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

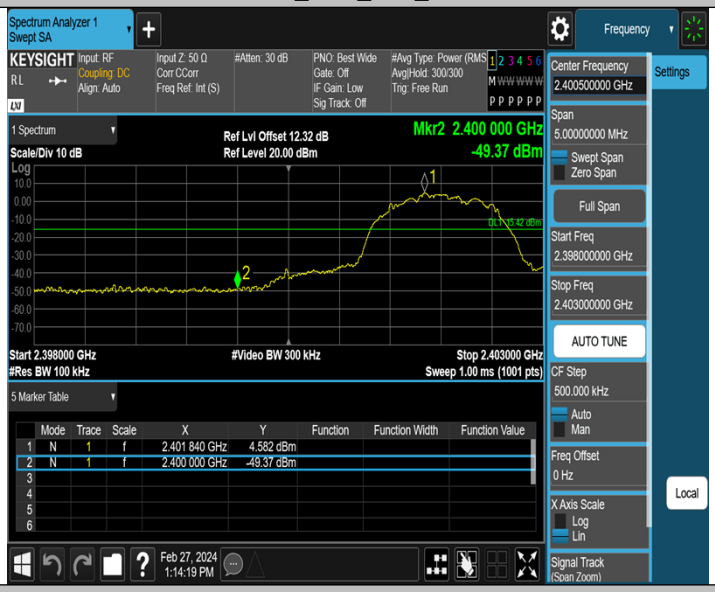
Band Edge

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	3.637	-50.26	≤-16.36	PASS
		High	2480	3.957	-48.6	≤-16.04	PASS
3DH5	Ant1	Low	2402	4.582	-49.37	≤-15.42	PASS
		High	2480	5.424	-50.18	≤-14.58	PASS
DH5	Ant1	Hopping	2402	3.139	-49.44	≤-16.86	PASS
		Hopping	2480	2.863	-49.58	≤-17.14	PASS
3DH5	Ant1	Hopping	2402	1.634	-50.08	≤-18.37	PASS
		Hopping	2480	2.329	-47.78	≤-17.67	PASS

DH5_Ant1_Low_2402

DH5_Ant1_High_2480

3DH5_Ant1_Low_2402



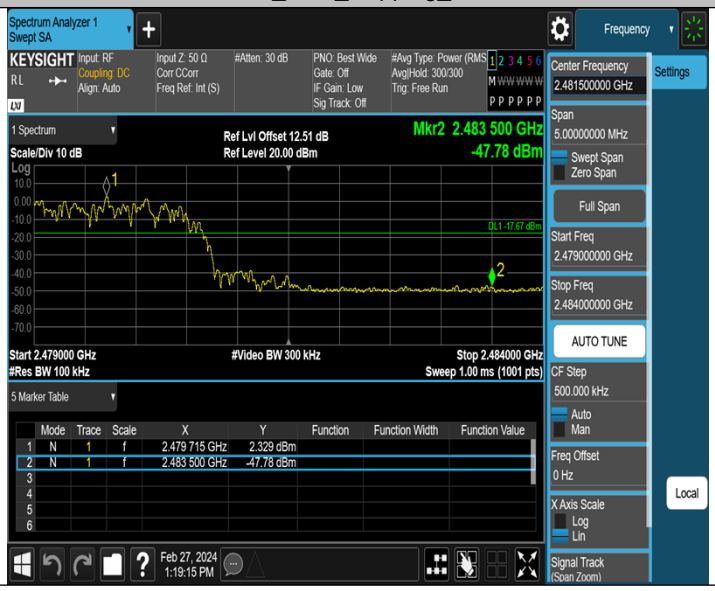
3DH5_Ant1_High_2480

DH5_Ant1_Hopping_2402

DH5_Ant1_Hopping_2480

3DH5_Ant1_Hopping_2402

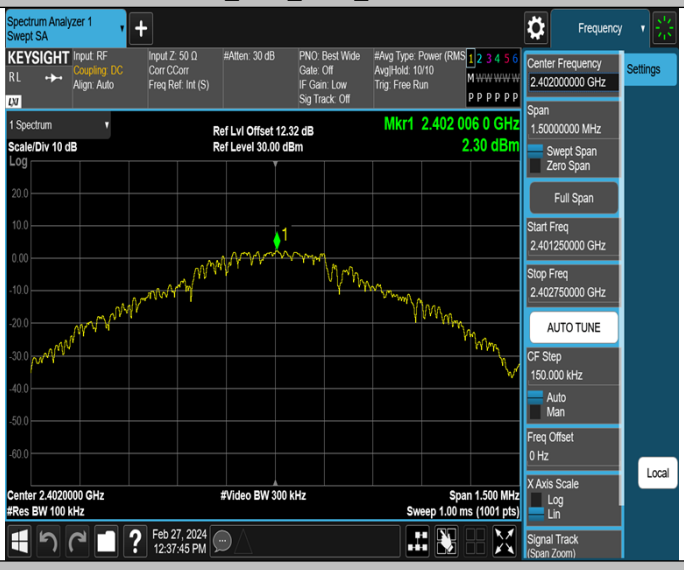
3DH5_Ant1_Hopping_2480



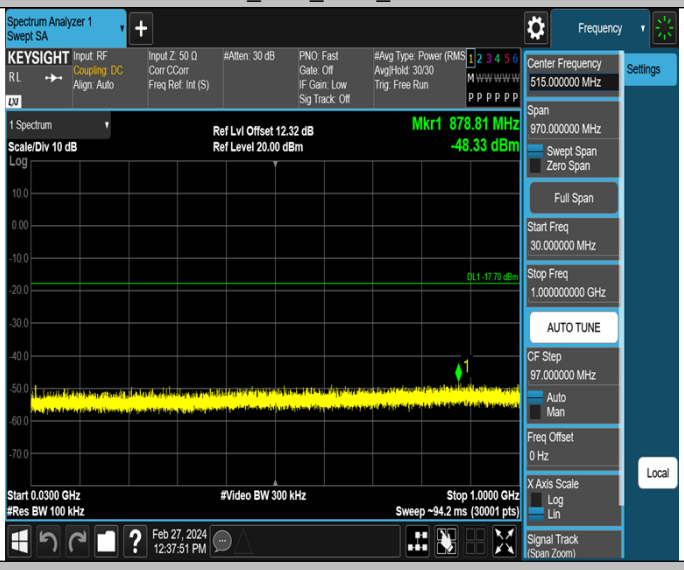
Conducted Spurious Emission

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	2.30	2.30	---	PASS
			30~1000	2.30	-48.33	≤-17.7	PASS
			1000~26500	2.30	-38.53	≤-17.7	PASS
		2441	Reference	3.31	3.31	---	PASS
			30~1000	3.31	-47.97	≤-16.69	PASS
			1000~26500	3.31	-37.4	≤-16.69	PASS
		2480	Reference	3.76	3.76	---	PASS
			30~1000	3.76	-46.79	≤-16.24	PASS
			1000~26500	3.76	-38.44	≤-16.24	PASS
3DH5	Ant1	2402	Reference	1.52	1.52	---	PASS
			30~1000	1.52	-48.02	≤-18.48	PASS
			1000~26500	1.52	-38.79	≤-18.48	PASS
		2441	Reference	1.41	1.41	---	PASS
			30~1000	1.41	-47.55	≤-18.59	PASS
			1000~26500	1.41	-38.43	≤-18.59	PASS
		2480	Reference	2.16	2.16	---	PASS
			30~1000	2.16	-47.15	≤-17.84	PASS
			1000~26500	2.16	-38.3	≤-17.84	PASS

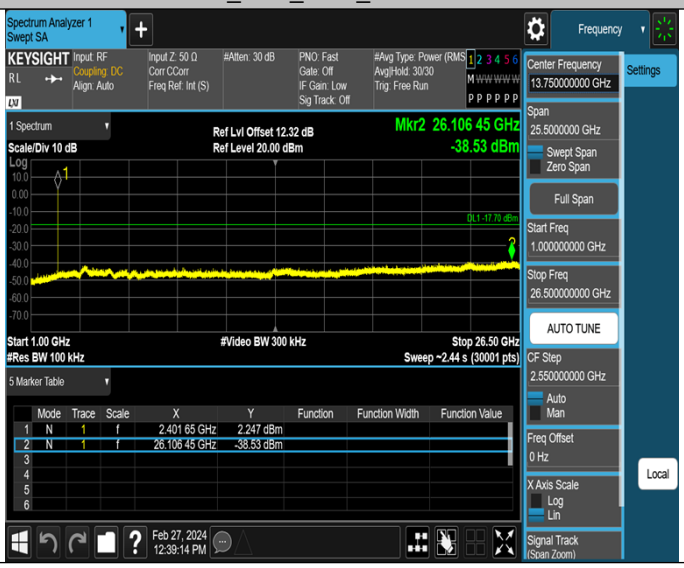
DH5_Ant1_2402_0~Reference



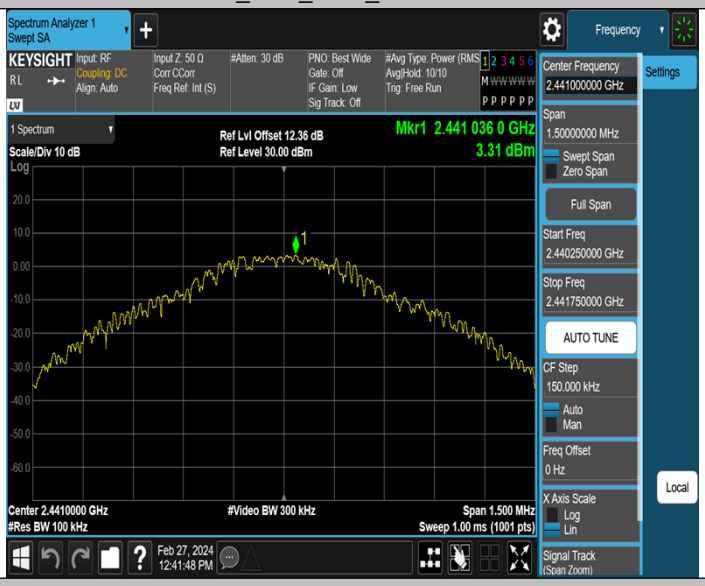
DH5_Ant1_2402_30~1000



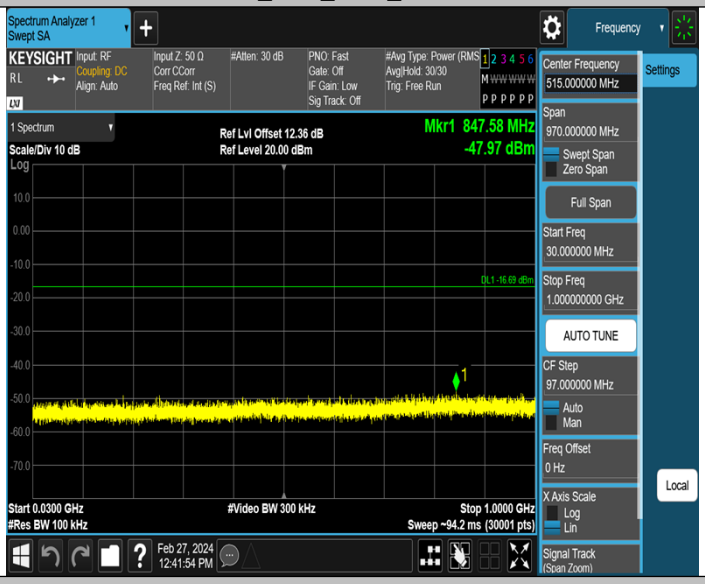
DH5_Ant1_2402_1000~26500



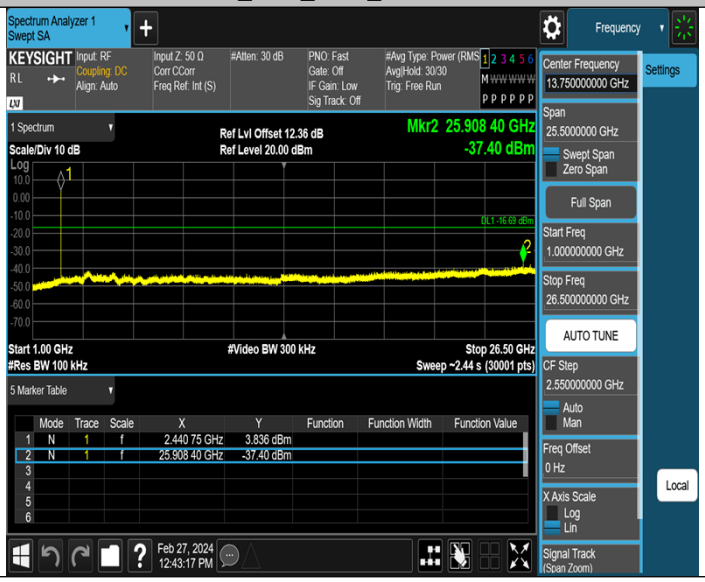
DH5_Ant1_2441_0~Reference



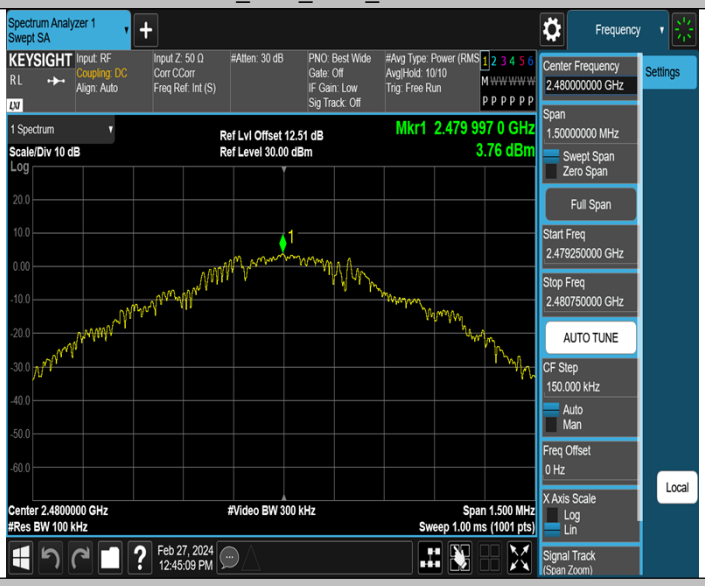
DH5_Ant1_2441_30~1000



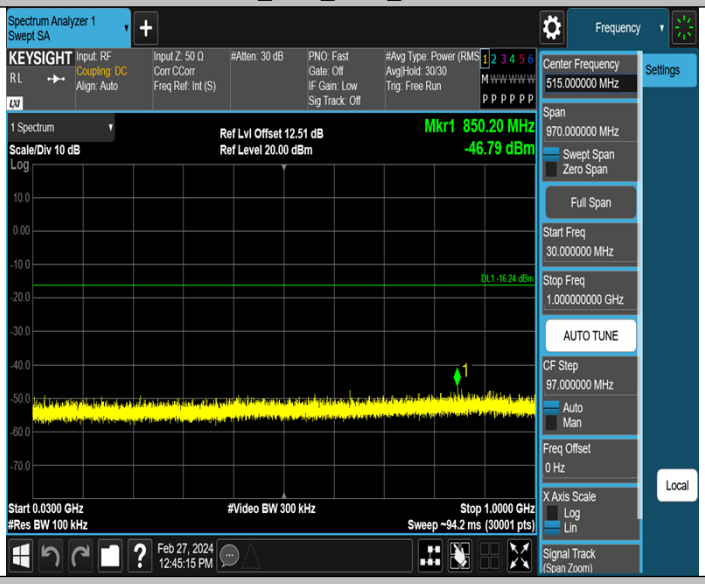
DH5_Ant1_2441_1000~26500



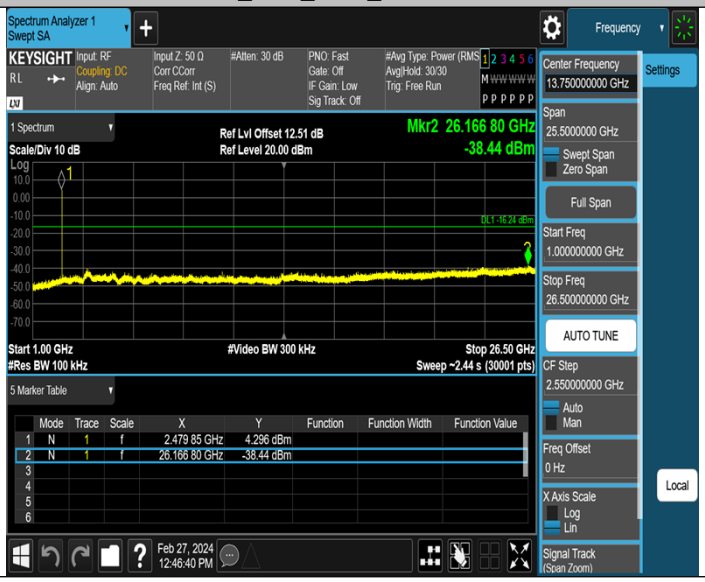
DH5_Ant1_2480_0~Reference



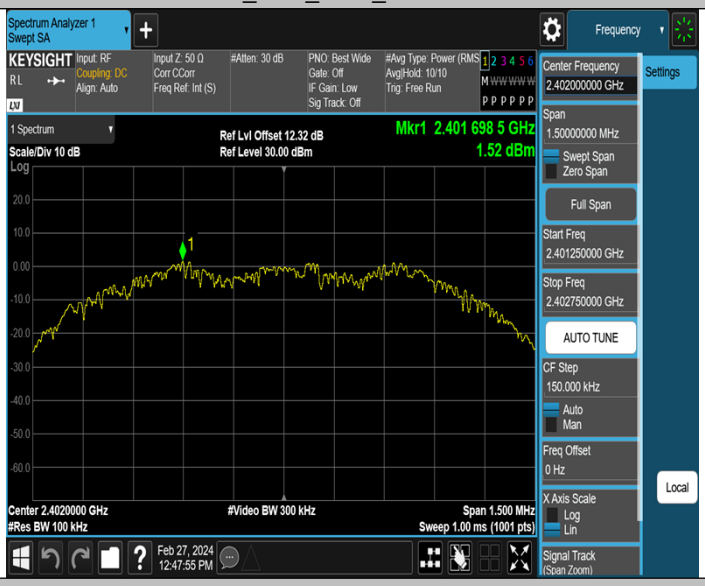
DH5_Ant1_2480_30~1000



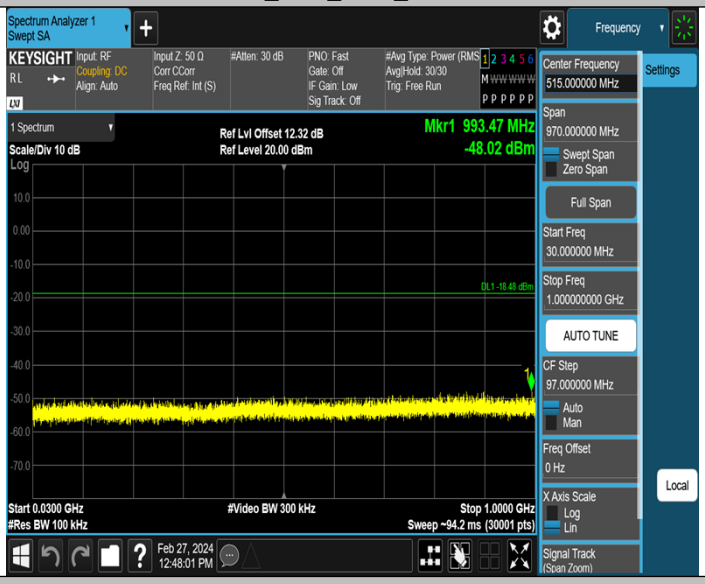
DH5_Ant1_2480_1000~26500



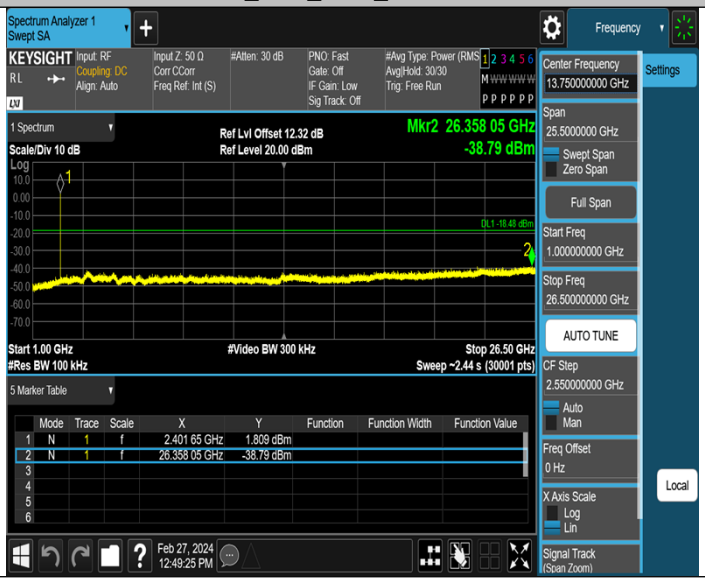
3DH5_Ant1_2402_0~Reference



3DH5_Ant1_2402_30~1000

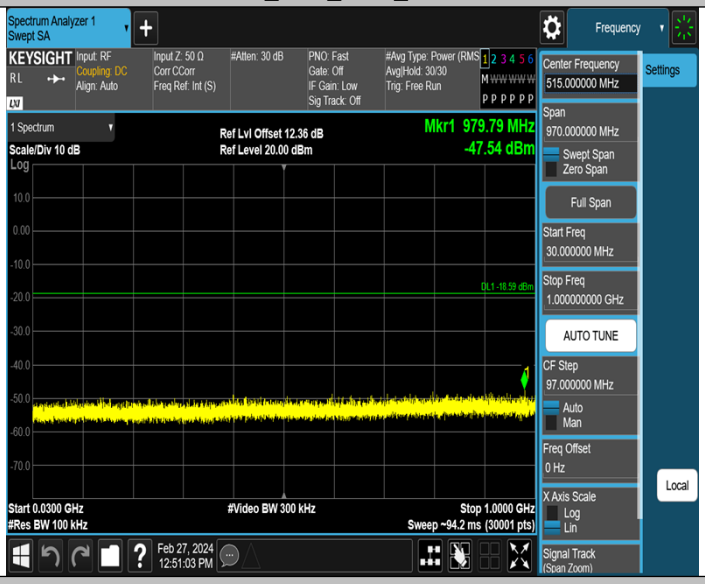


3DH5_Ant1_2402_1000~26500

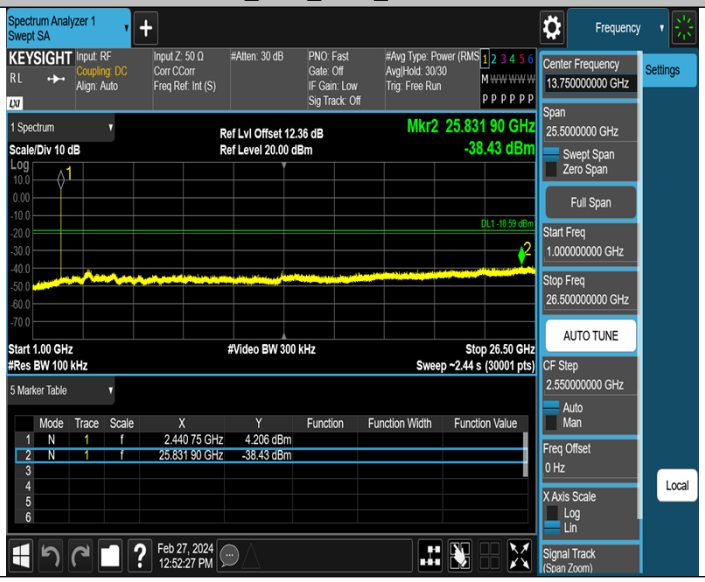


3DH5_Ant1_2441_0~Reference

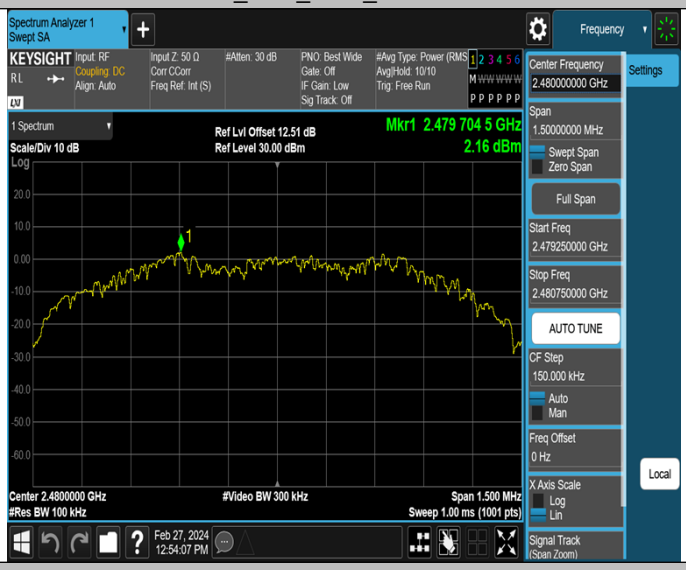
3DH5_Ant1_2441_30~1000



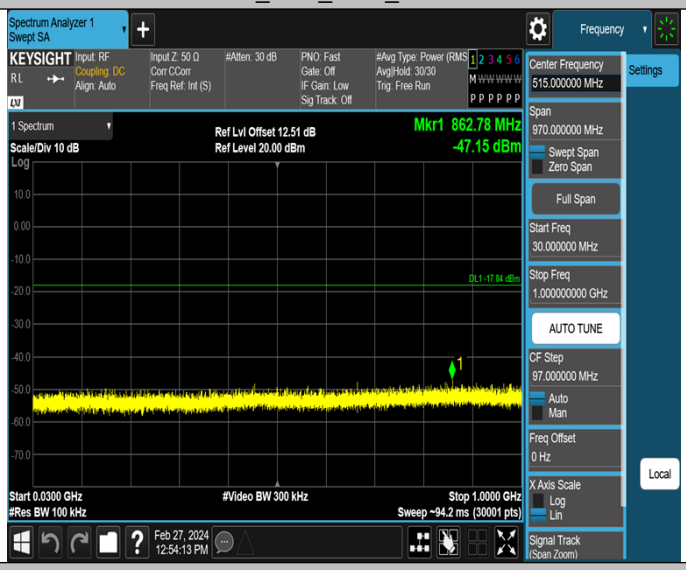
3DH5_Ant1_2441_1000~26500



3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500

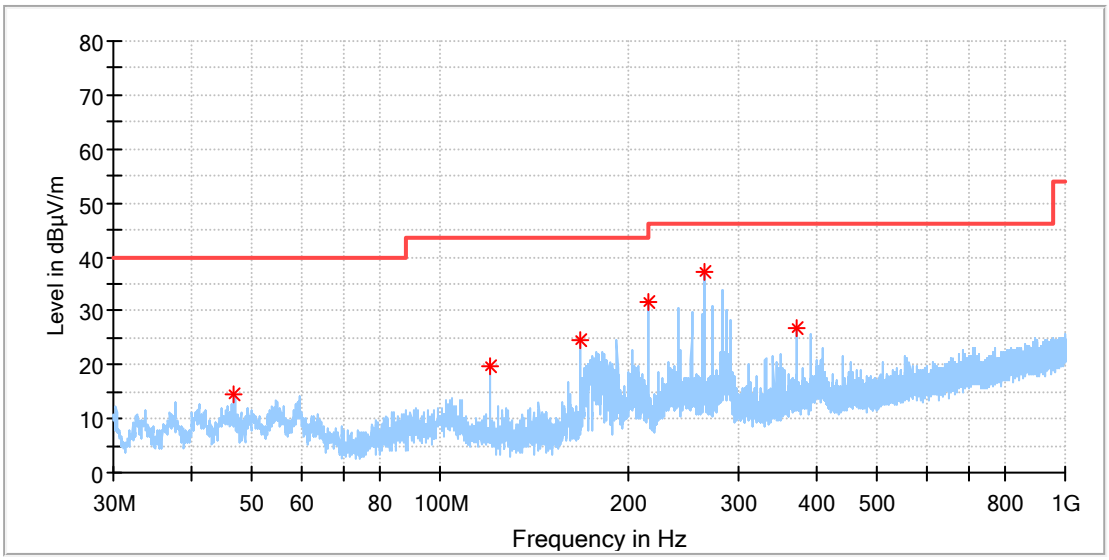
Appendix A.7: Test Results of Radiated Spurious Emissions

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.

30 MHz - 1GHz

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

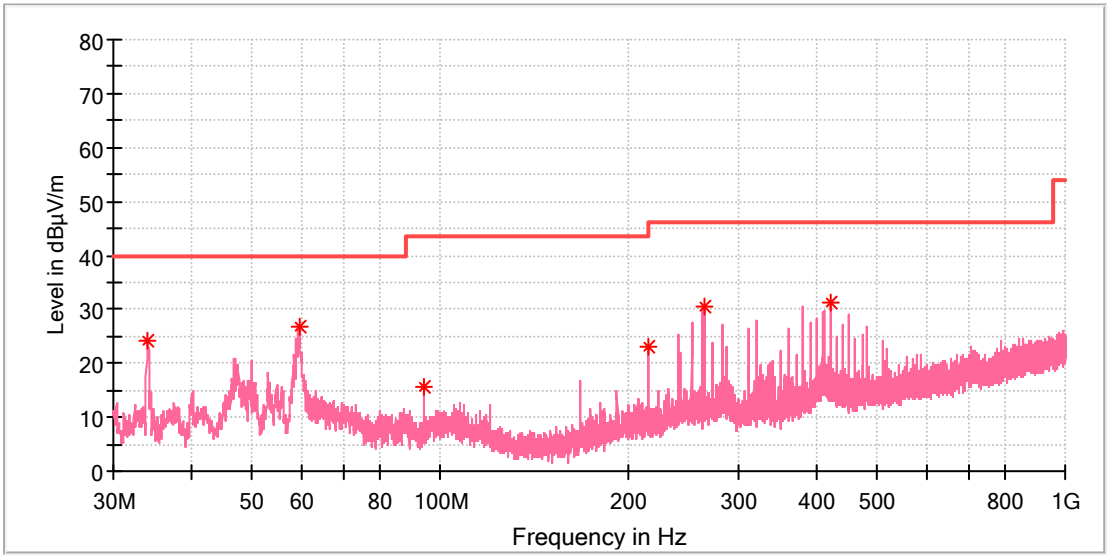
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
46.863077	14.41	40.00	25.59	100.0	H	138.0	-18.9
119.986154	19.59	43.50	23.91	100.0	H	198.0	-21.1
168.001154	24.55	43.50	18.95	100.0	H	0.0	-21.7
216.016154	31.57	46.00	14.43	100.0	H	36.0	-19.0
263.993846	37.05	46.00	8.95	100.0	H	214.0	-17.4
371.253462	26.66	46.00	19.34	100.0	H	145.0	-14.7

Final_Result

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

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
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)
34.029231	24.34	40.00	15.66	100.0	V	93.0	-22.6
59.622308	26.87	40.00	13.13	100.0	V	174.0	-19.2
94.057308	15.76	43.50	27.74	100.0	V	287.0	-20.3
216.016154	23.24	46.00	22.76	100.0	V	227.0	-19.0
263.993846	30.55	46.00	15.45	100.0	V	271.0	-17.4
420.760769	31.34	46.00	14.66	100.0	V	263.0	-13.7

Final_Result

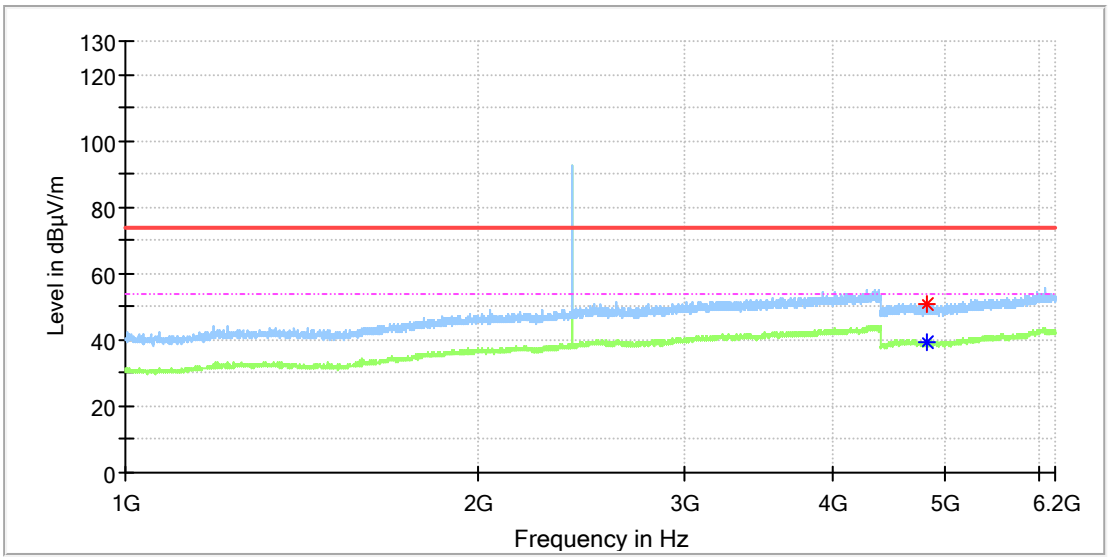
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

1GHz - 18GHz

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

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

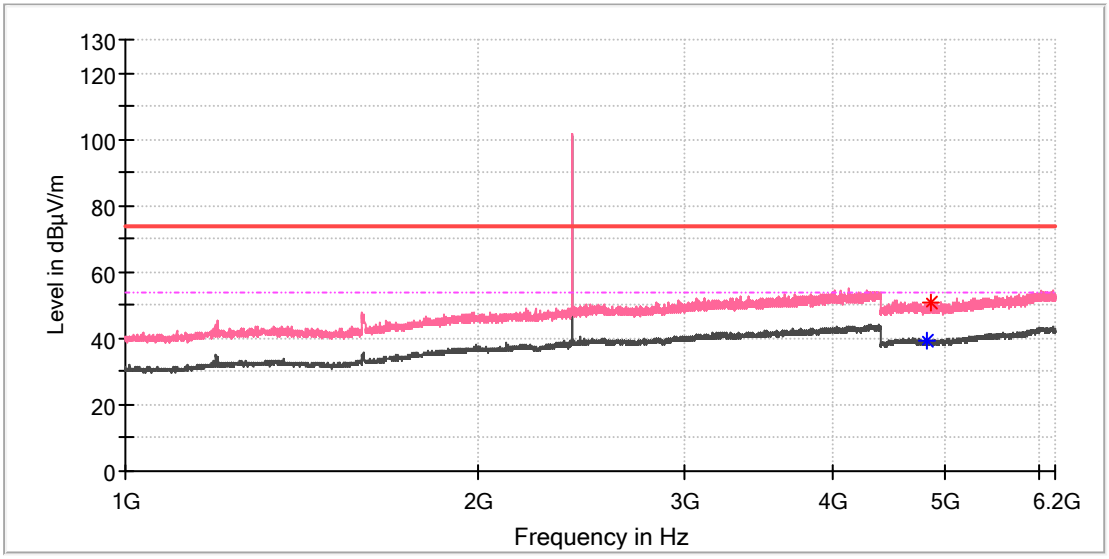
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4814.500000	50.93	---	74.00	23.07	150.0	H	41.0	11.8
4820.000000	---	39.33	54.00	14.67	150.0	H	109.0	11.8

Final_Result

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

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

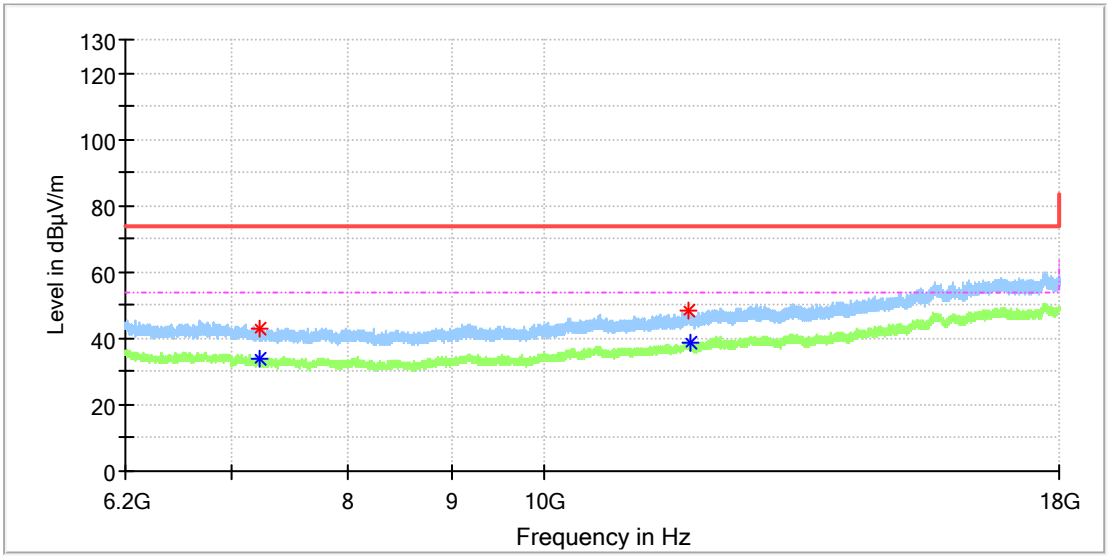
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4816.000000	---	39.29	54.00	14.71	150.0	V	195.0	11.8
4850.000000	50.82	---	74.00	23.18	150.0	V	276.0	11.8

Final_Result

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

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

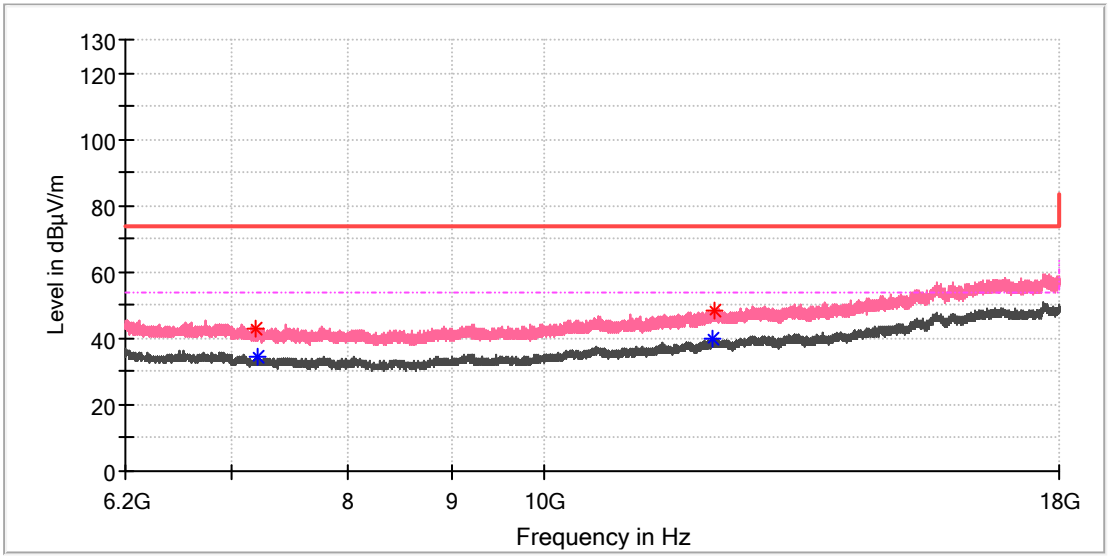
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7219.716667	43.04	---	74.00	30.96	150.0	H	324.0	8.7
7220.208333	---	34.06	54.00	19.94	150.0	H	0.0	8.7
11798.608333	48.10	---	74.00	25.90	150.0	H	24.0	13.4
11822.208333	---	38.83	54.00	15.17	150.0	H	155.0	13.5

Final_Result

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

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

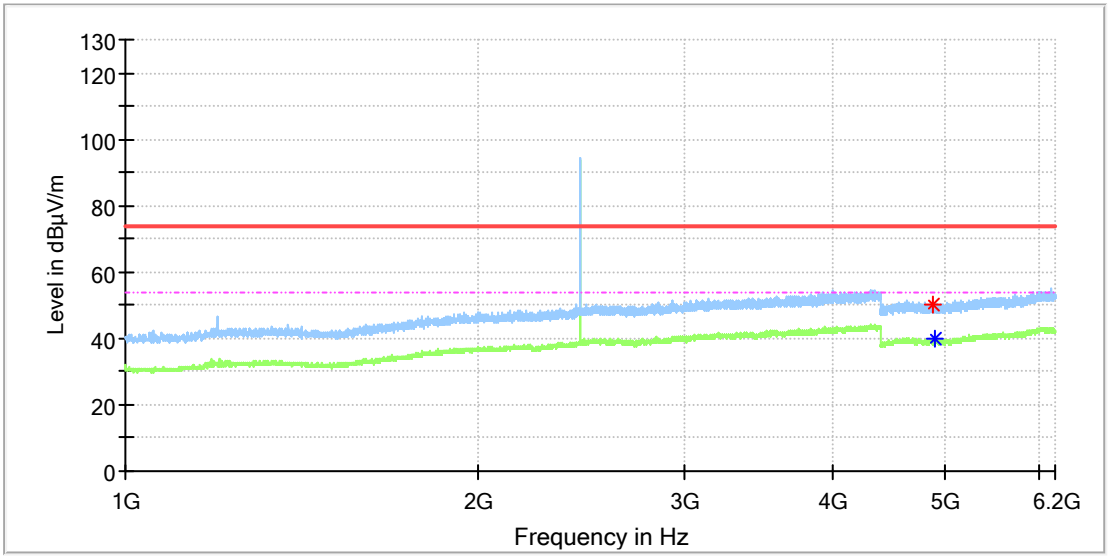
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7199.066667	43.17	---	74.00	30.83	150.0	V	0.0	8.8
7213.816667	---	34.22	54.00	19.78	150.0	V	0.0	8.7
12105.900000	---	39.67	54.00	14.33	150.0	V	142.0	14.2
12154.575000	48.35	---	74.00	25.65	150.0	V	295.0	14.4

Final_Result

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

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

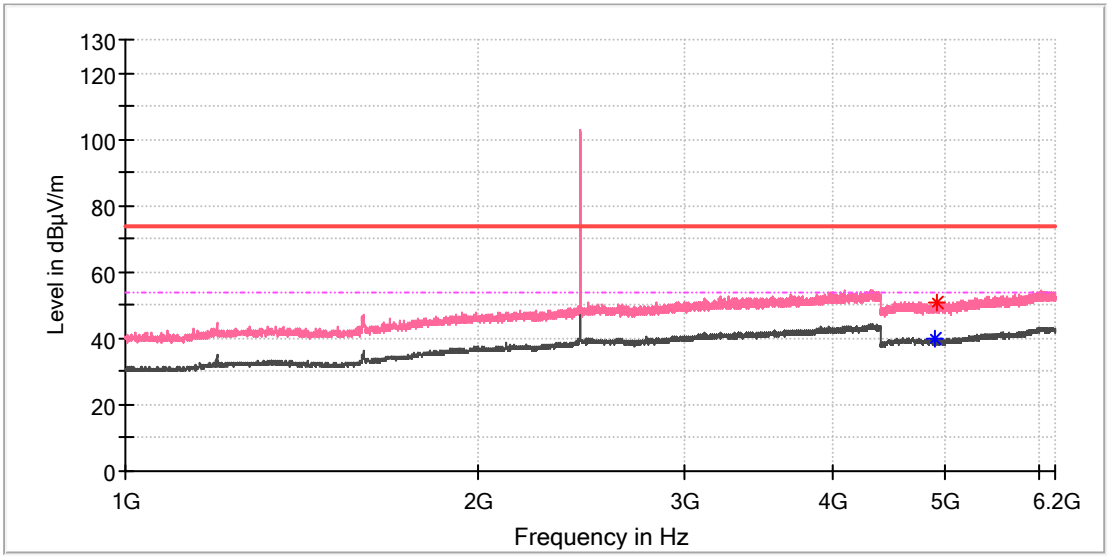
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4875.500000	50.34	---	74.00	23.66	150.0	H	237.0	11.8
4904.500000	---	39.78	54.00	14.22	150.0	H	23.0	11.8

Final_Result

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

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

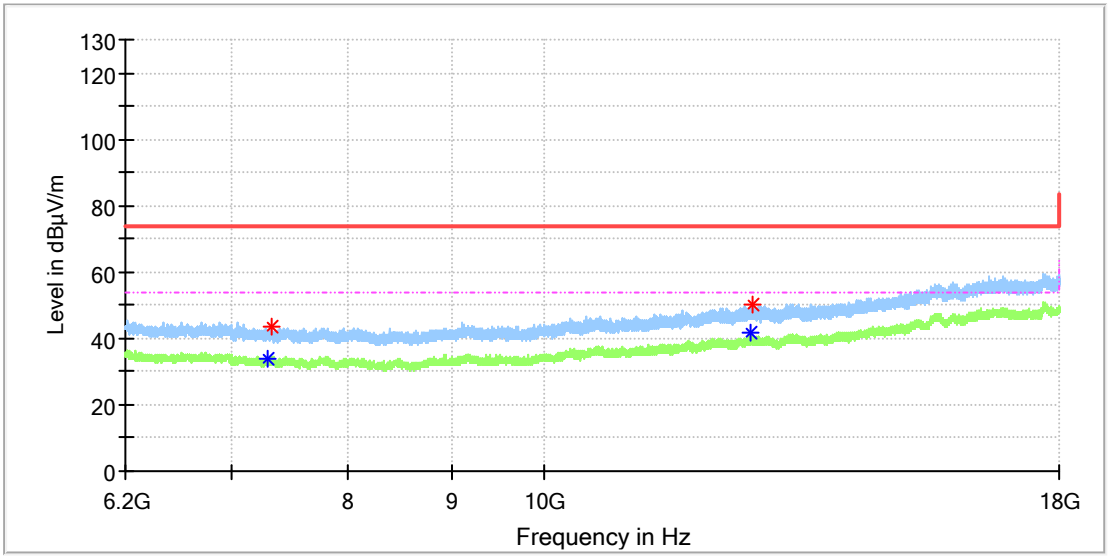
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4903.500000	---	39.70	54.00	14.30	150.0	V	108.0	11.8
4917.500000	50.62	---	74.00	23.38	150.0	V	89.0	11.8

Final_Result

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

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

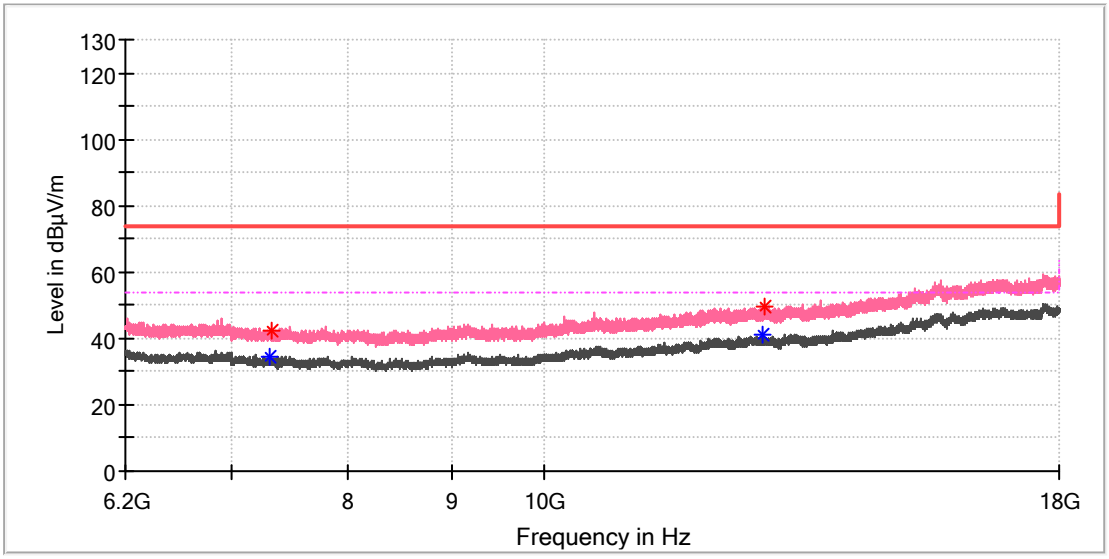
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7296.908333	---	34.10	54.00	19.90	150.0	H	206.0	8.3
7334.275000	43.63	---	74.00	30.37	150.0	H	262.0	8.1
12656.075000	---	41.42	54.00	12.58	150.0	H	237.0	15.0
12685.575000	50.15	---	74.00	23.85	150.0	H	336.0	15.1

Final_Result

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

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
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)
7305.266667	---	34.44	54.00	19.56	150.0	V	130.0	8.3
7327.883333	42.57	---	74.00	31.43	150.0	V	225.0	8.1
12844.875000	---	41.04	54.00	12.96	150.0	V	179.0	15.3
12851.266667	49.44	---	74.00	24.56	150.0	V	32.0	15.4

Final_Result

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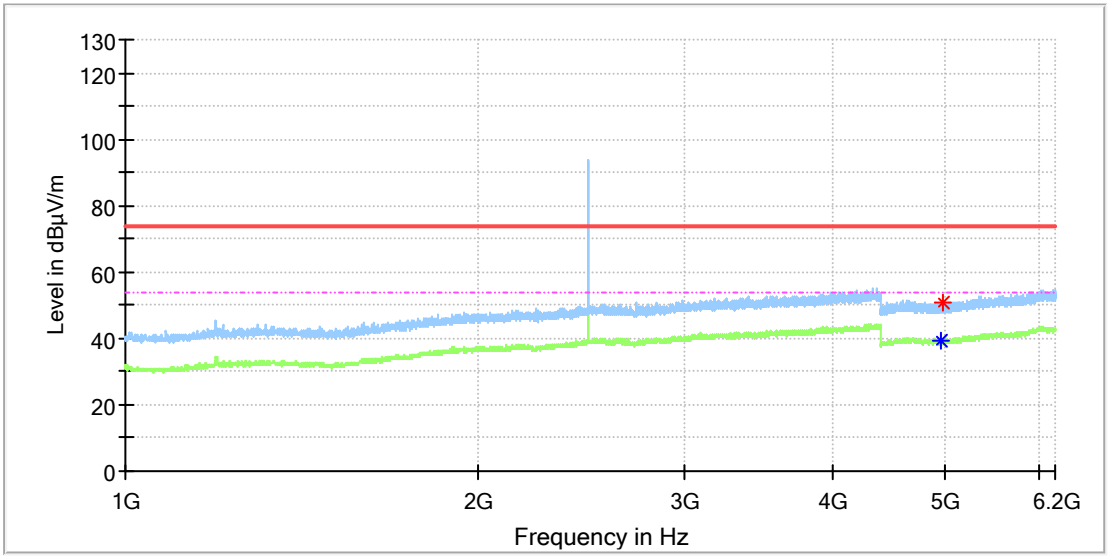
EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

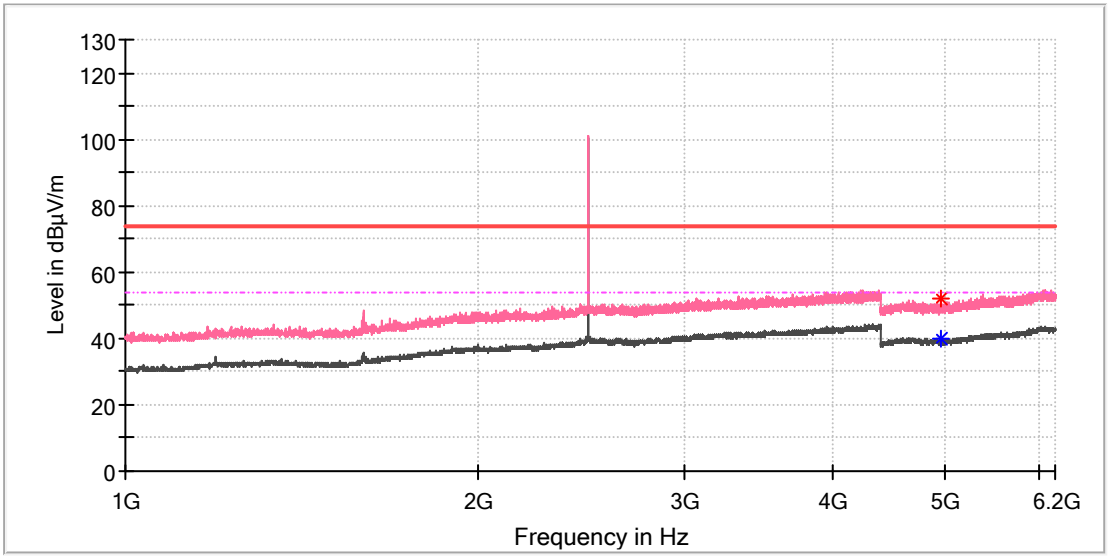
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4959.500000	---	39.60	54.00	14.40	150.0	H	185.0	11.8
4966.500000	50.82	---	74.00	23.18	150.0	H	103.0	11.8

Final_Result

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

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

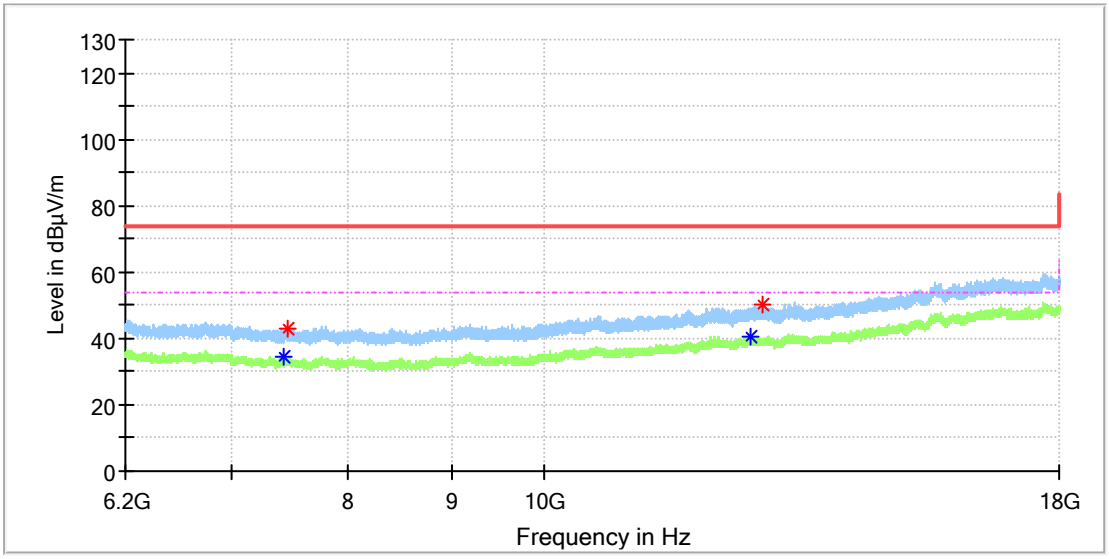
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4955.000000	51.96	---	74.00	22.04	150.0	V	0.0	11.8
4961.000000	---	39.97	54.00	14.03	150.0	V	240.0	11.8

Final_Result

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

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

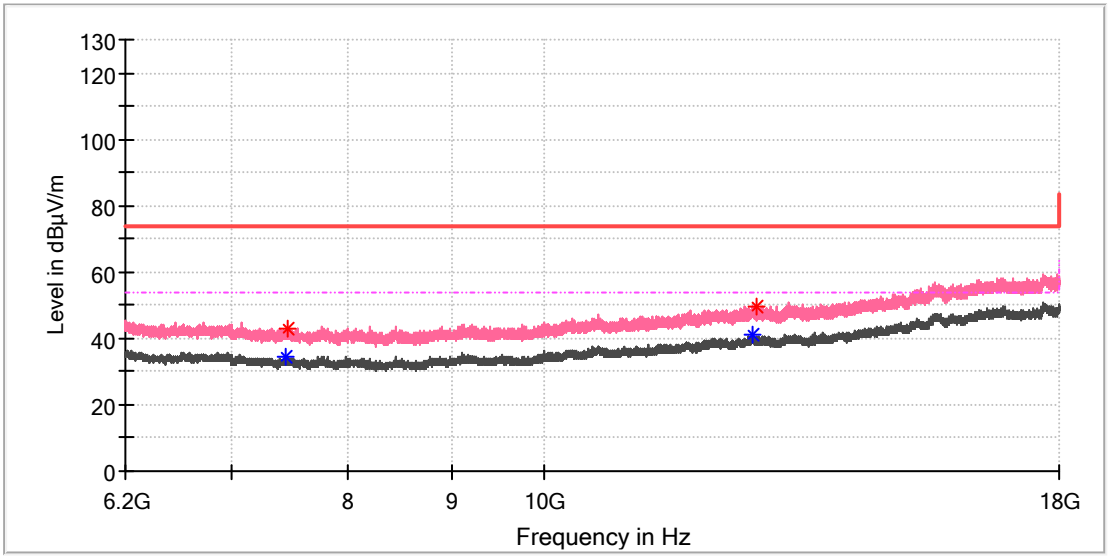
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7435.558333	---	34.69	54.00	19.31	150.0	H	165.0	8.4
7463.583333	42.98	---	74.00	31.02	150.0	H	105.0	8.6
12653.616667	---	40.70	54.00	13.30	150.0	H	250.0	15.0
12818.816667	50.46	---	74.00	23.54	150.0	H	275.0	15.3

Final_Result

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

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
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)
7443.425000	---	34.60	54.00	19.40	150.0	V	110.0	8.5
7455.225000	43.02	---	74.00	30.98	150.0	V	87.0	8.5
12690.000000	---	40.97	54.00	13.03	150.0	V	51.0	15.1
12756.375000	49.53	---	74.00	24.47	150.0	V	251.0	15.2

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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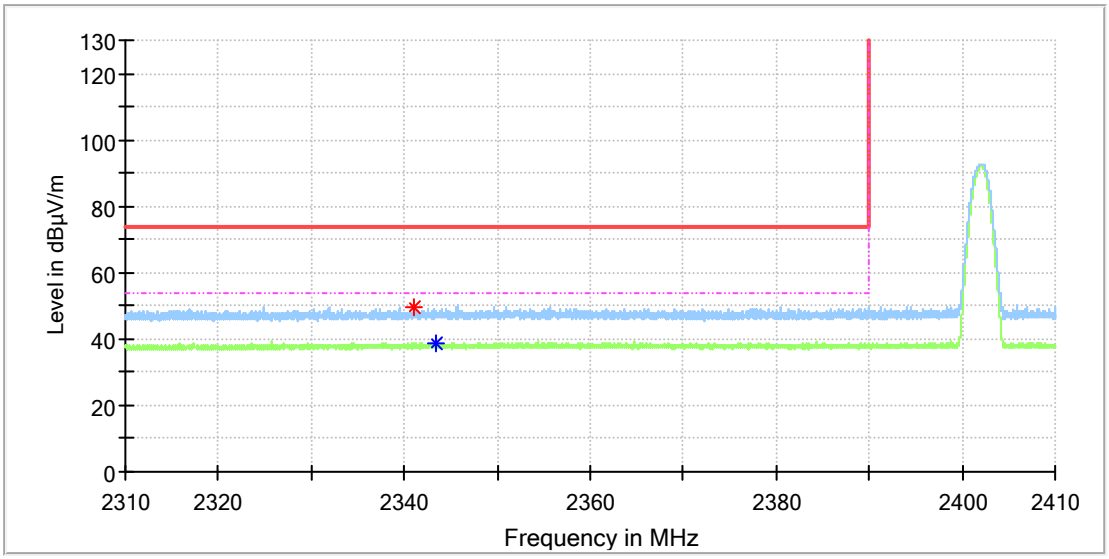
Appendix A.8: Test Results of Radiated Emissions in Restricted Bands

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

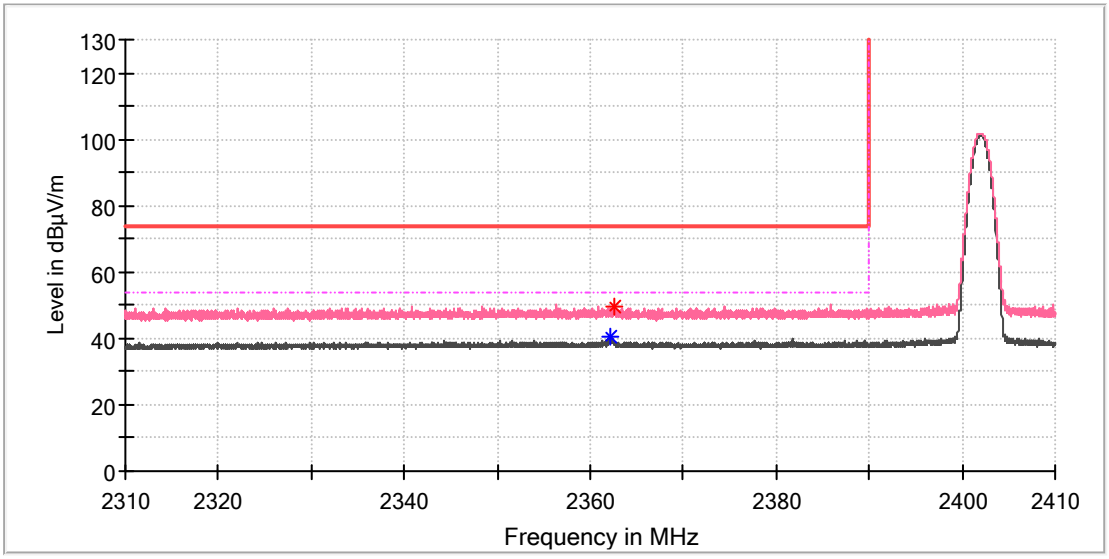
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2341.117647	49.67	---	74.00	24.33	150.0	H	108.0	6.8
2343.308824	---	38.88	54.00	15.12	150.0	H	4.0	6.8

Final_Result

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

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

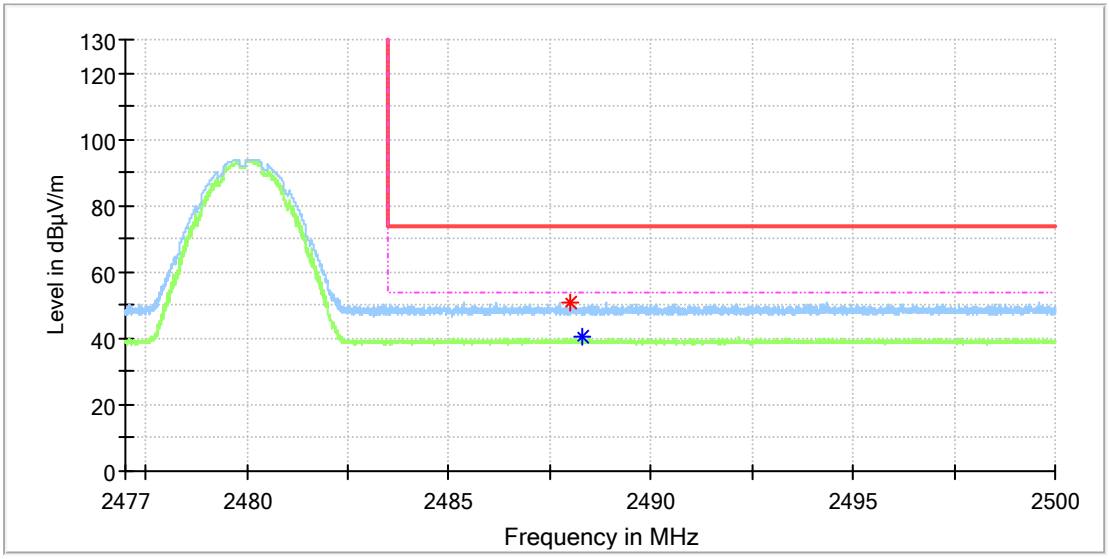
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2362.235294	---	40.21	54.00	13.79	150.0	V	6.0	6.9
2362.500000	49.41	---	74.00	24.59	150.0	V	332.0	6.9

Final_Result

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

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

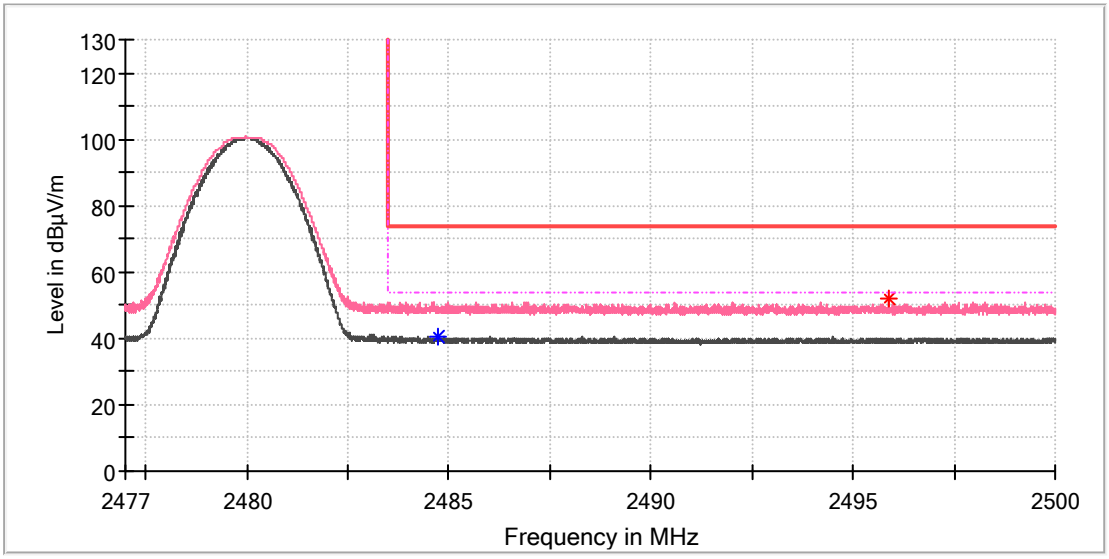
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2488.013235	50.99	---	74.00	23.01	150.0	H	237.0	7.4
2488.317647	---	40.23	54.00	13.77	150.0	H	172.0	7.4

Final_Result

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

EUT Information

EUT Name:	Lawn Mowing Robot
Model:	MPB14
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168459797/A003634855-001
Test Voltage:	Battery
Remark:	Temp 24 Humi:50%
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)
2484.739706	---	40.43	54.00	13.57	150.0	V	346.0	7.4
2495.875000	51.94	---	74.00	22.06	150.0	V	205.0	7.4

Final_Result

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