

Appendix A: Test Results of Classic Bluetooth

APPENDIX A: TEST RESULTS OF CLASSIC BLUETOOTH	1
APPENDIX A.1: TEST RESULTS OF 99% BANDWIDTH	2
<i>BR mode (DH5)</i>	2
<i>EDR mode (3-DH5)</i>	5
APPENDIX A.2: TEST RESULTS OF 20DB BANDWIDTH	8
<i>BR mode (DH5)</i>	8
<i>EDR mode (3-DH5)</i>	11
APPENDIX A.3: TEST RESULTS OF CARRIER FREQUENCY SEPARATION	14
<i>BR mode (DH5)</i>	14
<i>EDR mode (3-DH5)</i>	15
APPENDIX A.4: TEST RESULTS OF NUMBER OF HOPPING FREQUENCY	17
<i>BR mode (DH5)</i>	17
<i>EDR mode (3-DH5)</i>	18
APPENDIX A.5: TEST RESULTS OF TIME OF OCCUPANCY	19
<i>BR mode (DH5)</i>	19
<i>EDR mode (3-DH5)</i>	22
APPENDIX A.6: TEST RESULTS OF CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHz BANDWIDTH	25
<i>BR mode (DH5)</i>	25
<i>Fixed mode, Band Edge</i>	25
<i>Fixed mode, Conducted Spurious Emission</i>	26
<i>Hopping Mode, Band Edge</i>	29
<i>Hopping Mode, Conducted Spurious Emission</i>	30
<i>EDR mode (3-DH5)</i>	31
<i>Fixed mode, Band Edge</i>	31
<i>Fixed mode, Conducted Spurious Emission</i>	32
<i>Hopping Mode, Band Edge</i>	35
<i>Hopping Mode, Conducted Spurious Emission</i>	36
APPENDIX A.7: TEST RESULTS OF RADIATED SPURIOUS EMISSIONS	37
30MHz - 1GHz	37
1GHz - 18GHz	39
APPENDIX A.8: TEST RESULTS OF RADIATED EMISSIONS IN RESTRICTED BANDS	51
APPENDIX A.9: TEST RESULTS OF CONDUCTED EMISSION ON AC MAINS	55
Adapter (GM42-150200-1A)	55

Appendix A.1: Test Results of 99% Bandwidth

BR mode (DH5)

Occupied Channel Bandwidth 99% (2402 MHz; 10.000 dBm; 1 MHz; Test Mode)

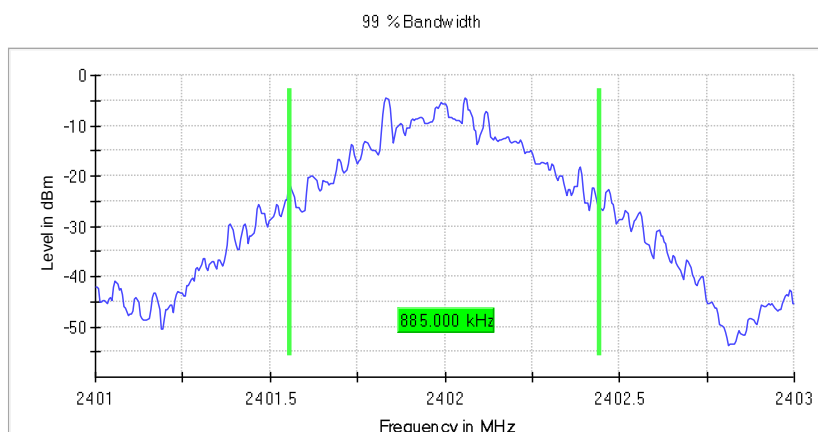
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	0.885000	---	---	2401.557500	2402.442500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2402.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweeptime	189.648 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.22 dB	0.30 dB

Occupied Channel Bandwidth 99% (2441 MHz; 10.000 dBm; 1 MHz; Test Mode)

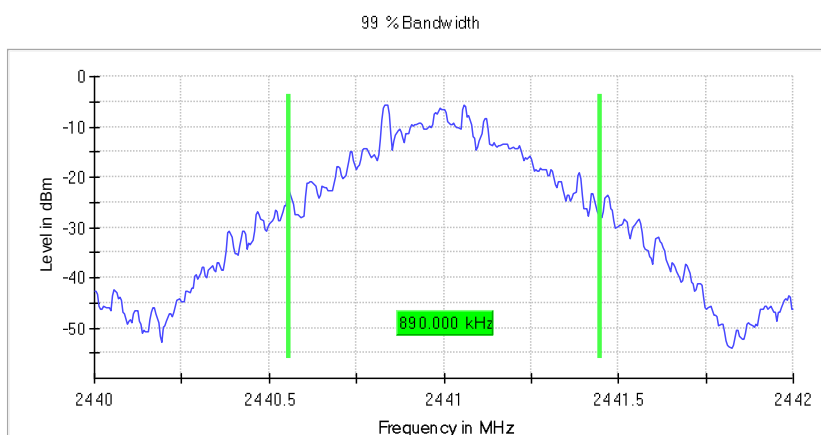
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2441.000000	0.890000	---	---	2440.557500	2441.447500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2441.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44200 GHz	2.44200 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
SweepTime	189.648 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.13 dB	0.30 dB

Occupied Channel Bandwidth 99% (2480 MHz; 10.000 dBm; 1 MHz; Test Mode)

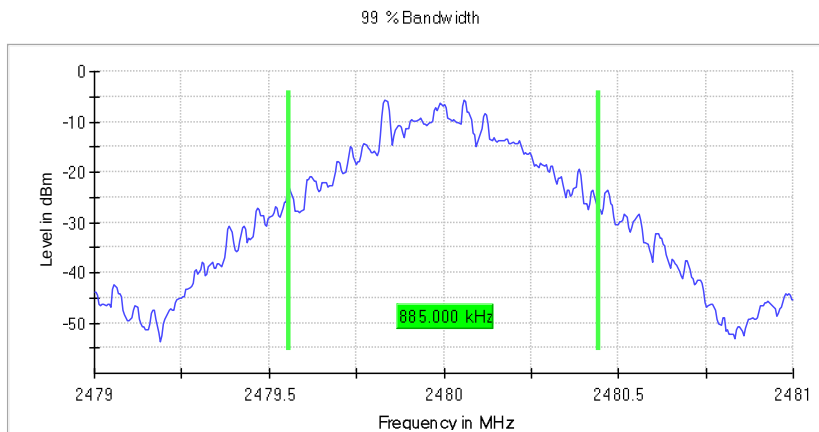
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	0.885000	---	---	2479.557500	2480.442500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2480.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
SweepTime	189.648 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.08 dB	0.30 dB

EDR mode (3-DH5)

Occupied Channel Bandwidth 99% (2402 MHz; 10.000 dBm; 1 MHz; Test Mode)

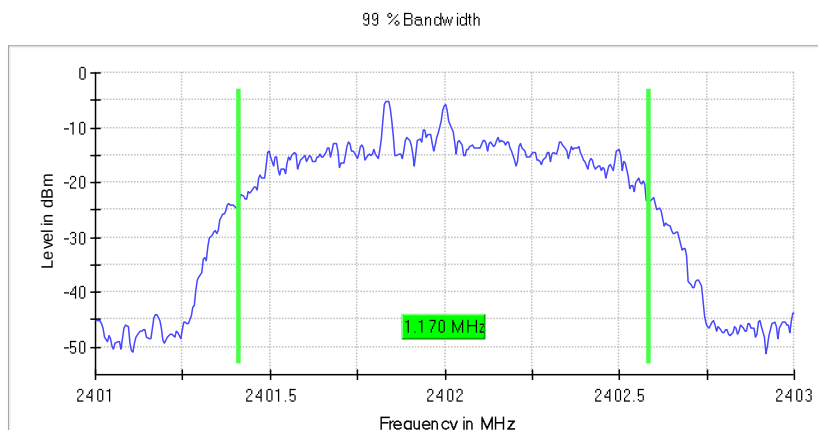
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	1.170000	---	---	2401.412500	2402.582500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2402.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweeptime	189.648 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.19 dB	0.30 dB

Occupied Channel Bandwidth 99% (2441 MHz; 10.000 dBm; 1 MHz; Test Mode)

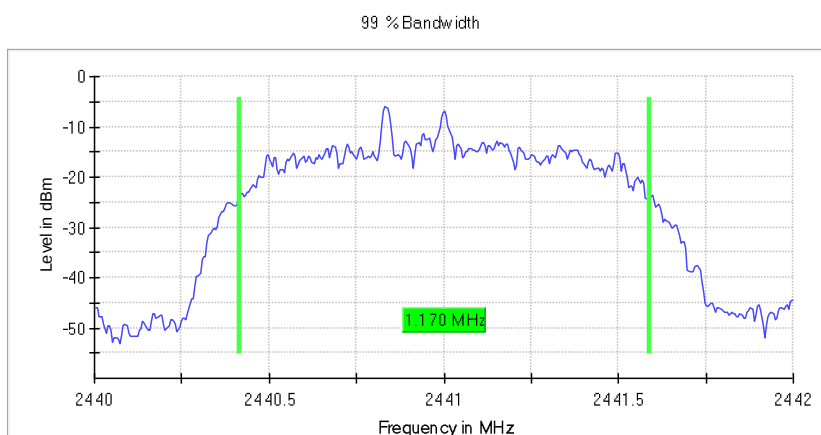
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2441.000000	1.170000	---	---	2440.417500	2441.587500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2441.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44200 GHz	2.44200 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
SweepTime	189.648 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.11 dB	0.30 dB

Occupied Channel Bandwidth 99% (2480 MHz; 10.000 dBm; 1 MHz; Test Mode)

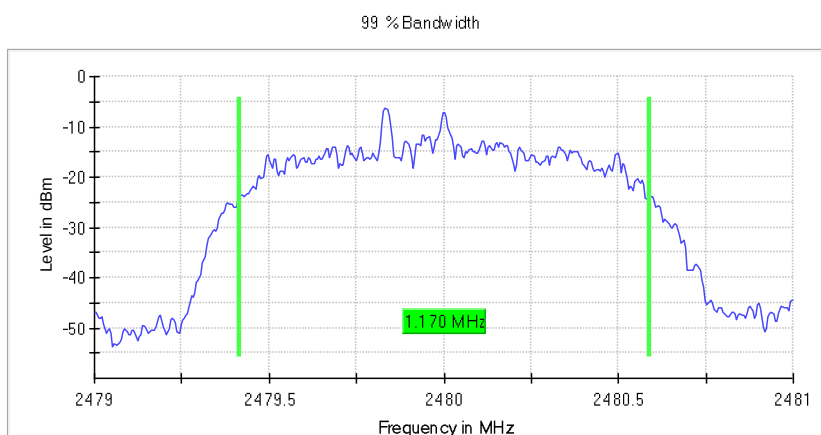
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	1.170000	---	---	2479.417500	2480.587500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2480.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
SweepTime	189.648 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	500	500
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	6 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.29 dB	0.30 dB

Appendix A.2: Test Results of 20dB Bandwidth

BR mode (DH5)

Emission Bandwidth 20 dB (2402 MHz; 10.000 dBm; 1 MHz; Test Mode)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

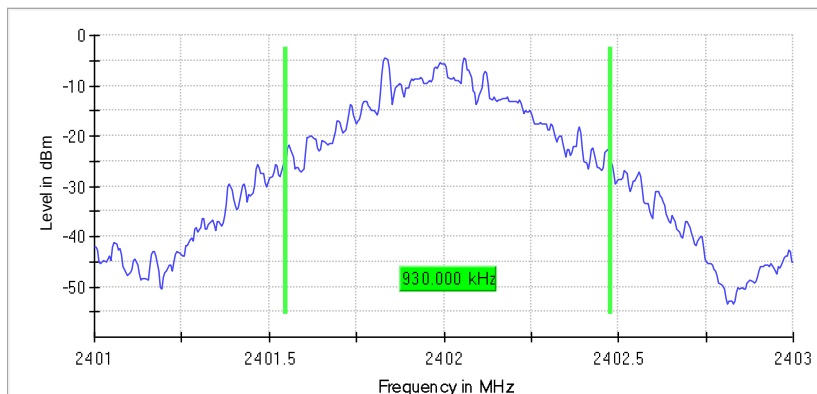
20 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	0.930000	---	---	2401.547500	2402.477500

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2402.000000	-4.5	PASS

20 dB Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweeptime	189.648 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	12 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.07 dB	0.50 dB

Emission Bandwidth 20 dB (2441 MHz; 10.000 dBm; 1 MHz; Test Mode)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

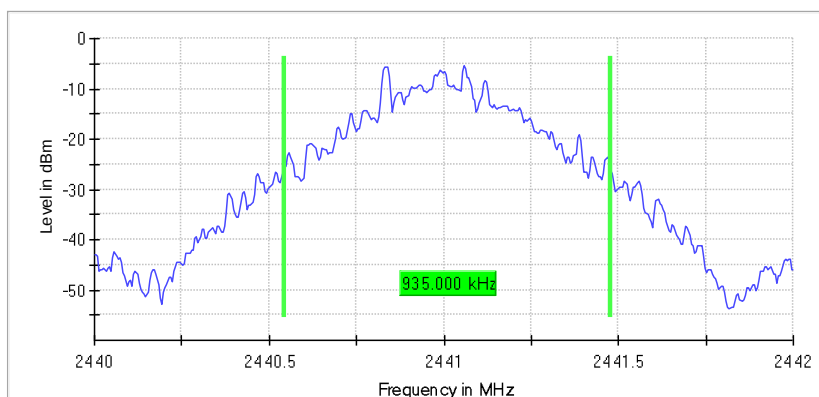
20 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2441.000000	0.935000	---	---	2440.542500	2441.477500

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2441.000000	-5.5	PASS

20 dB Bandwidth

**Measurement**

Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44200 GHz	2.44200 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
SweepTime	189.648 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	7 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.17 dB	0.50 dB

Emission Bandwidth 20 dB (2480 MHz; 10.000 dBm; 1 MHz; Test Mode)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

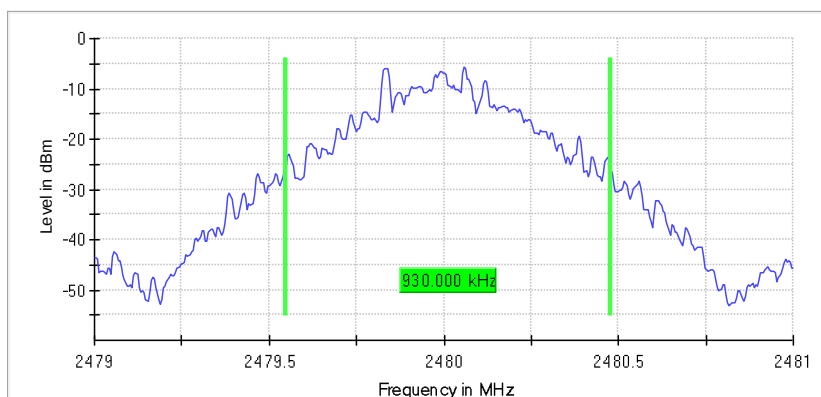
20 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	0.930000	---	---	2479.547500	2480.477500

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2480.000000	-5.7	PASS

20 dB Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
SweepTime	189.648 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.16 dB	0.50 dB

EDR mode (3-DH5)

Emission Bandwidth 20 dB (2402 MHz; 10.000 dBm; 1 MHz; Test Mode)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

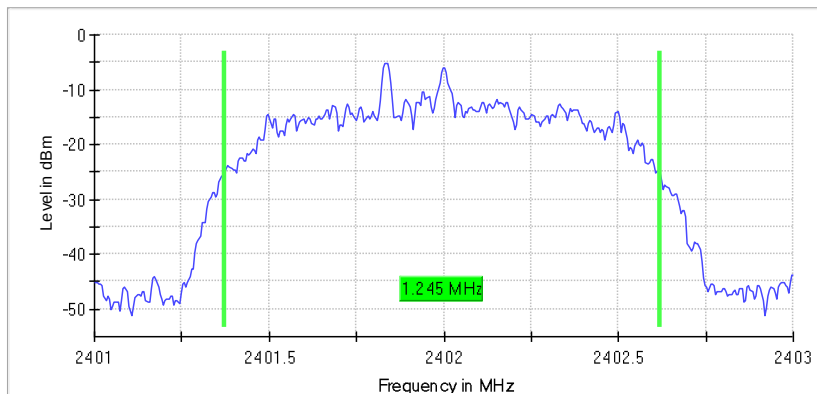
20 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	1.245000	---	---	2401.372500	2402.617500

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2402.000000	-5.1	PASS

20 dB Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweeptime	189.648 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.18 dB	0.50 dB

Emission Bandwidth 20 dB (2441 MHz; 10.000 dBm; 1 MHz; Test Mode)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

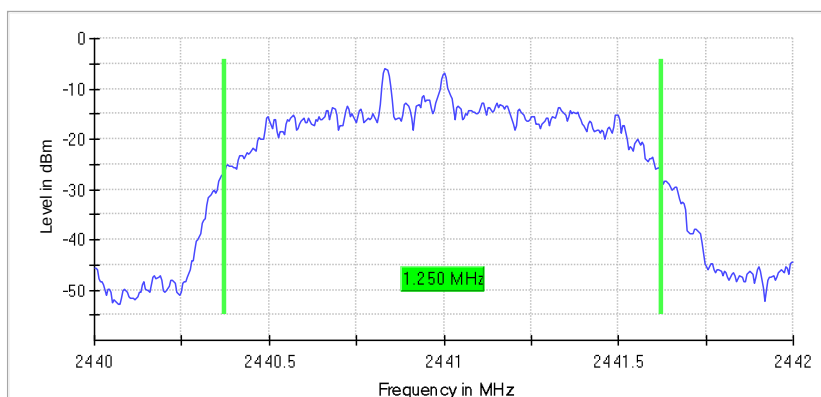
20 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2441.000000	1.250000	---	---	2440.372500	2441.622500

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2441.000000	-6.1	PASS

20 dB Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.44000 GHz	2.44000 GHz
Stop Frequency	2.44200 GHz	2.44200 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
SweepTime	189.648 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	7 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.37 dB	0.50 dB

Emission Bandwidth 20 dB (2480 MHz; 10.000 dBm; 1 MHz; Test Mode)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

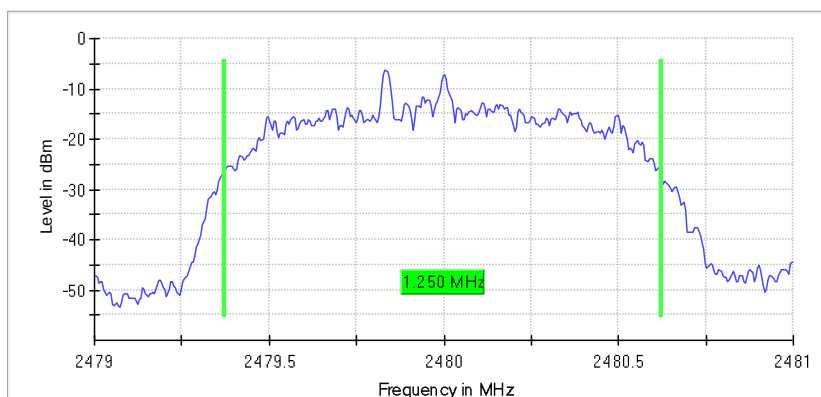
20 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	1.250000	---	---	2479.372500	2480.622500

(continuation of the "20 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2480.000000	-6.3	PASS

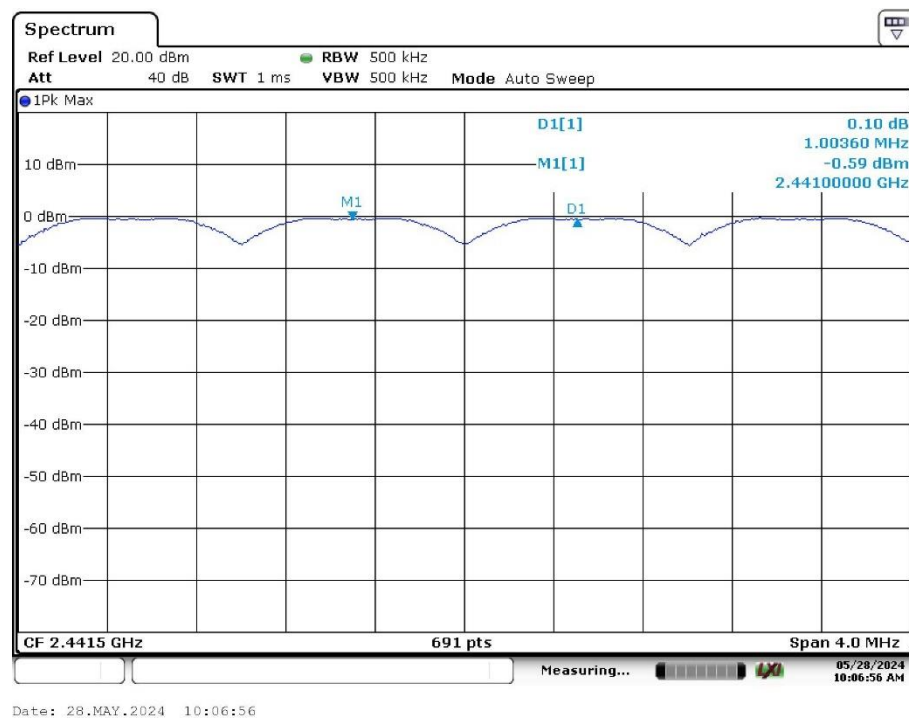
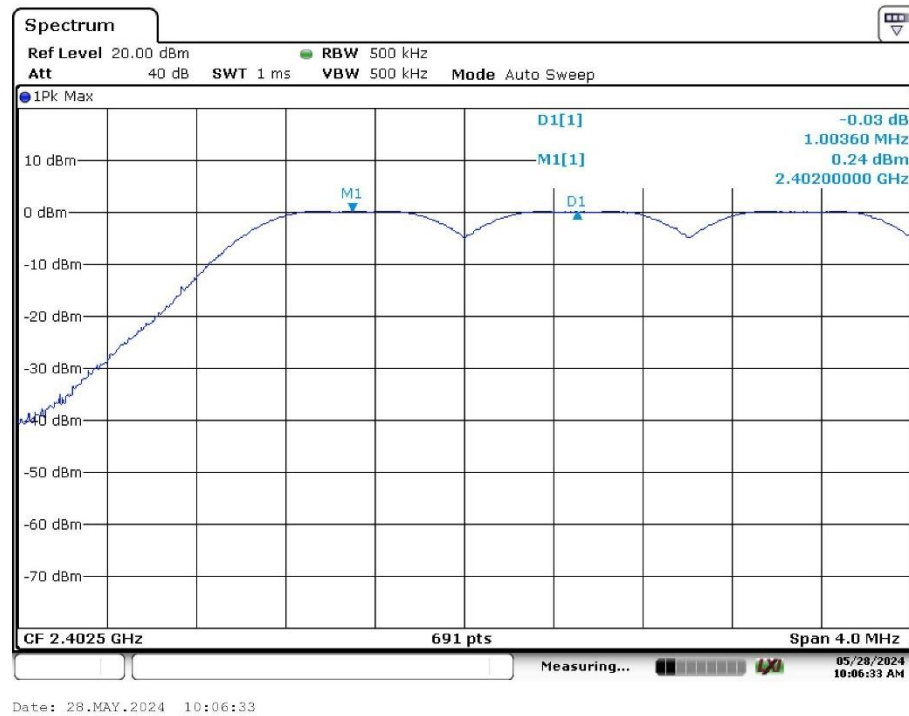
20 dB Bandwidth

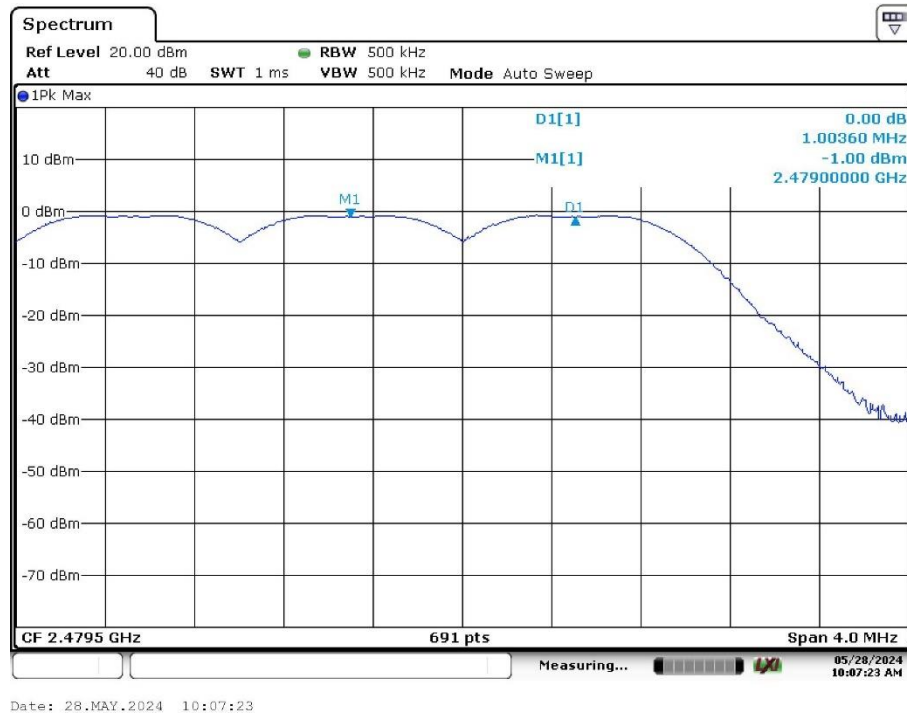
**Measurement**

Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
SweepTime	189.648 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	200	200
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.21 dB	0.50 dB

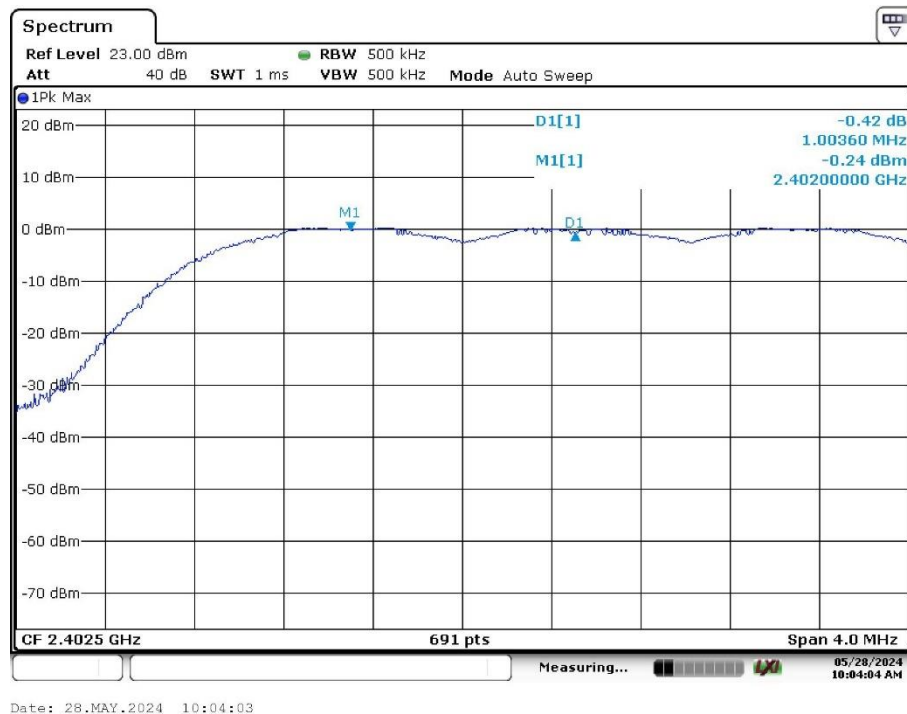
Appendix A.3: Test Results of Carrier Frequency Separation

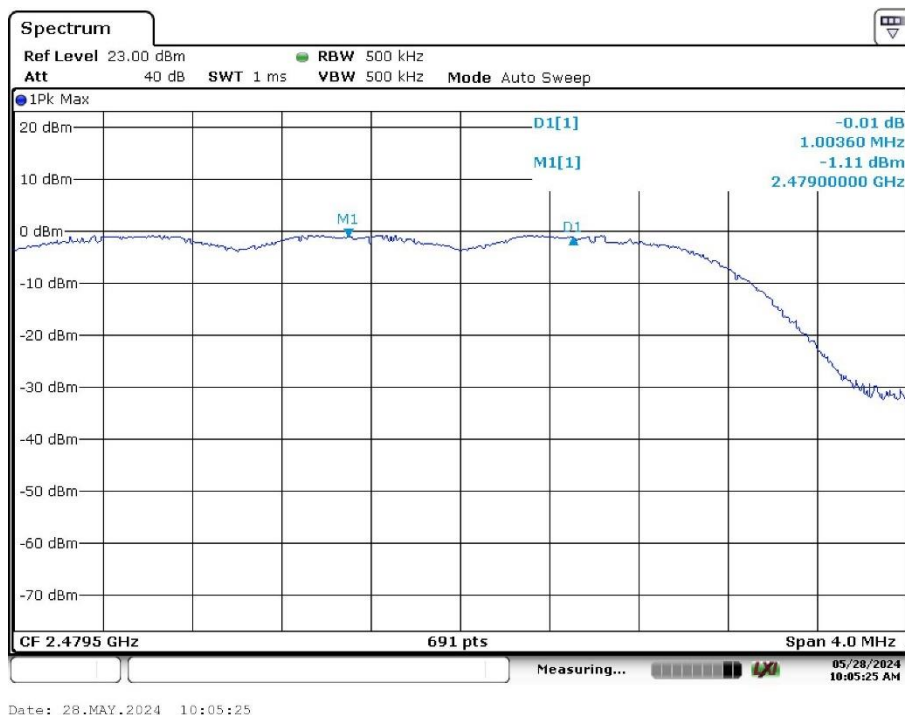
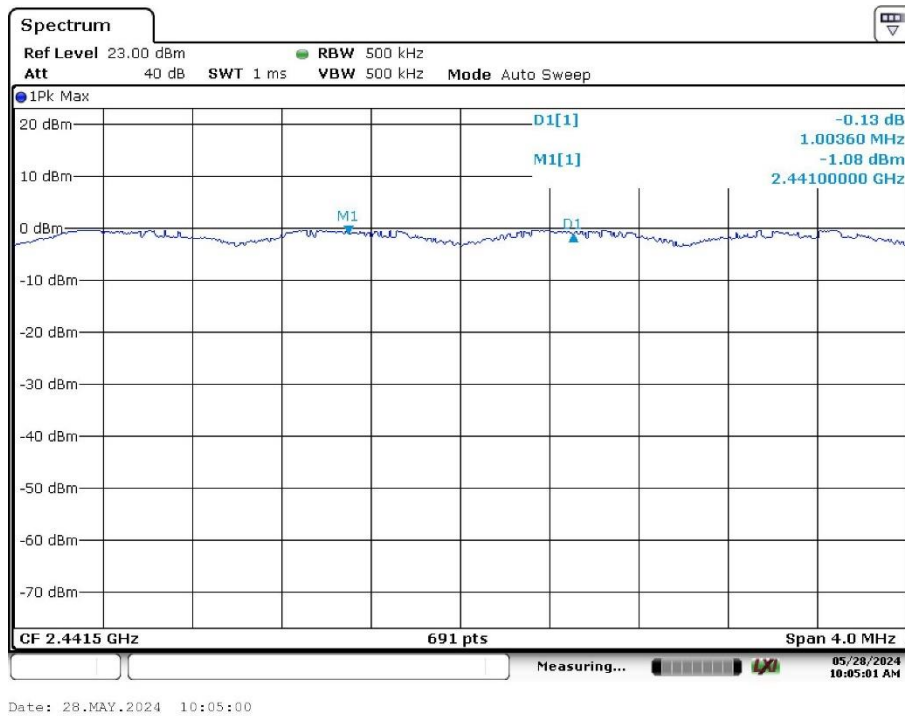
BR mode (DH5)





EDR mode (3-DH5)





Appendix A.4: Test Results of Number of Hopping Frequency

BR mode (DH5)

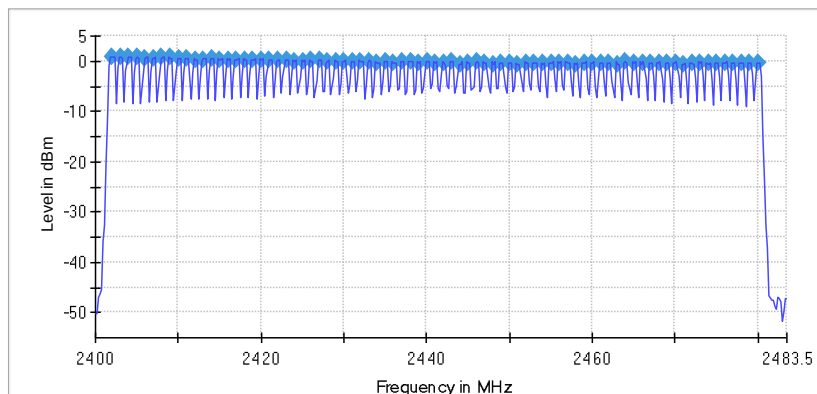
Hopping Frequencies (frequency independent; 10.000 dBm; 1 MHz)

Test according to FCC title 47 part 15 §15.247(a),(g), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

Channels

Channels	Limit Min	Limit Max	Result
79	15	---	PASS

Sequence



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	200.000 kHz	<= 299.000 kHz
VBW	200.000 kHz	>= 200.000 kHz
SweepPoints	418	~ 418
Sweptime	1.060 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	65 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.17 dB	0.50 dB

EDR mode (3-DH5)

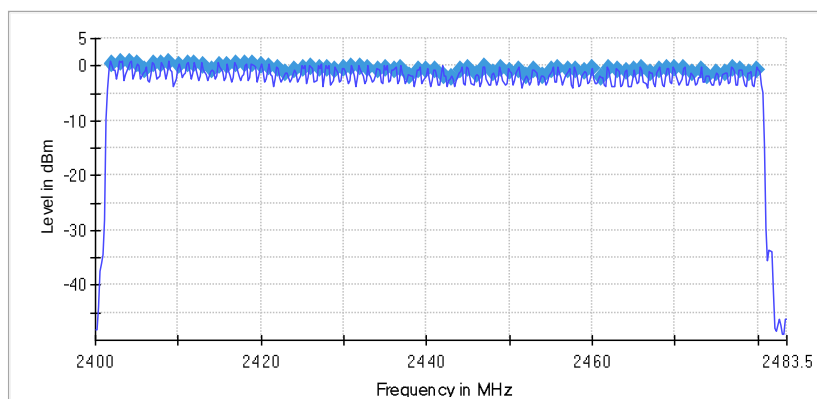
Hopping Frequencies (frequency independent; 10.000 dBm; 1 MHz)

Test according to FCC title 47 part 15 §15.247(a),(g), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

Channels

Channels	Limit Min	Limit Max	Result
79	15	---	PASS

Sequence



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40000 GHz	2.40000 GHz
Stop Frequency	2.48350 GHz	2.48350 GHz
Span	83.500 MHz	83.500 MHz
RBW	200.000 kHz	<= 299.000 kHz
VBW	200.000 kHz	>= 200.000 kHz
SweepPoints	418	~ 418
Sweptime	1.060 ms	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	84 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.31 dB	0.50 dB

Appendix A.5: Test Results of Time of Occupancy

BR mode (DH5)

Time of Channel Occupancy (2441 MHz; 10.000 dBm; 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result	Number of Hops	Average time of occupancy (ms)	Threshold (dBm)
2441.000000	PASS	319	122.650	-10.0

Periode

Min (ms)	Max (ms)	Mean (ms)
98.740	98.750	98.747

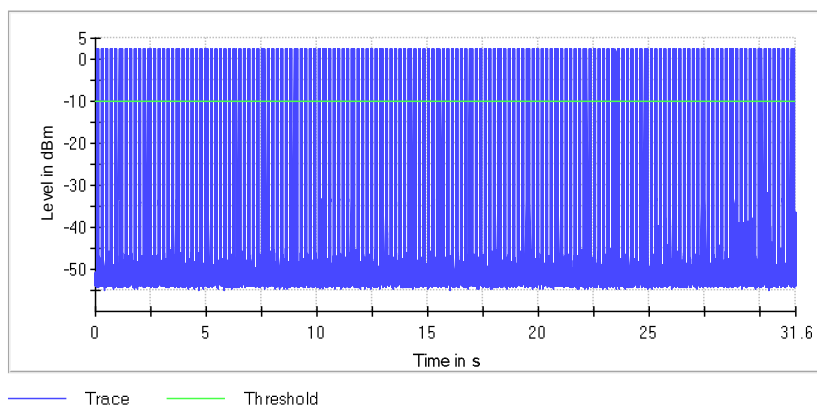
Transmit Time per Hop

Min (ms)	Max (ms)	Limit Max for Max (ms)	Limit Min for Max (ms)	Mean (ms)
0.38	0.39	400.000	0.000	0.383

DwellTime

Min (ms)	Max (ms)	Mean (ms)
0.38	0.39	0.383

Time of Channel Occupancy



Time of Channel Occupancy(2) (2441 MHz; 10.000 dBm; 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result	Number of Hops	Average time of occupancy (ms)	Threshold (dBm)
2441.000000	PASS	159	261.010	-10.0

Periode

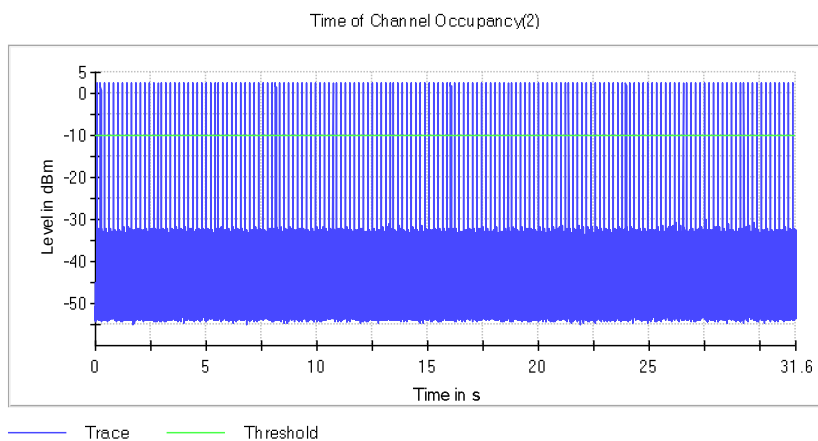
Min (ms)	Max (ms)	Mean (ms)
197.490	197.500	197.494

Transmit Time per Hop

Min (ms)	Max (ms)	Limit Max for Max (ms)	Limit Min for Max (ms)	Mean (ms)
1.630	1.640	400.000	0.000	1.631

DwellTime

Min (ms)	Max (ms)	Mean (ms)
1.630	1.640	1.631



Time of Channel Occupancy(3) (2441 MHz; 10.000 dBm; 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result	Number of Hops	Average time of occupancy (ms)	Threshold (dBm)
2441.000000	PASS	106	308.040	-10.0

Periode

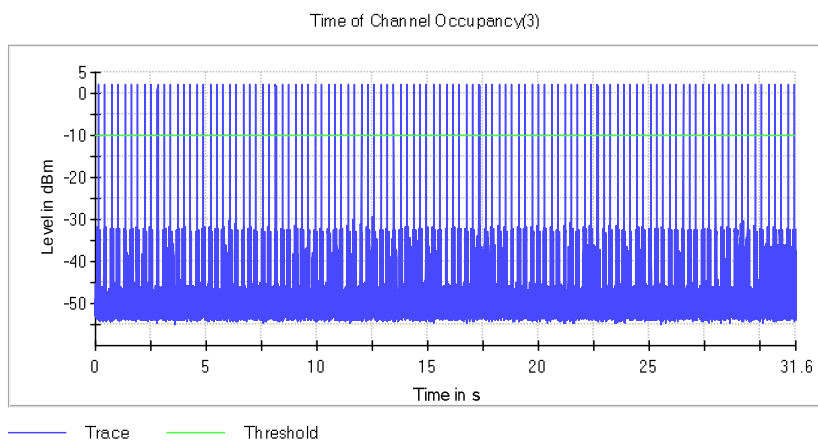
Min (ms)	Max (ms)	Mean (ms)
296.240	296.250	296.242

Transmit Time per Hop

Min (ms)	Max (ms)	Limit Max for Max (ms)	Limit Min for Max (ms)	Mean (ms)
2.870	2.880	400.000	0.000	2.879

DwellTime

Min (ms)	Max (ms)	Mean (ms)
2.870	2.880	2.879



EDR mode (3-DH5)

Time of Channel Occupancy (2441 MHz; 10.000 dBm; 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result	Number of Hops	Average time of occupancy (ms)	Threshold (dBm)
2441.000000	PASS	319	107.860	-10.0

Periode

Min (ms)	Max (ms)	Mean (ms)
98.740	98.750	98.747

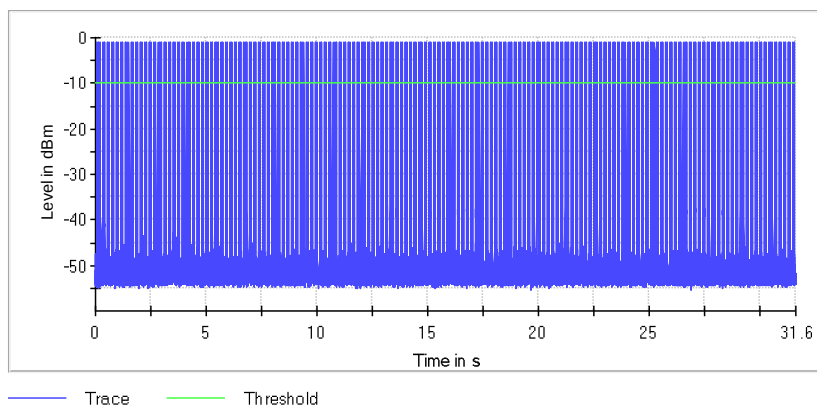
Transmit Time per Hop

Min (ms)	Max (ms)	Limit Max for Max (ms)	Limit Min for Max (ms)	Mean (ms)
0.28	0.39	400.000	0.000	0.337

DwellTime

Min (ms)	Max (ms)	Mean (ms)
0.38	0.39	0.388

Time of Channel Occupancy



Time of Channel Occupancy(2) (2441 MHz; 10.000 dBm; 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result	Number of Hops	Average time of occupancy (ms)	Threshold (dBm)
2441.000000	PASS	159	253.440	-10.0

Periode

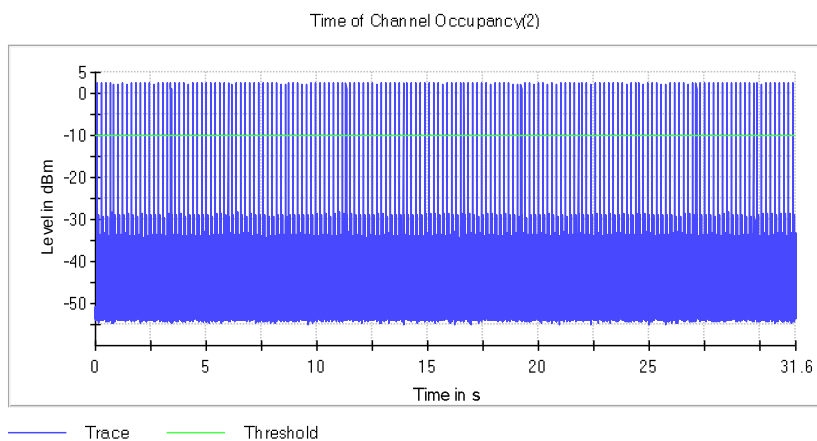
Min (ms)	Max (ms)	Mean (ms)
197.490	197.500	197.494

Transmit Time per Hop

Min (ms)	Max (ms)	Limit Max for Max (ms)	Limit Min for Max (ms)	Mean (ms)
1.500	1.630	400.000	0.000	1.584

DwellTime

Min (ms)	Max (ms)	Mean (ms)
1.630	1.650	1.639



Time of Channel Occupancy(3) (2441 MHz; 10.000 dBm; 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

Result

DUT Frequency (MHz)	Result	Number of Hops	Average time of occupancy (ms)	Threshold (dBm)
2441.000000	PASS	105	295.330	-10.0

Periode

Min (ms)	Max (ms)	Mean (ms)
296.240	296.250	296.242

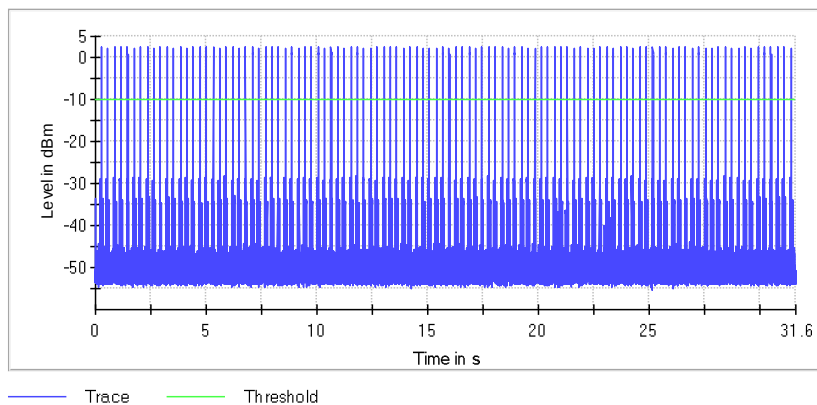
Transmit Time per Hop

Min (ms)	Max (ms)	Limit Max for Max (ms)	Limit Min for Max (ms)	Mean (ms)
2.720	2.850	400.000	0.000	2.786

DwellTime

Min (ms)	Max (ms)	Mean (ms)
2.890	2.900	2.892

Time of Channel Occupancy(3)

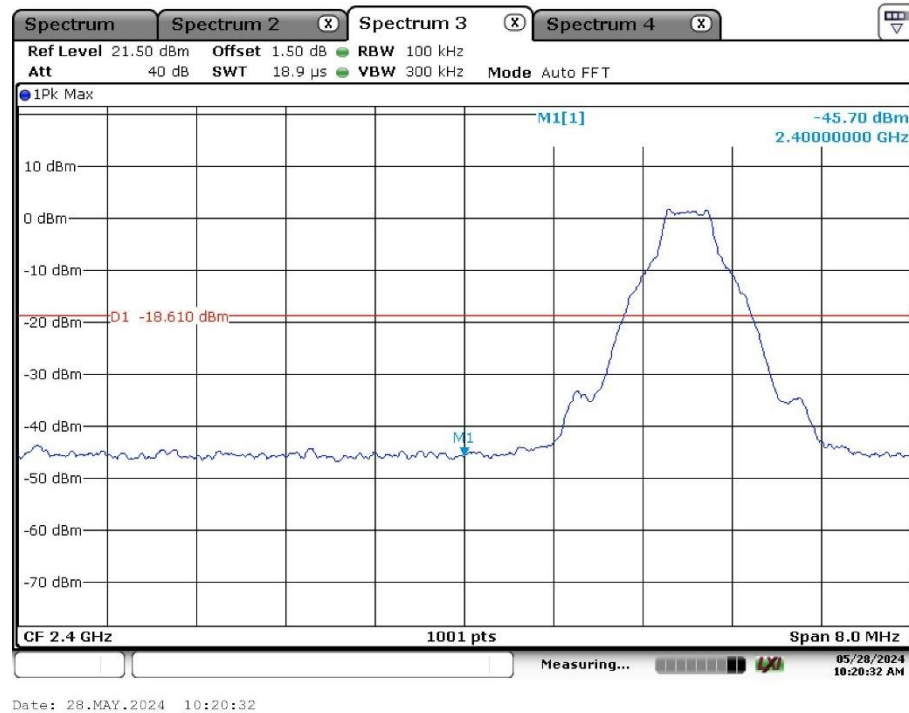


Appendix A.6: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

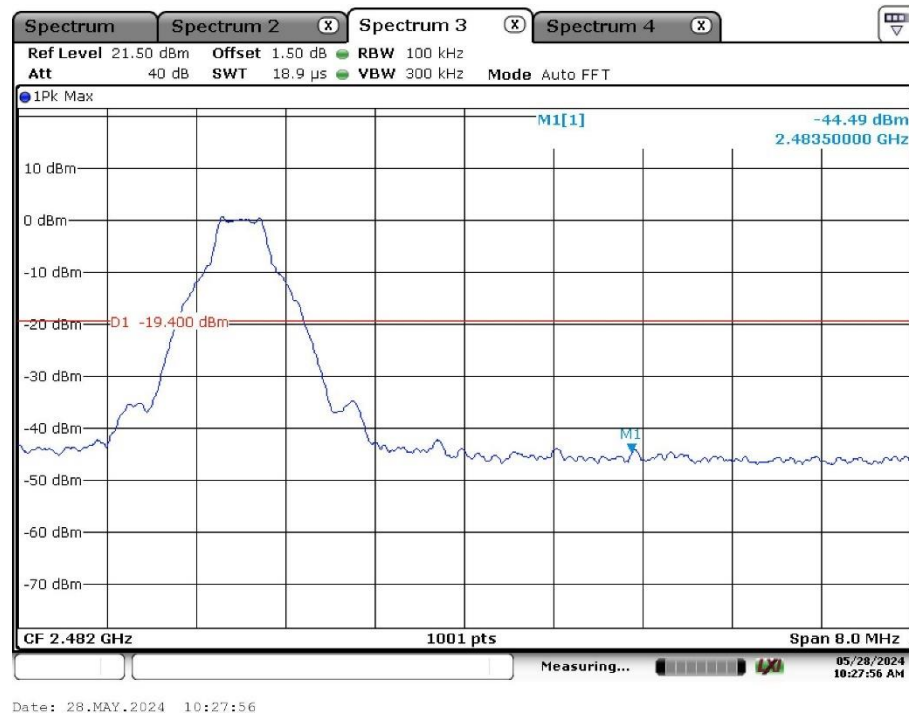
BR mode (DH5)

Fixed mode, Band Edge

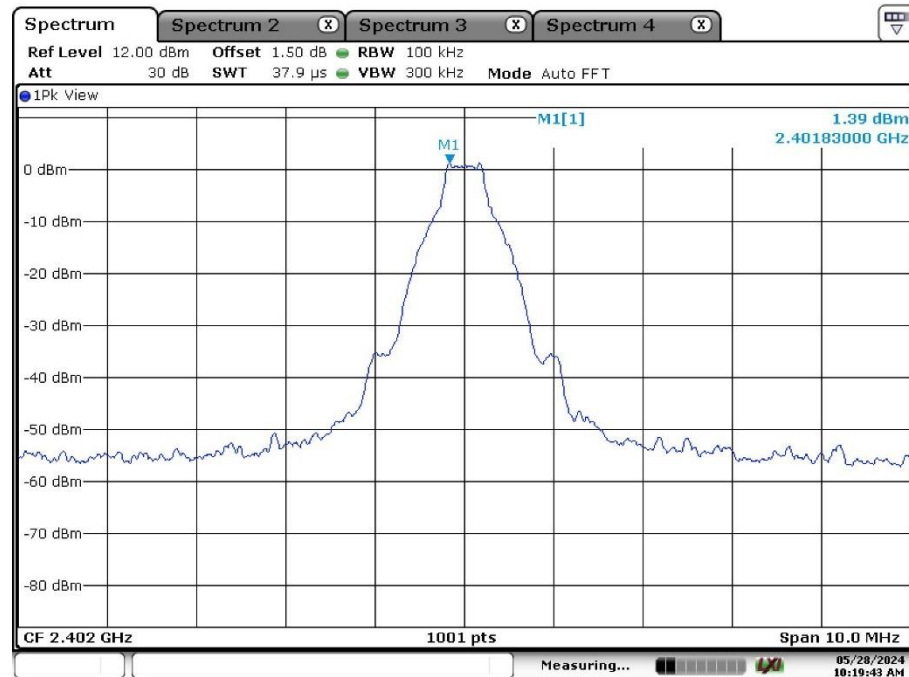
Low Channel



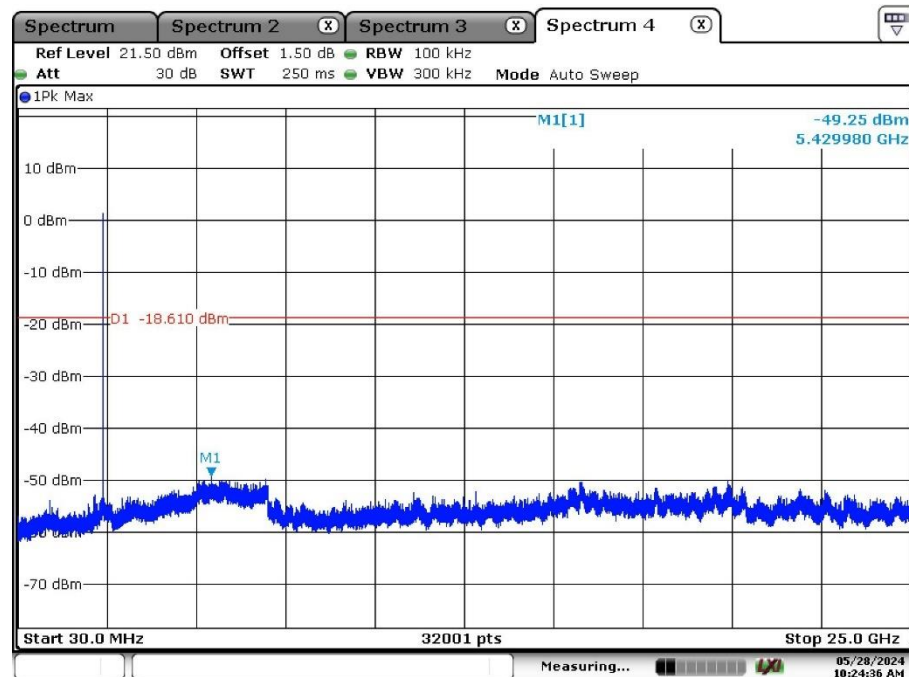
High Channel



Fixed mode, Conducted Spurious Emission
Low Channel

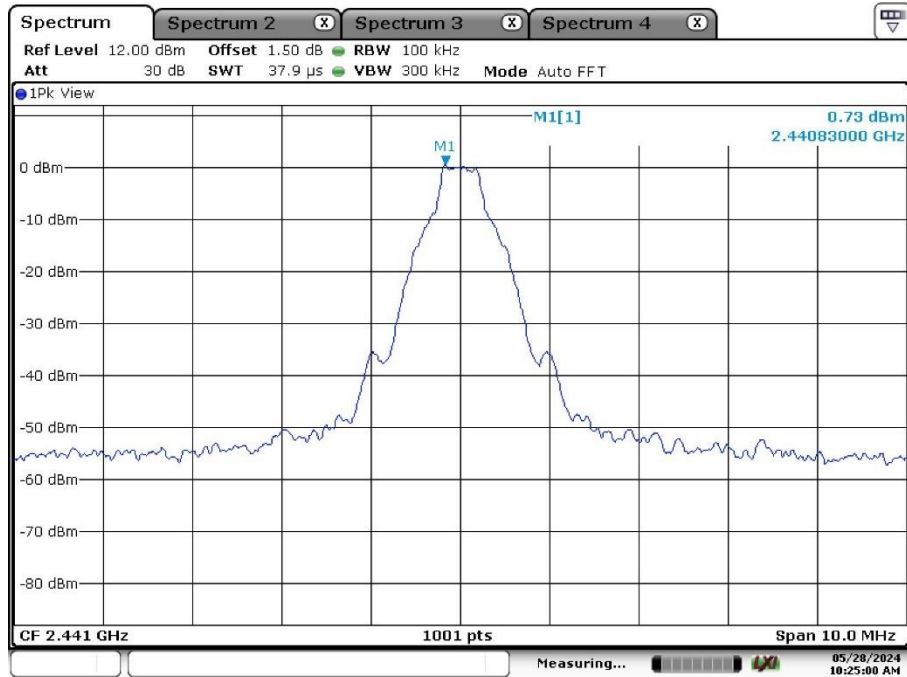


Date: 28.MAY.2024 10:19:43

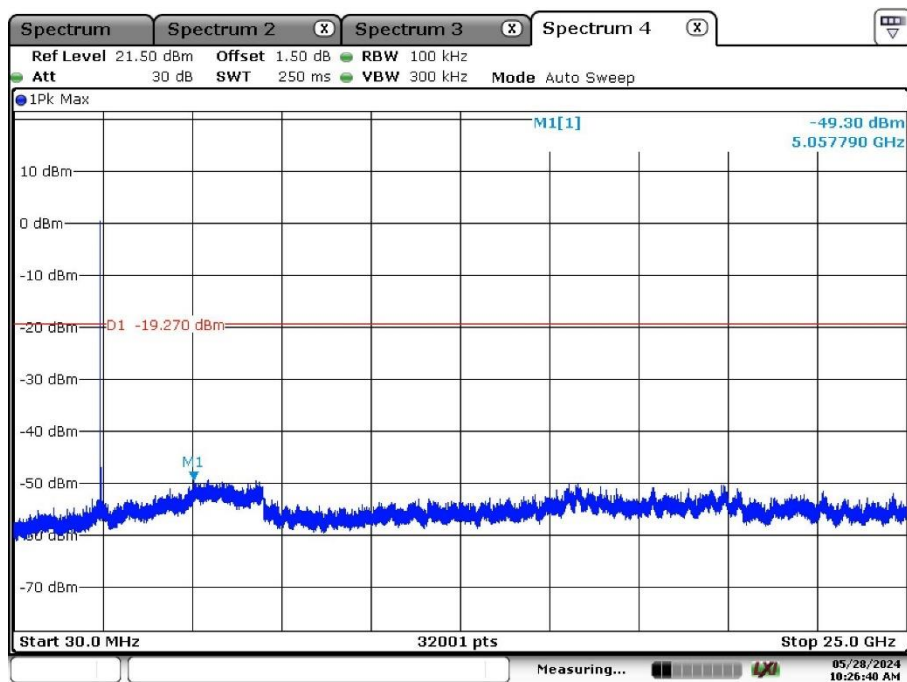


Date: 28.MAY.2024 10:24:36

Middle Channel

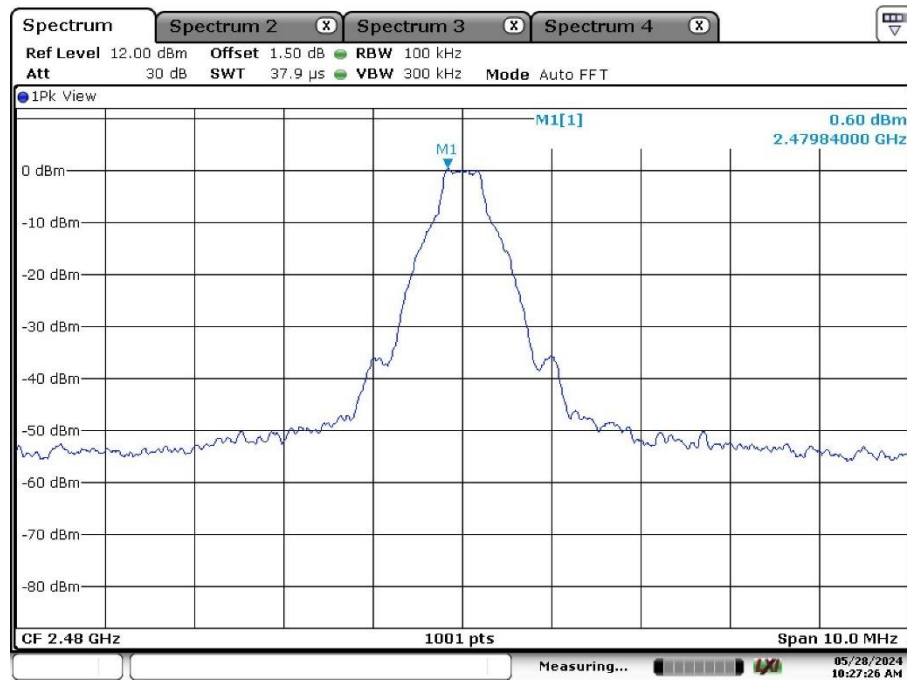


Date: 28.MAY.2024 10:25:00

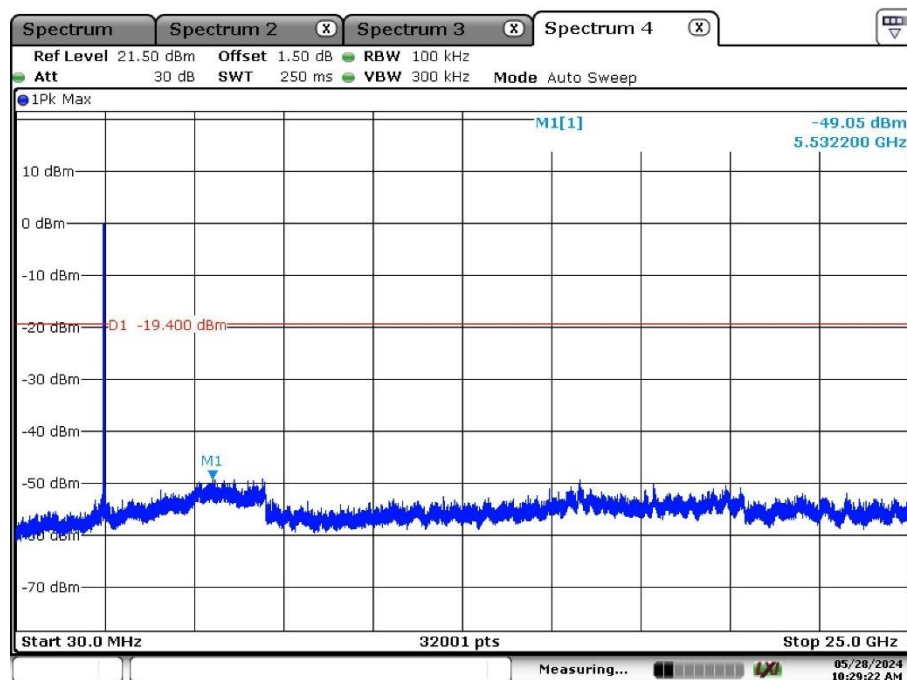


Date: 28.MAY.2024 10:26:40

High Channel



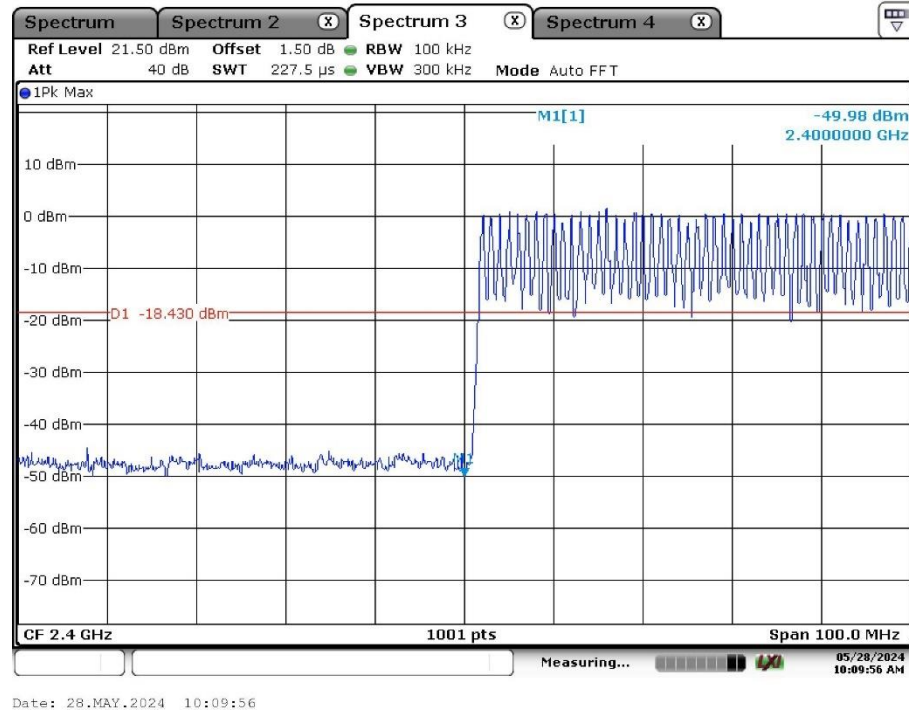
Date: 28.MAY.2024 10:27:26



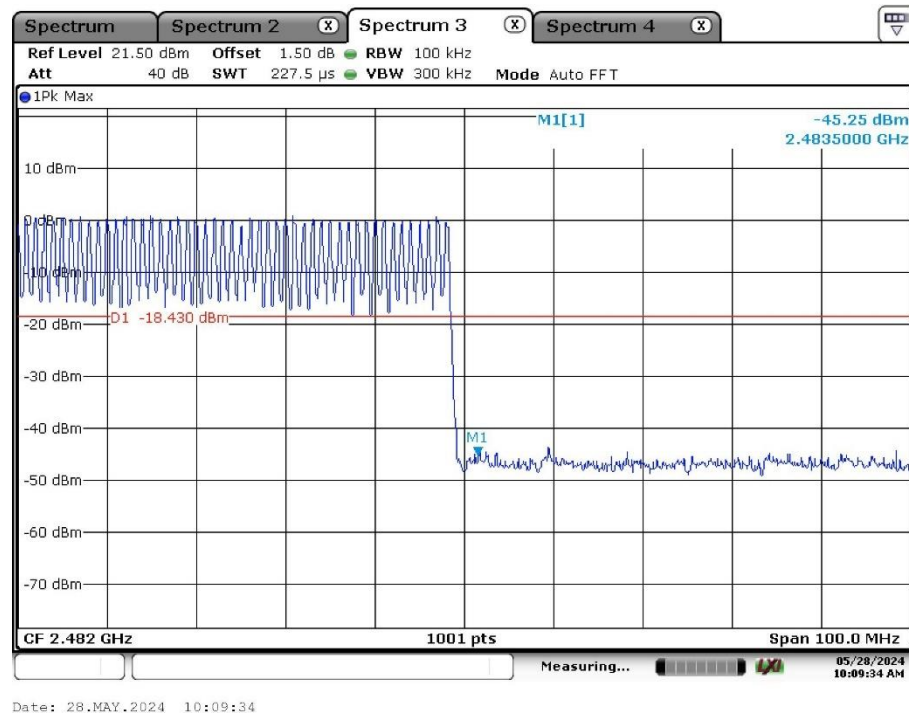
Date: 28.MAY.2024 10:29:22

Hopping Mode, Band Edge

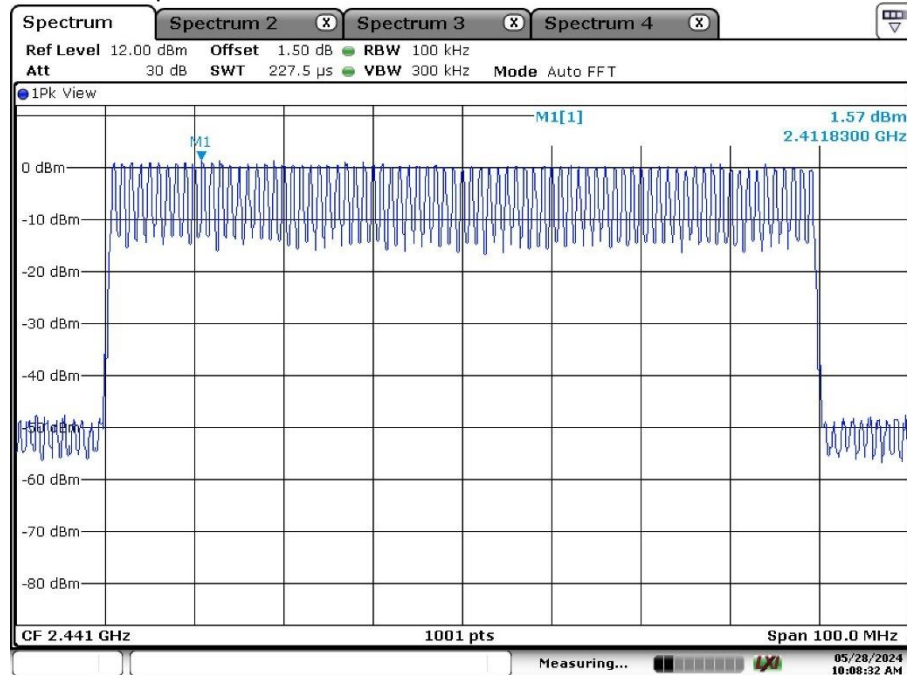
Low Channel



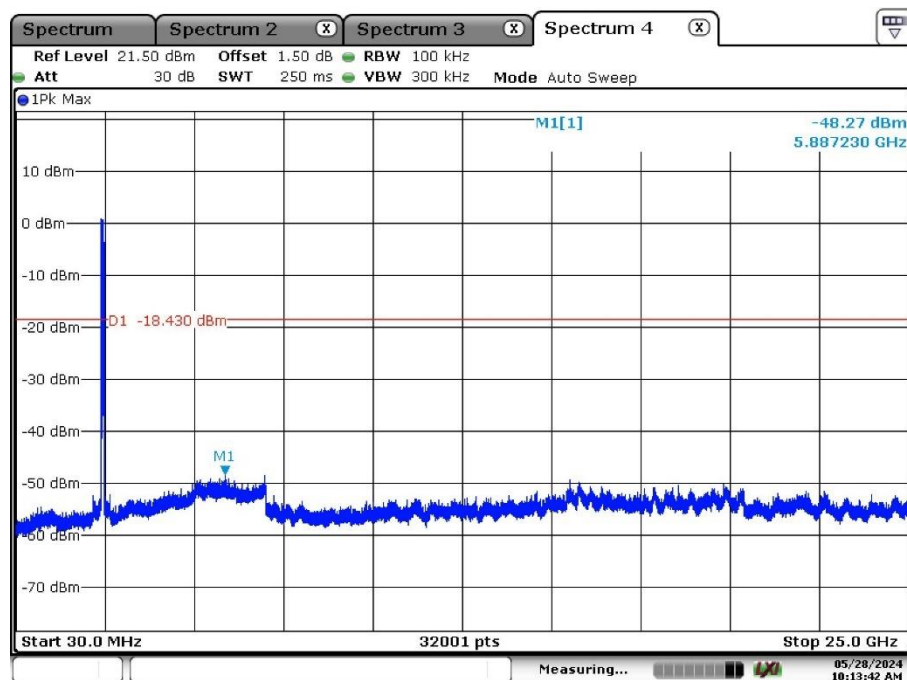
High Channel



Hopping Mode, Conducted Spurious Emission



Date: 28.MAY.2024 10:08:32

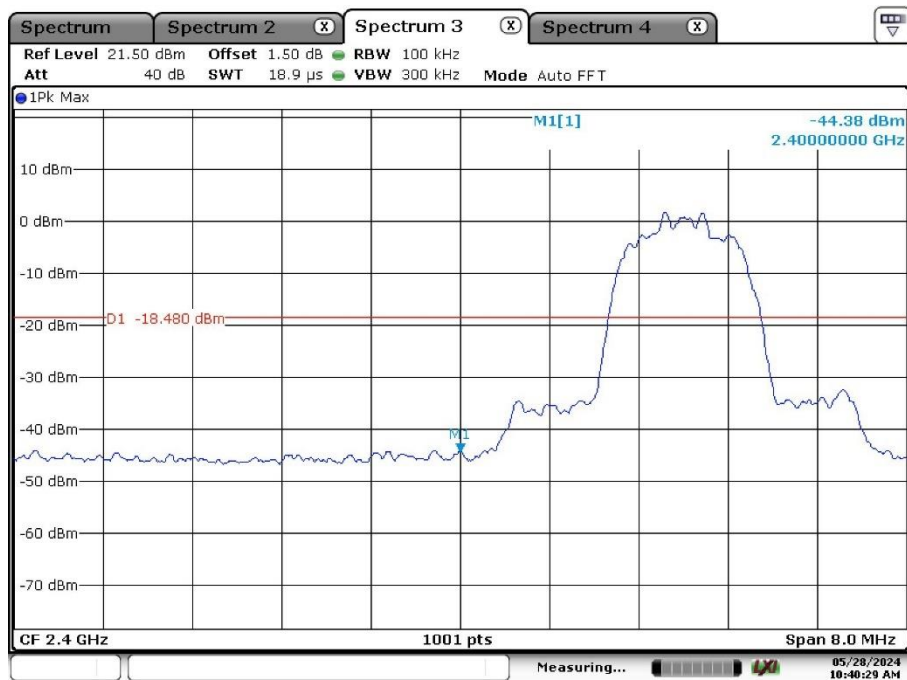


Date: 28.MAY.2024 10:13:42

EDR mode (3-DH5)

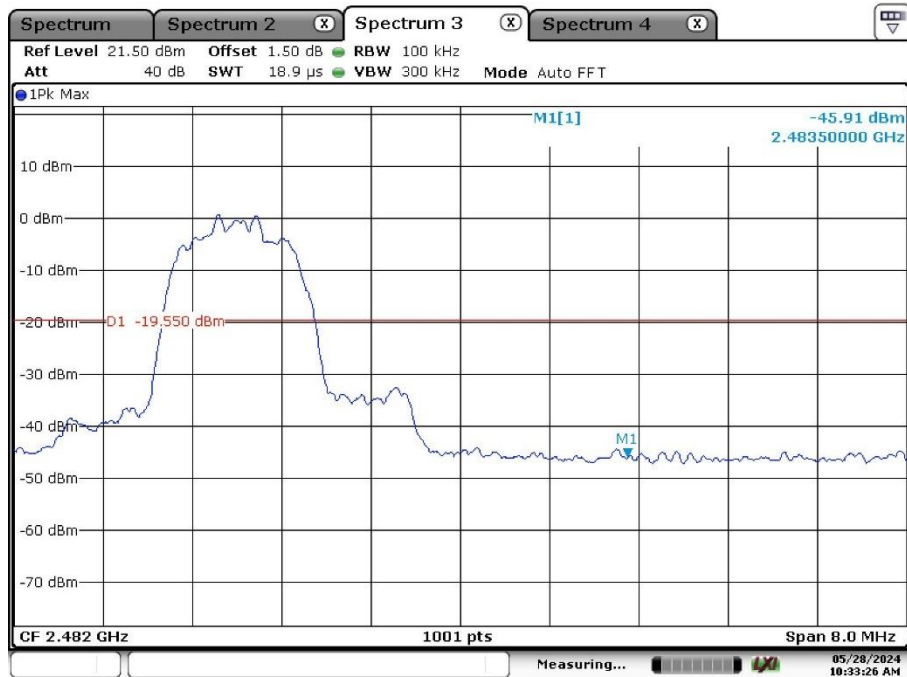
Fixed mode, Band Edge

Low Channel



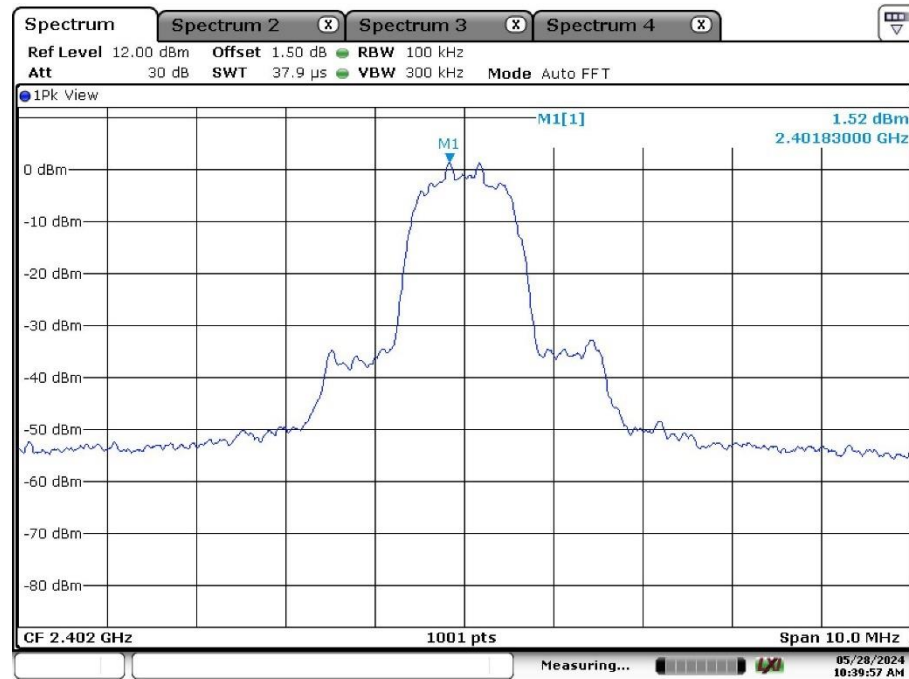
Date: 28.MAY.2024 10:40:29

High Channel

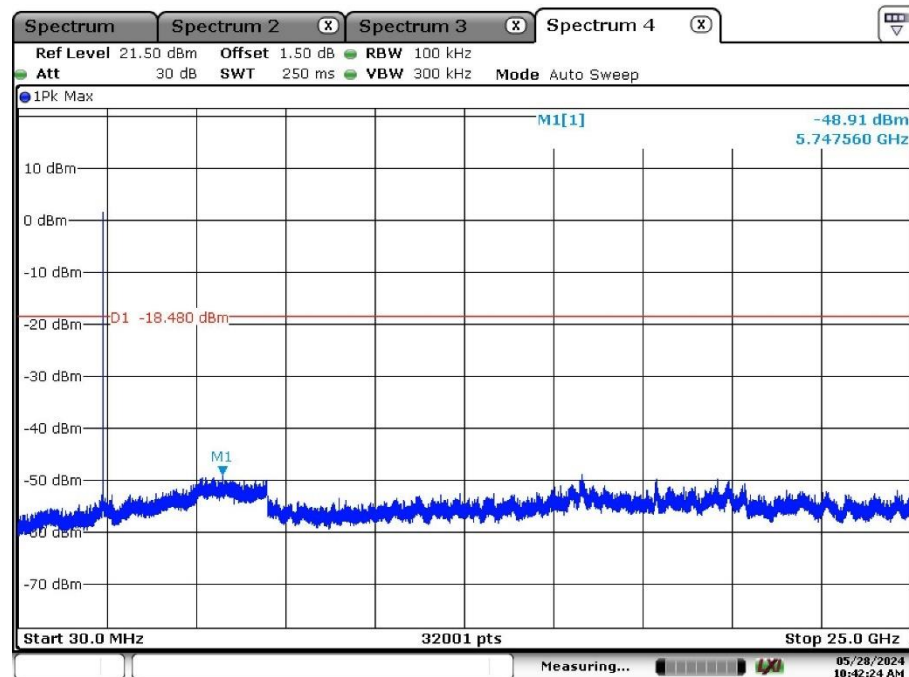


Date: 28.MAY.2024 10:33:26

Fixed mode, Conducted Spurious Emission
Low Channel

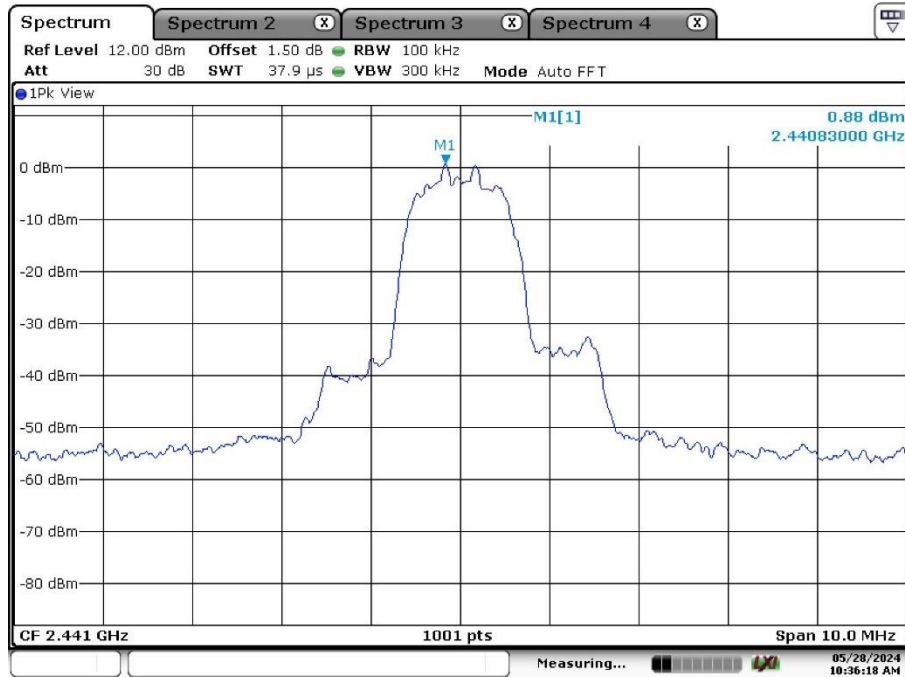


Date: 28.MAY.2024 10:39:57

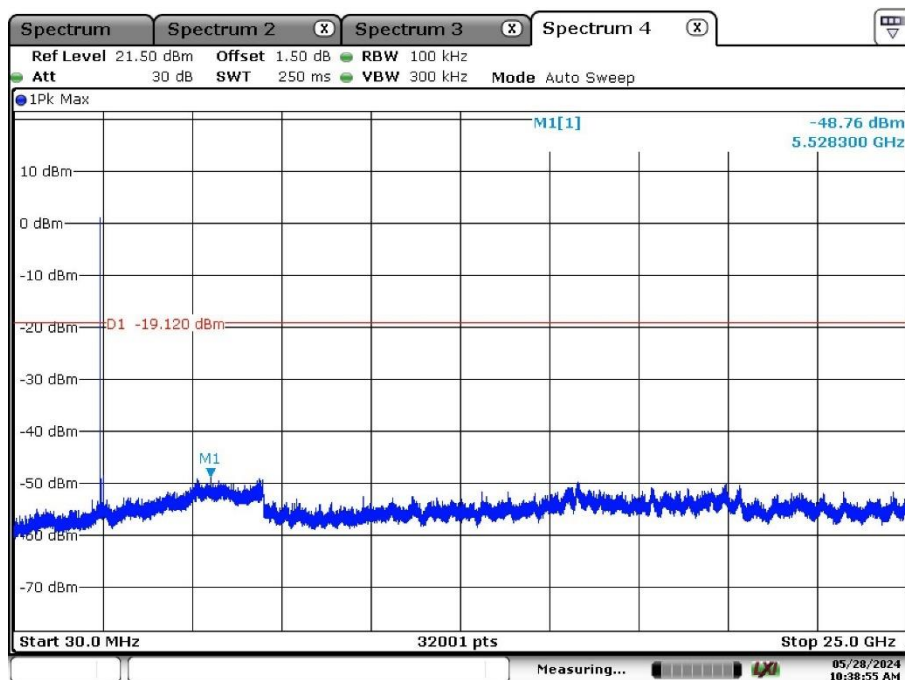


Date: 28.MAY.2024 10:42:24

Middle Channel

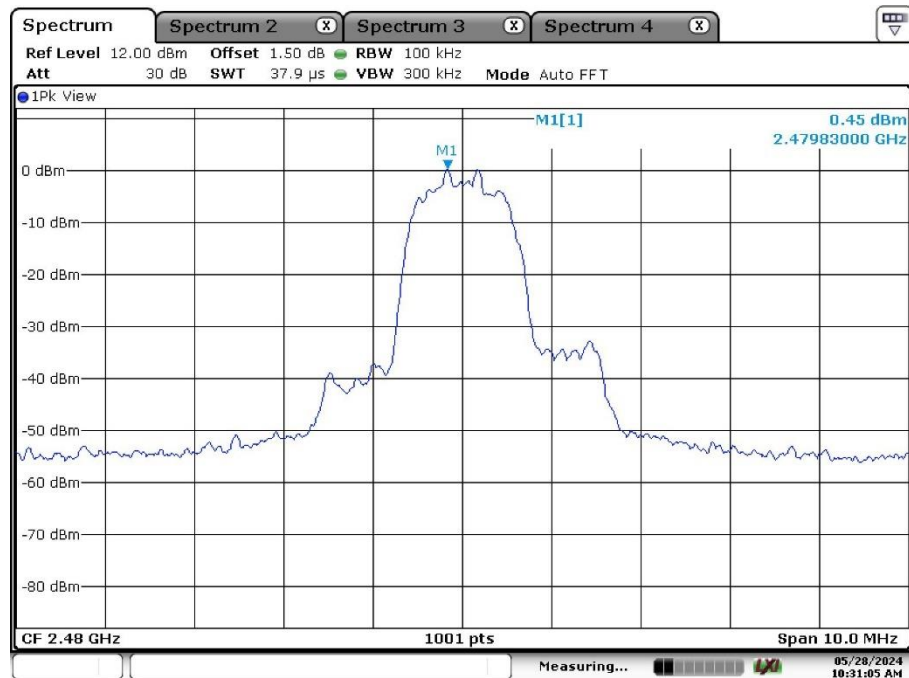


Date: 28.MAY.2024 10:36:18

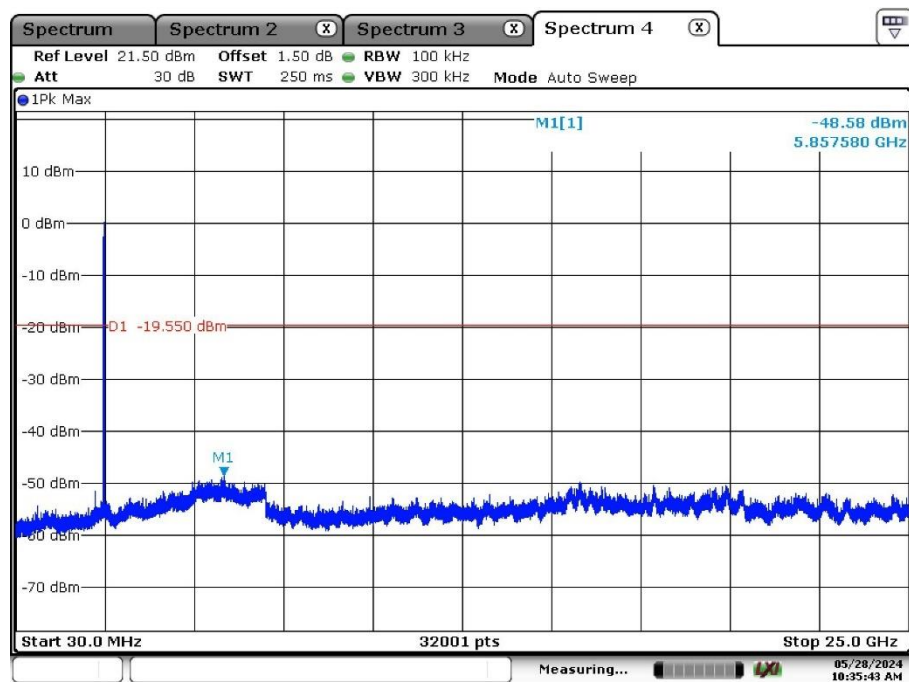


Date: 28.MAY.2024 10:38:55

High Channel



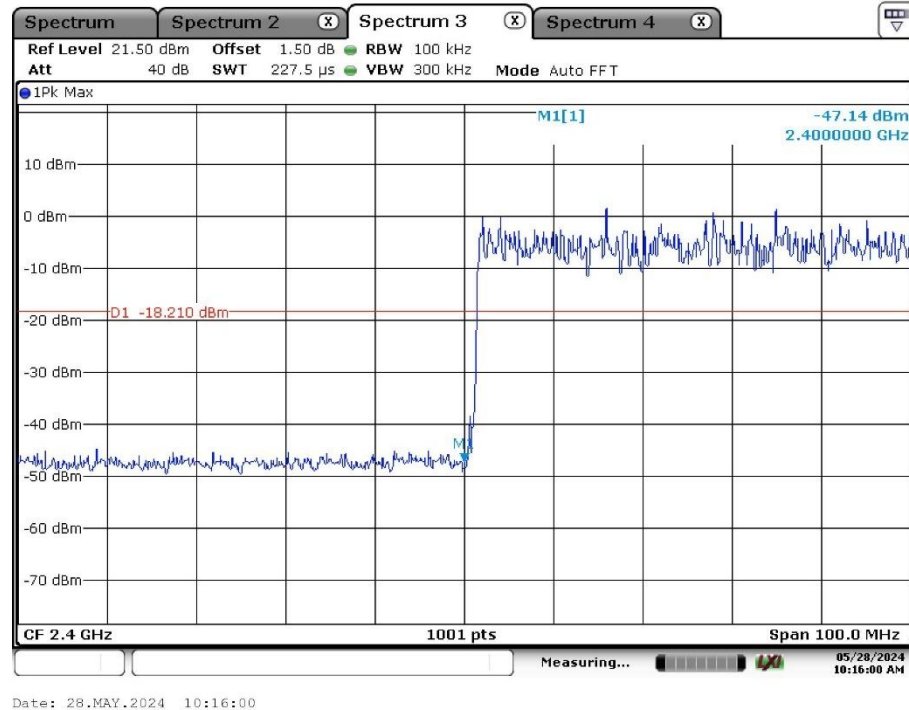
Date: 28.MAY.2024 10:31:05



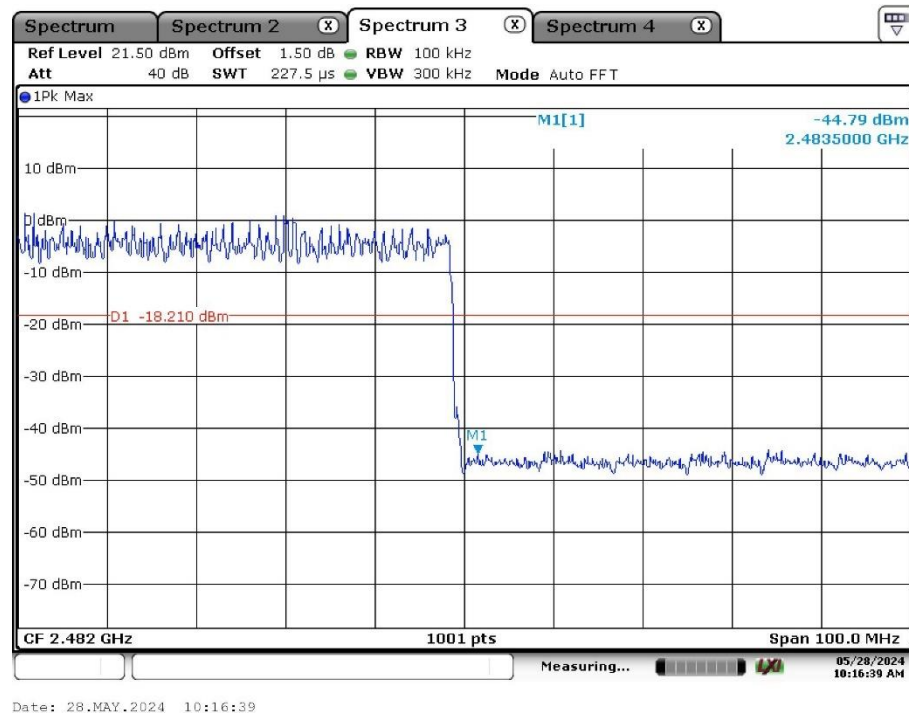
Date: 28.MAY.2024 10:35:43

Hopping Mode, Band Edge

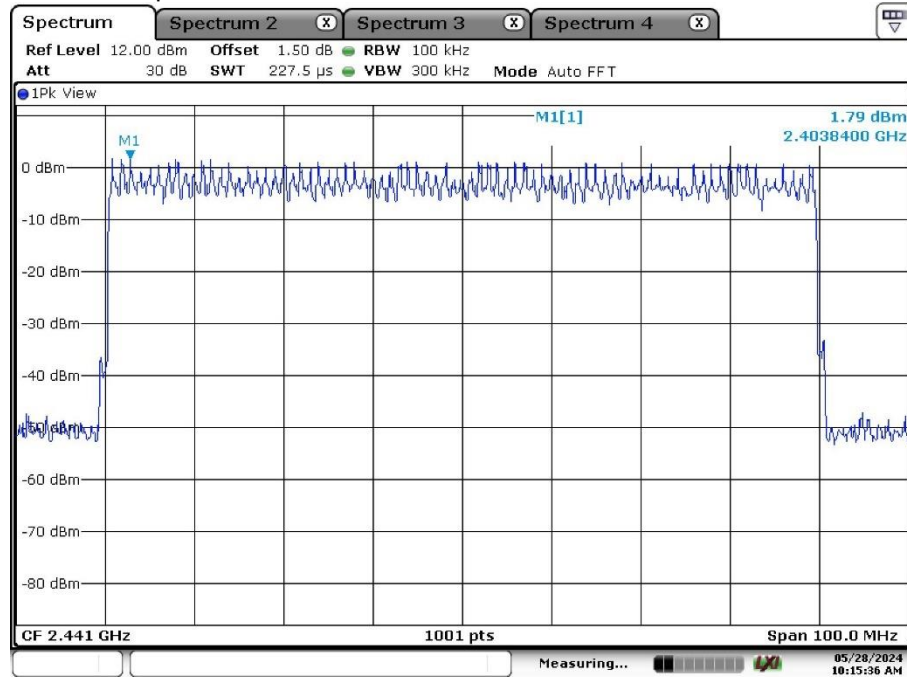
Low Channel



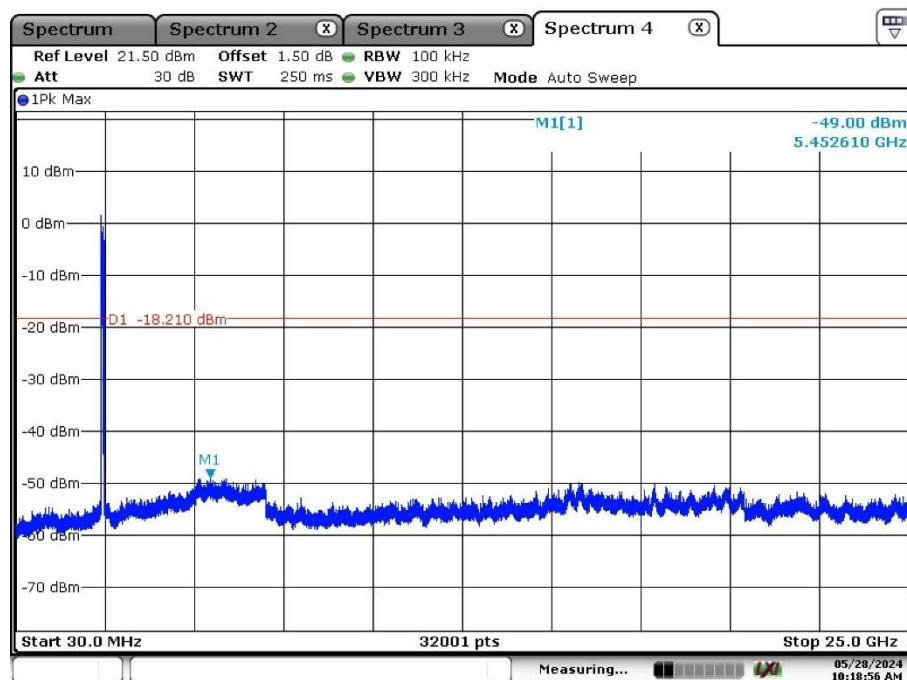
High Channel



Hopping Mode, Conducted Spurious Emission



Date: 28.MAY.2024 10:15:36



Date: 28.MAY.2024 10:18:56

Appendix A.7: Test Results of Radiated Spurious Emissions

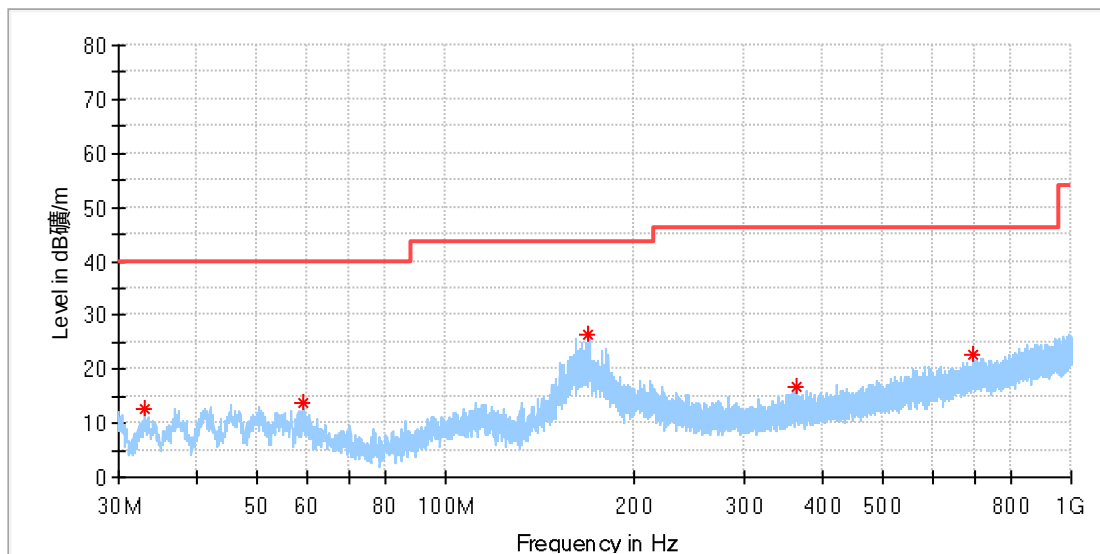
Note:

- 1) This testing was carried out on different modulations, but only the worst case was presented in this report.
- 2) Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

30MHz - 1GHz

EUT Information

EUT Name:	2.0-Channel 20 in. Soundbar
Model:	NS-HTSB20S
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168483805/A003719627-002
Test Voltage:	AC 120V, 60Hz
Remark:	Temp 24 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

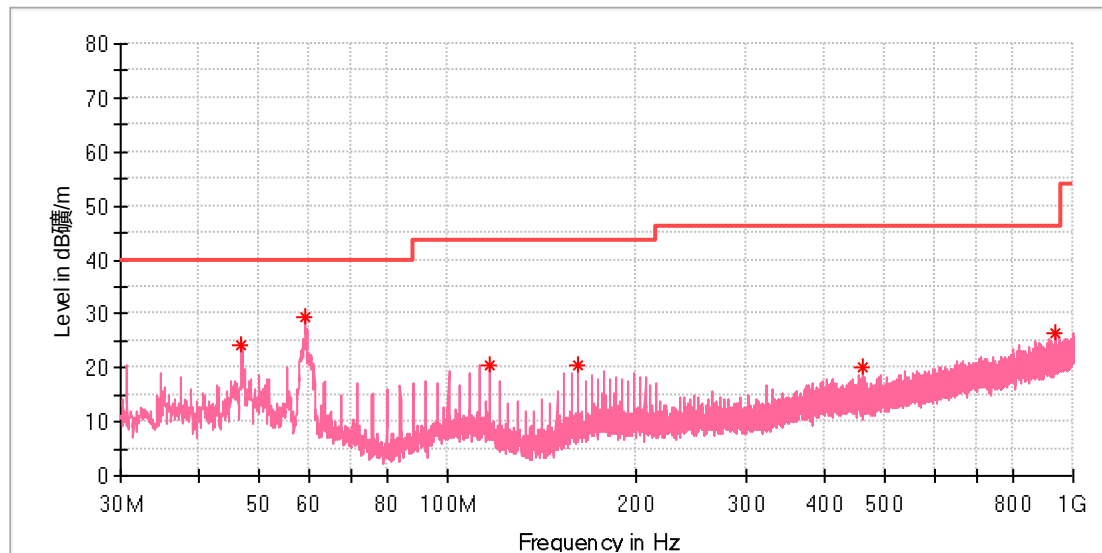
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
32.984615	12.60	40.00	27.40	100.0	H	301.0	-22.8
59.323846	13.58	40.00	26.42	100.0	H	65.0	-19.2
168.486154	26.43	43.50	17.07	100.0	H	192.0	-21.7
363.269615	16.67	46.00	29.33	100.0	H	159.0	-14.9
697.658462	22.55	46.00	23.45	100.0	H	151.0	-8.4

Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Model: NS-HTSB20S
Test Mode: BR_DH5_Mid channel
Order No/Sample No: 168483805/A003719627-002
Test Voltage: AC 120V, 60Hz
Remark: Temp 24 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
46.863077	24.28	40.00	15.72	100.0	V	83.0	-18.9
59.174615	29.30	40.00	10.70	100.0	V	211.0	-19.2
116.740385	20.39	43.50	23.11	100.0	V	179.0	-20.4
161.770769	20.49	43.50	23.01	100.0	V	107.0	-21.9
460.829231	20.15	46.00	25.85	100.0	V	211.0	-13.1
937.546923	26.31	46.00	19.69	100.0	V	336.0	-5.0

Final Result

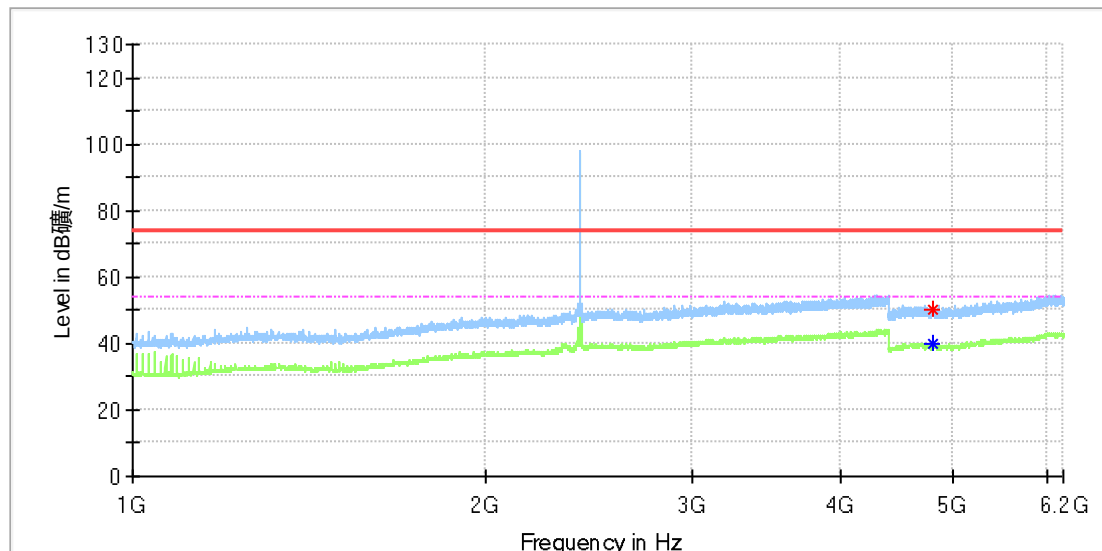
Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

1GHz - 18GHz

Note: The highest waveform in the figure is Bluetooth Fundamental.

EUT Information

EUT Name:	2.0-Channel 20 in. Soundbar
Model:	NS-HTSB20S
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168483805/A003719627-002
Test Voltage:	AC 120V, 60Hz
Remark:	Temp 24 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

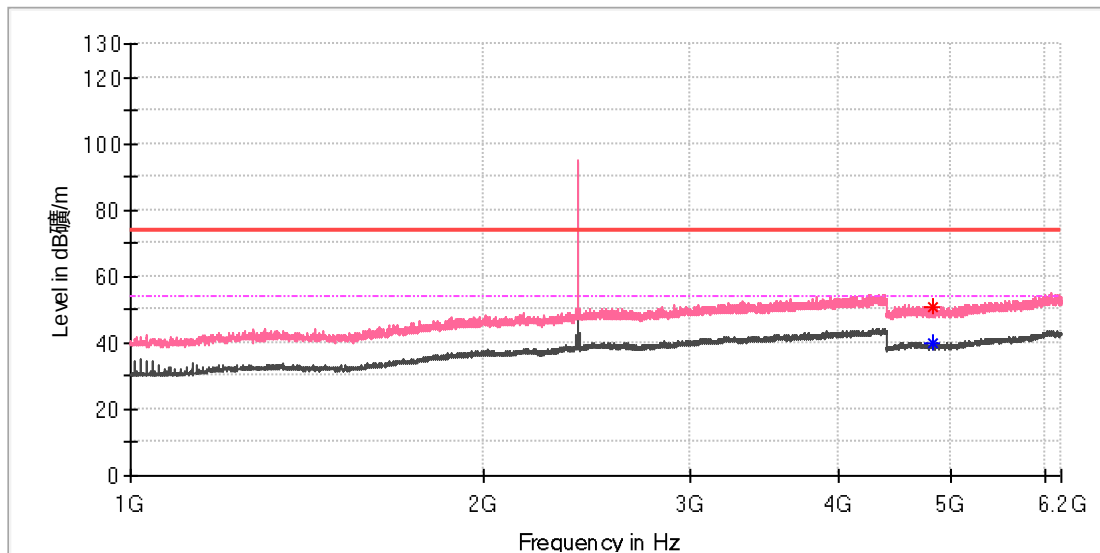
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4806.000000	50.48	---	74.00	23.52	150.0	H	15.0	11.8
4810.500000	---	39.90	54.00	14.10	150.0	H	115.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Model: NS-HTSB20S
Test Mode: BR_DH5_Low channel
Order No/Sample No: 168483805/A003719627-002
Test Voltage: AC 120V, 60Hz
Remark: Temp 24 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

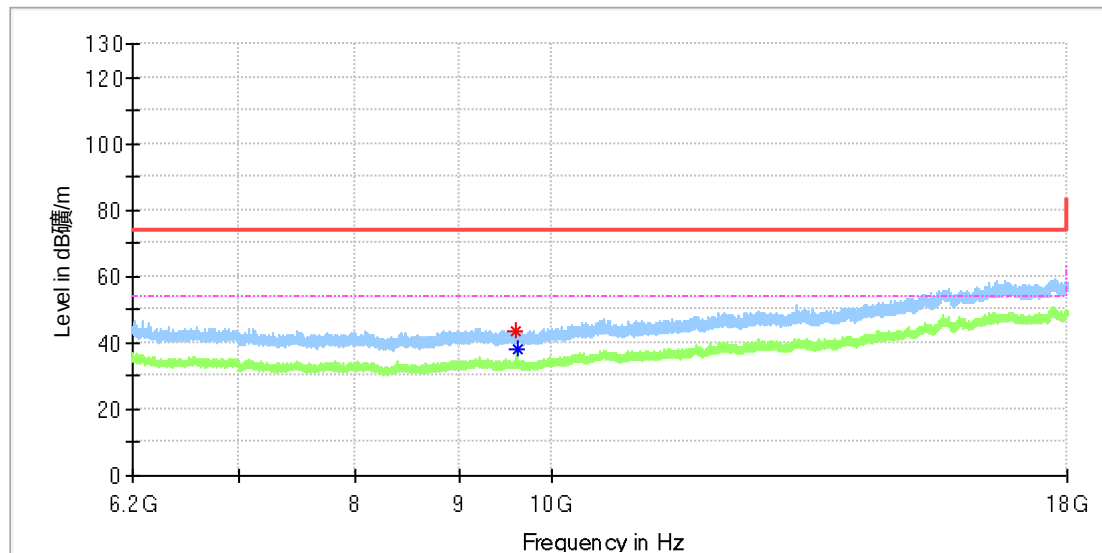
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4812.000000	---	39.65	54.00	14.35	150.0	V	31.0	11.8
4817.500000	50.63	---	74.00	23.37	150.0	V	239.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Model: NS-HTSB20S
Test Mode: BR_DH5_Low channel
Order No/Sample No: 168483805/A003719627-002
Test Voltage: AC 120V, 60Hz
Remark: Temp 24 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

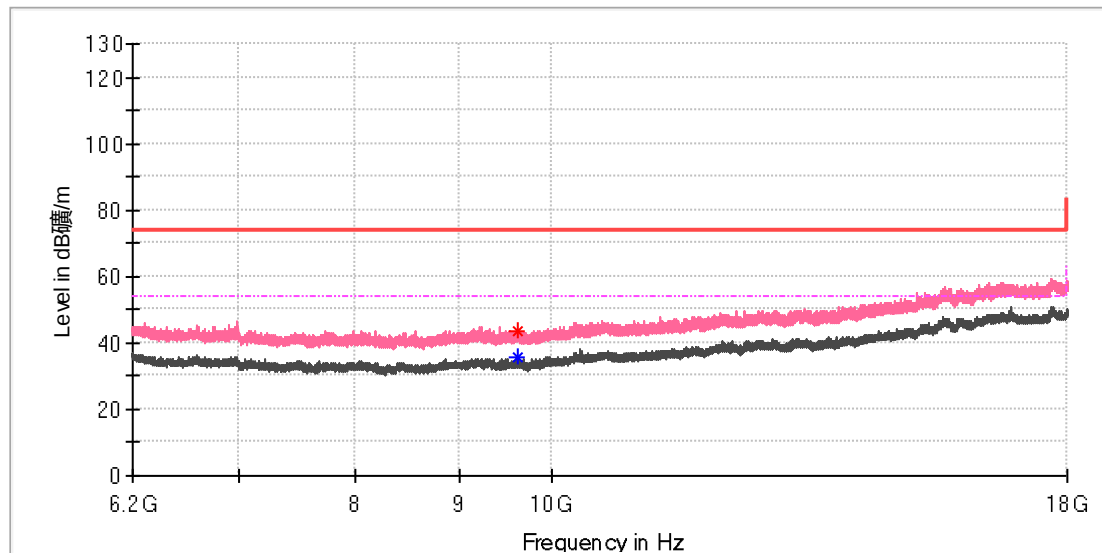
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9607.250000	43.47	---	74.00	30.53	150.0	H	248.0	10.4
9608.233333	---	38.21	54.00	15.79	150.0	H	248.0	10.4

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Model: NS-HTSB20S
Test Mode: BR_DH5_Low channel
Order No/Sample No: 168483805/A003719627-002
Test Voltage: AC 120V, 60Hz
Remark: Temp 24 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

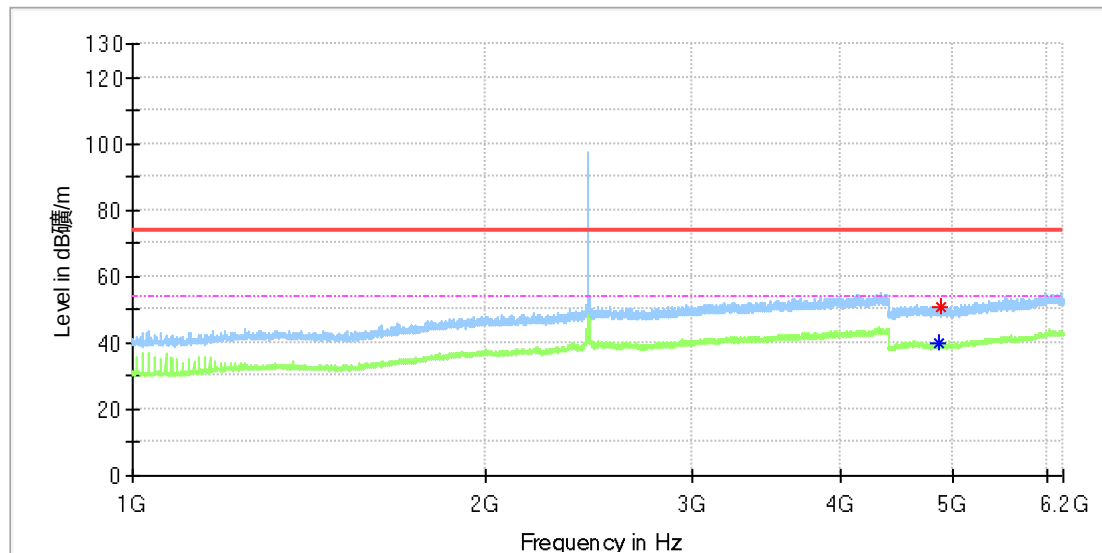
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9607.741667	---	35.73	54.00	18.27	150.0	V	128.0	10.4
9618.066667	43.49	---	74.00	30.51	150.0	V	0.0	10.4

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Model: NS-HTSB20S
Test Mode: BR_DH5_Mid channel
Order No/Sample No: 168483805/A003719627-002
Test Voltage: AC 120V, 60Hz
Remark: Temp 24 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

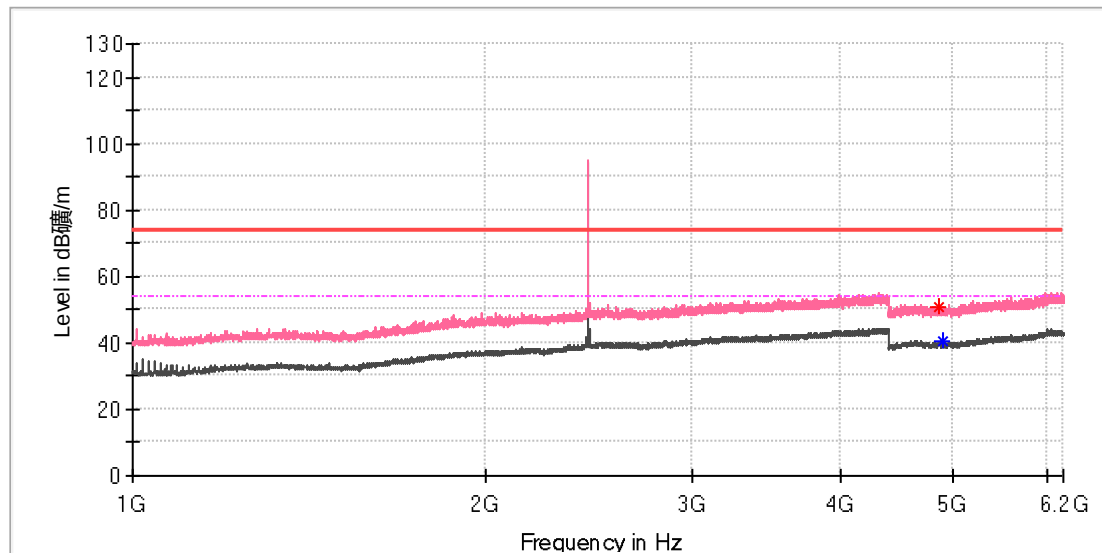
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4864.500000	---	39.63	54.00	14.37	150.0	H	154.0	11.8
4877.000000	50.80	---	74.00	23.20	150.0	H	36.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Model: NS-HTSB20S
Test Mode: BR_DH5_Mid channel
Order No/Sample No: 168483805/A003719627-002
Test Voltage: AC 120V, 60Hz
Remark: Temp 24 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

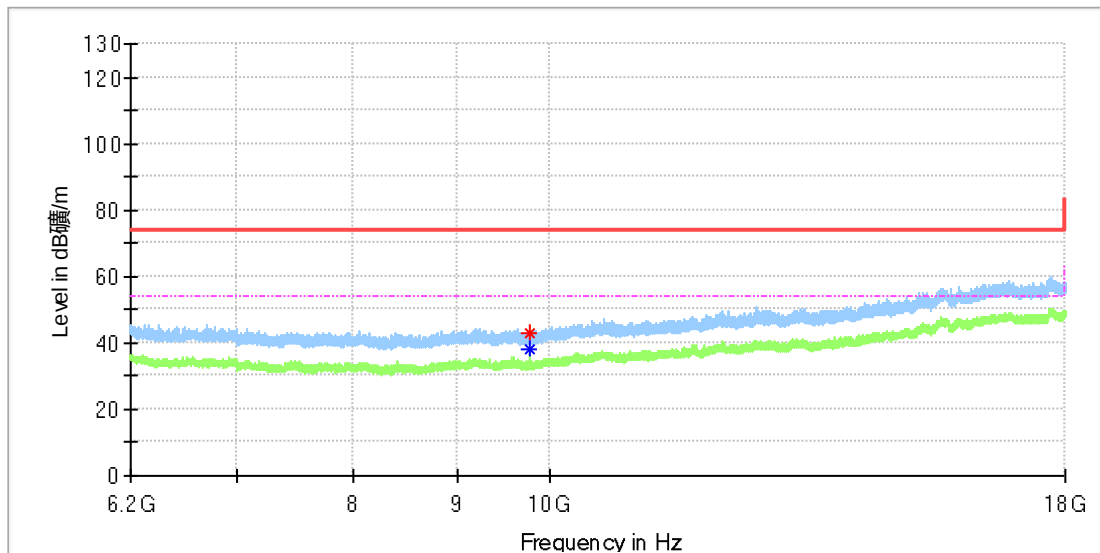
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4861.500000	50.96	---	74.00	23.04	150.0	V	166.0	11.8
4905.500000	---	40.26	54.00	13.74	150.0	V	203.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Model: NS-HTSB20S
Test Mode: BR_DH5_Mid channel
Order No/Sample No: 168483805/A003719627-002
Test Voltage: AC 120V, 60Hz
Remark: Temp 24 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

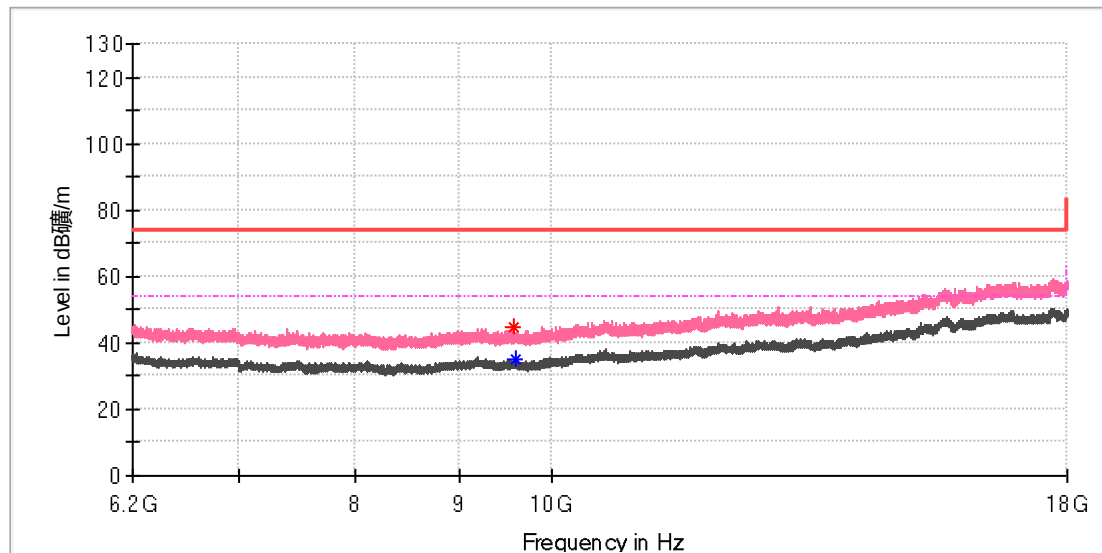
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9763.600000	42.73	---	74.00	31.27	150.0	H	146.0	10.4
9763.600000	---	38.28	54.00	15.72	150.0	H	146.0	10.4

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Model: NS-HTSB20S
Test Mode: BR_DH5_Mid channel
Order No/Sample No: 168483805/A003719627-002
Test Voltage: AC 120V, 60Hz
Remark: Temp 24 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

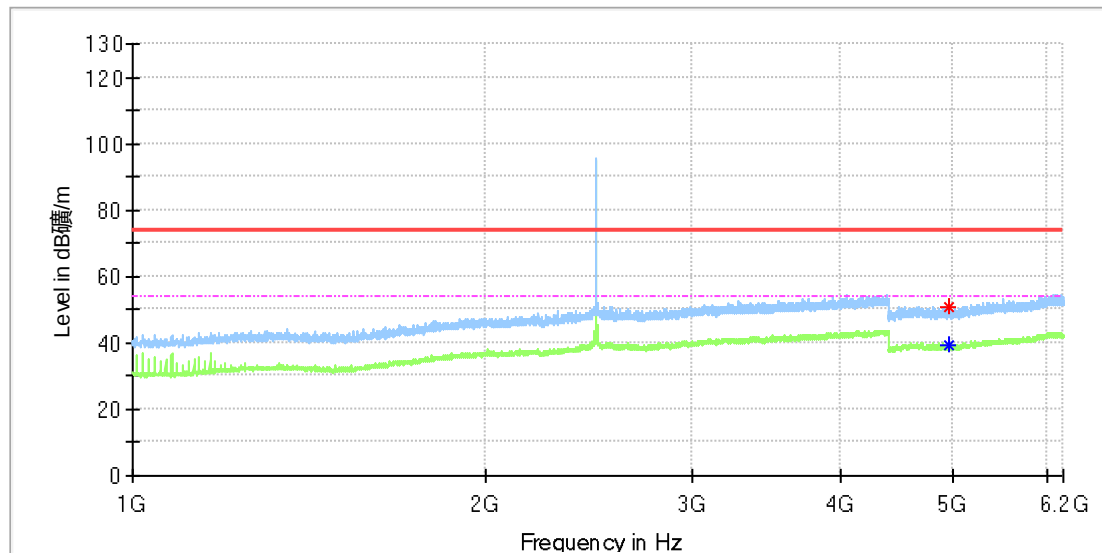
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9580.208333	44.52	---	74.00	29.48	150.0	V	202.0	10.3
9595.450000	---	35.30	54.00	18.70	150.0	V	106.0	10.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Model: NS-HTSB20S
Test Mode: BR_DH5_High channel
Order No/Sample No: 168483805/A003719627-002
Test Voltage: AC 120V, 60Hz
Remark: Temp 24 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

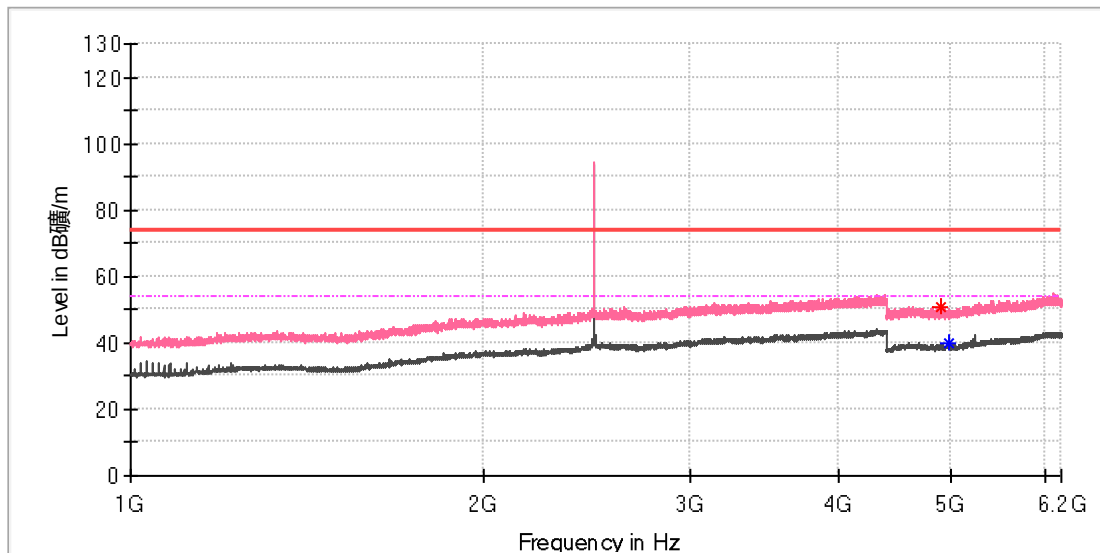
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4947.500000	50.56	---	74.00	23.44	150.0	H	17.0	11.8
4960.000000	---	39.28	54.00	14.72	150.0	H	90.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Model: NS-HTSB20S
Test Mode: BR_DH5_High channel
Order No/Sample No: 168483805/A003719627-002
Test Voltage: AC 120V, 60Hz
Remark: Temp 24 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

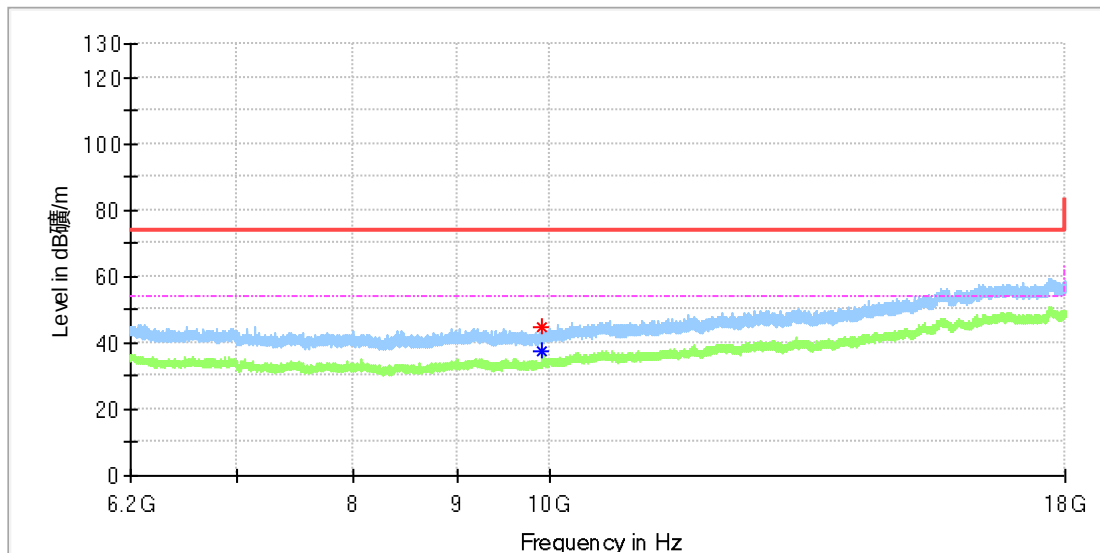
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4892.500000	51.02	---	74.00	22.98	150.0	V	144.0	11.8
4967.500000	---	39.99	54.00	14.01	150.0	V	270.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Model: NS-HTSB20S
Test Mode: BR_DH5_High channel
Order No/Sample No: 168483805/A003719627-002
Test Voltage: AC 120V, 60Hz
Remark: Temp 24 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

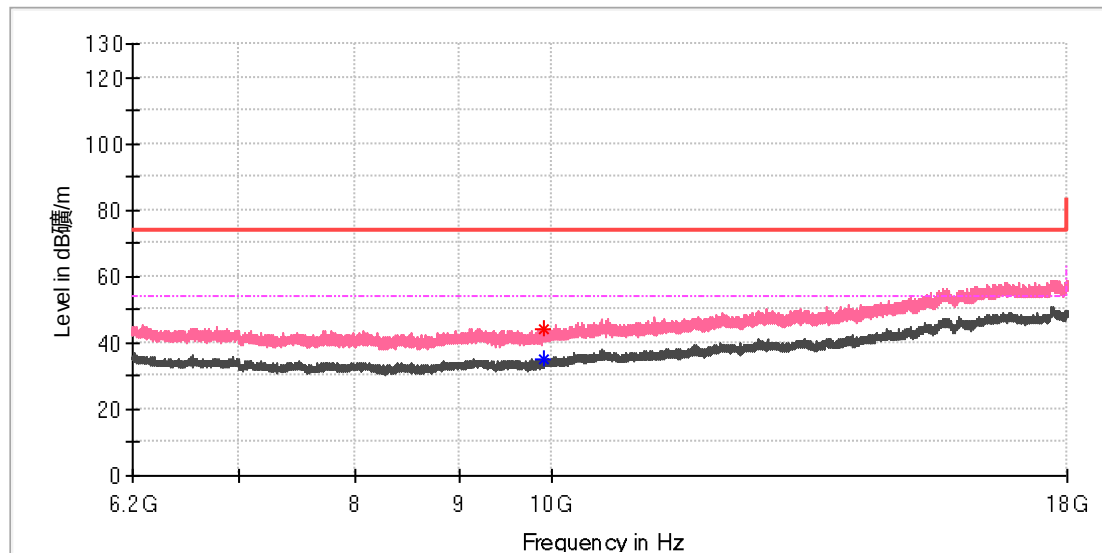
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9918.966667	45.03	---	74.00	28.97	150.0	H	38.0	10.8
9919.950000	---	37.66	54.00	16.34	150.0	H	121.0	10.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Model: NS-HTSB20S
Test Mode: BR_DH5_High channel
Order No/Sample No: 168483805/A003719627-002
Test Voltage: AC 120V, 60Hz
Remark: Temp 24 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9914.050000	44.24	---	74.00	29.76	150.0	V	349.0	10.8
9919.950000	---	34.85	54.00	19.15	150.0	V	58.0	10.8

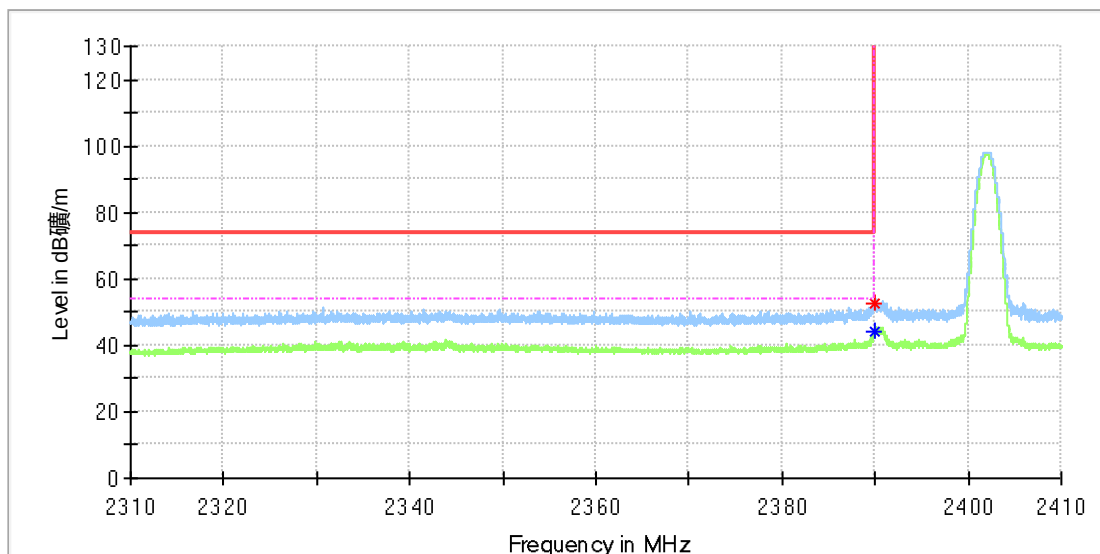
Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Appendix A.8: Test Results of Radiated Emissions in Restricted Bands

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Model: NS-HTSB20S
Test Mode: BR_DH5_Low channel
Order No/Sample No: 168483805/A003719627-002
Test Voltage: AC 120V, 60Hz
Remark: Temp 24 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

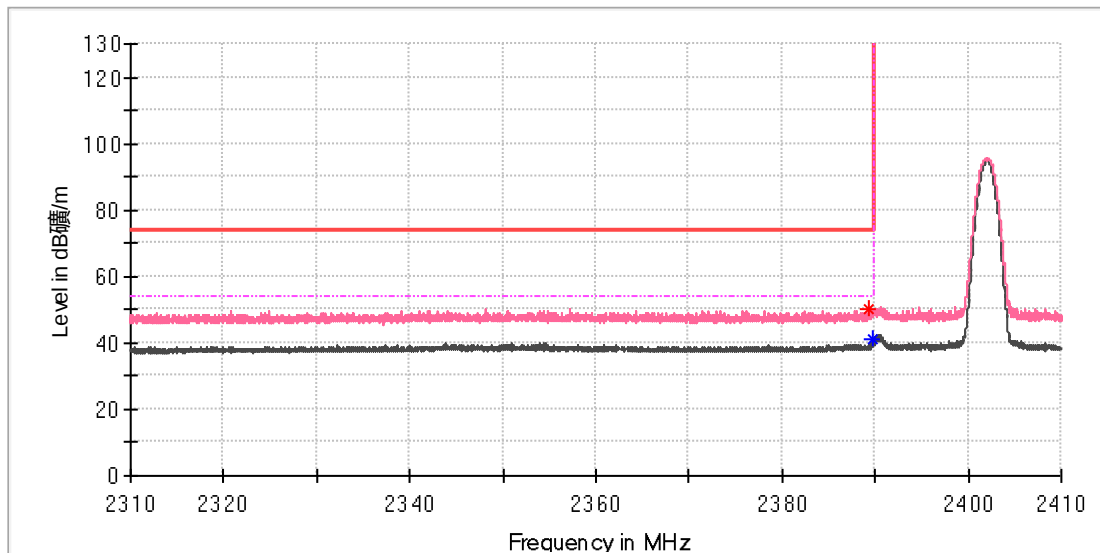
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.867647	52.54	---	74.00	21.46	150.0	H	237.0	7.0
2390.000000	---	44.40	54.00	9.60	150.0	H	0.0	7.0

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Model: NS-HTSB20S
Test Mode: BR_DH5_Low channel
Order No/Sample No: 168483805/A003719627-002
Test Voltage: AC 120V, 60Hz
Remark: Temp 24 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

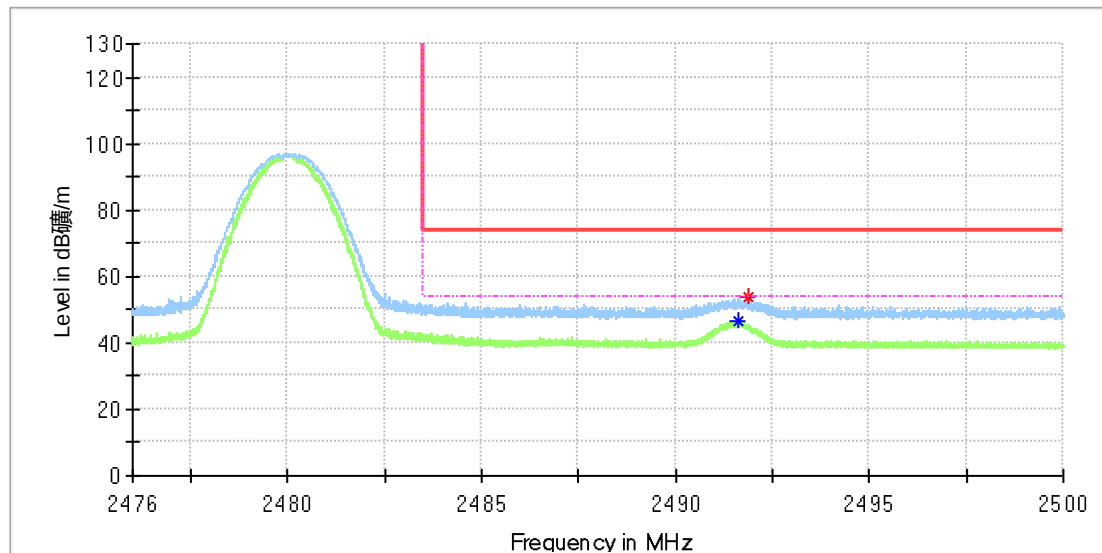
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.279412	50.44	---	74.00	23.56	150.0	V	261.0	7.0
2389.779412	---	41.30	54.00	12.70	150.0	V	323.0	7.0

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Model: NS-HTSB20S
Test Mode: BR_DH5_High channel
Order No/Sample No: 168483805/A003719627-002
Test Voltage: AC 120V, 60Hz
Remark: Temp 24 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

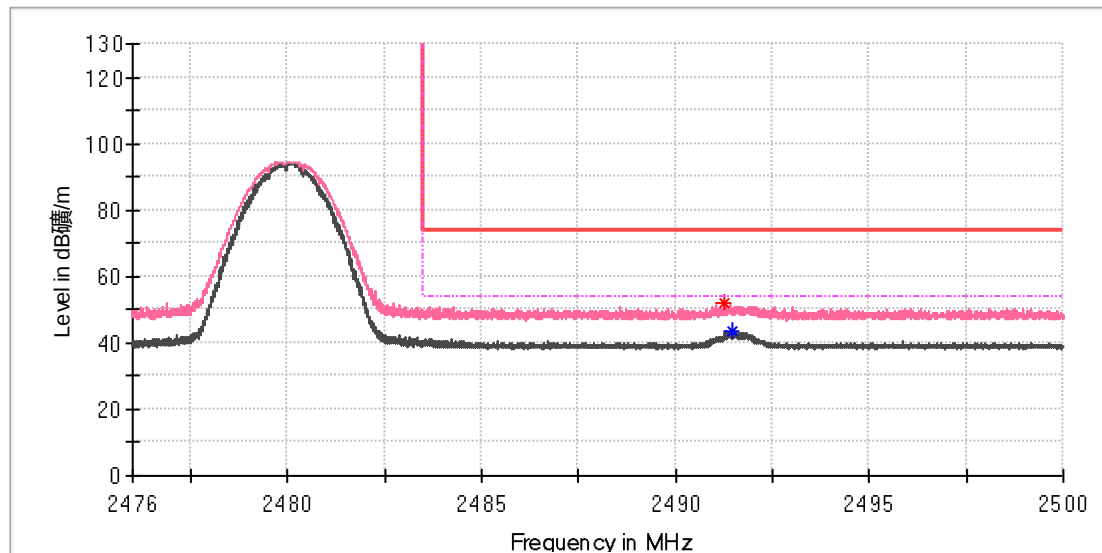
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2491.600000	---	46.37	54.00	7.63	150.0	H	358.0	7.4
2491.868235	53.76	---	74.00	20.24	150.0	H	354.0	7.4

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Model: NS-HTSB20S
Test Mode: BR_DH5_High channel
Order No/Sample No: 168483805/A003719627-002
Test Voltage: AC 120V, 60Hz
Remark: Temp 24 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2491.250588	51.70	---	74.00	22.30	150.0	V	315.0	7.4
2491.465882	---	43.53	54.00	10.47	150.0	V	277.0	7.4

Final Result

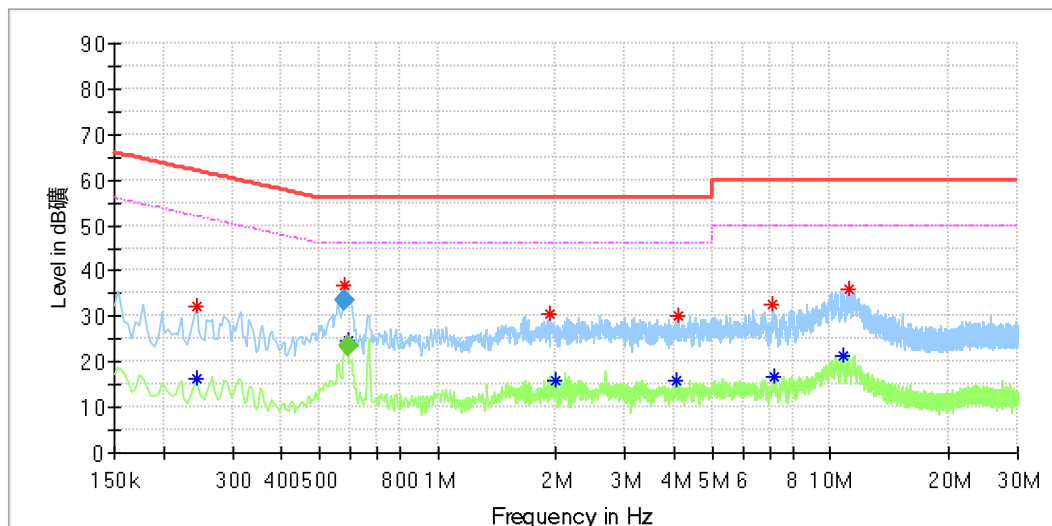
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---

Appendix A.9: Test Results of Conducted Emission on AC Mains

Adapter (GM42-150200-1A)

EUT Information

EUT Name:	2.0-Channel 20 in. Soundbar
Order Number:	168483805 30
Model:	NS-HTSB20S
Test Mode:	BT Link
Test Voltage:	AC 120V/60Hz
Test Standard:	FCC Part 15C
Test By:/Review By:	Junhua/ Shower Dai
Tem./Hum./Pressure:	24.3°C/52.2%/101kPa
Remark:	SR2



Critical_Freqs

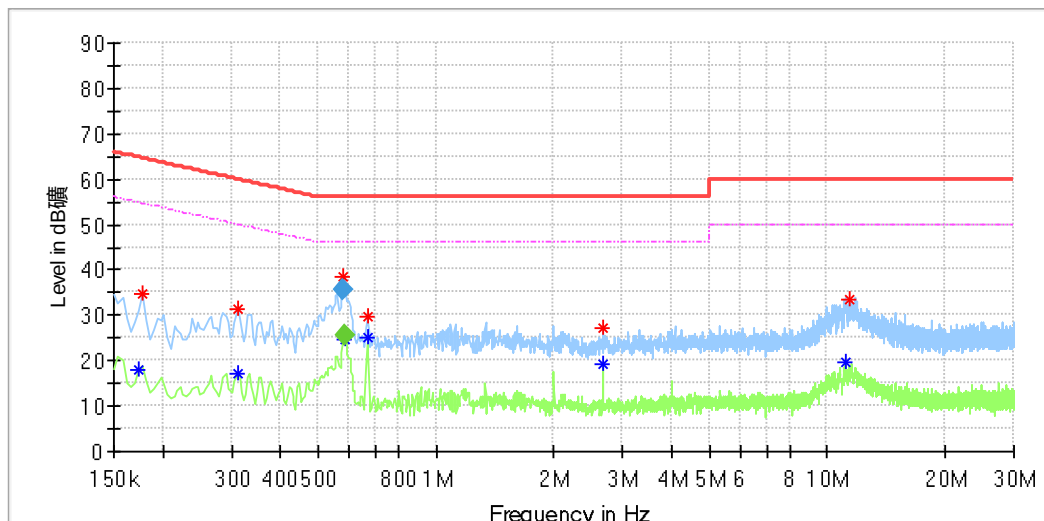
Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.242000	---	16.24	52.03	35.79	L1	9.9
0.242000	32.24	---	62.03	29.79	L1	9.9
0.581500	36.76	---	56.00	19.24	L1	10.0
0.589500	---	24.59	46.00	21.41	L1	10.0
1.938000	30.41	---	56.00	25.59	L1	10.1
2.002000	---	15.91	46.00	30.09	L1	10.1
4.070000	---	15.83	46.00	30.17	L1	10.2
4.074000	30.34	---	56.00	25.66	L1	10.2
7.146000	32.61	---	60.00	27.39	L1	10.3
7.190000	---	16.68	50.00	33.32	L1	10.3
10.726000	---	21.23	50.00	28.77	L1	10.3
11.142000	35.94	---	60.00	24.06	L1	10.3

Final_Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.581500	33.52	---	56.00	22.48	1000.0	9.000	L1	10.0
0.589500	---	23.33	46.00	22.67	1000.0	9.000	L1	10.0

EUT Information

EUT Name: 2.0-Channel 20 in. Soundbar
Order Number: 168483805 30
Model: NS-HTSB20S
Test Mode: BT Link
Test Voltage: AC 120V/60Hz
Test Standard: FCC Part 15C
Test By:/Review By: Junhua/ Shower Dai
Tem./Hum./Pressure: 24.3°C/52.2%/101kPa
Remark: SR2



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.174000	---	18.09	54.77	36.68	N	9.8
0.178000	34.91	---	64.58	29.67	N	9.8
0.310000	---	17.27	49.97	32.70	N	9.8
0.310000	31.60	---	59.97	28.37	N	9.8
0.581500	38.60	---	56.00	17.40	N	9.8
0.586500	---	24.90	46.00	21.10	N	9.8
0.666000	---	25.22	46.00	20.78	N	9.8
0.666000	29.59	---	56.00	26.41	N	9.8
2.662000	27.26	---	56.00	28.74	N	9.9
2.666000	---	19.07	46.00	26.93	N	9.9
11.098000	---	19.50	50.00	30.50	N	10.0
11.454000	33.67	---	60.00	26.33	N	10.1

Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.581500	35.53	---	56.00	20.47	1000.0	9.000	N	9.8
0.586500	---	25.53	46.00	20.47	1000.0	9.000	N	9.8