

FCC PART 15C TEST REPORT FOR CERTIFICATION

On Behalf of

Incipio, LLC

Incase Keyboard for iPad Pro 9.7

Model Number: INPW500185

FCC ID: 2AAWX-INPW500185

Prepared for : Incipio, LLC

6001 Oak Canyon, Irvine, California, United States, 92618

Prepared By : EST Technology Co., Ltd.

San Tun Management Zone, Houjie District Dongguan, China

Tel: 86-769-83081888-808

Report Number: ESTE-R1608069

Date of Test : July 18 ~ August 19, 2016

Date of Report : August 21, 2016

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Test Report Verification

| | | | |
|---|---|---|---------------------------|
| Applicant: | Incipio, LLC | | |
| Address: | 6001 Oak Canyon, Irvine, California, United States, 92618 | | |
| Manufacturer Address: | DongGuan Siliten Electronics Co.,Ltd Sijia Yewu Industrial Park, Shijie Town, Dongguan City, Guangdong Province, China | | |
| E.U.T: | Incase Keyboard for iPad Pro 9.7 | | |
| Model Number: | INPW500185 | | |
| Power Supply: | DC 3.7V From Internal Battery DC 5V | | |
| Test Voltage: | DC 3.7V DC 5V From PC | | |
| Trade Name: | Incase | Serial No.: | ----- |
| Date of Receipt: | July 18, 2016 | Date of Test: | July 18 ~ August 20, 2016 |
| Test Specification: | FCC Rules and Regulations Part 15 Subpart C:2015 ANSI C63.10:2013 | | |
| Test Result: | <p>The device described above is tested by EST Technology Co., Ltd.. The measurement results were contained in this test report and EST Technology Co., Ltd. was assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliance with the FCC Rules and Regulations Part 15 Subpart C requirements.</p> <p style="text-align: right;">This report applies to above tested sample only and shall not be reproduced in part without written approval of EST Technology Co., Ltd. Date: August 21, 2016</p> | | |
| Prepared by: | Tested by: | Approved by: | |
|  |  |  | |
| Ada / Assistant | Tony.Tang / Engineer | Iceman.Hu / Manager | |
| Other Aspects: | None. | | |
| Abbreviations: OK/P=passed fail/F=failed n.a/N=not applicable E.U.T=equipment under tested | | | |
| This test report is based on a single evaluation of one sample of above mentioned products ,It is not permitted to be duplicated in extracts without written approval of EST Technology Co., Ltd. | | | |



1. GENERAL INFORMATION

1.1. Description of Device (EUT)

| | | |
|---------------------|---|----------------------------------|
| Product Name | : | Incase Keyboard for iPad Pro 9.7 |
| FCC ID | : | 2AAWX-INPW500185 |
| Model Number | : | INPW500185 |
| Operation frequency | : | 2402MHz~2480MHz |
| Number of channel | : | 79 |
| Antenna | : | PCB antenna, 1.5dBi gain |
| Modulation | : | BT BDR: GFSK |
| Sample Type | : | Prototype production |

2. SUMMARY OF TEST

2.1. Summary of test result

| Description of Test Item | Standard | Results |
|--------------------------------|--|---------|
| Maximum Peak Output Power | FCC Part 15: 15.247(b)(1) DA 00-705 | PASS |
| 20dB Bandwidth | FCC Part 15: 15.247a1 DA 00-705 | PASS |
| Carrier Frequency Separation | FCC Part 15: 15.247(a)(1) DA 00-705 | PASS |
| Number Of Hopping Channel | FCC Part 15: 15.247(a)(1)(iii) DA 00-705 | PASS |
| Dwell Time | FCC Part 15: 15.247(a)(1)(iii) DA 00-705 | PASS |
| Radiated Emission | FCC Part 15: 15.209 FCC Part 15: 15.247(d) ANSI C63.10:2013 DA 00-705 | PASS |
| Band Edge Compliance | FCC Part 15: 15.247(d) DA 00-705 | PASS |
| Power Line Conducted Emissions | FCC Part 15: 15.207 ANSI C63.10:201 DA 00-705 | PASS |
| Antenna requirement | FCC Part 15: 15.203 | PASS |

2.2. Test Facilities

| | | |
|---------------|---|---|
| EMC Lab | : | Certificated by CNAL, CHINA Registration No.: L5288 Date of registration: December 07, 2015 Certificated by FCC, USA Registration No.: 989591 Date of registration: November 20, 2013 Certificated by Industry Canada Registration No.: 9405A-1 Date of registration: December 30, 2015 Certificated by VCCI, Japan Registration No.: R-3663 & C-4103 Date of registration: July 25, 2011 Certificated by TUV Rheinland, Germany Registration No.: UA 50195514 0001 Date of registration: January 07, 2011 Certificated by TUV/PS, Shenzhen Registration No.: SCN1017 Date of registration: January 27, 2011 Certificated by Intertek ETL SEMKO Registration No.: 2011-RTL-L1-18 Date of registration: April 28, 2011 Certificated by Siemic, Inc. Registration No.: SLCN021 Date of registration: November 8, 2011 Certificated by Nemko, Hong Kong Registration No.: 175193 Date of registration: May 4, 2011 |
| Name of Firm | : | EST Technology Co., Ltd. |
| Site Location | : | San Tun Management Zone, Houjie Town, Dongguan, Guangdong, China |

2.3. Measurement uncertainty

| Test Item | Uncertainty |
|--|--------------------|
| Uncertainty for Conduction emission test | 2.54dB |
| Uncertainty for Radiation Emission test (30MHz-1GHz) | 3.62dB |
| Uncertainty for Radiation Emission test (1GHz to 18GHz) | 4.86dB |
| Uncertainty for radio frequency | 7×10^{-8} |
| Uncertainty for conducted RF Power | 0.20dB |
| Uncertainty for Power density test | 0.26dB |

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

2.4. Assistant equipment used for test

2.4.1. NoteBook

Manufacturer : DELL
 M/N : Latitude E6420
 Adapter : M/N: DA90PM111

2.5. Block Diagram

For radiated emissions test: EUT was placed on a turn table, which is 0.8 (or 1.5) meter high above ground. EUT was be set into BT test mode by software before test.

...



(EUT: Incase Keyboard for iPad Pro 9.7)

2.6. Test mode

The test software was used to control EUT work in Continuous TX mode, and select test channel, wireless mode

| Mode | Channel | Frequency |
|------|---------|-----------|
| GFSK | Low | 2402MHz |
| | Middle | 2441MHz |
| | High | 2480MHz |

2.7. Channel List for Bluetooth

| Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) | Channel No. | Frequency (MHz) |
|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|
| 1 | 2402 | 2 | 2403 | 3 | 2404 | 4 | 2405 |
| 5 | 2406 | 6 | 2407 | 7 | 2408 | 8 | 2409 |
| 9 | 2410 | 10 | 2411 | 11 | 2412 | 12 | 2413 |
| 13 | 2414 | 14 | 2415 | 15 | 2416 | 16 | 2417 |
| 17 | 2418 | 18 | 2419 | 19 | 2420 | 20 | 2421 |
| 21 | 2422 | 22 | 2423 | 23 | 2424 | 24 | 2425 |
| 25 | 2426 | 26 | 2427 | 27 | 2428 | 28 | 2429 |
| 29 | 2430 | 30 | 2431 | 31 | 2432 | 32 | 2433 |
| 33 | 2434 | 34 | 2435 | 35 | 2436 | 36 | 2437 |
| 37 | 2438 | 38 | 2439 | 39 | 2440 | 40 | 2441 |
| 41 | 2442 | 42 | 2443 | 43 | 2444 | 44 | 2445 |
| 45 | 2446 | 46 | 2447 | 47 | 2448 | 48 | 2449 |
| 49 | 2450 | 50 | 2451 | 51 | 2452 | 52 | 2453 |
| 53 | 2454 | 54 | 2455 | 55 | 2456 | 56 | 2457 |
| 57 | 2458 | 58 | 2459 | 59 | 2460 | 60 | 2461 |
| 61 | 2462 | 62 | 2463 | 63 | 2464 | 64 | 2465 |
| 65 | 2466 | 66 | 2467 | 67 | 2468 | 68 | 2469 |
| 69 | 2470 | 70 | 2471 | 71 | 2472 | 72 | 2473 |
| 73 | 2474 | 74 | 2475 | 75 | 2476 | 76 | 2477 |
| 77 | 2478 | 78 | 2479 | 79 | 2480 | - | - |

2.8. Test Equipment

2.8.1. For conducted emission test

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Next Cal. |
|-------------------------|-----------------|--------------|------------|------------|-----------|
| EMI Test Receiver | Rohde & Schwarz | ESHS30 | 832354 | June 25,16 | 1 Year |
| Artificial Mains Networ | Rohde & Schwarz | ENV216 | 101260 | June 25,16 | 1 Year |
| Pulse Limiter | Rohde & Schwarz | ESEON ONE-Z2 | 101100 | June 25,16 | 1 Year |

2.8.2. For radiated emission test(30-1000MHz)

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Next Cal. |
|-------------------|-----------------|-----------|------------|------------|-----------|
| EMI Test Receiver | Rohde & Schwarz | ESVS10 | 100004 | June 25,16 | 1 Year |
| Spectrum Analyzer | Agilent | E4411B | MY50140697 | June 25,16 | 1 Year |
| Bilog Antenna | Teseq | CBL 6111D | 27090 | June 28,15 | 3 Year |
| Signal Amplifier | Agilent | 310N | 187037 | June 25,16 | 1 Year |

2.8.3. For radiated emission test(above 1GHz)

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Next Cal. |
|-------------------|--------------|-------------|---------------|------------|-----------|
| Horn Antenna | SCHWARZB ECK | BBHA 9120 D | BBHA9120D1002 | June 28,15 | 3 Year |
| Signal Amplifier | SCHWARZB ECK | BBV9718 | 9718-212 | June 25,16 | 1 Year |
| Spectrum Analyzer | Agilent | E4408B | MY44211139 | June 25,16 | 1 Year |
| RF Cable | Hubersuhner | RG 214/U | 513423 | June 25,16 | 1 Year |

3. MAXIMUM PEAK OUTPUT POWER

3.1. Limit

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts, the e.i.r.p shall not exceed 4W

3.2. Test Procedure

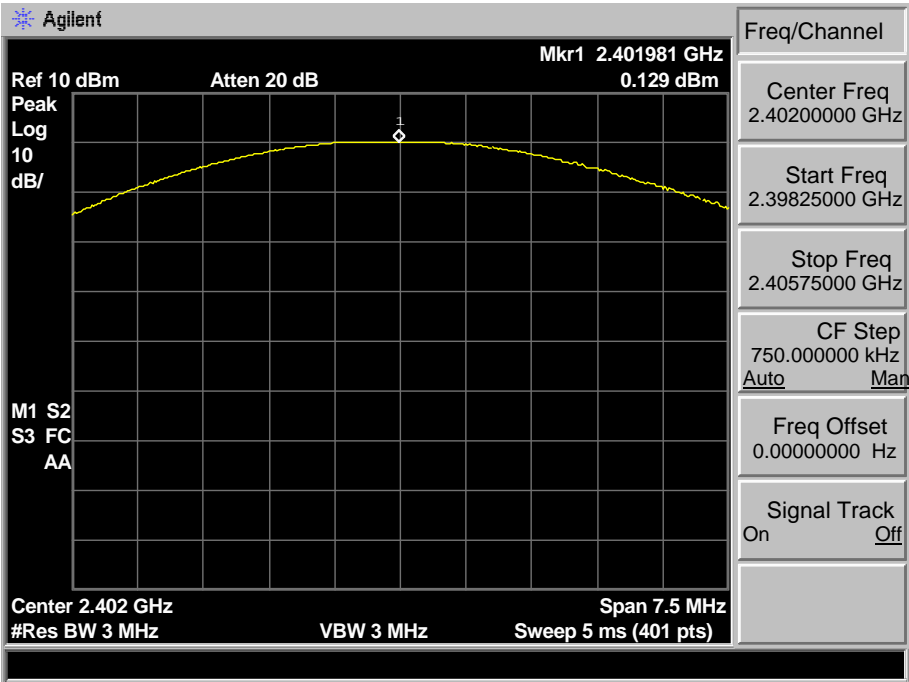
The transmitter output (antenna port) was connected to the spectrum analyzer

3.3. Test Result

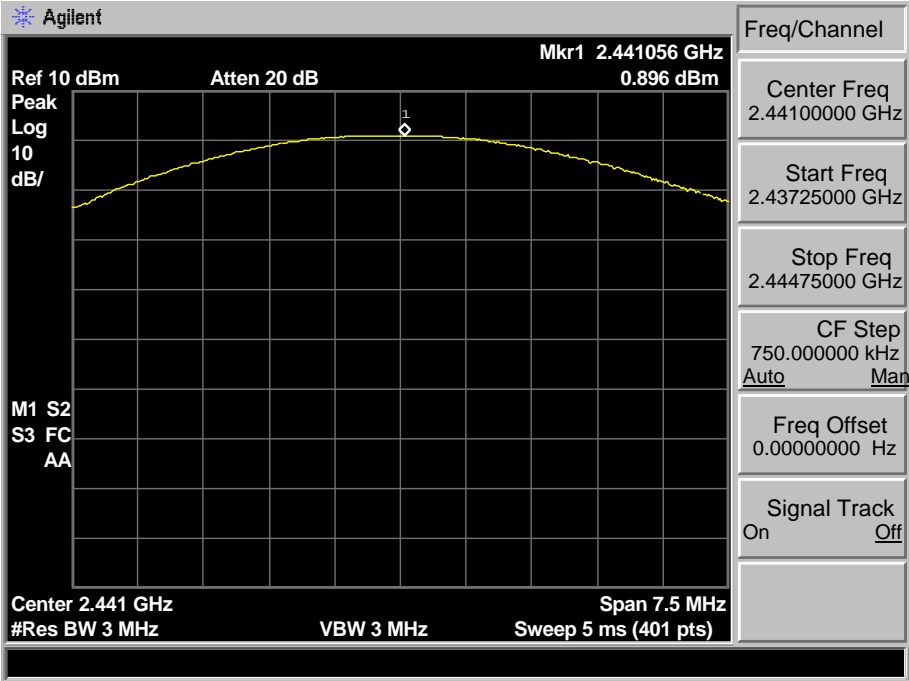
| EUT: Incase Keyboard for iPad Pro 9.7 | | | | | |
|---------------------------------------|------------|--------------------|-------|----------------------|-------------|
| M/N: INPW500185 | | | | | |
| Test date: 2016-07-27 | | Test site: RF site | | Tested by: Tony Tang | |
| Mode | Freq (MHz) | Result (dBm) | Limit | | Margin (dB) |
| | | | dBm | W | |
| GFSK | 2402 | 0.129 | 21.00 | 0.125 | 20.871 |
| | 2441 | 0.896 | 21.00 | 0.125 | 20.104 |
| | 2480 | 1.406 | 21.00 | 0.125 | 19.594 |
| Conclusion: PASS | | | | | |

3.4. Test Data

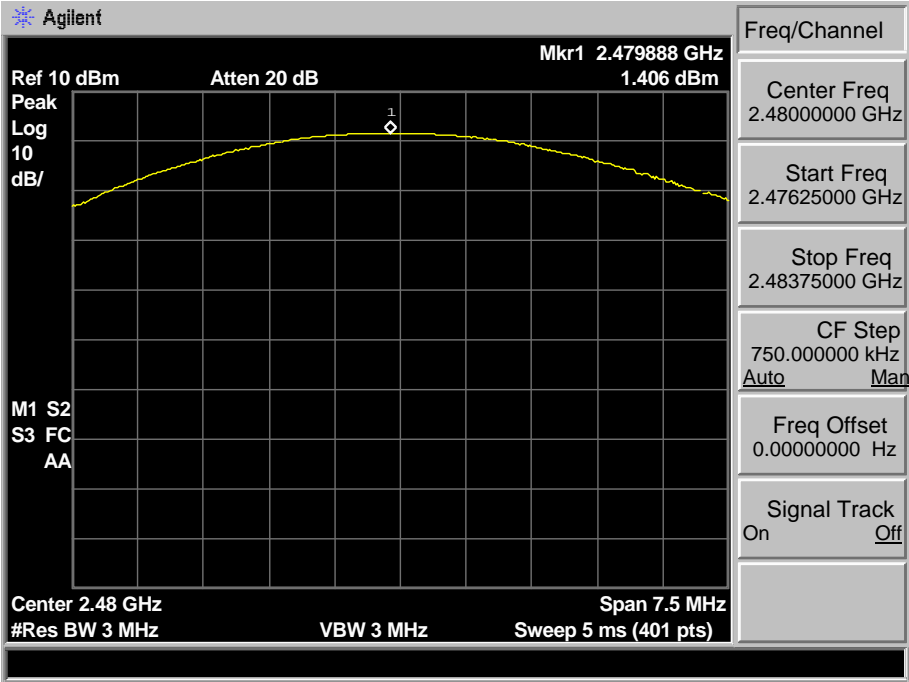
GFSK 2402 MHz



GFSK 2441 MHz



GFSK 2480 MHz



4. 20 DB BANDWIDTH

4.1. Limit

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

4.2. Test Procedure

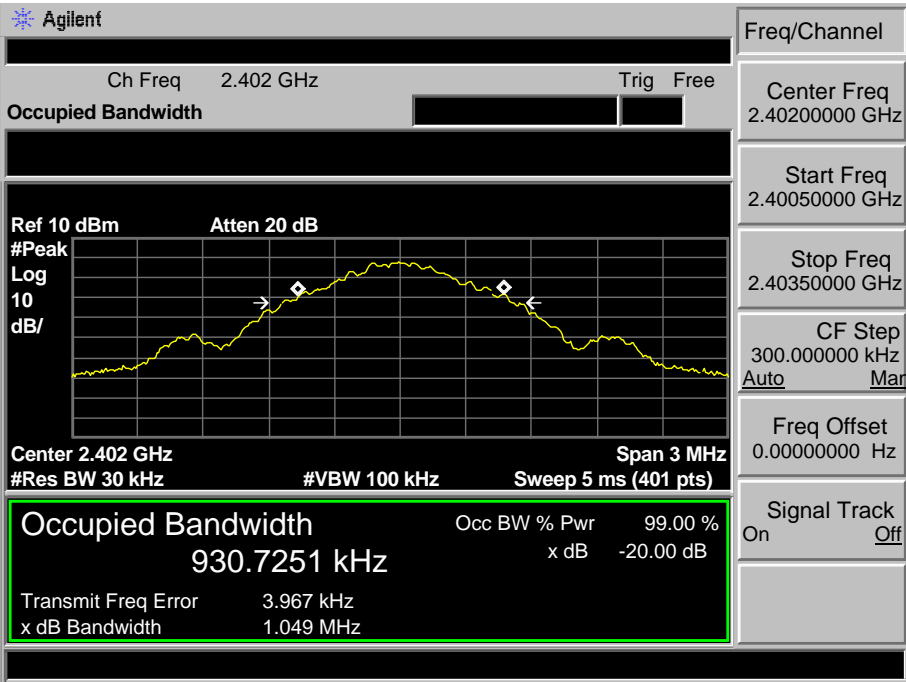
The transmitter output was coupled to a spectrum analyzer via a antenna. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 30kHz RBW and 100kHz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

4.3. Test Result

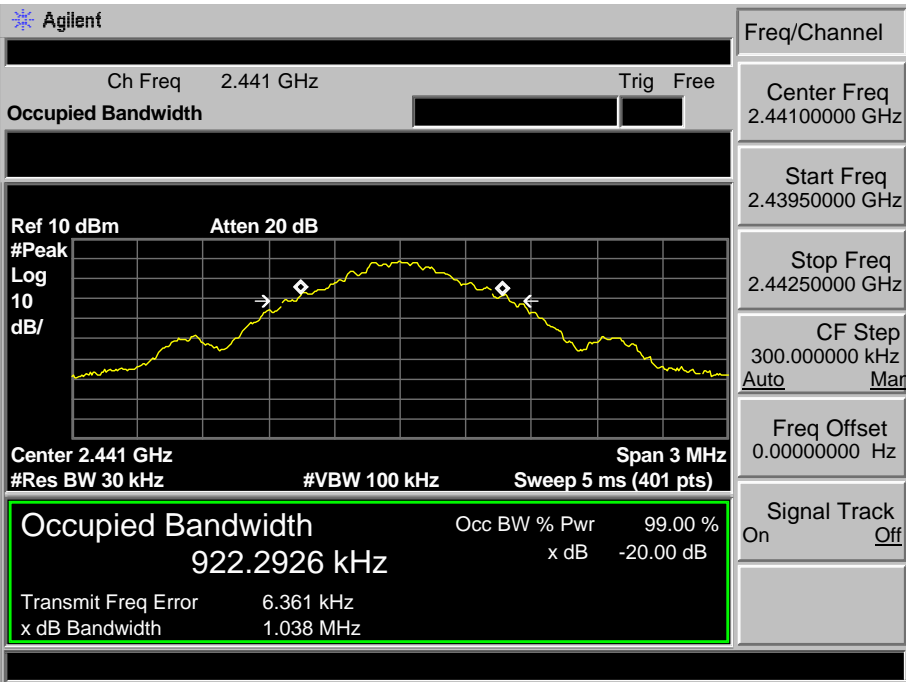
| EUT: Incase Keyboard for iPad Pro 9.7 | | | | |
|---------------------------------------|------------|----------------------|-------------|----------------------|
| M/N: INPW500185 | | | | |
| Test date: 2016-07-27 | | Test site: RF site | | Tested by: Tony Tang |
| Mode | Freq (MHz) | 20dB Bandwidth (MHz) | Limit (kHz) | Conclusion |
| GFSK | 2402 | 1.049 | / | PASS |
| | 2441 | 1.038 | / | PASS |
| | 2480 | 1.034 | / | PASS |

4.4. Test Data

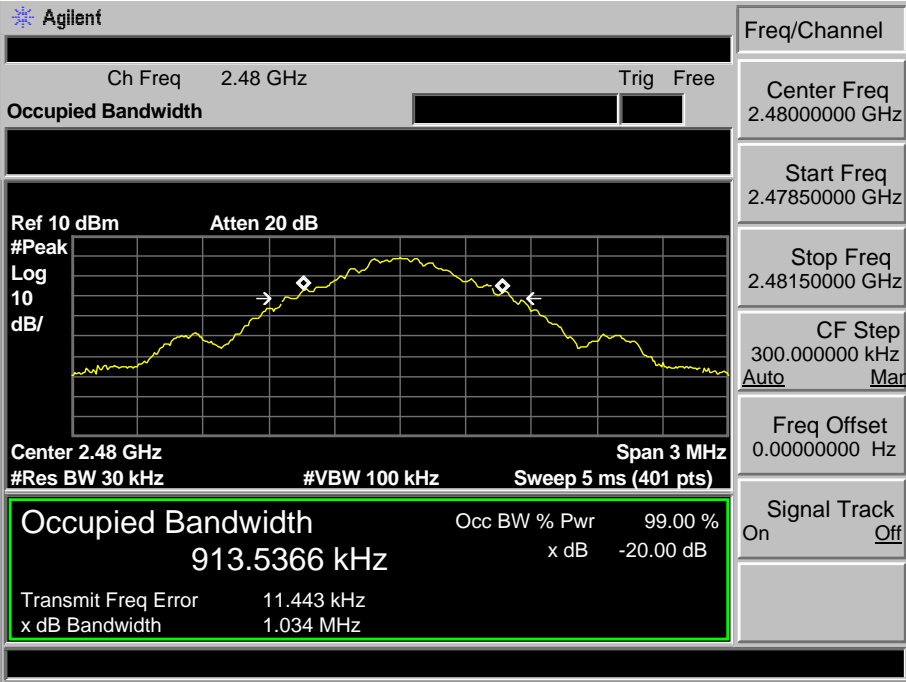
GFSK 2402MHz



GFSK 2441MHz



GFSK 2480MHz



5. CARRIER FREQUENCY SEPARATION

5.1. Limit

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW

5.2. Test Procedure

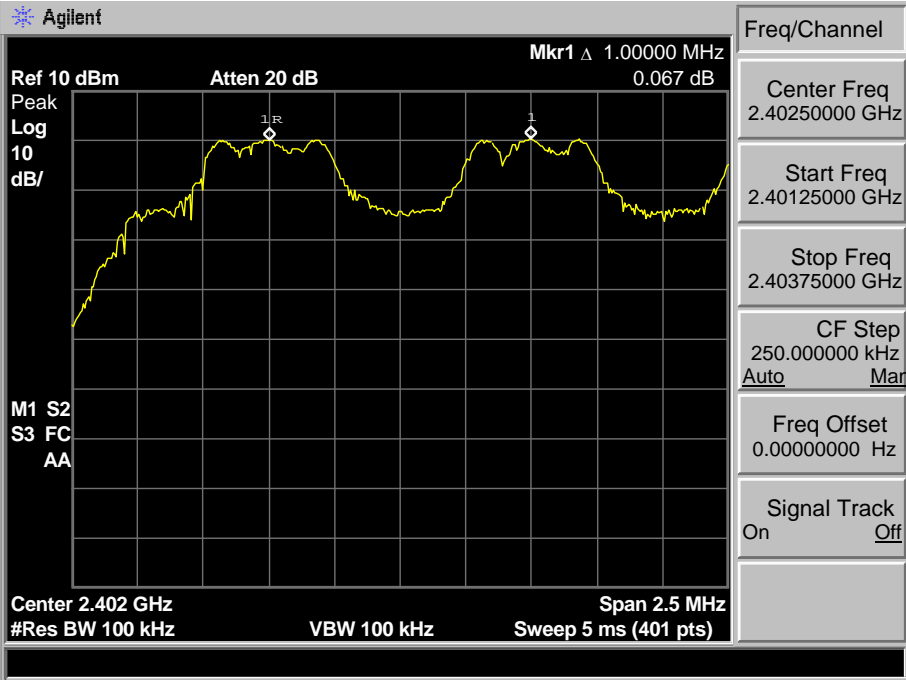
The transmitter output was coupled to a spectrum analyzer via a antenna. The carrier frequency was measured by spectrum analyzer with 100kHz RBW and 100kHz VBW.

5.3. Test Result

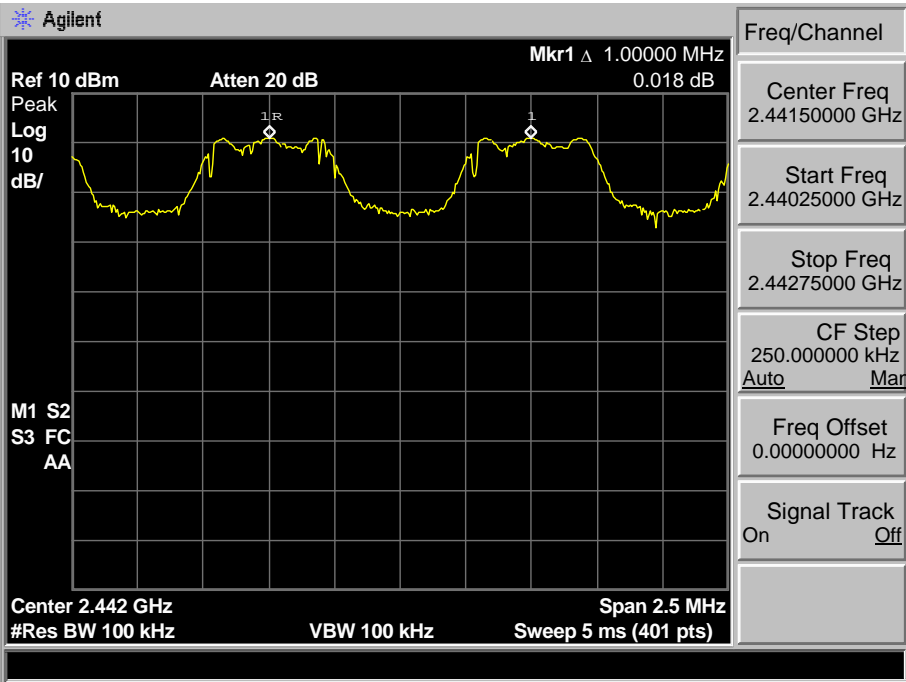
| EUT: Incase Keyboard for iPad Pro 9.7 | | | | |
|---------------------------------------|---------|--------------------------|---|----------------------|
| M/N: INPW500185 | | | | |
| Test date: 2016-07-27 | | | Test site: RF site | Tested by: Tony Tang |
| Mode | Channel | Channel separation (MHz) | Limit | Conclusion |
| GFSK | Low CH | 1.000 | > 2/3 of the 20dB Bandwidth or 25[kHz](whichever is greater) | PASS |
| | Mid CH | 1.000 | | PASS |
| | High CH | 1.000 | | PASS |

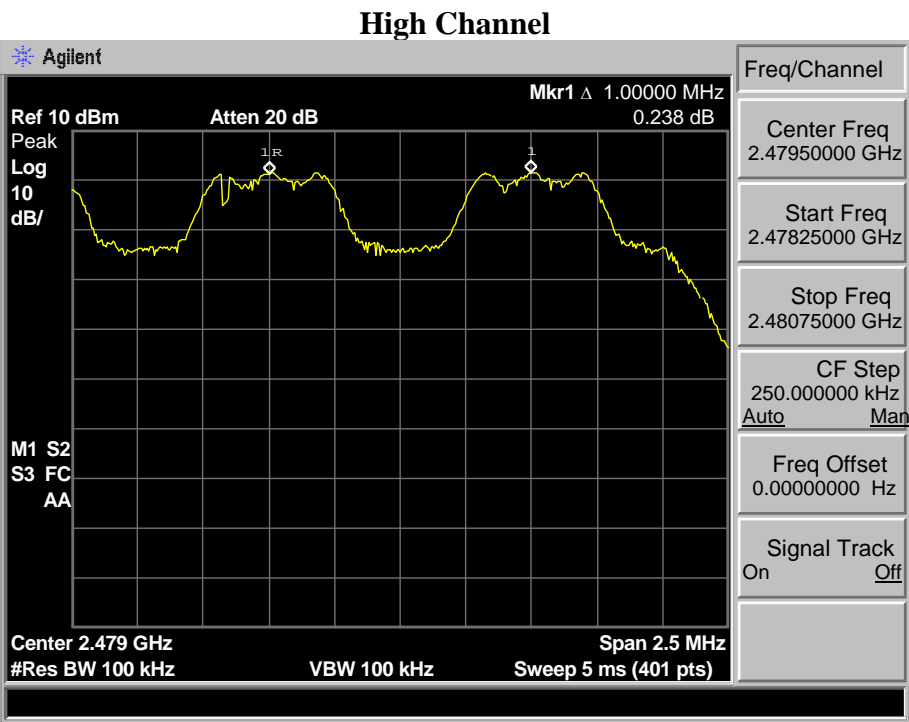
5.4. Test Data

GFSK
Low Channel



Mid Channel





6. NUMBER OF HOPPING CHANNEL

6.1. Limit

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels

6.2. Test Procedure

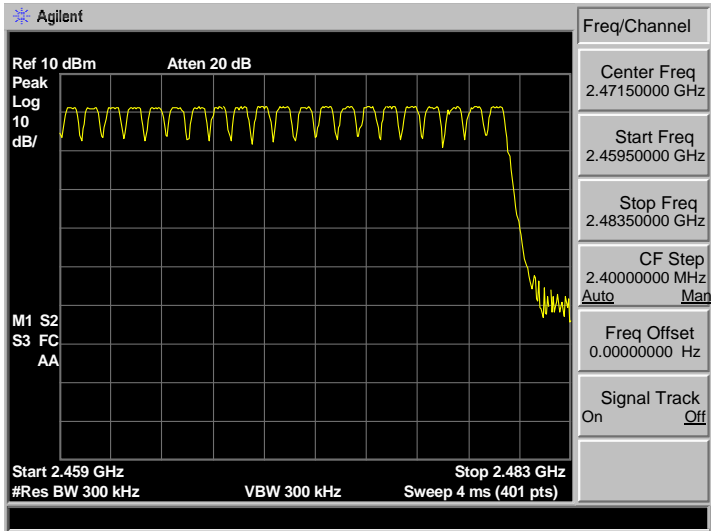
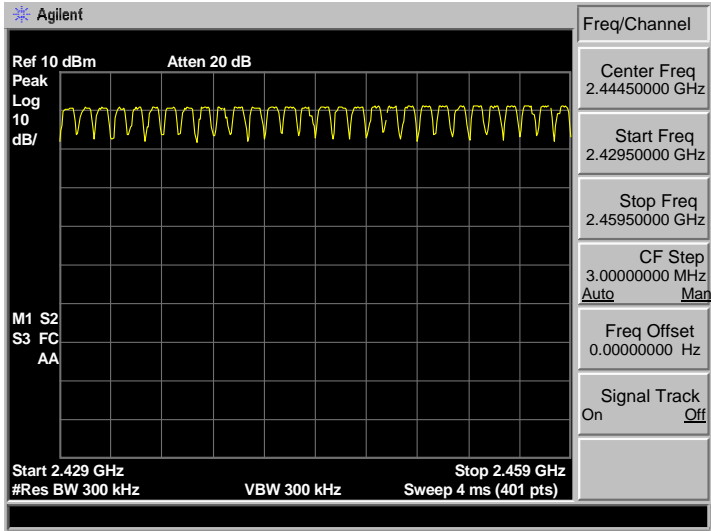
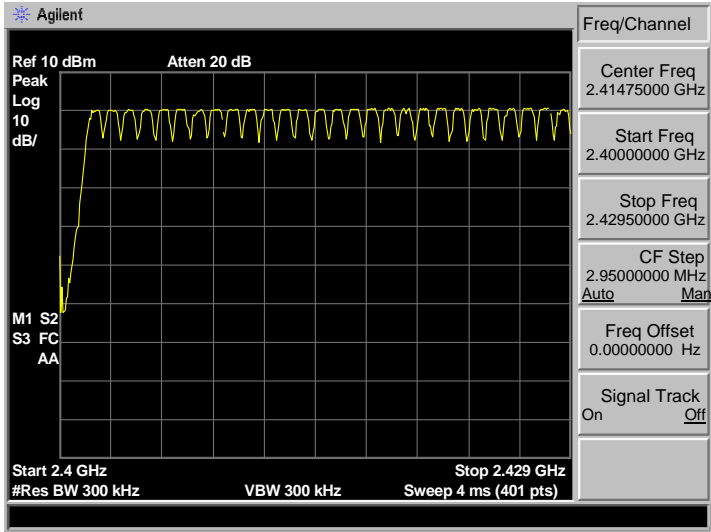
The transmitter output was coupled to a spectrum analyzer via a antenna. The number of hopping channel was measured by spectrum analyzer with 300kHz RBW and 300kHz VBW.

6.3. Test Result

| EUT: Incase Keyboard for iPad Pro 9.7 | | | |
|---------------------------------------|---------------------------|--------------------|----------------------|
| M/N: INPW500185 | | | |
| Test date: 2016-07-27 | | Test site: RF site | Tested by: Tony.Tang |
| Mode | Number of hopping channel | Limit | Conclusion |
| GFSK | 79 | >15 | PASS |

6.4. Test Data

GFSK



7. DWELL TIME

7.1. Limit

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

7.2. Test Procedure

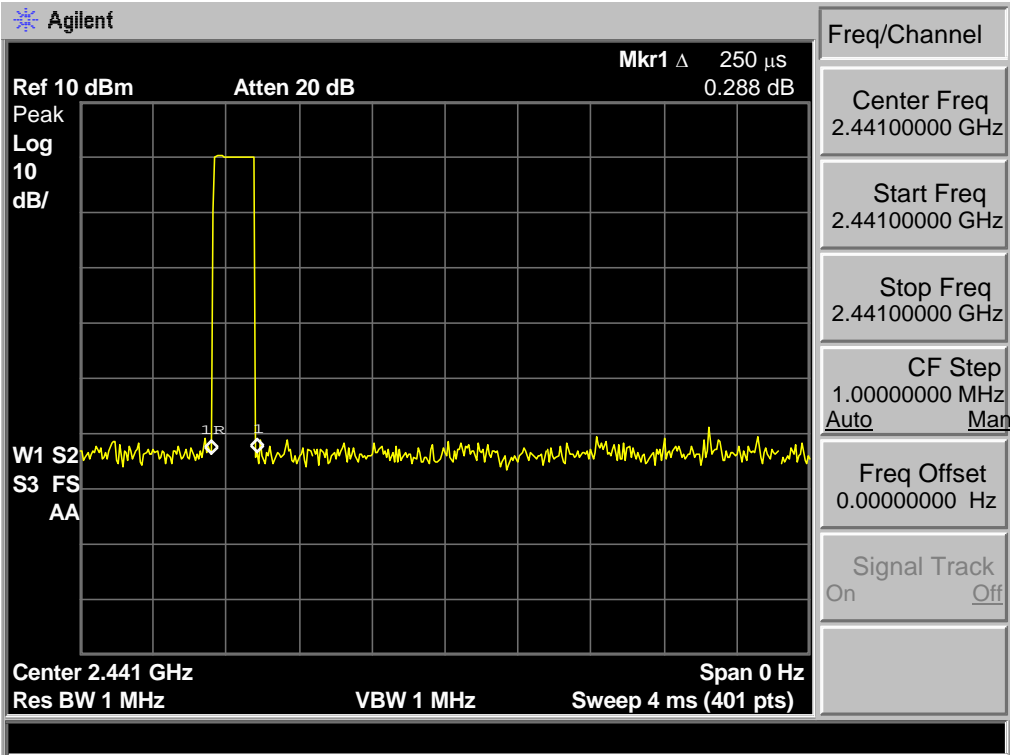
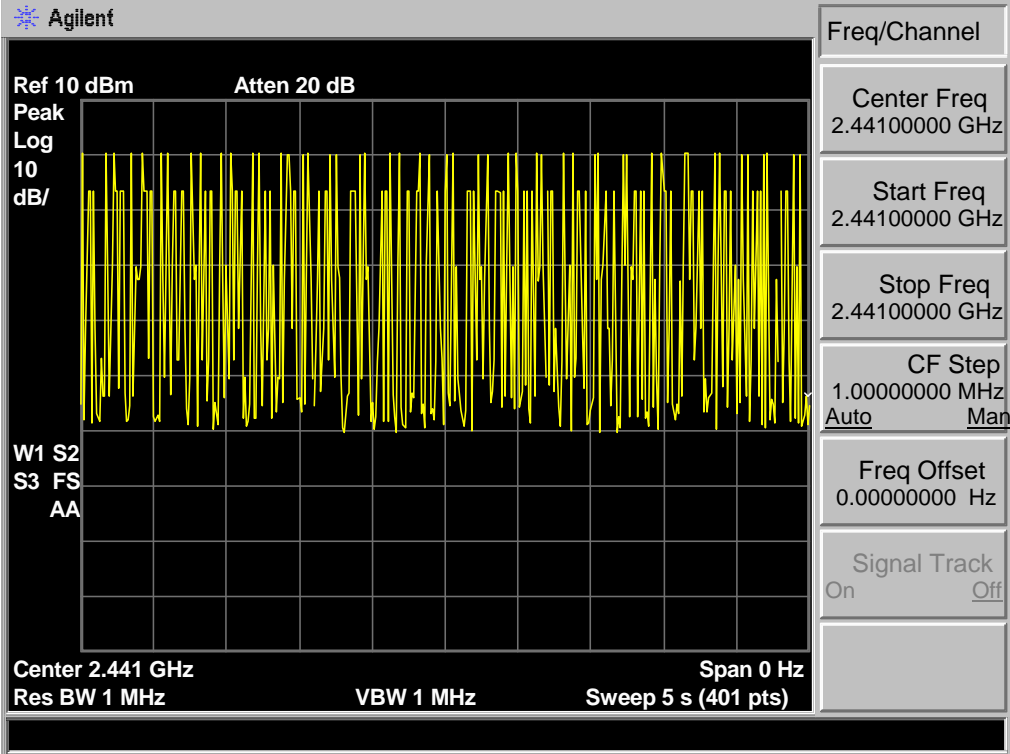
1. Connect the antenna port of the EUT to the spectrum analyzer by a low loss cable.
2. Set the EUT to proper test mode with relative test software and hardware.
3. Spectrum analyzer setting: Centered Frequency = measured channel, RBW = 1MHz, VBW= 1MHz, Frequency Span = 0 Hz.
4. Set sweep time properly to capture the entire dwell time per hopping channel.
5. Set detector type to Peak and trace mode to Max Hold and make the measurement.
6. Repeat step 3-5 until all channels measured were complete.

7.3. Test Result

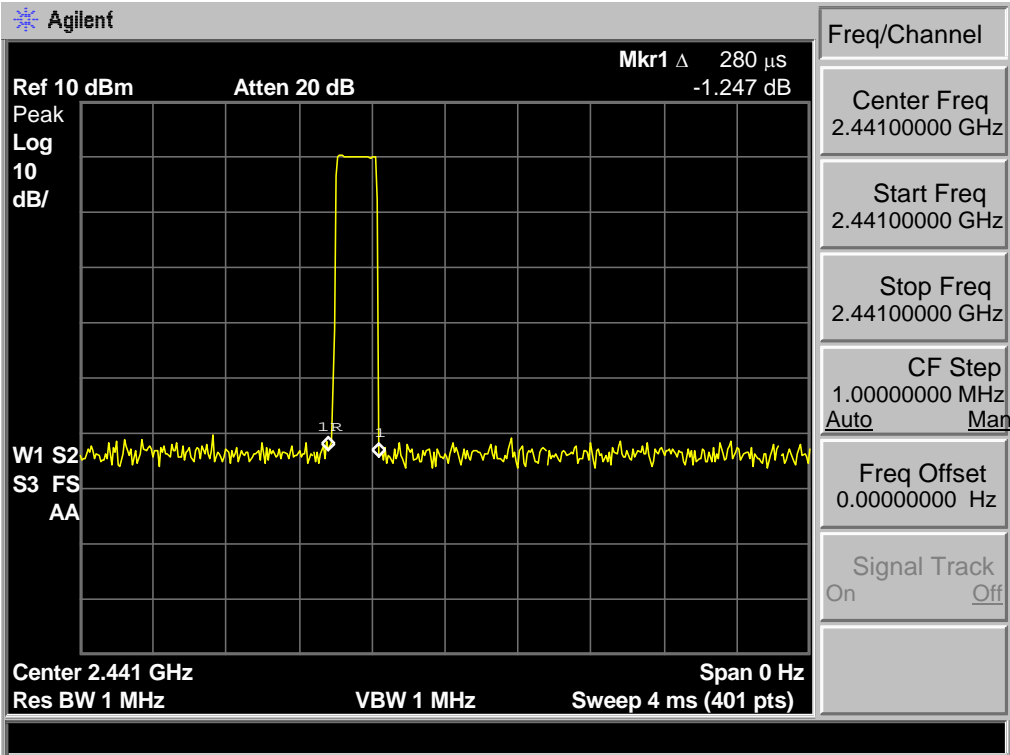
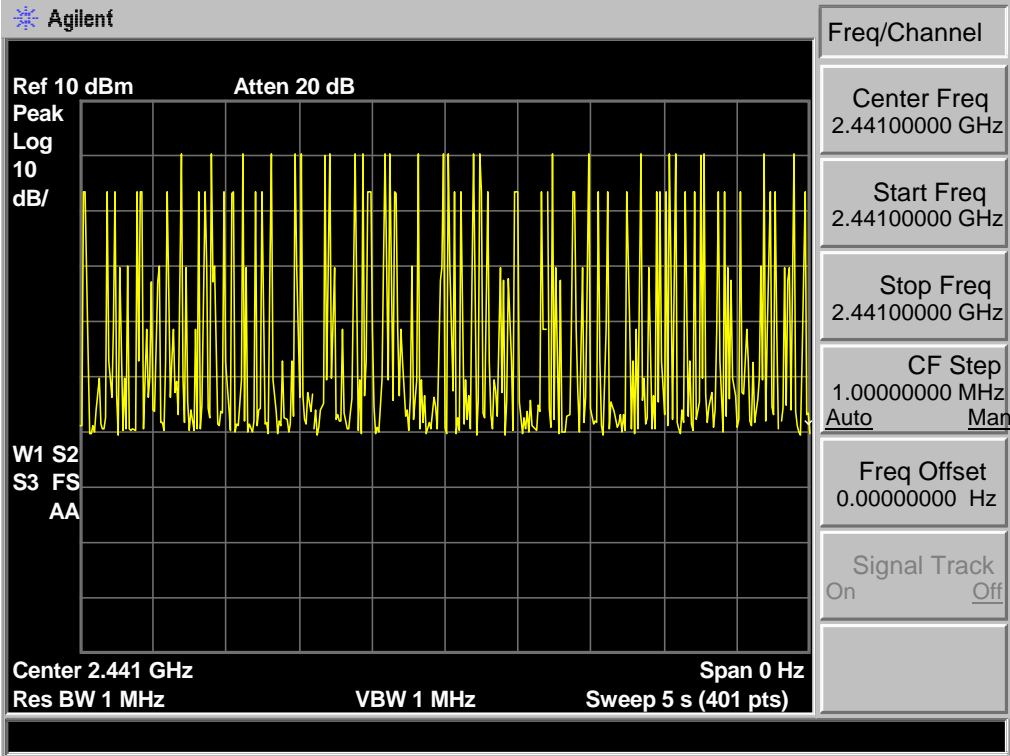
| | | | |
|---------------------------------------|-----------------|--------------------|----------------------|
| EUT: Incase Keyboard for iPad Pro 9.7 | | | |
| M/N: INPW500185 | | | |
| Test date: 2016-07-27 | | Test site: RF site | Tested by: Tony Tang |
| Mode | Dwell time (ms) | Limit | Conclusion |
| GFSK DH1 | 77.42 | <400ms | PASS |
| GFSK DH3 | 46.01 | <400ms | PASS |
| GFSK DH5 | 25.60 | <400ms | PASS |

7.4. Test Data

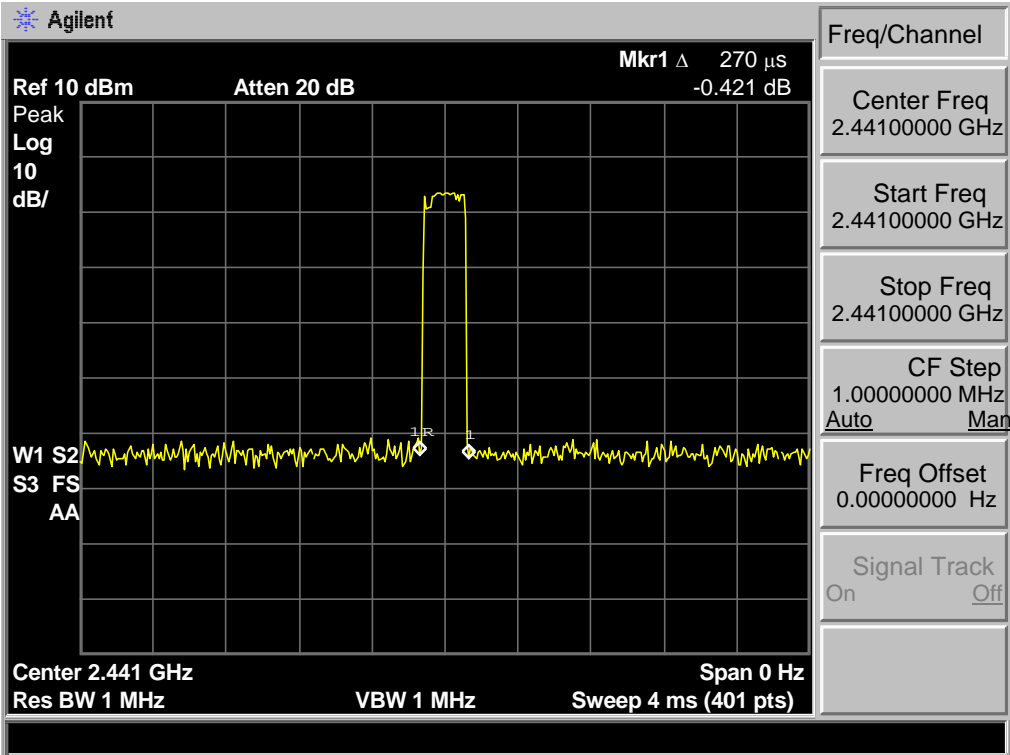
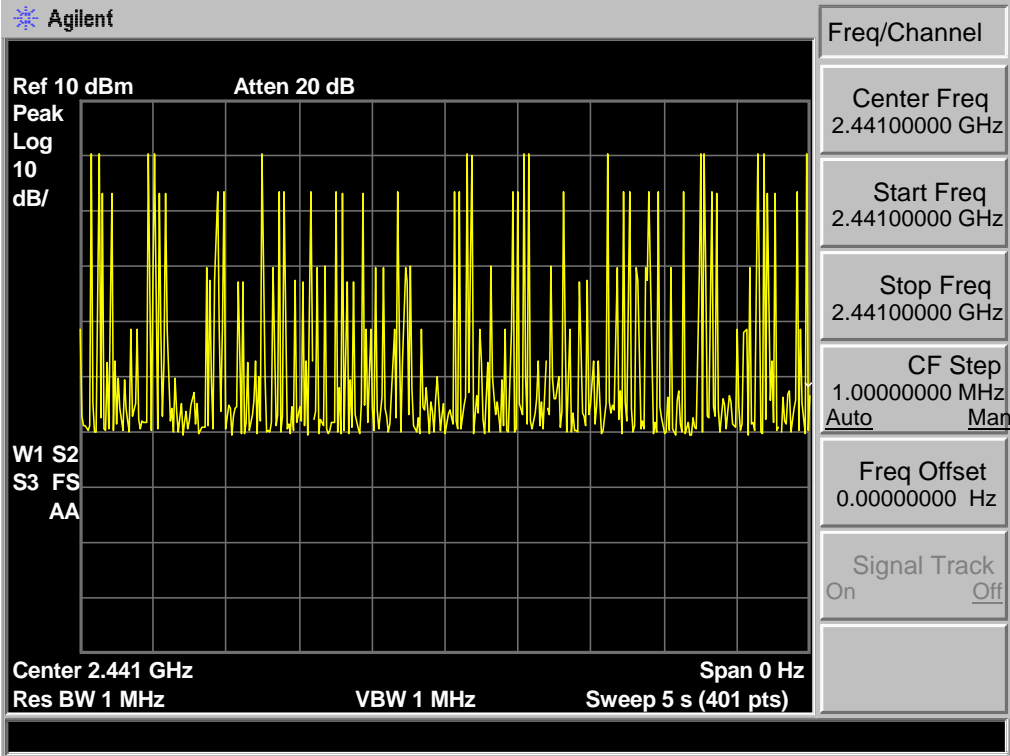
GFSK DH1 : $49\text{hop}/5\text{s} * 0.4 * 79 * 0.25\text{ms} = 77.42$



GFSK DH3 : 26hop/5s * 0.4 * 79 * 0.28ms= 46.01



GSFK DH5 : 15hop/5s * 0.4 * 79 * 0.27ms = 25.60



8. RADIATED EMISSIONS

8.1. Limit

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

15.205 Restricted frequency band

| MHz | MHz | MHz | GHz |
|----------------------------|-----------------------|-----------------|------------------|
| 0.090 - 0.110 | 16.42 - 16.423 | 399.9 - 410 | 4.5 - 5.15 |
| ¹ 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 | (²) |

15.209 Limit

| FREQUENCY MHz | DISTANCE Meters | FIELD STRENGTHS LIMIT | |
|------------------|--------------------|---|----------|
| | | μV/m | dB(μV)/m |
| 30 ~ 88 | 3 | 100 | 40.0 |
| 88 ~ 216 | 3 | 150 | 43.5 |
| 216 ~ 960 | 3 | 200 | 46.0 |
| 960 ~ 1000 | 3 | 500 | 54.0 |
| Above 1000 | 3 | 74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average) | |

Remark : (1) Emission level dBμV = 20 log Emission level μV/m

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

8.2. Test Procedure

EUT was placed on a turn table, which is 0.8 meter high above ground for 30~1000MHz test, and which is 1.5 meter high above ground for above 1GHz test. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 1MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

PEAK detector, 1MHz/1MHz for PAEK measurement,

PEAK detector, 1MHz/10Hz for Average measurement

The frequency range from 30MHz to 10th harmonic (25GHz) are checked.

8.3. Test Result

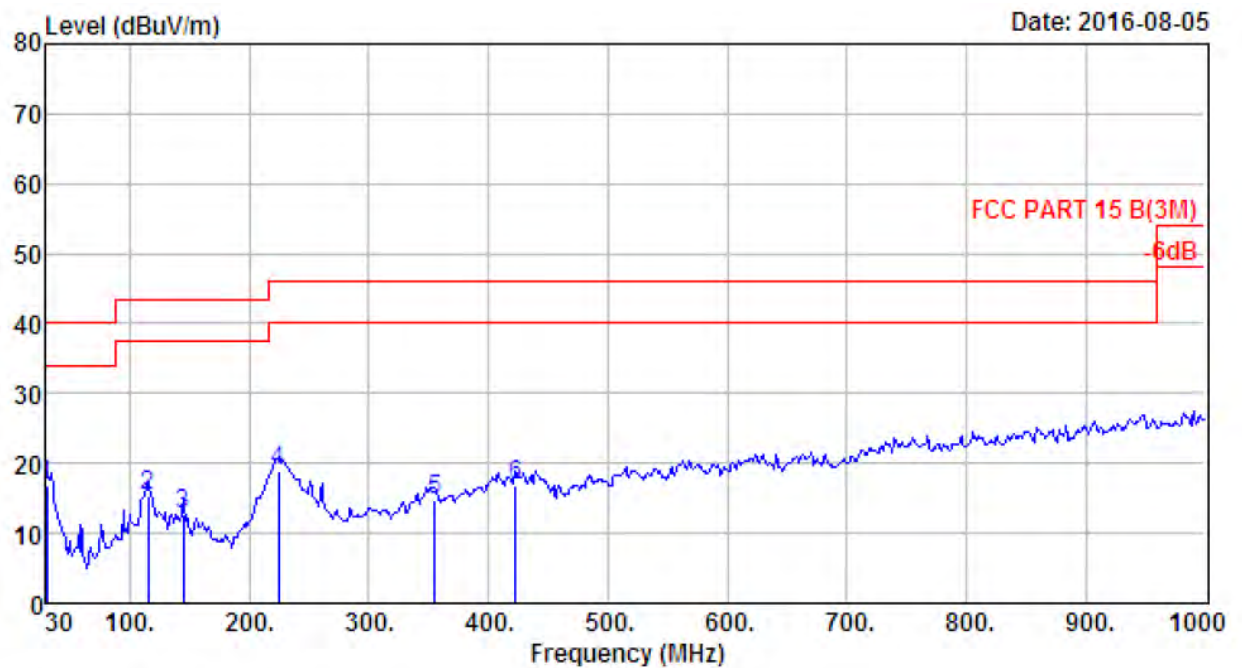
PASS.

All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.

- Note: 1、 For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.
- 2、 The frequency 2402MHz 、 2441MHz and 2480MHz is fundamental frequency which no limit, the limit on plots is automatically generated by the software, it's not fundamental limit, we can't remove it.

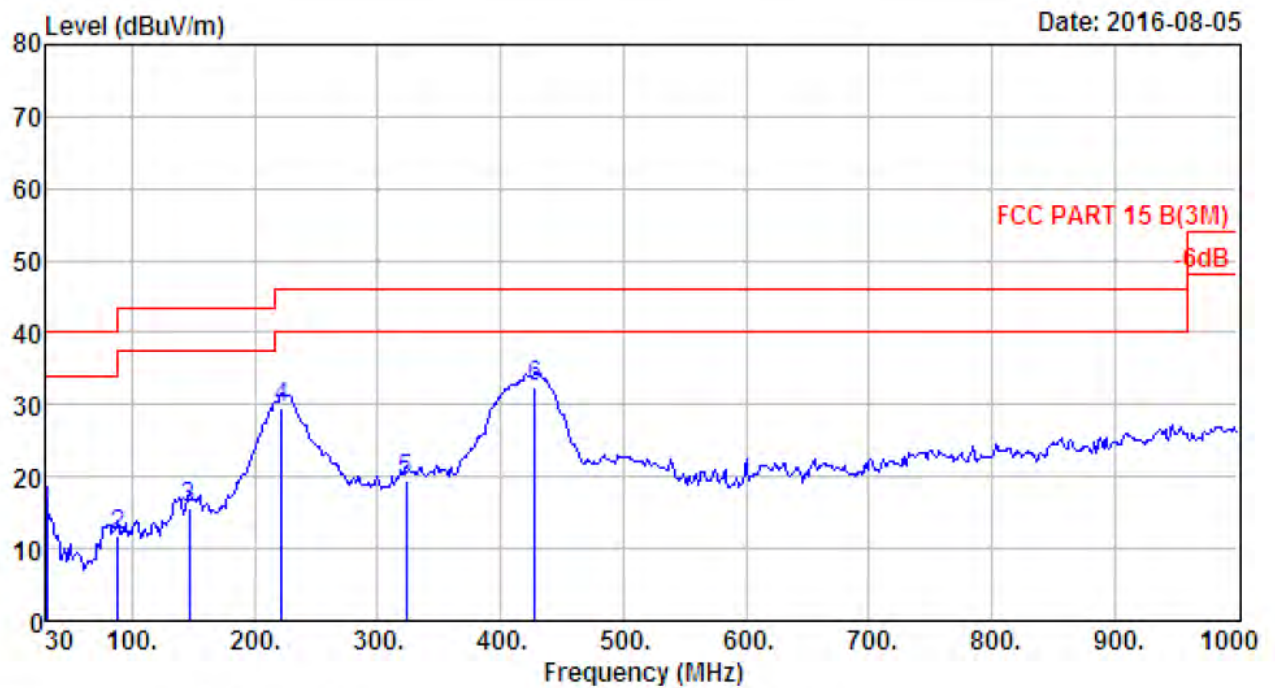
8.4. Test Data

30 MHz – 1000 MHz



Site no. : 966 1# chamber Data no. : 155
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL
 Limit : FCC PART 15 B(3M)
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2402MHz

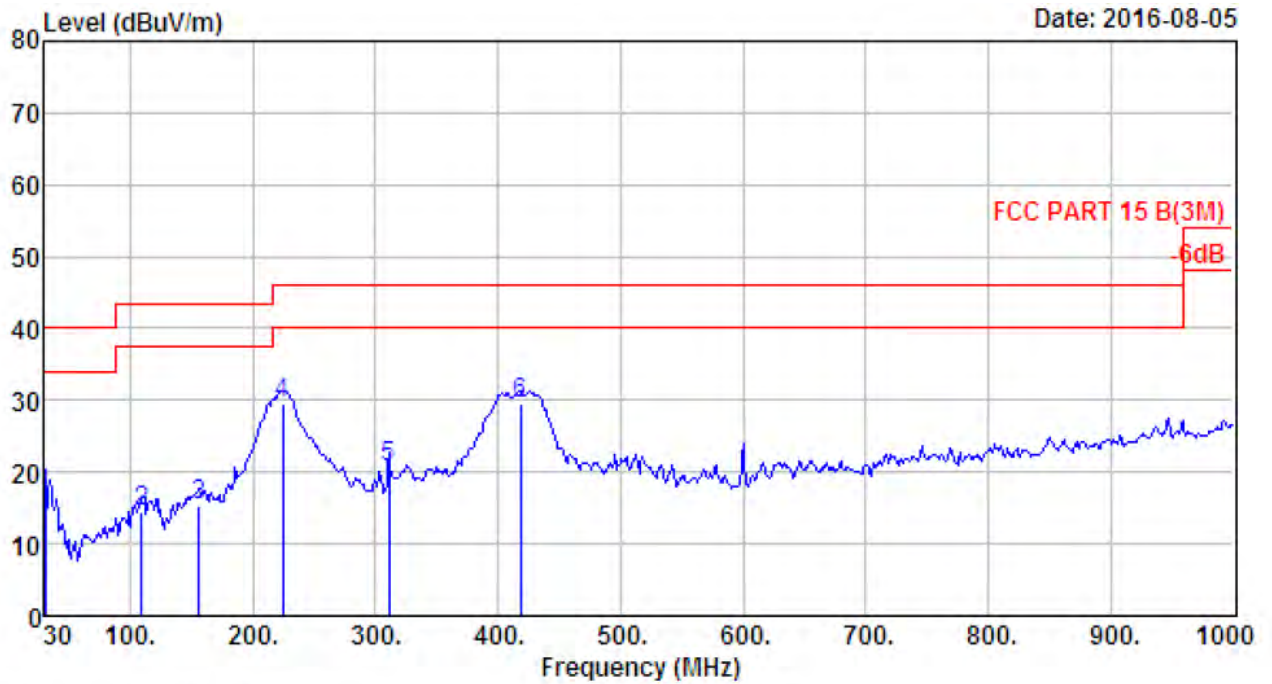
| | Freq. (MHz) | ANT Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|----------------|-------------------------|-----------------------|-------------------|-------------------------------|-------------------|----------------|--------|
| 1 | 30.00 | 18.51 | 0.65 | 29.09 | 16.79 | 40.00 | 23.21 | QP |
| 2 | 115.36 | 10.93 | 1.46 | 34.17 | 15.42 | 43.50 | 28.08 | QP |
| 3 | 144.46 | 11.26 | 1.54 | 31.09 | 12.77 | 43.50 | 30.73 | QP |
| 4 | 224.00 | 9.42 | 2.01 | 38.43 | 18.91 | 46.00 | 27.09 | QP |
| 5 | 354.95 | 14.46 | 2.57 | 28.49 | 14.63 | 46.00 | 31.37 | QP |
| 6 | 422.85 | 16.23 | 2.75 | 28.84 | 16.83 | 46.00 | 29.17 | QP |



Site no. : 966 1# chamber
 Dis. / Ant. : 3m 27137
 Limit : FCC PART 15 B(3M)
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2402MHz

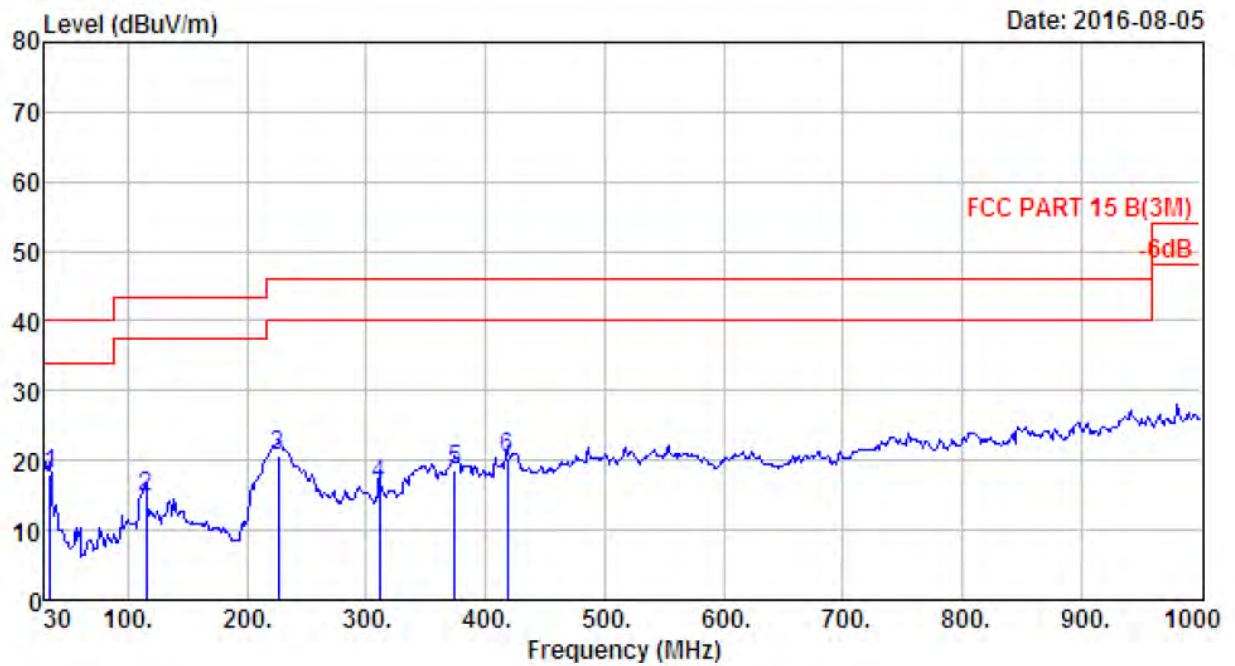
Data no. : 156
Ant. pol. : HORIZONTAL

| | Freq. (MHz) | ANT Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|----------------|-------------------------|-----------------------|-------------------|-------------------------------|-------------------|----------------|--------|
| 1 | 30.00 | 18.51 | 0.65 | 27.42 | 15.12 | 40.00 | 24.88 | QP |
| 2 | 88.20 | 8.11 | 1.31 | 33.64 | 11.86 | 43.50 | 31.64 | QP |
| 3 | 146.40 | 11.15 | 1.58 | 34.18 | 15.79 | 43.50 | 27.71 | QP |
| 4 | 222.06 | 9.31 | 2.01 | 49.11 | 29.51 | 46.00 | 16.49 | QP |
| 5 | 322.94 | 13.65 | 2.43 | 34.38 | 19.44 | 46.00 | 26.56 | QP |
| 6 | 427.70 | 16.11 | 2.85 | 44.61 | 32.57 | 46.00 | 13.43 | QP |



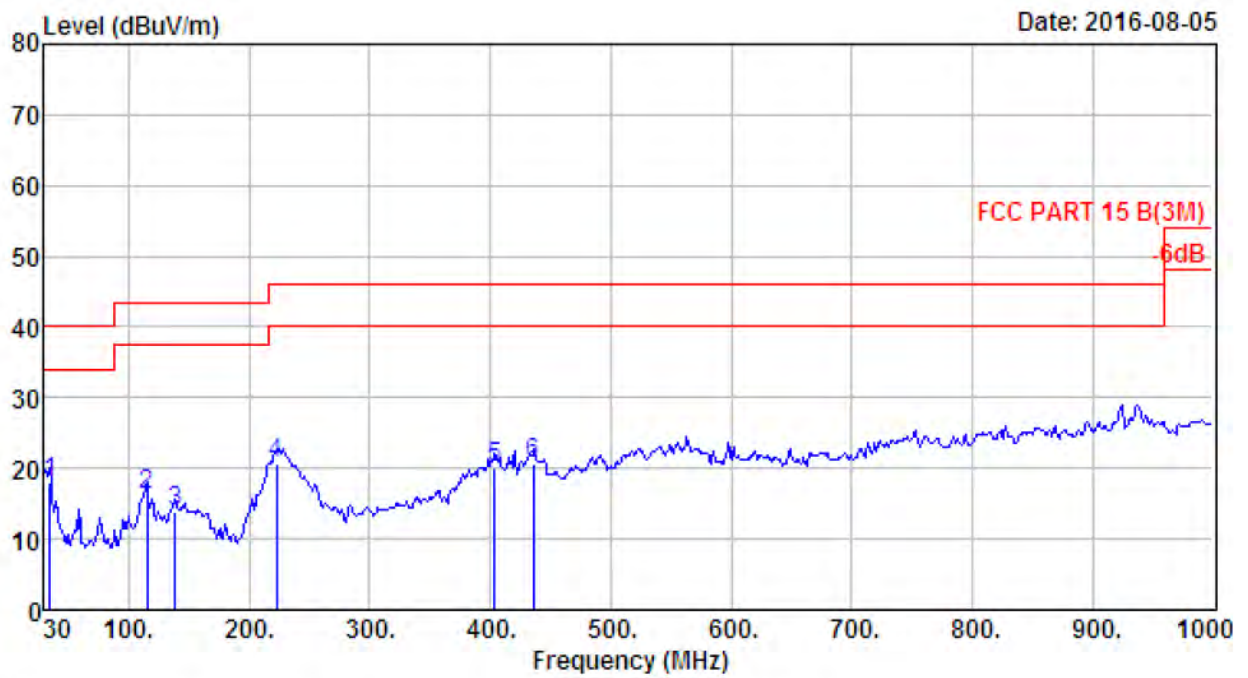
Site no. : 966 1# chamber Data no. : 157
 Dis. / Ant. : 3m 27137 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 B(3M)
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2441MHz

| | Freq. (MHz) | ANT Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|----------------|-------------------------|-----------------------|-------------------|-------------------------------|-------------------|----------------|--------|
| 1 | 30.00 | 18.51 | 0.65 | 29.11 | 16.81 | 40.00 | 23.19 | QP |
| 2 | 109.54 | 10.44 | 1.40 | 33.88 | 14.53 | 43.50 | 28.97 | QP |
| 3 | 156.10 | 10.61 | 1.67 | 34.30 | 15.47 | 43.50 | 28.03 | QP |
| 4 | 224.00 | 9.42 | 2.01 | 48.90 | 29.38 | 46.00 | 16.62 | QP |
| 5 | 311.30 | 13.24 | 2.33 | 36.33 | 20.80 | 46.00 | 25.20 | QP |
| 6 | 418.00 | 16.30 | 2.74 | 41.16 | 29.38 | 46.00 | 16.62 | QP |



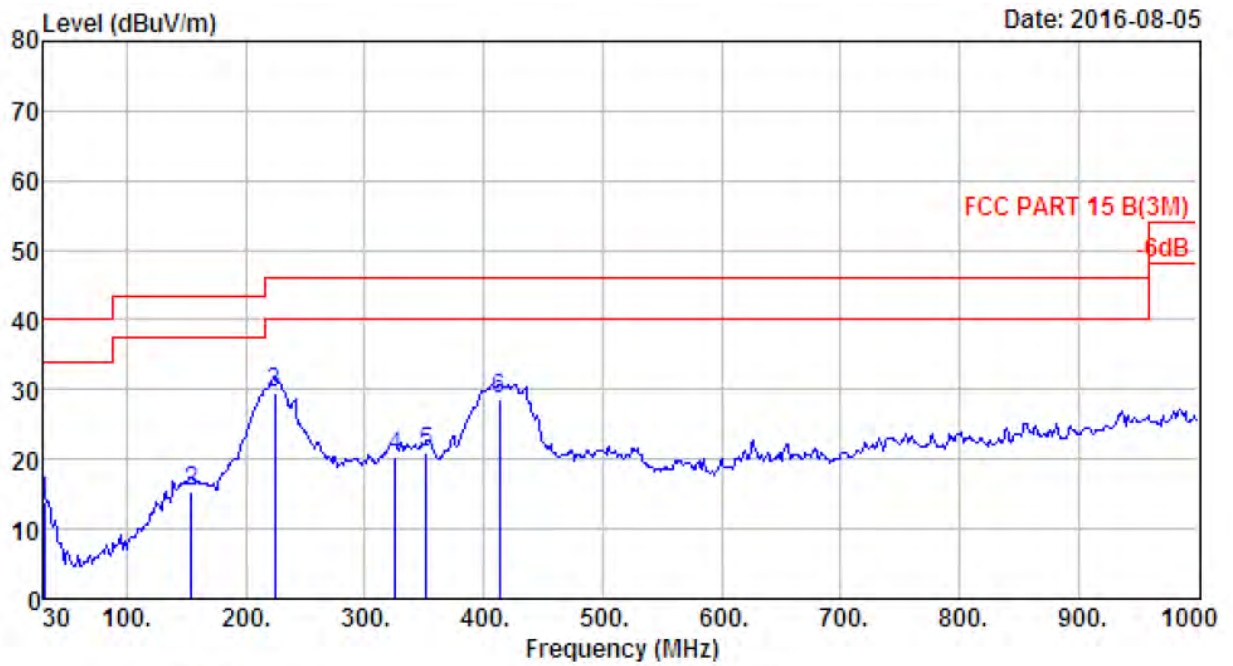
Site no. : 966 1# chamber Data no. : 158
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL
 Limit : FCC PART 15 B(3M)
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2441MHz

| | Freq. (MHz) | ANT Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|----------------|-------------------------|-----------------------|-------------------|-------------------------------|-------------------|----------------|--------|
| 1 | 34.85 | 15.55 | 0.72 | 33.03 | 17.90 | 40.00 | 22.10 | QP |
| 2 | 115.36 | 10.93 | 1.46 | 33.59 | 14.84 | 43.50 | 28.66 | QP |
| 3 | 225.94 | 9.47 | 1.99 | 40.17 | 20.60 | 46.00 | 25.40 | QP |
| 4 | 311.30 | 13.24 | 2.33 | 32.06 | 16.53 | 46.00 | 29.47 | QP |
| 5 | 374.35 | 14.93 | 2.70 | 31.70 | 18.53 | 46.00 | 27.47 | QP |
| 6 | 418.00 | 16.30 | 2.74 | 32.02 | 20.24 | 46.00 | 25.76 | QP |



Site no. : 966 1# chamber Data no. : 159
 Dis. / Ant. : 3m 27137 Ant. pol. : VERTICAL
 Limit : FCC PART 15 B(3M)
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK IX 2480MHz

| | Freq. (MHz) | ANT Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|----------------|-------------------------|-----------------------|-------------------|-------------------------------|-------------------|----------------|--------|
| 1 | 34.85 | 15.55 | 0.72 | 33.26 | 18.13 | 40.00 | 21.87 | QP |
| 2 | 115.36 | 10.93 | 1.46 | 34.84 | 16.09 | 43.50 | 27.41 | QP |
| 3 | 138.64 | 11.42 | 1.54 | 31.69 | 13.75 | 43.50 | 29.75 | QP |
| 4 | 223.03 | 9.37 | 2.01 | 40.17 | 20.64 | 46.00 | 25.36 | QP |
| 5 | 403.45 | 16.14 | 2.69 | 32.04 | 20.08 | 46.00 | 25.92 | QP |
| 6 | 435.46 | 16.16 | 2.82 | 32.68 | 20.67 | 46.00 | 25.33 | QP |



Site no. : 966 1# chamber
 Dis. / Ant. : 3m 27137
 Limit : FCC PART 15 B(3M)
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2480MHz

Data no. : 160
Ant. pol. : HORIZONTAL

| | Freq. (MHz) | ANT Factor (dB/m) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|----------------|-------------------------|-----------------------|-------------------|-------------------------------|-------------------|----------------|--------|
| 1 | 30.00 | 18.51 | 0.65 | 26.31 | 14.01 | 40.00 | 25.99 | QP |
| 2 | 154.16 | 10.71 | 1.66 | 34.12 | 15.36 | 43.50 | 28.14 | QP |
| 3 | 224.00 | 9.42 | 2.01 | 48.97 | 29.45 | 46.00 | 16.55 | QP |
| 4 | 325.85 | 13.74 | 2.43 | 35.13 | 20.28 | 46.00 | 25.72 | QP |
| 5 | 352.04 | 14.47 | 2.53 | 34.80 | 20.86 | 46.00 | 25.14 | QP |
| 6 | 413.15 | 16.29 | 2.69 | 40.64 | 28.72 | 46.00 | 17.28 | QP |

Above 1GHz

Site no. : 966 1# chamber Data no. : 123
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2402MHz

| | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Amp Factor (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|---|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2402.00 | 27.61 | 6.62 | 34.64 | 88.91 | 88.50 | 74.00 | -14.50 | Peak |
| 2 | 4804.00 | 31.25 | 11.77 | 35.64 | 33.07 | 40.45 | 74.00 | 33.55 | Peak |
| 3 | 7206.00 | 36.52 | 11.54 | 33.95 | 30.55 | 44.66 | 74.00 | 29.34 | Peak |
| 4 | 8701.00 | 37.35 | 11.45 | 33.65 | 30.04 | 45.19 | 74.00 | 28.81 | Peak |
| 5 | 11166.00 | 39.41 | 11.17 | 33.31 | 29.56 | 46.83 | 74.00 | 27.17 | Peak |
| 6 | 13784.00 | 40.88 | 11.16 | 33.05 | 29.98 | 48.97 | 74.00 | 25.03 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.

2. The emission levels that are 20dB below the official limit are not reported.

Site no. : 966 1# chamber Data no. : 124
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2402MHz

| | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Amp Factor (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|---|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2402.00 | 27.61 | 6.62 | 34.64 | 87.22 | 86.81 | 74.00 | -12.81 | Peak |
| 2 | 4804.00 | 31.25 | 11.77 | 35.64 | 31.93 | 39.31 | 74.00 | 34.69 | Peak |
| 3 | 7206.00 | 36.52 | 11.54 | 33.95 | 29.01 | 43.12 | 74.00 | 30.88 | Peak |
| 4 | 8684.00 | 37.32 | 11.45 | 33.66 | 29.95 | 45.06 | 74.00 | 28.94 | Peak |
| 5 | 10180.00 | 38.42 | 11.49 | 34.53 | 29.29 | 44.67 | 74.00 | 29.33 | Peak |
| 6 | 13546.00 | 40.21 | 11.44 | 32.61 | 27.46 | 46.50 | 74.00 | 27.50 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : 966 1# chamber Data no. : 127
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2441MHz

| | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Amp Factor (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|---|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2441.00 | 27.60 | 6.67 | 34.85 | 88.51 | 87.93 | 74.00 | -13.93 | Peak |
| 2 | 4882.00 | 31.37 | 12.07 | 35.76 | 34.15 | 41.83 | 74.00 | 32.17 | Peak |
| 3 | 7323.00 | 36.55 | 11.57 | 34.14 | 29.43 | 43.41 | 74.00 | 30.59 | Peak |
| 4 | 8684.00 | 37.32 | 11.45 | 33.66 | 30.05 | 45.16 | 74.00 | 28.84 | Peak |
| 5 | 11115.00 | 39.44 | 11.20 | 33.55 | 28.59 | 45.68 | 74.00 | 28.32 | Peak |
| 6 | 14056.00 | 41.51 | 10.90 | 33.06 | 28.35 | 47.70 | 74.00 | 26.30 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official
 limit are not reported.

Site no. : 966 1# chamber Data no. : 128
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2441MHz

| | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Amp Factor (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|---|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2441.00 | 27.60 | 6.67 | 34.85 | 85.18 | 84.60 | 74.00 | -10.60 | Peak |
| 2 | 4882.00 | 31.37 | 12.07 | 35.76 | 31.88 | 39.56 | 74.00 | 34.44 | Peak |
| 3 | 7323.00 | 36.55 | 11.57 | 34.14 | 30.59 | 44.57 | 74.00 | 29.43 | Peak |
| 4 | 8650.00 | 37.27 | 11.45 | 33.68 | 30.88 | 45.92 | 74.00 | 28.08 | Peak |
| 5 | 11200.00 | 39.39 | 11.14 | 33.24 | 28.78 | 46.07 | 74.00 | 27.93 | Peak |
| 6 | 14005.00 | 41.46 | 10.90 | 33.01 | 28.44 | 47.79 | 74.00 | 26.21 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Site no. : 966 1# chamber Data no. : 129
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2480MHz

| | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Amp Factor (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|---|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2480.00 | 27.58 | 6.71 | 35.11 | 85.14 | 84.32 | 74.00 | -10.32 | Peak |
| 2 | 4960.00 | 31.49 | 12.44 | 36.01 | 32.65 | 40.57 | 74.00 | 33.43 | Peak |
| 3 | 7440.00 | 36.54 | 11.61 | 34.22 | 31.33 | 45.26 | 74.00 | 28.74 | Peak |
| 4 | 8684.00 | 37.32 | 11.45 | 33.66 | 31.44 | 46.55 | 74.00 | 27.45 | Peak |
| 5 | 11166.00 | 39.41 | 11.17 | 33.31 | 29.54 | 46.81 | 74.00 | 27.19 | Peak |
| 6 | 13410.00 | 39.87 | 11.49 | 32.86 | 29.81 | 48.31 | 74.00 | 25.69 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official
 limit are not reported.

Site no. : 966 1# chamber Data no. : 130
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2480MHz

| | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Amp Factor (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|---|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2480.00 | 27.58 | 6.71 | 35.11 | 87.76 | 86.94 | 74.00 | -12.94 | Peak |
| 2 | 4960.00 | 31.49 | 12.44 | 36.01 | 34.26 | 42.18 | 74.00 | 31.82 | Peak |
| 3 | 7440.00 | 36.54 | 11.61 | 34.22 | 31.91 | 45.84 | 74.00 | 28.16 | Peak |
| 4 | 8735.00 | 37.40 | 11.45 | 33.76 | 30.40 | 45.49 | 74.00 | 28.51 | Peak |
| 5 | 11166.00 | 39.41 | 11.17 | 33.31 | 28.46 | 45.73 | 74.00 | 28.27 | Peak |
| 6 | 14090.00 | 41.54 | 10.91 | 33.13 | 27.92 | 47.24 | 74.00 | 26.76 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

9. BAND EDGE COMPLIANCE

9.1. Limit

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

9.2. Test Procedure

EUT was placed on a turn table, which is 1.5 m high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.

Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of emissions

Peak : RBW = 1MHz, VBW = 1MHz, Detector=PEAK detector, Sweep time = auto.

AV : RBW = 1MHz, VBW = 10Hz, Detector=PEAK detector, Sweep time = auto.

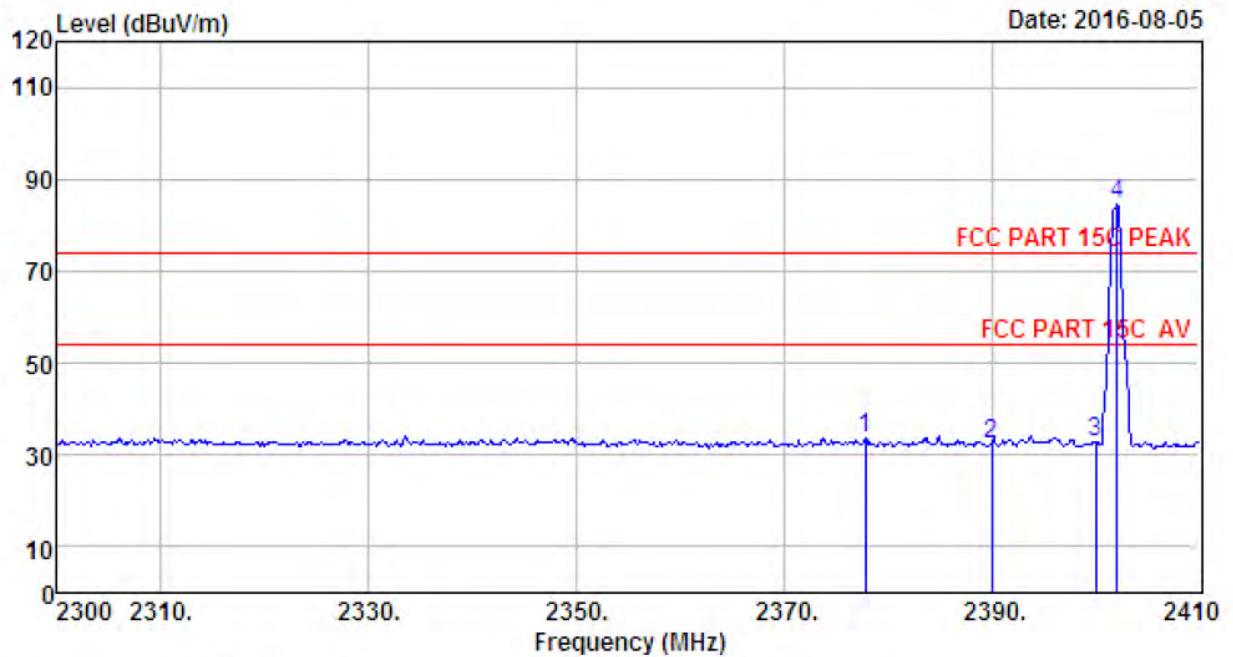
9.3. Test Result

Pass (The testing data was attached in the next pages.)

Note: 1、 For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.

2、 The frequency 2402MHz 、2441MHz and 2480MHz is fundamental frequency which no limit, the limit on plots is automatically generated by the software, it's not fundamental limit, we can't remove it.

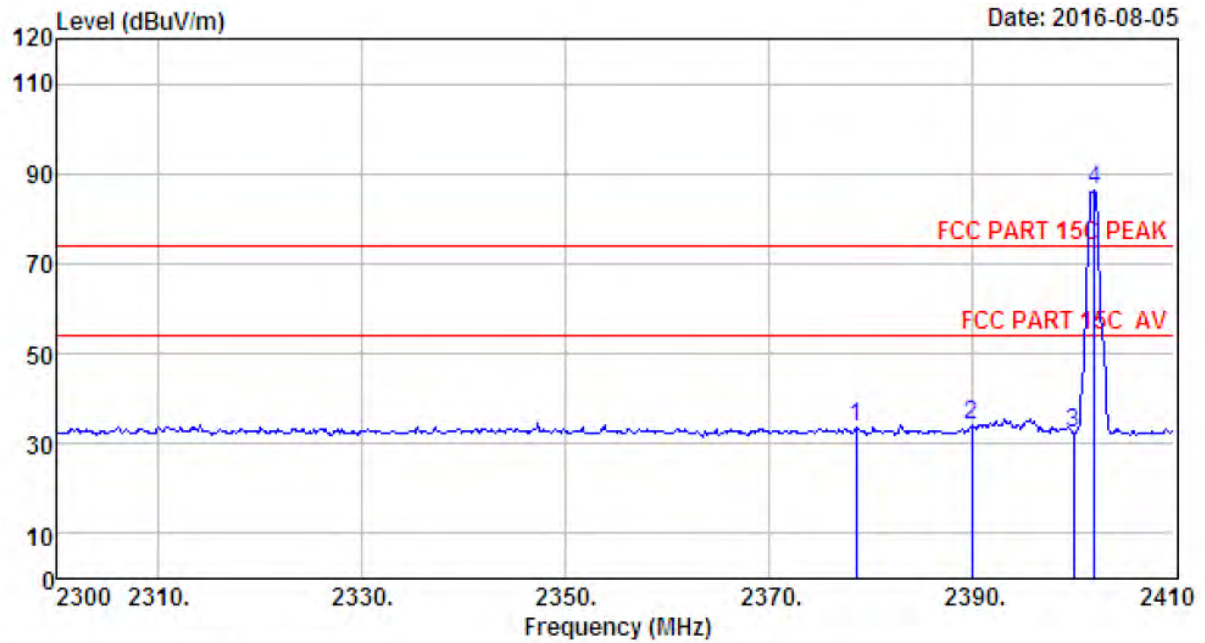
9.4. Test Data



Site no. : 966 1# chamber Data no. : 125
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2402MHz (No Hopping)

| | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Amp Factor (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|---|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2377.88 | 27.64 | 6.60 | 34.59 | 33.94 | 33.59 | 74.00 | 40.41 | Peak |
| 2 | 2390.00 | 27.64 | 6.62 | 34.62 | 32.54 | 32.18 | 74.00 | 41.82 | Peak |
| 3 | 2400.00 | 27.61 | 6.62 | 34.64 | 33.20 | 32.79 | 74.00 | 41.21 | Peak |
| 4 | 2402.08 | 27.61 | 6.62 | 34.64 | 85.19 | 84.78 | 74.00 | -10.78 | Peak |

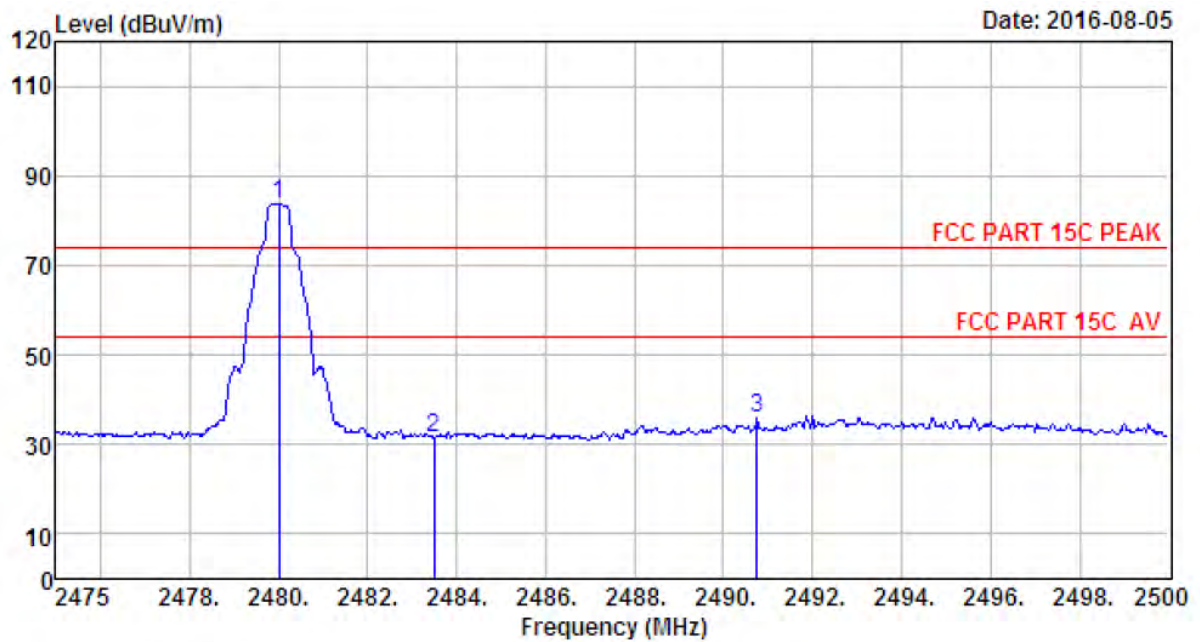
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 966 1# chamber Data no. : 126
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2402MHz (No Hopping)

| | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Amp Factor (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|---|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2378.65 | 27.64 | 6.60 | 34.59 | 34.15 | 33.80 | 74.00 | 40.20 | Peak |
| 2 | 2390.00 | 27.64 | 6.62 | 34.62 | 34.45 | 34.09 | 74.00 | 39.91 | Peak |
| 3 | 2400.00 | 27.61 | 6.62 | 34.64 | 32.85 | 32.44 | 74.00 | 41.56 | Peak |
| 4 | 2402.08 | 27.61 | 6.62 | 34.64 | 86.89 | 86.48 | 74.00 | -12.48 | Peak |

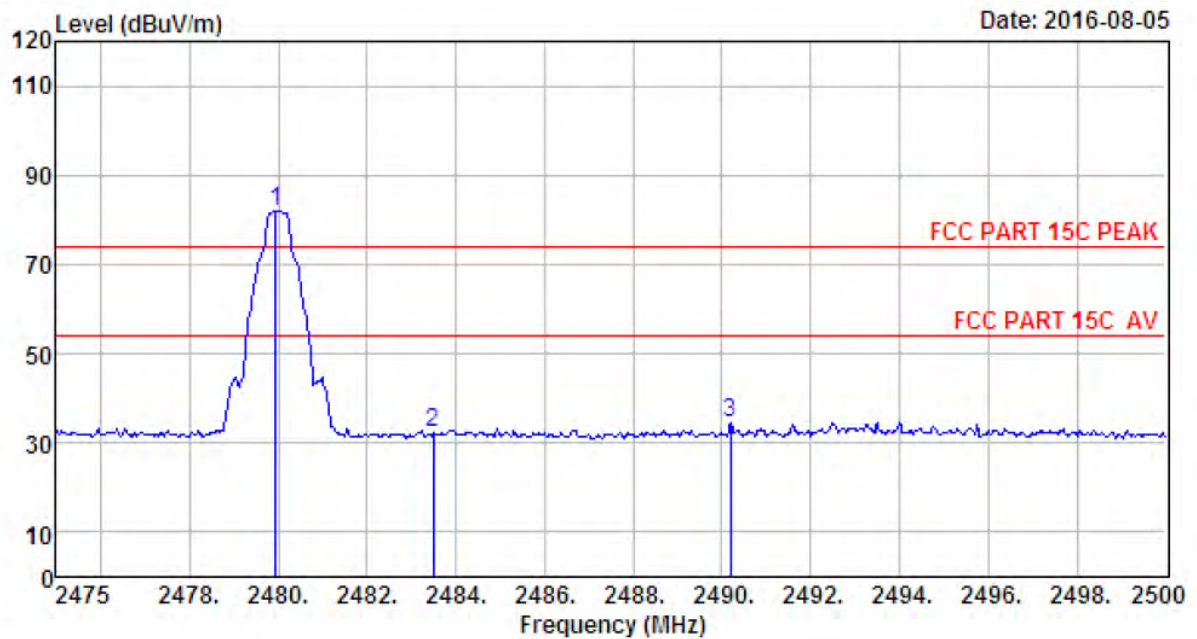
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 966 1# chamber Data no. : 131
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUI : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2480MHz (No Hopping)

| | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Amp Factor (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|---|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2480.00 | 27.58 | 6.71 | 35.11 | 84.71 | 83.89 | 74.00 | -9.89 | Peak |
| 2 | 2483.50 | 27.58 | 6.71 | 35.11 | 32.15 | 31.33 | 74.00 | 42.67 | Peak |
| 3 | 2490.75 | 27.58 | 6.73 | 35.24 | 36.72 | 35.79 | 74.00 | 38.21 | Peak |

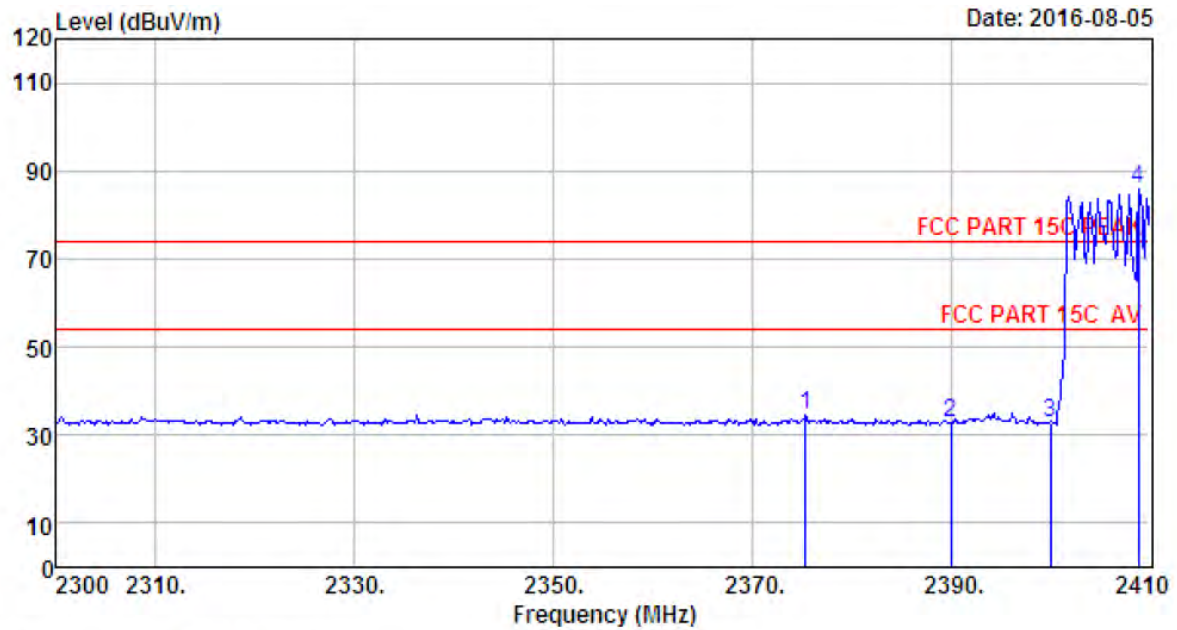
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 966 1# chamber Data no. : 132
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2480MHz (No Hopping)

| | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Amp Factor (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|---|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2479.95 | 27.58 | 6.71 | 35.11 | 82.87 | 82.05 | 74.00 | -8.05 | Peak |
| 2 | 2483.50 | 27.58 | 6.71 | 35.11 | 32.93 | 32.11 | 74.00 | 41.89 | Peak |
| 3 | 2490.20 | 27.58 | 6.73 | 35.24 | 35.58 | 34.65 | 74.00 | 39.35 | Peak |

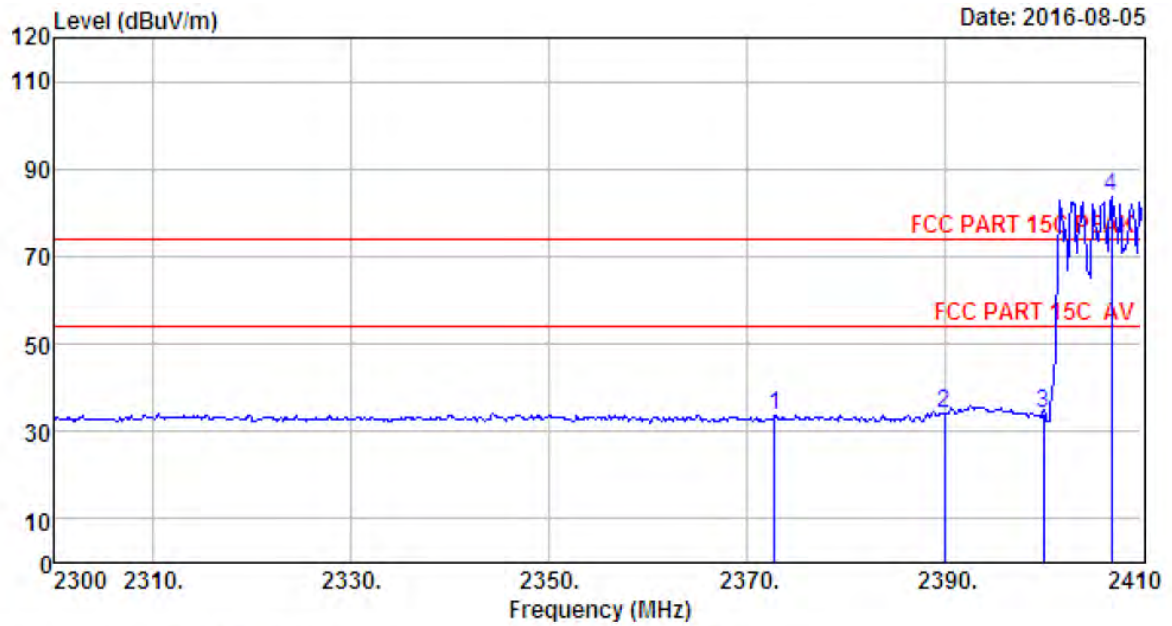
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 966 1# chamber Data no. : 133
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2402MHz (Hopping On)

| | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Amp Factor (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|---|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2375.35 | 27.64 | 6.60 | 34.59 | 35.05 | 34.70 | 74.00 | 39.30 | Peak |
| 2 | 2390.00 | 27.64 | 6.62 | 34.62 | 33.15 | 32.79 | 74.00 | 41.21 | Peak |
| 3 | 2400.00 | 27.61 | 6.62 | 34.64 | 33.21 | 32.80 | 74.00 | 41.20 | Peak |
| 4 | 2408.90 | 27.60 | 6.64 | 34.64 | 86.14 | 85.74 | 74.00 | -11.74 | Peak |

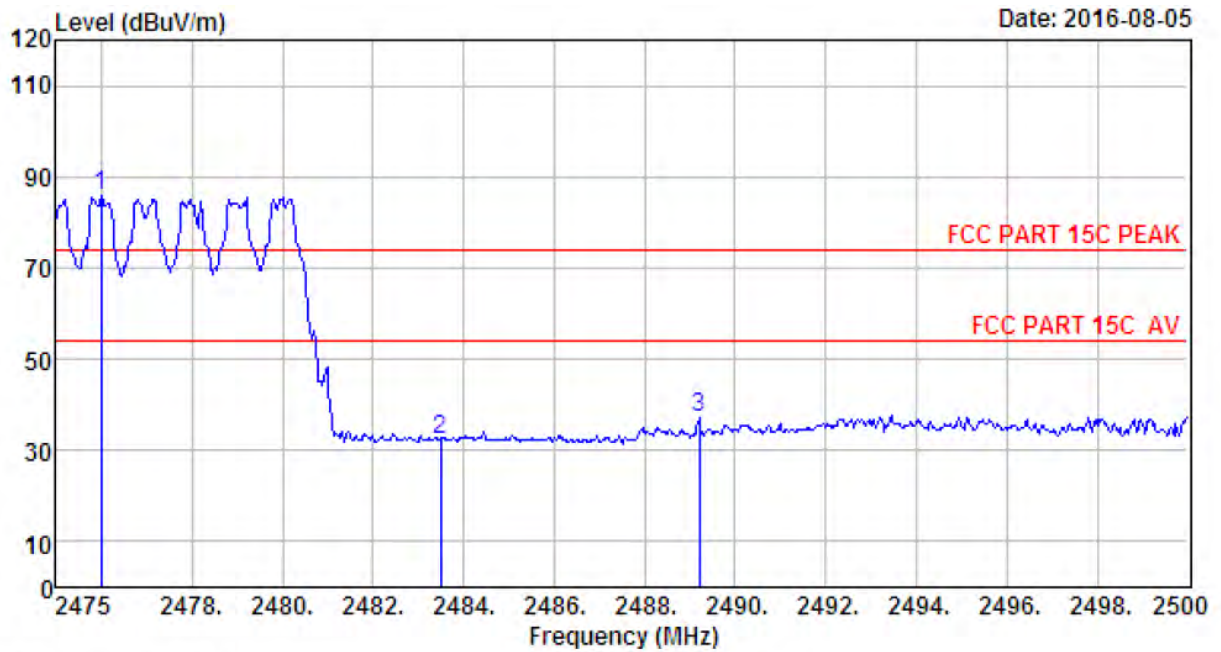
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 966 1# chamber Data no. : 134
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2402MHz (Hopping On)

| | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Amp Factor (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|---|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2372.82 | 27.67 | 6.60 | 34.59 | 34.10 | 33.78 | 74.00 | 40.22 | Peak |
| 2 | 2390.00 | 27.64 | 6.62 | 34.62 | 34.40 | 34.04 | 74.00 | 39.96 | Peak |
| 3 | 2400.00 | 27.61 | 6.62 | 34.64 | 34.48 | 34.07 | 74.00 | 39.93 | Peak |
| 4 | 2406.92 | 27.61 | 6.64 | 34.64 | 84.01 | 83.62 | 74.00 | -9.62 | Peak |

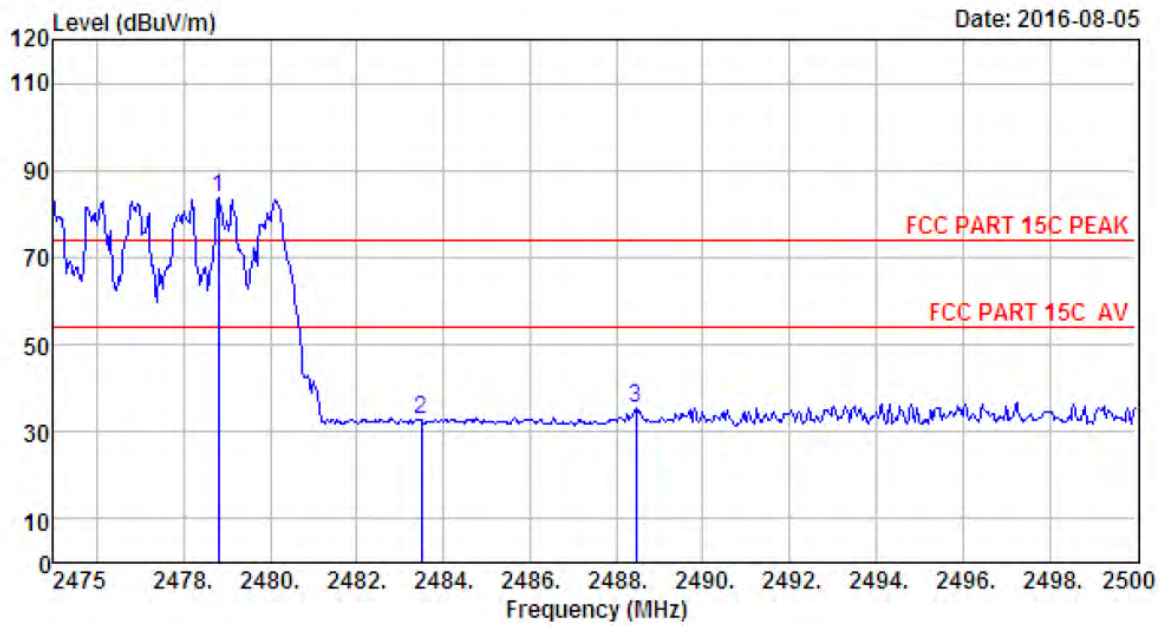
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 966 1# chamber Data no. : 135
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2480MHz (Hopping On)

| | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Amp Factor (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|---|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2476.00 | 27.58 | 6.71 | 35.11 | 86.57 | 85.75 | 74.00 | -11.75 | Peak |
| 2 | 2483.50 | 27.58 | 6.71 | 35.11 | 33.01 | 32.19 | 74.00 | 41.81 | Peak |
| 3 | 2489.20 | 27.58 | 6.73 | 35.24 | 38.22 | 37.29 | 74.00 | 36.71 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 966 1# chamber Data no. : 136
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:23.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 3.7V
 M/N : INPW500185
 Test Mode : GFSK TX 2480MHz (Hopping On)

| | Freq. (MHz) | Ant. Factor (dB/m) | Cable Loss (dB) | Amp Factor (dB) | Reading (dBuV) | Emission Level (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Remark |
|---|----------------|--------------------------|-----------------------|-----------------------|-------------------|-------------------------------|--------------------|----------------|--------|
| 1 | 2478.80 | 27.58 | 6.71 | 35.11 | 84.40 | 83.58 | 74.00 | -9.58 | Peak |
| 2 | 2483.50 | 27.58 | 6.71 | 35.11 | 33.61 | 32.79 | 74.00 | 41.21 | Peak |
| 3 | 2488.45 | 27.58 | 6.73 | 35.11 | 36.23 | 35.43 | 74.00 | 38.57 | Peak |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

10. POWER LINE CONDUCTED EMISSIONS

10.1. Limit

| Frequency | Maximum RF Line Voltage | |
|-----------------|----------------------------------|-------------------------------|
| | Quasi-Peak Level dB(μ V) | Average Level dB(μ V) |
| 150kHz ~ 500kHz | 66 ~ 56* | 56 ~ 46* |
| 500kHz ~ 5MHz | 56 | 46 |
| 5MHz ~ 30MHz | 60 | 50 |

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

10.2. Test Procedure

The EUT was placed on a non-metallic table, 80 cm above the ground plane. The EUT was charged from PC's USB port which connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#).. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2009 on Conducted Emission Test.

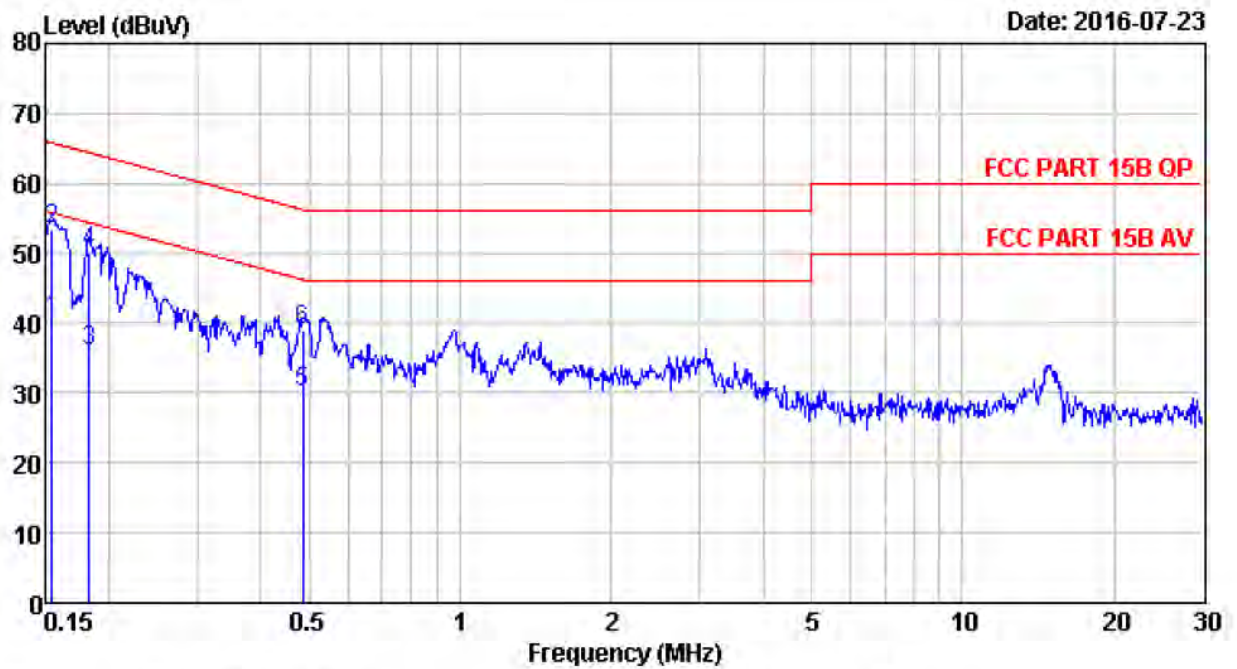
The bandwidth of test receiver (R & S ESHS30) is set at 10kHz.

The frequency range from 150kHz to 30MHz is checked.

10.3. Test Result

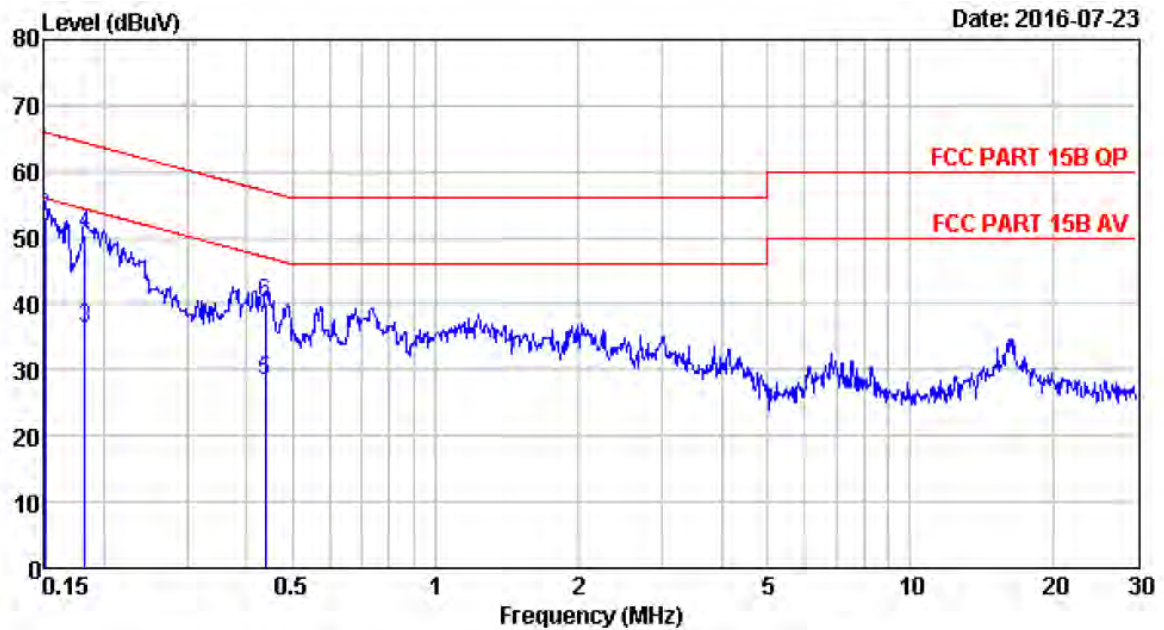
PASS. (All emissions not reported below are too low against the prescribed limits.)

10.4. Test data



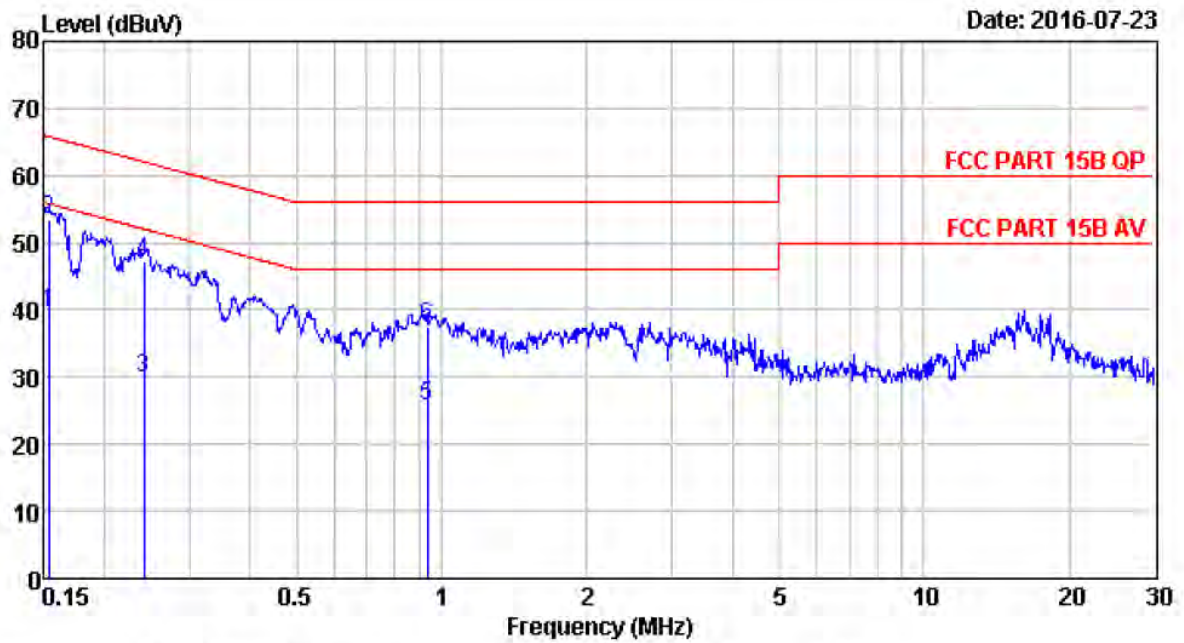
Site no : 844 Shield Room Data no. : 33
 Env. / Ins. : Temp:24.3'C Humi:58% Press:101.50kPa LINE Phase : LINE
 Limit : FCC PART 15B QP
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 5V From PC Input AC 120V/60Hz
 M/N : INPW500185
 Test Mode : TX Mode

| | Freq. (MHz) | LISM Factor (dB) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV) | Limits (dBuV) | Margin (dB) | Remark |
|---|----------------|------------------------|-----------------------|-------------------|-----------------------------|------------------|----------------|---------|
| 1 | 0.15 | 9.61 | 9.81 | 21.13 | 40.55 | 55.78 | 15.23 | Average |
| 2 | 0.15 | 9.61 | 9.81 | 34.13 | 53.55 | 65.78 | 12.23 | QP |
| 3 | 0.18 | 9.61 | 9.80 | 16.57 | 35.98 | 54.37 | 18.39 | Average |
| 4 | 0.18 | 9.61 | 9.80 | 30.88 | 50.29 | 64.37 | 14.08 | QP |
| 5 | 0.49 | 9.61 | 9.81 | 10.77 | 30.19 | 46.23 | 16.04 | Average |
| 6 | 0.49 | 9.61 | 9.81 | 19.45 | 38.87 | 56.23 | 17.36 | QP |



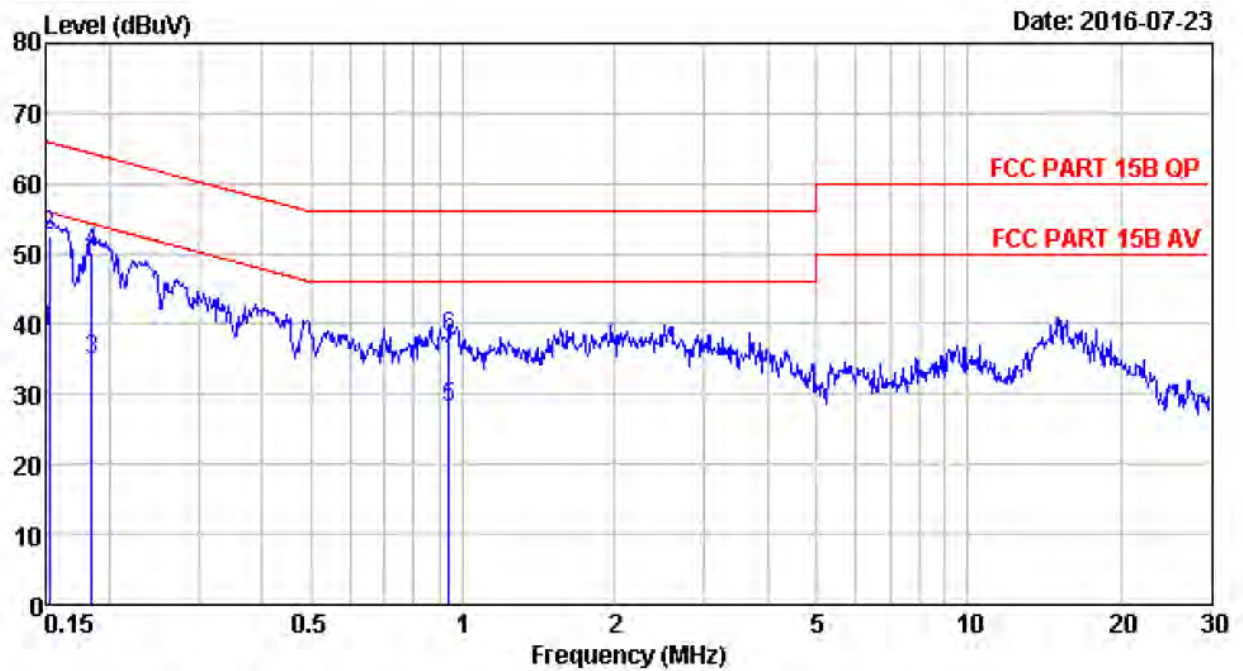
Site no : 844 Shield Room Data no. : 35
 Env. / Ins. : Temp:24.3'C Humi:58% Press:101.50kPa LINE Phase : NEUTRAL
 Limit : FCC PART 15B QP
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 5V From PC Input AC 120V/60Hz
 M/N : INPW500185
 Test Mode : TX Mode

| | Freq. (MHz) | LISN Factor (dB) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV) | Limits (dBuV) | Margin (dB) | Remark |
|---|----------------|------------------------|-----------------------|-------------------|-----------------------------|------------------|----------------|---------|
| 1 | 0.15 | 9.46 | 9.81 | 20.13 | 39.40 | 56.00 | 16.60 | Average |
| 2 | 0.15 | 9.46 | 9.81 | 33.89 | 53.16 | 66.00 | 12.84 | QP |
| 3 | 0.18 | 9.56 | 9.80 | 16.97 | 36.33 | 54.37 | 18.04 | Average |
| 4 | 0.18 | 9.56 | 9.80 | 31.19 | 50.55 | 64.37 | 13.82 | QP |
| 5 | 0.44 | 9.59 | 9.81 | 8.96 | 28.36 | 47.11 | 18.75 | Average |
| 6 | 0.44 | 9.59 | 9.81 | 20.61 | 40.01 | 57.11 | 17.10 | QP |



Site no : 844 Shield Room Data no. : 37
 Env. / Ins. : Temp:24.3'C Humi:58% Press:101.50kPa LINE Phase : LINE
 Limit : FCC PART 15B QP
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 5V From PC Input AC 240V/60Hz
 M/N : INPW500185
 Test Mode : TX Mode

| | Freq. (MHz) | LISN Factor (dB) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV) | Limits (dBuV) | Margin (dB) | Remark |
|---|----------------|------------------------|-----------------------|-------------------|-----------------------------|------------------|----------------|---------|
| 1 | 0.15 | 9.61 | 9.81 | 20.13 | 39.55 | 55.82 | 16.27 | Average |
| 2 | 0.15 | 9.61 | 9.81 | 33.87 | 53.29 | 65.82 | 12.53 | QP |
| 3 | 0.24 | 9.61 | 9.82 | 10.25 | 29.68 | 52.04 | 22.36 | Average |
| 4 | 0.24 | 9.61 | 9.82 | 27.70 | 47.13 | 62.04 | 14.91 | QP |
| 5 | 0.93 | 9.63 | 9.82 | 6.09 | 25.54 | 46.00 | 20.46 | Average |
| 6 | 0.93 | 9.63 | 9.82 | 17.98 | 37.43 | 56.00 | 18.57 | QP |



Site no : 844 Shield Room Data no. : 39
 Env. / Ins. : Temp:24.3'C Humi:58% Press:101.50kPa LINE Phase : NEUTRAL
 Limit : FCC PART 15B QP
 Engineer : Tony
 EUT : Incase Keyboard for iPad Pro 9.7
 Power : DC 5V From PC Input AC 240V/60Hz
 M/N : INPW500185
 Test Mode : TX Mode

| | Freq. (MHz) | LISN Factor (dB) | Cable Loss (dB) | Reading (dBuV) | Emission Level (dBuV) | Limits (dBuV) | Margin (dB) | Remark |
|---|----------------|------------------------|-----------------------|-------------------|-----------------------------|------------------|----------------|---------|
| 1 | 0.15 | 9.46 | 9.81 | 19.74 | 39.01 | 55.91 | 16.90 | Average |
| 2 | 0.15 | 9.46 | 9.81 | 33.40 | 52.67 | 65.91 | 13.24 | QP |
| 3 | 0.18 | 9.56 | 9.80 | 15.57 | 34.93 | 54.28 | 19.35 | Average |
| 4 | 0.18 | 9.56 | 9.80 | 30.95 | 50.31 | 64.28 | 13.97 | QP |
| 5 | 0.94 | 9.61 | 9.82 | 8.71 | 28.14 | 46.00 | 17.86 | Average |
| 6 | 0.94 | 9.61 | 9.82 | 18.53 | 37.96 | 56.00 | 18.04 | QP |

11.ANTENNA REQUIREMENTS

11.1.Limit

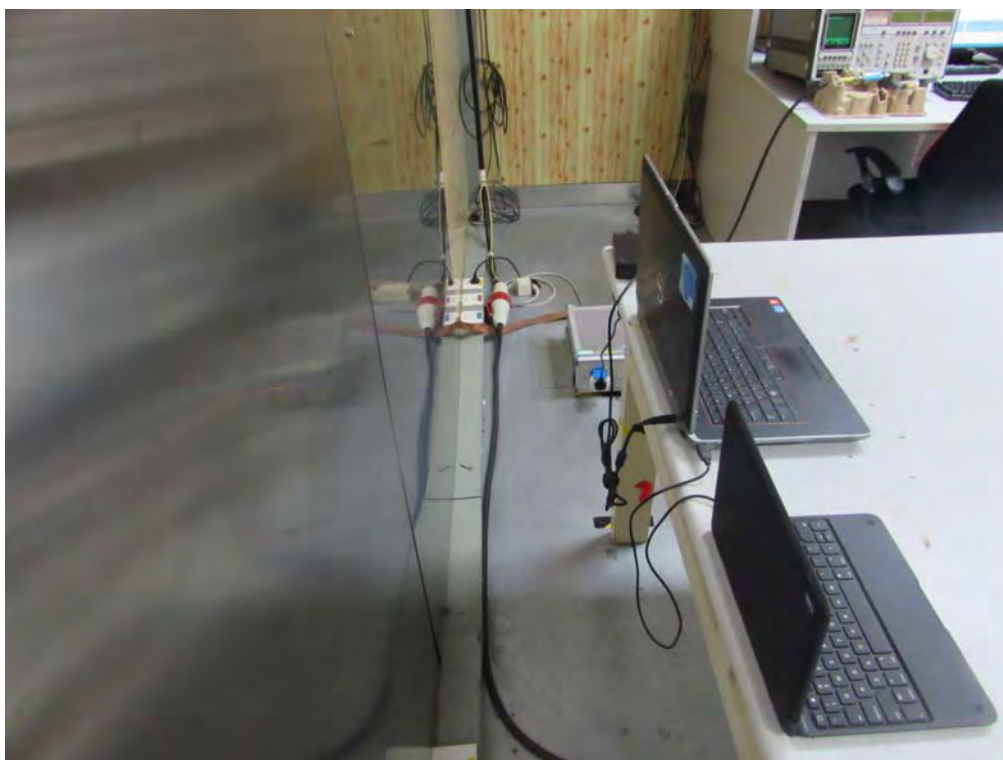
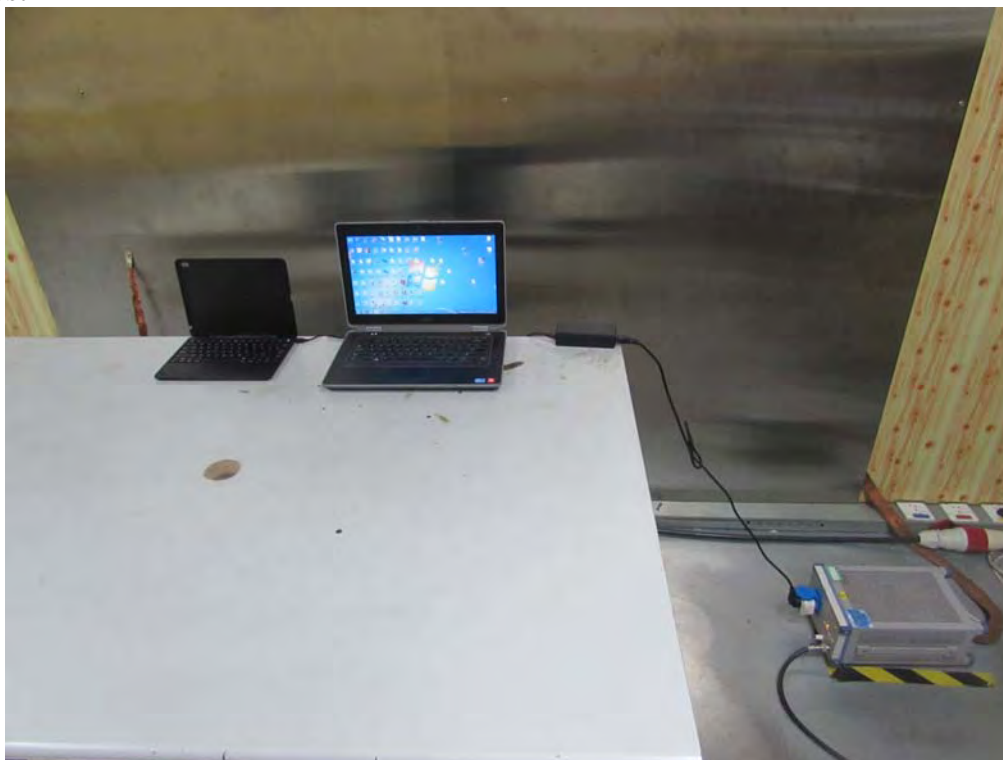
For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

11.2.Result

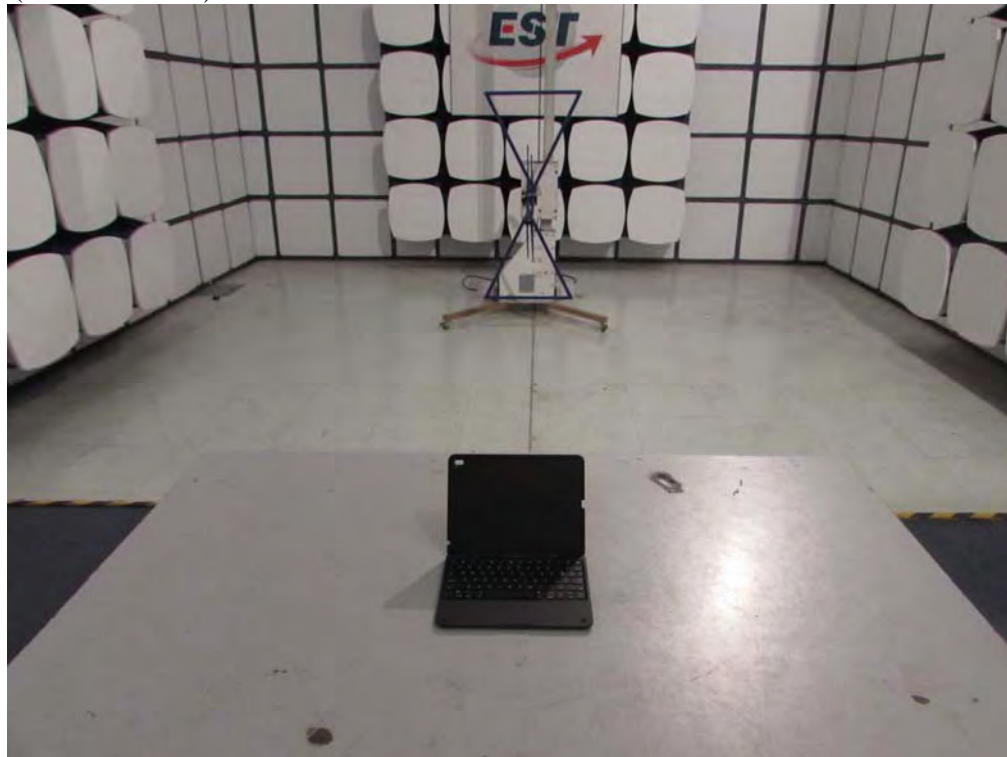
The antennas used for this product are PCB Antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is only 1.5dBi.

12. TEST SETUP PHOTO

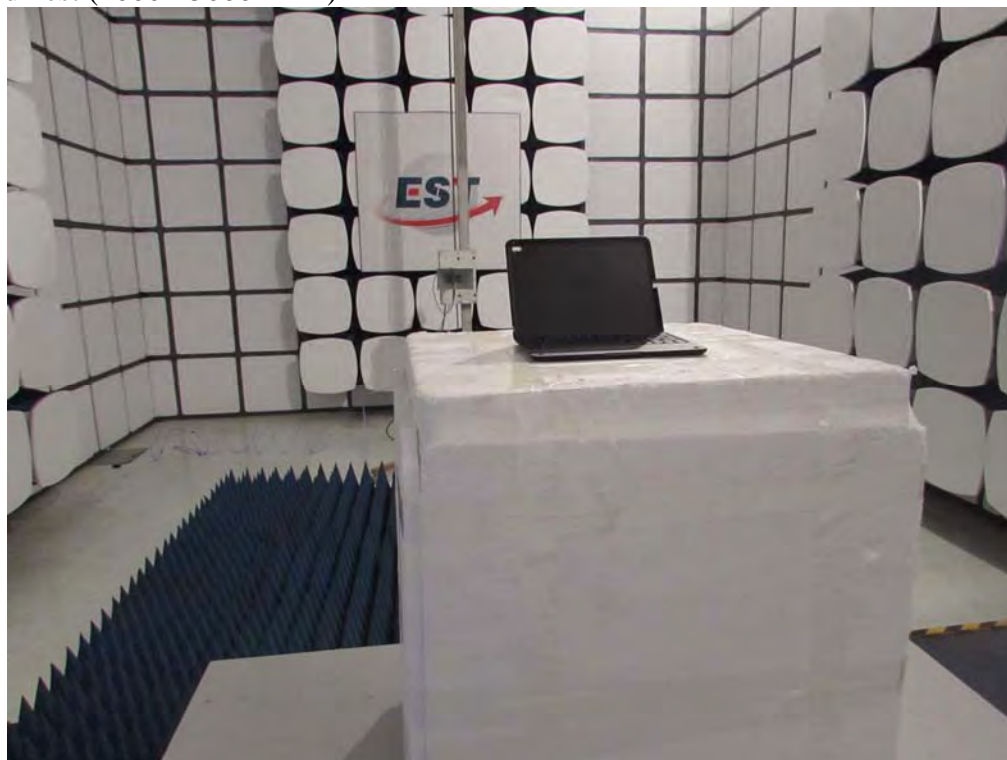
Conducted Test



Radiated Test (30-1000 MHz)



Radiated Test (1000-25000 MHz)

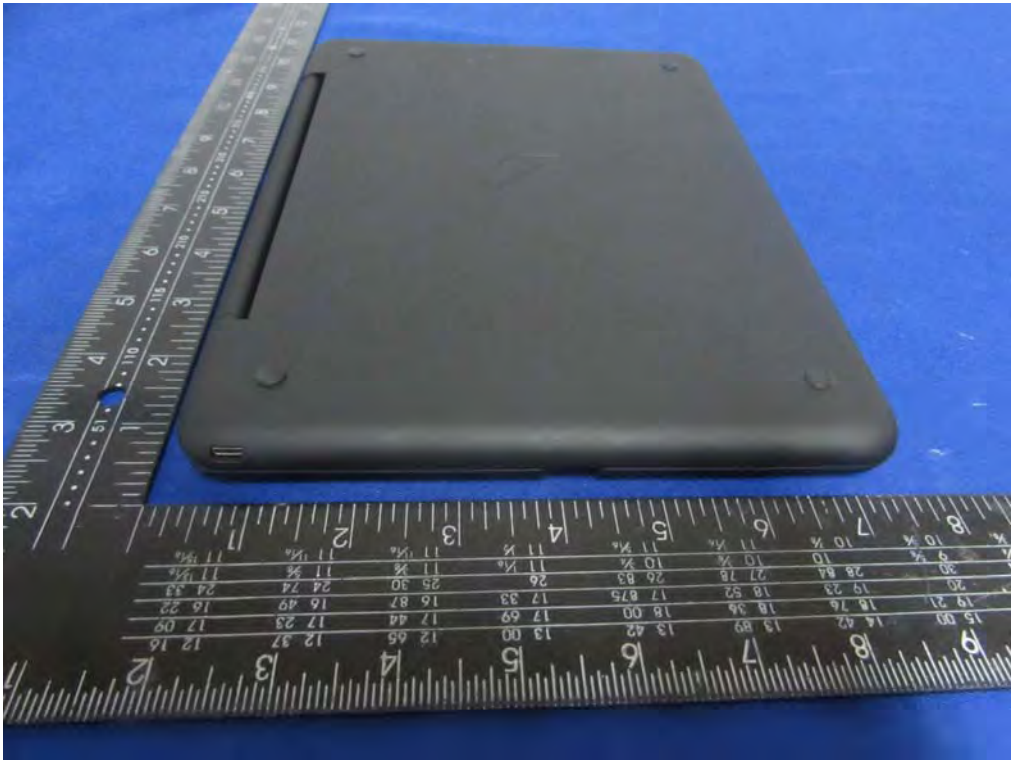


13. PHOTOS OF EUT

External Photos
M/N: INPW500185



External Photos
M/N: INPW500185



External Photos
M/N: INPW500185



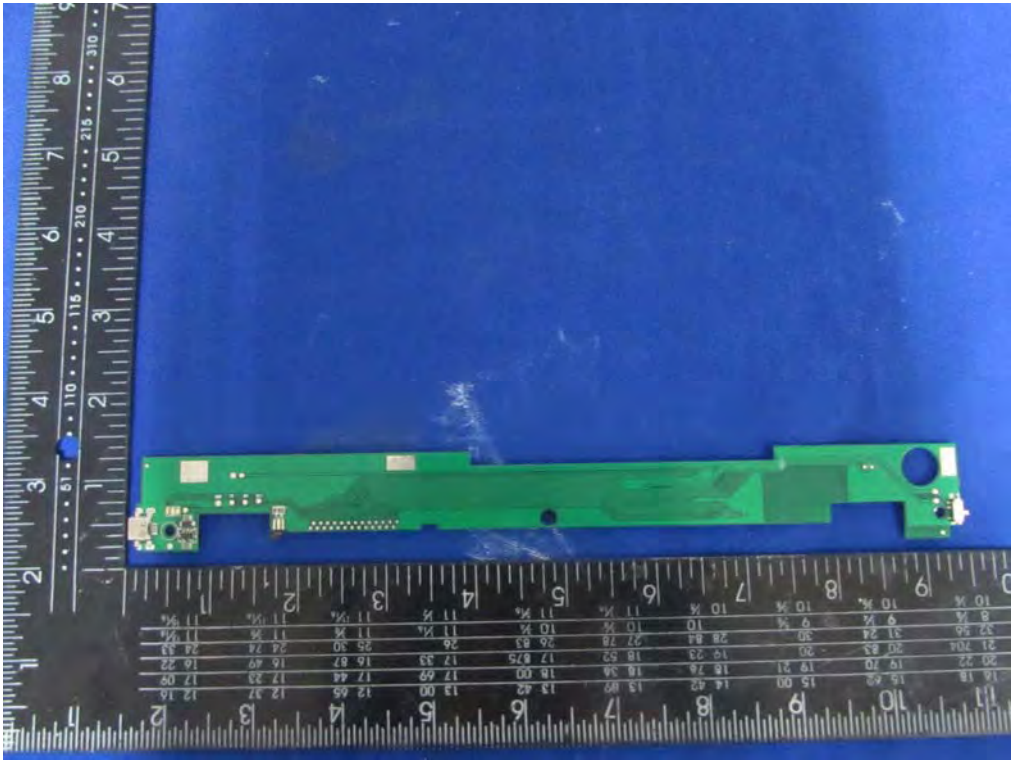
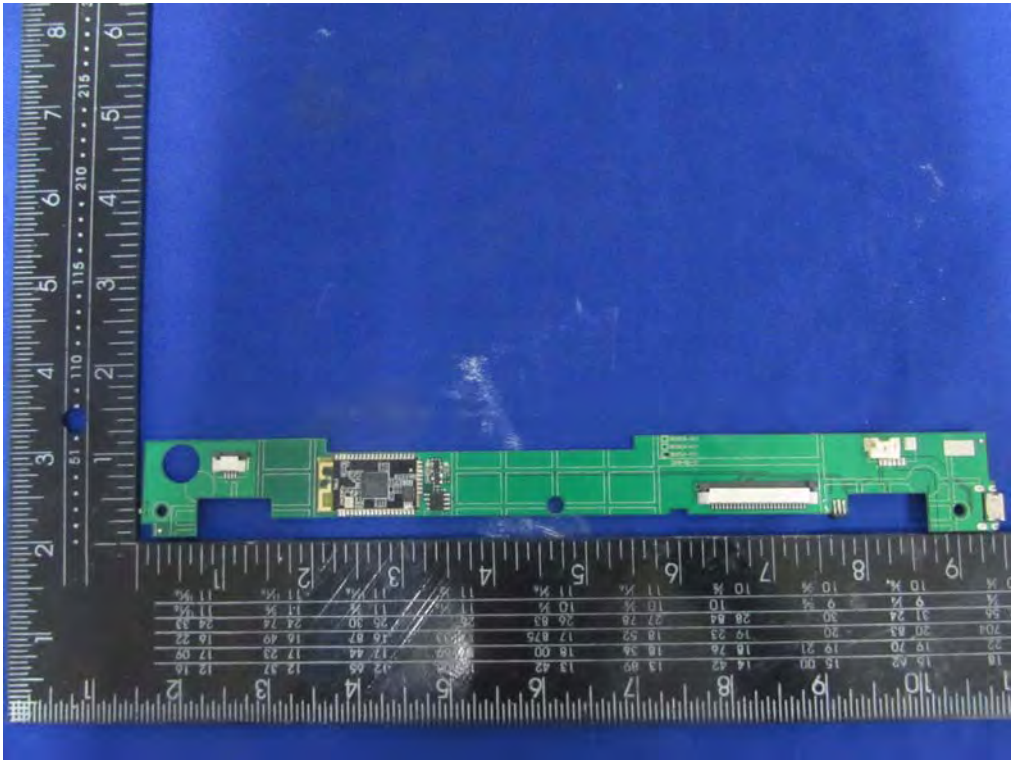
External Photos
M/N: INPW500185



Internal Photos
M/N: INPW500185



Internal Photos
M/N: INPW500185



Internal Photos
M/N: INPW500185

Bluetooth
Antenna

