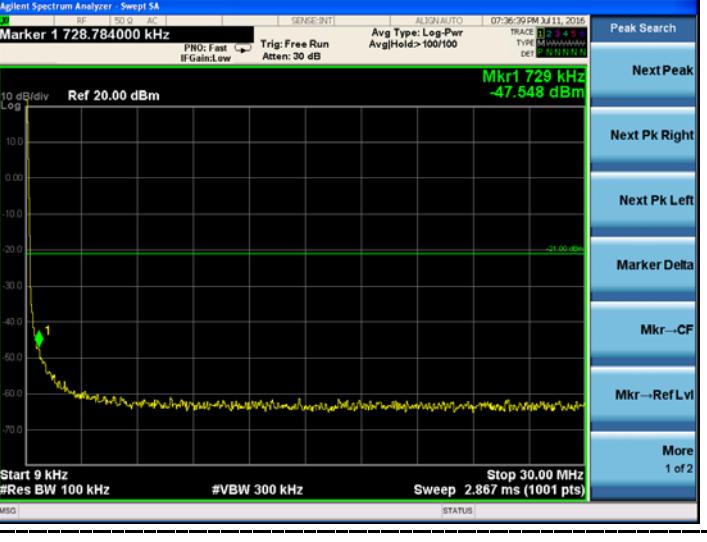
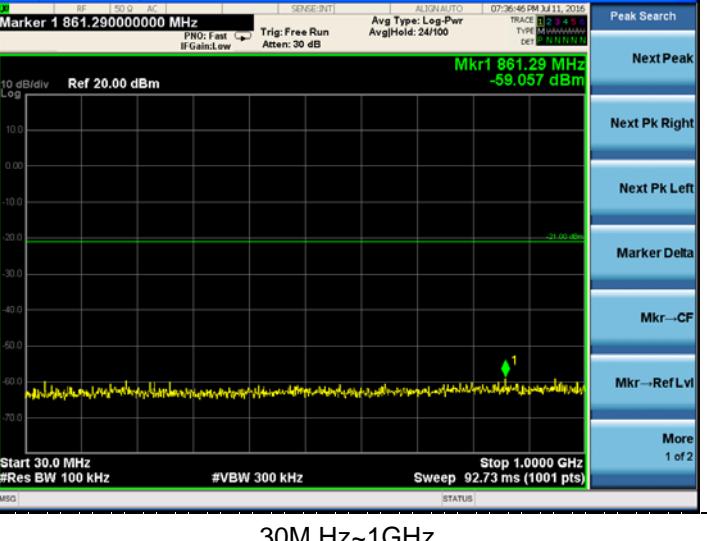
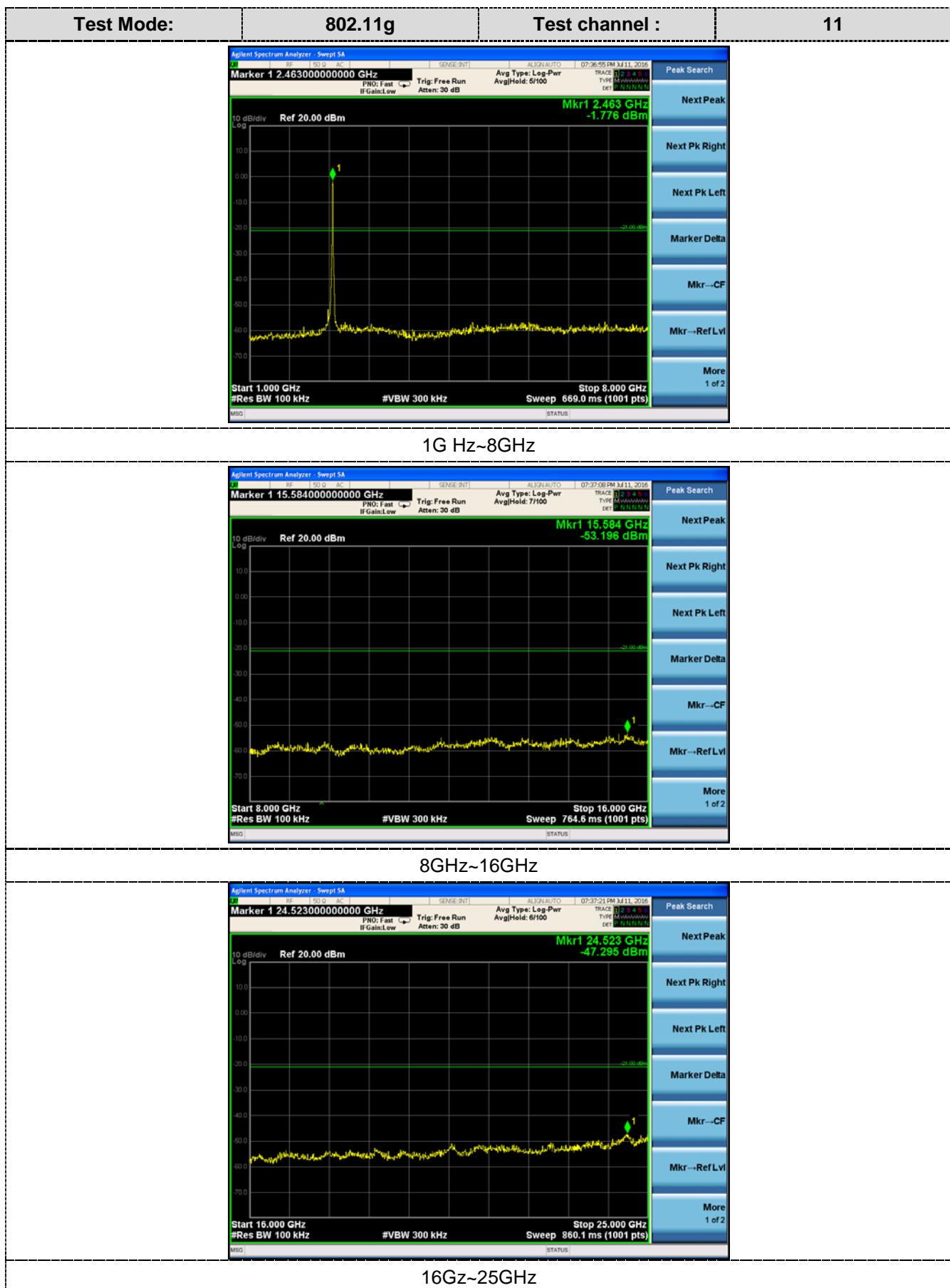
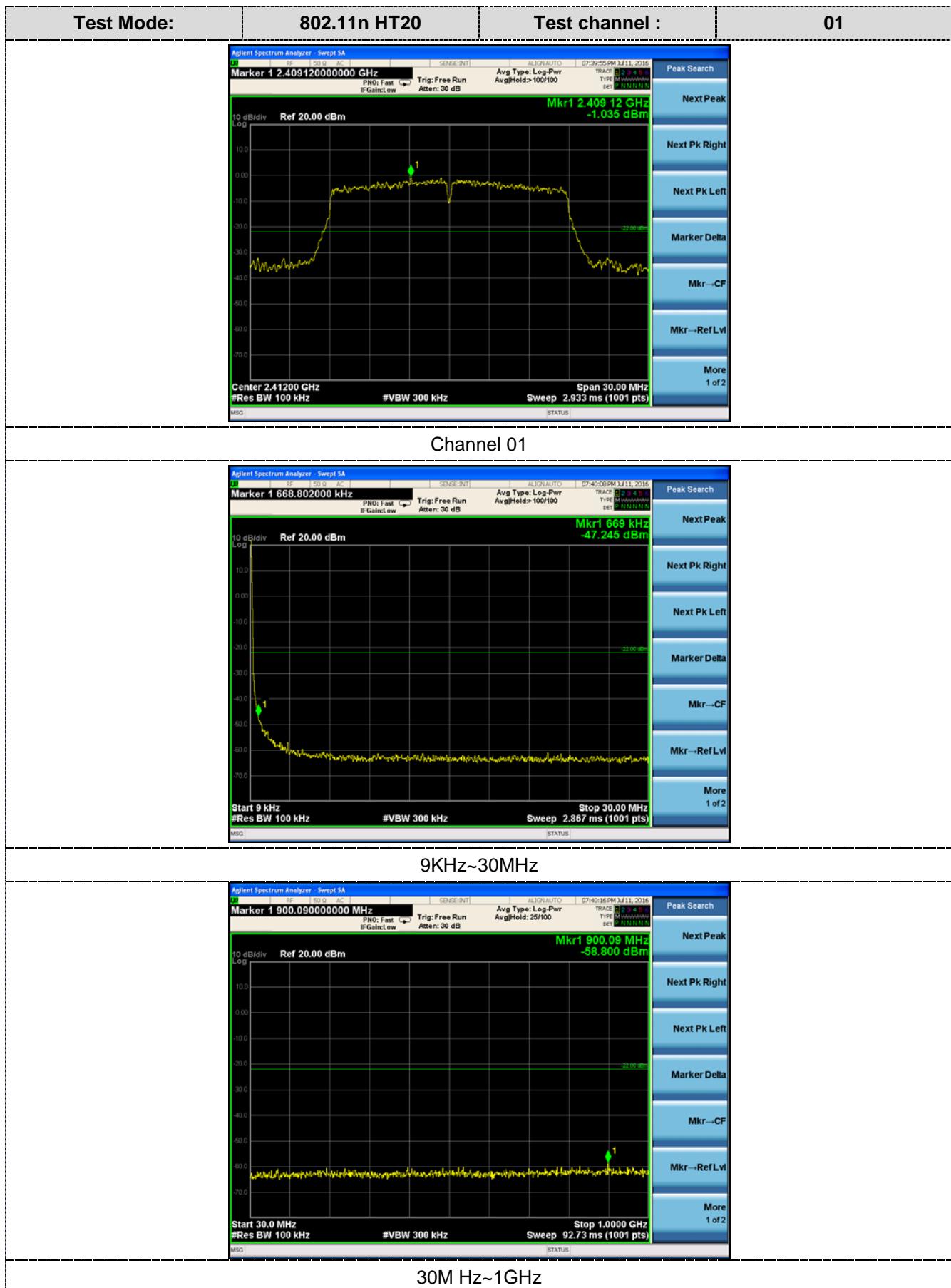
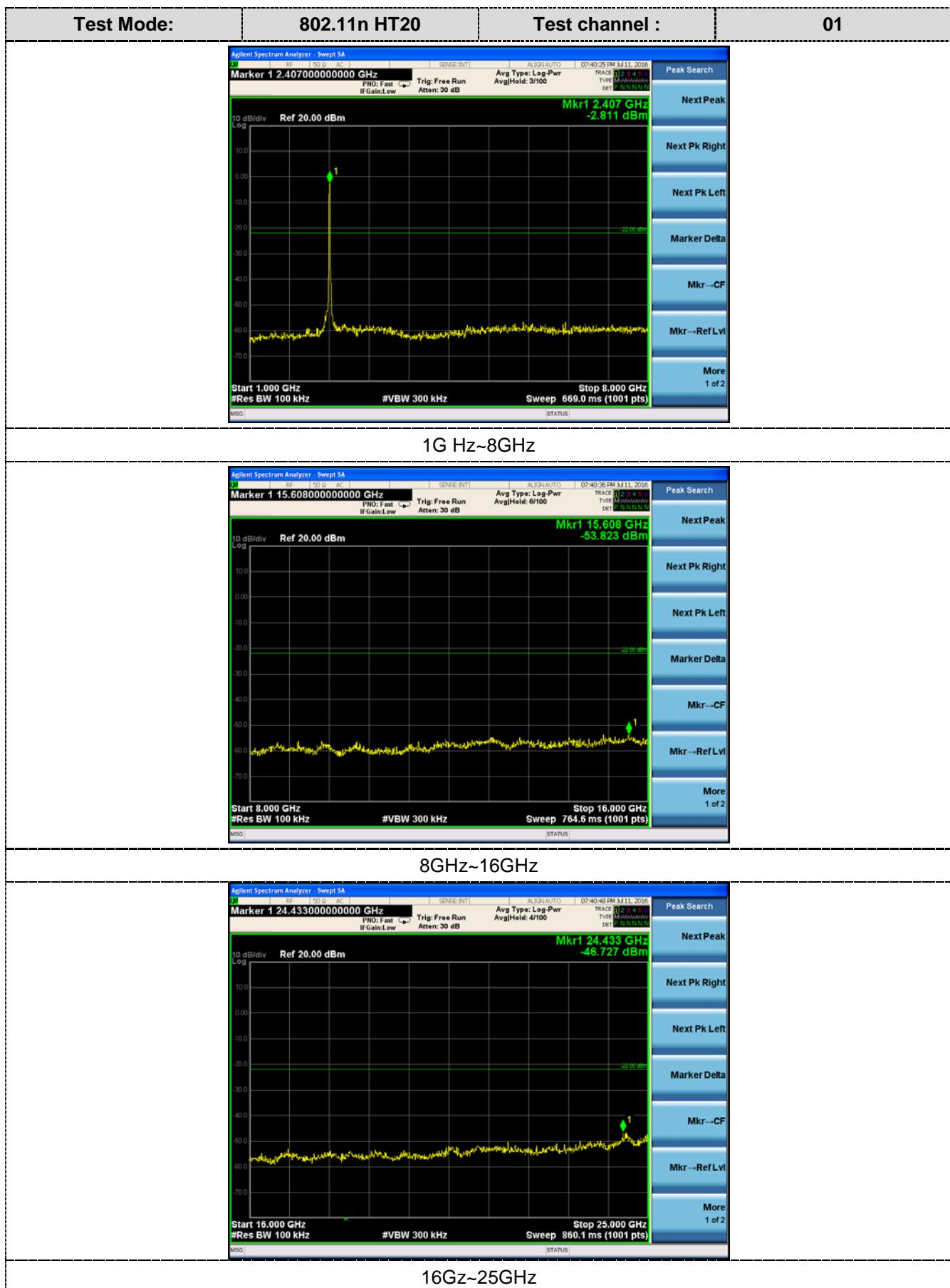
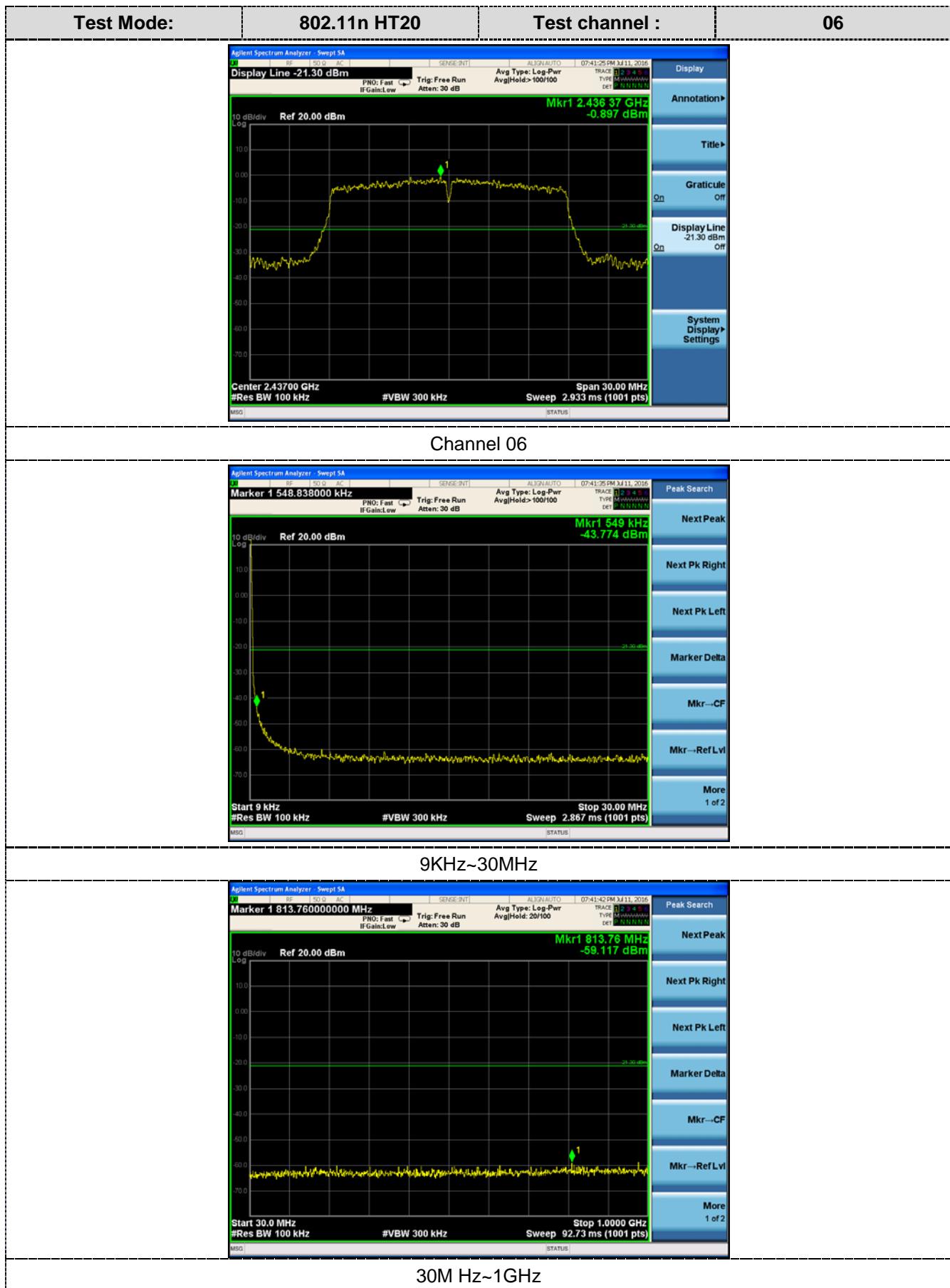


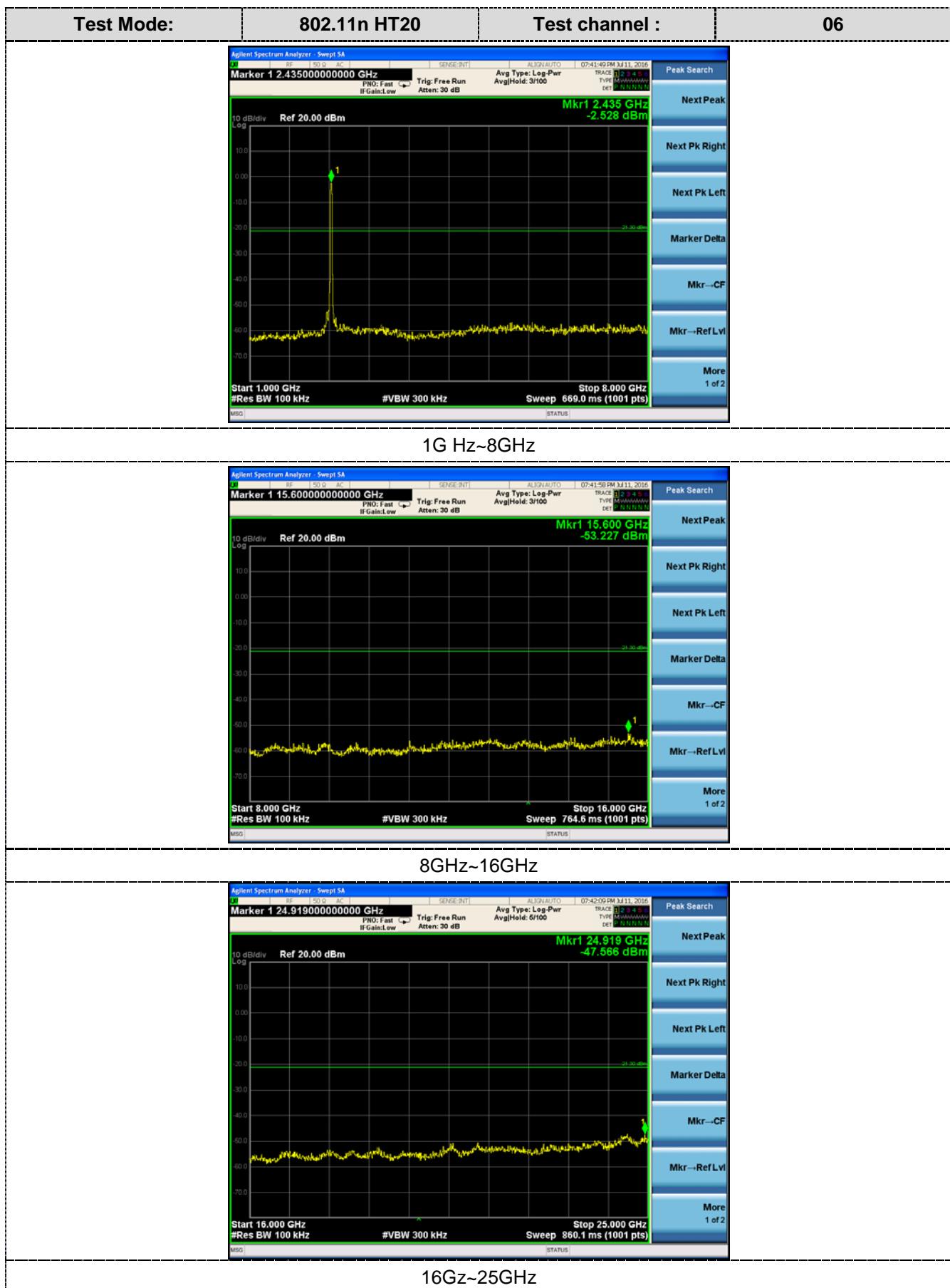
Test Mode:	802.11g	Test channel :	11
 <p>Marker 1 2.462630000000 GHz</p> <p>Ref 20.00 dBm</p> <p>10 dB/div</p> <p>Center 2.46200 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.933 ms (1001 pts)</p> <p>Span 30.00 MHz</p> <p>Mkr1 2.462 63 GHz -0.692 dBm</p> <p>Peaks and markers are visible on the spectrum plot.</p>			
Channel 11			
 <p>Marker 1 2.462784000 kHz</p> <p>Ref 20.00 dBm</p> <p>10 dB/div</p> <p>Start 9 kHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.867 ms (1001 pts)</p> <p>Stop 30.00 MHz</p> <p>Mkr1 729 kHz -47.648 dBm</p> <p>Peaks and markers are visible on the spectrum plot.</p>			
9KHz~30MHz			
 <p>Marker 1 861.290000000000 MHz</p> <p>Ref 20.00 dBm</p> <p>10 dB/div</p> <p>Start 30.00 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 92.73 ms (1001 pts)</p> <p>Stop 1.0000 GHz</p> <p>Mkr1 861.29 MHz -59.057 dBm</p> <p>Peaks and markers are visible on the spectrum plot.</p>			











Test Mode:	802.11n HT20	Test channel :	11
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Channel 11

9Khz~30MHz

30M Hz~1GHz

Agilent Spectrum Analyzer - Swept SA

Marker 1 2.461370000000 GHz

RF: 150 Q AC SENSE: INT. ALIGN: AUTO 07:42:44 PM Jul 11, 2016

PNO: Fast Trig: Free Run Avg Type: Log-Pwr

IFGain:Low Atten: 30 dB AvgHold: > 100/100

TRACE 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

10 dB/div Ref 20.00 dBm

Log

Mkr1 2.46137 GHz -0.723 dBm

Center 2.46200 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 30.00 MHz Span 30.00 MHz Sweep 2.933 ms (1001 pts)

MSG STATUS

Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

Mkr--CF

Mkr--Ref Lvl

More 1 of 2

Agilent Spectrum Analyzer - Swept SA

Marker 1 608.820000 kHz

RF: 150 Q AC SENSE: INT. ALIGN: AUTO 07:42:50 PM Jul 11, 2016

PNO: Fast Trig: Free Run Avg Type: Log-Pwr

IFGain:Low Atten: 30 dB AvgHold: > 100/100

TRACE 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

10 dB/div Ref 20.00 dBm

Log

Mkr1 608.82000 kHz -46.008 dBm

Start 9 kHz #Res BW 100 kHz #VBW 300 kHz Sweep 30.00 MHz Stop 30.00 MHz Sweep 2.867 ms (1001 pts)

MSG STATUS

Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

Mkr--CF

Mkr--Ref Lvl

More 1 of 2

Agilent Spectrum Analyzer - Swept SA

Marker 1 266.680000000 MHz

RF: 150 Q AC SENSE: INT. ALIGN: AUTO 07:43:07 PM Jul 11, 2016

PNO: Fast Trig: Free Run Avg Type: Log-Pwr

IFGain:Low Atten: 30 dB AvgHold: 22/100

TRACE 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

10 dB/div Ref 20.00 dBm

Log

Mkr1 266.68 MHz -59.485 dBm

Start 30.0 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.0000 GHz Stop 1.0000 GHz Sweep 92.73 ms (1001 pts)

MSG STATUS

Peak Search

Next Peak

Next Pk Right

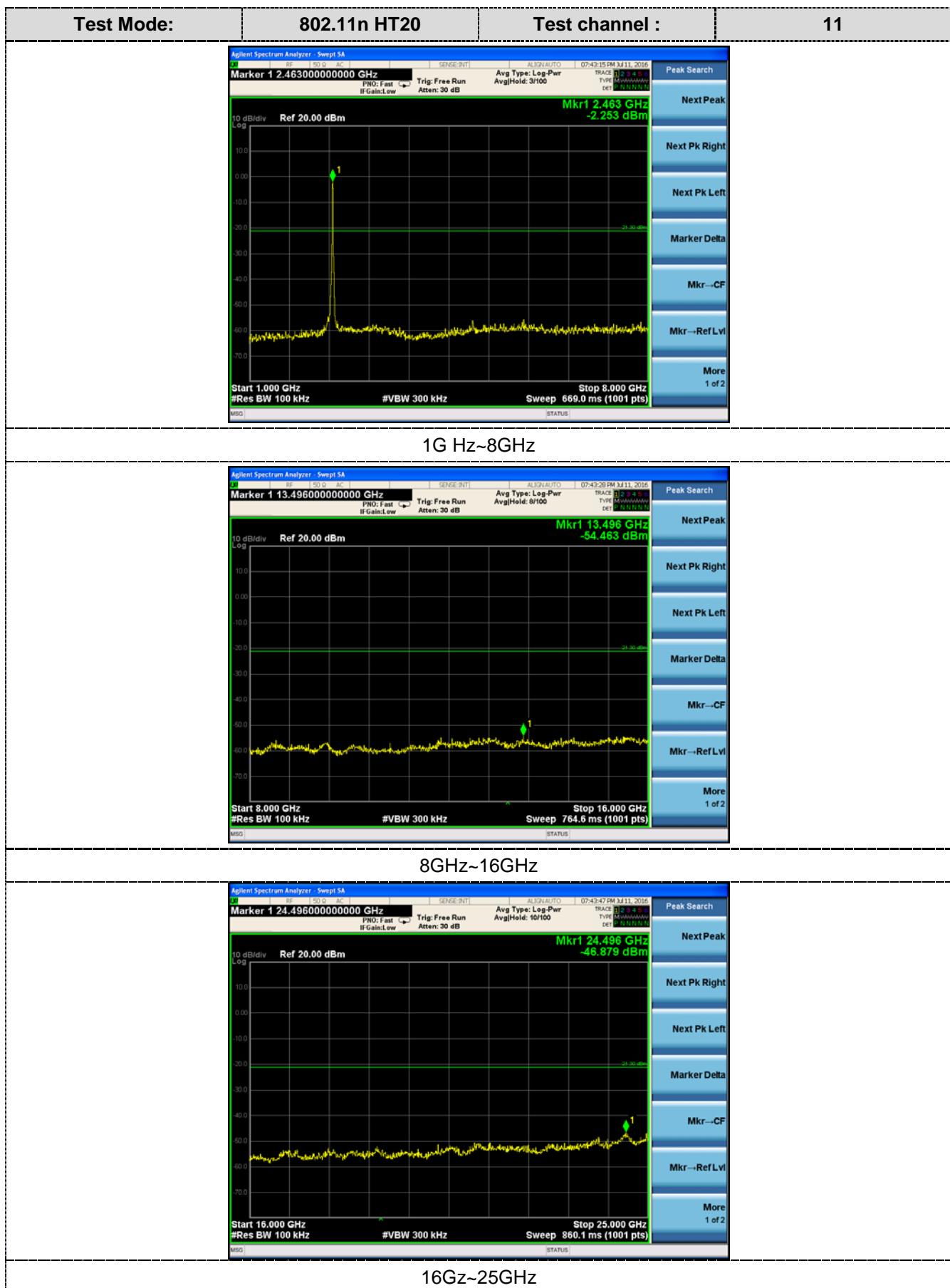
Next Pk Left

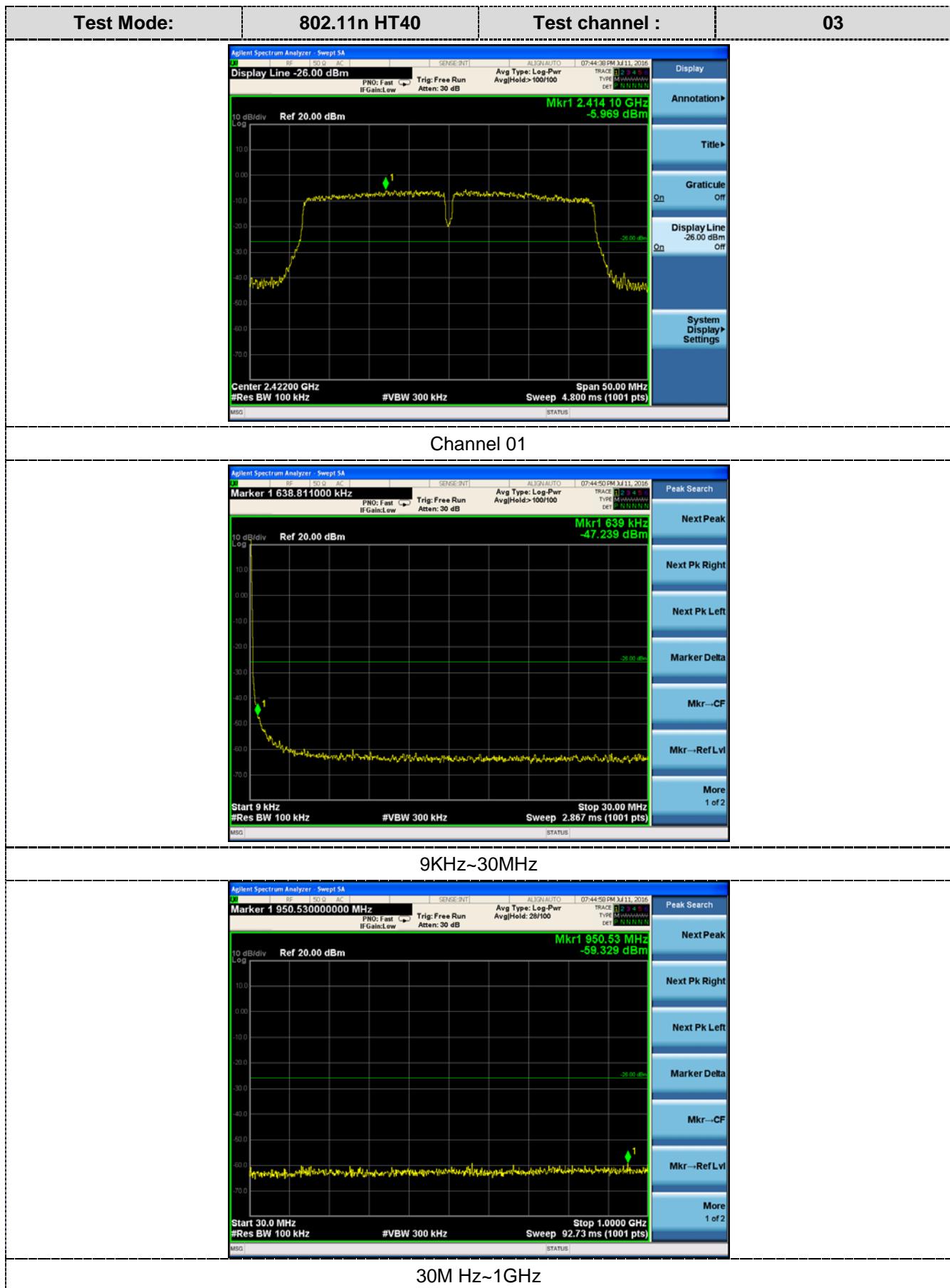
Marker Delta

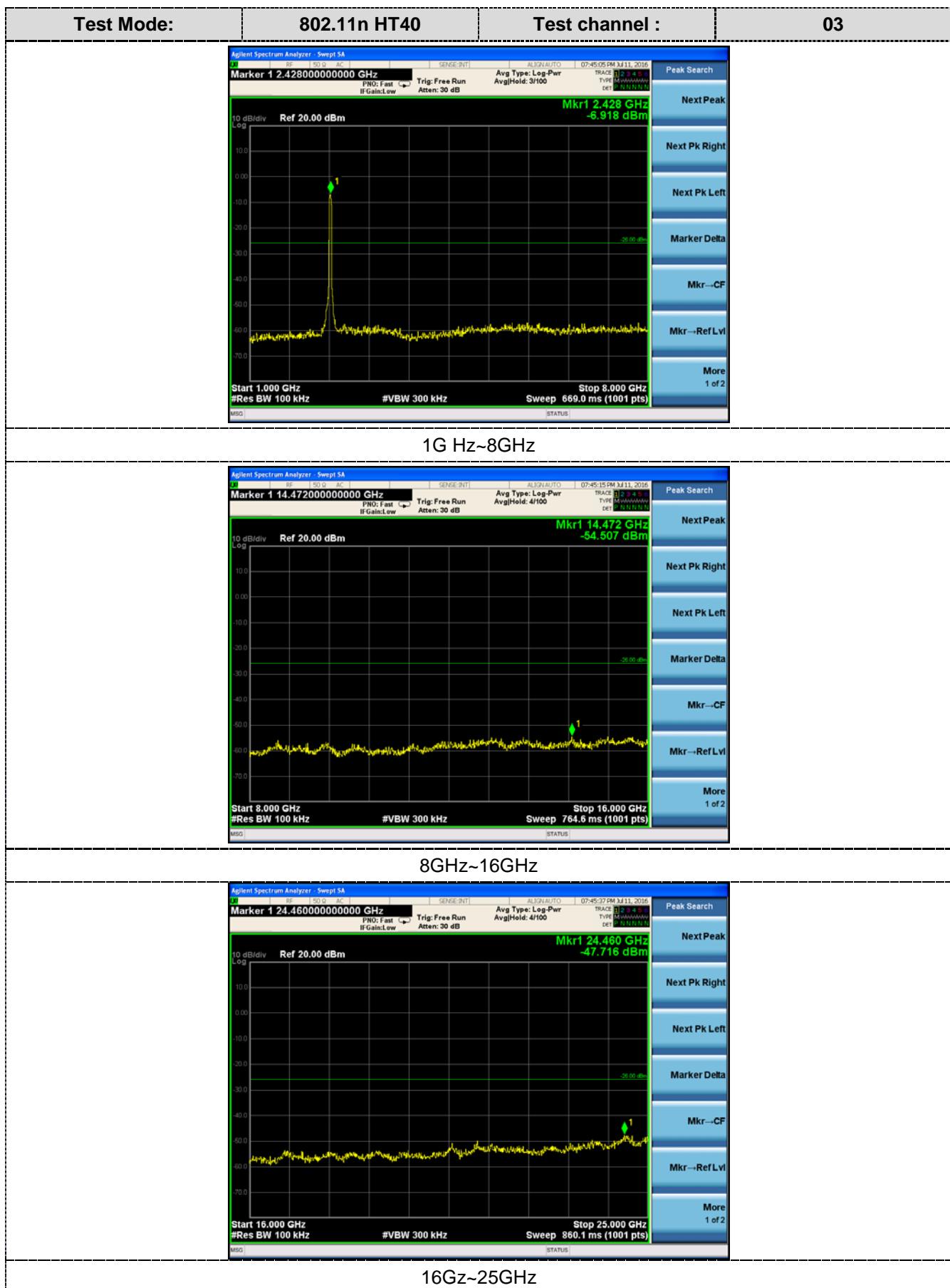
Mkr--CF

Mkr--Ref Lvl

More 1 of 2







Test Mode:	802.11n HT40	Test channel :	06
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Marker 1 2.439150000000 GHz

10 dB/div Ref 20.00 dBm

Center 2.43700 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 4.800 ms (1001 pts)

Mkr1 2.439 15 GHz -5.809 dBm

Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

Mkr--CF

Mkr--Ref Lvl

More 1 of 2

Channel 06

Marker 1 668.802000 kHz

10 dB/div Ref 20.00 dBm

Start 9 kHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.867 ms (1001 pts)

Mkr1 669 kHz -46.312 dBm

Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

Mkr--CF

Mkr--Ref Lvl

More 1 of 2

9KHz~30MHz

Marker 1 850.620000000 MHz

10 dB/div Ref 20.00 dBm

Start 30.0 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 92.73 ms (1001 pts)

Mkr1 850.62 MHz -58.702 dBm

Peak Search

Next Peak

Next Pk Right

Next Pk Left

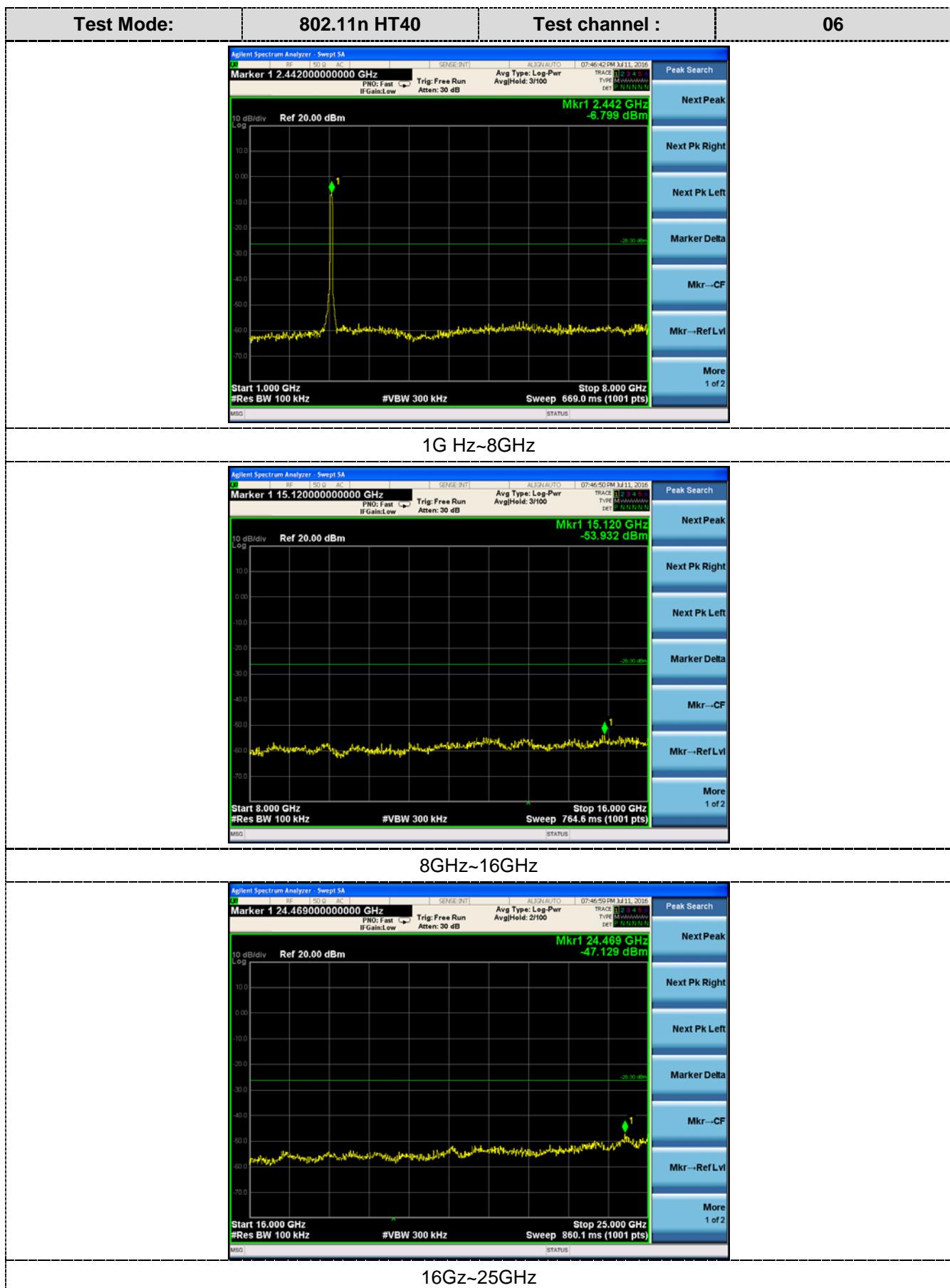
Marker Delta

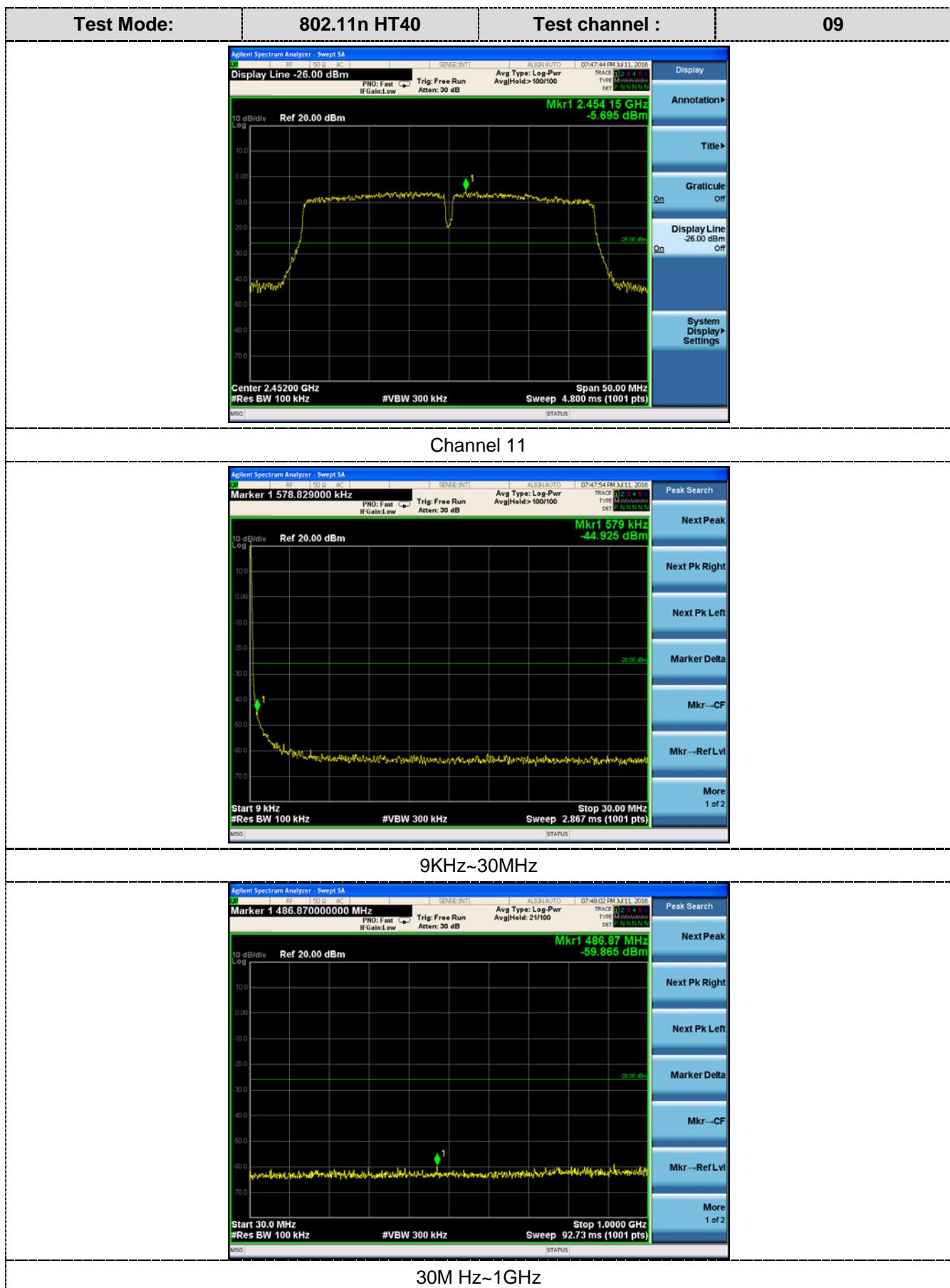
Mkr--CF

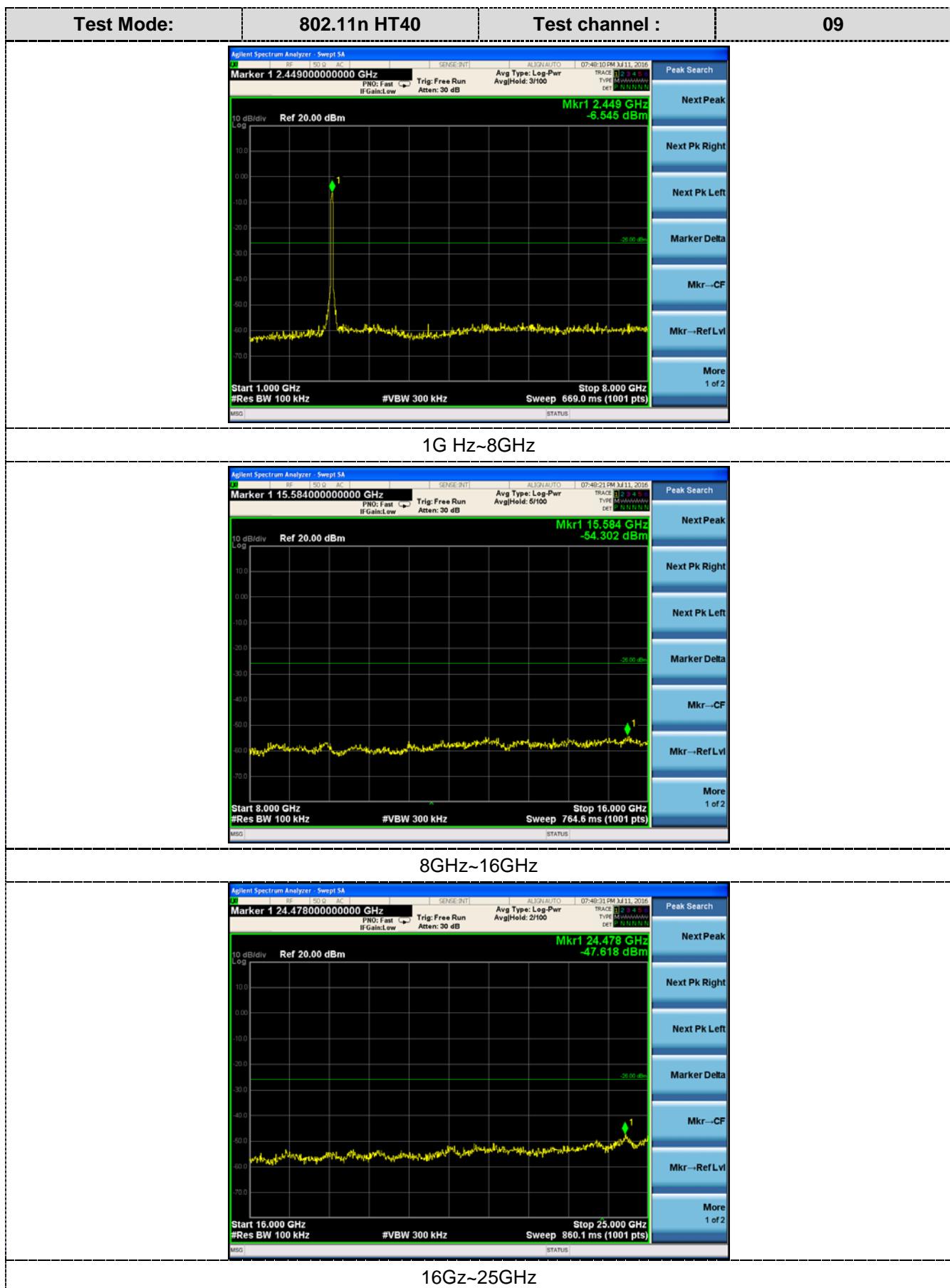
Mkr--Ref Lvl

More 1 of 2

30M Hz~1GHz







4.8. Antenna Requirement

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 15.247 (c), 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.

Refer to statement below for compliance.

The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

Measurement

The antenna gain of the complete system is calculated by the difference of radiated power in EIRP and the conducted power of the module. For normal WLAN devices, the DSSS mode is used.

Measurement parameters

Measurement parameter	
Detector:	Peak
Sweep time:	Auto
Resolution bandwidth:	1MHz
Video bandwidth:	3MHz
Trace-Mode:	Max hold

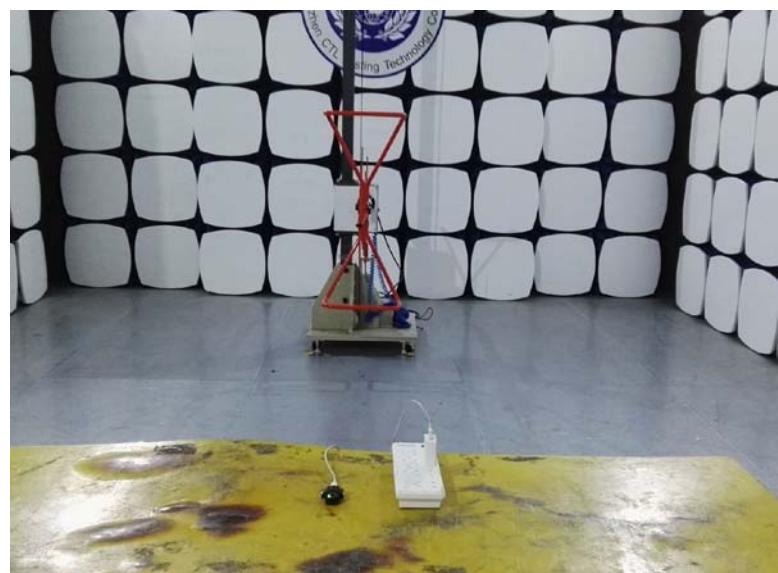
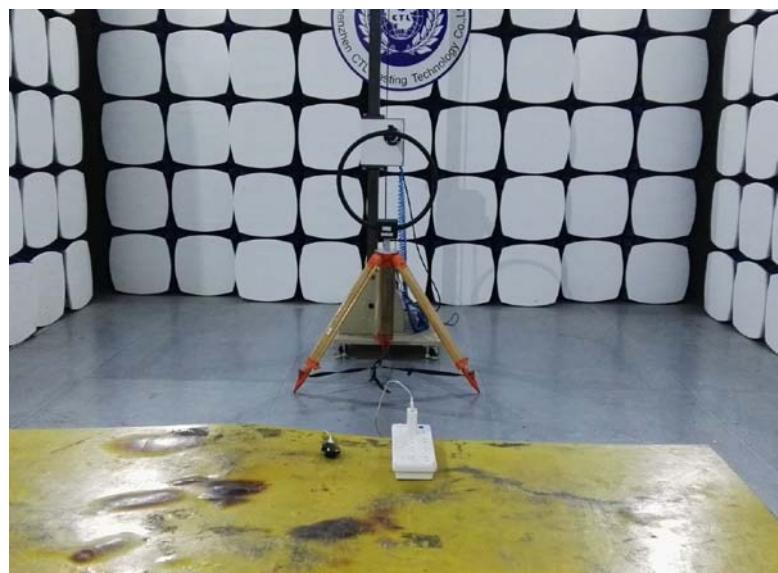
Limits

Antenna Gain	6 dBi
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Results

T_{nom}	V_{nom}	Lowest Channel 2412 MHz	Middle Channel 2437 MHz	Highest Channel 2462 MHz
Conducted power [dBm] Measured with DSSS modulation		9.21	9.86	9.62
Radiated power [dBm] Measured with DSSS modulation		10.77	11.29	10.98
Gain [dBi] Calculated		1.56	1.43	1.36
Measurement uncertainty	$\pm 0.6 \text{ dB (cond.)} / \pm 4.32 \text{ dB (rad.)}$			

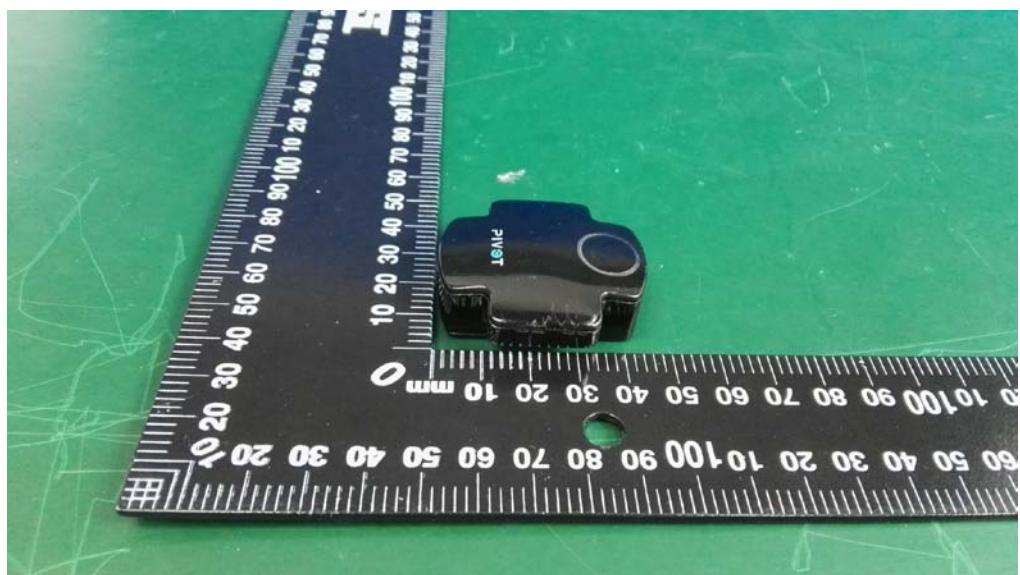
5. Test Setup Photos of the EUT





6. External and Internal Photos of the EUT

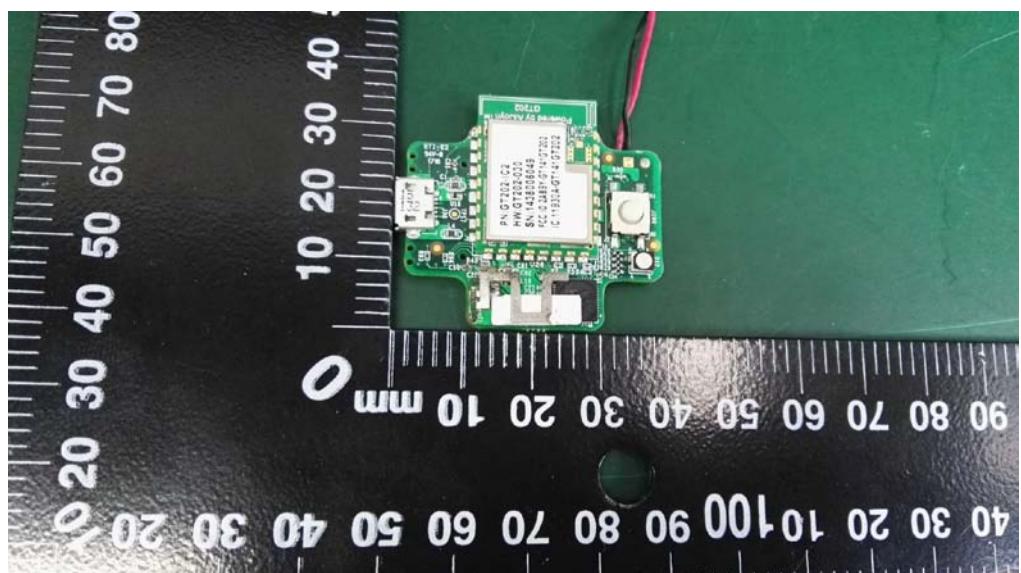
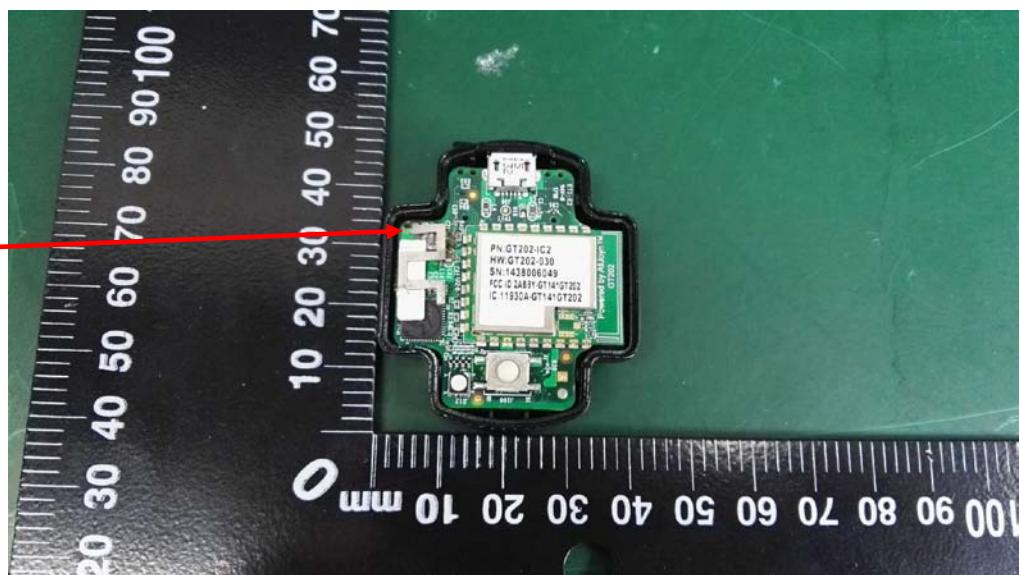
External Photos

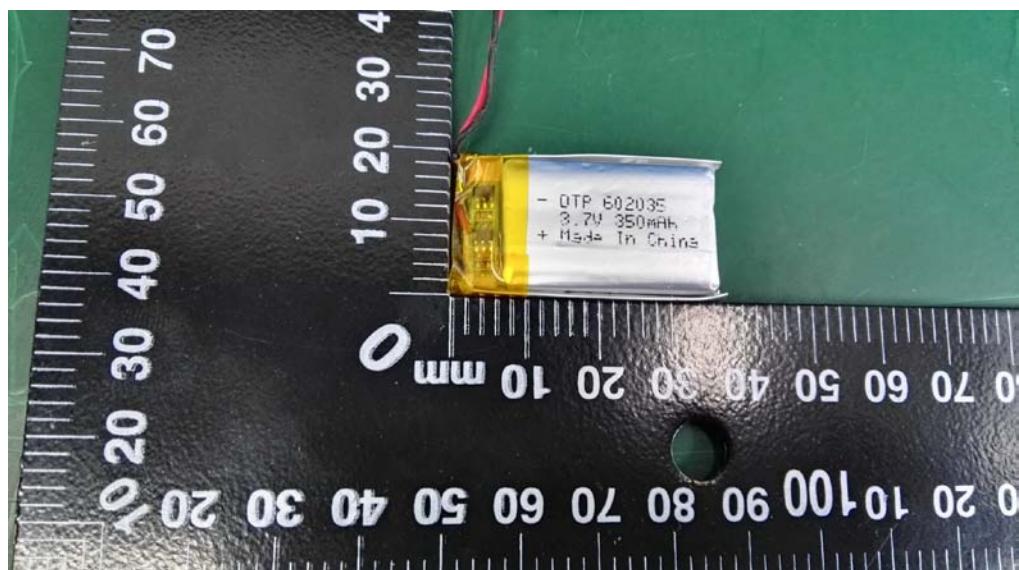




Internal Photos

WLAN
Antenna





.....End of Report.....