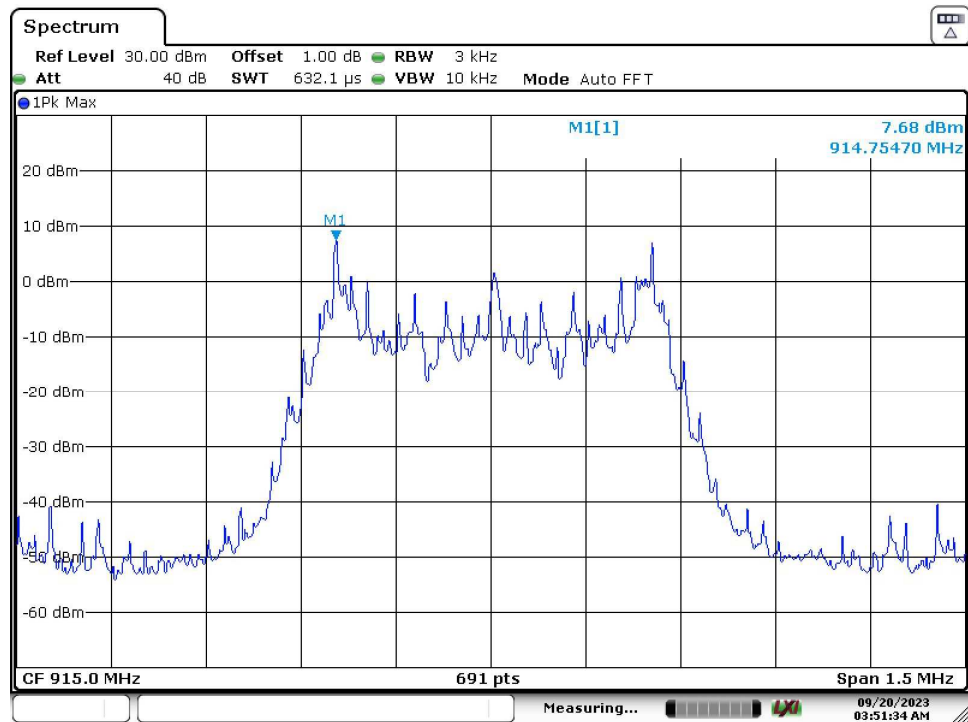


Appendix A: Test Results of 915MHz

APPENDIX A: TEST RESULTS OF 915MHZ	1
APPENDIX A.1: TEST RESULTS OF CONDUCTED POWER SPECTRAL DENSITY	2
APPENDIX A.2: TEST RESULTS OF 6dB BANDWIDTH	3
APPENDIX A.3: TEST RESULTS OF 99% BANDWIDTH	4
APPENDIX A.4: TEST RESULTS OF CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 kHz BANDWIDTH	5
<i>Band Edge</i>	5
<i>Conducted Spurious Emission</i>	6
APPENDIX A.5: TEST RESULTS OF RADIATED SPURIOUS EMISSIONS	7
30 MHz - 1GHz	7
1GHz - 10GHz	9
APPENDIX A.6: TEST RESULTS OF CONDUCTED EMISSION ON AC MAINS	13

Appendix A.1: Test Results of Conducted Power Spectral Density

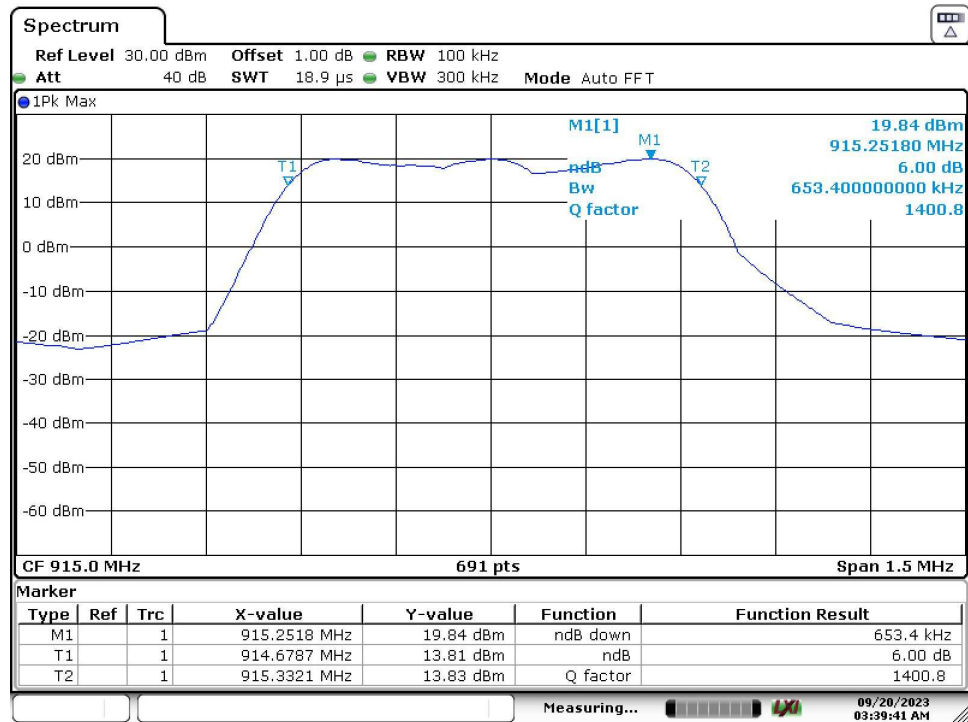
Test Frequency (MHz)	Result [dBm/3-100kHz]	Limit [dBm/3kHz]	Verdict
915	7.68	≤8.00	PASS



Date: 20.SEP.2023 03:51:34

Appendix A.2: Test Results of 6dB Bandwidth

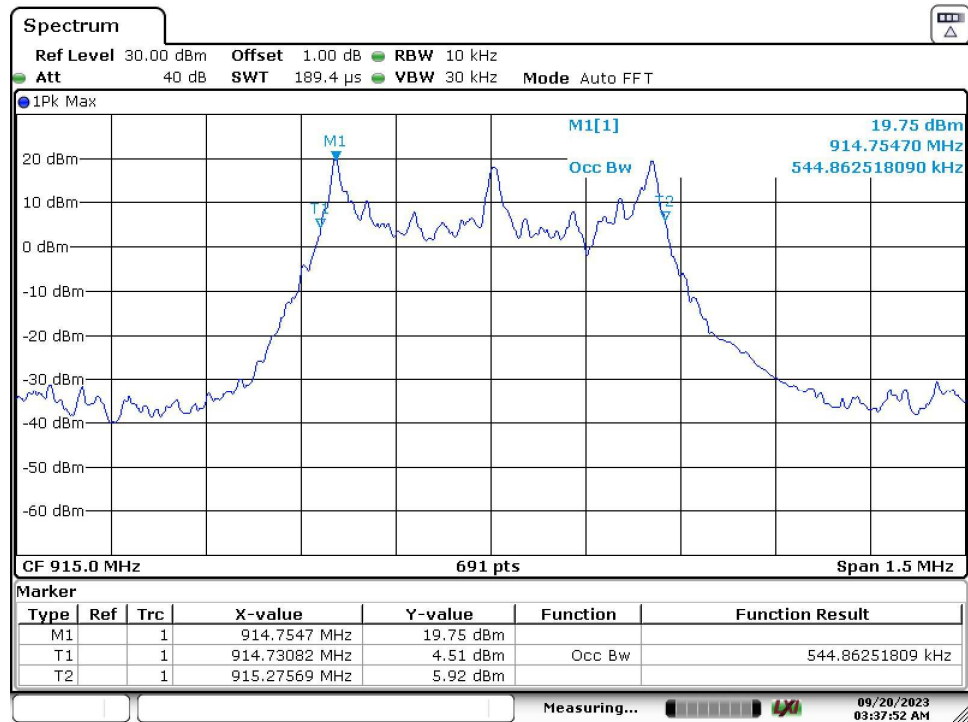
Test Frequency (MHz)	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
915	0.653	914.6787	915.3321	0.5	PASS



Date: 20.SEP.2023 03:39:41

Appendix A.3: Test Results of 99% Bandwidth

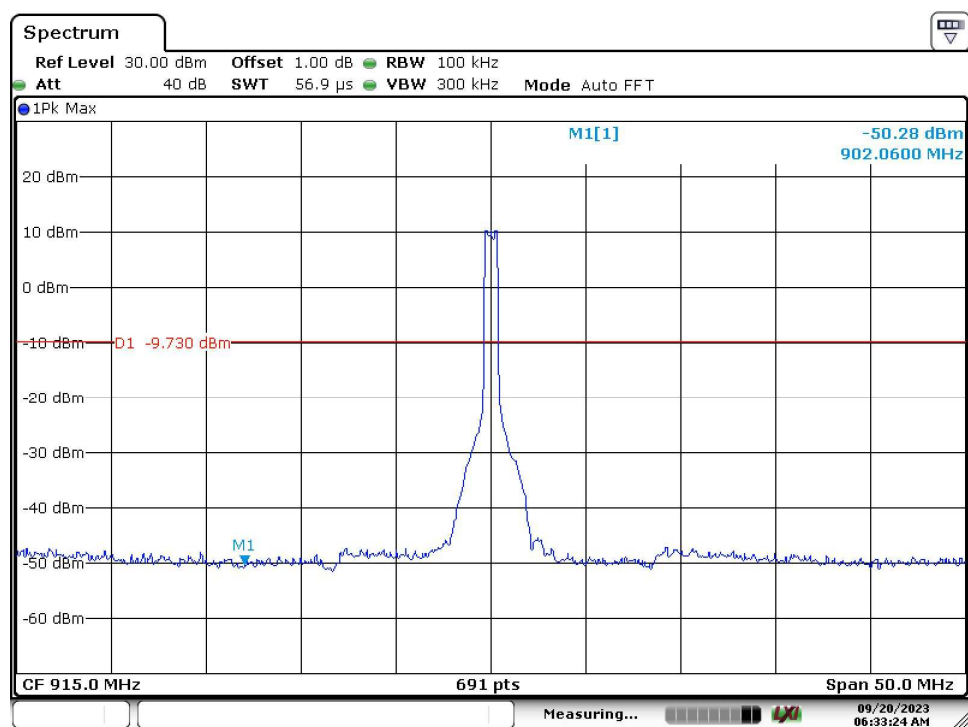
Test Frequency (MHz)	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
915	0.545	914.731	915.276	---	PASS



Date: 20.SEP.2023 03:37:53

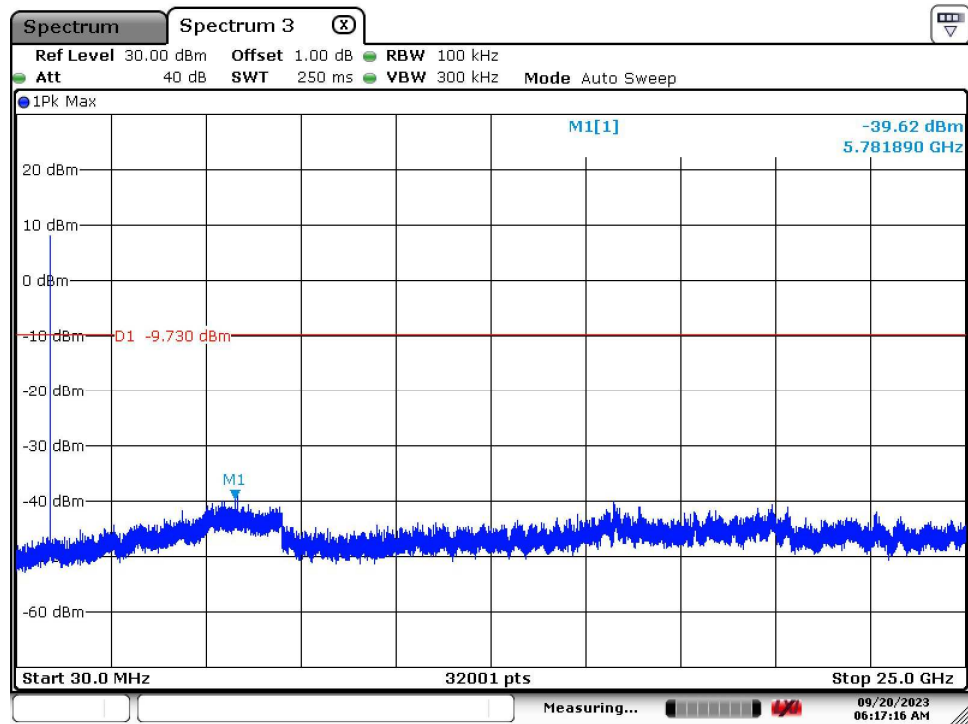
Appendix A.4: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

Band Edge



Date: 20.SEP.2023 06:33:25

Conducted Spurious Emission



Date: 20.SEP.2023 06:17:17



Date: 20.SEP.2023 03:52:55

Appendix A.5: Test Results of Radiated Spurious Emissions

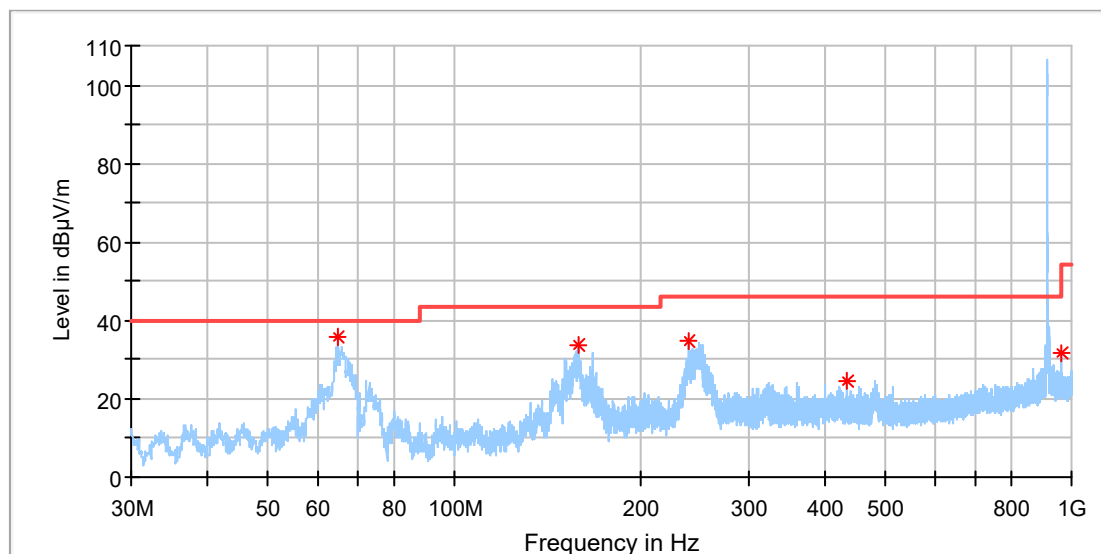
Note:

1. Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and above 10GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 10GHz were reported.
2. The highest waveform in the figure is 915MHz Fundamental.

30 MHz - 1GHz

EUT Information

EUT Name:	Home Communication Unit
Model:	HUB-300
Test Mode:	915MHz
Order No/Sample No:	168443071/A003550494-002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

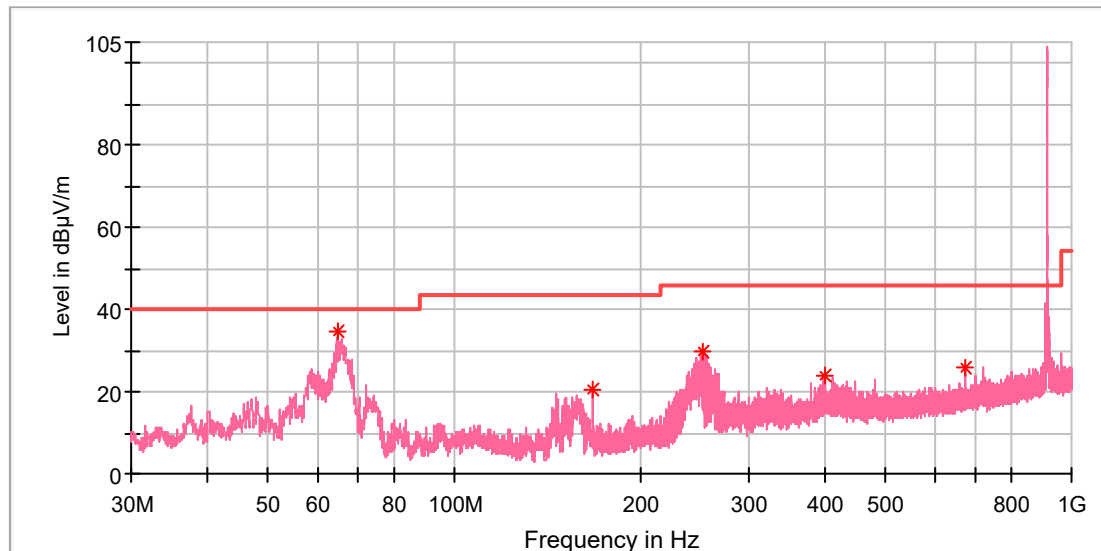
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
64.920000	35.57	40.00	4.43	100.0	H	342.0	-20.4
158.562308	33.86	43.50	9.64	100.0	H	0.0	-22.1
240.005000	35.02	46.00	10.98	100.0	H	160.0	-18.0
432.065000	24.68	46.00	21.32	100.0	H	324.0	-13.6
960.043462	31.60	54.00	22.40	100.0	H	253.0	-4.7

Final_Result

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

EUT Information

EUT Name: Home Communication Unit
Model: HUB-300
Test Mode: 915MHz
Order No/Sample No: 168443071/A003550494-002
Test Voltage: AC 120V/60Hz
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)
64.621539	34.82	40.00	5.18	100.0	V	76.0	-20.3
168.001154	20.73	43.50	22.77	100.0	V	84.0	-21.7
252.913462	30.02	46.00	15.98	100.0	V	52.0	-17.6
399.346154	23.74	46.00	22.26	100.0	V	0.0	-14.1
672.028077	25.78	46.00	20.22	100.0	V	108.0	-8.9

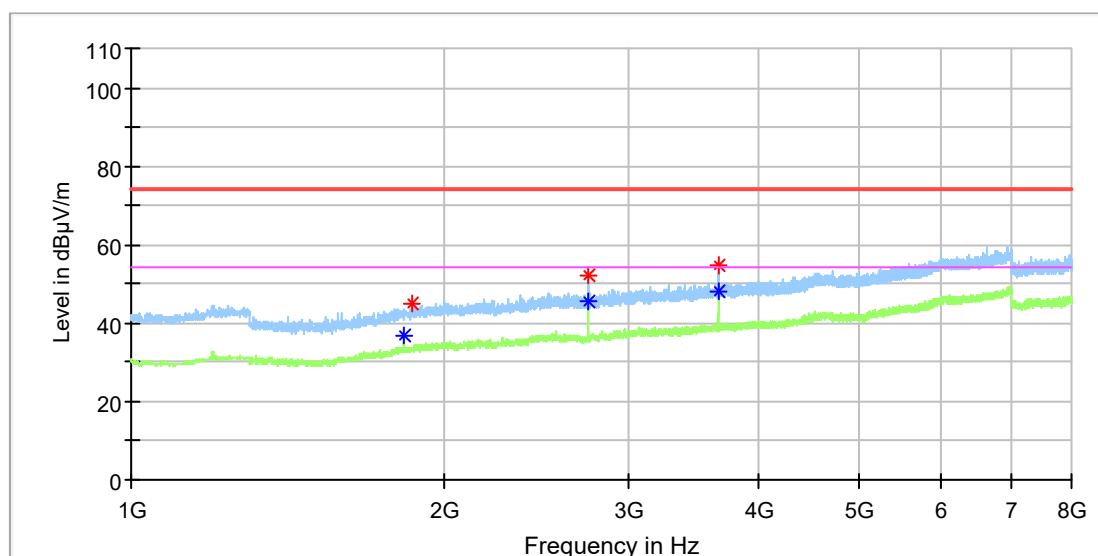
Final Result

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

1GHz - 10GHz

EUT Information

EUT Name:	Home Communication Unit
Model:	HUB-300
Test Mode:	915MHz
Order No/Sample No:	168443071/A003550494-002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

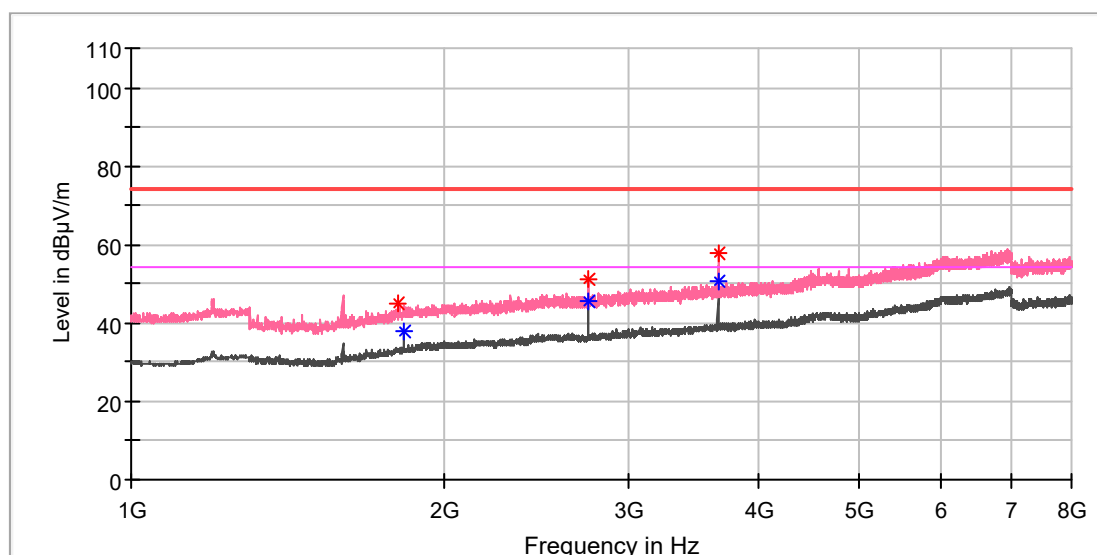
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1829.858333	---	36.82	54.00	17.18	150.0	H	82.0	4.9
1862.800000	44.80	---	74.00	29.20	150.0	H	114.0	5.1
2744.408333	---	45.59	54.00	8.41	150.0	H	1.0	7.8
2745.525000	52.03	---	74.00	21.97	150.0	H	0.0	7.8
3659.516667	54.68	---	74.00	19.32	150.0	H	14.0	9.4
3660.075000	---	48.10	54.00	5.90	150.0	H	265.0	9.4

Final Result

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

EUT Information

EUT Name: Home Communication Unit
Model: HUB-300
Test Mode: 915MHz
Order No/Sample No: 168443071/A003550494-002
Test Voltage: AC 120V/60Hz
Remark: Temp 24 Humi:50%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

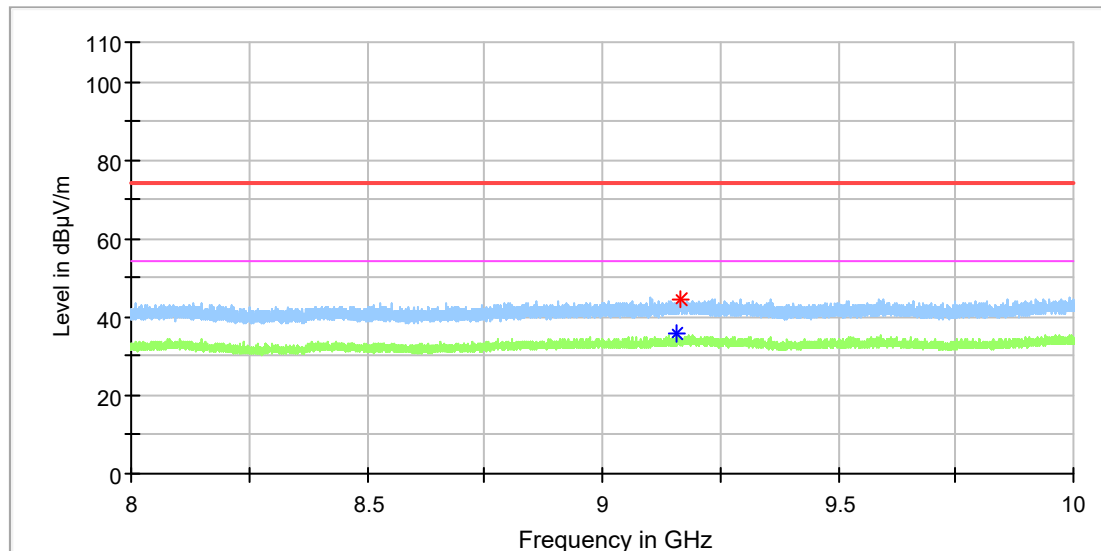
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1805.850000	45.05	---	74.00	28.95	150.0	V	357.0	4.8
1829.858333	---	37.69	54.00	16.31	150.0	V	214.0	4.9
2743.850000	51.07	---	74.00	22.93	150.0	V	224.0	7.8
2744.408333	---	45.42	54.00	8.58	150.0	V	322.0	7.8
3658.958333	---	50.59	54.00	3.41	150.0	V	147.0	9.4
3660.075000	57.83	---	74.00	16.17	150.0	V	157.0	9.4

Final_Result

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

EUT Information

EUT Name: Home Communication Unit
Model: HUB-300
Test Mode: 915MHz
Order No/Sample No: 168443071/A003550494-002
Test Voltage: AC 120V/60Hz
Remark: Temp 24 Humi:50%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

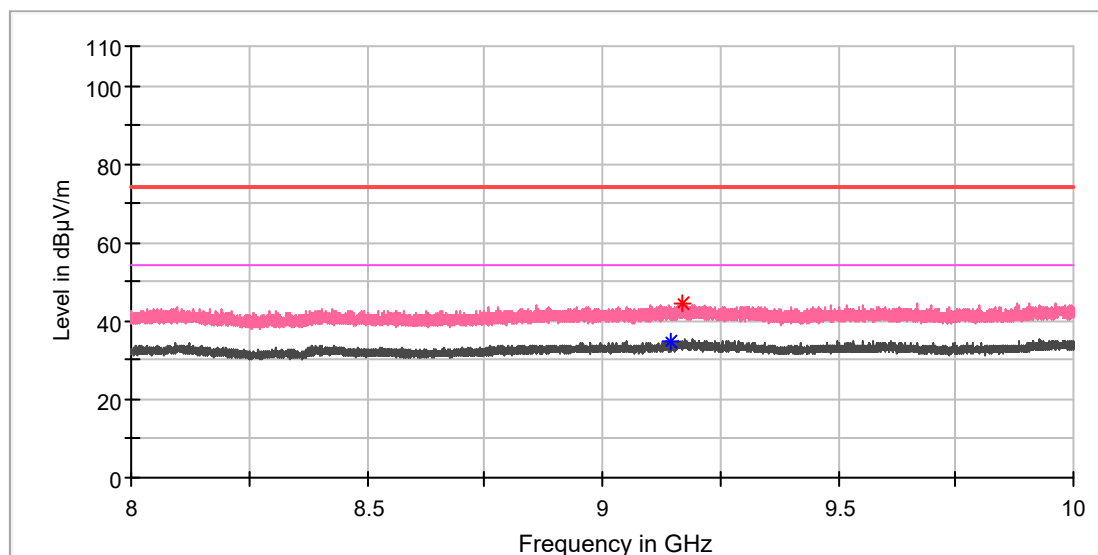
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9157.600000	---	35.68	54.00	18.32	150.0	H	356.0	10.4
9165.200000	44.39	---	74.00	29.61	150.0	H	272.0	10.5

Final Result

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

EUT Information

EUT Name: Home Communication Unit
Model: HUB-300
Test Mode: 915MHz
Order No/Sample No: 168443071/A003550494-002
Test Voltage: AC 120V/60Hz
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)
9143.300000	---	34.78	54.00	19.22	150.0	V	1.0	10.4
9171.500000	44.70	---	74.00	29.30	150.0	V	200.0	10.5

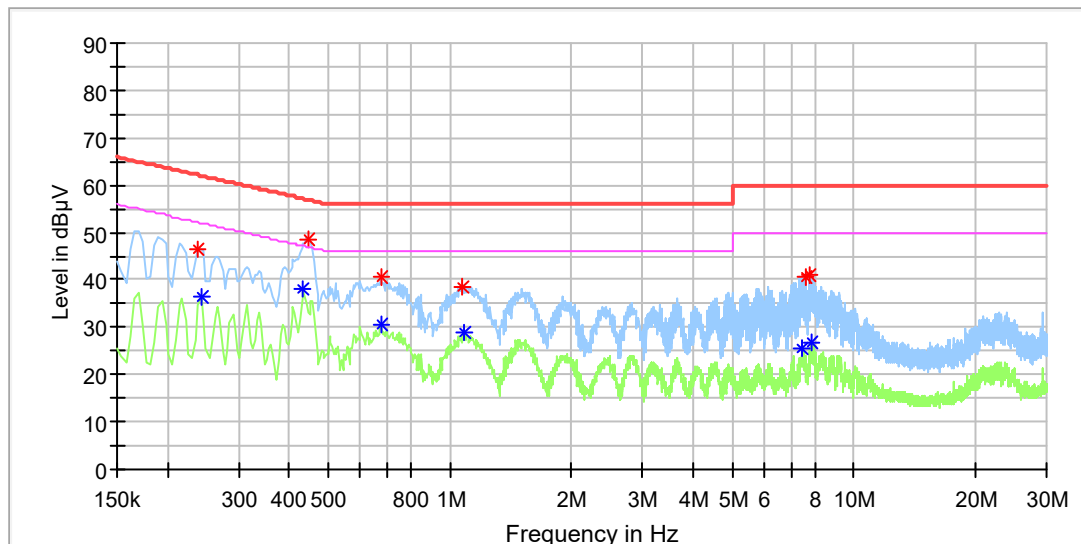
Final_Result

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

Appendix A.6: Test Results of Conducted Emission on AC Mains

EUT Information

EUT Name: Home Communication Unit
Model: HUB-300
Test Mode: 915MHz
Order No/Sample No: 168443071/A003550494-002
Test Voltage: AC 120V/60Hz
Remark: Temp 24 Humi:50%
Test Standard: FCC 15.207
Tested By: Kei Zhang
Reviewed By: Terry Yin

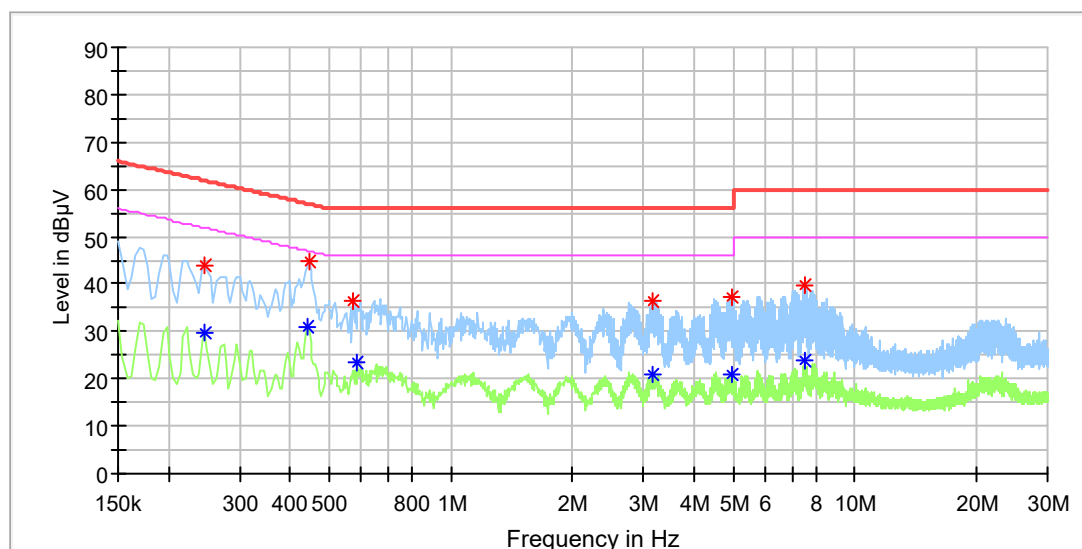


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.238000	46.33	---	62.17	15.83	L1	9.8
0.242000	---	36.58	52.03	15.45	L1	9.8
0.434000	---	38.26	47.18	8.91	L1	9.9
0.446000	48.67	---	56.95	8.28	L1	9.9
0.676000	---	30.59	46.00	15.41	L1	9.8
0.676000	40.54	---	56.00	15.46	L1	9.8
1.080000	38.37	---	56.00	17.63	L1	9.7
1.092000	---	28.80	46.00	17.20	L1	9.7
7.456000	---	25.60	50.00	24.40	L1	9.9
7.568000	40.42	---	60.00	19.58	L1	9.9
7.804000	40.84	---	60.00	19.16	L1	9.9
7.892000	---	26.73	50.00	23.27	L1	9.9

EUT Information

EUT Name: Home Communication Unit
Model: HUB-300
Test Mode: 915MHz
Order No/Sample No: 168443071/A003550494-002
Test Voltage: AC 120V/60Hz
Remark: Temp 24 Humi:50%
Test Standard: FCC 15.207
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.246000	---	29.62	51.89	22.27	N	9.7
0.246000	44.09	---	61.89	17.81	N	9.7
0.442000	---	31.15	47.02	15.88	N	9.7
0.446000	44.64	---	56.95	12.31	N	9.7
0.572000	36.40	---	56.00	19.60	N	9.7
0.588000	---	23.63	46.00	22.37	N	9.7
3.156000	36.56	---	56.00	19.44	N	10.0
3.164000	---	20.84	46.00	25.16	N	10.0
4.936000	---	21.07	46.00	24.93	N	10.0
4.964000	37.20	---	56.00	18.80	N	10.0
7.520000	---	23.97	50.00	26.03	N	9.9
7.556000	39.63	---	60.00	20.37	N	10.0