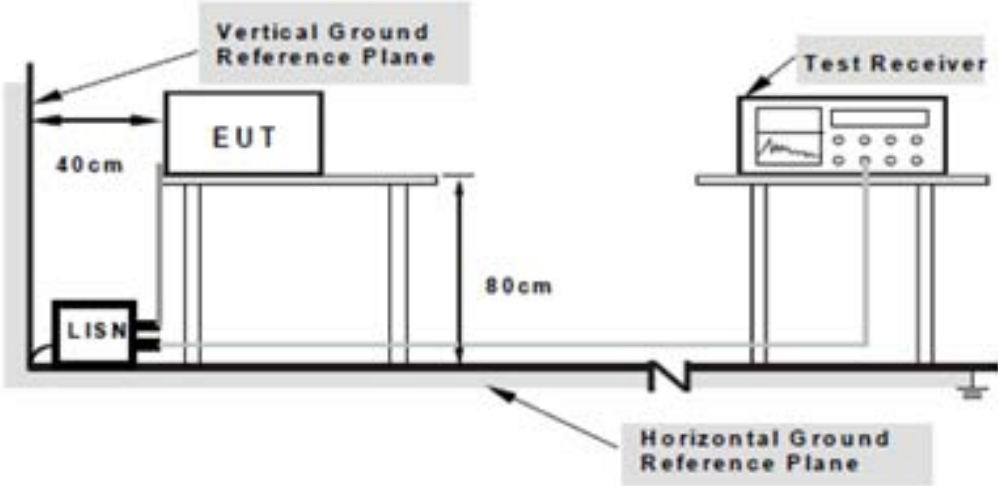


## 6.6 AC Power Line Conducted Emissions

Temperature	28°C
Relative Humidity	54%
Atmospheric Pressure	1021mbar
Test date :	March 29, 2018
Tested By :	Peter Wei

Spec	Item	Requirement	Applicable											
47CFR§15.207	a)	For Low-power radio-frequency devices that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 [mu]H/50 ohms line impedance stabilization network (LISN). The lower limit applies at the boundary between the frequencies ranges.	<div><input checked="" type="checkbox"/></div>											
		Class A Limit												
		<table><tr><th rowspan="2">Frequency ranges (MHz)</th><th colspan="2">Limit (dBµV)</th></tr><tr><th>QP</th><th>Average</th></tr><tr><td>0.15 ~ 0.5</td><td>79</td><td>66</td></tr><tr><td>0.5 ~ 30</td><td>73</td><td>60</td></tr></table>		Frequency ranges (MHz)	Limit (dBµV)		QP	Average	0.15 ~ 0.5	79	66	0.5 ~ 30	73	60
		Frequency ranges (MHz)			Limit (dBµV)									
				QP	Average									
0.15 ~ 0.5	79	66												
0.5 ~ 30	73	60												
Class B Limit														
<table><tr><th rowspan="2">Frequency ranges (MHz)</th><th colspan="2">Limit (dBµV)</th></tr><tr><th>QP</th><th>Average</th></tr><tr><td>0.15 ~ 0.5</td><td>66 – 56</td><td>56 – 46</td></tr><tr><td>0.5 ~ 5</td><td>56</td><td>46</td></tr><tr><td>5 ~ 30</td><td>60</td><td>50</td></tr></table>	Frequency ranges (MHz)	Limit (dBµV)		QP	Average	0.15 ~ 0.5	66 – 56	56 – 46	0.5 ~ 5	56	46	5 ~ 30	60	50
Frequency ranges (MHz)		Limit (dBµV)												
	QP	Average												
0.15 ~ 0.5	66 – 56	56 – 46												
0.5 ~ 5	56	46												
5 ~ 30	60	50												
Test Setup		<div><p><b>Note:</b> 1.Support units were connected to second LISN. 2.Both of LISNs (AMN) are 80cm from EUT and at least 80cm from other units and other metal planes support units.</p></div>												
Procedure		<div><ul style="list-style-type: none"><li>- The EUT and supporting equipment were set up in accordance with the requirements of the standard on top of a 1.5m x 1m x 0.8m high, non-metallic table.</li><li>- The power supply for the EUT was fed through a 50 [mu]H/50 EUT LISN, connected to filtered mains.</li><li>- The RF OUT of the EUT LISN was connected to the EMI test receiver via a low-loss coaxial cable.</li><li>- All other supporting equipment were powered separately from another main supply.</li><li>- The EUT was switched on and allowed to warm up to its normal operating condition.</li><li>- A scan was made on the NEUTRAL line (for AC mains) or Earth line (for DC power) over the required frequency range using an EMI test receiver.</li><li>- High peaks, relative to the limit line, The EMI test receiver was then tuned to the selected frequencies and the necessary measurements made with a receiver bandwidth setting of 10 kHz.</li></ul></div>												

	- Step 7 was then repeated for the LIVE line (for AC mains) or DC line (for DC power).
Remark	
Result	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail

Test Data ☒ Yes ☐ N/A

Test Plot ☒ Yes (See below) ☐ N/A

#### Data sample

No.	Frequency (MHz)	Reading (dBμV)	Detector	Lisn/lisn (dB)	Ps_Lmt (dB)	Cab_L (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)
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Frequency (MHz) = Emission frequency in MHz

Reading (dBμV) = Receiver Reading Value

Detector=Quasi Peak Detector or Average Detector

Lisn/lisn= Insertion loss of LISN

Ps\_Lmt= Insertion loss of transient limiter (The transient limiter included 10dB attenuation)

Cab\_L= cable loss

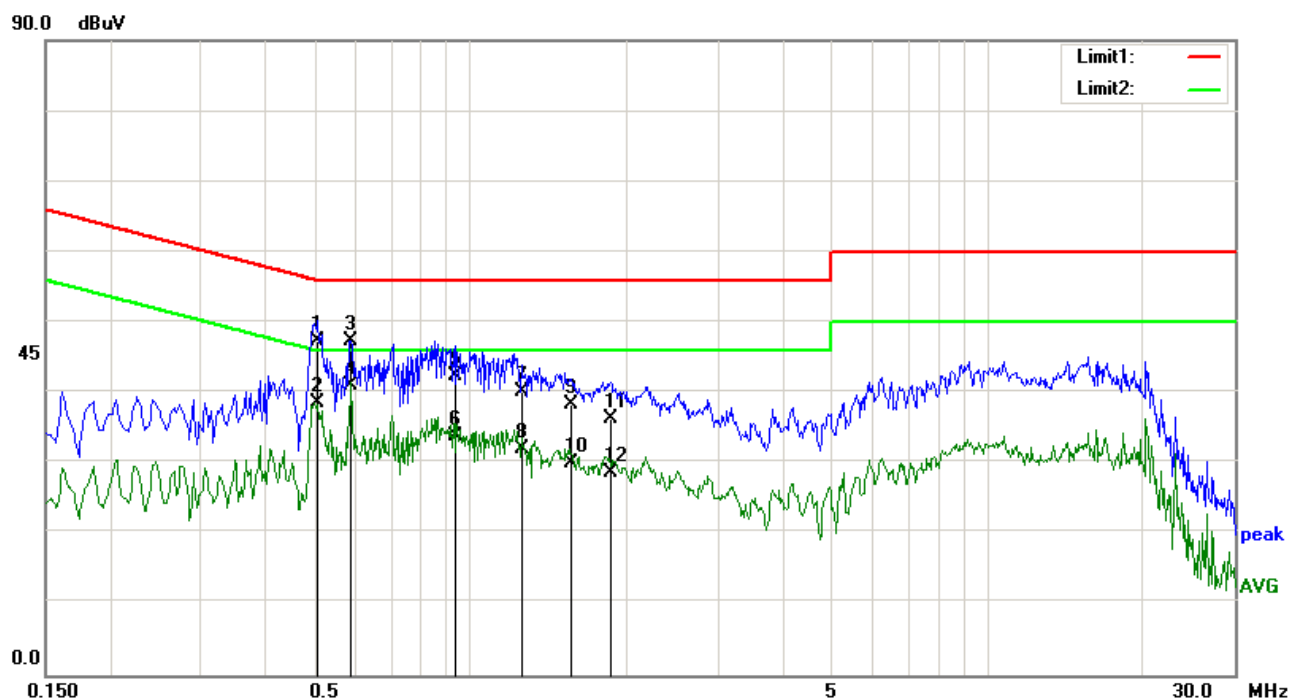
Result (dBμV) = Reading Value + Corrected Value

Limit (dBμV) = Limit stated in standard

#### Calculation Formula:

Margin (dB) = Result (dBμV) – limit (dBμV)

Test Mode(Adapter) : Normal Working Mode

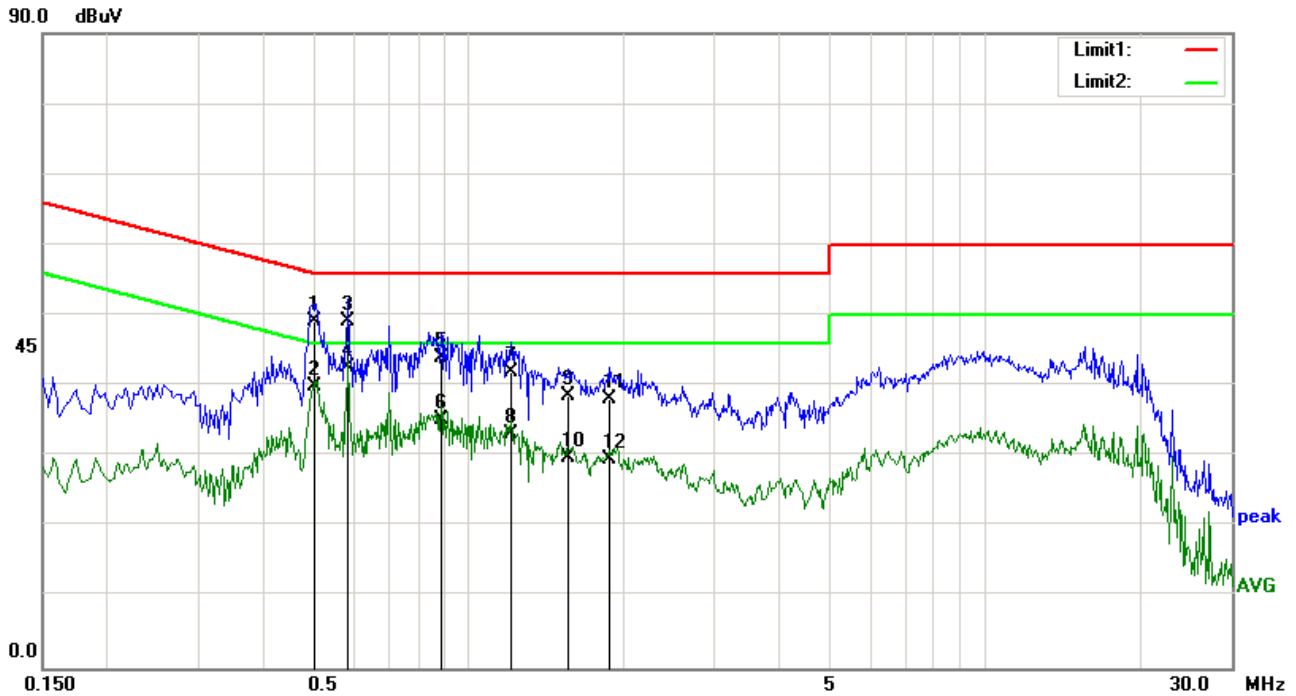


Test Data

Phase Line Plot at 120Vac, 60Hz

No.	Frequency (MHz)	Reading (dB $\mu$ V)	Detector	Lisn/Isn (dB)	Ps_Lmt (dB)	Cab_L (dB)	Result (dB $\mu$ V)	Limit (dB $\mu$ V)	Margin (dB)
1	0.5060	37.07	QP	0.12	-10.00	0.21	47.40	56.00	-8.60
2	0.5060	28.19	AVG	0.12	-10.00	0.21	38.52	46.00	-7.48
3	0.5860	37.03	QP	0.12	-10.00	0.21	47.36	56.00	-8.64
4	0.5860	30.83	AVG	0.12	-10.00	0.21	41.16	46.00	-4.84
5	0.9340	32.13	QP	0.14	-10.00	0.19	42.46	56.00	-13.54
6	0.9340	23.47	AVG	0.14	-10.00	0.19	33.80	46.00	-12.20
7	1.2500	29.91	QP	0.15	-10.00	0.21	40.27	56.00	-15.73
8	1.2500	21.72	AVG	0.15	-10.00	0.21	32.08	46.00	-13.92
9	1.5620	27.95	QP	0.15	-10.00	0.20	38.30	56.00	-17.70
10	1.5620	19.63	AVG	0.15	-10.00	0.20	29.98	46.00	-16.02
11	1.8620	26.00	QP	0.16	-10.00	0.20	36.36	56.00	-19.64
12	1.8620	18.24	AVG	0.16	-10.00	0.20	28.60	46.00	-17.40

Test Mode(Adapter) : Normal Working Mode

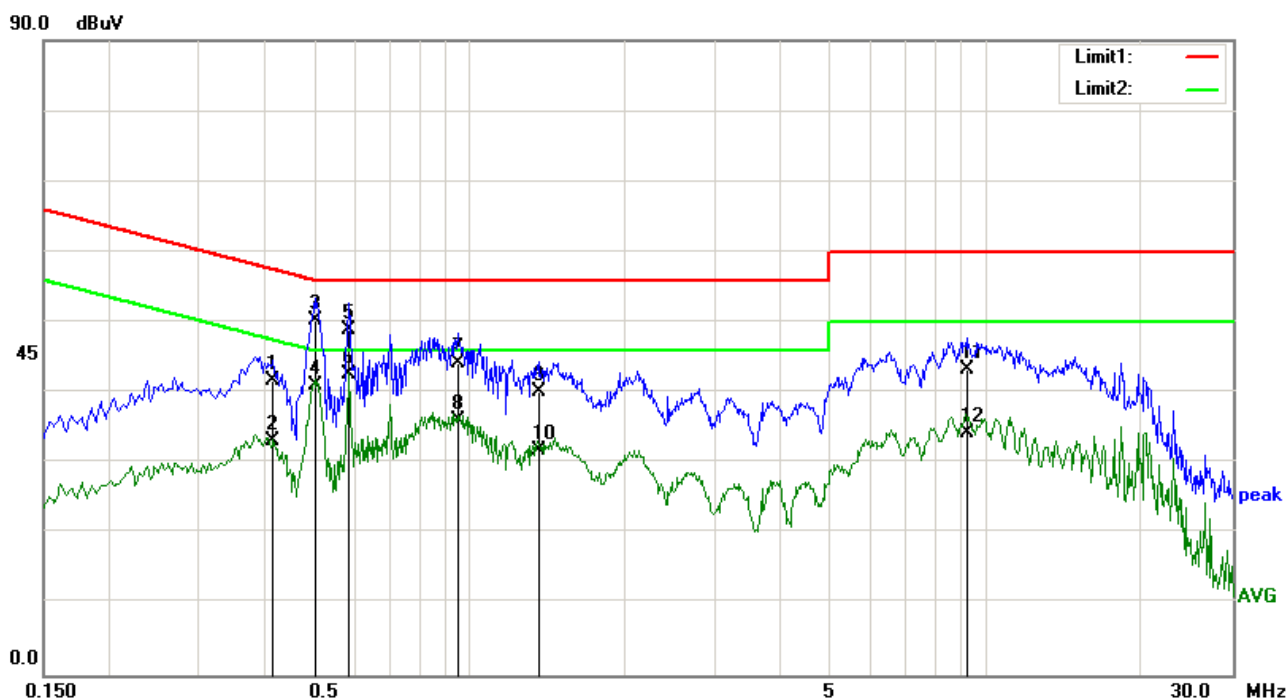


Test Data

Phase Neutral Plot at 120Vac, 60Hz

No.	Frequency (MHz)	Reading (dBμV)	Detector	Lisn/Isn (dB)	Ps_Lmt (dB)	Cab_L (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)
1	0.5020	38.80	QP	0.11	-10.00	0.21	49.12	56.00	-6.88
2	0.5020	29.60	AVG	0.11	-10.00	0.21	39.92	46.00	-6.08
3	0.5860	38.78	QP	0.11	-10.00	0.21	49.10	56.00	-6.90
4	0.5860	32.34	AVG	0.11	-10.00	0.21	42.66	46.00	-3.34
5	0.8860	33.60	QP	0.13	-10.00	0.19	43.92	56.00	-12.08
6	0.8860	24.82	AVG	0.13	-10.00	0.19	35.14	46.00	-10.86
7	1.2100	31.59	QP	0.14	-10.00	0.21	41.94	56.00	-14.06
8	1.2100	22.95	AVG	0.14	-10.00	0.21	33.30	46.00	-12.70
9	1.5660	28.21	QP	0.15	-10.00	0.20	38.56	56.00	-17.44
10	1.5660	19.45	AVG	0.15	-10.00	0.20	29.80	46.00	-16.20
11	1.8740	27.78	QP	0.16	-10.00	0.20	38.14	56.00	-17.86
12	1.8740	19.24	AVG	0.16	-10.00	0.20	29.60	46.00	-16.40

Test Mode(Adapter) : Normal Working Mode

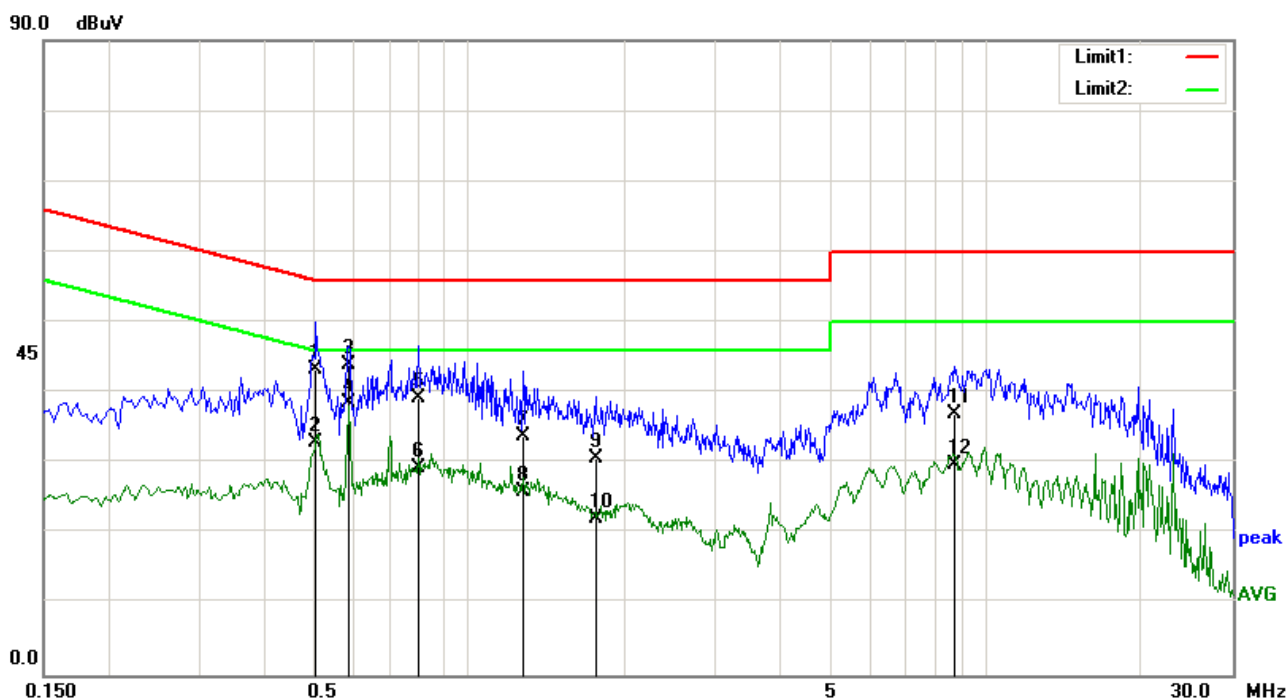


Test Data

Phase Line Plot at 230Vac, 50Hz

No.	Frequency (MHz)	Reading (dBμV)	Detector	Lisn/Isn (dB)	Ps_Lmt (dB)	Cab_L (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)
1	0.4180	31.48	QP	0.11	-10.00	0.21	41.80	57.49	-15.69
2	0.4180	22.96	AVG	0.11	-10.00	0.21	33.28	47.49	-14.21
3	0.5020	40.05	QP	0.12	-10.00	0.21	50.38	56.00	-5.62
4	0.5020	30.69	AVG	0.12	-10.00	0.21	41.02	46.00	-4.98
5	0.5860	38.54	QP	0.12	-10.00	0.21	48.87	56.00	-7.13
6	0.5860	32.34	AVG	0.12	-10.00	0.21	42.67	46.00	-3.33
7	0.9500	33.81	QP	0.14	-10.00	0.19	44.14	56.00	-11.86
8	0.9500	25.83	AVG	0.14	-10.00	0.19	36.16	46.00	-9.84
9	1.3620	29.80	QP	0.15	-10.00	0.21	40.16	56.00	-15.84
10	1.3620	21.51	AVG	0.15	-10.00	0.21	31.87	46.00	-14.13
11	9.1900	32.37	QP	0.46	-10.00	0.38	43.21	60.00	-16.79
12	9.1900	23.37	AVG	0.46	-10.00	0.38	34.21	50.00	-15.79

**Test Mode(Adapter) :** Normal Working Mode



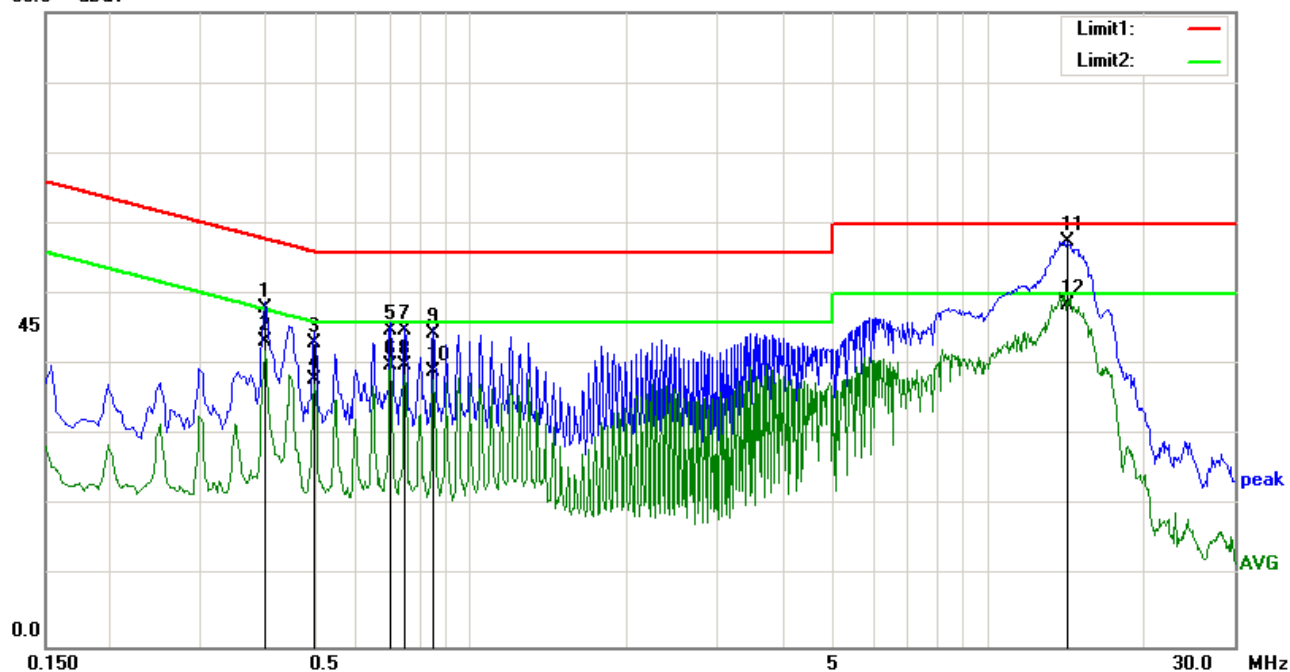
**Test Data**

**Phase Neutral Plot at 230Vac, 50Hz**

No.	Frequency (MHz)	Reading (dBμV)	Detector	Lisn/Isn (dB)	Ps_Lmt (dB)	Cab_L (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)
1	0.5060	33.09	QP	0.11	-10.00	0.21	43.41	56.00	-12.59
2	0.5060	22.55	AVG	0.11	-10.00	0.21	32.87	46.00	-13.13
3	0.5860	33.75	QP	0.11	-10.00	0.21	44.07	56.00	-11.93
4	0.5860	28.26	AVG	0.11	-10.00	0.21	38.58	46.00	-7.42
5	0.7980	29.00	QP	0.12	-10.00	0.20	39.32	56.00	-16.68
6	0.7980	19.09	AVG	0.12	-10.00	0.20	29.41	46.00	-16.59
7	1.2740	23.49	QP	0.14	-10.00	0.21	33.84	56.00	-22.16
8	1.2740	15.57	AVG	0.14	-10.00	0.21	25.92	46.00	-20.08
9	1.7620	20.26	QP	0.16	-10.00	0.21	30.63	56.00	-25.37
10	1.7620	11.75	AVG	0.16	-10.00	0.21	22.12	46.00	-23.88
11	8.6900	26.06	QP	0.48	-10.00	0.37	36.91	60.00	-23.09
12	8.6900	18.92	AVG	0.48	-10.00	0.37	29.77	50.00	-20.23

Test Mode(POE) : Normal Working Mode

90.0 dBuV

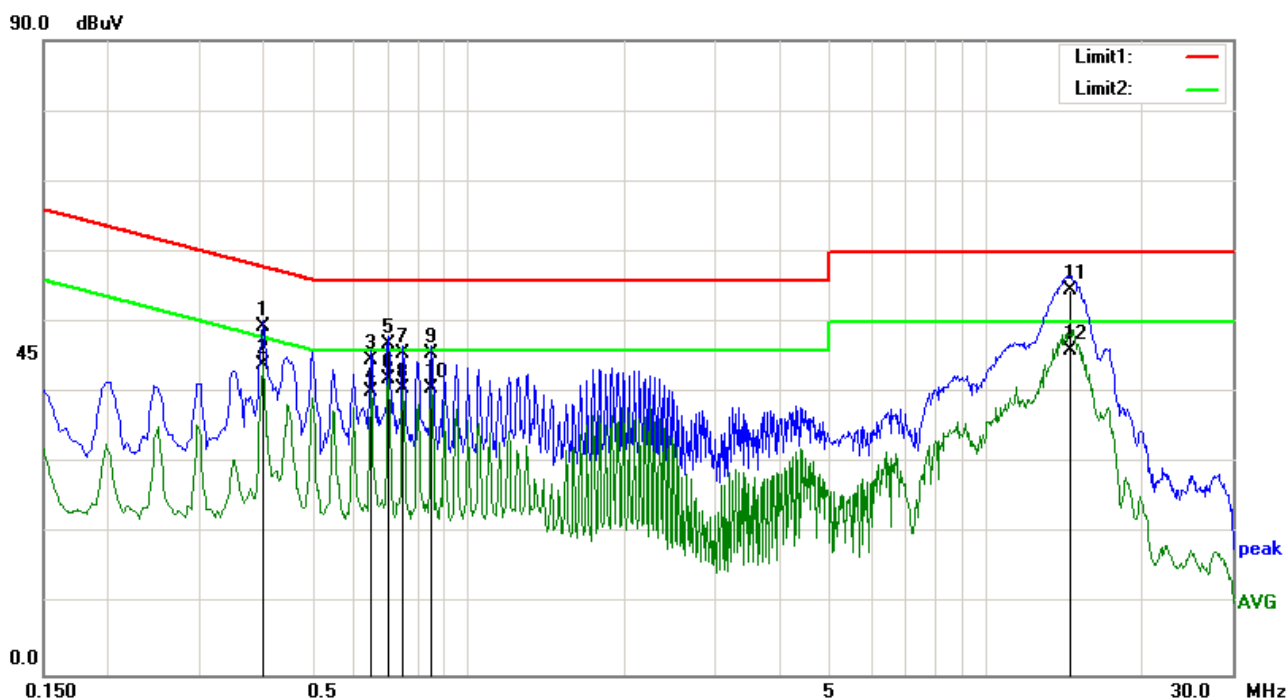


Test Data

Phase Line

No.	Frequency (MHz)	Reading (dBμV)	Detector	Lisn/Isn (dB)	Ps_Lmt (dB)	Cab_L (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)
1	0.3980	37.77	QP	0.11	-10.00	0.21	48.09	57.90	-9.81
2	0.3980	33.00	AVG	0.11	-10.00	0.21	43.32	47.90	-4.58
3	0.4980	32.76	QP	0.12	-10.00	0.21	43.09	56.03	-12.94
4	0.4980	27.59	AVG	0.12	-10.00	0.21	37.92	46.03	-8.11
5	0.6980	34.62	QP	0.13	-10.00	0.20	44.95	56.00	-11.05
6	0.6980	29.56	AVG	0.13	-10.00	0.20	39.89	46.00	-6.11
7	0.7460	34.47	QP	0.13	-10.00	0.20	44.80	56.00	-11.20
8	0.7460	29.58	AVG	0.13	-10.00	0.20	39.91	46.00	-6.09
9	0.8460	34.08	QP	0.13	-10.00	0.20	44.41	56.00	-11.59
10	0.8460	28.71	AVG	0.13	-10.00	0.20	39.04	46.00	-6.96
11	14.2740	46.22	QP	0.81	-10.00	0.47	57.50	60.00	-2.50
12	14.2740	37.27	AVG	0.81	-10.00	0.47	48.55	50.00	-1.45

**Test Mode(POE) :** Normal Working Mode



**Test Data**

**Phase Neutral**

No.	Frequency (MHz)	Reading (dBμV)	Detector	Lisn/Isn (dB)	Ps_Lmt (dB)	Cab_L (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)
1	0.3980	39.08	QP	0.11	-10.00	0.21	49.40	57.90	-8.50
2	0.3980	33.76	AVG	0.11	-10.00	0.21	44.08	47.90	-3.82
3	0.6460	34.36	QP	0.12	-10.00	0.20	44.68	56.00	-11.32
4	0.6460	29.88	AVG	0.12	-10.00	0.20	40.20	46.00	-5.80
5	0.6980	36.50	QP	0.12	-10.00	0.20	46.82	56.00	-9.18
6	0.6980	31.68	AVG	0.12	-10.00	0.20	42.00	46.00	-4.00
7	0.7460	35.22	QP	0.12	-10.00	0.20	45.54	56.00	-10.46
8	0.7460	30.35	AVG	0.12	-10.00	0.20	40.67	46.00	-5.33
9	0.8460	35.24	QP	0.12	-10.00	0.20	45.56	56.00	-10.44
10	0.8460	30.33	AVG	0.12	-10.00	0.20	40.65	46.00	-5.35
11	14.5260	43.10	QP	0.91	-10.00	0.47	54.48	60.00	-5.52
12	14.5260	34.63	AVG	0.91	-10.00	0.47	46.01	50.00	-3.99

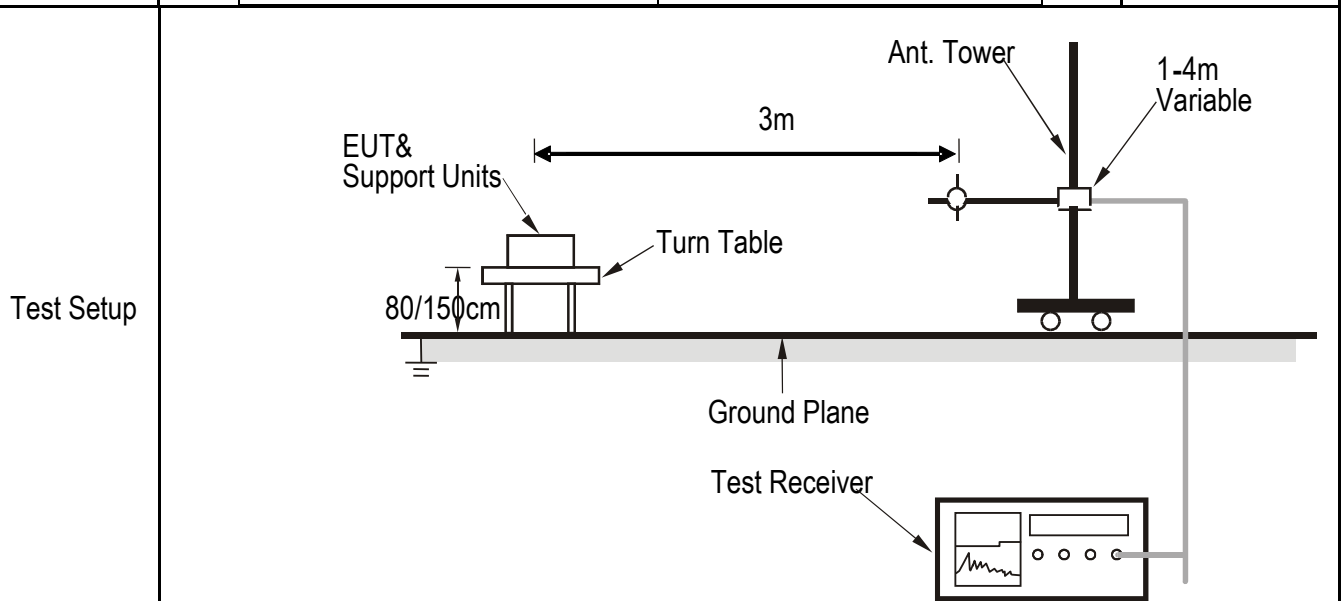


## 6.7 Radiated Emissions

Temperature	28°C
Relative Humidity	54%
Atmospheric Pressure	1021mbar
Test date :	March 29, 2018
Tested By :	Peter Wei

### Requirement(s):

Spec	Requirement	Applicable											
47CFR §15.209	Except higher limit as specified elsewhere in other section, the emissions from the low-power radio-frequency devices shall not exceed the field strength levels specified in the following table and the level of any unwanted emissions shall not exceed the level of the fundamental emission. The tighter limit applies at the band edges	<div>☒</div>											
	Class A Limit												
	<table><tr><th>Frequency range (MHz)</th><th>Field Strength (µV/m)</th></tr><tr><td>30 – 88</td><td>90</td></tr><tr><td>88 – 216</td><td>150</td></tr><tr><td>216 – 960</td><td>210</td></tr><tr><td>Above 960</td><td>300</td></tr></table>		Frequency range (MHz)	Field Strength (µV/m)	30 – 88	90	88 – 216	150	216 – 960	210	Above 960	300	
	Frequency range (MHz)		Field Strength (µV/m)										
	30 – 88		90										
	88 – 216		150										
	216 – 960		210										
	Above 960		300										
	Class B Limit												
	<table><tr><th>Frequency range (MHz)</th><th>Field Strength (µV/m)</th></tr><tr><td>30 – 88</td><td>100</td></tr><tr><td>88 – 216</td><td>150</td></tr><tr><td>216 – 960</td><td>200</td></tr><tr><td>Above 960</td><td>500</td></tr></table>		Frequency range (MHz)	Field Strength (µV/m)	30 – 88	100	88 – 216	150	216 – 960	200	Above 960	500	
Frequency range (MHz)	Field Strength (µV/m)												
30 – 88	100												
88 – 216	150												
216 – 960	200												
Above 960	500												



Procedure	<ol style="list-style-type: none"> <li>The EUT was switched on and allowed to warm up to its normal operating condition.</li> <li>The test was carried out at the selected frequency points obtained from the EUT characterisation. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner: <ol style="list-style-type: none"> <li>Vertical or horizontal polarisation (whichever gave the higher emission level over a full rotation of the EUT) was chosen.</li> <li>The EUT was then rotated to the direction that gave the maximum emission.</li> <li>Finally, the antenna height was adjusted to the height that gave the maximum emission.</li> </ol> </li> <li>For emission frequencies measured below and above 1GHz, set the spectrum analyzer on a 100kHz and</li> </ol>
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	4. 1MHz resolution bandwidth respectively for each frequency measured. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured.
Remark	Note: We had tested 802.11b、 802.11g、 802.11n20、 802.11n40,and only show worse case (802.11b ) in the report.
Result	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
Test Data	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A
Test Plot	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> N/A

#### Data sample

No.	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
	(MHz)	(dB $\mu$ V/m)		(dB/m)	(dB)	(dB)	(dB $\mu$ V/m)	(dB $\mu$ V/m)	(dB)	(cm)	(°)

Frequency (MHz) = Emission frequency in MHz

Reading (dB $\mu$ V/m) = Receiver Reading Value

Detector= Peak Detector or Quasi Peak Detector

Ant\_F=Antenna Factor

PA\_G=Pre-Amplifier Gain

Cab\_L=Cable Loss

Result (dB $\mu$ V/m) = Read ing Value + Corrected Value

Limit (dB $\mu$ V/m) = Limit stated in standard

Height (cm) = Height of Receiver antenna

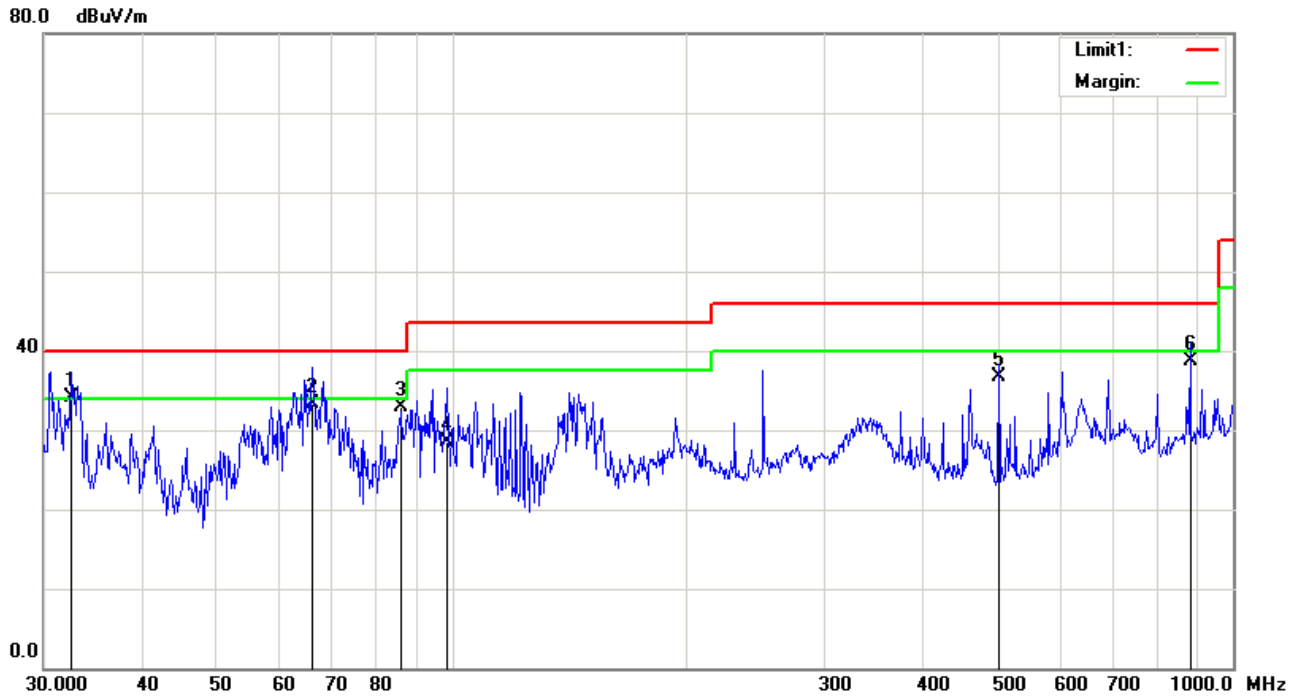
Degree = Turn table degree

#### Calculation Formula:

Margin (dB) = Result (dB $\mu$ V/m) – limit (dB $\mu$ V/m)

Test Mode(Adapter) : Normal Working Mode

### Below 1GHz



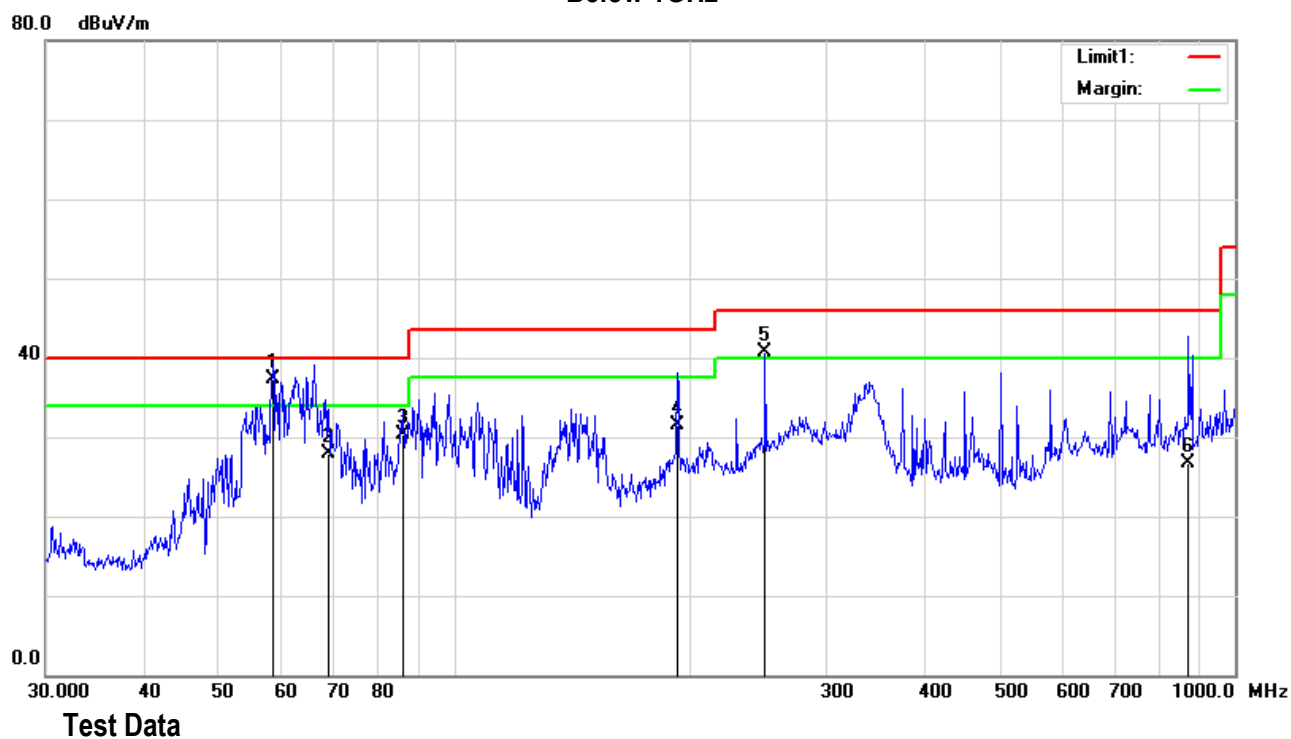
Test Data

### Vertical Polarity Plot @3m

No.	Frequency (MHz)	Reading (dB $\mu$ V/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Height (cm)	Degree (°)
1	32.5198	58.71	QP	20.13	45.66	0.92	34.10	40.00	-5.90	100	259
2	66.2662	70.13	QP	9.48	47.70	1.39	33.30	40.00	-6.70	100	35
3	85.8984	70.53	QP	8.32	47.43	1.48	32.90	40.00	-7.10	100	76
4	98.4866	62.67	QP	10.79	46.56	1.60	28.50	43.50	-15.00	121	360
5	501.1790	67.13	QP	15.38	49.27	3.56	36.80	46.00	-9.20	100	162
6	881.4067	56.67	QP	23.28	45.95	4.80	38.80	46.00	-7.20	200	322

**Test Mode(Adapter) :** Normal Working Mode

### Below 1GHz



### Horizontal Polarity Plot @3m

No.	Frequency (MHz)	Reading (dB $\mu$ V/m)	Detector	Ant F (dB/m)	PA G (dB)	Cab L (dB)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Height (cm)	Degree (°)
1	58.6126	73.59	QP	9.54	47.12	1.29	37.30	40.00	-2.70	300	148
2	69.1141	63.80	QP	10.61	47.84	1.43	28.00	40.00	-12.00	200	154
3	85.8984	66.72	QP	9.63	47.43	1.48	30.40	40.00	-9.60	200	154
4	193.0945	63.29	QP	12.98	46.90	2.23	31.60	43.50	-11.90	200	201
5	250.3012	70.87	QP	15.16	47.74	2.51	40.80	46.00	-5.20	100	181
6	872.1832	45.31	QP	22.78	46.06	4.77	26.80	46.00	-19.20	100	213

### Above 1GHz

<b>Test Mode:</b>	<b>Transmitting Mode ( 802.11b Low Channel )</b>
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#### Vertical

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant F (dB/m)	PA G (dB)	Cab L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )
1	4826	56.28	peak	33.22	53.43	6.08	42.15	74	-31.85	100	78
2	6354	55.41	peak	33.97	52.38	5.84	42.84	74	-31.16	100	158
3	8637	54.39	peak	34.55	54.02	8.29	43.21	74	-30.79	100	126
4	11057	51.24	peak	38.42	53.22	9.56	46.00	74	-28.00	100	267
5	13909	53.21	peak	42	52.11	9.11	52.21	74	-21.79	100	144
6	15562	56.38	peak	39.33	50.28	10.21	55.64	74	-18.36	100	256
7	15562	41.30	AVG	39.33	50.28	10.21	40.56	54	-13.44	100	256

#### Horizontal

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant F (dB/m)	PA G (dB)	Cab L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree ( ° )
1	4915	65.19	peak	33.4	53.81	5.96	50.74	74	-23.26	100	338
2	7392	58.14	peak	34.93	54.94	7.25	45.38	74	-28.62	100	243
3	10520	54.28	peak	38.59	53.04	9.36	49.19	74	-24.81	100	353
4	12951	53.47	peak	40.43	51.91	9.64	51.63	74	-22.37	100	142
5	13937	54.33	peak	42.04	52.12	9.09	53.34	74	-20.66	100	190
6	15518	51.26	peak	39.46	50.08	10.18	50.82	74	-23.18	100	36

<b>Test Mode:</b>	<b>Transmitting Mode ( 802.11b Middle Channel )</b>
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#### Vertical

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)
1	4847	57.26	peak	33.25	53.51	6.05	43.05	74	-30.95	100	30
2	7975	56.39	peak	36.51	54.74	7.82	45.98	74	-28.02	100	256
3	10383	53.24	peak	38.63	53.39	9.31	47.79	74	-26.21	100	142
4	13114	52.49	peak	40.73	51.84	9.6	50.98	74	-23.02	100	14
5	14338	55.67	peak	41.58	52.44	9.27	54.08	74	-19.92	100	308
6	14338	40.01	AVG	41.58	52.44	9.27	38.42	54	-15.58	100	308
7	15532	54.17	peak	39.42	50.15	10.19	53.63	74	-20.37	100	232

#### Horizontal

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)
1	4874	56.86	peak	33.33	53.66	6	42.53	74	-31.47	100	231
2	7475	54.17	peak	35.06	54.82	7.38	41.79	74	-32.21	100	345
3	10694	53.69	peak	38.52	53.11	9.41	48.51	74	-25.49	100	135
4	13102	53.32	peak	40.73	51.84	9.6	51.81	74	-22.19	100	213
5	15708	53.47	peak	39.01	50.82	10.28	51.94	74	-22.06	100	168
6	17036	53.18	peak	40.19	57.17	11.21	47.41	74	-26.59	100	336

<b>Test Mode:</b>	<b>Transmitting Mode ( 802.11b High Channel )</b>
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#### Vertical

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)
1	3005	59.48	peak	31.55	52.81	4.45	42.67	74	-31.33	100	115
2	4703	57.27	peak	32.95	52.9	6.13	43.45	74	-30.55	100	321
3	5927	55.15	peak	33.41	51.52	5.91	42.95	74	-31.05	200	85
4	7947	55.36	peak	36.56	54.74	7.84	45.02	74	-28.98	100	231
5	11050	55.98	peak	38.41	53.22	9.54	50.71	74	-23.29	100	135
6	13846	55.47	peak	41.99	52.11	9.12	54.47	74	-19.53	100	311
7	13846	39.45	AVG	41.99	52.11	9.12	38.45	54	-15.55	100	311

#### Horizontal

No.	Frequency (MHz)	Reading (dBuV/m)	Detector	Ant_F (dB/m)	PA_G (dB)	Cab_L (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)
1	5994	56.12	peak	33.4	51.29	5.85	44.08	74	-29.92	100	359
2	8083	54.39	peak	36.16	54.56	7.95	43.94	74	-30.06	100	63
3	10141	53.28	peak	38.67	53.79	9.27	47.43	74	-26.57	100	269
4	11577	54.26	peak	38.59	53.24	10.08	49.69	74	-24.31	100	157
5	13780	53.87	peak	41.88	52.08	9.2	52.87	74	-21.13	100	93
6	15635	52.49	peak	39.17	50.55	10.25	51.36	74	-22.64	100	257

## Annex A. TEST INSTRUMENT

Instrument	Model	Serial #	Cal Date	Cal Due	In use
<b>AC Line Conducted Emissions</b>					
R&S EMI Test Receiver	ESPI3	101216	04/26/2018	04/25/2019	<input checked="" type="checkbox"/>
V-LISN	ESH3-Z5	838979/005	04/26/2018	04/25/2019	<input checked="" type="checkbox"/>
INFOMW Antenna (1 ~18GHz)	JXTXLB-10180	J2031081120092	05/19/2018	05/18/2019	<input checked="" type="checkbox"/>
SIEMIC EZ_EMC Conducted Emissions software	Ver.ICP-03A1	N/A	N/A	N/A	<input checked="" type="checkbox"/>
<b>RF Conducted Test</b>					
R&S EMI Receiver	ESPI3	101216	04/26/2018	04/25/2019	<input checked="" type="checkbox"/>
Power Splitter	1#	1#	04/26/2018	04/25/2019	<input checked="" type="checkbox"/>
Spectrum Analyzer	N9010A	MY47191130	04/26/2018	04/25/2019	<input checked="" type="checkbox"/>
<b>Radiated Emissions</b>					
Spectrum Analyzer	N9010A	MY47191130	04/26/2018	04/25/2019	<input checked="" type="checkbox"/>
R&S EMI Receiver	ESPI3	101216	04/26/2018	04/25/2019	<input checked="" type="checkbox"/>
Antenna (30MHz~6GHz)	JB6	A121411	05/19/2018	05/18/2019	<input checked="" type="checkbox"/>
EMCO Horn Antenna (1 ~18GHz)	3115	N/A	04/26/2018	04/25/2019	<input checked="" type="checkbox"/>
INFOMW Antenna (1 ~18GHz)	JXTXLB-10180	J2031081120092	04/26/2018	04/25/2019	<input checked="" type="checkbox"/>
Hp Pre-Amplifier	8447F	1937A01160	04/26/2018	04/25/2019	<input checked="" type="checkbox"/>
Agilent Pre-Amplifier	8449B	N/A	04/26/2018	04/25/2019	<input checked="" type="checkbox"/>
SIEMIC EZ_EMC Conducted Emissions	Ver.ICP-03A1	N/A	N/A	N/A	<input checked="" type="checkbox"/>



## Annex B. EUT and Test Setup Photographs

### Annex B.i. Photograph: EUT External Photo



The Whole Package – Front View



EUT - Top View



EUT - Bottom View



EUT - Front View



EUT - Rear View



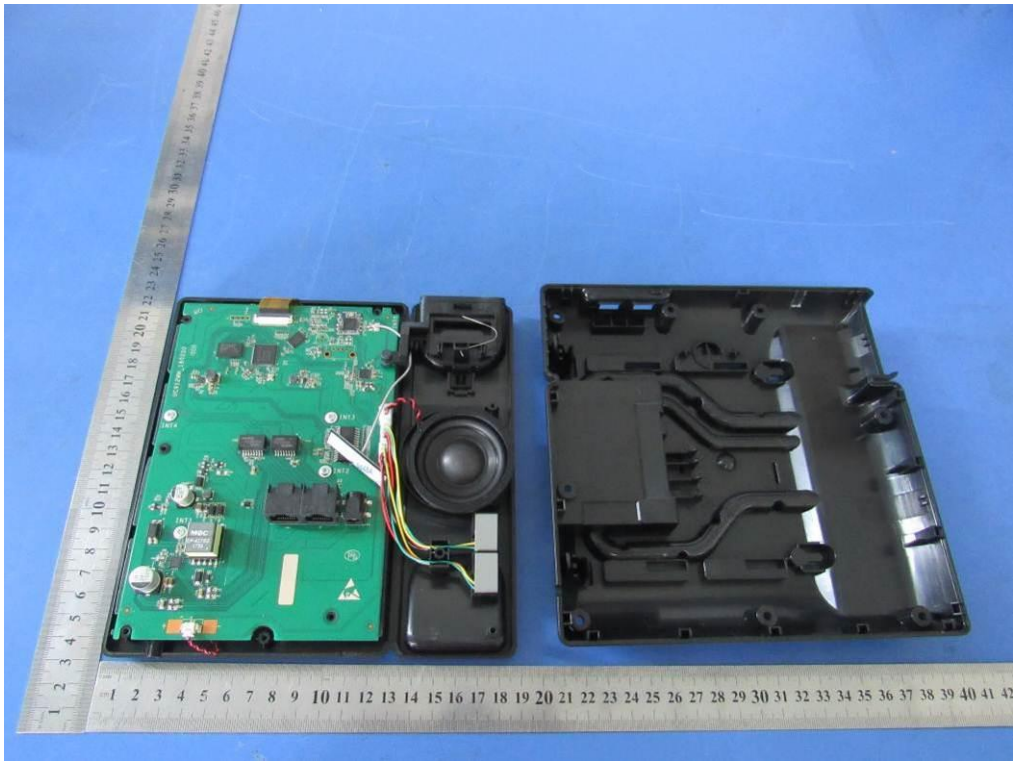
EUT - Left View



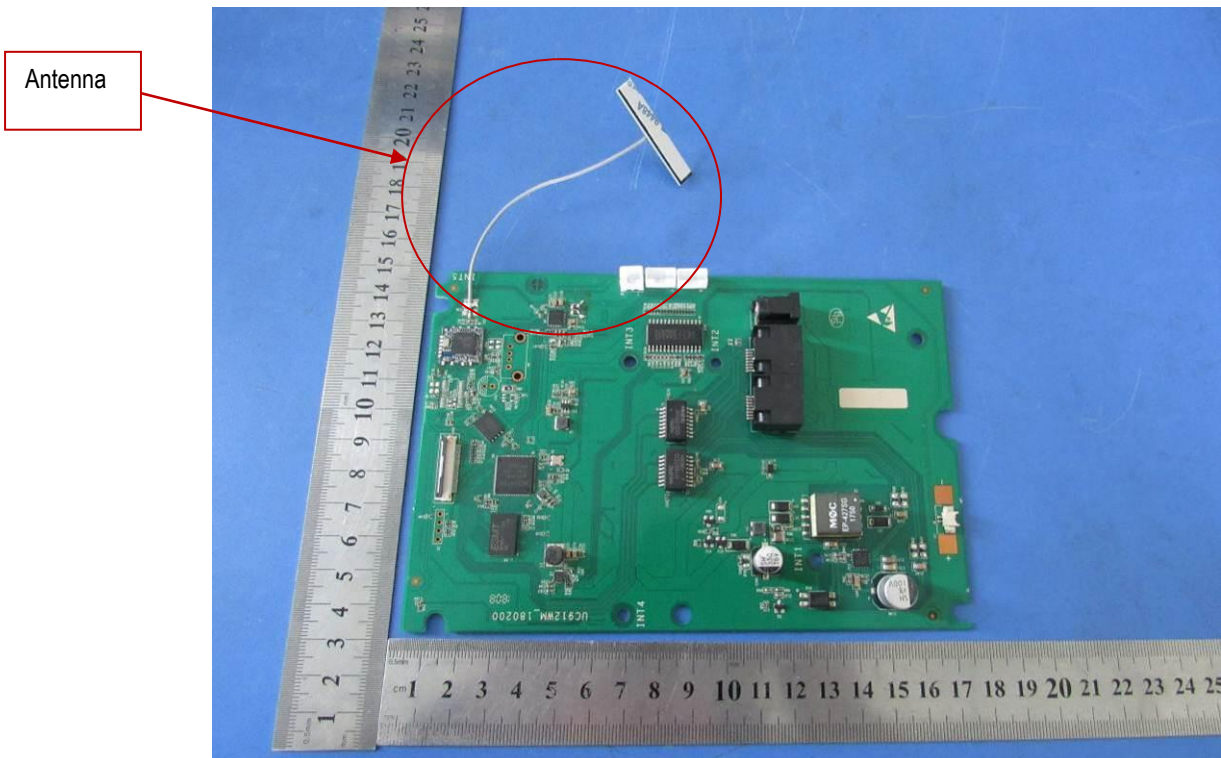


EUT - Right View

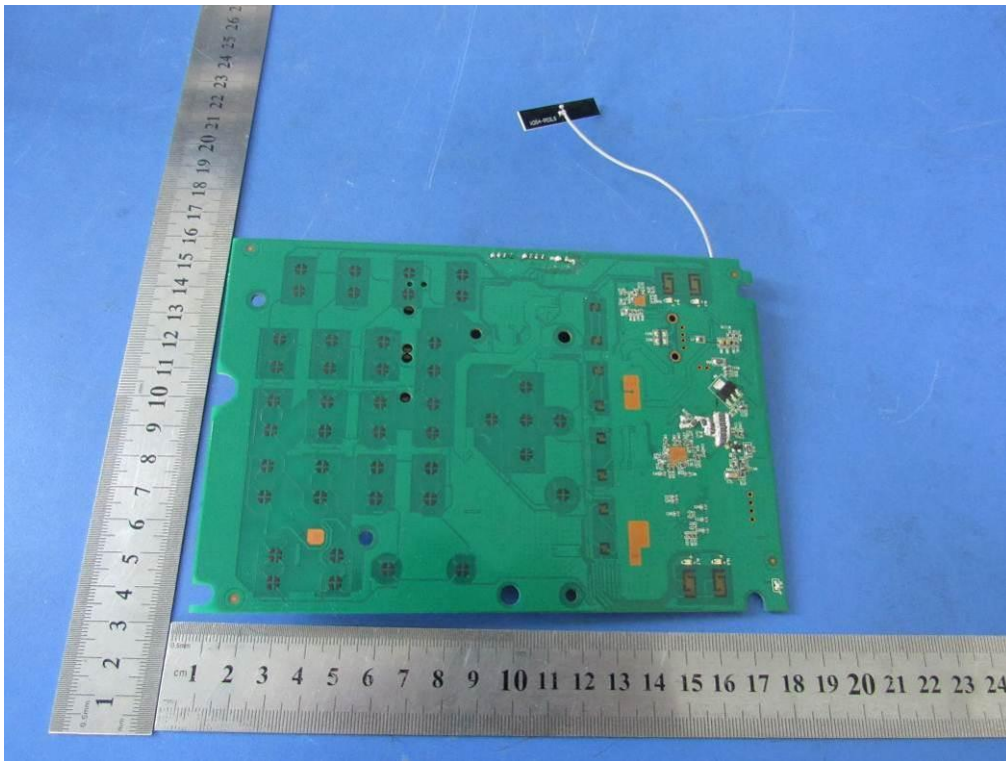
**Annex B.ii. Photograph: EUT Internal Photo**



EUT Uncover – Front View



EUT PCBA – Front View



EUT PCBA- Rear View



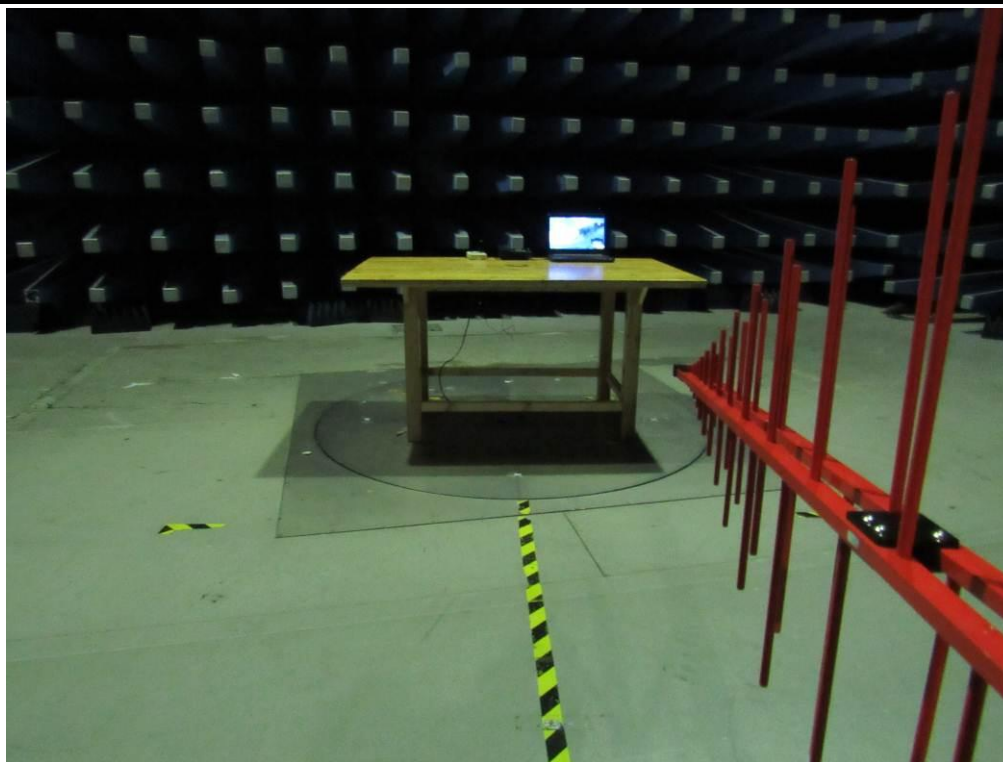
**Annex B.iii. Photograph: Test Setup Photo**



Conducted Emissions Test Setup Front View



Conducted Emissions Test Setup Side View

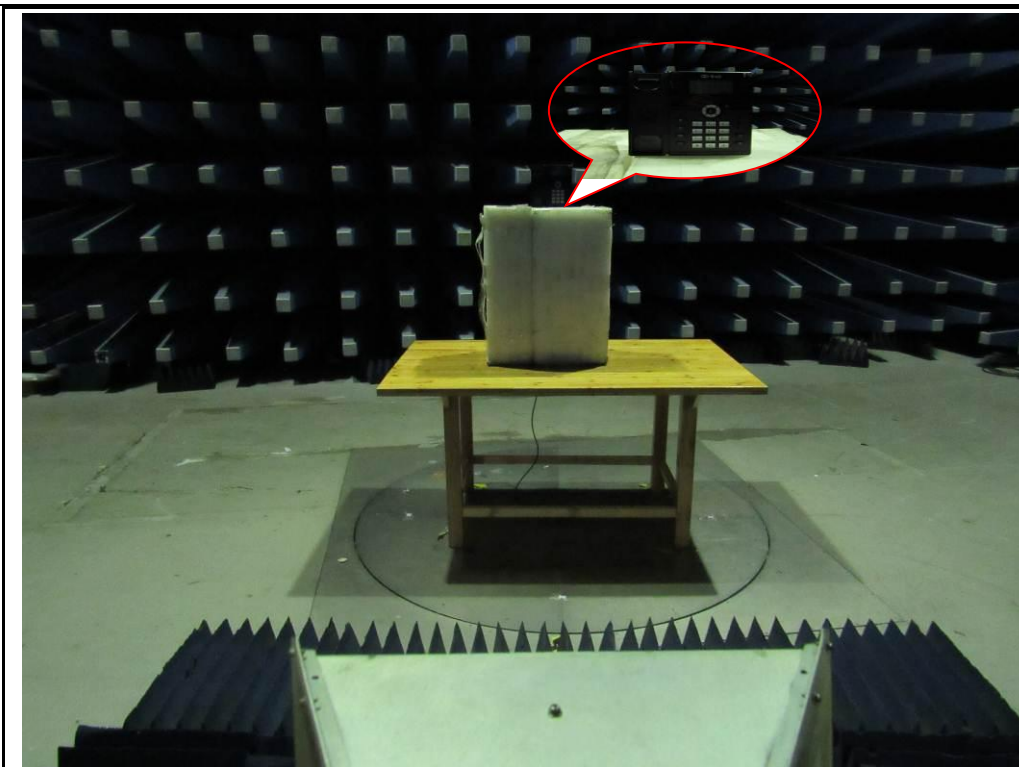


Radiated Spurious Emissions Test Setup Front View Below 1GHz



Radiated Spurious Emissions Test Setup Rear View Below 1GHz



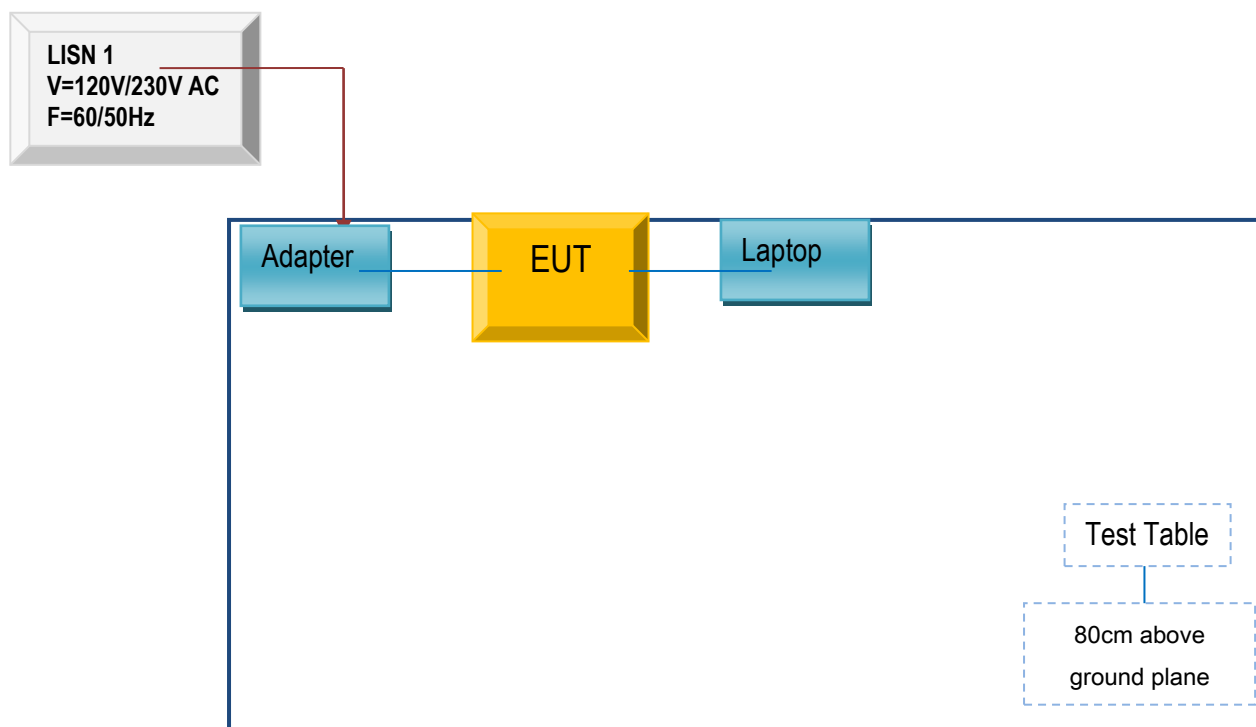


Radiated Spurious Emissions Test Setup Above 1GHz

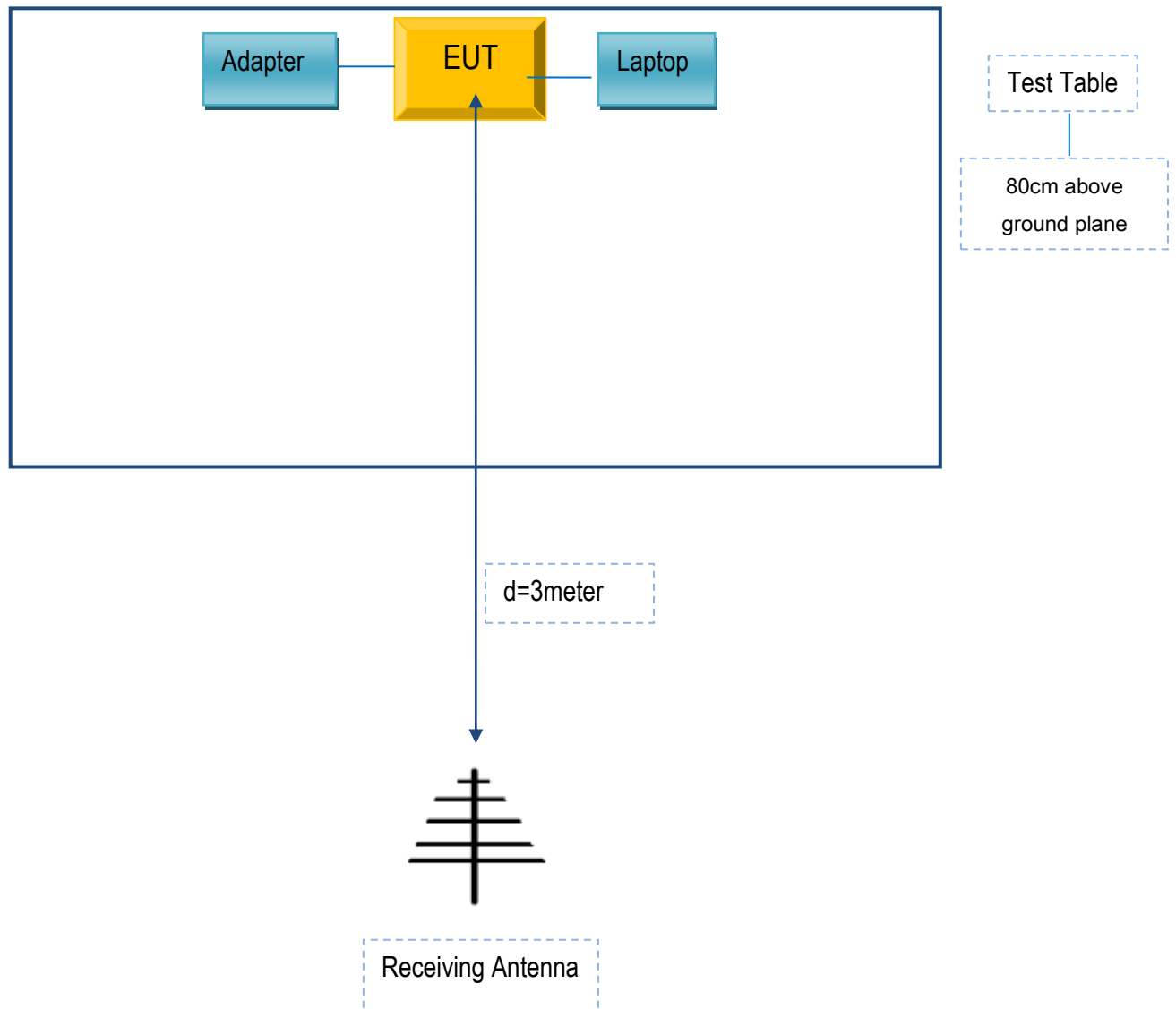
## Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

### Annex C.i. TEST SET UP BLOCK

#### Block Configuration Diagram for Conducted Emissions



## Block Configuration Diagram for Radiated Emissions



## **Annex C. il. SUPPORTING EQUIPMENT DESCRIPTION**

The following is a description of supporting equipment and details of cables used with the EUT.

### **Supporting Equipment:**

Manufacturer	Equipment Description	Model	Serial No
HP	Laptop	4321S	N/A
N/A	Earphone	N/A	N/A
PROCET	POE	PT-PSE101	PT1050000242

### **Supporting Cable:**

Cable type	Shield Type	Ferrite Core	Length	Serial No
Power Cable	Un-shielding	No	0.8m	N/A

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## Annex D. User Manual / Block Diagram / Schematics / Partlist

Please see attachment

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## Annex E. DECLARATION OF SIMILARITY

N/A