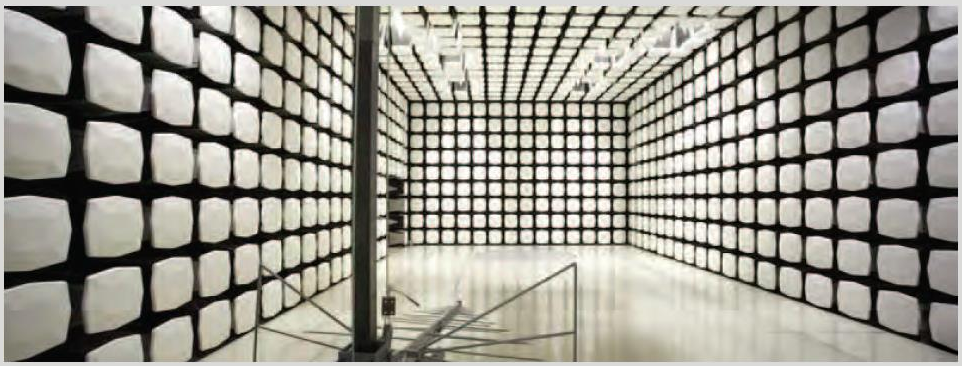
Polaris Industries, Inc.

CCU-2

FCC 15.247:2020

Bluetooth (FHSS) Radio

Report # POLR0058



NVLAP LAB CODE: 200630-0

CERTIFICATE OF TEST

Last Date of Test: January 6, 2020
Polaris Industries, Inc.
EUT: CCU-2

Radio Equipment Testing

Standards

Specification	Method
FCC 15.247:2020	ANSI C63.10:2013

Results

Method Clause	Test Description	Applied	Results	Comments
6.2	Powerline Conducted Emissions	No	N/A	Not requested.
6.5, 6.6	Spurious Radiated Emissions	Yes	Pass	
7.5	Duty Cycle	Yes	N/A	Characterization of radio operation.
7.8.2	Carrier Frequency Separation	No	N/A	Not required for a C2PC to lower the output power. Test data to satisfy this requirement is contained in the original filing.
7.8.3	Number of Hopping Frequencies	No	N/A	Not required for a C2PC to lower the output power. Test data to satisfy this requirement is contained in the original filing.
7.8.4	Dwell Time	No	N/A	Not required for a C2PC to lower the output power. Test data to satisfy this requirement is contained in the original filing.
7.8.5	Output Power	Yes	Pass	
7.8.5	Equivalent Isotropic Radiated Power	Yes	Pass	
7.8.6	Band Edge Compliance	Yes	Pass	
7.8.6	Band Edge Compliance - Hopping Mode	Yes	Pass	
7.8.7	Occupied Bandwidth	Yes	Pass	
7.8.8	Spurious Conducted Emissions	Yes	Pass	

Deviations From Test Standards

None

Approved By:

Kyle Holgate, Operations Manager

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information. As indicated in the Statement of Work sent with the quotation, Element's standard process is to always use the latest published version of the test methods even when earlier versions are cited in the test specification. Issuance of a purchase order was de facto acceptance of this approach. Otherwise, the client would have advised Element in writing of the specific version of the test methods they wanted applied to the subject testing.

REVISION HISTORY

Revision Number	Description	Date (yyyy-mm-dd)	Page Number
00	None		

ACCREDITATIONS AND AUTHORIZATIONS

United States

FCC - Designated by the FCC as a Telecommunications Certification Body (TCB). Certification chambers, Open Area Test Sites, and conducted measurement facilities are listed with the FCC.

A2LA - Accredited by A2LA to ISO / IEC 17065 as a product certifier. This allows Element to certify transmitters to FCC and IC specifications.

NVLAP - Each laboratory is accredited by NVLAP to ISO 17025

Canada

ISED - Recognized by Innovation, Science and Economic Development Canada as a Certification Body (CB) and as a CAB for the acceptance of test data.

European Union

European Commission – Within Element, we have a EU Notified Body validated for the EMCD and RED Directives.

Australia/New Zealand

ACMA - Recognized by ACMA as a CAB for the acceptance of test data.

Korea

MSIT / RRA - Recognized by KCC's RRA as a CAB for the acceptance of test data.

Japan

VCCI - Associate Member of the VCCI. Conducted and radiated measurement facilities are registered.

Taiwan

BSMI – Recognized by BSMI as a CAB for the acceptance of test data.

NCC - Recognized by NCC as a CAB for the acceptance of test data.

Singapore

IDA – Recognized by IDA as a CAB for the acceptance of test data.

Israel

MOC – Recognized by MOC as a CAB for the acceptance of test data.

Hong Kong

OFCA – Recognized by OFCA as a CAB for the acceptance of test data.

Vietnam

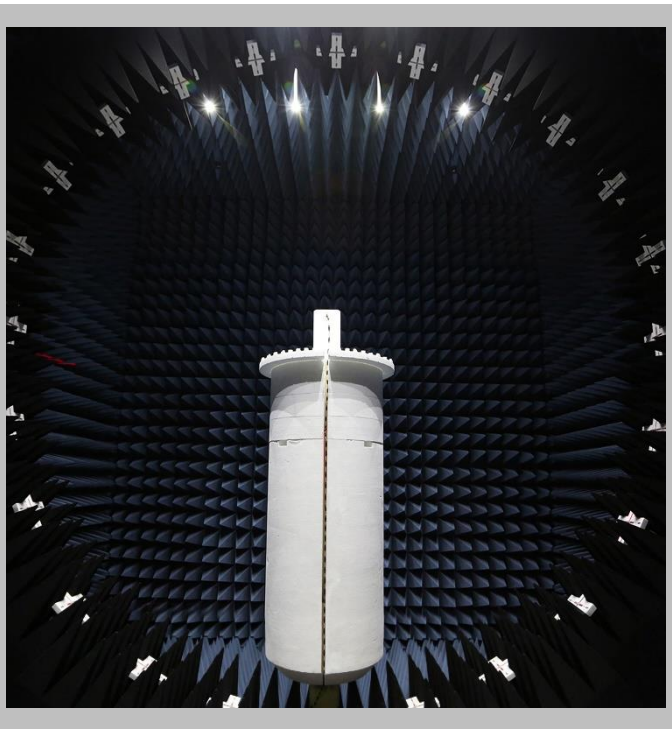
MIC – Recognized by MIC as a CAB for the acceptance of test data.

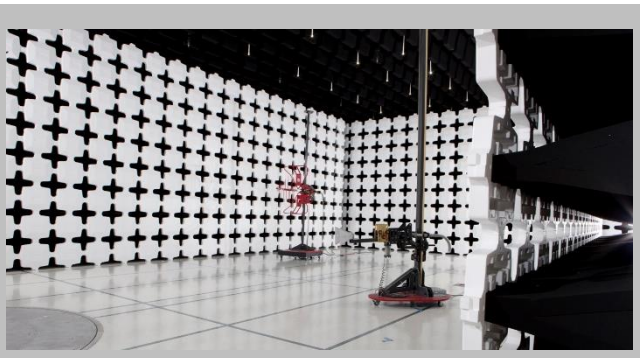
SCOPE

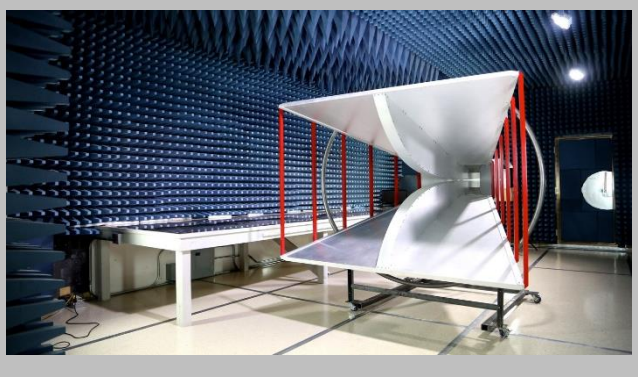
For details on the Scopes of our Accreditations, please visit:
https://www.nwemc.com/emc-testing-accreditations

FACILITIES

California	Minnesota	Oregon	Texas	Washington
Labs OC01-17 41 Tesla Irvine, CA 92618 (949) 861-8918	Labs MN01-10 9349 W Broadway Ave. Brooklyn Park, MN 55445 (612)-638-5136	Labs EV01-12 6775 NE Evergreen Pkwy #400 Hillsboro, OR 97124 (503) 844-4066	Labs TX01-09 3801 E Plano Pkwy Plano, TX 75074 (469) 304-5255	Labs NC01-05 19201 120th Ave NE Bothell, WA 98011 (425)984-6600
NVLAP				
NVLAP Lab Code: 200676-0	NVLAP Lab Code: 200881-0	NVLAP Lab Code: 200630-0	NVLAP Lab Code:201049-0	NVLAP Lab Code: 200629-0
Innovation, Science and Economic Development Canada				
2834B-1, 2834B-3	2834E-1, 2834E-3	2834D-1	2834G-1	2834F-1
BSMI				
SL2-IN-E-1154R	SL2-IN-E-1152R	SL2-IN-E-1017	SL2-IN-E-1158R	SL2-IN-E-1153R
VCCI				
A-0029	A-0109	A-0108	A-0201	A-0110
Recognized Phase I CAB for ISED, ACMA, BSMI, IDA, KCC/RRA, MIC, MOC, NCC, OFCA				
US0158	US0175	US0017	US0191	US0157

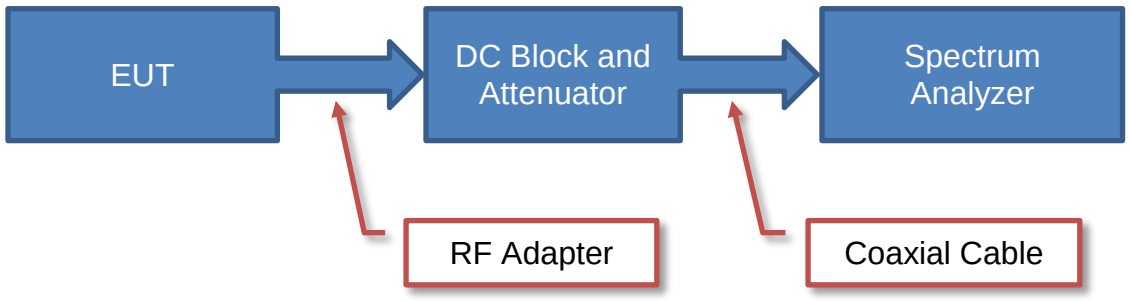




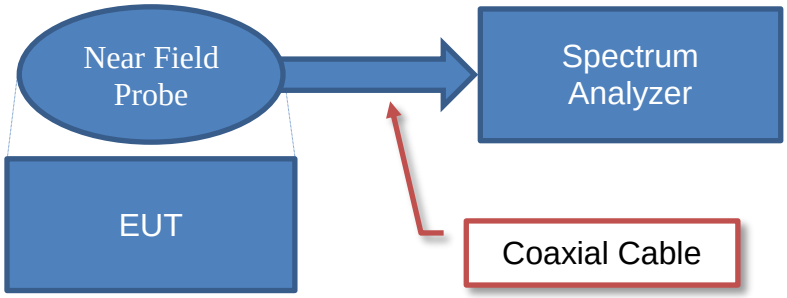


Test Setup Block Diagrams

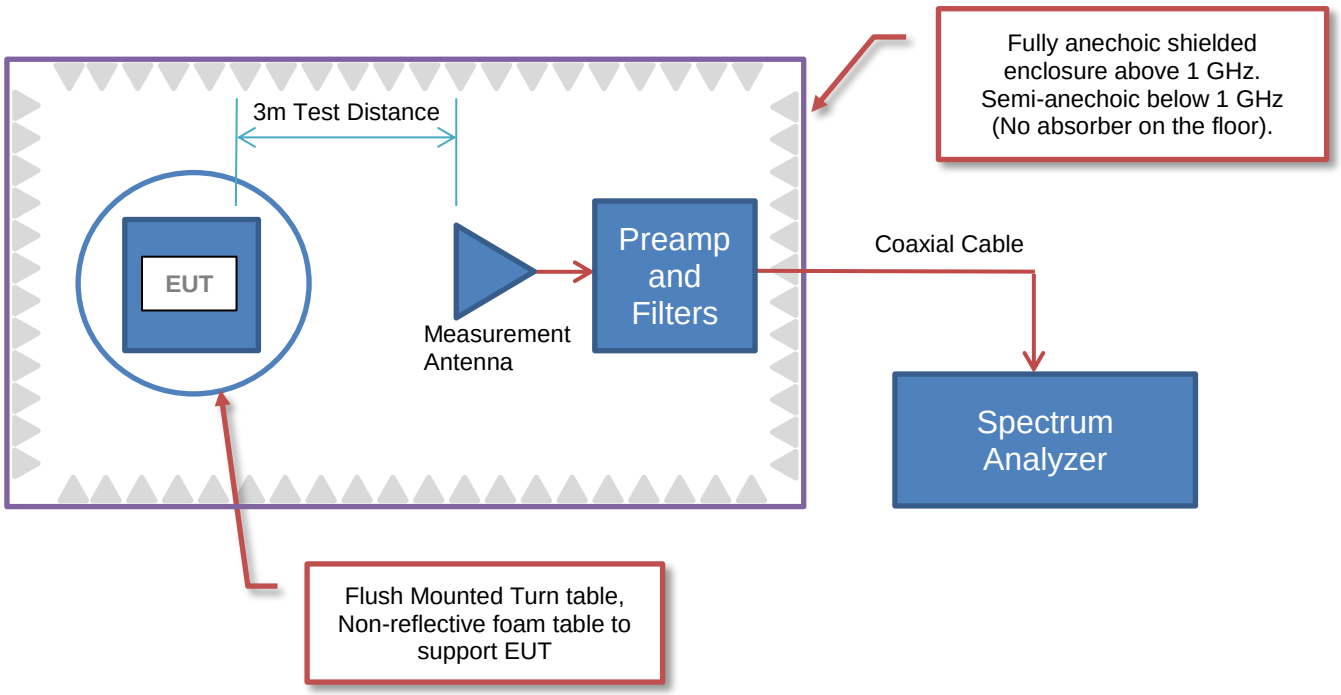
Antenna Port Conducted Measurements



Near Field Test Fixture Measurements



Spurious Radiated Emissions



MEASUREMENT UNCERTAINTY

element
TMU.2015.07.10

Measurement Uncertainty

When a measurement is made, the result will be different from the true or theoretically correct value. The difference is the result of tolerances in the measurement system that cannot be completely eliminated. To the extent that technology allows us, it has been our aim to minimize this error. Measurement uncertainty is a statistical expression of measurement error qualified by a probability distribution.

A measurement uncertainty estimation has been performed for each test per our internal quality document QM205.4.6. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) can be found included as part of the applicable test description page. Our measurement data meets or exceeds the measurement uncertainty requirements of the applicable specification; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for estimating measurement uncertainty are based upon ETSI TR 100 028 (or CISPR 16-4-2 as applicable), and are available upon request.

The following table represents the Measurement Uncertainty (MU) budgets for each of the tests that may be contained in this report.

Test	+ MU	- MU
Frequency Accuracy	0.0007%	-0.0007%
Amplitude Accuracy (dB)	1.2 dB	-1.2 dB
Conducted Power (dB)	1.2 dB	-1.2 dB
Radiated Power via Substitution (dB)	0.7 dB	-0.7 dB
Temperature (degrees C)	0.7°C	-0.7°C
Humidity (% RH)	2.5% RH	-2.5% RH
Voltage (AC)	1.0%	-1.0%
Voltage (DC)	0.7%	-0.7%
Field Strength (dB)	5.2 dB	-5.2 dB
AC Powerline Conducted Emissions (dB)	2.4 dB	-2.4 dB

PRODUCT DESCRIPTION

Client and Equipment Under Test (EUT) Information

Company Name:	Polaris Industries, Inc.
Address:	7290 E. Viking Blvd.
City, State, Zip:	WYOMING, WA 55092
Test Requested By:	Wayne Rieger
EUT:	CCU-2
First Date of Test:	December 10, 2019
Last Date of Test:	January 6, 2020
Receipt Date of Samples:	November 20, 2019
Equipment Design Stage:	Production
Equipment Condition:	No Damage
Purchase Authorization:	Verified

Information Provided by the Party Requesting the Test

Functional Description of the EUT:
Connectivity Control Unit

Testing Objective:
To demonstrate compliance to 15.247 for a FHSS radio

CONFIGURATIONS

Configuration POLR0058- 1

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Connectivity Control Unit	Polaris Industries, Inc.	CCU-2	1

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Laptop	Lenovo	T430	None
Serial to Ethernet Converter	RADMOON	None	11625
AC/DC Adapter Laptop	Lenovo	41r4538	11S41R4538ZVJ51U05108N
AC/DC Adapter Converter	Samsung	None	None

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Power Cable Laptop	No	1.5m	No	AC mains	AC/DC Adapter (Laptop)
DC Power Cable Laptop	No	2.0m	Yes	AC/DC Adapter (Laptop)	Laptop
Ethernet CAT 5	No	1.0 m	No	Laptop	Ethernet converter
USB Power Cable	No	.6 m	No	AC/DC Adapter Converter	Ethernet converter
DC Power Leads (14 volt)	No	1.6 m	No	DC Power Supply	Connectivity Control Unit
Serial Cable	No	.8 m	No	Ethernet Converter	Connectivity Control Unit

CONFIGURATIONS

Configuration POLR0058- 2

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Connectivity Control Unit	Polaris Industries, Inc.	CCU-2	Regulatory Unit #5

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Laptop	Lenovo	T430	None
Serial to Ethernet Converter	RADMOON	None	11625
AC/DC Adapter Laptop	Lenovo	41r4538	11S41R4538ZVJ51U05108N
AC/DC Adapter Converter	Samsung	None	None

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Power Cable Laptop	No	1.5m	No	AC mains	AC/DC Adapter (Laptop)
DC Power Cable Laptop	No	2.0m	Yes	AC/DC Adapter (Laptop)	Laptop
Ethernet CAT 5	No	1.0 m	No	Laptop	Ethernet converter
USB Power Cable	No	.6 m	No	AC/DC Adapter Converter	Ethernet converter
DC Power Leads (14 volt)	No	1.6 m	No	DC Power Supply	Connectivity Control Unit
Serial Cable	No	.8 m	No	Ethernet Converter	Connectivity Control Unit

CONFIGURATIONS

Configuration POLR0058- 3

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Connectivity Control Unit	Polaris Industries, Inc.	CCU-2	Unit #10

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Serial to Ethernet Converter	RADMOON	None	11625
AC/DC Adapter Converter	Samsung	None	None
DC Power Supply	Topward Electric Instruments Co.	TPS 2000	TPD

Remote Equipment Outside of Test Setup Boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Laptop	Lenovo	T430	None

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
USB Power Cable	No	.6 m	No	AC/DC Adapter Converter	Ethernet converter
DC Power Leads (14 volt)	No	1.6 m	No	DC Power Supply	Connectivity Control Unit
Serial Cable	No	.8 m	No	Ethernet Converter	Connectivity Control Unit
Ethernet Cat 6	No	10 m	No	Laptop	Ethernet converter
AC Power Cable	No	1.8 m	No	AC Mains	AC Mains

CONFIGURATIONS

Configuration POLR0058- 4

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Connectivity Control Unit	Polaris Industries, Inc.	CCU-2	Regulatory Unit #6

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Laptop	Lenovo	T430	None
Serial to Ethernet Converter	RADMOON	None	11625
AC/DC Adapter Laptop	Lenovo	41r4538	11S41R4538ZVJ51U05108N
AC/DC Adapter Converter	Samsung	None	None

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Power Cable Laptop	No	1.5m	No	AC mains	AC/DC Adapter (Laptop)
DC Power Cable Laptop	No	2.0m	Yes	AC/DC Adapter (Laptop)	Laptop
Ethernet CAT 5	No	1.0 m	No	Laptop	Ethernet converter
USB Power Cable	No	.6 m	No	AC/DC Adapter Converter	Ethernet converter
DC Power Leads (14 volt)	No	1.6 m	No	DC Power Supply	Connectivity Control Unit
Serial Cable	No	.8 m	No	Ethernet Converter	Connectivity Control Unit

MODIFICATIONS

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	2019-12-10	Output Power	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
2	2019-12-10	Equivalent Isotropic Radiated Power	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
3	2019-12-10	Occupied Bandwidth	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
4	2019-01-03	Spurious Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
5	2019-01-03	Band Edge Compliance	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
6	2019-01-03	Band Edge Compliance - Hopping Mode	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
7	2020-01-06	Spurious Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

POWER SETTINGS

The EUT was tested using the power settings provided by the manufacturer:

SETTINGS FOR ALL TESTS IN THIS REPORT

Modulation Types	Type	Channel	Position	Frequency (MHz)	Power Setting
DH5, 2DH5, 3DH5	FHSS	0 or 1	Low Channel	2402	6
		39	Mid Channel	2440	6
		78 or 79	High Channel	2480	6

SPURIOUS RADIATED EMISSIONS

PSA-ESCI 2019.05.10

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. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Bluetooth, Tx, Low Ch. = 2402 MHz, Mid Ch. = 2440 MHz, High Ch. = 2480 MHz, Software power setting = 6.

POWER SETTINGS INVESTIGATED

14VDC

CONFIGURATIONS INVESTIGATED

POLR0058 - 3

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	26.5 GHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Analyzer - Spectrum Analyzer	Agilent	E4446A	AAQ	24-Mar-2019	12 mo
Filter - High Pass	Micro-Tronics	HPM50111	HFO	18-Nov-2019	12 mo
Filter - Low Pass	Micro-Tronics	LPM50004	LFD	15-Feb-2019	12 mo
Attenuator	Coaxicom	3910-20	AXZ	15-Feb-2019	12 mo
Cable	ESM Cable Corp.	TTBJ141-KMKM-72	EVY	31-Jul-2019	12 mo
Cable	None	Standard Gain Horns Cable	EVF	19-Nov-2019	12 mo
Cable	N/A	Double Ridge Horn Cables	EVB	18-Nov-2019	12 mo
Cable	N/A	Bilog Cables	EVA	18-Nov-2019	12 mo
Amplifier - Pre-Amplifier	Miteq	AMF-6F-18002650-25-10P	AVU	31-Jul-2019	12 mo
Amplifier - Pre-Amplifier	Miteq	AMF-6F-12001800-30-10P	AVD	19-Nov-2019	12 mo
Amplifier - Pre-Amplifier	L-3 Narda-MITEQ	AMF-6F-08001200-30-10P	PAO	19-Nov-2019	12 mo
Amplifier - Pre-Amplifier	Miteq	AMF-3D-00100800-32-13P	PAG	18-Nov-2019	12 mo
Amplifier - Pre-Amplifier	Miteq	AM-1616-1000	AOL	18-Nov-2019	12 mo
Antenna - Standard Gain	ETS Lindgren	3160-09	AIV	NCR	0 mo
Antenna - Standard Gain	ETS Lindgren	3160-08	AHV	NCR	0 mo
Antenna - Standard Gain	ETS Lindgren	3160-07	AHU	NCR	0 mo
Antenna - Double Ridge	ETS Lindgren	3115	AIZ	7-Feb-2018	24 mo
Antenna - Biconilog	Teseq	CBL 6141B	AXR	2-Oct-2018	24 mo

TEST DESCRIPTION

The highest gain antenna of each type to be used with the EUT was tested. The EUT was configured for the required transmit frequencies and the modes as showed in the data sheets.

For each configuration, the spectrum was scanned throughout the specified range as part of the exploratory investigation of the emissions. These “pre-scans” are not included in the report. Final measurements on individual emissions were then made and included in this test report.

The individual emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and EUT antenna in three orthogonal axis if required, and adjusting the measurement antenna height and polarization (per ANSI C63.10). A preamp and high pass filter (and notch filter) were used for this test in order to provide sufficient measurement sensitivity.

Measurements were made with the required detectors and annotated on the data for each individual point using the following annotation:

QP = Quasi-Peak Detector
PK = Peak Detector
AV = RMS Detector

Measurements were made to satisfy the specific requirements of the test specification for out of band emissions as well as the restricted band requirements.

If there are no detectable emissions above the noise floor, the data included may show noise floor measurements for reference only.

Measurements at the edges of the allowable band may be presented in an alternative method as provided for in the ANSI C63.10 Marker-Delta method. This method involves performing an in-band fundamental measurement followed by a screen capture of the fundamental and out-of-band emission using reduced measurement instrumentation bandwidths. The amplitude delta measured on this screen capture is applied to the fundamental emission value to show the out-of-band emission level as applied to the limit.

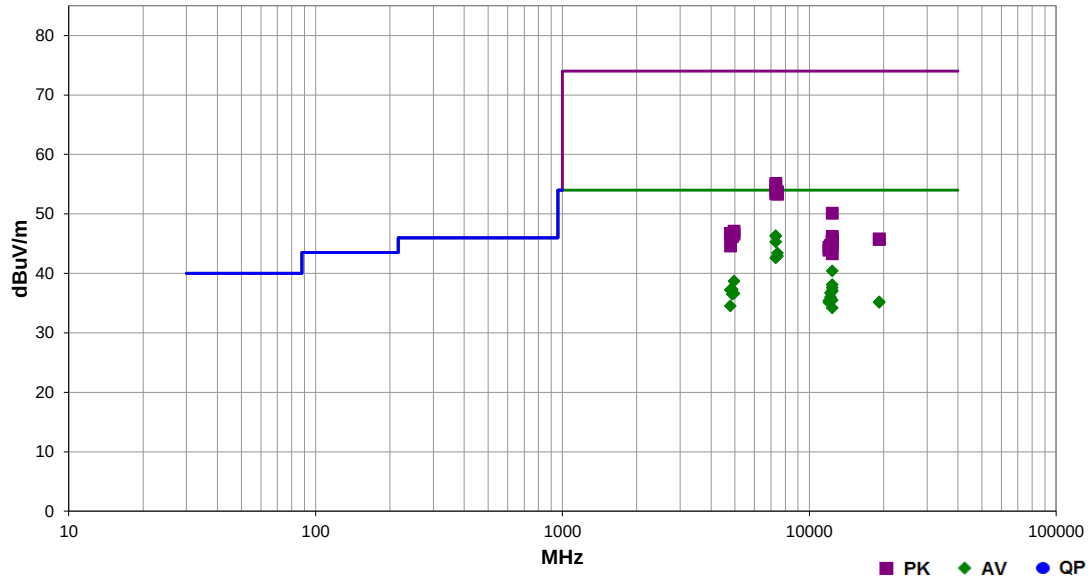
SPURIOUS RADIATED EMISSIONS

EmiR5 2019.08.15.1 PSA-ESCI 2019.05.10

Work Order:	POLR0058	**Date:**	6-Jan-2020		
Project:	None	**Temperature:**	20.8 °C		
Job Site:	EV01	**Humidity:**	41% RH		
Serial Number:	Unit #10	**Barometric Pres.:**	1029 mbar	**Tested by:**	Cole Ghizzone
EUT:	CCU-2				
Configuration:	3				
Customer:	Polaris Industries, Inc.				
Attendees:	Wayne Rieger				
EUT Power:	14VDC				
Operating Mode:	Bluetooth, Tx, Low Ch. = 2402 MHz, Mid Ch. = 2440 MHz, High Ch. = 2480 MHz, Software power setting = 6.				
Deviations:	None				
Comments:	See data comments below for channel, data rate, and EUT orientation.				

Test Specifications	**Test Method**
FCC 15.247:2020	ANSI C63.10:2013

Run #	41	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
7319.900	32.2	14.1	2.57	190.0	3.0	0.0	Horz	AV	0.0	46.3	54.0	-7.7	Mid Ch, 2DH5, EUT Vertical
7320.050	32.2	14.1	2.57	190.0	3.0	0.0	Horz	AV	0.0	46.3	54.0	-7.7	Mid Ch, 3DH5, EUT Vertical
7319.883	31.2	14.1	2.43	191.0	3.0	0.0	Horz	AV	0.0	45.3	54.0	-8.7	Mid Ch, DH5, EUT Vertical
7440.125	28.8	14.6	1.5	59.0	3.0	0.0	Vert	AV	0.0	43.4	54.0	-10.6	High Ch, DH5, EUT Vertical
7441.108	28.3	14.6	1.5	55.0	3.0	0.0	Horz	AV	0.0	42.9	54.0	-11.1	High Ch, DH5, EUT Vertical
7319.600	28.5	14.1	1.5	172.0	3.0	0.0	Vert	AV	0.0	42.6	54.0	-11.4	Mid Ch, DH5, EUT Vertical
12400.550	30.0	10.4	1.43	254.0	3.0	0.0	Vert	AV	0.0	40.4	54.0	-13.6	High Ch, DH5, EUT Vertical
4959.992	32.2	6.5	2.19	159.0	3.0	0.0	Horz	AV	0.0	38.7	54.0	-15.3	High Ch, DH5, EUT Vertical
12399.380	37.0	1.1	1.94	295.0	3.0	0.0	Vert	AV	0.0	38.1	54.0	-15.9	High Ch, DH5, EUT Vertical
12399.330	36.5	1.1	2.8	124.0	3.0	0.0	Horz	AV	0.0	37.6	54.0	-16.4	High Ch, DH5, EUT Vertical
4879.008	30.9	6.4	4.0	142.0	3.0	0.0	Horz	AV	0.0	37.3	54.0	-16.7	Mid Ch, DH5, EUT Vertical
4794.083	31.8	5.4	2.24	161.0	3.0	0.0	Horz	AV	0.0	37.2	54.0	-16.8	Low Ch, DH5, EUT Vertical
12399.240	36.0	1.1	1.5	159.0	3.0	0.0	Horz	AV	0.0	37.1	54.0	-16.9	High Ch, DH5, EUT On Side
12399.260	35.9	1.1	2.11	192.0	3.0	0.0	Vert	AV	0.0	37.0	54.0	-17.0	High Ch, DH5, EUT On Side
12200.580	35.9	0.8	1.4	262.0	3.0	0.0	Vert	AV	0.0	36.7	54.0	-17.3	Mid Ch, DH5, EUT Vertical
4959.992	30.1	6.5	1.5	166.0	3.0	0.0	Vert	AV	0.0	36.6	54.0	-17.4	High Ch, DH5, EUT Vertical
4879.925	30.1	6.4	3.86	174.0	3.0	0.0	Vert	AV	0.0	36.5	54.0	-17.5	Mid Ch, DH5, EUT Vertical
12199.380	35.2	0.8	1.5	271.0	3.0	0.0	Horz	AV	0.0	36.0	54.0	-18.0	Mid Ch, DH5, EUT Vertical
12399.240	34.4	1.1	1.05	224.0	3.0	0.0	Vert	AV	0.0	35.5	54.0	-18.5	High Ch, DH5, EUT Horizontal
12009.310	34.4	1.0	1.5	254.0	3.0	0.0	Vert	AV	0.0	35.4	54.0	-18.6	Low Ch, DH5, EUT Vertical
19215.010	33.1	2.1	1.55	0.0	3.0	0.0	Vert	AV	0.0	35.2	54.0	-18.8	Low Ch, DH5, EUT Vertical
12009.240	34.1	1.0	3.69	162.0	3.0	0.0	Horz	AV	0.0	35.1	54.0	-18.9	Low Ch, DH5, EUT Vertical
7320.242	41.0	14.1	2.57	190.0	3.0	0.0	Horz	PK	0.0	55.1	74.0	-18.9	Mid Ch, 3DH5, EUT Vertical
19216.940	33.0	2.1	1.55	158.0	3.0	0.0	Horz	AV	0.0	35.1	54.0	-18.9	Low Ch, DH5, EUT Vertical
7319.183	40.6	14.1	2.57	190.0	3.0	0.0	Horz	PK	0.0	54.7	74.0	-19.3	Mid Ch, 2DH5, EUT Vertical
4793.000	29.1	5.4	2.31	274.0	3.0	0.0	Vert	AV	0.0	34.5	54.0	-19.5	Low Ch, DH5, EUT Vertical
12399.330	33.1	1.1	1.11	90.0	3.0	0.0	Horz	AV	0.0	34.2	54.0	-19.8	High Ch, DH5, EUT Horizontal

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
7319.708	39.7	14.1	2.43	191.0	3.0	0.0	Horz	PK	0.0	53.8	74.0	-20.2	Mid Ch, DH5, EUT Vertical
7441.992	39.1	14.6	1.5	55.0	3.0	0.0	Horz	PK	0.0	53.7	74.0	-20.3	High Ch, DH5, EUT Vertical
7321.067	39.3	14.1	1.5	172.0	3.0	0.0	Vert	PK	0.0	53.4	74.0	-20.6	Mid Ch, DH5, EUT Vertical
7439.683	38.7	14.6	1.5	59.0	3.0	0.0	Vert	PK	0.0	53.3	74.0	-20.7	High Ch, DH5, EUT Vertical
12400.230	39.7	10.4	1.43	254.0	3.0	0.0	Vert	PK	0.0	50.1	74.0	-23.9	High Ch, DH5, EUT Vertical
4959.800	40.6	6.5	2.19	159.0	3.0	0.0	Horz	PK	0.0	47.1	74.0	-26.9	High Ch, DH5, EUT Vertical
4793.567	41.3	5.4	2.24	161.0	3.0	0.0	Horz	PK	0.0	46.7	74.0	-27.3	Low Ch, DH5, EUT Vertical
4959.983	40.1	6.5	1.5	166.0	3.0	0.0	Vert	PK	0.0	46.6	74.0	-27.4	High Ch, DH5, EUT Vertical
4879.292	39.9	6.4	4.0	142.0	3.0	0.0	Horz	PK	0.0	46.3	74.0	-27.7	Mid Ch, DH5, EUT Vertical
12399.000	45.1	1.1	2.8	124.0	3.0	0.0	Horz	PK	0.0	46.2	74.0	-27.8	High Ch, DH5, EUT Vertical
4879.167	39.8	6.4	3.86	174.0	3.0	0.0	Vert	PK	0.0	46.2	74.0	-27.8	Mid Ch, DH5, EUT Vertical
19214.710	43.7	2.1	1.55	158.0	3.0	0.0	Horz	PK	0.0	45.8	74.0	-28.2	Low Ch, DH5, EUT Vertical
19216.920	43.6	2.1	1.55	0.0	3.0	0.0	Vert	PK	0.0	45.7	74.0	-28.3	Low Ch, DH5, EUT Vertical
12399.990	44.5	1.1	2.11	192.0	3.0	0.0	Vert	PK	0.0	45.6	74.0	-28.4	High Ch, DH5, EUT On Side
12399.680	44.4	1.1	1.94	295.0	3.0	0.0	Vert	PK	0.0	45.5	74.0	-28.5	High Ch, DH5, EUT Vertical
12399.180	44.3	1.1	1.5	159.0	3.0	0.0	Horz	PK	0.0	45.4	74.0	-28.6	High Ch, DH5, EUT On Side
12399.030	43.6	1.1	1.05	224.0	3.0	0.0	Vert	PK	0.0	44.7	74.0	-29.3	High Ch, DH5, EUT Horizontal
12199.080	43.9	0.8	1.4	262.0	3.0	0.0	Vert	PK	0.0	44.7	74.0	-29.3	Mid Ch, DH5, EUT Vertical
4795.675	39.1	5.5	2.31	274.0	3.0	0.0	Vert	PK	0.0	44.6	74.0	-29.4	Low Ch, DH5, EUT Vertical
12009.080	43.4	1.0	3.69	162.0	3.0	0.0	Horz	PK	0.0	44.4	74.0	-29.6	Low Ch, DH5, EUT Vertical
12199.060	43.5	0.8	1.5	271.0	3.0	0.0	Horz	PK	0.0	44.3	74.0	-29.7	Mid Ch, DH5, EUT Vertical
12011.160	42.9	1.0	1.5	254.0	3.0	0.0	Vert	PK	0.0	43.9	74.0	-30.1	Low Ch, DH5, EUT Vertical
12399.200	42.2	1.1	1.11	90.0	3.0	0.0	Horz	PK	0.0	43.3	74.0	-30.7	High Ch, DH5, EUT Horizontal

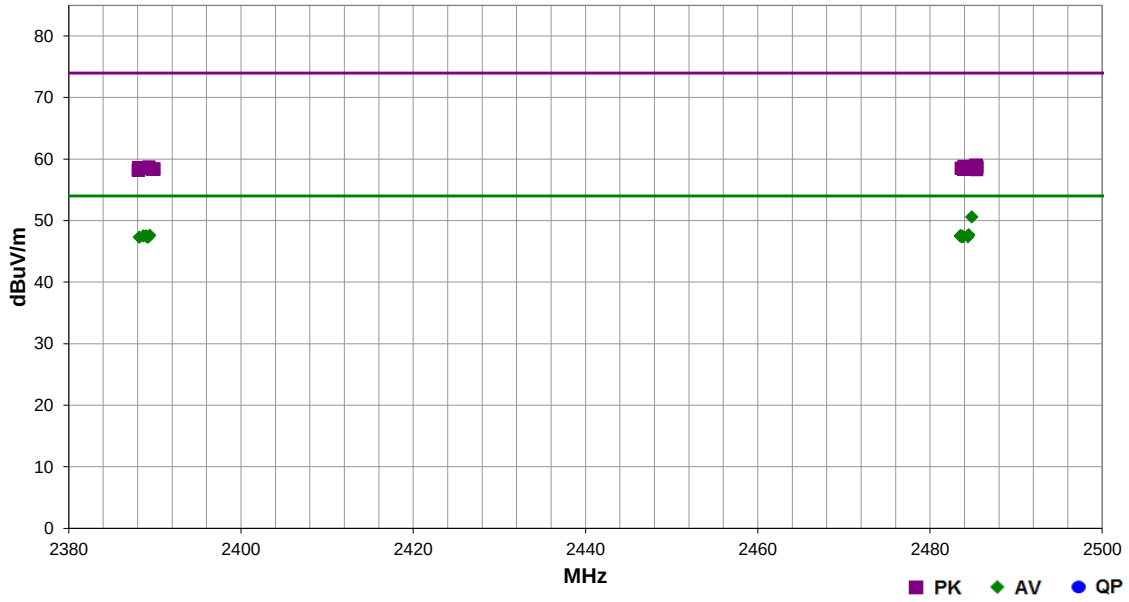
SPURIOUS RADIATED EMISSIONS

EmiR5 2019.08.15.1 PSA-ESCI 2019.05.10

Work Order:	POLR0058	**Date:**	6-Jan-2020		
Project:	None	**Temperature:**	20.8 °C		
Job Site:	EV01	**Humidity:**	41% RH		
Serial Number:	Unit #10	**Barometric Pres.:**	1029 mbar	**Tested by:**	Cole Ghizzone
EUT:	CCU-2				
Configuration:	3				
Customer:	Polaris Industries, Inc.				
Attendees:	Wayne Rieger				
EUT Power:	14VDC				
Operating Mode:	Bluetooth, Tx, Low Ch. = 2402 MHz, Mid Ch. = 2440 MHz, High Ch. = 2480 MHz, Software power setting = 6.				
Deviations:	None				
Comments:	See data comments below for channel, data rate, and EUT orientaiton.				

Test Specifications	**Test Method**
FCC 15.247:2020	ANSI C63.10:2013

Run #	45	**Test Distance (m)**	3	**Antenna Height(s)**	1 to 4(m)	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
2484.850	34.3	-3.7	1.21	231.0	3.0	20.0	Vert	AV	0.0	50.6	54.0	-3.4	High Ch, DH5, EUT Horizontal
2484.497	31.4	-3.7	1.5	283.0	3.0	20.0	Horz	AV	0.0	47.7	54.0	-6.3	High Ch, DH5, EUT Vertical
2389.403	31.6	-4.0	1.5	310.0	3.0	20.0	Vert	AV	0.0	47.6	54.0	-6.4	Low Ch, DH5, EUT Horizontal
2483.673	31.3	-3.8	1.5	235.0	3.0	20.0	Vert	AV	0.0	47.5	54.0	-6.5	High Ch, DH5, EUT Vertical
2483.547	31.3	-3.8	1.5	357.0	3.0	20.0	Vert	AV	0.0	47.5	54.0	-6.5	High Ch, DH5, EUT On Side
2483.520	31.3	-3.8	1.5	178.0	3.0	20.0	Horz	AV	0.0	47.5	54.0	-6.5	High Ch, DH5, EUT Horizontal
2388.657	31.5	-4.0	1.5	310.0	3.0	20.0	Vert	AV	0.0	47.5	54.0	-6.5	Low Ch, 2DH5, EUT Horizontal
2388.970	31.5	-4.0	1.5	310.0	3.0	20.0	Vert	AV	0.0	47.5	54.0	-6.5	Low Ch, 3DH5, EUT Horizontal
2483.717	31.2	-3.8	1.5	355.0	3.0	20.0	Horz	AV	0.0	47.4	54.0	-6.6	High Ch, DH5, EUT On Side
2483.847	31.2	-3.8	1.5	347.0	3.0	20.0	Vert	AV	0.0	47.4	54.0	-6.6	High Ch, 2DH5, EUT Horizontal
2484.403	31.1	-3.7	1.5	347.0	3.0	20.0	Vert	AV	0.0	47.4	54.0	-6.6	High Ch, 3DH5, EUT Horizontal
2389.057	31.4	-4.0	1.5	246.0	3.0	20.0	Horz	AV	0.0	47.4	54.0	-6.6	Low Ch, 3DH5, EUT Vertical
2388.190	31.3	-4.0	1.5	246.0	3.0	20.0	Horz	AV	0.0	47.3	54.0	-6.7	Low Ch, 2DH5, EUT Vertical
2389.223	31.3	-4.0	1.5	246.0	3.0	20.0	Horz	AV	0.0	47.3	54.0	-6.7	Low Ch, DH5, EUT Vertical
2485.353	42.7	-3.7	1.5	357.0	3.0	20.0	Vert	PK	0.0	59.0	74.0	-15.0	High Ch, DH5, EUT On Side
2485.260	42.6	-3.7	1.5	235.0	3.0	20.0	Vert	PK	0.0	58.9	74.0	-15.1	High Ch, DH5, EUT Vertical
2483.950	42.6	-3.8	1.21	231.0	3.0	20.0	Vert	PK	0.0	58.8	74.0	-15.2	High Ch, DH5, EUT Horizontal
2485.457	42.4	-3.7	1.5	178.0	3.0	20.0	Horz	PK	0.0	58.7	74.0	-15.3	High Ch, DH5, EUT Horizontal
2389.307	42.7	-4.0	1.5	310.0	3.0	20.0	Vert	PK	0.0	58.7	74.0	-15.3	Low Ch, DH5, EUT Horizontal
2388.117	42.6	-4.0	1.5	246.0	3.0	20.0	Horz	PK	0.0	58.6	74.0	-15.4	Low Ch, DH5, EUT Vertical
2483.637	42.3	-3.8	1.5	283.0	3.0	20.0	Horz	PK	0.0	58.5	74.0	-15.5	High Ch, DH5, EUT Vertical
2484.200	42.2	-3.7	1.5	355.0	3.0	20.0	Horz	PK	0.0	58.5	74.0	-15.5	High Ch, DH5, EUT On Side
2389.303	42.5	-4.0	1.5	246.0	3.0	20.0	Horz	PK	0.0	58.5	74.0	-15.5	Low Ch, 2DH5, EUT Vertical

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
2483.897	42.2	-3.8	1.5	347.0	3.0	20.0	Vert	PK	0.0	58.4	74.0	-15.6	High Ch, 2DH5, EUT Horizontal
2389.903	42.4	-4.0	1.5	310.0	3.0	20.0	Vert	PK	0.0	58.4	74.0	-15.6	Low Ch, 2DH5, EUT Horizontal
2389.773	42.4	-4.0	1.5	246.0	3.0	20.0	Horz	PK	0.0	58.4	74.0	-15.6	Low Ch, 3DH5, EUT Vertical
2485.397	42.0	-3.7	1.5	347.0	3.0	20.0	Vert	PK	0.0	58.3	74.0	-15.7	High Ch, 3DH5, EUT Horizontal
2388.070	42.2	-4.0	1.5	310.0	3.0	20.0	Vert	PK	0.0	58.2	74.0	-15.8	Low Ch, 3DH5, EUT Horizontal

DUTY CYCLE

TEST DESCRIPTION

The Duty Cycle (x) were measured for each of the EUT operating modes. The measurements were made using a zero span on the spectrum analyzer to see the pulses in the time domain. The transmit power was set to its default maximum.

The duty cycle was calculated by dividing the transmission pulse duration (T) by the total period of a single on and total off time.

The EUT operates at 100% Duty Cycle.

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	Dr. Meter	PS-305DM	TZZ	NCR	NCR
Meter - Multimeter	Tektronix	DMM912	MMH	15-Feb-19	15-Feb-22
Generator - Signal	Keysight	N5182B	TFU	5-Nov-18	5-Nov-21
Cable	Micro-Coax	UFD150A-1-0720-200200	EVH	28-Mar-19	28-Mar-20
Attenuator	S.M. Electronics	SA26B-20	AUY	28-Mar-19	28-Mar-20
Block - DC	Fairview Microwave	SD3379	AMW	28-Mar-19	28-Mar-20
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFA	12-Feb-19	12-Feb-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:	**CCU-2**			**Work Order:**	**POLR0058**
Serial Number:	**Regulatory Unit #5**			**Date:**	**10-Dec-19**
Customer:	**Polaris Industries, Inc.**			**Temperature:**	**21.3 °C**
Attendees:	**Wayne Rieger**			**Humidity:**	**40.1% RH**
Project:	**None**			**Barometric Pres.:**	**1024 mbar**
Tested by:	**Jeff Alcoke and Brandon Hobbs**	**Power:**	**14VDC**	**Job Site:**	**EV06**

TEST SPECIFICATIONS	**Test Method**
FCC 15.247:2019	ANSI C63.10:2013

COMMENTS

Reference level offset includes: DC block, 20 dB attenuator, and measurement cable. Software power setting = 6

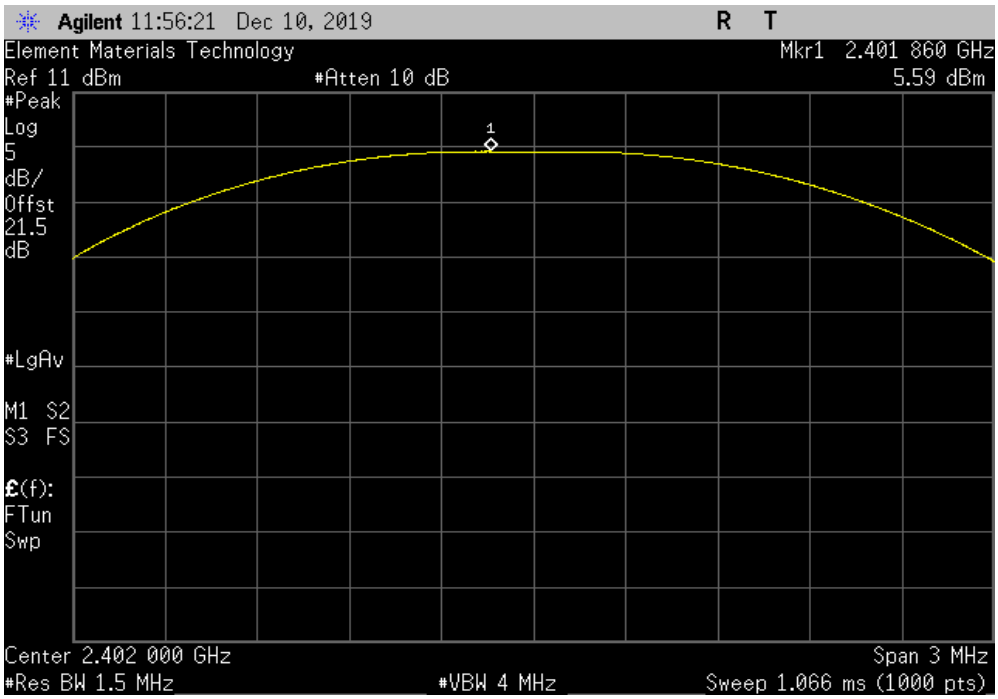
DEVIATIONS FROM TEST STANDARD

None

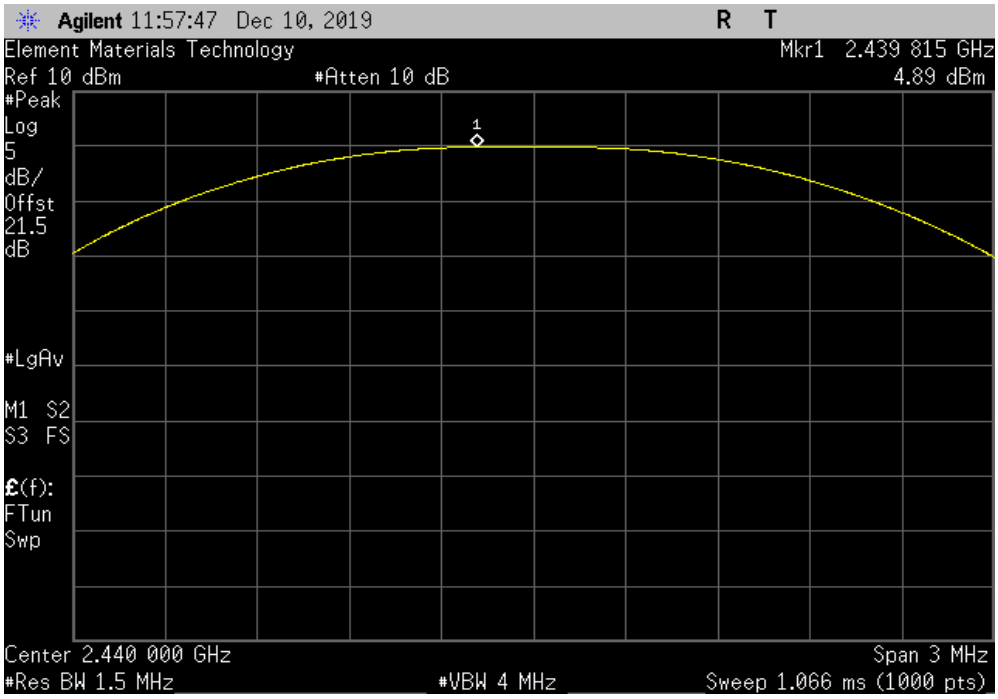
Configuration #	**2**	*Signature*

		Out Pwr (dBm)	**Limit (dBm)**	**Result**
DH5, GFSK				
	Low Channel, 2402 MHz	5.587	21	Pass
	Mid Channel, 2440 MHz	4.893	21	Pass
	High Channel, 2480 MHz	4.123	21	Pass
2DH5, pi/4-DQPSK				
	Low Channel, 2402 MHz	2.39	21	Pass
	Mid Channel, 2440 MHz	1.6	21	Pass
	High Channel, 2480 MHz	0.788	21	Pass
3DH5, 8-DPSK				
	Low Channel, 2402 MHz	3.023	21	Pass
	Mid Channel, 2440 MHz	2.227	21	Pass
	High Channel, 2480 MHz	1.434	21	Pass

DH5, GFSK, Low Channel, 2402 MHz						
				Out Pwr (dBm)	Limit (dBm)	Result
				5.587	21	Pass

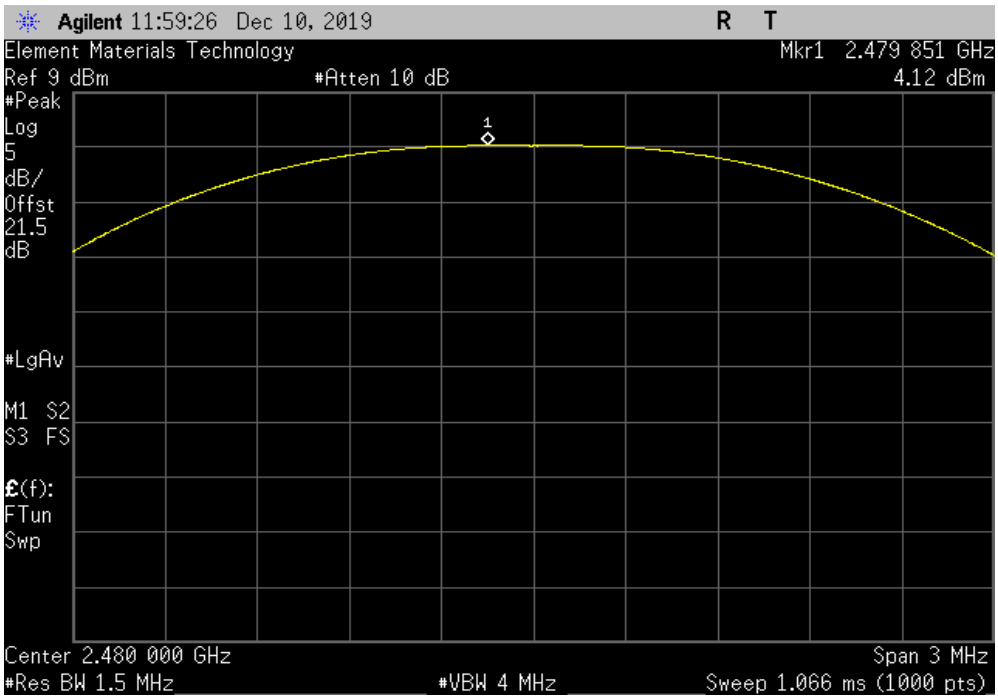


DH5, GFSK, Mid Channel, 2440 MHz						
				Out Pwr (dBm)	Limit (dBm)	Result
				4.893	21	Pass

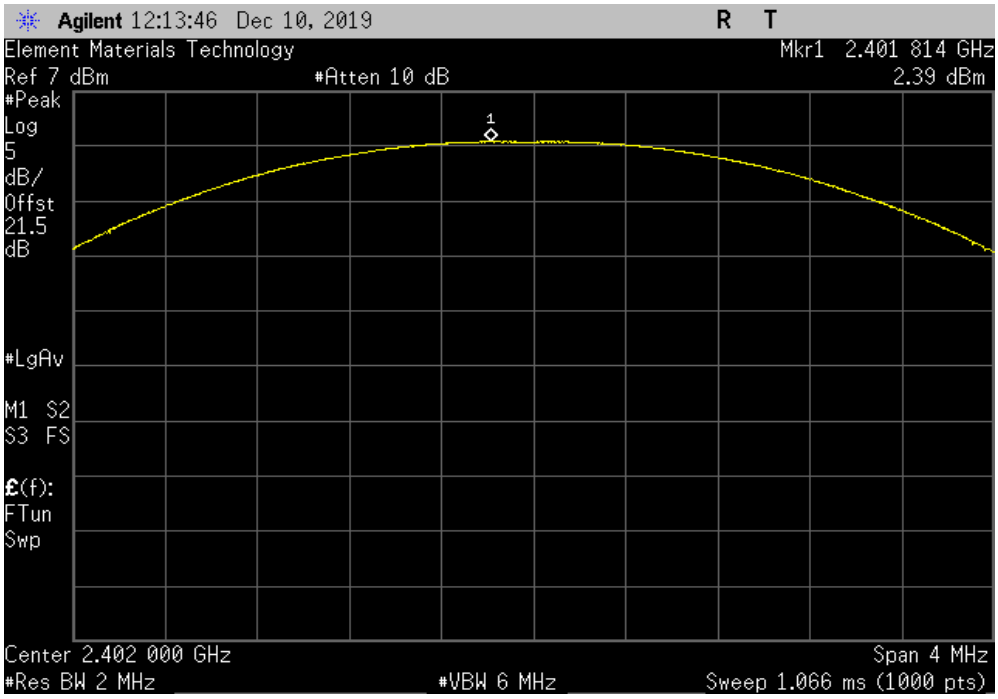


OUTPUT POWER

DH5, GFSK, High Channel, 2480 MHz							
					Out Pwr (dBm)	Limit (dBm)	Result
					4.123	21	Pass

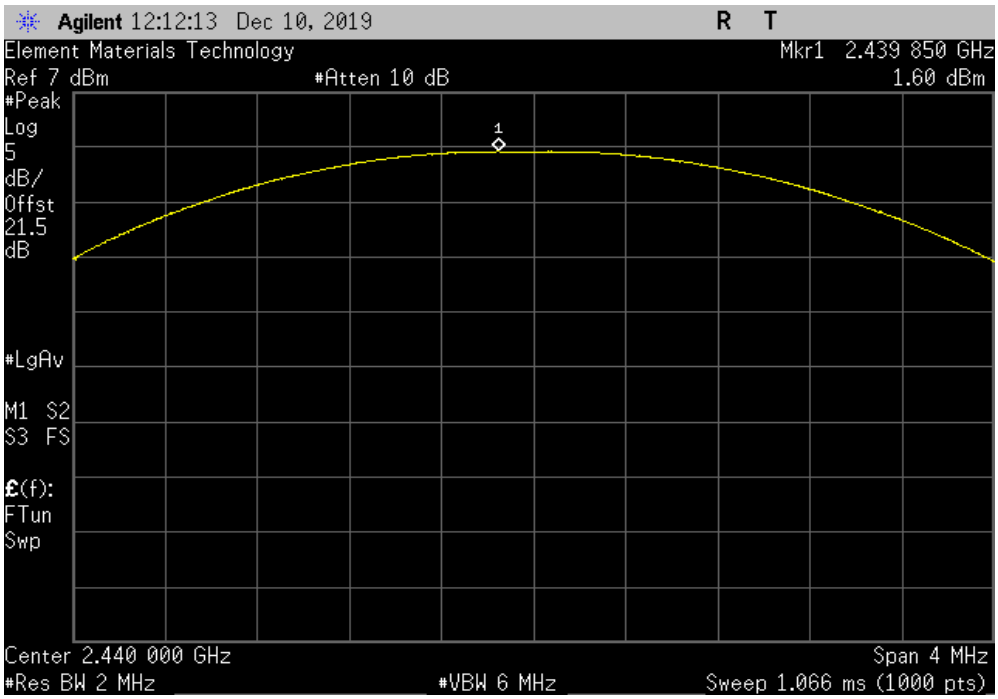


2DH5, pi/4-DQPSK, Low Channel, 2402 MHz							
					Out Pwr (dBm)	Limit (dBm)	Result
					2.39	21	Pass

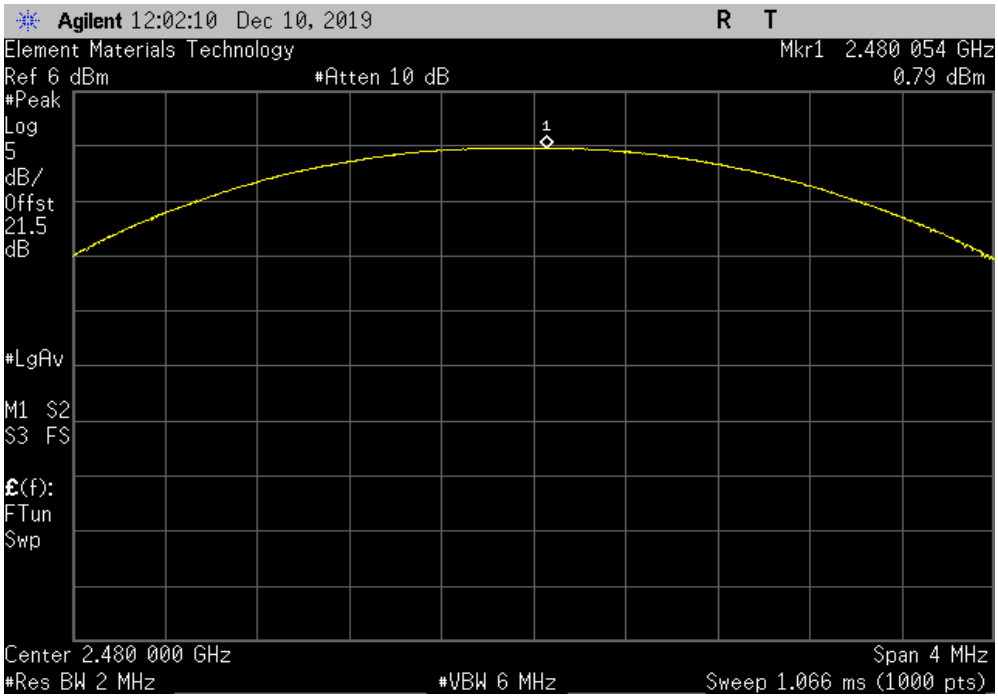


OUTPUT POWER

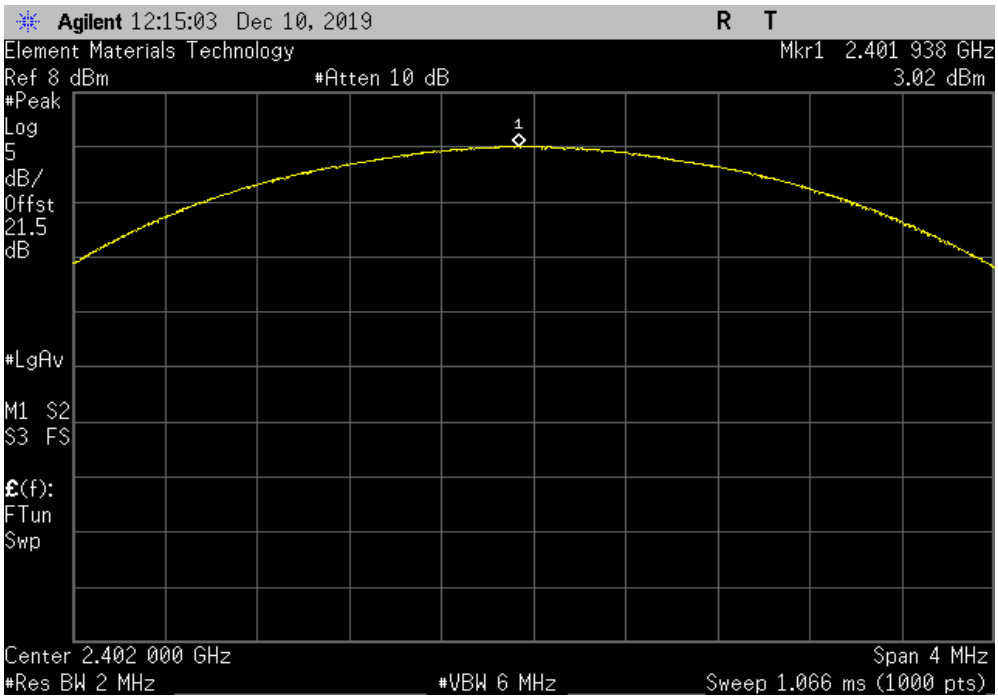
2DH5, pi/4-DQPSK, Mid Channel, 2440 MHz							
					Out Pwr (dBm)	Limit (dBm)	Result
					1.6	21	Pass



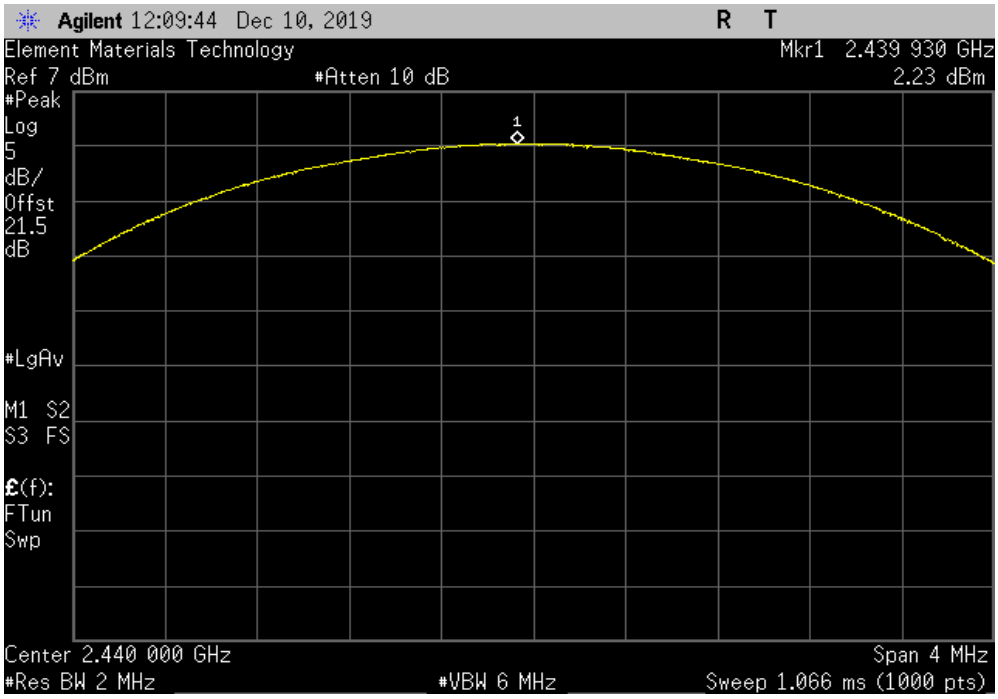
2DH5, pi/4-DQPSK, High Channel, 2480 MHz							
					Out Pwr (dBm)	Limit (dBm)	Result
					0.788	21	Pass



3DH5, 8-DPSK, Low Channel, 2402 MHz							
					Out Pwr (dBm)	Limit (dBm)	Result
					3.023	21	Pass

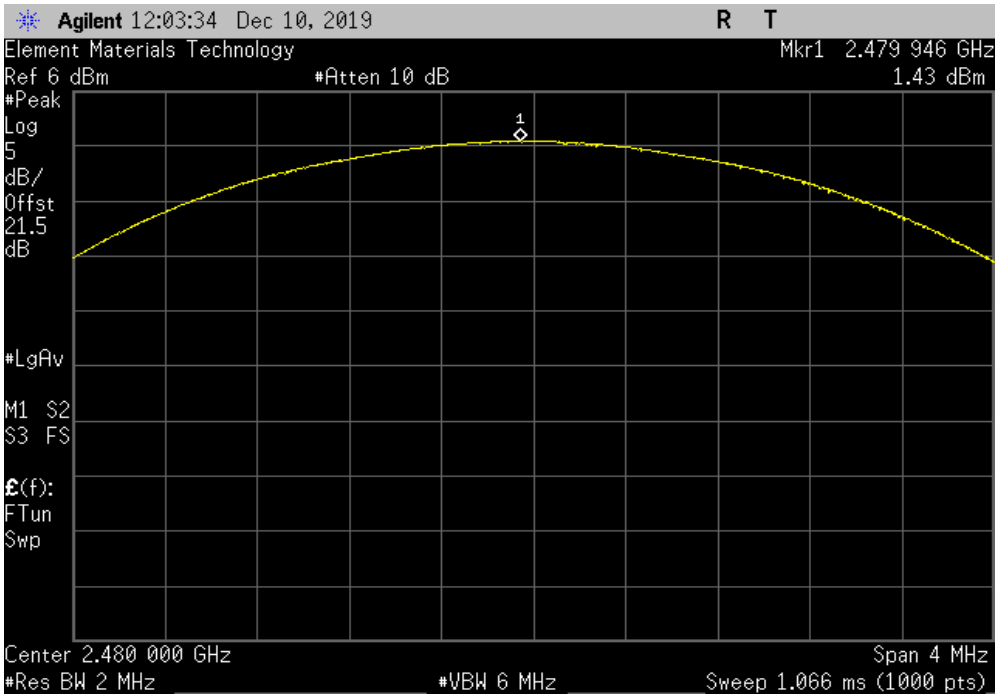


3DH5, 8-DPSK, Mid Channel, 2440 MHz							
					Out Pwr (dBm)	Limit (dBm)	Result
					2.227	21	Pass



OUTPUT POWER

3DH5, 8-DPSK, High Channel, 2480 MHz						
				Out Pwr (dBm)	Limit (dBm)	Result
				1.434	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	Dr. Meter	PS-305DM	TZZ	NCR	NCR
Meter - Multimeter	Tektronix	DMM912	MMH	15-Feb-19	15-Feb-22
Generator - Signal	Keysight	N5182B	TFU	5-Nov-18	5-Nov-21
Cable	Micro-Coax	UFD150A-1-0720-200200	EVH	28-Mar-19	28-Mar-20
Attenuator	S.M. Electronics	SA26B-20	AUY	28-Mar-19	28-Mar-20
Block - DC	Fairview Microwave	SD3379	AMW	28-Mar-19	28-Mar-20
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFA	12-Feb-19	12-Feb-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.

The antenna gain of the EUT was then added to the conducted output power to derive the EIRP Values.

EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)

element

TbtTx 2019.08.30.0 XMit 2019.09.05

EUT:	CCU-2			**Work Order:**	POLR0058
Serial Number:	Regulatory Unit #5			**Date:**	10-Dec-19
Customer:	Polaris Industries, Inc.			**Temperature:**	21.3 °C
Attendees:	Wayne Rieger			**Humidity:**	40.2% RH
Project:	None			**Barometric Pres.:**	1024 mbar
Tested by:	Jeff Alcoke and Brandon Hobbs	**Power:**	14VDC	**Job Site:**	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.247:2019	ANSI C63.10:2013

COMMENTS

Reference level offset includes: DC block, 20 dB attenuator, and measurement cable. Software power setting = 6

DEVIATIONS FROM TEST STANDARD

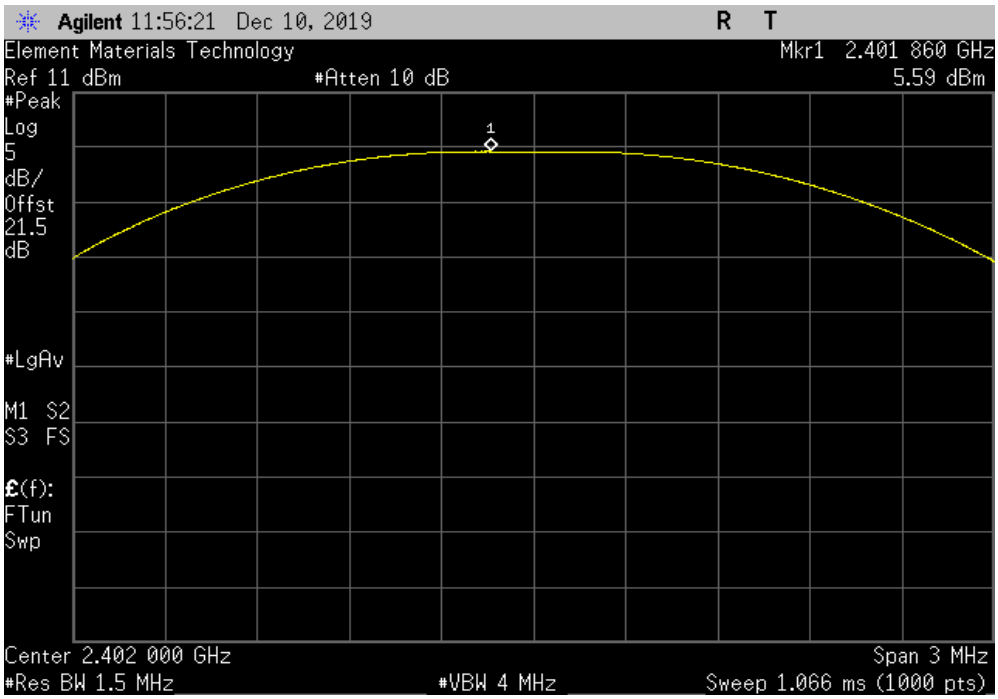
None

Configuration #	2	Signature

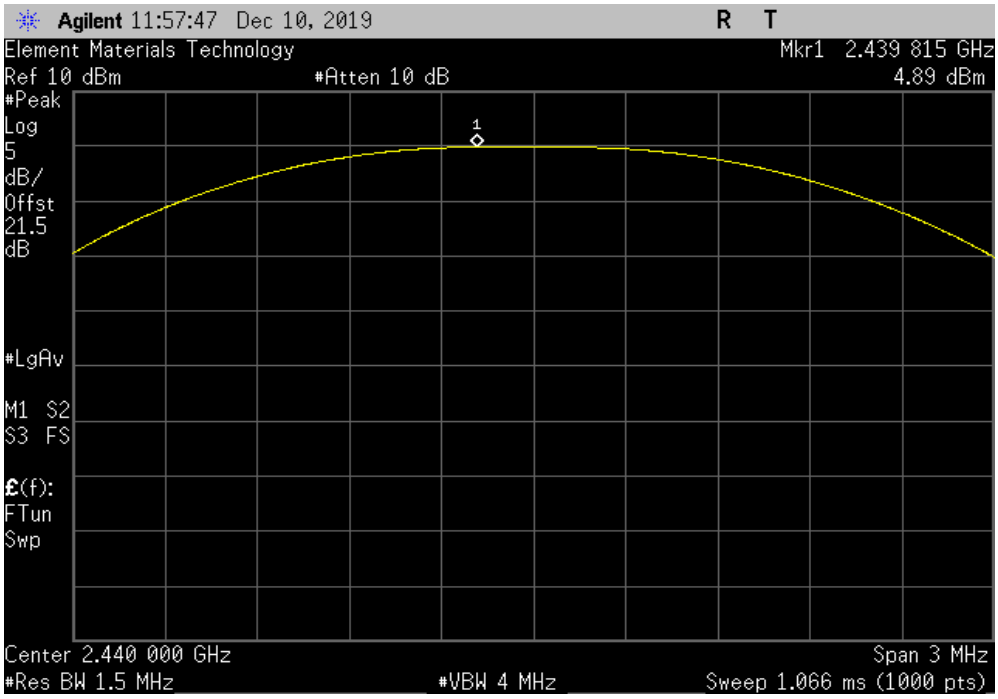
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
DH5, GFSK						
	Low Channel, 2402 MHz	5.587	0.5	6.087	27	Pass
	Mid Channel, 2440 MHz	4.893	0.5	5.393	27	Pass
	High Channel, 2480 MHz	4.123	0.5	4.623	27	Pass
2DH5, pi/4-DQPSK						
	Low Channel, 2402 MHz	2.39	0.5	2.89	27	Pass
	Mid Channel, 2440 MHz	1.6	0.5	2.1	27	Pass
	High Channel, 2480 MHz	0.788	0.5	1.288	27	Pass
3DH5, 8-DPSK						
	Low Channel, 2402 MHz	3.023	0.5	3.523	27	Pass
	Mid Channel, 2440 MHz	2.227	0.5	2.727	27	Pass
	High Channel, 2480 MHz	1.434	0.5	1.934	27	Pass

EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)

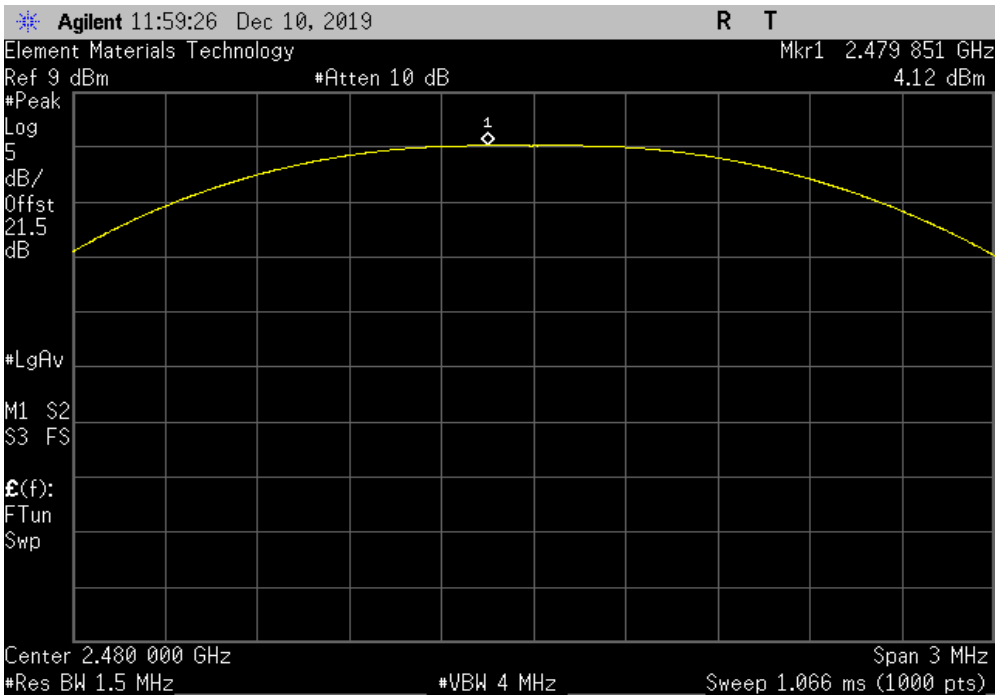
DH5, GFSK, Low Channel, 2402 MHz						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		5.587	0.5	6.087	27	Pass



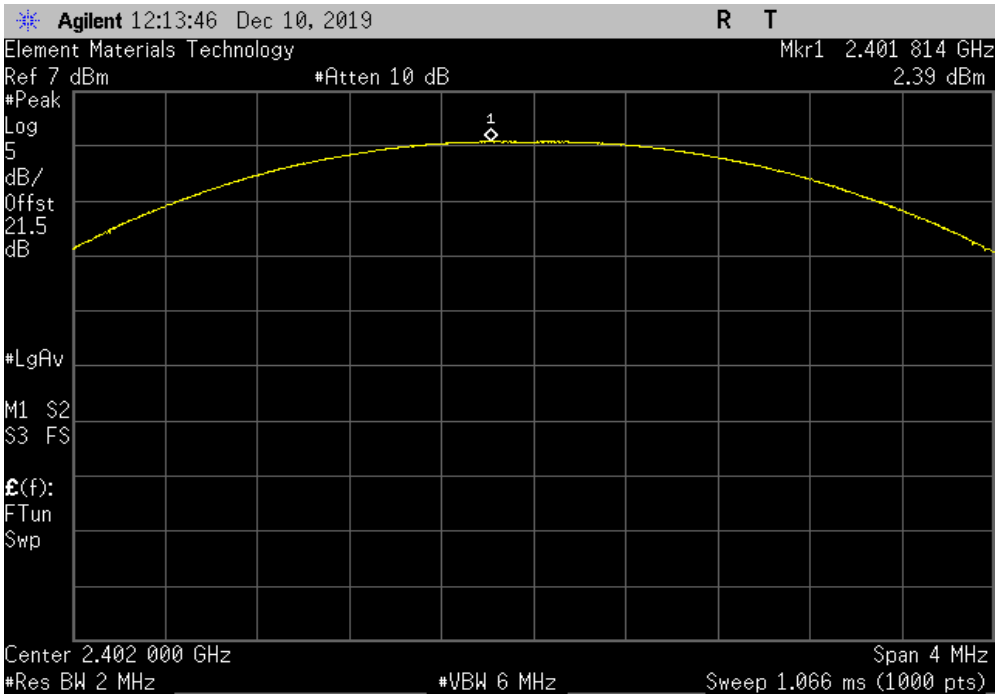
DH5, GFSK, Mid Channel, 2440 MHz						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		4.893	0.5	5.393	27	Pass



DH5, GFSK, High Channel, 2480 MHz						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		4.123	0.5	4.623	27	Pass

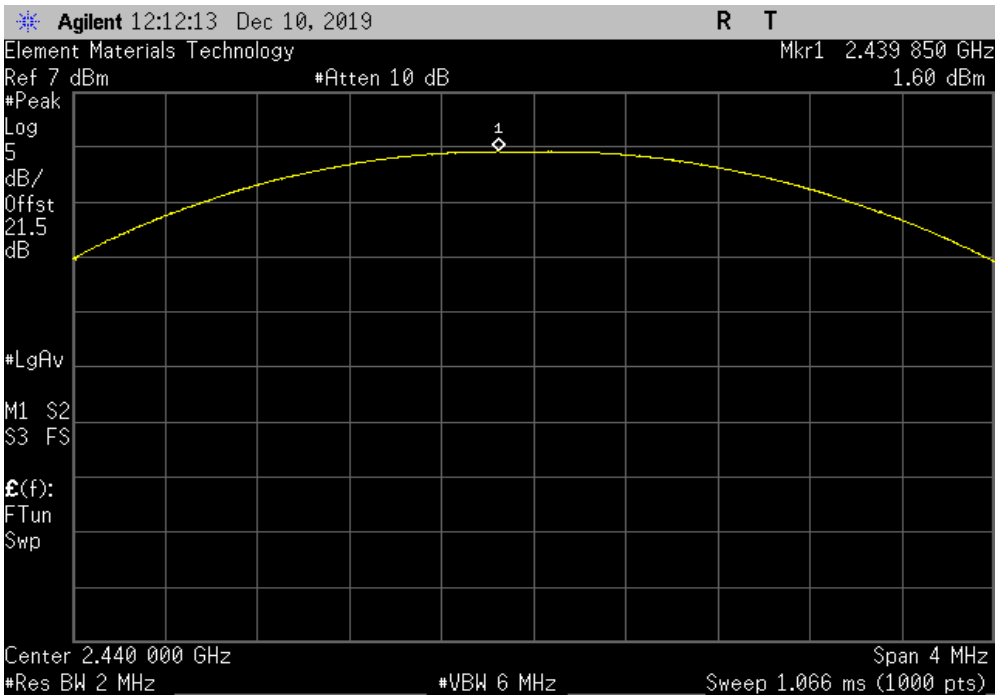


2DH5, pi/4-DQPSK, Low Channel, 2402 MHz						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		2.39	0.5	2.89	27	Pass

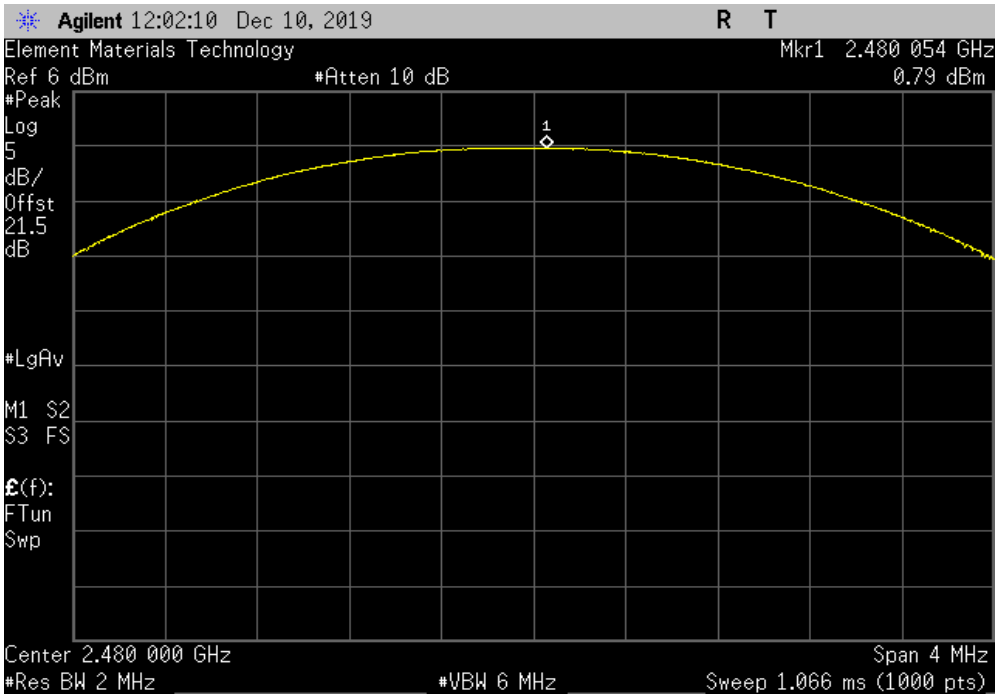


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)

2DH5, pi/4-DQPSK, Mid Channel, 2440 MHz						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		1.6	0.5	2.1	27	Pass

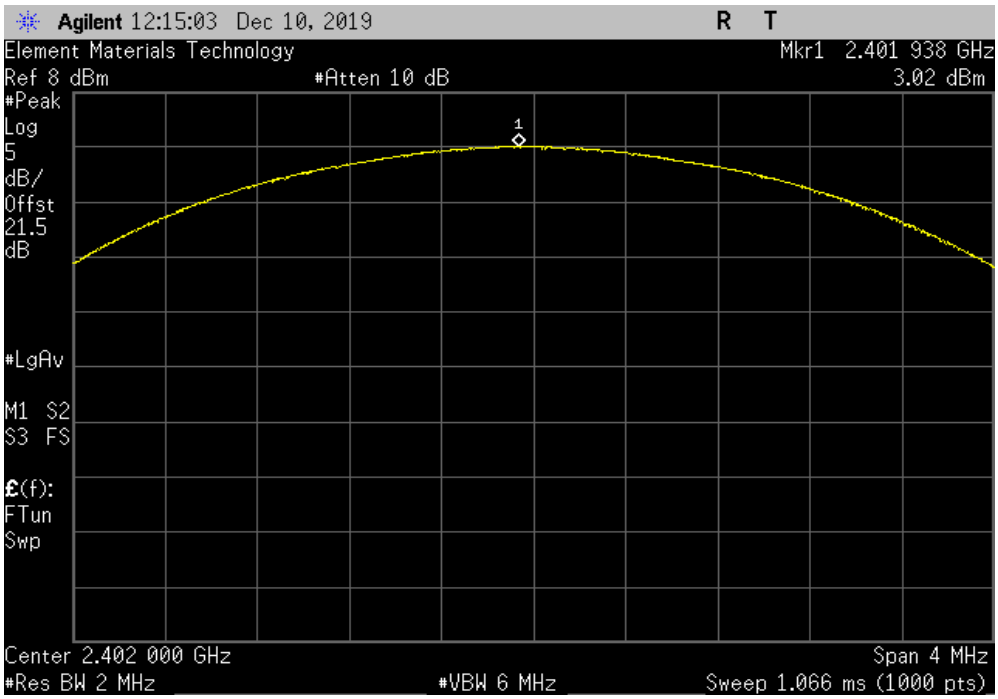


2DH5, pi/4-DQPSK, High Channel, 2480 MHz						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		0.788	0.5	1.288	27	Pass

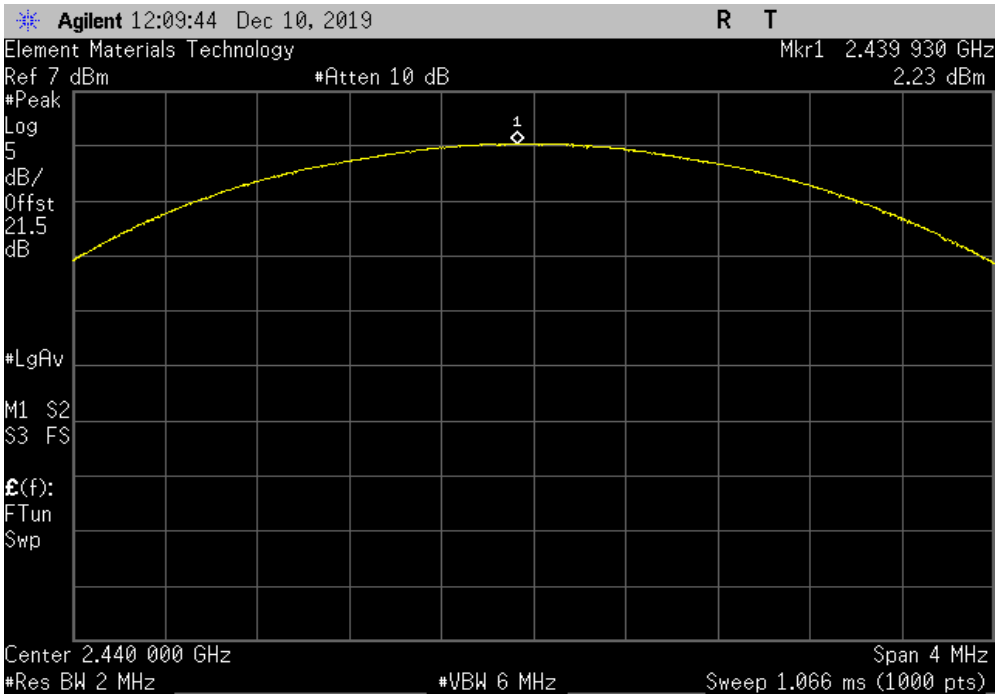


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)

3DH5, 8-DPSK, Low Channel, 2402 MHz						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		3.023	0.5	3.523	27	Pass

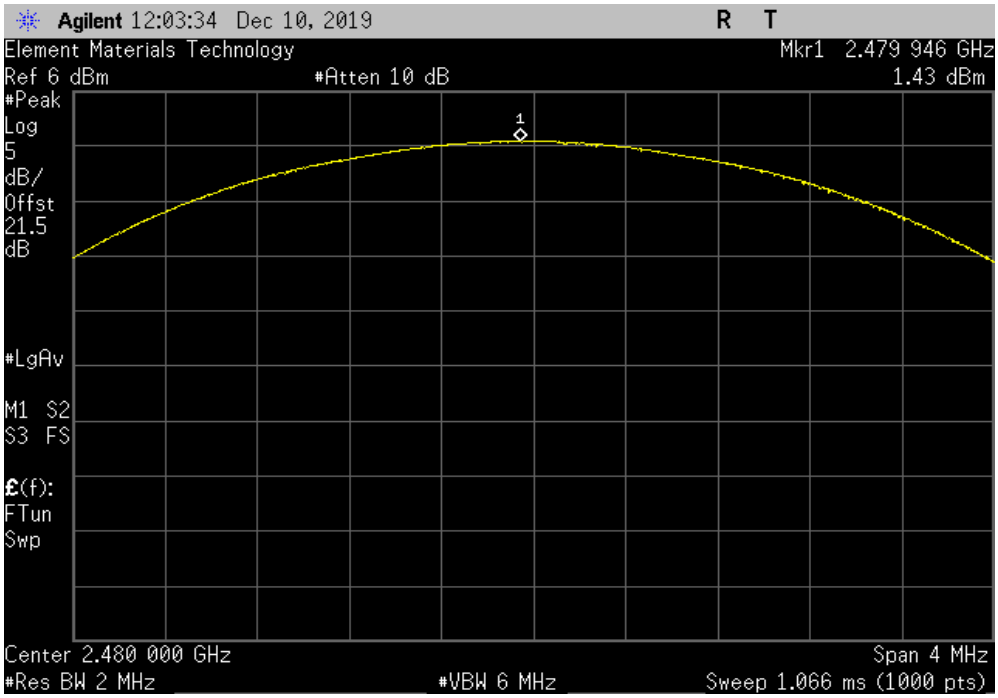


3DH5, 8-DPSK, Mid Channel, 2440 MHz						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		2.227	0.5	2.727	27	Pass



EQUIVALENT ISOTROPIC RADIATED POWER (EIRP)

3DH5, 8-DPSK, High Channel, 2480 MHz						
		Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
		1.434	0.5	1.934	27	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
Attenuator	S.M. Electronics	SA26B-20	AUY	28-Mar-19	28-Mar-20
Meter - Multimeter	Tektronix	DMM912	MMH	15-Feb-19	15-Feb-22
Power Supply - DC	Dr. Meter	PS-305DM	TZZ	NCR	NCR
Cable	Micro-Coax	UFD150A-1-0720-200200	EVH	28-Mar-19	28-Mar-20
Generator - Signal	Keysight	N5182B	TFU	5-Nov-18	5-Nov-21
Terminator	S.M. Electronics	ST2B	AWM	9-Apr-19	9-Apr-20
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFA	12-Feb-19	12-Feb-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:	CCU-2			**Work Order:**	POLR0058
Serial Number:	Unit #6			**Date:**	3-Jan-20
Customer:	Polaris Industries, Inc.			**Temperature:**	21.4 °C
Attendees:	Wayne Rieger			**Humidity:**	40.7% RH
Project:	None			**Barometric Pres.:**	1016 mbar
Tested by:	Brandon Hobbs	**Power:**	14VDC	**Job Site:**	EV06

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

COMMENTS

Reference level offset includes: DC block, 20 dB attenuator, and measurement cable. Software power setting = 6

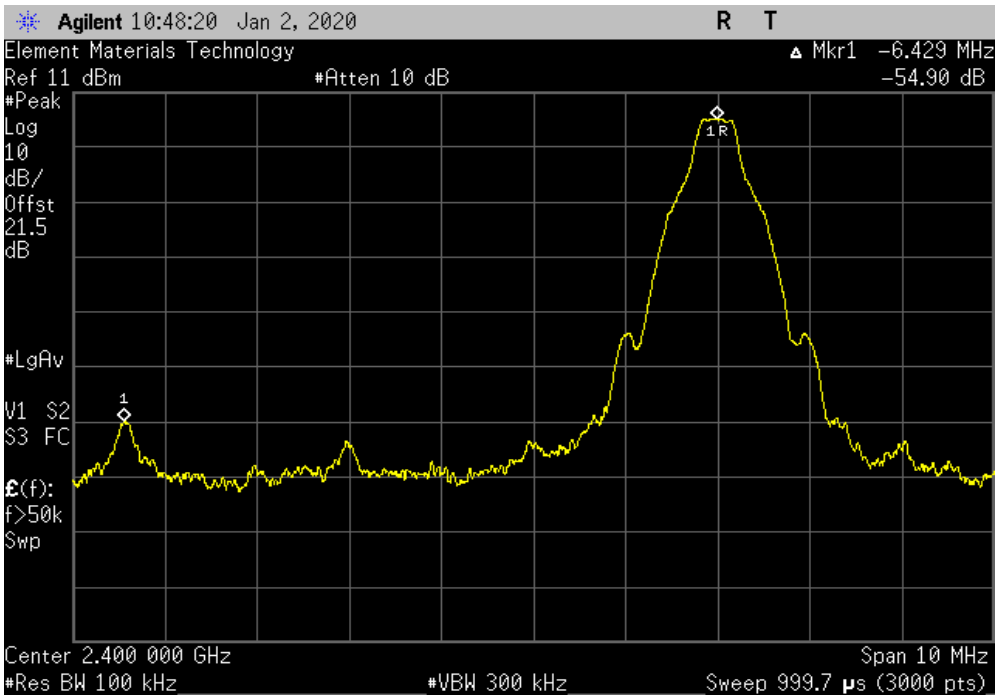
DEVIATIONS FROM TEST STANDARD

None

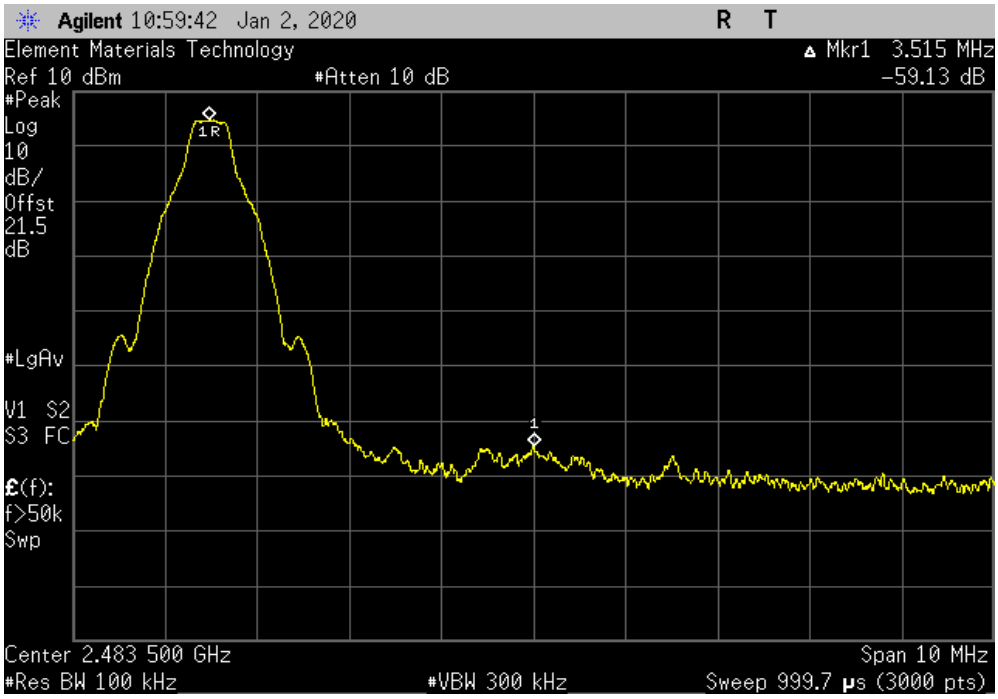
Configuration #	4	*Signature*

		Value (dBc)	Limit ≤ (dBc)	Result
1DH, GFSK				
	Low Channel, 2402 MHz	-54.9	-20	Pass
	High Channel, 2480 MHz	-59.13	-20	Pass
2DH, pi/4-DQPSK				
	Low Channel, 2402 MHz	-55.21	-20	Pass
	High Channel, 2480 MHz	-54.82	-20	Pass
3DH, 8-DPSK				
	Low Channel, 2402 MHz	-54.6	-20	Pass
	High Channel, 2480 MHz	-55.33	-20	Pass

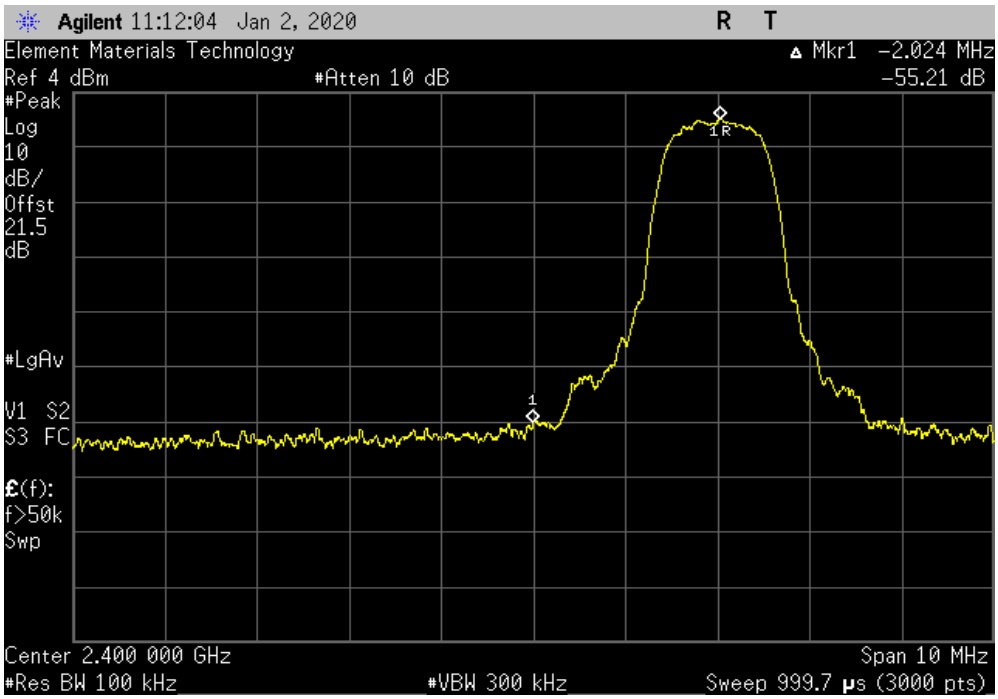
1DH, GFSK, Low Channel, 2402 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-54.9	-20	Pass



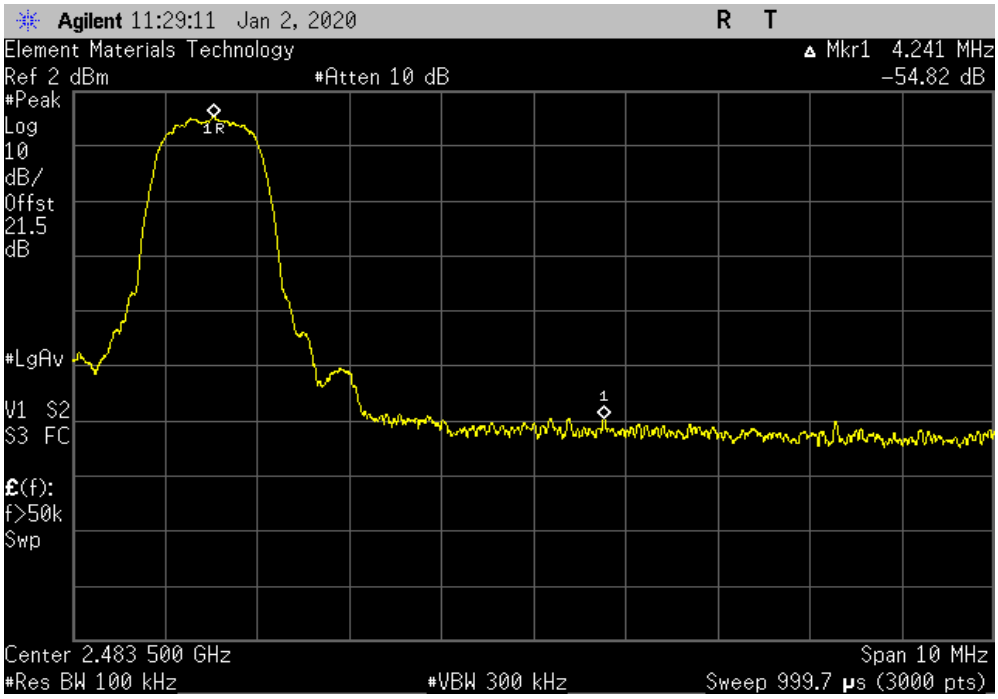
1DH, GFSK, High Channel, 2480 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-59.13	-20	Pass



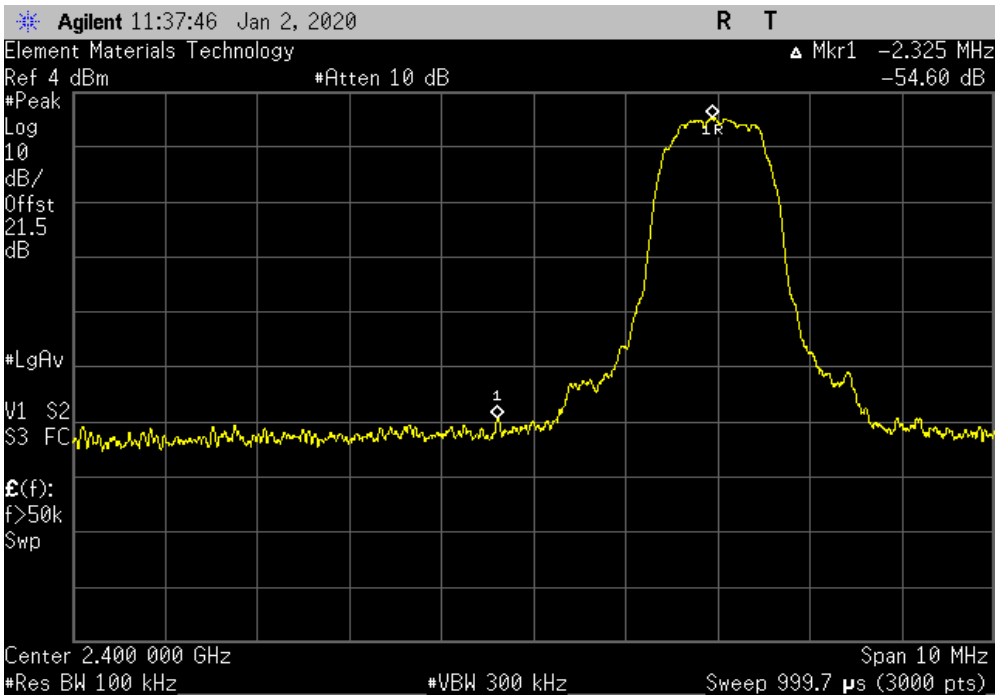
2DH, pi/4-DQPSK, Low Channel, 2402 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-55.21	-20	Pass



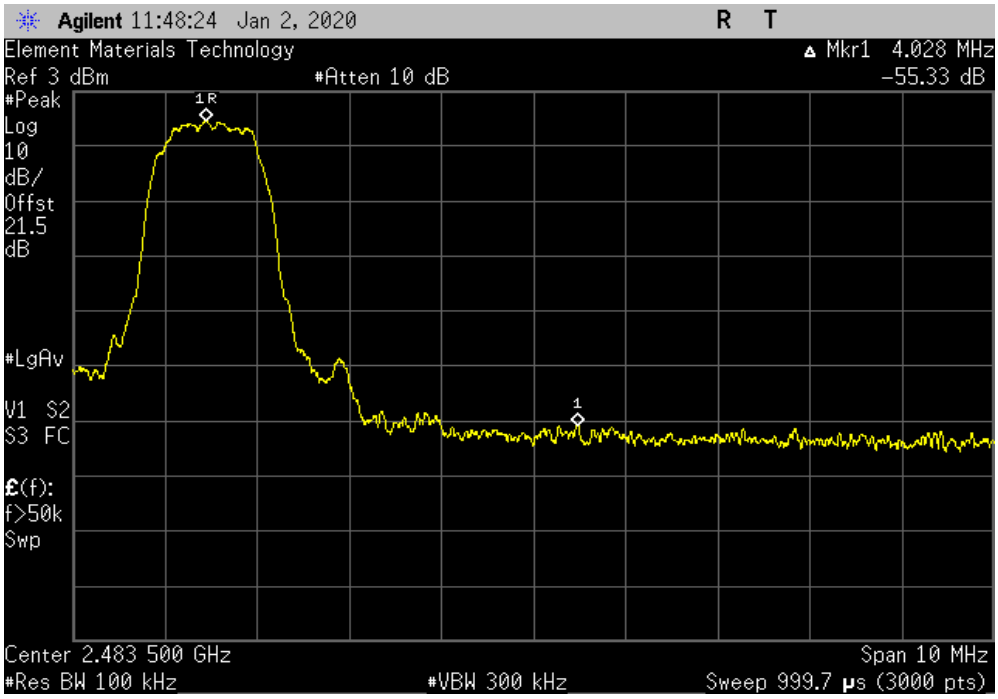
2DH, pi/4-DQPSK, High Channel, 2480 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-54.82	-20	Pass



3DH, 8-DPSK, Low Channel, 2402 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-54.6	-20	Pass



3DH, 8-DPSK, High Channel, 2480 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-55.33	-20	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
Cable	Micro-Coax	UFD150A-1-0720-200200	EVH	28-Mar-19	28-Mar-20
Meter - Multimeter	Tektronix	DMM912	MMH	15-Feb-19	15-Feb-22
Power Supply - DC	Dr. Meter	PS-305DM	TZZ	NCR	NCR
Generator - Signal	Keysight	N5182B	TFU	5-Nov-18	5-Nov-21
Attenuator	S.M. Electronics	SA26B-20	AUY	28-Mar-19	28-Mar-20
Terminator	S.M. Electronics	ST2B	AWM	9-Apr-19	9-Apr-20
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFA	12-Feb-19	12-Feb-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:	**CCU-2**			**Work Order:**	**POLR0058**
Serial Number:	**Unit #6**			**Date:**	**3-Jan-20**
Customer:	**Polaris Industries, Inc.**			**Temperature:**	**21.4 °C**
Attendees:	**Wayne Rieger**			**Humidity:**	**40.7% RH**
Project:	**None**			**Barometric Pres.:**	**1016 mbar**
Tested by:	**Brandon Hobbs**	**Power:**	**14VDC**	**Job Site:**	**EV06**

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

COMMENTS

Reference level offset includes: DC block, 20 dB attenuator, and measurement cable. Software power setting = 6

DEVIATIONS FROM TEST STANDARD

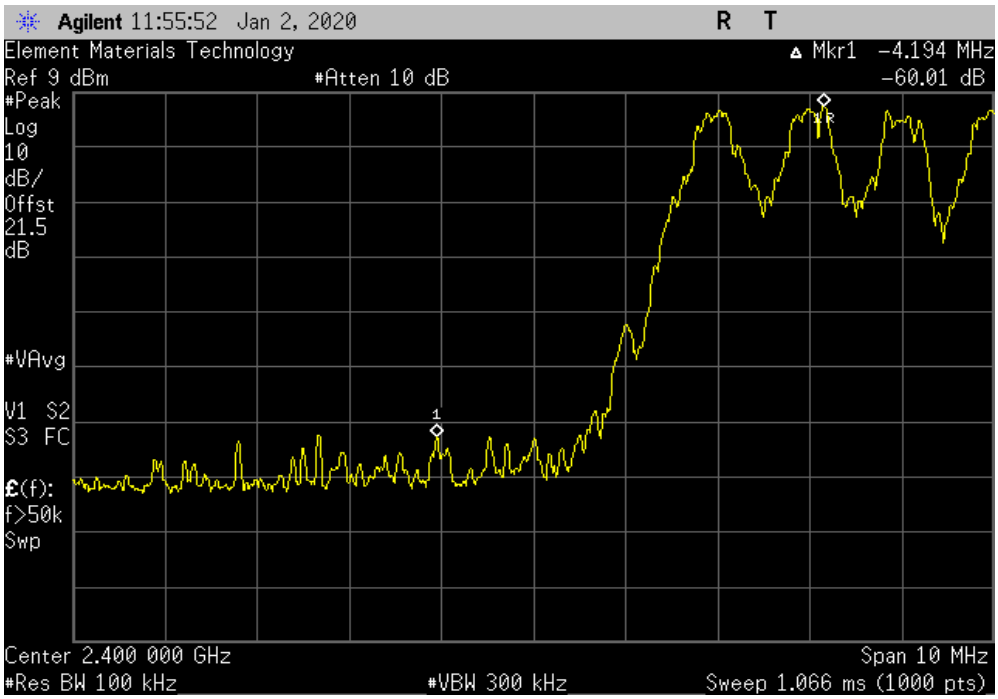
None

Configuration #	**4**	*Signature*

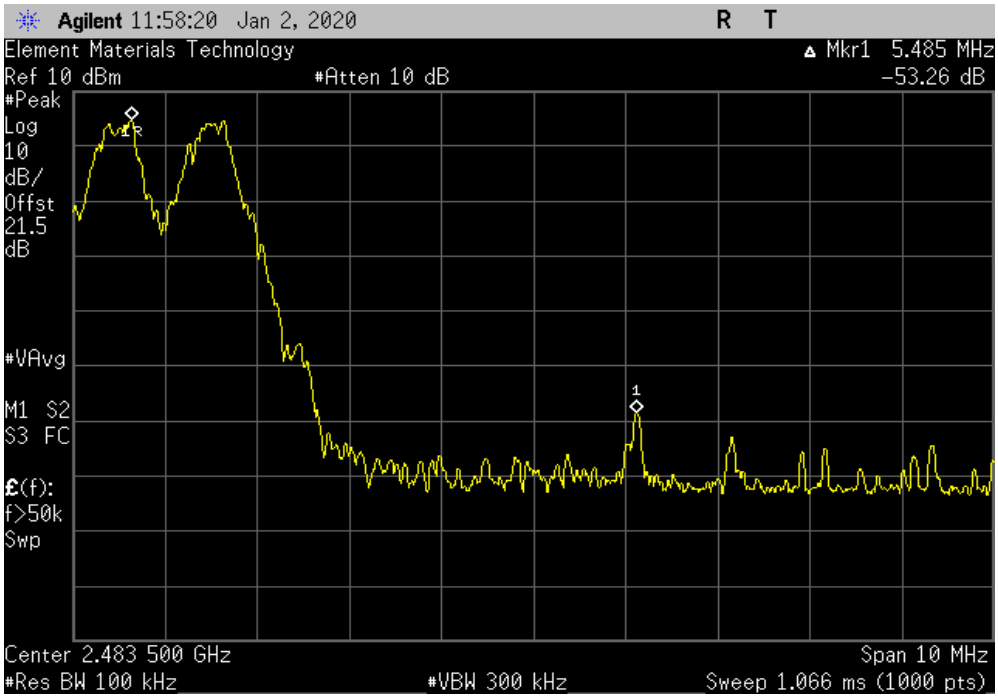
	Value (dBc)	**Limit ≤ (dBc)**	**Result**
Hopping Mode (All Channels)			
1DH, GFSK			
Low Channel, 2402 MHz	-60.01	-20	Pass
High Channel, 2480 MHz	-53.26	-20	Pass
2DH, pi/4-DQPSK			
Low Channel, 2402 MHz	-58.47	-20	Pass
High Channel, 2480 MHz	-52.75	-20	Pass
3DH, 8-DPSK			
Low Channel, 2402 MHz	-57.5	-20	Pass
High Channel, 2480 MHz	-55.92	-20	Pass

BAND EDGE COMPLIANCE -HOPPING MODE

Hopping Mode (All Channels), 1DH, GFSK, Low Channel, 2402 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-60.01	-20	Pass

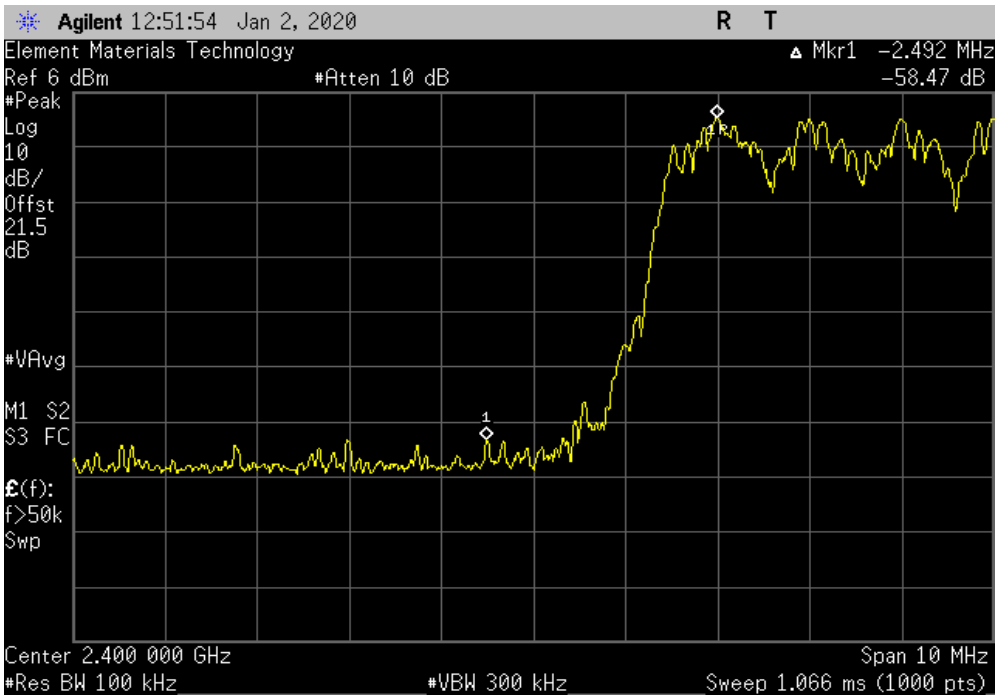


Hopping Mode (All Channels), 1DH, GFSK, High Channel, 2480 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-53.26	-20	Pass

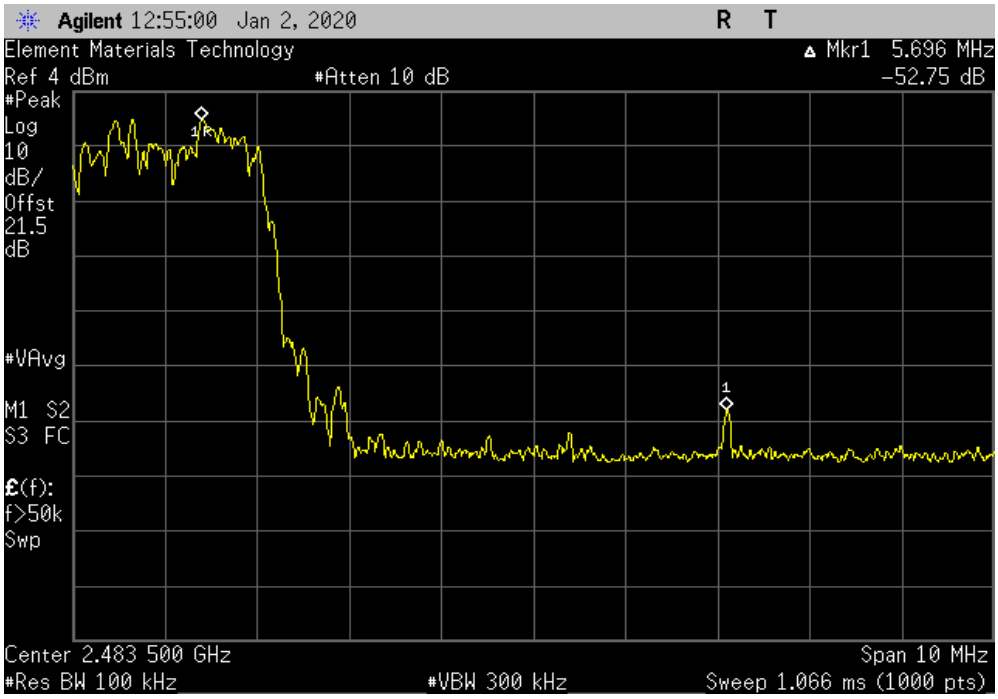


BAND EDGE COMPLIANCE -HOPPING MODE

Hopping Mode (All Channels), 2DH, pi/4-DQPSK, Low Channel, 2402 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-58.47	-20	Pass

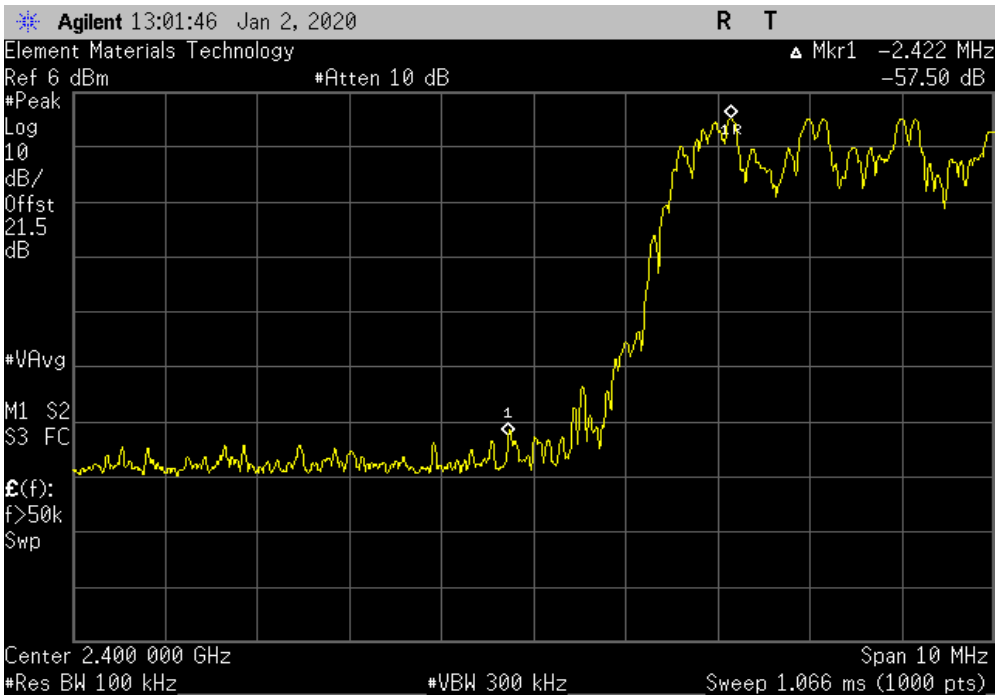


Hopping Mode (All Channels), 2DH, pi/4-DQPSK, High Channel, 2480 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-52.75	-20	Pass

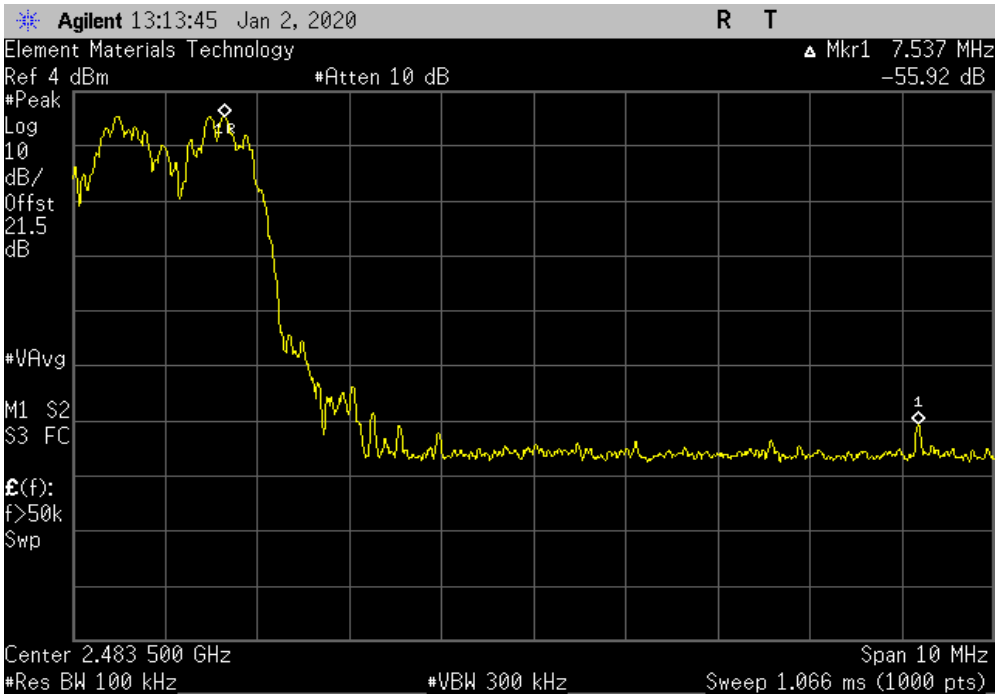


BAND EDGE COMPLIANCE -HOPPING MODE

Hopping Mode (All Channels), 3DH, 8-DPSK, Low Channel, 2402 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-57.5	-20	Pass



Hopping Mode (All Channels), 3DH, 8-DPSK, High Channel, 2480 MHz						
				Value (dBc)	Limit ≤ (dBc)	Result
				-55.92	-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	Dr. Meter	PS-305DM	TZZ	NCR	NCR
Meter - Multimeter	Tektronix	DMM912	MMH	15-Feb-19	15-Feb-22
Generator - Signal	Keysight	N5182B	TFU	5-Nov-18	5-Nov-21
Cable	Micro-Coax	UFD150A-1-0720-200200	EVH	28-Mar-19	28-Mar-20
Attenuator	S.M. Electronics	SA26B-20	AUY	28-Mar-19	28-Mar-20
Block - DC	Fairview Microwave	SD3379	AMW	28-Mar-19	28-Mar-20
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFA	12-Feb-19	12-Feb-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

TbtTx 2019.08.30.0 XMit 2019.09.05

EUT:	CCU-2			**Work Order:**	POLR0058
Serial Number:	Regulatory Unit #5			**Date:**	10-Dec-19
Customer:	Polaris Industries, Inc.			**Temperature:**	21.3 °C
Attendees:	Wayne Rieger			**Humidity:**	40.1% RH
Project:	None			**Barometric Pres.:**	1024 mbar
Tested by:	Jeff Alcoke and Brandon Hobbs	**Power:**	14VDC	**Job Site:**	EV06

TEST SPECIFICATIONS	**Test Method**
FCC 15.247:2019	ANSI C63.10:2013

COMMENTS

Reference level offset includes: DC block, 20 dB attenuator, and mesaurement cable. Software power settting = 6

DEVIATIONS FROM TEST STANDARD

None

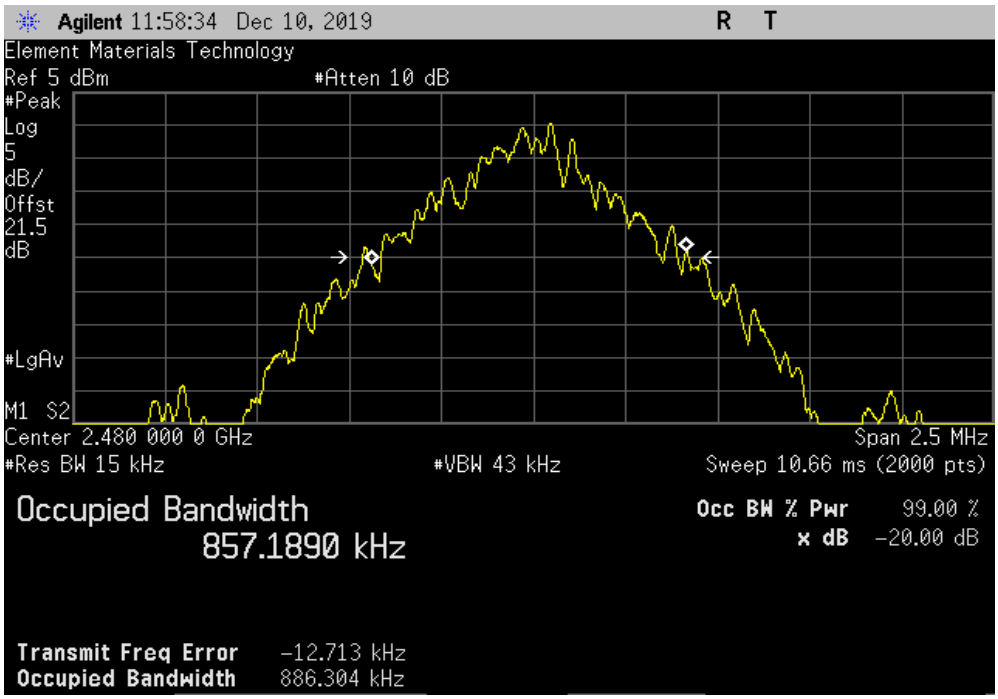
Configuration #	**2**	*Signature*

		Value	**Limit (<)**	**Result**
DH5, GFSK				
	Low Channel, 2402 MHz	885.413 kHz	1.5 MHz	Pass
	Mid Channel, 2440 MHz	886.847 kHz	1.5 MHz	Pass
	High Channel, 2480 MHz	886.304 kHz	1.5 MHz	Pass
2DH5, pi/4-DQPSK				
	Low Channel, 2402 MHz	1.36 MHz	1.5 MHz	Pass
	Mid Channel, 2440 MHz	1.363 MHz	1.5 MHz	Pass
	High Channel, 2480 MHz	1.361 MHz	1.5 MHz	Pass
3DH5, 8-DPSK				
	Low Channel, 2402 MHz	1.348 MHz	1.5 MHz	Pass
	Mid Channel, 2440 MHz	1.349 MHz	1.5 MHz	Pass
	High Channel, 2480 MHz	1.348 MHz	1.5 MHz	Pass

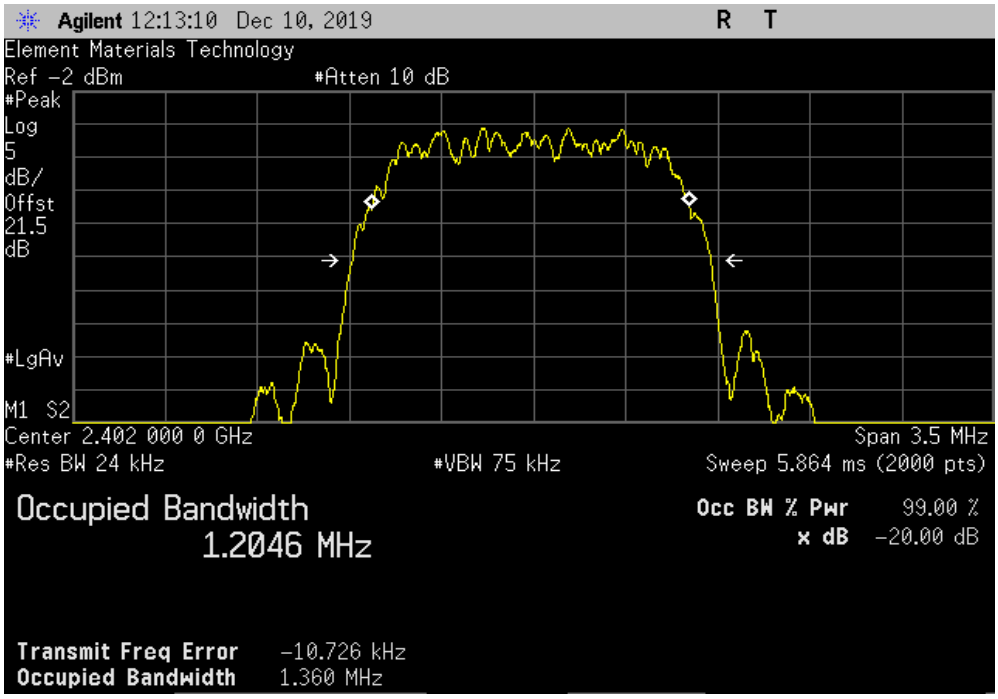
DH5, GFSK, Low Channel, 2402 MHz						
				Value	Limit (<)	Result
				885.413 kHz	1.5 MHz	Pass

DH5, GFSK, Mid Channel, 2440 MHz						
				Value	Limit (<)	Result
				886.847 kHz	1.5 MHz	Pass

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

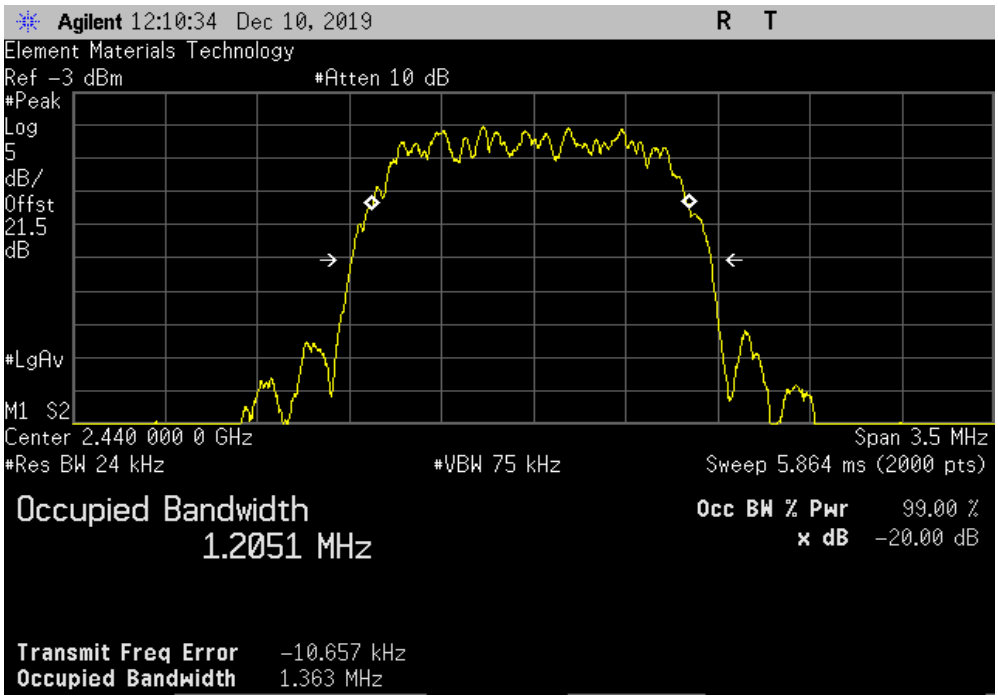


2DH5, pi/4-DQPSK, Low Channel, 2402 MHz						
				Value	Limit (<)	Result
				1.36 MHz	1.5 MHz	Pass

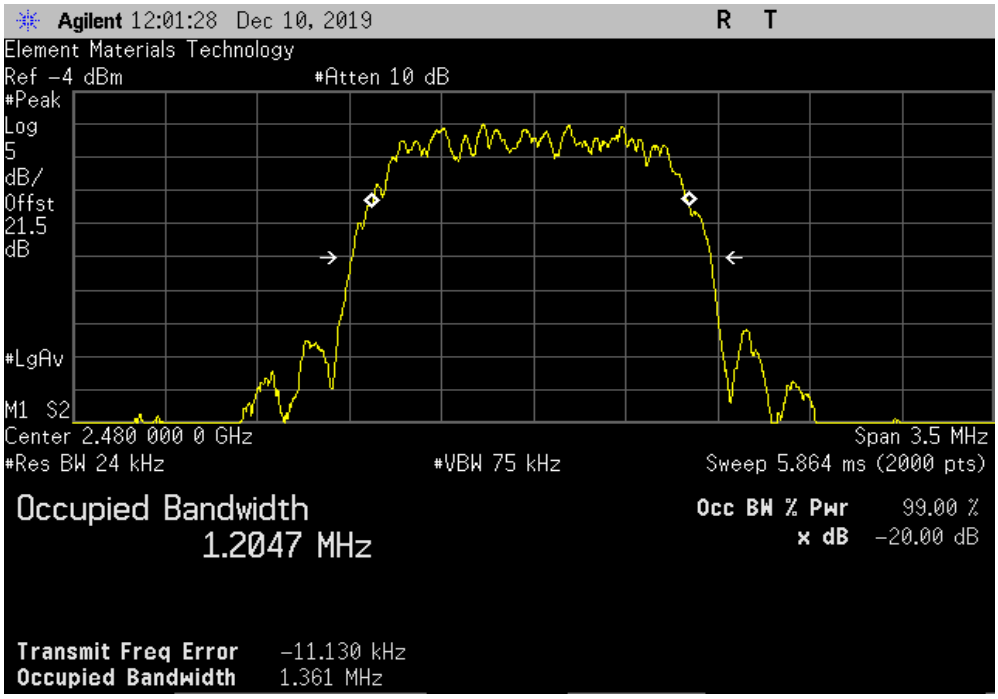


OCCUPIED BANDWIDTH

2DH5, pi/4-DQPSK, Mid Channel, 2440 MHz						
				Value	Limit (<)	Result
				1.363 MHz	1.5 MHz	Pass

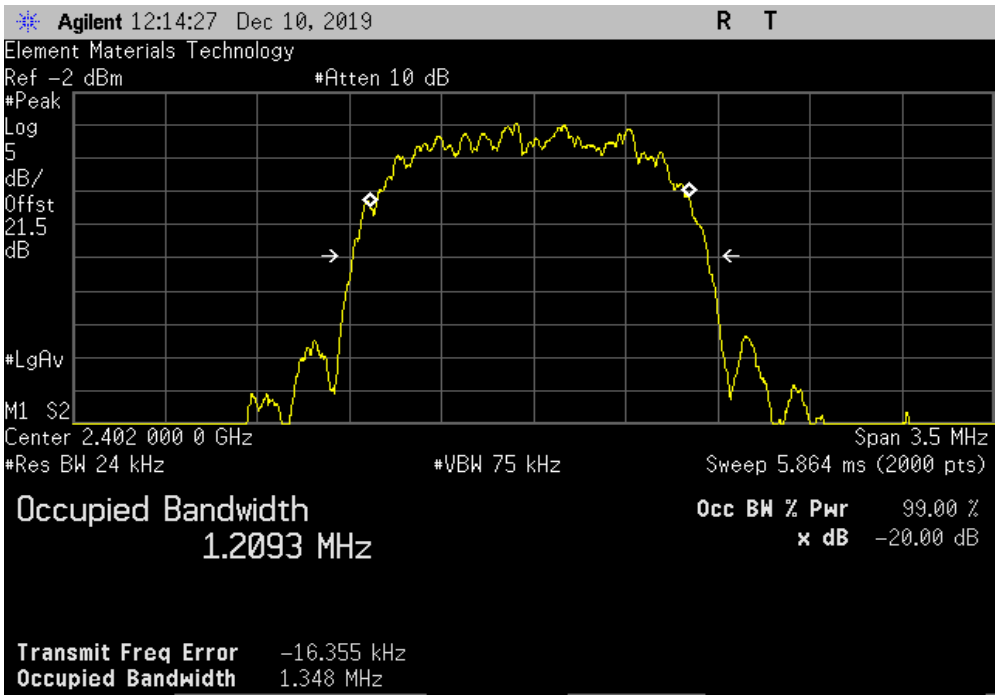


2DH5, pi/4-DQPSK, High Channel, 2480 MHz						
				Value	Limit (<)	Result
				1.361 MHz	1.5 MHz	Pass

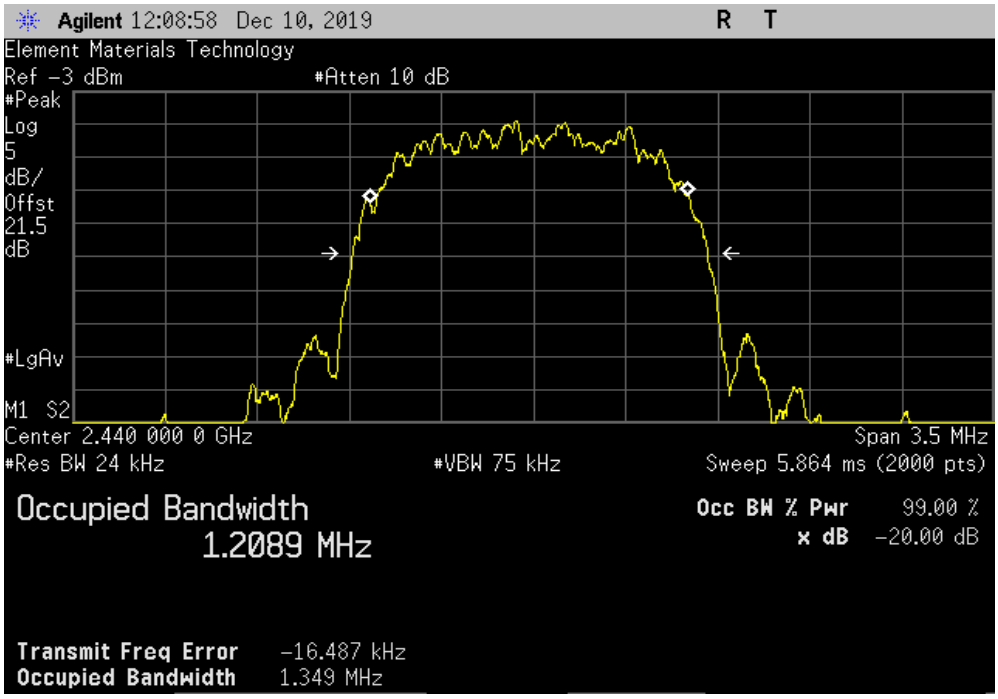


OCCUPIED BANDWIDTH

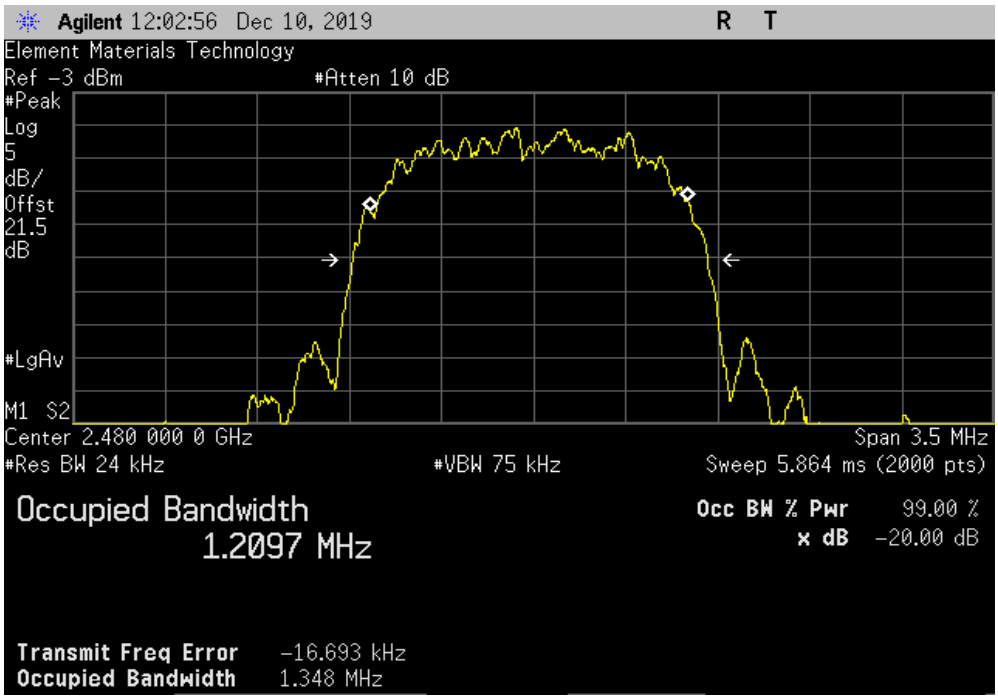
3DH5, 8-DPSK, Low Channel, 2402 MHz						
				Value	Limit (<)	Result
				1.348 MHz	1.5 MHz	Pass



3DH5, 8-DPSK, Mid Channel, 2440 MHz						
				Value	Limit (<)	Result
				1.349 MHz	1.5 MHz	Pass



3DH5, 8-DPSK, High Channel, 2480 MHz						
				Value	Limit (<)	Result
				1.348 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	Dr. Meter	PS-305DM	TZZ	NCR	NCR
Meter - Multimeter	Tektronix	DMM912	MMH	15-Feb-19	15-Feb-22
Generator - Signal	Keysight	N5182B	TFU	5-Nov-18	5-Nov-21
Cable	Micro-Coax	UFD150A-1-0720-200200	EVH	28-Mar-19	28-Mar-20
Attenuator	S.M. Electronics	SA26B-20	AUY	28-Mar-19	28-Mar-20
Terminator	S.M. Electronics	ST2B	AWM	9-Apr-19	9-Apr-20
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFA	12-Feb-19	12-Feb-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

TbtTx 2019.08.30.0 XMit 2019.09.05

EUT:	**CCU-2**			**Work Order:**	**POLR0058**
Serial Number:	**Unit #6**			**Date:**	**3-Jan-20**
Customer:	**Polaris Industries, Inc.**			**Temperature:**	**21.4 °C**
Attendees:	**Wayne Rieger**			**Humidity:**	**40.8% RH**
Project:	**None**			**Barometric Pres.:**	**1016 mbar**
Tested by:	**Brandon Hobbs**	**Power:**	**14VDC**	**Job Site:**	**EV06**

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

COMMENTS

Reference level offset includes: DC block, 20 dB attenuator, and measurement cable. Software power setting = 6

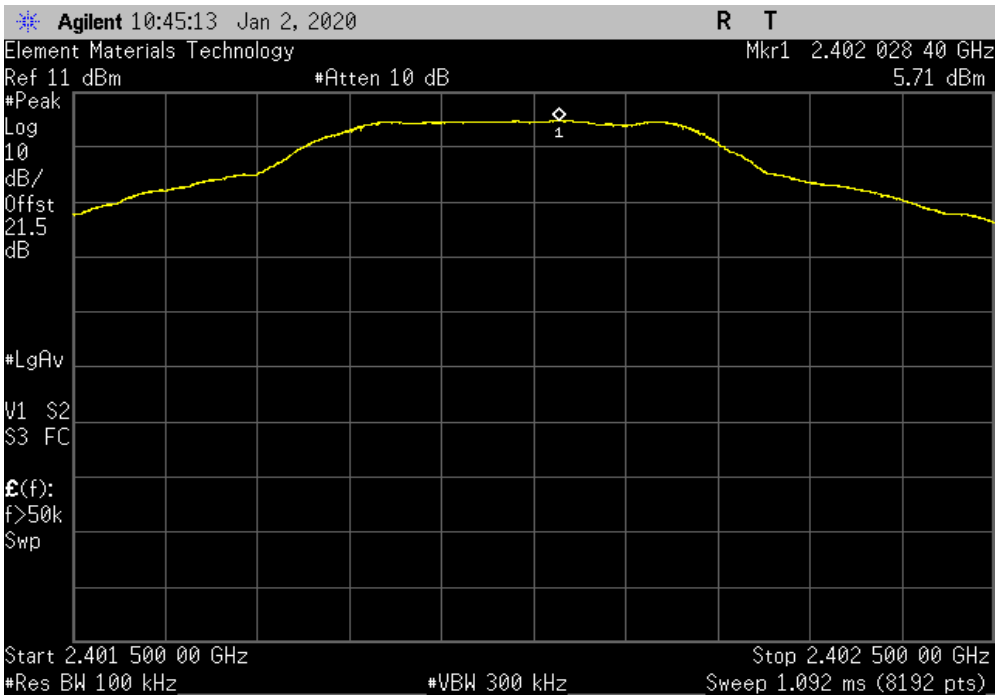
DEVIATIONS FROM TEST STANDARD

None

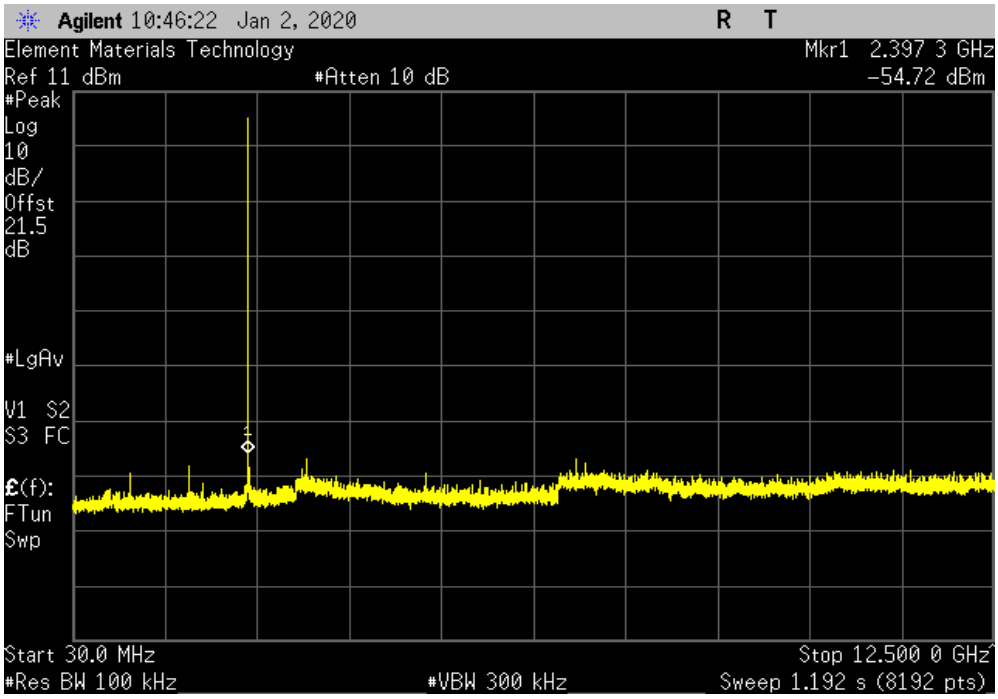
Configuration #	**4**	*Signature*

		Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
1DH, GFSK						
	Low Channel, 2402 MHz	Fundamental	2402.03	N/A	N/A	N/A
	Low Channel, 2402 MHz	30 MHz - 12.5 GHz	2397.3	-60.43	-20	Pass
	Low Channel, 2402 MHz	12.5 GHz - 25 GHz	13585	-59.87	-20	Pass
	Mid Channel, 2440 MHz	Fundamental	2440.03	N/A	N/A	N/A
	Mid Channel, 2440 MHz	30 MHz - 12.5 GHz	3252.9	-60.18	-20	Pass
	Mid Channel, 2440 MHz	12.5 GHz - 25 GHz	24639.8	-58.84	-20	Pass
	High Channel, 2480 MHz	Fundamental	2480.03	N/A	N/A	N/A
	High Channel, 2480 MHz	30 MHz - 12.5 GHz	3306.2	-59.45	-20	Pass
	High Channel, 2480 MHz	12.5 GHz - 25 GHz	21128.4	-58.33	-20	Pass
2DH, pi/4-DQPSK						
	Low Channel, 2402 MHz	Fundamental	2402.01	N/A	N/A	N/A
	Low Channel, 2402 MHz	30 MHz - 12.5 GHz	7325.4	-56.33	-20	Pass
	Low Channel, 2402 MHz	12.5 GHz - 25 GHz	24989.3	-52.65	-20	Pass
	Mid Channel, 2440 MHz	Fundamental	2440.01	N/A	N/A	N/A
	Mid Channel, 2440 MHz	30 MHz - 12.5 GHz	1884.3	-55.01	-20	Pass
	Mid Channel, 2440 MHz	12.5 GHz - 25 GHz	13652.2	-52.18	-20	Pass
	High Channel, 2480 MHz	Fundamental	2480.02	N/A	N/A	N/A
	High Channel, 2480 MHz	30 MHz - 12.5 GHz	7826.2	-53.92	-20	Pass
	High Channel, 2480 MHz	12.5 GHz - 25 GHz	24043.2	-50.75	-20	Pass
3DH, 8-DPSK						
	Low Channel, 2402 MHz	Fundamental	2402.07	N/A	N/A	N/A
	Low Channel, 2402 MHz	30 MHz - 12.5 GHz	9330.4	-56.25	-20	Pass
	Low Channel, 2402 MHz	12.5 GHz - 25 GHz	23011.5	-52.94	-20	Pass
	Mid Channel, 2440 MHz	Fundamental	2440.07	N/A	N/A	N/A
	Mid Channel, 2440 MHz	30 MHz - 12.5 GHz	7396.9	-56.02	-20	Pass
	Mid Channel, 2440 MHz	12.5 GHz - 25 GHz	24539.1	-52.22	-20	Pass
	High Channel, 2480 MHz	Fundamental	2480.08	N/A	N/A	N/A
	High Channel, 2480 MHz	30 MHz - 12.5 GHz	6943.2	-54.86	-20	Pass
	High Channel, 2480 MHz	12.5 GHz - 25 GHz	23518.2	-51.02	-20	Pass

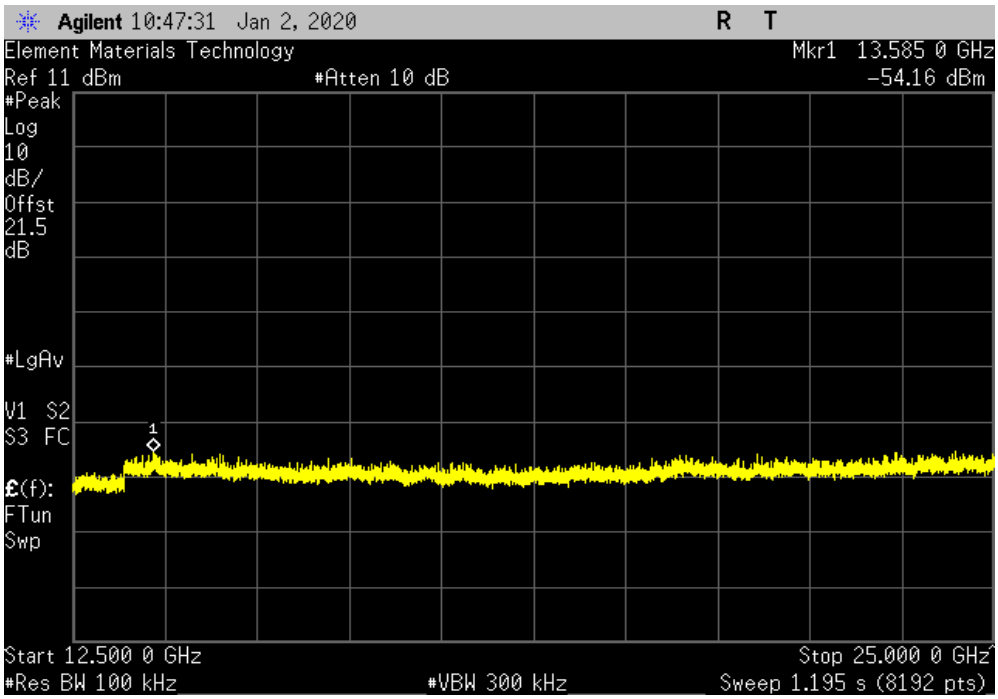
1DH, GFSK, Low Channel, 2402 MHz						
	Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental		2402.03	N/A	N/A	N/A



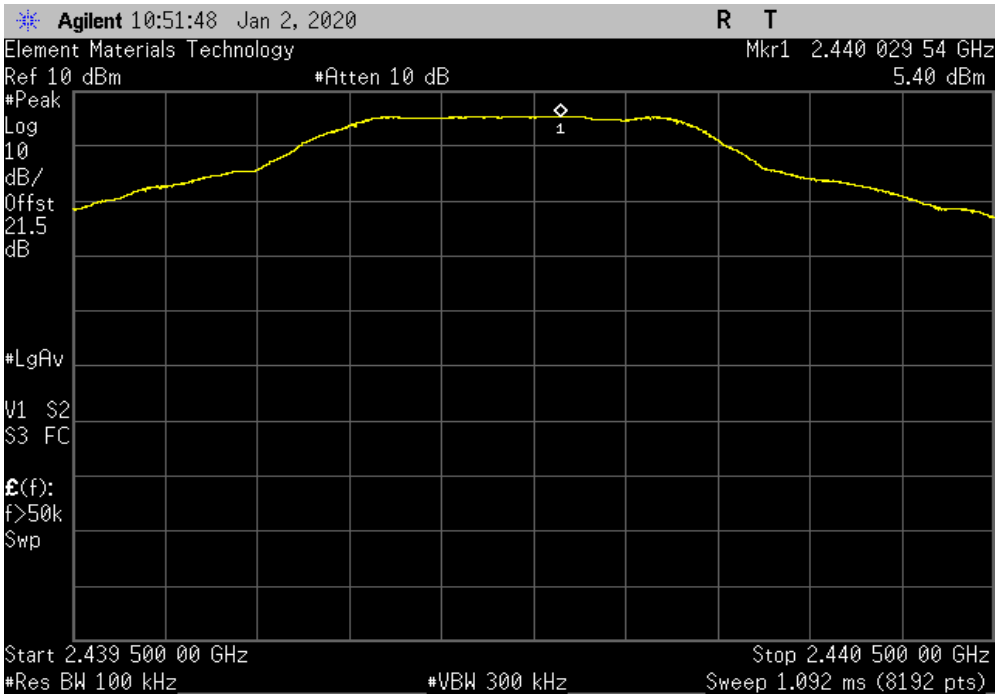
1DH, GFSK, Low Channel, 2402 MHz					
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	2397.3	-60.43	-20	Pass



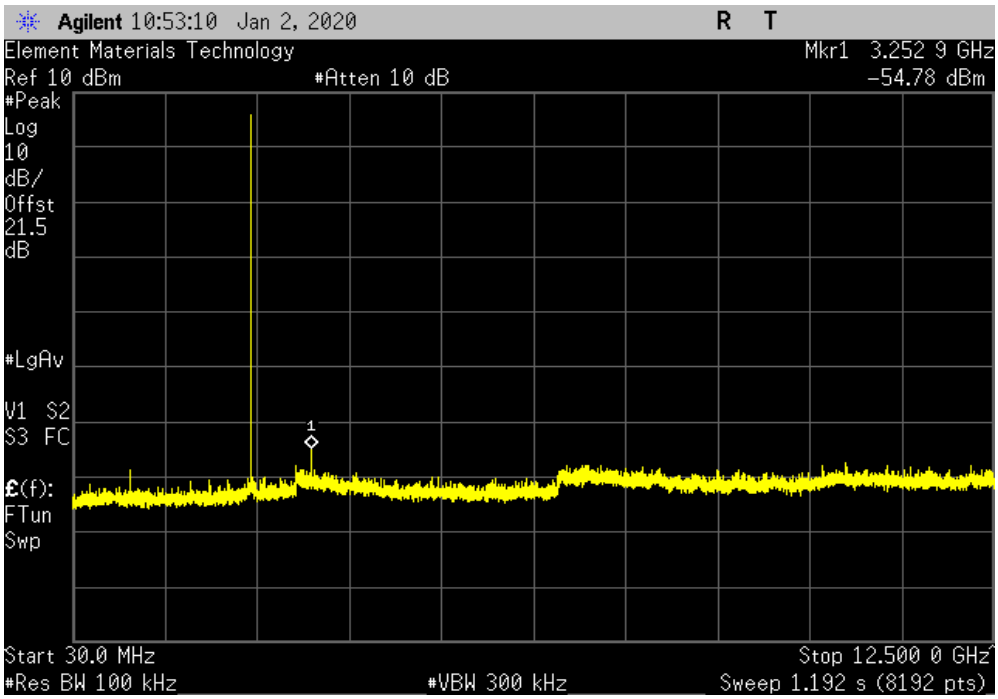
1DH, GFSK, Low Channel, 2402 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	13585	-59.87	-20	Pass



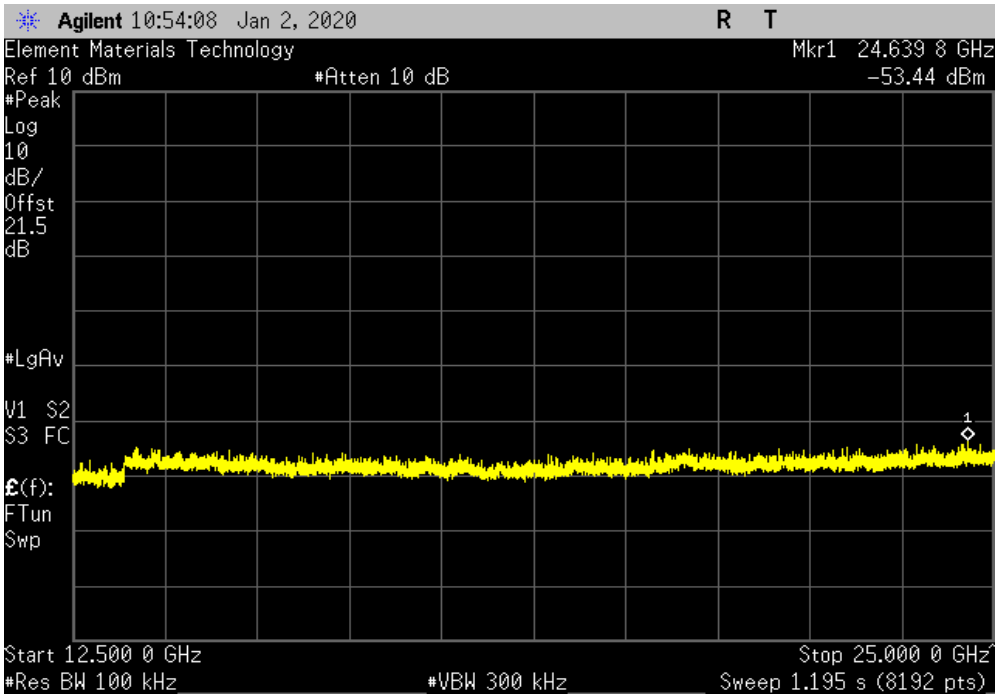
1DH, GFSK, Mid Channel, 2440 MHz					
Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
Fundamental		2440.03	N/A	N/A	N/A



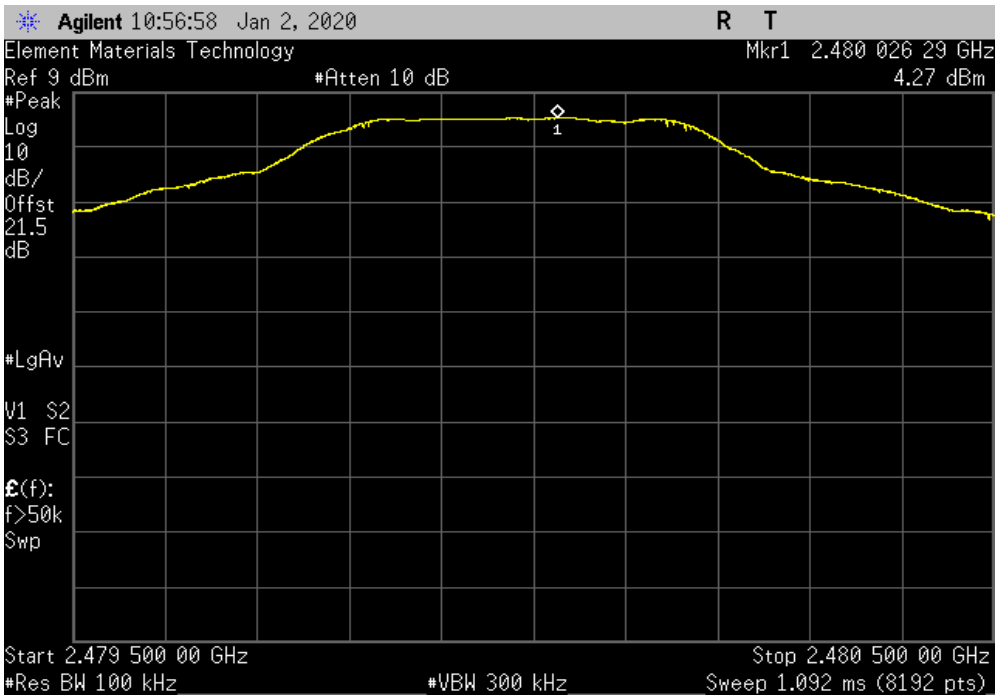
1DH, GFSK, Mid Channel, 2440 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
30 MHz - 12.5 GHz	3252.9	-60.18	-20	Pass



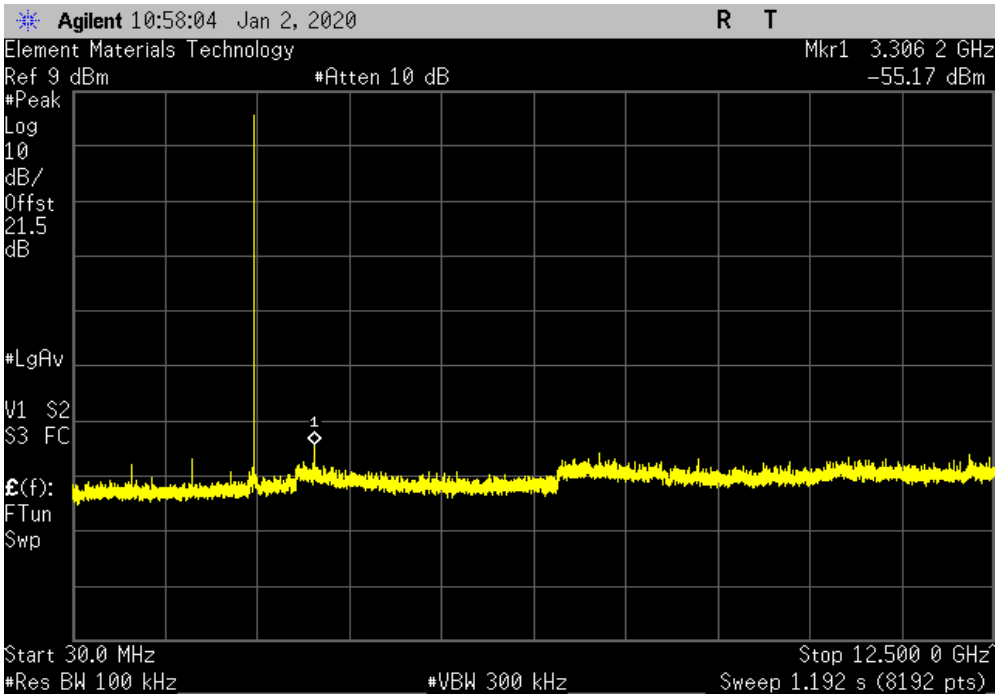
1DH, GFSK, Mid Channel, 2440 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
12.5 GHz - 25 GHz	24639.8	-58.84	-20	Pass



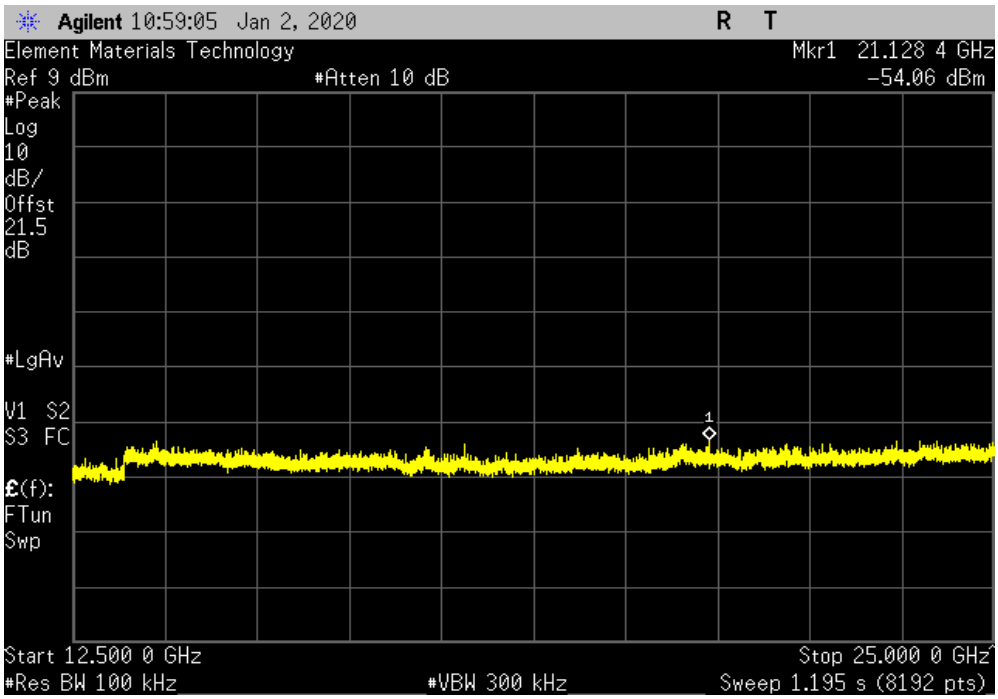
1DH, GFSK, High Channel, 2480 MHz					
Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental	2480.03	N/A	N/A	N/A



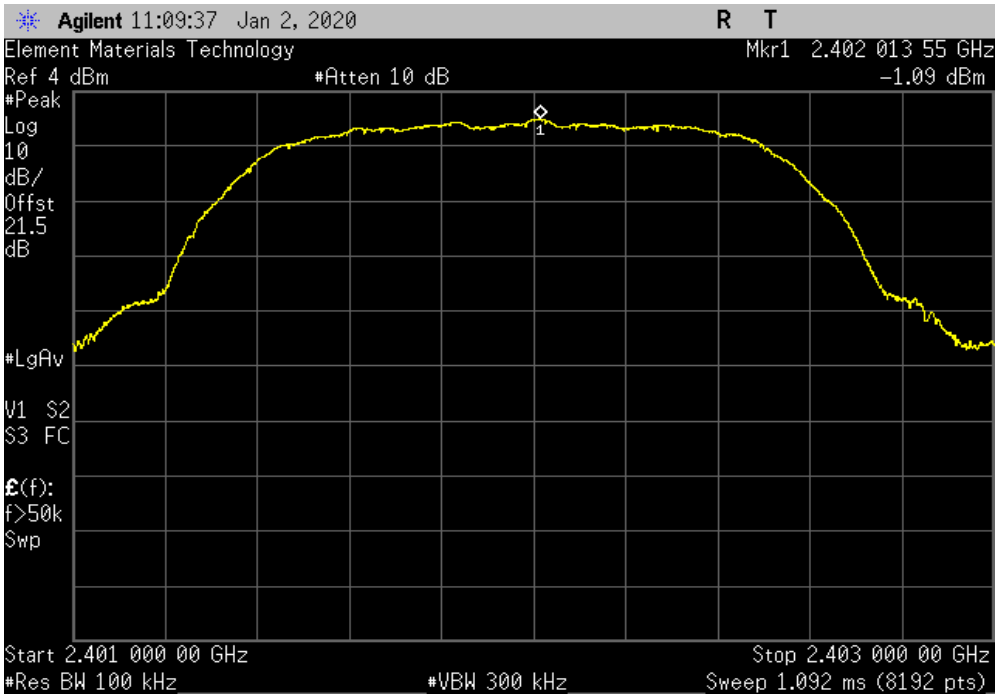
1DH, GFSK, High Channel, 2480 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	3306.2	-59.45	-20	Pass



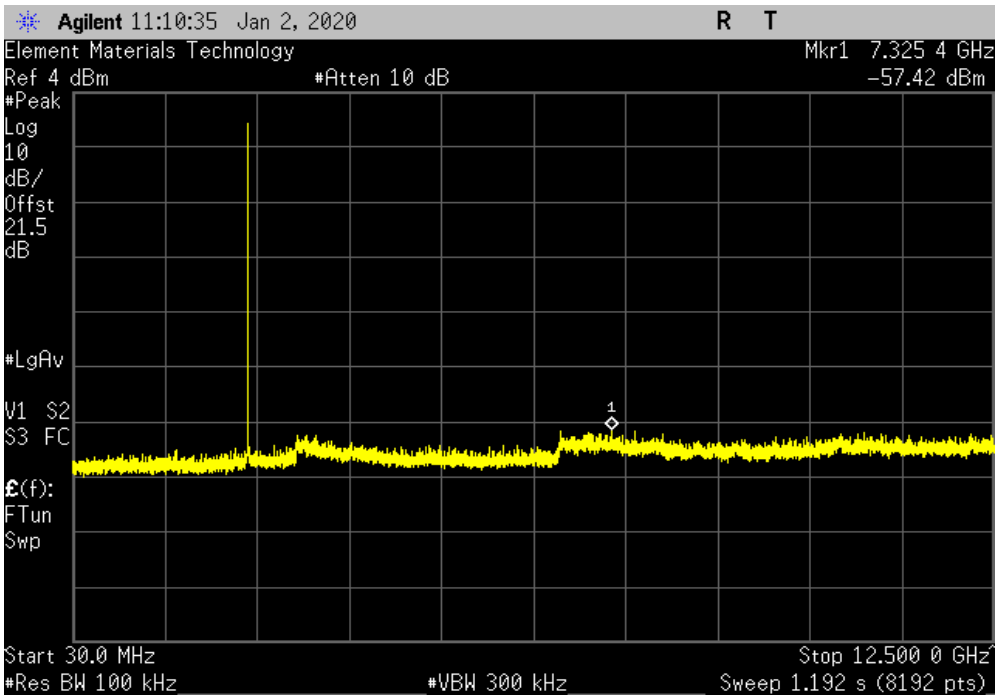
1DH, GFSK, High Channel, 2480 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
12.5 GHz - 25 GHz	21128.4	-58.33	-20	Pass



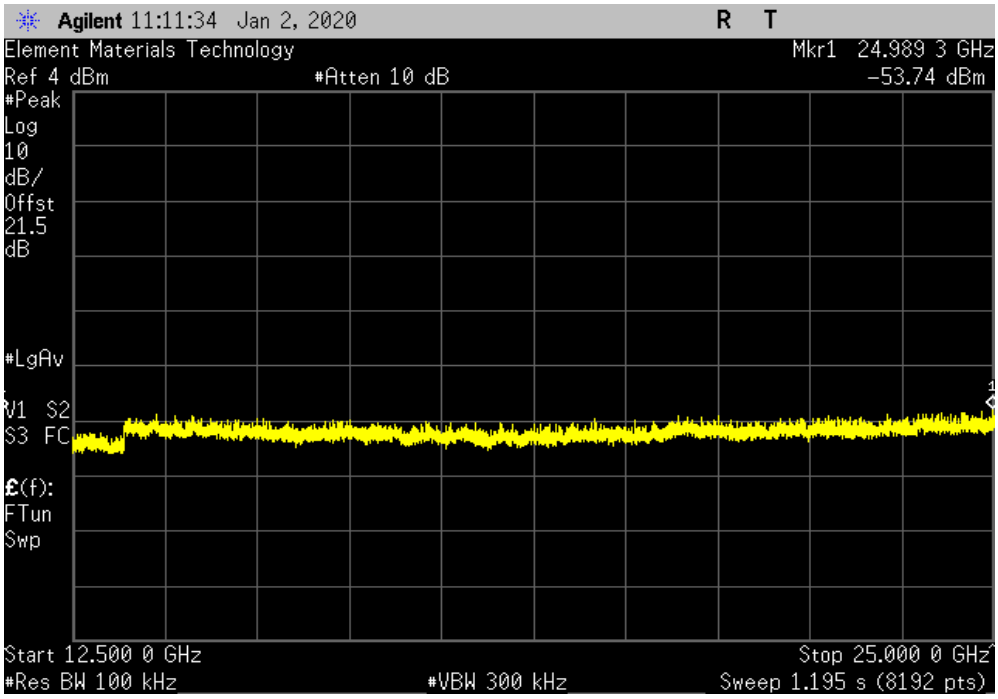
2DH, pi/4-DQPSK, Low Channel, 2402 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
Fundamental	2402.01	N/A	N/A	N/A



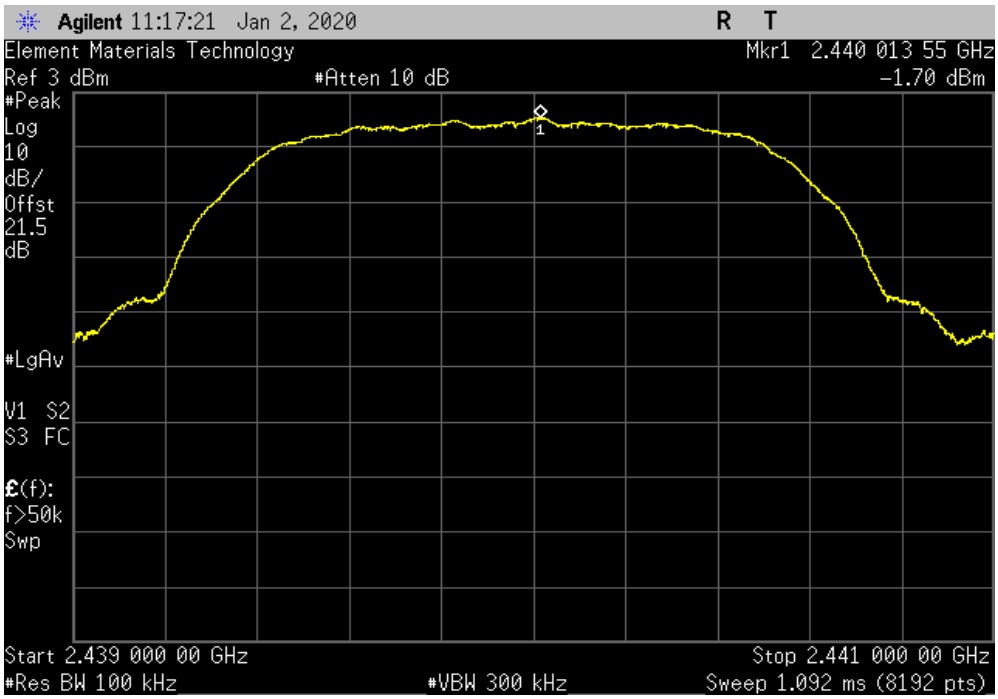
2DH, pi/4-DQPSK, Low Channel, 2402 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
30 MHz - 12.5 GHz	7325.4	-56.33	-20	Pass



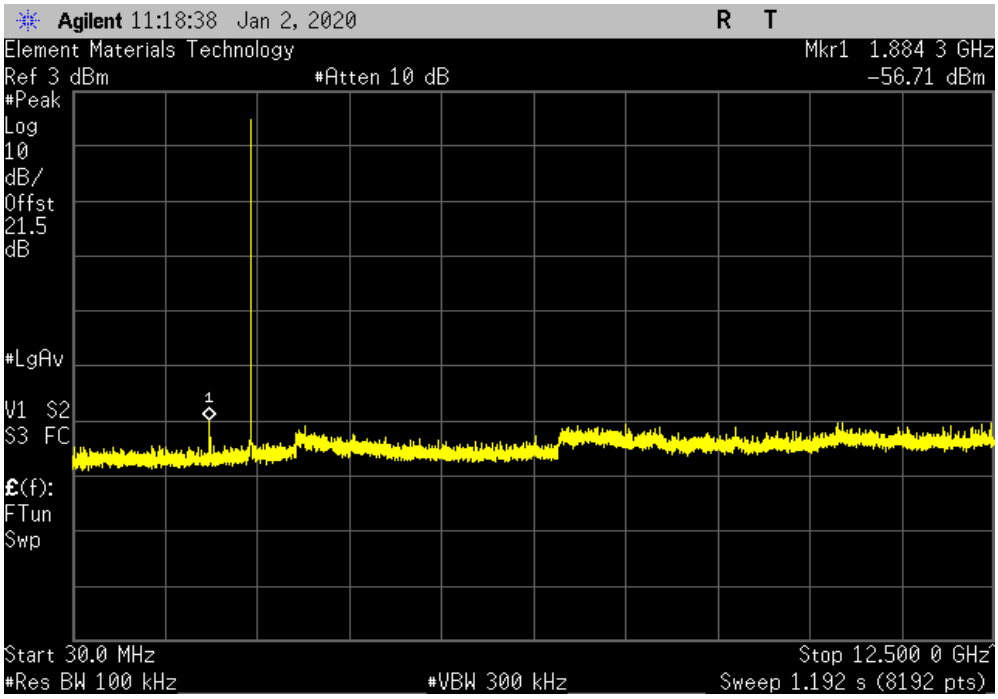
2DH, pi/4-DQPSK, Low Channel, 2402 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
12.5 GHz - 25 GHz	24989.3	-52.65	-20	Pass



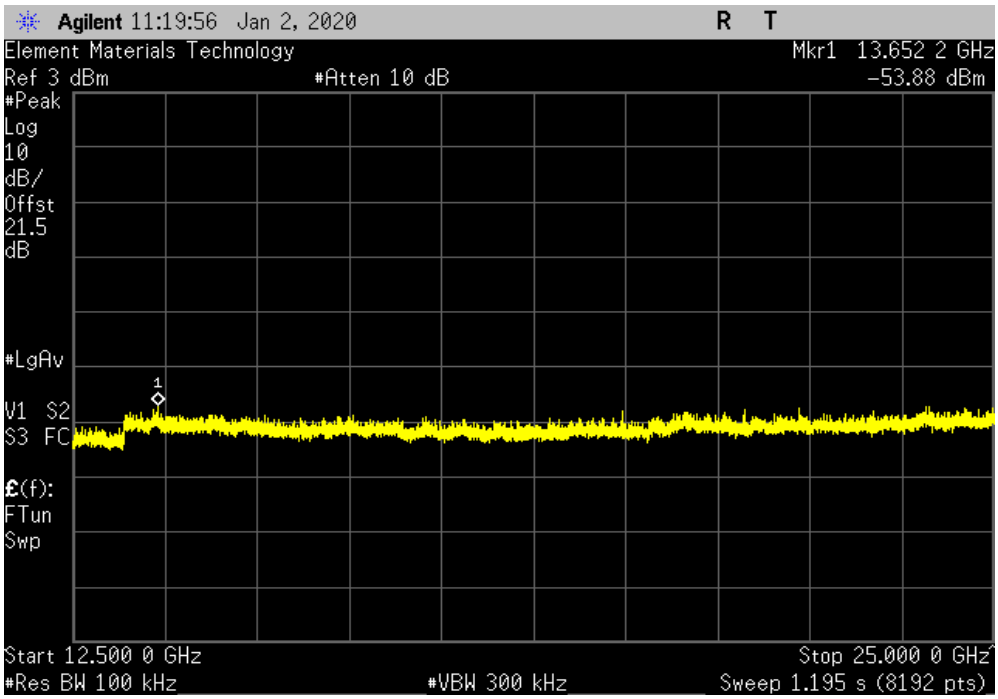
2DH, pi/4-DQPSK, Mid Channel, 2440 MHz					
Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental	2440.01	N/A	N/A	N/A



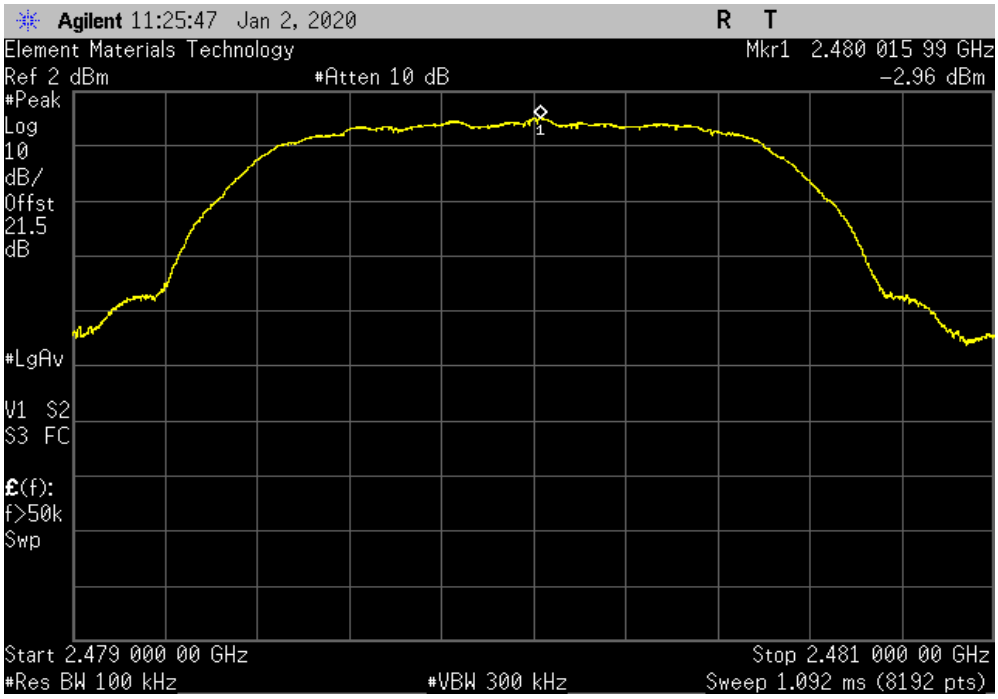
2DH, pi/4-DQPSK, Mid Channel, 2440 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	1884.3	-55.01	-20	Pass



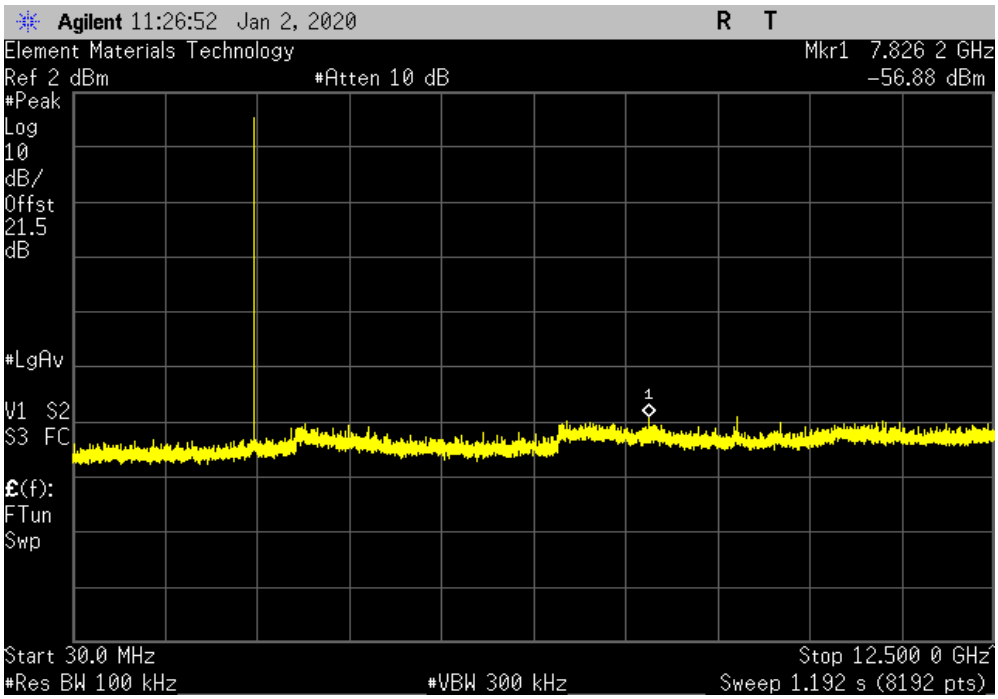
2DH, pi/4-DQPSK, Mid Channel, 2440 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
12.5 GHz - 25 GHz	13652.2	-52.18	-20	Pass



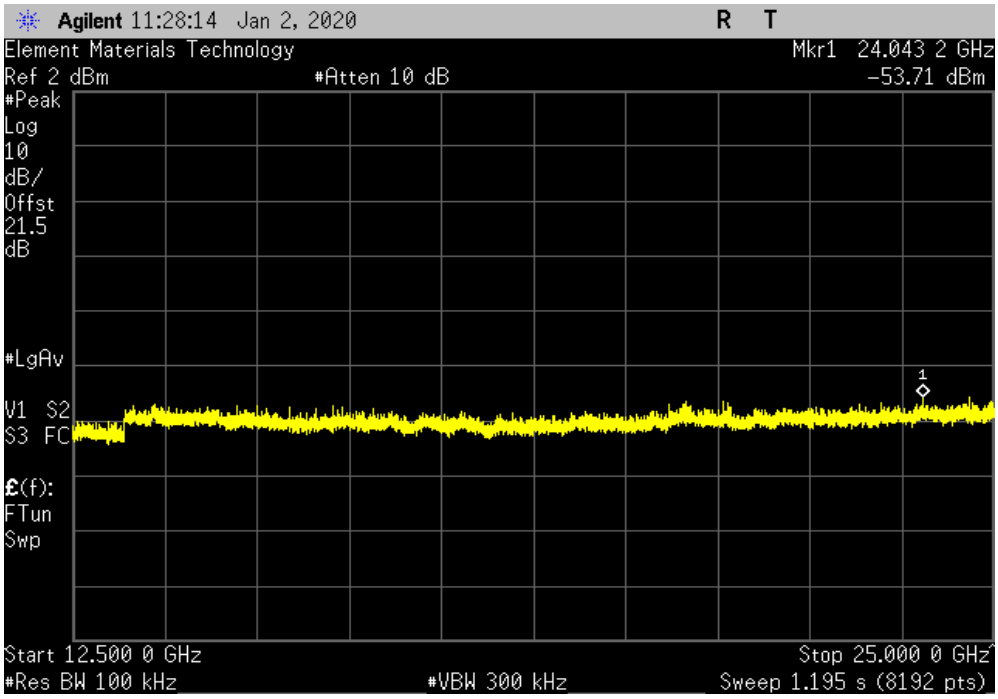
2DH, pi/4-DQPSK, High Channel, 2480 MHz					
Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental	2480.02	N/A	N/A	N/A



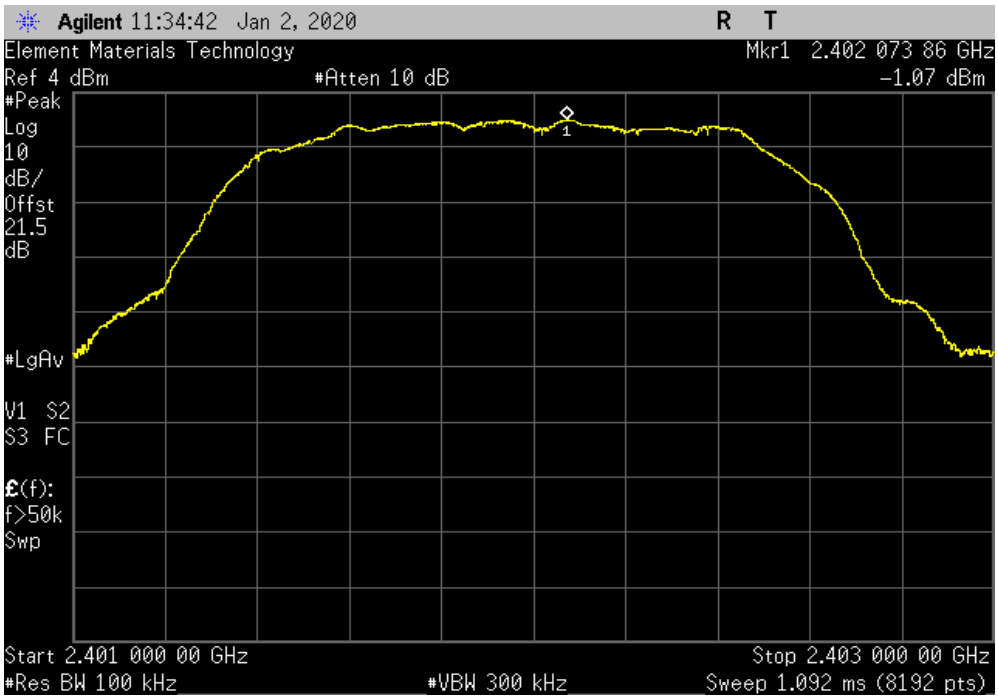
2DH, pi/4-DQPSK, High Channel, 2480 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
30 MHz - 12.5 GHz	7826.2	-53.92	-20	Pass



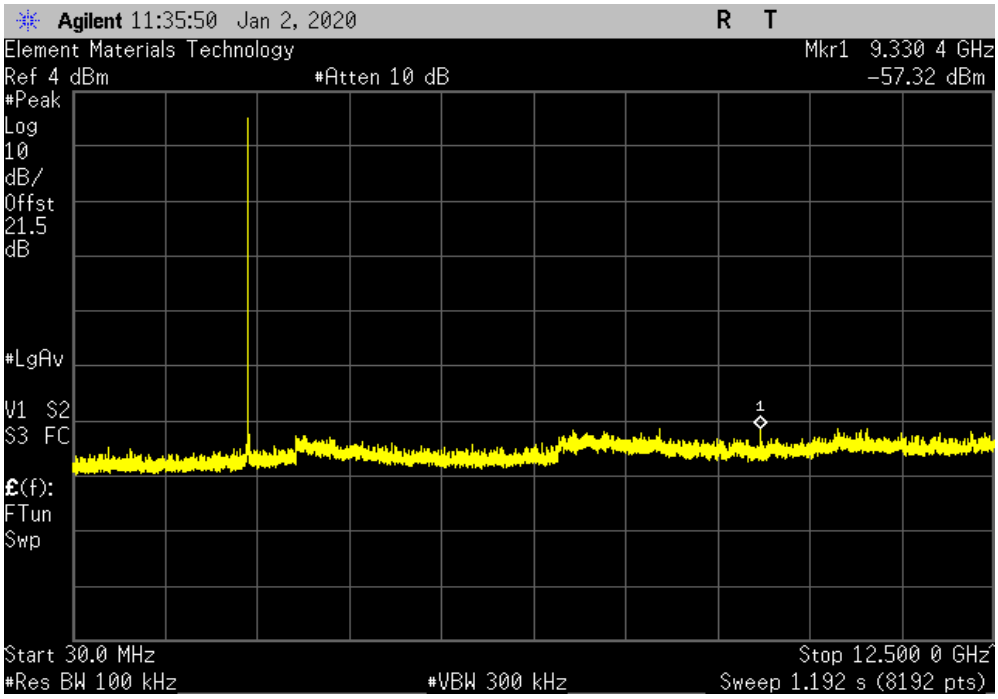
2DH, pi/4-DQPSK, High Channel, 2480 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
12.5 GHz - 25 GHz	24043.2	-50.75	-20	Pass



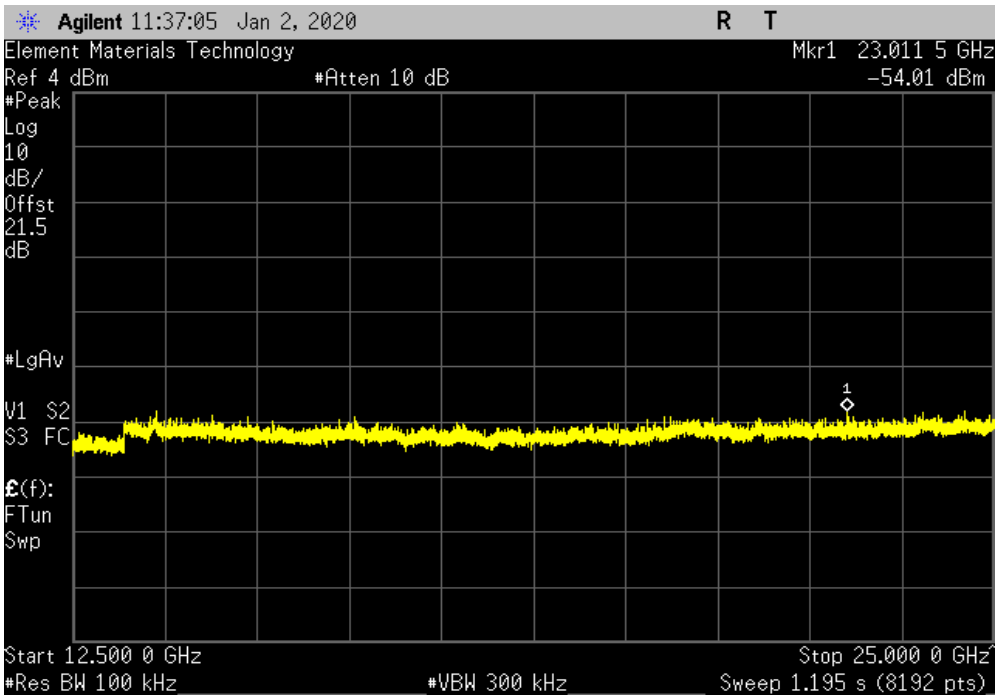
3DH, 8-DPSK, Low Channel, 2402 MHz					
Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
	Fundamental	2402.07	N/A	N/A	N/A



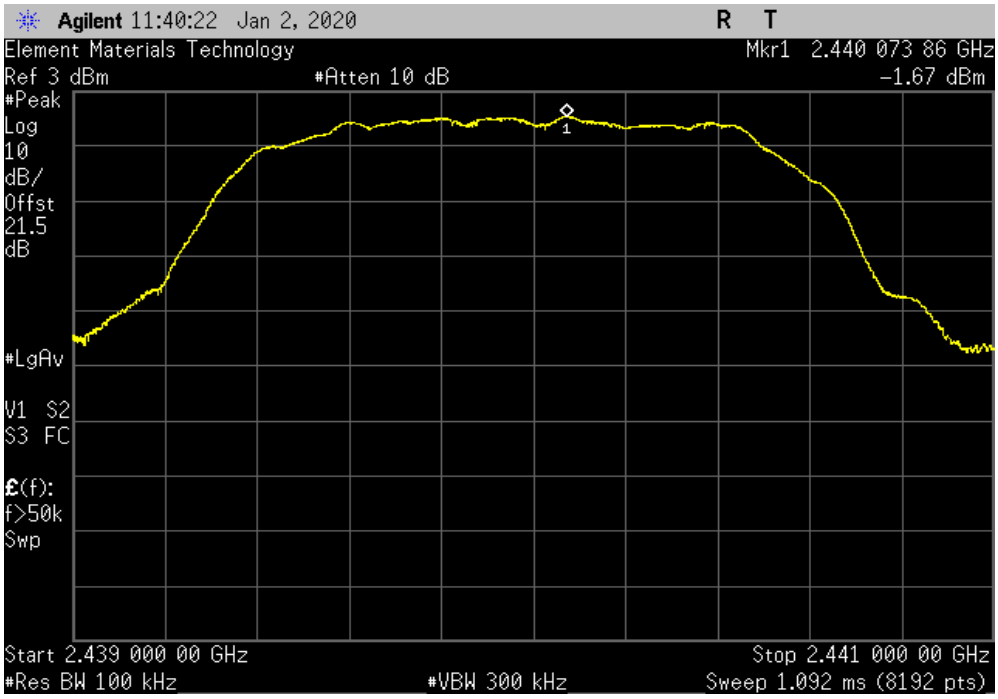
3DH, 8-DPSK, Low Channel, 2402 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	9330.4	-56.25	-20	Pass



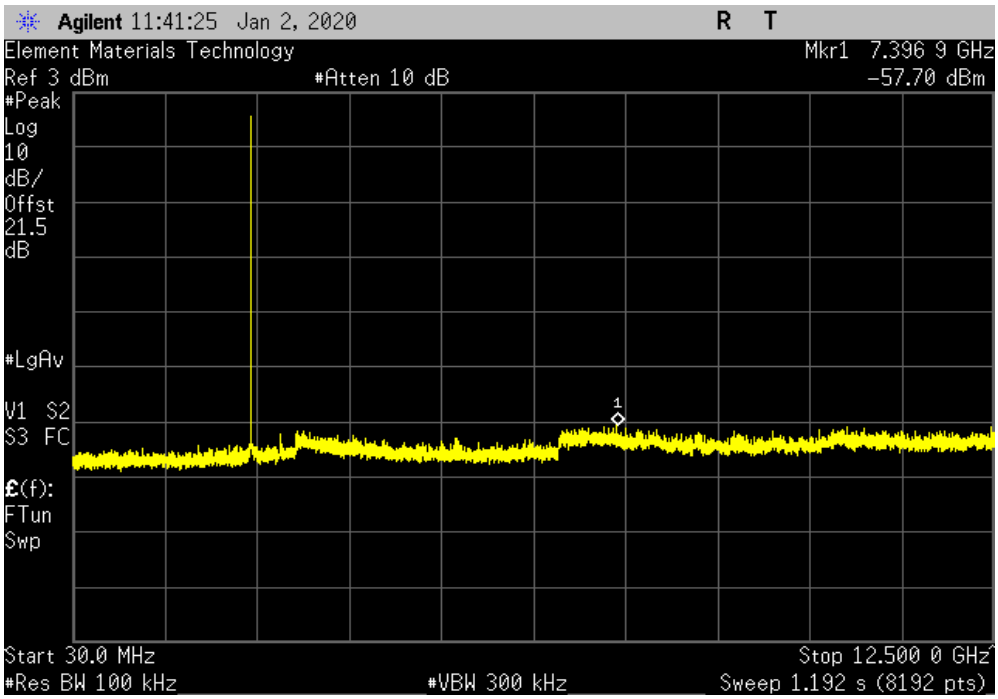
3DH, 8-DPSK, Low Channel, 2402 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
12.5 GHz - 25 GHz	23011.5	-52.94	-20	Pass



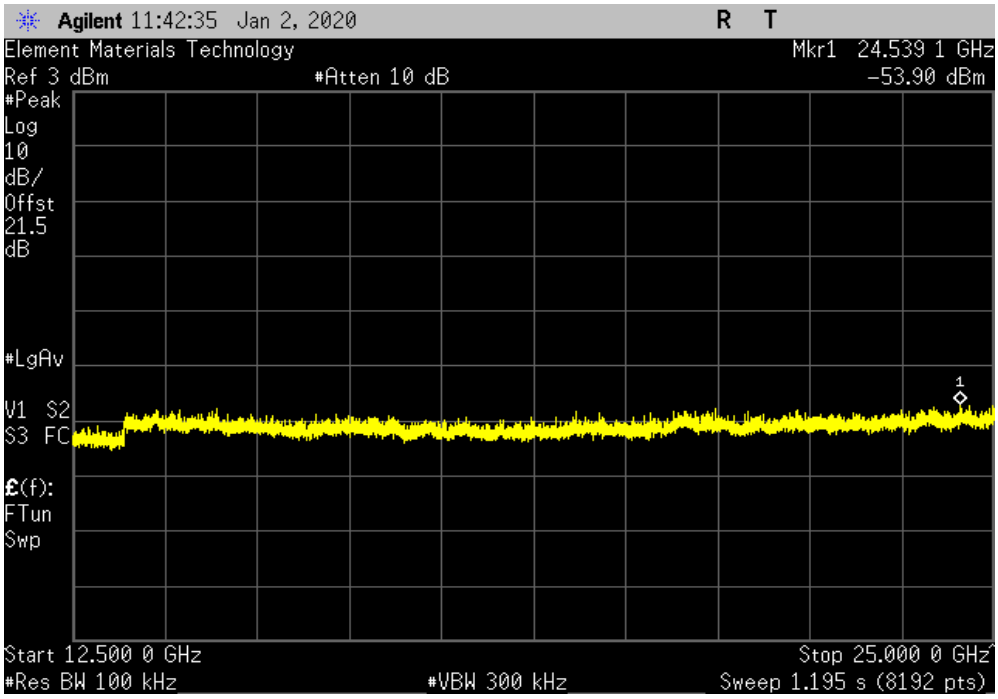
3DH, 8-DPSK, Mid Channel, 2440 MHz					
Frequency Range		**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
	Fundamental	2440.07	N/A	N/A	N/A



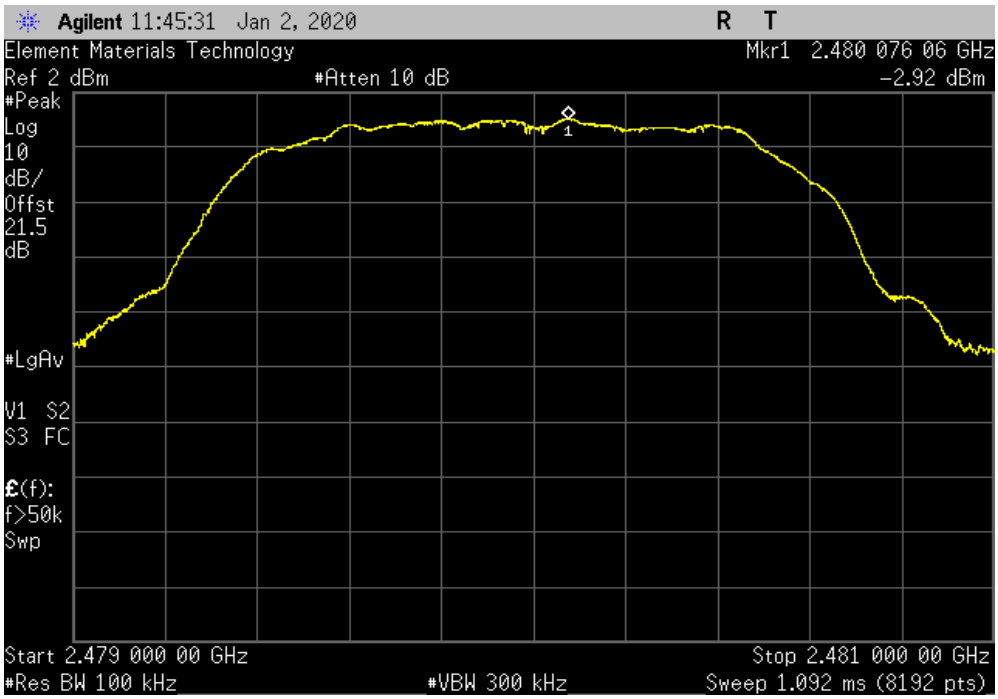
3DH, 8-DPSK, Mid Channel, 2440 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
30 MHz - 12.5 GHz	7396.9	-56.02	-20	Pass



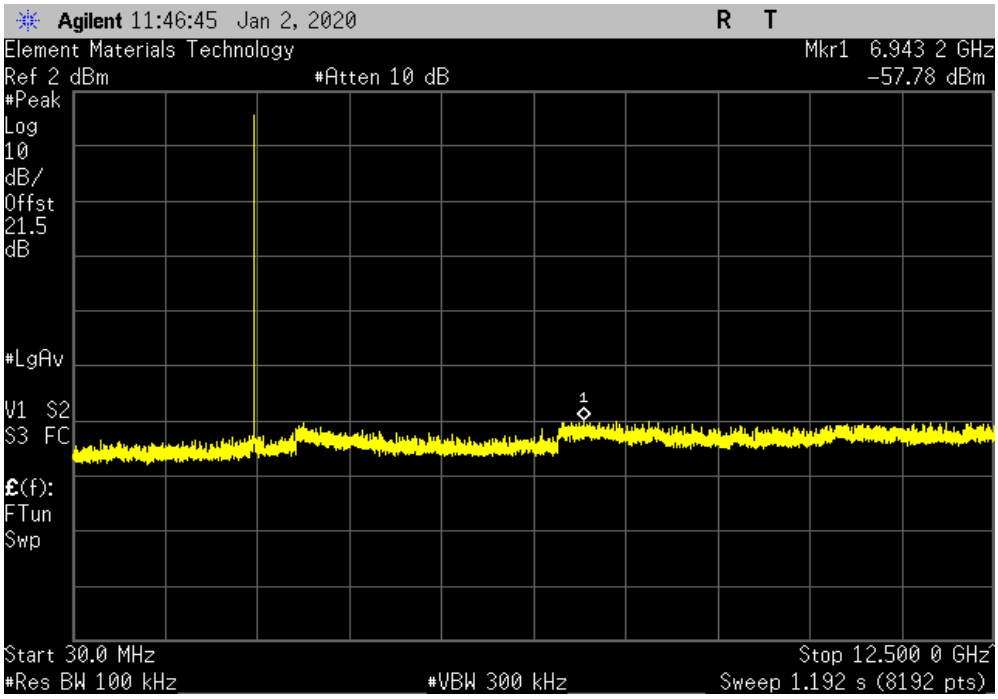
3DH, 8-DPSK, Mid Channel, 2440 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
12.5 GHz - 25 GHz	24539.1	-52.22	-20	Pass



3DH, 8-DPSK, High Channel, 2480 MHz					
Frequency Range		Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
Fundamental		2480.08	N/A	N/A	N/A



3DH, 8-DPSK, High Channel, 2480 MHz				
Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ≤ (dBc)	Result
30 MHz - 12.5 GHz	6943.2	-54.86	-20	Pass



3DH, 8-DPSK, High Channel, 2480 MHz				
Frequency Range	**Measured Freq (MHz)**	**Max Value (dBc)**	**Limit ≤ (dBc)**	**Result**
12.5 GHz - 25 GHz	23518.2	-51.02	-20	Pass