

Appendix B: Test Results

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Appendix B.1: Test Results of Radiated Spurious Emissions

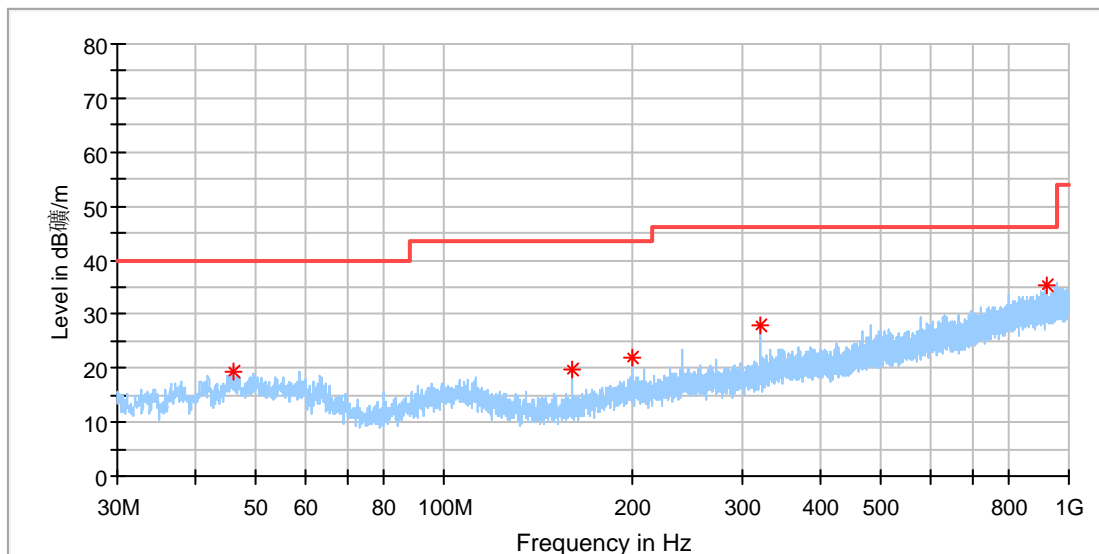
Note:

- 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.

30 MHz to 1GHz

EUT Information

EUT Name:	Label Maker
Model:	LetraTag 200B
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168373259/A003285126-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

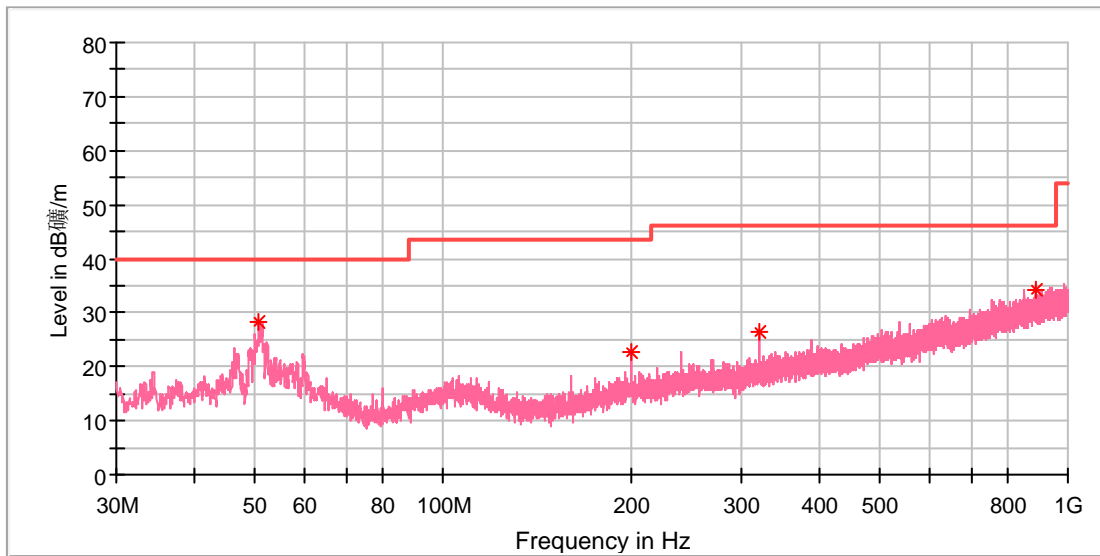


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
45.908000	19.43	40.00	20.57	100.0	H	51.0	-18.7
159.980000	19.78	43.50	23.72	100.0	H	214.0	-21.8
199.992500	21.99	43.50	21.51	100.0	H	220.0	-19.0
320.030000	27.85	46.00	18.15	100.0	H	318.0	-15.8
920.848000	35.52	46.00	10.48	100.0	H	7.0	-4.8

EUT Information

EUT Name:	Label Maker
Model:	LetraTag 200B
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168373259/A003285126-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

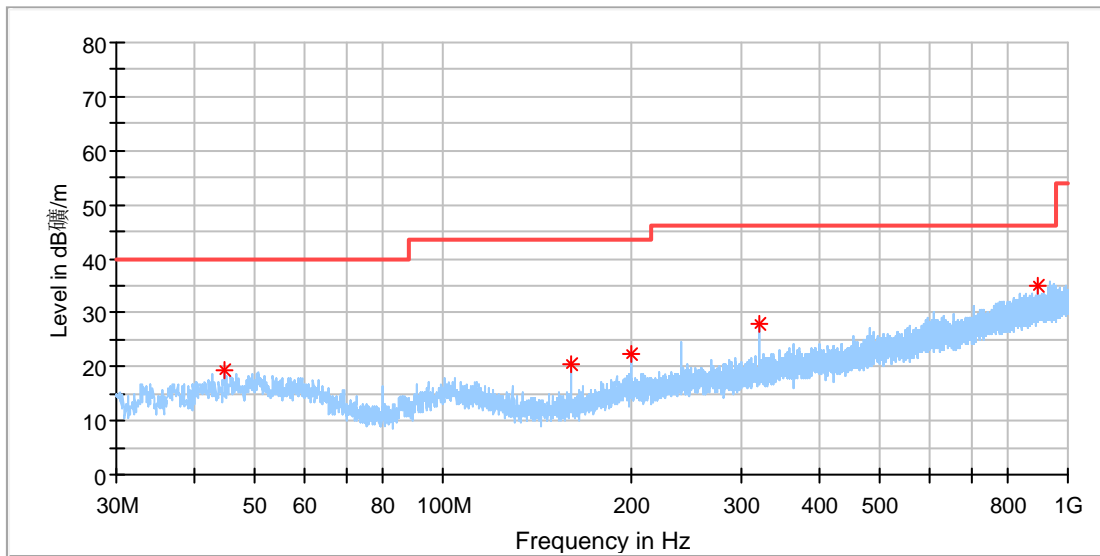


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
50.806500	28.30	40.00	11.70	100.0	V	75.0	-18.3
199.992500	22.69	43.50	20.81	100.0	V	273.0	-19.0
320.030000	26.60	46.00	19.40	100.0	V	305.0	-15.8
887.722500	34.37	46.00	11.63	100.0	V	102.0	-5.1

EUT Information

EUT Name:	Label Maker
Model:	LetraTag 200B
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168373259/A003285126-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

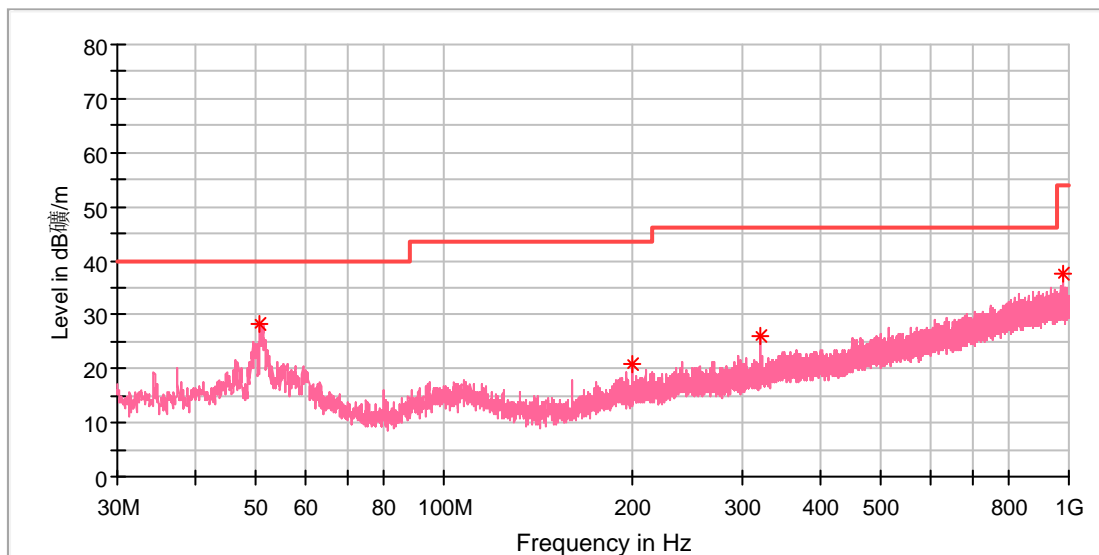


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
44.647000	19.19	40.00	20.81	100.0	H	142.0	-18.9
159.980000	20.64	43.50	22.86	100.0	H	226.0	-21.8
199.992500	22.27	43.50	21.23	100.0	H	233.0	-19.0
320.030000	27.86	46.00	18.14	100.0	H	304.0	-15.8
892.475500	34.99	46.00	11.01	100.0	H	3.0	-5.0

EUT Information

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Order No/Sample No:	168373259/A003285126-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
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Critical Freqs

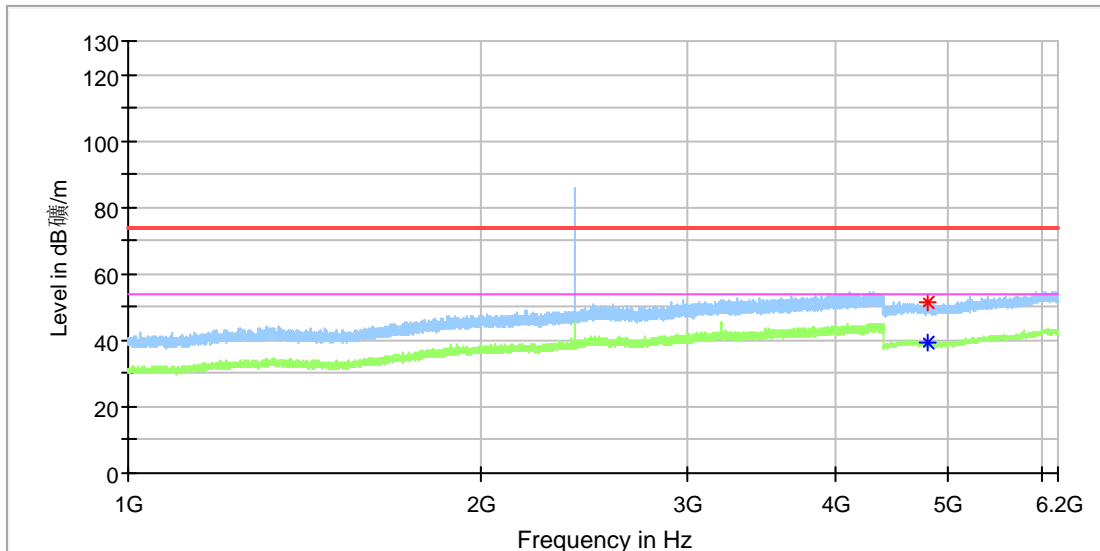
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
50.855000	28.10	40.00	11.90	100.0	V	0.0	-18.3
199.992500	20.99	43.50	22.51	100.0	V	285.0	-19.0
320.030000	25.90	46.00	20.10	100.0	V	250.0	-15.8
979.921000	37.50	54.00	16.50	100.0	V	271.0	-4.0

1GHz-18GHz

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

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Test Standard:	FCC 15.247
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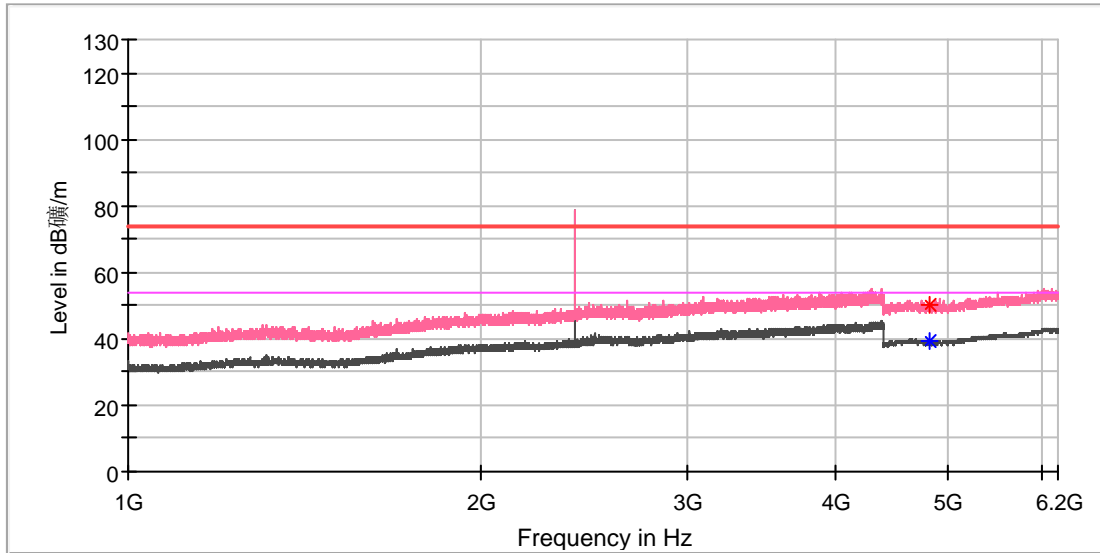


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4806.500000	---	39.36	54.00	14.64	100.0	H	238.0	11.8
4810.500000	51.50	---	74.00	22.50	100.0	H	304.0	11.8

EUT Information

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Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168373259/A003285126-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

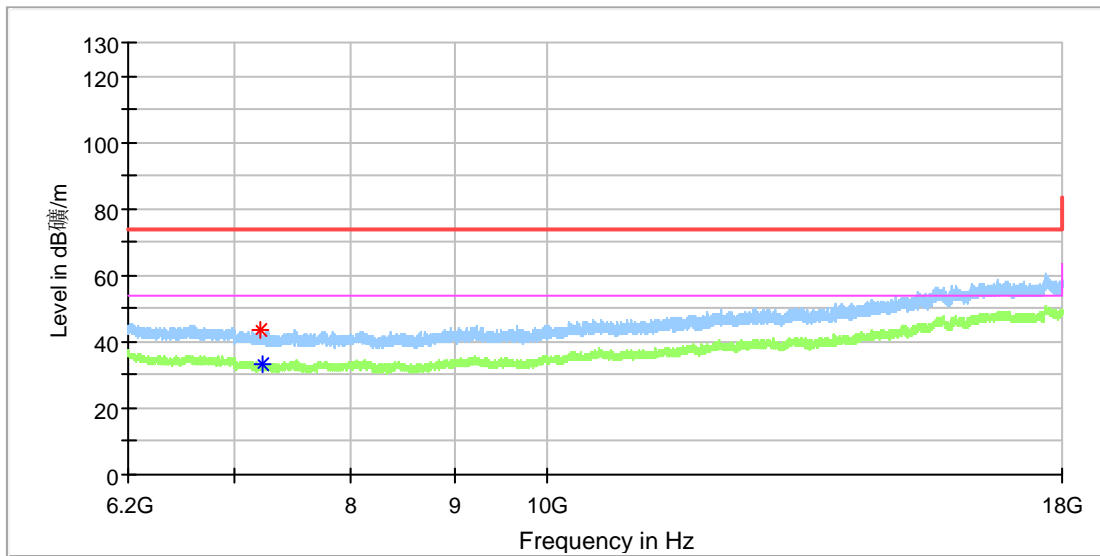


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4814.000000	---	39.59	54.00	14.41	100.0	V	48.0	11.8
4815.500000	49.99	---	74.00	24.01	100.0	V	273.0	11.8

EUT Information

EUT Name:	Label Maker
Model:	LetraTag 200B
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168373259/A003285126-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

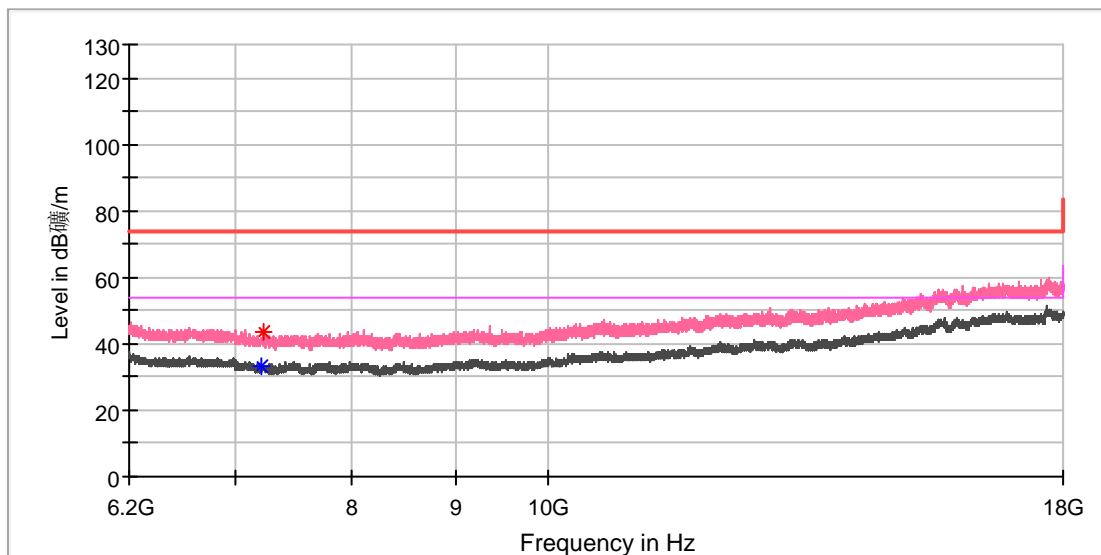


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7209.883333	43.46	---	74.00	30.54	100.0	H	161.0	8.7
7230.041667	---	33.54	54.00	20.46	100.0	H	322.0	8.6

EUT Information

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Model:	LetraTag 200B
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168373259/A003285126-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

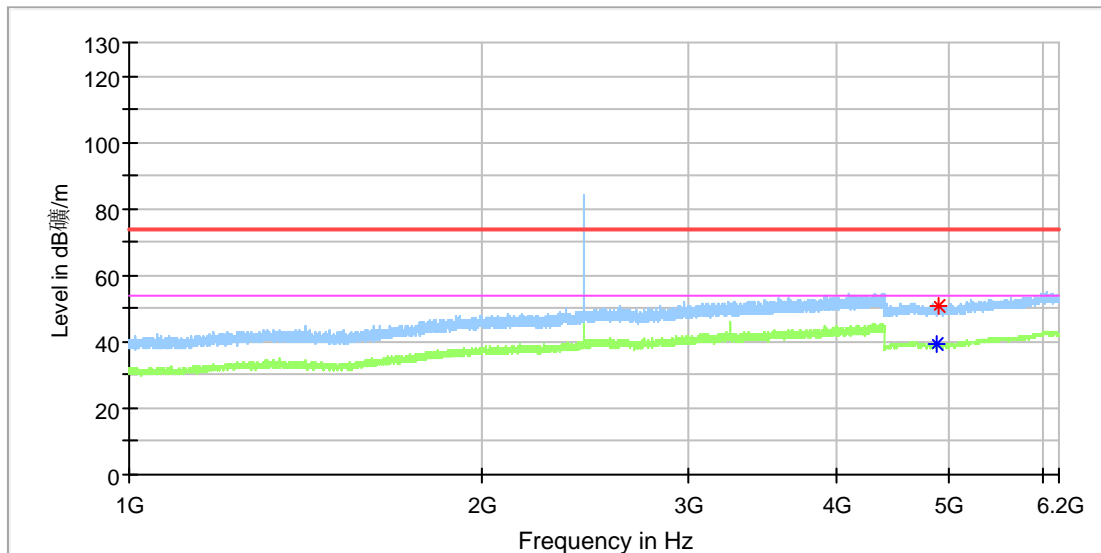


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7203.000000	---	33.40	54.00	20.60	100.0	V	286.0	8.8
7223.650000	43.64	---	74.00	30.36	100.0	V	137.0	8.7

EUT Information

EUT Name:	Label Maker
Model:	LetraTag 200B
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168373259/A003285126-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

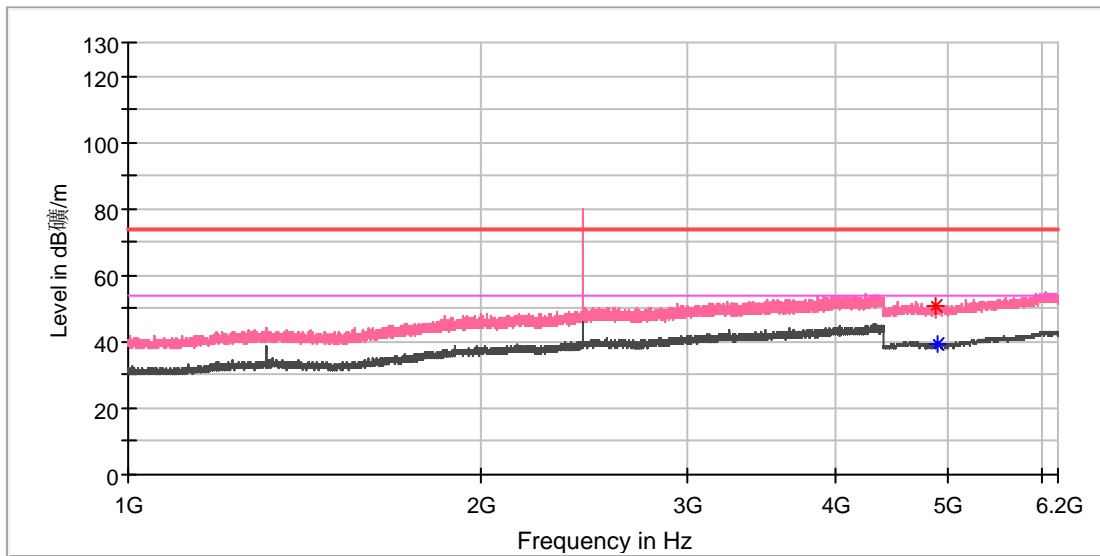


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4879.000000	---	39.15	54.00	14.85	100.0	H	225.0	11.8
4893.500000	50.53	---	74.00	23.47	100.0	H	311.0	11.8

EUT Information

EUT Name:	Label Maker
Model:	LetraTag 200B
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168373259/A003285126-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

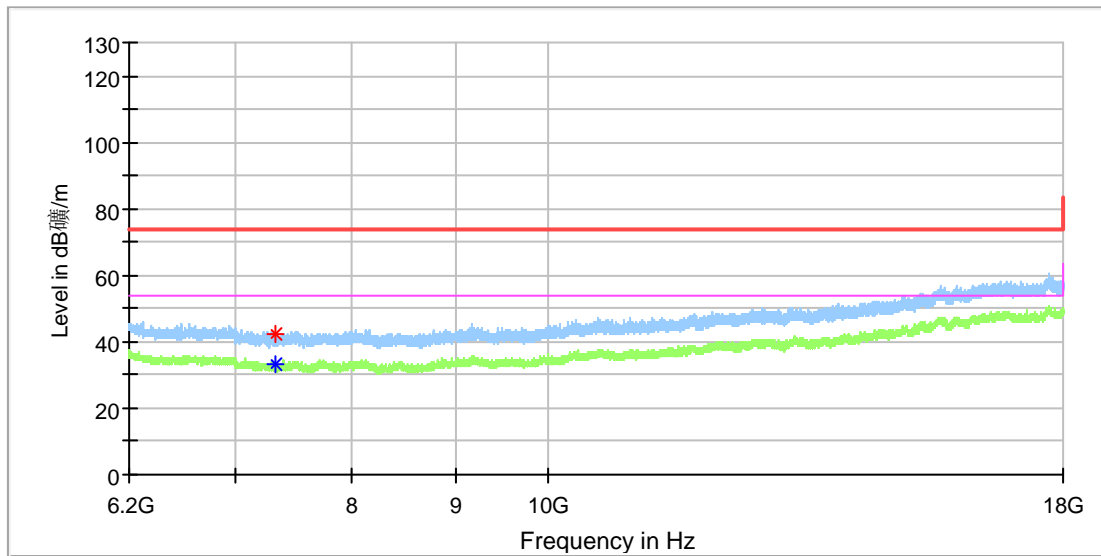


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4886.500000	50.81	---	74.00	23.19	100.0	V	290.0	11.8
4892.000000	---	39.22	54.00	14.78	100.0	V	297.0	11.8

EUT Information

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Order No/Sample No:	168373259/A003285126-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
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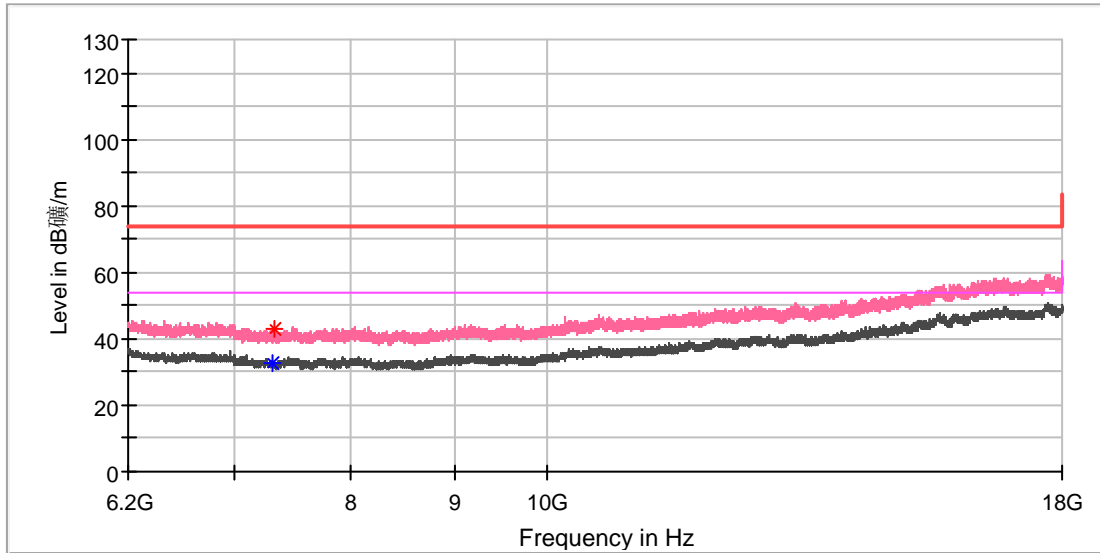


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7319.525000	---	33.23	54.00	20.77	100.0	H	34.0	8.2
7326.900000	42.18	---	74.00	31.82	100.0	H	0.0	8.1

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Test Standard:	FCC 15.247
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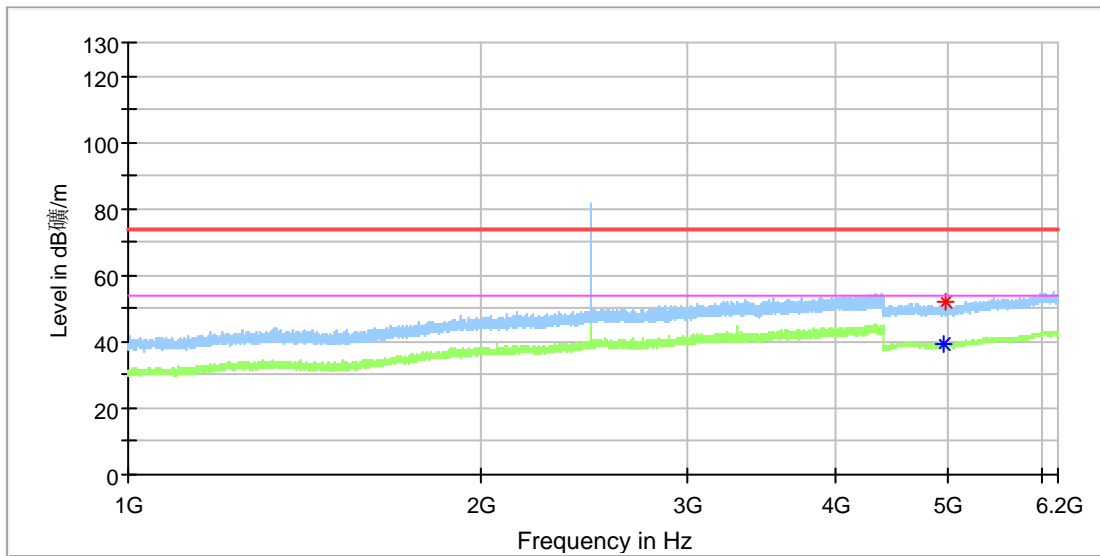


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7316.575000	---	32.91	54.00	21.09	100.0	V	222.0	8.2
7323.458333	42.76	---	74.00	31.24	100.0	V	321.0	8.2

EUT Information

EUT Name:	Label Maker
Model:	LetraTag 200B
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168373259/A003285126-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

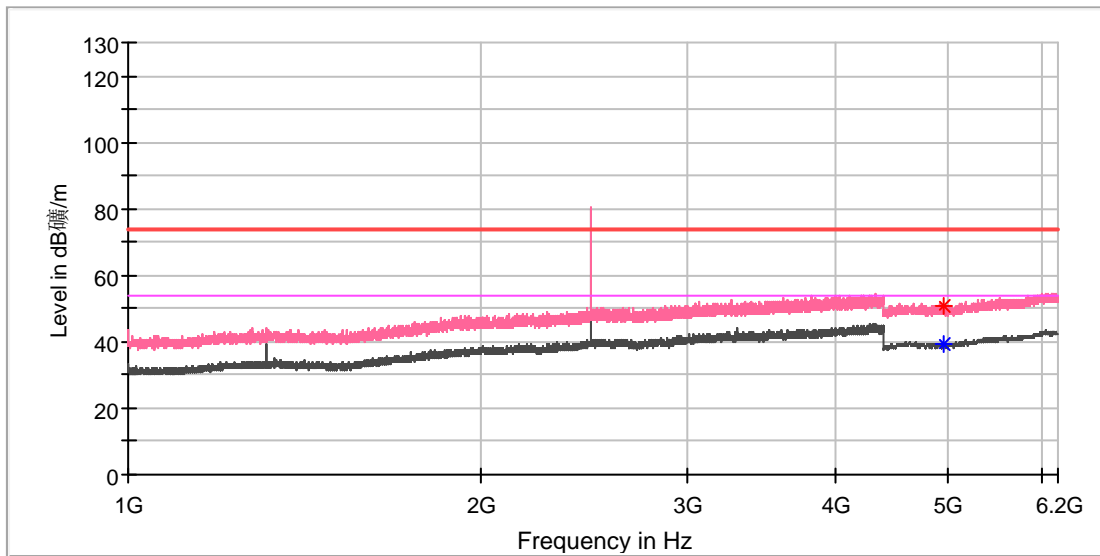


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4950.000000	---	39.33	54.00	14.67	100.0	H	222.0	11.8
4968.500000	52.15	---	74.00	21.85	100.0	H	311.0	11.8

EUT Information

EUT Name:	Label Maker
Model:	LetraTag 200B
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168373259/A003285126-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

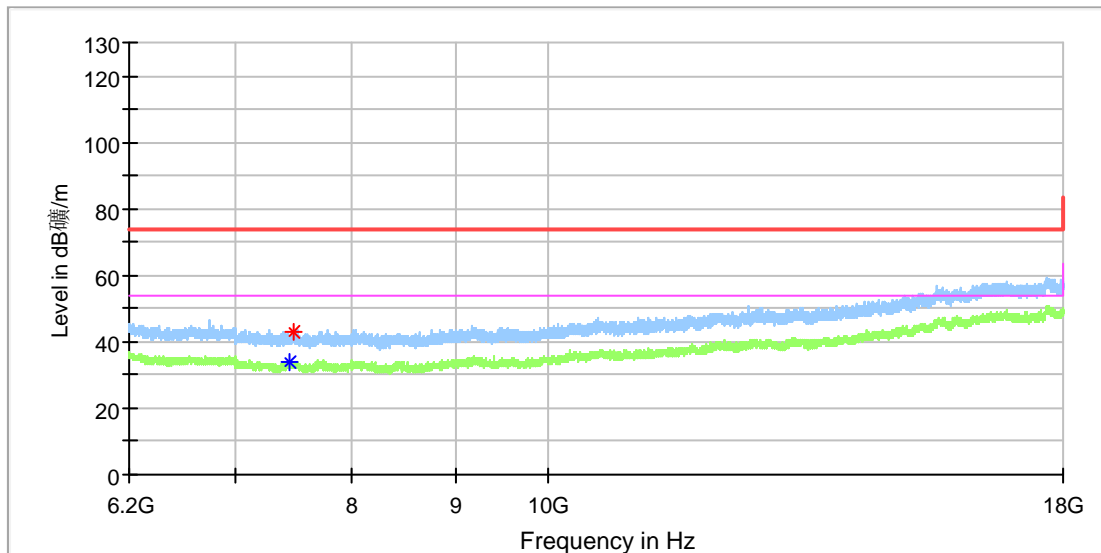


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4951.500000	---	39.52	54.00	14.48	100.0	V	300.0	11.8
4960.000000	50.50	---	74.00	23.50	100.0	V	341.0	11.8

EUT Information

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Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
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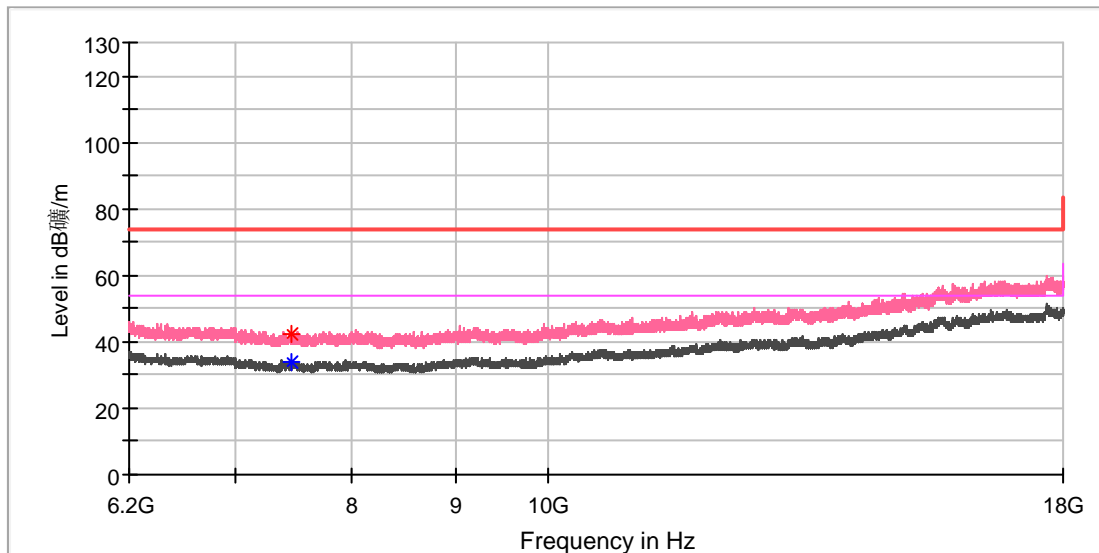


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7442.933333	---	33.73	54.00	20.27	100.0	H	74.0	8.4
7478.825000	42.93	---	74.00	31.07	100.0	H	236.0	8.7

EUT Information

EUT Name:	Label Maker
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Order No/Sample No:	168373259/A003285126-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
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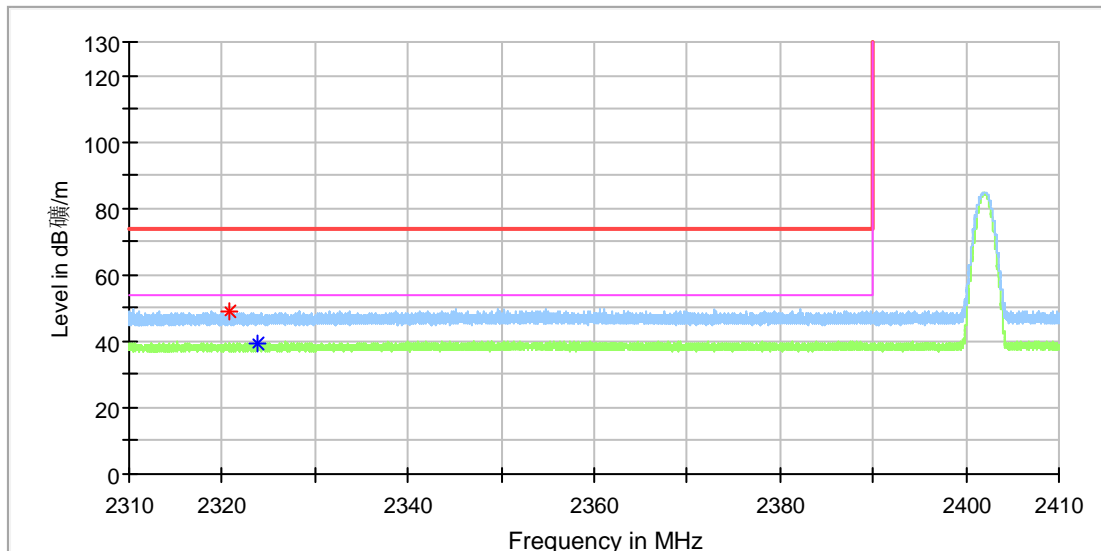
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7456.700000	---	33.59	54.00	20.41	100.0	V	122.0	8.5
7459.158333	42.12	---	74.00	31.88	100.0	V	303.0	8.5

Appendix B.2: Test Results of Radiated Emissions in Restricted Bands

EUT Information

EUT Name:	Label Maker
Model:	LetraTag 200B
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168373259/A003285126-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

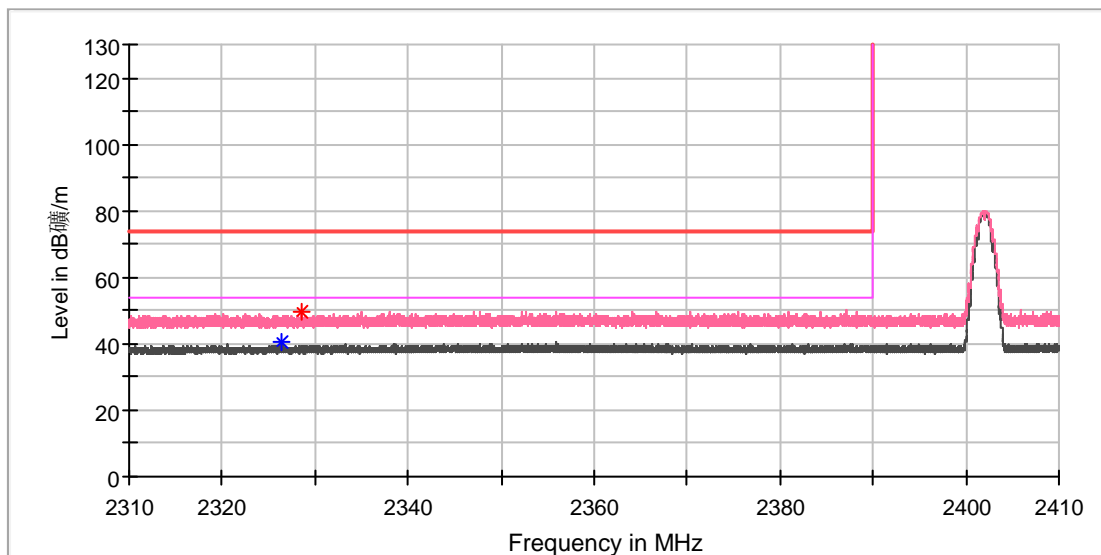


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2320.880000	49.01	---	74.00	24.99	100.0	H	172.0	6.6
2323.800000	---	39.47	54.00	14.53	100.0	H	317.0	6.6

EUT Information

EUT Name:	Label Maker
Model:	LetraTag 200B
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168373259/A003285126-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

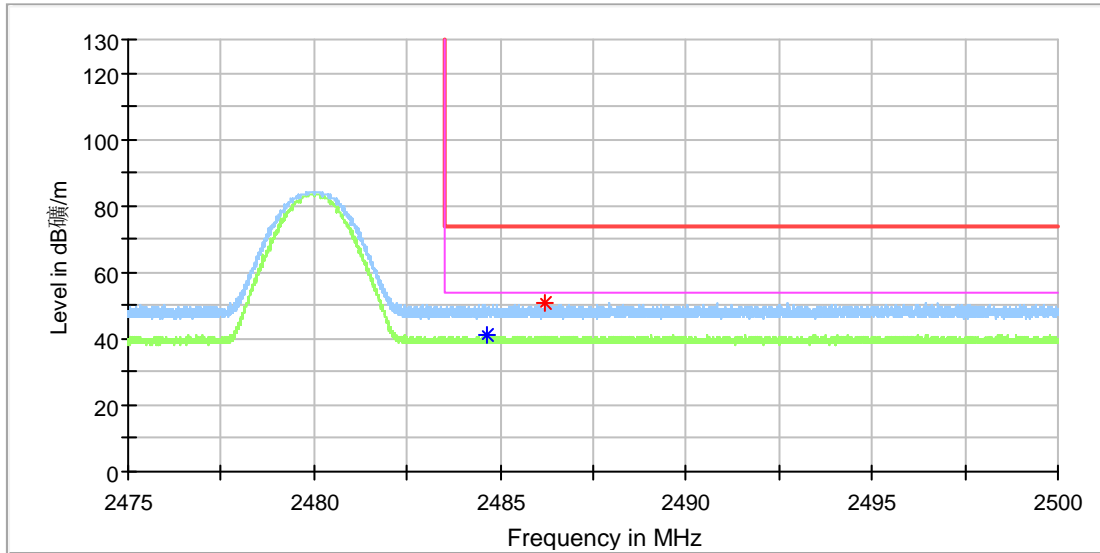


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2326.455000	---	40.36	54.00	13.64	100.0	V	117.0	6.7
2328.585000	49.46	---	74.00	24.54	100.0	V	162.0	6.7

EUT Information

EUT Name:	Label Maker
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Test Mode:	BLE 1M_High channel
Order No/Sample No:	168373259/A003285126-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

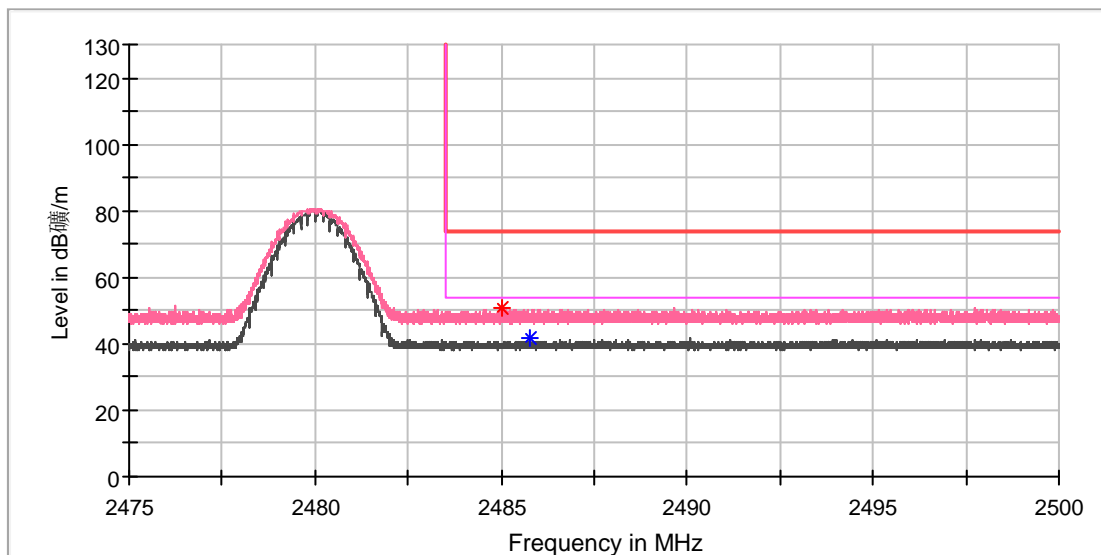


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.647500	---	41.15	54.00	12.85	100.0	H	245.0	7.4
2486.183750	50.51	---	74.00	23.49	100.0	H	150.0	7.4

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Remark:	Temp 22 Humi:55%
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)
2485.000000	50.69	---	74.00	23.31	100.0	V	82.0	7.4
2485.760000	---	41.53	54.00	12.47	100.0	V	279.0	7.4