

Test Report No.50103731 001

Appendix D: Radiated and Mains Spurious Emission Data

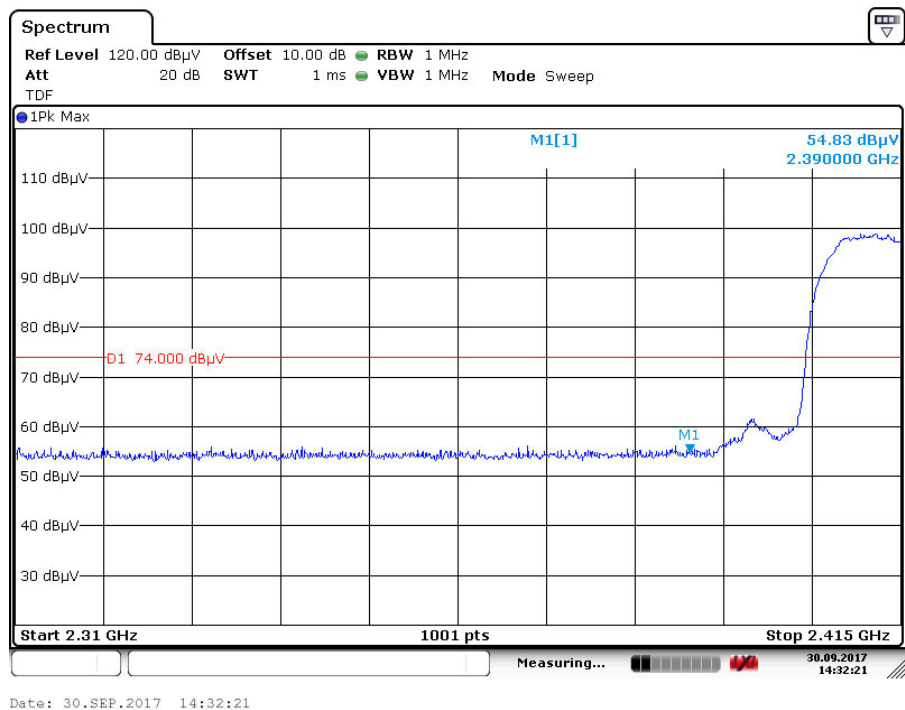
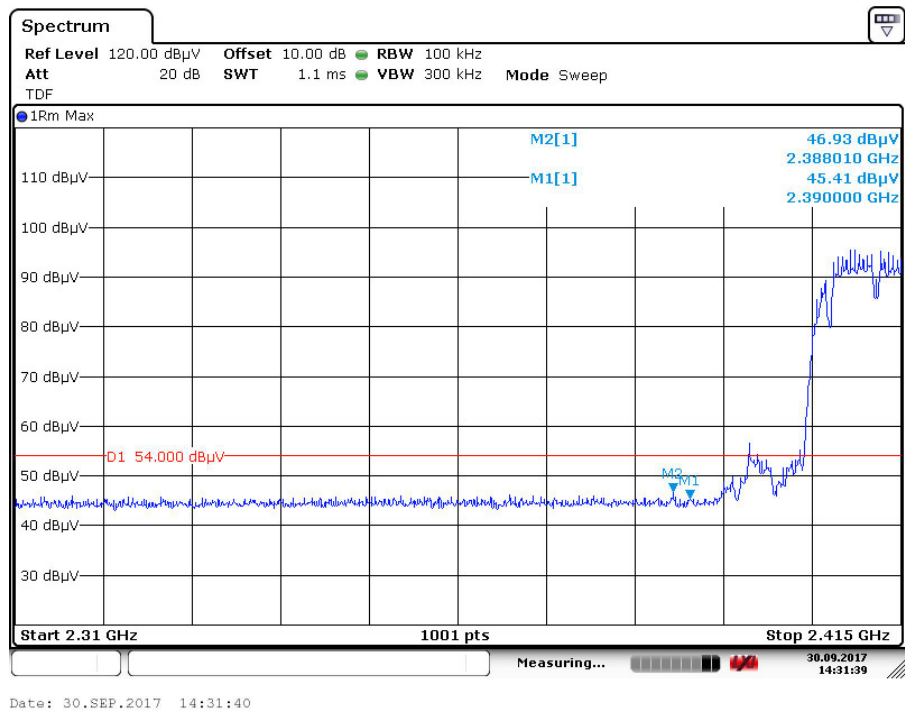
(File: 50103731 001AppendixD)

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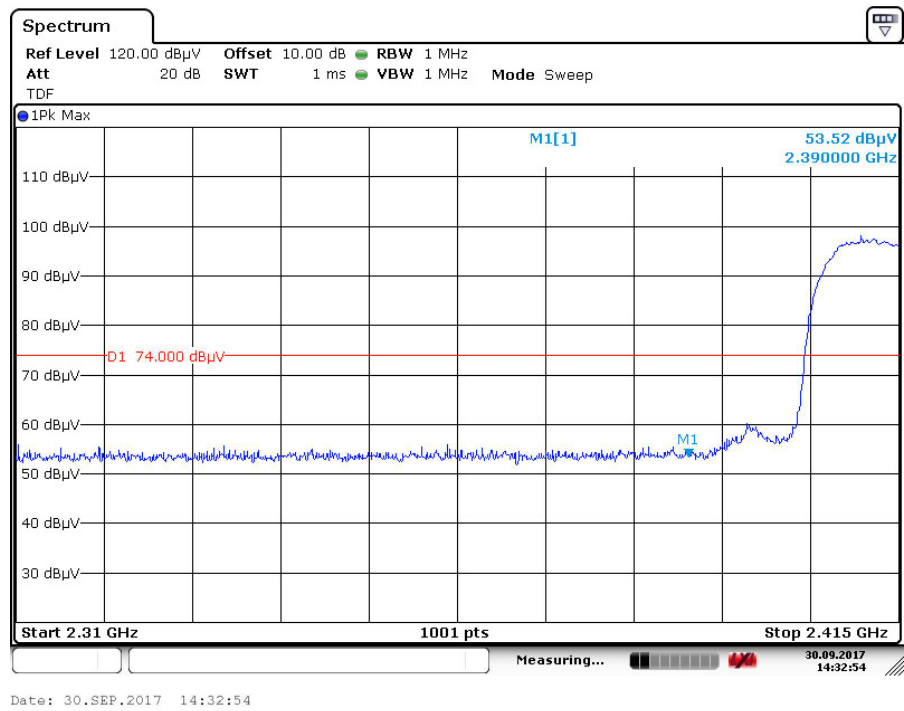
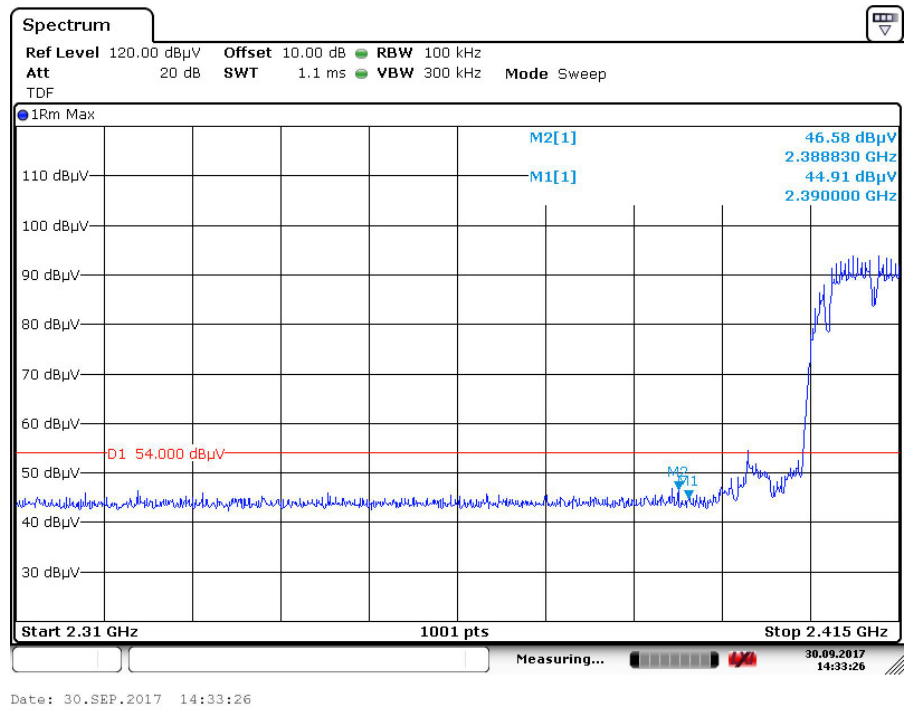
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Radiated Bandedge 11b

Low Channel (Hor)

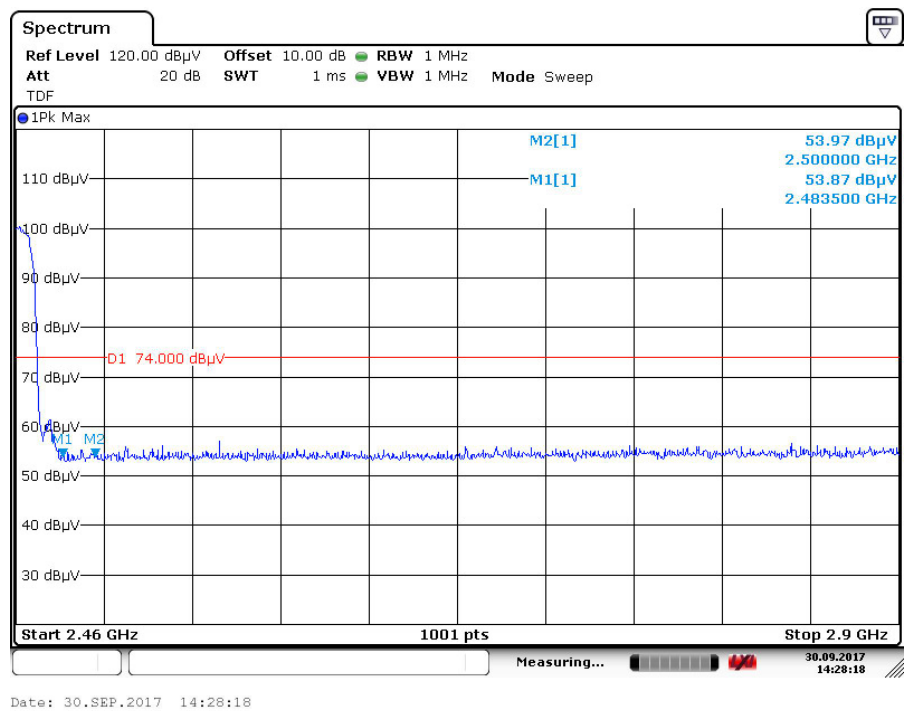
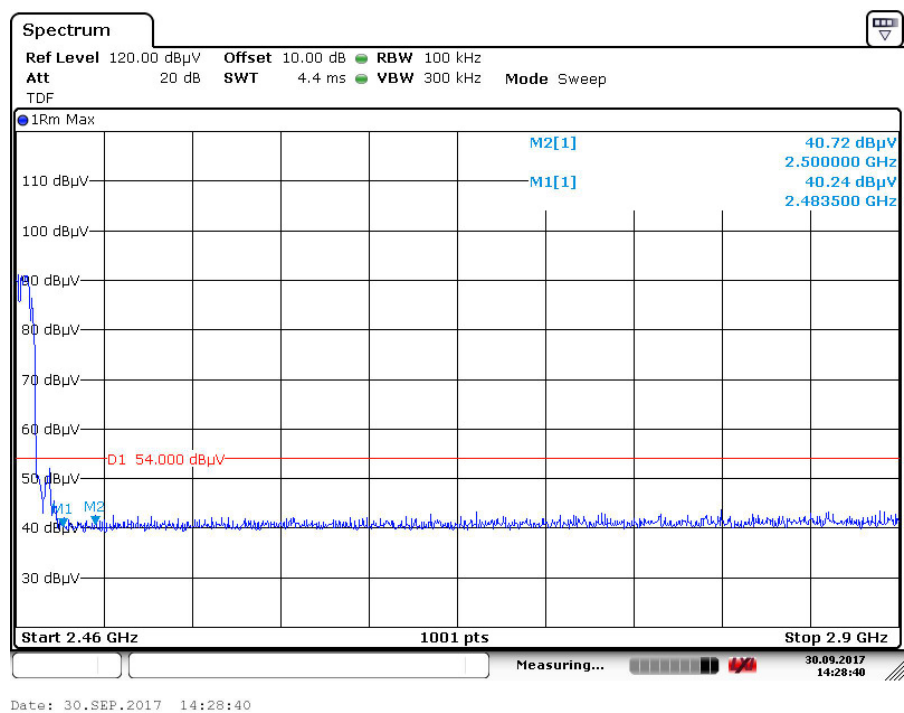


Low Channel (Ver)

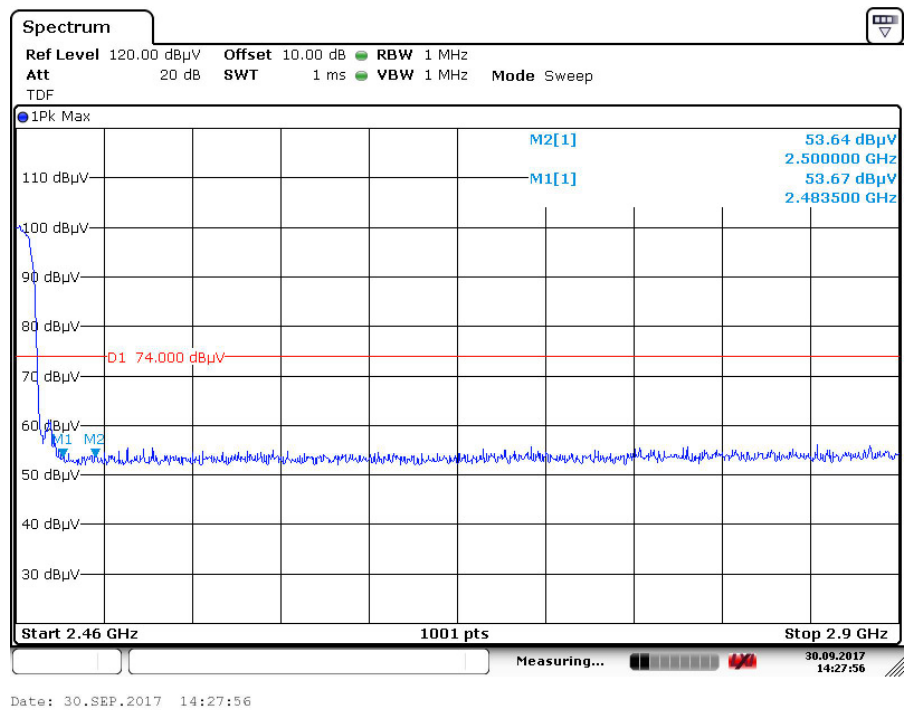
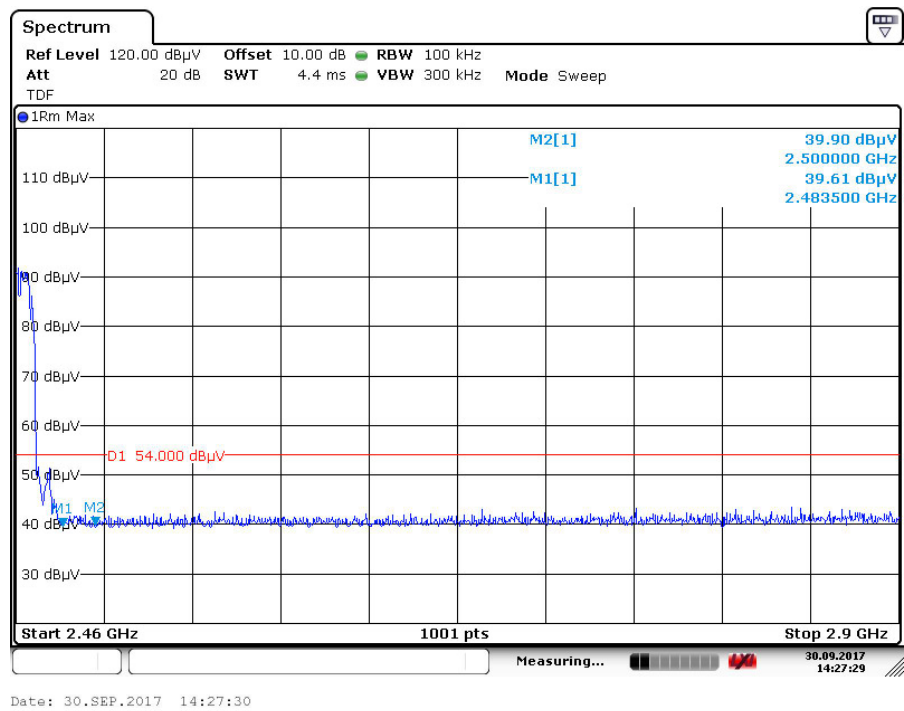


Radiated Bandedge 11b

High Channel (Hor)

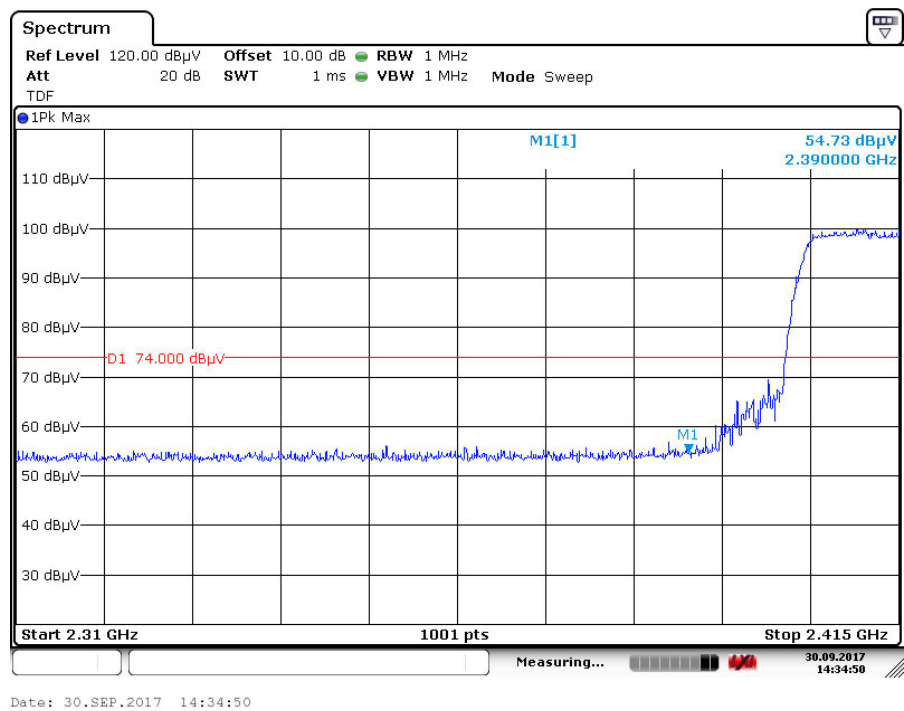
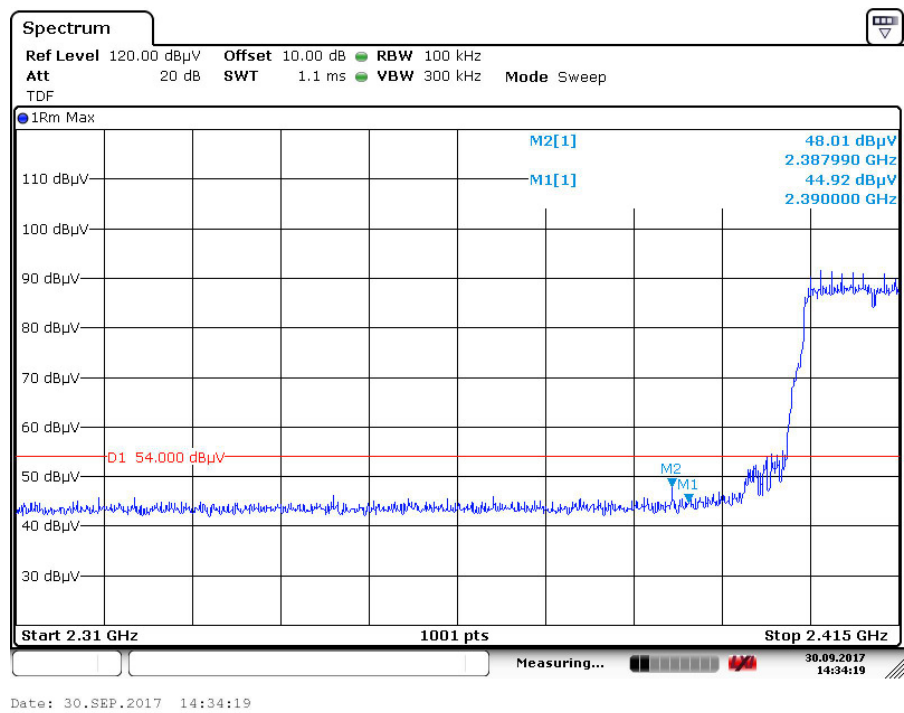


High Channel (Ver)

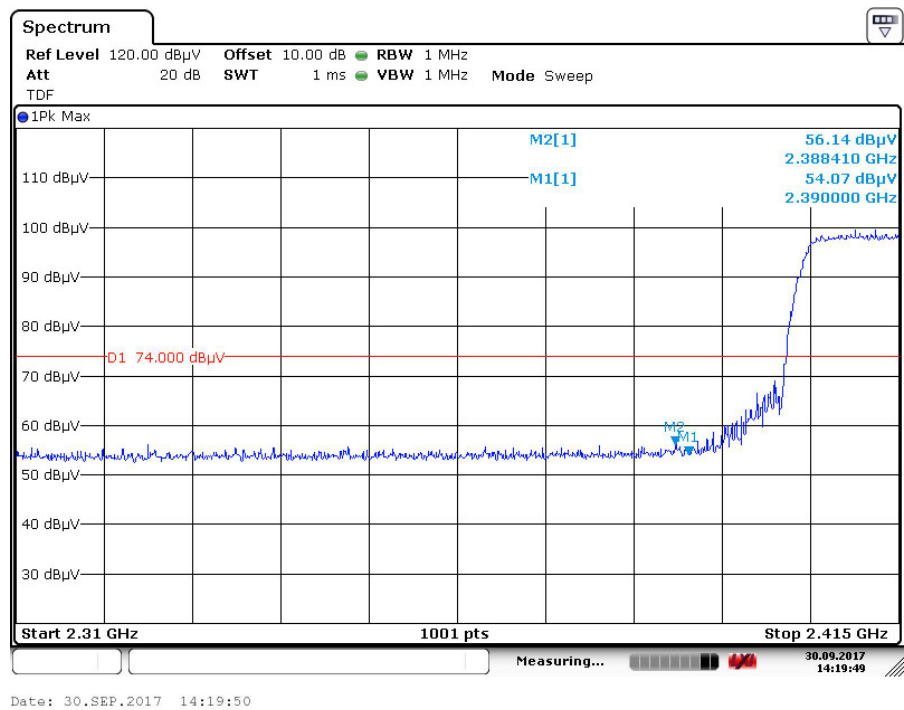
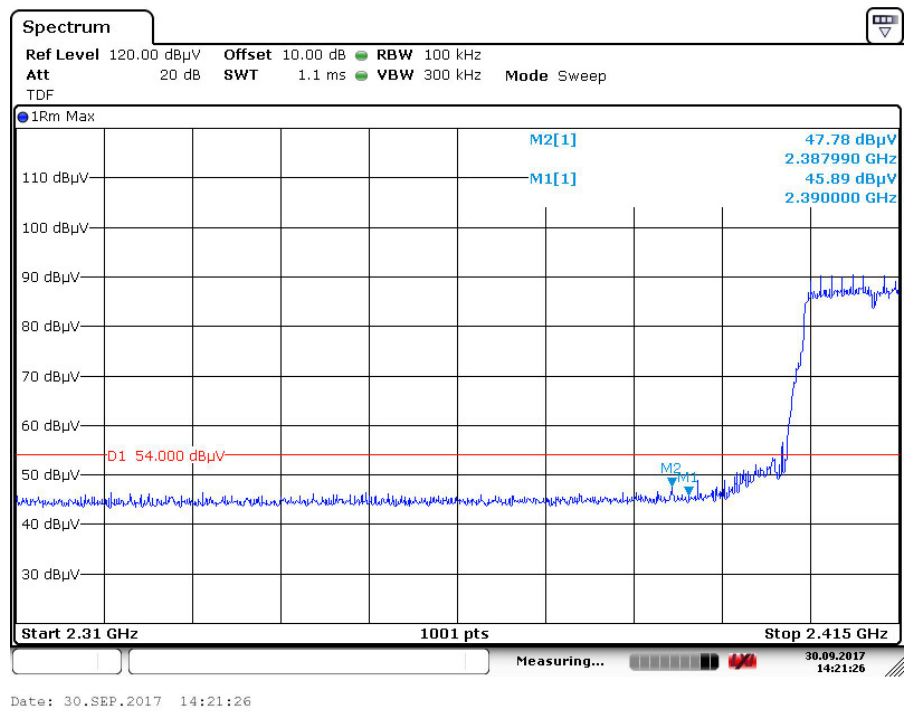


Radiated Bandedge 11g

Low Channel (Hor)

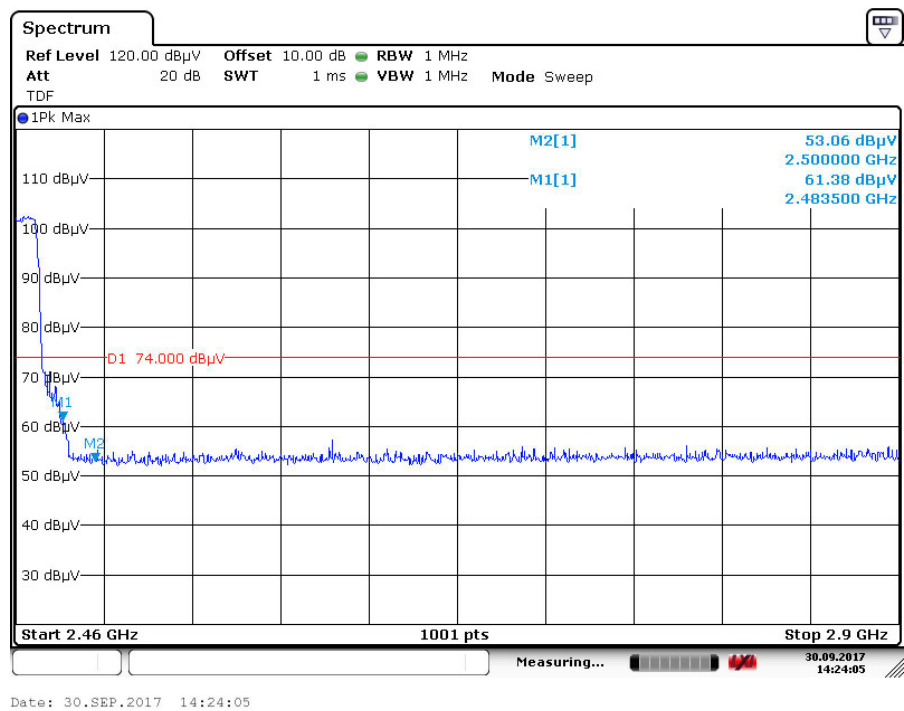
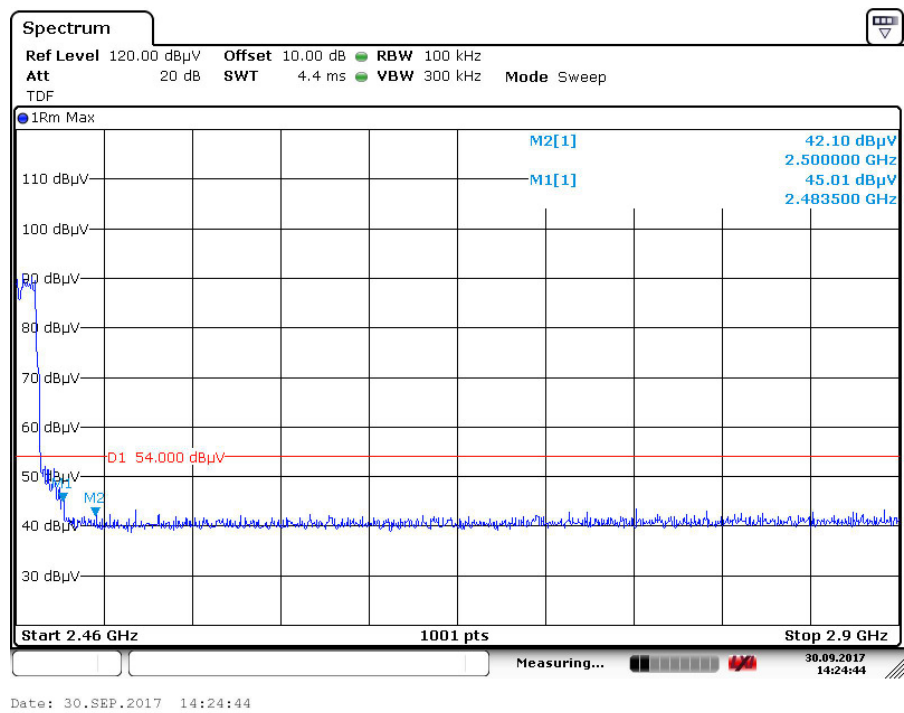


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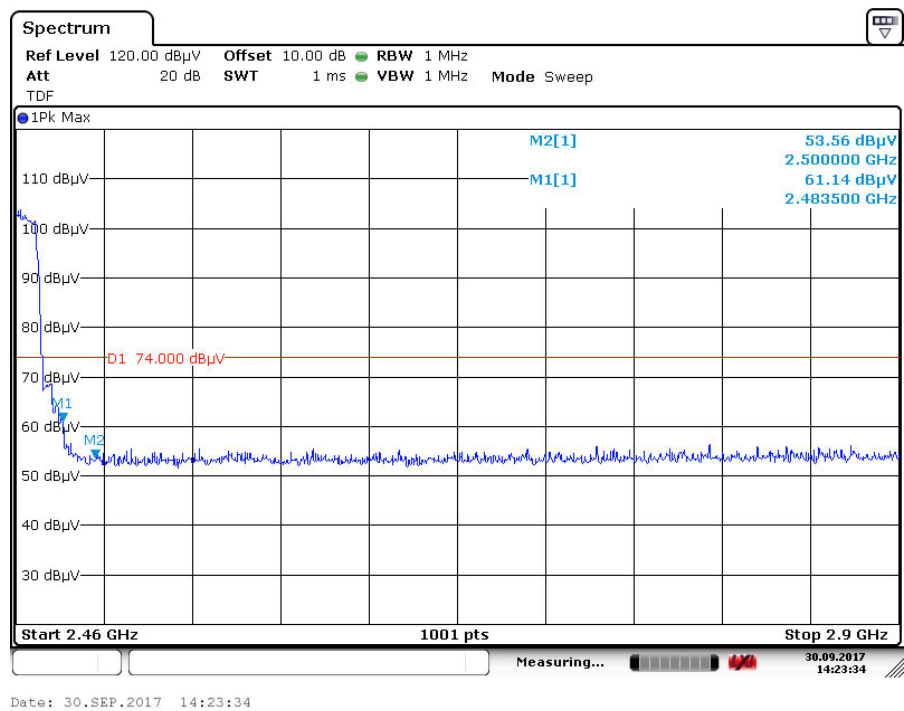
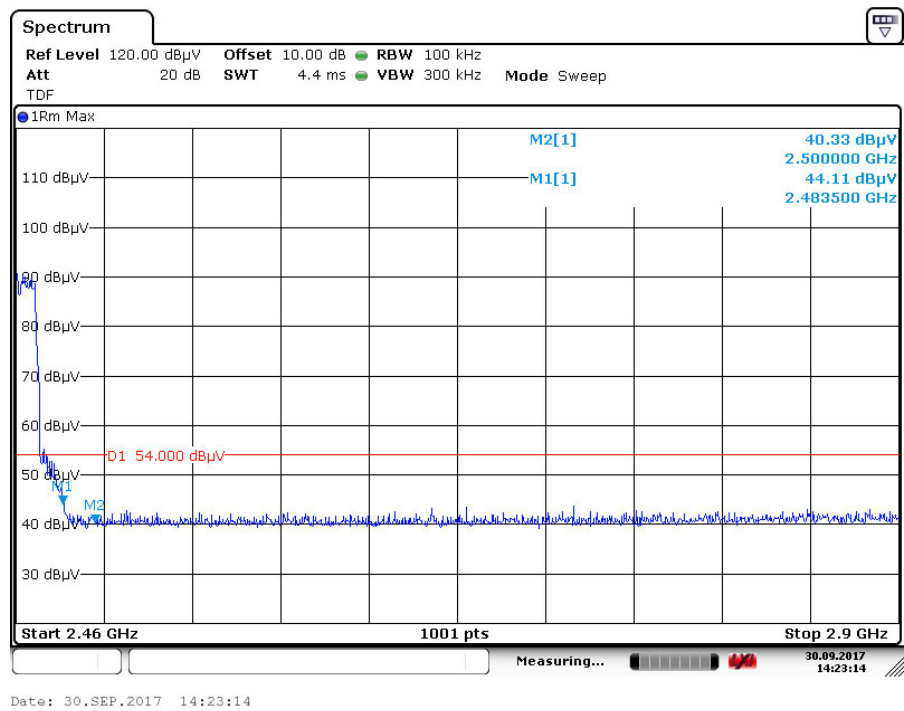


Radiated Bandedge 11g

High Channel (Hor)

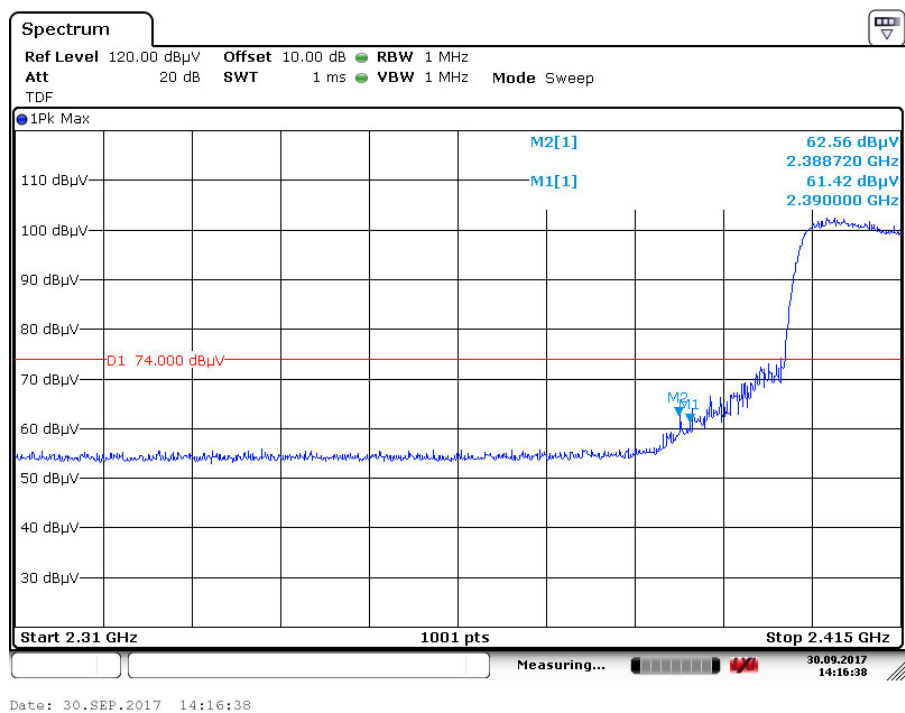
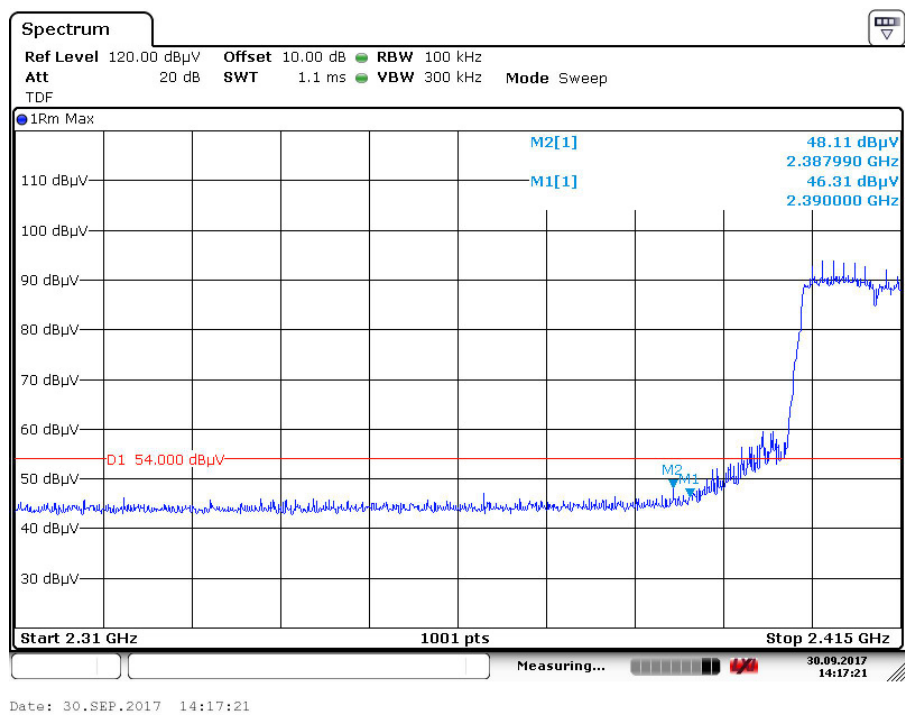


High Channel (Ver)

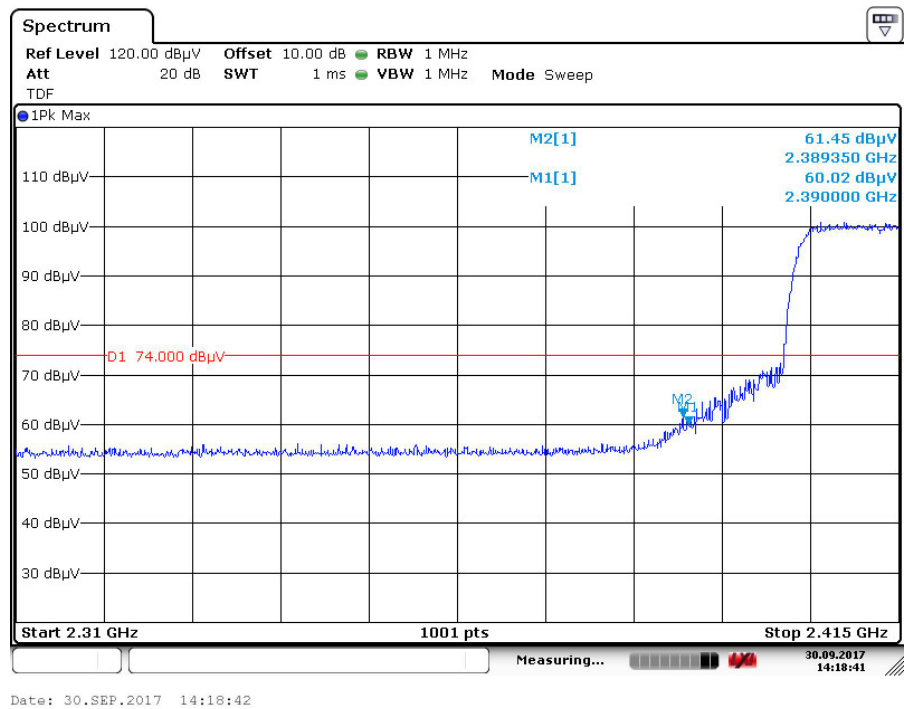
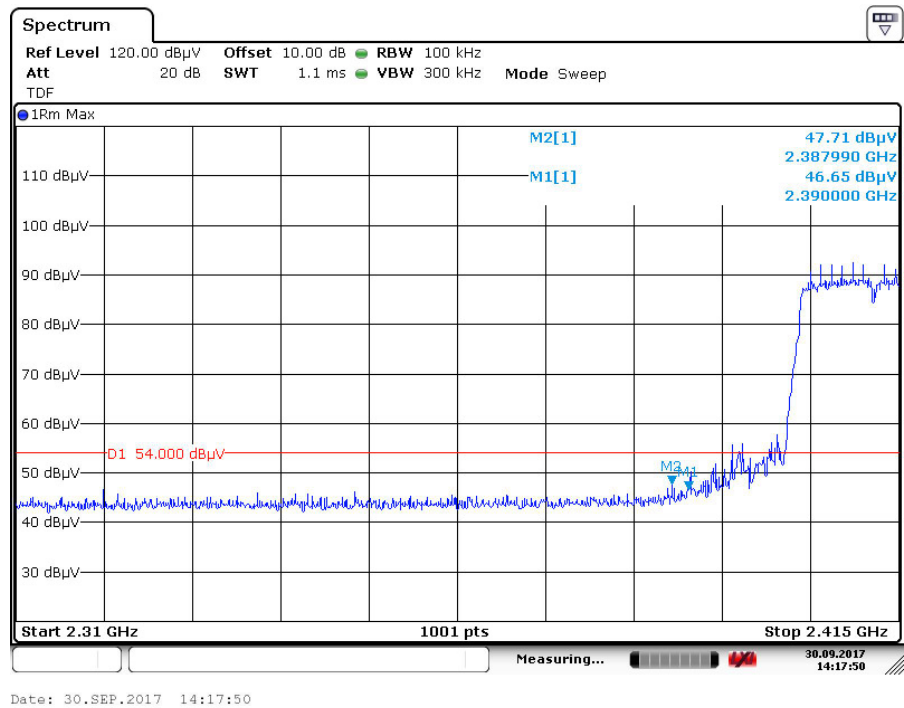


Radiated Bandedge 11n

Low Channel (Hor)

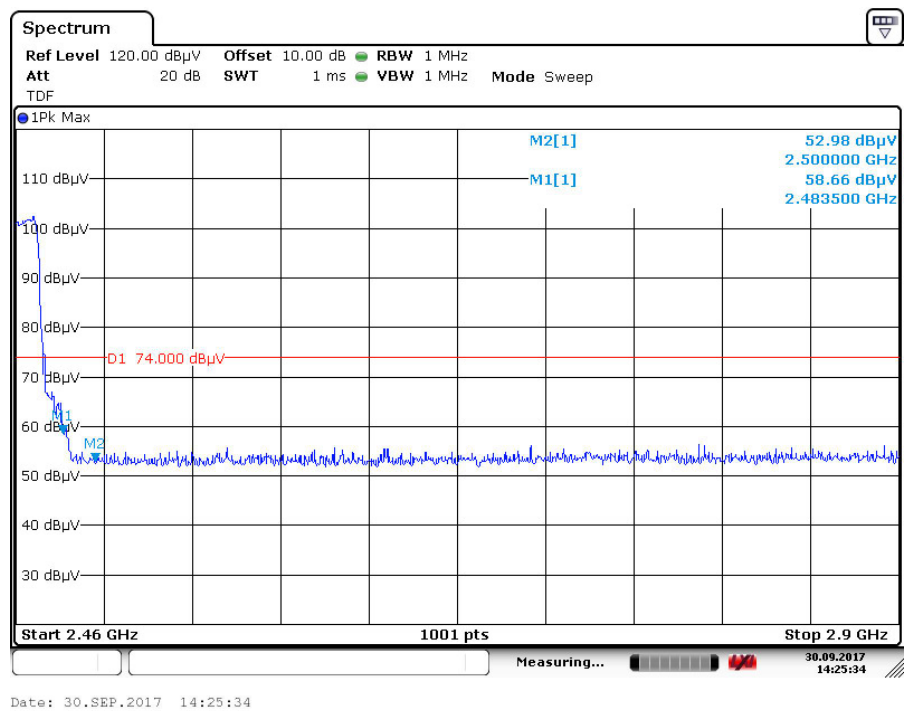
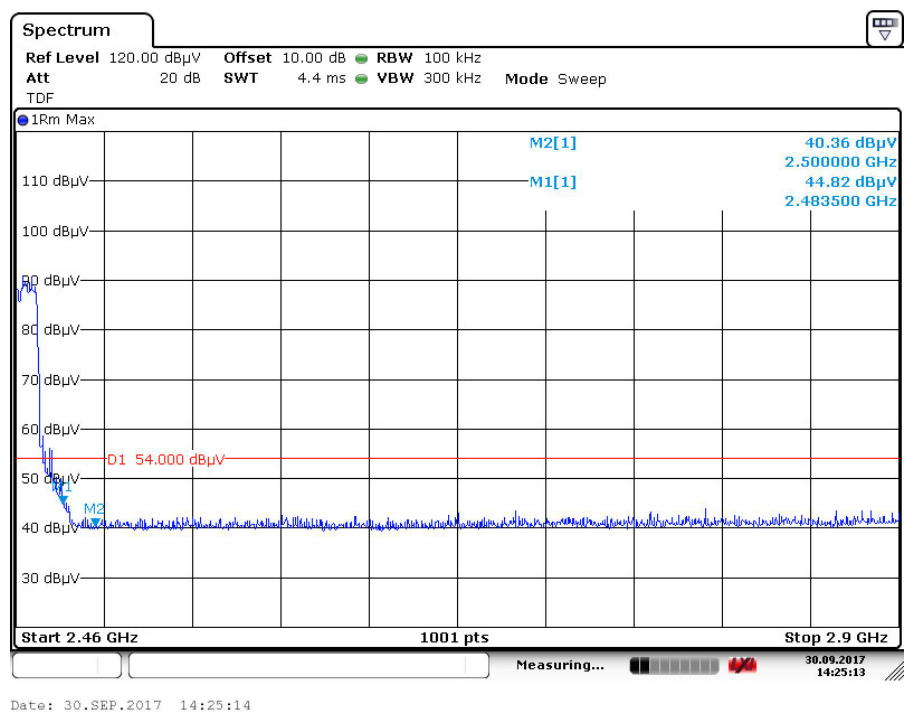


Low Channel (Ver)

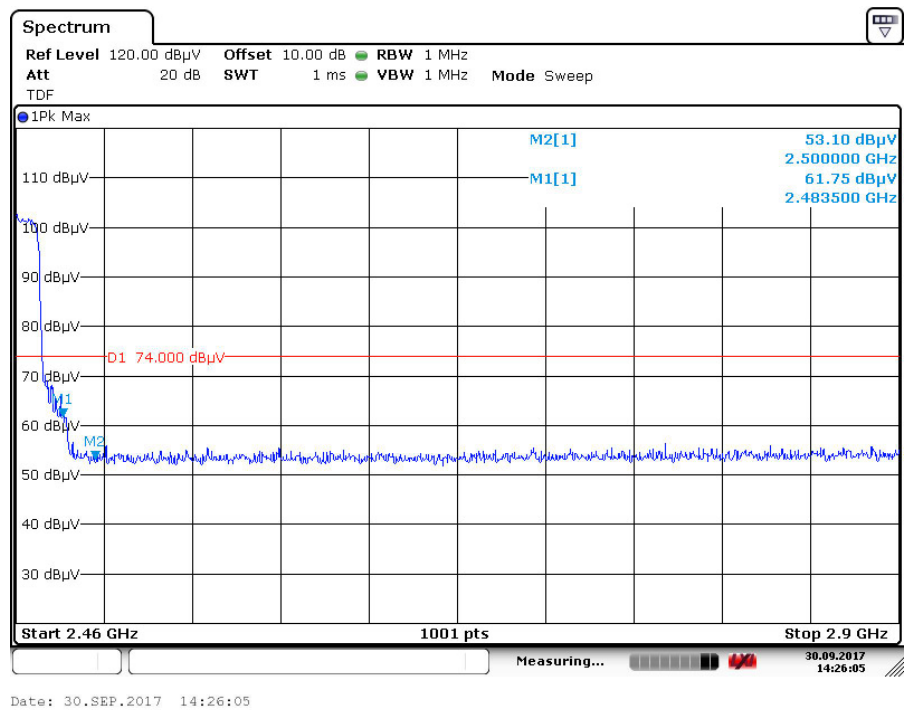
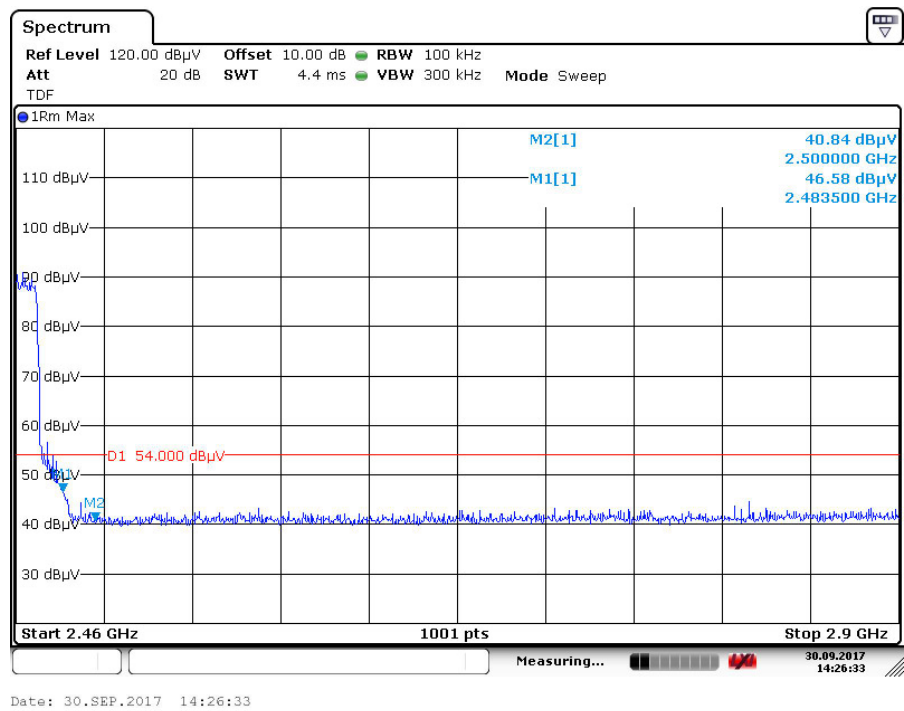


Radiated Bandedge 11n

High Channel (Hor)



High Channel (Ver)



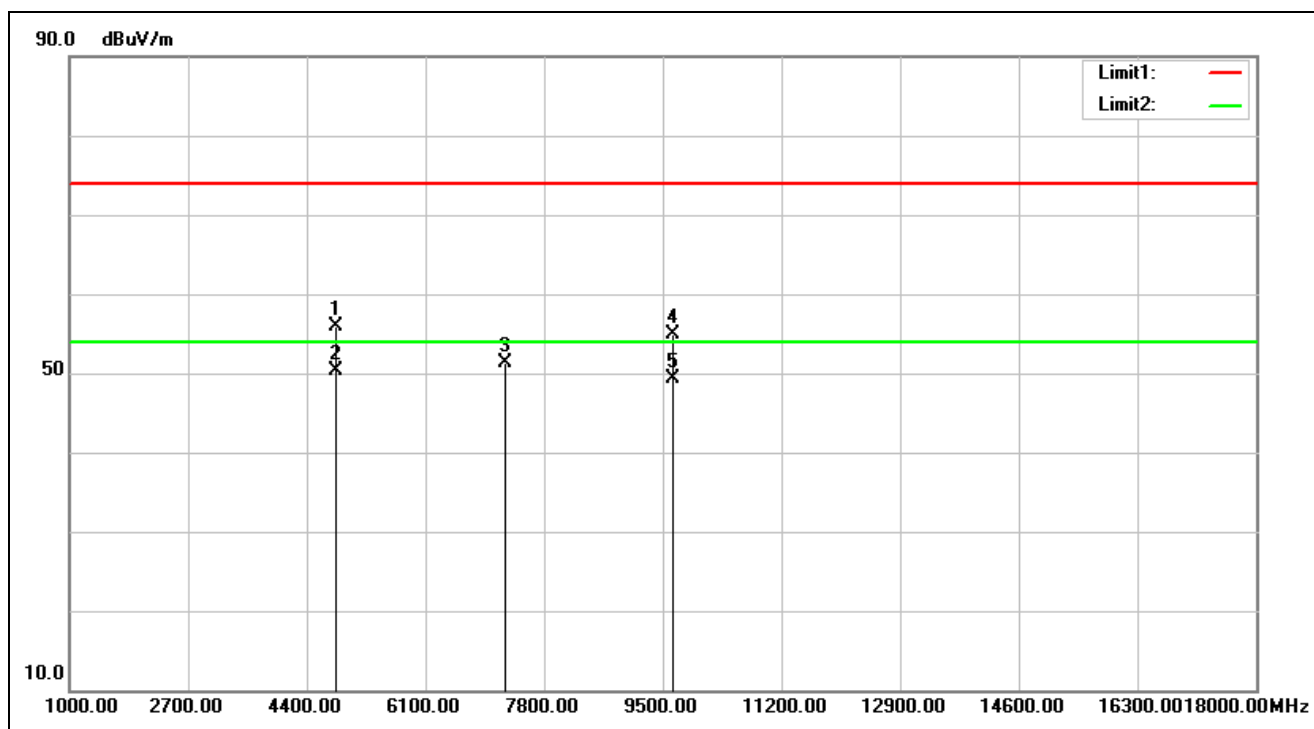
Spurious Emissions, TX Mode, 1-18G



TUV Rheinland Taiwan Ltd.

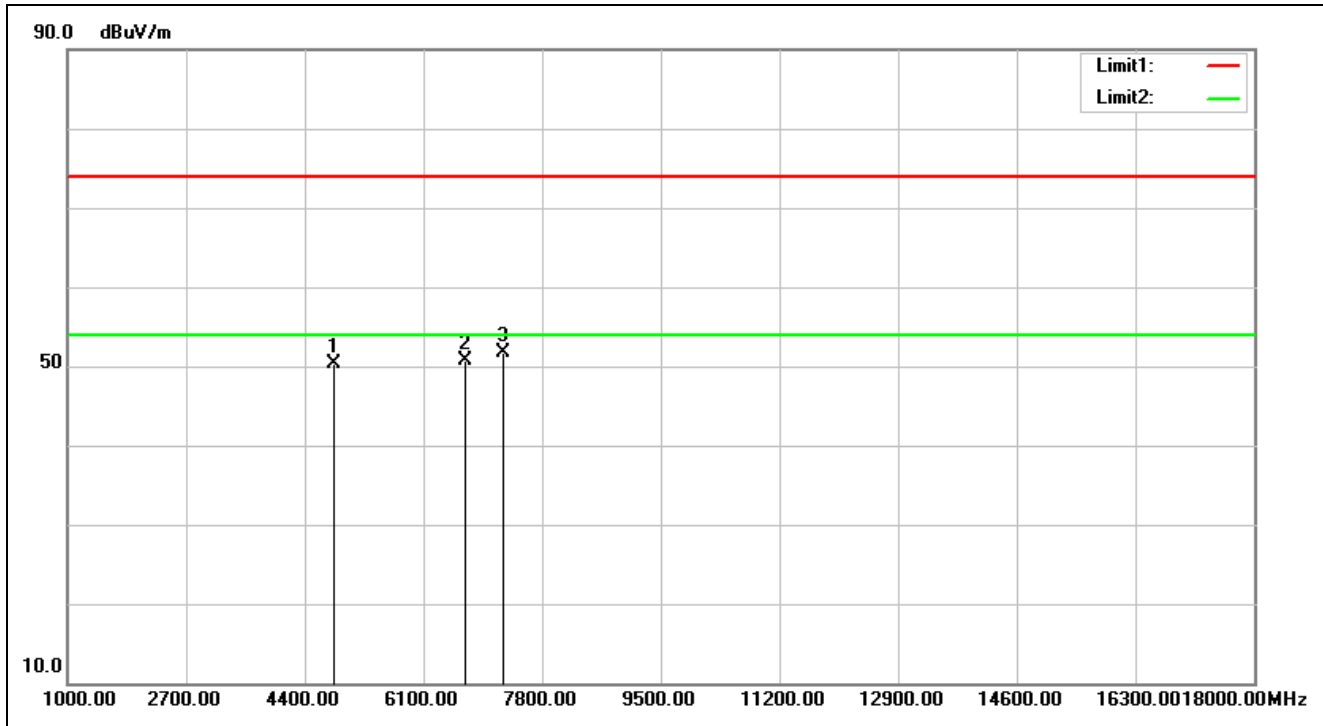
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

Tel: +886-2172-7000 fax: +886-2528-0018



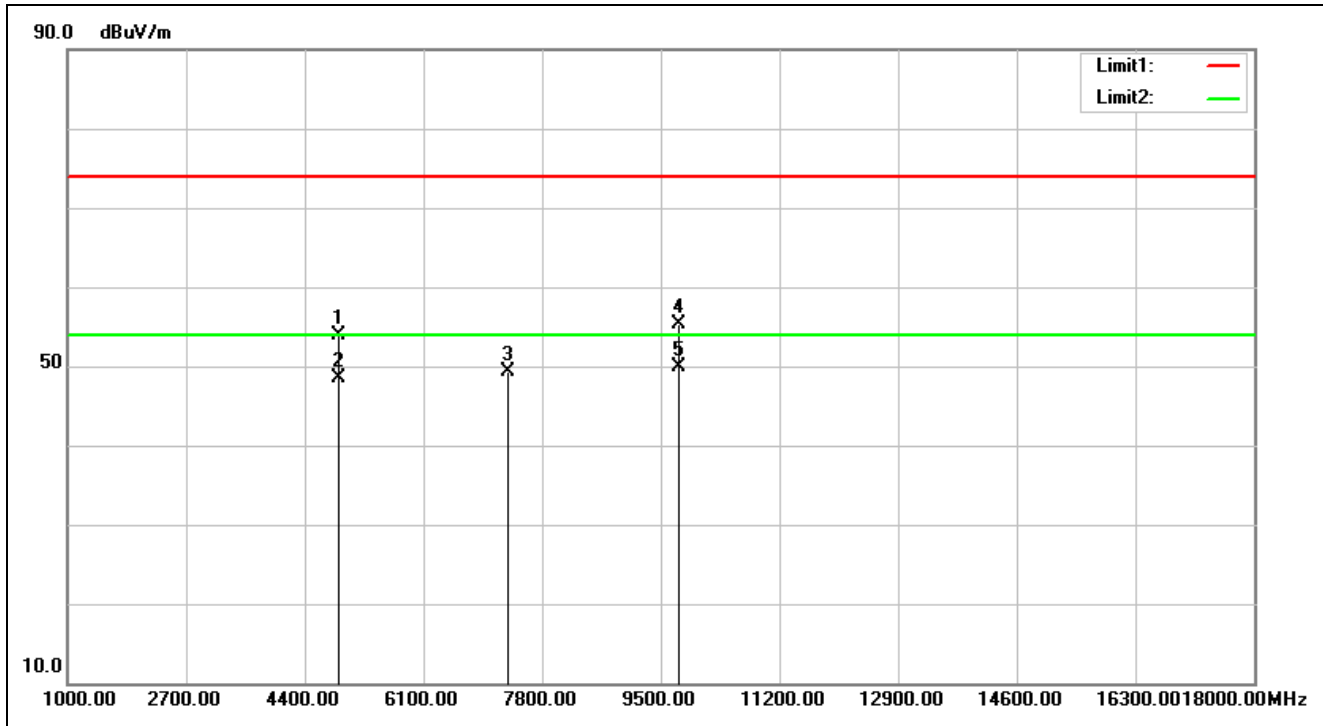
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 14:35:54
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2412-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4824.000	-2.65	58.63	55.98	74.00	-18.02	peak	100	321	
2	4824.000	-2.65	53.03	50.38	54.00	-3.62	AVG	100	321	
3	7236.000	5.37	45.93	51.30	74.00	-22.70	peak		0	
4	9648.000	6.31	48.62	54.93	74.00	-19.07	peak	100	349	
5	9648.000	6.31	43.08	49.39	54.00	-4.61	AVG	100	349	



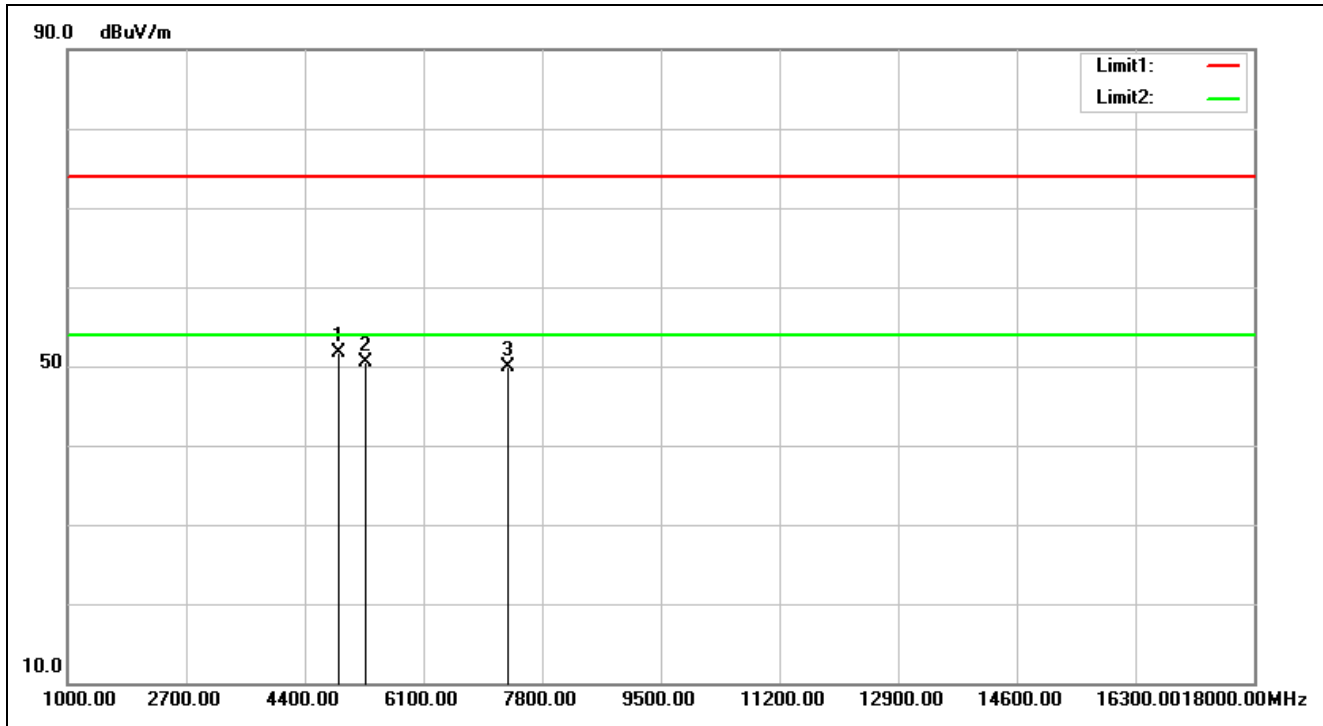
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Test item:	Radiation Emission	Test Time:	2017/9/30 14:36:57
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2412-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4824.000	-2.65	52.95	50.30	74.00	-23.70	peak	100	25	
2	6695.000	5.12	45.66	50.78	74.00	-23.22	peak	100	72	
3	7236.000	5.37	46.40	51.77	74.00	-22.23	peak			



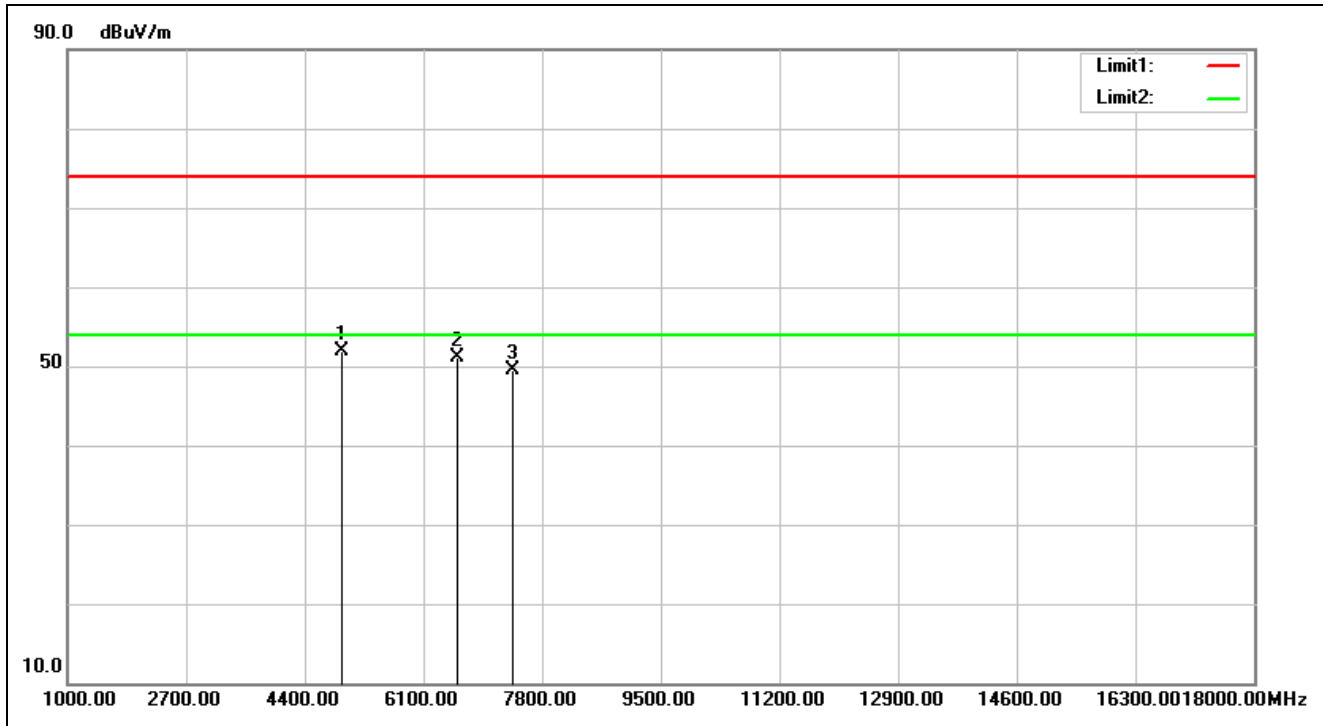
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Test item:	Radiation Emission	Test Time:	2017/9/30 14:44:01
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2437-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4874.000	-2.52	56.42	53.90	74.00	-20.10	peak	100	318	
2	4874.000	-2.52	51.02	48.50	54.00	-5.50	AVG	100	318	
3	7311.000	5.57	43.72	49.29	74.00	-24.71	peak			
4	9748.000	6.15	49.22	55.37	74.00	-18.63	peak	100	3	
5	9748.000	6.15	43.75	49.90	54.00	-4.10	AVG	100	3	



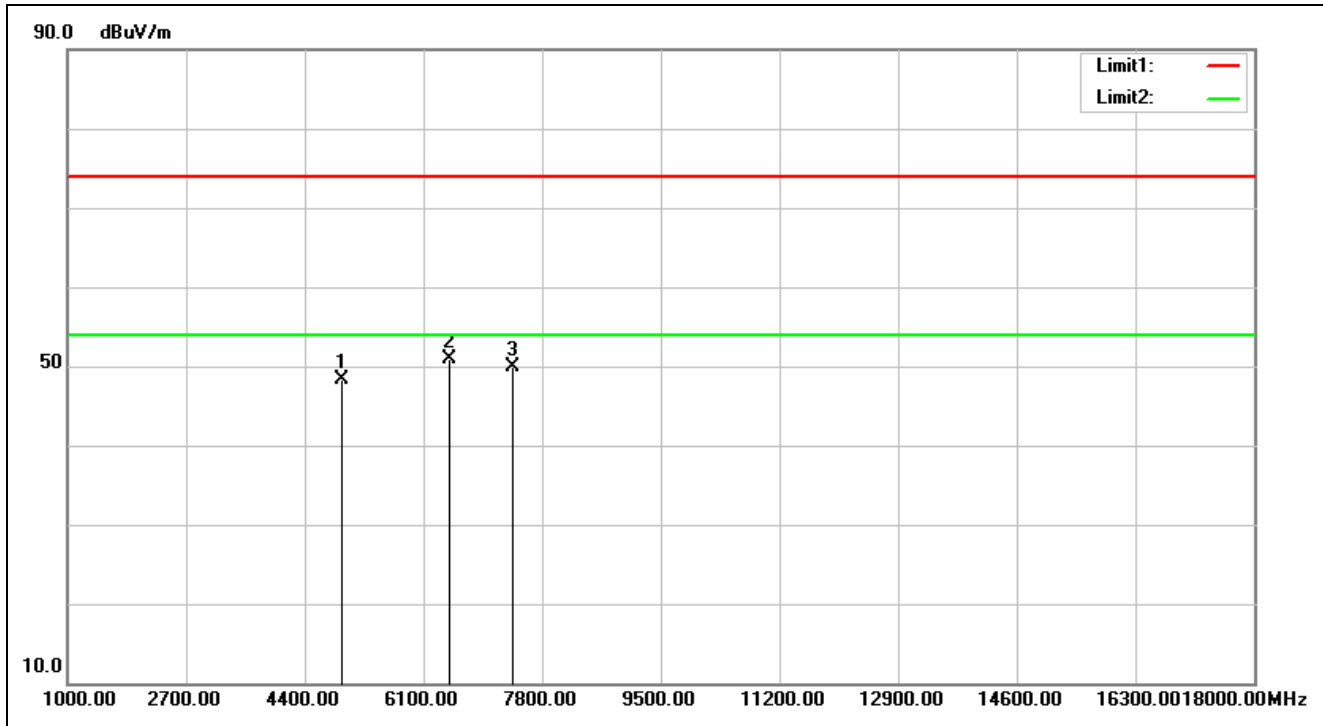
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Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 14:45:03
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2437-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4874.000	-2.52	54.13	51.61	74.00	-22.39	peak	100	335	
2	5267.000	-0.94	51.47	50.53	74.00	-23.47	peak	100	321	
3	7311.000	5.57	44.29	49.86	74.00	-24.14	peak			



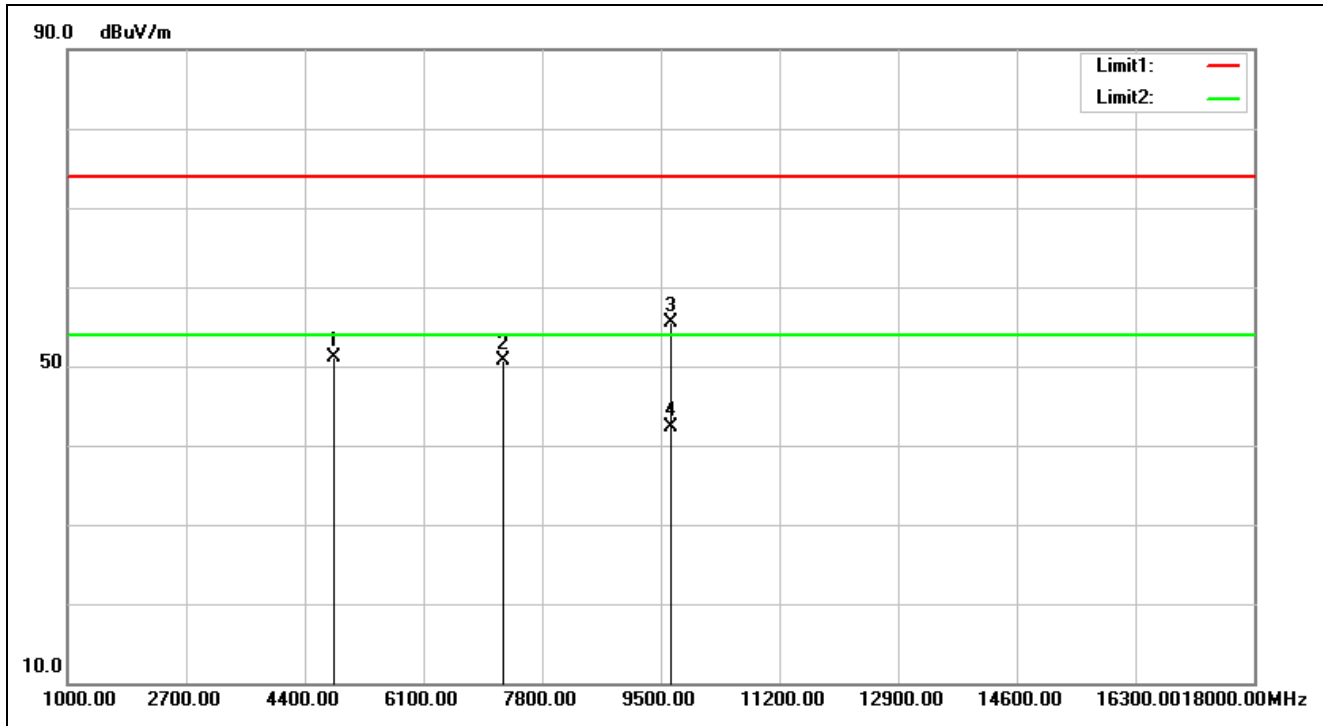
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Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 14:47:47
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2462-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4924.000	-2.39	54.39	52.00	74.00	-22.00	peak	100	174	
2	6576.000	5.25	45.78	51.03	74.00	-22.97	peak	100	307	
3	7386.000	5.75	43.76	49.51	74.00	-24.49	peak			



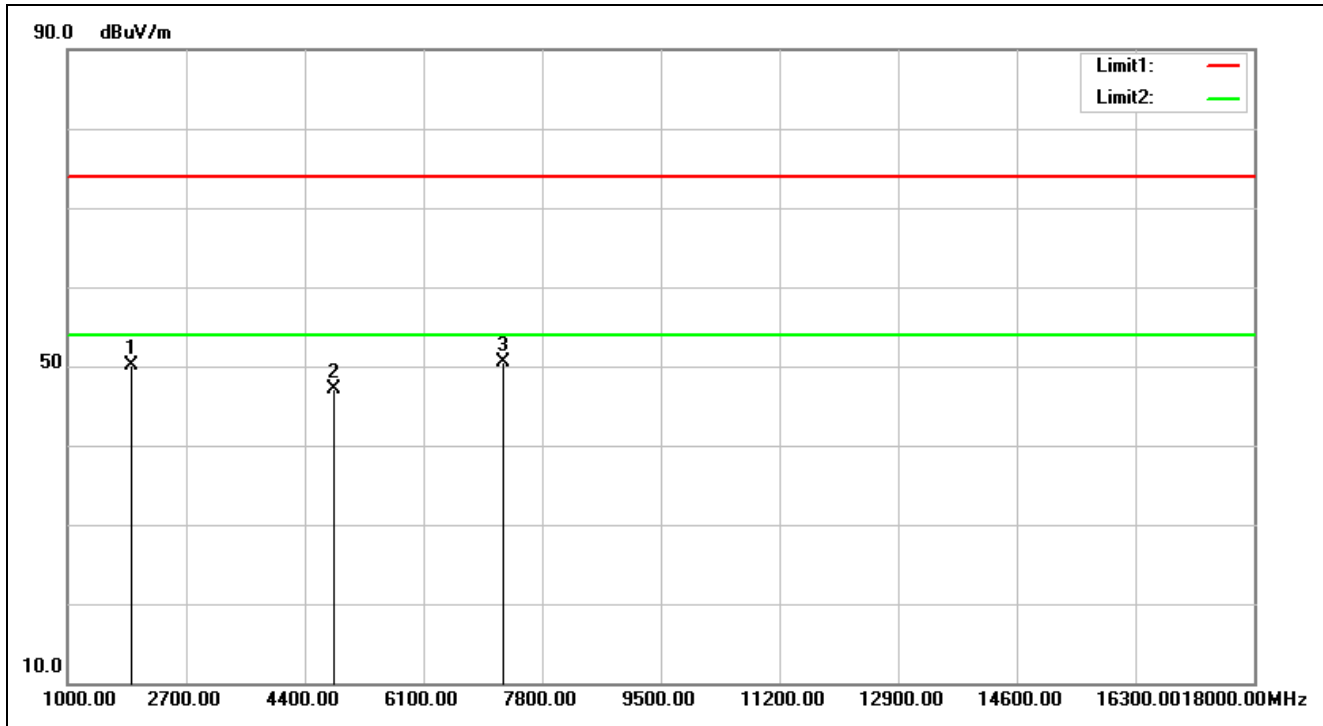
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 14:48:49
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2462-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4924.000	-2.39	50.65	48.26	74.00	-25.74	peak			
2	6474.000	5.25	45.63	50.88	74.00	-23.12	peak	100	192	
3	7386.000	5.75	44.25	50.00	74.00	-24.00	peak			



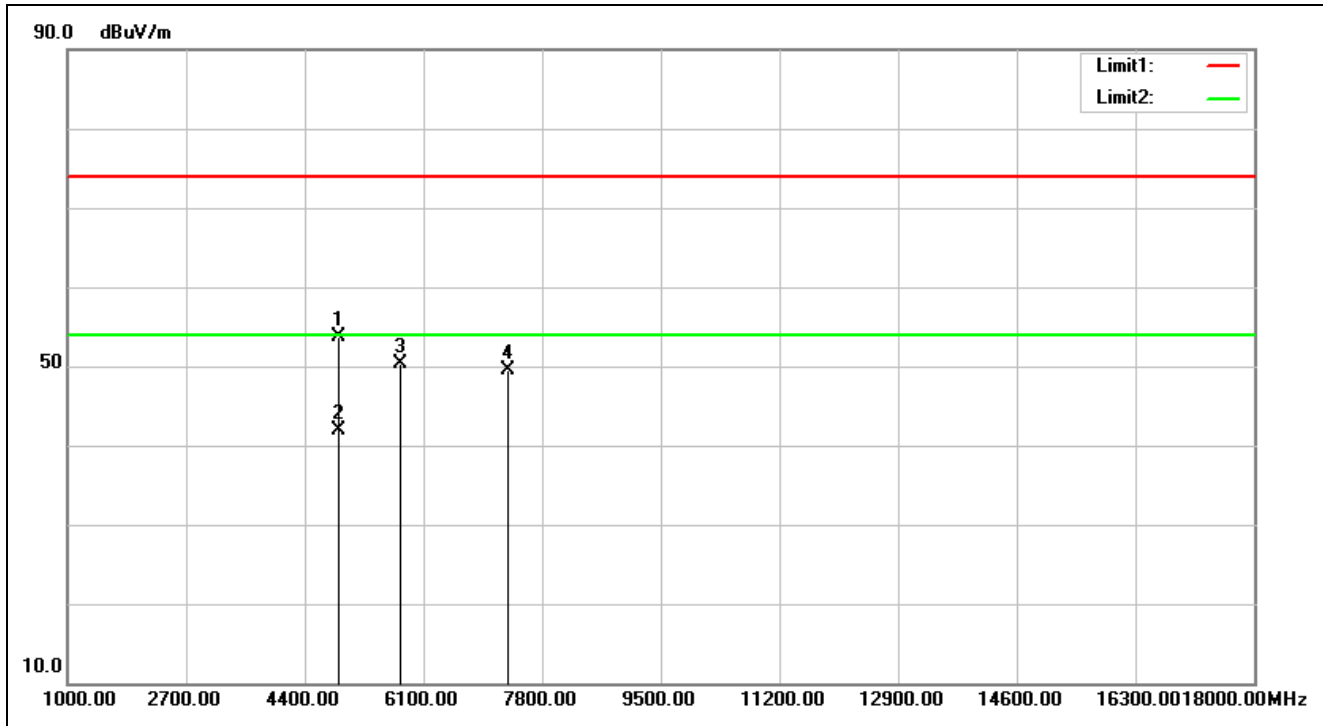
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Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 14:51:45
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G-2412-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4824.000	-2.65	53.85	51.20	74.00	-22.80	peak	100	329	
2	7236.000	5.37	45.33	50.70	74.00	-23.30	peak			
3	9648.000	6.31	49.19	55.50	74.00	-18.50	peak	100	1	
4	9648.000	6.31	35.99	42.30	54.00	-11.70	AVG	100	1	



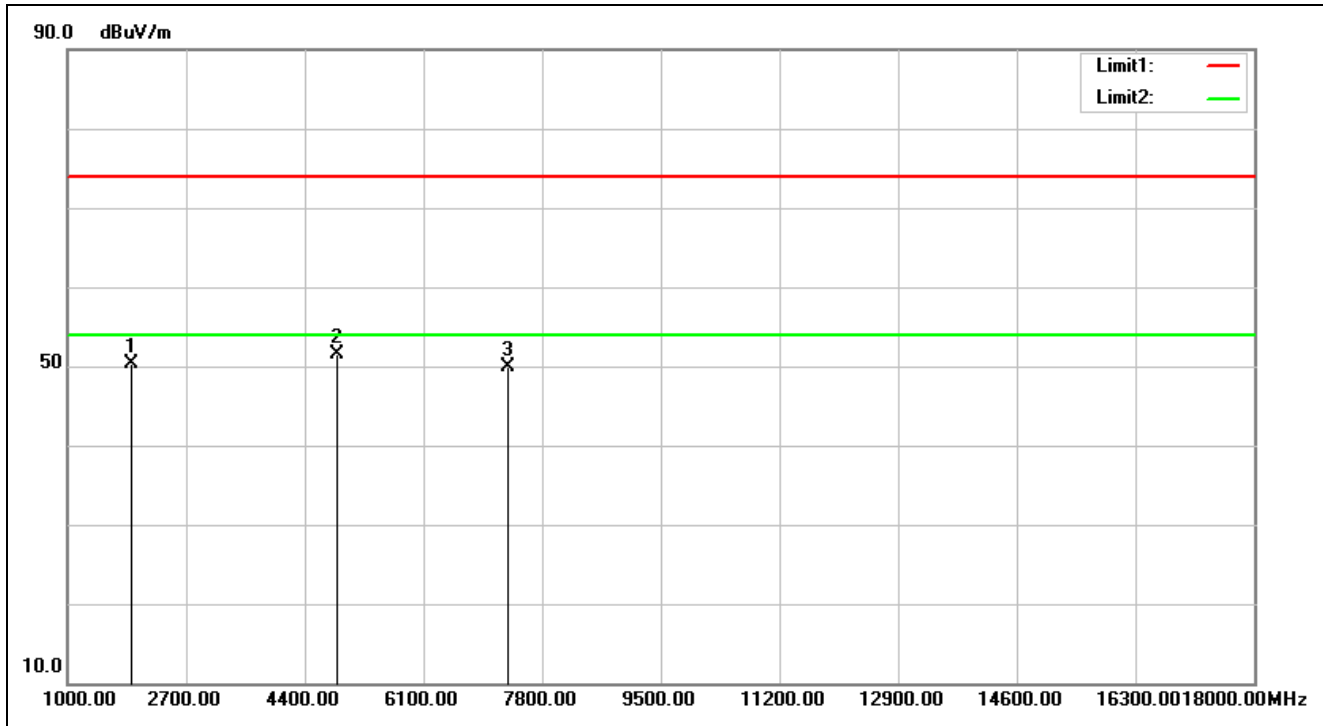
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 14:52:47
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G-2412-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	1918.000	-7.68	57.87	50.19	74.00	-23.81	peak	100	0	
2	4824.000	-2.65	49.75	47.10	74.00	-26.90	peak			
3	7236.000	5.37	45.12	50.49	74.00	-23.51	peak			



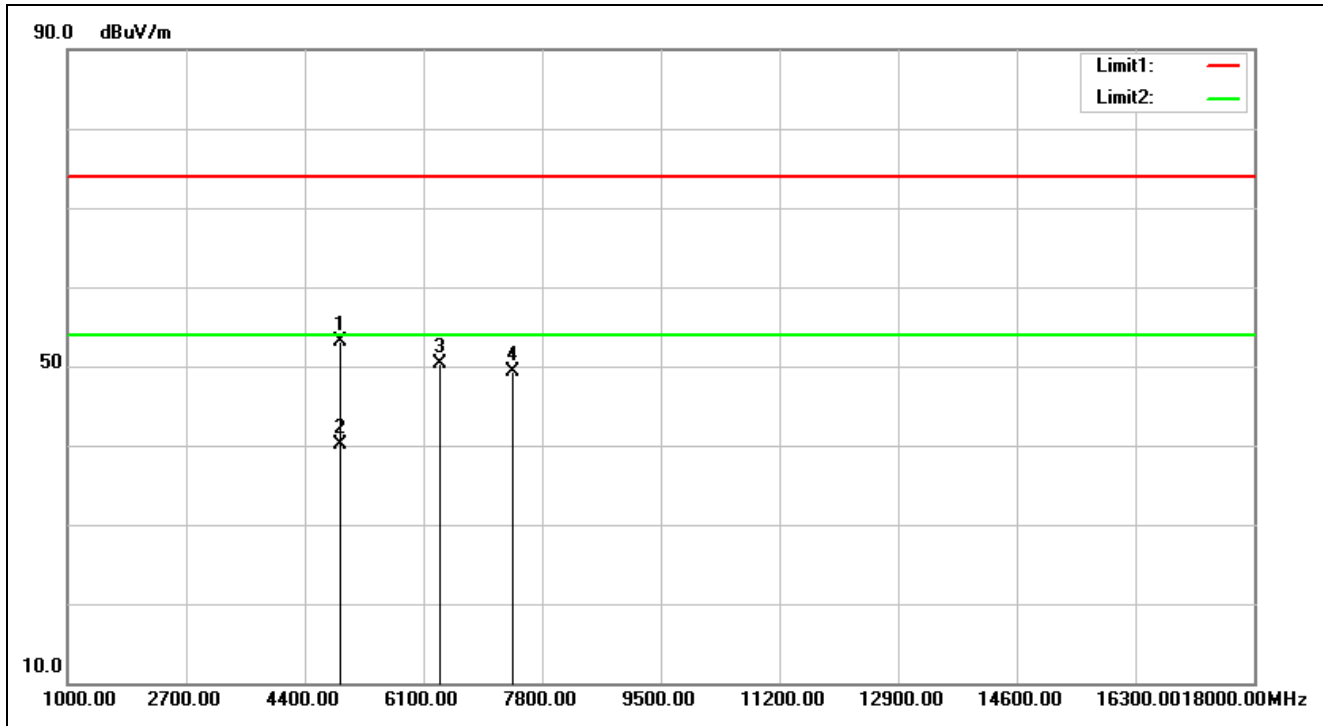
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Test item:	Radiation Emission	Test Time:	2017/9/30 14:56:50
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G-2437-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4874.000	-2.52	56.28	53.76	74.00	-20.24	peak	100	316	
2	4874.000	-2.52	44.42	41.90	54.00	-12.10	AVG	100	316	
3	5777.000	1.97	48.33	50.30	74.00	-23.70	peak	100	177	
4	7311.000	5.57	43.94	49.51	74.00	-24.49	peak			



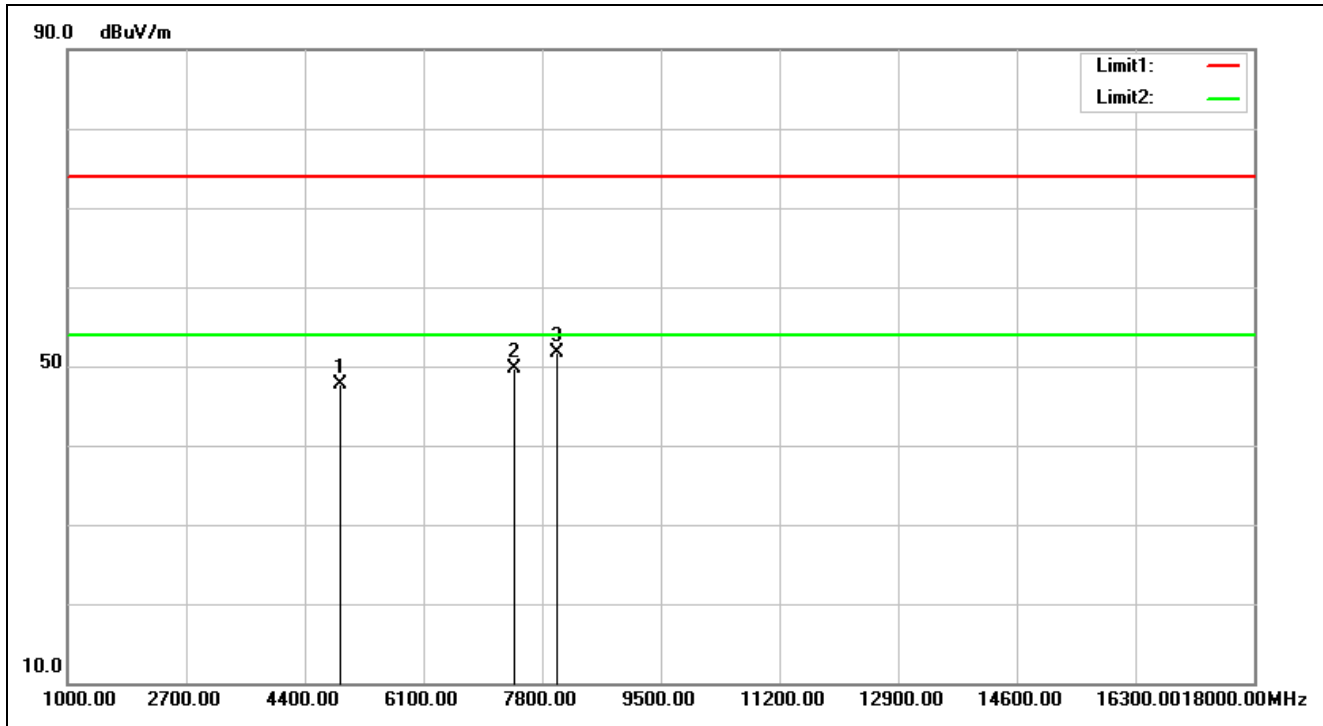
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Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 14:57:52
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G-2437-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	1918.000	-7.68	58.00	50.32	74.00	-23.68	peak	100	0	
2	4874.000	-2.52	54.10	51.58	74.00	-22.42	peak	100	338	
3	7311.000	5.57	44.41	49.98	74.00	-24.02	peak			



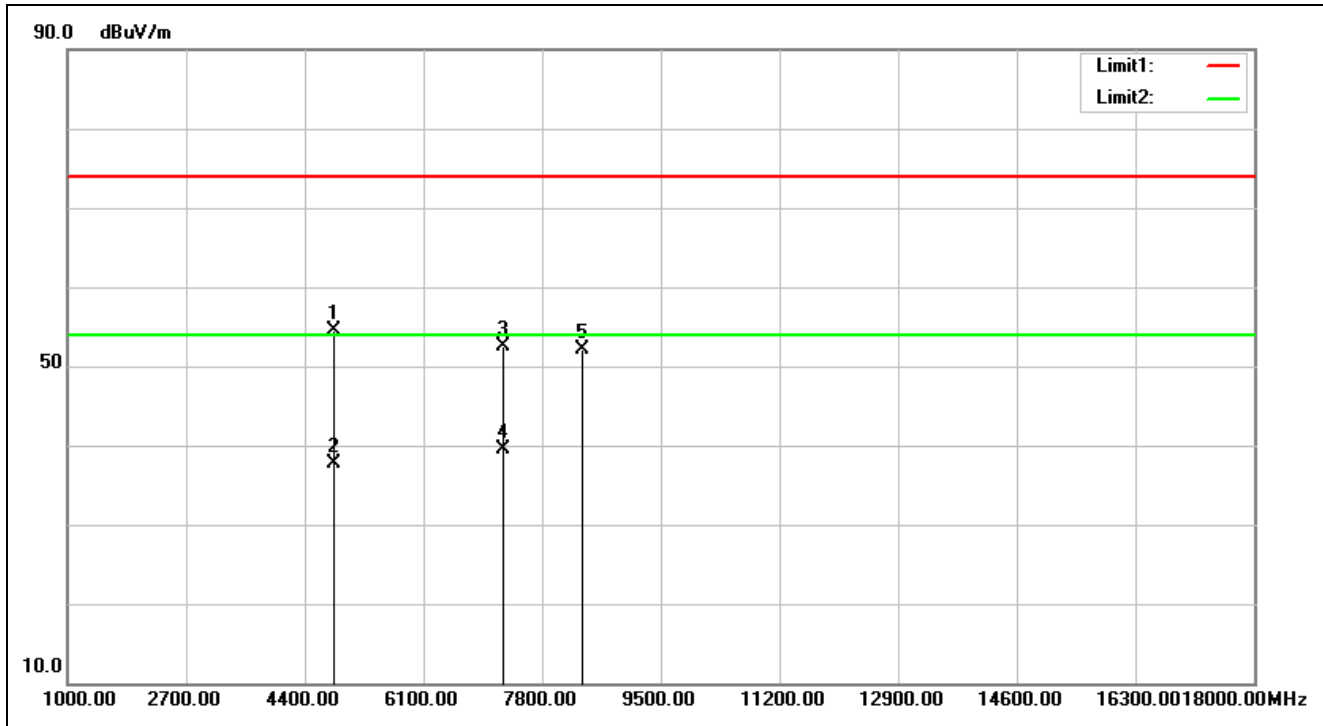
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 15:03:36
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G-2462-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4924.000	-2.39	55.45	53.06	74.00	-20.94	peak	100	177	
2	4924.000	-2.39	42.59	40.20	54.00	-13.80	AVG	100	177	
3	6338.000	4.71	45.65	50.36	74.00	-23.64	peak	100	50	
4	7386.000	5.75	43.49	49.24	74.00	-24.76	peak			



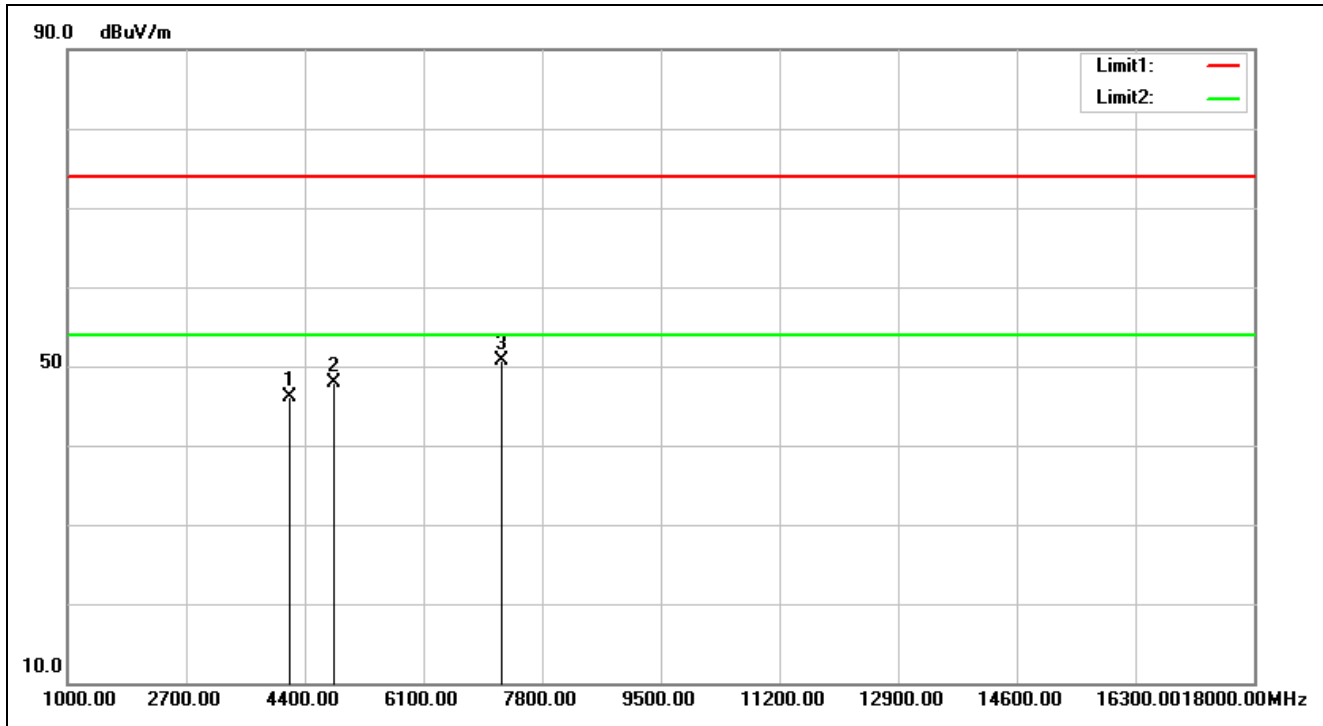
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 15:04:38
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G-2462-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4924.000	-2.39	50.17	47.78	74.00	-26.22	peak			
2	7386.000	5.75	43.97	49.72	74.00	-24.28	peak			
3	8021.000	5.82	45.94	51.76	74.00	-22.24	peak	100	241	



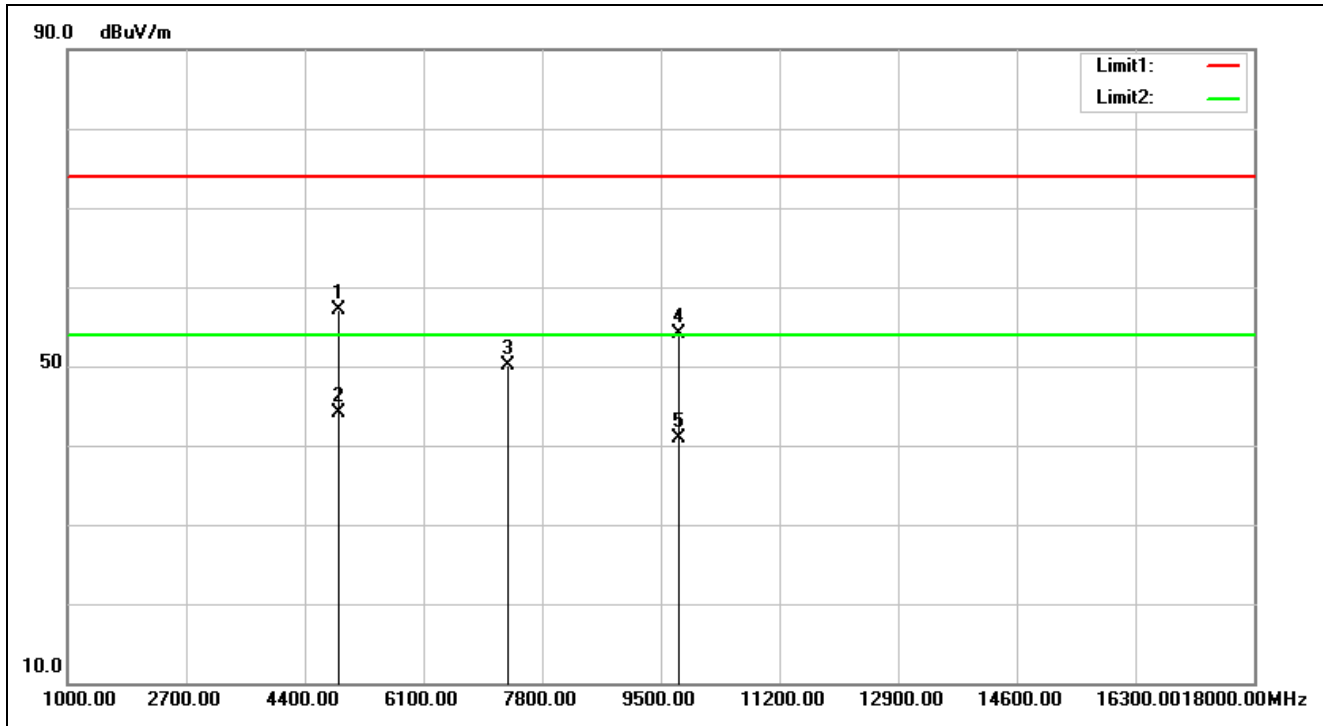
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 15:07:06
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G20-2412-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4824.000	-2.65	57.06	54.41	74.00	-19.59	peak	100	315	
2	4824.000	-2.65	40.35	37.70	54.00	-16.30	AVG	100	315	
3	7236.000	5.37	47.06	52.43	74.00	-21.57	peak	100	155	
4	7236.000	5.37	34.13	39.50	54.00	-14.50	AVG	100	155	
5	8378.000	6.32	45.78	52.10	74.00	-21.90	peak	100	235	



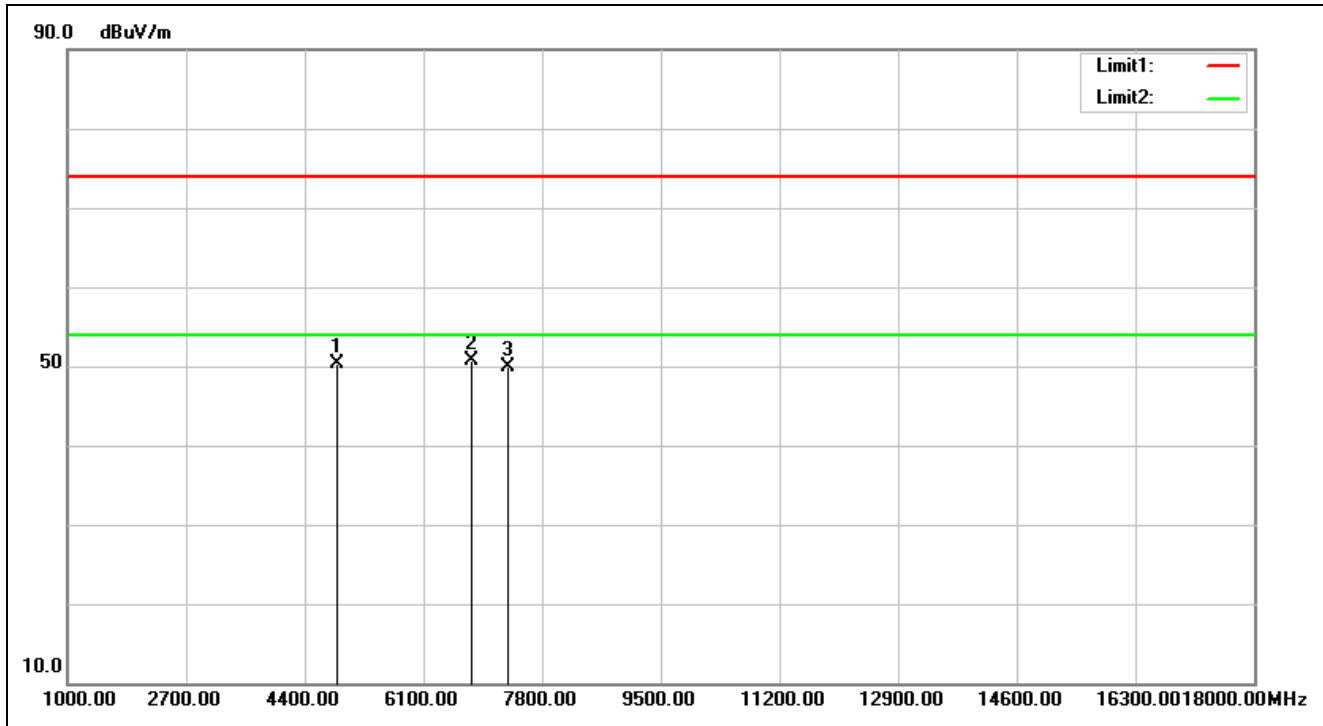
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 15:08:09
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G20-2412-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4179.000	-4.87	51.05	46.18	74.00	-27.82	peak	100	119	
2	4824.000	-2.65	50.65	48.00	74.00	-26.00	peak			
3	7236.000	5.37	45.36	50.73	74.00	-23.27	peak			



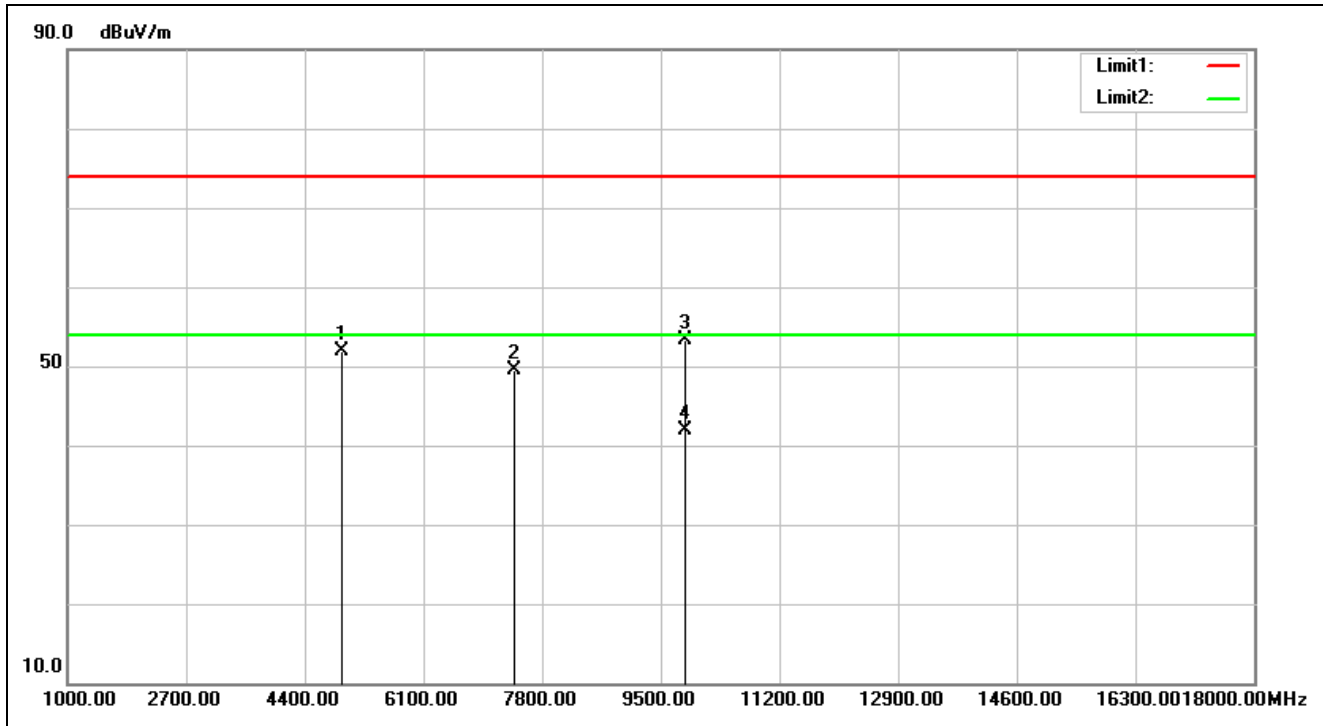
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 15:12:21
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G20-2437-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4874.000	-2.52	59.61	57.09	74.00	-16.91	peak	100	315	
2	4874.000	-2.52	46.64	44.12	54.00	-9.88	AVG	100	315	
3	7311.000	5.57	44.45	50.02	74.00	-23.98	peak			
4	9748.000	6.15	47.89	54.04	74.00	-19.96	peak	100	2	
5	9748.000	6.15	34.85	41.00	54.00	-13.00	AVG	100	2	



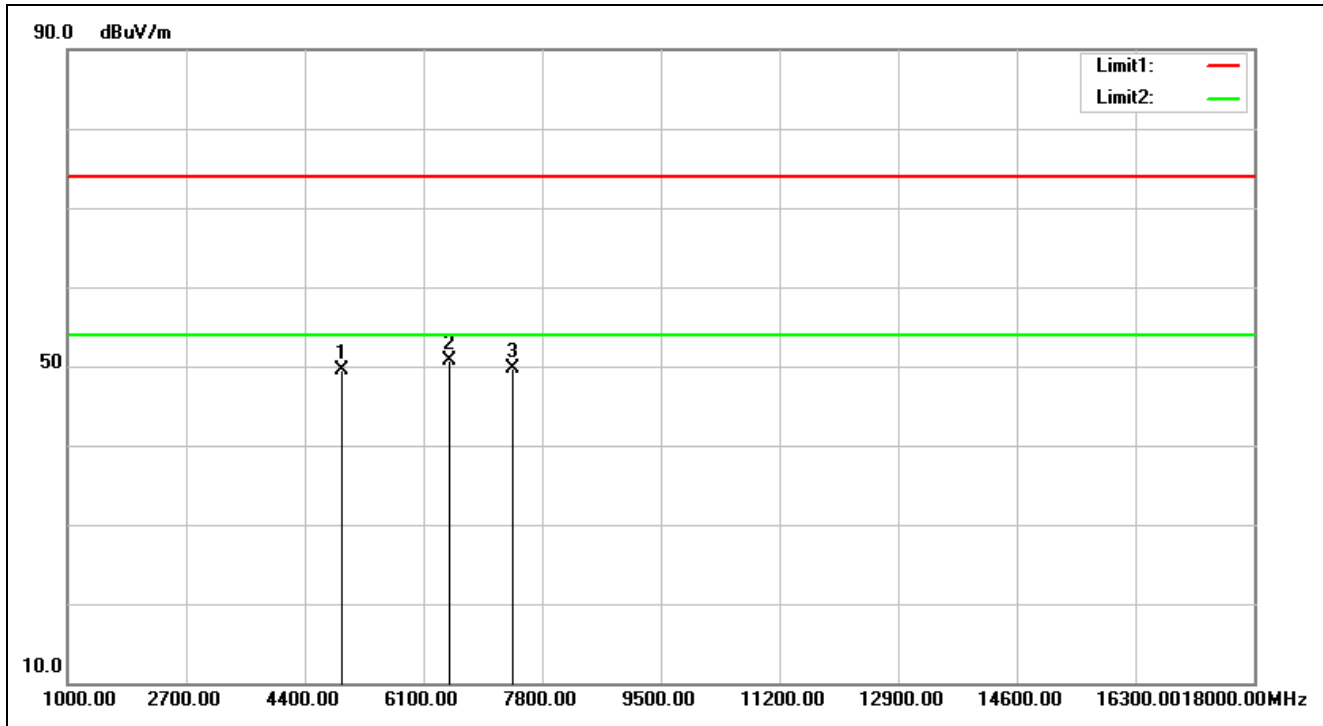
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 15:13:24
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G20-2437-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4874.000	-2.52	52.82	50.30	74.00	-23.70	peak	100	333	
2	6780.000	5.01	45.70	50.71	74.00	-23.29	peak	100	249	
3	7311.000	5.57	44.38	49.95	74.00	-24.05	peak			



Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 15:16:44
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G20-2462-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4924.000	-2.39	54.39	52.00	74.00	-22.00	peak	100	335	
2	7386.000	5.75	43.85	49.60	74.00	-24.40	peak			
3	9848.000	5.98	47.33	53.31	74.00	-20.69	peak	100	349	
4	9848.000	5.98	35.89	41.87	54.00	-12.13	AVG	100	349	



Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 15:17:47
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G20-2462-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4924.000	-2.39	51.82	49.43	74.00	-24.57	peak			
2	6474.000	5.25	45.37	50.62	74.00	-23.38	peak	100	47	
3	7386.000	5.75	43.88	49.63	74.00	-24.37	peak			

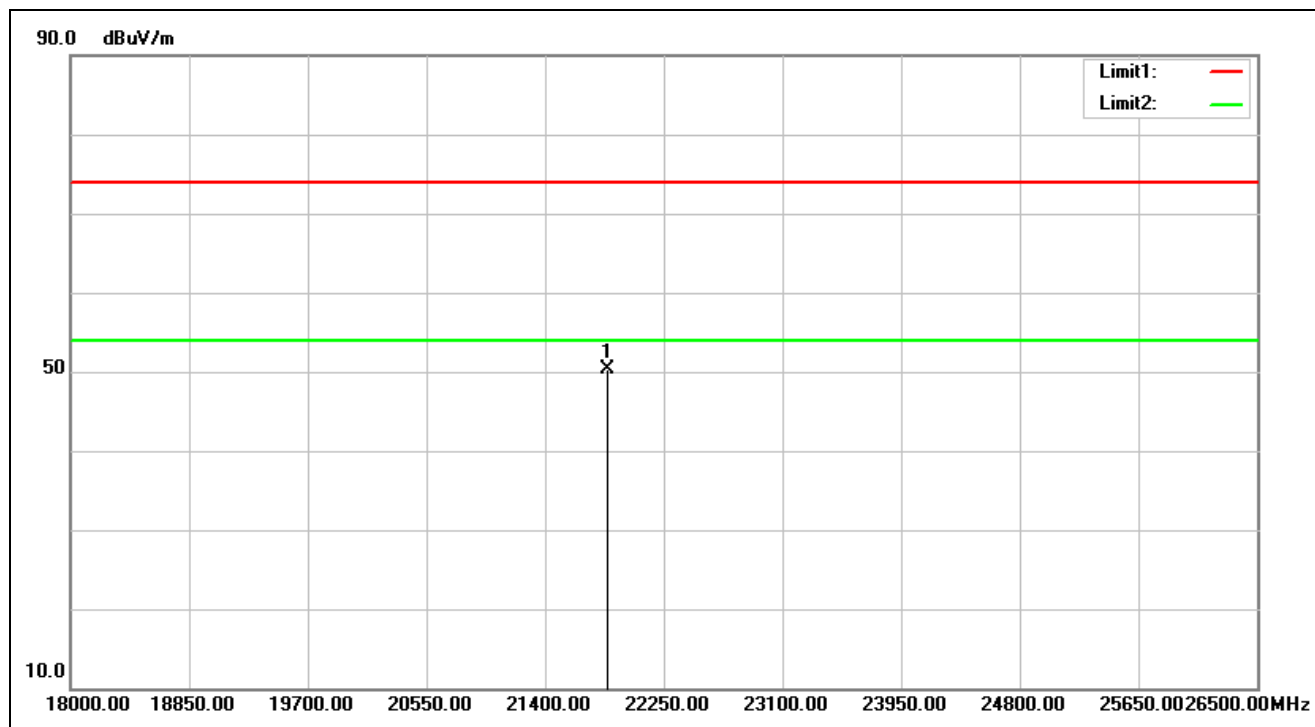
Spurious Emissions, TX Mode, 18-26G



TUV Rheinland Taiwan Ltd.

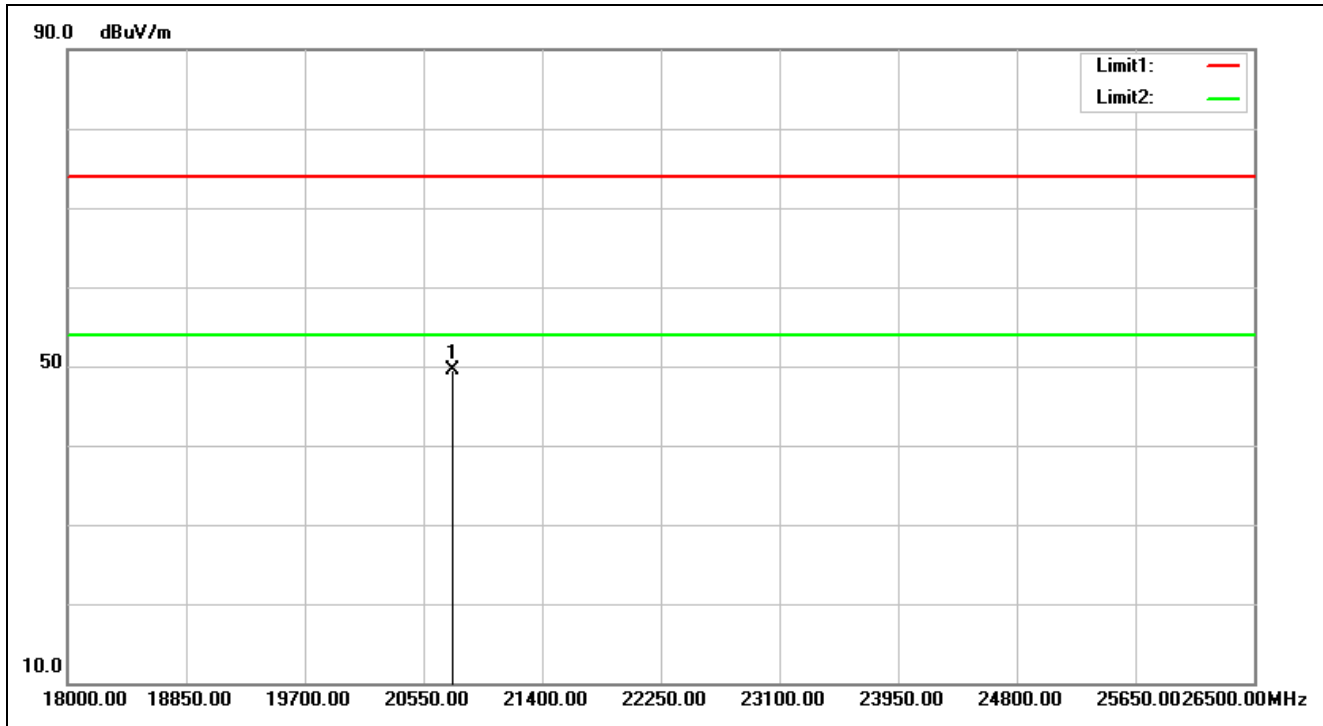
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

Tel:+886-2172-7000 fax:+886-2528-0018



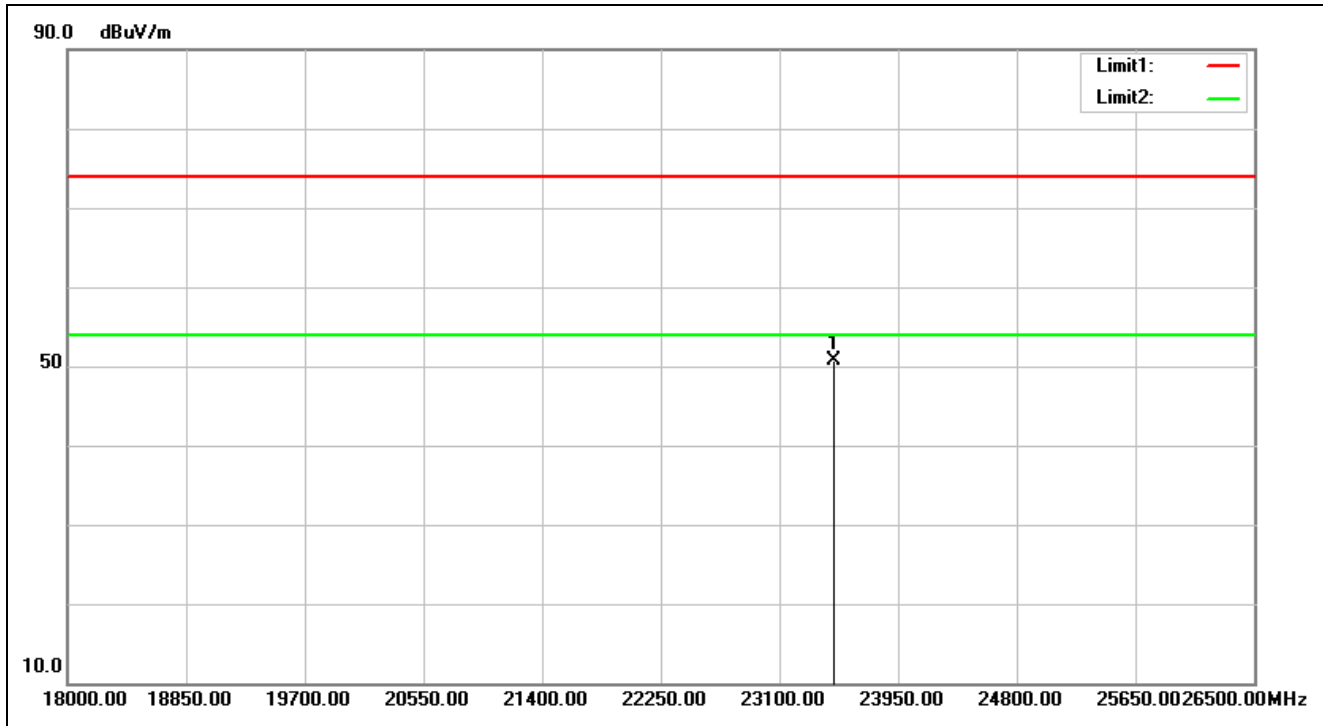
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 15:37:47
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2412-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	21842.000	32.41	17.93	50.34	74.00	-23.66	peak		0	



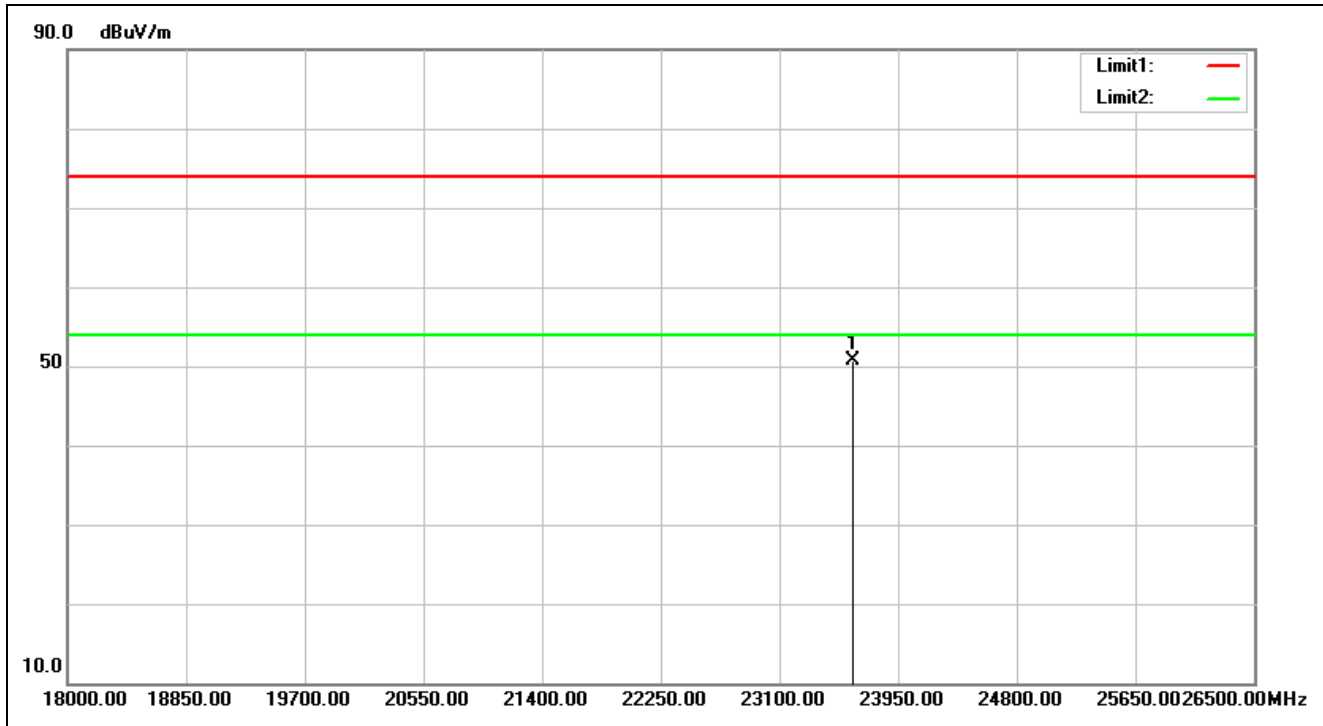
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 15:37:57
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2412-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20762.500	31.13	18.39	49.52	74.00	-24.48	peak			



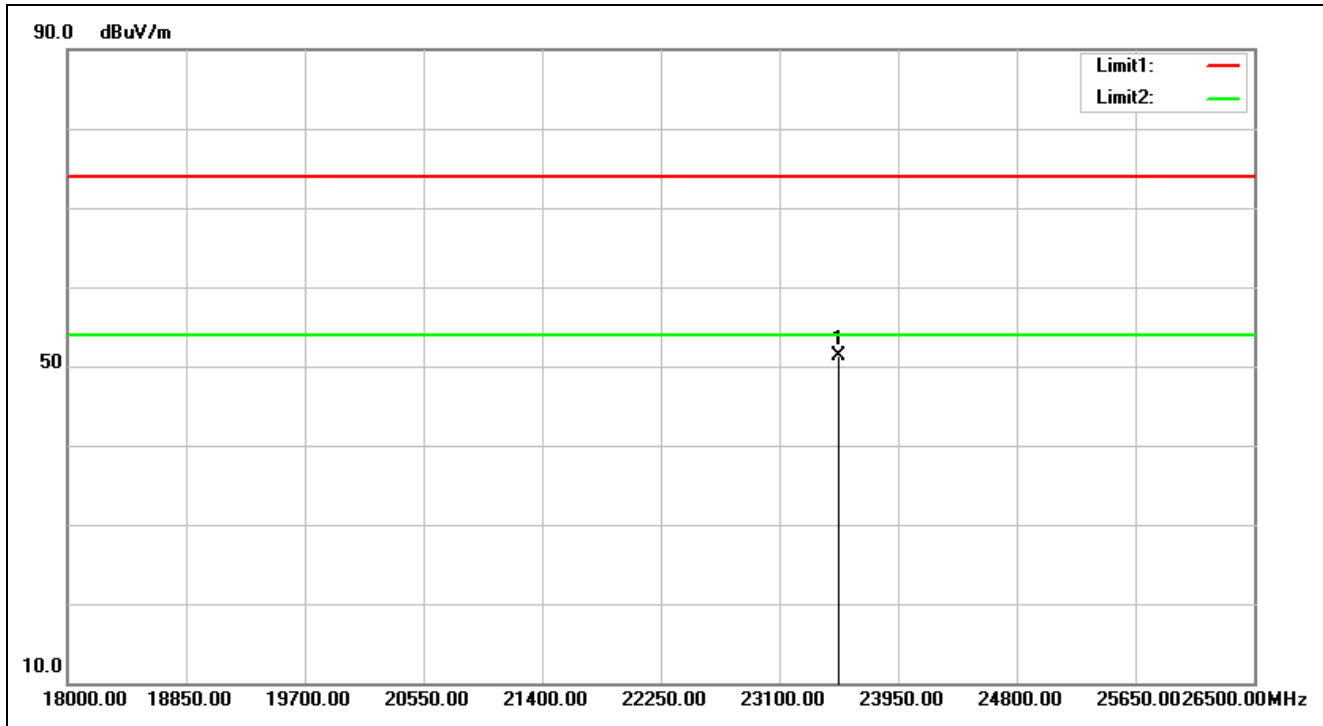
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 15:38:12
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2437-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23491.000	32.42	18.21	50.63	74.00	-23.37	peak			



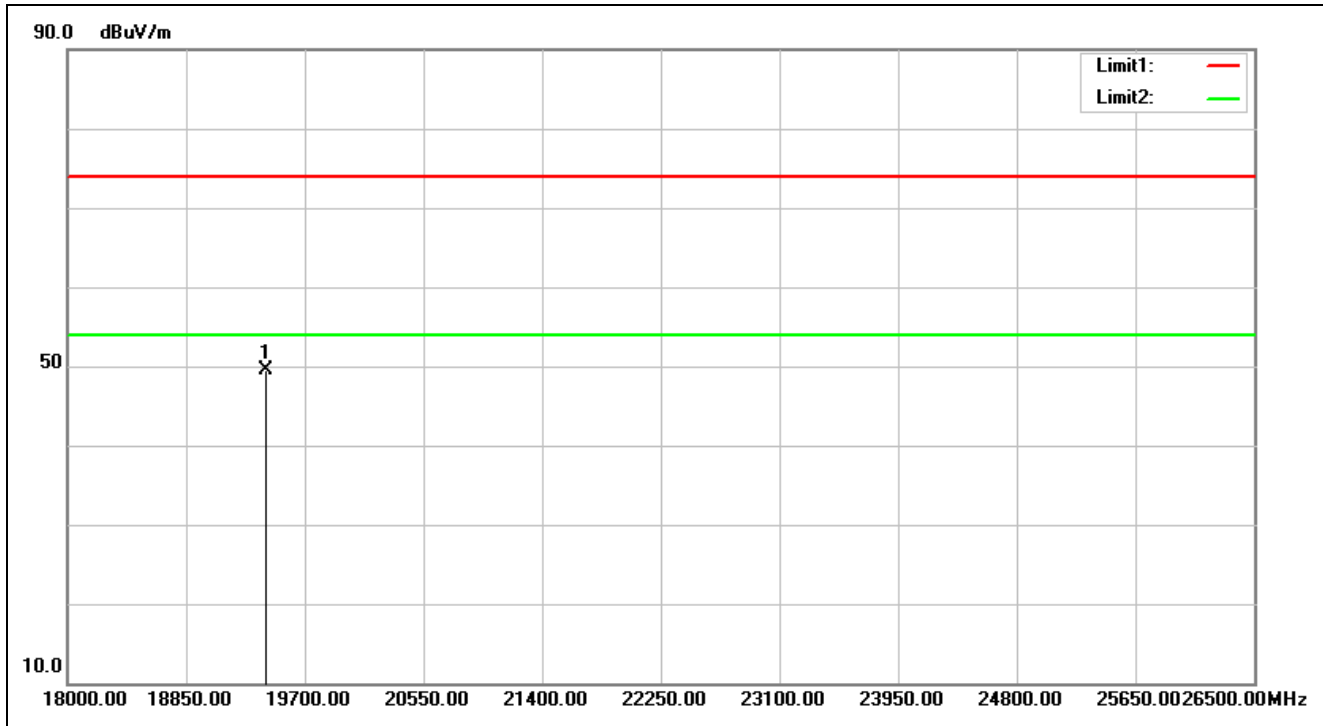
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 15:38:21
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2437-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23627.000	32.23	18.45	50.68	74.00	-23.32	peak			



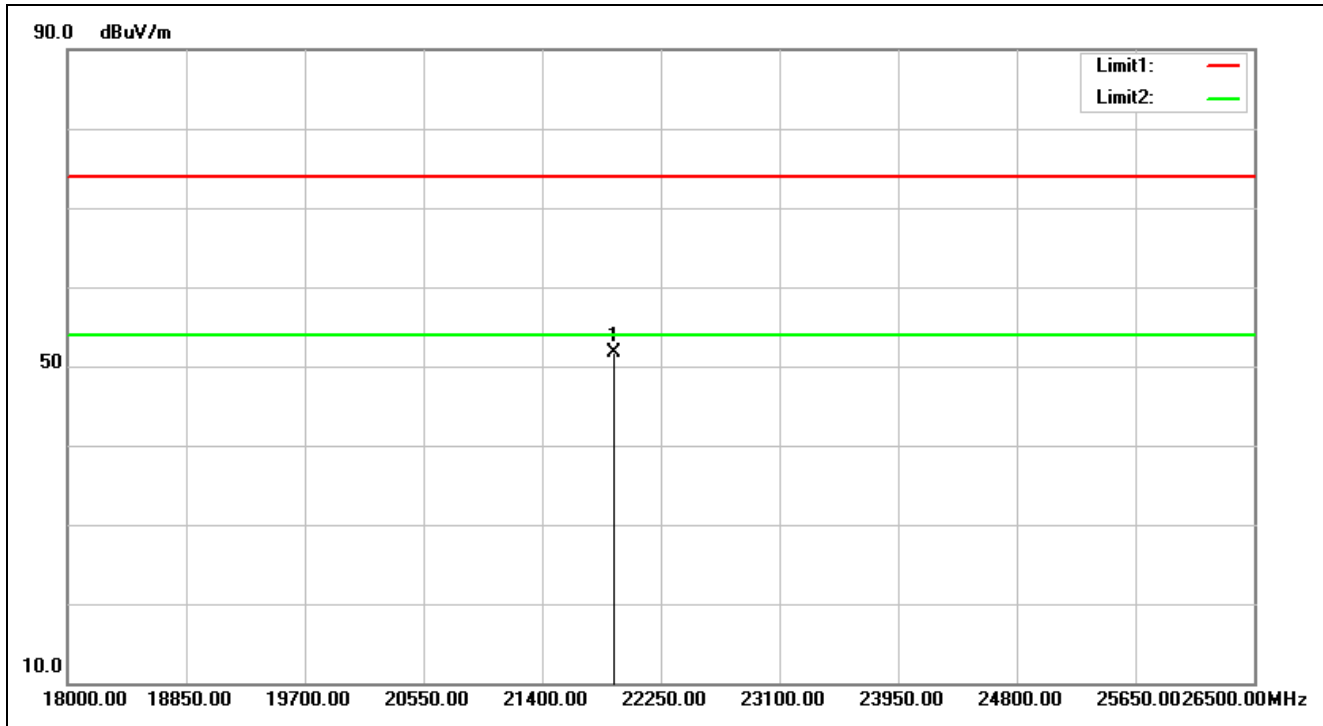
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 15:38:37
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2462-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23525.000	32.39	18.89	51.28	74.00	-22.72	peak			



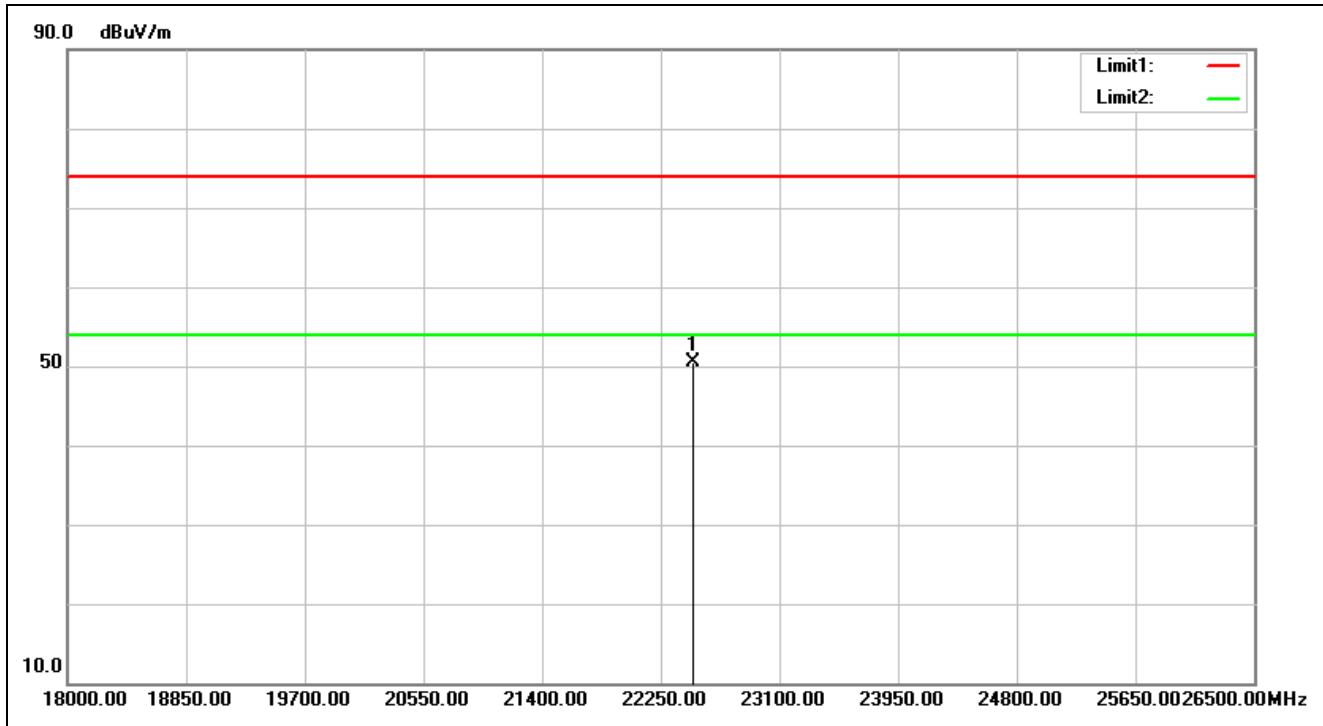
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 15:38:46
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2462-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	19419.500	29.87	19.62	49.49	74.00	-24.51	peak			



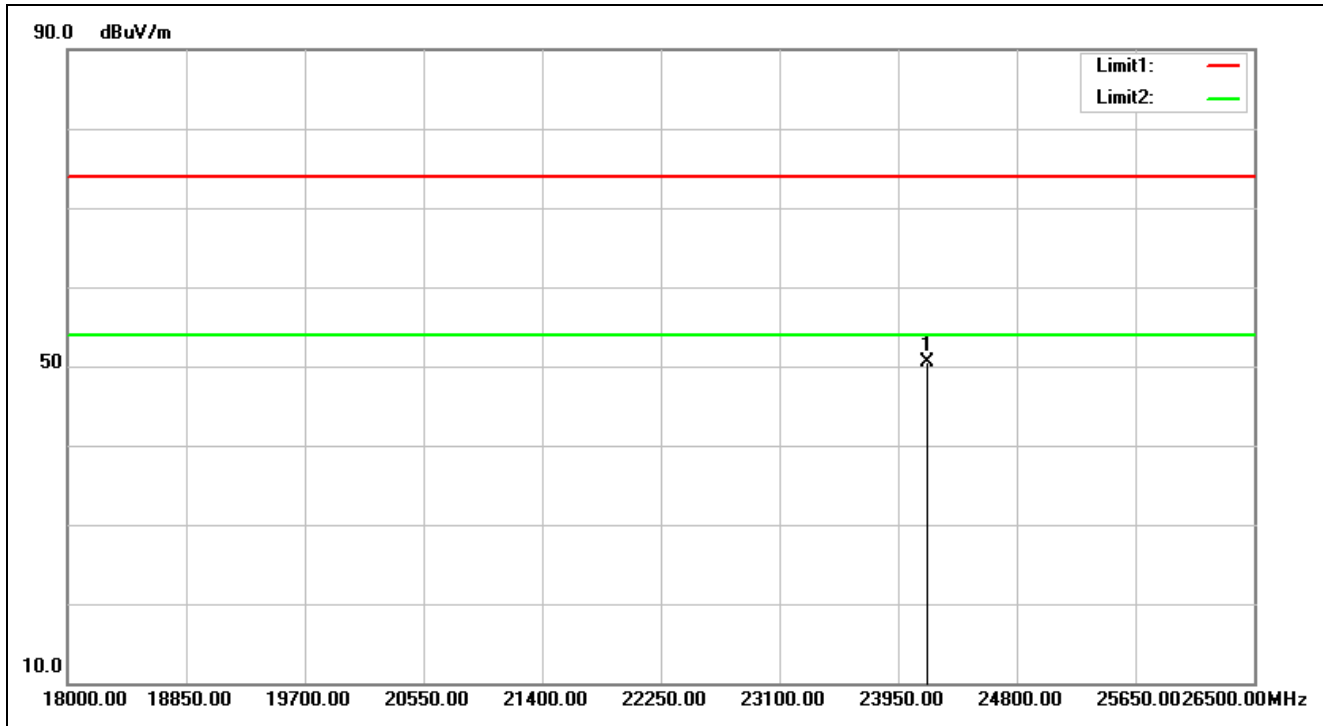
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 15:38:59
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G-2412-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	21918.500	32.49	19.31	51.80	74.00	-22.20	peak			



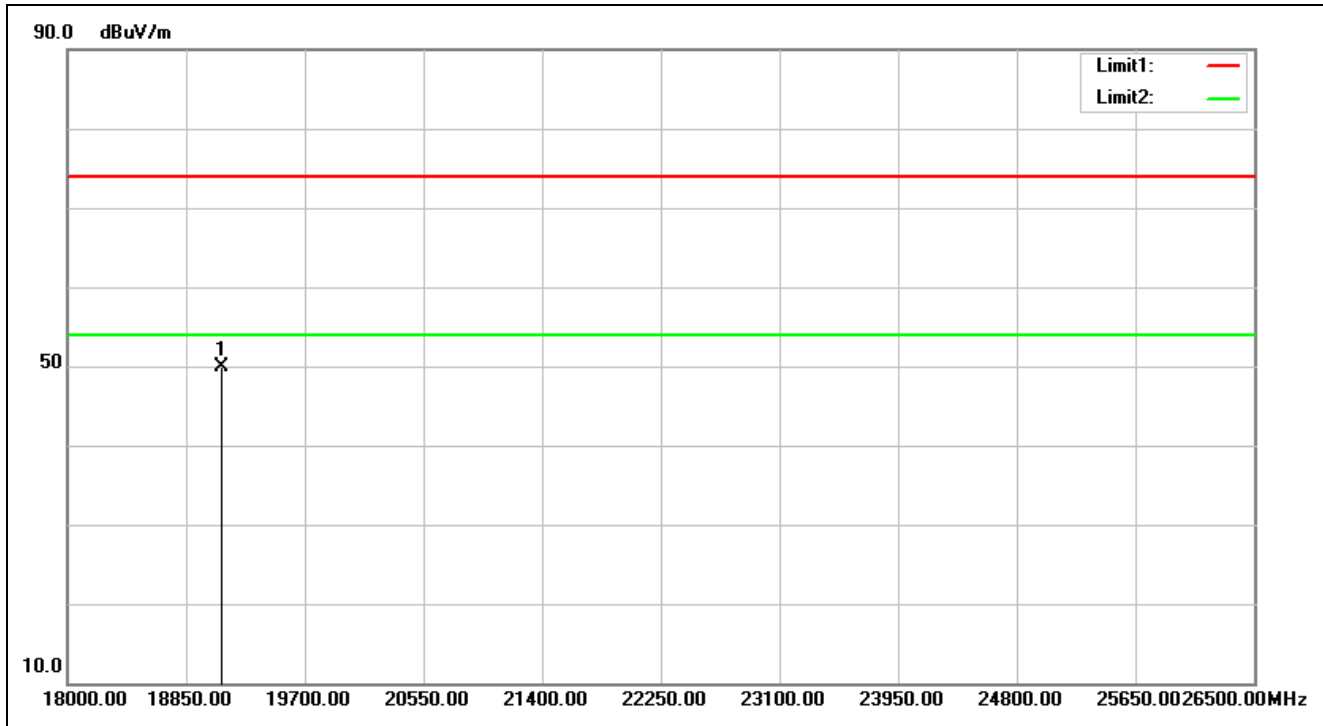
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 15:39:08
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G-2412-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	22479.500	32.25	18.30	50.55	74.00	-23.45	peak			



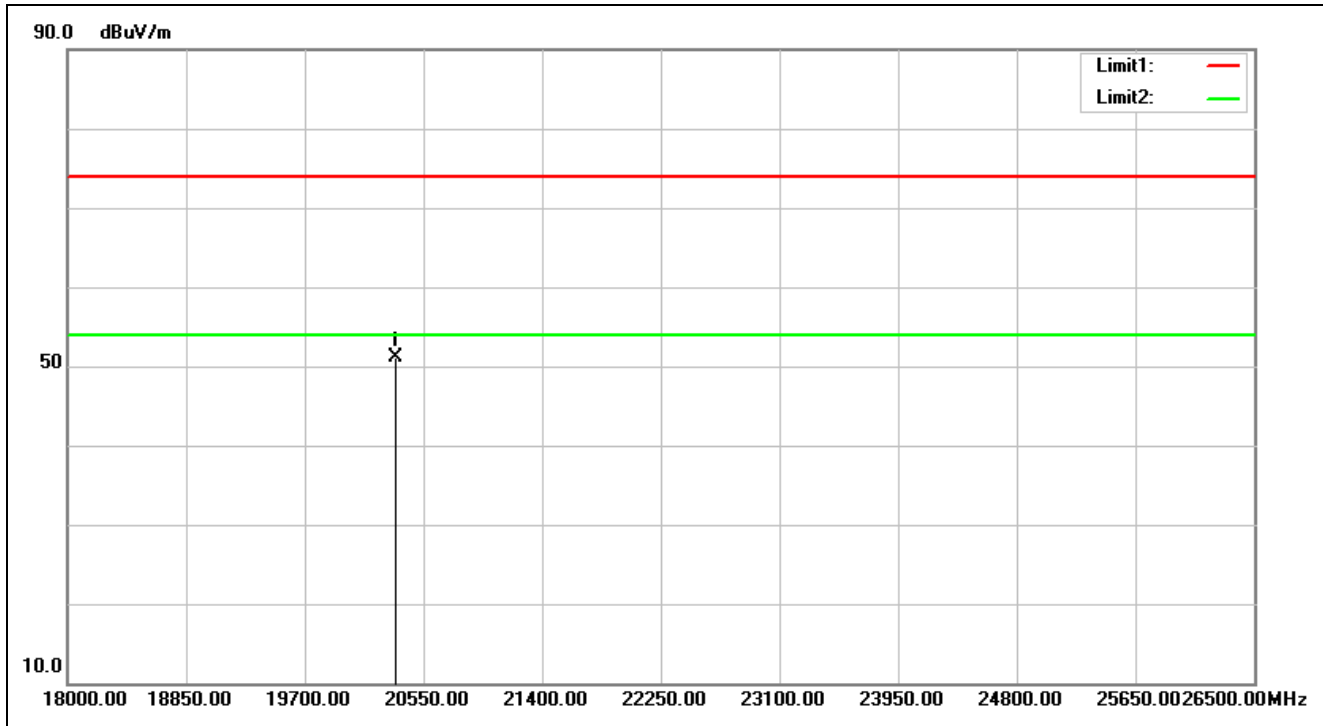
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 15:39:26
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G-2437-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	24162.500	31.87	18.55	50.42	74.00	-23.58	peak			



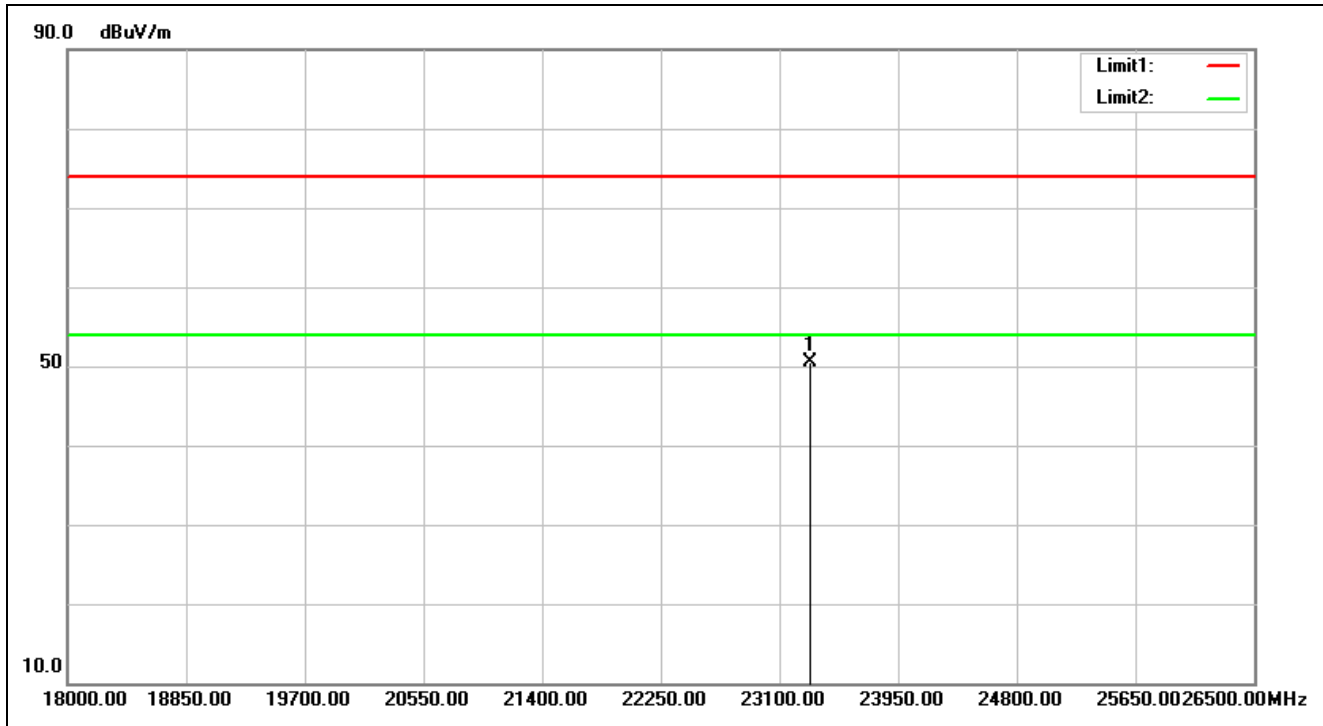
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 15:39:36
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G-2437-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	19105.000	29.29	20.53	49.82	74.00	-24.18	peak			



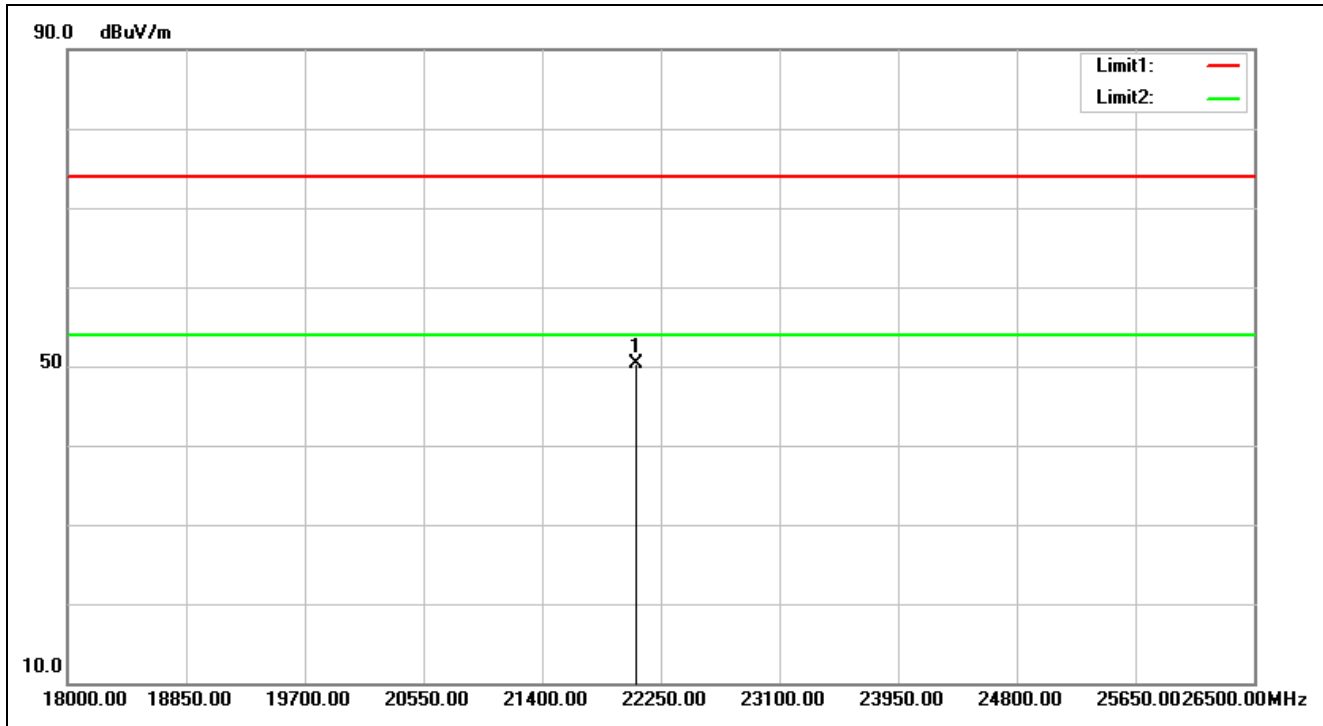
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 15:39:50
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G-2462-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20346.000	30.84	20.18	51.02	74.00	-22.98	peak			



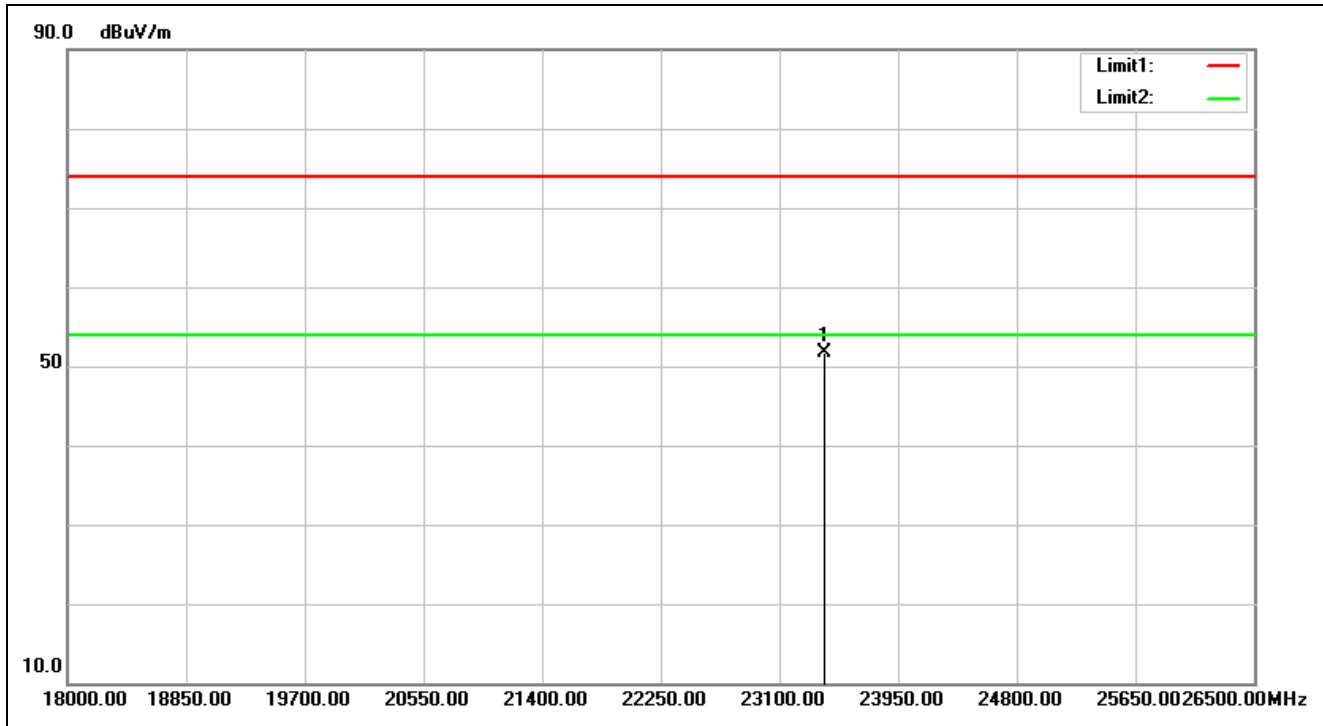
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 15:40:12
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G-2462-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23321.000	32.25	18.27	50.52	74.00	-23.48	peak			



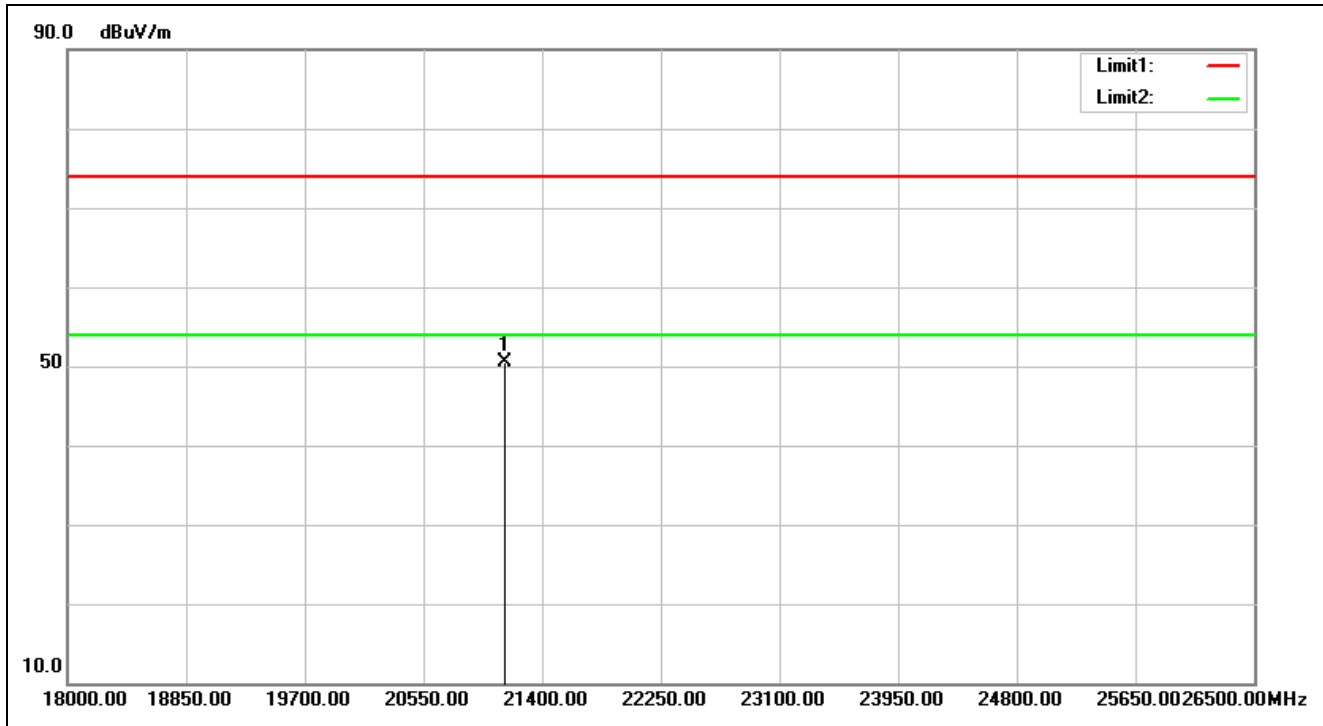
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 15:40:27
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G20-2412-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	22071.500	32.54	17.75	50.29	74.00	-23.71	peak			



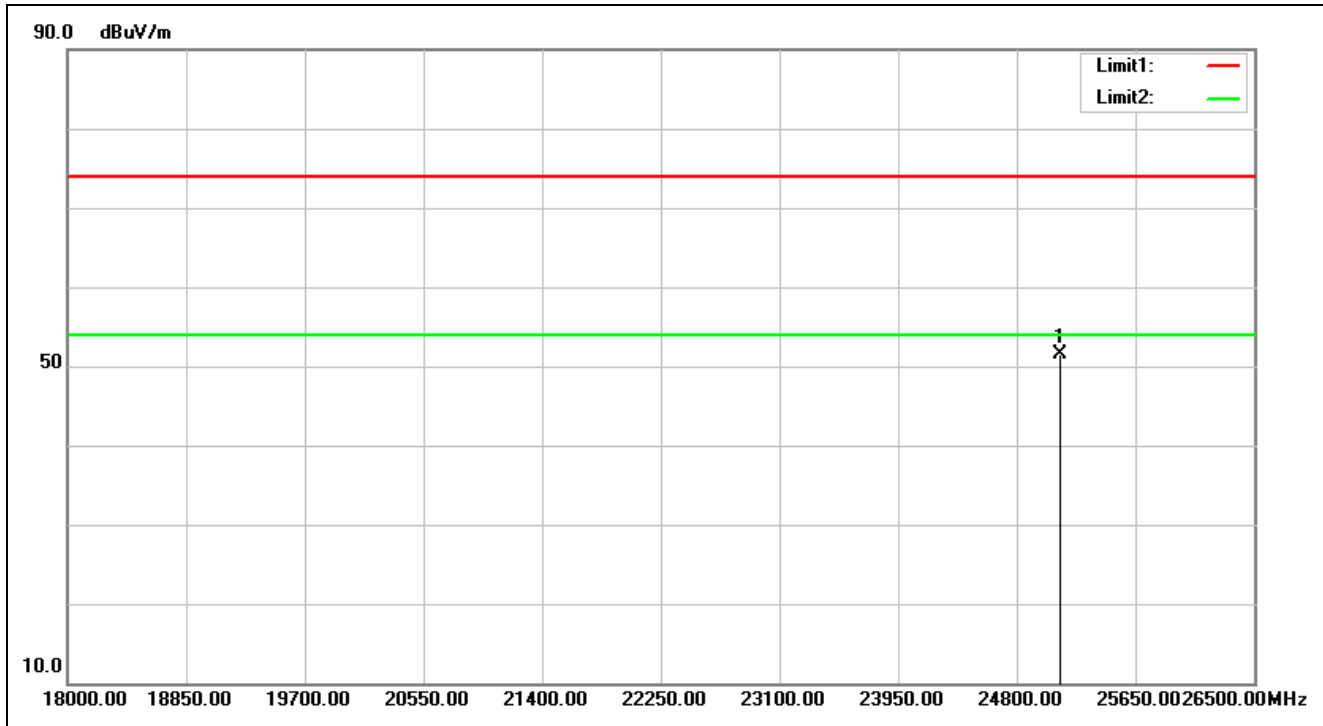
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 15:40:37
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G20-2412-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23423.000	32.35	19.41	51.76	74.00	-22.24	peak			



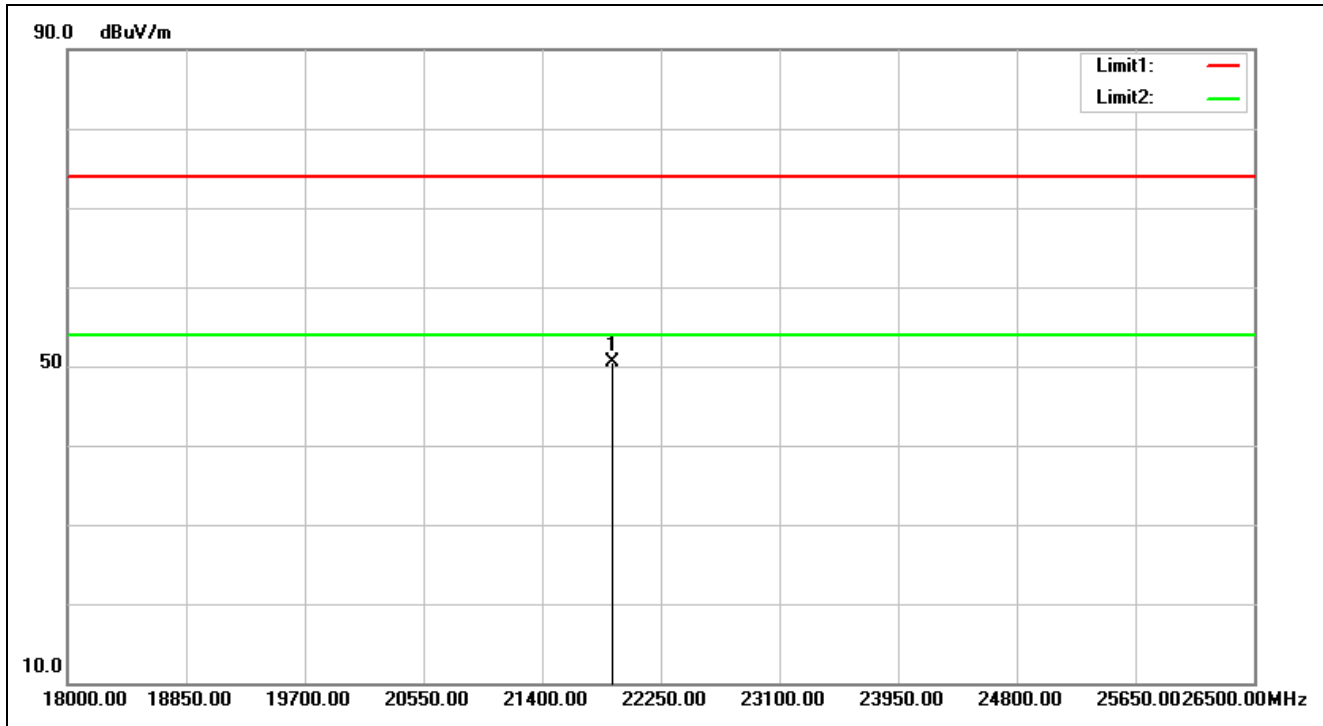
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 15:40:50
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G20-2437-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	21136.500	31.48	19.03	50.51	74.00	-23.49	peak			



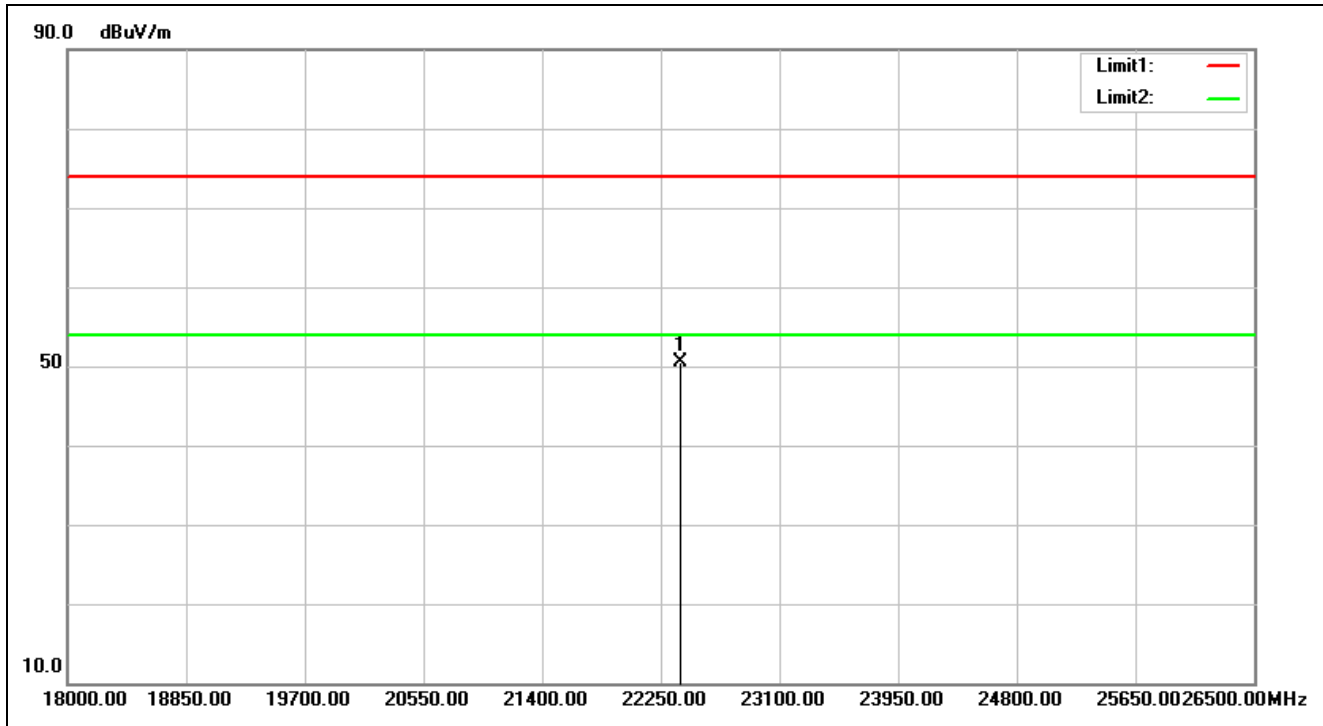
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 15:40:59
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G20-2437-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	25114.500	33.46	18.13	51.59	74.00	-22.41	peak			



Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 15:41:12
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G20-2462-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	21901.500	32.47	18.08	50.55	74.00	-23.45	peak			



Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 15:41:24
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%) :	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	G20-2462-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	22394.500	32.31	18.24	50.55	74.00	-23.45	peak			

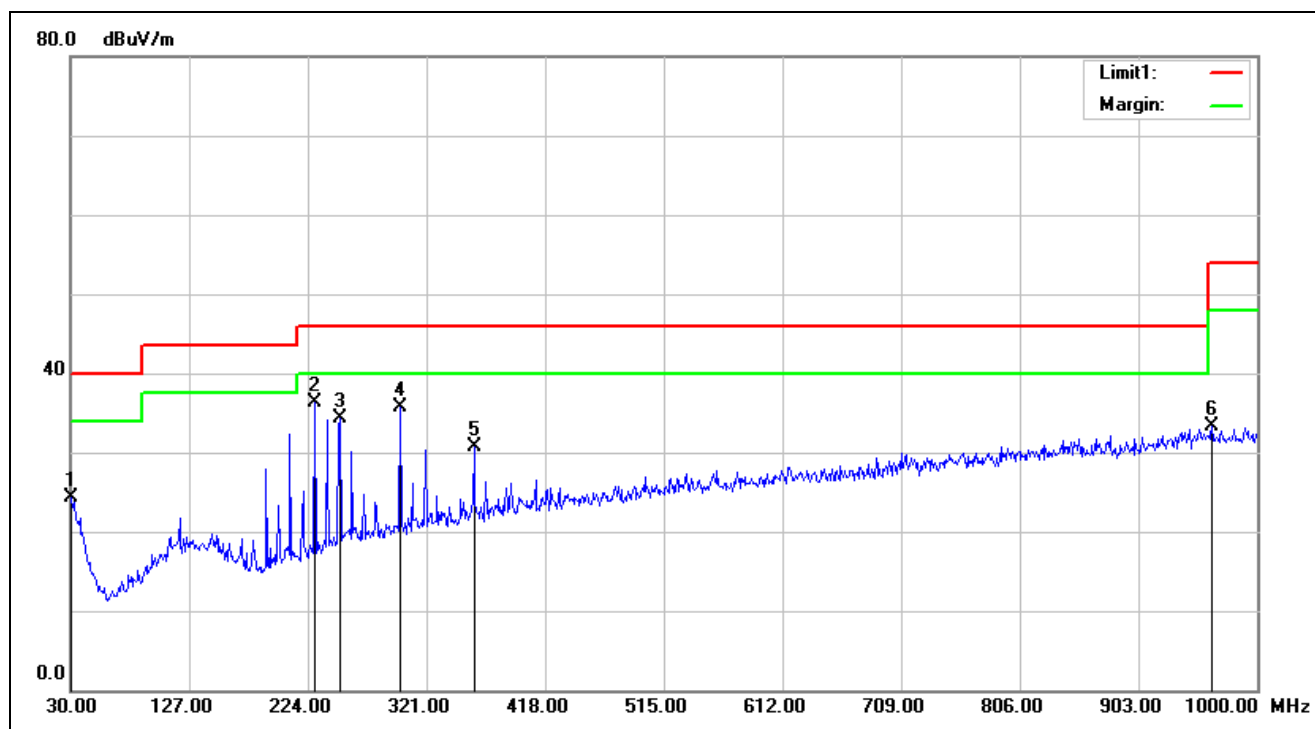
Spurious Emissions, TX Mode, 30M-1G



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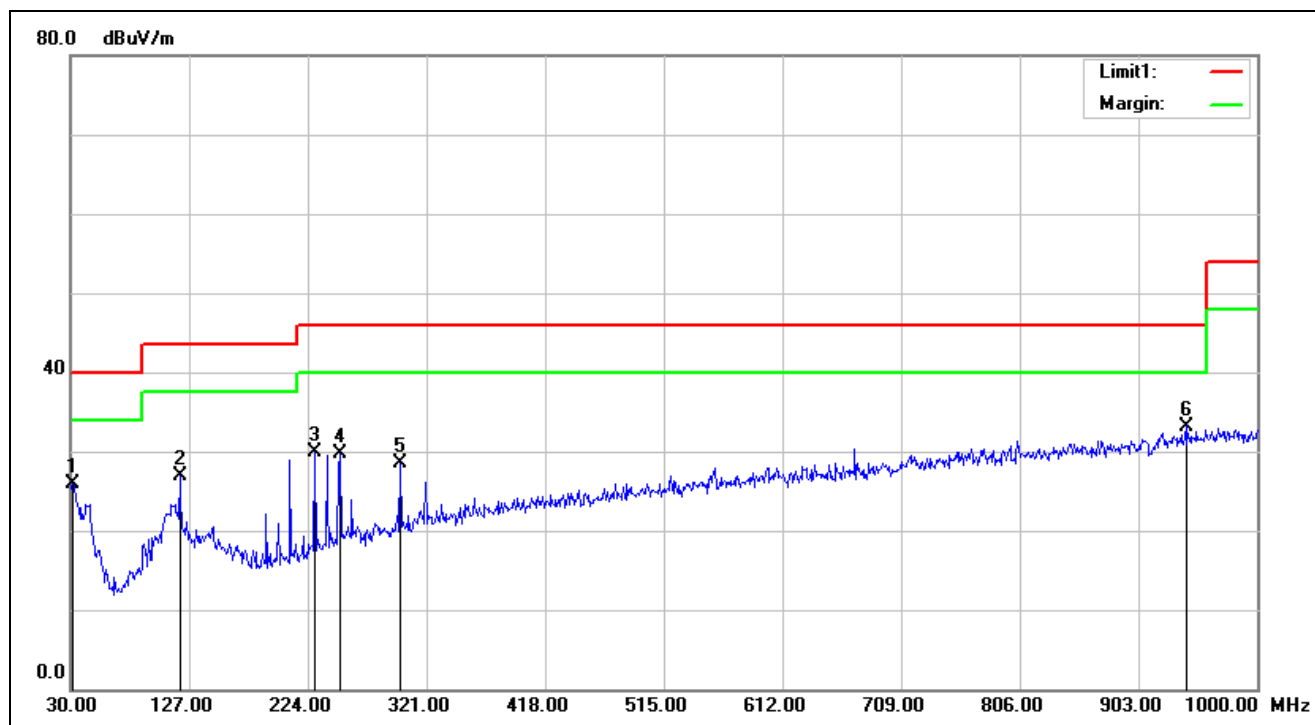
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Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 16:00:07
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2437-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	30.0000	-0.25	24.46	24.21	40.00	-15.79	QP	100	299	
2	229.8200	-7.57	43.90	36.33	46.00	-9.67	QP	100	136	
3	250.1900	-5.75	39.97	34.22	46.00	-11.78	QP	100	133	
4	299.6600	-4.57	40.18	35.61	46.00	-10.39	QP	100	143	
5	359.8000	-3.16	33.94	30.78	46.00	-15.22	QP	100	334	
6	963.1400	5.56	27.75	33.31	54.00	-20.69	QP	100	227	



Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 16:01:10
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2437-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	31.9400	-1.36	27.26	25.90	40.00	-14.10	QP	100	75	
2	119.2400	-7.50	34.50	27.00	43.50	-16.50	QP	100	164	
3	229.8200	-7.57	37.38	29.81	46.00	-16.19	QP	100	299	
4	250.1900	-5.75	35.38	29.63	46.00	-16.37	QP	100	274	
5	299.6600	-4.57	33.11	28.54	46.00	-17.46	QP	100	208	
6	941.8000	5.26	27.94	33.20	46.00	-12.80	QP	100	131	

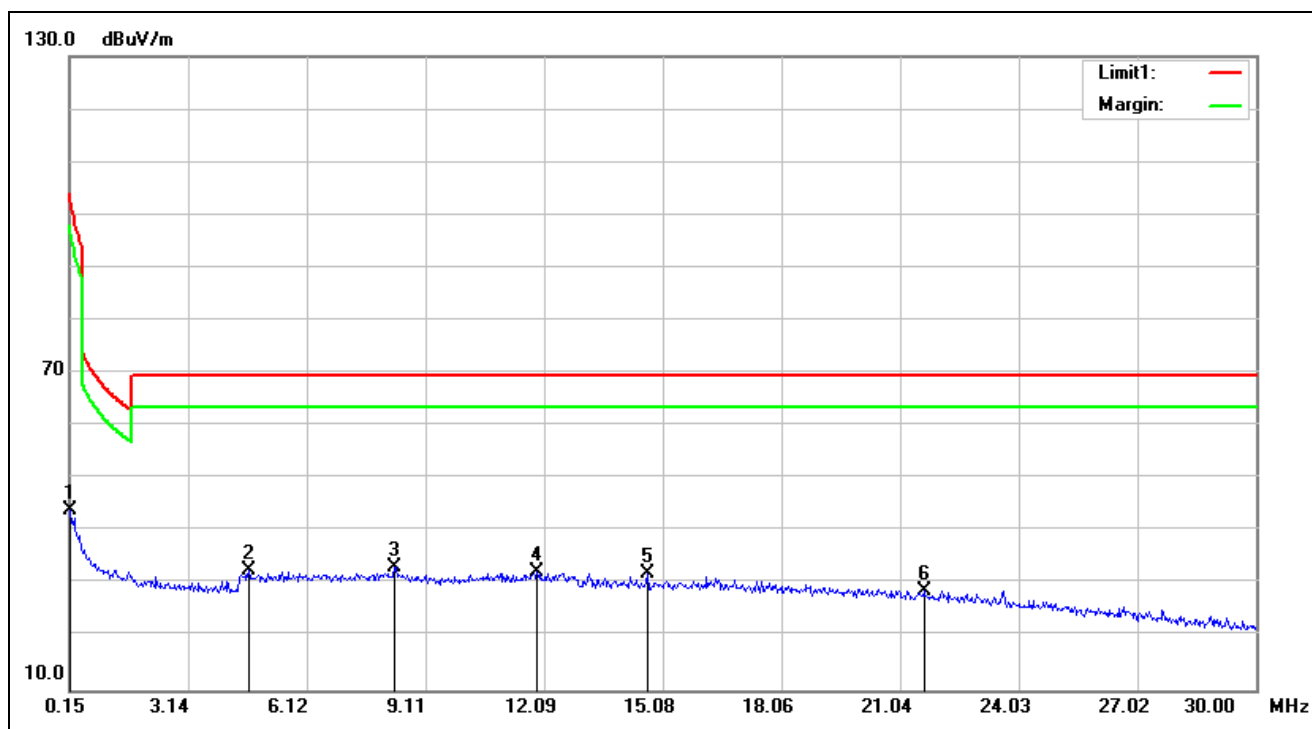
Spurious Emissions, TX Mode, 150K-30M



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Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC15.209_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2017/9/30 15:53:33
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2437-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.1798	19.06	24.94	44.00	102.50	-58.50	QP	100	5	
2	4.6573	19.54	13.21	32.75	69.50	-36.75	QP	100	252	
3	8.3289	20.07	13.27	33.34	69.50	-36.16	QP	100	276	
4	11.9109	20.55	11.73	32.28	69.50	-37.22	QP	100	284	
5	14.6869	21.05	10.89	31.94	69.50	-37.56	QP	100	173	
6	21.6420	22.10	6.65	28.75	69.50	-40.75	QP	100	200	

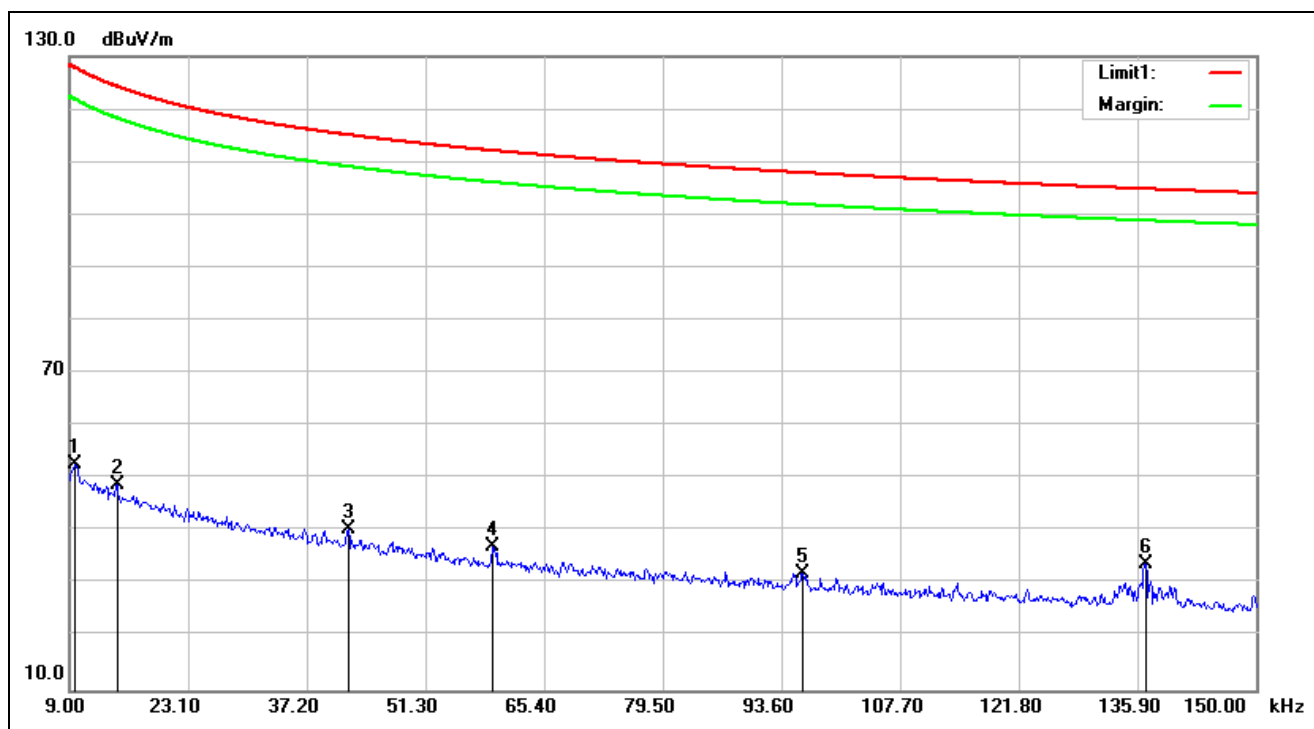
Spurious Emissions, TX Mode, 9K-150K



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Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC15.209_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2017/9/30 15:50:19
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2437-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.0097	19.81	32.92	52.73	127.85	-75.12	QP	100	336	
2	0.0146	19.98	28.99	48.97	124.30	-75.33	QP	100	3	
3	0.0421	19.71	20.68	40.39	115.11	-74.72	QP	100	181	
4	0.0591	19.38	17.86	37.24	112.16	-74.92	QP	100	349	
5	0.0961	19.15	13.03	32.18	107.94	-75.76	QP	100	317	
6	0.1368	19.09	14.86	33.95	104.88	-70.93	QP	100	197	

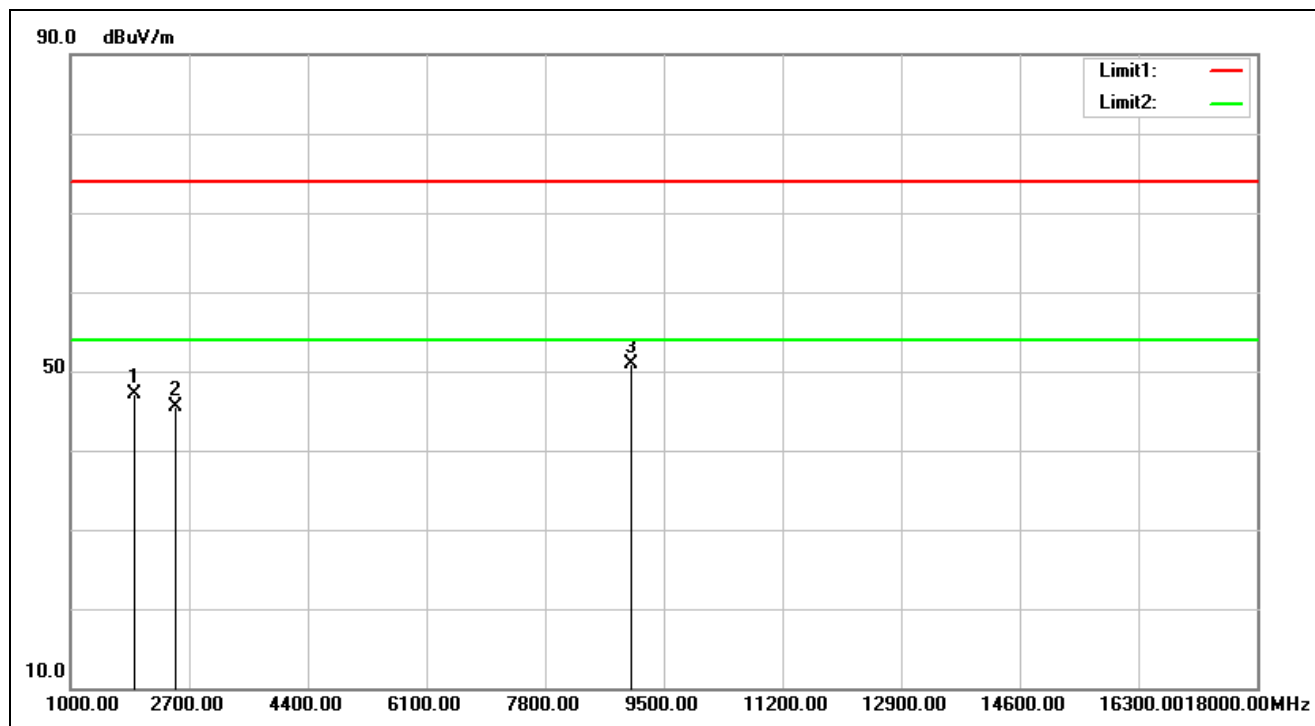
Spurious Emissions, RX Mode, 1-18G



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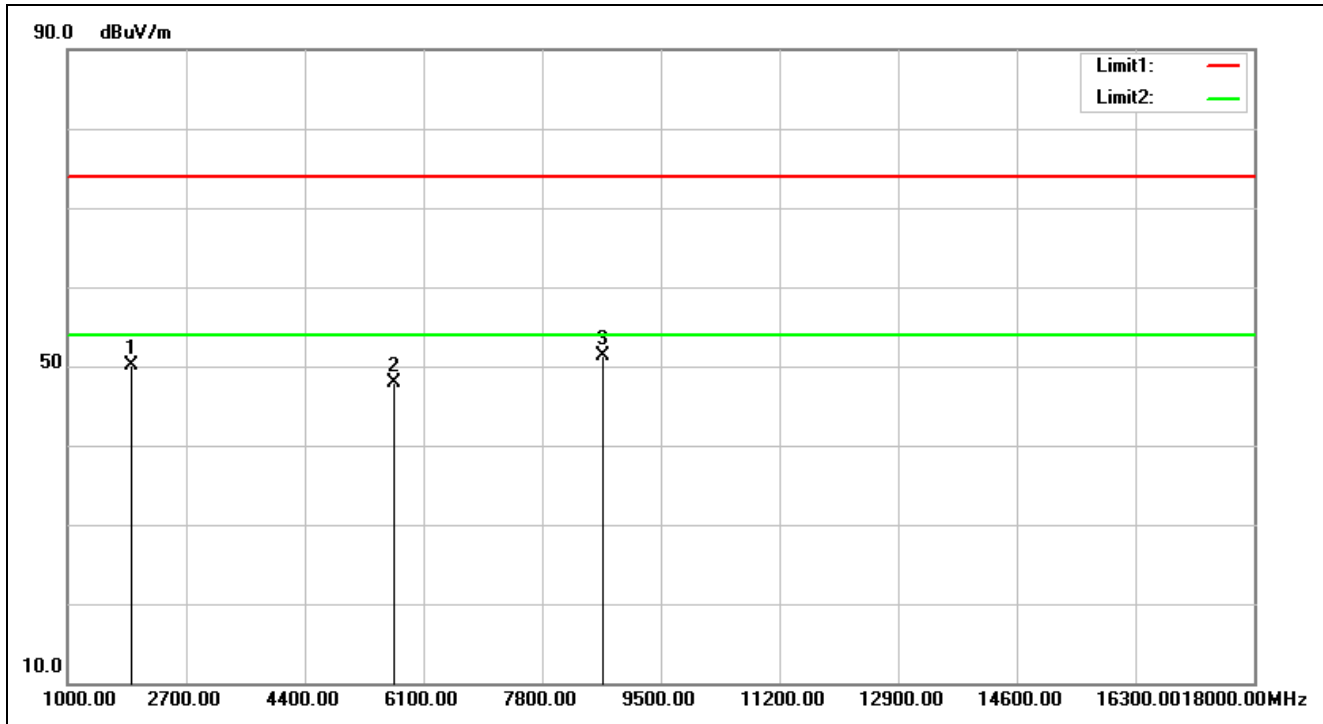
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Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 15:23:20
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2437-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	1918.000	-8.64	55.65	47.01	74.00	-26.99	peak	100	86	
2	2513.000	-8.07	53.67	45.60	74.00	-28.40	peak	100	301	
3	9041.000	5.46	45.46	50.92	74.00	-23.08	peak	100	271	



Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 15:24:23
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2437-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	1918.000	-8.64	58.79	50.15	74.00	-23.85	peak	100	291	
2	5675.000	0.27	47.57	47.84	74.00	-26.16	peak	100	258	
3	8667.000	5.46	45.92	51.38	74.00	-22.62	peak	100	219	

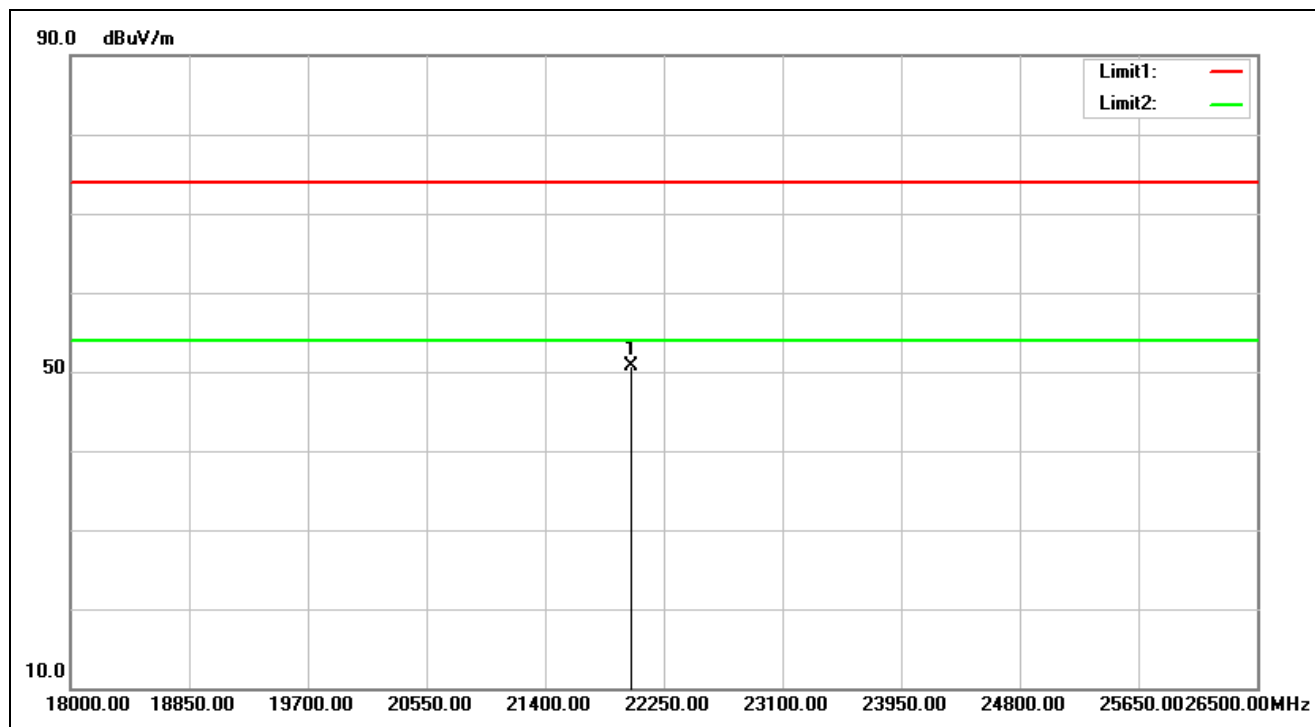
Spurious Emissions, RX Mode, 18-26G



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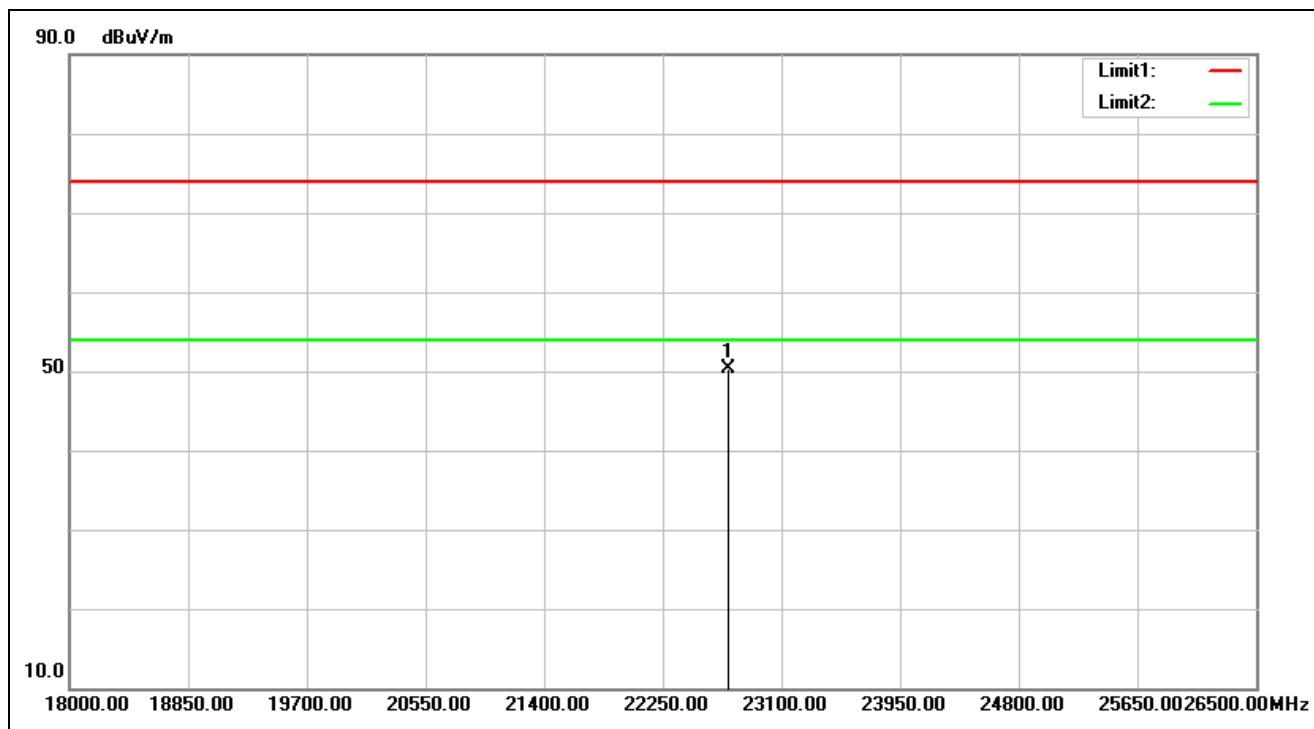
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Tel:+886-2172-7000 fax:+886-2528-0018



Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 15:41:42
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2437-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	22012.000	32.57	18.08	50.65	74.00	-23.35	peak			



Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 15:41:50
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2437-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	22717.500	32.11	18.11	50.22	74.00	-23.78	peak			

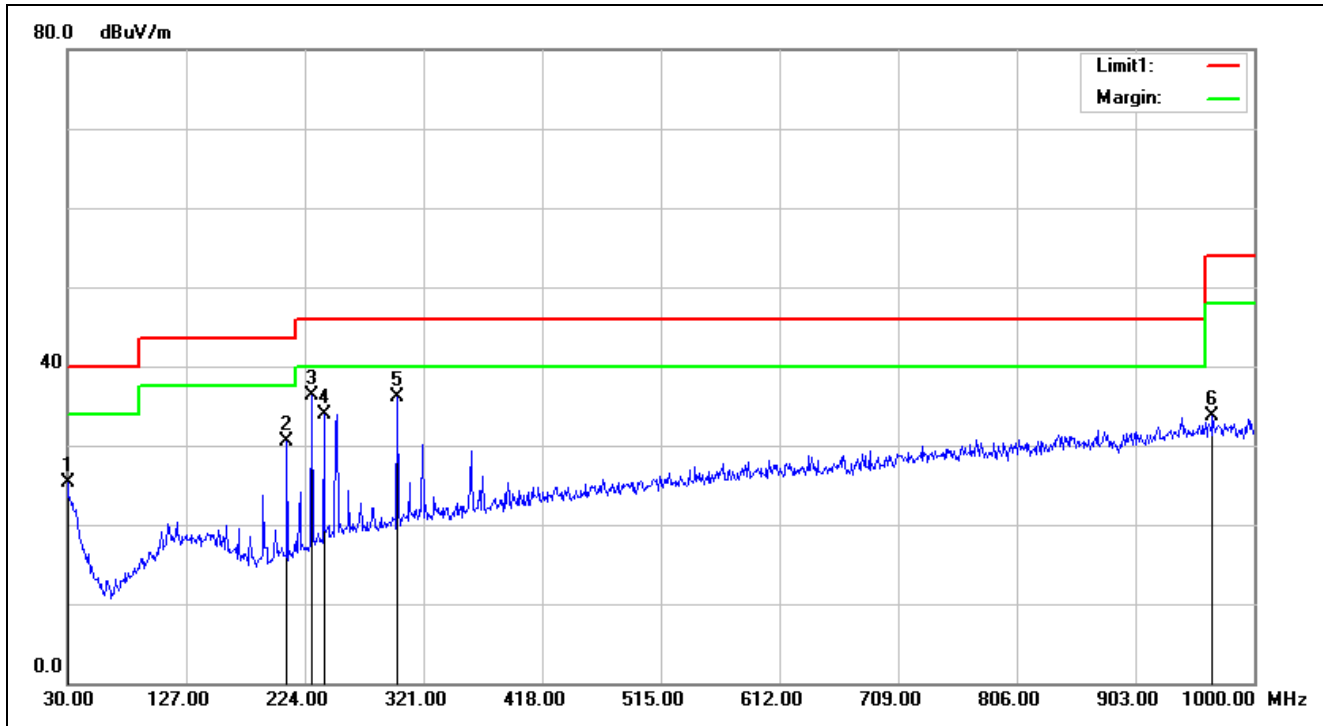
Spurious Emissions, RX Mode, 30M-1G



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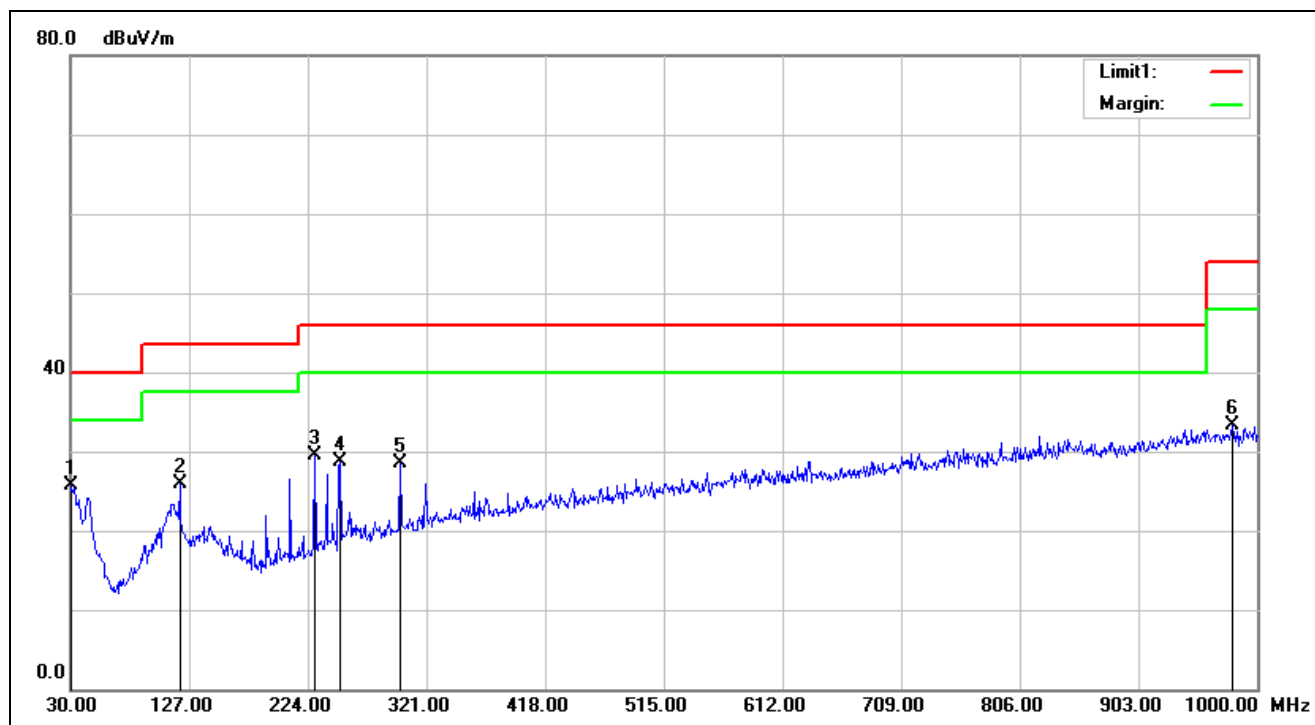
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Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/9/30 16:04:46
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2437-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	30.0000	-0.25	25.61	25.36	40.00	-14.64	QP	100	72	
2	209.4500	-8.57	39.15	30.58	43.50	-12.92	QP	100	321	
3	229.8200	-7.57	43.92	36.35	46.00	-9.65	QP	100	130	
4	239.5200	-6.85	40.73	33.88	46.00	-12.12	QP	100	147	
5	299.6600	-4.57	40.76	36.19	46.00	-9.81	QP	100	155	
6	966.0500	5.57	28.13	33.70	54.00	-20.30	QP	100	318	



Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/9/30 16:05:49
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2437-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	30.0000	-0.25	25.88	25.63	40.00	-14.37	QP	100	200	
2	119.2400	-7.50	33.39	25.89	43.50	-17.61	QP	100	255	
3	229.8200	-7.57	37.09	29.52	46.00	-16.48	QP	100	308	
4	250.1900	-5.75	34.55	28.80	46.00	-17.20	QP	100	255	
5	299.6600	-4.57	33.13	28.56	46.00	-17.44	QP	100	208	
6	979.6300	5.64	27.66	33.30	54.00	-20.70	QP	100	28	

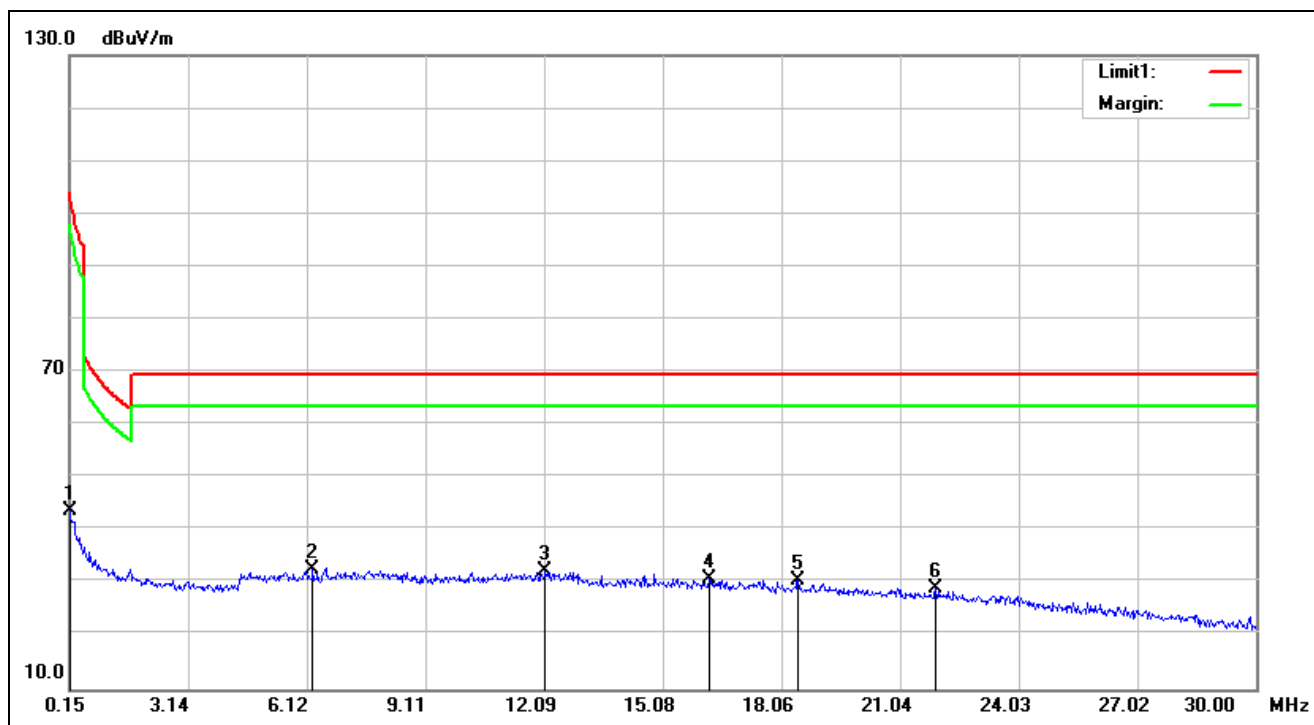
Spurious Emissions, RX Mode, 150K-30M



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Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC15.209_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2017/9/30 15:54:36
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2437-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.1500	19.08	24.79	43.87	104.08	-60.21	QP	100	222	
2	6.2693	19.88	12.72	32.60	69.50	-36.90	QP	100	142	
3	12.1199	20.59	11.64	32.23	69.50	-37.27	QP	100	336	
4	16.2392	21.32	9.40	30.72	69.50	-38.78	QP	100	175	
5	18.4779	21.72	8.72	30.44	69.50	-39.06	QP	100	48	
6	21.9405	22.12	6.92	29.04	69.50	-40.46	QP	100	200	

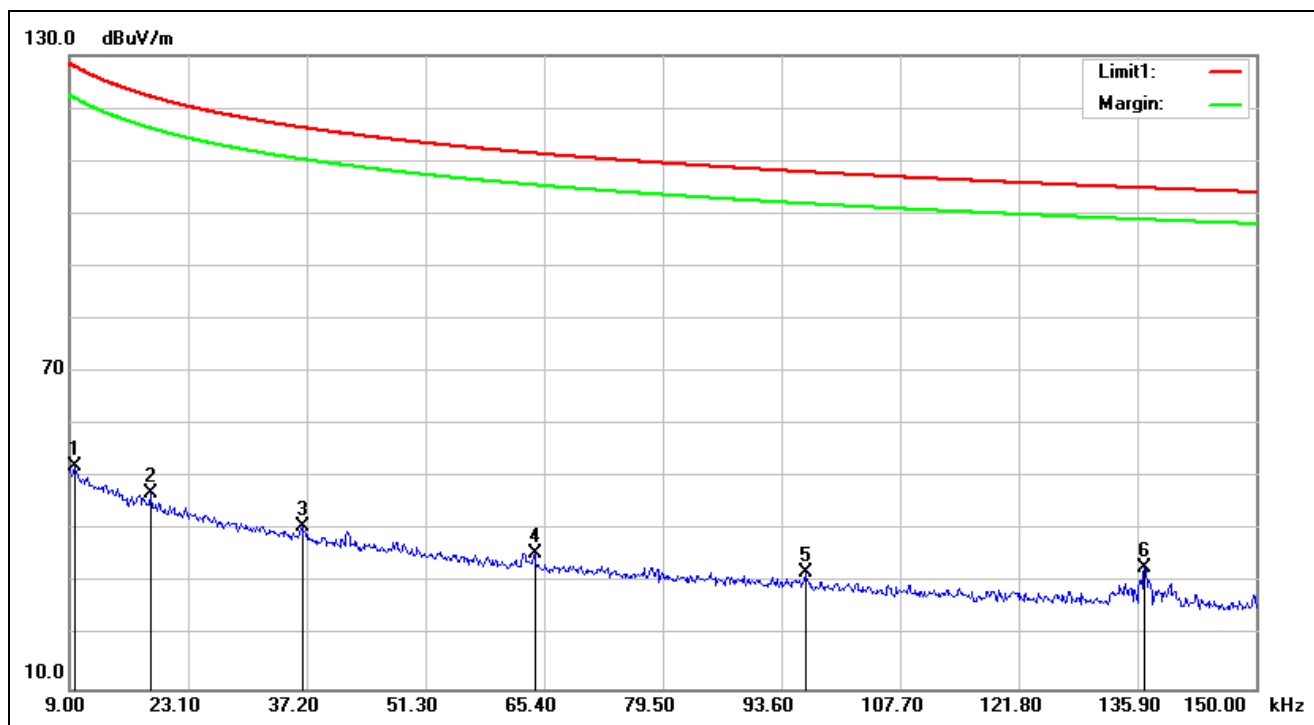
Spurious Emissions, RX Mode, 9K-150K



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Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC15.209_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2017/9/30 15:51:22
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V TO 4.2V (TYPICAL = 3.3V)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%)	21(°C)/57%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	B-2437-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.0096	19.77	32.28	52.05	127.94	-75.89	QP	100	22	
2	0.0186	20.02	27.01	47.03	122.20	-75.17	QP	100	164	
3	0.0366	19.90	20.85	40.75	116.32	-75.57	QP	100	225	
4	0.0643	19.34	16.17	35.51	111.43	-75.92	QP	100	286	
5	0.0964	19.15	12.95	32.10	107.91	-75.81	QP	100	25	
6	0.1367	19.09	14.01	33.10	104.88	-71.78	QP	100	201	