

Test Report No.10055843 001

Appendix D: Radiated Spurious Emission Data

(File: 10055843AppendixD)

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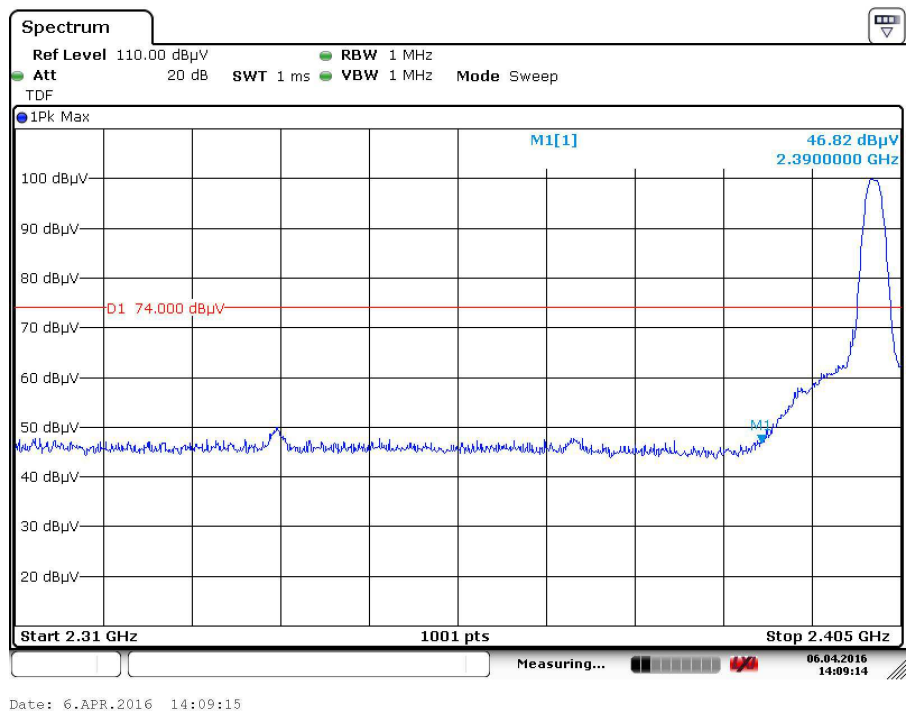
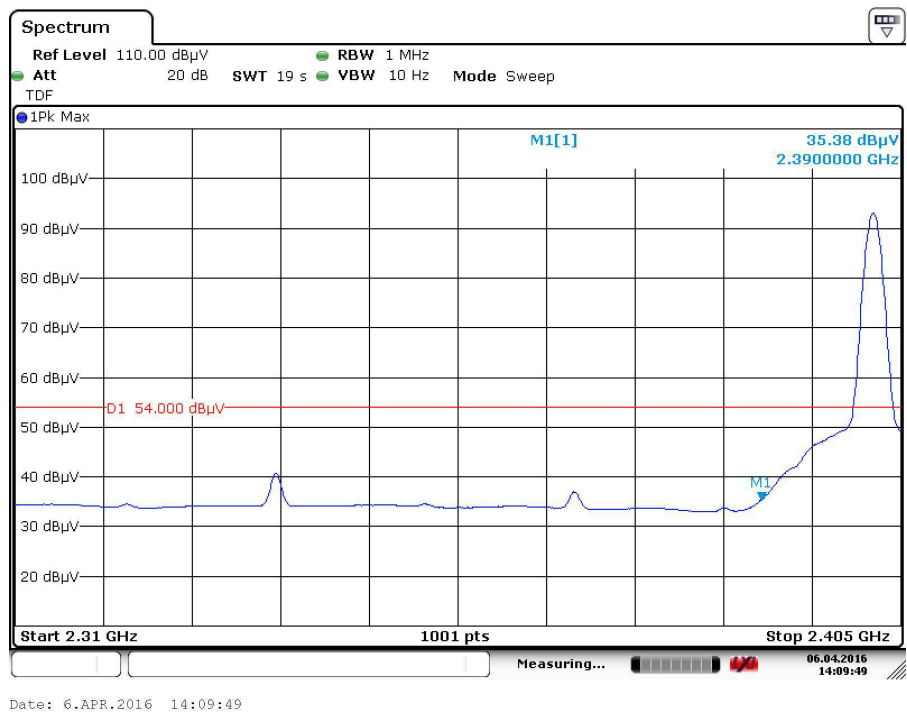
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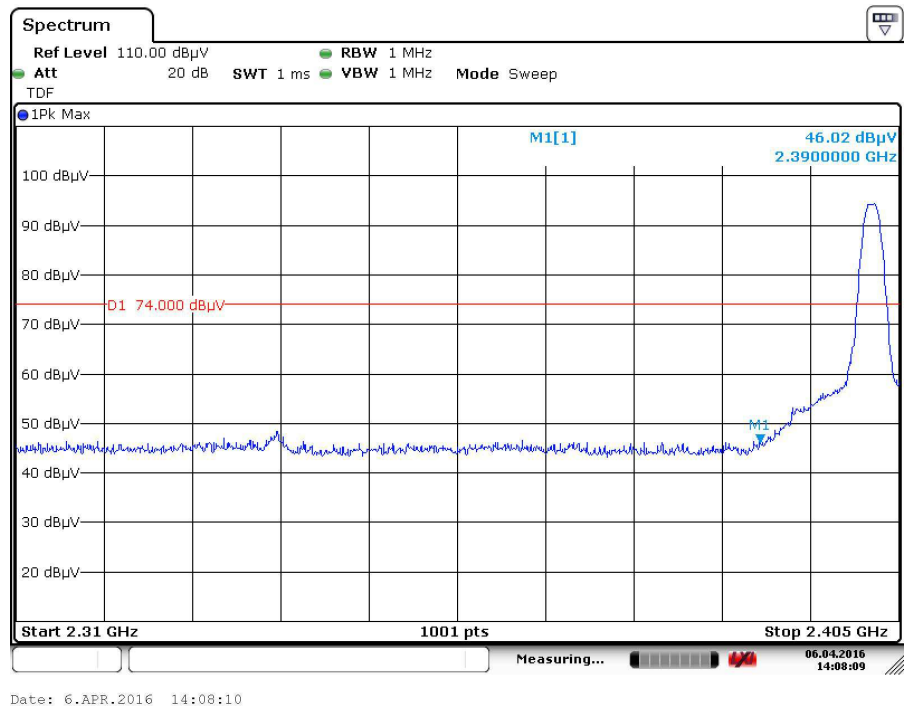
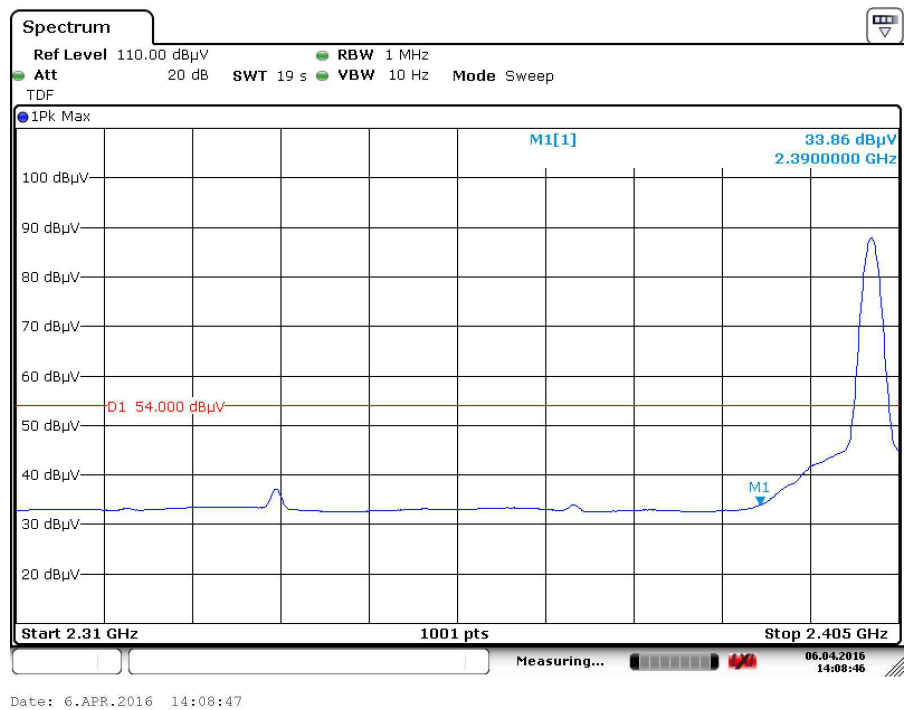
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Radiated Bandedge (GFSK)

Low Channel (Hor)



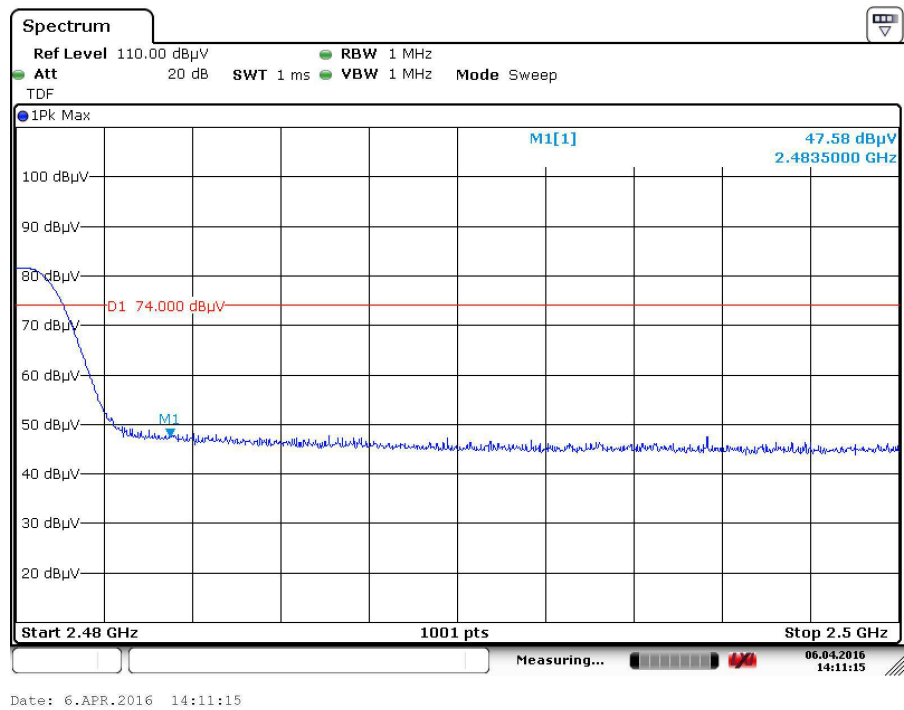
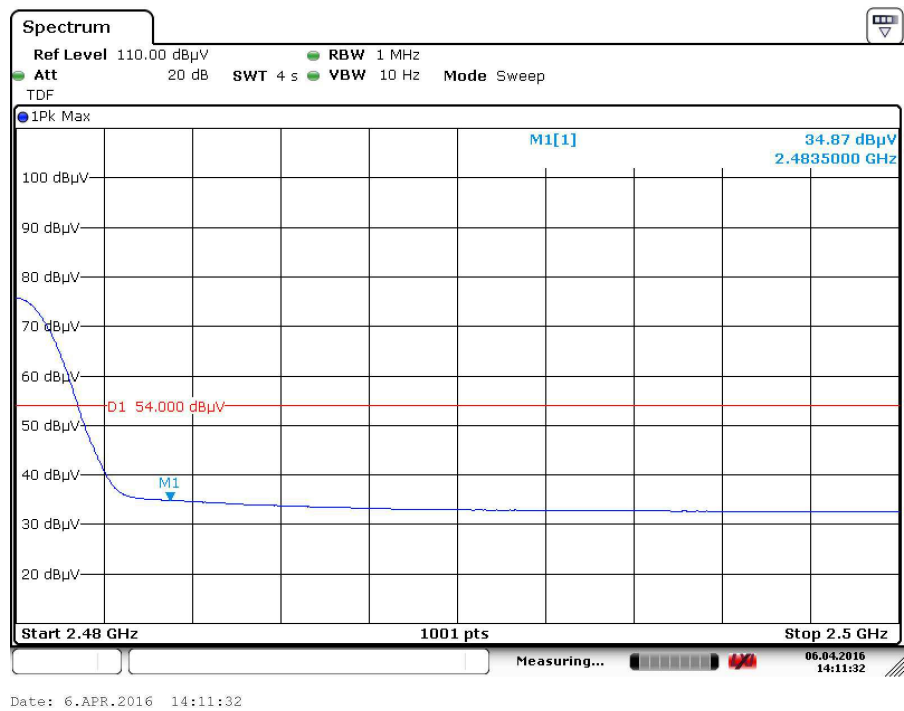
Low Channel (Ver)



Spurious Emissions, Band Edge, 2.35-2.5G

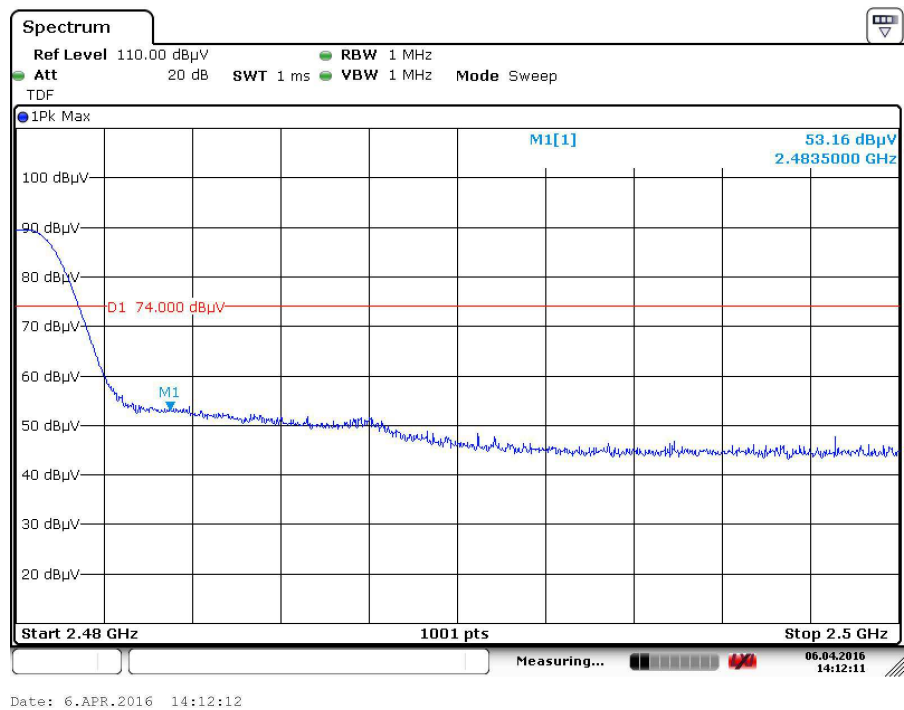
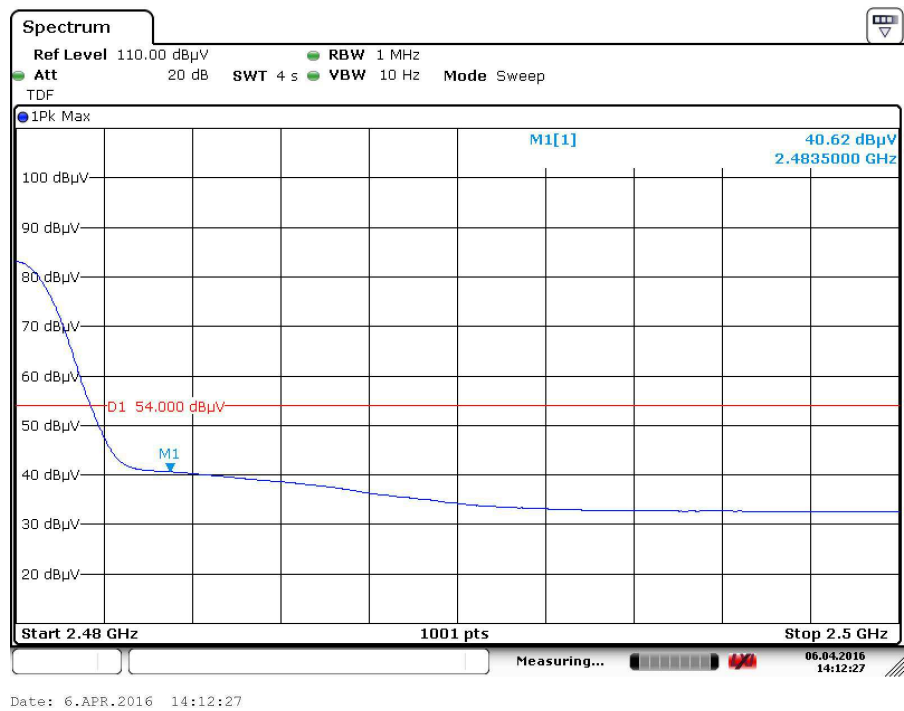
Radiated Bandedge (GFSK)

High Channel (Hor)



Spurious Emissions, Band Edge, 2.35-2.5G

High Channel (Ver)



Spurious Emissions, Band Edge, 2.35-2.5G

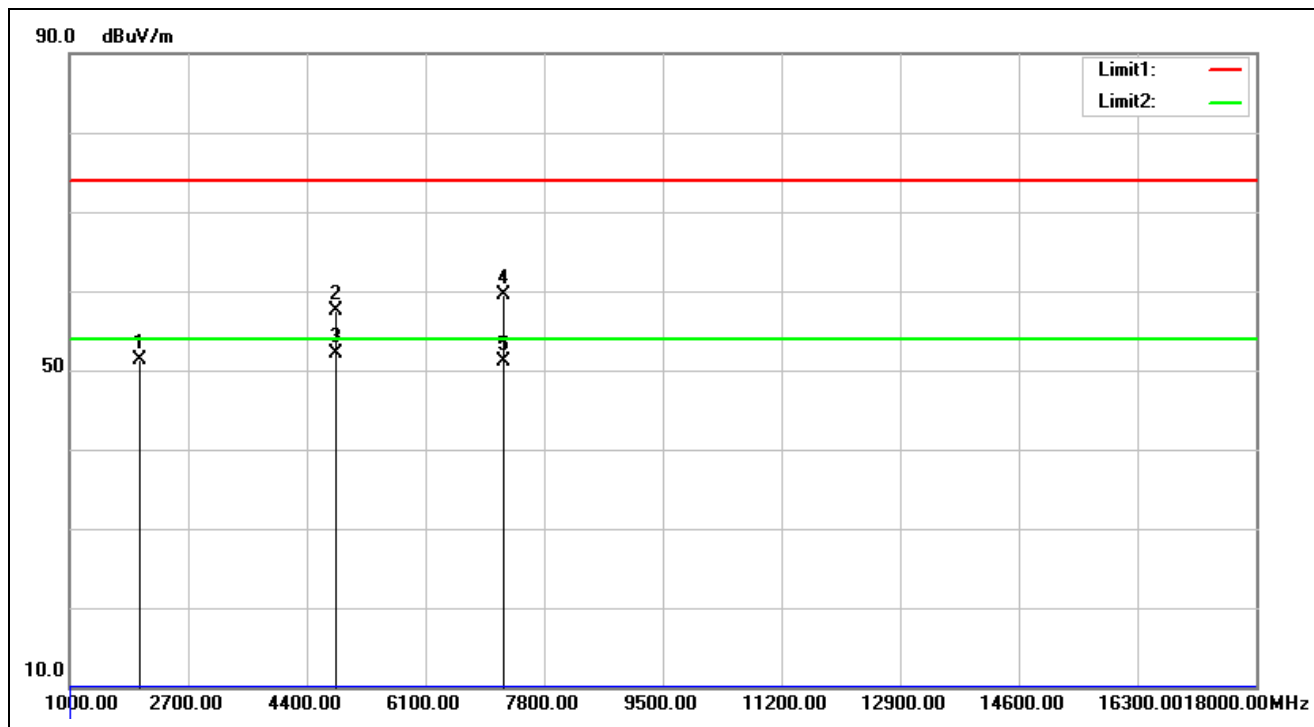
Spurious Emissions, TX Mode, 1-18G



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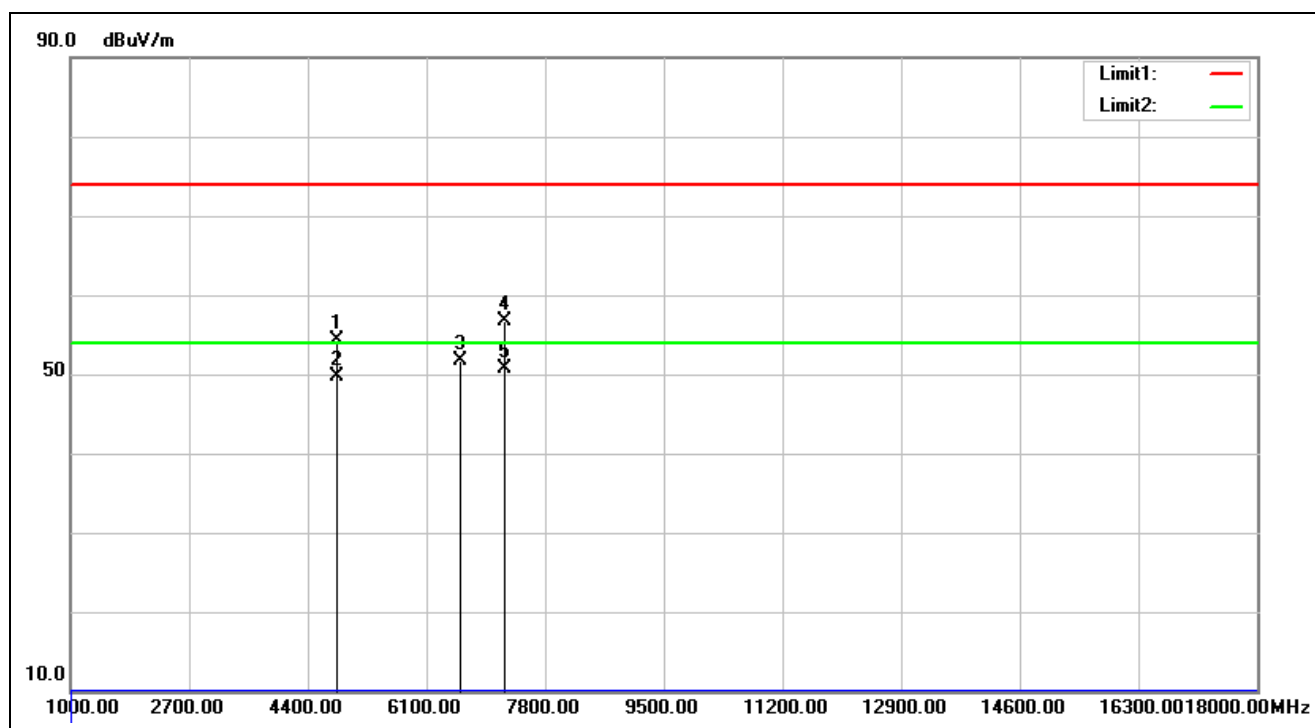
Tel: +886-2172-7000 fax: +886-2528-0018



Service No.:	114048539-FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/4/6 14:09:05
Applicant:	Avant	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	ACI810700S-BLE-MD+SHIELDING	Test Engineer:	George Yang
Test Mode:	2402-TX		
Remark:			

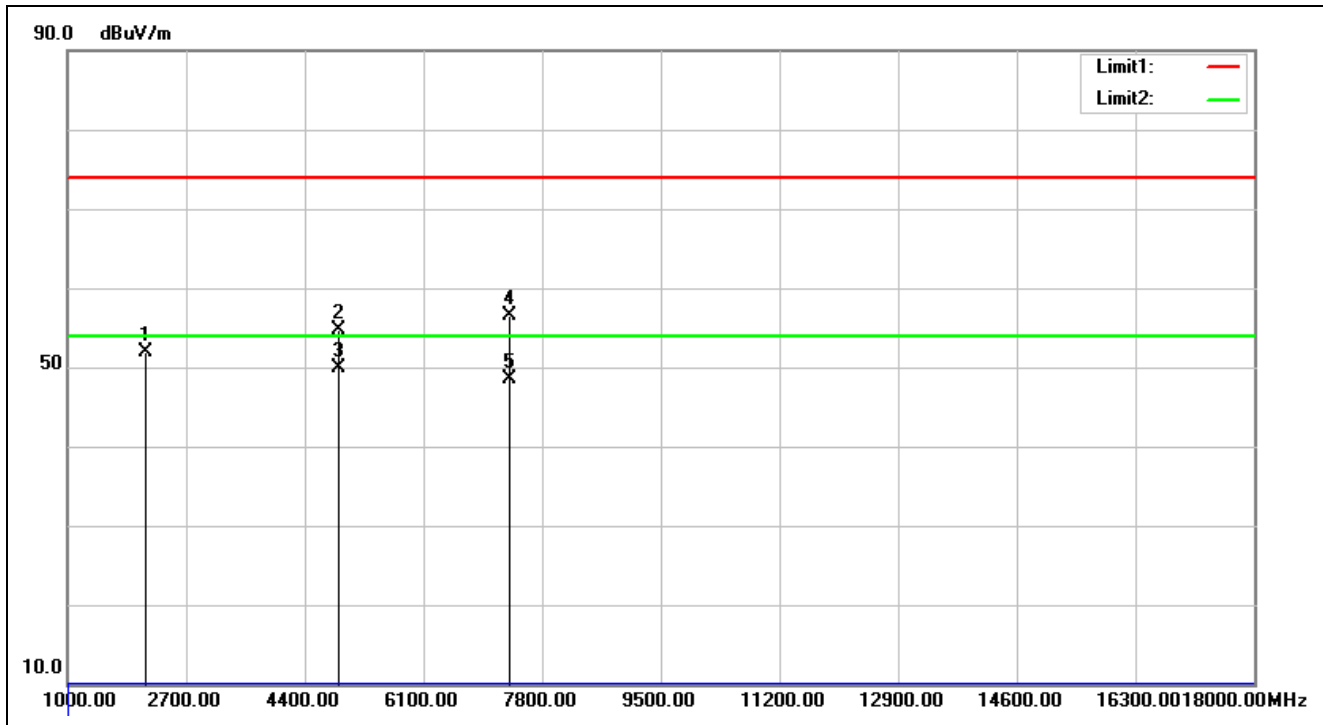
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	2003.000	-7.16	58.42	51.26	74.00	-22.74	peak	107	257	
2	4804.000	-2.28	59.71	57.43	74.00	-16.57	peak	107	149	
3	4804.000	-2.28	54.41	52.13	54.00	-1.87	AVG	107	149	
4	7206.000	5.77	53.73	59.50	74.00	-14.50	peak	107	138	
5	7206.000	5.77	45.26	51.03	54.00	-2.97	AVG	107	138	

Spurious Emissions, TX Mode, 1-18G



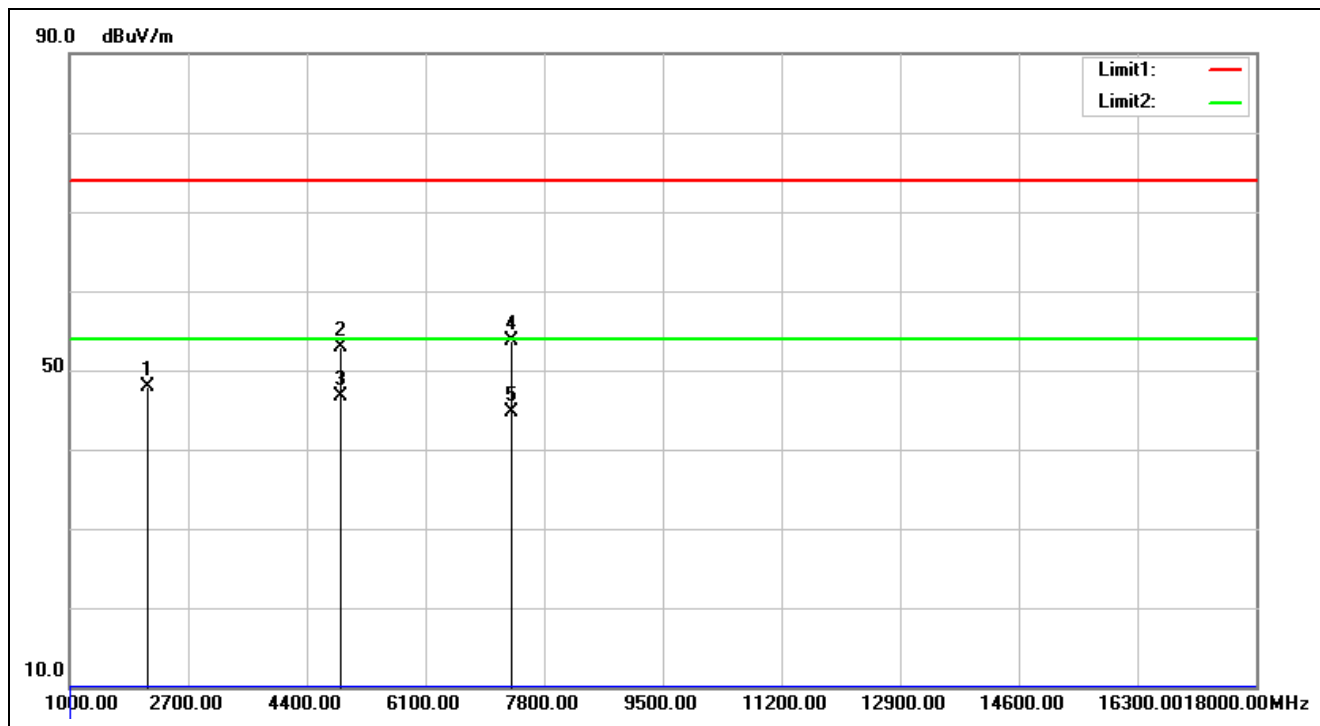
Service No.:	114048539-FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/4/6 14:10:08
Applicant:	Avant	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	ACI810700S-BLE-MD+SHIELDING	Test 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	-2.28	56.54	54.26	74.00	-19.74	peak	107	169	
2	4804.000	-2.28	51.92	49.64	54.00	-4.36	AVG	107	169	
3	6576.000	5.90	45.76	51.66	74.00	-22.34	peak	107	45	
4	7206.000	5.77	51.01	56.78	74.00	-17.22	peak	107	194	
5	7206.000	5.77	45.02	50.79	54.00	-3.21	AVG	107	194	



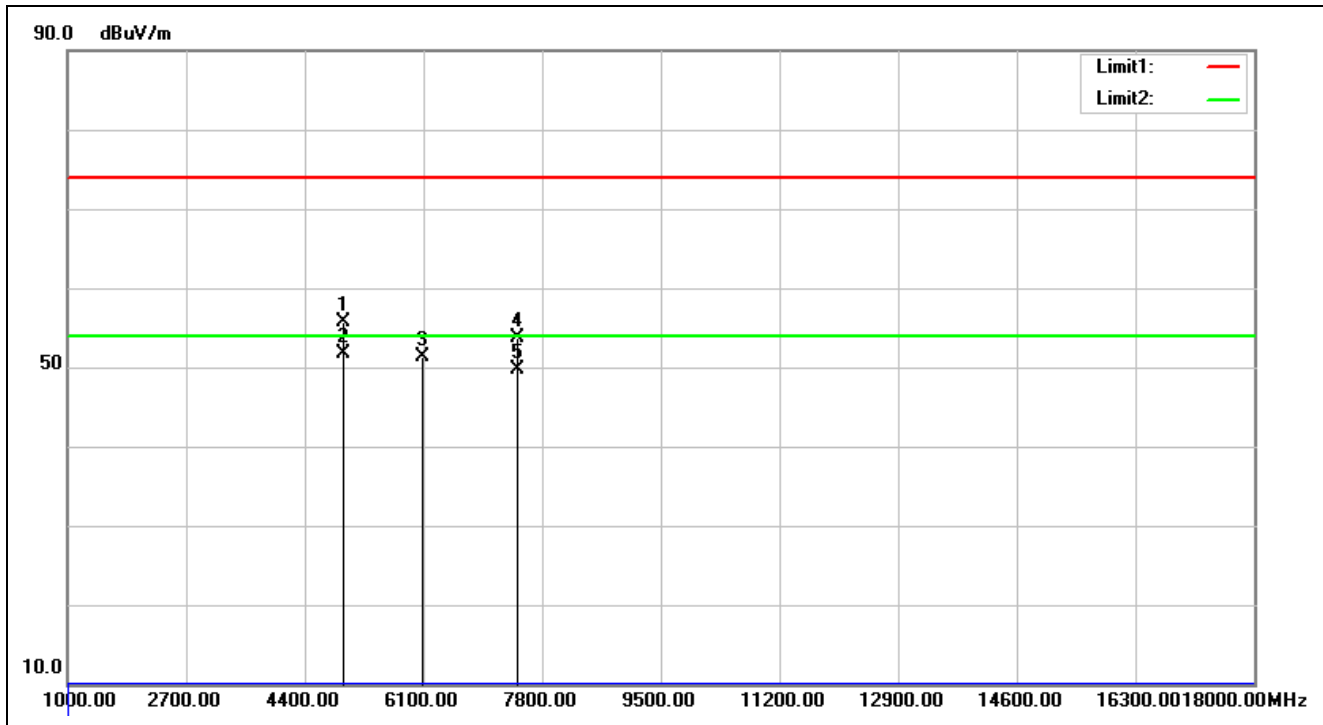
Service No.:	114048539-FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/4/6 14:56:42
Applicant:	Avant	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	ACI810700S-BLE-MD+SHIELDING	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	2122.000	-7.32	59.27	51.95	74.00	-22.05	peak	100	250	
2	4880.000	-2.10	56.72	54.62	74.00	-19.38	peak	100	147	
3	4880.000	-2.10	52.06	49.96	54.00	-4.04	AVG	100	147	
4	7320.000	6.10	50.35	56.45	74.00	-17.55	peak	100	133	
5	7320.000	6.10	42.40	48.50	54.00	-5.50	AVG	100	133	



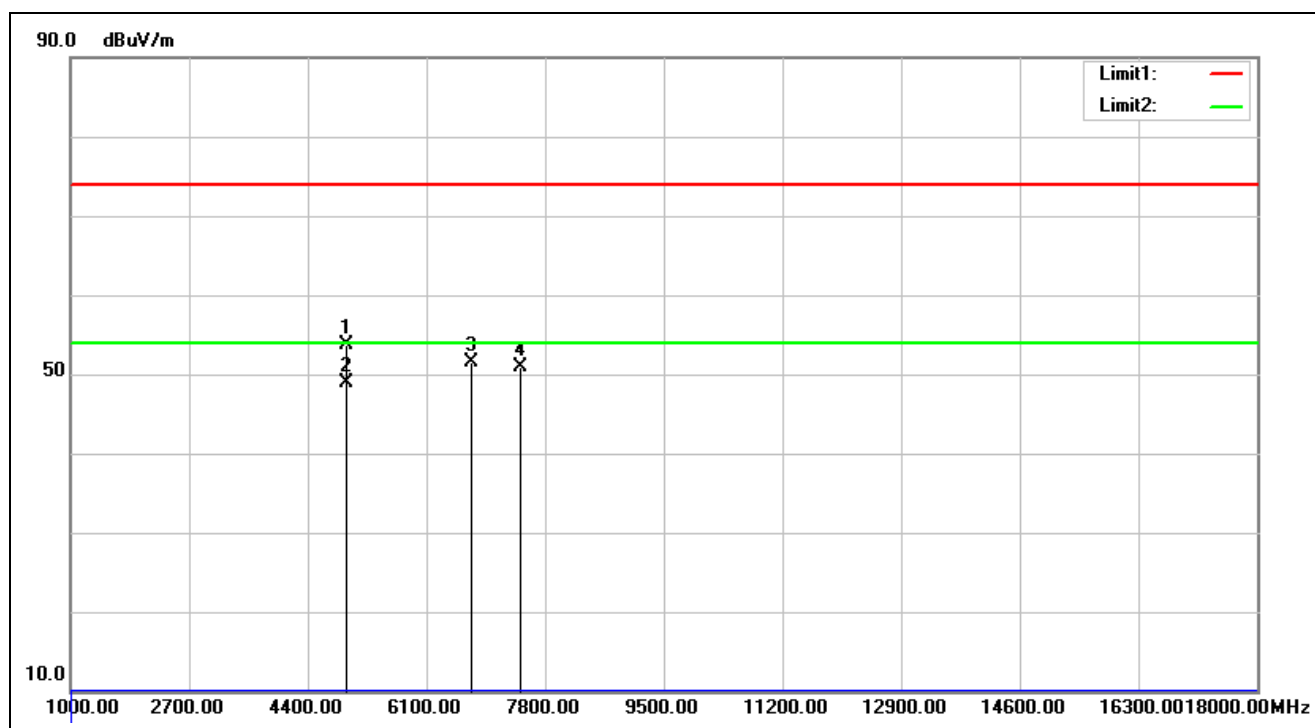
Service No.:	114048539-FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/4/6 14:57:45
Applicant:	Avant	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	ACI810700S-BLE-MD+SHIELDING	Test 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	2122.000	-7.32	55.28	47.96	74.00	-26.04	peak	100	204	
2	4880.000	-2.10	55.02	52.92	74.00	-21.08	peak	100	174	
3	4880.000	-2.10	48.82	46.72	54.00	-7.28	AVG	100	174	
4	7320.000	6.10	47.63	53.73	74.00	-20.27	peak	100	196	
5	7320.000	6.10	38.70	44.80	54.00	-9.20	AVG	100	196	



Service No.:	114048539-FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/4/6 15:02:58
Applicant:	Avant	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	ACI810700S-BLE-MD+SHIELDING	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	-1.91	57.60	55.69	74.00	-18.31	peak	100	149	
2	4960.000	-1.91	53.56	51.65	54.00	-2.35	AVG	100	149	
3	6083.000	4.45	46.84	51.29	74.00	-22.71	peak	100	160	
4	7440.000	6.44	47.34	53.78	74.00	-20.22	peak	100	138	
5	7440.000	6.44	43.33	49.77	54.00	-4.23	AVG	100	138	



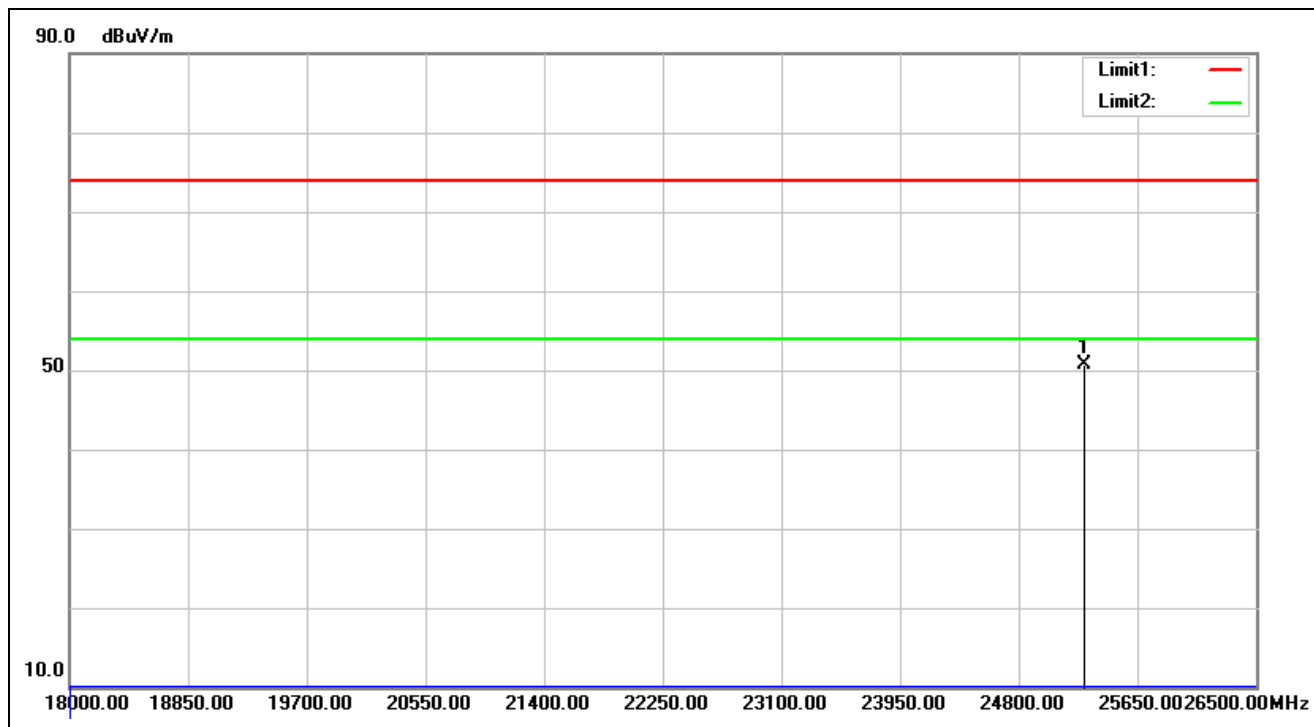
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Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/4/6 15:04:01
Applicant:	Avant	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	ACI810700S-BLE-MD+SHIELDING	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	-1.91	55.63	53.72	74.00	-20.28	peak	100	167	
2	4960.000	-1.91	50.82	48.91	54.00	-5.09	AVG	100	167	
3	6746.000	5.60	45.98	51.58	74.00	-22.42	peak	100	106	
4	7440.000	6.44	44.53	50.97	74.00	-23.03	peak			

Spurious Emissions, TX Mode, 18-26G

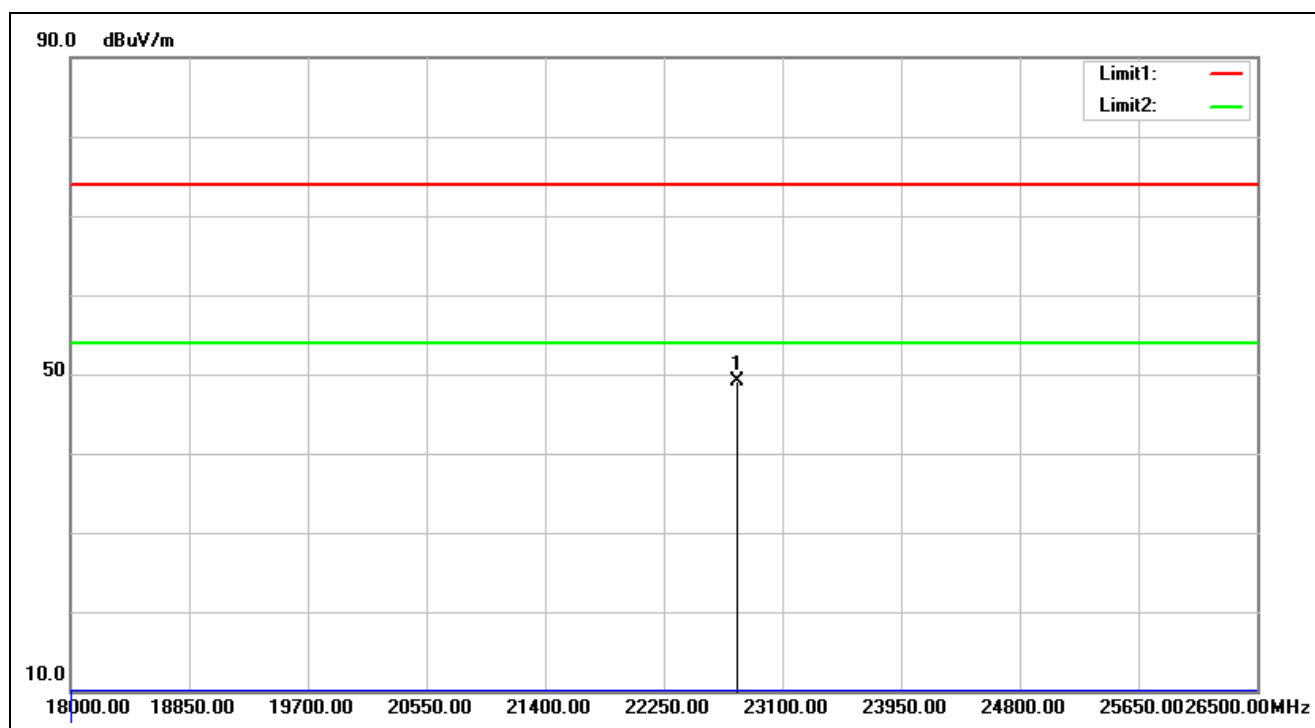


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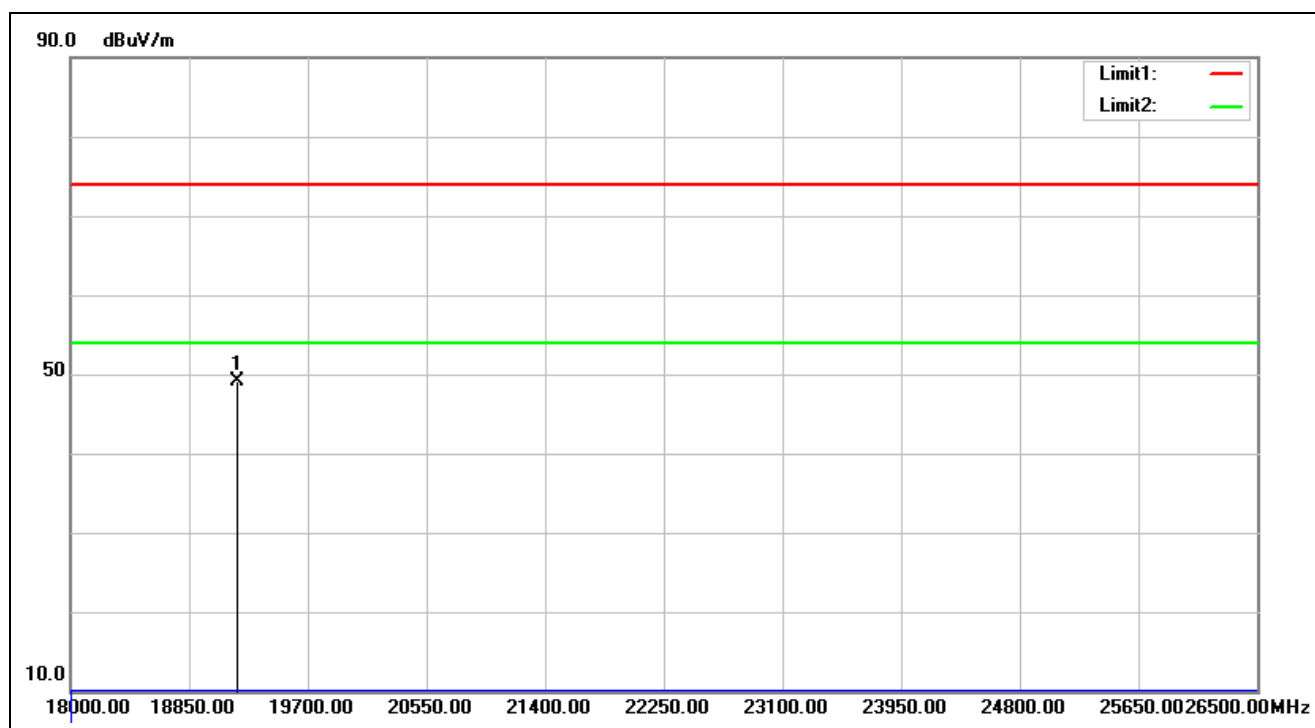
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Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/4/6 15:20:43
Applicant:	Avant	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	ACI810700S-BLE-MD+SHIELDING	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	25267.500	31.54	19.22	50.76	74.00	-23.24	peak		0	



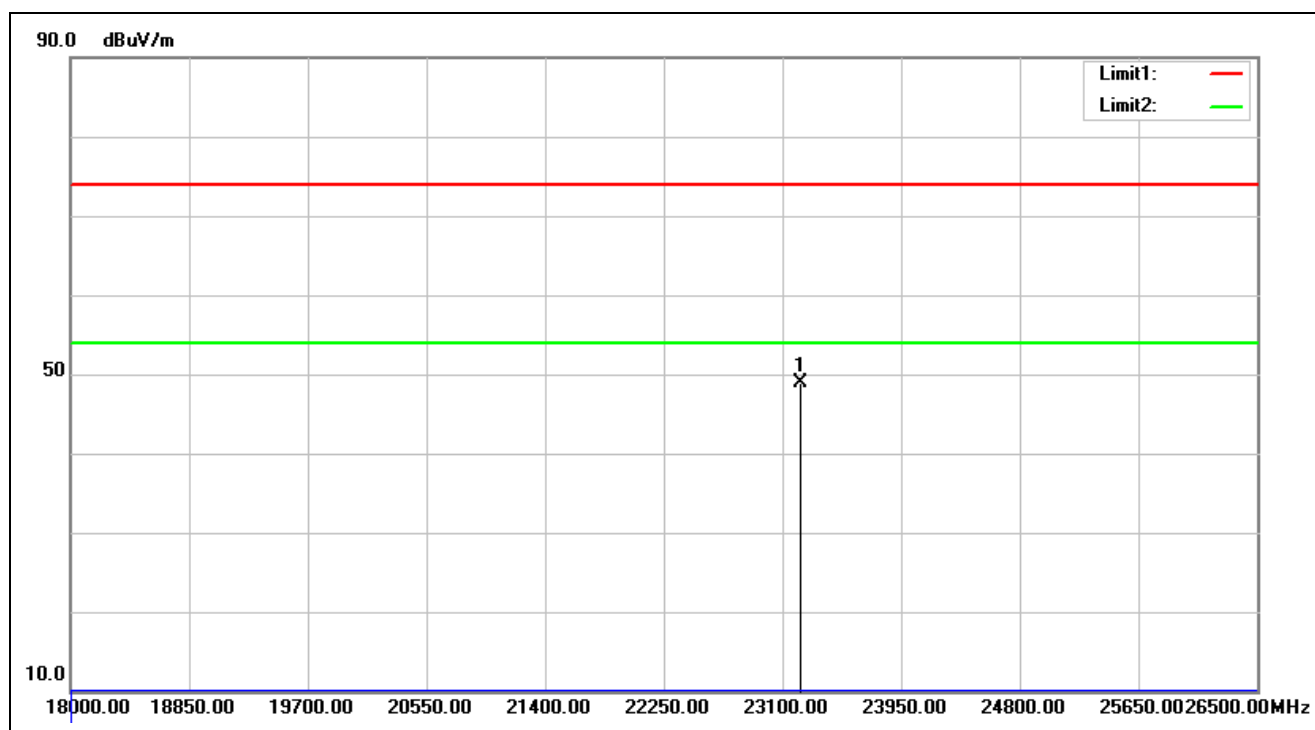
Service No.:	114048539-FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/4/6 15:20:58
Applicant:	Avant	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	ACI810700S-BLE-MD+SHIELDING	Test 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	22777.000	30.15	18.95	49.10	74.00	-24.90	peak			



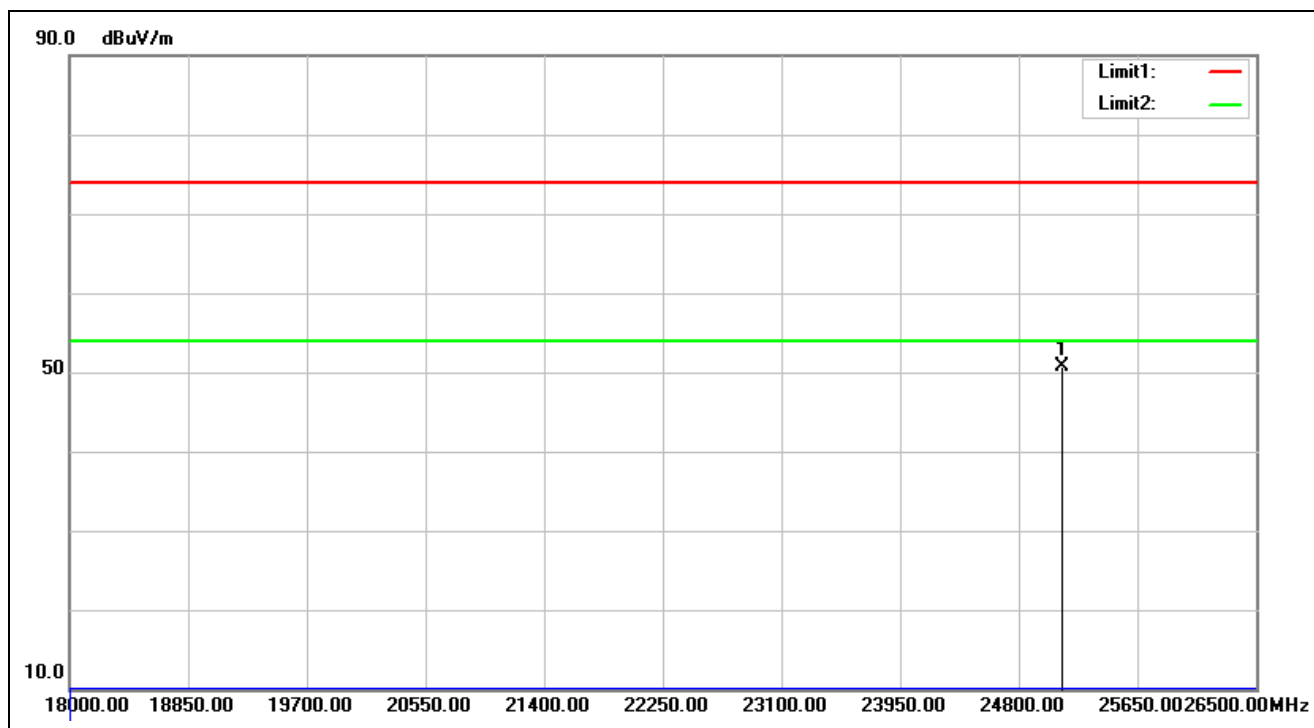
Service No.:	114048539-FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/4/6 15:21:17
Applicant:	Avant	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	ACI810700S-BLE-MD+SHIELDING	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	19198.500	29.48	19.54	49.02	74.00	-24.98	peak			



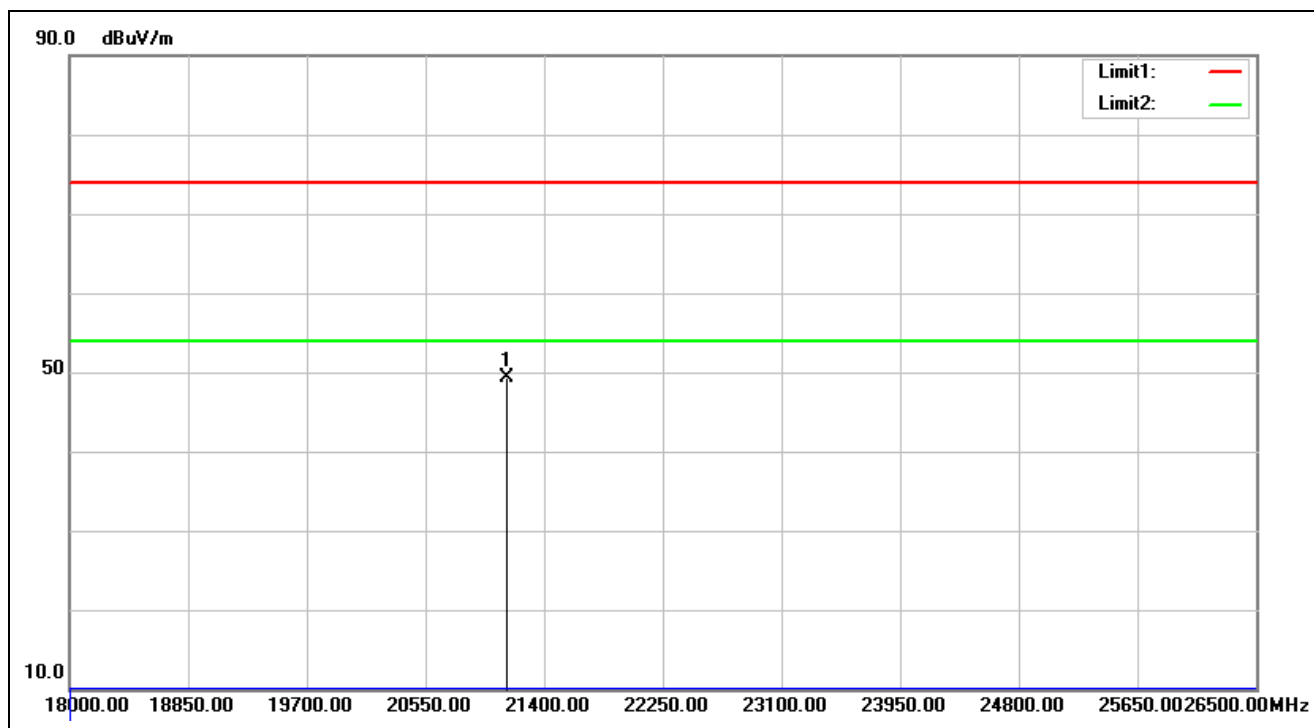
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Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/4/6 15:21:23
Applicant:	Avant	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	ACI810700S-BLE-MD+SHIELDING	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	23227.500	30.27	18.60	48.87	74.00	-25.13	peak			



Service No.:	114048539-FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/4/6 15:22:41
Applicant:	Avant	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	ACI810700S-BLE-MD+SHIELDING	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	25106.000	31.36	19.36	50.72	74.00	-23.28	peak	100	321	



Service No.:	114048539-FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/4/6 15:23:43
Applicant:	Avant	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	ACI810700S-BLE-MD+SHIELDING	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	21128.000	29.85	19.54	49.39	74.00	-24.61	peak	100	86	

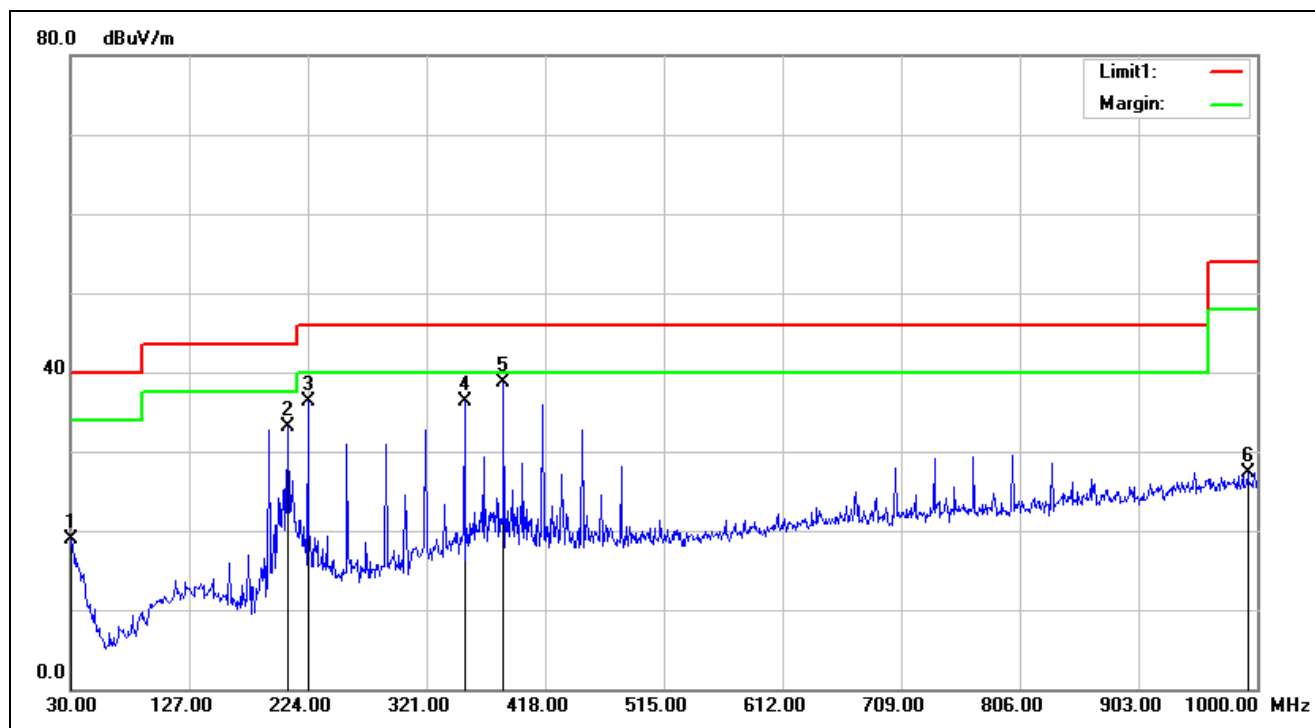
Spurious Emissions, TX Mode, 30M-1G



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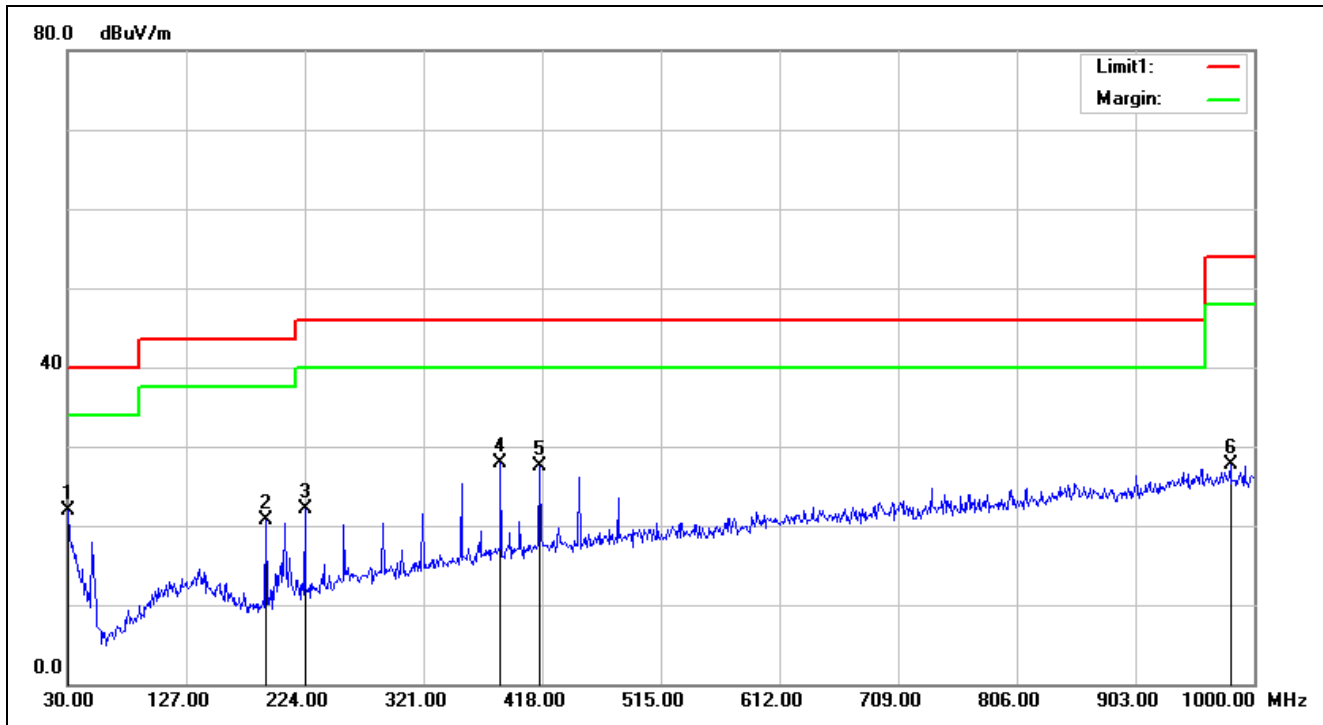
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Service No.:	114048539-FCC	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/4/6 15:32:39
Applicant:	Avant	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	ACI810700S-BLE-MD+SHIELDING	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	-5.85	24.66	18.81	40.00	-21.19	QP	100	48	
2	207.5100	-14.55	47.64	33.09	43.50	-10.41	QP	100	266	
3	224.0000	-13.97	50.19	36.22	46.00	-9.78	QP	100	115	
4	352.0400	-9.36	45.64	36.28	46.00	-9.72	QP	100	330	
5	384.0500	-8.90	47.63	38.73	46.00	-7.27	QP	100	333	
6	992.2400	-0.07	27.45	27.38	54.00	-26.62	QP	100	67	

Spurious Emissions, TX Mode, 30M-1G



Service No.:	114048539-FCC	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/4/6 15:33:42
Applicant:	Avant	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	ACI810700S-BLE-MD+SHIELDING	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	-5.85	27.80	21.95	40.00	-18.05	QP	100	81	
2	191.9900	-15.27	36.03	20.76	43.50	-22.74	QP	100	25	
3	224.0000	-13.97	36.00	22.03	46.00	-23.97	QP	100	187	
4	384.0500	-8.90	36.77	27.87	46.00	-18.13	QP	100	256	
5	416.0600	-8.47	35.95	27.48	46.00	-18.52	QP	100	115	
6	980.6000	-0.19	27.90	27.71	54.00	-26.29	QP	100	261	