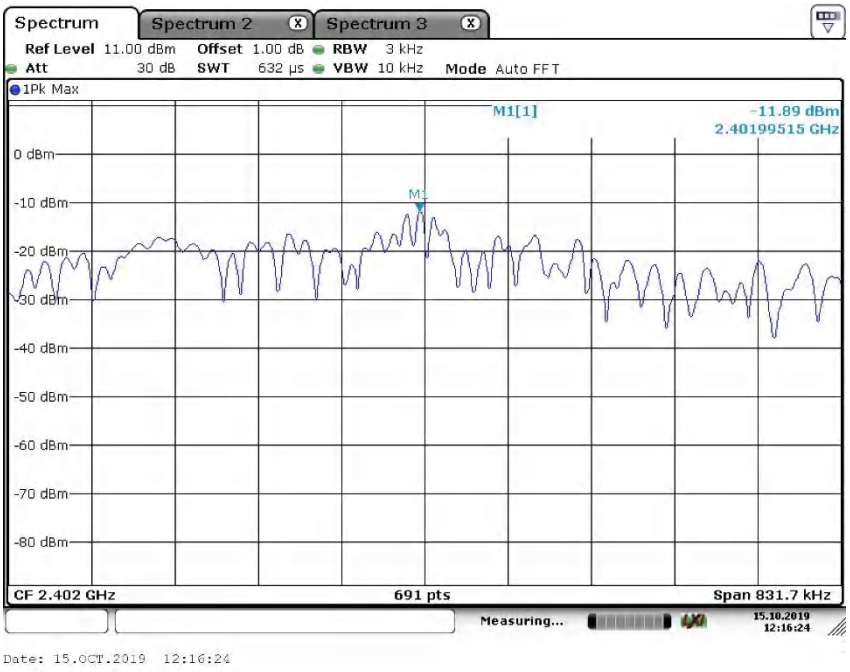
Appendix B: Test Results of DTSs

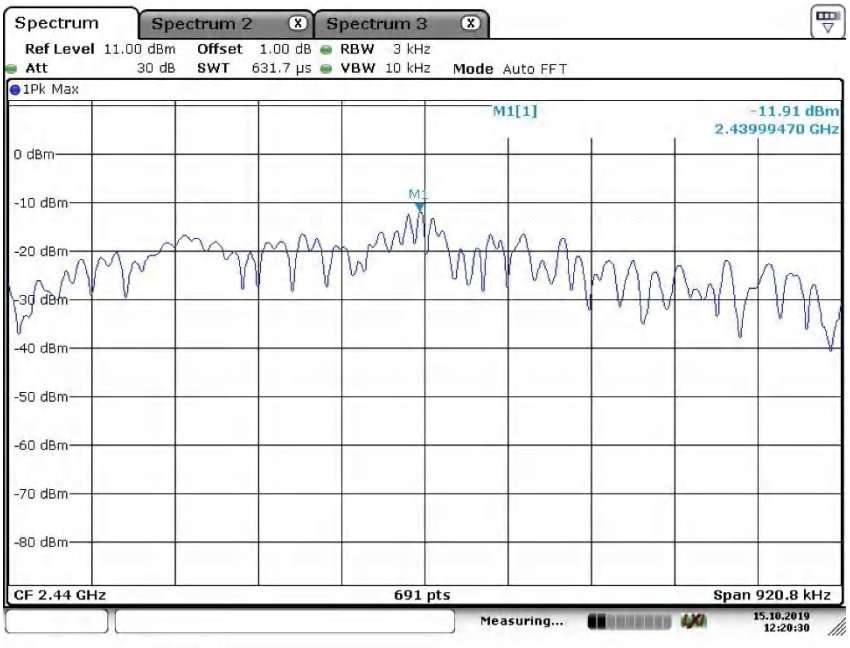
Appendix B.1: Test Results of Conducted Power Spectral Density

DTSs#1 (BLE)
Low Channel



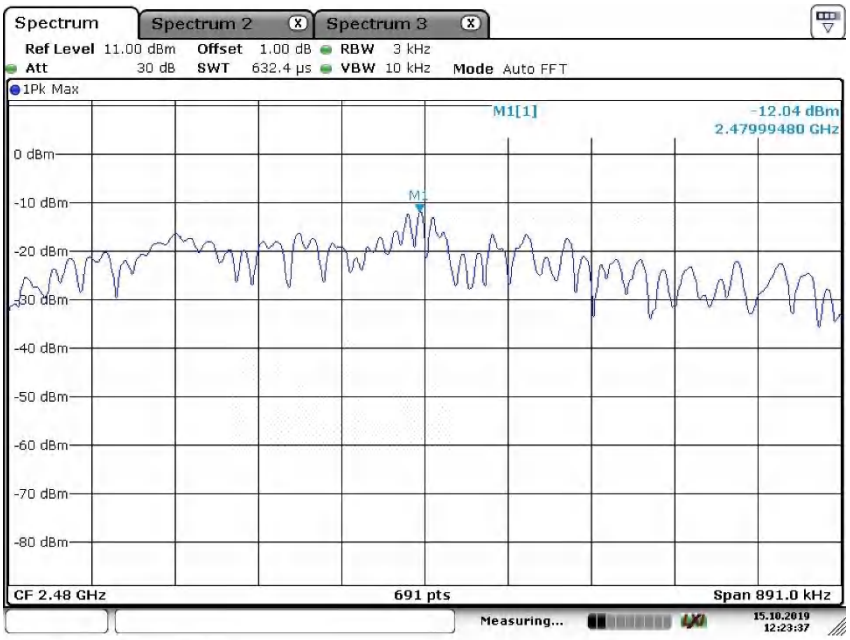
Date: 15.OCT.2019 12:16:24

Middle Channel



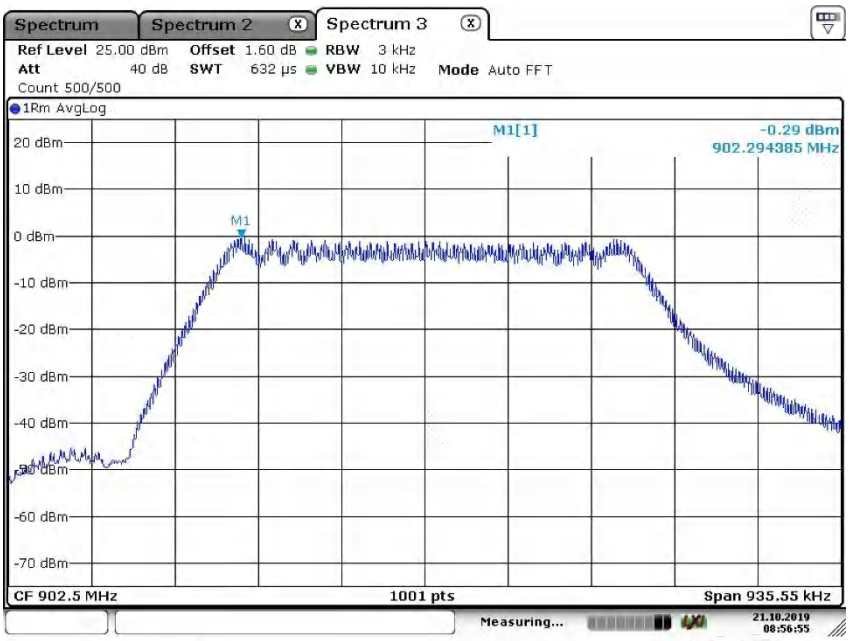
Date: 15.OCT.2019 12:20:30

High Channel



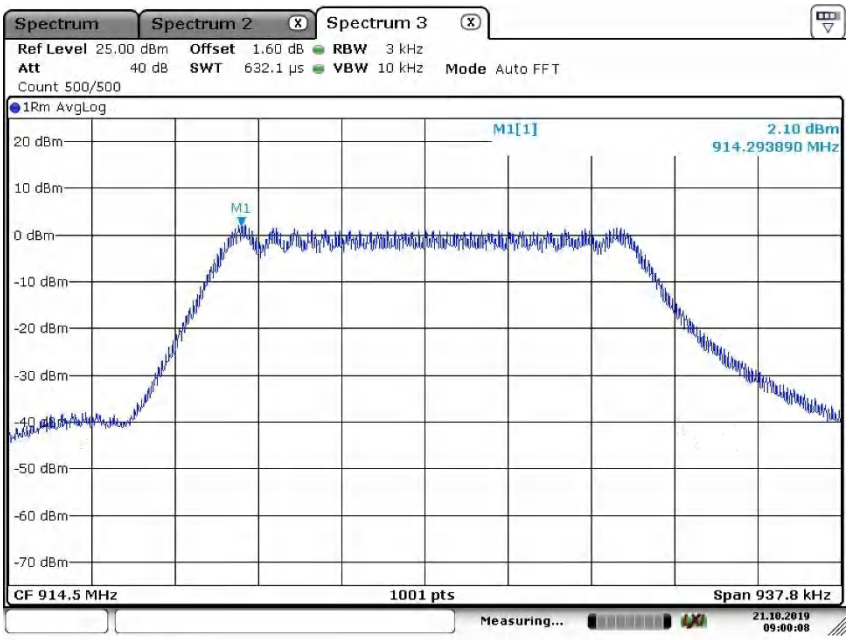
Date: 15.OCT.2019 12:23:38

DTSs#2 (Bandwidth: 500KHz)
Low Channel



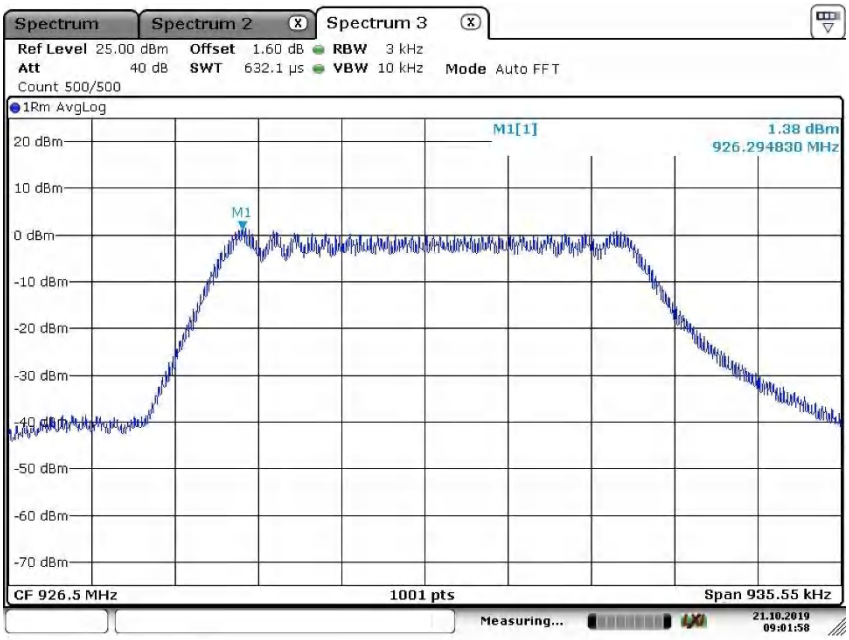
Date: 21.OCT.2019 08:56:56

Middle Channel



Date: 21.OCT.2019 09:00:08

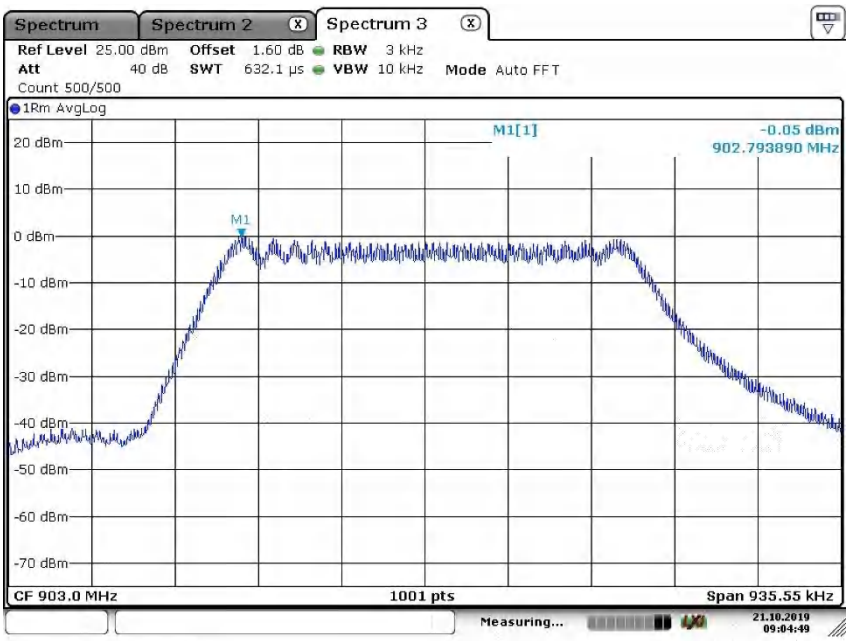
High Channel



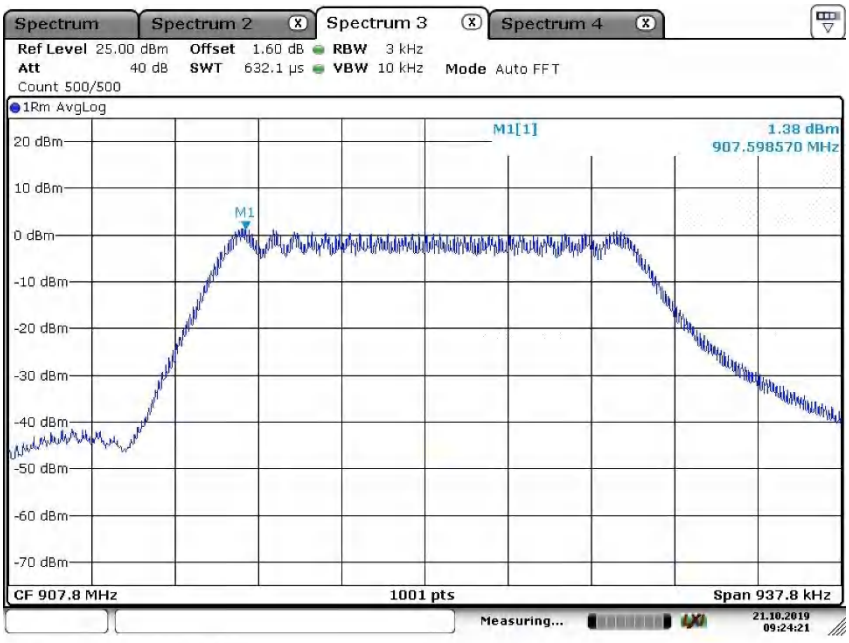
Date: 21.OCT.2019 09:01:58

DTSs#3 (Bandwidth: 500KHz)

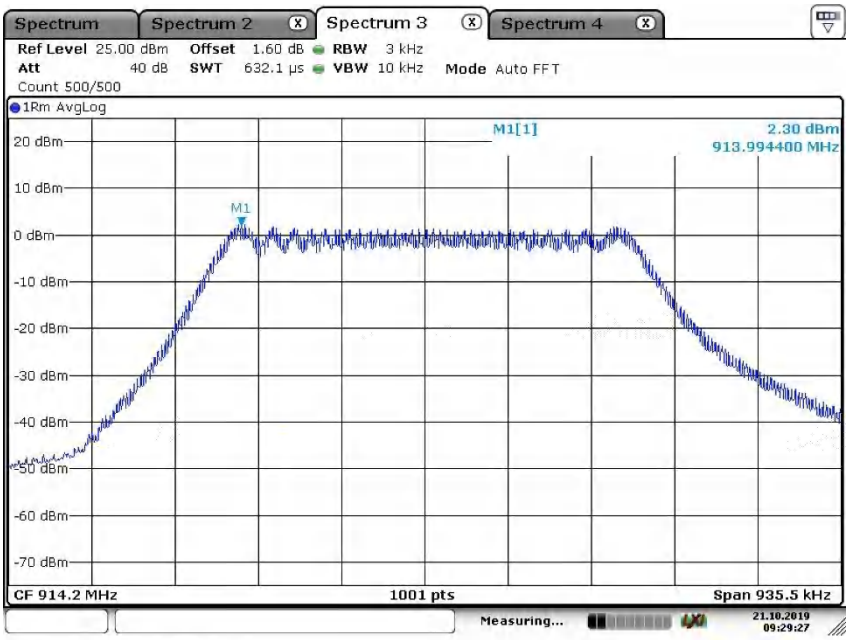
Low Channel



Middle Channel

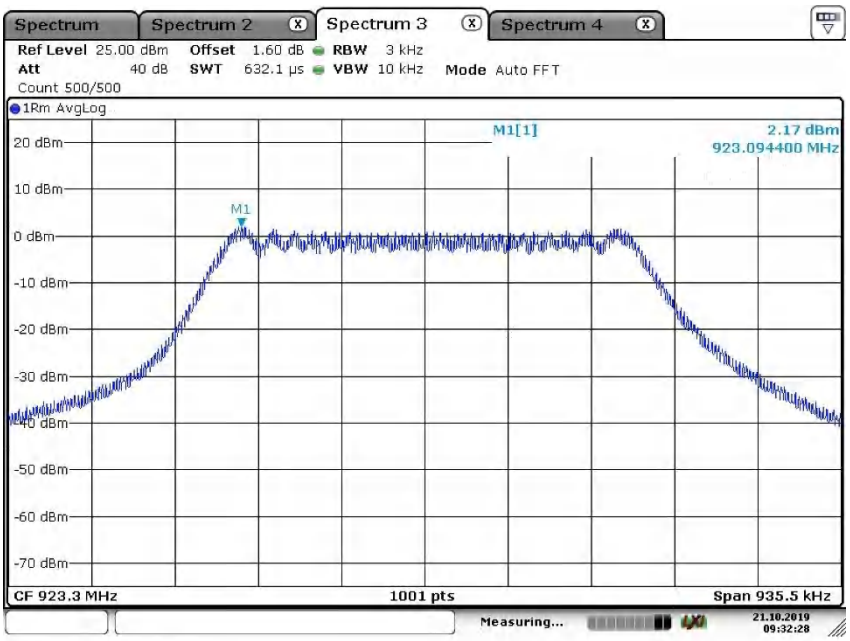


High Channel



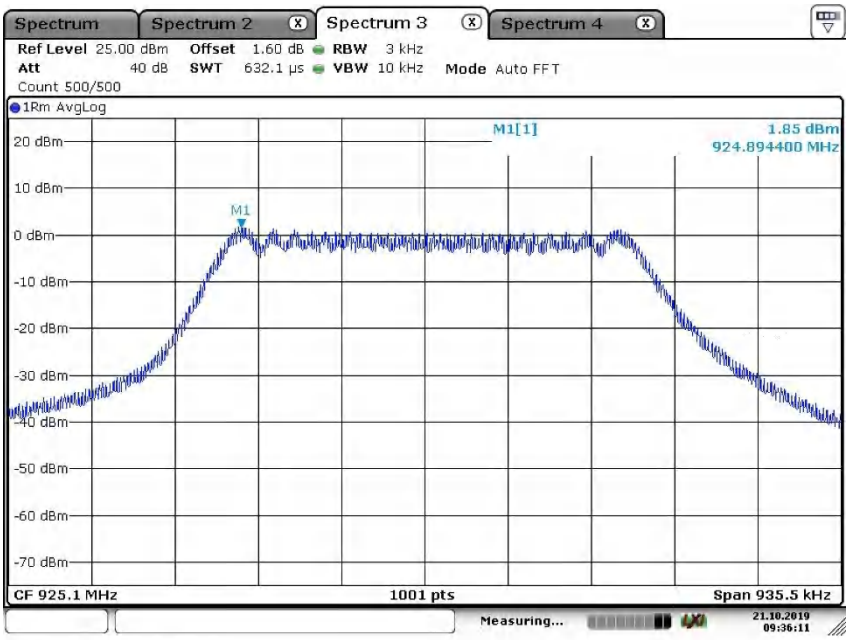
Date: 21.OCT.2019 09:29:27

DTSs#4 (Bandwidth: 500KHz)
Low Channel



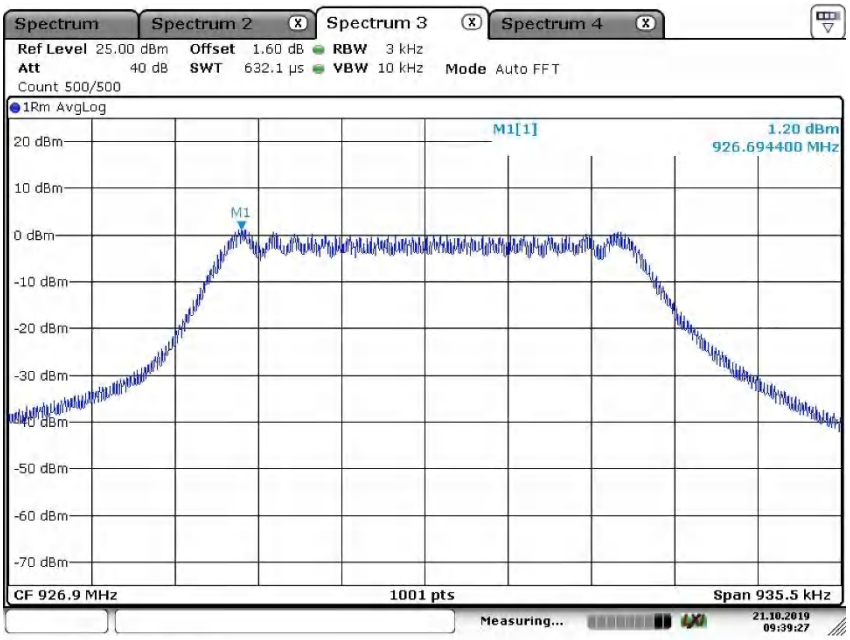
Date: 21.OCT.2019 09:32:29

Middle Channel



Date: 21.OCT.2019 09:36:11

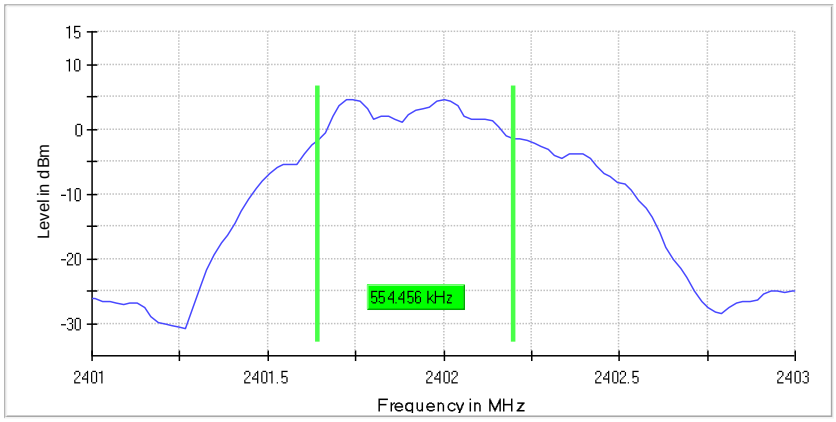
High Channel



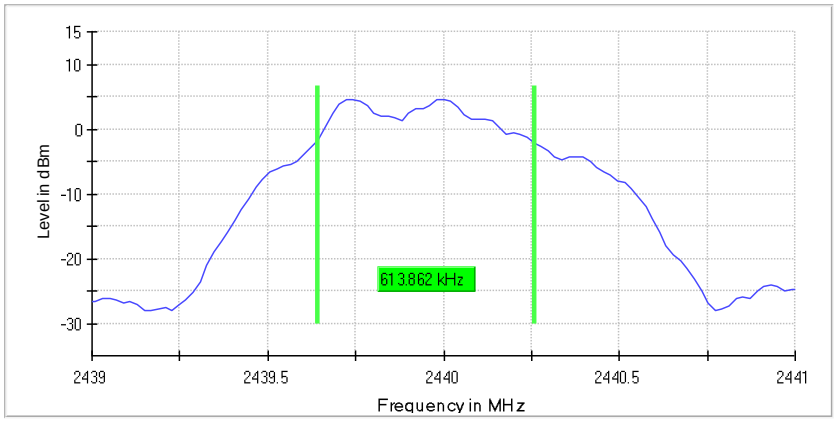
Date: 21.OCT.2019 09:39:28

Appendix B.2: Test Results of 6dB Bandwidth

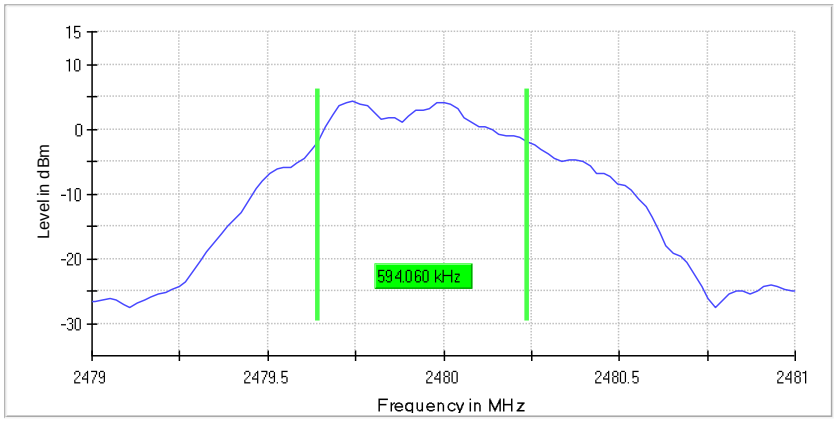
DTSs#1 (BLE)
Low Channel



Middle Channel

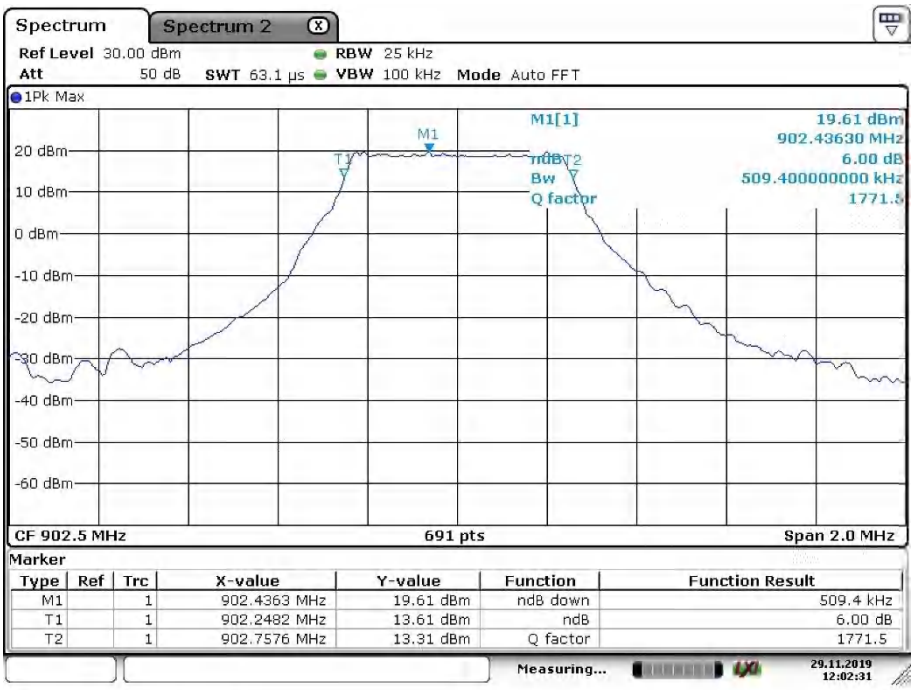


High Channel



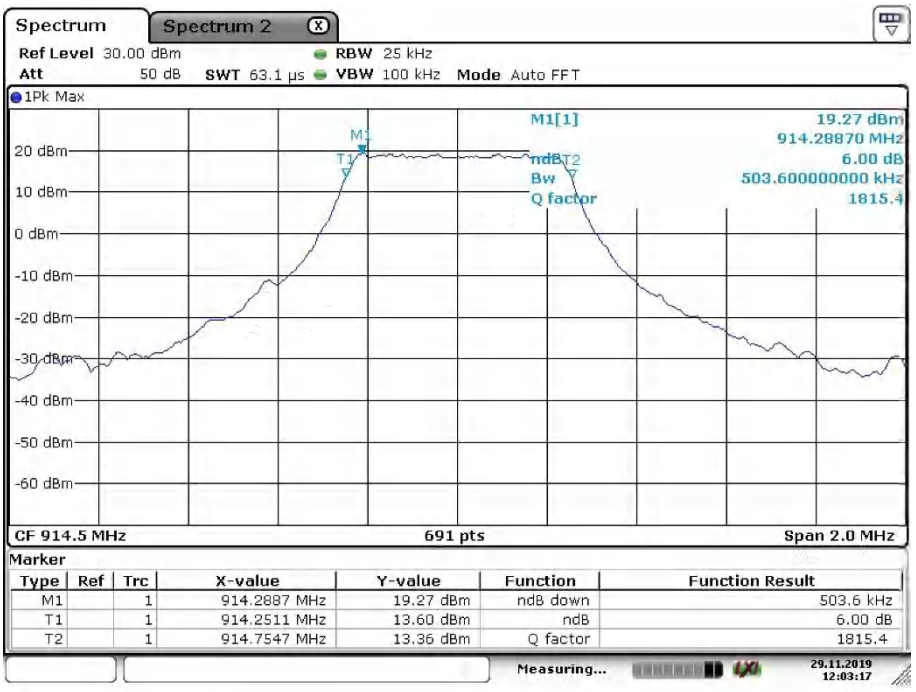
DTSs#2 (Bandwidth: 500KHz)

Low Channel



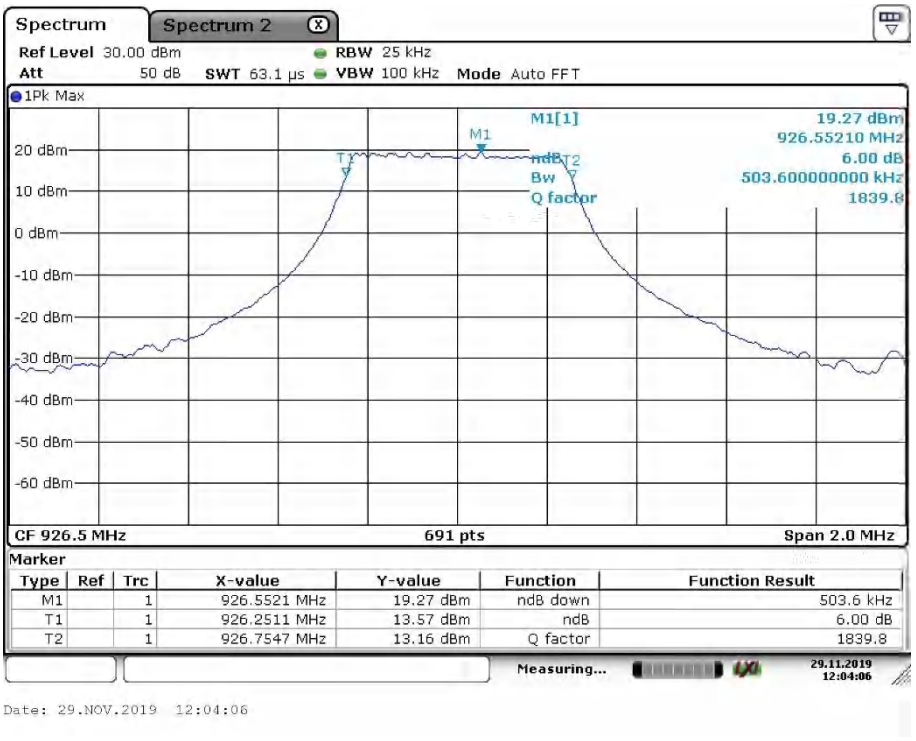
Date: 29.NOV.2019 12:02:32

Middle Channel

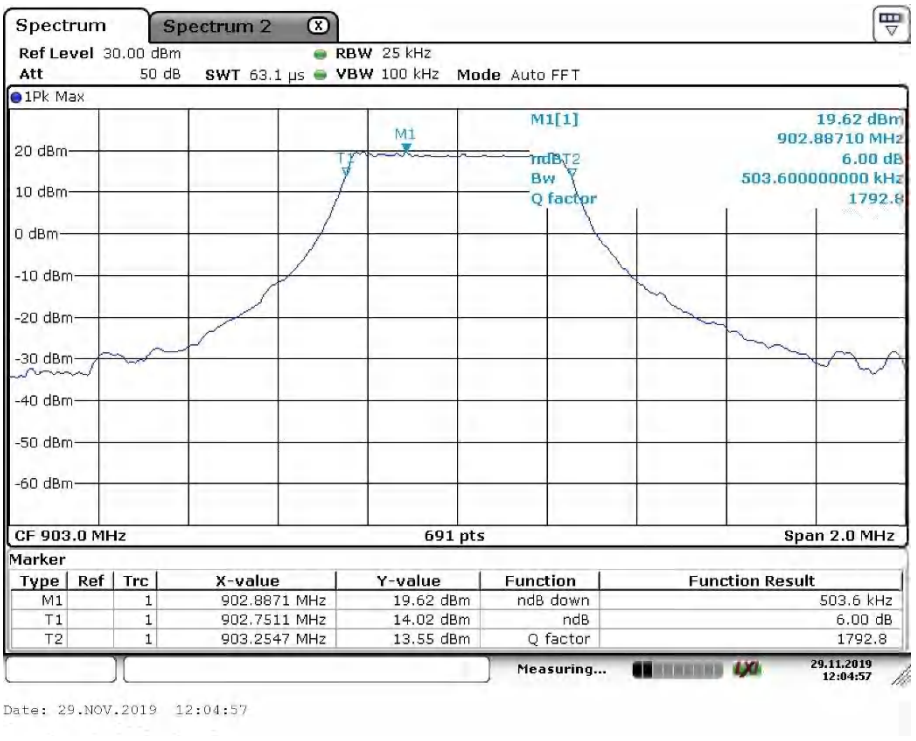


Date: 29.NOV.2019 12:03:18

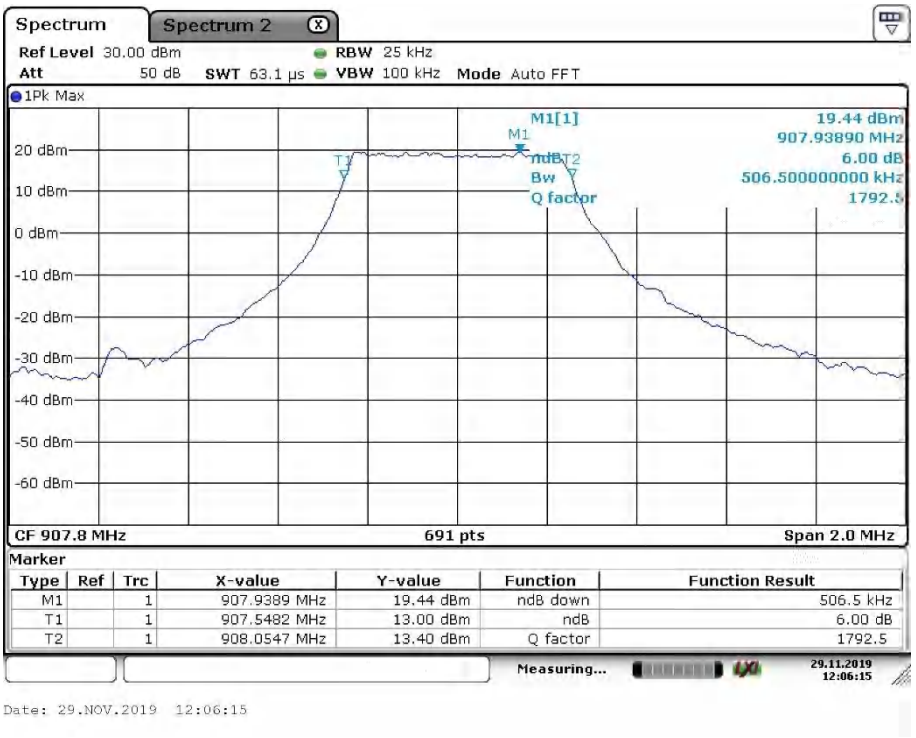
High Channel



DTSs#3 (Bandwidth: 500KHz)
Low Channel

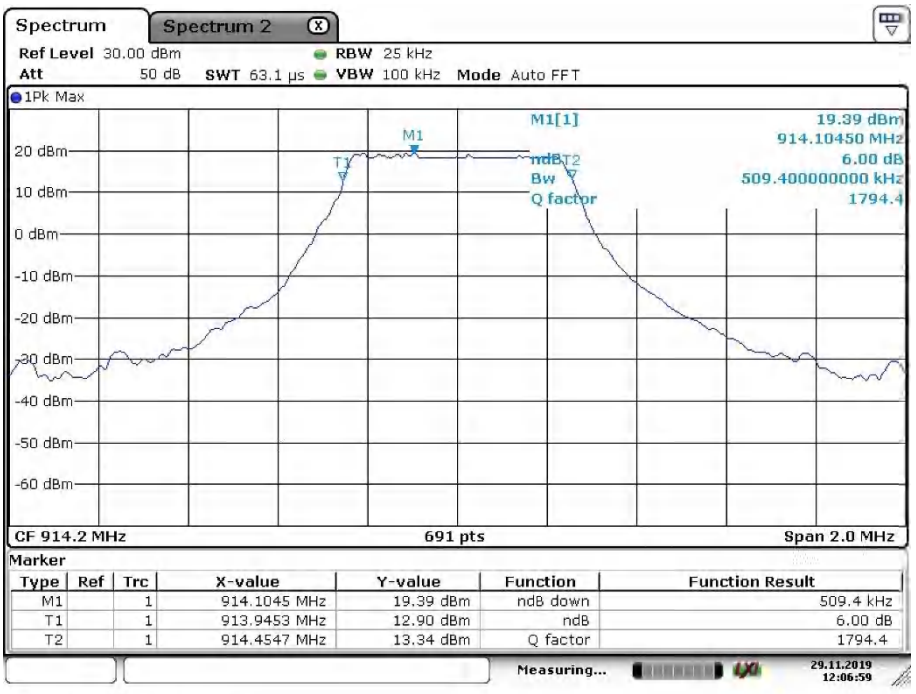


Middle Channel



Date: 29.NOV.2019 12:06:15

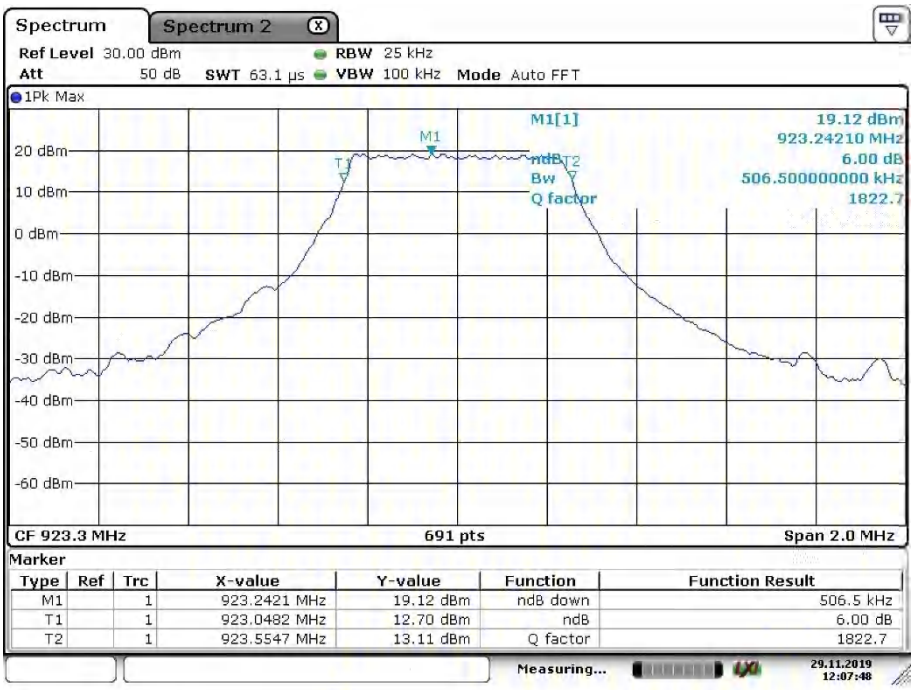
High Channel



Date: 29.NOV.2019 12:06:59

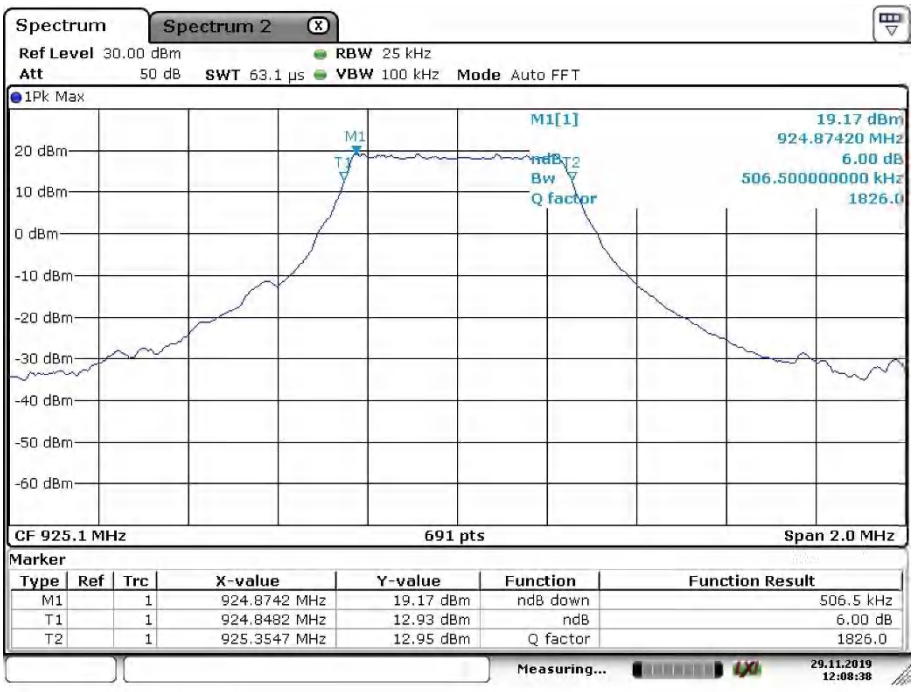
DTSs#4 (Bandwidth: 500KHz)

Low Channel



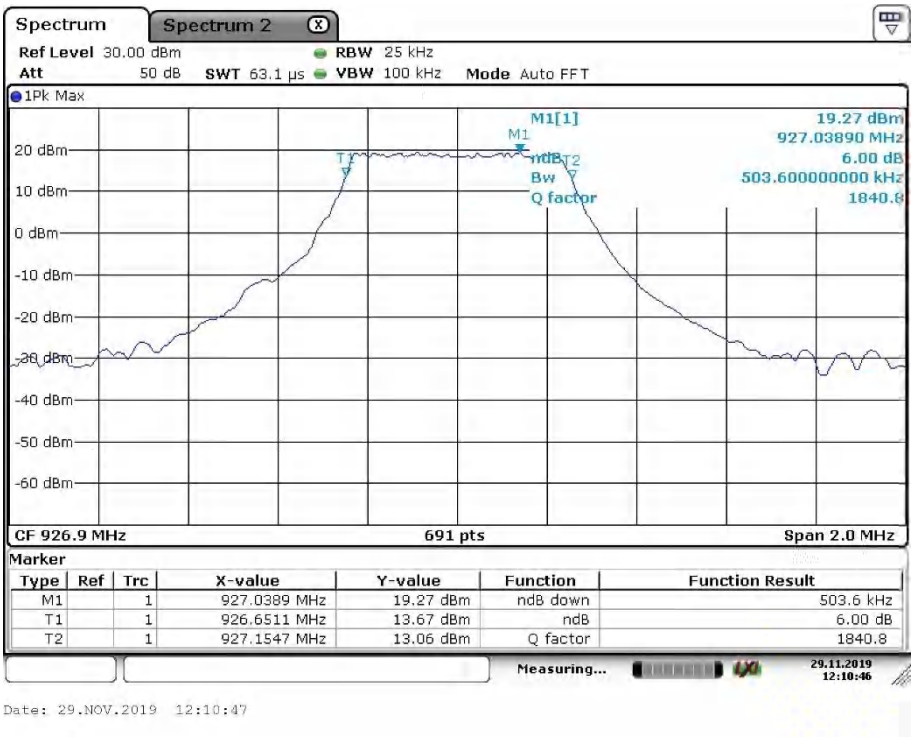
Date: 29.NOV.2019 12:07:49

Middle Channel



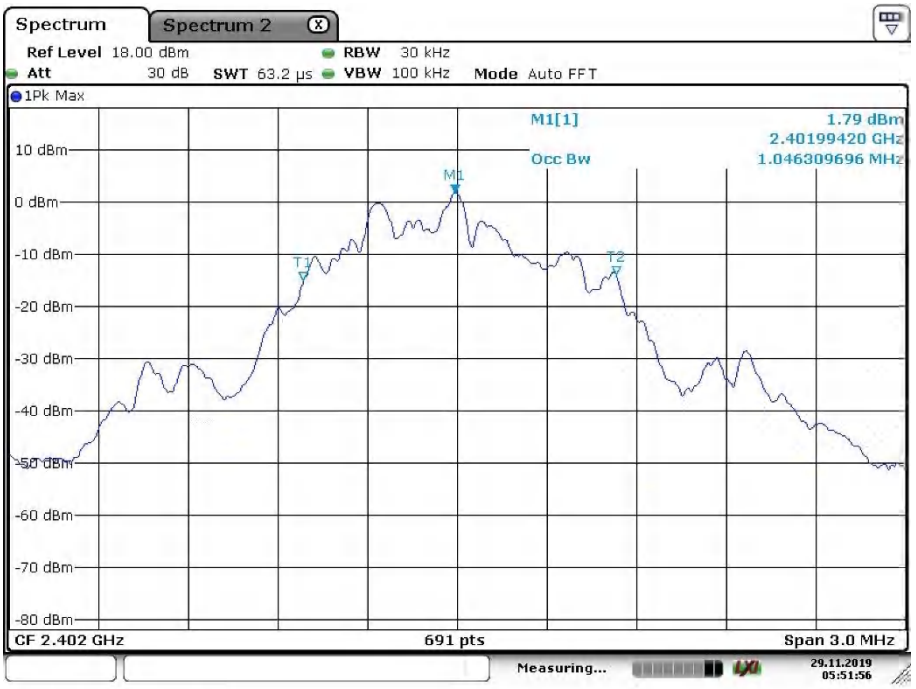
Date: 29.NOV.2019 12:08:38

High Channel



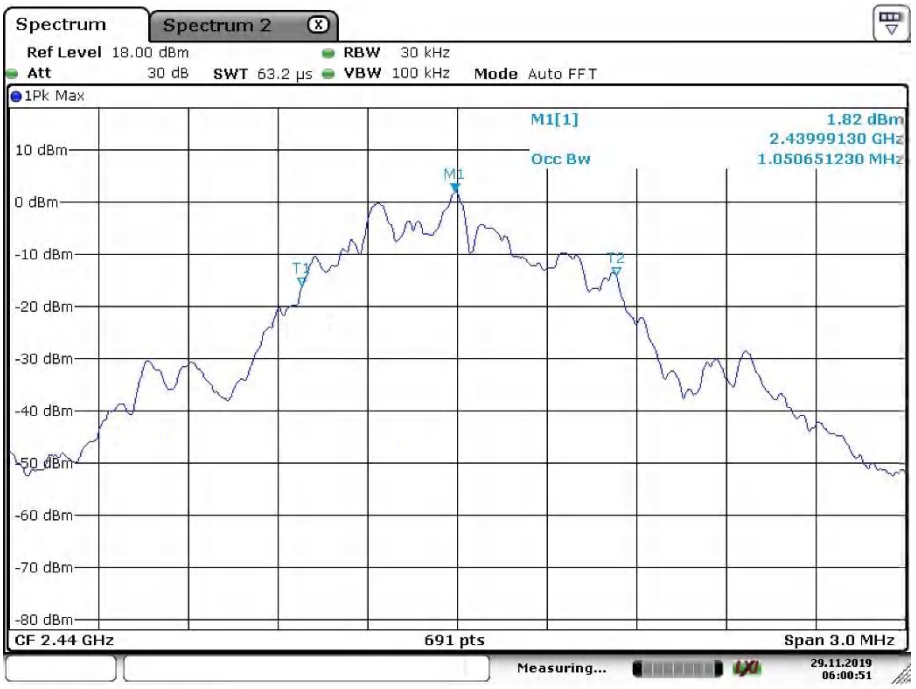
Appendix B.3: Test Results of 99% Bandwidth

DTSs#1 (BLE)
Low Channel



Date: 29.NOV.2019 05:51:56

Middle Channel

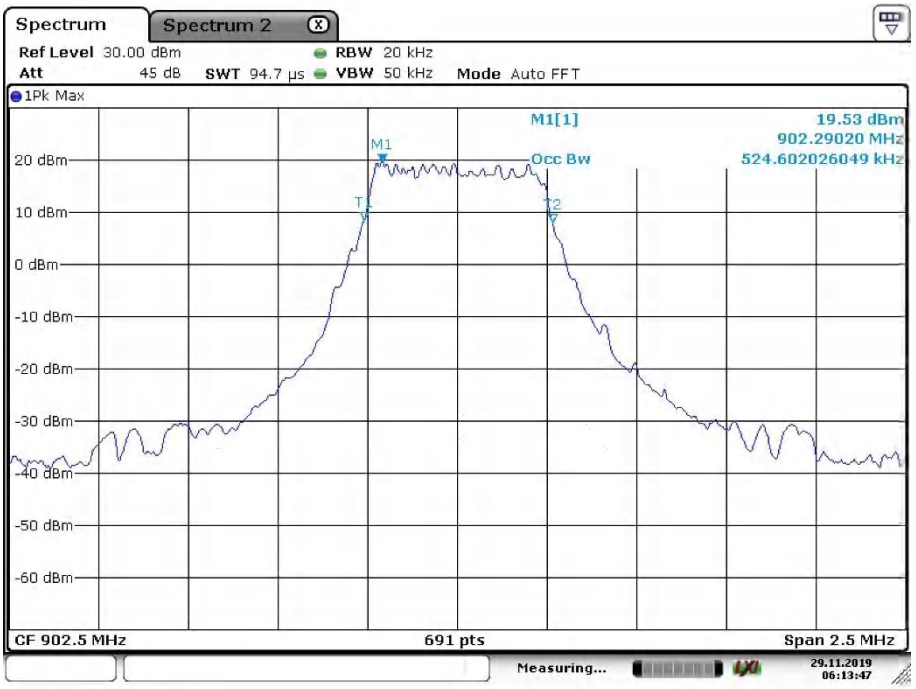


Date: 29.NOV.2019 06:00:52

High Channel

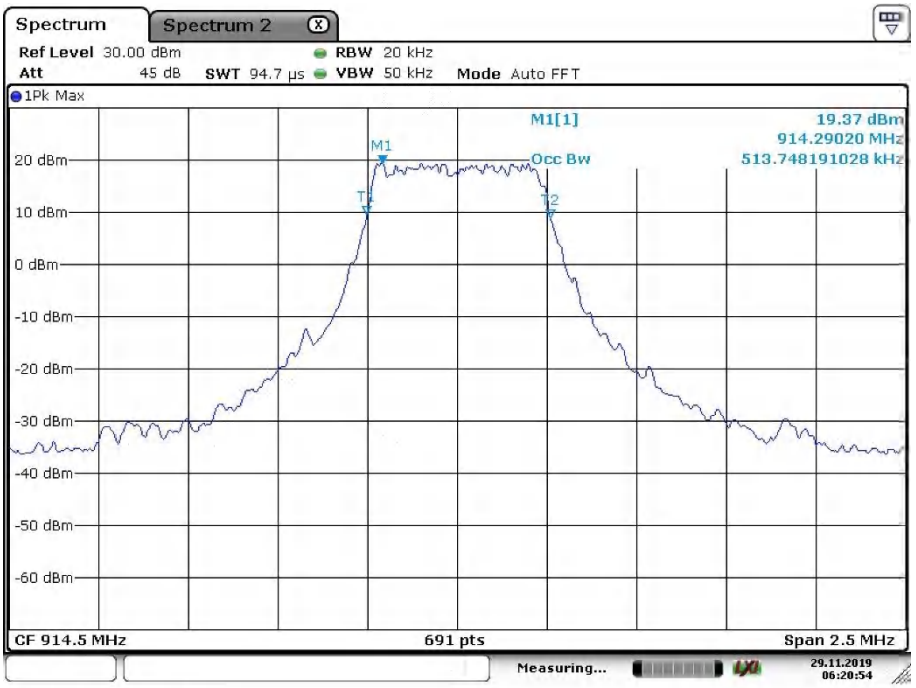
DTSs#2 (Bandwidth: 500KHz)

Low Channel



Date: 29.NOV.2019 06:13:48

Middle Channel

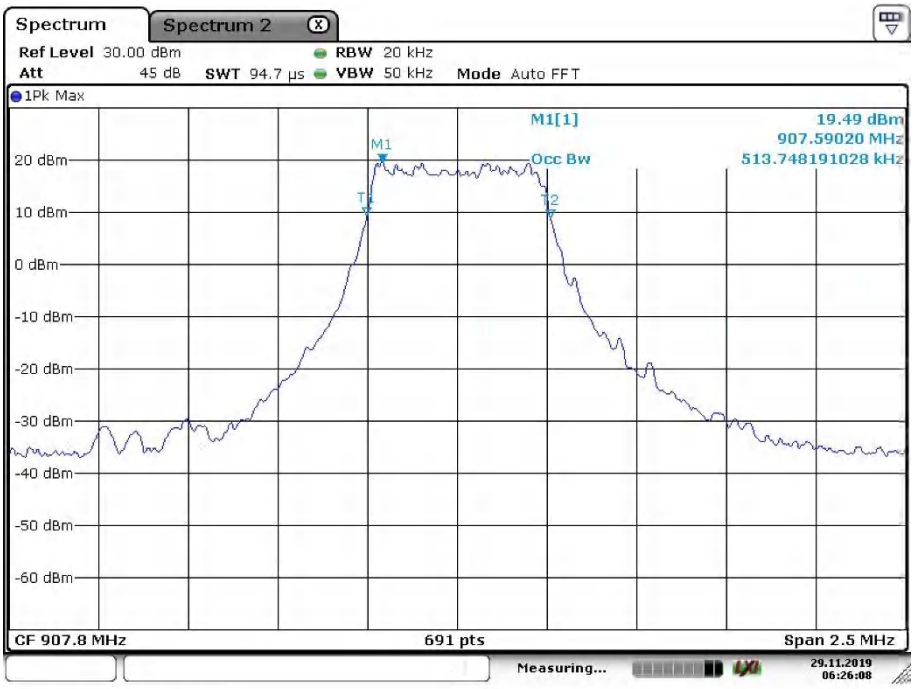


Date: 29.NOV.2019 06:20:54

High Channel

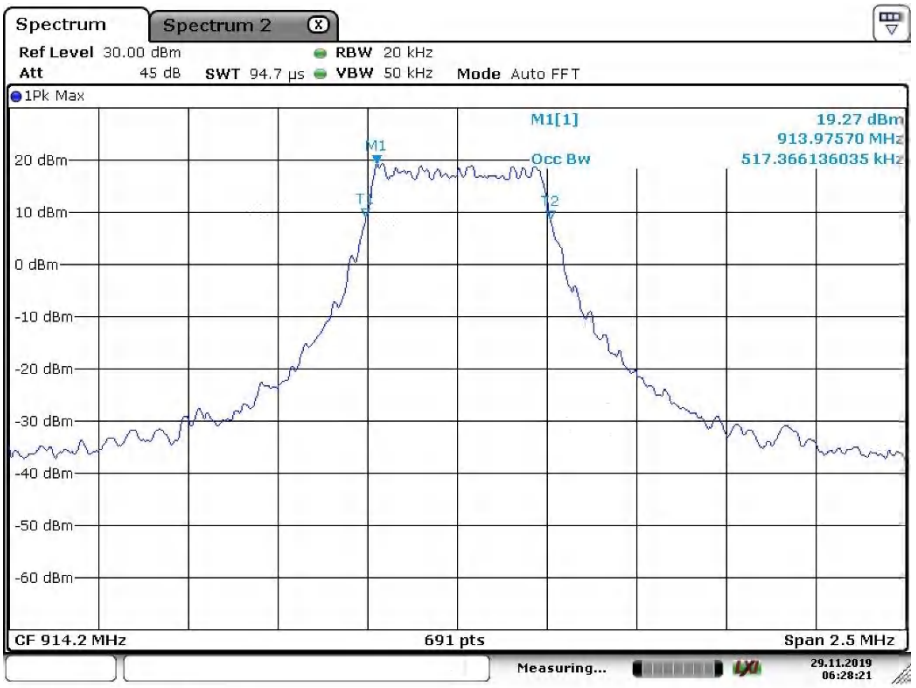
DTSs#3 (Bandwidth: 500KHz)
Low Channel

Middle Channel



Date: 29.NOV.2019 06:26:08

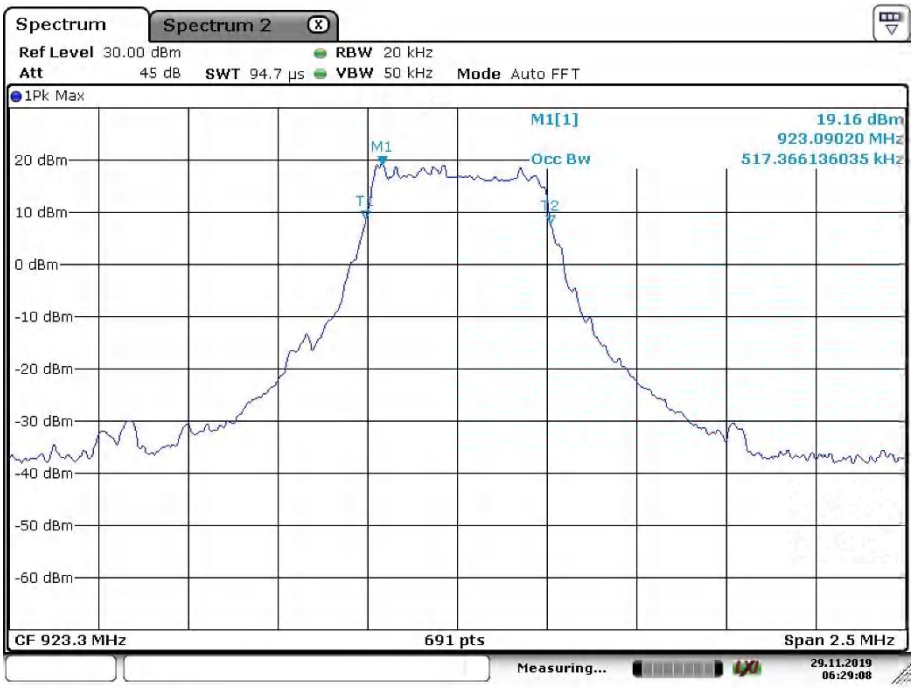
High Channel



Date: 29.NOV.2019 06:28:22

DTSs#4 (Bandwidth: 500KHz)

Low Channel



Date: 29.NOV.2019 06:29:08

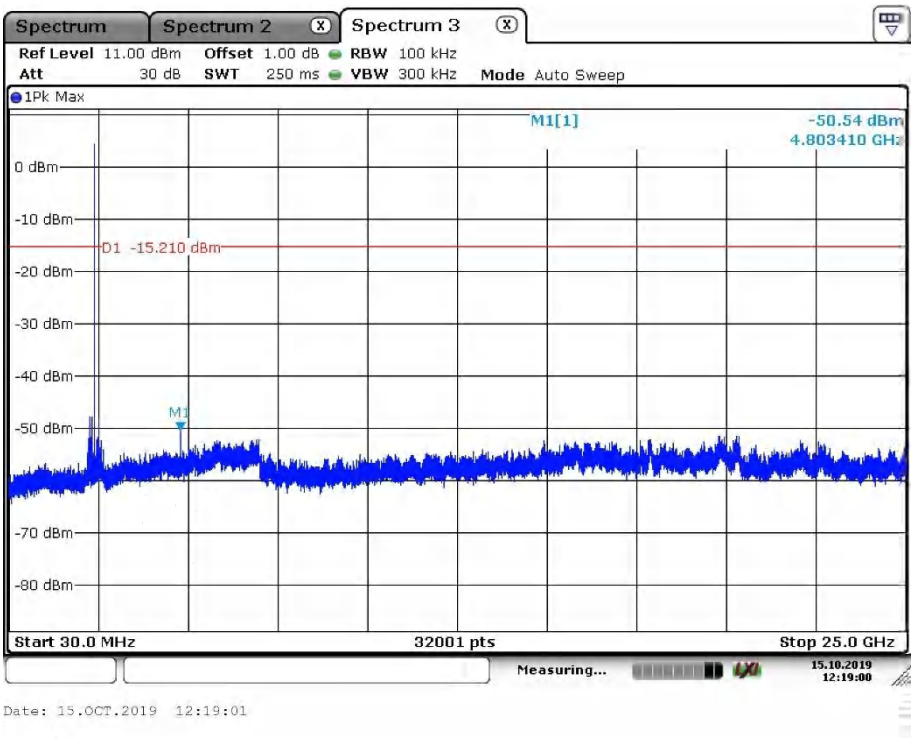
Middle Channel

Date: 29.NOV.2019 06:31:06

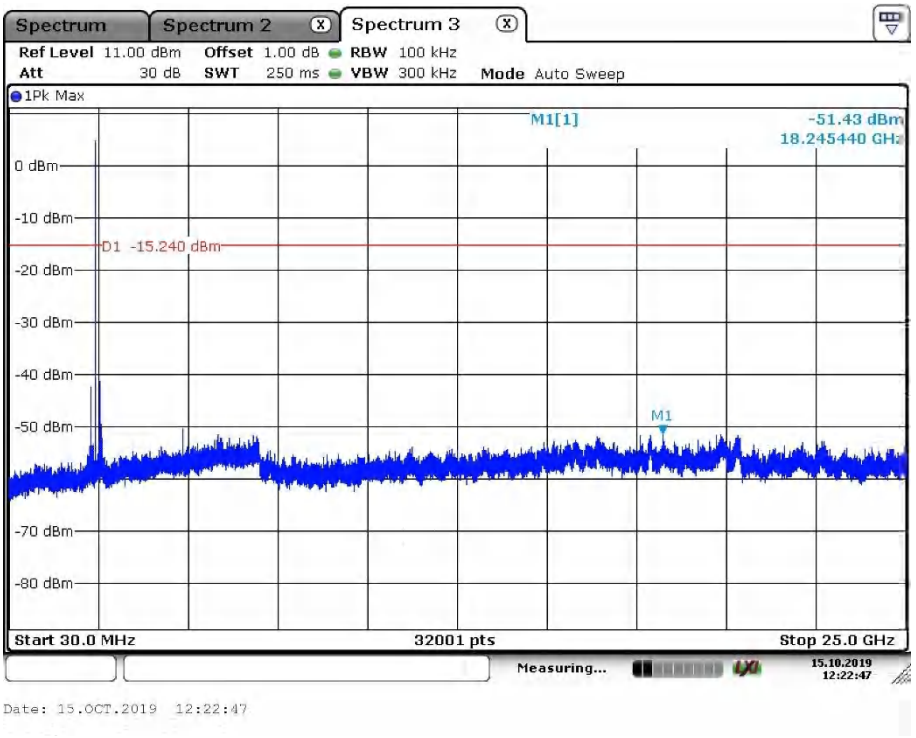
High Channel

Appendix B.4: Test Results of Conducted Spurious Emissions

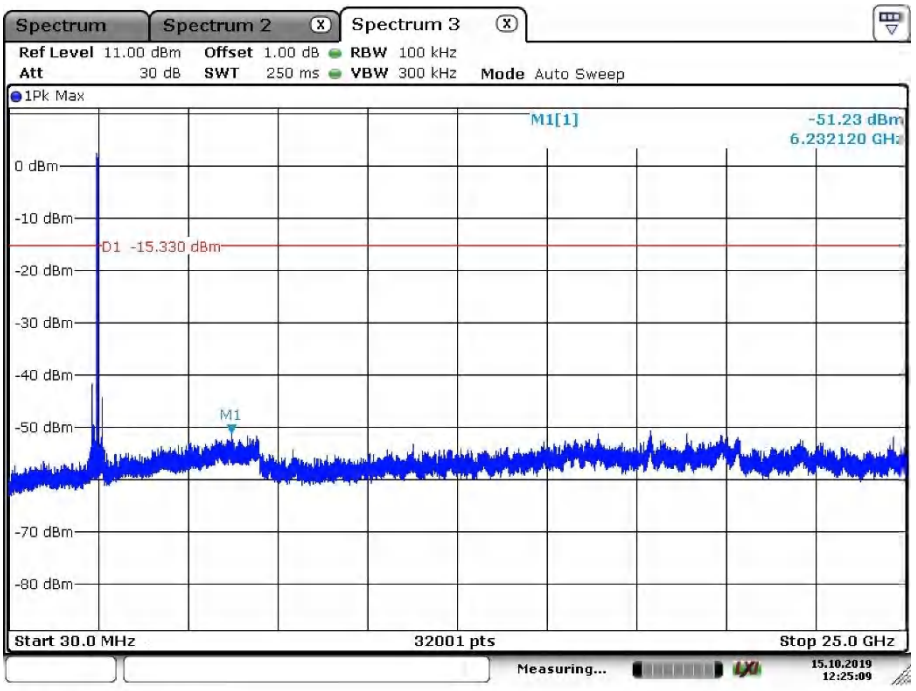
DTSs#1 (BLE)
Low Channel



Middle Channel

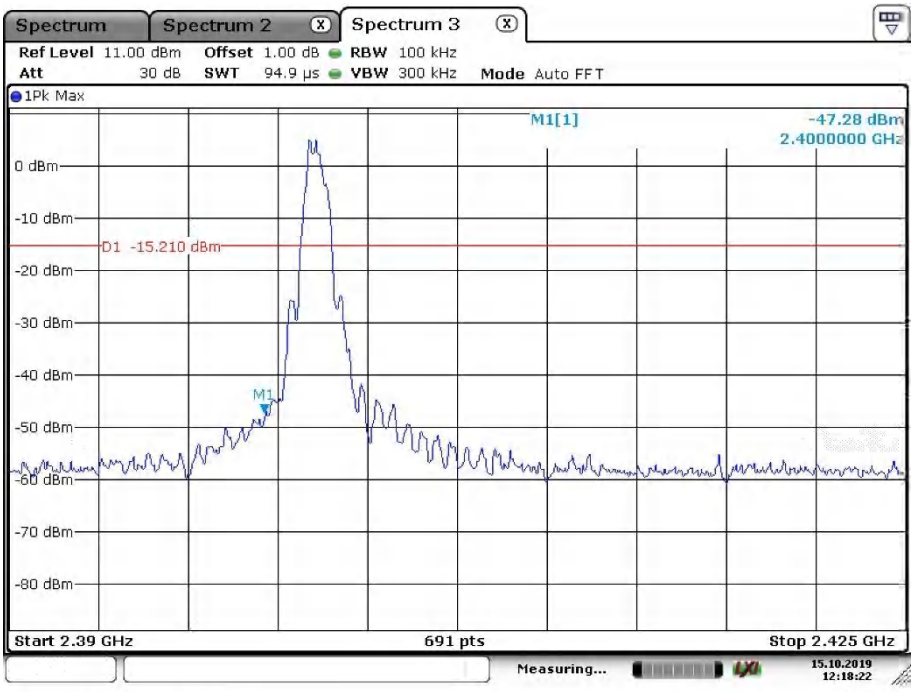


High Channel



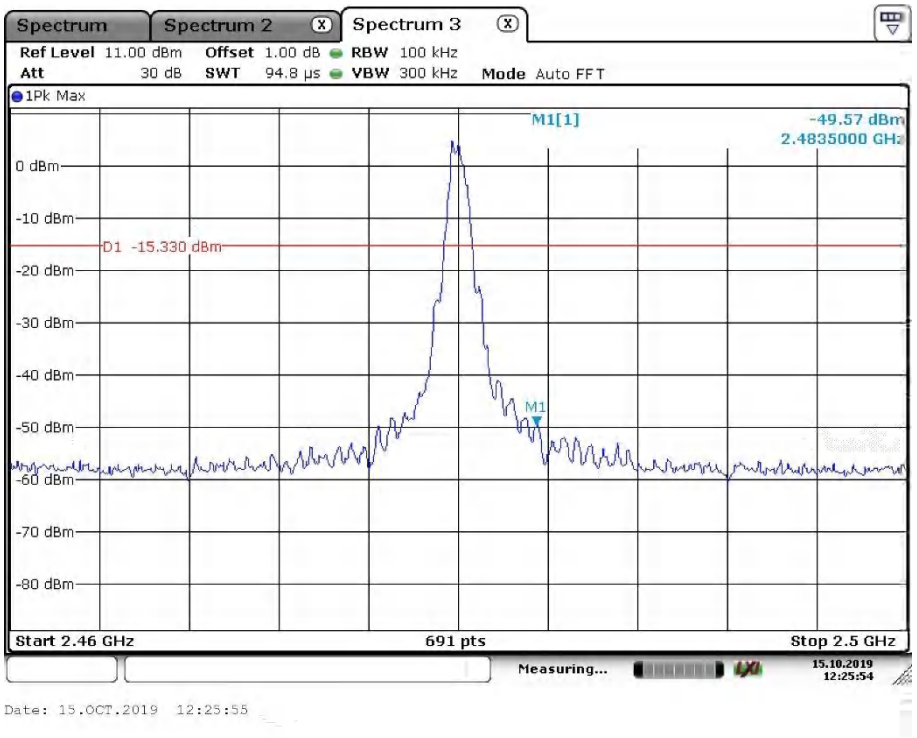
Date: 15.OCT.2019 12:25:10

Band Edge, Low Channel

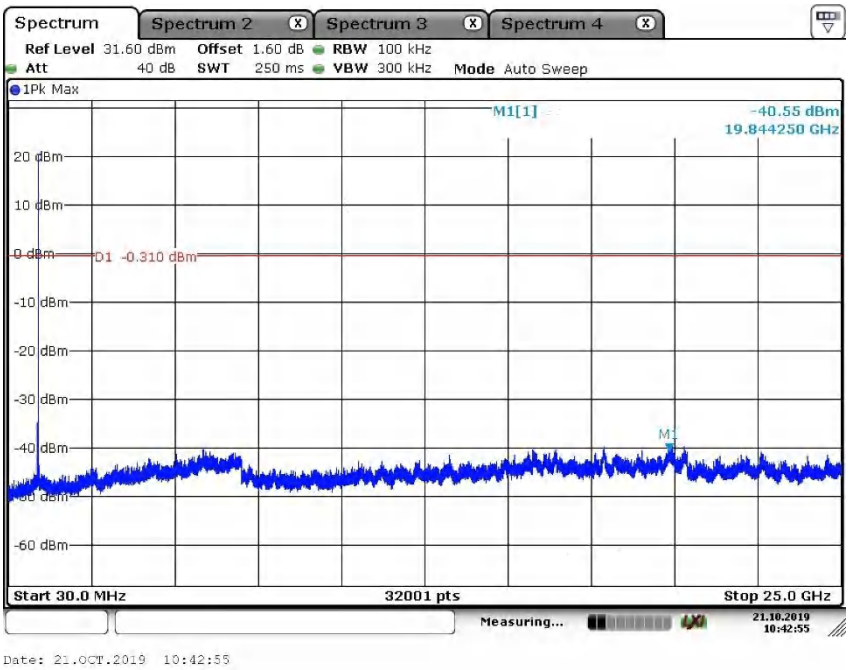


Date: 15.OCT.2019 12:18:23

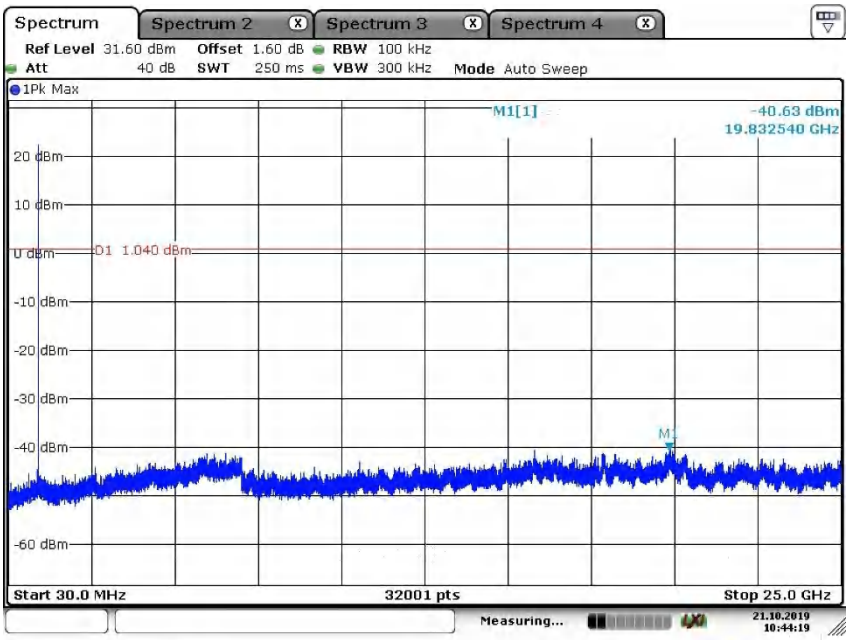
Band Edge, High Channel



DTSs#2 (Bandwidth: 500KHz)
Low Channel

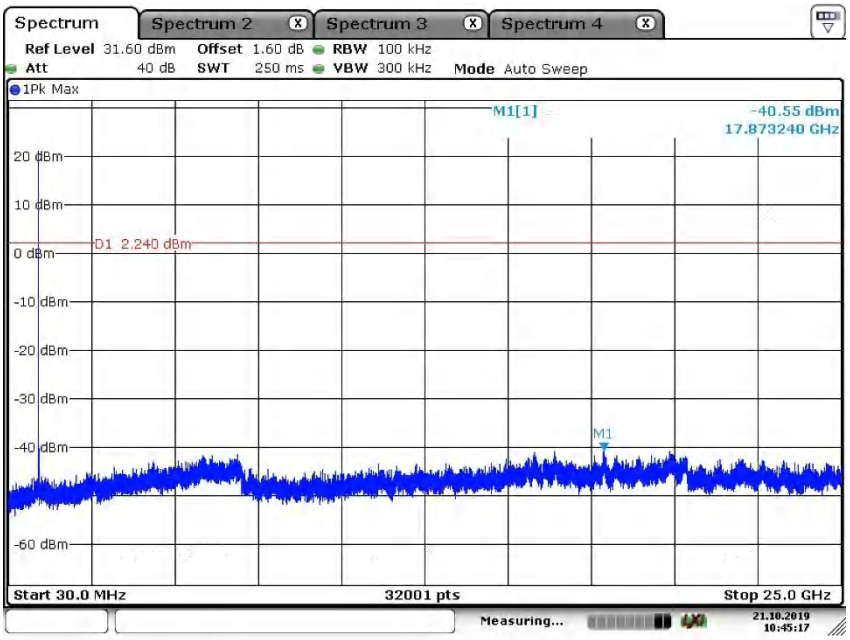


Middle Channel



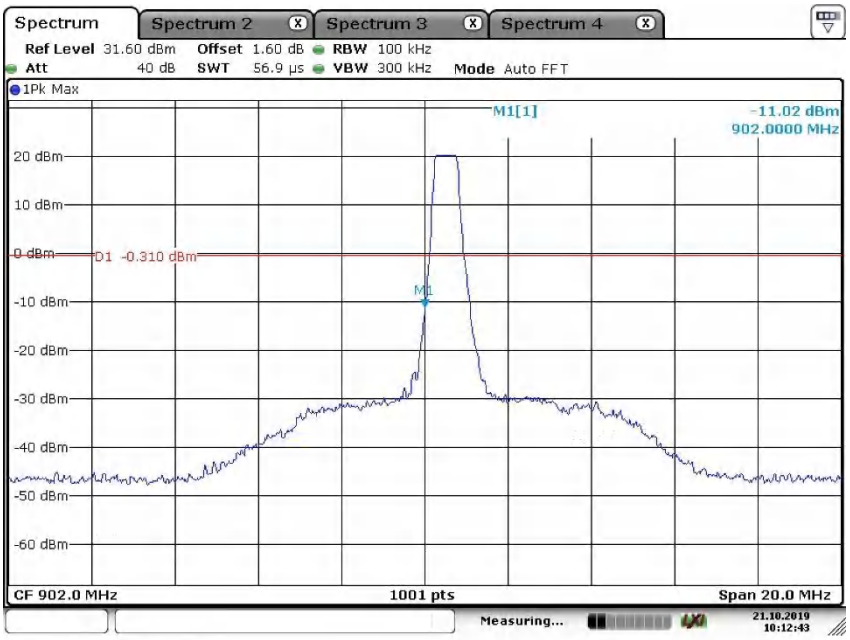
Date: 21.OCT.2019 10:44:19

High Channel



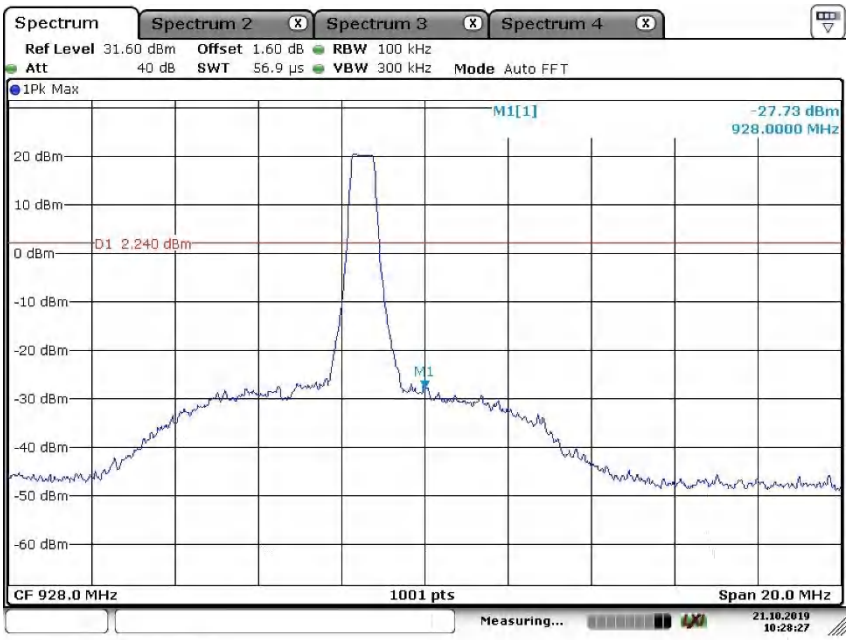
Date: 21.OCT.2019 10:45:18

Band Edge, Low Channel



Date: 21.OCT.2019 10:12:44

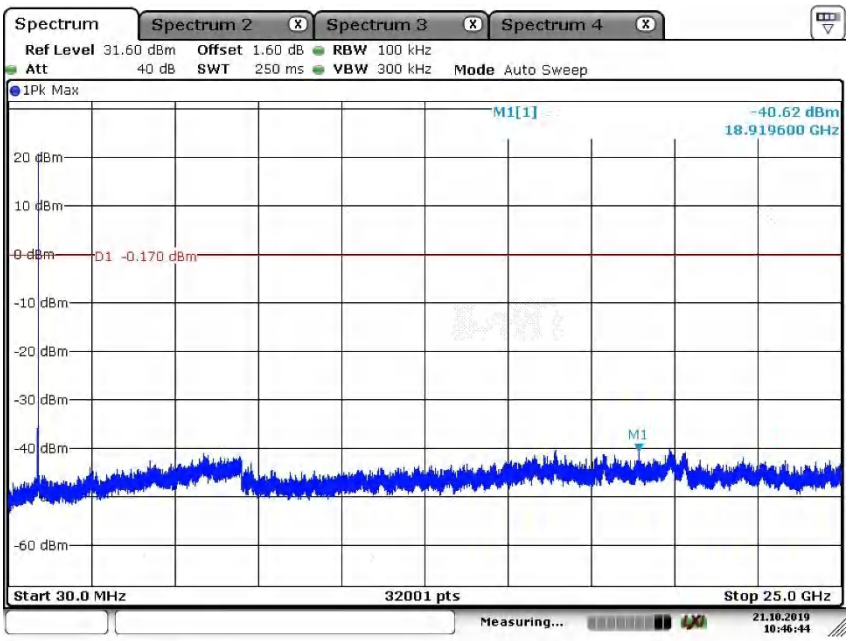
Band Edge, High Channel



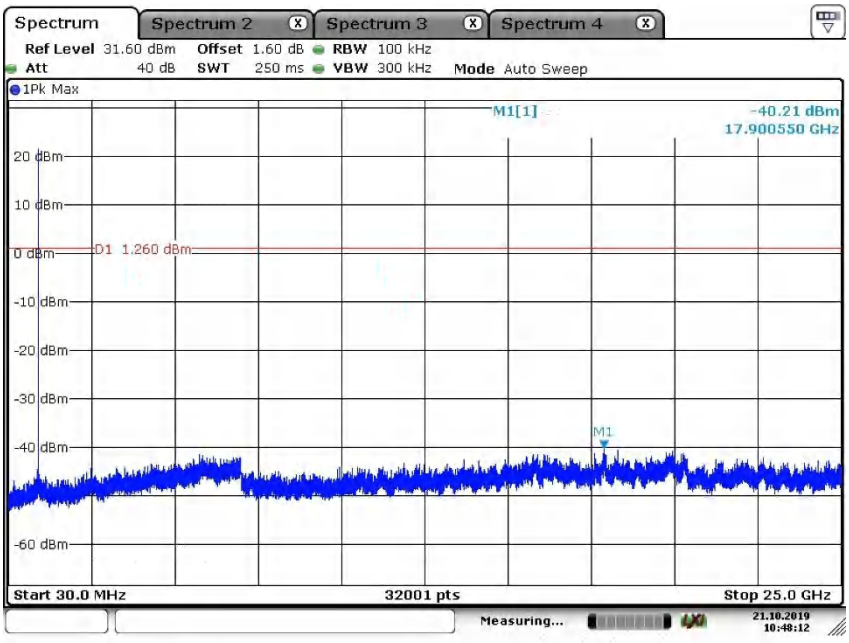
Date: 21.OCT.2019 10:28:28

DTSs#3 (Bandwidth: 500KHz)

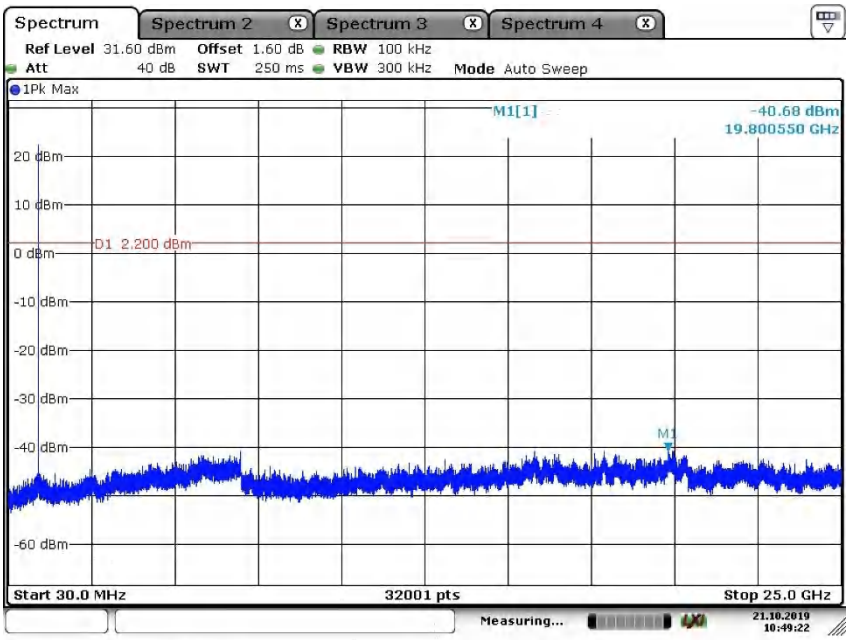
Low Channel



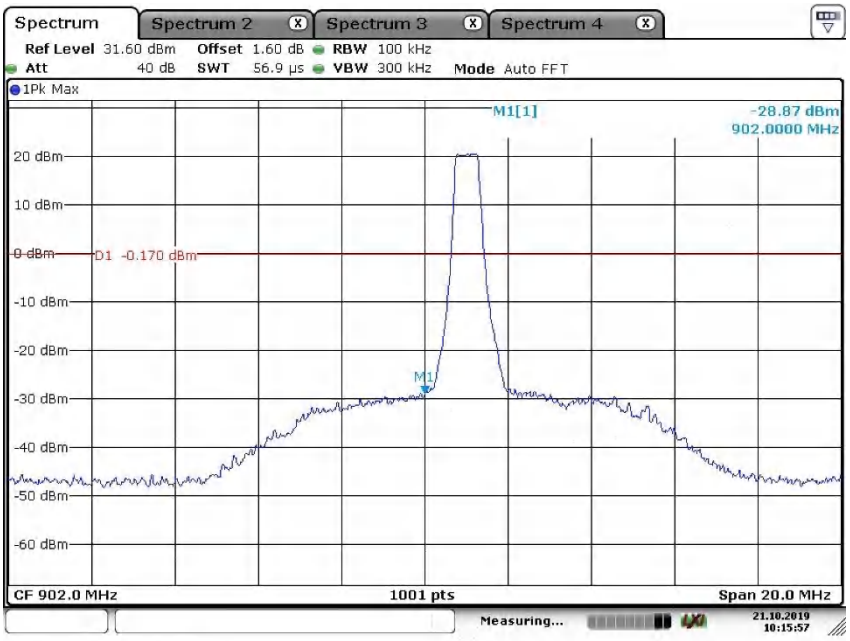
Middle Channel



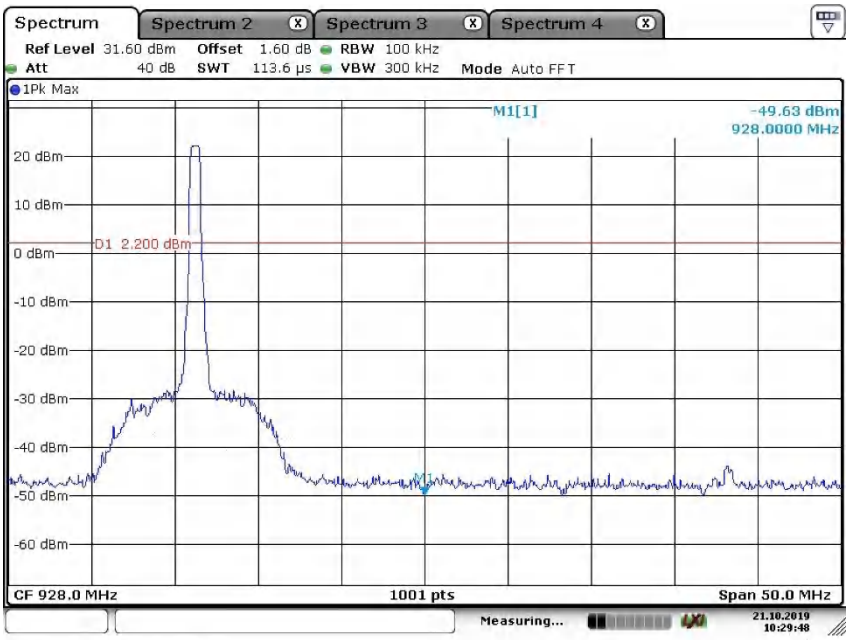
High Channel



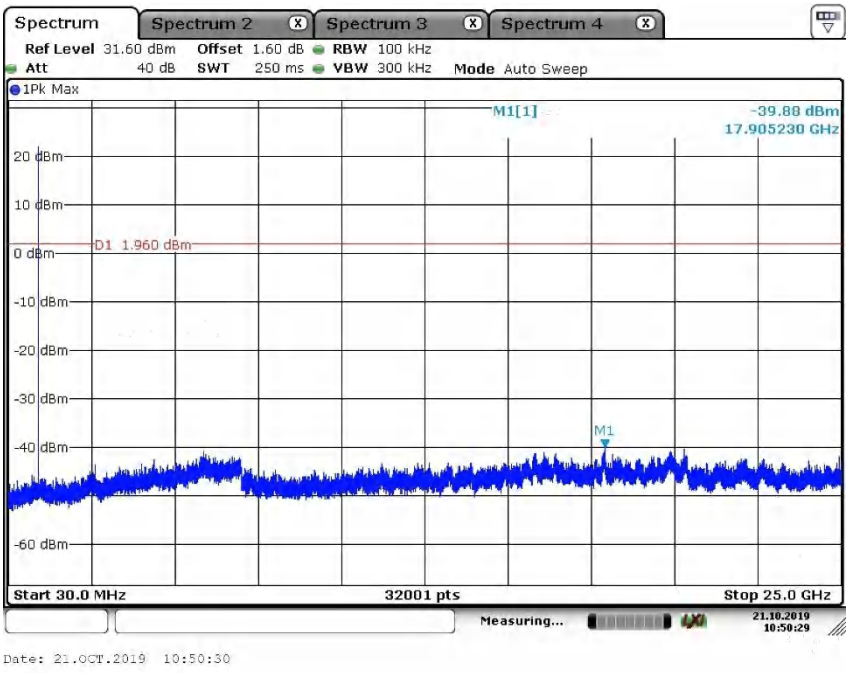
Band Edge, Low Channel



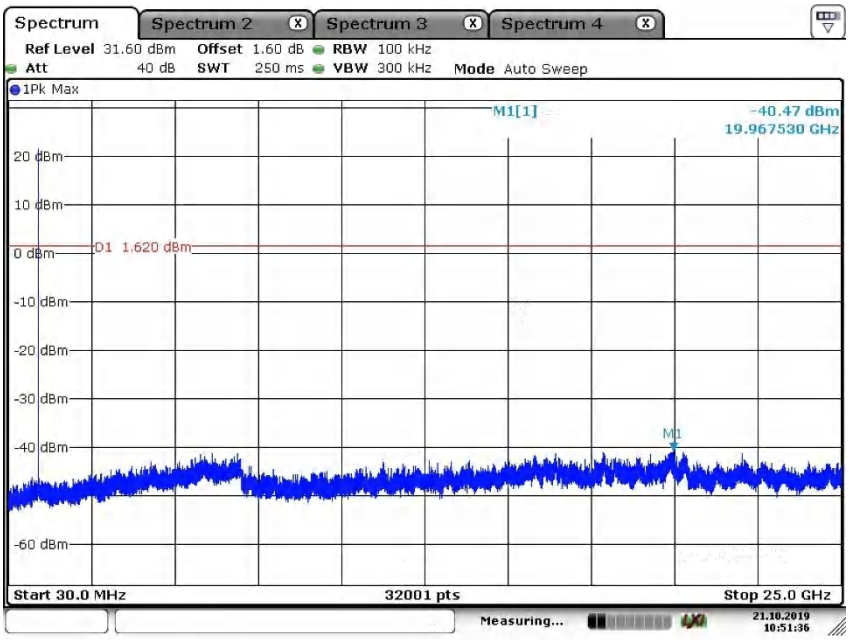
Band Edge, High Channel



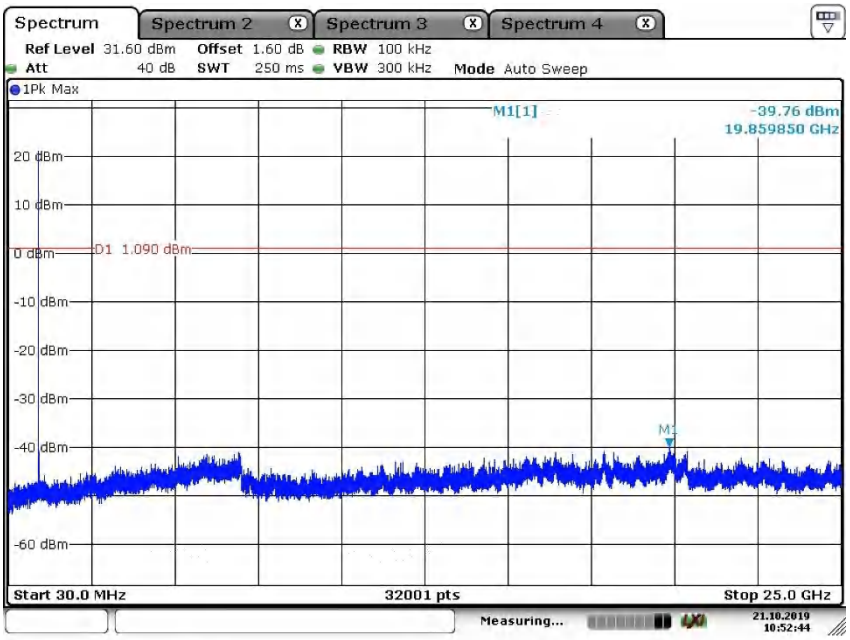
DTSs#4 (Bandwidth: 500KHz)
Low Channel



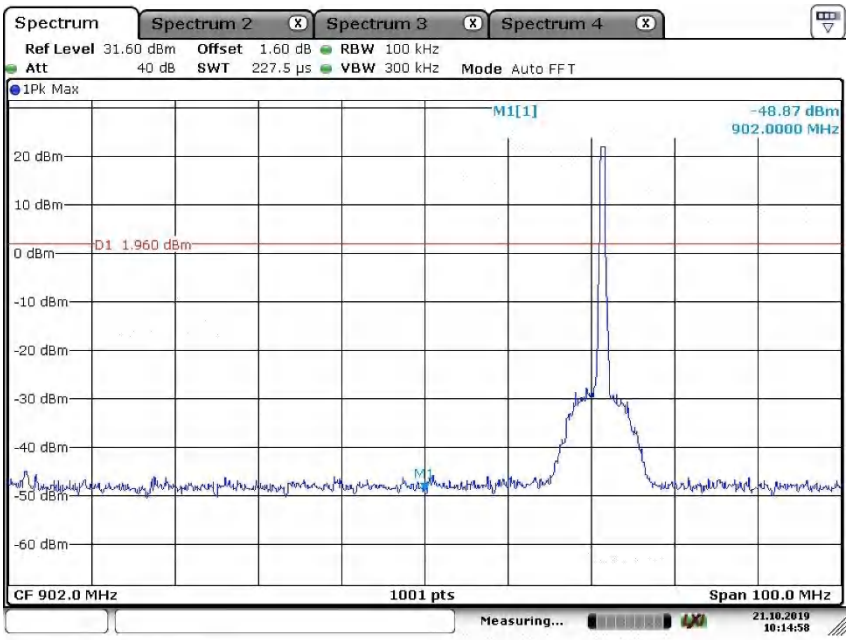
Middle Channel



High Channel

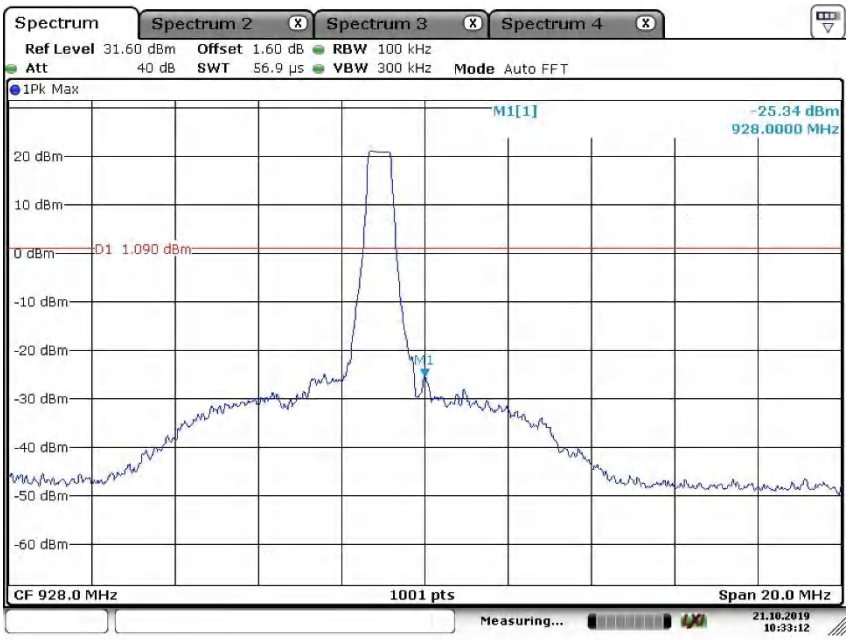


Band Edge, Low Channel



Date: 21.OCT.2019 10:14:59

Band Edge, High Channel



Date: 21.OCT.2019 10:33:13

Appendix B.5: Test Results of Conducted Emission on AC Mains

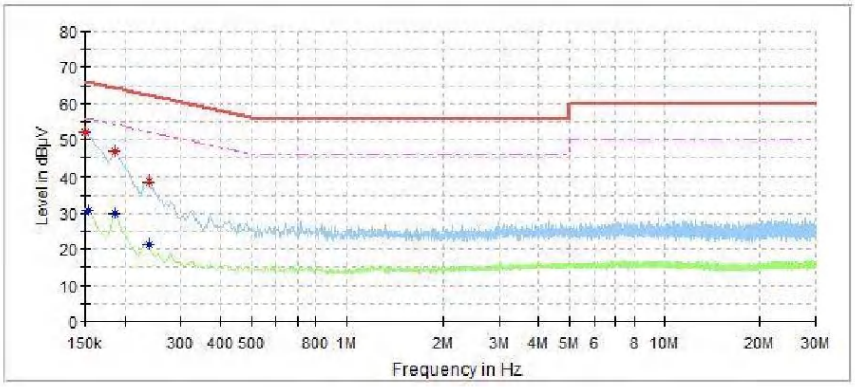
Bluetooth connecting mode

L-120V-BT 1 / 6

Test Report

EUT Information

EUT Name:	Ring Smart Lightbulb
Model:	PAR38
Order No.:	168134202 50
Test Mode:	Bluetooth conneting
Test Voltage:	AC120V50Hz
Test By:	Tom Guo
Review By:	Gary Chen



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	51.92	---	66.00	14.08	---	---	L1	9.6
0.154000	---	30.87	55.78	24.91	---	---	L1	9.6
0.186000	---	30.07	54.21	24.15	---	---	L1	9.6
0.186000	46.70	---	64.21	17.52	---	---	L1	9.6
0.238000	---	21.52	52.17	30.64	---	---	L1	9.6
0.238000	38.71	---	62.17	23.46	---	---	L1	9.6

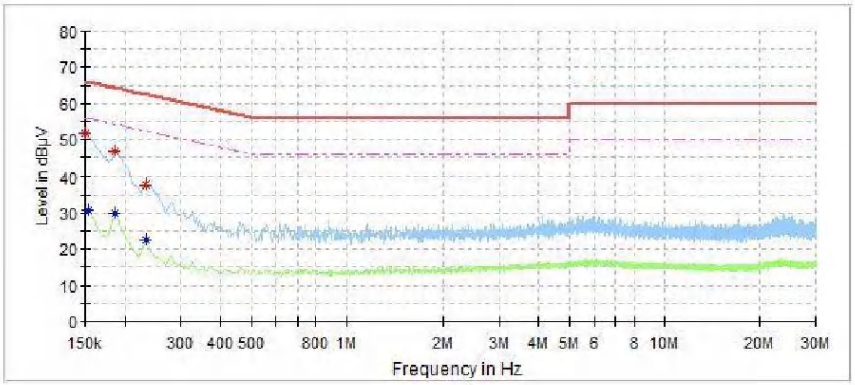
11/13/2019 9:59:30 AM

L-120V-BT 2 / 6

Test Report

EUT Information

EUT Name:	Ring Smart Lightbulb
Model:	PAR38
Order No.:	168134202 50
Test Mode:	Bluetooth conneting
Test Voltage:	AC120V50Hz
Test By:	Tom Guo
Review By:	Gary Chen



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	51.74	---	66.00	14.26	---	---	N	9.6
0.154000	---	30.59	55.78	25.19	---	---	N	9.6
0.186000	---	29.89	54.21	24.33	---	---	N	9.6
0.186000	46.93	---	64.21	17.29	---	---	N	9.6
0.234000	---	22.63	52.31	29.68	---	---	N	9.6
0.234000	37.70	---	62.31	24.60	---	---	N	9.6

DTSs connecting mode

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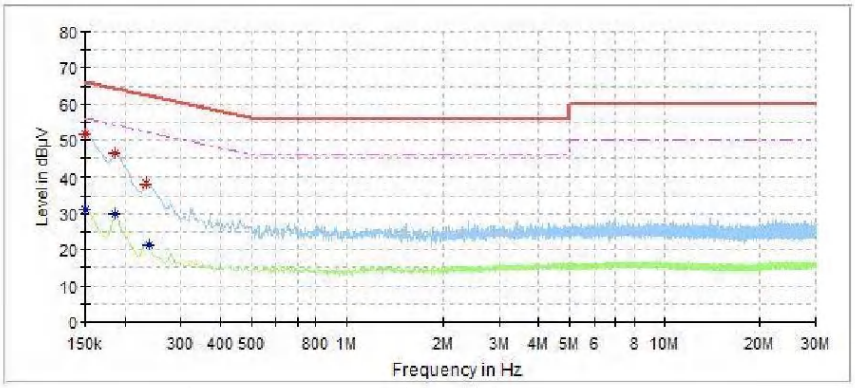
Test Report

EUT Information

EUT Name:	Ring Smart Lightbulb
Model:	PAR38
Order No.:	168134202 50
Test Mode:	DTSs conneting
Test Voltage:	AC120V50Hz
Test By:	Tom Guo
Review By:	Gary Chen



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	---	31.10	56.00	24.90	---	---	L1	9.6
0.150000	51.88	---	66.00	14.12	---	---	L1	9.6
0.186000	---	29.99	54.21	24.22	---	---	L1	9.6
0.186000	46.45	---	64.21	17.77	---	---	L1	9.6
0.234000	38.03	---	62.31	24.27	---	---	L1	9.6
0.238000	---	21.17	52.17	30.99	---	---	L1	9.6

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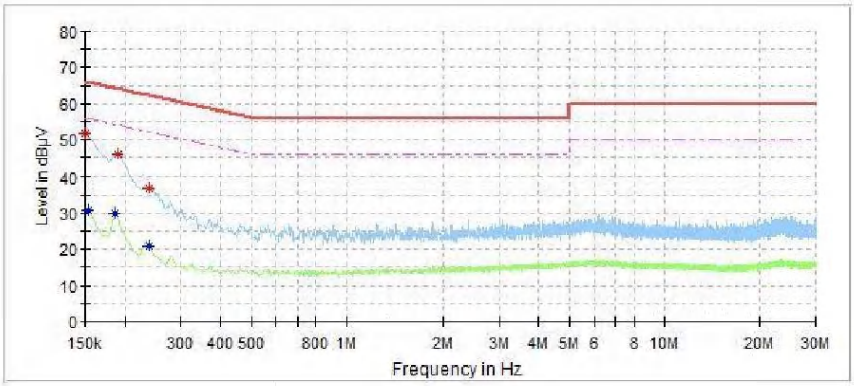
Test Report

EUT Information

EUT Name:	Ring Smart Lightbulb
Model:	PAR38
Order No.:	168134202 50
Test Mode:	DTSs conneting
Test Voltage:	AC120V50Hz
Test By:	Tom Guo
Review By:	Gary Chen
EUT Name:	Ring Smart Lightbulb



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	51.81	---	66.00	14.19	---	---	N	9.6
0.154000	---	30.57	55.78	25.21	---	---	N	9.6
0.186000	---	29.77	54.21	24.44	---	---	N	9.6
0.190000	45.88	---	64.04	18.16	---	---	N	9.6
0.238000	---	20.74	52.17	31.43	---	---	N	9.6
0.238000	36.88	---	62.17	25.29	---	---	N	9.6

FHSs connecting mode

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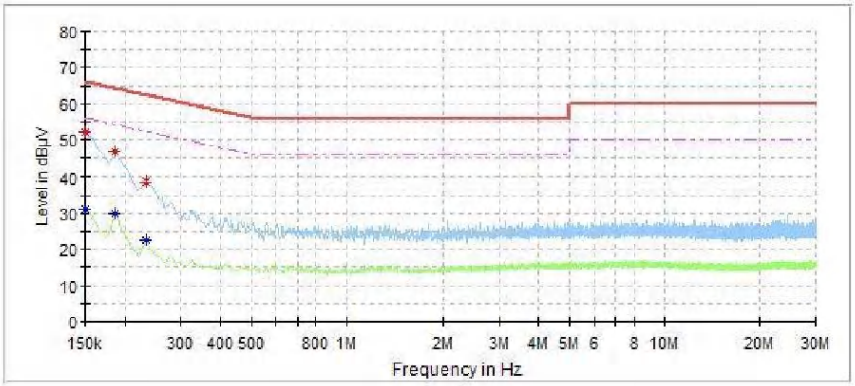
Test Report

EUT Information

EUT Name:	Ring Smart Lightbulb
Model:	PAR38
Order No.:	168134202 50
Test Mode:	FHSs conneting
Test Voltage:	AC120V50Hz
Test By:	Tom Guo
Review By:	Gary Chen
EUT Name:	Ring Smart Lightbulb



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	---	31.14	56.00	24.86	---	---	L1	9.6
0.150000	51.98	---	66.00	14.02	---	---	L1	9.6
0.186000	---	29.89	54.21	24.33	---	---	L1	9.6
0.186000	46.65	---	64.21	17.56	---	---	L1	9.6
0.234000	---	22.59	52.31	29.72	---	---	L1	9.6
0.234000	38.75	---	62.31	23.55	---	---	L1	9.6

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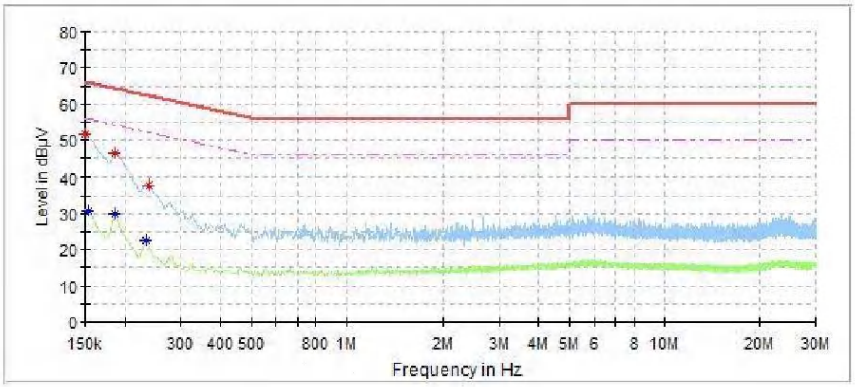
Test Report

EUT Information

EUT Name:	Ring Smart Lightbulb
Model:	PAR38
Order No.:	168134202 50
Test Mode:	FHSs conneting
Test Voltage:	AC120V50Hz
Test By:	Tom Guo
Review By:	Gary Chen
EUT Name:	Ring Smart Lightbulb



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	51.80	---	66.00	14.20	---	---	N	9.6
0.154000	---	30.59	55.78	25.19	---	---	N	9.6
0.186000	---	29.87	54.21	24.34	---	---	N	9.6
0.186000	46.44	---	64.21	17.77	---	---	N	9.6
0.234000	---	22.48	52.31	29.83	---	---	N	9.6
0.238000	37.55	---	62.17	24.62	---	---	N	9.6