

Test Number: 216-13R2

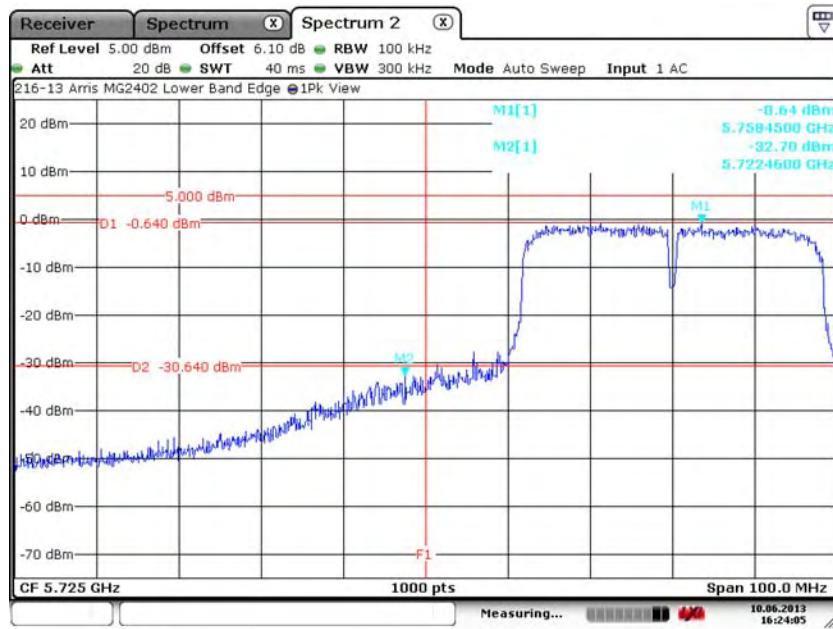
Issue Date: 6/18/2013

7. Measurement Data (continued)

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

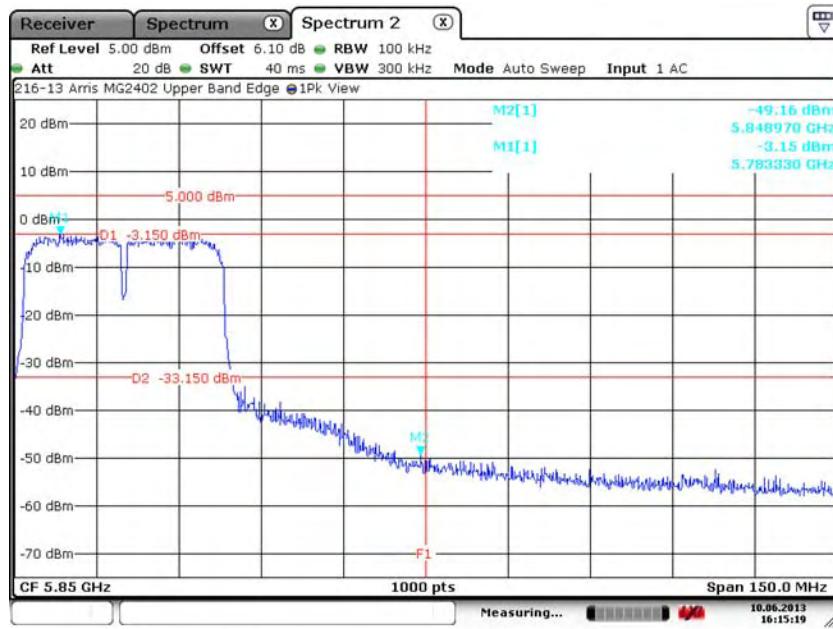
7.7.6.1 5 GHz, HT40:

Lower Band Edge, Low Channel – 151, J5000



Date: 10.JUN.2013 16:24:05

Upper Band Edge, High Channel – 159, J5000



Date: 10.JUN.2013 16:15:19

Test Number: 216-13R2

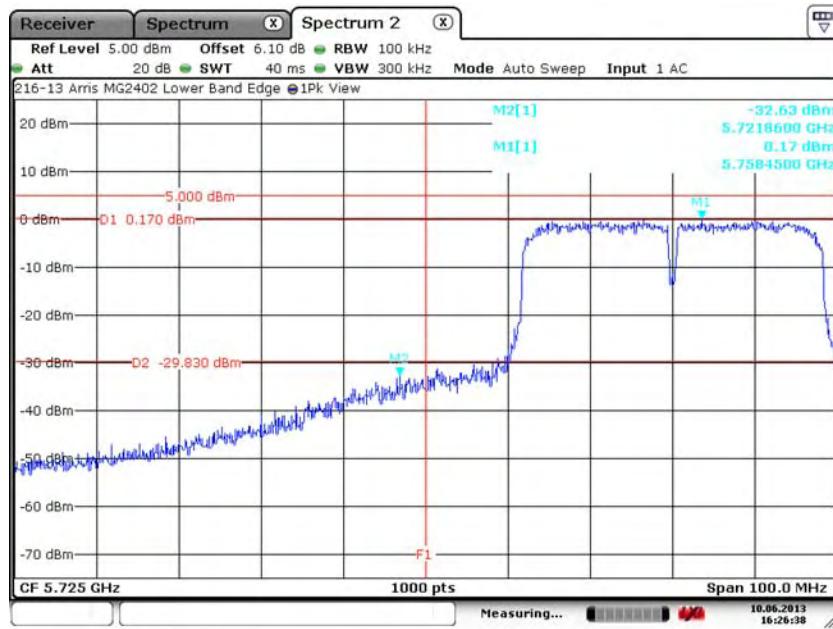
Issue Date: 6/18/2013

7. Measurement Data (continued)

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

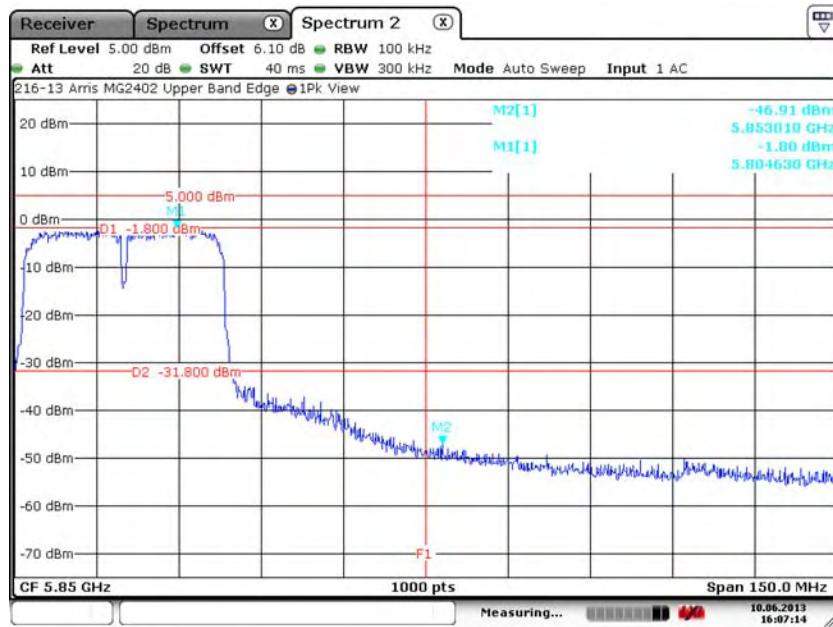
7.7.6.2 5 GHz, HT40:

Lower Band Edge, Low Channel – 151, J5001



Date: 10.JUN.2013 16:26:38

Upper Band Edge, High Channel – 159, J5001



Date: 10.JUN.2013 16:07:14

Test Number: 216-13R2

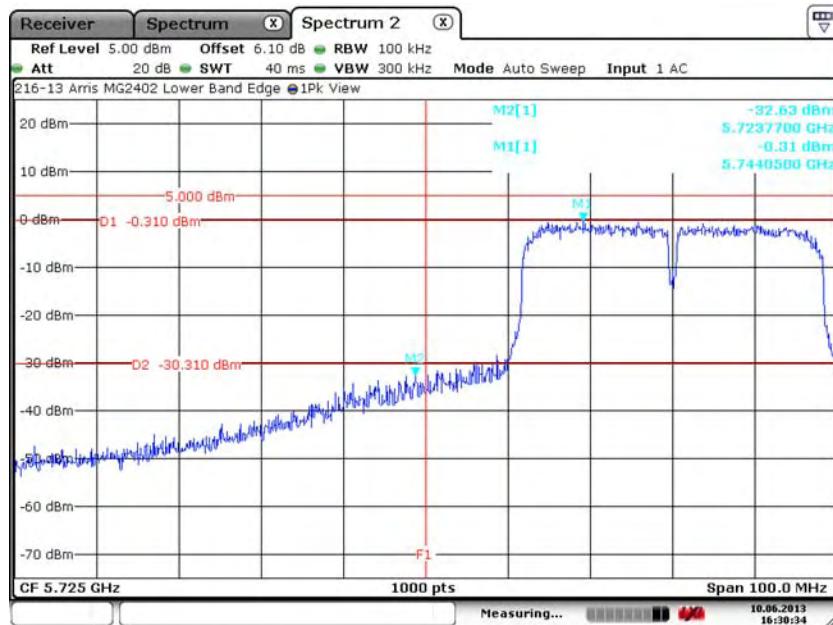
Issue Date: 6/18/2013

7. Measurement Data (continued)

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

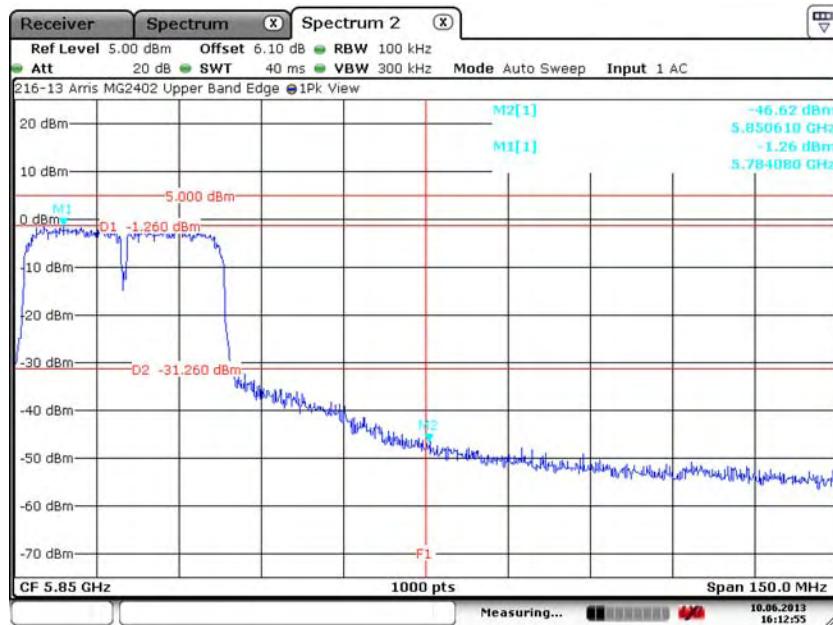
7.7.6.3 5 GHz, HT40:

Lower Band Edge, Low Channel – 151, J5002



Date: 10.JUN.2013 16:30:34

Upper Band Edge, High Channel – 159, J5002



Date: 10.JUN.2013 16:12:55

Test Number: 216-13R2

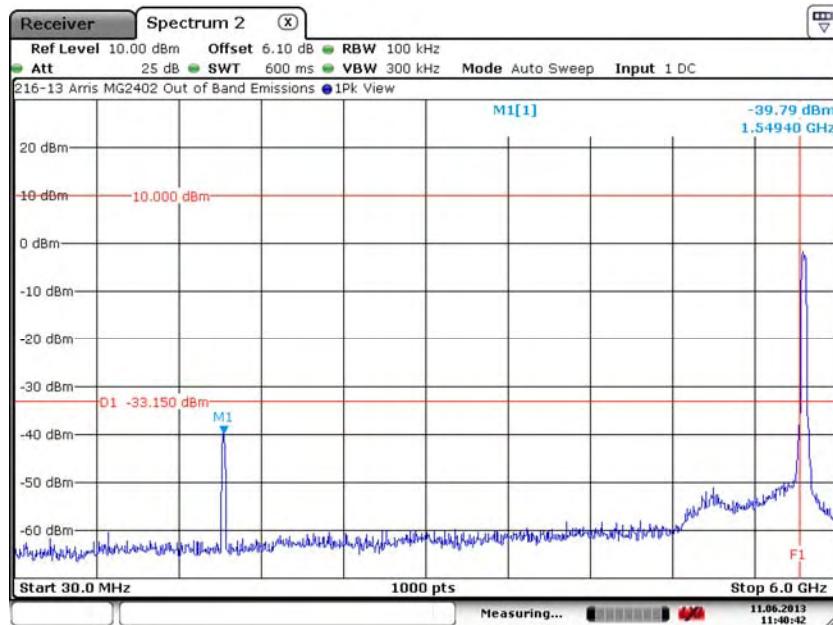
Issue Date: 6/18/2013

7. Measurement Data (continued)

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

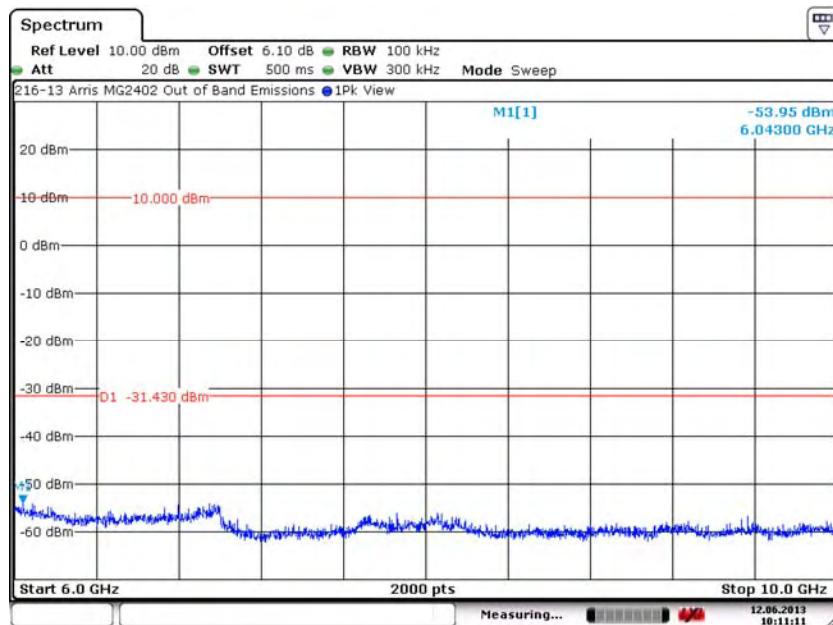
7.7.6.4 5 GHz, HT40:

Out of Band, Low Channel – 151, J5000, 30 MHz to 6 GHz



Date: 11.JUN.2013 11:40:42

Out of Band, Low Channel – 151, J5000, 6 GHz to 10 GHz



Date: 12.JUN.2013 10:11:11

Test Number: 216-13R2

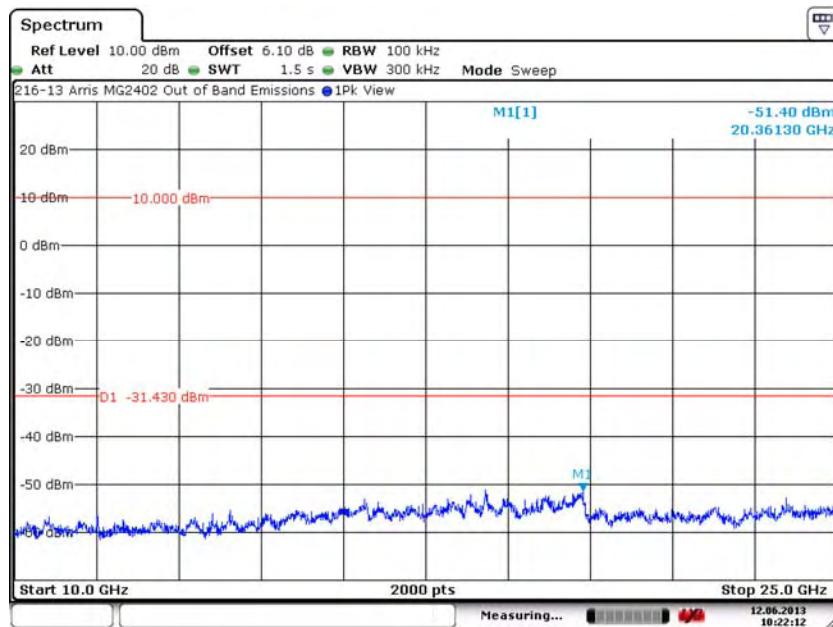
Issue Date: 6/18/2013

7. Measurement Data (continued)

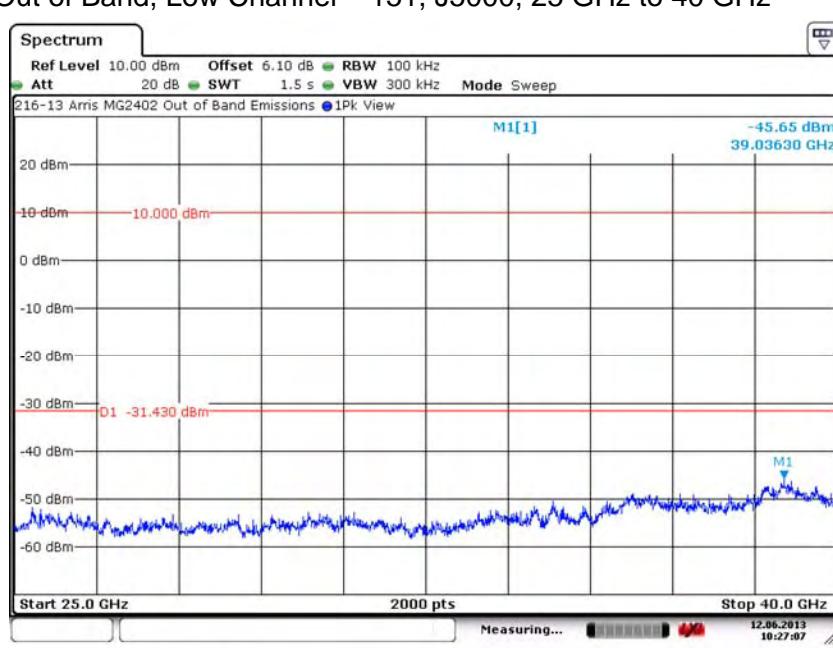
7.7. Band Edge and Out of Band Measurements (continued)

7.7.6.5 5 GHz, HT40:

Out of Band, Low Channel – 151, J5000, 10 GHz to 25 GHz



Out of Band, Low Channel – 151, J5000, 25 GHz to 40 GHz



Test Number: 216-13R2

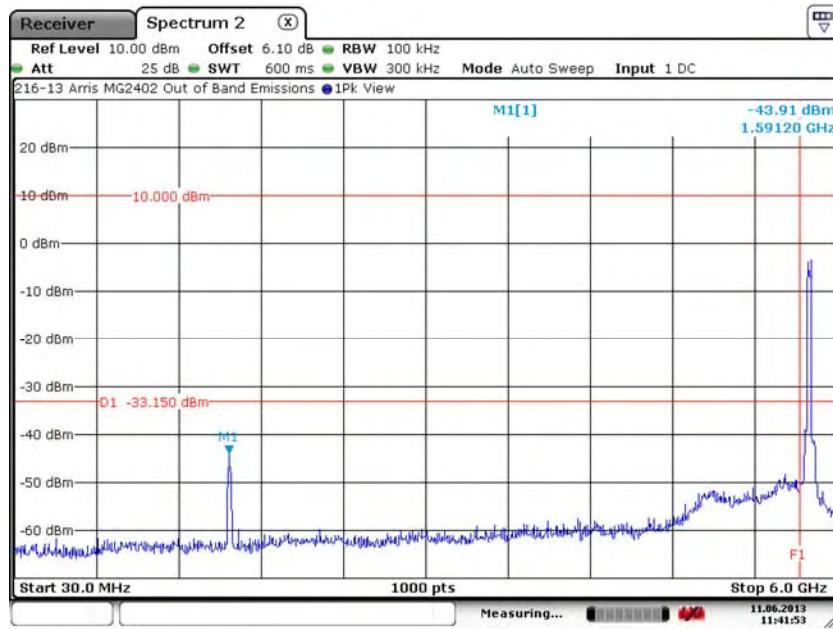
Issue Date: 6/18/2013

7. Measurement Data (continued)

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

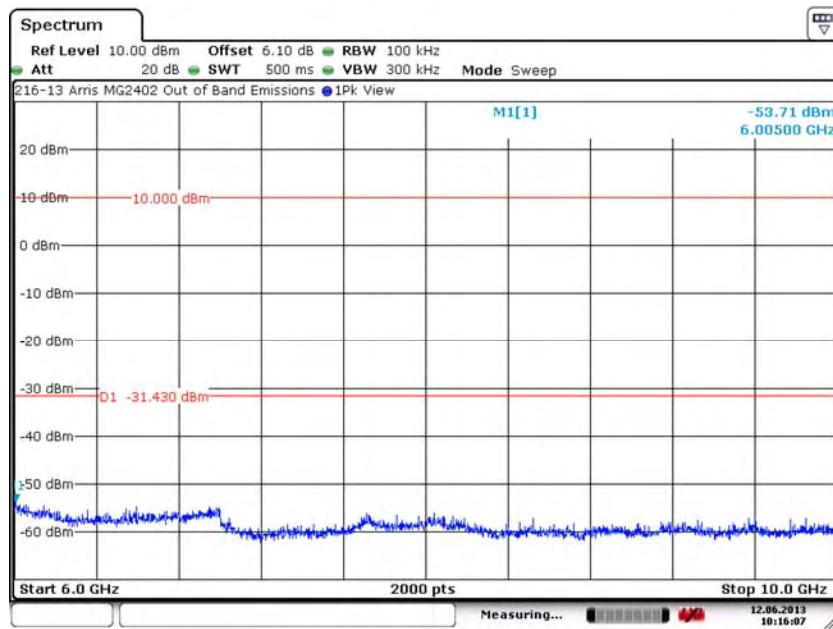
7.7.6.6 5 GHz, HT40:

Out of Band, High Channel – 159, J5000, 30 MHz to 6 GHz



Date: 11.JUN.2013 11:41:53

Out of Band, High Channel – 159, J5000, 6 GHz to 10 GHz



Date: 12.JUN.2013 10:16:07

Test Number: 216-13R2

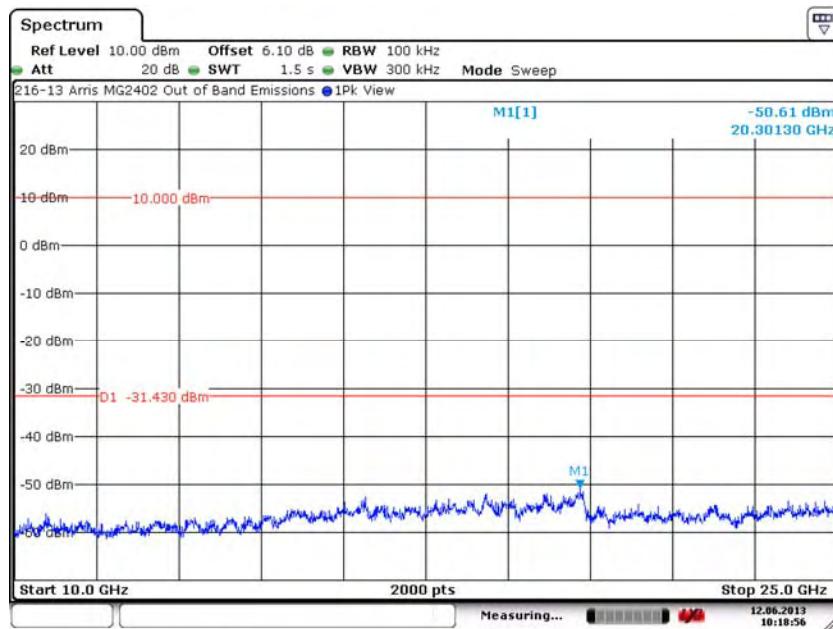
Issue Date: 6/18/2013

7. Measurement Data (continued)

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

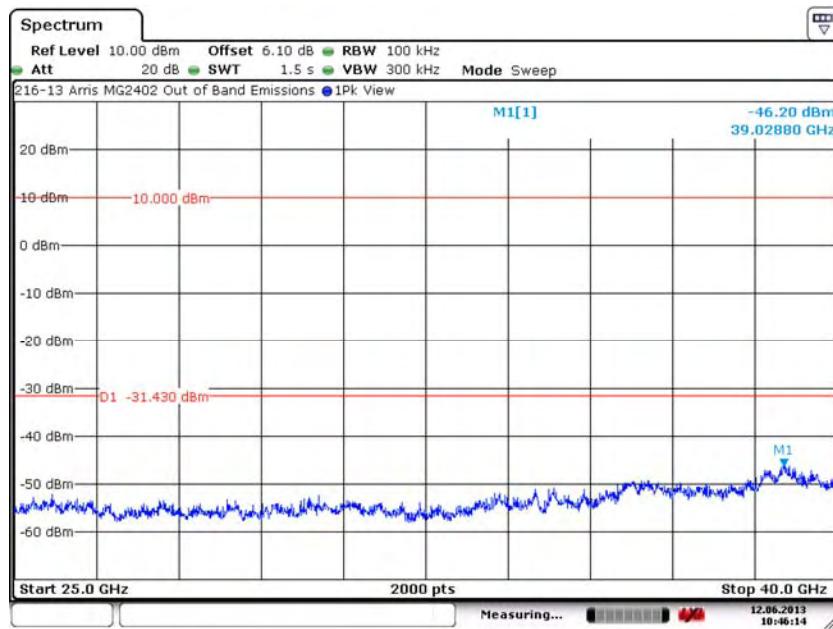
7.7.6.7 5 GHz, HT40:

Out of Band, High Channel – 159, J5000, 10 GHz to 25 GHz



Date: 12.JUN.2013 10:18:56

Out of Band, High Channel – 159, J5000, 25 GHz to 40 GHz



Date: 12.JUN.2013 10:46:14

Test Number: 216-13R2

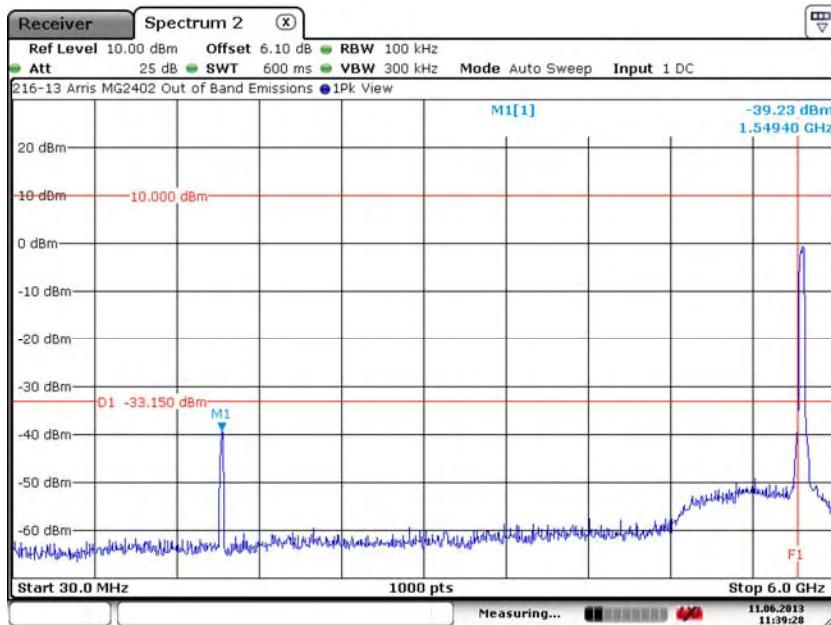
Issue Date: 6/18/2013

7. Measurement Data (continued)

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

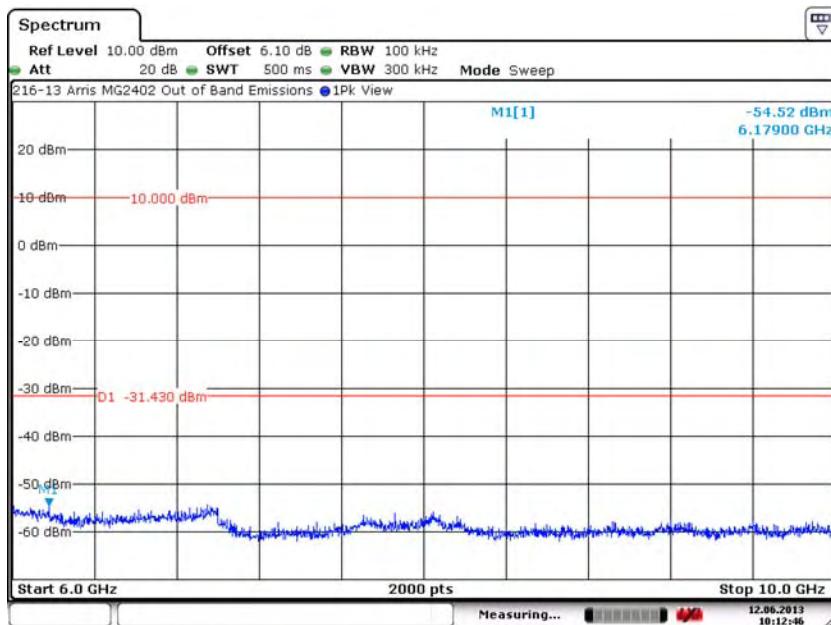
7.7.6.8 5 GHz, HT40:

Out of Band, Low Channel – 151, J5001, 30 MHz to 6 GHz



Date: 11.JUN.2013 11:39:28

Out of Band, Low Channel – 151, J5001, 6 GHz to 10 GHz



Date: 12.JUN.2013 10:12:46

Test Number: 216-13R2

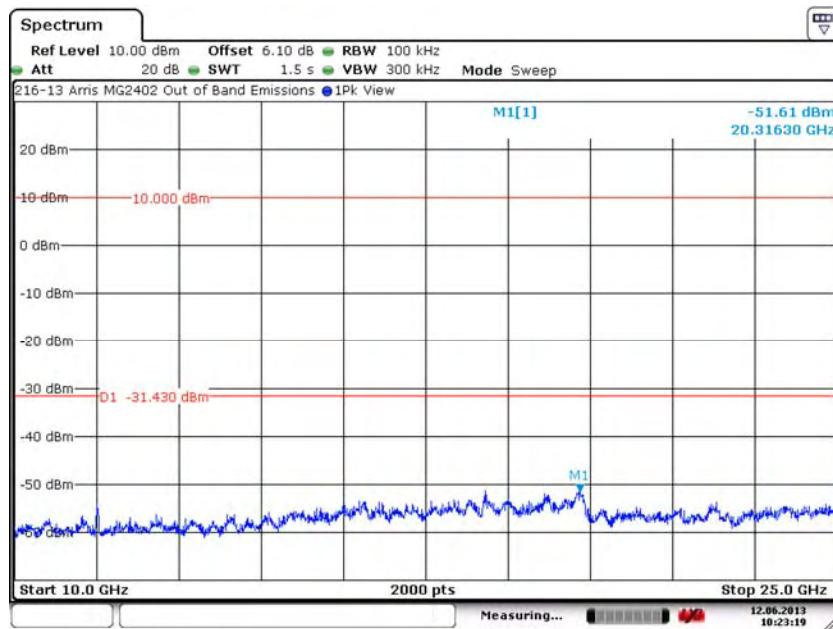
Issue Date: 6/18/2013

7. Measurement Data (continued)

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

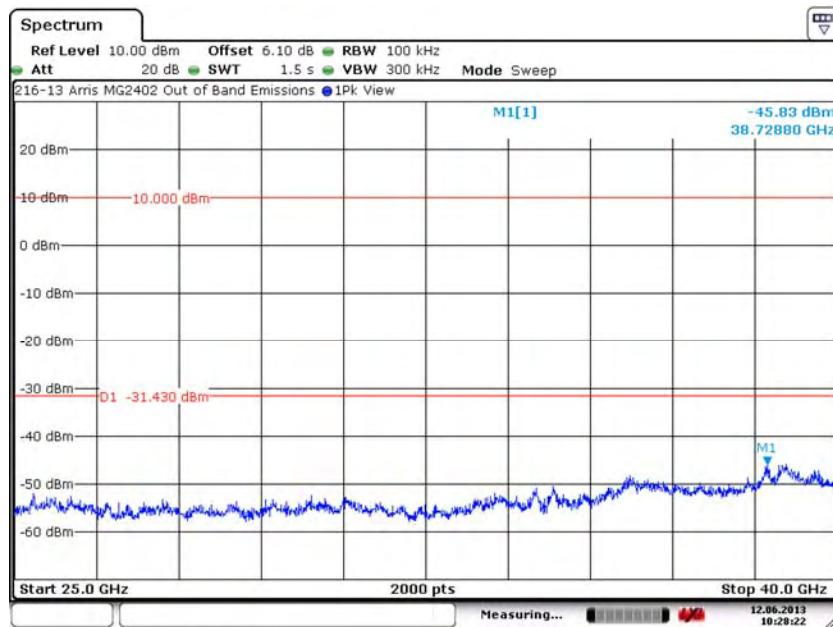
7.7.6.9 5 GHz, HT40:

Out of Band, Low Channel – 151, J5001, 10 GHz to 25 GHz



Date: 12.JUN.2013 10:23:19

Out of Band, Low Channel – 151, J5001, 25 GHz to 40 GHz



Date: 12.JUN.2013 10:28:22

Test Number: 216-13R2

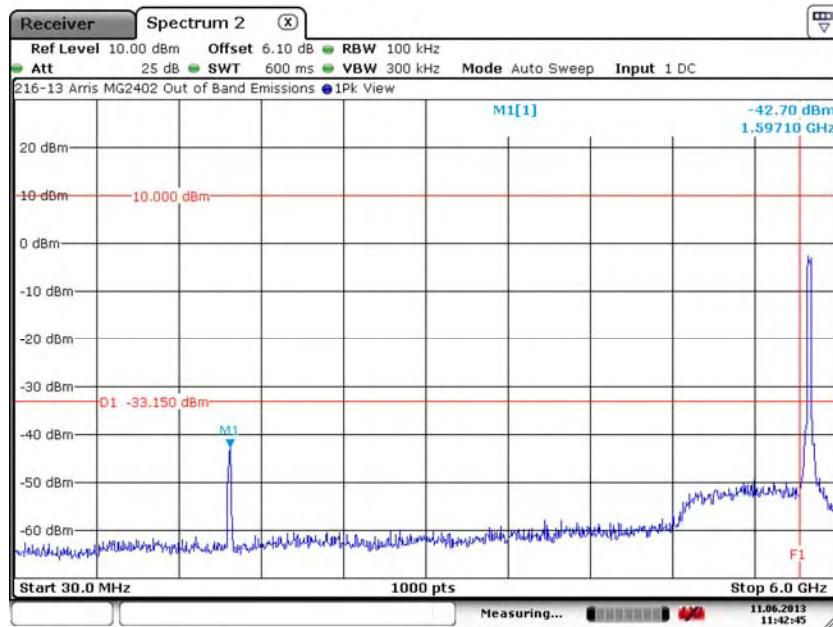
Issue Date: 6/18/2013

7. Measurement Data (continued)

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

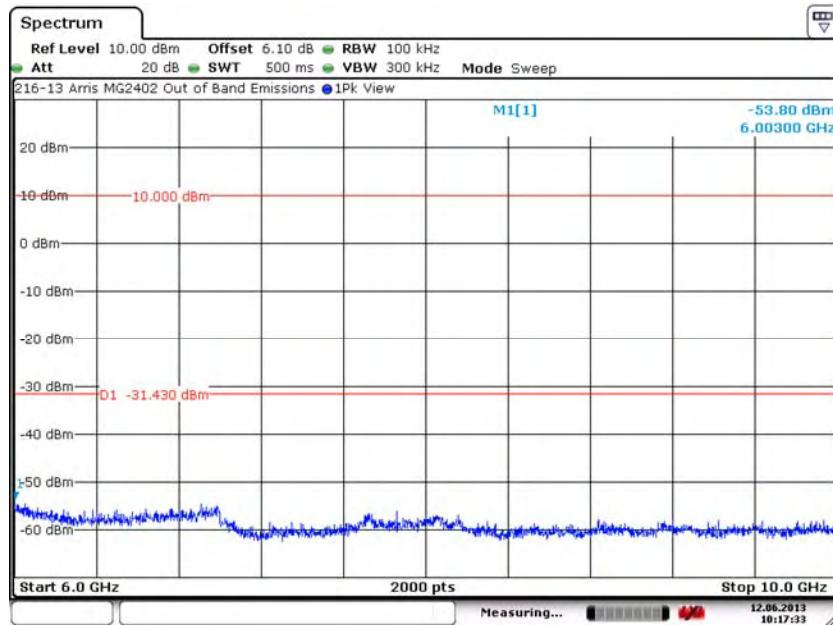
7.7.6.10 5 GHz, HT40:

Out of Band, High Channel – 159, J5001, 30 MHz to 6 GHz



Date: 11.JUN.2013 11:42:45

Out of Band, High Channel – 159, J5001, 6 GHz to 10 GHz



Date: 12.JUN.2013 10:17:32

Test Number: 216-13R2

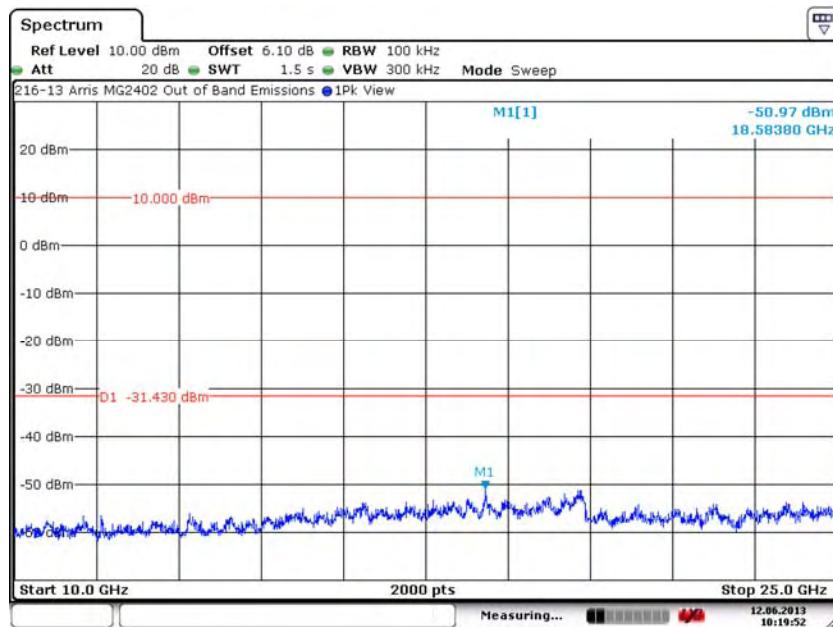
Issue Date: 6/18/2013

7. Measurement Data (continued)

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

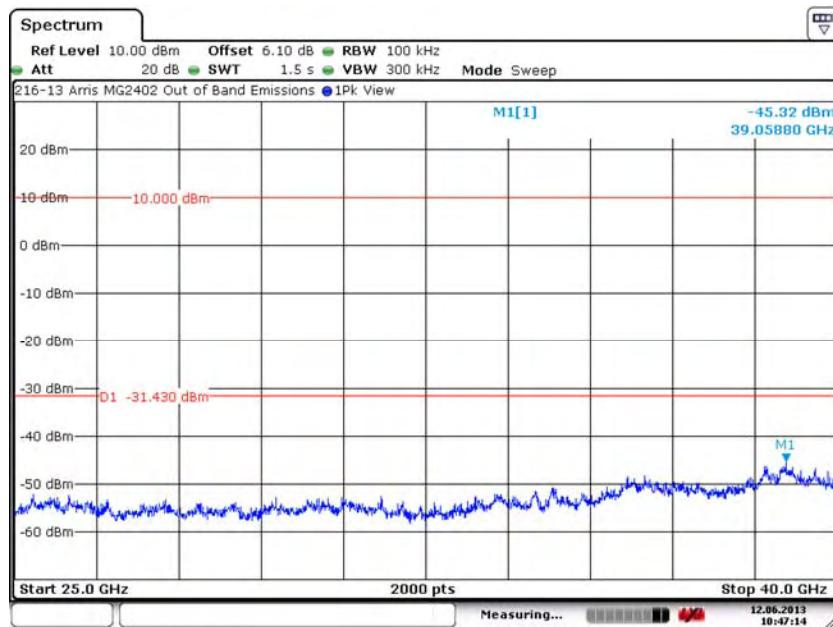
7.7.6.11 5 GHz, HT40:

Out of Band, High Channel – 159, J5001, 10 GHz to 25 GHz



Date: 12.JUN.2013 10:19:52

Out of Band, High Channel – 159, J5001, 25 GHz to 40 GHz



Date: 12.JUN.2013 10:47:14

Test Number: 216-13R2

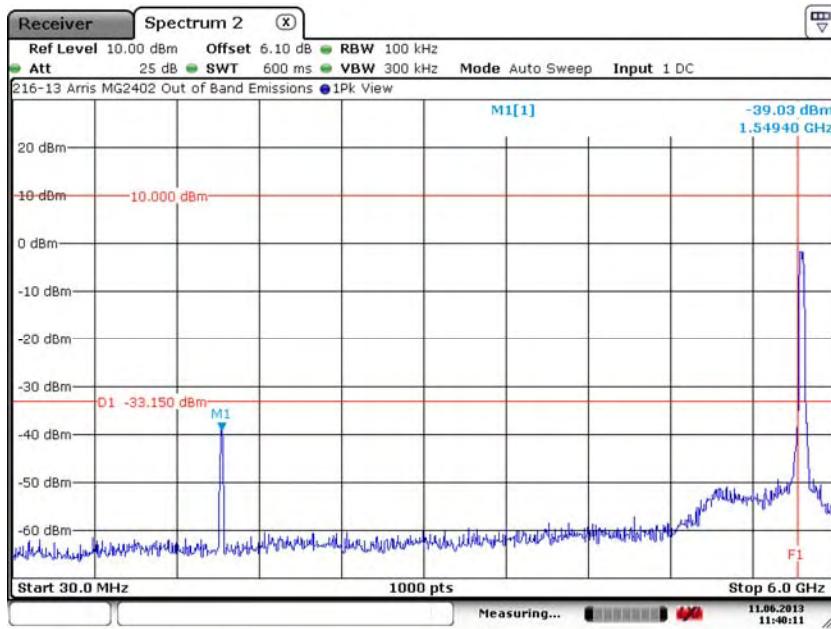
Issue Date: 6/18/2013

7. Measurement Data (continued)

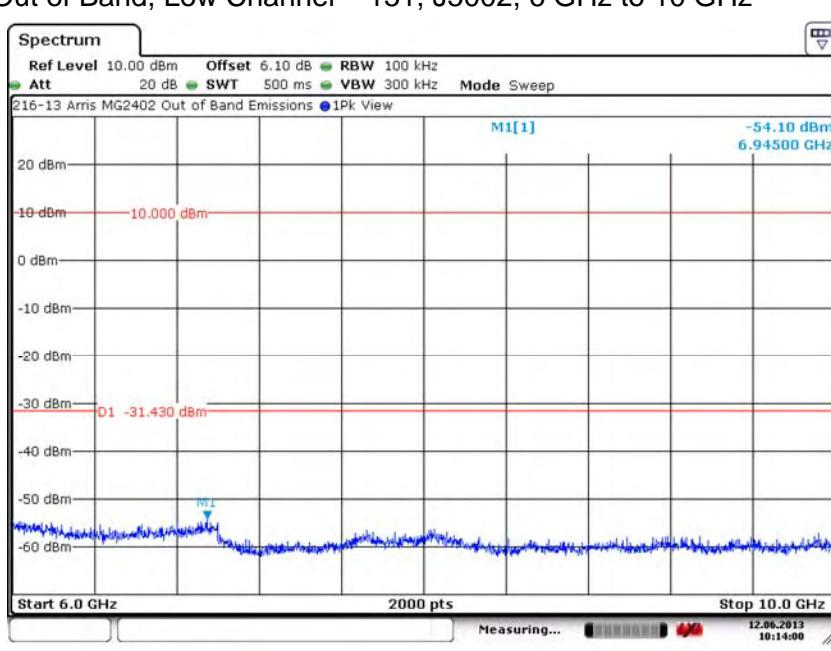
7.7. Band Edge and Out of Band Measurements (continued)

7.7.6.12 5 GHz, HT40:

Out of Band, Low Channel – 151, J5002, 30 MHz to 6 GHz



Out of Band, Low Channel – 151, J5002, 6 GHz to 10 GHz



Test Number: 216-13R2

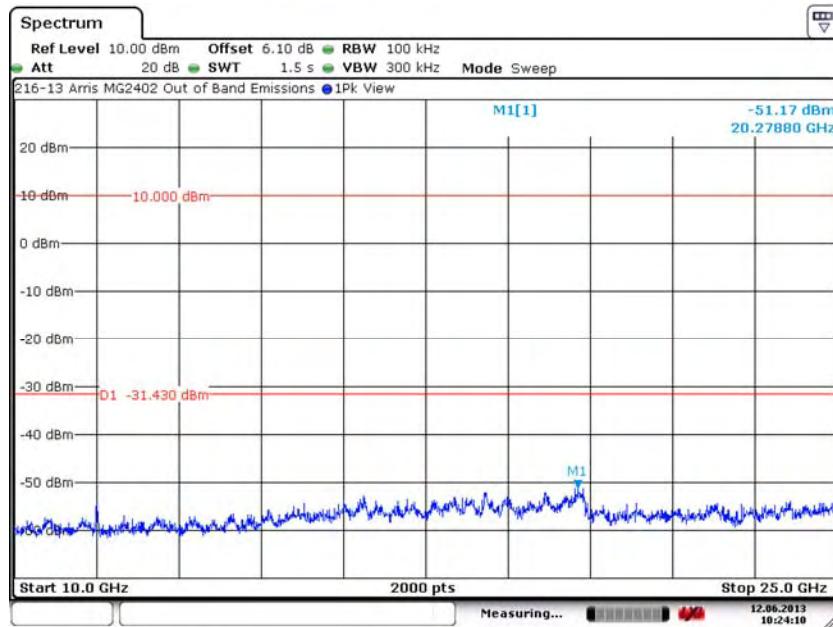
Issue Date: 6/18/2013

7. Measurement Data (continued)

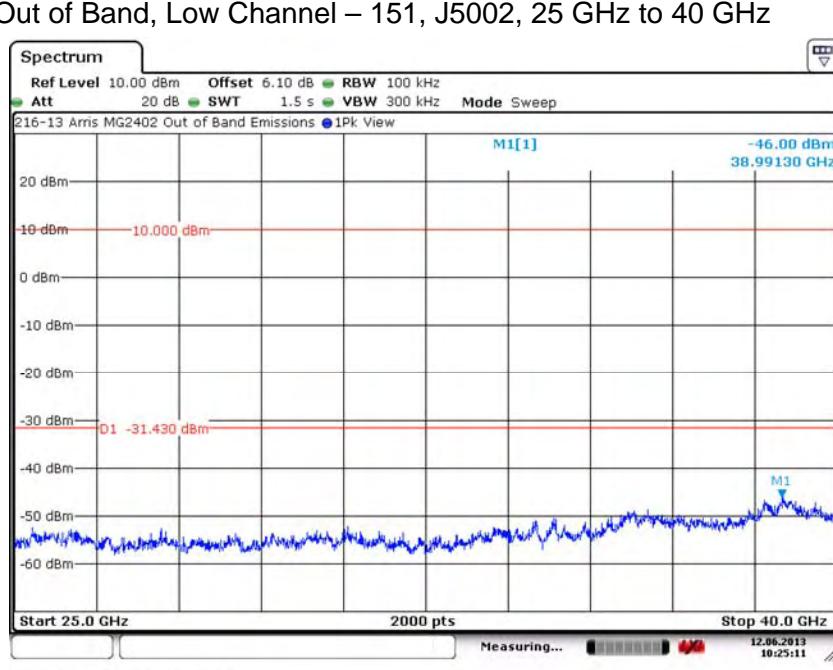
7.7. Band Edge and Out of Band Measurements (continued)

7.7.6.13 5 GHz, HT40:

Out of Band, Low Channel – 151, J5002, 10 GHz to 25 GHz



Out of Band, Low Channel – 151, J5002, 25 GHz to 40 GHz



Test Number: 216-13R2

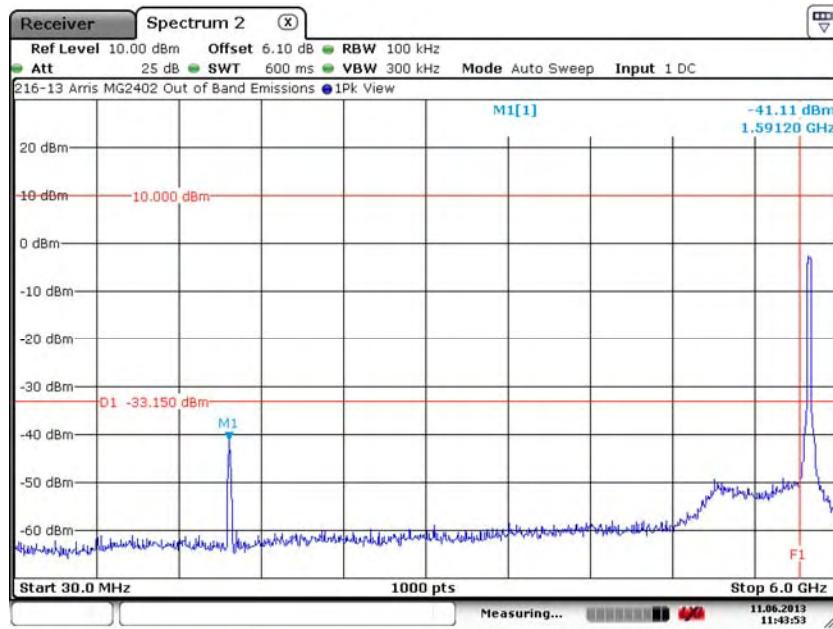
Issue Date: 6/18/2013

7. Measurement Data (continued)

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

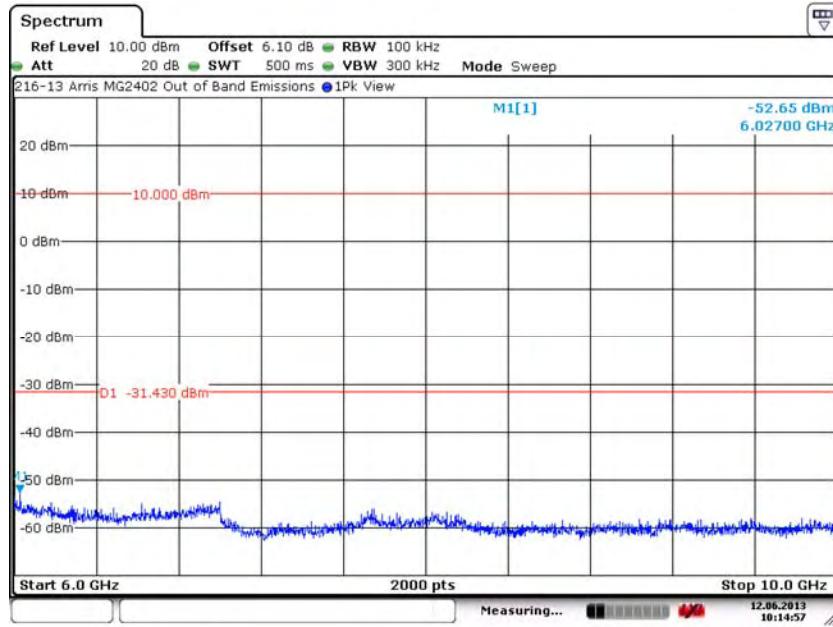
7.7.6.14 5 GHz, HT40:

Out of Band, High Channel – 159, J5002, 30 MHz to 6 GHz



Date: 11.JUN.2013 11:43:53

Out of Band, High Channel – 159, J5002, 6 GHz to 10 GHz



Date: 12.JUN.2013 10:14:57

Test Number: 216-13R2

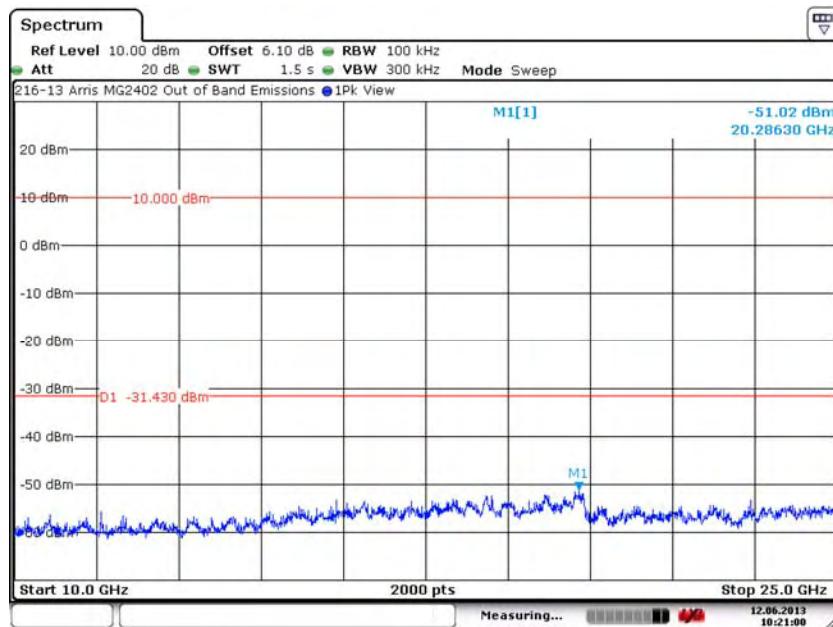
Issue Date: 6/18/2013

7. Measurement Data (continued)

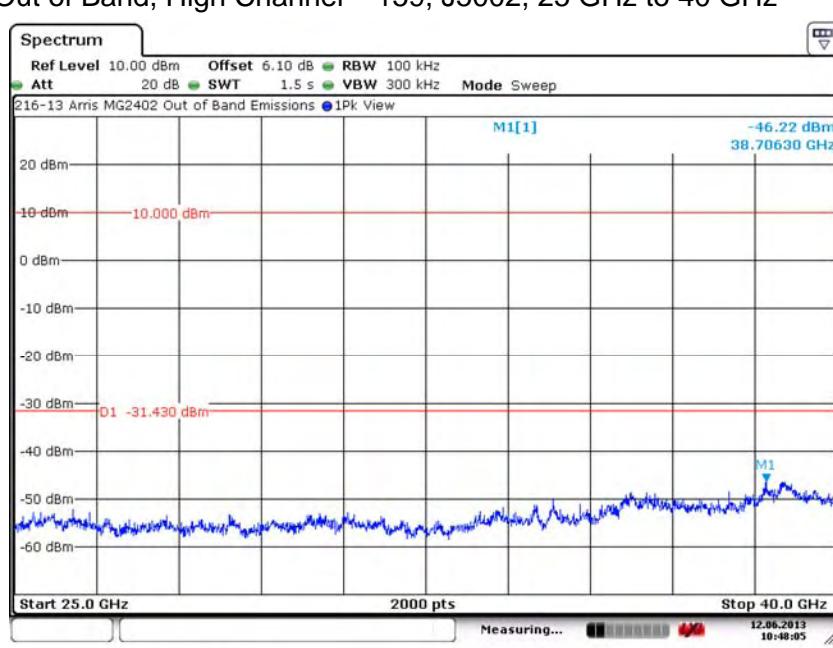
7.7. Band Edge and Out of Band Measurements (continued)

7.7.6.15 5 GHz, HT40:

Out of Band, High Channel – 159, J5002, 10 GHz to 25 GHz



Out of Band, High Channel – 159, J5002, 25 GHz to 40 GHz



Test Number: 216-13R2
Issue Date: 6/18/2013

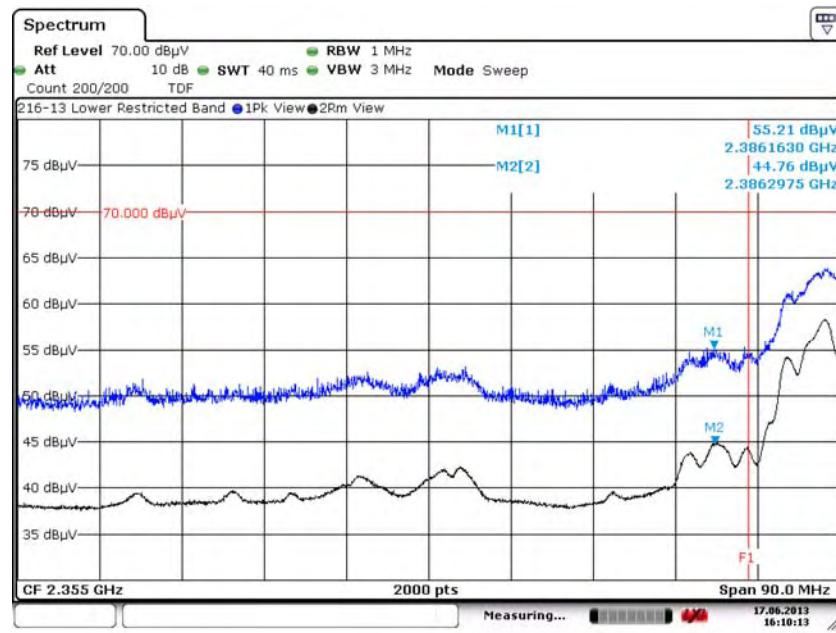
7. Measurement Data (continued)

7.7. Band Edge Measurements (continued)

Measurement Results – Lower Restricted Band (2310 to 2390 MHz)

Mode of Operation CH1	Freq. (MHz)	Field Strength (dB μ V/m)		Limit (dB μ V/m)		Margin (dB μ V/m)		Result
		Peak	Average	Peak	Average	Peak	Average	
802.11b	2386.29	55.21	44.76	74	54	-18.79	-9.24	Compliant
802.11g	2388.91	61.47	45.4	74	54	-12.53	-8.60	Compliant
HT20	2389.49	62.68	46.48	74	54	-11.32	-7.52	Compliant
HT40	2389.49	63.63	52.49	74	54	-10.37	-1.51	Compliant

7.7.7. 802.11b: Lower Restricted Band (2310 to 2390 MHz)



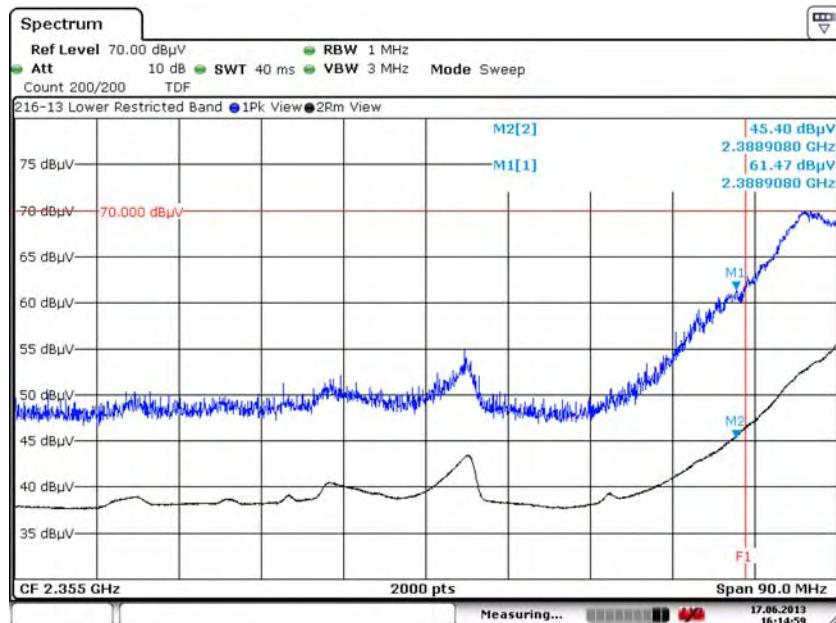
Test Number: 216-13R2

Issue Date: 6/18/2013

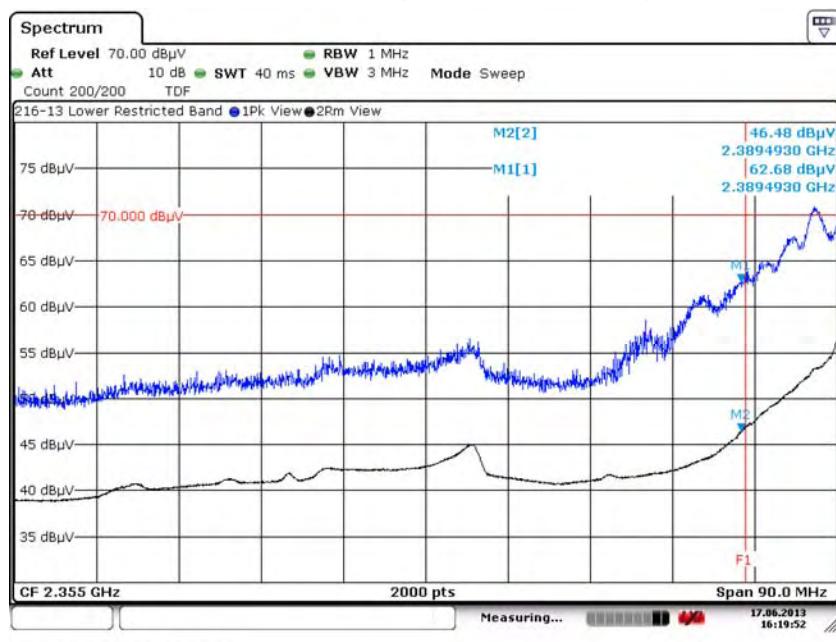
7. Measurement Data (continued)

7.7. Band Edge Measurements (continued)

7.7.8. 802.11g: Lower Restricted Band (2310 to 2390 MHz)



7.7.9. HT20: Lower Restricted Band (2310 to 2390 MHz)



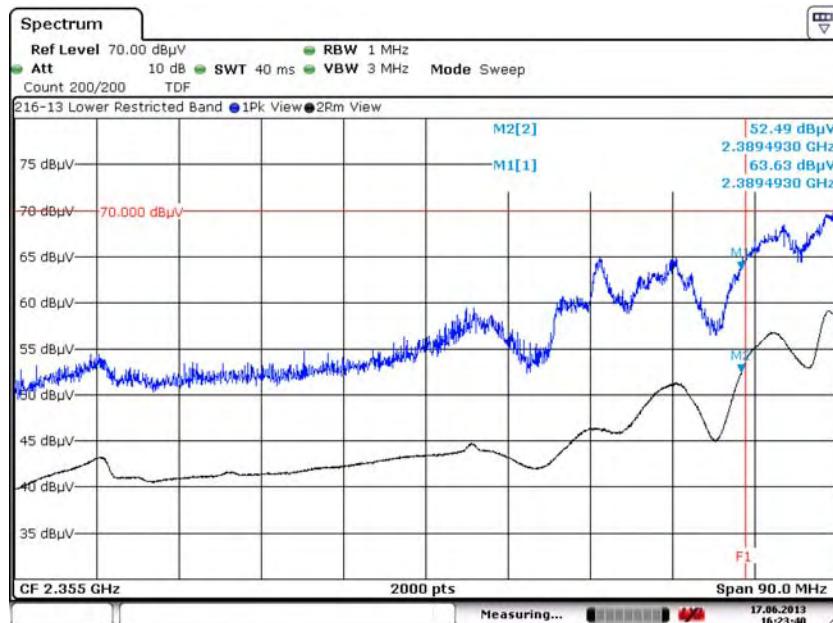
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

7.7. Band Edge Measurements (continued)

7.7.10. HT40: Lower Restricted Band (2310 to 2390 MHz)



Date: 17.JUN.2013 16:23:40

Test Number: 216-13R2
Issue Date: 6/18/2013

7. Measurement Data (continued)

7.7. Band Edge Measurements (continued)

Measurement Results – Upper Band Edge & Worst Case Out of Band – 2.4 GHz

Note: The 2.4 GHz upper band edge measurements were made as field strength offset measurements. An offset requirement of -30 dBc was used because average (RMS) values were used for the maximum peak conducted output power measurements in accordance with FCC Part 15.247 (b) (3).

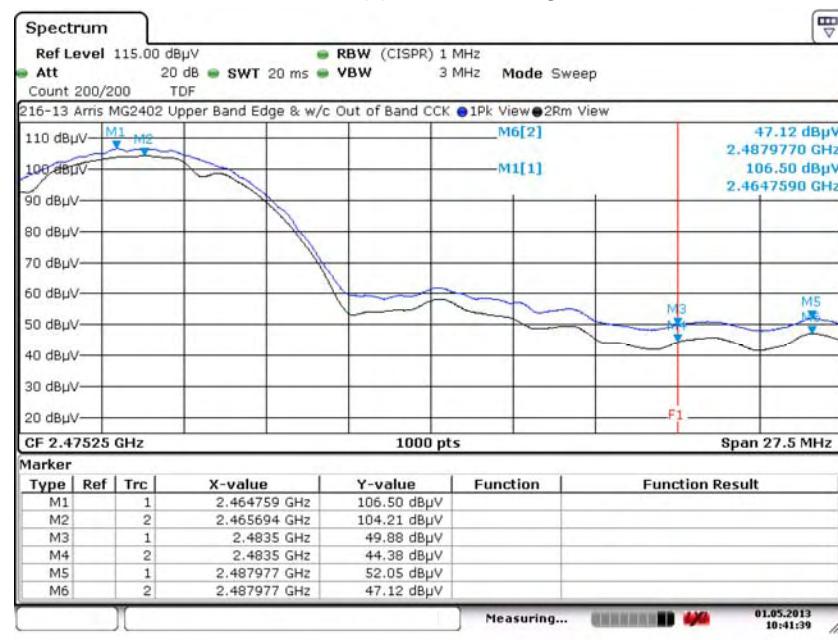
Upper Band Edge

Mode of Operation	Freq. (MHz)	Field Strength (dB μ V/m)		Limit (dB μ V/m)		Margin (dB μ V/m)		Result
		Peak	Average	Peak	Average	Peak	Average	
802.11b	2483.50	49.88	44.38	74	54	-24.12	-9.62	Compliant
802.11g		66.74	50.33	74	54	-7.26	-3.67	Compliant
HT20		64.83	50.97	74	54	-9.17	-3.03	Compliant
HT40		65.47	50.84	74	54	-8.53	-3.16	Compliant

Worst Case Out of Band

Mode of Operation	Freq. (MHz)	Field Strength (dB μ V/m)		Limit (dB μ V/m)		Margin (dB μ V/m)		Result
		Peak	Average	Peak	Average	Peak	Average	
802.11b	2487.977	52.05	47.12	74	54	-21.95	-6.88	Compliant
802.11g	2485.090	66.76	42.39	74	54	-7.24	-11.61	Compliant
HT20	2484.100	65.70	49.12	74	54	-8.30	-4.88	Compliant
HT40	2484.100	64.96	51.10	74	54	-9.04	-2.90	Compliant

7.7.11. Measurement Results – Upper Band Edge and Restricted Band, 802.11/b



Date: 1.MAY.2013 10:41:39

Measuring... 01.05.2013 10:41:39

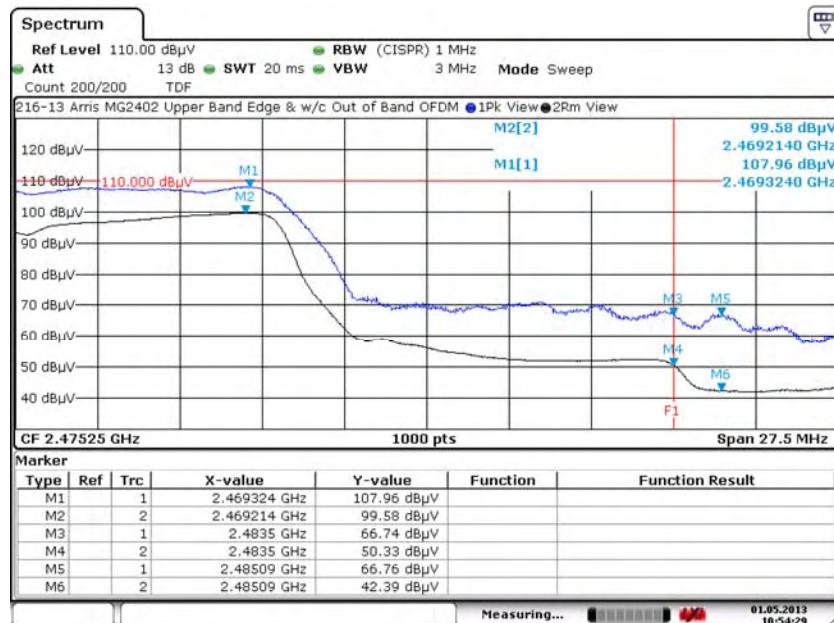
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

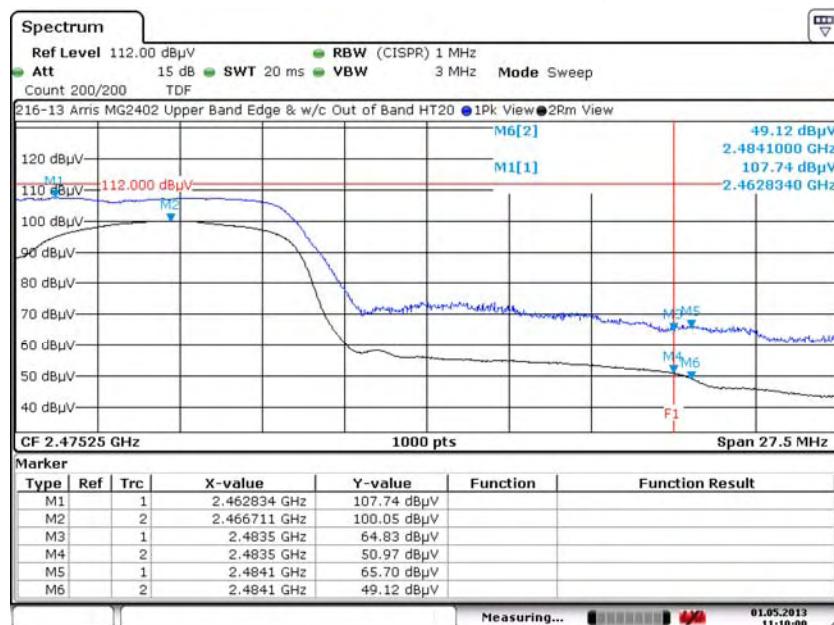
7.7. Band Edge Measurements (continued)

7.7.12. Measurement Results – Upper Band Edge and Restricted Band, 802.11/g



Date: 1.MAY.2013 10:54:29

7.7.13. Measurement Results – Upper Band Edge and Restricted Band, HT20



Date: 1.MAY.2013 11:09:59

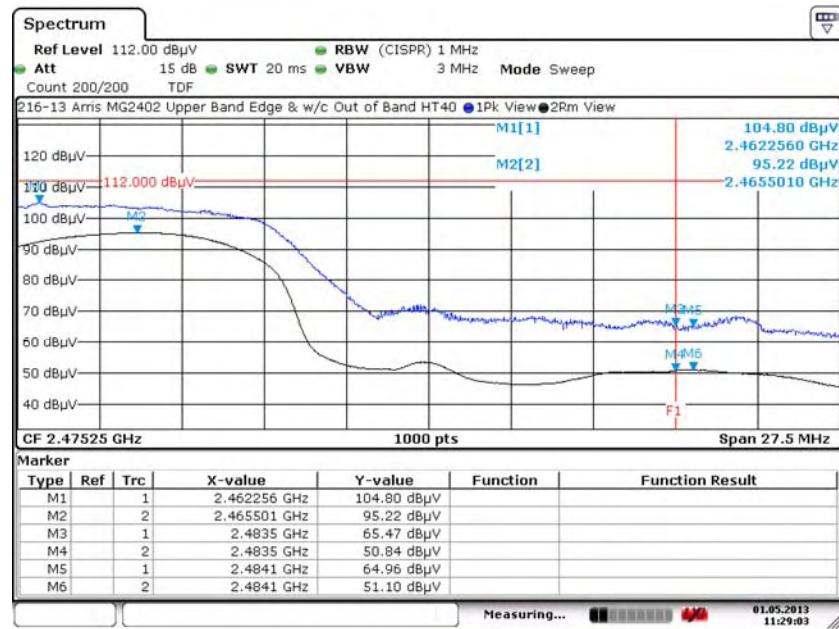
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

7.7. Band Edge Measurements (continued)

7.7.14. Measurement Results – Upper Band Edge and Restricted Band, HT40



Test Number: 216-13R2
Issue Date: 6/18/2013

7. Measurement Data (continued)

7.8. Power Spectral Density (15.247(e))

Requirement: For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of FCC Part 15.247. The same method of determining the conducted output power shall be used to determine the power spectral density.

Procedure: FCC OET publication number 558074, Section 9: Maximum Power Spectral Density Level in the Fundamental Emission, Section 9.2, Option 2. FCC OET 662911 was referenced to determine the procedure for measuring in-band power spectral density of transmitters with multiple outputs in the same band.

Conclusion: The DUT passed the required power spectral density limit at the tested frequencies.

Measurement Results in 2400 MHz to 2483.5 MHz band

Channel	Frequency (MHz)	Maximum Power Spectral Density			Total Max Power Spectral Density (dBm)	Limit (dBm)	Result
		J2400	J2401	J2402			
		(dBm)	(dBm)	(dBm)			
Low	2412	-11.49	-11.98	-12.22	-7.11	8.00	Compliant
Middle	2437	-11.27	-11.16	-12.23	-6.76	8.00	Compliant
High	2462	-10.63	-11.81	-12.18	-6.75	8.00	Compliant

Channel	Frequency (MHz)	Maximum Power Spectral Density			Total Max Power Spectral Density (dBm)	Limit (dBm)	Result
		J2400	J2401	J2402			
		(dBm)	(dBm)	(dBm)			
Low	2412	-14.24	-14.90	-15.23	-10.00	8.00	Compliant
Middle	2437	-15.02	-15.28	-18.31	-11.20	8.00	Compliant
High	2462	-13.68	-15.26	-16.64	-10.26	8.00	Compliant

Channel	Frequency (MHz)	Maximum Power Spectral Density			Total Max Power Spectral Density (dBm)	Limit (dBm)	Result
		J2400	J2401	J2402			
		(dBm)	(dBm)	(dBm)			
Low	2412	-12.04	-14.66	-15.27	-8.98	8.00	Compliant
Middle	2437	-15.30	-15.12	-18.12	-11.21	8.00	Compliant
High	2462	-13.71	-15.16	-17.31	-10.38	8.00	Compliant

Channel	Frequency (MHz)	Maximum Power Spectral Density			Total Max Power Spectral Density (dBm)	Limit (dBm)	Result
		J2400	J2401	J2402			
		(dBm)	(dBm)	(dBm)			
Low	2412	-15.11	-14.84	-17.98	-10.99	8.00	Compliant
Middle	2437	-15.74	-15.12	-18.72	-11.50	8.00	Compliant
High	2462	-16.35	-15.25	-18.91	-13.05	8.00	Compliant

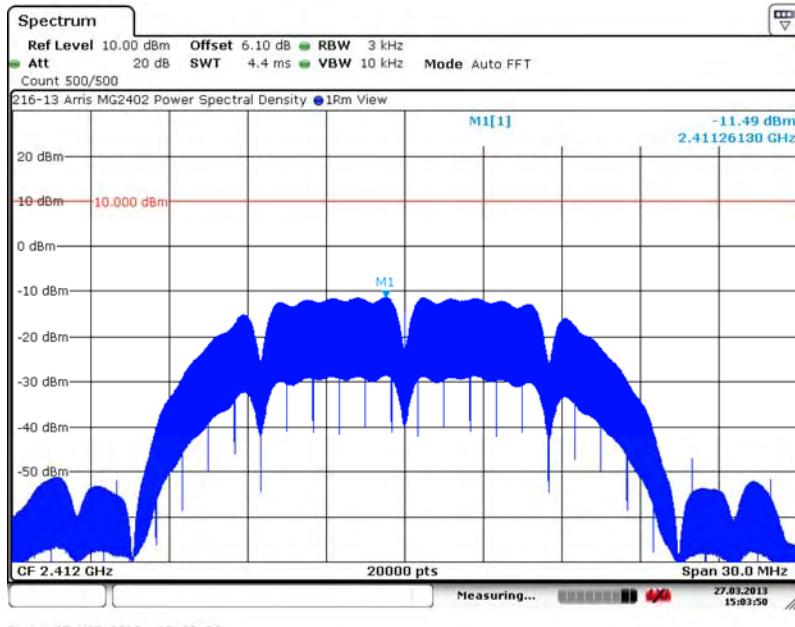
Test Number: 216-13R2

Issue Date: 6/18/2013

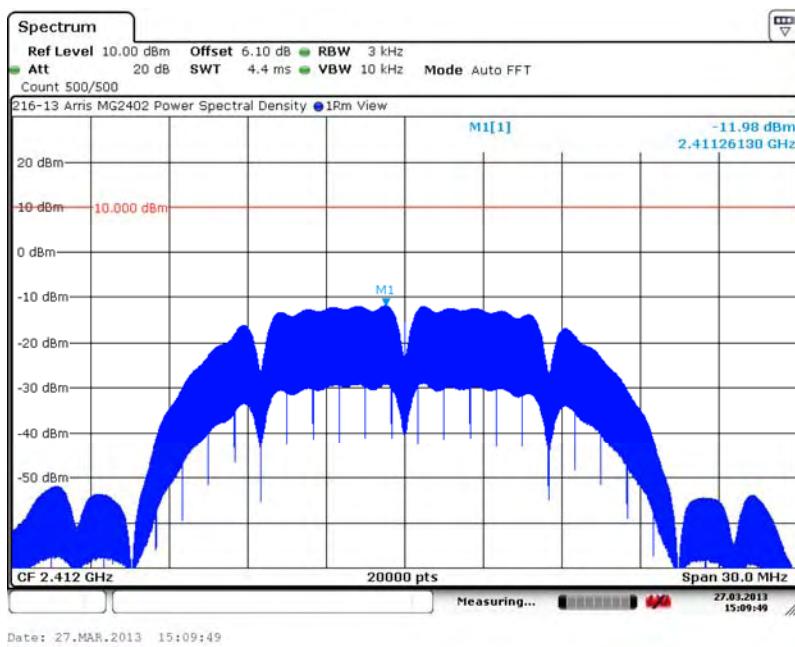
7. Measurement Data (continued)

7.8. Power Spectral Density (15.247(e)) (continued)

7.8.1. 802.11b: Low Channel – 1, J2400



7.8.2. 802.11b: Low Channel – 1, J2401



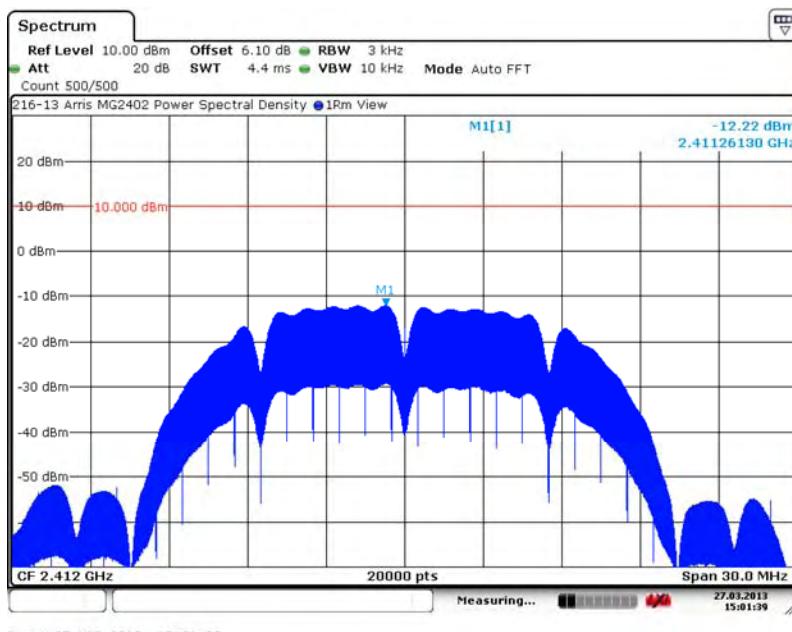
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data

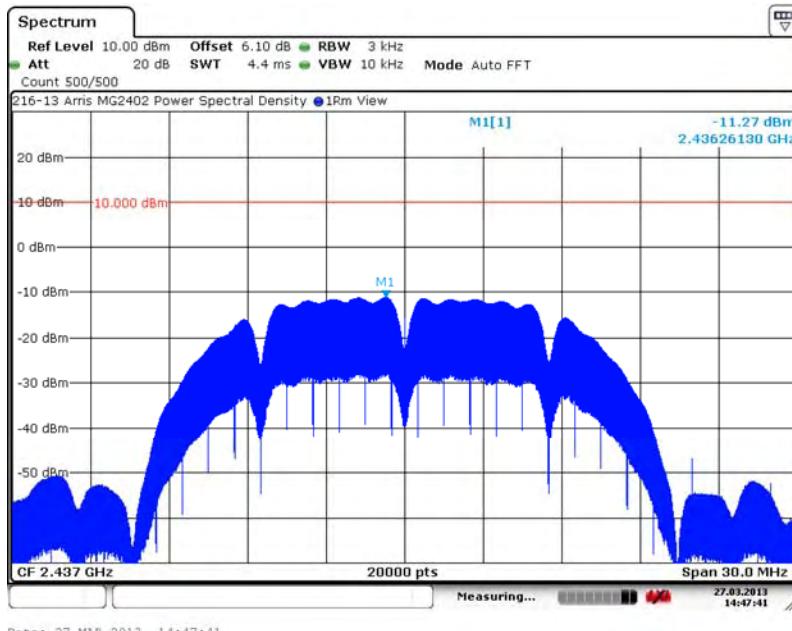
7.8. Power Spectral Density (15.247(e)) (continued)

7.8.3. 802.11b: Low Channel – 1, J2402



Date: 27.MAR.2013 15:01:39

7.8.4. 802.11b: Middle Channel – 6, J2400



Date: 27.MAR.2013 14:47:41

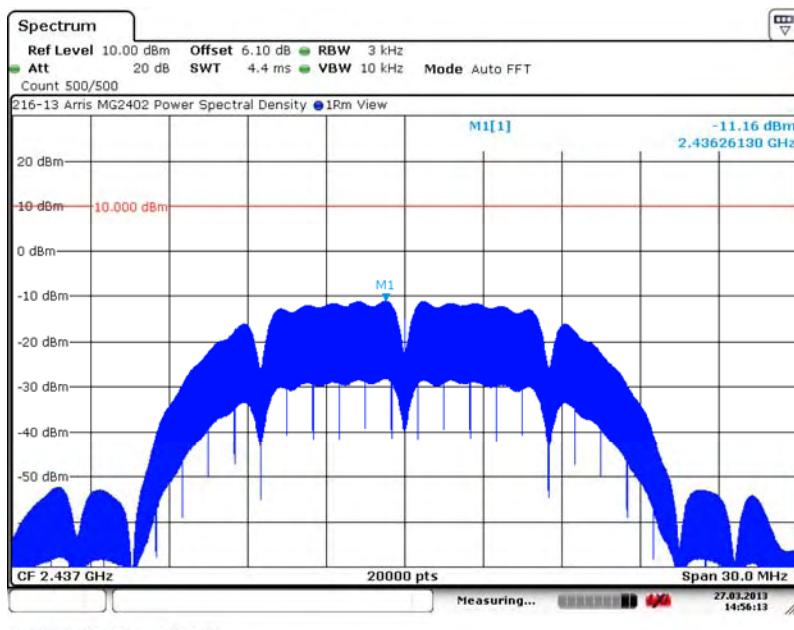
Test Number: 216-13R2

Issue Date: 6/18/2013

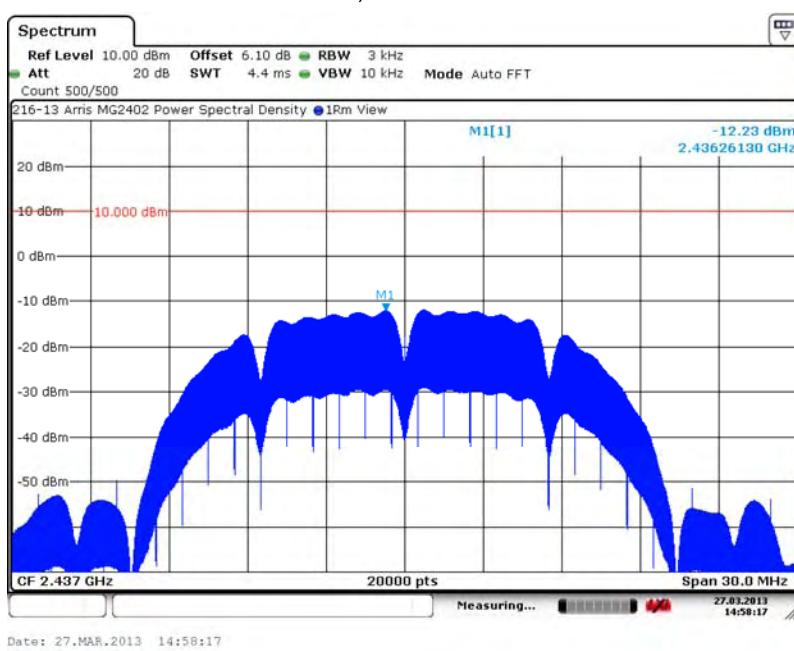
7. Measurement Data

7.8. Power Spectral Density (15.247(e)) (continued)

7.8.5. 802.11b: Middle Channel – 6, J2401



7.8.6. 802.11b: Middle Channel – 6, J2402



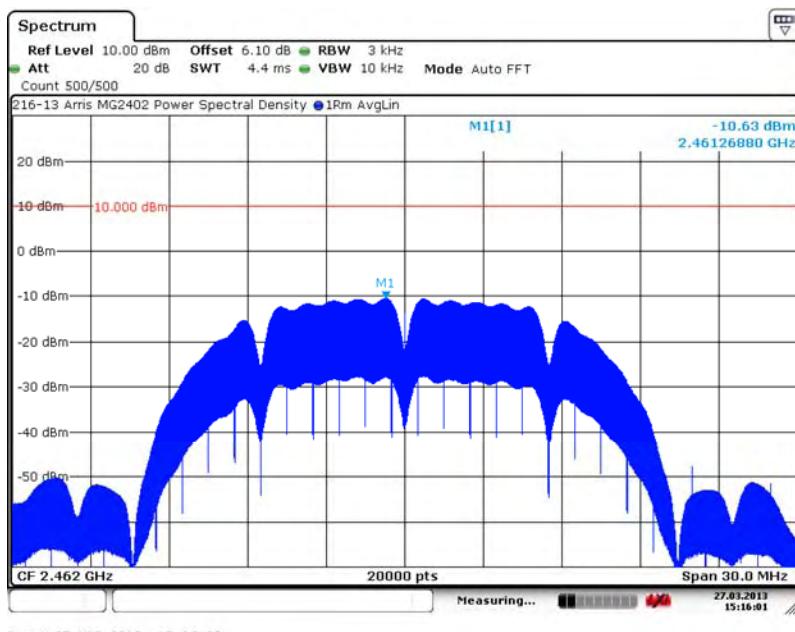
Test Number: 216-13R2

Issue Date: 6/18/2013

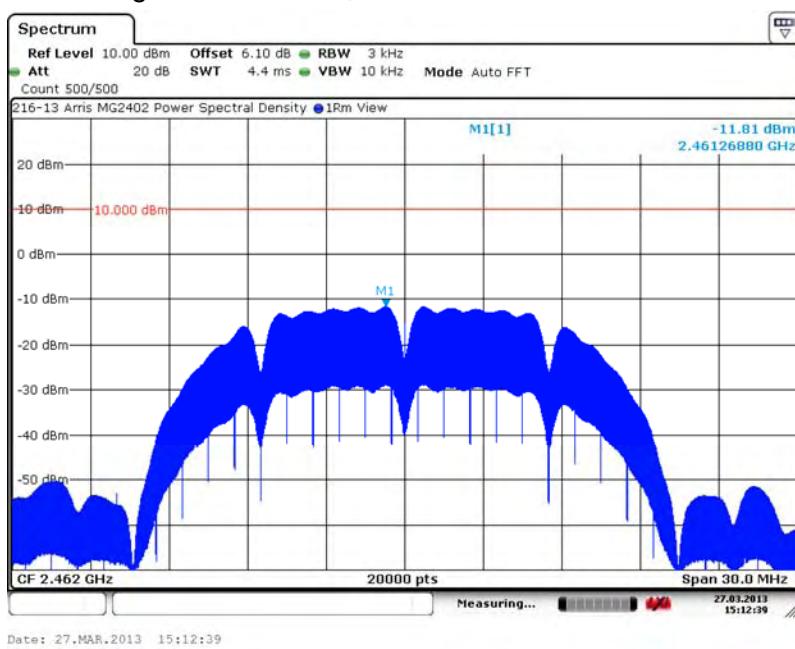
7. Measurement Data

7.8. Power Spectral Density (15.247(e)) (continued)

7.8.7. 802.11b: High Channel – 11, J2400



7.8.8. 802.11b: High Channel – 11, J2401



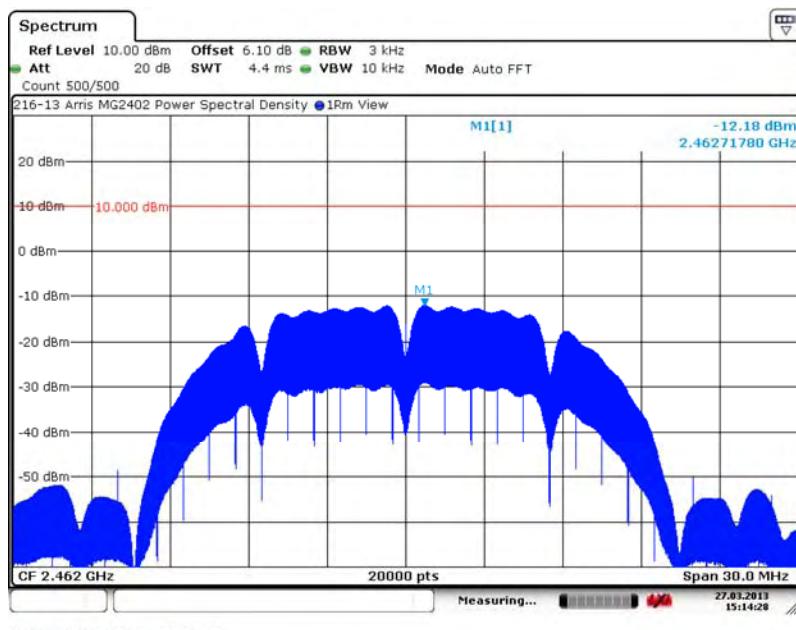
Test Number: 216-13R2

Issue Date: 6/18/2013

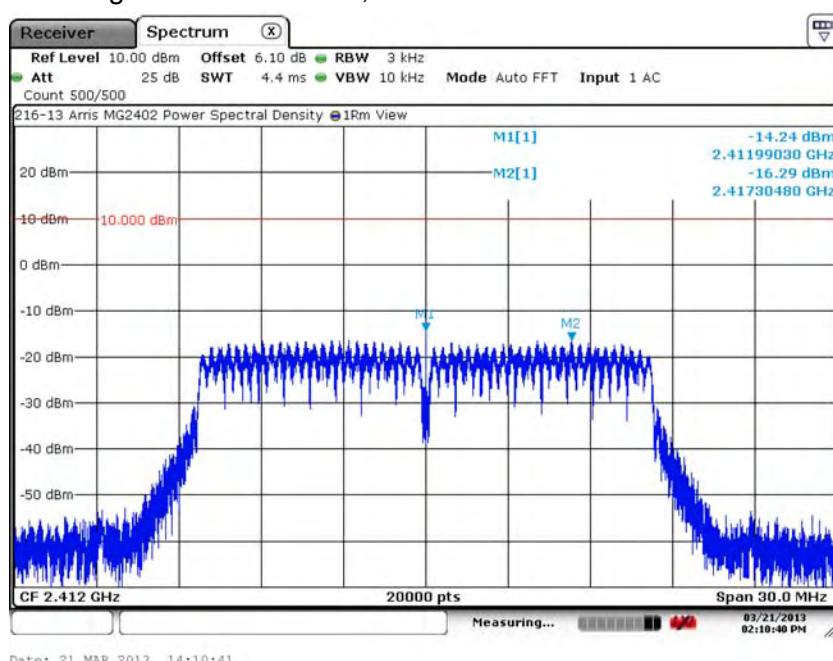
7. Measurement Data

7.8. Power Spectral Density (15.247(e)) (continued)

7.8.9. 802.11b: High Channel – 11, J2402



7.8.10. 802.11g: Low Channel – 1, J2400



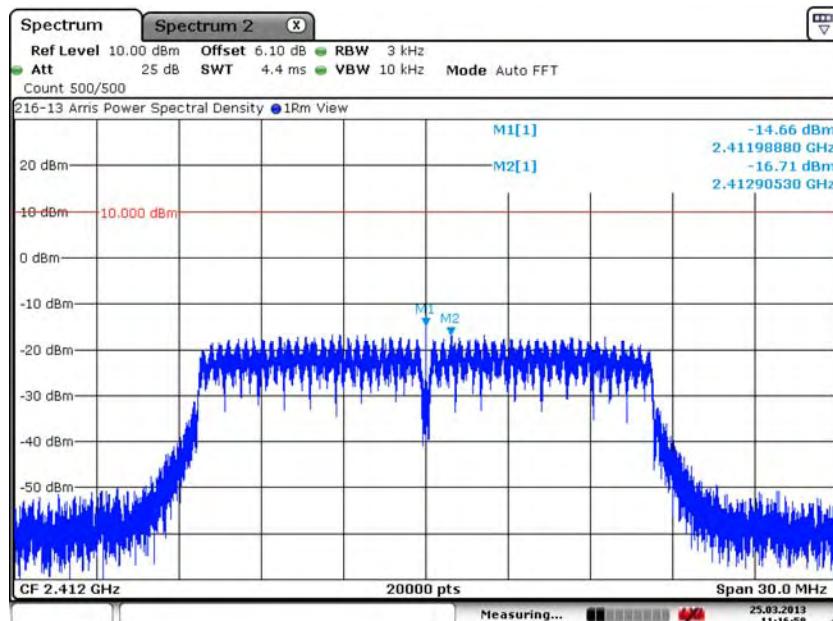
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data

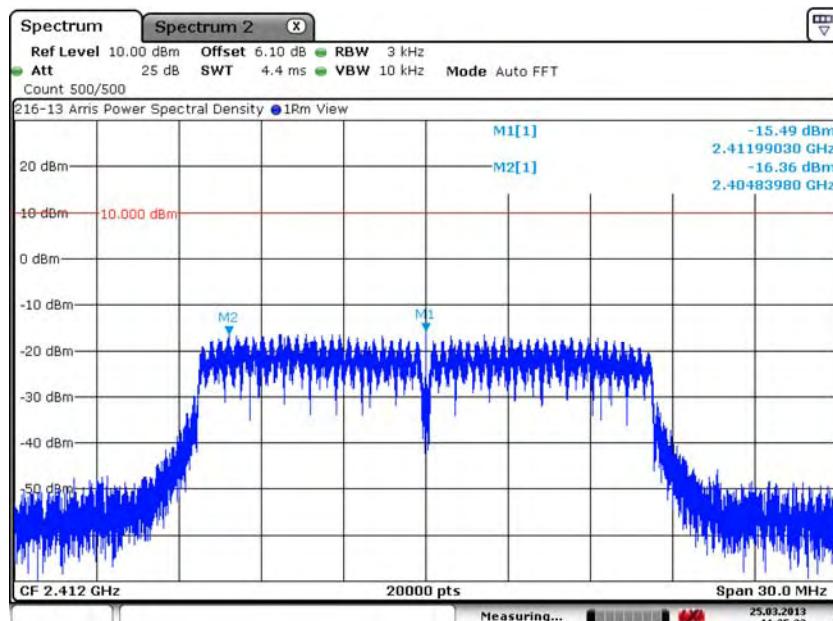
7.8. Power Spectral Density (15.247(e)) (continued)

7.8.11. 802.11g: Low Channel – 1, J2401



Date: 25.MAR.2013 11:16:58

7.8.12. 802.11g: Low Channel – 1, J2402



Date: 25.MAR.2013 11:25:23

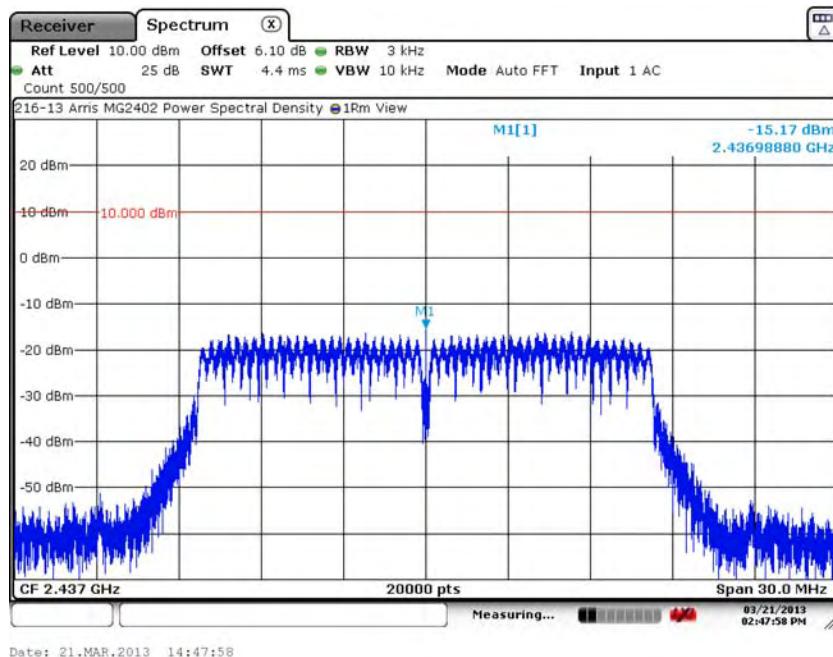
Test Number: 216-13R2

Issue Date: 6/18/2013

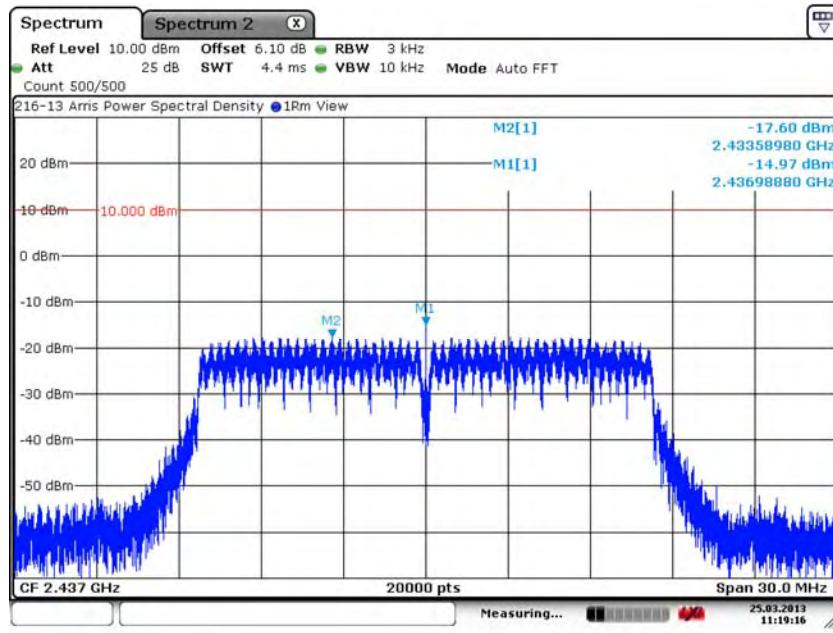
7. Measurement Data

7.8. Power Spectral Density (15.247(e)) (continued)

7.8.13. 802.11g: Middle Channel – 6, J2400



7.8.14. 802.11g: Middle Channel – 6, J2401



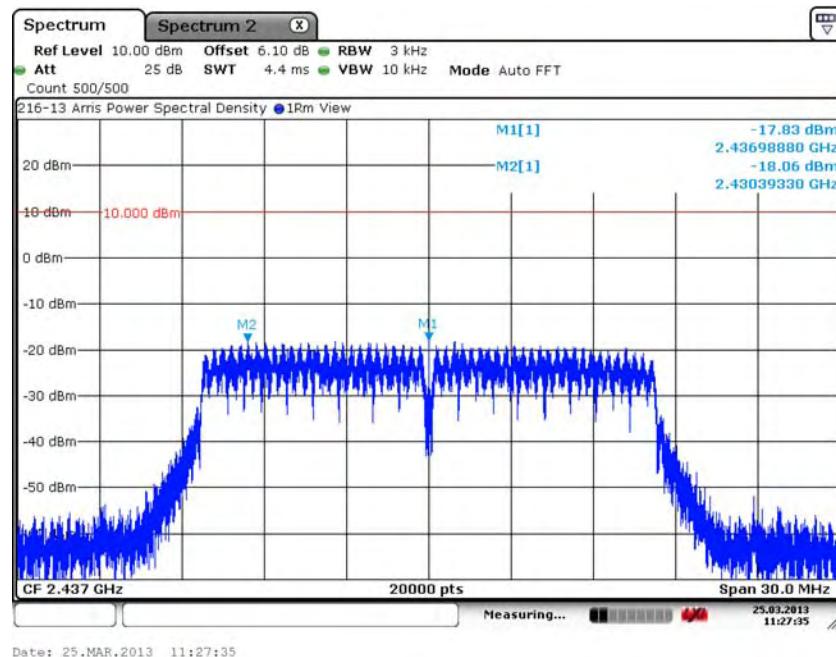
Test Number: 216-13R2

Issue Date: 6/18/2013

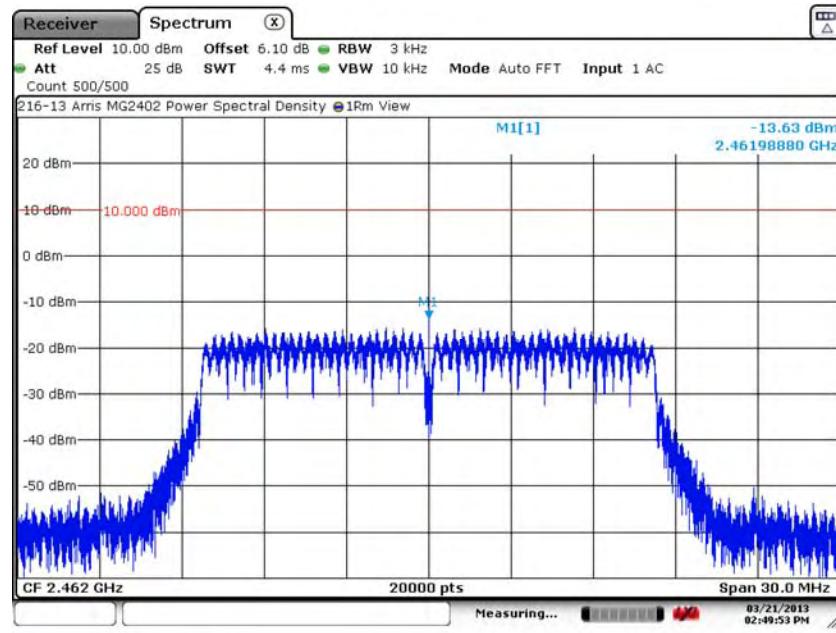
7. Measurement Data

7.8. Power Spectral Density (15.247(e)) (continued)

7.8.15. 802.11g: Middle Channel – 6, J2402



7.8.16. 802.11g: High Channel – 11, J2400



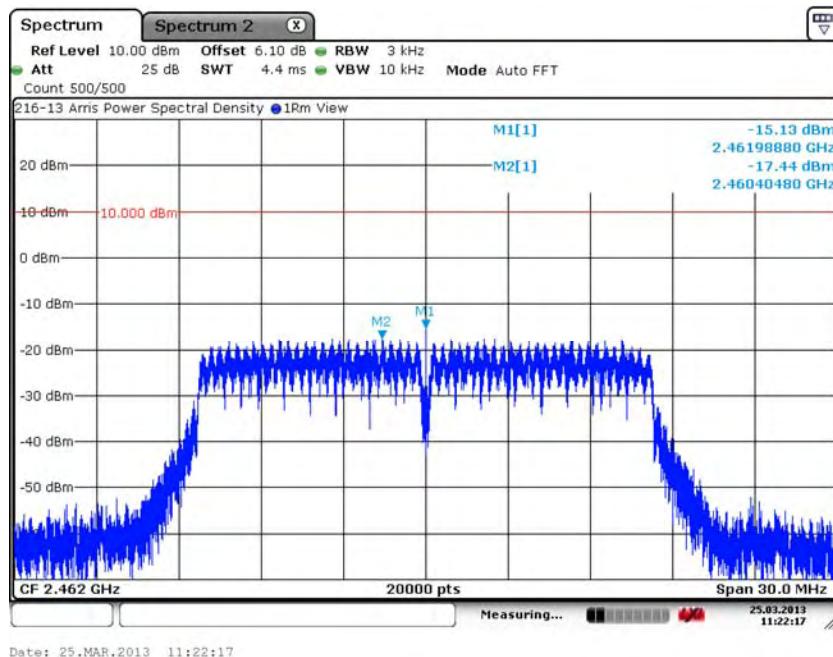
Test Number: 216-13R2

Issue Date: 6/18/2013

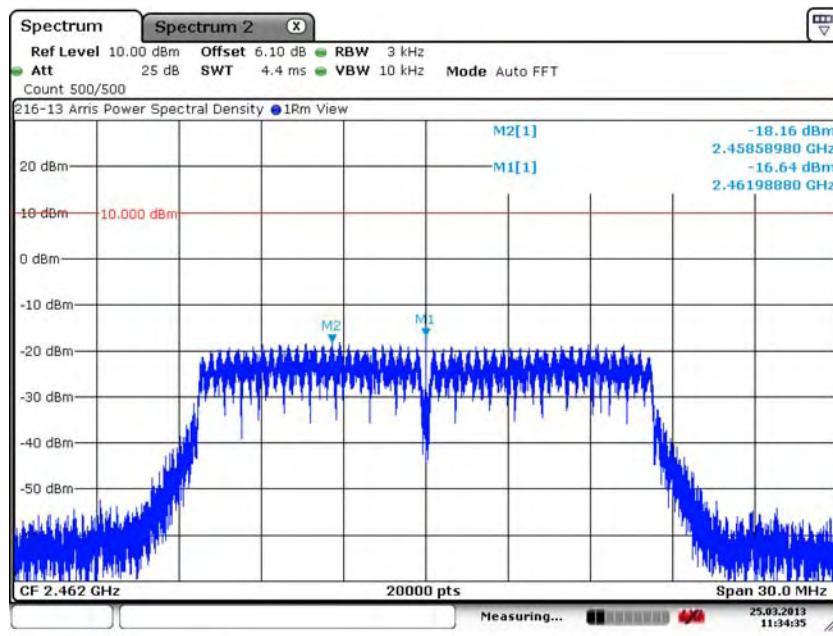
7. Measurement Data

7.8. Power Spectral Density (15.247(e)) (continued)

7.8.17. 802.11g: High Channel – 11, J2401



7.8.18. 802.11g: High Channel – 11, J2402



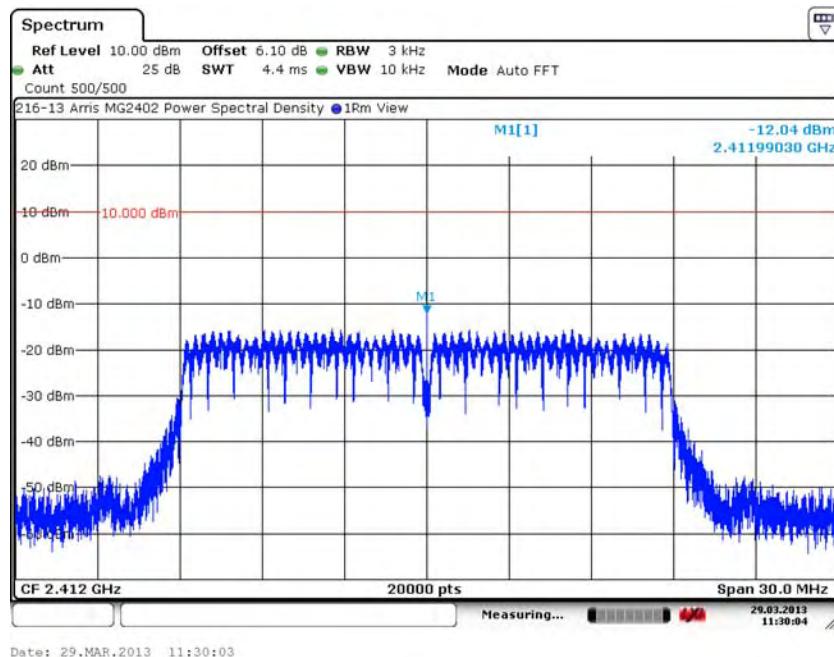
Test Number: 216-13R2

Issue Date: 6/18/2013

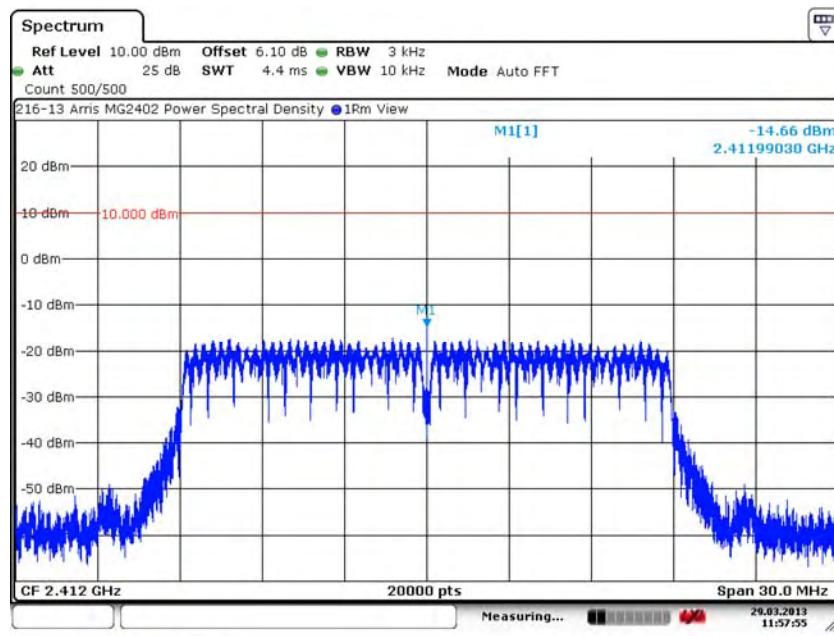
7. Measurement Data

7.8. Power Spectral Density (15.247(e)) (continued)

7.8.19. HT20: Low Channel – 1, J2400



7.8.20. HT20: Low Channel – 1, J2401



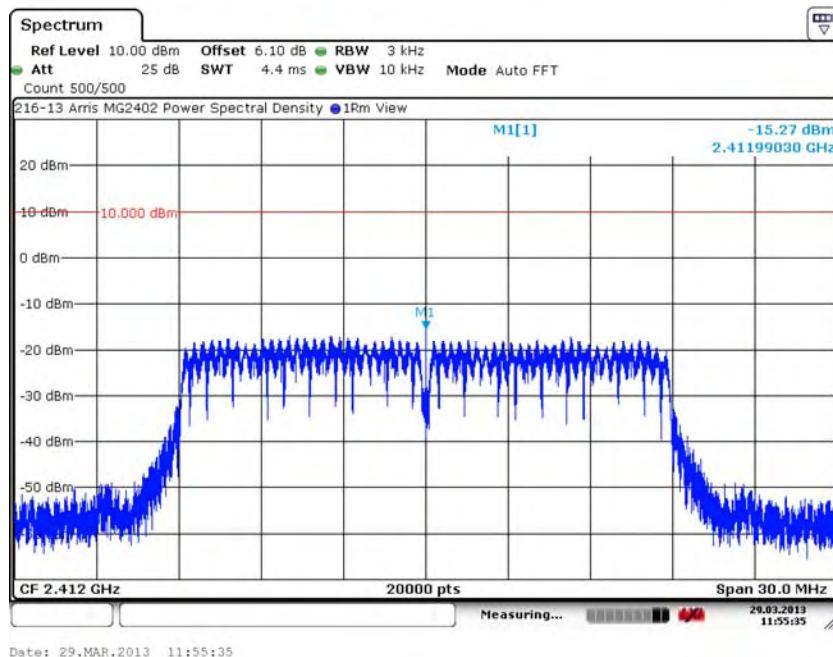
Test Number: 216-13R2

Issue Date: 6/18/2013

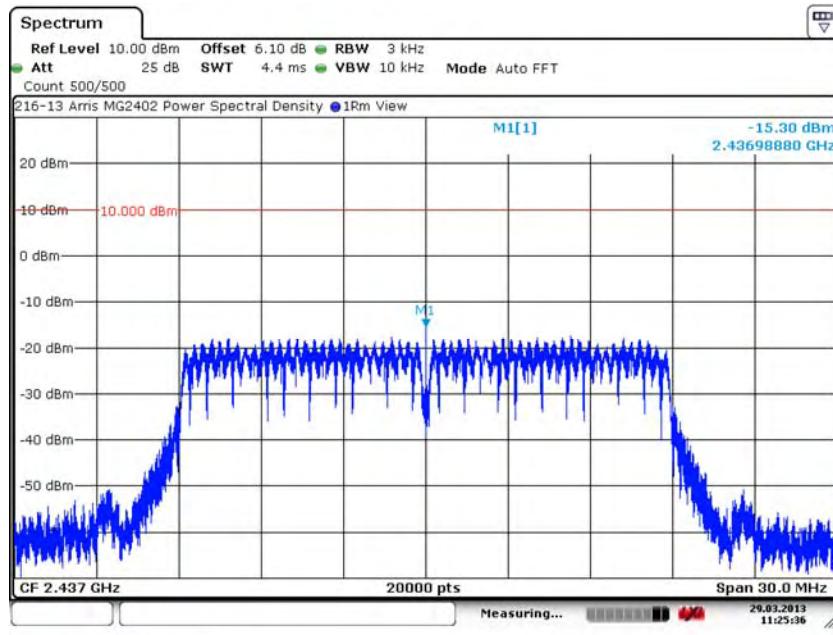
7. Measurement Data

7.8. Power Spectral Density (15.247(e)) (continued)

7.8.21. HT20: Low Channel – 1, J2402



7.8.22. HT20: Mid Channel – 6, J2400



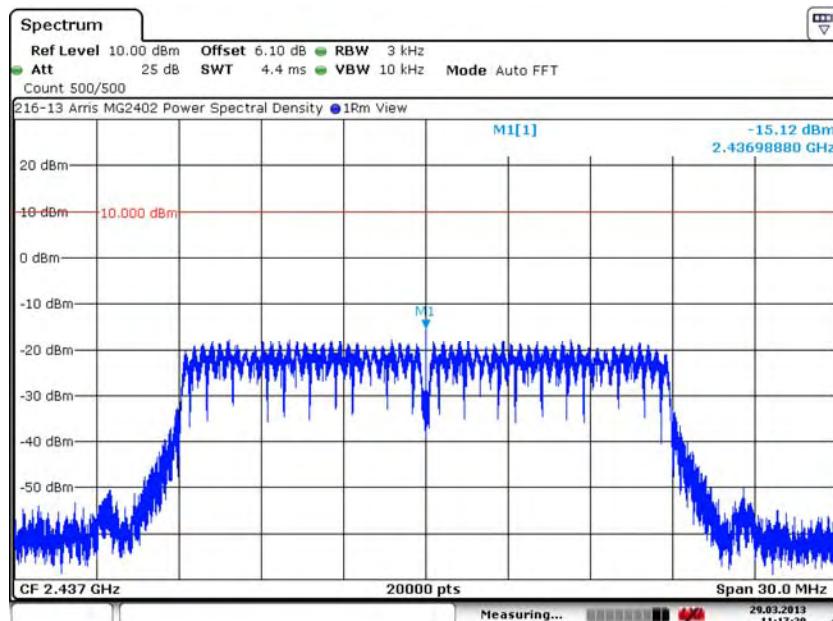
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data

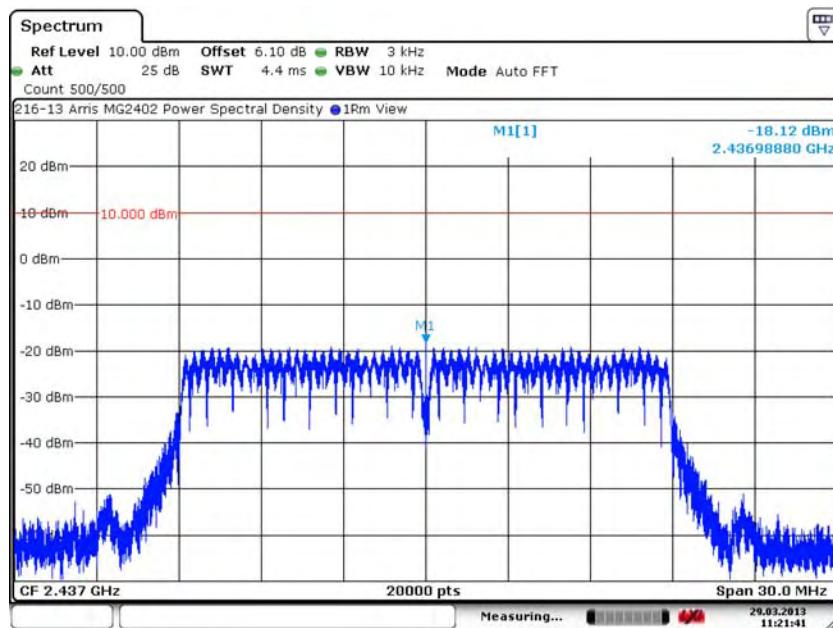
7.8. Power Spectral Density (15.247(e)) (continued)

7.8.23. HT20: Mid Channel – 6, J2401



Date: 29.MAR.2013 11:17:29

7.8.24. HT20: Mid Channel – 6, J2402



Date: 29.MAR.2013 11:21:40

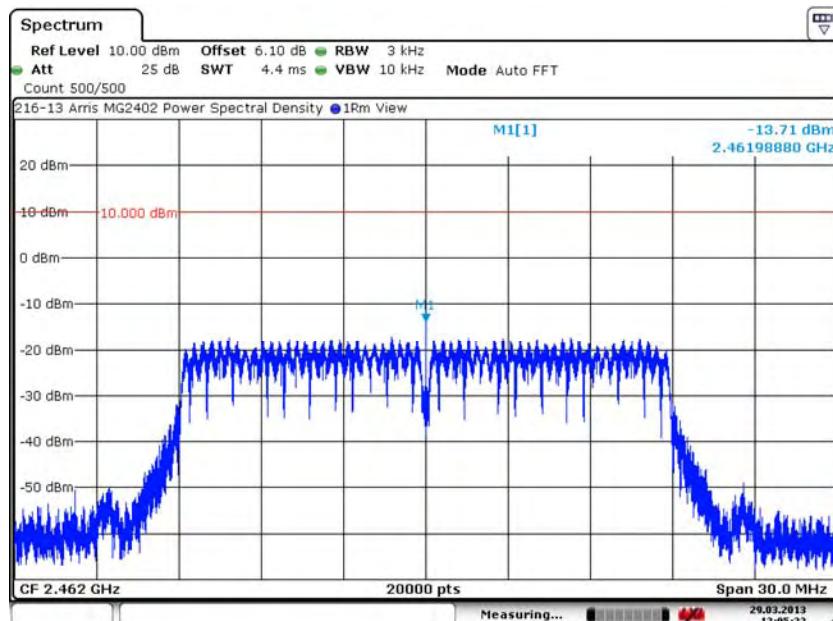
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data

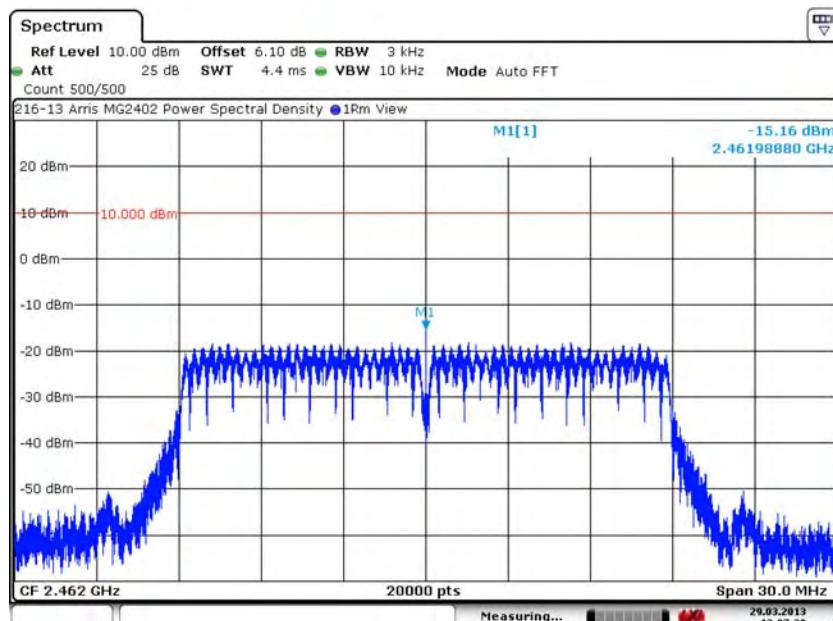
7.8. Power Spectral Density (15.247(e)) (continued)

7.8.25. HT20: High Channel – 11, J2400



Date: 29.MAR.2013 12:05:22

7.8.26. HT20: High Channel – 11, J2401



Date: 29.MAR.2013 12:07:29

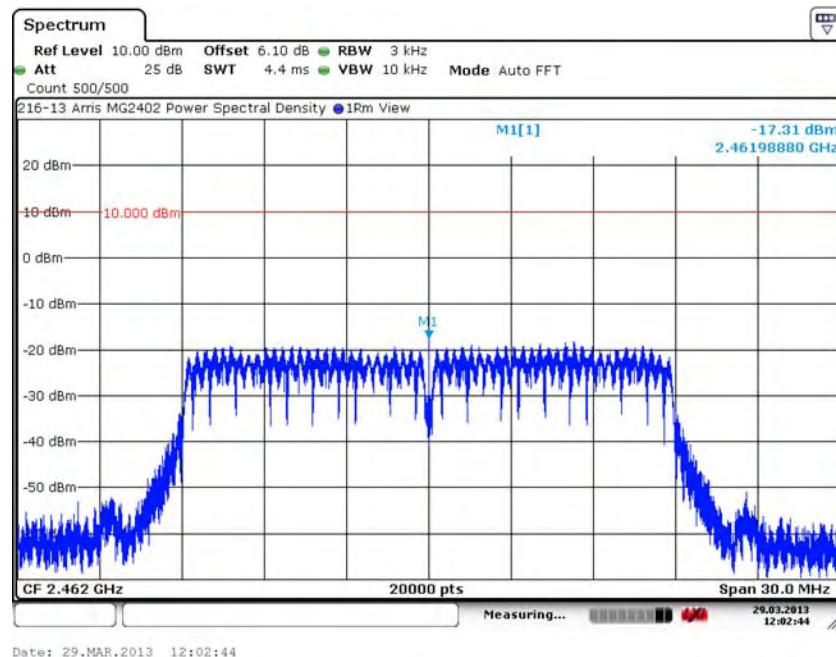
Test Number: 216-13R2

Issue Date: 6/18/2013

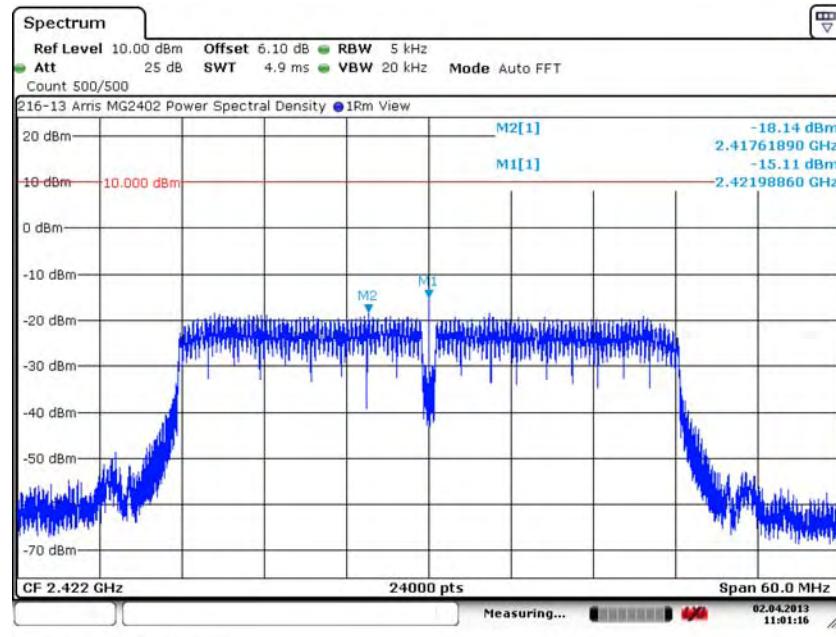
7. Measurement Data

7.8. Power Spectral Density (15.247(e)) (continued)

7.8.27. HT20: High Channel – 11, J2402



7.8.28. HT40: Low Channel – 3, J2400



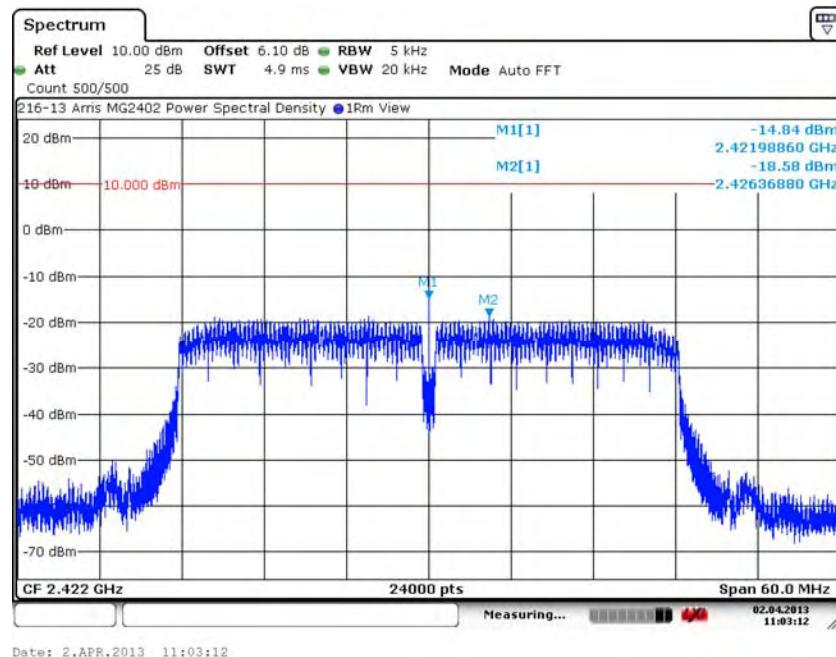
Test Number: 216-13R2

Issue Date: 6/18/2013

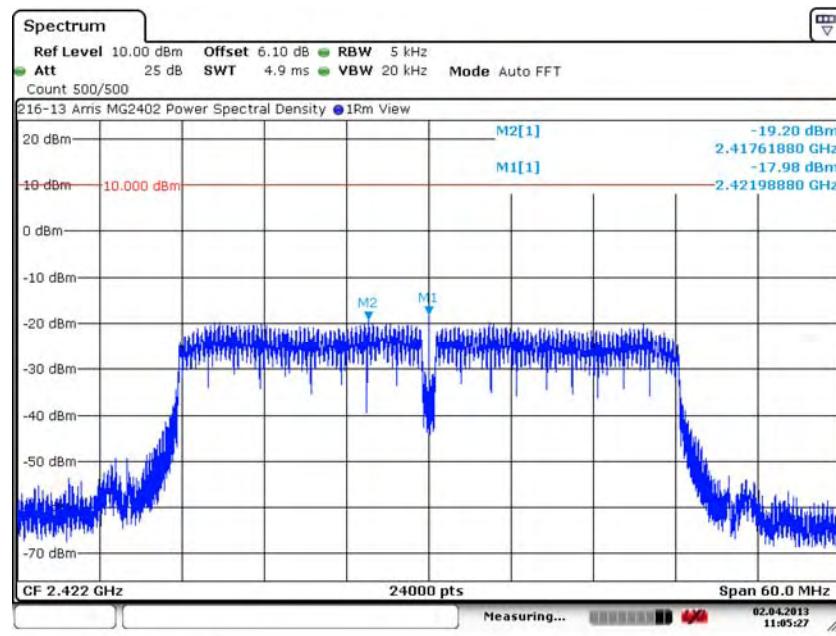
7. Measurement Data

7.8. Power Spectral Density (15.247(e)) (continued)

7.8.29. HT40: Low Channel – 3, J2401



7.8.30. HT40: Low Channel – 3, J2402



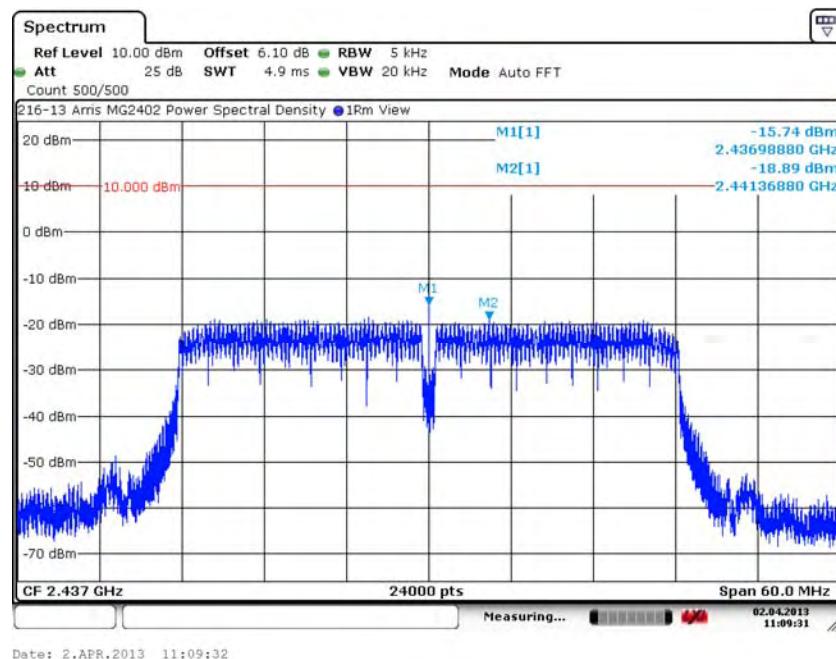
Test Number: 216-13R2

Issue Date: 6/18/2013

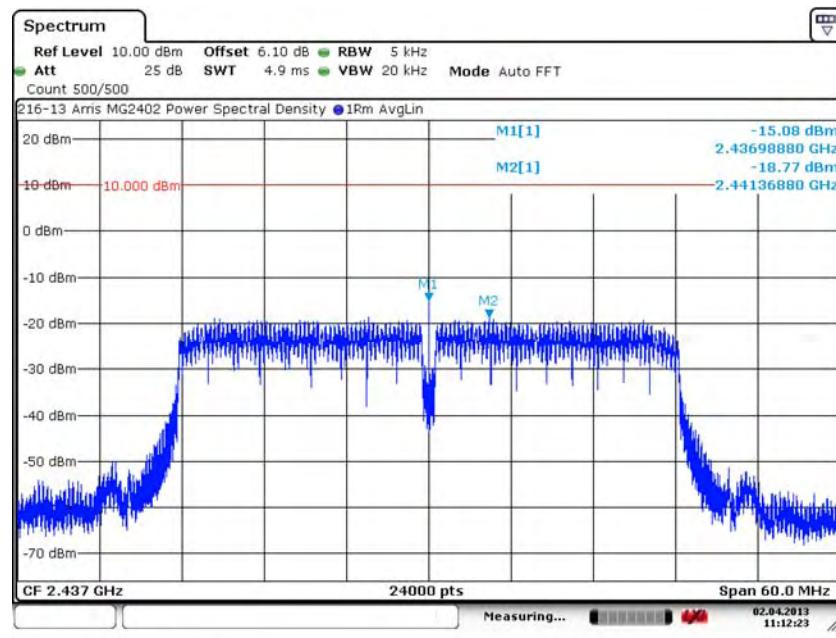
7. Measurement Data

7.8. Power Spectral Density (15.247(e)) (continued)

7.8.31. HT40: Mid Channel – 6, J2400



7.8.32. HT40: Mid Channel – 6, J2401



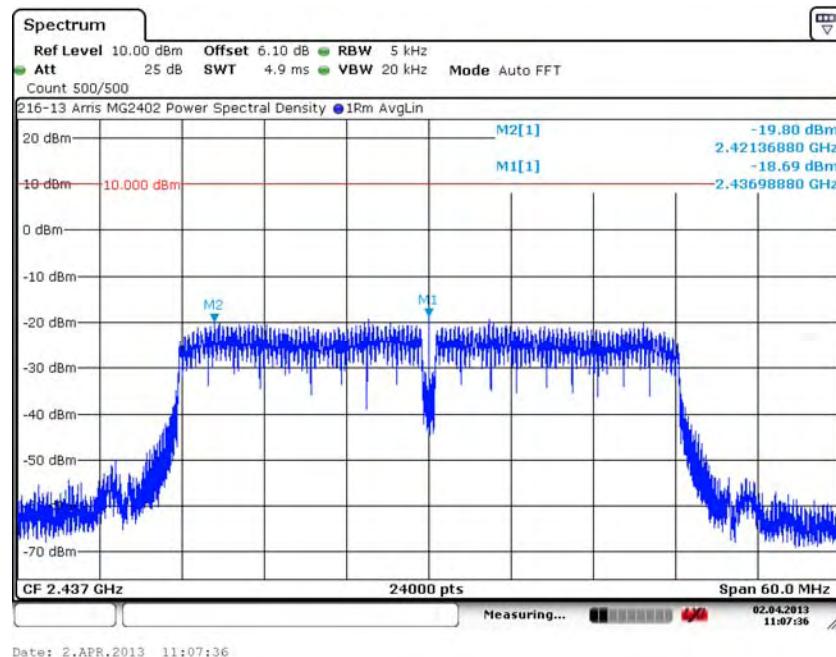
Test Number: 216-13R2

Issue Date: 6/18/2013

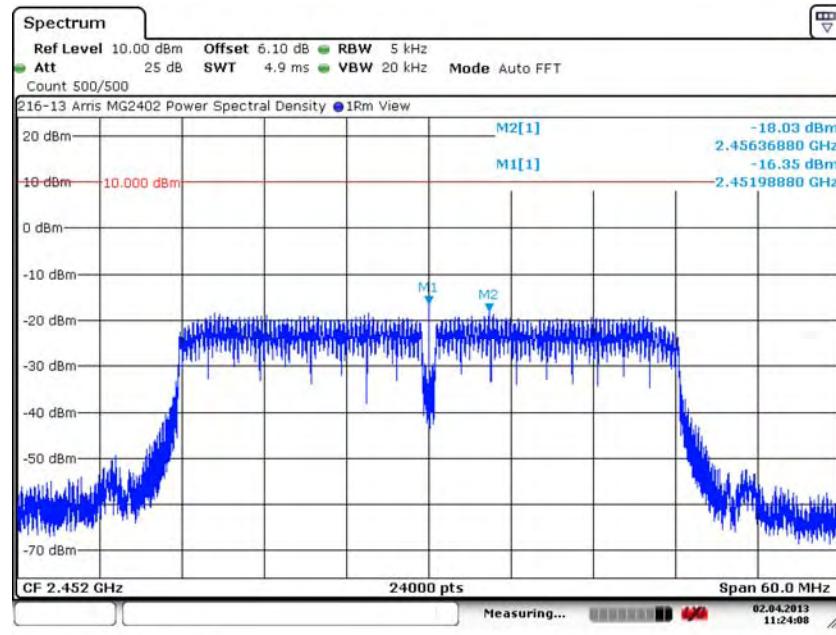
7. Measurement Data

7.8. Power Spectral Density (15.247(e)) (continued)

7.8.33. HT40: Mid Channel – 6, J2402



7.8.34. HT40: High Channel – 9, J2400



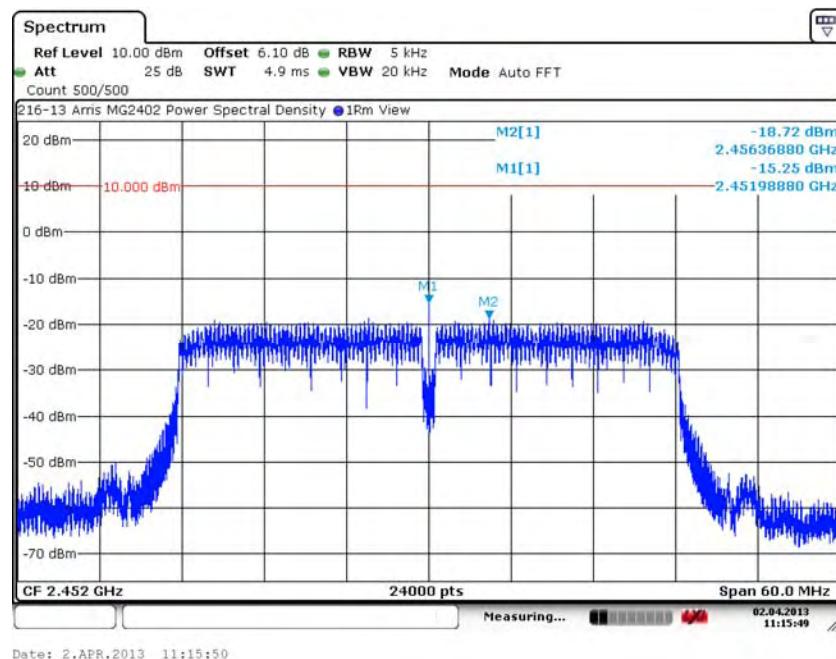
Test Number: 216-13R2

Issue Date: 6/18/2013

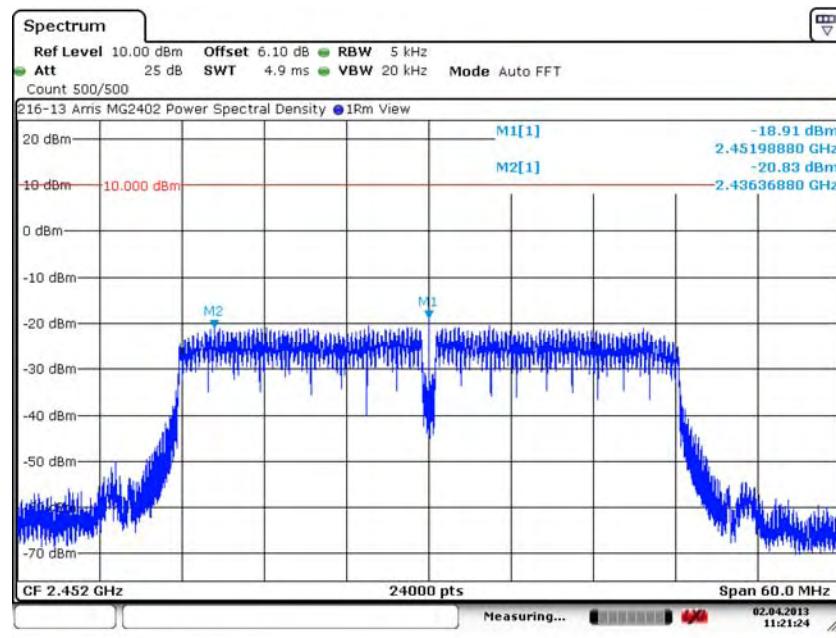
7. Measurement Data

7.8. Power Spectral Density (15.247(e)) (continued)

7.8.35. HT40: High Channel – 9, J2401



7.8.36. HT40: High Channel – 9, J2402



Test Number: 216-13R2
Issue Date: 6/18/2013

7. Measurement Data (continued)

7.8. Power Spectral Density (15.247(e)) (continued)

Measurement Results in 5725 MHz to 5850 MHz band

802.11a Mode Channel	Frequency (MHz)	Maximum Power Spectral Density			Total Max Power Spectral Density (dBm)	Limit (dBm)	Result
		J5000	J5001	J5002			
		(dBm)	(dBm)	(dBm)			
Low	5743.3792	-15.77	-13.78	-15.15	-10.05	8.00	Compliant
Middle	5779.6770	-16.41	-15.47	-15.82	-11.11	8.00	Compliant
High	5822.1776	-19.18	-17.01	-17.82	-13.14	8.00	Compliant

HT20 Mode Channel	Frequency (MHz)	Maximum Power Spectral Density			Total Max Power Spectral Density (dBm)	Limit (dBm)	Result
		J5000	J5001	J5002			
		(dBm)	(dBm)	(dBm)			
Low	5749.9360	-14.70	-13.83	-14.90	-9.68	8.00	Compliant
Middle	5790.2855	-17.12	-15.45	-15.74	-11.28	8.00	Compliant
High	5829.9360	-19.41	-17.99	-17.62	-13.51	8.00	Compliant

HT40 Mode Channel	Frequency (MHz)	Maximum Power Spectral Density			Total Max Power Spectral Density (dBm)	Limit (dBm)	Result
		J5000	J5001	J5002			
		(dBm)	(dBm)	(dBm)			
Low	5746.1759	-15.90	-15.54	-15.75	-10.96	8.00	Compliant
High	5790.5936	-17.89	-16.49	-17.99	-12.63	8.00	Compliant

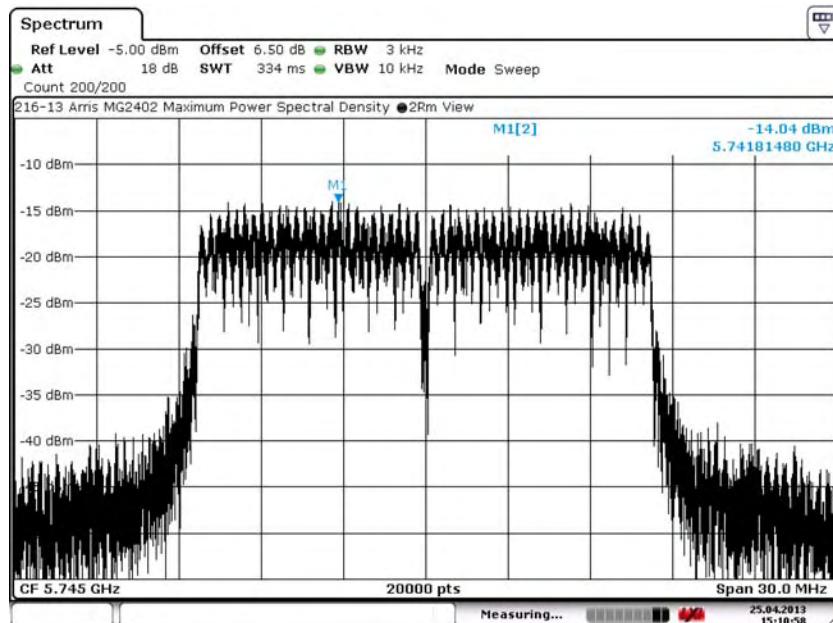
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

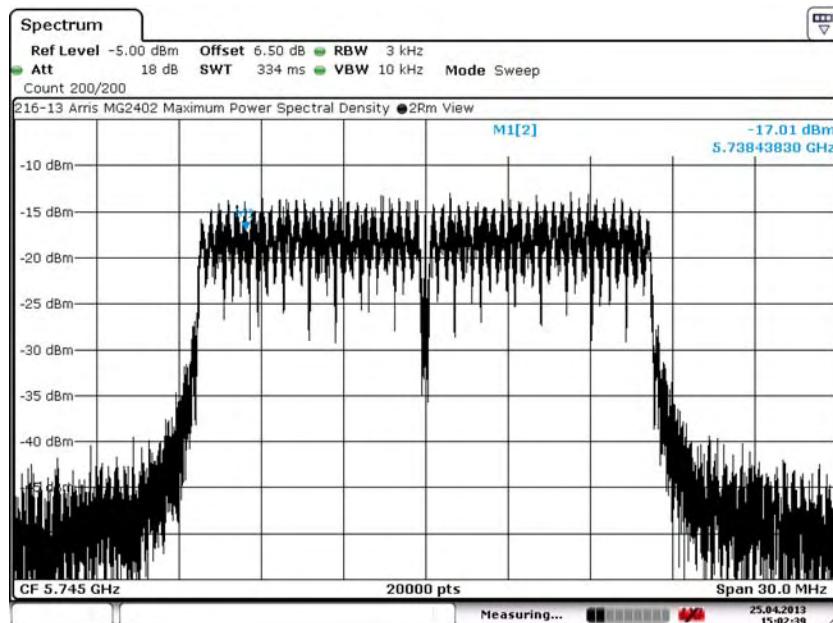
7.8. Power Spectral Density (15.247(e)) (continued)

7.8.37. 802.11a: Low Channel – 149, J5000



Date: 25.APR.2013 15:10:58

7.8.38. 802.11a: Low Channel – 149, J5001



Date: 25.APR.2013 15:02:40

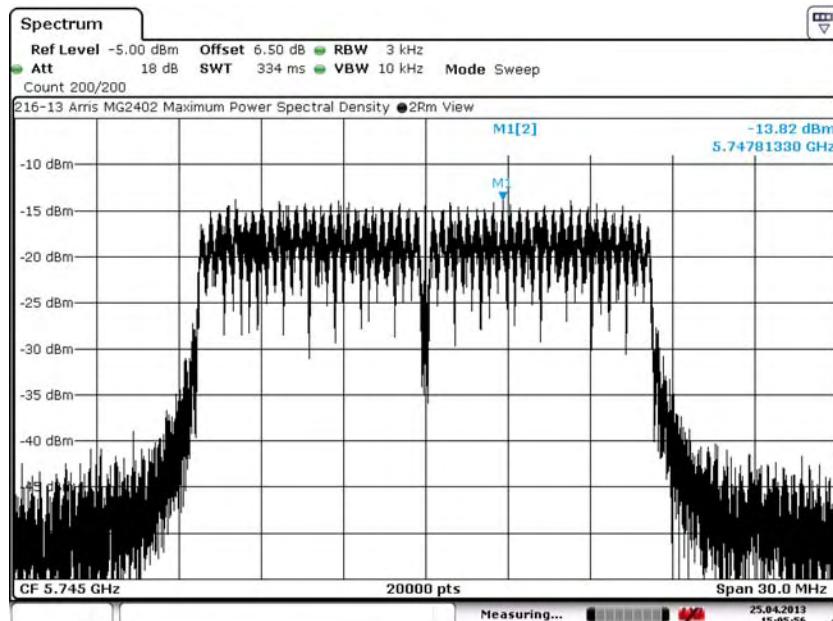
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

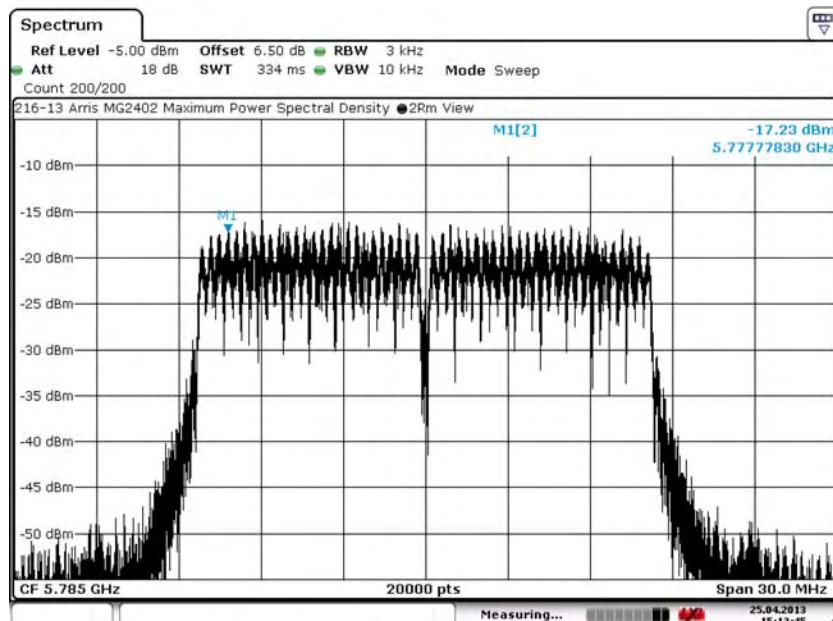
7.8. Power Spectral Density (15.247(e)) (continued)

7.8.39. 802.11a: Low Channel – 149, J5002



Date: 25.APR.2013 15:05:57

7.8.40. 802.11a: Middle Channel – 157, J5000



Date: 25.APR.2013 15:13:45

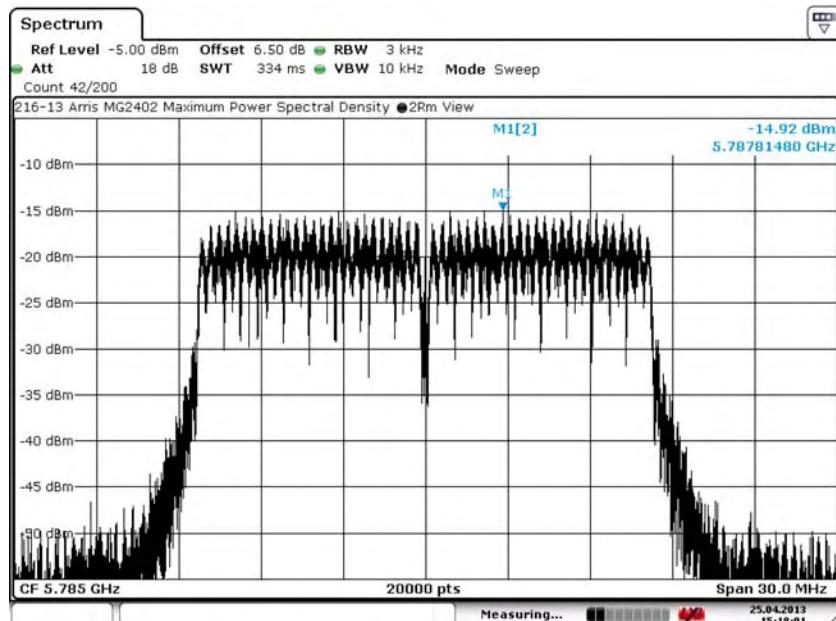
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

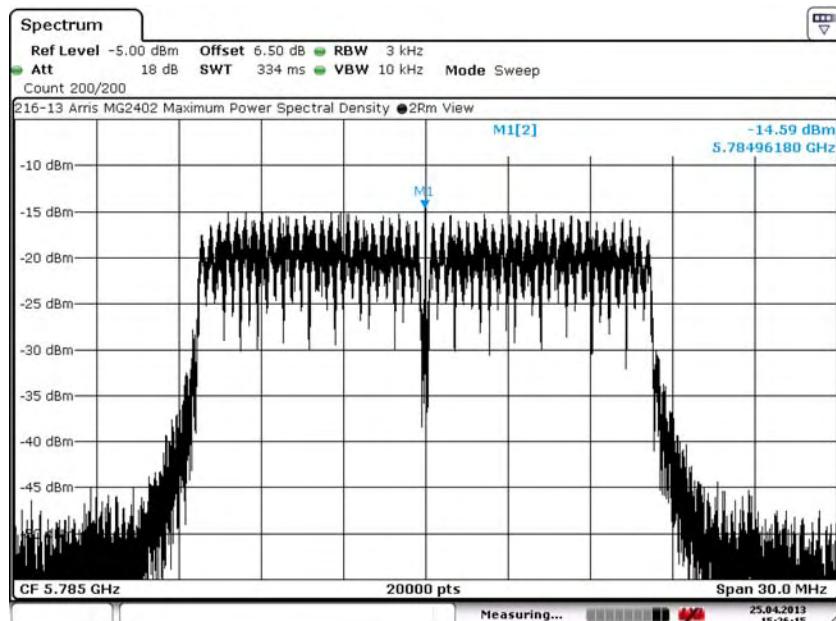
7.8. Power Spectral Density (15.247(e)) (continued)

7.8.41. 802.11a: Middle Channel – 157, J5001



Date: 25.APR.2013 15:18:02

7.8.42. 802.11a: Middle Channel – 157, J5002



Date: 25.APR.2013 15:26:15

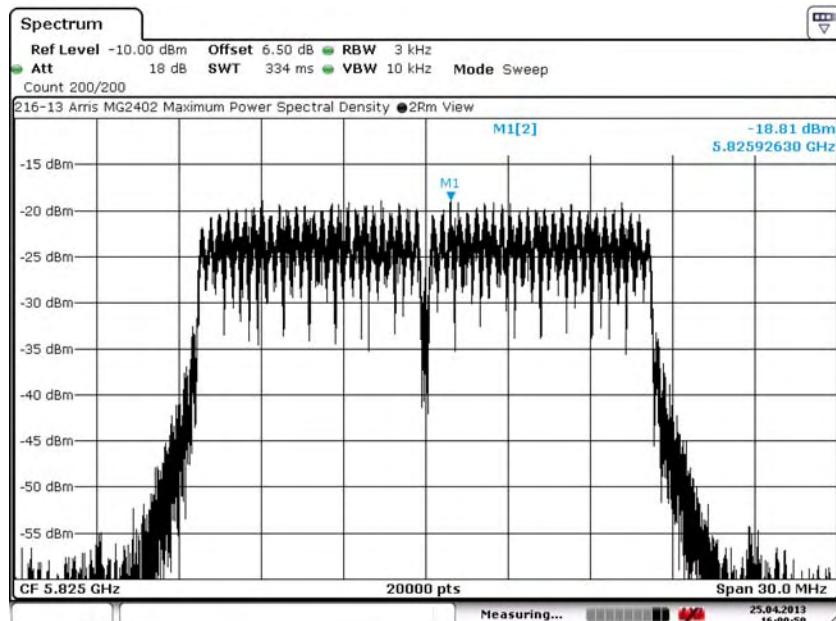
Test Number: 216-13R2

Issue Date: 6/18/2013

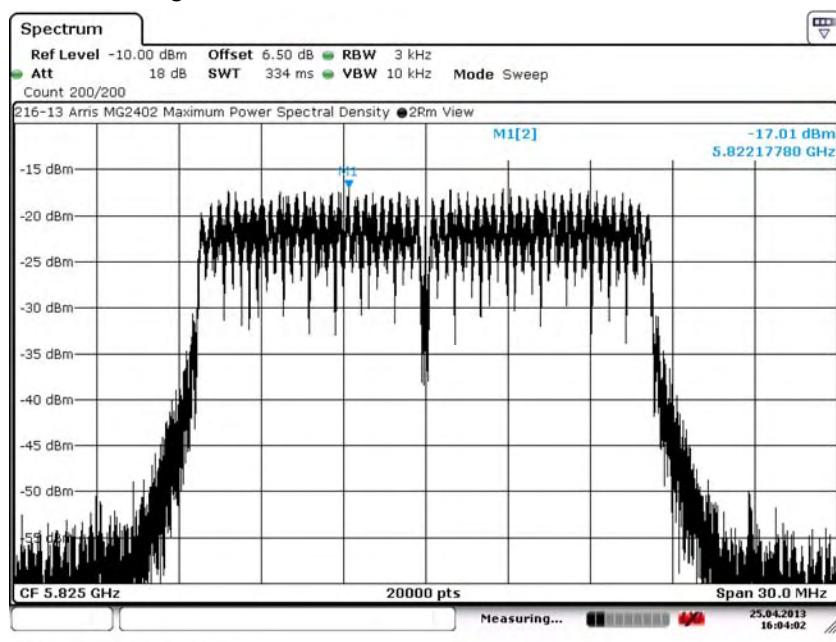
7. Measurement Data (continued)

7.8. Power Spectral Density (15.247(e)) (continued)

7.8.43. 802.11a: High Channel – 165, J5000



7.8.44. 802.11a: High Channel – 165, J5001



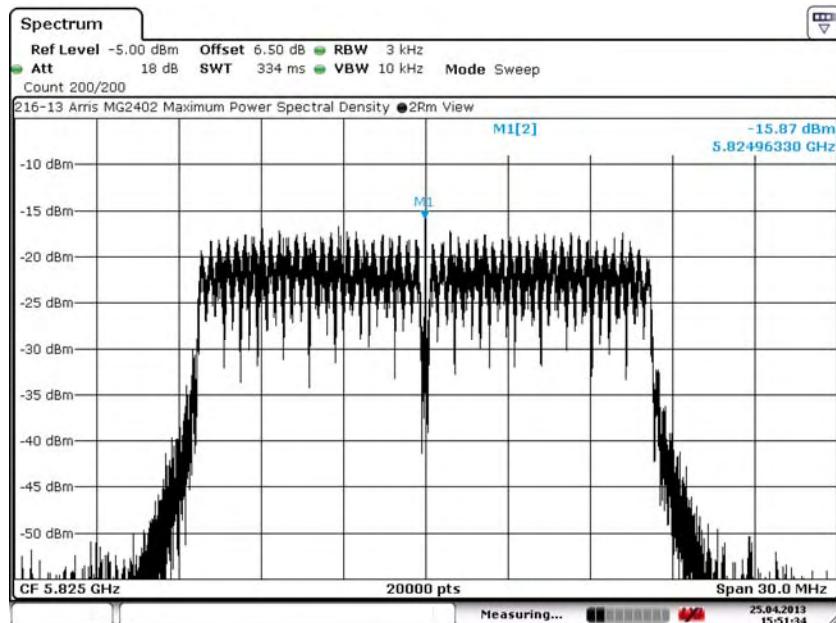
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

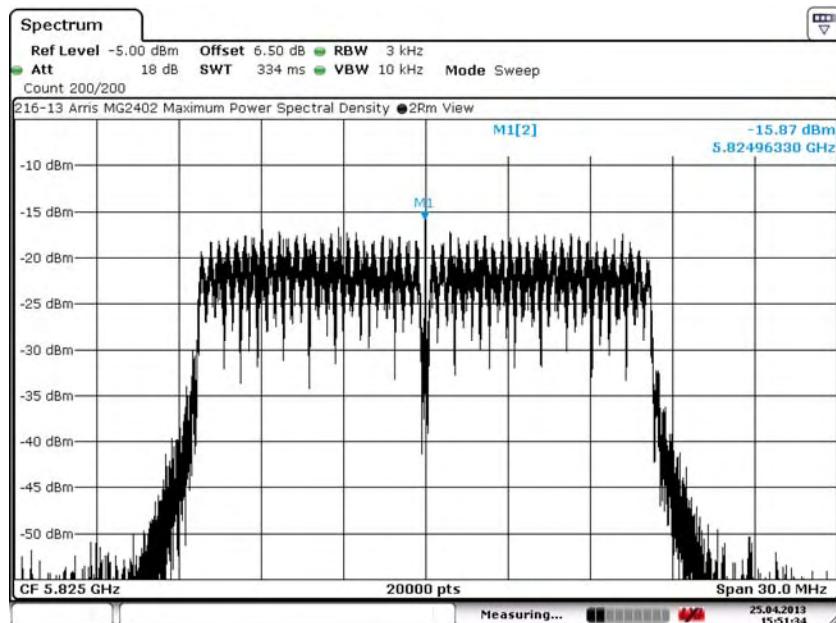
7.8. Power Spectral Density (15.247(e)) (continued)

7.8.45. 802.11a: High Channel – 165, J5002



Date: 25.APR.2013 15:51:34

7.8.46. HT20: Low Channel – 149, J5000



Date: 25.APR.2013 15:51:34

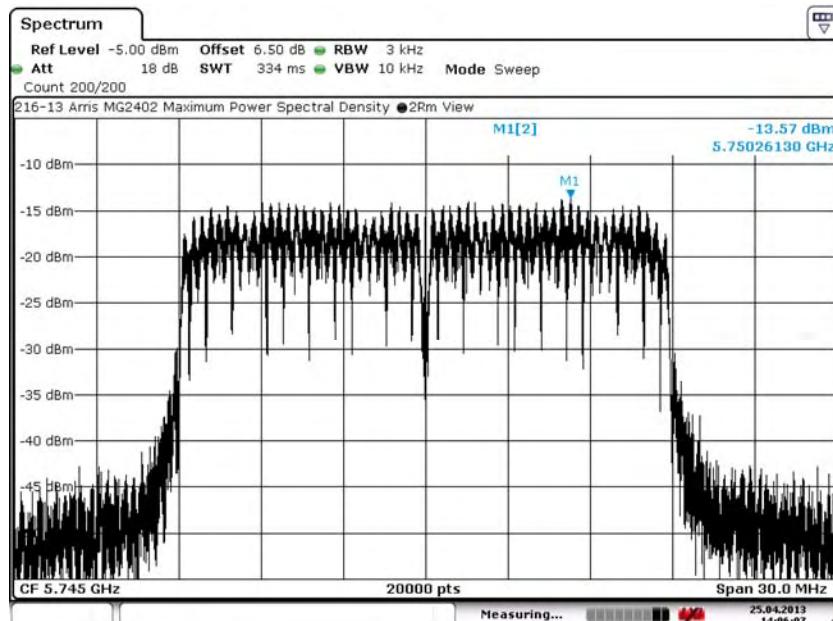
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

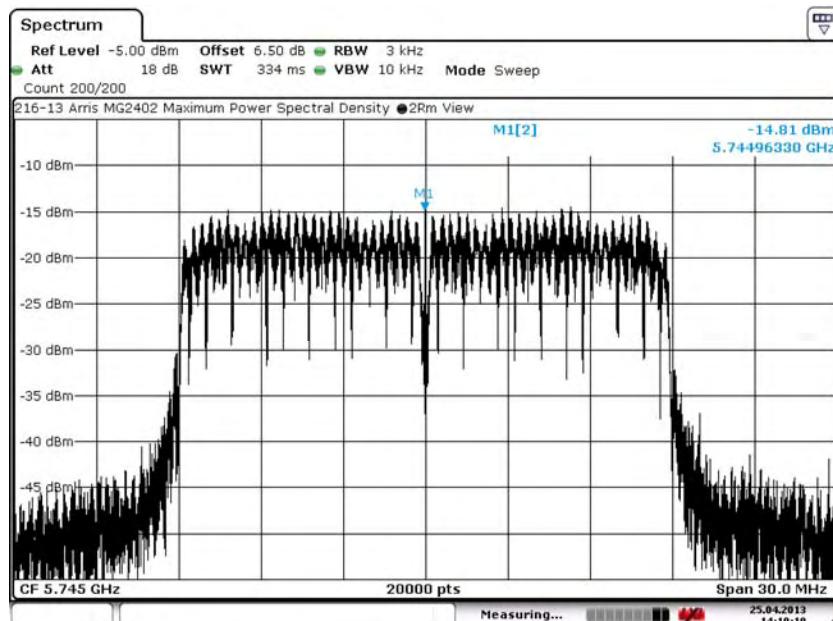
7.8. Power Spectral Density (15.247(e)) (continued)

7.8.47. HT20: Low Channel – 149, J5001



Date: 25.APR.2013 14:06:07

7.8.48. HT20: Low Channel – 149, J5002



Date: 25.APR.2013 14:10:19

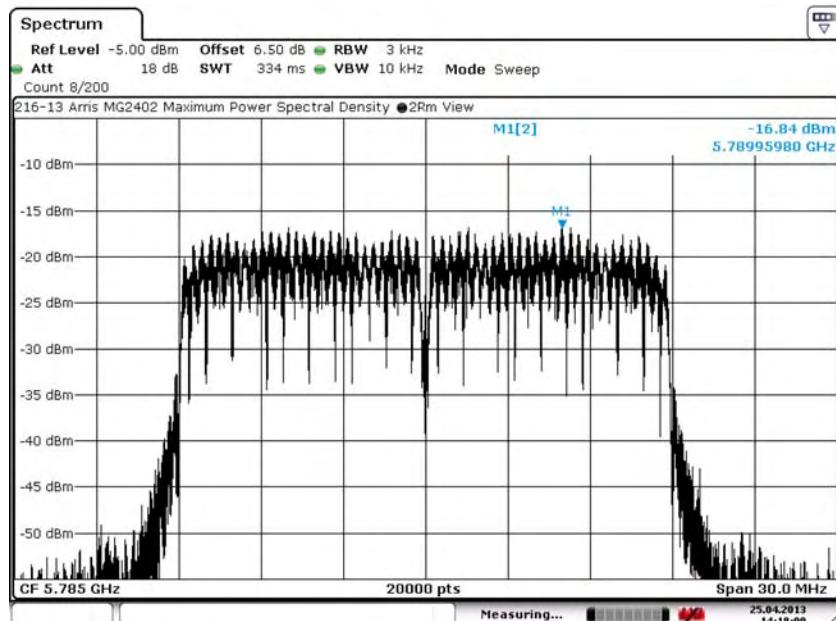
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

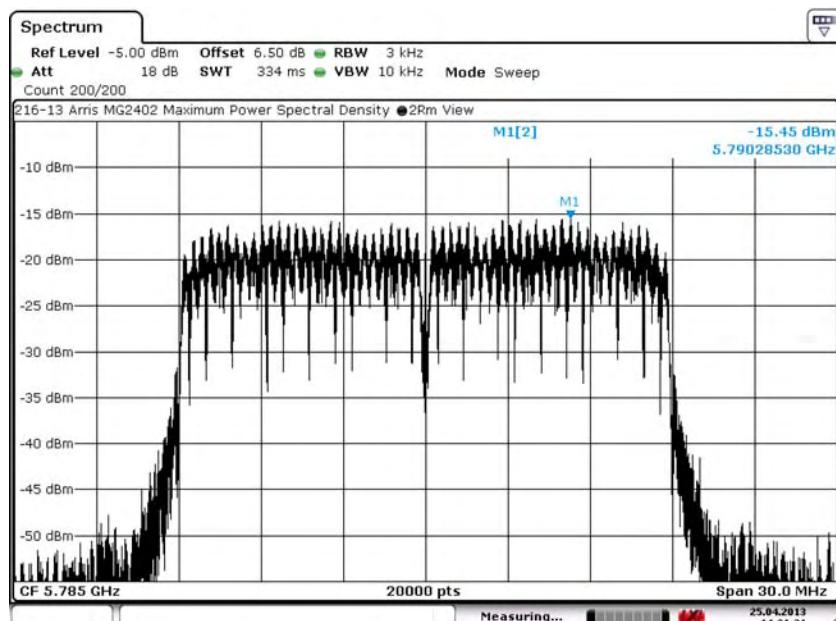
7.8. Power Spectral Density (15.247(e)) (continued)

7.8.49. HT20: Middle Channel – 157, J5000



Date: 25.APR.2013 14:18:09

7.8.50. HT20: Middle Channel – 157, J5001



Date: 25.APR.2013 14:21:21

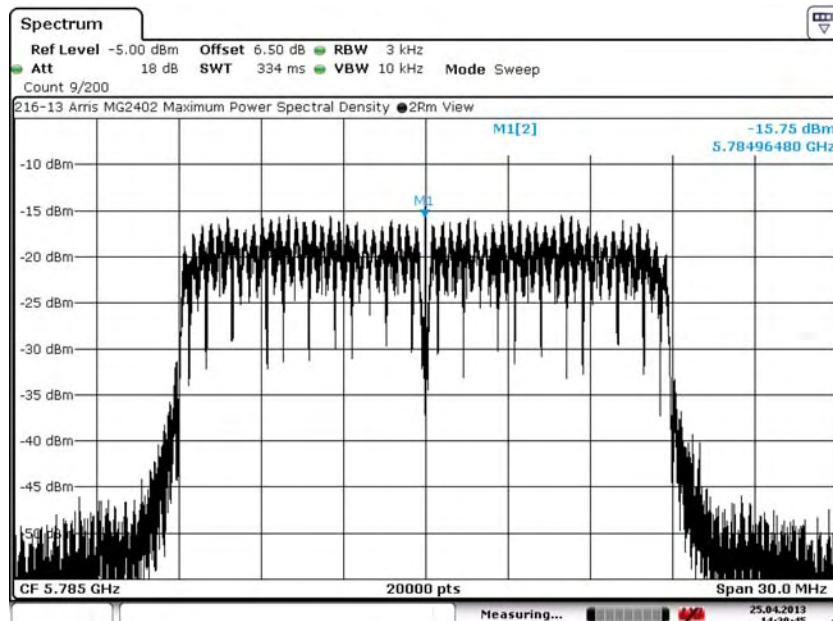
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

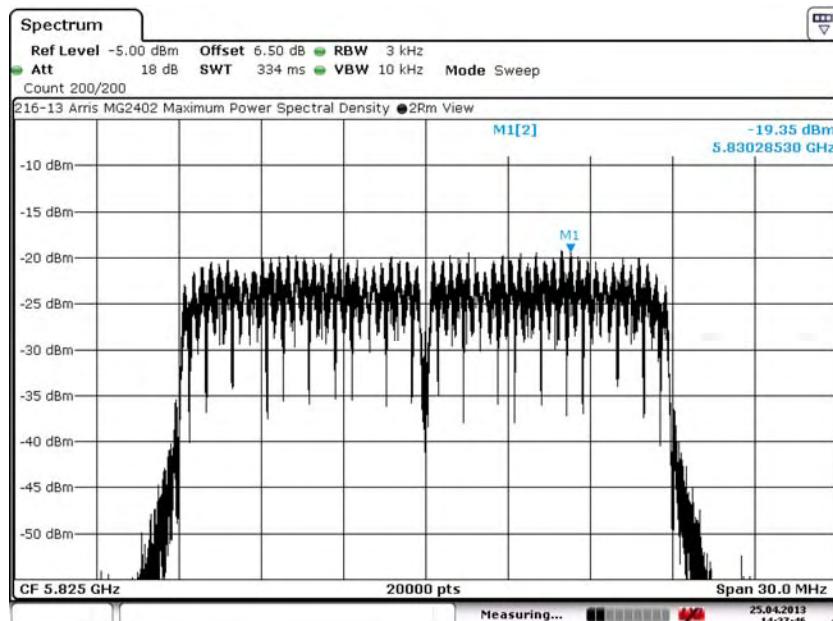
7.8. Power Spectral Density (15.247(e)) (continued)

7.8.51. HT20: Middle Channel – 157, J5002



Date: 25.APR.2013 14:30:45

7.8.52. HT20: High Channel – 165, J5000



Date: 25.APR.2013 14:37:47

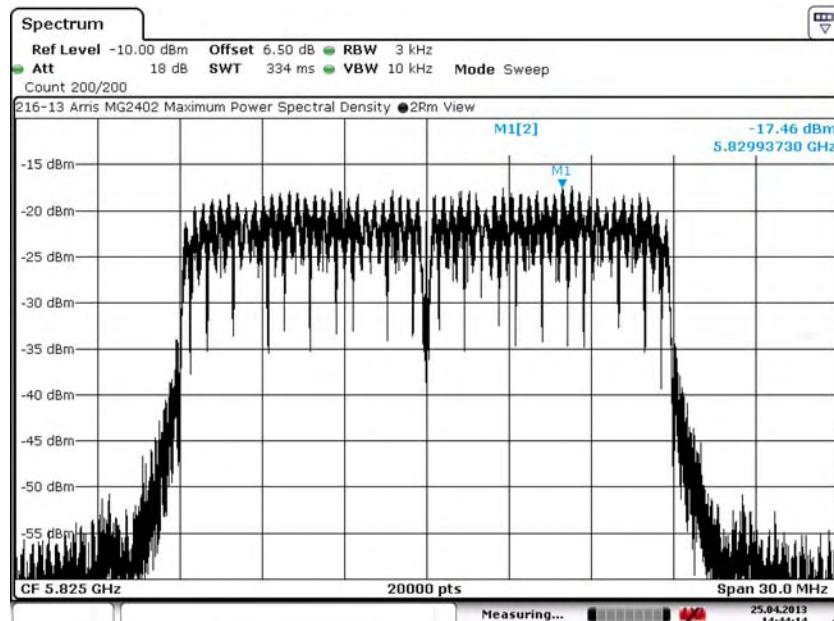
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

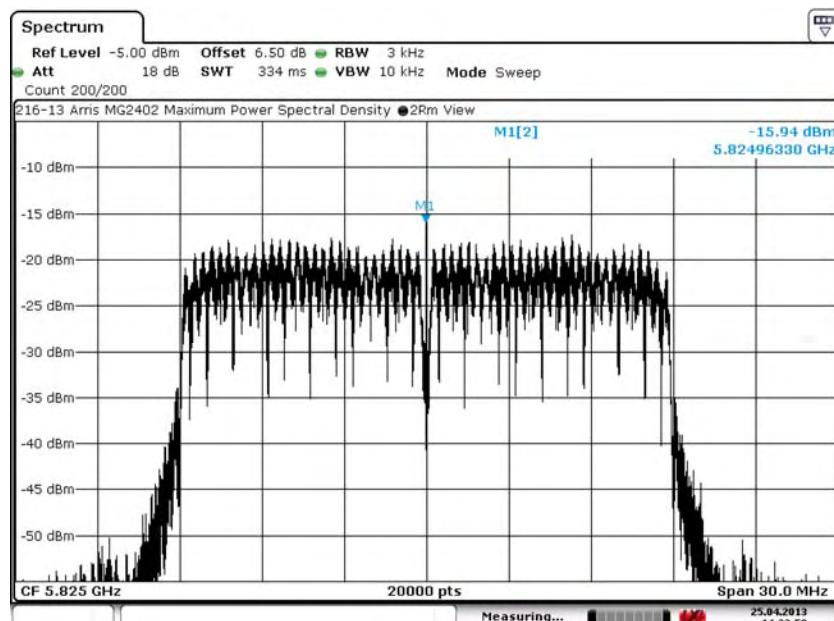
7.8. Power Spectral Density (15.247(e)) (continued)

7.8.53. HT20: High Channel – 165, J5001



Date: 25.APR.2013 14:44:15

7.8.54. HT20: High Channel – 165, J5002



Date: 25.APR.2013 14:33:59

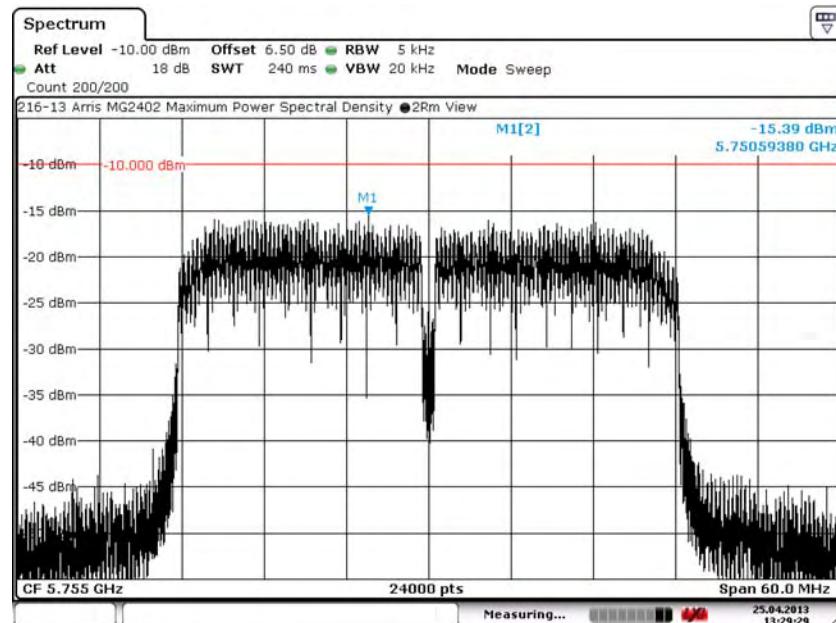
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

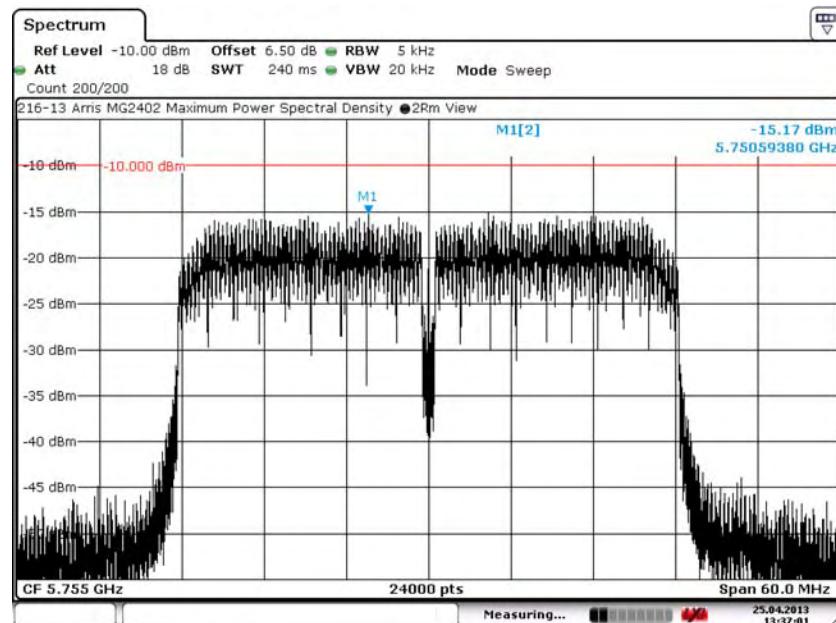
7.8. Power Spectral Density (15.247(e)) (continued)

7.8.55. HT40: Low Channel – 151, J5000



Date: 25.APR.2013 13:29:29

7.8.56. HT40: Low Channel – 151, J5001



Date: 25.APR.2013 13:37:01

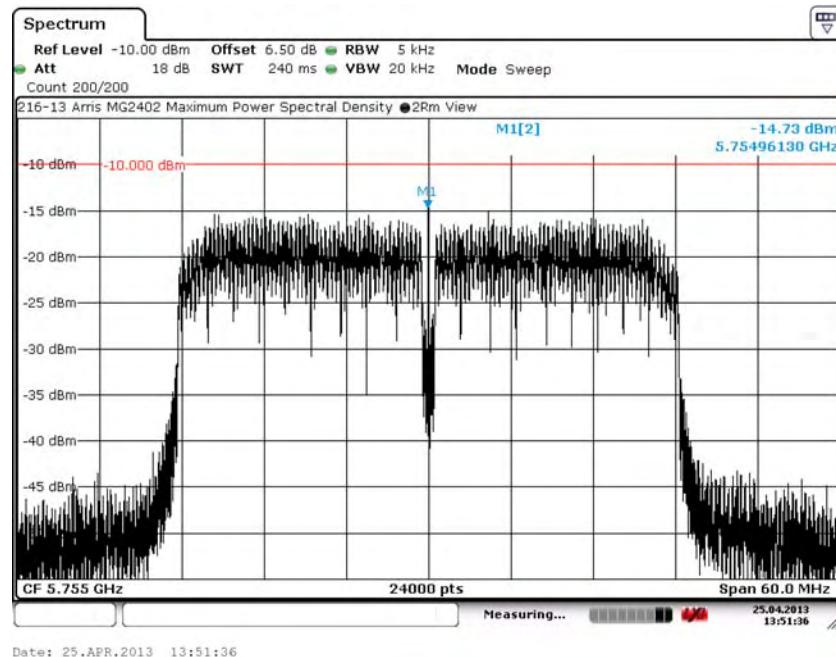
Test Number: 216-13R2

Issue Date: 6/18/2013

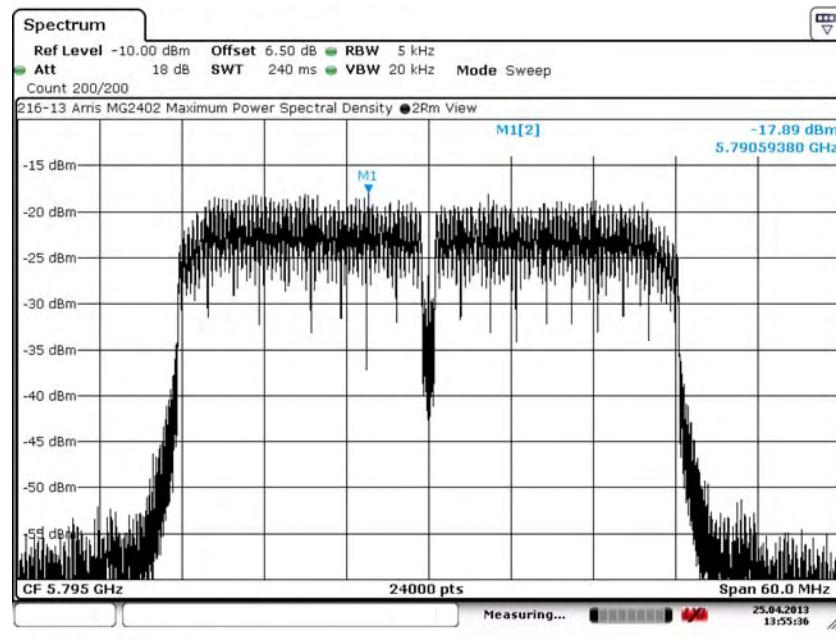
7. Measurement Data (continued)

7.8. Power Spectral Density (15.247(e)) (continued)

7.8.57. HT40: Low Channel – 151, J5002



7.8.58. HT40: High Channel – 159, J5000



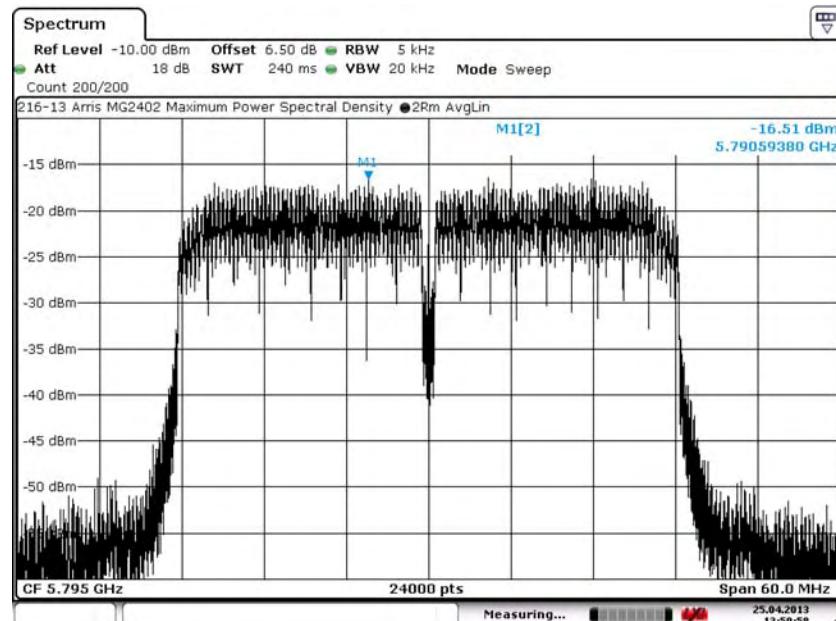
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

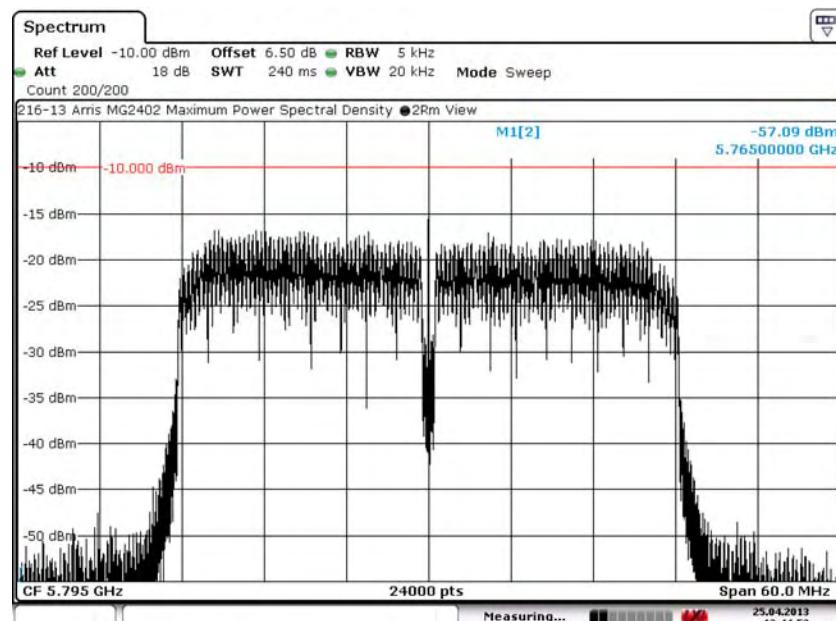
7.8. Power Spectral Density (15.247(e)) (continued)

7.8.59. HT40: High Channel – 159, J5001



Date: 25.APR.2013 13:59:58

7.8.60. HT40: High Channel – 159, J5002



Date: 25.APR.2013 13:44:53

Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

7.9. Conducted Emissions

Regulatory Limit: FCC Part 15.315, 15.207, IC RSS-213 6.3, RSS-GEN

Frequency Range (MHz)	Limits (dB μ V)	
	Quasi-Peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5.0	56	46
5.0 to 30.0	60	50

* Decreases with the logarithm of the frequency.

Measurement Equipment Used to Perform Test

Device	Manufacturer	Model No.	Serial No.	Cal Due
LISN	EMCO	3825/2	9109-1860	7/2/2013
EMI Receiver	Hewlett Packard	8546A	3330A00115	6/13/2014

Manufacturer	Software Description	Title/Model #	Rev.
Compliance Worldwide	Test Report Generation Software	Test Report Generator	1.0

Measurement & Equipment Setup

Test Date:	06/7/2013
Test Engineer:	Cody Merry
Site Temperature (°C):	21
Relative Humidity (%RH):	37
Frequency Range:	0.15 MHz to 30 MHz
EMI Receiver IF Bandwidth:	9 kHz
EMI Receiver Avg Bandwidth:	30 kHz
Detector Functions:	Peak, Quasi-Peak & Average

Test Procedure

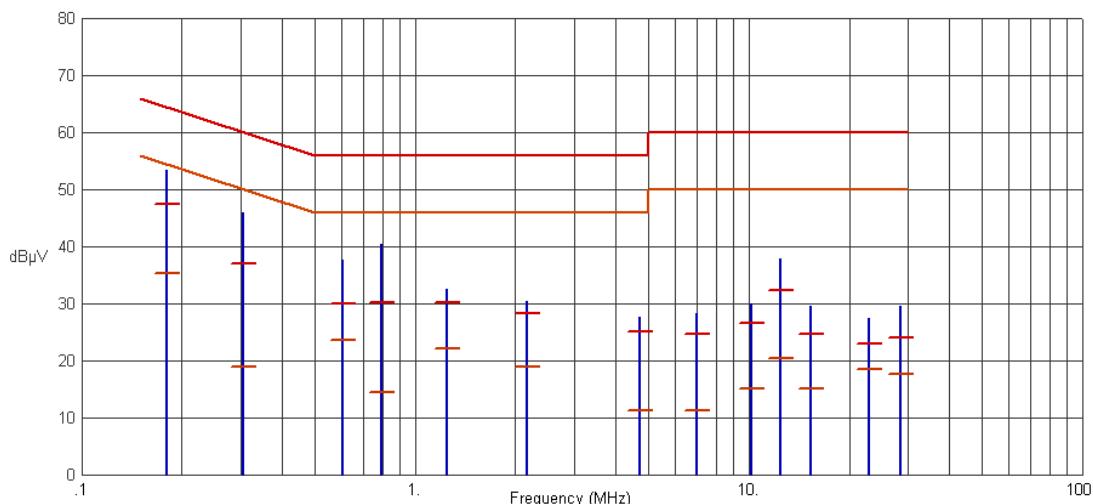
Test measurements were made in accordance with ANSI C63.4-2003, Standard Methods of Measurement of Radio Noise Emissions from Low-Voltage Electrical and Electronics Equipment in the Range of 9 kHz to 40 GHz.

Test Number: 216-13R2
Issue Date: 6/18/2013

7. Measurement Data (continued)

7.9. Conducted Emissions

7.9.1. 120 Volts, 60 Hz Phase

Test No.: 265-13, 120 Volts, 60 Hz Phase
FCC, Class B


Frequency (MHz)	Pk Amp (dB μ V)	QP Amp (dB μ V)	QP Limit (dB μ V)	QP Margin (dB)	Avg Amp (dB μ V)	Avg Limit (dB μ V)	Avg Margin (dB)	Comments
.1797	53.45	47.35	64.50	-17.15	35.35	54.50	-19.15	
.3047	45.92	36.94	60.11	-23.17	18.88	50.11	-31.23	
.6064	37.73	30.04	56.00	-25.96	23.59	46.00	-22.41	
.7968	40.32	30.19	56.00	-25.81	14.42	46.00	-31.58	
1.2507	32.47	30.23	56.00	-25.77	22.13	46.00	-23.87	
2.1655	30.43	28.35	56.00	-27.65	18.86	46.00	-27.14	
4.7325	27.71	25.12	56.00	-30.88	11.19	46.00	-34.81	
7.0124	28.28	24.55	60.00	-35.45	11.19	50.00	-38.81	
10.1761	29.86	26.52	60.00	-33.48	15.04	50.00	-34.96	
12.5129	37.95	32.26	60.00	-27.74	20.45	50.00	-29.55	
15.3486	29.54	24.65	60.00	-35.35	15.05	50.00	-34.95	
22.9024	27.40	22.91	60.00	-37.09	18.49	50.00	-31.51	
28.6521	29.48	23.95	60.00	-36.05	17.70	50.00	-32.30	

Test Number: 216-13R2
Issue Date: 6/18/2013

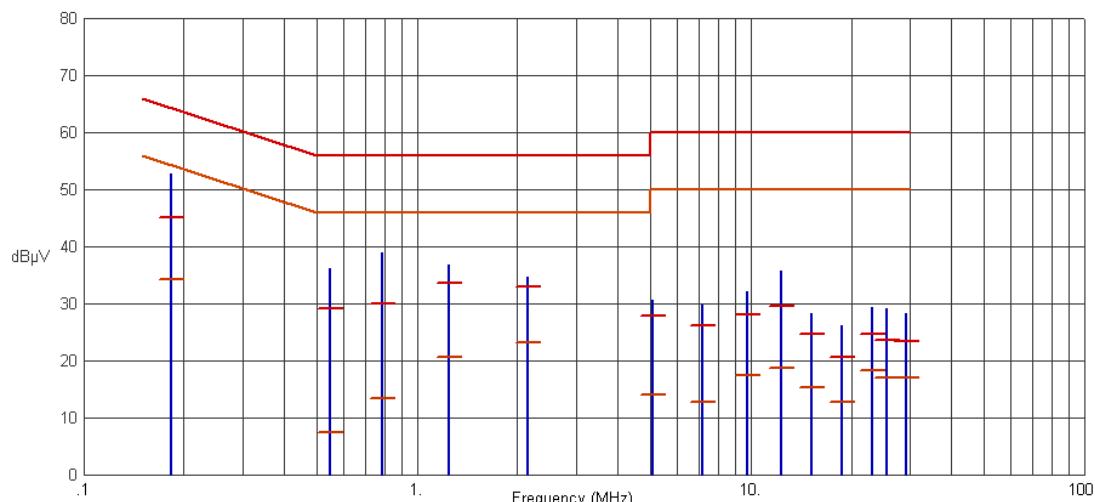
7. Measurement Data (continued)

7.9. Conducted Emissions

7.9.2. 120 Volts, 60 Hz Neutral

Test No.: 265-13, 120 Volts, 60 Hz Neutral

FCC, Class B



Frequency (MHz)	Pk Amp (dB μ V)	QP Amp (dB μ V)	QP Limit (dB μ V)	QP Margin (dB)	Avg Amp (dB μ V)	Avg Limit (dB μ V)	Avg Margin (dB)	Comments
.1841	52.74	45.01	64.30	-19.29	34.26	54.30	-20.04	
.5508	36.15	29.15	56.00	-26.85	7.38	46.00	-38.62	
.7896	38.95	29.86	56.00	-26.14	13.41	46.00	-32.59	
1.2482	36.79	33.57	56.00	-22.43	20.63	46.00	-25.37	
2.1419	34.68	33.05	56.00	-22.95	23.15	46.00	-22.85	
5.0719	30.61	27.80	60.00	-32.20	13.87	50.00	-36.13	
7.1839	29.79	26.03	60.00	-33.97	12.69	50.00	-37.31	
9.7458	32.07	28.10	60.00	-31.90	17.45	50.00	-32.55	
12.3752	35.79	29.60	60.00	-30.40	18.75	50.00	-31.25	
15.2609	28.27	24.73	60.00	-35.27	15.21	50.00	-34.79	
18.8246	26.20	20.54	60.00	-39.46	12.70	50.00	-37.30	
23.1692	29.32	24.63	60.00	-35.37	18.19	50.00	-31.81	
25.5420	29.11	23.55	60.00	-36.45	16.97	50.00	-33.03	
29.1997	28.21	23.32	60.00	-36.68	16.97	50.00	-33.03	

Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

7.10. Duty Cycle

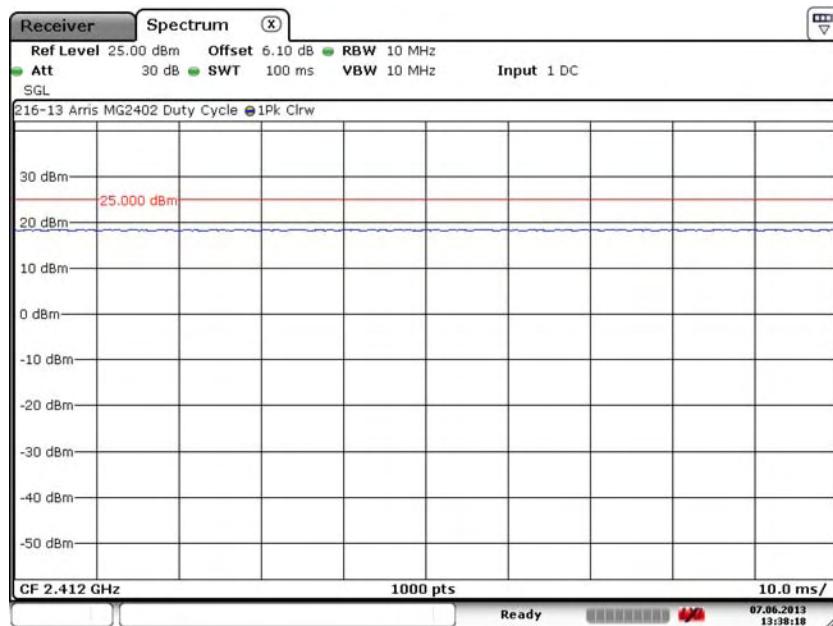
Requirement: (FCC OET publication number 558074)

Preferably, all measurements of maximum conducted (average) output power will be performed with the EUT transmitting continuously (i.e., with a duty cycle of greater than or equal to 98%).

Procedure: Duty cycle measurements were made according to the procedure detailed FCC OET publication number 558074, Section 6.0 b.

Conclusion: The tested device operates with a duty cycle of greater than or equal to 98%.

7.10.1. 2.4 GHz 802.11b: Low Channel – 1, J2400



Date: 7.JUN.2013 13:38:17

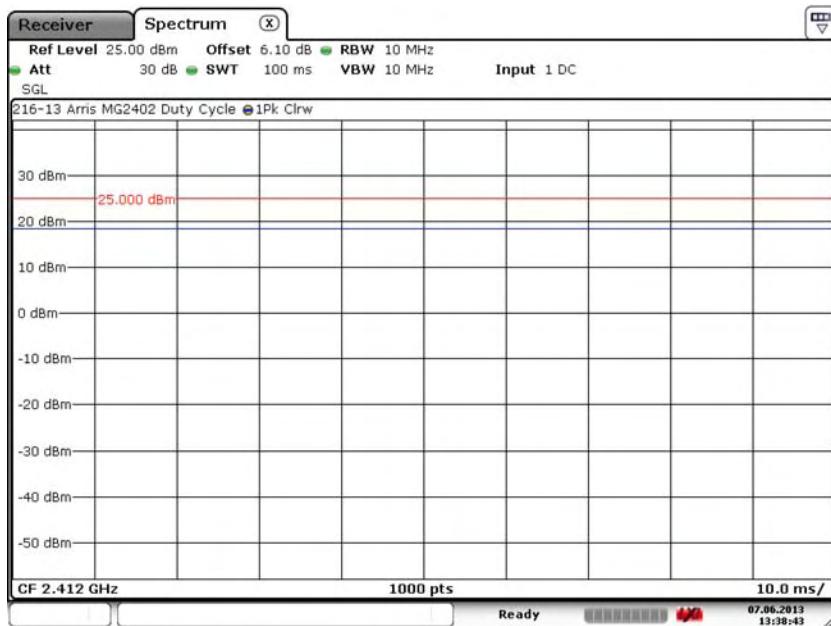
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

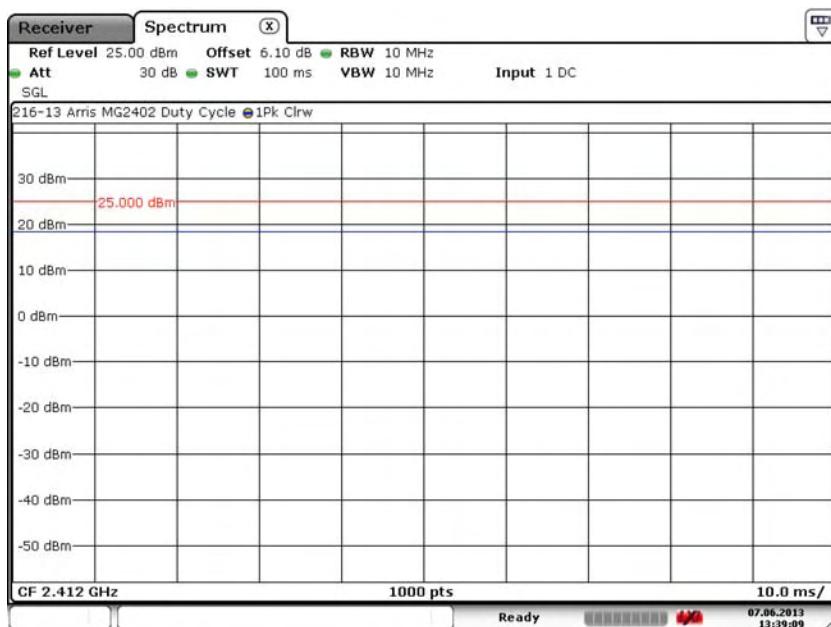
7.10. Duty Cycle

7.10.2. 2.4 GHz 802.11b: Low Channel – 1, J2401



Date: 7.JUN.2013 13:38:43

7.10.3. 2.4 GHz 802.11b: Low Channel – 1, J2402



Date: 7.JUN.2013 13:39:09

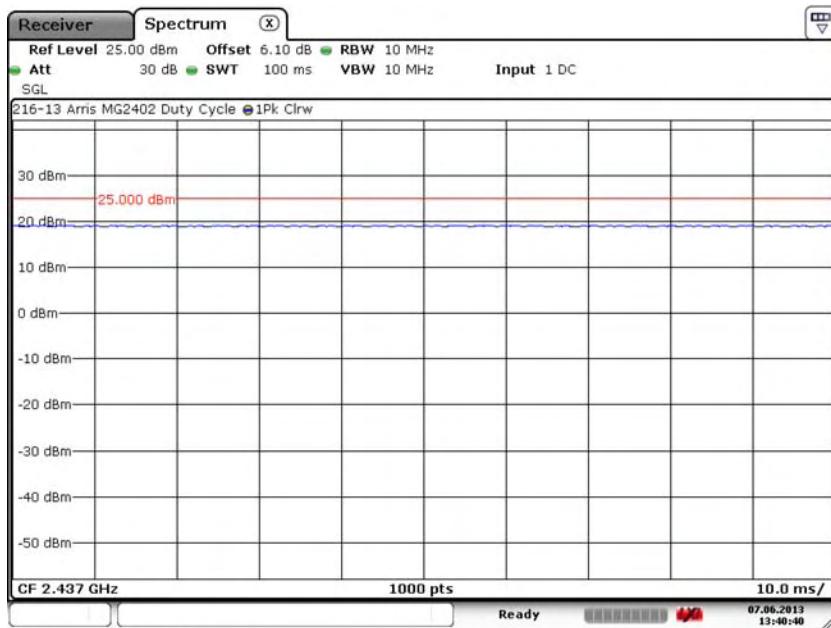
Test Number: 216-13R2

Issue Date: 6/18/2013

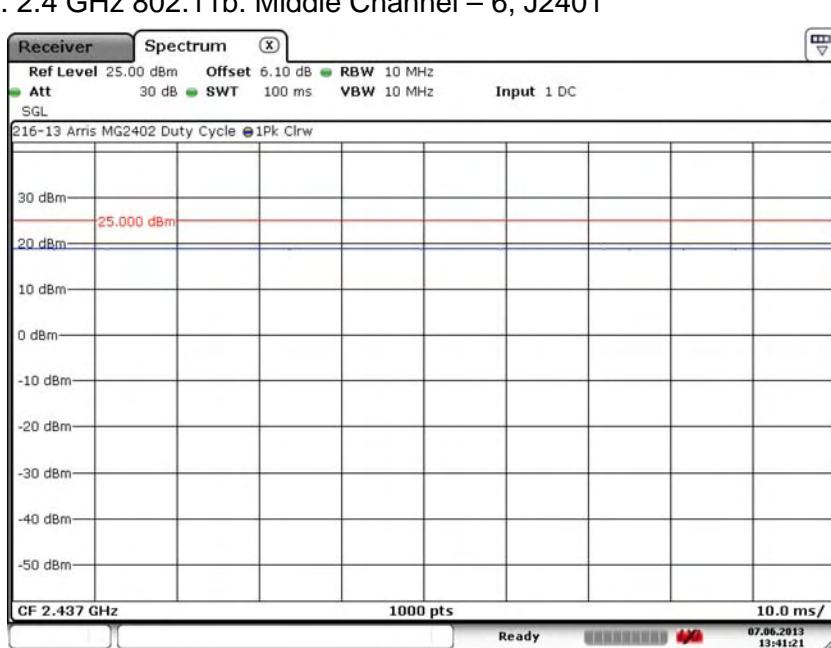
7. Measurement Data (continued)

7.10. Duty Cycle

7.10.4. 2.4 GHz 802.11b: Middle Channel – 6, J2400



7.10.5. 2.4 GHz 802.11b: Middle Channel – 6, J2401



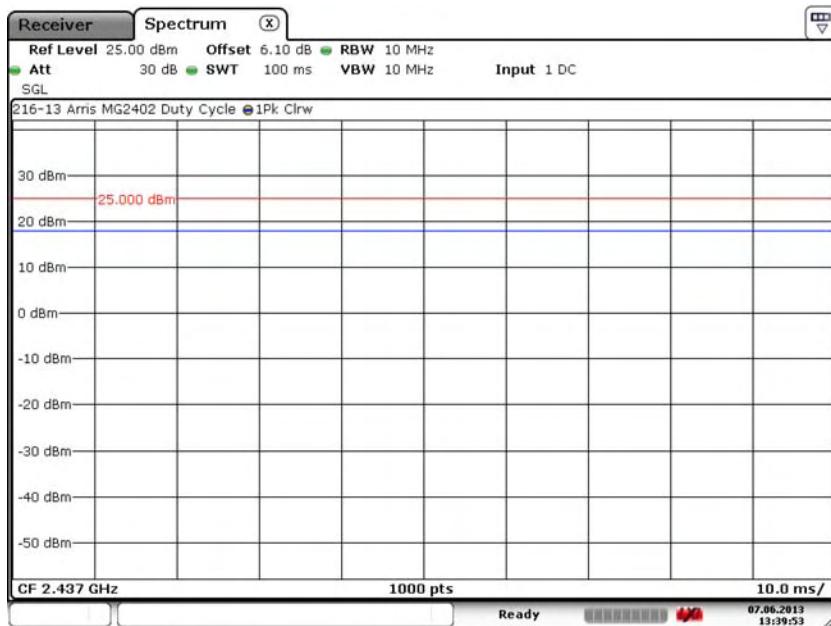
Test Number: 216-13R2

Issue Date: 6/18/2013

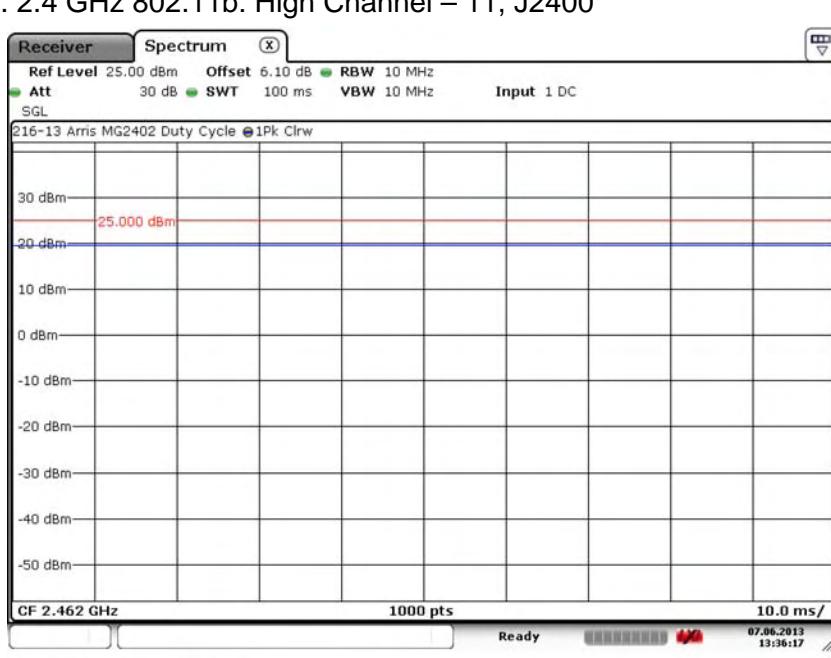
7. Measurement Data (continued)

7.10. Duty Cycle

7.10.6. 2.4 GHz 802.11b: Middle Channel – 6, J2402



7.10.7. 2.4 GHz 802.11b: High Channel – 11, J2400



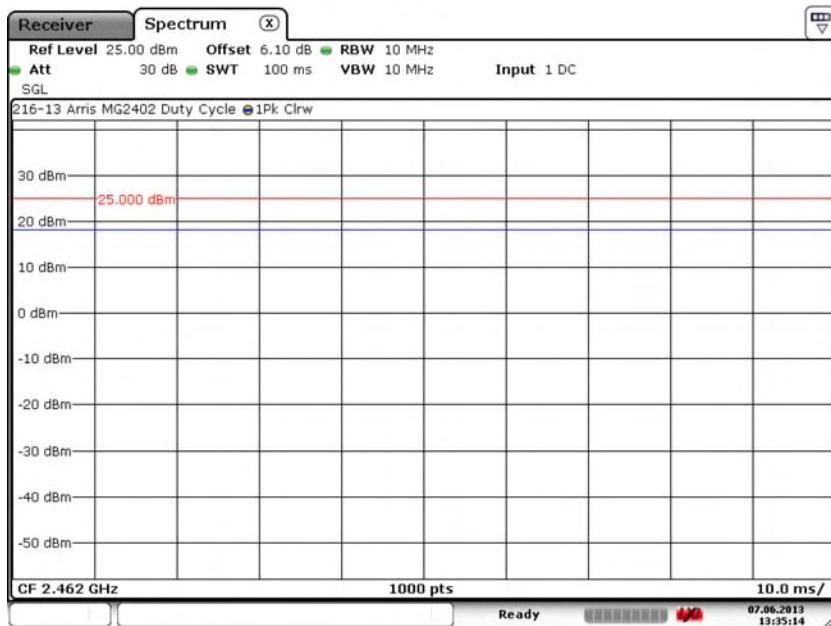
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

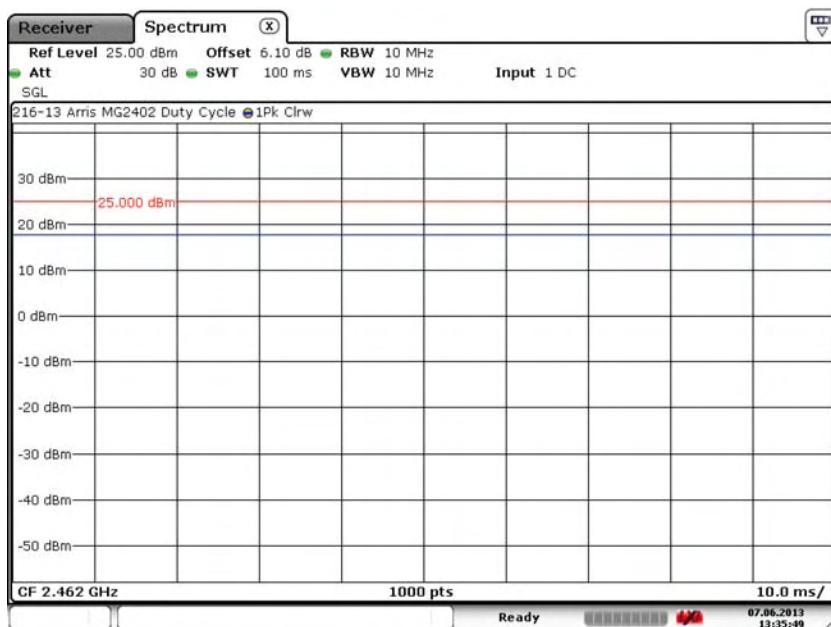
7.10. Duty Cycle

7.10.8. 2.4 GHz 802.11b: High Channel – 11, J2401



Date: 7.JUN.2013 13:35:14

7.10.9. 2.4 GHz 802.11b: High Channel – 11, J2402



Date: 7.JUN.2013 13:35:49

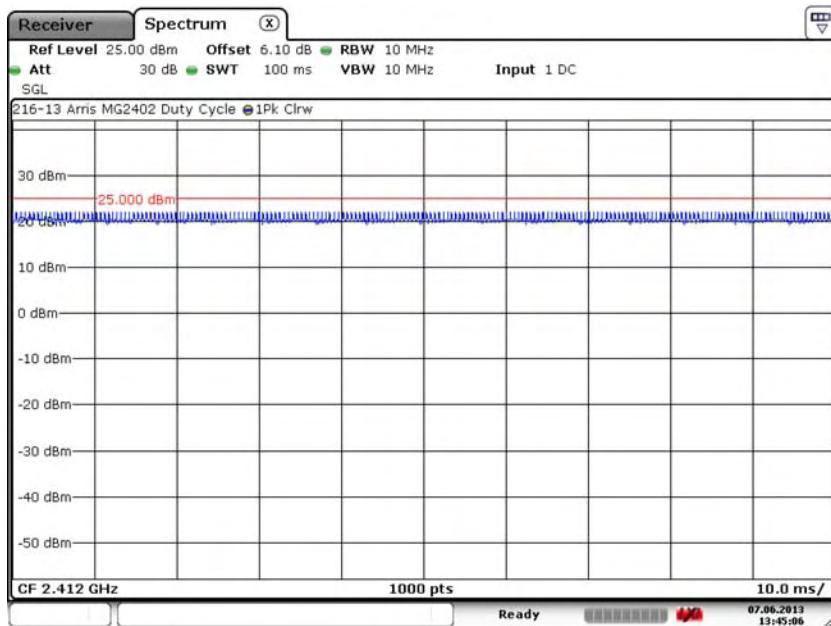
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

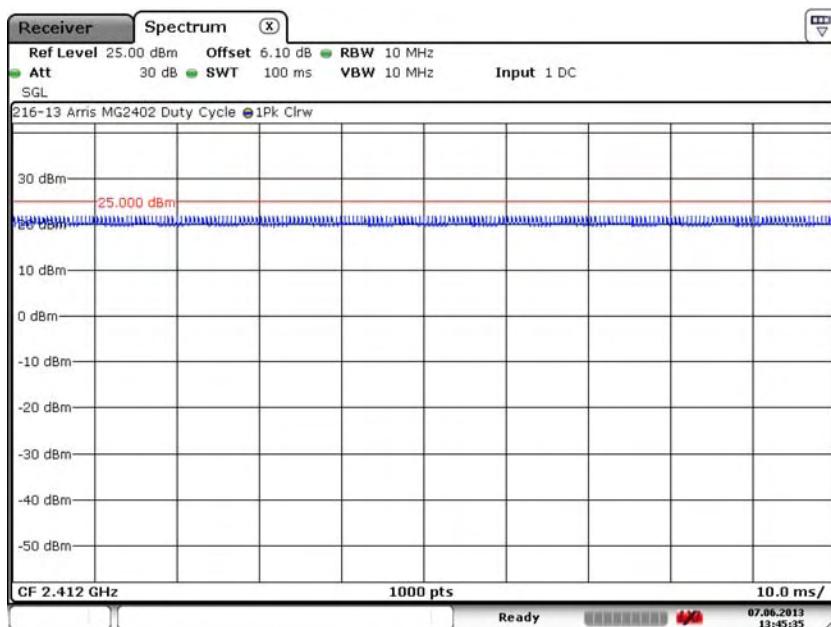
7.10. Duty Cycle

7.10.10. 2.4 GHz 802.11g: Low Channel – 1, J2400



Date: 7.JUN.2013 13:45:06

7.10.11. 2.4 GHz 802.11g: Low Channel – 1, J2401



Date: 7.JUN.2013 13:45:35

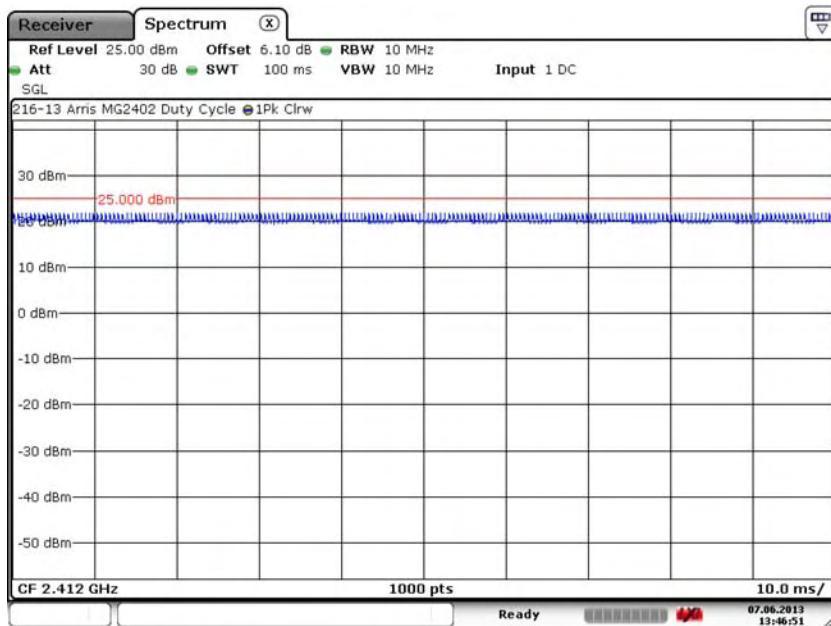
Test Number: 216-13R2

Issue Date: 6/18/2013

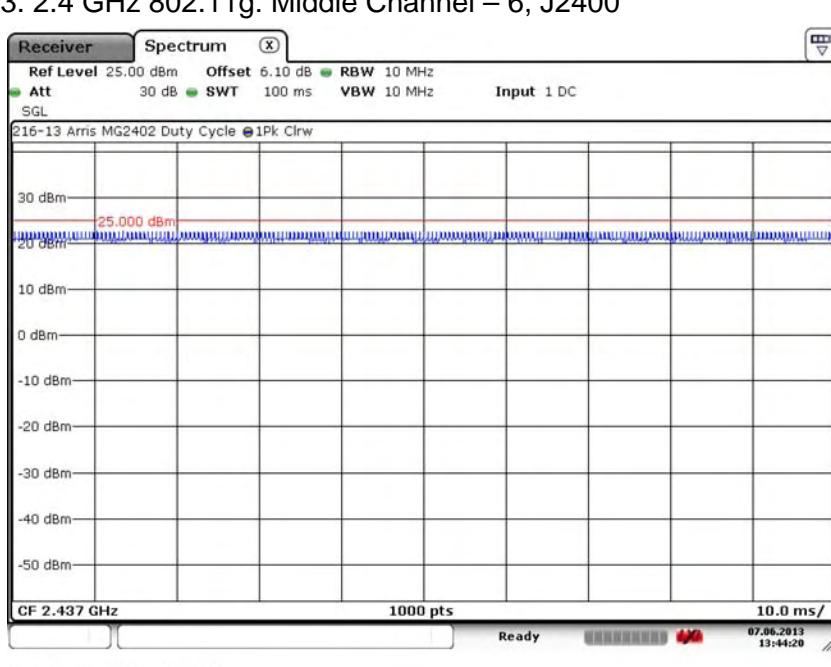
7. Measurement Data (continued)

7.10. Duty Cycle

7.10.12. 2.4 GHz 802.11g: Low Channel – 1, J2402



7.10.13. 2.4 GHz 802.11g: Middle Channel – 6, J2400



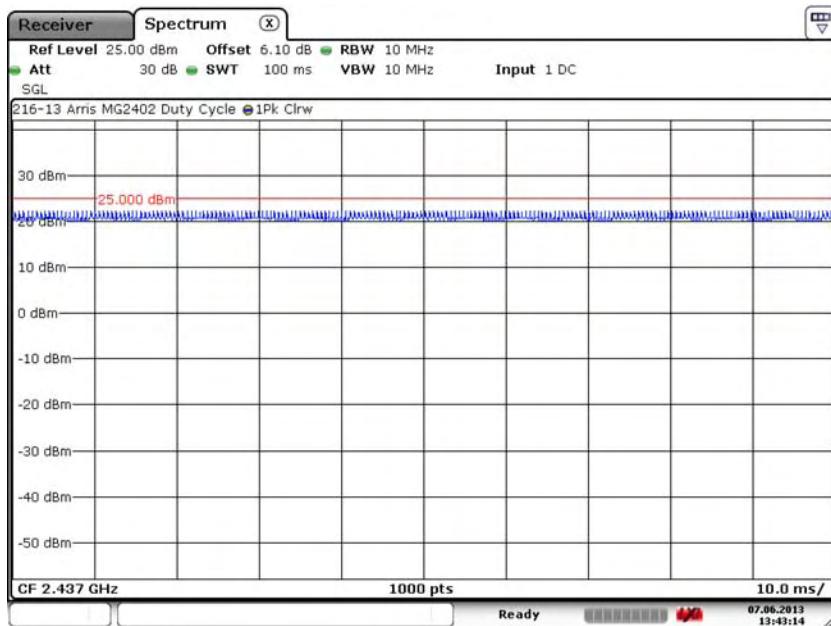
Test Number: 216-13R2

Issue Date: 6/18/2013

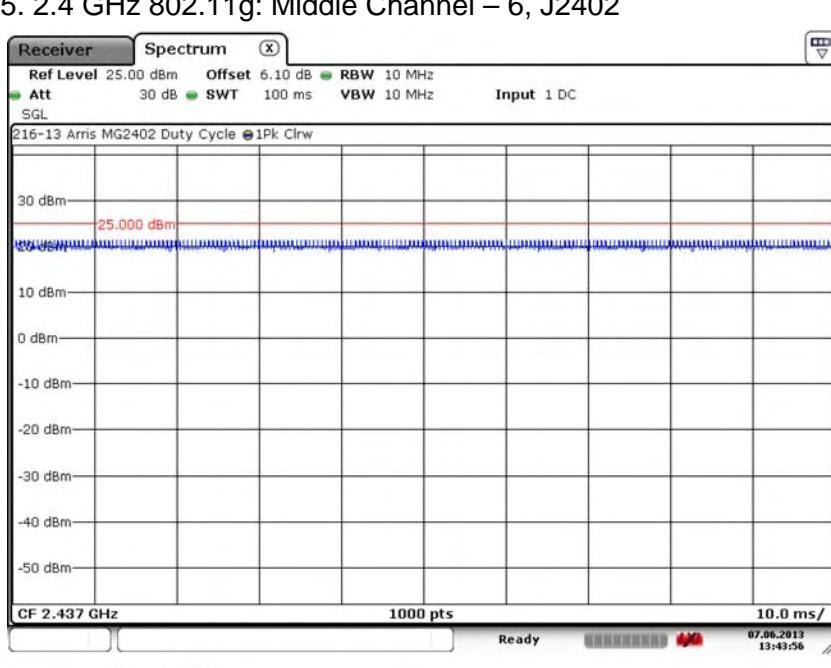
7. Measurement Data (continued)

7.10. Duty Cycle

7.10.14. 2.4 GHz 802.11g: Middle Channel – 6, J2401



7.10.15. 2.4 GHz 802.11g: Middle Channel – 6, J2402



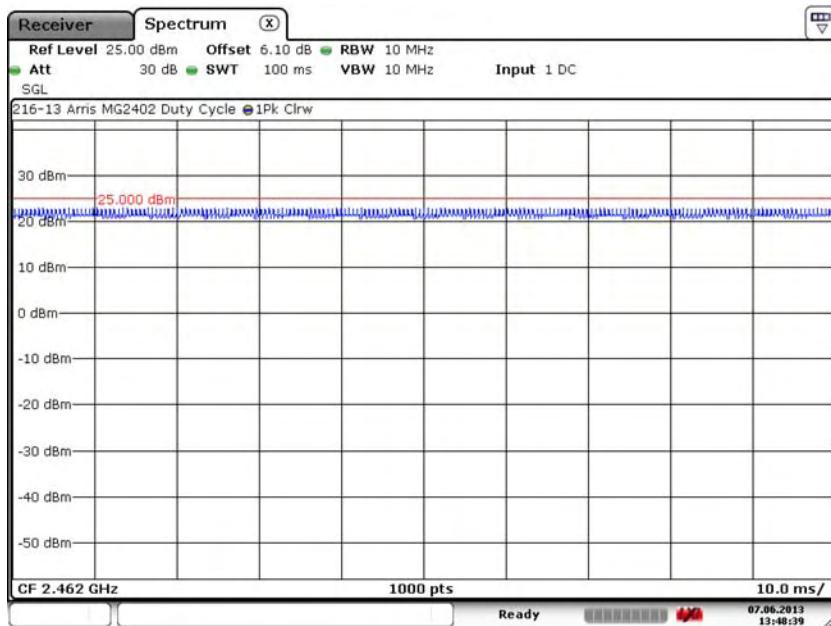
Test Number: 216-13R2

Issue Date: 6/18/2013

7. Measurement Data (continued)

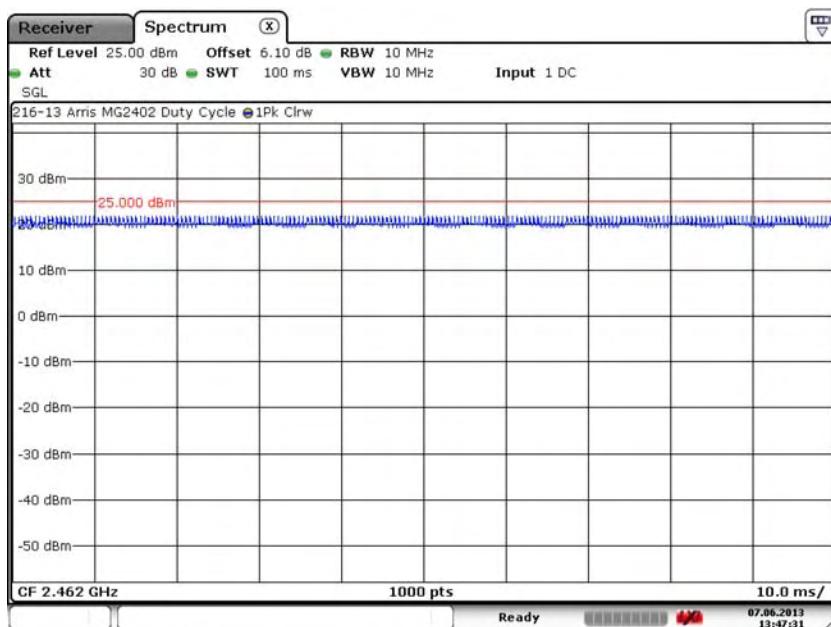
7.10. Duty Cycle

7.10.16. 2.4 GHz 802.11g: High Channel – 11, J2400



Date: 7.JUN.2013 13:48:39

7.10.17. 802.11g: High Channel – 11, J2401



Date: 7.JUN.2013 13:47:30