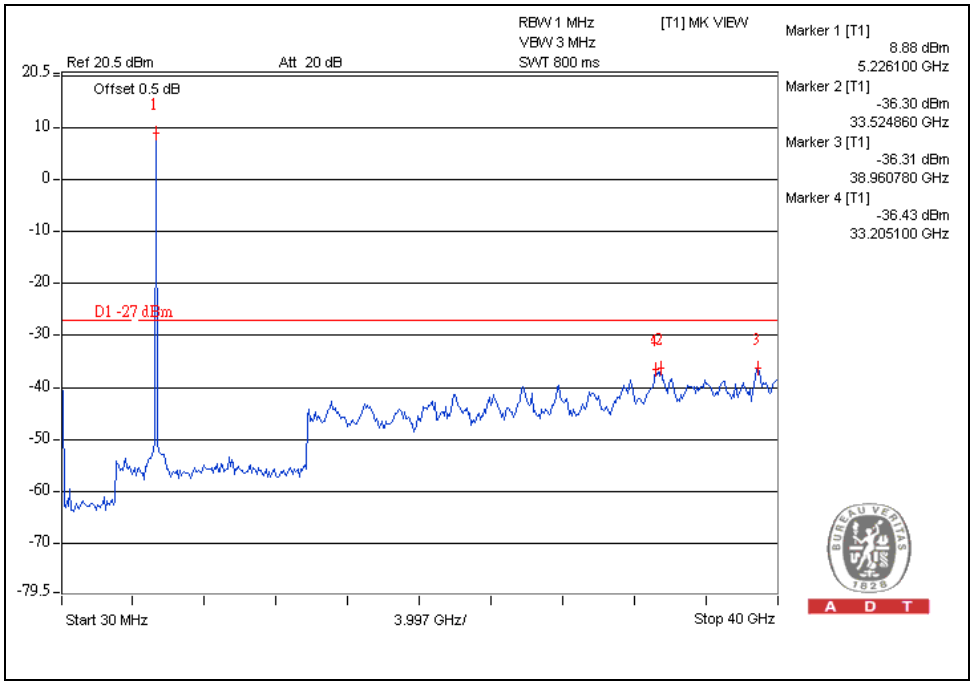
CH 5



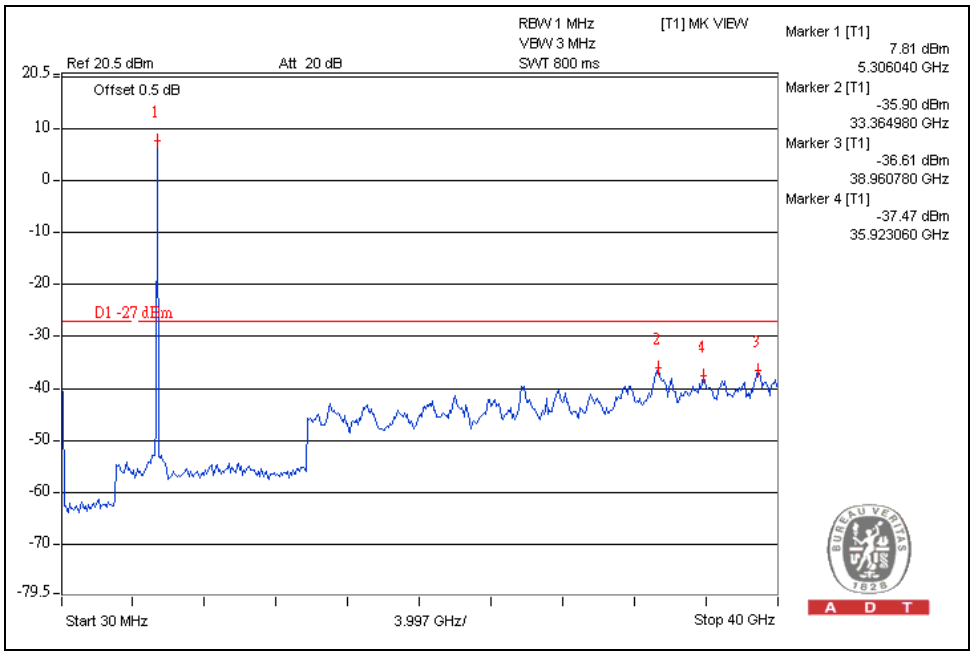
CH 8



CH 5

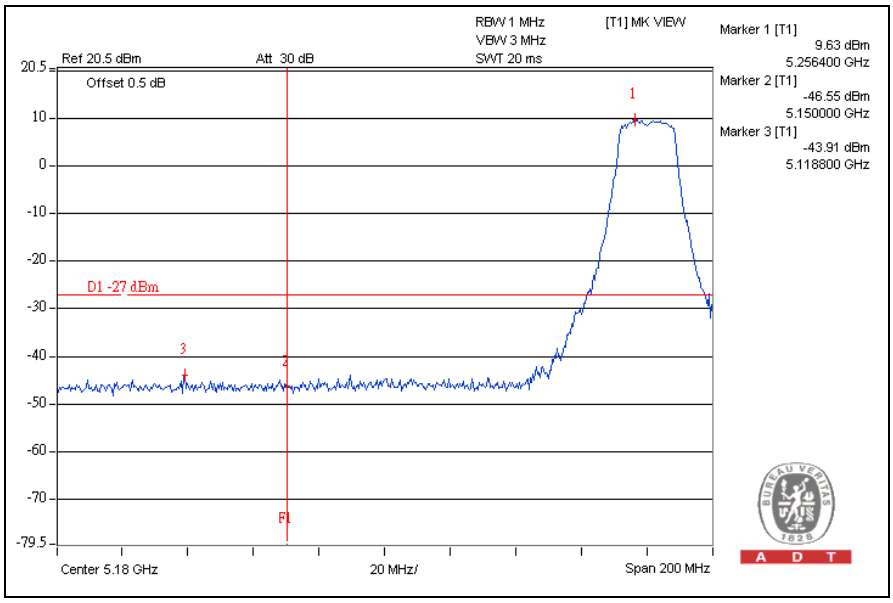

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
8.88 dBm
5.226100 GHz
Marker 2 [T1]
-36.30 dBm
33.524860 GHz
Marker 3 [T1]
-36.31 dBm
38.960780 GHz
Marker 4 [T1]
-36.43 dBm
33.205100 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH 8

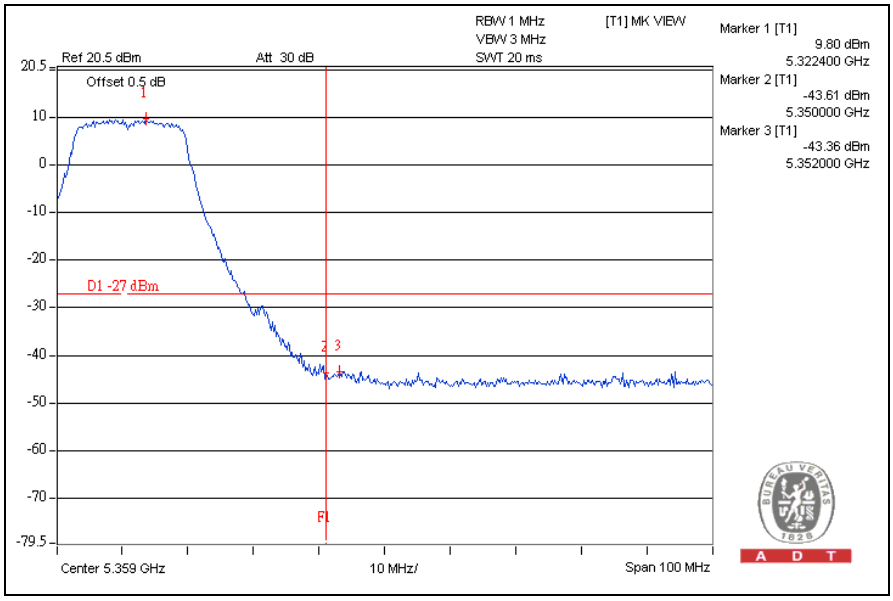

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
7.81 dBm
5.306040 GHz
Marker 2 [T1]
-35.90 dBm
33.364980 GHz
Marker 3 [T1]
-36.61 dBm
38.960780 GHz
Marker 4 [T1]
-37.47 dBm
35.923060 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (20MHz) OFDM MODULATION:

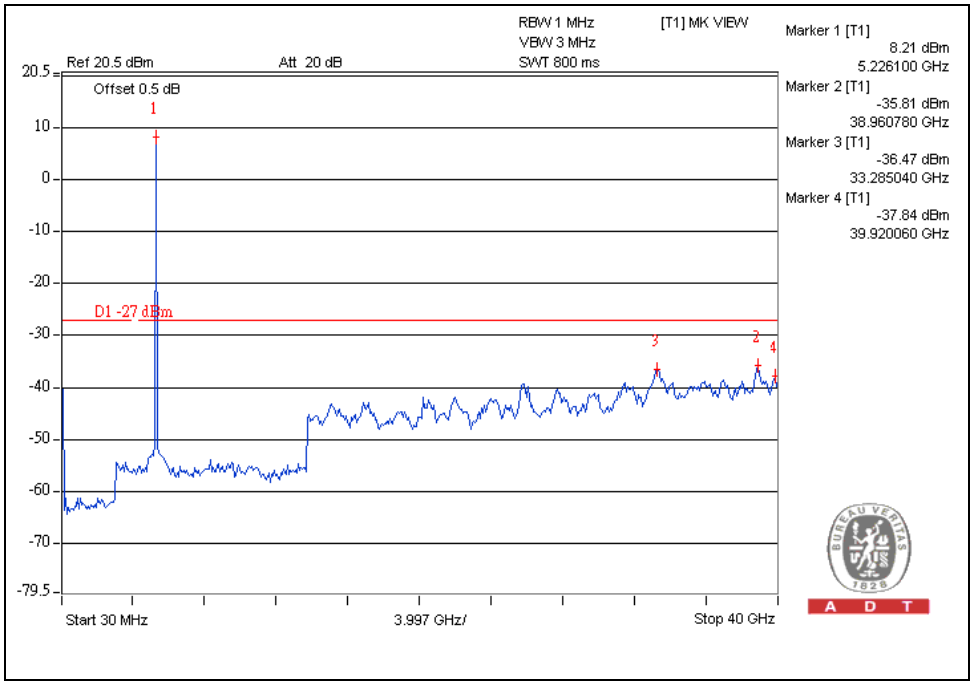
CH5



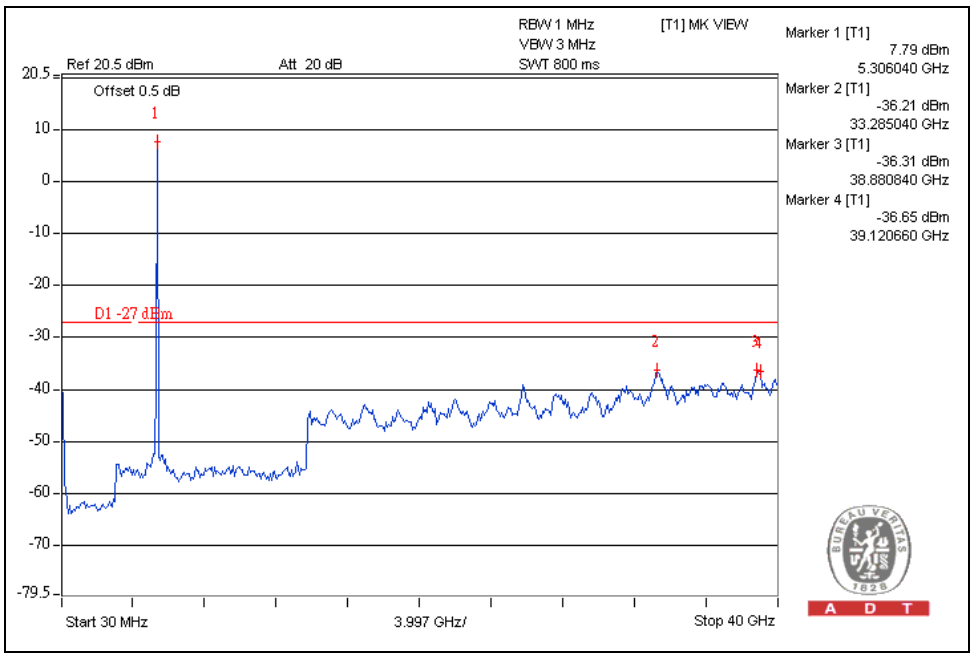
CH8



CH5

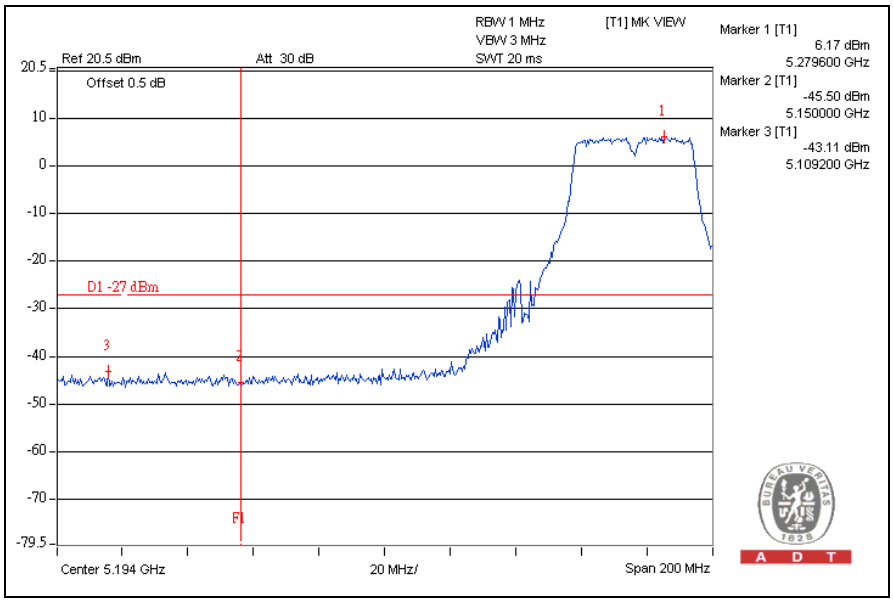

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
8.21 dBm
5.226100 GHz
Marker 2 [T1]
-35.81 dBm
38.960780 GHz
Marker 3 [T1]
-36.47 dBm
33.285040 GHz
Marker 4 [T1]
-37.84 dBm
39.920060 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH8

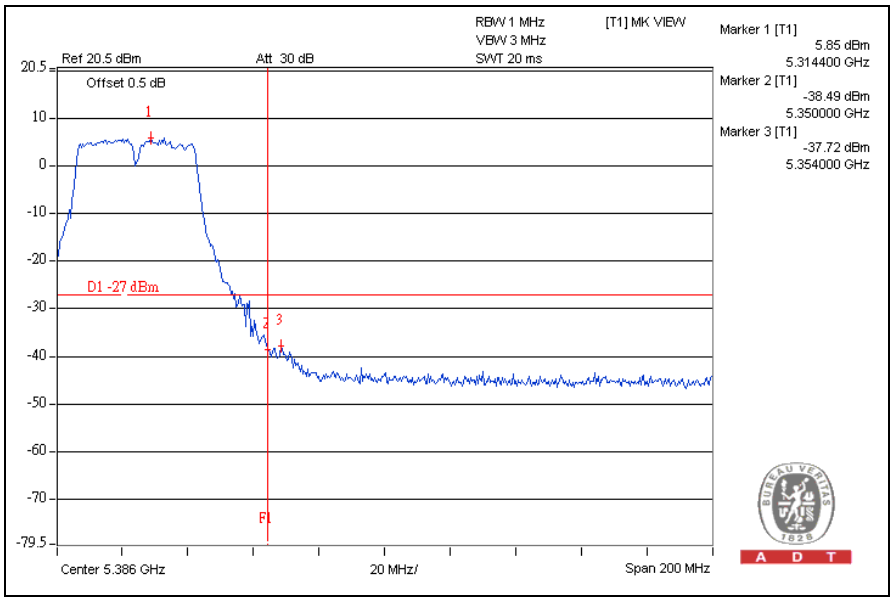

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
7.79 dBm
5.306040 GHz
Marker 2 [T1]
-36.21 dBm
33.285040 GHz
Marker 3 [T1]
-36.31 dBm
38.880840 GHz
Marker 4 [T1]
-36.65 dBm
39.120660 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (40MHz) OFDM MODULATION:

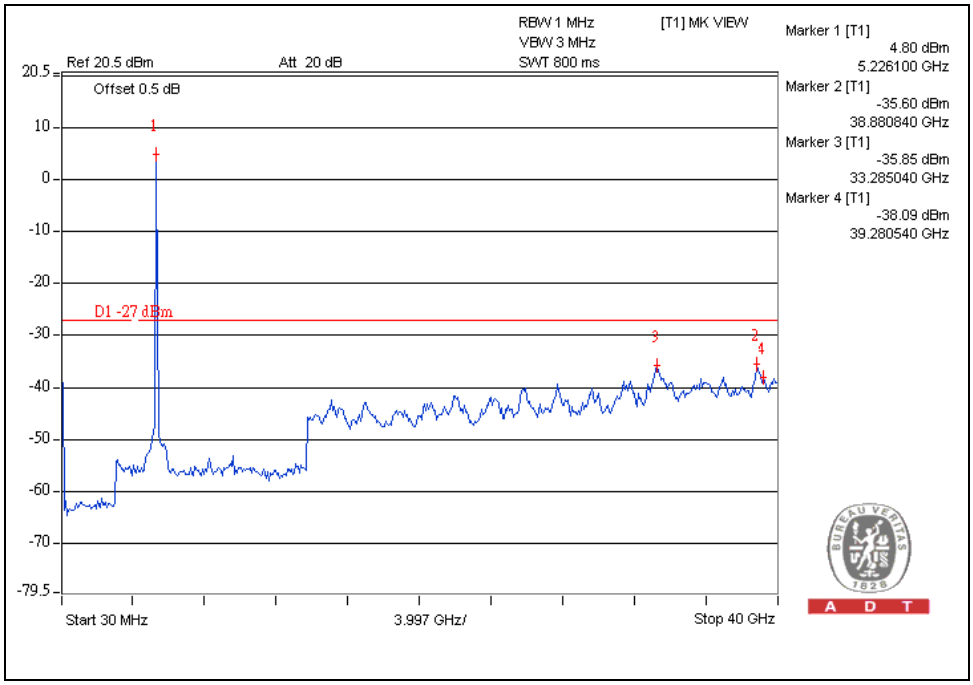
CH3



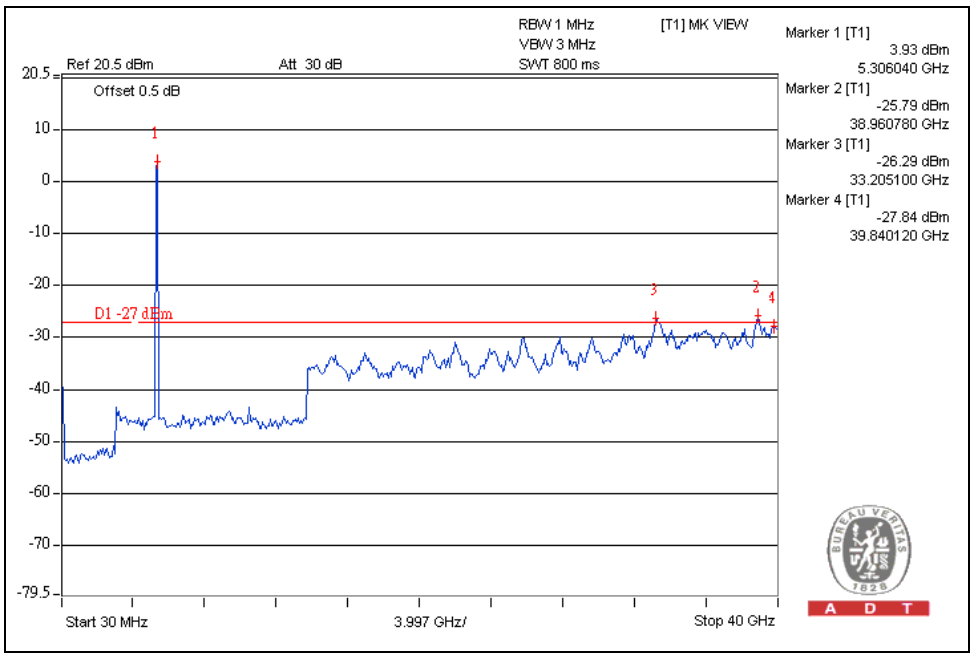
CH4



CH3


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
4.80 dBm
5.226100 GHz
Marker 2 [T1]
-35.60 dBm
38.880840 GHz
Marker 3 [T1]
-35.85 dBm
33.285040 GHz
Marker 4 [T1]
-38.09 dBm
39.280540 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH4

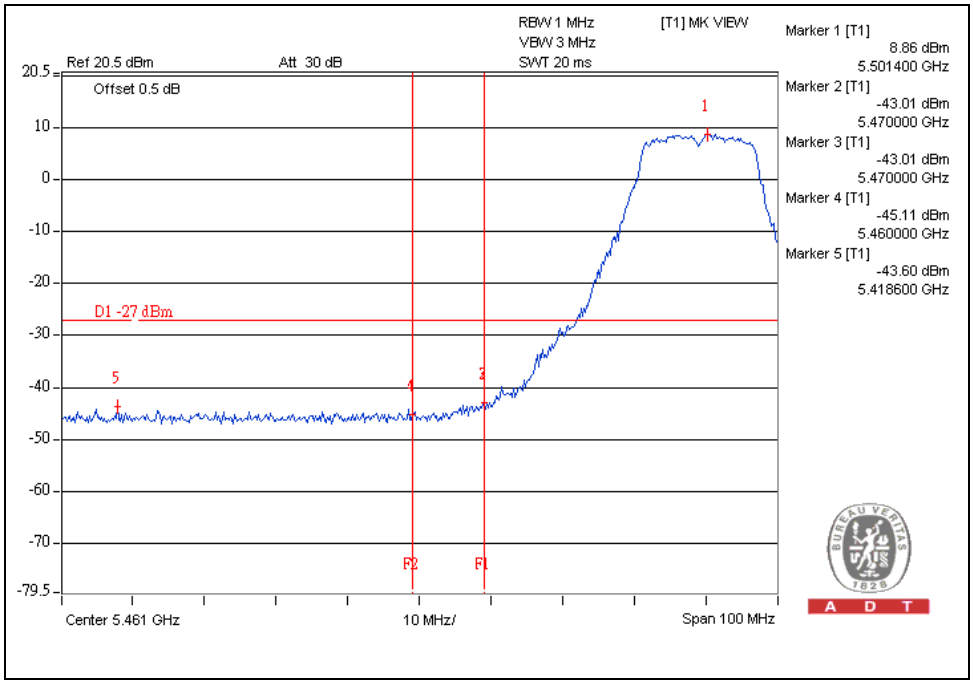

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
3.93 dBm
5.306040 GHz
Marker 2 [T1]
-25.79 dBm
38.960780 GHz
Marker 3 [T1]
-26.29 dBm
33.205100 GHz
Marker 4 [T1]
-27.84 dBm
39.840120 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

For 5.47 to 5.725GHz band:

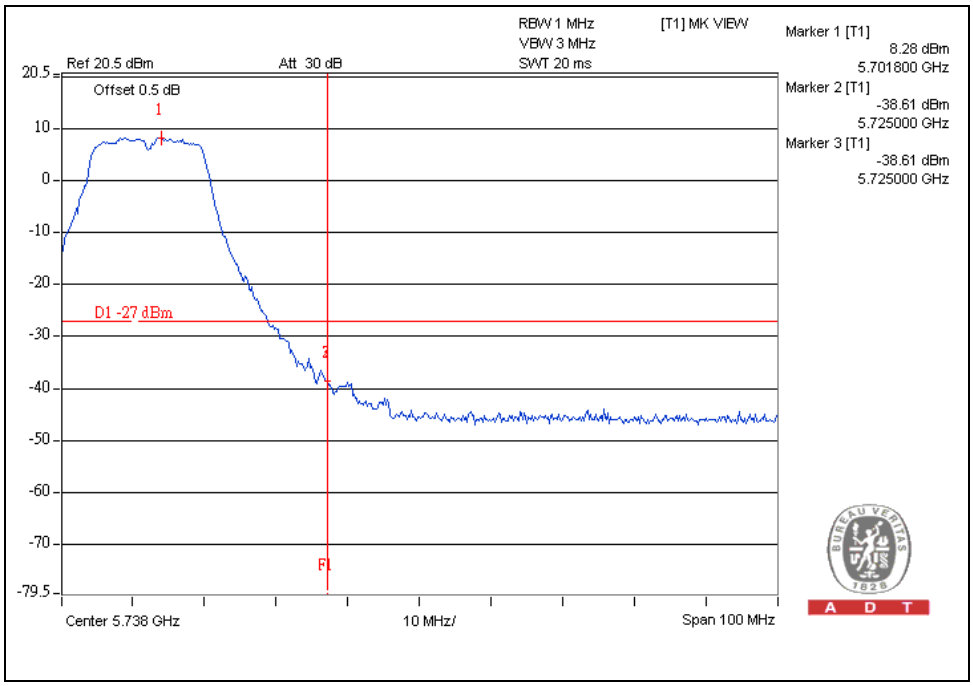
The spectrum plots (Peak RBW=1MHz, VBW=3MHz) are attached on the following pages.

802.11a OFDM modulation

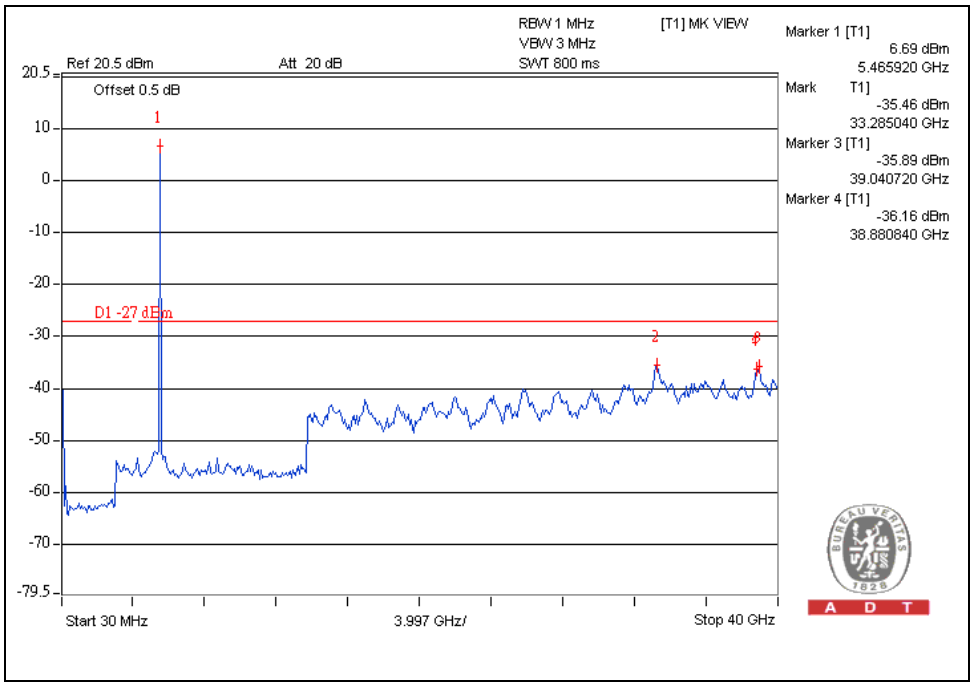
CH 9



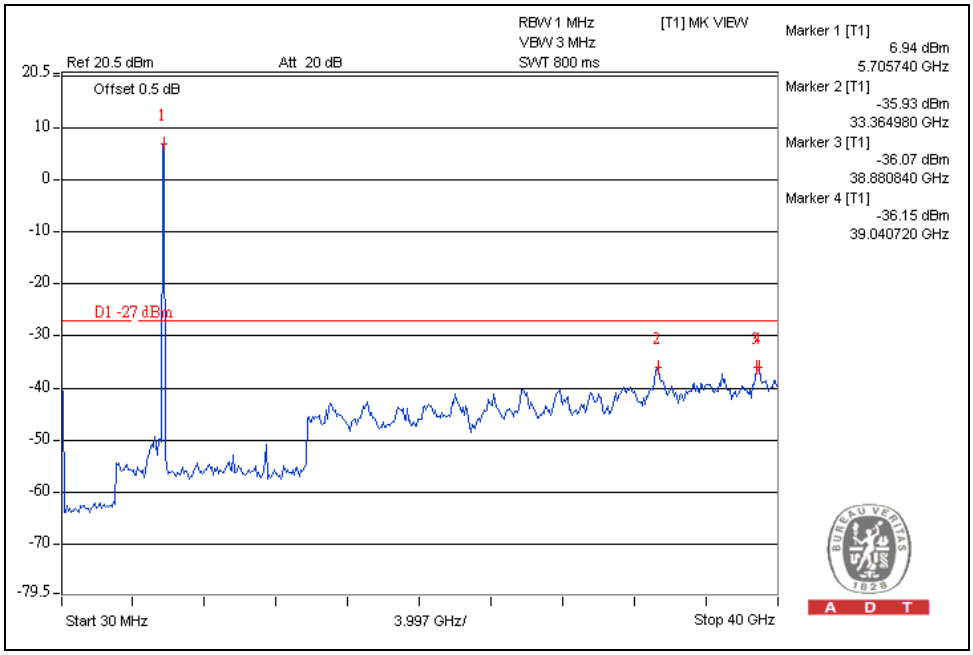
CH 19



CH 9

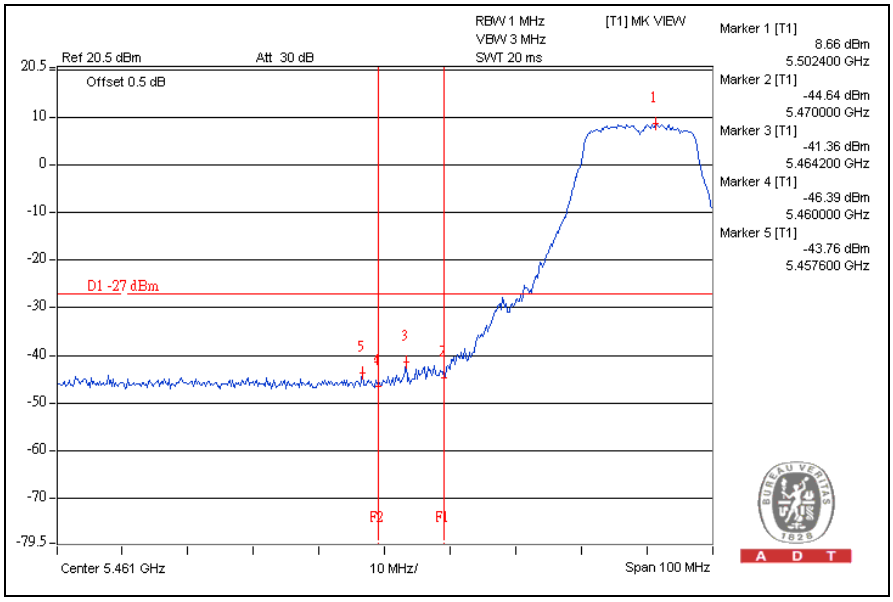

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
6.69 dBm
5.465920 GHz
Mark T1]
-35.46 dBm
33.285040 GHz
Marker 3 [T1]
-35.89 dBm
39.040720 GHz
Marker 4 [T1]
-36.16 dBm
38.880840 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH 19

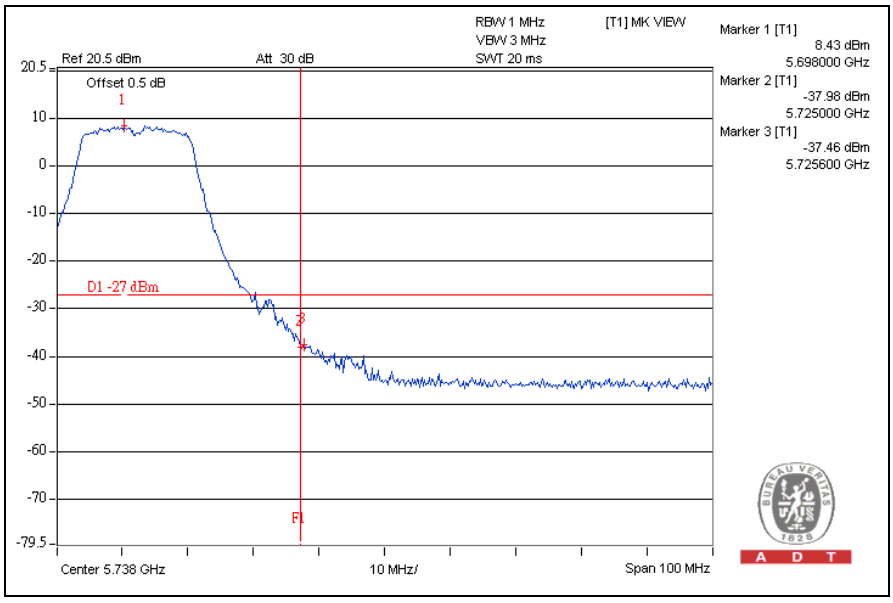

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
6.94 dBm
5.705740 GHz
Marker 2 [T1]
-35.93 dBm
33.364980 GHz
Marker 3 [T1]
-36.07 dBm
38.880840 GHz
Marker 4 [T1]
-36.15 dBm
39.040720 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (20MHz) OFDM MODULATION:

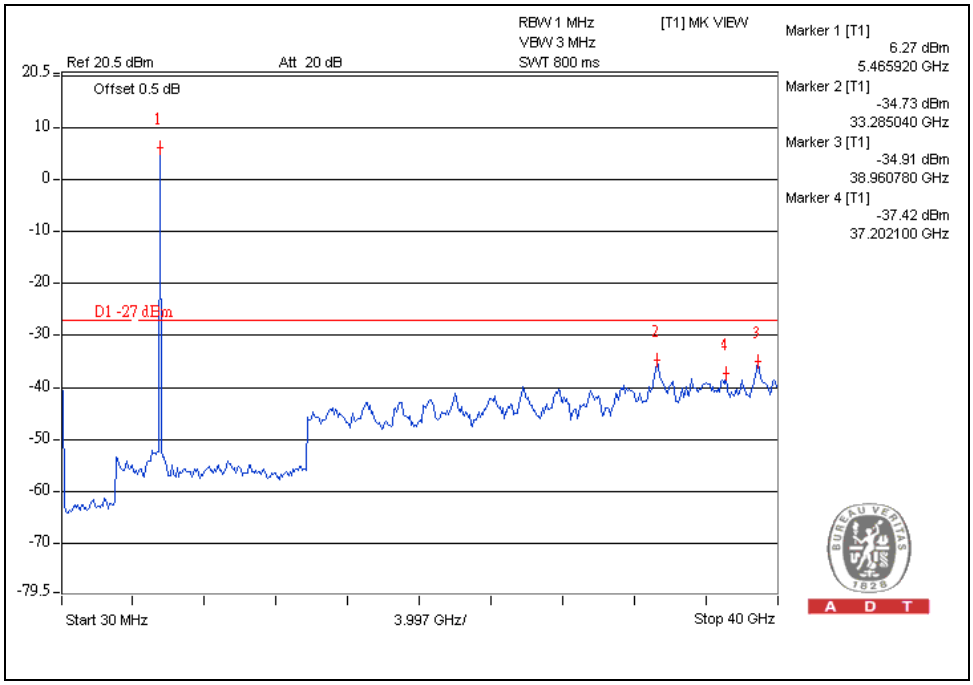
CH9



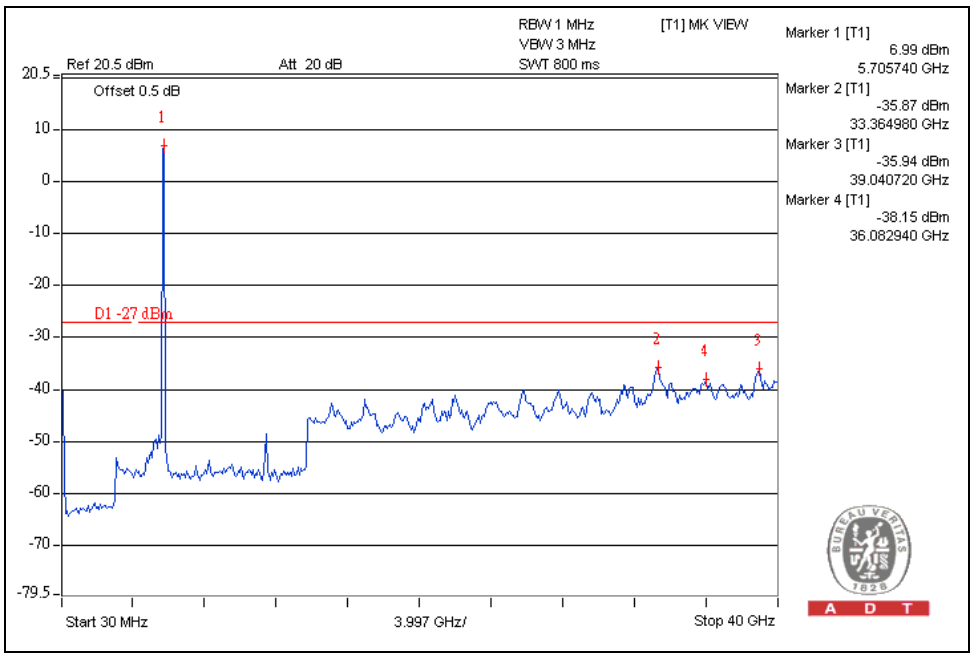
CH19



CH9

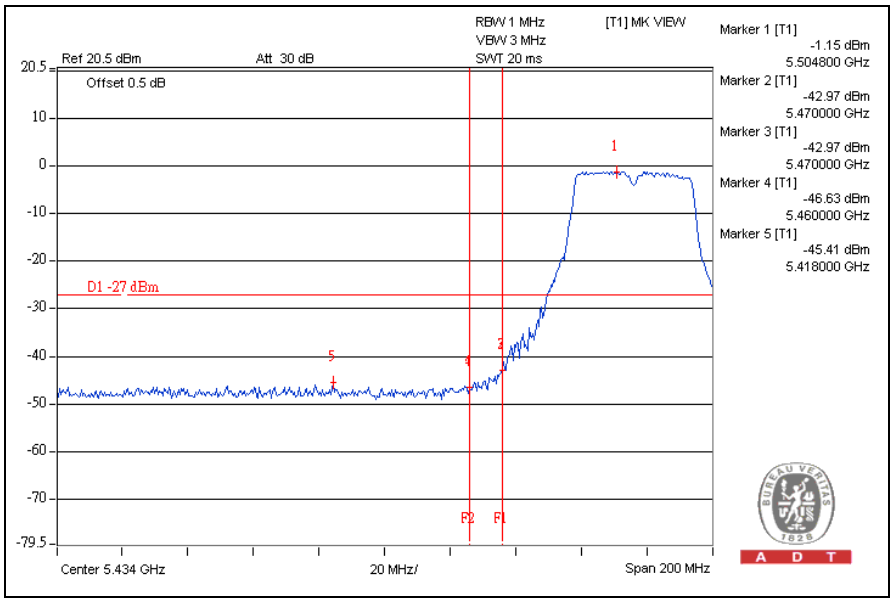

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
6.27 dBm
5.465920 GHz
Marker 2 [T1]
-34.73 dBm
33.285040 GHz
Marker 3 [T1]
-34.91 dBm
38.960780 GHz
Marker 4 [T1]
-37.42 dBm
37.202100 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH19

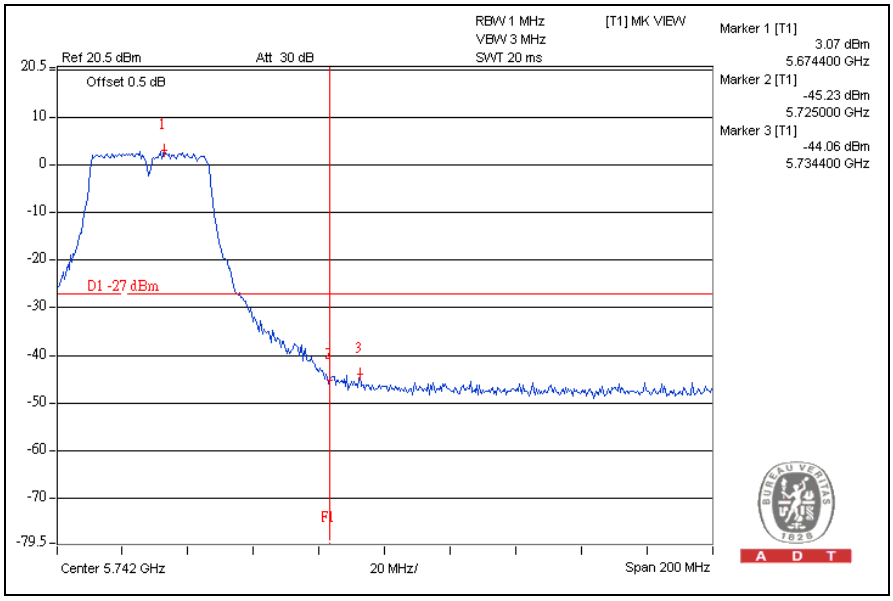

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
6.99 dBm
5.705740 GHz
Marker 2 [T1]
-35.87 dBm
33.364980 GHz
Marker 3 [T1]
-35.94 dBm
39.040720 GHz
Marker 4 [T1]
-38.15 dBm
36.082940 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (40MHz) OFDM MODULATION:

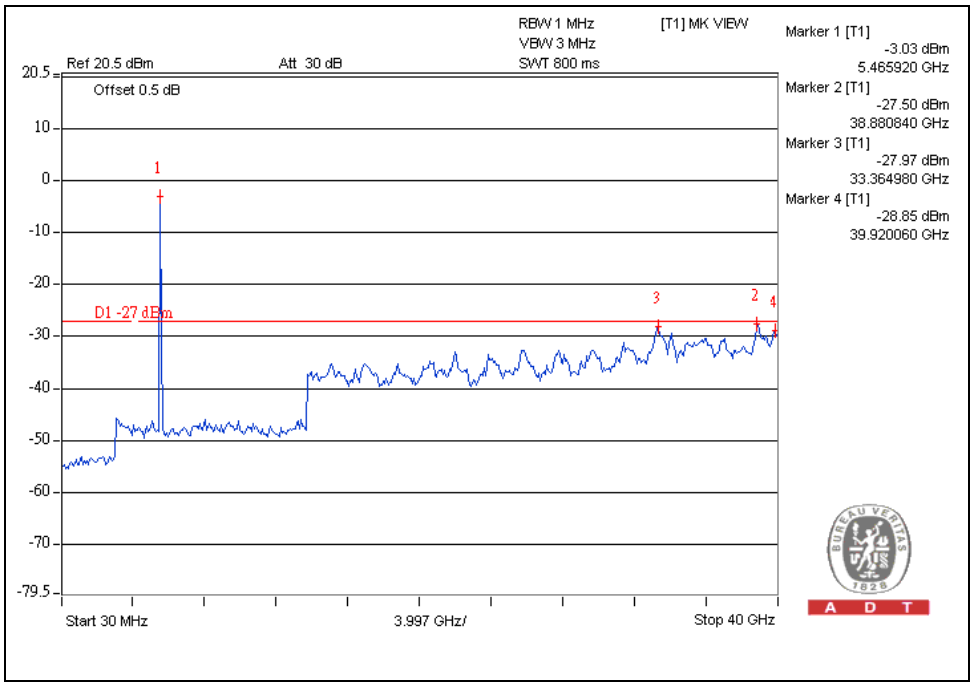
CH5



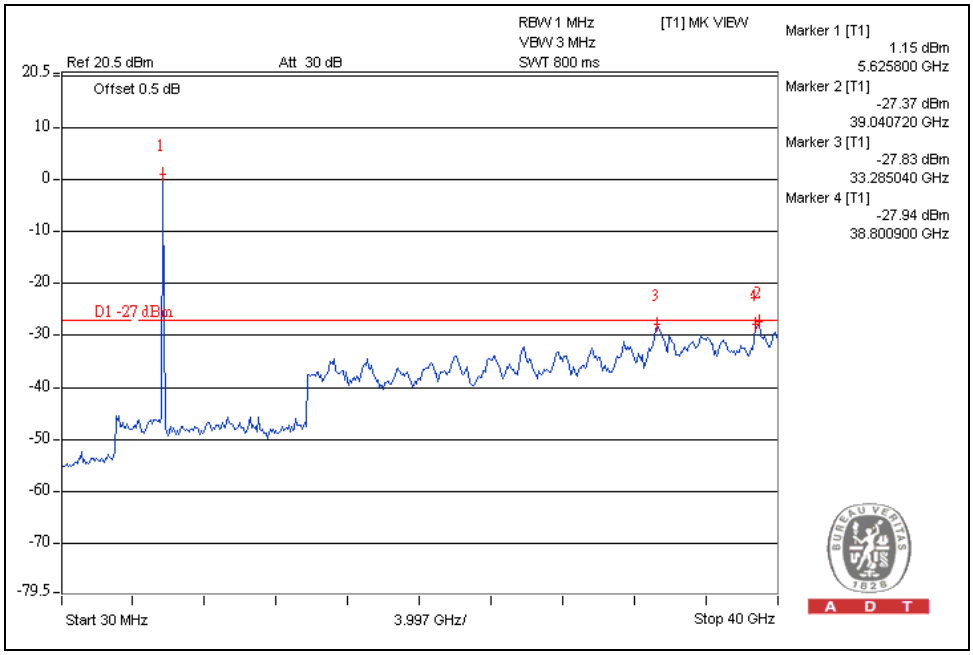
CH9



CH5


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
-3.03 dBm
5.465920 GHz
Marker 2 [T1]
-27.50 dBm
38.880840 GHz
Marker 3 [T1]
-27.97 dBm
33.364980 GHz
Marker 4 [T1]
-28.85 dBm
39.920060 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH9

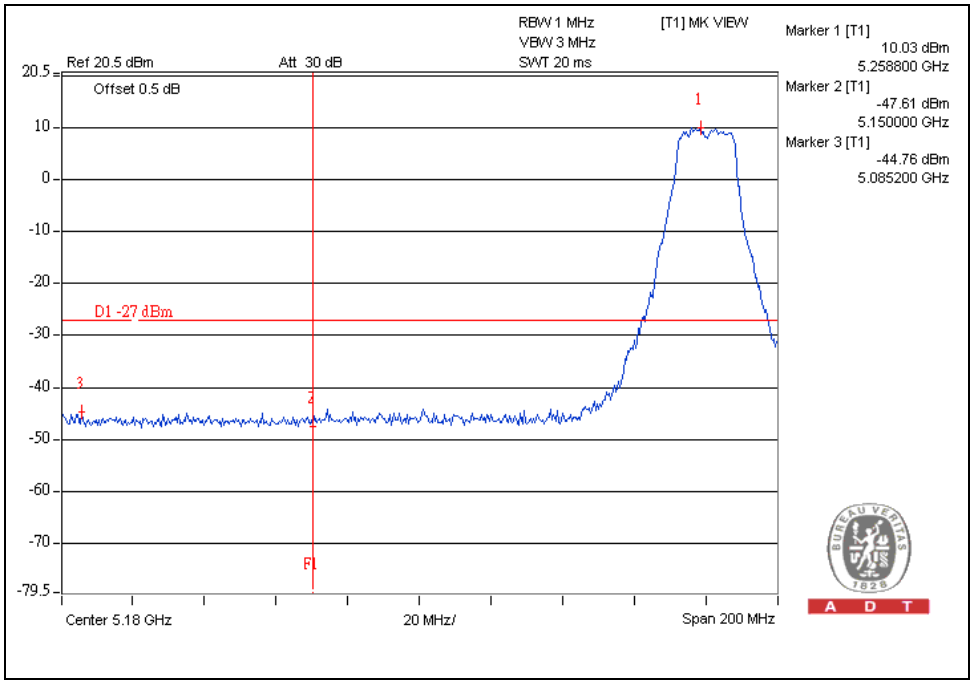

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
1.15 dBm
5.625800 GHz
Marker 2 [T1]
-27.37 dBm
39.040720 GHz
Marker 3 [T1]
-27.83 dBm
33.285040 GHz
Marker 4 [T1]
-27.94 dBm
38.800900 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

4.7.5 TEST RESULTS-ANTENNA 5

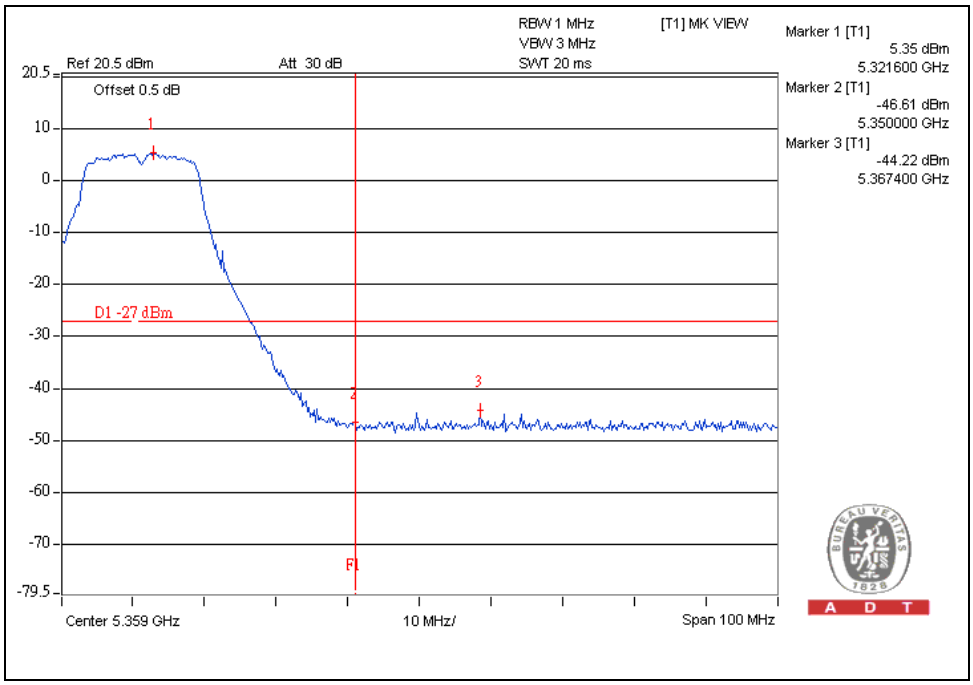
For 5.25 to 5.35GHz band:
The spectrum plots (Peak RBW=1MHz, VBW=3MHz) are attached on the following pages.

802.11a OFDM modulation

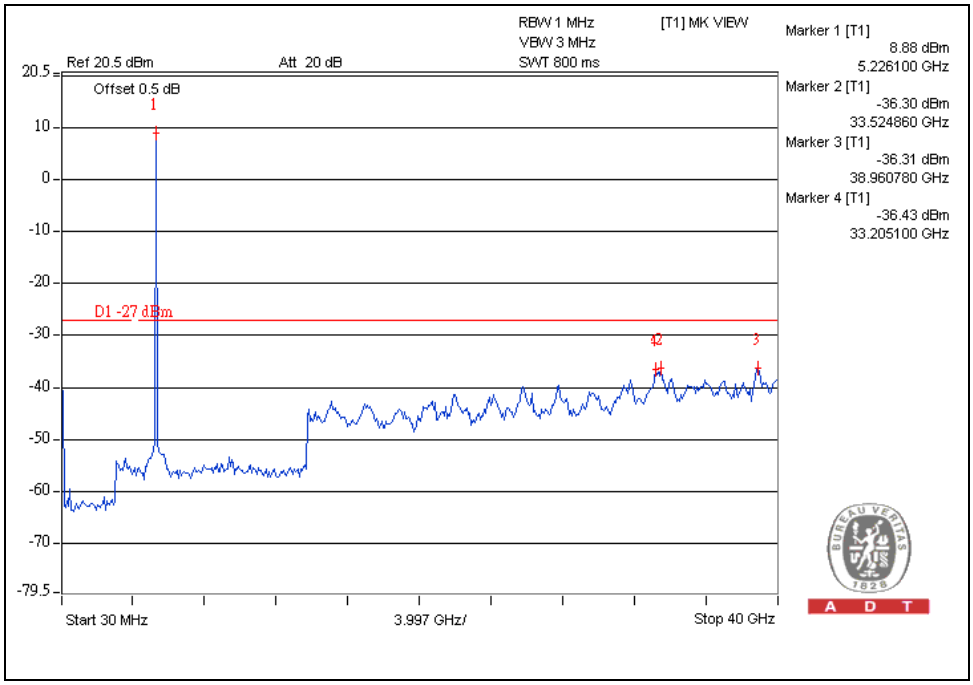
CH 5



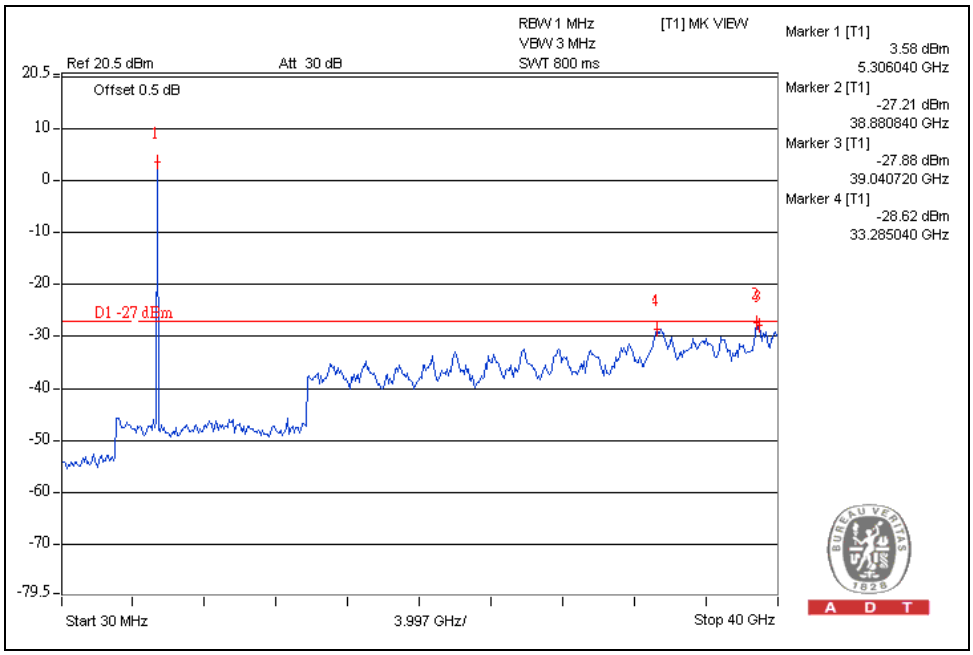
CH 8



CH 5

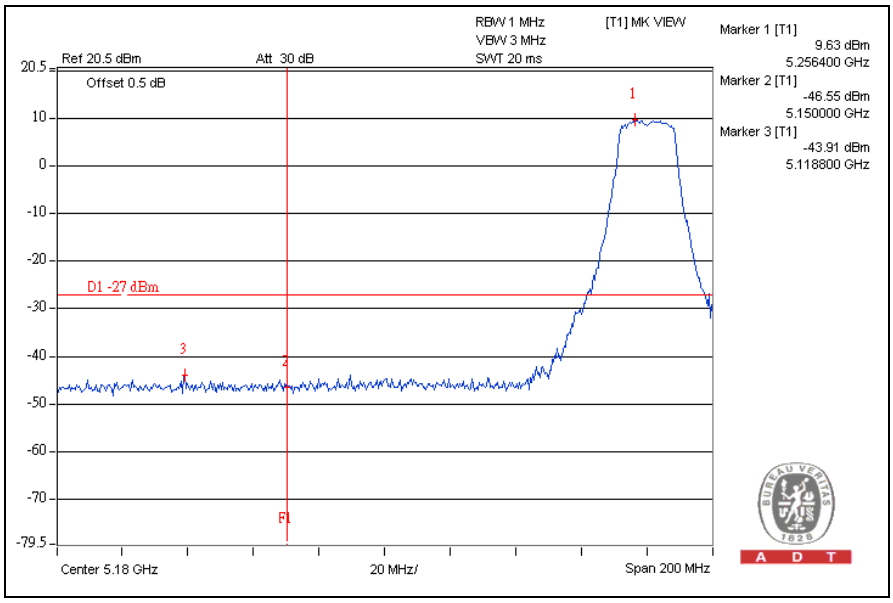

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
8.88 dBm
5.226100 GHz
Marker 2 [T1]
-36.30 dBm
33.524860 GHz
Marker 3 [T1]
-36.31 dBm
38.960780 GHz
Marker 4 [T1]
-36.43 dBm
33.205100 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH 8

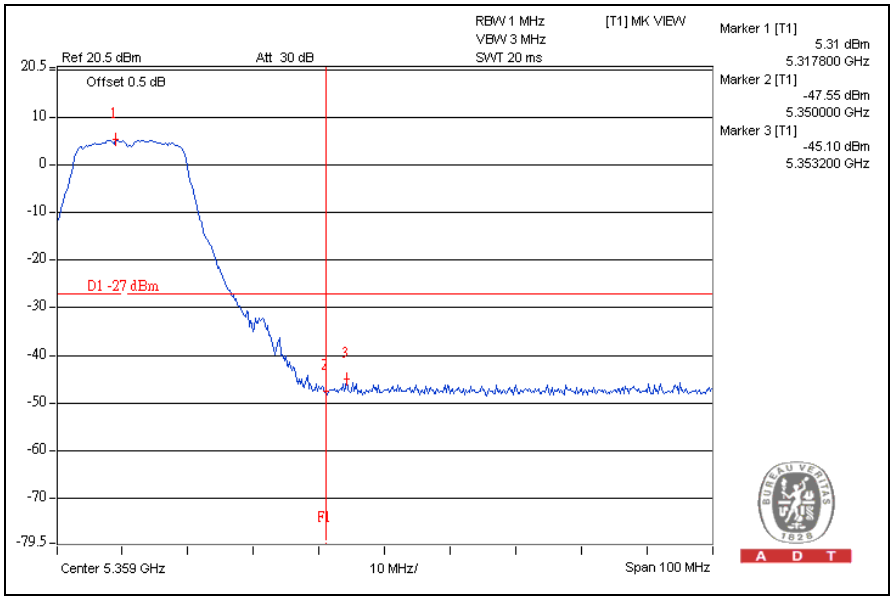

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
3.58 dBm
5.306040 GHz
Marker 2 [T1]
-27.21 dBm
38.880840 GHz
Marker 3 [T1]
-27.88 dBm
39.040720 GHz
Marker 4 [T1]
-28.62 dBm
33.285040 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (20MHz) OFDM MODULATION:

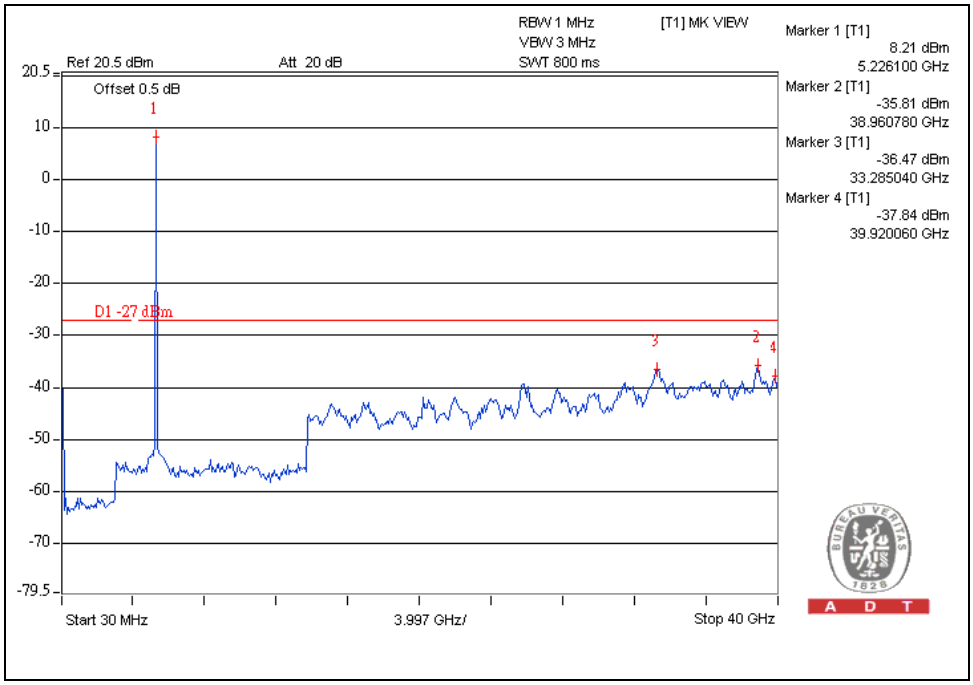
CH5



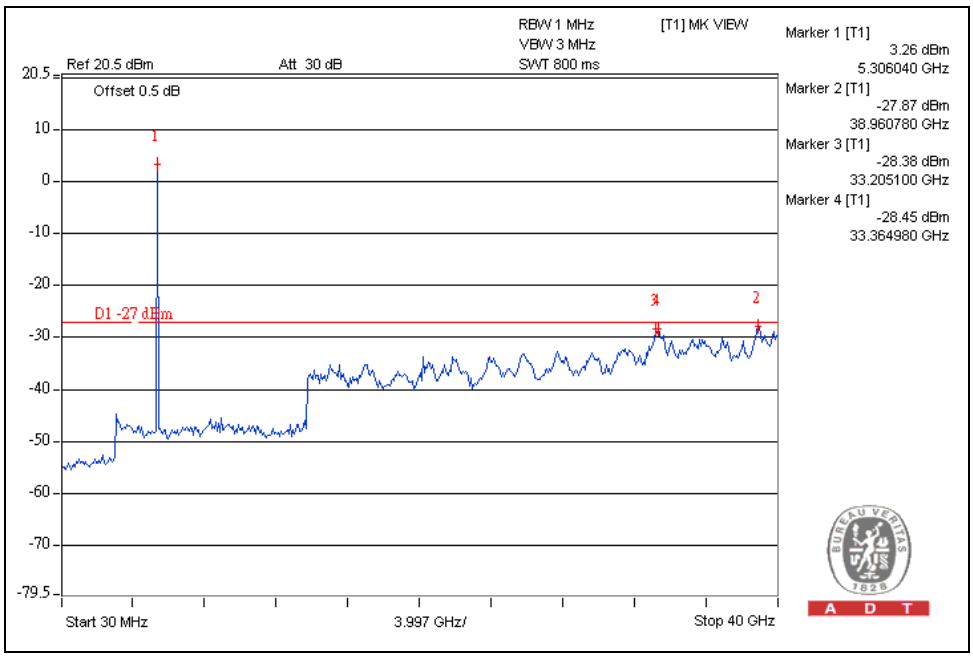
CH8



CH5

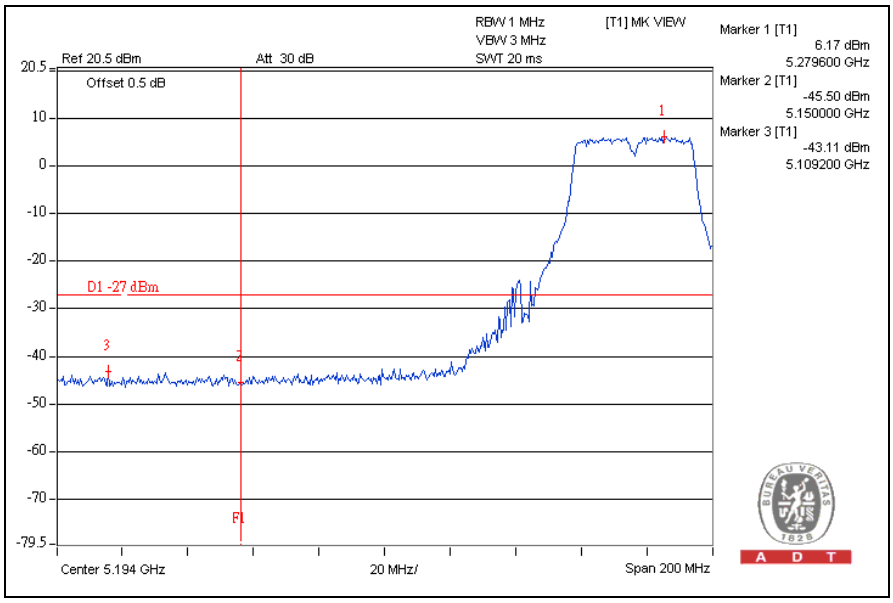

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
8.21 dBm
5.226100 GHz
Marker 2 [T1]
-35.81 dBm
38.960780 GHz
Marker 3 [T1]
-36.47 dBm
33.285040 GHz
Marker 4 [T1]
-37.84 dBm
39.920060 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH8

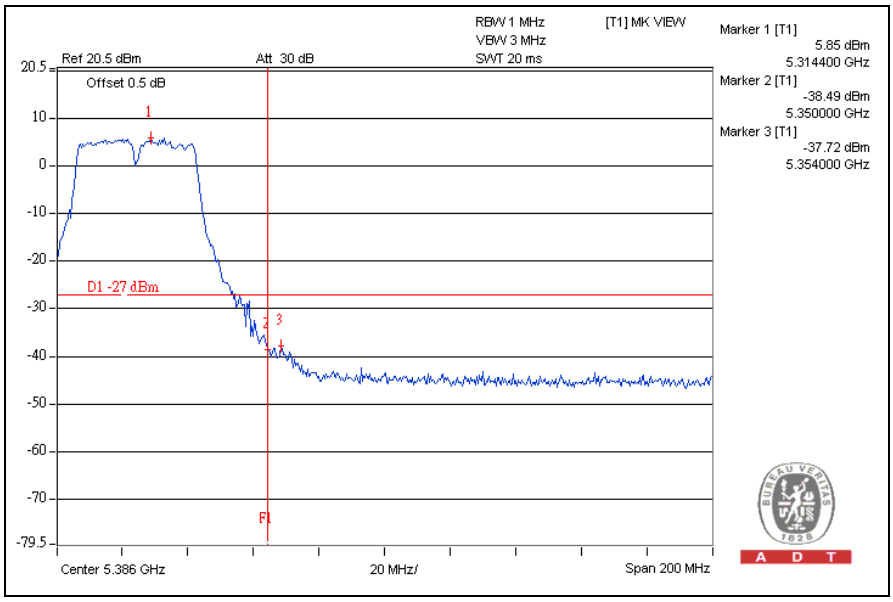

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
3.26 dBm
5.306040 GHz
Marker 2 [T1]
-27.87 dBm
38.960780 GHz
Marker 3 [T1]
-28.38 dBm
33.205100 GHz
Marker 4 [T1]
-28.45 dBm
33.364980 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (40MHz) OFDM MODULATION:

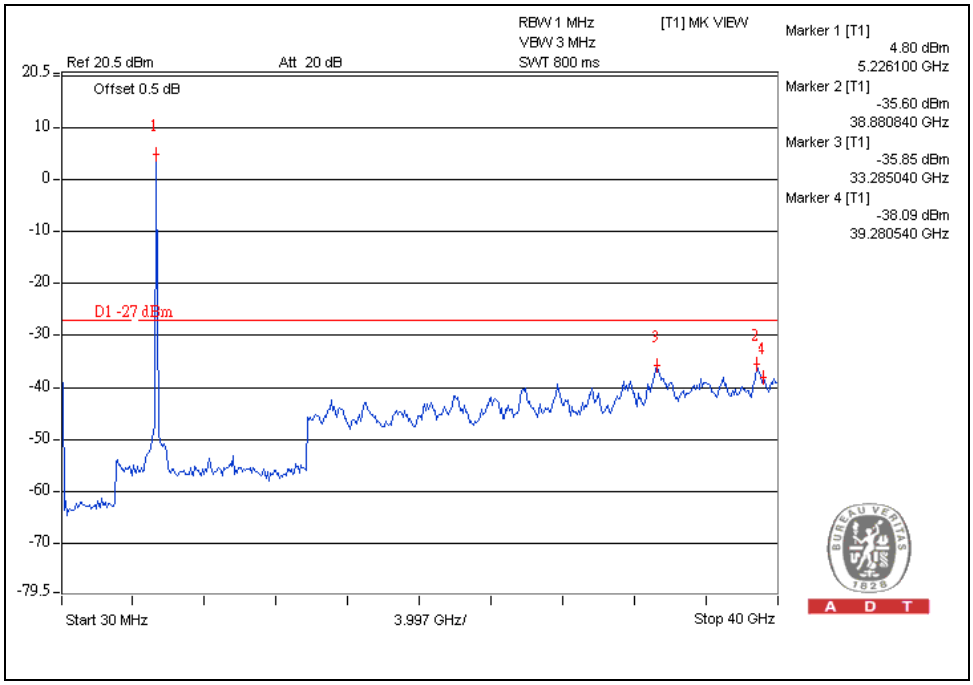
CH3



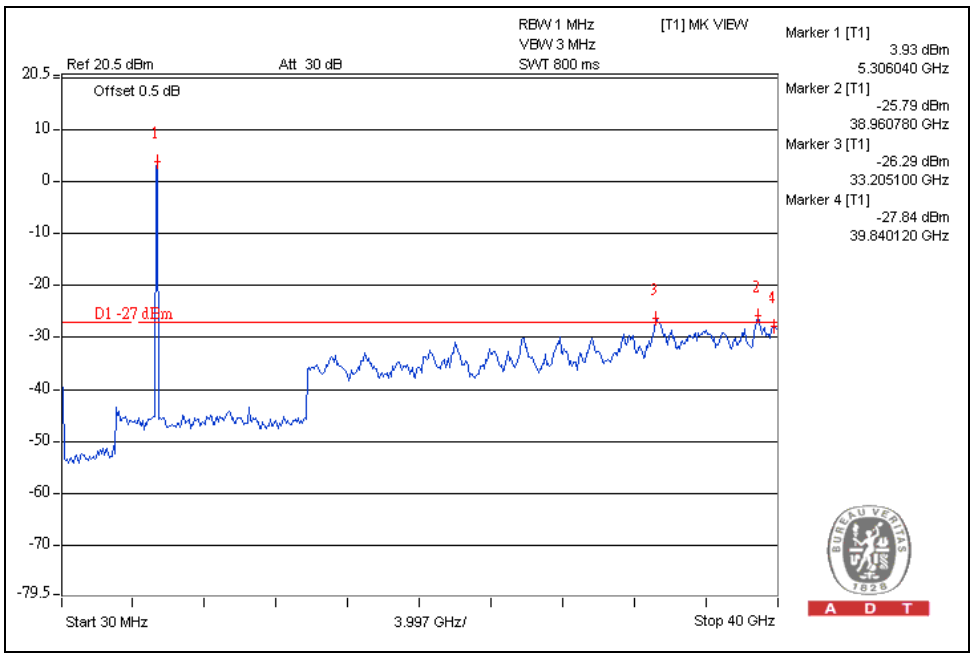
CH4



CH3


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
4.80 dBm
5.226100 GHz
Marker 2 [T1]
-35.60 dBm
38.880840 GHz
Marker 3 [T1]
-35.85 dBm
33.285040 GHz
Marker 4 [T1]
-38.09 dBm
39.280540 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH4

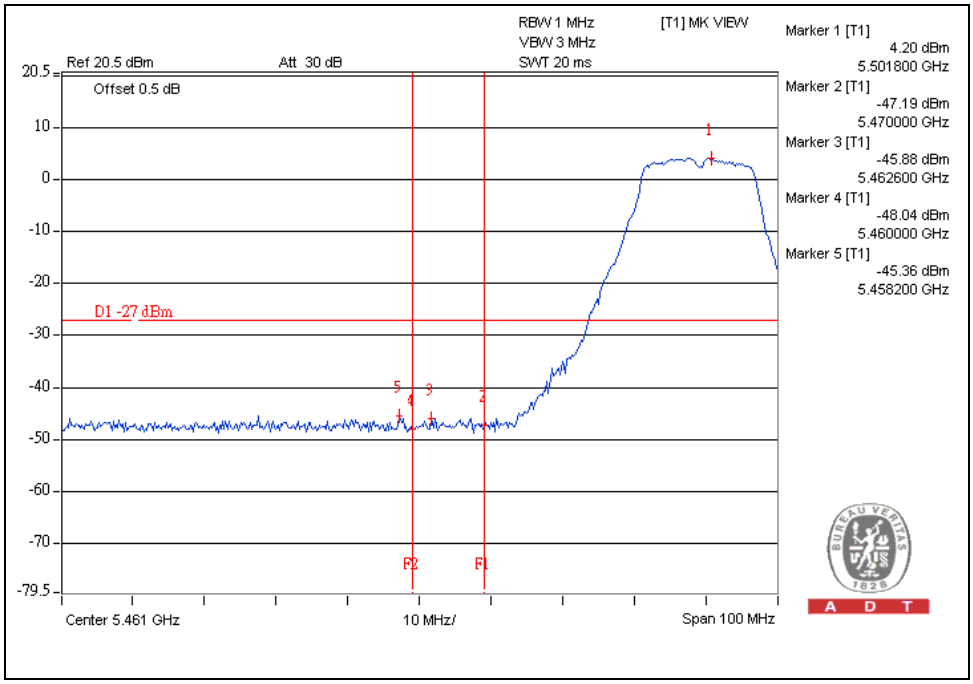

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
3.93 dBm
5.306040 GHz
Marker 2 [T1]
-25.79 dBm
38.960780 GHz
Marker 3 [T1]
-26.29 dBm
33.205100 GHz
Marker 4 [T1]
-27.84 dBm
39.840120 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

For 5.47 to 5.725GHz band:

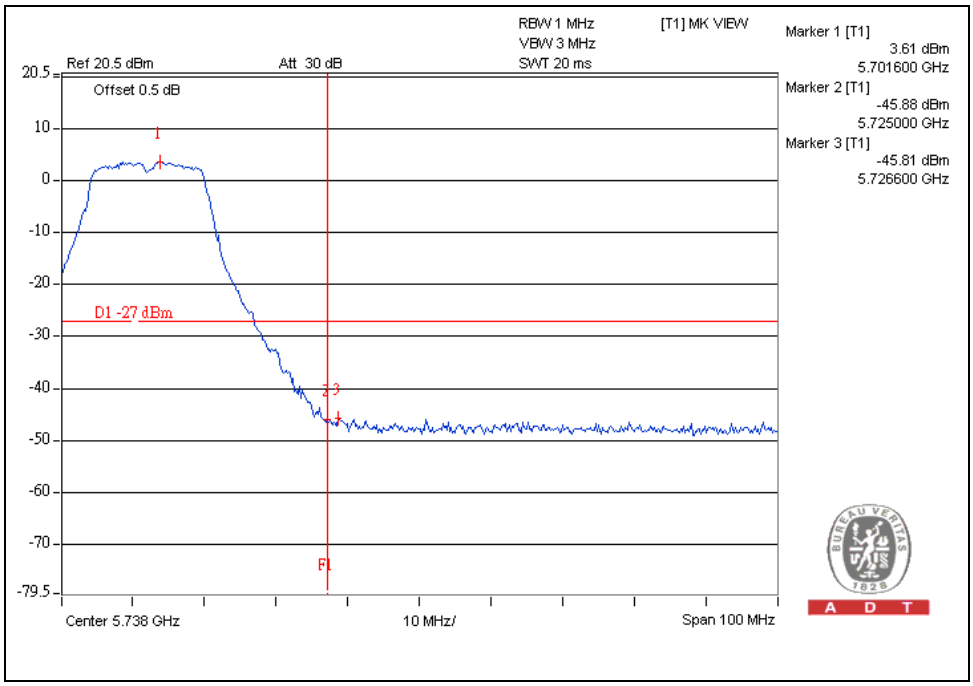
The spectrum plots (Peak RBW=1MHz, VBW=3MHz) are attached on the following pages.

802.11a OFDM modulation

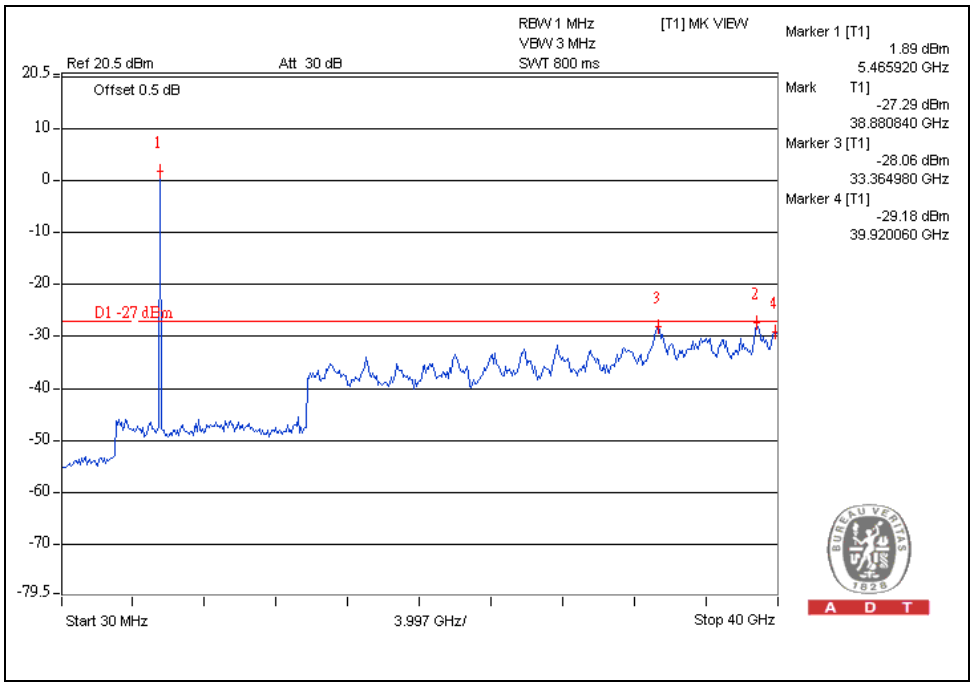
CH 9



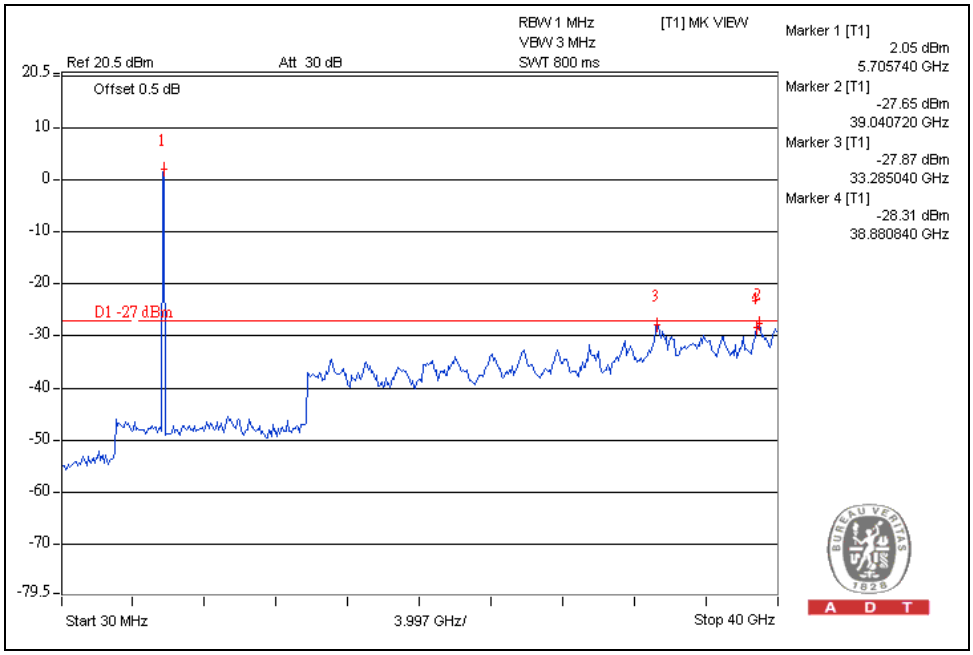
CH 19



CH 9

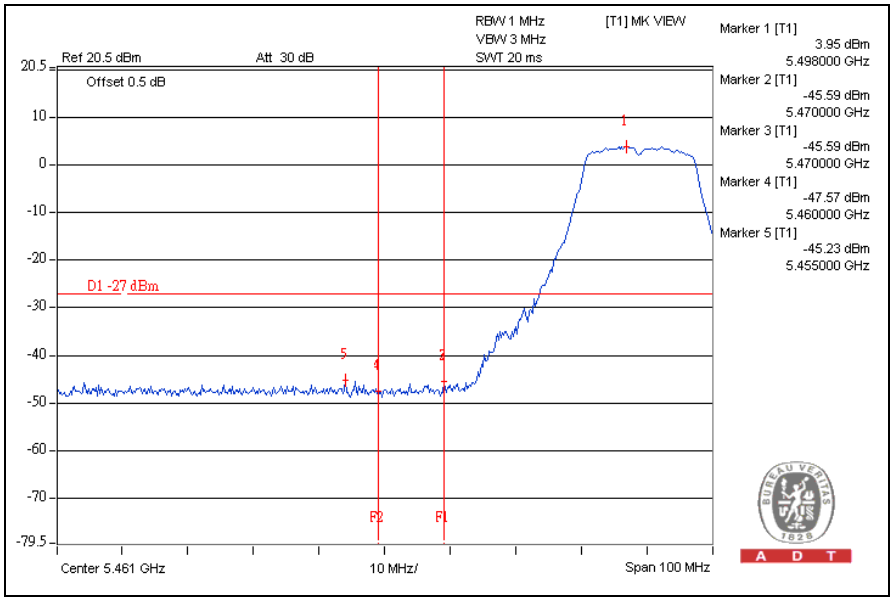

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
1.89 dBm
5.465920 GHz
Mark T1]
-27.29 dBm
38.880840 GHz
Marker 3 [T1]
-28.06 dBm
33.364980 GHz
Marker 4 [T1]
-29.18 dBm
39.920060 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH 19

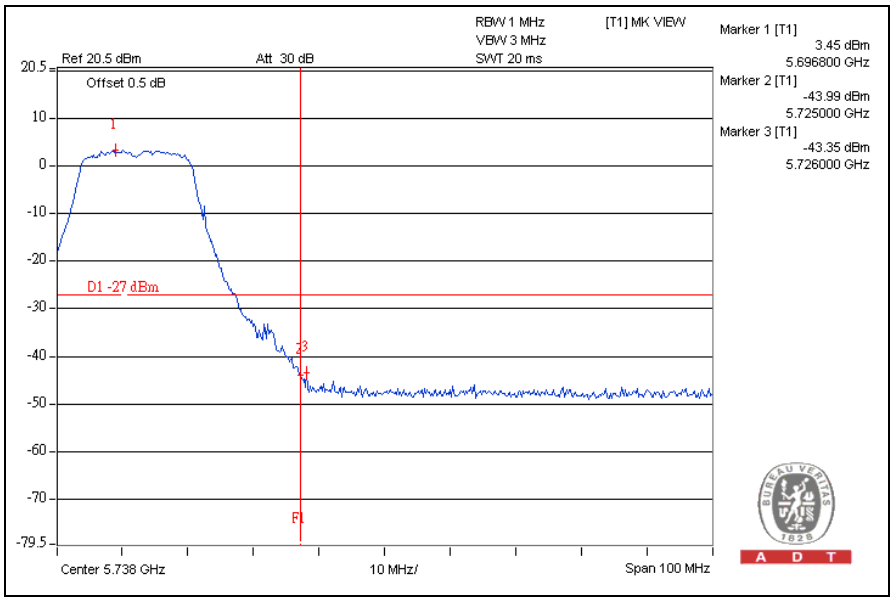

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
2.05 dBm
5.705740 GHz
Marker 2 [T1]
-27.65 dBm
39.040720 GHz
Marker 3 [T1]
-27.87 dBm
33.285040 GHz
Marker 4 [T1]
-28.31 dBm
38.880840 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (20MHz) OFDM MODULATION:

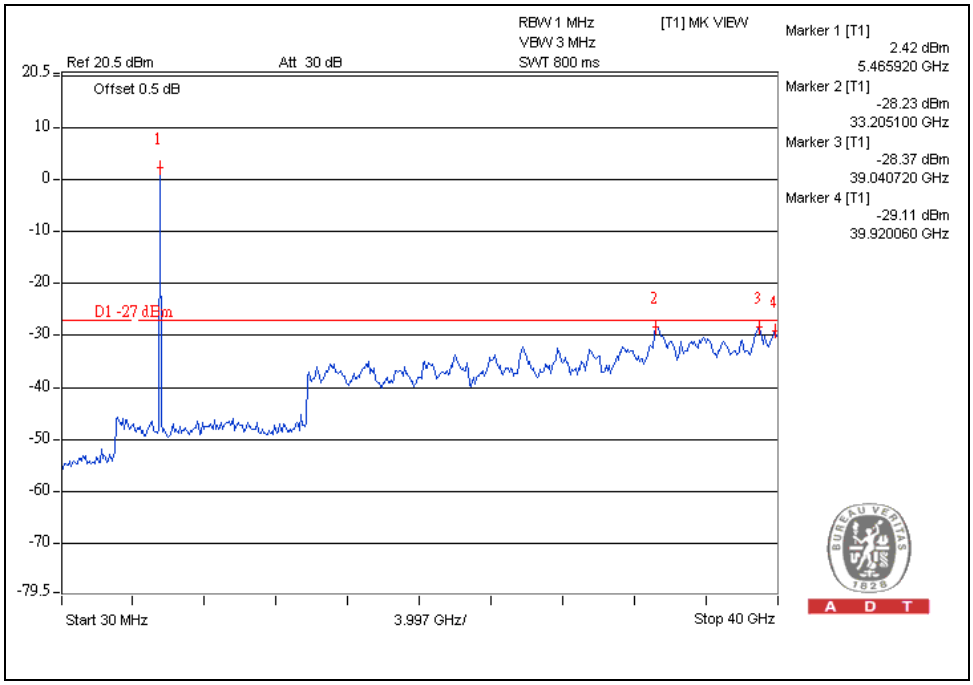
CH9



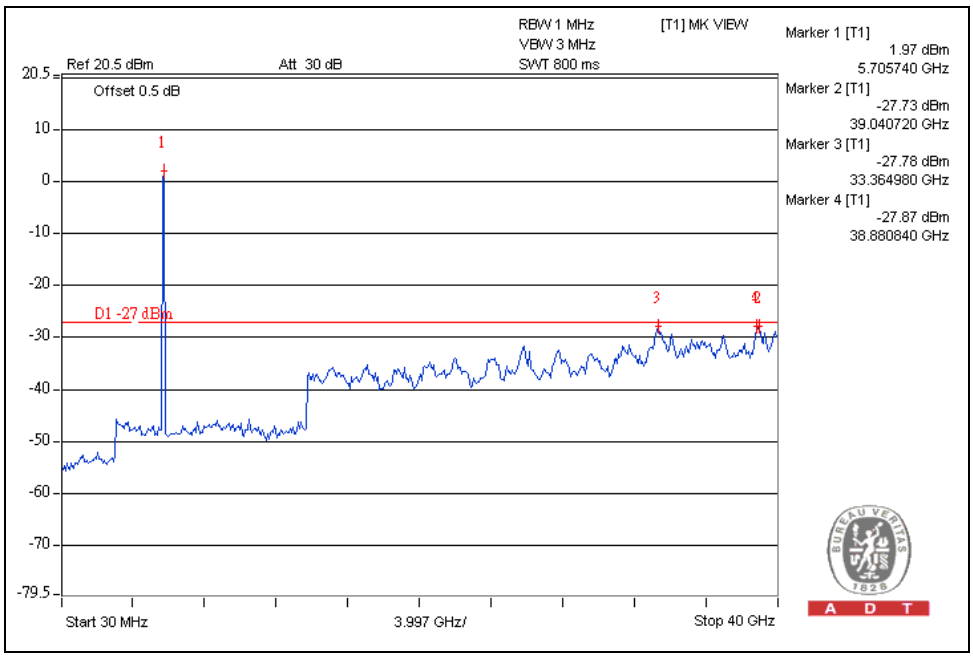
CH19



CH9

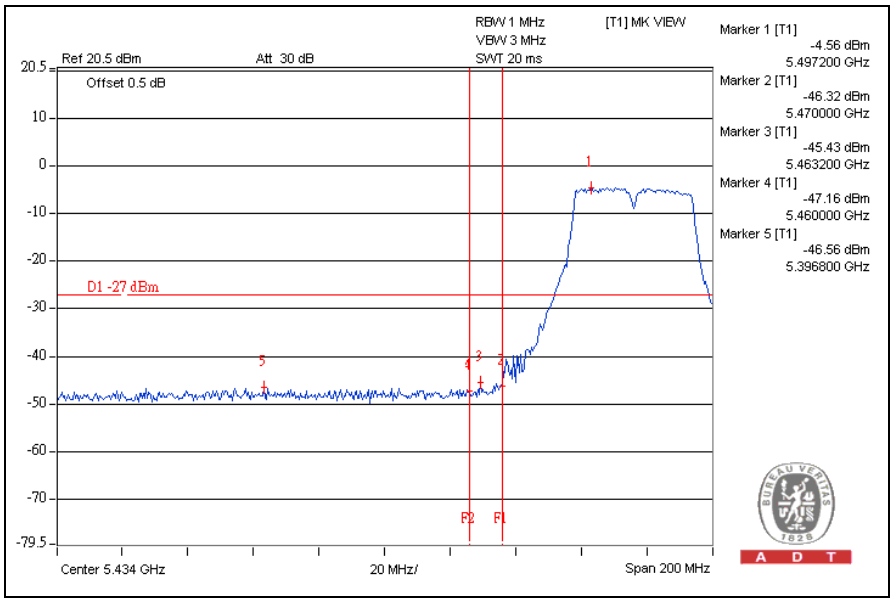

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
2.42 dBm
5.465920 GHz
Marker 2 [T1]
-28.23 dBm
33.205100 GHz
Marker 3 [T1]
-28.37 dBm
39.040720 GHz
Marker 4 [T1]
-29.11 dBm
39.920060 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH19

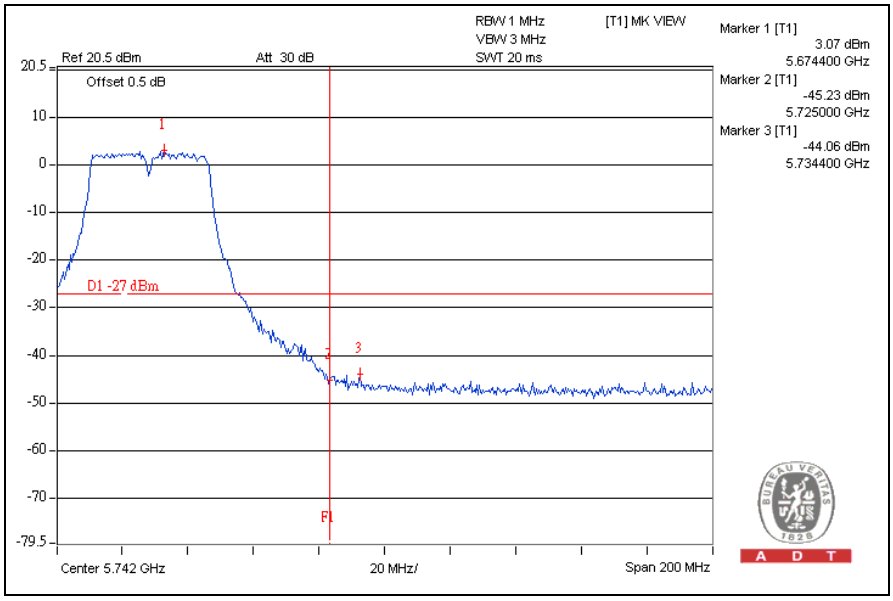

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
1.97 dBm
5.705740 GHz
Marker 2 [T1]
-27.73 dBm
39.040720 GHz
Marker 3 [T1]
-27.78 dBm
33.364980 GHz
Marker 4 [T1]
-27.87 dBm
38.880840 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (40MHz) OFDM MODULATION:

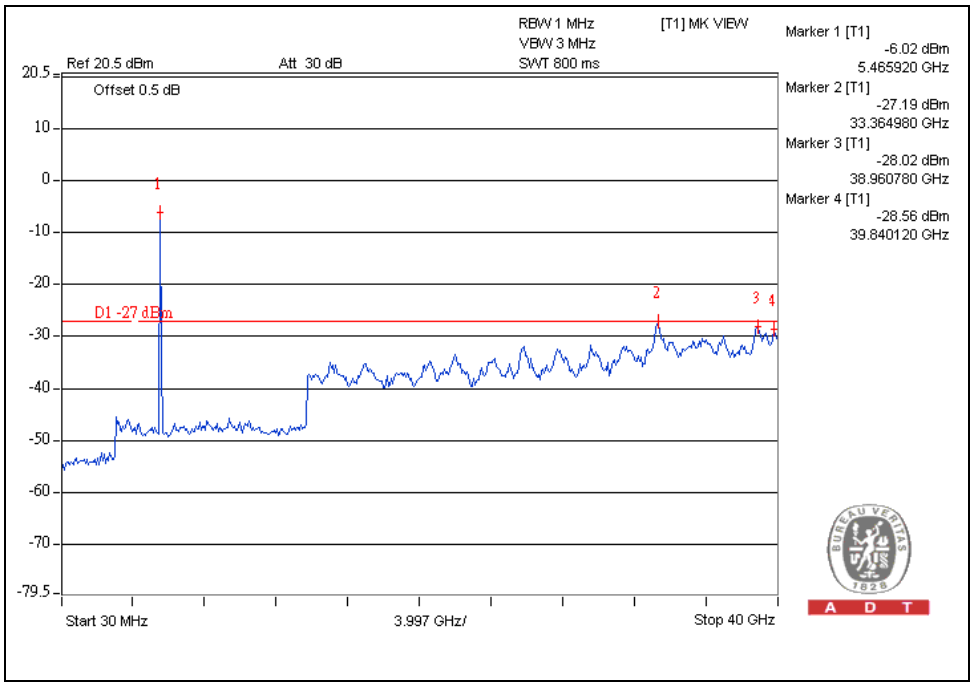
CH5



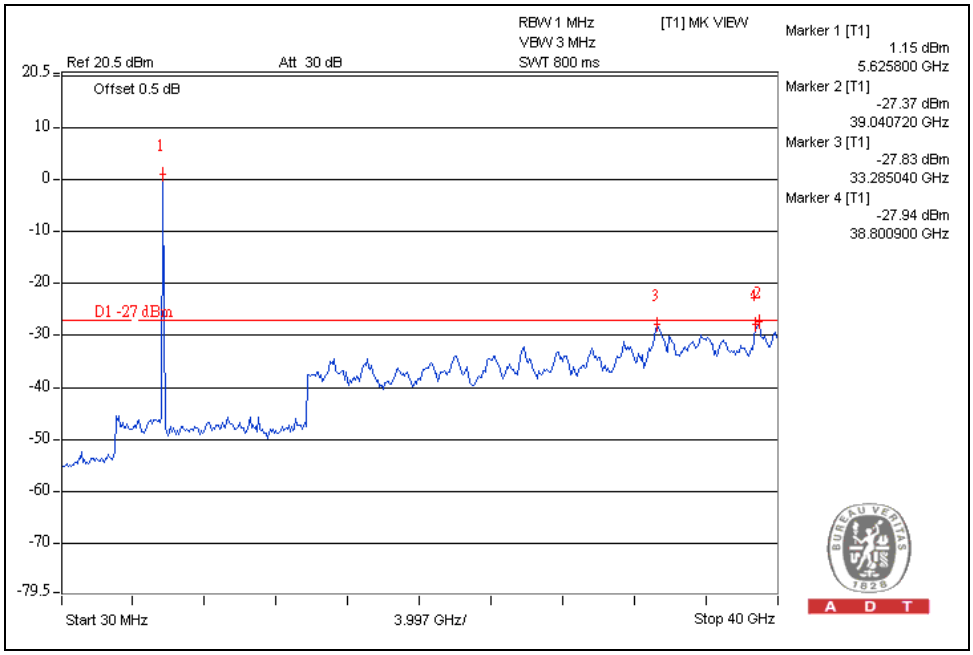
CH9



CH5


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
-6.02 dBm
5.465920 GHz
Marker 2 [T1]
-27.19 dBm
33.364980 GHz
Marker 3 [T1]
-28.02 dBm
38.960780 GHz
Marker 4 [T1]
-28.56 dBm
39.840120 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH9

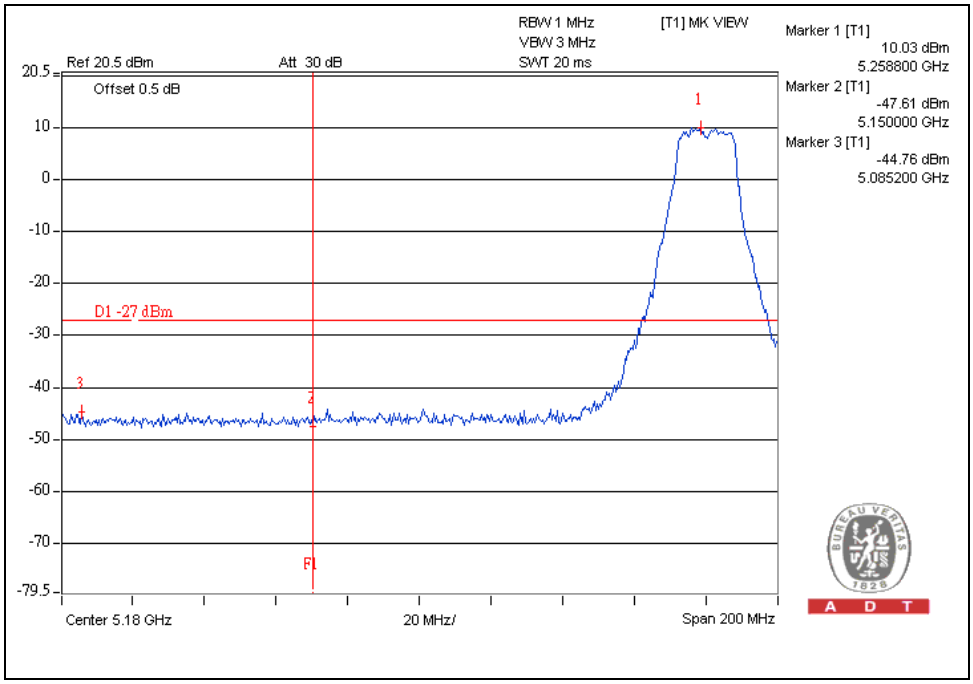

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
1.15 dBm
5.625800 GHz
Marker 2 [T1]
-27.37 dBm
39.040720 GHz
Marker 3 [T1]
-27.83 dBm
33.285040 GHz
Marker 4 [T1]
-27.94 dBm
38.800900 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

4.7.6 TEST RESULTS-ANTENNA 7

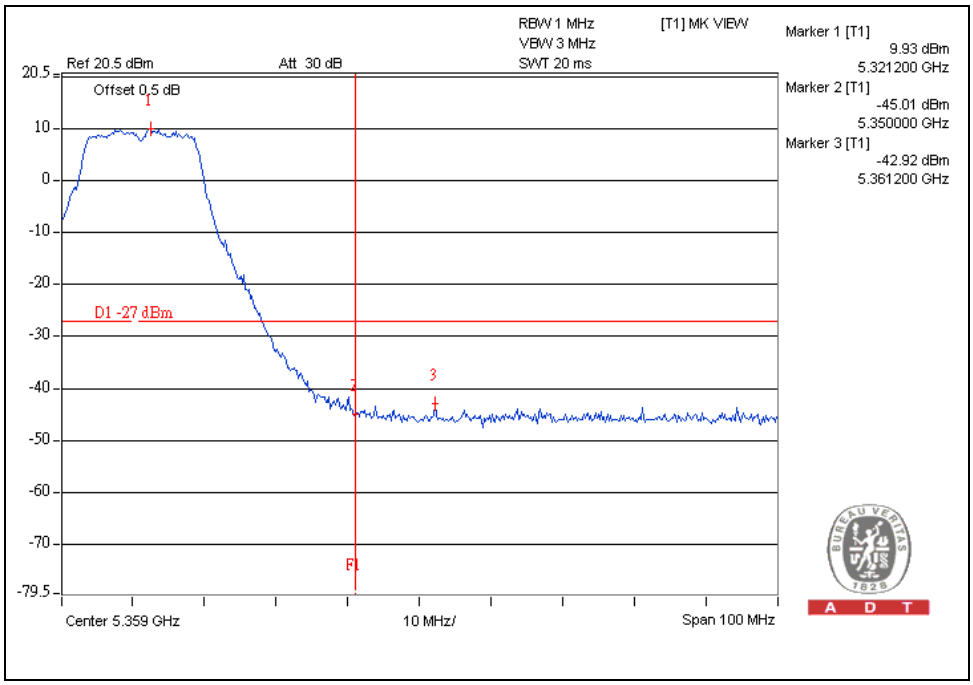
For 5.25 to 5.35GHz band:
The spectrum plots (Peak RBW=1MHz, VBW=3MHz) are attached on the following pages.

802.11a OFDM modulation

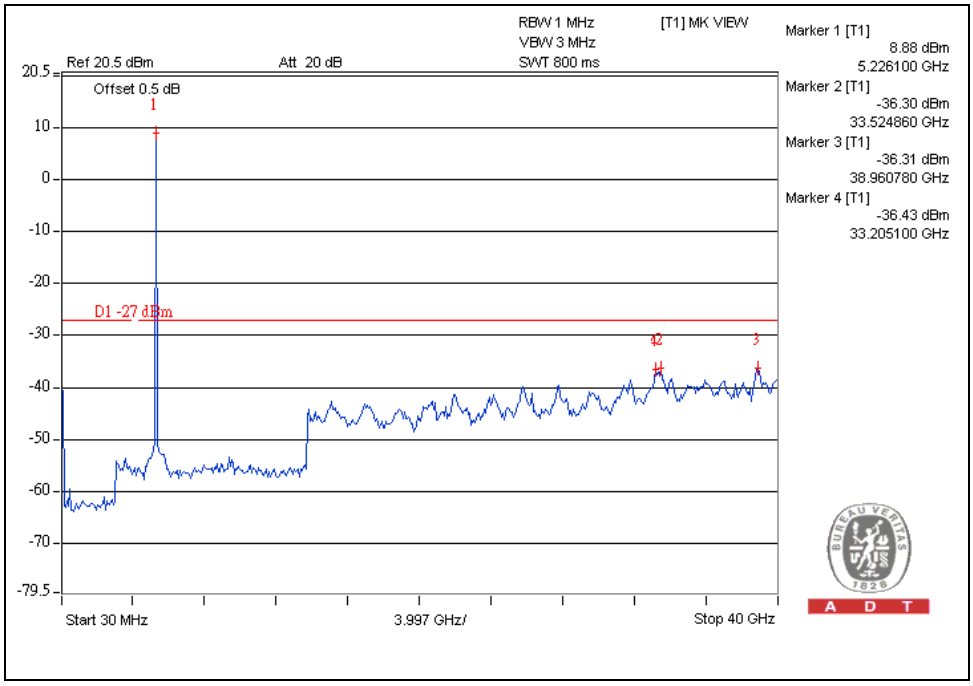
CH 5



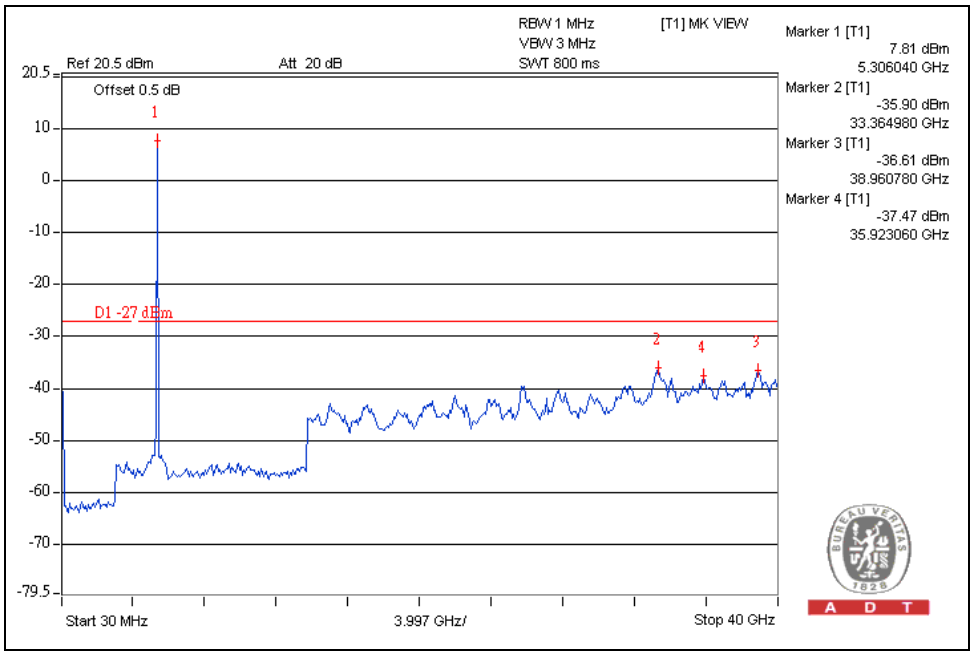
CH 8



CH 5

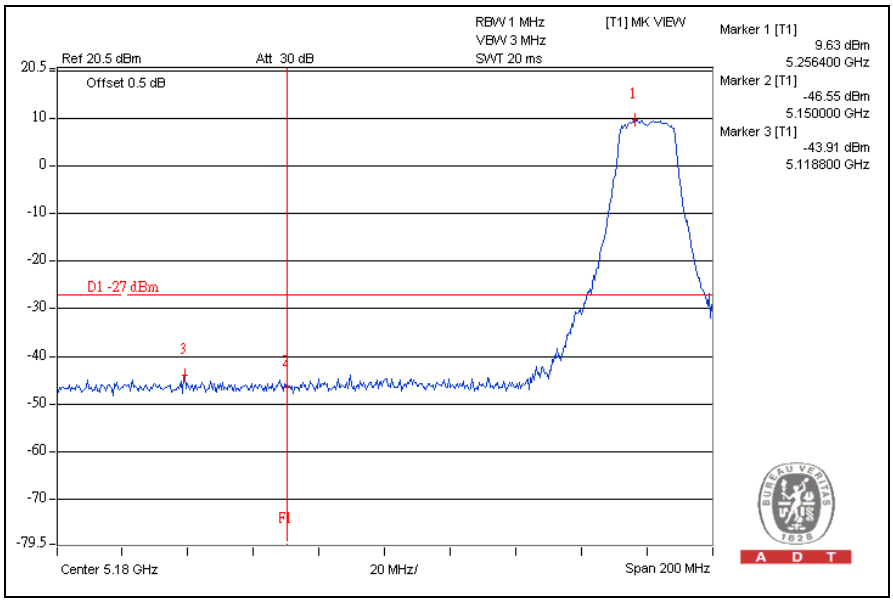

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
8.88 dBm
5.226100 GHz
Marker 2 [T1]
-36.30 dBm
33.524860 GHz
Marker 3 [T1]
-36.31 dBm
38.960780 GHz
Marker 4 [T1]
-36.43 dBm
33.205100 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH 8

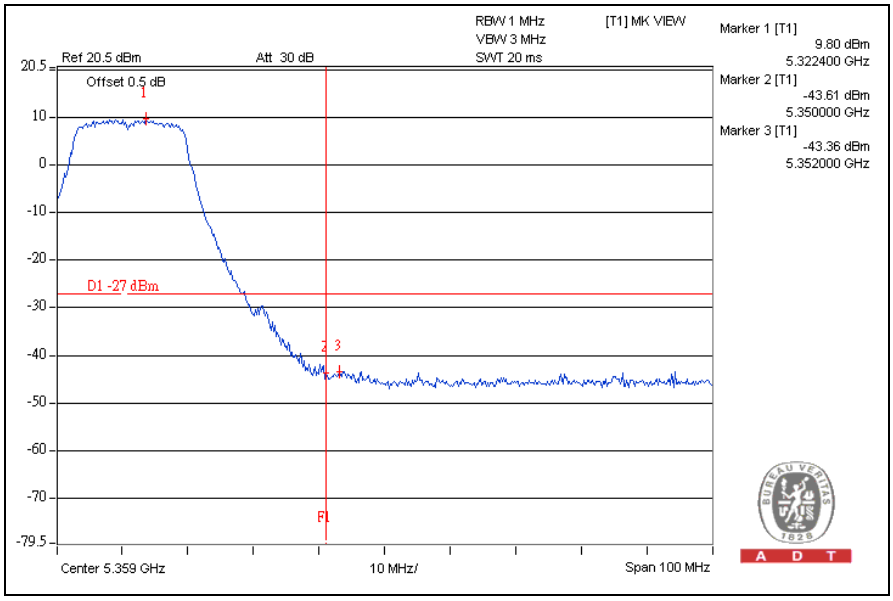

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
7.81 dBm
5.306040 GHz
Marker 2 [T1]
-35.90 dBm
33.364980 GHz
Marker 3 [T1]
-36.61 dBm
38.960780 GHz
Marker 4 [T1]
-37.47 dBm
35.923060 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (20MHz) OFDM MODULATION:

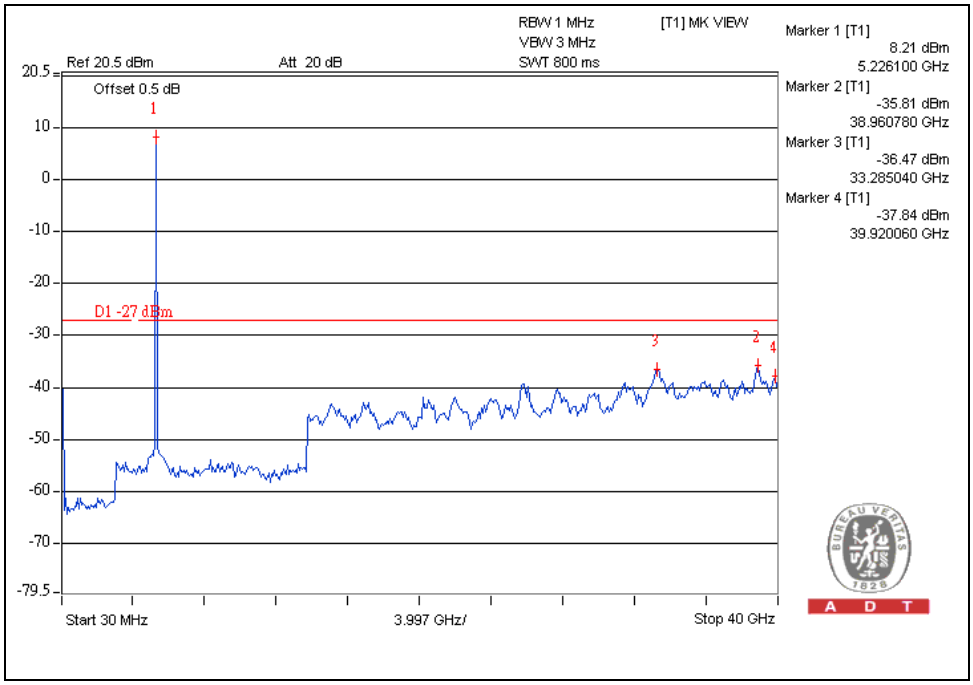
CH5



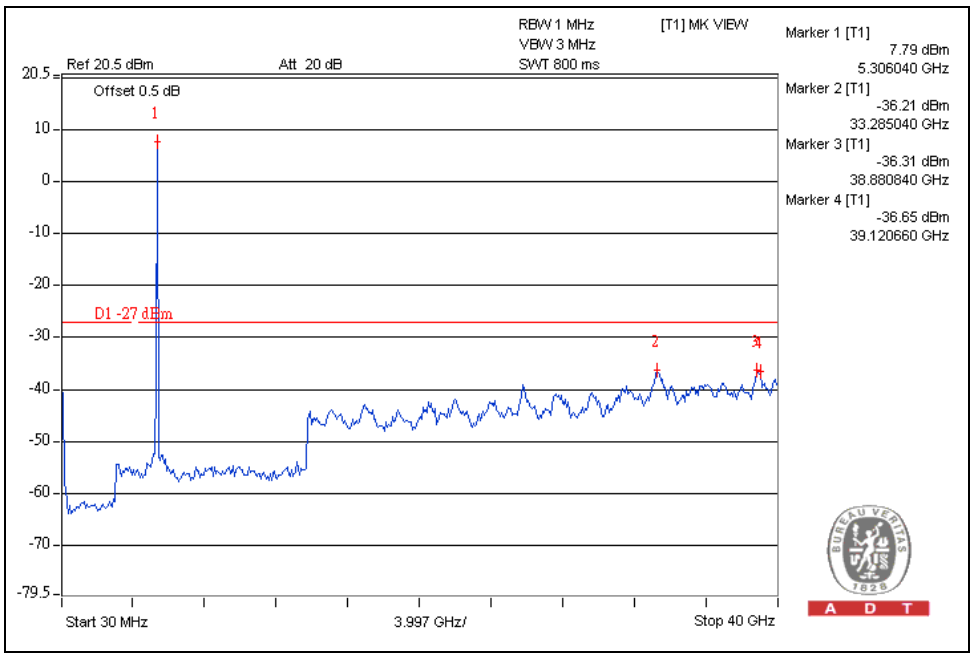
CH8



CH1

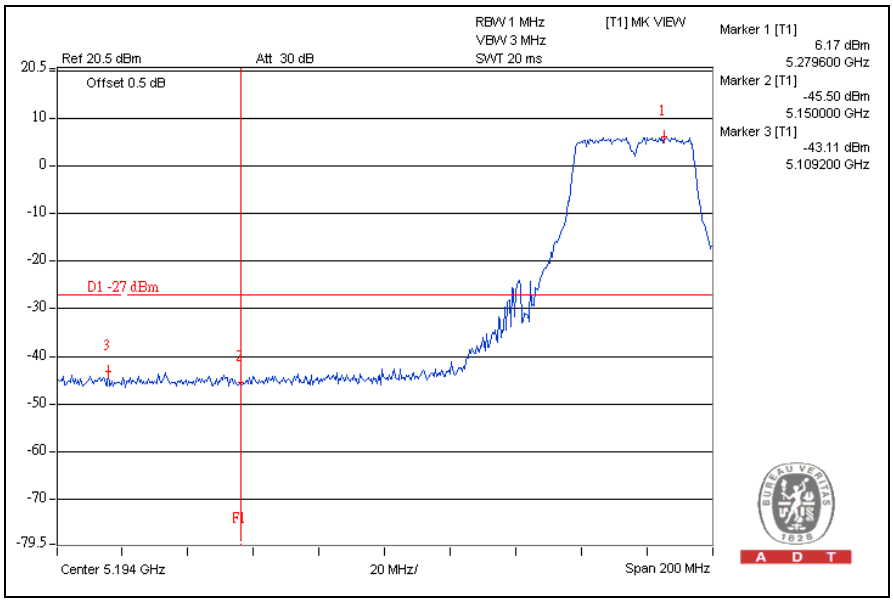

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
8.21 dBm
5.226100 GHz
Marker 2 [T1]
-35.81 dBm
38.960780 GHz
Marker 3 [T1]
-36.47 dBm
33.285040 GHz
Marker 4 [T1]
-37.84 dBm
39.920060 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH8

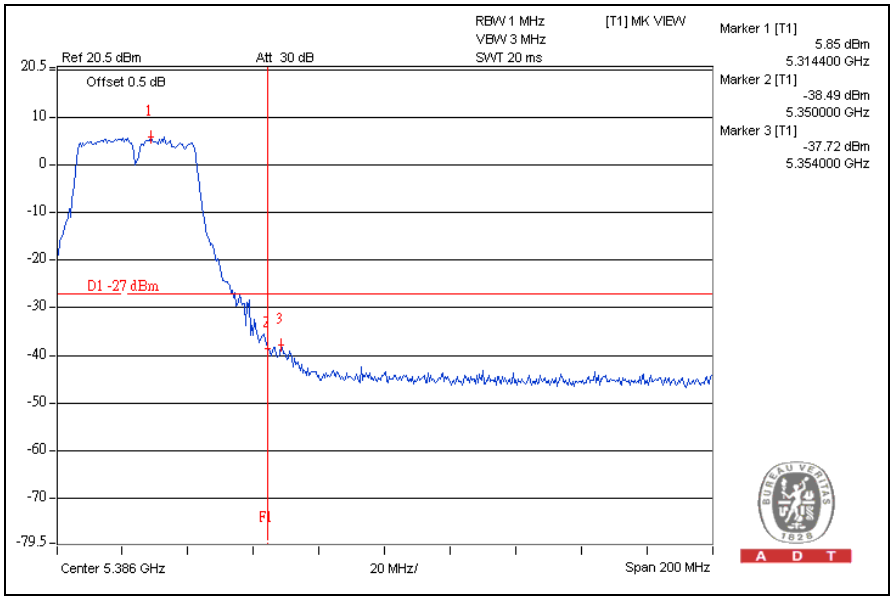

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
7.79 dBm
5.306040 GHz
Marker 2 [T1]
-36.21 dBm
33.285040 GHz
Marker 3 [T1]
-36.31 dBm
38.880840 GHz
Marker 4 [T1]
-36.65 dBm
39.120660 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (40MHz) OFDM MODULATION:

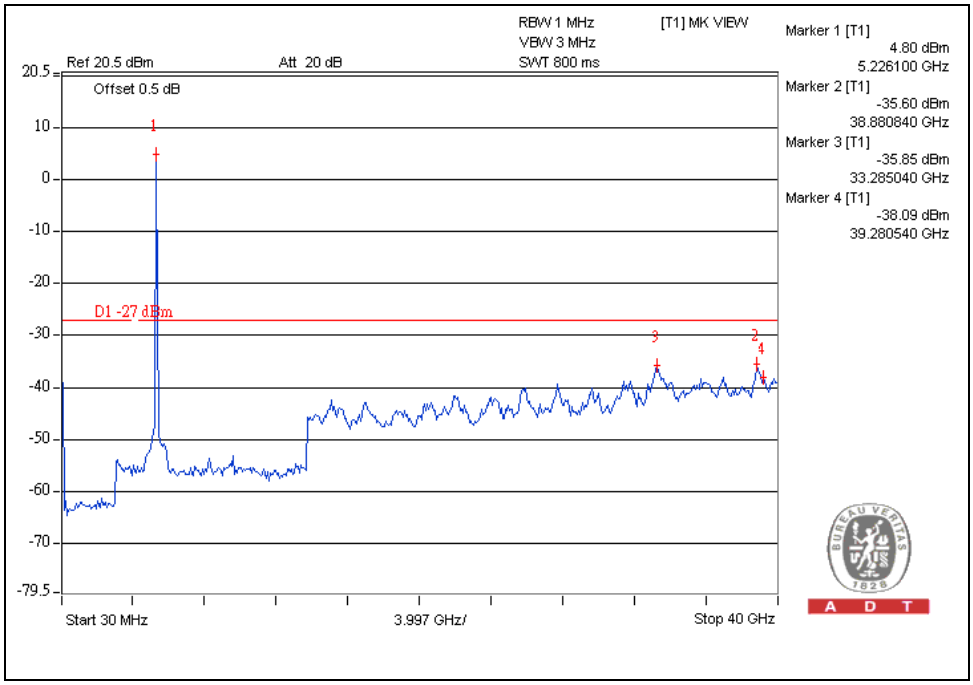
CH3



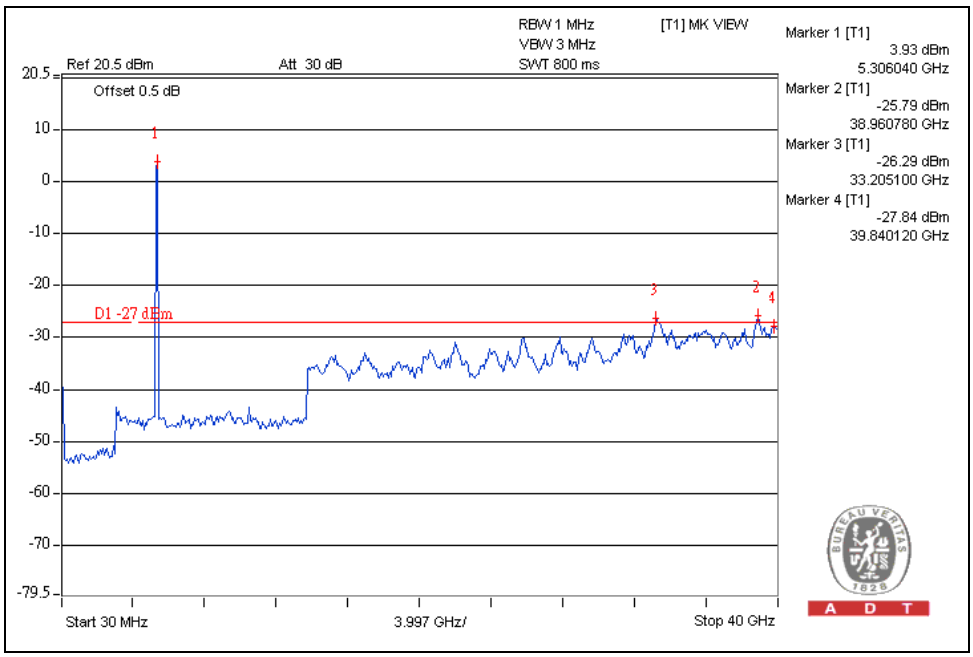
CH4



CH1


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
4.80 dBm
5.226100 GHz
Marker 2 [T1]
-35.60 dBm
38.880840 GHz
Marker 3 [T1]
-35.85 dBm
33.285040 GHz
Marker 4 [T1]
-38.09 dBm
39.280540 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH4

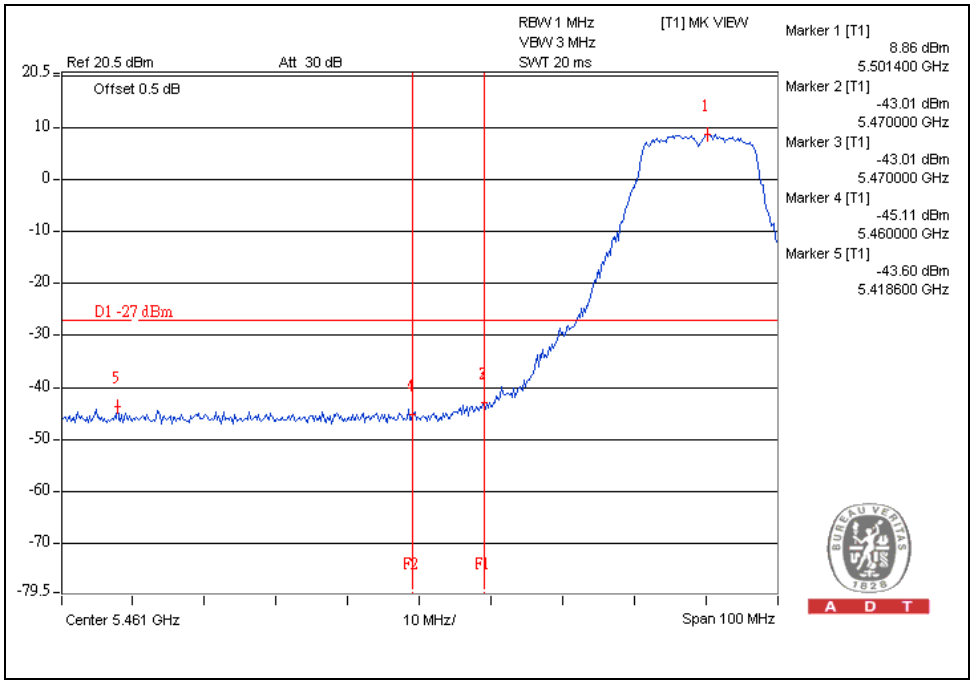

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
3.93 dBm
5.306040 GHz
Marker 2 [T1]
-25.79 dBm
38.960780 GHz
Marker 3 [T1]
-26.29 dBm
33.205100 GHz
Marker 4 [T1]
-27.84 dBm
39.840120 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

For 5.47 to 5.725GHz band:

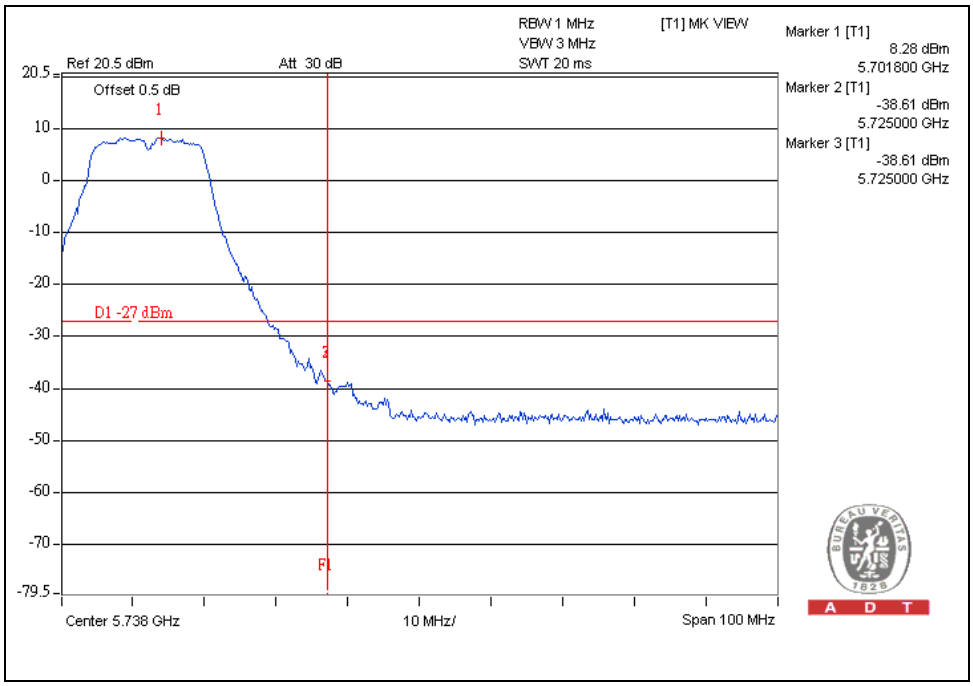
The spectrum plots (Peak RBW=1MHz, VBW=3MHz) are attached on the following pages.

802.11a OFDM modulation

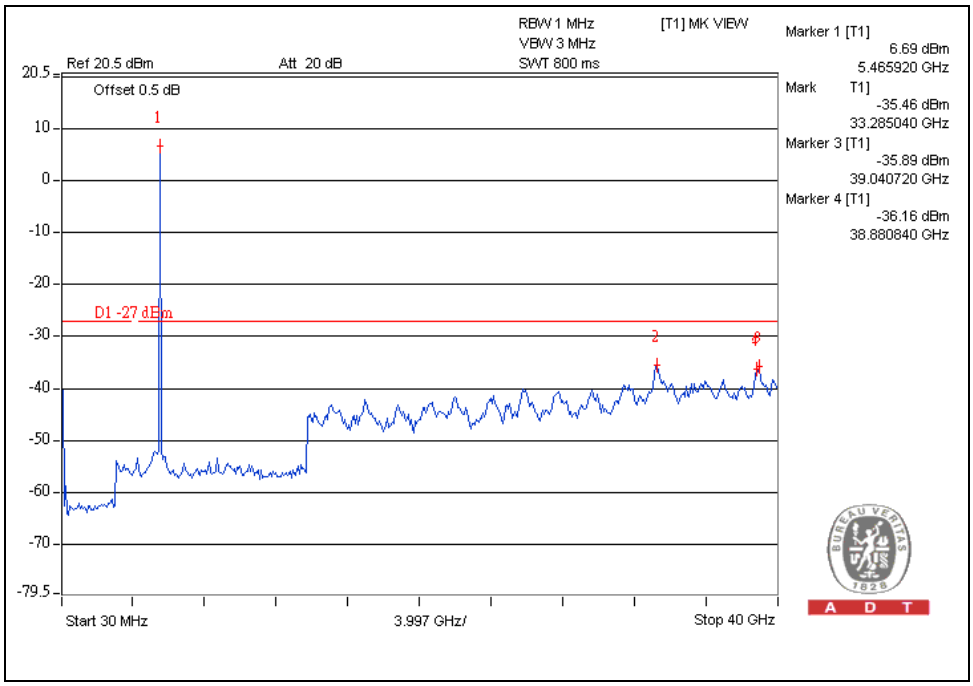
CH 9



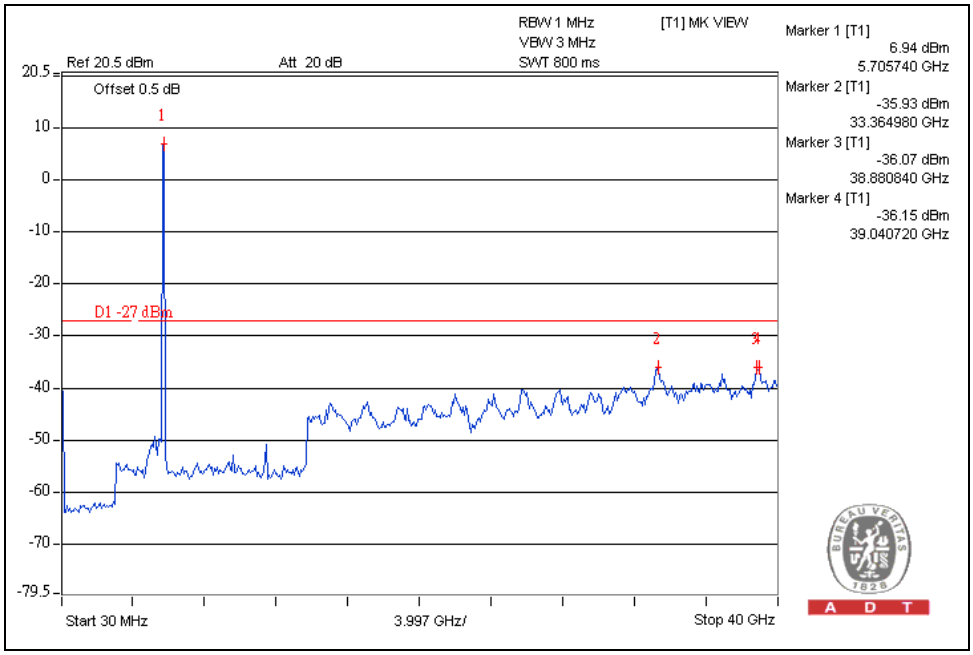
CH 19



CH 9

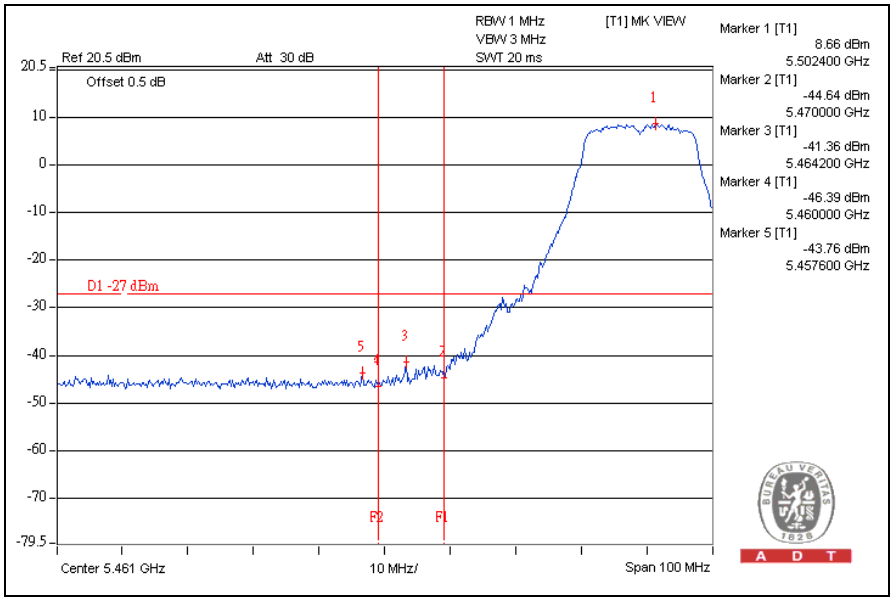

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
6.69 dBm
5.465920 GHz
Mark T1]
-35.46 dBm
33.285040 GHz
Marker 3 [T1]
-35.89 dBm
39.040720 GHz
Marker 4 [T1]
-36.16 dBm
38.880840 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH 19

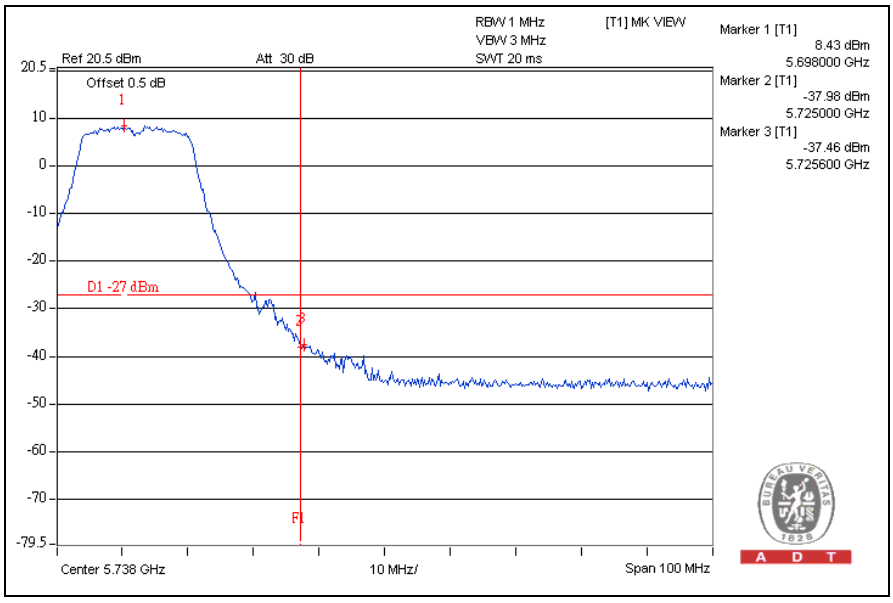

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
6.94 dBm
5.705740 GHz
Marker 2 [T1]
-35.93 dBm
33.364980 GHz
Marker 3 [T1]
-36.07 dBm
38.880840 GHz
Marker 4 [T1]
-36.15 dBm
39.040720 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (20MHz) OFDM MODULATION:

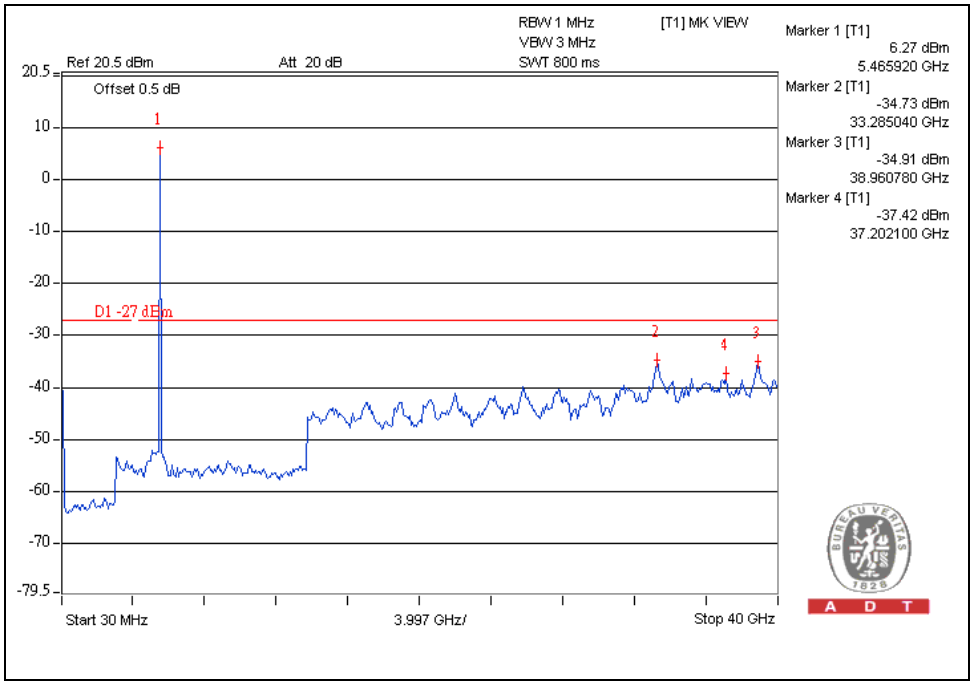
CH9



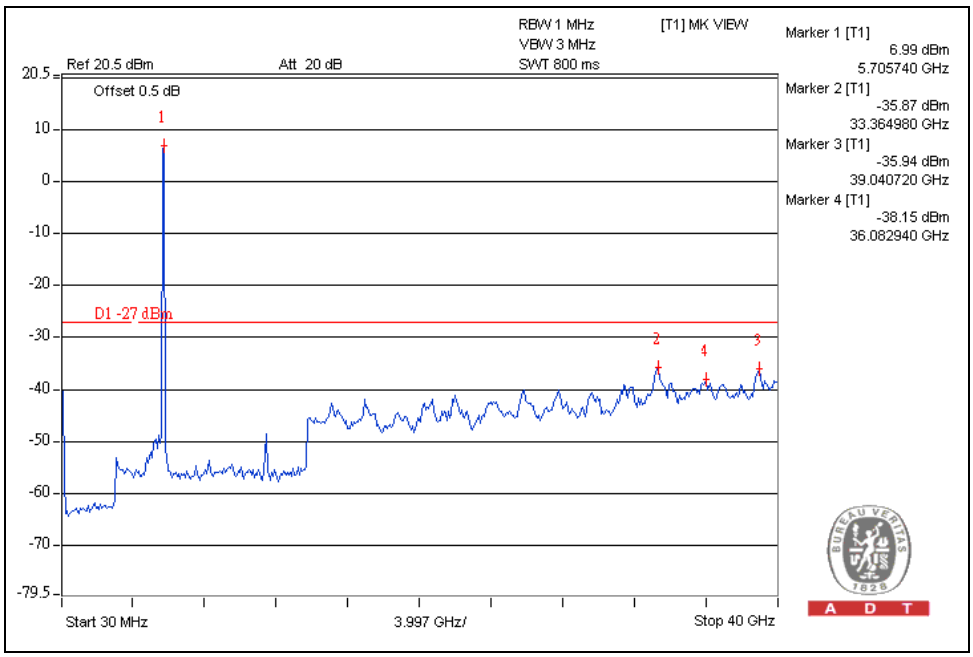
CH19



CH9

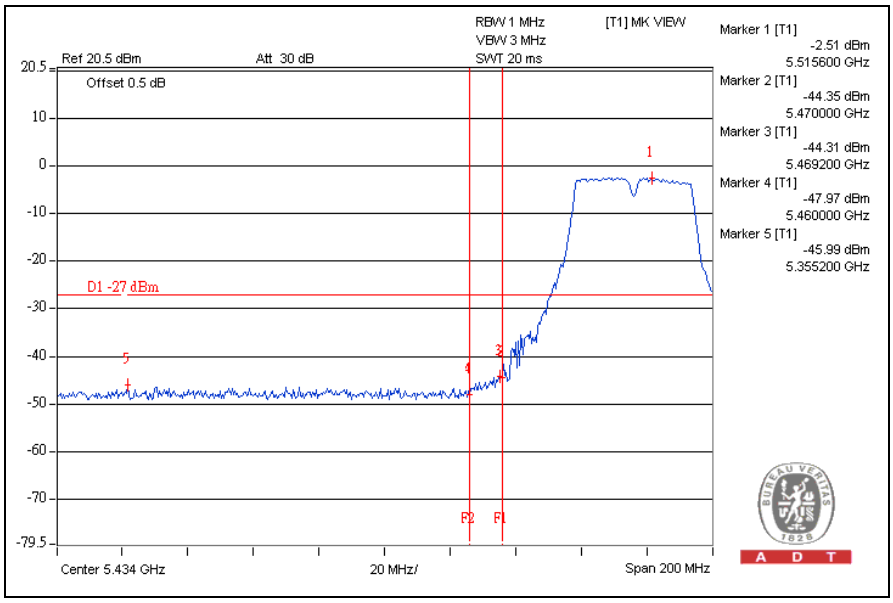

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
6.27 dBm
5.465920 GHz
Marker 2 [T1]
-34.73 dBm
33.285040 GHz
Marker 3 [T1]
-34.91 dBm
38.960780 GHz
Marker 4 [T1]
-37.42 dBm
37.202100 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH19

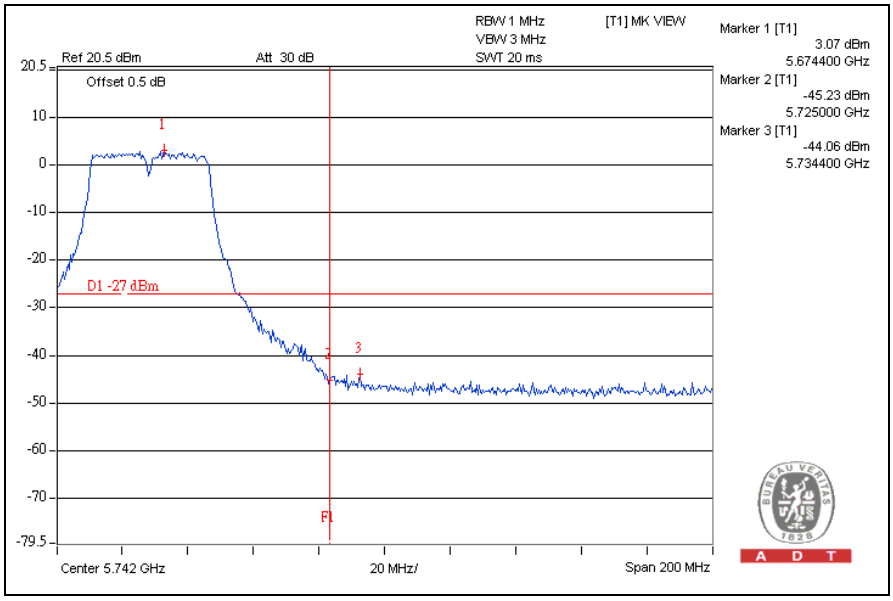

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
6.99 dBm
5.705740 GHz
Marker 2 [T1]
-35.87 dBm
33.364980 GHz
Marker 3 [T1]
-35.94 dBm
39.040720 GHz
Marker 4 [T1]
-38.15 dBm
36.082940 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (40MHz) OFDM MODULATION:

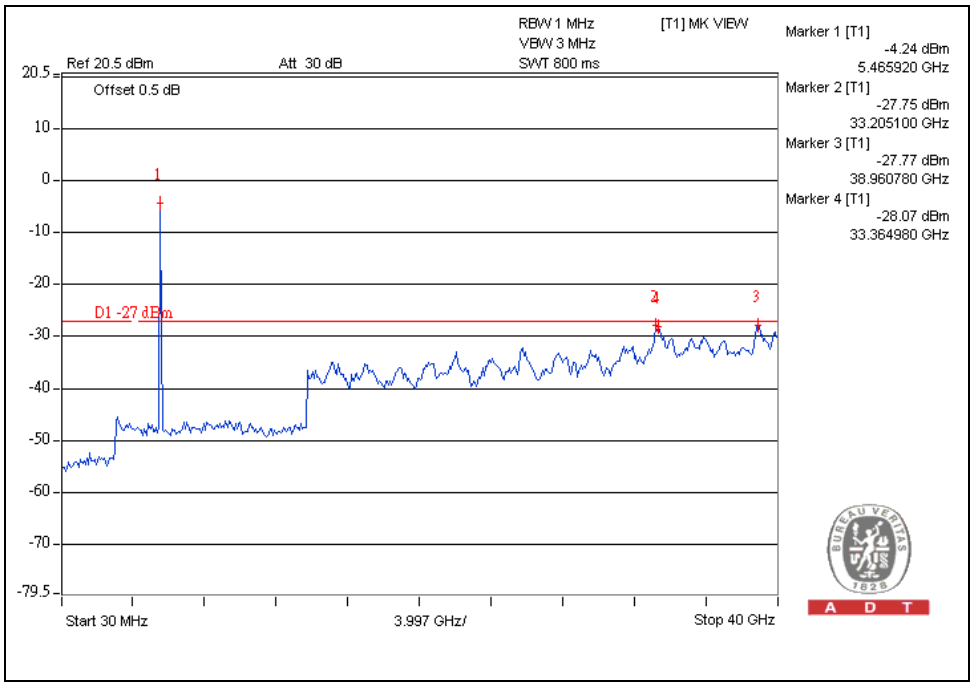
CH5



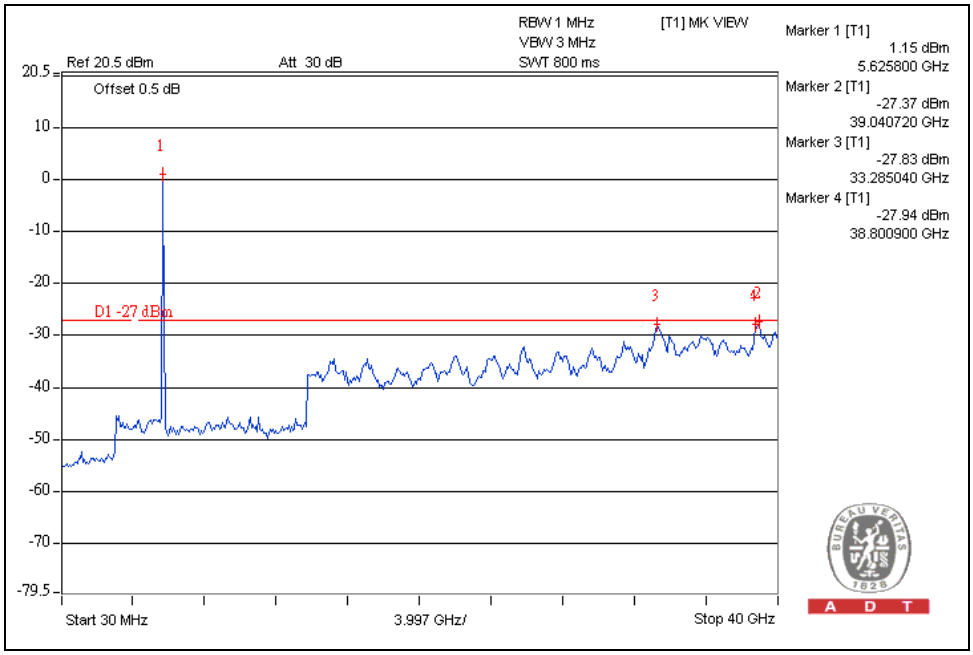
CH9



CH5


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
-4.24 dBm
5.465920 GHz
Marker 2 [T1]
-27.75 dBm
33.205100 GHz
Marker 3 [T1]
-27.77 dBm
38.960780 GHz
Marker 4 [T1]
-28.07 dBm
33.364980 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH9

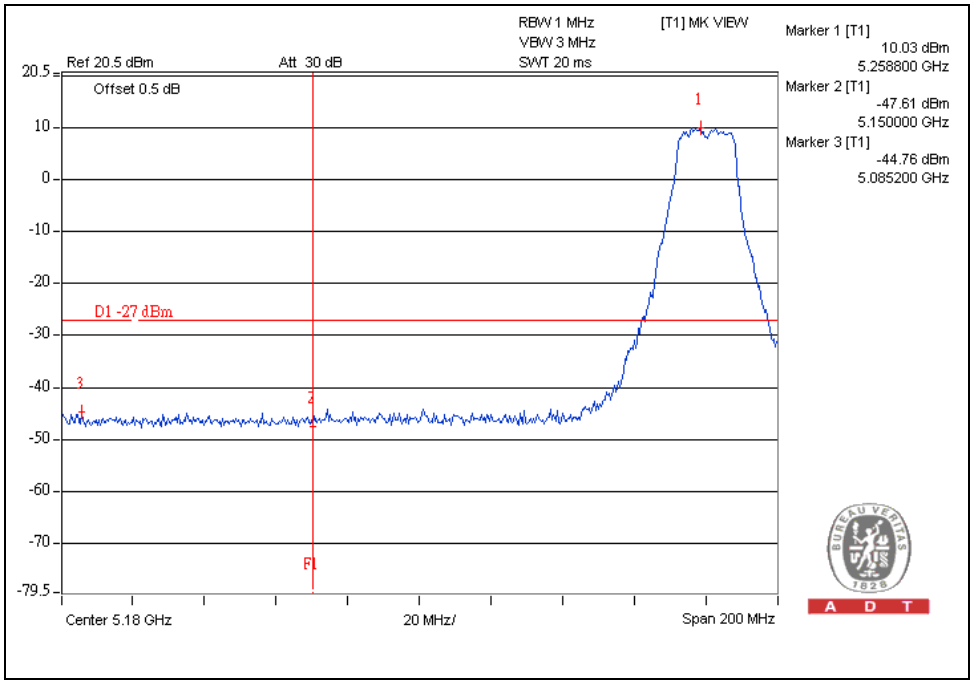

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
1.15 dBm
5.625800 GHz
Marker 2 [T1]
-27.37 dBm
39.040720 GHz
Marker 3 [T1]
-27.83 dBm
33.285040 GHz
Marker 4 [T1]
-27.94 dBm
38.800900 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

4.7.7 TEST RESULTS-ANTENNA 8

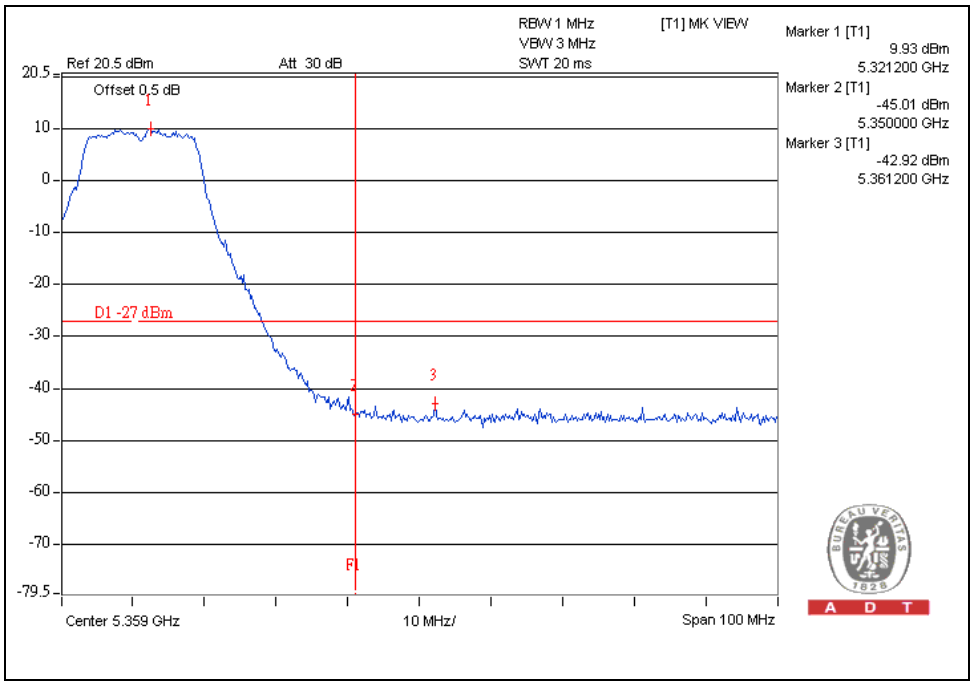
For 5.25 to 5.35GHz band:
The spectrum plots (Peak RBW=1MHz, VBW=3MHz) are attached on the following pages.

802.11a OFDM modulation

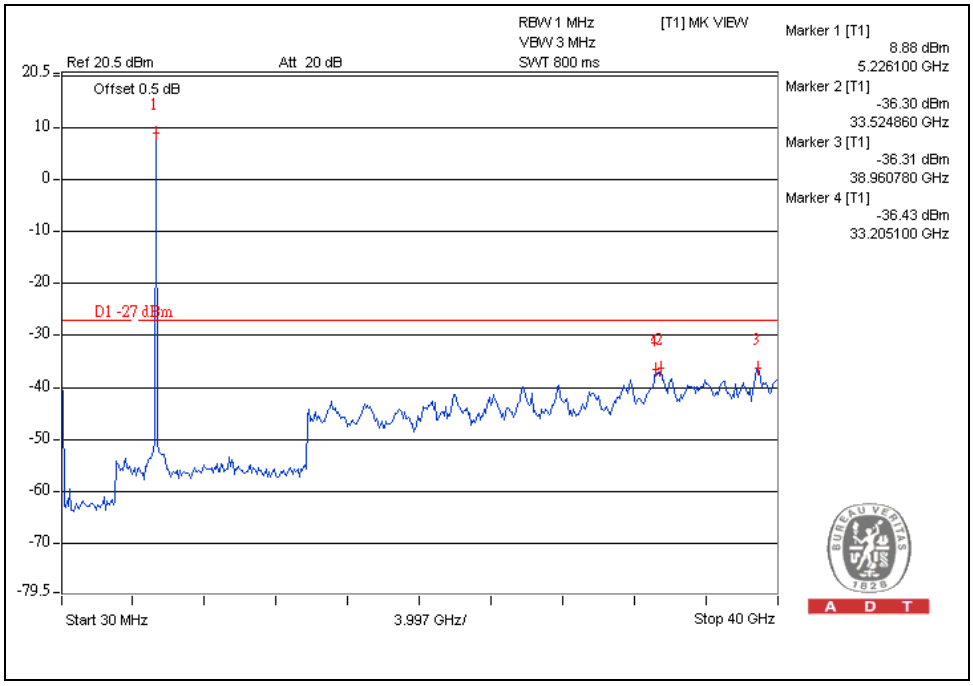
CH 5



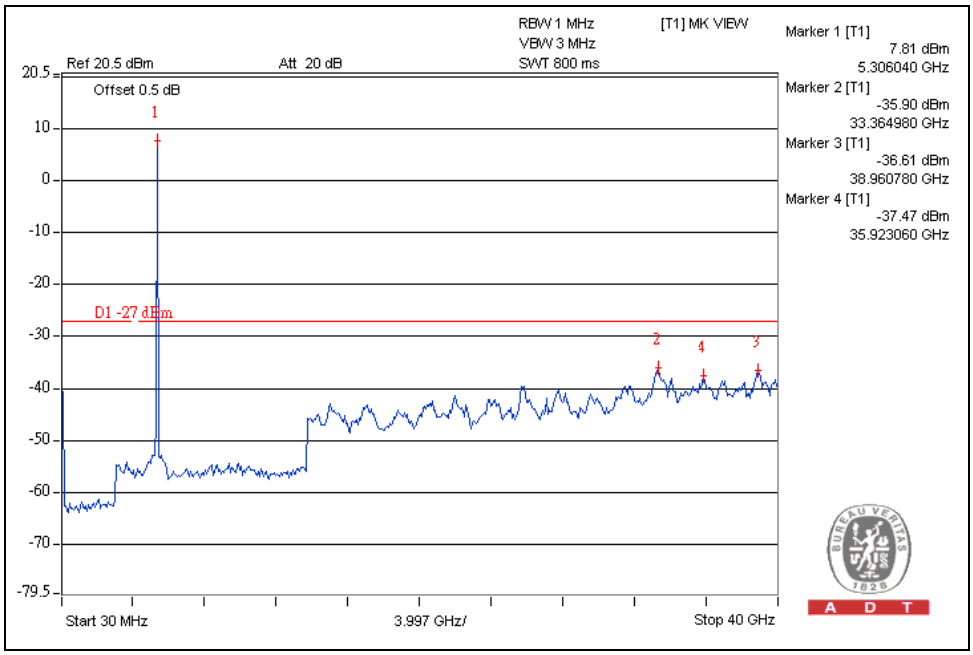
CH 8



CH 1

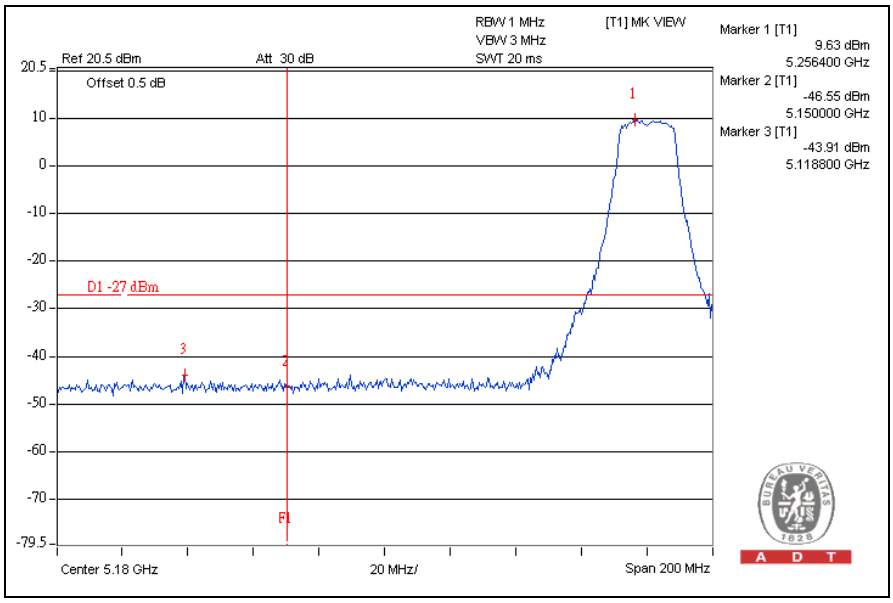

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
8.88 dBm
5.226100 GHz
Marker 2 [T1]
-36.30 dBm
33.524860 GHz
Marker 3 [T1]
-36.31 dBm
38.960780 GHz
Marker 4 [T1]
-36.43 dBm
33.205100 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH 8

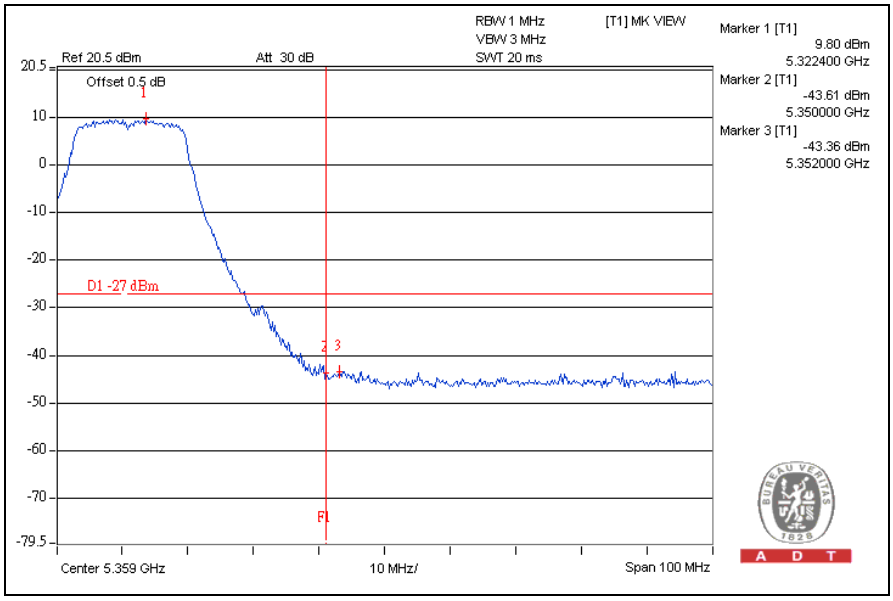

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
7.81 dBm
5.306040 GHz
Marker 2 [T1]
-35.90 dBm
33.364980 GHz
Marker 3 [T1]
-36.61 dBm
38.960780 GHz
Marker 4 [T1]
-37.47 dBm
35.923060 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (20MHz) OFDM MODULATION:

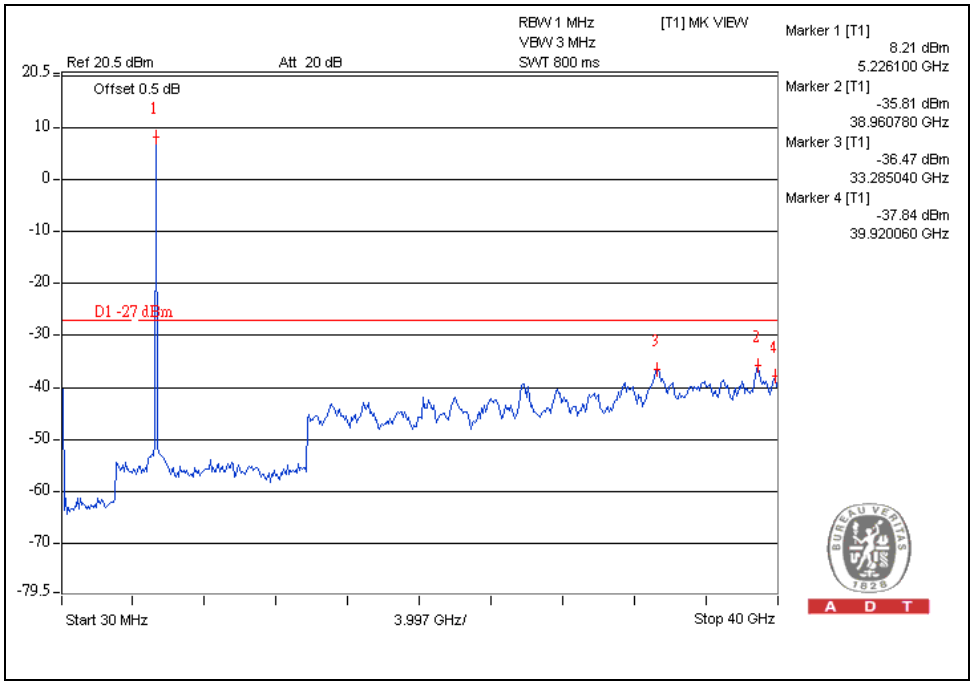
CH1



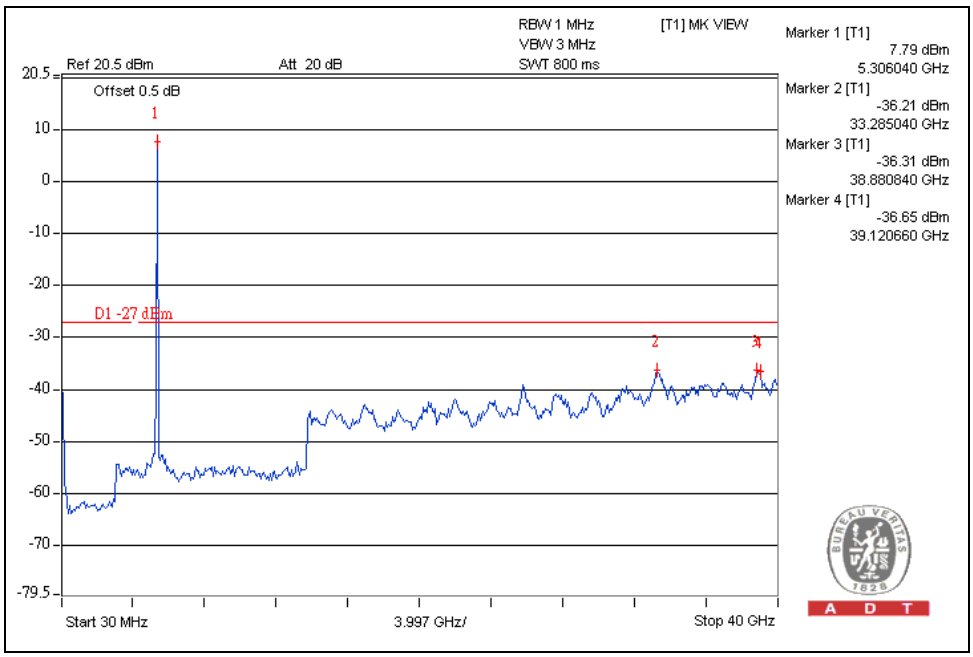
CH8



CH1

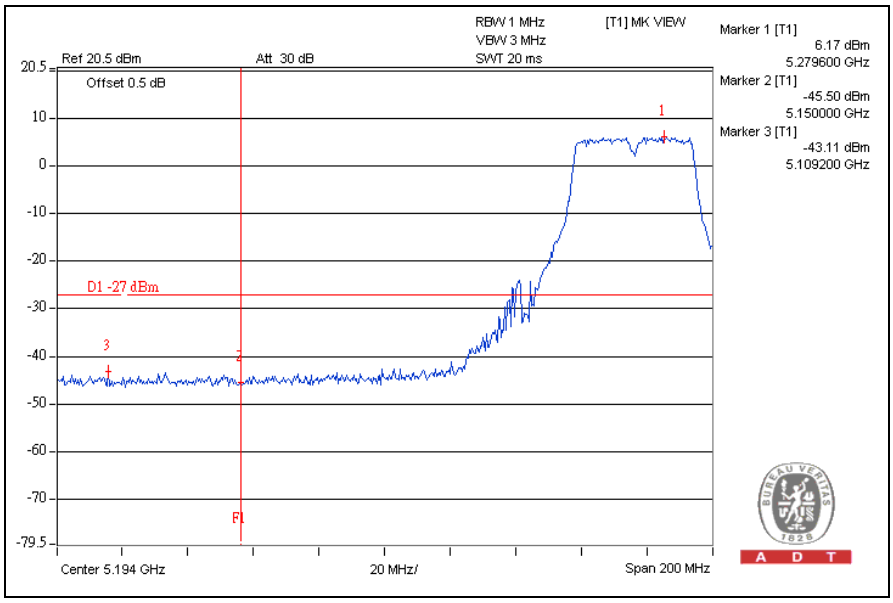

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
8.21 dBm
5.226100 GHz
Marker 2 [T1]
-35.81 dBm
38.960780 GHz
Marker 3 [T1]
-36.47 dBm
33.285040 GHz
Marker 4 [T1]
-37.84 dBm
39.920060 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH8

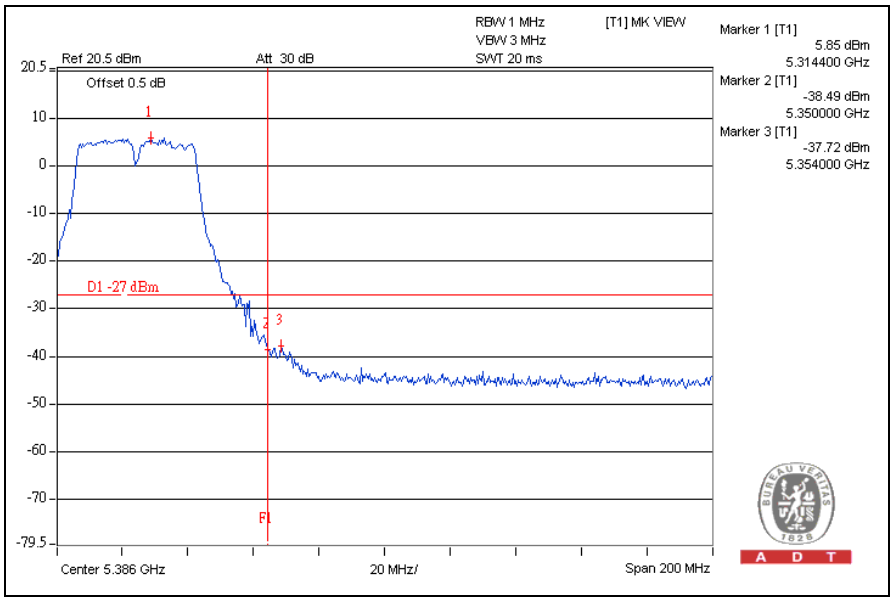

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
7.79 dBm
5.306040 GHz
Marker 2 [T1]
-36.21 dBm
33.285040 GHz
Marker 3 [T1]
-36.31 dBm
38.880840 GHz
Marker 4 [T1]
-36.65 dBm
39.120660 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (40MHz) OFDM MODULATION:

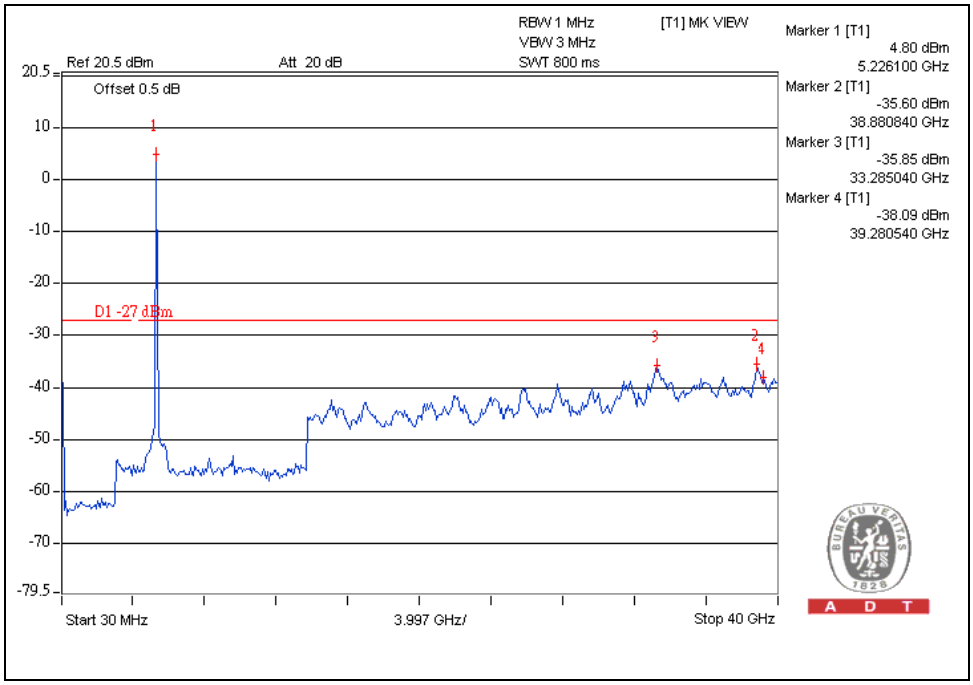
CH3



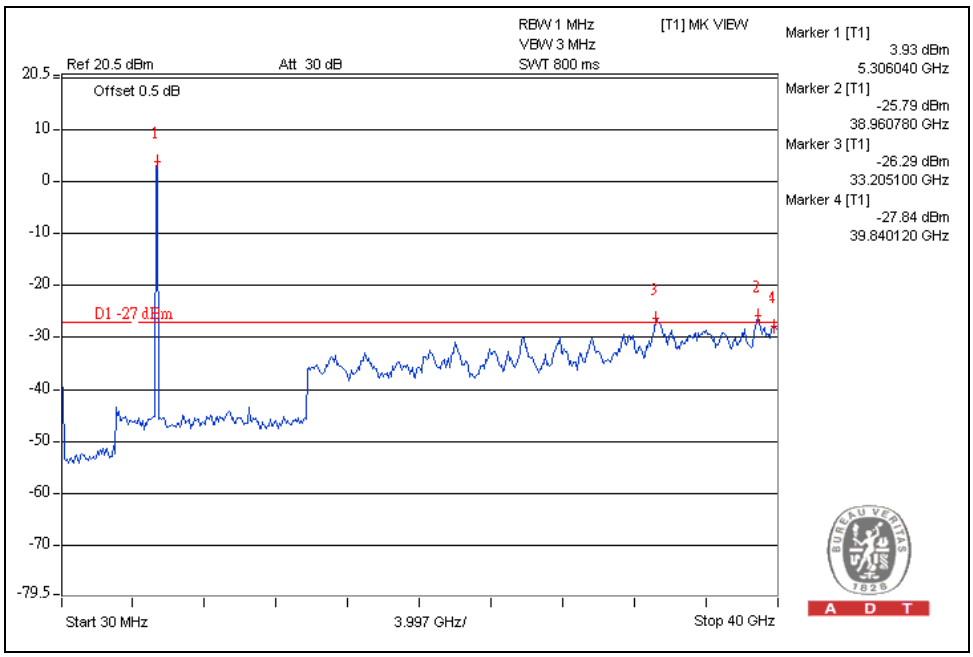
CH4



CH3


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
4.80 dBm
5.226100 GHz
Marker 2 [T1]
-35.60 dBm
38.880840 GHz
Marker 3 [T1]
-35.85 dBm
33.285040 GHz
Marker 4 [T1]
-38.09 dBm
39.280540 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH4

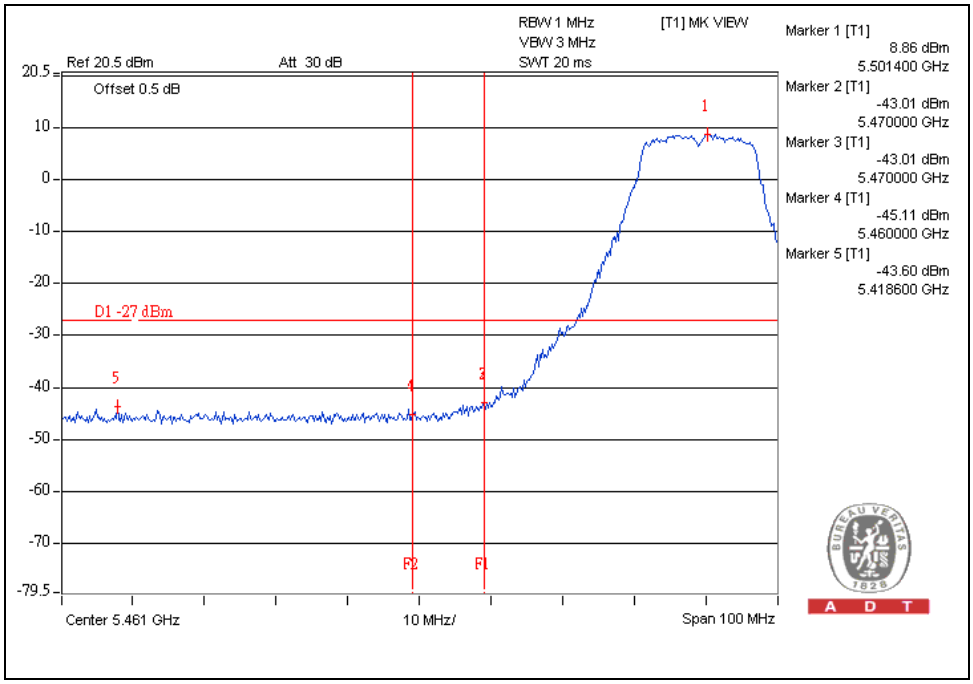

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
3.93 dBm
5.306040 GHz
Marker 2 [T1]
-25.79 dBm
38.960780 GHz
Marker 3 [T1]
-26.29 dBm
33.205100 GHz
Marker 4 [T1]
-27.84 dBm
39.840120 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

For 5.47 to 5.725GHz band:

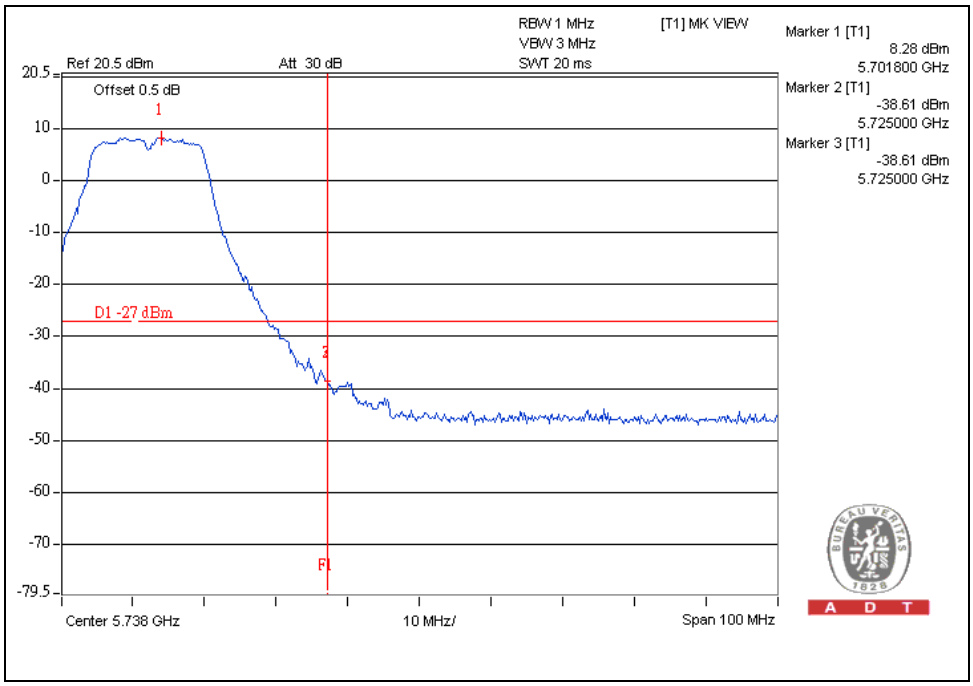
The spectrum plots (Peak RBW=1MHz, VBW=3MHz) are attached on the following pages.

802.11a OFDM modulation

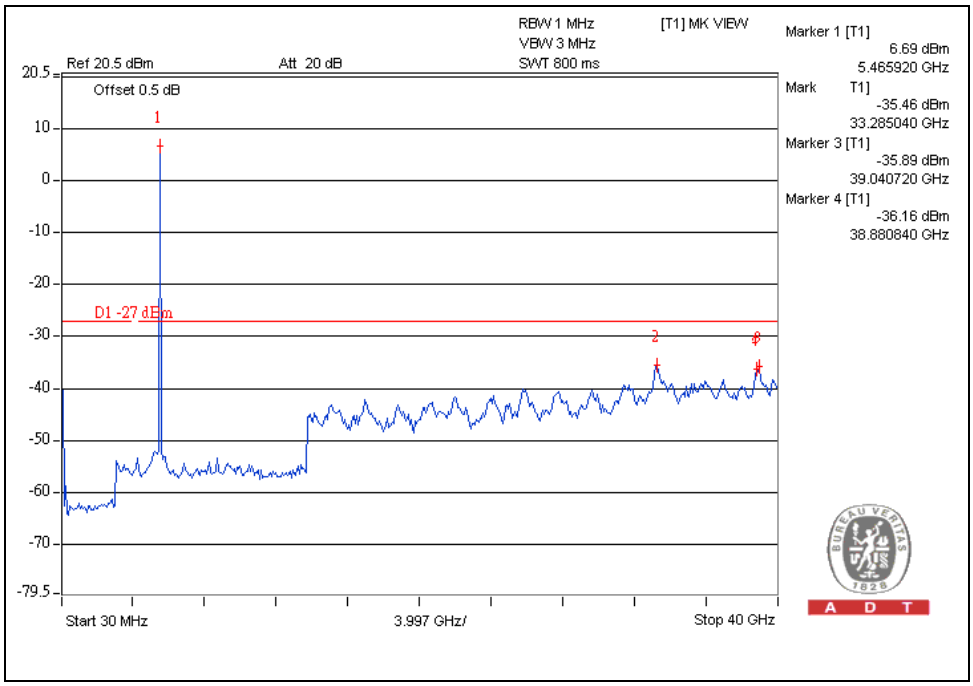
CH 9



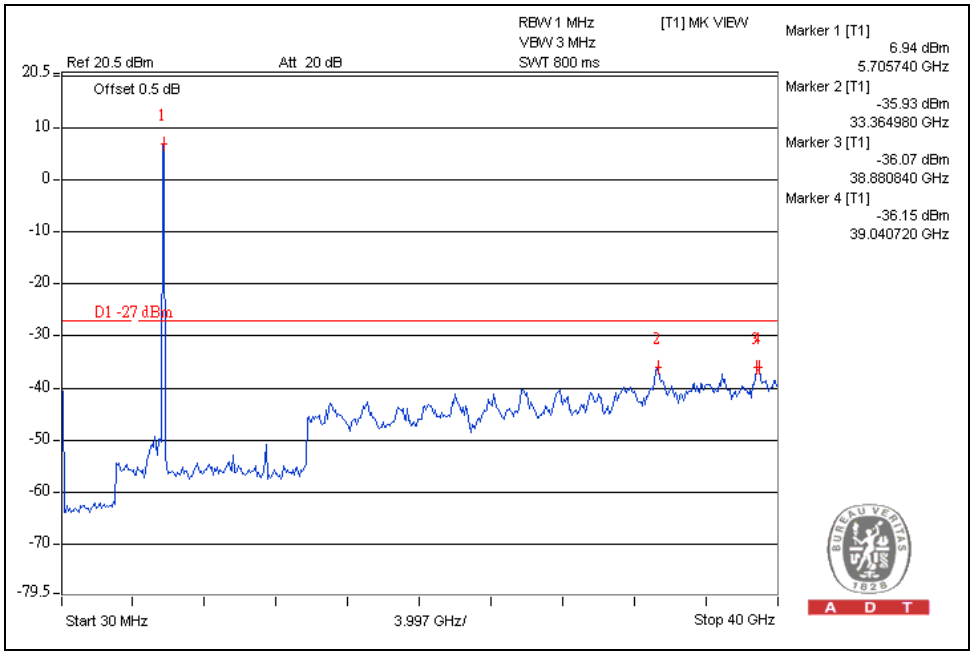
CH 19



CH 9

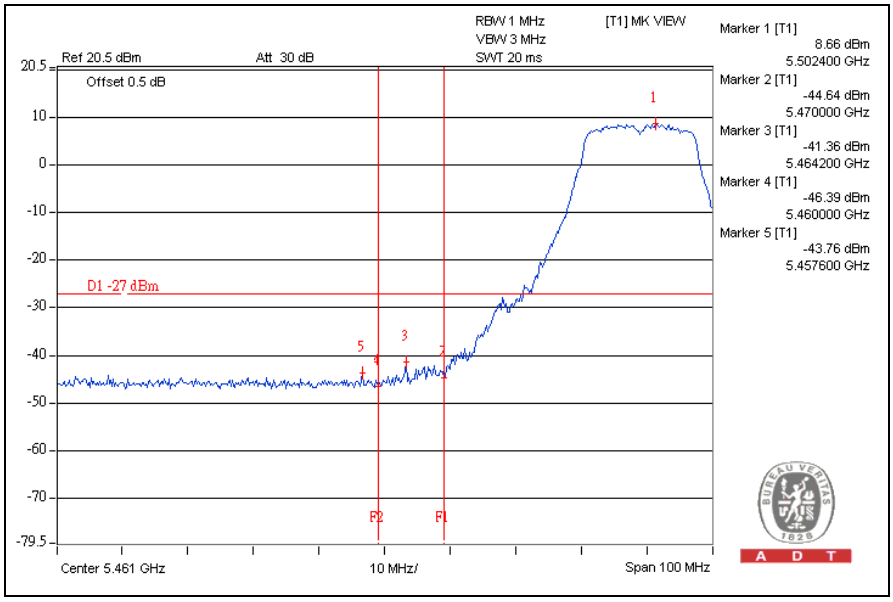

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
6.69 dBm
5.465920 GHz
Mark T1]
-35.46 dBm
33.285040 GHz
Marker 3 [T1]
-35.89 dBm
39.040720 GHz
Marker 4 [T1]
-36.16 dBm
38.880840 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH 19

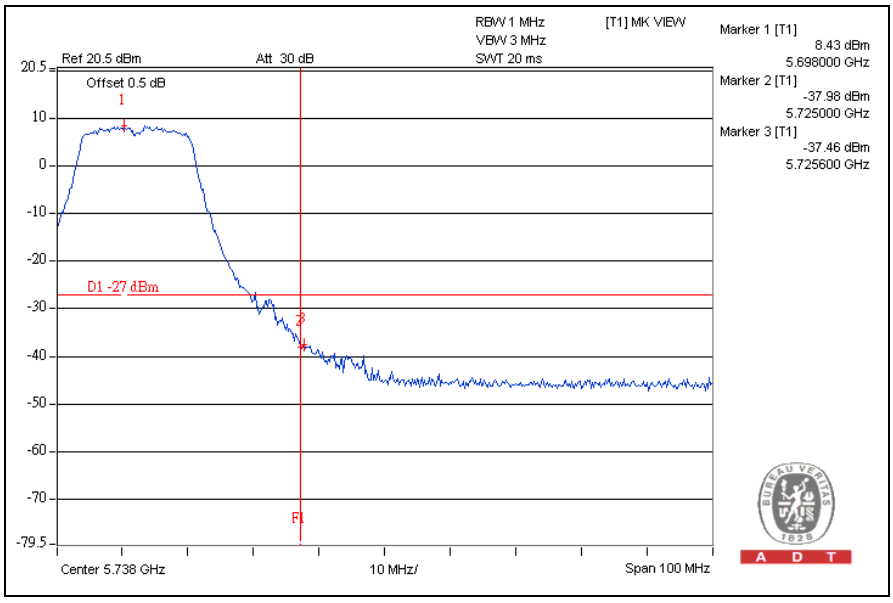

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
6.94 dBm
5.705740 GHz
Marker 2 [T1]
-35.93 dBm
33.364980 GHz
Marker 3 [T1]
-36.07 dBm
38.880840 GHz
Marker 4 [T1]
-36.15 dBm
39.040720 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (20MHz) OFDM MODULATION:

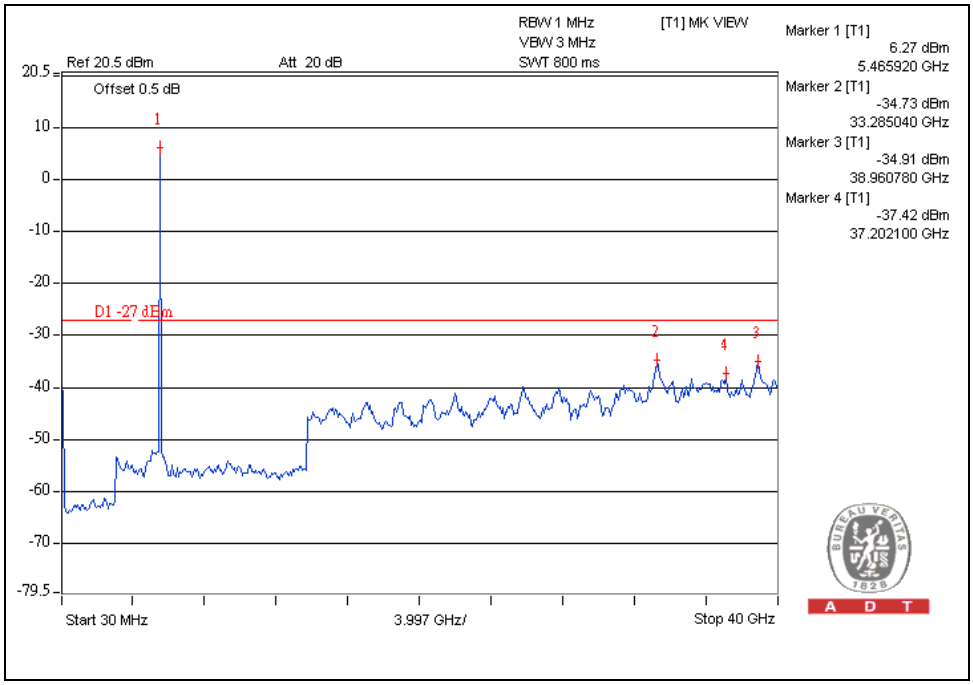
CH9



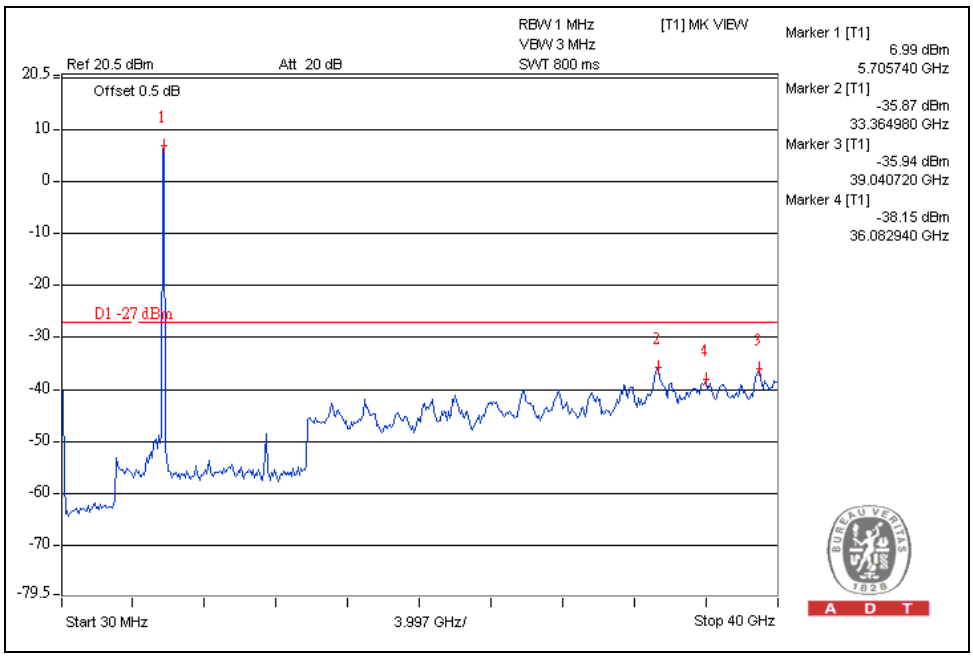
CH19



CH9

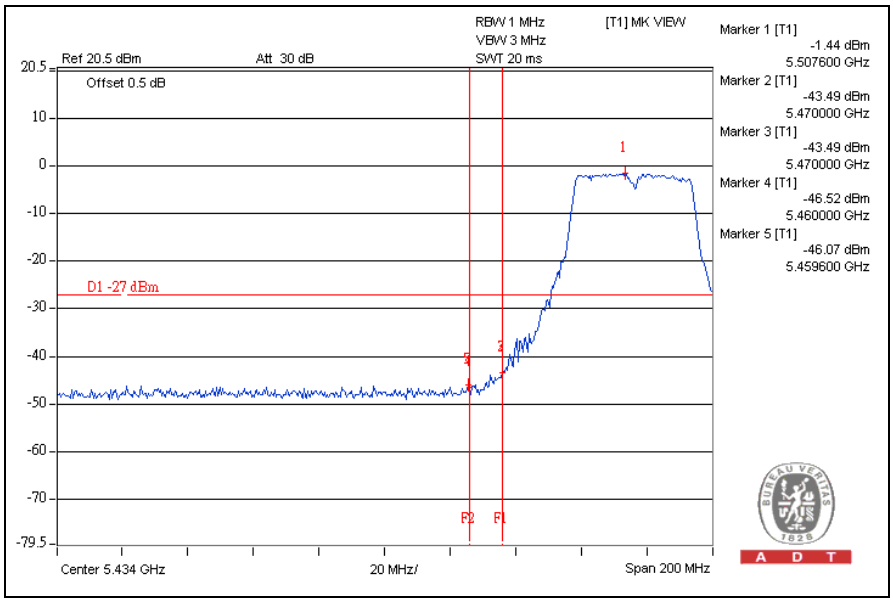

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
6.27 dBm
5.465920 GHz
Marker 2 [T1]
-34.73 dBm
33.285040 GHz
Marker 3 [T1]
-34.91 dBm
38.960780 GHz
Marker 4 [T1]
-37.42 dBm
37.202100 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH19

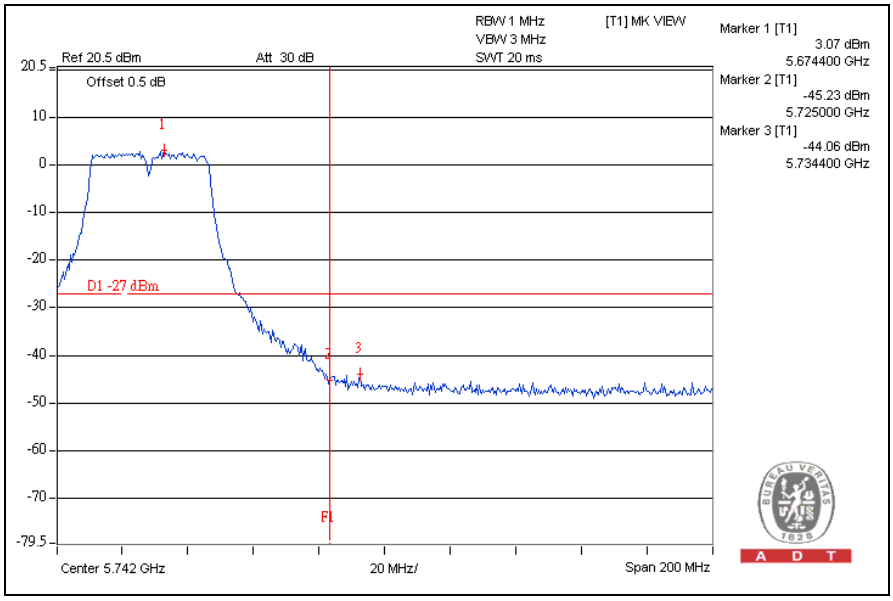

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
6.99 dBm
5.705740 GHz
Marker 2 [T1]
-35.87 dBm
33.364980 GHz
Marker 3 [T1]
-35.94 dBm
39.040720 GHz
Marker 4 [T1]
-38.15 dBm
36.082940 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (40MHz) OFDM MODULATION:

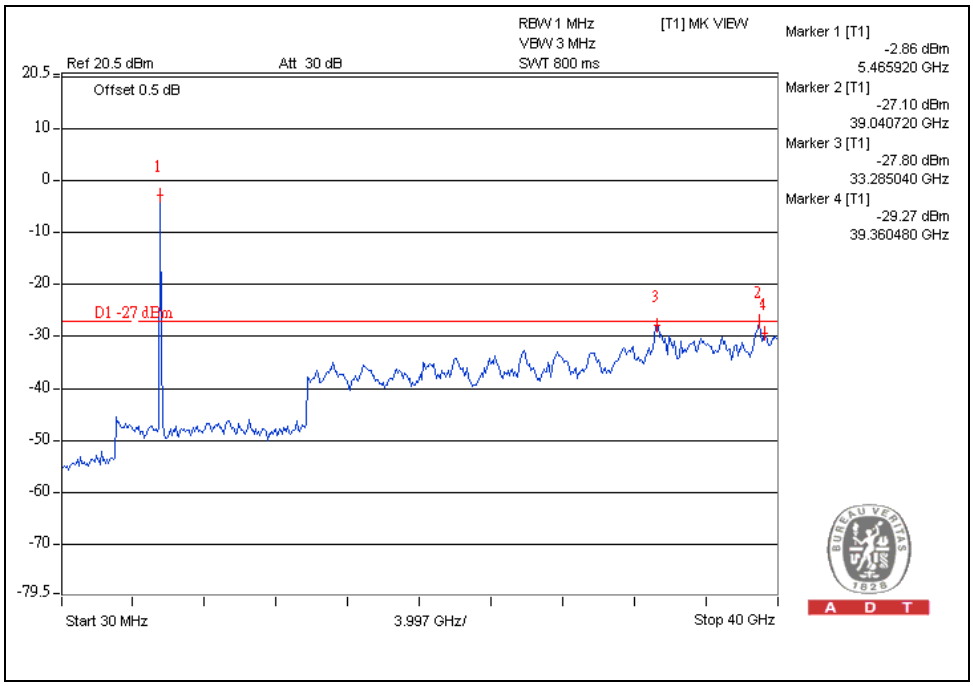
CH5



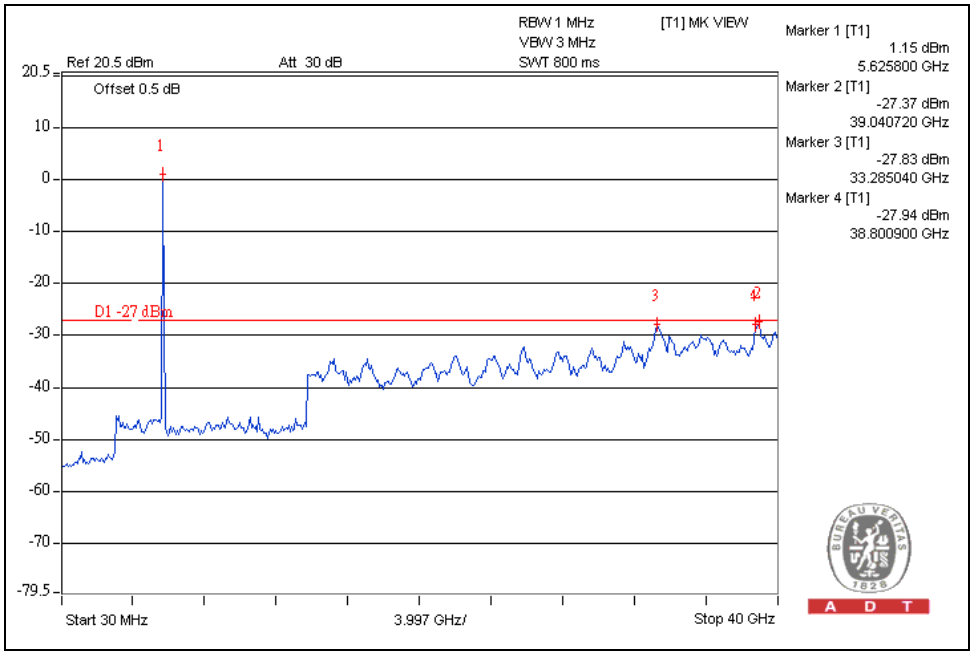
CH9



CH5


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
-2.86 dBm
5.465920 GHz
Marker 2 [T1]
-27.10 dBm
39.040720 GHz
Marker 3 [T1]
-27.80 dBm
33.285040 GHz
Marker 4 [T1]
-29.27 dBm
39.360480 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH9

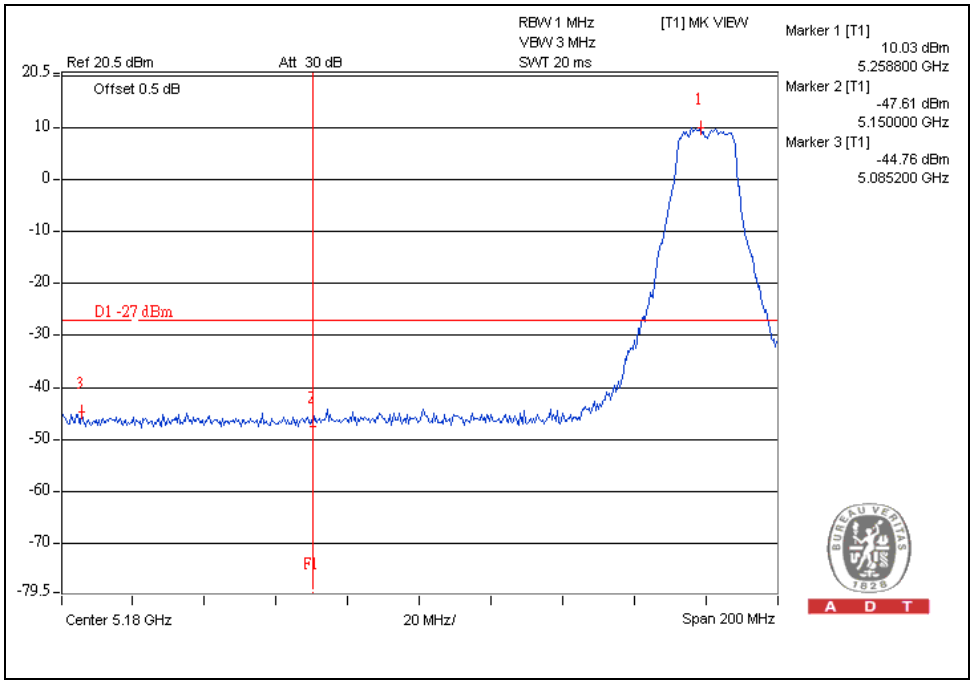

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
1.15 dBm
5.625800 GHz
Marker 2 [T1]
-27.37 dBm
39.040720 GHz
Marker 3 [T1]
-27.83 dBm
33.285040 GHz
Marker 4 [T1]
-27.94 dBm
38.800900 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

4.7.8 TEST RESULTS-ANTENNA 11

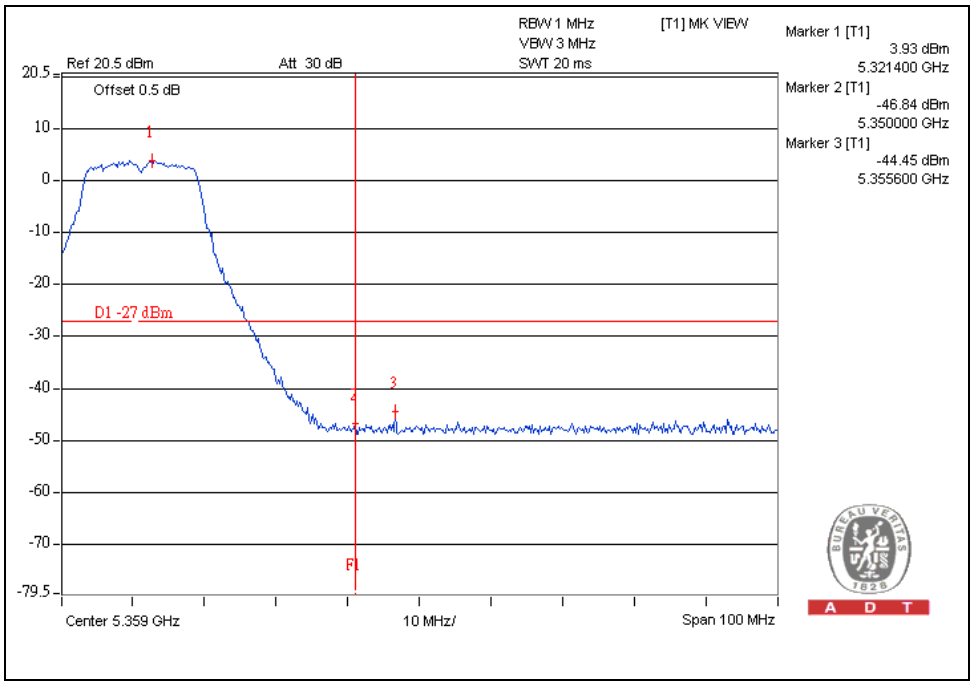
For 5.25 to 5.35GHz band:
The spectrum plots (Peak RBW=1MHz, VBW=3MHz) are attached on the following pages.

802.11a OFDM modulation

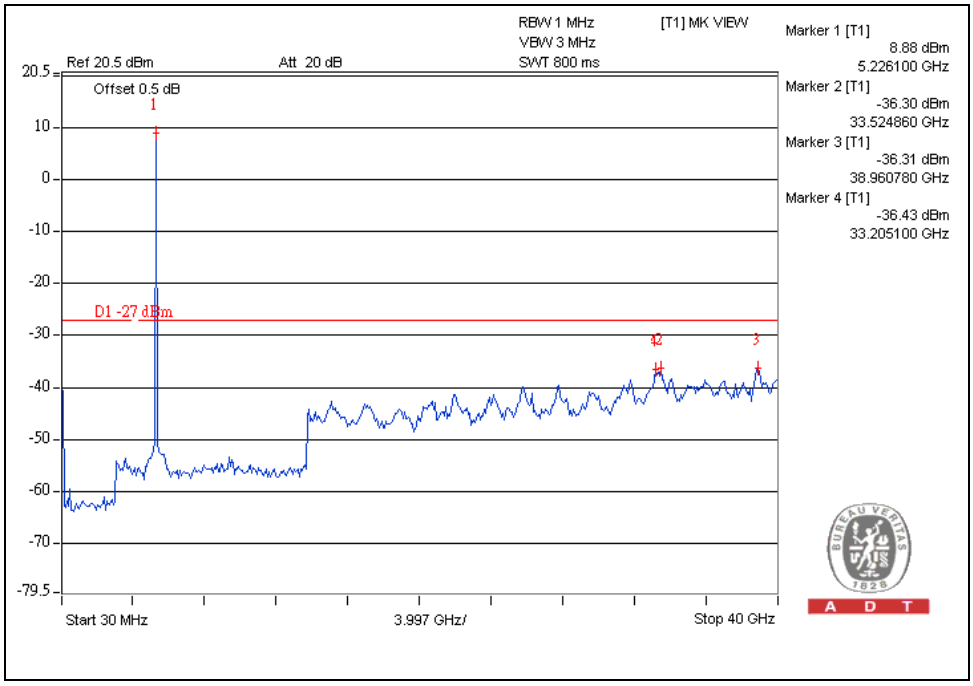
CH 5



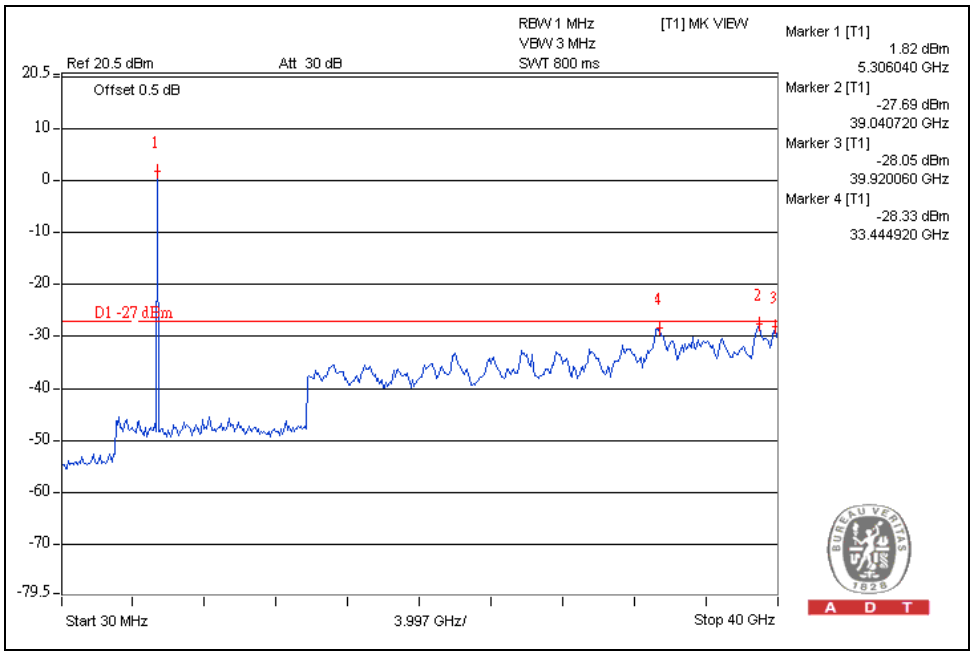
CH 8



CH 5

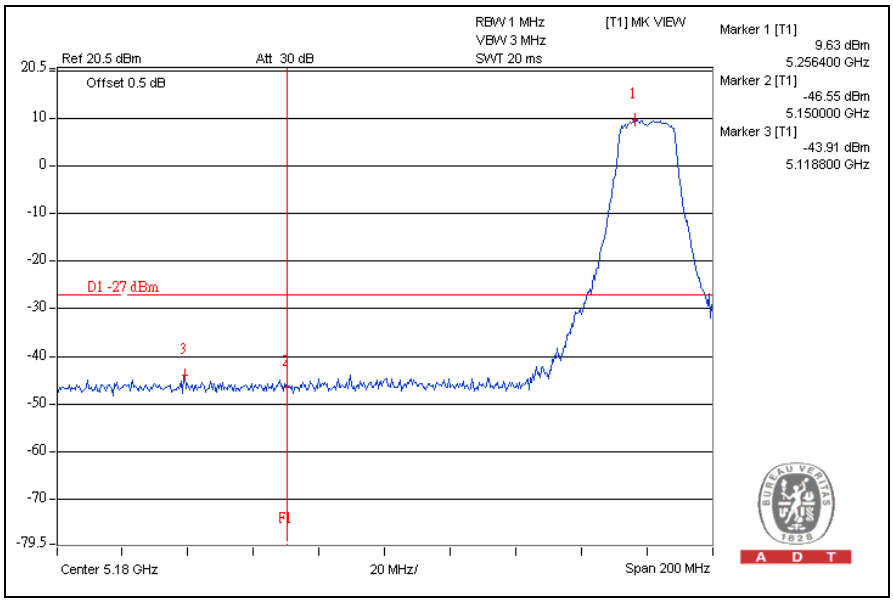

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
8.88 dBm
5.226100 GHz
Marker 2 [T1]
-36.30 dBm
33.524860 GHz
Marker 3 [T1]
-36.31 dBm
38.960780 GHz
Marker 4 [T1]
-36.43 dBm
33.205100 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH 8

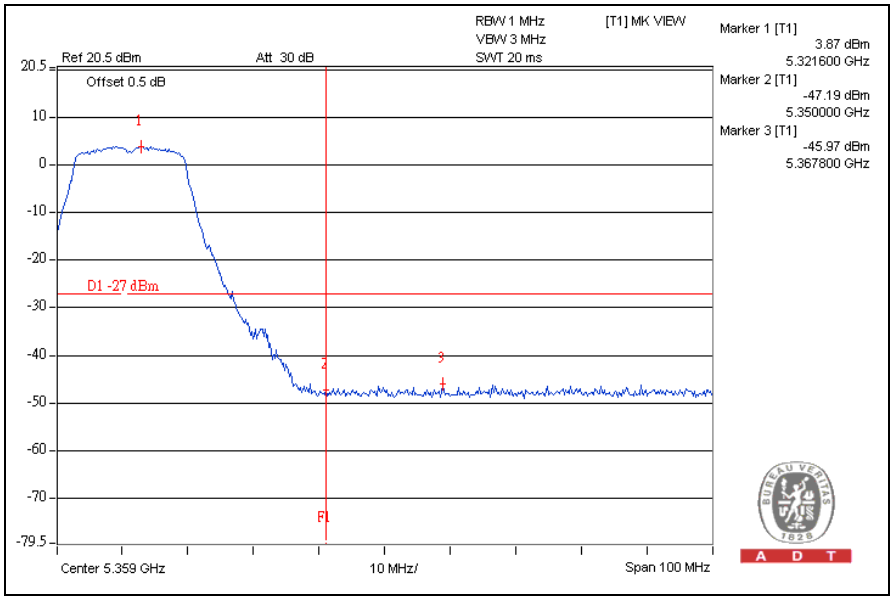

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
1.82 dBm
5.306040 GHz
Marker 2 [T1]
-27.69 dBm
39.040720 GHz
Marker 3 [T1]
-28.05 dBm
39.920060 GHz
Marker 4 [T1]
-28.33 dBm
33.444920 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (20MHz) OFDM MODULATION:

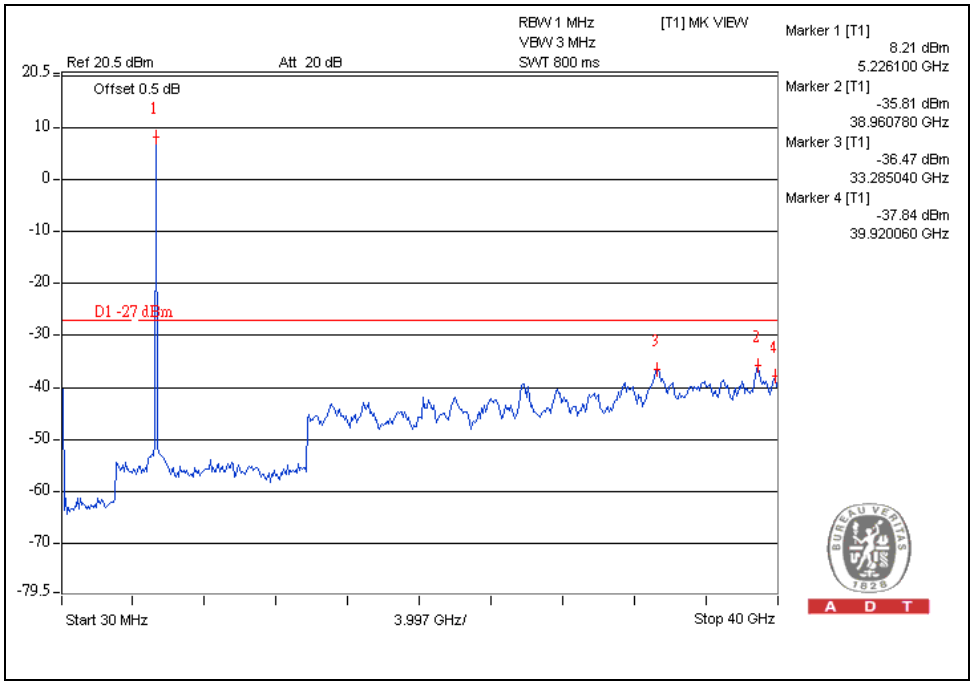
CH5



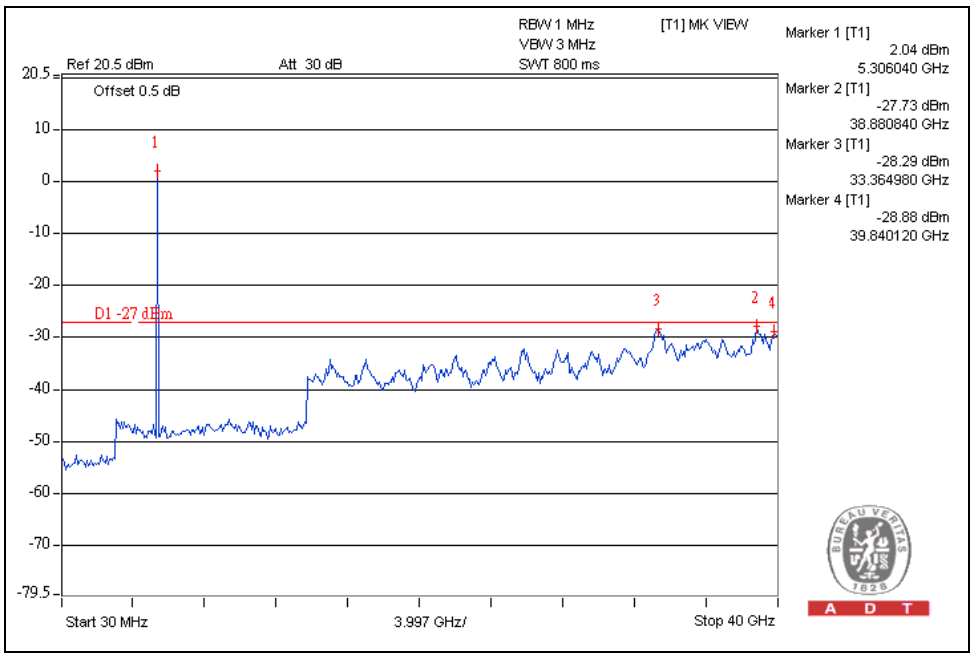
CH8



CH5

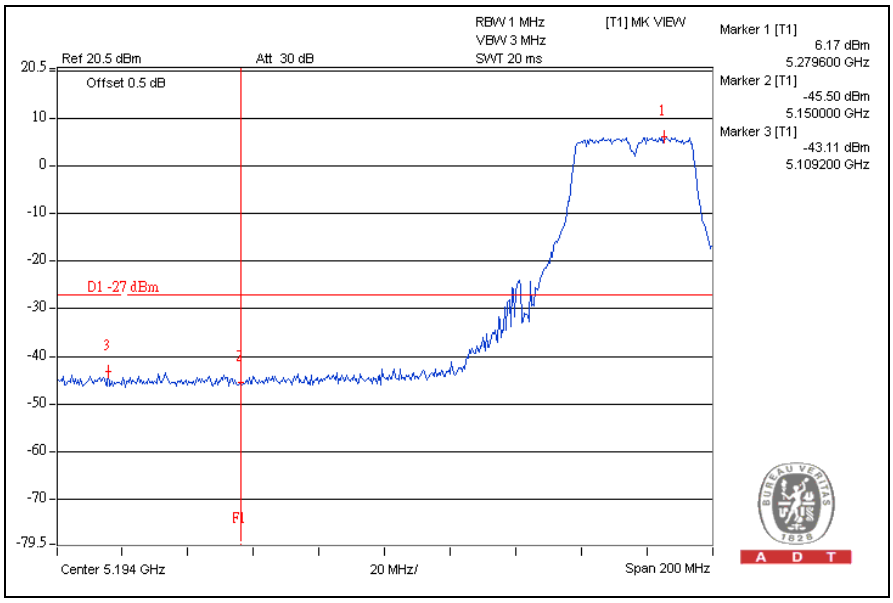

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
8.21 dBm
5.226100 GHz
Marker 2 [T1]
-35.81 dBm
38.960780 GHz
Marker 3 [T1]
-36.47 dBm
33.285040 GHz
Marker 4 [T1]
-37.84 dBm
39.920060 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH8

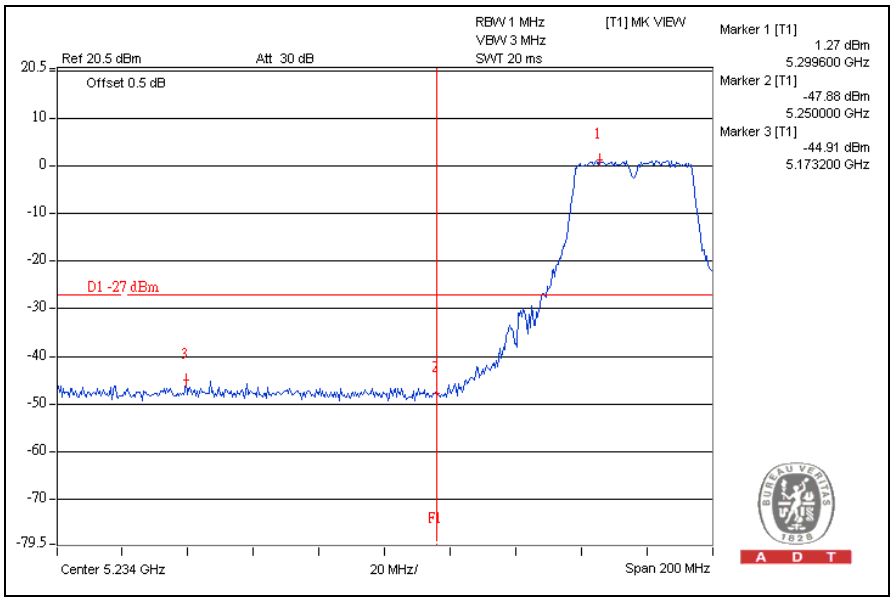

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
2.04 dBm
5.306040 GHz
Marker 2 [T1]
-27.73 dBm
38.880840 GHz
Marker 3 [T1]
-28.29 dBm
33.364980 GHz
Marker 4 [T1]
-28.88 dBm
39.840120 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (40MHz) OFDM MODULATION:

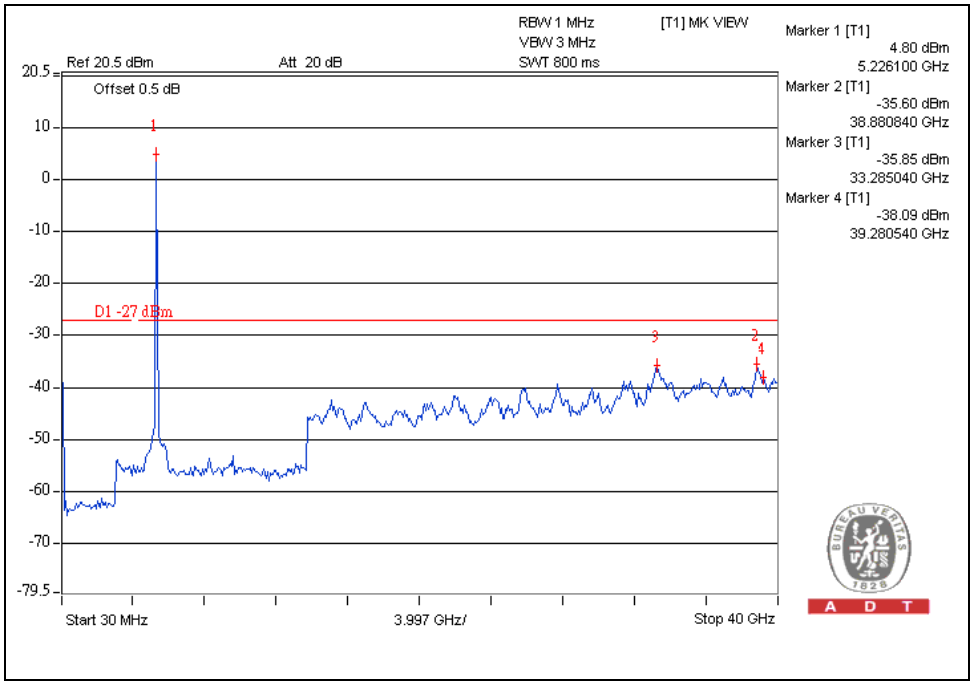
CH3



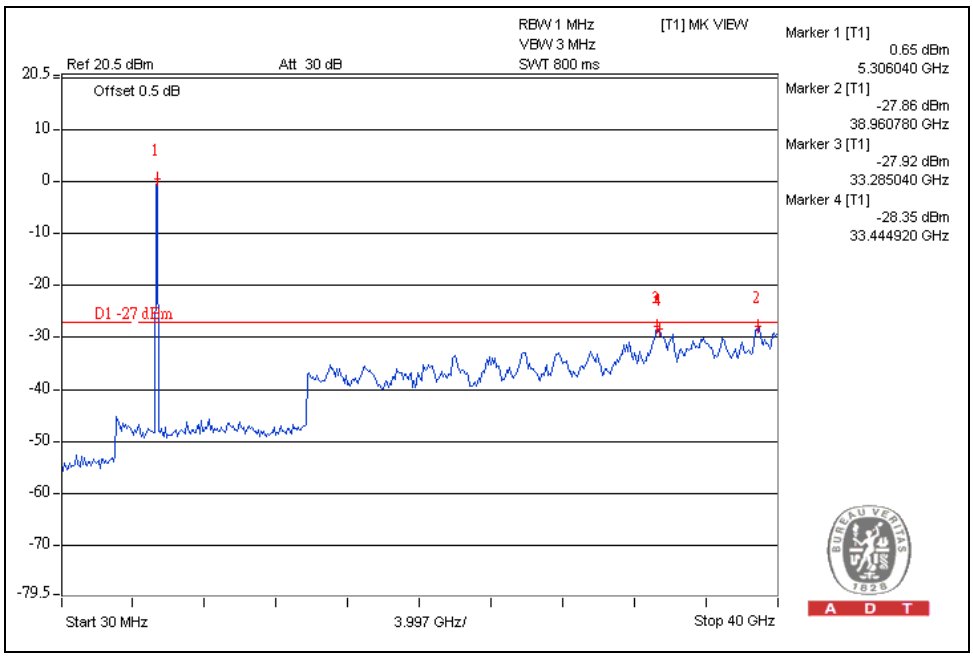
CH4



CH3


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
4.80 dBm
5.226100 GHz
Marker 2 [T1]
-35.60 dBm
38.880840 GHz
Marker 3 [T1]
-35.85 dBm
33.285040 GHz
Marker 4 [T1]
-38.09 dBm
39.280540 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH4

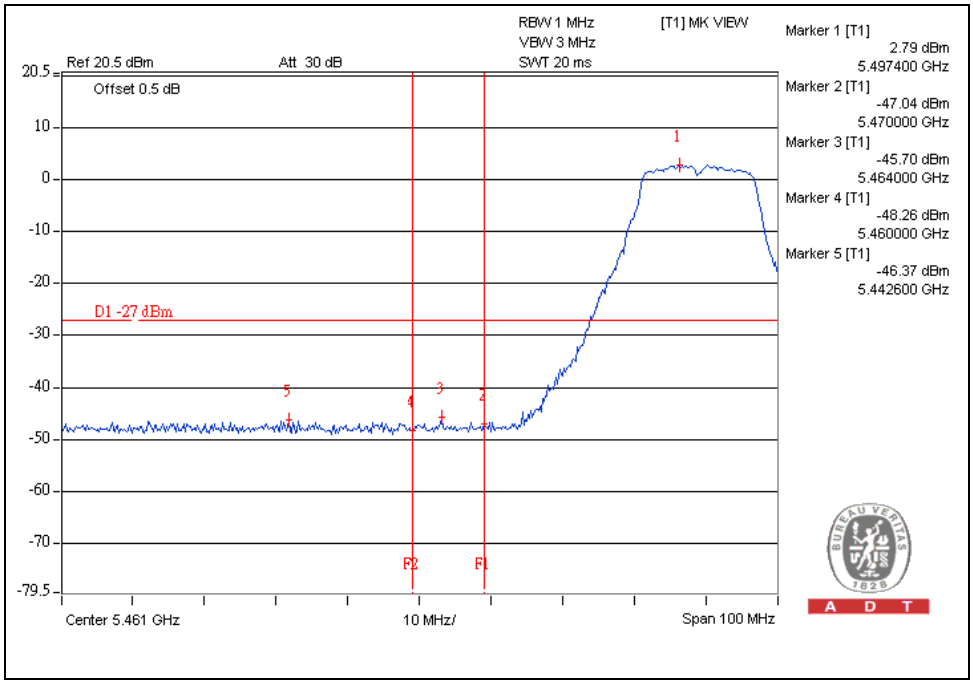

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
0.65 dBm
5.306040 GHz
Marker 2 [T1]
-27.86 dBm
38.960780 GHz
Marker 3 [T1]
-27.92 dBm
33.285040 GHz
Marker 4 [T1]
-28.35 dBm
33.444920 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

For 5.47 to 5.725GHz band:

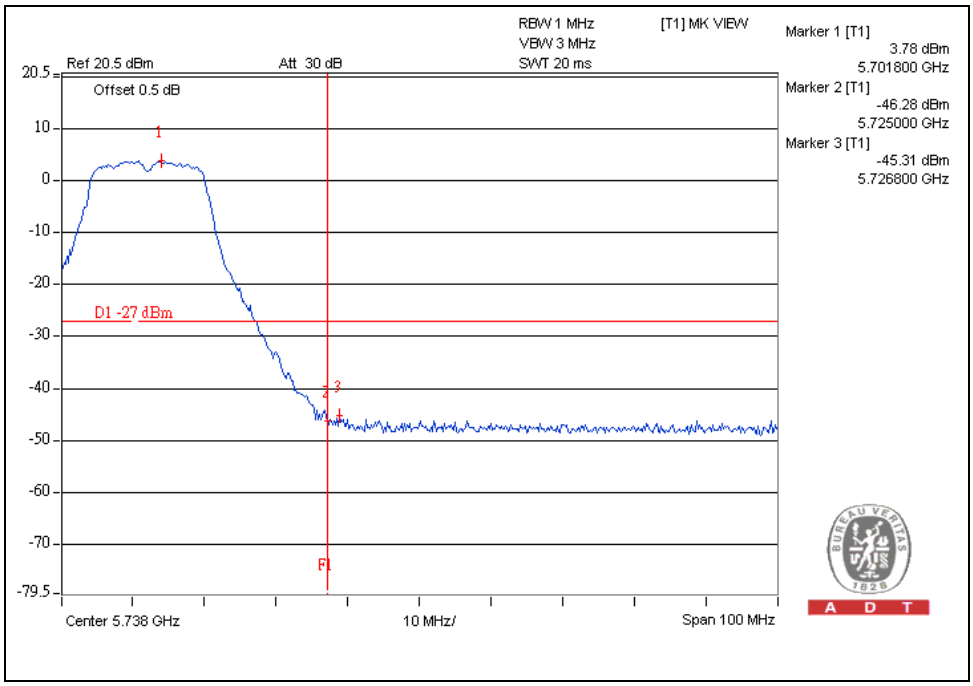
The spectrum plots (Peak RBW=1MHz, VBW=3MHz) are attached on the following pages.

802.11a OFDM modulation

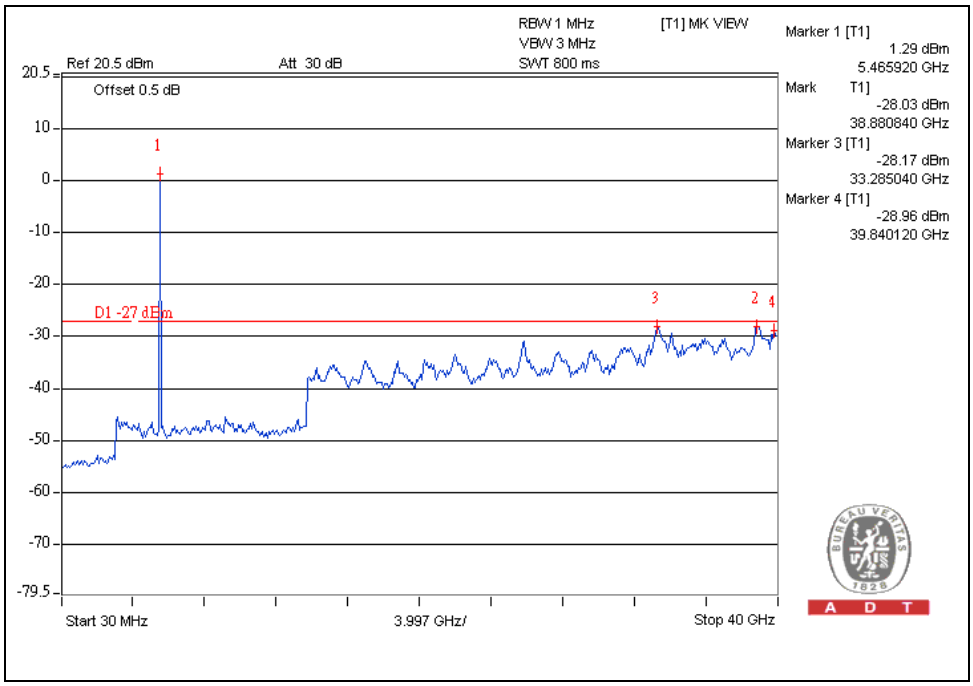
CH 9



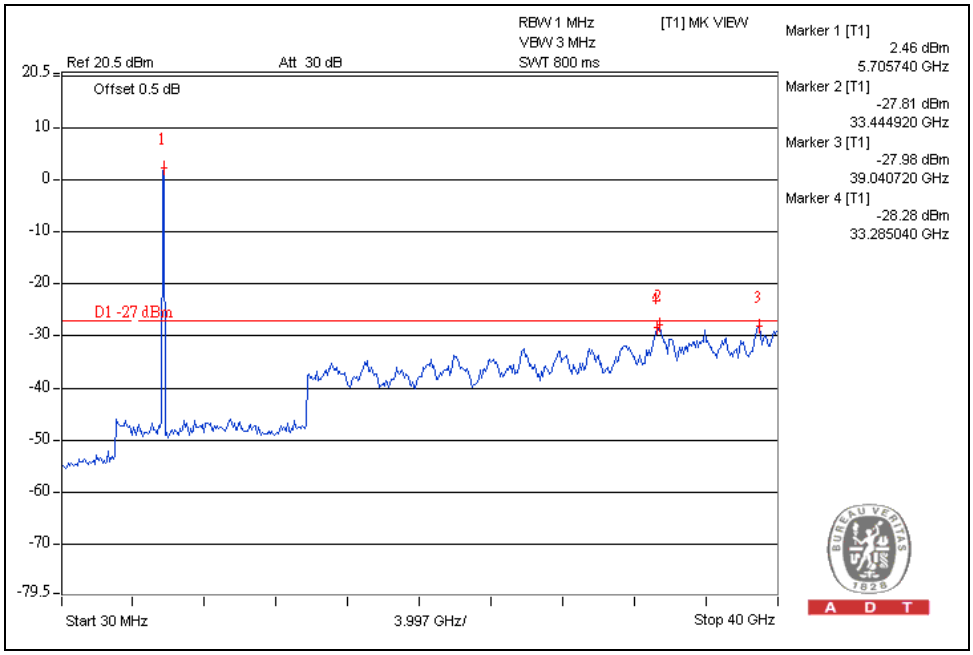
CH 19



CH 9

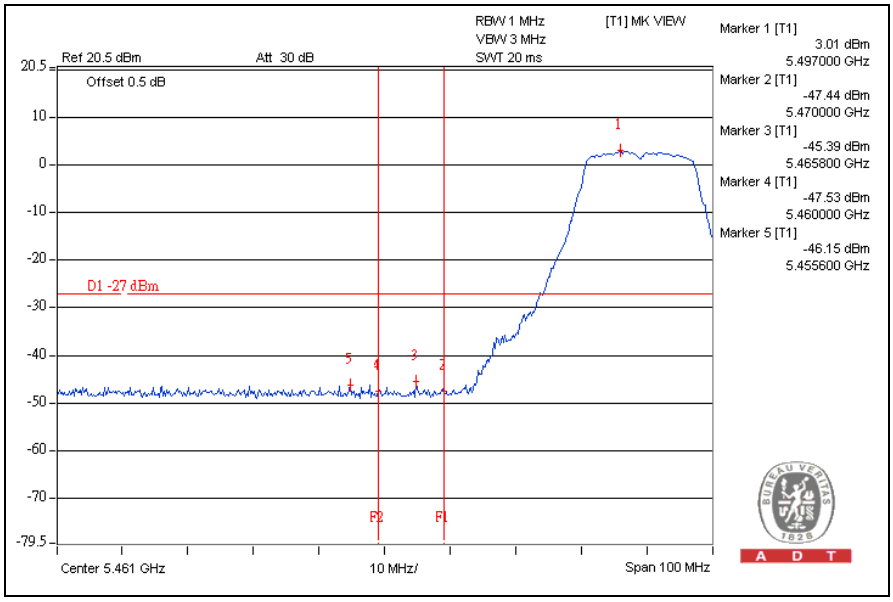

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
1.29 dBm
5.465920 GHz
Mark T1]
-28.03 dBm
38.880840 GHz
Marker 3 [T1]
-28.17 dBm
33.285040 GHz
Marker 4 [T1]
-28.96 dBm
39.840120 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH 19

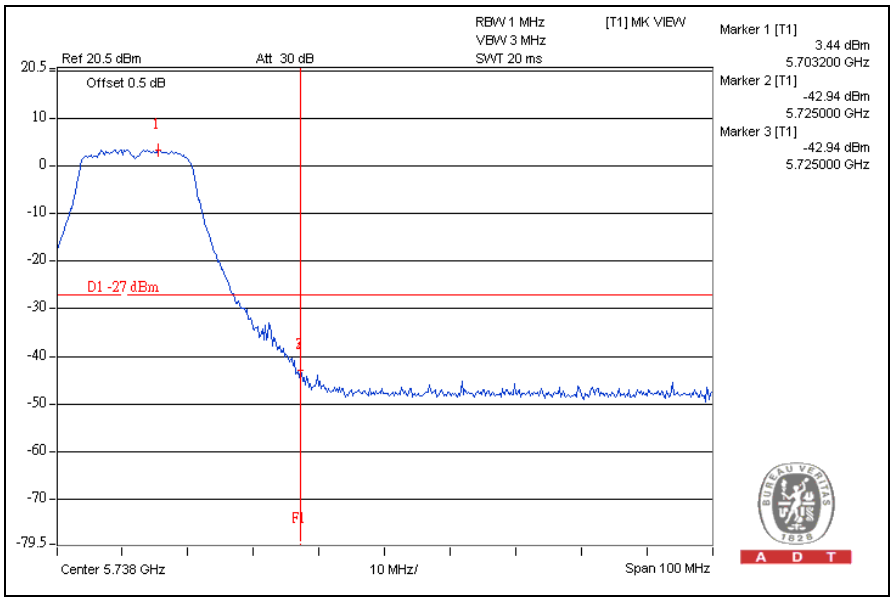

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
2.46 dBm
5.705740 GHz
Marker 2 [T1]
-27.81 dBm
33.444920 GHz
Marker 3 [T1]
-27.98 dBm
39.040720 GHz
Marker 4 [T1]
-28.28 dBm
33.285040 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (20MHz) OFDM MODULATION:

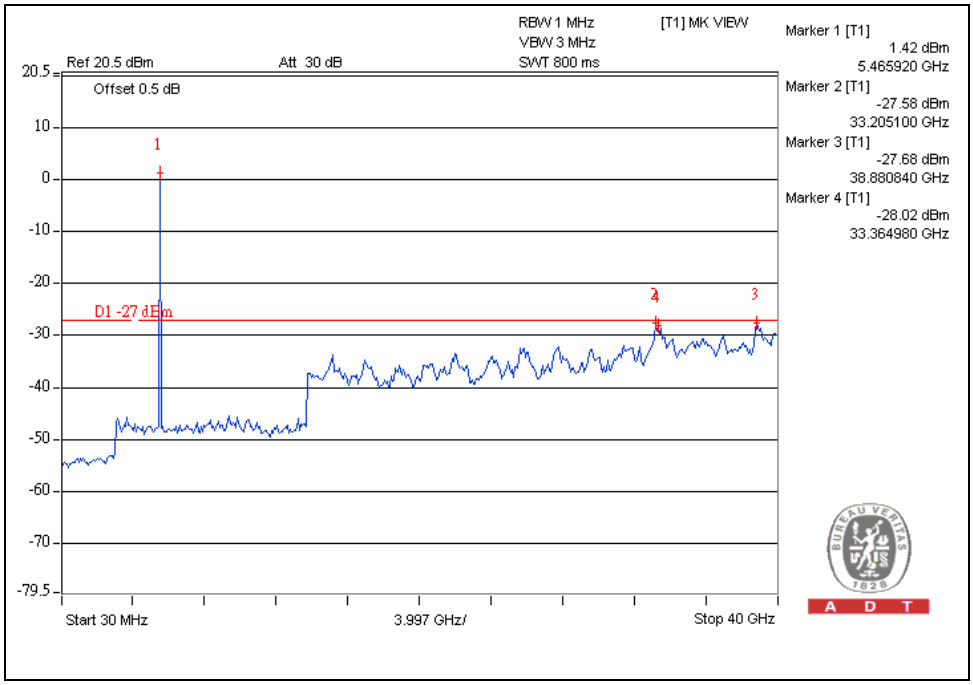
CH9



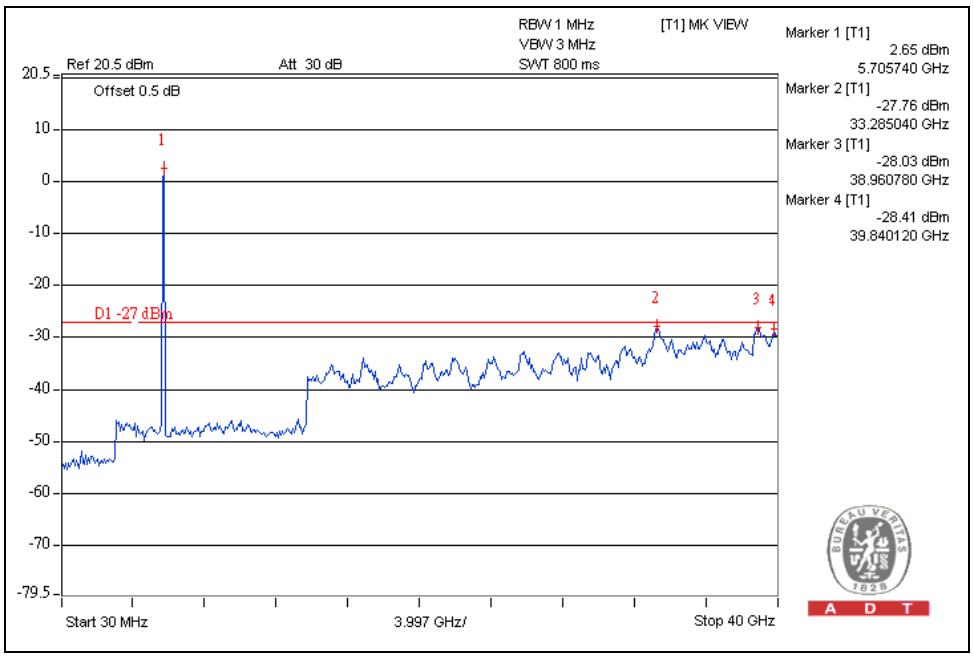
CH19



CH9

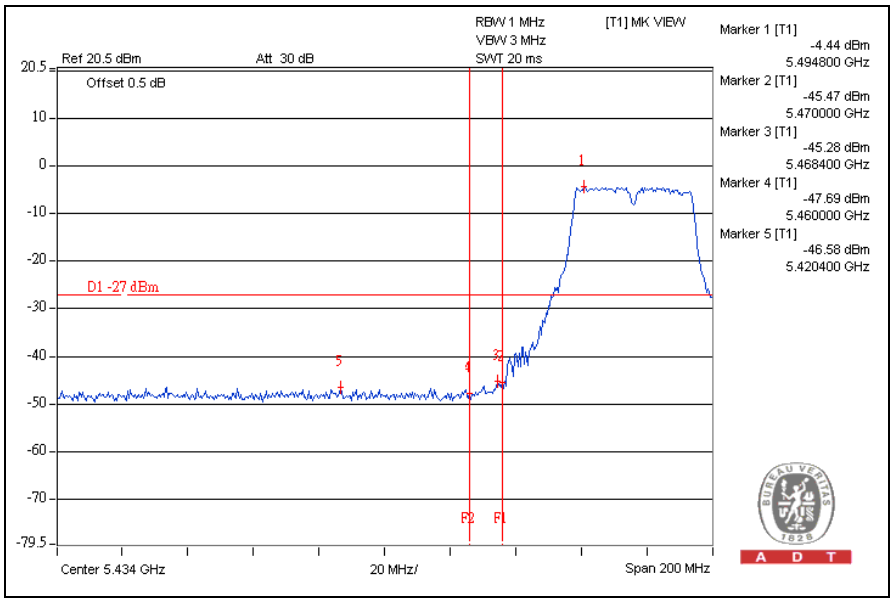

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
1.42 dBm
5.465920 GHz
Marker 2 [T1]
-27.58 dBm
33.205100 GHz
Marker 3 [T1]
-27.68 dBm
38.880840 GHz
Marker 4 [T1]
-28.02 dBm
33.364980 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH19

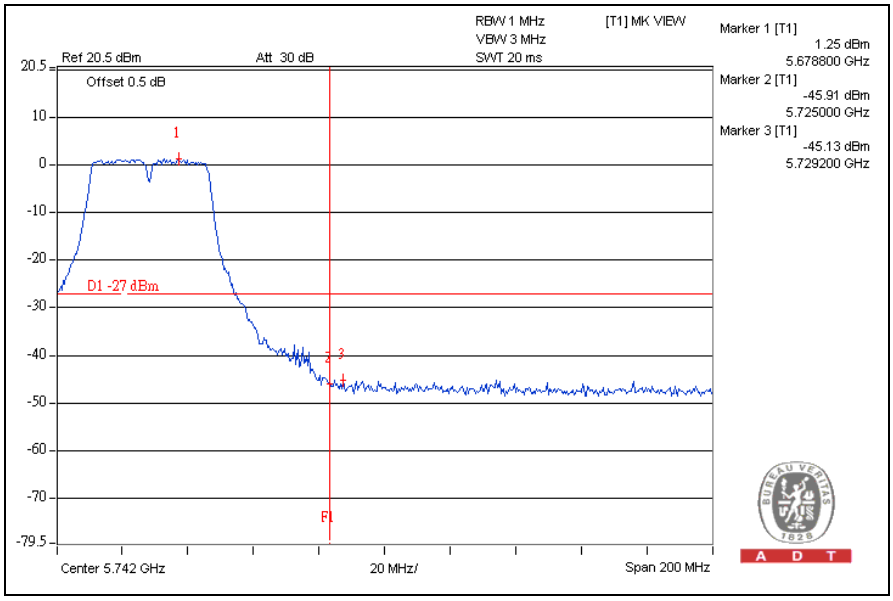

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
2.65 dBm
5.705740 GHz
Marker 2 [T1]
-27.76 dBm
33.285040 GHz
Marker 3 [T1]
-28.03 dBm
38.960780 GHz
Marker 4 [T1]
-28.41 dBm
39.840120 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

DRAFT 802.11n (40MHz) OFDM MODULATION:

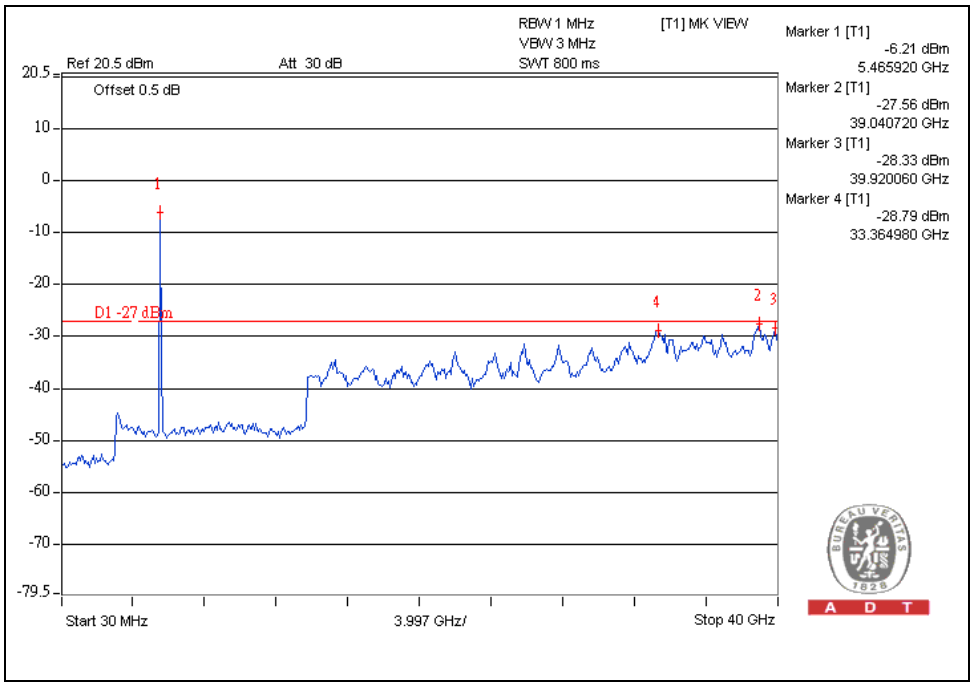
CH5



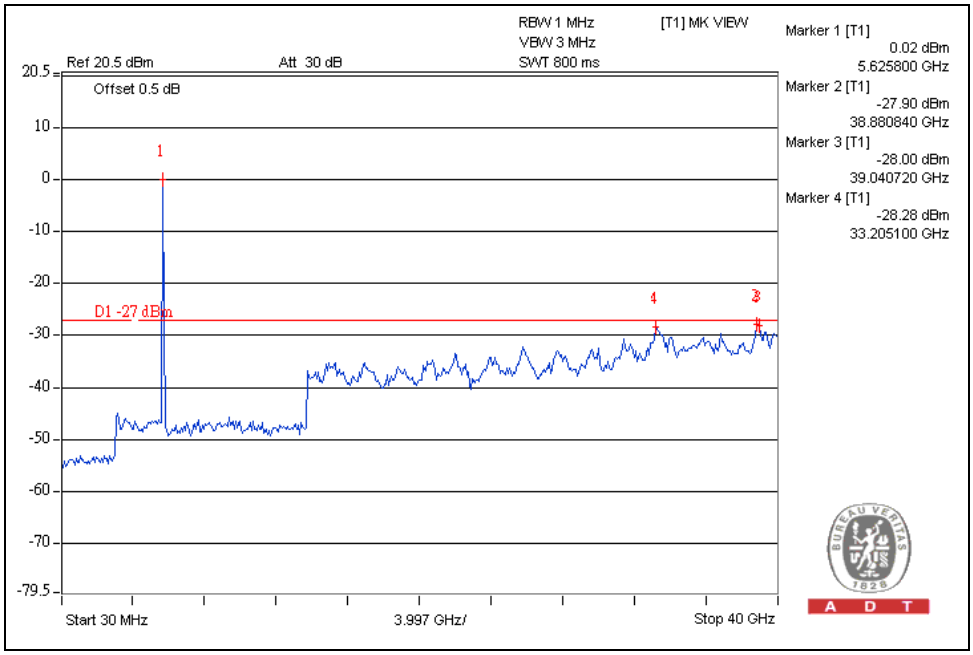
CH9



CH5


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
-6.21 dBm
5.465920 GHz
Marker 2 [T1]
-27.56 dBm
39.040720 GHz
Marker 3 [T1]
-28.33 dBm
39.920060 GHz
Marker 4 [T1]
-28.79 dBm
33.364980 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH9


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
0.02 dBm
5.625800 GHz
Marker 2 [T1]
-27.90 dBm
38.880840 GHz
Marker 3 [T1]
-28.00 dBm
39.040720 GHz
Marker 4 [T1]
-28.28 dBm
33.205100 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

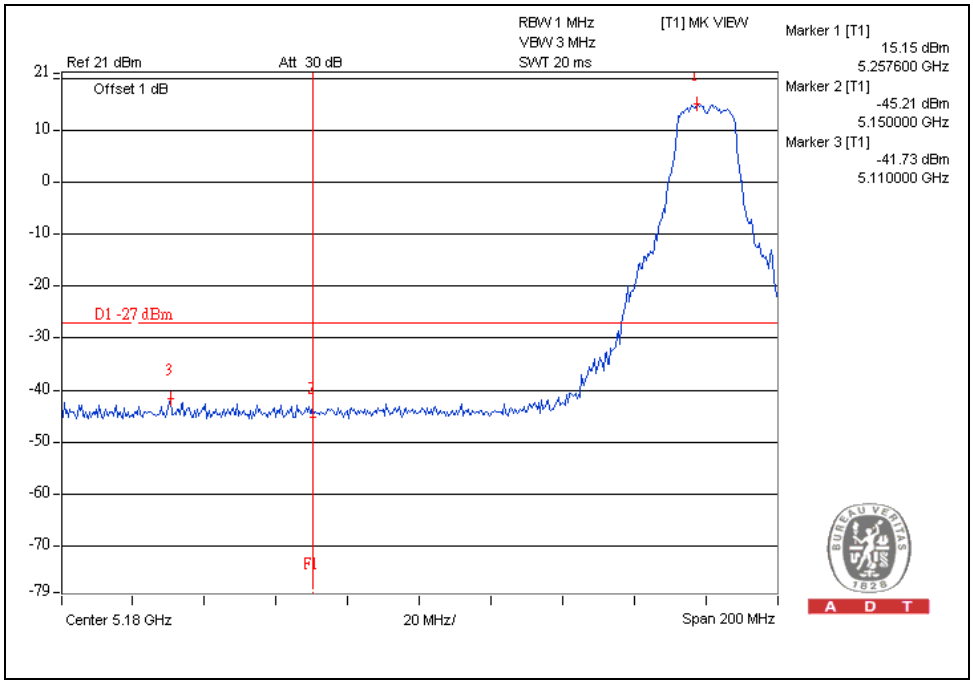
4.7.9 TEST RESULTS-ANTENNA 12

For 5.25 to 5.35GHz band:

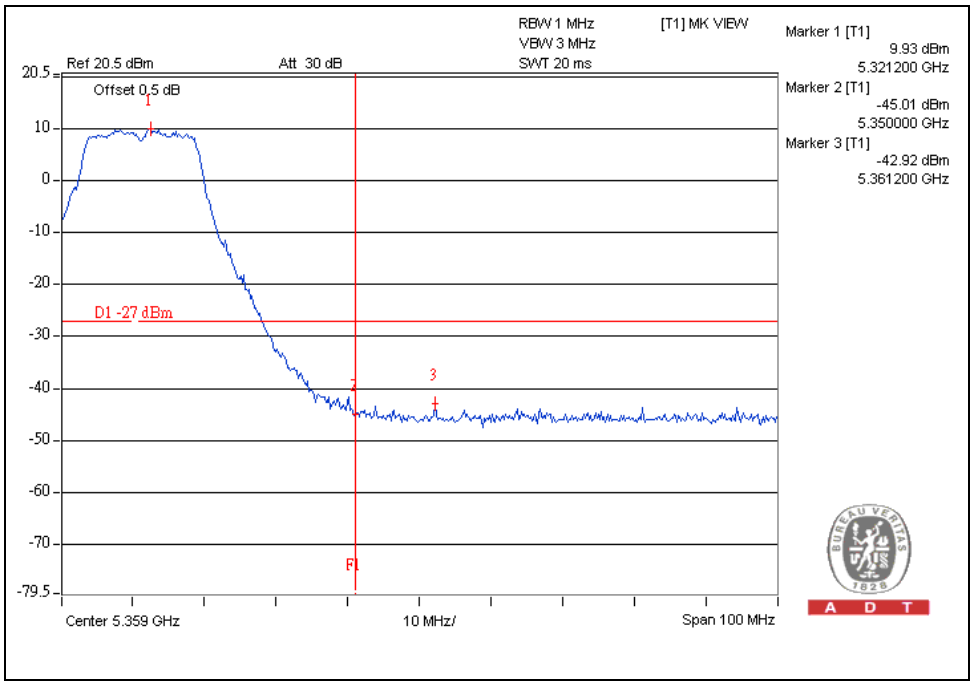
The spectrum plots (Peak RBW=1MHz, VBW=3MHz) are attached on the following pages.

802.11a OFDM modulation

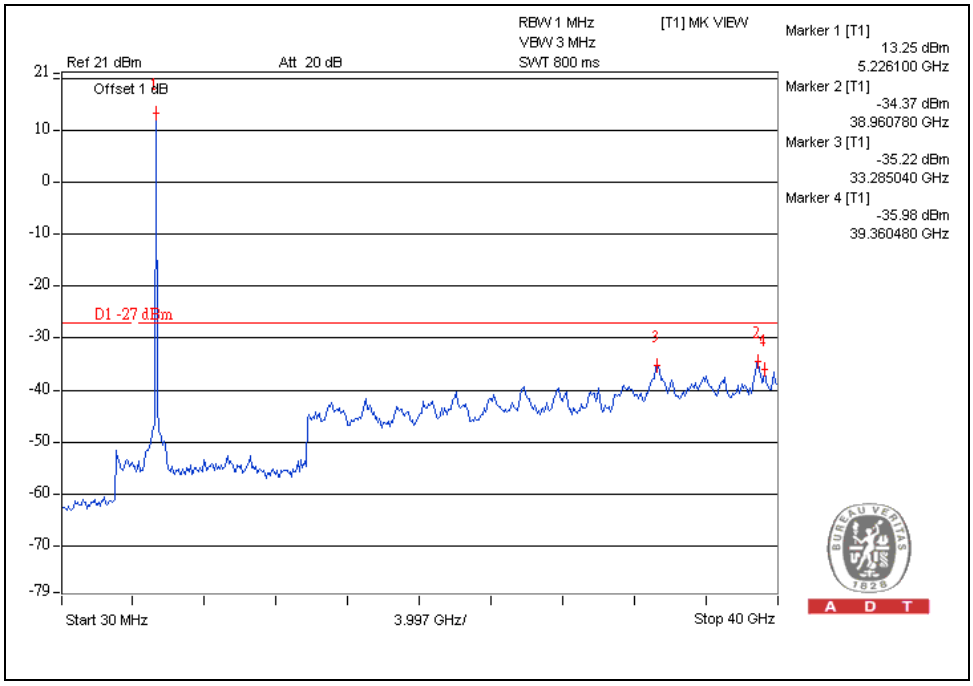
CH 5



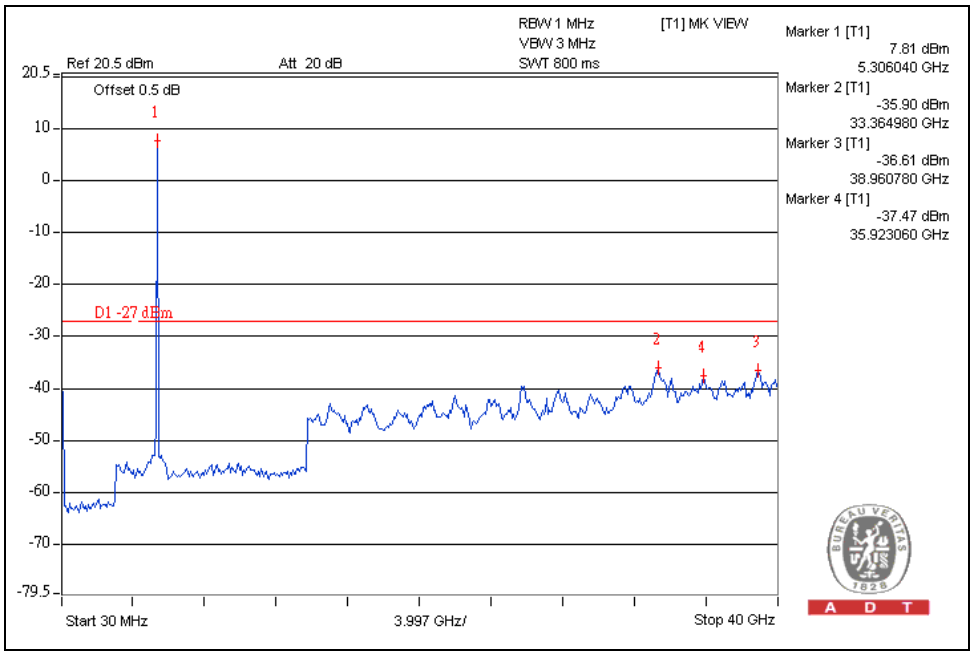
CH 8



CH5


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 21 dBm
Att 20 dB
Offset 1 dB
D1 -27 dBm
Marker 1 [T1]
13.25 dBm
5.226100 GHz
Marker 2 [T1]
-34.37 dBm
38.960780 GHz
Marker 3 [T1]
-35.22 dBm
33.285040 GHz
Marker 4 [T1]
-35.98 dBm
39.360480 GHz
21
10
0
-10
-20
-30
-40
-50
-60
-70
-79
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH 8

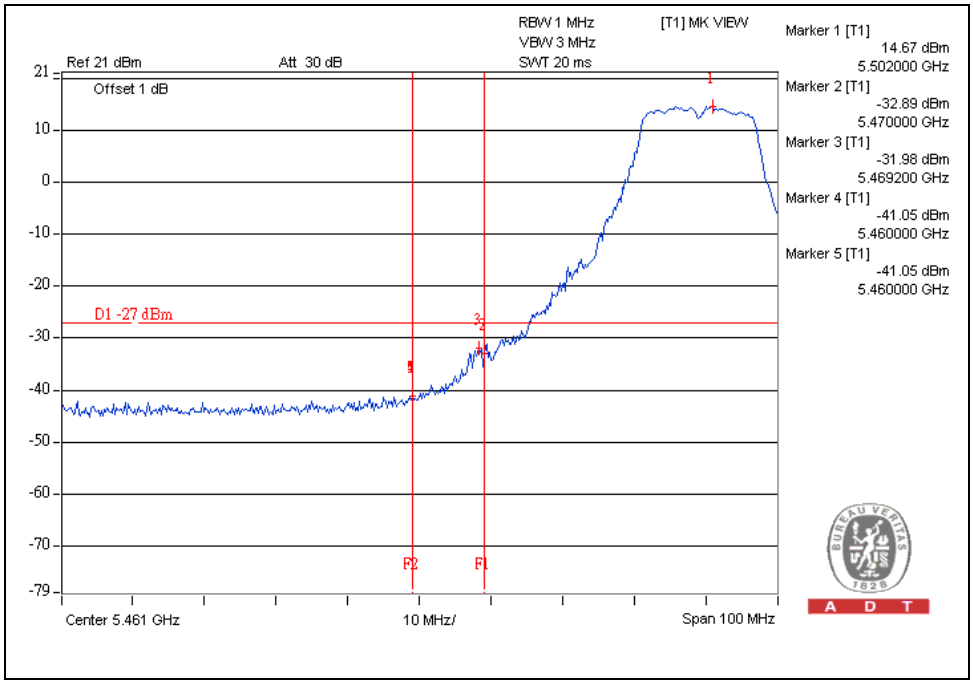

RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
7.81 dBm
5.306040 GHz
Marker 2 [T1]
-35.90 dBm
33.364980 GHz
Marker 3 [T1]
-36.61 dBm
38.960780 GHz
Marker 4 [T1]
-37.47 dBm
35.923060 GHz
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
3.997 GHz/
Stop 40 GHz

For 5.47 to 5.725GHz band:

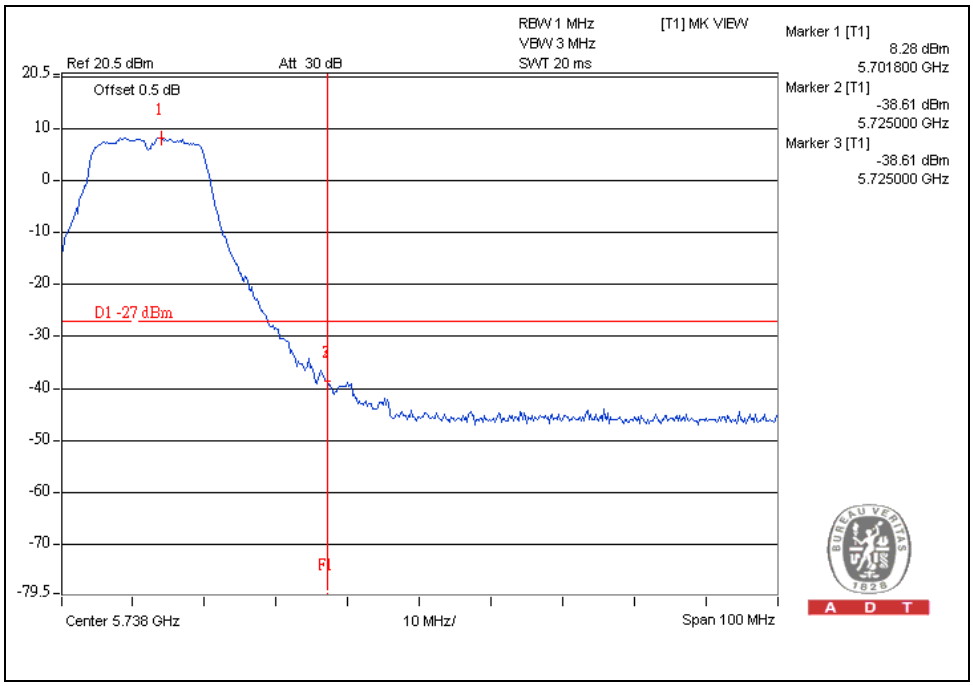
The spectrum plots (Peak RBW=1MHz, VBW=3MHz) are attached on the following pages.

802.11a OFDM modulation

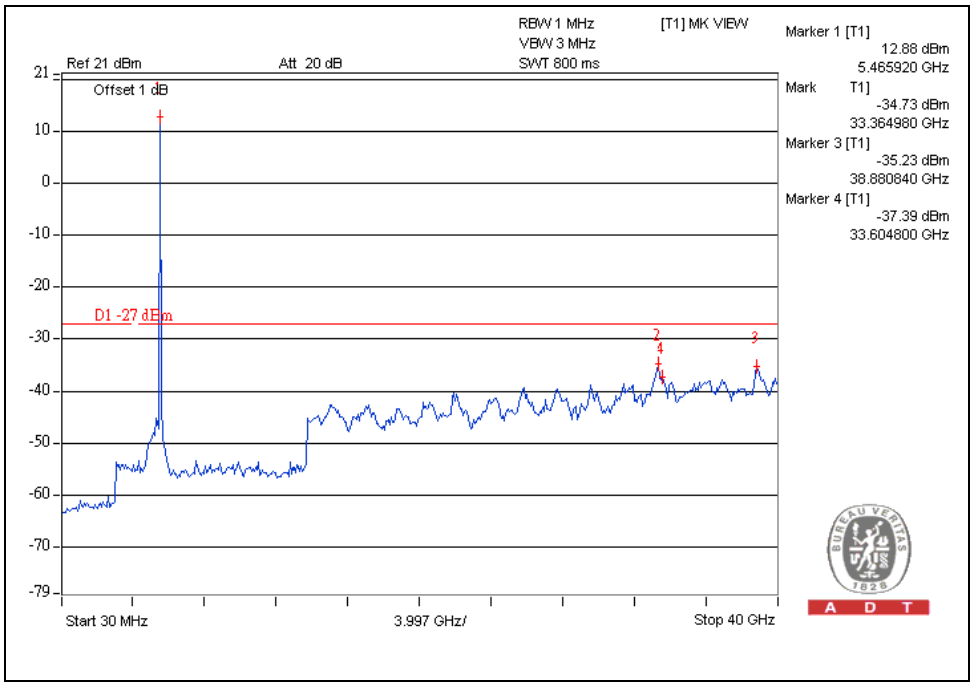
CH 9



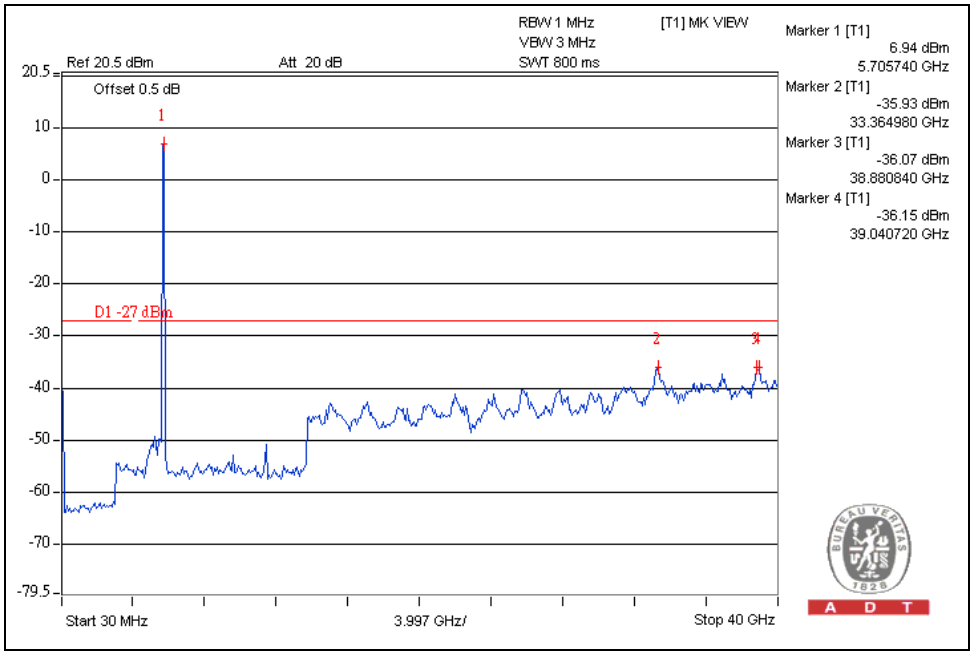
CH 19



CH 9


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 21 dBm
Att 20 dB
Offset 1 dB
D1 -27 dBm
Marker 1 [T1]
12.88 dBm
5.465920 GHz
Mark T1]
-34.73 dBm
33.364980 GHz
Marker 3 [T1]
-35.23 dBm
38.880840 GHz
Marker 4 [T1]
-37.39 dBm
33.604800 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

CH 19


RBW 1 MHz
VBW 3 MHz
SWT 800 ms
[T1] MK VIEW
Ref 20.5 dBm
Att 20 dB
Offset 0.5 dB
D1 -27 dBm
Marker 1 [T1]
6.94 dBm
5.705740 GHz
Marker 2 [T1]
-35.93 dBm
33.364980 GHz
Marker 3 [T1]
-36.07 dBm
38.880840 GHz
Marker 4 [T1]
-36.15 dBm
39.040720 GHz
Start 30 MHz
3.997 GHz/
Stop 40 GHz

4.8 ANTENNA REQUIREMENT

4.8.1 STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.407(a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.8.2 ANTENNA CONNECTED CONSTRUCTION

There are twelve antennas provided to this EUT, please refer to the following table:

No	Brand	Model	Antenna Type	Connecter Type (External only)	Frequency range (MHz)	Indoor or Outdoor
1	Symbol	ML-2499-BYGA2-01R	YAGI	Type N-Female	2400~2500	Indoor
2	Symbol	ML-2499-11PNA2-01R	Panel	RP-BNC-Female	2400~2500	Indoor
3	Symbol	ML-2452-APA2-01	Dipole	RP-SMA MALE	2400-2500, 5150-5850	Indoor
4	Motolora	ML-2452-PTA2M3X3-1	Embedded	RP-SMA-Male	2400-2500, 4900-5990	Indoor
5	Symbol	ML-5299-WPNA1-01R	Panel	RP-SMA-Female	5150-5875	Indoor
6	Symbol	ML-2499-HPA3-01R	Dipole	RP-BNC FEMALE	2400-2500	Indoor
7	Symbol	ML-5299-HPA1-01R	Dipole	RP-SMA FEMALE	5150-5875	Indoor
8	Motolora	ML-2452-PTA3M3-036	Patch	RP-SMA-Male	2400-2500, 4900-5990	Indoor
9	WHA YU	ML-2452-APA6J-01	Dipole	SMA Plug Reverse	2400-2500, 4900-5990	Indoor
10	Motolora	ML-2452-PNL9M3-036	Panel	Reverse SMA	2400-2500, 5150-5875	Indoor
11	Motolora	ML-5299-BYGA15-012	YAGI	Type N Female connector	4900-5800	Indoor
12	WHA YU	M25.90002.S01	Dipole	I-PEX	2400-2500, 5150-5850	Indoor

No	Brand	Model	Gain (dBi)	Cable Loss(dB) (External only, if any)	Net Gain (dB)	Cable Length (External only, if any)
1	Symbol	ML-2499-BYGA2-01R	14.2	0.3	13.9	12 inch
2	Symbol	ML-2499-11PNA2-01R	11.2	2.7	8.5	96 inch
3	Symbol	ML-2452-APA2-01	3 / 4	N/A	3 / 4	N/A

4	Motolora	ML-2452-PTA2M3X3-1	1 / 2	N/A	1 / 2	N/A
5	Symbol	ML-5299-WPNA1-01R	14.2	1.2	13	36 inch
6	Symbol	ML-2499-HPA3-01R	4.6	1.3	3.3	48 inch
7	Symbol	ML-5299-HPA1-01R	5.9	0.84	5.06	36 inch
8	Motolora	ML-2452-PTA3M3-036	6/7	0.92 / 1.97	5.08 / 5.03	36 inch
9	WHA YU	ML-2452-APA6J-01	-6 / -6	N/A	2.4GHz Peak gain : -5.76dBi 5GHz Peak gain : band 1: -3.77dBi band 2: -3.38dBi band 3: -2.84dBi band 4: -2.94dBi	N/A
10	Motolora	ML-2452-PNL9M3-036	8 / 10.7	N/A	8 / 10.7	36 inch
11	Motolora	ML-5299-BYGA15-012	14.5	N/A	14.5	3 ft
12	WHA YU	M25.90002.S01	3.03 / 4.06	N/A	3.03 / 4.06	63mm

Note :

1. For Radio card 1: The antennas 1~4, 6 & 8-10 will be use, therefore antenna 1, 2, 4, 6, 8, were chosen for final test.
2. For Radio card 2: The antennas 3~5 & 7-11 will be use, therefore antenna 4, 5, 7, 8, 11, were chosen for final test.
3. For Radio card 3: The antenna 12 will be use only, therefore antenna 12 was chosen for final test.

5. INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025:

USA	FCC, NVLAP
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA, CSA
R.O.C.	TAF, BSMI, NCC
Netherlands	Telefication
Singapore	GOST-ASIA (MOU)
Russia	CERTIS (MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5/phtml. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:
Tel: 886-2-26052180
Fax: 886-2-26052943

Hsin Chu EMC/RF Lab:
Tel: 886-3-5935343
Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Telecom Lab:
Tel: 886-3-3183232
Fax: 886-3-3185050

Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also

6.APPENDIX-A- MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

---END---