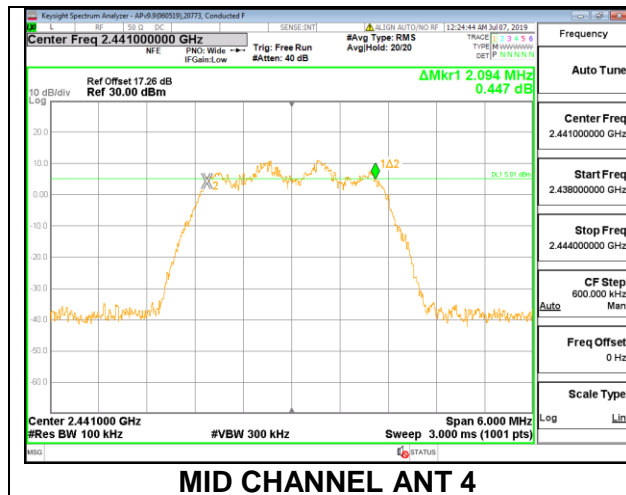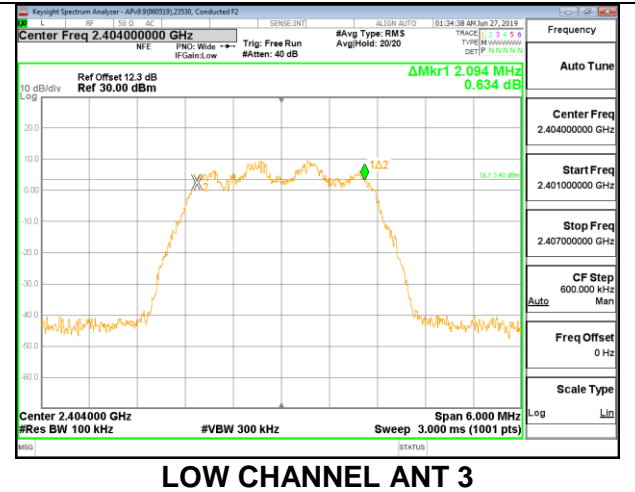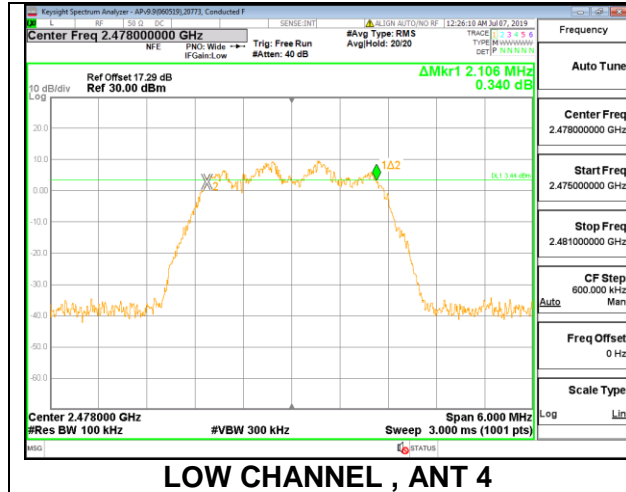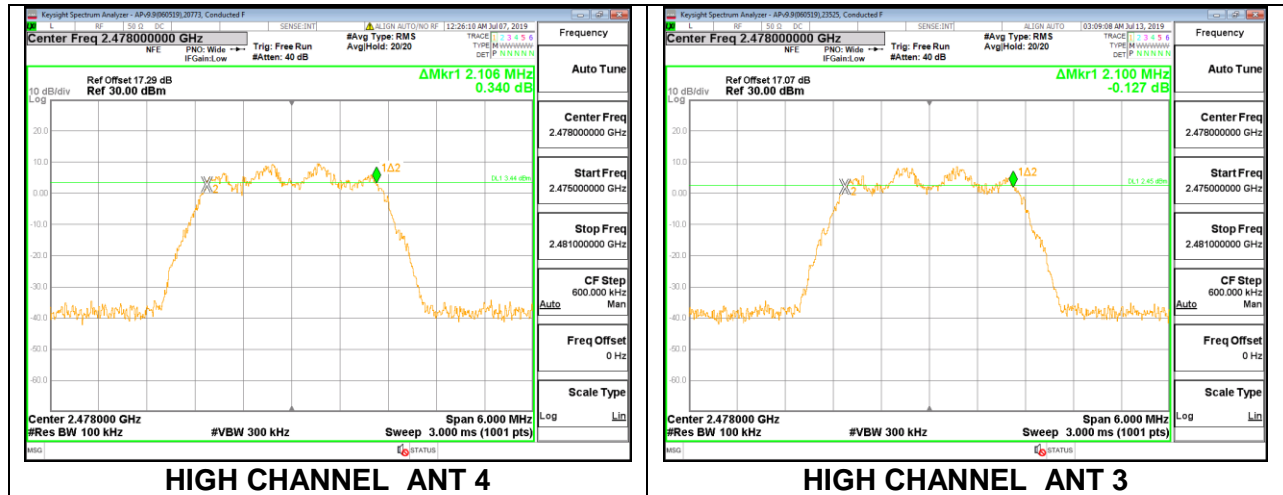## 8.11. BEAMFORMING, 6dB BANDWIDTH

8.11.1. HDR4, HIGH POWER BLE

Channel	Frequency (MHz)	6dB Bandwidth ANT 4 (MHz)	6dB Bandwidth ANT 3 (MHz)
Low	2404	2.088	2.094
Mid	2441	2.094	2.118
High	2478	2.106	2.100
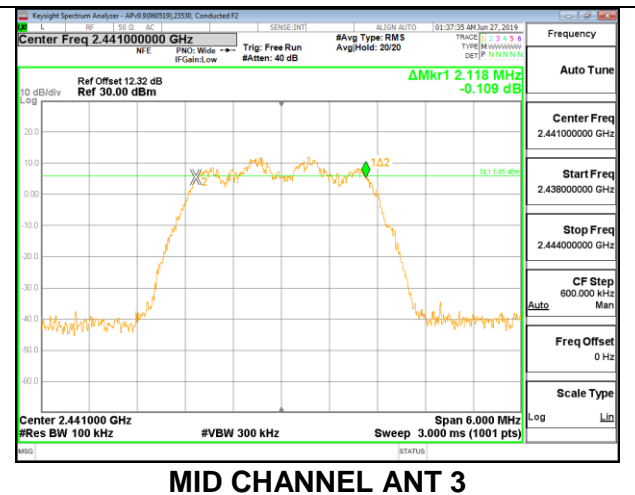
LOW CHANNEL , ANT 4

LOW CHANNEL ANT 3

MID CHANNEL ANT 4

MID CHANNEL ANT 3

HIGH CHANNEL ANT 4	HIGH CHANNEL ANT 3

Note: Test procedures and setting on beamforming are same as HDR normal mode

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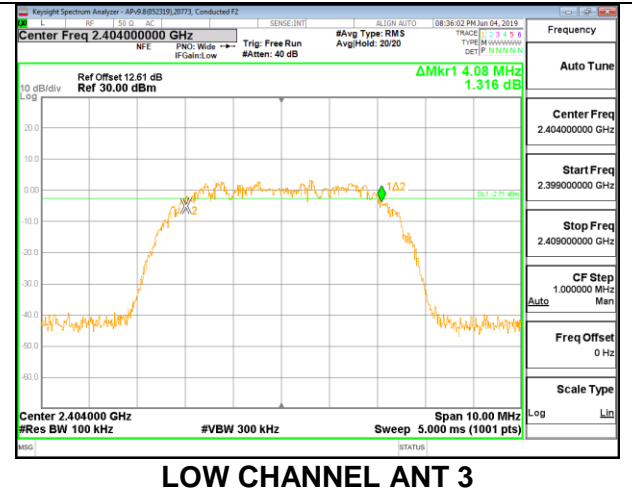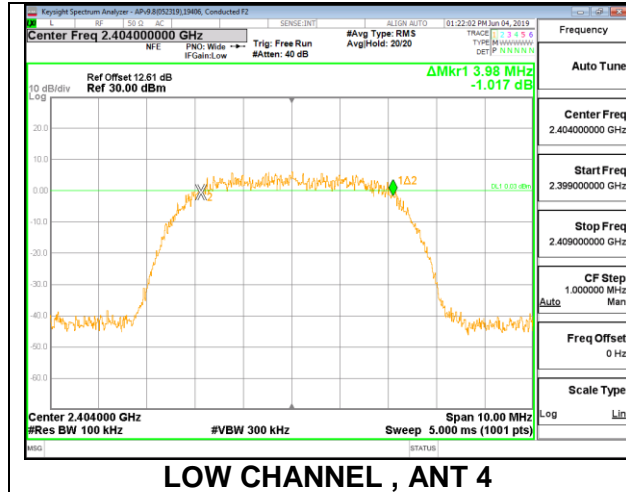47173 Benicia Street, Fremont, CA 94538; USA   TEL:(510) 319-4000   FAX:(510) 661-0888
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8.11.2. HDR8, HIGH POWER BLE

Channel	Frequency (MHz)	6dB Bandwidth ANT 4 (MHz)	6dB Bandwidth ANT 3 (MHz)
Low	2404	3.980	4.080
Mid	2441	3.910	4.100
High	2478	3.920	4.040

LOW CHANNEL , ANT 4

LOW CHANNEL ANT 3

MID CHANNEL ANT 4

MID CHANNEL ANT 3

HIGH CHANNEL ANT 4

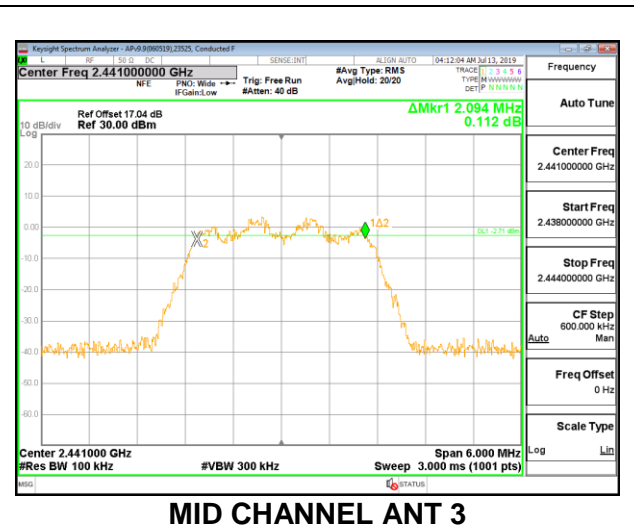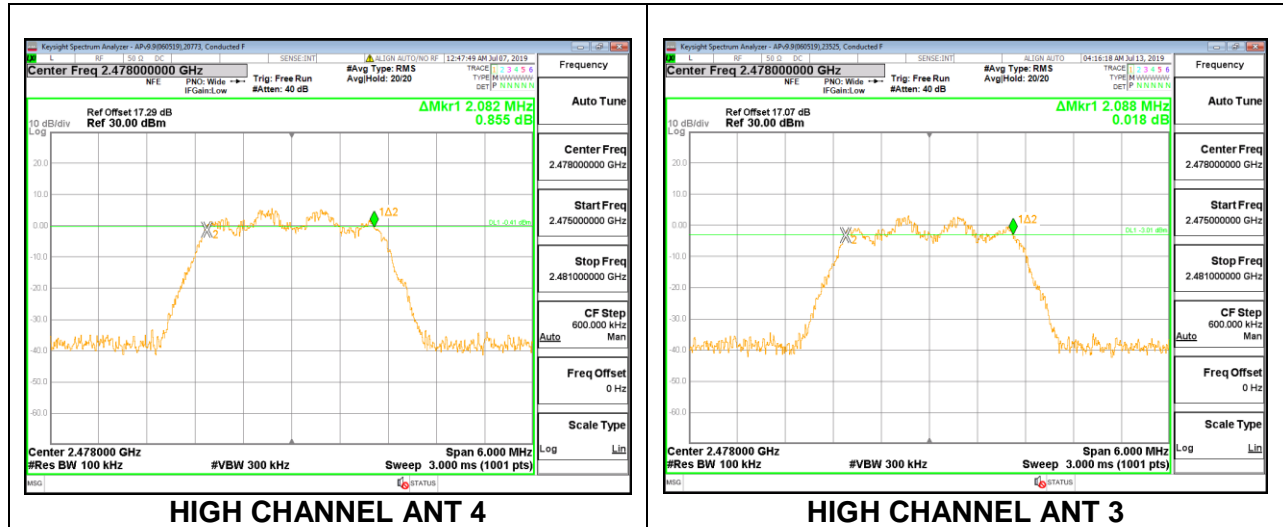

HIGH CHANNEL ANT 3
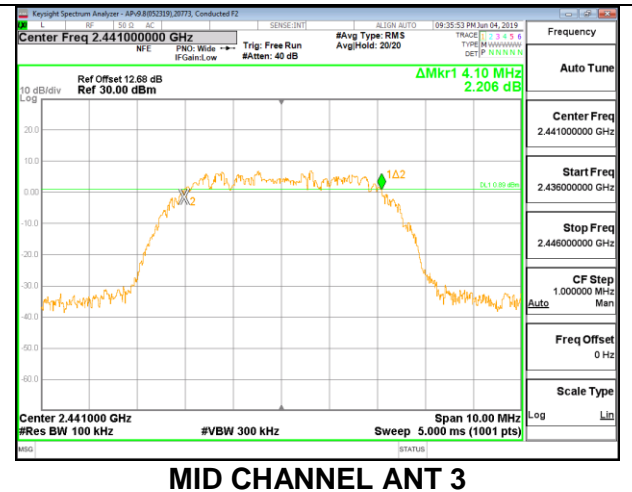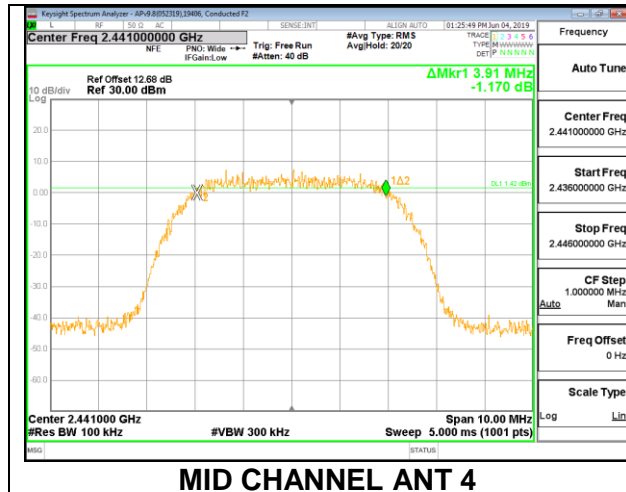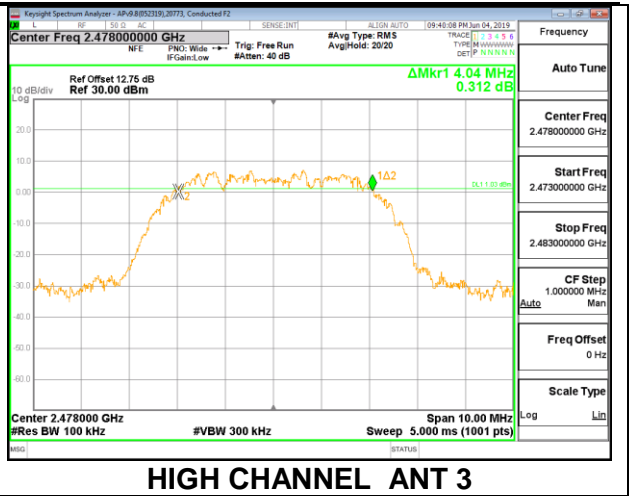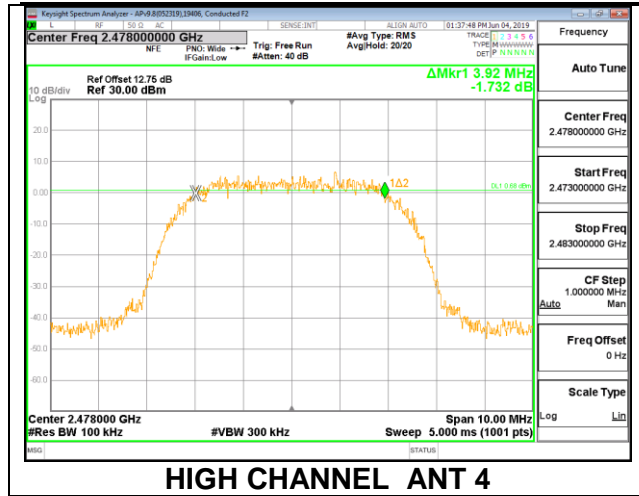
8.11.3. HDR4, LOW POWER BLE

Channel	Frequency (MHz)	6dB Bandwidth ANT 4 (MHz)	6dB Bandwidth ANT 3 (MHz)
Low	2404	2.100	2.100
Mid	2441	2.100	2.094
High	2478	2.082	2.088

LOW CHANNEL ANT 4

LOW CHANNEL ANT 3

MID CHANNEL ANT 4

MID CHANNEL ANT 3

HIGH CHANNEL ANT 4	HIGH CHANNEL ANT 3

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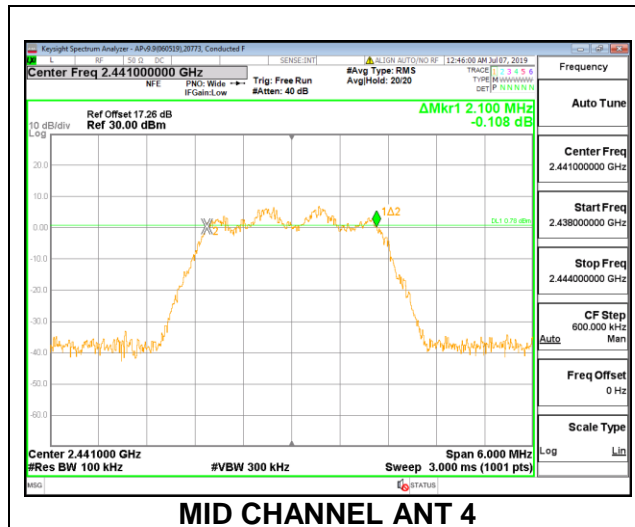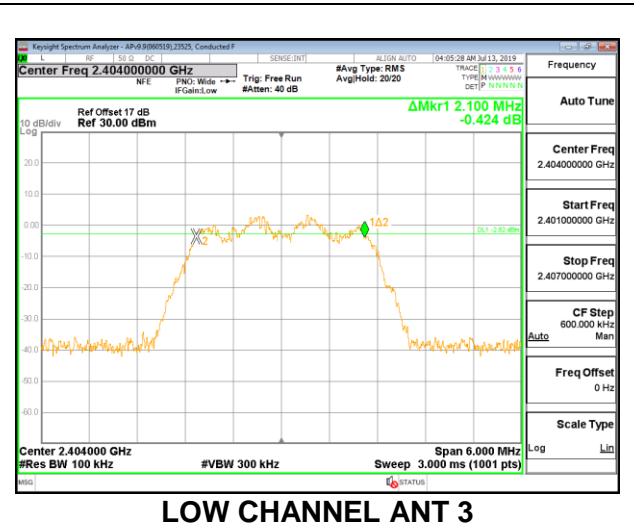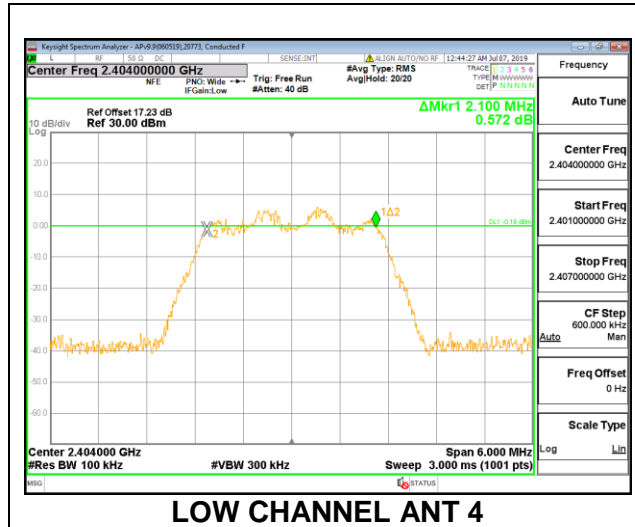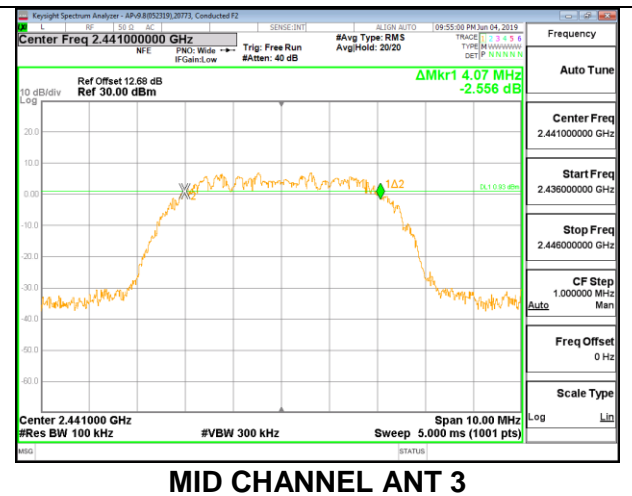
8.11.4. HDR8, LOW POWER BLE

Channel	Frequency (MHz)	6dB Bandwidth ANT 4 (MHz)	6dB Bandwidth ANT 3 (MHz)
Low	2404	4.070	4.080
Mid	2441	4.080	4.070
High	2478	4.070	4.070

LOW CHANNEL ANT 4

LOW CHANNEL ANT 3

MID CHANNEL ANT 4

MID CHANNEL ANT 3

HIGH CHANNEL ANT 4

HIGH CHANNEL ANT 3

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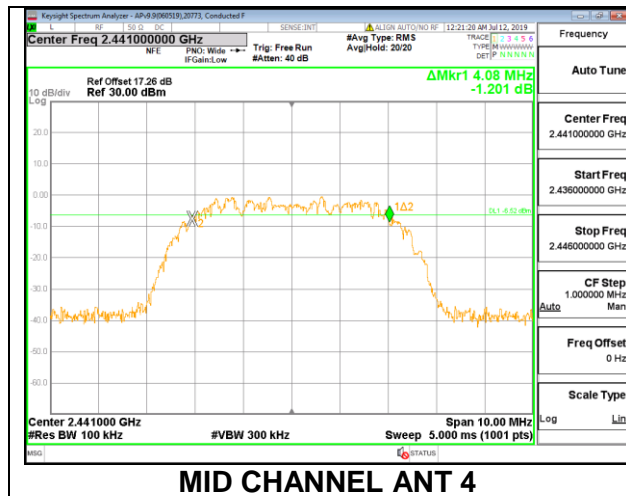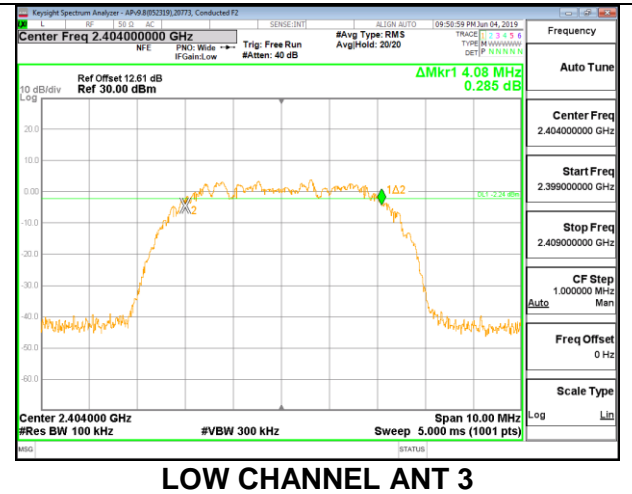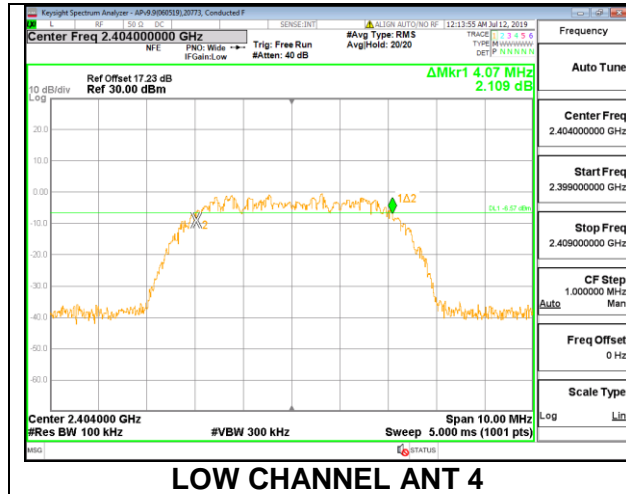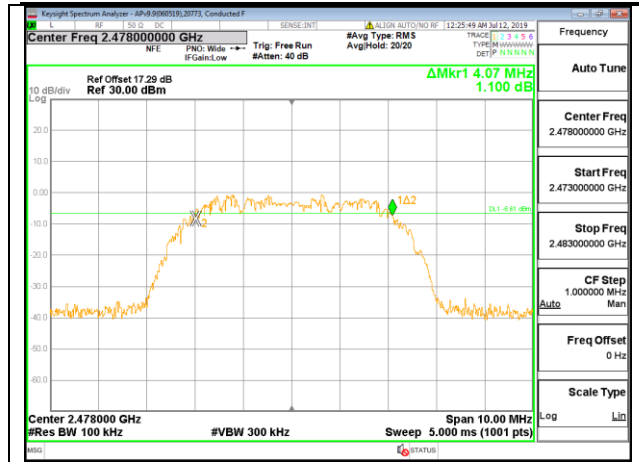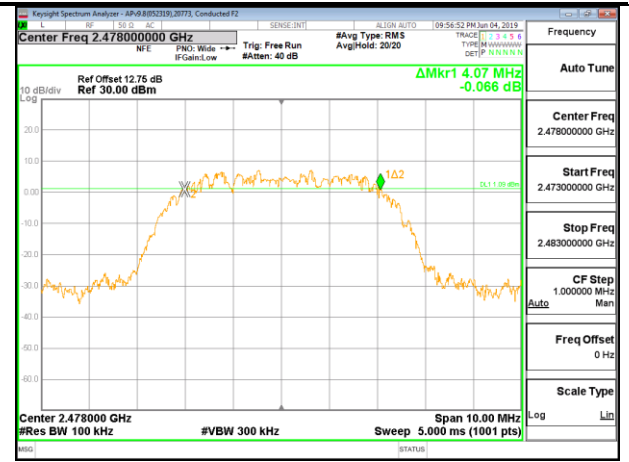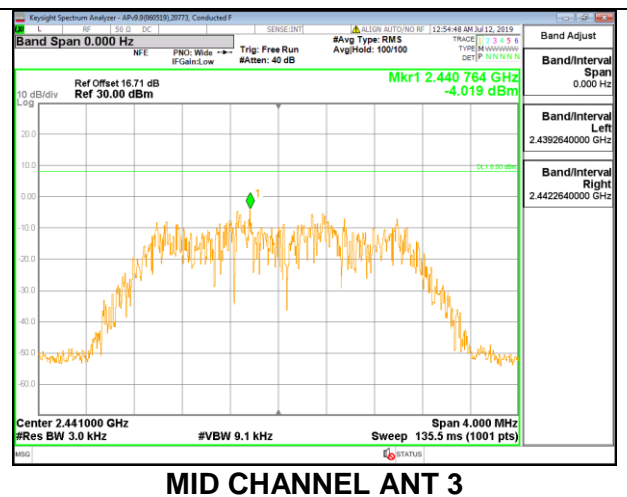
8.12. BEAMFORMING, POWER SPECTRAL DENSITY

8.12.1. HDR4, HIGH POWER BLE

Duty Cycle CF (dB)		Included in Calculations of Corr'd PSD				

PSD Results

Channel	Frequency (MHz)	ANT 4 Meas (dBm/ 3kHz)	ANT 3 Meas (dBm/ 3kHz)	Total Corr'd PSD (dBm/ 3kHz)	Limit (dBm/ 3kHz)	Margin (dB)
Low	2404	-3.98	-4.17	-1.06	8.0	-9.1
Mid	2441	-3.83	-4.02	-0.92	8.0	-8.9
Hjigh	2478	-4.12	-3.92	-1.01	8.0	-9.0

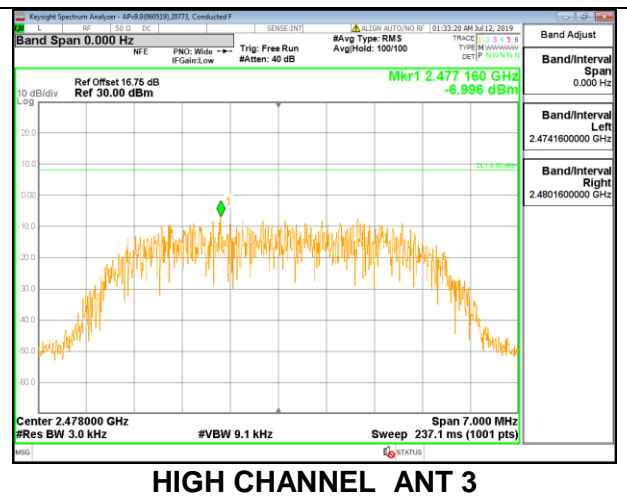Note: Test procedures and setting on beamforming are same as HDR normal mode
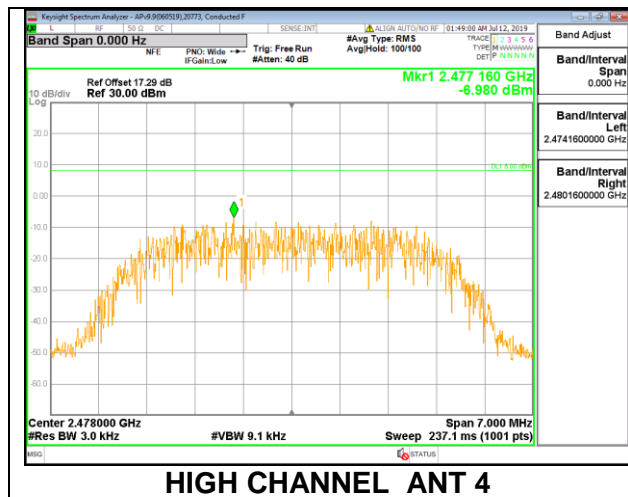
LOW CHANNEL ANT 4

LOW CHANNEL ANT 3

MID CHANNEL ANT 4
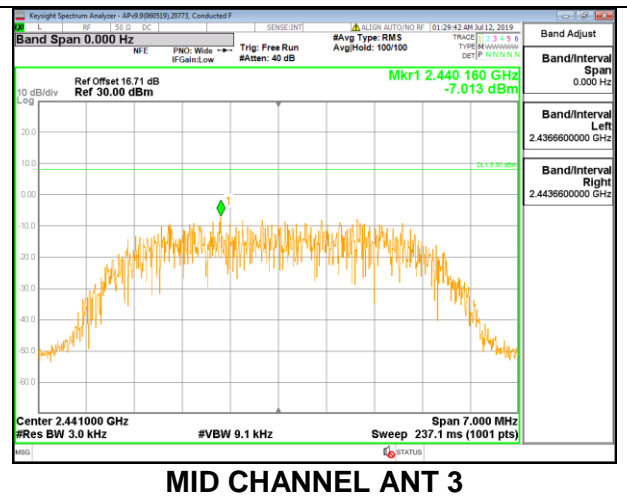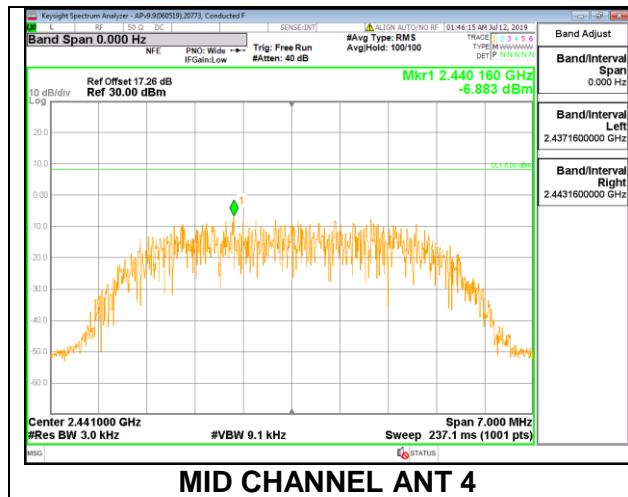
MID CHANNEL ANT 3

HIGH CHANNEL ANT 4

HIGH CHANNEL ANT 3
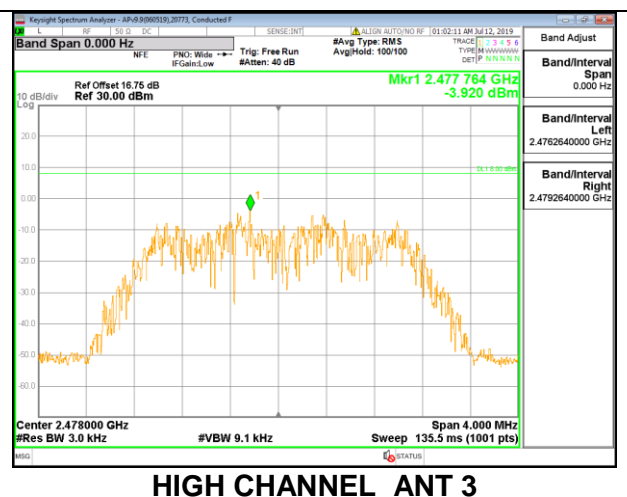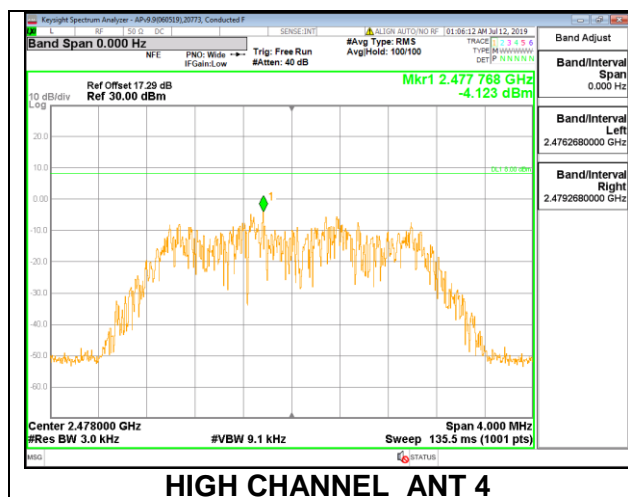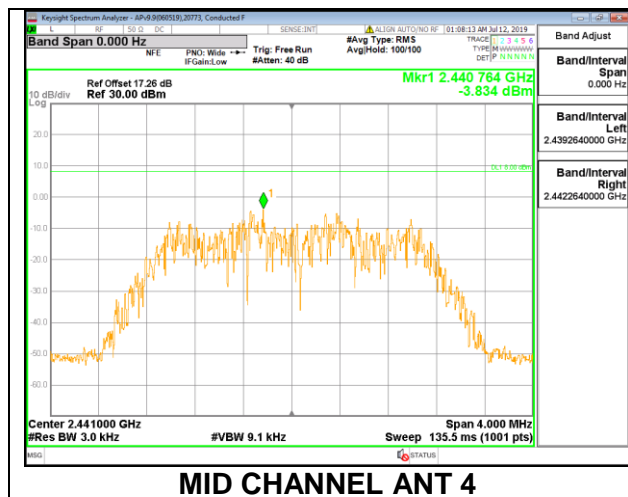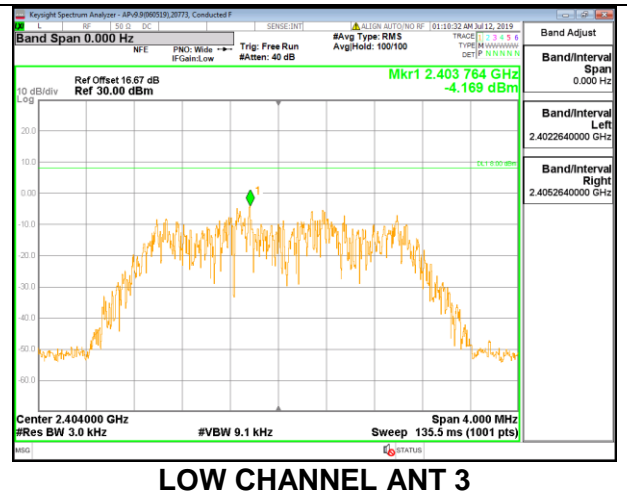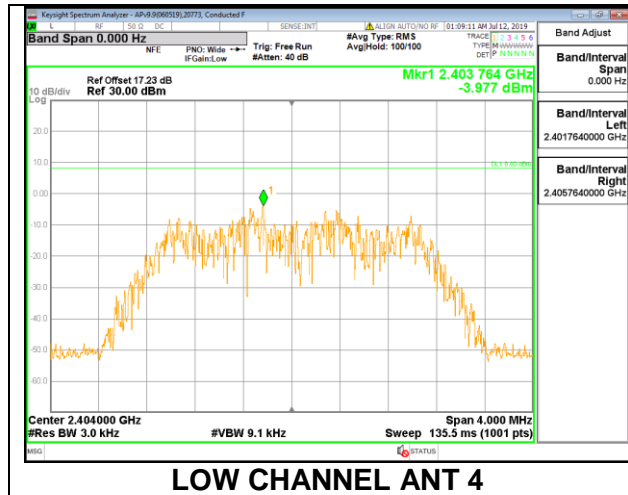
8.12.2. **HDR8, HIGH POWER BLE**

| Duty Cycle CF (dB) | | Included in Calculations of Corr'd PSD | | | |

PSD Results

Channel	Frequency (MHz)	ANT 4 Meas (dBm/ 3kHz)	ANT 3 Meas (dBm/ 3kHz)	Total Corr'd PSD (dBm/ 3kHz)	Limit (dBm/ 3kHz)	Margin (dB)
Low	2404	-6.95	-6.84	-3.89	8.0	-11.9
Mid	2441	-6.88	-7.01	-3.94	8.0	-11.9
Hjigh	2478	-6.98	-7.00	-3.98	8.0	-12.0

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LOW CHANNEL , ANT 4

LOW CHANNEL ANT 3

MID CHANNEL ANT 4

MID CHANNEL ANT 3
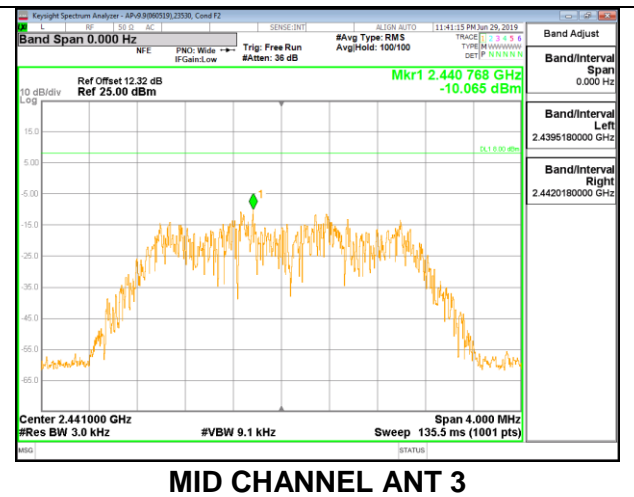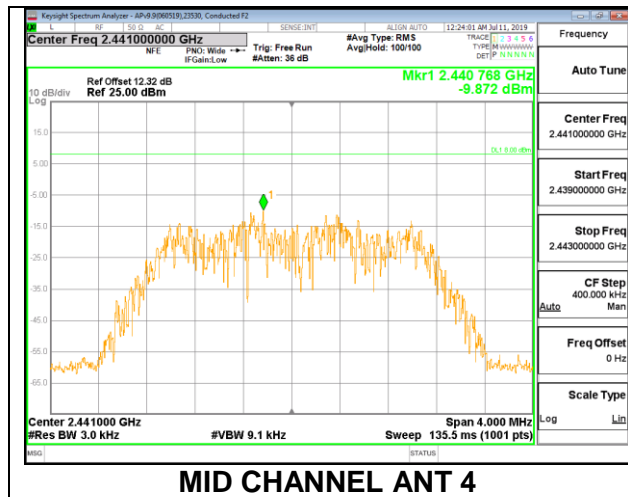

HIGH CHANNEL ANT 4

HIGH CHANNEL ANT 3
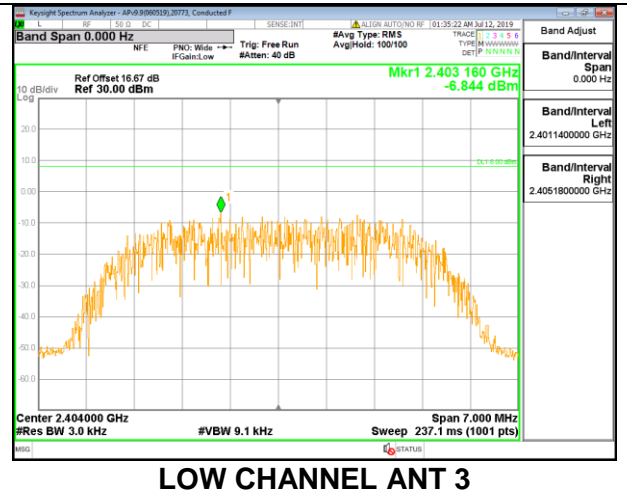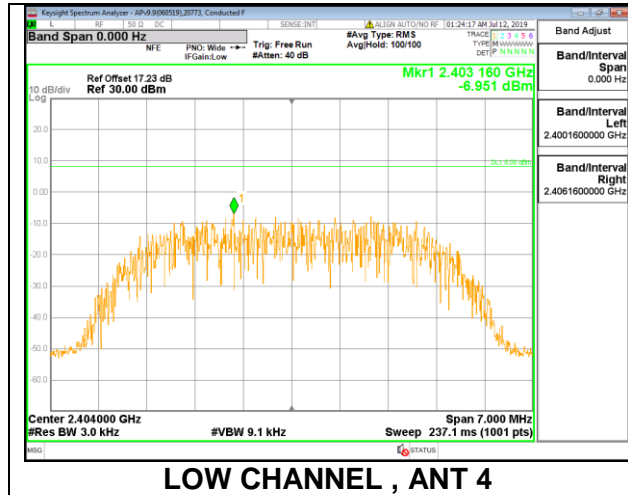
8.12.3. HDR4, LOW POWER BLE

Duty Cycle CF (dB)		Included in Calculations of Corr'd PSD				

PSD Results

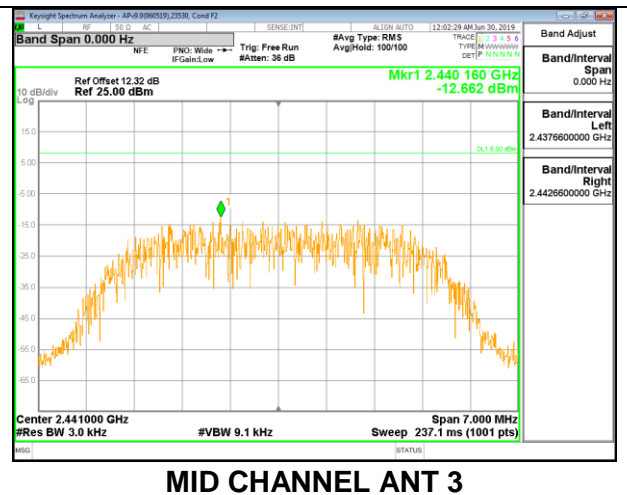| Channel	Frequency (MHz)	ANT 4 Meas (dBm/ 3kHz)	ANT 3 Meas (dBm/ 3kHz)	Total Corr'd PSD (dBm/ 3kHz)	Limit (dBm/ 3kHz)	Margin (dB)
Low	2404	-9.83	-9.89	-6.85	8.0	-14.9
Mid	2441	-9.87	-10.07	-6.96	8.0	-15.0
Hjigh	2478	-9.89	-10.15	-7.01	8.0	-15.0

LOW CHANNEL , ANT 4

LOW CHANNEL ANT 3

MID CHANNEL ANT 4

MID CHANNEL ANT 3

HIGH CHANNEL ANT 4

HIGH CHANNEL ANT 3

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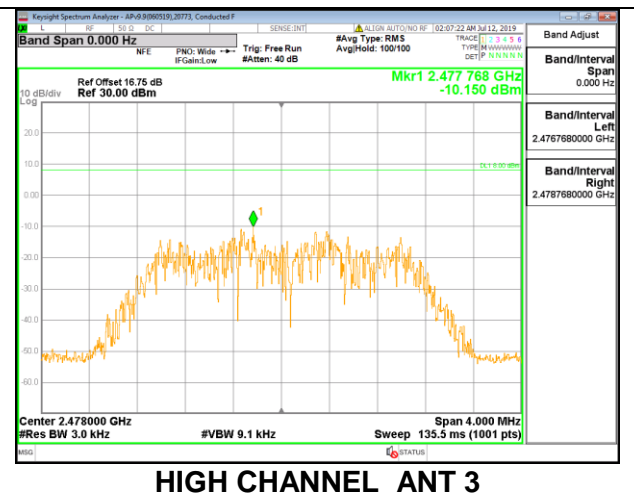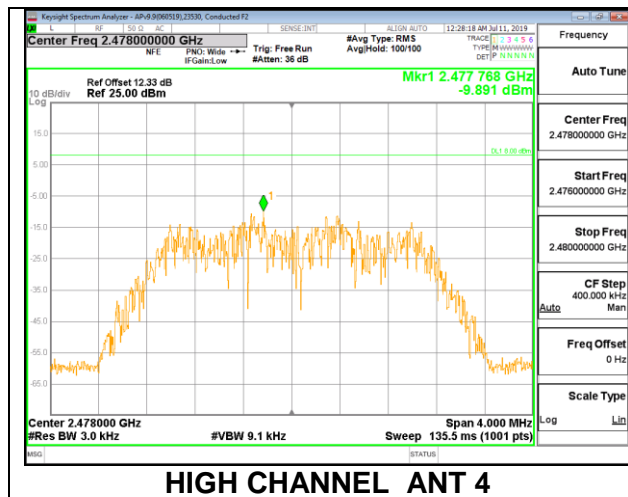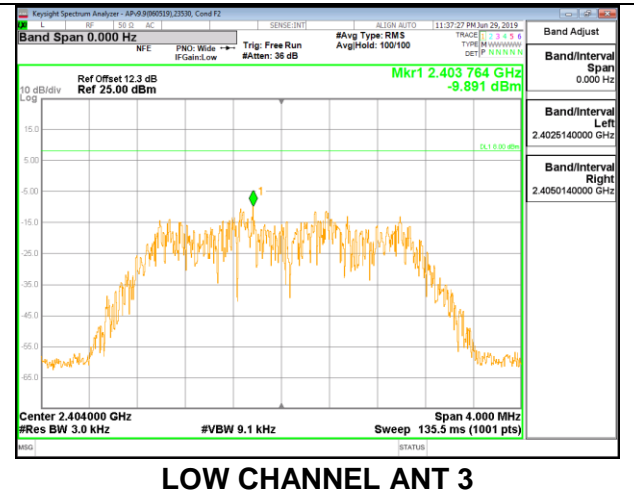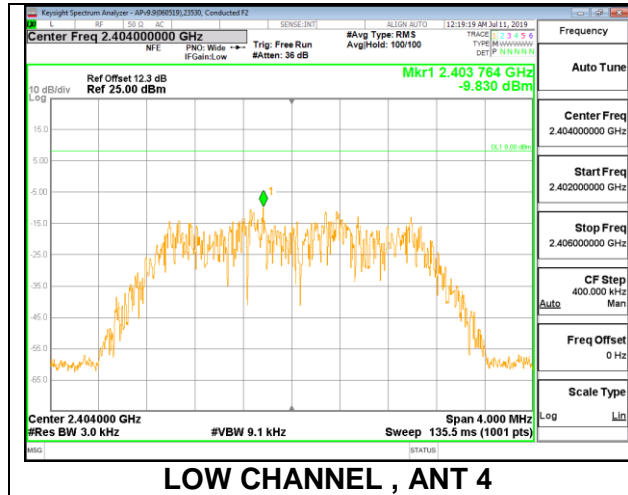
8.12.4. HDR8, LOW POWER BLE

Duty Cycle CF (dB)		Included in Calculations of Corr'd PSD				

PSD Results

Channel	Frequency (MHz)	ANT 4 Meas (dBm/ 3kHz)	ANT 3 Meas (dBm/ 3kHz)	Total Corr'd PSD (dBm/ 3kHz)	Limit (dBm/ 3kHz)	Margin (dB)
Low	2404	-12.70	-12.67	-9.67	8.0	-17.7
Mid	2441	-12.53	-12.66	-9.58	8.0	-17.6
Hjigh	2478	-12.42	-12.71	-9.55	8.0	-17.5

FCC ID: BCG-E3305A

DATE: 8/5/2019
IC: 579C-E3305A

LOW CHANNEL , ANT 1

LOW CHANNEL ANT 3

MID CHANNEL ANT 4

MID CHANNEL ANT 3

HIGH CHANNEL ANT 4
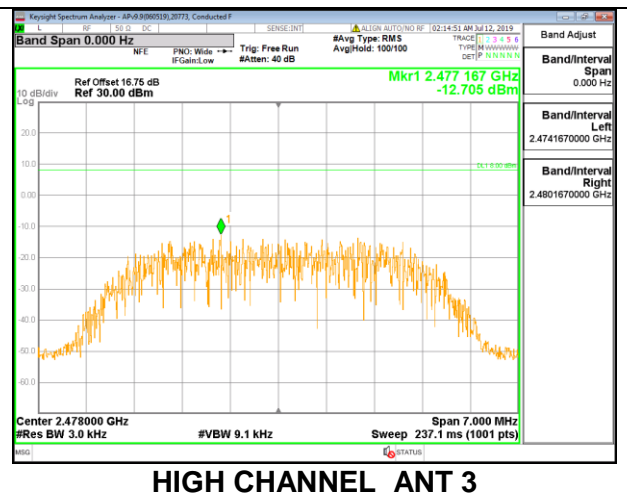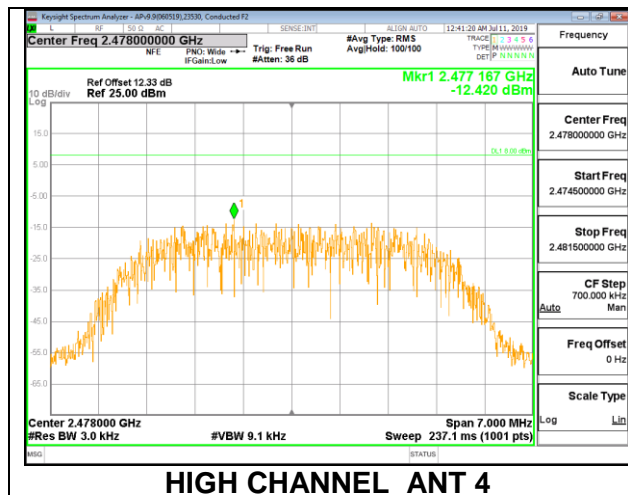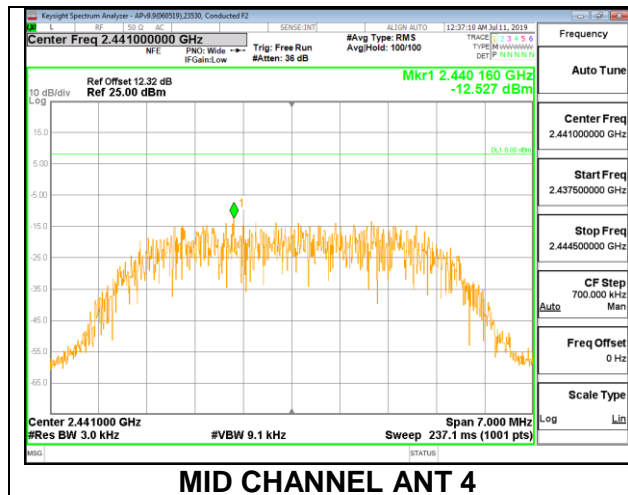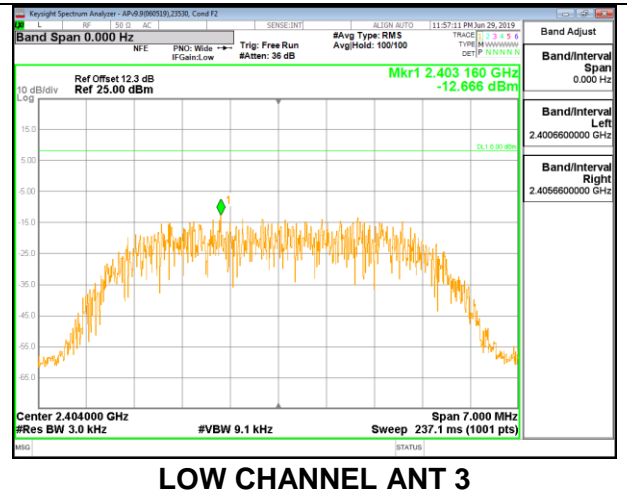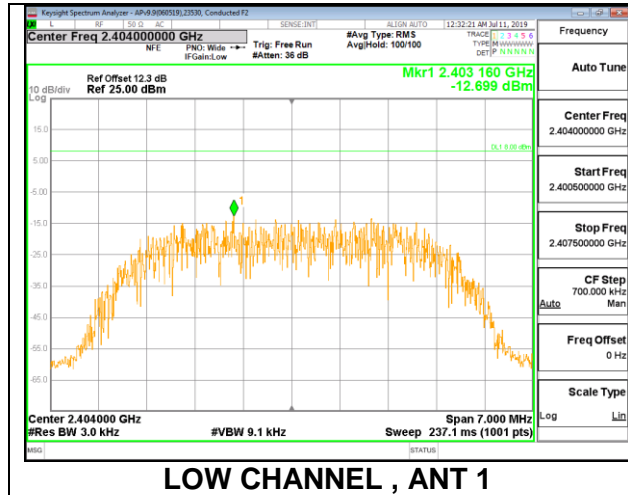
HIGH CHANNEL ANT 3

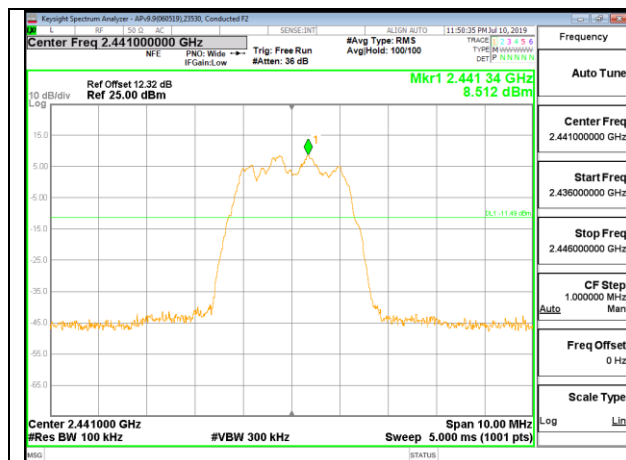## 8.13. BEAMFORMING, CONDUCTED SPURIOUS

8.13.1. HDR4, HIGH POWER
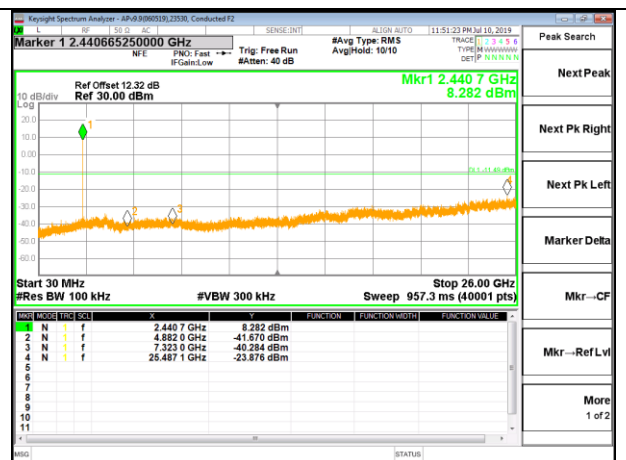
Antenna 4
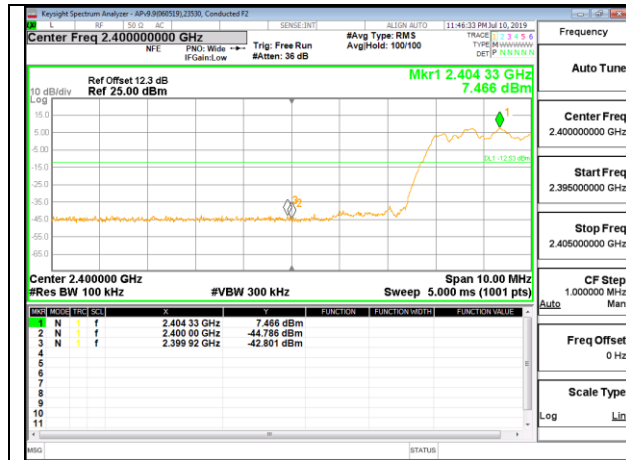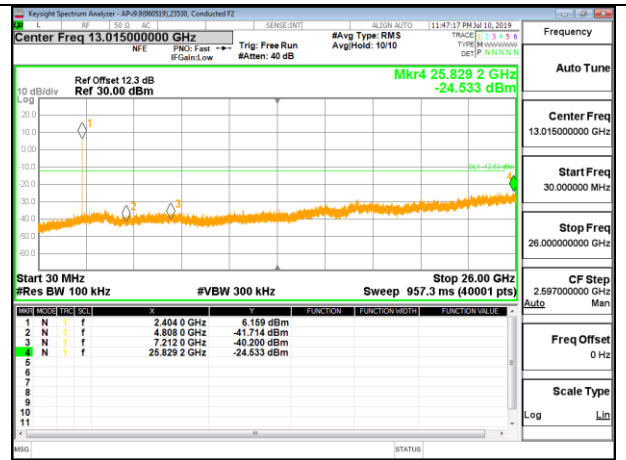
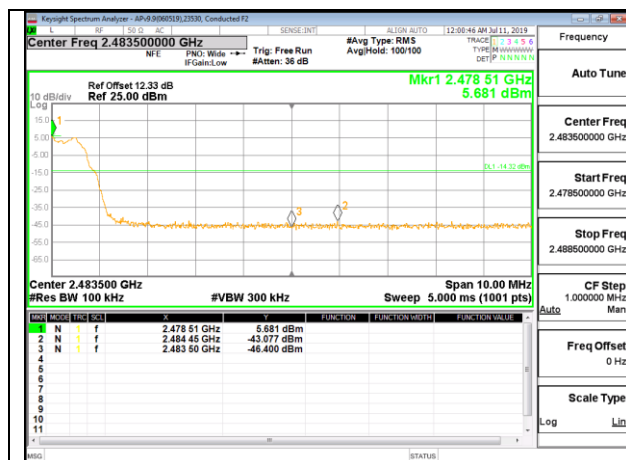LOW CHANNEL , BANDEDGE ANT 4
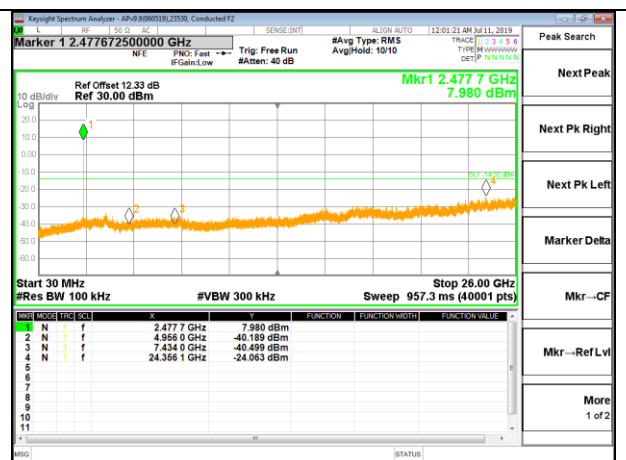

LOW CHANNEL OUT-OF-BAND ANT 4

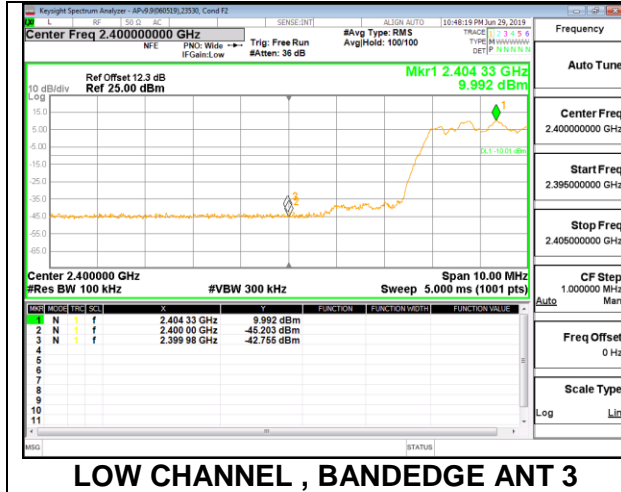MID CHANNEL REFERENCE ANT 4

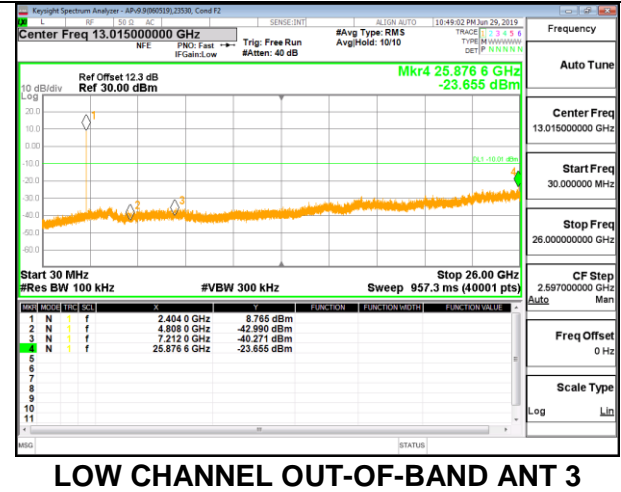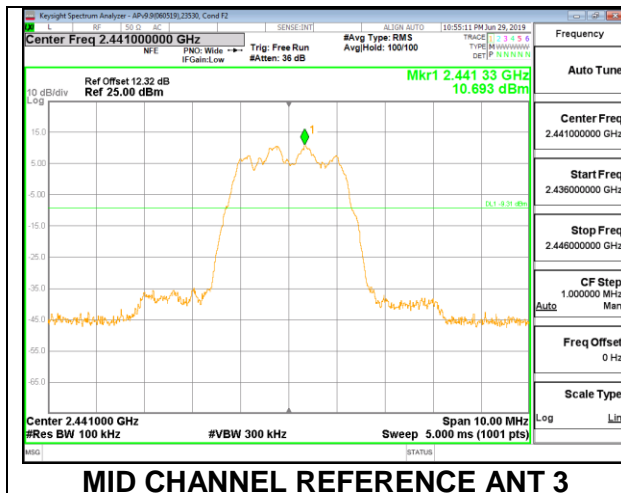MID CHANNEL OUT-OF-BAND ANT 4

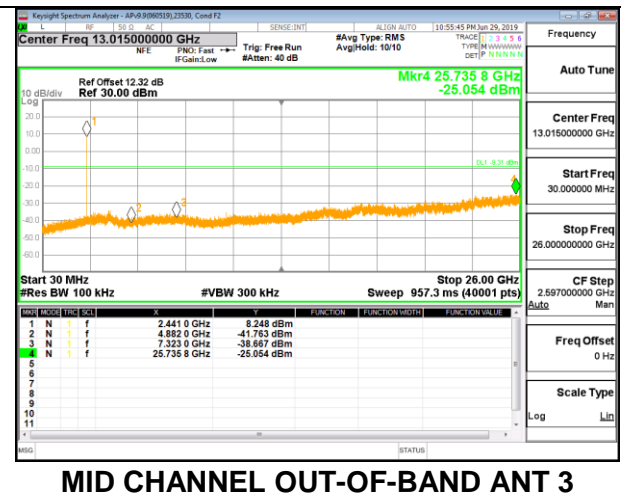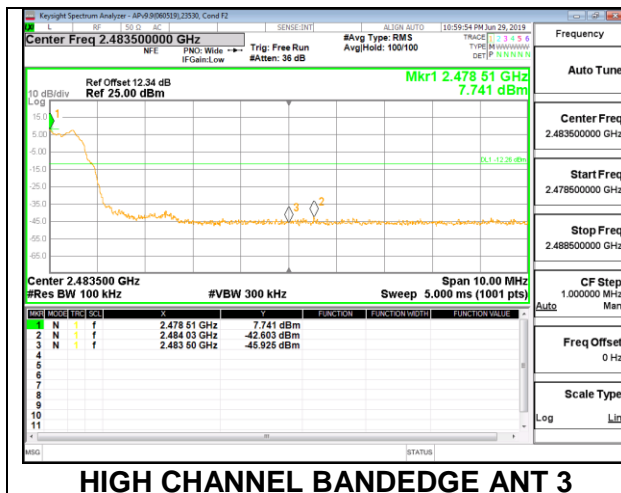HIGH CHANNEL BANDEDGE ANT 4

HIGH CHANNEL OUT-OF-BAND ANT 4

Antenna 3

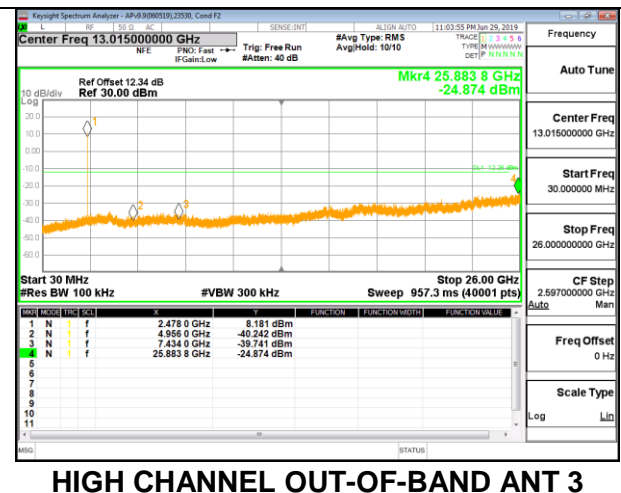LOW CHANNEL , BANDEDGE ANT 3

LOW CHANNEL OUT-OF-BAND ANT 3

MID CHANNEL REFERENCE ANT 3

MID CHANNEL OUT-OF-BAND ANT 3

HIGH CHANNEL BANDEDGE ANT 3

HIGH CHANNEL OUT-OF-BAND ANT 3

Note: Test procedures and setting on beamforming are same as HDR normal mode

8.13.2. HDR8, HIGH POWER

Antenna 4

LOW CHANNEL , BANDEDGE ANT 4

LOW CHANNEL OUT-OF-BAND ANT 4

MID CHANNEL REFERENCE ANT 4

MID CHANNEL OUT-OF-BAND ANT 4

HIGH CHANNEL BANDEDGE ANT 4

HIGH CHANNEL OUT-OF-BAND ANT 4

Antenna 3

LOW CHANNEL , BANDEDGE ANT 3

LOW CHANNEL OUT-OF-BAND ANT 3

MID CHANNEL REFERENCE ANT 3

MID CHANNEL OUT-OF-BAND ANT 3

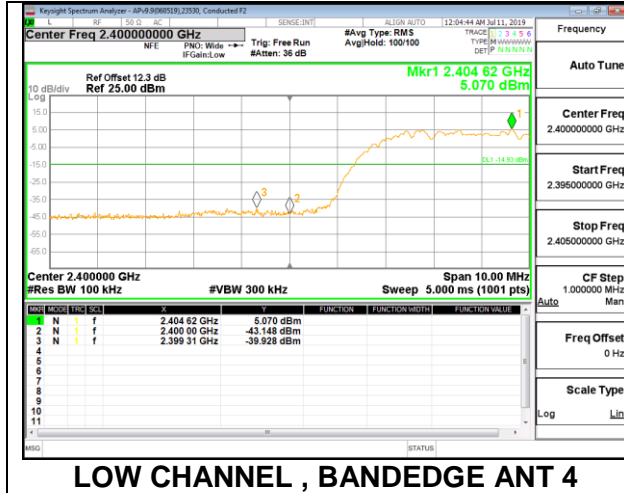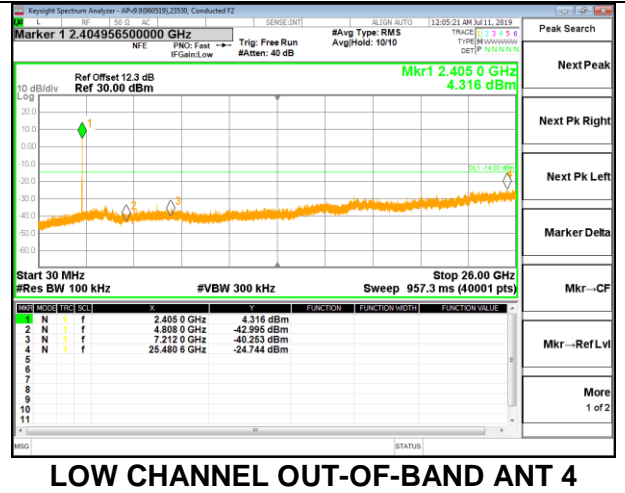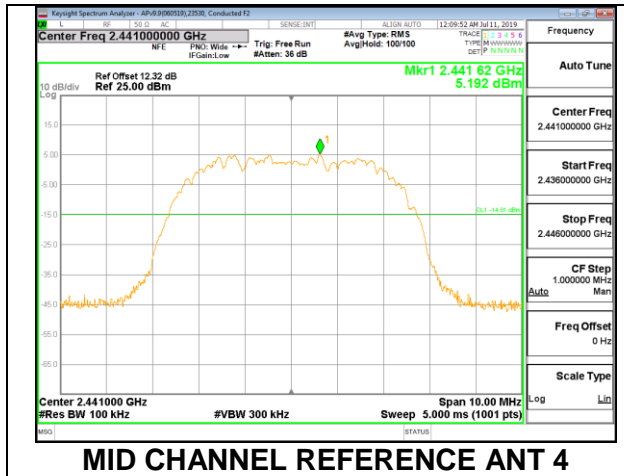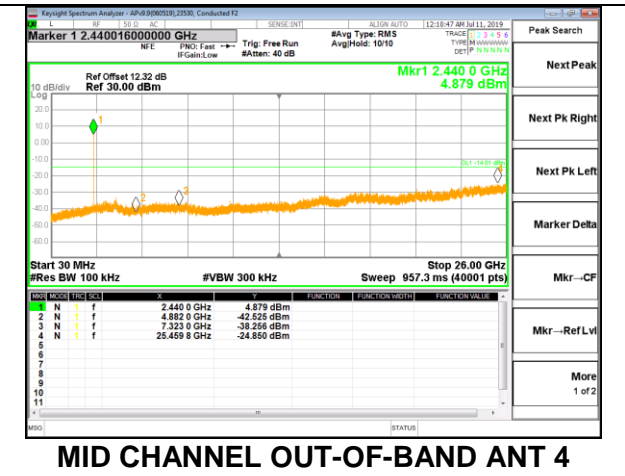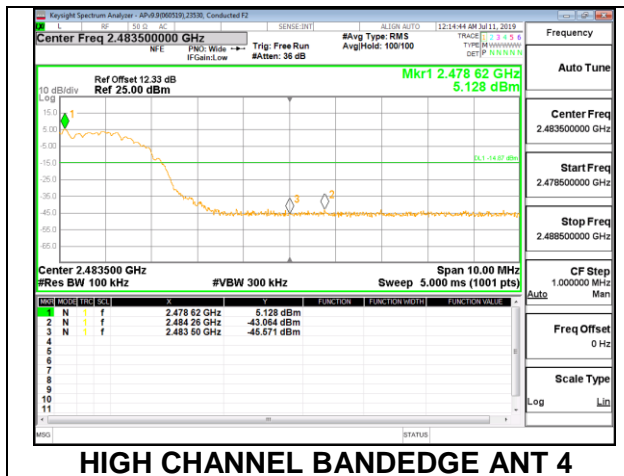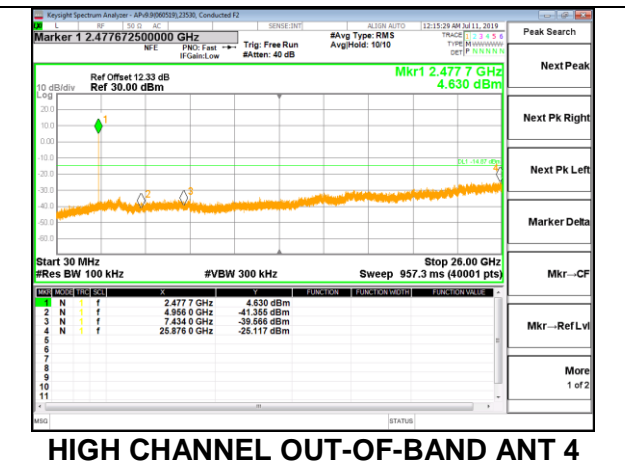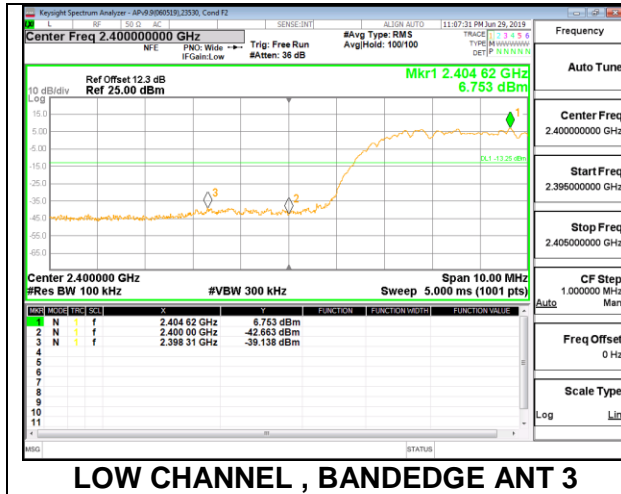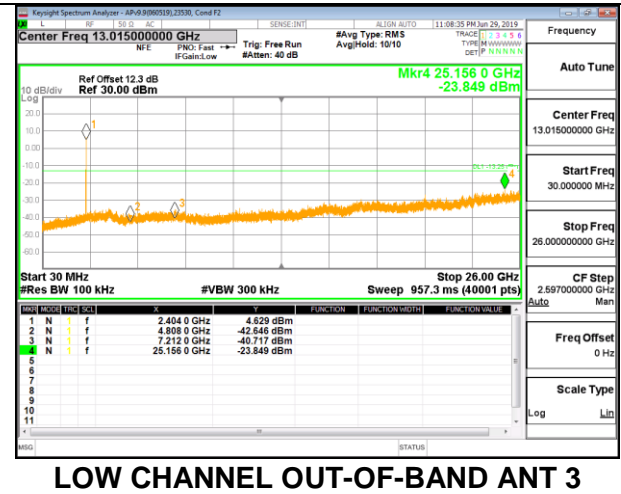**HIGH CHANNEL BANDEDGE ANT 3**

HIGH CHANNEL OUT-OF-BAND ANT 3

Note: Test procedures and setting on beamforming are same as HDR normal mode
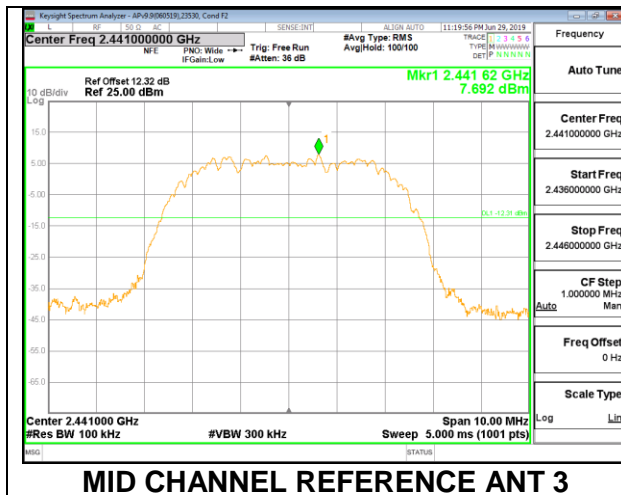
8.13.3. HDR4, LOW POWER
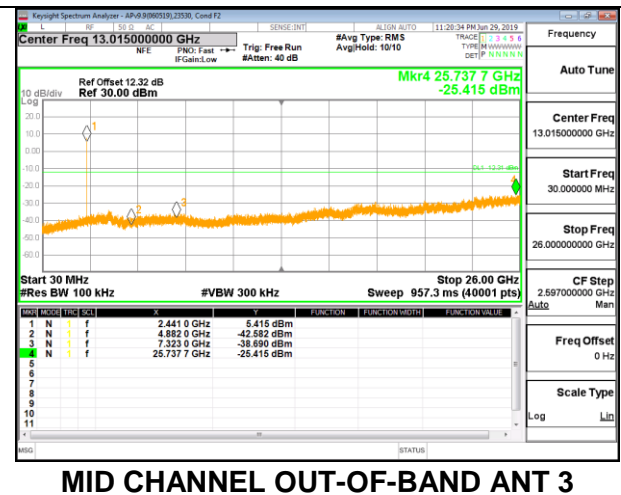
Antenna 4

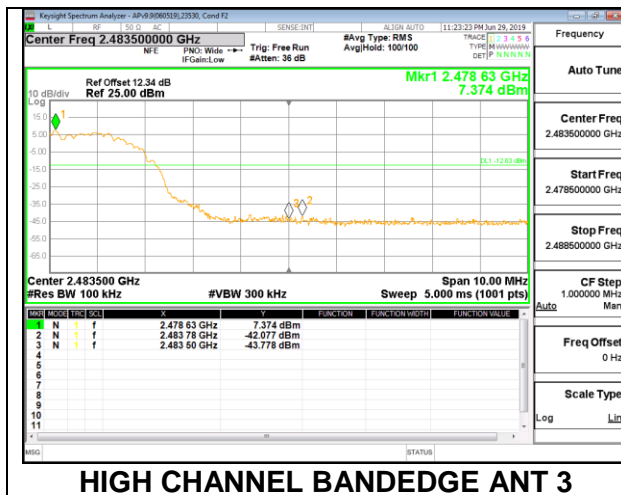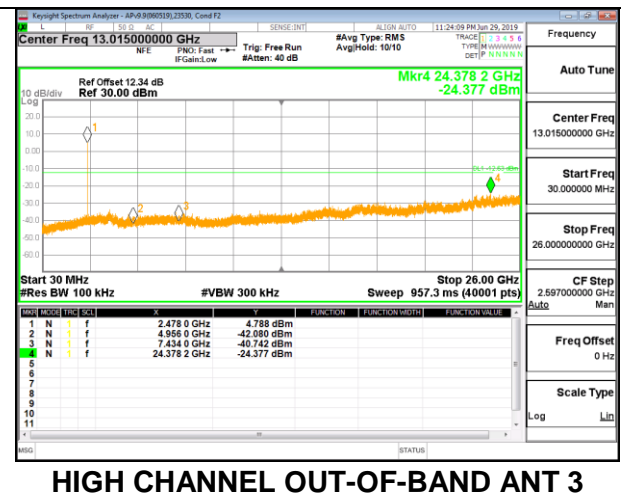**LOW CHANNEL , BANDEDGE ANT 4**

LOW CHANNEL OUT-OF-BAND ANT 4

MID CHANNEL REFERENCE ANT 4

MID CHANNEL OUT-OF-BAND ANT 4

HIGH CHANNEL BANDEDGE ANT 4

HIGH CHANNEL OUT-OF-BAND ANT 4

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