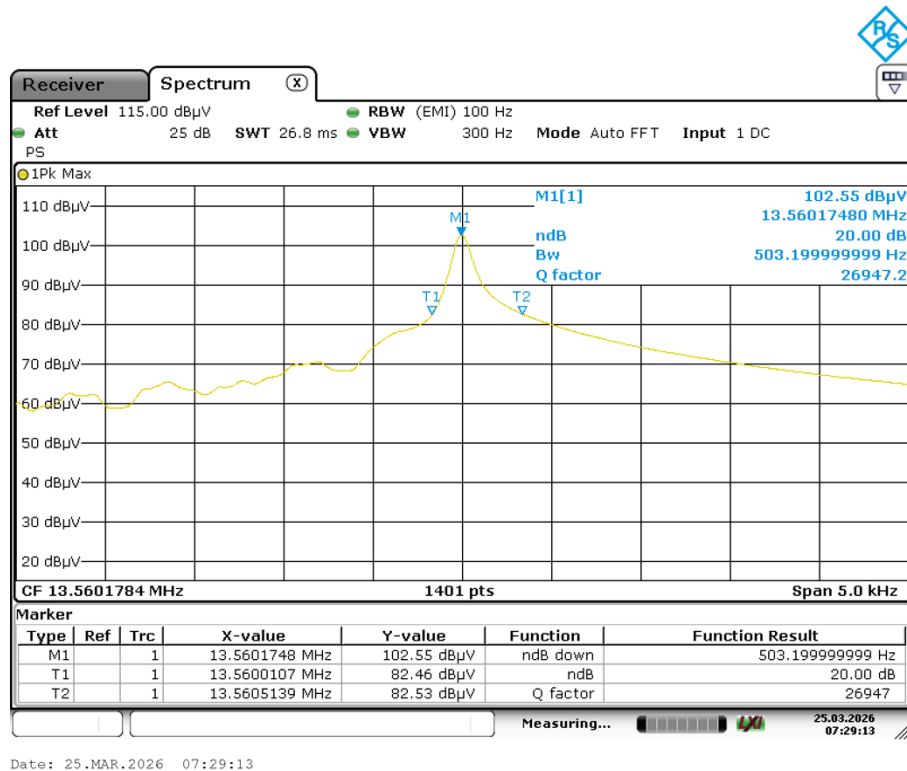


Appendix A: Test Results of NFC

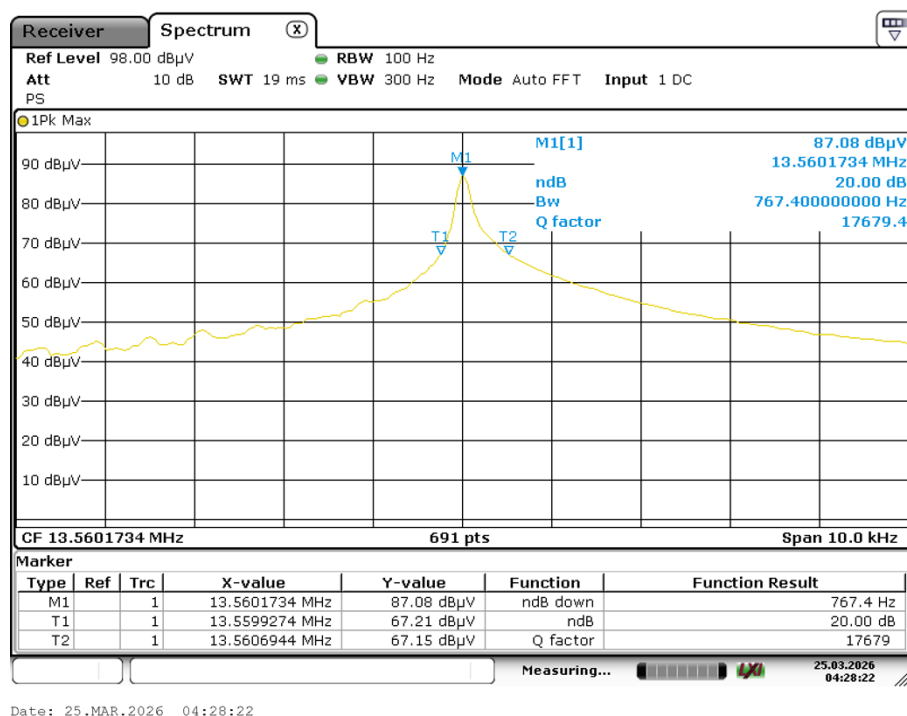
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<i>Standby</i>	<i>2</i>
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<i>Standby</i>	<i>10</i>

Appendix A.1: Test Results of 20dB Bandwidth

Operating mode

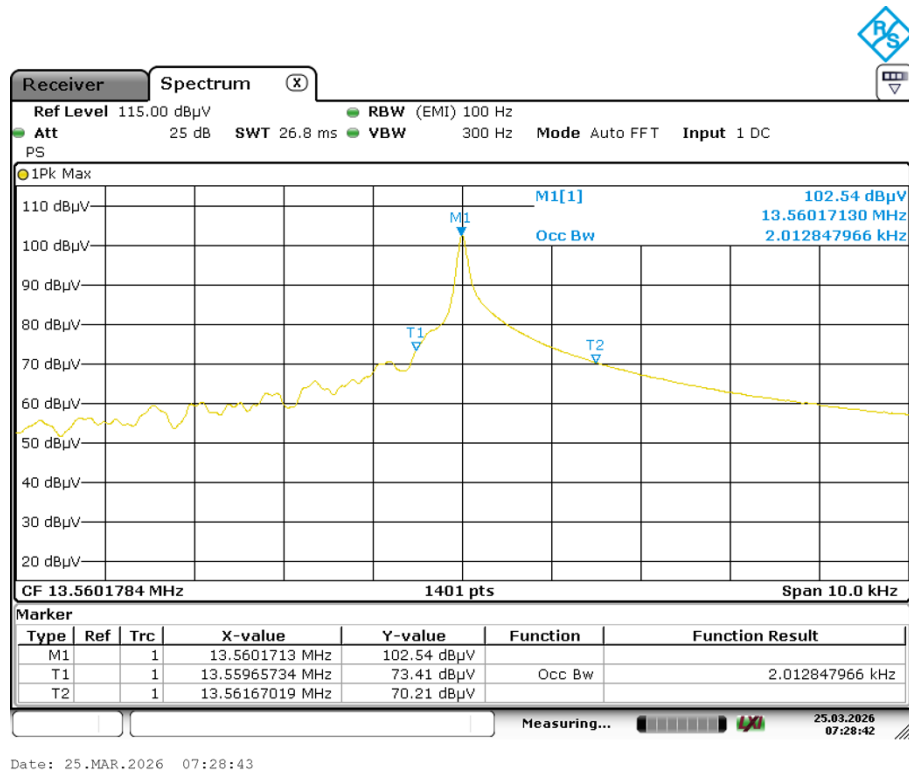


Standby

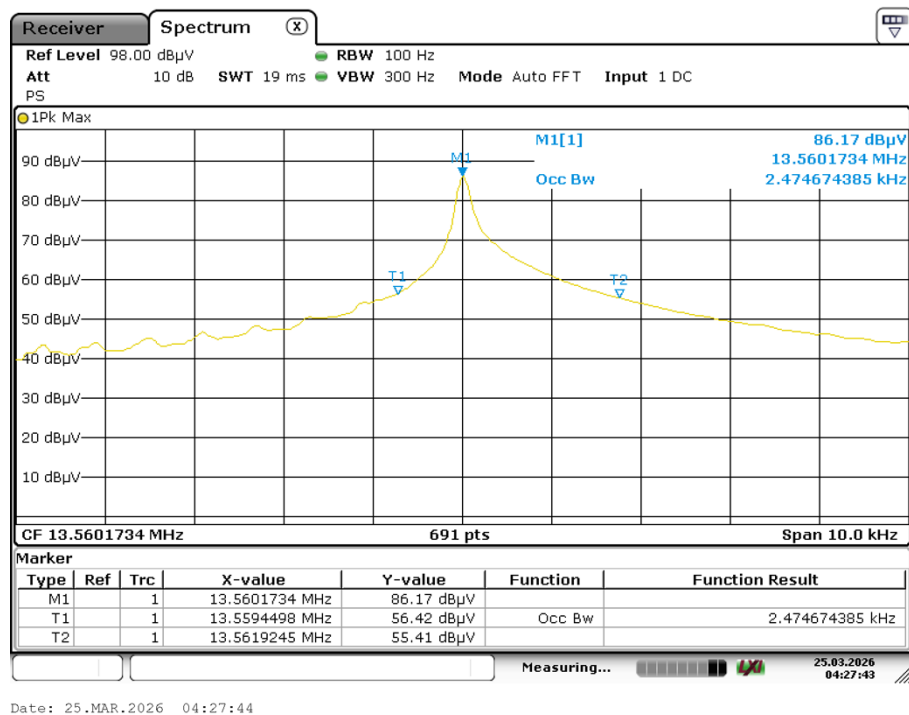


Appendix A.2: Test Results of 99% Bandwidth

Operating mode



Standby



Appendix A.3: Test Results of Frequency Stability

Test Frequency (MHz)	Test Conditions		Test Results (MHz)	Deviation (kHz)	Limit (kHz)	Result
	Temp(°C)	Volt (V DC)				
13.56	0	12	13.560264	0.264	±0.01% (1.356 kHz)	Pass
	10	12	13.560271	0.271		Pass
	20	12	13.560319	0.319		Pass
	30	12	13.560526	0.526		Pass
	40	12	13.560493	0.493		Pass
	25	10.2	13.560328	0.328		Pass
		13.8	13.560375	0.375		Pass

Note: Deviation (kHz) = (Test Result-13.56MHz)*1000

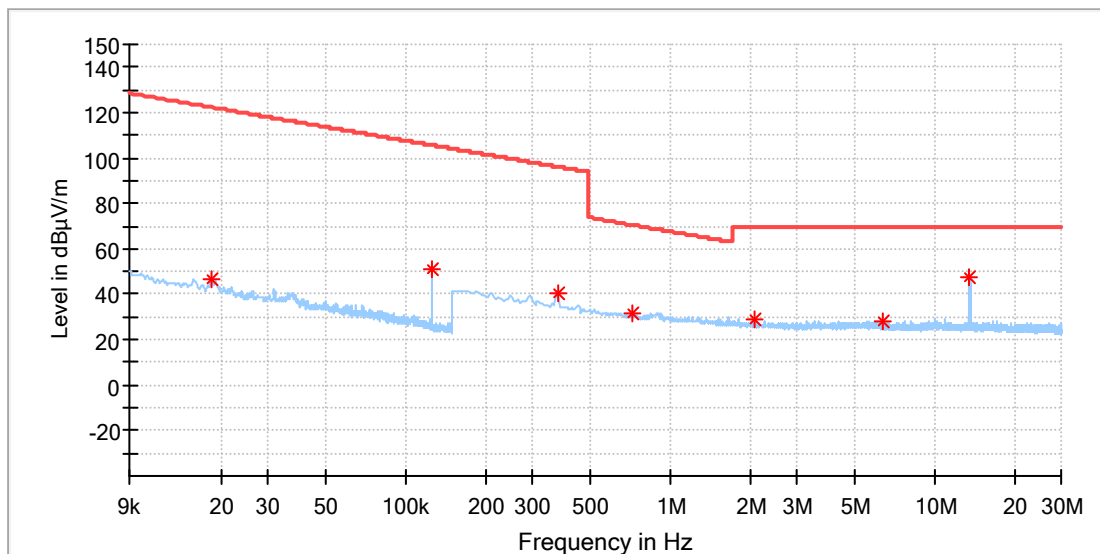
Appendix A.4: Test Results of Radiated Spurious Emission (In-Band & Out-Band Emissions)

Note: The highest waveform in the figure is Fundamental and/or harmonics frequency.

Operating mode

EUT Information

EUT Name:	Smart lock
Model:	1507-R
Test Mode:	13.56MHz
Order No/Sample No:	27220691/A004206636-001
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:53%
Test Standard:	FCC 15.225
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

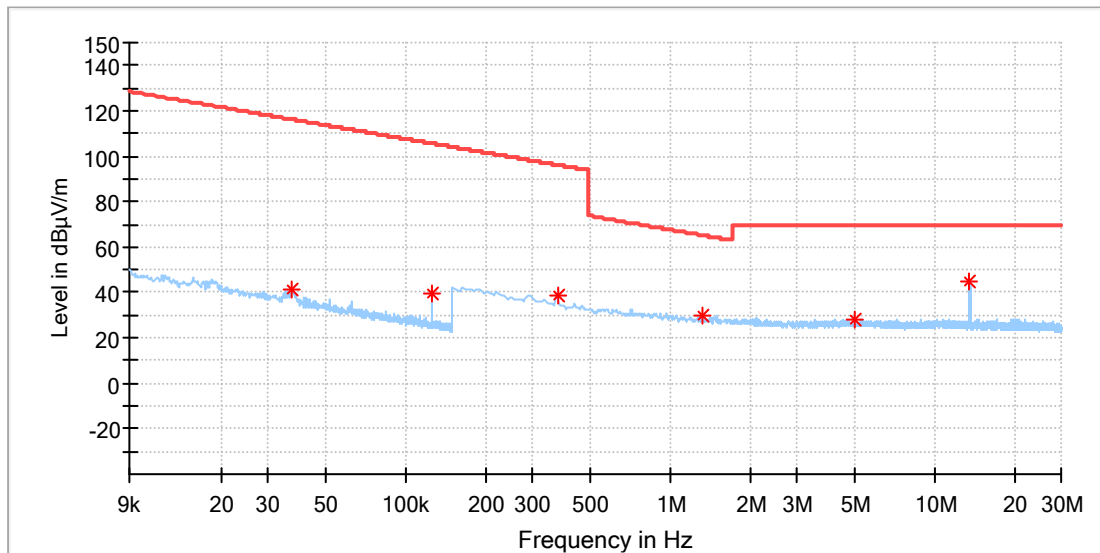
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.018467	46.32	122.26	75.94	100.0	X	323.0	19.9
0.124620	51.01	105.69	54.68	100.0	X	134.0	19.9
0.373875	40.10	96.15	56.05	100.0	X	180.0	19.9
0.716272	31.93	70.51	38.58	100.0	X	183.0	19.9
2.068302	29.19	69.50	40.31	100.0	X	216.0	20.0
6.374603	28.38	69.50	41.12	100.0	X	248.0	20.1
13.560552	47.63	69.50	21.87	100.0	X	86.0	20.3

Final Result

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

EUT Name: Smart lock
Model: 1507-R
Test Mode: 13.56MHz
Order No/Sample No: 27220691/A004206636-001
Test Voltage: DC 12V From DC Source
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.225
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

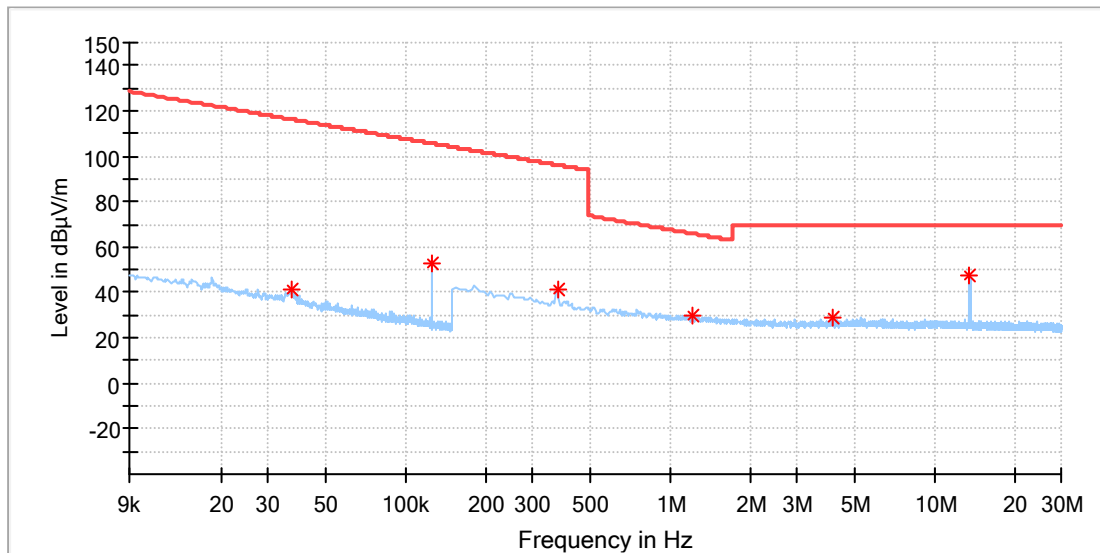
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.037099	41.73	116.20	74.48	100.0	Y	84.0	19.9
0.124620	39.40	105.69	66.29	100.0	Y	232.0	19.9
0.373875	38.39	96.15	57.76	100.0	Y	32.0	19.9
1.322052	29.83	65.20	35.37	100.0	Y	197.0	19.9
4.996235	28.40	69.50	41.10	100.0	Y	346.0	20.1
13.560552	44.71	69.50	24.79	100.0	Y	309.0	20.3

Final Result

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

EUT Name: Smart lock
Model: 1507-R
Test Mode: 13.56MHz
Order No/Sample No: 27220691/A004206636-001
Test Voltage: DC 12V From DC Source
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.225
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

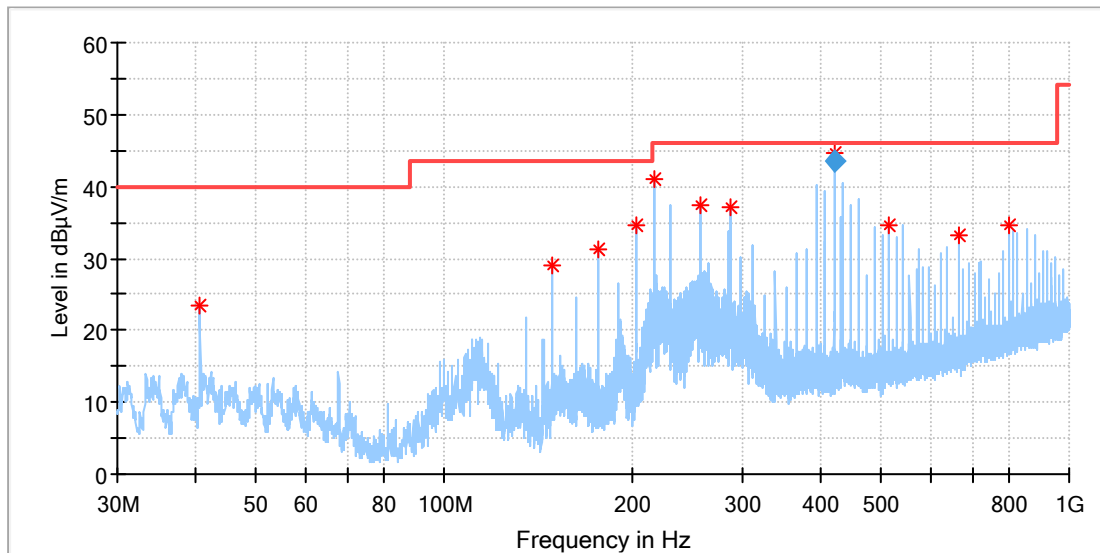
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.037099	41.43	116.20	74.78	100.0	Z	89.0	19.9
0.124620	53.08	105.69	52.60	100.0	Z	231.0	19.9
0.373875	40.98	96.15	55.17	100.0	Z	163.0	19.9
1.221088	29.94	65.89	35.95	100.0	Z	97.0	19.9
4.078787	28.75	69.50	40.75	100.0	Z	256.0	20.1
13.560552	47.67	69.50	21.83	100.0	Z	321.0	20.3

Final Result

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

EUT Name: Smart lock
Model: 1507-R
Test Mode: 13.56MHz
Order No/Sample No: 27220691/A004206636-001
Test Voltage: DC 12V From DC Source
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.225
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

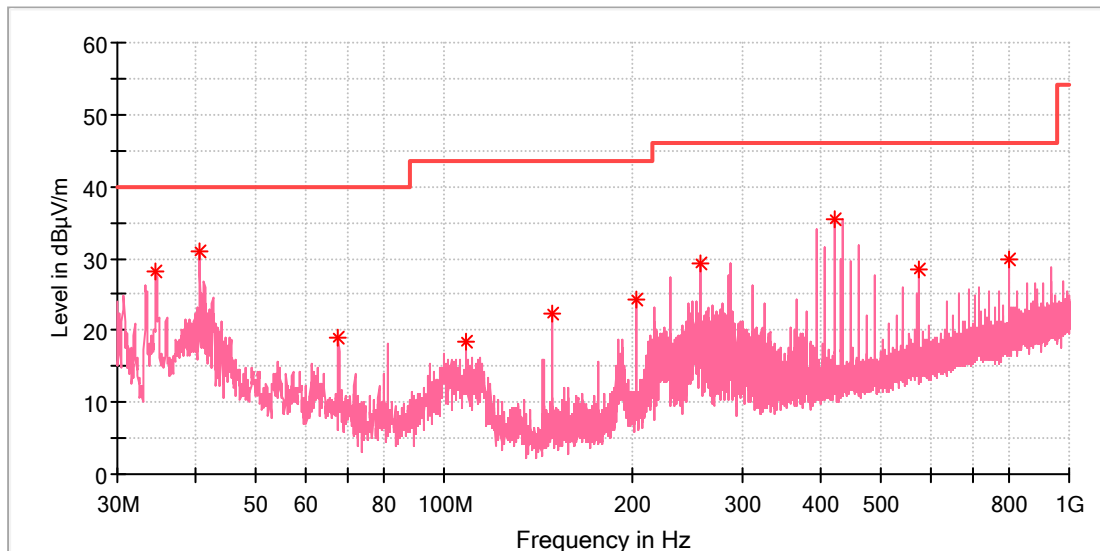
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
40.670000	23.45	40.00	16.55	100.0	H	93.0	-20.0
149.148333	28.92	43.50	14.58	100.0	H	287.0	-22.3
176.254444	31.34	43.50	12.16	100.0	H	241.0	-20.9
203.414444	34.63	43.50	8.87	100.0	H	211.0	-19.0
216.940556	40.91	46.00	5.09	100.0	H	324.0	-18.7
257.626667	37.49	46.00	8.51	100.0	H	295.0	-17.2
288.020000	36.99	46.00	9.01	100.0	H	241.0	-16.6
420.371111	44.54	46.00	1.46	100.0	H	0.0	-13.2
515.323333	34.54	46.00	11.46	100.0	H	161.0	-11.6
664.487778	33.09	46.00	12.91	100.0	H	339.0	-8.6
800.072222	34.64	46.00	11.36	100.0	H	31.0	-6.2

Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
420.365444	43.58	46.00	2.42	100.0	H	-5.0	-13.2

EUT Information

EUT Name: Smart lock
Model: 1507-R
Test Mode: 13.56MHz
Order No/Sample No: 27220691/A004206636-001
Test Voltage: DC 12V From DC Source
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.225
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)
34.634444	28.26	40.00	11.74	100.0	V	308.0	-22.1
40.670000	31.03	40.00	8.97	100.0	V	23.0	-20.0
67.776111	18.94	40.00	21.06	100.0	V	235.0	-21.2
108.462222	18.54	43.50	24.96	100.0	V	314.0	-19.1
149.148333	22.26	43.50	21.24	100.0	V	94.0	-22.3
203.414444	24.17	43.50	19.33	100.0	V	235.0	-19.0
257.626667	29.28	46.00	16.72	100.0	V	314.0	-17.2
420.371111	35.51	46.00	10.50	100.0	V	248.0	-13.2
576.056111	28.38	46.00	17.62	100.0	V	101.0	-10.2
800.072222	29.94	46.00	16.06	100.0	V	87.0	-6.2

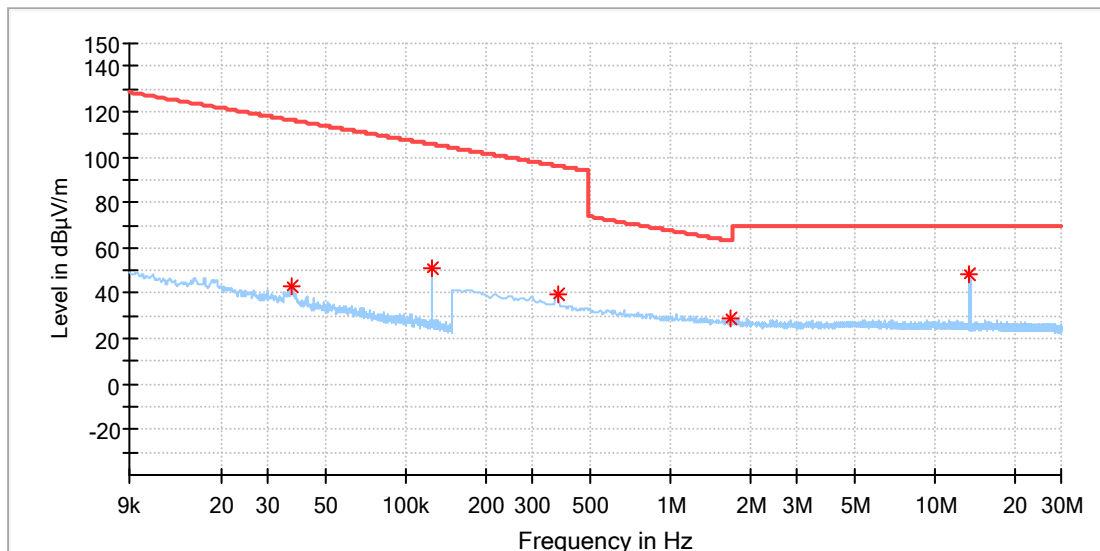
Final Result

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

EUT Information

EUT Name:	Smart lock
Model:	1507-R
Test Mode:	Standby
Order No/Sample No:	27220691/A004206636-001
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:53%
Test Standard:	FCC 15.225
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

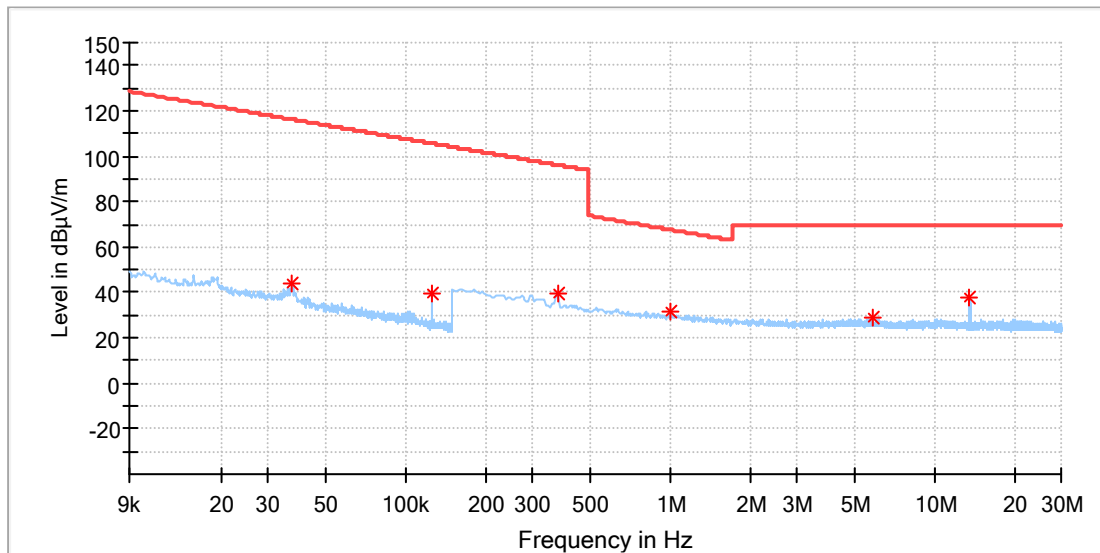
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.036898	42.80	116.25	73.45	100.0	X	273.0	19.9
0.124620	50.92	105.69	54.77	100.0	X	122.0	19.9
0.373875	39.69	96.15	56.45	100.0	X	233.0	19.9
1.686397	29.14	63.10	33.95	100.0	X	57.0	20.0
13.560552	48.43	69.50	21.07	100.0	X	82.0	20.3

Final Result

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

EUT Name: Smart lock
Model: 1507-R
Test Mode: Standby
Order No/Sample No: 27220691/A004206636-001
Test Voltage: DC 12V From DC Source
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.225
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

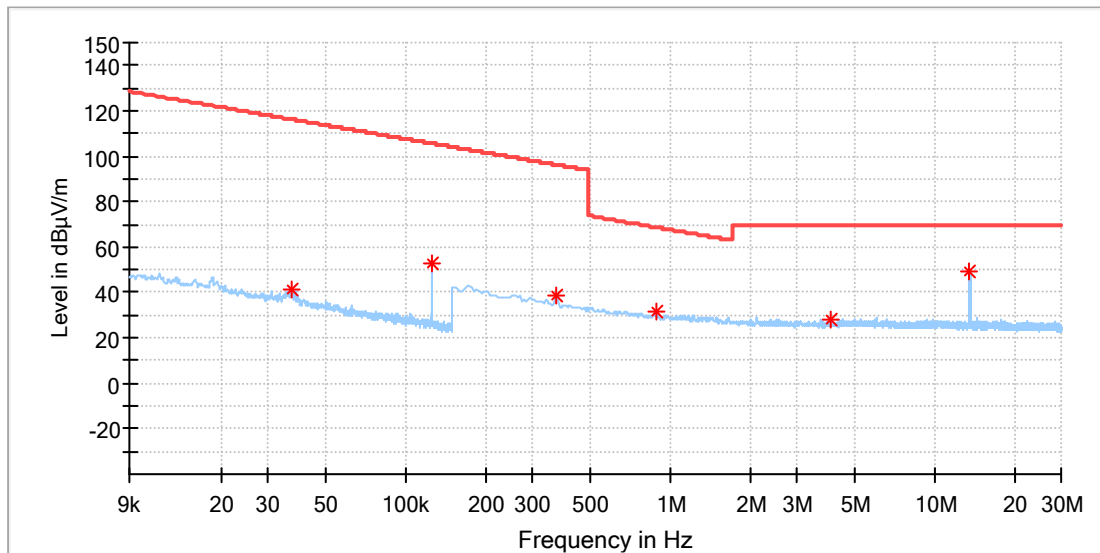
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.036999	43.90	116.23	72.33	100.0	Y	263.0	19.9
0.124620	39.29	105.69	66.40	100.0	Y	235.0	19.9
0.373875	39.53	96.15	56.62	100.0	Y	271.0	19.9
1.001603	31.16	67.61	36.45	100.0	Y	325.0	19.9
5.839059	29.29	69.50	40.21	100.0	Y	203.0	20.1
13.560552	37.56	69.50	31.94	100.0	Y	163.0	20.3

Final Result

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

EUT Name: Smart lock
Model: 1507-R
Test Mode: Standby
Order No/Sample No: 27220691/A004206636-001
Test Voltage: DC 12V From DC Source
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.225
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

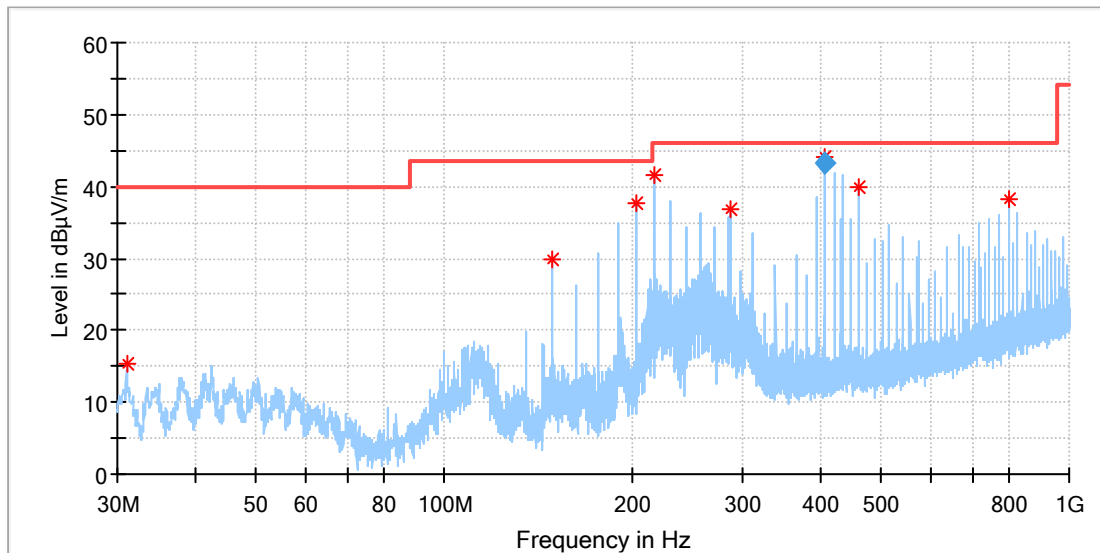
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.036797	41.59	116.28	74.68	100.0	Z	72.0	19.9
0.124519	52.71	105.69	52.98	100.0	Z	241.0	19.9
0.369485	38.27	96.25	57.98	100.0	Z	56.0	19.9
0.883081	31.28	68.70	37.42	100.0	Z	6.0	19.9
4.065618	28.07	69.50	41.43	100.0	Z	144.0	20.1
13.560552	49.31	69.50	20.19	100.0	Z	288.0	20.3

Final Result

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

EUT Name: Smart lock
Model: 1507-R
Test Mode: Standby
Order No/Sample No: 27220691/A004206636-001
Test Voltage: DC 12V From DC Source
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.225
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

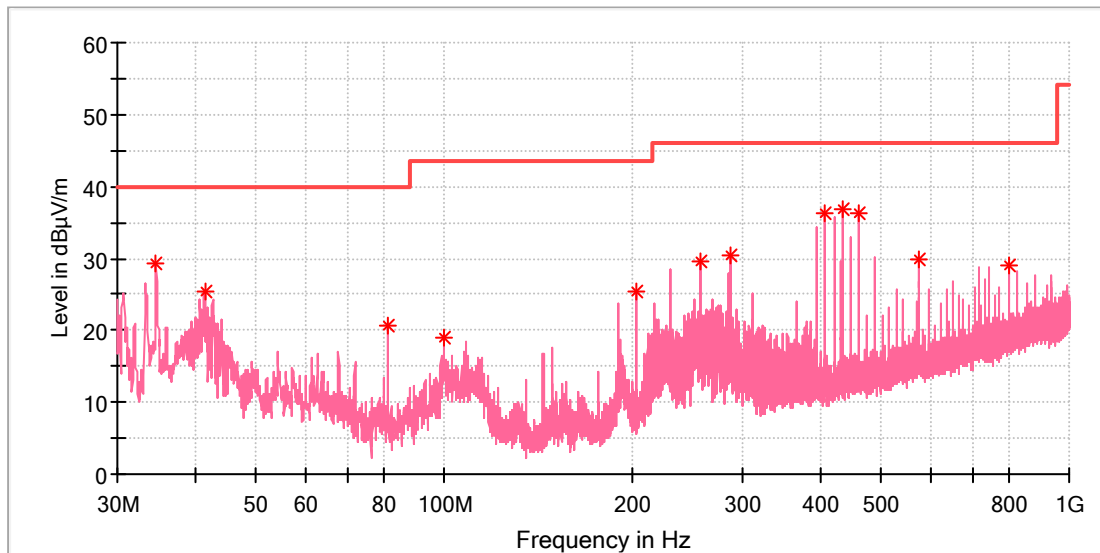
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
31.023889	15.38	40.00	24.62	100.0	H	283.0	-22.9
149.148333	29.83	43.50	13.67	100.0	H	283.0	-22.3
203.414444	37.55	43.50	5.95	100.0	H	233.0	-19.0
216.994444	41.69	46.00	4.31	100.0	H	295.0	-18.7
288.020000	36.76	46.00	9.24	100.0	H	240.0	-16.6
406.791111	44.10	46.00	1.90	100.0	H	0.0	-13.6
461.057222	39.96	46.00	6.04	100.0	H	0.0	-12.5
800.072222	38.24	46.00	7.76	100.0	H	139.0	-6.2

Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
406.803167	43.25	46.00	2.75	100.0	H	-5.0	-13.6

EUT Information

EUT Name: Smart lock
Model: 1507-R
Test Mode: Standby
Order No/Sample No: 27220691/A004206636-001
Test Voltage: DC 12V From DC Source
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.225
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)
34.634444	29.33	40.00	10.67	100.0	V	0.0	-22.1
41.370556	25.50	40.00	14.50	100.0	V	351.0	-19.8
81.356111	20.62	40.00	19.38	100.0	V	198.0	-23.3
100.109444	18.86	43.50	24.64	100.0	V	5.0	-19.1
203.414444	25.42	43.50	18.08	100.0	V	272.0	-19.0
257.626667	29.70	46.00	16.30	100.0	V	177.0	-17.2
288.020000	30.28	46.00	15.72	100.0	V	99.0	-16.6
406.791111	36.41	46.00	9.59	100.0	V	183.0	-13.6
433.951111	36.79	46.00	9.21	100.0	V	246.0	-13.1
461.057222	36.31	46.00	9.69	100.0	V	142.0	-12.5
576.056111	29.97	46.00	16.03	100.0	V	107.0	-10.2
800.072222	28.91	46.00	17.09	100.0	V	68.0	-6.2

Final Result

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