

Test Mode:	802.11n HT40	Test channel :	03
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Agilent Spectrum Analyzer - Swept SA

Marker 1 2.414000000000 GHz

10 dB/div Ref 10.00 dBm

1

Mkr1 2.414 GHz

-10.494 dBm

Start 1.000 GHz

#Res BW 100 kHz

#VBW 300 kHz

Stop 8.000 GHz

#Sweep 1.000 ms (1001 pts)

Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

Mkr--CF

Mkr--Ref Lvl

More 1 of 2

1G Hz~8GHz

Agilent Spectrum Analyzer - Swept SA

Marker 1 15.632000000000 GHz

10 dB/div Ref 10.00 dBm

1

Mkr1 15.632 GHz

-63.757 dBm

Start 8.000 GHz

#Res BW 100 kHz

#VBW 300 kHz

Stop 16.000 GHz

#Sweep 1.000 ms (1001 pts)

Peak Search

Next Peak

Next Pk Right

Next Pk Left

Marker Delta

Mkr--CF

Mkr--Ref Lvl

More 1 of 2

8GHz~16GHz

Agilent Spectrum Analyzer - Swept SA

Marker 1 24.568000000000 GHz

10 dB/div Ref 10.00 dBm

1

Mkr1 24.568 GHz

-56.272 dBm

Start 16.000 GHz

#Res BW 100 kHz

#VBW 300 kHz

Stop 25.000 GHz

#Sweep 1.000 ms (1001 pts)

Peak Search

Next Peak

Next Pk Right

Next Pk Left

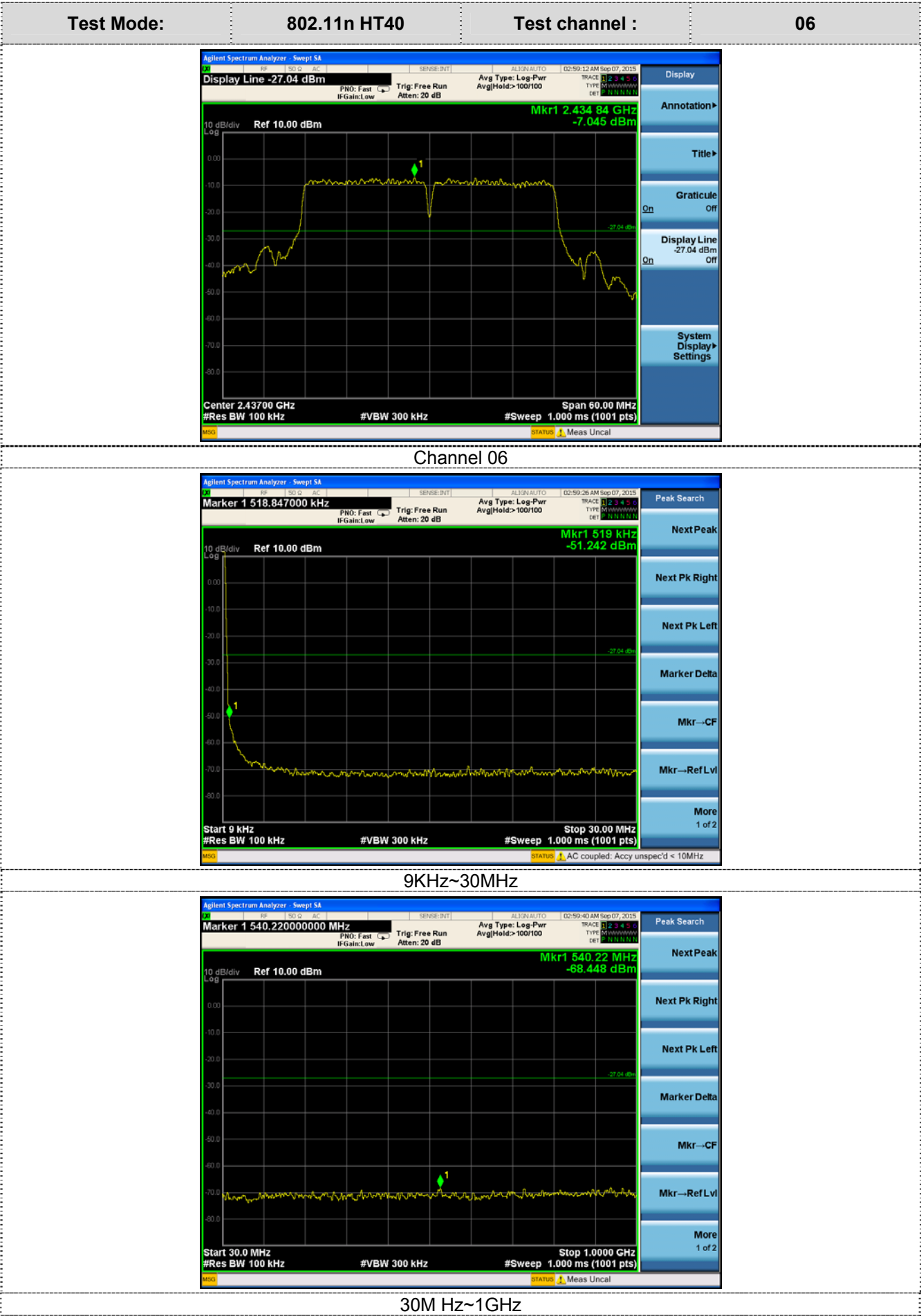
Marker Delta

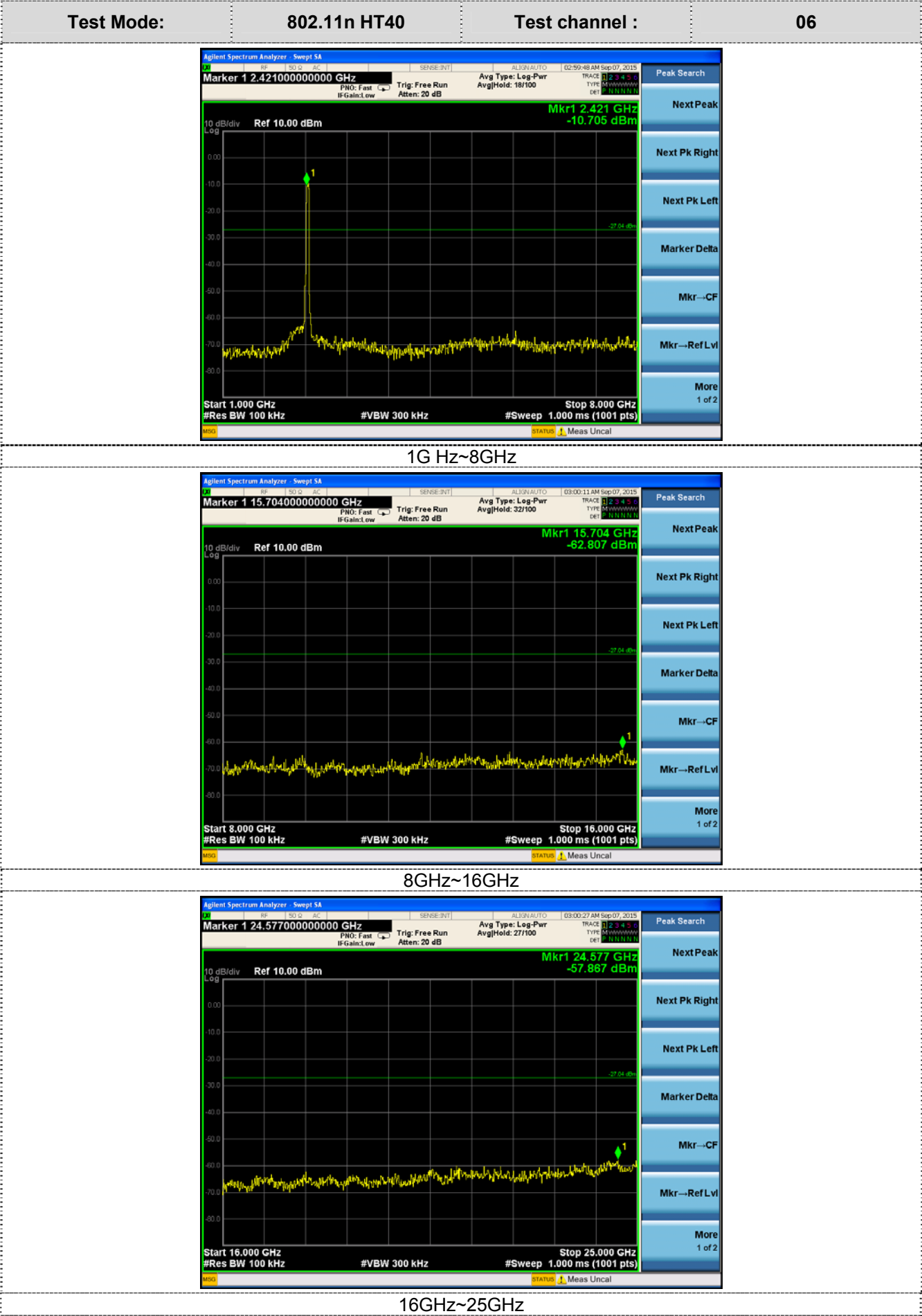
Mkr--CF

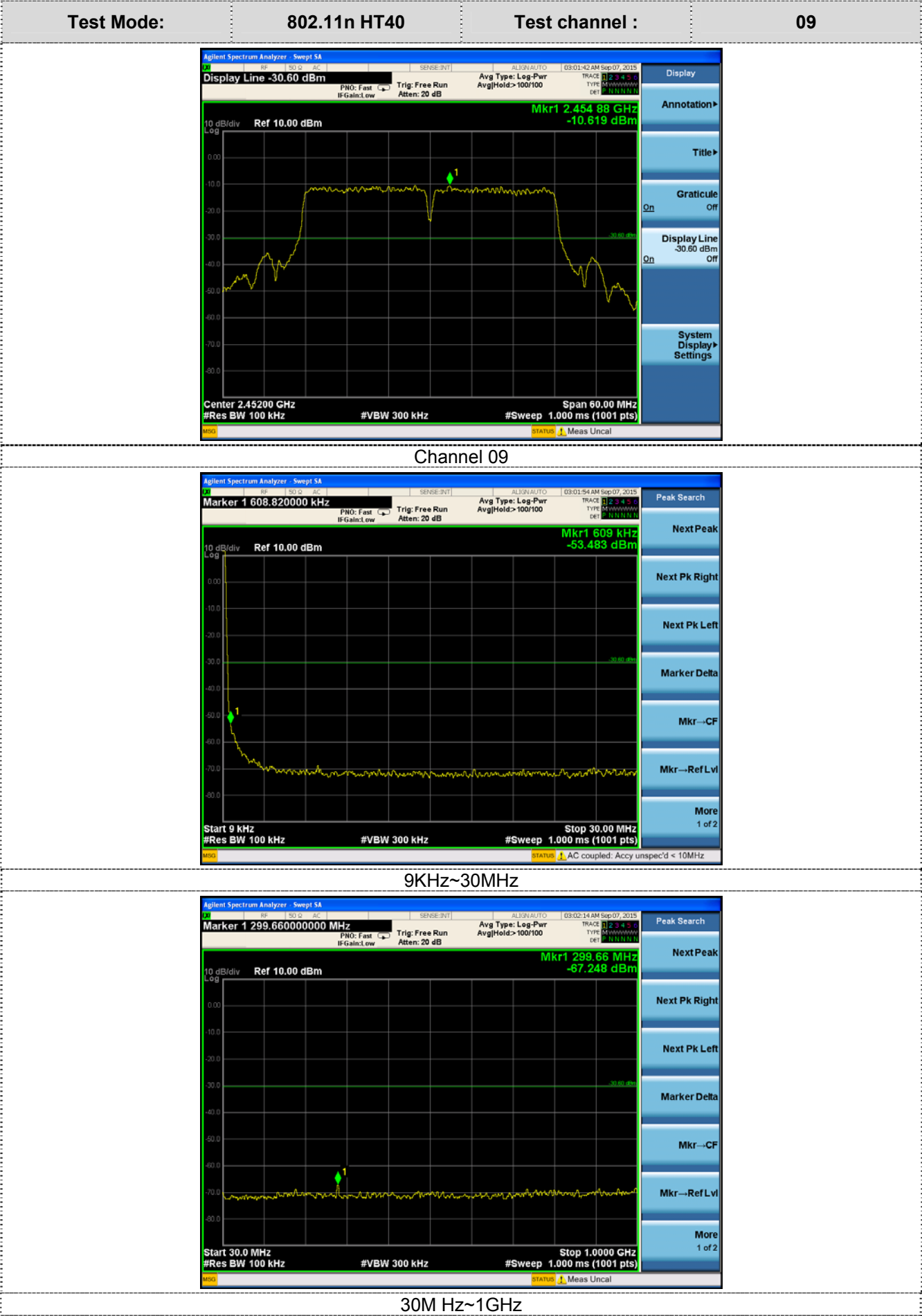
Mkr--Ref Lvl

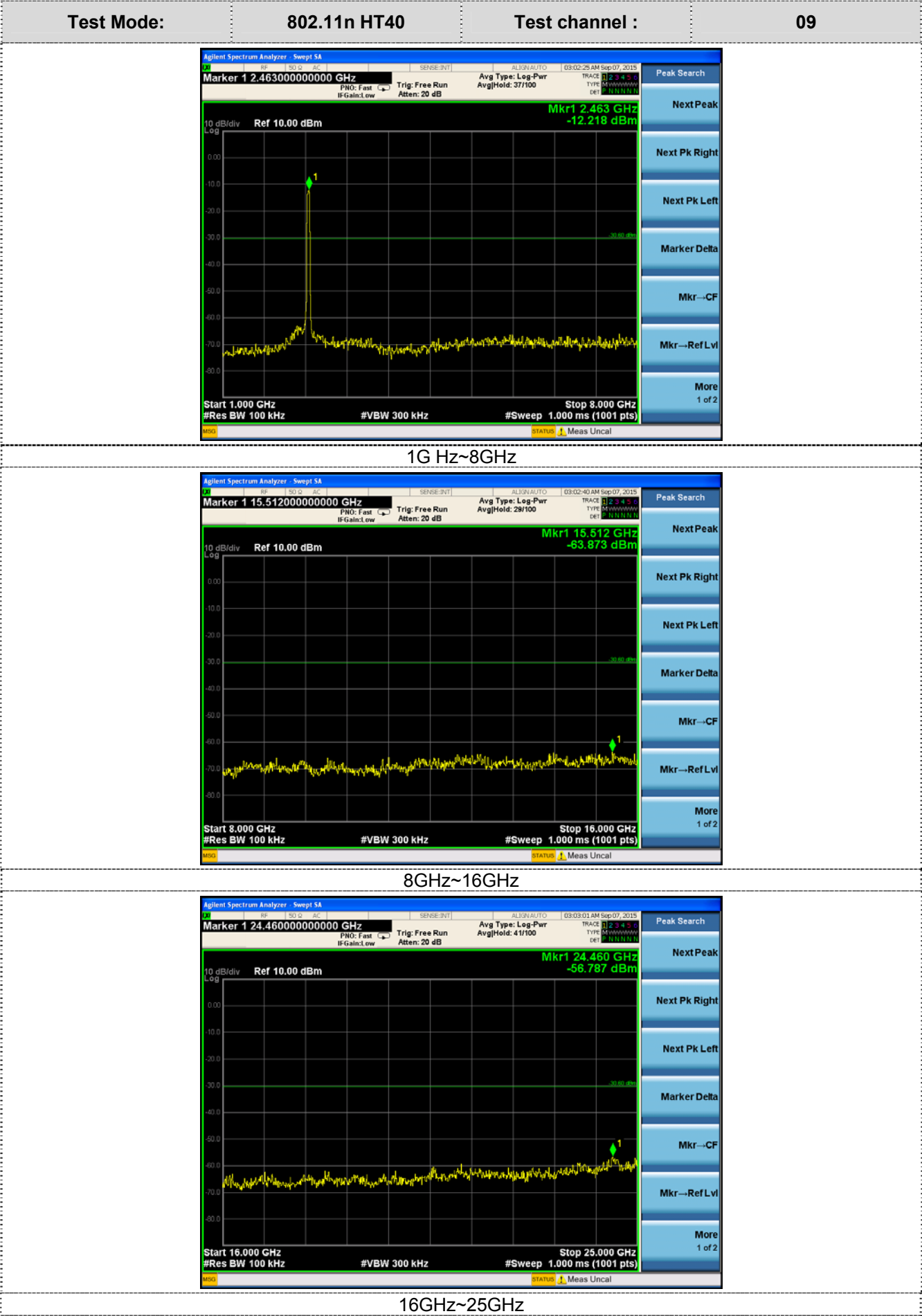
More 1 of 2

16GHz~25GHz











## 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 <sub>nom</sub>	V <sub>nom</sub>	Lowest Channel 2412 MHz	Middle Channel 2437 MHz	Highest Channel 2462 MHz
Conducted power [dBm] Measured with DSSS modulation		9.12	9.16	9.08
Radiated power [dBm] Measured with DSSS modulation		10.98	10.77	10.88
Gain [dBi] Calculated		1.86	1.61	1.80
Measurement uncertainty		± 0.6 dB (cond.) / ± 4.32 dB (rad.)		

## 5. Test Setup Photos of the EUT





## 6. External and Internal Photos of the EUT

### External Photos





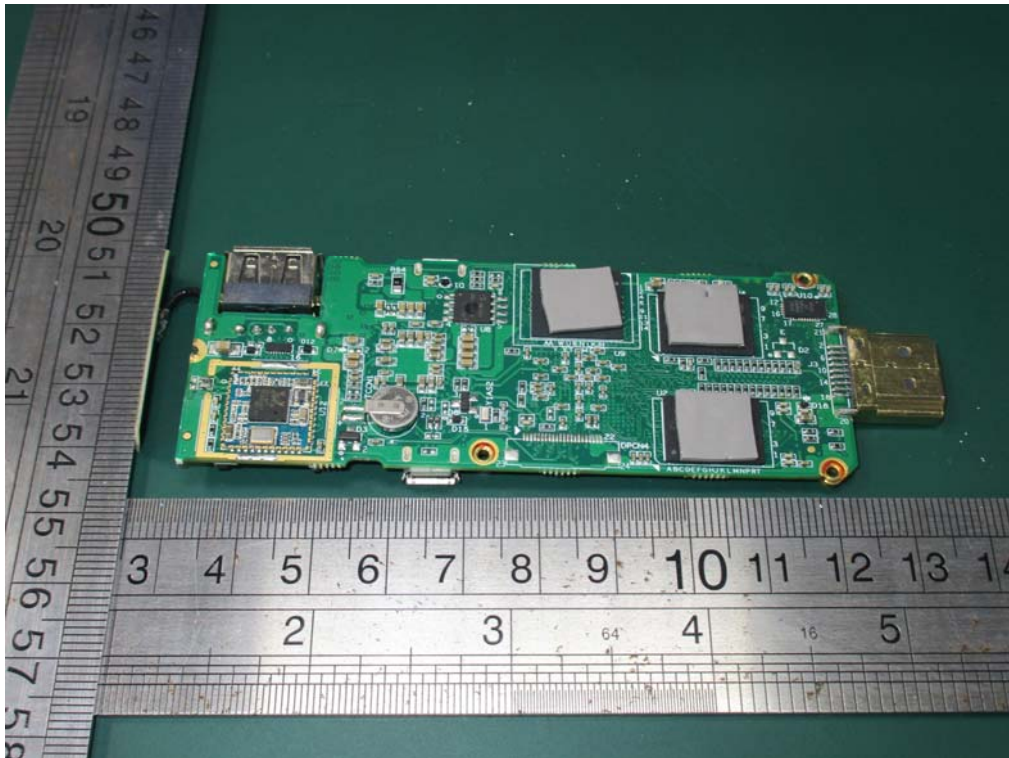


Internal Photos



WLAN/BT  
Antenna





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