

Test Report No.50103730 001

Appendix D: Radiated and Mains Spurious Emission Data

(File: 50103730 001AppendixD)

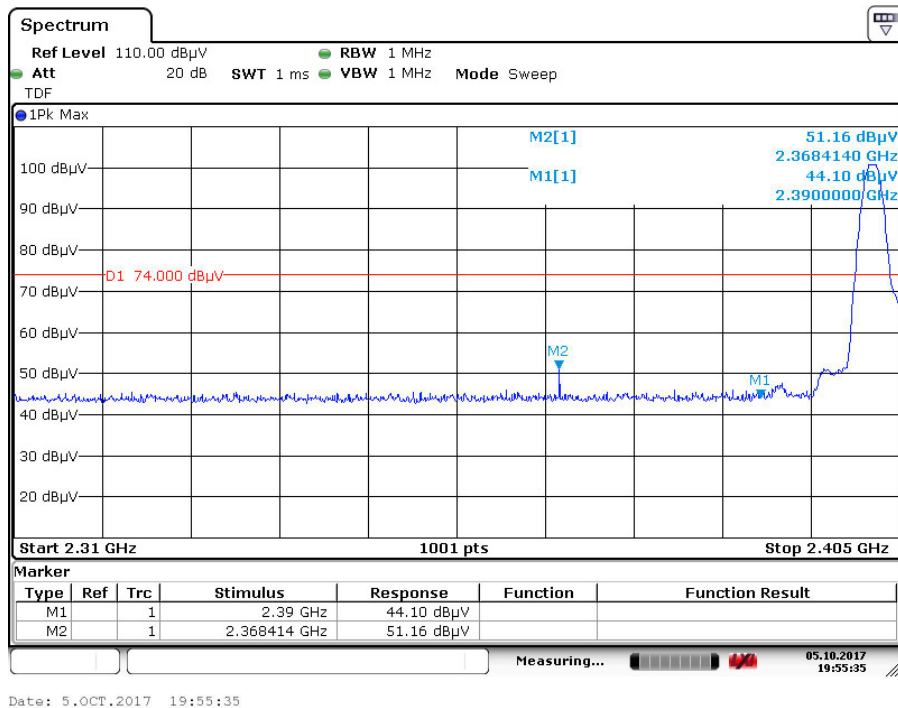
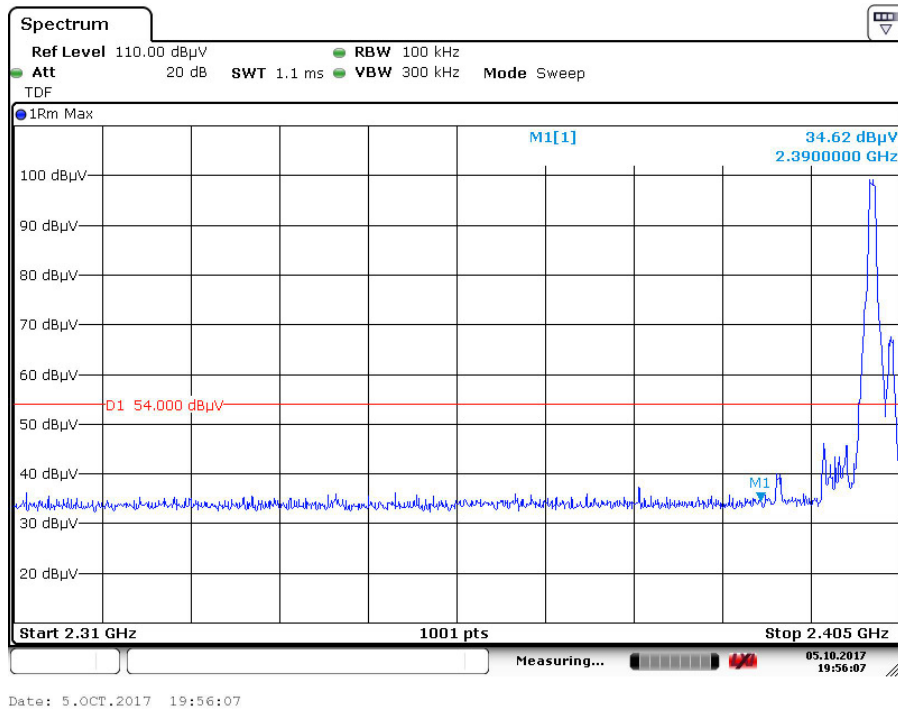
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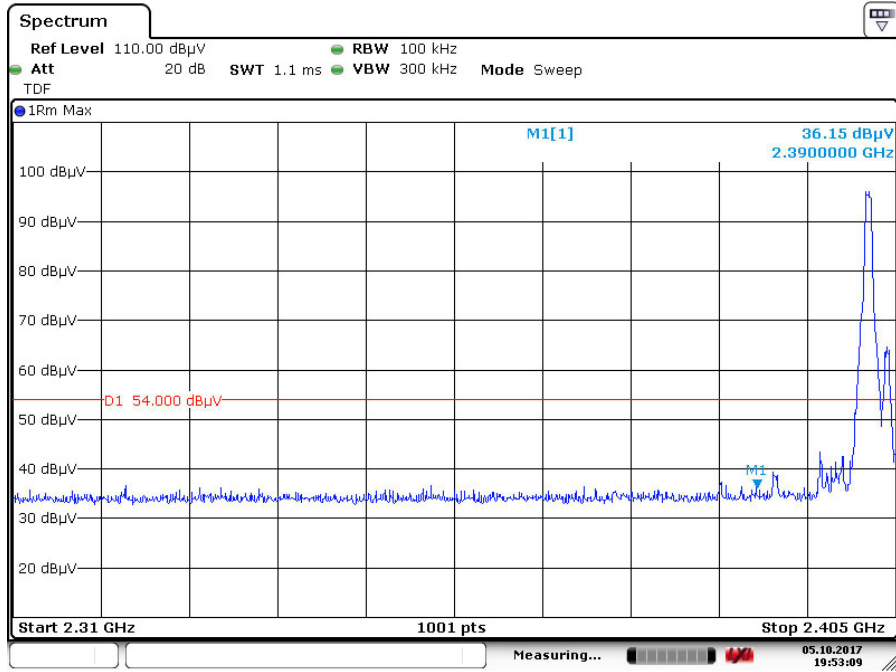
Spurious Emissions, Band Edges, 2.35-2.5G

Radiated Bandedge (GFSK)

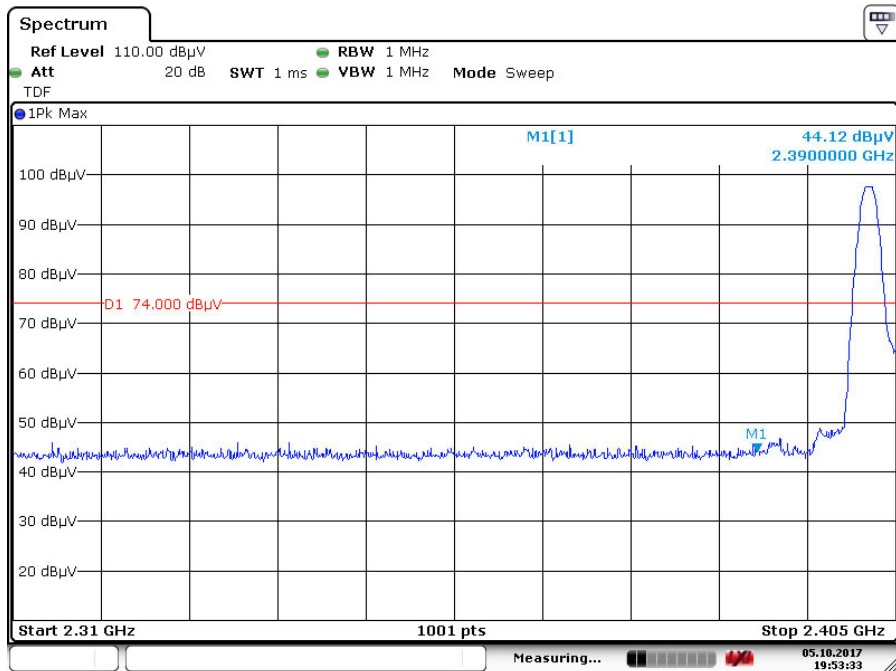
Low Channel (Hor)



Low Channel (Ver)



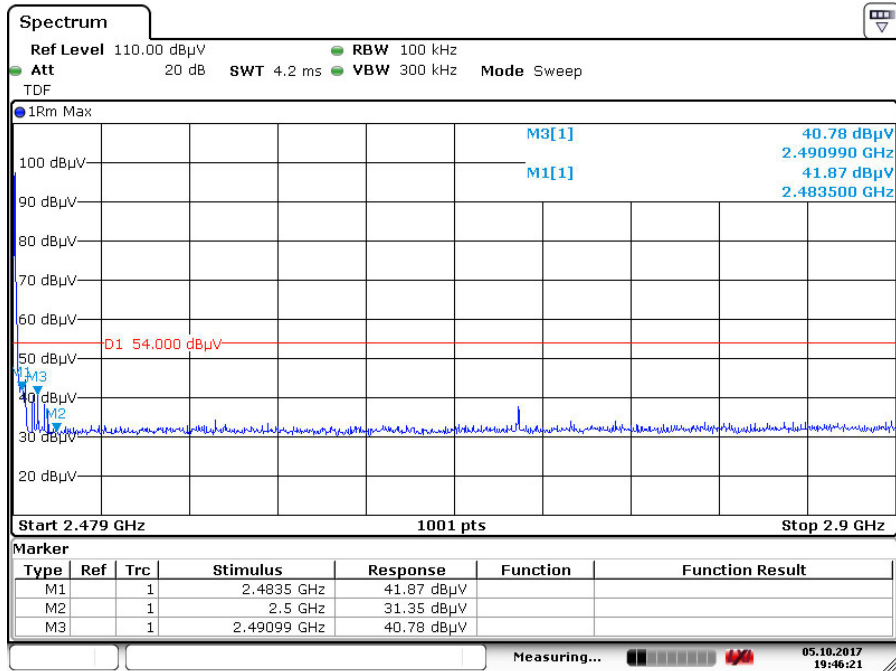
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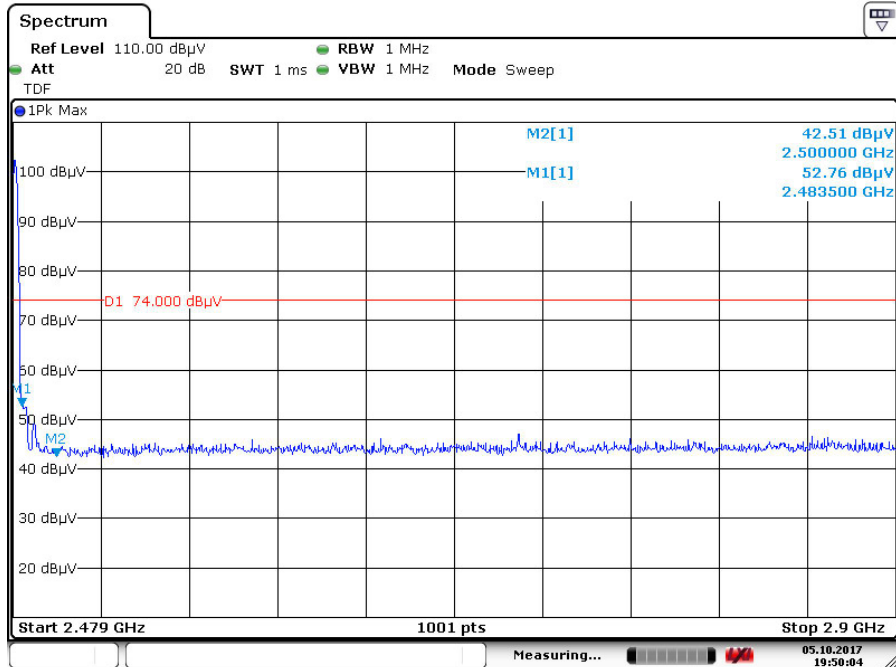
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Radiated Bandedge (GFSK)

High Channel (Hor)

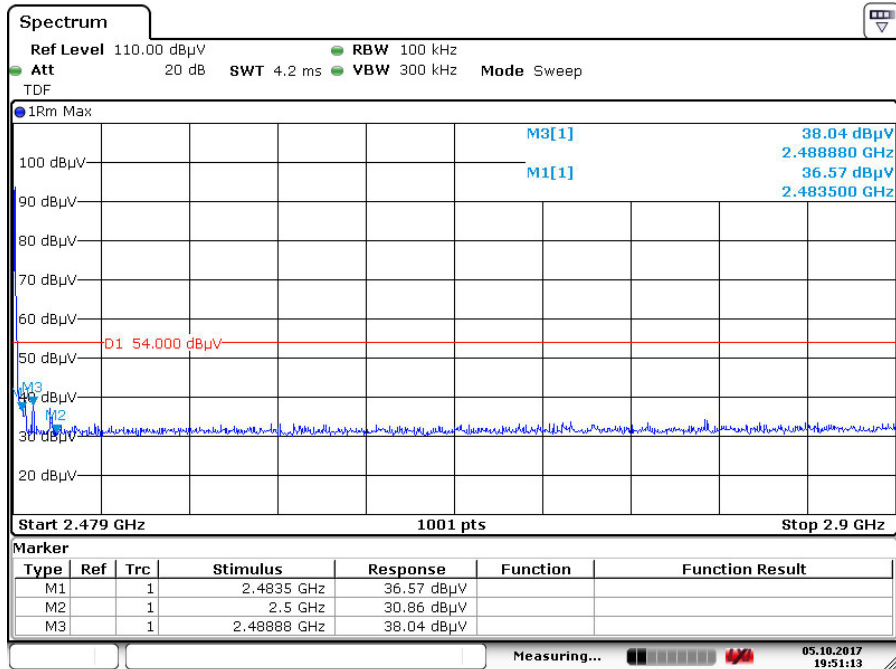


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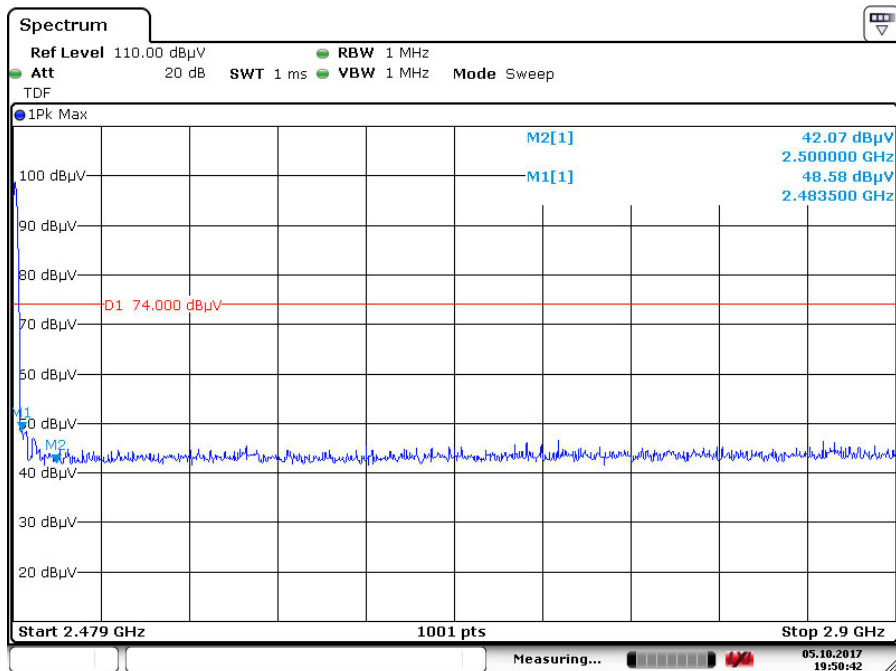


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High Channel (Ver)



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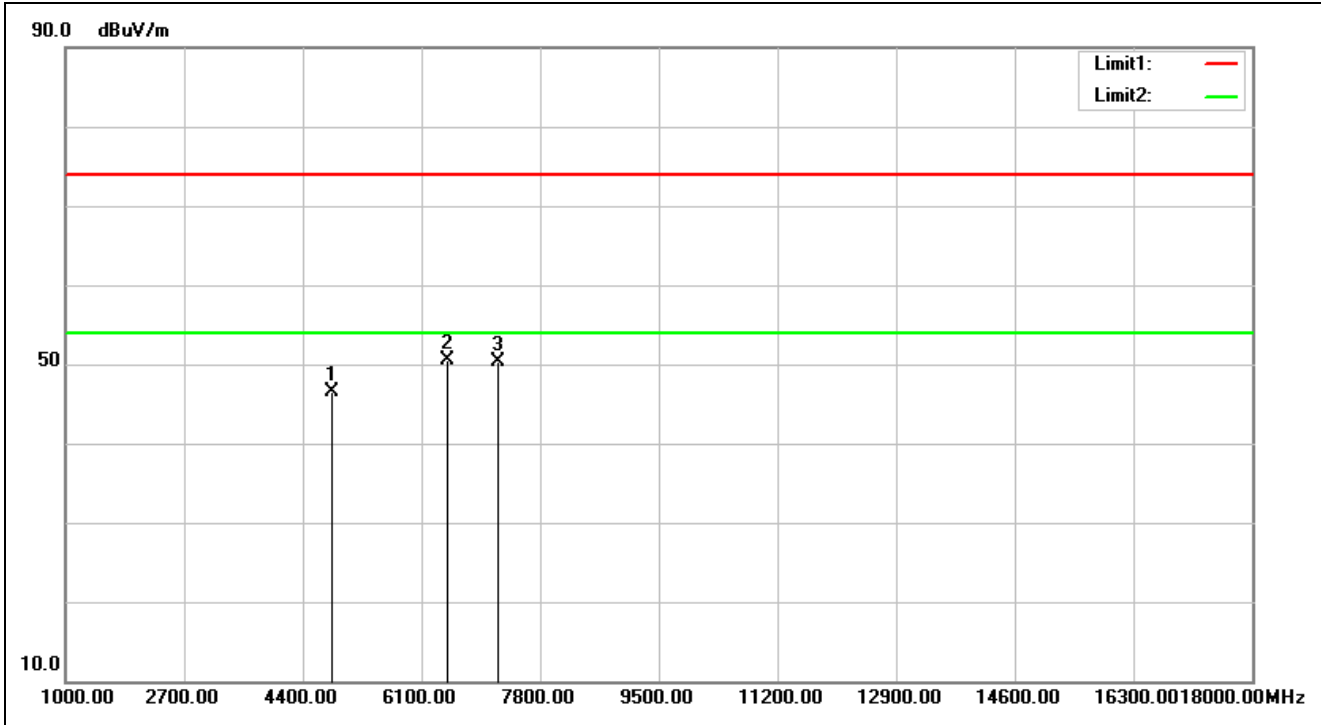


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Spurious Emissions, TX Mode, 1-18G

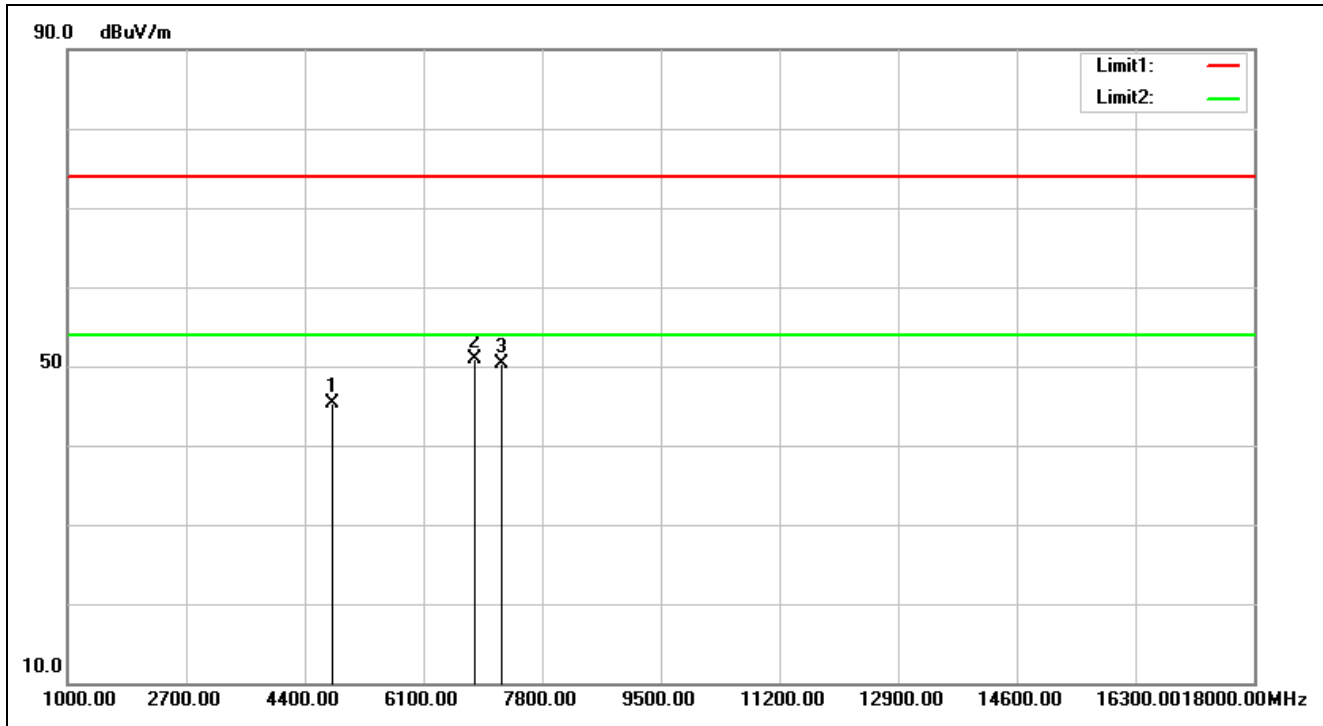


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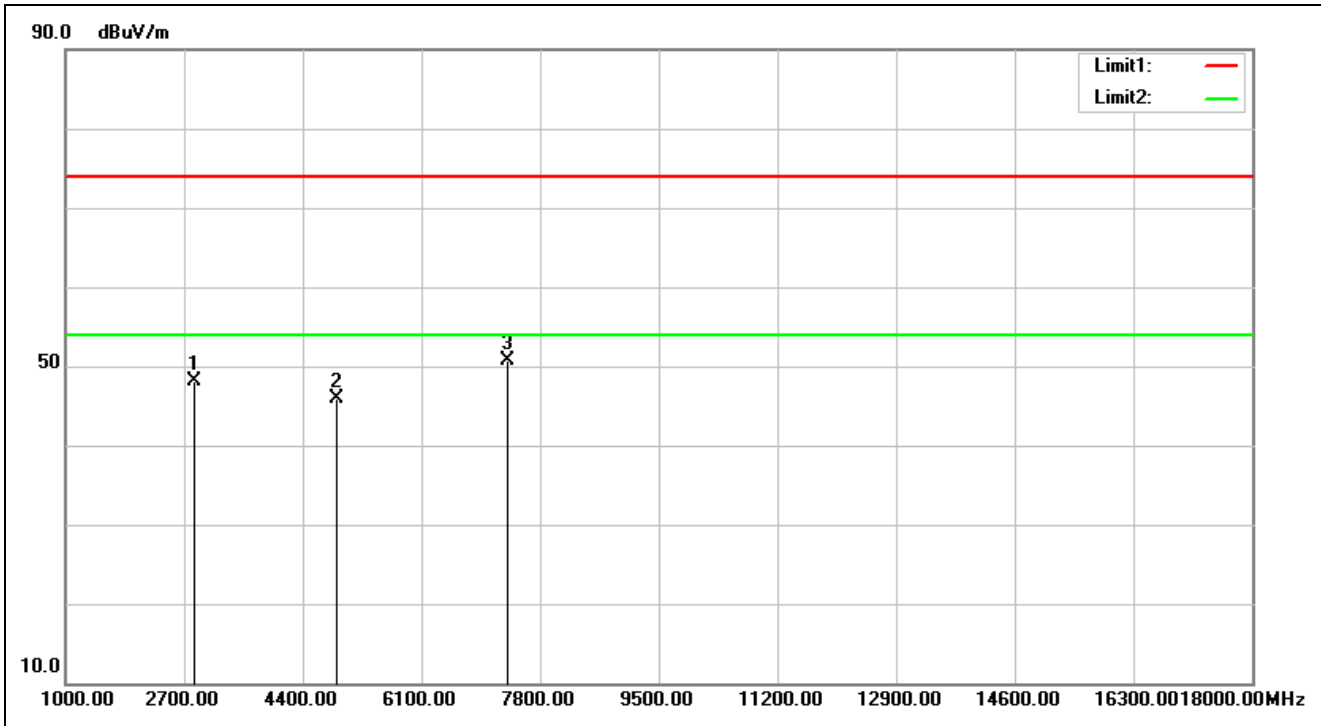
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Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/10/5 19:55:01
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2402-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4804.000	-2.71	49.28	46.57	74.00	-27.43	peak		0	
2	6474.000	5.25	45.25	50.50	74.00	-23.50	peak	100	22	
3	7206.000	5.29	44.99	50.28	74.00	-23.72	peak		0	



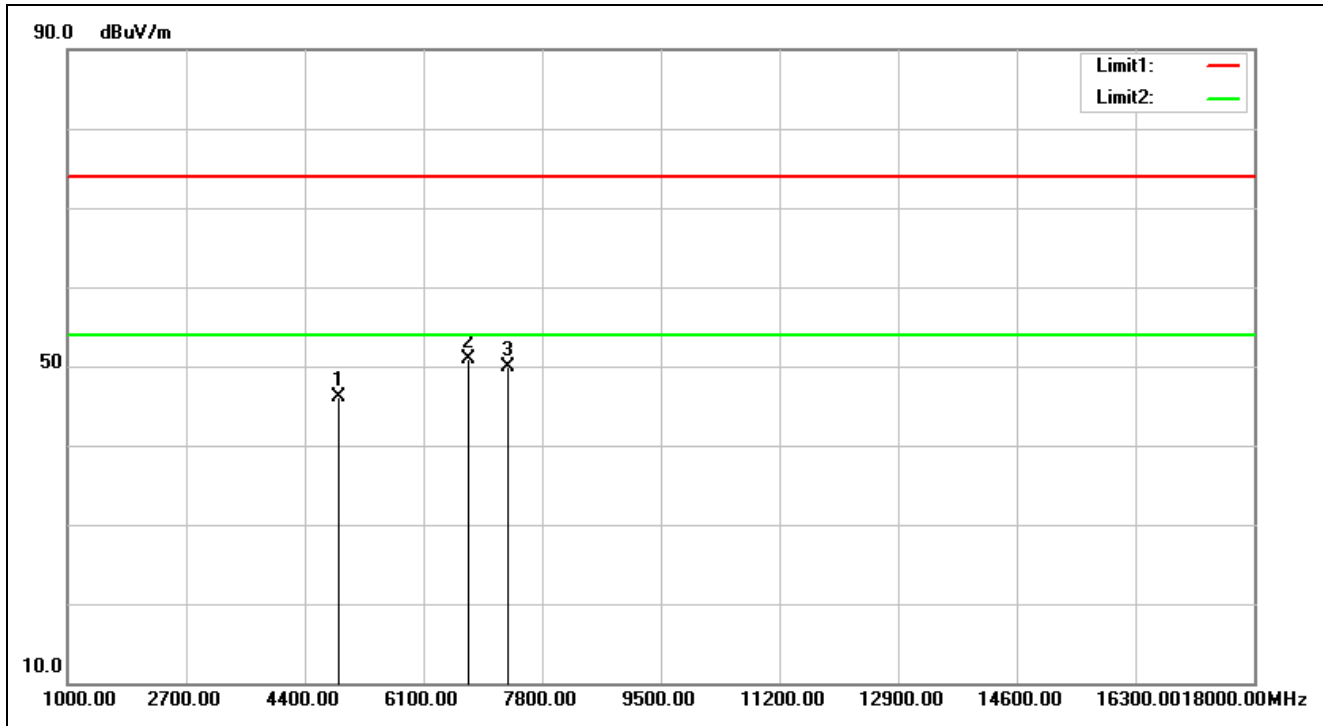
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/10/5 19:56:03
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2402-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4804.000	-2.71	48.00	45.29	74.00	-28.71	peak			
2	6831.000	4.95	46.02	50.97	74.00	-23.03	peak	100	147	
3	7206.000	5.29	45.08	50.37	74.00	-23.63	peak			



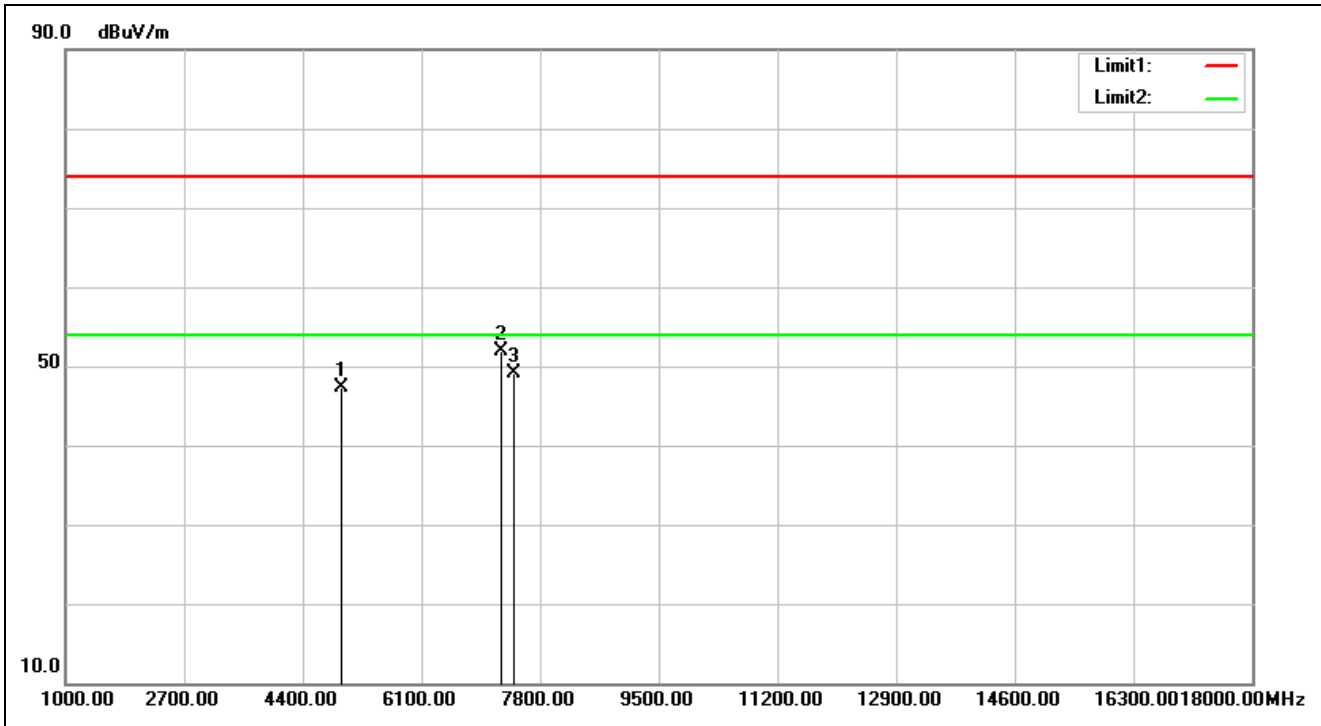
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/10/5 20:00:28
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2440-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	2836.000	-6.73	54.78	48.05	74.00	-25.95	peak	100	283	
2	4880.000	-2.50	48.41	45.91	74.00	-28.09	peak			
3	7320.000	5.59	45.15	50.74	74.00	-23.26	peak			



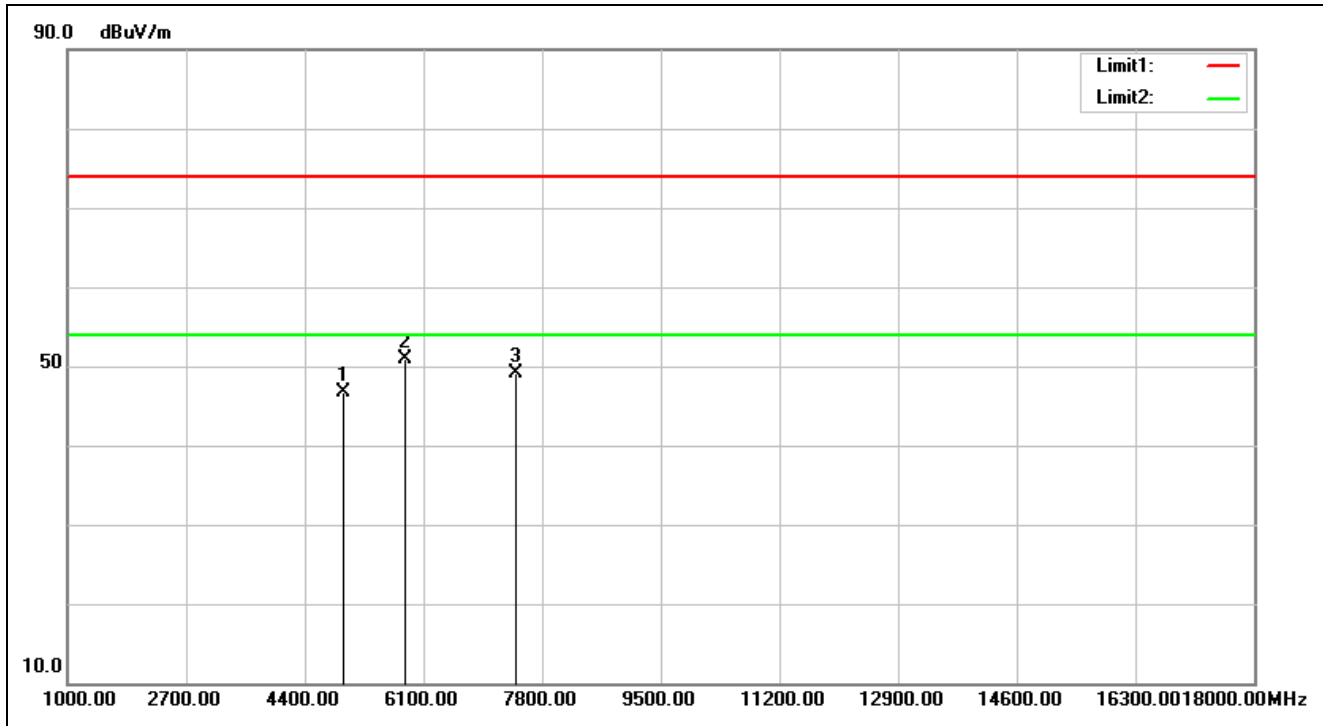
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Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/10/5 20:01:30
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2440-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4880.000	-2.50	48.61	46.11	74.00	-27.89	peak			
2	6746.000	5.05	45.79	50.84	74.00	-23.16	peak	100	168	
3	7320.000	5.59	44.27	49.86	74.00	-24.14	peak			



Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/10/5 20:03:42
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.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2480-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4960.000	-2.29	49.53	47.24	74.00	-26.76	peak			
2	7239.000	5.38	46.53	51.91	74.00	-22.09	peak	100	305	
3	7440.000	5.90	43.12	49.02	74.00	-24.98	peak			



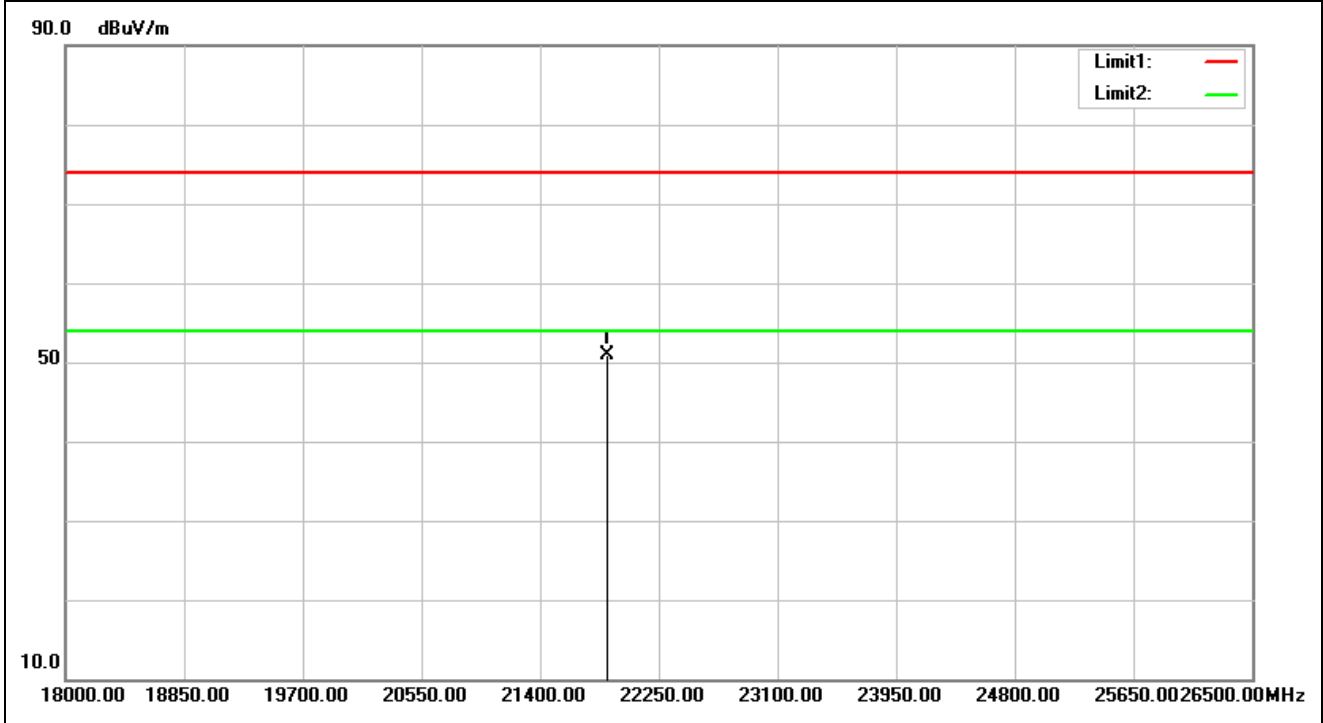
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Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2480-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4960.000	-2.29	48.96	46.67	74.00	-27.33	peak			
2	5828.000	2.30	48.51	50.81	74.00	-23.19	peak	100	232	
3	7440.000	5.90	43.23	49.13	74.00	-24.87	peak			

Spurious Emissions, TX Mode, 18-26G

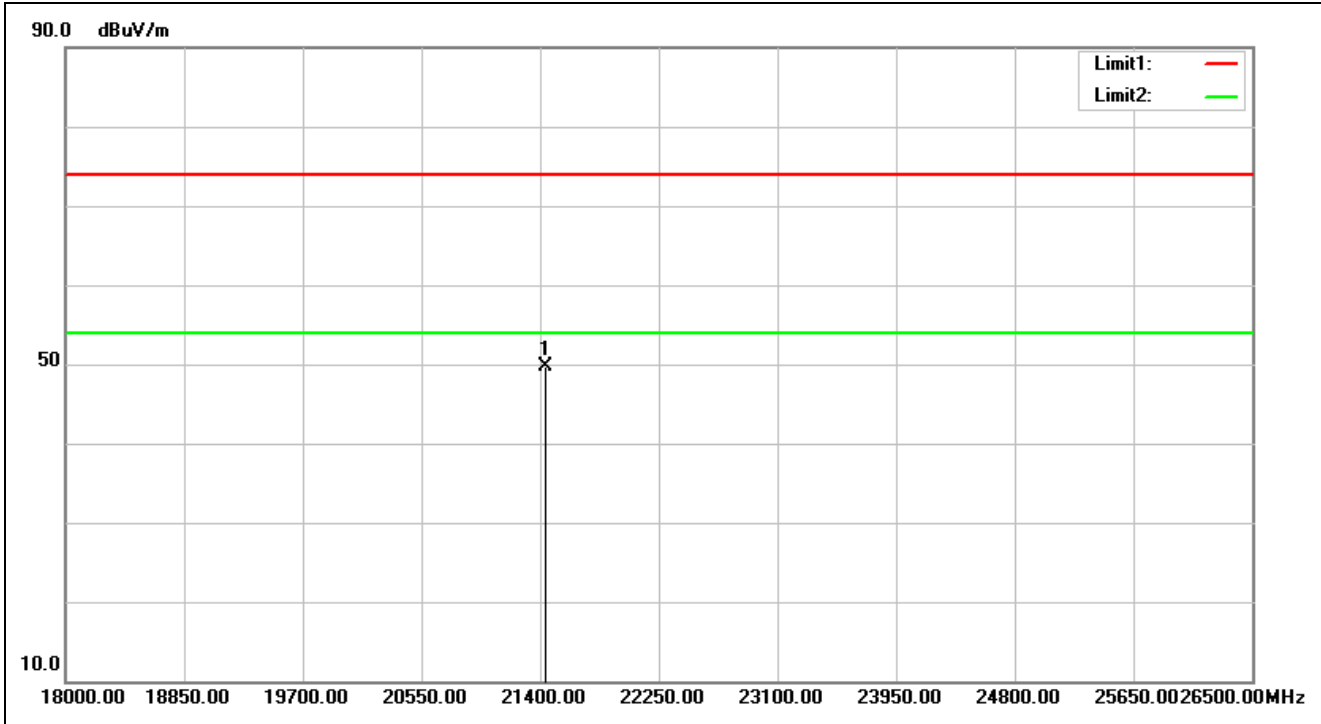


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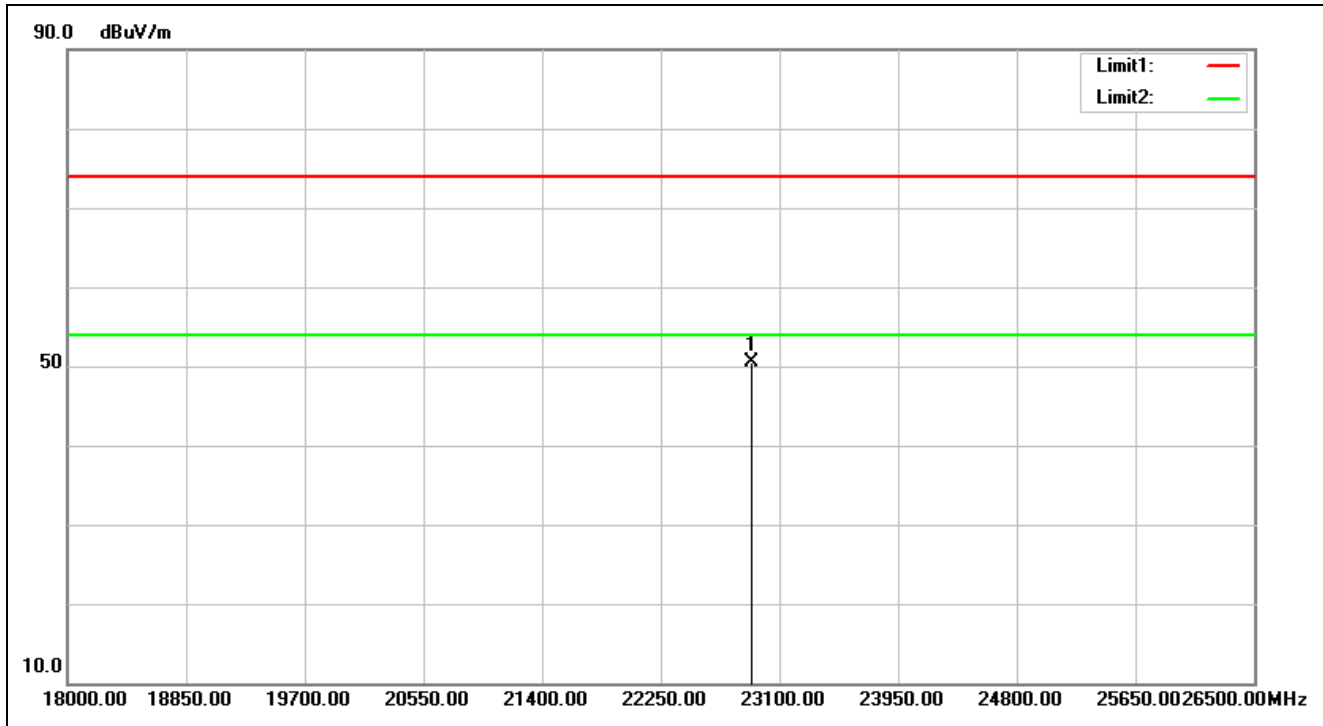
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/10/5 20:27:29
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2402-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	21876.000	32.44	18.49	50.93	74.00	-23.07	peak	100	155	



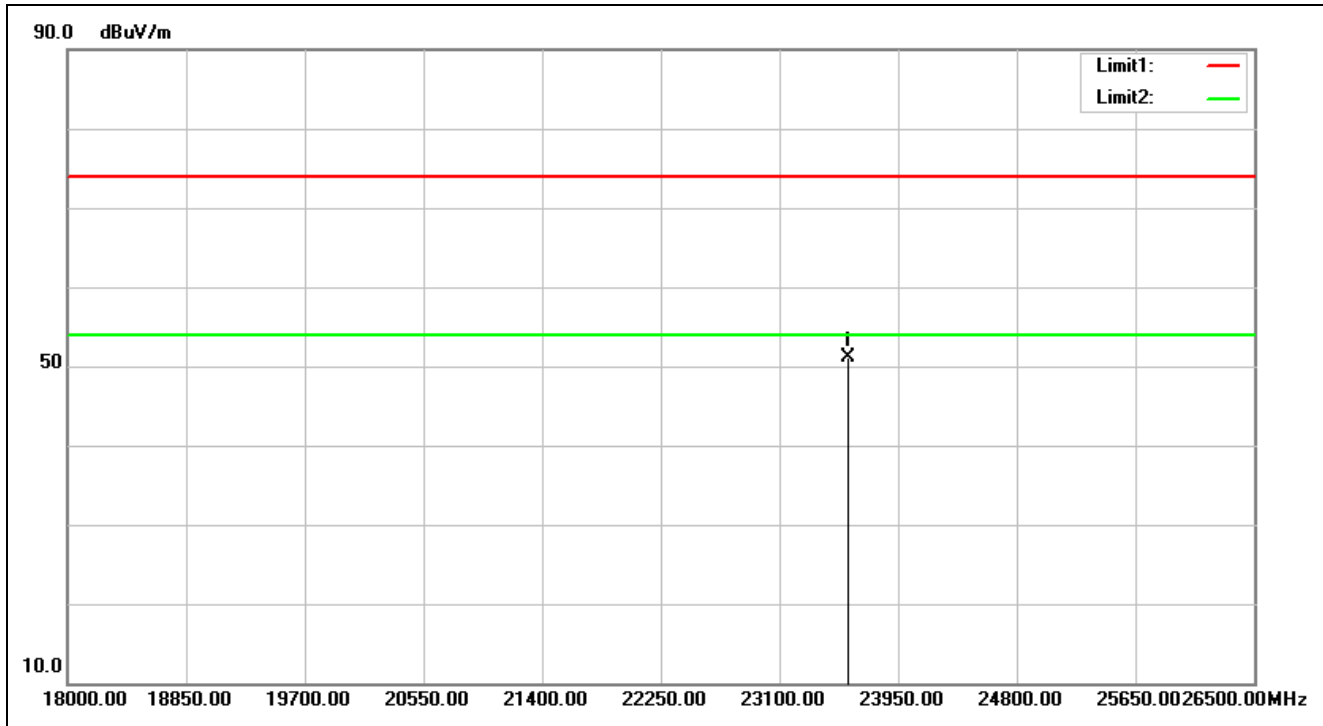
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/10/5 20:27:55
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2402-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	21442.500	31.94	17.82	49.76	74.00	-24.24	peak			



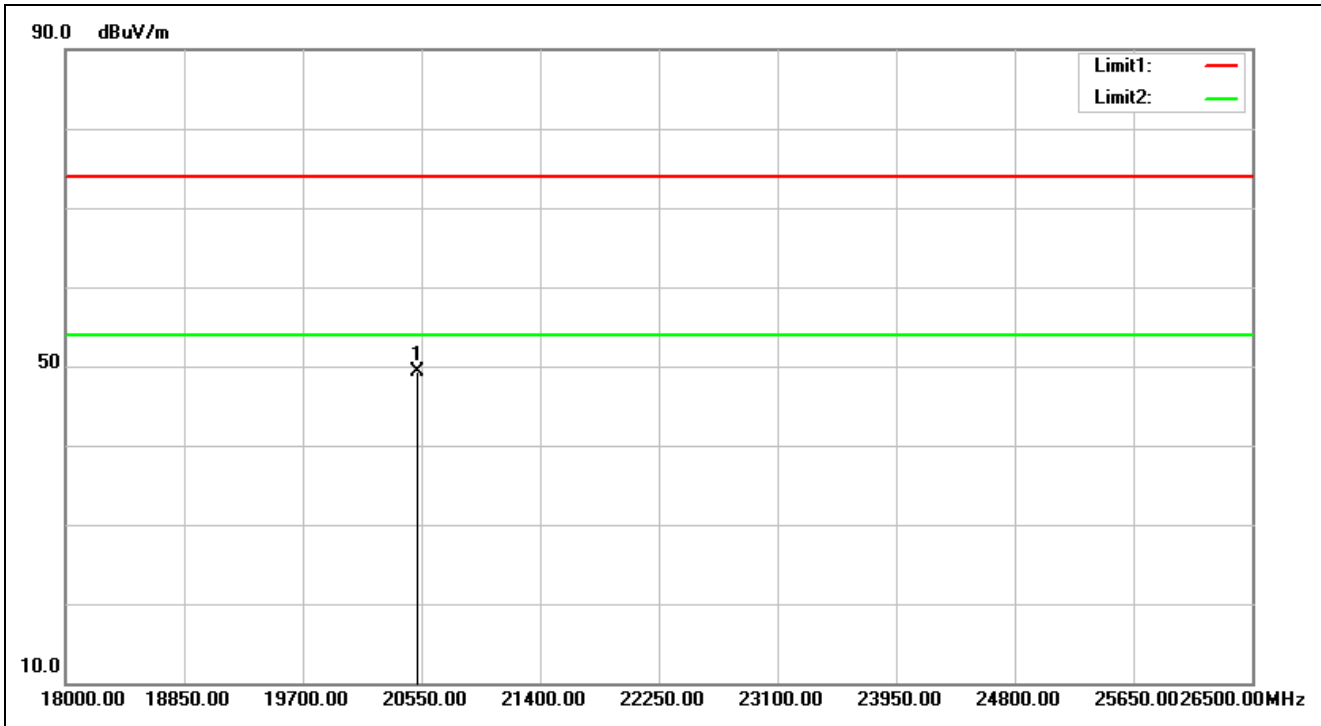
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/10/5 20:29:29
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2440-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	22896.000	31.99	18.52	50.51	74.00	-23.49	peak			



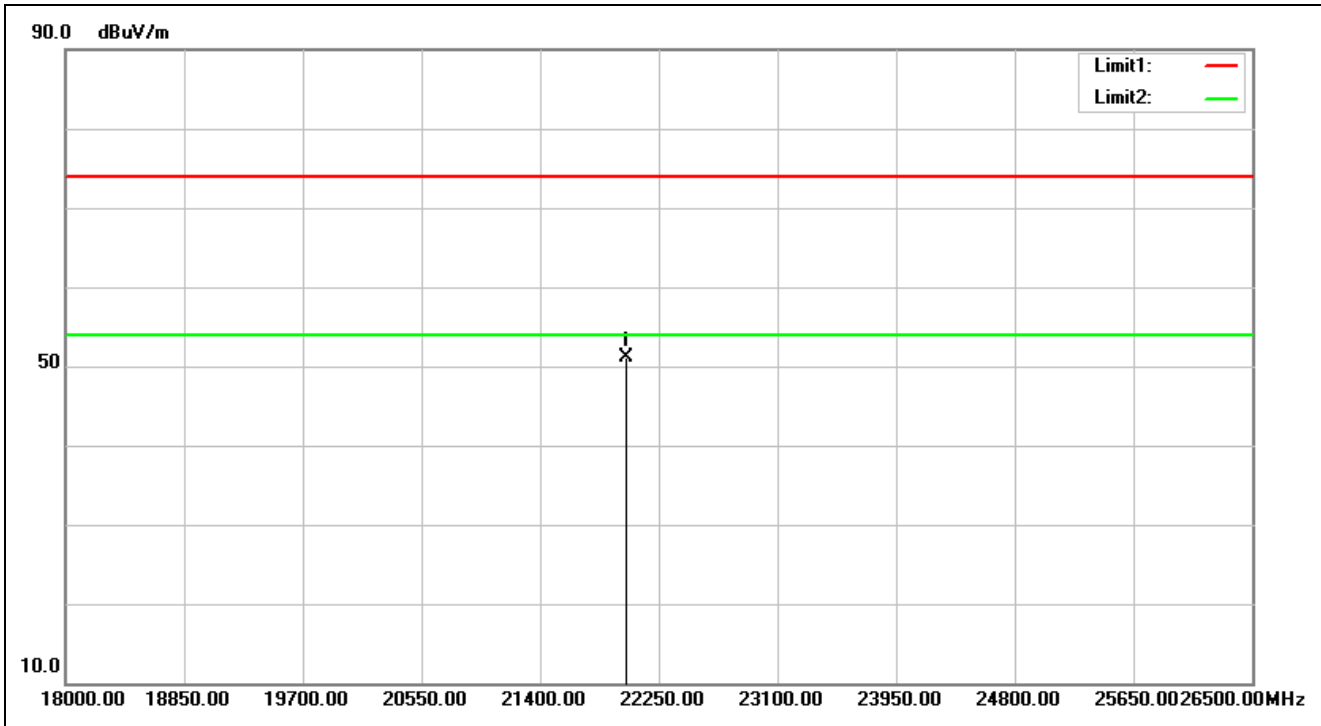
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Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/10/5 20:29:41
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2440-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23593.000	32.27	18.85	51.12	74.00	-22.88	peak			



Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/10/5 20:29:53
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.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2480-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20516.000	30.98	18.35	49.33	74.00	-24.67	peak			



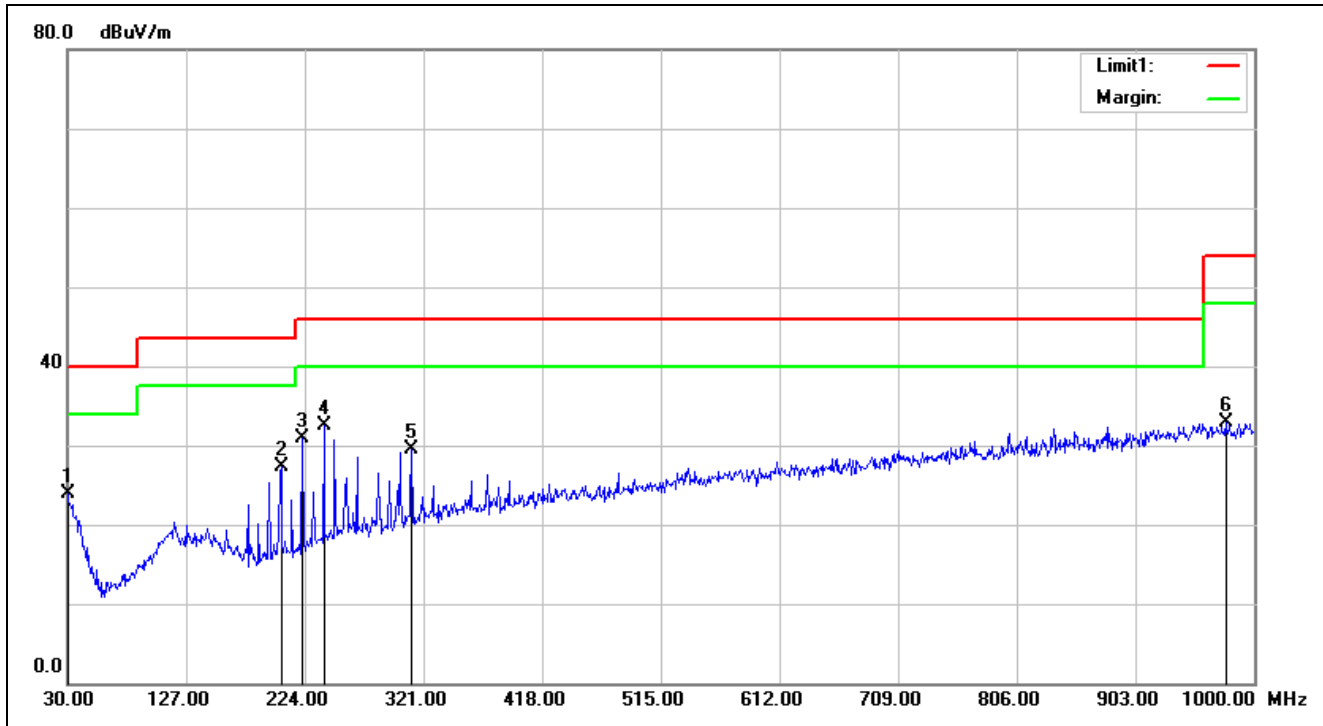
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/10/5 20:30:02
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2480-TX		
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	18.48	51.05	74.00	-22.95	peak			

Spurious Emissions, TX Mode, 30M-1G

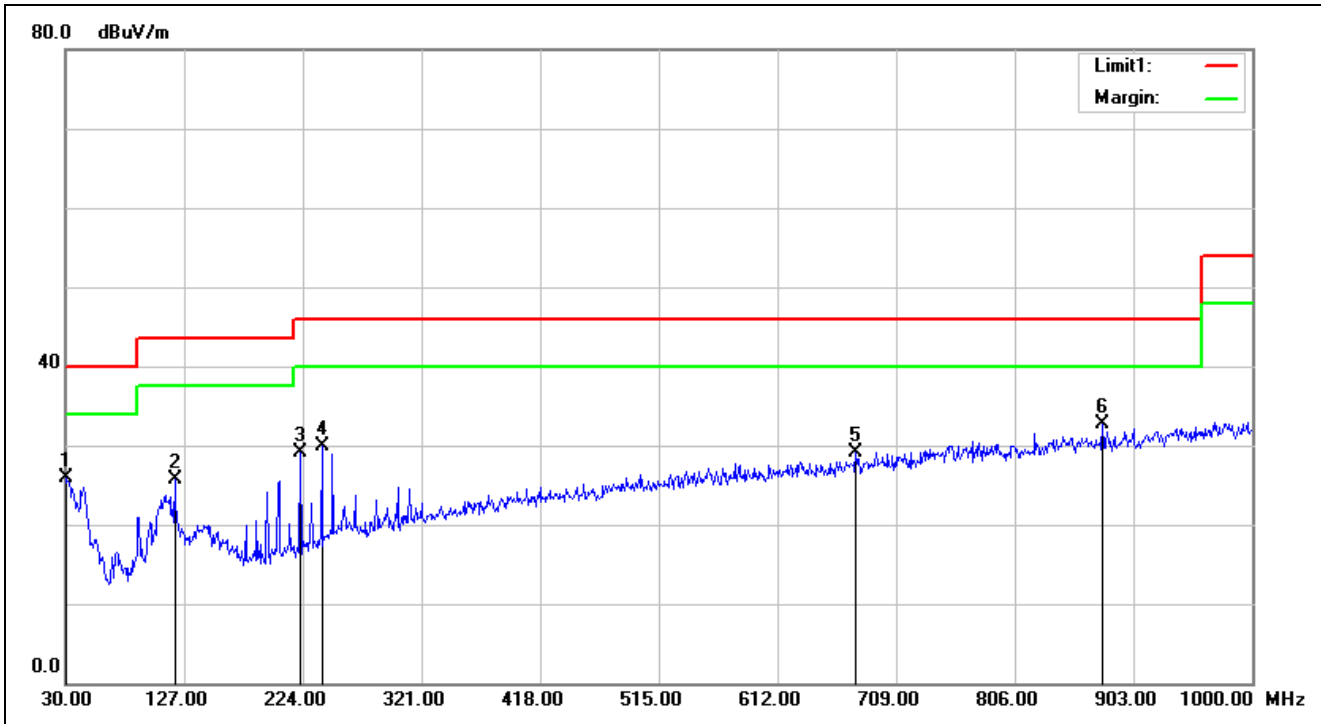


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Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/10/5 21:06:20
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2440-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	24.17	23.92	40.00	-16.08	QP	100	306	
2	204.5999	-8.73	35.98	27.25	43.50	-16.25	QP	100	348	
3	222.0600	-8.15	38.99	30.84	46.00	-15.16	QP	100	258	
4	239.5200	-6.85	39.34	32.49	46.00	-13.51	QP	100	38	
5	311.3000	-4.29	33.75	29.46	46.00	-16.54	QP	100	66	
6	976.7200	5.62	27.33	32.95	54.00	-21.05	QP	100	146	



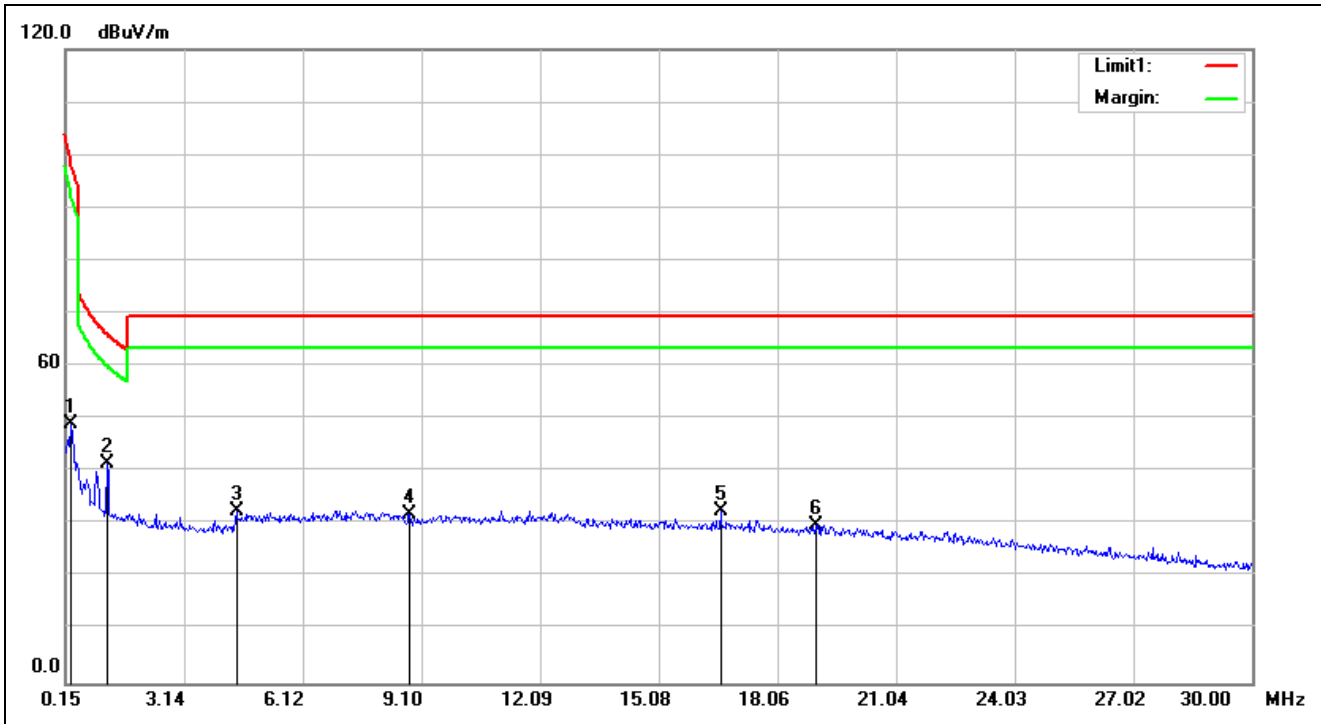
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/10/5 21:07:23
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2440-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	30.9700	-0.79	26.75	25.96	40.00	-14.04	QP	100	99	
2	119.2400	-7.50	33.26	25.76	43.50	-17.74	QP	100	253	
3	222.0600	-8.15	37.20	29.05	46.00	-16.95	QP	100	261	
4	239.5200	-6.85	36.69	29.84	46.00	-16.16	QP	100	264	
5	676.0200	0.91	28.24	29.15	46.00	-16.85	QP	100	322	
6	877.7800	3.91	28.73	32.64	46.00	-13.36	QP	100	2	

Spurious Emissions, TX Mode, 150K-30M



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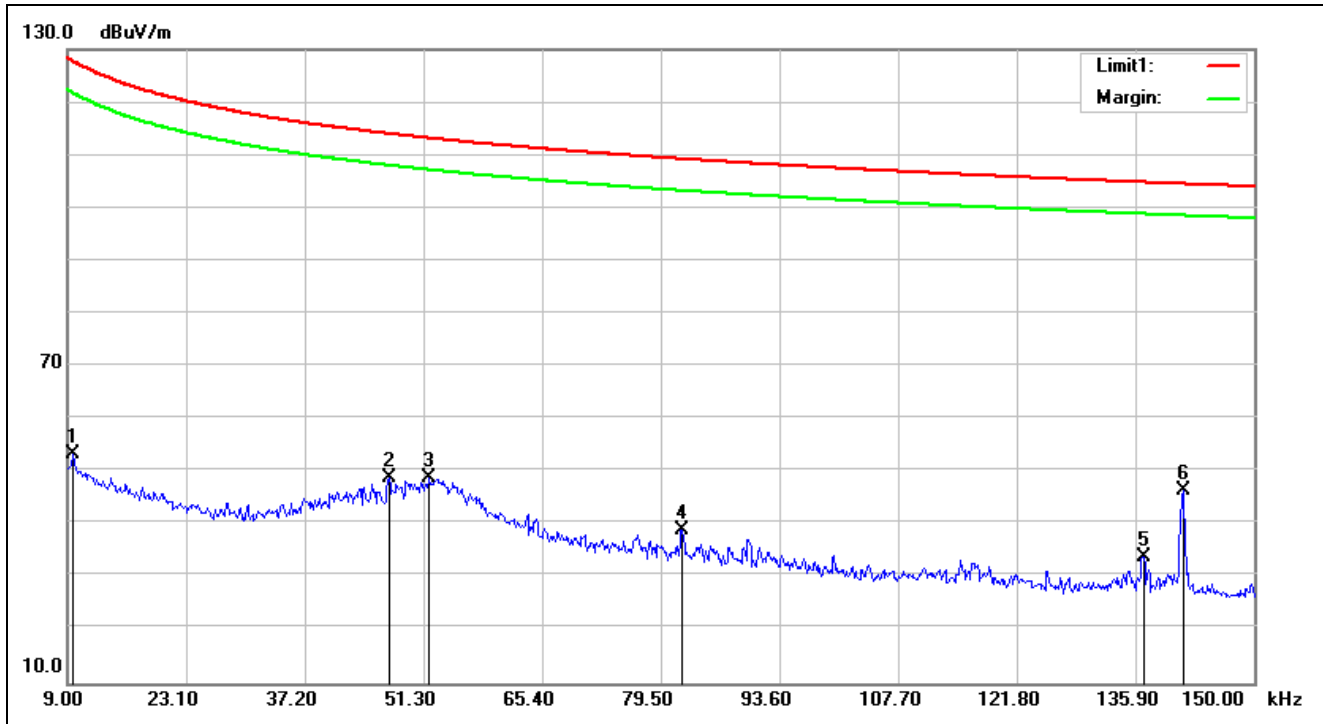
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC15.209_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2017/10/5 20:57:52
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2440-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.2992	18.94	30.06	49.00	98.06	-49.06	QP	100	245	
2	1.1947	18.93	22.69	41.62	66.08	-24.46	QP	100	253	
3	4.4484	19.42	13.11	32.53	69.50	-36.97	QP	100	269	
4	8.8063	20.11	11.87	31.98	69.50	-37.52	QP	100	0	
5	16.6271	21.39	11.25	32.64	69.50	-36.86	QP	100	360	
6	19.0152	21.81	8.09	29.90	69.50	-39.60	QP	100	27	

Spurious Emissions, TX Mode, 9K-150K



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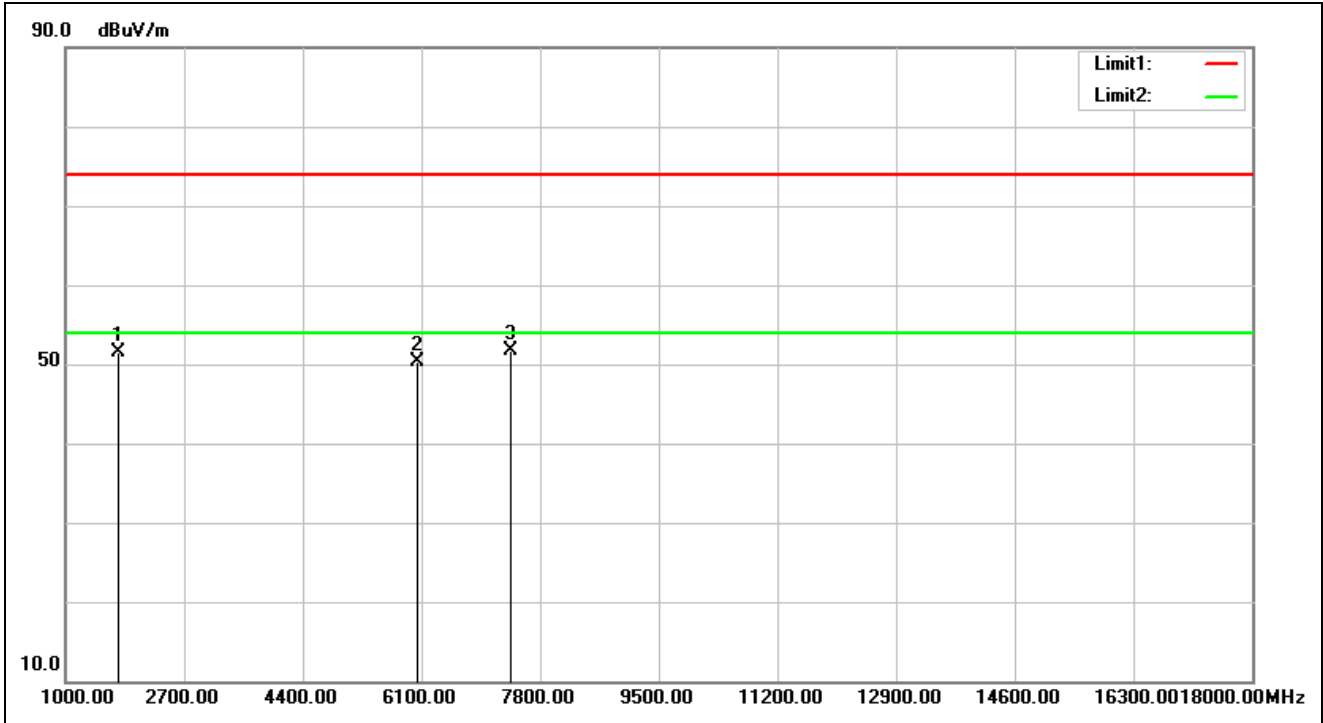
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC15.209_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2017/10/5 20:54:56
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2440-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	19.83	33.38	53.21	127.66	-74.45	QP	100	356	
2	0.0472	19.53	29.38	48.91	114.00	-65.09	QP	100	221	
3	0.0520	19.42	29.31	48.73	113.16	-64.43	QP	100	200	
4	0.0820	19.24	19.85	39.09	109.23	-70.14	QP	100	203	
5	0.1367	19.09	14.82	33.91	104.82	-70.91	QP	100	216	
6	0.1415	19.09	27.22	46.31	104.52	-58.21	QP	100	192	

Spurious Emissions, RX Mode, 1-18G

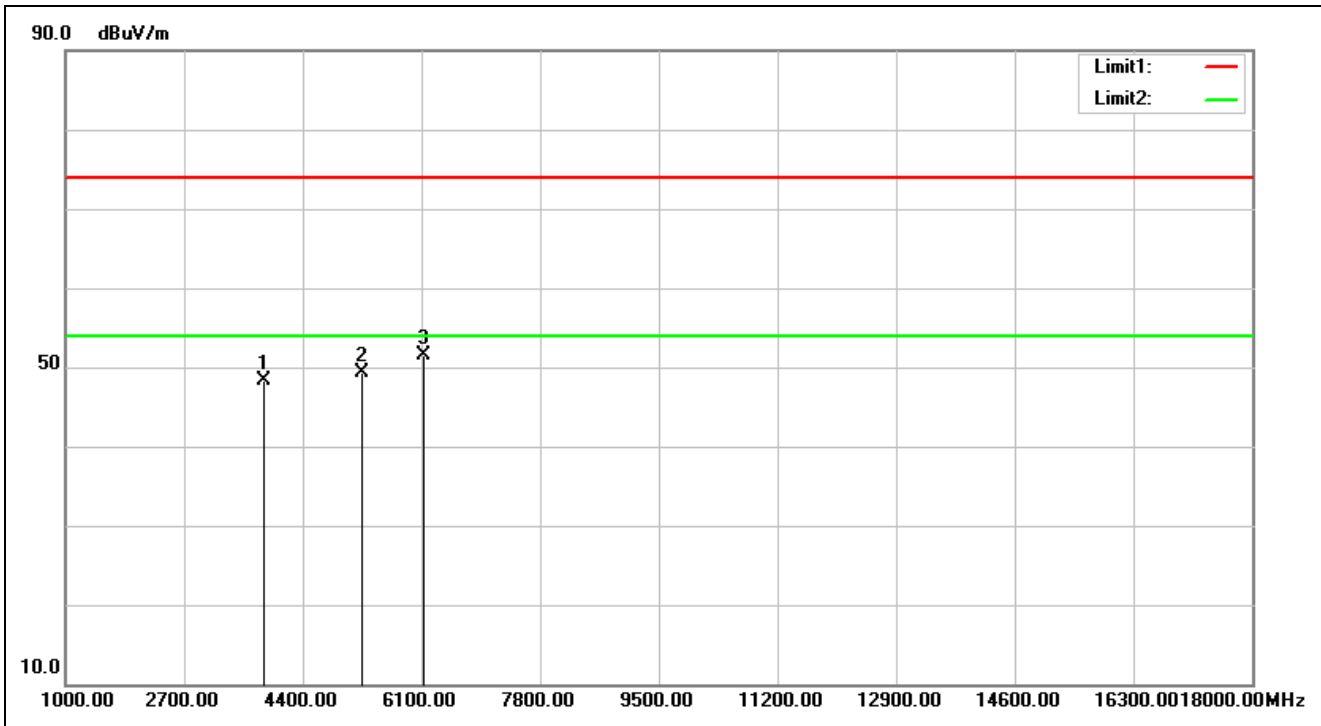


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Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/10/5 20:20:33
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2480-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	1748.000	-8.84	60.30	51.46	74.00	-22.54	peak	100	359	
2	6032.000	3.55	46.79	50.34	74.00	-23.66	peak	100	0	
3	7375.000	5.72	46.04	51.76	74.00	-22.24	peak	100	344	



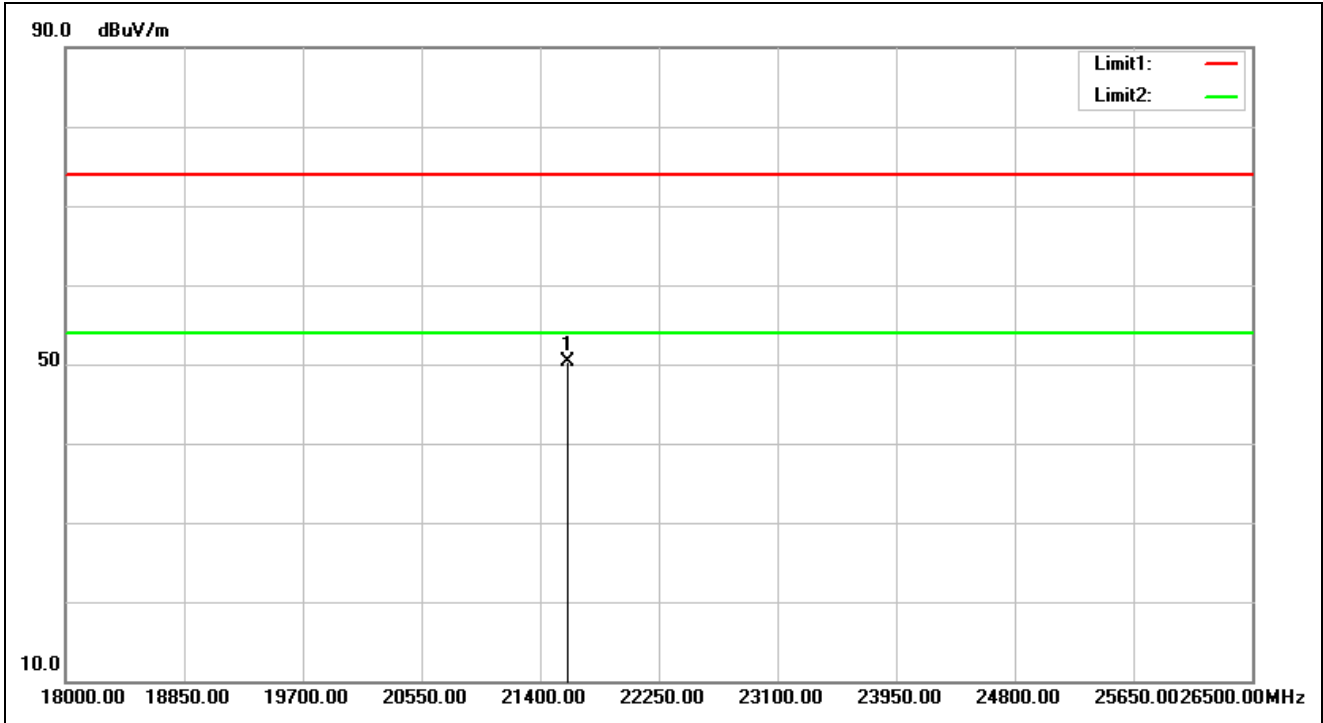
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/10/5 20:21:36
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2480-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	3839.000	-5.79	54.13	48.34	74.00	-25.66	peak	100	174	
2	5250.000	-1.01	50.28	49.27	74.00	-24.73	peak	100	188	
3	6134.000	3.94	47.58	51.52	74.00	-22.48	peak	100	94	

Spurious Emissions, RX Mode, 18-26G

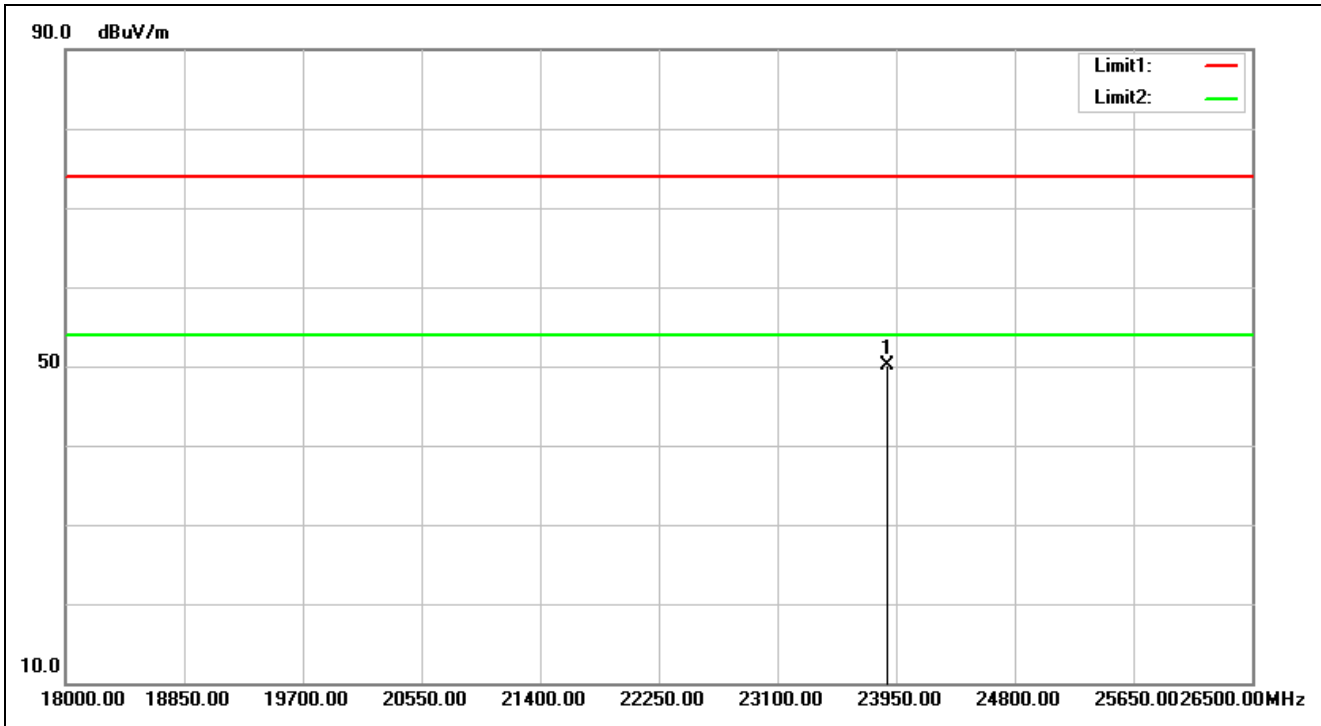


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Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/10/5 20:30:17
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2440-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	21595.500	32.13	18.11	50.24	74.00	-23.76	peak			



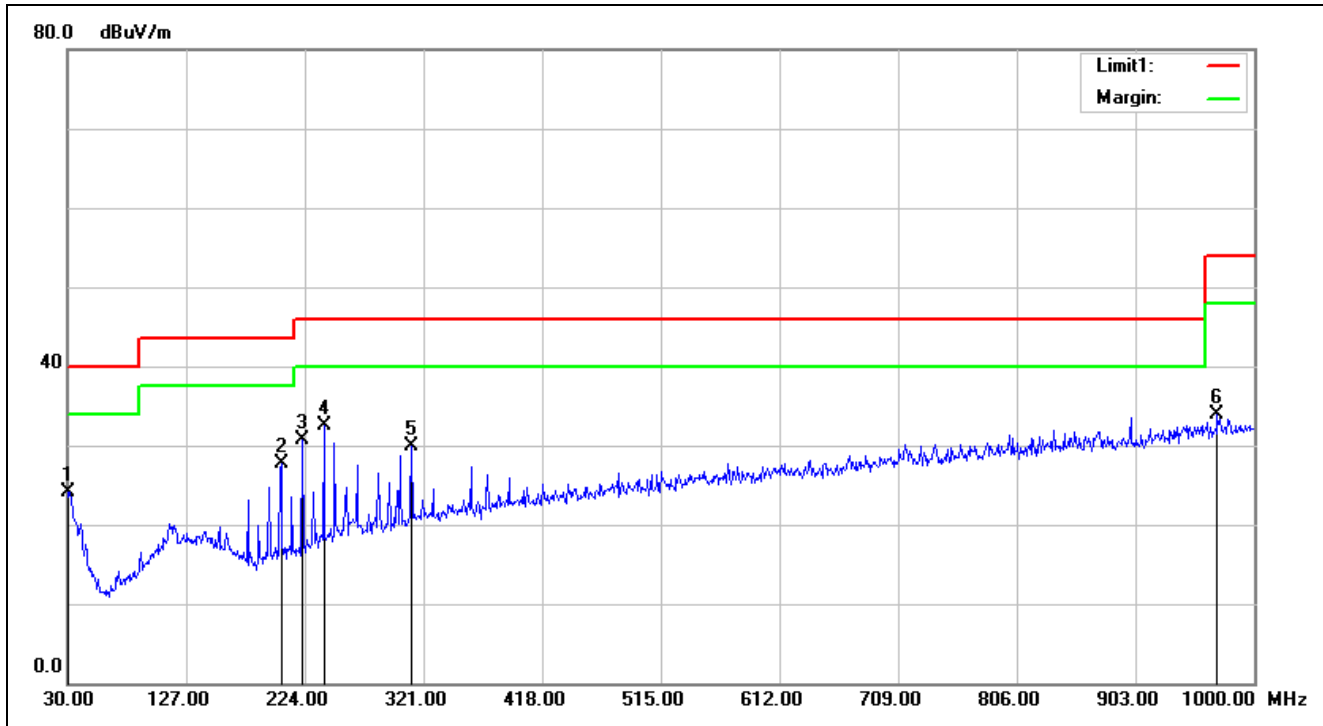
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/10/5 20:30:26
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2440-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23890.500	31.80	18.26	50.06	74.00	-23.94	peak			

Spurious Emissions, RX Mode, 30M-1G

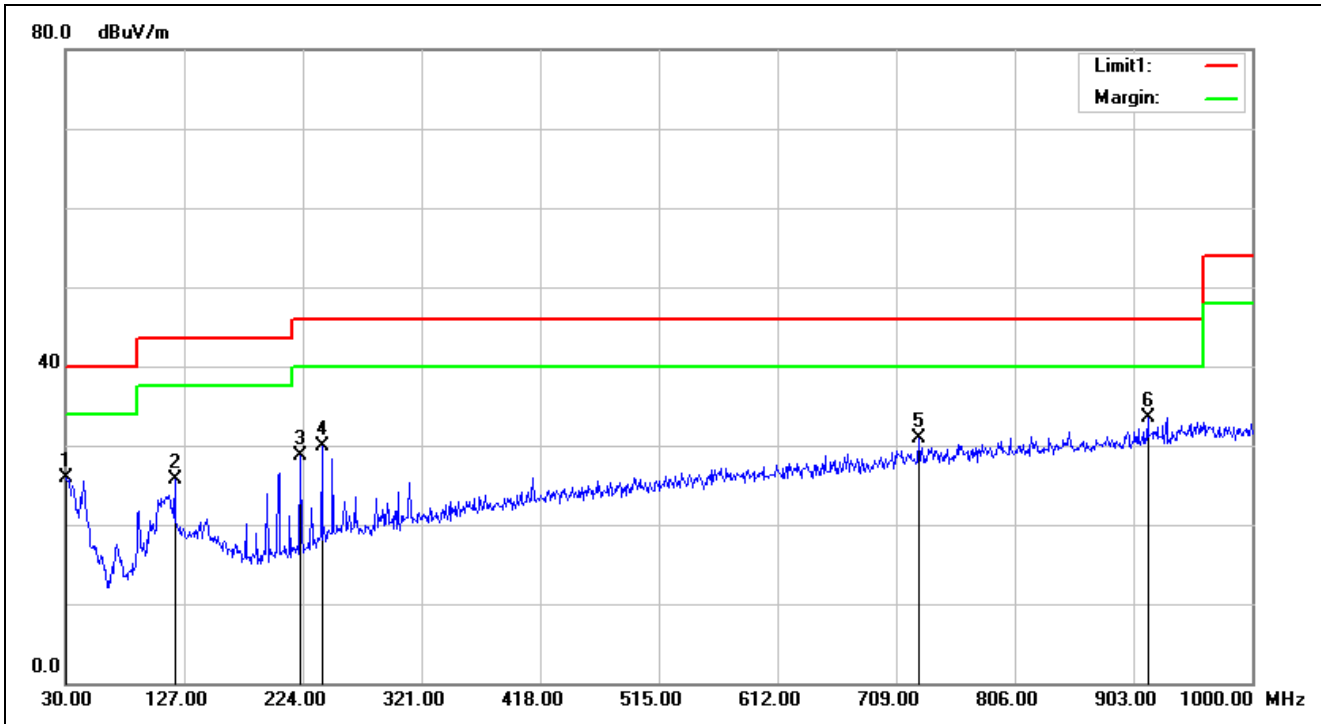


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Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2017/10/5 21:10:02
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2440-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	24.34	24.09	40.00	-15.91	QP	100	139	
2	204.5999	-8.73	36.39	27.66	43.50	-15.84	QP	100	347	
3	222.0600	-8.15	38.89	30.74	46.00	-15.26	QP	100	251	
4	239.5200	-6.85	39.34	32.49	46.00	-13.51	QP	100	17	
5	311.3000	-4.29	34.15	29.86	46.00	-16.14	QP	100	70	
6	969.9299	5.58	28.23	33.81	54.00	-20.19	QP	100	325	



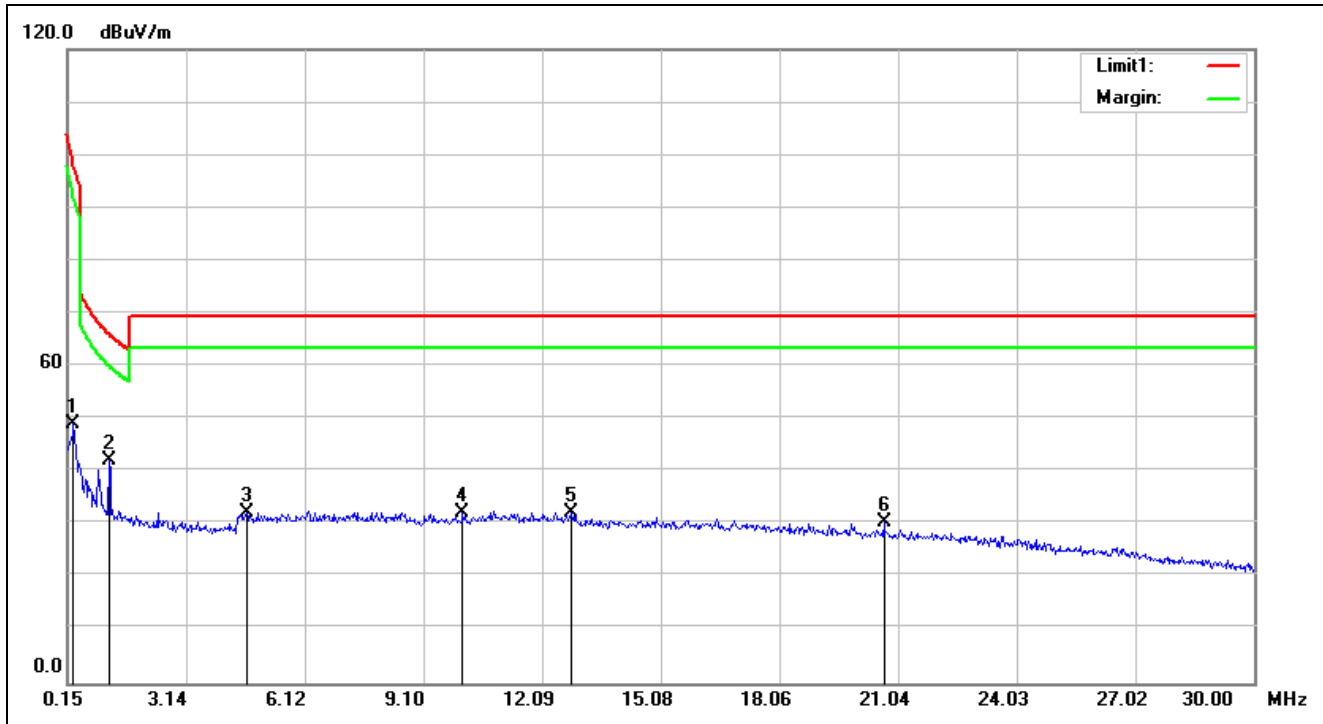
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2017/10/5 21:11:04
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2440-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	30.9700	-0.79	26.66	25.87	40.00	-14.13	QP	100	189	
2	119.2400	-7.50	33.15	25.65	43.50	-17.85	QP	100	131	
3	222.0600	-8.15	36.93	28.78	46.00	-17.22	QP	100	287	
4	239.5200	-6.85	36.71	29.86	46.00	-16.14	QP	100	274	
5	727.4300	1.87	29.10	30.97	46.00	-15.03	QP	100	309	
6	914.6400	4.48	29.07	33.55	46.00	-12.45	QP	100	325	

Spurious Emissions, RX Mode, 150K-30M



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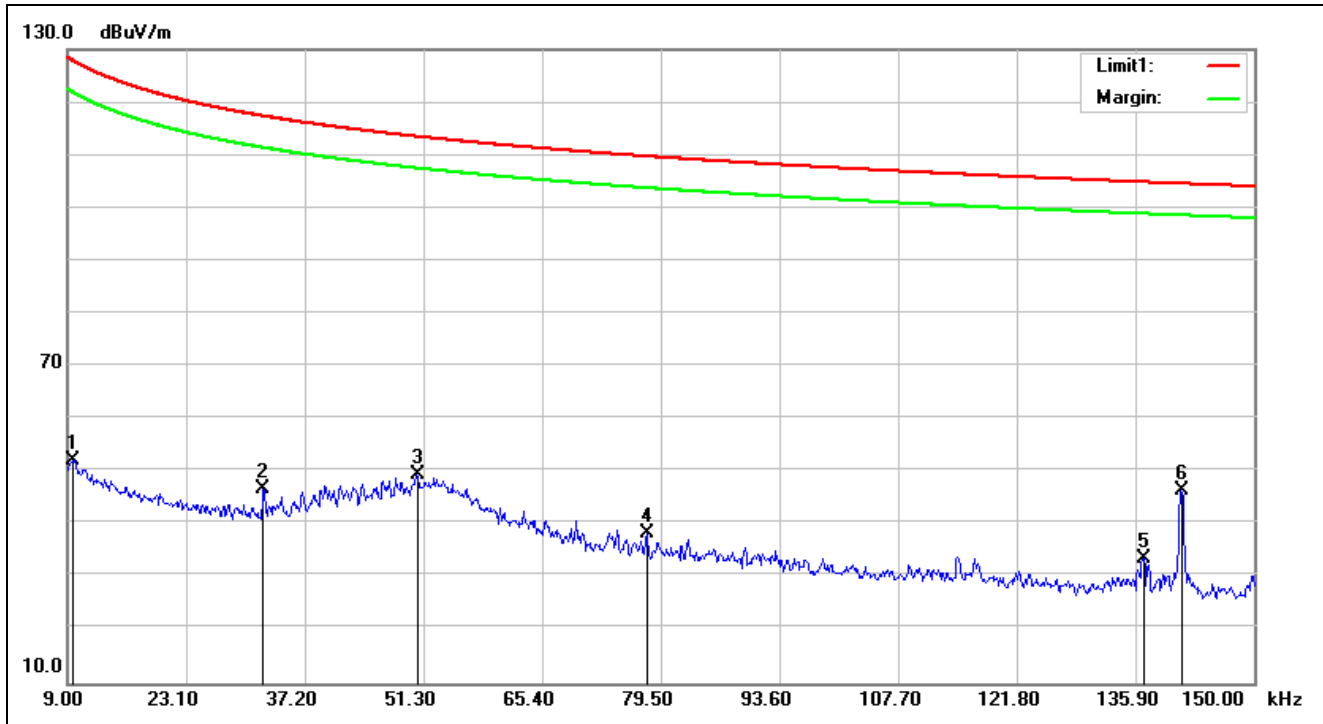
Service No.:	114068828	Test Distance:	3m
Test Standard:	FCC15.209_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2017/10/5 20:58:55
Applicant:	Microchip Technology Inc.	Test Rating:	DC 3.0V to 4.2V (Typical = 3.3v)
Product:	IEEE 802.11 b/g/n Network Controller Module With Integrated Bluetooth 4.0 (BLE)	Temp.(°C)/Hum.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2440-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.2993	18.94	30.07	49.01	98.07	-49.06	QP	100	213	
2	1.1947	18.93	23.25	42.18	66.08	-23.90	QP	100	261	
3	4.6574	19.54	12.70	32.24	69.50	-37.26	QP	100	221	
4	10.0900	20.24	11.87	32.11	69.50	-37.39	QP	100	59	
5	12.8362	20.72	11.41	32.13	69.50	-37.37	QP	100	309	
6	20.6868	22.03	8.30	30.33	69.50	-39.17	QP	100	202	

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:	2017/10/5 20:55:59
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.(%):	22(°C)/56%
Model No.:	ATWINC3400-MR210CA	Test Engineer:	George Yang
Test Mode:	2440-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.0097	19.82	32.34	52.16	127.75	-75.59	QP	100	139	
2	0.0323	20.05	26.64	46.69	117.34	-70.65	QP	100	226	
3	0.0505	19.43	29.90	49.33	113.47	-64.14	QP	100	195	
4	0.0778	19.26	19.00	38.26	109.73	-71.47	QP	100	195	
5	0.1369	19.09	14.49	33.58	104.84	-71.26	QP	100	213	
6	0.1413	19.09	27.26	46.35	104.56	-58.21	QP	100	189	