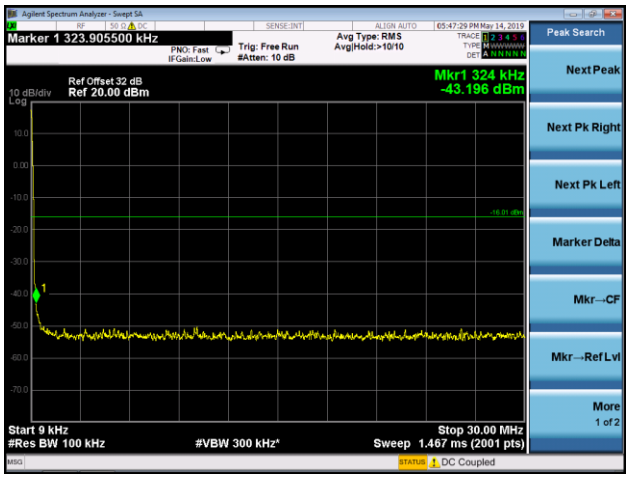
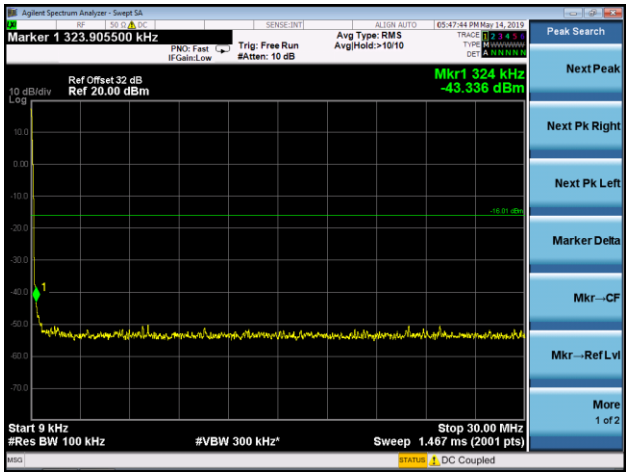
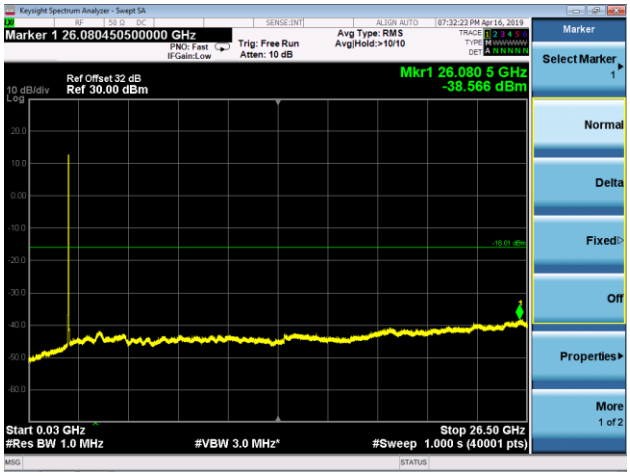
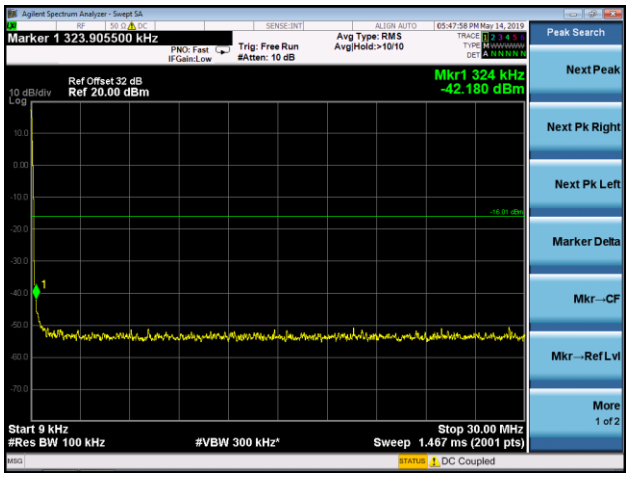
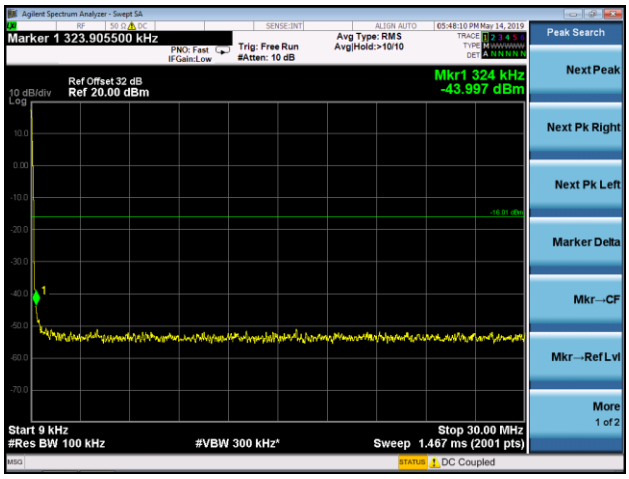
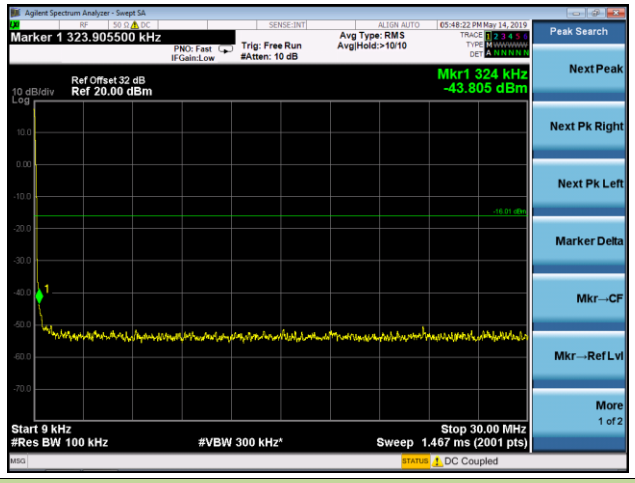
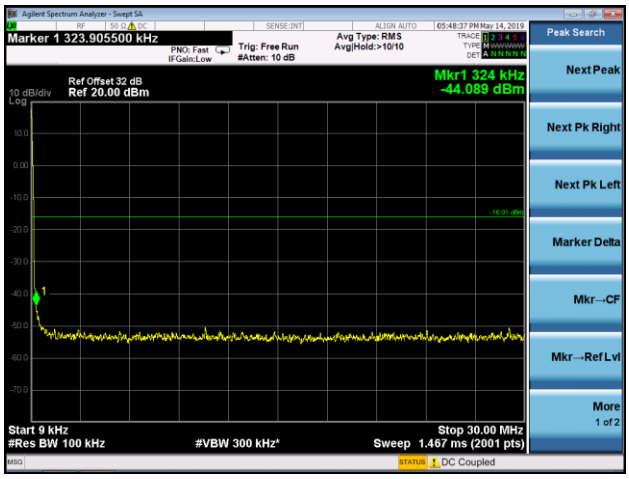
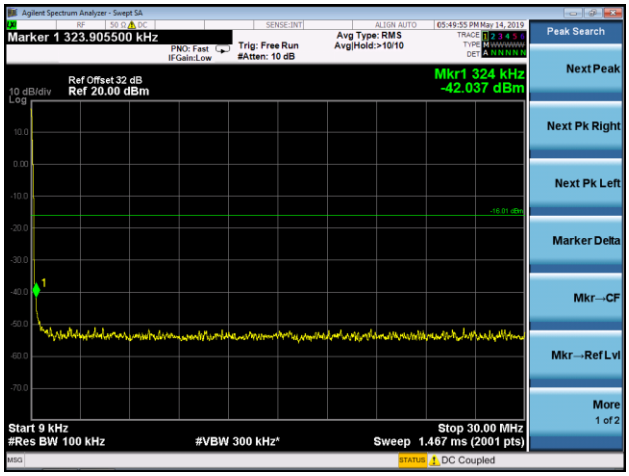
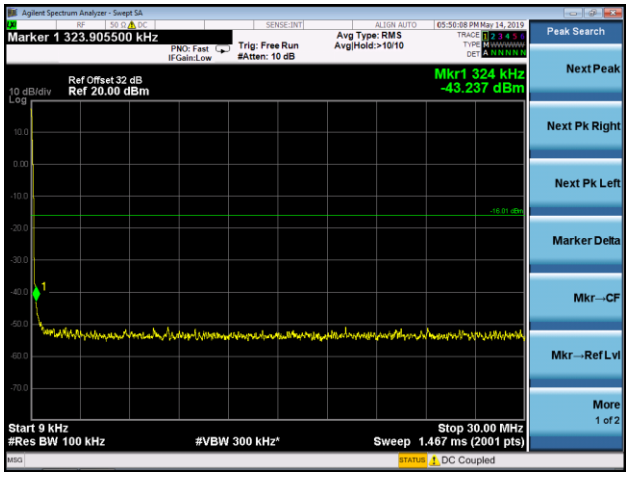
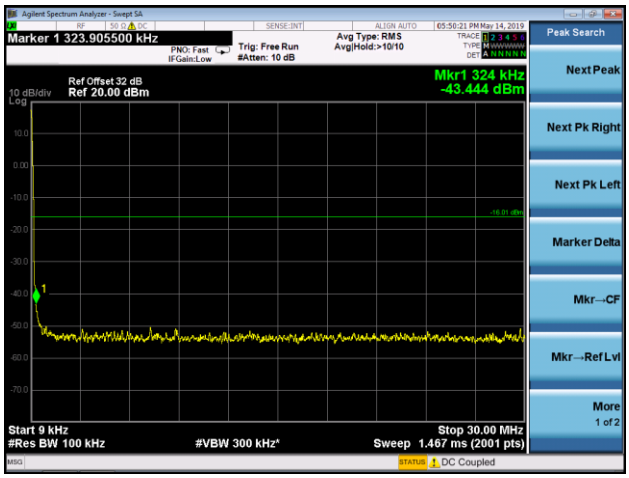
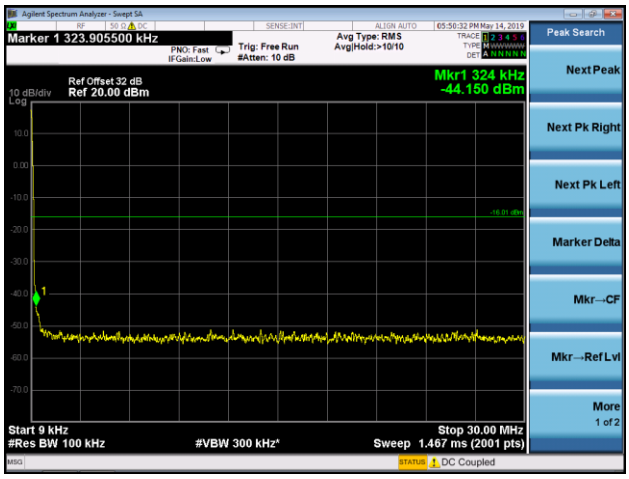
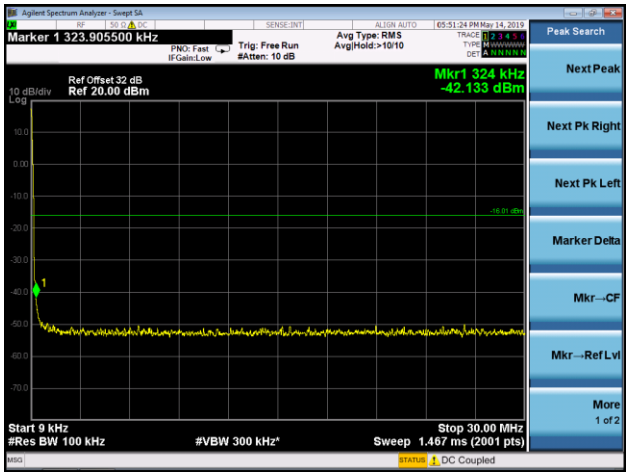
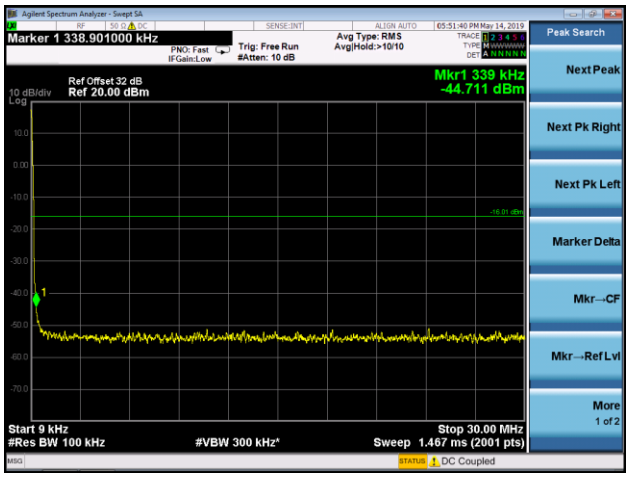
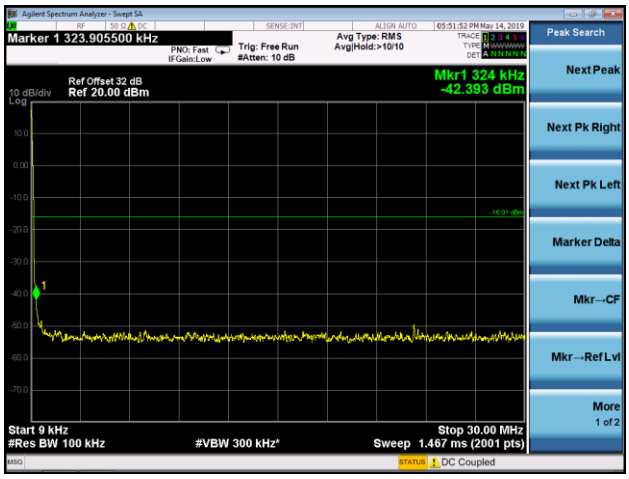
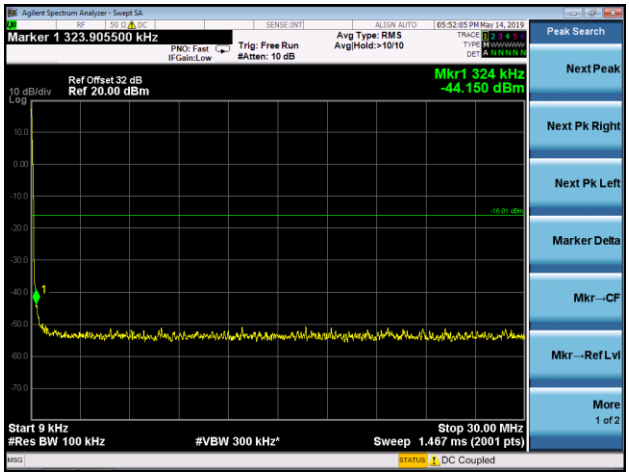
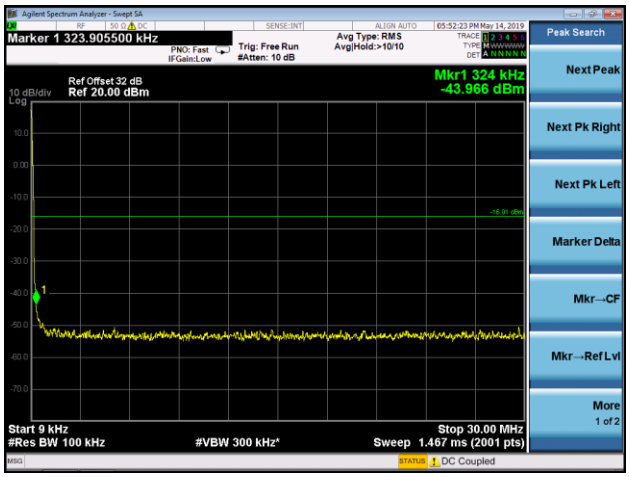
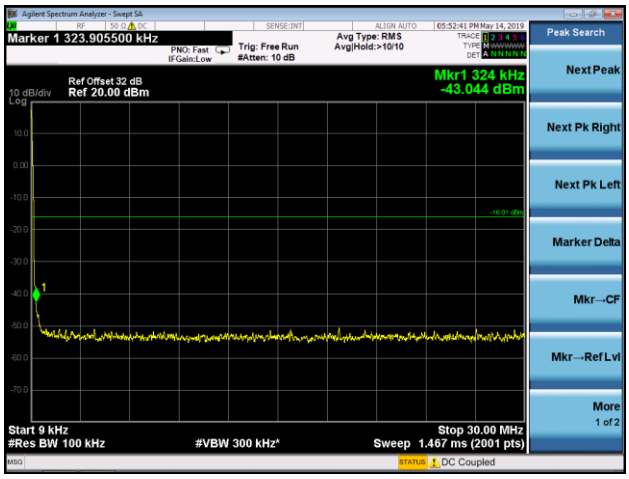
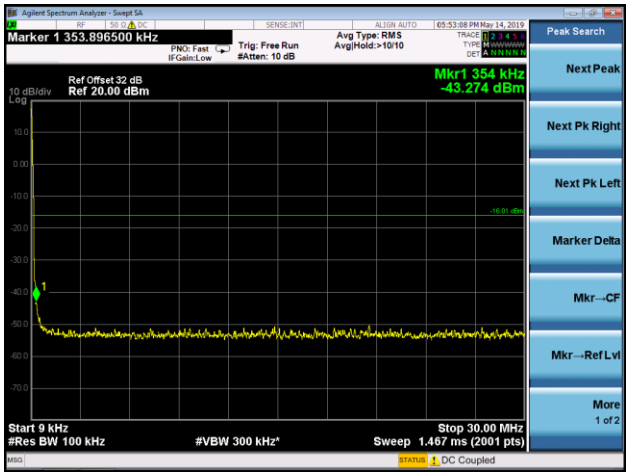
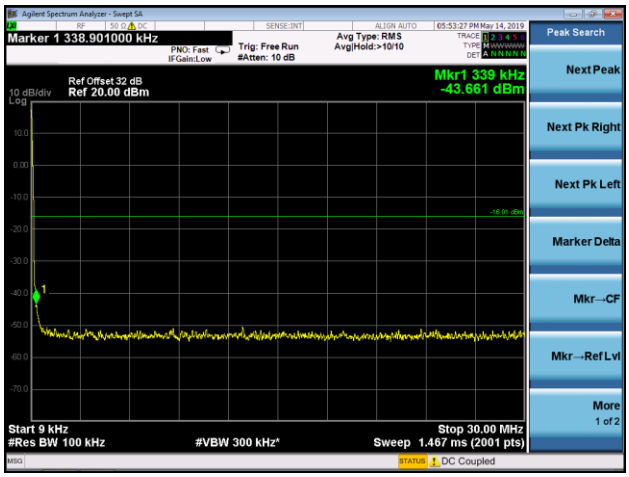
15 + 15MHz Channel Bandwidth	
2117.5MHz + 2132.5MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2130.0MHz + 2145.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2157.5MHz + 2172.5MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	

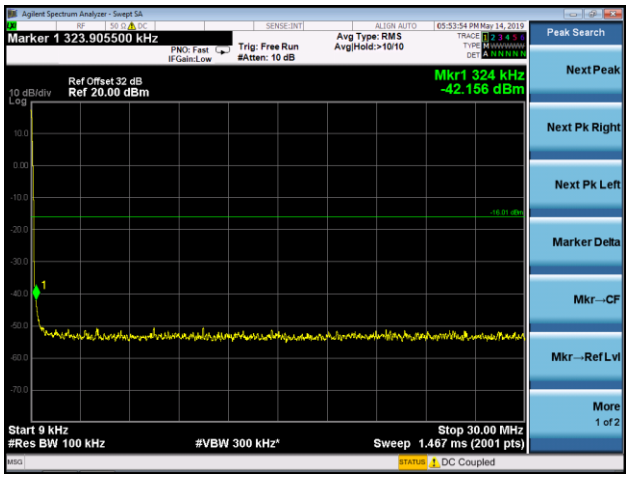
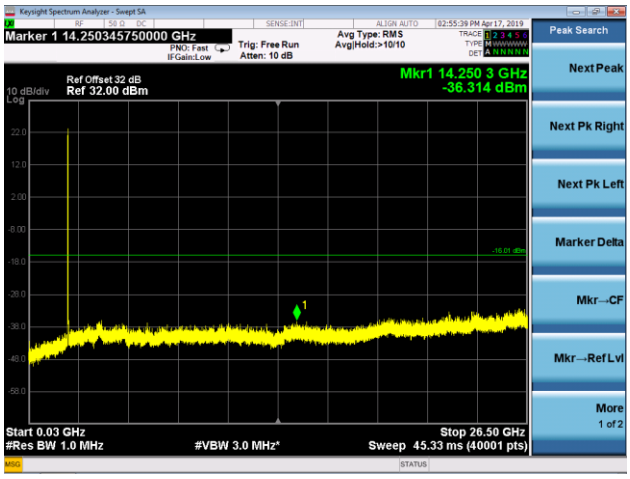
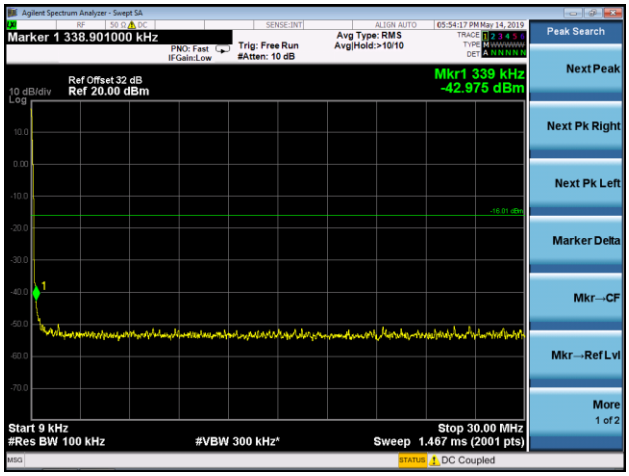
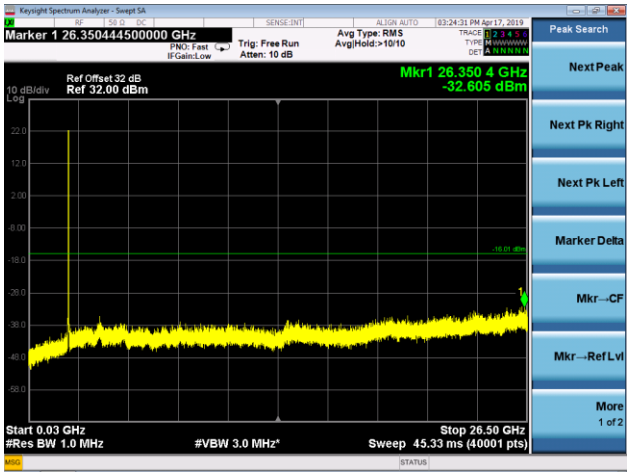
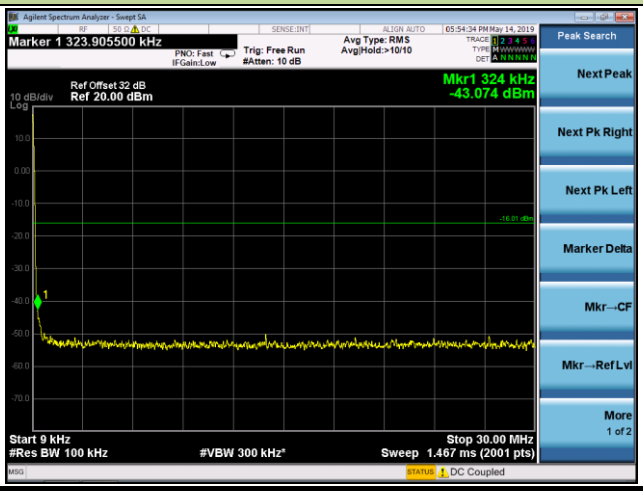
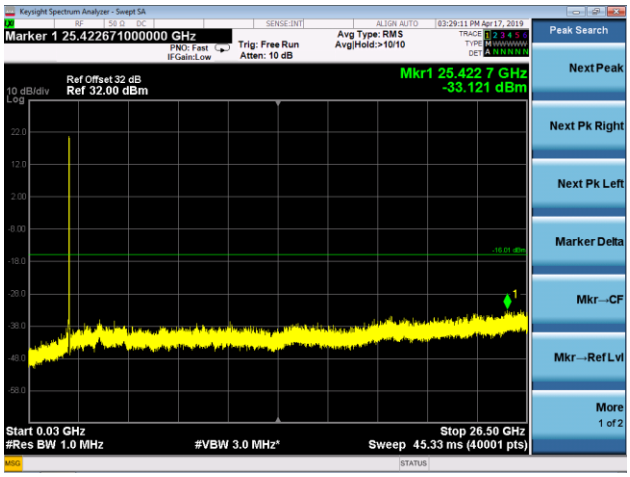
20 + 20MHz Channel Bandwidth	
2120.0MHz + 2140.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2125.0MHz + 2145.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2150.0MHz + 2170.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	

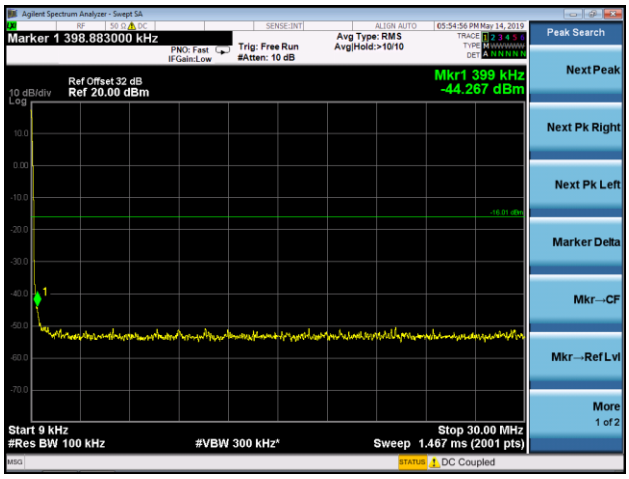
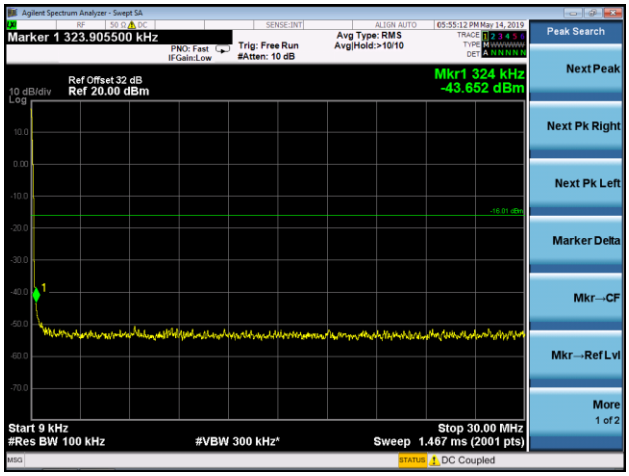
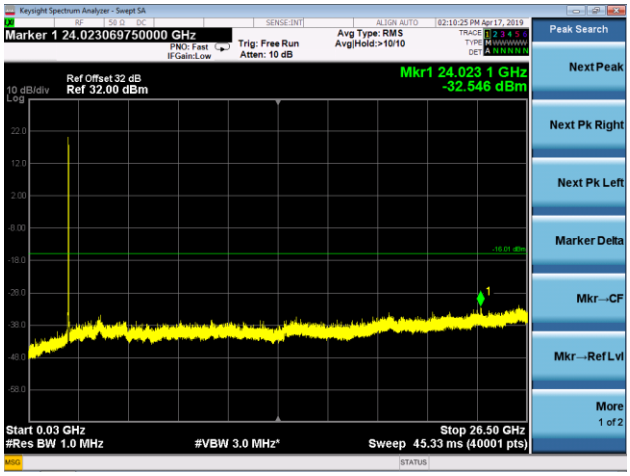
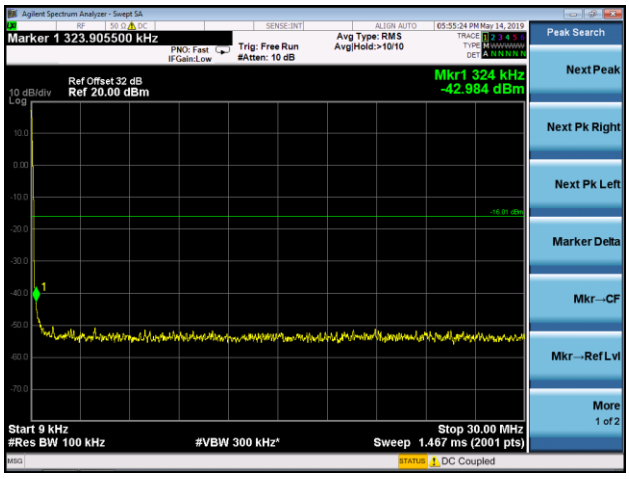
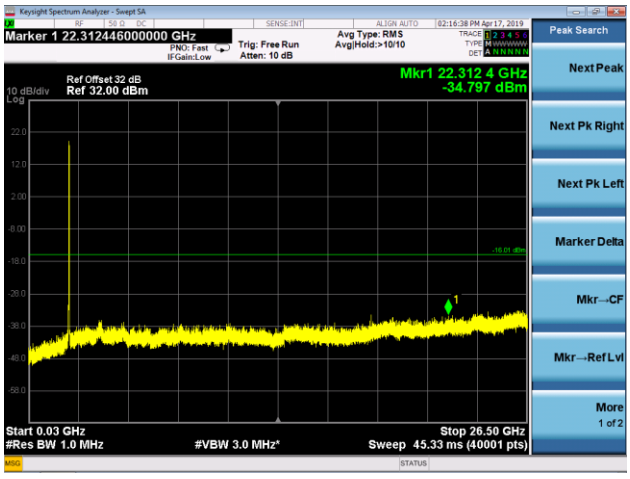
Conducted Spurious Emissions - Ant 1 (QPSK)	
5MHz Channel Bandwidth	
2112.5MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2145.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2177.5MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	

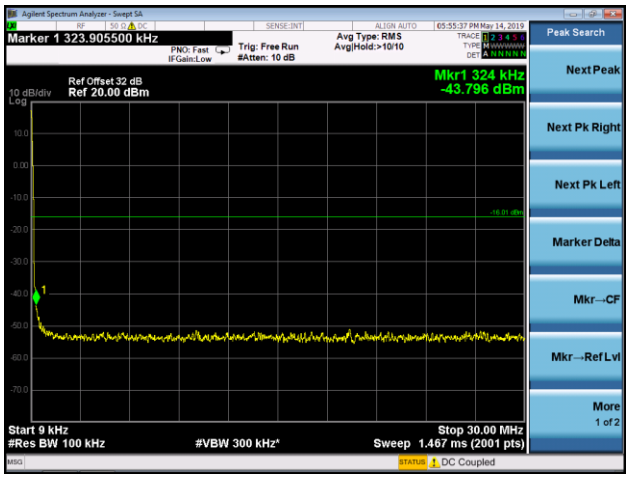
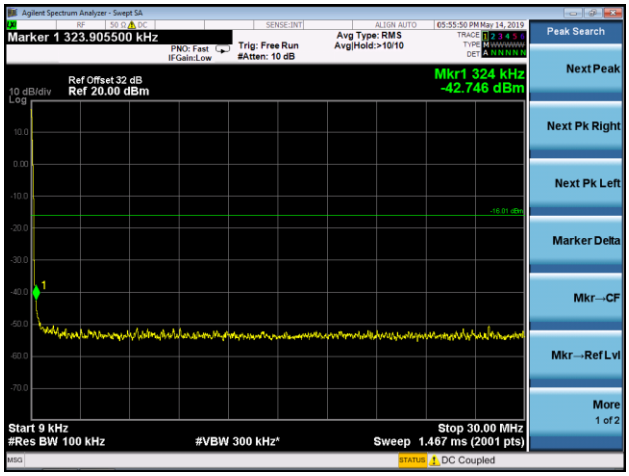
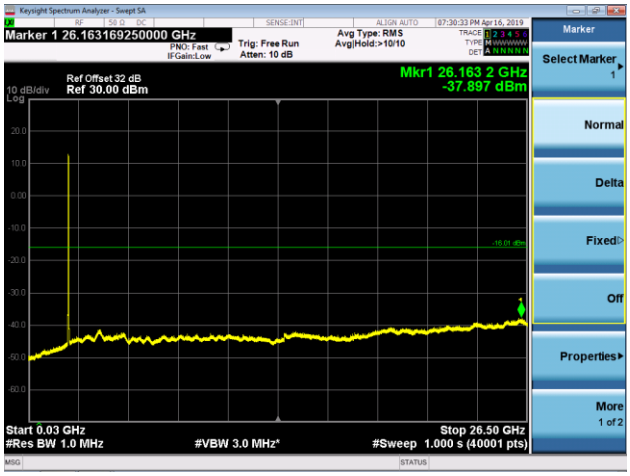
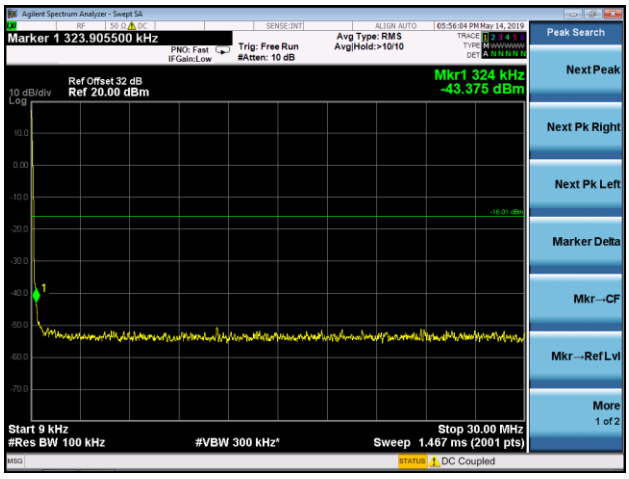
10MHz Channel Bandwidth	
2115.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2145.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2175.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	

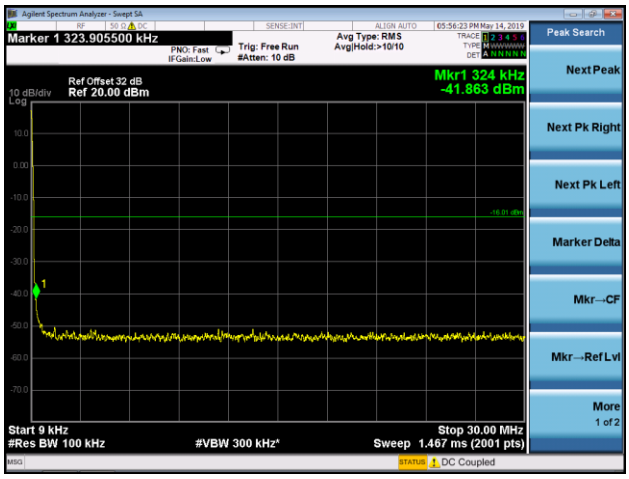
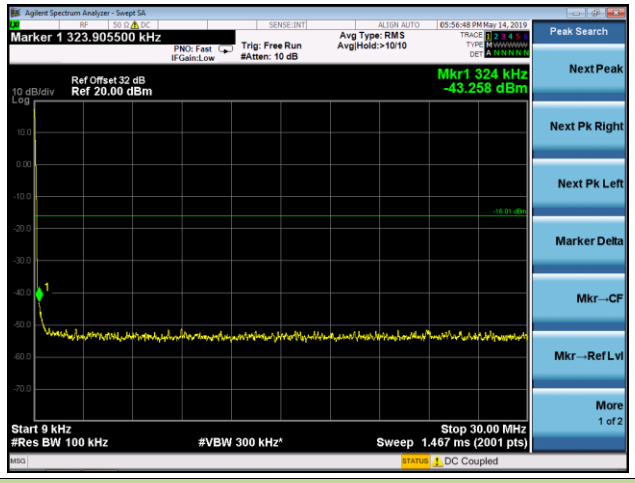
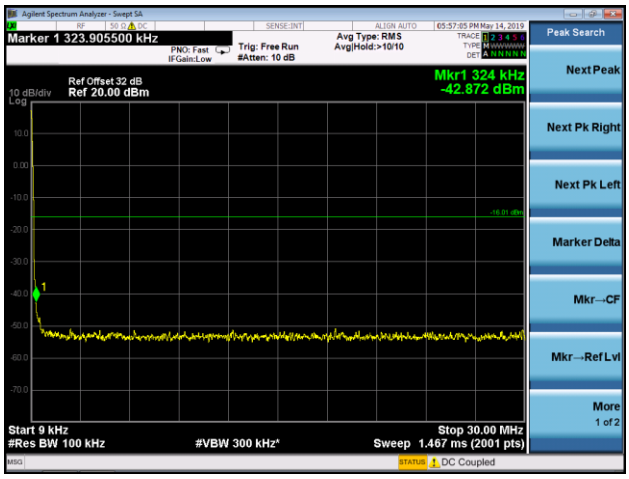
15MHz Channel Bandwidth	
2117.5MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2145.0MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	
2172.5MHz	
9kHz ~ 30MHz	30MHz ~ 26.5GHz
	

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

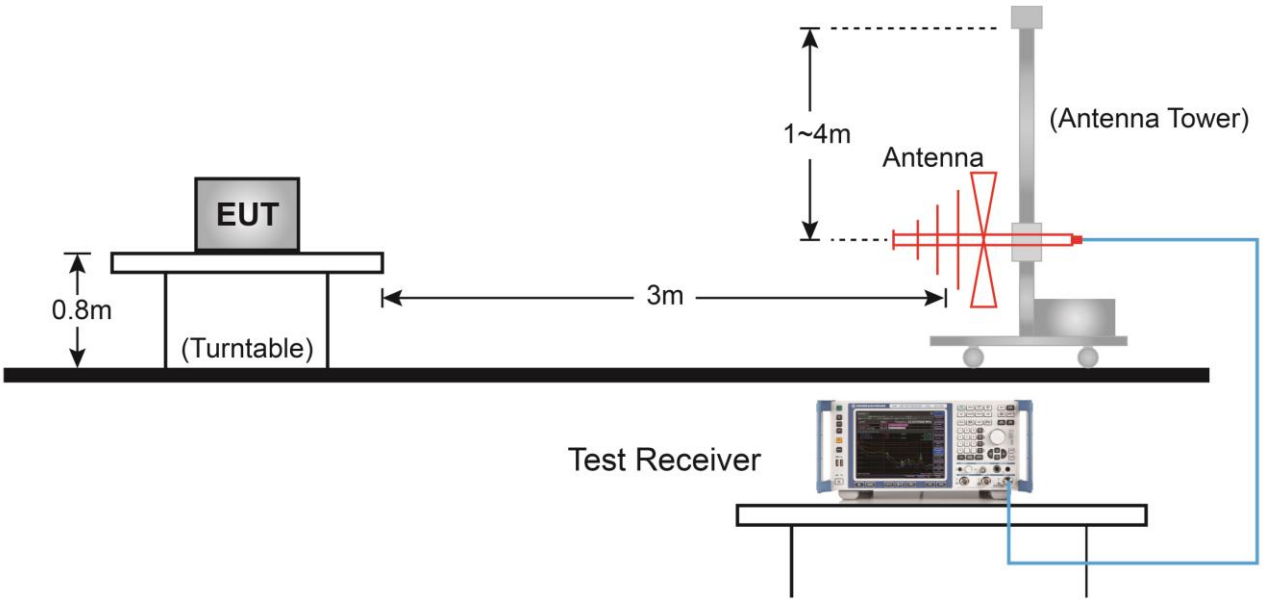
ANSI C63.26-2015 - Section 5.2.7 & 5.5

6.8.3.Test Setting

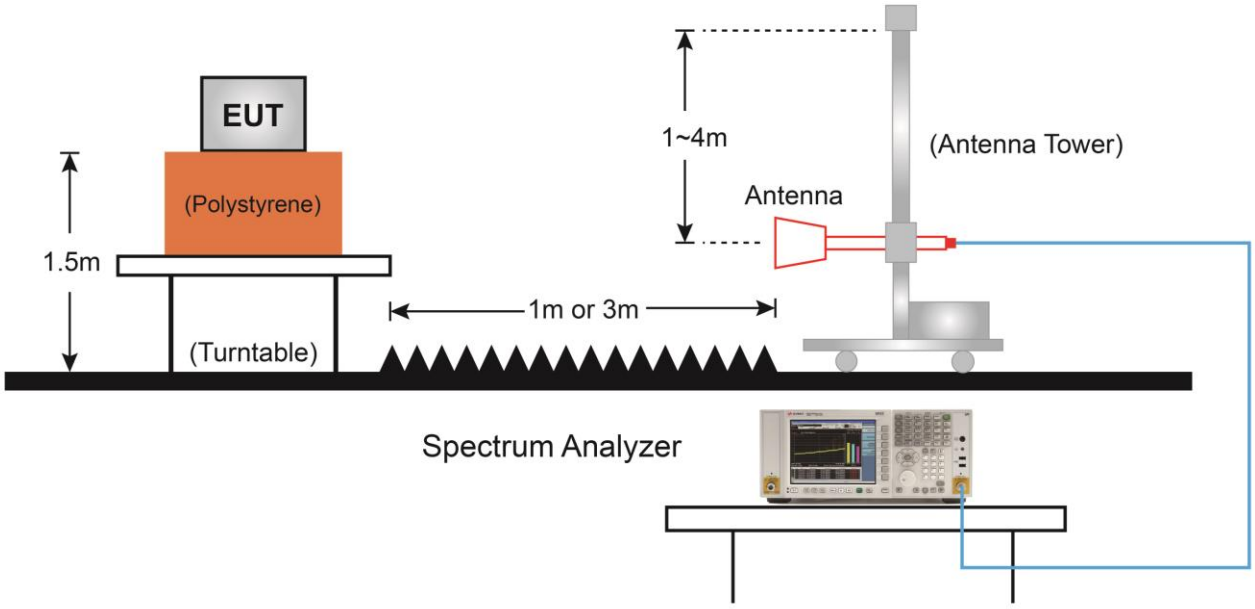
1. RBW = 100kHz or 1MHz
2. VBW ≥ 3*RBW
3. Sweep time ≥ 10 × (number of points in sweep) × (transmission symbol period)
4. Detector = Peak
5. Trace mode = max hold
6. The trace was allowed to stabilize

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)							
142.5	17.2	15.6	32.8	82.3	-49.5	Peak	Horizontal
353.5	13.2	23.4	36.6	82.3	-45.7	Peak	Horizontal
142.0	16.4	15.6	32.0	82.3	-50.3	Peak	Vertical
372.4	12.0	23.6	35.6	82.3	-46.7	Peak	Vertical
7630.0	41.1	12.8	53.9	82.3	-28.4	Peak	Horizontal
10741.0	40.7	18.5	59.2	82.3	-23.1	Peak	Horizontal
8089.0	41.3	13.0	54.3	82.3	-28.0	Peak	Vertical
11208.5	39.7	19.2	58.9	82.3	-23.4	Peak	Vertical
B2 Middle CH 900 (1960.0MHz) & B66 Middle CH 66786 (2145.0MHz)							
143.5	15.7	15.6	31.3	82.3	-51.0	Peak	Horizontal
355.0	13.8	23.4	37.2	82.3	-45.1	Peak	Horizontal
138.2	15.8	15.8	31.6	82.3	-50.7	Peak	Vertical
372.9	12.0	23.6	35.6	82.3	-46.7	Peak	Vertical
8046.5	41.9	13.0	54.9	82.3	-27.4	Peak	Horizontal
10545.5	41.1	18.1	59.2	82.3	-23.1	Peak	Horizontal
8080.5	41.1	13.0	54.1	82.3	-28.2	Peak	Vertical
10112.0	42.0	16.3	58.3	82.3	-24.0	Peak	Vertical
B2 Top CH 1175 (1987.5MHz) & B66 Top CH 67111 (2177.5MHz)							
143.0	16.8	15.6	32.4	82.3	-49.9	Peak	Horizontal
354.0	13.1	23.4	36.5	82.3	-45.8	Peak	Horizontal
144.0	15.8	15.6	31.4	82.3	-50.9	Peak	Vertical
372.9	12.4	23.6	36.0	82.3	-46.3	Peak	Vertical
8021.0	41.9	12.9	54.8	82.3	-27.5	Peak	Horizontal
10596.5	40.5	18.2	58.7	82.3	-23.6	Peak	Horizontal
5377.5	57.0	4.1	61.1	82.3	-21.2	Peak	Vertical
8063.5	45.3	13.0	58.3	82.3	-24.0	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)							
140.1	16.7	15.6	32.3	82.3	-50.0	Peak	Horizontal
355.4	13.5	23.4	36.9	82.3	-45.4	Peak	Horizontal
142.0	16.7	15.6	32.3	82.3	-50.0	Peak	Vertical
379.7	11.9	23.7	35.6	82.3	-46.7	Peak	Vertical
7264.5	41.1	12.0	53.1	82.3	-29.2	Peak	Horizontal
9967.5	39.2	15.7	54.9	82.3	-27.4	Peak	Horizontal
9619.0	42.8	14.9	57.7	82.3	-24.6	Peak	Vertical
10690.0	40.4	18.4	58.8	82.3	-23.5	Peak	Vertical
B2 Middle CH 900 (1960.0MHz) & B66 Middle CH 66786 (2145.0MHz)							
142.5	16.7	15.6	32.3	82.3	-50.0	Peak	Horizontal
355.4	13.2	23.4	36.6	82.3	-45.7	Peak	Horizontal
143.0	16.3	15.6	31.9	82.3	-50.4	Peak	Vertical
374.4	12.3	23.6	35.9	82.3	-46.4	Peak	Vertical
11421.0	39.7	19.2	58.9	82.3	-23.4	Peak	Horizontal
14039.0	41.2	22.1	63.3	82.3	-19.0	Peak	Horizontal
9891.0	41.9	15.5	57.4	82.3	-24.9	Peak	Vertical
11948.0	40.3	18.9	59.2	82.3	-23.1	Peak	Vertical
B2 Top CH 1150 (1985.0MHz) & B66 Top CH 67086 (2175.0MHz)							
142.0	15.4	15.6	31.0	82.3	-51.3	Peak	Horizontal
354.0	13.6	23.4	37.0	82.3	-45.3	Peak	Horizontal
137.7	16.5	15.8	32.3	82.3	-50.0	Peak	Vertical
374.4	12.1	23.6	35.7	82.3	-46.6	Peak	Vertical
8242.0	40.6	13.0	53.6	82.3	-28.7	Peak	Horizontal
10579.5	41.2	18.1	59.3	82.3	-23.0	Peak	Horizontal
5377.5	51.6	4.1	55.7	82.3	-26.6	Peak	Vertical
10894.0	39.9	18.8	58.7	82.3	-23.6	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)							
143.5	16.0	15.6	31.6	82.3	-50.7	Peak	Horizontal
356.9	13.3	23.4	36.7	82.3	-45.6	Peak	Horizontal
137.7	15.6	15.8	31.4	82.3	-50.9	Peak	Vertical
374.4	12.3	23.6	35.9	82.3	-46.4	Peak	Vertical
8097.5	41.2	13.0	54.2	82.3	-28.1	Peak	Horizontal
10911.0	40.7	18.9	59.6	82.3	-22.7	Peak	Horizontal
8242.0	41.9	13.0	54.9	82.3	-27.4	Peak	Vertical
10800.5	40.7	18.6	59.3	82.3	-23.0	Peak	Vertical
B2 Middle CH 900 (1960.0MHz) & B66 Middle CH 66786 (2145.0MHz)							
146.4	16.5	15.7	32.2	82.3	-50.1	Peak	Horizontal
359.3	13.4	23.4	36.8	82.3	-45.5	Peak	Horizontal
138.6	16.7	15.7	32.4	82.3	-49.9	Peak	Vertical
377.7	11.9	23.7	35.6	82.3	-46.7	Peak	Vertical
8004.0	40.4	12.9	53.3	82.3	-29.0	Peak	Horizontal
10732.5	40.4	18.5	58.9	82.3	-23.4	Peak	Horizontal
8199.5	40.7	13.0	53.7	82.3	-28.6	Peak	Vertical
10877.0	39.8	18.8	58.6	82.3	-23.7	Peak	Vertical
B2 Top CH 1115 (1982.5MHz) & B66 Top CH 67061 (2172.5MHz)							
144.9	16.4	15.7	32.1	82.3	-50.2	Peak	Horizontal
355.4	13.6	23.4	37.0	82.3	-45.3	Peak	Horizontal
142.5	15.8	15.6	31.4	82.3	-50.9	Peak	Vertical
366.6	10.5	23.5	34.0	82.3	-48.3	Peak	Vertical
8080.5	41.2	13.0	54.2	82.3	-28.1	Peak	Horizontal
10163.0	41.6	16.5	58.1	82.3	-24.2	Peak	Horizontal
5369.0	50.4	4.1	54.5	82.3	-27.8	Peak	Vertical
10953.5	40.4	19.0	59.4	82.3	-22.9	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_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)							
145.9	14.6	15.7	30.3	82.3	-52.0	Peak	Horizontal
379.7	13.4	23.7	37.1	82.3	-45.2	Peak	Horizontal
139.1	15.0	15.7	30.7	82.3	-51.6	Peak	Vertical
374.8	13.0	23.6	36.6	82.3	-45.7	Peak	Vertical
8029.5	40.8	12.9	53.7	82.3	-28.6	Peak	Horizontal
10137.5	41.4	16.4	57.8	82.3	-24.5	Peak	Horizontal
7647.0	42.1	12.8	54.9	82.3	-27.4	Peak	Vertical
10664.5	40.5	18.3	58.8	82.3	-23.5	Peak	Vertical
B2 Middle CH 900 (1960.0MHz) & B66 Middle CH 66786 (2145.0MHz)							
141.1	14.4	15.6	30.0	82.3	-52.3	Peak	Horizontal
372.4	14.0	23.6	37.6	82.3	-44.7	Peak	Horizontal
138.2	16.4	15.8	32.2	82.3	-50.1	Peak	Vertical
375.3	12.3	23.6	35.9	82.3	-46.4	Peak	Vertical
7213.5	41.1	11.9	53.0	82.3	-29.3	Peak	Horizontal
10868.5	40.9	18.8	59.7	82.3	-22.6	Peak	Horizontal
7290.0	40.6	12.1	52.7	82.3	-29.6	Peak	Vertical
11132.0	39.8	19.1	58.9	82.3	-23.4	Peak	Vertical
B2 Top CH 1100 (1980.0MHz) & B66 Top CH 67036 (2170.0MHz)							
139.6	15.9	15.7	31.6	82.3	-50.7	Peak	Horizontal
359.8	15.6	23.5	39.1	82.3	-43.2	Peak	Horizontal
137.7	15.9	15.8	31.7	82.3	-50.6	Peak	Vertical
379.7	13.3	23.7	37.0	82.3	-45.3	Peak	Vertical
9780.5	41.9	15.3	57.2	82.3	-25.1	Peak	Horizontal
10715.5	38.6	18.4	57.0	82.3	-25.3	Peak	Horizontal
5360.5	47.4	4.1	51.5	82.3	-30.8	Peak	Vertical
10894.0	39.9	18.8	58.7	82.3	-23.6	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)							
144.0	15.3	15.6	30.9	82.3	-51.4	Peak	Horizontal
329.2	8.7	22.5	31.2	82.3	-51.1	Peak	Horizontal
174.0	6.1	25.5	31.6	82.3	-50.7	Peak	Vertical
447.6	4.2	26.3	30.5	82.3	-51.8	Peak	Vertical
7145.5	36.3	11.7	48.0	82.3	-34.3	Peak	Horizontal
10860.0	35.0	18.8	53.8	82.3	-28.5	Peak	Horizontal
7443.0	36.3	12.6	48.9	82.3	-33.4	Peak	Vertical
9134.5	36.2	14.4	50.6	82.3	-31.7	Peak	Vertical
B2 Top CH 900 + 1100 (1960.0 + 1980.0MHz) & B66 Middle CH 66586 + 66786 (2125.0 + 2145.0MHz)							
138.2	13.9	15.8	29.7	82.3	-52.6	Peak	Horizontal
390.4	3.7	23.8	27.5	82.3	-54.8	Peak	Horizontal
186.2	11.1	18.0	29.1	82.3	-53.2	Peak	Vertical
381.1	6.7	23.7	30.4	82.3	-51.9	Peak	Vertical
4255.5	43.2	1.6	44.8	82.3	-37.5	Peak	Horizontal
8140.0	36.5	13.0	49.5	82.3	-32.8	Peak	Horizontal
4264.0	44.4	1.7	46.1	82.3	-36.2	Peak	Vertical
7834.0	35.9	12.9	48.8	82.3	-33.5	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)							
137.7	16.9	15.8	32.7	82.3	-49.6	Peak	Horizontal
375.3	11.4	23.6	35.0	82.3	-47.3	Peak	Horizontal
146.4	15.6	15.7	31.3	82.3	-51.0	Peak	Vertical
176.0	14.5	16.8	31.3	82.3	-51.0	Peak	Vertical
7970.0	36.3	12.9	49.2	82.3	-33.1	Peak	Horizontal
11599.5	41.3	19.2	60.5	82.3	-21.8	Peak	Horizontal
7341.0	36.8	12.3	49.1	82.3	-33.2	Peak	Vertical
11599.5	35.6	19.2	54.8	82.3	-27.5	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: 2AD8UAHFIH01** is in compliance with FCC Rules.

The End