OUTPUT POWER

XMit 2019.09.05

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Supply - DC	Agilent	U8002A	TPZ	NCR	NCR
Block - DC	Fairview Microwave	SD3379	AMI	6-Aug-19	6-Aug-20
Attenuator	S.M. Electronics	SA26B-20	TZP	9-Nov-19	9-Nov-20
Generator - Signal	Keysight	N5171B (EXG)	TEY	31-Dec-19	31-Dec-22
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFN	23-Dec-19	23-Dec-20
Cable	Micro-Coax	UFD150A-1-0720-200200	MNL	15-Sep-19	15-Sep-20

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The peak output power was measured with the EUT set to low, medium and high transmit frequencies. The EUT was transmitting in a no hop mode at the data rate(s) listed in the datasheet.

The method found in ANSI C63.10:2013 Section 7.8.5 was used for a FHSS radio.

OUTPUT POWER

TbtTx 2019.08.30.0 XMit 2019.09.05

EUT:	C2-03CPU			Work Order:	KOYO0001
Serial Number:	N/A			Date:	14-Feb-20
Customer:	Koyo Electronics Industries Co., LTD			Temperature:	22 °C
Attendees:	None			Humidity:	14.7% RH
Project:	None			Barometric Pres.:	1025 mbar
Tested by:	Andrew Rogstad	Power:	24 VDC	Job Site:	MN08

TEST SPECIFICATIONS	Test Method
FCC 15.247:2020	ANSI C63.10:2013

COMMENTS

Reference level offset includes 20 dB attenuator, DC block, and measurement cable.

DEVIATIONS FROM TEST STANDARD

None

Configuration #	10	Signature

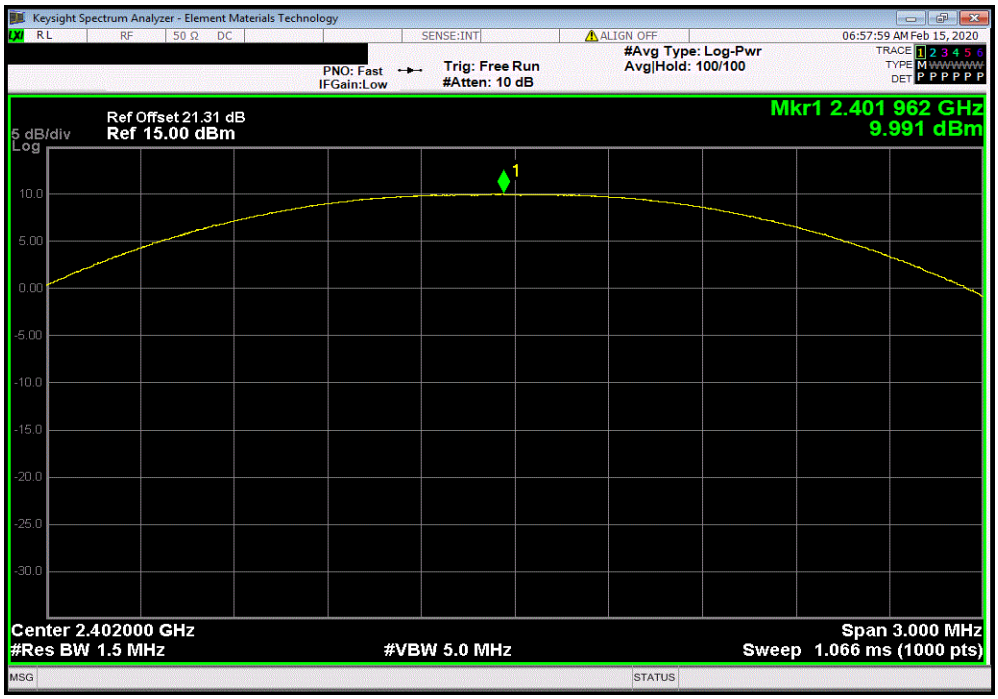
		Out Pwr (dBm)	Limit (dBm)	Result
DH5, GFSK				
	Low Channel (2402 MHz)	9.991	21	Pass
	Mid Channel (2441 MHz)	9.749	21	Pass
	High Channel (2480 MHz)	9.835	21	Pass
2DH5, pi/4-DQPSK				
	Low Channel (2402 MHz)	12.022	21	Pass
	Mid Channel (2441 MHz)	12.099	21	Pass
	High Channel (2480 MHz)	12.213	21	Pass
3DH5, 8-DPSK				
	Low Channel (2402 MHz)	12.492	21	Pass
	Mid Channel (2441 MHz)	12.477	21	Pass
	High Channel (2480 MHz)	12.403	21	Pass

OUTPUT POWER

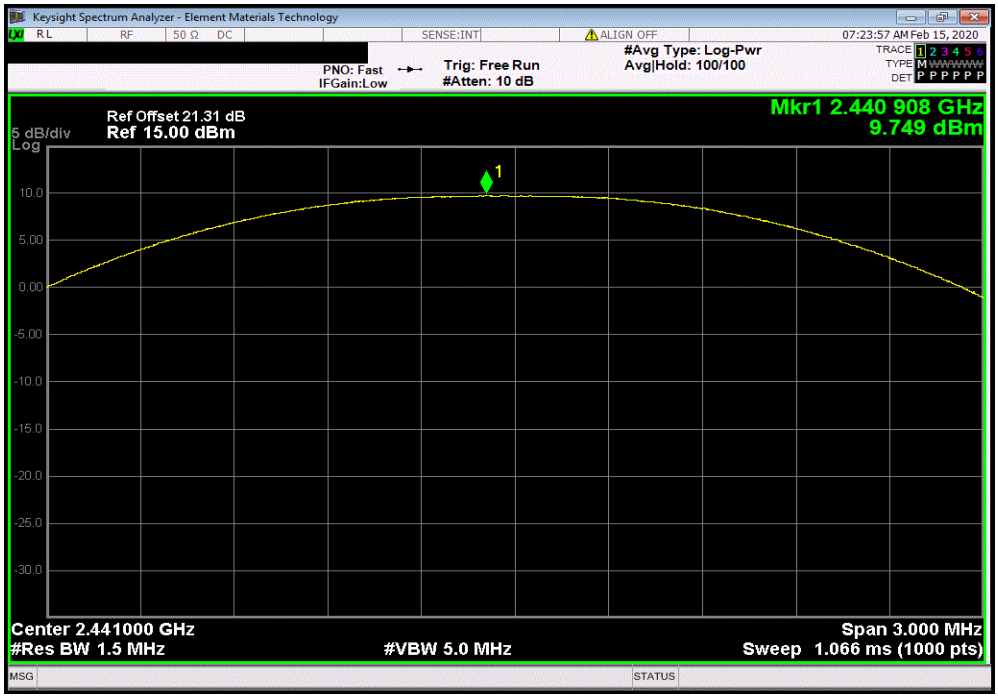
element

TbtTx 2019.08.30.0 XMit 2019.09.05

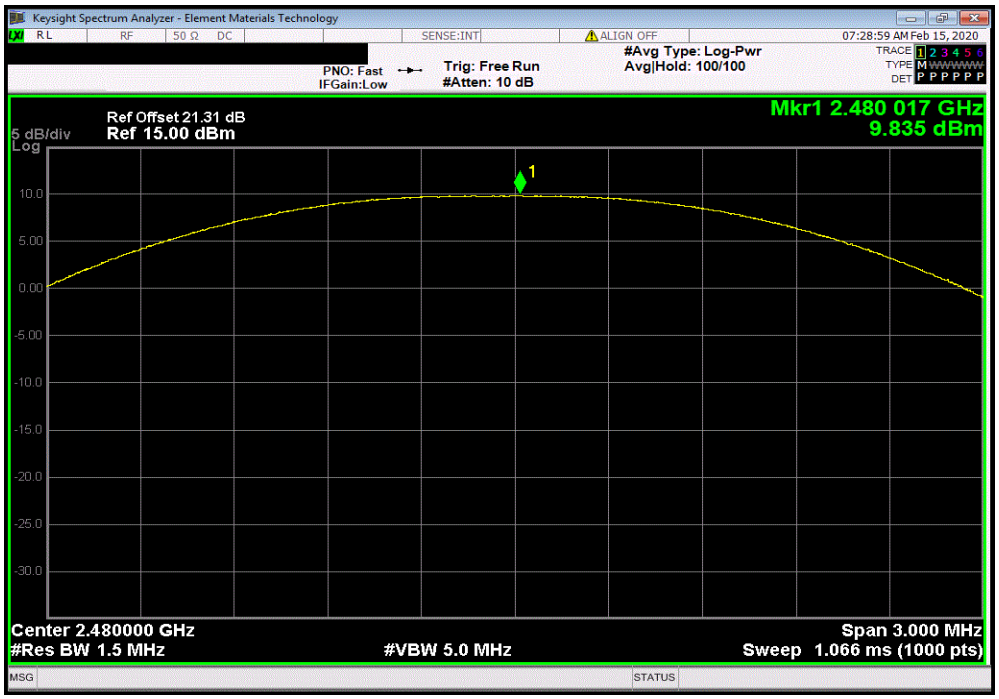
DH5, GFSK, Low Channel (2402 MHz)						
				Out Pwr (dBm)	Limit (dBm)	Result
				9.991	21	Pass



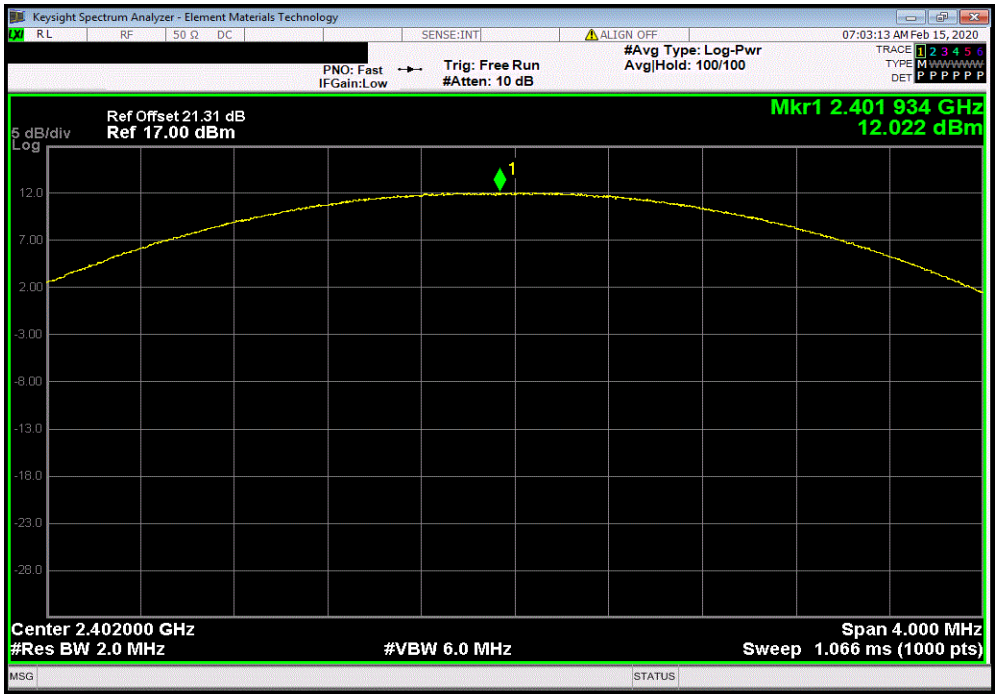
DH5, GFSK, Mid Channel (2441 MHz)						
				Out Pwr (dBm)	Limit (dBm)	Result
				9.749	21	Pass



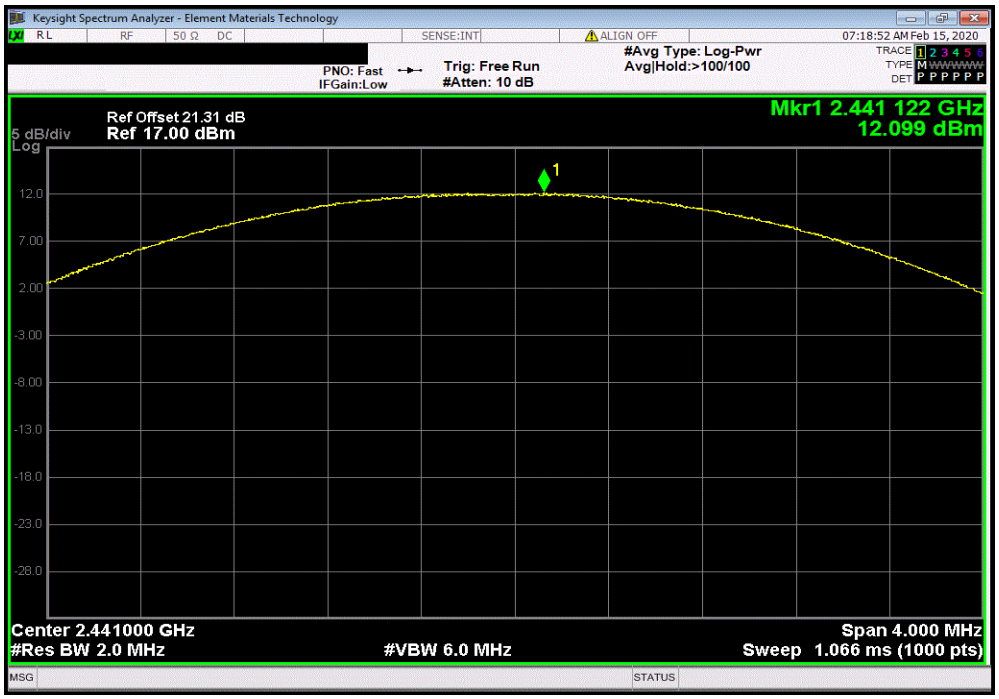
DH5, GFSK, High Channel (2480 MHz)						
				Out Pwr (dBm)	Limit (dBm)	Result
				9.835	21	Pass



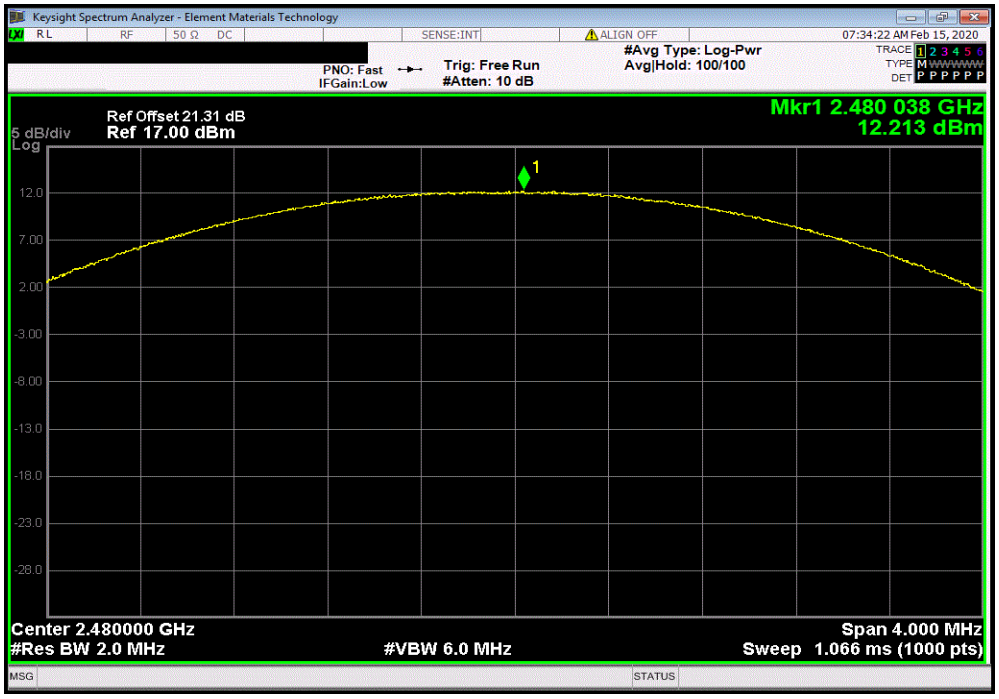
2DH5, pi/4-DQPSK, Low Channel (2402 MHz)						
				Out Pwr (dBm)	Limit (dBm)	Result
				12.022	21	Pass



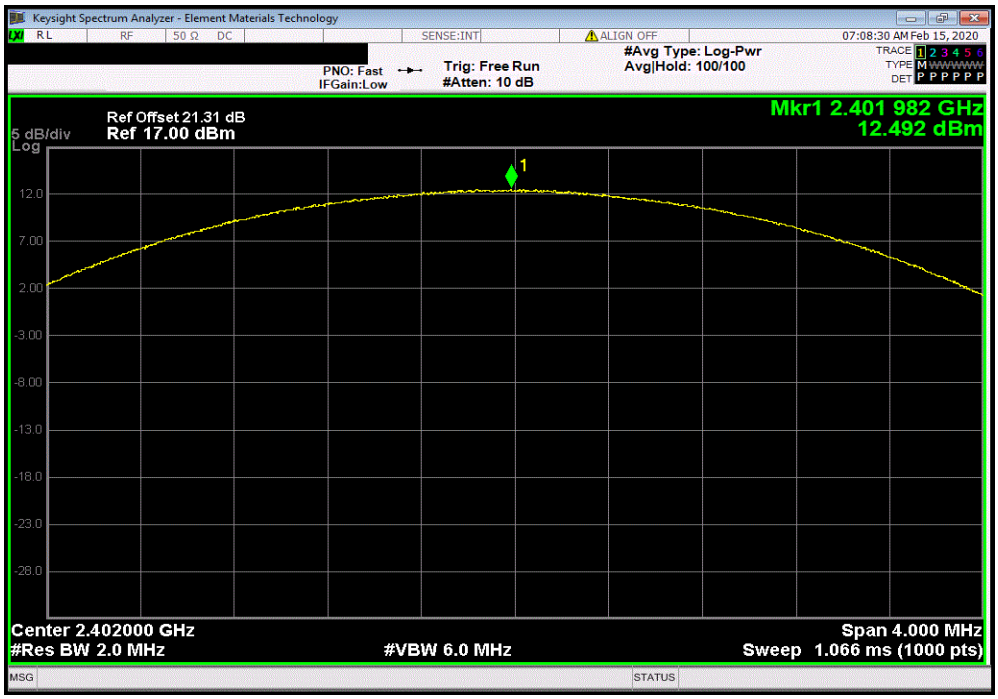
2DH5, pi/4-DQPSK, Mid Channel (2441 MHz)						
				Out Pwr (dBm)	Limit (dBm)	Result
				12.099	21	Pass



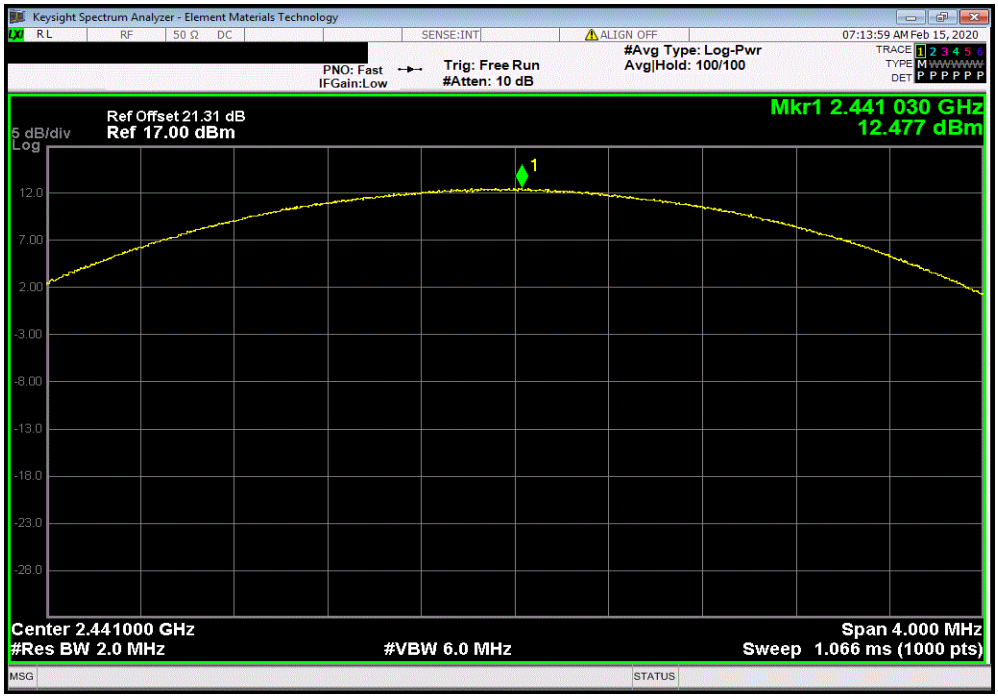
2DH5, pi/4-DQPSK, High Channel (2480 MHz)						
				Out Pwr (dBm)	Limit (dBm)	Result
				12.213	21	Pass



3DH5, 8-DPSK, Low Channel (2402 MHz)						
				Out Pwr (dBm)	Limit (dBm)	Result
				12.492	21	Pass



3DH5, 8-DPSK, Mid Channel (2441 MHz)						
				Out Pwr (dBm)	Limit (dBm)	Result
				12.477	21	Pass



OUTPUT POWER

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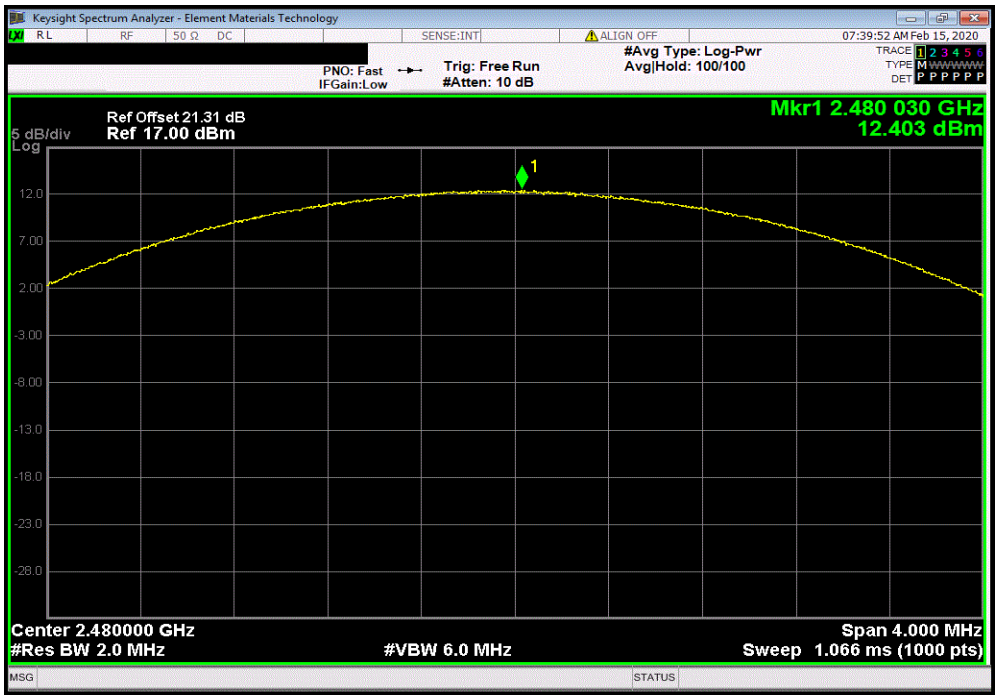
3DH5, 8-DPSK, High Channel (2480 MHz)						
				Out Pwr (dBm)	Limit (dBm)	Result
				12.403	21	Pass



EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)

XMit 2019.09.05

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Supply - DC	Agilent	U8002A	TPZ	NCR	NCR
Block - DC	Fairview Microwave	SD3379	AMI	6-Aug-19	6-Aug-20
Attenuator	S.M. Electronics	SA26B-20	TZP	9-Nov-19	9-Nov-20
Generator - Signal	Keysight	N5171B (EXG)	TEY	31-Dec-19	31-Dec-22
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFN	23-Dec-19	23-Dec-20
Cable	Micro-Coax	UFD150A-1-0720-200200	MNL	15-Sep-19	15-Sep-20

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The peak output power was measured with the EUT set to low, medium and high transmit frequencies. The EUT was transmitting in a no hop mode at the data rate(s) listed in the datasheet.

The method found in ANSI C63.10:2013 Section 7.8.5 was used for a FHSS radio.

EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)

TbtTx 2019.08.30.0 XMit 2019.09.05

EUT:	C2-03CPU	**Work Order:**	KOYO0001
Serial Number:	N/A	**Date:**	14-Feb-20
Customer:	Koyo Electronics Industries Co., LTD	**Temperature:**	22.1 °C
Attendees:	None	**Humidity:**	14.6% RH
Project:	None	**Barometric Pres.:**	1025 mbar
Tested by:	Andrew Rogstad	**Power:** 24 VDC	**Job Site:** MN08

TEST SPECIFICATIONS	Test Method
FCC 15.247:2020	ANSI C63.10:2013

COMMENTS

Reference level offset includes 20 dB attenuator, DC block, and measurement cable. Data shown with highest gain antenna variant.

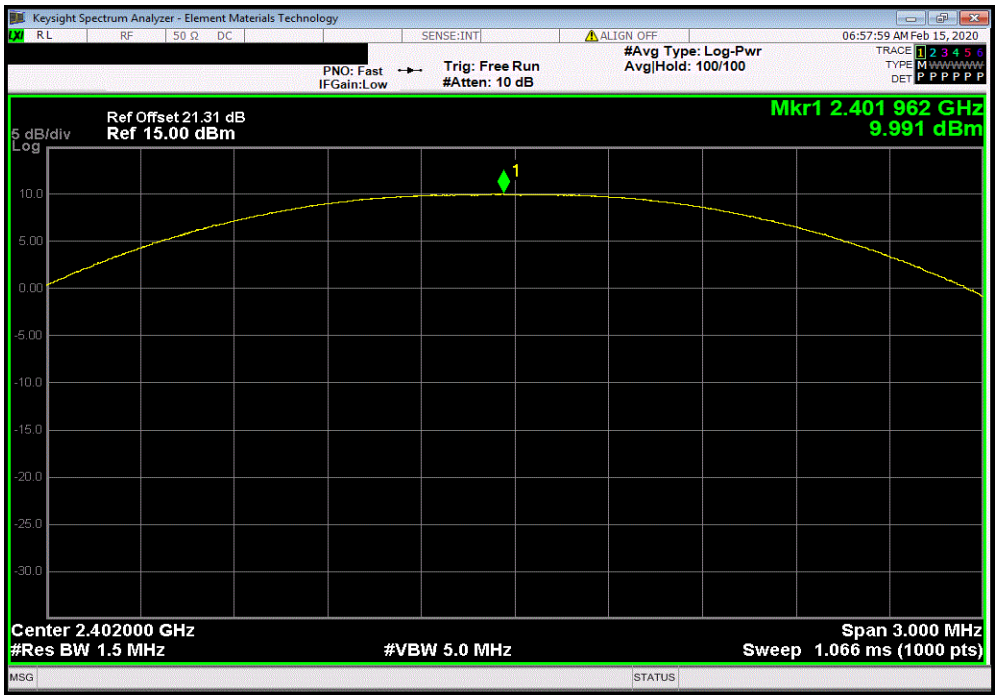
DEVIATIONS FROM TEST STANDARD

None

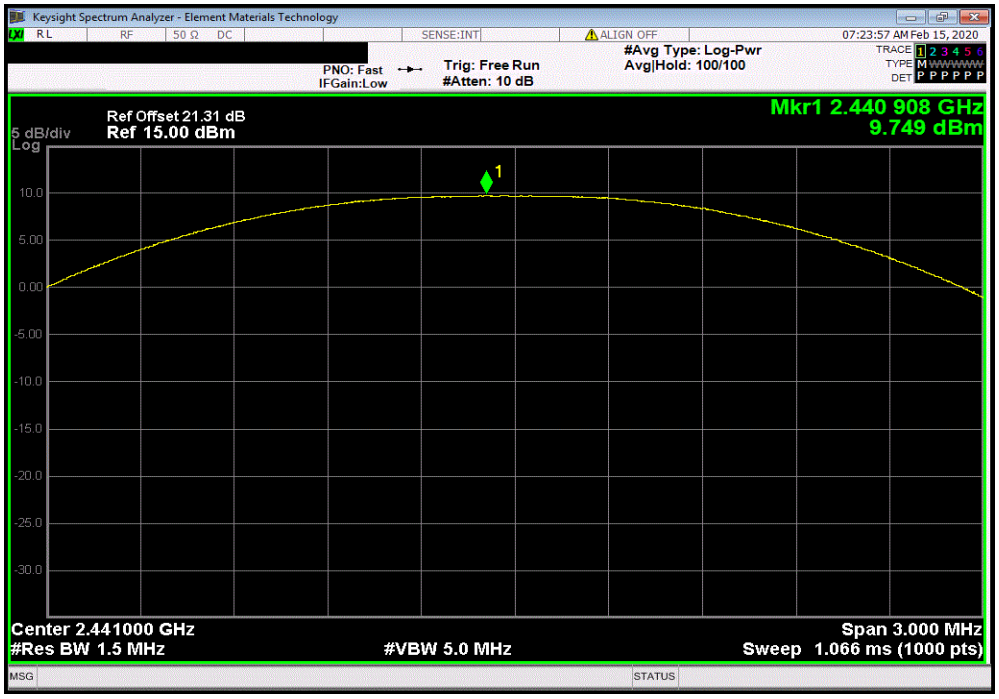
Configuration #	10	Signature

		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
DH5, GFSK						
	Low Channel (2402 MHz)	9.991	1.8	11.791	27	Pass
	Mid Channel (2441 MHz)	9.749	1.8	11.549	27	Pass
	High Channel (2480 MHz)	9.835	1.8	11.635	27	Pass
2DH5, pi/4-DQPSK						
	Low Channel (2402 MHz)	12.022	1.8	13.822	27	Pass
	Mid Channel (2441 MHz)	12.099	1.8	13.899	27	Pass
	High Channel (2480 MHz)	12.213	1.8	14.013	27	Pass
3DH5, 8-DPSK						
	Low Channel (2402 MHz)	12.492	1.8	14.292	27	Pass
	Mid Channel (2441 MHz)	12.477	1.8	14.277	27	Pass
	High Channel (2480 MHz)	12.403	1.8	14.203	27	Pass

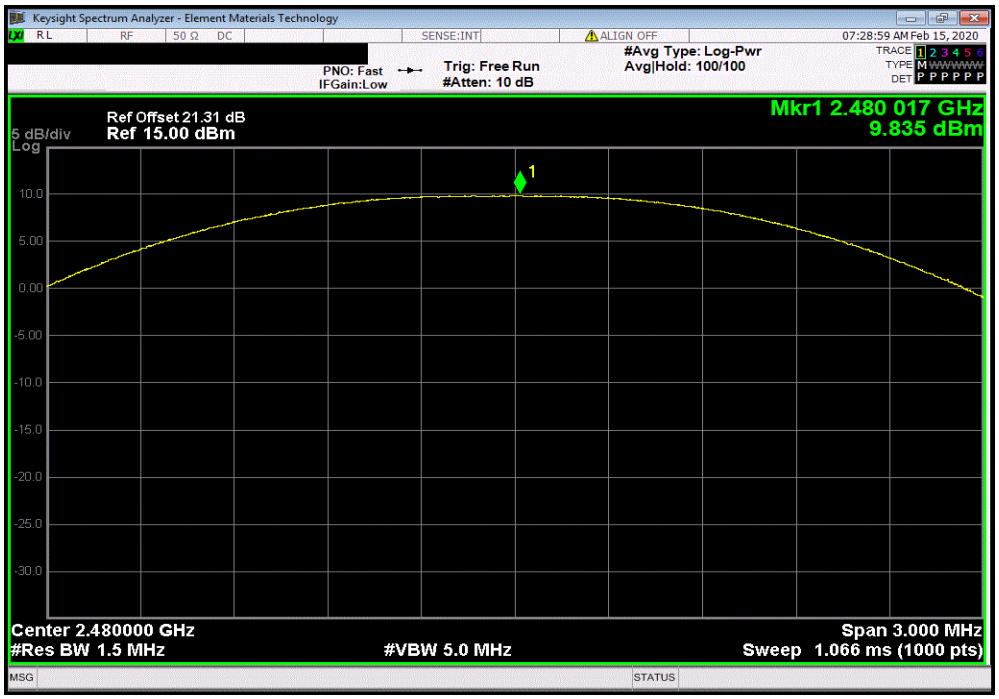
DH5, GFSK, Low Channel (2402 MHz)						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		9.991	1.8	11.791	27	Pass



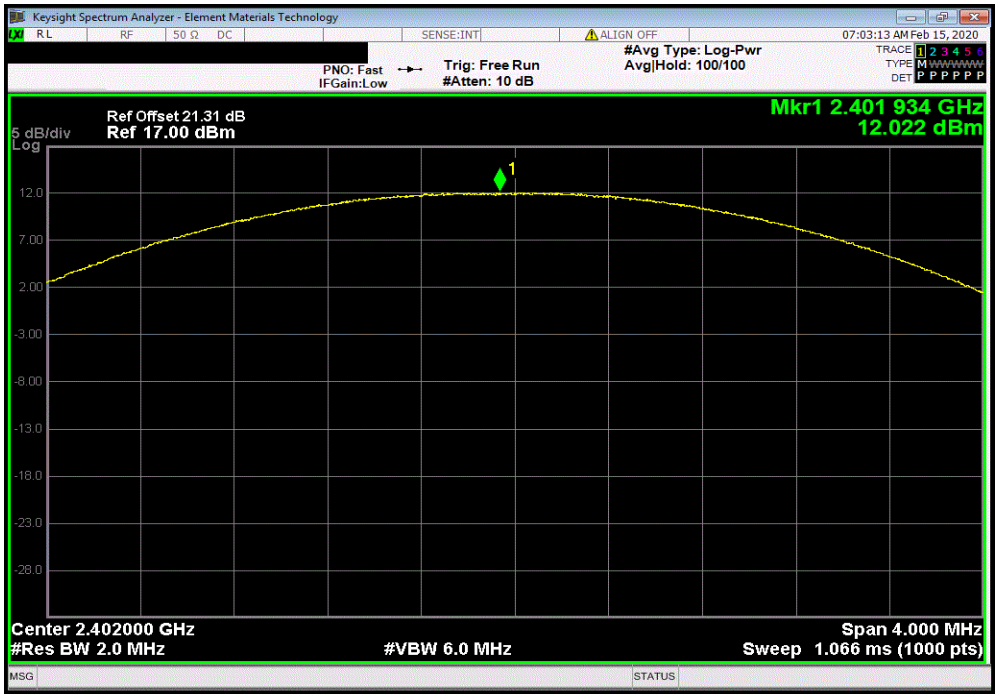
DH5, GFSK, Mid Channel (2441 MHz)						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		9.749	1.8	11.549	27	Pass



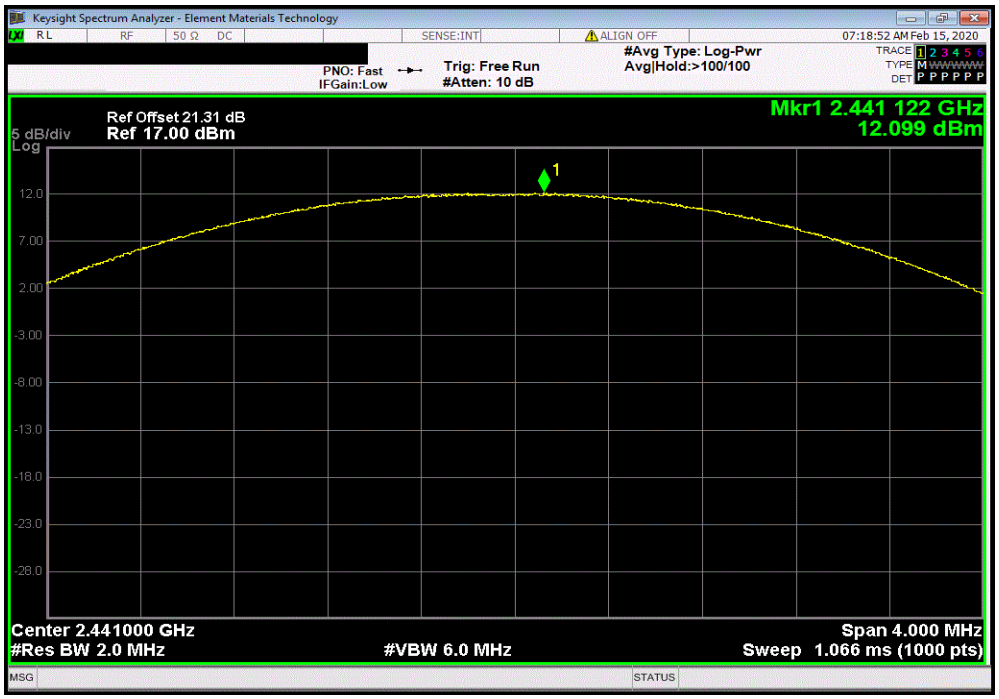
DH5, GFSK, High Channel (2480 MHz)						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		9.835	1.8	11.635	27	Pass



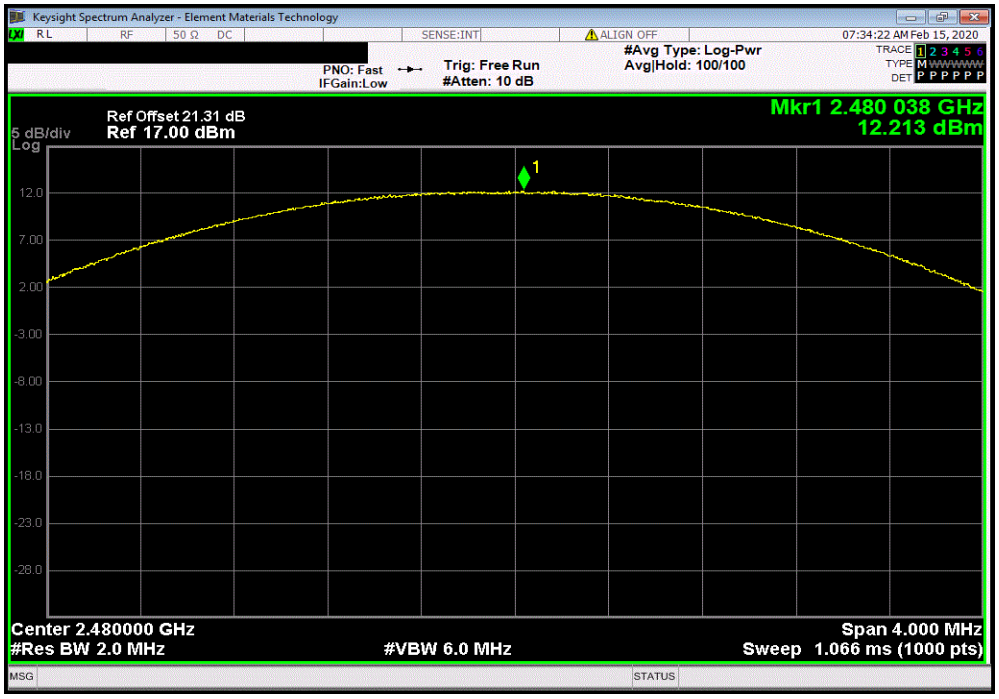
2DH5, pi/4-DQPSK, Low Channel (2402 MHz)						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		12.022	1.8	13.822	27	Pass



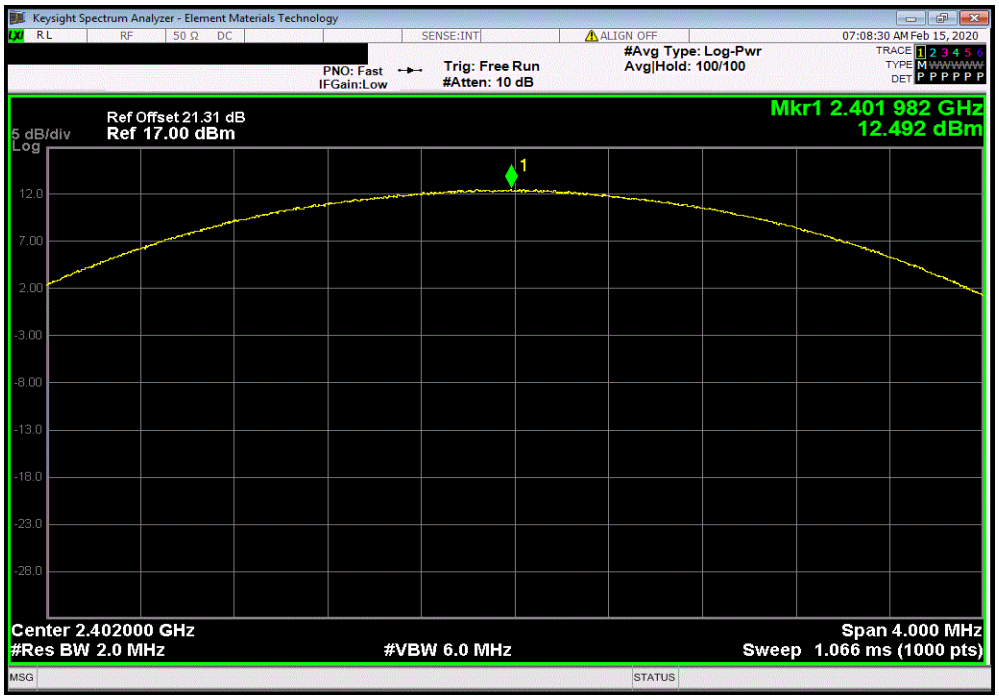
2DH5, pi/4-DQPSK, Mid Channel (2441 MHz)						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		12.099	1.8	13.899	27	Pass



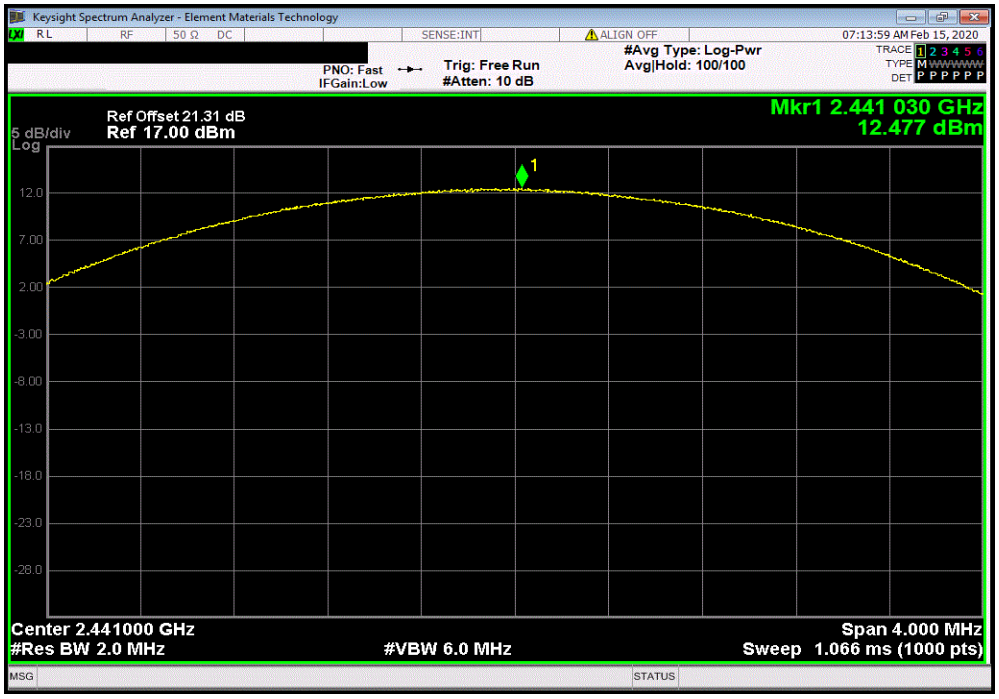
2DH5, pi/4-DQPSK, High Channel (2480 MHz)						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		12.213	1.8	14.013	27	Pass



3DH5, 8-DPSK, Low Channel (2402 MHz)						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		12.492	1.8	14.292	27	Pass



3DH5, 8-DPSK, Mid Channel (2441 MHz)						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		12.477	1.8	14.277	27	Pass

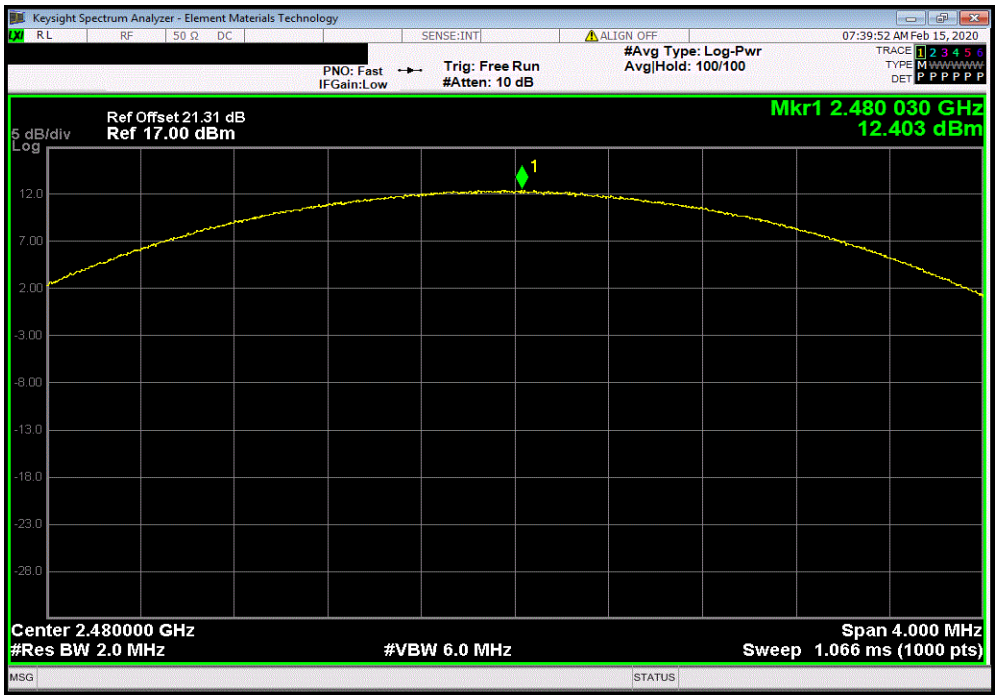


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)

element

TbtTx 2019.08.30.0 XMit 2019.09.05

3DH5, 8-DPSK, High Channel (2480 MHz)						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		12.403	1.8	14.203	27	Pass



BAND EDGE COMPLIANCE -HOPPING MODE

XMit 2019.09.05

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Supply - DC	Agilent	U8002A	TPZ	NCR	NCR
Block - DC	Fairview Microwave	SD3379	AMI	6-Aug-19	6-Aug-20
Attenuator	S.M. Electronics	SA26B-20	TZP	9-Nov-19	9-Nov-20
Generator - Signal	Keysight	N5171B (EXG)	TEY	31-Dec-19	31-Dec-22
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFN	23-Dec-19	23-Dec-20
Cable	Micro-Coax	UFD150A-1-0720-200200	MNL	15-Sep-19	15-Sep-20

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The spurious RF conducted emissions at the edges of the authorized band were measured with the EUT set to its normal pseudo-random hopping sequence. The EUT was transmitting at the data rate(s) listed in the datasheet.

The spectrum was scanned below the lower band edge and above the higher band edge.

BAND EDGE COMPLIANCE -HOPPING MODE

TbtTx 2019.08.30.0 XMit 2019.09.05

EUT:	C2-03CPU	Work Order:	KOYO0001
Serial Number:	N/A	Date:	14-Feb-20
Customer:	Koyo Electronics Industries Co., LTD	Temperature:	22.3 °C
Attendees:	None	Humidity:	14.6% RH
Project:	None	Barometric Pres.:	1026 mbar
Tested by:	Andrew Rogstad	Power: 24 VDC	Job Site: MN08

TEST SPECIFICATIONS	Test Method
FCC 15.247:2020	ANSI C63.10:2013

COMMENTS

Reference level offset includes 20 dB attenuator, DC block, and measurement cable.

DEVIATIONS FROM TEST STANDARD

None

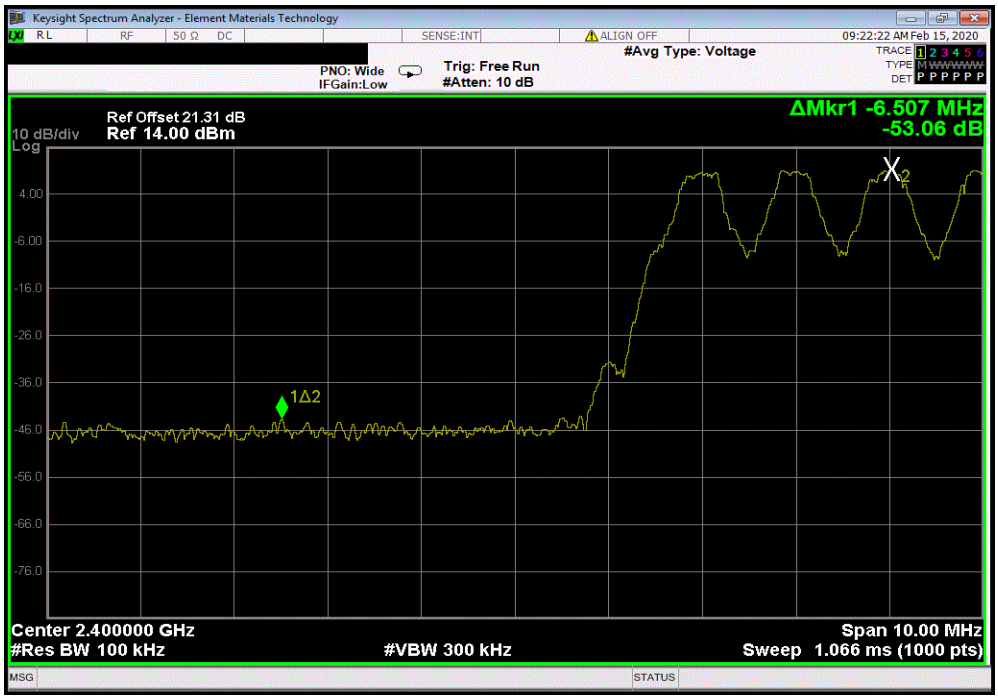
Configuration #	10	Signature

	Value (dBc)	Limit ≤ (dBc)	Result
Hopping Mode (All Channels)			
DH5, GFSK			
Low Channel, 2402 MHz	-53.06	-20	Pass
High Channel, 2480 MHz	-50.36	-20	Pass
2DH5, pi/4-DQPSK			
Low Channel, 2402 MHz	-53.47	-20	Pass
High Channel, 2480 MHz	-51.55	-20	Pass
3DH5, 8-DPSK			
Low Channel, 2402 MHz	-50.57	-20	Pass
High Channel, 2480 MHz	-50.39	-20	Pass

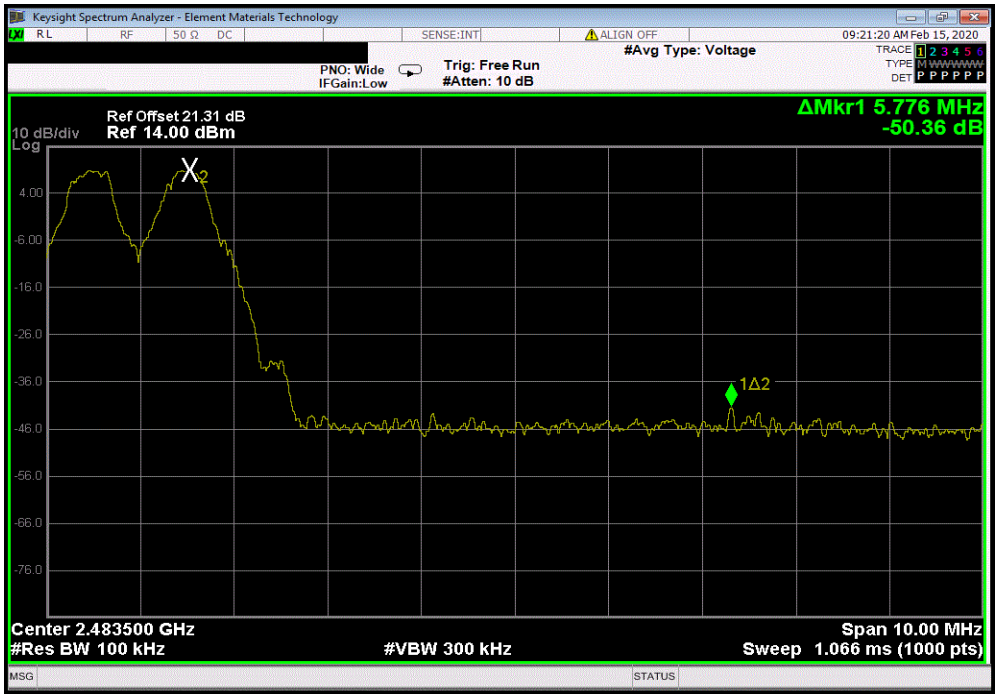
BAND EDGE COMPLIANCE -HOPPING MODE

TbtTx 2019.08.30.0 XMit 2019.09.05

Hopping Mode (All Channels), DH5, GFSK, Low Channel, 2402 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-53.06	-20	Pass



Hopping Mode (All Channels), DH5, GFSK, High Channel, 2480 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-50.36	-20	Pass

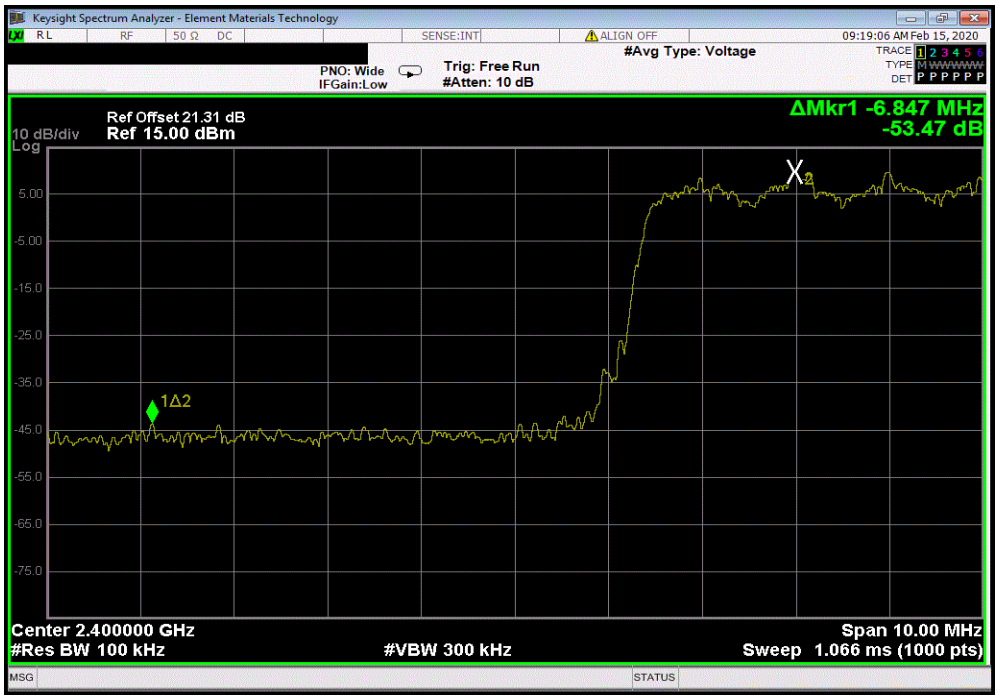


BAND EDGE COMPLIANCE -HOPPING MODE

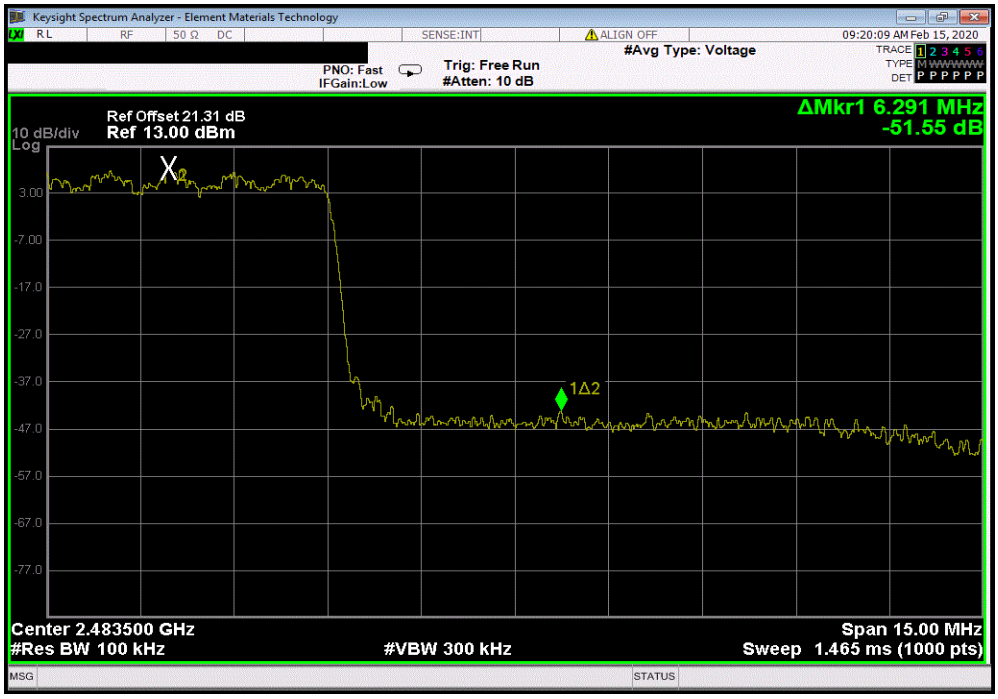
element

TbtTx 2019.08.30.0 XMit 2019.09.05

Hopping Mode (All Channels), 2DH5, pi/4-DQPSK, Low Channel, 2402 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-53.47	-20	Pass



Hopping Mode (All Channels), 2DH5, pi/4-DQPSK, High Channel, 2480 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-51.55	-20	Pass

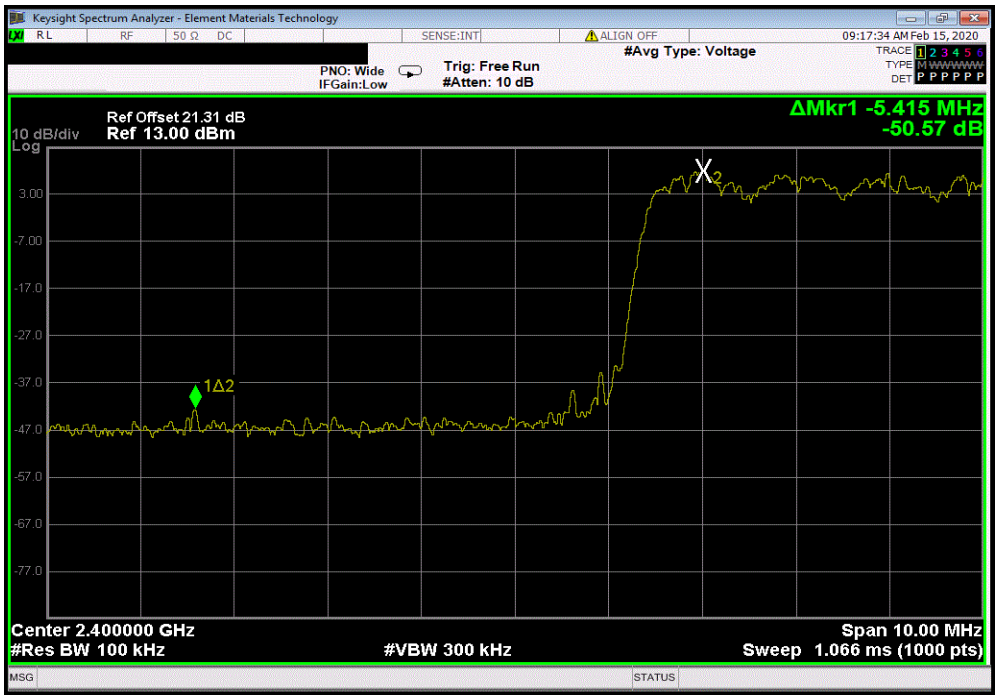


BAND EDGE COMPLIANCE -HOPPING MODE

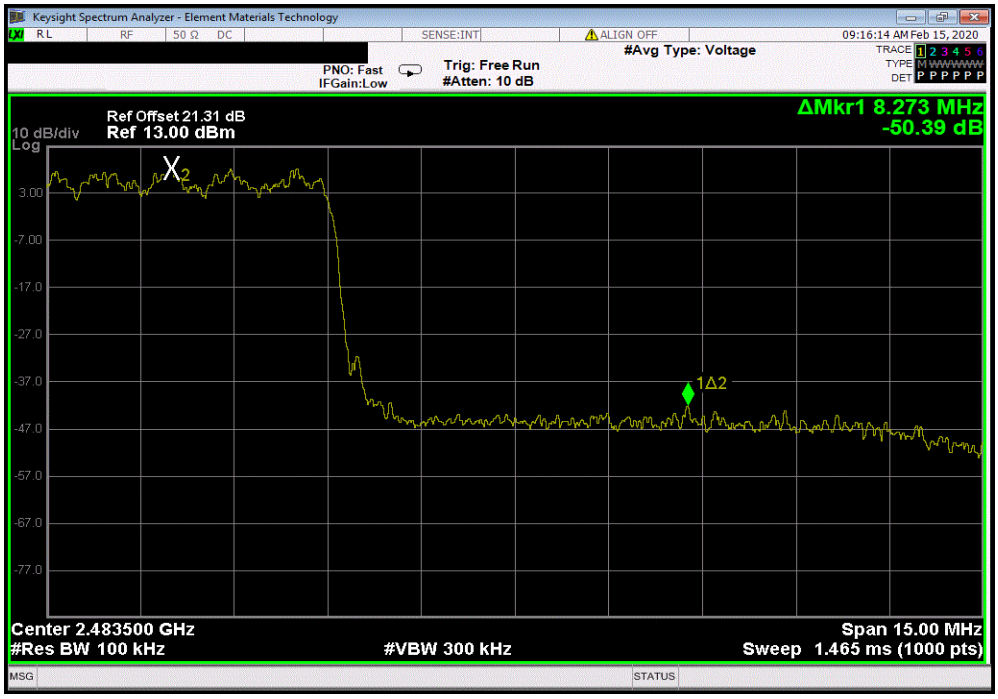
element

TbtTx 2019.08.30.0 XMit 2019.09.05

Hopping Mode (All Channels), 3DH5, 8-DPSK, Low Channel, 2402 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-50.57	-20	Pass



Hopping Mode (All Channels), 3DH5, 8-DPSK, High Channel, 2480 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-50.39	-20	Pass



BAND EDGE COMPLIANCE

XMit 2019.09.05

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Supply - DC	Agilent	U8002A	TPZ	NCR	NCR
Block - DC	Fairview Microwave	SD3379	AMI	6-Aug-19	6-Aug-20
Attenuator	S.M. Electronics	SA26B-20	TZP	9-Nov-19	9-Nov-20
Generator - Signal	Keysight	N5171B (EXG)	TEY	31-Dec-19	31-Dec-22
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFN	23-Dec-19	23-Dec-20
Cable	Micro-Coax	UFD150A-1-0720-200200	MNL	15-Sep-19	15-Sep-20

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The spurious RF conducted emissions at the edges of the authorized band were measured with the EUT set to low and high transmit frequencies. The EUT was transmitting at the data rate(s) listed in the datasheet in a no hop mode. The channels closest to the band edges were selected.

The spectrum was scanned below the lower band edge and above the higher band edge.

BAND EDGE COMPLIANCE

TbtTx 2019.08.30.0 XMit 2019.09.05

EUT:	C2-03CPU	Work Order:	KOYO0001
Serial Number:	N/A	Date:	14-Feb-20
Customer:	Koyo Electronics Industries Co., LTD	Temperature:	22.1 °C
Attendees:	None	Humidity:	14.6% RH
Project:	None	Barometric Pres.:	1025 mbar
Tested by:	Andrew Rogstad	Power: 24 VDC	Job Site: MN08

TEST SPECIFICATIONS	Test Method
FCC 15.247:2020	ANSI C63.10:2013

COMMENTS

Reference level offset includes 20 dB attenuator, DC block, and measurement cable.

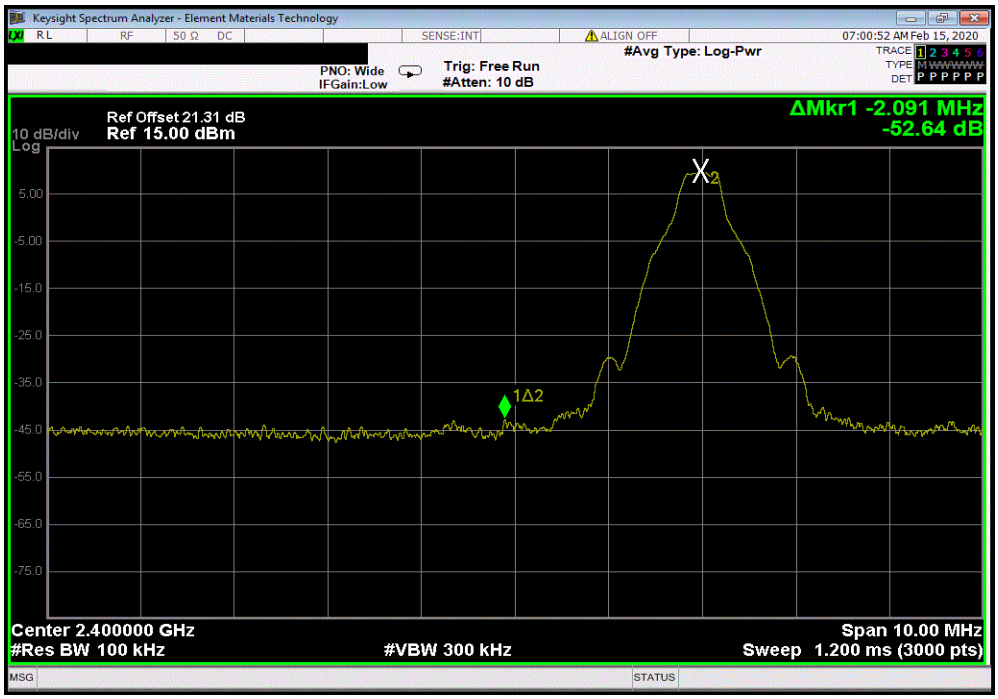
DEVIATIONS FROM TEST STANDARD

None

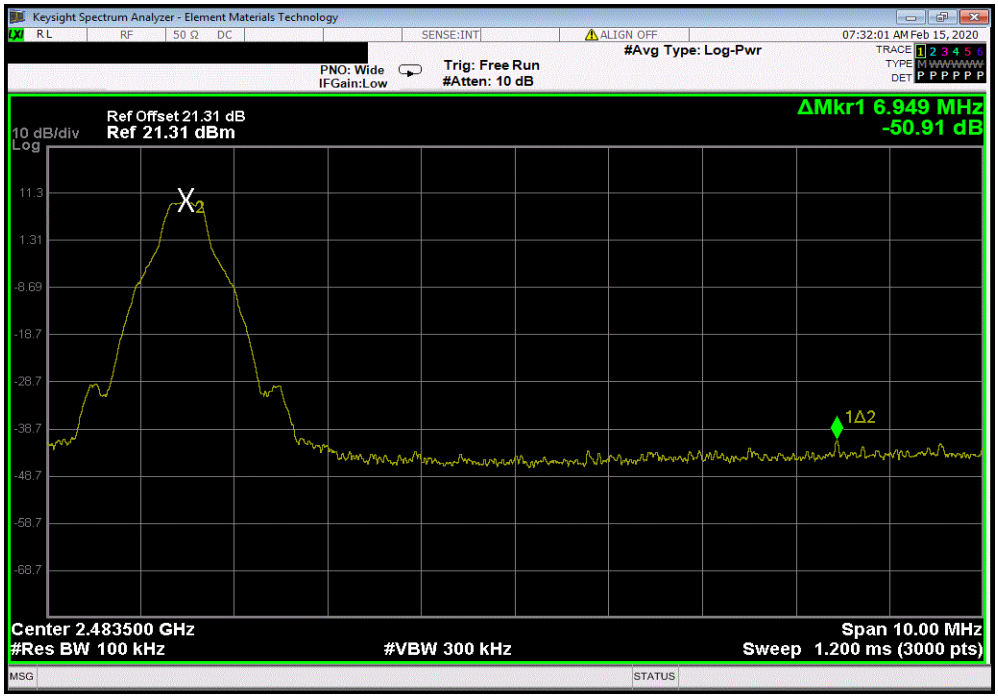
Configuration #	10	Signature

	Value (dBc)	Limit ≤ (dBc)	Result
DH5, GFSK			
Low Channel (2402 MHz)	-52.65	-20	Pass
High Channel (2480 MHz)	-50.91	-20	Pass
2DH5, pi/4-DQPSK			
Low Channel (2402 MHz)	-51.73	-20	Pass
High Channel (2480 MHz)	-51.4	-20	Pass
3DH5, 8-DPSK			
Low Channel (2402 MHz)	-51.7	-20	Pass
High Channel (2480 MHz)	-51.31	-20	Pass

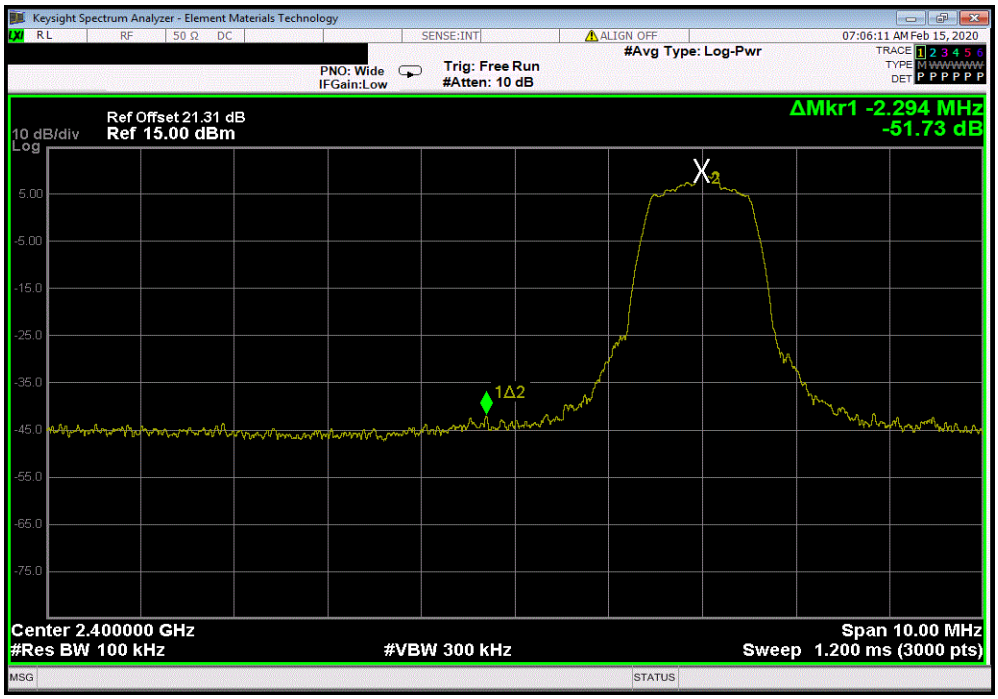
DH5, GFSK, Low Channel (2402 MHz)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-52.65	-20	Pass



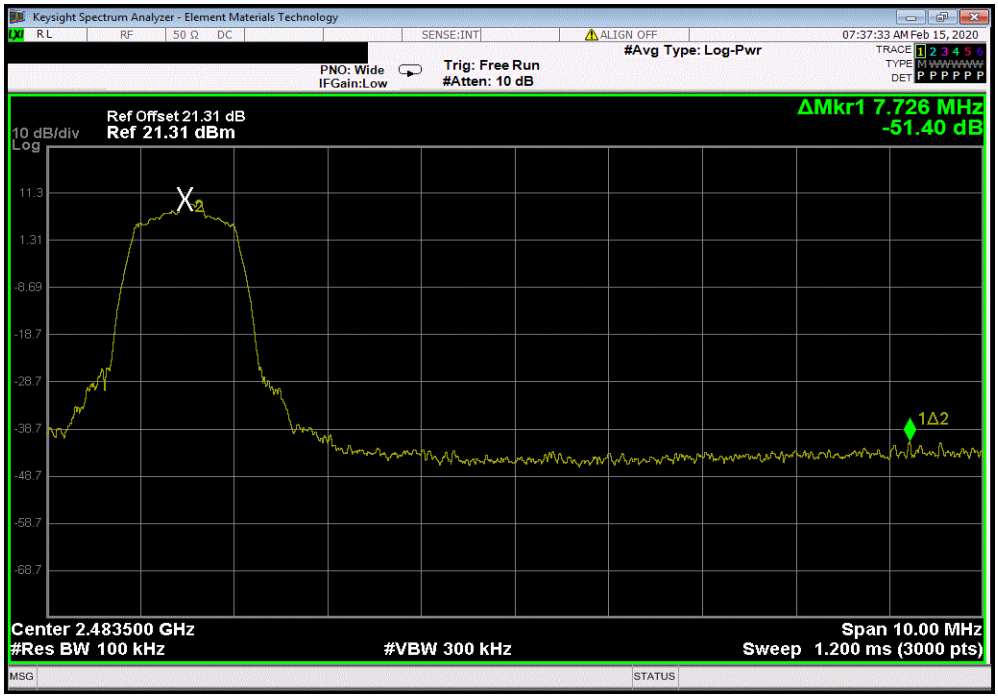
DH5, GFSK, High Channel (2480 MHz)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-50.91	-20	Pass



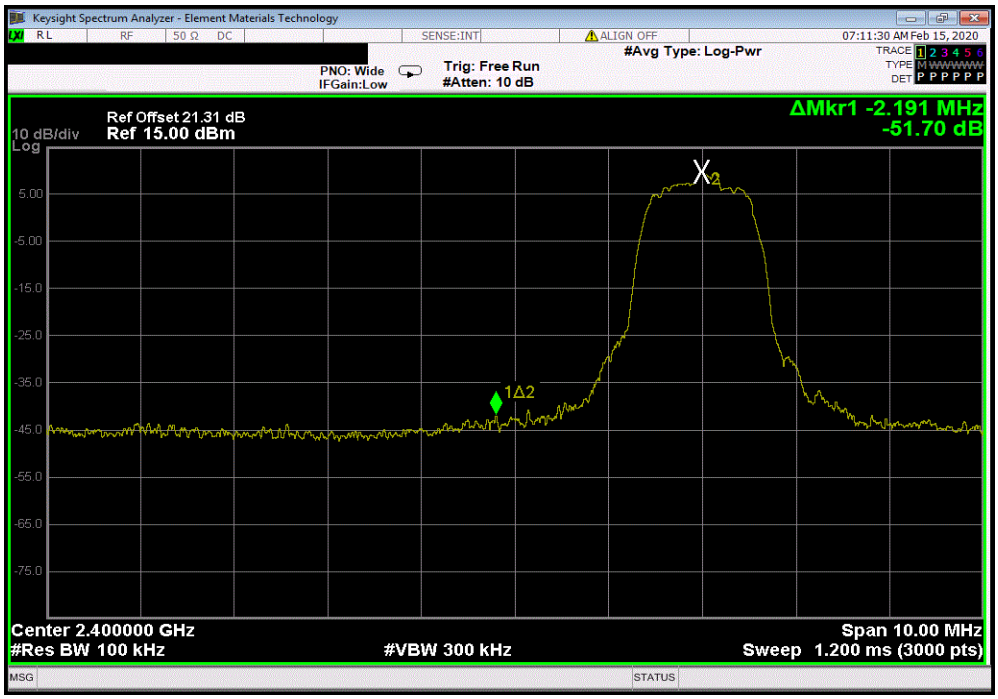
2DH5, pi/4-DQPSK, Low Channel (2402 MHz)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-51.73	-20	Pass



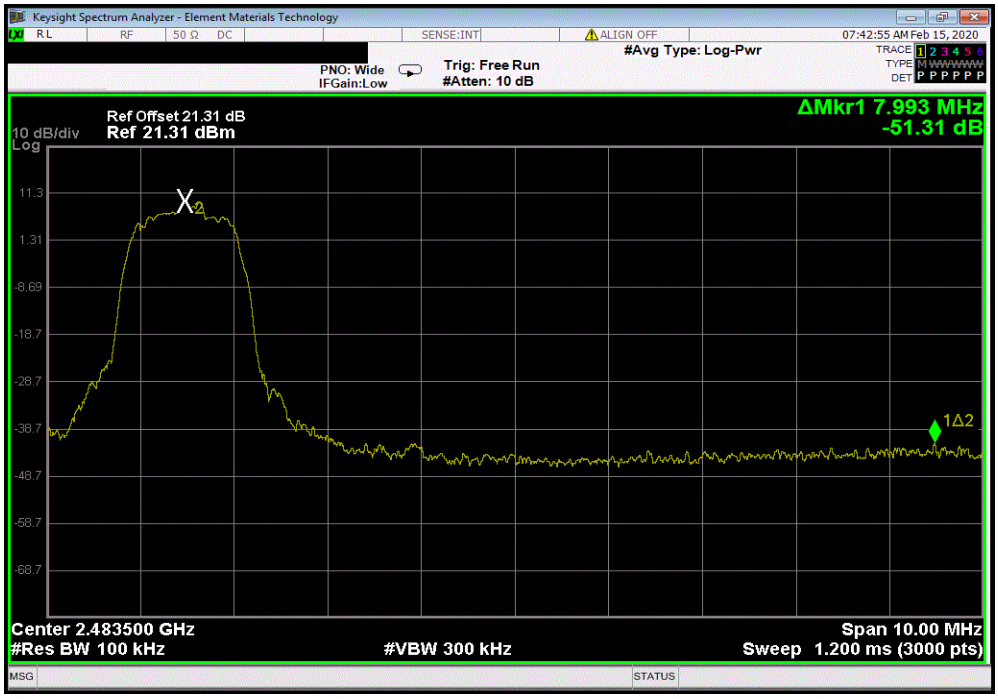
2DH5, pi/4-DQPSK, High Channel (2480 MHz)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-51.4	-20	Pass



3DH5, 8-DPSK, Low Channel (2402 MHz)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-51.7	-20	Pass



3DH5, 8-DPSK, High Channel (2480 MHz)						
				Value (dBc)	Limit ≤ (dBc)	Result
				-51.31	-20	Pass



OCCUPIED BANDWIDTH

XMit 2019.09.05

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Supply - DC	Agilent	U8002A	TPZ	NCR	NCR
Block - DC	Fairview Microwave	SD3379	AMI	6-Aug-19	6-Aug-20
Attenuator	S.M. Electronics	SA26B-20	TZP	9-Nov-19	9-Nov-20
Generator - Signal	Keysight	N5171B (EXG)	TEY	31-Dec-19	31-Dec-22
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFN	23-Dec-19	23-Dec-20
Cable	Micro-Coax	UFD150A-1-0720-200200	MNL	15-Sep-19	15-Sep-20

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The 20 dB occupied bandwidth was measured with the EUT set to low, medium and high transmit frequencies in the band. The EUT was transmitting at the data rate(s) listed in the datasheet in a no-hop mode.

OCCUPIED BANDWIDTH

element

TbtTx 2019.08.30.0 XMit 2019.09.05

EUT:	C2-03CPU	Work Order:	KOYO0001
Serial Number:	N/A	Date:	14-Feb-20
Customer:	Koyo Electronics Industries Co., LTD	Temperature:	22.1 °C
Attendees:	None	Humidity:	14.7% RH
Project:	None	Barometric Pres.:	1025 mbar
Tested by:	Andrew Rogstad Power: 24 VDC	Job Site:	MN08

TEST SPECIFICATIONS	Test Method
FCC 15.247:2020	ANSI C63.10:2013

COMMENTS

Reference level offset includes 20 dB attenuator, DC block, and measurement cable.

DEVIATIONS FROM TEST STANDARD

None

Configuration #	10	Signature

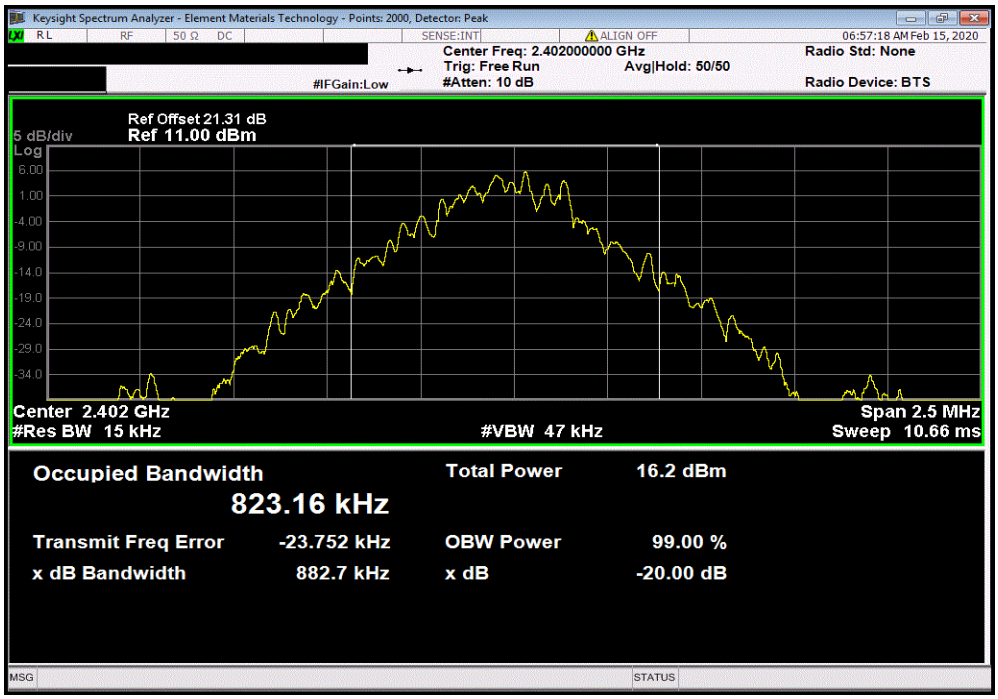
		Value	Limit (<)	Result
DH5, GFSK				
	Low Channel (2402 MHz)	882.656 kHz	1.5 MHz	Pass
	Mid Channel (2441 MHz)	918.687 kHz	1.5 MHz	Pass
	High Channel (2480 MHz)	881.615 kHz	1.5 MHz	Pass
2DH5, pi/4-DQPSK				
	Low Channel (2402 MHz)	1.322 MHz	1.5 MHz	Pass
	Mid Channel (2441 MHz)	1.321 MHz	1.5 MHz	Pass
	High Channel (2480 MHz)	1.32 MHz	1.5 MHz	Pass
3DH5, 8-DPSK				
	Low Channel (2402 MHz)	1.308 MHz	1.5 MHz	Pass
	Mid Channel (2441 MHz)	1.307 MHz	1.5 MHz	Pass
	High Channel (2480 MHz)	1.308 MHz	1.5 MHz	Pass

OCCUPIED BANDWIDTH

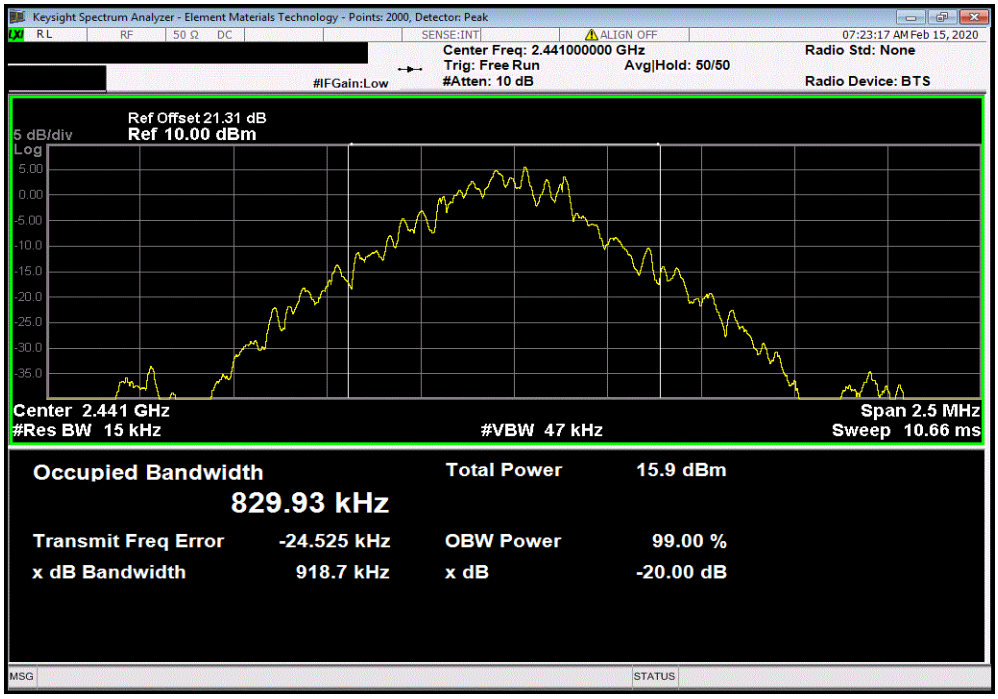
element

TbtTx 2019.08.30.0 XMit 2019.09.05

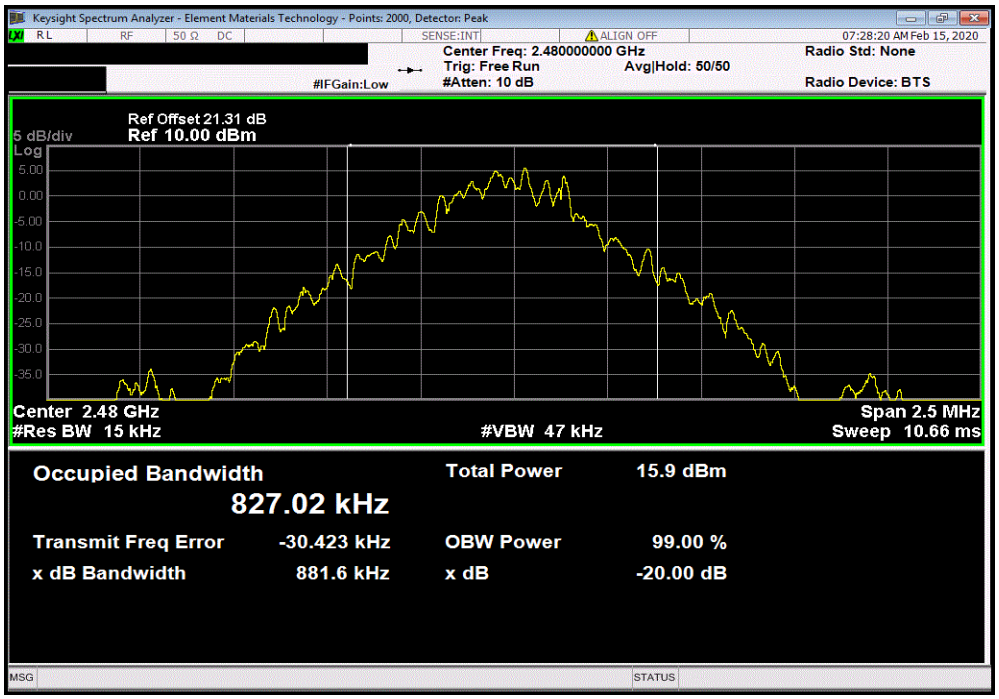
DH5, GFSK, Low Channel (2402 MHz)						
				Value	Limit (<)	Result
				882.656 kHz	1.5 MHz	Pass



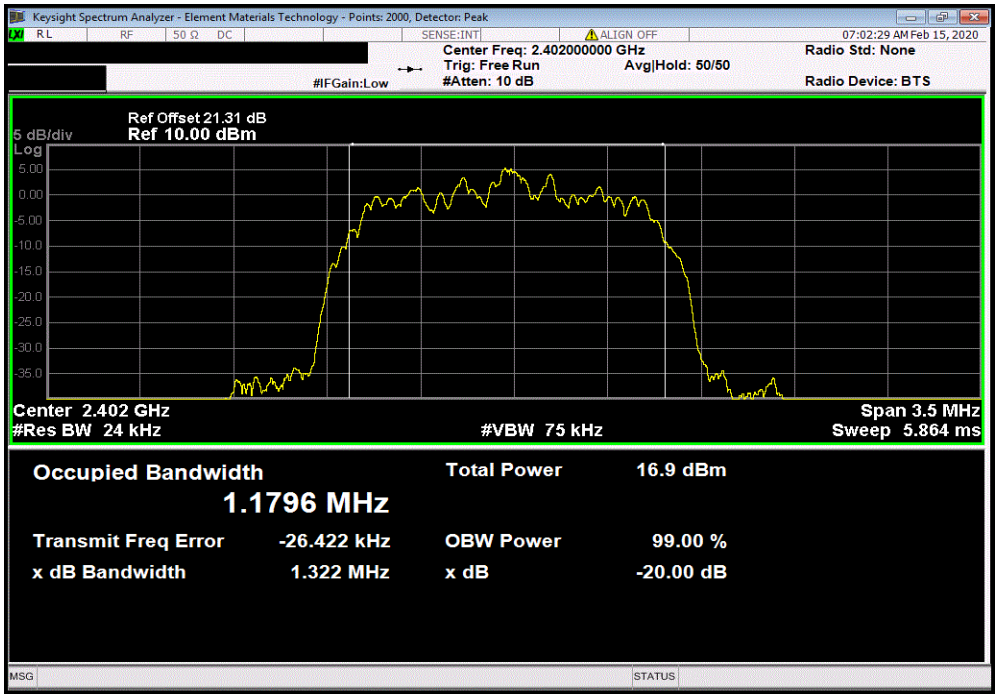
DH5, GFSK, Mid Channel (2441 MHz)						
				Value	Limit (<)	Result
				918.687 kHz	1.5 MHz	Pass



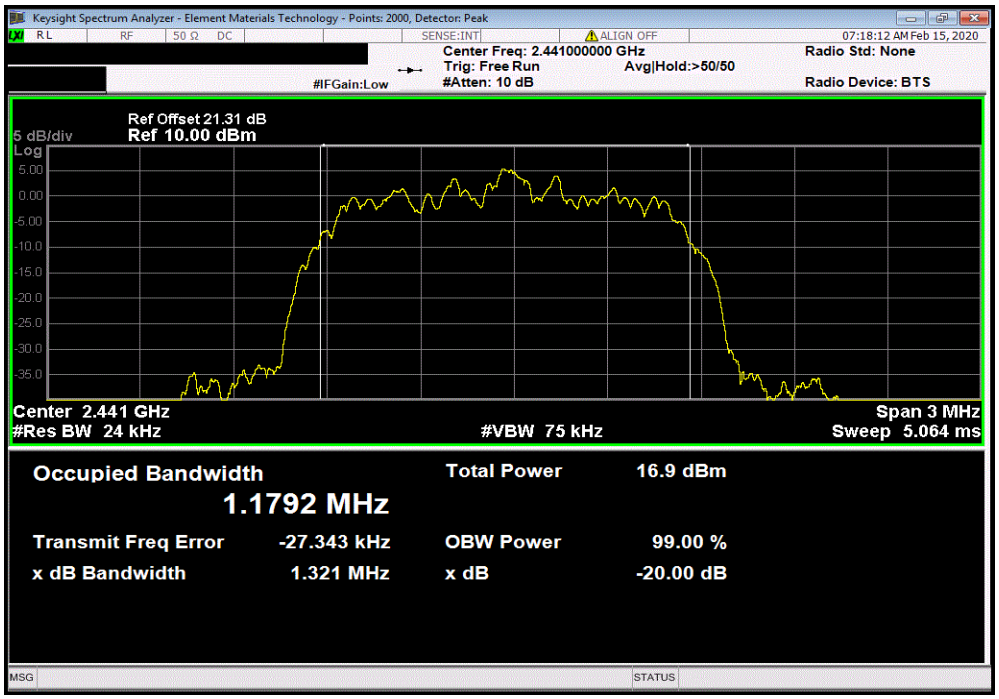
DH5, GFSK, High Channel (2480 MHz)						
				Value	Limit (<)	Result
				881.615 kHz	1.5 MHz	Pass



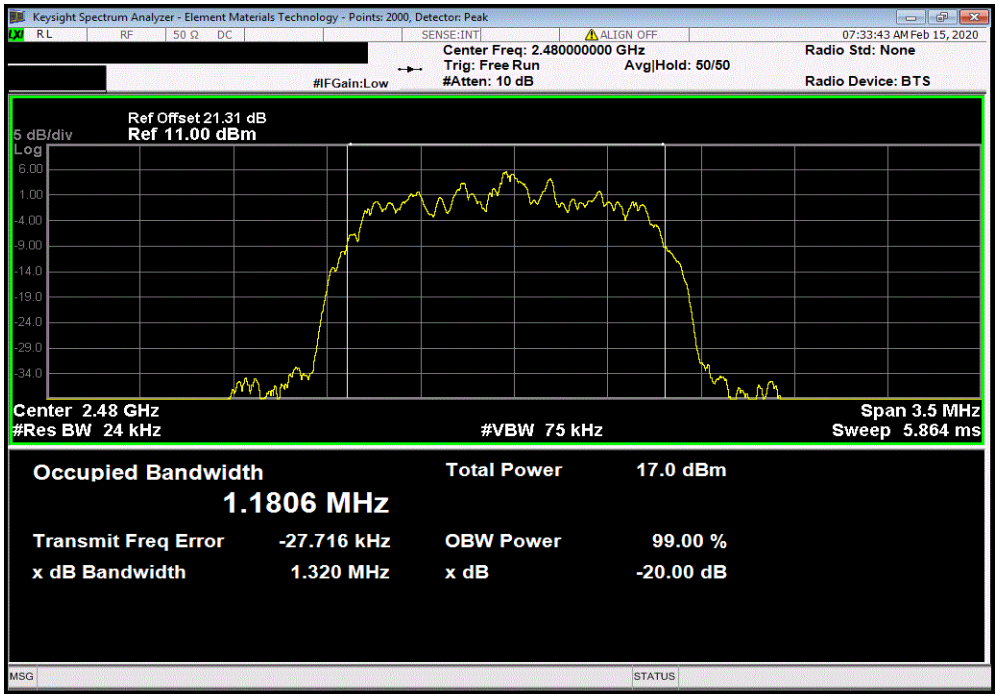
2DH5, pi/4-DQPSK, Low Channel (2402 MHz)						
				Value	Limit (<)	Result
				1.322 MHz	1.5 MHz	Pass



2DH5, pi/4-DQPSK, Mid Channel (2441 MHz)						
				Value	Limit (<)	Result
				1.321 MHz	1.5 MHz	Pass



2DH5, pi/4-DQPSK, High Channel (2480 MHz)						
				Value	Limit (<)	Result
				1.32 MHz	1.5 MHz	Pass

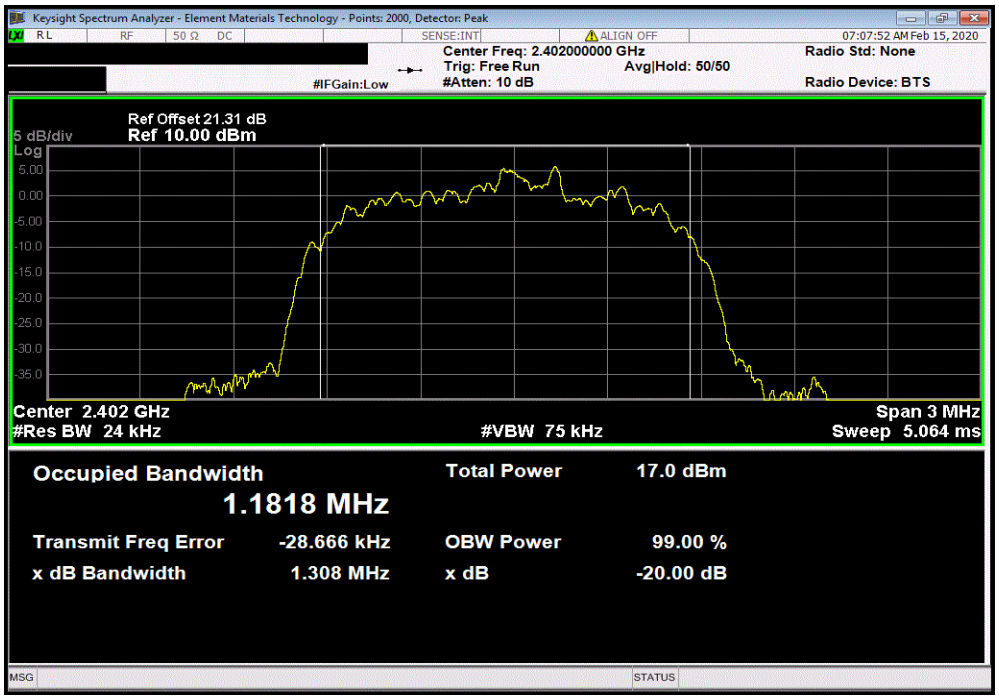


OCCUPIED BANDWIDTH

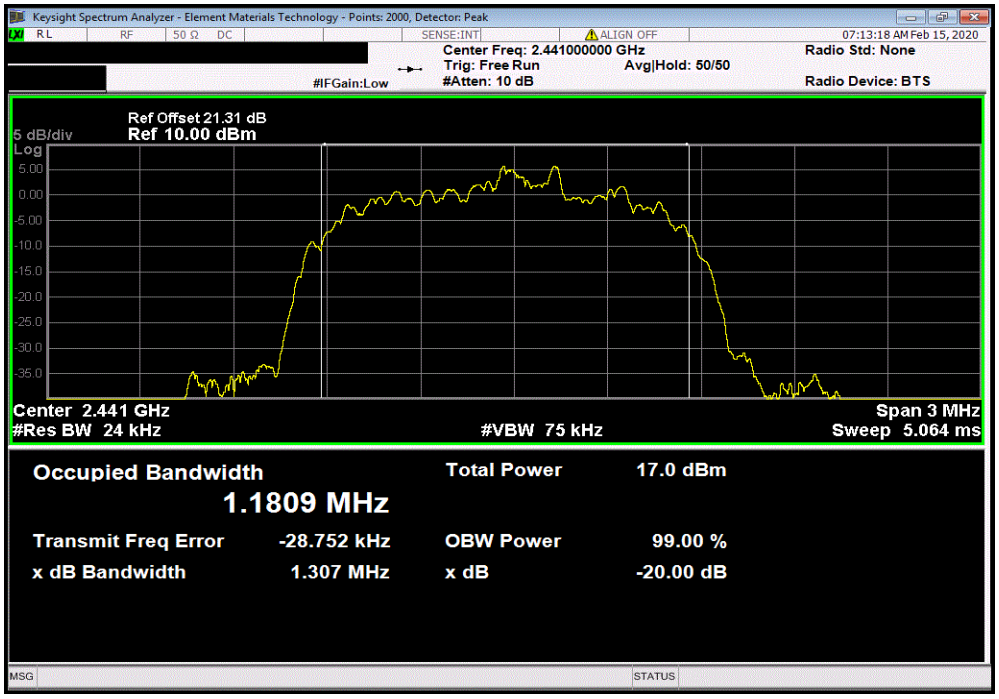
element

TbtTx 2019.08.30.0 XMit 2019.09.05

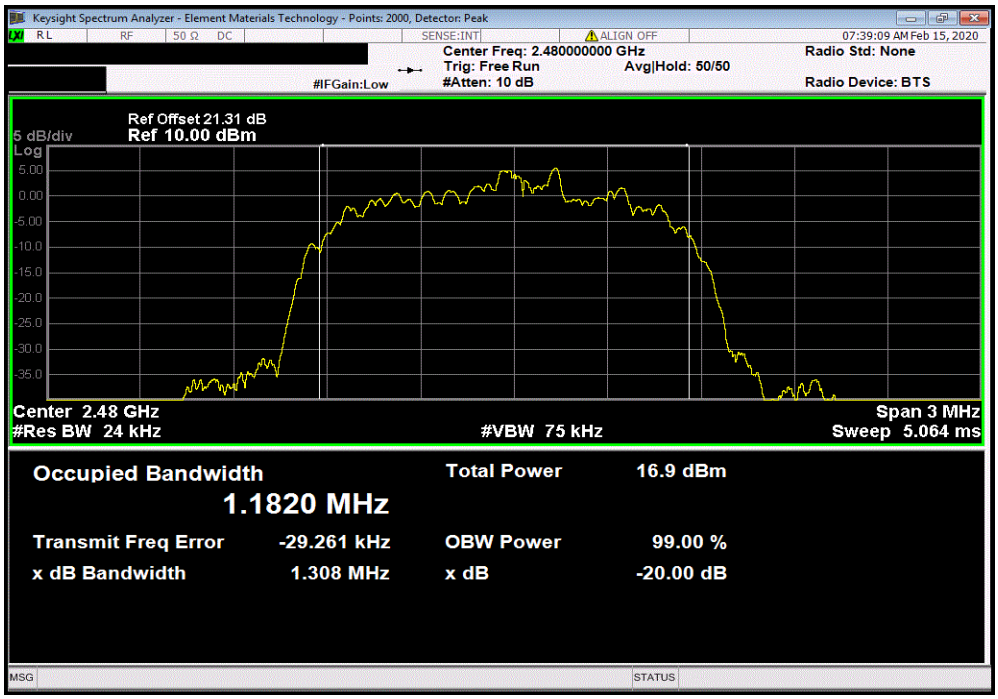
3DH5, 8-DPSK, Low Channel (2402 MHz)						
				Value	Limit (<)	Result
				1.308 MHz	1.5 MHz	Pass



3DH5, 8-DPSK, Mid Channel (2441 MHz)						
				Value	Limit (<)	Result
				1.307 MHz	1.5 MHz	Pass



3DH5, 8-DPSK, High Channel (2480 MHz)						
				Value	Limit (<)	Result
				1.308 MHz	1.5 MHz	Pass



SPURIOUS CONDUCTED EMISSIONS

XMit 2019.09.05

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Power Supply - DC	Agilent	U8002A	TPZ	NCR	NCR
Block - DC	Fairview Microwave	SD3379	AMI	6-Aug-19	6-Aug-20
Attenuator	S.M. Electronics	SA26B-20	TZP	9-Nov-19	9-Nov-20
Generator - Signal	Keysight	N5171B (EXG)	TEY	31-Dec-19	31-Dec-22
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFN	23-Dec-19	23-Dec-20
Cable	Micro-Coax	UFD150A-1-0720-200200	MNL	15-Sep-19	15-Sep-20

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The spurious RF conducted emissions were measured with the EUT set to low, medium and high transmit frequencies. The EUT was transmitting at the data rate(s) listed in the datasheet in a no-hop mode. For each transmit frequency, the spectrum was scanned throughout the specified frequency range.

SPURIOUS CONDUCTED EMISSIONS

element

TbtTx 2019.08.30.0 XMit 2019.09.05

EUT:	C2-03CPU	Work Order:	KOYO0001
Serial Number:	N/A	Date:	14-Feb-20
Customer:	Koyo Electronics Industries Co., LTD	Temperature:	22 °C
Attendees:	None	Humidity:	15% RH
Project:	None	Barometric Pres.:	1025 mbar
Tested by:	Andrew Rogstad	Power: 24 VDC	Job Site: MN08

TEST SPECIFICATIONS	Test Method
FCC 15.247:2020	ANSI C63.10:2013

COMMENTS

Reference level offset includes 20 dB attenuator, DC block, and measurement cable.

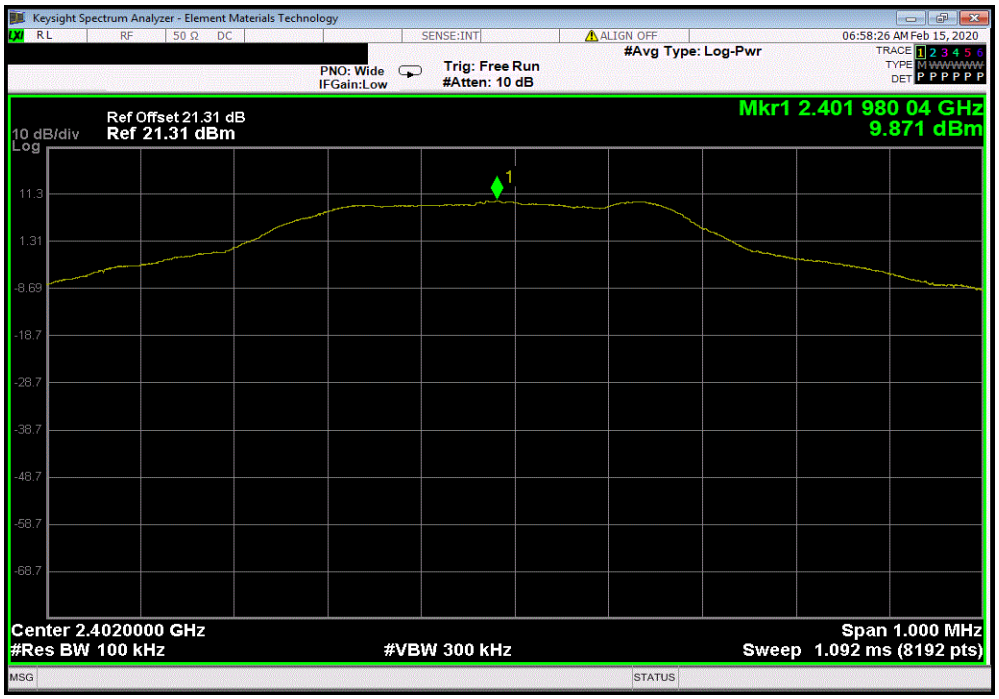
DEVIATIONS FROM TEST STANDARD

None

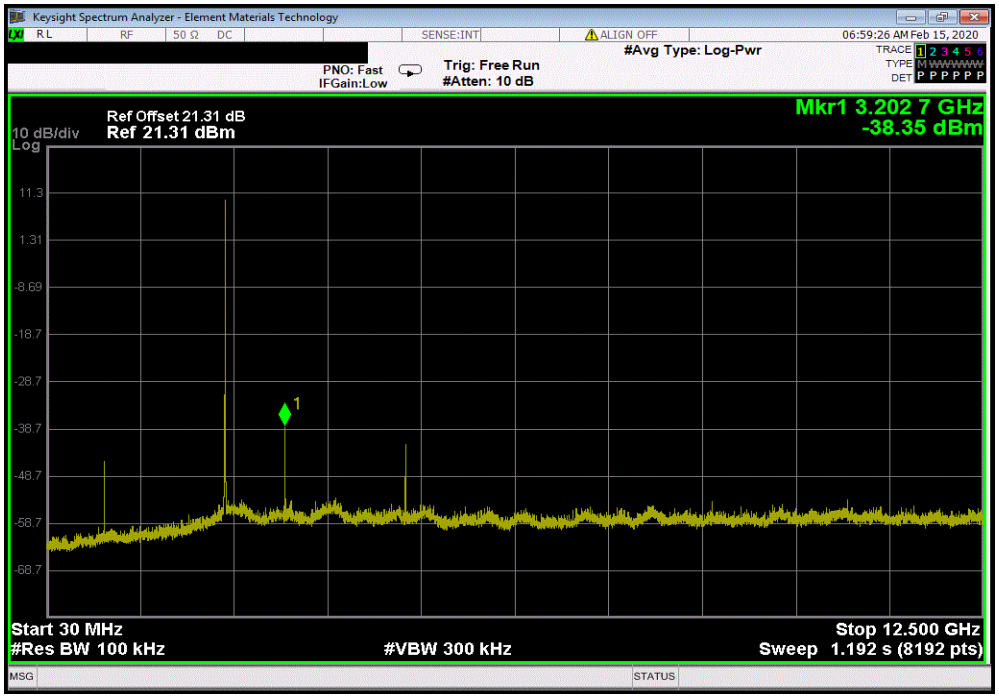
Configuration #	10	Signature

		Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
DH5, GFSK						
	Low Channel (2402 MHz)	Fundamental	2401.98	N/A	N/A	N/A
	Low Channel (2402 MHz)	30 MHz - 12.5 GHz	3202.69	-48.22	-20	Pass
	Low Channel (2402 MHz)	12.5 GHz - 25 GHz	24381.94	-60.96	-20	Pass
	Mid Channel (2441 MHz)	Fundamental	2440.97	N/A	N/A	N/A
	Mid Channel (2441 MHz)	30 MHz - 12.5 GHz	3254.45	-50.57	-20	Pass
	Mid Channel (2441 MHz)	12.5 GHz - 25 GHz	24993.9	-61.05	-20	Pass
	High Channel (2480 MHz)	Fundamental	2479.98	N/A	N/A	N/A
	High Channel (2480 MHz)	30 MHz - 12.5 GHz	3306.21	-52.58	-20	Pass
	High Channel (2480 MHz)	12.5 GHz - 25 GHz	24653.58	-61.14	-20	Pass
2DH5, pi/4-DQPSK						
	Low Channel (2402 MHz)	Fundamental	2401.98	N/A	N/A	N/A
	Low Channel (2402 MHz)	30 MHz - 12.5 GHz	3202.69	-47.53	-20	Pass
	Low Channel (2402 MHz)	12.5 GHz - 25 GHz	24073.68	-60.75	-20	Pass
	Mid Channel (2441 MHz)	Fundamental	2440.98	N/A	N/A	N/A
	Mid Channel (2441 MHz)	30 MHz - 12.5 GHz	3254.45	-50.12	-20	Pass
	Mid Channel (2441 MHz)	12.5 GHz - 25 GHz	23672.32	-60.48	-20	Pass
	High Channel (2480 MHz)	Fundamental	2479.98	N/A	N/A	N/A
	High Channel (2480 MHz)	30 MHz - 12.5 GHz	3306.21	-52.67	-20	Pass
	High Channel (2480 MHz)	12.5 GHz - 25 GHz	25000	-60.59	-20	Pass
3DH5, 8-DPSK						
	Low Channel (2402 MHz)	Fundamental	2401.97	N/A	N/A	N/A
	Low Channel (2402 MHz)	30 MHz - 12.5 GHz	3202.69	-47.86	-20	Pass
	Low Channel (2402 MHz)	12.5 GHz - 25 GHz	23817.3	-60.86	-20	Pass
	Mid Channel (2441 MHz)	Fundamental	2440.98	N/A	N/A	N/A
	Mid Channel (2441 MHz)	30 MHz - 12.5 GHz	3254.45	-50.25	-20	Pass
	Mid Channel (2441 MHz)	12.5 GHz - 25 GHz	24119.46	-60.88	-20	Pass
	High Channel (2480 MHz)	Fundamental	2479.97	N/A	N/A	N/A
	High Channel (2480 MHz)	30 MHz - 12.5 GHz	2487.16	-51.86	-20	Pass
	High Channel (2480 MHz)	12.5 GHz - 25 GHz	24989.32	-60.68	-20	Pass

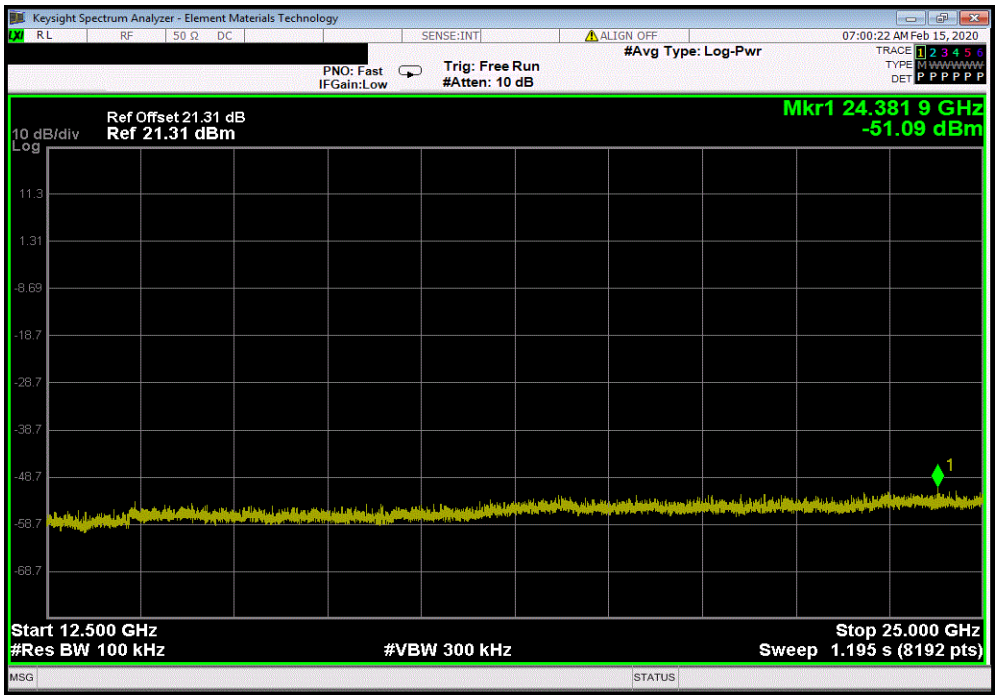
DH5, GFSK, Low Channel (2402 MHz)						
	Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental		2401.98	N/A	N/A	N/A



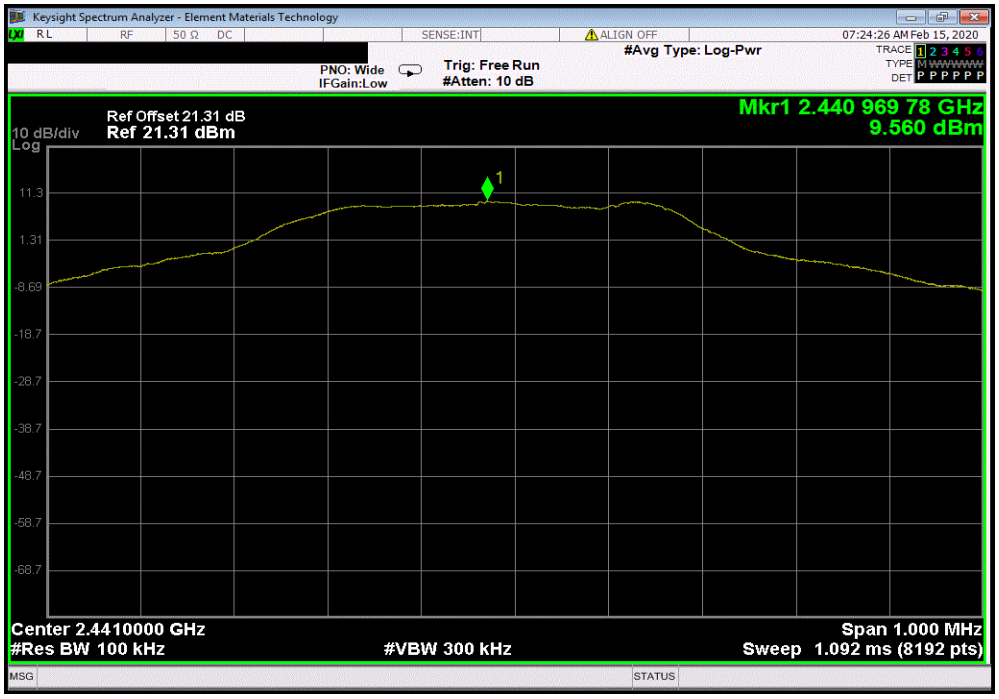
DH5, GFSK, Low Channel (2402 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	3202.69	-48.22	-20	Pass



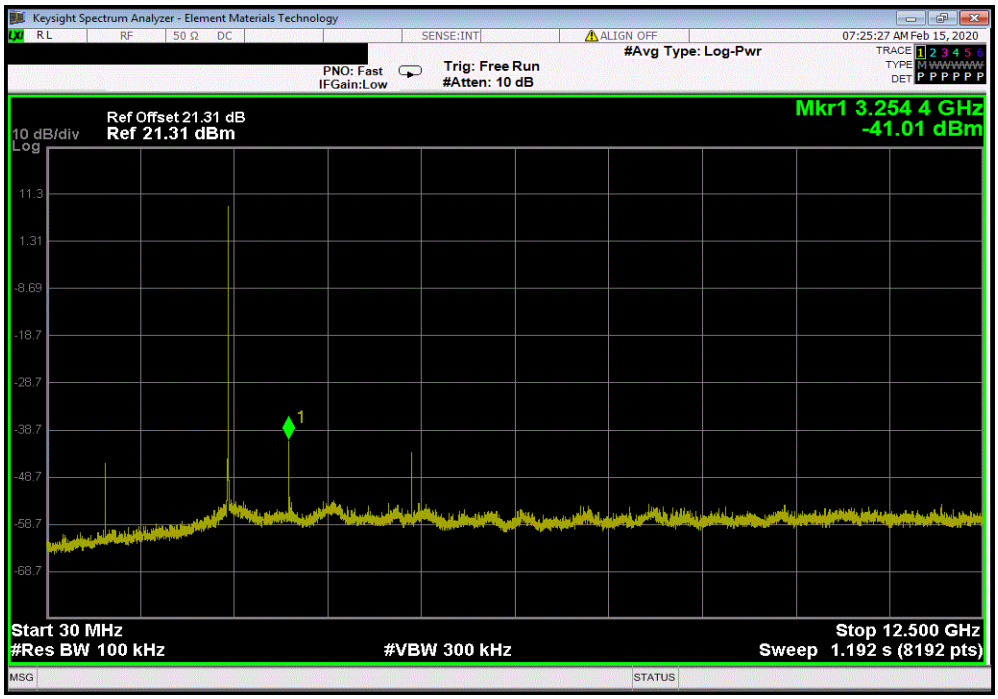
DH5, GFSK, Low Channel (2402 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	24381.94	-60.96	-20	Pass



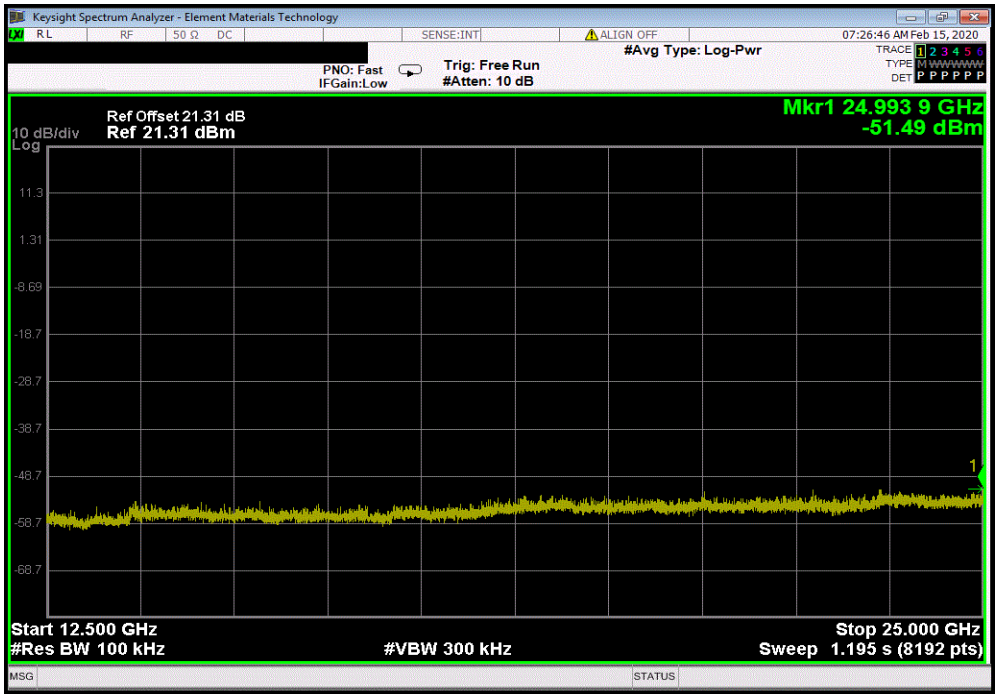
DH5, GFSK, Mid Channel (2441 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
Fundamental	2440.97	N/A	N/A	N/A



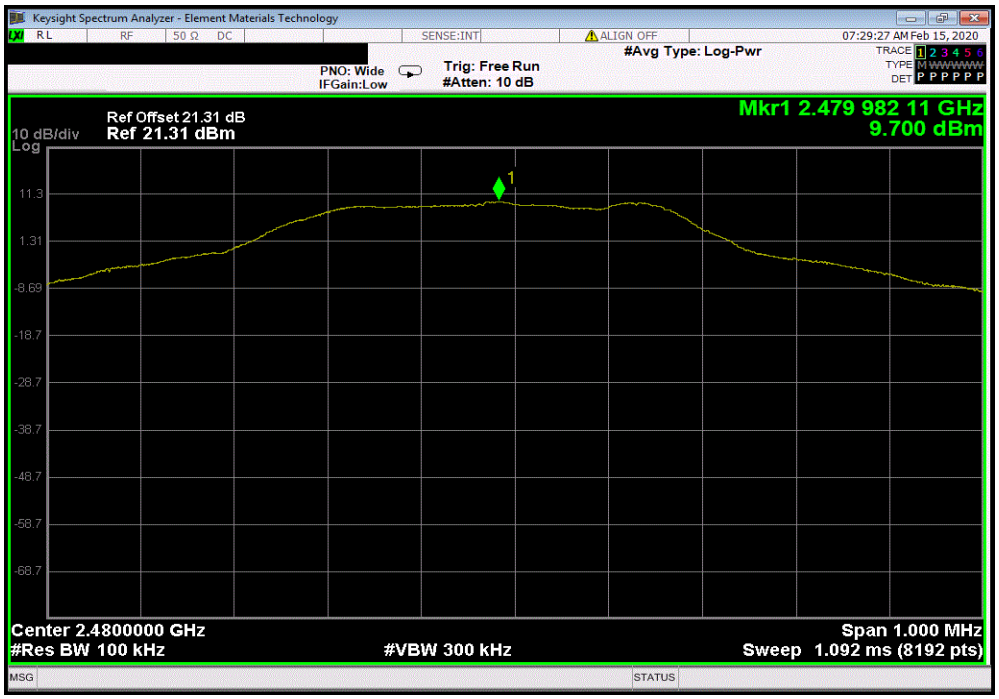
DH5, GFSK, Mid Channel (2441 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	3254.45	-50.57	-20	Pass



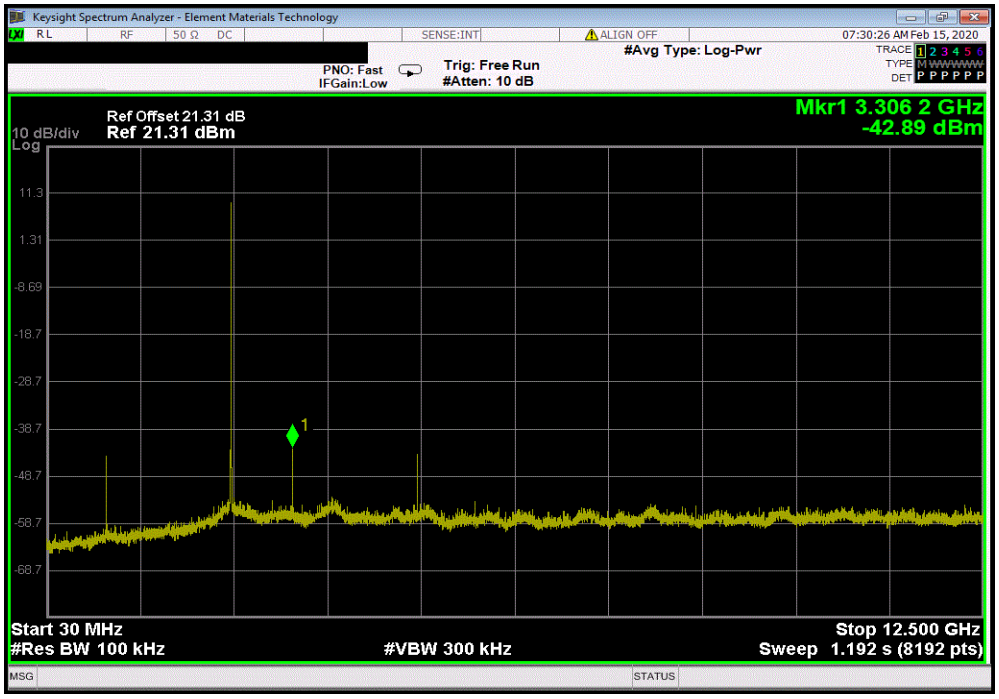
DH5, GFSK, Mid Channel (2441 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	24993.9	-61.05	-20	Pass



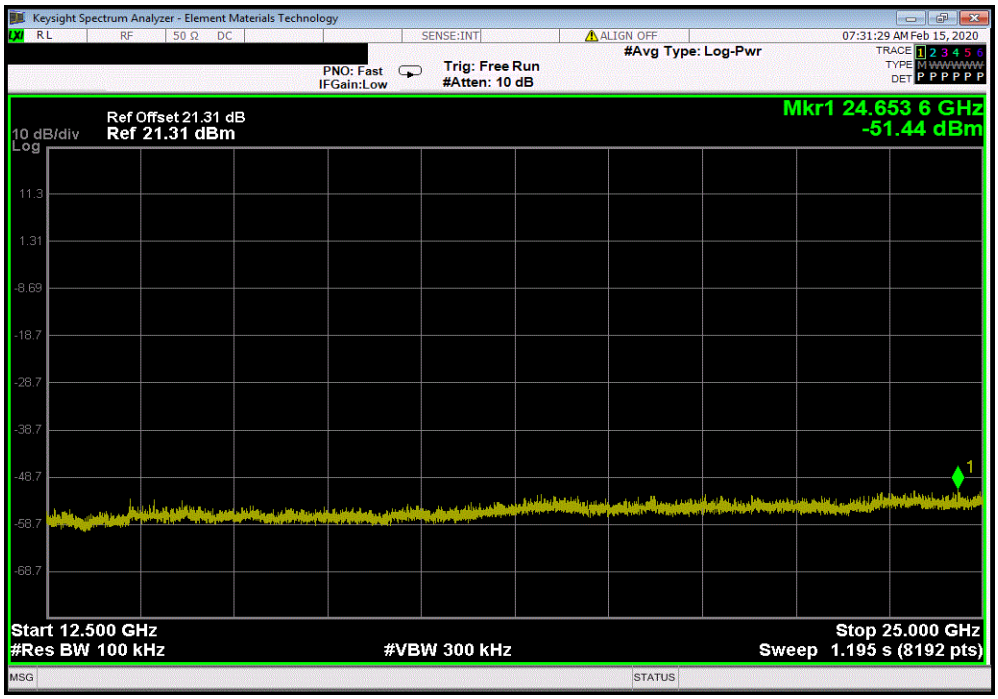
DH5, GFSK, High Channel (2480 MHz)						
	Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental		2479.98	N/A	N/A	N/A



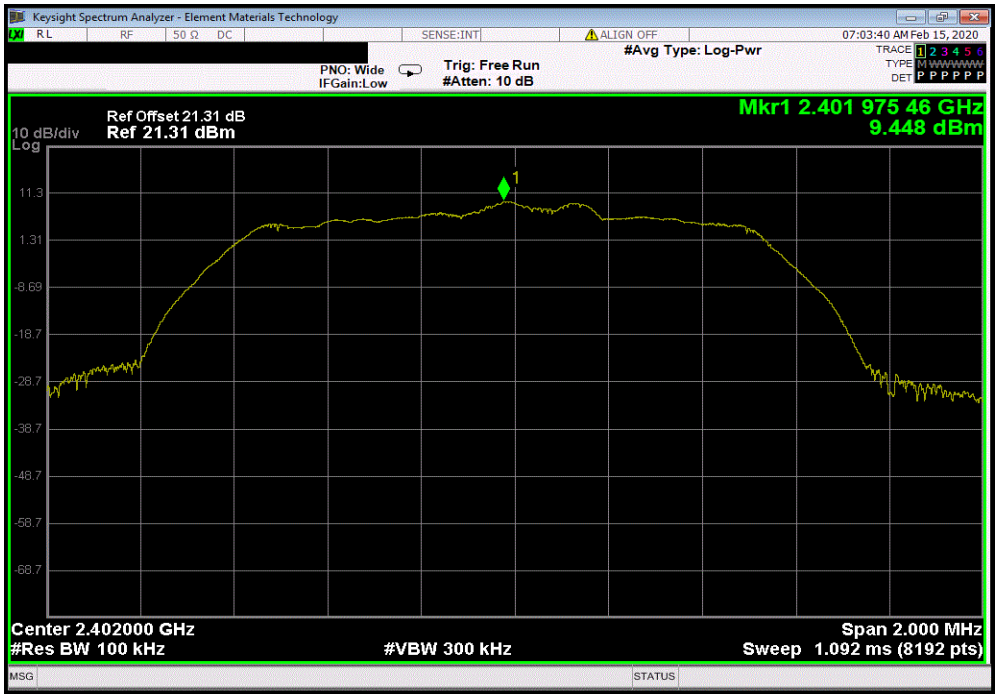
DH5, GFSK, High Channel (2480 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	3306.21	-52.58	-20	Pass



DH5, GFSK, High Channel (2480 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	24653.58	-61.14	-20	Pass



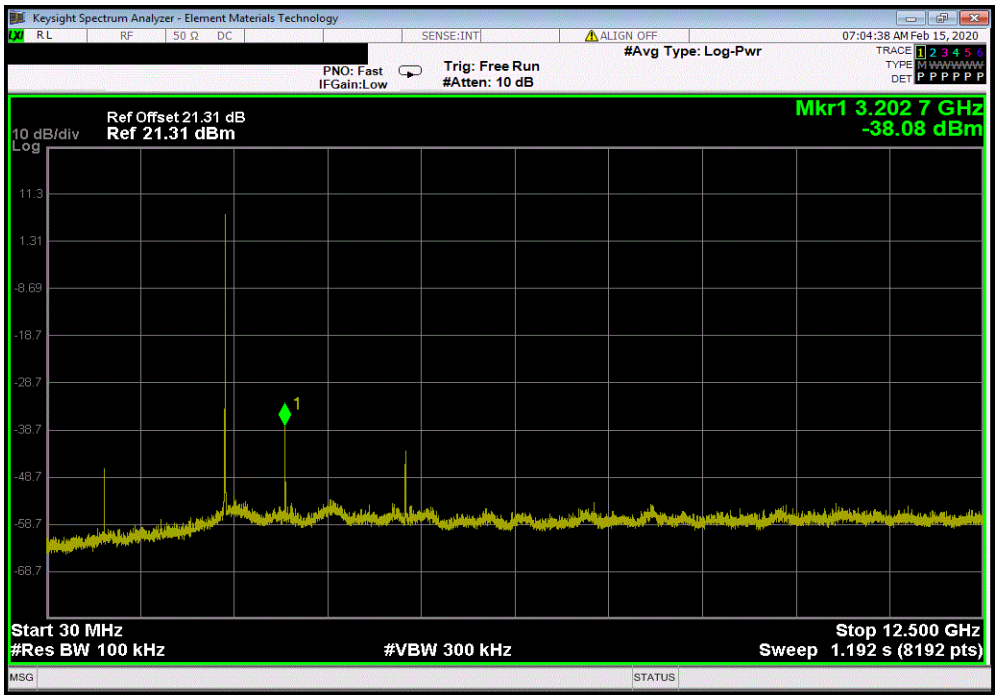
2DH5, pi/4-DQPSK, Low Channel (2402 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
Fundamental	2401.98	N/A	N/A	N/A



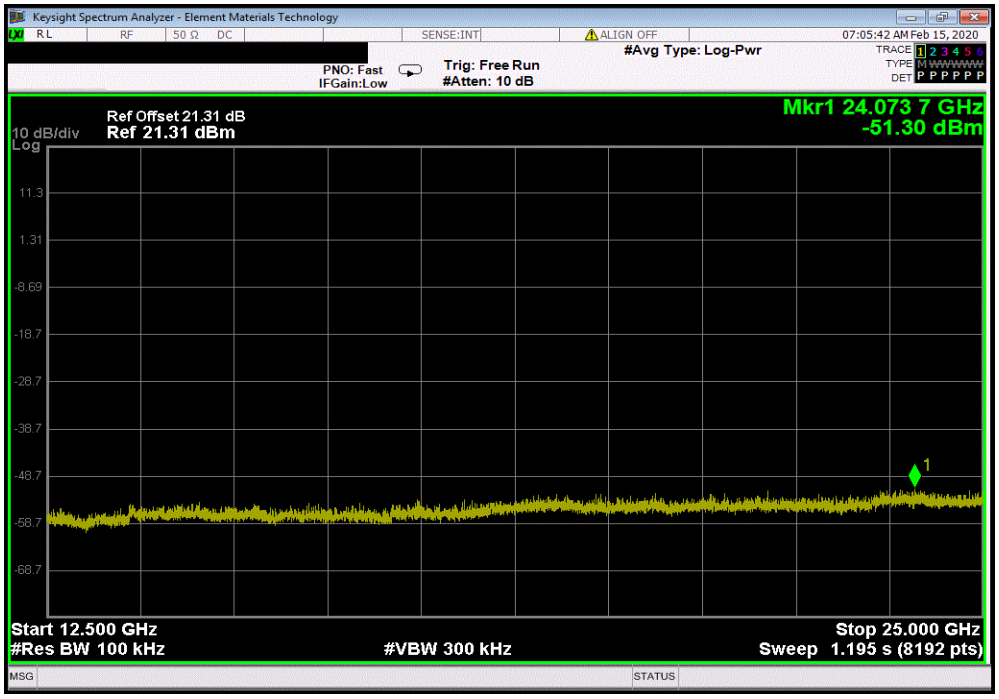
SPURIOUS CONDUCTED EMISSIONS

TbtTx 2019.08.30.0 XMit 2019.09.05

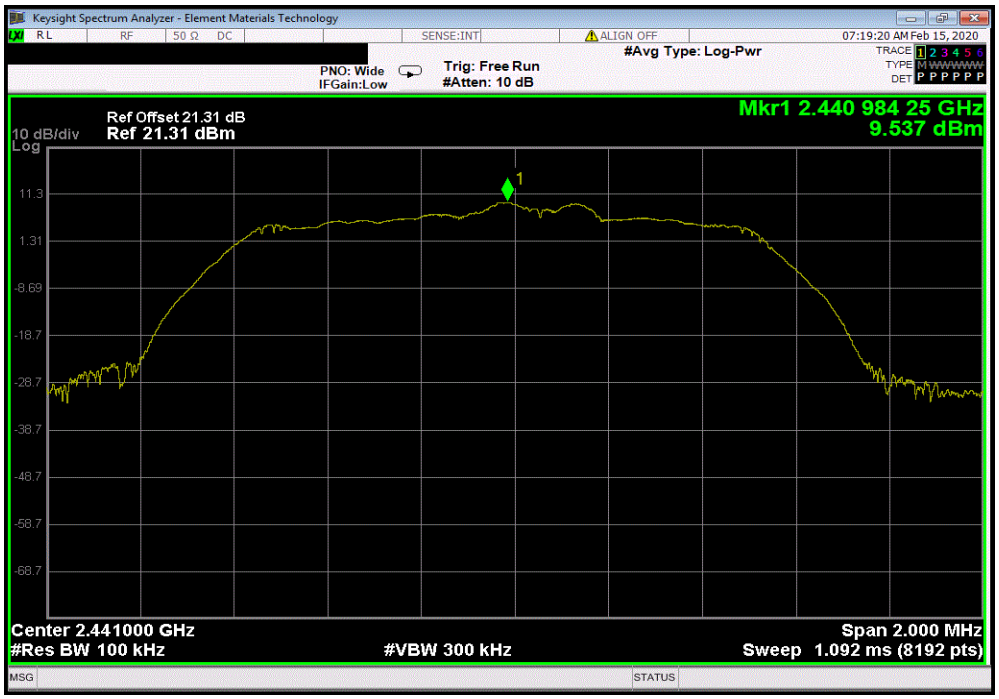
2DH5, pi/4-DQPSK, Low Channel (2402 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	3202.69	-47.53	-20	Pass



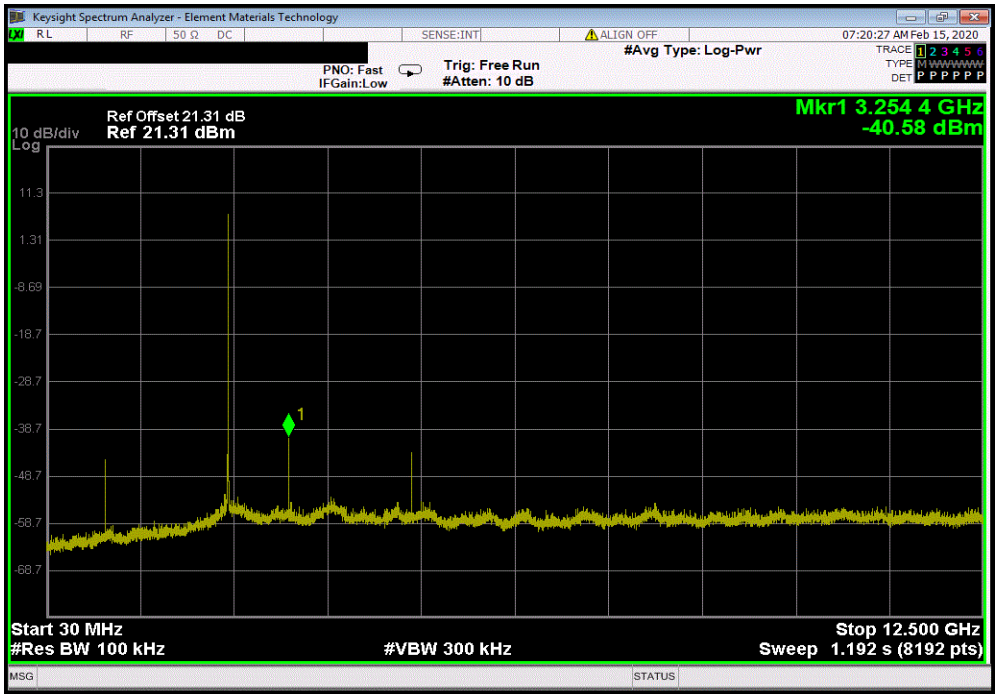
2DH5, pi/4-DQPSK, Low Channel (2402 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	24073.68	-60.75	-20	Pass



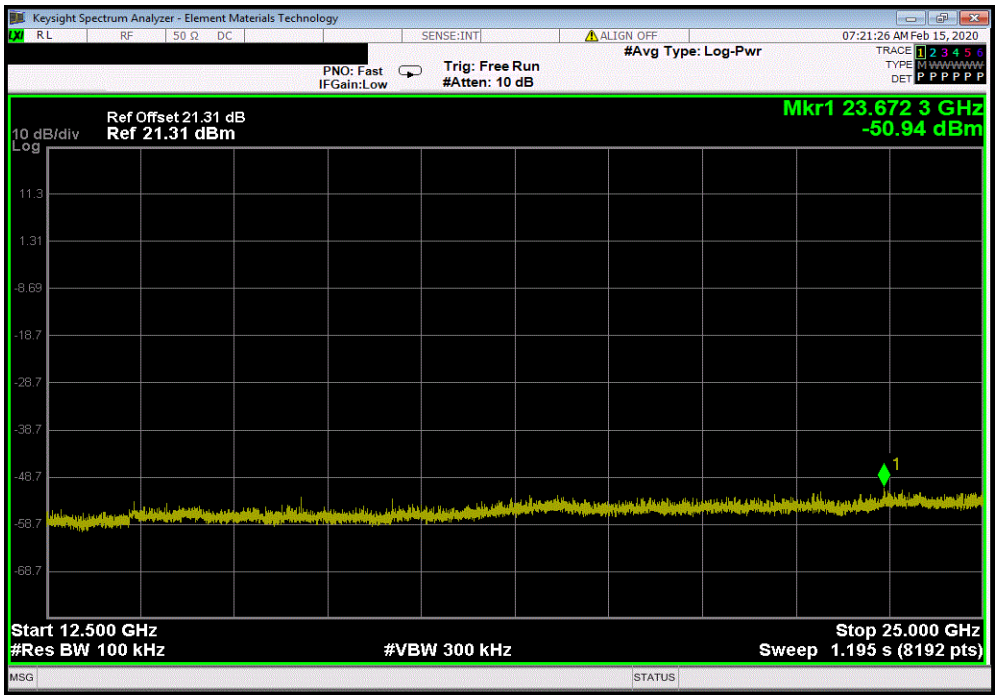
2DH5, pi/4-DQPSK, Mid Channel (2441 MHz)						
	Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental		2440.98	N/A	N/A	N/A



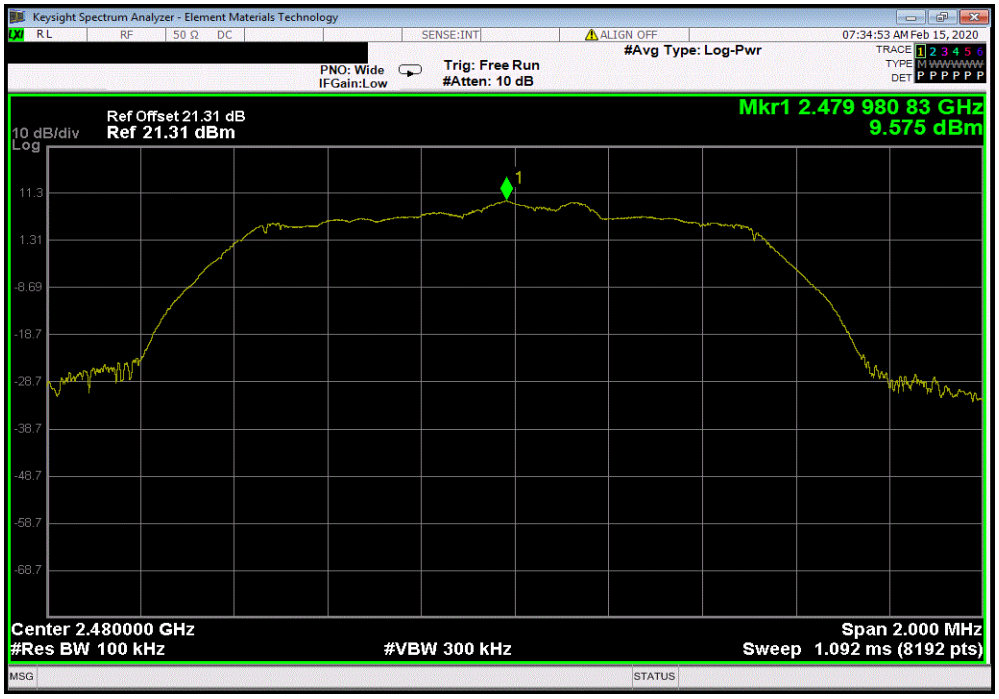
2DH5, pi/4-DQPSK, Mid Channel (2441 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	3254.45	-50.12	-20	Pass



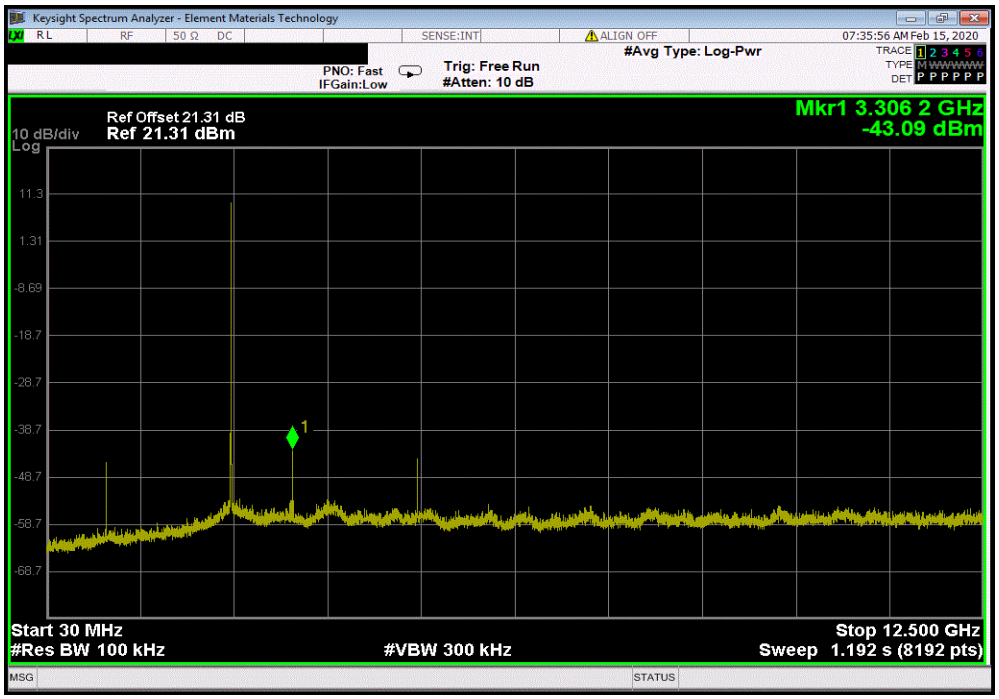
2DH5, pi/4-DQPSK, Mid Channel (2441 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	23672.32	-60.48	-20	Pass



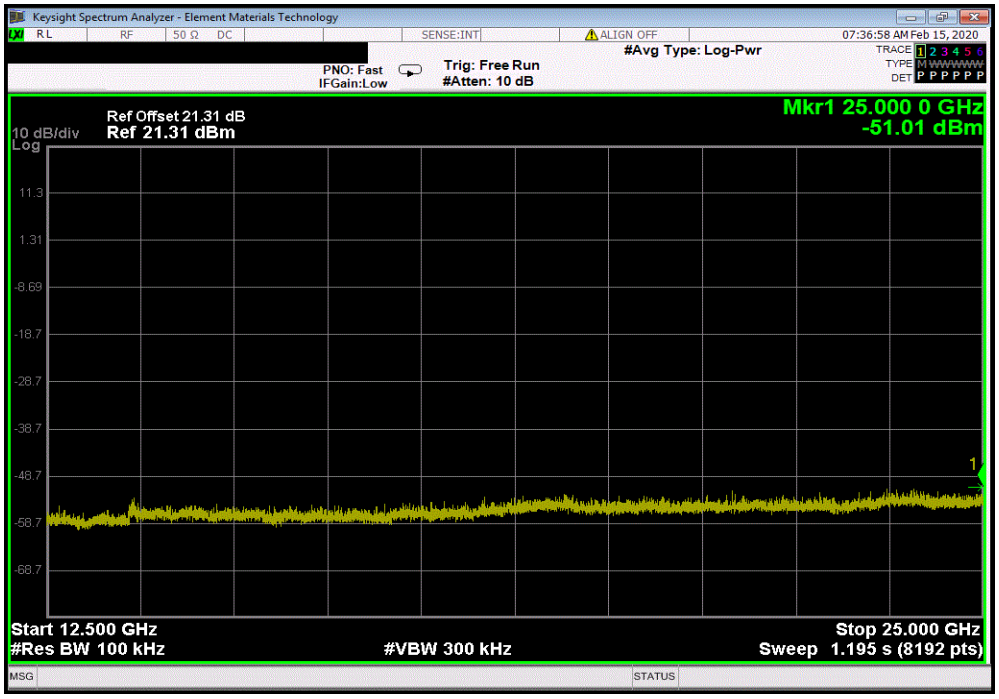
2DH5, pi/4-DQPSK, High Channel (2480 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
Fundamental	2479.98	N/A	N/A	N/A



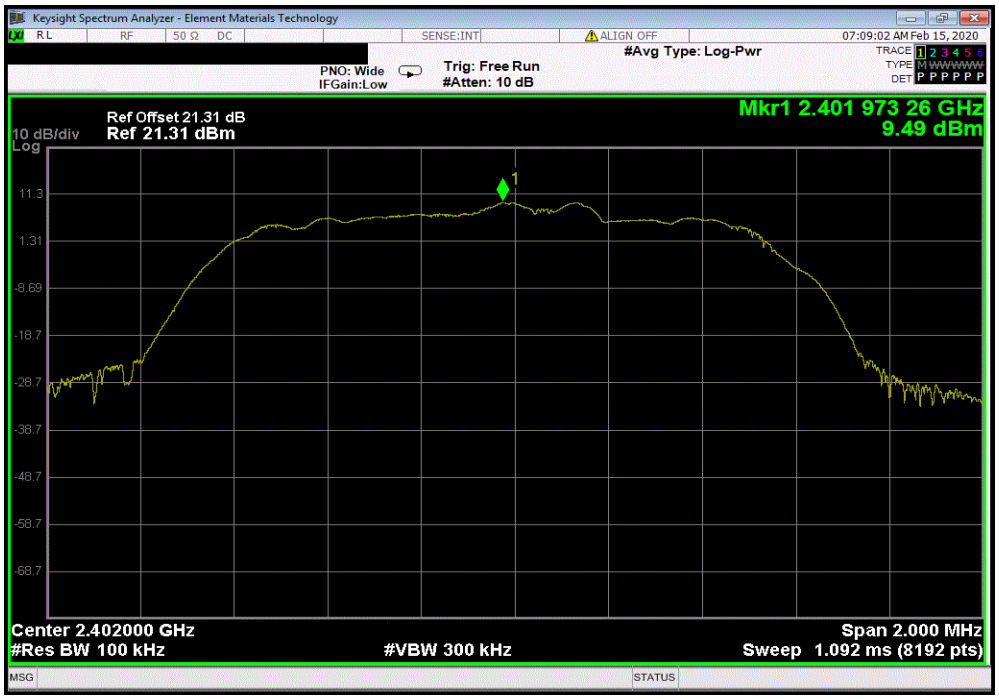
2DH5, pi/4-DQPSK, High Channel (2480 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	3306.21	-52.67	-20	Pass



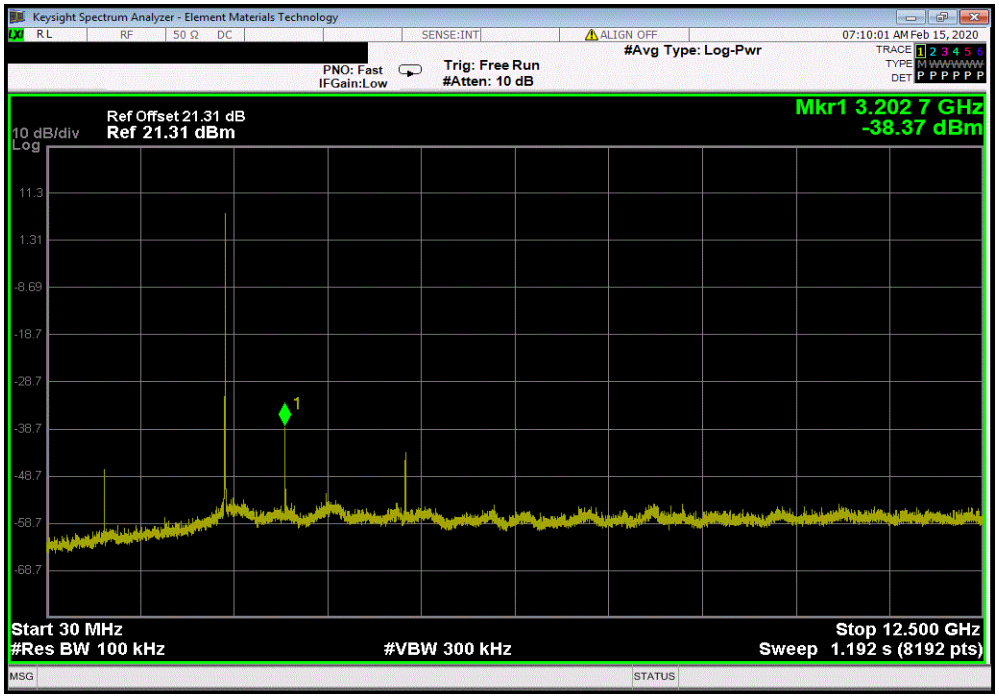
2DH5, pi/4-DQPSK, High Channel (2480 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	25000	-60.59	-20	Pass



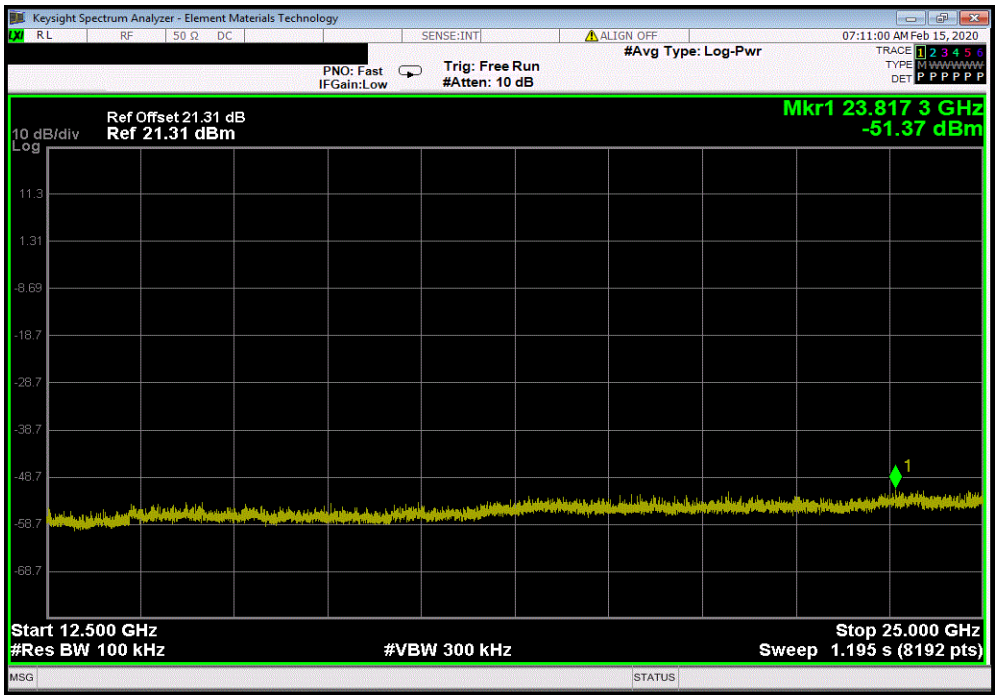
3DH5, 8-DPSK, Low Channel (2402 MHz)						
	Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental		2401.97	N/A	N/A	N/A



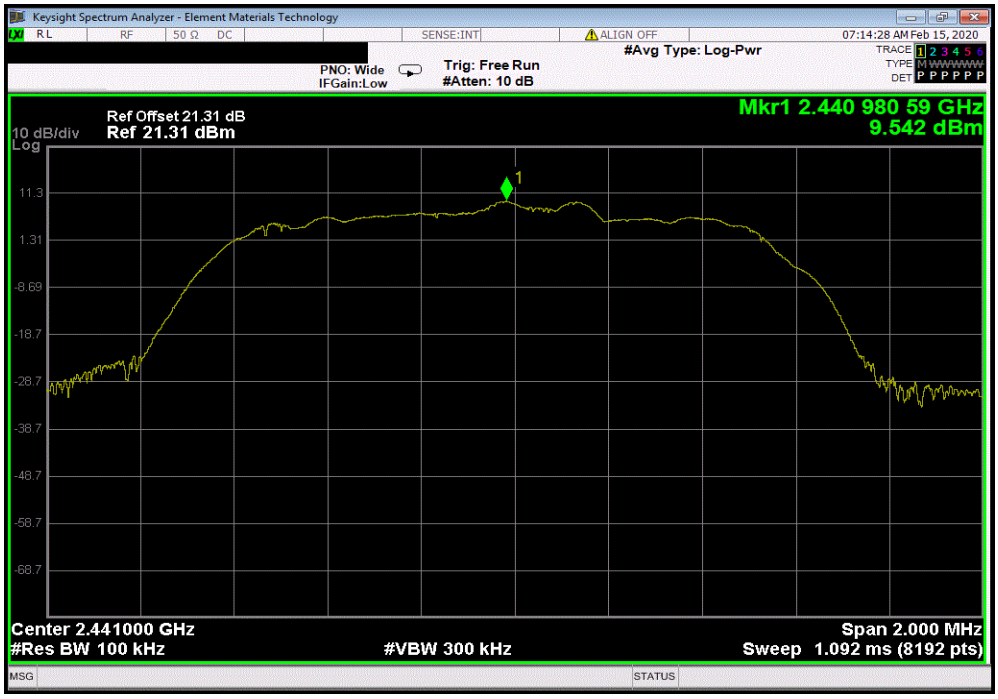
3DH5, 8-DPSK, Low Channel (2402 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	3202.69	-47.86	-20	Pass



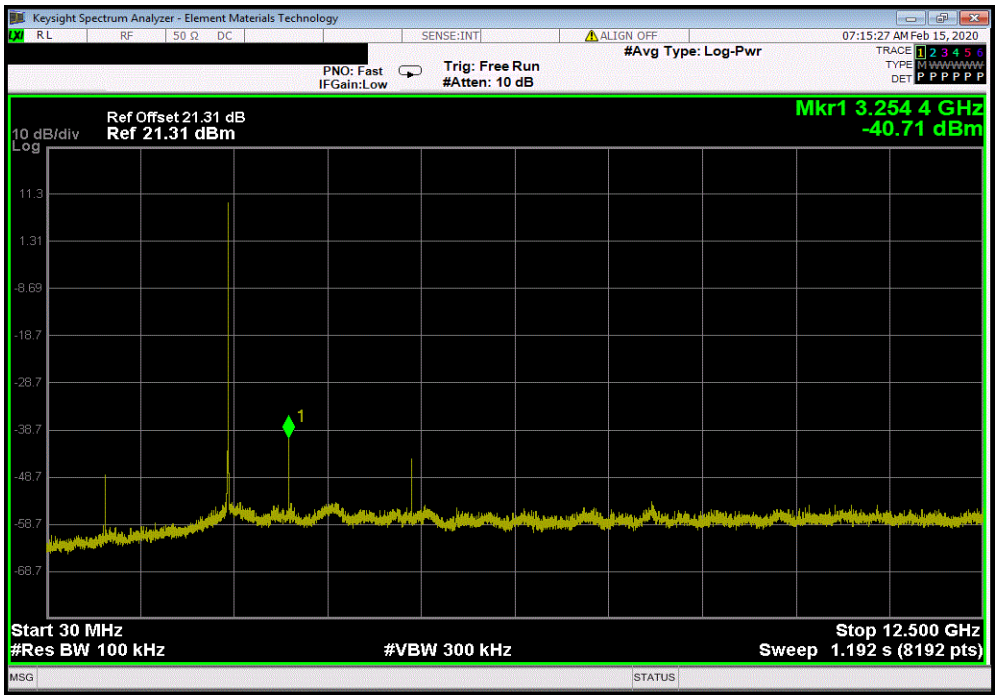
3DH5, 8-DPSK, Low Channel (2402 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	23817.3	-60.86	-20	Pass



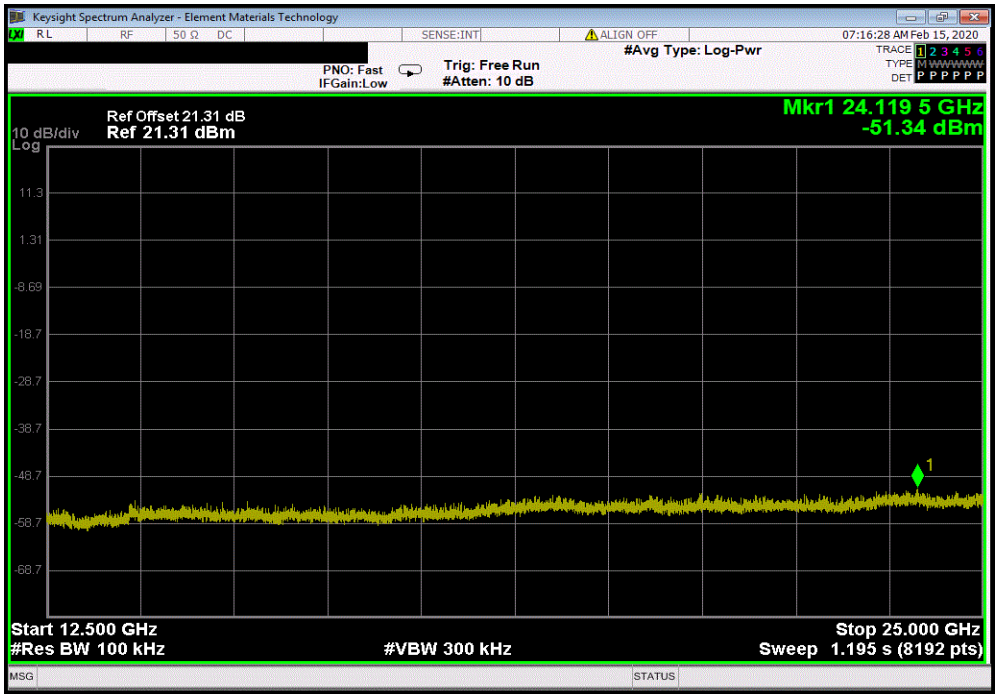
3DH5, 8-DPSK, Mid Channel (2441 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
Fundamental	2440.98	N/A	N/A	N/A



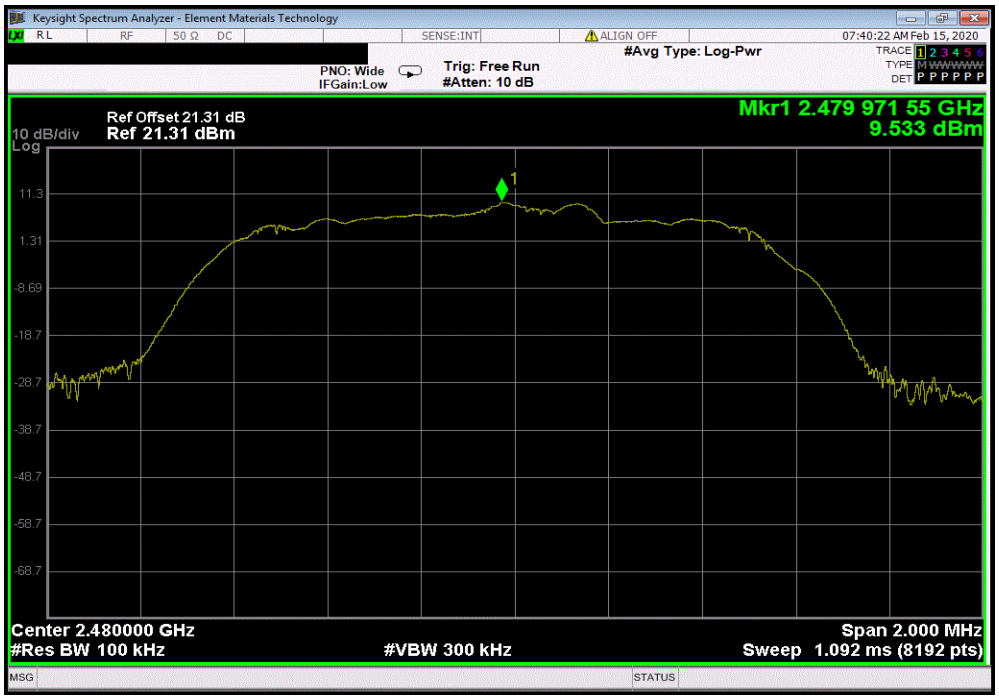
3DH5, 8-DPSK, Mid Channel (2441 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	3254.45	-50.25	-20	Pass



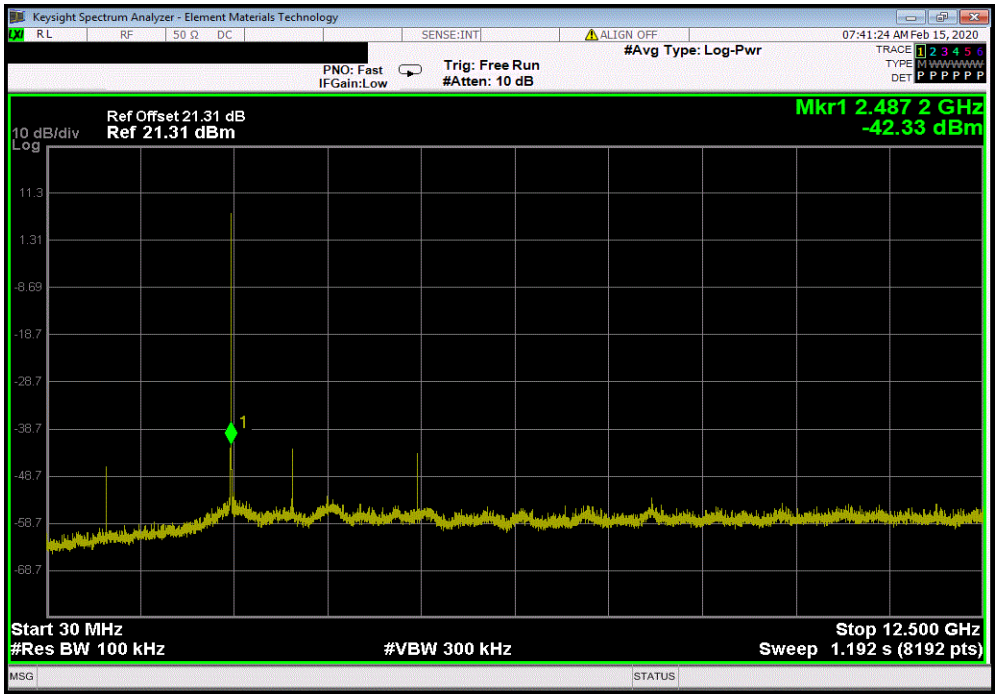
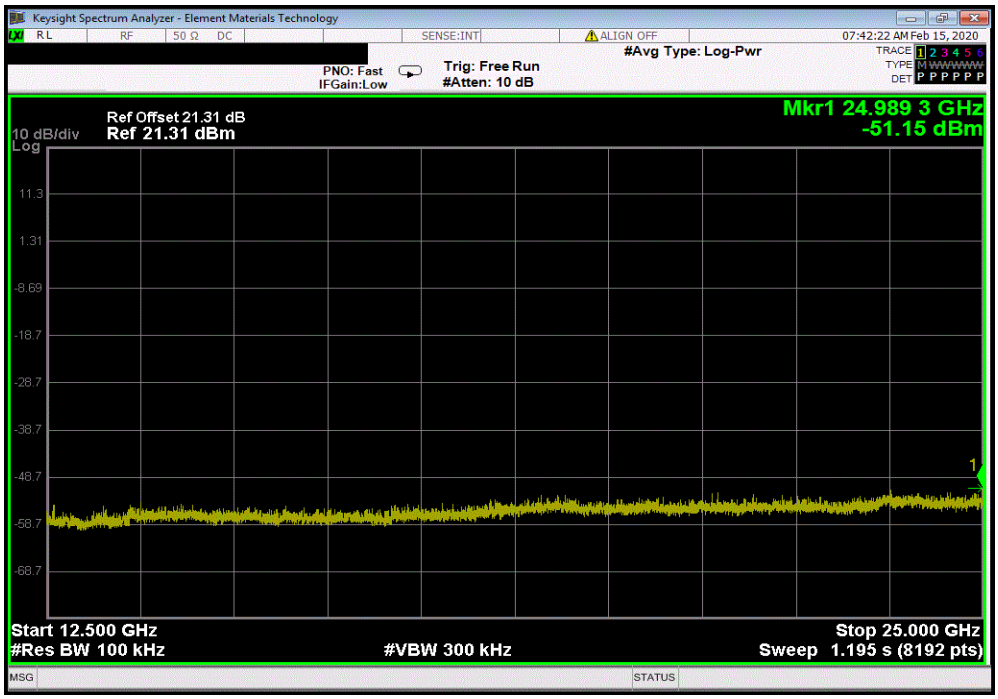
3DH5, 8-DPSK, Mid Channel (2441 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	24119.46	-60.88	-20	Pass



3DH5, 8-DPSK, High Channel (2480 MHz)						
	Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental		2479.97	N/A	N/A	N/A



3DH5, 8-DPSK, High Channel (2480 MHz)				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	2487.16	-51.86	-20	Pass



3DH5, 8-DPSK, High Channel (2480 MHz)				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
12.5 GHz - 25 GHz	24989.32	-60.68	-20	Pass