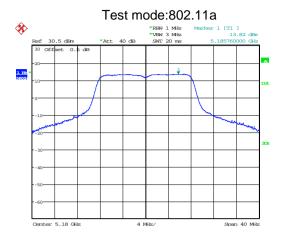


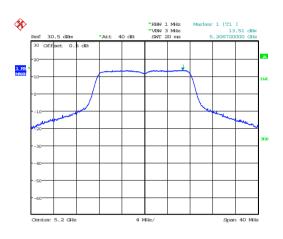
Test plot as follows:

Band 1: TX0



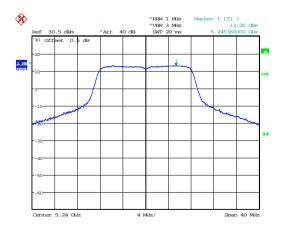
Date: 20.MAR.2016 13:08:43

Lowest channel



Date: 20.MAR.2016 13:09:09

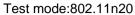
Middle channel

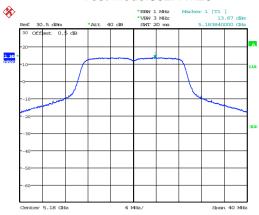


Date: 20.MAR.2016 13:09:47

Highest channel

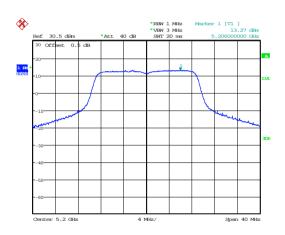






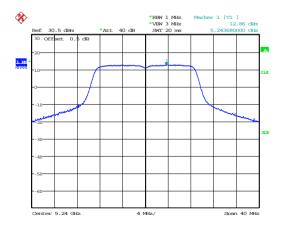
Date: 20.MAR.2016 13:59:48

Lowest channel



Date: 20.MAR.2016 14:00:07

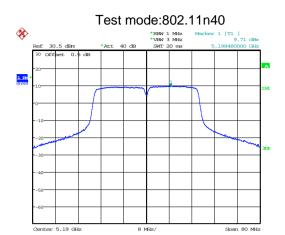
Middle channel



Date: 20.MAR.2016 14:00:28

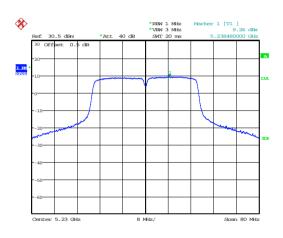
Highest channel





Date: 20.MAR.2016 14:00:55

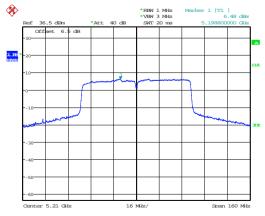
Lowest channel



Date: 20.MAR.2016 14:01:17

Highest channel

Test mode:802.11ac 80

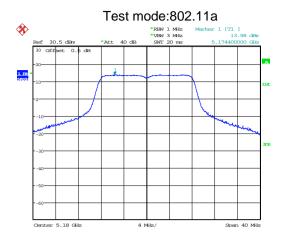


Date: 15.APR.2016 19:25:56

Middle channel

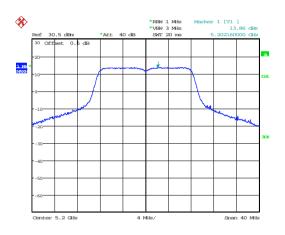


TX1



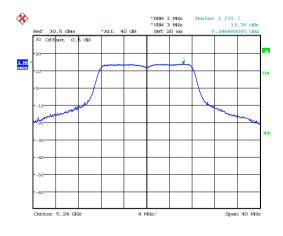
Date: 20.MAR.2016 13:57:17

Lowest channel



Date: 20.MAR.2016 13:57:39

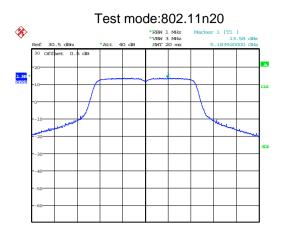
Middle channel



Date: 20.MAR.2016 13:58:08

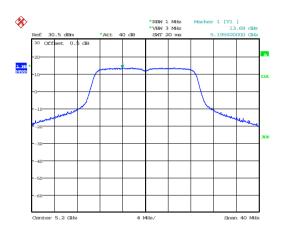
Highest channel





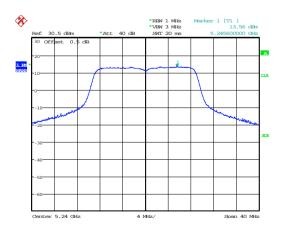
Date: 20.MAR.2016 13:56:01

Lowest channel



Date: 20.MAR.2016 13:56:26

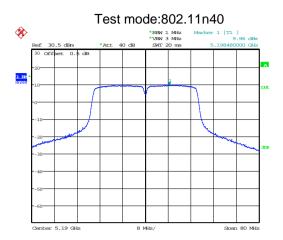
Middle channel



Date: 20.MAR.2016 13:56:47

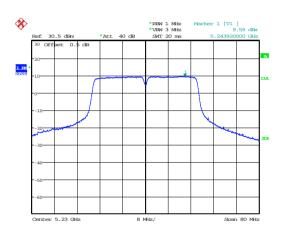
Highest channel





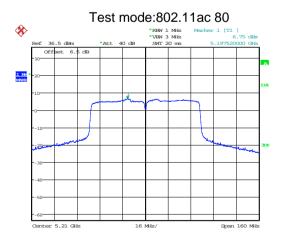
Date: 20.MAR.2016 13:55:34

Lowest channel



Date: 20.MAR.2016 13:55:12

Highest channel

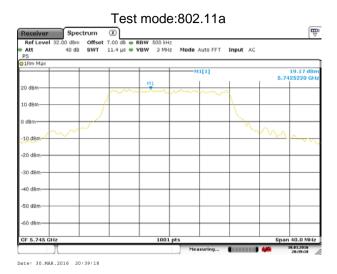


Date: 15.APR.2016 19:26:44

Middle channel



Band 4: TX0



Lowest channel



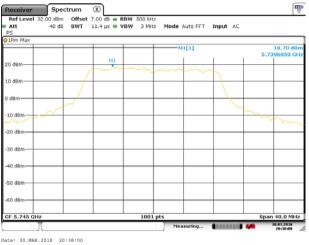
Middle channel



Highest channel



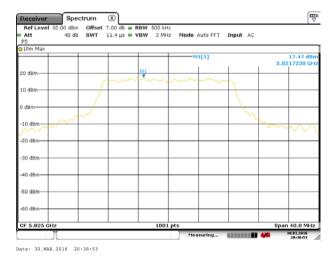




Lowest channel

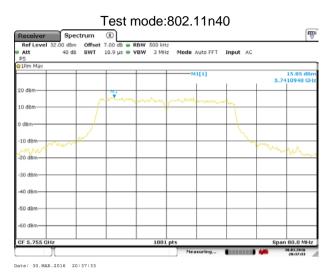


Middle channel



Highest channel

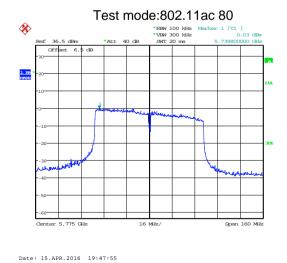




Lowest channel



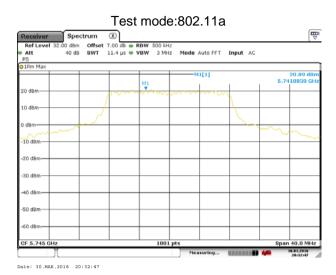
Highest channel



Middle channel



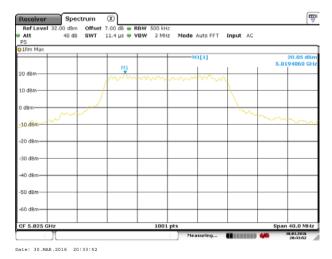
TX1



Lowest channel

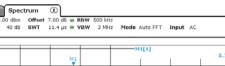


Middle channel

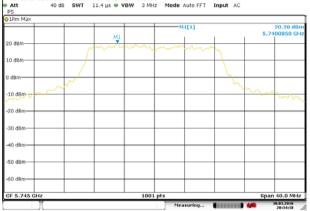


Highest channel





Test mode:802.11n20

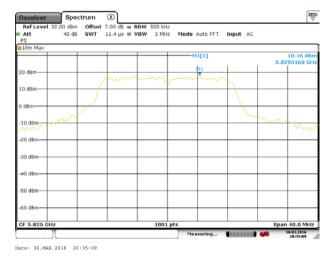


Date: 30.MAR.2016 20:34:18

Lowest channel

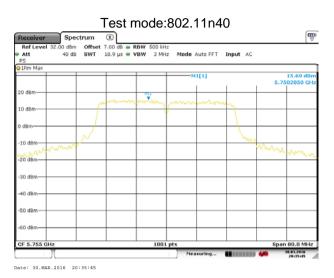


Middle channel



Highest channel

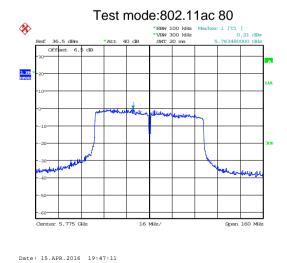




Lowest channel



Highest channel



Middle channel



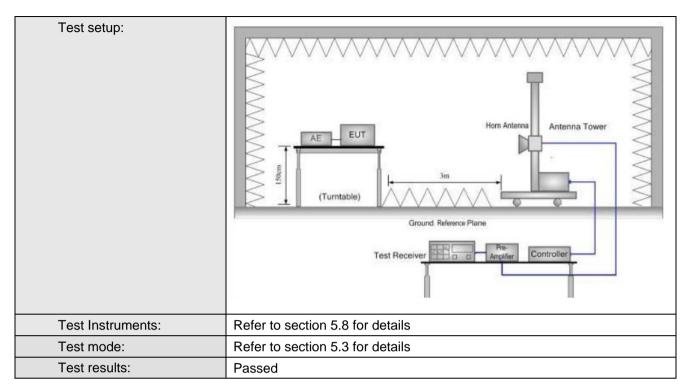


6.6 Band Edge

| Test Requirement: | FCC Part15 E Sec | tion 15.407 (b) | | |
|-------------------|---|---|---|---|
| Test Method: | ANSI C63.10:2013 | , KDB 789033 | | |
| Receiver setup: | Detector | RBW | VBW | Remark |
| · | Peak | 1MHz | 3MHz | Peak Value |
| | RMS | 1MHz | 3MHz | Average Value |
| Limit: | | | | |
| | Band | Limit (dBu | uV/m @3m) | Remark |
| | Band 1 | 68 | 3.20 | Peak Value |
| | Danu | 54 | 4.00 | Average Value |
| | Band 4 | 68 | 3.20 | Peak Value |
| | Danu 4 | 54 | 1.00 | Average Value |
| | Remark: | | | |
| | 1. Band 1 limit: | | | |
| | $E[dB\mu V/m] = EIF$ | RP[dBm] + 95.2=6 | 68.2 dBuV/m,for El | IPR[dBm]=-27dBm. |
| | 2. Band 4 limit: | | | |
| | | | | IPR[dBm]=-17dBm. |
| Test Procedure: | the groundat a todetermine the 2. The EUT was antenna, which tower. 3. The antenna has the ground to Both horizontal make the mea 4. For each suspicase and then meters and the to find the maximum specified Band 6. If the emission the limit specified for the EUT wo have 10dB maximum specified by the second specified | a 3 meter cambered position of the set 3 meters as what was mounted the set 3 meters as what was mounted the surement. The sected emission the antenna was were system was alwight with Max and level of the EU wild be reported argin would be resident of the surement. | er. The table was e highest radiation way from the interport on the top of a various from one meter to haximum value of colarizations of the turned from 0 deset to Peak Determination of the limum Hold Model of the peak mode of could be stopped. Otherwise the elected one by the set of the limum by the set of the limum hold model of the limum hold work in peak mode of the limum hold work in peak mode of the limum hold work in peak model of the limum hold work in the limum hold work | rference-receiving ariable-height antenna of our meters above of the field strength. The antenna are set to the from 1 meter to 4 grees to 360 degrees ect Function and |











Band 1:

| | | | | 802.11a | | | | |
|--------------------|------------------------|------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| Test c | hannel | | Lowest | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5150.00 | 42.15 | 36.23 | 10.96 | 40.06 | 49.28 | 68.20 | -18.92 | Horizontal |
| 5150.00 | 41.87 | 36.23 | 10.96 | 40.06 | 49.00 | 68.20 | -19.20 | Vertical |
| | | | | 802.11a | | | | |
| Test c | hannel | | Lowest | | Le | vel | Av | erage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5150.00 | 32.06 | 36.23 | 10.96 | 40.06 | 39.19 | 54.00 | -14.81 | Horizontal |
| 5150.00 | 31.47 | 36.23 | 10.96 | 40.06 | 38.60 | 54.00 | -15.40 | Vertical |
| | | | | 802.11a | | | | |
| Test c | hannel | | Highest | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5350.00 | 41.78 | 35.37 | 11.19 | 40.18 | 48.16 | 68.20 | -20.04 | Horizontal |
| 5350.00 | 42.63 | 35.37 | 11.19 | 40.18 | 49.01 | 68.20 | -19.19 | Vertical |
| | | | | 802.11a | | | | |
| Test c | hannel | | Highest | | Le | vel | Av | erage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5350.00 | 31.47 | 35.37 | 11.19 | 40.18 | 37.85 | 54.00 | -16.15 | Horizontal |
| 5350.00 | 32.52 | 35.37 | 11.19 | 40.18 | 38.90 | 54.00 | -15.10 | Vertical |

| | | | 8 | 302.11n-HT20 | | | | |
|--------------------|------------------------|------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| Test cl | hannel | | Lowest | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5150.00 | 42.18 | 36.23 | 10.96 | 40.06 | 49.31 | 68.20 | -18.89 | Horizontal |
| 5150.00 | 41.26 | 36.23 | 10.96 | 40.06 | 48.39 | 68.20 | -19.81 | Vertical |
| | | | 8 | 302.11n-HT20 | | | | |
| Test cl | hannel | | Lowest | | Le | vel | Av | erage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5150.00 | 32.65 | 36.23 | 10.96 | 40.06 | 39.78 | 54.00 | -14.22 | Horizontal |
| 5150.00 | 31.45 | 36.23 | 10.96 | 40.06 | 38.58 | 54.00 | -15.42 | Vertical |
| | | | 8 | 302.11n-HT20 | | | | |
| Test cl | hannel | | Highest | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5350.00 | 42.15 | 35.37 | 11.19 | 40.18 | 48.53 | 68.20 | -19.67 | Horizontal |
| 5350.00 | 41.89 | 35.37 | 11.19 | 40.18 | 48.27 | 68.20 | -19.93 | Vertical |
| | | | 8 | 302.11n-HT20 | | | | |
| Test cl | hannel | | Highest | | Le | vel | Av | erage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5350.00 | 32.67 | 35.37 | 11.19 | 40.18 | 39.05 | 54.00 | -14.95 | Horizontal |
| 5350.00 | 31.47 | 35.37 | 11.19 | 40.18 | 37.85 | 54.00 | -16.15 | Vertical |

Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



| | | | 8 | 02.11n-HT40 | | | | |
|--------------------|------------------------|------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| Test cl | hannel | | Lowest | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5150.00 | 42.15 | 36.23 | 10.96 | 40.06 | 49.28 | 68.20 | -18.92 | Horizontal |
| 5150.00 | 43.62 | 36.23 | 10.96 | 40.06 | 50.75 | 68.20 | -17.45 | Vertical |
| | | | 8 | 02.11n-HT40 | | | | |
| Test cl | hannel | | Lowest | | Le | vel | Av | rerage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5150.00 | 32.57 | 36.23 | 10.96 | 40.06 | 39.70 | 54.00 | -14.30 | Horizontal |
| 5150.00 | 33.02 | 36.23 | 10.96 | 40.06 | 40.15 | 54.00 | -13.85 | Vertical |
| | | | 8 | 02.11n-HT40 | | | | |
| Test cl | hannel | | Highest | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5350.00 | 42.15 | 35.37 | 11.19 | 40.18 | 48.53 | 68.20 | -19.67 | Horizontal |
| 5350.00 | 42.69 | 35.37 | 11.19 | 40.18 | 49.07 | 68.20 | -19.13 | Vertical |
| | | | 8 | 02.11n-HT40 | | | | |
| Test cl | hannel | | Highest | | Le | vel | Av | rerage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5350.00 | 32.47 | 35.37 | 11.19 | 40.18 | 38.85 | 54.00 | -15.15 | Horizontal |
| 5350.00 | 32.07 | 35.37 | 11.19 | 40.18 | 38.45 | 54.00 | -15.55 | Vertical |

| | | | 8 | 02.11ac-HT80 | | | | |
|--------------------|------------------------|------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| Test cl | hannel | | Middle | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5150.00 | 41.25 | 36.23 | 10.96 | 40.06 | 48.38 | 68.20 | -19.82 | Horizontal |
| 5150.00 | 42.35 | 36.23 | 10.96 | 40.06 | 49.48 | 68.20 | -18.72 | Vertical |
| | | | 8 | 02.11ac-HT80 | | | | |
| Test cl | hannel | | Middle | | Le | vel | Av | erage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5150.00 | 31.25 | 36.23 | 10.96 | 40.06 | 38.38 | 54.00 | -15.62 | Horizontal |
| 5150.00 | 31.52 | 36.23 | 10.96 | 40.06 | 38.65 | 54.00 | -15.35 | Vertical |
| | | | 8 | 02.11ac-HT80 | | | | |
| Test cl | hannel | | Middle | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5350.00 | 42.62 | 35.37 | 11.19 | 40.18 | 49.00 | 68.20 | -19.20 | Horizontal |
| 5350.00 | 41.25 | 35.37 | 11.19 | 40.18 | 47.63 | 68.20 | -20.57 | Vertical |
| | | | 80 | 02.11ac-HT80 | | | | |
| Test cl | hannel | | Middle | | Le | vel | Av | erage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5350.00 | 31.25 | 35.37 | 11.19 | 40.18 | 37.63 | 54.00 | -16.37 | Horizontal |
| 5350.00 | 32.85 | 35.37 | 11.19 | 40.18 | 39.23 | 54.00 | -14.77 | Vertical |

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.





Band 4:

| | | | | 802.11a | | | | |
|--------------------|------------------------|------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| Test cl | hannel | | Lowest | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5725.00 | 41.58 | 34.65 | 11.62 | 40.54 | 47.31 | 68.20 | -20.89 | Horizontal |
| 5725.00 | 42.68 | 34.65 | 11.62 | 40.54 | 48.41 | 68.20 | -19.79 | Vertical |
| | | | | 802.11a | | | | |
| Test cl | hannel | | Lowest | | Le | vel | Av | erage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5725.00 | 31.47 | 34.65 | 11.62 | 40.54 | 37.20 | 54.00 | -16.80 | Horizontal |
| 5725.00 | 32.69 | 34.65 | 11.62 | 40.54 | 38.42 | 54.00 | -15.58 | Vertical |
| | | | | 802.11a | | | | |
| Test cl | hannel | | Highest | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5850.00 | 41.57 | 34.63 | 11.75 | 40.69 | 47.26 | 68.20 | -20.94 | Horizontal |
| 5850.00 | 40.69 | 34.63 | 11.75 | 40.69 | 46.38 | 68.20 | -21.82 | Vertical |
| | | | | 802.11a | | | | |
| Test cl | hannel | | Highest | Av | erage | | | |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5850.00 | 31.48 | 34.63 | 11.75 | 40.69 | 37.17 | 54.00 | -16.83 | Horizontal |
| 5850.00 | 30.69 | 34.63 | 11.75 | 40.69 | 36.38 | 54.00 | -17.62 | Vertical |

| | | | 8 | 302.11n-HT20 | | | | |
|--------------------|------------------------|------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| Test c | hannel | | Lowest | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5725.00 | 42.51 | 34.65 | 11.62 | 40.54 | 48.24 | 68.20 | -19.96 | Horizontal |
| 5725.00 | 41.57 | 34.65 | 11.62 | 40.54 | 47.30 | 68.20 | -20.90 | Vertical |
| | | | 8 | 302.11n-HT20 | | | | |
| Test c | hannel | | Lowest | | Le | vel | Av | erage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5725.00 | 32.59 | 34.65 | 11.62 | 40.54 | 38.32 | 54.00 | -15.68 | Horizontal |
| 5725.00 | 31.41 | 34.65 | 11.62 | 40.54 | 37.14 | 54.00 | -16.86 | Vertical |
| | | | 8 | 302.11n-HT20 | | | | |
| Test c | hannel | | Highest | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5850.00 | 42.18 | 34.63 | 11.75 | 40.69 | 47.87 | 68.20 | -20.33 | Horizontal |
| 5850.00 | 41.27 | 34.63 | 11.75 | 40.69 | 46.96 | 68.20 | -21.24 | Vertical |
| | | | 8 | 02.11n-HT20 | | | | |
| Test c | hannel | | Highest | | Le | vel | Av | rerage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5850.00 | 32.28 | 34.63 | 11.75 | 40.69 | 37.97 | 54.00 | -16.03 | Horizontal |
| 5850.00 | 31.47 | 34.63 | 11.75 | 40.69 | 37.16 | 54.00 | -16.84 | Vertical |

Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



| | | | 8 | 302.11n-HT40 | | | | |
|--------------------|------------------------|------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| Test cl | hannel | | Lowest | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5725.00 | 41.57 | 34.65 | 11.62 | 40.54 | 47.30 | 68.20 | -20.90 | Horizontal |
| 5725.00 | 42.18 | 34.65 | 11.62 | 40.54 | 47.91 | 68.20 | -20.29 | Vertical |
| | | | 8 | 02.11n-HT40 | | | | |
| Test cl | hannel | | Lowest | | Le | vel | Av | rerage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5725.00 | 32.57 | 34.65 | 11.62 | 40.54 | 38.30 | 54.00 | -15.70 | Horizontal |
| 5725.00 | 31.74 | 34.65 | 11.62 | 40.54 | 37.47 | 54.00 | -16.53 | Vertical |
| | | | 8 | 02.11n-HT40 | | | | |
| Test cl | hannel | | Highest | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5850.00 | 41.57 | 34.63 | 11.75 | 40.69 | 47.26 | 68.20 | -20.94 | Horizontal |
| 5850.00 | 40.68 | 34.63 | 11.75 | 40.69 | 46.37 | 68.20 | -21.83 | Vertical |
| | | | 8 | 302.11n-HT40 | | | | |
| Test cl | hannel | | Highest | | Le | vel | Av | rerage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5850.00 | 31.49 | 34.63 | 11.75 | 40.69 | 37.18 | 54.00 | -16.82 | Horizontal |
| 5850.00 | 30.20 | 34.63 | 11.75 | 40.69 | 35.89 | 54.00 | -18.11 | Vertical |

| | | | 8 | 02.11ac-HT80 | | | | |
|--------------------|------------------------|------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| Test cl | hannel | | Middle | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | | | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5725.00 | 41.74 | 34.65 | 11.62 | 40.54 | 47.47 | 68.20 | -20.73 | Horizontal |
| 5725.00 | 41.69 | 34.65 | 11.62 | 40.54 | 47.42 | 68.20 | -20.78 | Vertical |
| | | | 8 | 02.11ac-HT80 | | | | |
| Test cl | hannel | | Middle | | Le | vel | Av | rerage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5725.00 | 31.65 | 34.65 | 11.62 | 40.54 | 37.38 | 54.00 | -16.62 | Horizontal |
| 5725.00 | 31.98 | 34.65 | 11.62 | 40.54 | 37.71 | 54.00 | -16.29 | Vertical |
| | | | 8 | 02.11ac-HT80 | | | | |
| Test cl | hannel | | Middle | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5850.00 | 41.65 | 34.63 | 11.75 | 40.69 | 47.34 | 68.20 | -20.86 | Horizontal |
| 5850.00 | 41.98 | 34.63 | 11.75 | 40.69 | 47.67 | 68.20 | -20.53 | Vertical |
| | | | 8 | 02.11ac-HT80 | | | | |
| Test cl | hannel | | Middle Level Avera | | | | | |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5850.00 | 31.05 | 34.63 | 11.75 | 40.69 | 36.74 | 54.00 | -17.26 | Horizontal |
| 5850.00 | 31.87 | 34.63 | 11.75 | 40.69 | 37.56 | 54.00 | -16.44 | Vertical |

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



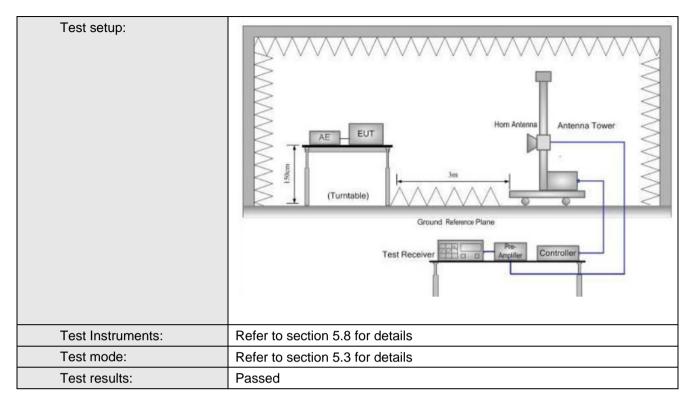
6.7 Spurious Emission

6.7.1 Restricted Band

| Test Requirement: | FCC Part15 E Section 15.407(b) | | | | | | | |
|---------------------|--|--|--|--|---|--|--|--|
| Test Method: | ANSI C63.10: 2013 | | | | | | | |
| TestFrequencyRange: | Band 1: 4.5 GHz to 5.15 GHz and 5.35GHz to 5.46GHz Band 4: 5.35 GHz to 5.46 GHz | | | | | | | |
| Test site: | Measurement Dis | tance: 3m | | | | | | |
| Receiver setup: | Frequency Detector RBW VBW Remark | | | | | | | |
| · | Above 1GHz Peak 1MHz 3MHz Peak Value RMS 1MHz 3MHz Average Value | | | | | | | |
| Limit: | Frequency | | t (dBuV/m @3 | | Remark | | | |
| | Above 1GHz | - | 74.00 54.00 | | Peak Value Average Value | | | |
| Test Procedure: | the groundat todetermine to determine to determine to determine to determine to determine tower. 3. The antenna the ground to Both horizon make the med. 4. For each suscase and the meters and the meters and the find the material to find the material formation of the emission of the EUT with have 10dB med. | a 3 meter cathe position of set 3 meter chwas mount height is var of determine that and vertice asurement. Spected emission the antennation of the position of the iffied, then test couldbe reportargin would | amber. The tab of the highest r is away from the ted on the top lied from one n ne maximum v al polarizations asion, the EUT a was tuned to lied from lied from lied from lied from lied from lied from lied be set to Pea lied | ole was rotaradiation. The interference of a variable meter to found a variable meter form 0 degree at the emission of the emission of the variable was stopped are the variable was stopped at the variable | 0.8 meters above ated 360 degrees ence-receiving ble-height antenna ar meters above a field strength. It tenna are set to ged to its worst om 1 meter to 4 s to 360 degrees function and 10dB lower than and the peak values sions that did not using peak, quasi-orted in a data | | | |









Band 1:

802.11a

| Test c | hannel | | Lowest | | Le | vel | F | eak |
|--------------------|------------------------|------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 4500.00 | 43.21 | 34.50 | 10.22 | 40.67 | 47.26 | 74.00 | -26.74 | Horizontal |
| 4500.00 | 42.18 | 34.50 | 10.22 | 40.67 | 46.23 | 74.00 | -27.77 | Vertical |
| Test c | hannel | | Lowest | | Le | vel | Av | erage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 4500.00 | 32.59 | 34.50 | 10.22 | 40.67 | 36.64 | 54.00 | -17.36 | Horizontal |
| 4500.00 | 31.07 | 34.50 | 10.22 | 40.67 | 35.12 | 54.00 | -18.88 | Vertical |
| Test c | hannel | | Highest | | Le | vel | F | eak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5460.00 | 41.58 | 34.90 | 11.32 | 40.23 | 47.57 | 74.00 | -26.43 | Horizontal |
| 5460.00 | 42.95 | 34.90 | 11.32 | 40.23 | 48.94 | 74.00 | -25.06 | Vertical |
| Test c | hannel | | Highest | | Le | vel | Av | erage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5460.00 | 31.47 | 34.90 | 11.32 | 40.23 | 37.46 | 54.00 | -16.54 | Horizontal |
| 5460.00 | 32.61 | 34.90 | 11.32 | 40.23 | 38.60 | 54.00 | -15.40 | Vertical |

802.11n-HT20

| 002.1111-111120 | | | | | | | | |
|-----------------|------------|-------------|-----------|-------------|----------|------------|------------|--------------|
| Test c | hannel | | Lowest | | Le | vel | F | Peak |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Polarization |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polatization |
| 4500.00 | 41.59 | 34.50 | 10.22 | 40.67 | 45.64 | 74.00 | -28.36 | Horizontal |
| 4500.00 | 42.36 | 34.50 | 10.22 | 40.67 | 46.41 | 74.00 | -27.59 | Vertical |
| Test c | hannel | | Lowest | | Le | vel | Av | erage |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Polarization |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization |
| 4500.00 | 31.02 | 34.50 | 10.22 | 40.67 | 35.07 | 54.00 | -18.93 | Horizontal |
| 4500.00 | 32.65 | 34.50 | 10.22 | 40.67 | 36.70 | 54.00 | -17.30 | Vertical |
| Test c | hannel | | Highest | | Le | vel | F | Peak |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dolorization |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization |
| 5460.00 | 41.57 | 34.90 | 11.32 | 40.23 | 47.56 | 74.00 | -26.44 | Horizontal |
| 5460.00 | 42.15 | 34.90 | 11.32 | 40.23 | 48.14 | 74.00 | -25.86 | Vertical |
| Test c | hannel | | Highest | | Le | vel | Av | erage |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Delegization |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization |
| 5460.00 | 31.26 | 34.90 | 11.32 | 40.23 | 37.25 | 54.00 | -16.75 | Horizontal |
| 5460.00 | 32.57 | 34.90 | 11.32 | 40.23 | 38.56 | 54.00 | -15.44 | Vertical |

Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



802.11n-HT40

| Test cl | hannel | | Lowest | | Le | vel | F | Peak | | |
|-----------|------------|-------------|-----------|-------------|----------|------------|------------|--------------|--|--|
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Polarization | | |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Fulanzation | | |
| 4500.00 | 42.18 | 34.50 | 10.22 | 40.67 | 46.23 | 74.00 | -27.77 | Horizontal | | |
| 4500.00 | 41.56 | 34.50 | 10.22 | 40.67 | 45.61 | 74.00 | -28.39 | Vertical | | |
| Test cl | hannel | | Lowest | | Le | vel | Av | erage | | |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dolorization | | |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization | | |
| 4500.00 | 32.58 | 34.50 | 10.22 | 40.67 | 36.63 | 54.00 | -17.37 | Horizontal | | |
| 4500.00 | 31.46 | 34.50 | 10.22 | 40.67 | 35.51 | 54.00 | -18.49 | Vertical | | |
| Test cl | hannel | | Highest | | Le | vel | F | Peak | | |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dolorization | | |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization | | |
| 5460.00 | 41.57 | 34.90 | 11.32 | 40.23 | 47.56 | 74.00 | -26.44 | Horizontal | | |
| 5460.00 | 42.63 | 34.90 | 11.32 | 40.23 | 48.62 | 74.00 | -25.38 | Vertical | | |
| Test cl | hannel | Highest | | | Le | vel | Av | erage | | |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dolorization | | |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization | | |
| 5460.00 | 31.25 | 34.90 | 11.32 | 40.23 | 37.24 | 54.00 | -16.76 | Horizontal | | |
| 5460.00 | 33.29 | 34.90 | 11.32 | 40.23 | 39.28 | 54.00 | -14.72 | Vertical | | |

802.11ac-HT80

| 002.1140 11100 | | | | | | | | | | |
|----------------|------------|-------------|-----------|-------------|----------|------------|------------|--------------|--|--|
| Test cl | hannel | | Middle | | Le | vel | F | Peak | | |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dolorization | | |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization | | |
| 4500.00 | 41.25 | 34.50 | 10.22 | 40.67 | 45.30 | 74.00 | -28.70 | Horizontal | | |
| 4500.00 | 41.55 | 34.50 | 10.22 | 40.67 | 45.60 | 74.00 | -28.40 | Vertical | | |
| Test cl | hannel | | Middle | | Le | vel | Av | erage | | |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dolorization | | |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization | | |
| 4500.00 | 31.25 | 34.50 | 10.22 | 40.67 | 35.30 | 54.00 | -18.70 | Horizontal | | |
| 4500.00 | 31.59 | 34.50 | 10.22 | 40.67 | 35.64 | 54.00 | -18.37 | Vertical | | |
| Test cl | hannel | | Middle | | Le | vel | F | Peak | | |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Delevinetiev | | |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization | | |
| 5460.00 | 41.25 | 34.90 | 11.32 | 40.23 | 47.24 | 74.00 | -26.76 | Horizontal | | |
| 5460.00 | 41.96 | 34.90 | 11.32 | 40.23 | 47.95 | 74.00 | -26.05 | Vertical | | |
| Test cl | hannel | | Middle | | Le | vel | Av | erage | | |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Delevization | | |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization | | |
| 5460.00 | 31.84 | 34.90 | 11.32 | 40.23 | 37.83 | 54.00 | -16.17 | Horizontal | | |
| 5460.00 | 31.98 | 34.90 | 11.32 | 40.23 | 37.97 | 54.00 | -16.03 | Vertical | | |

Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



Band 4:

802.11a

| 0.0-1.1.00 | | | | | | | | |
|------------|------------|-------------|-----------|-------------|----------|------------|------------|--------------|
| Test c | hannel | | Lowest | | Le | vel | F | Peak |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dolorization |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization |
| 5350.00 | 42.18 | 35.37 | 11.19 | 40.18 | 48.56 | 74.00 | -25.44 | Horizontal |
| 5350.00 | 41.96 | 35.37 | 11.19 | 40.18 | 48.34 | 74.00 | -25.66 | Vertical |
| Test c | hannel | | Lowest | | Le | vel | Av | erage |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dolorization |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization |
| 5350.00 | 32.05 | 35.37 | 11.19 | 40.18 | 38.43 | 54.00 | -15.57 | Horizontal |
| 5350.00 | 31.96 | 35.37 | 11.19 | 40.18 | 38.34 | 54.00 | -15.66 | Vertical |
| Test c | hannel | | Lowest | | Le | vel | F | Peak |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dalarization |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization |
| 5460.00 | 42.87 | 34.90 | 11.32 | 40.23 | 48.86 | 74.00 | -25.14 | Horizontal |
| 5460.00 | 41.35 | 34.90 | 11.32 | 40.23 | 47.34 | 74.00 | -26.66 | Vertical |
| Test c | hannel | | Lowest | | Le | vel | Av | erage |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dalarination |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization |
| 5460.00 | 33.26 | 34.90 | 11.32 | 40.23 | 39.25 | 54.00 | -14.75 | Horizontal |
| 5460.00 | 32.08 | 34.90 | 11.32 | 40.23 | 38.07 | 54.00 | -15.93 | Vertical |

802.11n-HT20

| 002.111111120 | | | | | | | | | | |
|---------------|------------|-------------|-----------|-------------|----------|------------|------------|--------------|--|--|
| Test c | hannel | | Lowest | | Le | vel | F | Peak | | |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dalarization | | |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization | | |
| 5350.00 | 42.18 | 35.37 | 11.19 | 40.18 | 48.56 | 74.00 | -25.44 | Horizontal | | |
| 5350.00 | 41.26 | 35.37 | 11.19 | 40.18 | 47.64 | 74.00 | -26.36 | Vertical | | |
| Test c | hannel | | Lowest | | Le | vel | Av | erage | | |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dolorization | | |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization | | |
| 5350.00 | 32.69 | 35.37 | 11.19 | 40.18 | 39.07 | 54.00 | -14.93 | Horizontal | | |
| 5350.00 | 31.40 | 35.37 | 11.19 | 40.18 | 37.78 | 54.00 | -16.22 | Vertical | | |
| Test c | hannel | | Lowest | | Le | vel | F | Peak | | |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dalarination | | |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization | | |
| 5460.00 | 42.59 | 34.90 | 11.32 | 40.23 | 48.58 | 74.00 | -25.42 | Horizontal | | |
| 5460.00 | 43.51 | 34.90 | 11.32 | 40.23 | 49.50 | 74.00 | -24.50 | Vertical | | |
| Test c | hannel | | Lowest | | Le | vel | Av | erage | | |
| Frequency | Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dalawinatian | | |
| (MHz) | (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization | | |
| 5460.00 | 32.57 | 34.90 | 11.32 | 40.23 | 38.56 | 54.00 | -15.44 | Horizontal | | |
| 5460.00 | 32.65 | 34.90 | 11.32 | 40.23 | 38.64 | 54.00 | -15.36 | Vertical | | |

Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



802.11n-HT40

| Test c | hannel | | Lowest | | Le | vel | F | eak |
|--------------------|------------------------|------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5350.00 | 42.18 | 35.37 | 11.19 | 40.18 | 48.56 | 74.00 | -25.44 | Horizontal |
| 5350.00 | 43.51 | 35.37 | 11.19 | 40.18 | 49.89 | 74.00 | -24.11 | Vertical |
| Test c | hannel | | Lowest | | Le | vel | Av | erage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5350.00 | 32.65 | 35.37 | 11.19 | 40.18 | 39.03 | 54.00 | -14.97 | Horizontal |
| 5350.00 | 33.17 | 35.37 | 11.19 | 40.18 | 39.55 | 54.00 | -14.45 | Vertical |
| Test c | hannel | | Lowest | | Le | vel | F | Peak |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5460.00 | 42.17 | 34.90 | 11.32 | 40.23 | 48.16 | 74.00 | -25.84 | Horizontal |
| 5460.00 | 41.55 | 34.90 | 11.32 | 40.23 | 47.54 | 74.00 | -26.46 | Vertical |
| Test c | hannel | | Lowest | | Le | vel | Av | erage |
| Frequency (MHz) | Read Level (dBuV/m) | Antenna Factor (dB) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | Polarization |
| 5460.00 | 32.57 | 34.90 | 11.32 | 40.23 | 38.56 | 54.00 | -15.44 | Horizontal |
| 5460.00 | 31.62 | 34.90 | 11.32 | 40.23 | 37.61 | 54.00 | -16.39 | Vertical |

802.11ac-HT80

| 002.11ac-11100 | | | | | | | | | | |
|----------------|--|--|---|--|---|---|--|--|--|--|
| hannel | | Middle | | Le | vel | F | Peak | | | |
| Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Polarization | | | |
| (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polatization | | | |
| 41.54 | 35.37 | 11.19 | 40.18 | 47.92 | 74.00 | -26.08 | Horizontal | | | |
| 41.65 | 35.37 | 11.19 | 40.18 | 48.03 | 74.00 | -25.97 | Vertical | | | |
| hannel | | Middle | | Le | vel | Av | erage | | | |
| Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dolorization | | | |
| (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization | | | |
| 31.85 | 35.37 | 11.19 | 40.18 | 38.23 | 54.00 | -15.77 | Horizontal | | | |
| 31.25 | 35.37 | 11.19 | 40.18 | 37.63 | 54.00 | -16.37 | Vertical | | | |
| hannel | | Middle | | Le | vel | F | Peak | | | |
| Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dolorization | | | |
| (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization | | | |
| 41.65 | 34.90 | 11.32 | 40.23 | 47.64 | 74.00 | -26.36 | Horizontal | | | |
| 41.50 | 34.90 | 11.32 | 40.23 | 47.49 | 74.00 | -26.51 | Vertical | | | |
| hannel | | Middle | | Le | vel | Av | erage | | | |
| Read Level | Antenna | Cable | Preamp | Level | Limit Line | Over | Dolovinstian | | | |
| (dBuV/m) | Factor (dB) | Loss (dB) | Factor (dB) | (dBuV/m) | (dBuV/m) | Limit (dB) | Polarization | | | |
| 31.05 | 34.90 | 11.32 | 40.23 | 37.04 | 54.00 | -16.96 | Horizontal | | | |
| 31.88 | 34.90 | 11.32 | 40.23 | 37.87 | 54.00 | -16.13 | Vertical | | | |
| | Read Level (dBuV/m) 41.54 41.65 nannel Read Level (dBuV/m) 31.85 31.25 nannel Read Level (dBuV/m) 41.65 41.50 nannel Read Level (dBuV/m) Read Level (dBuV/m) 31.05 | Read Level (dBuV/m) Antenna Factor (dB) 41.54 35.37 41.65 35.37 nannel Antenna Factor (dB) 31.85 35.37 31.25 35.37 nannel Antenna Factor (dB) 41.65 34.90 41.50 34.90 nannel Antenna Factor (dB) Read Level (dBuV/m) Antenna Factor (dB) 31.05 34.90 | Read Level (dBuV/m) Antenna Factor (dB) Cable Loss (dB) 41.54 35.37 11.19 41.65 35.37 11.19 nannel Middle Read Level (dBuV/m) Antenna Factor (dB) Cable Loss (dB) 31.85 35.37 11.19 31.25 35.37 11.19 nannel Middle Read Level (dBuV/m) Factor (dB) Loss (dB) 41.65 34.90 11.32 nannel Middle Read Level (dBuV/m) Antenna Factor (dB) Cable Loss (dB) Read Level (dBuV/m) Factor (dB) Loss (dB) 31.05 34.90 11.32 | Read Level (dBuV/m) Antenna Factor (dB) Cable Loss (dB) Preamp Factor (dB) 41.54 35.37 11.19 40.18 41.65 35.37 11.19 40.18 nannel Middle Read Level (dBuV/m) Antenna Factor (dB) Cable Freamp Factor (dB) Factor (dB) 31.85 35.37 11.19 40.18 31.25 35.37 11.19 40.18 nannel Middle Read Level (dBuV/m) Factor (dB) Loss (dB) Factor (dB) 41.65 34.90 11.32 40.23 nannel Middle Read Level (dBuV/m) Antenna Cable Factor (dB) Preamp Factor (dB) Read Level (dBuV/m) Factor (dB) Loss (dB) Factor (dB) 31.05 34.90 11.32 40.23 | Read Level (dBuV/m) Antenna Factor (dB) Cable Loss (dB) Preamp Factor (dB) Level (dBuV/m) 41.54 35.37 11.19 40.18 47.92 41.65 35.37 11.19 40.18 48.03 nannel Middle Level Level (dBuV/m) Read Level (dBuV/m) Factor (dB) Level (dBuV/m) 31.85 35.37 11.19 40.18 37.63 nannel Middle Level Level (dBuV/m) Read Level (dBuV/m) Factor (dB) Loss (dB) Factor (dB) (dBuV/m) 41.65 34.90 11.32 40.23 47.64 41.50 34.90 11.32 40.23 47.49 nannel Middle Level (dBuV/m) Read Level (dBuV/m) Factor (dB) Level (dBuV/m) 31.05 34.90 11.32 40.23 47.49 Read Level (dBuV/m) Factor (dB) < | Read Level (dBuV/m) Antenna Factor (dB) Cable Loss (dB) Preamp Factor (dB) Level (dBuV/m) Limit Line (dBuV/m) 41.54 35.37 11.19 40.18 47.92 74.00 41.65 35.37 11.19 40.18 48.03 74.00 nannel Middle Level Limit Line (dBuV/m) Read Level (dBuV/m) Factor (dB) Loss (dB) Factor (dB) (dBuV/m) (dBuV/m) 31.85 35.37 11.19 40.18 37.63 54.00 31.25 35.37 11.19 40.18 37.63 54.00 nannel Middle Level Limit Line (dBuV/m) Read Level (dBuV/m) Factor (dB) Loss (dB) Factor (dB) (dBuV/m) (dBuV/m) 74.00 41.50 34.90 11.32 40.23 47.49 74.00 41.50 34.90 11.32 40.23 47.49 74.00 nannel Middle Level Limit Line (dBuV/m) | Read Level (dBuV/m) Antenna (dBuV/m) Cable Loss (dB) Preamp Factor (dB) Level (dBuV/m) Limit Line (dBuV/m) Over Limit (dB) 41.54 35.37 11.19 40.18 47.92 74.00 -26.08 41.65 35.37 11.19 40.18 48.03 74.00 -25.97 nannel Middle Level Limit Line Over (dBuV/m) (dBuV/m) Factor (dB) Loss (dB) Factor (dB) Level Limit Line Over (dBuV/m) 31.85 35.37 11.19 40.18 38.23 54.00 -15.77 31.25 35.37 11.19 40.18 37.63 54.00 -16.37 nannel Middle Level Limit Line Over (dBuV/m) Factor (dB) Loss (dB) Factor (dB) (dBuV/m) (dBuV/m) Limit Line Over (dBuV/m) Factor (dB) Loss (dB) Factor (dB) Hace Level Colspan="3">Arce Level Colspan="3">Arce Level Colspan="3">Arce Colspan="3">Arce Colspan="3">Arce Colspan="3">Arce Colspan="3">Arce Colspan="3">Arce Colspan | | | |

Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.



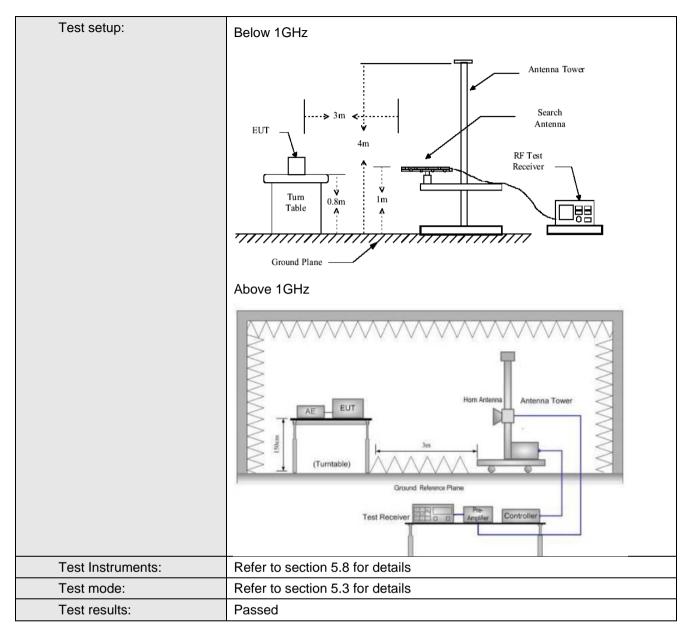


6.7.2 Unwanted Emissions out of the Restricted Bands

| Test Requirement: | FCC Part15 C Section 15.209 and 15.205 | | | | | | | | |
|---------------------|--|---|--|---|--|---|---|--|--|
| Test Method: | ANSI C63.10:20 |)13 | | | | | | | |
| TestFrequencyRange: | 30MHz to 40GH | z | | | | | | | |
| Test site: | Measurement D | istance: 3 | 3m | | | | | | |
| Receiver setup: | Frequency | Detect | or | RBW | VB | sW | Remark | | |
| · | 30MHz-1GHz | Quasi-pe | eak | 120kHz | 300 | | Quasi-peak Value | | |
| | Above 1GHz | Peak | | 1MHz | 3M | | Peak Value | | |
| 117 | Above 1GHz RMS 1MHz 3MHz | | | | | | AV value | | |
| Limit: | Frequency Limit (dBuV/m @3m) Remark | | | | | | | | |
| | 30MHz-88MHz 40.0 Quasi-peak Value | | | | | | | | |
| | 88MHz-216N | ИHz | | 43.5 | | C | luasi-peak Value | | |
| | 216MHz-960I | MHz | | 46.0 | | Q | luasi-peak Value | | |
| | 960MHz-1G | Hz | | 54.0 | | G | luasi-peak Value | | |
| | Frequency | y | | Limit (dBm/MH: | z) | | Remark | | |
| | Above 1GH | 17 | | 68.20 | | | Peak Value | | |
| | 7.5575 101 | | | 54.00 | | | Average Value | | |
| Test Procedure: | 1. The EUT we the grounds todetermine todetermine 2. The EUT we antenna, we tower. 3. The antenna ground to de horizontal as measurement and thenthe and the rota maximum results. The test-results becified Baselimits pecified EUT would 10dB marg. | = EIRP[dE cas placed at a 3 met e the position as set 3 met e the position as set 3 met hichwas met letermine and vertical ent. uspected of e antennal atablewas eading. ceiver system and width of sion level of ed, then te be reported in would be | d on the ter can tion on the can tion on the can the man term of the casting term of the casting term. | mber. The take of the highest is away from the ted on the top ded from one reaximum valuarizations of the ted from 0 deg was set to Peake aximum Hold to the teut in peake could be stop therwise the e | ating ta ble was radiatione inter of a value meter to e of the me anter was armose to d Mode mode value pped armission one us | rotate n. ference frield senna ar rangeon 1 me 360 dect Funda sen 10 dect funda the period from that ing period from the period from that ing period from the | B meters above d 360 degrees ee-receiving cheight antenna meters above the strength. Both re set to make the d to its worst case efter to 4 meters egrees to find the action and DdB lower than the peak values of the did not have ak, quasi-peak or | | |





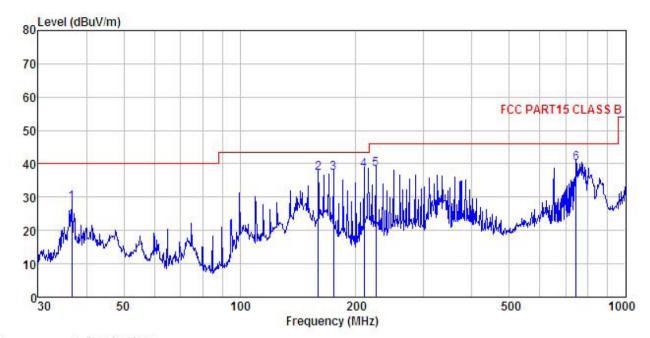






Adapter (1) **Below 1GHz**

Horizontal:



Site

: 3m chamber : FCC PART15 CLASS B 3m VULB9163(30M3G) HORIZONTAL Condition

EUT : Broadband Digital Transmission System

: LigoDLB 5-20ac Model Test mode : 5Gwifi mode Power Rating : AC120V/60Hz

Environment : Temp: 25.5°C Huni: 55% 101KPa

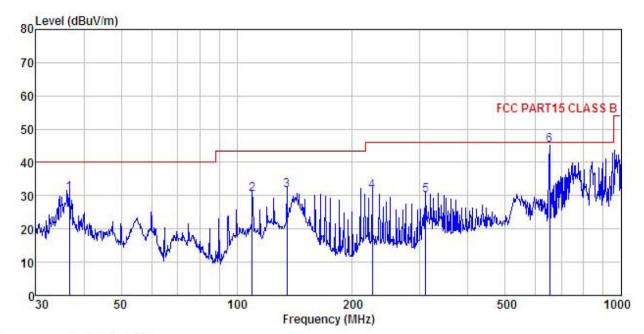
Test Engineer: YT REMARK : G0720-240-050

| Ellata | | | Antenna Factor | | | | | | Remark |
|--------|---------|--------|-------------------|------|-----------|---------------------|---------------------|-----------|--------|
| - | MHz | −−dBuV | <u>dB</u> /π | | <u>ab</u> | $\overline{dBuV/m}$ | $\overline{dBuV/m}$ | <u>dB</u> | |
| 1 | 36.637 | 41.55 | 15.52 | 1.11 | 29.93 | 28.25 | 40.00 | -11.75 | QP |
| 2 | 159.784 | 53.82 | 9.90 | 2.59 | 29.13 | 37.18 | 43.50 | -6.32 | QP |
| 3 4 | 175.037 | 54.13 | 9.50 | 2.69 | 29.01 | 37.31 | 43.50 | -6.19 | QP |
| 4 | 210.048 | 53.23 | 10.70 | 2.86 | 28.77 | 38.02 | 43.50 | -5.48 | QP |
| 5 | 225.308 | 52.70 | 11.56 | 2.84 | 28.68 | 38.42 | 46.00 | -7.58 | QP |
| 6 | 744.866 | 43.97 | 20.24 | 4.34 | 28.50 | 40.05 | 46.00 | -5.95 | QP |





Vertical:



Site

: 3m chamber : FCC PART15 CLASS B 3m VULB9163(30M3G) VERTICAL : Broadband Digital Transmission System : LigoDLB 5-20ac Condition

EUT

Model Test mode : 5Gwifi mode Power Rating : AC120V/60Hz

Environment : Temp: 25.5°C Huni: 55% 101KPa

Test Engineer: YT

: G0720-240-050

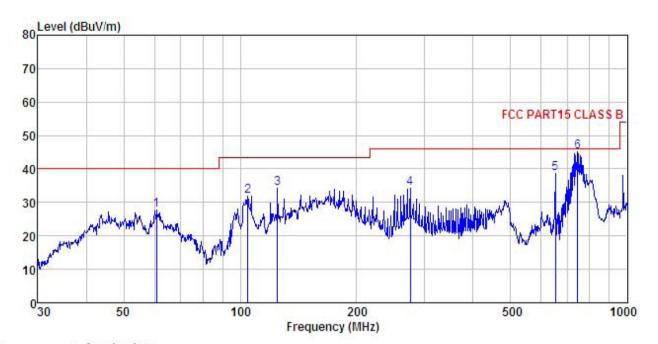
| Freq | | | | | | | | |
|---------|--|--|--|---|---|--|--|---|
| MHz | —dBu∜ | — <u>d</u> B/π | | <u>ab</u> | $\overline{dBuV/m}$ | dBuV/m | <u>dB</u> | |
| 36.637 | 44.08 | 15.52 | 1.11 | 29.93 | 30.78 | 40.00 | -9.22 | QP |
| 109.796 | 47.60 | 10.30 | 2.05 | 29.46 | 30.49 | 43.50 | -13.01 | QP |
| 135.032 | 46.63 | 11.98 | 2.34 | 29.30 | 31.65 | 43.50 | -11.85 | QP |
| 225.308 | 45.68 | 11.56 | 2.84 | 28.68 | 31.40 | 46.00 | -14.60 | QP |
| 309.998 | 42.71 | 13.00 | 2.97 | 28.47 | 30.21 | 46.00 | -15.79 | QP |
| 651.942 | 51.17 | 18.82 | 3.87 | 28.77 | 45.09 | 46.00 | -0.91 | QP |
| | MHz 36.637 109.796 135.032 225.308 309.998 | Freq Level MHz dBuV 36.637 44.08 109.796 47.60 135.032 46.63 225.308 45.68 309.998 42.71 | Freq Level Factor MHz dBuV dB/m 36.637 44.08 15.52 109.796 47.60 10.30 135.032 46.63 11.98 225.308 45.68 11.56 309.998 42.71 13.00 | Freq Level Factor Loss MHz dBuV dB/m dB 36.637 44.08 15.52 1.11 109.796 47.60 10.30 2.05 135.032 46.63 11.98 2.34 225.308 45.68 11.56 2.84 309.998 42.71 13.00 2.97 | Freq Level Factor Loss Factor MHz dBuV dB/m dB dB 36.637 44.08 15.52 1.11 29.93 109.796 47.60 10.30 2.05 29.46 135.032 46.63 11.98 2.34 29.30 225.308 45.68 11.56 2.84 28.68 309.998 42.71 13.00 2.97 28.47 | Freq Level Factor Loss Factor Level MHz dBuV dB/m dB dB dBuV/m 36.637 44.08 15.52 1.11 29.93 30.78 109.796 47.60 10.30 2.05 29.46 30.49 135.032 46.63 11.98 2.34 29.30 31.65 225.308 45.68 11.56 2.84 28.68 31.40 309.998 42.71 13.00 2.97 28.47 30.21 | Freq Level Factor Loss Factor Level Line MHz dBuV dB/m dB dB dBuV/m dBuV/m 36.637 44.08 15.52 1.11 29.93 30.78 40.00 109.796 47.60 10.30 2.05 29.46 30.49 43.50 135.032 46.63 11.98 2.34 29.30 31.65 43.50 225.308 45.68 11.56 2.84 28.68 31.40 46.00 309.998 42.71 13.00 2.97 28.47 30.21 46.00 | 36.637 44.08 15.52 1.11 29.93 30.78 40.00 -9.22 |





Adapter (2) **Below 1GHz**

Horizontal:



Site : 3m chamber

: FCC PART15 CLASS B 3m VULB9163(30M3G) HORIZONTAL Condition

: Broadband Digital Transmission System : LigoDLB 5-20ac EUT

Model Test mode : 5Gwifi mode Power Rating : AC120V/60Hz

Environment : Temp: 25.5°C Huni: 55% 101KPa Test Engineer: YT

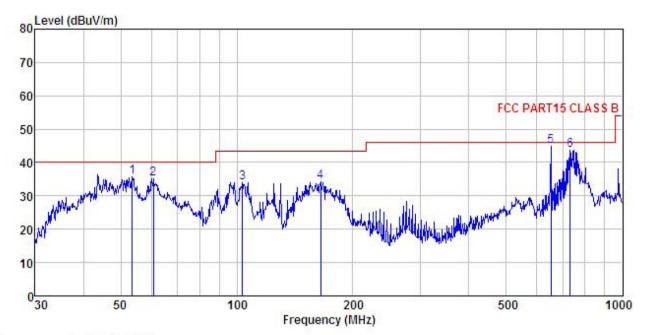
: GRT-POE20-240100A REMARK

| | Frea | | Antenna Factor | | | | | | Remark |
|---------|---------|-------|-------------------|------|--------|--------|--------|--------|--------|
| <u></u> | | | | | | | | | |
| | MHz | dBu∀ | dB/m | dB | dB | dBuV/m | dBuV/m | dB | |
| 1 | 60.704 | 46.23 | 9.99 | 1.38 | 29.77 | 27.83 | 40.00 | -12.17 | QP |
| 2 | 104.536 | | | | | | | | |
| 3 | 125.007 | 49.28 | 12.06 | 2.22 | 29.36 | 34.20 | 43.50 | -9.30 | QP |
| 4 | 275.157 | 47.65 | 12.15 | 2.87 | 28.49 | 34.18 | 46.00 | -11.82 | QP |
| 5 | 651.942 | 44.73 | 18.82 | 3.87 | 28.77 | 38.65 | 46.00 | -7.35 | QP |
| 6 | 744.866 | 49.11 | 20.24 | 4.34 | 28, 50 | 45.19 | 46.00 | -0.81 | QP |





Vertical:



Site

: 3m chamber : FCC PART15 CLASS B 3m VULB9163(30M3G) VERTICAL Condition

: Broadband Digital Transmission System : LigoDLB 5-20ac EUT

Model Test mode : 5Gwifi mode Power Rating : AC120V/60Hz

Environment : Temp:25.5°C Test Engineer: YT Huni:55% 101KPa

REMARK : GRT-POE20-240100A

| | | ~ | | ~~~ | | | | | |
|---|---------|-------|--------------|------------|-----------|--------|---------------------|-----------|--------|
| | | Read | Antenna | Cable | Preamp | | Limit | Over | |
| | Freq | Level | Factor | Loss | Factor | Level | Line | Limit | Remark |
| - | MHz | dBu∜ | <u>dB</u> /m | d <u>B</u> | <u>dB</u> | dBuV/m | $\overline{dBuV/m}$ | <u>dB</u> | |
| 1 | 53.505 | 50.85 | 13.24 | 1.32 | 29.81 | 35.60 | 40.00 | -4.40 | QP |
| 2 | 60.704 | 53.52 | 9.99 | 1.38 | 29.77 | 35.12 | 40.00 | -4.88 | QP |
| 2 | 103.442 | 51.17 | 10.45 | 1.97 | 29.50 | 34.09 | 43.50 | -9.41 | QP |
| 4 | 164.908 | 50.96 | 9.85 | 2.62 | 29.09 | 34.34 | 43.50 | -9.16 | QP |
| 5 | 651.942 | 50.92 | 18.82 | 3.87 | 28.77 | 44.84 | 46.00 | -1.16 | QP |
| 6 | 731.920 | 48.01 | 20.00 | 4.29 | 28.55 | 43.75 | 46.00 | -2.25 | QP |





Above 1GHz:

Band 1:

| Band 1: | | | | | | | | | | |
|--------------------|-------------------------|-----------------------------|--------------------|--------------------------|-------------------|---------------------------|-----------------------|--------------|--|--|
| | | 802.1 | 1a mode Lov | vest chann | el (Peak Val | ue) | | | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization | | |
| 10360.00 | 41.58 | 40.10 | 15.37 | 41.34 | 55.71 | 68.20 | -12.49 | Vertical | | |
| 10360.00 | 42.25 | 40.10 | 15.37 | 41.34 | 56.38 | 68.20 | -11.82 | Horizontal | | |
| | | 802.11 | a mode Lowe | est channe | I (AverageV | alue) | | | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization | | |
| 10360.00 | 31.65 | 40.10 | 15.37 | 41.34 | 45.78 | 54.00 | -8.22 | Vertical | | |
| 10360.00 | 32.15 | 40.10 | 15.37 | 41.34 | 46.28 | 54.00 | -7.72 | Horizontal | | |
| | | 802.1 | 1a mode Mid | ddle chann | el (Peak Val | ue) | | | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization | | |
| 10400.00 | 41.31 | 40.00 | 15.42 | 41.27 | 55.46 | 68.20 | -12.74 | Vertical | | |
| 10400.00 | 41.03 | 40.00 | 15.42 | 41.27 | 55.18 | 68.20 | -13.02 | Horizontal | | |
| | | 802.11 | a mode Mide | dle channe | l (AverageVa | alue) | | | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization | | |
| 10400.00 | 31.59 | 40.00 | 15.42 | 41.27 | 45.74 | 54.00 | -8.26 | Vertical | | |
| 10400.00 | 31.28 | 40.00 | 15.42 | 41.27 | 45.43 | 54.00 | -8.57 | Horizontal | | |
| | | 802.11 | Ia mode Hig | hest chann | el (Peak Va | lue) | | | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization | | |
| 10480.00 | 40.36 | 39.70 | 15.55 | 41.10 | 54.51 | 68.20 | -13.69 | Vertical | | |
| 10480.00 | 40.28 | 39.70 | 15.55 | 41.10 | 54.43 | 68.20 | -13.77 | Horizontal | | |
| | | 802.11a | mode High | est channe | l (AverageV | alue) | | | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization | | |
| 10480.00 | 30.59 | 39.70 | 15.55 | 41.10 | 44.74 | 54.00 | -9.26 | Vertical | | |
| 10480.00 | 30.60 | 39.70 | 15.55 | 41.10 | 44.75 | 54.00 | -9.25 | Horizontal | | |

Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.





| | | 802.11 | n20 mode Lo | west chan | nel (Peak Va | alue) | | |
|--------------------|-------------------------|-----------------------------|--------------------|--------------------------|-------------------|---------------------------|-----------------------|--------------|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 10360.00 | 41.35 | 40.10 | 15.37 | 41.34 | 55.48 | 68.20 | -12.72 | Vertical |
| 10360.00 | 40.59 | 40.10 | 15.37 | 41.34 | 54.72 | 68.20 | -13.48 | Horizontal |
| | | 802.11n2 | 20 mode Lov | vest chann | el (Average) | √alue) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 10360.00 | 31.69 | 40.10 | 15.37 | 41.34 | 45.82 | 54.00 | -8.18 | Vertical |
| 10360.00 | 30.47 | 40.10 | 15.37 | 41.34 | 44.60 | 54.00 | -9.40 | Horizontal |
| | | 802.11 | n20 mode M | iddle chan | nel (Peak Va | alue) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 10400.00 | 42.51 | 40.00 | 15.42 | 41.27 | 56.66 | 68.20 | -11.54 | Vertical |
| 10400.00 | 40.65 | 40.00 | 15.42 | 41.27 | 54.80 | 68.20 | -13.40 | Horizontal |
| | | 802.11n | 20 mode Mid | dle chann | el (Average\ | /alue) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 10400.00 | 32.52 | 40.00 | 15.42 | 41.27 | 46.67 | 54.00 | -7.33 | Vertical |
| 10400.00 | 30.17 | 40.00 | 15.42 | 41.27 | 44.32 | 54.00 | -9.68 | Horizontal |
| | | 802.11r | n20 mode Hi | ghest char | nel (Peak V | alue) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 10480.00 | 41.07 | 39.70 | 15.55 | 41.10 | 55.22 | 68.20 | -12.98 | Vertical |
| 10480.00 | 42.61 | 39.70 | 15.55 | 41.10 | 56.76 | 68.20 | -11.44 | Horizontal |
| | | 802.11n2 | 20 mode Hig | hest chann | el (Average | Value) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 10480.00 | 31.51 | 39.70 | 15.55 | 41.10 | 45.66 | 54.00 | -8.34 | Vertical |
| 10480.00 | 32.50 | 39.70 | 15.55 | 41.10 | 46.65 | 54.00 | -7.35 | Horizontal |

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.





| | | 802.11 | n40 mode Lo | west chan | nel (Peak Va | alue) | | |
|--------------------|-------------------------|-----------------------------|--------------------|--------------------------|--------------------------|---------------------------|-----------------------|--------------|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 10380.00 | 41.05 | 40.00 | 15.42 | 41.31 | 55.16 | 68.20 | -13.04 | Vertical |
| 10380.00 | 40.63 | 40.00 | 15.42 | 41.31 | 54.74 | 68.20 | -13.46 | Horizontal |
| | | 802.11n | 40 mode Lov | vest chann | el (Average ⁾ | √alue) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 10380.00 | 31.48 | 40.00 | 15.42 | 41.31 | 45.59 | 54.00 | -8.41 | Vertical |
| 10380.00 | 30.29 | 40.00 | 15.42 | 41.31 | 44.40 | 54.00 | -9.60 | Horizontal |
| | | 802.11r | 140 mode Hi | ghest char | nel (Peak V | alue) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 10460.00 | 40.18 | 39.80 | 15.51 | 41.17 | 54.32 | 68.20 | -13.88 | Vertical |
| 10460.00 | 41.51 | 39.80 | 15.51 | 41.17 | 55.65 | 68.20 | -12.55 | Horizontal |
| | | 802.11n ² | 10 mode Hig | hest chann | el (Average) | Value) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 10460.00 | 30.14 | 39.80 | 15.51 | 41.17 | 44.28 | 54.00 | -9.72 | Vertical |
| 10460.00 | 31.52 | 39.80 | 15.51 | 41.17 | 45.66 | 54.00 | -8.34 | Horizontal |

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.





| | 802.11ac80 mode Middle channel (Peak Value) | | | | | | | |
|--------------------|---|-----------------------------|--------------------|--------------------------|-------------------|---------------------------|-----------------------|--------------|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 10420.00 | 42.15 | 39.90 | 15.46 | 41.24 | 56.27 | 68.20 | -11.93 | Vertical |
| 10420.00 | 41.23 | 39.90 | 15.46 | 41.24 | 55.35 | 68.20 | -12.85 | Horizontal |
| | | 802.11ac | 80 mode Mi | ddle chanr | el (Average | Value) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 10420.00 | 32.65 | 39.90 | 15.46 | 41.24 | 46.77 | 54.00 | -7.23 | Vertical |
| 10420.00 | 30.28 | 39.90 | 15.46 | 41.24 | 44.40 | 54.00 | -9.60 | Horizontal |

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.





Band 4:

| Band 4: | | | | | | | | |
|--------------------|---|-----------------------------|--------------------|--------------------------|-------------------|---------------------------|-----------------------|--------------|
| | | 802.1 | 1a mode Lov | vest chann | el (Peak Val | lue) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11490.00 | 41.26 | 41.50 | 16.83 | 40.75 | 58.84 | 68.20 | / | Vertical |
| 11490.00 | 41.84 | 41.50 | 16.83 | 40.75 | 59.42 | 68.20 | / | Horizontal |
| | 802.11a mode Lowest channel (AverageValue) | | | | | | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11490.00 | 31.35 | 41.50 | 16.83 | 40.75 | 48.93 | 54.00 | -5.07 | Vertical |
| 11490.00 | 32.98 | 41.50 | 16.83 | 40.75 | 50.56 | 54.00 | -3.44 | Horizontal |
| | | 802.1 | 1a mode Mid | ddle chann | el (Peak Val | ue) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11570.00 | 40.46 | 41.38 | 16.90 | 40.91 | 57.83 | 68.20 | / | Vertical |
| 11570.00 | 40.28 | 41.38 | 16.90 | 40.91 | 57.65 | 68.20 | / | Horizontal |
| | 802.11a mode Middle channel (Average Value) | | | | | | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11570.00 | 31.55 | 41.38 | 16.90 | 40.91 | 48.92 | 54.00 | -5.08 | Vertical |
| 11570.00 | 31.26 | 41.38 | 16.90 | 40.91 | 48.63 | 54.00 | -5.37 | Horizontal |
| | | 802.11 | Ia mode Hig | hest chanr | el (Peak Va | lue) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11650.00 | 40.83 | 41.26 | 16.97 | 41.06 | 58.00 | 68.20 | / | Vertical |
| 11650.00 | 40.41 | 41.26 | 16.97 | 41.06 | 57.58 | 68.20 | / | Horizontal |
| | | 802.11a | mode Highe | est channe | I (Average V | /alue) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11650.00 | 31.24 | 41.26 | 16.97 | 41.06 | 48.41 | 54.00 | -5.59 | Vertical |
| 11650.00 | 30.29 | 41.26 | 16.97 | 41.06 | 47.46 | 54.00 | -6.54 | Horizontal |

Remark:

^{1.} Final Level =Receiver Read level + Antenna Factor + Cable Loss - Preamplifier Factor

^{2.} The emission levels of other frequencies are very lower than the limit and not show in test report.





| | | 802.11 | n20 mode Lo | west chan | nel (Peak Va | alue) | | |
|--------------------|---|-----------------------------|--------------------|--------------------------|-------------------|---------------------------|-----------------------|--------------|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11490.00 | 40.25 | 41.50 | 16.83 | 40.75 | 57.83 | 68.20 | / | Vertical |
| 11490.00 | 39.56 | 41.50 | 16.83 | 40.75 | 57.14 | 68.20 | / | Horizontal |
| | | 802.11n2 | 20 mode Low | est chann | el (Average | Value) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11490.00 | 30.21 | 41.50 | 16.83 | 40.75 | 47.79 | 54.00 | -6.21 | Vertical |
| 11490.00 | 29.48 | 41.50 | 16.83 | 40.75 | 47.06 | 54.00 | -6.94 | Horizontal |
| | | 802.11 | n20 mode M | iddle chan | nel (Peak Va | alue) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11570.00 | 41.83 | 41.38 | 16.90 | 40.91 | 59.20 | 68.20 | / | Vertical |
| 11570.00 | 42.07 | 41.38 | 16.90 | 40.91 | 59.44 | 68.20 | / | Horizontal |
| | 802.11n20 mode Middle channel (Average Value) | | | | | | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11570.00 | 31.59 | 41.38 | 16.90 | 40.91 | 48.96 | 54.00 | -5.04 | Vertical |
| 11570.00 | 32.51 | 41.38 | 16.90 | 40.91 | 49.88 | 54.00 | -4.12 | Horizontal |
| | | 802.11r | n20 mode Hi | ghest char | nel (Peak V | alue) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11650.00 | 40.52 | 41.26 | 16.97 | 41.06 | 57.69 | 68.20 | / | Vertical |
| 11650.00 | 41.20 | 41.26 | 16.97 | 41.06 | 58.37 | 68.20 | / | Horizontal |
| | | 802.11n2 | 0 mode High | nest chann | el (Average | Value) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11650.00 | 30.56 | 41.26 | 16.97 | 41.06 | 47.73 | 54.00 | -6.27 | Vertical |
| 11650.00 | 31.41 | 41.26 | 16.97 | 41.06 | 48.58 | 54.00 | -5.42 | Horizontal |

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.





| | | 802.11 | n40 mode Lo | west chan | nel (Peak V | alue) | | |
|--------------------|---|-----------------------------|--------------------|--------------------------|-------------------|---------------------------|-----------------------|--------------|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11510.00 | 40.15 | 41.50 | 16.83 | 40.77 | 57.71 | 68.20 | / | Vertical |
| 11510.00 | 39.51 | 41.50 | 16.83 | 40.77 | 57.07 | 68.20 | / | Horizontal |
| | | 802.11n ² | 10 mode Low | est chann | el (Average | Value) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11510.00 | 30.65 | 41.50 | 16.83 | 40.77 | 48.21 | 54.00 | -5.79 | Vertical |
| 11510.00 | 29.58 | 41.50 | 16.83 | 40.77 | 47.14 | 54.00 | -6.86 | Horizontal |
| | 802.11n40 mode Highest channel (Peak Value) | | | | | | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11590.00 | 41.02 | 41.32 | 16.93 | 40.95 | 58.32 | 68.20 | / | Vertical |
| 11590.00 | 40.15 | 41.32 | 16.93 | 40.95 | 57.45 | 68.20 | / | Horizontal |
| | | 802.11n4 | 0 mode High | nest chann | el (Average | Value) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11590.00 | 31.56 | 41.32 | 16.93 | 40.95 | 48.86 | 54.00 | -5.14 | Vertical |
| 11590.00 | 30.27 | 41.32 | 16.93 | 40.95 | 47.57 | 54.00 | -6.43 | Horizontal |

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.





| | 802.11ac80 mode Middle channel (Peak Value) | | | | | | | |
|--------------------|---|-----------------------------|--------------------|--------------------------|-------------------|---------------------------|-----------------------|--------------|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11550.00 | 42.13 | 41.44 | 16.86 | 40.88 | 59.55 | 68.20 | / | Vertical |
| 11550.00 | 41.74 | 41.44 | 16.86 | 40.88 | 59.16 | 68.20 | / | Horizontal |
| | | 802.11ac | 80 mode Mid | ddle chann | el (Average | Value) | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 11550.00 | 31.54 | 41.44 | 16.86 | 40.88 | 48.96 | 54.00 | -5.04 | Vertical |
| 11550.00 | 31.65 | 41.44 | 16.86 | 40.88 | 49.07 | 54.00 | -4.93 | Horizontal |

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.





6.8 Frequency stability

| Test Requirement: | FCC Part15 E Section 15.407 (g) | | | | |
|-------------------|--|--|--|--|--|
| Limit: | Manufacturers of U-NII devices are responsible for ensuringfrequency stability such that anemission is maintained within the band of operation under all conditions of normal operation asspecified in the user's manual. | | | | |
| Test setup: | Temperature Chamber | | | | |
| | Spectrum analyzer EUT Att. Variable Power Supply | | | | |
| Test procedure: | Note: Measurement setup for testing on Antenna connector 1. The EUT is installed in an environment test chamber with external | | | | |
| | power source. Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT. A sufficient stabilization period at each temperature is used prior to each frequency measurement. When temperature is stabled, measure the frequency stability. The test shall be performed under -30 to 50 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions. | | | | |
| Test Instruments: | Refer to section 5.8 for details | | | | |
| Test mode: | Refer to section 5.3 for details, and all channels have been tested, only shows the worst channel data in this report. | | | | |
| Test results: | Passed | | | | |





Measurement Data (the worst channel):

Band 1:

Voltage vs. Frequency Stability (Lowest channel=5180MHz)

| Tes | st conditions | | | |
|---------|-------------------|----------------|----------------------|--|
| Temp(℃) | Voltage(AC /60Hz) | Frequency(MHz) | Max. Deviation (ppm) | |
| | 138 | 5179.984500 | 2.99 | |
| 20 | 120 | 5179.987800 | 2.36 | |
| | 102 | 5179.987400 | 2.43 | |

Temperature vs. Frequency Stability (Lowest channel=5180MHz)

| Test conditi | ons | F(NALL=) | May Deviation (name) |
|-------------------|----------|----------------|----------------------|
| Voltage(AC /60Hz) | Temp(°C) | Frequency(MHz) | Max. Deviation (ppm) |
| | -20 | 5179.985100 | 2.88 |
| | -10 | 5179.987400 | 2.43 |
| | 0 | 5179.988200 | 2.28 |
| 400 | 10 | 5179.988400 | 2.24 |
| 120 | 20 | 5179.988700 | 2.18 |
| | 30 | 5179.986800 | 2.55 |
| | 40 | 5179.984700 | 2.95 |
| | 50 | 5179.983500 | 3.19 |

Band 4:

Voltage vs. Frequency Stability (Lowest channel=5745MHz)

| Tes | st conditions | F(8411-) | Man Davietien (num) |
|---------|-------------------|----------------|----------------------|
| Temp(℃) | Voltage(AC /60Hz) | Frequency(MHz) | Max. Deviation (ppm) |
| | 138 | 5744.986584 | 2.34 |
| 20 | 120 | 5744.988745 | 1.96 |
| | 102 | 5744.987548 | 2.17 |

Temperature vs. Frequency Stability (Lowest channel=5745MHz)

| Test conditi | ions | Francisco (MIII-) | May Posistion (nam) |
|-------------------|----------|-------------------|----------------------|
| Voltage(AC /60Hz) | Temp(°C) | Frequency(MHz) | Max. Deviation (ppm) |
| | -30 | 5744.996285 | 0.65 |
| | -20 | 5744.993550 | 1.12 |
| | -10 | 5744.998471 | 0.27 |
| | 0 | 5744.989878 | 1.76 |
| 120 | 10 | 5744.997884 | 0.37 |
| | 20 | 5744.988875 | 1.94 |
| | 30 | 5744.998541 | 0.25 |
| | 40 | 5744.986784 | 2.30 |
| | 50 | 5744.990247 | 1.70 |