

# APPENDIX REPORT

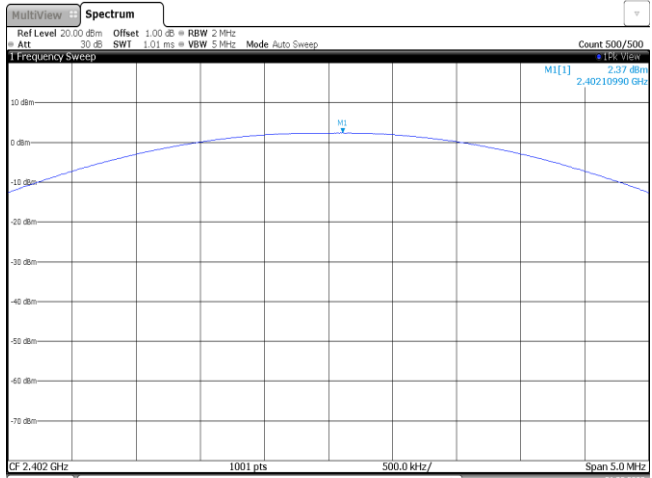
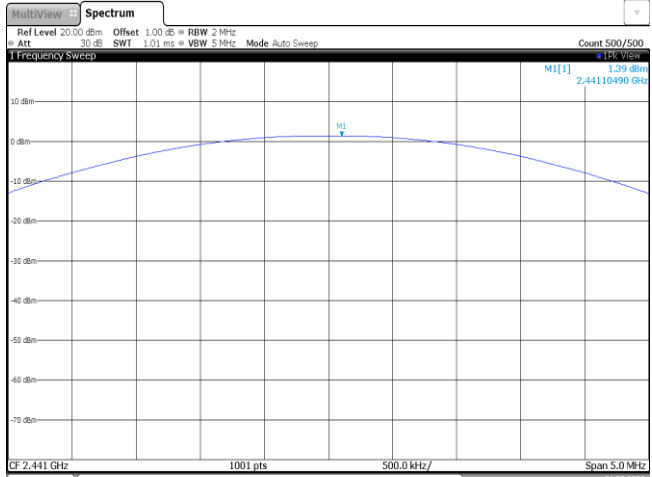
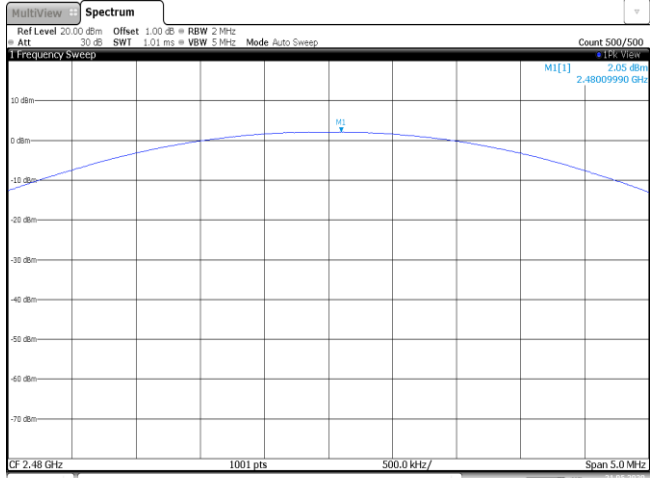
Project No.	SHT2003046801EW	Radio Specification	Bluetooth EDR
Test sample No.	YPHT20030468003	Model No.	R40
Start test date	2020/5/15	Finish date	2020/5/21
Temperature	25°C	Humidity	50%
Test Engineer	JiongSheng.Feng	Auditor	<i>William.wang</i>

Appendix clause	Test item	Result
A	Peak Output Power	PASS
B	20 dB Bandwidth	PASS
C	99% Occupied Bandwidth	PASS
D	Carrier Frequencies Separation	PASS
E	Hopping Channel Number	PASS
F	Dwell Time	PASS
G	Duty Cycle Correction Factor (DCCF)	PASS
H	Band edge and Spurious Emissions(coducted)	PASS

**Appendix A: Peak Output Power**

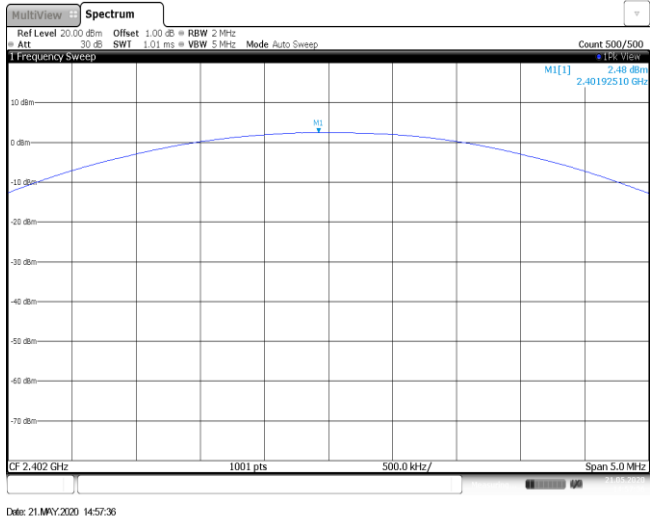
Modulation type	Channel	Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
GFSK	00	3.06	3.05	≤ 30.00	Pass
	39	2.01	2.00		
	78	2.73	2.70		
π/4DQPSK	00	2.37	1.86	≤ 21.00	Pass
	39	1.39	0.81		
	78	2.05	1.47		
8DPSK	00	2.48	1.92	≤ 21.00	Pass
	39	1.47	0.95		
	78	2.19	1.71		

Modulation Type:		GFSK
CH00	<p>Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWI 4.21 us (~31 ms) VBW 3 MHz Mode Auto FFT Count 500/500 1 Frequency Sweep M1[1] 3.06 dBm 2.40214990 GHz CF 2.402 GHz 1001 pts 500.0 kHz/ Span 5.0 MHz Date: 21.MAY.2020 14:31:05</p>	
CH39	<p>Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWI 4.21 us (~31 ms) VBW 3 MHz Mode Auto FFT Count 500/500 1 Frequency Sweep M1[1] 2.01 dBm 2.44085010 GHz CF 2.441 GHz 1001 pts 500.0 kHz/ Span 5.0 MHz Date: 21.MAY.2020 14:27:56</p>	
CH78	<p>Ref Level 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWI 4.21 us (~31 ms) VBW 3 MHz Mode Auto FFT Count 500/500 1 Frequency Sweep M1[1] 2.73 dBm 2.47984520 GHz CF 2.48 GHz 1001 pts 500.0 kHz/ Span 5.0 MHz Date: 21.MAY.2020 14:39:30</p>	

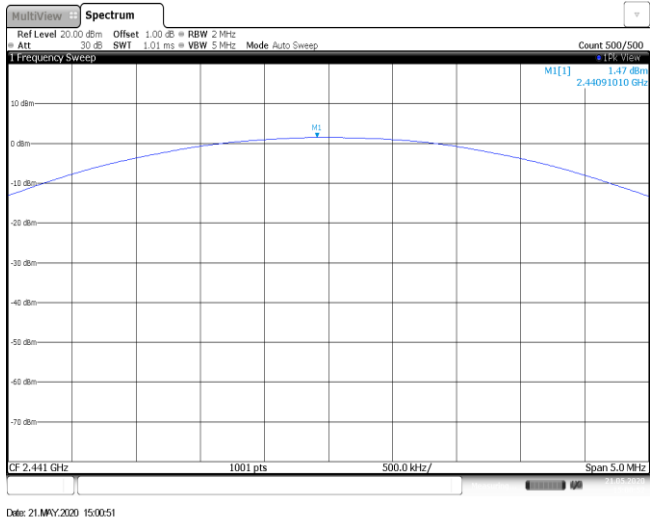
Modulation Type:		$\pi/4$ DQPSK
CH00	 <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 2 MHz Att 30 dB SWI 1.01 ms VBW 5 MHz Mode Auto Sweep Count 500/500 M1[1] 2.37 dBm 2.40210990 GHz CF 2.402 GHz 1001 pts 500.0 kHz/ Span 5.0 MHz Date: 21.MAY.2020 14:42:52</p>	
CH39	 <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 2 MHz Att 30 dB SWI 1.01 ms VBW 5 MHz Mode Auto Sweep Count 500/500 M1[1] 1.39 dBm 2.44110490 GHz CF 2.441 GHz 1001 pts 500.0 kHz/ Span 5.0 MHz Date: 21.MAY.2020 14:49:26</p>	
CH78	 <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 2 MHz Att 30 dB SWI 1.01 ms VBW 5 MHz Mode Auto Sweep Count 500/500 M1[1] 2.05 dBm 2.48009990 GHz CF 2.48 GHz 1001 pts 500.0 kHz/ Span 5.0 MHz Date: 21.MAY.2020 14:54:18</p>	

**Modulation Type: 8DPSK**

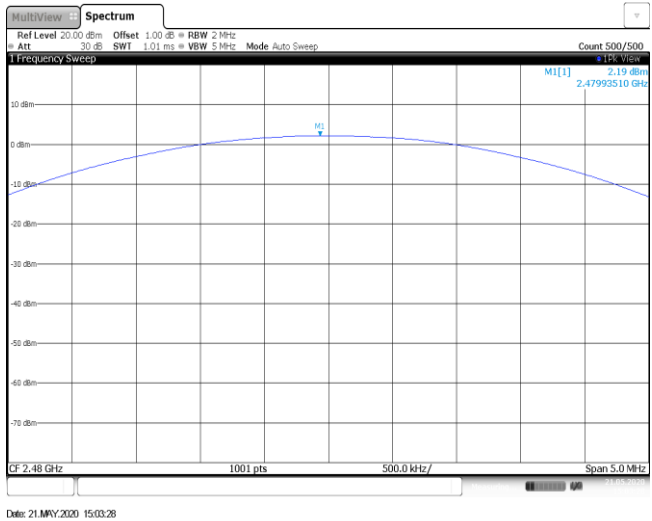
CH00



CH39



CH78

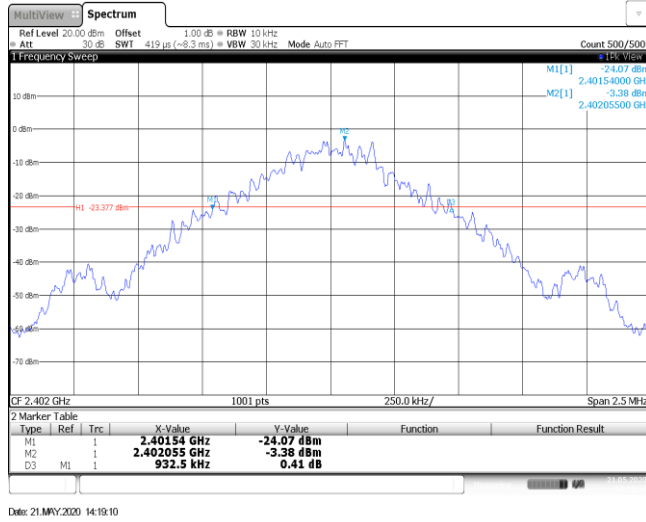


**Appendix B : 20 dB Bandwidth**

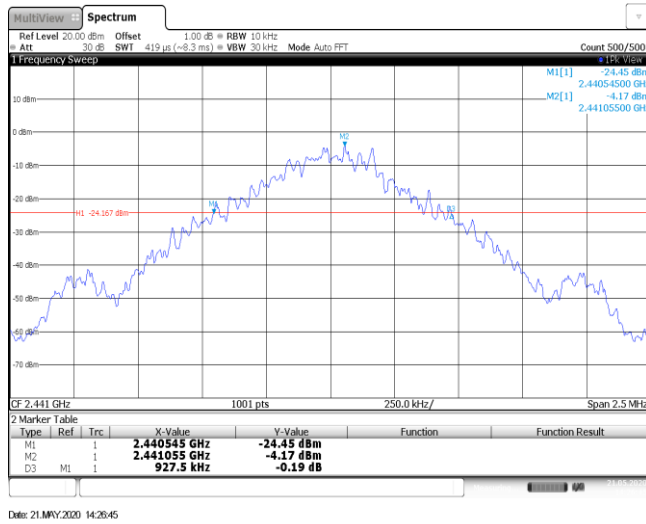
Modulation type	Channel	20 dB Bandwidth (kHz)	Limit (kHz)	Result
GFSK	00	932.50	-	Pass
	39	927.50		
	78	927.50		
$\pi/4$ DQPSK	00	1287.50	-	Pass
	39	1312.50		
	78	1315.00		
8DPSK	00	1297.50	-	Pass
	39	1297.50		
	78	1300.00		

**Modulation Type: GFSK**

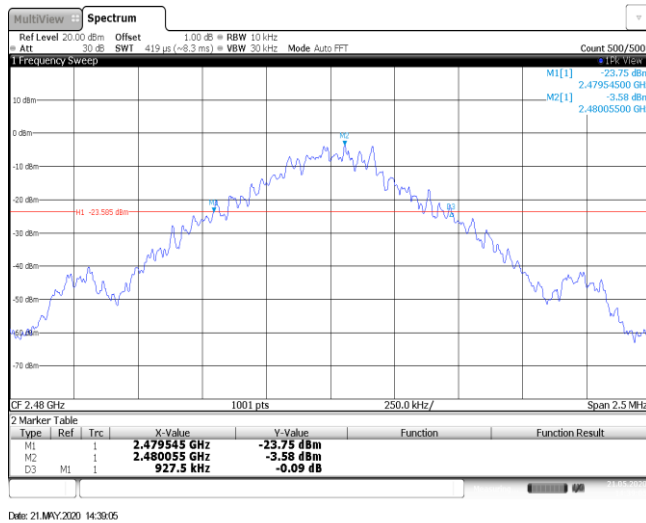
CH00



CH39

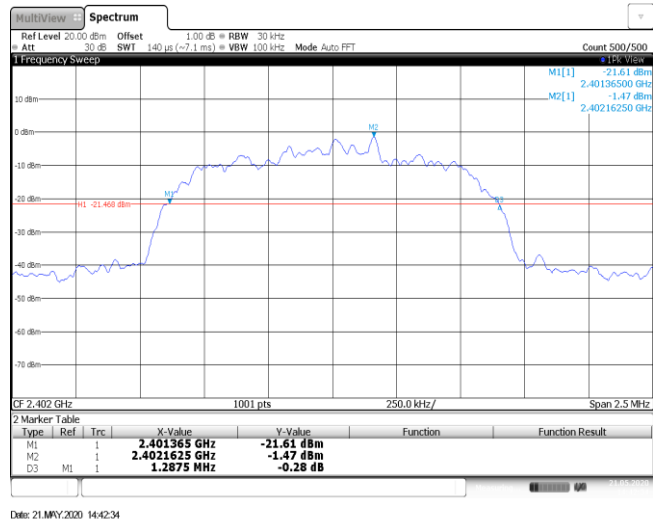


CH78

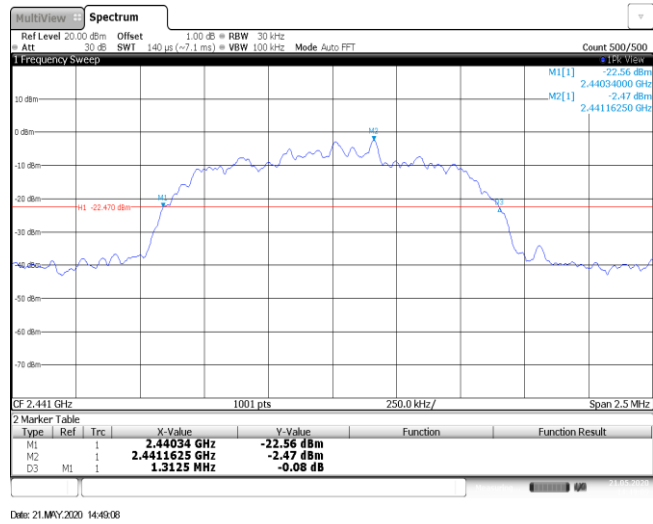


**Modulation Type:**  **$\pi/4$ DQPSK**

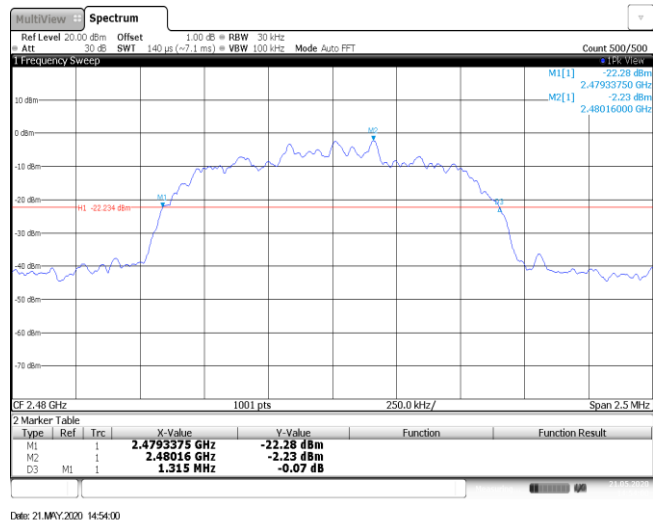
CH00



CH39



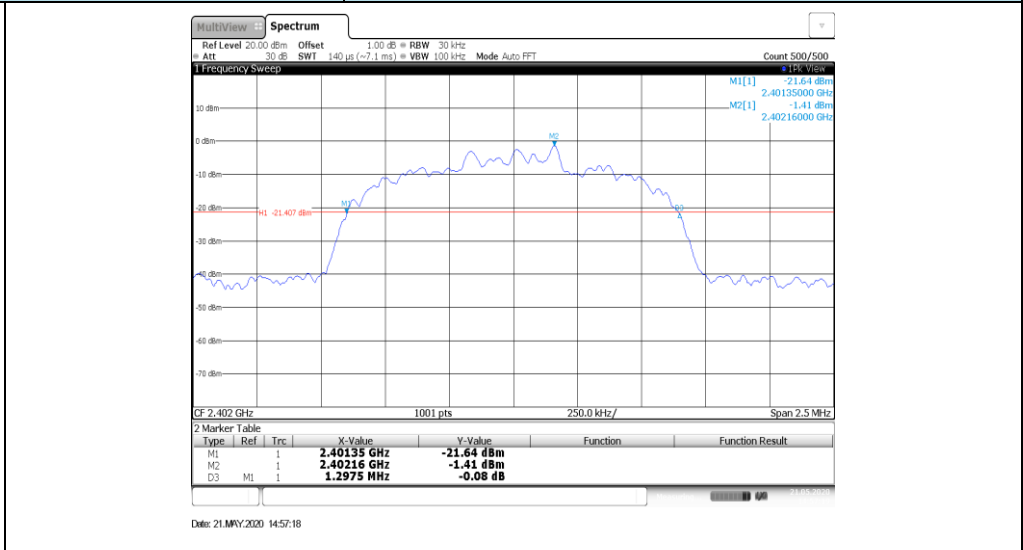
CH78



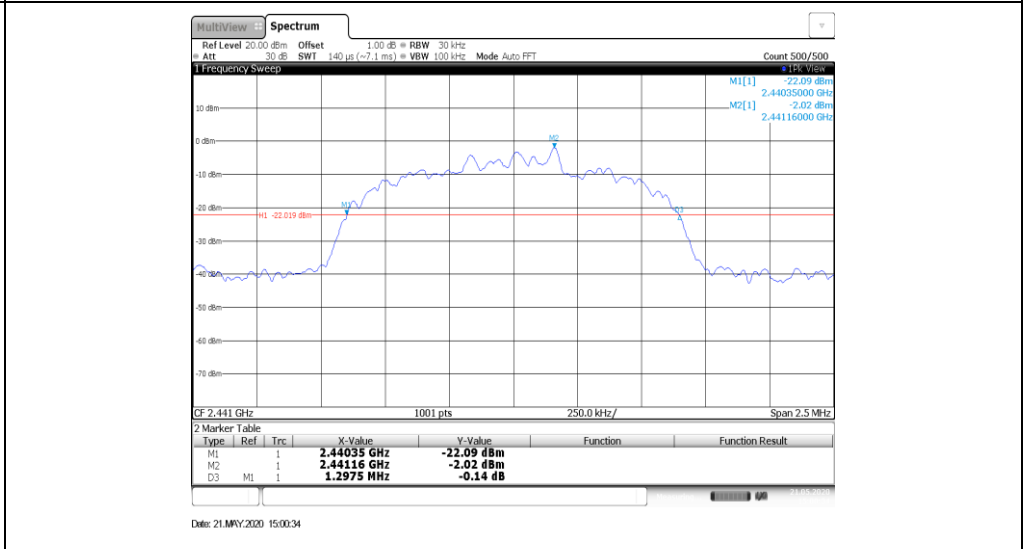


**Modulation Type: 8DPSK**

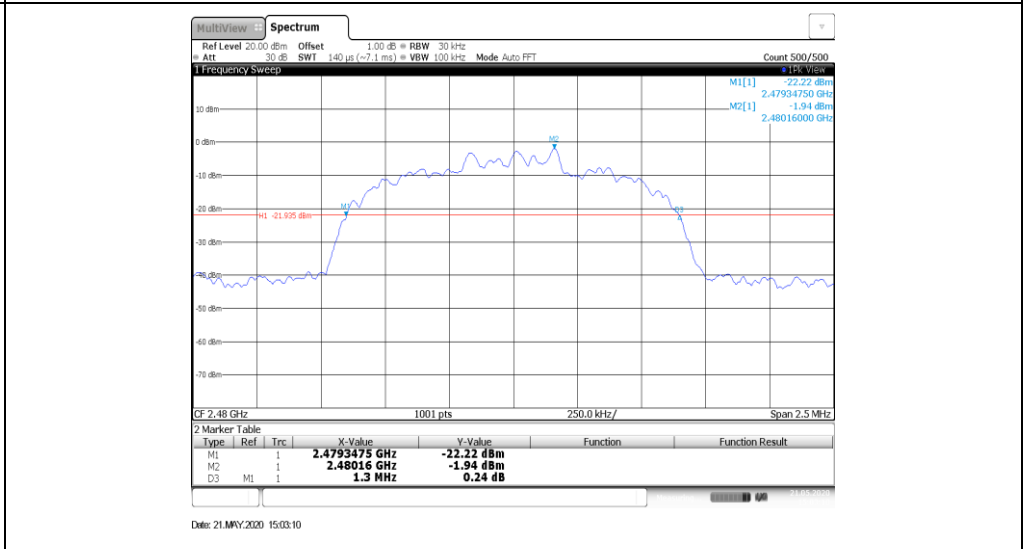
CH00



CH39



CH78

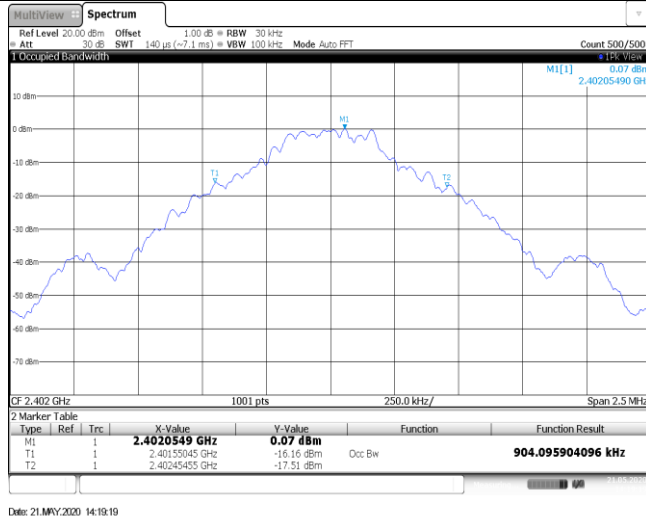


**Appendix C: 99% Occupied Bandwidth**

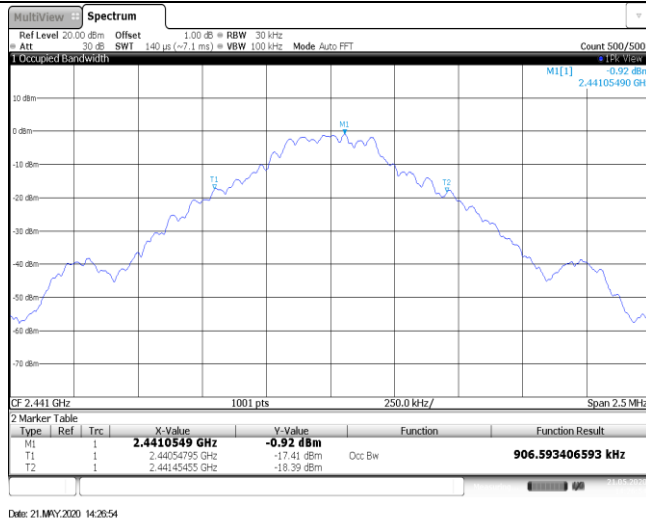
Modulation type	Channel	99% Occupied Bandwidth (MHz)	Limit (MHz)	Result
GFSK	00	0.90	-	Pass
	39	0.91		
	78	0.91		
$\pi/4$ DQPSK	00	1.17	-	Pass
	39	1.18		
	78	1.17		
8DPSK	00	1.18	-	Pass
	39	1.19		
	78	1.18		

**Modulation Type: GFSK**

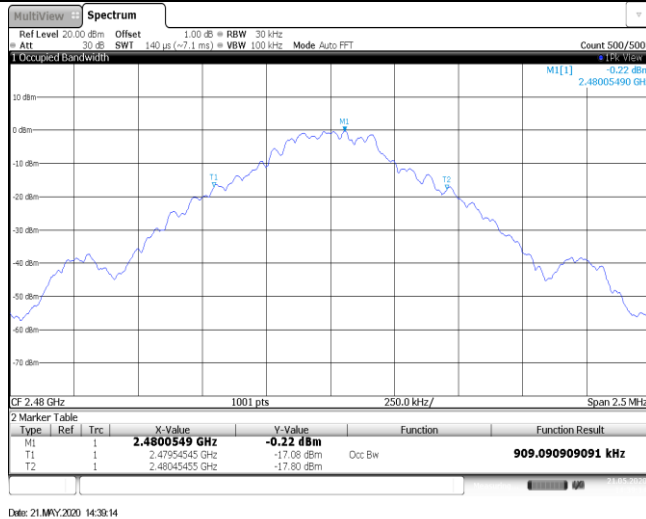
CH00



CH39



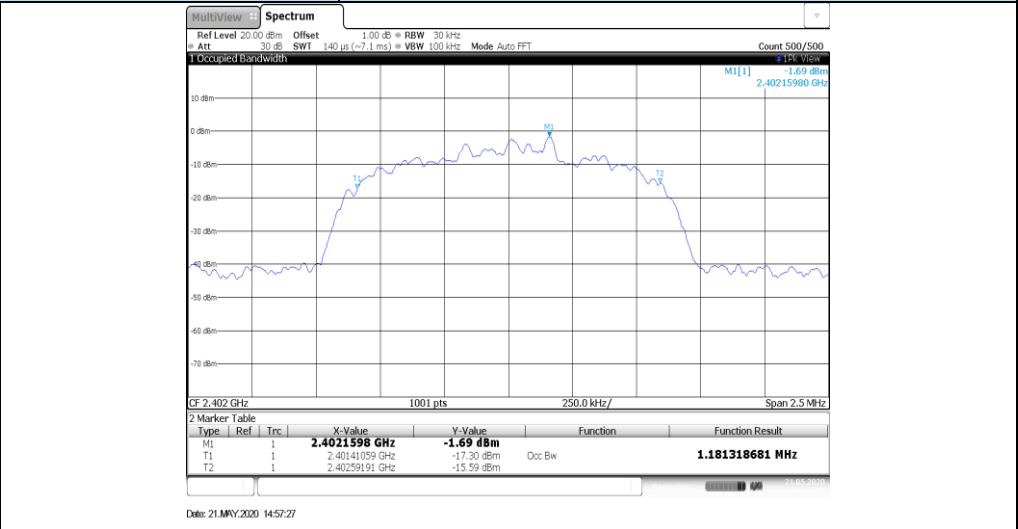
CH78



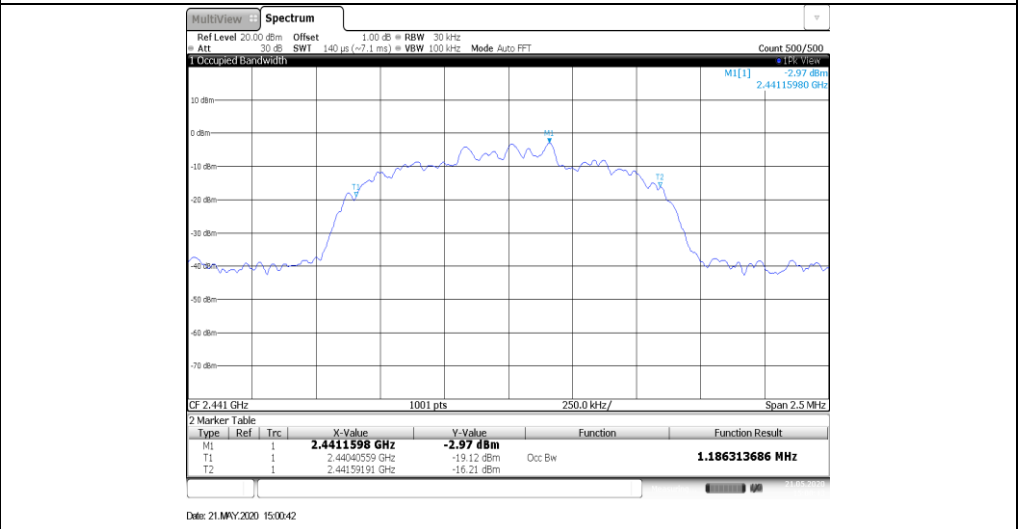
Modulation Type:		$\pi/4$ DQPSK																												
CH00	<p><b>2 Marker Table</b></p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-Value</th> <th>Y-Value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.4020125 GHz</td> <td>-2.16 dBm</td> <td></td> <td></td> </tr> <tr> <td>T1</td> <td>1</td> <td></td> <td>2.40141059 GHz</td> <td>-15.20 dBm</td> <td>Occ BW</td> <td>1.171328671 MHz</td> </tr> <tr> <td>T2</td> <td>1</td> <td></td> <td>2.40258192 GHz</td> <td>-17.95 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21.MAY.2020 14:42:43</p>		Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.4020125 GHz	-2.16 dBm			T1	1		2.40141059 GHz	-15.20 dBm	Occ BW	1.171328671 MHz	T2	1		2.40258192 GHz	-17.95 dBm		
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T2	1		2.48057942 GHz	-17.78 dBm																										

**Modulation Type: 8DPSK**

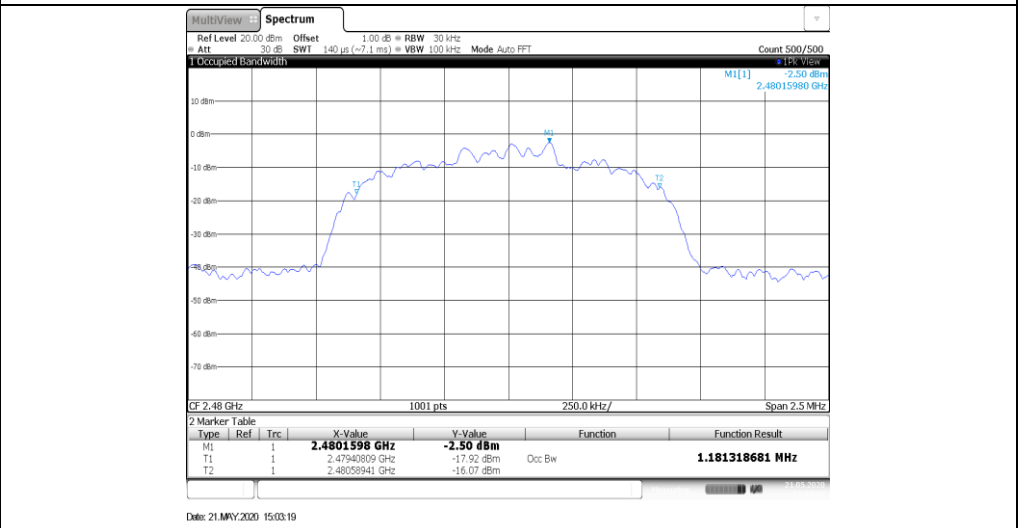
CH00



CH39



CH78



**Appendix D: Carrier Frequencies Separation**

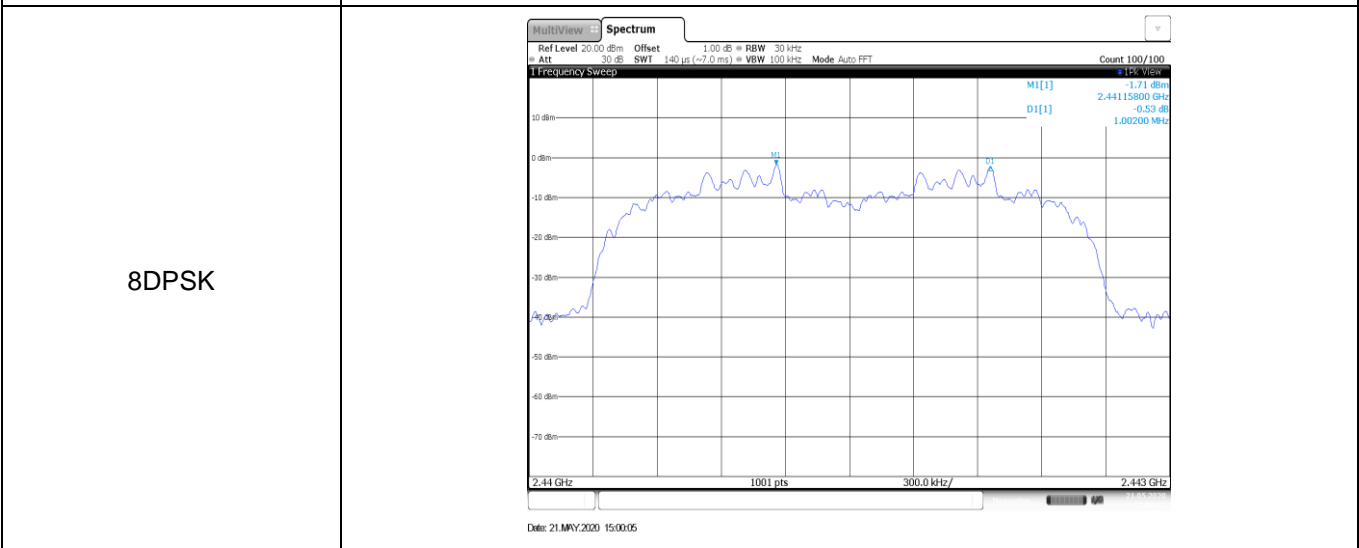
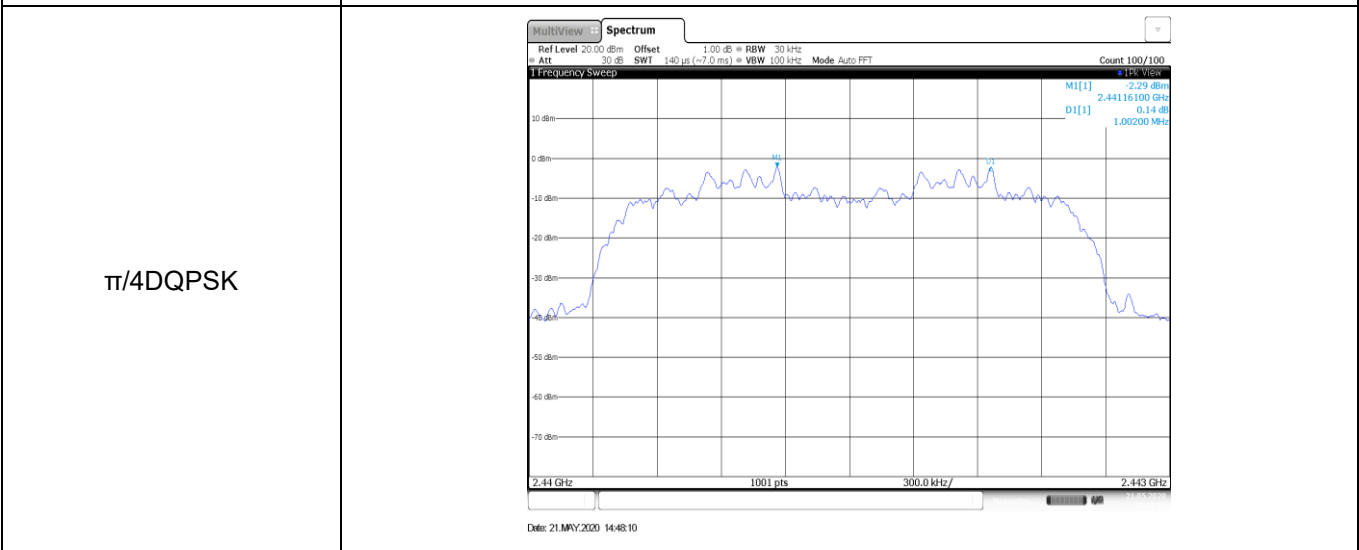
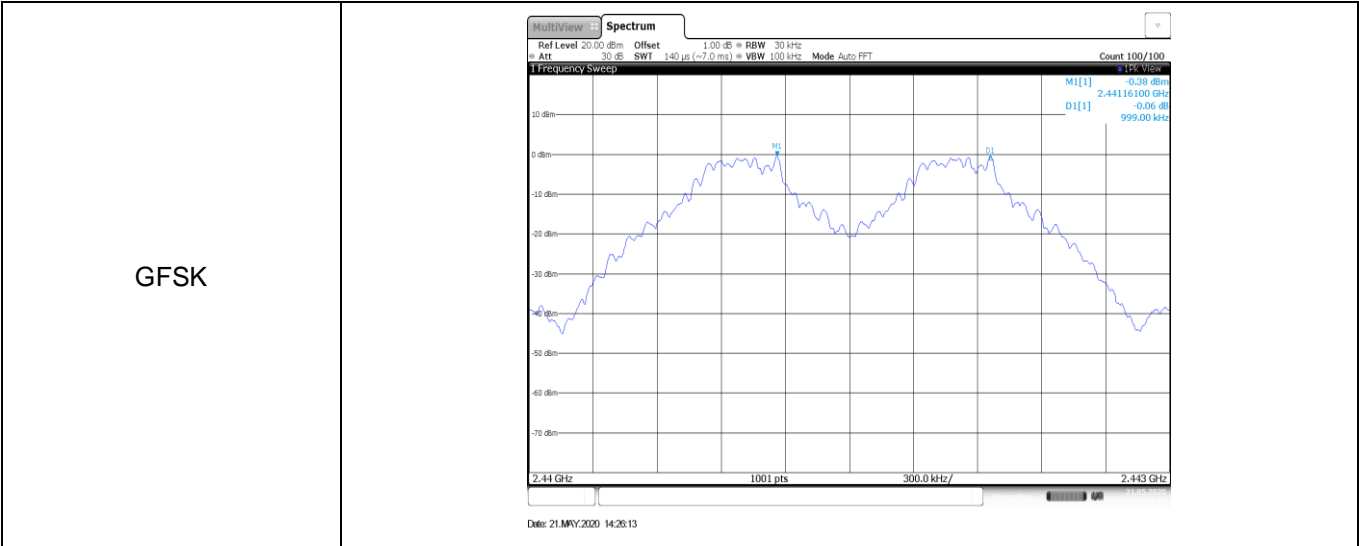
Modulation type	Channel	Carrier Frequencies Separation (MHz)	Limit (kHz) *	Result
GFSK	39	1.00	≥932.50	Pass
π/4DQPSK	39	1.00	≥876.67	Pass
8DPSK	39	1.00	≥866.67	Pass

**Note:**

\*: GFSK limit = The maximum 20 dB Bandwidth for GFSK modulation on the appendix B.

π/4DQPSK limit = 2/3 \* The maximum 20 dB Bandwidth for π/4DQPSK modulation on the appendix B.

8DPSK limit = 2/3 \* The maximum 20 dB Bandwidth for 8DPSK modulation on the appendix B

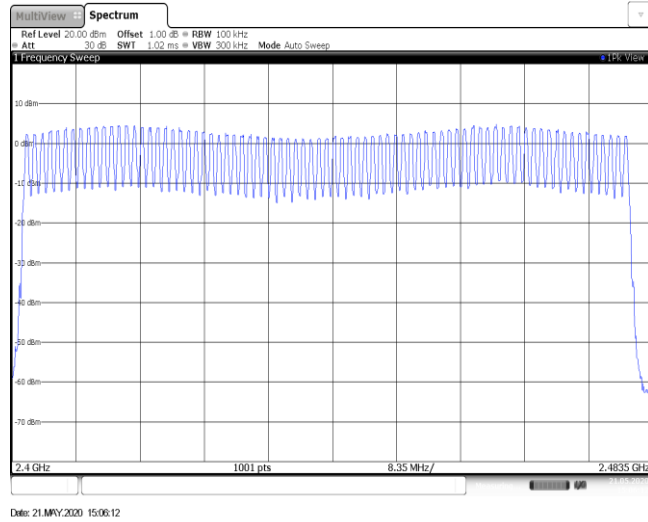


**Appendix E: Hopping Channel Number**

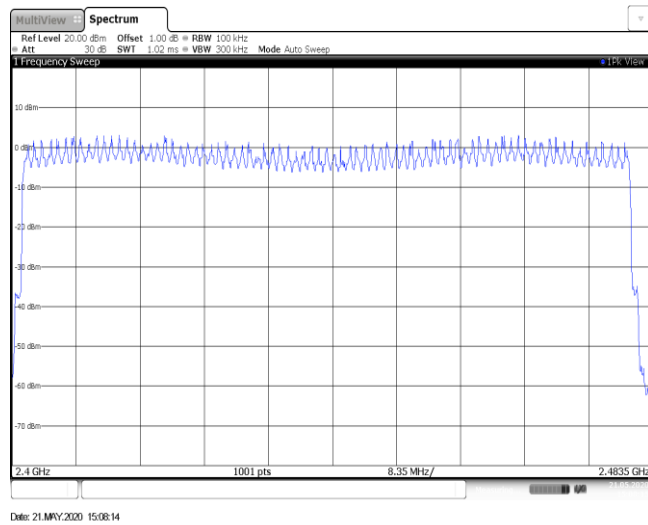
Modulation type	Channel number	Limit	Result
GFSK	79	≥15.00	Pass
π/4DQPSK	79		
8DPSK	79		



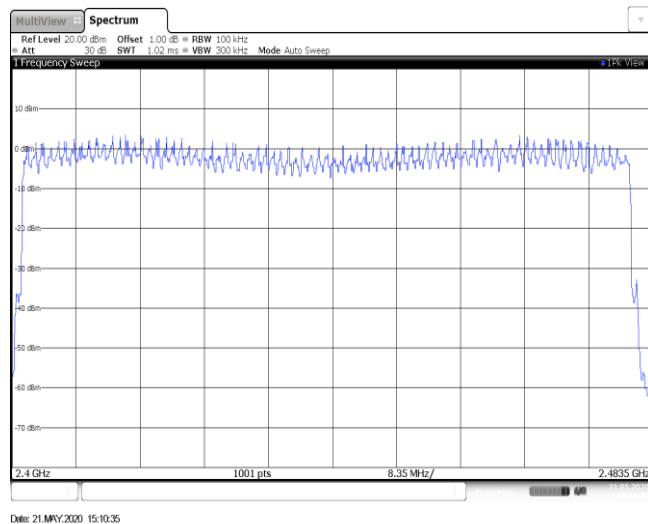
GFSK



$\pi/4$ DQPSK



8DPSK

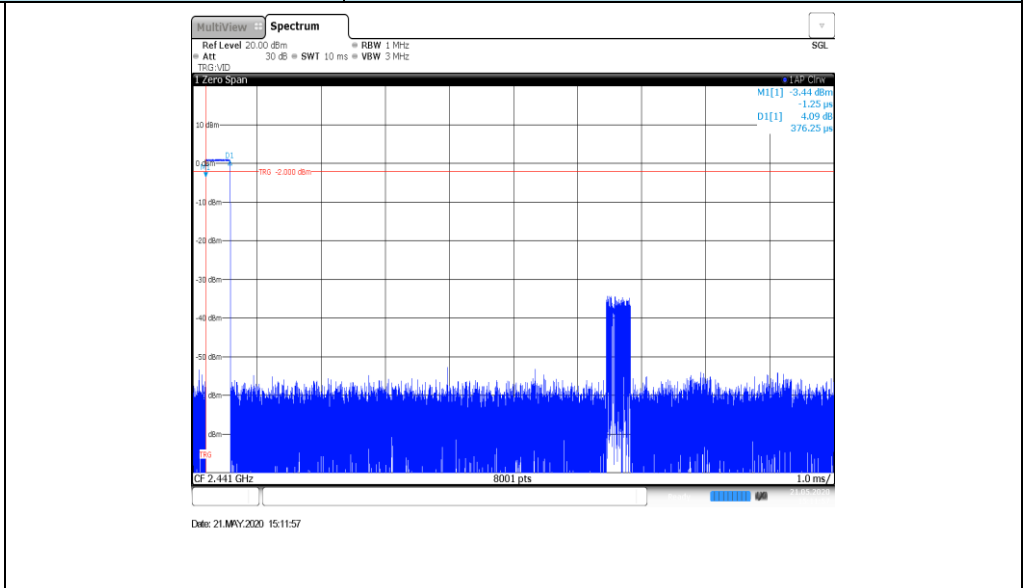


**Appendix F: Dwell Time**

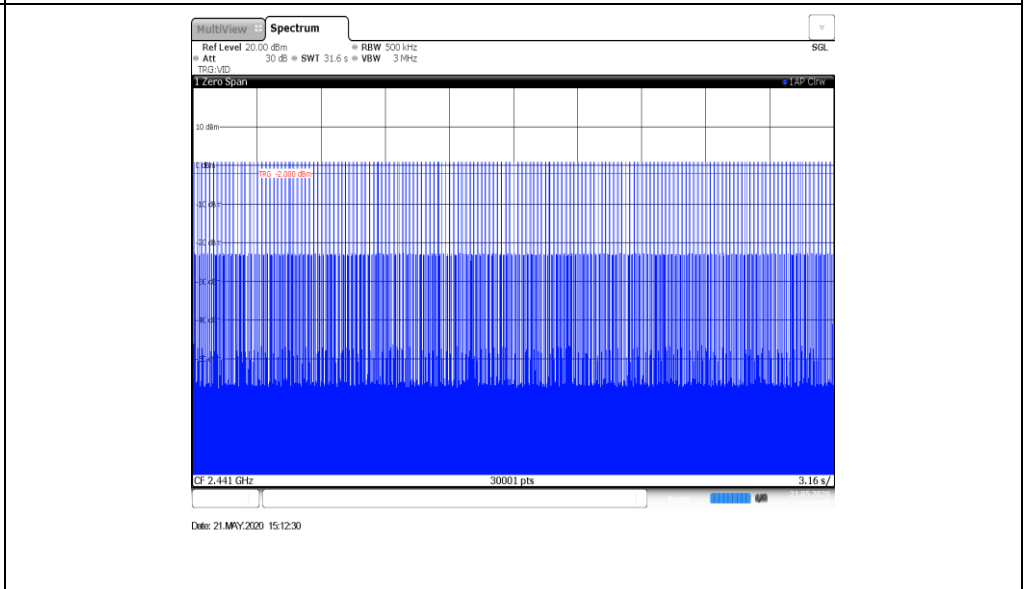
Modulation type	Packet	Burst Width [ms]	Total Hops[hop*ch]	Dwell time (Second)	Limit (Second)	Result
GFSK	DH1	0.38	314	0.12	≤ 0.40	Pass
	DH3	1.63	168	0.27		
	DH5	2.88	112	0.32		
π/4DQPSK	2DH1	0.38	314	0.12	≤ 0.40	Pass
	2DH3	1.64	160	0.26		
	2DH5	2.88	106	0.31		
8DPSK	3DH1	0.39	313	0.12	≤ 0.40	Pass
	3DH3	1.64	158	0.26		
	3DH5	2.89	106	0.31		

**Modulation Type: GFSK**

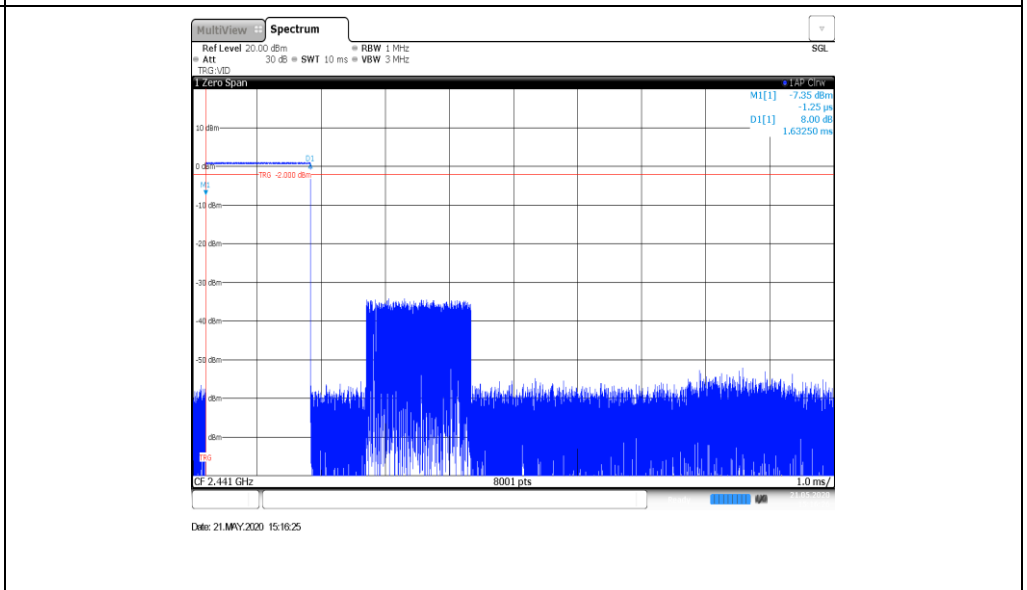
DH1  
Burst width



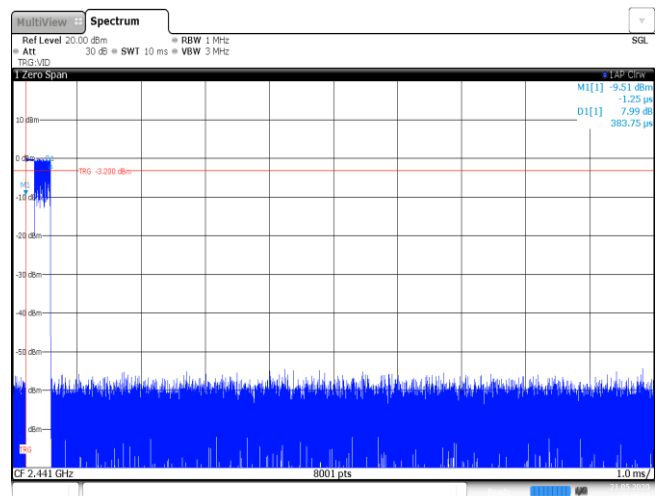
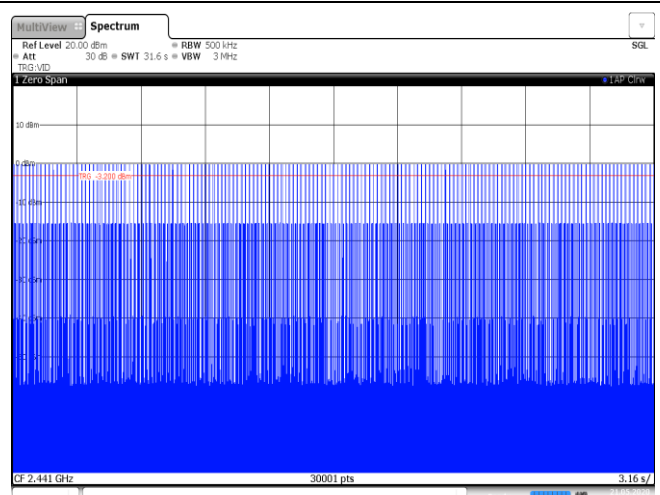
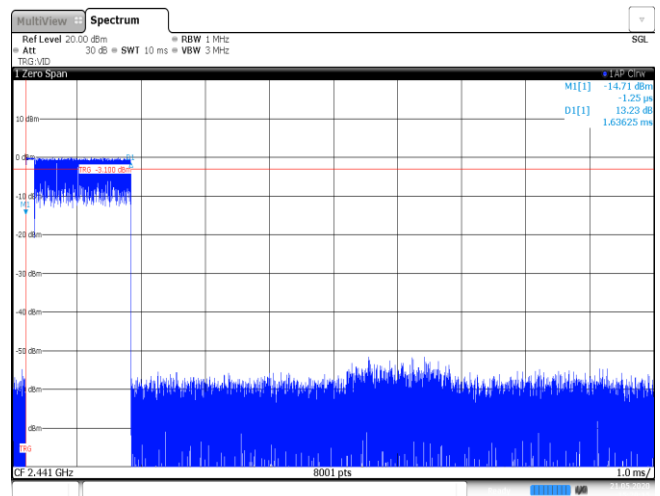
DH1  
Burst number



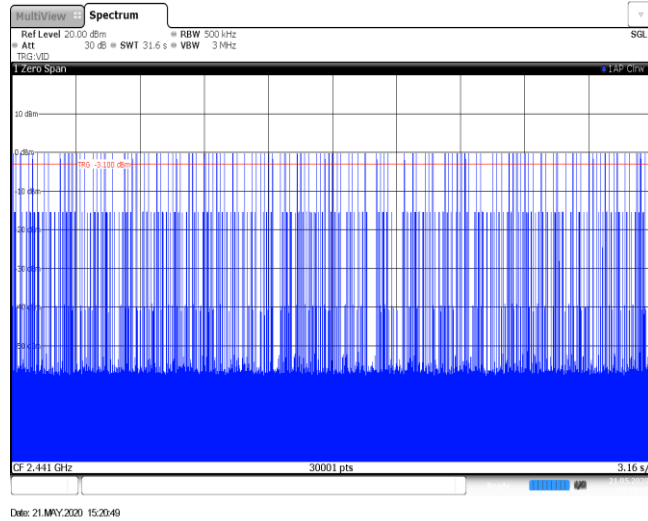
DH3  
Burst width



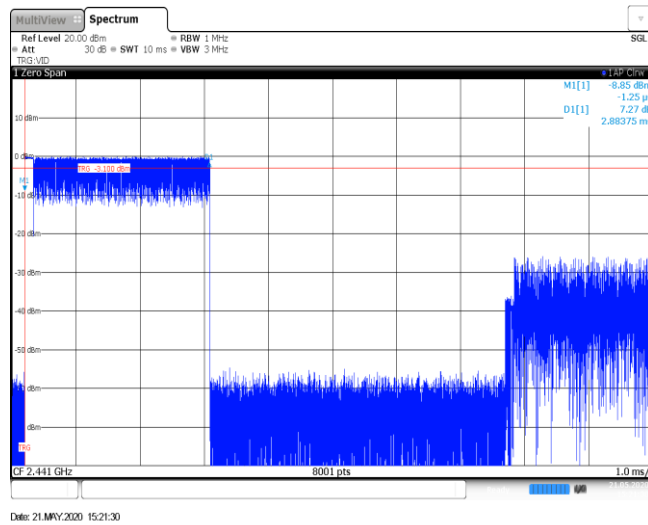
<p>DH3 Burst number</p>	
<p>DH5 Burst width</p>	
<p>DH5 Burst number</p>	

Modulation Type:	$\pi/4$ DQPSK
<p>2DH1 Burst width</p>	 <p>The spectrum plot shows a signal burst at 2.441 GHz. The y-axis represents power in dBm, ranging from -80 to 10. The x-axis represents time in ms, ranging from 0 to 1.0. A red horizontal line indicates a trigger level at -3.000 dBm. The signal burst is visible between approximately 0.2 ms and 0.4 ms. The plot includes parameters: Ref Level 20.00 dBm, Att 30 dB, SWT 10 ms, RBW 1 MHz, VBW 3 MHz, and 8001 pts.</p>
<p>2DH1 Burst number</p>	 <p>The spectrum plot shows a signal burst at 2.441 GHz. The y-axis represents power in dBm, ranging from -80 to 10. The x-axis represents time in s, ranging from 0 to 3.16. A red horizontal line indicates a trigger level at -3.000 dBm. The signal burst is visible between approximately 0.5 s and 1.5 s. The plot includes parameters: Ref Level 20.00 dBm, Att 30 dB, SWT 31.6 s, RBW 500 kHz, VBW 3 MHz, and 30001 pts.</p>
<p>2DH3 Burst width</p>	 <p>The spectrum plot shows a signal burst at 2.441 GHz. The y-axis represents power in dBm, ranging from -80 to 10. The x-axis represents time in ms, ranging from 0 to 1.0. A red horizontal line indicates a trigger level at -3.100 dBm. The signal burst is visible between approximately 0.2 ms and 0.4 ms. The plot includes parameters: Ref Level 20.00 dBm, Att 30 dB, SWT 10 ms, RBW 1 MHz, VBW 3 MHz, and 8001 pts. The signal characteristics are: M[1] -14.71 dBm, D1[1] 13.23 dB, and 1.63625 ms.</p>

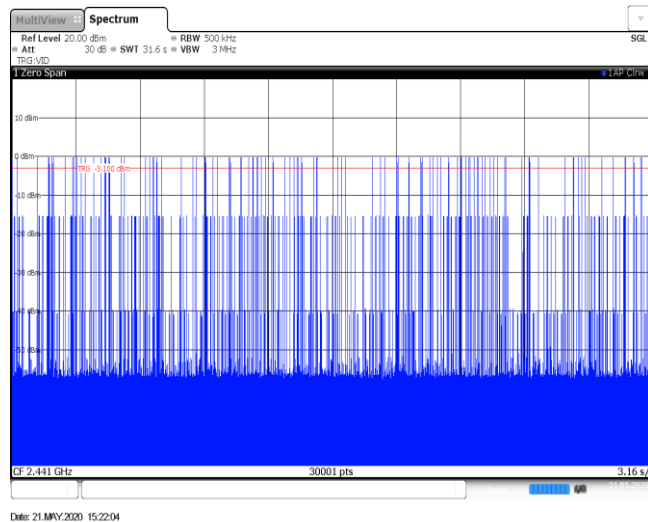
2DH3  
Burst number



2DH5  
Burst width

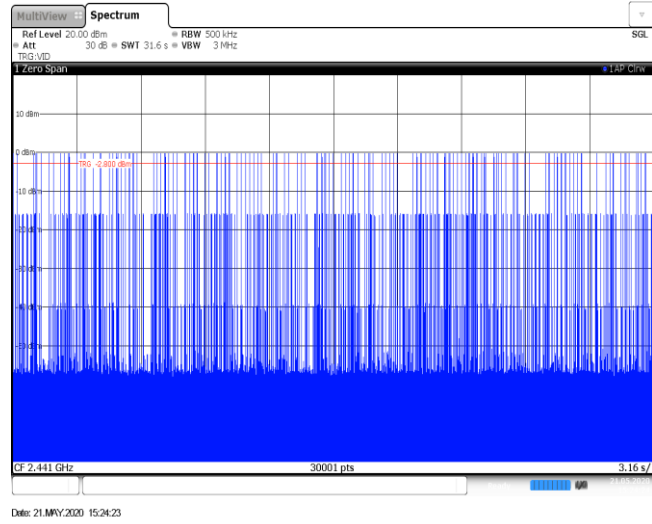


2DH5  
Burst number

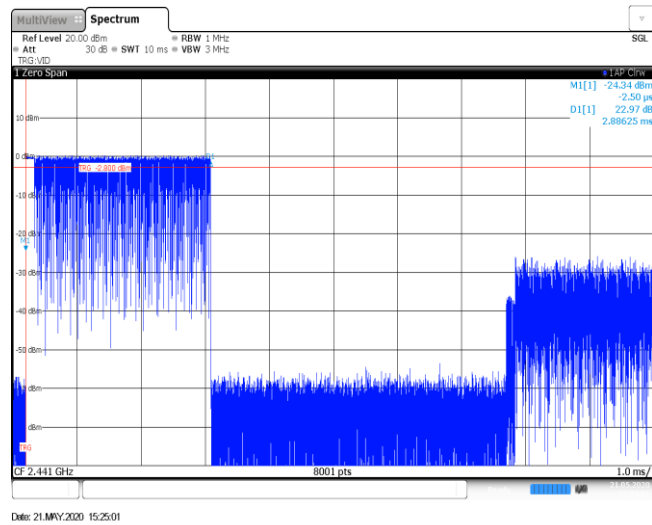


Modulation Type: 8DPSK	
3DH1 Burst width	<p>Ref Level 20.00 dBm, Att 30 dB, SWT 10 ms, VBW 3 MHz, RBW 1 MHz, TRIG:VD, SGL, 1 Zero Span, 8001 pts, 1.0 ms/</p> <p>M[1] -13.42 dBm, -1.25 μs D[1] 12.04 dB, 385.00 μs</p> <p>CF 2.441 GHz, Date: 21.MAY.2020 15:22:36</p>
3DH1 Burst number	<p>Ref Level 20.00 dBm, Att 30 dB, SWT 31.6 s, VBW 3 MHz, RBW 500 kHz, TRIG:VD, SGL, 1 Zero Span, 30001 pts, 3.16 s/</p> <p>M[1] -14.74 dBm, -2.50 μs D[1] 13.38 dB, 1.63500 ms</p> <p>CF 2.441 GHz, Date: 21.MAY.2020 15:23:10</p>
3DH3 Burst width	<p>Ref Level 20.00 dBm, Att 30 dB, SWT 10 ms, VBW 3 MHz, RBW 1 MHz, TRIG:VD, SGL, 1 Zero Span, 8001 pts, 1.0 ms/</p> <p>M[1] -14.74 dBm, -2.50 μs D[1] 13.38 dB, 1.63500 ms</p> <p>CF 2.441 GHz, Date: 21.MAY.2020 15:23:49</p>

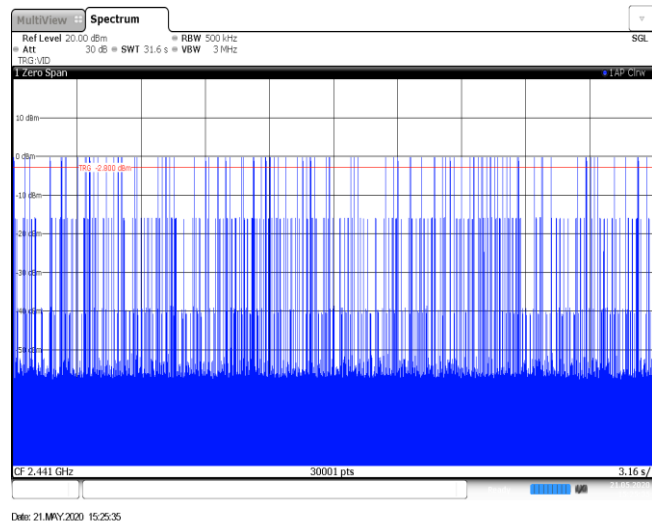
3DH3  
Burst number



3DH5  
Burst width



3DH5  
Burst number

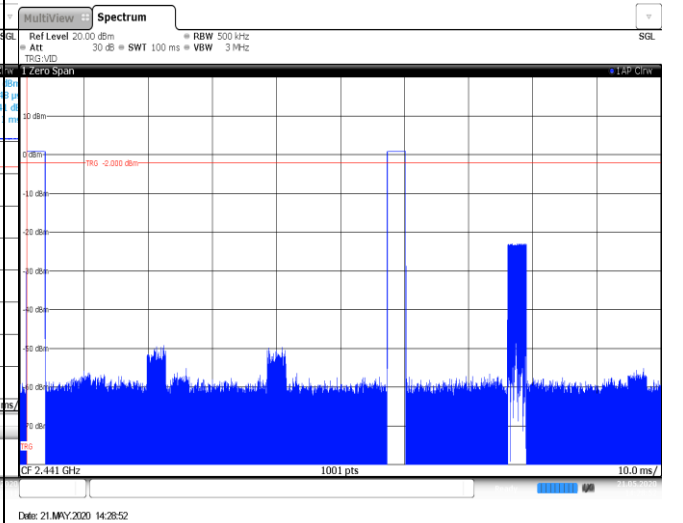
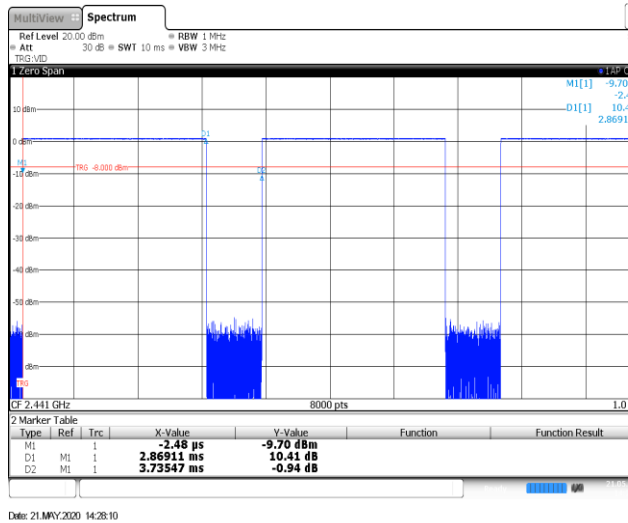




**Appendix G: Duty Cycle Correction Factor (DCCF)**

DCCF Calculate Formula					
DCCF=20 * Log(duty cycle) = 20 * Log( $T_{on\ time} / T_{period}$ )					
Modulation type	Test Frequency (MHz)	$T_{on\ time}$ for single burst [ms]	$T_{period}$ [ms]	Burst Quantity	DCCF [dB]
GFSK	2441	2.87	100	3	-21.30
$\pi/4$ DQPSK	2441	2.87	100	2	-24.82
8DPSK	2441	2.87	100	2	-24.82

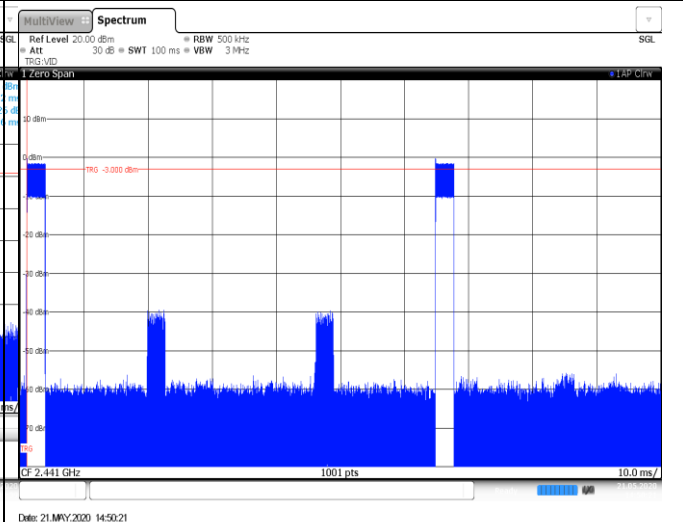
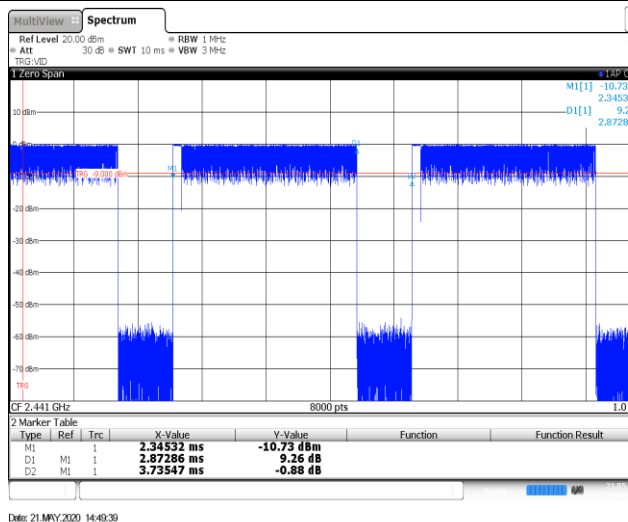
### GFSK



Ton time for single burst

Burst Quantity

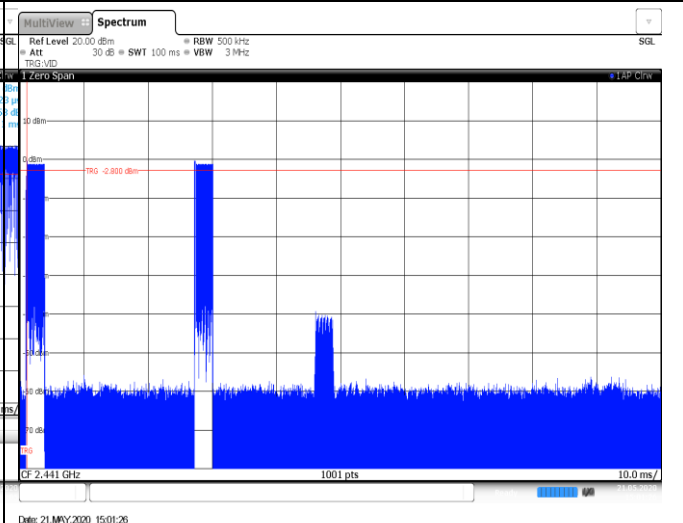
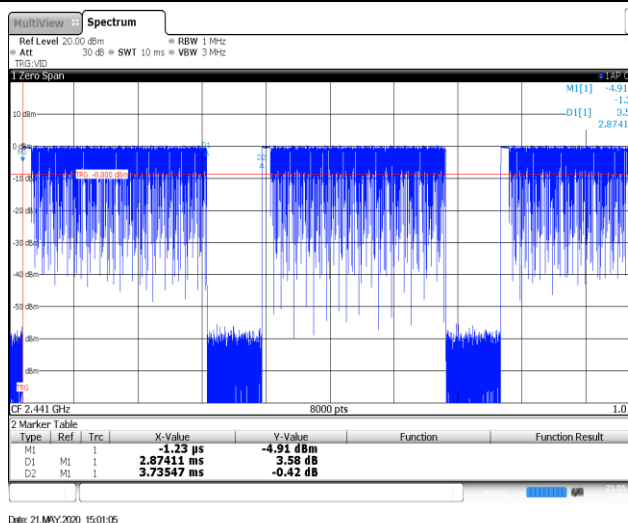
### $\pi/4$ DQPSK



Ton time for single burst

Burst Quantity

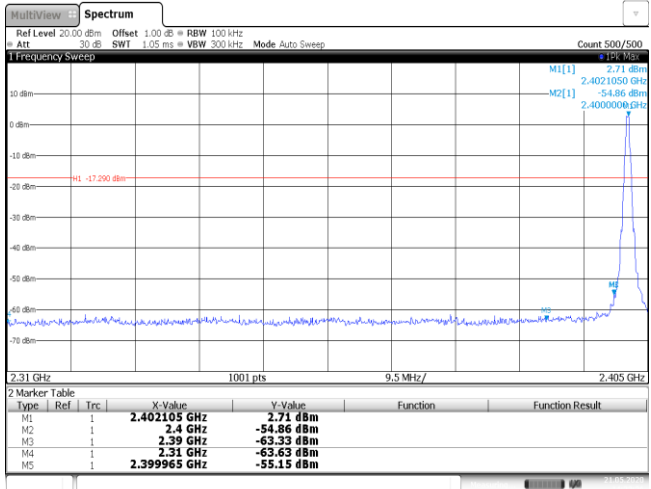
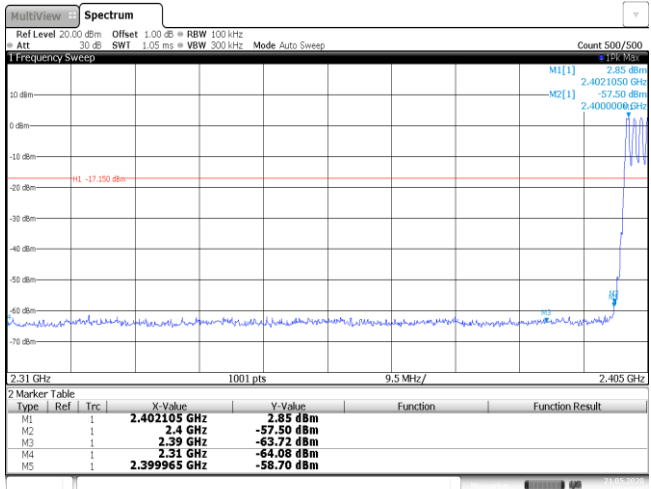
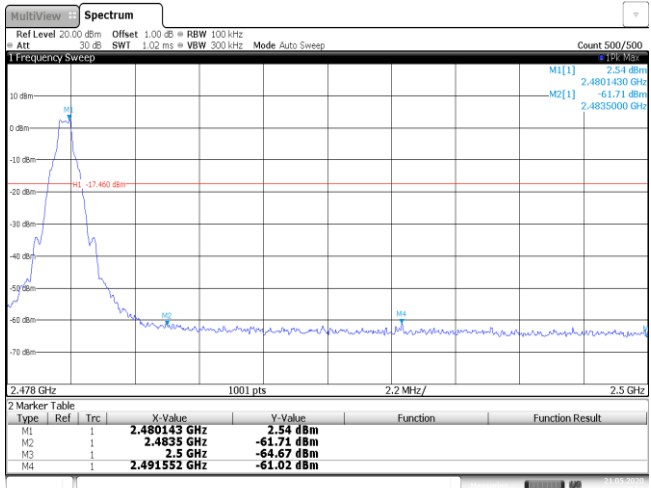
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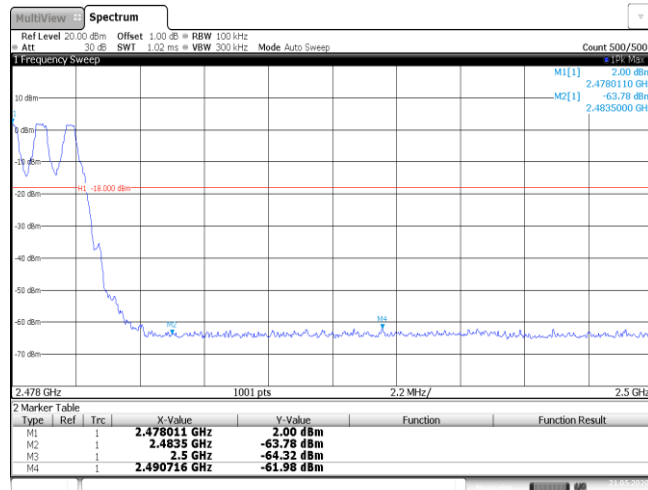
Ton time for single burst

Burst Quantity

**Appendix H: Band edge and Spurious Emissions (conducted)**

Test Item:	Band edge	Modulation type:	GFSK																																										
<p>CH00 No hopping mode</p>	 <table border="1" data-bbox="684 734 1337 840"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-Value</th> <th>Y-Value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.402105 GHz</td> <td>2.71 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-54.86 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-63.33 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-63.63 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.399965 GHz</td> <td>-55.15 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21.MAY.2020 14:23:26</p>			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.402105 GHz	2.71 dBm			M2	1		2.4 GHz	-54.86 dBm			M3	1		2.39 GHz	-63.33 dBm			M4	1		2.31 GHz	-63.63 dBm			M5	1		2.399965 GHz	-55.15 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
M1	1		2.402105 GHz	2.71 dBm																																									
M2	1		2.4 GHz	-54.86 dBm																																									
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M4	1		2.31 GHz	-63.63 dBm																																									
M5	1		2.399965 GHz	-55.15 dBm																																									
<p>CH00 Hopping mode</p>	 <table border="1" data-bbox="684 1281 1337 1386"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-Value</th> <th>Y-Value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.402105 GHz</td> <td>2.85 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-57.50 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-63.72 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-64.08 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.399965 GHz</td> <td>-58.70 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21.MAY.2020 15:06:26</p>			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.402105 GHz	2.85 dBm			M2	1		2.4 GHz	-57.50 dBm			M3	1		2.39 GHz	-63.72 dBm			M4	1		2.31 GHz	-64.08 dBm			M5	1		2.399965 GHz	-58.70 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
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M5	1		2.399965 GHz	-58.70 dBm																																									
<p>CH78 No hopping mode</p>	 <table border="1" data-bbox="684 1841 1337 1933"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-Value</th> <th>Y-Value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.480143 GHz</td> <td>2.54 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4833 GHz</td> <td>-61.71 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.5 GHz</td> <td>-64.67 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.491552 GHz</td> <td>-61.02 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21.MAY.2020 14:30:55</p>			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.480143 GHz	2.54 dBm			M2	1		2.4833 GHz	-61.71 dBm			M3	1		2.5 GHz	-64.67 dBm			M4	1		2.491552 GHz	-61.02 dBm									
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
M1	1		2.480143 GHz	2.54 dBm																																									
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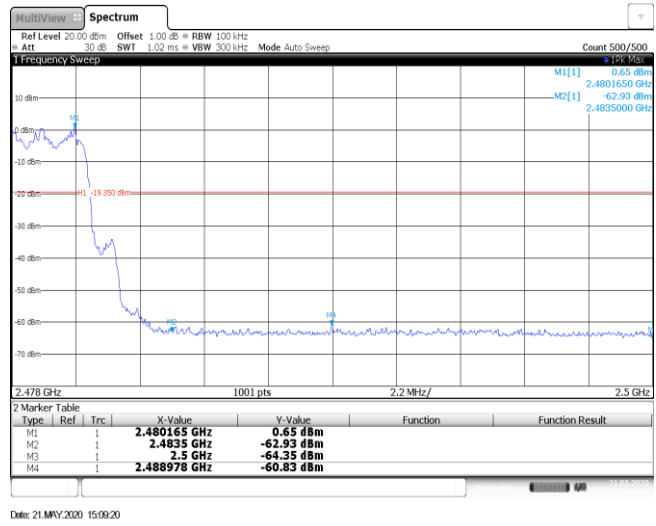
CH78  
Hopping mode

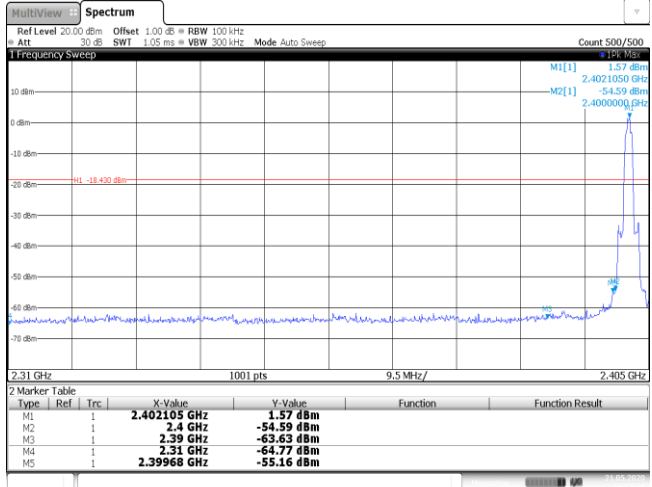
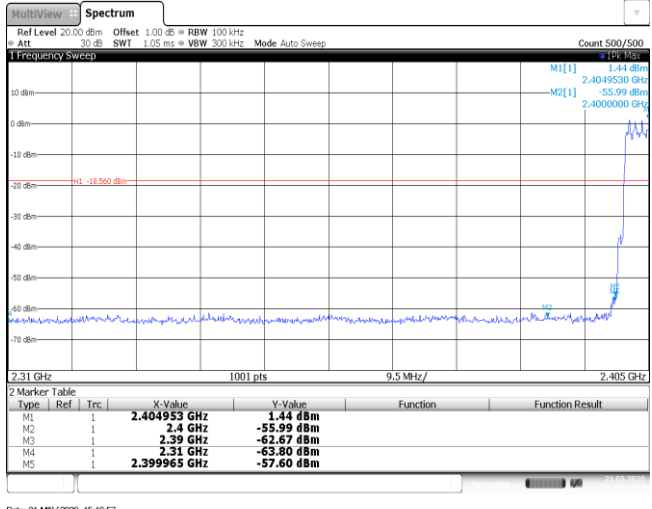
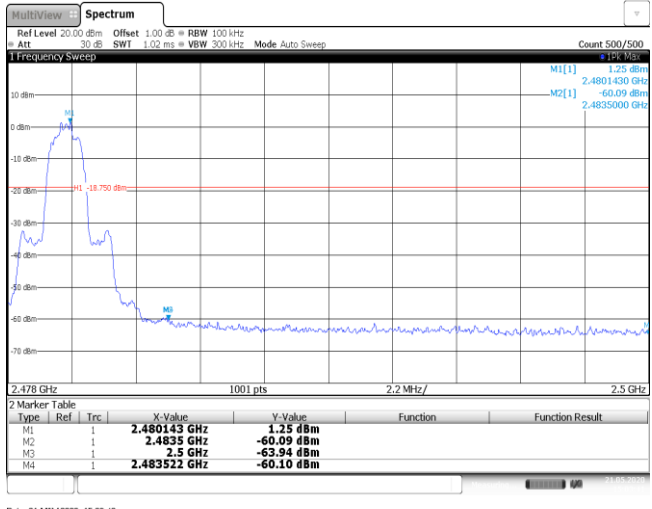


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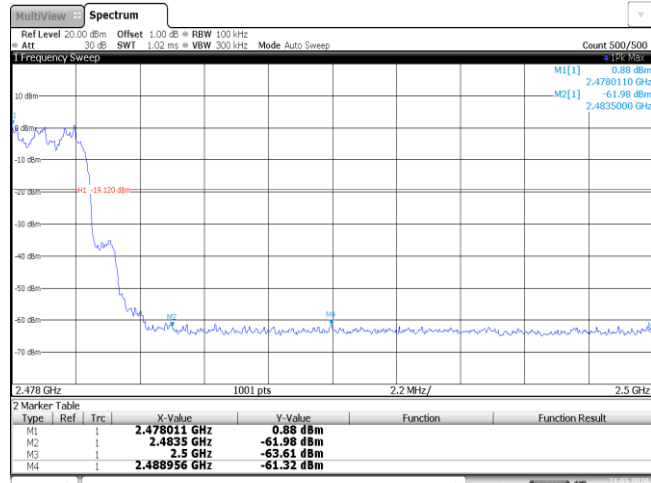
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<p>CH00 Hopping mode</p>			
<p>CH78 No hopping mode</p>			

CH78  
Hopping mode



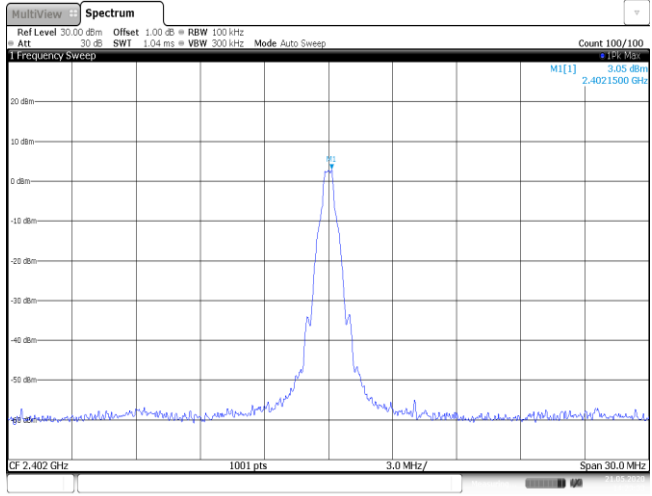
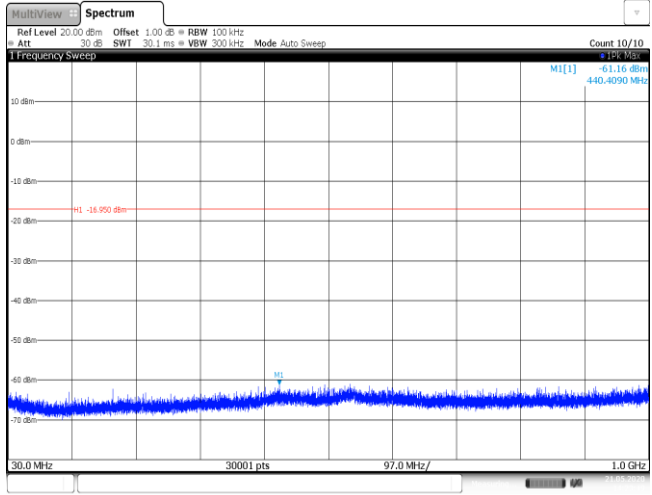
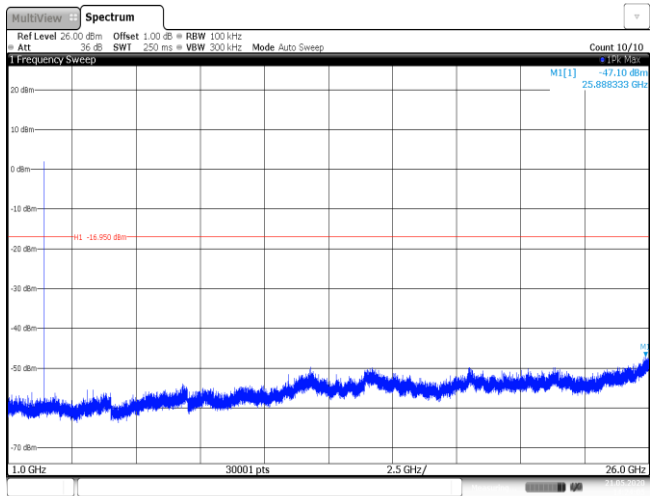
Test Item:	Band edge	Modulation type:	8DPSK																																										
<p>CH00 No hopping mode</p>	 <p>2 Marker Table</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-Value</th> <th>Y-Value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.402105 GHz</td> <td>1.57 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-54.59 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-63.63 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-64.77 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.39968 GHz</td> <td>-55.16 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21.MAY.2020 14:57:50</p>			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.402105 GHz	1.57 dBm			M2	1		2.4 GHz	-54.59 dBm			M3	1		2.39 GHz	-63.63 dBm			M4	1		2.31 GHz	-64.77 dBm			M5	1		2.39968 GHz	-55.16 dBm		
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
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Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
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<p>CH78 No hopping mode</p>	 <p>2 Marker Table</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-Value</th> <th>Y-Value</th> <th>Function</th> <th>Function Result</th> </tr> </thead> <tbody> <tr> <td>M1</td> <td>1</td> <td></td> <td>2.480143 GHz</td> <td>1.25 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4835 GHz</td> <td>-60.09 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.5 GHz</td> <td>-63.94 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.483522 GHz</td> <td>-60.10 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Date: 21.MAY.2020 15:03:42</p>			Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.480143 GHz	1.25 dBm			M2	1		2.4835 GHz	-60.09 dBm			M3	1		2.5 GHz	-63.94 dBm			M4	1		2.483522 GHz	-60.10 dBm									
Type	Ref	Trc	X-Value	Y-Value	Function	Function Result																																							
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CH78  
Hoppig mode



Date: 21.MAY.2020 15:11:25

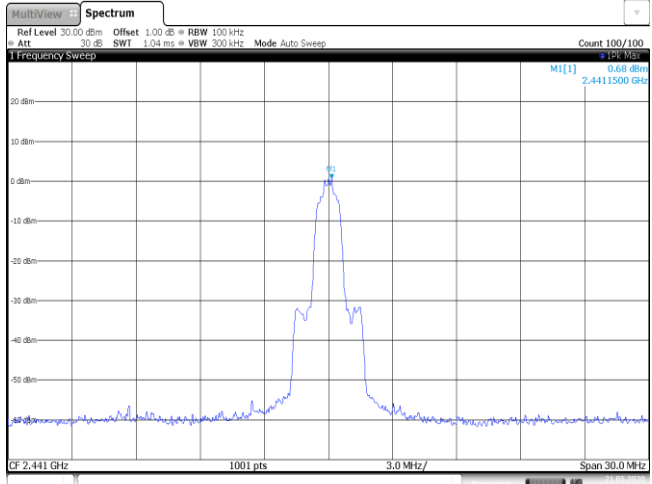
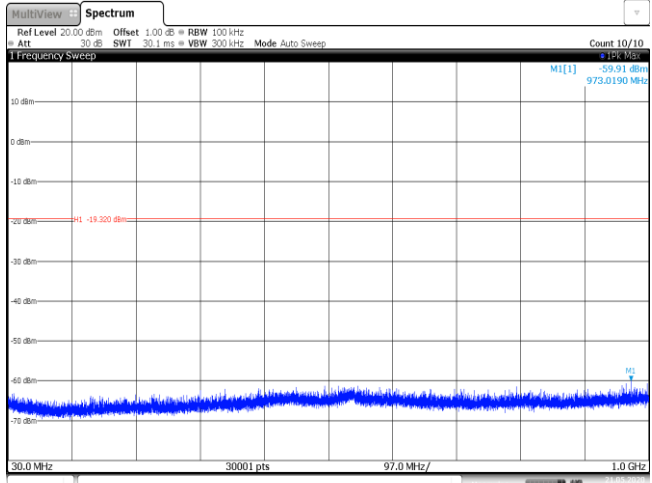
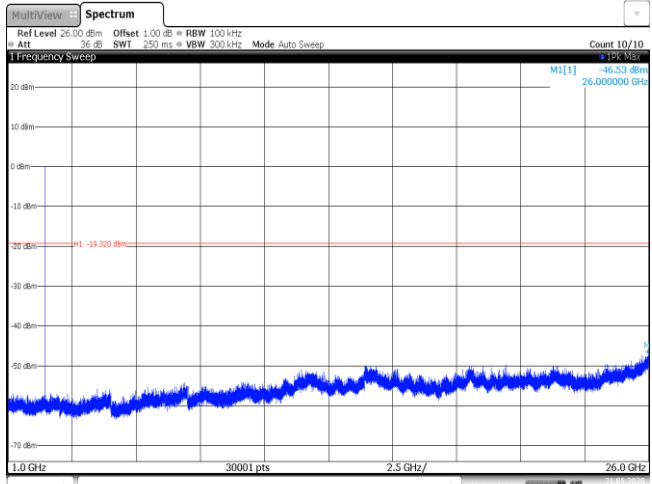


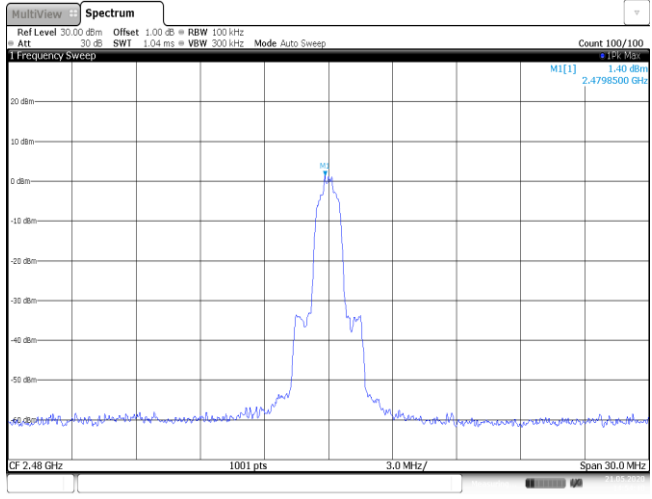
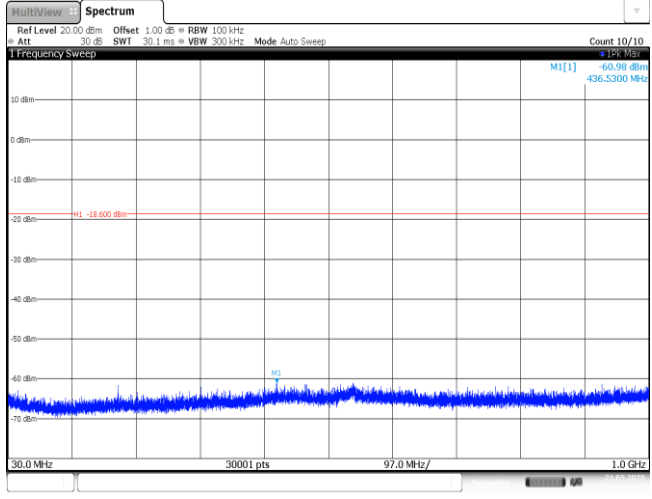
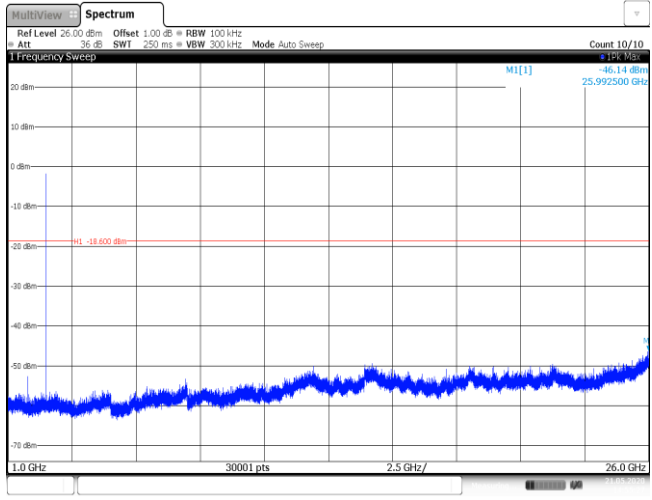
Test Item:	Spurious Emission	Modulation type:	GFSK
<p>CH00 Reference level</p>	 <p>MultiView Spectrum                      Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz                      Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep                      Count 100/100                      Frequency Sweep                      M1[1] 9.05 dBm                      2.4021500 GHz                      CF 2.402 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz                      Date: 21.MAY.2020 14:23:33</p>		
<p>CH00 30MHz~1000MHz</p>	 <p>MultiView Spectrum                      Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz                      Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep                      Count 10/10                      Frequency Sweep                      M1[1] -61.16 dBm                      410.4090 MHz                      M1 -16.950 dBm                      30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz                      Date: 21.MAY.2020 14:23:49</p>		
<p>CH00 1GHz~26GHz</p>	 <p>MultiView Spectrum                      Ref Level 26.00 dBm Offset 1.00 dB RBW 100 kHz                      Att 36 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep                      Count 10/10                      Frequency Sweep                      M1[1] -47.10 dBm                      25.886333 GHz                      M1 -16.950 dBm                      1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz                      Date: 21.MAY.2020 14:24:05</p>		

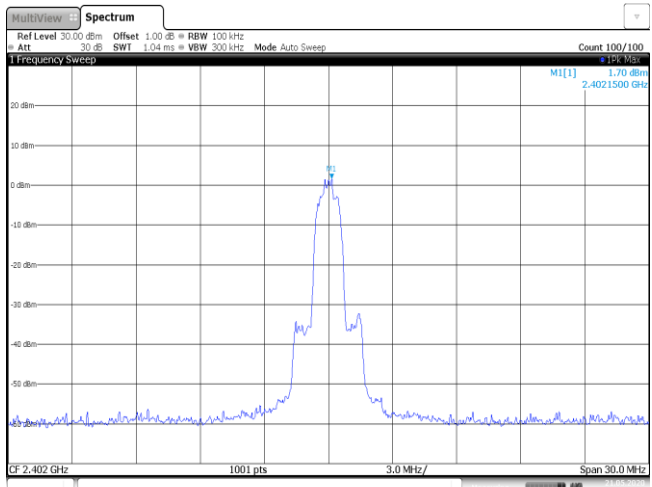
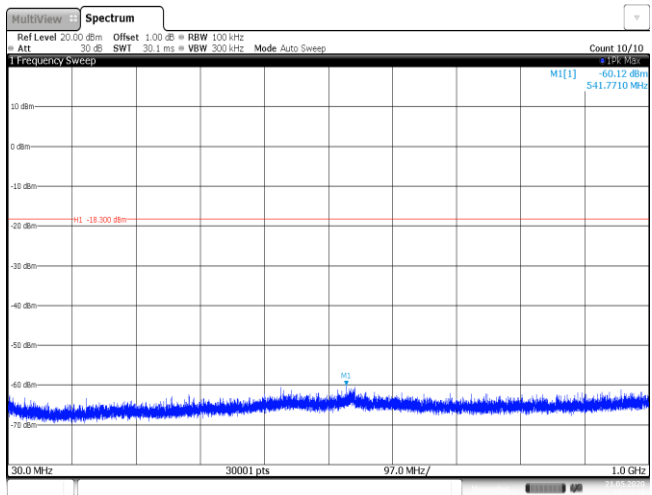
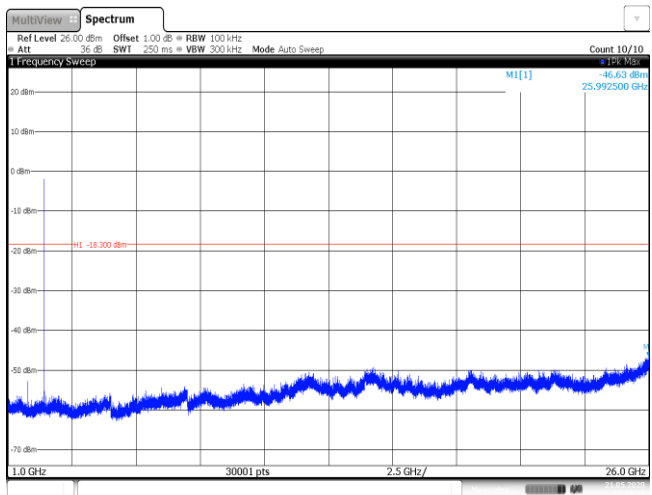
<p>CH39 Reference level</p>	<p>MultiView Spectrum Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 1 Frequency Sweep M1[1] 2.00 dBm 2.4411500 GHz CF 2.441 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 21.MAY.2020 14:29:23</p>
<p>CH39 30MHz~1000MHz</p>	<p>MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1 Frequency Sweep M1[1] -61.19 dBm 593.6320 MHz M1 -18.000 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 21.MAY.2020 14:29:30</p>
<p>CH39 1GHz~26GHz</p>	<p>MultiView Spectrum Ref Level 26.00 dBm Offset 1.00 dB RBW 100 kHz Att 36 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1 Frequency Sweep M1[1] -47.59 dBm 25.842500 GHz M1 -18.000 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 21.MAY.2020 14:29:56</p>

<p>CH78 Reference level</p>	<p>MultiView Spectrum Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 1 Frequency Sweep M1[1] 2.74 dBm 2.4801500 GHz CF 2.48 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 21.MAY.2020 14:40:02</p>
<p>CH78 30MHz~1000MHz</p>	<p>MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1 Frequency Sweep M1[1] -61.07 dBm 553.0550 MHz M1 -17.260 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 21.MAY.2020 14:40:19</p>
<p>CH78 1GHz~26GHz</p>	<p>MultiView Spectrum Ref Level 26.00 dBm Offset 1.00 dB RBW 100 kHz Att 36 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1 Frequency Sweep M1[1] -46.67 dBm 25.942920 GHz M1 -17.260 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 21.MAY.2020 14:41:29</p>

Test Item:	Spurious Emission	Modulation type:	$\pi/4$ DQPSK
<p>CH00 Reference level</p>	<p>Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SW1 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 M1[1] 1.53 dBm 2.4021500 GHz Date: 21.MAY.2020 14:43:34</p>		
<p>CH00 30MHz~1000MHz</p>	<p>Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SW1 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -61.04 dBm 552.2470 MHz Date: 21.MAY.2020 14:43:50</p>		
<p>CH00 1GHz~26GHz</p>	<p>Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 36 dB SW1 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -46.59 dBm 25.996667 GHz Date: 21.MAY.2020 14:44:06</p>		

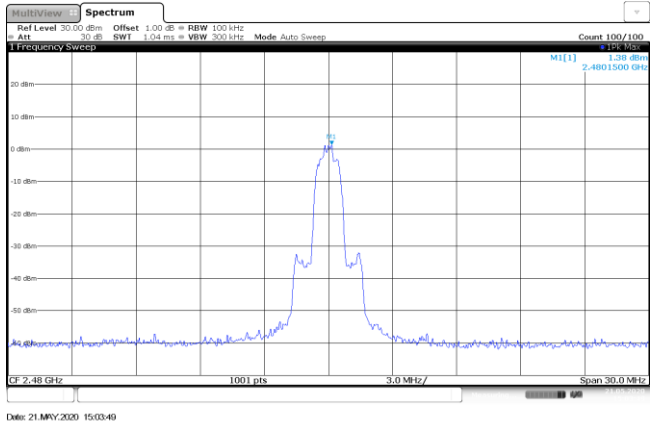
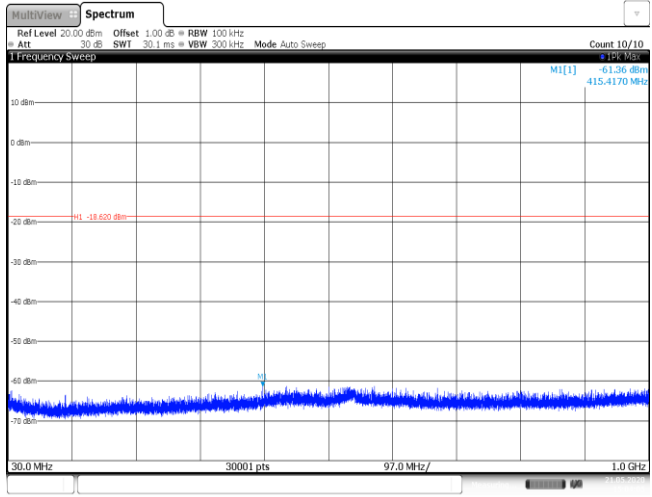
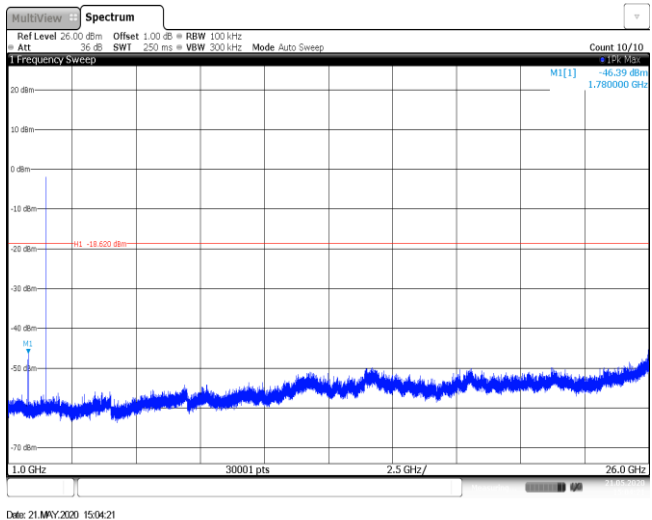
<p>CH39 Reference level</p>	 <p>The plot shows a spectrum with a central peak at 2.441 GHz. The y-axis represents power in dBm, ranging from -60 to 20. The x-axis represents frequency in MHz, with a span of 30.0 MHz. A measurement point M1[1] is marked at 2.4411500 GHz with a value of 0.68 dBm. The plot title is 'Spectrum' and it includes parameters like Ref Level 30.00 dBm, Offset 1.00 dB, RBW 100 kHz, and Date: 21.MAY.2020 14:51:44.</p>
<p>CH39 30MHz~1000MHz</p>	 <p>The plot shows a wideband spectrum from 30.0 MHz to 1.0 GHz. The y-axis ranges from -70 to 10 dBm. A red horizontal line indicates a noise floor at -19.200 dBm. A measurement point M1[1] is marked at 973.0190 MHz with a value of -59.91 dBm. The plot title is 'Spectrum' and it includes parameters like Ref Level 20.00 dBm, Offset 1.00 dB, RBW 100 kHz, and Date: 21.MAY.2020 14:51:59.</p>
<p>CH39 1GHz~26GHz</p>	 <p>The plot shows a wideband spectrum from 1.0 GHz to 26.0 GHz. The y-axis ranges from -70 to 20 dBm. A red horizontal line indicates a noise floor at -19.200 dBm. A measurement point M1[1] is marked at 26.000000 GHz with a value of -46.53 dBm. The plot title is 'Spectrum' and it includes parameters like Ref Level 26.00 dBm, Offset 1.00 dB, RBW 100 kHz, and Date: 21.MAY.2020 14:52:16.</p>

<p>CH78 Reference level</p>	 <p>The plot shows a spectrum with a prominent peak at 2.4798500 GHz. The y-axis represents power in dBm, ranging from -60 to 20. The x-axis represents frequency in GHz, centered around 2.48 GHz. The peak height is approximately 10 dBm. The plot includes technical parameters: Ref Level 30.00 dBm, Offset 1.00 dB, RBW 100 kHz, Att 30 dB, SWI 1.04 ms, VBW 300 kHz, Mode Auto Sweep, Count 100/100, and MI[1] 1.40 dBm.</p>
<p>CH78 30MHz~1000MHz</p>	 <p>The plot shows a wide frequency range from 30.0 MHz to 1.0 GHz. The y-axis ranges from -70 to 10 dBm. The signal is mostly a flat noise floor around -60 dBm. A red horizontal line is drawn at -18.600 dBm. The plot includes technical parameters: Ref Level 20.00 dBm, Offset 1.00 dB, RBW 100 kHz, Att 30 dB, SWI 30.1 ms, VBW 300 kHz, Mode Auto Sweep, Count 10/10, and MI[1] -60.98 dBm.</p>
<p>CH78 1GHz~26GHz</p>	 <p>The plot shows a wide frequency range from 1.0 GHz to 26.0 GHz. The y-axis ranges from -70 to 20 dBm. The signal is mostly a flat noise floor around -60 dBm. A red horizontal line is drawn at -18.600 dBm. The plot includes technical parameters: Ref Level 26.00 dBm, Offset 1.00 dB, RBW 100 kHz, Att 36 dB, SWI 250 ms, VBW 300 kHz, Mode Auto Sweep, Count 10/10, and MI[1] -46.14 dBm.</p>

Test Item:	Spurious Emission	Modulation type:	8DPSK
<p>CH00 Reference level</p>	 <p>Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 M1[1] 1.70 dBm 2.4021500 GHz Date: 21.MAY.2020 14:57:57</p>		
<p>CH00 30MHz~1000MHz</p>	 <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -60.12 dBm 541.7710 MHz M1 -18.00 dBm Date: 21.MAY.2020 14:58:13</p>		
<p>CH00 1GHz~26GHz</p>	 <p>Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 36 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -46.63 dBm 25.992500 GHz M1 -18.00 dBm Date: 21.MAY.2020 14:58:45</p>		

<p>CH39 Reference level</p>	<p>MultiView Spectrum Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 1 Frequency Sweep MI[1] 0.87 dBm 2.4411500 GHz CF 2.441 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 21.MAY.2020 15:01:50</p>
<p>CH39 30MHz~1000MHz</p>	<p>MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1 Frequency Sweep MI[1] -59.72 dBm 536.0160 MHz M1 -19.130 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 21.MAY.2020 15:02:06</p>
<p>CH39 1GHz~26GHz</p>	<p>MultiView Spectrum Ref Level 26.00 dBm Offset 1.00 dB RBW 100 kHz Att 36 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1 Frequency Sweep MI[1] -47.27 dBm 25.951667 GHz M1 -19.130 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 21.MAY.2020 15:02:24</p>



<p>CH78 Reference level</p>	 <p>The plot shows a spectrum with a prominent peak at 2.48 GHz. The y-axis represents power in dBm, ranging from -60 to 20. The x-axis represents frequency in MHz, with a span of 30.0 MHz. The peak is labeled with a count of 1007100.</p>
<p>CH78 30MHz~1000MHz</p>	 <p>The plot shows a wide frequency range from 30.0 MHz to 1.0 GHz. The power level is consistently low, around -60 dBm, indicating a noise floor. A red horizontal line is drawn at -18.620 dBm. The plot includes a peak marker at 415.4170 MHz with a count of 10/10.</p>
<p>CH78 1GHz~26GHz</p>	 <p>The plot shows a wide frequency range from 1.0 GHz to 26.0 GHz. The power level is consistently low, around -60 dBm, indicating a noise floor. A red horizontal line is drawn at -18.620 dBm. The plot includes a peak marker at 1.780000 GHz with a count of 10/10.</p>

-----End of Report-----