SPURIOUS CONDUCTED EMISSIONS

XMit 2019.05.15

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Generator - Signal	Agilent	E4422B	TGQ	15-Mar-18	15-Mar-21
Block - DC	Fairview Microwave	SD3379	AMI	7-Sep-18	7-Sep-19
Attenuator	S.M. Electronics	SA26B-20	RFW	13-Feb-19	13-Feb-20
Cable	ESM Cable Corp.	TTBJ141 KMKM-72	MNO	7-Jun-19	7-Jun-20
Analyzer - Spectrum Analyzer	Keysight	N9010A (EXA)	AFQ	13-Dec-18	13-Dec-19

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The spurious RF conducted emissions were measured with the EUT set to low, medium and high transmit frequencies. The EUT was transmitting at the data rate(s) listed in the datasheet. For each transmit frequency, the spectrum was scanned throughout the specified frequency range.

SPURIOUS CONDUCTED EMISSIONS

TbtTx 2018.09.13 XMit 2019.05.15

EUT:	Remote Microphone			**Work Order:**	NUAH0001
Serial Number:	EP3.7			**Date:**	9-Jul-19
Customer:	Nuance Hearing			**Temperature:**	21.5 °C
Attendees:	Charlie Esch			**Humidity:**	57.6% RH
Project:	None			**Barometric Pres.:**	1014 mbar
Tested by:	Andrew Rogstad	**Power:**	4.8 VDC	**Job Site:**	MN08

TEST SPECIFICATIONS	Test Method
FCC 15.247:2019	ANSI C63.10:2013

COMMENTS

None

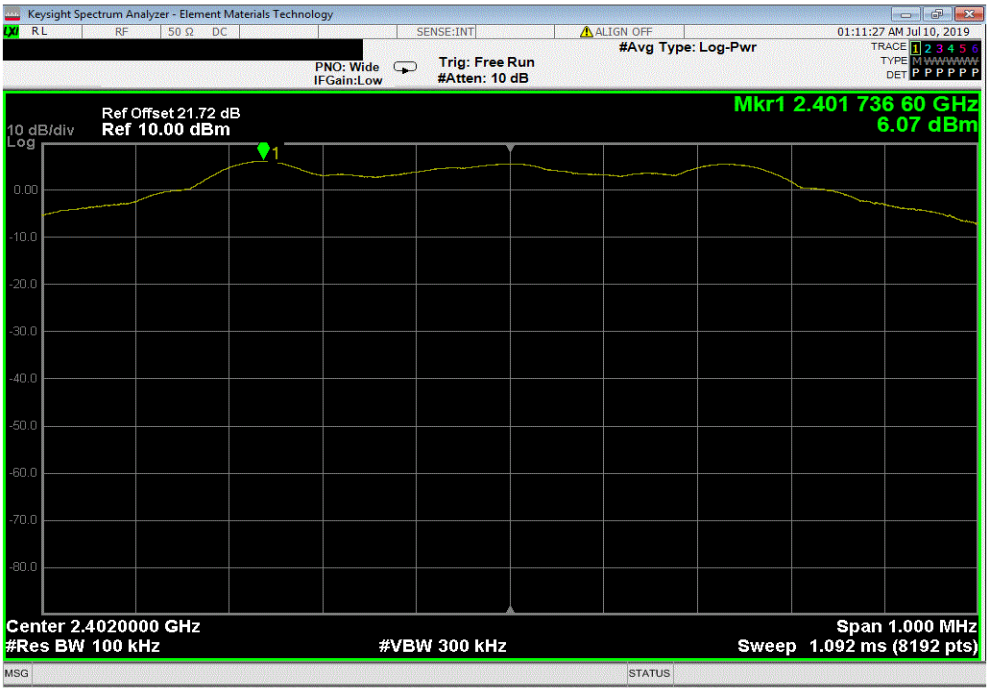
DEVIATIONS FROM TEST STANDARD

None

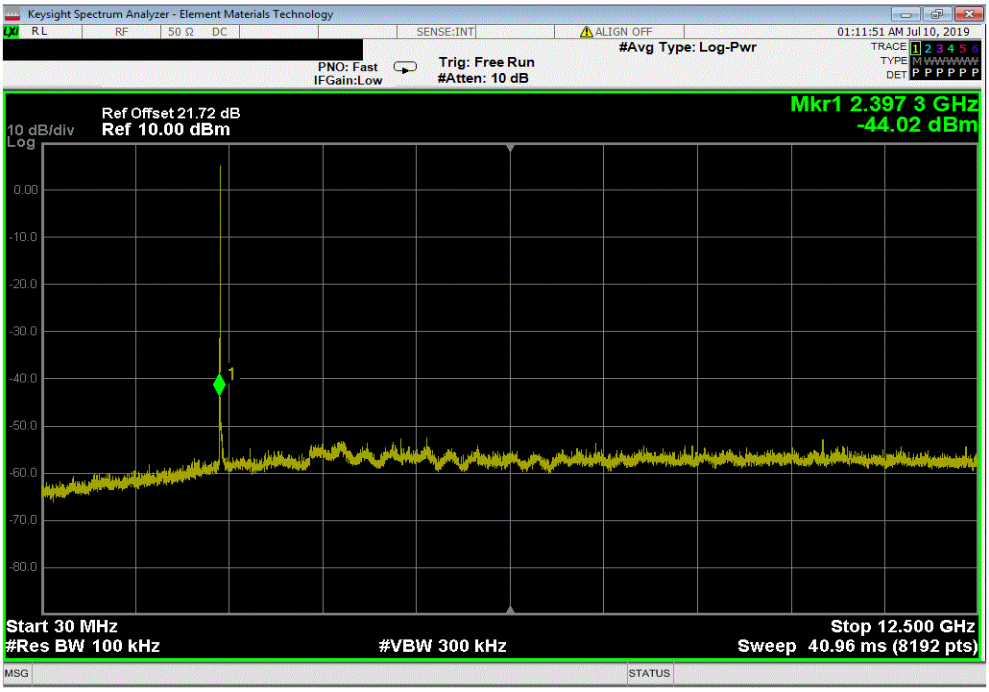
Configuration #	6	Signature

	Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
BLE/GFSK Low Channel, 2402 MHz	Fundamental	2401.74	N/A	N/A	N/A
BLE/GFSK Low Channel, 2402 MHz	30 MHz - 12.5 GHz	2397.34	-50.09	-20	Pass
BLE/GFSK Low Channel, 2402 MHz	12.5 GHz - 25 GHz	24153.03	-56.22	-20	Pass
BLE/GFSK Mid Channel, 2442 MHz	Fundamental	2441.74	N/A	N/A	N/A
BLE/GFSK Mid Channel, 2442 MHz	30 MHz - 12.5 GHz	3636.57	-60.21	-20	Pass
BLE/GFSK Mid Channel, 2442 MHz	12.5 GHz - 25 GHz	24105.73	-57.21	-20	Pass
BLE/GFSK High Channel, 2480 MHz	Fundamental	2479.74	N/A	N/A	N/A
BLE/GFSK High Channel, 2480 MHz	30 MHz - 12.5 GHz	2487.16	-53.08	-20	Pass
BLE/GFSK High Channel, 2480 MHz	12.5 GHz - 25 GHz	23924.12	-56.21	-20	Pass

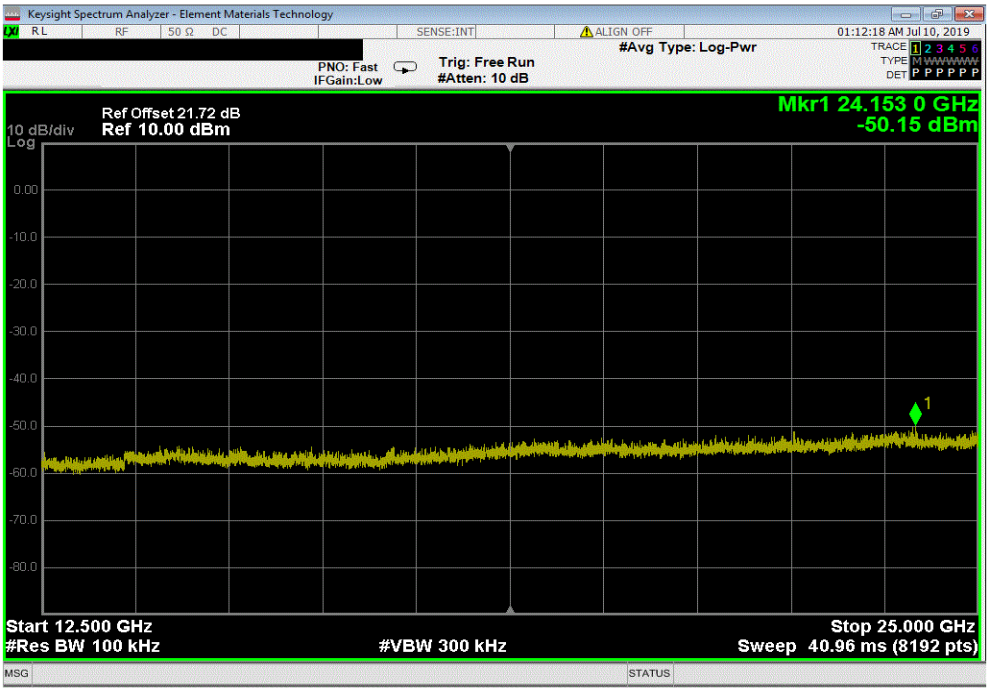
BLE/GFSK Low Channel, 2402 MHz					
Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental	2401.74	N/A	N/A	N/A



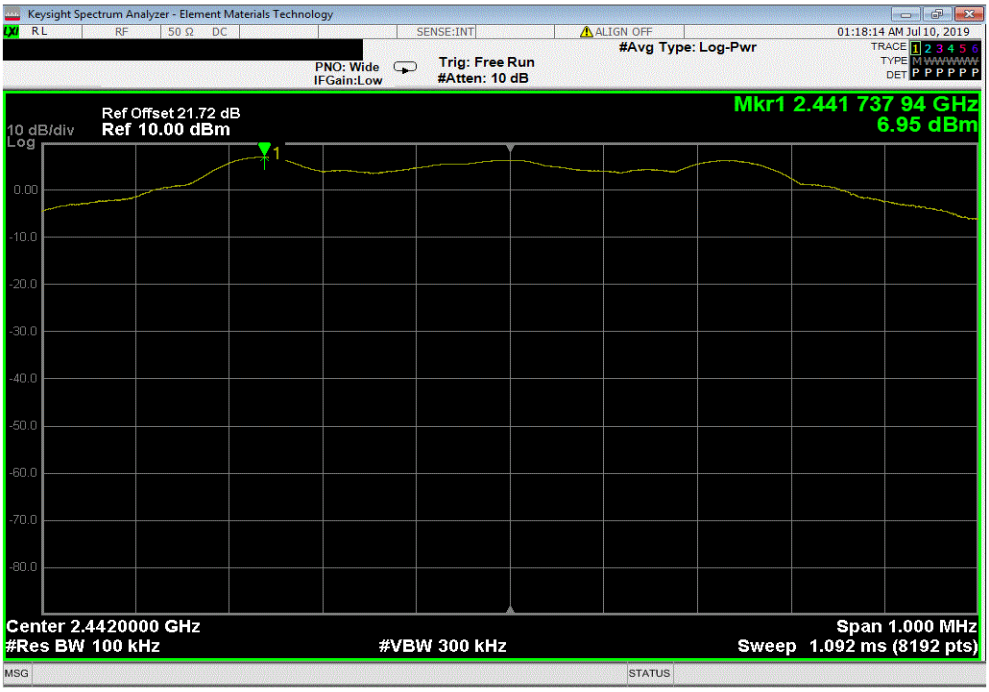
BLE/GFSK Low Channel, 2402 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	2397.34	-50.09	-20	Pass



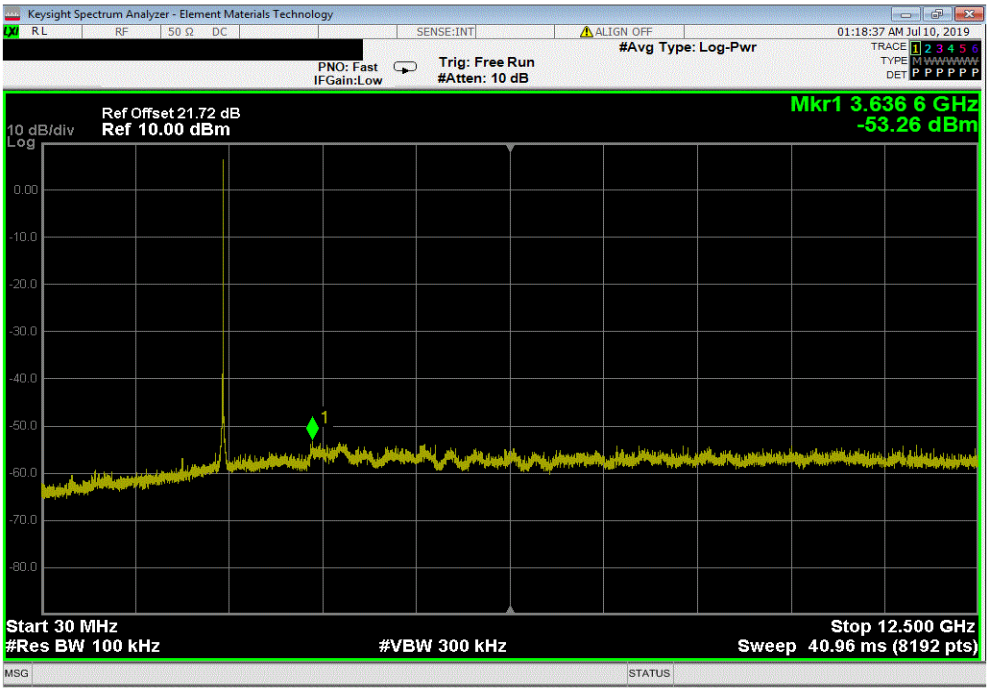
BLE/GFSK Low Channel, 2402 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	24153.03	-56.22	-20	Pass



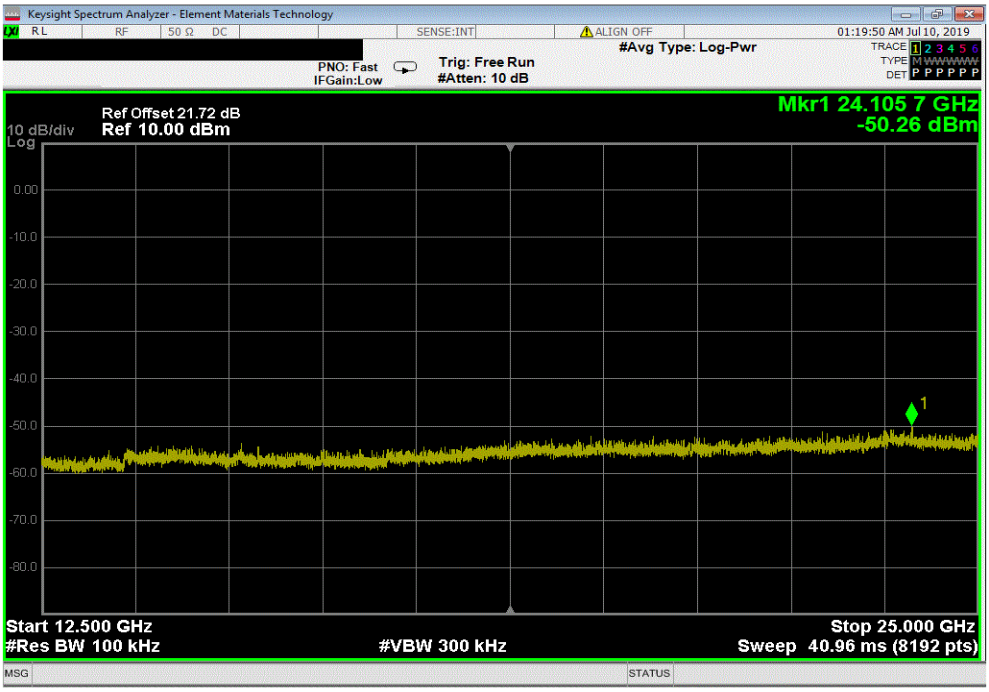
BLE/GFSK Mid Channel, 2442 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
Fundamental	2441.74	N/A	N/A	N/A



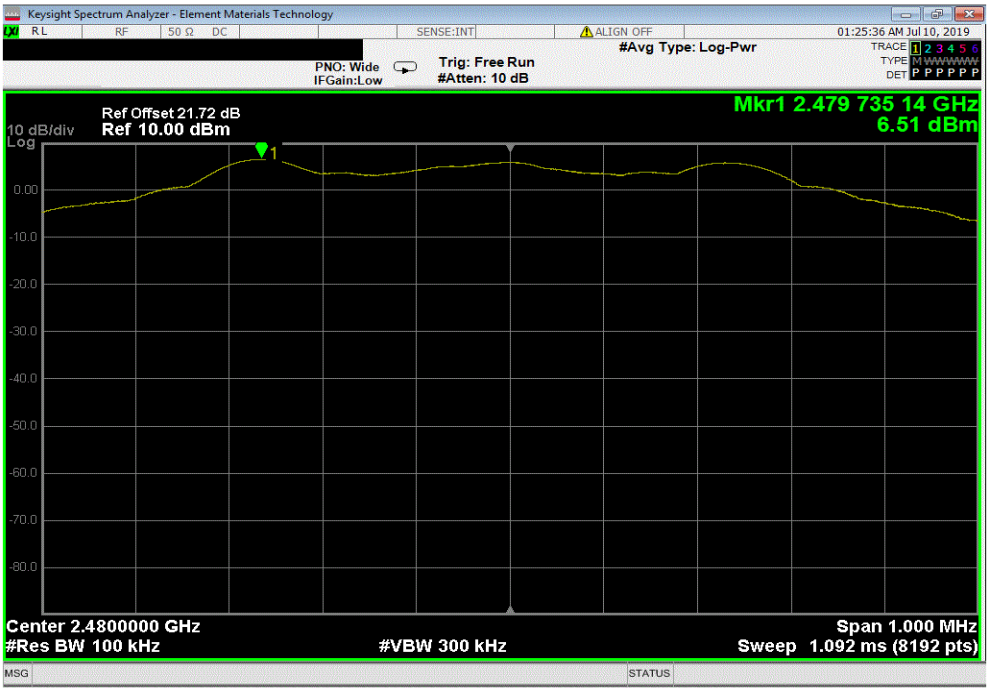
BLE/GFSK Mid Channel, 2442 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	3636.57	-60.21	-20	Pass



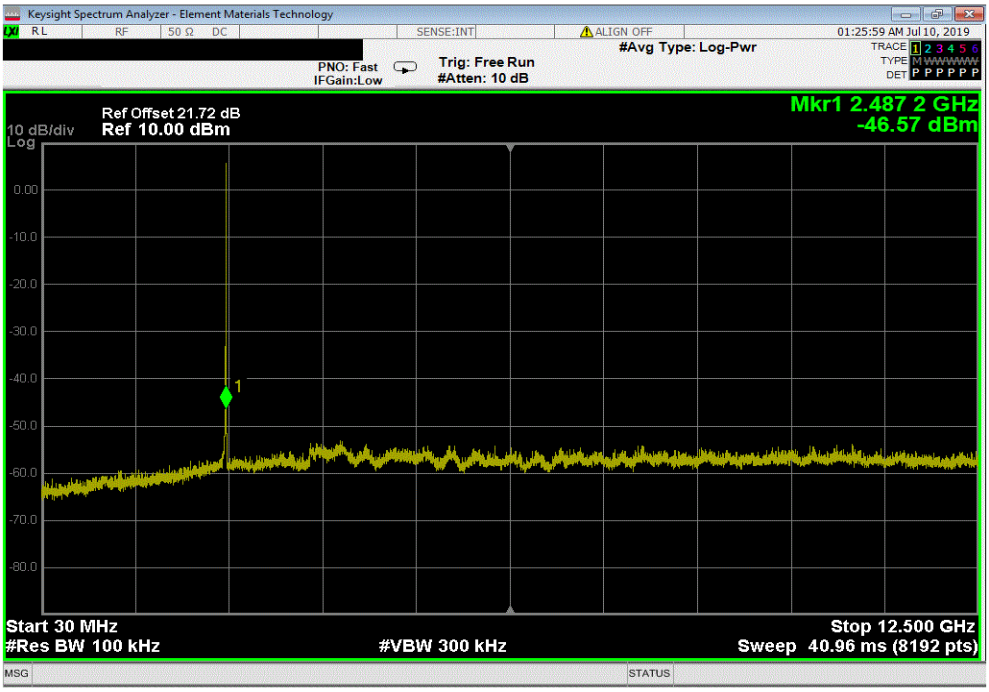
BLE/GFSK Mid Channel, 2442 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	24105.73	-57.21	-20	Pass



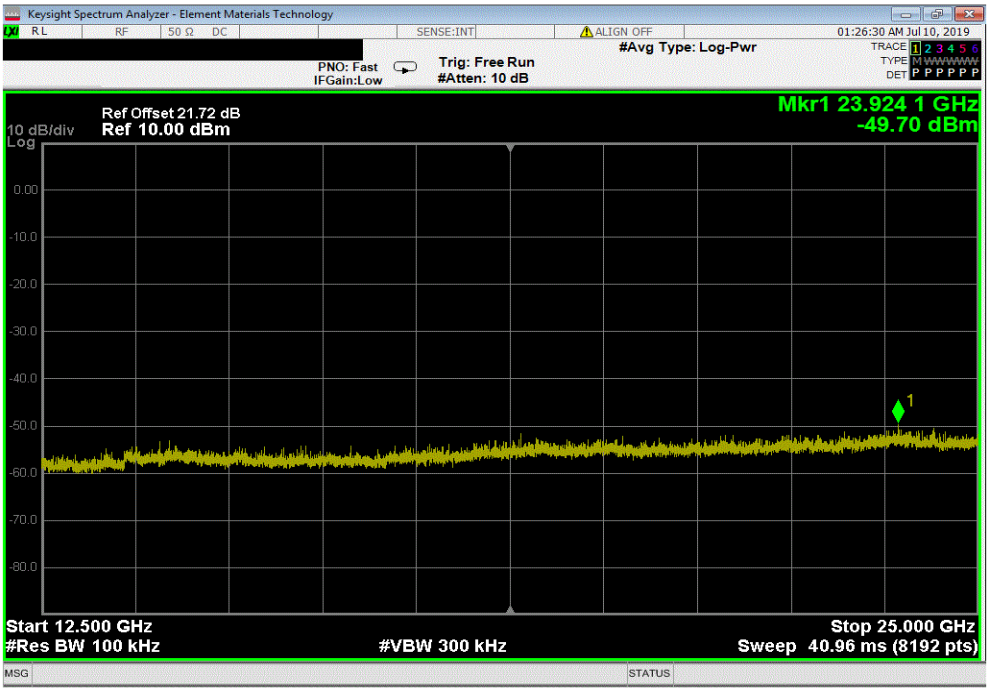
BLE/GFSK High Channel, 2480 MHz					
Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental	2479.74	N/A	N/A	N/A



BLE/GFSK High Channel, 2480 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	2487.16	-53.08	-20	Pass



BLE/GFSK High Channel, 2480 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	23924.12	-56.21	-20	Pass



SPURIOUS CONDUCTED EMISSIONS

XMit 2019.09.05

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Meter - Multimeter	Fluke	117	MLS	23-Jan-17	23-Jan-20
Power Supply - DC	Agilent	U8002A	TPZ	NCR	NCR
Generator - Signal	Agilent	N5173B	TIW	5-Jul-17	5-Jul-20
Cable	Micro-Coax	UFD150A-1-0720-200200	MNL	15-Sep-19	15-Sep-20
Attenuator	S.M. Electronics	SA26B-20	RFW	13-Feb-19	13-Feb-20
Block - DC	Fairview Microwave	SD3379	AMI	6-Aug-19	6-Aug-20
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFN	1-May-19	1-May-20

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The spurious RF conducted emissions were measured with the EUT set to low, medium and high transmit frequencies. The EUT was transmitting at the data rate(s) listed in the datasheet. For each transmit frequency, the spectrum was scanned throughout the specified frequency range.

SPURIOUS CONDUCTED EMISSIONS

TbtTx 2019.08.30.0 XMit 2019.09.05

EUT:	**Remote Microphone**			**Work Order:**	**NUAH0004**
Serial Number:	**1938AE20030**			**Date:**	**19-Nov-19**
Customer:	**Nuance Hearing**			**Temperature:**	**22.3 °C**
Attendees:	**John Quach**			**Humidity:**	**33.6% RH**
Project:	**None**			**Barometric Pres.:**	**1014 mbar**
Tested by:	**Dustin Sparks**	**Power:**	**Battery**	**Job Site:**	**MN08**

TEST SPECIFICATIONS	**Test Method**
FCC 15.247:2019	ANSI C63.10:2013

COMMENTS

Reference level offset on spectrum analyzer includes 20 dB attenuator, DC block, and measurement cable.

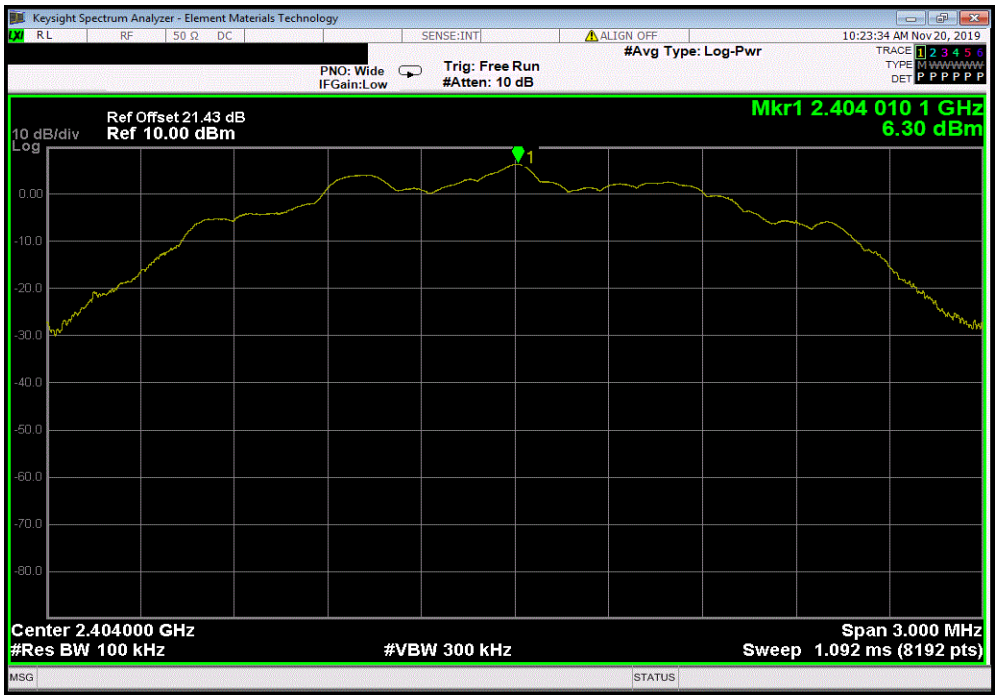
DEVIATIONS FROM TEST STANDARD

None

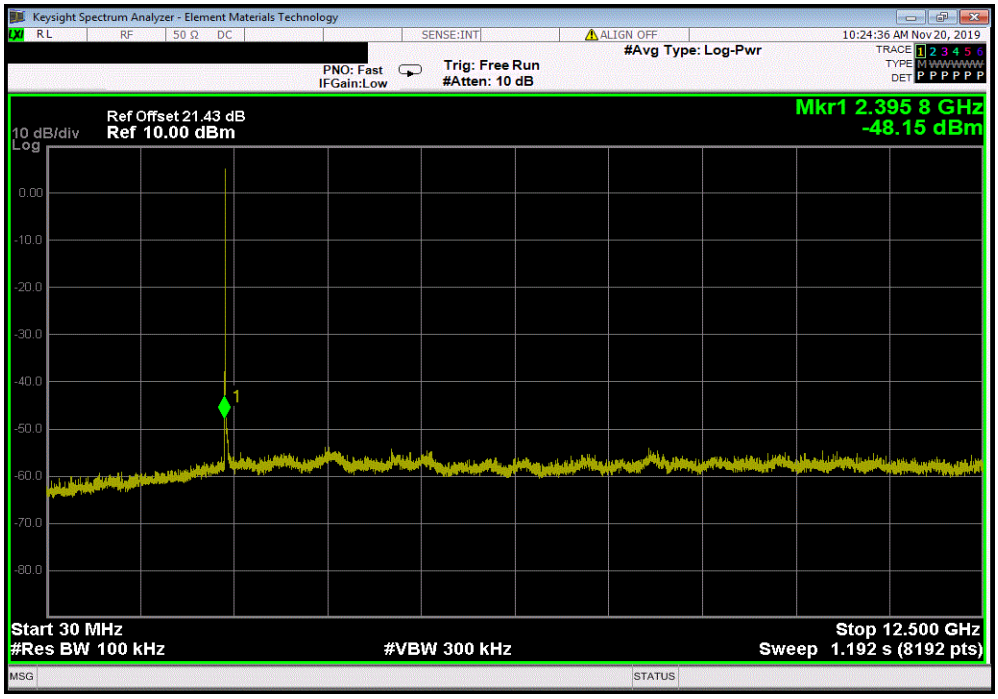
Configuration #	**1**	*Signature* Dustin Sparks

	Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
PAS (2 Mbps), Low Channel, 2404 MHz	Fundamental	2404.01	N/A	N/A	N/A
PAS (2 Mbps), Low Channel, 2404 MHz	30 MHz - 12.5 GHz	2395.81	-54.45	-20	Pass
PAS (2 Mbps), Low Channel, 2404 MHz	12.5 GHz - 25 GHz	24188.13	-57.8	-20	Pass
PAS (2 Mbps), Mid Channel, 2442 MHz	Fundamental	2442.01	N/A	N/A	N/A
PAS (2 Mbps), Mid Channel, 2442 MHz	30 MHz - 12.5 GHz	3163.1	-60.61	-20	Pass
PAS (2 Mbps), Mid Channel, 2442 MHz	12.5 GHz - 25 GHz	19431.39	-58.22	-20	Pass
PAS (2 Mbps), High Channel, 2476 MHz	Fundamental	2476	N/A	N/A	N/A
PAS (2 Mbps), High Channel, 2476 MHz	30 MHz - 12.5 GHz	8080.47	-59.55	-20	Pass
PAS (2 Mbps), High Channel, 2476 MHz	12.5 GHz - 25 GHz	23889.02	-57.91	-20	Pass

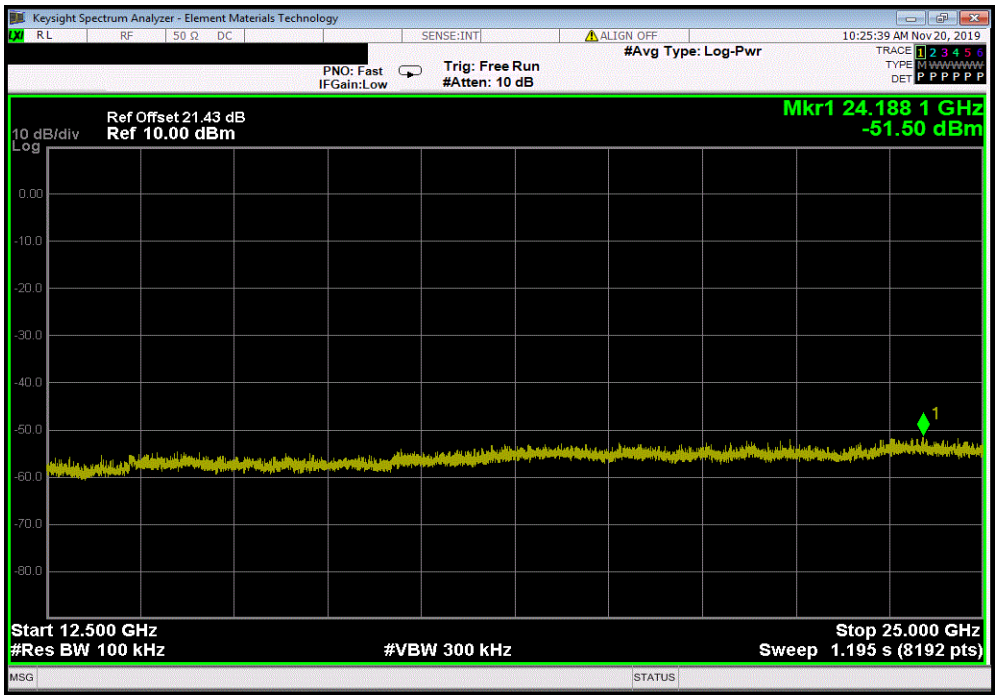
PAS (2 Mbps), Low Channel, 2404 MHz					
Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental	2404.01	N/A	N/A	N/A



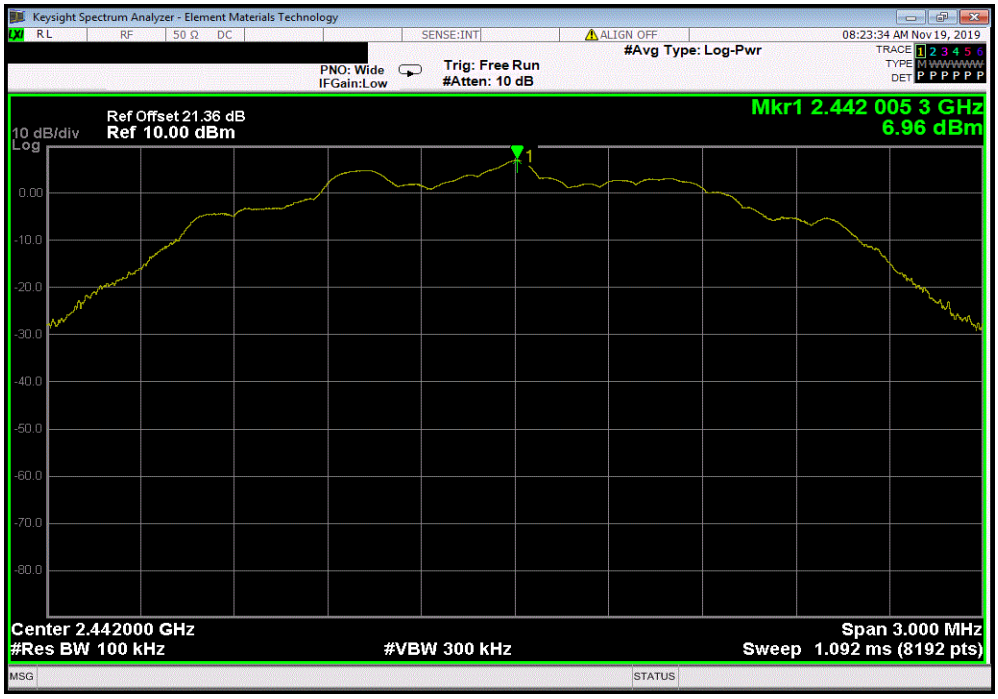
PAS (2 Mbps), Low Channel, 2404 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	2395.81	-54.45	-20	Pass



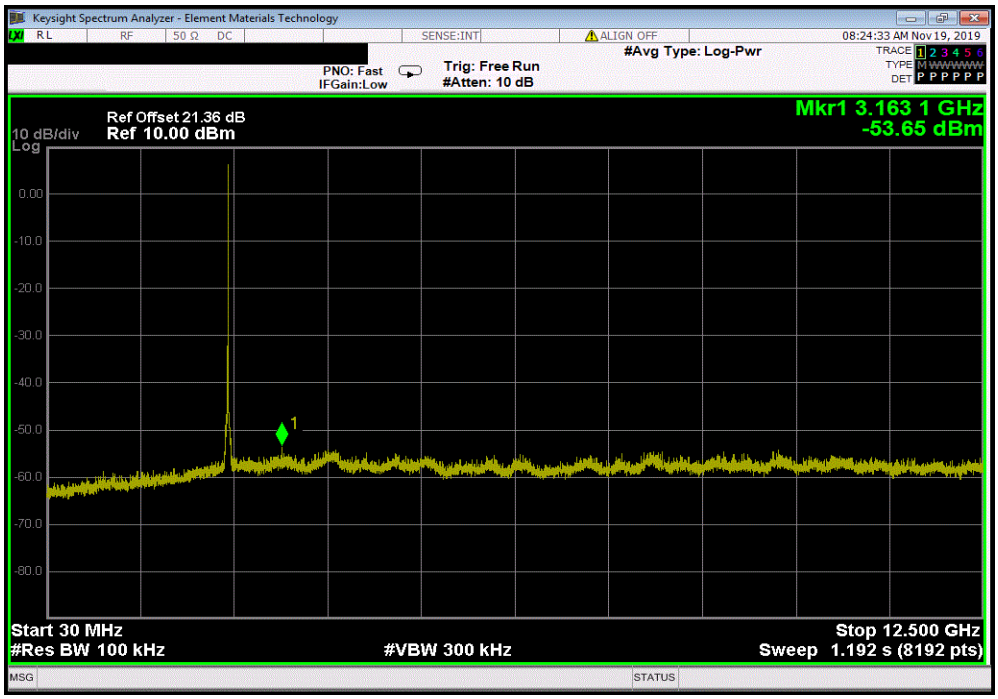
PAS (2 Mbps), Low Channel, 2404 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	24188.13	-57.8	-20	Pass



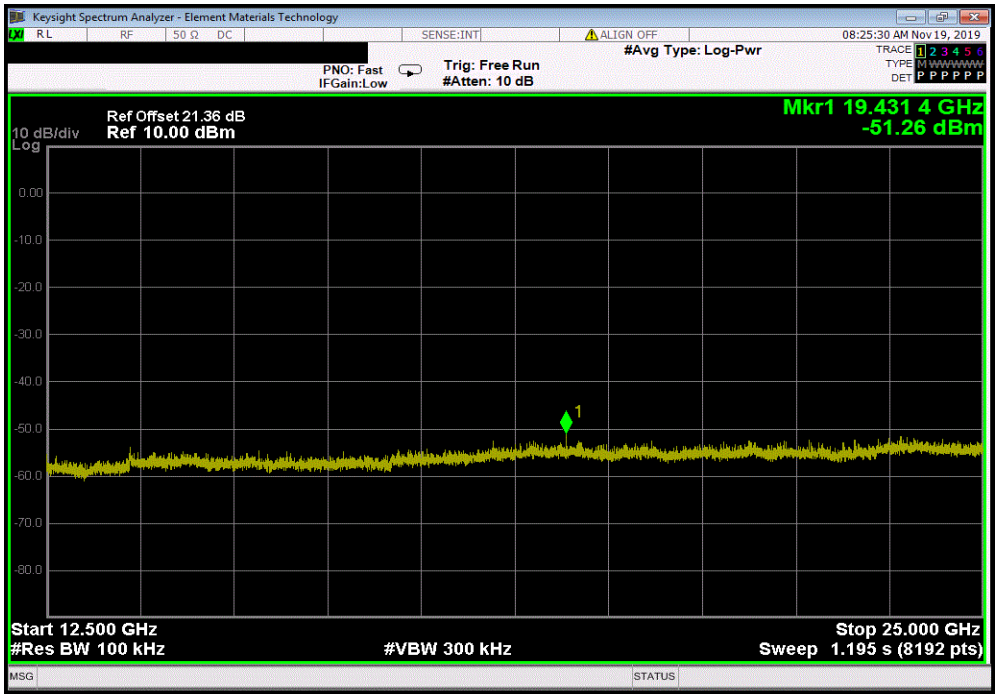
PAS (2 Mbps), Mid Channel, 2442 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
Fundamental	2442.01	N/A	N/A	N/A



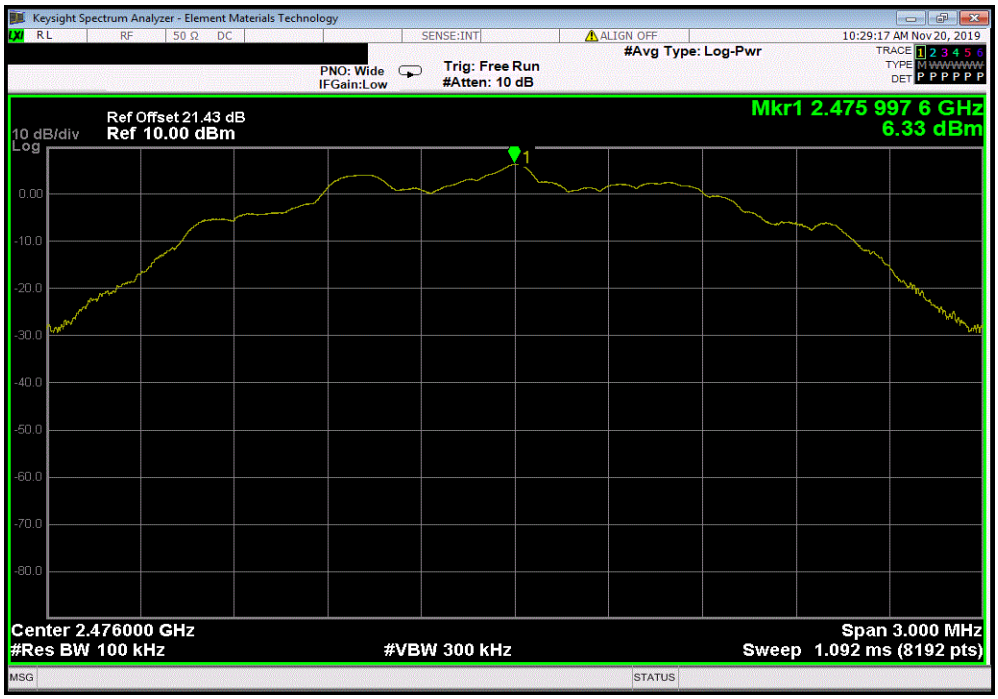
PAS (2 Mbps), Mid Channel, 2442 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	3163.1	-60.61	-20	Pass



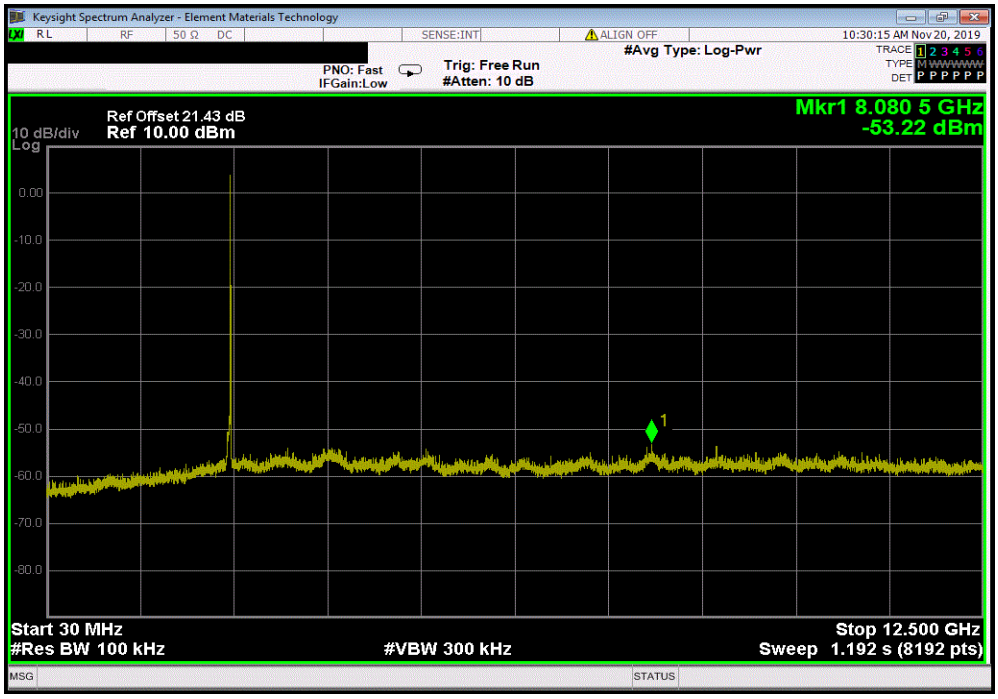
PAS (2 Mbps), Mid Channel, 2442 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	19431.39	-58.22	-20	Pass



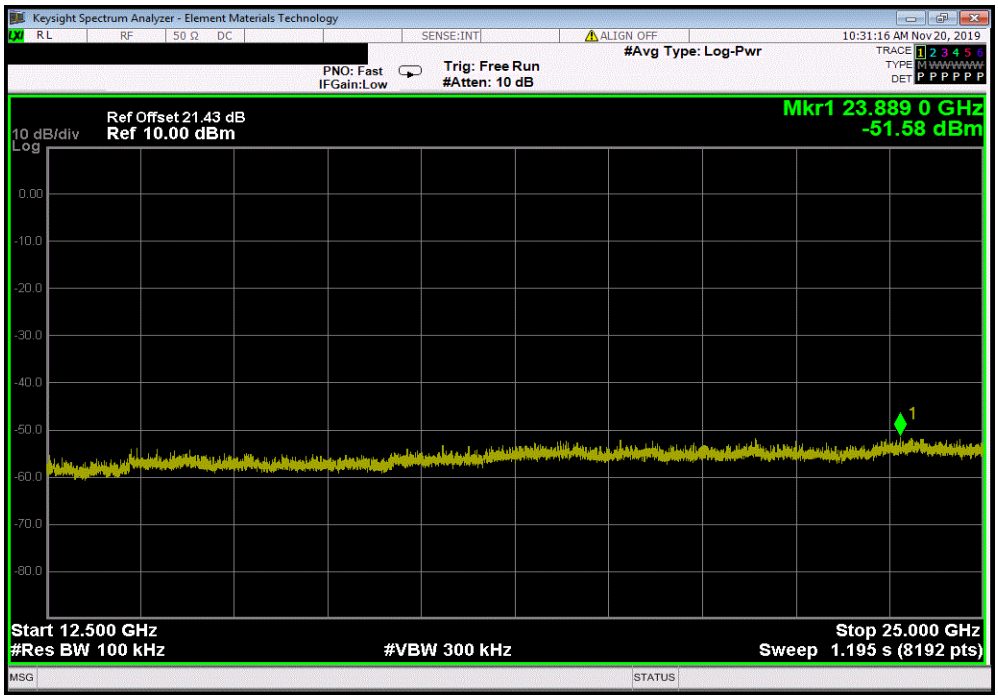
PAS (2 Mbps), High Channel, 2476 MHz					
Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental	2476	N/A	N/A	N/A



PAS (2 Mbps), High Channel, 2476 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	8080.47	-59.55	-20	Pass



PAS (2 Mbps), High Channel, 2476 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	23889.02	-57.91	-20	Pass



SPURIOUS RADIATED EMISSIONS

PSA-ESCI 2019.05.10

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Tx on low channel (2402 MHz), mid channel (2442 MHz), and high channel (2480 MHz); BLE
Transmitting PAS (2 Mbps) - mid channel (2442 MHz) and high channel (2476 MHz) modulated

POWER SETTINGS INVESTIGATED

DC via 120VAC/60Hz
Battery

CONFIGURATIONS INVESTIGATED

NUAH0001 - 1
NUAH0004 - 2

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	26500 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT (2-JUL-2019)

Description	Manufacturer	Model	ID	Last Cal.	Interval
Amplifier - Pre-Amplifier	L-3 Narda-MITEQ	AMF-6F-12001800-30-10P	PAP	23-Feb-2019	12 mo
Antenna	ETS-Lindgren	3160-08	AJP	NCR	0 mo
Amplifier - Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AVC	23-Feb-2019	12 mo
Cable	Element	Standard Gain Cable	MNW	23-Feb-2019	12 mo
Antenna	ETS-Lindgren	3160-07	AJJ	NCR	0 mo
Amplifier - Pre-Amplifier	Miteq	AMF-3D-00100800-32-13P	AVX	23-Feb-2019	12 mo
Cable	Element	Double Ridge Guide Horn Cables	MNV	23-Feb-2019	12 mo
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFD	27-Jul-2018	12 mo
Antenna - Double Ridge	ETS Lindgren	3115	AIB	27-Aug-2018	24 mo
Filter - Low Pass	Micro-Tronics	LPM50004	HGG	17-Sep-2019	12 mo
Filter - High Pass	Micro-Tronics	HPM50111	HFM	18-Sep-2019	12 mo
Attenuator	Coaxicom	3910-20	AXY	17-Sep-2019	12 mo

TEST EQUIPMENT (19-NOV-2019)

Description	Manufacturer	Model	ID	Last Cal.	Interval
Filter - High Pass	Micro-Tronics	HPM50111	LFN	12-Sep-2019	12 mo
Attenuator	Fairview Microwave	SA18E-20	TWZ	17-Sep-2019	12 mo
Amplifier - Pre-Amplifier	Miteq	AMF-3D-00100800-32-13P	AVT	8-Feb-2019	12 mo
Cable	ESM Cable Corp.	Double Ridge Guide Horn Cables	MNI	17-Sep-2019	12 mo
Antenna - Double Ridge	ETS-Lindgren	3115	AJQ	16-Jan-2019	24 mo
Analyzer - Spectrum Analyzer	Keysight	N9010A (EXA)	AFQ	13-Dec-2018	12 mo

SPURIOUS RADIATED EMISSIONS

PSA-ESCI 2019.05.10

TEST DESCRIPTION

The highest gain antenna of each type to be used with the EUT was tested. The EUT was configured for the required transmit frequencies and the modes as showed in the data sheets.

For each configuration, the spectrum was scanned throughout the specified range as part of the exploratory investigation of the emissions. These “pre-scans” are not included in the report. Final measurements on individual emissions were then made and included in this test report.

The individual emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis if required, and adjusting the measurement antenna height and polarization (per ANSI C63.10). A preamp and high pass filter (and notch filter) were used for this test in order to provide sufficient measurement sensitivity.

Measurements were made with the required detectors and annotated on the data for each individual point using the following annotation:

QP = Quasi-Peak Detector
PK = Peak Detector
AV = RMS Detector

Measurements were made to satisfy the specific requirements of the test specification for out of band emissions as well as the restricted band requirements.

If there are no detectable emissions above the noise floor, the data included may show noise floor measurements for reference only.

Measurements at the edges of the allowable band may be presented in an alternative method as provided for in the ANSI C63.10 Marker-Delta method. This method involves performing an in-band fundamental measurement followed by a screen capture of the fundamental and out-of-band emission using reduced measurement instrumentation bandwidths. The amplitude delta measured on this screen capture is applied to the fundamental emission value to show the out-of-band emission level as applied to the limit.

Where the radio test software does not provide for a duty cycle at continuous transmit conditions (> 98%) and the RMS (power average) measurements were made across the on and off times of the EUT transmissions, a duty cycle correction is added to the measurements using the formula of 10*LOG(dc).

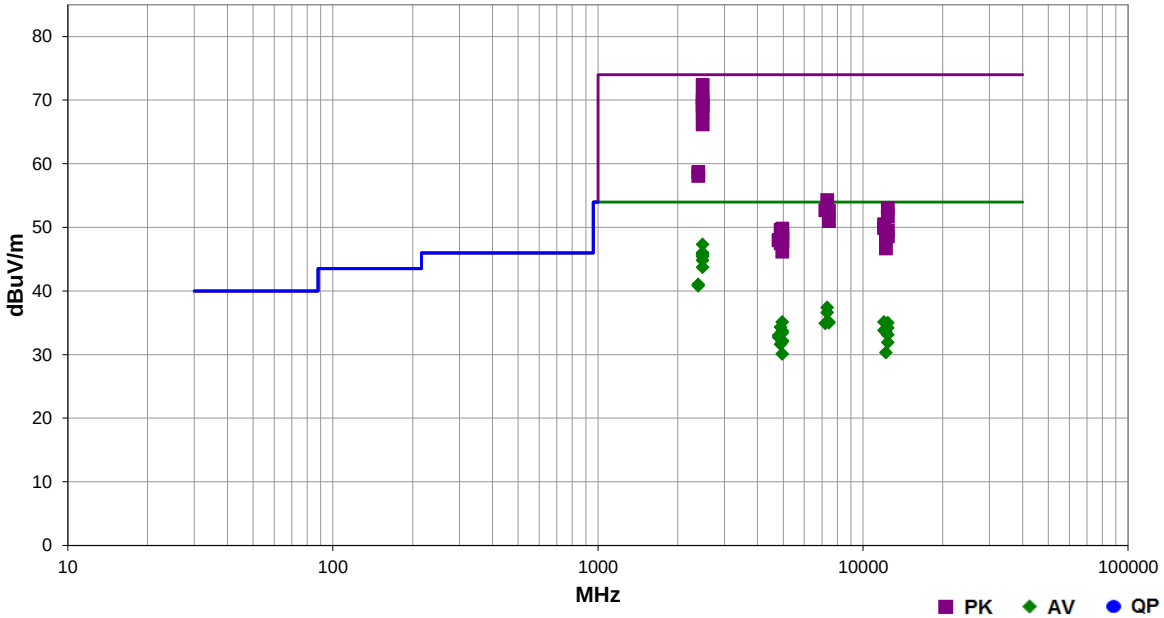
SPURIOUS RADIATED EMISSIONS

EmiR5 2019.05.20 PSA-ESCI 2019.05.10

Work Order:	NUAH0001	**Date:**	2-Jul-2019		
Project:	None	**Temperature:**	22 °C		
Job Site:	MN09	**Humidity:**	70.5% RH		
Serial Number:	EP3.4	**Barometric Pres.:**	1015 mbar	**Tested by:**	Andrew Rogstad
EUT:	Remote Microphone				
Configuration:	1				
Customer:	Nuance Hearing				
Attendees:	Charlie Esch				
EUT Power:	DC via 120VAC/60Hz				
Operating Mode:	Tx on low channel (2402 MHz), mid channel (2442 MHz), and high channel (2480 MHz); BLE				
Deviations:	None				
Comments:	Added a Duty Cycle Correction Factor (DCCF) of 4.5 dB due to test mode having a maximum duty cycle of 35.5% and then added a DCCF of -10.4 dB due to the customer stating that the EUT had a fixed operational duty cycle of 30.25%. This resulted in -5.9 dB being added to the raw average data. See data comments for EUT orientation and Tx channel.				

Test Specifications	**Test Method**
FCC 15.247:2019	ANSI C63.10:2013

Run #	14	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Duty Cycle Correction Factor (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
2483.580	56.5	-4.1	3.0	89.0		20.0	Horz	PK	0.0	72.4	74.0	-1.6	EUT on side, High ch., BLE
2483.513	54.5	-4.1	4.0	79.0		20.0	Horz	PK	0.0	70.4	74.0	-3.6	EUT horz, High ch., BLE
2483.517	54.0	-4.1	1.3	289.0		20.0	Vert	PK	0.0	69.9	74.0	-4.1	EUT vert, High ch., BLE
2483.707	53.2	-4.1	4.0	290.0		20.0	Horz	PK	0.0	69.1	74.0	-4.9	EUT vert, High ch., BLE
2483.517	52.2	-4.1	3.8	51.0		20.0	Vert	PK	0.0	68.1	74.0	-5.9	EUT horz, High ch., BLE
2483.510	37.3	-4.1	3.0	89.0	-5.9	20.0	Horz	AV	0.0	47.3	54.0	-6.7	EUT on side, High ch., BLE
2483.527	50.3	-4.1	1.5	148.0		20.0	Vert	PK	0.0	66.2	74.0	-7.8	EUT on side, High ch., BLE
2483.500	36.0	-4.1	4.0	79.0	-5.9	20.0	Horz	AV	0.0	46.0	54.0	-8.0	EUT horz, High ch., BLE
2483.540	35.8	-4.1	4.0	290.0	-5.9	20.0	Horz	AV	0.0	45.8	54.0	-8.2	EUT vert, High ch., BLE
2483.500	35.7	-4.1	1.3	289.0	-5.9	20.0	Vert	AV	0.0	45.7	54.0	-8.3	EUT vert, High ch., BLE
2483.510	35.4	-4.1	3.7	134.0	-5.9	20.0	Vert	AV	0.0	45.4	54.0	-8.6	EUT horz, High ch., BLE 2
2483.513	34.8	-4.1	3.8	51.0	-5.9	20.0	Vert	AV	0.0	44.8	54.0	-9.2	EUT horz, High ch., BLE
2483.507	33.7	-4.1	1.5	148.0	-5.9	20.0	Vert	AV	0.0	43.7	54.0	-10.3	EUT on side, High ch., BLE
2389.007	31.1	-4.2	1.5	96.0	-5.9	20.0	Vert	AV	0.0	41.0	54.0	-13.0	EUT vert, Low ch., BLE
2388.310	30.9	-4.2	1.5	225.0	-5.9	20.0	Horz	AV	0.0	40.8	54.0	-13.2	EUT on side, Low ch., BLE
2388.713	42.9	-4.2	1.5	96.0		20.0	Vert	PK	0.0	58.7	74.0	-15.3	EUT vert, Low ch., BLE
2389.330	42.3	-4.2	1.5	225.0		20.0	Horz	PK	0.0	58.1	74.0	-15.9	EUT on side, Low ch., BLE
7325.392	30.6	12.7	1.5	272.0	-5.9	0.0	Horz	AV	0.0	37.4	54.0	-16.6	EUT on side, Mid ch., BLE
7325.375	29.8	12.7	1.5	69.0	-5.9	0.0	Vert	AV	0.0	36.6	54.0	-17.4	EUT horz, Mid ch., BLE
12008.680	42.2	-1.2	1.3	20.0	-5.9	0.0	Horz	AV	0.0	35.1	54.0	-18.9	EUT on side, Low ch., BLE

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Duty Cycle Correction Factor (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
4959.758	37.2	3.8	2.3	50.0	-5.9	0.0	Horz	AV	0.0	35.1	54.0	-18.9	EUT on side, High ch., BLE
7439.392	28.2	12.8	1.5	315.0	-5.9	0.0	Vert	AV	0.0	35.1	54.0	-18.9	EUT horz, High ch., BLE
7437.625	28.1	12.8	1.5	297.0	-5.9	0.0	Horz	AV	0.0	35.0	54.0	-19.0	EUT on side, High ch., BLE
12400.960	28.5	12.4	2.0	11.0	-5.9	0.0	Horz	AV	0.0	35.0	54.0	-19.0	EUT on side, High ch., BLE
7205.308	28.5	12.3	1.5	246.0	-5.9	0.0	Vert	AV	0.0	34.9	54.0	-19.1	EUT horz, Low ch., BLE
4883.817	36.7	3.5	2.1	314.0	-5.9	0.0	Horz	AV	0.0	34.3	54.0	-19.7	EUT on side, Mid ch., BLE
7326.533	41.6	12.7	1.5	272.0		0.0	Horz	PK	0.0	54.3	74.0	-19.7	EUT on side, Mid ch., BLE
12400.950	27.7	12.4	2.4	17.0	-5.9	0.0	Vert	AV	0.0	34.2	54.0	-19.8	EUT horz, High ch., BLE
12008.710	40.9	-1.2	1.0	47.0	-5.9	0.0	Vert	AV	0.0	33.8	54.0	-20.2	EUT horz, Low ch., BLE
4959.925	35.8	3.8	1.0	153.0	-5.9	0.0	Vert	AV	0.0	33.7	54.0	-20.3	EUT horz, High ch., BLE
12208.670	39.8	-0.4	1.8	13.0	-5.9	0.0	Horz	AV	0.0	33.5	54.0	-20.5	EUT on side, Mid ch., BLE
4959.817	35.5	3.8	2.3	154.0	-5.9	0.0	Horz	AV	0.0	33.4	54.0	-20.6	EUT vert, High ch., BLE
12398.720	39.2	-0.2	1.8	8.0	-5.9	0.0	Horz	AV	0.0	33.1	54.0	-20.9	EUT on side, High ch., BLE
4803.858	35.4	3.5	2.3	341.0	-5.9	0.0	Horz	AV	0.0	33.0	54.0	-21.0	EUT on side, Low ch., BLE
12401.350	40.6	12.4	2.0	11.0		0.0	Horz	PK	0.0	53.0	74.0	-21.0	EUT on side, High ch., BLE
7326.792	40.2	12.7	1.5	69.0		0.0	Vert	PK	0.0	52.9	74.0	-21.1	EUT horz, Mid ch., BLE
4803.925	35.1	3.5	1.6	183.0	-5.9	0.0	Vert	AV	0.0	32.7	54.0	-21.3	EUT horz, Low ch., BLE
7208.067	40.4	12.3	1.5	246.0		0.0	Vert	PK	0.0	52.7	74.0	-21.3	EUT horz, Low ch., BLE
7438.100	39.8	12.8	1.5	315.0		0.0	Vert	PK	0.0	52.6	74.0	-21.4	EUT horz, High ch., BLE
4959.825	34.3	3.8	1.6	270.0	-5.9	0.0	Vert	AV	0.0	32.2	54.0	-21.8	EUT vert, High ch., BLE
4959.858	34.1	3.8	1.5	127.0	-5.9	0.0	Vert	AV	0.0	32.0	54.0	-22.0	EUT on side, High ch., BLE
12398.640	38.0	-0.2	1.0	61.0	-5.9	0.0	Vert	AV	0.0	31.9	54.0	-22.1	EUT horz, High ch., BLE
12400.860	39.3	12.4	2.4	17.0		0.0	Vert	PK	0.0	51.7	74.0	-22.3	EUT horz, High ch., BLE
4883.900	34.0	3.5	1.5	192.0	-5.9	0.0	Vert	AV	0.0	31.6	54.0	-22.4	EUT horz, Mid ch., BLE
7439.767	38.2	12.8	1.5	297.0		0.0	Horz	PK	0.0	51.0	74.0	-23.0	EUT on side, High ch., BLE
12008.480	51.7	-1.2	1.3	20.0		0.0	Horz	PK	0.0	50.5	74.0	-23.5	EUT on side, Low ch., BLE
12208.710	36.6	-0.4	2.4	137.0	-5.9	0.0	Vert	AV	0.0	30.3	54.0	-23.7	EUT horz, Mid ch., BLE
4959.800	32.2	3.8	1.1	152.0	-5.9	0.0	Horz	AV	0.0	30.1	54.0	-23.9	EUT horz, High ch., BLE
12011.230	51.1	-1.2	1.0	47.0		0.0	Vert	PK	0.0	49.9	74.0	-24.1	EUT horz, Low ch., BLE
4959.358	46.0	3.8	2.3	50.0		0.0	Horz	PK	0.0	49.8	74.0	-24.2	EUT on side, High ch., BLE
4884.375	46.1	3.5	2.1	314.0		0.0	Horz	PK	0.0	49.6	74.0	-24.4	EUT on side, Mid ch., BLE
12399.610	49.7	-0.2	1.8	8.0		0.0	Horz	PK	0.0	49.5	74.0	-24.5	EUT on side, High ch., BLE
4959.358	45.4	3.8	2.3	154.0		0.0	Horz	PK	0.0	49.2	74.0	-24.8	EUT vert, High ch., BLE
12399.780	48.8	-0.2	1.0	61.0		0.0	Vert	PK	0.0	48.6	74.0	-25.4	EUT horz, High ch., BLE
12211.000	49.0	-0.4	1.8	13.0		0.0	Horz	PK	0.0	48.6	74.0	-25.4	EUT on side, Mid ch., BLE
4960.617	44.7	3.8	1.0	153.0		0.0	Vert	PK	0.0	48.5	74.0	-25.5	EUT horz, High ch., BLE
4803.633	44.5	3.5	1.6	183.0		0.0	Vert	PK	0.0	48.0	74.0	-26.0	EUT horz, Low ch., BLE
4803.317	44.5	3.5	2.3	341.0		0.0	Horz	PK	0.0	48.0	74.0	-26.0	EUT on side, Low ch., BLE
4959.800	44.1	3.8	1.6	270.0		0.0	Vert	PK	0.0	47.9	74.0	-26.1	EUT vert, High ch., BLE
4960.358	43.8	3.8	1.5	127.0		0.0	Vert	PK	0.0	47.6	74.0	-26.4	EUT on side, High ch., BLE
4883.675	44.0	3.5	1.5	192.0		0.0	Vert	PK	0.0	47.5	74.0	-26.5	EUT horz, Mid ch., BLE
12208.700	47.1	-0.4	2.4	137.0		0.0	Vert	PK	0.0	46.7	74.0	-27.3	EUT horz, Mid ch., BLE
4960.500	42.4	3.8	1.1	152.0		0.0	Horz	PK	0.0	46.2	74.0	-27.8	EUT horz, High ch., BLE

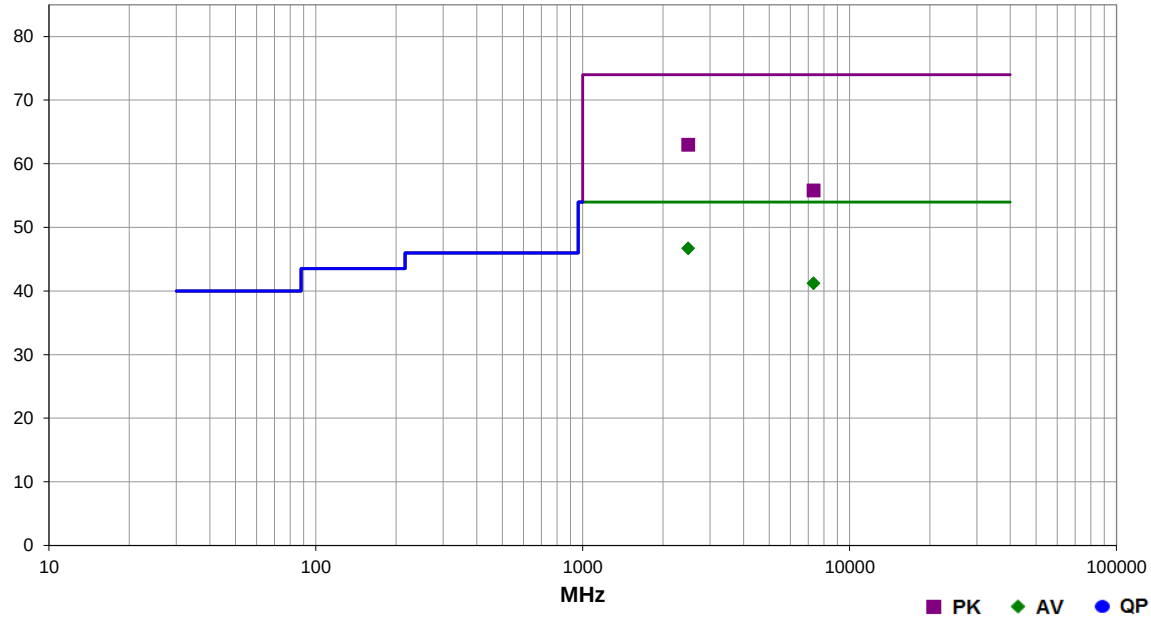
SPURIOUS RADIATED EMISSIONS

EmiR5 2019.08.15.1 PSA-ESCI 2019.05.10

Work Order:	NUAH0004	**Date:**	19-Nov-2019		
Project:	None	**Temperature:**	22.6 °C		
Job Site:	MN05	**Humidity:**	31.9% RH		
Serial Number:	1938AE20010	**Barometric Pres.:**	1012 mbar	**Tested by:**	Dustin Sparks
EUT:	Remote Microphone				
Configuration:	2				
Customer:	Nuance Hearing				
Attendees:	John Quach				
EUT Power:	Battery				
Operating Mode:	Transmitting PAS (2 Mbps) - mid channel (2442 MHz) and high channel (2476 MHz) modulated				
Deviations:	None				
Comments:	Duty cycle correction factor (DCCF) of 7.5 dB added to RMS average points, based on a duty cycle of 17.9% and the formula DCCF = 10 * log(1/0.179). Manufacturer declared that the maximum operating duty cycle is 30.25%, so another DCCF of -10.4 was applied based on the formula 20 * log(0.3025). Total DCCF of -2.9 dB.				

Test Specifications	**Test Method**
FCC 15.247:2019	ANSI C63.10:2013

Run #	1	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Duty Cycle Correction Factor (dB)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
2485.108	33.4	-3.8	1.5	136.0	-2.9	20.0	Horz	AV	0.0	46.7	54.0	-7.3	EUT on side, High ch., PAS
2483.542	46.8	-3.8	1.5	136.0	0.0	20.0	Horz	PK	0.0	63.0	74.0	-11.0	EUT on side, High ch., PAS
7325.242	30.6	13.5	1.5	348.9	-2.9	0.0	Horz	AV	0.0	41.2	54.0	-12.8	EUT on side, Mid ch., PAS
7324.742	42.3	13.5	1.5	348.9	0.0	0.0	Horz	PK	0.0	55.8	74.0	-18.2	EUT on side, Mid ch., PAS