

# Test report

# FCC-15.209 and RSS-210 #308044

Date of issue: May 19, 2016

Applicant: MoJoose Inc.

Product: mJoose 3-in-1 smartphone case

Model: MJ-I6B-1001 Model variant: N/A

FCC ID: 2AFV8-CAMJPI6B1001 IC Registration number: 20621-MJPI6B1001

### Specifications:

### ◆ FCC 47 CFR Part 15.209

Radiated emission limits; general requirements.

### IC RSS-210 Issue 8

Licence-exempt Radio Apparatus (All Frequency Bands): Category I Equipment



#### Test location

Company name	Nemko USA Inc.	
Address	2210 Faraday Ave., Suite 150	
City	Carlsbad	
Province	CA	
Postal code	92008-7226	
Country	USA	
Telephone	+1 858-755-5525	
Website	www.nemko.com	
Site number	FCC: US5058; IC: 2040B	

Tested by:	Feng You, Sr. Wireless Engineer
Reviewed by:	James Morris
Date:	May 24, 2016
Signature:	James & Morris

#### Limits of responsibility

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

This test report has been completed in accordance with the requirements of ISO/IEC 17025. All results contain in this report are within Nemko USA's ISO/IEC 17025 accreditation.

#### Copyright notification

Nemko USA Inc. authorizes the applicant to reproduce this report provided it is reproduced in its entirety and for use by the company's employees only. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties.

Nemko USA Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

© Nemko USA Inc.



# Table of contents

Table of c	ontents	
Section 1.	Report summary4	
1.1	Applicant and manufacturer	
1.2	Test specifications	
1.3	Statement of compliance	
1.4	Exclusions	
1.5	Test report revision history	
Section 2	Summary of test results5	
2.1	FCC Part 15 Subpart C, general requirements test results	
2.2	IC RSS-210, Issue 8, test results	
Section 3	Equipment under test (EUT) details6	
3.1	Sample information	
3.2	EUT information	
3.3	Technical information	
3.4	Product description and theory of operation	
3.5	EUT exercise details	
3.6	EUT setup diagram and photos	
3.7	EUT sub assemblies	
Section 4	. Engineering considerations8	
4.1	Modifications incorporated in the EUT	
4.2	Technical judgment	
4.3	Deviations from laboratory tests procedures	
Section 5	Test conditions9	
5.1	Atmospheric conditions	
5.2	Power supply range	
Section 6	. Measurement uncertainty	
6.1	Uncertainty of measurement	
Section 7	Test equipment	
7.1	Test equipment list	
Section 8	Testing data12	
8.1	FCC 15.209 Radiated emission limits; general requirements. RSS-210-I8 2.5 General Field Strength Limits	
Section 9	Block diagrams of test set-ups	
9.1	Radiated emissions set-up	



# Section 1. Report summary

### 1.1 Applicant and manufacturer

Company name:	MoJoose Inc.
Address:	65 Enterprise
City:	Aliso Viejo
Province/State:	CA
Postal/Zip code:	92656
Country:	U.S.A.

#### 1.2 Test specifications

FCC 47 CFR Part 15.209 Radiated emission limits; general requirements.

### 1.3 Statement of compliance

In the configuration tested, the EUT was found compliant.

Testing was completed against all relevant requirements of the test standard. Results obtained indicate that the product under test complies in full with the requirements tested. The test results relate only to the items tested.

See "Summary of test results" for full details.

#### 1.4 Exclusions

None

#### 1.5 Test report revision history

Revision #	Details of changes made to test report	
1	Original report issued	
2	Revised based on customer feedback	



# **Section 2.** Summary of test results

# 2.1 FCC Part 15 Subpart C, general requirements test results

Part	Test description	Verdict
§15.31(e)	Variation of power source	Not applicable <sup>1</sup>
§15.203	Antenna requirement	Pass <sup>2</sup>
§15.209	Radiated emission limits; general requirements	Pass

Notes: <sup>1</sup> Tested with freshly charge battery.

#### 2.2 IC RSS-210, Issue 8, test results

Part	Test description	Verdict
2.1	RSS-Gen Compliance	Pass
2.2	Emissions Falling Within Restricted Frequency Bands	Pass
2.3	Receivers	Not applicable <sup>1</sup>
2.5	General Field Strength Limits	Pass
2.5.1	Transmitters with Wanted Emissions that are Within the General Field Strength Limits	Pass

Notes: <sup>1</sup> No stand-alone receiver in EUT.

<sup>&</sup>lt;sup>2</sup> The Antennas are located within the enclosure of EUT and not user accessible.



# Section 3. Equipment under test (EUT) details

#### 3.1 Sample information

Receipt date	May 2, 2016
Nemko sample ID number	1

### 3.2 EUT information

Product name	mJoose 3-in-1 smartphone case
Model	MJ-i6B-1001
Model variant	N/A
Serial number	MJ151101A1014

#### 3.3 Technical information

Operating bands	LTE FDD 2/4/5/13/17/25/26, WCDMA 2/4/5, CDMA BCO/1, GSM 850/1900 734-746MHz, 746-756MHz, 869-894MHz, 1930-1990MHz, 2110-2155MHz, 1930-1995MHz, 859-894MHz
Operating frequency	734-746MHz, 746-756MHz, 869-894MHz, 1930-1990MHz, 2110-2155MHz, 1930-1995MHz, 859-894MHz
Modulation type	AMP *
Occupied bandwidth (99 %)	AMP *
Emission designator	D7W, F9W, G7W
Power requirements	Internal Lithium Polymer Battery
Antenna information	The EUT uses a unique antenna coupling/ non-detachable antenna for the transmission to the intentional radiator.

<sup>\*</sup> Not internal generated, only amplifies downlink signal received by host phone's antenna.

#### 3.4 Product description and theory of operation

Product description: This product is an iPhone 6 protective case with extra battery and very low power cellular signal amplifier (LNA) to increase the downlink signal for the device users.

Theory of operation: This product has three main functions:

- Protective case
- 2. A built in battery extender which charges the phone and gives the phone over 100% more battery life.
- 3. The product receives very low level cellular downlink signal with its donor receive antenna and then amplifies the signal with its low noise amplifier (LNA), which is then wirelessly coupled to the phone's internal antenna.

#### 3.5 EUT exercise details

EUT was tested with Apple iPhone 6 when registered to base station simulator (R&S CMW500). The results was compared to baseline without the EUT (iPhone 6 Only). The device was in its normal active state amplifying signals received from the base station simulator as described in the test plan agreed to in KDB filing. EUT (with iPhone 6) was tested in worst position.



# 3.6 EUT setup diagram and photos

iPhone 6

Figure 3.6-1: Setup diagram

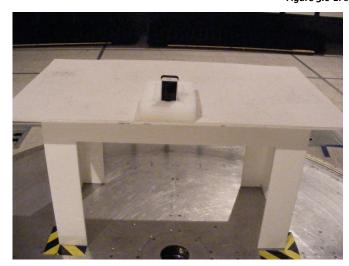




Figure 3.6-2: Setup photo – Radiated Emissions 30-1000MHz

Figure 3.6-3: Setup photo – Radiated Emissions above 1GHz

# 3.7 EUT sub assemblies

Table 3.7-1: EUT sub assemblies

Description	Brand name	Model/Part number	Serial number
3-in-1 smartphone case	mJoose	MJ-i6B-1001	MJ150901A1010
Lithium Polymer Battery (Internal)	mJoose	ASP-1S1P-4446A1	N/A
Cellphone (Host)	Apple	iPhone A1549	358369061945322
		FCC ID BCG-E2816A	
Charger	Apple	A1385	N/A



# **Section 4.** Engineering considerations

### 4.1 Modifications incorporated in the EUT

There were no modifications performed to the EUT during this assessment.

### 4.2 Technical judgment

None

### 4.3 Deviations from laboratory tests procedures

No deviations were made from laboratory procedures.



# **Section 5.** Test conditions

### 5.1 Atmospheric conditions

Temperature	15–30 °C
Relative humidity	20–75 %
Air pressure	860–1060 mbar

When it is impracticable to carry out tests under these conditions, a note to this effect stating the ambient temperature and relative humidity during the tests shall be recorded and stated.

### 5.2 Power supply range

The normal test voltage for equipment to be connected to the mains shall be the nominal mains voltage. For the purpose of the present document, the nominal voltage shall be the declared voltage, or any of the declared voltages ±5 %, for which the equipment was designed.

Lithium Polymer Battery 3.7V.



# Section 6. Measurement uncertainty

### 6.1 Uncertainty of measurement

Nemko USA Inc. has calculated measurement uncertainty and is documented in EMC/MUC/001 "Uncertainty in EMC measurements." Measurement uncertainty was calculated using the methods described in CISPR 16-4 Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC measurements; as well as described in UKAS LAB34: The expression of Uncertainty in EMC Testing. Measurement uncertainty calculations assume a coverage factor of K=2 with 95% certainty.

Frequency/Time Uncertainty <=0.2ms Amplitude Uncertainty <=1.7dB



# **Section 7.** Test equipment

# 7.1 Test equipment list

Table 7.1-1: Equipment list

Asset Tag	Description	Manufacturer	Model	Serial #	Last Cal	Next Cal
529	Antenna, DRWG	EMCO	3115	2505	01-Feb- 2016	01-Feb- 2017
E1026	EMI Test Receiver 9kHz to 7GHz	Rohde & Schwarz	ESCI 7	100800	17-Mar- 2016	17-Mar- 2017
1480	Antenna, Bilog	Schaffner-Chase	CBL6111C	2572	18-May- 2015	18-May- 2016
1767	Receiver, EMI Test 20Hz - 26.5 GHz - 150 - +30 dBm LCD	Rohde & Schwartz	ESIB26	837491/0002	03-Feb- 2016	03-Feb- 2017
Client	Basestation Simulator	Rohde & Schwartz	CMW500	CMW50050- 140665	N/A*	N/A*

<sup>\*</sup>Device from client, provide basestation signal for Phone to register only.

Specification

Test name FCC 15.209 Radiated emission limits; general requirements.

RSS-210-I8 2.5 General Field Strength Limits FCC Part 15 Subpart C, RSS-210-I8, RSS-Gen-I4



# Section 8. Testing data

### 8.1 FCC 15.209 Radiated emission limits; general requirements. RSS-210-I8 2.5 General Field Strength Limits.

#### 8.1.1 Definitions and limits

**FCC:** The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table: **RSs-Gen:** The emissions from licence-exempt transmitters shall comply with the field strength limits shown in Table:

Table 8.1-1: FCC §15.209 and RSS-Gen 8.9 – Radiated emission limits

Frequency,	Field streng	gth of emissions	Measurement distance, m
MHz	μV/m	dBμV/m	
0.009-0.490	2400/F	$67.6 - 20 \times log_{10}(F)$	300
0.490-1.705	24000/F	$87.6 - 20 \times \log_{10}(F)$	30
1.705-30.0	30	29.5	30
30–88	100	40.0	3
88–216	150	43.5	3
216–960	200	46.0	3
above 960	500	54.0	3

Notes: In the emission table above, the tighter limit applies at the band edges. For frequencies above 1 GHz the limit on peak RF emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test

Table 8.1-2: FCC §15.205 and RSS-Gen 8.10 - Restricted frequency bands

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9–410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25–7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5–38.25	1435–1626.5	9.0–9.2
4.20725-4.20775	73–74.6	1645.5-1646.5	9.3–9.5
6.215-6.218	74.8–75.2	1660–1710	10.6–12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123–138	2200–2300	14.47-14.5
8.291-8.294	149.9–150.05	2310-2390	15.35–16.2
8.362-8.366	156.52475-156.52525	2483.5–2500	17.7–21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01–23.12
8.41425-8.41475	162.0125-167.17	3260–3267	23.6–24.0
12.29-12.293	167.72-173.2	3332-3339	31.2–31.8
12.51975-12.52025	240–285	3345.8–3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	Above 38.6
13.36–13.41			

#### 8.1.2 Test summary

Test date:	May 11, 2016	Temperature:	21 °C
Test engineer:	Feng You	Air pressure:	1005 mbar
Verdict:	Pass	Relative humidity:	61 %

No degradation detected by adding the EUT to the iPhone 6.

Test name FCC 15.209 Radiated emission limits; general requirements.

RSS-210-I8 2.5 General Field Strength Limits

Specification FCC Part 15 Subpart C, RSS-210-I8, RSS-Gen-I4



#### 8.1.3 Observations, settings and special notes

The spectrum was searched from 9kHz to the 18GHz. Radiated measurements were performed at a distance of 3 m.

EUT was tested with iPhone 6 when registered to basestation simulator (R&S CMW500). The results was compared to baseline without the EUT (iPhone 6 Only).

EUT was also tested alone.

Spectrum analyzer settings for radiated measurements from 30-1000MHz:

Resolution bandwidth:	100 kHz
Video bandwidth:	300 kHz
Detector mode:	Peak
Trace mode:	Max Hold

Spectrum analyzer settings for radiated measurements above 1 GHz:

Resolution bandwidth:	1 MHz
Video bandwidth:	3 MHz
Detector mode:	Peak
Trace mode:	Max Hold

#### 8.1.4 Test data - EUT only

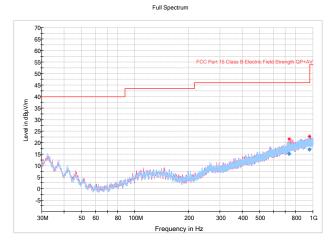


Figure 8.1-1: Radiated spurious emissions 30-1000MHz for EUT only

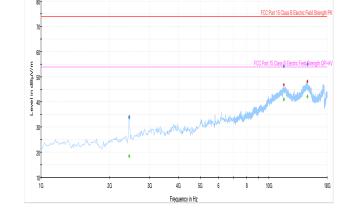


Figure 8.1-2: Radiated spurious emissions >1GHz for EUT only

- 1. Emissions >10GHz are noise signals. Ignored
- 2. Emissions at 2.44GHz range are from WiFi/BT interference. Ignored
- 3. No emissions above noise floor detected.

Test name FCC 15.209 Radiated emission limits; general requirements.

RSS-210-I8 2.5 General Field Strength Limits

Specification FCC Part 15 Subpart C, RSS-210-I8, RSS-Gen-I4



### 8.1.5 Test data – CDMA BCo (869-894MHz)

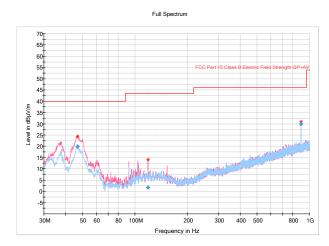


Figure 8.1-3: Radiated spurious emissions 30-1000MHz for iPhone 6 only (Baseline) – CDMA BCO Ch777

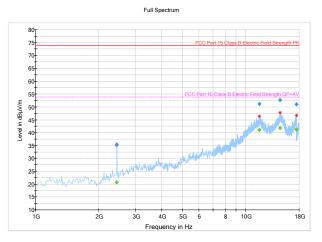


Figure 8.1-4: Radiated spurious emissions >1GHz for iPhone 6 only (Baseline) – CDMA BCO Ch777

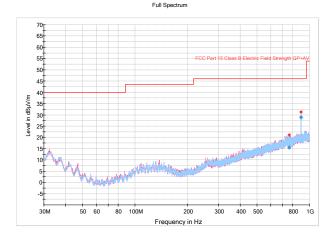


Figure 8.1-5: Radiated spurious emissions 30-1000MHz for EUT with iPhone 6 – CDMA BCO Ch777

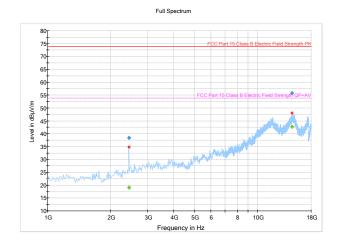


Figure 8.1-6: Radiated spurious emissions >1GHz for EUT with iPhone 6 – CDMA BCO Ch777

**Table 8.1-3:** Radiated field strength measurement results for iPhone 6 Baseline

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol
46.813750	19.97	40.00	20.03	120.000	117.9	V
118.713750	1.80	43.50	41.70	120.000	314.9	V
892.817500	29.99	46.00	16.01	120.000	156.5	V

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol
2438.485772	35.37		73.90	38.53	1000.000	110.4	V
2438.485772		20.67	53.90	33.23	1000.000	110.4	V
11611.610421	51.24		73.90	22.66	1000.000	158.9	V
11611.610421		41.02	53.90	12.88	1000.000	158.9	V
14568.346293	52.65		73.90	21.25	1000.000	143.3	Н
14568.346293		41.87	53.90	12.03	1000.000	143.3	Н
17474.533868	50.97		73.90	22.93	1000.000	221.3	Н
17474.533868		41.19	53.90	12.71	1000.000	221.3	Н

Test name

Specification

FCC 15.209 Radiated emission limits; general requirements.

RSS-210-I8 2.5 General Field Strength Limits FCC Part 15 Subpart C, RSS-210-I8, RSS-Gen-I4



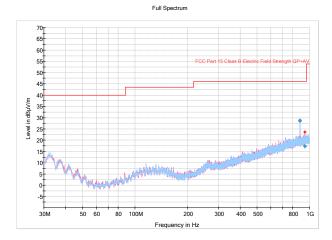


Figure 8.1-7: Radiated spurious emissions 30-1000MHz for EUT with iPhone 6 – CDMA BCO Ch384

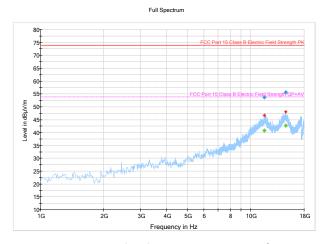


Figure 8.1-8: Radiated spurious emissions >1GHz for EUT with iPhone 6 – CDMA BCO Ch384

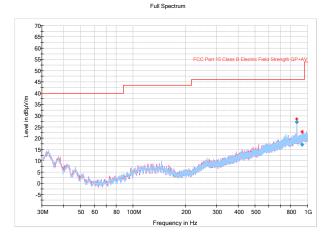


Figure 8.1-9: Radiated spurious emissions 30-1000MHz for EUT with iPhone 6 – CDMA BCO Ch1013

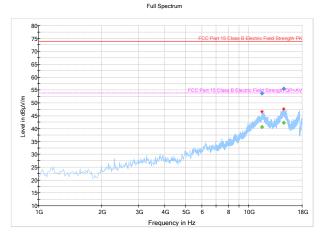


Figure 8.1-10: Radiated spurious emissions >1GHz for EUT with iPhone 6 – CDMA BCO Ch1013

- 1. Emissions >10GHz are noise signals. Ignored
- 2. Emissions at 869-894MHz are basestation signasl from CMW500. Ignored
- 3. Emissions at 2.44GHz range are from WiFi/BT interference. Ignored
- 4. There is no degradation between baseline and tested with EUT. No emissions within 20dB of limit line above noise floor detected.

Test name FCC 15.209 Radiated emission limits; general requirements.

RSS-210-I8 2.5 General Field Strength Limits

Specification FCC Part 15 Subpart C, RSS-210-I8, RSS-Gen-I4



#### 8.1.6 Test data – CDMA BC1 (1930-1990MHz)

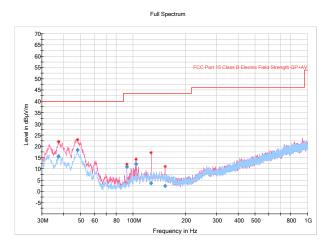


Figure 8.1-11: Radiated spurious emissions 30-1000MHz for iPhone 6 only (Baseline) – CDMA BC1 Ch1175

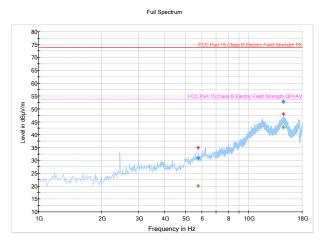
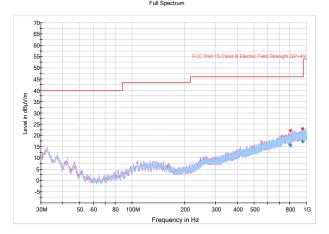


Figure 8.1-12: Radiated spurious emissions >1GHz for iPhone 6 only (Baseline) – CDMA BC1 Ch1175



**Figure 8.1-13:** Radiated spurious emissions 30-1000MHz for EUT with iPhone 6 – CDMA BC1 Ch1175

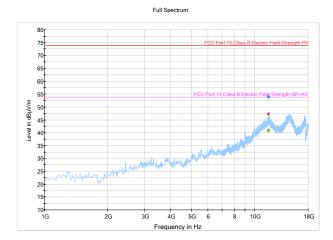


Figure 8.1-14: Radiated spurious emissions >1GHz for EUT with iPhone 6 – CDMA BC1 Ch1175

Table 8.1-4: Radiated field strength measurement results for iPhone 6 Baseline

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol
37.200000	15.41	40.00	24.59	120.000	152.6	V
47.982500	18.33	40.00	21.67	120.000	188.7	V
92.080000	10.97	43.50	32.53	120.000	147.7	V
103.720000	12.09	43.50	31.41	120.000	118.7	V
126.762500	3.63	43.50	39.87	120.000	388.3	V
152.586250	2.33	43.50	41.17	120.000	188.0	V

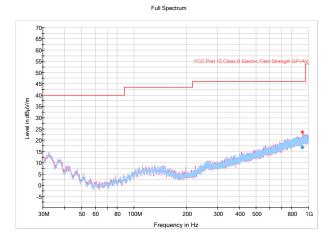
Test name

Specification

FCC 15.209 Radiated emission limits; general requirements.

RSS-210-I8 2.5 General Field Strength Limits FCC Part 15 Subpart C, RSS-210-I8, RSS-Gen-I4





**Figure 8.1-15:** Radiated spurious emissions 30-1000MHz for EUT with iPhone 6 – CDMA BC1 Ch600

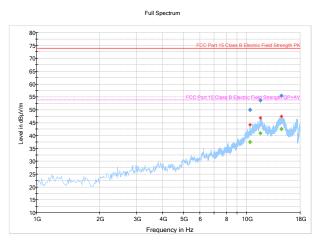


Figure 8.1-16: Radiated spurious emissions >1GHz for EUT with iPhone 6 – CDMA BC1 Ch6oo

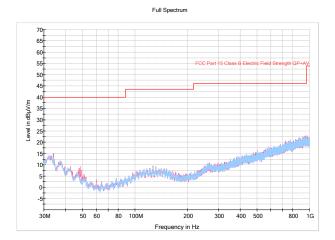


Figure 8.1-17: Radiated spurious emissions 30-1000MHz for EUT with iPhone 6 – CDMA BC1 Ch25

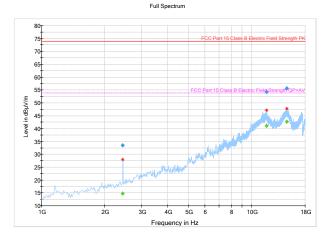


Figure 8.1-18: Radiated spurious emissions >1GHz for EUT with iPhone 6 – CDMA CDMA BC1 Ch25

- 1. Emissions >10GHz are noise signals. Ignored
- 2. Emissions at 1930-1990MHz are basestation signasl from CMW500. Ignored
- 3. Emissions at 2.44GHz range are from WiFi/BT interference. Ignored
- 4. There is no degradation between baseline and tested with EUT. No emissions within 20dB of limit line above noise floor detected.

Test name FCC 15.209 Radiated emission limits; general requirements.

RSS-210-I8 2.5 General Field Strength Limits

Specification FCC Part 15 Subpart C, RSS-210-I8, RSS-Gen-I4



### 8.1.7 Test data – LTE4 (2110-2155MHz)

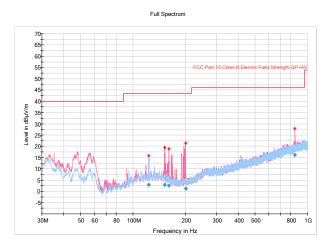


Figure 8.1-19: Radiated spurious emissions 30-1000MHz for iPhone 6 only (Baseline) – LTE4 Ch2350

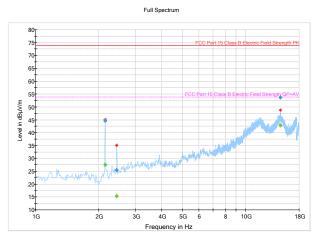
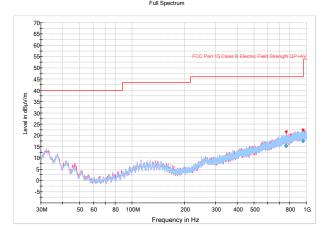
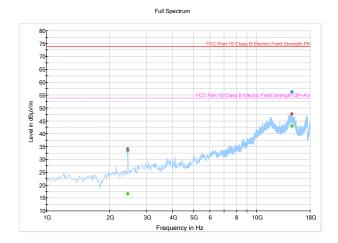


Figure 8.1-20: Radiated spurious emissions >1GHz for iPhone 6 only (Baseline) – LTE4 Ch2350



**Figure 8.1-21:** Radiated spurious emissions 30-1000MHz for EUT with iPhone 6 – LTE4 Ch2350



**Figure 8.1-22:** Radiated spurious emissions >1GHz for EUT with iPhone 6 – LTE4 Ch2350

Table 8.1-5: Radiated field strength measurement results for iPhone 6 Baseline

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol
122.555000	2.94	43.50	40.56	120.000	223.5	Н
151.608750	2.99	43.50	40.51	120.000	284.9	V
160.825000	2.51	43.50	40.99	120.000	156.9	V
200.392500	1.26	43.50	42.24	120.000	262.3	V
847.835000	16.08	46.00	29.92	120.000	342.0	V

Test name

Specification

FCC 15.209 Radiated emission limits; general requirements.

RSS-210-I8 2.5 General Field Strength Limits FCC Part 15 Subpart C, RSS-210-I8, RSS-Gen-I4



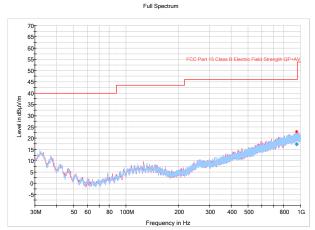


Figure 8.1-23: Radiated spurious emissions 30-1000MHz for EUT with iPhone 6 – LTE4 Ch2175

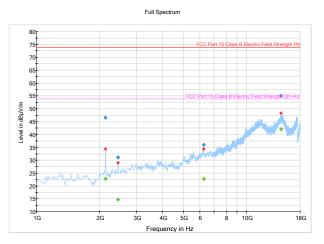


Figure 8.1-24: Radiated spurious emissions >1GHz for EUT with iPhone 6 – LTE4 Ch2175

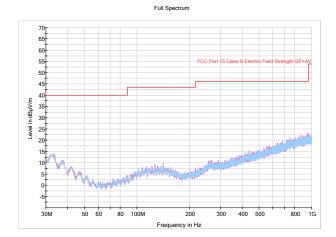


Figure 8.1-25: Radiated spurious emissions 30-1000MHz for EUT with iPhone 6 – LTE4 Ch2000

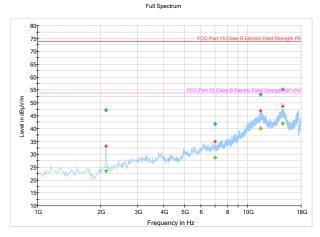


Figure 8.1-26: Radiated spurious emissions >1GHz for EUT with iPhone 6 – LTE4 Ch2000

- 1. Emissions >10GHz are noise signals. Ignored
- 2. Emissions at 2110-2155MHz are basestation signasl from CMW500. Ignored
- 3. Emissions at 2.44GHz range are from WiFi/BT interference. Ignored
- 4. There is no degradation between baseline and tested with EUT. No emissions within 20dB of limit line above noise floor detected.

Test name FCC 15.209 Radiated emission limits; general requirements.

RSS-210-I8 2.5 General Field Strength Limits

Specification FCC Part 15 Subpart C, RSS-210-I8, RSS-Gen-I4



# 8.1.8 Test data – LTE13 (746-756MHz)

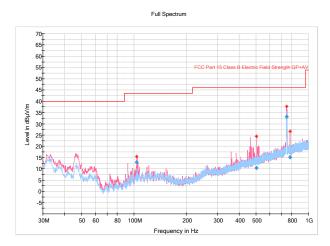


Figure 8.1-27: Radiated spurious emissions 30-1000MHz for iPhone 6 only (Baseline) – LTE13 Ch5230

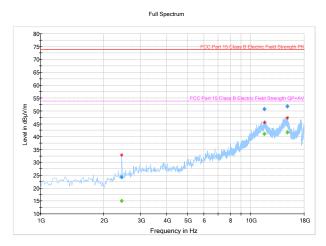
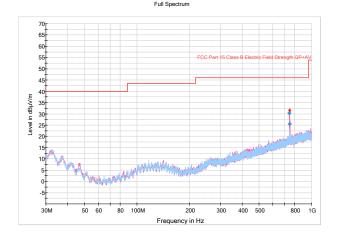
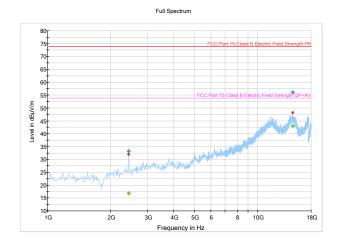


Figure 8.1-28: Radiated spurious emissions >1GHz for iPhone 6 only (Baseline) – LTE13 Ch5230



**Figure 8.1-29:** Radiated spurious emissions 30-1000MHz for EUT with iPhone 6 – LTE13 Ch5230



**Figure 8.1-30:** Radiated spurious emissions >1GHz for EUT with iPhone 6 – LTE13 Ch5230

**Table 8.1-5:** Radiated field strength measurement results for iPhone 6 Baseline

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol
103.678750	12.90	43.50	30.60	120.000	140.5	V
504.092500	10.34	46.00	35.66	120.000	291.0	V
751.472500	33.17	46.00	12.83	120.000	181.1	V
785.710000	15.11	46.00	30.89	120.000	325.4	V

- 1. Emissions >10GHz are noise signals. Ignored
- 2. Emissions at 746-756MHz are basestation signasl from CMW500. Ignored
- 3. Emissions at 2.44GHz range are from WiFi/BT interference. Ignored
- 4. There is no degradation between baseline and tested with EUT. No emissions within 20dB of limit line above noise floor detected.

Specification

Test name FCC 15.209 Radiated emission limits; general requirements.

RSS-210-I8 2.5 General Field Strength Limits FCC Part 15 Subpart C, RSS-210-I8, RSS-Gen-I4



### 8.1.9 Test data – LTE17 (734-746MHz)

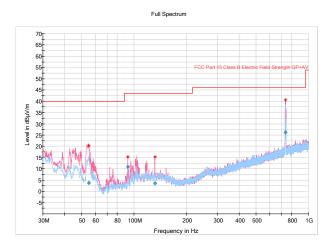


Figure 8.1-31: Radiated spurious emissions 30-1000MHz for iPhone 6 only (Baseline) – LTE17 Ch5800

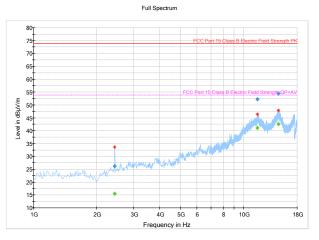


Figure 8.1-32: Radiated spurious emissions >1GHz for iPhone 6 only (Baseline) – LTE17 Ch5800

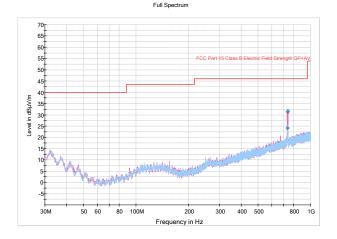


Figure 8.1-33: Radiated spurious emissions 30-1000MHz for EUT with iPhone 6 – LTE17 Ch5800

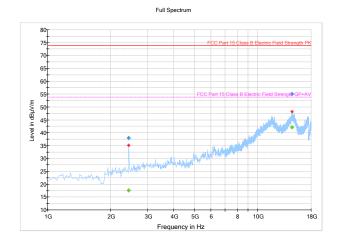


Figure 8.1-34: Radiated spurious emissions >1GHz for EUT with iPhone 6 – LTE17 Ch5800

Table 8.1-5: Radiated field strength measurement results for iPhone 6 Baseline

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol
55.052500	3.69	40.00	36.31	120.000	175.1	V
92.118750	10.88	43.50	32.62	120.000	112.7	V
131.806250	3.61	43.50	39.89	120.000	356.9	V
736.648750	26.24	46.00	19.76	120.000	377.6	V

Test name

Specification

FCC 15.209 Radiated emission limits; general requirements.

RSS-210-I8 2.5 General Field Strength Limits FCC Part 15 Subpart C, RSS-210-I8, RSS-Gen-I4



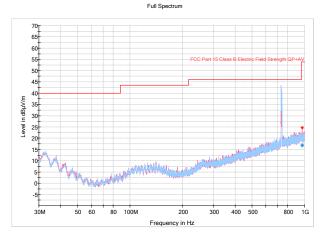


Figure 8.1-35: Radiated spurious emissions 30-1000MHz for EUT with iPhone 6 – LTE17 Ch5790

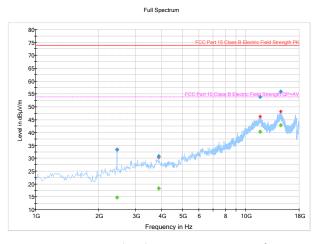


Figure 8.1-36: Radiated spurious emissions >1GHz for EUT with iPhone 6 – LTE17 Ch5790

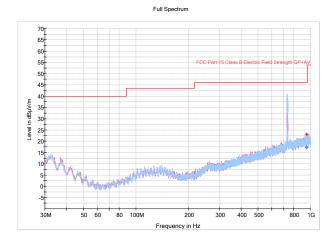


Figure 8.1-37: Radiated spurious emissions 30-1000MHz for EUT with iPhone 6 LTE17 Ch5780

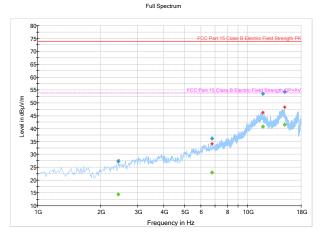


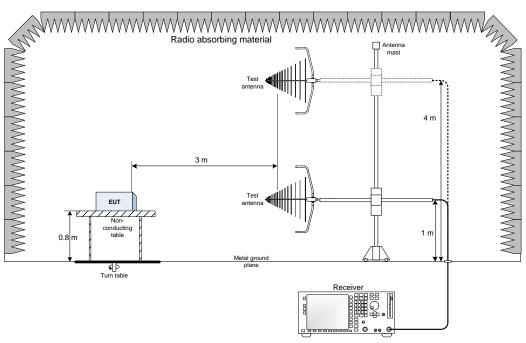
Figure 8.1-38: Radiated spurious emissions >1GHz for EUT with iPhone 6 – LTE17 Ch5780

- 1. Emissions >10GHz are noise signals. Ignored
- 2. Emissions at 734-746MHz are basestation signasl from CMW500. Ignored
- 3. Emissions at 2.44GHz range are from WiFi/BT interference. Ignored
- 4. There is no degradation between baseline and tested with EUT. No emissions within 20dB of limit line above noise floor detected.

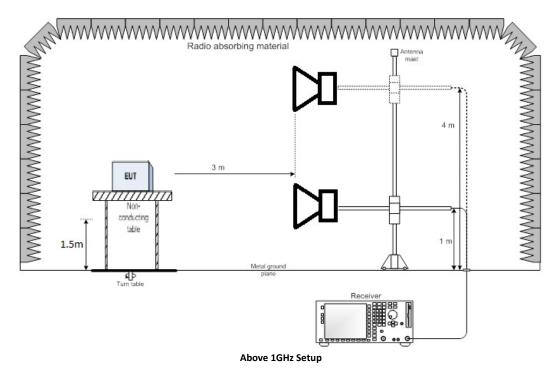


# Section 9. Block diagrams of test set-ups

#### 9.1 Radiated emissions set-up



30-1000MHz Setup



Report reference ID: FCC-15.209 and RSS-210 #308044