

Appendix B: Test Results

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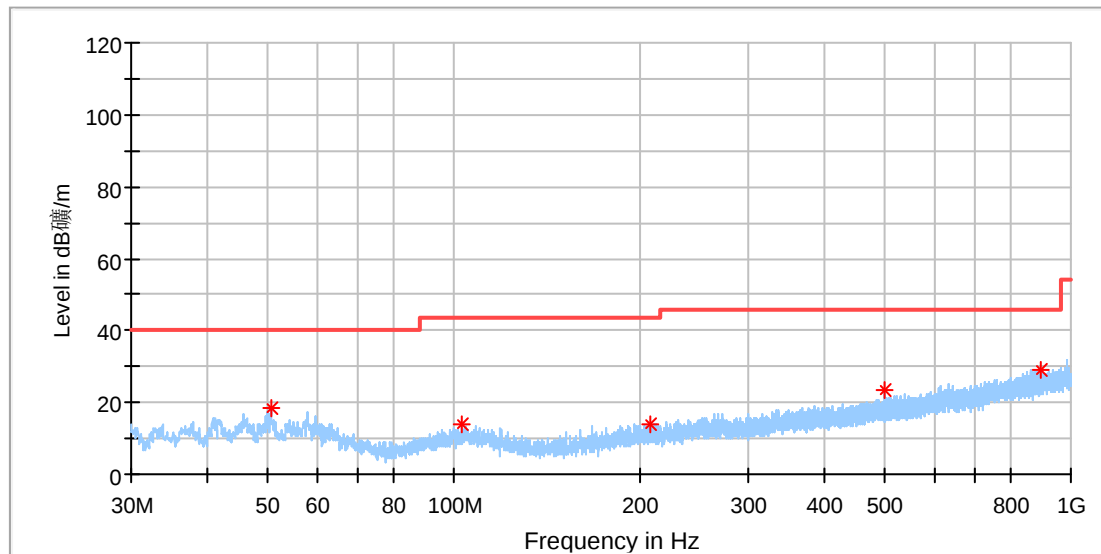
Note: The testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz to 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

Appendix B.1: Test Results of Field strength of fundamental & harmonics

30MHz - 1GHz

EUT Information

EUT Name:	Lenovo Go Wireless Split Keyboard
Model:	KB299W
Test Mode:	2.4GHz LOW CH
Test Voltage::	Battery
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

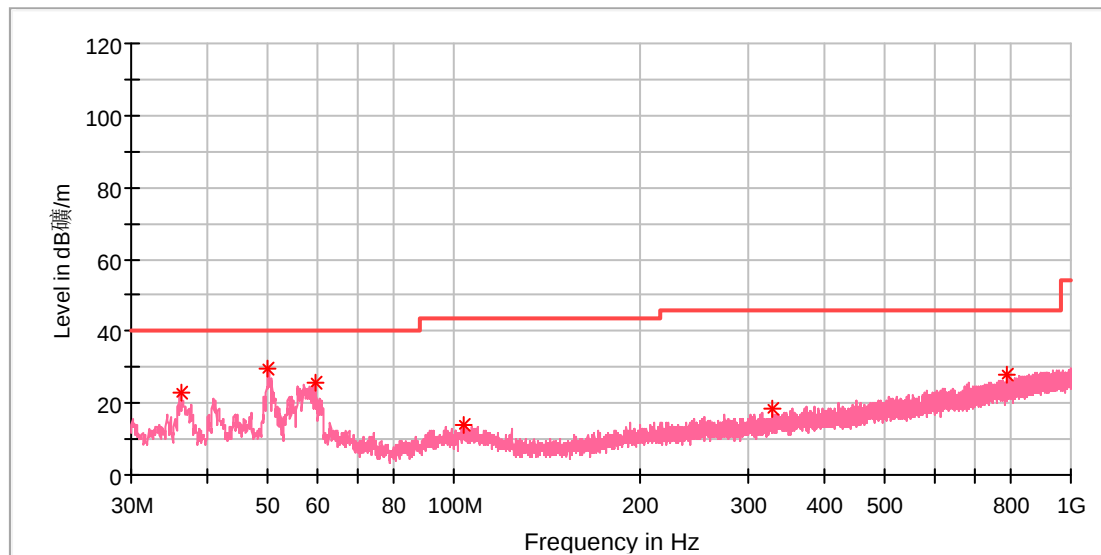


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
50.564000	18.63	40.00	21.37	100.0	H	227.0	-18.3
103.089500	13.86	43.50	29.64	100.0	H	167.0	-18.8
207.995000	14.05	43.50	29.45	100.0	H	257.0	-18.9
500.644000	23.68	46.00	22.32	100.0	H	14.0	-11.8
895.967500	29.04	46.00	16.96	100.0	H	94.0	-5.0

EUT Information

EUT Name: Lenovo Go Wireless Split Keyboard
Model: KB299W
Test Mode: 2.4GHz LOW CH
Test Voltage:: Battery
Remark: Temp 23 Humi:45%
Test Standard: FCC 15.249
Tested By: Kei Zhang
Reviewed By: Terry Yin

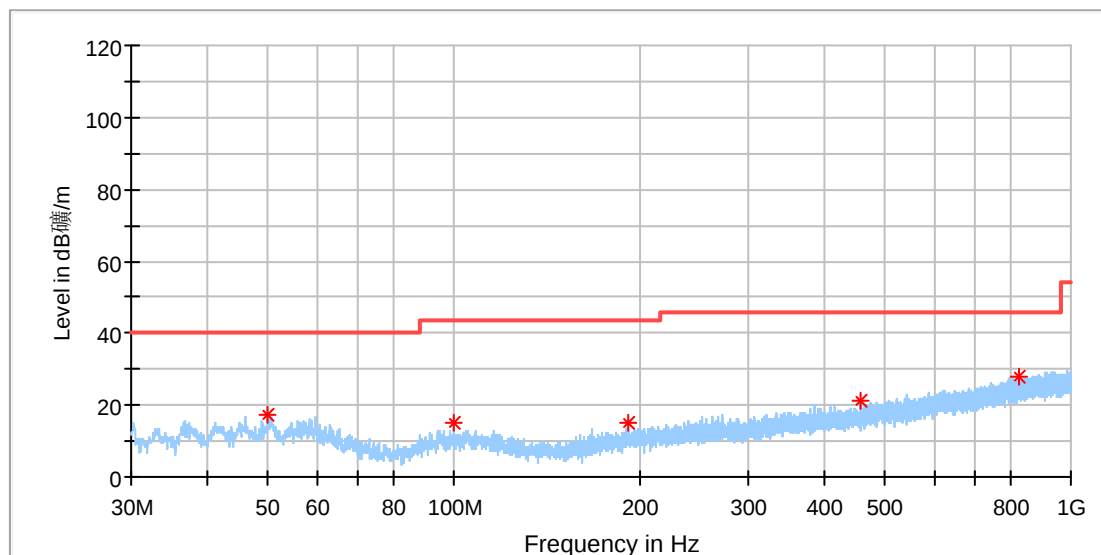


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
36.062500	22.73	40.00	17.27	100.0	V	189.0	-21.6
50.030500	29.45	40.00	10.55	100.0	V	299.0	-18.3
59.682000	25.70	40.00	14.30	100.0	V	226.0	-18.9
103.914000	13.73	43.50	29.77	100.0	V	0.0	-18.8
328.372000	18.43	46.00	27.57	100.0	V	199.0	-15.5
786.697000	28.03	46.00	17.97	100.0	V	68.0	-6.6

EUT Information

EUT Name: Lenovo Go Wireless Split Keyboard
Model: KB299W
Test Mode: 2.4GHz High CH
Test Voltage:: Battery
Remark: Temp 23 Humi:45%
Test Standard: FCC 15.249
Tested By: Kei Zhang
Reviewed By: Terry Yin

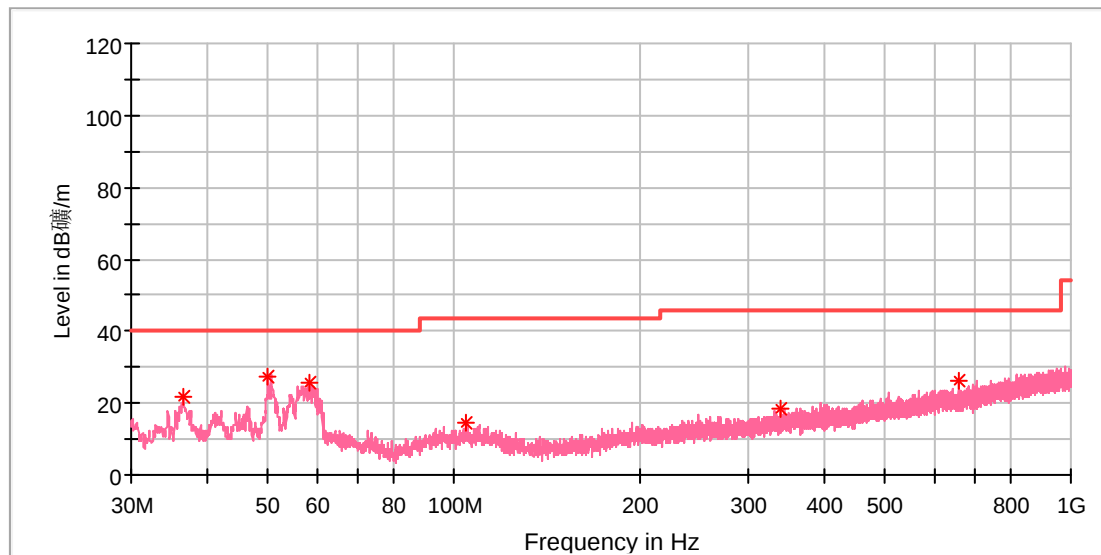


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
49.982000	17.35	40.00	22.65	100.0	H	245.0	-18.3
100.131000	14.93	43.50	28.57	100.0	H	142.0	-19.0
191.990000	15.09	43.50	28.41	100.0	H	160.0	-19.4
456.897000	21.28	46.00	24.72	100.0	H	160.0	-12.8
825.545500	28.04	46.00	17.96	100.0	H	111.0	-5.9

EUT Information

EUT Name: Lenovo Go Wireless Split Keyboard
Model: KB299W
Test Mode: 2.4GHz High CH
Test Voltage:: Battery
Remark: Temp 23 Humi:45%
Test Standard: FCC 15.249
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

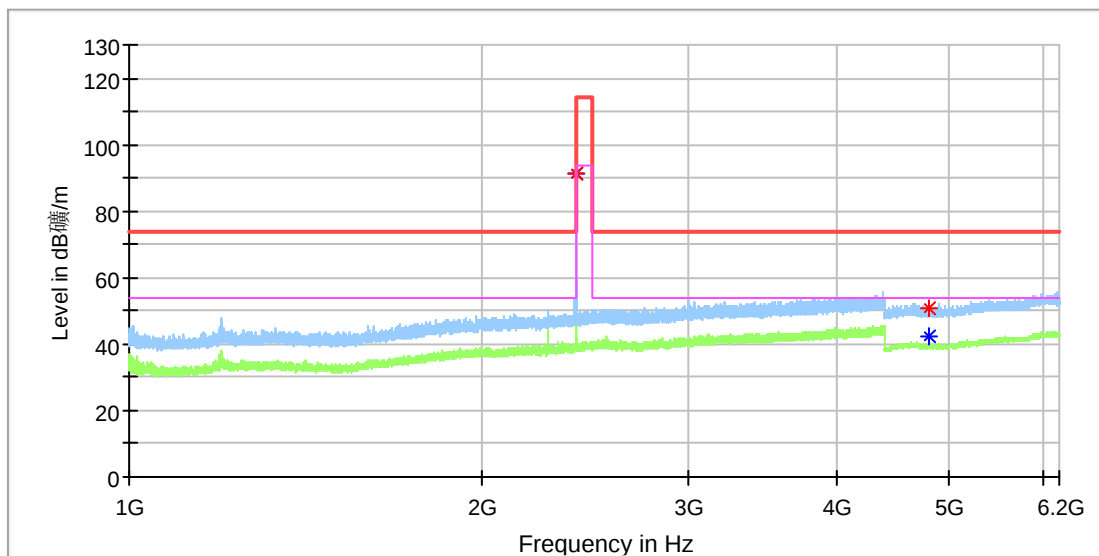
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
36.499000	21.85	40.00	18.15	100.0	V	93.0	-21.4
50.030500	27.58	40.00	12.42	100.0	V	0.0	-18.3
58.518000	25.68	40.00	14.32	100.0	V	13.0	-18.8
104.835500	14.36	43.50	29.14	100.0	V	279.0	-18.8
338.751000	18.62	46.00	27.38	100.0	V	108.0	-15.0
658.366000	26.24	46.00	19.76	100.0	V	27.0	-8.9

1GHz - 18GHz

Note: The highest waveform in the figure is 2.4GHz Fundamental.

EUT Information

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Test Mode:	2.4GHz LOW CH
Test Voltage::	Battery
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

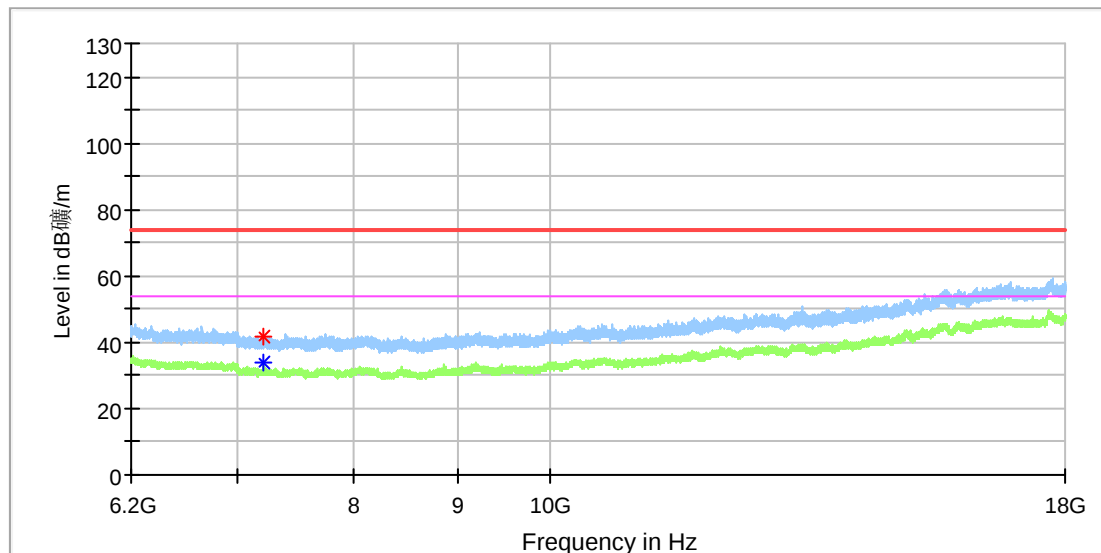


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2401.990000	91.35	---	114.00	22.65	100.0	H	292.0	7.0
2401.990000	---	91.22	94.00	2.78	100.0	H	292.0	7.0
4803.500000	50.86	---	74.00	23.14	100.0	H	56.0	11.8
4804.000000	---	42.43	54.00	11.57	100.0	H	77.0	11.8

EUT Information

EUT Name: Lenovo Go Wireless Split Keyboard
Model: KB299W
Test Mode: 2.4GHz LOW CH
Test Voltage:: Battery
Remark: Temp 23 Humi:45%
Test Standard: FCC 15.249
Tested By: Kei Zhang
Reviewed By: Terry Yin

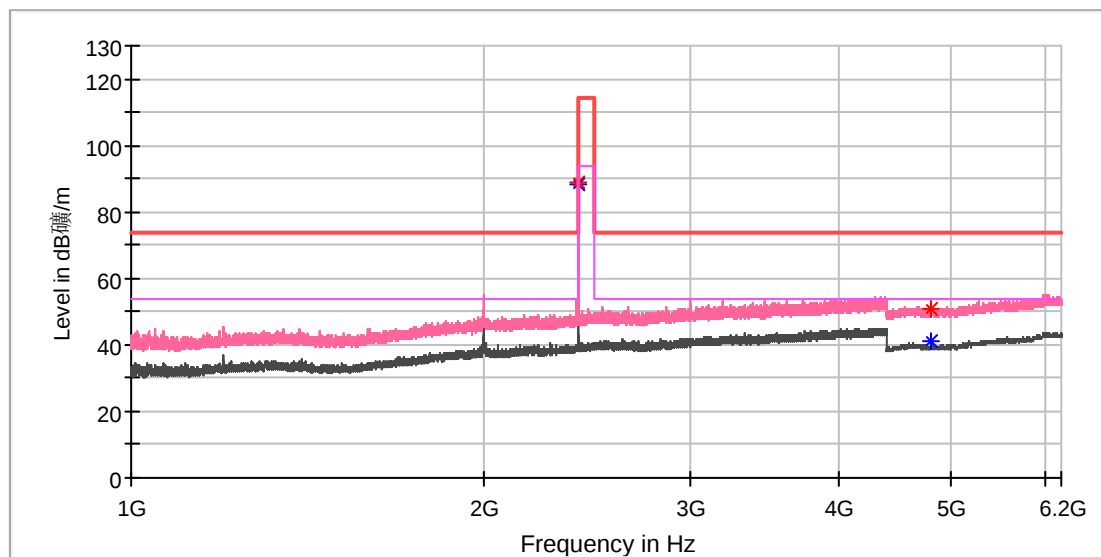


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7204.966667	---	33.71	54.00	20.29	100.0	H	326.0	8.8
7205.950000	41.87	---	74.00	32.13	100.0	H	7.0	8.8

EUT Information

EUT Name: Lenovo Go Wireless Split Keyboard
Model: KB299W
Test Mode: 2.4GHz LOW CH
Test Voltage:: Battery
Remark: Temp 23 Humi:45%
Test Standard: FCC 15.249
Tested By: Kei Zhang
Reviewed By: Terry Yin

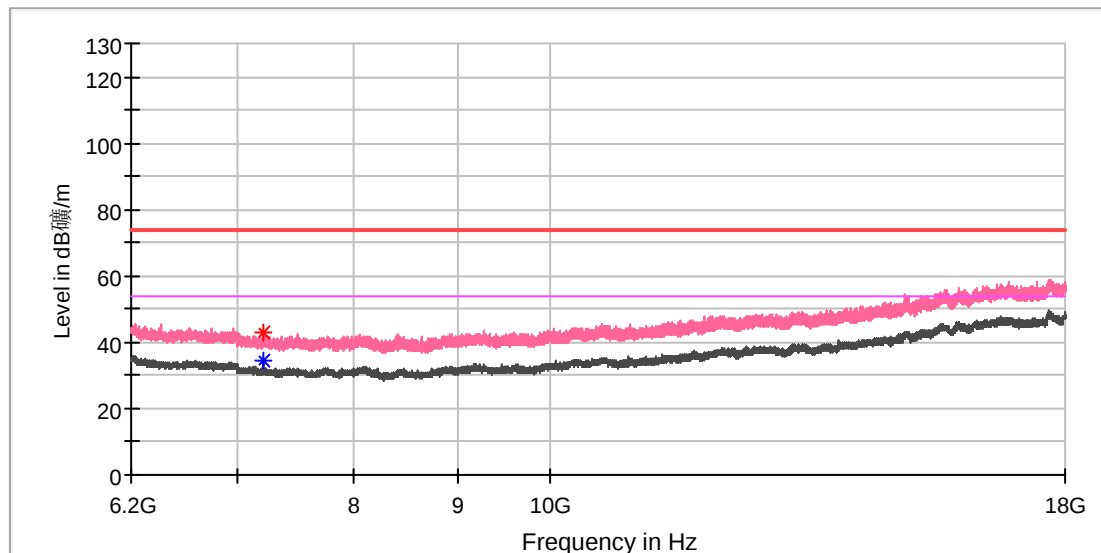


Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2401.650000	88.73	---	114.00	25.27	100.0	V	319.0	7.0
2401.990000	---	88.05	94.00	5.95	100.0	V	189.0	7.0
4803.500000	---	41.38	54.00	12.62	100.0	V	8.0	11.8
4804.000000	50.85	---	74.00	23.15	100.0	V	190.0	11.8

EUT Information

EUT Name: Lenovo Go Wireless Split Keyboard
Model: KB299W
Test Mode: 2.4GHz LOW CH
Test Voltage:: Battery
Remark: Temp 23 Humi:45%
Test Standard: FCC 15.249
Tested By: Kei Zhang
Reviewed By: Terry Yin

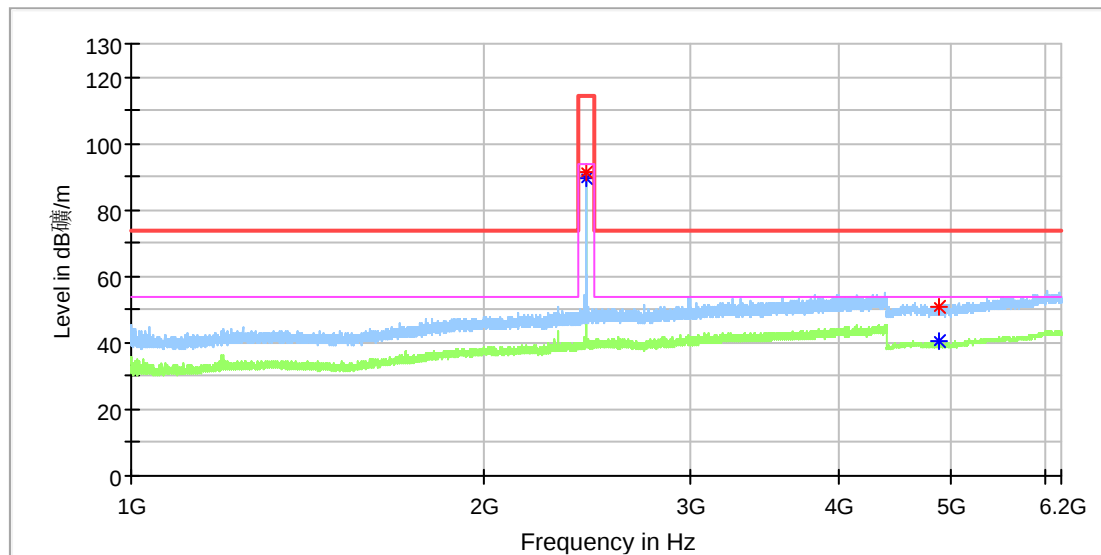


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7204.475000	42.92	---	74.00	31.08	100.0	V	135.0	8.8
7204.966667	---	34.60	54.00	19.40	100.0	V	115.0	8.8

EUT Information

EUT Name: Lenovo Go Wireless Split Keyboard
Model: KB299W
Test Mode: 2.4GHz Middle CH
Test Voltage:: Battery
Remark: Temp 23 Humi:45%
Test Standard: FCC 15.249
Tested By: Kei Zhang
Reviewed By: Terry Yin

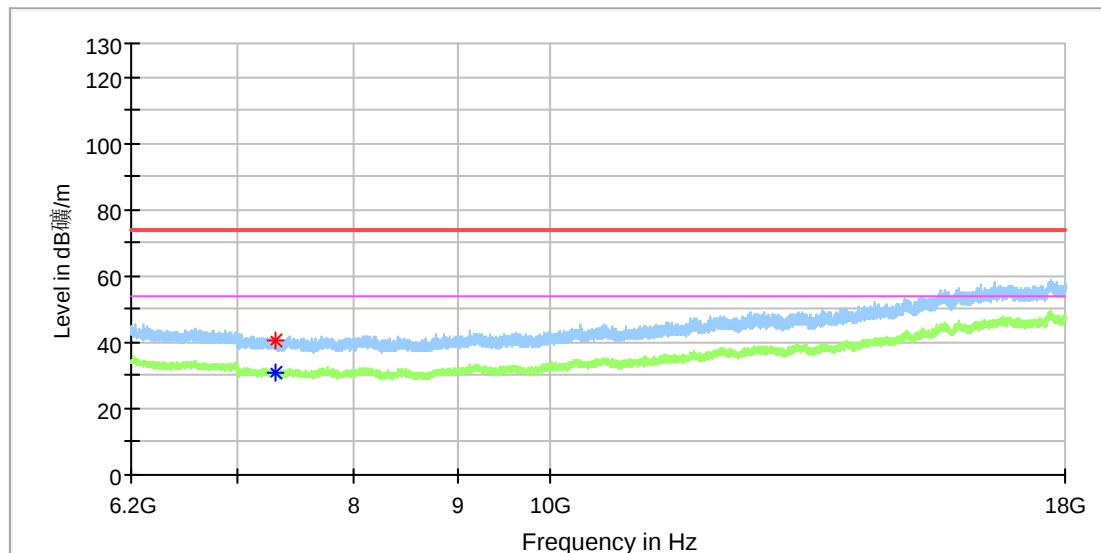


Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2440.070000	---	89.55	94.00	4.45	100.0	H	318.0	7.4
2440.410000	91.34	---	114.00	22.66	100.0	H	286.0	7.4
4879.000000	50.72	---	74.00	23.28	100.0	H	50.0	11.8
4879.000000	---	40.60	54.00	13.40	100.0	H	50.0	11.8

EUT Information

EUT Name:	Lenovo Go Wireless Split Keyboard
Model:	KB299W
Test Mode:	2.4GHz Middle CH
Test Voltage::	Battery
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

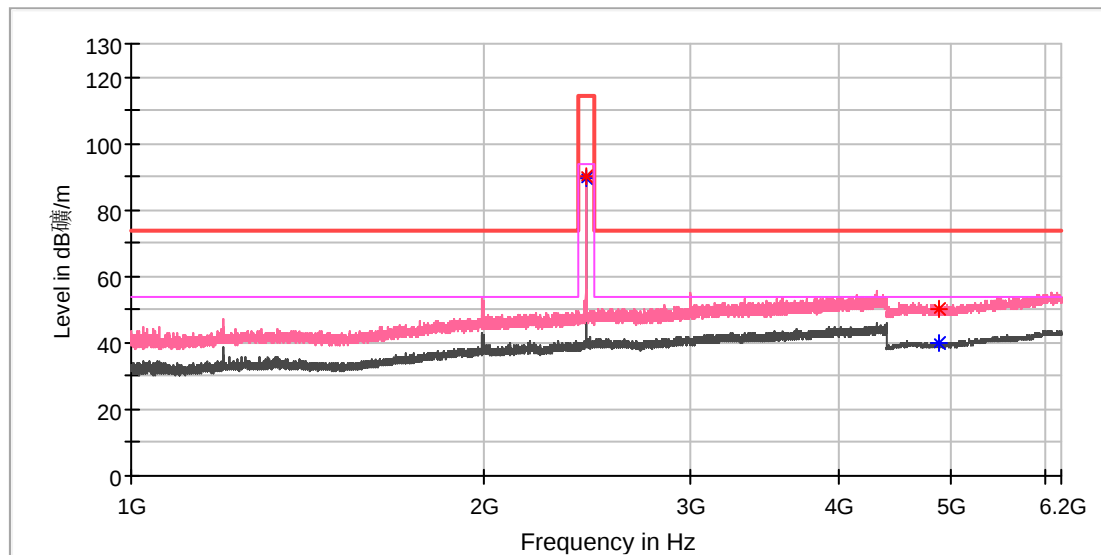


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7310.183333	---	30.80	54.00	23.20	100.0	H	0.0	8.2
7315.591667	40.72	---	74.00	33.28	100.0	H	46.0	8.2

EUT Information

EUT Name:	Lenovo Go Wireless Split Keyboard
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Test Mode:	2.4GHz Middle CH
Test Voltage::	Battery
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

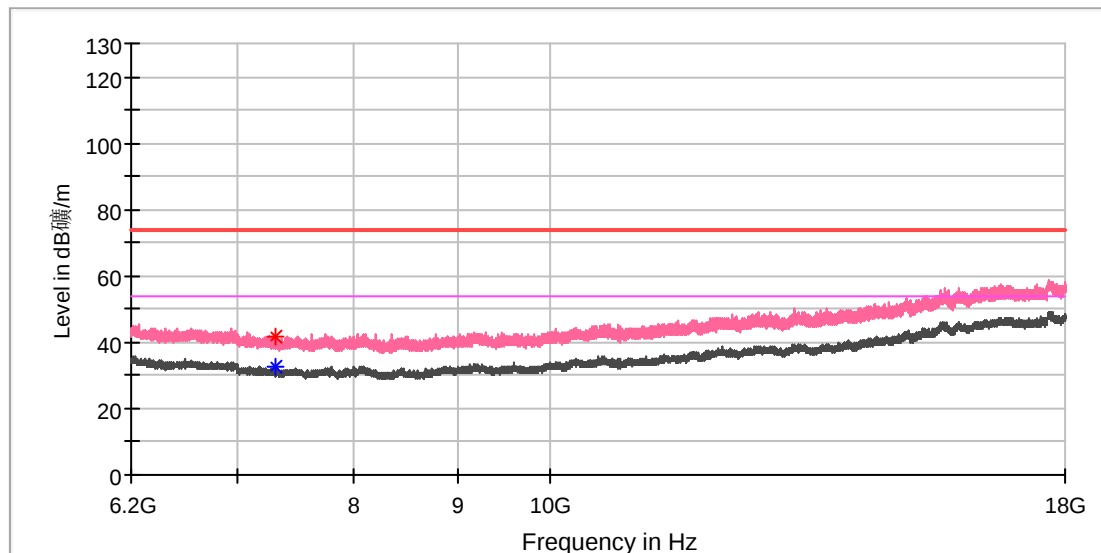


Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2439.730000	90.12	---	114.00	23.88	100.0	V	347.0	7.4
2439.900000	---	89.71	94.00	4.29	100.0	V	347.0	7.4
4880.000000	50.36	---	74.00	23.64	100.0	V	173.0	11.8
4880.000000	---	40.09	54.00	13.91	100.0	V	173.0	11.8

EUT Information

EUT Name: Lenovo Go Wireless Split Keyboard
Model: KB299W
Test Mode: 2.4GHz Middle CH
Test Voltage:: Battery
Remark: Temp 23 Humi:45%
Test Standard: FCC 15.249
Tested By: Kei Zhang
Reviewed By: Terry Yin

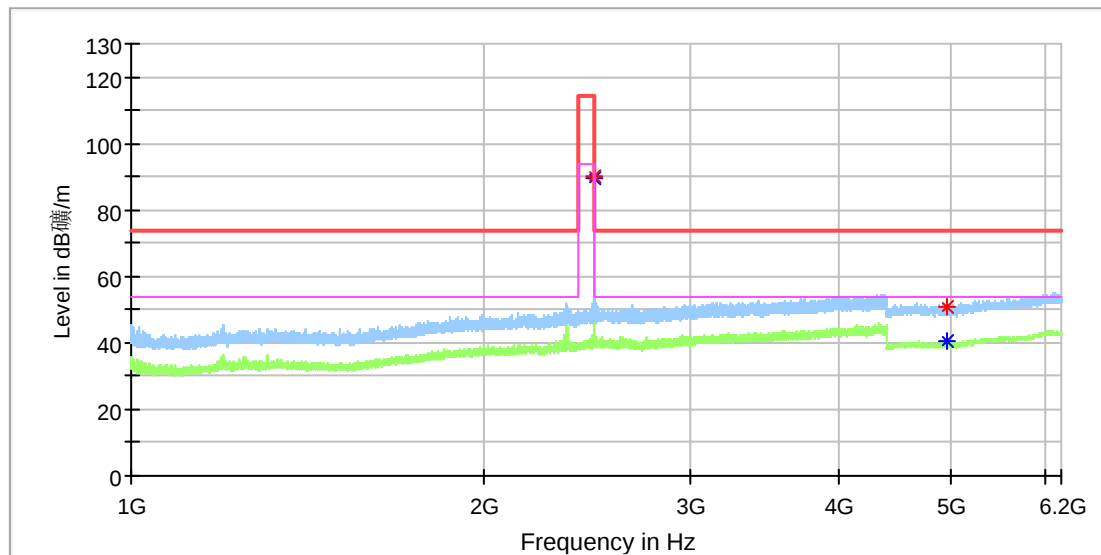


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7316.083333	---	32.46	54.00	21.54	100.0	V	48.0	8.2
7317.066667	41.46	---	74.00	32.54	100.0	V	133.0	8.2

EUT Information

EUT Name:	Lenovo Go Wireless Split Keyboard
Model:	KB299W
Test Mode:	2.4GHz High CH
Test Voltage::	Battery
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

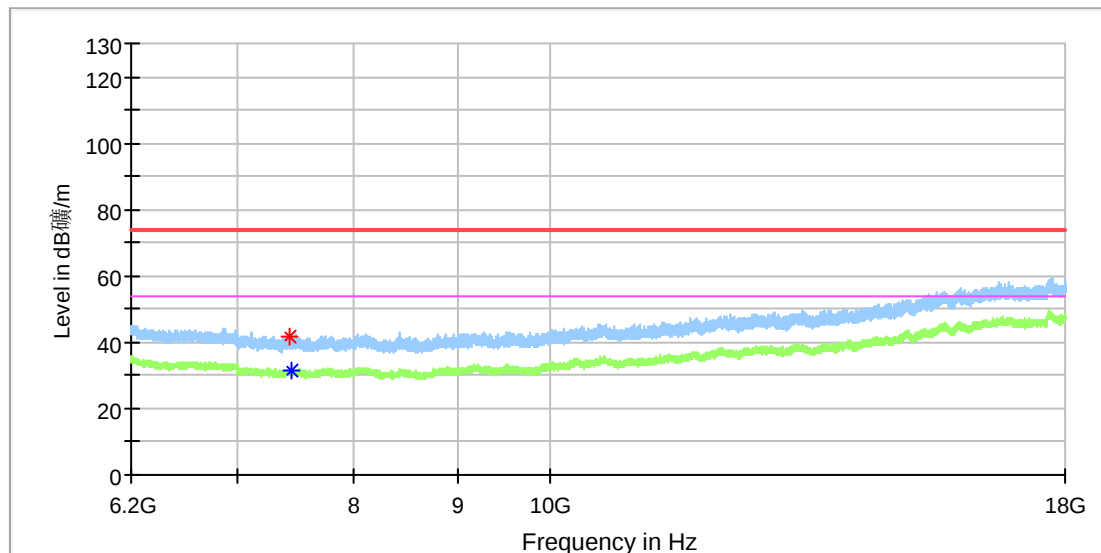


Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2479.680000	89.81	---	114.00	24.19	100.0	H	271.0	7.4
2480.020000	---	89.33	94.00	4.67	100.0	H	271.0	7.4
4958.000000	50.68	---	74.00	23.32	100.0	H	237.0	11.8
4960.000000	---	40.22	54.00	13.78	100.0	H	41.0	11.8

EUT Information

EUT Name: Lenovo Go Wireless Split Keyboard
Model: KB299W
Test Mode: 2.4GHz High CH
Test Voltage:: Battery
Remark: Temp 23 Humi:45%
Test Standard: FCC 15.249
Tested By: Kei Zhang
Reviewed By: Terry Yin

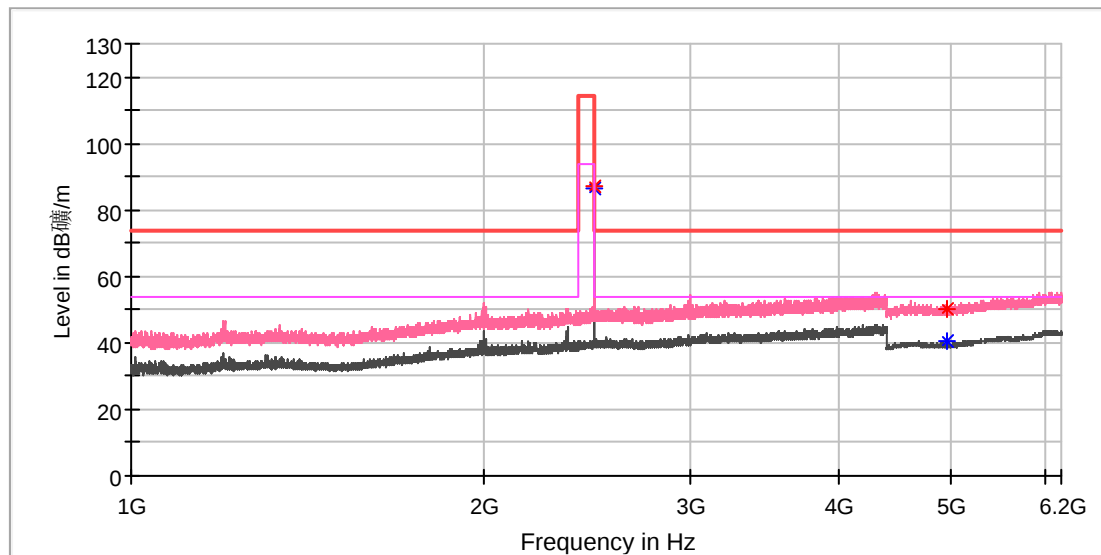


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7428.675000	41.43	---	74.00	32.57	100.0	H	56.0	8.4
7437.033333	---	31.71	54.00	22.29	100.0	H	35.0	8.4

EUT Information

EUT Name: Lenovo Go Wireless Split Keyboard
Model: KB299W
Test Mode: 2.4GHz High CH
Test Voltage:: Battery
Remark: Temp 23 Humi:45%
Test Standard: FCC 15.249
Tested By: Kei Zhang
Reviewed By: Terry Yin

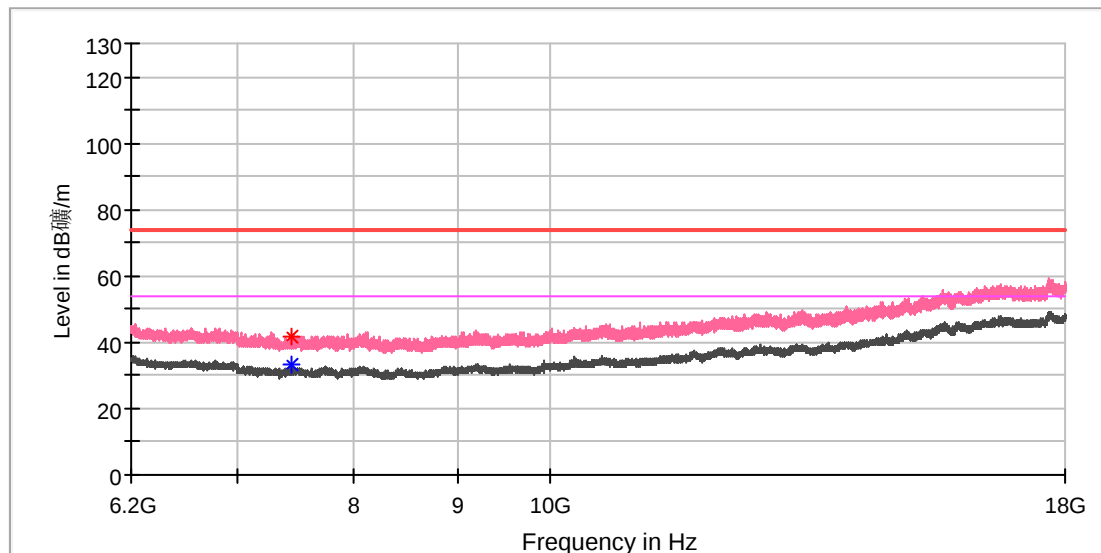


Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2479.680000	87.04	---	114.00	26.96	100.0	V	19.0	7.4
2480.020000	---	86.46	94.00	7.54	100.0	V	19.0	7.4
4960.000000	---	40.28	54.00	13.72	100.0	V	241.0	11.8
4961.000000	50.15	---	74.00	23.85	100.0	V	67.0	11.8

EUT Information

EUT Name: Lenovo Go Wireless Split Keyboard
Model: KB299W
Test Mode: 2.4GHz High CH
Test Voltage:: Battery
Remark: Temp 23 Humi:45%
Test Standard: FCC 15.249
Tested By: Kei Zhang
Reviewed By: Terry Yin

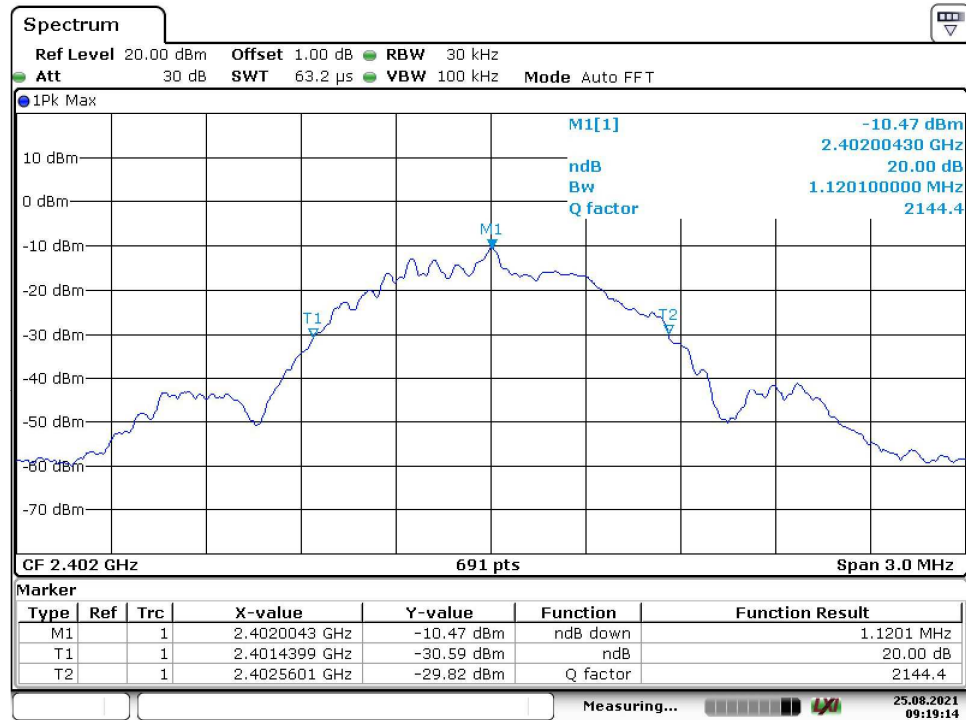


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7438.016667	---	33.11	54.00	20.89	100.0	V	154.0	8.4
7444.900000	41.67	---	74.00	32.33	100.0	V	258.0	8.5

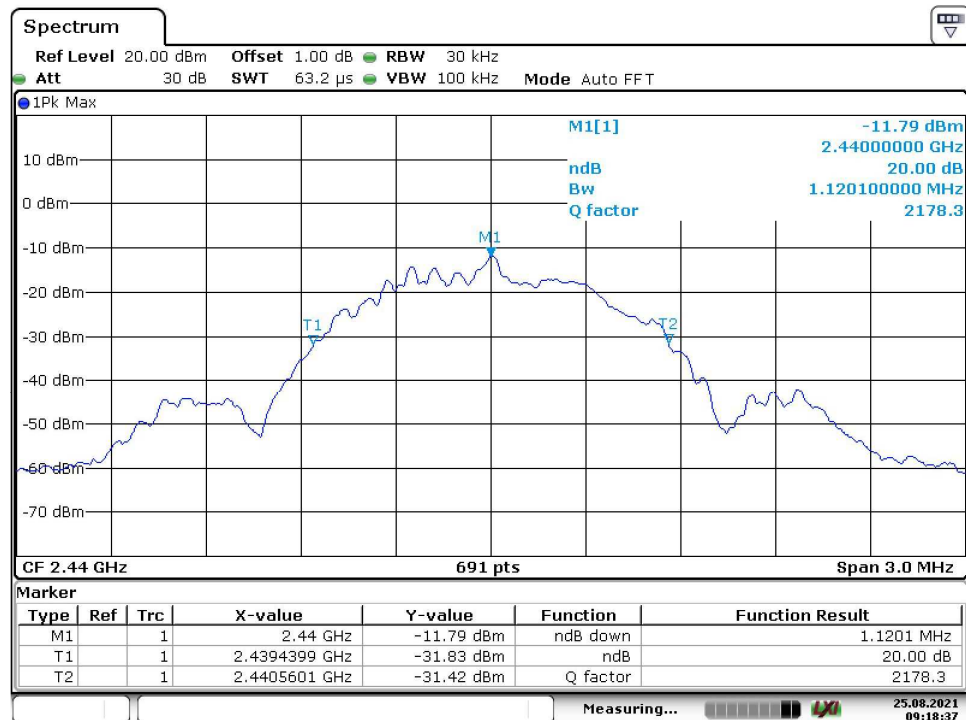
Appendix B.2: Test Results of 20dB Bandwidth

2402MHz



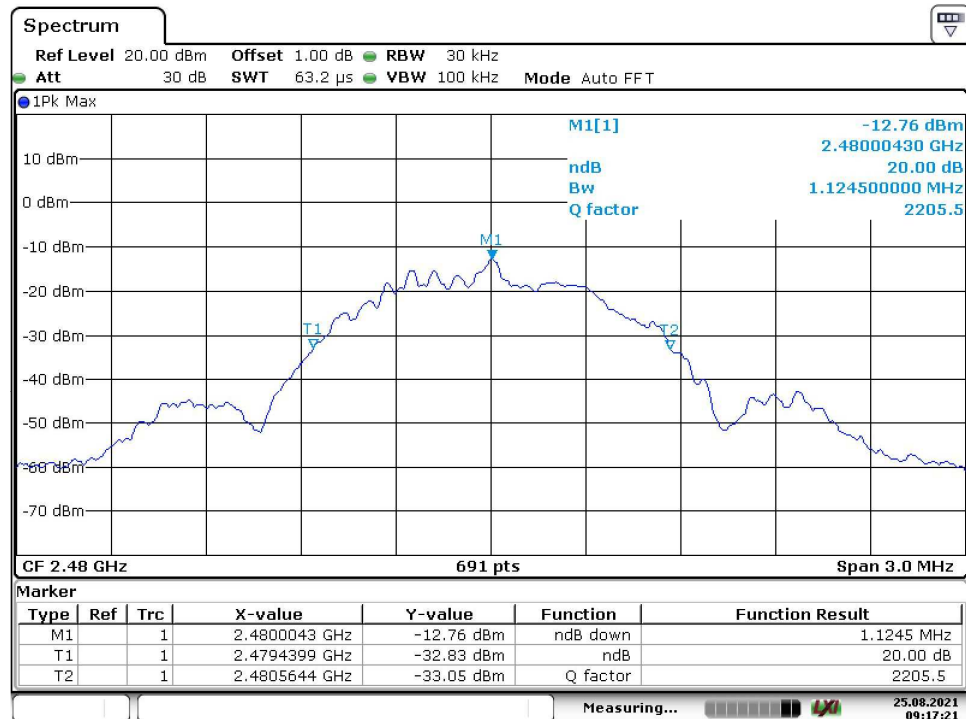
Date: 25.AUG.2021 09:19:14

2440MHz



Date: 25.AUG.2021 09:18:37

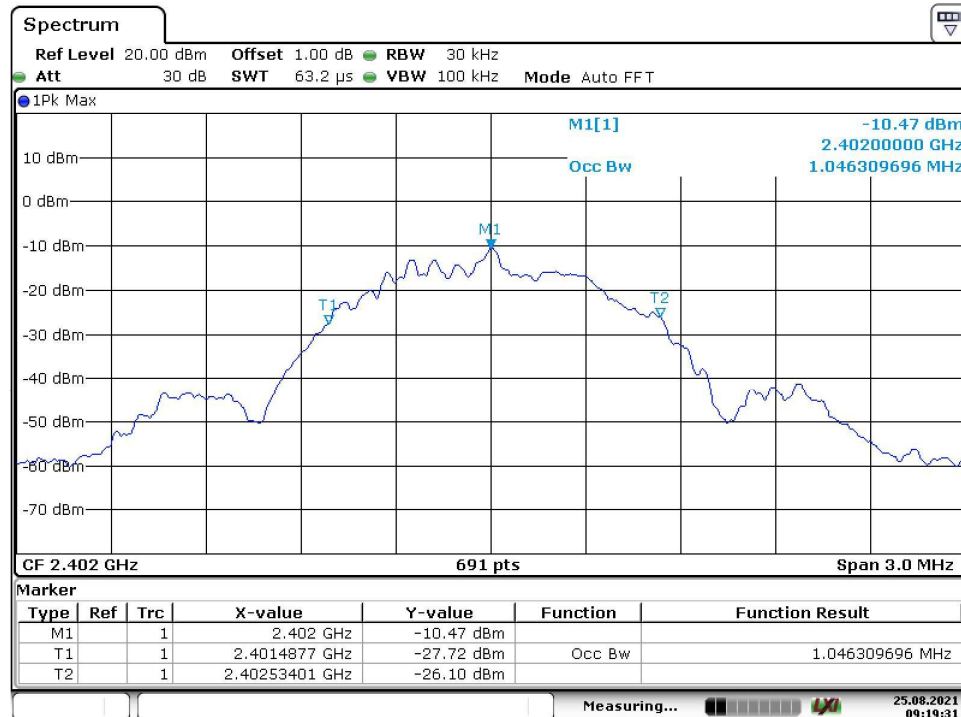
2480MHz



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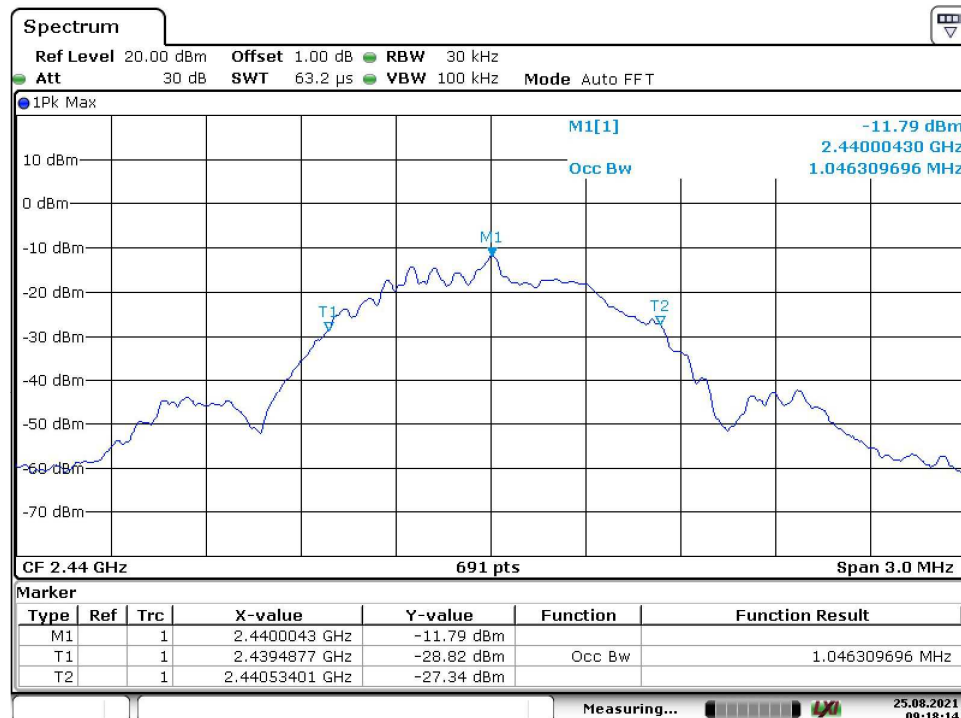
Appendix B.3: Test Results of 99% Bandwidth

2402MHz



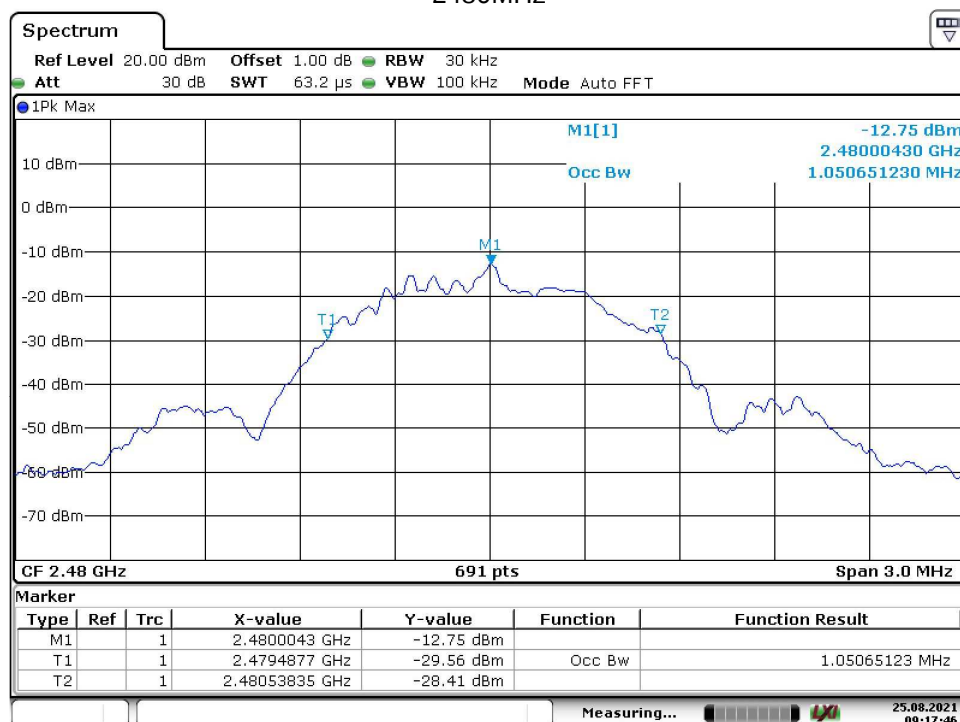
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2440MHz



Date: 25.AUG.2021 09:18:13

2480MHz

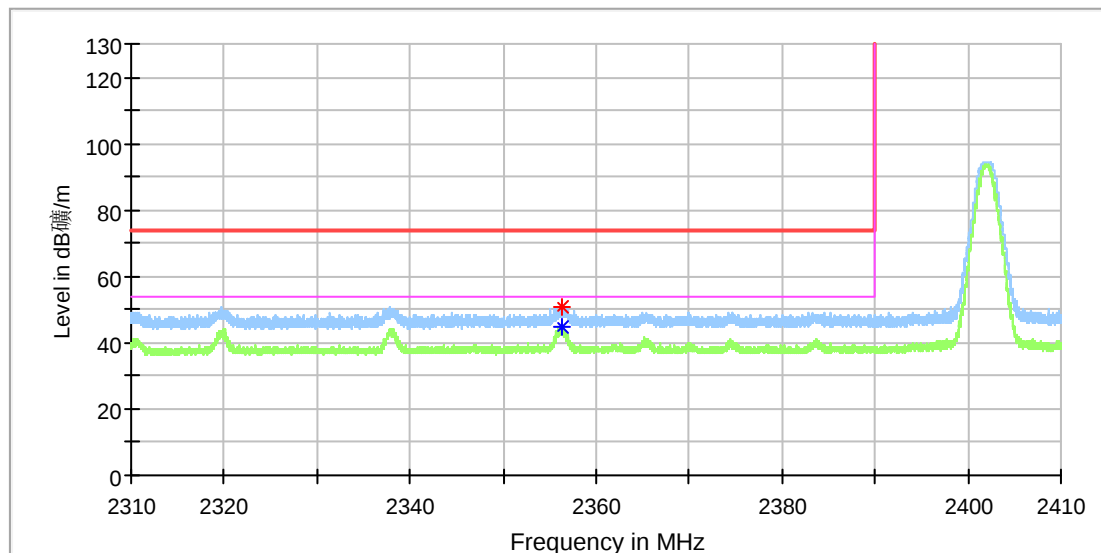


Date: 25.AUG.2021 09:17:46

Appendix B.4: Test Results of Band Edge

EUT Information

EUT Name:	Lenovo Go Wireless Split Keyboard
Model:	KB299W
Test Mode:	2.4GHz LOW CH
Test Voltage::	Battery
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

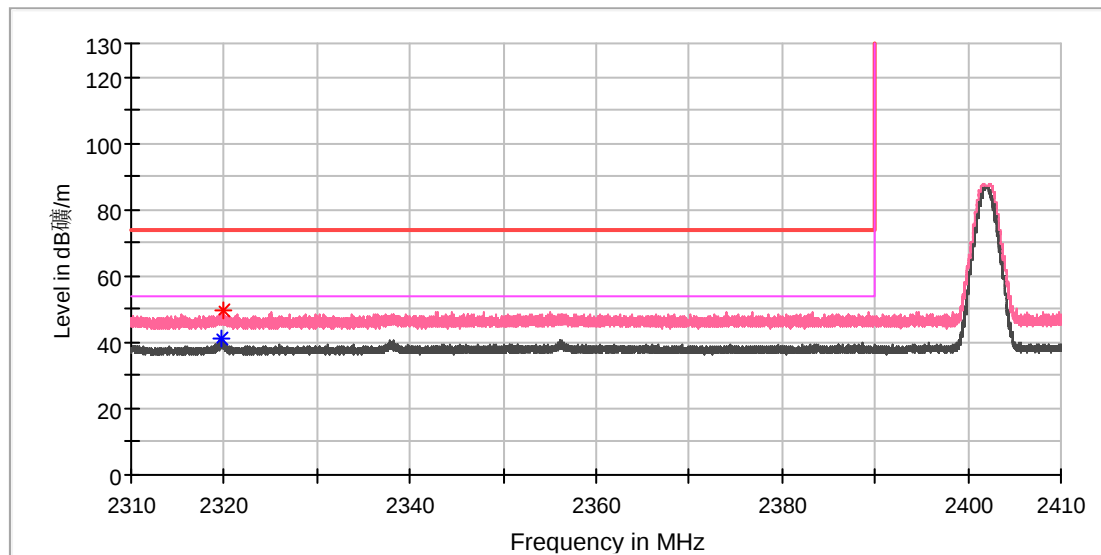


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2356.244250	50.85	---	74.00	23.15	100.0	H	232.0	6.9
2356.271250	---	44.99	54.00	9.01	100.0	H	232.0	6.9

EUT Information

EUT Name:	Lenovo Go Wireless Split Keyboard
Model:	KB299W
Test Mode:	2.4GHz LOW CH
Test Voltage::	Battery
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

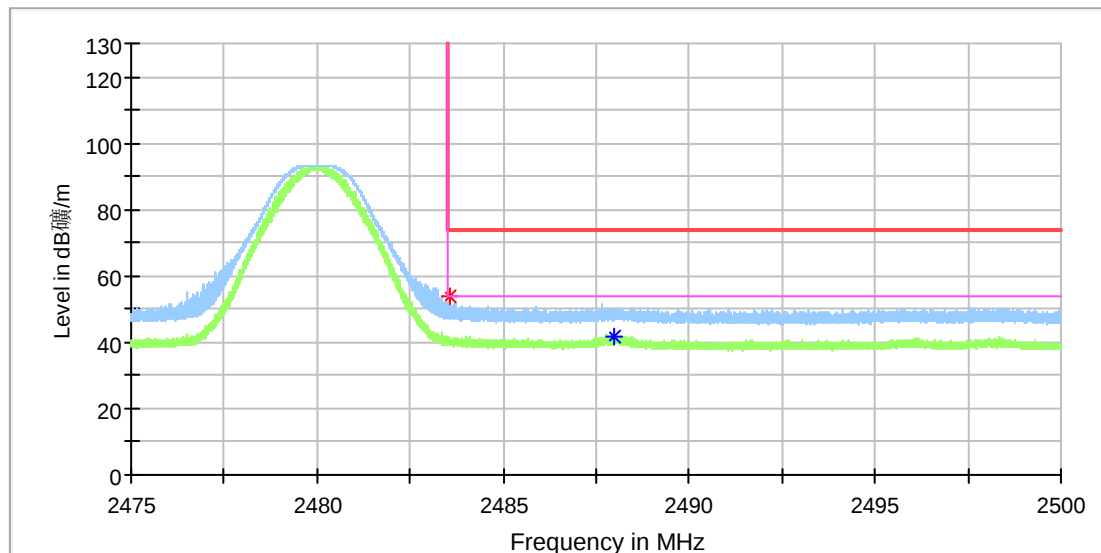


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2319.640000	---	41.03	54.00	12.97	100.0	V	137.0	6.6
2319.920000	49.28	---	74.00	24.72	100.0	V	137.0	6.6

EUT Information

EUT Name:	Lenovo Go Wireless Split Keyboard
Model:	KB299W
Test Mode:	2.4GHz High CH
Test Voltage::	Battery
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

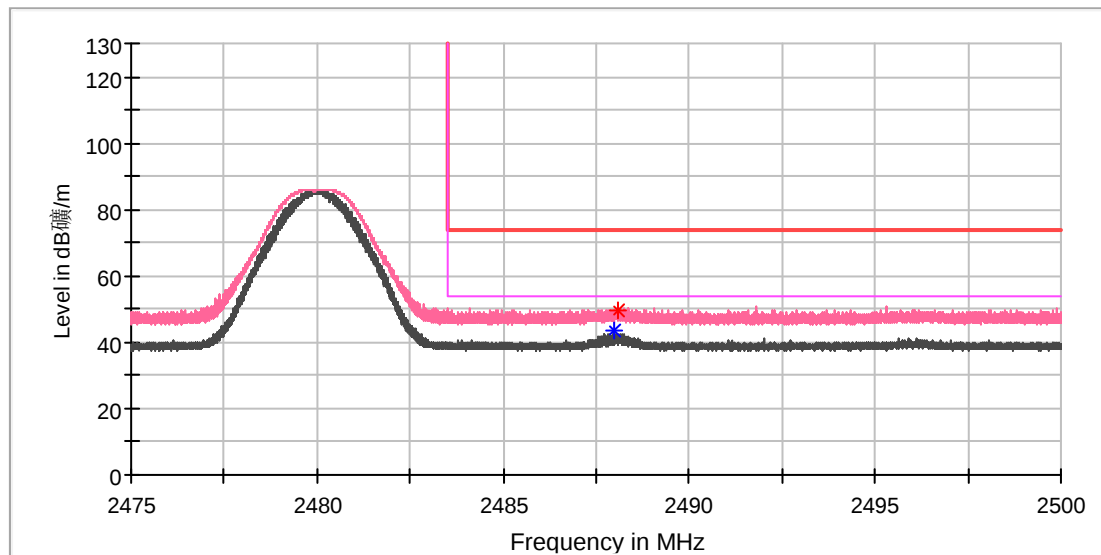


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.581250	53.54	---	74.00	20.46	100.0	H	233.0	7.4
2487.985000	---	41.98	54.00	12.02	100.0	H	165.0	7.4

EUT Information

EUT Name:	Lenovo Go Wireless Split Keyboard
Model:	KB299W
Test Mode:	2.4GHz High CH
Test Voltage::	Battery
Remark:	Temp 23 Humi:45%
Test Standard:	FCC 15.249
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)
2487.958750	---	43.51	54.00	10.49	100.0	V	164.0	7.4
2488.093750	49.72	---	74.00	24.28	100.0	V	164.0	7.4