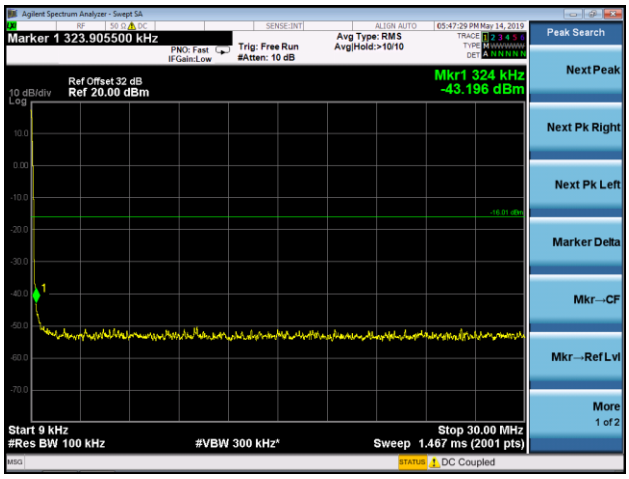
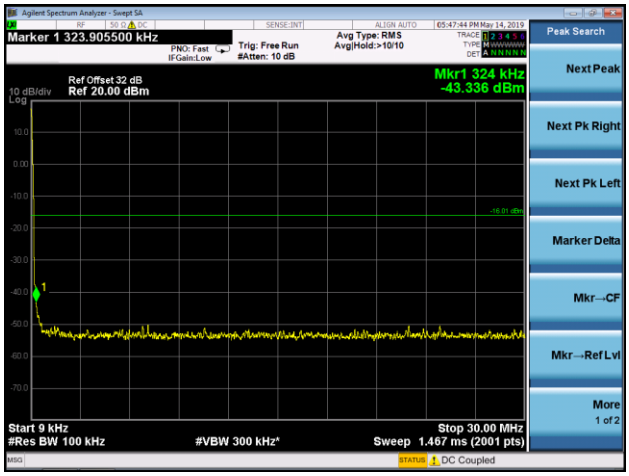
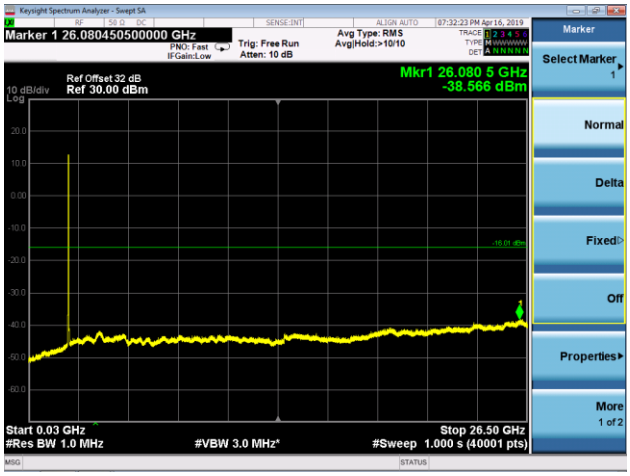
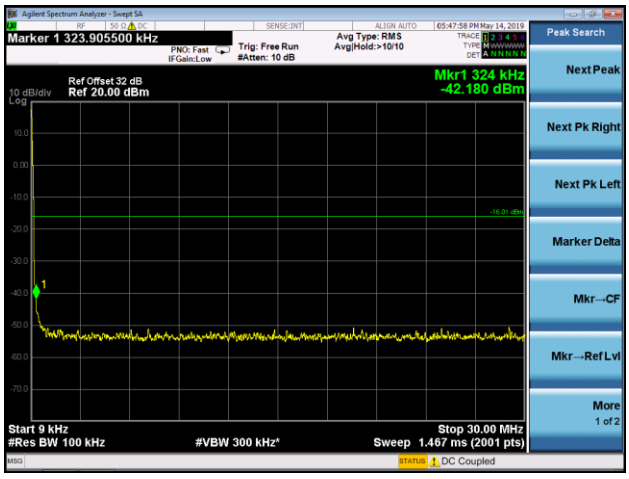
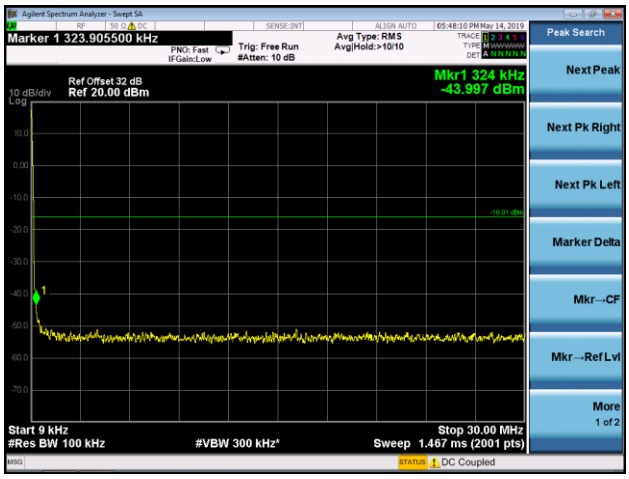
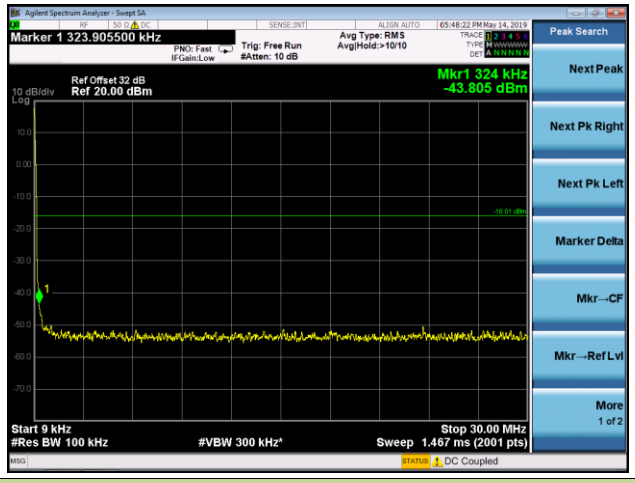
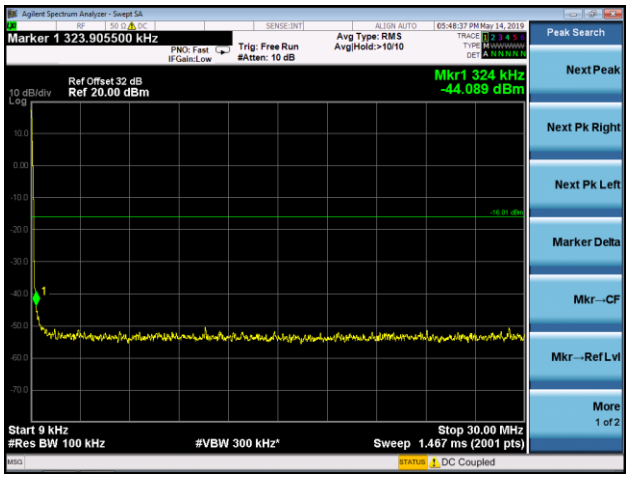
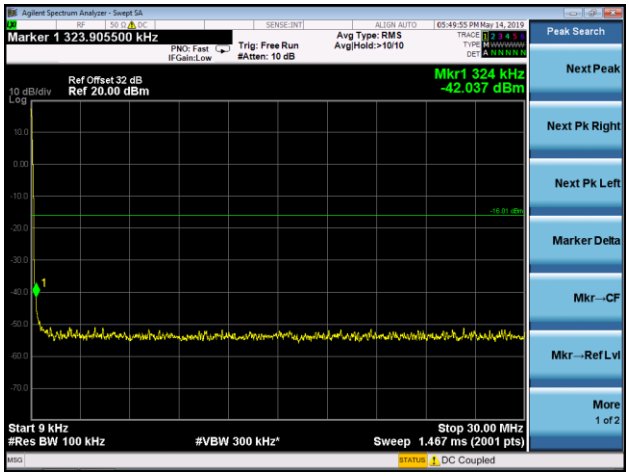
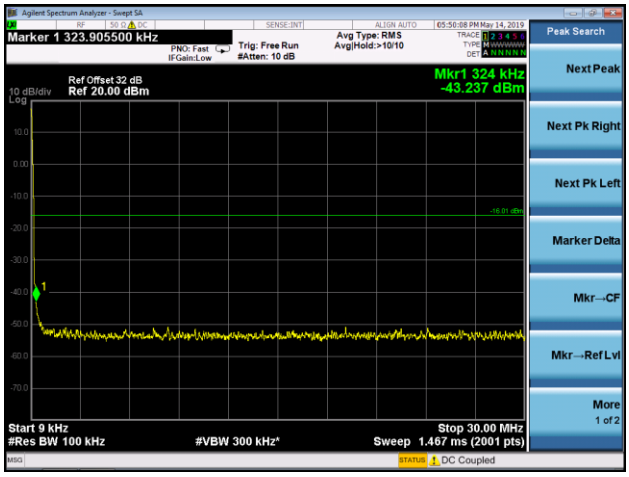
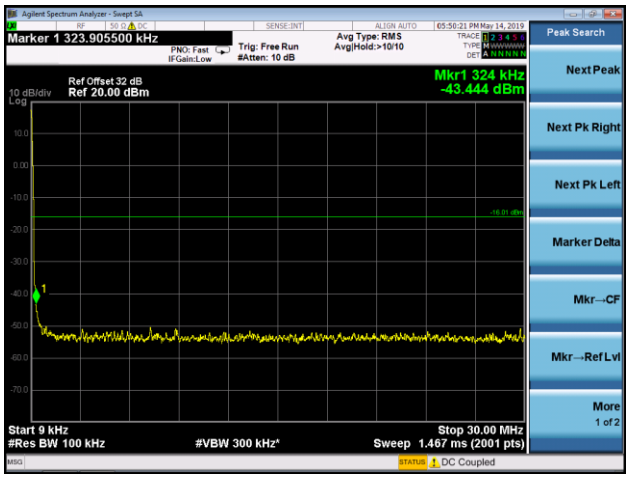
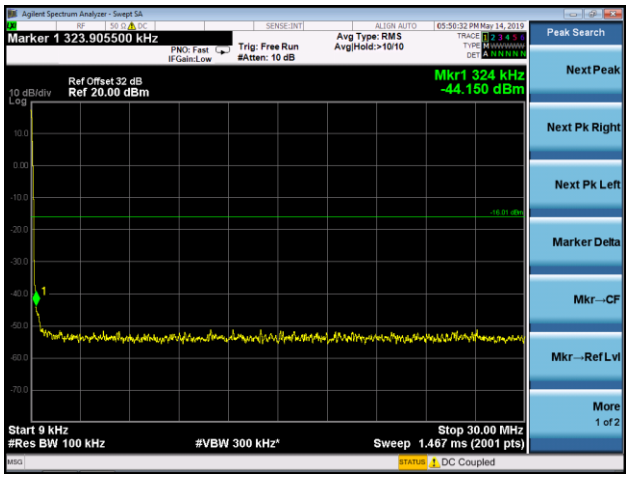
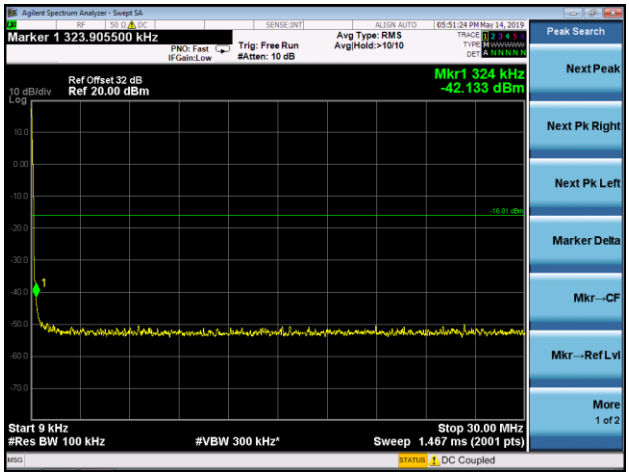
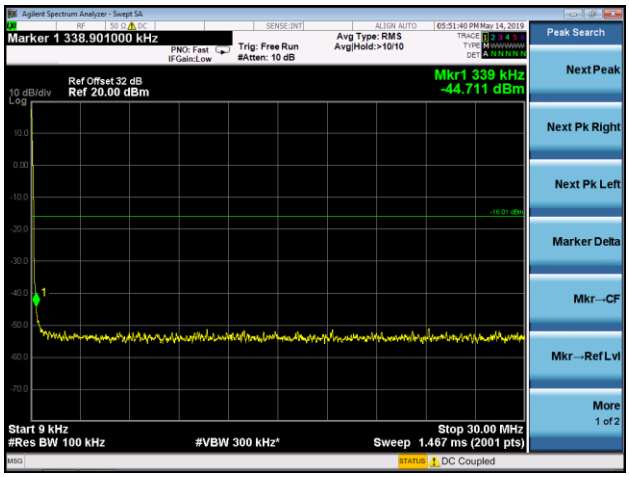
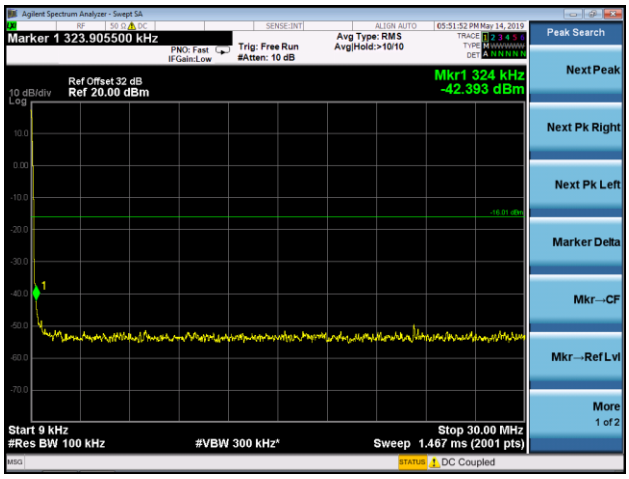
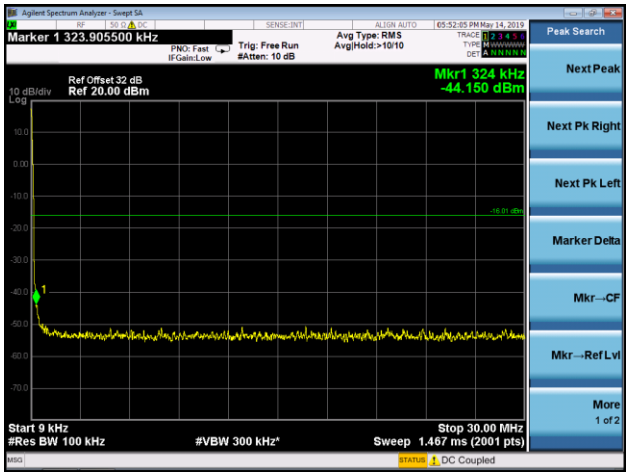
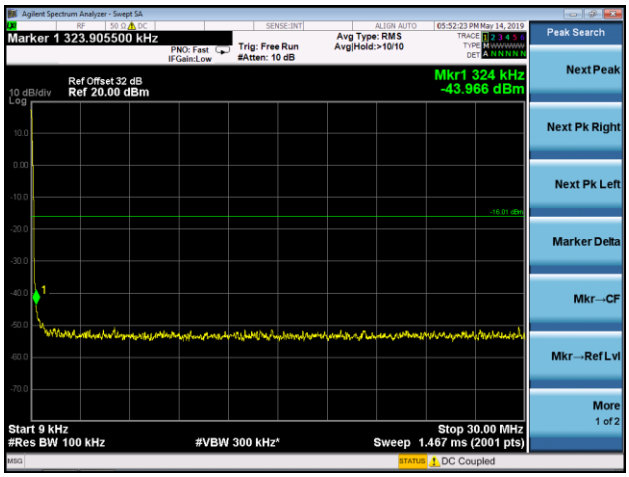
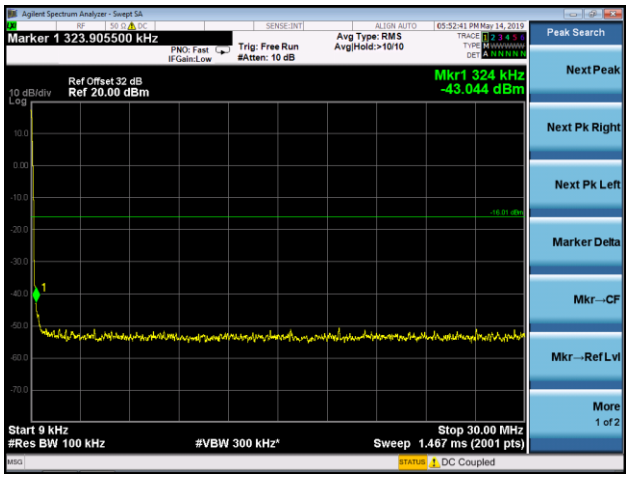
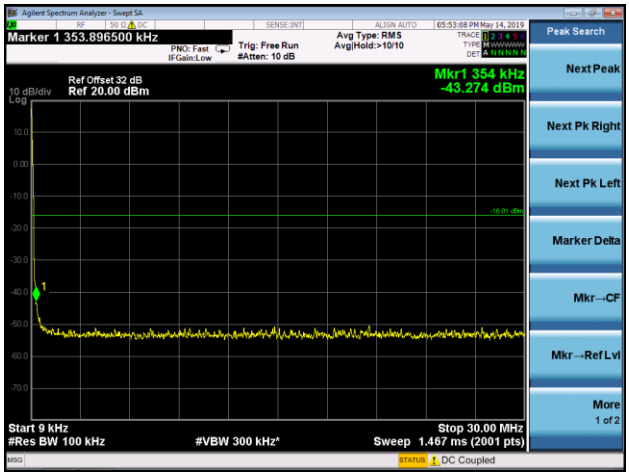
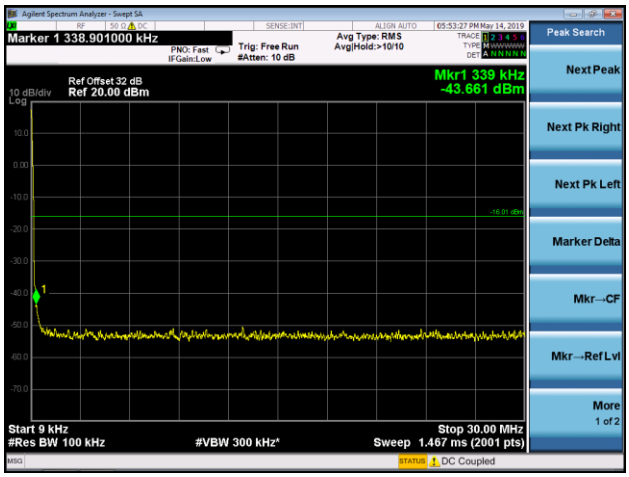
15 + 15MHz Channel Bandwidth	
2117.5MHz + 2132.5MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2130.0MHz + 2145.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2157.5MHz + 2172.5MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	

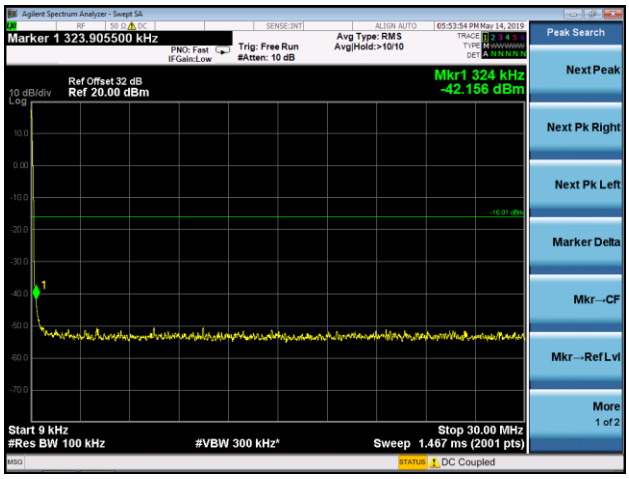
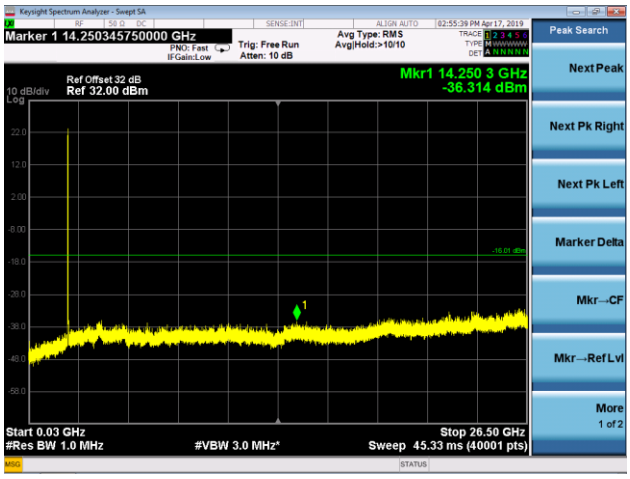
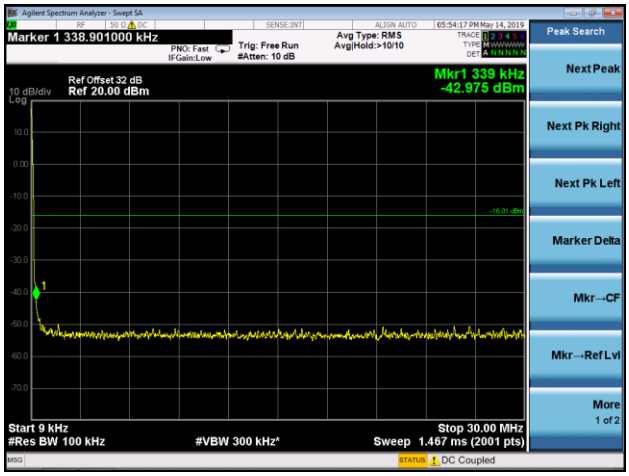
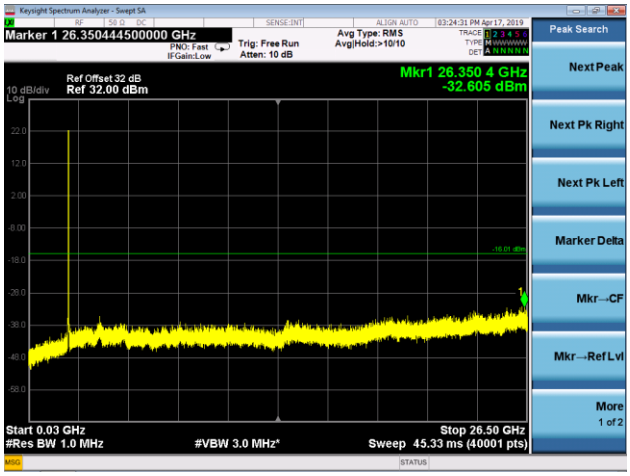
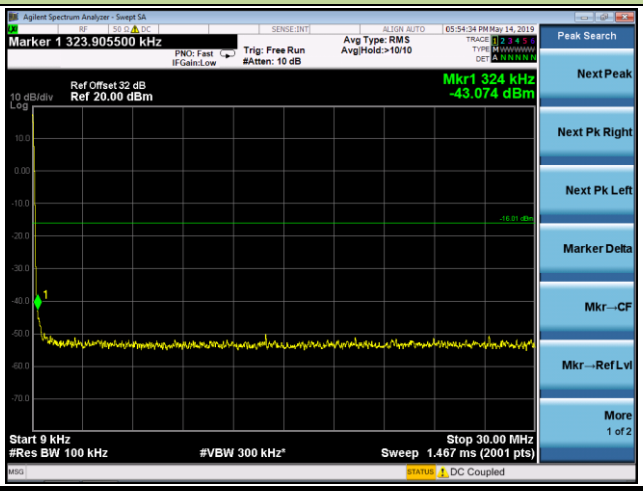
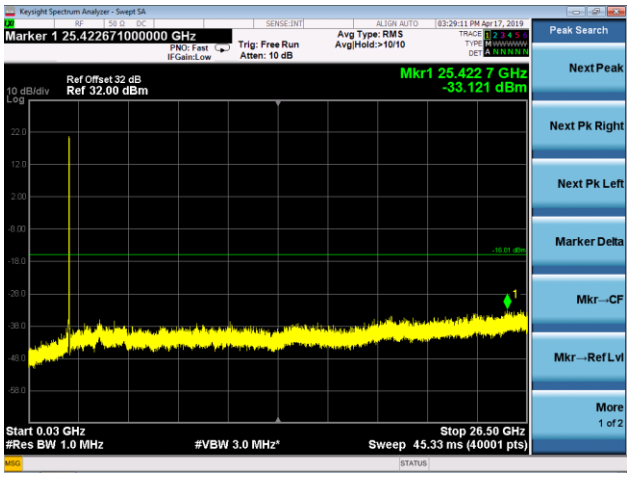
20 + 20MHz Channel Bandwidth	
2120.0MHz + 2140.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2125.0MHz + 2145.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2150.0MHz + 2170.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	

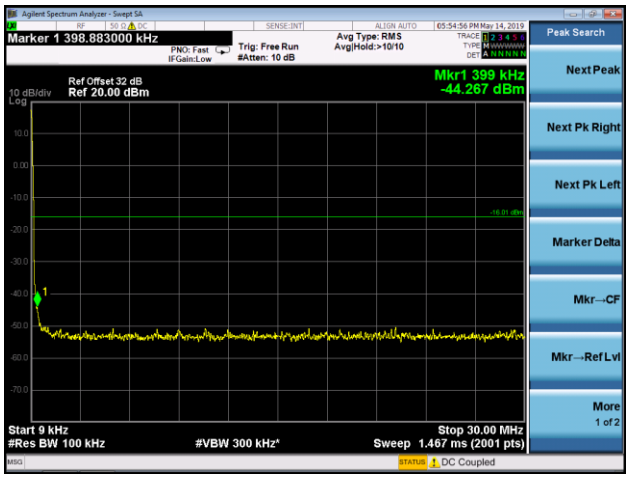
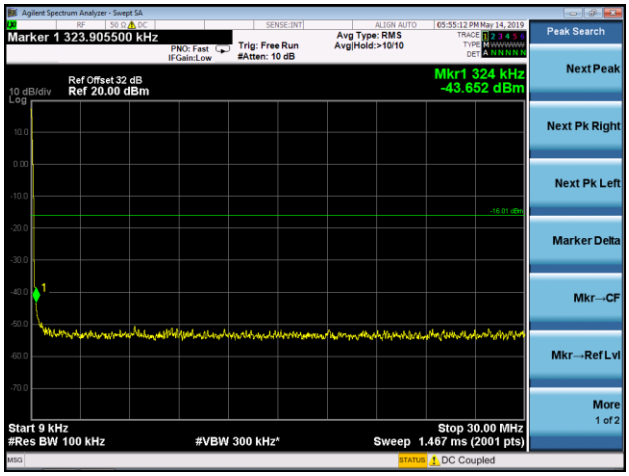
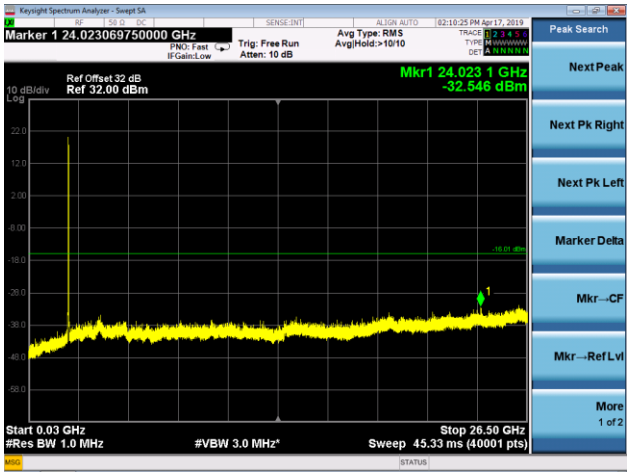
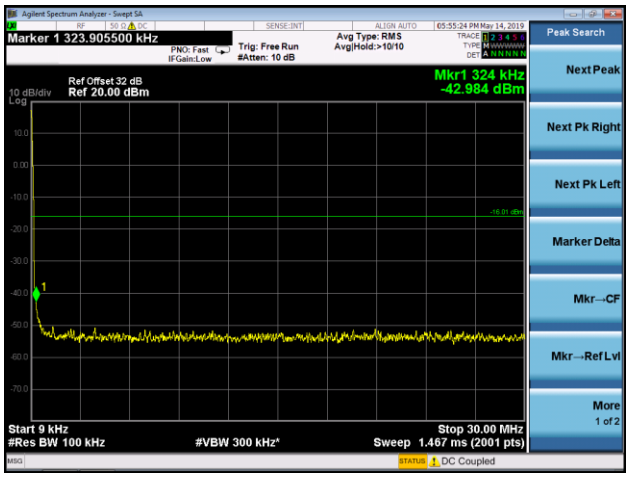
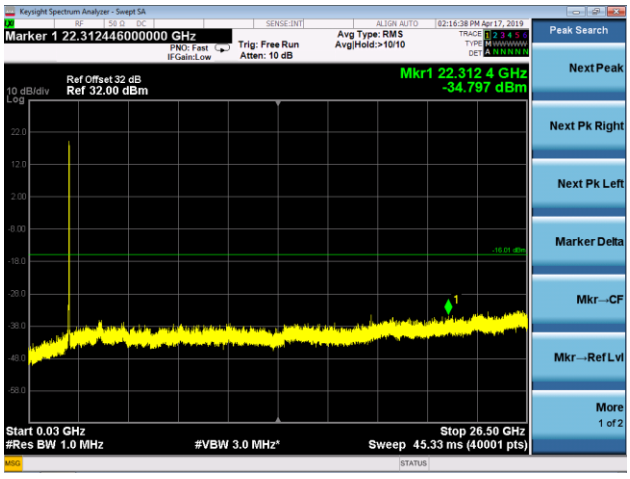
Conducted Spurious Emissions - Ant 1 (QPSK)	
5MHz Channel Bandwidth	
2112.5MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2145.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2177.5MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	

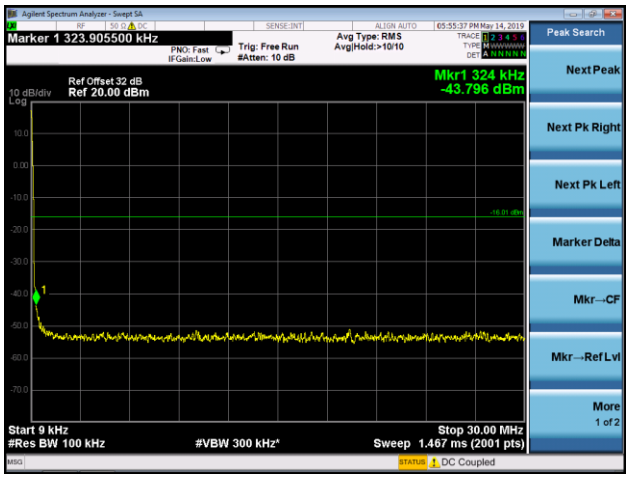
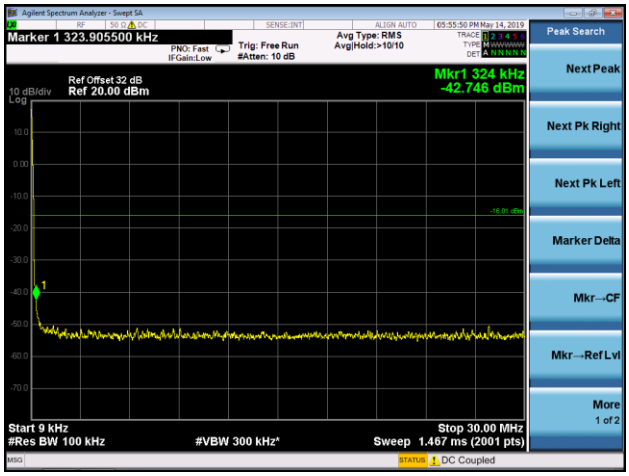
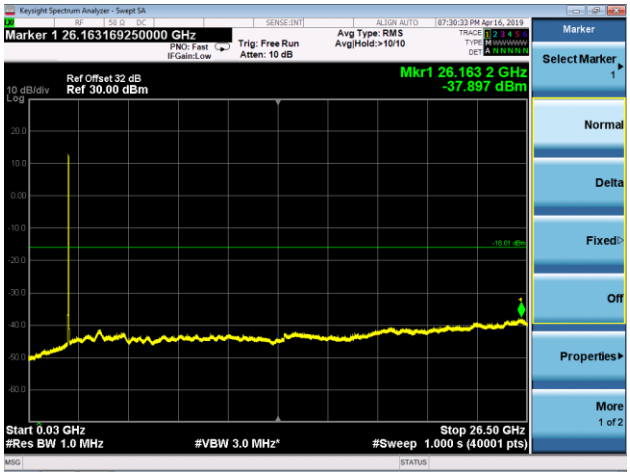
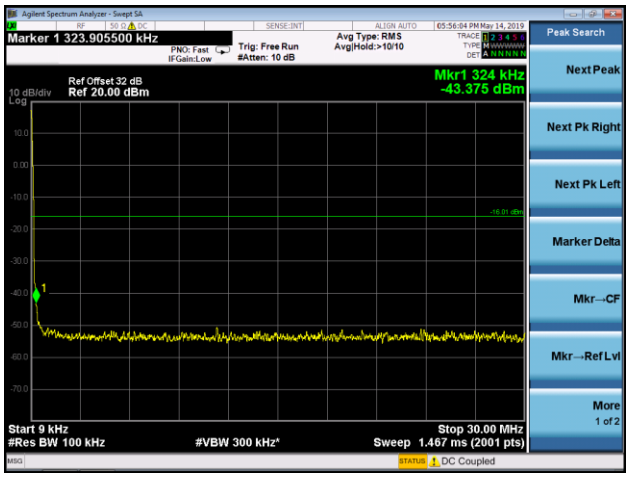
10MHz Channel Bandwidth	
2115.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2145.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2175.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	

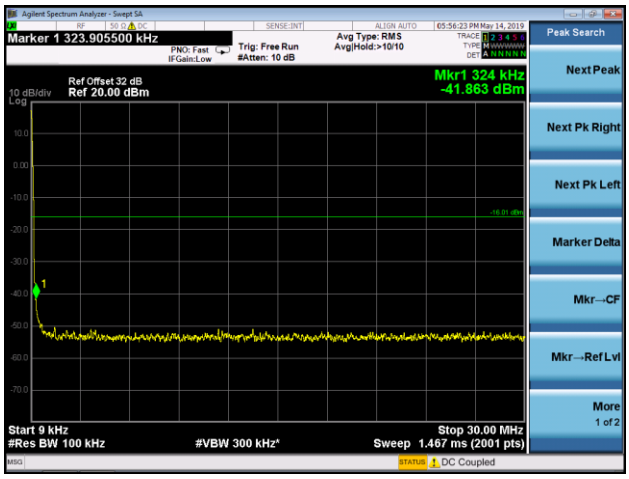
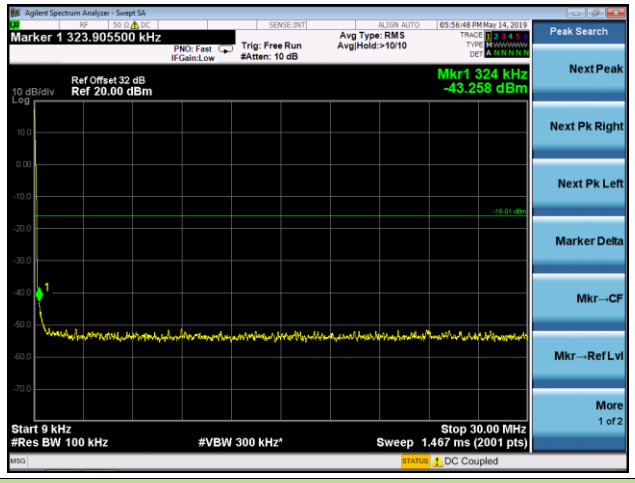
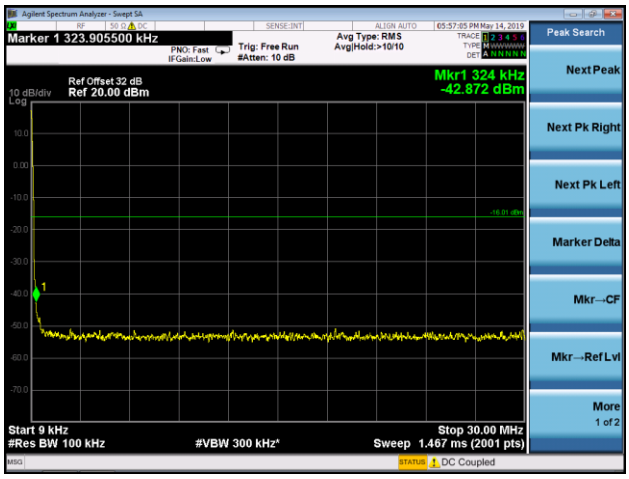
15MHz Channel Bandwidth	
2117.5MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2145.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2172.5MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	

20MHz Channel Bandwidth	
2120.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2145.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2170.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	

5 + 5MHz Channel Bandwidth	
2112.5MHz + 2117.5MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2140.0MHz + 2145.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2172.5MHz + 2177.5MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	

10 + 10MHz Channel Bandwidth	
2115.0MHz + 2125.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2135.0MHz + 2145.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2165.0MHz + 2175.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	

15 + 15MHz Channel Bandwidth	
2117.5MHz + 2132.5MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2130.0MHz + 2145.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2157.5MHz + 2172.5MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	

20 + 20MHz Channel Bandwidth	
2120.0MHz + 2140.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2125.0MHz + 2145.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2150.0MHz + 2170.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	

6.8. Radiated Spurious Emissions Measurements

6.8.1.Test Limit

Out of band emissions: The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to -13dBm.

E (dBμV/m) = EIRP (dBm) – 20 log D + 104.8; where D is the measurement distance in meters. The emission limit equal to 82.3dBμV/m.

6.8.2.Test Procedure Used

KDB 971168 D01v03r01 - Section 5.8 & 7

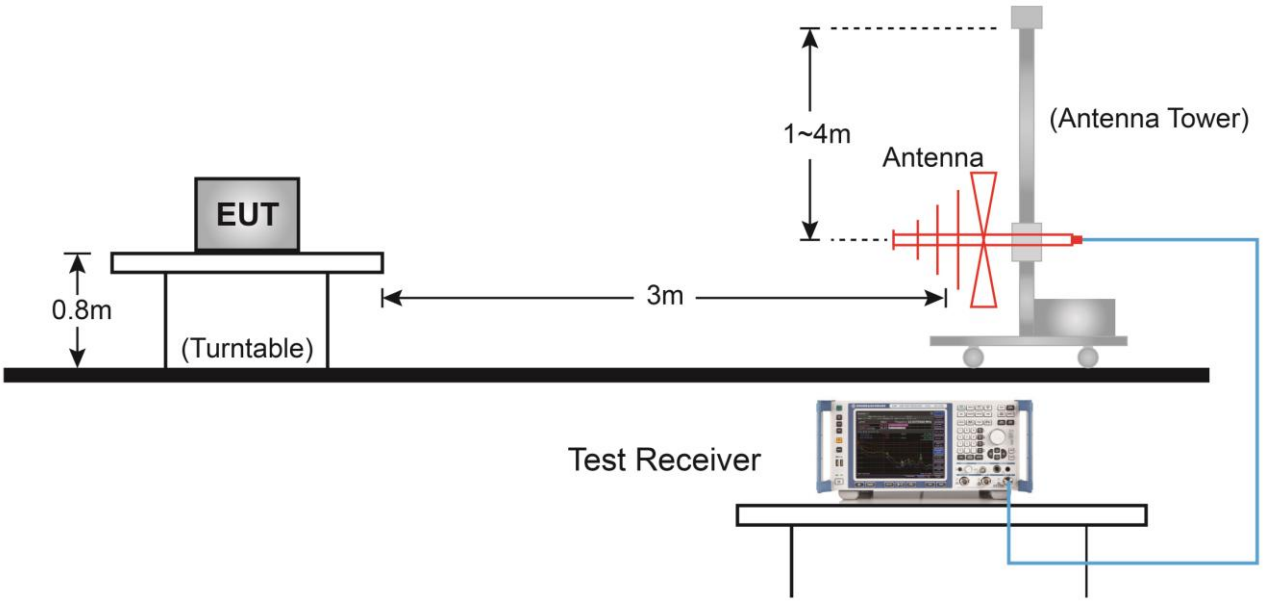
ANSI C63.26-2015 - Section 5.2.7 & 5.5

6.8.3.Test Setting

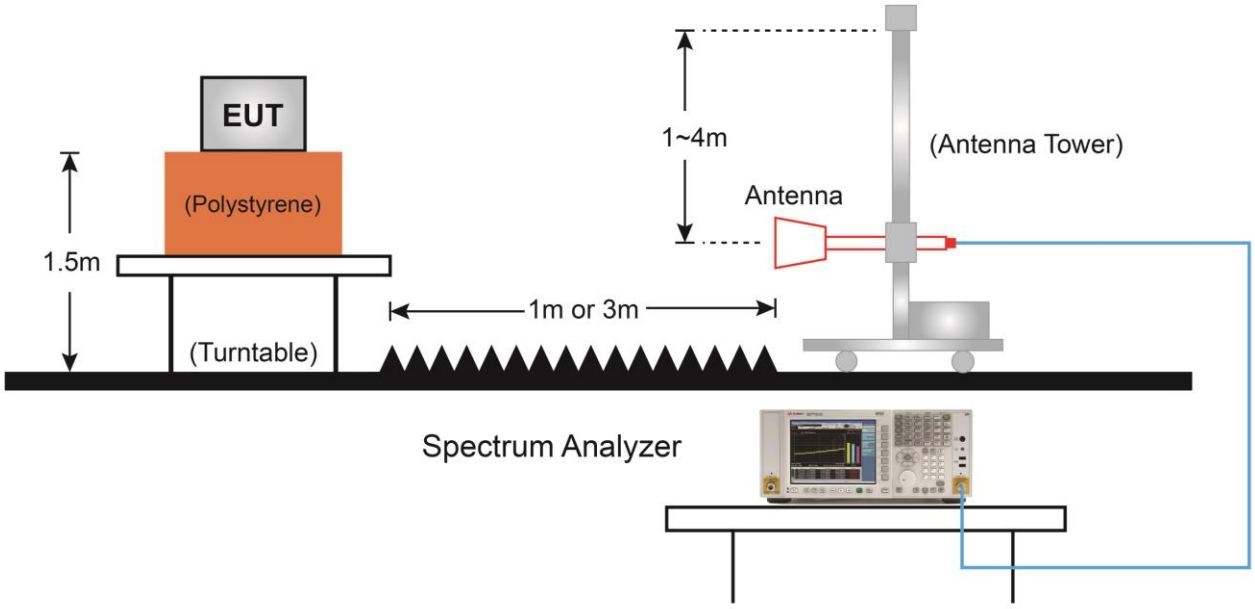
1. RBW = 100kHz or 1MHz
2. VBW ≥ 3*RBW
3. Sweep time ≥ 10 × (number of points in sweep) × (transmission symbol period)
4. Detector = Peak
5. Trace mode = max hold
6. The trace was allowed to stabilize

6.8.4.Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



6.8.5.Test Result

Product	AirScale Indoor Radio ASiR-pRRH	Test Engineer	Peter Xu
Test Site	AC1	Test Date	2019/04/10 ~ 2019/05/14
Test Item	LTE Band 2 & 66_QPSK_Single Carrier, BW = 5MHz		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
B2 Bottom CH 625 (1932.5MHz) & B66 Bottom CH 66461 (2112.5MHz)							
153.7	14.0	15.8	29.8	82.3	-52.5	Peak	Horizontal
360.8	11.5	23.5	35.0	82.3	-47.3	Peak	Horizontal
154.2	17.3	15.9	33.2	82.3	-49.1	Peak	Horizontal
373.9	10.4	23.6	34.0	82.3	-48.3	Peak	Horizontal
8454.5	39.5	13.1	52.6	82.3	-29.7	Peak	Vertical
9670.0	39.1	15.0	54.1	82.3	-28.2	Peak	Vertical
8446.0	39.0	13.1	52.1	82.3	-30.2	Peak	Vertical
9440.5	36.5	14.6	51.1	82.3	-31.2	Peak	Vertical
B2 Middle CH 900 (1960.0MHz) & B66 Middle CH 66786 (2145.0MHz)							
149.8	14.3	15.7	30.0	82.3	-52.3	Peak	Horizontal
361.3	11.8	23.5	35.3	82.3	-47.0	Peak	Horizontal
154.2	17.9	15.9	33.8	82.3	-48.5	Peak	Horizontal
375.3	10.1	23.6	33.7	82.3	-48.6	Peak	Horizontal
8582.0	36.0	13.4	49.4	82.3	-32.9	Peak	Vertical
9806.0	38.8	15.3	54.1	82.3	-28.2	Peak	Vertical
9797.5	35.9	15.3	51.2	82.3	-31.1	Peak	Vertical
11761.0	35.5	19.0	54.5	82.3	-27.8	Peak	Vertical
B2 Top CH 1175 (1987.5MHz) & B66 Top CH 67111 (2177.5MHz)							
193.4	10.5	18.8	29.3	82.3	-53.0	Peak	Horizontal
359.8	12.0	23.5	35.5	82.3	-46.8	Peak	Horizontal
153.7	17.3	15.8	33.1	82.3	-49.2	Peak	Horizontal
365.1	9.9	23.5	33.4	82.3	-48.9	Peak	Horizontal
8709.5	36.7	13.7	50.4	82.3	-31.9	Peak	Vertical
9942.0	39.7	15.6	55.3	82.3	-27.0	Peak	Vertical
5377.5	50.6	4.1	54.7	82.3	-27.6	Peak	Vertical
8063.5	36.3	13.0	49.3	82.3	-33.0	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	AirScale Indoor Radio ASiR-pRRH	Test Engineer	Peter Xu
Test Site	AC1	Test Date	2019/04/10 ~ 2019/05/14
Test Item	LTE Band 2 & 66_QPSK_Single Carrier, BW = 10MHz		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
B2 Bottom CH 650 (1935.0MHz) & B66 Bottom CH 66486 (2115.0MHz)							
150.3	13.0	15.7	28.7	82.3	-53.6	Peak	Horizontal
359.8	11.8	23.5	35.3	82.3	-47.0	Peak	Horizontal
153.7	17.3	15.8	33.1	82.3	-49.2	Peak	Horizontal
376.3	10.1	23.7	33.8	82.3	-48.5	Peak	Horizontal
8250.5	35.8	13.0	48.8	82.3	-33.5	Peak	Vertical
10375.5	34.3	17.4	51.7	82.3	-30.6	Peak	Vertical
8021.0	35.6	12.9	48.5	82.3	-33.8	Peak	Vertical
10545.5	34.0	18.1	52.1	82.3	-30.2	Peak	Vertical
B2 Middle CH 900 (1960.0MHz) & B66 Middle CH 66786 (2145.0MHz)							
188.6	11.6	18.4	30.0	82.3	-52.3	Peak	Horizontal
363.2	11.5	23.5	35.0	82.3	-47.3	Peak	Horizontal
154.2	17.8	15.9	33.7	82.3	-48.6	Peak	Horizontal
366.6	10.6	23.5	34.1	82.3	-48.2	Peak	Horizontal
7817.0	35.5	12.9	48.4	82.3	-33.9	Peak	Vertical
9721.0	35.7	15.1	50.8	82.3	-31.5	Peak	Vertical
8021.0	35.7	12.9	48.6	82.3	-33.7	Peak	Vertical
9372.5	35.9	14.6	50.5	82.3	-31.8	Peak	Vertical
B2 Top CH 1150 (1985.0MHz) & B66 Top CH 67086 (2175.0MHz)							
192.0	10.9	18.7	29.6	82.3	-52.7	Peak	Horizontal
363.7	11.3	23.5	34.8	82.3	-47.5	Peak	Horizontal
154.2	16.7	15.9	32.6	82.3	-49.7	Peak	Horizontal
374.8	10.2	23.6	33.8	82.3	-48.5	Peak	Horizontal
8777.5	36.5	13.3	49.8	82.3	-32.5	Peak	Vertical
10460.5	35.6	16.7	52.3	82.3	-30.0	Peak	Vertical
5369.0	43.4	4.1	47.5	82.3	-34.8	Peak	Vertical
8497.0	35.3	13.2	48.5	82.3	-33.8	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	AirScale Indoor Radio ASiR-pRRH	Test Engineer	Peter Xu
Test Site	AC1	Test Date	2019/04/10 ~ 2019/05/14
Test Item	LTE Band 2 & 66_QPSK_Single Carrier, BW = 15MHz		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
B2 Bottom CH 675 (1937.5MHz) & B66 Bottom CH 66511 (2117.5MHz)							
152.2	13.8	15.8	29.6	82.3	-52.7	Peak	Horizontal
357.9	11.8	23.4	35.2	82.3	-47.1	Peak	Horizontal
152.7	16.4	15.8	32.2	82.3	-50.1	Peak	Horizontal
366.6	10.4	23.5	33.9	82.3	-48.4	Peak	Horizontal
7995.5	35.2	12.9	48.1	82.3	-34.2	Peak	Vertical
10579.5	34.4	18.1	52.5	82.3	-29.8	Peak	Vertical
8471.5	36.5	13.1	49.6	82.3	-32.7	Peak	Vertical
10154.5	35.4	16.4	51.8	82.3	-30.5	Peak	Vertical
B2 Middle CH 900 (1960.0MHz) & B66 Middle CH 66786 (2145.0MHz)							
188.6	10.1	18.4	28.5	82.3	-53.8	Peak	Horizontal
361.3	11.5	23.5	35.0	82.3	-47.3	Peak	Horizontal
153.2	17.5	15.8	33.3	82.3	-49.0	Peak	Horizontal
366.6	10.2	23.5	33.7	82.3	-48.6	Peak	Horizontal
7188.0	36.2	11.8	48.0	82.3	-34.3	Peak	Vertical
9415.0	35.7	14.6	50.3	82.3	-32.0	Peak	Vertical
8012.5	36.1	12.9	49.0	82.3	-33.3	Peak	Vertical
10078.0	35.4	16.1	51.5	82.3	-30.8	Peak	Vertical
B2 Top CH 1115 (1982.5MHz) & B66 Top CH 67061 (2172.5MHz)							
189.1	10.8	18.5	29.3	82.3	-53.0	Peak	Horizontal
362.7	11.5	23.5	35.0	82.3	-47.3	Peak	Horizontal
152.7	16.5	15.8	32.3	82.3	-50.0	Peak	Horizontal
374.8	10.4	23.6	34.0	82.3	-48.3	Peak	Horizontal
7944.5	35.5	12.9	48.4	82.3	-33.9	Peak	Vertical
10613.5	34.1	18.2	52.3	82.3	-30.0	Peak	Vertical
5360.5	43.1	4.1	47.2	82.3	-35.1	Peak	Vertical
9542.5	35.8	14.7	50.5	82.3	-31.8	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	AirScale Indoor Radio ASiR-pRRH	Test Engineer	Peter Xu
Test Site	AC1	Test Date	2019/04/10 ~ 2019/05/14
Test Item	LTE Band 2 & 66_QPSK_Single Carrier, BW = 20MHz		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
B2 Bottom CH 700 (1940.0MHz) & B66 Bottom CH 66536 (2120.0MHz)							
191.0	10.9	18.7	29.6	82.3	-52.7	Peak	Horizontal
362.2	11.7	23.5	35.2	82.3	-47.1	Peak	Horizontal
152.7	16.8	15.8	32.6	82.3	-49.7	Peak	Horizontal
375.8	10.5	23.7	34.2	82.3	-48.1	Peak	Horizontal
7604.5	35.7	12.8	48.5	82.3	-33.8	Peak	Vertical
9364.0	36.5	14.6	51.1	82.3	-31.2	Peak	Vertical
8004.0	36.7	12.9	49.6	82.3	-32.7	Peak	Vertical
9559.5	36.1	14.8	50.9	82.3	-31.4	Peak	Vertical
B2 Middle CH 900 (1960.0MHz) & B66 Middle CH 66786 (2145.0MHz)							
189.6	10.4	18.5	28.9	82.3	-53.4	Peak	Horizontal
362.2	11.4	23.5	34.9	82.3	-47.4	Peak	Horizontal
154.2	16.4	15.9	32.3	82.3	-50.0	Peak	Horizontal
369.5	10.2	23.6	33.8	82.3	-48.5	Peak	Horizontal
9381.0	36.3	14.6	50.9	82.3	-31.4	Peak	Vertical
10537.0	35.3	18.1	53.4	82.3	-28.9	Peak	Vertical
8480.0	35.7	13.1	48.8	82.3	-33.5	Peak	Vertical
10936.5	33.9	18.9	52.8	82.3	-29.5	Peak	Vertical
B2 Top CH 1100 (1980.0MHz) & B66 Top CH 67036 (2170.0MHz)							
188.6	10.0	18.4	28.4	82.3	-53.9	Peak	Horizontal
358.8	11.3	23.4	34.7	82.3	-47.6	Peak	Horizontal
154.2	17.0	15.9	32.9	82.3	-49.4	Peak	Horizontal
375.8	10.1	23.7	33.8	82.3	-48.5	Peak	Horizontal
9474.5	36.3	14.6	50.9	82.3	-31.4	Peak	Vertical
11064.0	33.5	19.1	52.6	82.3	-29.7	Peak	Vertical
5360.5	42.6	4.1	46.7	82.3	-35.6	Peak	Vertical
8080.5	36.4	13.0	49.4	82.3	-32.9	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Product	AirScale Indoor Radio ASiR-pRRH	Test Engineer	Peter Xu
Test Site	AC1	Test Date	2019/04/10 ~ 2019/05/14
Test Item	LTE Band 2 & 66_QPSK_Multi Carriers, BW = 20MHz		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
B2 Bottom CH 700 + 900 (1940.0+1960.0MHz) & B66 Bottom CH 66536 + 66736 (2120.0+2140.0MHz)							
154.6	13.9	15.9	29.8	82.3	-52.5	Peak	Horizontal
360.8	11.5	23.5	35.0	82.3	-47.3	Peak	Horizontal
154.2	17.3	15.9	33.2	82.3	-49.1	Peak	Vertical
373.9	10.4	23.6	34.0	82.3	-48.3	Peak	Vertical
4230.0	43.7	1.5	45.2	82.3	-37.1	Peak	Horizontal
7885.0	38.0	12.9	50.9	82.3	-31.4	Peak	Horizontal
4238.5	44.6	1.6	46.2	82.3	-36.1	Peak	Vertical
7902.0	38.2	12.9	51.1	82.3	-31.2	Peak	Vertical
B2 Top CH 900 + 1100 (1960.0 + 1980.0MHz) & B66 Middle CH 66586 + 66786 (2125.0 + 2145.0MHz)							
149.8	14.3	15.7	30.0	82.3	-52.3	Peak	Horizontal
361.3	11.8	23.5	35.3	82.3	-47.0	Peak	Horizontal
154.2	17.9	15.9	33.8	82.3	-48.5	Peak	Vertical
375.3	10.1	23.6	33.7	82.3	-48.6	Peak	Vertical
4264.0	50.2	1.7	51.9	82.3	-30.4	Peak	Horizontal
7885.0	38.5	12.9	51.4	82.3	-30.9	Peak	Horizontal
4264.0	51.3	1.7	53.0	82.3	-29.3	Peak	Vertical
10647.5	35.7	18.3	54.0	82.3	-28.3	Peak	Vertical

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
B2 Top CH 900 + 1100 (1960.0 + 1980.0MHz) & B66 Top CH 66836 + 67036 (2150.0 + 2170.0MHz)							
152.7	13.0	15.8	28.8	82.3	-53.5	Peak	Horizontal
359.8	12.0	23.5	35.5	82.3	-46.8	Peak	Horizontal
153.7	17.3	15.8	33.1	82.3	-49.2	Peak	Vertical
365.1	9.9	23.5	33.4	82.3	-48.9	Peak	Vertical
4221.5	43.2	1.5	44.7	82.3	-37.6	Peak	Horizontal
7910.5	40.5	12.9	53.4	82.3	-28.9	Peak	Horizontal
4238.5	44.2	1.6	45.8	82.3	-36.5	Peak	Vertical
7902.0	39.1	12.9	52.0	82.3	-30.3	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

7. CONCLUSION

The data collected relate only the item(s) tested and show that the **AirScale Indoor Radio ASiR-pRRH, FCC ID: 2AD8UAHFID01** is in compliance with FCC Rules.

The End