Test Report No.50104503 001

Appendix D: Radiated and Mains Spurious Emission Data

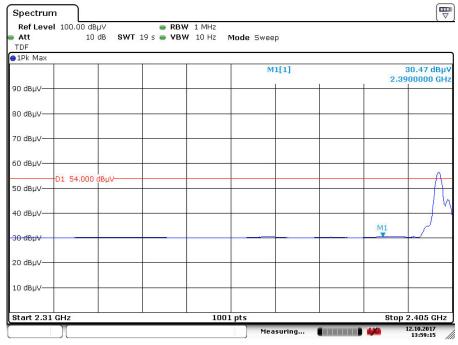
(File: 50104503 001AppendixD)

Contents

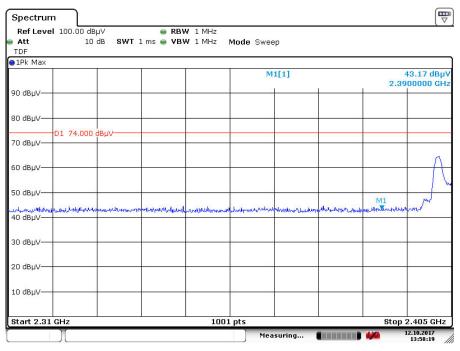
Spurious Emissions, Band Edges, 2.35-2.5G	2
Spurious Emissions, TX Mode, 1-18G	10
Spurious Emissions, TX Mode, 18G-26.5G	21
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Radiated Bandedge (GFSK)

Low Channel (Hor)

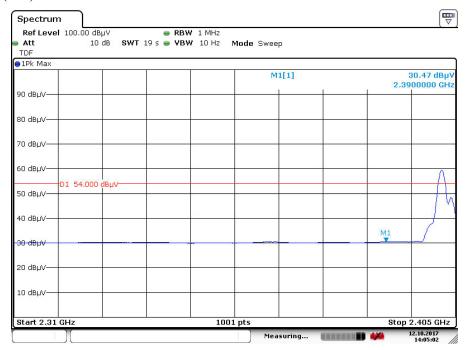


Date: 12.0CT.2017 13:59:15

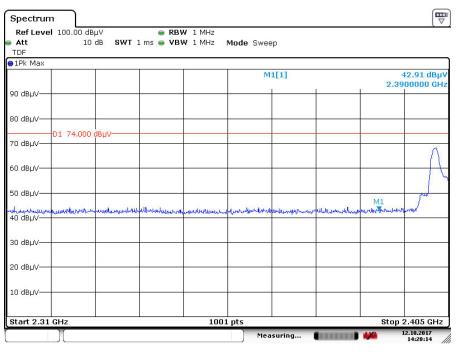


Date: 12.0CT.2017 13:58:19

Low Channel (Ver)



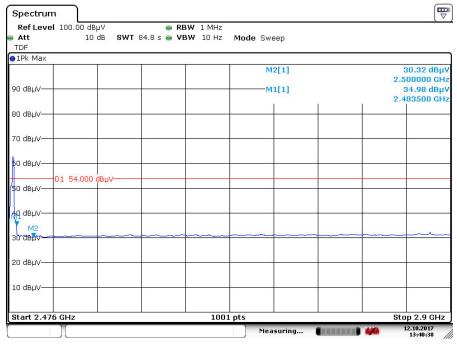
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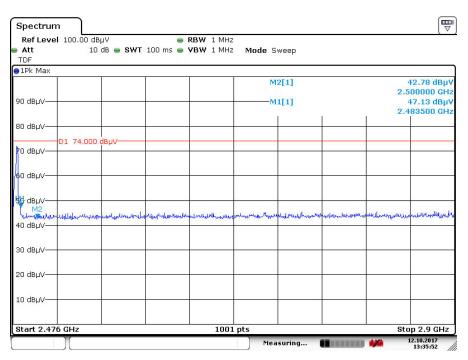
Date: 12.0CT.2017 14:20:14

Radiated Bandedge (GFSK)

High Channel (Hor)

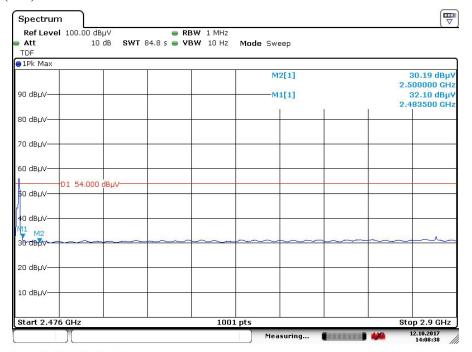


Date: 12.0CT.2017 13:40:38

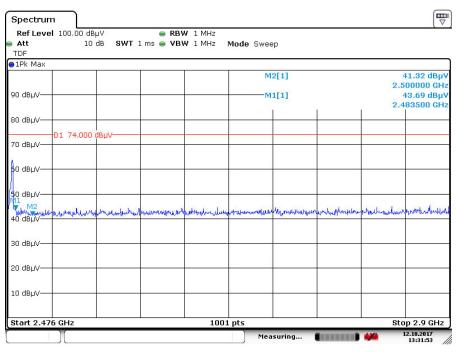


Date: 12.0CT.2017 13:35:51

Low Channel (Ver)



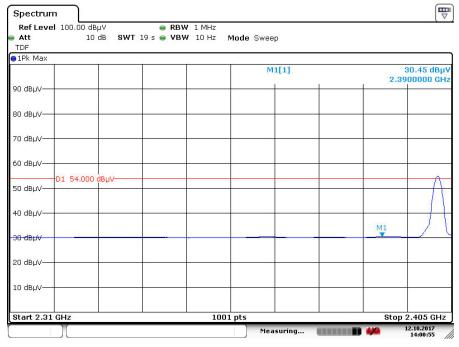
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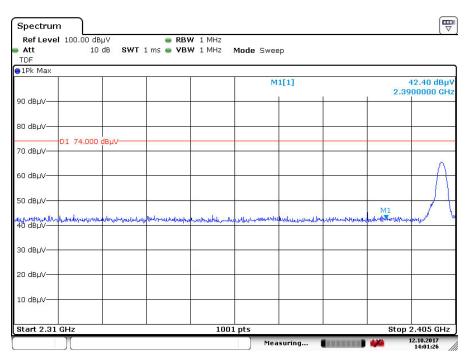
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Radiated Bandedge (8DPSK)

Low Channel (Hor)

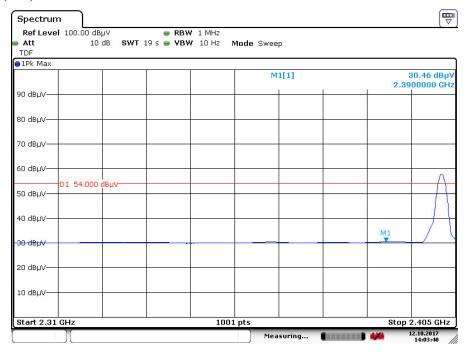


Date: 12.0CT.2017 14:00:55

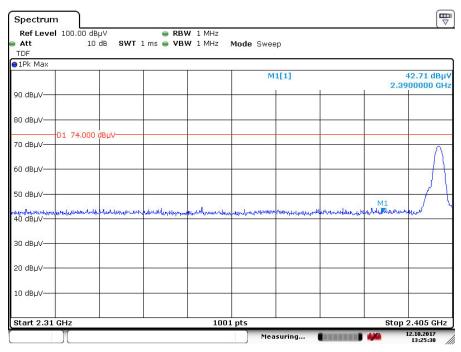


Date: 12.0CT.2017 14:01:26

Low Channel (Ver)



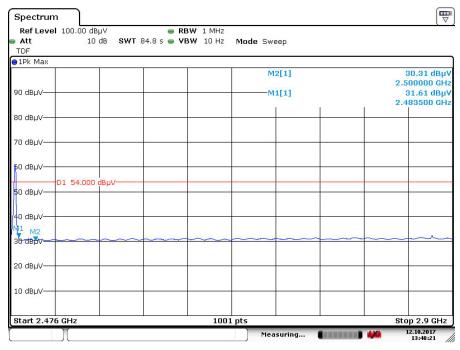
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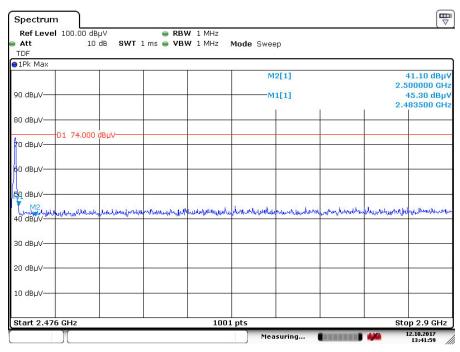
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Radiated Bandedge (8DPSK)

High Channel (Ver)

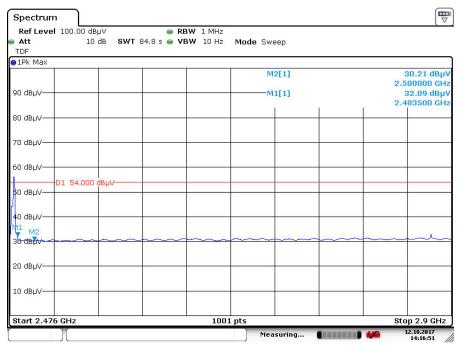


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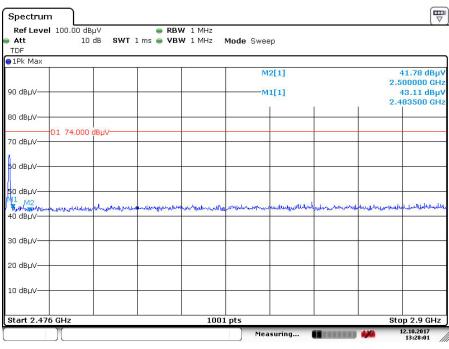


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High Channel (Ver)



Date: 12.0CT.2017 14:16:51



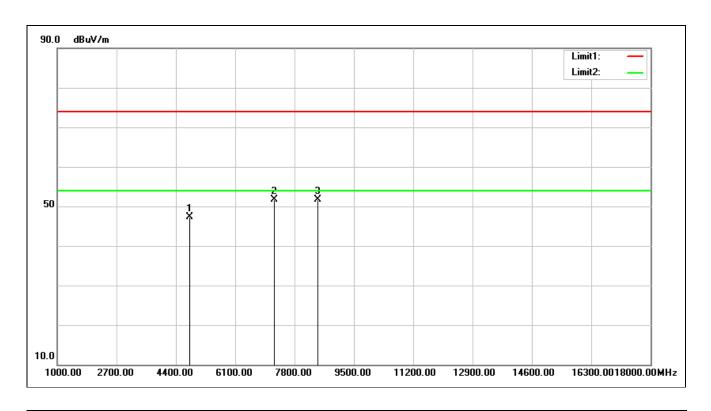
Date: 12.0CT.2017 13:28:01

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.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2017/10/12 14:33:59

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

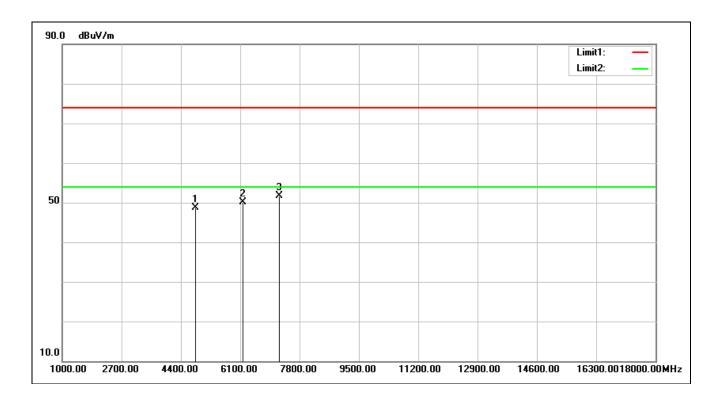
Test Mode: 1DH5-2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4804.000	-2.71	50.09	47.38	74.00	-26.62	peak	100	225	
2	7206.000	5.29	46.34	51.63	74.00	-22.37	peak	100	126	
3	8463.000	6.45	45.24	51.69	74.00	-22.31	peak	171	286	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2017/10/12 14:35:02

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

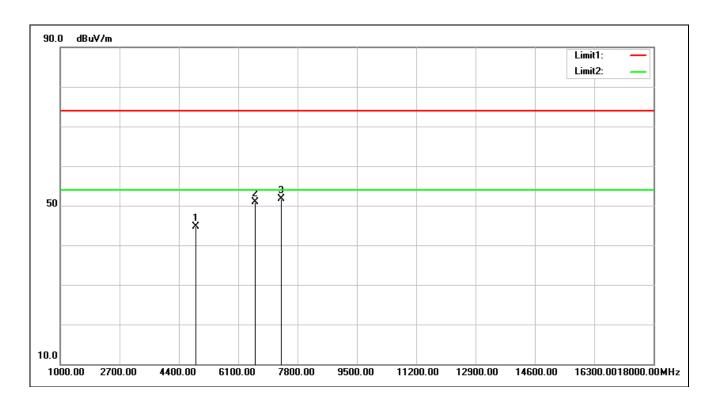
Test Mode: 1DH5-2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4804.000	-2.71	51.47	48.76	74.00	-25.24	peak	100	112	
2	6185.000	4.13	45.89	50.02	74.00	-23.98	peak	100	248	
3	7206.000	5.29	46.35	51.64	74.00	-22.36	peak	100	214	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2017/10/12 14:38:04

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

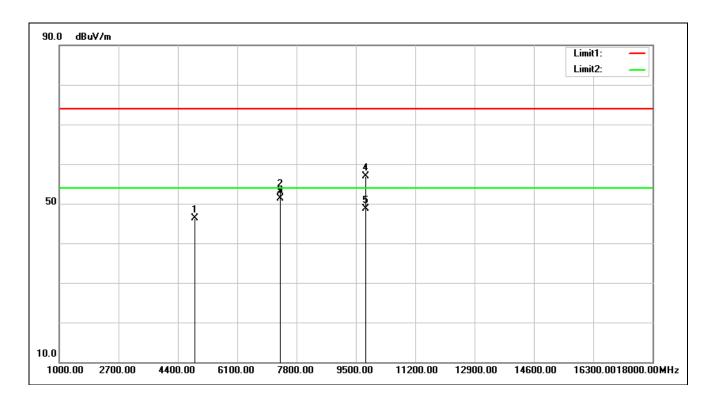
Test Mode: 1DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4882.000	-2.50	47.11	44.61	74.00	-29.39	peak	100	223	
2	6576.000	5.25	45.71	50.96	74.00	-23.04	peak	100	159	
3	7323.000	5.59	46.03	51.62	74.00	-22.38	peak	100	127	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2017/10/16 11:56:36

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

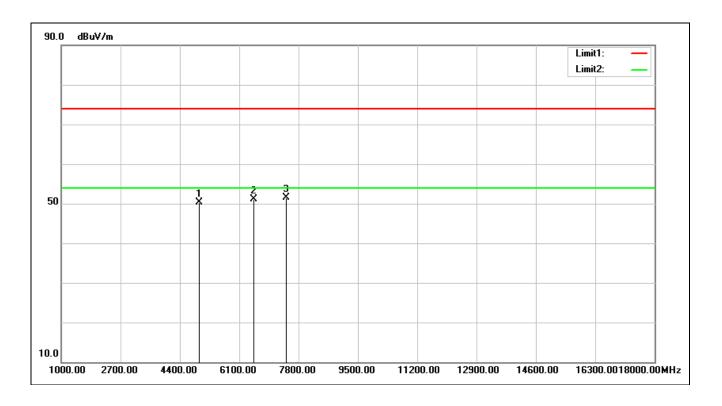
Test Mode: 1DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4882.000	-2.50	48.75	46.25	74.00	-27.75	peak	100	112	
2	7323.000	5.59	47.39	52.98	74.00	-21.02	peak	100	245	
3	7324.000	5.60	45.73	51.33	54.00	-2.67	AVG	100	343	
4	9772.000	6.11	50.76	56.87	74.00	-17.13	peak	100	161	
5	9772.000	6.11	42.62	48.73	54.00	-5.27	AVG	100	161	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2017/10/16 12:02:26

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp. ($^{\circ}$ C)/Hum. ($^{\circ}$): 23($^{\circ}$ C)/56%

Model No.: VS-18X Test Engineer: George Yang

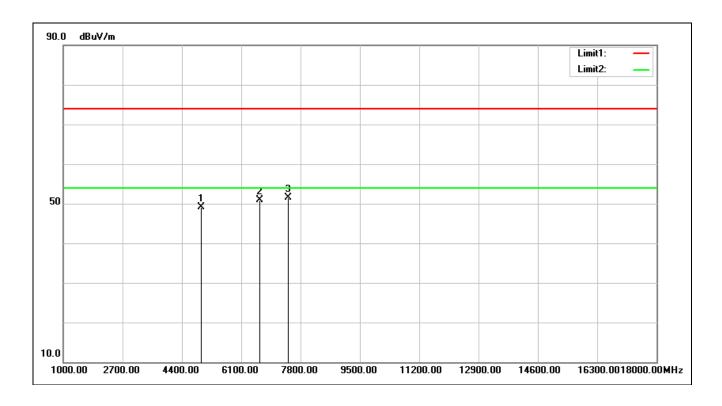
Test Mode: 1DH5-2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
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1	4960.000	-2.29	52.55	50.26	74.00	-23.74	peak	100	147	
2	6508.000	5.32	45.88	51.20	74.00	-22.80	peak	100	78	
3	7440.000	5.90	45.63	51.53	74.00	-22.47	peak	100	115	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2017/10/16 12:03:29

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

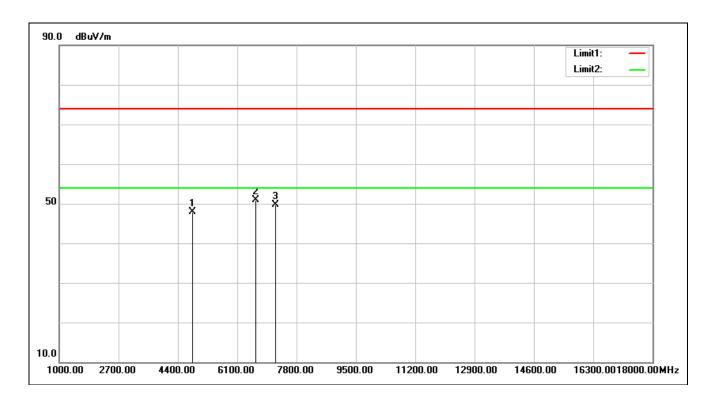
Test Mode: 1DH5-2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4960.000	-2.29	51.49	49.20	74.00	-24.80	peak	100	224	
2	6627.000	5.19	45.77	50.96	74.00	-23.04	peak	100	130	
3	7440.000	5.90	45.59	51.49	74.00	-22.51	peak	100	281	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2017/10/16 12:34:00

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

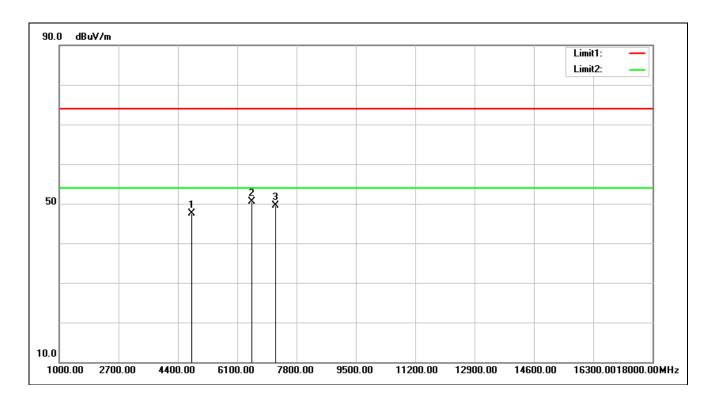
Test Mode: 3DH5-2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4804.000	-2.71	50.64	47.93	74.00	-26.07	peak	100	249	
2	6627.000	5.19	45.65	50.84	74.00	-23.16	peak	100	42	
3	7206.000	5.29	44.47	49.76	74.00	-24.24	peak	100	126	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2017/10/16 12:35:03

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

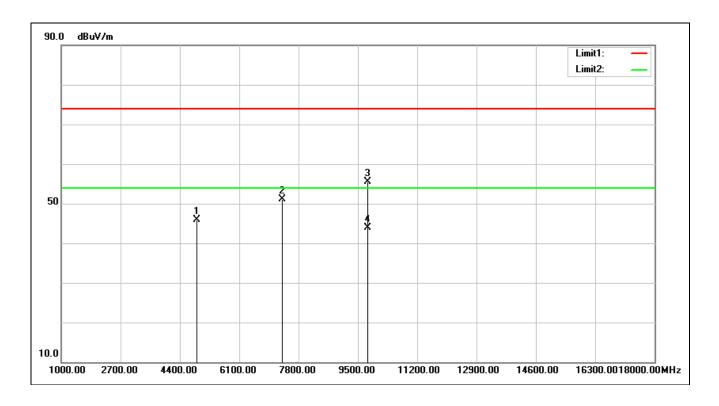
Test Mode: 3DH5-2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4804.000	-2.71	50.24	47.53	74.00	-26.47	peak	100	113	
2	6508.000	5.32	45.20	50.52	74.00	-23.48	peak	100	75	
3	7206.000	5.29	44.24	49.53	74.00	-24.47	peak	100	128	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2017/10/16 12:37:17

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

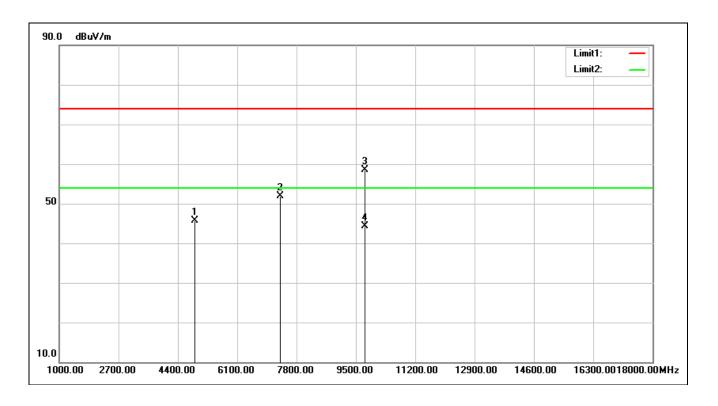
Test Mode: 3DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4882.000	-2.50	48.39	45.89	74.00	-28.11	peak	100	195	
2	7323.000	5.59	45.50	51.09	74.00	-22.91	peak	100	157	
3	9772.000	6.11	49.41	55.52	74.00	-18.48	peak	100	9	
4	9772.000	6.11	37.73	43.84	54.00	-10.16	AVG	100	9	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2017/10/16 12:38:20

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

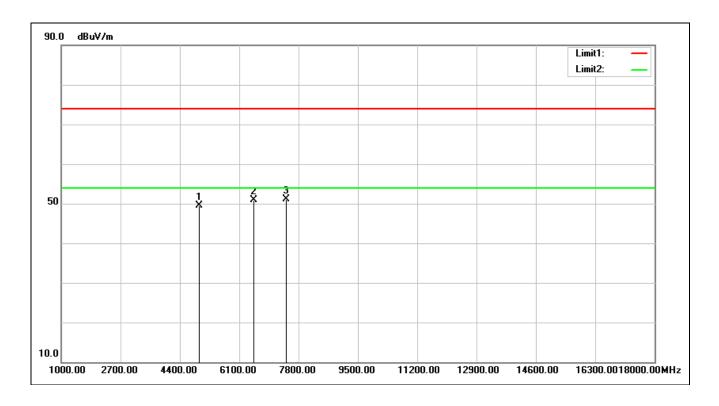
Test Mode: 3DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4882.000	-2.50	48.13	45.63	74.00	-28.37	peak	100	169	
2	7323.000	5.59	46.24	51.83	74.00	-22.17	peak	100	245	
3	9755.000	6.13	52.29	58.42	74.00	-15.58	peak	100	321	
4	9755.000	6.13	38.08	44.21	54.00	-9.79	AVG	100	321	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2017/10/16 12:44:34

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

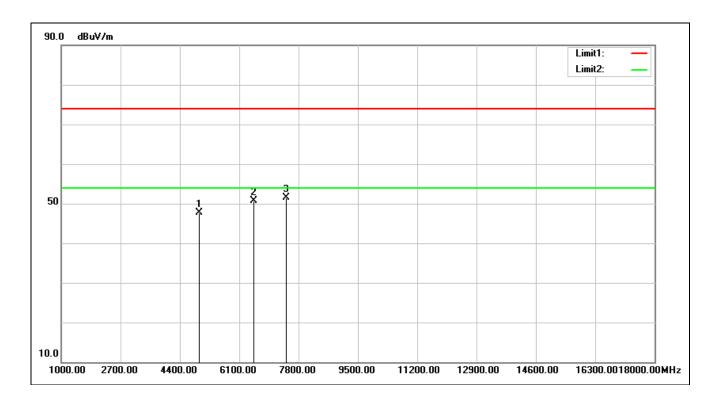
Test Mode: 3DH5-2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4960.000	-2.29	51.77	49.48	74.00	-24.52	peak	100	103	
2	6525.000	5.31	45.62	50.93	74.00	-23.07	peak	100	175	
3	7440.000	5.90	45.22	51.12	74.00	-22.88	peak	100	187	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2017/10/16 12:45:37

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

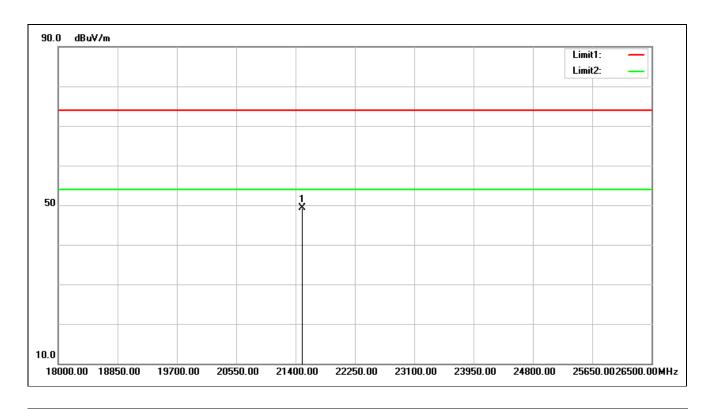
Test Mode: 3DH5-2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4960.000	-2.29	49.92	47.63	74.00	-26.37	peak	100	210	
2	6525.000	5.31	45.47	50.78	74.00	-23.22	peak	100	161	
3	7440.000	5.90	45.62	51.52	74.00	-22.48	peak	100	249	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2017/10/16 13:21:29

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.($^{\circ}$ C)/Hum.($^{\circ}$): 23($^{\circ}$ C)/56%

Model No.: VS-18X Test Engineer: George Yang

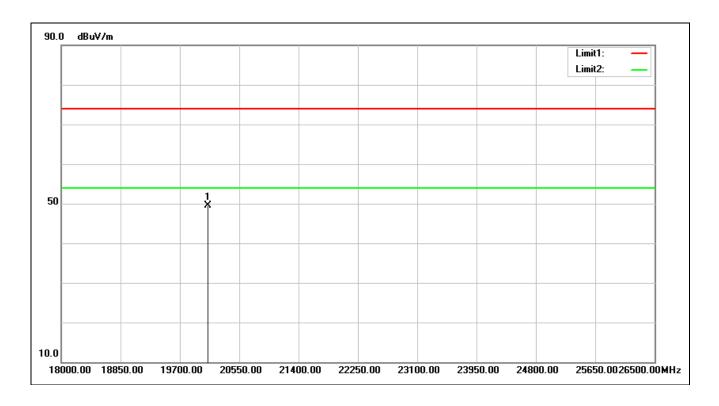
Test Mode: 1DH5-2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	21493.500	32.02	17.24	49.26	74.00	-24.74	peak	100	213	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2017/10/16 13:22:28

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

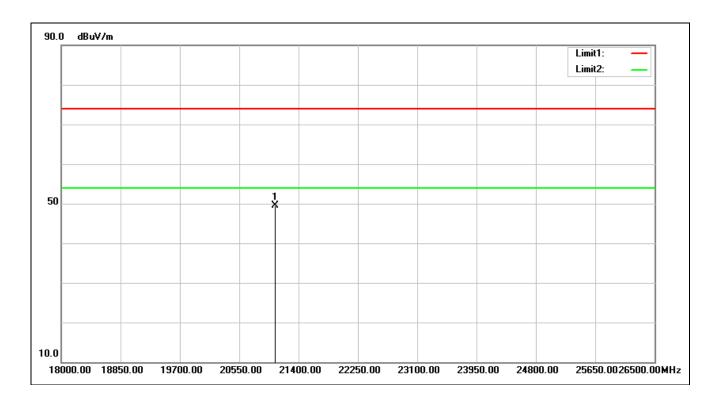
Test Mode: 1DH5-2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	20099.500	30.65	18.95	49.60	74.00	-24.40	peak	100	128	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2017/10/16 13:23:41

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

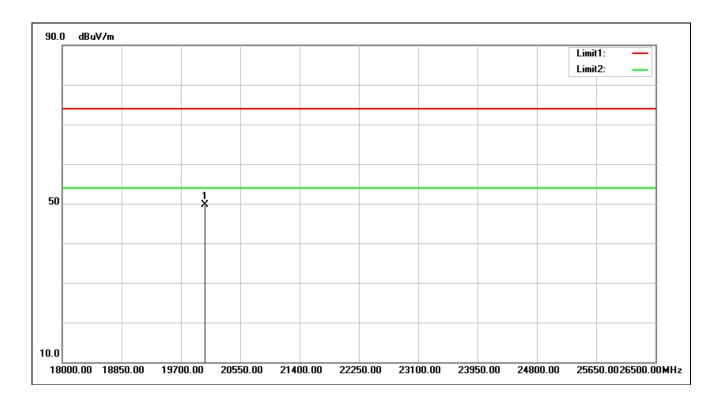
Test Mode: 1DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	21068.500	31.38	18.20	49.58	74.00	-24.42	peak	100	138	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2017/10/16 13:24:06

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

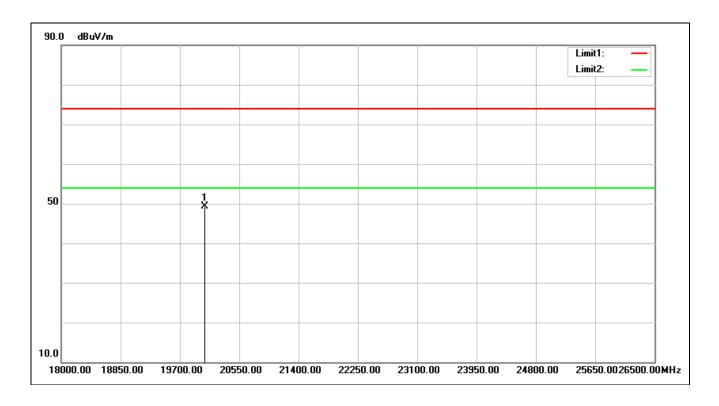
Test Mode: 1DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark	l
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)		l
1	20040.000	30.61	19.06	49.67	74.00	-24.33	peak	100	135		l



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2017/10/16 13:25:03

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

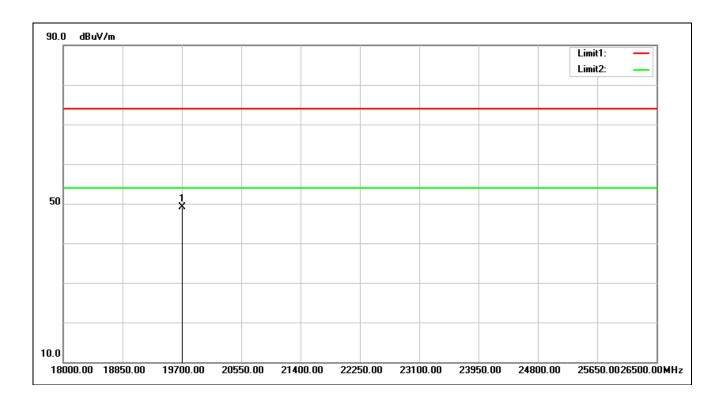
Test Mode: 1DH5-2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	20057.000	30.61	18.71	49.32	74.00	-24.68	peak	100	305	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2017/10/16 13:25:39

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

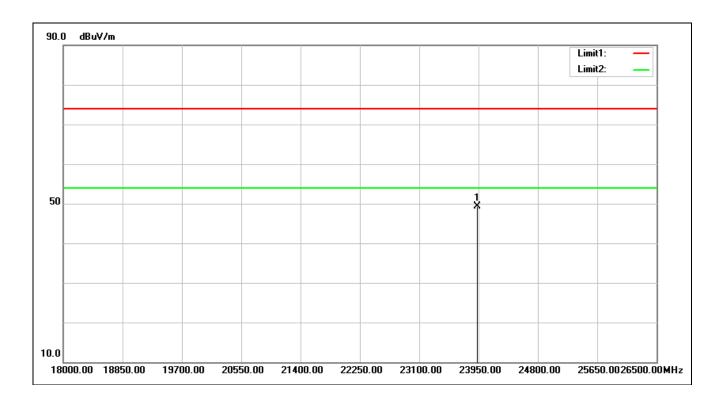
Test Mode: 1DH5-2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	19708.500	30.26	18.79	49.05	74.00	-24.95	peak	100	229	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2017/10/16 13:26:53

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

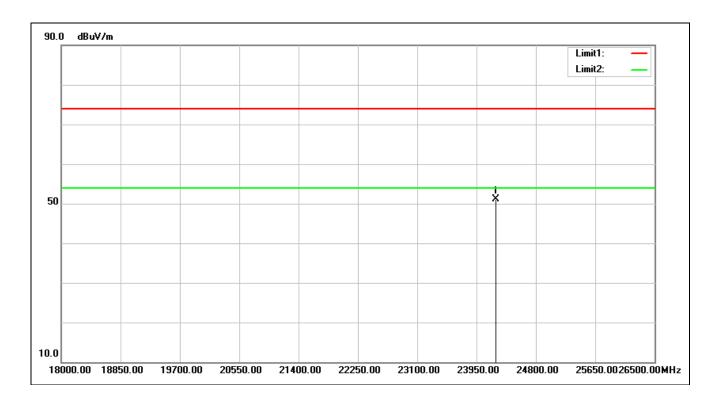
Test Mode: 3DH5-2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark	l
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)		l
1	23933.000	31.72	17.64	49.36	74.00	-24.64	peak	100	138		



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2017/10/16 13:27:14

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

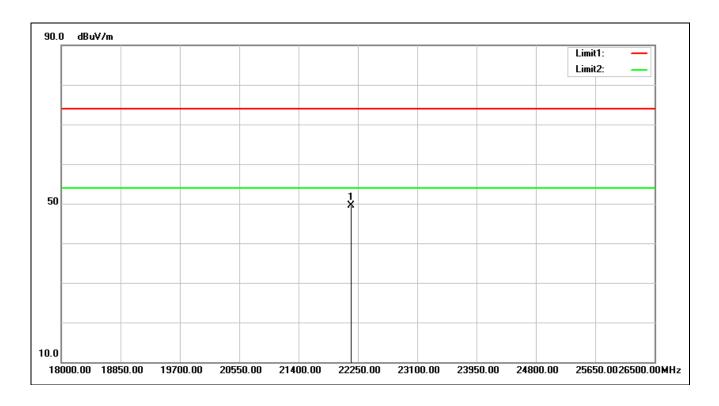
Test Mode: 3DH5-2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	24222.000	31.95	19.21	51.16	74.00	-22.84	peak	100	164	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2017/10/16 13:27:37

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

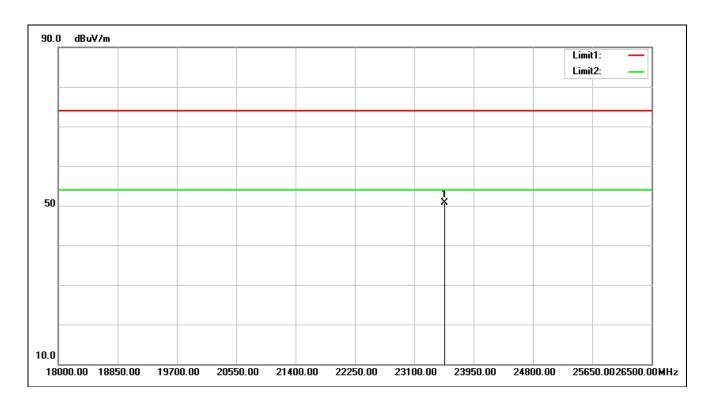
Test Mode: 3DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark	l
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)		l
1	22156.500	32.47	16.99	49.46	74.00	-24.54	peak	100	116		l



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2017/10/16 13:27:52

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

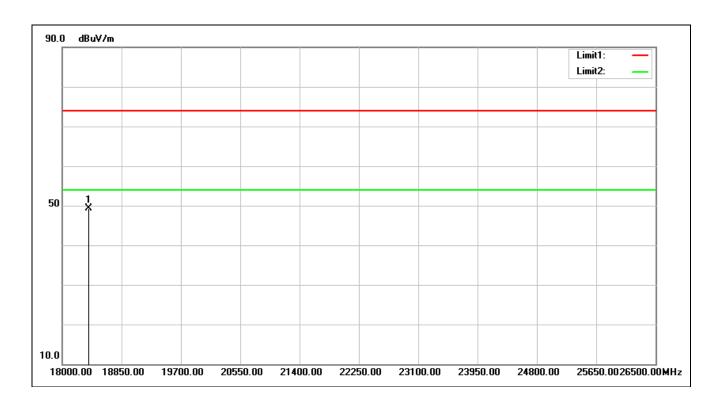
Test Mode: 3DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark	l
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)		l
1	23533.500	32.37	18.32	50.69	74.00	-23.31	peak	100	247		



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2017/10/16 13:28:15

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

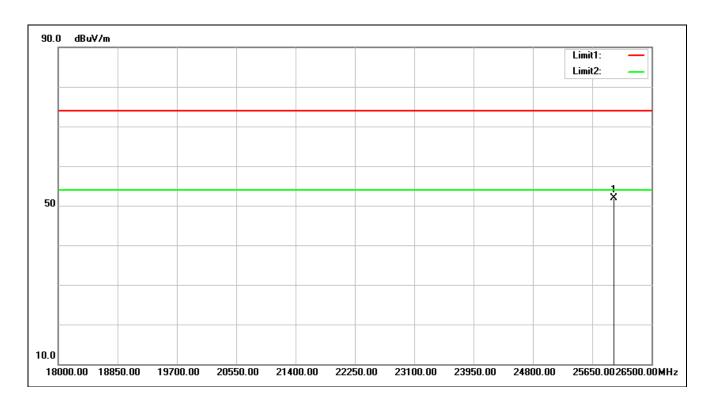
Test Mode: 3DH5-2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	18382.500	28.20	21.06	49.26	74.00	-24.74	peak	100	196	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2017/10/16 13:28:43

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

Test Mode: 3DH5-2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark	
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)		
1	25964.500	34.74	17.17	51.91	74.00	-22.09	peak	100	273		

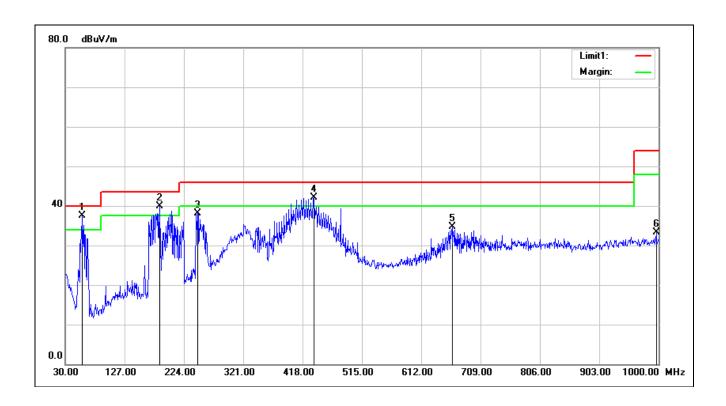
Spurious Emissions, TX Mode, 30M-1G



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Class B 3M Radiation Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2017/10/16 14:16:57

Applicant: VENCER Test Rating: DC 5V Product: Bluetooth Hi-Res Mini Amplifier Temp.($^{\circ}$ C)/Hum.($^{\circ}$ C): 23($^{\circ}$ C)/

Product: Bluetooth Hi-Res Mini Amplifier Temp.($^{\circ}$ C)/Hum.($^{\circ}$): 23($^{\circ}$ C)/56% Model No.: VS-18X Test Engineer: George Yang

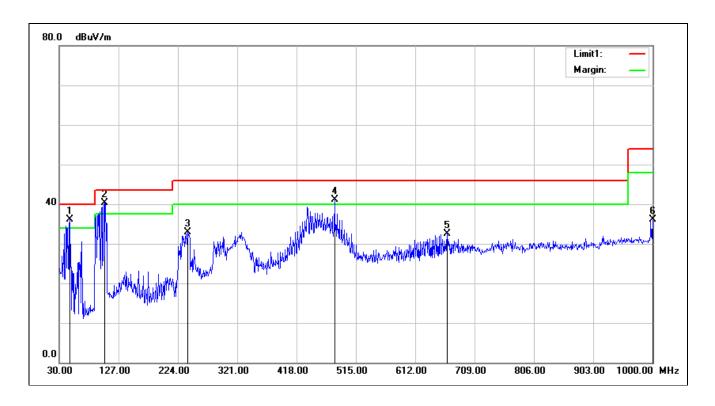
Test Mode: 1DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	58.1300	-13.33	50.91	37.58	40.00	-2.42	QP	100	291	
2	184.2298	-9.60	49.60	40.00	43.50	-3.50	QP	100	48	
3	246.3100	-6.16	44.32	38.16	46.00	-7.84	QP	100	248	
4	436.4300	-2.05	44.17	42.12	46.00	-3.88	QP	100	222	
5	662.4400	0.71	33.90	34.61	46.00	-11.39	QP	100	158	
6	996.1200	5.72	27.64	33.36	54.00	-20.64	QP	100	59	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Class B 3M Radiation Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2017/10/16 14:18:00

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

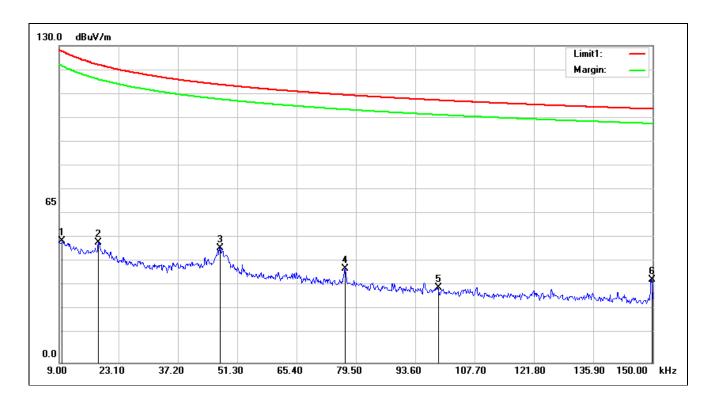
Test Mode: 1DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	47.4600	-10.07	46.12	36.05	40.00	-3.95	QP	100	285	
2	104.6900	-8.90	49.25	40.35	43.50	-3.15	QP	100	8	
3	239.5200	-6.85	39.82	32.97	46.00	-13.03	QP	100	160	
4	480.0800	-1.47	42.54	41.07	46.00	-4.93	QP	100	237	
5	664.3800	0.73	31.87	32.60	46.00	-13.40	QP	100	149	
6	1000.0000	5.73	30.33	36.06	54.00	-17.94	QP	100	184	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC2.8_9k-1G_3m Ant. Polarization:

Test item: Radiation Emission Test Time: 2017/10/16 13:58:32

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

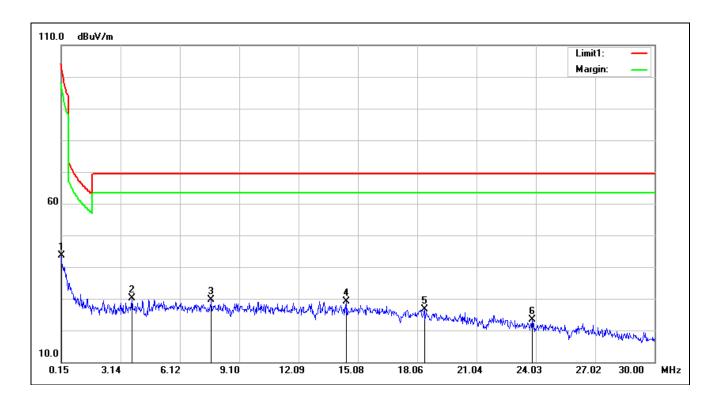
Test Mode: 1DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	0.0097	19.83	29.92	49.75	127.66	-77.91	QP	100	359	
2	0.0183	20.01	29.31	49.32	122.18	-72.86	QP	100	229	
3	0.0472	19.53	27.39	46.92	114.00	-67.08	QP	100	11	
4	0.0769	19.27	19.09	38.36	109.79	-71.43	QP	100	193	
5	0.0990	19.14	11.52	30.66	107.60	-76.94	QP	100	191	
6	0.1497	19.08	14.79	33.87	104.03	-70.16	QP	100	284	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC2.8_9k-1G_3m Ant. Polarization:

Test item: Radiation Emission Test Time: 2017/10/16 14:02:19

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

Test Mode: 1DH5-2441-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	0.1500	19.08	24.52	43.60	104.02	-60.42	QP	100	241	
2	3.7022	18.95	11.20	30.15	69.50	-39.35	QP	100	129	
3	7.7020	20.01	9.54	29.55	69.50	-39.95	QP	100	102	
4	14.5078	21.02	8.08	29.10	69.50	-40.40	QP	100	357	
5	18.4182	21.70	4.95	26.65	69.50	-42.85	QP	100	111	
6	23.8509	22.24	1.15	23.39	69.50	-46.11	QP	100	132	

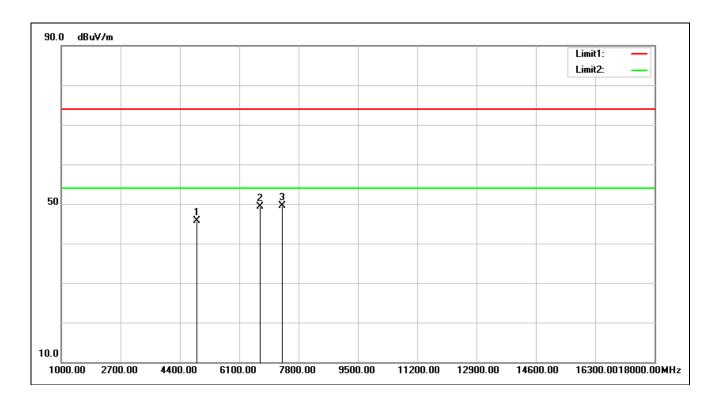
Spurious Emissions, RX Mode, 1G-18G



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2017/10/16 12:50:54

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

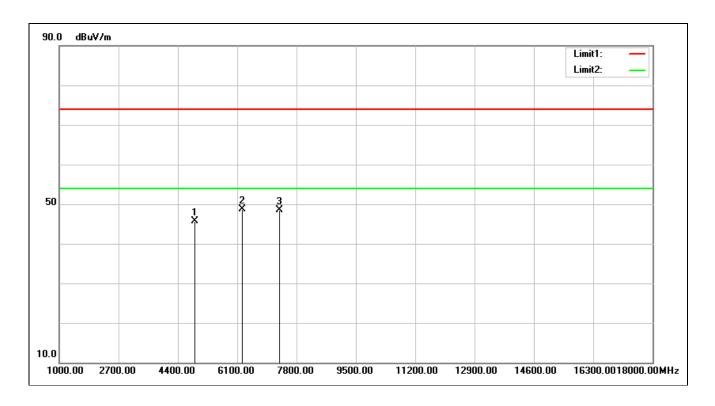
Test Mode: 1DH5-2441-RX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4882.000	-3.40	49.05	45.65	74.00	-28.35	peak	100	226	
2	6695.000	4.08	45.27	49.35	74.00	-24.65	peak	100	344	
3	7323.000	4.55	45.02	49.57	74.00	-24.43	peak	100	310	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2017/10/16 12:51:57

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

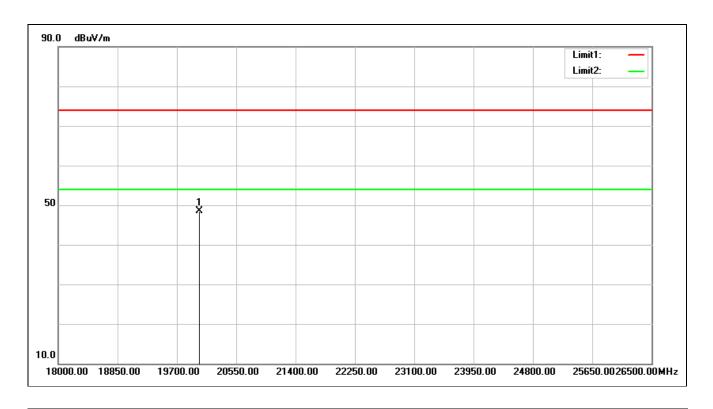
Test Mode: 1DH5-2441-RX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4883.000	-3.40	49.02	45.62	74.00	-28.38	peak	100	221	
2	6253.000	3.35	45.43	48.78	74.00	-25.22	peak	100	337	
3	7323.000	4.55	43.88	48.43	74.00	-25.57	peak	100	139	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2017/10/16 13:29:14

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

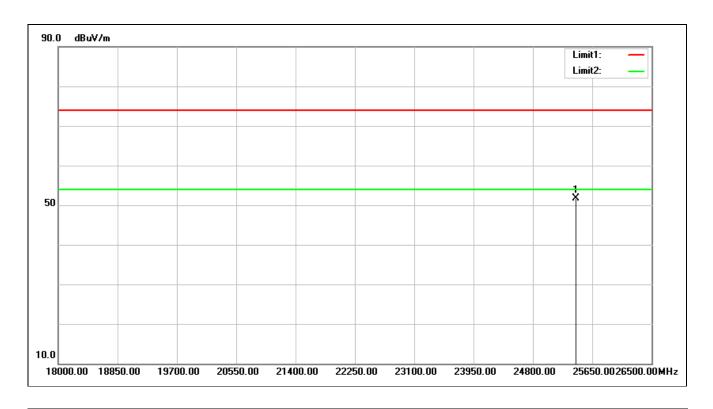
Test Mode: 1DH5-2441-RX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	20023.000	30.59	17.93	48.52	74.00	-25.48	peak	100	214	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2017/10/16 13:29:36

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

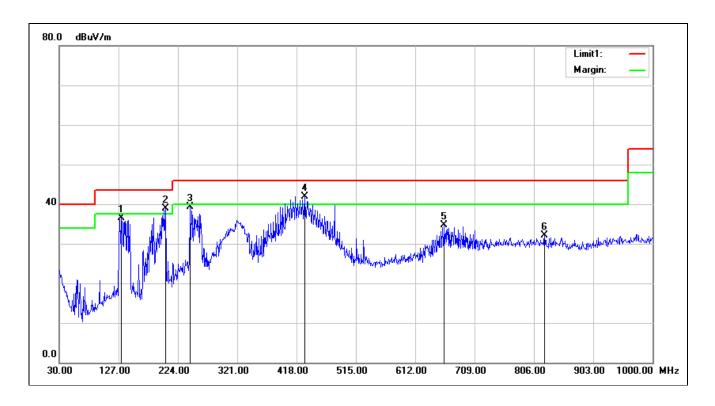
Test Mode: 1DH5-2441-RX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	25412.000	34.19	17.60	51.79	74.00	-22.21	peak	100	24	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Class B 3M Radiation Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2017/10/16 14:21:27

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp. ($^{\circ}$ C)/Hum. ($^{\circ}$ C): 23($^{\circ}$ C)/56%

Model No.: VS-18X Test Engineer: George Yang

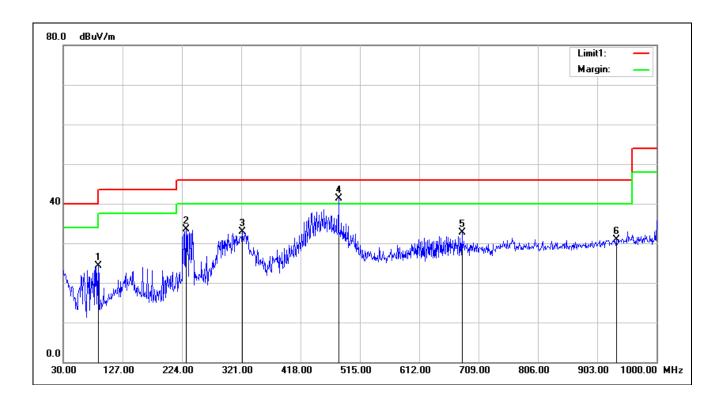
Test Mode: 1DH5-2441-RX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	130.8799	-7.16	43.64	36.48	43.50	-7.02	QP	100	115	
2	203.6299	-8.76	47.67	38.91	43.50	-4.59	QP	100	96	
3	244.3700	-6.36	45.66	39.30	46.00	-6.70	QP	100	216	
4	431.5799	-2.09	44.07	41.98	46.00	-4.02	QP	100	218	
5	659.5299	0.67	34.02	34.69	46.00	-11.31	QP	100	157	
6	823.4600	3.22	28.97	32.19	46.00	-13.81	QP	100	224	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC Class B 3M Radiation Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2017/10/16 14:22:31

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

Test Mode: 1DH5-2441-RX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	87.2300	-11.26	35.60	24.34	40.00	-15.66	QP	100	72	
2	230.7899	-7.50	40.97	33.47	46.00	-12.53	QP	100	343	
3	322.9399	-4.00	36.89	32.89	46.00	-13.11	QP	100	218	
4	480.0799	-1.47	42.68	41.21	46.00	-4.79	QP	100	227	
5	681.8400	1.01	31.78	32.79	46.00	-13.21	QP	100	149	
6	934.0399	5.04	25.91	30.95	46.00	-15.05	QP	100	30	

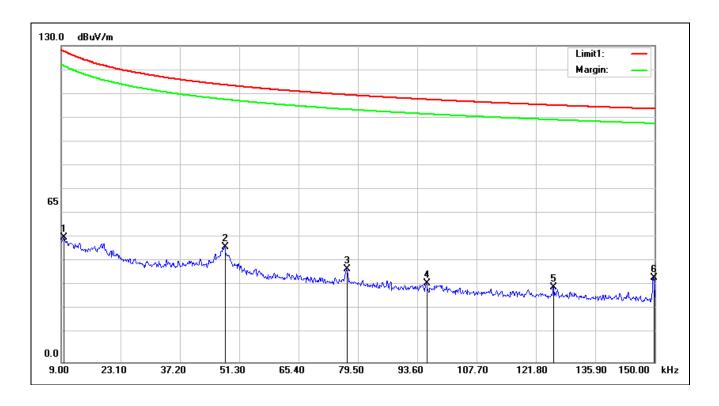
Spurious Emissions, RX Mode, 9K-30M



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC2.8_9k-1G_3m Ant. Polarization:

Test item: Radiation Emission Test Time: 2017/10/16 14:00:42

Applicant: VENCER Test Rating: DC 5V Product: Bluetooth Hi-Res Mini Amplifier Temp.($^{\circ}$)/Hum.($^{\circ}$): 23($^{\circ}$)/56%

Model No.: VS-18X Test Engineer: George Yang

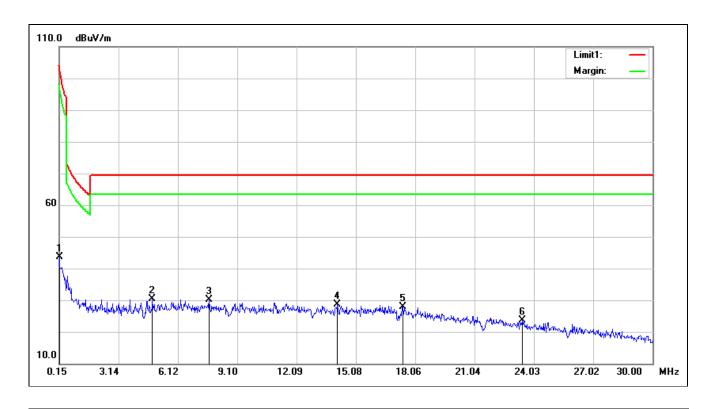
Test Mode: 1DH5-2441-RX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	0.0097	19.83	31.51	51.34	127.66	-76.32	QP	100	249	
2	0.0478	19.51	27.70	47.21	113.89	-66.68	QP	100	13	
3	0.0768	19.27	18.81	38.08	109.80	-71.72	QP	100	206	
4	0.0957	19.16	13.26	32.42	107.90	-75.48	QP	100	153	
5	0.1259	19.10	11.59	30.69	105.53	-74.84	QP	100	120	
6	0.1497	19.08	15.47	34.55	104.03	-69.48	QP	100	319	



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Service No.: 114067333 Test Distance: 3m

Test Standard: FCC2.8_9k-1G_3m Ant. Polarization:

Test item: Radiation Emission Test Time: 2017/10/16 14:07:45

Applicant: VENCER Test Rating: DC 5V

Product: Bluetooth Hi-Res Mini Amplifier Temp.(°C)/Hum.(%): 23(°C)/56%

Model No.: VS-18X Test Engineer: George Yang

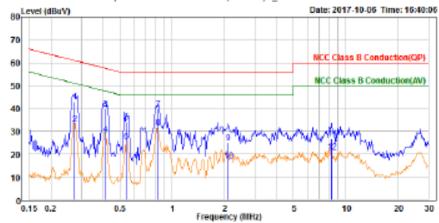
Test Mode: 1DH5-2441-RX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	0.1500	19.08	24.54	43.62	104.05	-60.43	QP	100	142	
2	4.8365	19.66	10.73	30.39	69.50	-39.11	QP	100	19	
3	7.6722	20.00	10.19	30.19	69.50	-39.31	QP	100	160	
4	14.1496	20.96	7.62	28.58	69.50	-40.92	QP	100	223	
5	17.4332	21.53	6.44	27.97	69.50	-41.53	QP	100	235	
6	23.4330	22.22	1.50	23.72	69.50	-45.78	QP	100	140	

Mains Spurious Emissions







Trace: 1

Site : Conduction room

Condition : NCC Class B Conduction(QP) line1

Test Engineer: George Yang

Applicant : Vencer

Product : Bluetooth Hi-Res Mini Amplifier

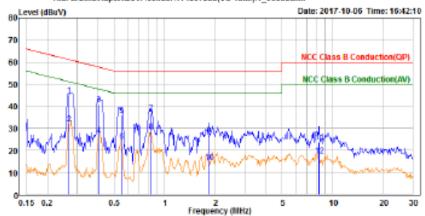
Model No. : VS-18xx Test Rating : 110Vac/60Hz Tmp/Hum : 23.1℃ / 42%

Memo : Mains

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	₫B	
1	0.275	33.32	9.66	42.98	60.96	-17.98	QP
2	0.275	23.36	9.66	33.02	50.96	-17.94	Average
3	0.413	30.09	9.66	39.75	57.58	-17.83	QP
4	0.413	18.81	9.66	28.47	47.58	-19.11	Average
5	0.541	24.53	9.66	34.19	56.00	-21.81	QP
6	0.541	15.76	9.66	25.42	46.00	-20.58	Average
7	0.829	30.29	9.66	39.95	56.00	-16.05	QP
8	0.829	22.84	9.66	31.70	46.00	-14.30	Average
9	2.111	15.12	9.69	24.81	56.00	-31.19	QP
10	2.111	7.20	9.69	16.89	46.00	-29.11	Average
11	8.322	16.85	9.77	26.62	60.00	-33.38	QP
12	8.322	11.34	9.77	21.11	50.00	-28.89	Average







Trace: 1

Site : Conduction room

Condition : NCC Class B Conduction(QP) neutral

Test Engineer: George Yang Applicant : Vencer

Product : Bluetooth Hi-Res Mini Amplifier

Model No. : VS-18xx Test Rating : 110Vac/60Hz Tmp/Hum : 23.1℃ / 42%

Memo : Mains

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	₫B	
1	0.270	35.45	9.67	45.12	61.13	-16.01	QP
2	0.270	22.27	9.67	31.94	51.13	-19.19	Average
3	0.405	31.18	9.66	40.84	57.74	-16.90	QP
4	0.405	17.15	9.66	26.81	47.74	-20.93	Average
5	0.552	26.16	9.66	35.82	56.00	-20.18	QP
6	0.552	14.41	9.66	24.07	46.00	-21.93	Average
7	0.829	27.13	9.67	36.80	56.00	-19.20	QP
8	0.829	19.07	9.67	28.74	46.00	-17.26	Average
9	1.837	17.85	9.70	26.75	56.00	-29.25	QP
10	1.837	4.96	9.70	14.66	46.00	-31.34	Average
11	8.322	14.01	9.79	23.80	60.00	-36.20	QP
12	8.322	7.88	9.79	17.67	50.00	-32.33	Average