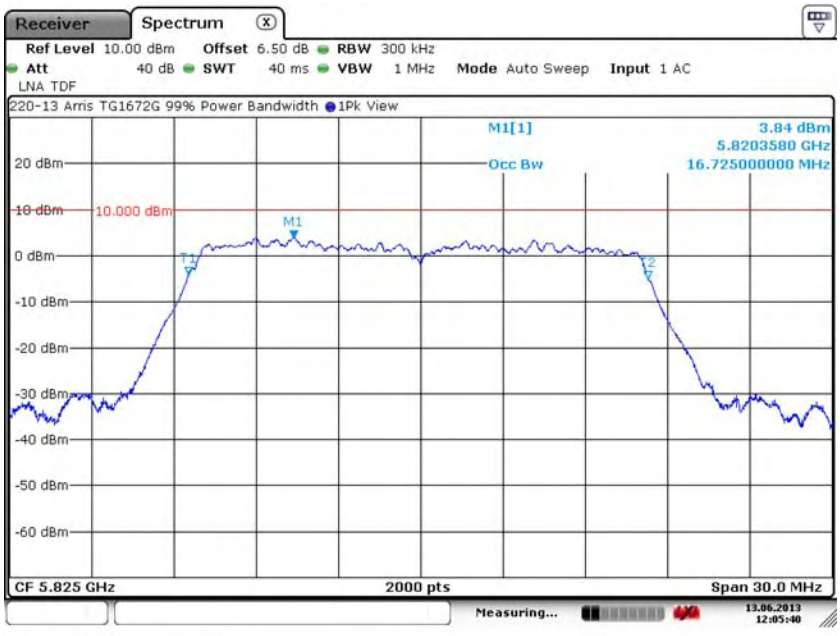
7. Measurement Data (continued)

7.3. 99% Bandwidth (RSS 210) (continued)

7.3.43. 802.11a: High Channel – 165, J5000

Date: 13.JUN.2013 12:05:13

7.3.44. 802.11a: High Channel – 165, J5001



Date: 13.JUN.2013 12:05:40

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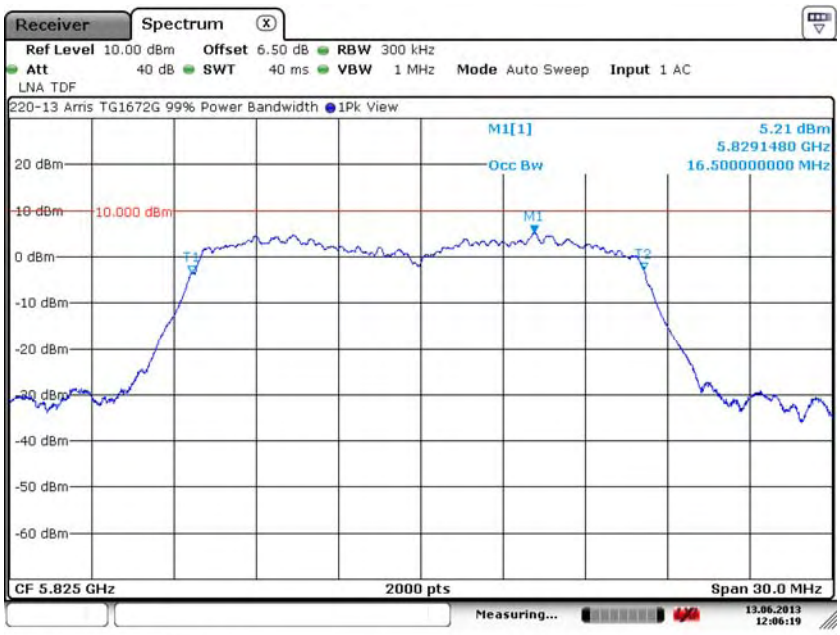
7. Measurement Data (continued)

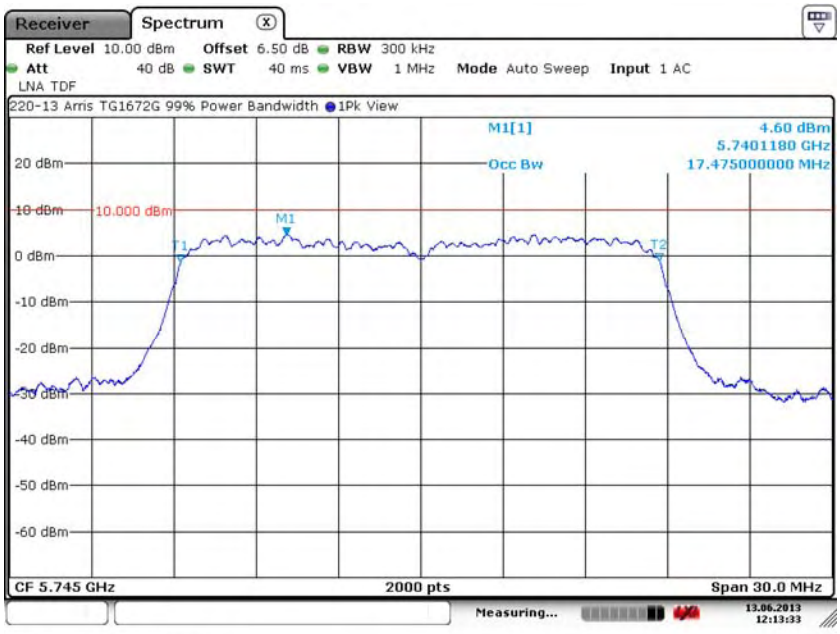
7.3. 99% Bandwidth (RSS 210) (continued)

7.3.45. 802.11a: High Channel – 165, J5002



Date: 13.JUN.2013 12:06:18

7.3.46. HT20: Low Channel – 149, J5000



Date: 13.JUN.2013 12:13:33

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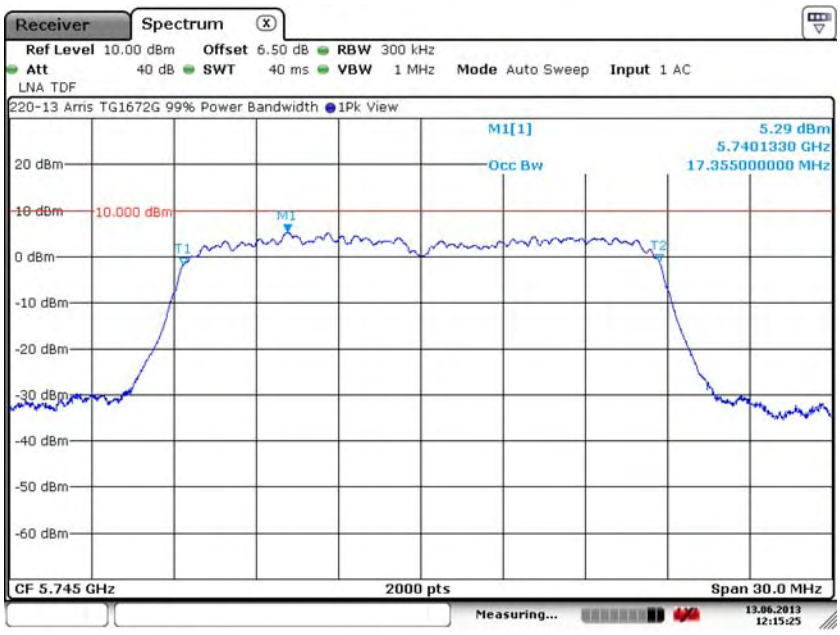
7. Measurement Data (continued)

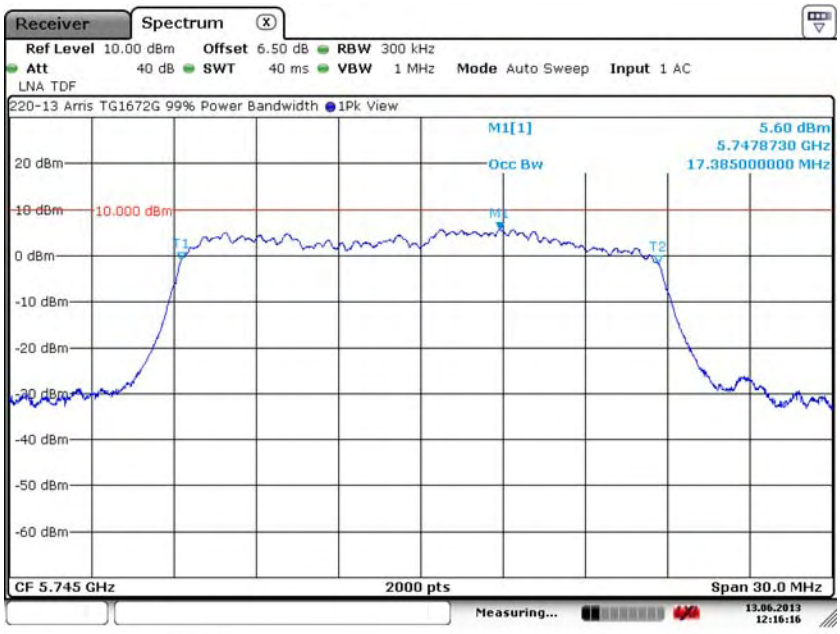
7.3. 99% Bandwidth (RSS 210) (continued)

7.3.47. HT20: Low Channel – 149, J5001



Date: 13.JUN.2013 12:15:25

7.3.48. HT20: Low Channel – 149, J5002



Date: 13.JUN.2013 12:16:17

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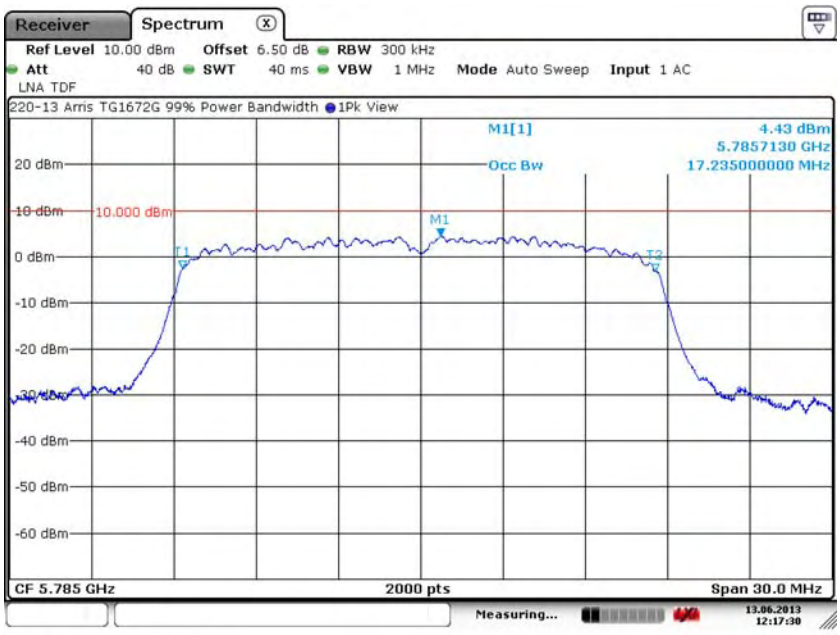
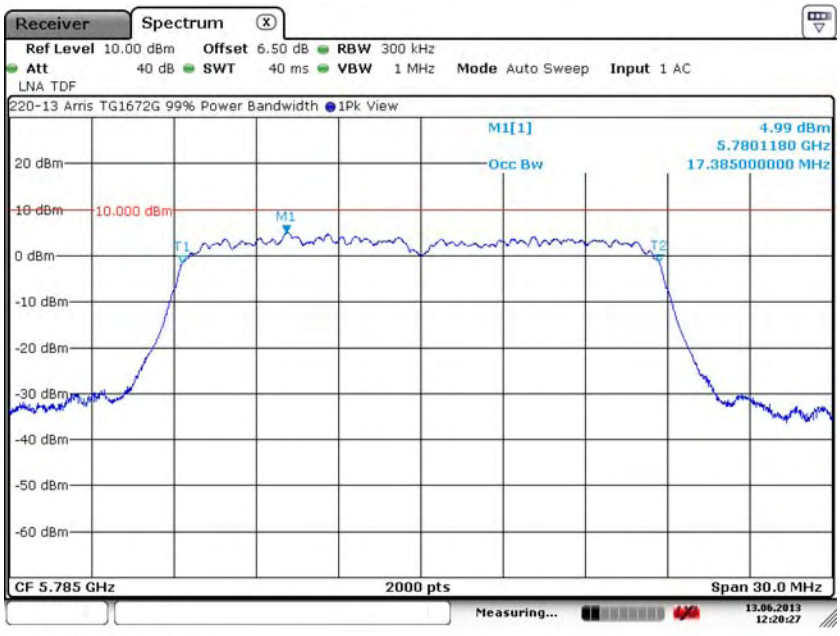
7. Measurement Data (continued)

7.3. 99% Bandwidth (RSS 210) (continued)

7.3.49. HT20: Middle Channel – 157, J5000



7.3.50. HT20: Middle Channel – 157, J5001



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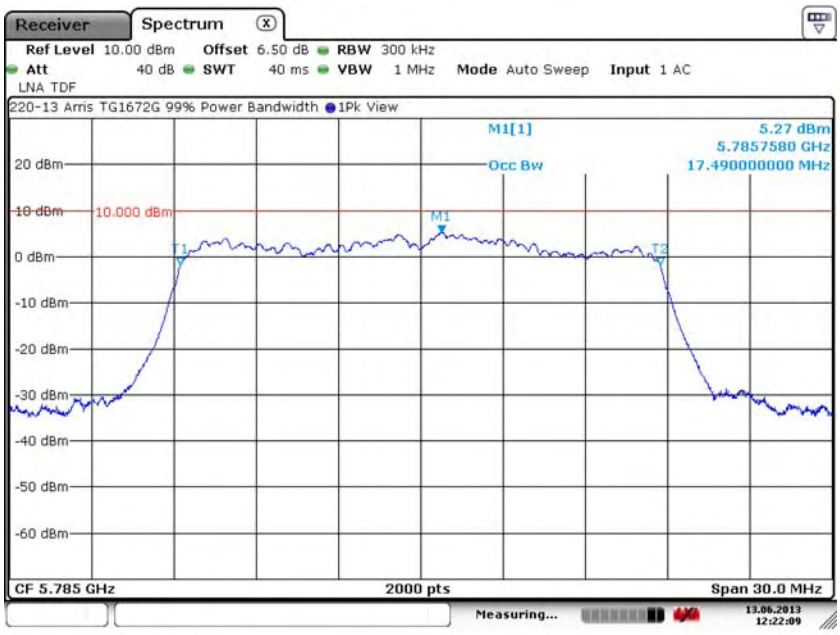
7. Measurement Data (continued)

7.3. 99% Bandwidth (RSS 210) (continued)

7.3.51. HT20: Middle Channel – 157, J5002



Date: 13.JUN.2013 12:22:09

7.3.52. HT20: High Channel – 165, J5000

Date: 13.JUN.2013 12:29:48

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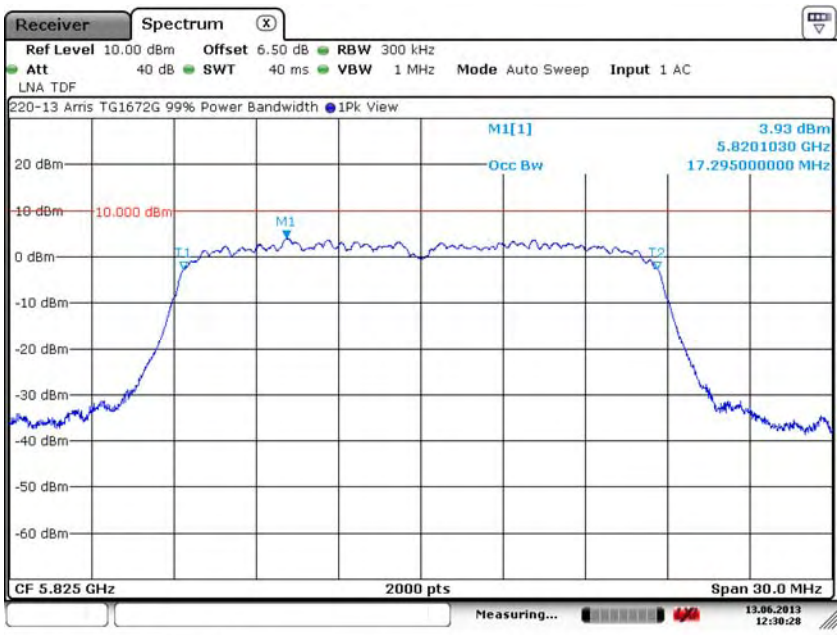
7. Measurement Data (continued)

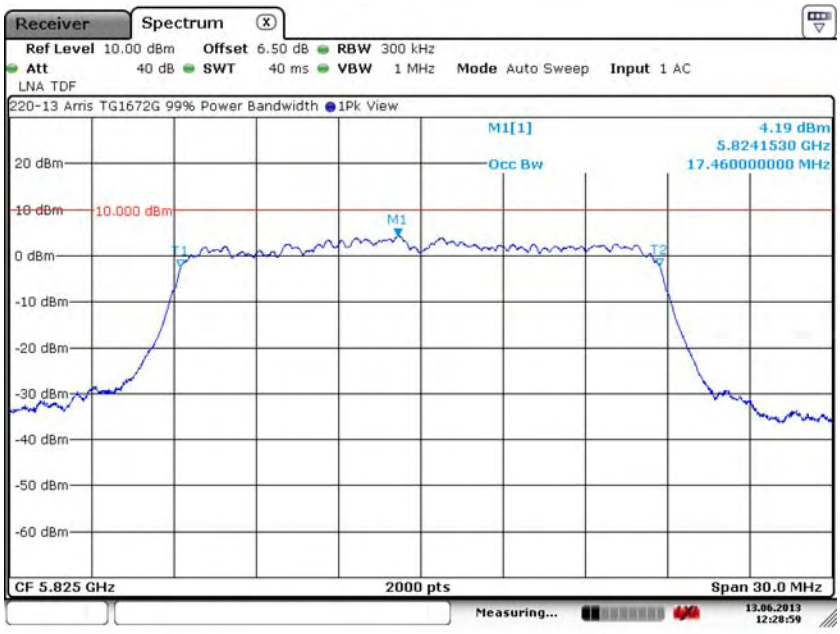
7.3. 99% Bandwidth (RSS 210) (continued)

7.3.53. HT20: High Channel – 165, J5001



Date: 13.JUN.2013 12:30:28

7.3.54. HT20: High Channel – 165, J5002



Date: 13.JUN.2013 12:28:58

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7. Measurement Data (continued)

7.3. 99% Bandwidth (RSS 210) (continued)

7.3.55. HT40: Low Channel – 151, J5000

7.3.56. HT40: Low Channel – 151, J5001

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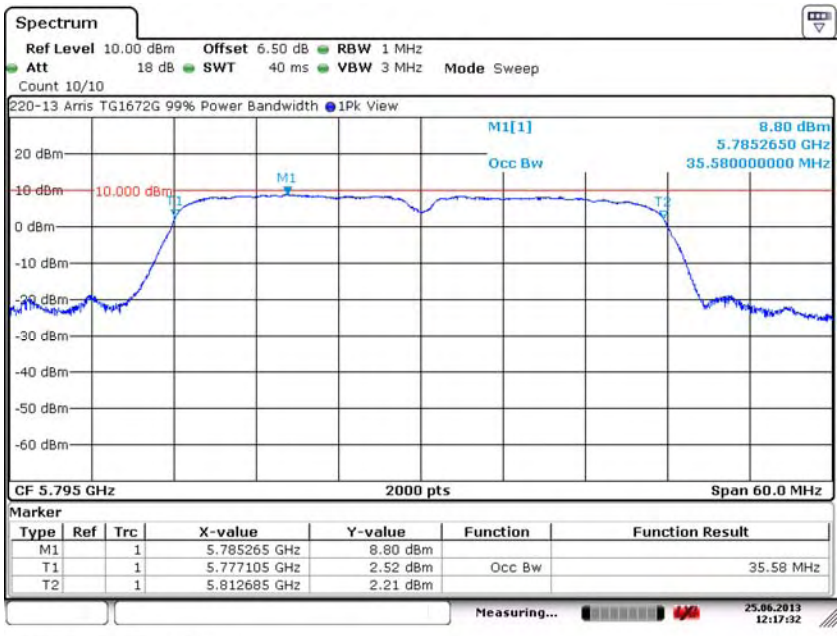
7. Measurement Data (continued)

7.3. 99% Bandwidth (RSS 210) (continued)

7.3.57. HT40: Low Channel – 151, J5002

7.3.58. HT40: High Channel – 159, J5000



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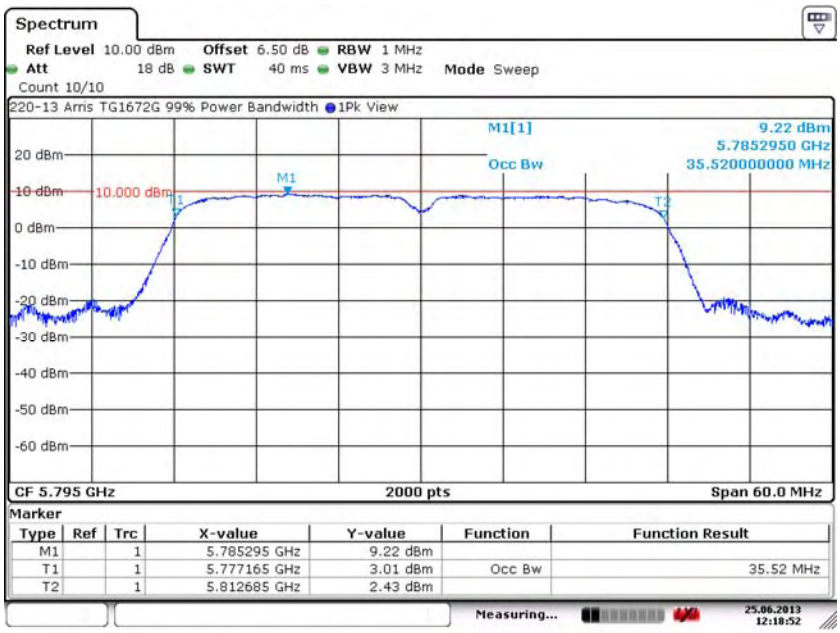
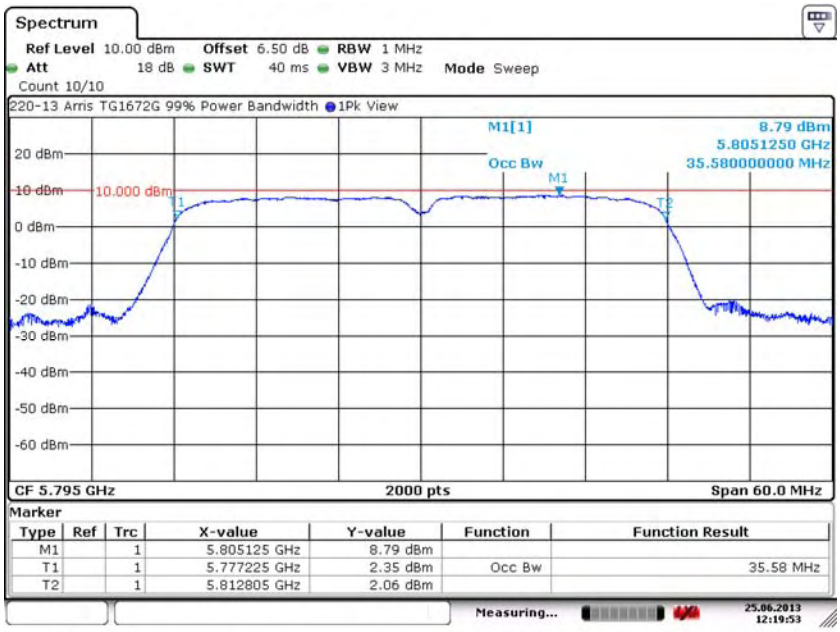
7. Measurement Data (continued)

7.3. 99% Bandwidth (RSS 210) (continued)

7.3.59. HT40: High Channel – 159, J5001



7.3.60. HT40: High Channel – 159, J5002



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7. Measurement Data (continued)

7.4. Maximum Peak (Average) Conducted Output Power

Requirement: (15.247 (b) (3))
The maximum peak conducted output power of the intentional radiator shall not exceed the following: For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt (+30 dBm).

Procedure: This test was performed in accordance with the procedure detailed in FCC OET publication number KDB 558074 D01, v03r01, Section 9.2.2.2.

Using the Rohde & Schwarz FSV40 band power function, the integrated average power was measured. The band average power function span was determined by using the 20 dB Occupied Bandwidth (OBW) measured in Section 7.2 of this report.

FCC OET publication number KDB 662911 D01, v02 was referenced to determine the combined total power output of the three MIMO outputs. The measure-and-sum technique was used.

Conclusion: The device under test meets the required maximum peak conducted output power level of 1 Watt (+30 dBm).

802.11b Mode / Channel	Frequency	Maximum Conducted Output Power			Total Max Conducted Output Power	Limit	Result
		J2400	J2401	J2402			
	(MHz)	(dBm)			(dBm)	(dBm)	
Low	2412	17.90	17.31	16.89	22.16	30.00	Compliant
Middle	2437	17.81	16.88	17.01	22.02	30.00	Compliant
High	2462	17.29	16.44	16.68	21.59	30.00	Compliant

802.11g Mode / Channel	Frequency	Maximum Conducted Output Power			Total Max Conducted Output Power	Limit	Result
		J2400	J2401	J2402			
	(MHz)	(dBm)			(dBm)	(dBm)	
Low	2412	14.25	13.83	13.57	18.66	30.00	Compliant
Middle	2437	14.42	13.62	13.70	18.70	30.00	Compliant
High	2462	14.04	13.22	13.26	18.29	30.00	Compliant

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7. Measurement Data (continued)

7.4. Maximum Peak (Average) Conducted Output Power (continued)

HT20 Mode Channel	Frequency	Maximum Conducted Output Power			Total Max Conducted Output Power	Limit	Result
		J2400	J2401	J2402			
	(MHz)	(dBm)			(dBm)	(dBm)	
Low	2412	14.70	14.21	13.37	18.90	30.00	Compliant
Middle	2437	14.32	13.55	13.31	18.52	30.00	Compliant
High	2462	13.81	13.12	13.05	18.11	30.00	Compliant

HT40 Mode Channel	Frequency	Maximum Conducted Output Power			Total Max Conducted Output Power	Limit	Result
		J2400	J2401	J2402			
	(MHz)	(dBm)			(dBm)	(dBm)	
Low	2422	13.28	12.96	12.99	17.85	30.00	Compliant
Middle	2437	13.86	13.09	13.04	18.12	30.00	Compliant
High	2452	13.13	12.99	12.92	17.79	30.00	Compliant

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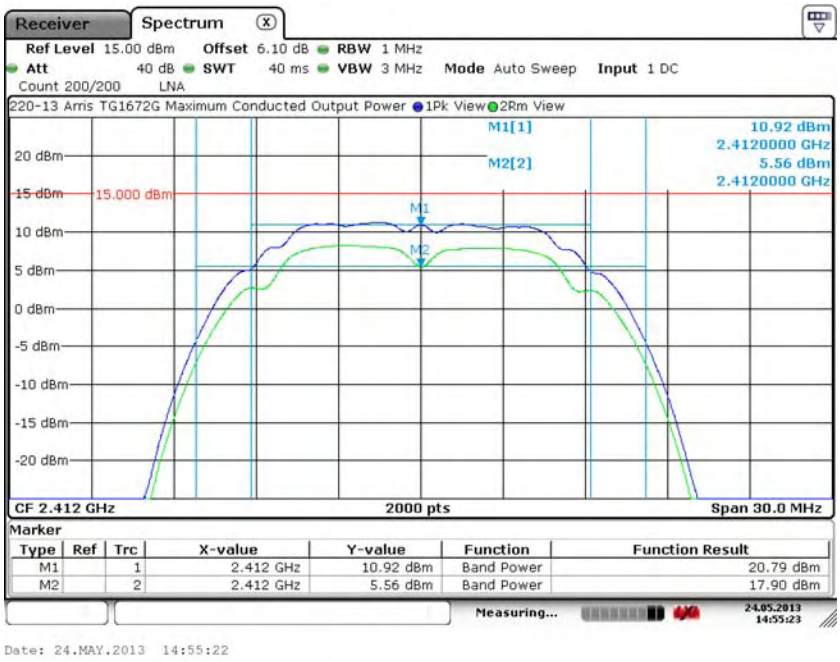
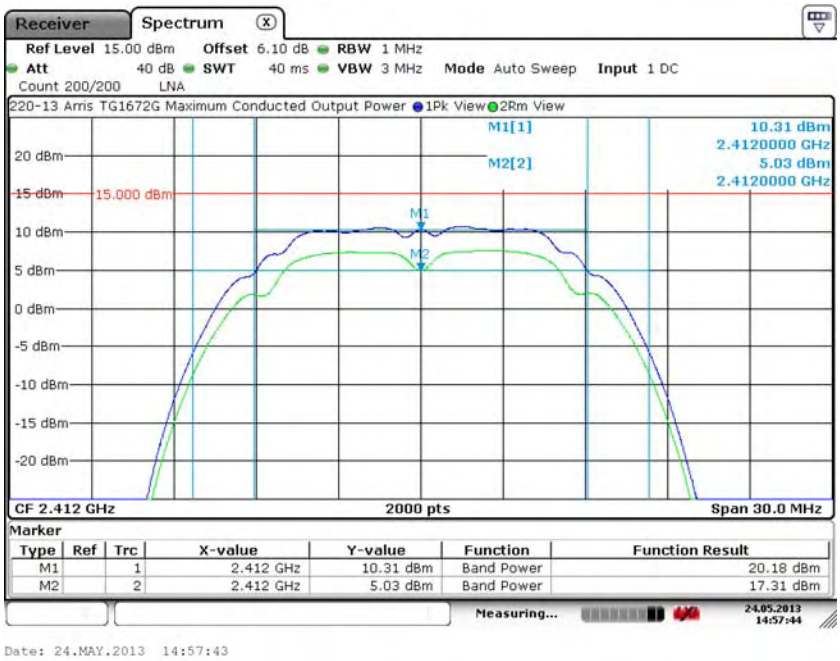
7. Measurement Data

7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.1. 802.11b: Low Channel – 1, J2400



7.4.2. 802.11b: Low Channel – 1, J2401



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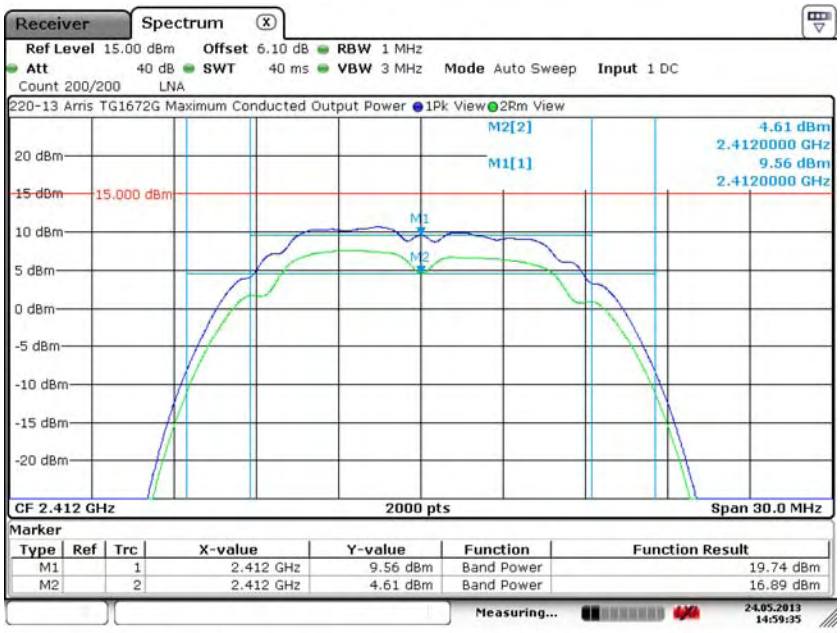
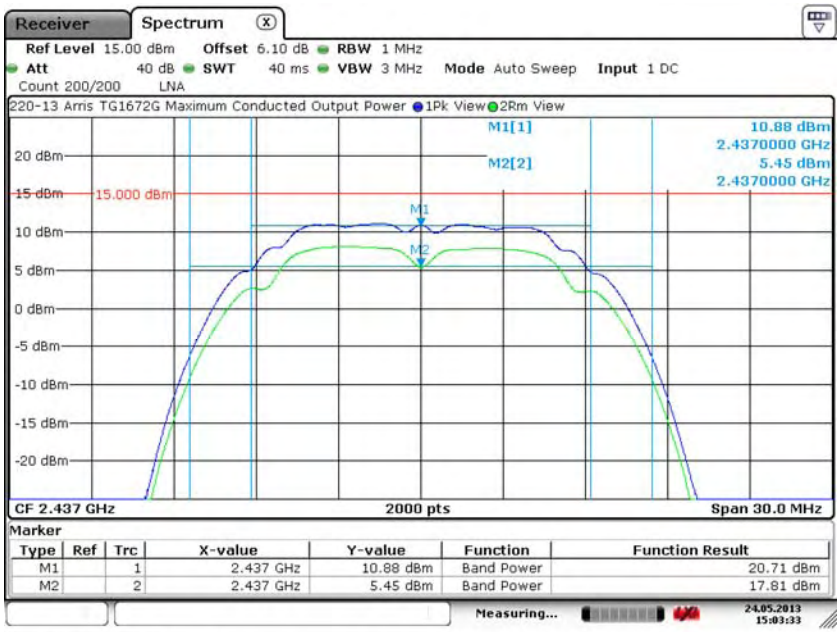
7. Measurement Data

7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.3. 802.11b: Low Channel – 1, J2402



7.4.4. 802.11b: Middle Channel – 6, J2400



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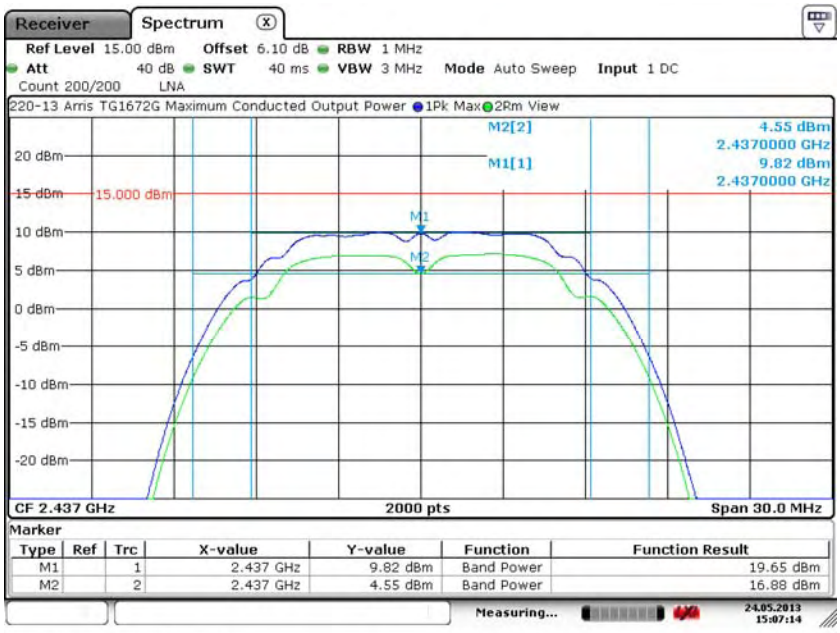
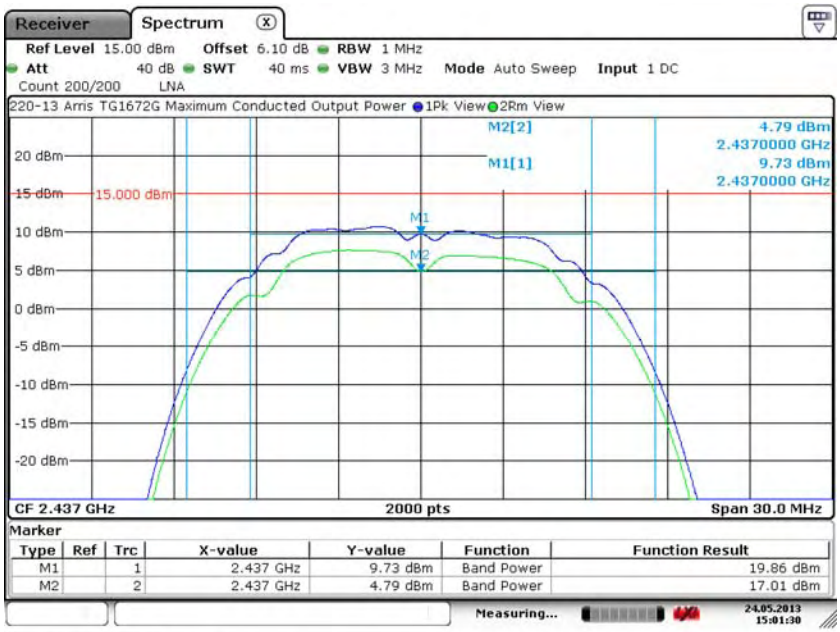
7. Measurement Data

7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.5. 802.11b: Middle Channel – 6, J2401



7.4.6. 802.11b: Middle Channel – 6, J2402



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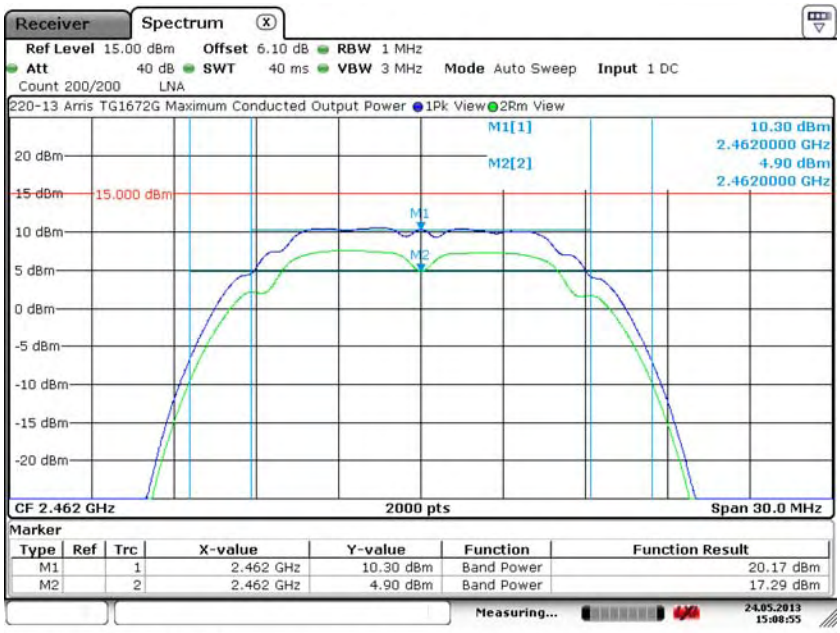
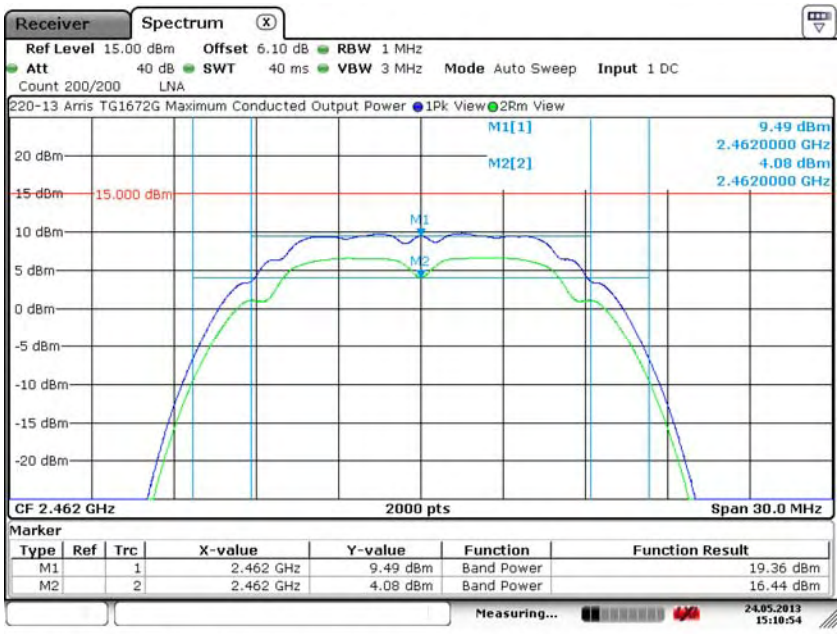
7. Measurement Data

7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.7. 802.11b: High Channel – 11, J2400



7.4.8. 802.11b: High Channel – 11, J2401



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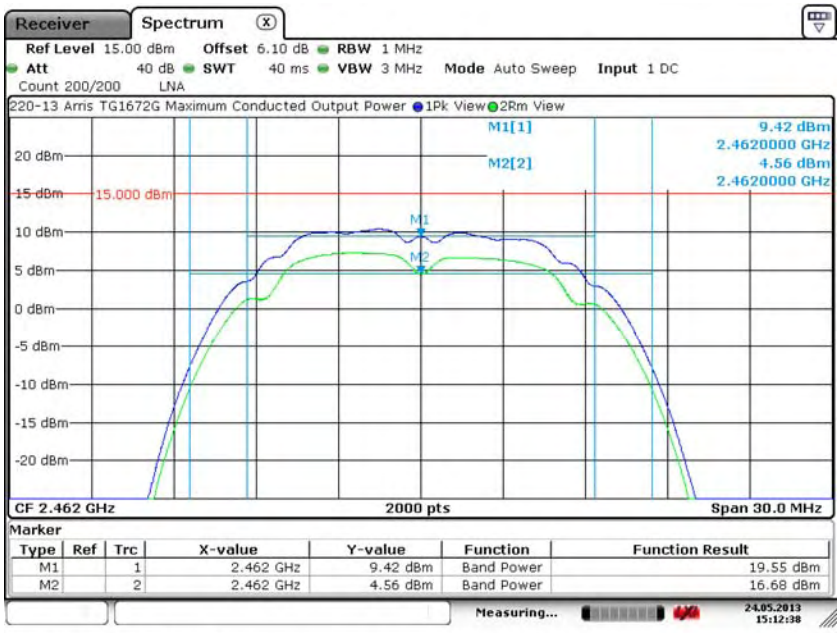
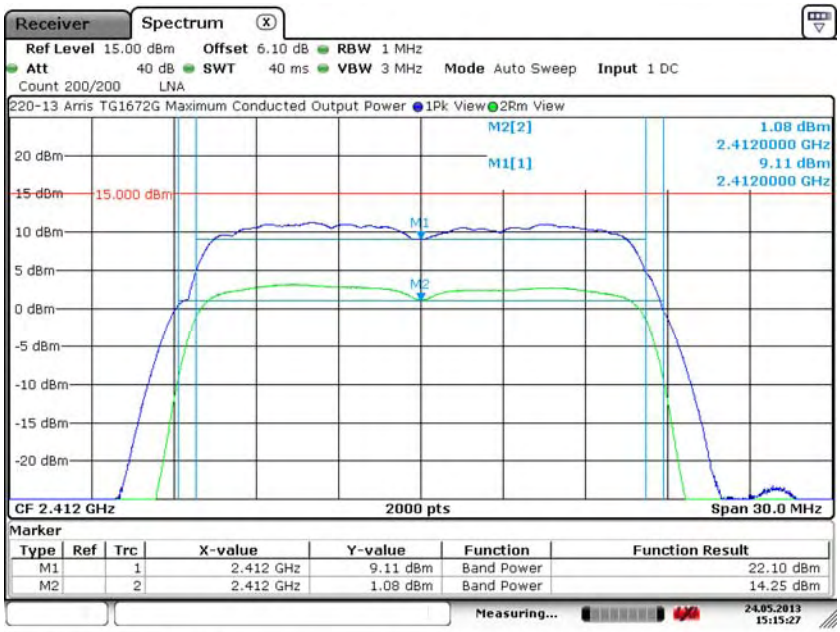
7. Measurement Data

7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.9. 802.11b: High Channel – 11, J2402



7.4.10. 802.11g: Low Channel – 1, J2400



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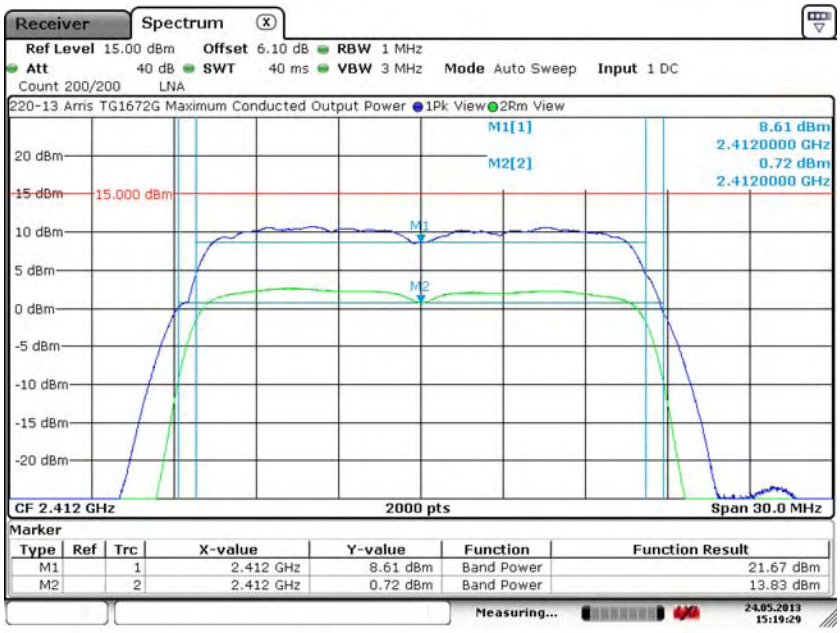
7. Measurement Data

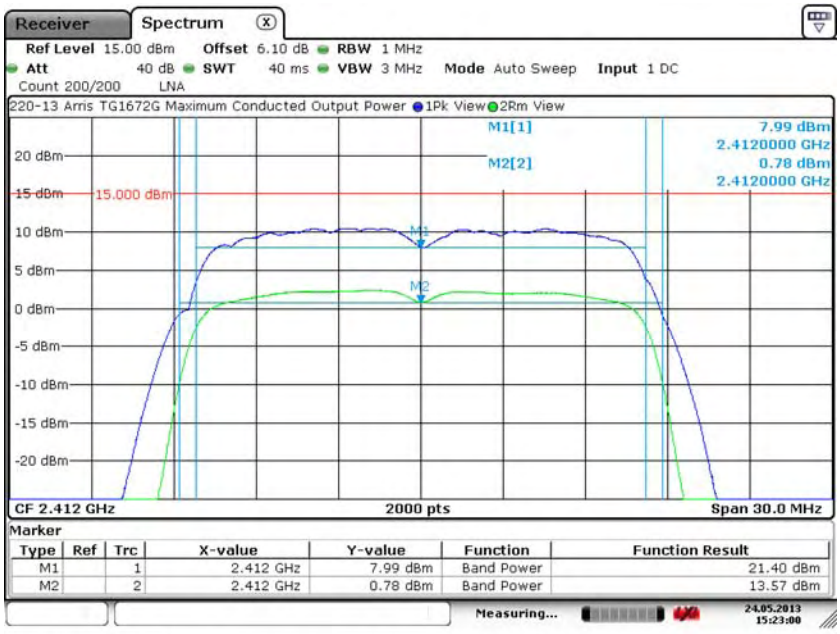
7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.11. 802.11g: Low Channel – 1, J2401



Date: 24.MAY.2013 15:19:29

7.4.12. 802.11g: Low Channel – 1, J2402



Date: 24.MAY.2013 15:23:00

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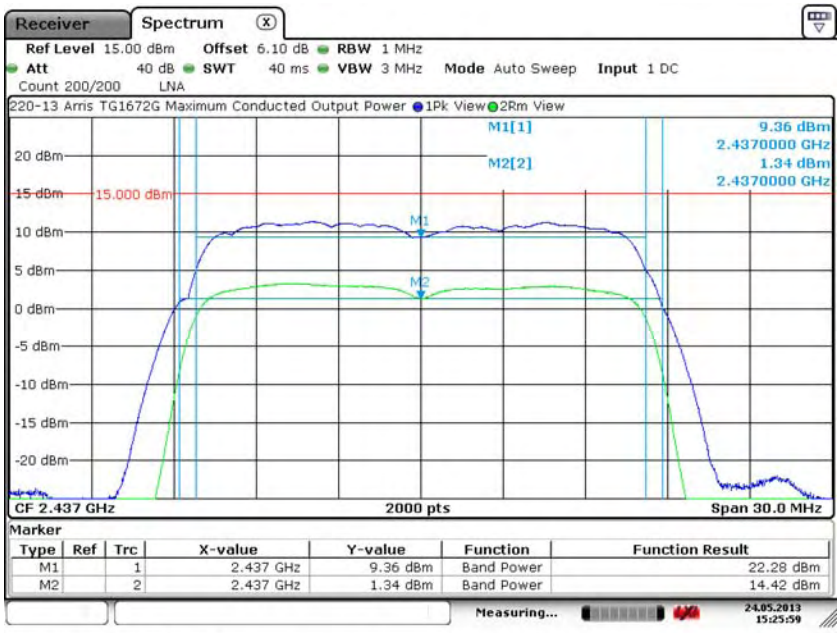
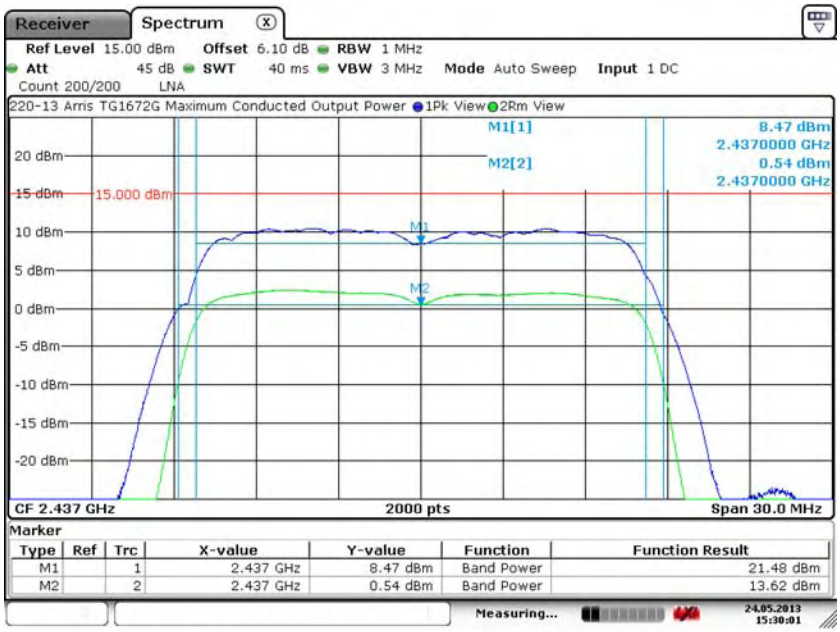
7. Measurement Data

7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.13. 802.11g: Middle Channel – 6, J2400



7.4.14. 802.11g: Middle Channel – 6, J2401



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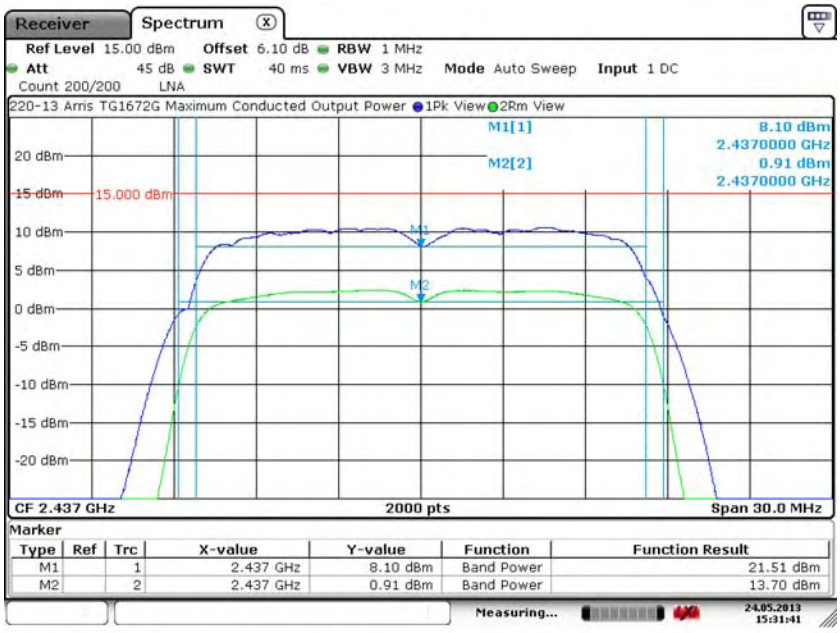
7. Measurement Data

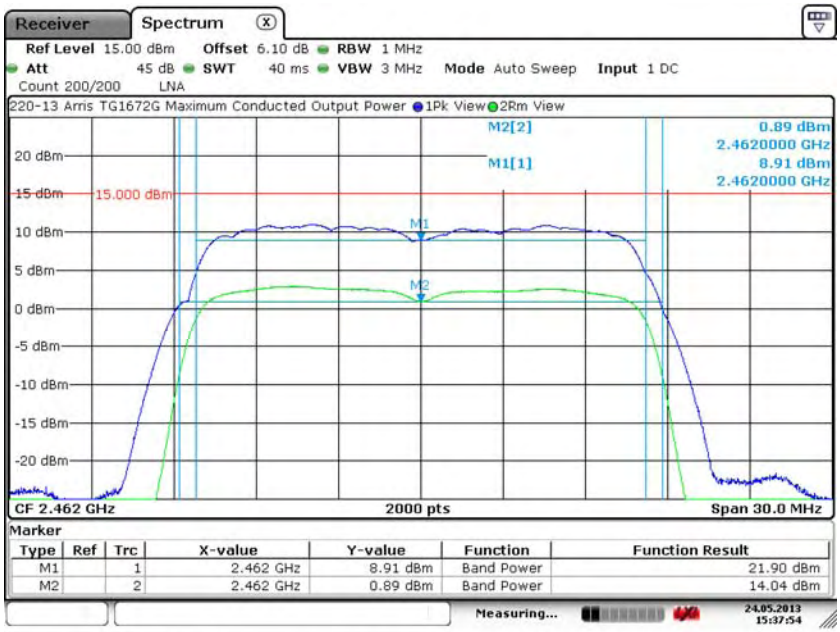
7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.15. 802.11g: Middle Channel – 6, J2402



Date: 24.MAY.2013 15:31:41

7.4.16. 802.11g: High Channel – 11, J2400



Date: 24.MAY.2013 15:37:54

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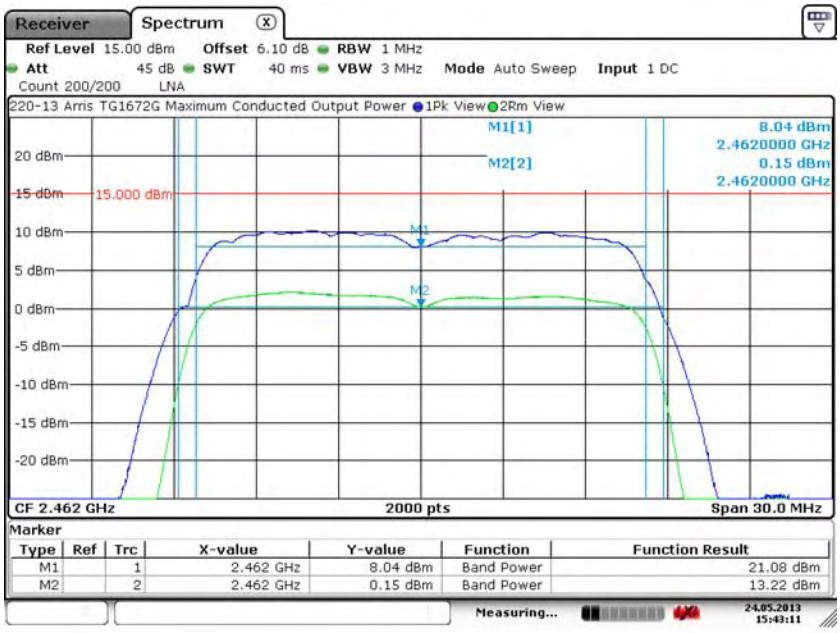
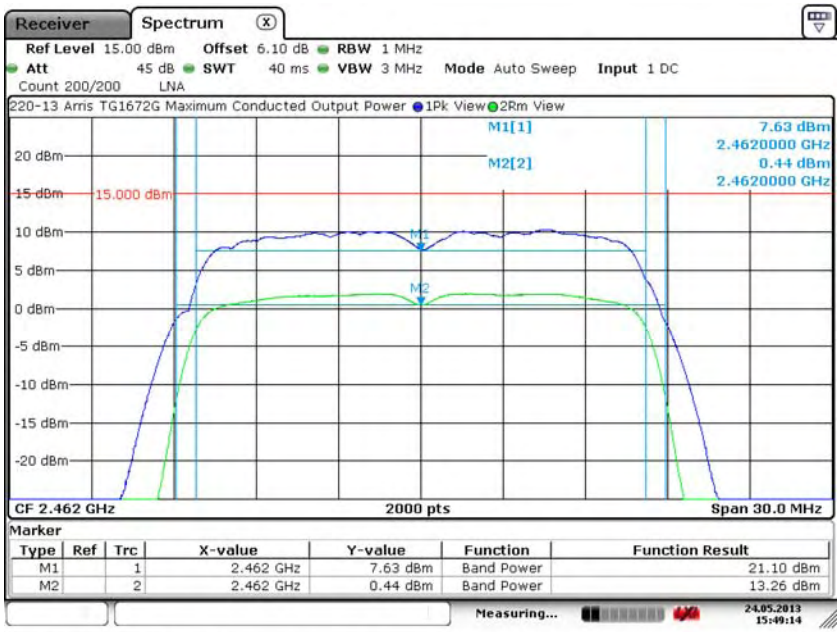
7. Measurement Data

7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.17. 802.11g: High Channel – 11, J2401



7.4.18. 802.11g: High Channel – 11, J2402



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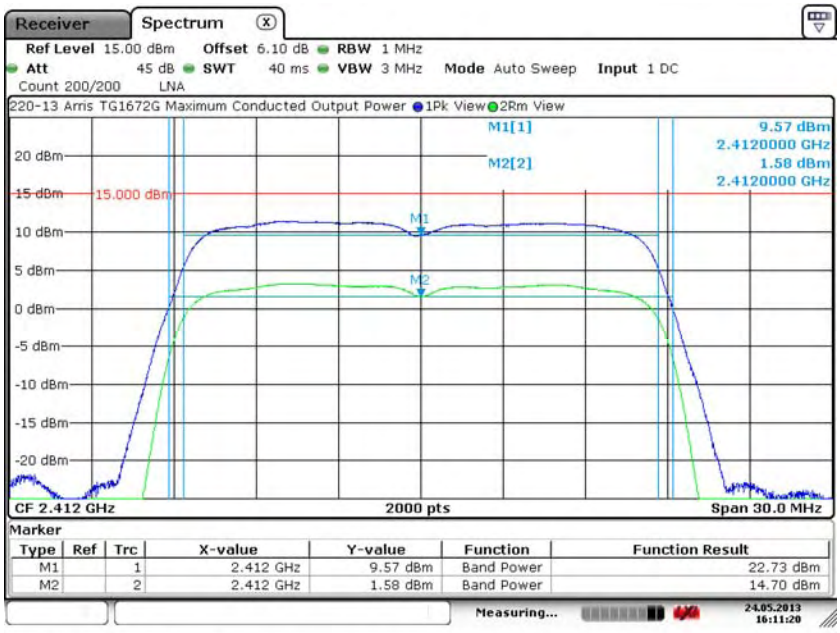
7. Measurement Data

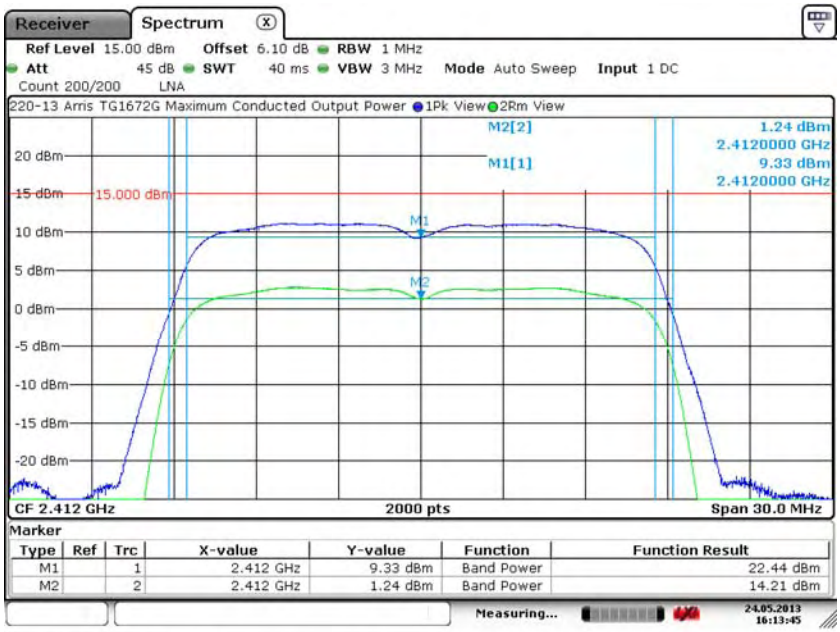
7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.19. HT20: Low Channel – 1, J2400



Date: 24.MAY.2013 16:11:20

7.4.20. HT20: Low Channel – 1, J2401



Date: 24.MAY.2013 16:13:44

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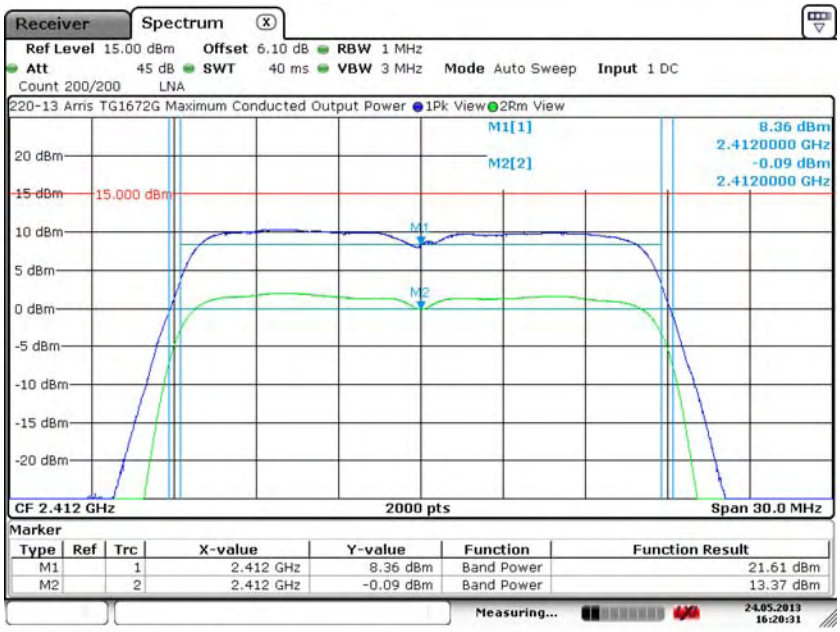
7. Measurement Data

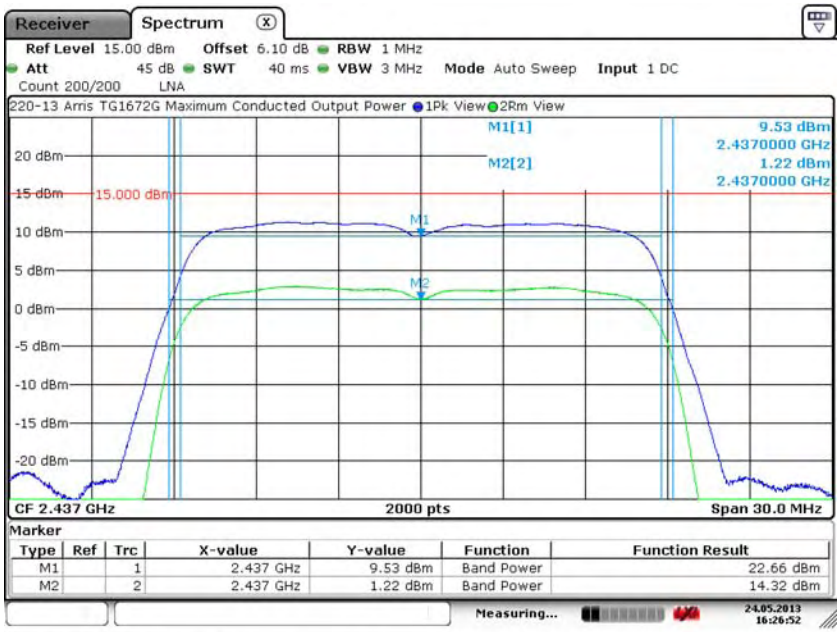
7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.21. HT20: Low Channel – 1, J2402



Date: 24.MAY.2013 16:20:30

7.4.22. HT20: Mid Channel – 6, J2400



Date: 24.MAY.2013 16:26:51

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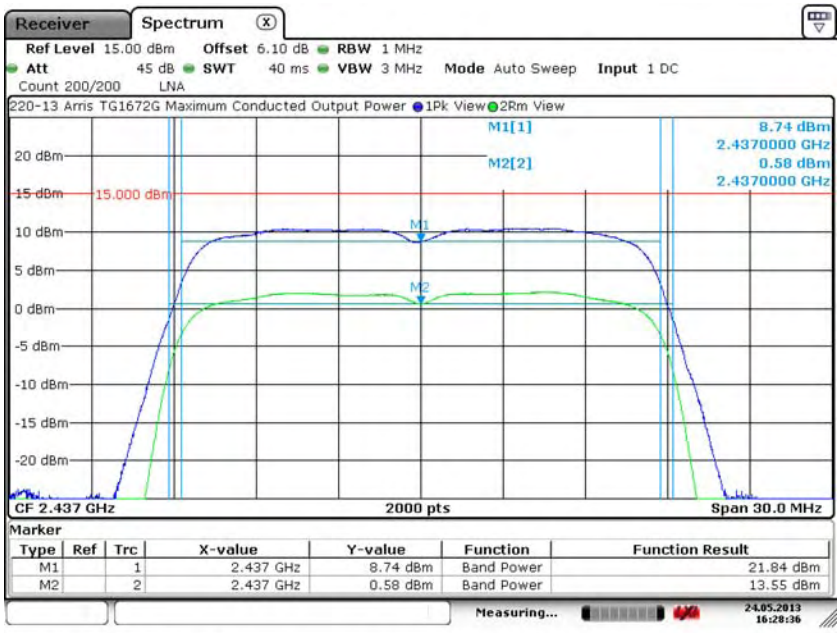
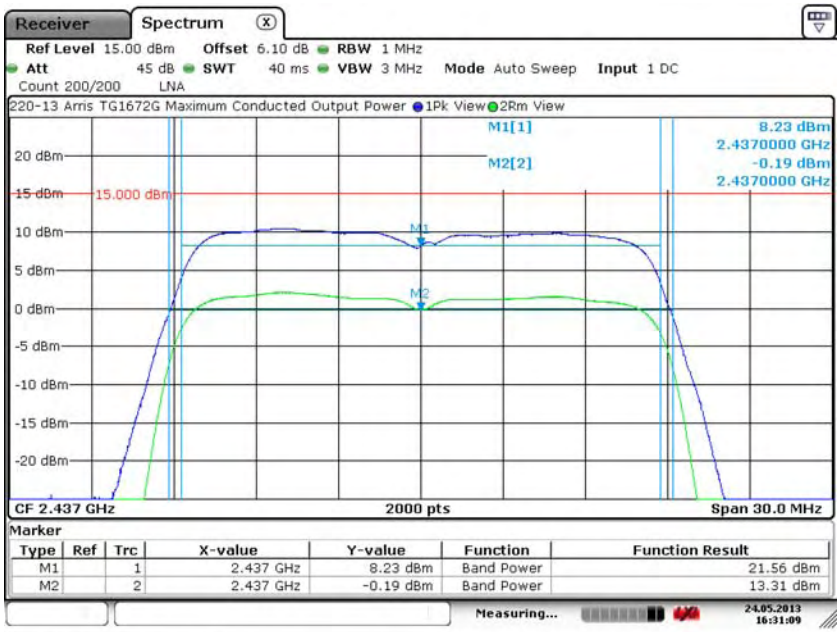
7. Measurement Data

7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.23. HT20: Mid Channel – 6, J2401



7.4.24. HT20: Mid Channel – 6, J2402



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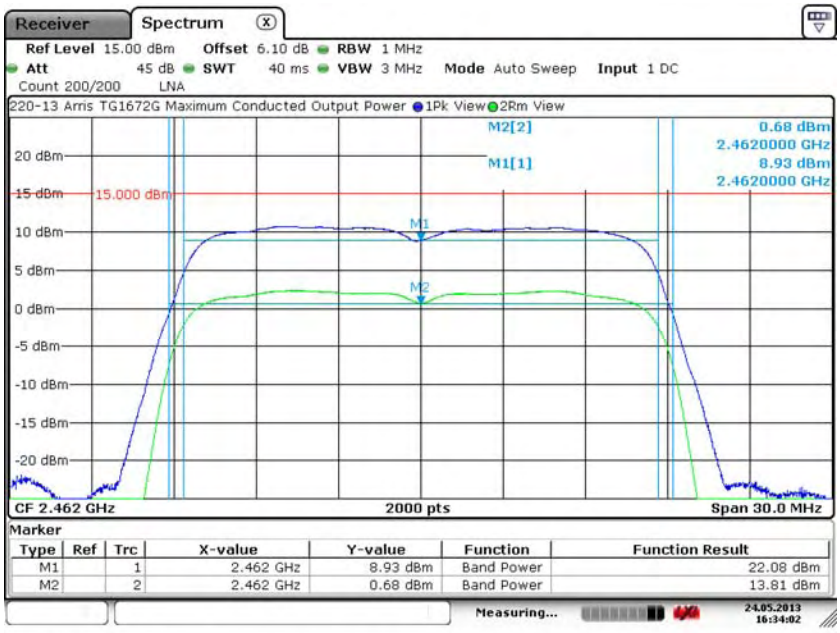
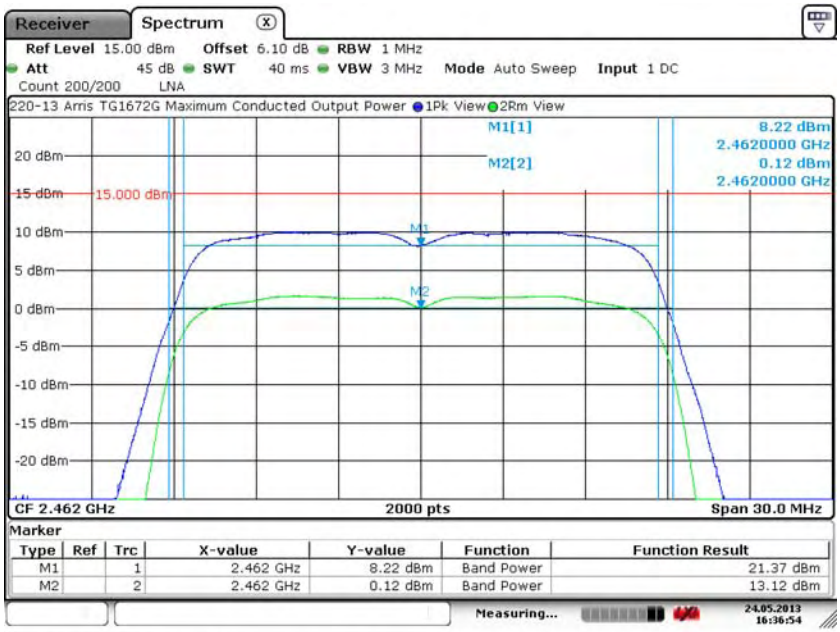
7. Measurement Data

7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.25. HT20: High Channel – 11, J2400



7.4.26. HT20: High Channel – 11, J2401



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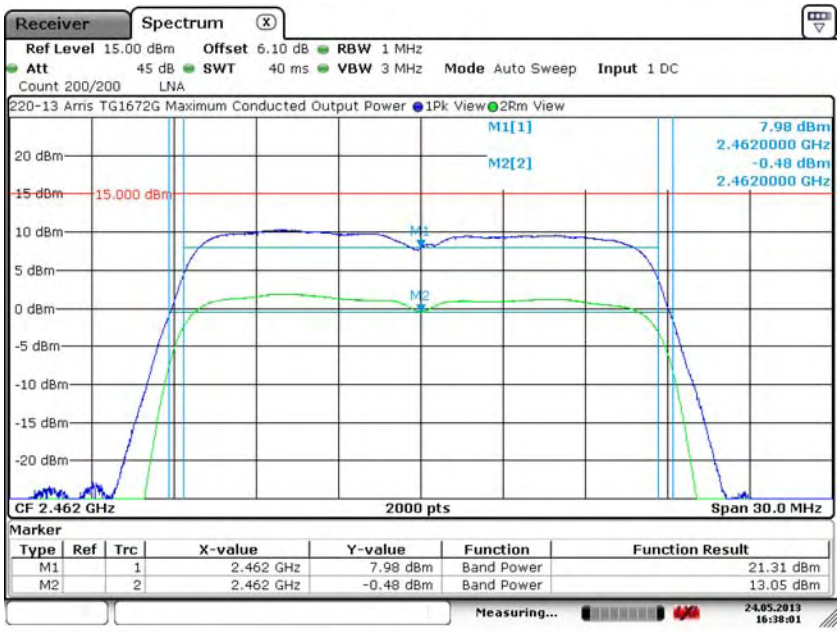
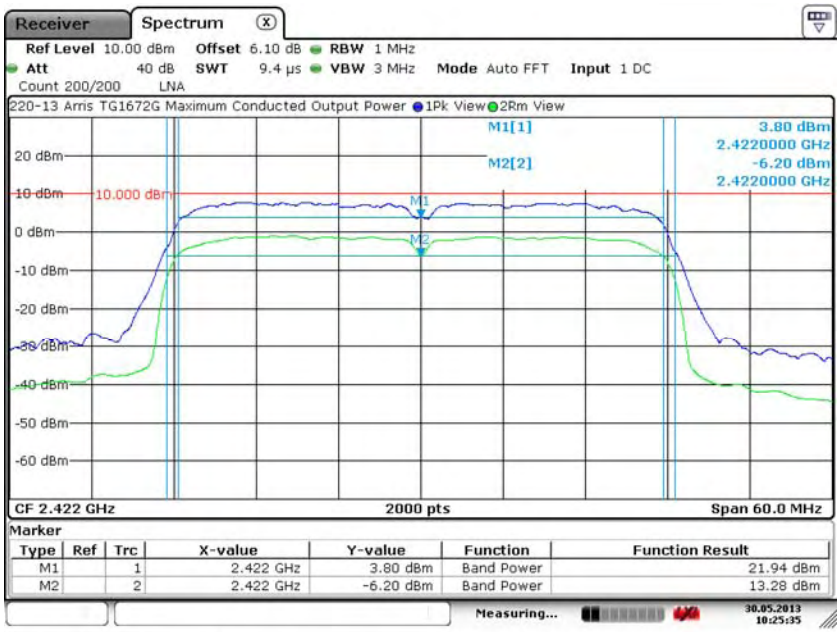
7. Measurement Data

7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.27. HT20: High Channel – 11, J2402



7.4.28. HT40: Low Channel – 3, J2400



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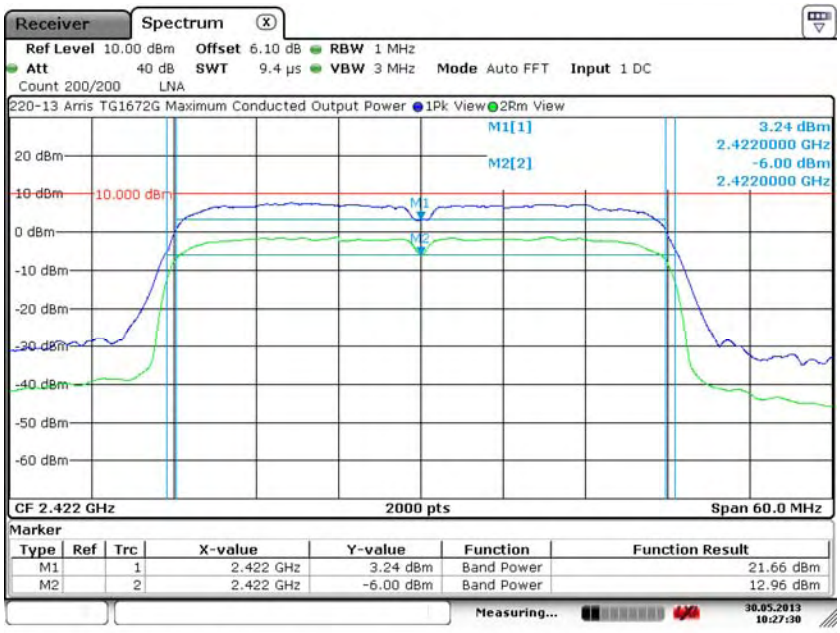
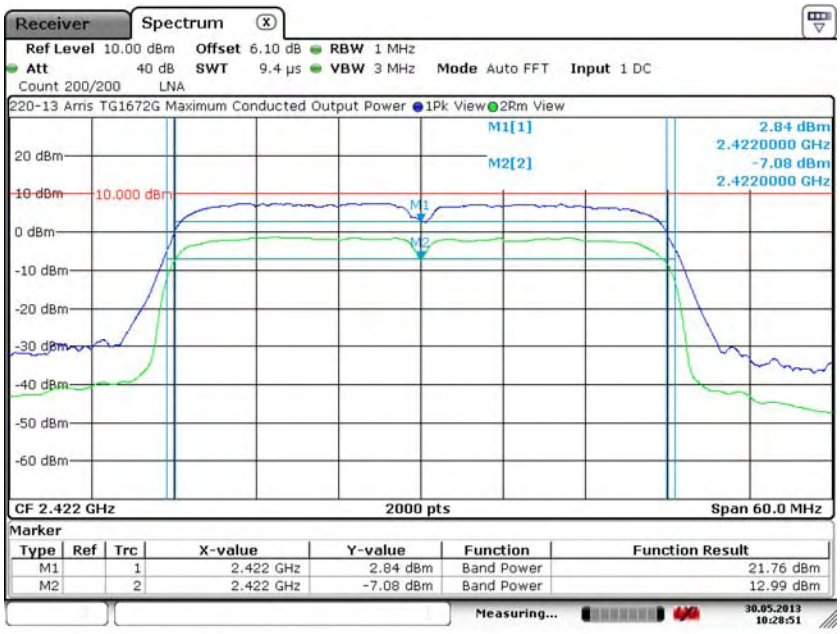
7. Measurement Data

7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.29. HT40: Low Channel – 3, J2401



7.4.30. HT40: Low Channel – 3, J2402



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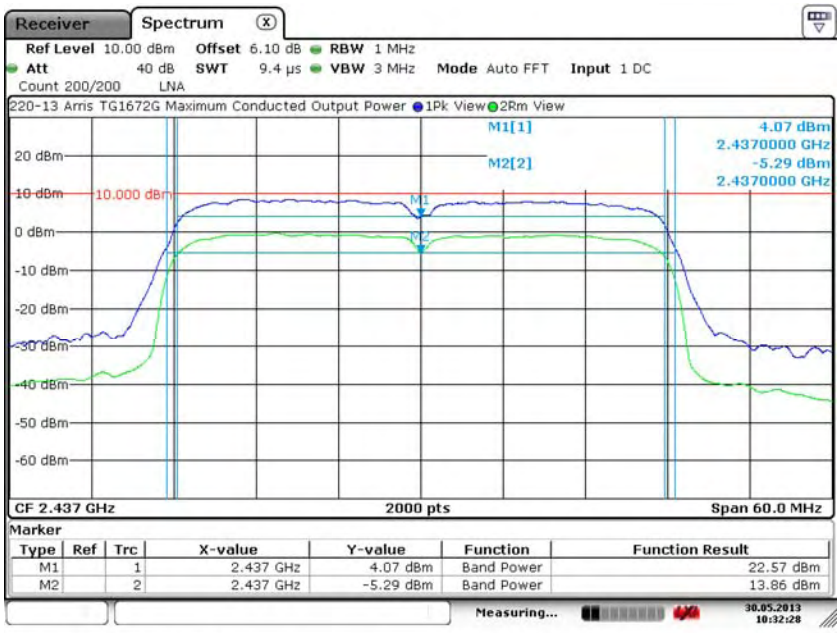
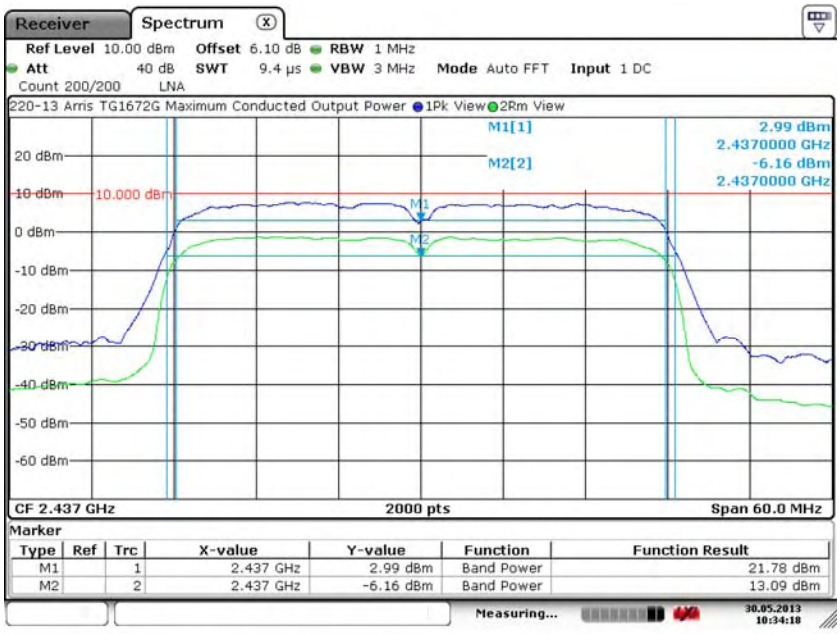
7. Measurement Data

7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.31. HT40: Mid Channel – 6, J2400



7.4.32. HT40: Mid Channel – 6, J2401



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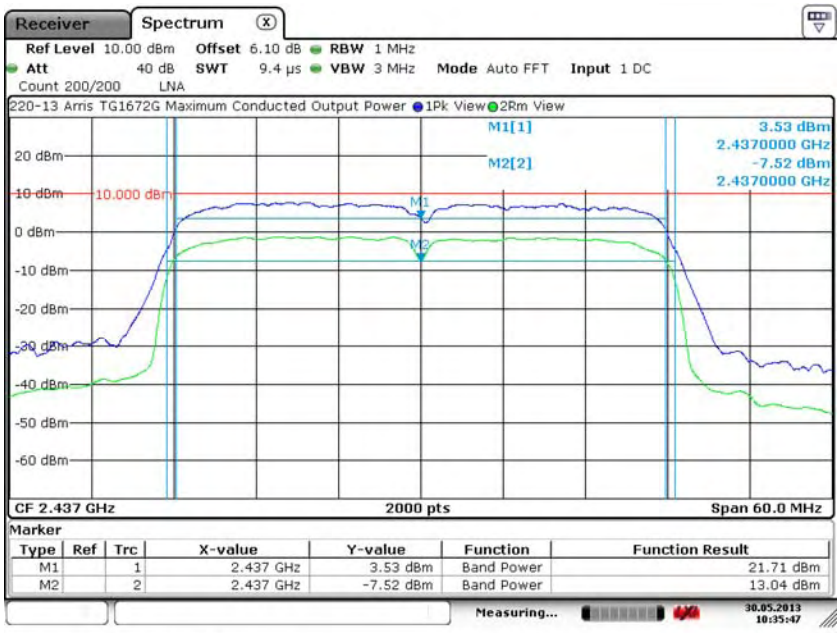
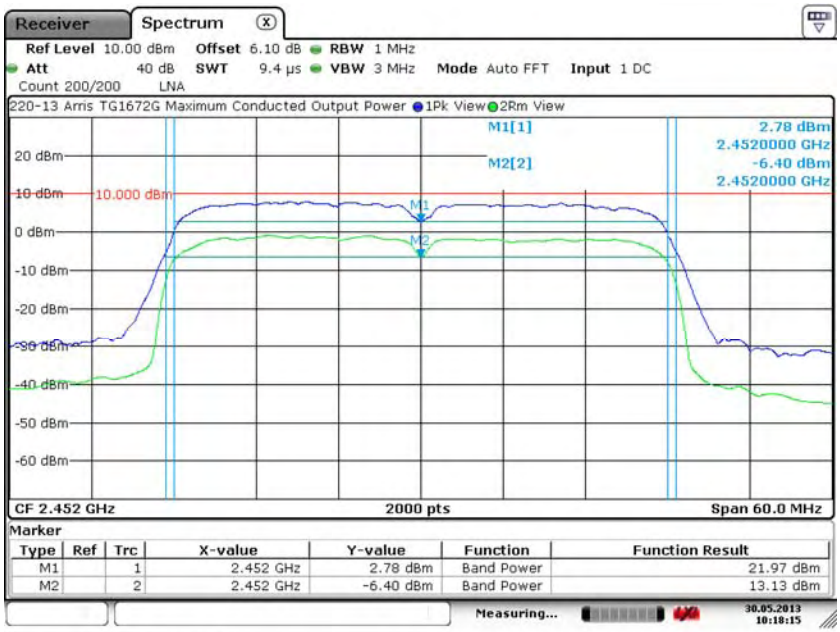
7. Measurement Data

7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.33. HT40: Mid Channel – 6, J2402



7.4.34. HT40: High Channel – 9, J2400



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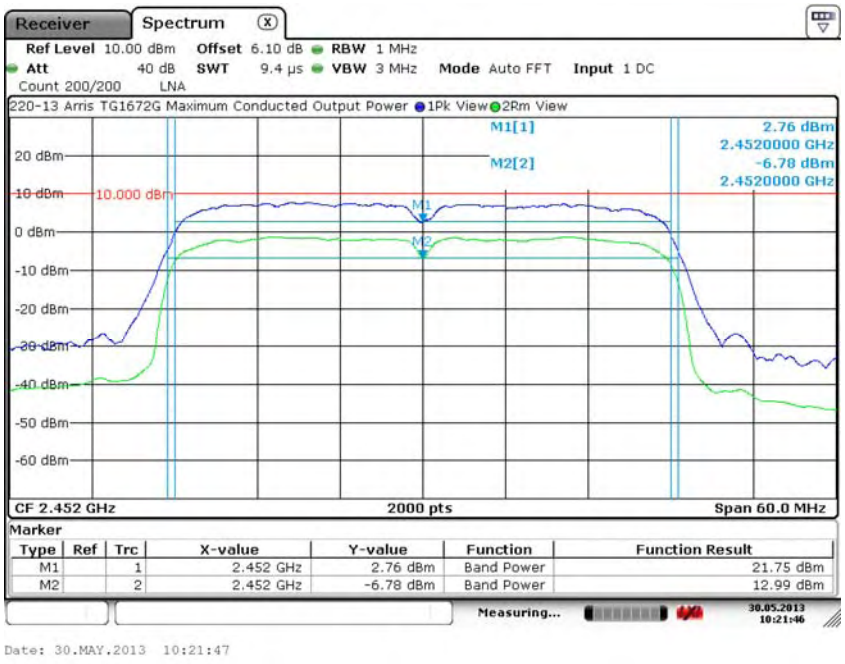
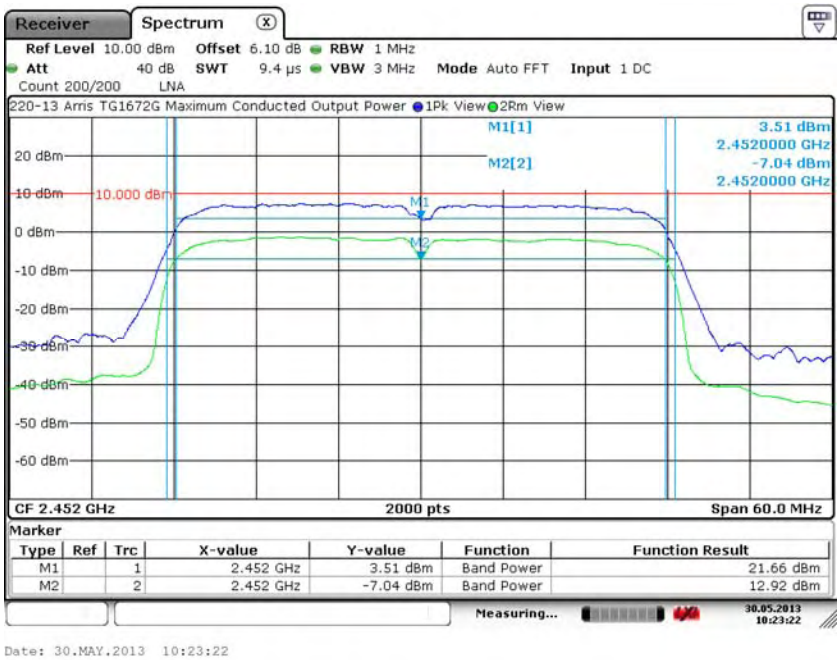
7. Measurement Data

7.4. Maximum Peak (Average) Conducted Output Power (continued)

7.4.35. HT40: High Channel – 9, J2401



7.4.36. HT40: High Channel – 9, J2402



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7. Measurement Data (continued)

7.4. Maximum Peak (Average) Conducted Output Power

7.4.14 Measurement Results for 5725 to 5850 MHz Band

802.11a Mode / Channel	Frequency	Maximum Conducted Output Power			Total Max Conducted Output Power	Limit	Result
		J5000	J5001	J5002			
	(MHz)	(dBm)			(dBm)	(dBm)	
Low	5745	14.94	15.04	14.75	19.68	30.00	Compliant
Middle	5785	14.48	14.98	14.48	19.42	30.00	Compliant
High	5825	14.19	13.95	13.82	18.76	30.00	Compliant

HT20 Mode / Channel	Frequency	Maximum Conducted Output Power			Total Max Conducted Output Power	Limit	Result
		J5000	J5001	J5002			
	(MHz)	(dBm)			(dBm)	(dBm)	
Low	5745	14.61	15.02	15.31	19.76	30.00	Compliant
Middle	5785	14.33	15.08	14.57	19.44	30.00	Compliant
High	5825	14.46	14.15	13.92	18.95	30.00	Compliant

HT40 Mode / Channel	Frequency	Maximum Conducted Output Power			Total Max Conducted Output Power	Limit	Result
		J5000	J5001	J5002			
	(MHz)	(dBm)			(dBm)	(dBm)	
Low	5755	14.38	15.18	14.75	19.55	30.00	Compliant
High	5795	14.43	15.00	14.31	19.36	30.00	Compliant

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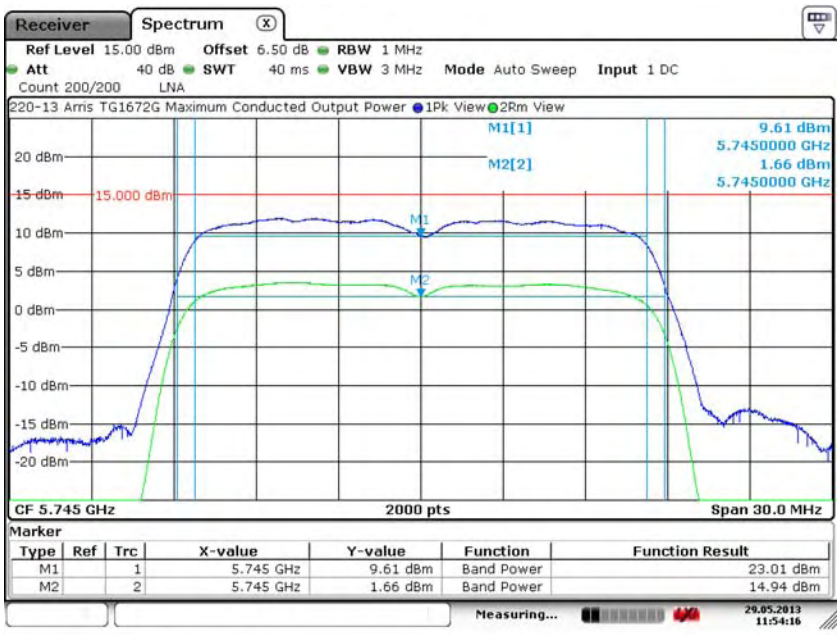
7. Measurement Data (continued)

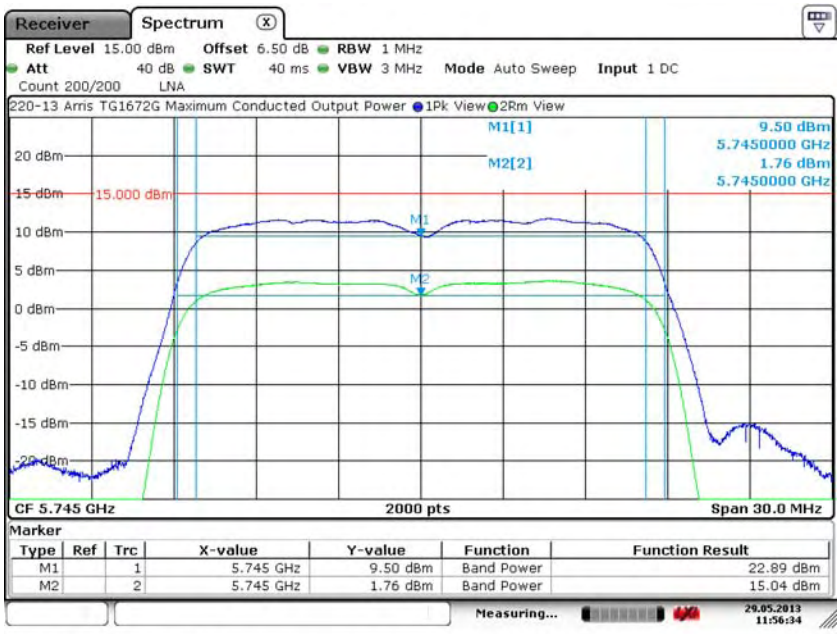
7.4. Maximum Peak (Average) Conducted Output Power (15.247 (b) (1)) (continued)

7.4.37. 802.11a: Low Channel – 149, J5000



Date: 29.MAY.2013 11:54:17

7.4.38. 802.11a: Low Channel – 149, J5001



Date: 29.MAY.2013 11:56:34

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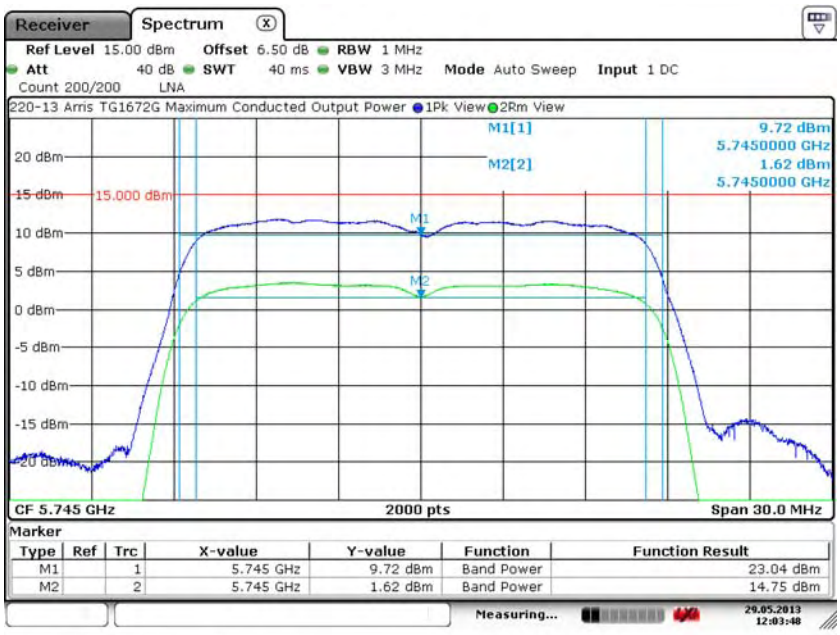
7. Measurement Data (continued)

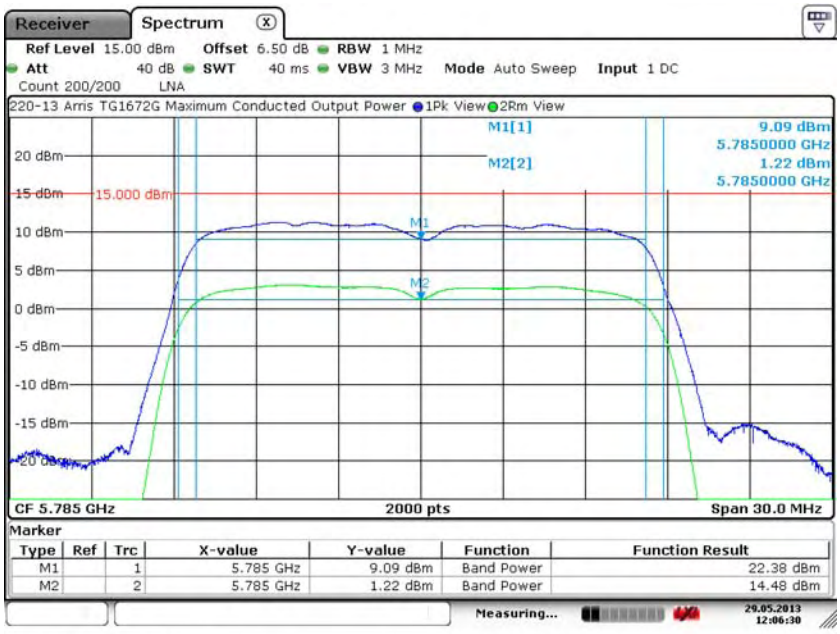
7.4. Maximum Peak (Average) Conducted Output Power (15.247 (b) (1)) (continued)

7.4.39. 802.11a: Low Channel – 149, J5002



Date: 29.MAY.2013 12:03:48

7.4.40. 802.11a: Middle Channel – 157, J5000



Date: 29.MAY.2013 12:06:31

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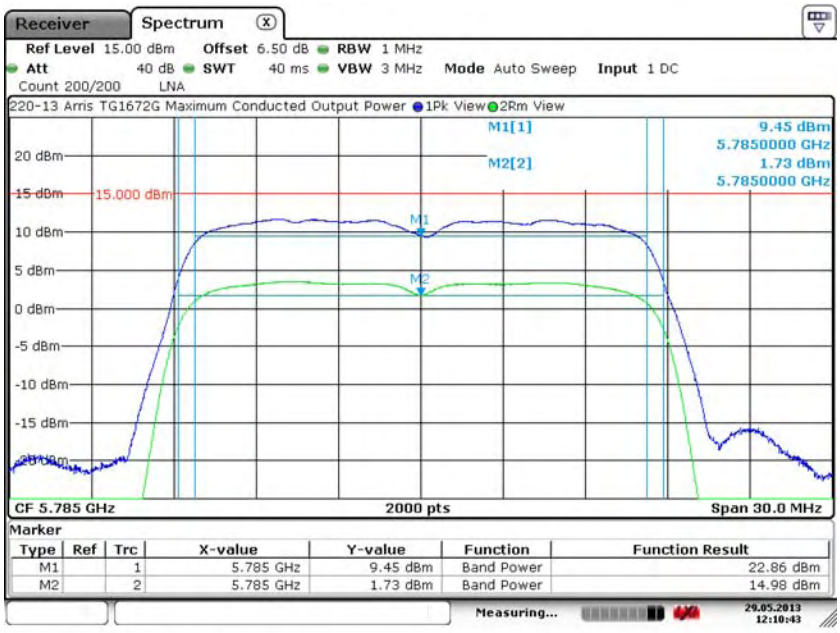
7. Measurement Data (continued)

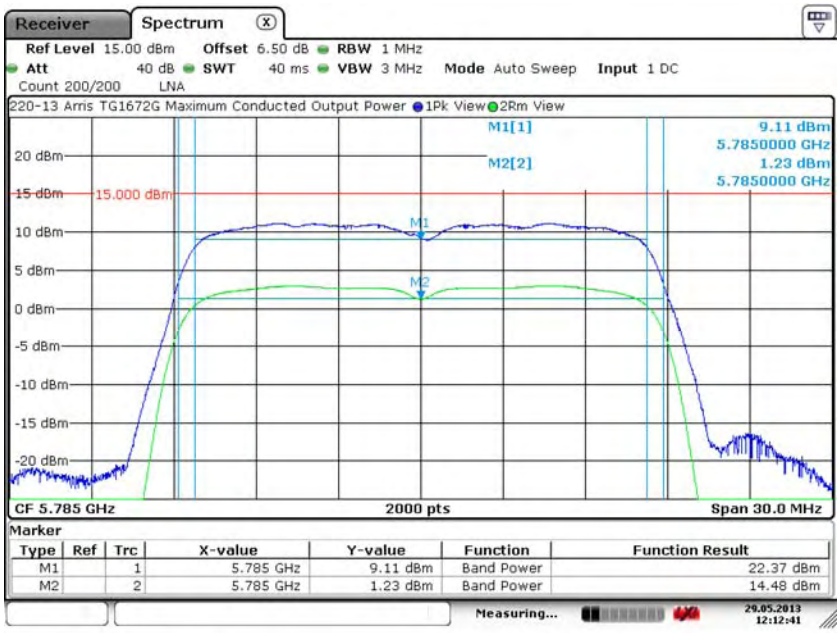
7.4. Maximum Peak (Average) Conducted Output Power (15.247 (b) (1))

7.4.41. 802.11a: Middle Channel – 157, J5001



Date: 29.MAY.2013 12:10:42

7.4.42. 802.11a: Middle Channel – 157, J5002



Date: 29.MAY.2013 12:12:42

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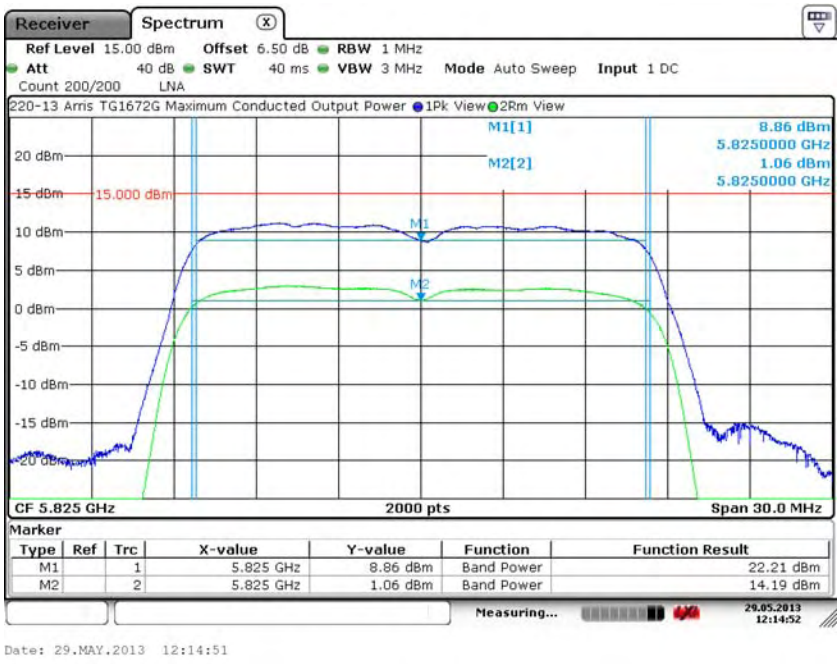
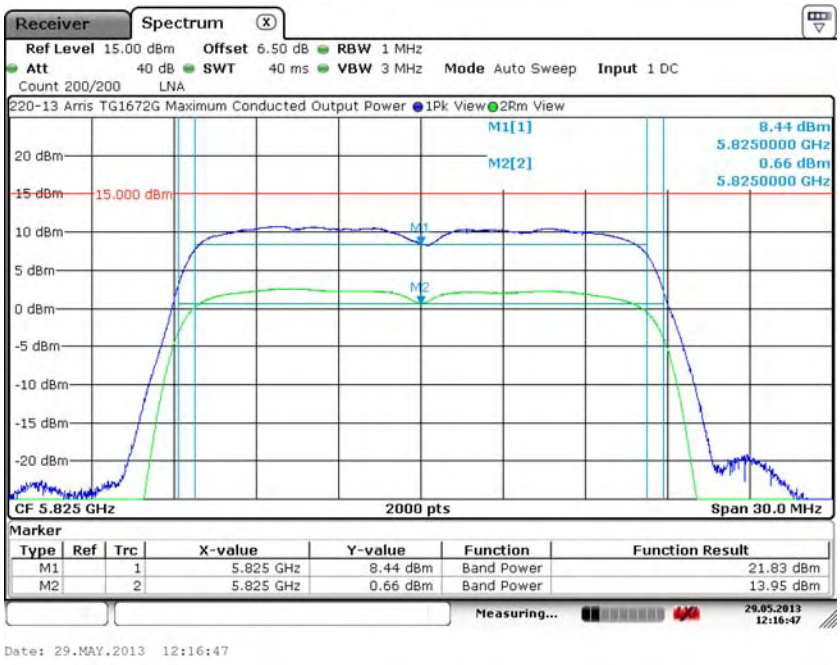
7. Measurement Data (continued)

7.4. Maximum Peak (Average) Conducted Output Power (15.247 (b) (1))

7.4.43. 802.11a: High Channel – 165, J5000



7.4.44. 802.11a: High Channel – 165, J5001



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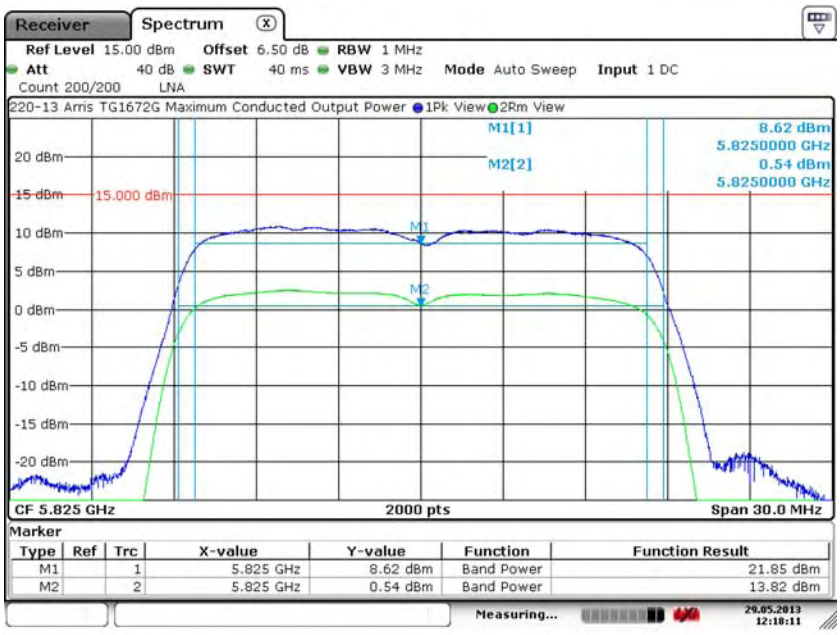
7. Measurement Data (continued)

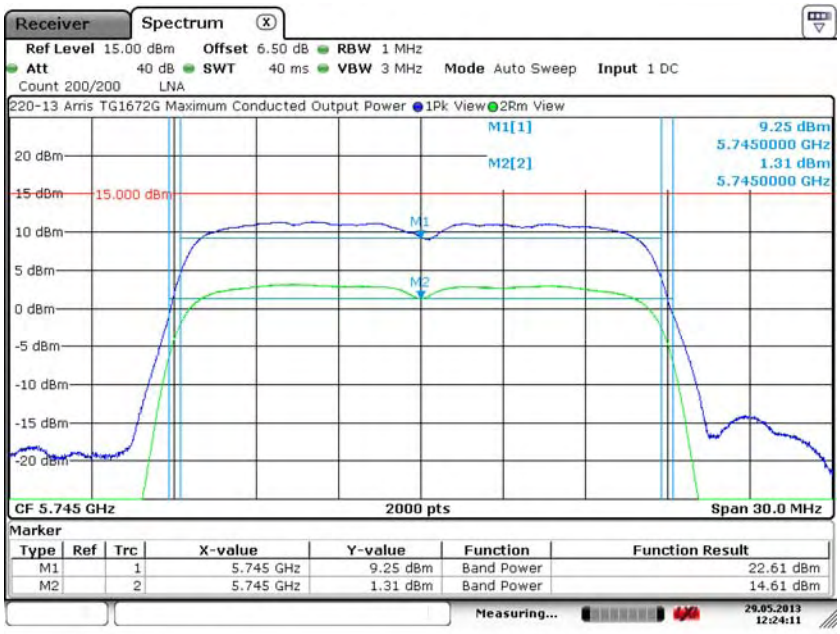
7.4. Maximum Peak (Average) Conducted Output Power (15.247 (b) (1)) (continued)

7.4.45. 802.11a: High Channel – 165, J5002



Date: 29.MAY.2013 12:18:11

7.4.46. HT20: Low Channel – 149, J5000



Date: 29.MAY.2013 12:24:12

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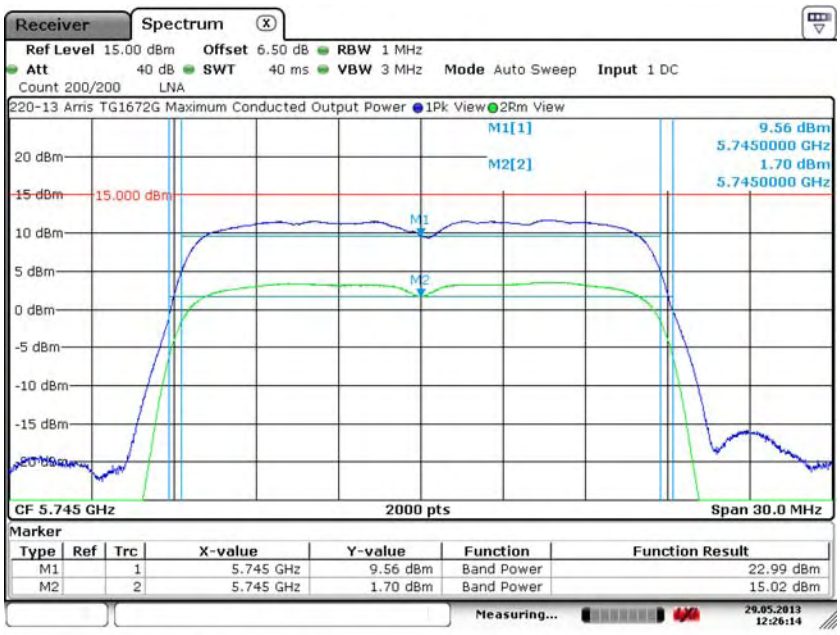
7. Measurement Data (continued)

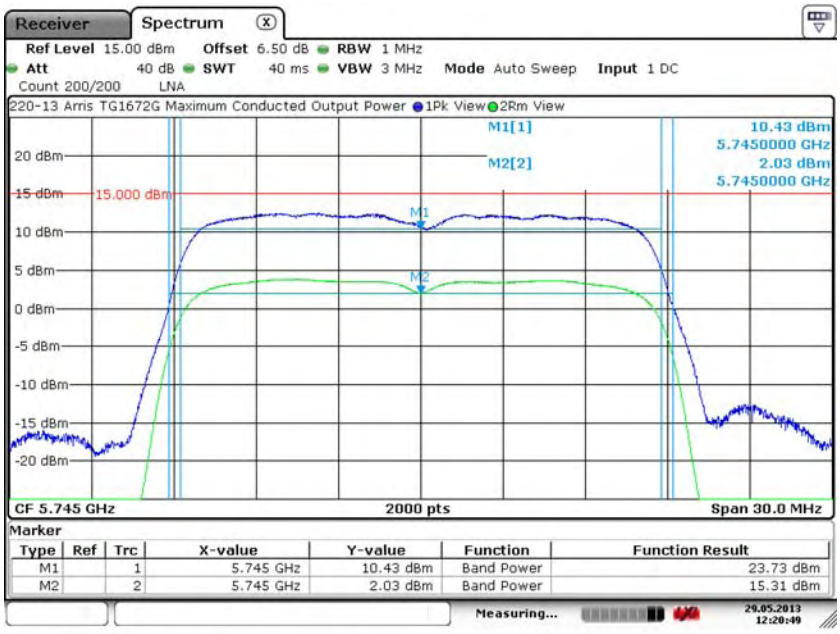
7.4. Maximum Peak (Average) Conducted Output Power (15.247 (b) (1)) (continued)

7.4.47. HT20: Low Channel – 149, J5001



Date: 29.MAY.2013 12:26:15

7.4.48. HT20: Low Channel – 149, J5002



Date: 29.MAY.2013 12:20:49

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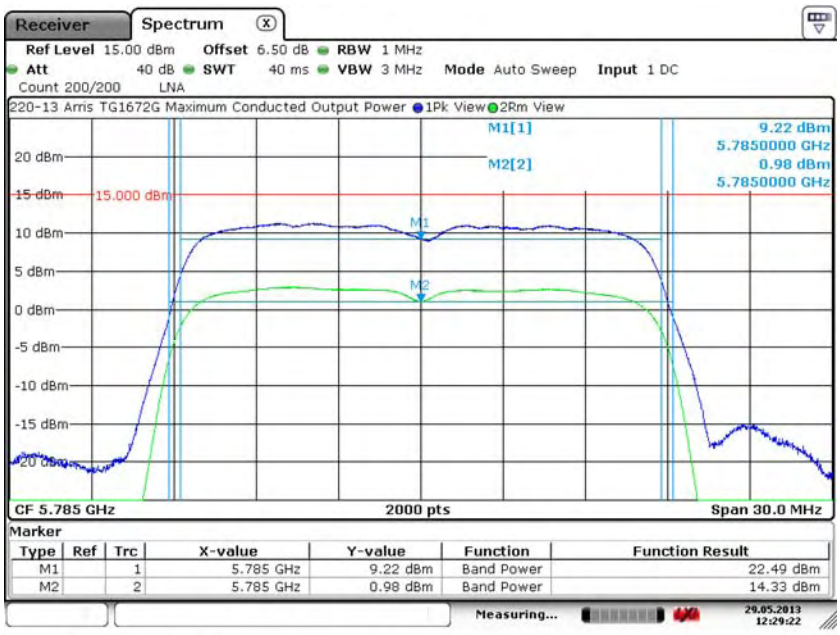
7. Measurement Data (continued)

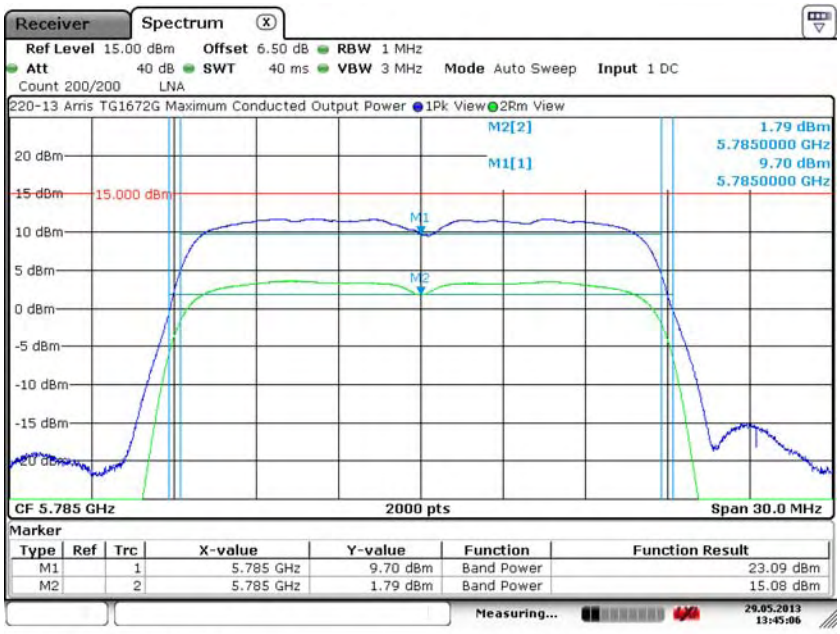
7.4. Maximum Peak (Average) Conducted Output Power (15.247 (b) (1)) (continued)

7.4.49. HT20: Middle Channel – 157, J5000



Date: 29.MAY.2013 12:29:22

7.4.50. HT20: Middle Channel – 157, J5001



Date: 29.MAY.2013 13:45:07

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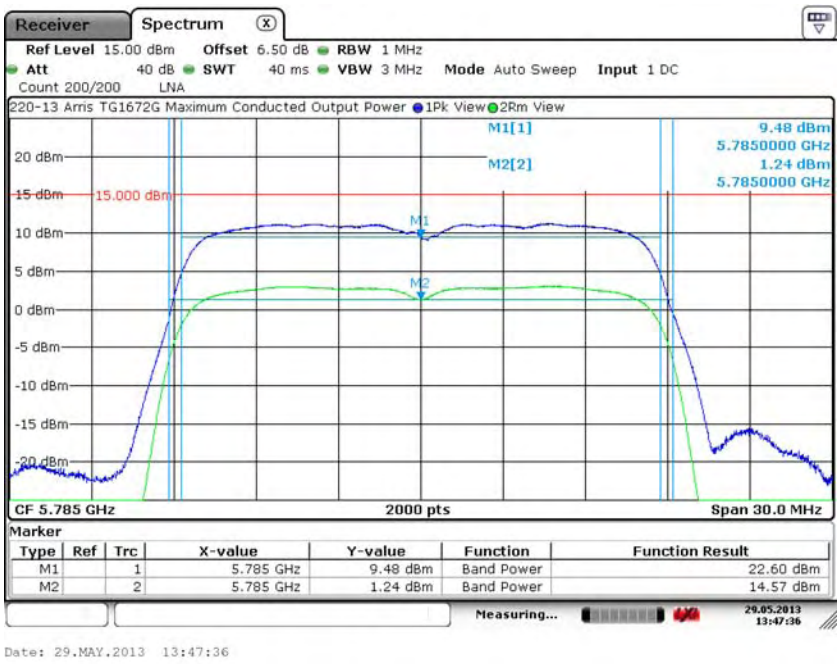
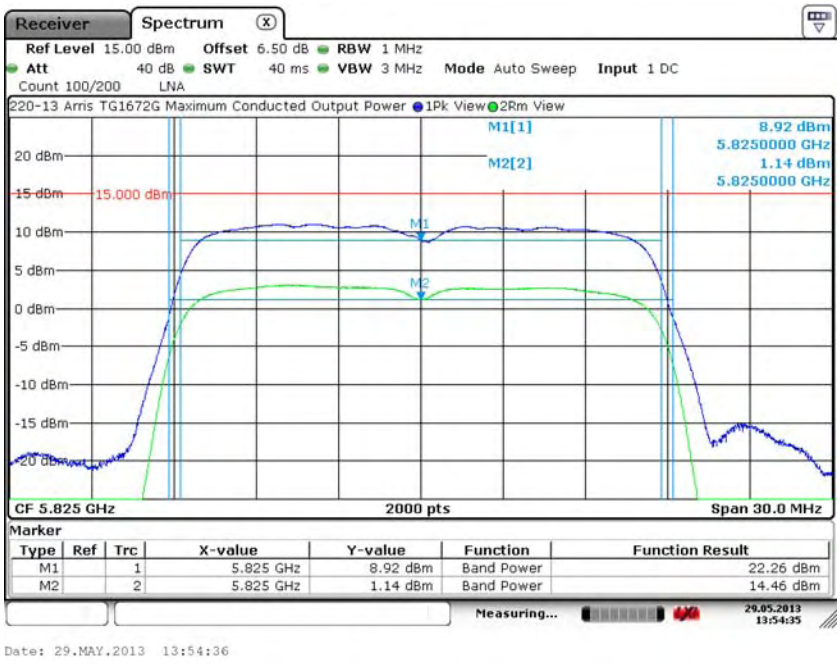
7. Measurement Data (continued)

7.4. Maximum Peak (Average) Conducted Output Power (15.247 (b) (1)) (continued)

7.4.51. HT20: Middle Channel – 157, J5002



7.4.52. HT20: High Channel – 165, J5000



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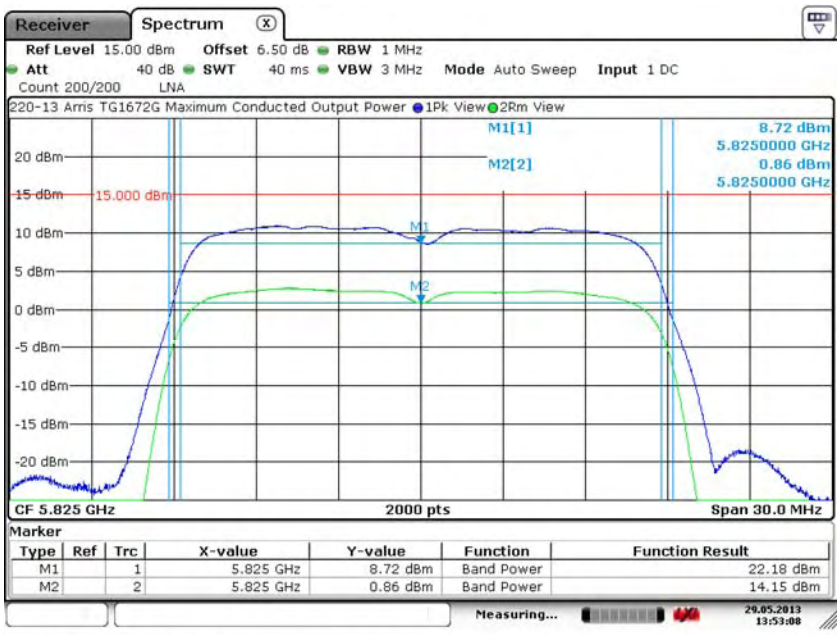
7. Measurement Data (continued)

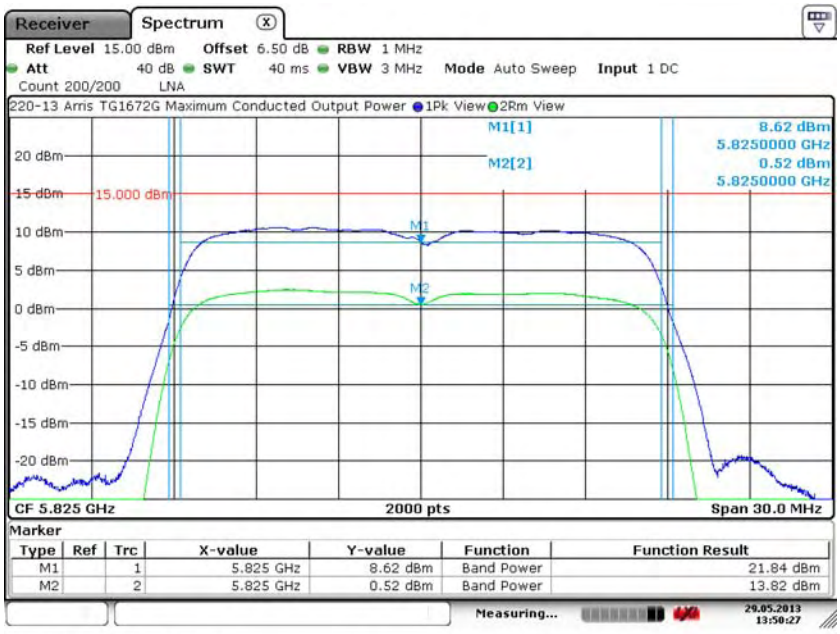
7.4. Maximum Peak (Average) Conducted Output Power (15.247 (b) (1)) (continued)

7.4.53. HT20: High Channel – 165, J5001



Date: 29.MAY.2013 13:53:09

7.4.54. HT20: High Channel – 165, J5002



Date: 29.MAY.2013 13:50:27

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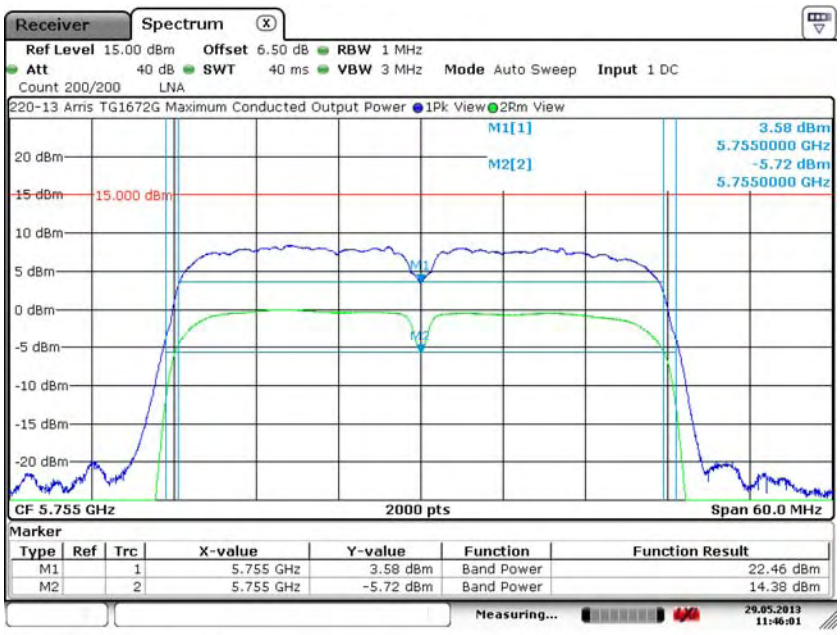
7. Measurement Data (continued)

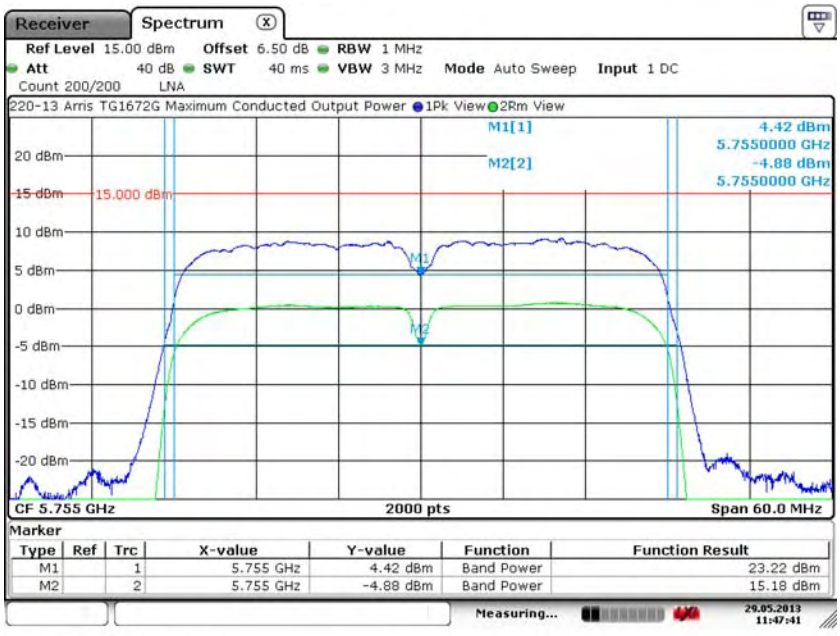
7.4. Maximum Peak (Average) Conducted Output Power (15.247 (b) (1)) (continued)

7.4.55. HT40: Low Channel – 151, J5000



Date: 29.MAY.2013 11:46:01

7.4.56. HT40: Low Channel – 151, J5001



Date: 29.MAY.2013 11:47:41

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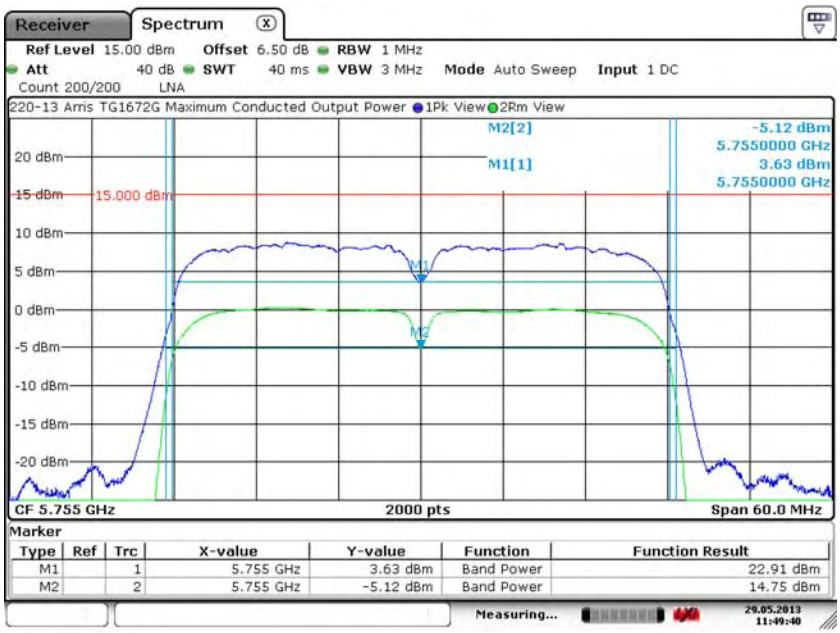
7. Measurement Data (continued)

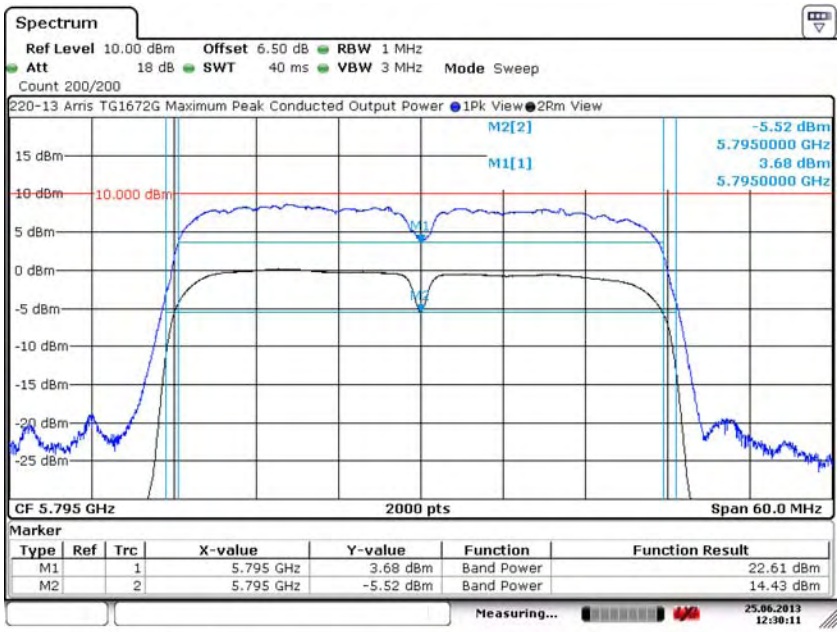
7.4. Maximum Peak (Average) Conducted Output Power (15.247 (b) (1)) (continued)

7.4.57. HT40: Low Channel – 151, J5002



Date: 29.MAY.2013 11:49:41

7.4.58. HT40: High Channel – 159, J5000



Date: 25.JUN.2013 12:30:11

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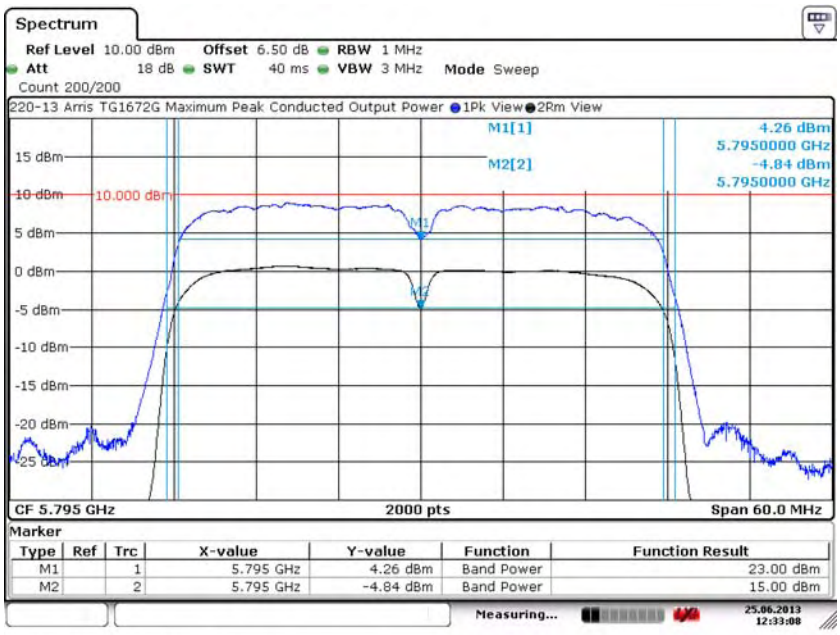
7. Measurement Data (continued)

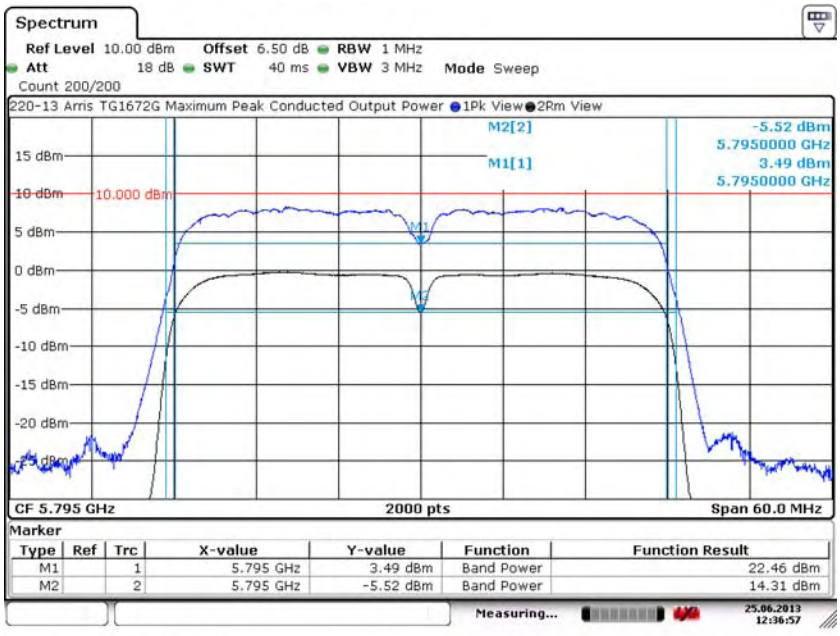
7.4. Maximum Peak (Average) Conducted Output Power (15.247 (b) (1)) (continued)

7.4.59. HT40: High Channel – 159, J5001



Date: 25.JUN.2013 12:33:08

7.4.60. HT40: High Channel – 159, J5002



Date: 25.JUN.2013 12:36:57

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7. Measurement Data (continued)

7.5. Operation with directional antenna gains greater than 6 dBi (15.247 (b)(4))

Requirement: If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of FCC Part 15.247, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Systems operating in the 2400 – 2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum peak output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

Systems operating in the 5725 – 5850 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter peak output power.

Procedure: FCC KDB 557074 Section 4.0 provides the formulas for calculating the reduction of power.

Pout = 30 – Floor | (Gtx – 6 / 3)|

DUT Status: The DUT utilizes antennas with a 3 dBi gain and therefore is exempt from this requirement.

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7. Measurement Data (continued)

7.6. Transmitter Spurious Radiated Emissions (150 kHz to 40 GHz)

Requirement: (15.209) The Emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency Range (MHz)	Distance (Meters)	Limit (dBµV/m)[1]
0.009 to 0.490	3	128.5 to 93.8
0.490 to 1.705	3	73.8 to 63.0
1.705 to 30	3	69.5
30 to 88	3	40.0
88 to 216	3	43.5
216 to 960	3	46.0
>960	3	54.0

[1] Measurements in the 9 to 90 kHz, 110 to 490 kHz and above 1000 MHz ranges employ an average detector. Otherwise a quasi-peak detector is used.

Procedure: This test was performed in accordance with the procedure detailed in FCC OET publication number 558074, Section 12.0: Emissions in restricted frequency bands and FCC 47CFRPart 15.209: Radiated Emission Limits; General Requirements.

The test methods used to generate the data in this test report is in accordance with ANSI C63.10:2009, American National Standard for Testing Unlicensed Wireless Devices.

Test Notes: Measurements were made from the lowest oscillator frequency stated by the manufacturer (150 kHz) to the 10th harmonic of the highest transmitter frequency or 40 MHz.

Each of the test modes documented within the test report were evaluated and the worst case of each of the test modes is documented on the following pages.

Conclusion: The Emissions from the DUT did not exceed the field strength levels specified in the above table.

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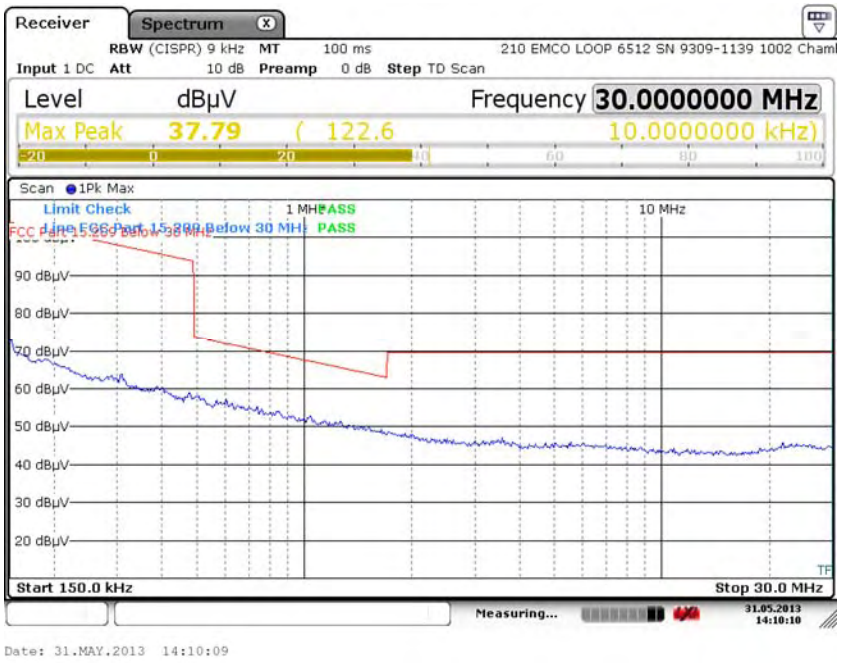
7. Measurement Data (continued)

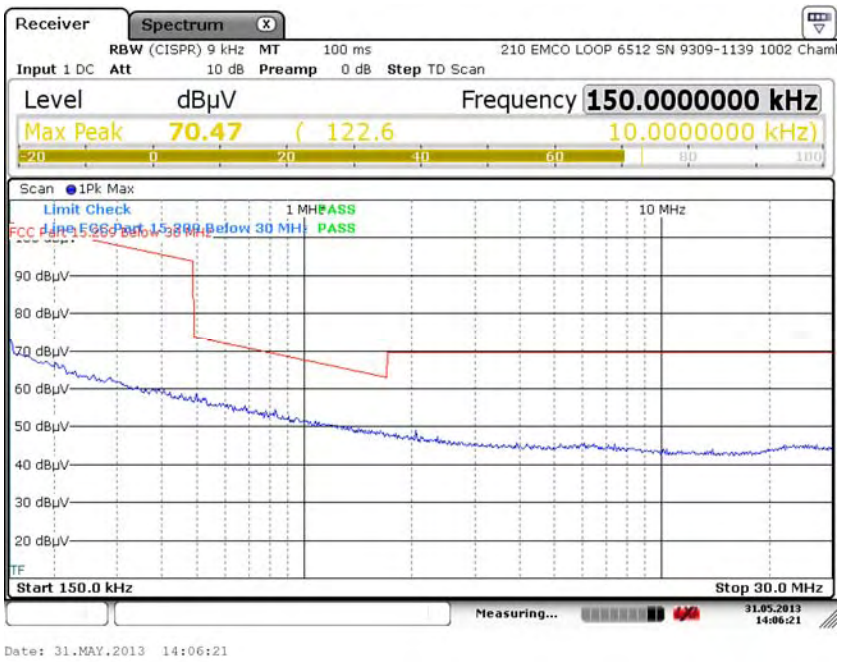
7.6. Transmitter Spurious Radiated Emissions (150 kHz to 40 GHz)

7.6.1. Spurious Radiated Emissions (150 kHz – 30 MHz) Test Results

7.6.1.1. Measurement Results – Parallel Antenna



7.6.1.2. Measurement Results – Perpendicular Antenna



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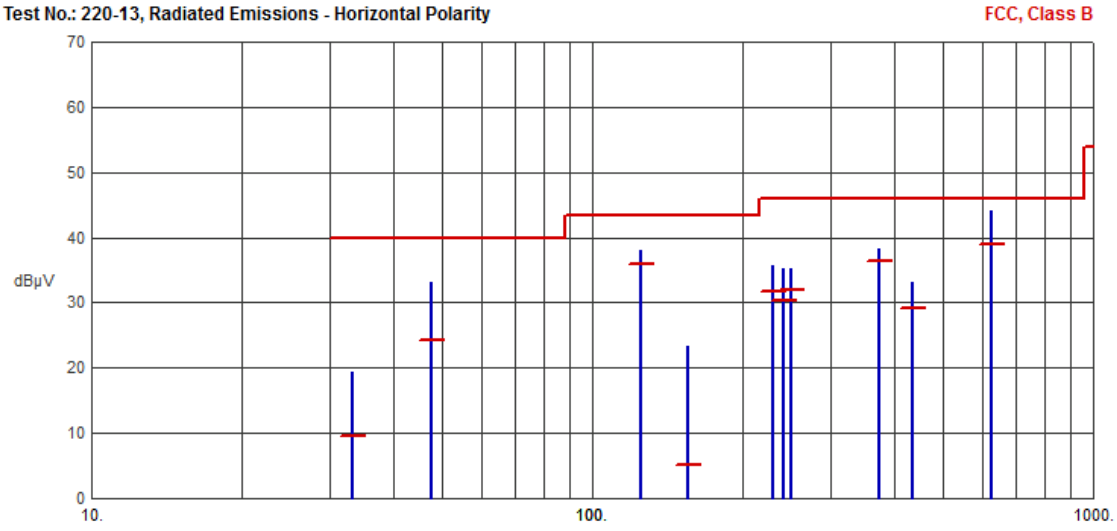
7. Measurement Data (continued)

7.6. Transmitter Spurious Radiated Emissions (150 kHz to 40 GHz)

7.6.2. Spurious Radiated Emissions (30 MHz – 1 GHz) Test Results

7.6.2.1. Horizontal Polarity



Frequency (MHz)	Pk Amp (dBµV/m)	QP Amp (dBµV/m)	QP Limit (dBµV/m)	Margin (dB)	Ant Ht (cm)	Table (Deg)	Comments
33.1576	19.44	9.63	40.00	-30.37	N/A	N/A	
47.8175	33.04	24.31	40.00	-15.69	N/A	N/A	
125.0000	38.08	35.96	43.50	-7.54	N/A	N/A	
155.1993	23.41	5.24	43.50	-38.26	N/A	N/A	
229.3123	35.81	31.72	46.00	-14.28	N/A	N/A	
241.0429	35.22	30.26	46.00	-15.74	N/A	N/A	
249.9841	35.34	31.93	46.00	-14.07	N/A	N/A	
374.9839	38.31	36.44	46.00	-9.56	N/A	N/A	
435.3480	33.02	29.16	46.00	-16.84	N/A	N/A	
624.9920	44.08	38.93	46.00	-7.07	N/A	N/A	

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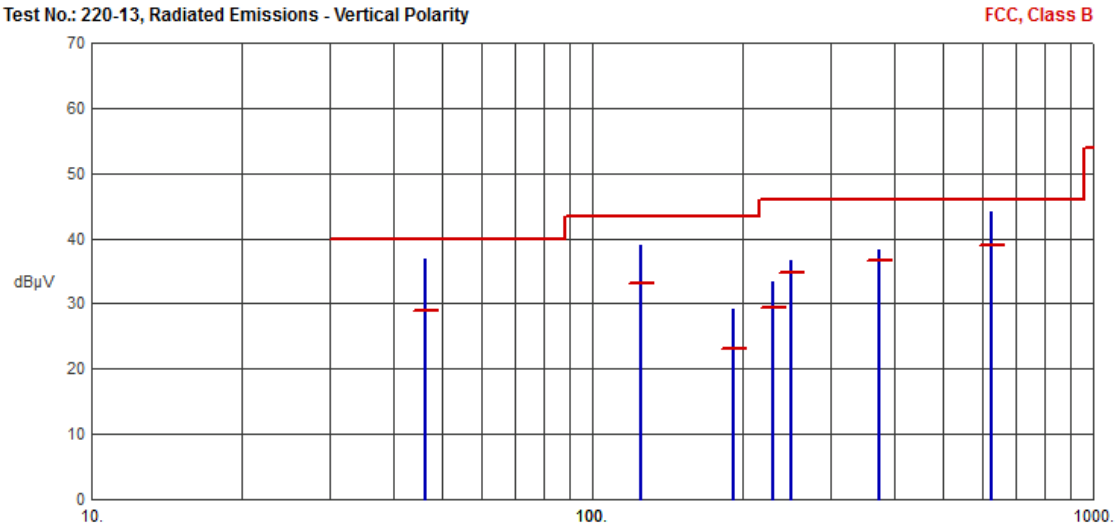
7. Measurement Data (continued)

7.6. Transmitter Spurious Radiated Emissions (150 kHz to 40 GHz)

7.6.2. Spurious Radiated Emissions (30 MHz – 1 GHz) Test Results

7.6.2.2. Vertical Polarity



Frequency (MHz)	Pk Amp (dBµV/m)	QP Amp (dBµV/m)	QP Limit (dBµV/m)	Margin (dB)	Ant Ht (cm)	Table (Deg)	Comments
46.4942	36.93	28.95	40.00	-11.05	N/A	N/A	
124.9957	38.88	33.24	43.50	-10.26	N/A	N/A	
191.7229	29.26	23.06	43.50	-20.44	N/A	N/A	
229.0711	33.38	29.42	46.00	-16.58	N/A	N/A	
249.9785	36.55	34.77	46.00	-11.23	N/A	N/A	
374.9834	38.20	36.61	46.00	-9.39	N/A	N/A	
624.9619	44.07	38.90	46.00	-7.10	N/A	N/A	

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7. Measurement Data (continued)

7.6. Transmitter Spurious Radiated Emissions (150 kHz to 40 GHz)

7.6.3. Spurious Radiated Emissions (1 GHz – 40 GHz) Test Results

Note: There were no measurable spurious emissions from 1 to 40 GHz other than the harmonics documented within the next sections of this report.

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7. Measurement Data (continued)

7.6. Transmitter Spurious Radiated Emissions (150 kHz to 40 GHz)

7.6.4. Transmitter Spurious Radiated Emissions (Harmonic Meas.) Test Results

Note: Measurement of Harmonics that fall into the restricted bands.

7.6.4.1. 2.4 GHz, 802.11b

802.11b Freq. (MHz)	Field Strength (dBµV/m)		Limit (dBµV/m)		Margin (dBµV/m)		Antenna Polarity (H/V)	Result
	Peak	Average	Peak	Average	Peak	Average		
4824	55.96	52.55	74	54	-18.04	-1.45	V	Compliant
4874	56.33	52.58	74	54	-17.67	-1.42	V	Compliant
4924	56.33	52.58	74	54	-17.67	-1.42	V	Compliant
7311	53.58	50.10	74	54	-20.42	-3.90	H	Compliant
7386	55.33	49.46	74	54	-18.67	-4.54	H	Compliant
12060	53.10	41.93	74	54	-20.90	-12.07	V	Compliant
12185	53.60	43.03	74	54	-20.40	-10.97	H	Compliant
12310	54.59	42.98	74	54	-19.41	-11.02	H	Compliant
14472	57.04	45.60	74	54	-16.96	-8.40	V	Compliant
19296	54.71	42.37	74	54	-19.29	-11.63	H	Compliant
19496	54.91	42.43	74	54	-19.09	-11.57	V	Compliant
19696	53.26	42.41	74	54	-20.74	-11.59	V	Compliant
22158	57.19	44.06	74	54	-16.81	-9.94	H	Compliant

7.6.4.2. 2.4 GHz, 802.11g

802.11b Freq. (MHz)	Field Strength (dBµV/m)		Limit (dBµV/m)		Margin (dBµV/m)		Antenna Polarity (H/V)	Result
	Peak	Average	Peak	Average	Peak	Average		
4824	54.17	42.04	74	54	-19.83	-11.96	V	Compliant
4874	56.47	43.62	74	54	-17.53	-10.38	V	Compliant
4924	54.21	41.70	74	54	-19.79	-12.30	V	Compliant
7311	54.25	42.07	74	54	-19.75	-11.93	H	Compliant
7386	50.95	38.79	74	54	-23.05	-15.21	H	Compliant
12060	53.91	43.04	74	54	-20.09	-10.96	H	Compliant
12185	53.70	42.92	74	54	-20.30	-11.08	V	Compliant
12310	55.85	43.42	74	54	-18.15	-10.58	V	Compliant
14472	56.61	45.54	74	54	-17.39	-8.46	V	Compliant
19296	54.33	42.07	74	54	-19.67	-11.93	V	Compliant
19496	54.29	42.16	74	54	-19.71	-11.84	H	Compliant
19696	55.17	42.53	74	54	-18.83	-11.47	H	Compliant
22158	55.11	44.00	74	54	-18.89	-10.00	V	Compliant

[1] All correction factors are stored in the spectrum analyzer and applied to this column entry.

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7. Measurement Data (continued)

7.6. Transmitter Spurious Radiated Emissions (150 kHz to 40 GHz)

7.6.4. Transmitter Spurious Radiated Emissions (Harmonic Meas.) Test Results

Note: Measurement of Harmonics that fall into the restricted bands.

7.6.4.3. 2.4 GHz, HT20

802.11b Freq. (MHz)	Field Strength (dBµV/m)		Limit (dBµV/m)		Margin (dBµV/m)		Antenna Polarity (H/V)	Result
	Peak	Average	Peak	Average	Peak	Average		
4824	54.35	41.12	74	54	-19.65	-12.88	H	Compliant
4874	53.38	40.84	74	54	-20.62	-13.16	V	Compliant
4924	50.32	38.40	74	54	-23.68	-15.60	V	Compliant
7311	53.39	41.84	74	54	-20.61	-12.16	H	Compliant
7386	49.27	38.04	74	54	-24.73	-15.96	H	Compliant
12060	53.98	42.36	74	54	-20.02	-11.64	V	Compliant
12185	53.30	42.28	74	54	-20.70	-11.72	V	Compliant
12310	55.41	43.05	74	54	-18.59	-10.95	V	Compliant
14472	56.87	44.82	74	54	-17.13	-9.18	V	Compliant
19296	54.08	42.27	74	54	-19.92	-11.73	H	Compliant
19496	54.54	42.54	74	54	-19.46	-11.46	H	Compliant
19696	54.72	42.51	74	54	-19.28	-11.49	H	Compliant
22158	56.73	44.16	74	54	-17.27	-9.84	H	Compliant

7.6.4.4. 2.4 GHz, HT40

802.11b Freq. (MHz)	Field Strength (dBµV/m)		Limit (dBµV/m)		Margin (dBµV/m)		Antenna Polarity (H/V)	Result
	Peak	Average	Peak	Average	Peak	Average		
4844	50.14	41.00	74	54	-23.86	-13.00	V	Compliant
4874	51.40	40.78	74	54	-22.60	-13.22	V	Compliant
4904	50.51	39.03	74	54	-23.49	-14.97	V	Compliant
7266	49.79	41.23	74	54	-24.21	-12.77	H	Compliant
7311	51.19	41.20	74	54	-22.81	-12.80	H	Compliant
7356	49.32	37.63	74	54	-24.68	-16.37	H	Compliant
12110	54.31	42.37	74	54	-19.69	-11.63	H	Compliant
12185	53.14	42.38	74	54	-20.86	-11.62	H	Compliant
12260	54.02	42.70	74	54	-19.98	-11.30	H	Compliant
19376	52.91	42.24	74	54	-21.09	-11.76	V	Compliant
19496	54.00	41.85	74	54	-20.00	-12.15	H	Compliant
19616	52.54	41.78	74	54	-21.46	-12.22	V	Compliant
22068	56.56	44.27	74	54	-17.44	-9.73	H	Compliant

[1] All correction factors are stored in the spectrum analyzer and applied to this column entry.

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7. Measurement Data (continued)

7.6. Transmitter Spurious Radiated Emissions (150 kHz to 40 GHz)

7.6.4. Transmitter Spurious Radiated Emissions (Harmonic Meas.) Test Results

Note: Measurement of Harmonics that fall into the restricted bands.

7.6.4.5. 5 GHz, 802.11a

802.11b Freq. (MHz)	Field Strength (dBµV/m)		Limit (dBµV/m)		Margin (dBµV/m)		Antenna Polarity (H/V)	Result
	Peak	Average	Peak	Average	Peak	Average		
11490	53.14	39.85	74	54	-20.86	-14.15	H	Compliant
11570	50.26	38.46	74	54	-23.74	-15.54	H	Compliant
11650	52.20	39.79	74	54	-21.80	-14.21	H	Compliant
22980	48.46	36.07	74	54	-25.54	-17.93	H	Compliant

7.6.4.6. 5 GHz, HT20

802.11b Freq. (MHz)	Field Strength (dBµV/m)		Limit (dBµV/m)		Margin (dBµV/m)		Antenna Polarity (H/V)	Result
	Peak	Average	Peak	Average	Peak	Average		
11490	50.80	37.92	74	54	-23.20	-16.08	H	Compliant
11570	48.76	36.24	74	54	-25.24	-17.76	H	Compliant
11650	50.19	36.52	74	54	-23.81	-17.48	H	Compliant
22980	47.53	36.02	74	54	-26.47	-17.98	V	Compliant

7.6.4.7. 5 GHz, HT40

802.11b Freq. (MHz)	Field Strength (dBµV/m)		Limit (dBµV/m)		Margin (dBµV/m)		Antenna Polarity (H/V)	Result
	Peak	Average	Peak	Average	Peak	Average		
11510	49.59	36.78	74	54	-24.41	-17.22	V	Compliant
11590	49.69	37.32	74	54	-24.31	-16.68	V	Compliant
23020	46.88	35.89	74	54	-27.12	-18.11	H	Compliant

[1] All correction factors are stored in the spectrum analyzer and applied to this column entry.

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7. Measurement Data (continued)

7.7. Band Edge and Out of Band Measurements

Requirement: 15.247(d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

Procedure: For the lower band edge, this test was performed in accordance with the procedure detailed in FCC OET publication number 558074, Section 11: Emissions in non-restricted frequency bands.

For the upper band edge, this test was performed in accordance with the procedure detailed in FCC OET publication number 558074, Section 13: Band-edge measurements.

The test methods used to generate the data in this test report is in accordance with ANSI C63.10:2009, American National Standard for Testing Unlicensed Wireless Devices.

Test Note: The lowest (worst case) offset for a given operation mode was used for all out of band measurements for that mode.

Conclusion: The DUT met the 30 dB requirement at the lower band edge and the Part 15.209 requirements at the upper band edge.

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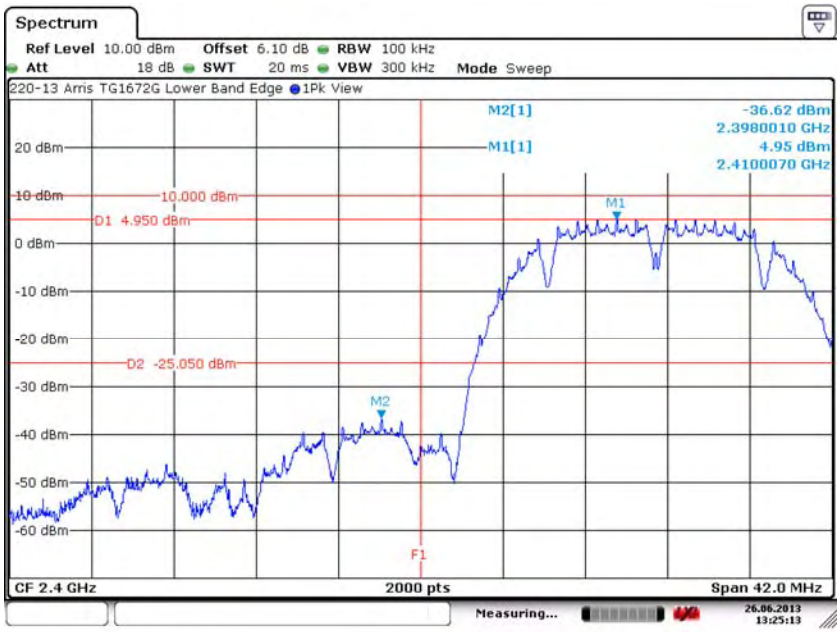
7. Measurement Data (continued)

7.7. Band Edge and Out of Band Measurements (continued)

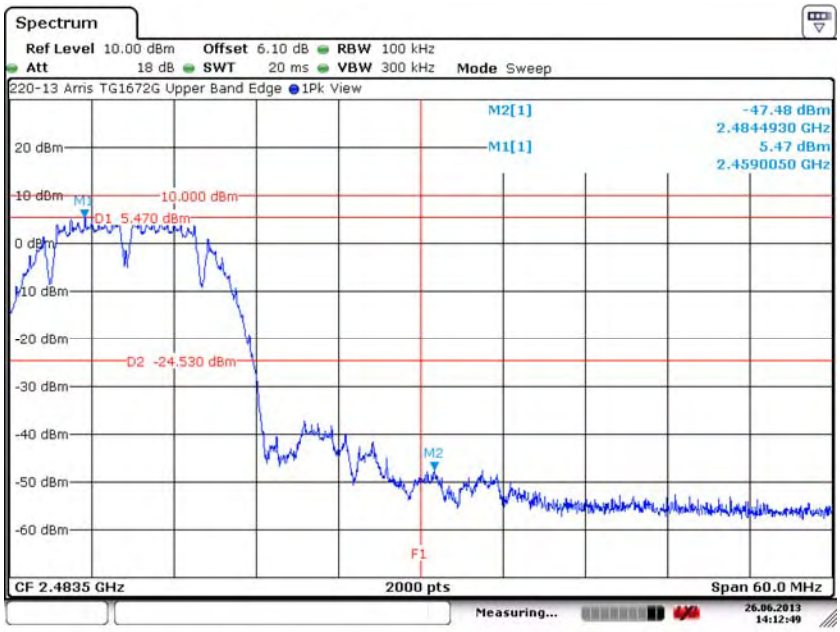
7.7.1. 2.4 GHz, 802.11b:

Lower Band Edge, Low Channel – 1, J2400



Date: 26.JUN.2013 13:25:12

Upper Band Edge, High Channel – 11, J2400



Date: 26.JUN.2013 14:12:48

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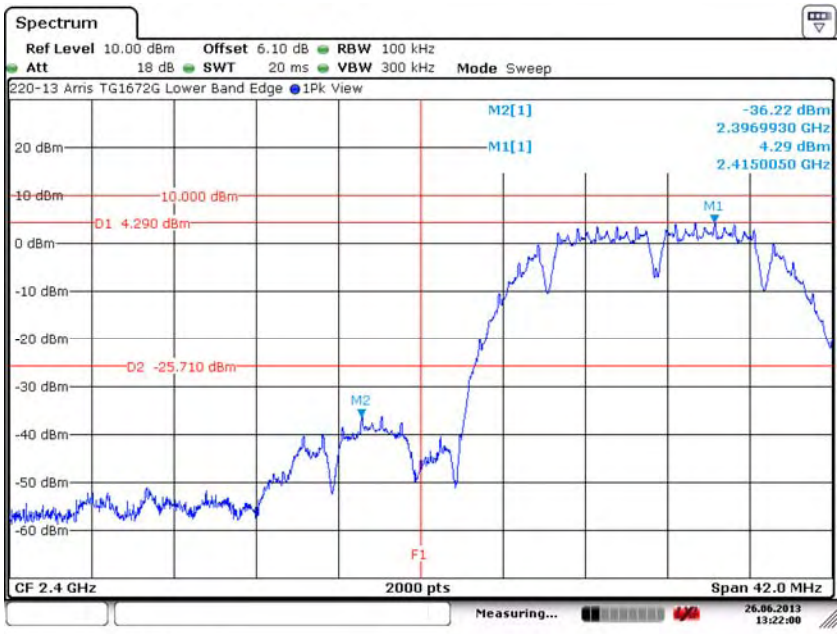
7. Measurement Data (continued)

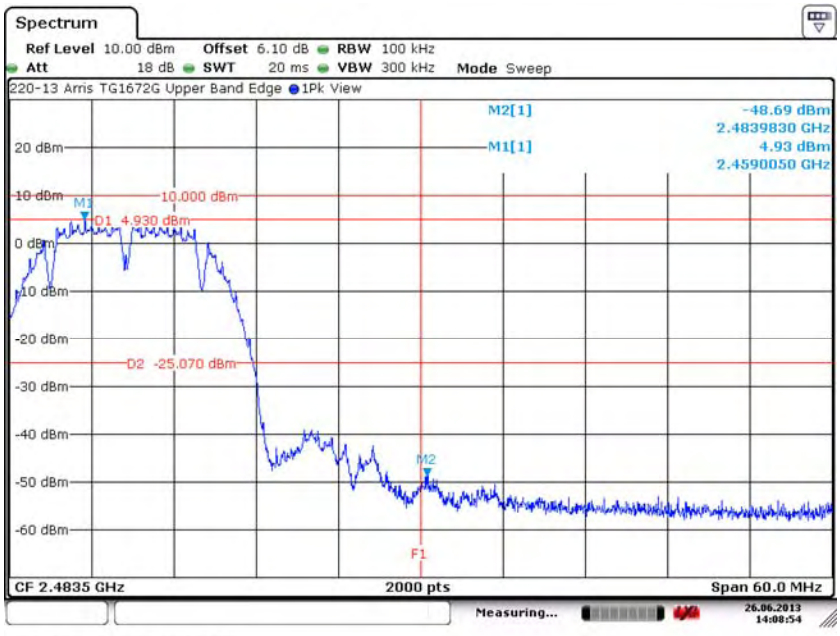
7.7. Band Edge and Out of Band Measurements (continued)

7.7.1. 2.4 GHz, 802.11b:

Lower Band Edge, Low Channel – 1, J2401



Upper Band Edge, High Channel – 11, J2401



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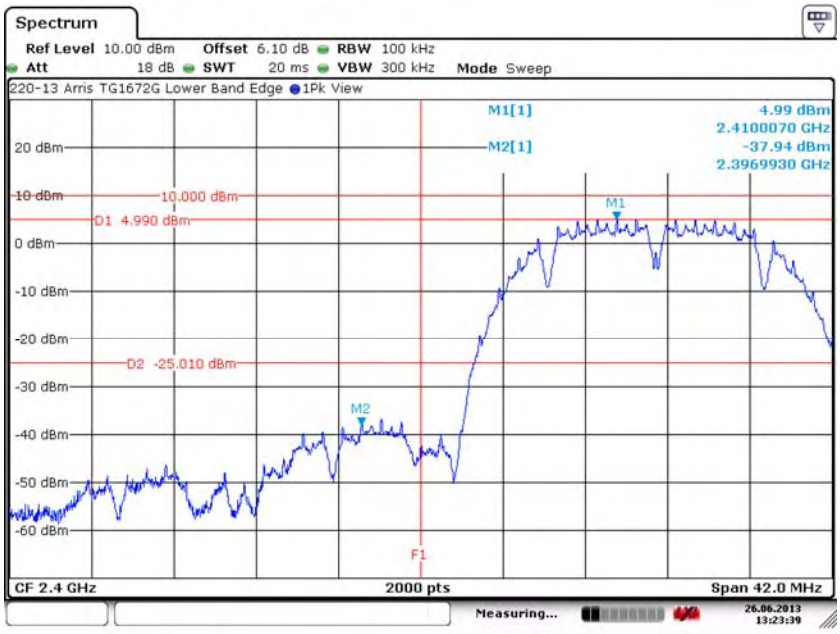
7. Measurement Data (continued)

7.7. Band Edge and Out of Band Measurements (continued)

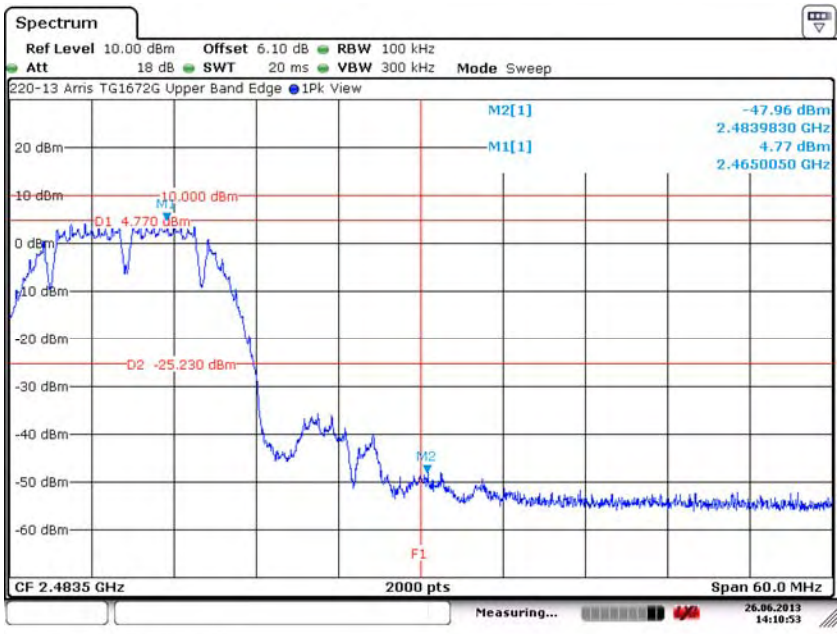
7.7.1. 2.4 GHz, 802.11b:

Lower Band Edge, Low Channel – 1, J2402



Date: 26.JUN.2013 13:23:39

Upper Band Edge, High Channel – 11, J2402



Date: 26.JUN.2013 14:10:53

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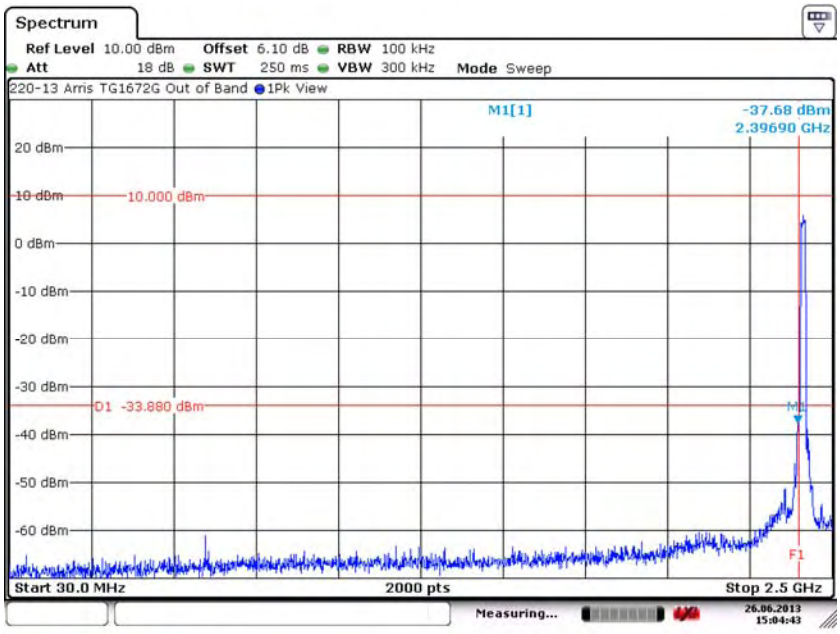
7. Measurement Data (continued)

7.7. Band Edge and Out of Band Measurements (continued)

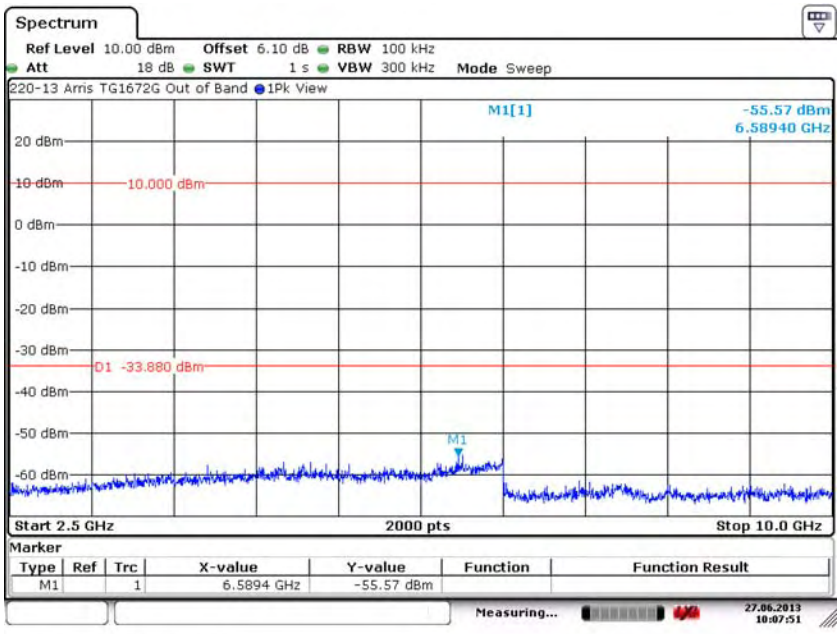
7.7.1. 2.4 GHz, 802.11b:

Out of Band, Low Channel – 1, J2400, 30 MHz to 2.5 GHz



Date: 26.JUN.2013 15:04:42

Out of Band, Low Channel – 1, J2400, 2.5 GHz to 10 GHz



Date: 27.JUN.2013 10:07:51

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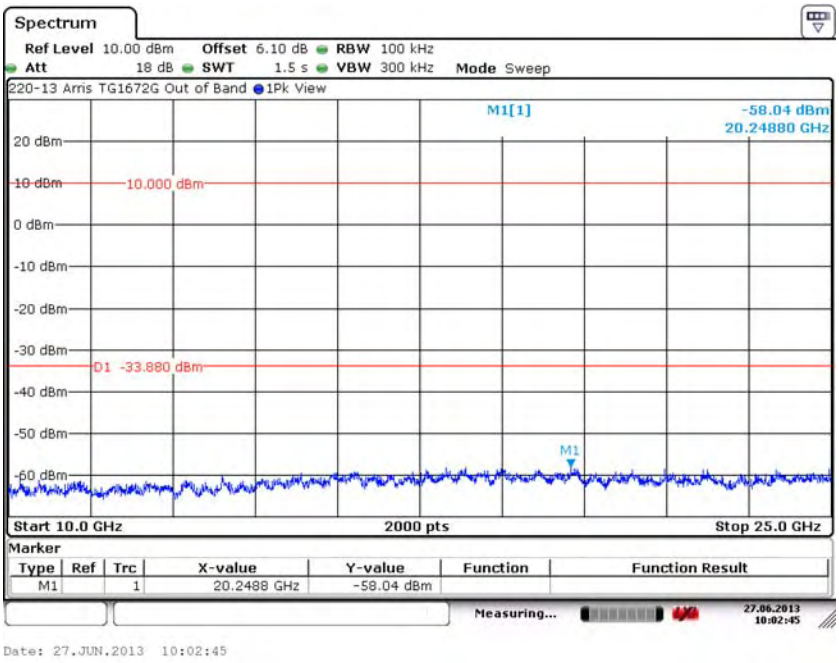
7. Measurement Data (continued)

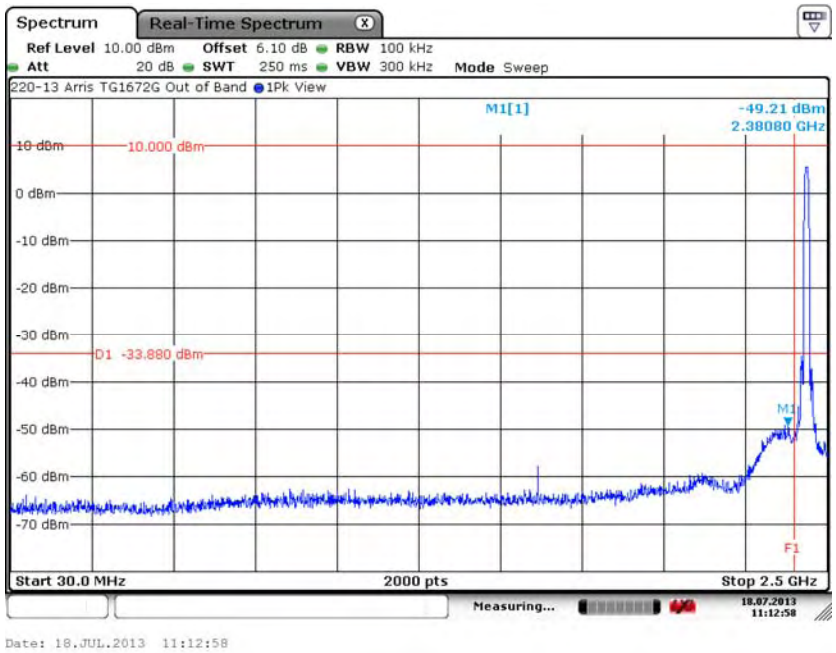
7.7. Band Edge and Out of Band Measurements (continued)

7.7.1. 2.4 GHz, 802.11b:

Out of Band, Low Channel – 1, J2400, 10 GHz to 25 GHz



Out of Band, Mid Channel – 6, J2400, 30 MHz to 2.5 GHz



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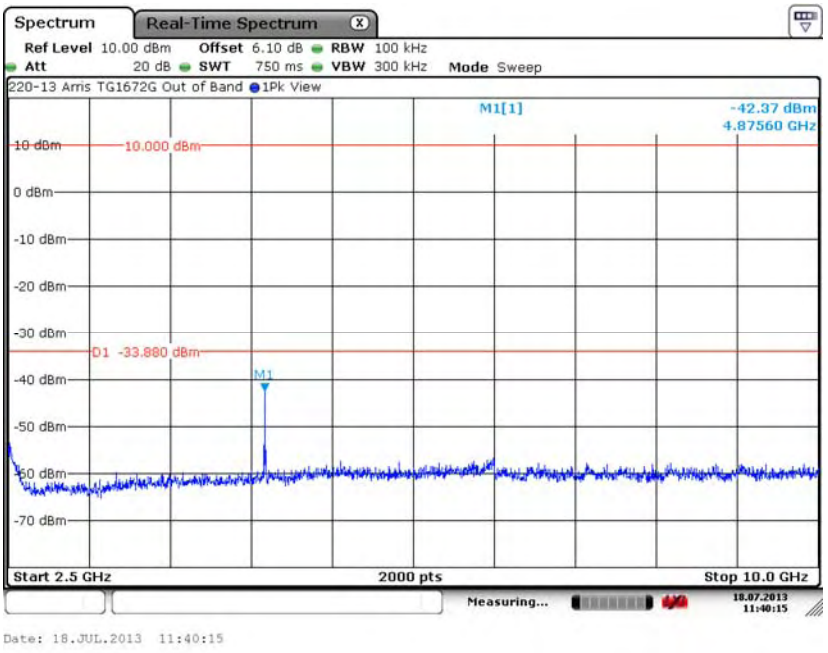
7. Measurement Data (continued)

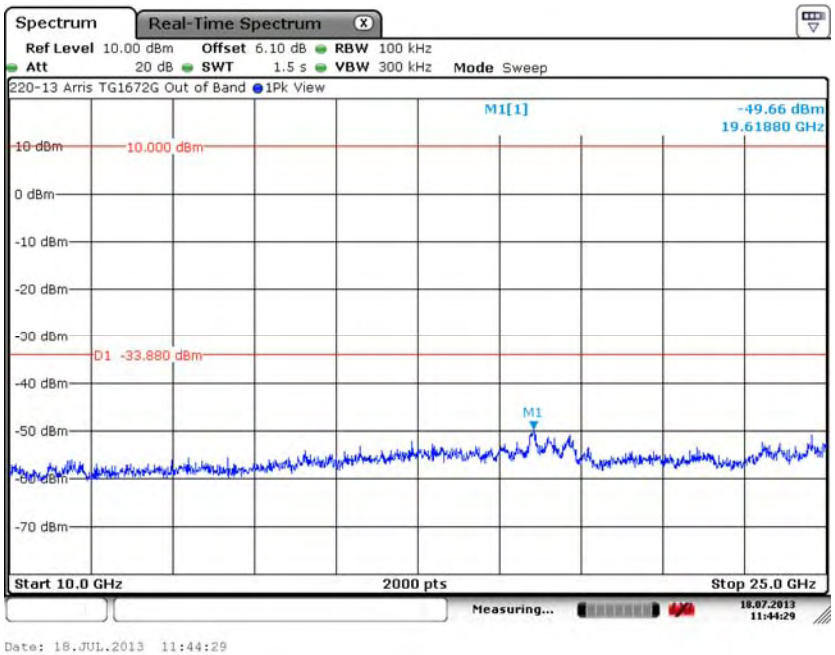
7.7. Band Edge and Out of Band Measurements (continued)

7.7.1. 2.4 GHz, 802.11b:

Out of Band, Mid Channel – 6, J2400, 2.5 GHz to 10 GHz



Out of Band, Mid Channel – 6, J2400, 10 GHz to 25 GHz



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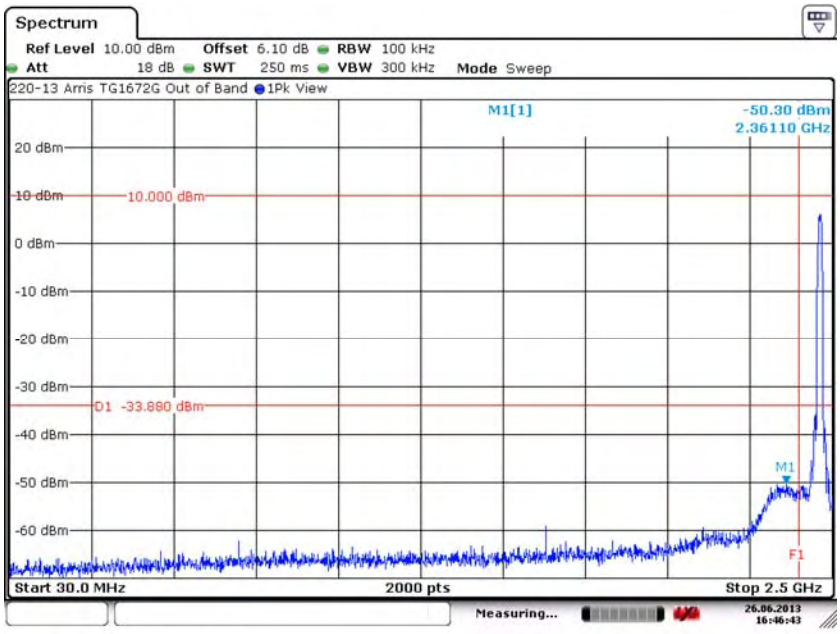
7. Measurement Data (continued)

7.7. Band Edge and Out of Band Measurements (continued)

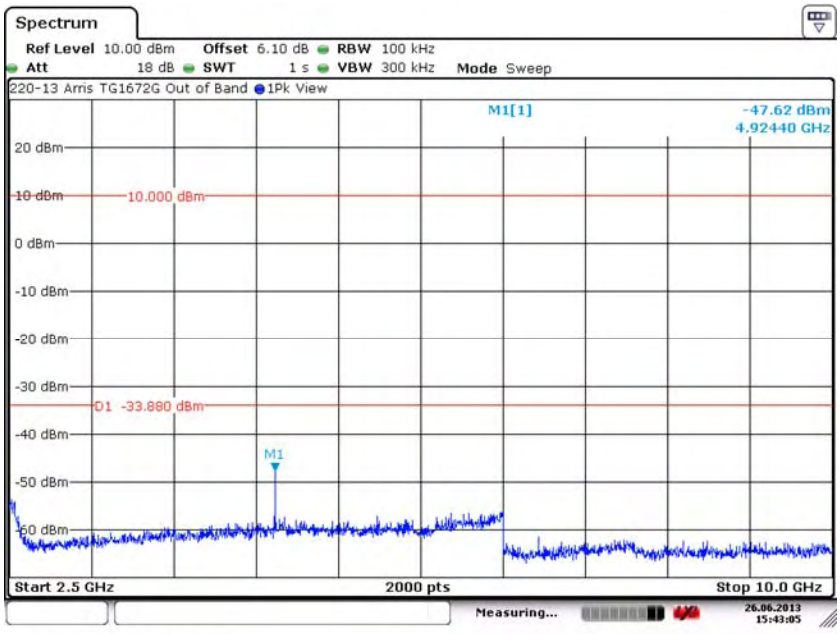
7.7.1. 2.4 GHz, 802.11b:

Out of Band, High Channel – 11, J2400, 30 MHz to 2.5 GHz



Date: 26.JUN.2013 16:46:43

Out of Band, High Channel – 11, J2400, 2.5 GHz to 10 GHz



Date: 26.JUN.2013 15:43:05

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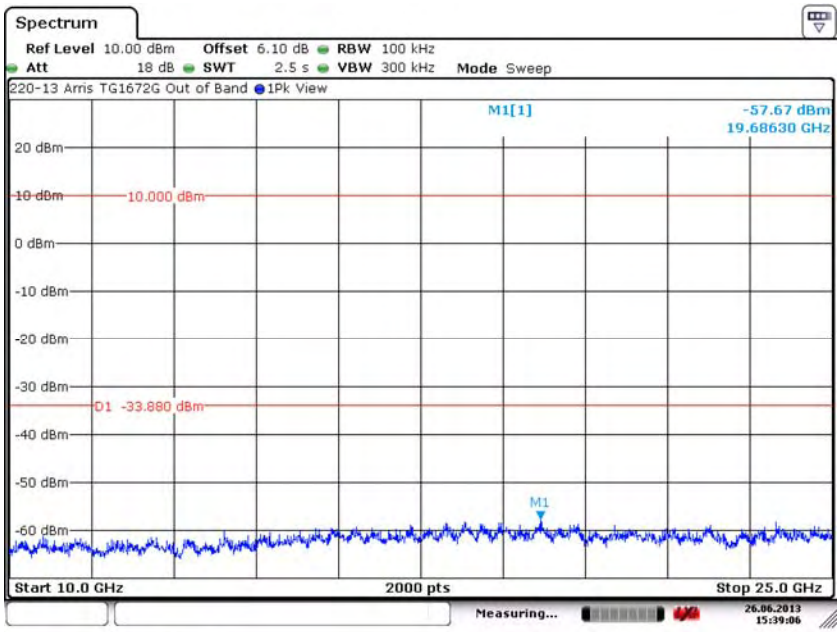
7. Measurement Data (continued)

7.7. Band Edge and Out of Band Measurements (continued)

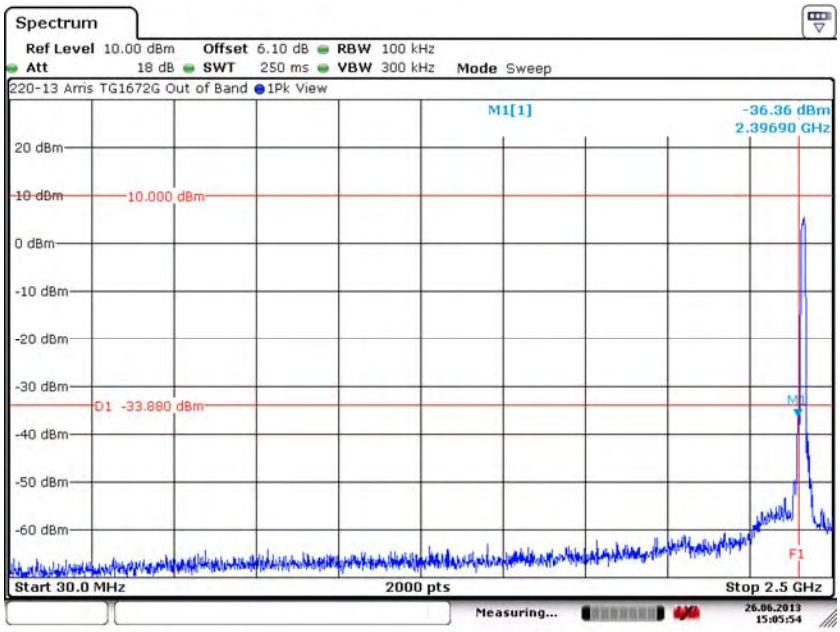
7.7.1. 2.4 GHz, 802.11b:

Out of Band, High Channel – 11, J2400, 10 GHz to 25 GHz



Date: 26.JUN.2013 15:39:05

Out of Band, Low Channel – 1, J2401, 30 MHz to 2.5 GHz



Date: 26.JUN.2013 15:05:54

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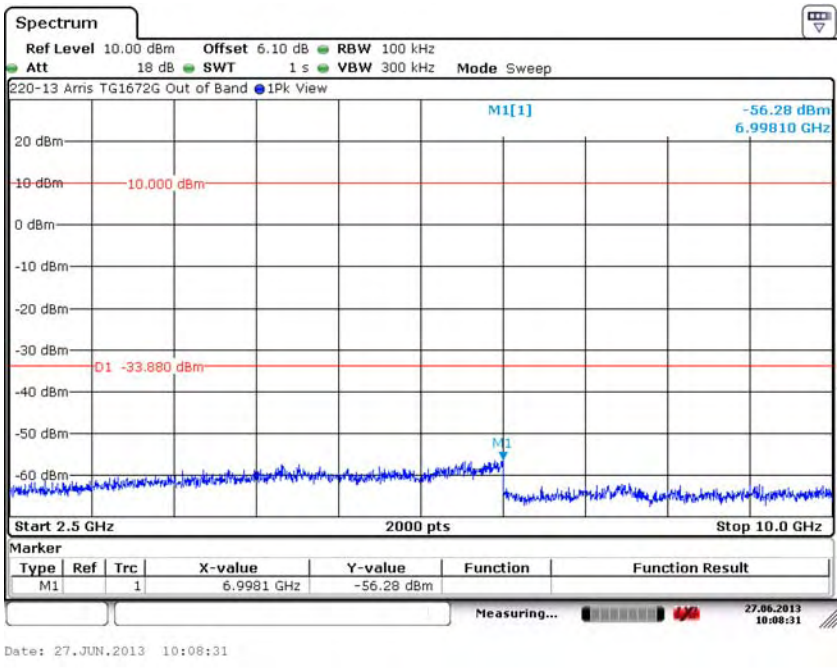
7. Measurement Data (continued)

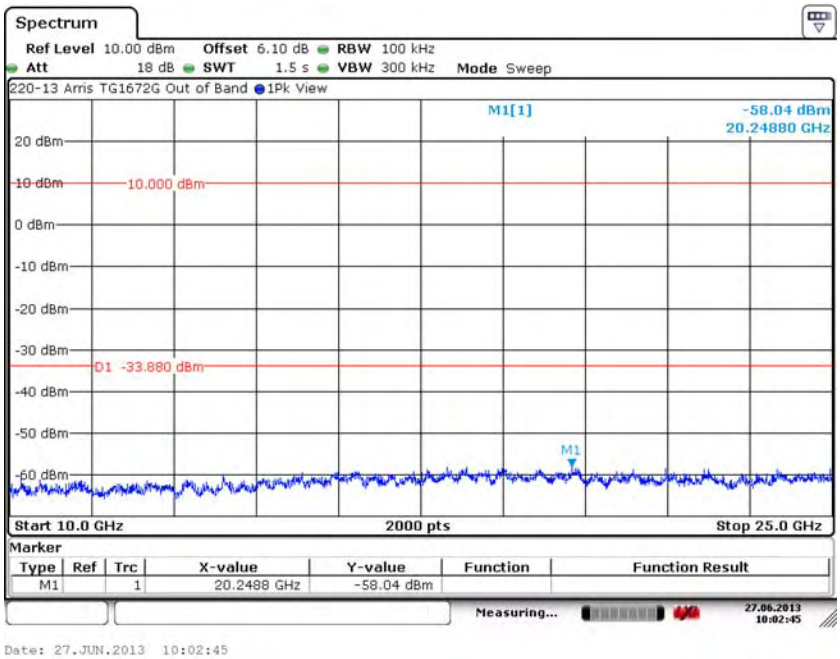
7.7. Band Edge and Out of Band Measurements (continued)

7.7.1. 2.4 GHz, 802.11b:

Out of Band, Low Channel – 1, J2401, 2.5 GHz to 10 GHz



Out of Band, Low Channel – 1, J2401, 10 GHz to 25 GHz



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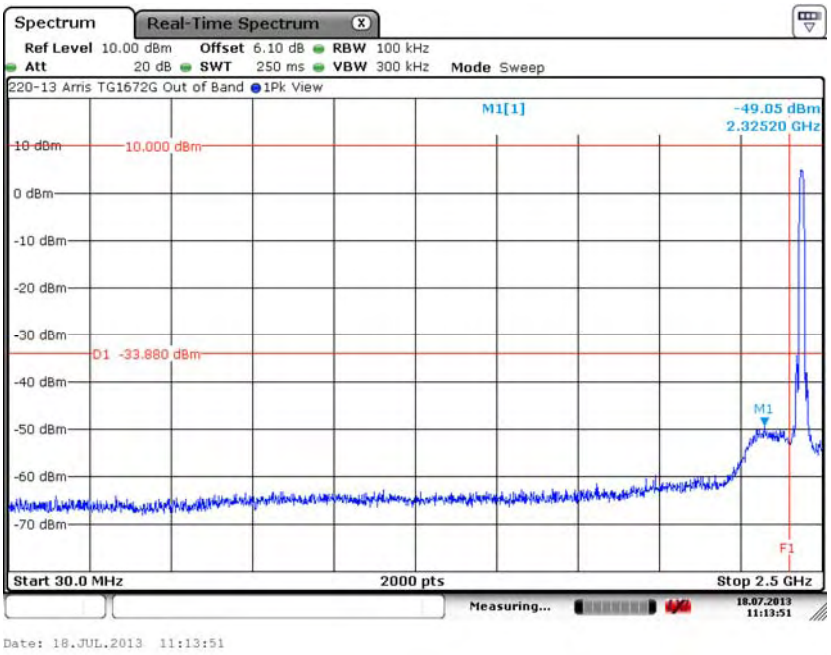
7. Measurement Data (continued)

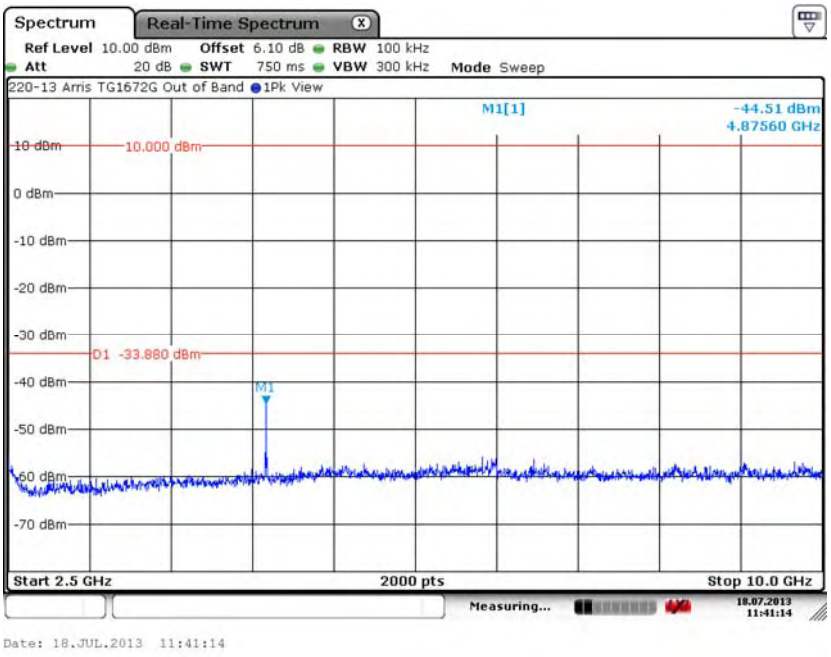
7.7. Band Edge and Out of Band Measurements (continued)

7.7.1. 2.4 GHz, 802.11b:

Out of Band, Mid Channel – 6, J2401, 30 MHz to 2.5 GHz



Out of Band, Mid Channel – 6, J2401, 2.5 GHz to 10 GHz



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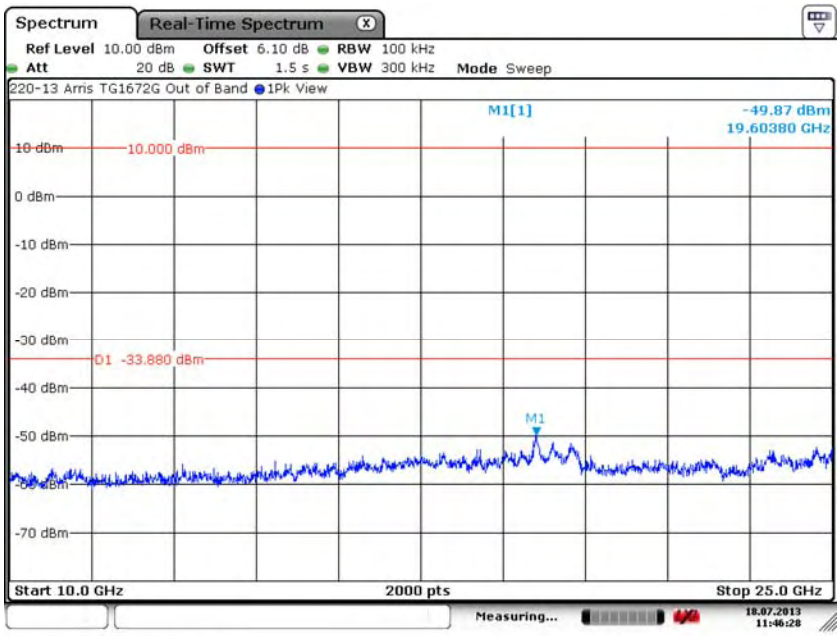
7. Measurement Data (continued)

7.7. Band Edge and Out of Band Measurements (continued)

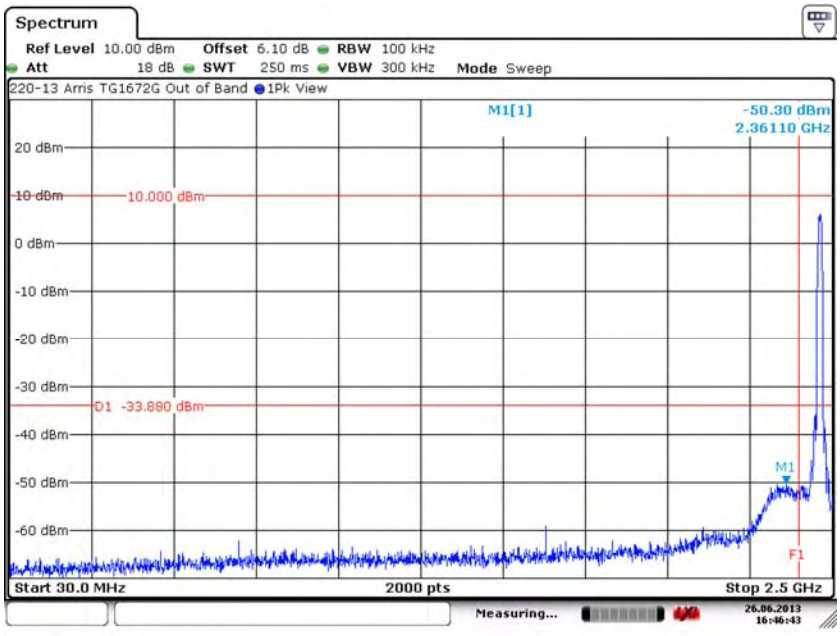
7.7.1. 2.4 GHz, 802.11b:

Out of Band, Mid Channel – 6, J2401, 10 GHz to 25 GHz



Date: 18.JUL.2013 11:46:28

Out of Band, High Channel – 11, J2401, 30 MHz to 2.5 GHz



Date: 26.JUN.2013 16:46:43

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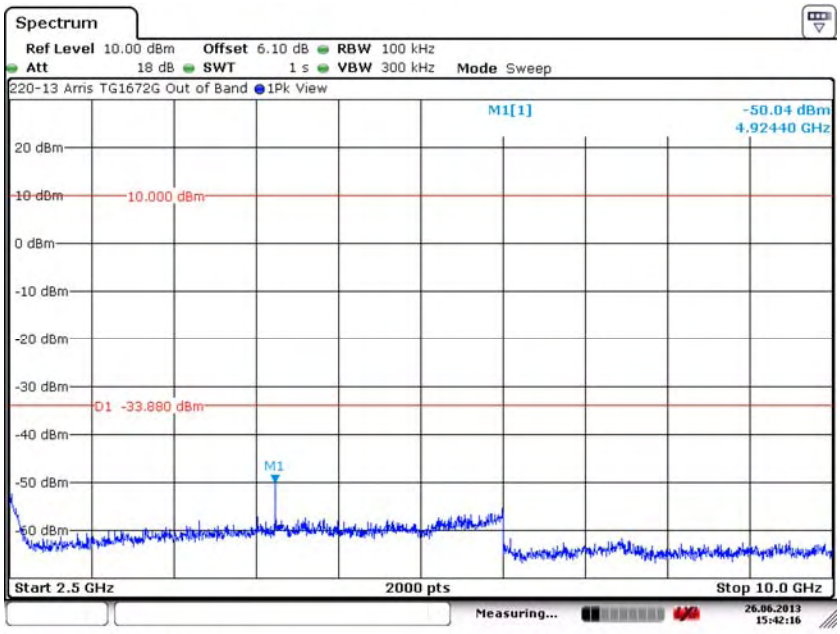
7. Measurement Data (continued)

7.7. Band Edge and Out of Band Measurements (continued)

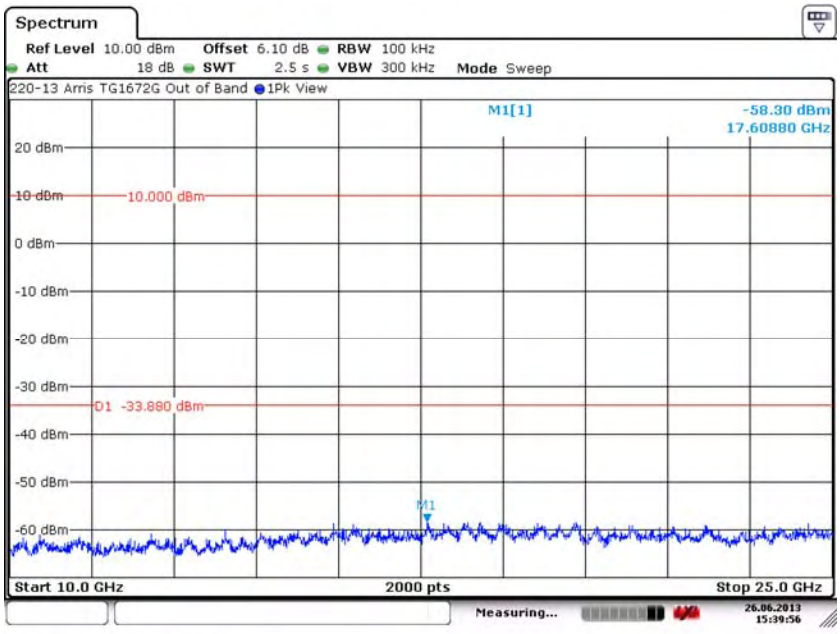
7.7.1. 2.4 GHz, 802.11b:

Out of Band, High Channel – 11, J2401, 2.5 GHz to 10 GHz



Date: 26.JUN.2013 15:42:16

Out of Band, High Channel – 11, J2401, 10 GHz to 25 GHz



Date: 26.JUN.2013 15:39:56

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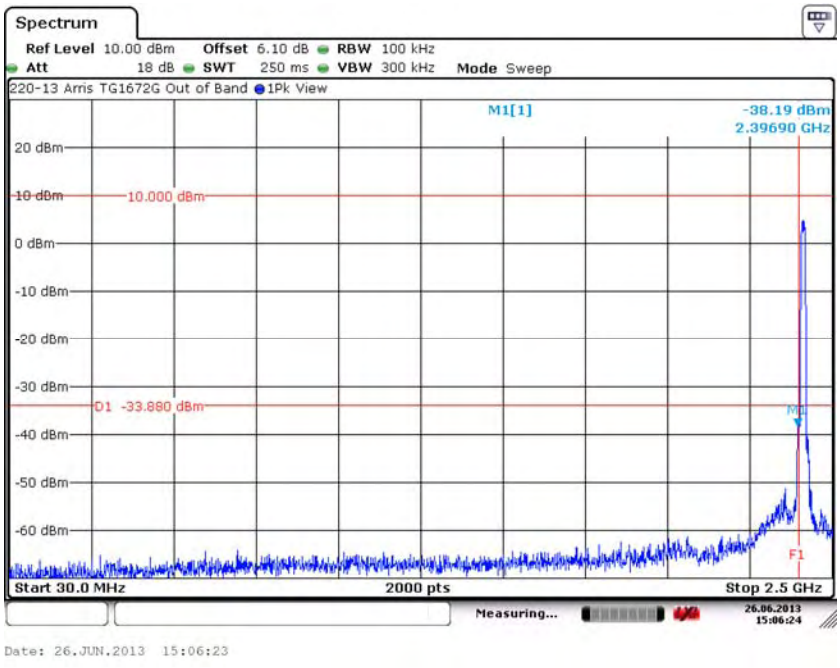
7. Measurement Data (continued)

7.7. Band Edge and Out of Band Measurements (continued)

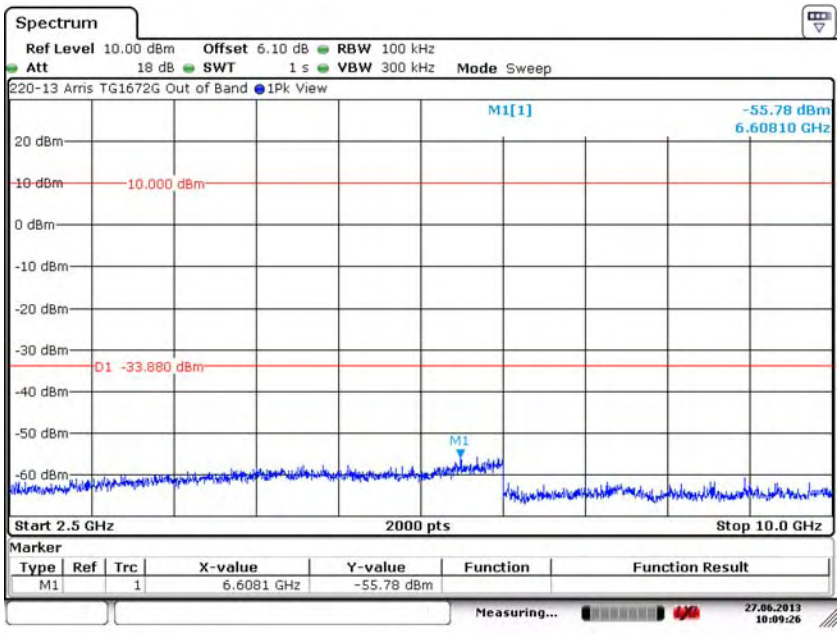
7.7.1. 2.4 GHz, 802.11b:

Out of Band, Low Channel – 1, J2402, 30 MHz to 2.5 GHz



Date: 26.JUN.2013 15:06:23

Out of Band, Low Channel – 1, J2402, 2.5 GHz to 10 GHz



Date: 27.JUN.2013 10:09:26

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