

Appendix B: Test Results

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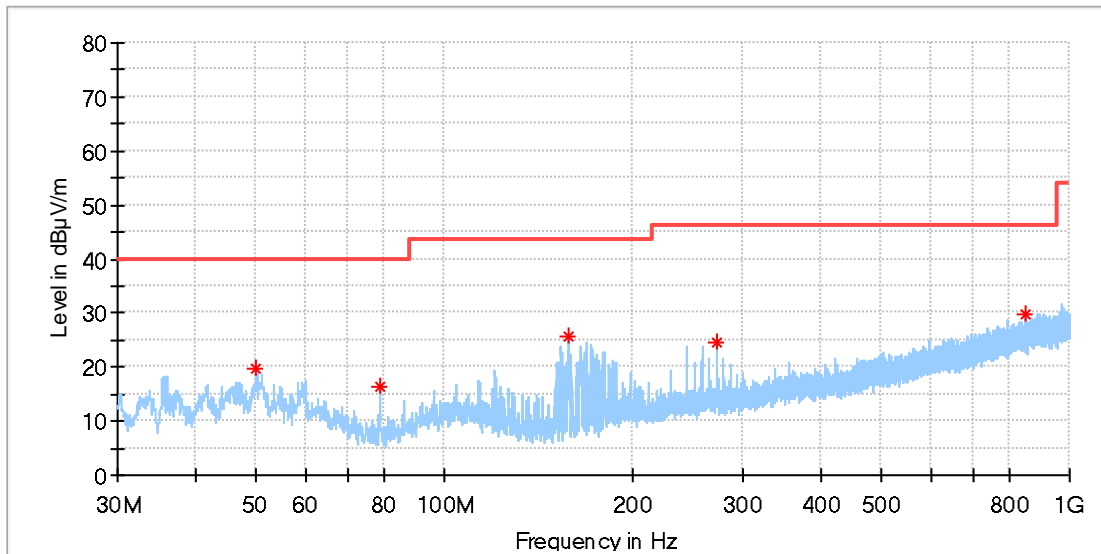
Appendix B.1: Test Results of Field strength of fundamental & harmonics

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.

30MHz - 1GHz

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
Model:	KBBTE571
Test Mode:	2.4G_Mid channel
Order No/Sample No:	168387330/A003327545-003
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

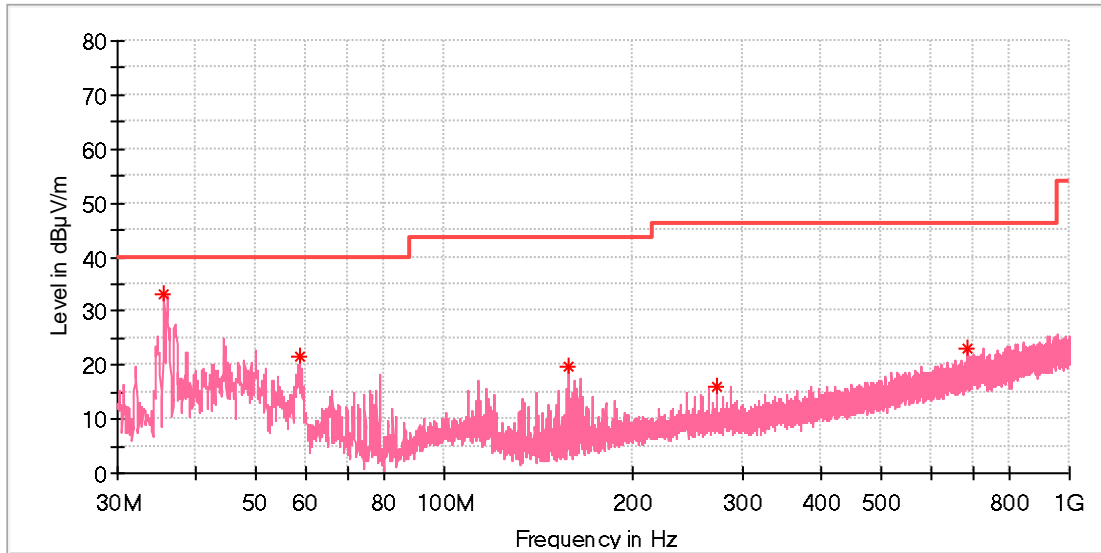


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
49.982000	19.58	40.00	20.42	100.0	H	142.0	-18.3
78.839500	16.34	40.00	23.66	100.0	H	213.0	-23.5
157.797500	25.56	43.50	17.94	100.0	H	310.0	-21.9
272.451500	24.45	46.00	21.55	100.0	H	187.0	-16.9
848.098000	29.65	46.00	16.35	100.0	H	61.0	-5.5

EUT Information

EUT Name: Lenovo Professional Wireless Rechargeable Keyboard
 Model: KBBTE571
 Test Mode: 2.4G_Mid channel
 Order No/Sample No: 168387330/A003327545-003
 Test Voltage: Battery
 Remark: Temp 23 Humi:58%
 Test Standard: FCC 15.249
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

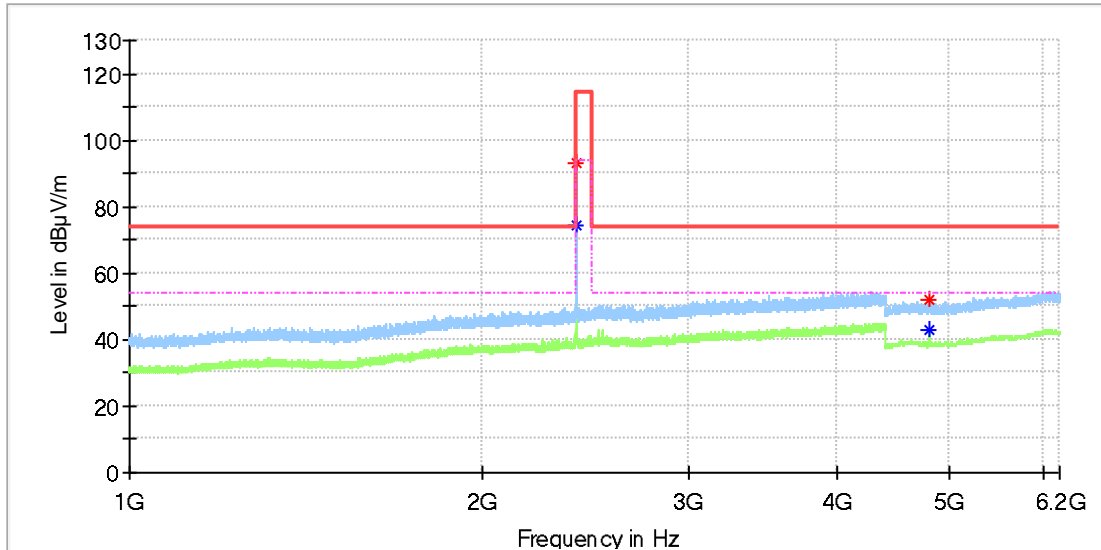
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
35.596154	32.98	40.00	7.02	100.0	V	50.0	-22.0
58.615000	21.63	40.00	18.37	100.0	V	151.0	-19.1
157.778846	19.61	43.50	23.89	100.0	V	143.0	-22.1
272.425385	15.87	46.00	30.13	100.0	V	121.0	-17.2
684.190385	22.98	46.00	23.02	100.0	V	307.0	-8.7

1GHz - 18GHz

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

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
Model:	KBBTE571
Test Mode:	2.4G_Low channel
Order No/Sample No:	168387330/A003327545-003
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

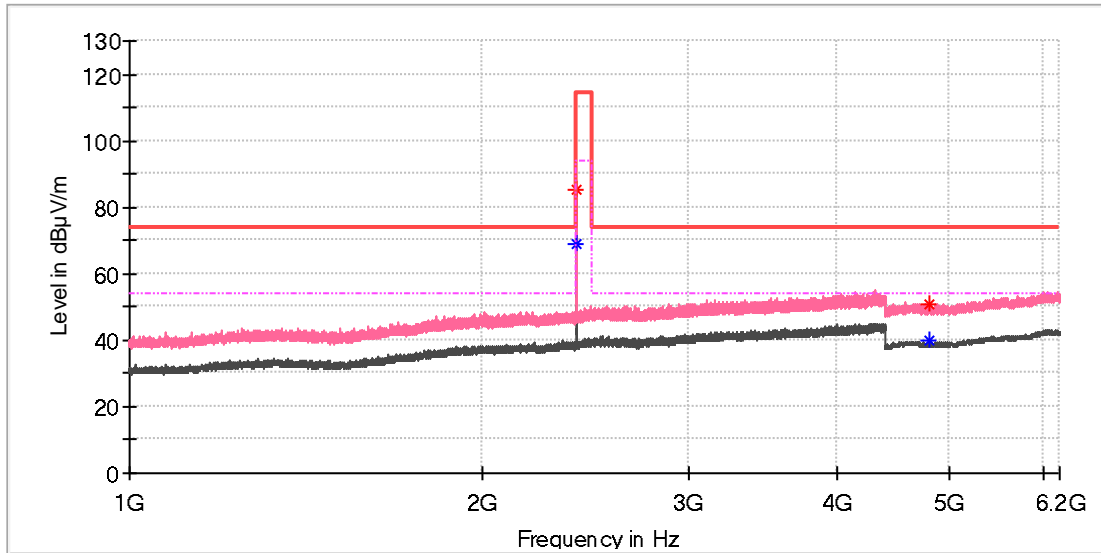


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2400.290000	---	74.48	94.00	19.52	100.0	H	42.0	7.0
2402.500000	93.09	---	114.00	20.91	100.0	H	42.0	7.0
4803.500000	52.15	---	74.00	21.85	100.0	H	313.0	11.8
4803.500000	---	42.65	54.00	11.35	100.0	H	313.0	11.8

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
Model:	KBBTE571
Test Mode:	2.4G_Low channel
Order No/Sample No:	168387330/A003327545-003
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

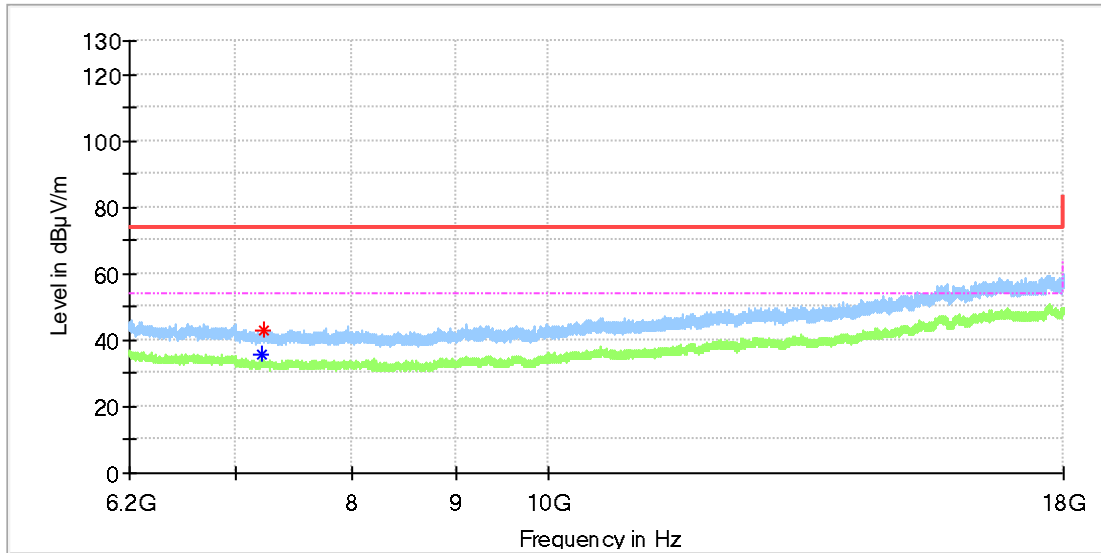


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2400.460000	---	68.77	94.00	25.23	100.0	V	263.0	7.0
2401.650000	85.41	---	114.00	28.59	100.0	V	263.0	7.0
4799.000000	50.60	---	74.00	23.40	100.0	V	318.0	11.8
4803.500000	---	39.79	54.00	14.21	100.0	V	83.0	11.8

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
Model:	KBBTE571
Test Mode:	2.4G_Low channel
Order No/Sample No:	168387330/A003327545-003
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
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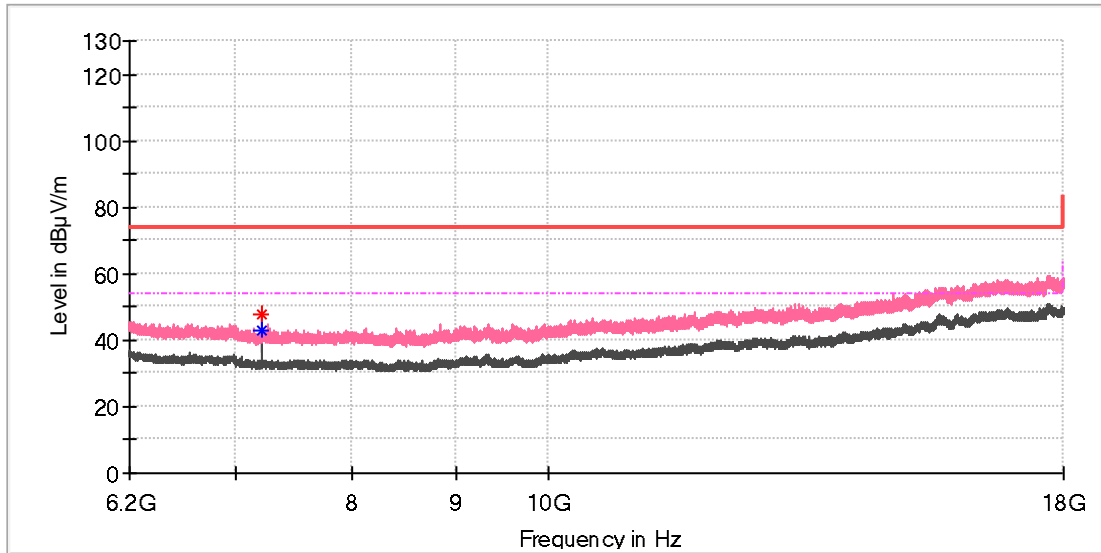


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7203.983333	---	35.88	54.00	18.12	100.0	H	316.0	8.8
7220.700000	43.10	---	74.00	30.90	100.0	H	316.0	8.7

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
Model:	KBBTE571
Test Mode:	2.4G_Low channel
Order No/Sample No:	168387330/A003327545-003
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

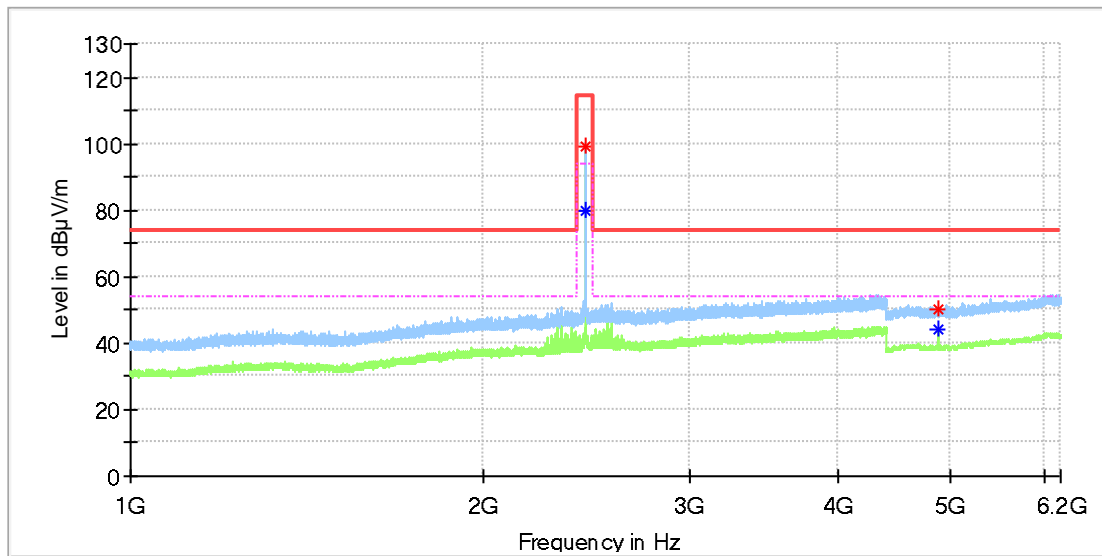


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7204.475000	47.87	---	74.00	26.13	100.0	V	144.0	8.8
7204.475000	---	43.23	54.00	10.77	100.0	V	144.0	8.8

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
Model:	KBBTE571
Test Mode:	2.4G_Mid channel
Order No/Sample No:	168387330/A003327545-003
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

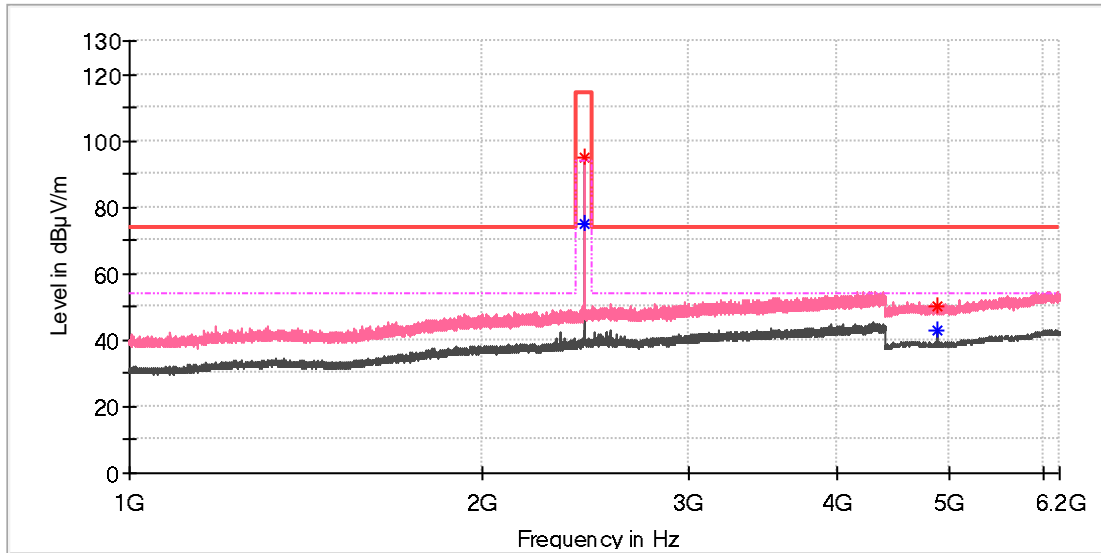


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2438.710000	---	79.82	94.00	14.18	100.0	H	78.0	7.4
2439.900000	99.25	---	114.00	14.75	100.0	H	78.0	7.4
4879.500000	50.16	---	74.00	23.84	100.0	H	320.0	11.8
4880.000000	---	43.95	54.00	10.05	100.0	H	320.0	11.8

EUT Information

EUT Name: Lenovo Professional Wireless Rechargeable Keyboard
 Model: KBBTE571
 Test Mode: 2.4G_Mid channel
 Order No/Sample No: 168387330/A003327545-003
 Test Voltage: Battery
 Remark: Temp 23 Humi:58%
 Test Standard: FCC 15.249
 Tested By: Kei Zhang
 Reviewed By: Terry Yin

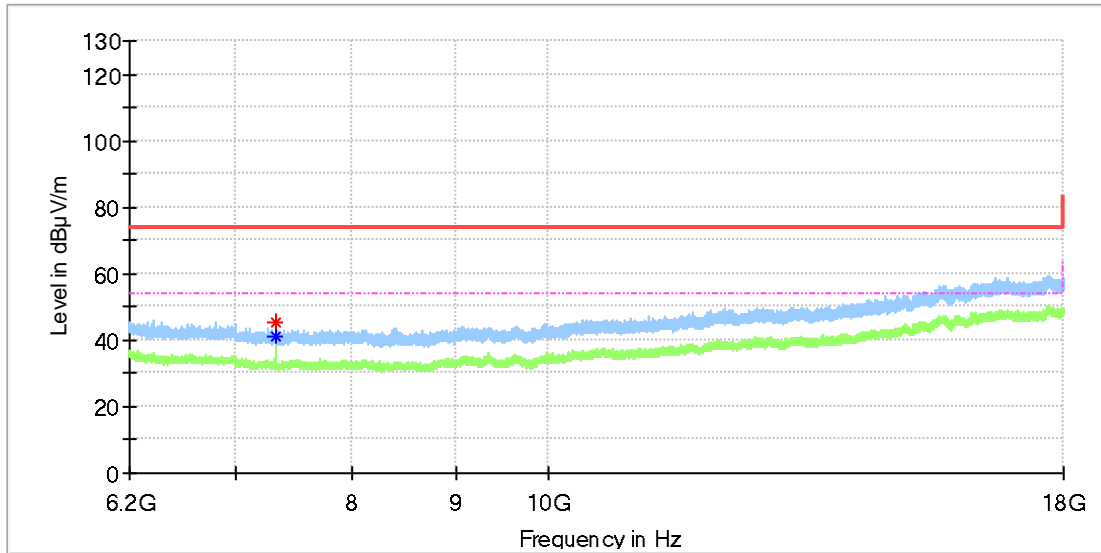


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2440.070000	94.71	---	114.00	19.29	100.0	V	101.0	7.4
2441.260000	---	75.12	94.00	18.88	100.0	V	101.0	7.4
4880.000000	50.27	---	74.00	23.73	100.0	V	233.0	11.8
4880.000000	---	42.98	54.00	11.02	100.0	V	233.0	11.8

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
Model:	KBBTE571
Test Mode:	2.4G_Mid channel
Order No/Sample No:	168387330/A003327545-003
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

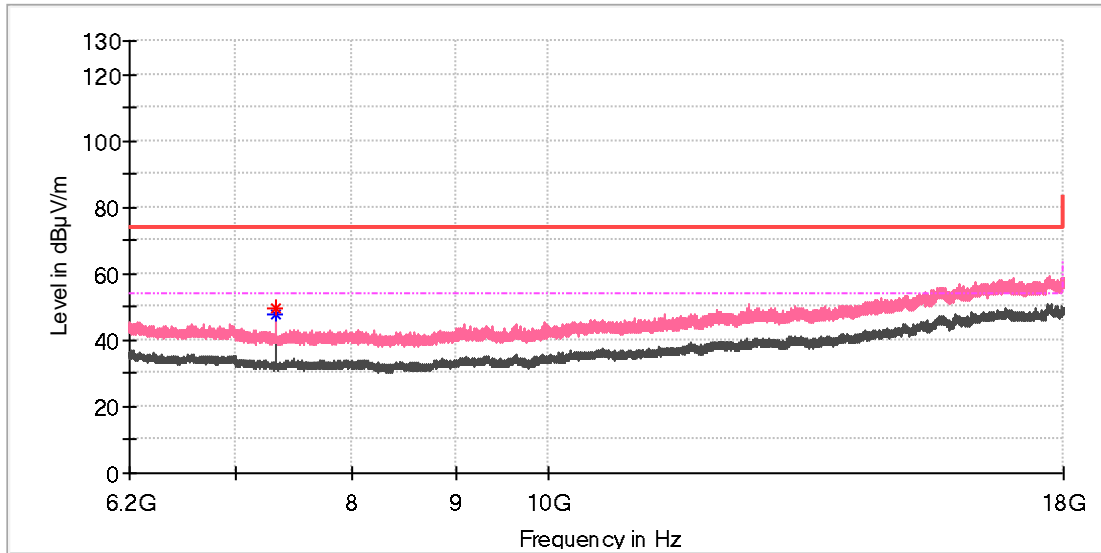


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7320.016667	45.27	---	74.00	28.73	100.0	H	353.0	8.2
7320.016667	---	40.95	54.00	13.05	100.0	H	353.0	8.2

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
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Test Mode:	2.4G_Mid channel
Order No/Sample No:	168387330/A003327545-003
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

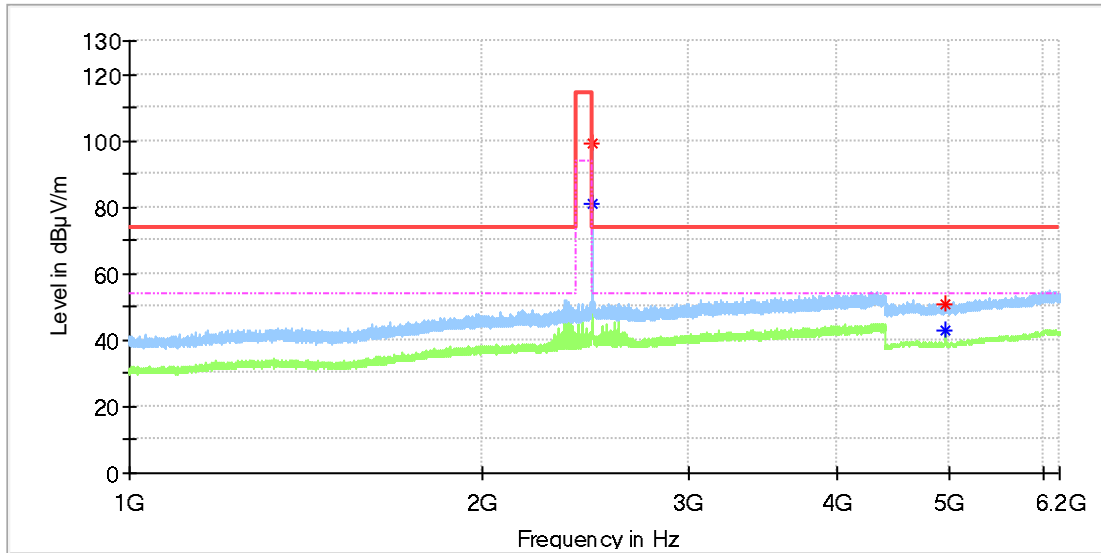


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7319.525000	49.83	---	74.00	24.17	100.0	V	152.0	8.2
7320.016667	---	47.53	54.00	6.47	100.0	V	152.0	8.2

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
Model:	KBBTE571
Test Mode:	2.4G_High channel
Order No/Sample No:	168387330/A003327545-003
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

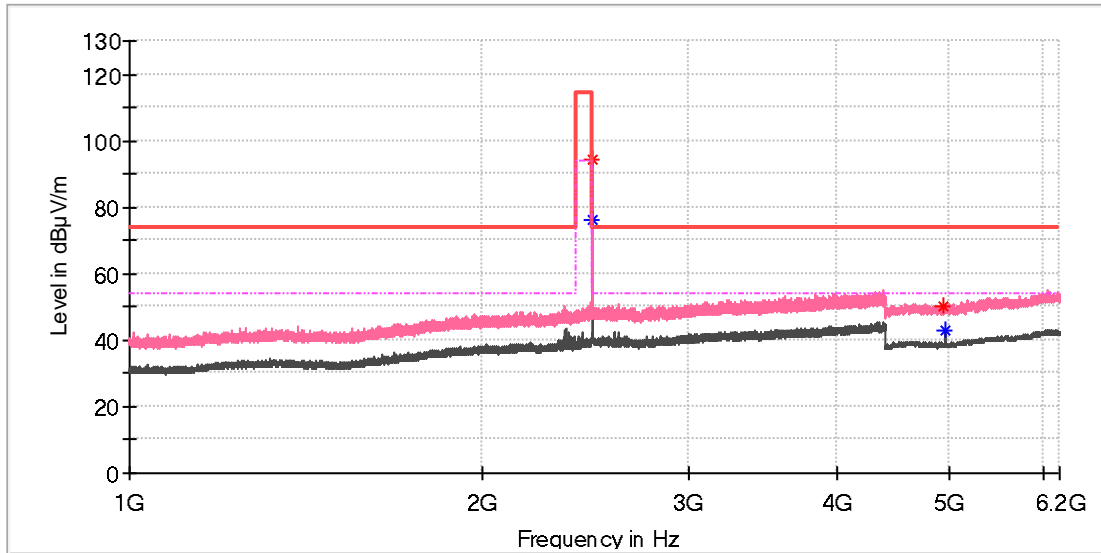


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2480.020000	98.93	---	114.00	15.07	100.0	H	87.0	7.4
2481.210000	---	80.84	94.00	13.16	100.0	H	87.0	7.4
4955.000000	51.01	---	74.00	22.99	100.0	H	290.0	11.8
4960.000000	---	43.08	54.00	10.92	100.0	H	317.0	11.8

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
Model:	KBBTE571
Test Mode:	2.4G_High channel
Order No/Sample No:	168387330/A003327545-003
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

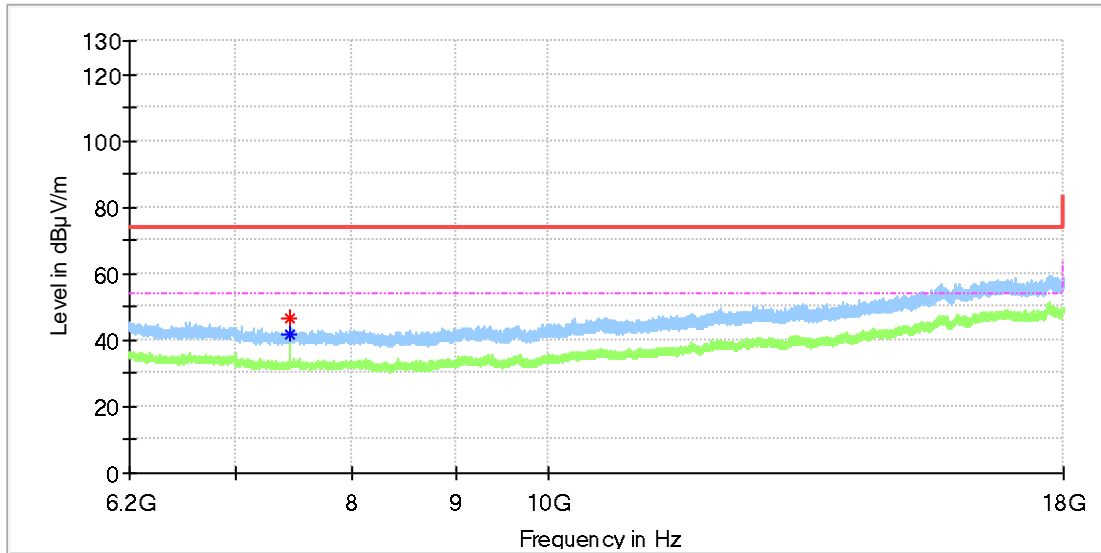


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2480.020000	94.41	---	114.00	19.59	100.0	V	93.0	7.4
2481.210000	---	76.32	94.00	17.68	100.0	V	93.0	7.4
4940.500000	50.48	---	74.00	23.52	100.0	V	329.0	11.8
4960.000000	---	43.18	54.00	10.82	100.0	V	118.0	11.8

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
Model:	KBBTE571
Test Mode:	2.4G_High channel
Order No/Sample No:	168387330/A003327545-003
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

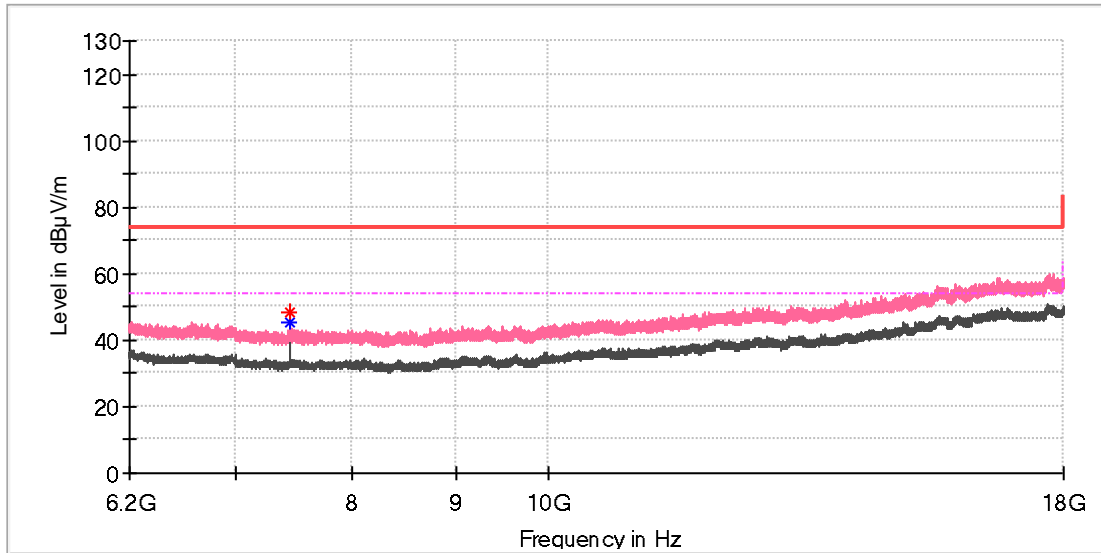


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7439.491667	46.60	---	74.00	27.40	100.0	H	314.0	8.4
7439.491667	---	41.48	54.00	12.52	100.0	H	314.0	8.4

EUT Information

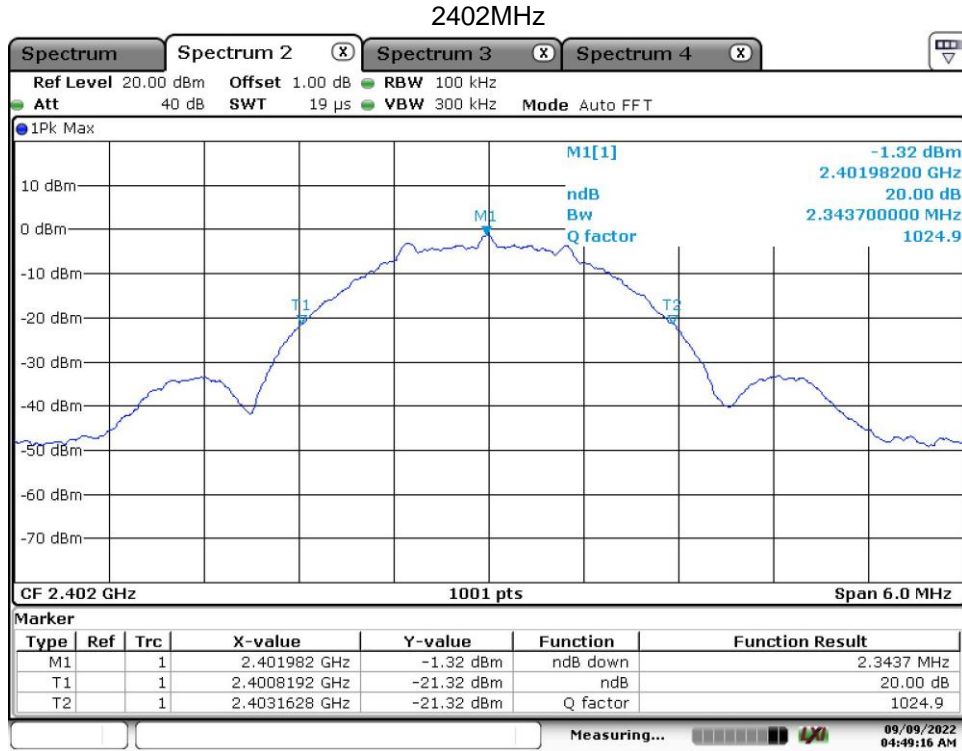
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Model:	KBBTE571
Test Mode:	2.4G_High channel
Order No/Sample No:	168387330/A003327545-003
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



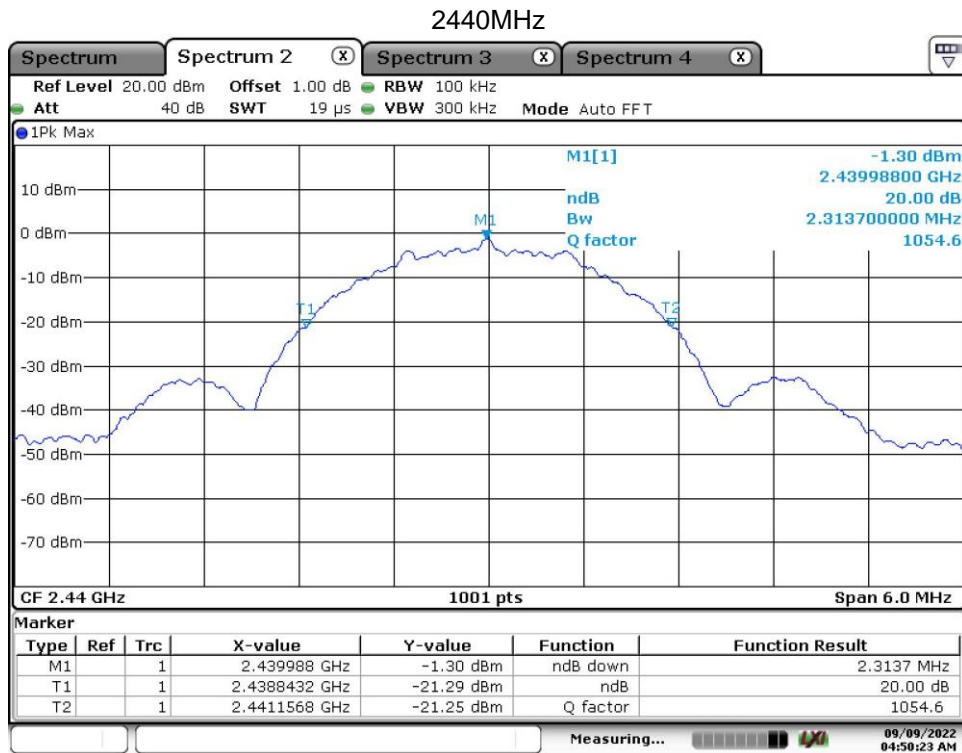
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7439.491667	48.32	---	74.00	25.68	100.0	V	159.0	8.4
7439.983333	---	45.52	54.00	8.48	100.0	V	159.0	8.4

Appendix B.2: Test Results of 20dB Bandwidth

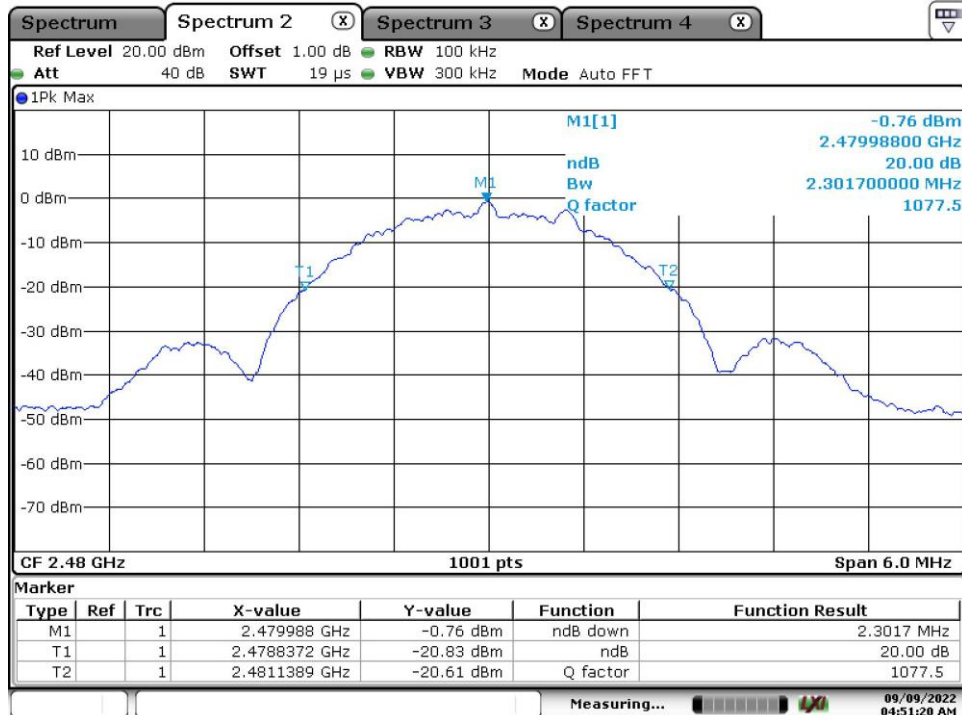


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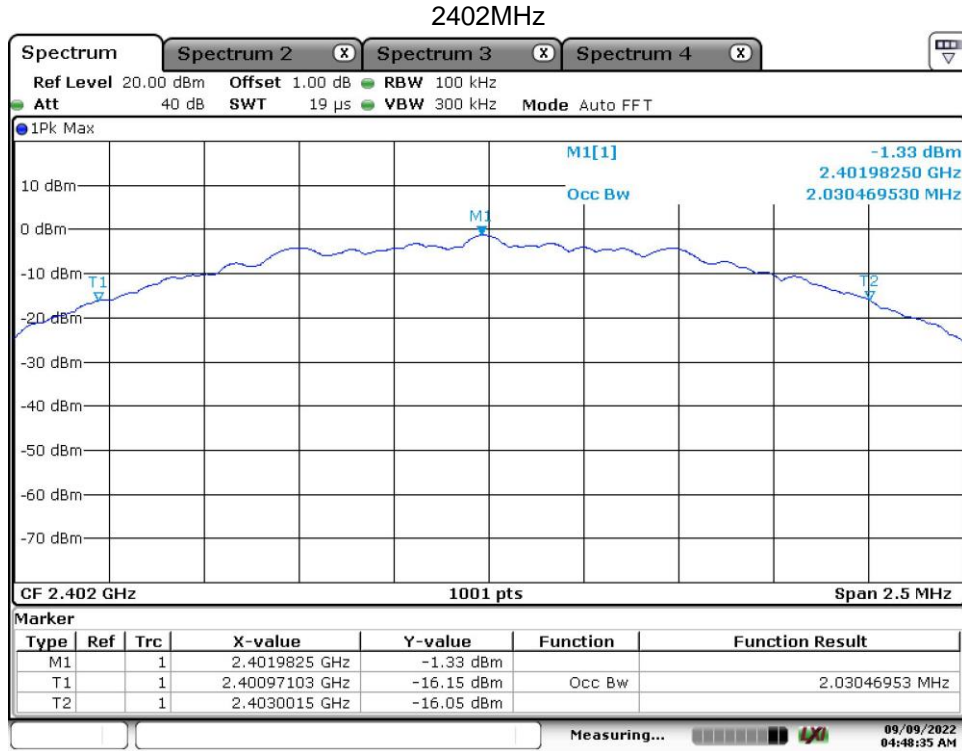
Date: 9.SEP.2022 04:50:24

2480MHz

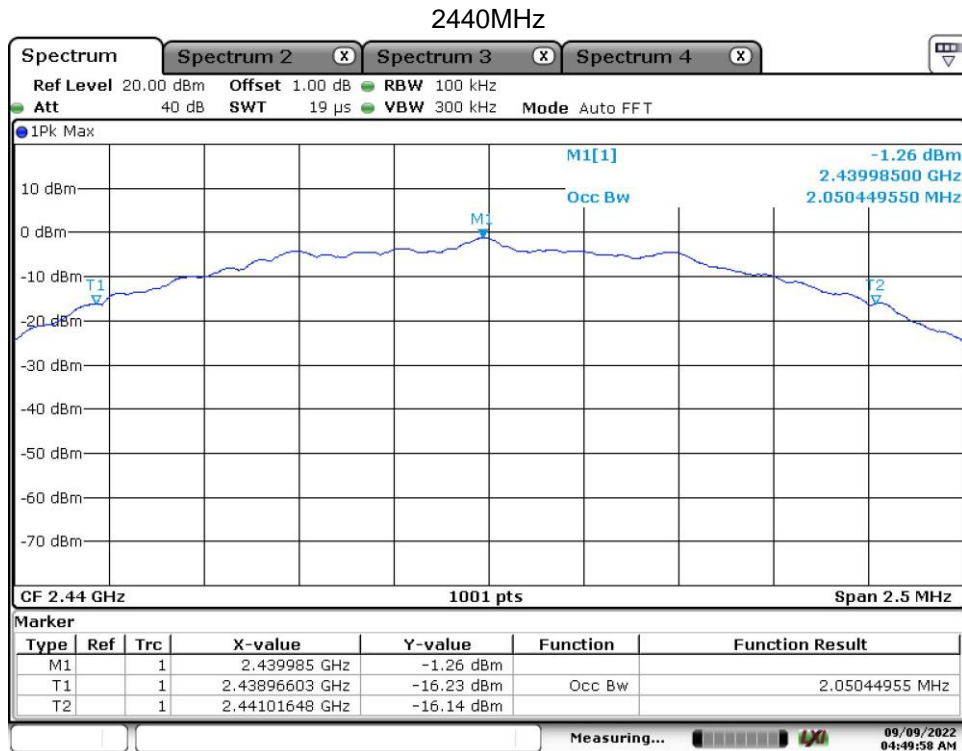


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Appendix B.3: Test Results of 99% Bandwidth

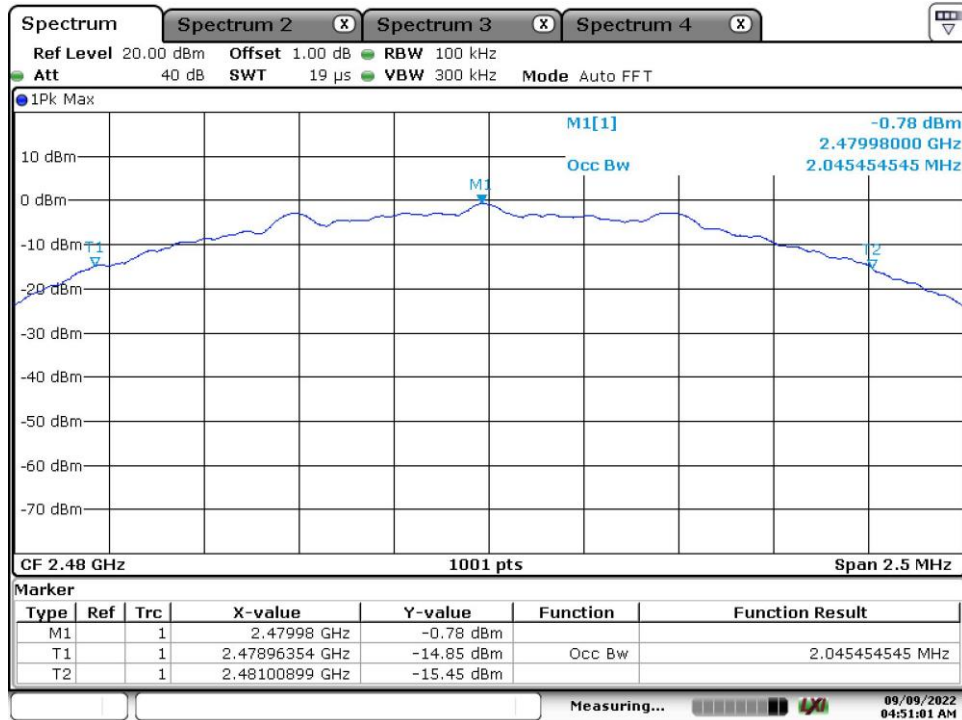


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Date: 9.SEP.2022 04:49:59

2480MHz

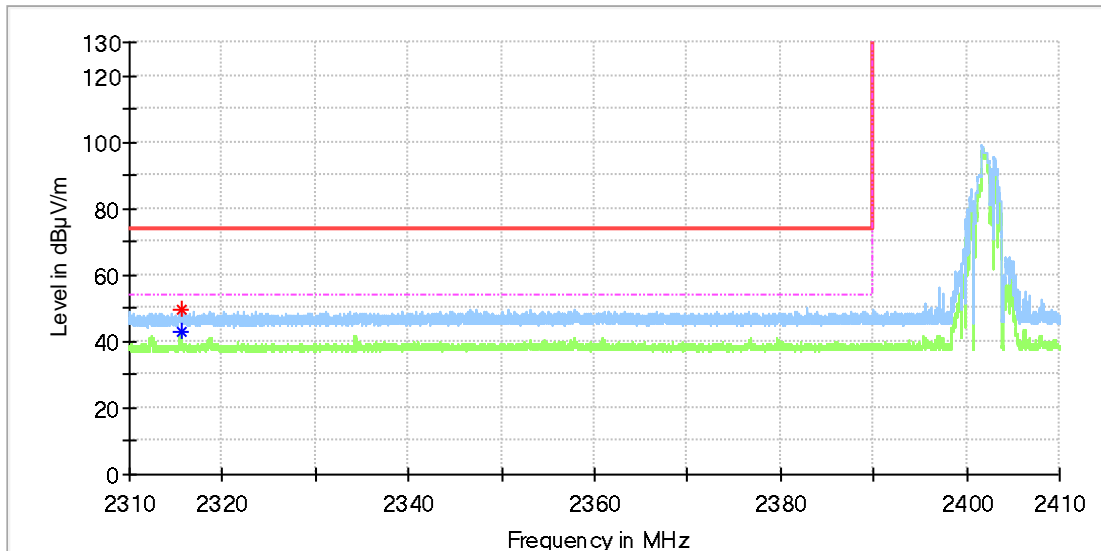


Date: 9.SEP.2022 04:51:01

Appendix B.4: Test Results of Band Edge

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
Model:	KBBTE571
Test Mode:	2.4G_Low channel
Order No/Sample No:	168387330/A003327545-003
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

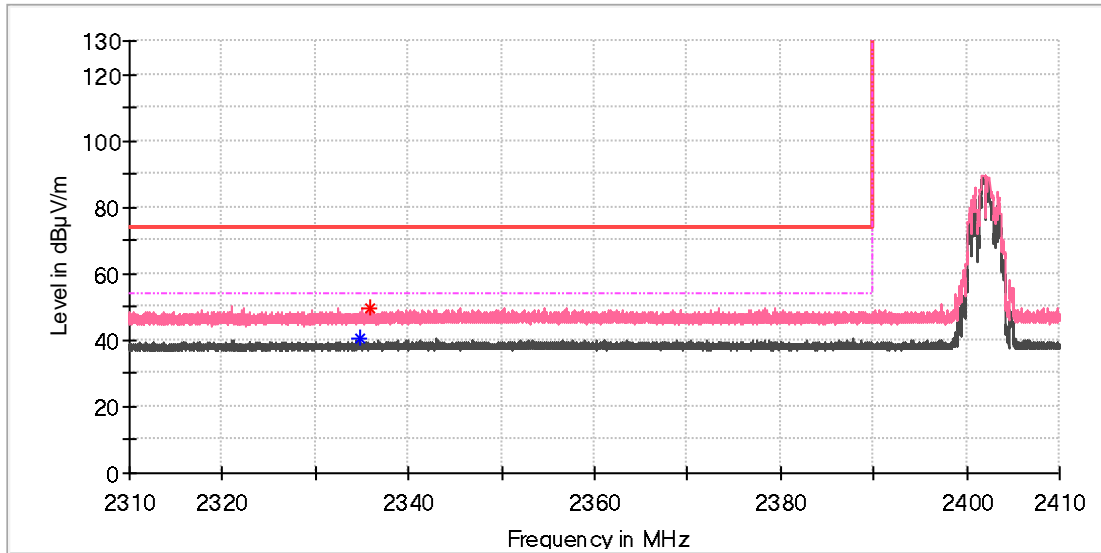


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2315.570000	49.47	---	74.00	24.53	100.0	H	78.0	6.5
2315.625000	---	42.63	54.00	11.37	100.0	H	78.0	6.5

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
Model:	KBBTE571
Test Mode:	2.4G_Low channel
Order No/Sample No:	168387330/A003327545-003
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

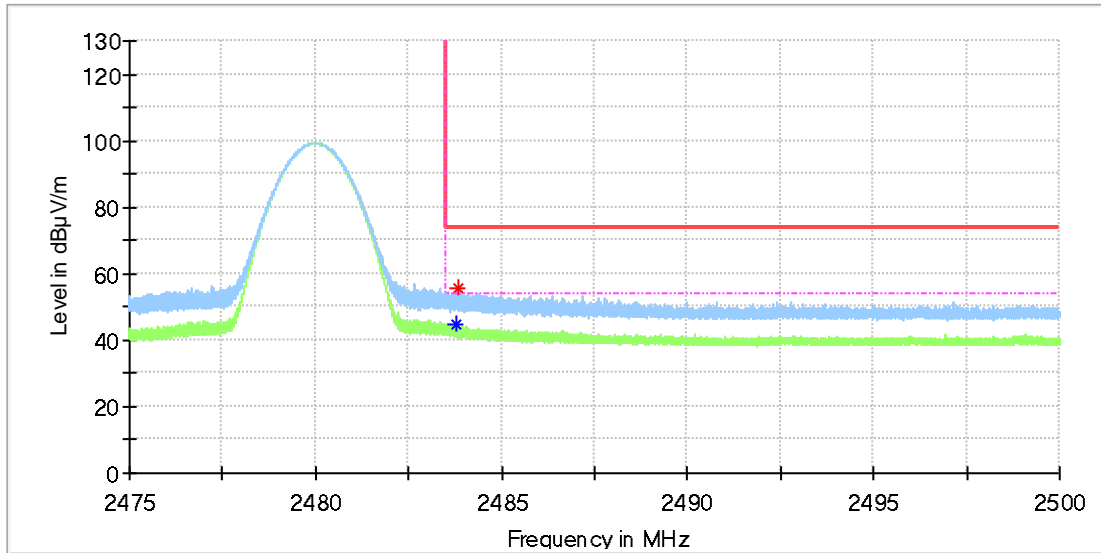


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2334.755000	---	40.41	54.00	13.59	100.0	V	101.0	6.8
2335.960000	49.67	---	74.00	24.33	100.0	V	153.0	6.8

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
Model:	KBBTE571
Test Mode:	2.4G_High channel
Order No/Sample No:	168387330/A003327545-003
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

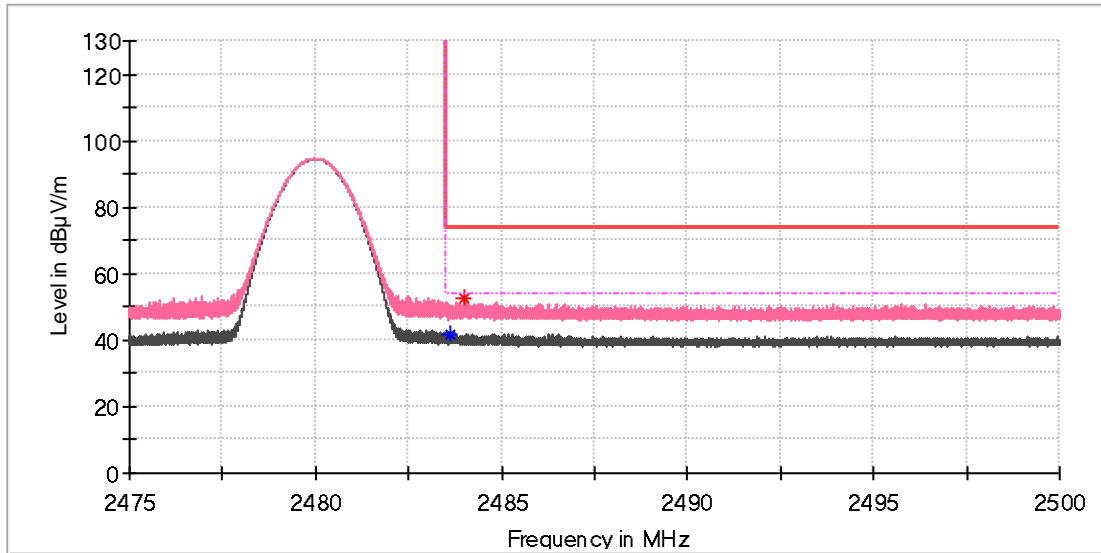


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.758750	---	44.81	54.00	9.19	100.0	H	82.0	7.4
2483.851250	55.69	---	74.00	18.31	100.0	H	82.0	7.4

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
Model:	KBBTE571
Test Mode:	2.4G_High channel
Order No/Sample No:	168387330/A003327545-003
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



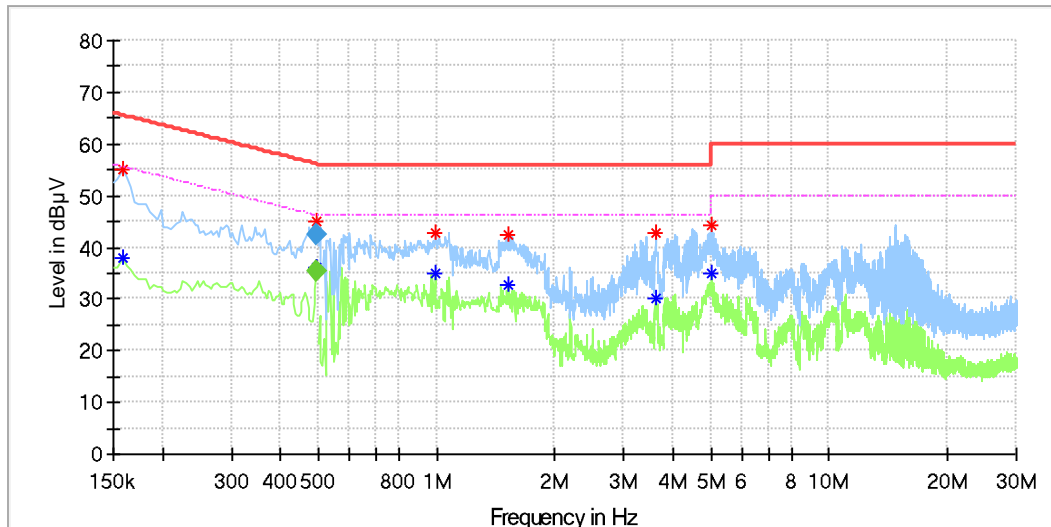
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.642500	---	41.97	54.00	12.03	100.0	V	104.0	7.4
2484.001250	52.52	---	74.00	21.48	100.0	V	89.0	7.4

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

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
Order No:	168387330
Model:	KBBTE571
Test Mode:	Charging + 2.4G
Test Voltage:	AC 120V/60Hz
Test By/Review By:	Kevin Zhou/Gary Chen
Test Standard:	FCC Part 15C
Tem./Hum./Pressure:	24.3°C/52.8%/101kPa
Remark:	SR1



Critical Freqs

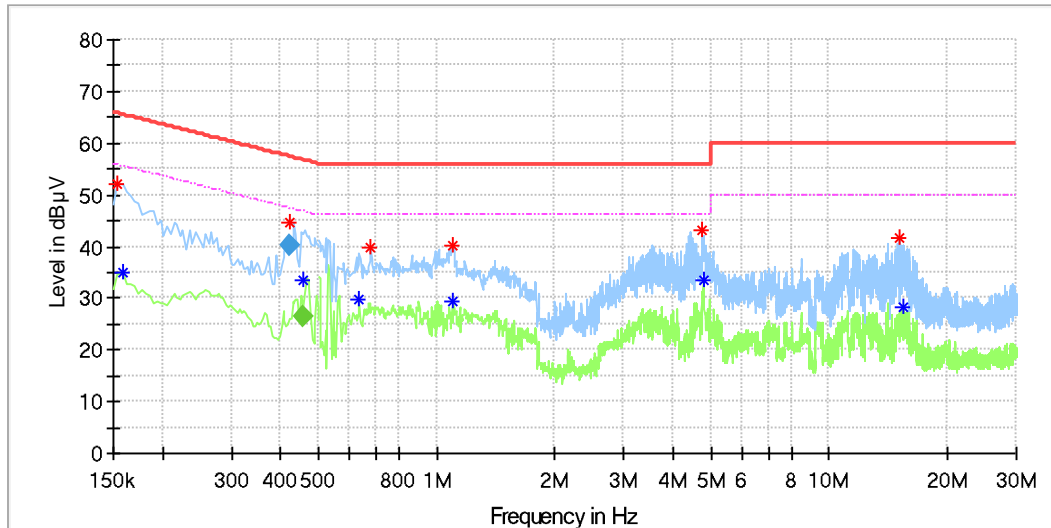
Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.158000	---	37.94	55.57	17.63	L1	9.6
0.158000	54.89	---	65.57	10.68	L1	9.6
0.492500	---	36.16	46.03	9.87	L1	9.7
0.496500	44.85	---	56.03	11.18	L1	9.7
0.992000	42.68	---	56.00	13.32	L1	9.7
0.992000	---	34.96	46.00	11.04	L1	9.7
1.524000	---	32.65	46.00	13.35	L1	9.8
1.528000	42.33	---	56.00	13.67	L1	9.8
3.600000	---	30.27	46.00	15.73	L1	9.9
3.612000	42.65	---	56.00	13.35	L1	9.9
5.008000	---	34.86	50.00	15.14	L1	10.0
5.008000	44.24	---	60.00	15.76	L1	10.0

Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.492500	---	35.49	46.13	10.64	1000.0	9.000	L1	9.7
0.496500	42.54	---	56.06	13.52	1000.0	9.000	L1	9.7

EUT Information

EUT Name:	Lenovo Professional Wireless Rechargeable Keyboard
Order No:	168387330
Model:	KBBTE571
Test Mode:	Charging + 2.4G
Test Voltage:	AC 120V/60Hz
Test By/Review By:	Kevin Zhou/Gary Chen
Test Standard:	FCC Part 15C
Tem./Hum./Pressure:	24.3°C/52.8%/101kPa
Remark:	SR1



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.154000	52.01	---	65.78	13.77	N	9.6
0.158000	---	34.85	55.57	20.72	N	9.6
0.424500	44.62	---	57.18	12.55	N	9.7
0.456500	---	33.59	46.51	12.93	N	9.7
0.636000	---	29.87	46.00	16.13	N	9.7
0.680000	39.89	---	56.00	16.11	N	9.7
1.096000	40.23	---	56.00	15.77	N	9.7
1.104000	---	29.38	46.00	16.62	N	9.7
4.764000	43.33	---	56.00	12.67	N	10.0
4.772000	---	33.32	46.00	12.68	N	10.0
15.096000	41.60	---	60.00	18.40	N	10.2
15.528000	---	28.43	50.00	21.57	N	10.2

Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.424500	40.00	---	57.36	17.36	1000.0	9.000	N	9.7
0.456500	---	26.59	46.76	20.17	1000.0	9.000	N	9.7