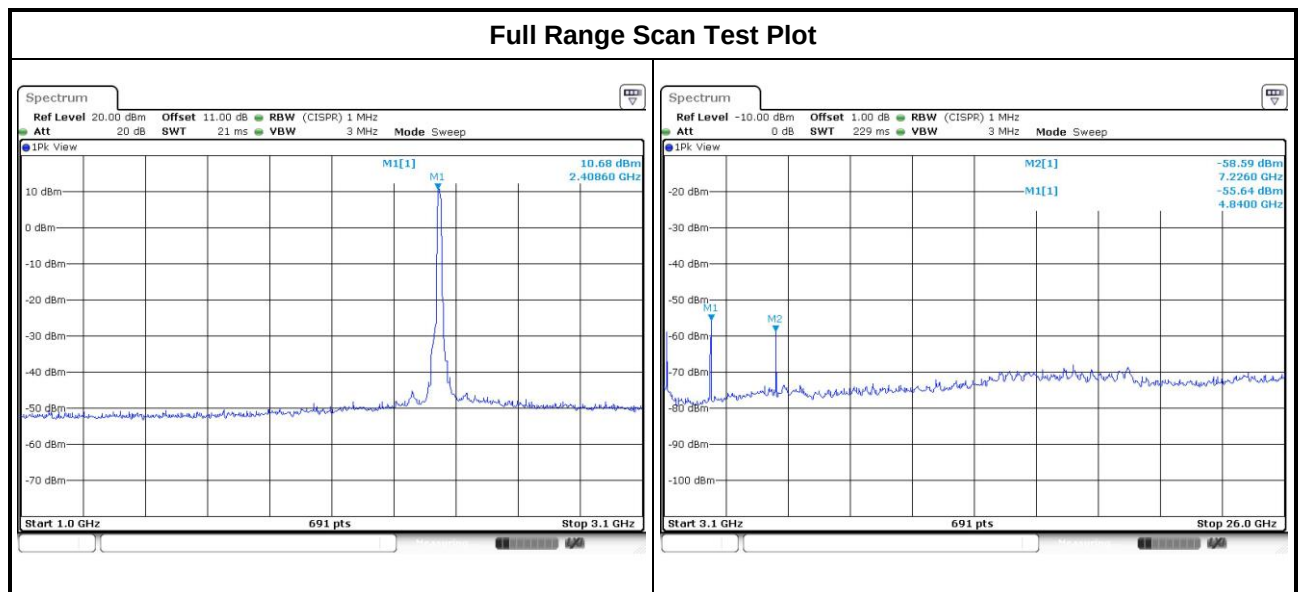


3.6.11 Transmitter Conducted Unwanted Emissions (Above 1GHz)

Antenna-ports conducted measurements are used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands.

Transmitter Conducted Unwanted Emissions Results in Restrict Bands						
Condition		11b_1Mbps; Test Frequency: 2412MHz				
Freq. (MHz)	Chain (dBm)	Gain (dBi)	EIRP (dBm)	E-Field Limit (dBm)	E-Field Margin (dB)	Remark
2386.10	-39.01	3.00	-36.01	-21.20	-14.81	PK
2386.10	-44.69	3.00	-41.69	-41.20	-0.49	AV
4824.00	-53.80	3.00	-50.80	-21.20	-29.60	PK
4824.00	-	3.00	-	-41.20	-	AV

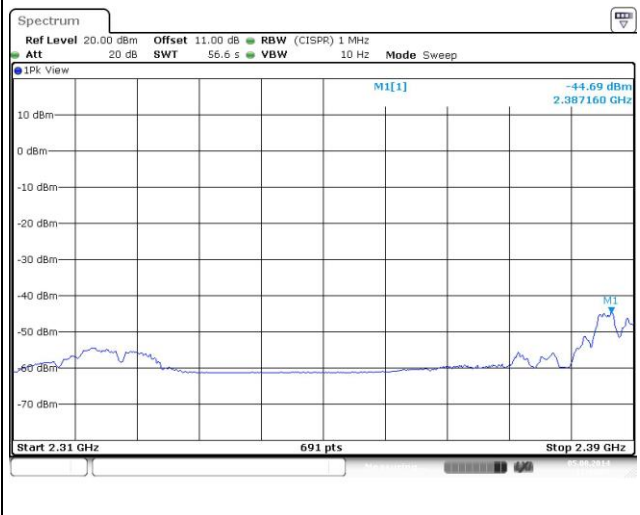
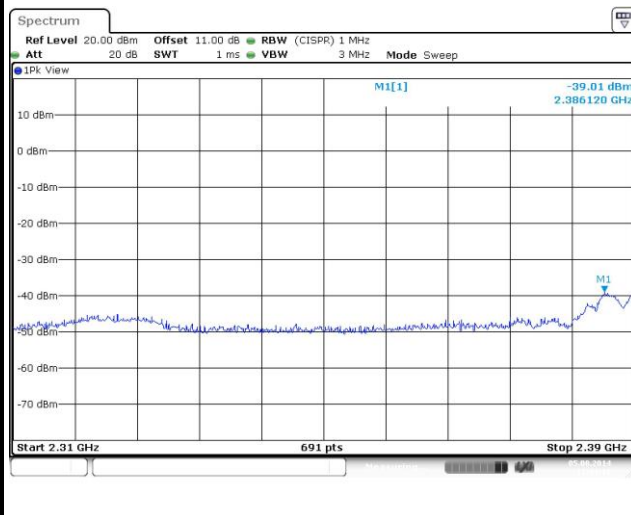
Note: Average value measurement is not performed if the peak measured value below the average limit



Band Edge Test Plot

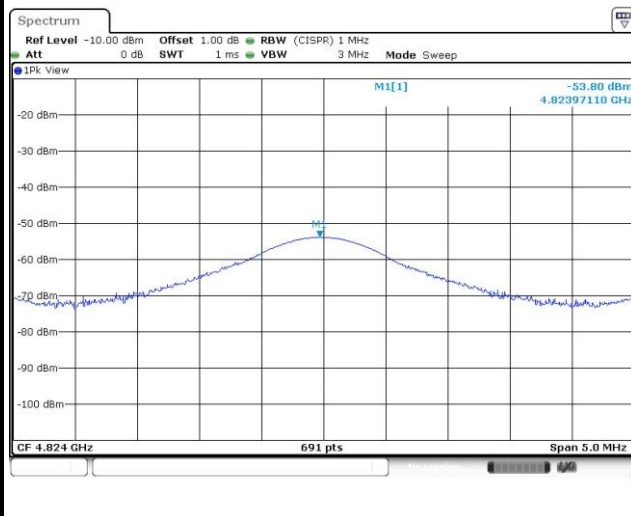
PK

AV



Harmonic Emissions Test Plot

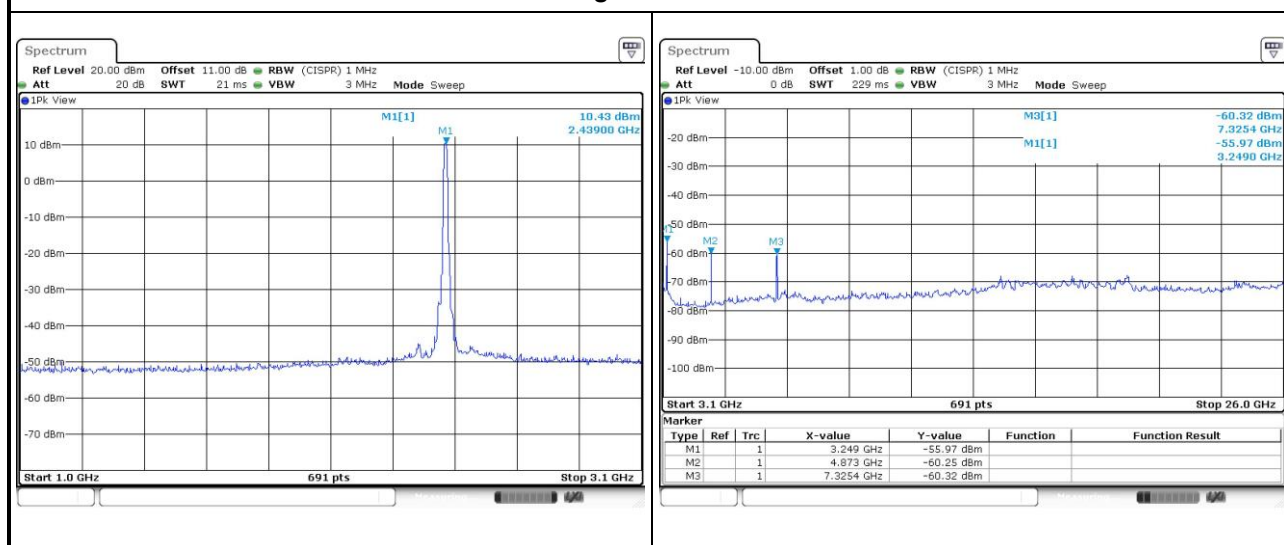
PK



Transmitter Conducted Unwanted Emissions Results in Restrict Bands

Condition		11b_1Mbps; Test Frequency: 2437MHz				
Freq. (MHz)	Chain (dBm)	Gain (dBi)	EIRP (dBm)	E-Field Limit (dBm)	E-Field Margin (dB)	Remark
2347.10	-43.62	3.00	-40.62	-21.20	-19.42	PK
2345.10	-53.25	3.00	-50.25	-41.20	-9.05	AV
2484.10	-44.65	3.00	-41.65	-21.20	-20.45	PK
2484.70	-56.20	3.00	-53.20	-41.20	-12.00	AV
4874.00	-59.61	3.00	-56.61	-21.20	-35.41	PK
4874.00	-	3.00	-	-41.20	-	AV
7311.00	-59.84	3.00	-56.84	-21.20	-35.64	PK
7311.00	-	3.00	-	-41.20	-	AV

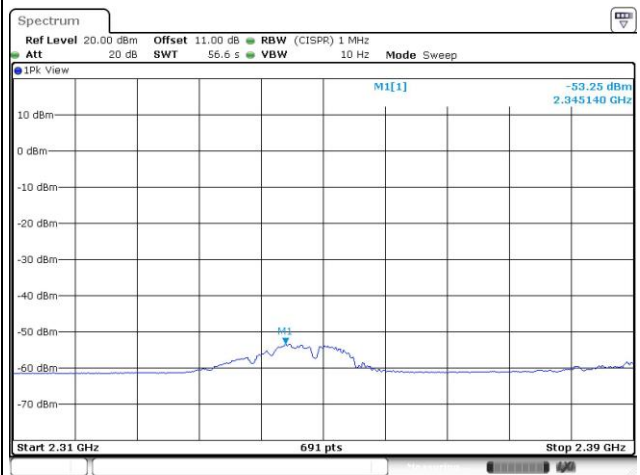
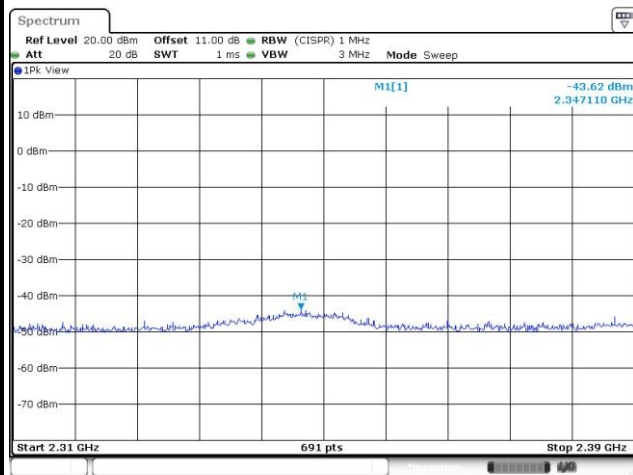
Note: Average value measurement is not performed if the peak measured value below the average limit

Full Range Scan Test Plot


Band Edge Test Plot

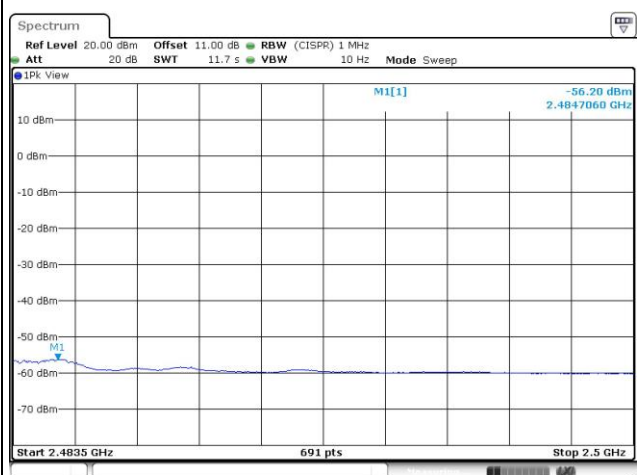
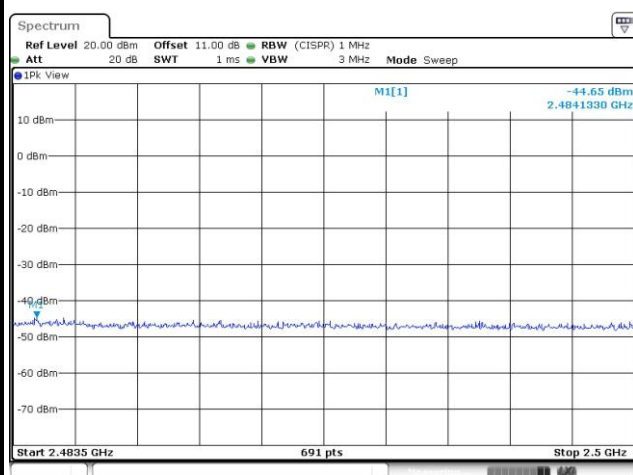
PK

AV



PK

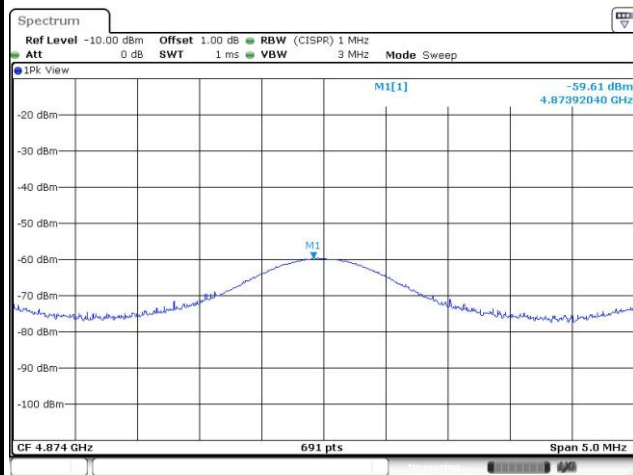
AV



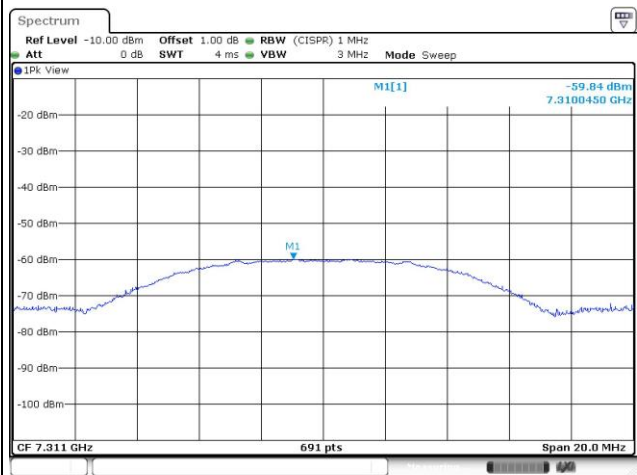


Harmonic Emissions Test Plot

PK



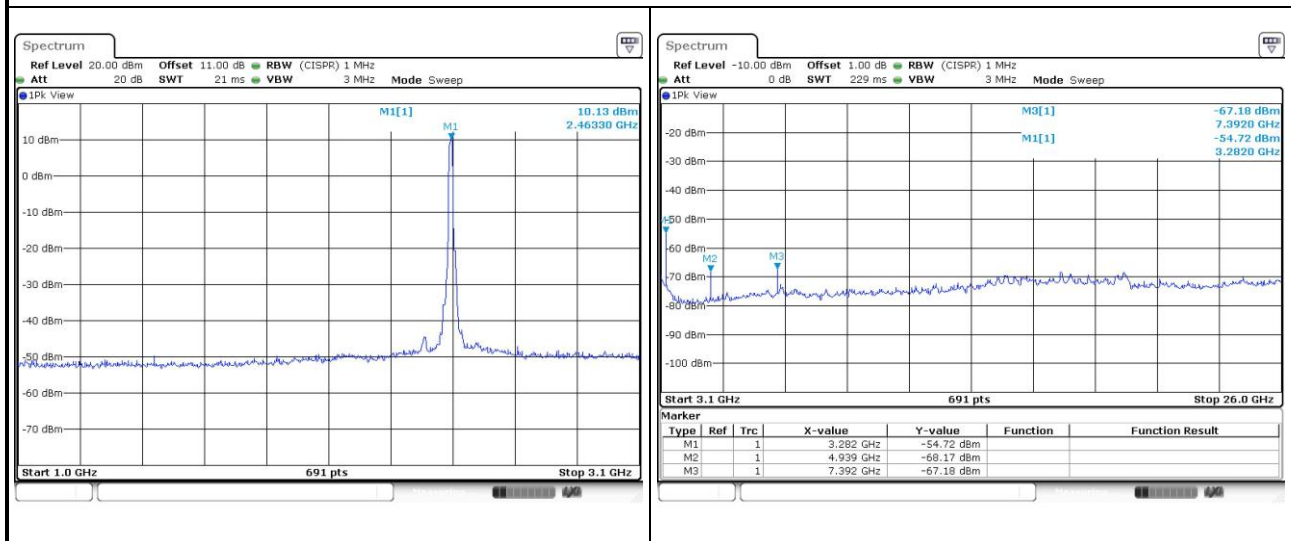
PK



Transmitter Conducted Unwanted Emissions Results in Restrict Bands

Condition		11b_1Mbps; Test Frequency: 2462MHz				
Freq. (MHz)	Chain (dBm)	Gain (dBi)	EIRP (dBm)	E-Field Limit (dBm)	E-Field Margin (dB)	Remark
2483.60	-36.69	3.00	-33.69	-21.20	-12.49	PK
2483.50	-44.83	3.00	-41.83	-41.20	-0.63	AV
4924.00	-67.37	3.00	-64.37	-21.20	-43.17	PK
4924.00	-	3.00	-	-41.20	-	AV
7386.00	-66.20	3.00	-63.20	-21.20	-42.00	PK
7386.00	-	3.00	-	-41.20	-	AV

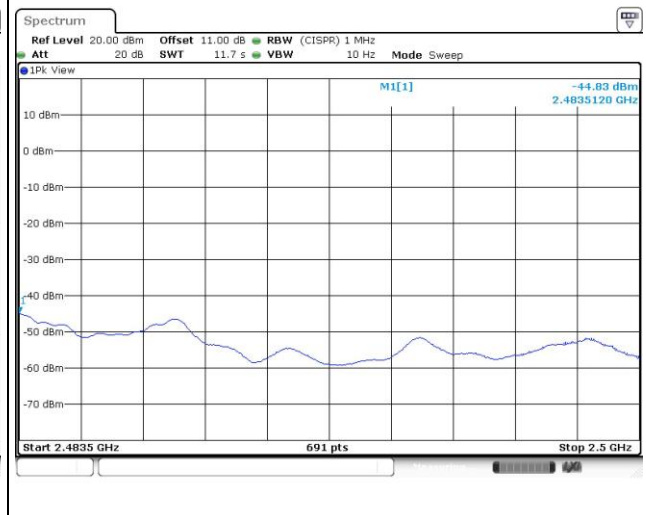
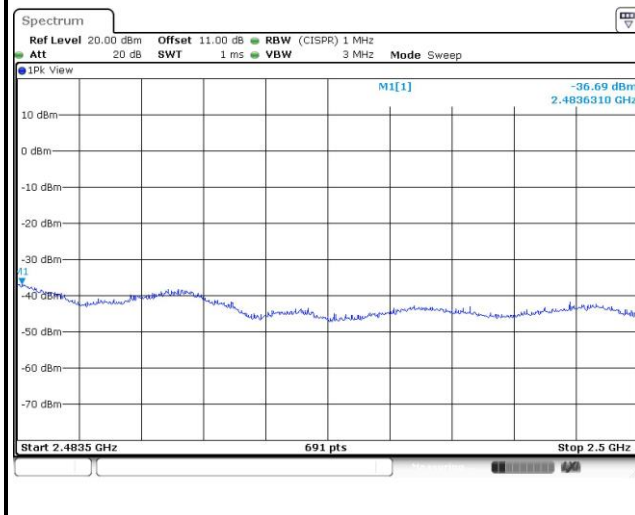
Note: Average value measurement is not performed if the peak measured value below the average limit

Full Range Scan Test Plot


Band Edge Test Plot

PK

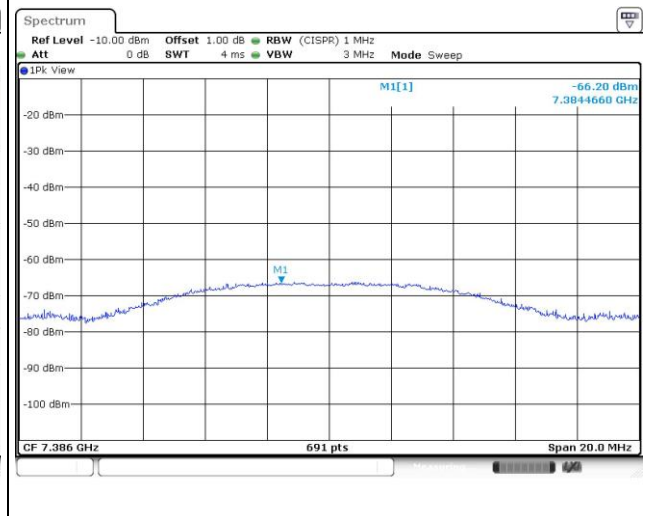
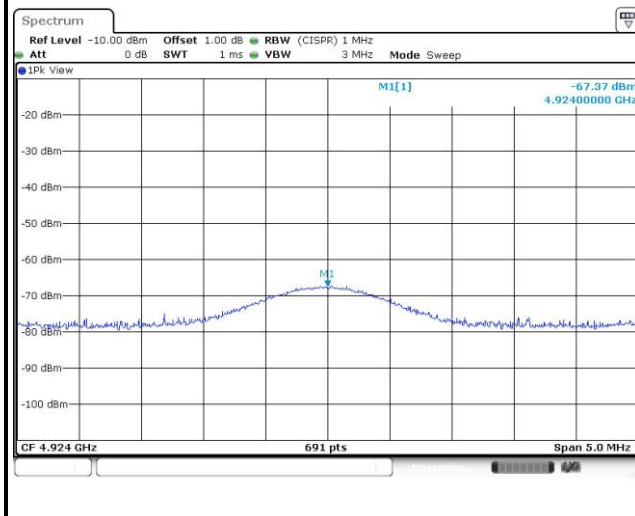
AV



Harmonic Emissions Test Plot

PK

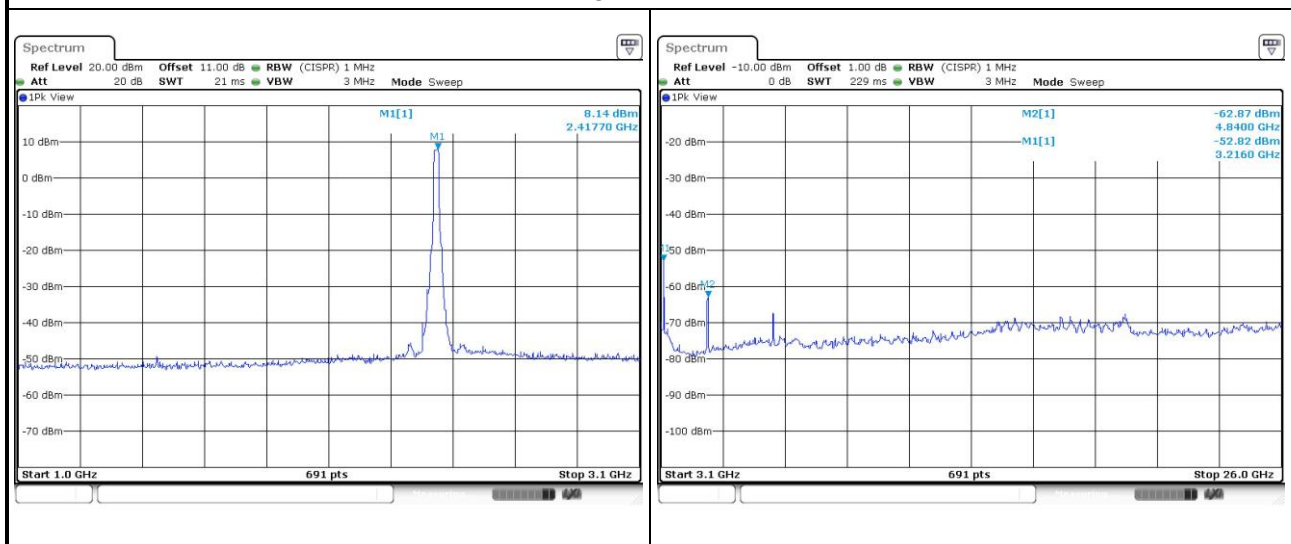
PK



Transmitter Conducted Unwanted Emissions Results in Restrict Bands

Condition		11g_6Mbps; Test Frequency: 2412MHz				
Freq. (MHz)	Chain (dBm)	Gain (dBi)	EIRP (dBm)	E-Field Limit (dBm)	E-Field Margin (dB)	Remark
2390.00	-25.09	3.00	-22.09	-21.20	-0.89	PK
2390.00	-49.98	3.00	-46.98	-41.20	-5.78	AV
4824.00	-60.50	3.00	-57.50	-21.20	-36.30	PK
4824.00	-	3.00	-	-41.20	-	AV

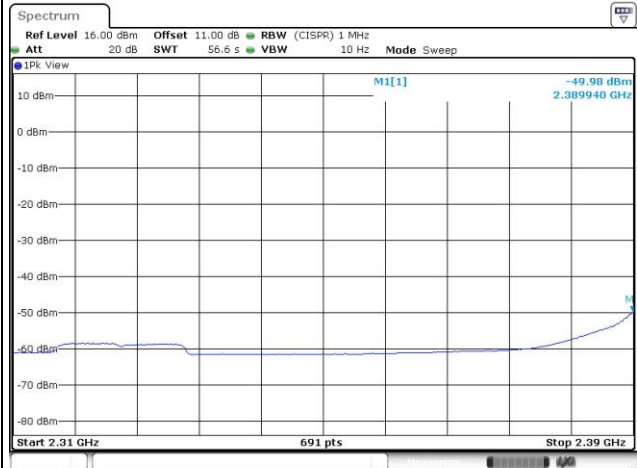
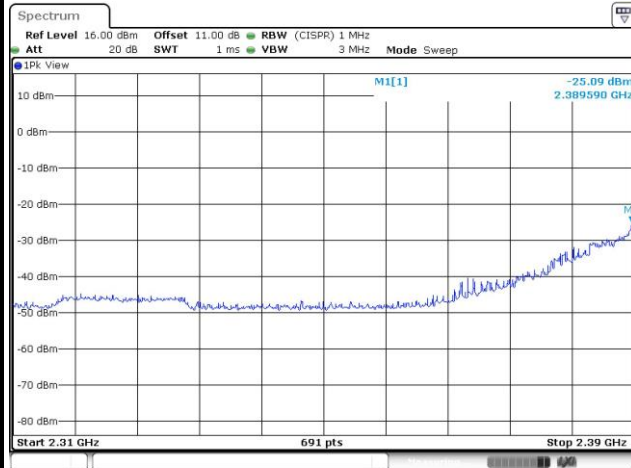
Note: Average value measurement is not performed if the peak measured value below the average limit

Full Range Scan Test Plot


Band Edge Test Plot

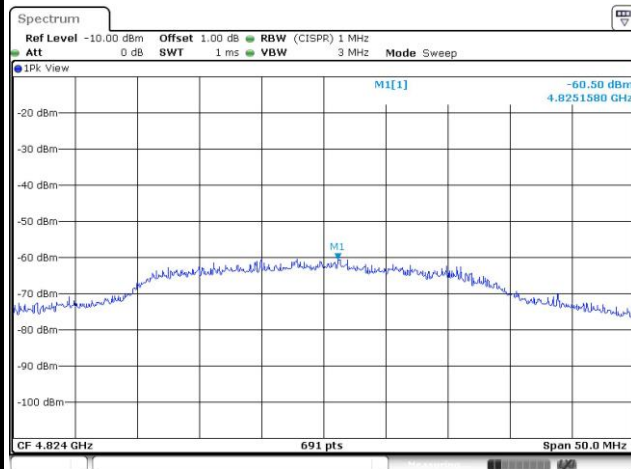
PK

AV



Harmonic Emissions Test Plot

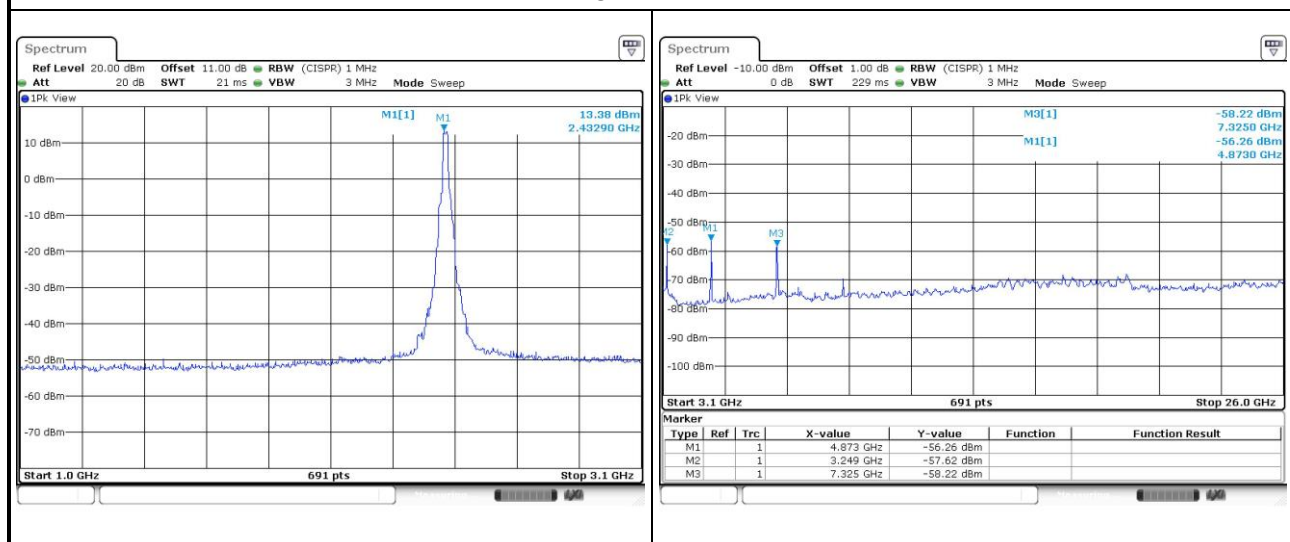
PK



Transmitter Conducted Unwanted Emissions Results in Restrict Bands

Condition		11g_6Mbps; Test Frequency: 2437MHz				
Freq. (MHz)	Chain (dBm)	Gain (dBi)	EIRP (dBm)	E-Field Limit (dBm)	E-Field Margin (dB)	Remark
2390.00	-30.98	3.00	-27.98	-21.20	-6.78	PK
2390.00	-49.85	3.00	-46.85	-41.20	-5.65	AV
2483.50	-25.48	3.00	-22.48	-21.20	-1.28	PK
2483.50	-47.95	3.00	-44.95	-41.20	-3.75	AV
4874.00	-54.29	3.00	-51.29	-21.20	-30.09	PK
4874.00	-	3.00	-	-41.20	-	AV

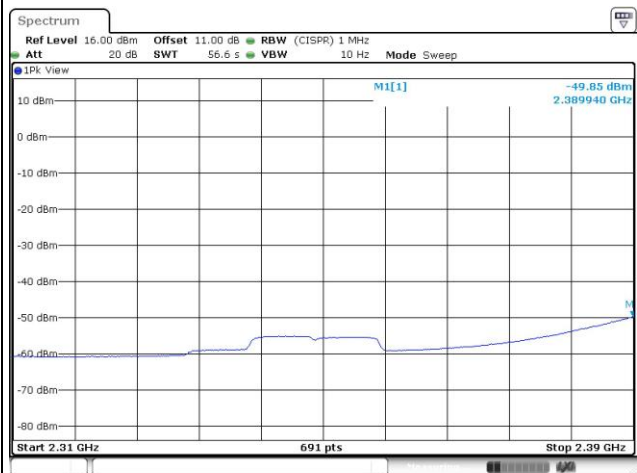
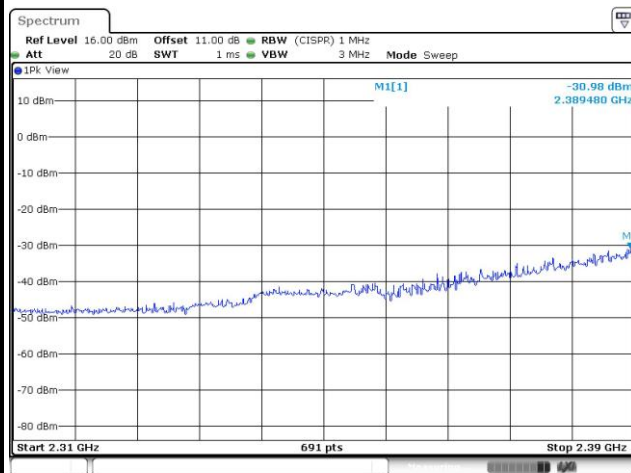
Note: Average value measurement is not performed if the peak measured value below the average limit

Full Range Scan Test Plot


Band Edge Test Plot

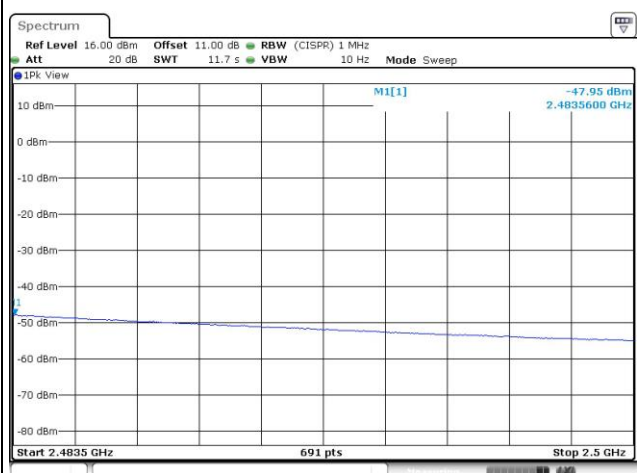
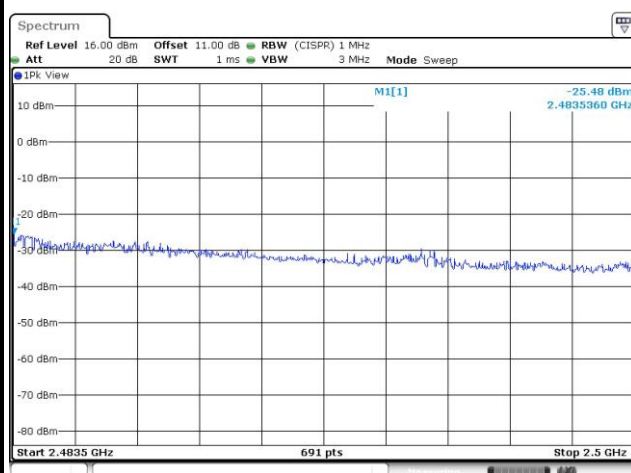
PK

AV



PK

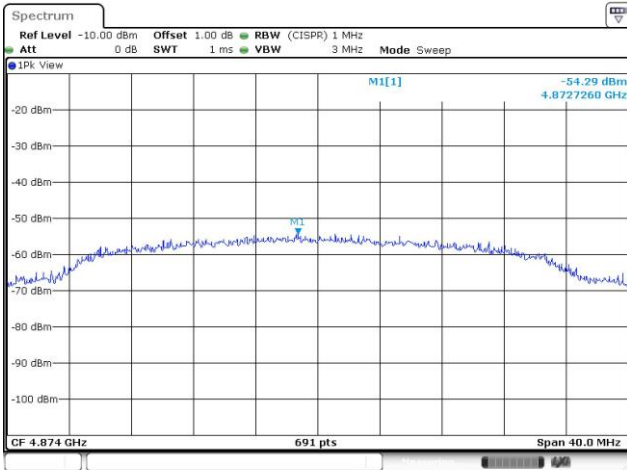
AV





Harmonic Emissions Test Plot

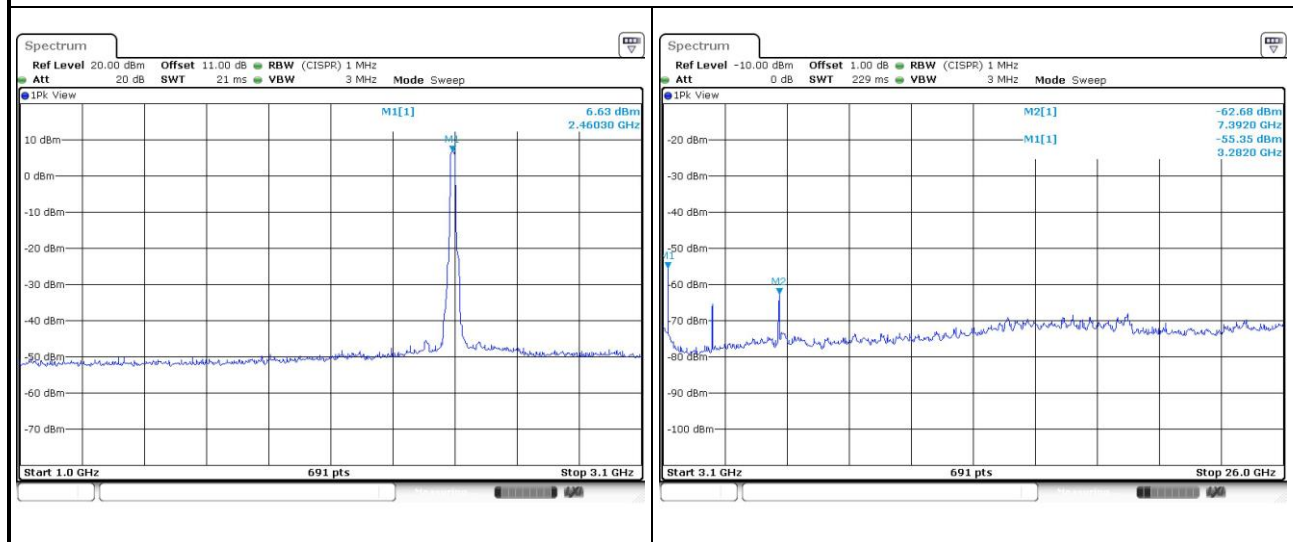
PK



Transmitter Conducted Unwanted Emissions Results in Restrict Bands

Condition		11g_6Mbps; Test Frequency: 2462MHz				
Freq. (MHz)	Chain (dBm)	Gain (dBi)	EIRP (dBm)	E-Field Limit (dBm)	E-Field Margin (dB)	Remark
2483.50	-25.70	3.00	-22.70	-21.20	-1.50	PK
2483.50	-52.37	3.00	-49.37	-41.20	-8.17	AV
7386.00	-60.55	3.00	-57.55	-21.20	-36.35	PK
7386.00	-	3.00	-	-41.20	-	AV

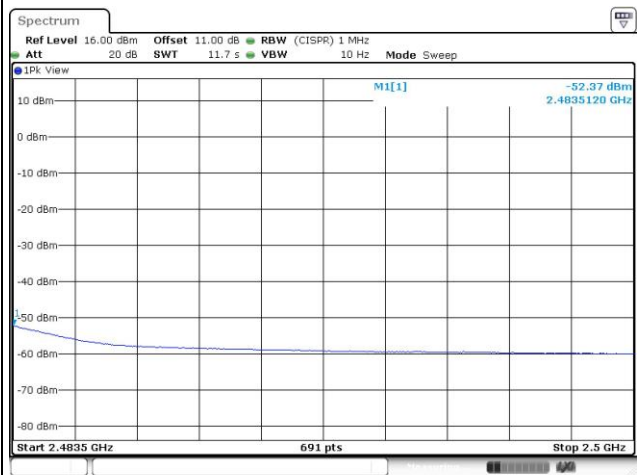
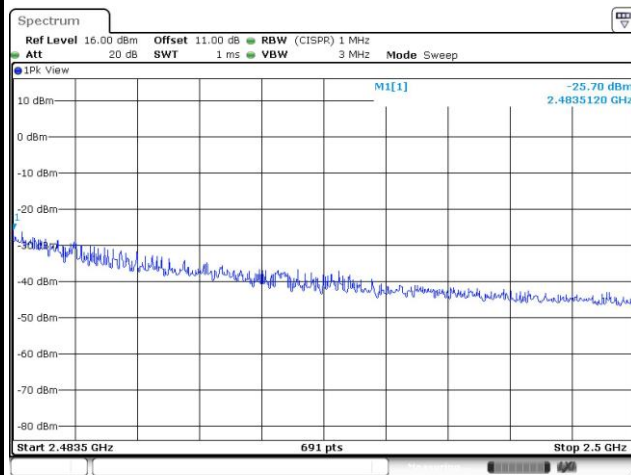
Note: Average value measurement is not performed if the peak measured value below the average limit

Full Range Scan Test Plot


Band Edge Test Plot

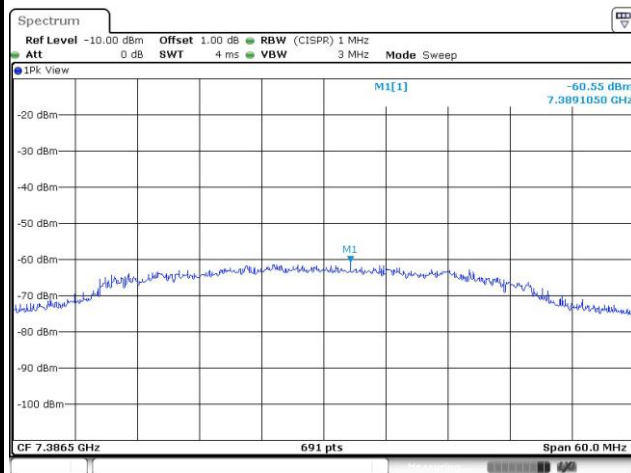
PK

AV



Harmonic Emissions Test Plot

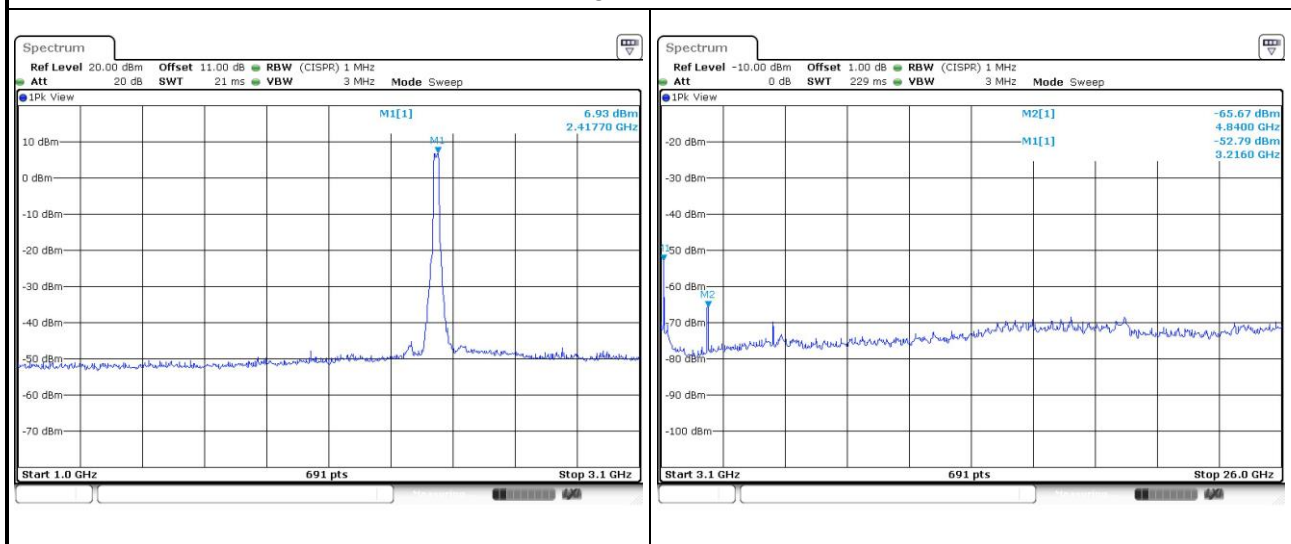
PK



Transmitter Conducted Unwanted Emissions Results in Restrict Bands

Condition		11n HT20_MCS 0; Test Frequency: 2412MHz				
Freq. (MHz)	Chain (dBm)	Gain (dBi)	EIRP (dBm)	E-Field Limit (dBm)	E-Field Margin (dB)	Remark
2390.00	-26.17	3.00	-23.17	-21.20	-1.97	PK
2390.00	-50.97	3.00	-47.97	-41.20	-6.77	AV
4824.00	-62.50	3.00	-59.50	-21.20	-38.30	PK
4824.00	-	3.00	-	-41.20	-	AV

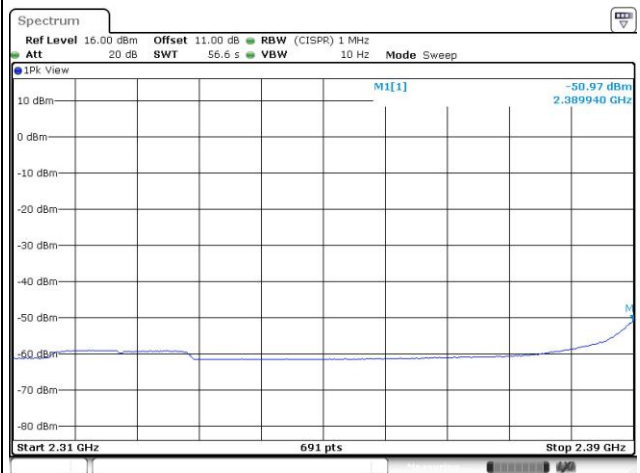
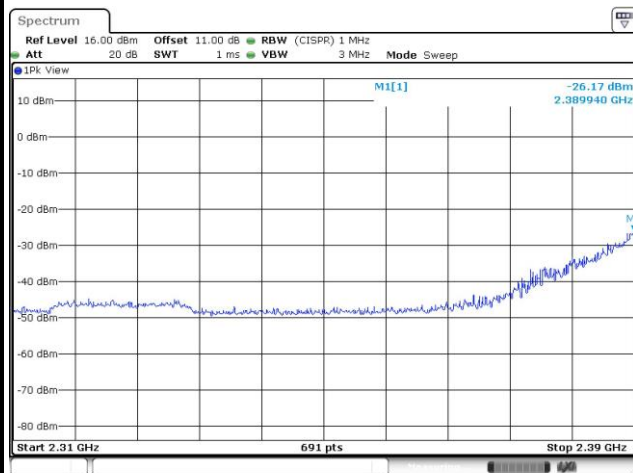
Note: Average value measurement is not performed if the peak measured value below the average limit

Full Range Scan Test Plot


Band Edge Test Plot

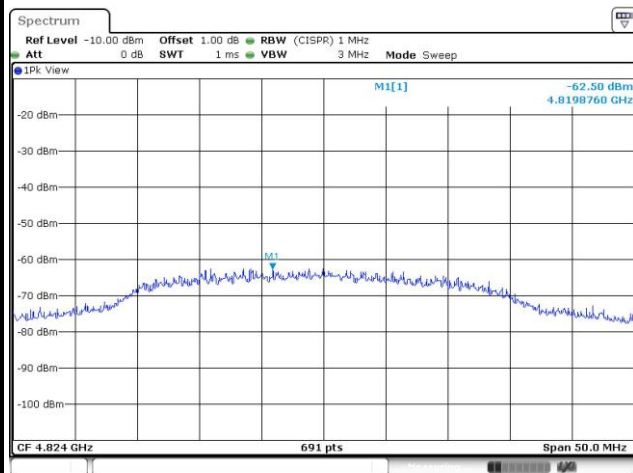
PK

AV



Harmonic Emissions Test Plot

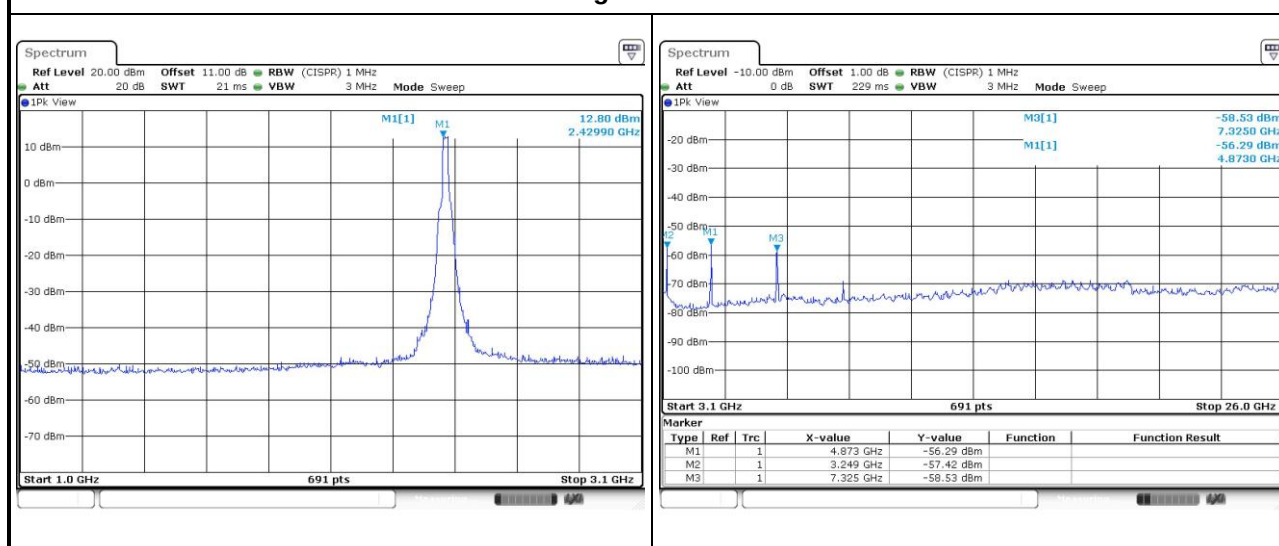
PK



Transmitter Conducted Unwanted Emissions Results in Restrict Bands

Condition		11n HT20_ MCS 0; Test Frequency: 2437MHz				
Freq. (MHz)	Chain (dBm)	Gain (dBi)	EIRP (dBm)	E-Field Limit (dBm)	E-Field Margin (dB)	Remark
2386.00	-27.03	3.00	-24.03	-21.20	-2.83	PK
2390.00	-49.29	3.00	-46.29	-41.20	-5.09	AV
2486.00	-25.42	3.00	-22.42	-21.20	-1.22	PK
2483.60	-47.52	3.00	-44.52	-41.20	-3.32	AV
4874.00	-54.70	3.00	-51.70	-21.20	-30.50	PK
4874.00	-	3.00	-	-41.20	-	AV

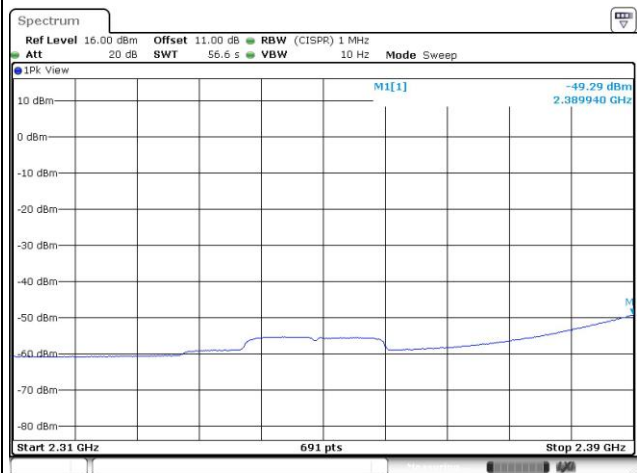
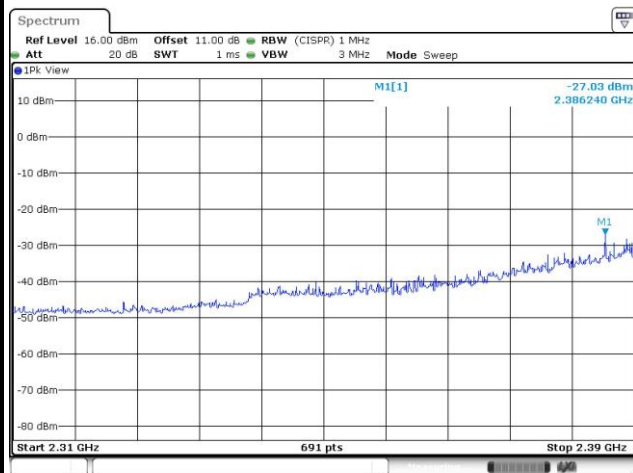
Note: Average value measurement is not performed if the peak measured value below the average limit

Full Range Scan Test Plot


Band Edge Test Plot

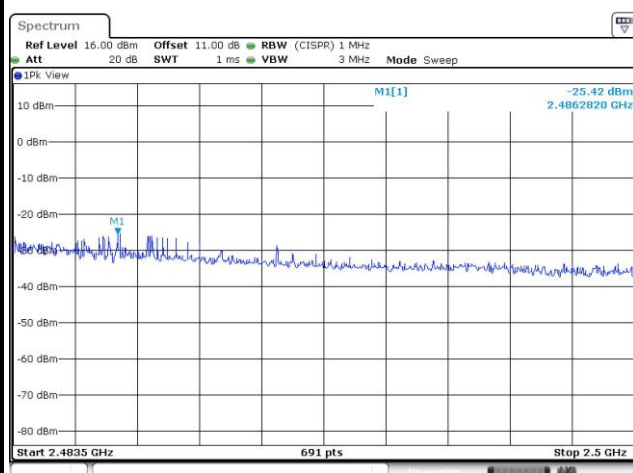
PK

AV



PK

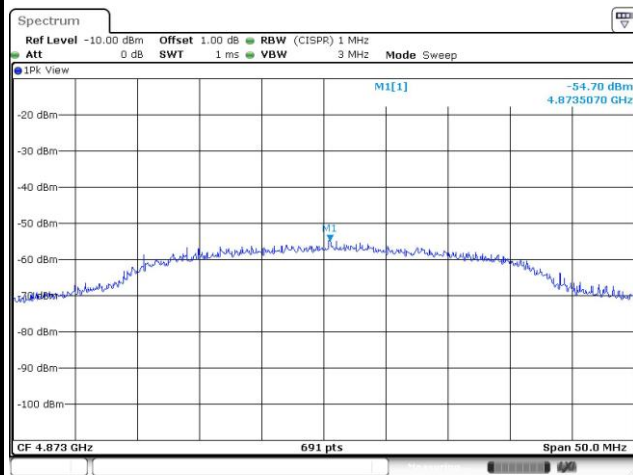
AV





Harmonic Emissions Test Plot

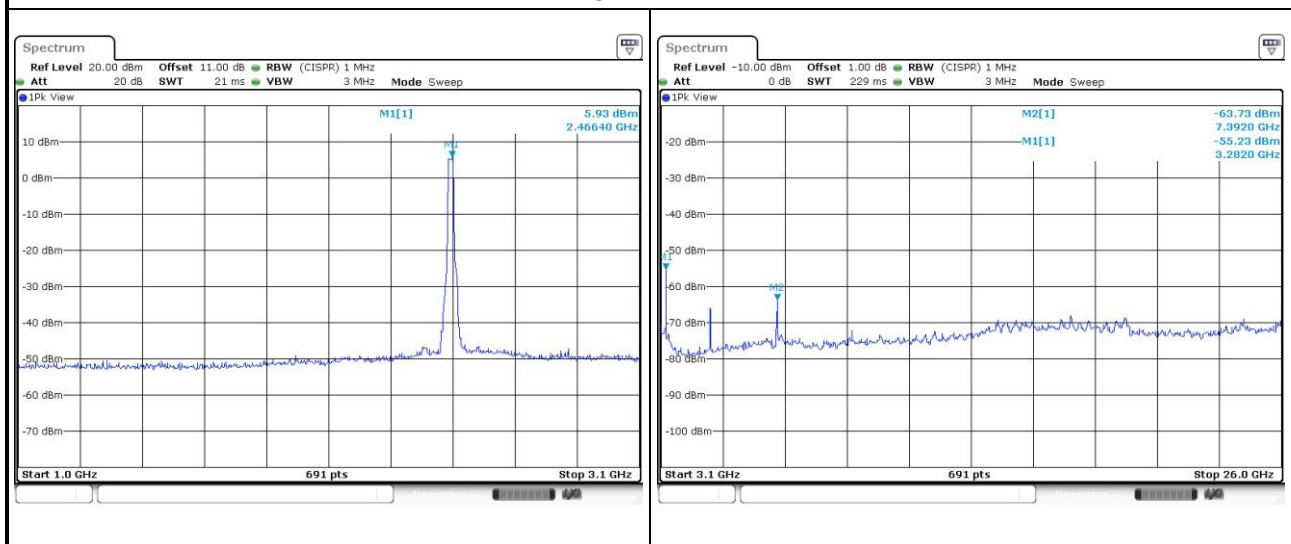
PK



Transmitter Conducted Unwanted Emissions Results in Restrict Bands

Condition		11n HT20_ MCS 0; Test Frequency: 2462MHz				
Freq. (MHz)	Chain (dBm)	Gain (dBi)	EIRP (dBm)	E-Field Limit (dBm)	E-Field Margin (dB)	Remark
2483.50	-26.43	3.00	-23.43	-21.20	-2.23	PK
2483.50	-51.71	3.00	-48.71	-41.20	-7.51	AV
7386.00	-62.12	3.00	-59.12	-21.20	-37.92	PK
7386.00	-	3.00	-	-41.20	-	AV

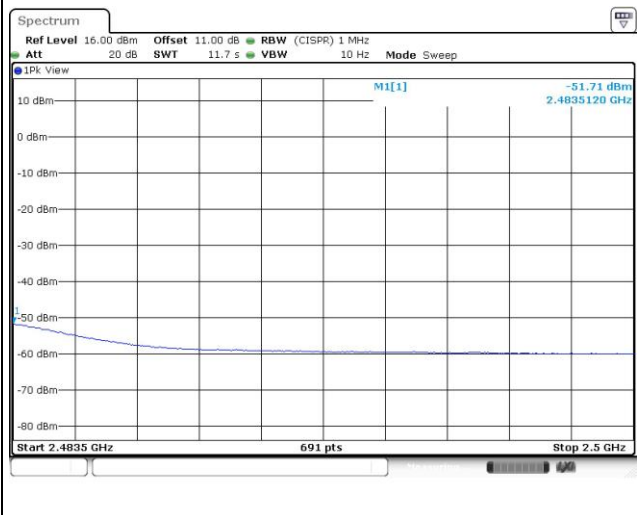
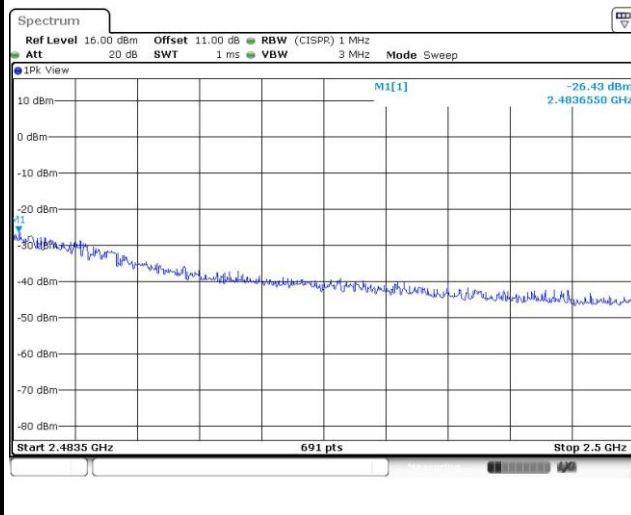
Note: Average value measurement is not performed if the peak measured value below the average limit

Full Range Scan Test Plot


Band Edge Test Plot

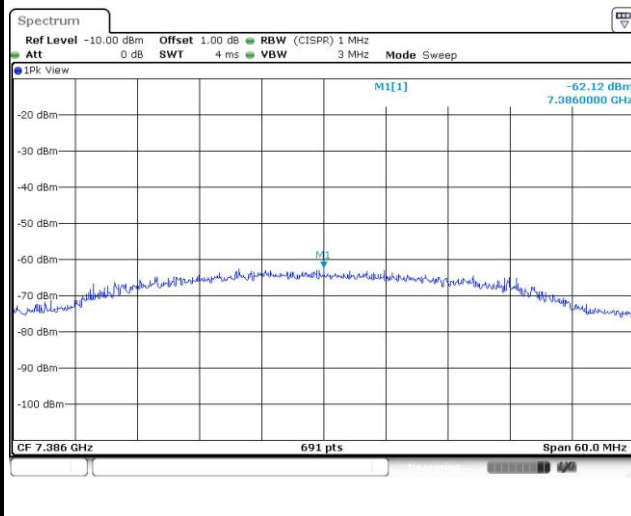
PK

AV



Harmonic Emissions Test Plot

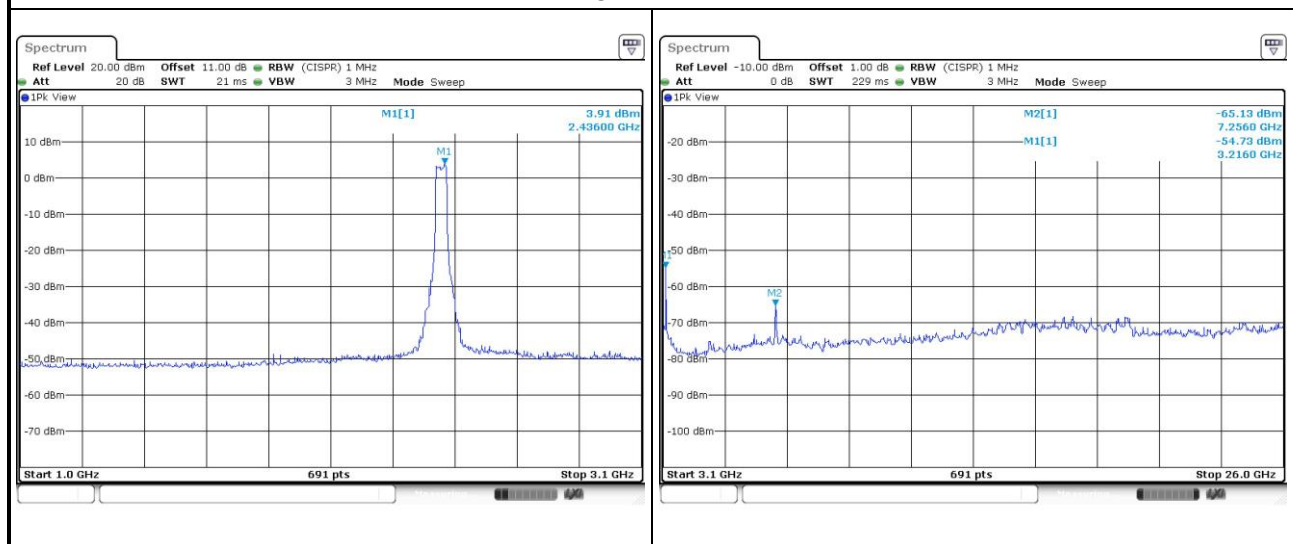
PK



Transmitter Conducted Unwanted Emissions Results in Restrict Bands

Condition		11n HT40_MCS 0; Test Frequency: 2422MHz				
Freq. (MHz)	Chain (dBm)	Gain (dBi)	EIRP (dBm)	E-Field Limit (dBm)	E-Field Margin (dB)	Remark
2389.00	-25.67	3.00	-22.67	-21.20	-1.47	PK
2390.00	-48.20	3.00	-45.20	-41.20	-4.00	AV
7266.00	-60.78	3.00	-57.78	-21.20	-36.58	PK
7266.00	-	3.00	-	-41.20	-	AV

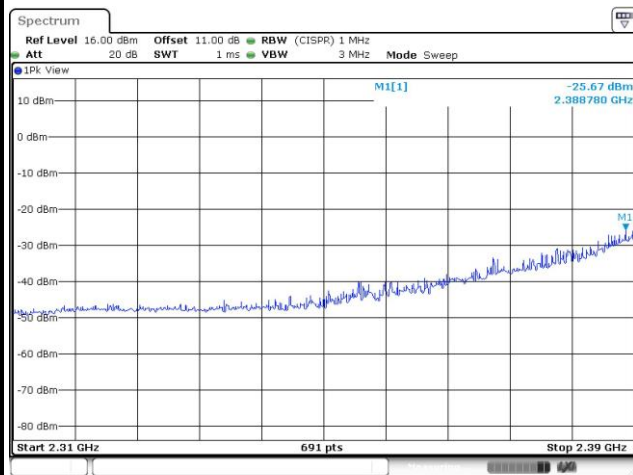
Note: Average value measurement is not performed if the peak measured value below the average limit

Full Range Scan Test Plot


Band Edge Test Plot

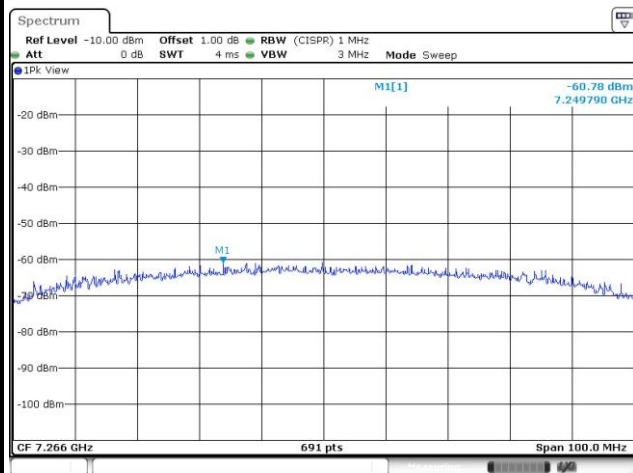
PK

AV



Harmonic Emissions Test Plot

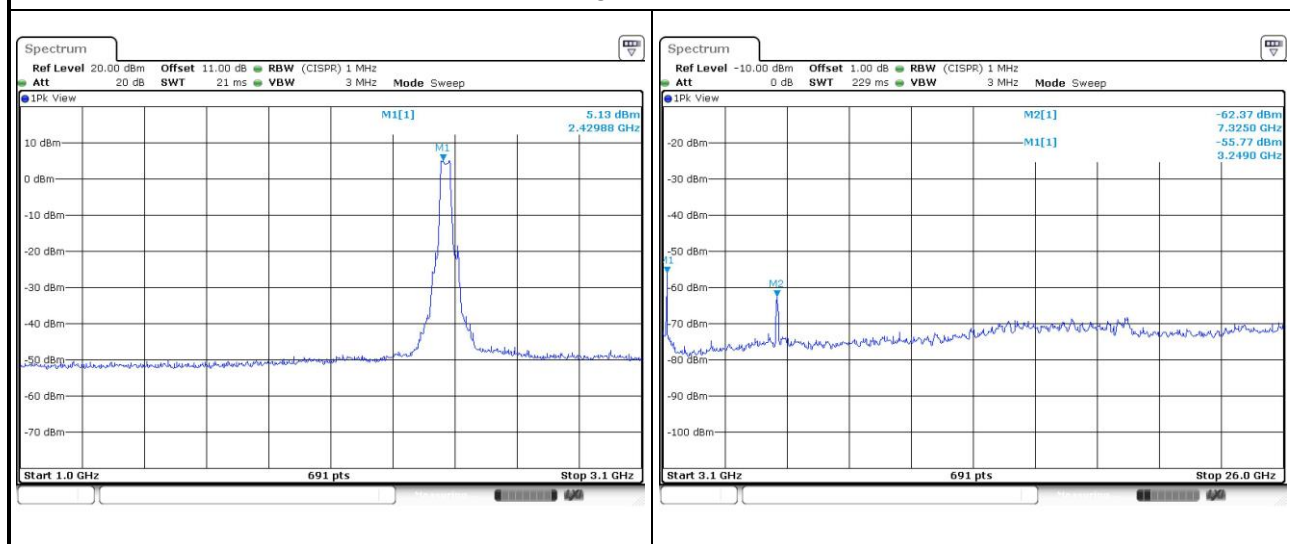
PK



Transmitter Conducted Unwanted Emissions Results in Restrict Bands

Condition		11n HT40_ MCS 0; Test Frequency: 2437MHz				
Freq. (MHz)	Chain (dBm)	Gain (dBi)	EIRP (dBm)	E-Field Limit (dBm)	E-Field Margin (dB)	Remark
2388.00	-29.94	3.00	-26.94	-21.20	-5.74	PK
2390.00	-52.96	3.00	-49.96	-41.20	-8.76	AV
2483.60	-25.46	3.00	-22.46	-21.20	-1.26	PK
2484.00	-51.42	3.00	-48.42	-41.20	-7.22	AV
7311.00	-59.47	3.00	-56.47	-21.20	-35.27	PK
7311.00	-	3.00	-	-41.20	-	AV

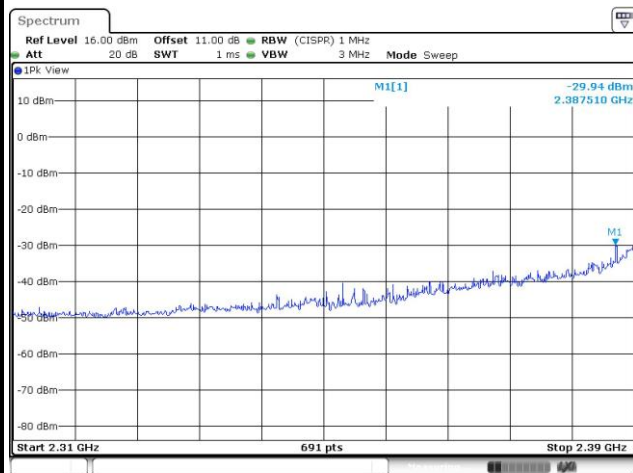
Note: Average value measurement is not performed if the peak measured value below the average limit

Full Range Scan Test Plot


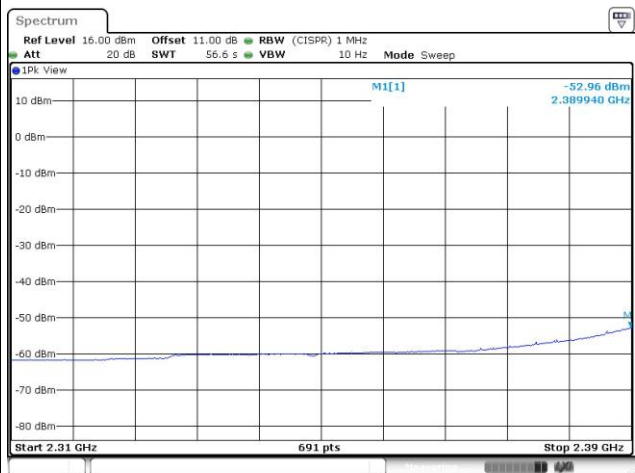


Band Edge Test Plot

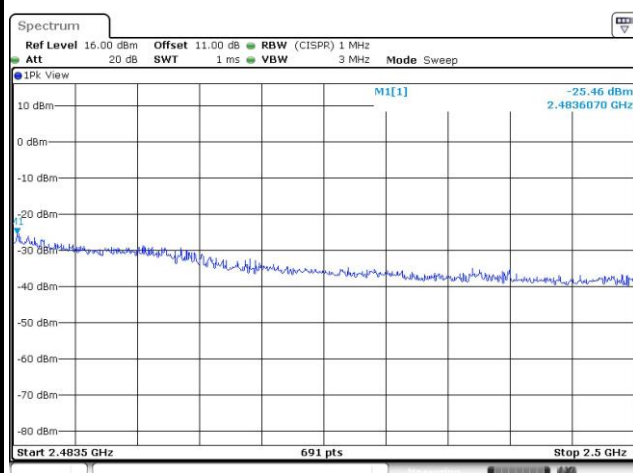
PK



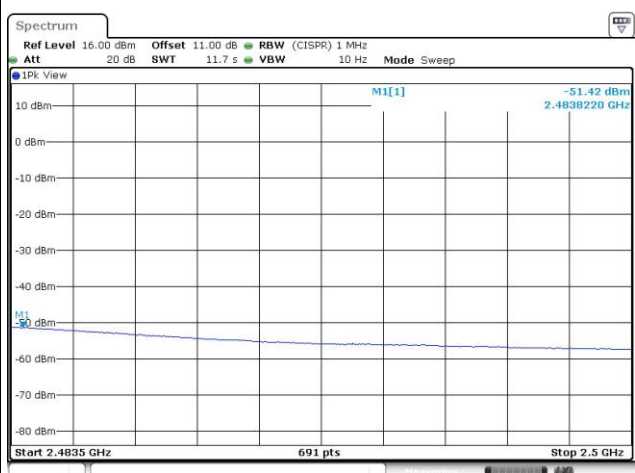
AV



PK



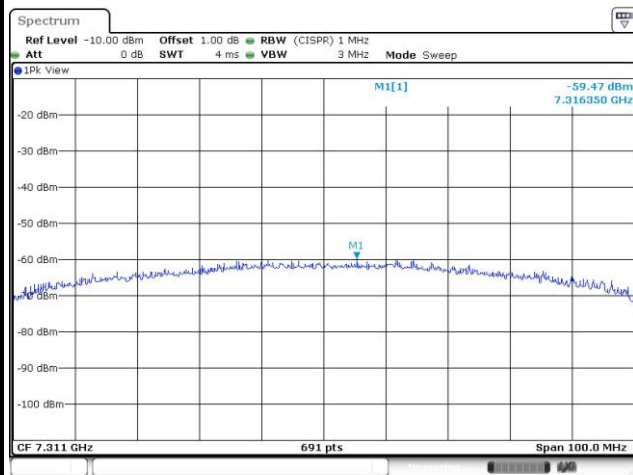
AV





Harmonic Emissions Test Plot

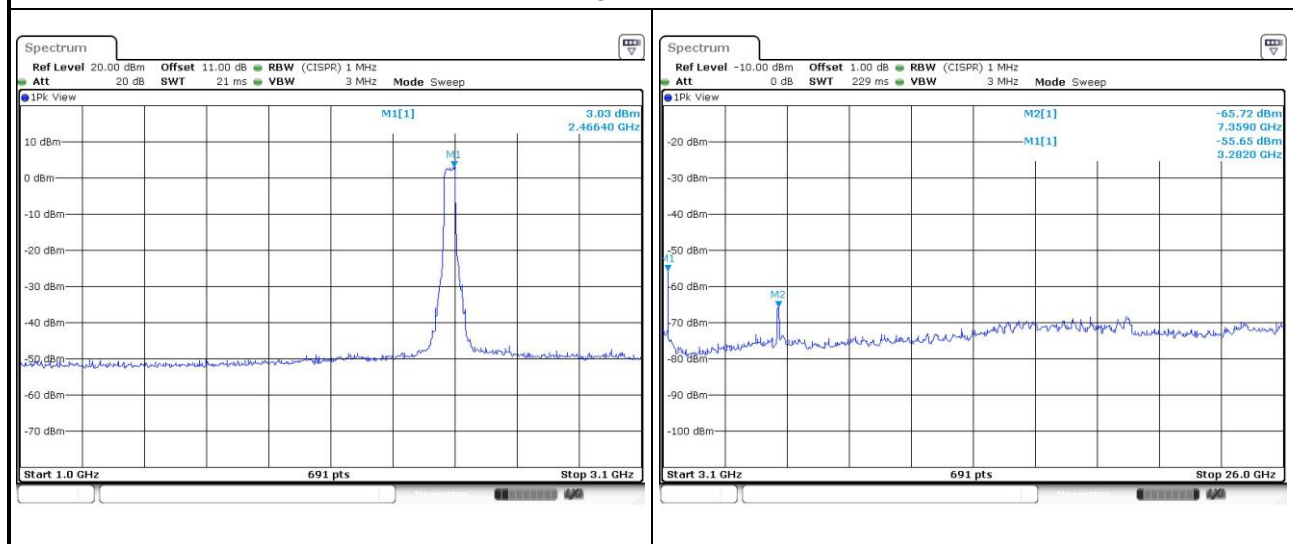
PK



Transmitter Conducted Unwanted Emissions Results in Restrict Bands

Condition		11n HT40_ MCS 0; Test Frequency: 2452MHz				
Freq. (MHz)	Chain (dBm)	Gain (dBi)	EIRP (dBm)	E-Field Limit (dBm)	E-Field Margin (dB)	Remark
2486.00	-25.44	3.00	-22.44	-21.20	-1.24	PK
2484.00	-49.00	3.00	-46.00	-41.20	-4.80	AV
7356.00	-63.60	3.00	-60.60	-21.20	-39.40	PK
7356.00	-	3.00	-	-41.20	-	AV

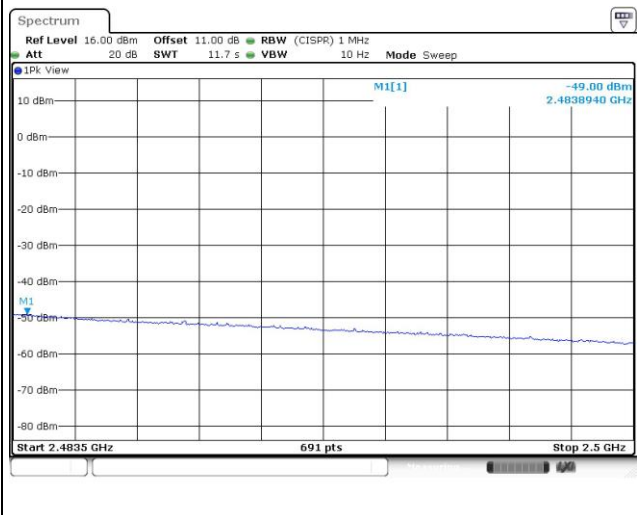
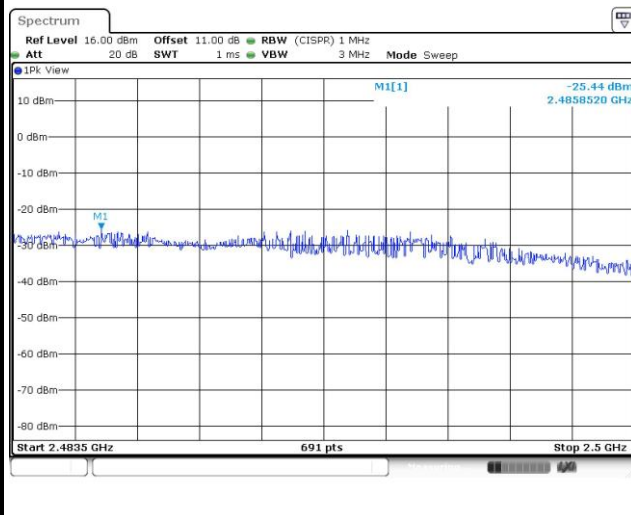
Note: Average value measurement is not performed if the peak measured value below the average limit

Full Range Scan Test Plot


Band Edge Test Plot

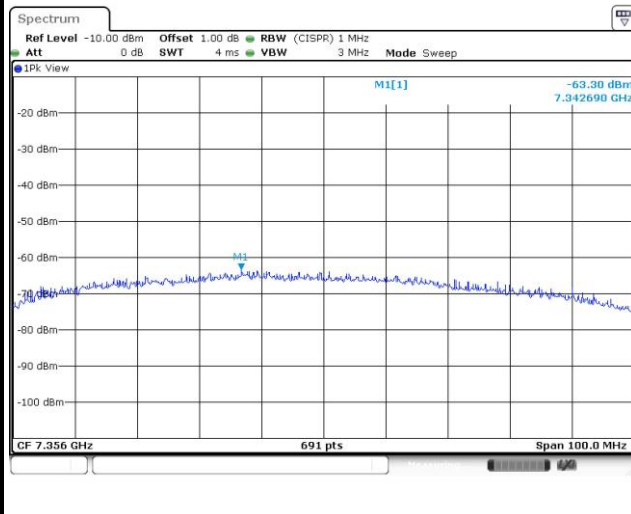
PK

AV



Harmonic Emissions Test Plot

PK



4 Test Equipment and Calibration Data

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
EMC Receiver	R&S	ESCS 30	100169	Oct. 15, 2013	Oct. 14, 2014
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 23, 2013	Nov. 22, 2014
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127-666	Dec. 04, 2013	Dec. 03, 2014
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Apr. 23, 2014	Apr. 22, 2015
50 ohm terminal (Support Unit)	NA	50	04	Apr. 18, 2014	Apr. 17, 2015
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-HY)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV 40	101013	Jan. 25, 2014	Jan. 24, 2015
Power Sensor	Anritsu	MA2411B	0917017	Jan. 28, 2014	Jan. 27, 2015
Power Meter	Anritsu	ML2495A	0949003	Jan. 28, 2014	Jan. 27, 2015
RF Cable-2m	HUBER+SUHNER	SUCOFLEX_104	SN 345675/4	Dec. 02, 2013	Dec. 01, 2014
DC Power Source	G.W.	GPC-6030D	C671845	Jul. 26, 2014	Jul. 25, 2015
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101498	Jan. 25, 2014	Jan. 24, 2015
Receiver	R&S	ESR3	101658	Jan. 10, 2014	Jan. 09, 2015
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jan. 02, 2014	Jan. 01, 2015
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Feb. 13, 2014	Feb. 12, 2015
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Dec. 27, 2013	Dec. 26, 2014
Preamplifier	Burgeon	BPA-530	SN:100219	Nov. 28, 2013	Nov. 27, 2014
Preamplifier	Agilent	83017A	MY39501308	Dec. 16, 2013	Dec. 15, 2014
Preamplifier	WM	TF-130N-R1	923365	Oct. 23, 2013	Oct. 22, 2014
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Dec. 16, 2013	Dec. 15, 2014
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Dec. 16, 2013	Dec. 15, 2014
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Dec. 16, 2013	Dec. 15, 2014
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Dec. 16, 2013	Dec. 15, 2014
Note: Calibration Interval of instruments listed above is one year.					

Loop Antenna	R&S	HFH2-Z2	100330	Nov. 15, 2012	Nov. 14, 2014
Note: Calibration Interval of instruments listed above is two year.					