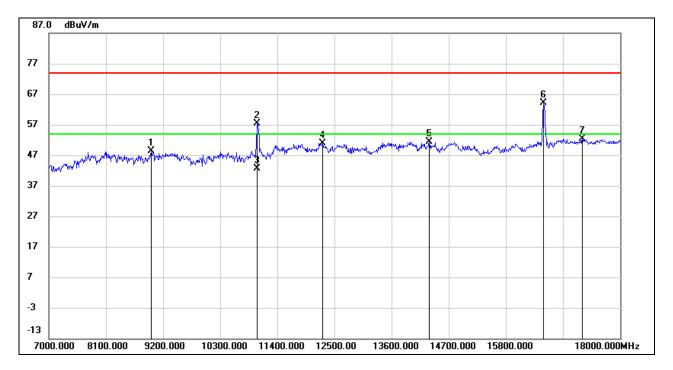


#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

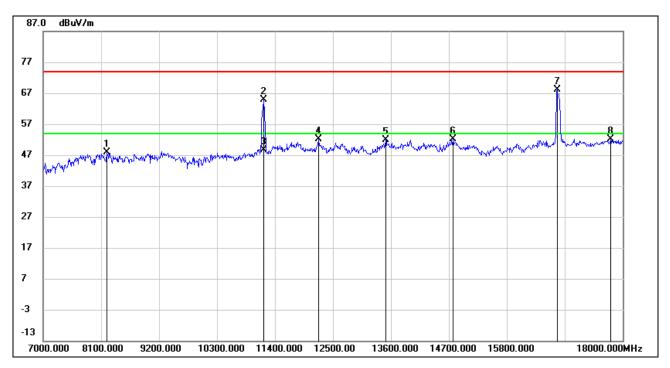


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8969.000	37.64	10.69	48.33	74.00	-25.67	peak
2	11015.000	43.98	13.38	57.36	74.00	-16.64	peak
3	11015.000	29.14	13.38	42.52	54.00	-11.48	AVG
4	12269.000	34.85	16.04	50.89	74.00	-23.11	peak
5	14326.000	33.51	17.93	51.44	74.00	-22.56	peak
6	16526.000	44.45	19.77	64.22	68.2	-3.98	peak
7	17274.000	29.97	22.45	52.42	74.00	-21.58	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, HORIZONTAL)

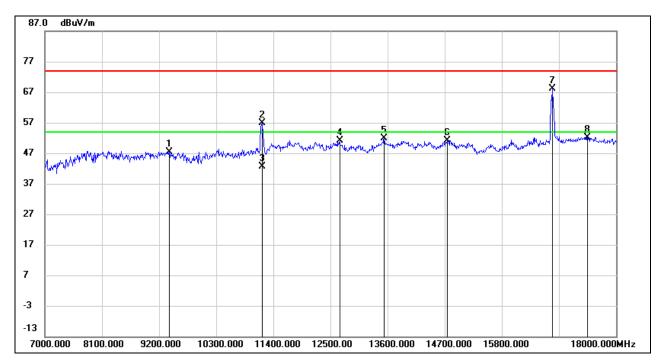


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8210.000	37.96	9.80	47.76	74.00	-26.24	peak
2	11191.000	51.21	13.78	64.99	74.00	-9.01	peak
3	11191.000	34.90	13.78	48.68	54.00	-5.32	AVG
4	12225.000	36.05	15.99	52.04	74.00	-21.96	peak
5	13501.000	34.59	17.22	51.81	74.00	-22.19	peak
6	14777.000	34.16	17.96	52.12	74.00	-21.88	peak
7	16757.000	49.81	20.39	67.13	68.2	-1.07	peak
8	17769.000	28.16	23.87	52.03	74.00	-21.97	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL, VERTICAL)

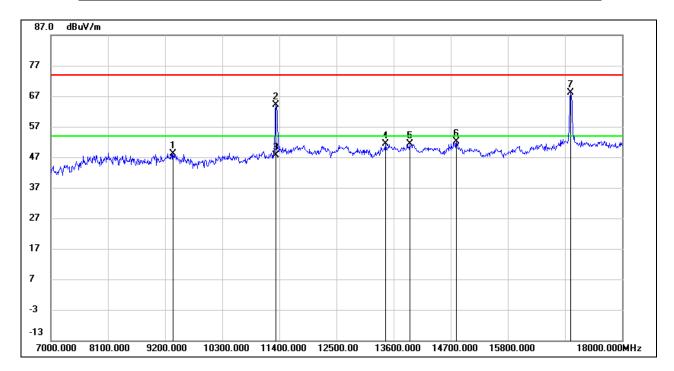


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9398.000	36.48	10.96	47.44	74.00	-26.56	peak
2	11191.000	43.08	13.78	56.86	74.00	-17.14	peak
3	11191.000	28.73	13.78	42.51	54.00	-11.49	AVG
4	12676.000	35.42	15.66	51.08	74.00	-22.92	peak
5	13534.000	34.66	17.18	51.84	74.00	-22.16	peak
6	14755.000	33.35	17.88	51.23	74.00	-22.77	peak
7	16768.000	47.59	20.47	67.23	68.2	-0.97	peak
8	17450.000	30.23	21.95	52.18	74.00	-21.82	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

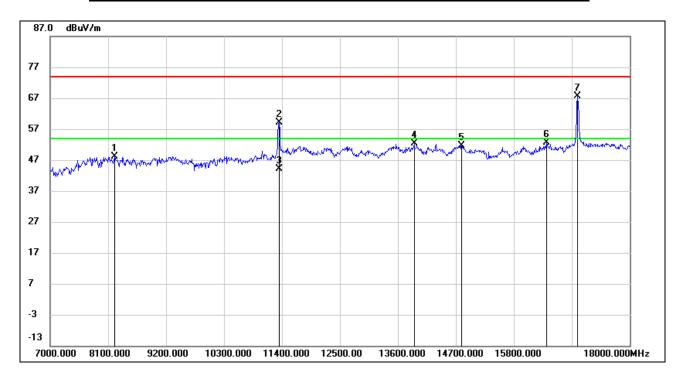


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9354.000	37.38	10.70	48.08	74.00	-25.92	peak
2	11334.000	49.91	14.15	64.06	74.00	-9.94	peak
3	11334.000	33.54	14.15	47.69	54.00	-6.31	AVG
4	13446.000	34.25	17.12	51.37	74.00	-22.63	peak
5	13908.000	33.90	17.54	51.44	74.00	-22.56	peak
6	14810.000	34.06	17.97	52.03	74.00	-21.97	peak
7	17010.000	46.75	21.31	67.21	68.2	-0.99	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



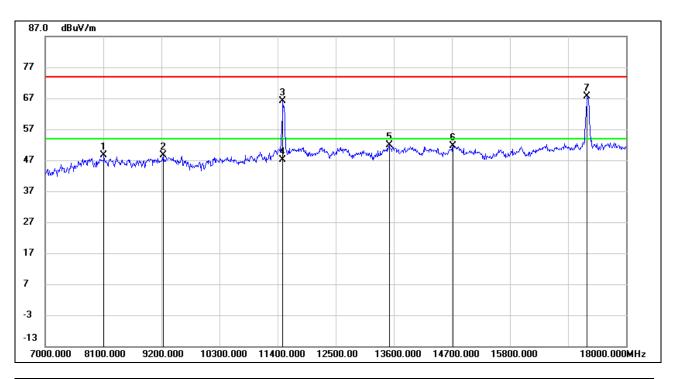
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8221.000	38.26	9.79	48.05	74.00	-25.95	peak
2	11345.000	44.77	14.26	59.03	74.00	-14.97	peak
3	11345.000	29.77	14.26	44.03	54.00	-9.97	AVG
4	13908.000	34.76	17.54	52.30	74.00	-21.70	peak
5	14810.000	33.72	17.97	51.69	74.00	-22.31	peak
6	16416.000	32.91	19.68	52.59	74.00	-21.41	peak
7	17010.000	47.04	21.31	67.15	68.2	-1.05	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### **UNII-3 BAND**

# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

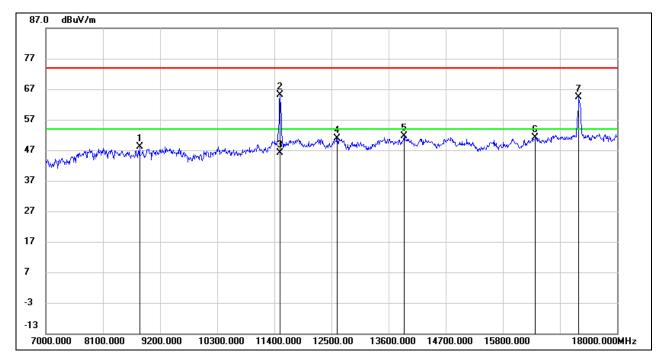


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	38.45	10.14	48.59	74.00	-25.41	peak
2	9233.000	38.65	10.08	48.73	74.00	-25.27	peak
3	11499.000	51.36	14.65	66.01	74.00	-7.99	peak
4	11499.000	32.54	14.65	47.19	54.00	-6.81	AVG
5	13512.000	34.60	17.20	51.80	74.00	-22.20	peak
6	14722.000	33.81	17.77	51.58	74.00	-22.42	peak
7	17263.000	46.03	22.38	67.12	68.2	-1.08	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

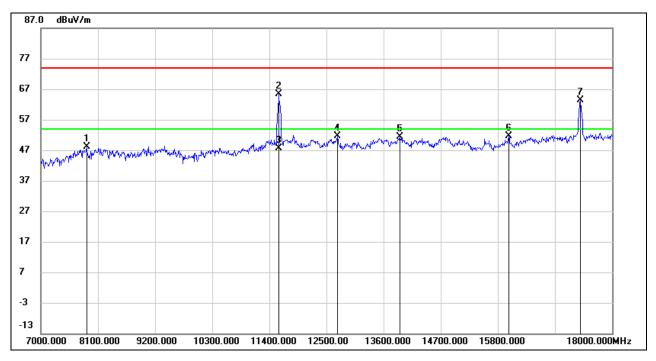


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8804.000	38.79	9.25	48.04	74.00	-25.96	peak
2	11510.000	50.38	14.66	65.04	74.00	-8.96	peak
3	11510.000	31.45	14.66	46.11	54.00	-7.89	AVG
4	12610.000	35.20	15.76	50.96	74.00	-23.04	peak
5	13897.000	34.17	17.52	51.69	74.00	-22.31	peak
6	16427.000	31.56	19.68	51.24	74.00	-22.76	peak
7	17263.000	42.08	22.38	64.46	68.2	-3.74	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

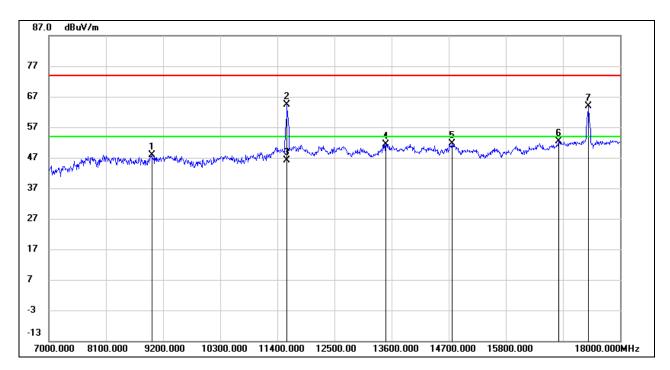


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7880.000	39.23	8.95	48.18	74.00	-25.82	peak
2	11576.000	50.77	14.71	65.48	74.00	-8.52	peak
3	11576.000	32.86	14.71	47.57	54.00	-6.43	AVG
4	12709.000	35.87	15.66	51.53	74.00	-22.47	peak
5	13908.000	33.76	17.54	51.30	74.00	-22.70	peak
6	16009.000	33.14	18.41	51.55	74.00	-22.45	peak
7	17384.000	41.46	21.99	63.45	68.2	-4.75	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



### HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8980.000	37.05	10.89	47.94	74.00	-26.06	peak
2	11587.000	49.61	14.72	64.33	74.00	-9.67	peak
3	11587.000	31.48	14.72	46.20	54.00	-7.80	AVG
4	13490.000	34.29	17.20	51.49	74.00	-22.51	peak
5	14766.000	33.67	17.92	51.59	74.00	-22.41	peak
6	16812.000	31.68	20.81	52.49	74.00	-21.51	peak
7	17395.000	41.87	21.91	63.78	68.2	-4.42	peak

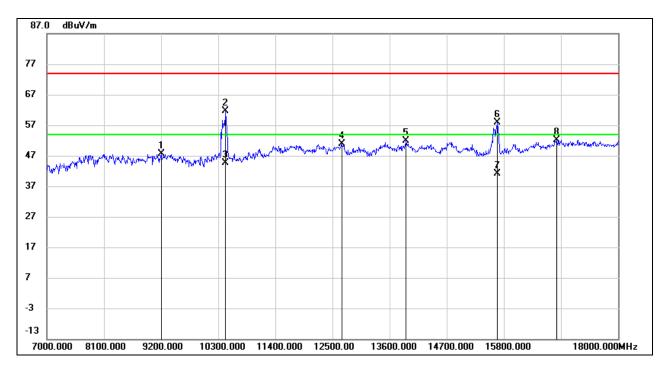
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### 8.3.4. 802.11ac VHT80 CDD 4TX MODE

#### **UNII-1 BAND**

## HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

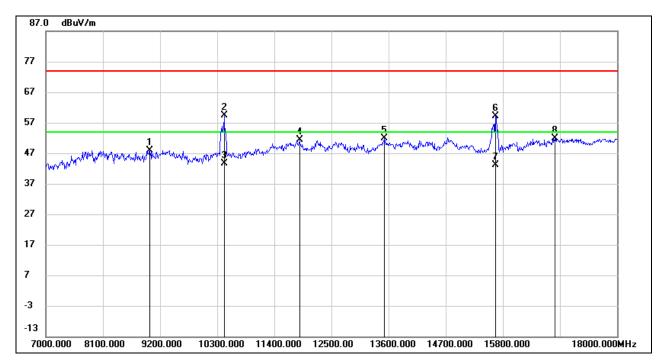


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9200.000	37.79	9.91	47.70	74.00	-26.30	peak
2	10443.000	49.44	12.29	61.73	68.2	-6,.47	peak
3	10443.000	32.22	12.29	44.51	/	/	AVG
4	12676.000	35.14	15.66	50.80	74.00	-23.20	peak
5	13919.000	34.29	17.55	51.84	74.00	-22.16	peak
6	15679.000	39.96	17.80	57.76	74.00	-16.24	peak
7	15679.000	23.36	17.80	41.16	54.00	-12.84	AVG
8	16823.000	31.18	20.91	52.09	74.00	-21.91	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



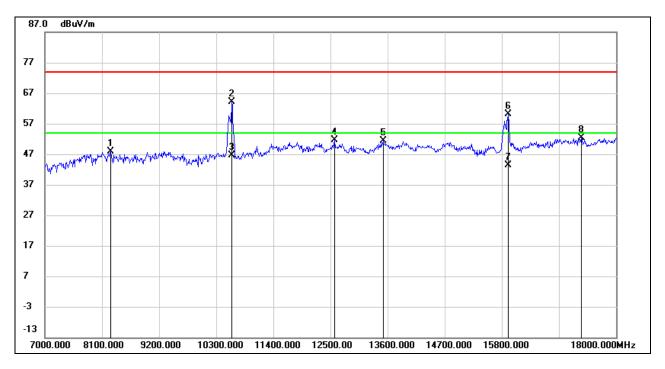
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9002.000	36.76	11.24	48.00	74.00	-26.00	peak
2	10432.000	47.22	12.27	59.49	68.2	-8.71	peak
3	10432.000	31.26	12.27	43.53	/	/	AVG
4	11884.000	35.79	15.47	51.26	74.00	-22.74	peak
5	13523.000	34.57	17.19	51.76	74.00	-22.24	peak
6	15657.000	41.45	17.77	59.22	74.00	-14.78	peak
7	15657.000	25.25	17.77	43.02	54.00	-10.98	AVG
8	16801.000	31.09	20.72	51.81	74.00	-22.19	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### **UNII-2A BAND**

#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

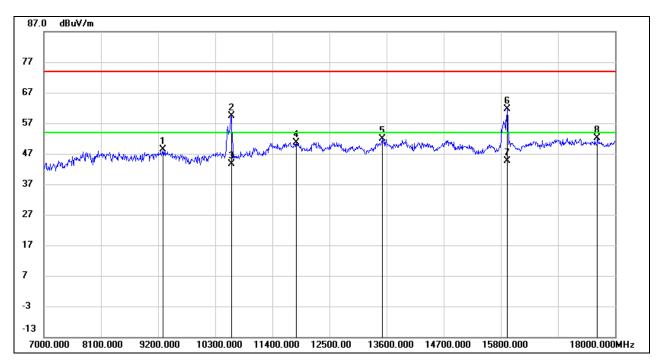


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8265.000	38.09	9.73	47.82	74.00	-26.18	peak
2	10597.000	51.51	12.68	64.19	68.2	-4.01	peak
3	10597.000	34.03	12.68	46.71	/	/	AVG
4	12577.000	35.76	15.75	51.51	74.00	-22.49	peak
5	13512.000	34.19	17.20	51.39	74.00	-22.61	peak
6	15921.000	42.05	18.14	60.19	74.00	-13.81	peak
7	15921.000	25.15	18.14	43.29	54.00	-10.71	AVG
8	17329.000	29.90	22.39	52.29	74.00	-21.71	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)



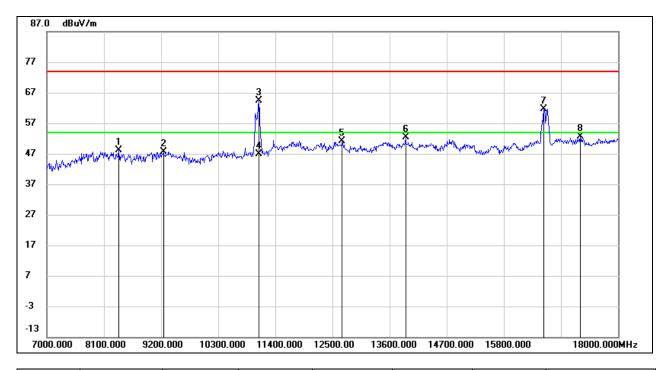
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9299.000	38.00	10.40	48.40	74.00	-25.60	peak
2	10608.000	46.75	12.70	59.45	74.00	-14.55	peak
3	10608.000	30.96	12.70	43.66	54.00	-10.34	AVG
4	11862.000	35.34	15.41	50.75	74.00	-23.25	peak
5	13523.000	34.77	17.19	51.96	74.00	-22.04	peak
6	15921.000	43.50	18.14	61.64	74.00	-12.36	peak
7	15921.000	26.49	18.14	44.63	54.00	-9.37	AVG
8	17659.000	29.05	23.17	52.22	74.00	-21.78	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### **UNII-2C BAND**

### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

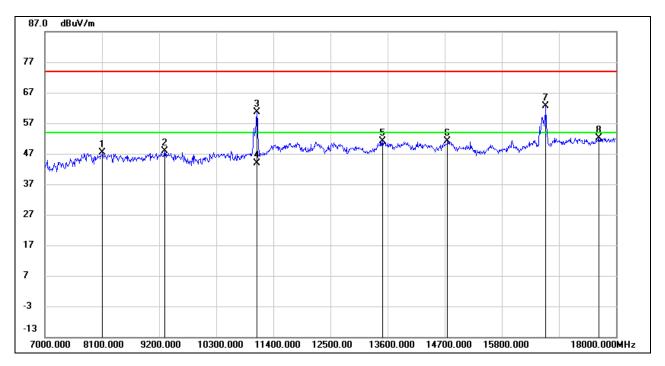


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8386.000	38.69	9.39	48.08	74.00	-25.92	peak
2	9244.000	37.48	10.12	47.60	74.00	-26.40	peak
3	11081.000	50.59	13.70	64.29	74.00	-9.71	peak
4	11081.000	33.12	13.70	46.82	54.00	-7.18	AVG
5	12687.000	35.59	15.64	51.23	74.00	-22.77	peak
6	13908.000	34.89	17.54	52.43	74.00	-21.57	peak
7	16570.000	41.81	19.92	61.73	68.2	-6.47	peak
8	17274.000	30.07	22.45	52.52	74.00	-21.48	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



#### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)

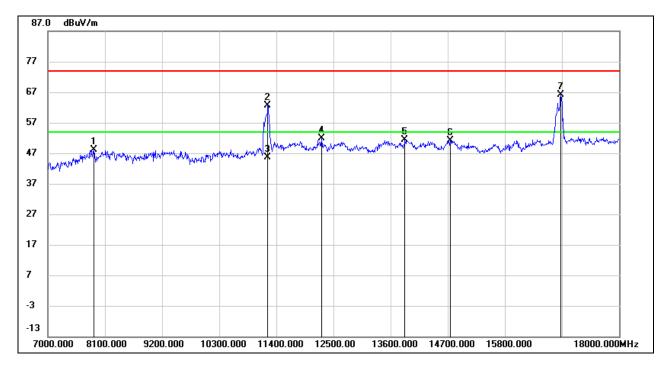


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8111.000	37.14	10.14	47.28	74.00	-26.72	peak
2	9310.000	37.47	10.46	47.93	74.00	-26.07	peak
3	11081.000	46.97	13.70	60.67	74.00	-13.33	peak
4	11081.000	30.26	13.70	43.96	54.00	-10.04	AVG
5	13501.000	34.02	17.22	51.24	74.00	-22.76	peak
6	14755.000	33.27	17.88	51.15	74.00	-22.85	peak
7	16647.000	42.55	19.98	62.53	68.2	-5.67	peak
8	17670.000	28.93	23.24	52.17	74.00	-21.83	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, HORIZONTAL)

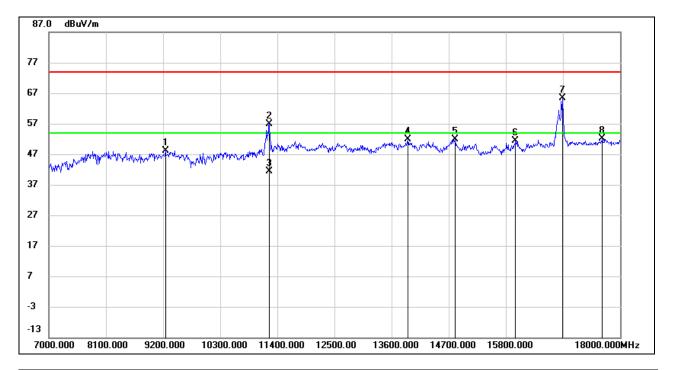


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7891.000	39.18	8.90	48.08	74.00	-25.92	peak
2	11235.000	48.80	13.81	62.61	74.00	-11.39	peak
3	11235.000	31.94	13.81	45.75	54.00	-8.25	AVG
4	12269.000	35.77	16.04	51.81	74.00	-22.19	peak
5	13875.000	33.82	17.55	51.37	74.00	-22.63	peak
6	14744.000	33.40	17.84	51.24	74.00	-22.76	peak
7	16878.000	44.77	21.38	66.15	68.2	-2.05	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. AVG: VBW=1/Ton, where: Ton is the transmitting duration.
- 5. For the transmitting duration, please refer to clause 7.1.
- 6. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 7. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 8. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL)



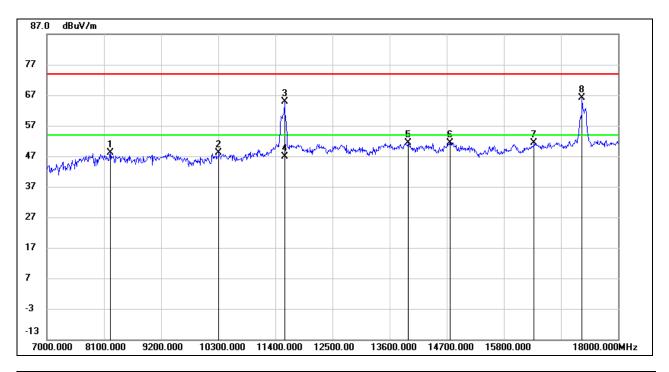
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	9244.000	37.92	10.12	48.04	74.00	-25.96	peak
2	11246.000	43.00	13.82	56.82	74.00	-17.18	peak
3	11246.000	27.51	13.82	41.33	54.00	-12.67	AVG
4	13919.000	34.31	17.55	51.86	74.00	-22.14	peak
5	14821.000	33.97	17.90	51.87	74.00	-22.13	peak
6	15987.000	33.13	18.37	51.50	74.00	-22.50	peak
7	16889.000	43.99	21.47	65.46	68.2	-2.74	peak
8	17659.000	28.86	23.17	52.03	74.00	-21.97	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# **UNII-3 BAND**

### HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, HORIZONTAL)

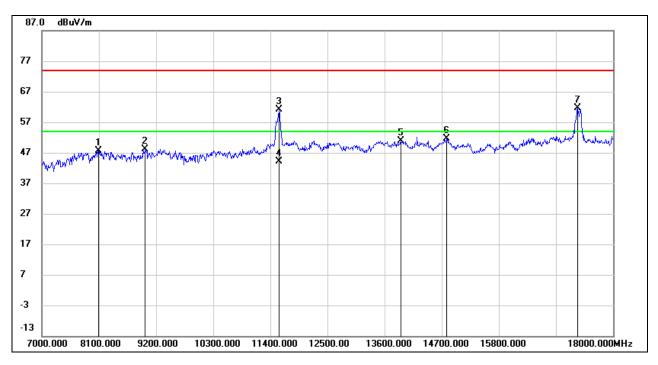


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8221.000	38.46	9.79	48.25	74.00	-25.75	peak
2	10311.000	36.36	11.86	48.22	74.00	-25.78	peak
3	11576.000	50.08	14.71	64.79	74.00	-9.21	peak
4	11576.000	32.07	14.71	46.78	54.00	-7.22	AVG
5	13963.000	33.77	17.61	51.38	74.00	-22.62	peak
6	14766.000	33.48	17.92	51.40	74.00	-22.60	peak
7	16383.000	31.64	19.67	51.31	74.00	-22.69	peak
8	17307.000	43.48	22.56	66.04	68.2	-2.16	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



**HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL, VERTICAL)** 



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8089.000	37.62	10.01	47.63	74.00	-26.37	peak
2	8991.000	37.06	11.10	48.16	74.00	-25.84	peak
3	11565.000	46.54	14.69	61.23	74.00	-12.77	peak
4	11565.000	29.54	14.69	44.23	54.00	-9.77	AVG
5	13908.000	33.45	17.54	50.99	74.00	-23.01	peak
6	14799.000	33.69	18.04	51.73	74.00	-22.27	peak
7	17318.000	39.09	22.47	61.56	68.2	-6.64	peak

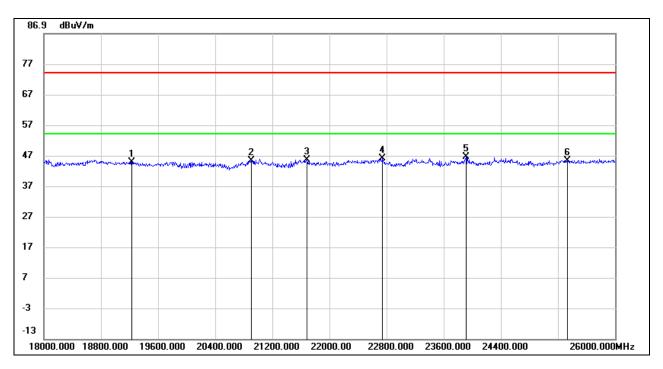
- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for High Pass Filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.
- 6. Since non-restricted band peak emissions are less than the average limit, they also comply with the -27dBm/MHz (68.2dBuV/m) limit.



# 8.4. SPURIOUS EMISSIONS (18 GHz ~ 26 GHz)

### 8.4.1. 802.11ac VHT80 CDD 4TX MODE

# SPURIOUS EMISSIONS (UNII-3 BAND HIGH CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	19232.000	49.92	-5.03	44.89	74.00	-29.11	peak
2	20904.000	50.38	-5.21	45.17	74.00	-28.83	peak
3	21680.000	51.24	-5.76	45.48	74.00	-28.52	peak
4	22744.000	51.68	-5.74	45.94	74.00	-28.06	peak
5	23912.000	50.82	-4.23	46.59	74.00	-27.41	peak
6	25328.000	46.76	-1.38	45.38	74.00	-28.62	peak

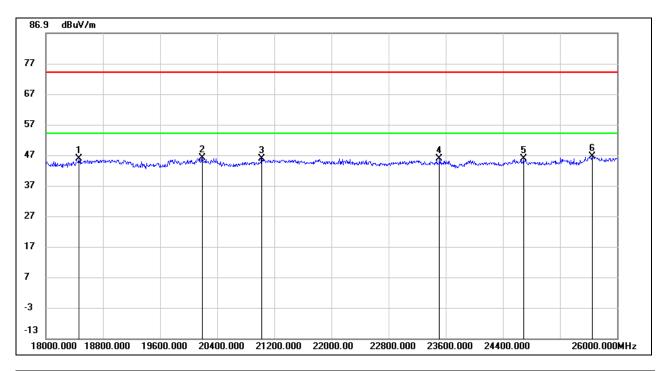
Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.



SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	18464.000	50.20	-4.39	45.81	74.00	-28.19	peak
2	20192.000	50.87	-4.76	46.11	74.00	-27.89	peak
3	21024.000	51.14	-5.30	45.84	74.00	-28.16	peak
4	23512.000	50.51	-4.76	45.75	74.00	-28.25	peak
5	24688.000	47.89	-2.11	45.78	74.00	-28.22	peak
6	25648.000	48.12	-1.53	46.59	74.00	-27.41	peak

Note: 1. Measurement = Reading Level + Correct Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.

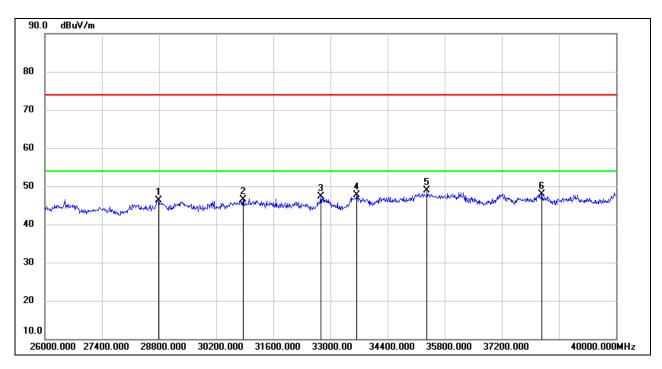
Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.



# 8.5. SPURIOUS EMISSIONS (26 GHz ~ 40 GHz)

### 8.5.1. 802.11ac VHT80 CDD 4TX MODE

# SPURIOUS EMISSIONS (UNII-3 BAND HIGH CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)

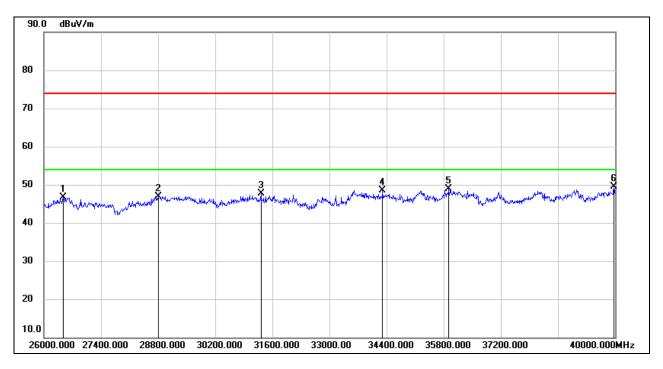


No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	28786.000	46.99	-0.64	46.35	74.00	-27.65	peak
2	30858.000	47.50	-0.97	46.53	74.00	-27.47	peak
3	32762.000	48.45	-1.21	47.24	74.00	-26.76	peak
4	33644.000	47.31	0.42	47.73	74.00	-26.27	peak
5	35366.000	46.40	2.59	48.99	74.00	-25.01	peak
6	38180.000	44.14	3.69	47.83	74.00	-26.17	peak

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Proper operation of the transmitter prior to adding the filter to the measurement chain.



SPURIOUS EMISSIONS (HIGH CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	26476.000	51.53	-4.78	46.75	74.00	-27.25	peak
2	28800.000	47.60	-0.70	46.90	74.00	-27.10	peak
3	31320.000	48.61	-0.93	47.68	74.00	-26.32	peak
4	34302.000	47.45	1.10	48.55	74.00	-25.45	peak
5	35926.000	44.94	3.88	48.82	74.00	-25.18	peak
6	39972.000	44.45	5.13	49.58	74.00	-24.42	peak

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Proper operation of the transmitter prior to adding the filter to the measurement chain.

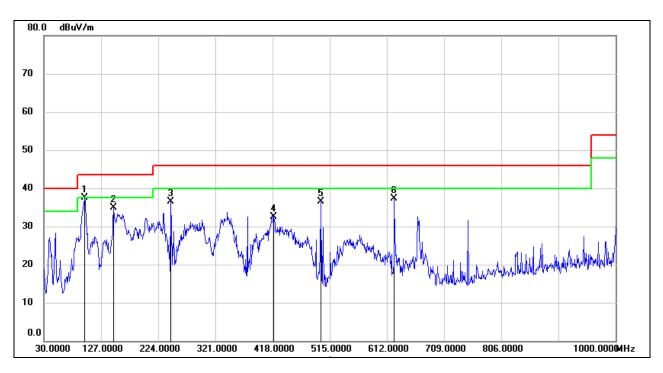
Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.



# 8.6. SPURIOUS EMISSIONS (30 MHz ~ 1 GHz)

### 8.6.1. 802.11ac VHT80 CDD 4TX MODE

# SPURIOUS EMISSIONS (UNII-3 BAND HIGH CHANNEL, HORIZONTAL, WORST-CASE CONFIGURATION)



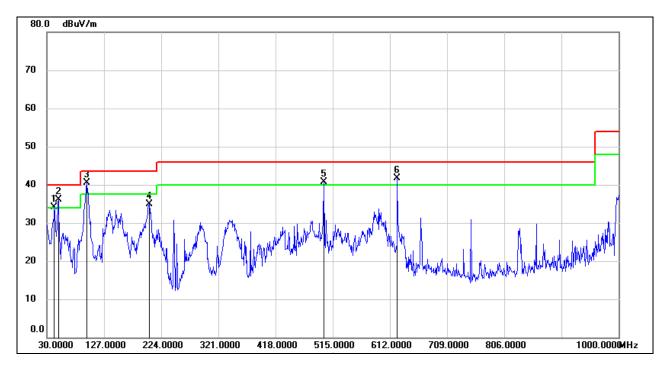
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	98.8700	58.65	-21.23	37.42	43.50	-6.08	QP
2	148.3400	53.18	-18.36	34.82	43.50	-8.68	QP
3	245.3400	55.49	-19.04	36.45	46.00	-9.55	QP
4	419.9400	45.50	-12.99	32.51	46.00	-13.49	QP
5	500.4500	48.06	-11.46	36.60	46.00	-9.40	QP
6	624.6100	46.60	-9.31	37.29	46.00	-8.71	QP

Note: 1. Result Level = Read Level + Correct Factor.

- 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
- 3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.



SPURIOUS EMISSIONS (UNII-3 BAND HIGH CHANNEL, VERTICAL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	42.6100	54.37	-20.17	34.20	40.00	-5.80	QP
2	49.4000	56.85	-20.72	36.13	40.00	-3.87	QP
3	97.9000	61.72	-21.30	40.42	43.50	-3.08	QP
4	203.6300	51.58	-16.70	34.88	43.50	-8.62	QP
5	499.4800	52.26	-11.48	40.78	46.00	-5.22	QP
6	624.6100	51.05	-9.31	41.74	46.00	-4.26	QP

Note: 1. Result Level = Read Level + Correct Factor.

- 2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
- 3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto

Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.

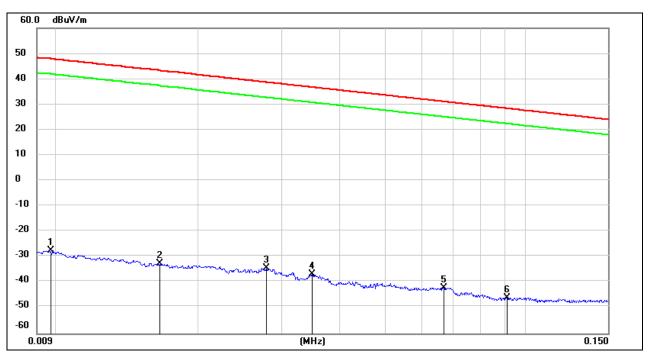


# 8.7. SPURIOUS EMISSIONS BELOW 30 MHz

#### 8.7.1. 802.11ac VHT80 CDD 4TX MODE

# SPURIOUS EMISSIONS (UNII-3 BAND HIGH CHANNEL, LOOP ANTENNA FACE ON TO THE EUT, WORST-CASE CONFIGURATION)

## 9 kHz~ 150 kHz

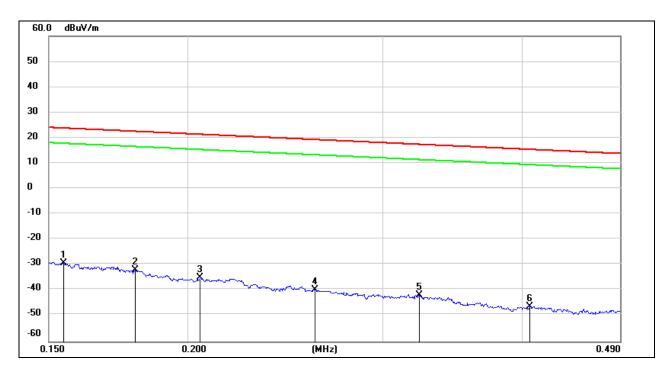


No.	Frequency	Reading	Correct	FCC	FCC	ISED	ISED	Margin	Remark
				Result	Limit	Result	Limit		
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.0097	73.93	-101.38	-27.45	47.82	-78.95	-3.68	-75.27	peak
2	0.0165	68.84	-101.37	-32.53	43.25	-84.03	-8.25	-75.78	peak
3	0.0279	67.17	-101.38	-34.21	38.69	-85.71	-12.81	-72.90	peak
4	0.0349	64.53	-101.41	-36.88	36.75	-88.38	-14.75	-73.63	peak
5	0.0666	59.43	-101.55	-42.12	31.13	-93.62	-20.37	-73.25	peak
6	0.0912	55.72	-101.73	-46.01	28.4	-97.51	-23.10	-74.41	peak

- 2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
- 3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.
  - 4.  $dBuA/m = dBuV/m 20log10(120\pi) = dBuV/m -51.5$ .



### 150 kHz ~ 490 kHz

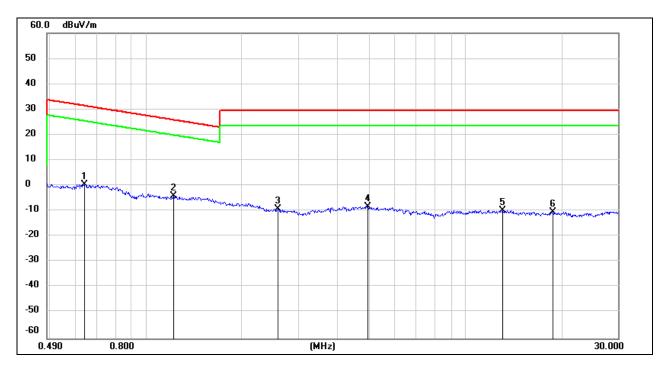


No.	Frequency	Reading	Correct	FCC	FCC	ISED	ISED	Margin	Remark
				Result	Limit	Result	Limit		
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.1547	72.31	-101.65	-29.34	23.81	-80.84	-27.69	-53.15	peak
2	0.1794	69.77	-101.68	-31.91	22.53	-83.41	-28.97	-54.44	peak
3	0.2053	66.79	-101.73	-34.94	21.35	-86.44	-30.15	-56.29	peak
4	0.2605	62.14	-101.81	-39.67	19.28	-91.17	-32.22	-58.95	peak
5	0.3234	59.98	-101.88	-41.9	17.41	-93.40	-34.09	-59.31	peak
6	0.4062	55.64	-101.96	-46.32	15.43	-97.82	-36.07	-61.75	peak

- 2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
- 3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.
  - 4.  $dBuA/m = dBuV/m 20log10(120\pi) = dBuV/m -51.5$ .



# 490 kHz ~ 30 MHz



No.	Frequency	Reading	Correct	FCC	FCC	ISED	ISED	Margin	Remark
				Result	Limit	Result	Limit		
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dBuA/m)	(dBuA/m)	(dB)	
1	0.6429	62.65	-62.09	0.56	31.44	-50.94	-20.06	-30.88	peak
2	1.2214	58.12	-62.16	-4.04	25.87	-55.54	-25.63	-29.91	peak
3	2.5935	52.61	-61.68	-9.07	29.54	-60.57	-21.96	-38.61	peak
4	4.9481	53.29	-61.47	-8.18	29.54	-59.68	-21.96	-37.72	peak
5	13.0907	51.13	-60.93	-9.8	29.54	-61.30	-21.96	-39.34	peak
6	18.7862	50.53	-60.88	-10.35	29.54	-61.85	-21.96	-39.89	peak

Note: 1. Measurement = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
- 3. All 3 polarizations (Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.
  - 4.  $dBuA/m = dBuV/m 20log10(120\pi) = dBuV/m -51.5$ .

Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.

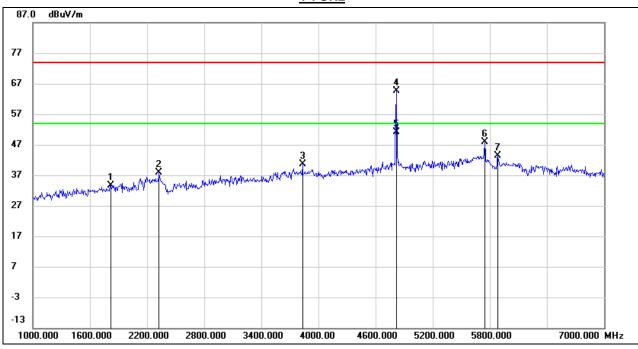


#### 8.8. SPURIOUS EMISSIONS FOR SIMULTANEOUS TRANSMISSION

# 8.8.1. UNII-3 802.11a 4TX MODE AND 802.11b MODE (TRANSMIT SIMULTANEOUSLY)

### SPURIOUS EMISSIONS (LOW CHANNEL, WORST-CASE CONFIGURATION, HORIZONTAL)





No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1822.000	43.62	-10.06	33.56	74.00	-40.44	peak
2	2326.000	46.61	-8.64	37.97	74.00	-36.03	peak
3	3832.000	43.98	-3.32	40.66	74.00	-33.34	peak
4	4822.000	64.09	0.63	64.72	74.00	-9.28	peak
5	4822.000	50.59	0.63	51.22	54.00	-2.78	AVG
6	5746.000	45.34	2.50	47.84	74.00	-26.16	peak
7	5884.000	40.45	2.84	43.29	74.00	-30.71	peak

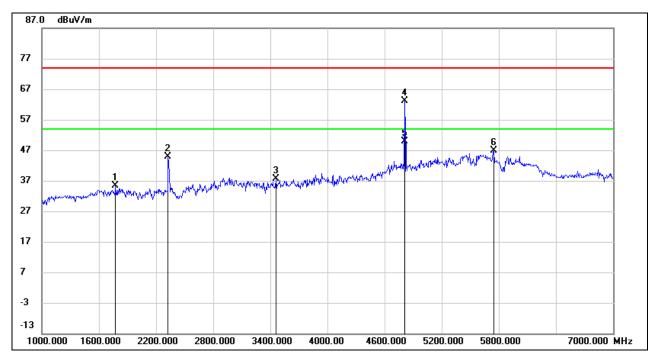
Note: 1. Peak Result = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



SPURIOUS EMISSIONS (LOW CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)

#### 1-7GHz



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	1774.000	45.52	-10.24	35.28	74.00	-38.72	peak
2	2326.000	53.41	-8.64	44.77	74.00	-29.23	peak
3	3460.000	42.55	-4.87	37.68	74.00	-36.32	peak
4	4821.000	62.65	0.60	63.25	74.00	-10.75	peak
5	4821.000	49.18	0.60	49.78	54.00	-4.22	AVG
6	5746.000	44.30	2.50	46.80	74.00	-27.20	peak

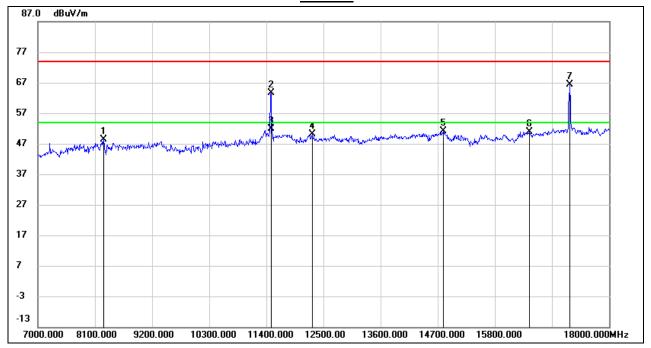
Note: 1. Peak Result = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band reject filter losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



### SPURIOUS EMISSIONS (LOW CHANNEL, WORST-CASE CONFIGURATION, HORIZONTAL)

#### 7-18GHz



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	8265.000	38.64	9.73	48.37	74.00	-25.63	peak
2	11488.000	49.08	14.66	63.74	74.00	-10.26	peak
3	11488.000	37.23	14.66	51.89	54.00	-2.11	AVG
4	12280.000	34.09	16.07	50.16	74.00	-23.84	peak
5	14810.000	33.21	17.97	51.18	74.00	-22.82	peak
6	16471.000	31.30	19.68	50.98	74.00	-23.02	peak
7	17241.000	44.07	22.24	66.89	68.2	-1.31	peak

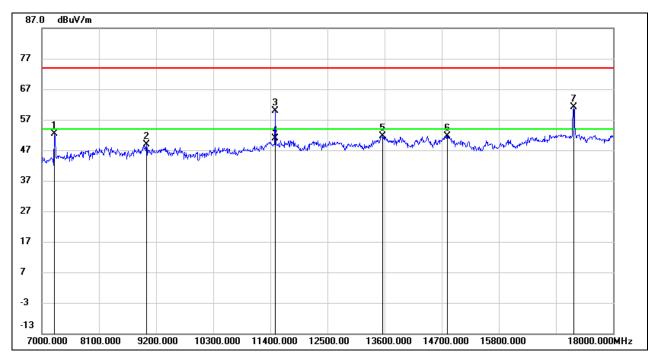
Note: 1. Peak Result = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.



SPURIOUS EMISSIONS (LOW CHANNEL, WORST-CASE CONFIGURATION, VERTICAL)

#### 7-18GHz



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
1	7242.000	45.01	7.25	52.26	74.00	-21.74	peak
2	9013.000	37.77	11.12	48.89	74.00	-25.11	peak
3	11488.000	45.23	14.66	59.89	74.00	-14.11	peak
4	11488.000	36.12	14.66	50.78	54.00	-3.22	AVG
5	13567.000	34.50	17.14	51.64	74.00	-22.36	peak
6	14810.000	33.61	17.97	51.58	74.00	-22.42	peak
7	17241.000	38.81	22.24	61.05	68.2	-7.15	peak

Note: 1. Peak Result = Reading Level + Correct Factor.

- 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Peak: Peak detector.
- 4. Filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
  - 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

Note: All the modes and antennas had been tested, but only the worst data was recorded in the report.



## 9. AC POWER LINE CONDUCTED EMISSIONS

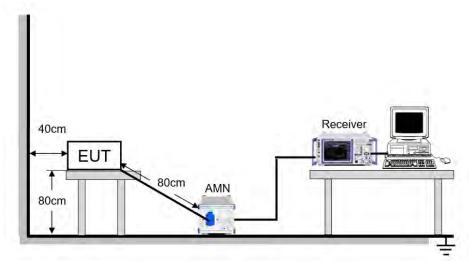
#### **LIMITS**

Please refer to CFR 47 FCC §15.207 (a).

FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

#### **TEST SETUP AND PROCEDURE**

Refer to ANSI C63.10-2013 clause 6.2.



The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

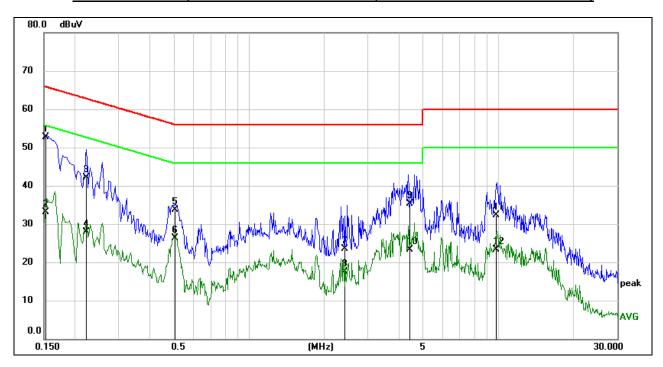
#### **TEST ENVIRONMENT**

Temperature	22.4 °C	Relative Humidity	52.1 %
Atmosphere Pressure	101 kPa	Test Voltage	AC 120 V,60Hz



### 9.1. 802.11n HT40 CDD MODE

#### LINE N RESULTS (UNII-3 BAND LOW CHANNEL, WORST-CASE CONFIGURATION)



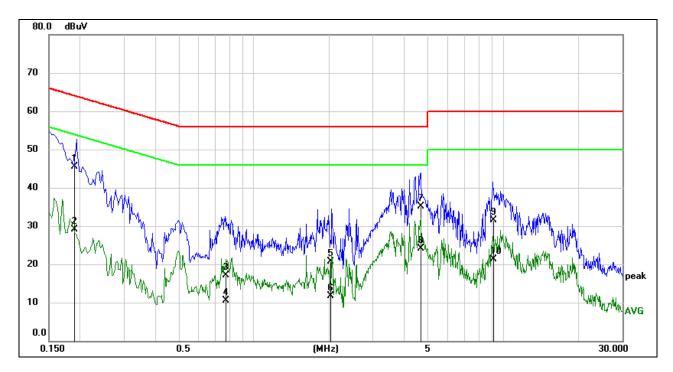
No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1524	43.21	9.59	52.80	65.87	-13.07	QP
2	0.1524	23.52	9.59	33.11	55.87	-22.76	AVG
3	0.2212	32.57	9.59	42.16	62.77	-20.61	QP
4	0.2212	18.36	9.59	27.95	52.77	-24.82	AVG
5	0.5048	24.01	9.60	33.61	56.00	-22.39	QP
6	0.5048	16.67	9.60	26.27	46.00	-19.73	AVG
7	2.4346	13.88	9.63	23.51	56.00	-32.49	QP
8	2.4346	7.80	9.63	17.43	46.00	-28.57	AVG
9	4.4174	25.72	9.61	35.33	56.00	-20.67	QP
10	4.4174	13.75	9.61	23.36	46.00	-22.64	AVG
11	9.8407	22.65	9.62	32.27	60.00	-27.73	QP
12	9.8407	13.68	9.62	23.30	50.00	-26.70	AVG

Note: 1. Result = Reading + Correct Factor.

- 2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
- 4. Step size: 80 Hz (0.009 MHz  $\sim$  0.15 MHz), 4 kHz (0.15 MHz  $\sim$  30 MHz), Scan time: auto.



### LINE L RESULTS (UNII-1 BAND LOW CHANNEL, WORST-CASE CONFIGURATION)



No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1901	35.83	9.59	45.42	64.03	-18.61	QP
2	0.1901	19.42	9.59	29.01	54.03	-25.02	AVG
3	0.7705	7.53	9.60	17.13	56.00	-38.87	QP
4	0.7705	0.98	9.60	10.58	46.00	-35.42	AVG
5	2.0312	10.99	9.63	20.62	56.00	-35.38	QP
6	2.0312	2.09	9.63	11.72	46.00	-34.28	AVG
7	4.6452	25.51	9.61	35.12	56.00	-20.88	QP
8	4.6452	14.56	9.61	24.17	46.00	-21.83	AVG
9	9.1421	21.81	9.61	31.42	60.00	-28.58	QP
10	9.1421	11.78	9.61	21.39	50.00	-28.61	AVG

Note: 1. Result = Reading + Correct Factor.

- 2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
- 3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
- 4. Step size: 80 Hz (0.009 MHz  $\sim$  0.15 MHz), 4 kHz (0.15 MHz  $\sim$  30 MHz), Scan time: auto.

Note: All the modes had been tested, but only the worst data was recorded in the report.



10. FREQUENCY STABILITY

#### **LIMITS**

The frequency of the carrier signal shall be maintained within band of operation.

# TEST PROCEDURE

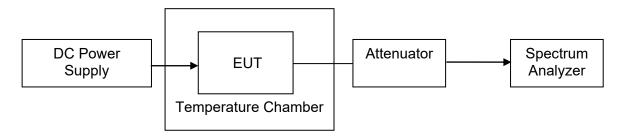
- 1. The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between 0  $^{\circ}$ C  $\sim$  40  $^{\circ}$ C (declared by customer).
- 2. The temperature was incremented by 10 °C intervals and the unit allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.
- 3. The primary supply voltage is varied from 85 % to 115 % of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

Connect the EUT to the spectrum analyser and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	10 kHz
VBW	≥3 × RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

- 4. While maintaining a constant temperature inside the environmental chamber, turn the EUT on and record the operating frequency at startup, and at 2 minutes, 5minutes, and 10 minutes after the EUT is energized.
- 5. Allow the trace to stabilize, find the peak value of the power envelope and record the frequency, then calculated the frequency drift.

#### **TEST SETUP**





#### **TEST ENVIRONMENT**

	Normal Test Conditions	Extreme Test Conditions
Relative Humidity	20 % - 75 %	1
Atmospheric Pressure	100 kPa ∼102 kPa	1
Temperature	T <sub>N</sub> (Normal Temperature):	T <sub>L</sub> (Low Temperature): 0 °C
remperature	22 °C – 28 °C	T <sub>H</sub> (High Temperature): 40 °C
Supply Voltage	V <sub>N</sub> (Normal Voltage): AC 120 V,	V <sub>L</sub> (Low Voltage): AC 132 V
Supply Voltage	60HZ	V <sub>H</sub> (High Voltage): AC 108 V

#### **RESULTS**

### **TEST RESULTS**

	Frequency Error vs. Voltage												
802.11a: 5200MHz													
	V. 16	0 Min	ute	2 Min	ute	5 Min	ute	10 Mii	nute				
Temp.	Volt.	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)				
TN	VL	5200.0052	1.01	5199.9867	-2.55	5199.9967	-0.64	5200.0133	2.56				
TN	VN	5199.9790	-4.04	5200.0189	3.64	5200.0081	1.57	5199.9965	-0.66				
TN	VH	5199.9947	-1.03	5199.9847	-2.94	5200.0151	2.90	5199.9958	-0.82				
	Frequency Error vs. Temperature												
				802.1	1a: 5200MH	z							
	V. II	0 Min	ute	2 Min	ute	5 Min	ute	10 Mir	nute				
Temp.	Volt.	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)				
50	VN	5200.0139	2.67	5199.9928	-1.39	5199.9966	-0.66	5200.0103	1.98				
40	VN	5200.0126	2.42	5200.0227	4.37	5200.0159	3.05	5199.9810	-3.66				
30	VN	5199.9769	-4.45	5200.0238	4.58	5199.9980	-0.38	5200.0081	1.56				
20	VN	5199.9822	-3.43	5200.0182	3.49	5200.0120	2.30	5199.9756	-4.70				
10	VN	5199.9932	-1.31	5200.0059	1.13	5200.0062	1.19	5200.0082	1.58				
0	VN	5200.0219	4.21	5200.0185	3.57	5199.9927	-1.41	5199.9839	-3.10				
-10	VN	5199.9820	-3.45	5199.9937	-1.21	5199.9917	-1.59	5200.0031	0.60				



-10

VN

5824.9897

-1.77

	Frequency Error vs. Voltage												
802.11a: 5825MHz													
_	V. 14	0 Min	ute	2 Min	ute	5 Min	ute	10 Mii	nute				
Temp.	Volt.	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)				
TN	VL	5824.9787	-3.66	5825.0191	3.29	5824.9759	-4.13	5825.0200	3.44				
TN	VN	5824.9831	-2.91	5824.9915	-1.46	5824.9893	-1.83	5824.9899	-1.74				
TN	VH	5824.9766	-4.02	5824.9786	-3.68	5824.9884	-1.99	5824.9760	-4.12				
	Frequency Error vs. Temperature												
				802.1	1a: 5825MH	z							
_	V. 16	0 Min	ute	2 Minute		5 Minute		10 Minute					
Temp.	Volt.	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)				
50	VN	5825.0116	1.99	5824.9809	-3.27	5824.9817	-3.14	5824.9878	-2.10				
40	VN	5824.9791	-3.59	5824.9810	-3.25	5825.0121	2.08	5825.0195	3.35				
30	VN	5825.0152	2.60	5824.9816	-3.16	5824.9778	-3.80	5824.9973	-0.47				
20	VN	5824.9867	-2.29	5825.0106	1.82	5825.0100	1.71	5824.9943	-0.98				
20		002000.											
10	VN	5825.0228	3.91	5825.0239	4.10	5824.9952	-0.82	5824.9927	-1.25				

-0.23

5825.0076

1.31

5824.9861

-2.39

Note: All the test modes have been tested, only the worst data record in the report.

5824.9987



#### 11. ANTENNA REQUIREMENTS

#### **APPLICABLE REQUIREMENTS**

Please refer to FCC §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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC §15.407(a)

If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### **RESULTS**

Complies



### 12. Appendix

## 12.1. Appendix A1: 26dB Emission Bandwidth 12.1.1. Test Result

Test Mode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Verdict
	Ant1	5180	19.560	5170.360	5189.920	PASS
	Ant1	5200	19.480	5190.200	5209.680	PASS
	Ant1	5240	19.440	5230.160	5249.600	PASS
	Ant1	5260	19.800	5250.280	5270.080	PASS
	Ant1	5280	19.600	5270.280	5289.880	PASS
444 000	Ant1	5320	19.520	5310.320	5329.840	PASS
11A-CDD	Ant1	5500	19.640	5490.240	5509.880	PASS
	Ant1	5580	19.320	5570.160	5589.480	PASS
	Ant1	5700	19.320	5690.520	5709.840	PASS
	Ant1	5745	19.440	5735.440	5754.880	PASS
	Ant1	5785	19.320	5775.600	5794.920	PASS
	Ant1	5825	19.520	5815.440	5834.960	PASS
	Ant1	5180	19.960	5170.040	5190.000	PASS
	Ant1	5200	19.560	5190.200	5209.760	PASS
	Ant1	5240	20.440	5229.680	5250.120	PASS
	Ant1	5260	20.360	5249.840	5270.200	PASS
	Ant1	5280	19.800	5270.080	5289.880	PASS
111 COO CDD	Ant1	5320	19.640	5310.160	5329.800	PASS
11AC20-CDD	Ant1	5500	20.120	5490.040	5510.160	PASS
	Ant1	5580	20.200	5569.880	5590.080	PASS
	Ant1	5700	19.840	5690.160	5710.000	PASS
	Ant1	5745	19.880	5735.160	5755.040	PASS
	Ant1	5785	19.960	5775.200	5795.160	PASS
	Ant1	5825	19.640	5815.400	5835.040	PASS
	Ant1	5190	39.920	5170.320	5210.240	PASS
	Ant1	5230	39.680	5210.320	5250.000	PASS
	Ant1	5270	40.000	5249.840	5289.840	PASS
	Ant1	5310	39.440	5290.640	5330.080	PASS
11AC40-CDD	Ant1	5510	39.440	5490.640	5530.080	PASS
	Ant1	5550	39.440	5530.320	5569.760	PASS
	Ant1	5670	39.600	5650.160	5689.760	PASS
	Ant1	5755	39.040	5735.880	5774.920	PASS
	Ant1	5795	38.720	5775.800	5814.520	PASS
	Ant1	5210	79.840	5170.160	5250.000	PASS
	Ant1	5290	81.280	5249.360	5330.640	PASS
11AC80-CDD	Ant1	5530	80.480	5490.160	5570.640	PASS
	Ant1	5610	80.960	5569.840	5650.800	PASS
	Ant1	5775	80.640	5734.840	5815.480	PASS



### 12.1.2. Test Graphs

















| Rt | F | S0 0 DC | Center Freq 5,180000000 GHz | NFE | PNC; Wilda | F | Falant.cow | Frequency | Fr #Avg Type: RMS Avg|Hold: 10/10 DET P P P P P Ref Offset 21.27 dB Ref 20.00 dBm Center Fre  $\Diamond^2$ Start Fre Span 40.00 MH: Sweep 1.000 ms (1001 pts **#VBW 620 kHz** 35.527 dBm -5.224 dBm 3.542 dB 11AC20-CDD\_Ant1\_5180 05 PM Mar 19, 2021 TRACE 2 3 4 3 1 TYPE MANAGEMENT DET P P P P P P #Avg Type: RMS Avg|Hold: 10/10 Auto Tu ΔMkr3 19.56 MHz -2.915 dB Ref Offset 21.27 dB Ref 20.00 dBm Start Fre enter 5.20000 GHz es BW 220 kHz Span 40.00 MH 1.000 ms (1001 pts 5.190 20 GHz 5.201 36 GHz 19.56 MHz (Δ) † (A) Scale Type 11AC20-CDD Ant1 5200 No enter Freq 5.240000000 GHz

NFE PNO: Wilde PNO: Wilde PRAIL: 30 dB 17 PM Mar 19, 202 TRACE 1 2 3 4 5 TYPE MWWWWW DET P P P P P #Avg Type: RMS Avg|Hold: 10/10 Frequency Auto Tur ΔMkr3 20.44 MHz -1.754 dB Ref Offset 21.27 dB Ref 20.00 dBm Start Fre Stop Fre Center 5.24000 GHz Span 40.00 MH: Sweep 1.000 ms (1001 pts CF Ste -33.672 dBm -6.129 dBm -1.754 dB Freq Offse Scale Typ 11AC20-CDD Ant1 5240















Rt #6 50 0 0C

Center Freq 5,190000000 GHz

NFE PNO: Fast PNO: Fast Affect: 30 dB #Avg Type: RMS Avg|Hold: 10/10 DET P P P P P Ref Offset 21.27 dB Ref 20.00 dBm Center Fre 0 Span 80.00 MH: Sweep 1.000 ms (1001 pts **#VBW 1.2 MHz** 11AC40-CDD\_Ant1\_5190 34 PM Mar 19, 2021 TRACE 1 2 3 4 5 TYPE M WARRINGTON #Avg Type: RMS Avg|Hold: 10/10 Auto Tu ΔMkr3 39.68 MHz -0.013 dB Ref Offset 21.27 dB Ref 20.00 dBm Start Fre enter 5.23000 GHz es BW 430 kHz 5.210 32 GHz 5.223 84 GHz 39.68 MHz (Δ) 1 N 1 1 2 N 1 (Δ) Scale Type 11AC40-CDD Ant1 5230 22 PM Mar 19, 202 TRACE 1 2 3 4 3 TYPE MWWWWW DET P P P P P #Avg Type: RMS Avg|Hold: 10/10 Auto Tur ΔMkr3 40.00 MHz -4.431 dB Ref Offset 21.27 dB Ref 20.00 dBm Start Fre enter 5.27000 GHz Res BW 430 kHz Span 80.00 MH: Sweep 1.000 ms (1001 pts CF Ste 26.089 dBm 0.274 dBm -4.431 dB Freq Offse Scale Typ 11AC40-CDD Ant1 5270







Rt #6 50 0 0C

Center Freq 5,67000000 GHz

NFE PNO: Fast PNO: Fast Affect 30 dB #Avg Type: RMS Avg|Hold: 10/10 DET P P P P P Ref Offset 21.38 dB Ref 20.00 dBm Center Fre Span 80.00 MH: Sweep 1.000 ms (1001 pts **#VBW 1.2 MHz** 11AC40-CDD\_Ant1\_5670 TRACE 1 2 3 + 5 TYPE M VANAGO DET P P P P P #Avg Type: RMS Avg|Hold: 10/10 ΔMkr3 39.04 MHz -0.297 dB Auto Tu Ref Offset 21.17 dB Ref 20.00 dBm Start Fre enter 5.75500 GHz es BW 430 kHz 1 N 1 1 2 N 1 1 (Δ) Scale Type 11AC40-CDD Ant1 5755 TYPE MVANYONDET P P P P P Center Freq 5.795000000 GHz

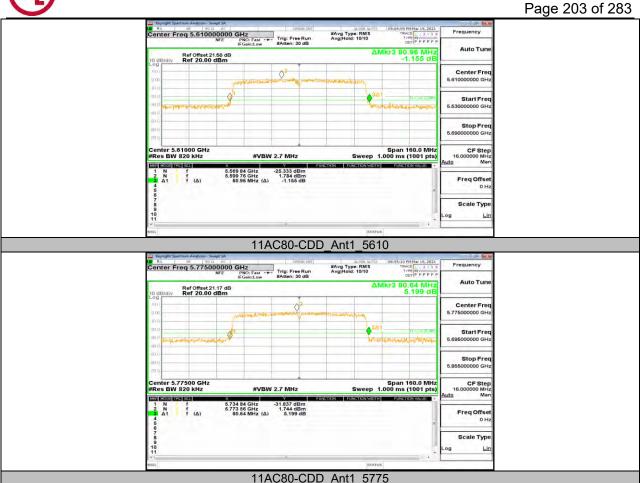
NFE PNO: Fast PNO: Free Run
#Aften: 30 dB #Avg Type: RMS Avg|Hold: 10/10 Auto Tur ΔMkr3 38.72 MHz 3.314 dB Ref Offset 21.17 dE Ref 20.00 dBm Start Fre Stop Fre Center 5.79500 GHz Span 80.00 MH: Sweep 1.000 ms (1001 pts CF Ste 27.135 dBm 2.672 dBm 3.314 dB Freq Offse Scale Typ 11AC40-CDD Ant1 5795



Reyught Salettian Annual Service DC Senter Freq 5.210000000 GHz

NFE NFE PRO: Fast Procedured to Service Servi #Avg Type: RMS Avg|Hold: 10/10 DET PPPPP 79,84 MHz 3,251 dE Ref Offset 21.27 dB Ref 20.00 dBm Center Fre enter 5.21000 GHz Res BW 820 kHz Span 160.0 MH: Sweep 1.000 ms (1001 pts **#VBW 2.7 MHz** 11AC80-CDD\_Ant1\_5210 08 PM Mar 19, 2021 TRACE 1 2 3 4 5 TYPE M WWW.WWW. DET P P P P P #Avg Type: RMS Avg|Hold: 10/10 Auto Tu ΔMkr3 81.28 MHz 5.493 dB Ref Offset 21.27 dB Ref 20.00 dBm Start Fre enter 5.29000 GHz es BW 820 kHz Span 160.0 MH 1.000 ms (1001 pts 5.249 36 GHz 5.279 60 GHz 81.28 MHz (Δ) 1 N 1 1 2 N 1 1 (Δ) Scale Type 11AC80-CDD Ant1 5290 Received Set December 1997 Set 32 PM Mar 19, 202 TRACE 1 2 3 4 5 TYPE MYMMMM DET P P P P P #Avg Type: RMS Avg|Hold: 10/10 Auto Tur Ref Offset 21.58 dB Ref 20.00 dBm Start Fre Stop Fre enter 5.53000 GHz Res BW 820 kHz Span 160.0 MH: Sweep 1.000 ms (1001 pts CF Ste Freq Offse Scale Typ 11AC80-CDD Ant1 5530







### 12.2. Appendix A2: 99% Occupied channel bandwidth 12.2.1. Test Result

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
		5180	16.573	5171.781	5188.354	PASS
		5200	16.824	5191.663	5208.487	PASS
		5240	16.651	5231.756	5248.407	PASS
		5260	16.580	5251.757	5268.337	PASS
		5280	16.510	5271.790	5288.300	PASS
44A CDD	A := 44	5320	16.673	5311.739	5328.412	PASS
11A-CDD	Ant1	5500	16.532	5491.871	5508.403	PASS
		5580	16.520	5571.790	5588.310	PASS
		5700	16.637	5691.790	5708.427	PASS
		5745	16.583	5736.858	5753.441	PASS
		5785	16.609	5776.798	5793.407	PASS
		5825	16.629	5816.751	5833.380	PASS
		5180	17.837	5171.140	5188.977	PASS
		5200	17.805	5191.161	5208.966	PASS
		5240	17.695	5231.239	5248.934	PASS
		5260	17.691	5251.206	5268.897	PASS
		5280	17.729	5271.199	5288.928	PASS
111 COO CDD	Ant1	5320	17.690	5311.225	5328.915	PASS
11AC20-CDD	Anti	5500	17.709	5491.216	5508.925	PASS
		5580	17.729	5571.228	5588.957	PASS
		5700	17.598	5691.337	5708.935	PASS
		5745	17.735	5736.215	5753.950	PASS
		5785	17.693	5776.277	5793.970	PASS
		5825	17.656	5816.267	5833.923	PASS
		5190	36.364	5171.893	5208.257	PASS
		5230	36.318	5211.858	5248.176	PASS
		5270	36.018	5252.034	5288.052	PASS
		5310	36.157	5292.028	5328.185	PASS
11AC40-CDD	Ant1	5510	36.128	5492.067	5528.195	PASS
		5550	36.138	5532.013	5568.151	PASS
		5670	36.150	5652.102	5688.252	PASS
		5755	36.104	5737.116	5773.220	PASS
		5795	36.178	5777.017	5813.195	PASS
		5210	76.000	5172.084	5248.084	PASS
		5290	75.955	5252.226	5328.181	PASS
11AC80-CDD	Ant1	5530	75.818	5492.331	5568.149	PASS
		5610	75.711	5572.465	5648.176	PASS
		5775	75.496	5737.585	5813.081	PASS



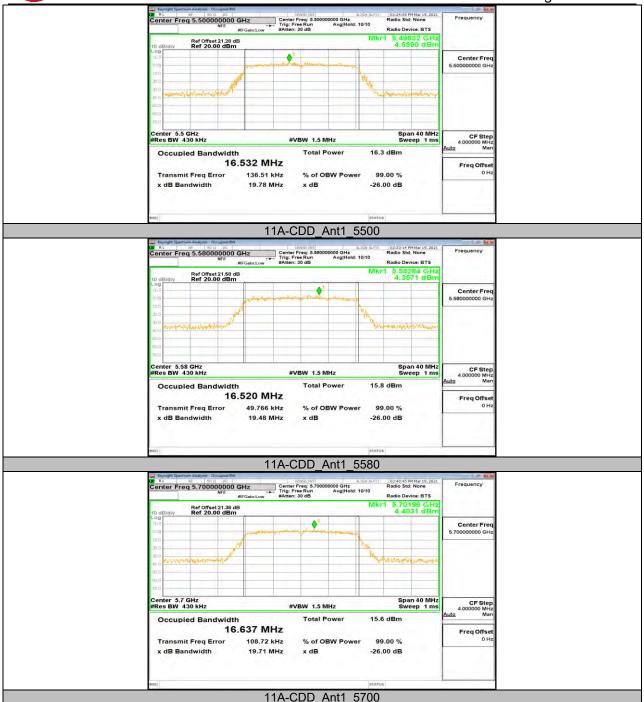
### 12.2.2. Test Graphs

















enter Freq 5.180000000 GHz Radio Device: BTS 5.17928 GH: -2.7476 dBn Ref Offset 21.27 dB Ref 20.00 dBm Center Fre #VBW 1.5 MHz Occupied Bandwidth Total Power 8.73 dBm 17.837 MHz Transmit Freq Error 58.250 kHz % of OBW Power 99.00 % x dB Bandwidth 20.02 MHz x dB -26.00 dB 11AC20-CDD\_Ant1\_5180 Rt Section allows | Storage | Storag Ref Offset 21.27 dB Ref 20.00 dBm Center Fre Span 40 MHz Sweep 1 ms Occupied Bandwidth Total Power 8.94 dBm 17.805 MHz Transmit Freq Error 63.963 kHz 99.00 % x dB Bandwidth 20.61 MHz x dB -26.00 dB 11AC20-CDD Ant1 5200 enter Freq 5.240000000 GHz Radio Device: BTS

Mkr1 5.24092 GHz
-3.0939 dBm Ref Offset 21.27 di Ref 20.00 dBm Span 40 MHz Sweep 1 ms 4.000000 MHz **#VBW 1.5 MHz** Occupied Bandwidth 17.695 MHz Freq Offse Transmit Freg Error 86.751 kHz 99.00 % % of OBW Power -26.00 dB x dB

11AC20-CDD Ant1 5240











enter Freq 5.745000000 GHz Radio Device: BTS kr1 5.7434 GH: 2.8861 dBn Ref Offset 21.17 dB Ref 20.00 dBm Center Free #VBW 1.5 MHz Occupied Bandwidth Total Power 15.7 dBm 17.735 MHz Transmit Freq Error 82.069 kHz % of OBW Power 99.00 % x dB Bandwidth 20.33 MHz x dB -26.00 dB 11AC20-CDD\_Ant1\_5745 Radio Device: BTS Ref Offset 21.17 dB Ref 20.00 dBm Span 40 MHz Sweep 1 ms Occupied Bandwidth Total Power 16.6 dBm 17.693 MHz Transmit Freq Error 123.69 kHz 99.00 % x dB Bandwidth 19.71 MHz x dB -26.00 dB 11AC20-CDD Ant1 5785 enter Freq 5.825000000 GHz Radio Device: BTS Mkr1 5.8268 GHz 4.5311 dBm Ref Offset 21.17 di Ref 20.00 dBm • Span 40 MHz Sweep 1 ms 4.000000 MHz **#VBW 1.5 MHz** Occupied Bandwidth 15.9 dBm 17.656 MHz Freq Offse Transmit Freg Error 95.276 kHz 99.00 % % of OBW Power -26.00 dB x dB

11AC20-CDD Ant1 5825







enter Freq 5.310000000 GHz Radio Device: BTS 5.31264 GH: 4.6317 dBn Ref Offset 21.27 dB Ref 20.00 dBm Center Free #VBW 3 MHz Occupied Bandwidth Total Power 15.5 dBm 36.157 MHz Transmit Freq Error 106.51 kHz % of OBW Power 99.00 % x dB Bandwidth 40.25 MHz x dB -26.00 dB 11AC40-CDD\_Ant1\_5310 Rt Section and DC Star DC Section Freq 5.510000000 GHz Radio Device: BTS Ref Offset 21.28 dB Ref 20.00 dBm Center Free Span 80 MHz Sweep 1 ms Occupied Bandwidth Total Power 17.2 dBm 36.128 MHz Transmit Freq Error 131.11 kHz 99.00 % x dB Bandwidth 40.09 MHz x dB -26.00 dB 11AC40-CDD Ant1 5510 enter Freq 5.550000000 GHz Radio Device: BTS

Mkr1 5.54776 GHz
4.7914 dBm Span 80 MHz Sweep 1 ms CF Step 8.000000 MHz #VBW 3 MHz Occupied Bandwidth 17.3 dBm 36.138 MHz Freq Offse Transmit Freg Error 81.699 kHz 99.00 % % of OBW Power -26.00 dB x dB 11AC40-CDD Ant1 5550



enter Freq 5.670000000 GHz Radio Device: BTS 5.67376 GH: 5.1888 dBn Ref Offset 21.38 dB Ref 20.00 dBm • Center Fre #VBW 3 MHz Occupied Bandwidth **Total Power** 17.0 dBm 36.150 MHz Transmit Freq Error 177.48 kHz % of OBW Power 99.00 % x dB Bandwidth 40.28 MHz x dB -26.00 dB 11AC40-CDD\_Ant1\_5670 Rt Section adapts DC State DC Section Freq 5.755000000 GHz Radio Device: BTS Ref Offset 21.17 dB Ref 20.00 dBm Center Free Span 80 MHz Sweep 1 ms Occupied Bandwidth Total Power 17.2 dBm 36.104 MHz Transmit Freq Error 167.94 kHz 99.00 % x dB Bandwidth 40.54 MHz x dB -26.00 dB 11AC40-CDD Ant1 5755 enter Freq 5.795000000 GHz Radio Device: BTS

Mkr1 5.79244 GHz
6.3341 dBm Span 80 MHz Sweep 1 ms CF Step 8.000000 MHz #VBW 3 MHz Occupied Bandwidth 36.178 MHz Freq Offse Transmit Freg Error 106.27 kHz 99.00 % % of OBW Power -26.00 dB x dB 11AC40-CDD Ant1 5795











## 12.3. Appendix A3: 6dB emission bandwidth 12.3.1. Test Result

Test Mode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
		5745	15.690	5737.560	5753.250	0.5	PASS
11A-CDD	Ant1	5785	16.350	5776.900	5793.250	0.5	PASS
		5825	15.510	5817.470	5832.980	0.5	PASS
		5745	15.990	5737.470	5753.460	0.5	PASS
11AC20-CDD	Ant1	5785	15.090	5777.470	5792.560	0.5	PASS
		5825	15.690	5816.900	5832.590	0.5	PASS
11AC40-CDD	Ant1	5755	35.160	5737.480	5772.640	0.5	PASS
TTAC40-CDD	AIILI	5795	35.160	5777.480	5812.640	0.5	PASS
11AC80-CDD	Ant1	5775	75.240	5737.440	5812.680	0.5	PASS



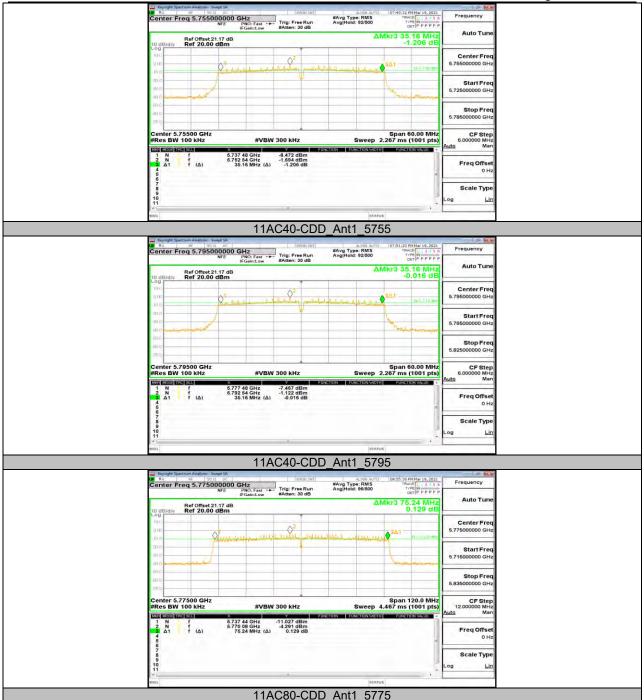
### 12.3.2. Test Graphs







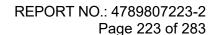






## 12.4. Appendix B: Maximum AVG conducted output power 12.4.1. Test Result

Ant1 5180 4.80 <=30 7.80  Ant2 5180 3.93 <=30 6.93  Ant3 5180 3.87 <=30 6.87  Ant4 5180 5.49 <=30 8.49  total 5180 10.60 <=30 13.60  Ant1 5200 3.71 <=30 6.71  Ant2 5200 3.02 <=30 6.02  Ant3 5200 3.52 <=30 6.52  Ant4 5200 9.83 <=30 12.83	PASS PASS PASS PASS PASS PASS PASS PASS
Ant2       5180       3.93       <=30	PASS PASS PASS PASS PASS PASS PASS PASS
Ant3         5180         3.87         <=30         6.87           Ant4         5180         5.49         <=30	PASS PASS PASS PASS PASS PASS PASS PASS
Ant4     5180     5.49     <=30     8.49       total     5180     10.60     <=30	PASS PASS PASS PASS PASS PASS PASS PASS
total         5180         10.60         <=30         13.60           Ant1         5200         3.71         <=30	PASS PASS PASS PASS PASS PASS PASS
Ant1     5200     3.71     <=30     6.71       Ant2     5200     3.02     <=30	PASS PASS PASS PASS PASS PASS
Ant2     5200     3.02     <=30     6.02       Ant3     5200     3.52     <=30	PASS PASS PASS PASS PASS
Ant3     5200     3.52     <=30     6.52       Ant4     5200     4.79     <=30	PASS PASS PASS PASS
Ant4         5200         4.79         <=30         7.79           total         5200         9.83         <=30	PASS PASS PASS
total 5200 9.83 <=30 12.83	PASS PASS
	PASS
Ant1   5240   4.33   <=30   7.33	
	PASS
	PASS PASS
	PASS PASS
	PASS
Ant1 5500 11.81 <=24 14.81	PASS
Ant2 5500 9.69 <=24 12.69	PASS
Ant3 5500 9.89 <=24 12.89	PASS
	PASS PASS
	PASS PASS
	PASS PASS
	PASS



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5825 **PASS** Ant1 11.15 <=30 14.15 9.78 12.78 Ant2 5825 <=30 **PASS** Ant3 5825 10.35 <=30 13.35 **PASS** 5825 11.29 <=30 14.29 **PASS** Ant4 5825 16.71 <=30 19.71 **PASS** total Ant1 5180 4.45 <=30 7.45 **PASS** Ant2 5180 2.88 <=30 5.88 PASS Ant3 5180 3.12 <=30 6.12 **PASS** Ant4 5180 4.79 <=30 7.79 **PASS** 9.91 <=30 12.91 5180 **PASS** total <=30 7.67 Ant1 5200 4.67 **PASS** <=30 Ant2 5200 3.18 6.18 PASS <=30 Ant3 5200 3.69 6.69 **PASS** 5200 5.00 <=30 8.00 **PASS** Ant4 5200 10.22 13.22 total <=30 **PASS** Ant1 5240 4.40 <=30 7.40 **PASS** Ant2 5240 3.05 <=30 6.05 **PASS** <=30 Ant3 5240 4.89 7.89 **PASS** 4.58 <=30 7.58 **PASS** Ant4 5240 5240 10.30 **PASS** total <=30 13.30 5260 10.60 <=24 **PASS** Ant1 13.60 Ant2 5260 9.58 <=24 12.58 **PASS** Ant3 5260 12.06 <=24 15.06 **PASS** 5260 10.84 <=24 13.84 **PASS** Ant4 total 5260 16.88 <=24 19.88 **PASS** Ant1 5280 10.26 <=24 13.26 **PASS** Ant2 5280 9.79 <=24 12.79 **PASS** 5280 12.35 <=24 15.35 **PASS** Ant3 5280 10.73 <=24 **PASS** Ant4 13.73 5280 16.92 <=24 19.92 **PASS** total 5320 10.40 <=24 13.40 **PASS** Ant1 Ant2 5320 10.91 <=24 13.91 **PASS** <=24 Ant3 5320 12.64 15.64 **PASS** 11AC20-CDD Ant4 5320 10.93 <=24 13.93 **PASS** total 5320 17.33 <=24 20.33 **PASS** Ant1 5500 11.75 <=24 14.75 **PASS** 5500 10.01 <=24 13.01 **PASS** Ant2 **PASS** Ant3 5500 10.53 <=24 13.53 <=24 14.49 Ant4 5500 11.49 **PASS** 5500 17.02 <=24 20.02 **PASS** total Ant1 5580 11.47 <=24 14.47 **PASS** Ant2 5580 10.74 <=24 13.74 **PASS** Ant3 5580 11.67 <=24 14.67 **PASS** Ant4 5580 10.96 <=24 13.96 **PASS** total 5580 17.25 <=24 20.25 **PASS** <=24 Ant1 5700 11.41 14.41 **PASS** <=24 Ant2 5700 11.65 14.65 **PASS** <=24 Ant3 5700 11.92 14.92 PASS <=24 Ant4 5700 11.75 14.75 **PASS** 5700 17.71 <=24 20.71 **PASS** total 5745 <=30 14.31 **PASS** Ant1 11.31 5745 <=30 14.42 **PASS** Ant2 11.42 Ant3 5745 11.18 <=30 14.18 **PASS** Ant4 5745 12.55 <=30 15.55 **PASS** 5745 <=30 PASS total 17.67 20.67 PASS 5785 <=30 Ant1 12.10 15.10 Ant2 5785 11.06 <=30 14.06 **PASS** 14.21 Ant3 5785 11.21 <=30 **PASS** Ant4 5785 12.53 <=30 15.53 **PASS** 5785 17.79 <=30 20.79 **PASS** total <=30 Ant1 5825 11.42 14.42 **PASS** Ant2 5825 10.24 <=30 13.24 **PASS** 



Ant3 5825 10.94 13.94 **PASS** <=30 11.62 14.62 Ant4 5825 <=30 **PASS** total 5825 17.11 <=30 20.11 **PASS** 5190 5.05 <=30 8.05 **PASS** Ant1 Ant2 5190 4.25 <=30 7.25 **PASS** Ant3 5190 4.69 <=30 7.69 **PASS** Ant4 5190 5.85 <=30 8.85 PASS total 5190 11.02 <=30 14.02 **PASS** 5230 4.97 <=30 7.97 **PASS** Ant1 <=30 Ant2 5230 3.96 6.96 **PASS** 5.57 Ant3 5230 <=30 8.57 **PASS** 5230 5.27 <=30 8.27 Ant4 PASS <=30 total 5230 11.00 14.00 **PASS** 5270 10.47 <=24 13.47 Ant1 PASS 5270 10.37 <=24 13.37 Ant2 **PASS** Ant3 5270 12.86 <=24 15.86 **PASS** Ant4 5270 11.32 <=24 14.32 **PASS** total 5270 17.40 <=24 20.40 **PASS PASS** Ant1 5310 10.14 <=24 13.14 **PASS** Ant2 5310 11.30 <=24 14.30 <=24 Ant3 5310 13.13 16.13 PASS 14.28 Ant4 5310 11.28 <=24 **PASS** 5310 17.62 <=24 20.62 **PASS** total 5510 11.92 <=24 14.92 **PASS** Ant1 Ant2 5510 10.36 <=24 13.36 **PASS** 11AC40-CDD Ant3 5510 11.01 <=24 14.01 **PASS** 5510 11.58 <=24 14.58 **PASS** Ant4 17.28 <=24 20.28 5510 **PASS** total 5550 <=24 **PASS** 11.83 14.83 Ant1 Ant2 5550 <=24 **PASS** 10.88 13.88 Ant3 5550 11.58 <=24 14.58 **PASS** 5550 11.74 <=24 14.74 **PASS** Ant4 17.54 <=24 total 5550 20.54 **PASS** Ant1 5670 11.82 <=24 14.82 **PASS** Ant2 5670 12.21 <=24 15.21 **PASS** Ant3 5670 12.65 <=24 15.65 **PASS** Ant4 5670 12.24 <=24 15.24 **PASS** 5670 18.26 <=24 21.26 **PASS** total 14.96 Ant1 5755 11.96 <=30 **PASS** Ant2 5755 11.87 <=30 14.87 **PASS** Ant3 5755 11.78 <=30 14.78 **PASS** Ant4 5755 13.14 <=30 16.14 **PASS** total 5755 18.25 <=30 21.25 **PASS** Ant1 5795 12.76 <=30 15.76 **PASS** 5795 Ant2 11.68 <=30 14.68 **PASS** <=30 Ant3 5795 11.72 14.72 **PASS** Ant4 5795 13.09 <=30 16.09 **PASS** <=30 total 5795 18.38 21.38 PASS <=30 Ant1 5210 9.11 12.11 **PASS** Ant2 5210 7.84 <=30 10.84 **PASS** 5210 9.16 <=30 12.16 **PASS** Ant3 5210 12.49 **PASS** Ant4 9.49 <=30 total 5210 14.96 <=30 17.96 **PASS** Ant1 5290 11.05 <=24 14.05 **PASS** Ant2 5290 11.48 <=24 14.48 **PASS** 11AC80-CDD PASS 5290 16.44 Ant3 13.44 <=24 5290 11.77 <=24 14.77 **PASS** Ant4 total 5290 18.06 <=24 21.06 **PASS** Ant1 5530 12.86 <=24 15.86 **PASS** Ant2 5530 11.33 <=24 14.33 **PASS** <=24 Ant3 5530 11.89 14.89 **PASS** Ant4 5530 12.70 <=24 15.70 **PASS** 



REPORT NO.: 4789807223-2 Page 225 of 283

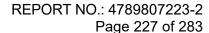
total	5530	18.26	<=24	21.26	PASS
Ant1	5610	12.59	<=24	15.59	PASS
Ant2	5610	12.03	<=24	15.03	PASS
Ant3	5610	12.88	<=24	15.88	PASS
Ant4	5610	12.46	<=24	15.46	PASS
total	5610	18.52	<=24	21.52	PASS
Ant1	5775	12.83	<=30	15.83	PASS
Ant2	5775	12.09	<=30	15.09	PASS
Ant3	5775	12.32	<=30	15.32	PASS
Ant4	5775	13.46	<=30	16.46	PASS
total	5775	18.73	<=30	21.73	PASS

Note: The Duty Cycle Factor is compensated in the graph.



# 12.5. Appendix C: Maximum power spectral density 12.5.1. Test Result

			Power	Limit	EIRP	Limit	
Test Mode	Antenna	Channel	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	Verdict
	Ant1	5180	-5.30	13.98	3.72	10	PASS
	Ant2	5180	-6.27	13.98	2.75	10	PASS
	Ant3	5180	-6.43	13.98	2.59	10	PASS
	Ant4	5180	-4.77	13.98	4.25	10	PASS
	total	5180	0.38	13.98	9.40	10	PASS
	Ant1	5200	-6.35	13.98	2.67	10	PASS
	Ant2	5200	-7.34	13.98	1.68	10	PASS
	Ant3	5200	-6.67	13.98	2.35	10	PASS
	Ant4	5200	-5.44	13.98	3.58	10	PASS
	total	5200	-0.37	13.98	8.65	10	PASS
	Ant1	5240	-5.94	13.98	3.08	10	PASS
	Ant2	5240	-7.12	13.98	1.90	10	PASS
	Ant3	5240	-5.20	13.98	3.82	10	PASS
	Ant4	5240	-5.63	13.98	3.39	10	PASS
	total	5240	0.10	13.98	9.12	10	PASS
	Ant1	5260	0.35	7.98			PASS
	Ant2	5260	0.13	7.98			PASS
	Ant3	5260	2.5	7.98			PASS
	Ant4	5260	0.98	7.98			PASS
	total	5260	7.11	7.98			PASS
	Ant1	5280	0.06	7.98			PASS
	Ant2	5280	-0.27	7.98			PASS
-	Ant3	5280	2.08	7.98			PASS
	Ant4	5280	0.44	7.98			PASS
	total	5280	6.70	7.98			PASS
_	Ant1	5320	-0.06	7.98			PASS
	Ant2	5320	0.51	7.98			PASS
11A-CDD	Ant3	5320	1.89	7.98			PASS
I IA-CDD	Ant4	5320	0.67	7.98			PASS
	total	5320	6.83	7.98			PASS
_	Ant1	5500	1.61	7.98			PASS
_	Ant2	5500	-0.47	7.98			PASS
_							PASS
_	Ant3	5500	-0.57	7.98			PASS
<u> </u>	Ant4	5500	1.07	7.98			
<u> </u>	total	5500	6.53	7.98			PASS
	Ant1	5580	0.96	7.98			PASS
	Ant2	5580	0.42	7.98			PASS
_	Ant3	5580	1.12	7.98			PASS
	Ant4	5580	0.31	7.98			PASS
_	total	5580	6.74	7.98			PASS
	Ant1	5700	1.35	7.98			PASS
	Ant2	5700	0.77	7.98			PASS
	Ant3	5700	1.29	7.98			PASS
	Ant4	5700	1.4	7.98			PASS
	total	5700	7.23	7.98			PASS
	Ant1	5745	-1.94	26.98			PASS
	Ant2	5745	-2.28	26.98			PASS
	Ant3	5745	-2.67	26.98			PASS
	Ant4	5745	-0.86	26.98			PASS
	total	5745	4.14	26.98			PASS
Γ	Ant1	5785	-1.29	26.98			PASS
	Ant2	5785	-2.53	26.98			PASS
	Ant3	5785	-2.2	26.98			PASS
	Ant4	5785	-0.82	26.98			PASS
	total	5785	4.36	26.98			PASS



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5825 -2.03 **PASS** Ant1 26.98 **PASS** Ant2 5825 -3.1826.98 ------Ant3 5825 -2.5626.98 **PASS** 5825 -1.4626.98 **PASS** Ant4 total 5825 3.76 26.98 **PASS** ------Ant1 5180 -6.1113.98 2.91 10 **PASS** Ant2 5180 -7.4213.98 1.60 10 **PASS** Ant3 5180 -7.2313.98 1.79 10 **PASS** 5180 -5.82 13.98 3.20 10 **PASS** Ant4 -0.5713.98 8.45 10 **PASS** total 5180 Ant1 5200 -5.79 13.98 3.23 10 **PASS PASS** Ant2 5200 -7.1713.98 1.85 10 2.47 Ant3 5200 -6.5513.98 10 **PASS** 5200 -5.4 13.98 3.62 10 **PASS** Ant4 5200 13.98 **PASS** total -0.15 8.87 10 Ant1 5240 -5.9813.98 3.04 10 **PASS** Ant2 5240 -7.1213.98 1.90 10 **PASS PASS** Ant3 5240 -5.0213.98 4.00 10 10 **PASS** Ant4 5240 -5.7813.98 3.24 5240 10 **PASS** total 0.11 13.98 9.13 0.20 **PASS** Ant1 5260 7.98 Ant2 5260 -0.637.98 **PASS** 5260 1.69 7.98 **PASS** Ant3 5260 0.43 7.98 **PASS** Ant4 total 5260 6.52 7.98 **PASS** Ant1 5280 0.22 7.98 **PASS** 5280 -0.44 7.98 **PASS** Ant2 5280 2.36 7.98 Ant3 **PASS** 0.27 5280 7.98 **PASS** Ant4 7.98 total 5280 6.76 **PASS** 5320 0.05 7.98 **PASS** Ant1 5320 7.98 **PASS** Ant2 0.52 Ant3 5320 2.21 7.98 **PASS** 11AC20-CDD Ant4 5320 0.79 7.98 **PASS** total 5320 6.99 7.98 **PASS** PASS Ant1 5500 1.27 7.98 PASS 5500 -0.25 7.98 Ant2 ---**PASS** 5500 7.98 Ant3 0.27 **PASS** Ant4 5500 1.41 7.98 -----total 5500 6.75 7.98 \_\_\_ **PASS** \_\_\_ 5580 1.05 7.98 **PASS** Ant1 ---**PASS** Ant2 5580 0.65 7.98 Ant3 5580 1.32 7.98 **PASS** Ant4 5580 0.54 7.98 **PASS** total 5580 6.92 7.98 **PASS** Ant1 5700 1.32 7.98 **PASS** Ant2 5700 1.53 7.98 **PASS** 7.98 **PASS** Ant3 5700 1.63 Ant4 5700 1.43 7.98 **PASS** 5700 7.50 7.98 **PASS** total 5745 -1.8426.98 **PASS** Ant1 5745 -1.49 26.98 **PASS** Ant2 Ant3 5745 -2 26.98 **PASS** Ant4 5745 -0.6926.98 **PASS** ---5745 PASS total 4.55 26.98 PASS 5785 -0.92Ant1 26.98 -------1.88**PASS** Ant2 5785 26.98 Ant3 5785 -1.7626.98 **PASS** 5785 -0.6 26.98 **PASS** Ant4 5785 4.76 26.98 **PASS** total **PASS** Ant1 5825 -1.31 26.98 Ant2 5825 -2.9 26.98 **PASS** 



5825 -2.31 **PASS** Ant3 26.98 **PASS** Ant4 5825 -1.3526.98 --total 5825 4.10 26.98 **PASS** 5190 -8.21 13.98 0.81 10 **PASS** Ant1 Ant2 5190 -8.76 13.98 0.26 10 **PASS** Ant3 5190 -8.96 13.98 0.06 10 **PASS** Ant4 5190 -7.5313.98 1.49 10 **PASS** total 5190 -2.3113.98 6.71 10 **PASS** 5230 -8.39 13.98 0.63 10 **PASS** Ant1 5230 -9.7 13.98 10 **PASS** Ant2 -0.68 -7.74 Ant3 5230 13.98 1.28 10 **PASS PASS** Ant4 5230 -8.10 13.98 0.92 10 total 5230 -2.4013.98 6.62 10 **PASS** 5270 -2.877.98 **PASS** Ant1 5270 -2.71**PASS** Ant2 7.98 Ant3 5270 -0.287.98 **PASS** Ant4 5270 -2.237.98 **PASS** ---**PASS** total 5270 4.13 7.98 ---**PASS** Ant1 5310 -2.897.98 -1.72**PASS** Ant2 5310 7.98 **PASS** Ant3 5310 0.15 7.98 Ant4 5310 -1.697.98 **PASS** 5310 4.62 7.98 **PASS** total 5510 -0.937.98 **PASS** Ant1 Ant2 5510 -2.837.98 **PASS** 11AC40-CDD Ant3 5510 -2.327.98 **PASS** 5510 -1.57 7.98 **PASS** Ant4 7.98 5510 4.17 **PASS** total 7.98 5550 -1.32**PASS** Ant1 -2.547.98 Ant2 5550 **PASS** 5550 -1.777.98 **PASS** Ant3 5550 -1.477.98 **PASS** Ant4 total 5550 4.27 7.98 **PASS** Ant1 5670 -1.347.98 **PASS** Ant2 5670 -0.79 7.98 **PASS** PASS Ant3 5670 -0.757.98 7.98 **PASS** Ant4 5670 -0.69---5670 7.98 **PASS** total 5.14 -3.76**PASS** Ant1 5755 26.98 ------Ant2 5755 -3.9726.98 \_\_\_ **PASS** \_\_\_ Ant3 5755 -4.2526.98 **PASS** ---26.98 **PASS** Ant4 5755 -2.92total 5755 2.32 26.98 **PASS** Ant1 5795 -3.2926.98 **PASS** Ant2 5795 -4.44 26.98 **PASS** Ant3 5795 -3.9726.98 **PASS** Ant4 5795 -3.14 26.98 ---**PASS** 2.34 total 5795 26.98 PASS Ant1 5210 -7.3313.98 1.69 10 **PASS** 5210 -8.72 13.98 0.30 10 **PASS** Ant2 5210 -7.51 13.98 **PASS** Ant3 1.51 10 5210 13.98 2.10 **PASS** Ant4 -6.9210 total 5210 -1.5513.98 7.47 10 **PASS** Ant1 5290 -5.427.98 **PASS** ------PASS Ant2 5290 -5.077.98 11AC80-CDD 5290 PASS 7.98 Ant3 -2.8 ------5290 **PASS** Ant4 -5.01 7.98 total 5290 1.58 7.98 **PASS** 5530 -3.077.98 **PASS** Ant1 Ant2 5530 7.98 **PASS** -5.11**PASS** Ant3 5530 -4.45 7.98 Ant4 5530 -3.477.98 **PASS** 



REPORT NO.: 4789807223-2 Page 229 of 283

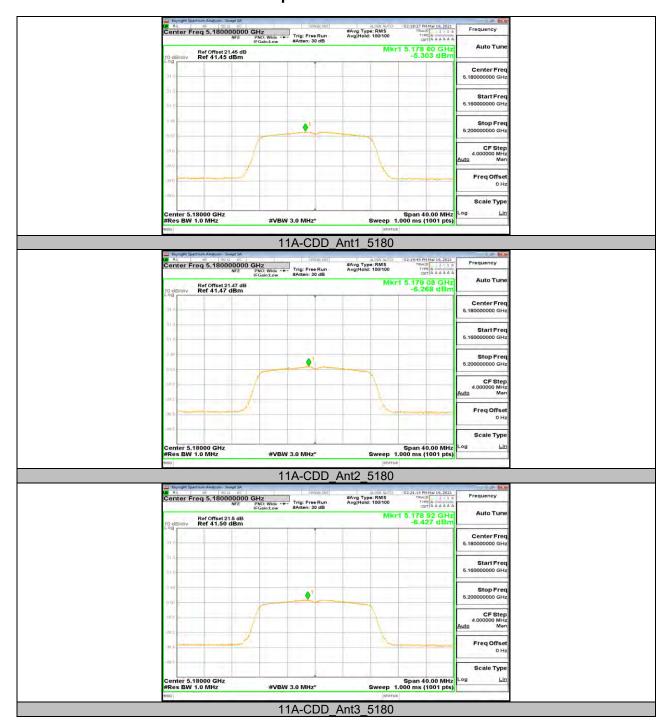
total	5530	2.07	7.98	 	PASS
Ant1	5610	-4.14	7.98	 	PASS
Ant2	5610	-4.68	7.98	 	PASS
Ant3	5610	-3.45	7.98	 	PASS
Ant4	5610	-4	7.98	 	PASS
total	5610	1.98	7.98	 	PASS
Ant1	5775	-5.82	26.98	 	PASS
Ant2	5775	-7.12	26.98	 	PASS
Ant3	5775	-6.8	26.98	 	PASS
Ant4	5775	-5.35	26.98	 	PASS
total	5775	-0.19	26.98	 	PASS

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2. The Duty Cycle Factor and RBW Factor is compensated in the graph.



### 12.5.2. Test Graphs





Page 231 of 283 #Avg Type: RMS Avg[Hold: 100/100 DET A A A A A Mkr1 5.178 76 GHz -4.766 dBm Ref Offset 21.5 dB Ref 41.50 dBm Center Fre #VBW 3.0 MHz\* 11A-CDD\_Ant4\_5180 R R W SV U UC Center Freq 5,200000000 GHz NFE PKD: Wide - Trig: Free Run PKD: Signature SAtten: 30 dB #Avg Type: RMS Avg[Hold: 100/100 Auto Tur Ref Offset 21.45 dB Ref 41.45 dBm Start Fre • #VBW 3.0 MHz\* 11A-CDD Ant1 5200 S4 PM Mar 19, 2021 TRALE 3 5 5 TYPE A A A A A A R NF SO II DC SERSE IN Center Freq 5.200000000 GHz

NFE PNO: Wide FGaint.ow #Atten: 30 dB Frequency #Avg Type: RMS Avg[Hold: 100/100 Auto Tur Mkr1 5.202 00 GH: -7.344 dBn Ref Offset 21.46 dB Ref 41.46 dBm Start Free • Freq Offse Scale Typ Span 40.00 MHz Sweep 1.000 ms (1001 pts)

11A-CDD Ant2 5200