

Appendix A

Report No.:	CISRR240416095
FCC ID:	2BDNH-X-20
Product Name:	Helmet earphones
Model No.:	X-20
Test Engineer:	Lucas Huang
Supervised by:	Rory Huang

1) Conducted Peak Output Power

Test Result

Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
GFSK	LE	0	1.556	1.43	30	PASS
		19	0.871	1.22		PASS
		39	0.810	1.21		PASS

2) 99% Bandwidth

Test Result

Mode	Channel	99% BW (MHz)
LE	0	1.0310
LE	19	1.0300
LE	39	1.0320

Test Graphs

LE_Channel 0

LE_Channel 19

LE_Channel 39

3) 6dB Bandwidth

Test Result

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
LE	0	2402	0.6600	0.5	PASS
	19	2440	0.6600		PASS
	39	2480	0.6600		PASS

Test Graphs

LE_Channel 0

LE_Channel 19

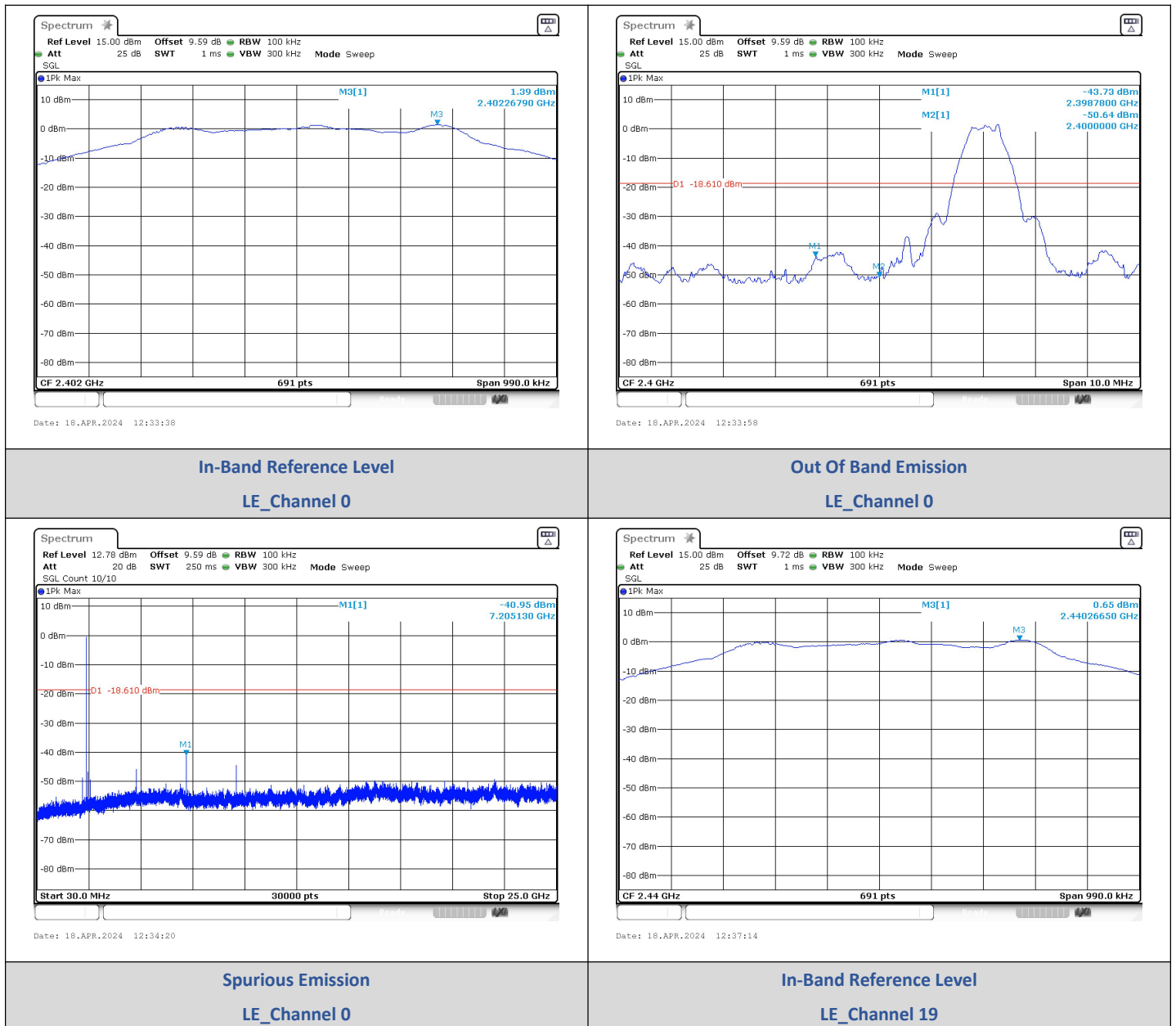
LE_Channel 39

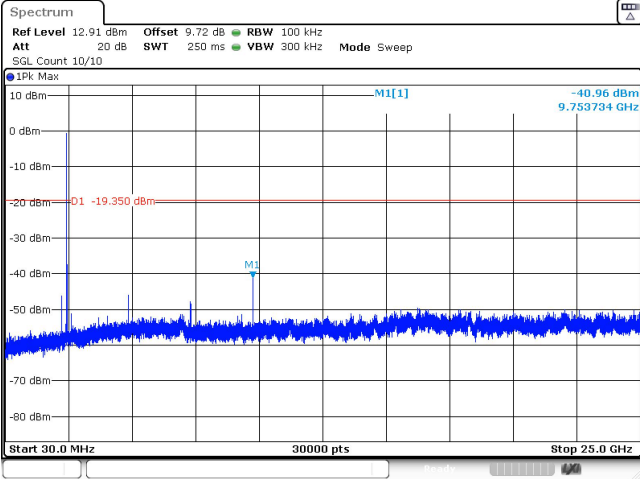
4) Conducted Out Of Band Emission

Test Result

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
LE	0	2400.00	-50.637	-18.61	-32.027	PASS
		2398.78	-43.733	-18.61	-25.123	PASS
		7205.10	-40.946	-18.61	-22.336	PASS
	19	9753.73	-40.963	-19.35	-21.613	PASS
	39	2483.50	-47.939	-19.43	-28.509	PASS
		9914.37	-39.601	-19.43	-20.171	PASS

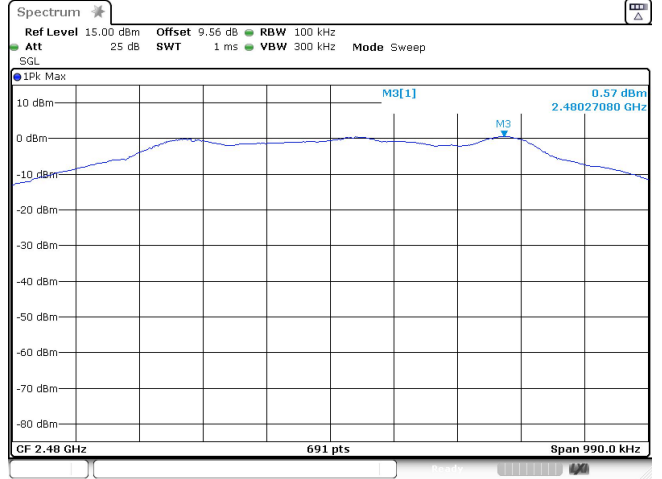
Test Graphs





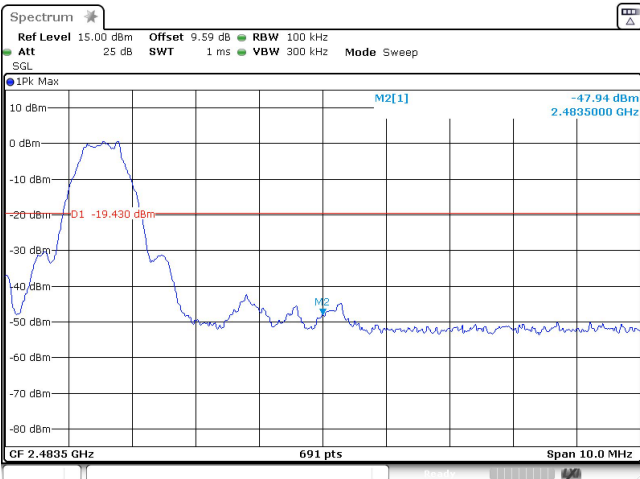
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Spurious Emissions
LE_Channel 19



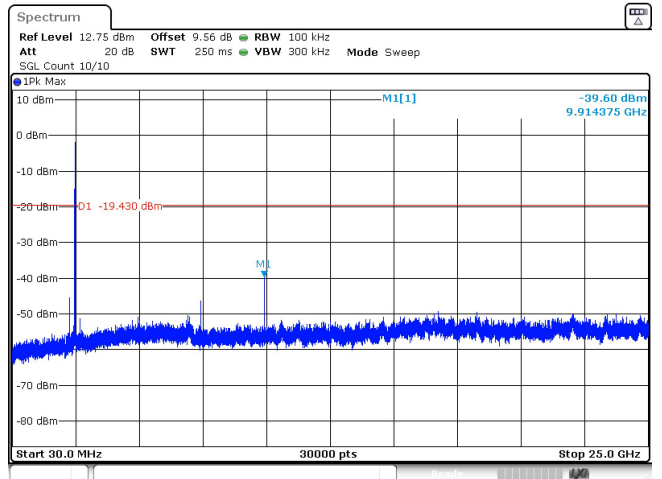
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In-Band Reference Level
LE_Channel 39



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Out Of Band Emission
LE_Channel 39



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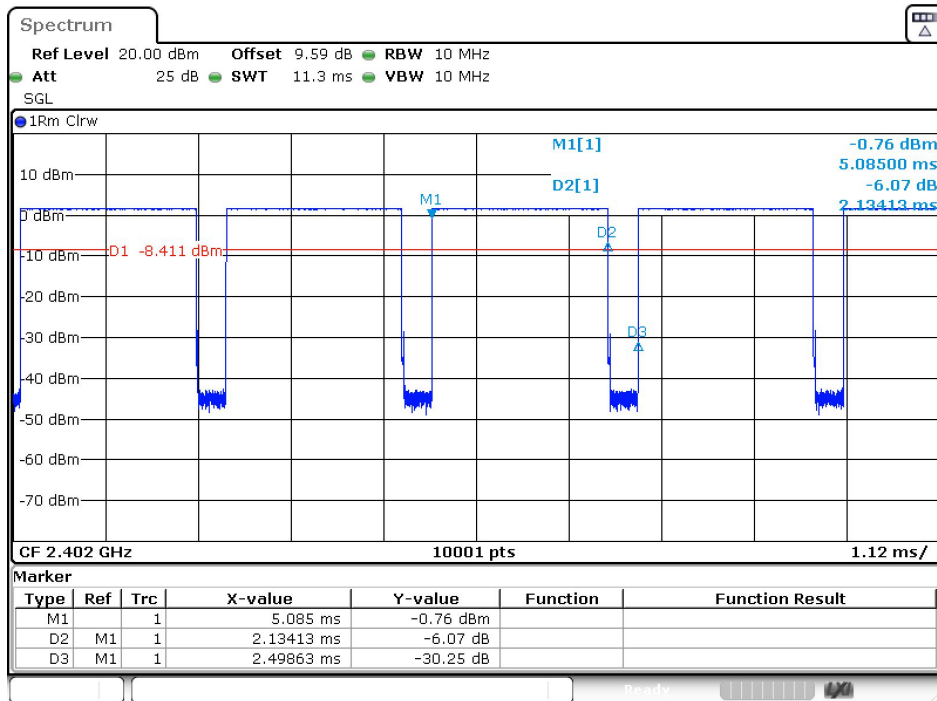
Spurious Emission
LE_Channel 39

5) Duty Cycle

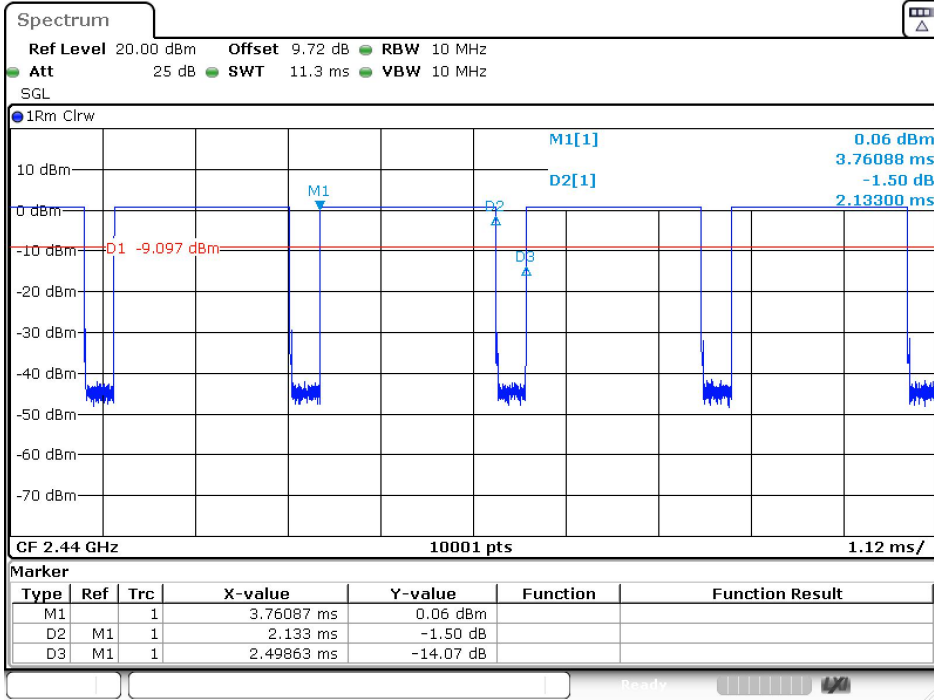
Test Result

Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
LE	0	2.134	2.499	85.41	0.8541	0.6849	0.47
	19	2.133	2.499	85.37	0.8537	0.6869	0.47
	39	2.133	2.499	85.37	0.8537	0.6869	0.47

Test Graphs

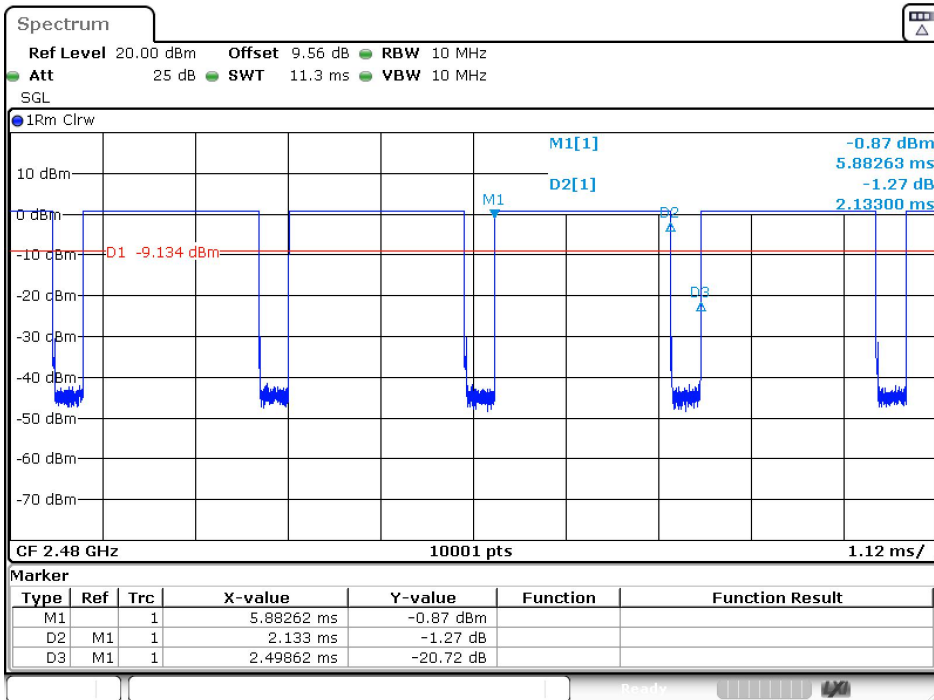


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LE



Date: 18.APR.2024 12:42:38

LE

6) Power Spectral Density

Test Result

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
LE	0	-14.828	8	PASS
LE	19	-15.537	8	PASS
LE	39	-15.584	8	PASS

Test Graphs

