

## Appendix B: Test Results of Bluetooth BDR/EDR mode

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**Appendix B.1: Test Results of 99% Bandwidth**

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.89944	2401.549	2402.448	---	PASS
		2441	0.90444	2440.540	2441.444	---	PASS
		2480	0.90073	2479.542	2480.442	---	PASS
3DH5	Ant1	2402	1.2590	2401.358	2402.617	---	PASS
		2441	2.2443	2439.552	2441.797	---	PASS
		2480	1.3308	2479.326	2480.656	---	PASS

DH5\_Ant1\_2402



DH5\_Ant1\_2441



DH5\_Ant1\_2480



3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480



### Appendix B.2: Test Results of 20dB Bandwidth

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.954	2401.517	2402.471	---	PASS
		2441	0.951	2440.517	2441.468	---	PASS
		2480	0.942	2479.529	2480.471	---	PASS
3DH5	Ant1	2402	1.299	2401.340	2402.639	---	PASS
		2441	1.317	2440.322	2441.639	---	PASS
		2480	1.314	2479.322	2480.636	---	PASS

DH5\_Ant1\_2402



DH5\_Ant1\_2441



DH5\_Ant1\_2480



3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480



### Appendix B.3: Test Results of Carrier Frequency Separation

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	Hop	1.116	≥0.954	PASS
3DH5	Ant1	Hop	1.006	≥0.878	PASS





### Appendix B.4: Test Results of Number of Hopping Frequency

TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS



### Appendix B.5: Test Results of Time of Occupancy

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.38	311	0.119	≤0.4	PASS
DH3	Ant1	Hop	1.64	156	0.255	≤0.4	PASS
DH5	Ant1	Hop	2.89	118	0.34	≤0.4	PASS
3DH1	Ant1	Hop	0.39	309	0.12	≤0.4	PASS
3DH3	Ant1	Hop	1.64	158	0.259	≤0.4	PASS
3DH5	Ant1	Hop	2.89	102	0.295	≤0.4	PASS

DH1\_Ant1\_Hop



DH3\_Ant1\_Hop





DH5\_Ant1\_Hop



3DH1\_Ant1\_Hop



3DH3\_Ant1\_Hop





3DH5\_Ant1\_Hop



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

#### Conducted Spurious Emission

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	4.98	4.98	---	PASS
			30~1000	4.98	-62.95	≤-15.02	PASS
			1000~26500	4.98	-54.26	≤-15.02	PASS
		2441	Reference	5.38	5.38	---	PASS
			30~1000	5.38	-62.47	≤-14.62	PASS
			1000~26500	5.38	-54.65	≤-14.62	PASS
		2480	Reference	5.59	5.59	---	PASS
			30~1000	5.59	-62.21	≤-14.41	PASS
			1000~26500	5.59	-53.9	≤-14.41	PASS
3DH5	Ant1	2402	Reference	3.02	3.02	---	PASS
			30~1000	3.02	-63.1	≤-16.98	PASS
			1000~26500	3.02	-52.84	≤-16.98	PASS
		2441	Reference	4.10	4.10	---	PASS
			30~1000	4.10	-63.23	≤-15.9	PASS
			1000~26500	4.10	-53.34	≤-15.9	PASS
		2480	Reference	4.78	4.78	---	PASS
			30~1000	4.78	-62.24	≤-15.22	PASS
			1000~26500	4.78	-53.45	≤-15.22	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



Band Edge

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	5.65	-51.06	≤-14.35	PASS
		High	2480	6.11	-50.58	≤-13.89	PASS
		Low	Hop_2402	5.58	-49.98	≤-14.42	PASS
		High	Hop_2480	6.51	-49.84	≤-13.49	PASS
3DH5	Ant1	Low	2402	4.52	-35.52	≤-15.48	PASS
		High	2480	6.78	-45.42	≤-13.22	PASS
		Low	Hop_2402	2.53	-50.13	≤-17.47	PASS
		High	Hop_2480	5.53	-50	≤-14.47	PASS

DH5\_Ant1\_Low\_2402



DH5\_Ant1\_High\_2480



DH5\_Ant1\_Low\_Hop\_2402



DH5\_Ant1\_High\_Hop\_2480



3DH5\_Ant1\_Low\_2402



3DH5\_Ant1\_High\_2480



3DH5\_Ant1\_Low\_Hop\_2402



3DH5\_Ant1\_High\_Hop\_2480





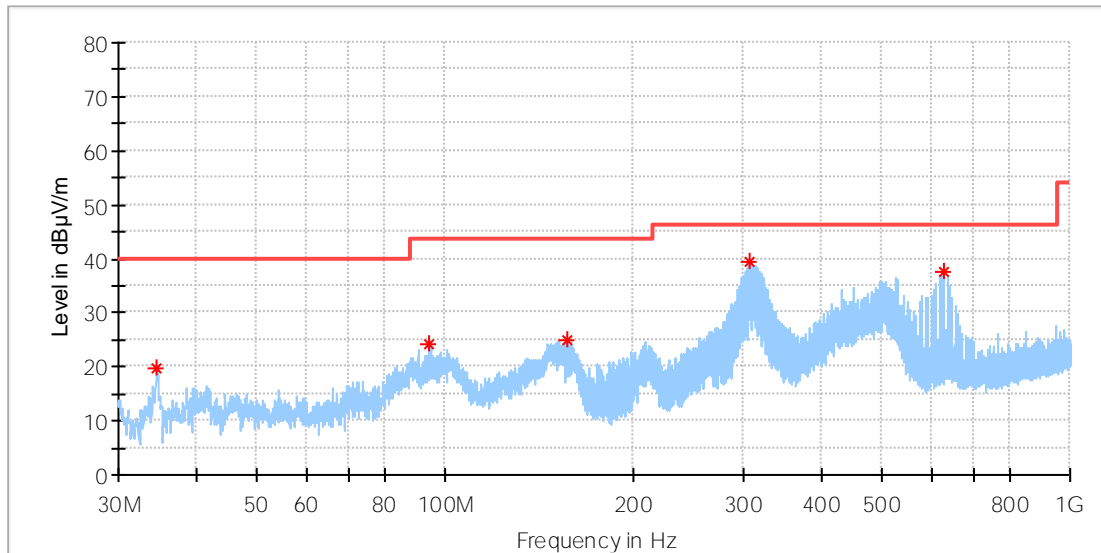
### Appendix B.7: Test Results of Radiated Spurious Emissions

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.

30MHz - 1GHz

### EUT Information

EUT Name:	ELAN 12" Touch Panel User Interface
Model:	ITP-12
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168362723/A003230744-008
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
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)
34.588846	19.74	40.00	20.26	100.0	H	238.0	-22.4
94.020000	24.30	43.50	19.20	100.0	H	288.0	-20.3
156.398462	24.91	43.50	18.59	100.0	H	112.0	-22.2
307.308077	39.41	46.00	6.59	100.0	H	161.0	-16.4
629.758462	37.42	46.00	8.58	100.0	H	321.0	-9.7

### Final\_Result

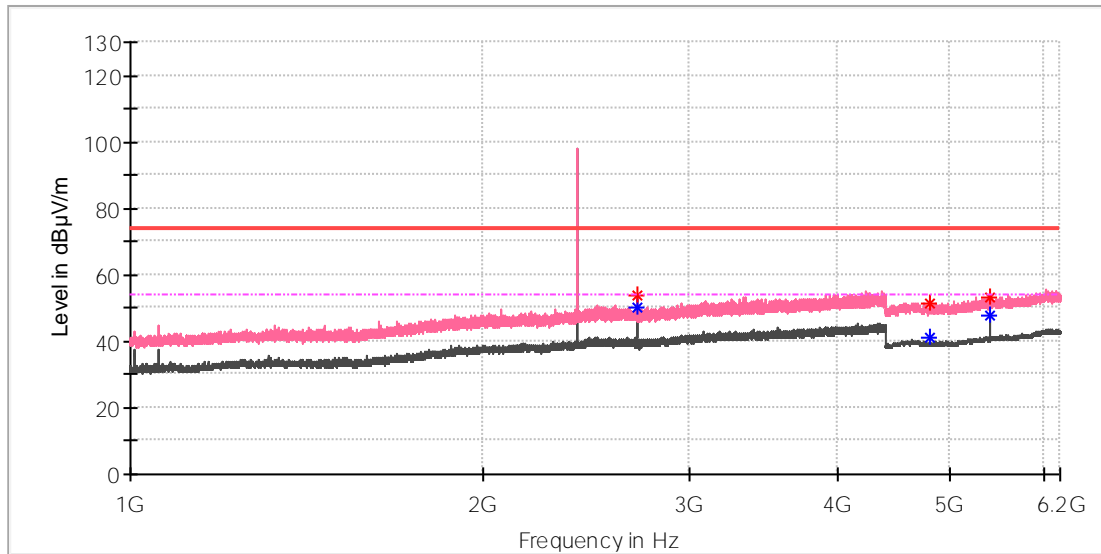
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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### EUT Information

EUT Name: ELAN 12" Touch Panel User Interface  
 Model: ITP-12  
 Test Mode: BR\_DH5\_Low channel  
 Order No/Sample No: 168362723/A003230744-008  
 Test Voltage: 120V/60Hz  
 Remark: Temp 23 Humi:56%  
 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)
2699.660000	53.78	--	74.00	20.22	100.0	V	147.0	7.5
2699.830000	--	50.43	54.00	3.57	100.0	V	147.0	7.5
4804.000000	--	41.09	54.00	12.91	100.0	V	141.0	11.8
4808.000000	51.22	--	74.00	22.78	100.0	V	230.0	11.8
5399.500000	53.51	--	74.00	20.49	100.0	V	148.0	13.5
5400.000000	--	47.60	54.00	6.40	100.0	V	148.0	13.5

### Final\_Result

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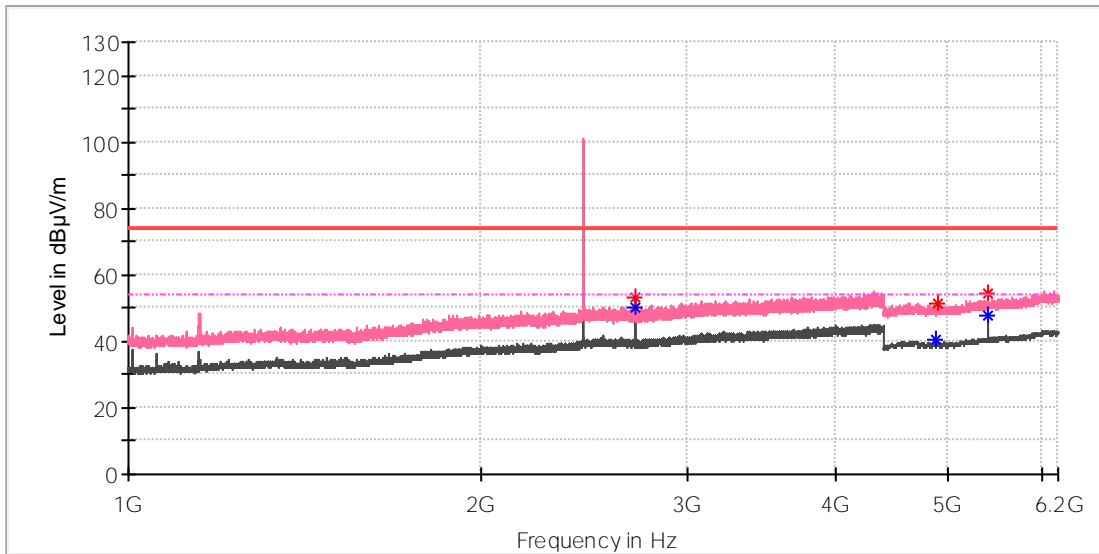






### EUT Information

EUT Name: ELAN 12" Touch Panel User Interface  
 Model: ITP-12  
 Test Mode: BR\_DH5\_Mid channel  
 Order No/Sample No: 168362723/A003230744-008  
 Test Voltage: 120V/60Hz  
 Remark: Temp 23 Humi:56%  
 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)
2700.000000	53.29	--	74.00	20.72	100.0	V	144.0	7.5
2700.340000	--	49.95	54.00	4.05	100.0	V	144.0	7.5
4881.500000	--	40.46	54.00	13.54	100.0	V	149.0	11.8
4905.500000	51.47	--	74.00	22.53	100.0	V	155.0	11.8
5400.000000	54.46	--	74.00	19.54	100.0	V	155.0	13.5
5400.000000	--	47.81	54.00	6.19	100.0	V	155.0	13.5

### Final\_Result

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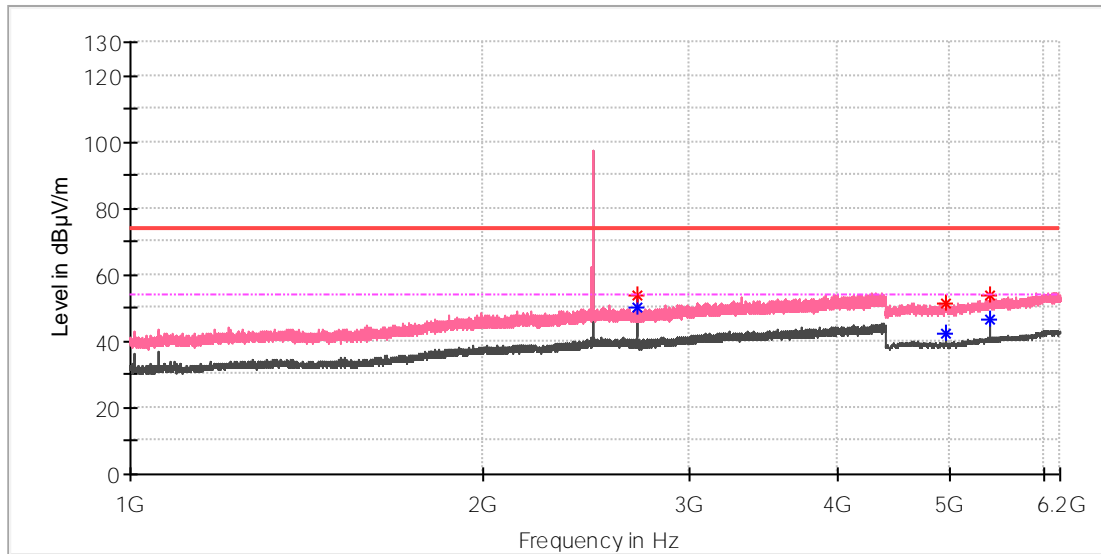






### EUT Information

EUT Name: ELAN 12" Touch Panel User Interface  
 Model: ITP-12  
 Test Mode: BR\_DH5\_High channel  
 Order No/Sample No: 168362723/A003230744-008  
 Test Voltage: 120V/60Hz  
 Remark: Temp 23 Humi:56%  
 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)
2700.000000	--	50.40	54.00	3.60	100.0	V	147.0	7.5
2700.170000	53.75	--	74.00	20.25	100.0	V	147.0	7.5
4960.000000	--	42.50	54.00	11.50	100.0	V	152.0	11.8
4960.500000	51.14	--	74.00	22.86	100.0	V	160.0	11.8
5400.000000	--	46.54	54.00	7.46	100.0	V	152.0	13.5
5400.500000	53.57	--	74.00	20.43	100.0	V	124.0	13.5

### 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 C: Test Results of Bluetooth Low Energy

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### Appendix C.1: Test Results of Conducted Power Spectral Density

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-9.46	≤8.00	PASS
		2440	-9.17	≤8.00	PASS
		2480	-8.93	≤8.00	PASS

BLE\_1M\_Ant1\_2402



BLE\_1M\_Ant1\_2440



BLE\_1M\_Ant1\_2480



Appendix C.2: Test Results of 6dB Bandwidth

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.672	2401.648	2402.320	0.5	PASS
		2440	0.680	2439.656	2440.336	0.5	PASS
		2480	0.684	2479.636	2480.320	0.5	PASS

BLE\_1M\_Ant1\_2402



BLE\_1M\_Ant1\_2440



BLE\_1M\_Ant1\_2480



Appendix C.3: Test Results of 99% Bandwidth

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0614	2401.466	2402.527	---	---
		2440	1.0609	2439.469	2440.530	---	---
		2480	1.0535	2479.465	2480.519	---	---



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

#### Conducted Spurious Emission

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	3.34	3.34	---	PASS
			30~1000	3.34	-63.09	≤-16.66	PASS
			1000~26500	3.34	-52.61	≤-16.66	PASS
		2440	Reference	2.90	2.90	---	PASS
			30~1000	2.90	-62.52	≤-17.1	PASS
			1000~26500	2.90	-52.91	≤-17.1	PASS
		2480	Reference	3.13	3.13	---	PASS
			30~1000	3.13	-62.22	≤-16.87	PASS
			1000~26500	3.13	-53.47	≤-16.87	PASS

BLE\_1M\_Ant1\_2402\_0-Reference



BLE\_1M\_Ant1\_2402\_30~1000



BLE\_1M\_Ant1\_2402\_1000~26500



BLE\_1M\_Ant1\_2440\_0~Reference



BLE\_1M\_Ant1\_2440\_30~1000





BLE\_1M\_Ant1\_2440\_1000~26500



BLE\_1M\_Ant1\_2480\_0~Reference



BLE\_1M\_Ant1\_2480\_30~1000



BLE\_1M\_Ant1\_2480\_1000~26500



Band Edge

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	3.84	-49.6	≤-16.16	PASS
		High	2480	4.30	-48.17	≤-15.7	PASS

BLE\_1M\_Ant1\_Low\_2402



BLE\_1M\_Ant1\_High\_2480

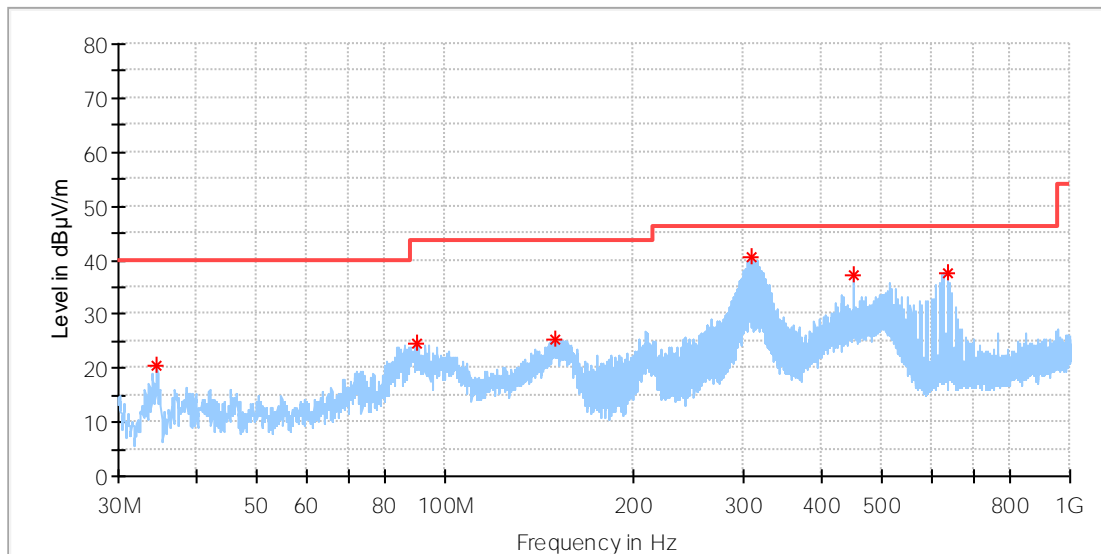


### Appendix C.5: Test Results of Radiated Spurious Emissions

Note: 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:	ELAN 12" Touch Panel User Interface
Model:	ITP-12
Test Mode:	BLE_Mid channel
Order No/Sample No:	168362723/A003230744-008
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



#### Critical\_Freqs

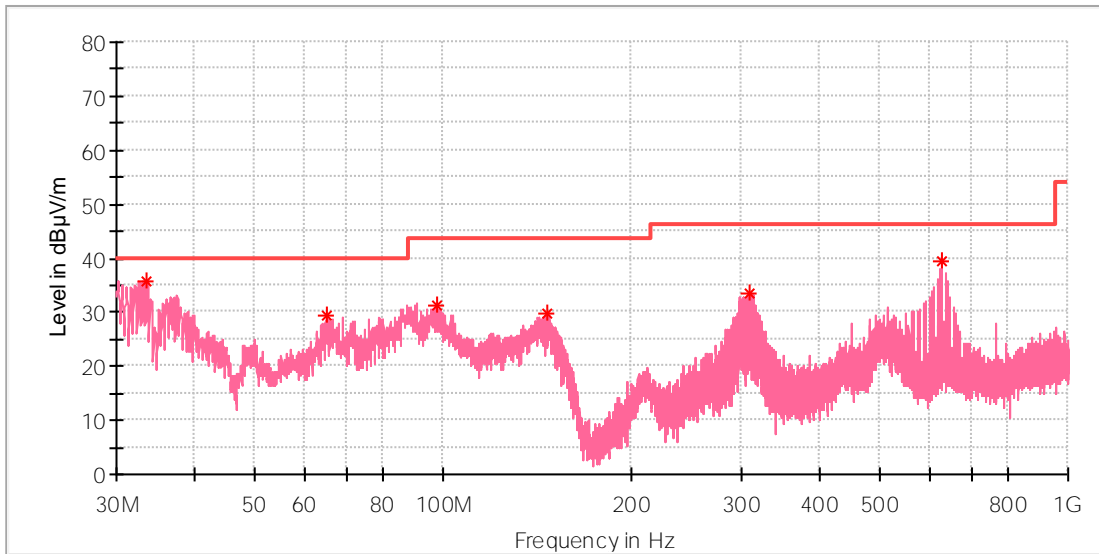
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
34.551539	20.64	40.00	19.36	100.0	H	179.0	-22.4
90.401154	24.52	43.50	18.98	100.0	H	49.0	-21.2
149.906923	25.42	43.50	18.08	100.0	H	258.0	-22.5
309.509231	40.52	46.00	5.48	100.0	H	13.0	-16.4
450.010000	37.29	46.00	8.71	100.0	H	304.0	-13.3
635.914231	37.74	46.00	8.26	100.0	H	327.0	-9.6

#### 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: ELAN 12" Touch Panel User Interface  
 Model: ITP-12  
 Test Mode: BLE\_Mid channel  
 Order No/Sample No: 168362723/A003230744-008  
 Test Voltage: 120V/60Hz  
 Remark: Temp 23 Humi:56%  
 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)
33.618846	35.84	40.00	4.16	100.0	V	0.0	-22.7
65.181154	29.52	40.00	10.48	100.0	V	0.0	-20.5
97.788077	31.37	43.50	12.13	100.0	V	90.0	-19.6
146.661154	29.68	43.50	13.82	100.0	V	0.0	-22.6
309.546539	33.48	46.00	12.52	100.0	V	13.0	-16.4
629.758462	39.55	46.00	6.45	100.0	V	71.0	-9.7

### Final\_Result

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

























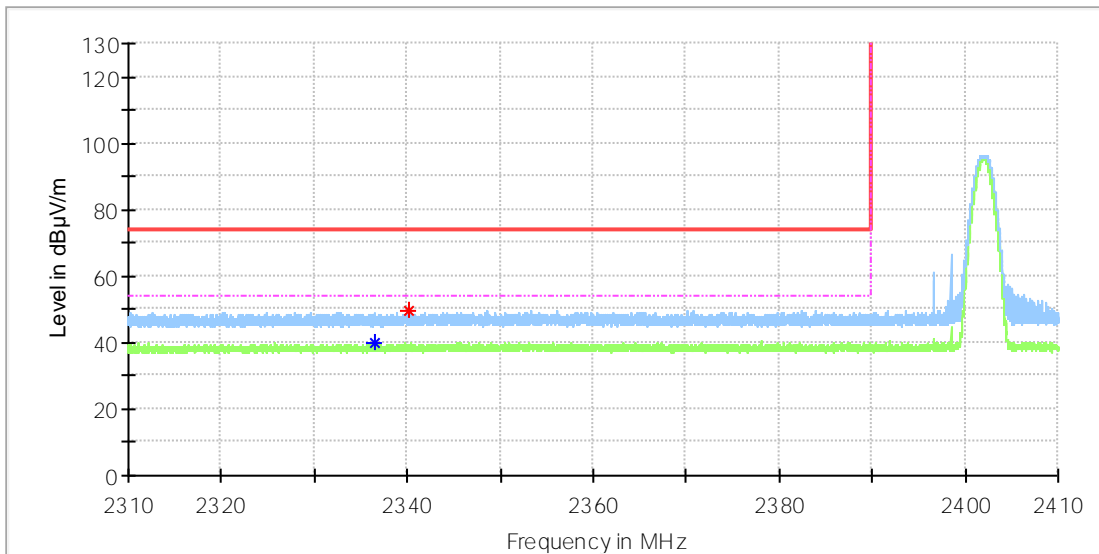




### Appendix C.6: Test Results of Radiated Emissions in Restricted Bands

#### EUT Information

EUT Name:	ELAN 12" Touch Panel User Interface
Model:	ITP-12
Test Mode:	BLE_Low channel
Order No/Sample No:	168362723/A003230744-008
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
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)
2336.600000	--	39.89	54.00	14.11	100.0	H	248.0	6.8
2340.210000	49.66	--	74.00	24.34	100.0	H	0.0	6.8

#### 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 D: Test Results of FCC PART 15B & ICES-003

<b>APPENDIX D: TEST RESULTS OF FCC 15B &amp; ICES-003</b> .....	<b>1</b>
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<i>Bluetooth connection</i> .....	4
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<i>Wi-fi connection with Camera and Trumpet on</i> .....	6
<i>Bluetooth connection</i> .....	8

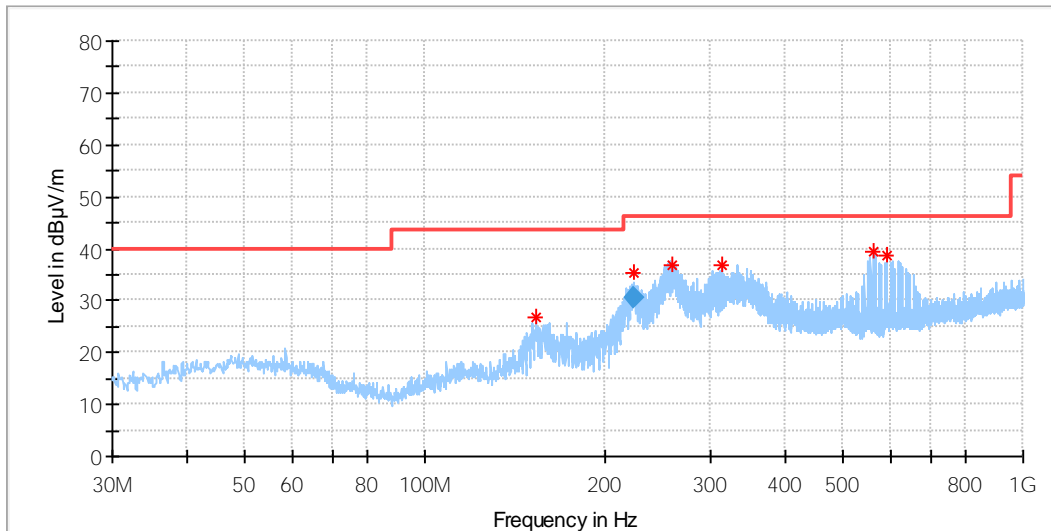
### Appendix D.1: Test Plots of Radiated Emission, Below 1GHz

Note: 1. The following illustration shows the limit that meet the FCC requirements, and these measured value also comply with IC requirements. 2. This testing was carried out on all operation modes, but only the worst case was presented in this report.

Wi-fi connection with Camera and Trumpet on

### EUT Information

EUT Name: ELAN 12" Touch Panel User Interface  
 Order No: 168362723 120  
 Model: ITP-12  
 Test Mode: Wireless communication (wifi)  
 Test Voltage: AC 120V, 60Hz  
 Test By: Kevin Zhou  
 Review By: Gary Chen  
 Tem./Hum./Pressure: 24.7°C/52%/101kPa



### Critical\_Freqs

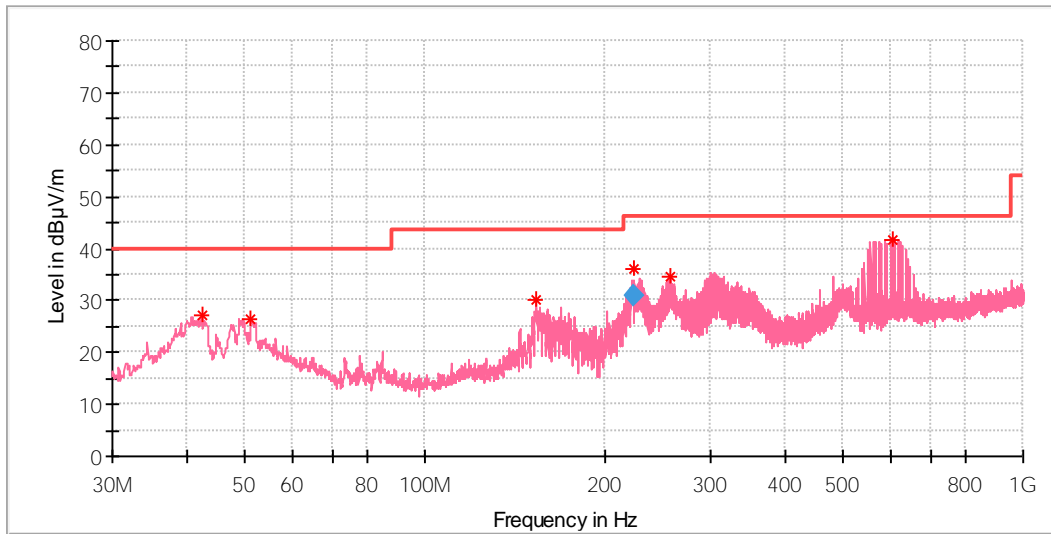
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
153.190000	26.69	43.50	16.81	200.0	H	129.0	21.1
223.495000	35.36	46.00	10.64	100.0	H	149.0	18.7
259.017000	36.90	46.00	9.10	100.0	H	166.0	19.8
314.016000	36.66	46.00	9.34	100.0	H	130.0	21.8
562.142000	39.45	46.00	6.55	200.0	H	256.0	26.5
592.891000	38.76	46.00	7.24	200.0	H	262.0	27.5

### Final\_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
223.495000	30.37	46.00	15.63	1000.0	120.000	100.0	H	149.0	18.7

### EUT Information

EUT Name: ELAN 12" Touch Panel User Interface  
 Order No: 168362723 120  
 Model: ITP-12  
 Test Mode: Wireless communication (wifi)  
 Test Voltage: AC 120V, 60Hz  
 Test By: Kevin Zhou  
 Review By: Gary Chen  
 Tem./Hum./Pressure: 24.7°C/52%/101kPa



### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
42.319000	27.05	40.00	12.95	100.0	V	257.0	20.1
51.146000	26.46	40.00	13.54	100.0	V	252.0	20.8
153.578000	30.24	43.50	13.26	100.0	V	88.0	21.2
223.843000	36.09	46.00	9.91	100.0	V	0.0	18.7
256.883000	34.64	46.00	11.36	200.0	V	91.0	19.6
605.210000	41.86	46.00	4.14	200.0	V	192.0	27.9

### Final Result

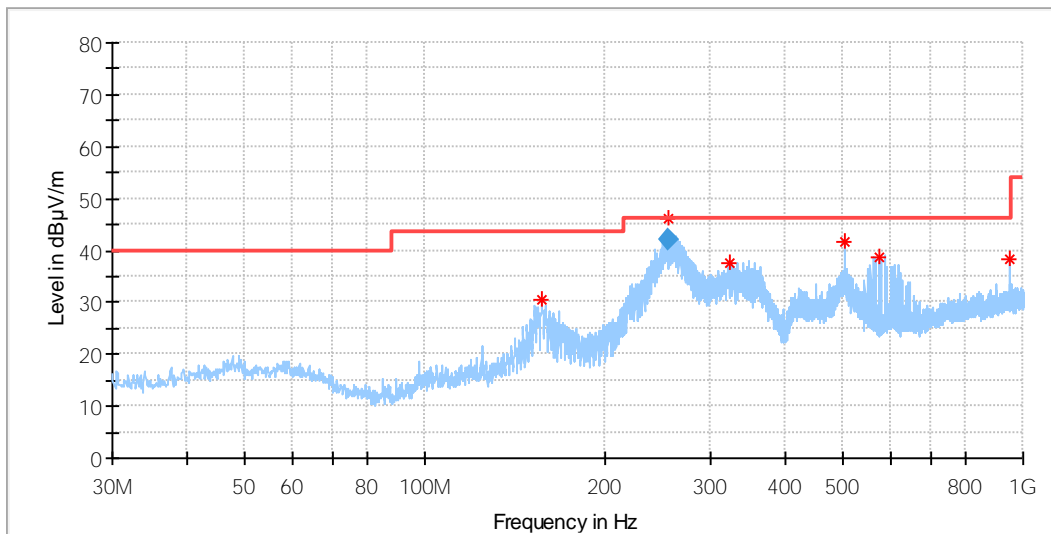
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
223.843000	30.82	46.00	15.18	1000.0	120.000	100.0	V	0.0	18.7



Bluetooth connection

### EUT Information

EUT Name:	ELAN 12" Touch Panel User Interface
Order No:	168362723 120
Model:	ITP-12
Test Mode:	Play music through Bluetooth
Test Voltage:	AC 120V, 60Hz
Test By:	Kevin Zhou
Review By:	Gary Chen
Tem./Hum./Pressure:	24.7°C/52%/101kPa



### Critical\_Freqs

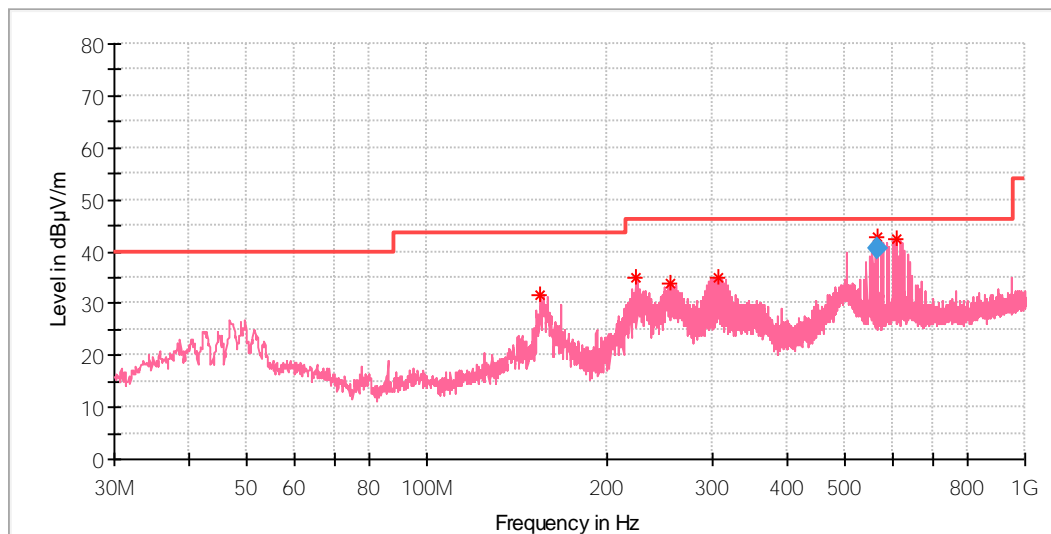
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
156.973000	30.58	43.50	12.92	200.0	H	213.0	21.5
255.739000	46.30	46.00	-0.30	100.0	H	176.0	19.5
323.619000	37.75	46.00	8.25	100.0	H	180.0	21.7
503.942000	41.80	46.00	4.20	200.0	H	37.0	25.6
574.461000	38.60	46.00	7.40	200.0	H	271.0	26.3
951.985000	38.23	46.00	7.77	100.0	H	144.0	32.0

### Final\_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
255.739000	42.08	46.00	3.92	1000.0	120.000	100.0	H	176.0	19.5

## EUT Information

EUT Name: ELAN 12" Touch Panel User Interface  
 Order No: 168362723 120  
 Model: ITP-12  
 Test Mode: Play music through Bluetooth  
 Test Voltage: AC 120V, 60Hz  
 Test By: Kevin Zhou  
 Review By: Gary Chen  
 Tem./Hum./Pressure: 24.7°C/52%/101kPa



## Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
155.033000	31.60	43.50	11.90	100.0	V	28.0	21.4
222.739000	34.94	46.00	11.06	100.0	V	117.0	18.7
255.719000	34.04	46.00	11.96	200.0	V	251.0	19.5
307.420000	34.85	46.00	11.15	200.0	V	134.0	21.4
568.290000	42.88	46.00	3.12	100.0	V	212.0	26.3
611.321000	42.47	46.00	3.53	100.0	V	204.0	27.7

## Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
568.290000	40.58	46.00	5.42	1000.0	120.000	100.0	V	212.0	26.3

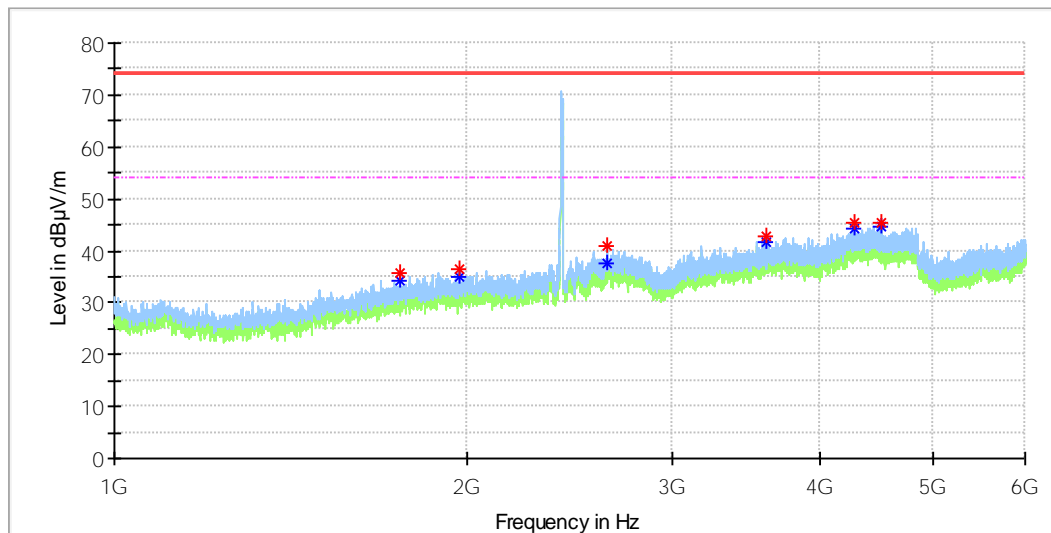
## Appendix D.2: Test Plots of Radiated Emission, Above 1GHz

Note: 1. Testing was carried out within frequency range 30MHz to the 5<sup>th</sup> harmonics. The measurement results above 6GHz were greater than 20dB below the limit, so only record the test result within the 30MHz to 6GHz. 2. The highest waveform in the figure is Fundamental and/or harmonics frequency.

Wi-fi connection with Camera and Trumpet on

### EUT Information

EUT Name:	ELAN 12" Touch Panel User Interface
Order No:	168362723 120
Model:	ITP-12
Test Mode:	Wireless communication (wifi)
Test Voltage:	AC 120V, 60Hz
Test By:	Kevin Zhou
Review By:	Gary Chen
Tem./Hum./Pressure:	24.7°C/52%/101kPa

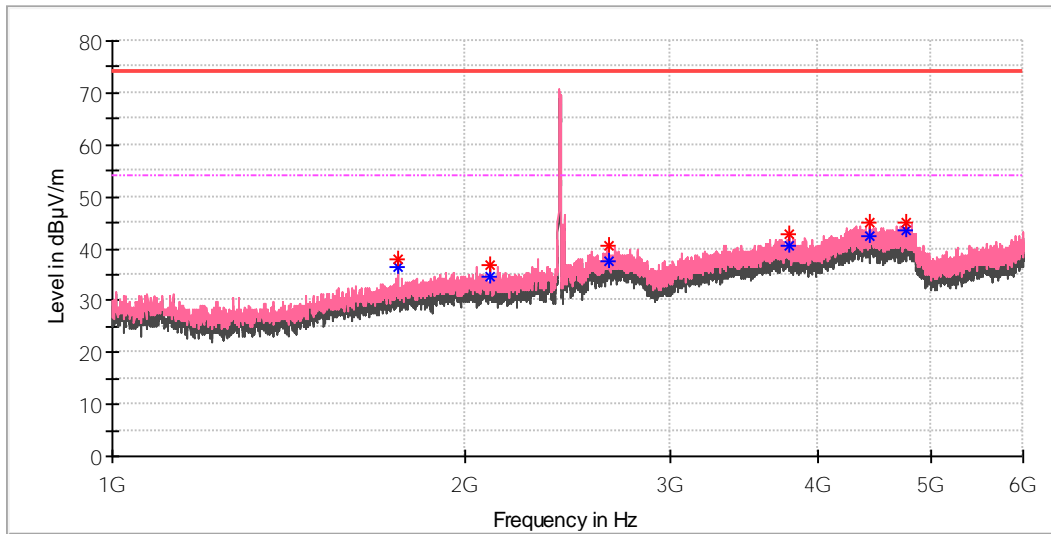


### Critical\_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1752.000000	—	34.30	54.00	19.70	100.0	H	332.0	-8.8
1752.000000	35.82	—	74.00	38.18	100.0	H	332.0	-8.8
1970.000000	36.29	—	74.00	37.71	100.0	H	259.0	-7.6
1970.000000	—	35.00	54.00	19.00	100.0	H	259.0	-7.6
2637.000000	—	37.44	54.00	16.56	100.0	H	105.0	-3.4
2637.000000	40.81	—	74.00	33.19	100.0	H	105.0	-3.4
3602.000000	—	41.63	54.00	12.37	100.0	H	166.0	-0.6
3602.000000	42.95	—	74.00	31.05	100.0	H	166.0	-0.6
4295.500000	45.27	—	74.00	28.73	100.0	H	194.0	2.2
4295.500000	—	44.30	54.00	9.70	100.0	H	194.0	2.2
4520.000000	—	44.63	54.00	9.37	100.0	H	244.0	2.1
4520.000000	45.45	—	74.00	28.55	100.0	H	244.0	2.1

### EUT Information

EUT Name: ELAN 12" Touch Panel User Interface  
 Order No: 168362723 120  
 Model: ITP-12  
 Test Mode: Wireless communication (wifi)  
 Test Voltage: AC 120V, 60Hz  
 Test By: Kevin Zhou  
 Review By: Gary Chen  
 Tem./Hum./Pressure: 24.7°C/52%/101kPa



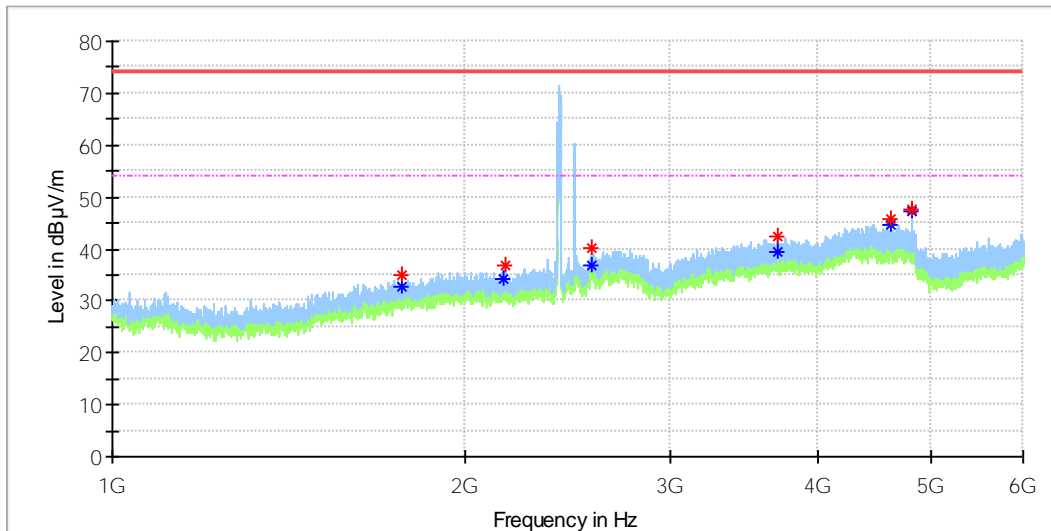
### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1752.000000	---	36.34	54.00	17.66	100.0	V	213.0	-8.8
1752.000000	37.86	---	74.00	36.14	100.0	V	213.0	-8.8
2100.000000	37.02	---	74.00	36.98	100.0	V	228.0	-7.5
2100.500000	---	34.44	54.00	19.56	100.0	V	228.0	-7.5
2656.000000	---	37.57	54.00	16.43	100.0	V	332.0	-3.2
2656.000000	40.48	---	74.00	33.52	100.0	V	332.0	-3.2
3789.000000	---	40.39	54.00	13.61	100.0	V	0.0	0.0
3789.000000	42.76	---	74.00	31.24	100.0	V	0.0	0.0
4443.500000	---	42.33	54.00	11.67	100.0	V	100.0	1.9
4443.500000	45.00	---	74.00	29.00	100.0	V	100.0	1.9
4764.000000	---	43.37	54.00	10.63	100.0	V	68.0	2.9
4764.000000	44.86	---	74.00	29.14	100.0	V	68.0	2.9

Bluetooth connection

### EUT Information

EUT Name:	ELAN 12" Touch Panel User Interface
Order No:	168362723 120
Model:	ITP-12
Test Mode:	Play music through Bluetooth
Test Voltage:	AC 120V, 60Hz
Test By:	Kevin Zhou
Review By:	Gary Chen
Tem./Hum./Pressure:	24.7°C/52%/101kPa

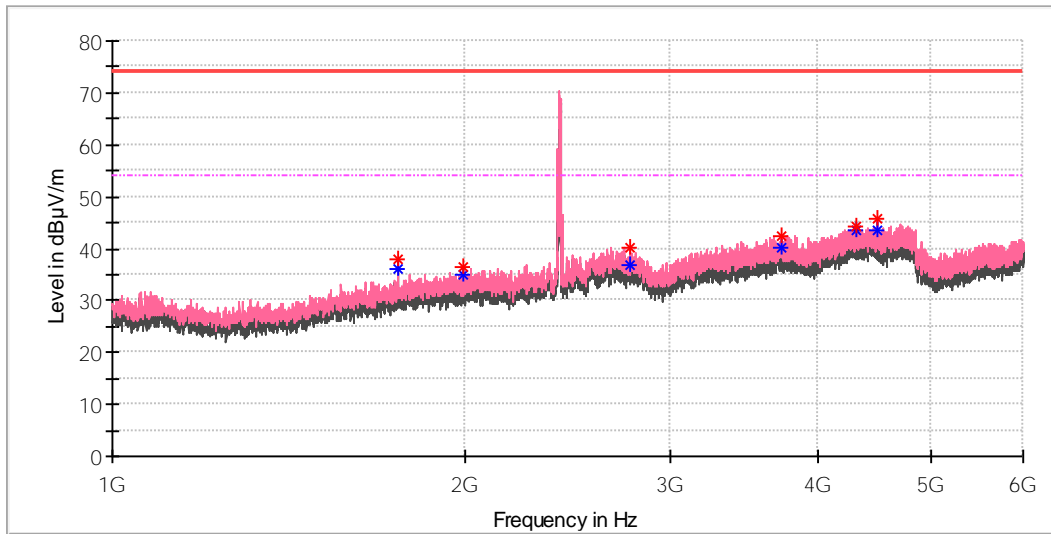


### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1769.500000	—	32.80	54.00	21.20	100.0	H	194.0	-8.7
1769.500000	34.93	—	74.00	39.07	100.0	H	194.0	-8.7
2162.500000	—	34.10	54.00	19.90	100.0	H	346.0	-7.4
2163.000000	36.69	—	74.00	37.31	100.0	H	346.0	-7.4
2571.500000	—	37.00	54.00	17.00	100.0	H	278.0	-3.9
2572.000000	40.08	—	74.00	33.92	100.0	H	189.0	-3.9
3695.500000	—	39.44	54.00	14.56	100.0	H	273.0	0.2
3695.500000	42.49	—	74.00	31.51	100.0	H	273.0	0.2
4627.000000	—	44.74	54.00	9.26	100.0	H	185.0	2.1
4627.000000	45.67	—	74.00	28.33	100.0	H	185.0	2.1
4824.500000	—	47.19	54.00	6.81	100.0	H	166.0	2.0
4824.500000	47.60	—	74.00	26.40	100.0	H	166.0	2.0

### EUT Information

EUT Name: ELAN 12" Touch Panel User Interface  
 Order No: 168362723 120  
 Model: ITP-12  
 Test Mode: Play music through Bluetooth  
 Test Voltage: AC 120V, 60Hz  
 Test By: Kevin Zhou  
 Review By: Gary Chen  
 Tem./Hum./Pressure: 24.7°C/52%/101kPa



### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1752.000000	—	35.99	54.00	18.01	100.0	V	156.0	-8.8
1752.000000	38.01	—	74.00	35.99	100.0	V	156.0	-8.8
1997.000000	—	35.03	54.00	18.97	100.0	V	73.0	-7.4
1997.000000	36.62	—	74.00	37.38	100.0	V	73.0	-7.4
2769.500000	—	36.94	54.00	17.06	100.0	V	288.0	-3.4
2769.500000	40.10	—	74.00	33.90	100.0	V	288.0	-3.4
3730.000000	—	40.16	54.00	13.84	100.0	V	27.0	0.2
3730.000000	42.57	—	74.00	31.43	100.0	V	27.0	0.2
4318.500000	—	43.36	54.00	10.64	100.0	V	346.0	2.2
4318.500000	44.39	—	74.00	29.61	100.0	V	346.0	2.2
4509.500000	—	43.36	54.00	10.64	100.0	V	256.0	2.1
4509.500000	45.93	—	74.00	28.07	100.0	V	256.0	2.1