

# Appendix G: Test Results of Band 26 Lower Band for eMTC operation

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## Appendix G.1: RF Power Output and Effective (Isotropic) Radiated Power Output Data for M1

### Test Result

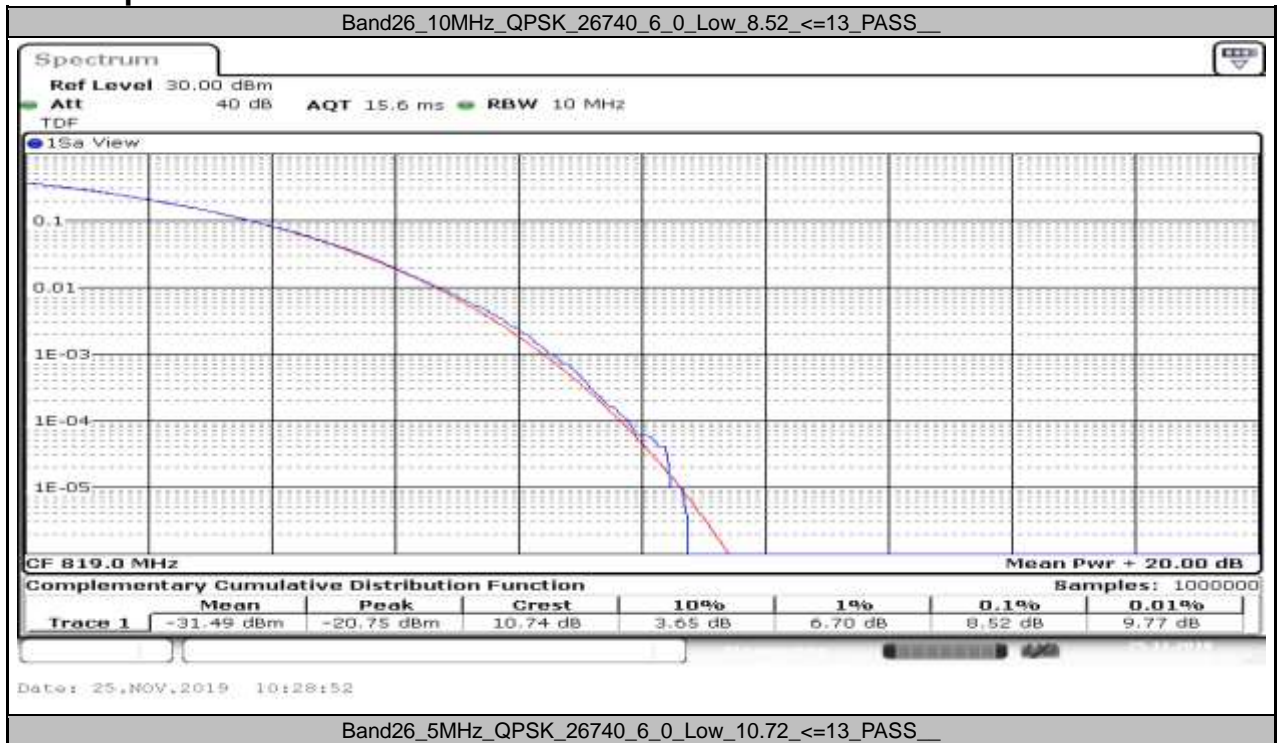
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result (dBm)	Power (watts)	Limit (watts)	Verdict
Band26	1.4MHz	QPSK	26697	1	0	Low	21	0.126	100	PASS
Band26	1.4MHz	QPSK	26697	6	0	Low	19.13	0.082	100	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	21.6	0.145	100	PASS
Band26	1.4MHz	QPSK	26740	6	0	Low	19.2	0.083	100	PASS
Band26	1.4MHz	QPSK	26783	6	0	Low	19.17	0.083	100	PASS
Band26	1.4MHz	QPSK	26783	1	5	Low	21.38	0.137	100	PASS
Band26	1.4MHz	16QAM	26697	6	0	Low	19.13	0.082	100	PASS
Band26	1.4MHz	16QAM	26697	1	0	Low	20.2	0.105	100	PASS
Band26	1.4MHz	16QAM	26740	6	0	Low	19.2	0.083	100	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	20.26	0.106	100	PASS
Band26	1.4MHz	16QAM	26783	6	0	Low	19.08	0.081	100	PASS
Band26	1.4MHz	16QAM	26783	1	5	Low	20.27	0.106	100	PASS
Band26	3MHz	QPSK	26705	6	0	Low	19	0.079	100	PASS
Band26	3MHz	QPSK	26705	1	0	Low	21.21	0.132	100	PASS
Band26	3MHz	QPSK	26740	1	0	Low	21.29	0.135	100	PASS
Band26	3MHz	QPSK	26740	6	0	Low	19.18	0.083	100	PASS
Band26	3MHz	QPSK	26775	1	5	High	21.22	0.132	100	PASS
Band26	3MHz	QPSK	26775	6	0	High	19.18	0.083	100	PASS
Band26	3MHz	16QAM	26705	1	0	Low	20.3	0.107	100	PASS
Band26	3MHz	16QAM	26705	6	0	Low	18.99	0.079	100	PASS
Band26	3MHz	16QAM	26740	1	0	Low	20.46	0.111	100	PASS
Band26	3MHz	16QAM	26740	6	0	Low	19.19	0.083	100	PASS
Band26	3MHz	16QAM	26775	6	0	High	19.09	0.081	100	PASS
Band26	3MHz	16QAM	26775	1	5	High	20.26	0.106	100	PASS
Band26	5MHz	QPSK	26715	1	0	Low	21.2	0.132	100	PASS
Band26	5MHz	QPSK	26715	6	0	Low	20.02	0.100	100	PASS
Band26	5MHz	QPSK	26740	1	0	Low	21.22	0.132	100	PASS
Band26	5MHz	QPSK	26740	6	0	Low	20.04	0.101	100	PASS
Band26	5MHz	QPSK	26765	1	5	High	21.27	0.134	100	PASS
Band26	5MHz	QPSK	26765	3	3	High	21.05	0.127	100	PASS
Band26	5MHz	16QAM	26715	6	0	Low	20.02	0.100	100	PASS
Band26	5MHz	16QAM	26715	1	0	Low	20.53	0.113	100	PASS
Band26	5MHz	16QAM	26740	1	0	Low	20.54	0.113	100	PASS
Band26	5MHz	16QAM	26740	6	0	Low	20.03	0.101	100	PASS
Band26	5MHz	16QAM	26765	3	3	High	20.72	0.118	100	PASS
Band26	5MHz	16QAM	26765	1	5	High	20.59	0.115	100	PASS
Band26	10MHz	QPSK	26740	1	0	Low	21.26	0.134	100	PASS
Band26	10MHz	QPSK	26740	5	0	Low	21.12	0.129	100	PASS
Band26	10MHz	QPSK	26740	1	5	High	21.23	0.133	100	PASS
Band26	10MHz	QPSK	26740	5	1	High	21.3	0.135	100	PASS
Band26	10MHz	16QAM	26740	5	0	Low	20.95	0.124	100	PASS
Band26	10MHz	16QAM	26740	1	5	High	20.57	0.114	100	PASS
Band26	10MHz	16QAM	26740	5	1	High	21.02	0.126	100	PASS
Band26	10MHz	16QAM	26740	1	0	Low	20.58	0.114	100	PASS

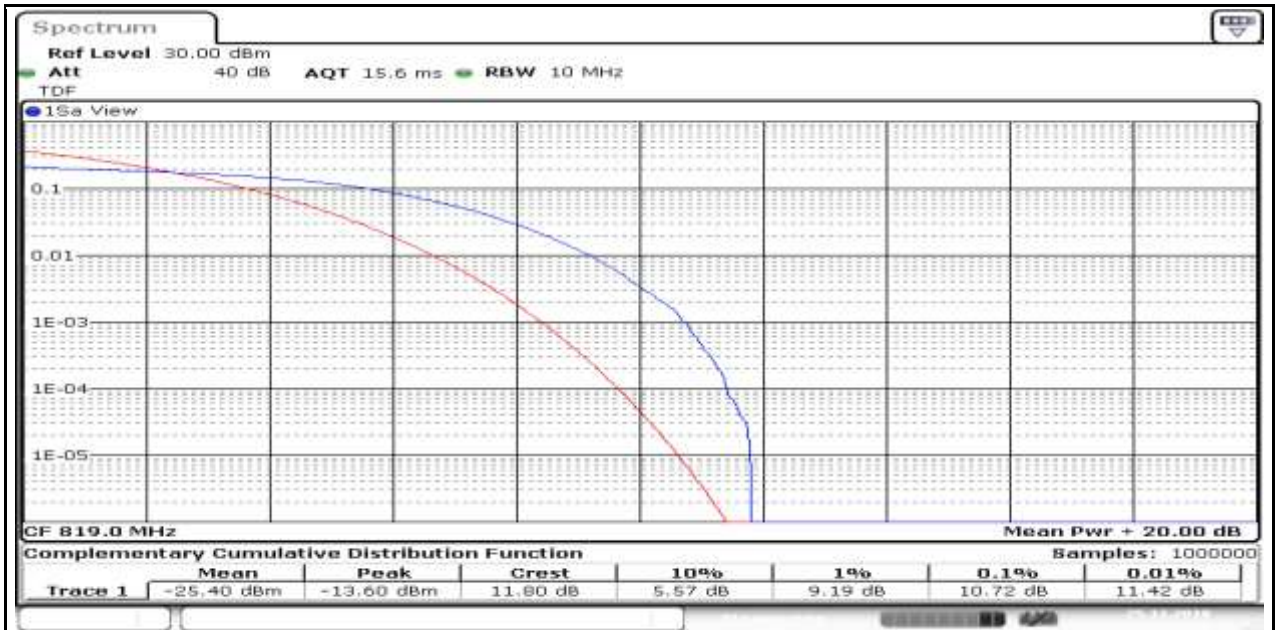
## Appendix G.2: Peak-to-Average Ratio (CCDF) for M1

### Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band26	10MHz	QPSK	26740	6	0	Low	8.52	<=13	PASS
Band26	5MHz	QPSK	26740	6	0	Low	10.72	<=13	PASS
Band26	3MHz	QPSK	26740	6	0	Low	8.23	<=13	PASS
Band26	1.4MHz	QPSK	26740	6	0	Low	5.97	<=13	PASS
Band26	10MHz	16QAM	26740	6	0	Low	9.22	<=13	PASS
Band26	5MHz	16QAM	26740	6	0	Low	9.36	<=13	PASS
Band26	3MHz	16QAM	26740	6	0	Low	9.30	<=13	PASS
Band26	1.4MHz	16QAM	26740	6	0	Low	10.67	<=13	PASS

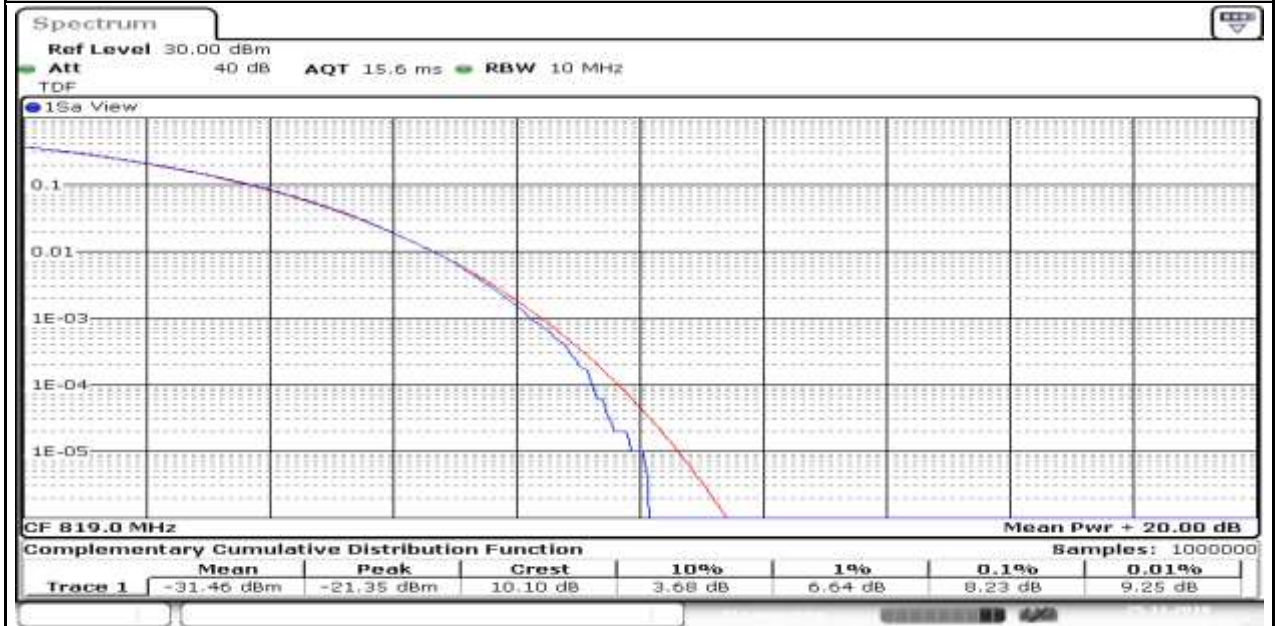
### Test Graphs





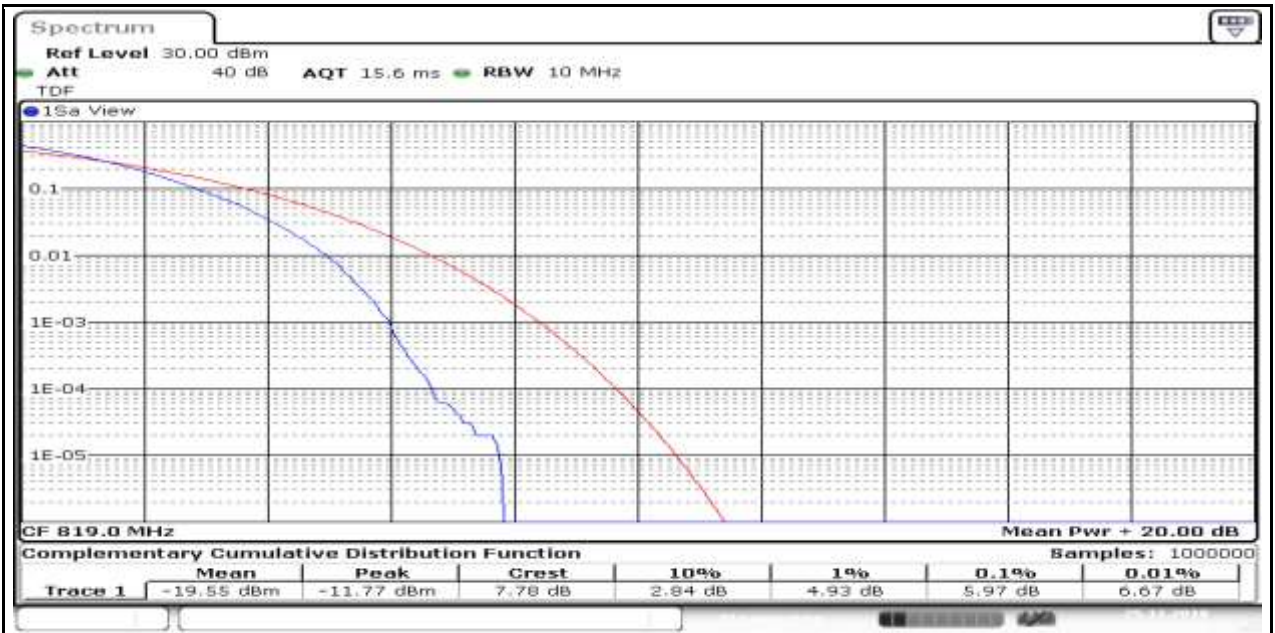
Date: 25.NOV.2019 10:26:42

Band26\_3MHz\_QPSK\_26740\_6\_0\_Low\_8.23\_<=13\_PASS\_



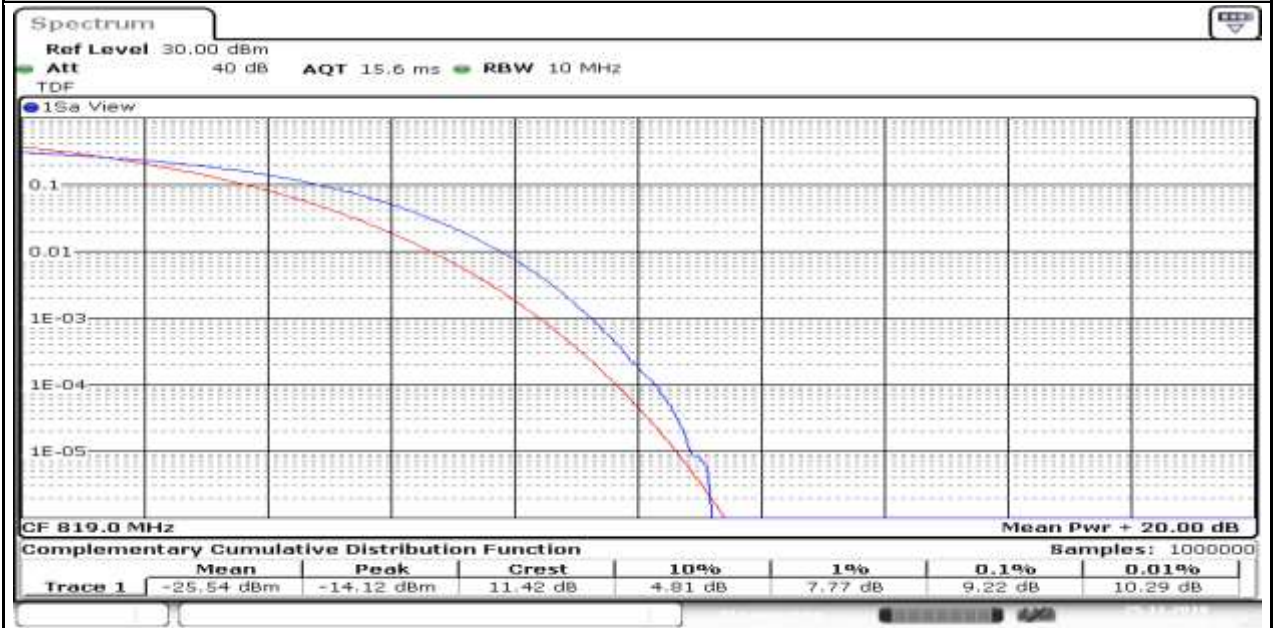
Date: 25.NOV.2019 10:24:39

Band26\_1.4MHz\_QPSK\_26740\_6\_0\_Low\_5.97\_<=13\_PASS\_



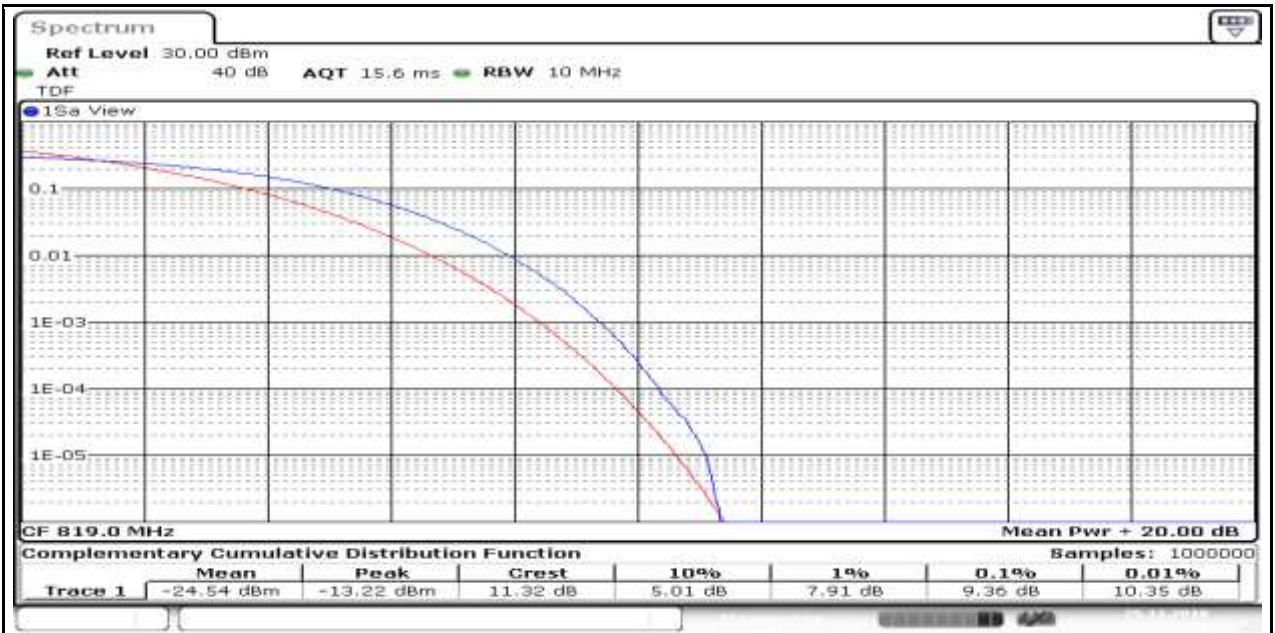
Date: 25.NOV.2019 10:23:39

Band26\_10MHz\_16QAM\_26740\_6\_0\_Low\_9.22\_<=13\_PASS\_



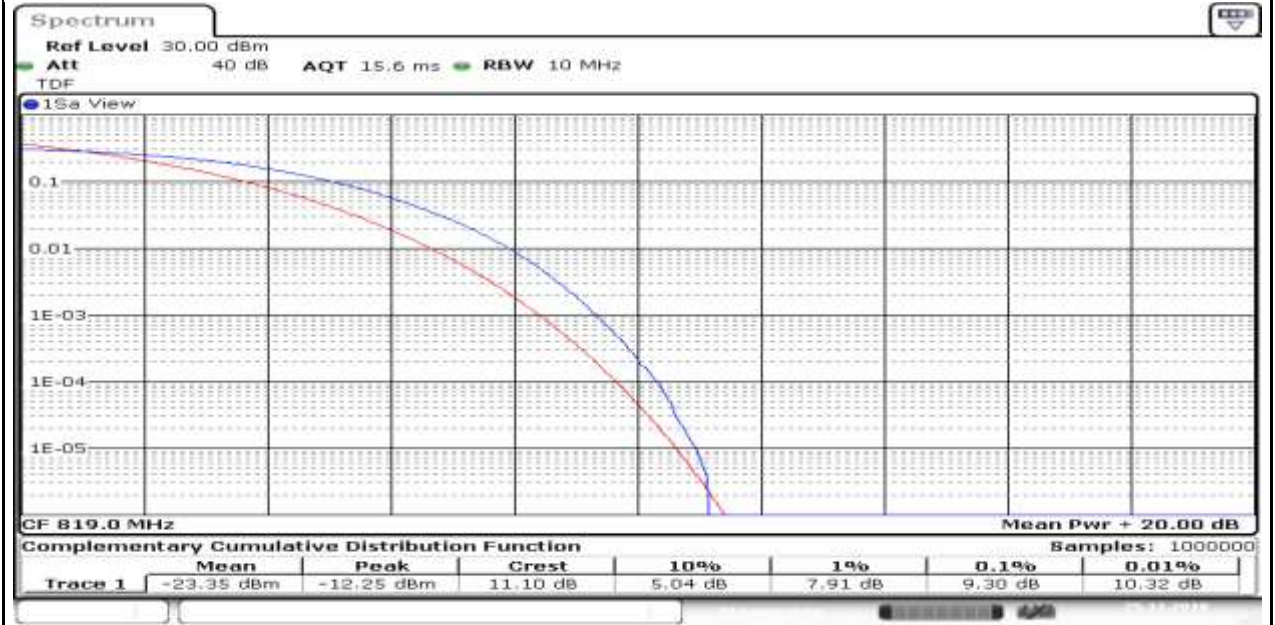
Date: 25.NOV.2019 10:29:09

Band26\_5MHz\_16QAM\_26740\_6\_0\_Low\_9.36\_<=13\_PASS\_



Date: 25.NOV.2019 10:26:59

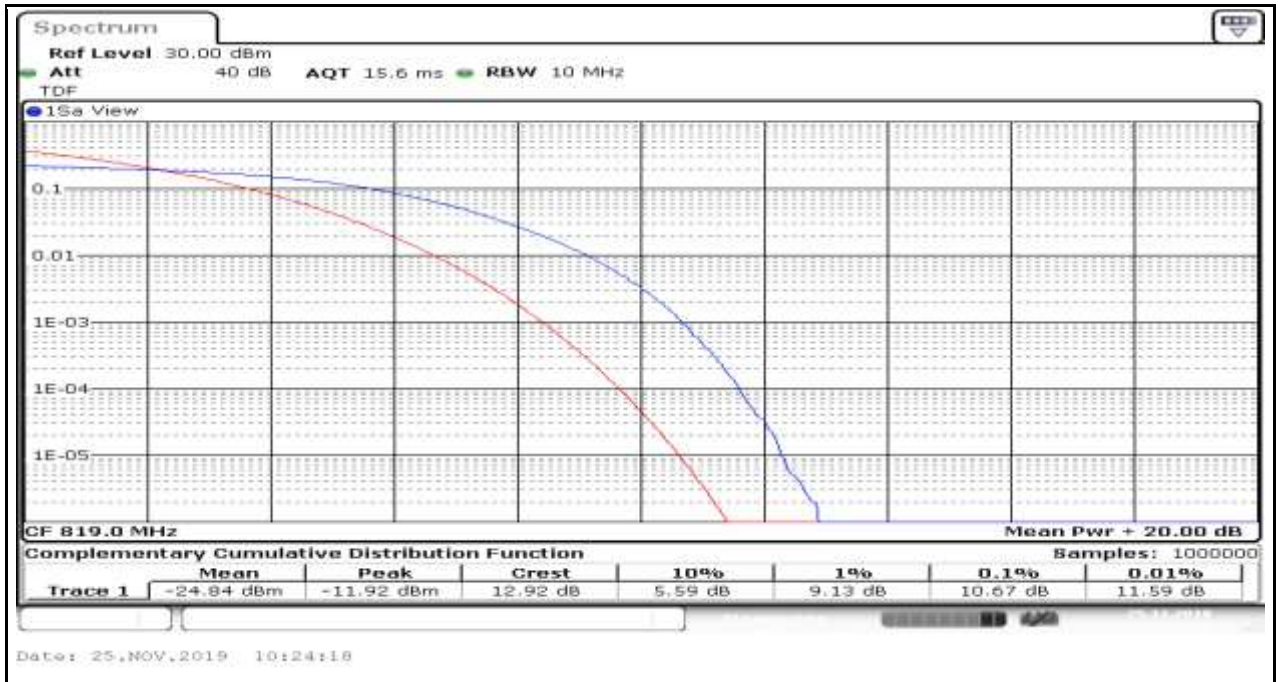
Band26\_3MHz\_16QAM\_26740\_6\_0\_Low\_9.30\_<=13\_PASS\_



Date: 25.NOV.2019 10:24:55

Band26\_1.4MHz\_16QAM\_26740\_6\_0\_Low\_10.67\_<=13\_PASS\_

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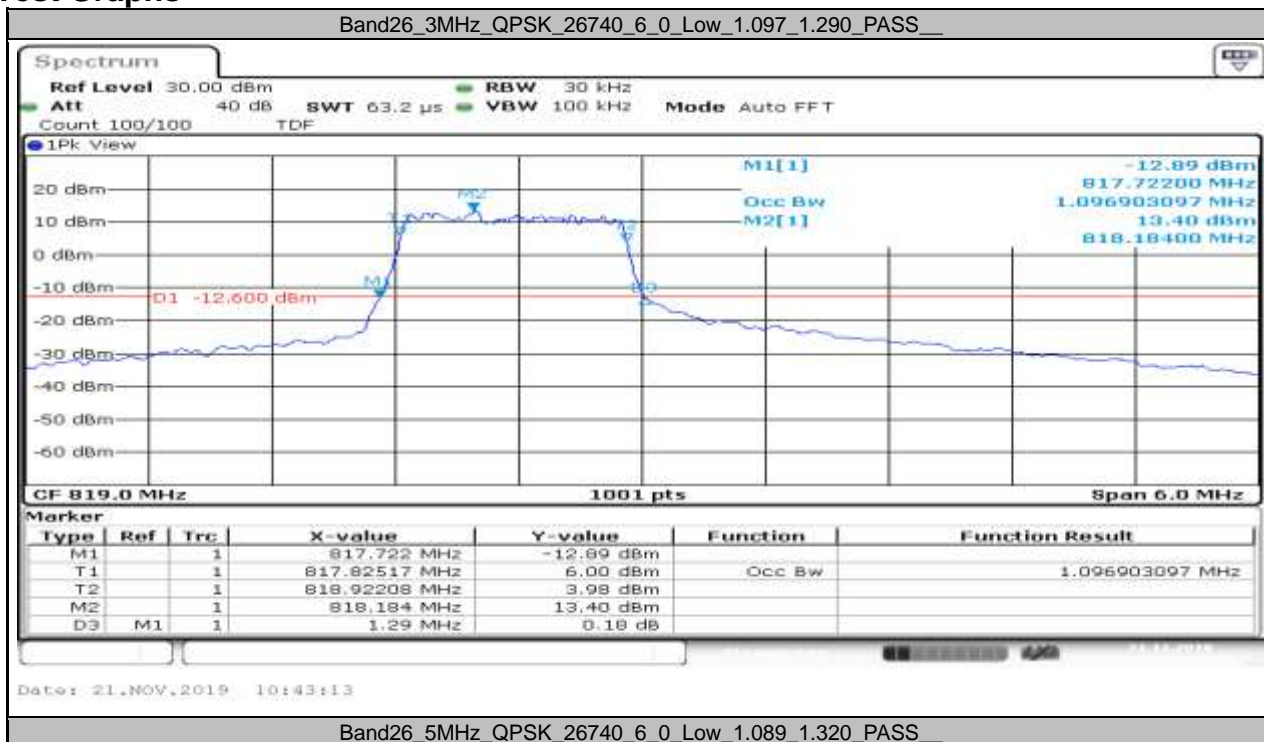


### Appendix G.3: 26dB Bandwidth and Occupied Bandwidth for M1

#### Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band26	3MHz	QPSK	26740	6	0	Low	1.097	1.290	PASS
Band26	5MHz	QPSK	26740	6	0	Low	1.089	1.320	PASS
Band26	1.4MHz	QPSK	26740	6	0	Low	1.097	1.281	PASS
Band26	10MHz	QPSK	26740	6	0	Low	1.099	1.320	PASS
Band26	1.4MHz	16QAM	26740	6	0	Low	1.1	1.323	PASS
Band26	3MHz	16QAM	26740	6	0	Low	1.103	1.332	PASS
Band26	5MHz	16QAM	26740	6	0	Low	1.099	1.330	PASS
Band26	10MHz	16QAM	26740	6	0	Low	1.099	1.320	PASS

#### Test Graphs

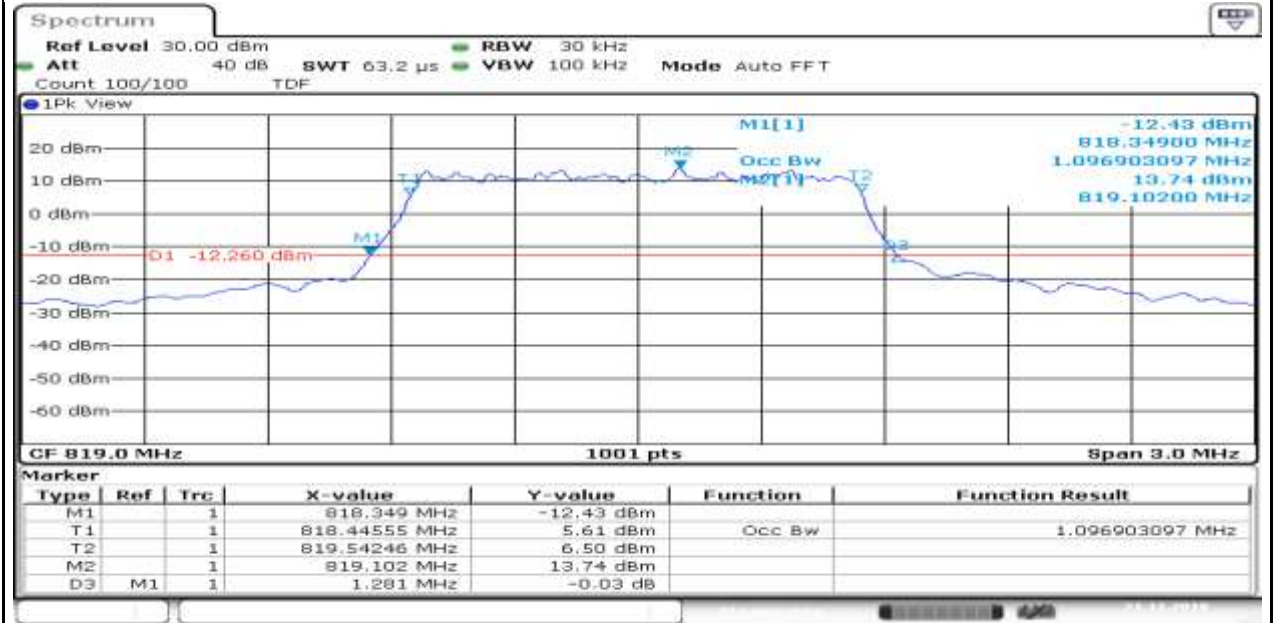






Date: 21.NOV.2019 10:46:00

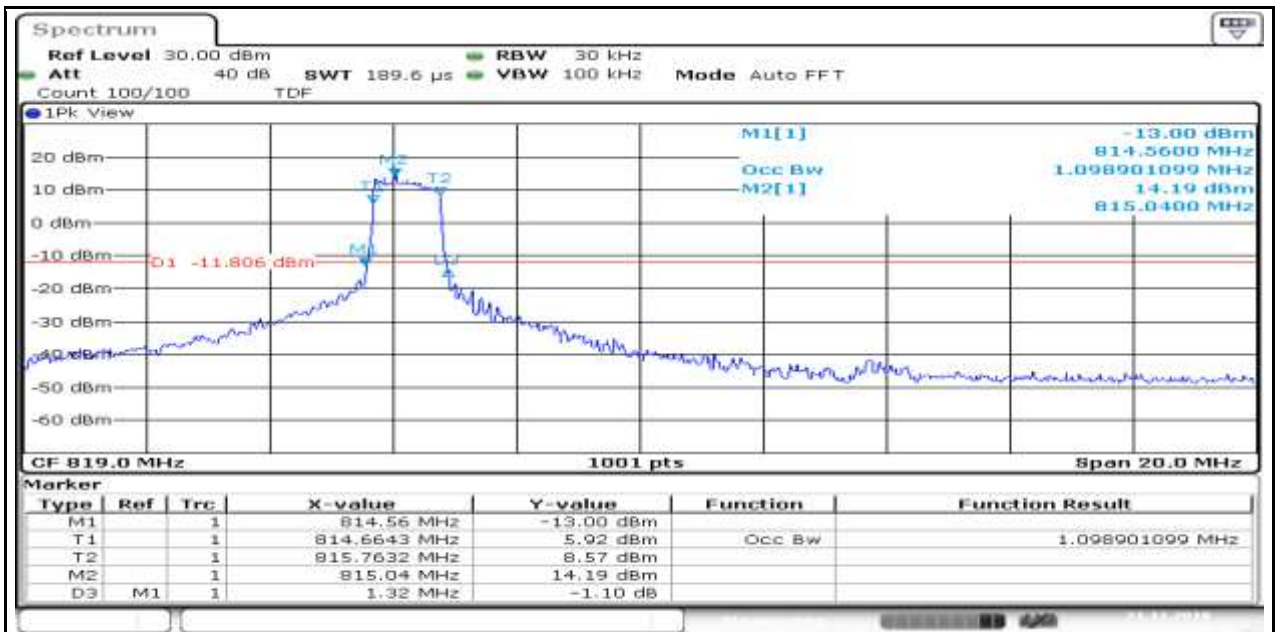
Band26\_1.4MHz\_QPSK\_26740\_6\_0\_Low\_1.097\_1.281\_PASS\_



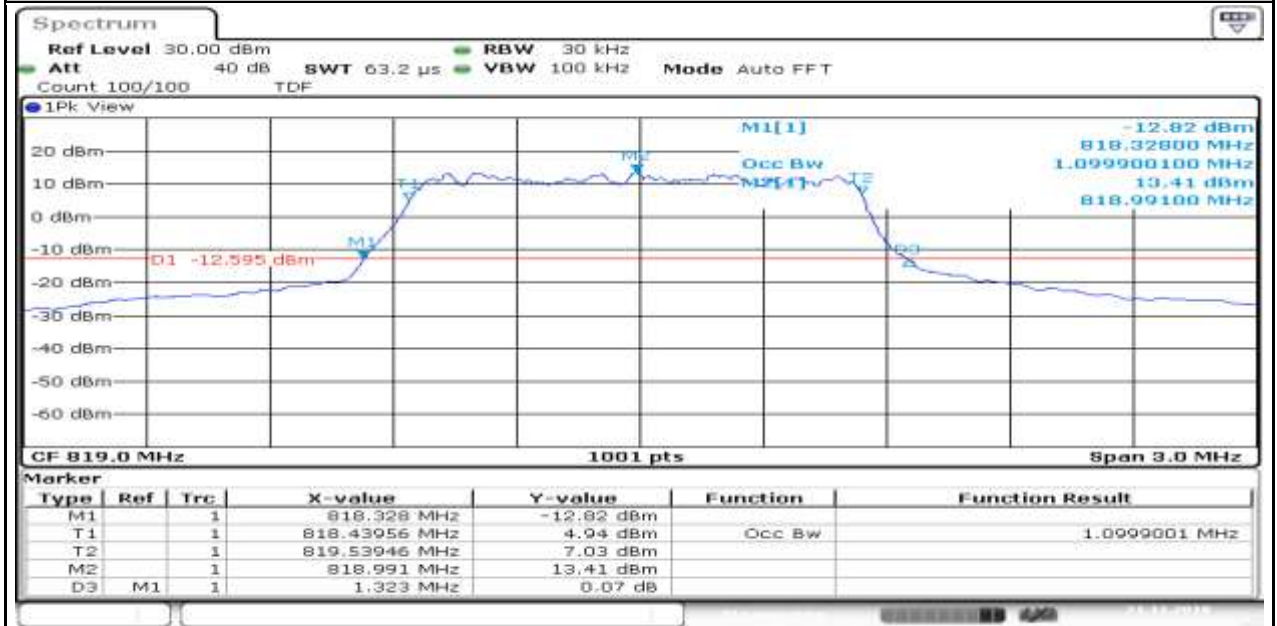
Date: 21.NOV.2019 10:37:14

Band26\_10MHz\_QPSK\_26740\_6\_0\_Low\_1.099\_1.320\_PASS\_

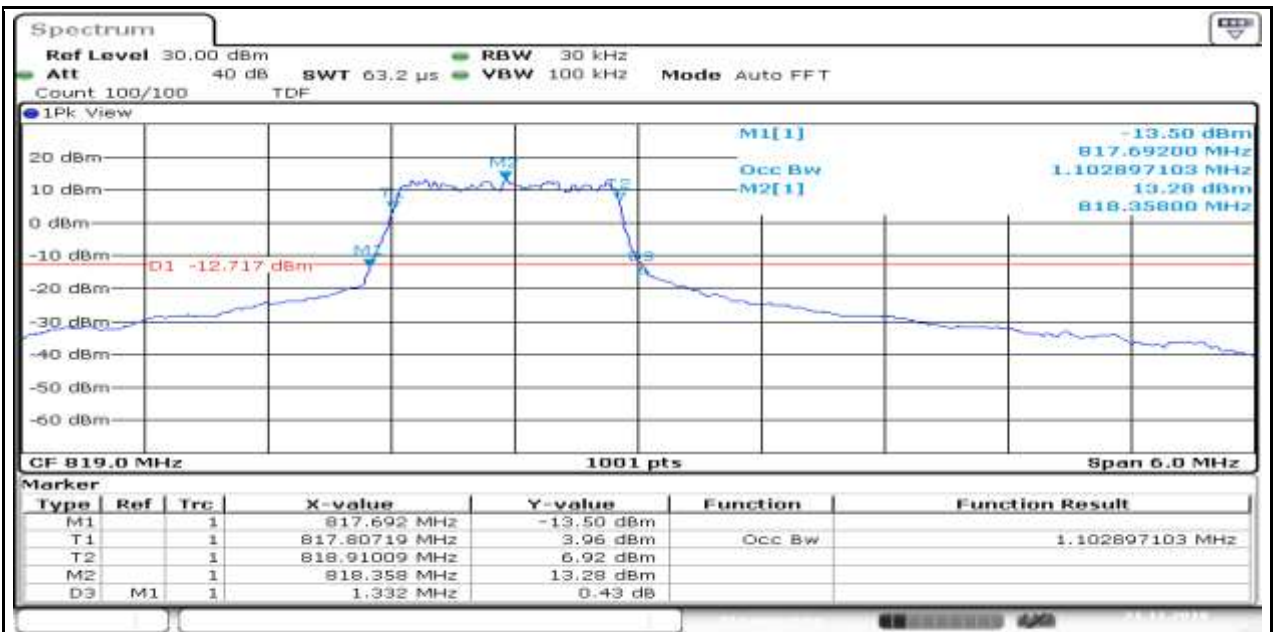
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Band26\_1.4MHz\_16QAM\_26740\_6\_0\_Low\_1.1\_1.323\_PASS\_



Band26\_3MHz\_16QAM\_26740\_6\_0\_Low\_1.103\_1.332\_PASS\_



Date: 21.NOV.2019 10:43:32

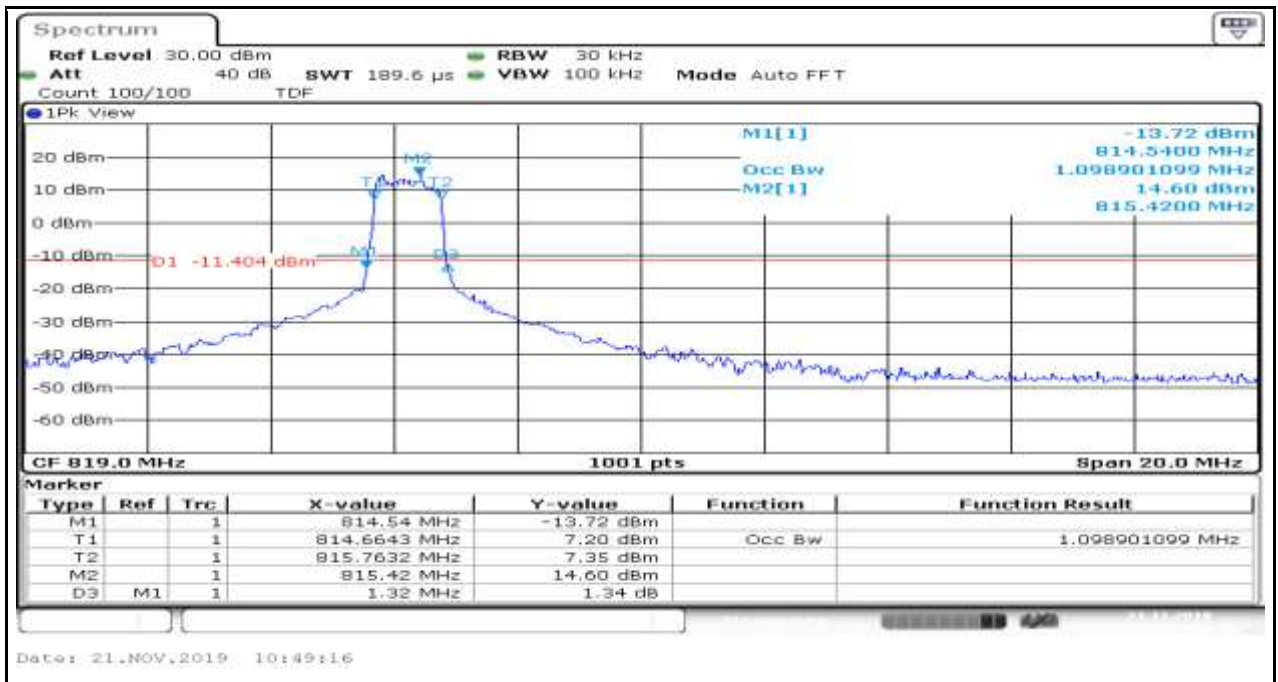
Band26\_5MHz\_16QAM\_26740\_6\_0\_Low\_1.099\_1.330\_PASS\_



Date: 21.NOV.2019 10:46:18

Band26\_10MHz\_16QAM\_26740\_6\_0\_Low\_1.099\_1.320\_PASS\_

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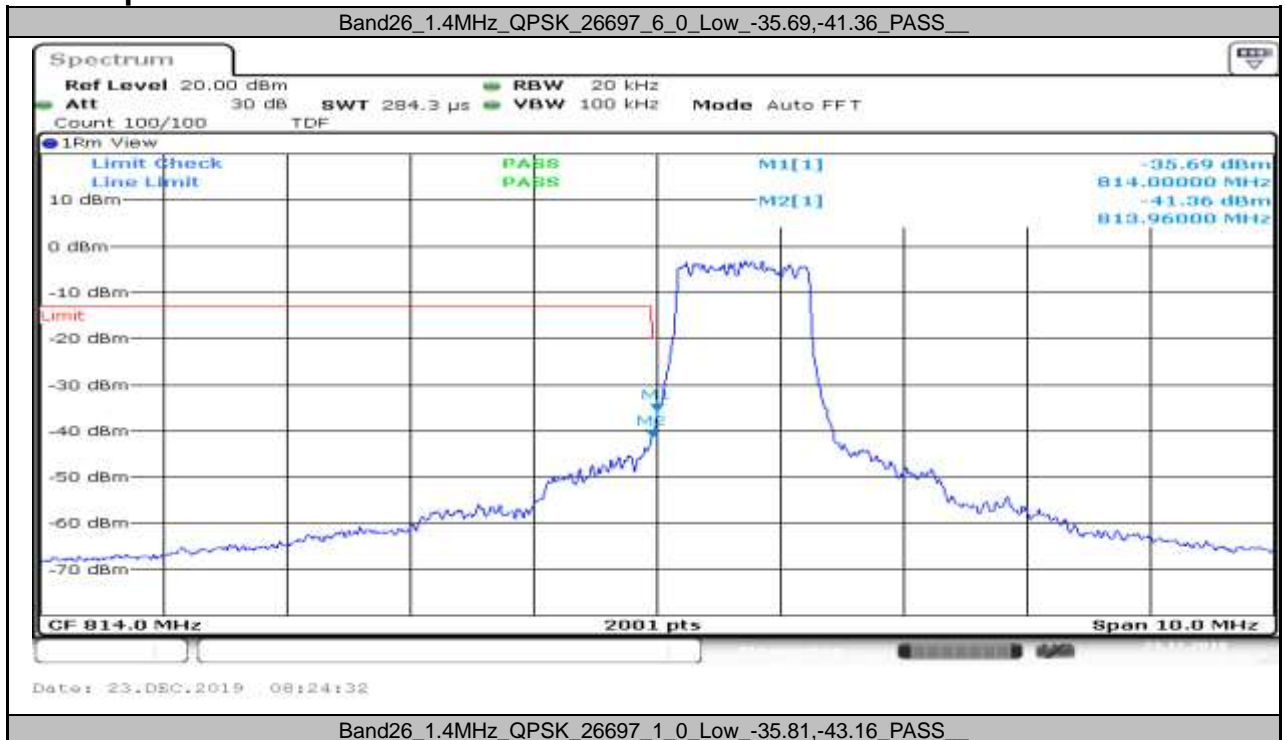


## Appendix G.4: Band Edge for M1

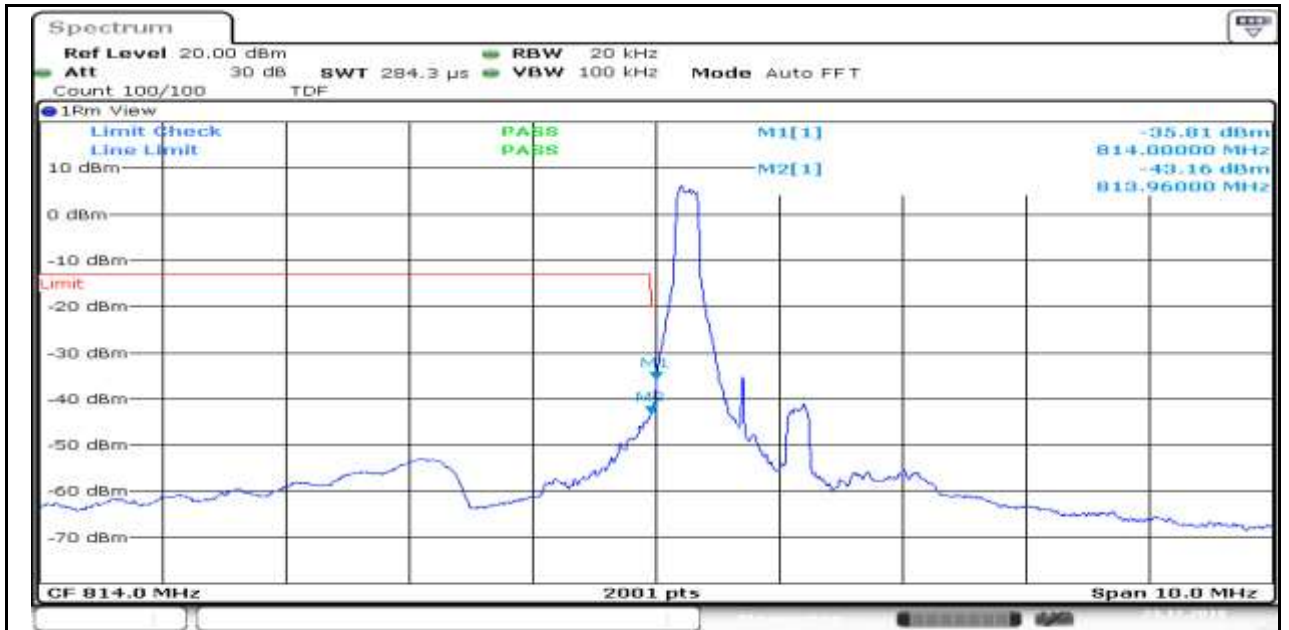
### Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Result (dBm)	Verdict
Band26	1.4MHz	QPSK	26697	6	0	Low	-35.69,-41.36	PASS
Band26	1.4MHz	QPSK	26697	1	0	Low	-35.81,-43.16	PASS
Band26	1.4MHz	QPSK	26783	6	0	Low	-39.18,-41.41	PASS
Band26	1.4MHz	QPSK	26783	1	5	Low	-38.89,-39.51	PASS
Band26	1.4MHz	16QAM	26697	6	0	Low	-38.40,-41.41	PASS
Band26	1.4MHz	16QAM	26697	1	0	Low	-33.08,-38.27	PASS
Band26	1.4MHz	16QAM	26783	6	0	Low	-37.87,-39.85	PASS
Band26	1.4MHz	16QAM	26783	1	5	Low	-43.21,-44.28	PASS

### Test Graphs

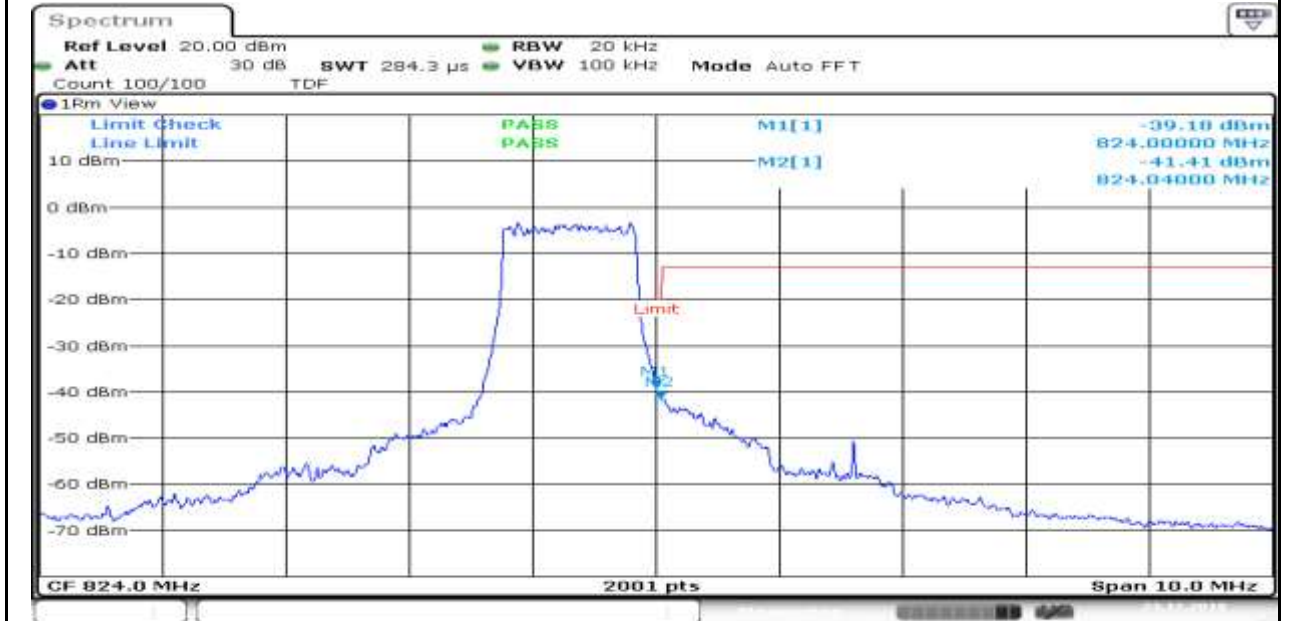


Band26\_1.4MHz\_QPSK\_26697\_1\_0\_Low\_-35.81,-43.16\_PASS\_



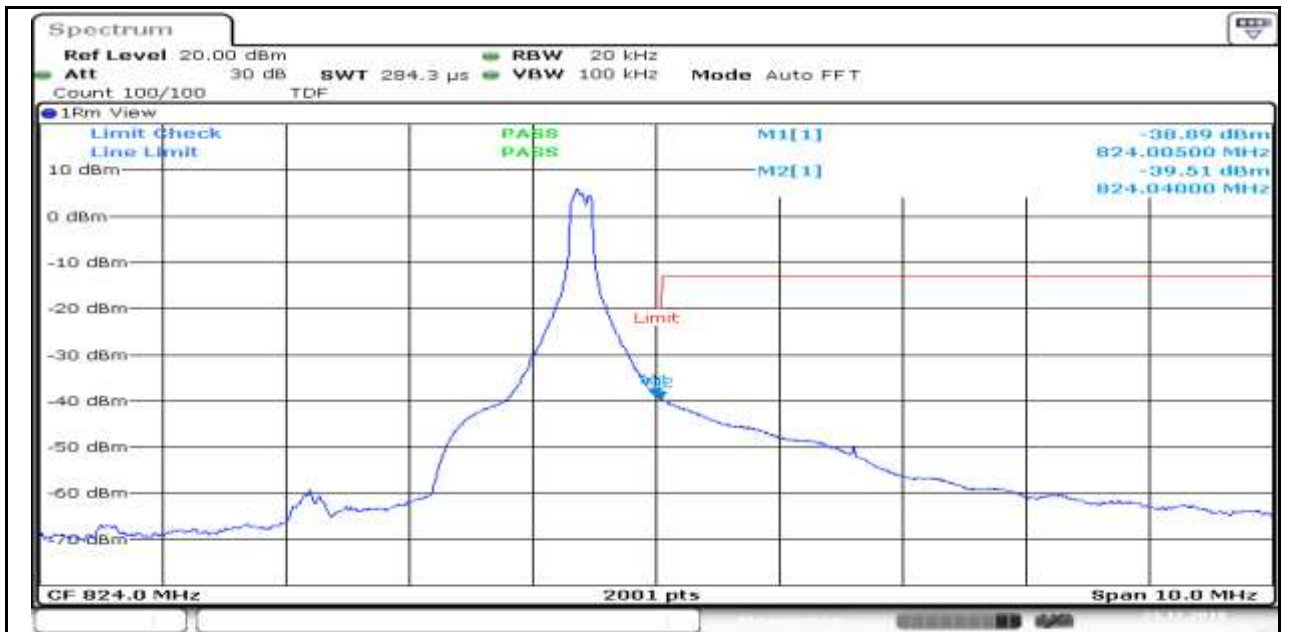
Date: 23.DEC.2019 08:23:16

Band26\_1.4MHz\_QPSK\_26783\_6\_0\_Low\_-39.18,-41.41\_PASS\_



Date: 23.DEC.2019 08:27:11

Band26\_1.4MHz\_QPSK\_26783\_1\_5\_Low\_-38.89,-39.51\_PASS\_



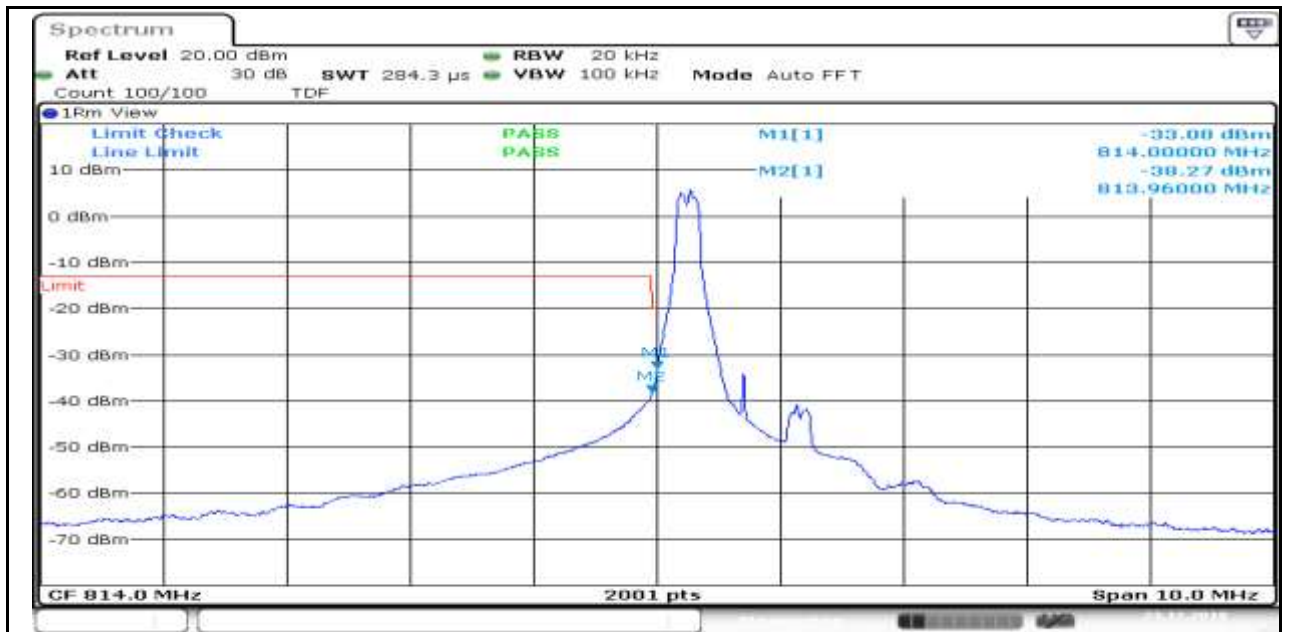
Date: 23.DEC.2019 08:26:00

Band26\_1.4MHz\_16QAM\_26697\_6\_0\_Low\_-38.40,-41.41\_PASS\_



Date: 23.DEC.2019 08:25:08

Band26\_1.4MHz\_16QAM\_26697\_1\_0\_Low\_-33.08,-38.27\_PASS\_



Band26\_1.4MHz\_16QAM\_26783\_6\_0\_Low\_-37.87,-39.85\_PASS\_



Band26\_1.4MHz\_16QAM\_26783\_1\_5\_Low\_-43.21,-44.28\_PASS\_



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## Appendix G.5: Conducted Spurious Emission for M1

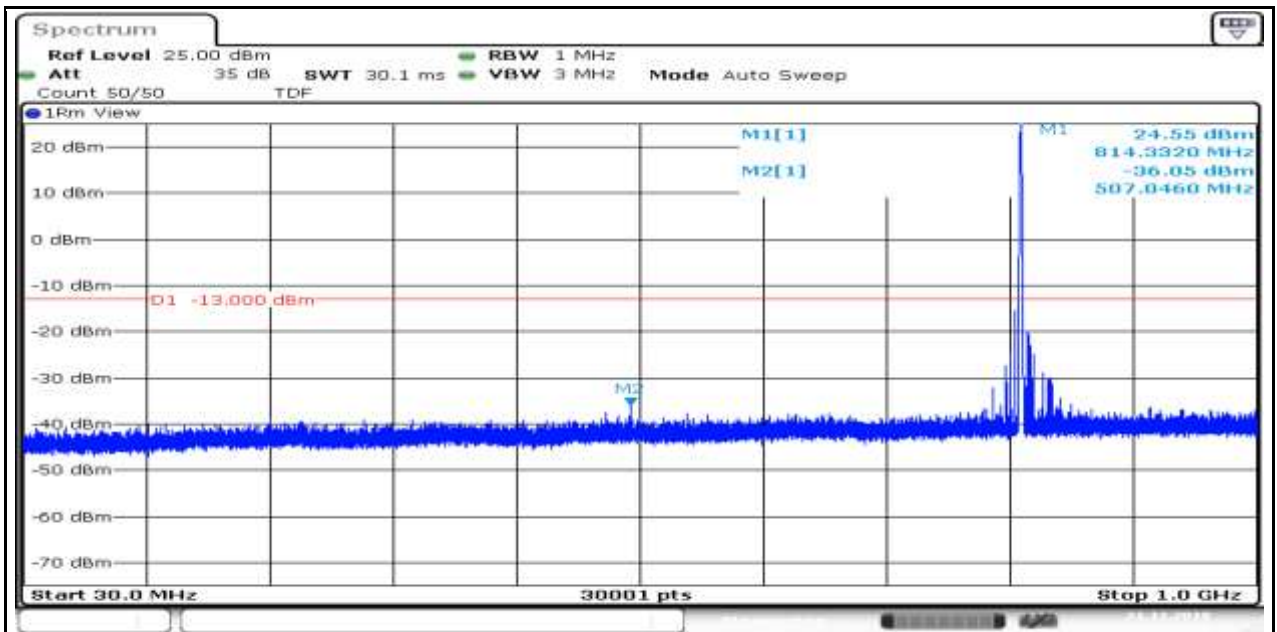
### Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Start Freq	Stop Freq	Result (dBm)	Verdict
Band26	1.4MHz	QPSK	26697	1	0	Low	30	1000	-36.05	PASS
Band26	1.4MHz	QPSK	26697	1	0	Low	1000	5000	-38.74	PASS
Band26	1.4MHz	QPSK	26697	1	0	Low	5000	12000	-48.09	PASS
Band26	1.4MHz	QPSK	26697	1	0	Low	12000	26500	-42.06	PASS
Band26	1.4MHz	QPSK	26697	6	0	Low	12000	26500	-41.87	PASS
Band26	1.4MHz	QPSK	26697	6	0	Low	5000	12000	-48.18	PASS
Band26	1.4MHz	QPSK	26697	6	0	Low	1000	5000	-38.83	PASS
Band26	1.4MHz	QPSK	26697	6	0	Low	30	1000	-36.92	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	30	1000	-35.97	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	5000	12000	-48.16	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	12000	26500	-42.12	PASS
Band26	1.4MHz	QPSK	26740	6	0	Low	12000	26500	-42.03	PASS
Band26	1.4MHz	QPSK	26740	6	0	Low	5000	12000	-47.89	PASS
Band26	1.4MHz	QPSK	26740	6	0	Low	1000	5000	-38.71	PASS
Band26	1.4MHz	QPSK	26740	6	0	Low	30	1000	-36.43	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	1000	5000	-38.78	PASS
Band26	1.4MHz	QPSK	26783	6	0	Low	12000	26500	-42.12	PASS
Band26	1.4MHz	QPSK	26783	6	0	Low	30	1000	-36.56	PASS
Band26	1.4MHz	QPSK	26783	1	5	Low	1000	5000	-38.73	PASS
Band26	1.4MHz	QPSK	26783	1	5	Low	5000	12000	-47.98	PASS
Band26	1.4MHz	QPSK	26783	1	5	Low	12000	26500	-42.06	PASS
Band26	1.4MHz	QPSK	26783	1	5	Low	30	1000	-36.26	PASS
Band26	1.4MHz	QPSK	26783	6	0	Low	1000	5000	-38.75	PASS
Band26	1.4MHz	QPSK	26783	6	0	Low	5000	12000	-48.01	PASS
Band26	1.4MHz	16QAM	26697	6	0	Low	12000	26500	-42.09	PASS
Band26	1.4MHz	16QAM	26697	1	0	Low	5000	12000	-47.98	PASS
Band26	1.4MHz	16QAM	26697	1	0	Low	1000	5000	-38.8	PASS
Band26	1.4MHz	16QAM	26697	1	0	Low	30	1000	-37.39	PASS
Band26	1.4MHz	16QAM	26697	6	0	Low	5000	12000	-48.12	PASS
Band26	1.4MHz	16QAM	26697	6	0	Low	1000	5000	-38.84	PASS
Band26	1.4MHz	16QAM	26697	6	0	Low	30	1000	-36.89	PASS
Band26	1.4MHz	16QAM	26697	1	0	Low	12000	26500	-42.14	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	1000	5000	-38.77	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	30	1000	-35.61	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	12000	26500	-41.96	PASS
Band26	1.4MHz	16QAM	26740	6	0	Low	30	1000	-36.61	PASS
Band26	1.4MHz	16QAM	26740	6	0	Low	1000	5000	-38.82	PASS
Band26	1.4MHz	16QAM	26740	6	0	Low	12000	26500	-41.91	PASS
Band26	1.4MHz	16QAM	26740	6	0	Low	5000	12000	-48.23	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	5000	12000	-47.95	PASS
Band26	1.4MHz	16QAM	26783	6	0	Low	30	1000	-36.27	PASS
Band26	1.4MHz	16QAM	26783	6	0	Low	12000	26500	-42.04	PASS
Band26	1.4MHz	16QAM	26783	6	0	Low	1000	5000	-38.68	PASS
Band26	1.4MHz	16QAM	26783	1	5	Low	12000	26500	-42.06	PASS
Band26	1.4MHz	16QAM	26783	1	5	Low	5000	12000	-48.14	PASS
Band26	1.4MHz	16QAM	26783	1	5	Low	1000	5000	-38.71	PASS
Band26	1.4MHz	16QAM	26783	1	5	Low	30	1000	-36.21	PASS
Band26	1.4MHz	16QAM	26783	6	0	Low	5000	12000	-47.97	PASS

### Test Graphs

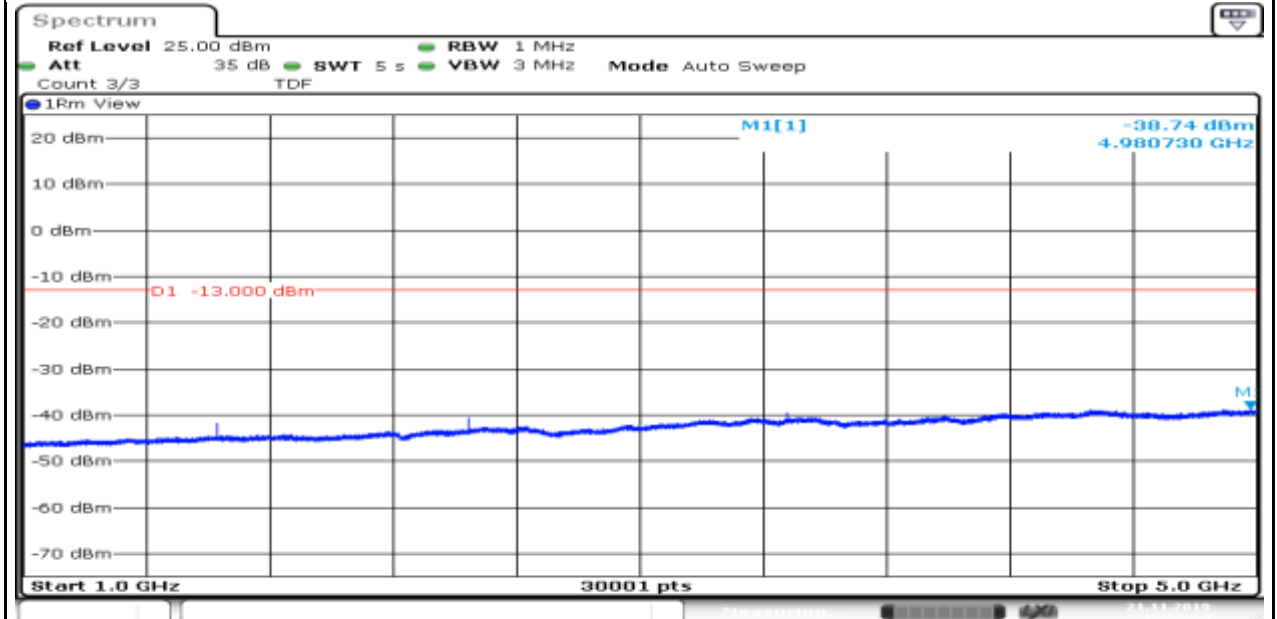
Band26\_1.4MHz\_QPSK\_26697\_1\_0\_Low\_30\_1000\_-36.05\_PASS

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Date: 21.NOV.2019 15:52:17

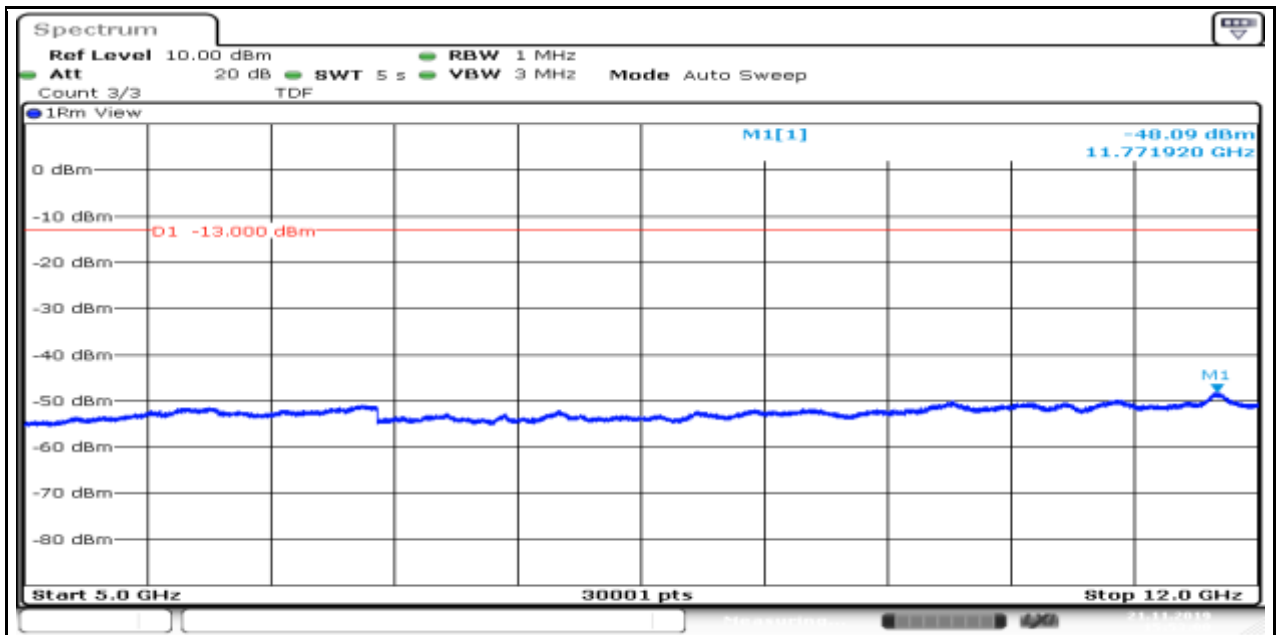
Band26\_1.4MHz\_QPSK\_26697\_1\_0\_Low\_1000\_5000\_-38.74\_PASS\_



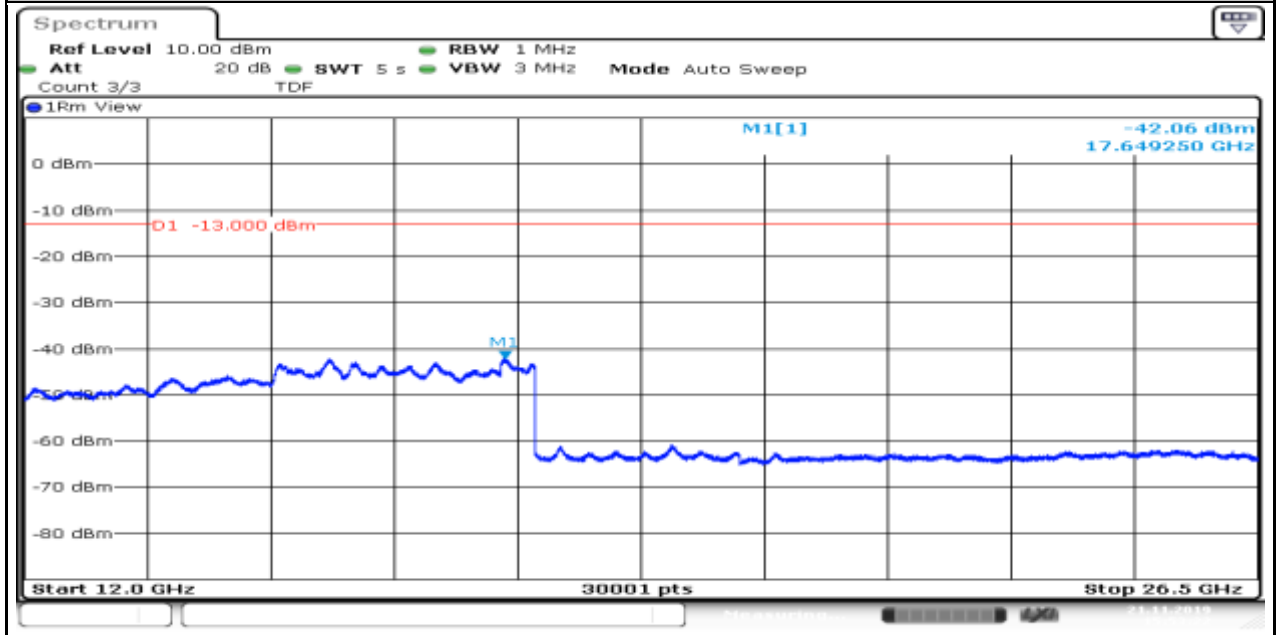
Date: 21.NOV.2019 15:52:39

Band26\_1.4MHz\_QPSK\_26697\_1\_0\_Low\_5000\_12000\_-48.09\_PASS\_

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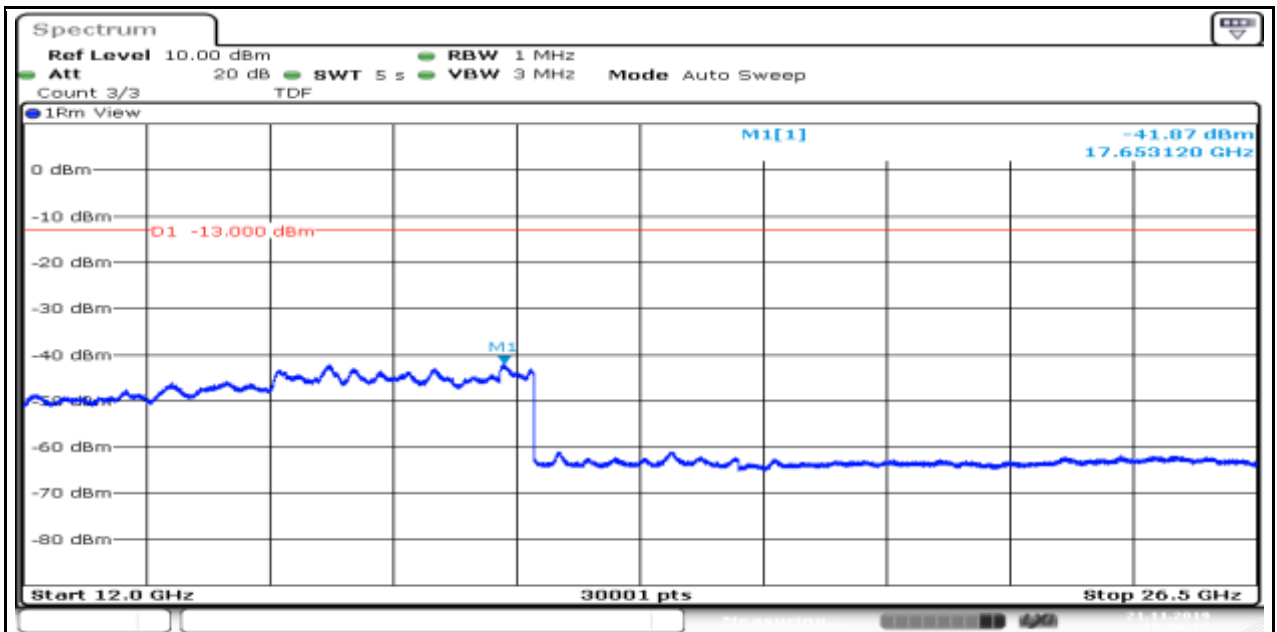


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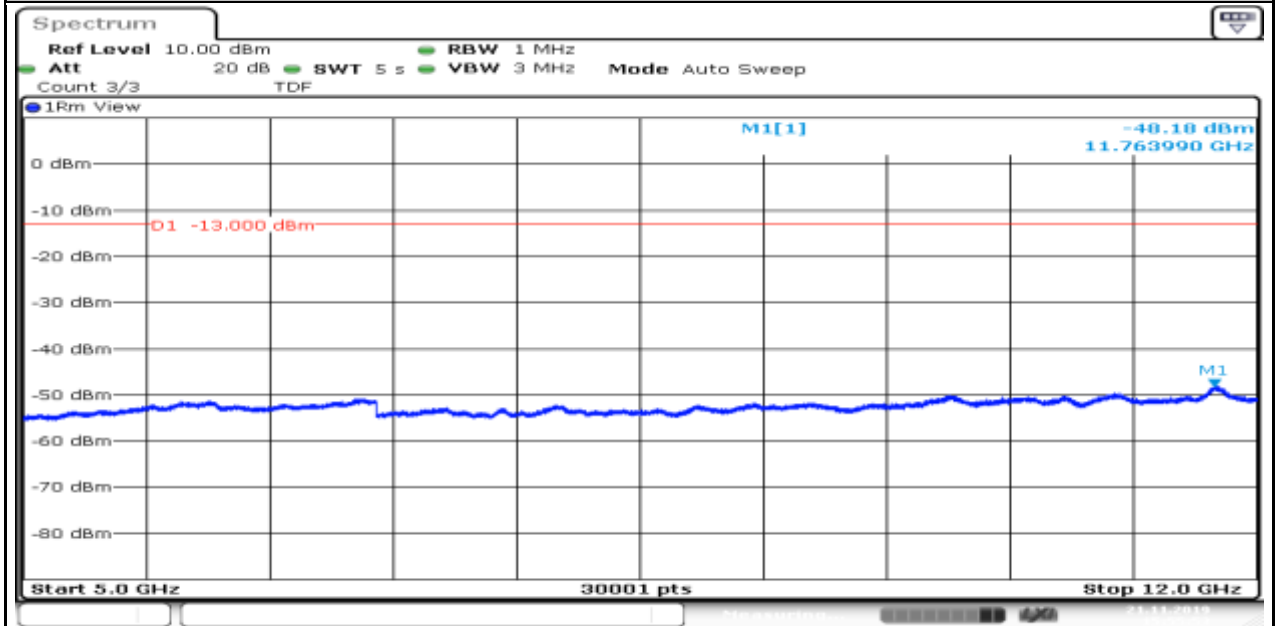


Band26\_1.4MHz\_QPSK\_26697\_6\_0\_Low\_12000\_26500\_-41.87\_PASS\_

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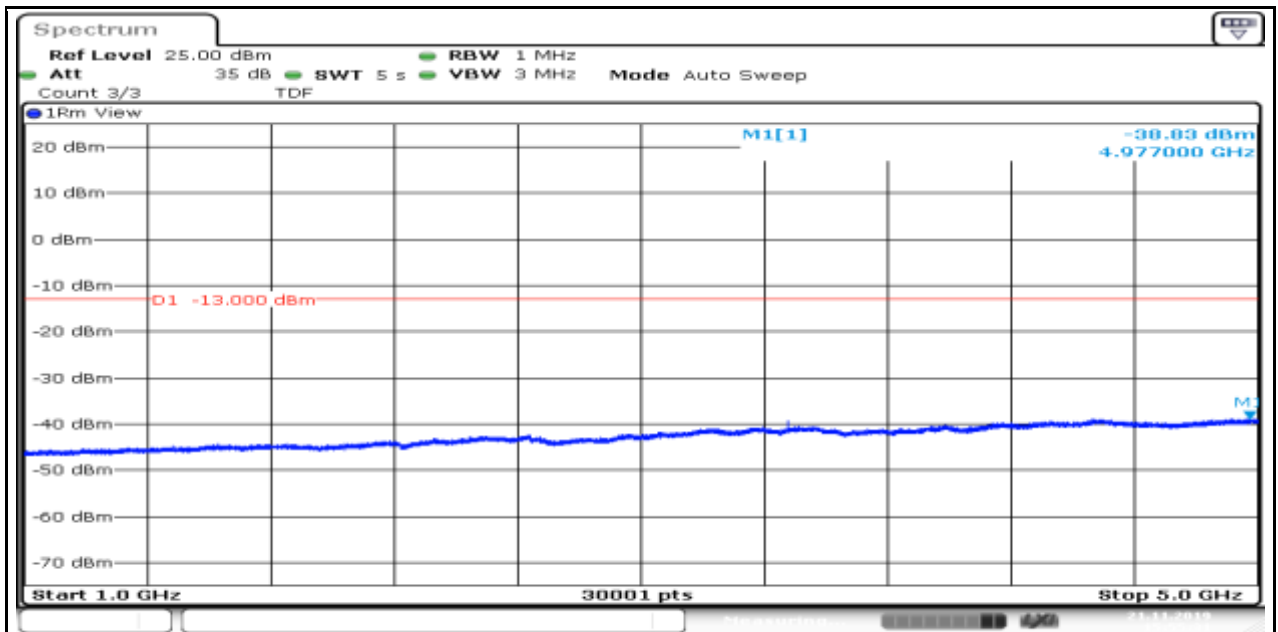


Band26\_1.4MHz\_QPSK\_26697\_6\_0\_Low\_5000\_12000\_-48.18\_PASS\_\_



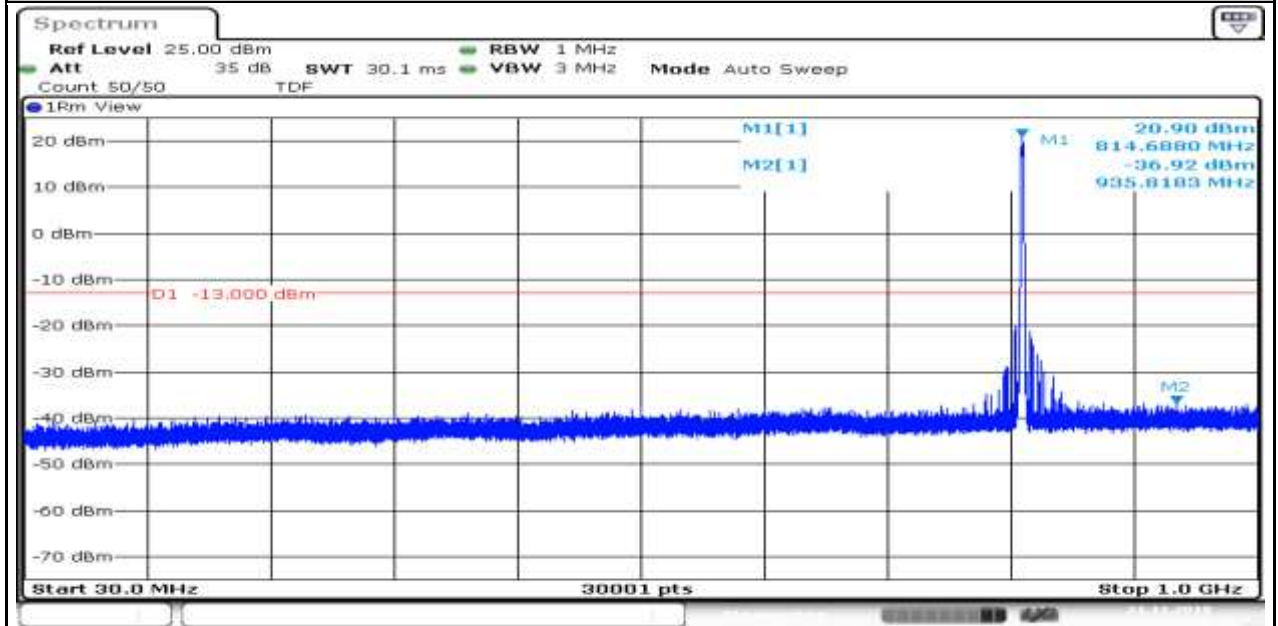
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Date: 21.NOV.2019 15:55:32

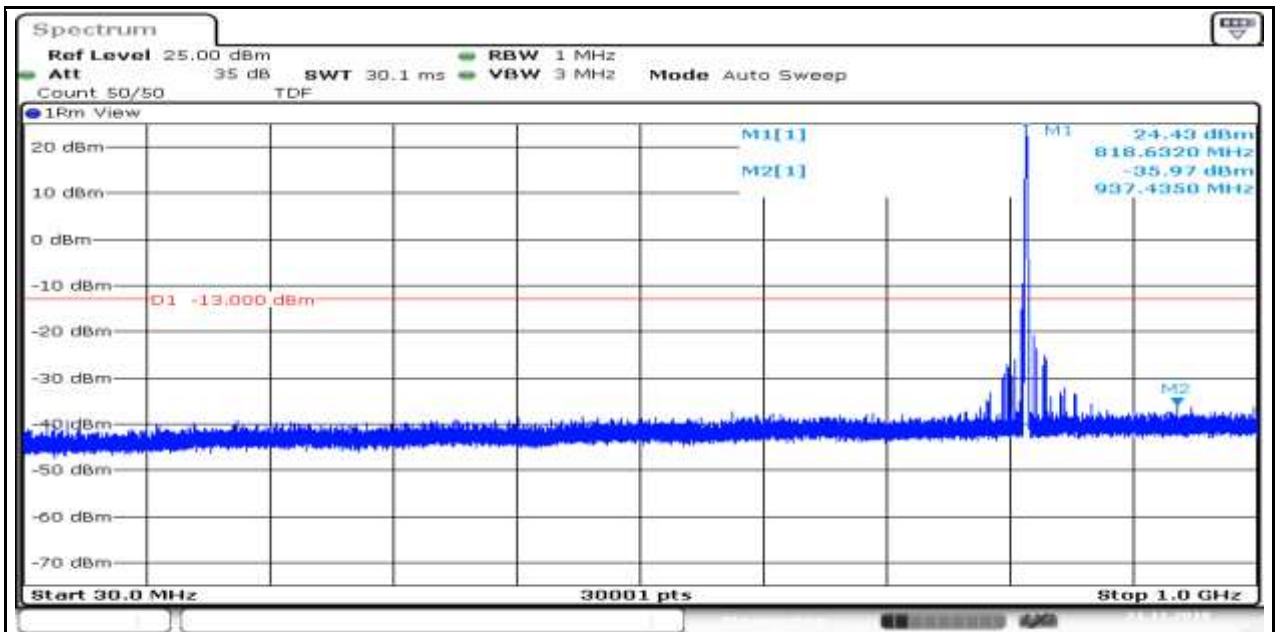
Band26\_1.4MHz\_QPSK\_26697\_6\_0\_Low\_30\_1000\_-36.92\_PASS\_



Date: 21.NOV.2019 15:55:10

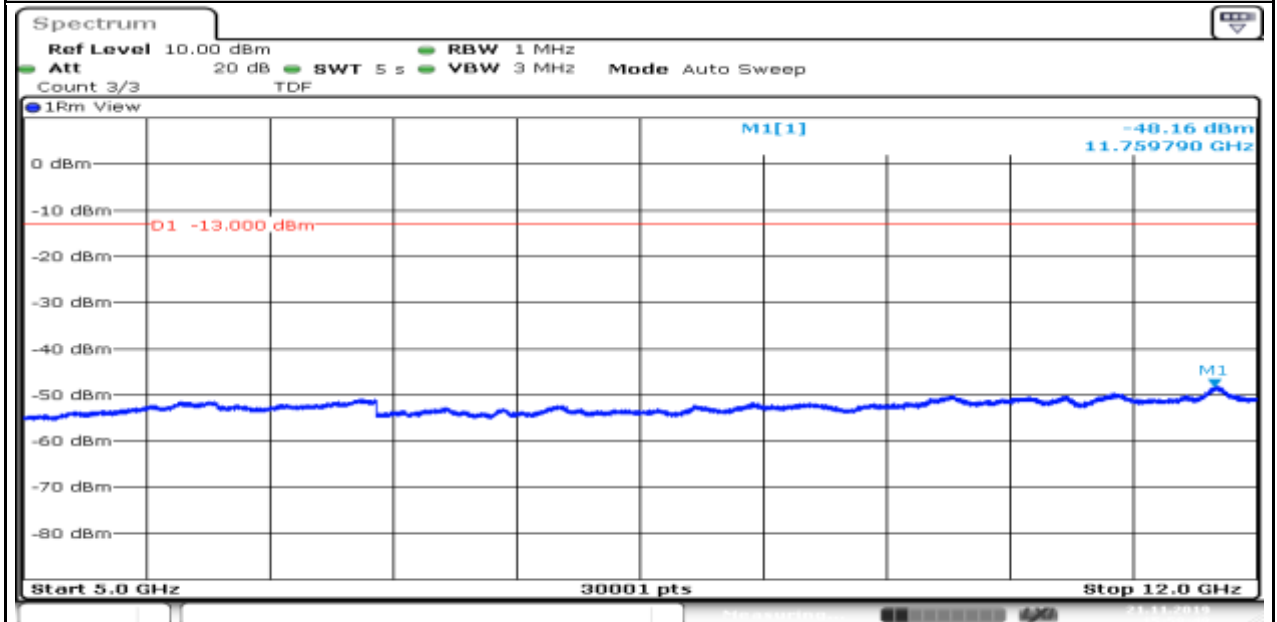
Band26\_1.4MHz\_QPSK\_26740\_1\_0\_Low\_30\_1000\_-35.97\_PASS\_

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 Products



Date: 21.NOV.2019 15:58:05

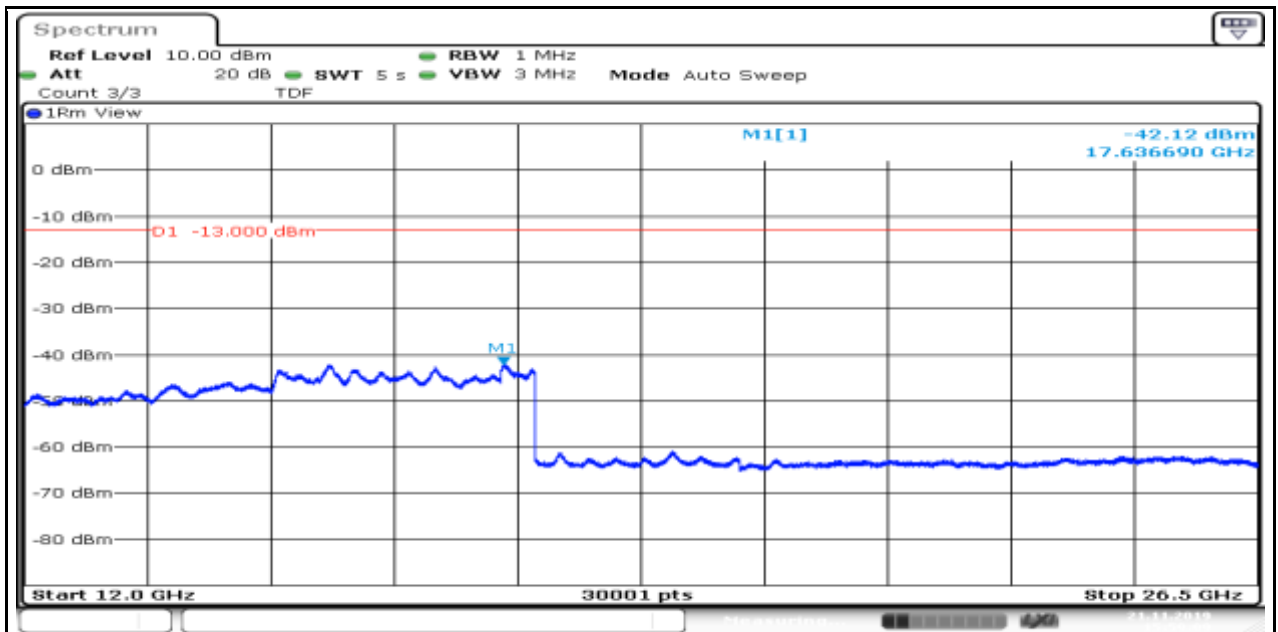
Band26\_1.4MHz\_QPSK\_26740\_1\_0\_Low\_5000\_12000\_-48.16\_PASS\_



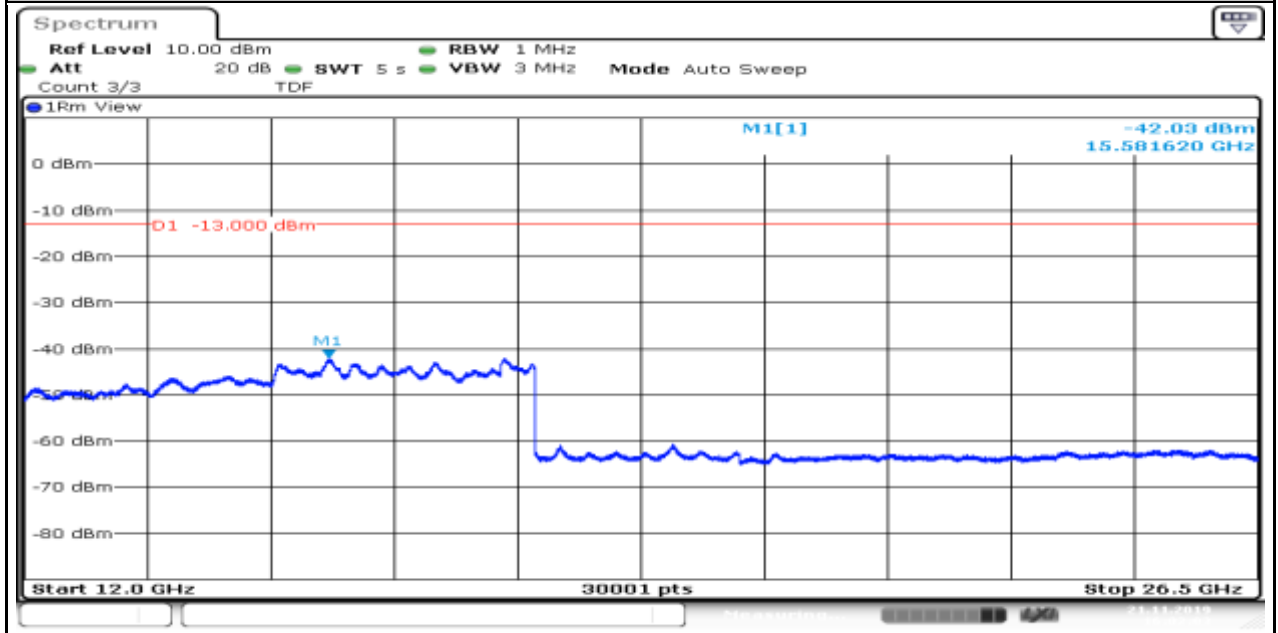
Date: 21.NOV.2019 15:58:48

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Produkte  
Products



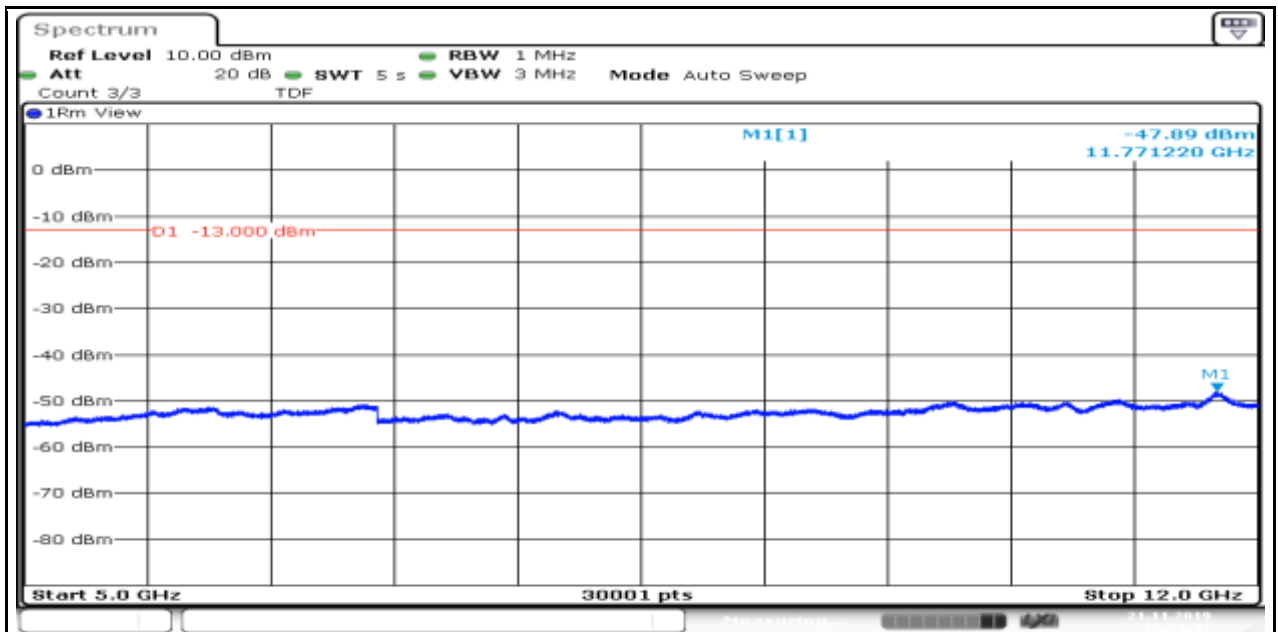
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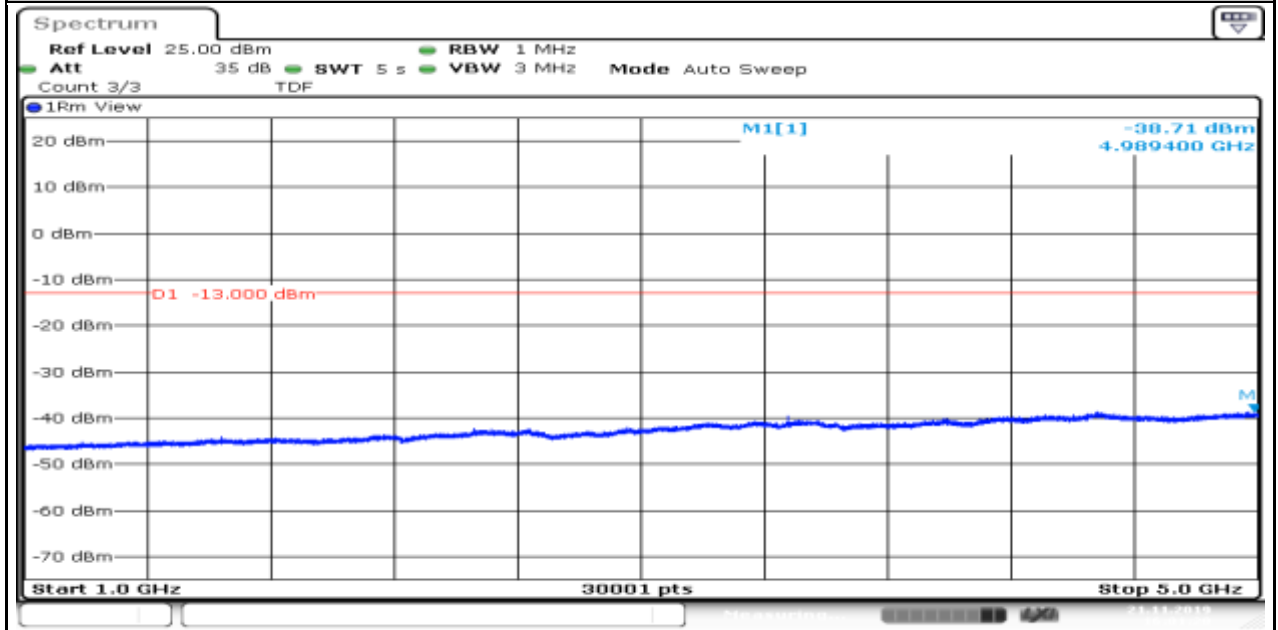
Band26\_1.4MHz\_QPSK\_26740\_6\_0\_Low\_5000\_12000\_-47.89\_PASS\_



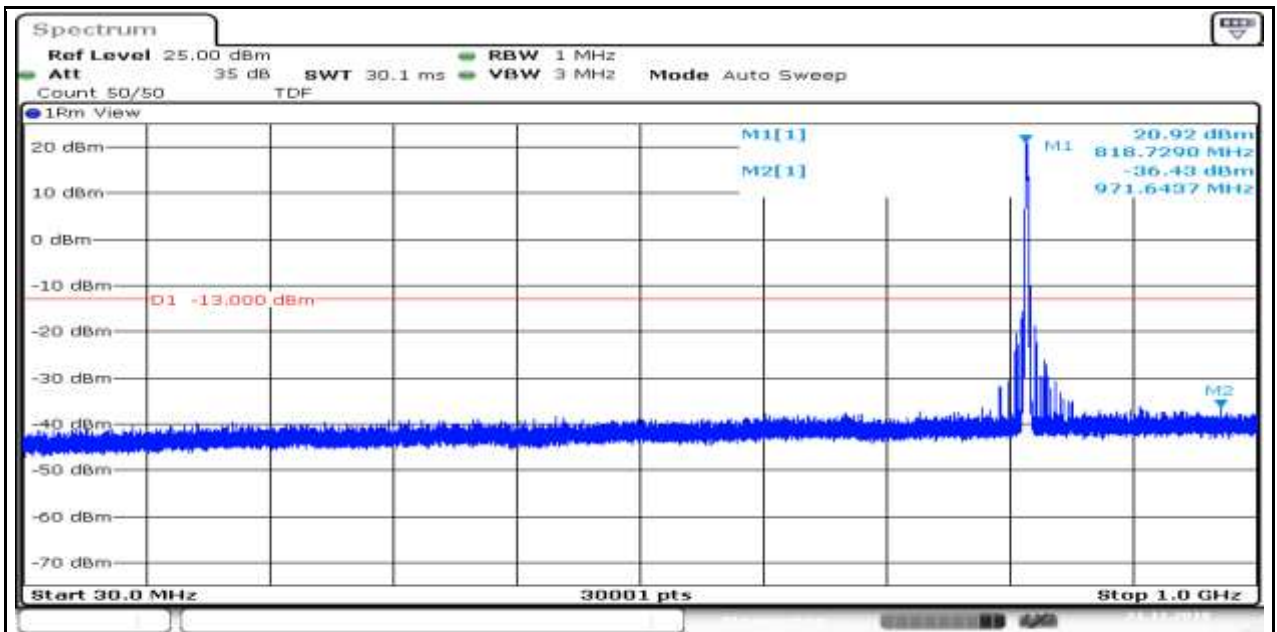
Produkte  
Products



Band26\_1.4MHz\_QPSK\_26740\_6\_0\_Low\_1000\_5000\_-38.71\_PASS\_

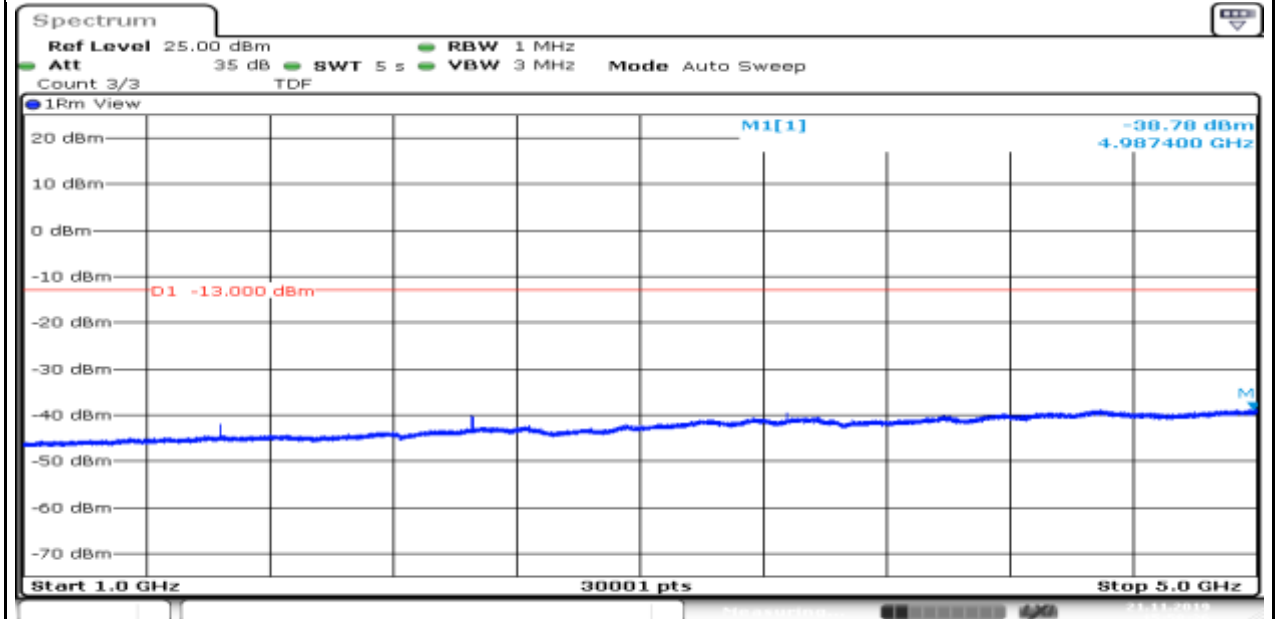


Band26\_1.4MHz\_QPSK\_26740\_6\_0\_Low\_30\_1000\_-36.43\_PASS\_



Date: 21.NOV.2019 16:00:58

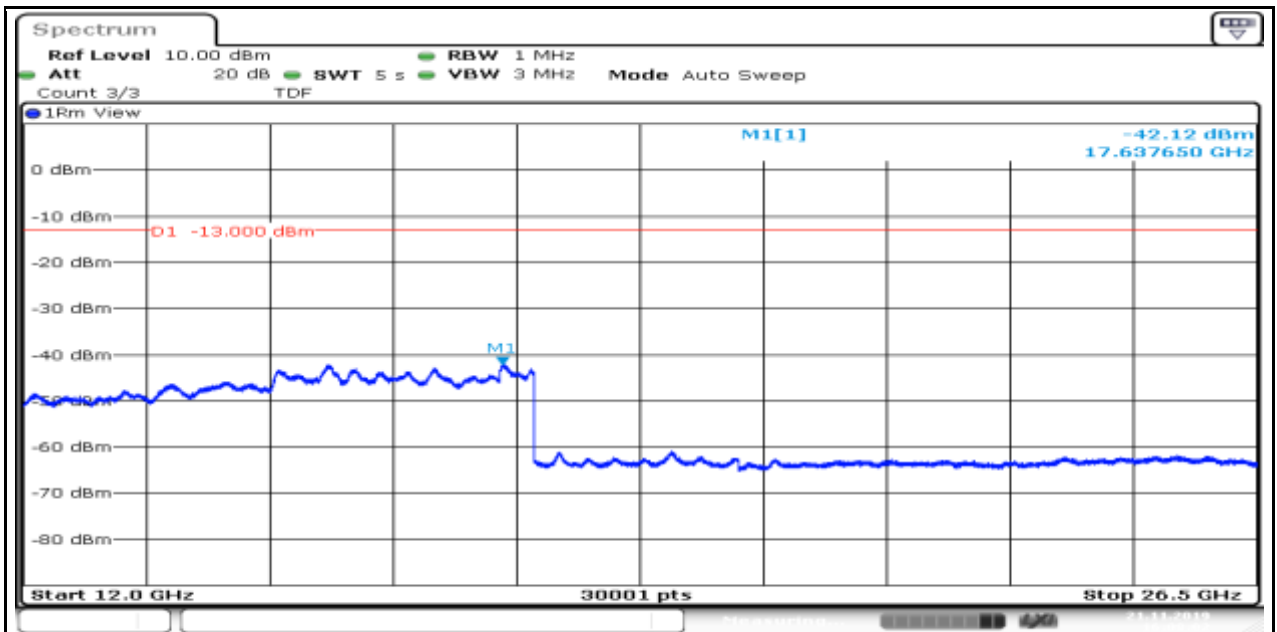
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Date: 21.NOV.2019 15:58:26

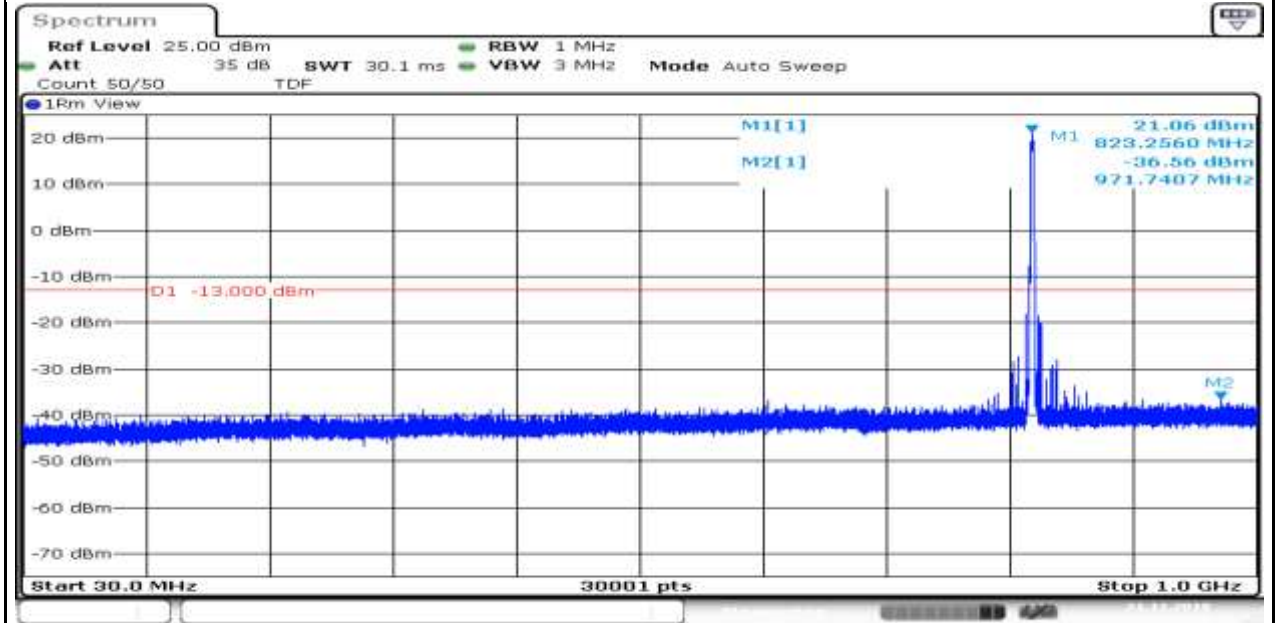
Band26\_1.4MHz\_QPSK\_26783\_6\_0\_Low\_12000\_26500\_-42.12\_PASS\_

Produkte  
 Products



Date: 21.NOV.2019 16:08:02

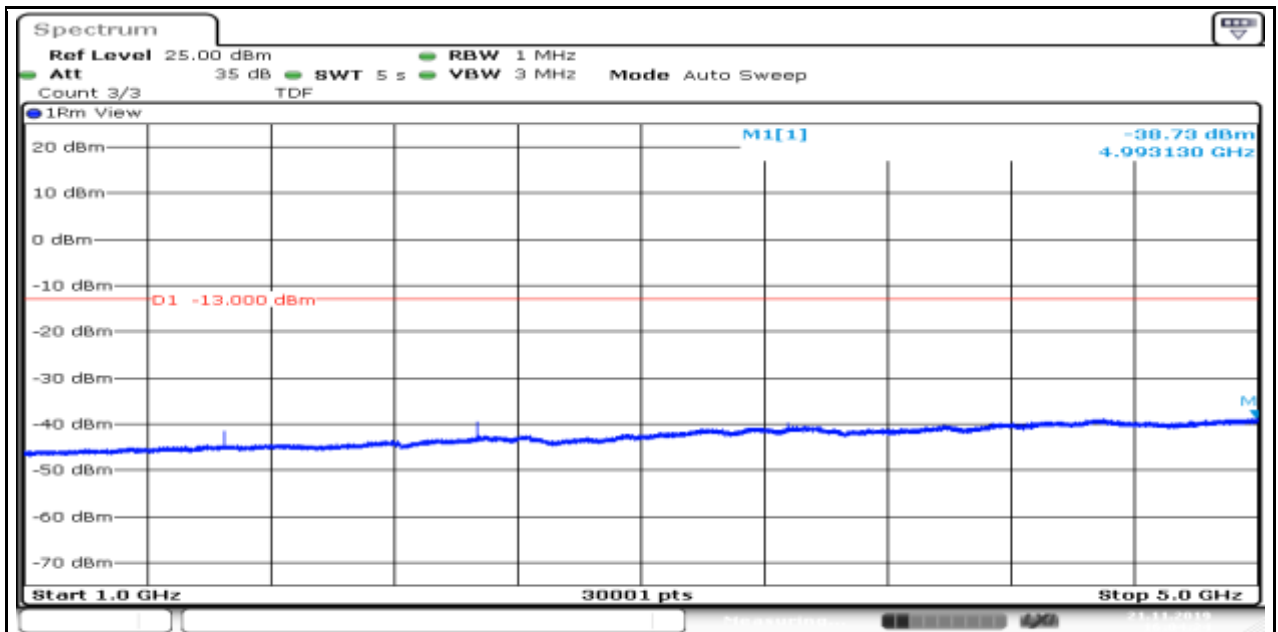
Band26\_1.4MHz\_QPSK\_26783\_6\_0\_Low\_30\_1000\_-36.56\_PASS\_



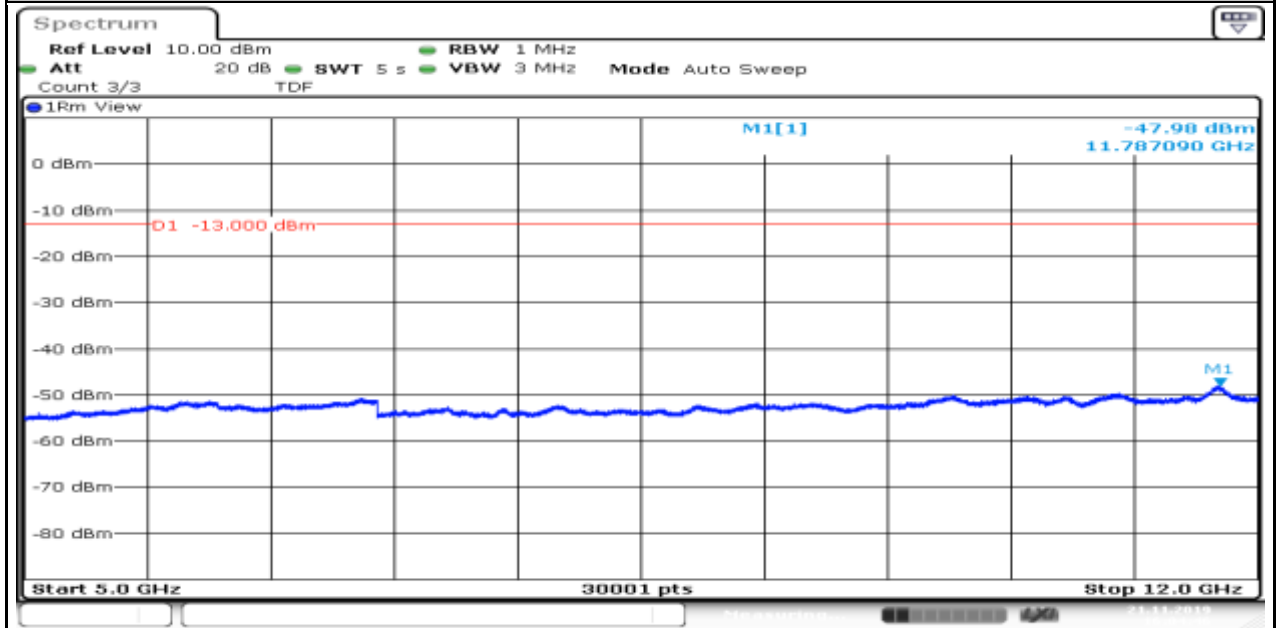
Date: 21.NOV.2019 16:06:57

Band26\_1.4MHz\_QPSK\_26783\_1\_5\_Low\_1000\_5000\_-38.73\_PASS\_

Produkte  
Products

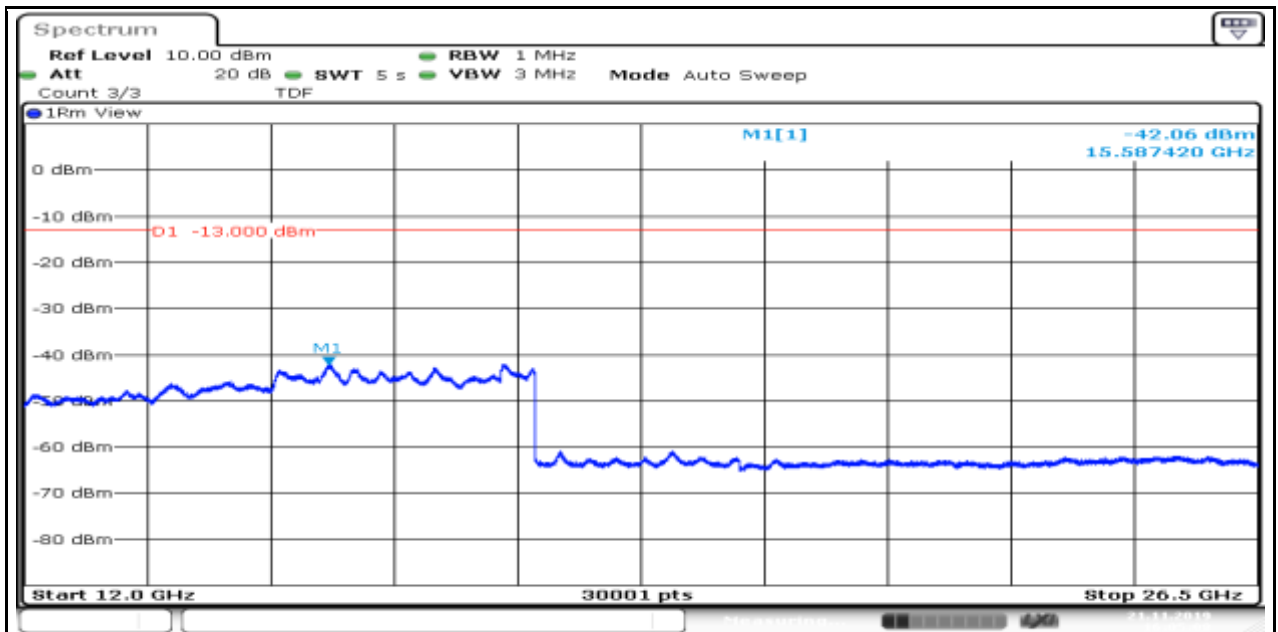


Band26\_1.4MHz\_QPSK\_26783\_1\_5\_Low\_5000\_12000\_-47.98\_PASS\_



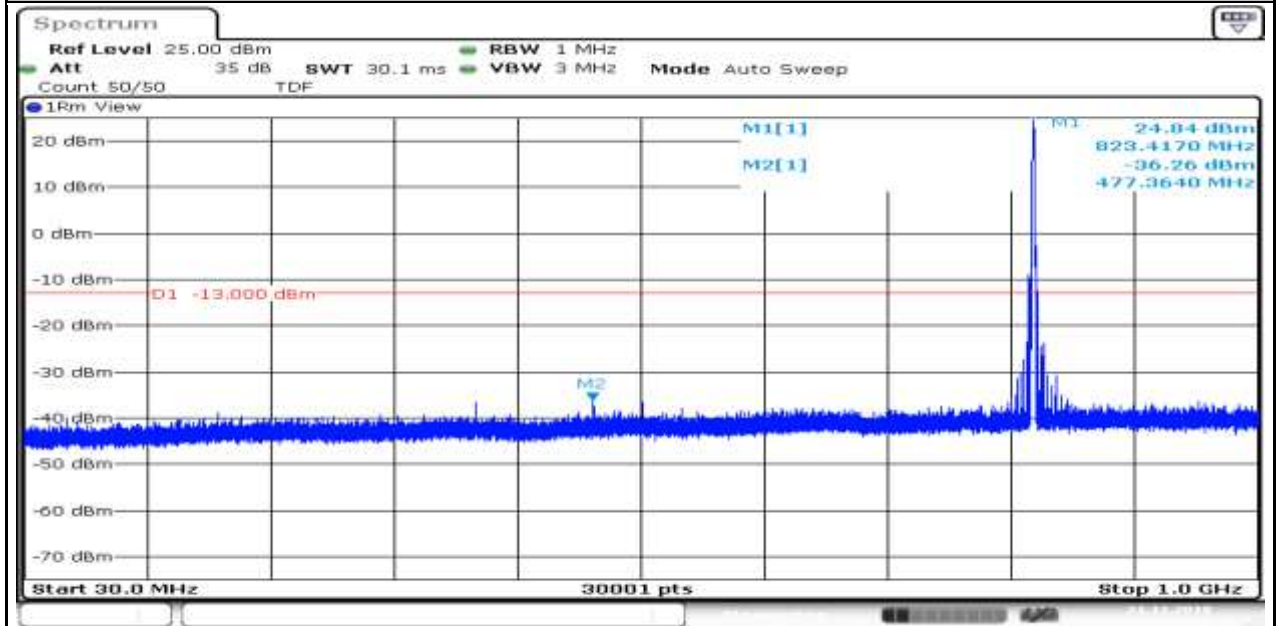
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Produkte  
Products



Date: 21.NOV.2019 16:05:08

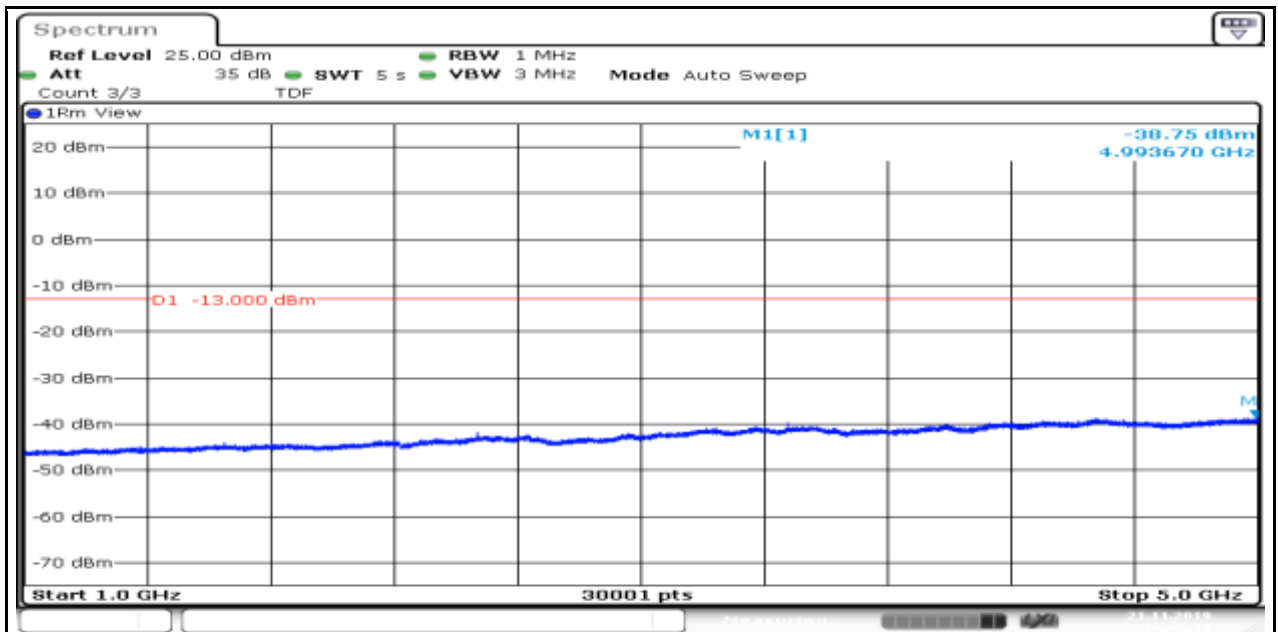
Band26\_1.4MHz\_QPSK\_26783\_1\_5\_Low\_30\_1000\_-36.26\_PASS\_\_



Date: 21.NOV.2019 16:04:03

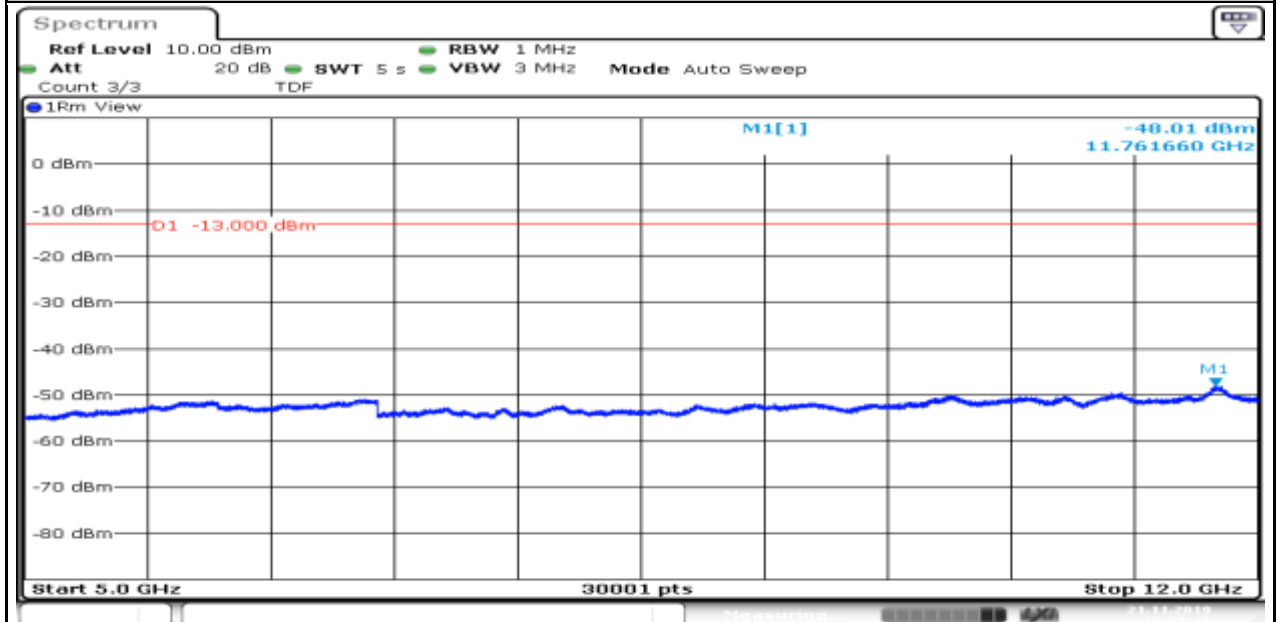
Band26\_1.4MHz\_QPSK\_26783\_6\_0\_Low\_1000\_5000\_-38.75\_PASS\_\_

Produkte  
Products



Date: 21.NOV.2019 16:07:19

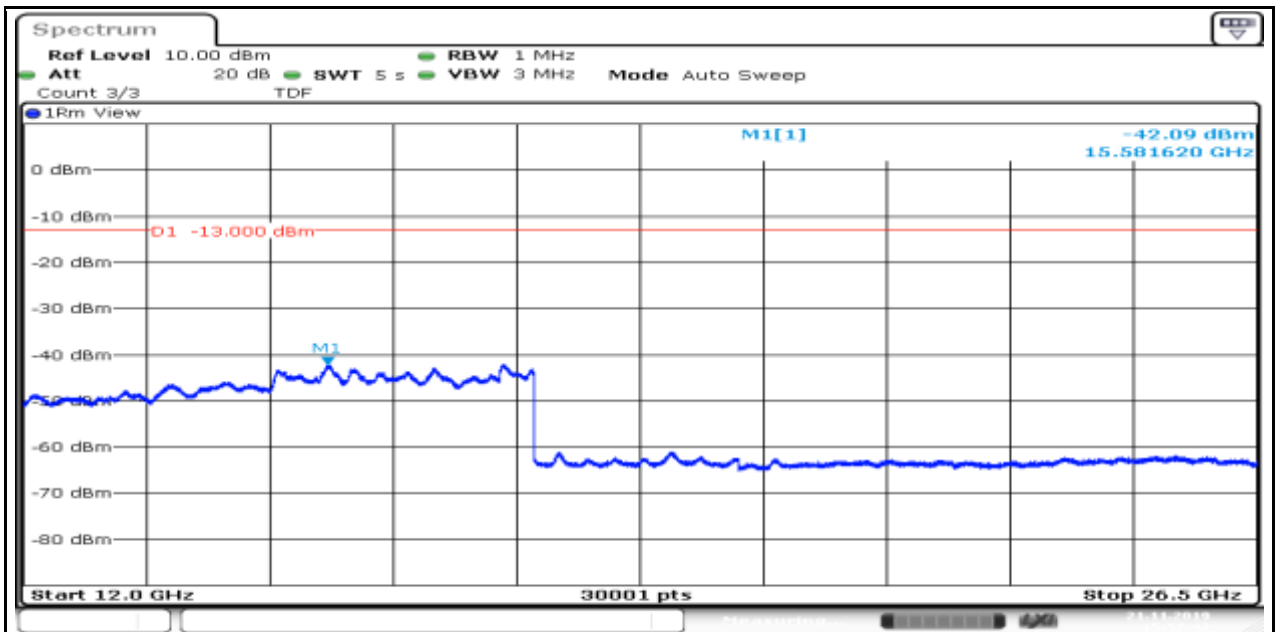
Band26\_1.4MHz\_QPSK\_26783\_6\_0\_Low\_5000\_12000\_-48.01\_PASS\_



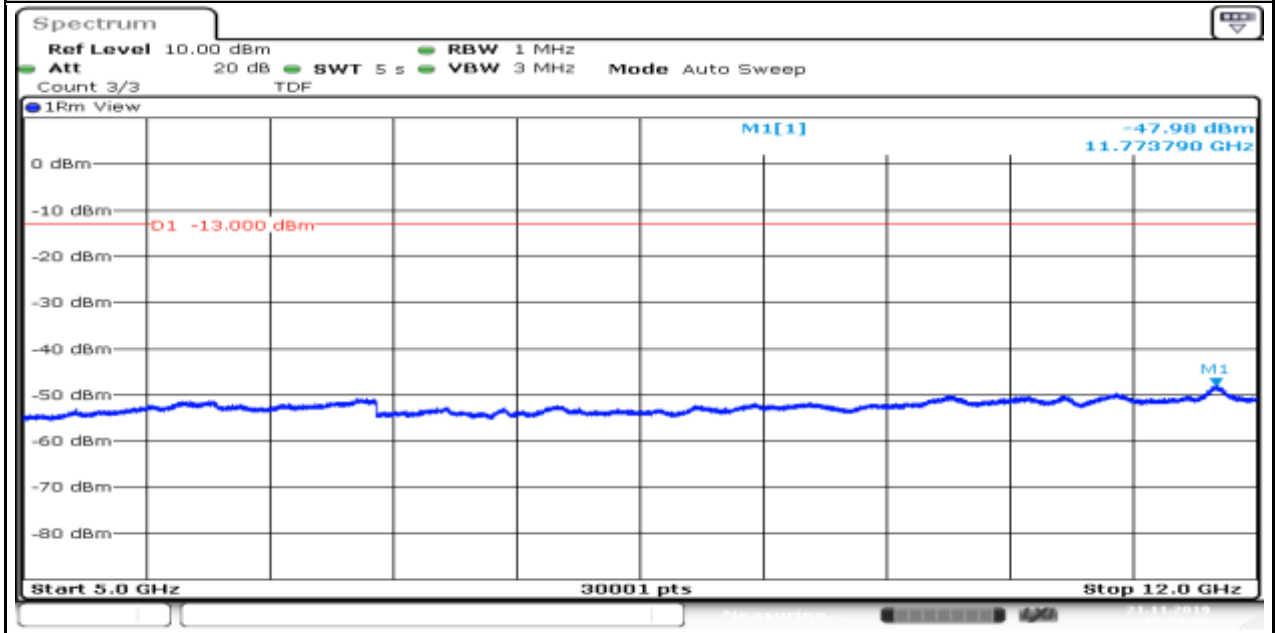
Date: 21.NOV.2019 16:07:40

Band26\_1.4MHz\_16QAM\_26697\_6\_0\_Low\_12000\_26500\_-42.09\_PASS\_

Produkte  
Products

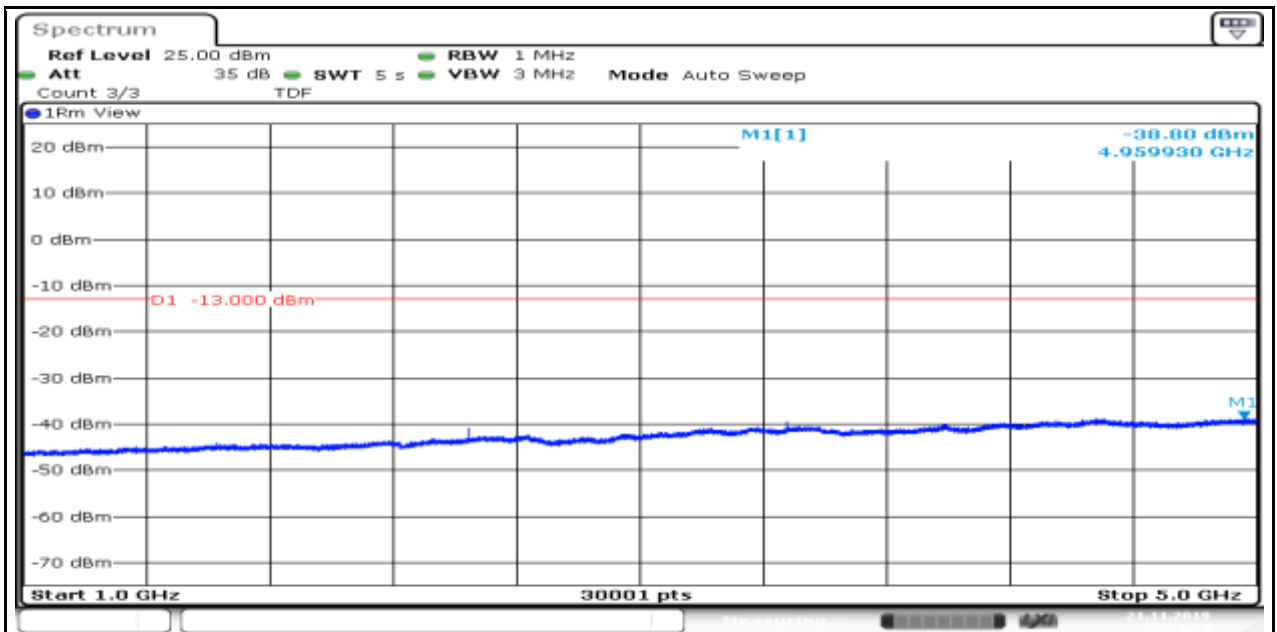


Band26\_1.4MHz\_16QAM\_26697\_1\_0\_Low\_5000\_12000\_-47.98\_PASS\_



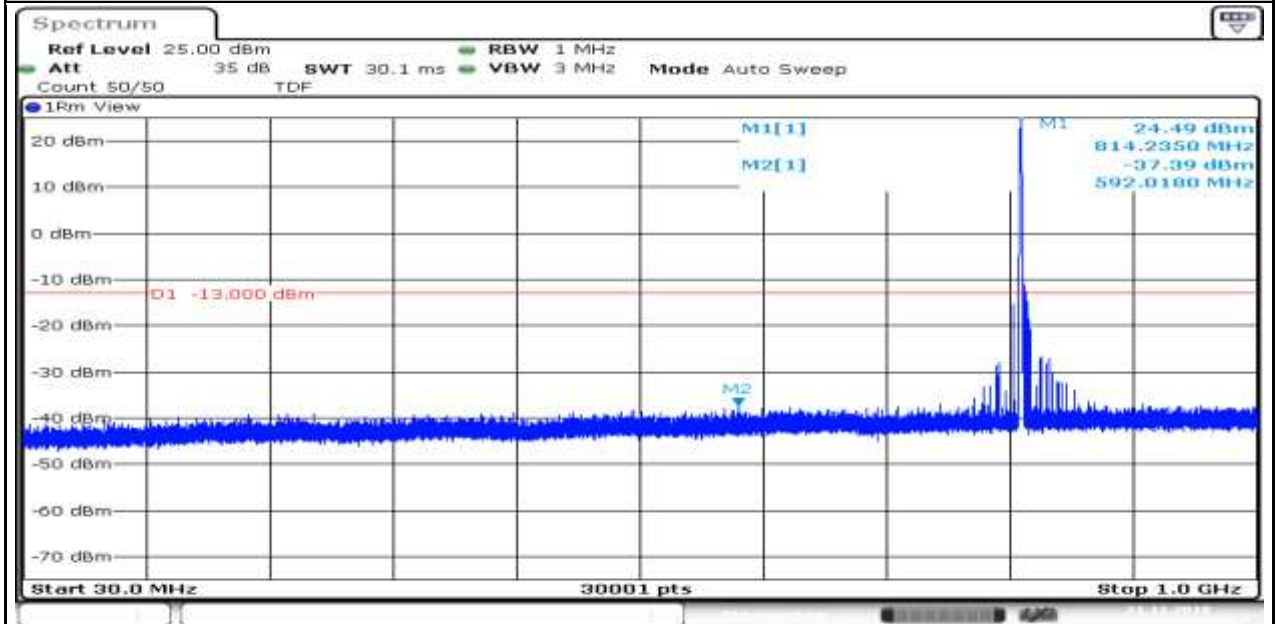
Band26\_1.4MHz\_16QAM\_26697\_1\_0\_Low\_1000\_5000\_-38.8\_PASS\_

Produkte  
 Products



Date: 21.NOV.2019 15:54:05

Band26\_1.4MHz\_16QAM\_26697\_1\_0\_Low\_30\_1000\_-37.39\_PASS\_

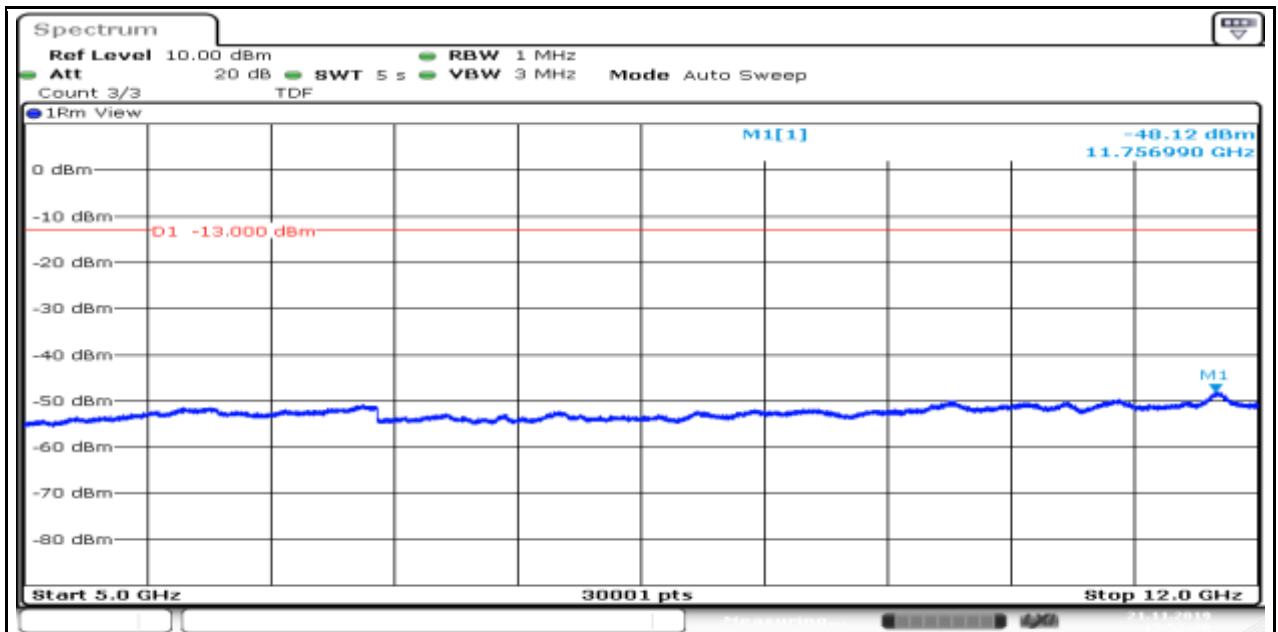


Date: 21.NOV.2019 15:53:43

Band26\_1.4MHz\_16QAM\_26697\_6\_0\_Low\_5000\_12000\_-48.12\_PASS\_

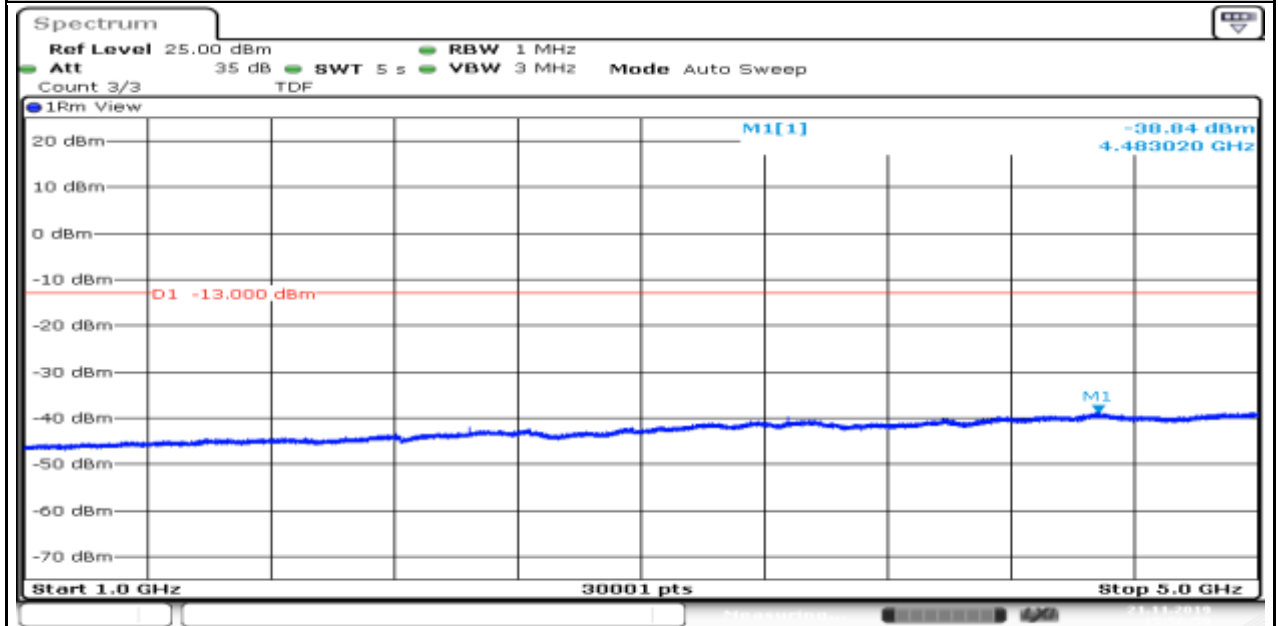


Produkte  
Products



Date: 21.NOV.2019 15:57:21

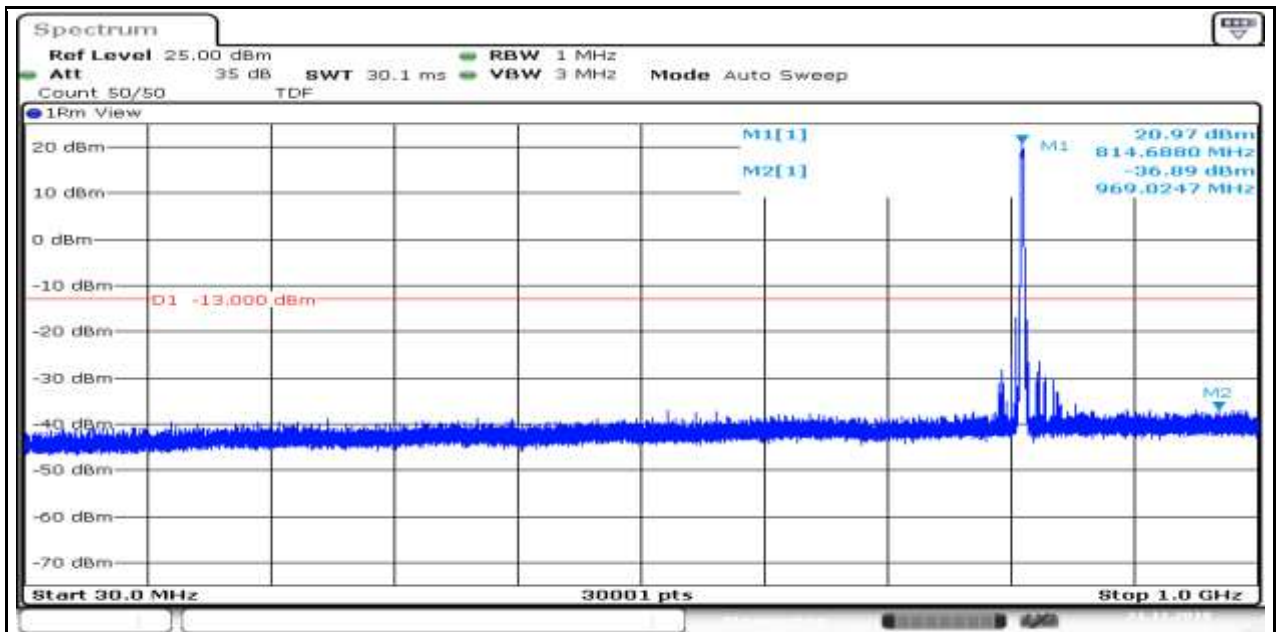
Band26\_1.4MHz\_16QAM\_26697\_6\_0\_Low\_1000\_5000\_-38.84\_PASS\_



Date: 21.NOV.2019 15:56:59

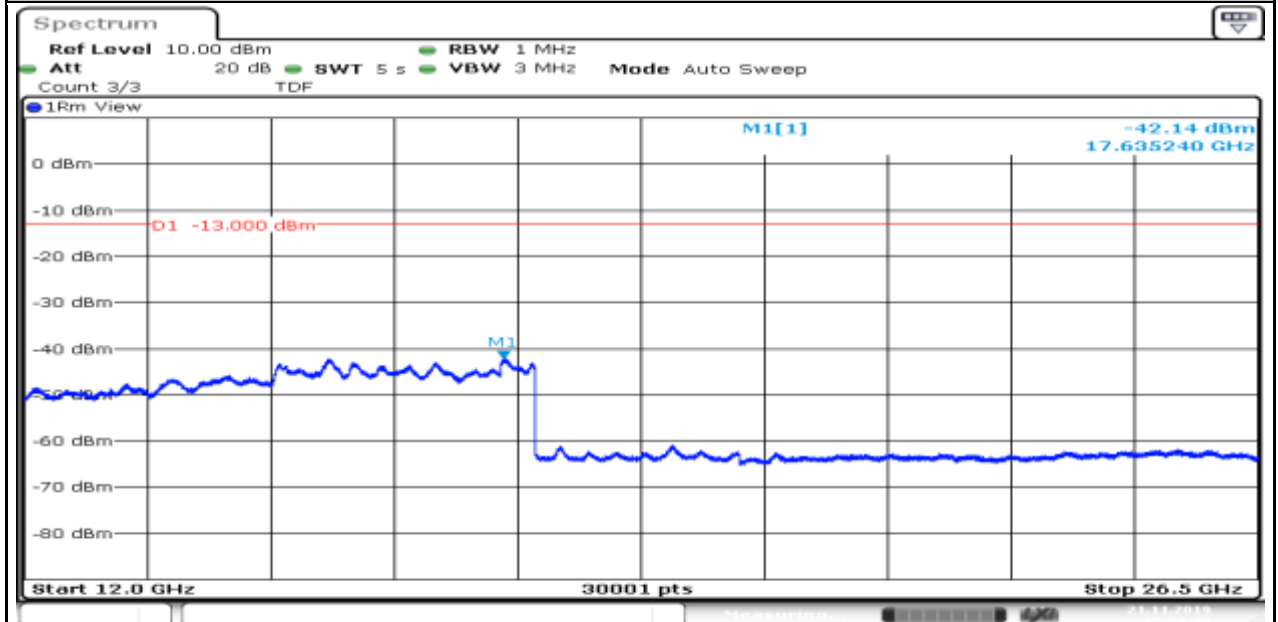
Band26\_1.4MHz\_16QAM\_26697\_6\_0\_Low\_30\_1000\_-36.89\_PASS\_

Produkte  
Products



Date: 21.NOV.2019 15:56:37

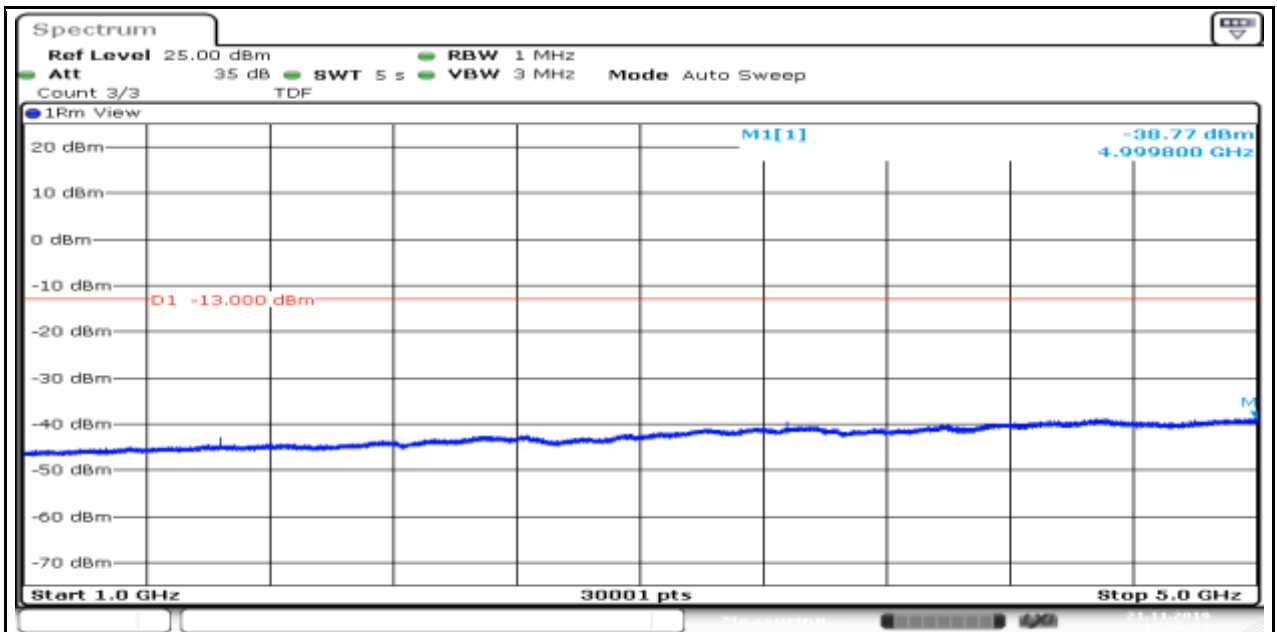
Band26\_1.4MHz\_16QAM\_26697\_1\_0\_Low\_12000\_26500\_-42.14\_PASS\_



Date: 21.NOV.2019 15:54:49

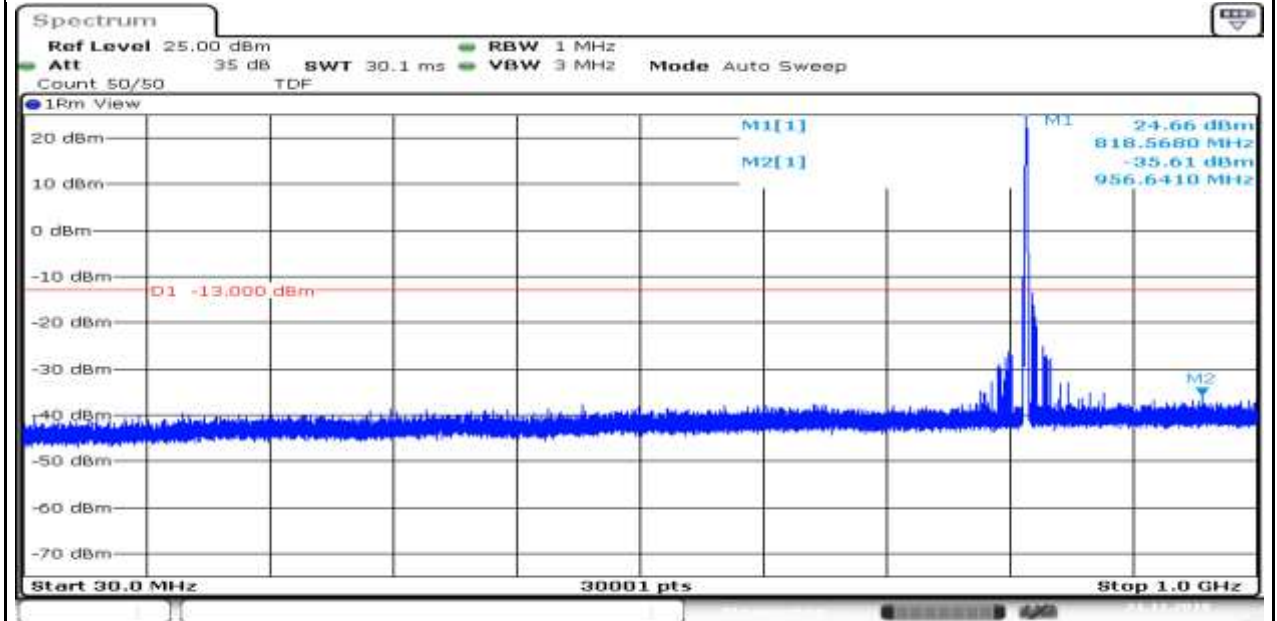
Band26\_1.4MHz\_16QAM\_26740\_1\_0\_Low\_1000\_5000\_-38.77\_PASS\_

Produkte  
 Products



Date: 21.NOV.2019 15:59:53

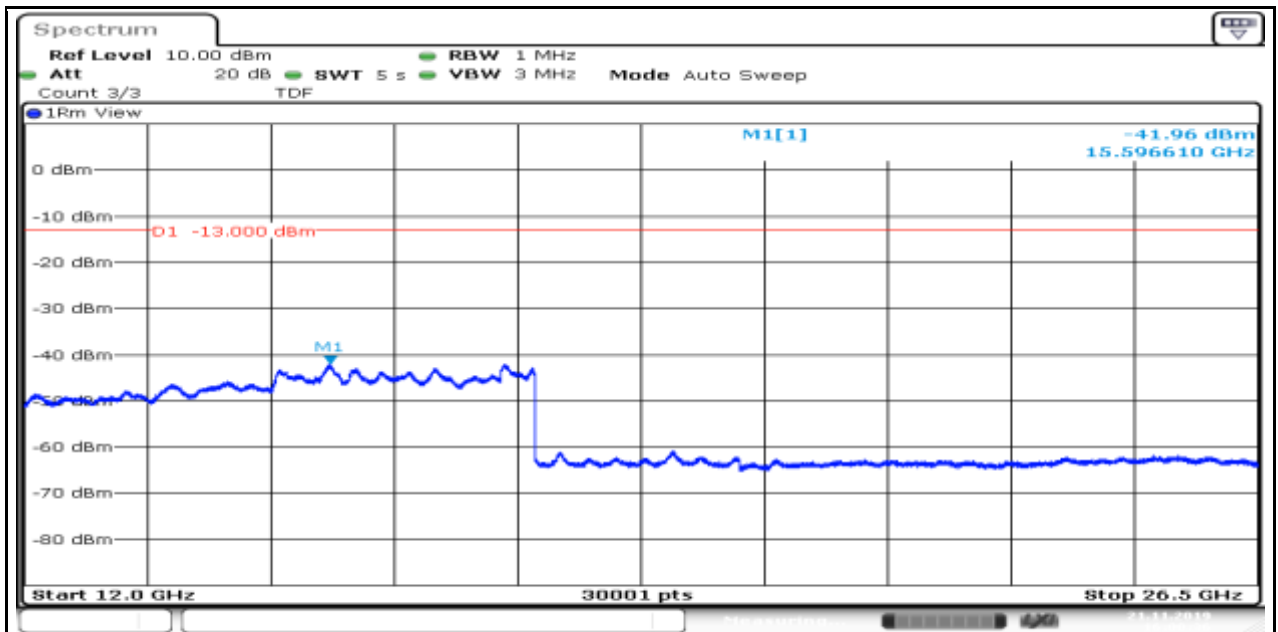
Band26\_1.4MHz\_16QAM\_26740\_1\_0\_Low\_30\_1000\_-35.61\_PASS\_



Date: 21.NOV.2019 15:59:31

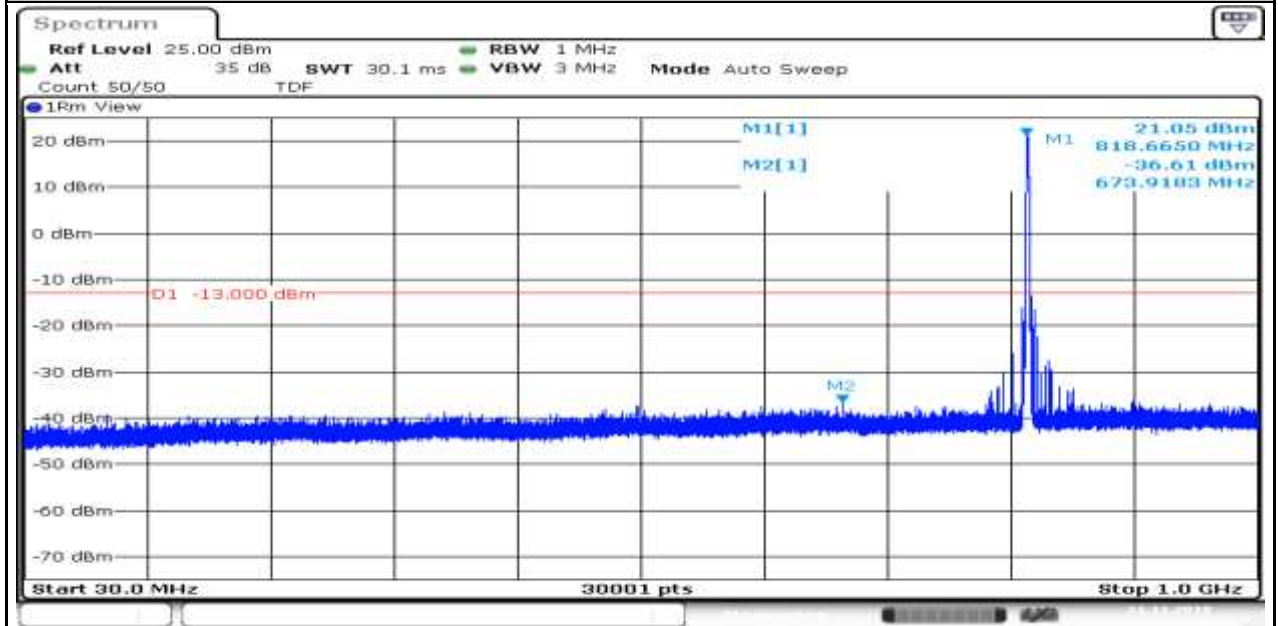
Band26\_1.4MHz\_16QAM\_26740\_1\_0\_Low\_12000\_26500\_-41.96\_PASS\_

Produkte  
Products



Date: 21.NOV.2019 16:00:37

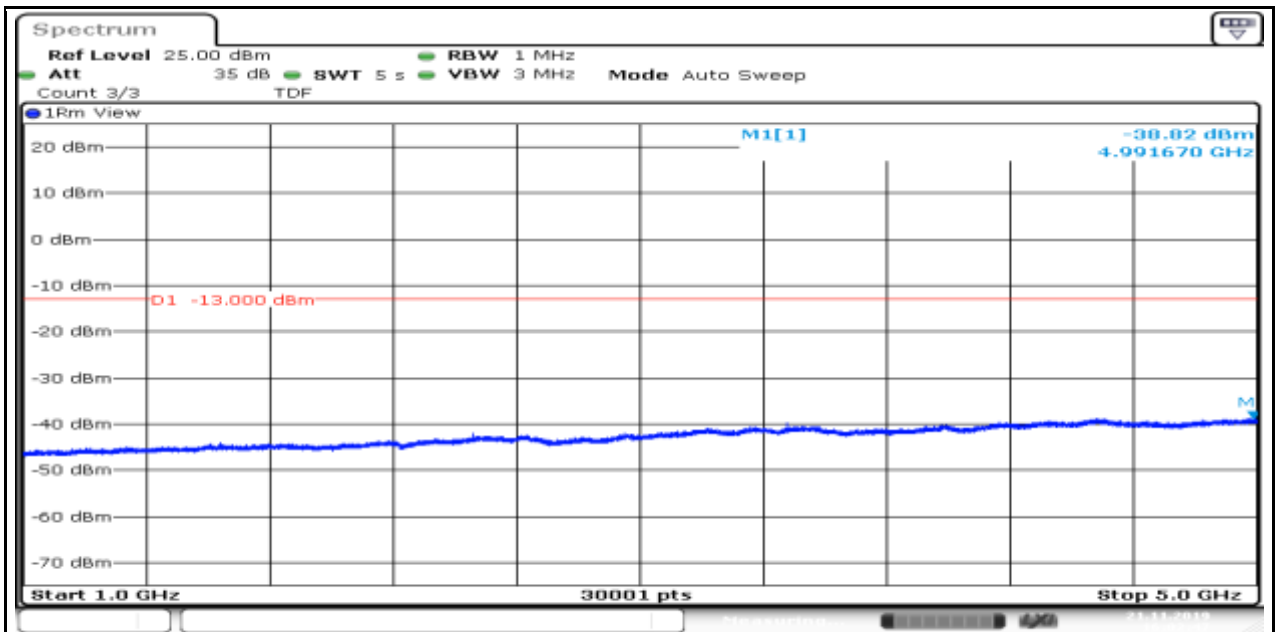
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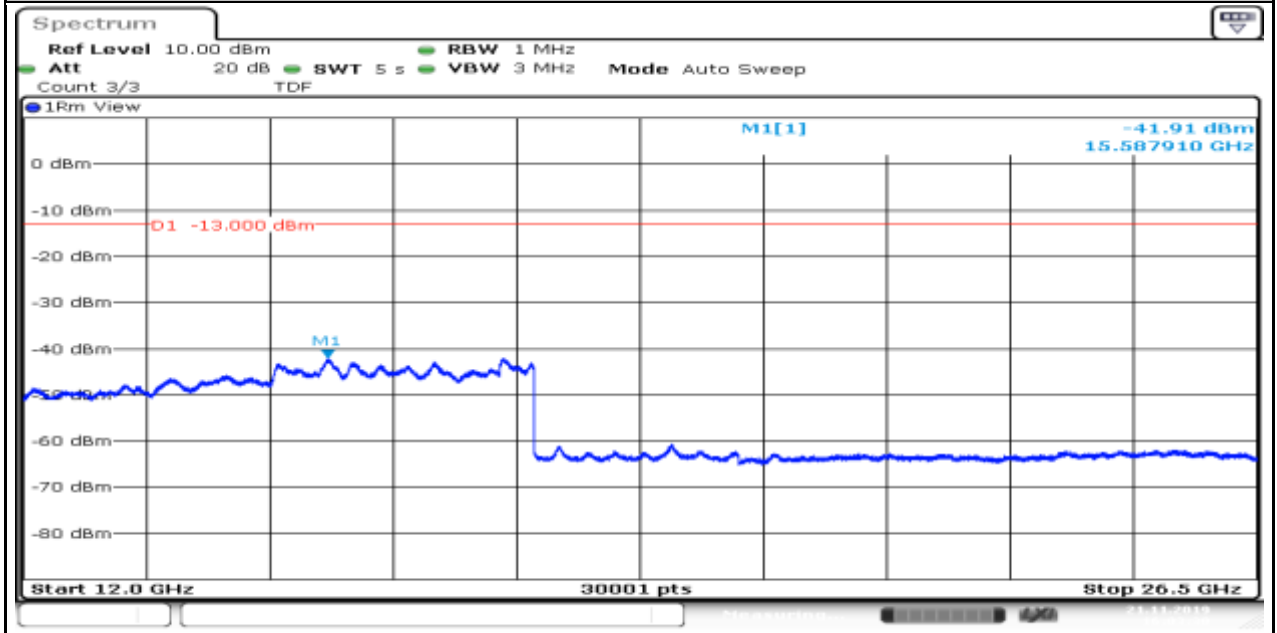
Date: 21.NOV.2019 16:02:25

Band26\_1.4MHz\_16QAM\_26740\_6\_0\_Low\_1000\_5000\_-38.82\_PASS\_

Produkte  
Products

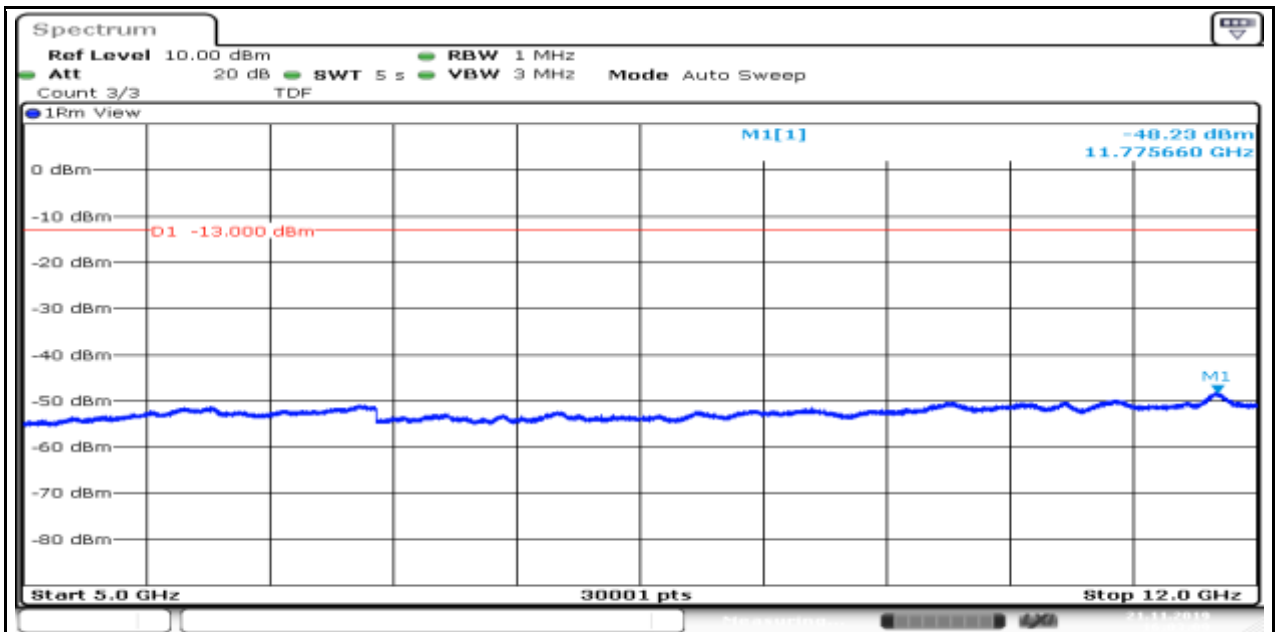


Band26\_1.4MHz\_16QAM\_26740\_6\_0\_Low\_12000\_26500\_-41.91\_PASS\_



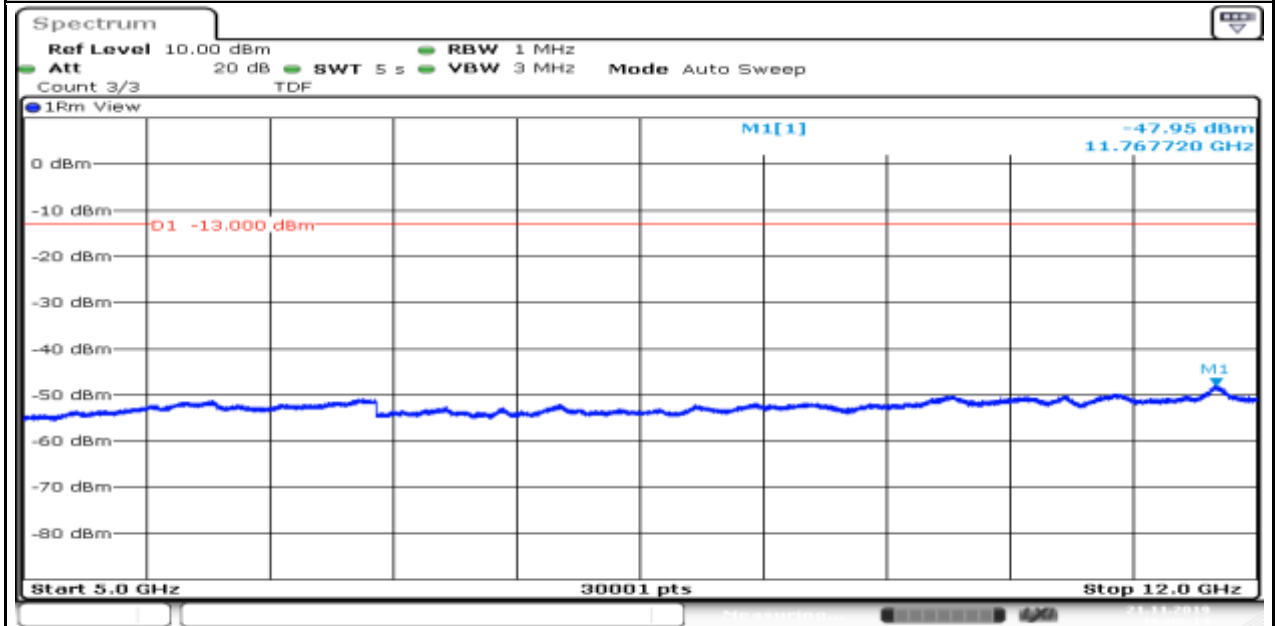
Band26\_1.4MHz\_16QAM\_26740\_6\_0\_Low\_5000\_12000\_-48.23\_PASS\_

Produkte  
Products



Date: 21.NOV.2019 16:03:09

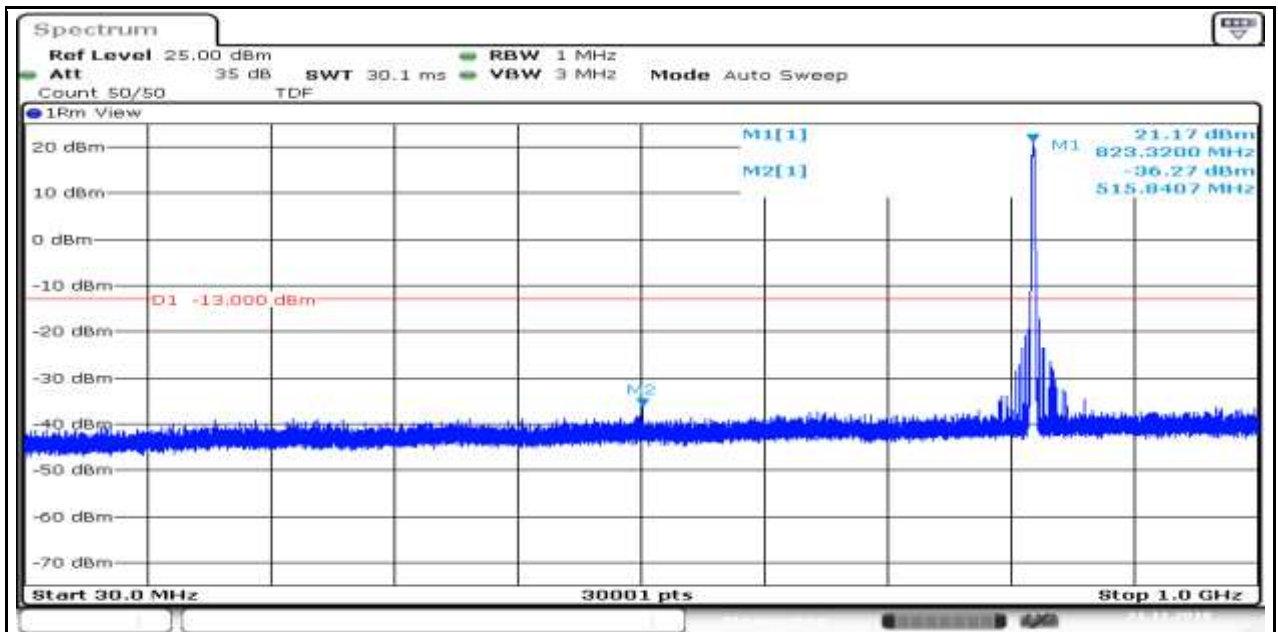
Band26\_1.4MHz\_16QAM\_26740\_1\_0\_Low\_5000\_12000\_-47.95\_PASS\_



Date: 21.NOV.2019 16:00:15

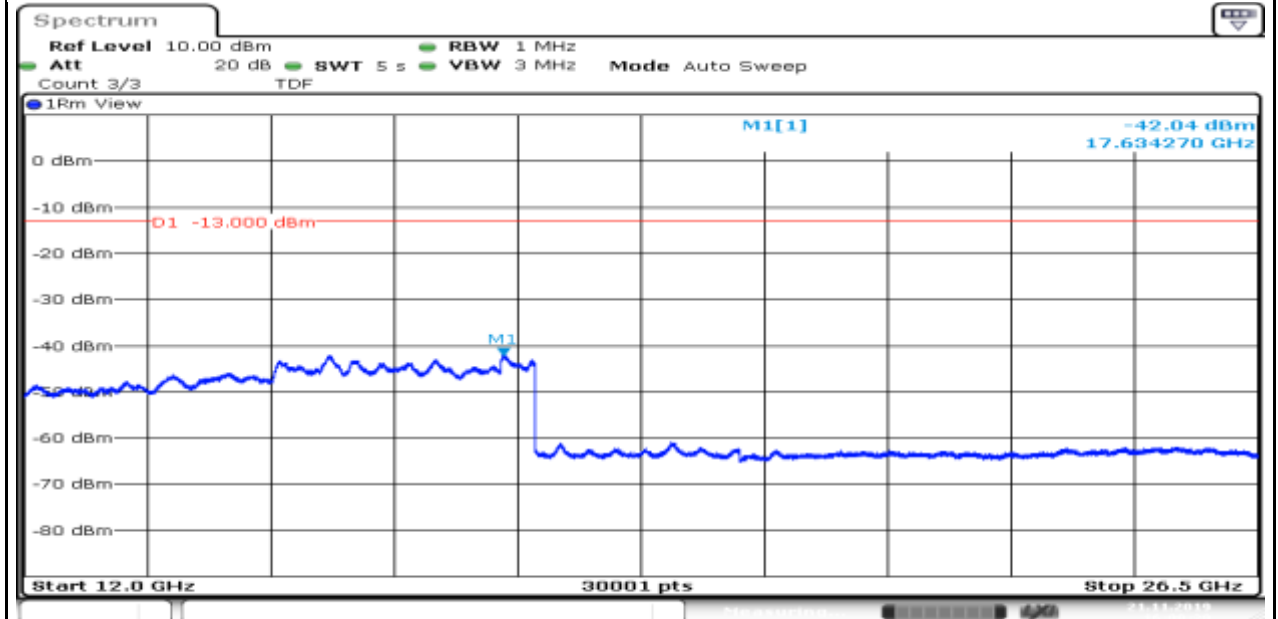
Band26\_1.4MHz\_16QAM\_26783\_6\_0\_Low\_30\_1000\_-36.27\_PASS\_

Produkte  
Products



Date: 21.NOV.2019 16:08:24

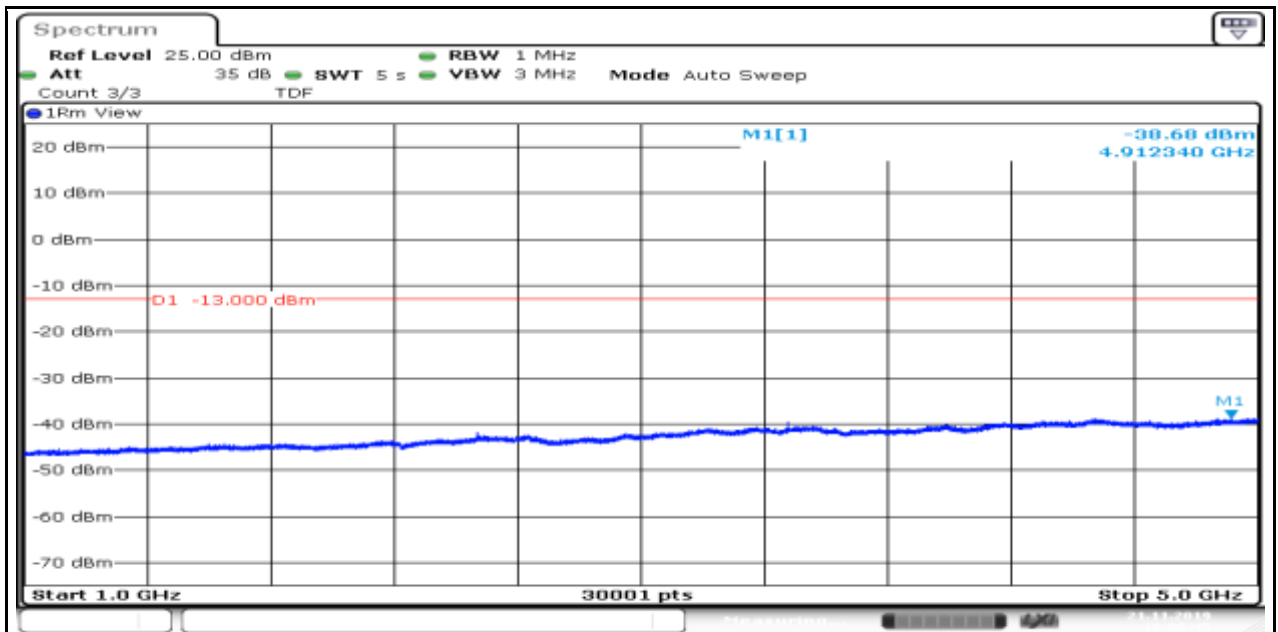
Band26\_1.4MHz\_16QAM\_26783\_6\_0\_Low\_12000\_26500\_-42.04\_PASS\_



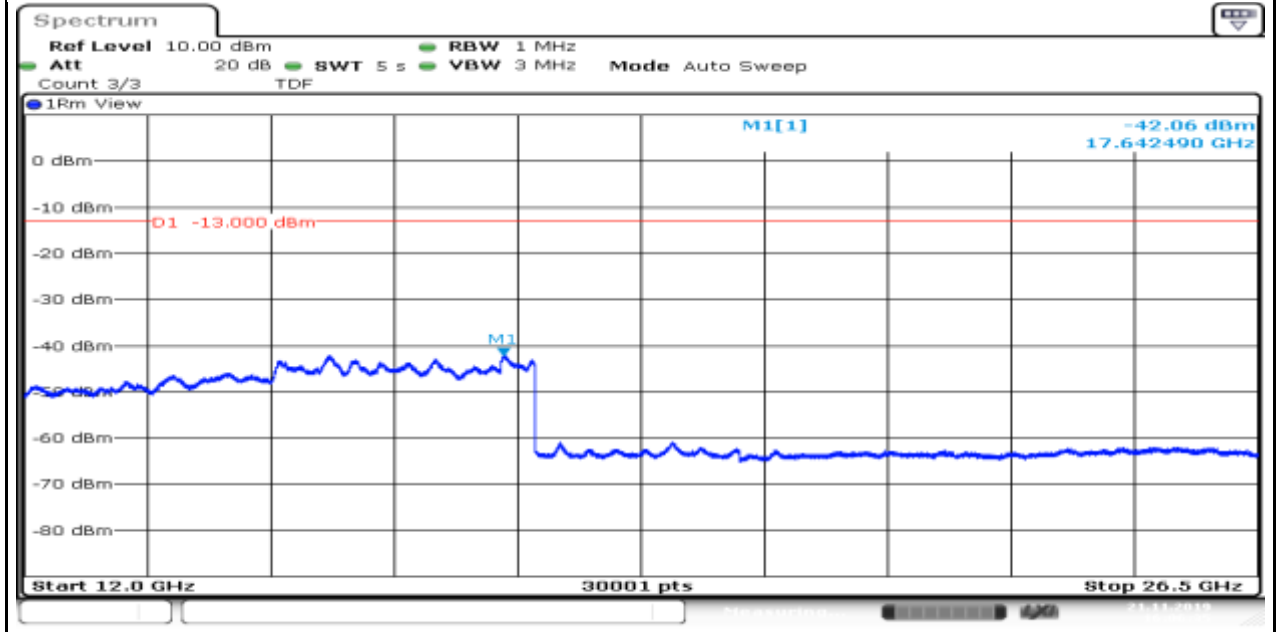
Date: 21.NOV.2019 16:09:29

Band26\_1.4MHz\_16QAM\_26783\_6\_0\_Low\_1000\_5000\_-38.68\_PASS\_

Produkte  
Products



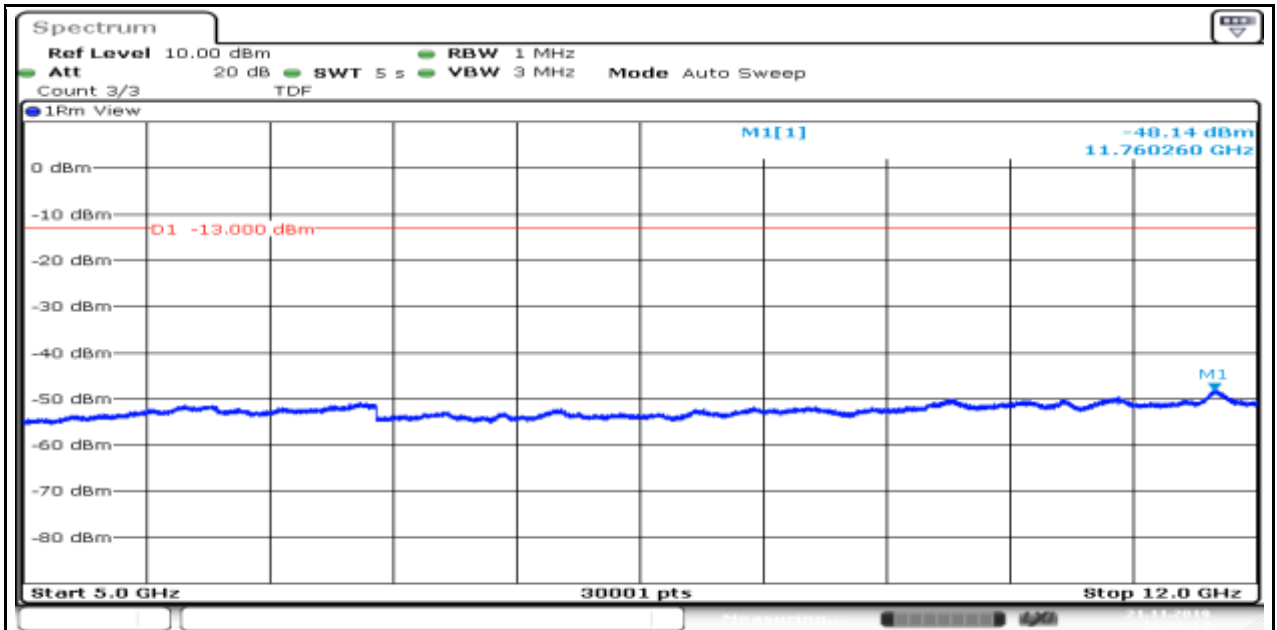
Band26\_1.4MHz\_16QAM\_26783\_1\_5\_Low\_12000\_26500\_-42.06\_PASS\_



Band26\_1.4MHz\_16QAM\_26783\_1\_5\_Low\_5000\_12000\_-48.14\_PASS\_

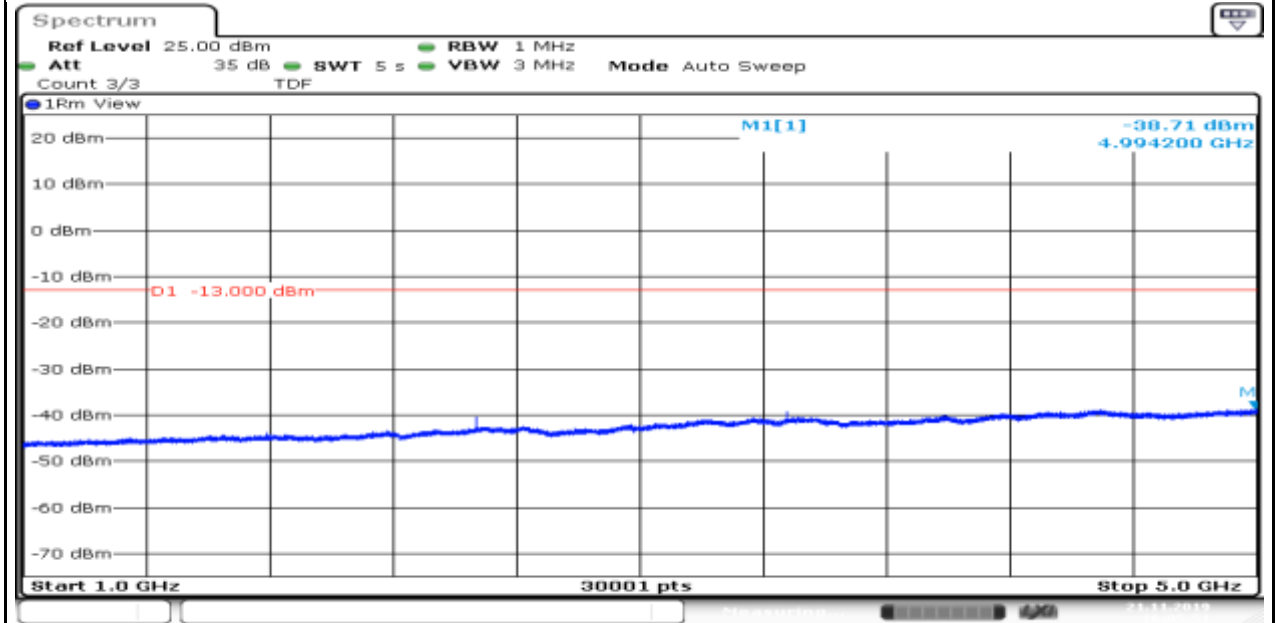


Produkte  
Products



Date: 21.NOV.2019 16:06:14

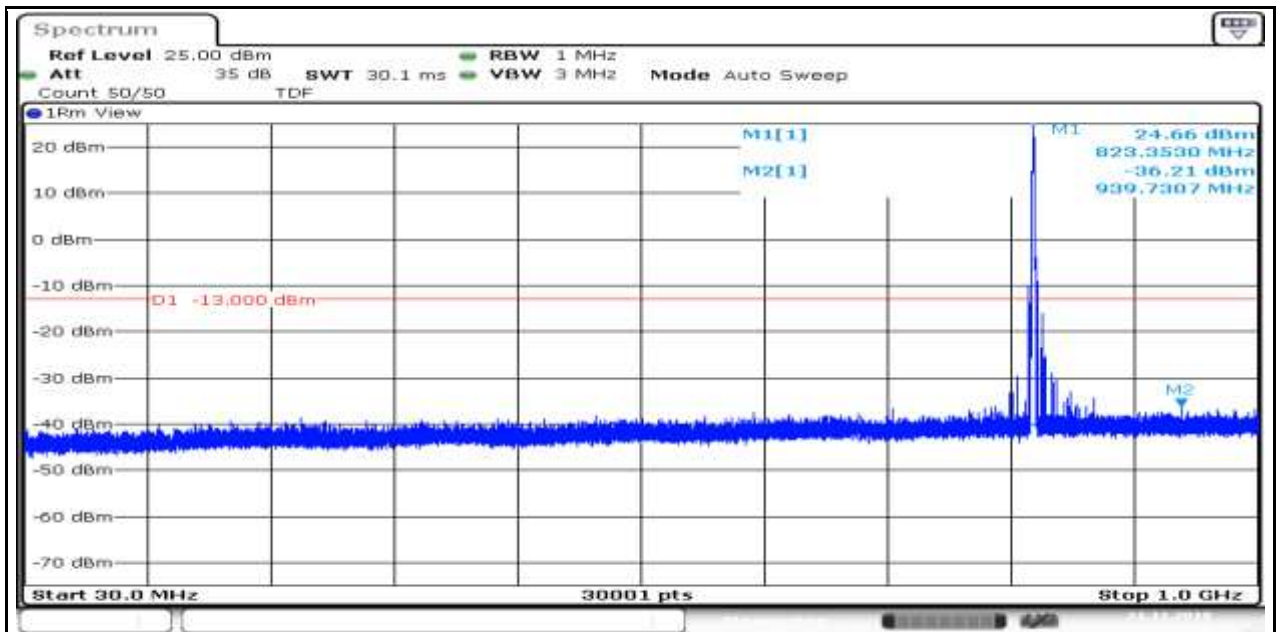
Band26\_1.4MHz\_16QAM\_26783\_1\_5\_Low\_1000\_5000\_-38.71\_PASS\_



Date: 21.NOV.2019 16:05:52

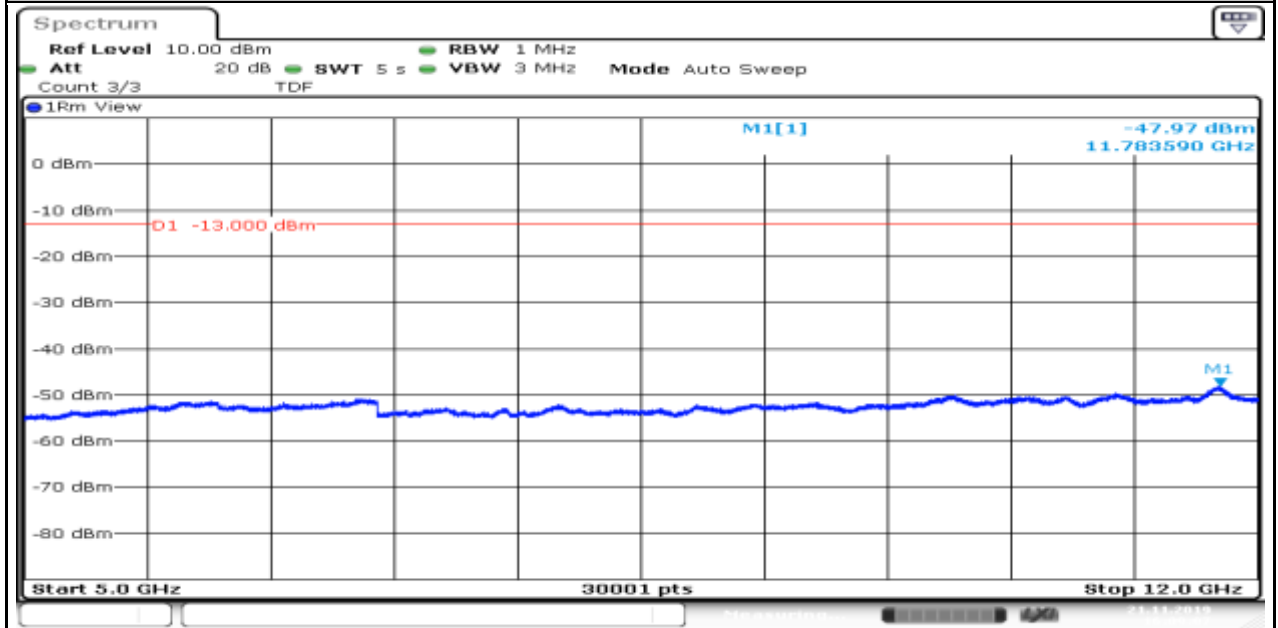
Band26\_1.4MHz\_16QAM\_26783\_1\_5\_Low\_30\_1000\_-36.21\_PASS\_

Produkte  
Products



Date: 21.NOV.2019 16:05:30

Band26\_1.4MHz\_16QAM\_26783\_6\_0\_Low\_5000\_12000\_-47.97\_PASS\_



Date: 21.NOV.2019 16:09:08

## Appendix G.6: Frequency Stability for M1 Test Result

Voltage												
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band26	1.4MHz	QPSK	26740	1	0	Low	HV	NT	-8.21	-0.01002	±2.5	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	NV	NT	-7.31	-0.00893	±2.5	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	LV	NT	-9.93	-0.01213	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	LV	NT	58.55	0.07149	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	HV	NT	56.42	0.068889	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	NV	NT	59.55	0.072711	±2.5	PASS

Temperature												
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band26	1.4MHz	QPSK	26740	1	0	Low	NV	85	-8.61	-0.01051	±2.5	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	NV	80	-7.71	-0.00941	±2.5	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	NV	60	-12.85	-0.01569	±2.5	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	NV	-20	-10.27	-0.01254	±2.5	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	NV	70	-8.04	-0.00982	±2.5	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	NV	-30	-9.54	-0.01165	±2.5	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	NV	50	-8.75	-0.01068	±2.5	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	NV	-10	-9.23	-0.01127	±2.5	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	NV	0	-11.13	-0.01359	±2.5	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	NV	10	-9.01	-0.011	±2.5	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	NV	20	-11.94	-0.01458	±2.5	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	NV	30	-6.94	-0.00847	±2.5	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	NV	40	-9.96	-0.01216	±2.5	PASS
Band26	1.4MHz	QPSK	26740	1	0	Low	NV	-40	-8.71	-0.01064	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	NV	-20	58.24	0.071111	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	NV	80	59.01	0.072051	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	NV	70	58.09	0.070928	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	NV	60	58.36	0.071258	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	NV	50	60.2	0.073504	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	NV	40	58.71	0.071685	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	NV	30	57.12	0.069744	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	NV	20	57.49	0.070195	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	NV	10	58.25	0.071123	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	NV	-10	58.78	0.07177	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	NV	-30	58.49	0.071416	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	NV	-40	56.46	0.068938	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	NV	85	61.74	0.075385	±2.5	PASS
Band26	1.4MHz	16QAM	26740	1	0	Low	NV	0	56.49	0.068974	±2.5	PASS

# Appendix H: Test Results of Band 26 Upper Band for eMTC operation

<b>APPENDIX H: TEST RESULTS OF BAND 26 UPPER BAND FOR EMTC OPERATION .....</b>	<b>1</b>
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Test Graphs.....	9
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Test Graphs.....	15
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Test Graphs.....	20
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Test Result .....	45

## Appendix H.1: RF Power Output and Effective (Isotropic) Radiated Power Output Data for M1

### Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result (dBm)	ERP		Limit (watts)		Verdict
								dBm	watts	FCC	ISED	
Band26	1.4MHz	QPSK	26797	6	0	Low	19.2	19.19	0.083	7	11.5	PASS
Band26	1.4MHz	QPSK	26797	1	0	Low	21.07	21.06	0.128	7	11.5	PASS
Band26	1.4MHz	QPSK	26915	6	0	Low	19.29	19.28	0.085	7	11.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	21.37	21.36	0.137	7	11.5	PASS
Band26	1.4MHz	QPSK	27033	1	5	Low	21.42	21.41	0.138	7	11.5	PASS
Band26	1.4MHz	QPSK	27033	6	0	Low	19.16	19.15	0.082	7	11.5	PASS
Band26	1.4MHz	16QAM	26797	1	0	Low	20.27	20.26	0.106	7	11.5	PASS
Band26	1.4MHz	16QAM	26797	6	0	Low	19.2	19.19	0.083	7	11.5	PASS
Band26	1.4MHz	16QAM	26915	6	0	Low	19.29	19.28	0.085	7	11.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	20.23	20.22	0.105	7	11.5	PASS
Band26	1.4MHz	16QAM	27033	1	5	Low	20.11	20.1	0.102	7	11.5	PASS
Band26	1.4MHz	16QAM	27033	6	0	Low	19.16	19.15	0.082	7	11.5	PASS
Band26	3MHz	QPSK	26805	6	0	Low	19.1	19.09	0.081	7	11.5	PASS
Band26	3MHz	QPSK	26805	1	0	Low	21.37	21.36	0.137	7	11.5	PASS
Band26	3MHz	QPSK	26915	6	0	Low	19.11	19.1	0.081	7	11.5	PASS
Band26	3MHz	QPSK	26915	1	0	Low	21.21	21.2	0.132	7	11.5	PASS
Band26	3MHz	QPSK	27025	1	5	High	21.21	21.2	0.132	7	11.5	PASS
Band26	3MHz	QPSK	27025	6	0	High	19.1	19.09	0.081	7	11.5	PASS
Band26	3MHz	16QAM	26805	1	0	Low	20.42	20.41	0.110	7	11.5	PASS
Band26	3MHz	16QAM	26805	6	0	Low	19.1	19.09	0.081	7	11.5	PASS
Band26	3MHz	16QAM	26915	1	0	Low	20.46	20.45	0.111	7	11.5	PASS
Band26	3MHz	16QAM	26915	6	0	Low	19.12	19.11	0.081	7	11.5	PASS
Band26	3MHz	16QAM	27025	1	5	High	20.33	20.32	0.108	7	11.5	PASS
Band26	3MHz	16QAM	27025	6	0	High	18.99	18.98	0.079	7	11.5	PASS
Band26	5MHz	QPSK	26815	1	0	Low	21.37	21.36	0.137	7	11.5	PASS
Band26	5MHz	QPSK	26815	6	0	Low	20.11	20.1	0.102	7	11.5	PASS
Band26	5MHz	QPSK	26915	6	0	Low	20.11	20.1	0.102	7	11.5	PASS
Band26	5MHz	QPSK	26915	1	0	Low	21.27	21.26	0.134	7	11.5	PASS
Band26	5MHz	QPSK	27015	3	3	High	21.06	21.05	0.127	7	11.5	PASS
Band26	5MHz	QPSK	27015	1	5	High	21.17	21.16	0.131	7	11.5	PASS
Band26	5MHz	16QAM	26815	6	0	Low	20.17	20.16	0.104	7	11.5	PASS
Band26	5MHz	16QAM	26815	1	0	Low	20.66	20.65	0.116	7	11.5	PASS
Band26	5MHz	16QAM	26915	1	0	Low	20.67	20.66	0.116	7	11.5	PASS
Band26	5MHz	16QAM	26915	6	0	Low	20.11	20.1	0.102	7	11.5	PASS
Band26	5MHz	16QAM	27015	3	3	High	20.74	20.73	0.118	7	11.5	PASS
Band26	5MHz	16QAM	27015	1	5	High	20.45	20.44	0.111	7	11.5	PASS
Band26	10MHz	QPSK	26840	1	0	Low	21.36	21.35	0.136	7	11.5	PASS
Band26	10MHz	QPSK	26840	5	0	Low	21.22	21.21	0.132	7	11.5	PASS
Band26	10MHz	QPSK	26915	1	0	Low	21.3	21.29	0.135	7	11.5	PASS
Band26	10MHz	QPSK	26915	5	0	Low	21.16	21.15	0.130	7	11.5	PASS
Band26	10MHz	QPSK	26990	1	5	High	21.21	21.2	0.132	7	11.5	PASS
Band26	10MHz	QPSK	26990	5	1	High	21.25	21.24	0.133	7	11.5	PASS
Band26	10MHz	16QAM	26840	5	0	Low	20.95	20.94	0.124	7	11.5	PASS
Band26	10MHz	16QAM	26840	1	0	Low	20.64	20.63	0.116	7	11.5	PASS
Band26	10MHz	16QAM	26915	1	0	Low	20.5	20.49	0.112	7	11.5	PASS
Band26	10MHz	16QAM	26915	5	0	Low	20.9	20.89	0.123	7	11.5	PASS
Band26	10MHz	16QAM	26990	5	1	High	21.18	21.17	0.131	7	11.5	PASS
Band26	10MHz	16QAM	26990	1	5	High	20.48	20.47	0.111	7	11.5	PASS
Band26	15MHz	QPSK	26865	1	0	Low	21.28	21.27	0.134	7	11.5	PASS
Band26	15MHz	QPSK	26865	6	0	Low	21.38	21.37	0.137	7	11.5	PASS
Band26	15MHz	QPSK	26915	1	0	Low	21.13	21.12	0.129	7	11.5	PASS

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Band26	15MHz	QPSK	26915	6	0	Low	21.24	21.23	0.133	7	11.5	PASS
Band26	15MHz	QPSK	26965	6	0	High	21.22	21.21	0.132	7	11.5	PASS
Band26	15MHz	QPSK	26965	1	5	High	21.23	21.22	0.132	7	11.5	PASS
Band26	15MHz	16QAM	26865	1	0	Low	20.68	20.67	0.117	7	11.5	PASS
Band26	15MHz	16QAM	26865	6	0	Low	21.38	21.37	0.137	7	11.5	PASS
Band26	15MHz	16QAM	26915	6	0	Low	21.25	21.24	0.133	7	11.5	PASS
Band26	15MHz	16QAM	26915	1	0	Low	20.68	20.67	0.117	7	11.5	PASS
Band26	15MHz	16QAM	26965	6	0	High	21.22	21.21	0.132	7	11.5	PASS
Band26	15MHz	16QAM	26965	1	5	High	20.52	20.51	0.112	7	11.5	PASS

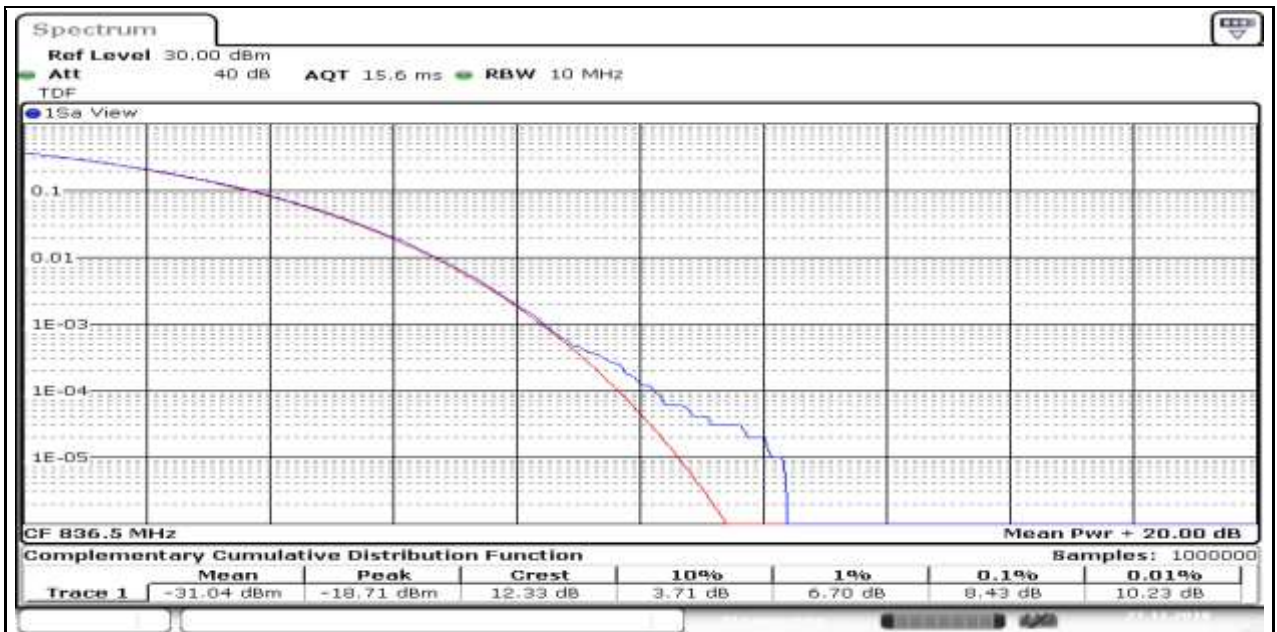
## Appendix H.2: Peak-to-Average Ratio(CCDF) for M1

### Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NBIndex	Result(dB)	Limit(dB)	Verdict
Band26	10MHz	QPSK	26915	6	0	Low	8.46	<=13	PASS
Band26	5MHz	QPSK	26915	6	0	Low	8.43	<=13	PASS
Band26	3MHz	QPSK	26915	6	0	Low	8.35	<=13	PASS
Band26	1.4MHz	QPSK	26915	6	0	Low	8.46	<=13	PASS
Band26	10MHz	16QAM	26915	6	0	Low	9.57	<=13	PASS
Band26	5MHz	16QAM	26915	6	0	Low	8.87	<=13	PASS
Band26	3MHz	16QAM	26915	6	0	Low	8.96	<=13	PASS
Band26	1.4MHz	16QAM	26915	6	0	Low	9.42	<=13	PASS
Band26	15MHz	QPSK	26915	6	0	Low	4.67	<=13	PASS
Band26	15MHz	16QAM	26915	6	0	Low	9.19	<=13	PASS

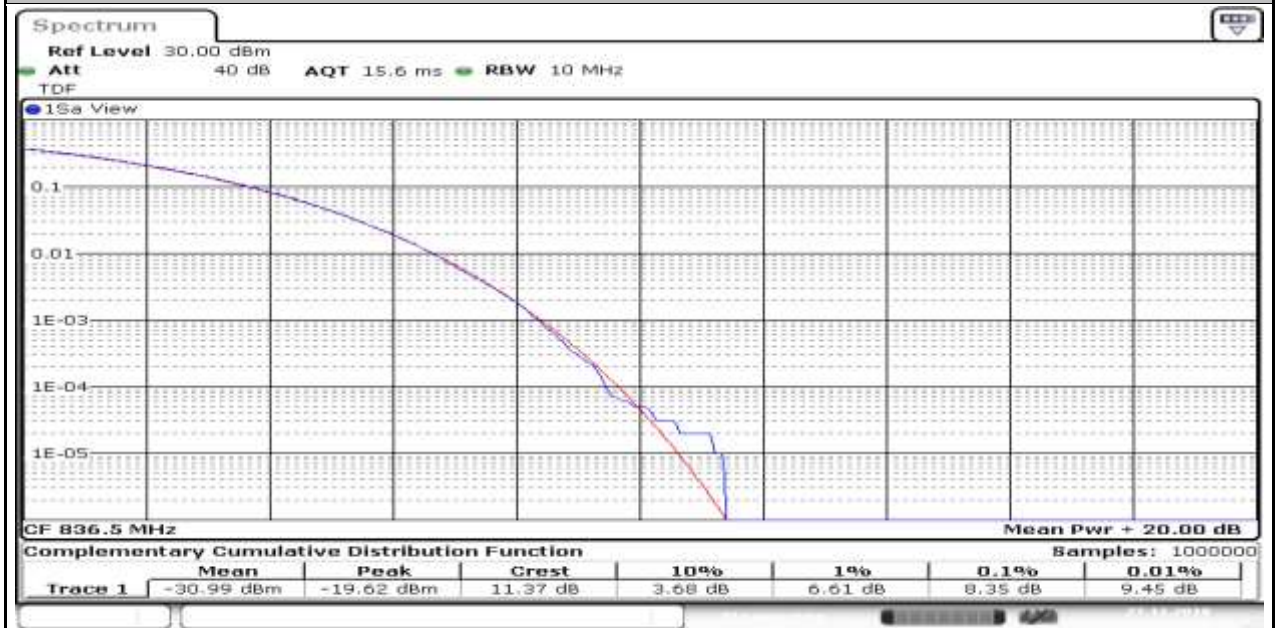
### Test Graphs





Date: 27.NOV.2019 10:54:37

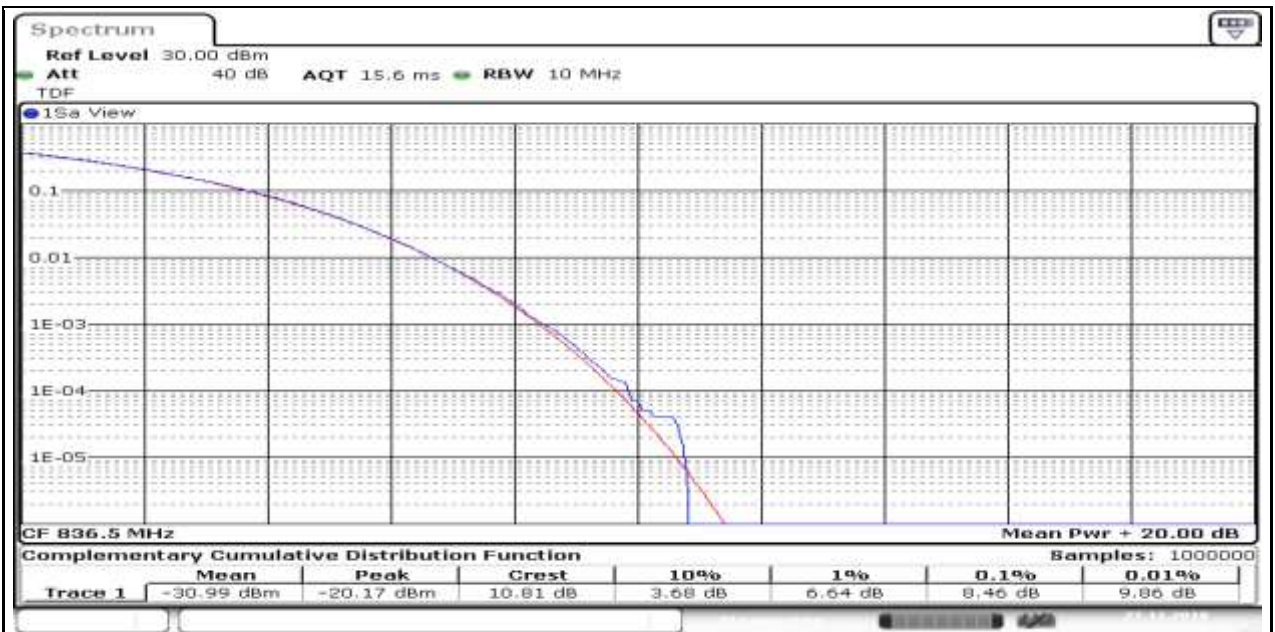
Band26\_3MHz\_QPSK\_26915\_6\_0\_Low\_8.35\_<=13\_PASS\_



Date: 27.NOV.2019 10:54:00

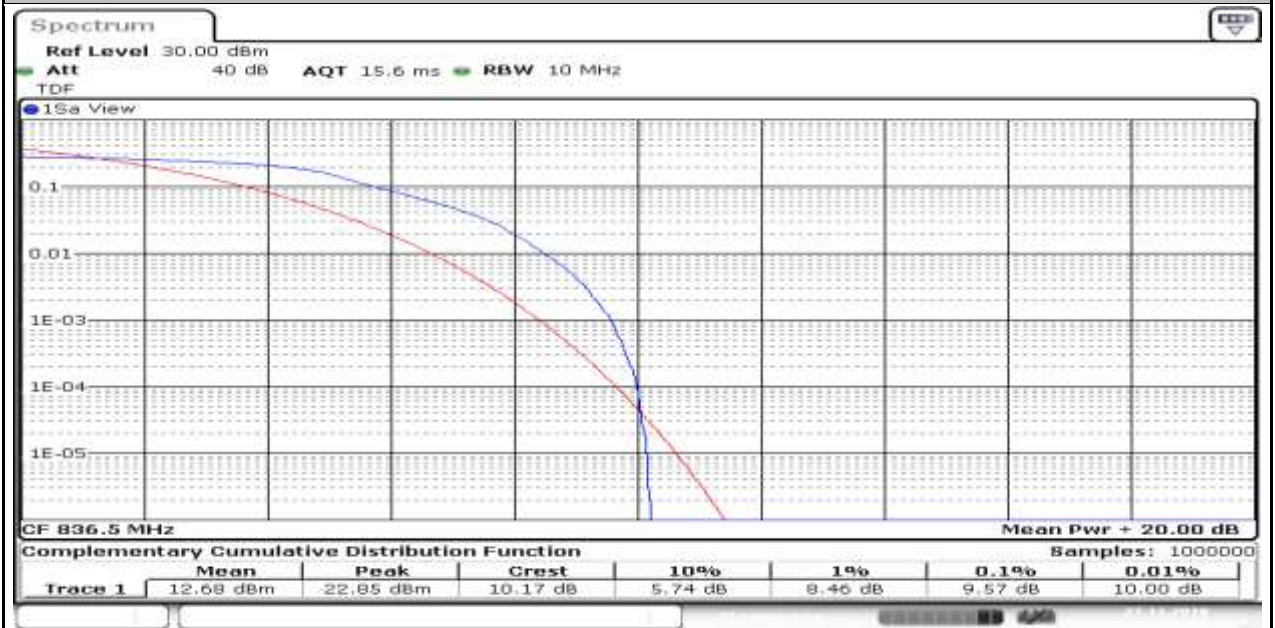
Band26\_1.4MHz\_QPSK\_26915\_6\_0\_Low\_8.46\_<=13\_PASS\_





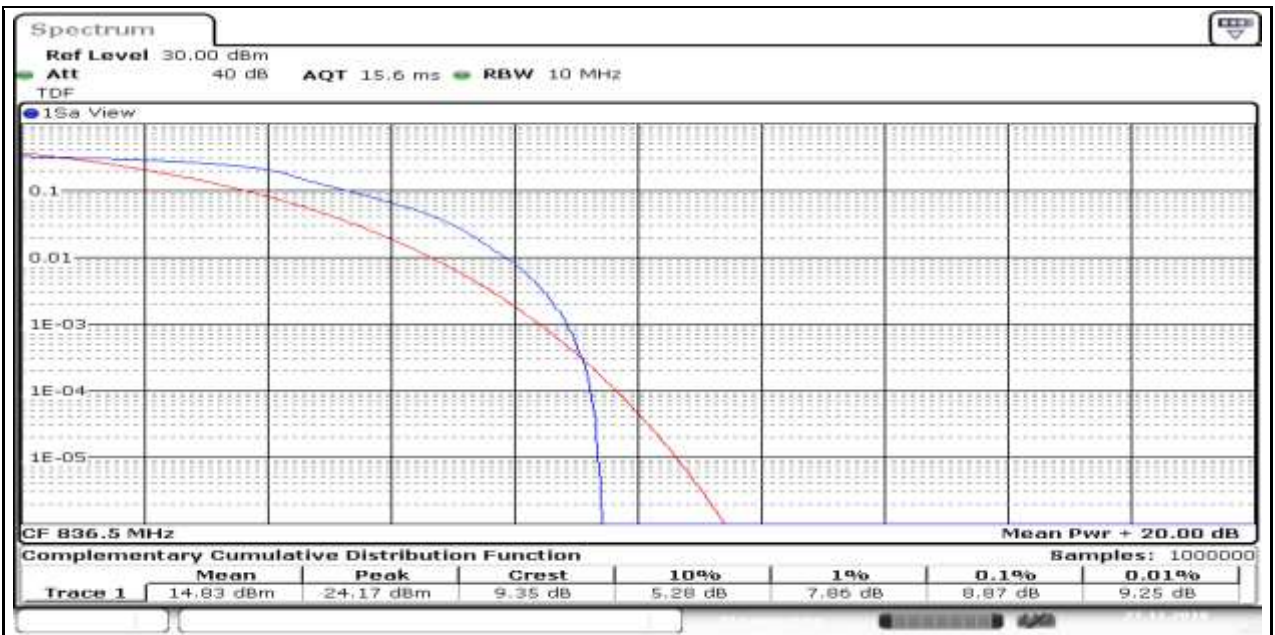
Date: 27.NOV.2019 10:53:10

Band26\_10MHz\_16QAM\_26915\_6\_0\_Low\_9.57\_<=13\_PASS\_



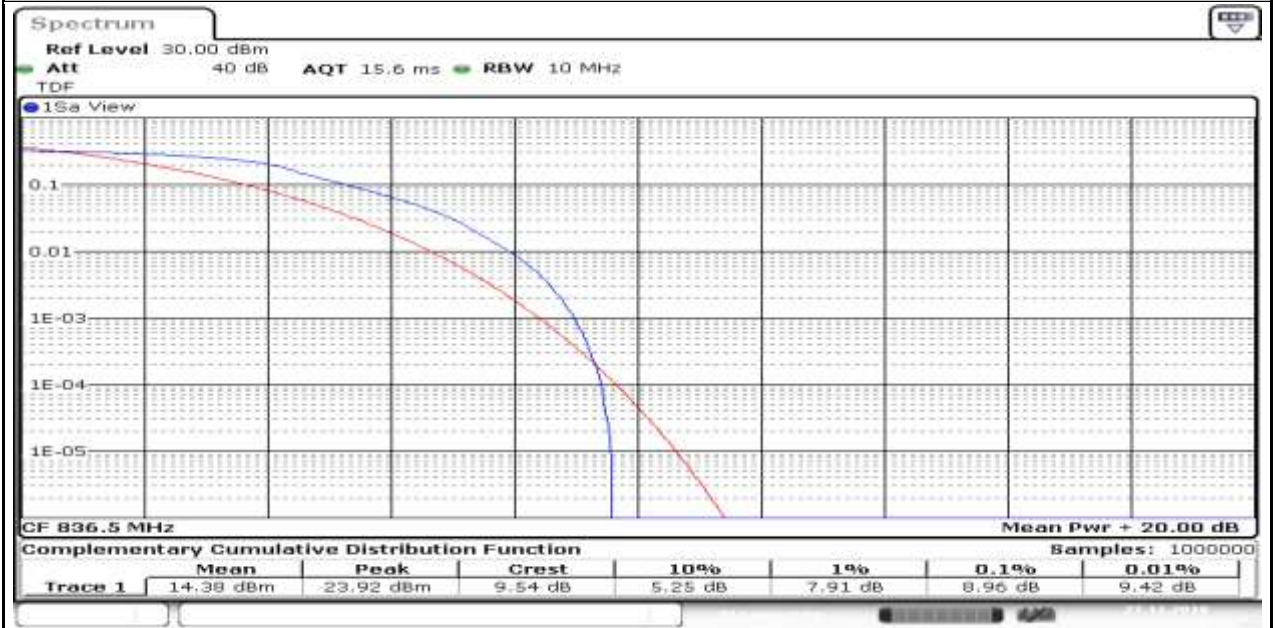
Date: 27.NOV.2019 10:55:30

Band26\_5MHz\_16QAM\_26915\_6\_0\_Low\_8.87\_<=13\_PASS\_



Date: 27.NOV.2019 10:54:54

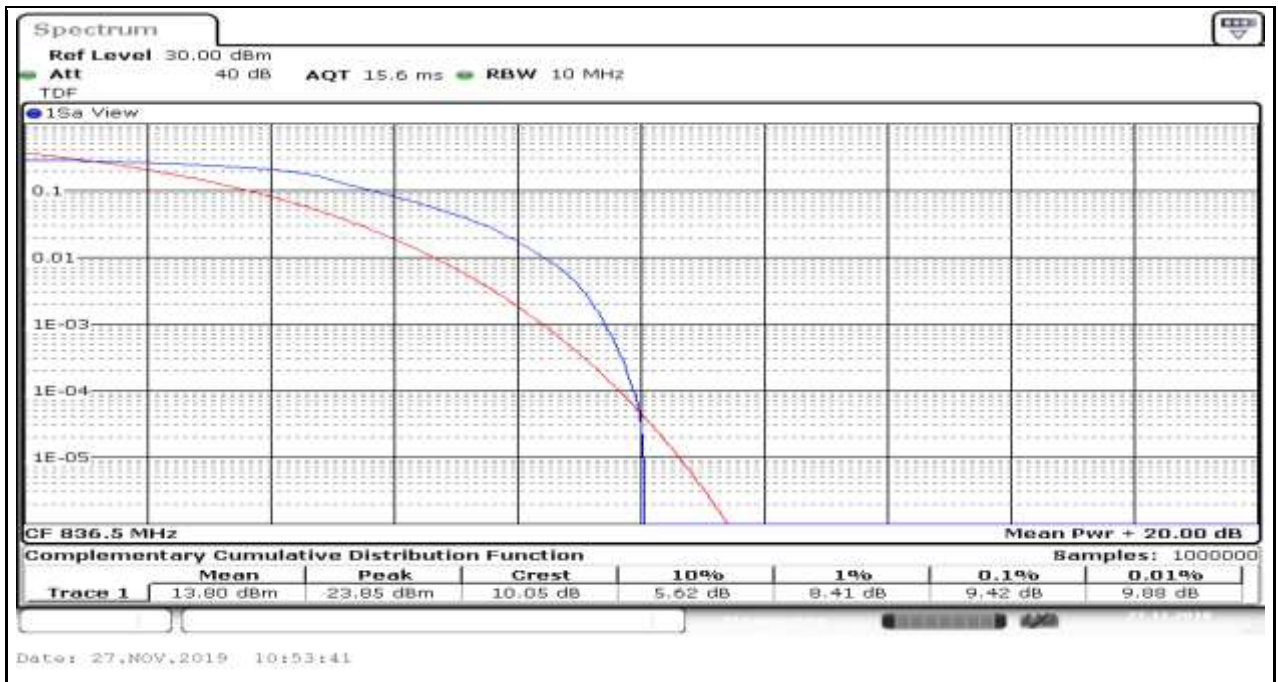
Band26\_3MHz\_16QAM\_26915\_6\_0\_Low\_8.96\_<=13\_PASS\_



Date: 27.NOV.2019 10:54:17

Band26\_1.4MHz\_16QAM\_26915\_6\_0\_Low\_9.42\_<=13\_PASS\_

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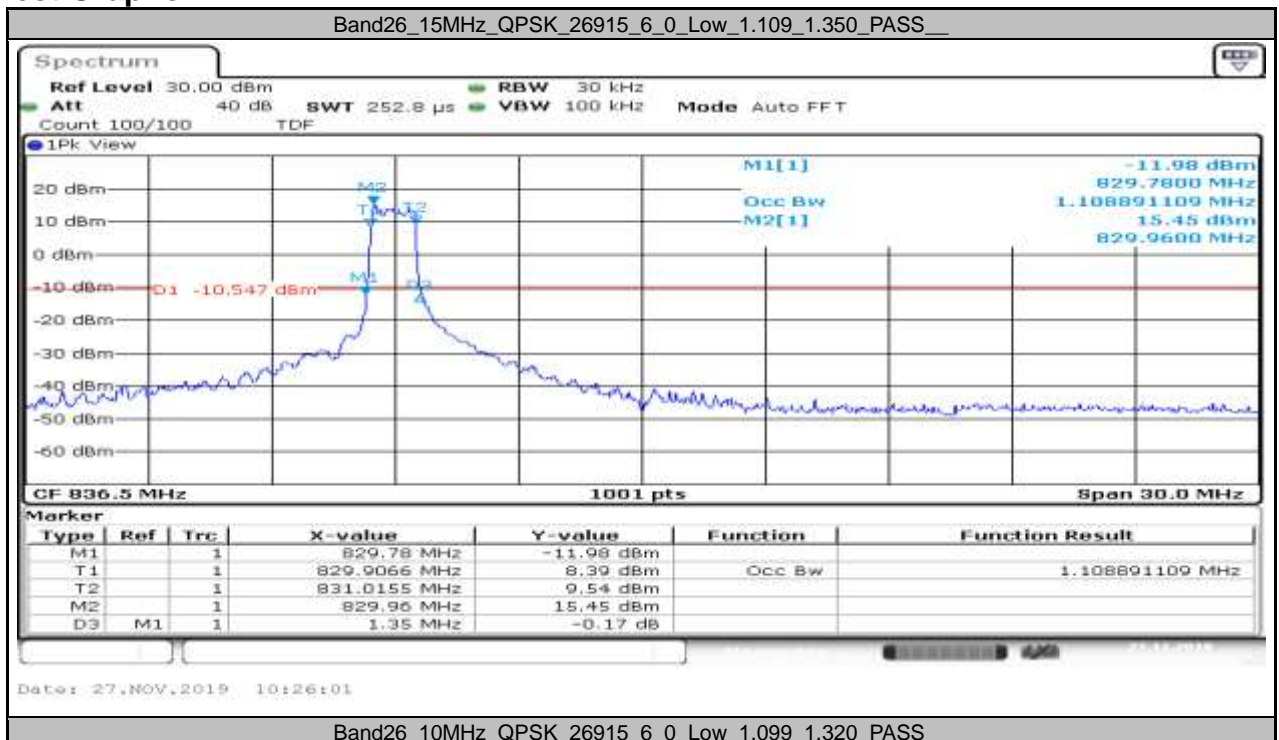


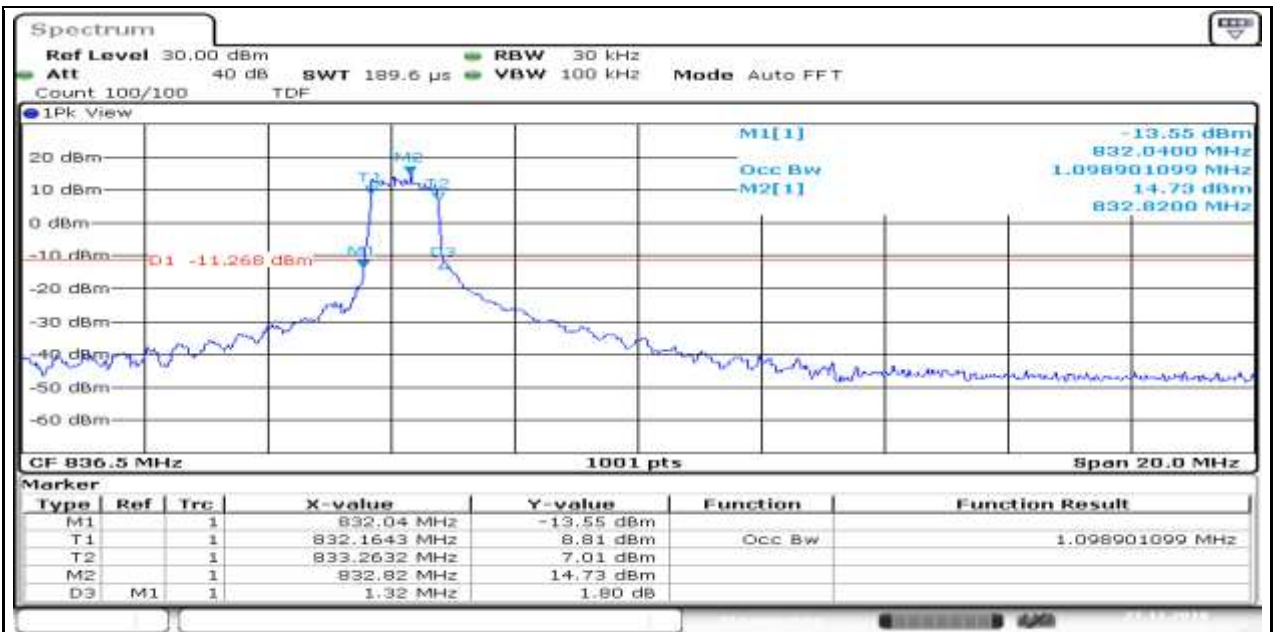
### Appendix H.3: 26dB Bandwidth and Occupied Bandwidth for M1

#### Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band26	15MHz	QPSK	26915	6	0	Low	1.109	1.350	PASS
Band26	10MHz	QPSK	26915	6	0	Low	1.099	1.320	PASS
Band26	5MHz	QPSK	26915	6	0	Low	1.099	1.330	PASS
Band26	3MHz	QPSK	26915	6	0	Low	1.103	1.332	PASS
Band26	1.4MHz	QPSK	26915	6	0	Low	1.091	1.272	PASS
Band26	15MHz	16QAM	26915	6	0	Low	1.109	1.350	PASS
Band26	10MHz	16QAM	26915	6	0	Low	1.099	1.320	PASS
Band26	5MHz	16QAM	26915	6	0	Low	1.099	1.330	PASS
Band26	3MHz	16QAM	26915	6	0	Low	1.103	1.326	PASS
Band26	1.4MHz	16QAM	26915	6	0	Low	1.1	1.323	PASS

#### Test Graphs

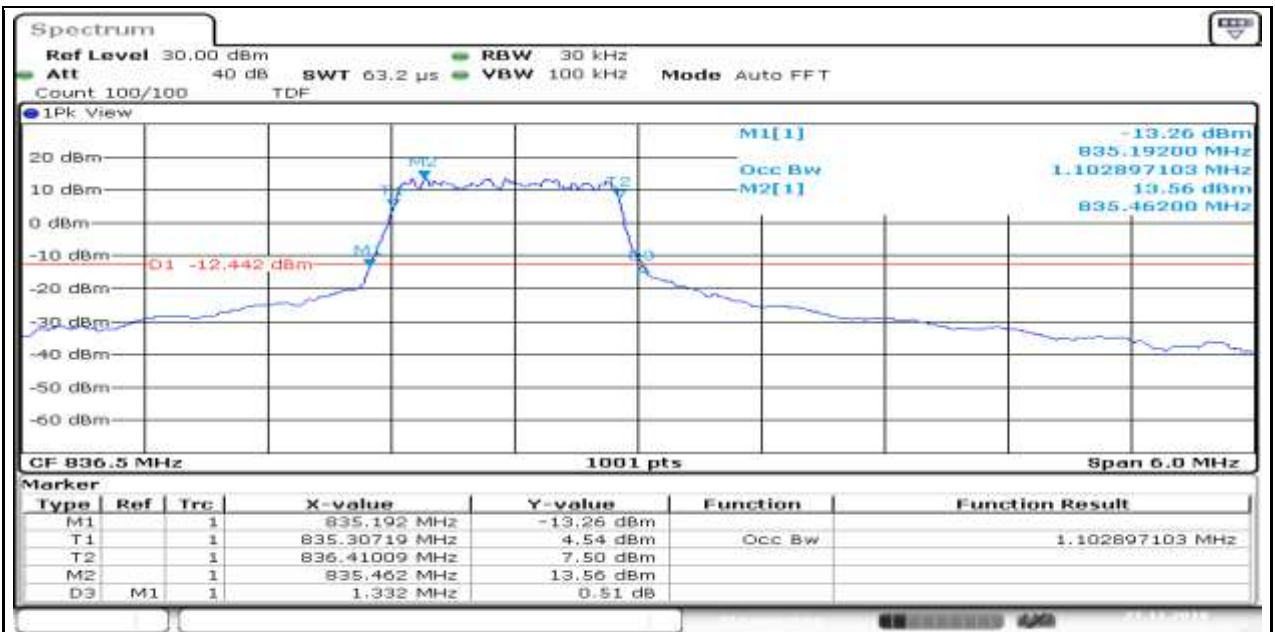




Band26\_5MHz\_QPSK\_26915\_6\_0\_Low\_1.099\_1.330\_PASS\_

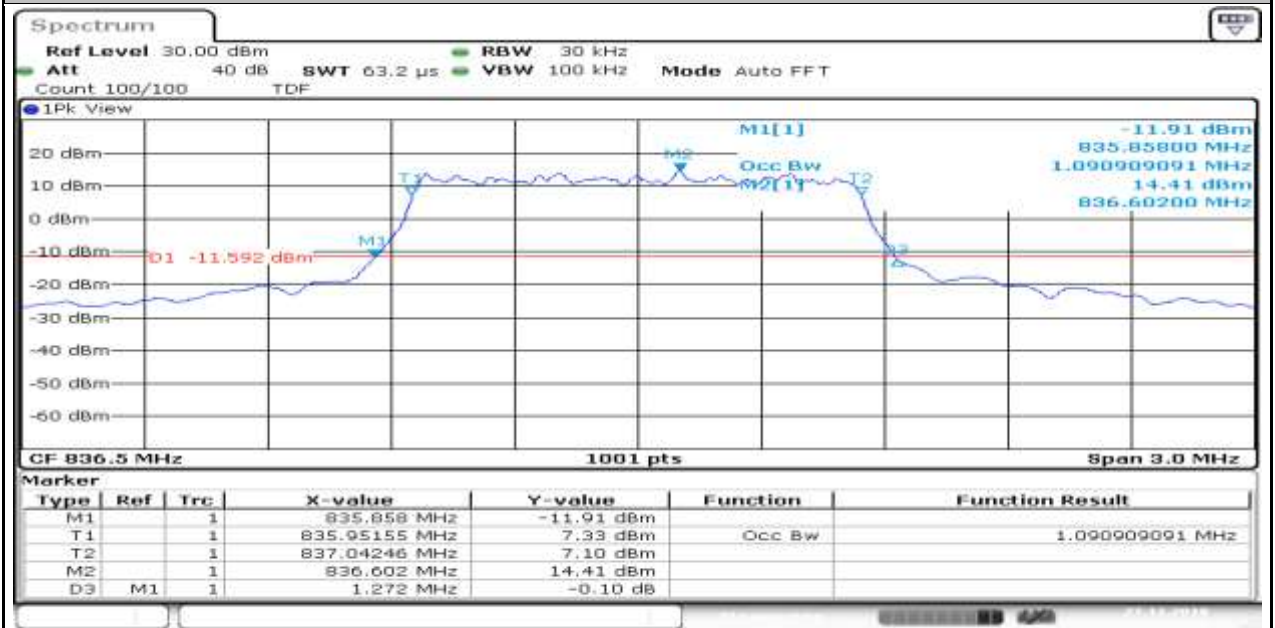


Band26\_3MHz\_QPSK\_26915\_6\_0\_Low\_1.103\_1.332\_PASS\_



Date: 27.NOV.2019 10:20:57

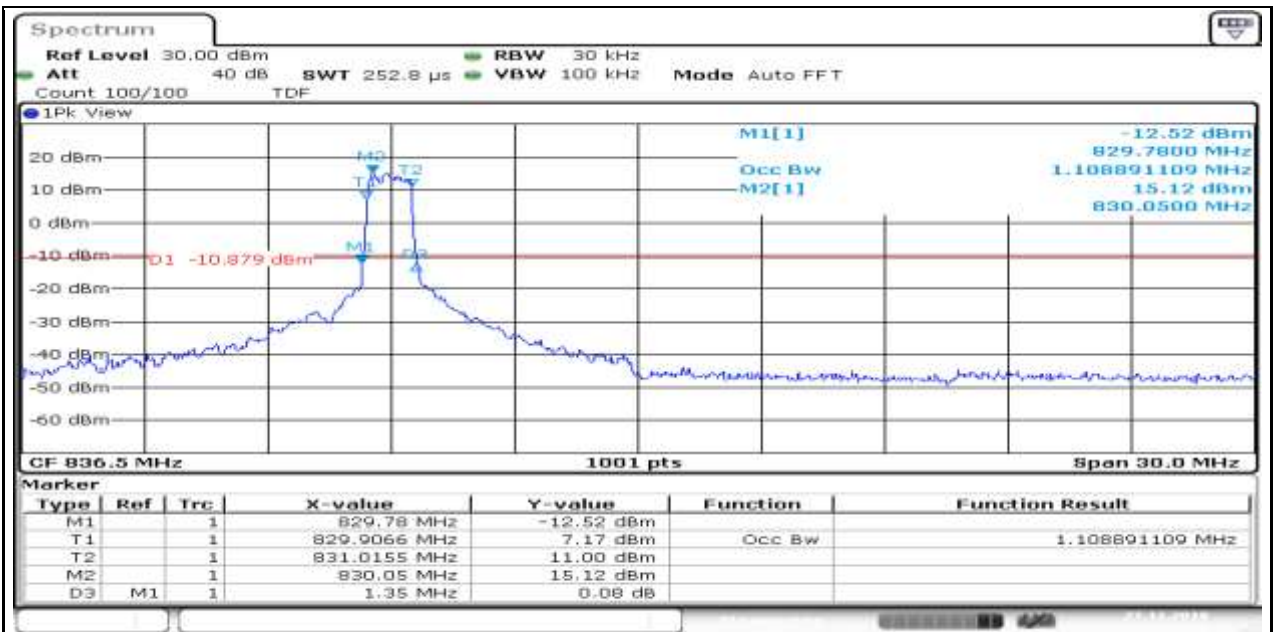
Band26\_1.4MHz\_QPSK\_26915\_6\_0\_Low\_1.091\_1.272\_PASS\_



Date: 27.NOV.2019 10:20:05

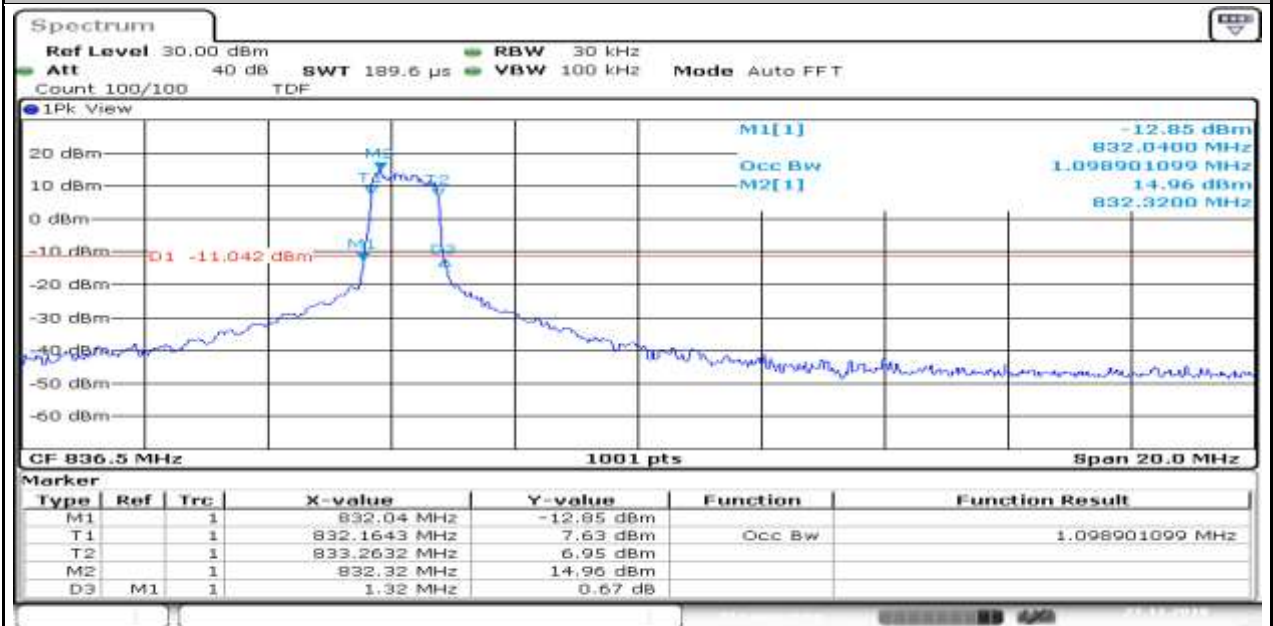
Band26\_15MHz\_16QAM\_26915\_6\_0\_Low\_1.109\_1.350\_PASS\_

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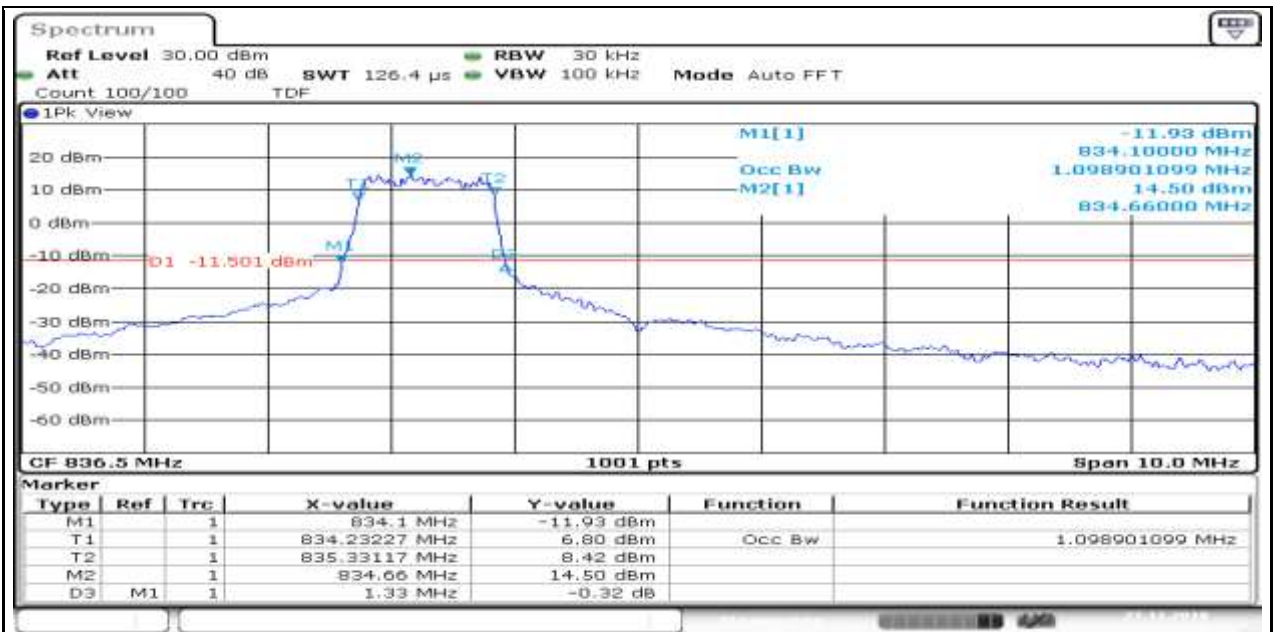
Date: 27.NOV.2019 10:26:20

Band26\_10MHz\_16QAM\_26915\_6\_0\_Low\_1.099\_1.320\_PASS\_



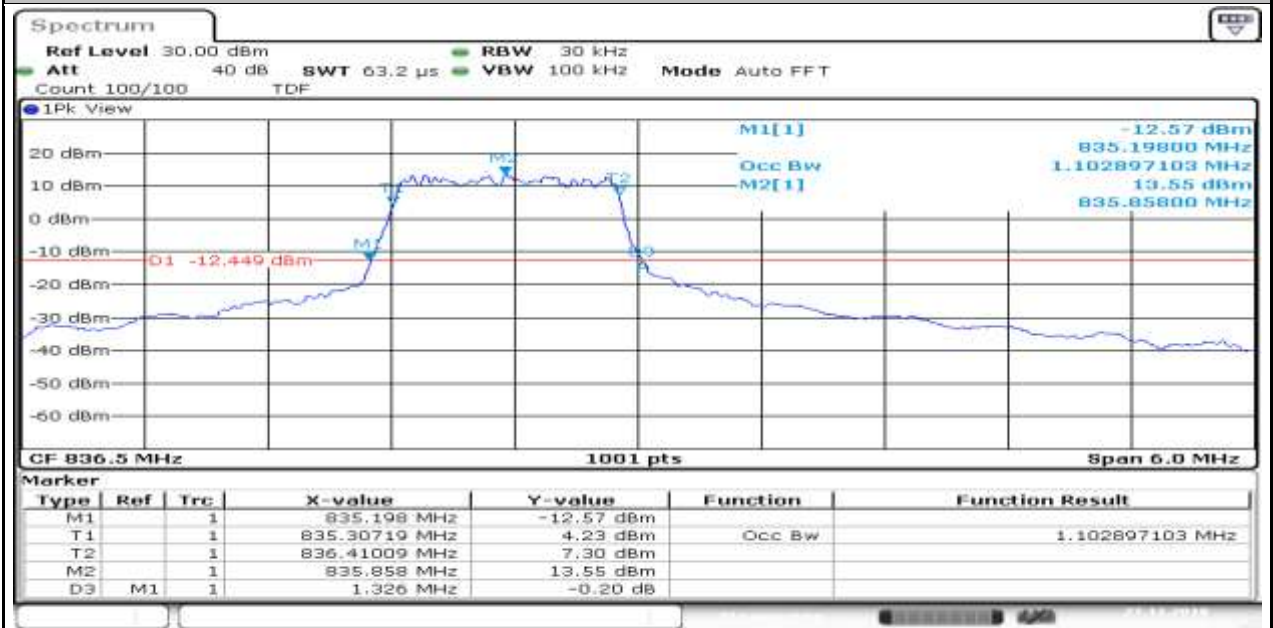
Date: 27.NOV.2019 10:24:13

Band26\_5MHz\_16QAM\_26915\_6\_0\_Low\_1.099\_1.330\_PASS\_



Date: 27.NOV.2019 10:22:07

Band26\_3MHz\_16QAM\_26915\_6\_0\_Low\_1.103\_1.326\_PASS\_

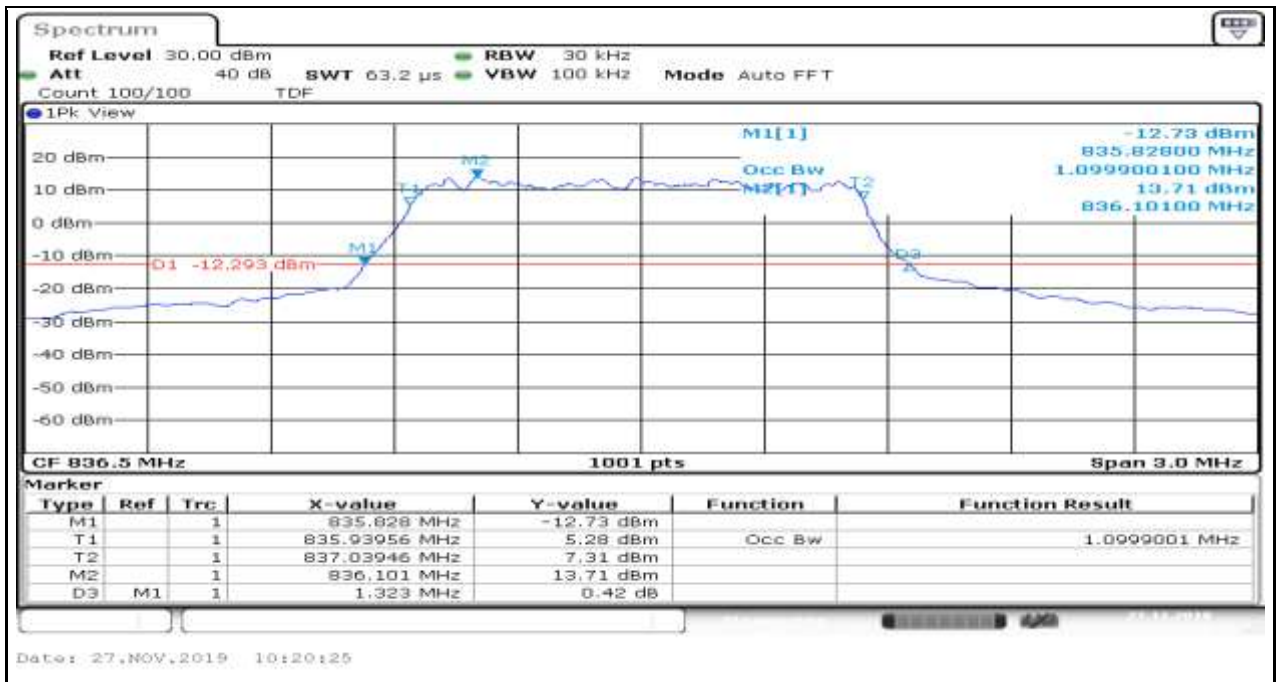


Date: 27.NOV.2019 10:21:25

Band26\_1.4MHz\_16QAM\_26915\_6\_0\_Low\_1.1\_1.323\_PASS\_



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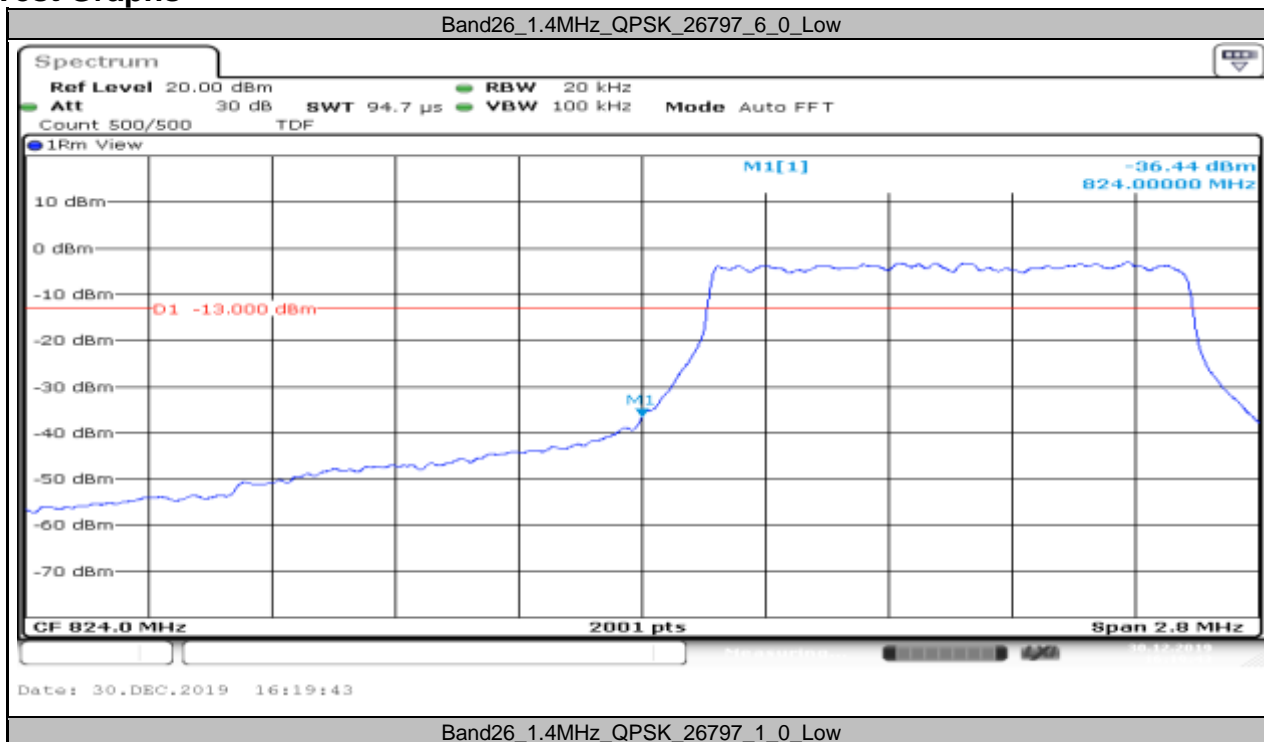


### Appendix H.4: Band Edge for M1

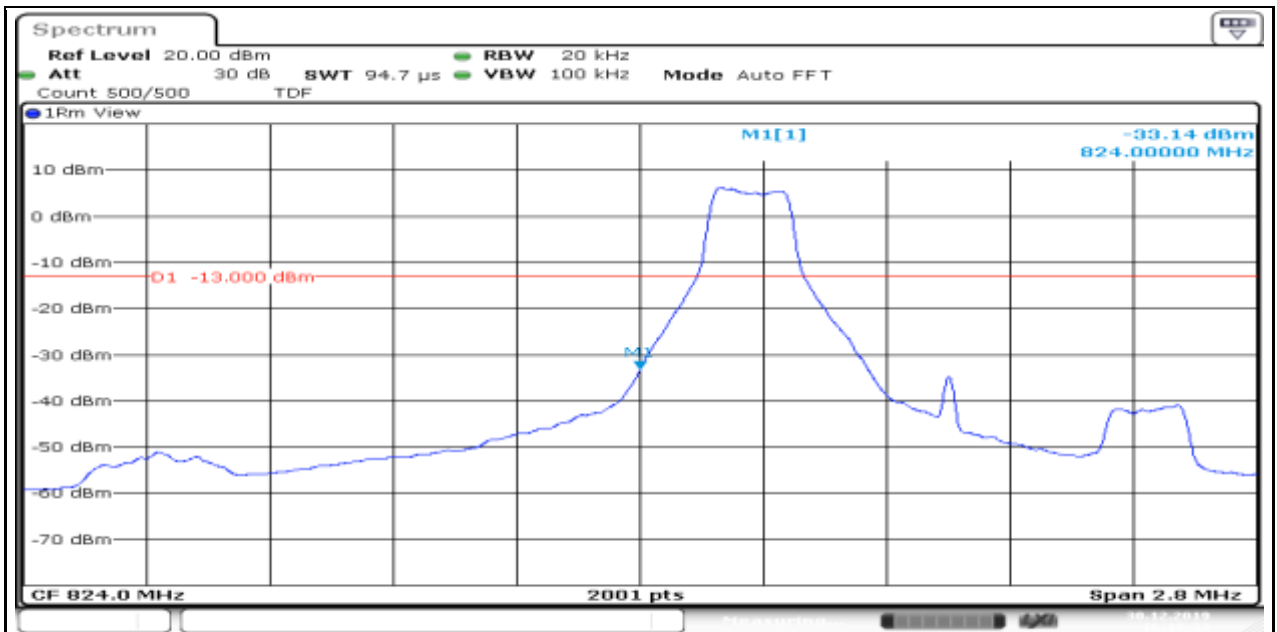
#### Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Result (dBm)	Verdict
Band26	1.4MHz	QPSK	26797	6	0	Low	-36.44	PASS
Band26	1.4MHz	QPSK	26797	1	0	Low	-33.14	PASS
Band26	1.4MHz	QPSK	27033	6	0	High	-37.50	PASS
Band26	1.4MHz	QPSK	27033	1	5	High	-49.19	PASS
Band26	1.4MHz	16QAM	26797	6	0	Low	-36.12	PASS
Band26	1.4MHz	16QAM	26797	1	0	Low	-33.42	PASS
Band26	1.4MHz	16QAM	27033	6	0	High	-38.83	PASS
Band26	1.4MHz	16QAM	27033	1	5	High	-49.27	PASS

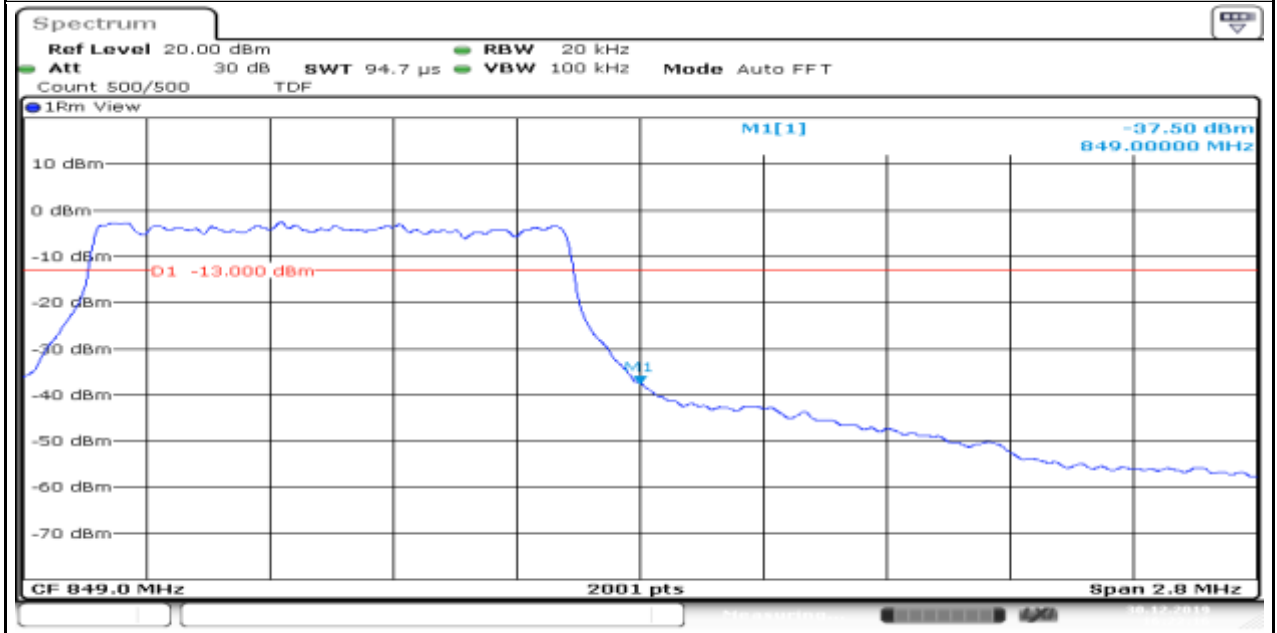
#### Test Graphs



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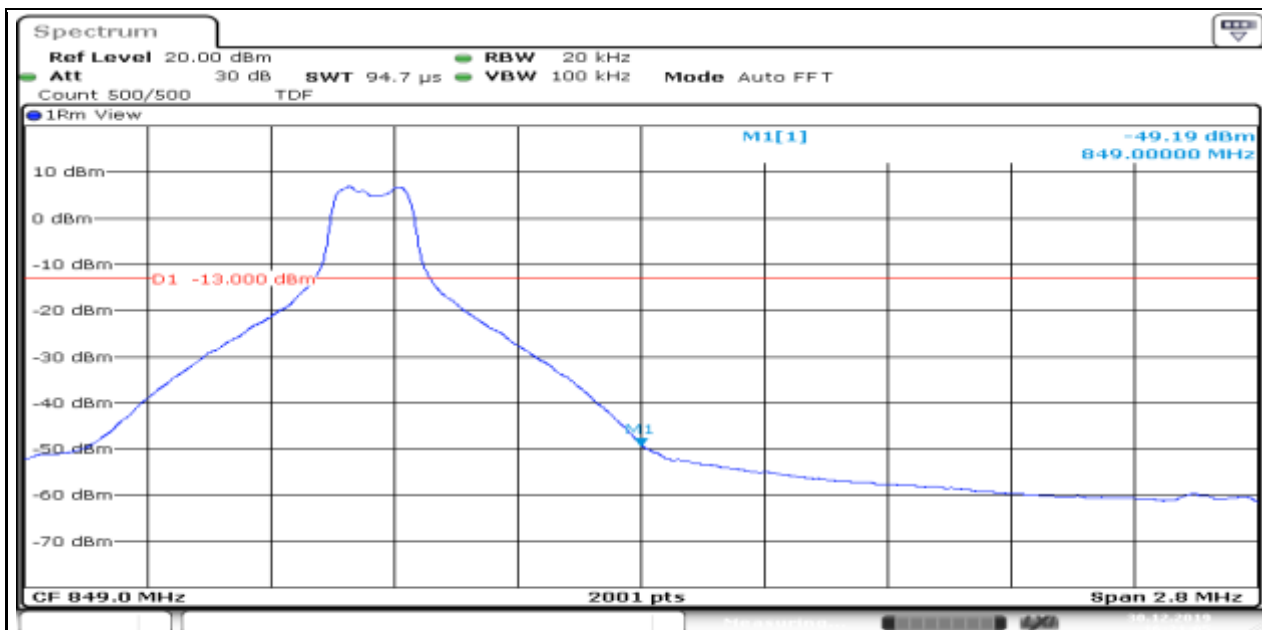


Band26\_1.4MHz\_QPSK\_27033\_6\_0\_High

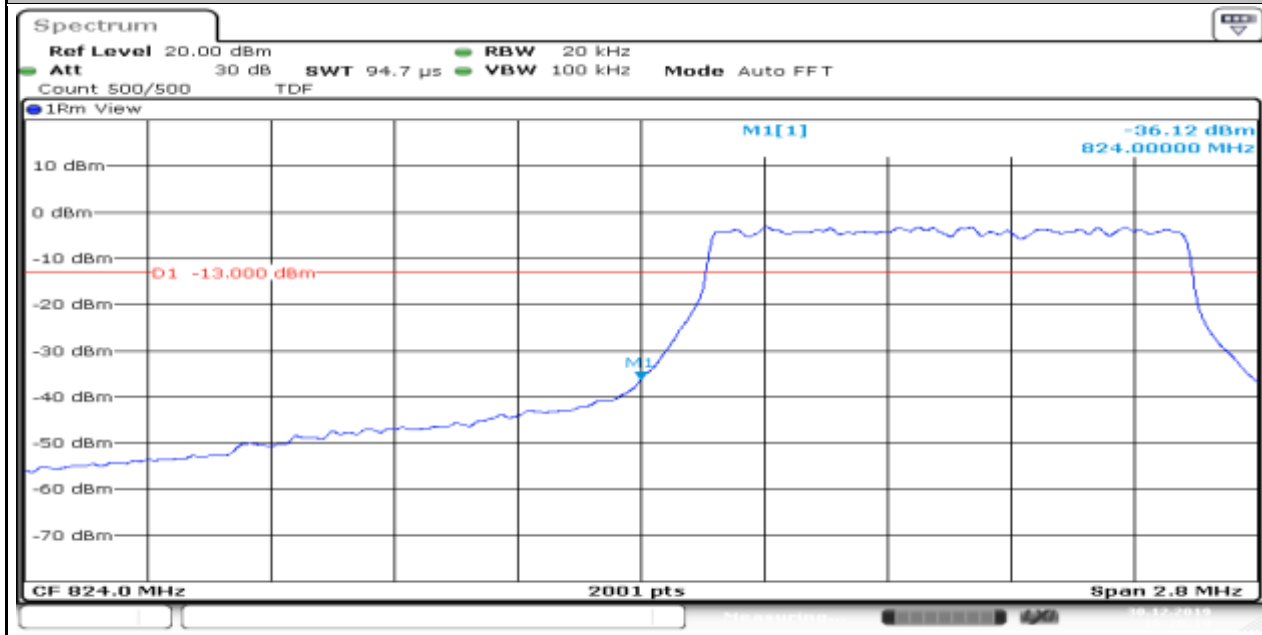


Band26\_1.4MHz\_QPSK\_27033\_1\_5\_High

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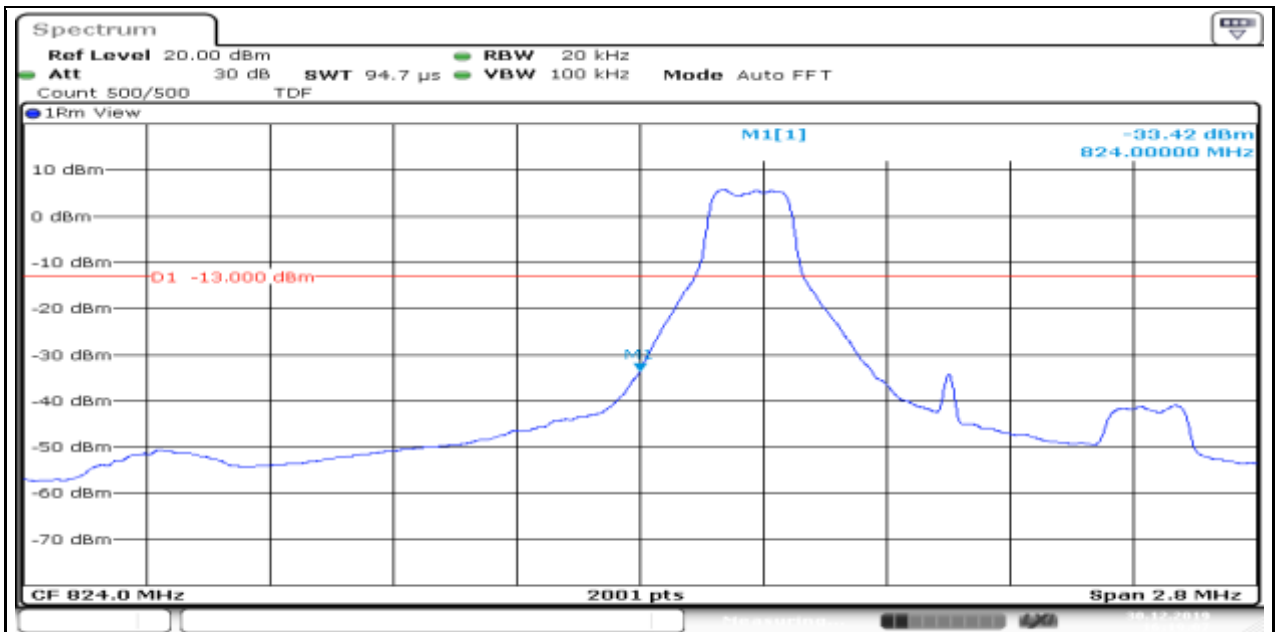


Band26\_1.4MHz\_16QAM\_26797\_6\_0\_Low

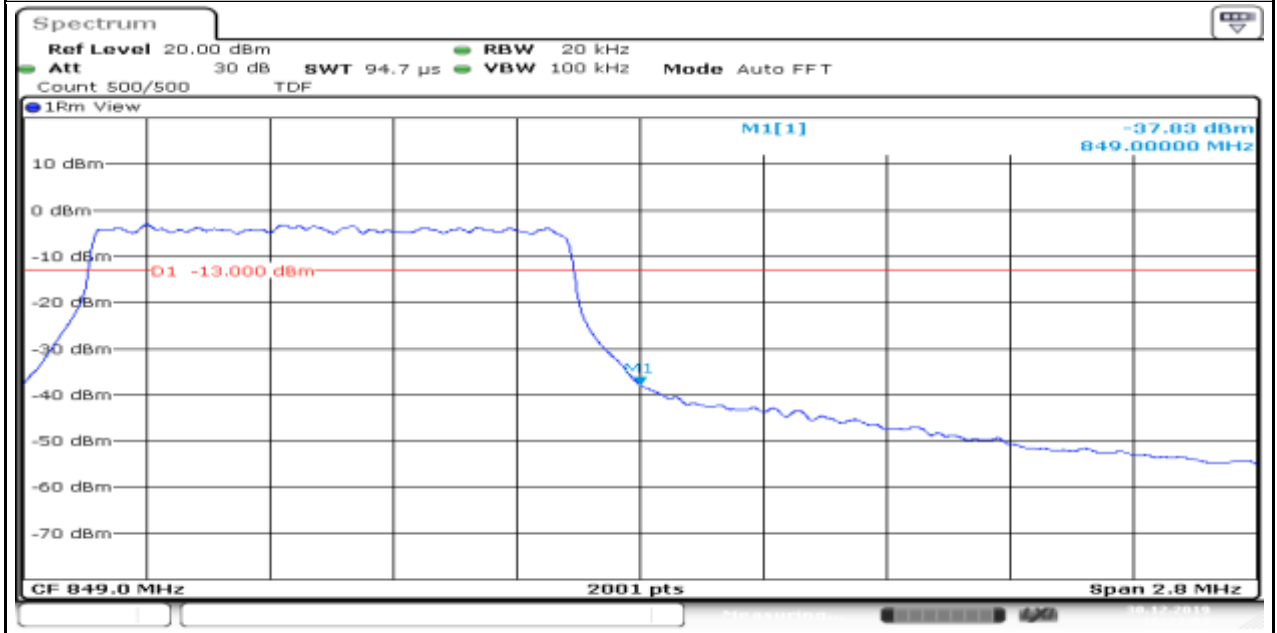


Band26\_1.4MHz\_16QAM\_26797\_1\_0\_Low

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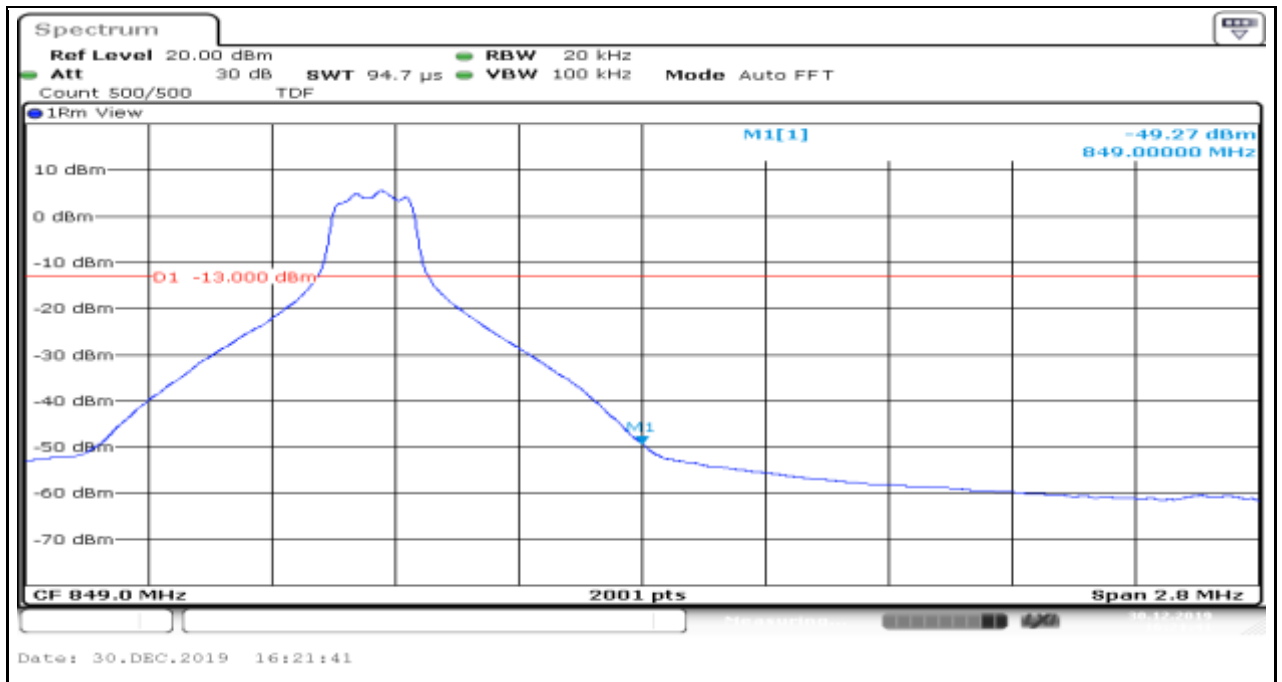


Band26\_1.4MHz\_16QAM\_27033\_6\_0\_High



Band26\_1.4MHz\_16QAM\_27033\_1\_5\_High

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## Appendix H.5: Conducted Spurious Emission for M1

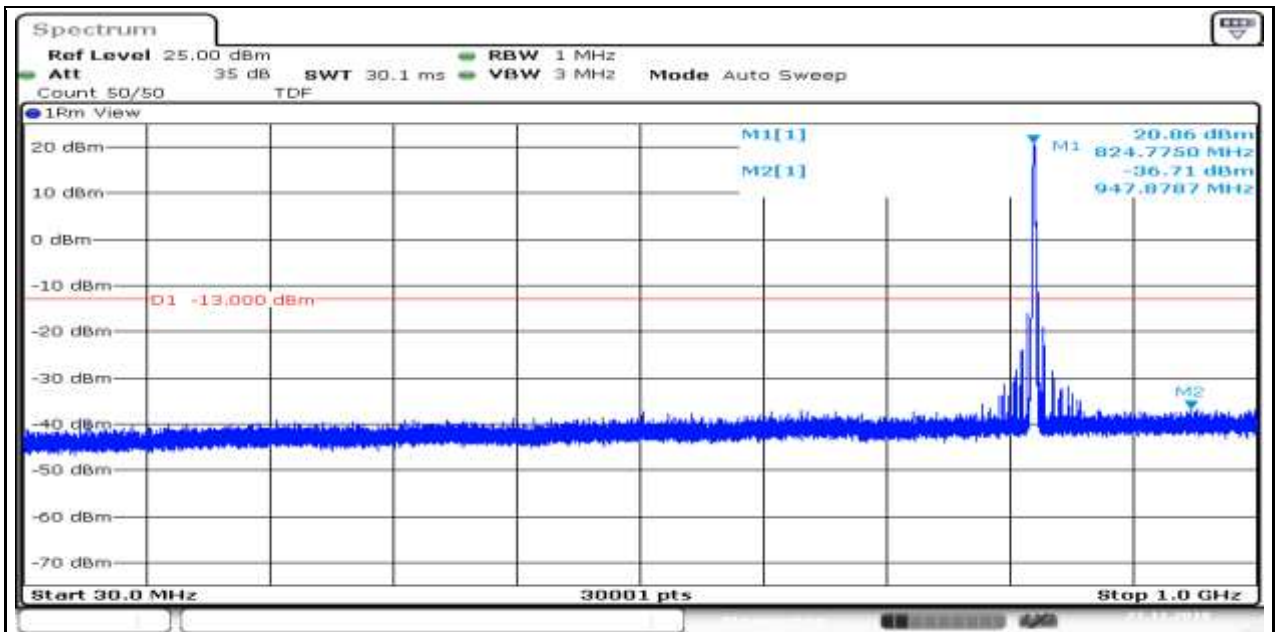
### Test Result

Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Start Freq	Stop Freq	Result (dBm)	Verdict
Band26	1.4MHz	QPSK	26797	6	0	Low	30	1000	-36.71	PASS
Band26	1.4MHz	QPSK	26797	1	0	Low	30	1000	-35.66	PASS
Band26	1.4MHz	QPSK	26797	6	0	Low	12000	26500	-42.07	PASS
Band26	1.4MHz	QPSK	26797	6	0	Low	5000	12000	-48.1	PASS
Band26	1.4MHz	QPSK	26797	6	0	Low	1000	5000	-38.57	PASS
Band26	1.4MHz	QPSK	26797	1	0	Low	12000	26500	-41.89	PASS
Band26	1.4MHz	QPSK	26797	1	0	Low	1000	5000	-38.65	PASS
Band26	1.4MHz	QPSK	26797	1	0	Low	5000	12000	-47.88	PASS
Band26	1.4MHz	QPSK	26915	6	0	Low	12000	26500	-41.95	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	1000	5000	-38.57	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	5000	12000	-48.07	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	12000	26500	-41.94	PASS
Band26	1.4MHz	QPSK	26915	6	0	Low	1000	5000	-38.42	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	30	1000	-36.08	PASS
Band26	1.4MHz	QPSK	26915	6	0	Low	5000	12000	-47.86	PASS
Band26	1.4MHz	QPSK	26915	6	0	Low	30	1000	-36.64	PASS
Band26	1.4MHz	QPSK	27033	1	5	Low	12000	26500	-41.9	PASS
Band26	1.4MHz	QPSK	27033	6	0	Low	12000	26500	-41.97	PASS
Band26	1.4MHz	QPSK	27033	6	0	Low	5000	12000	-48	PASS
Band26	1.4MHz	QPSK	27033	6	0	Low	30	1000	-36.57	PASS
Band26	1.4MHz	QPSK	27033	1	5	Low	1000	5000	-38.67	PASS
Band26	1.4MHz	QPSK	27033	1	5	Low	5000	12000	-48.05	PASS
Band26	1.4MHz	QPSK	27033	1	5	Low	30	1000	-35.33	PASS
Band26	1.4MHz	QPSK	27033	6	0	Low	1000	5000	-38.56	PASS
Band26	1.4MHz	16QAM	26797	1	0	Low	1000	5000	-38.6	PASS
Band26	1.4MHz	16QAM	26797	1	0	Low	5000	12000	-47.89	PASS
Band26	1.4MHz	16QAM	26797	1	0	Low	12000	26500	-42.13	PASS
Band26	1.4MHz	16QAM	26797	6	0	Low	12000	26500	-41.97	PASS
Band26	1.4MHz	16QAM	26797	6	0	Low	5000	12000	-47.95	PASS
Band26	1.4MHz	16QAM	26797	6	0	Low	30	1000	-35.41	PASS
Band26	1.4MHz	16QAM	26797	1	0	Low	30	1000	-35.93	PASS
Band26	1.4MHz	16QAM	26797	6	0	Low	1000	5000	-38.58	PASS
Band26	1.4MHz	16QAM	26915	6	0	Low	12000	26500	-41.8	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	1000	5000	-38.62	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	12000	26500	-42.04	PASS
Band26	1.4MHz	16QAM	26915	6	0	Low	30	1000	-36.38	PASS
Band26	1.4MHz	16QAM	26915	6	0	Low	1000	5000	-38.35	PASS
Band26	1.4MHz	16QAM	26915	6	0	Low	5000	12000	-47.96	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	30	1000	-36.58	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	5000	12000	-48.03	PASS
Band26	1.4MHz	16QAM	27033	6	0	Low	5000	12000	-47.92	PASS
Band26	1.4MHz	16QAM	27033	6	0	Low	1000	5000	-38.59	PASS
Band26	1.4MHz	16QAM	27033	6	0	Low	30	1000	-34.88	PASS
Band26	1.4MHz	16QAM	27033	1	5	Low	12000	26500	-41.91	PASS
Band26	1.4MHz	16QAM	27033	1	5	Low	5000	12000	-48	PASS
Band26	1.4MHz	16QAM	27033	1	5	Low	30	1000	-36.54	PASS
Band26	1.4MHz	16QAM	27033	6	0	Low	12000	26500	-41.99	PASS
Band26	1.4MHz	16QAM	27033	1	5	Low	1000	5000	-38.6	PASS

### Test Graphs

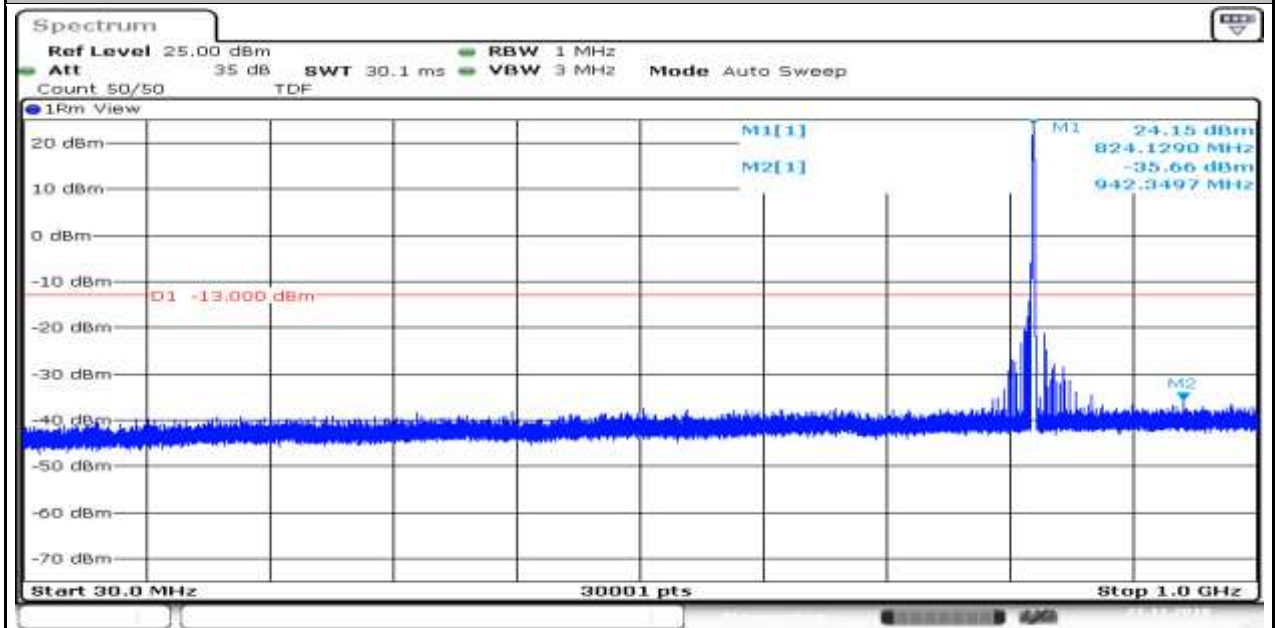
Band26\_1.4MHz\_QPSK\_26797\_6\_0\_Low\_30\_1000\_-36.71\_PASS

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Date: 27.NOV.2019 10:36:12

Band26\_1.4MHz\_QPSK\_26797\_1\_0\_Low\_30\_1000\_-35.66\_PASS\_

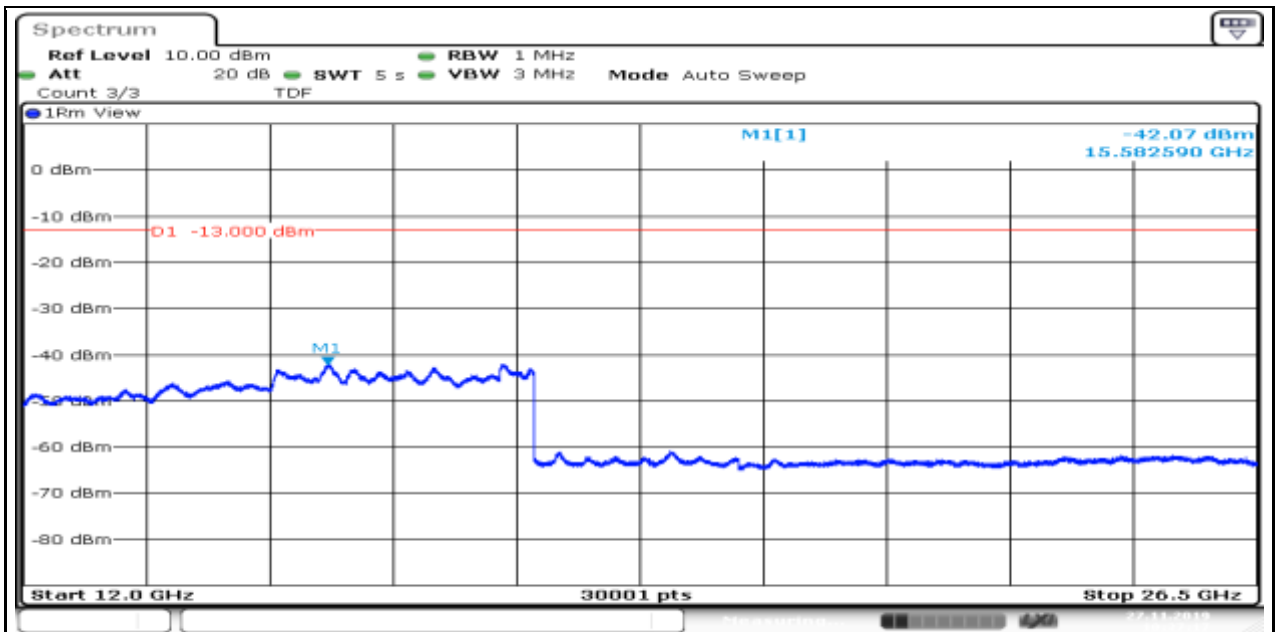


Date: 27.NOV.2019 10:33:18

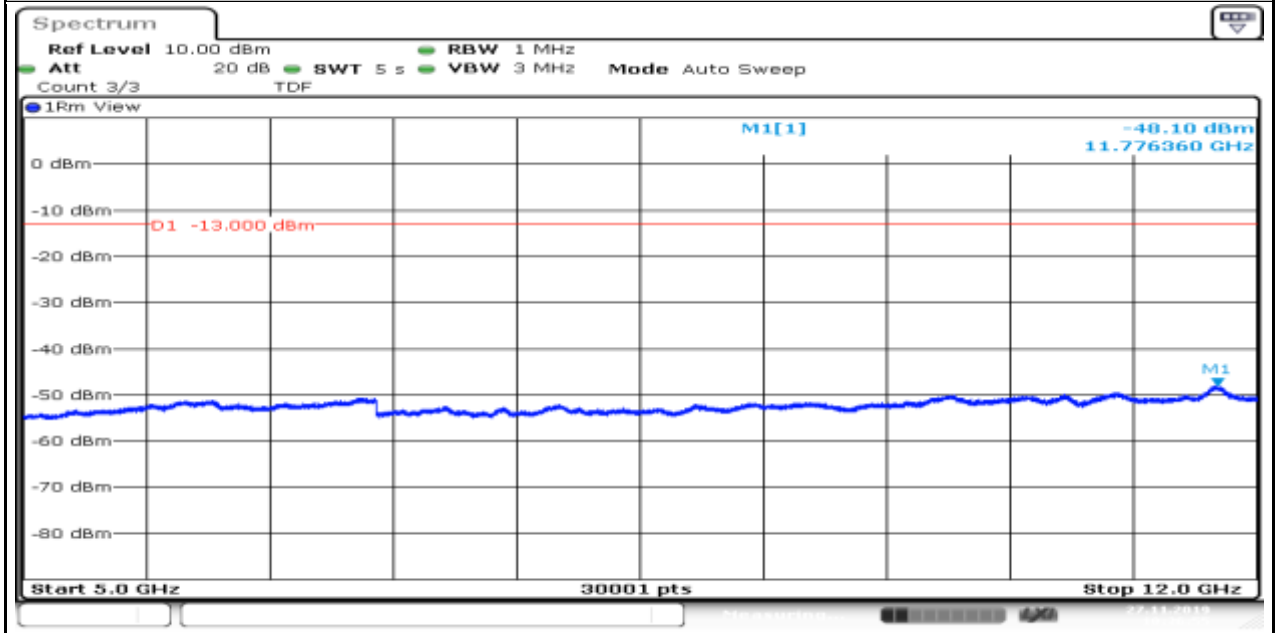
Band26\_1.4MHz\_QPSK\_26797\_6\_0\_Low\_12000\_26500\_-42.07\_PASS\_



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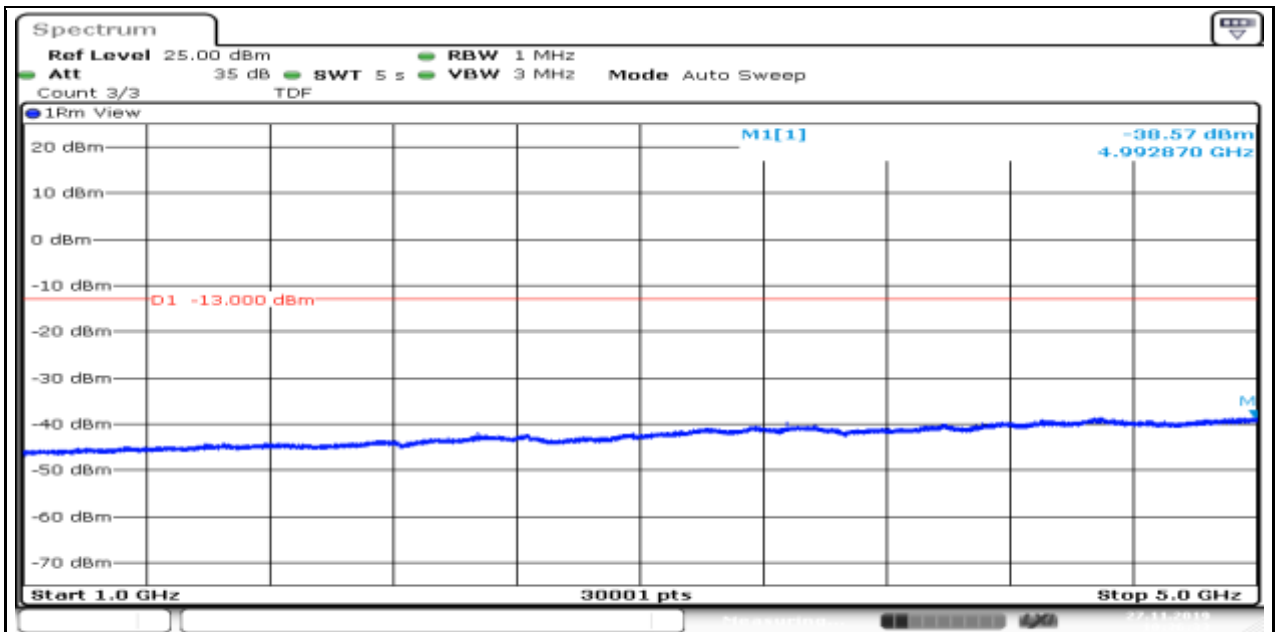


Band26\_1.4MHz\_QPSK\_26797\_6\_0\_Low\_5000\_12000\_-48.1\_PASS\_

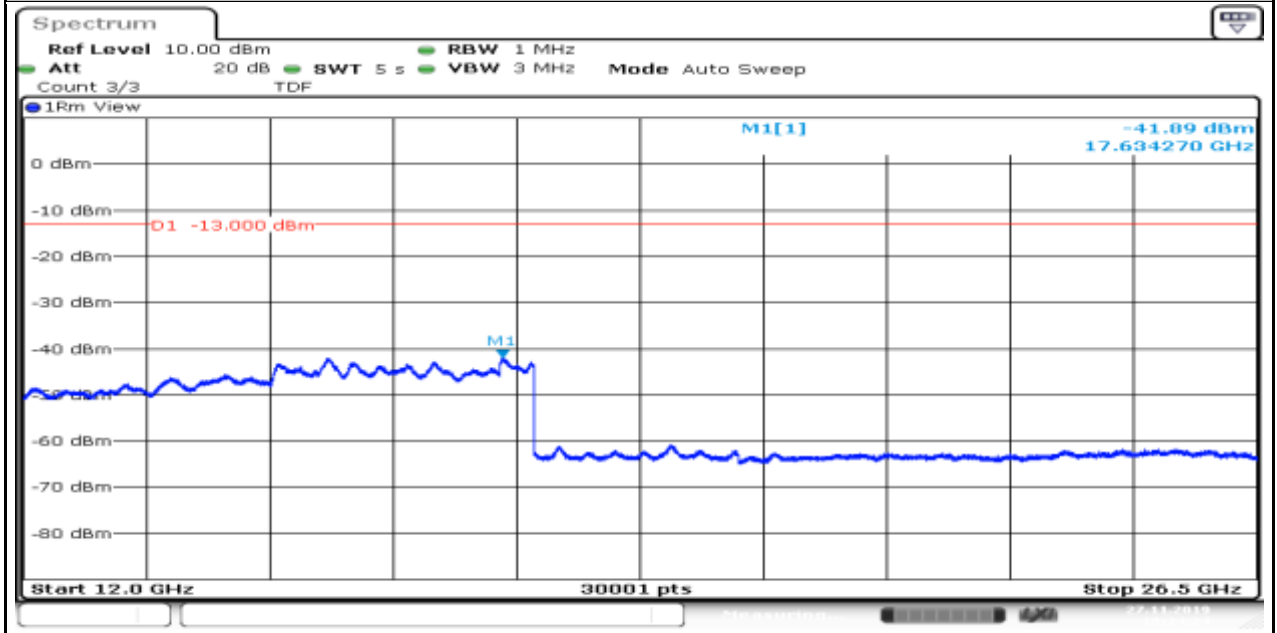


Band26\_1.4MHz\_QPSK\_26797\_6\_0\_Low\_1000\_5000\_-38.57\_PASS\_

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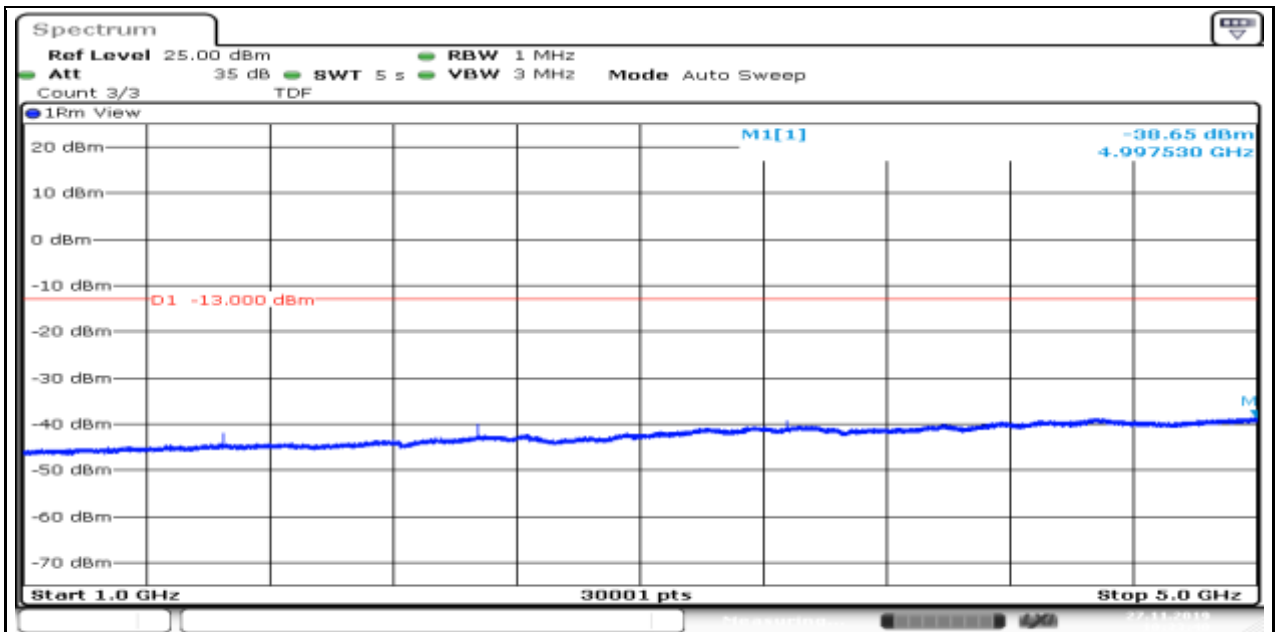


Band26\_1.4MHz\_QPSK\_26797\_1\_0\_Low\_12000\_26500\_-41.89\_PASS\_

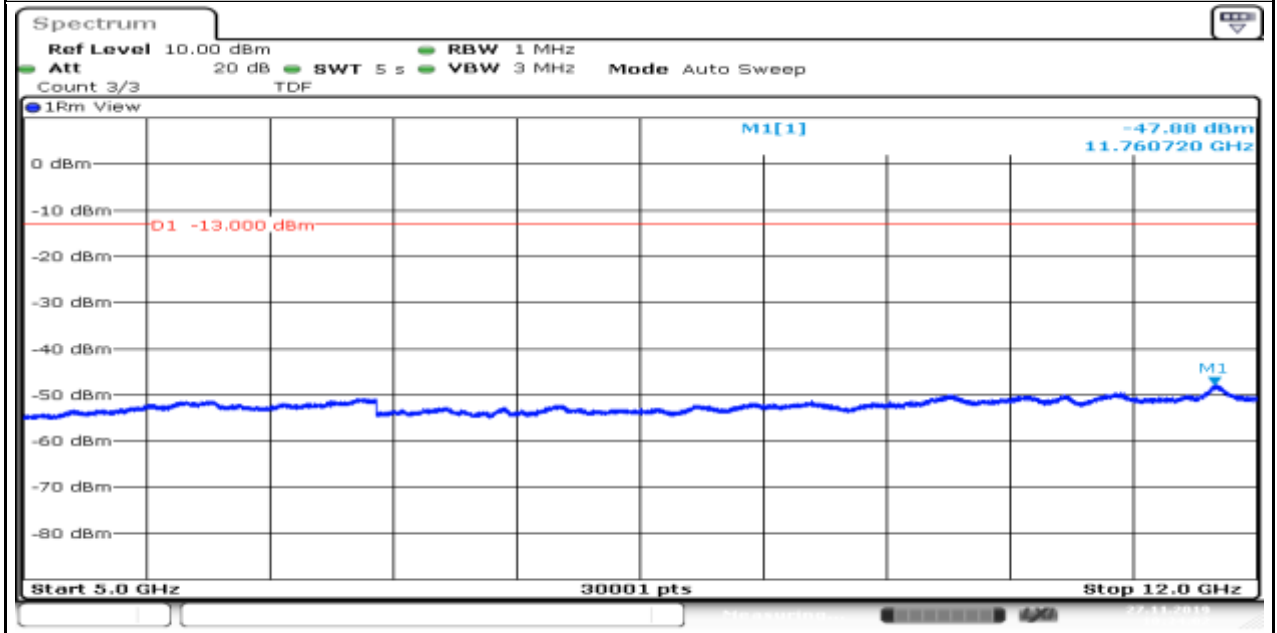


Band26\_1.4MHz\_QPSK\_26797\_1\_0\_Low\_1000\_5000\_-38.65\_PASS\_

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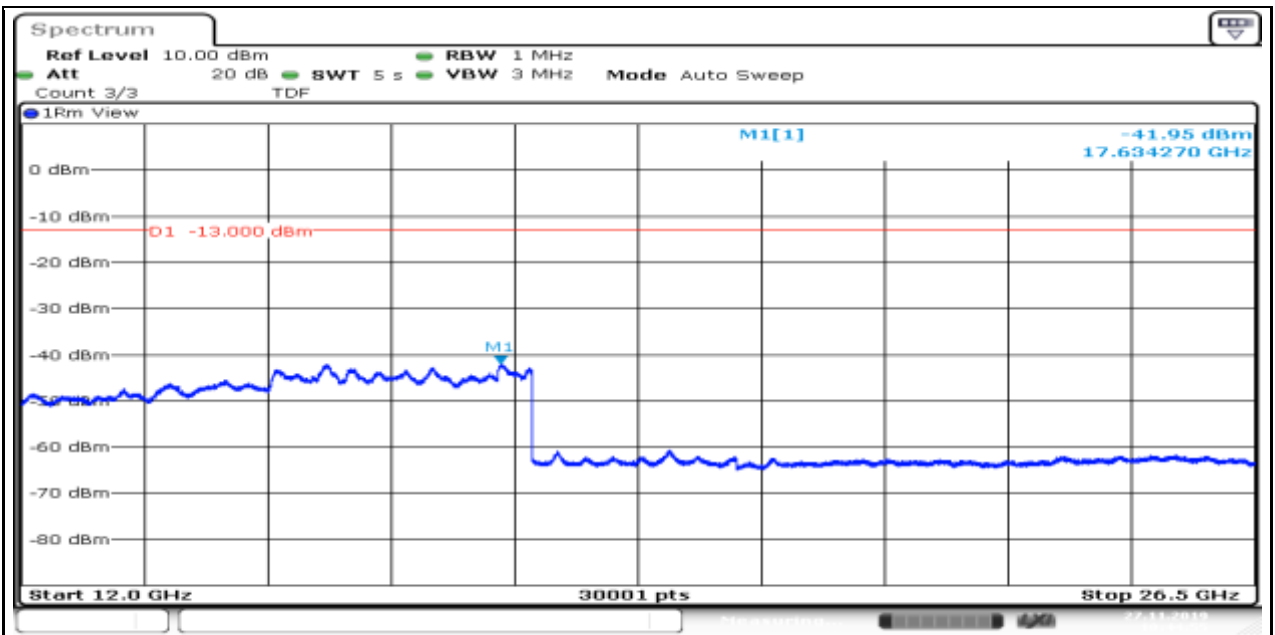


Band26\_1.4MHz\_QPSK\_26797\_1\_0\_Low\_5000\_12000\_-47.88\_PASS\_

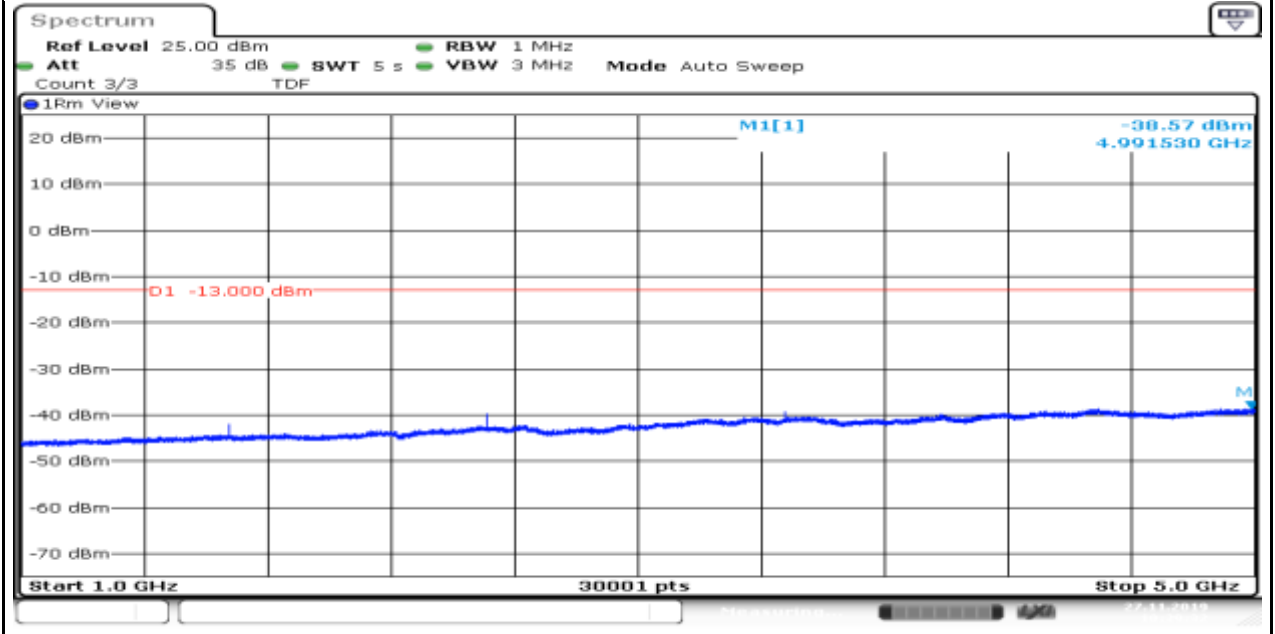


Band26\_1.4MHz\_QPSK\_26915\_6\_0\_Low\_12000\_26500\_-41.95\_PASS\_

Produkte  
Products

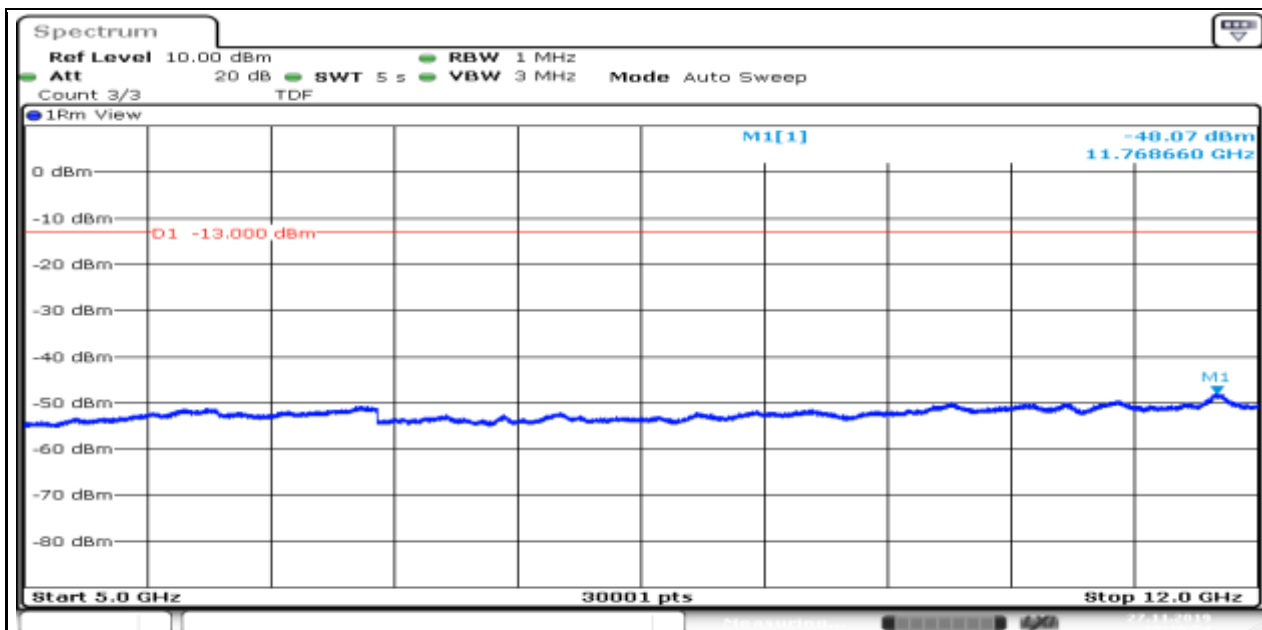


Band26\_1.4MHz\_QPSK\_26915\_1\_0\_Low\_1000\_5000\_-38.57\_PASS\_

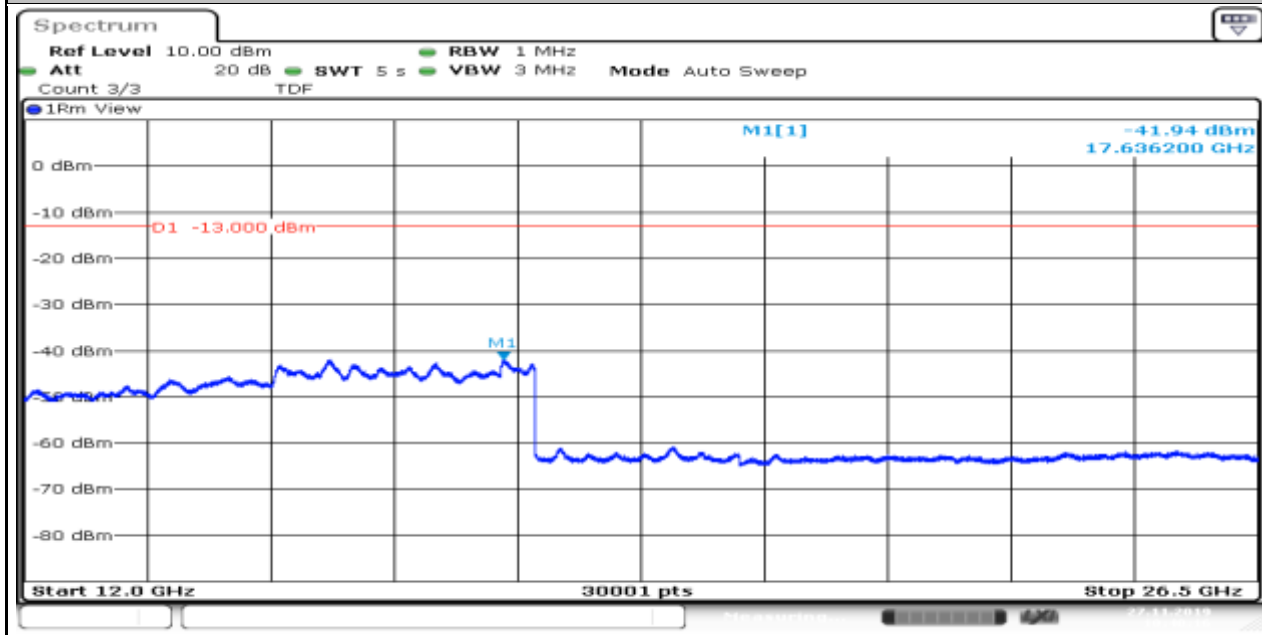


Band26\_1.4MHz\_QPSK\_26915\_1\_0\_Low\_5000\_12000\_-48.07\_PASS\_

Produkte  
Products

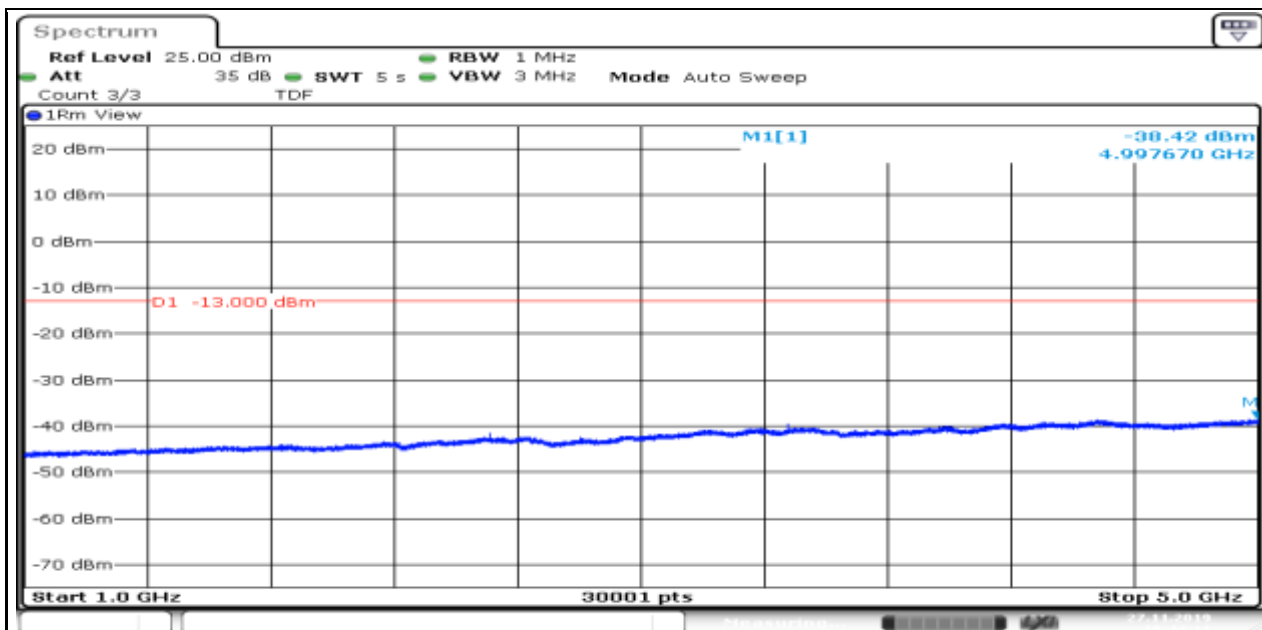


Band26\_1.4MHz\_QPSK\_26915\_1\_0\_Low\_12000\_26500\_-41.94\_PASS\_



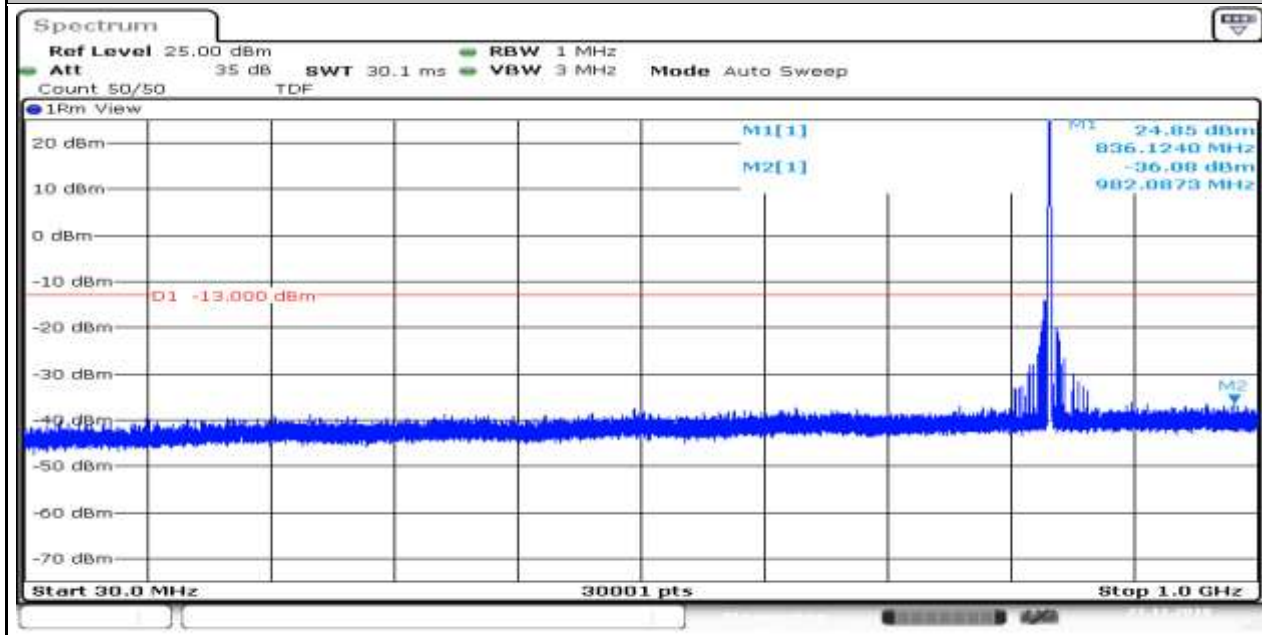
Band26\_1.4MHz\_QPSK\_26915\_6\_0\_Low\_1000\_5000\_-38.42\_PASS\_

Produkte  
Products



Date: 27.NOV.2019 10:44:11

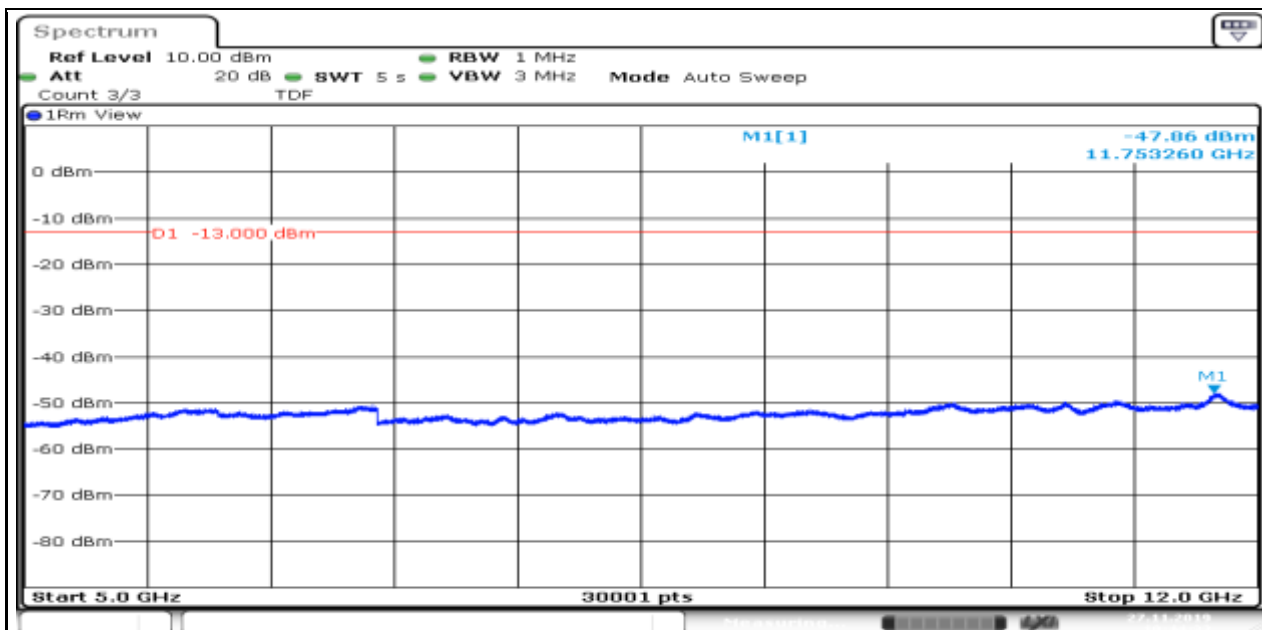
Band26\_1.4MHz\_QPSK\_26915\_1\_0\_Low\_30\_1000\_-36.08\_PASS\_



Date: 27.NOV.2019 10:39:11

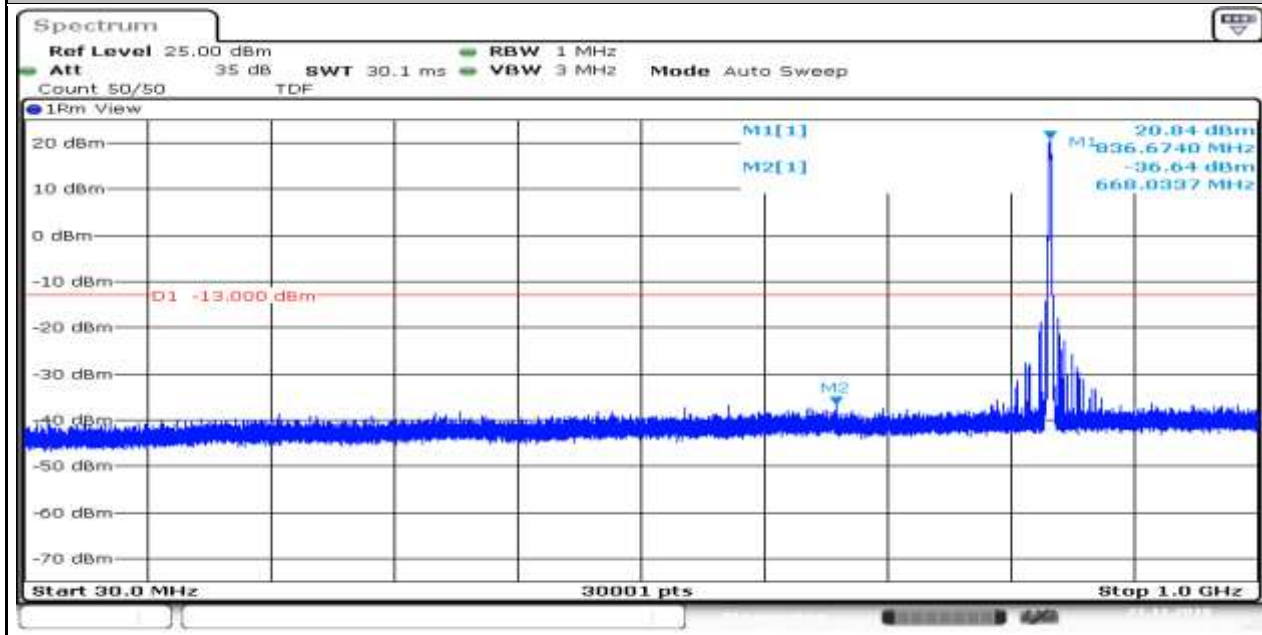
Band26\_1.4MHz\_QPSK\_26915\_6\_0\_Low\_5000\_12000\_-47.86\_PASS\_

Produkte  
Products



Date: 27.NOV.2019 10:44:33

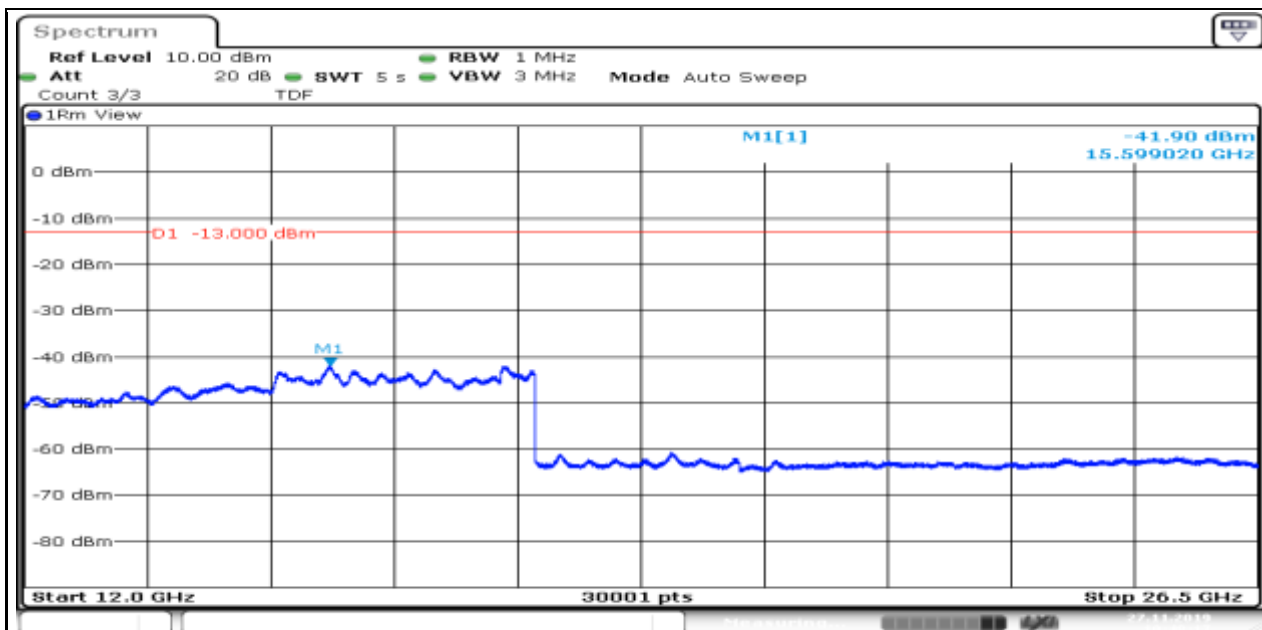
Band26\_1.4MHz\_QPSK\_26915\_6\_0\_Low\_30\_1000\_-36.64\_PASS\_



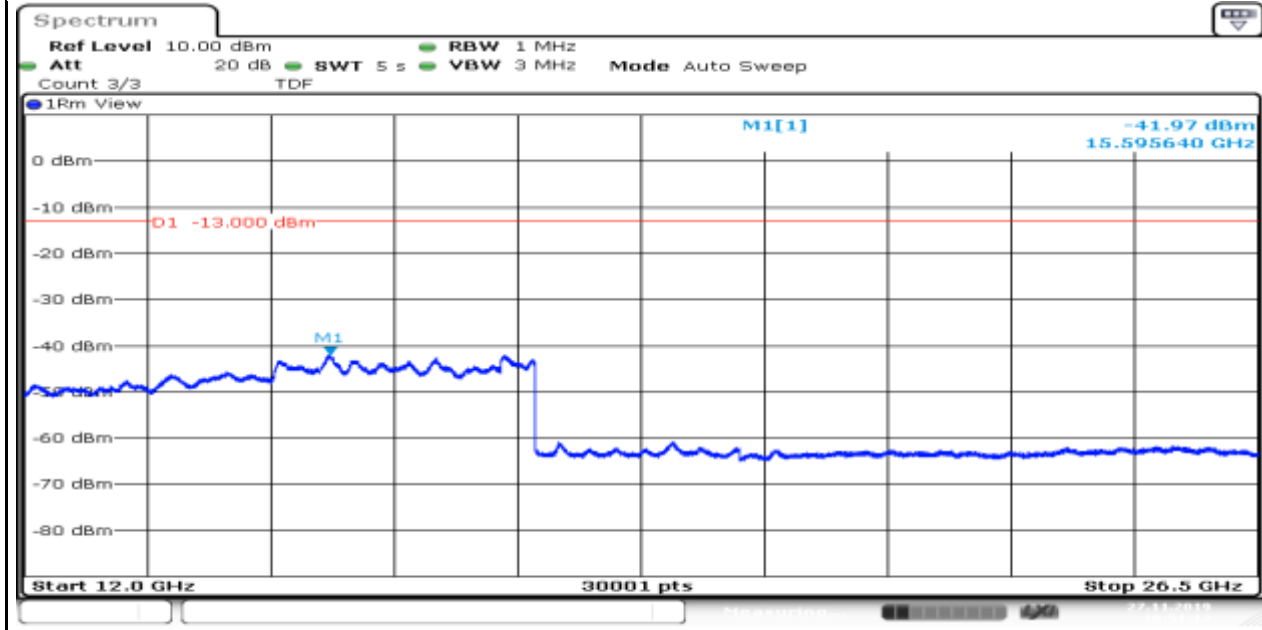
Date: 27.NOV.2019 10:43:49

Band26\_1.4MHz\_QPSK\_27033\_1\_5\_Low\_12000\_26500\_-41.9\_PASS\_

Produkte  
Products



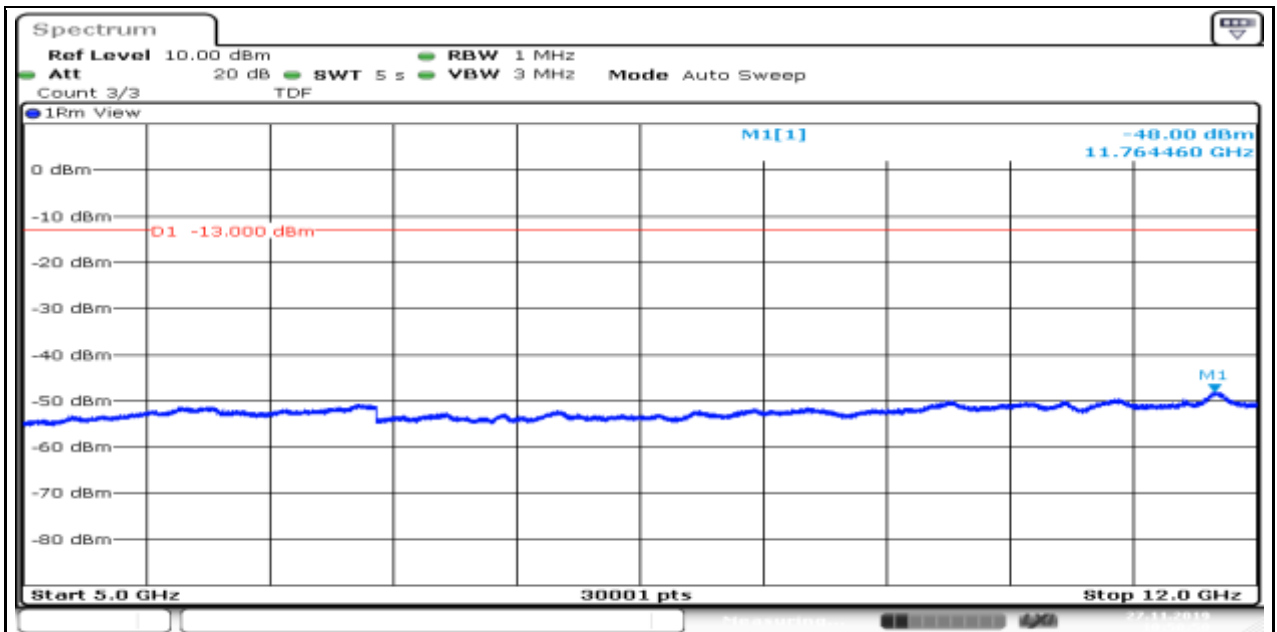
Band26\_1.4MHz\_QPSK\_27033\_6\_0\_Low\_12000\_26500\_-41.97\_PASS\_



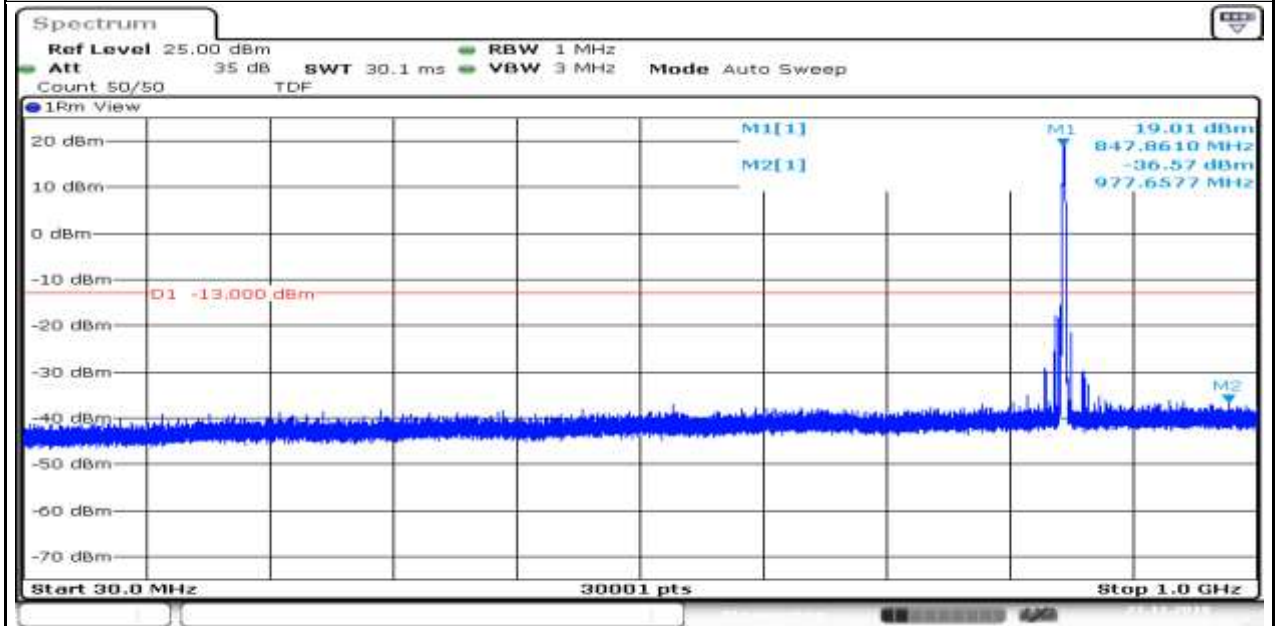
Band26\_1.4MHz\_QPSK\_27033\_6\_0\_Low\_5000\_12000\_-48\_PASS\_



Produkte  
Products

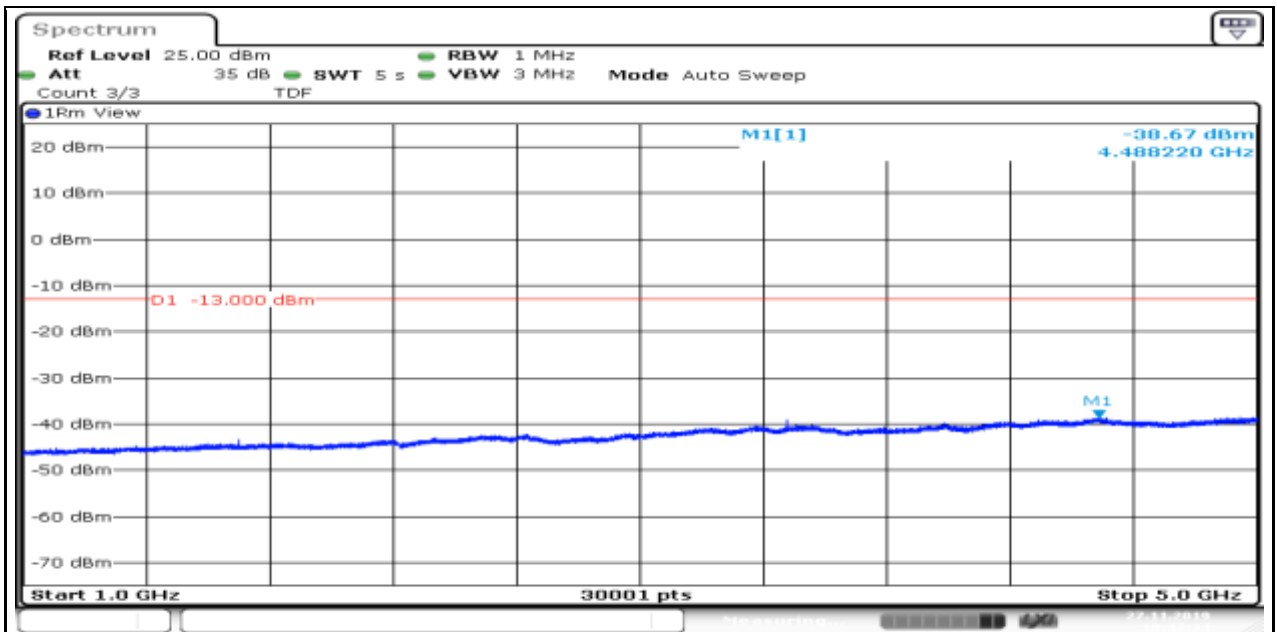


Band26\_1.4MHz\_QPSK\_27033\_6\_0\_Low\_30\_1000\_-36.57\_PASS\_\_

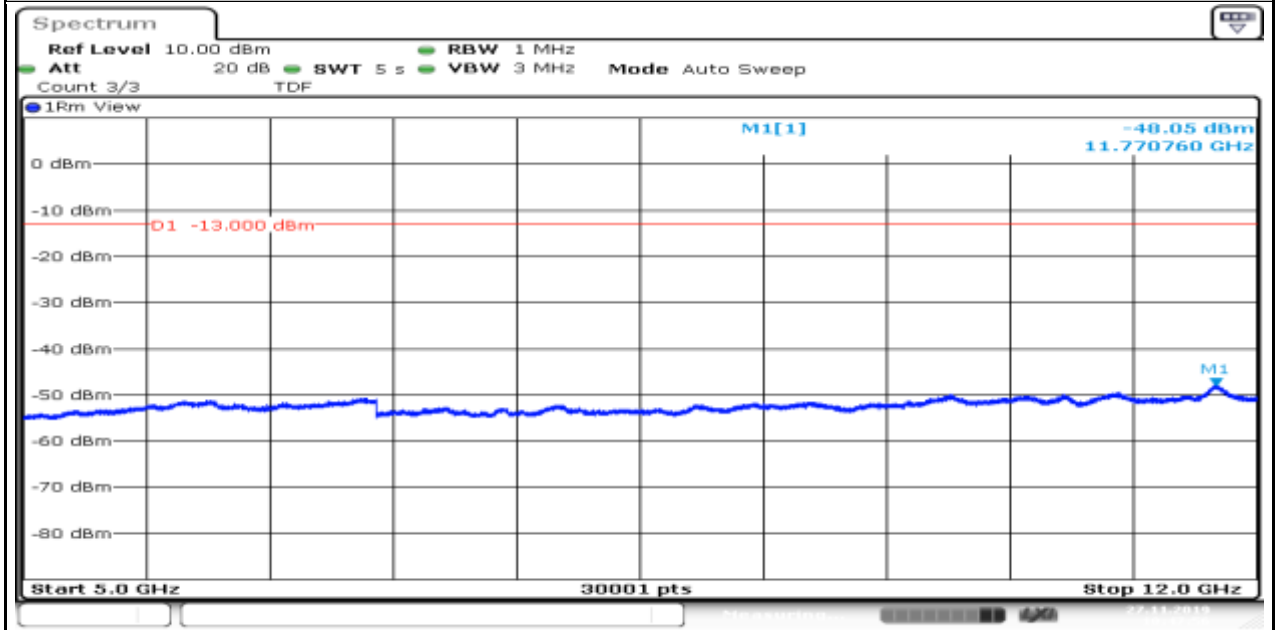


Band26\_1.4MHz\_QPSK\_27033\_1\_5\_Low\_1000\_5000\_-38.67\_PASS\_\_

Produkte  
Products

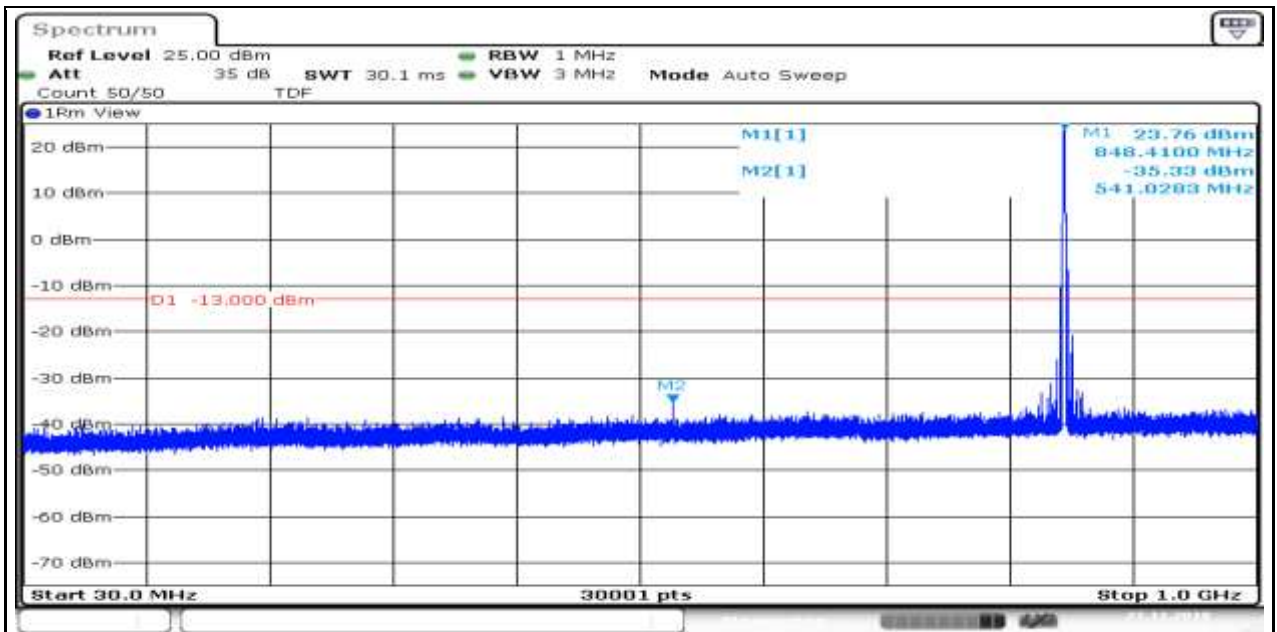


Band26\_1.4MHz\_QPSK\_27033\_1\_5\_Low\_5000\_12000\_-48.05\_PASS\_



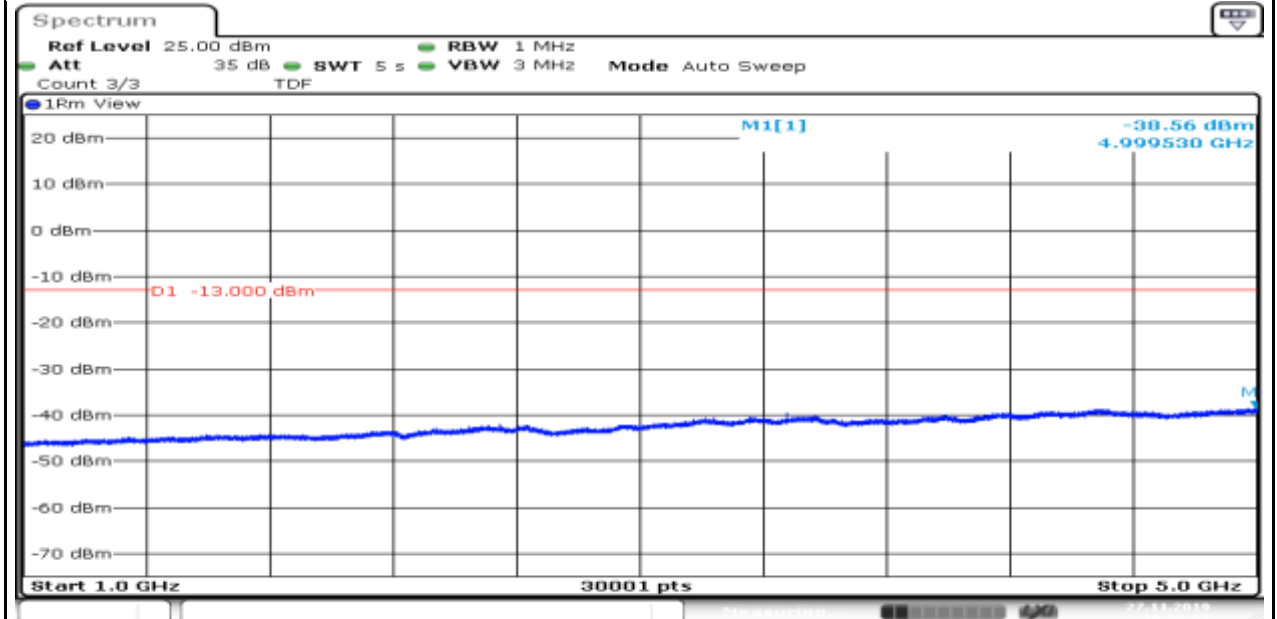
Band26\_1.4MHz\_QPSK\_27033\_1\_5\_Low\_30\_1000\_-35.33\_PASS\_

Produkte  
Products



Date: 27.NOV.2019 10:47:12

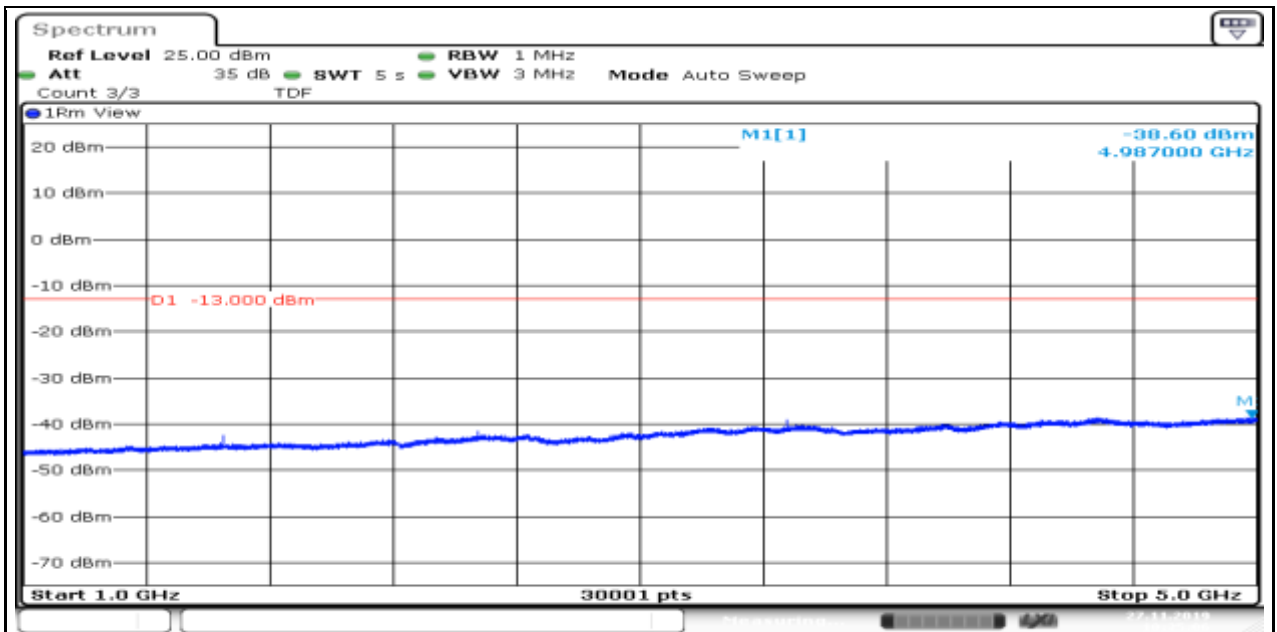
Band26\_1.4MHz\_QPSK\_27033\_6\_0\_Low\_1000\_5000\_-38.56\_PASS\_



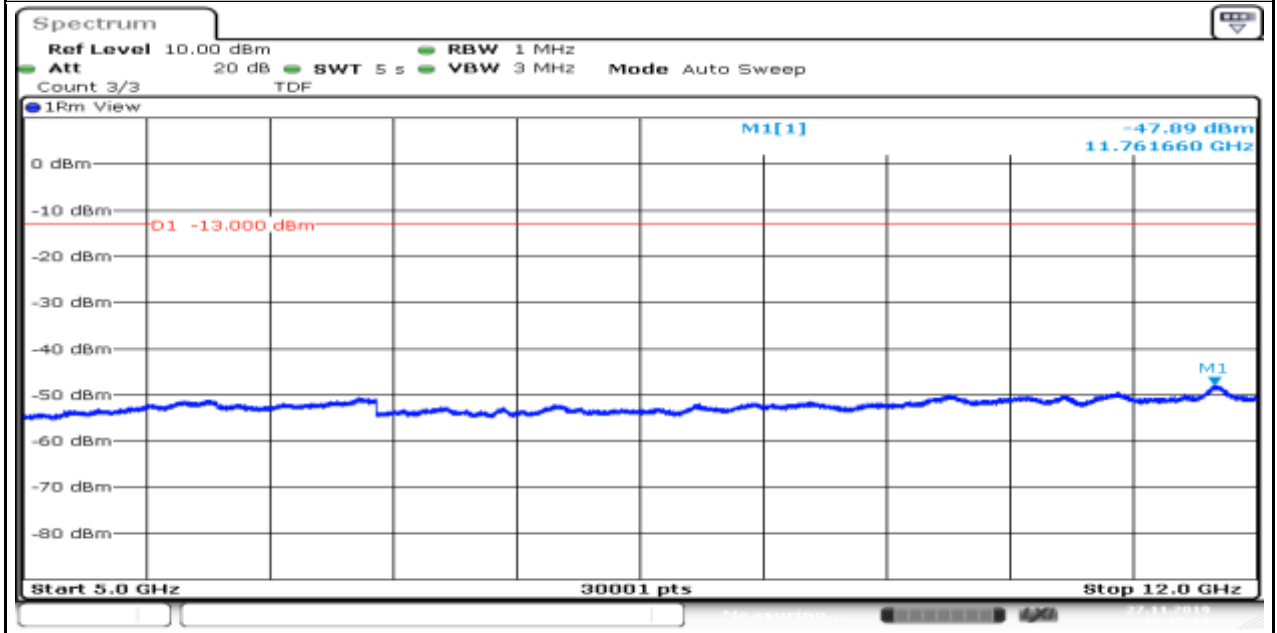
Date: 27.NOV.2019 10:50:28

Band26\_1.4MHz\_16QAM\_26797\_1\_0\_Low\_1000\_5000\_-38.6\_PASS\_

Produkte  
Products

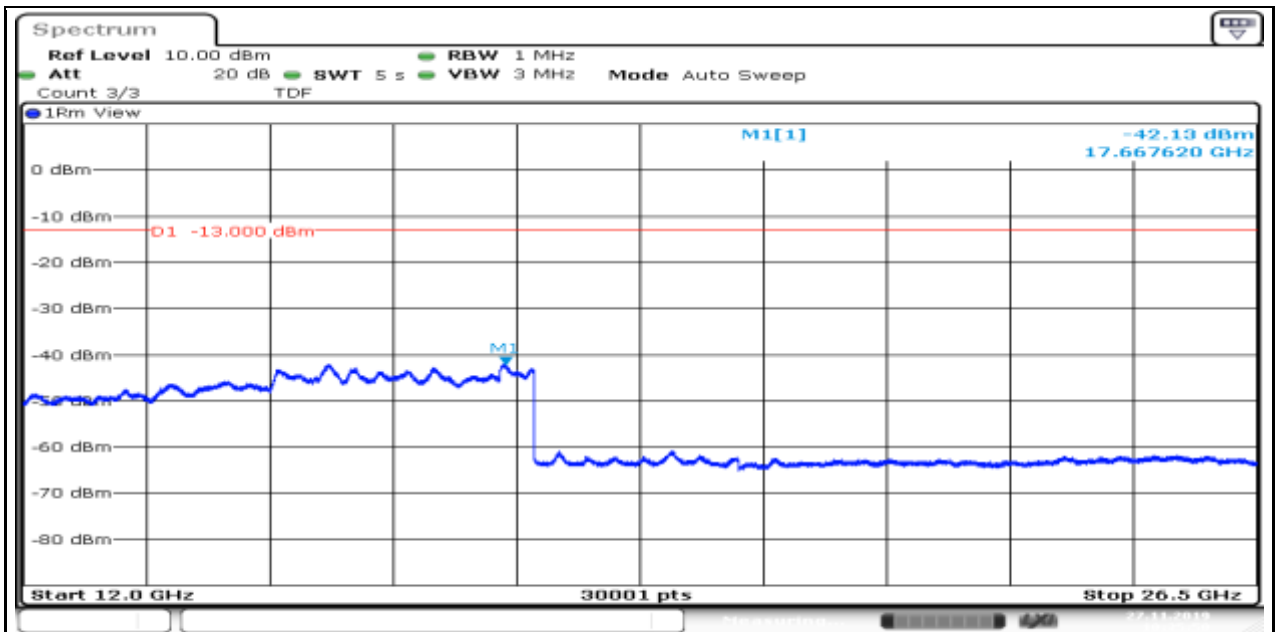


Band26\_1.4MHz\_16QAM\_26797\_1\_0\_Low\_5000\_12000\_-47.89\_PASS\_

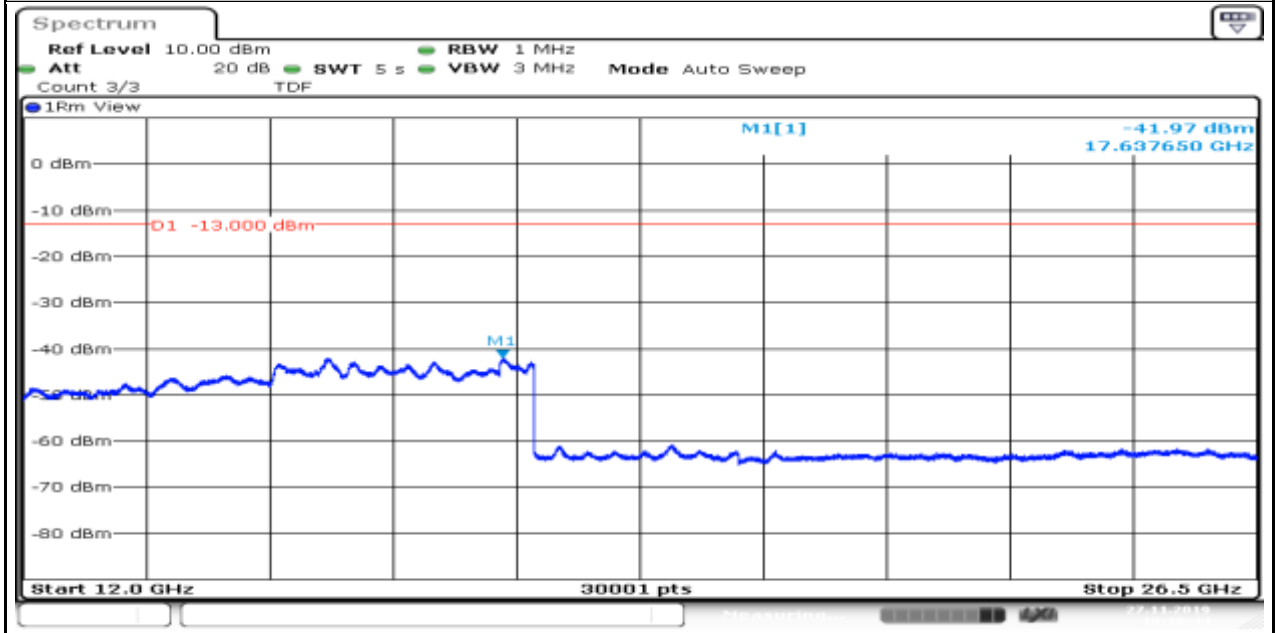


Band26\_1.4MHz\_16QAM\_26797\_1\_0\_Low\_12000\_26500\_-42.13\_PASS\_

Produkte  
Products

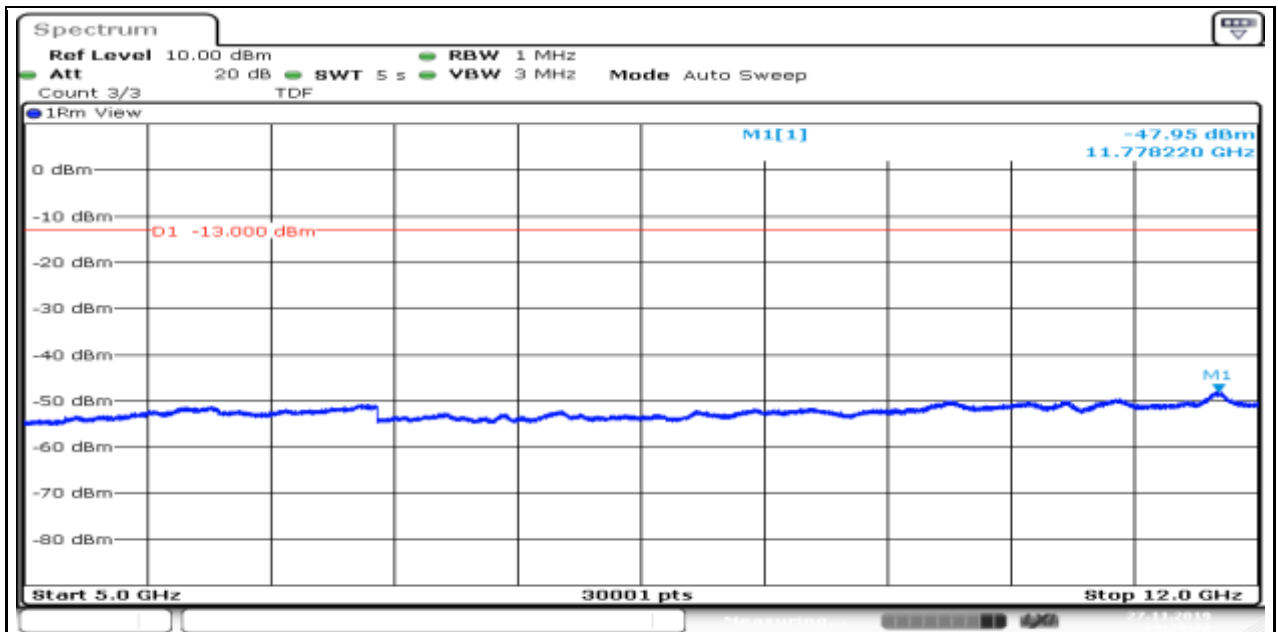


Band26\_1.4MHz\_16QAM\_26797\_6\_0\_Low\_12000\_26500\_-41.97\_PASS\_



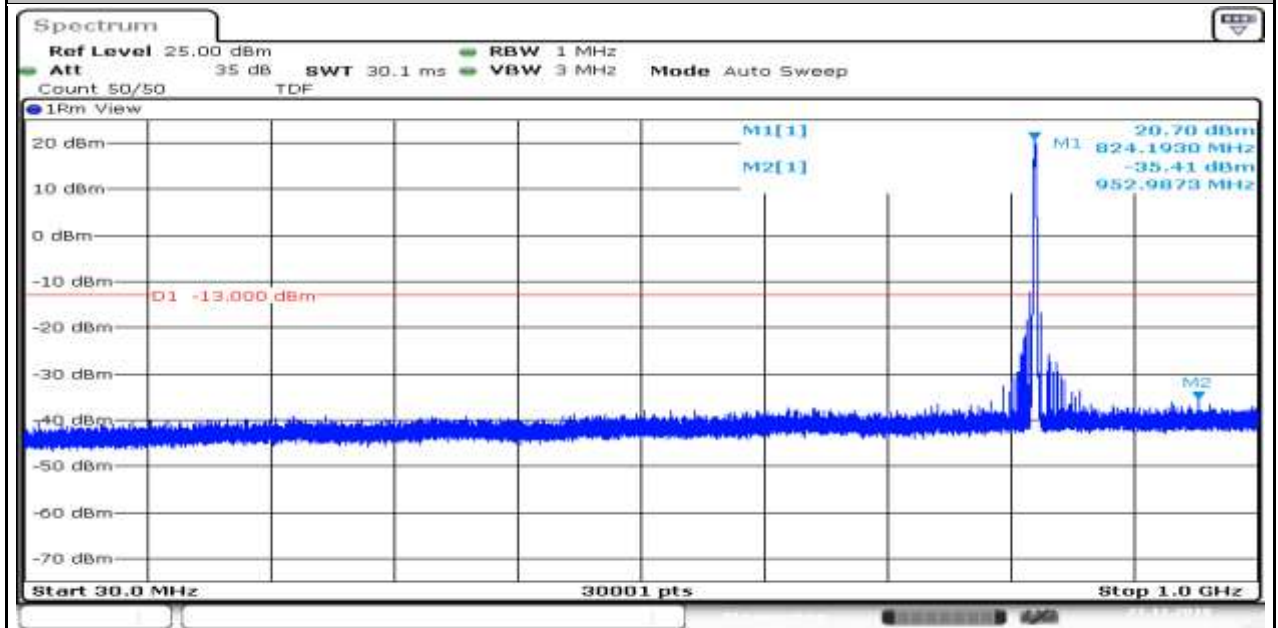
Band26\_1.4MHz\_16QAM\_26797\_6\_0\_Low\_5000\_12000\_-47.95\_PASS\_

Produkte  
Products



Date: 27.NOV.2019 10:38:22

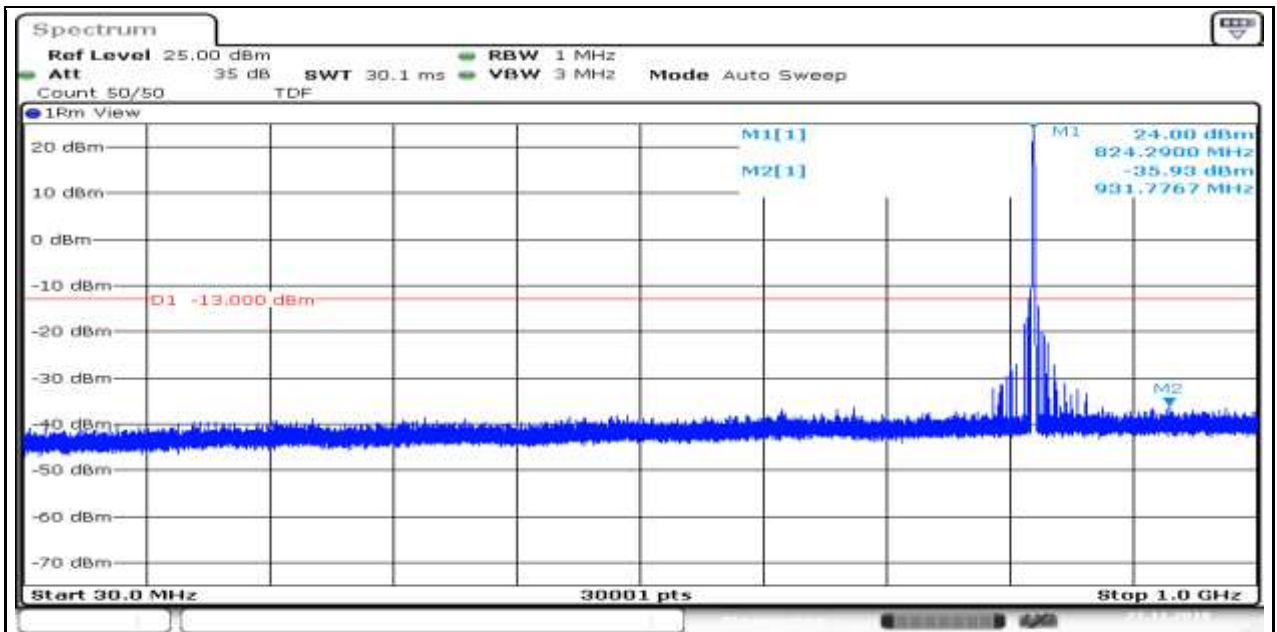
Band26\_1.4MHz\_16QAM\_26797\_6\_0\_Low\_30\_1000\_-35.41\_PASS\_



Date: 27.NOV.2019 10:37:39

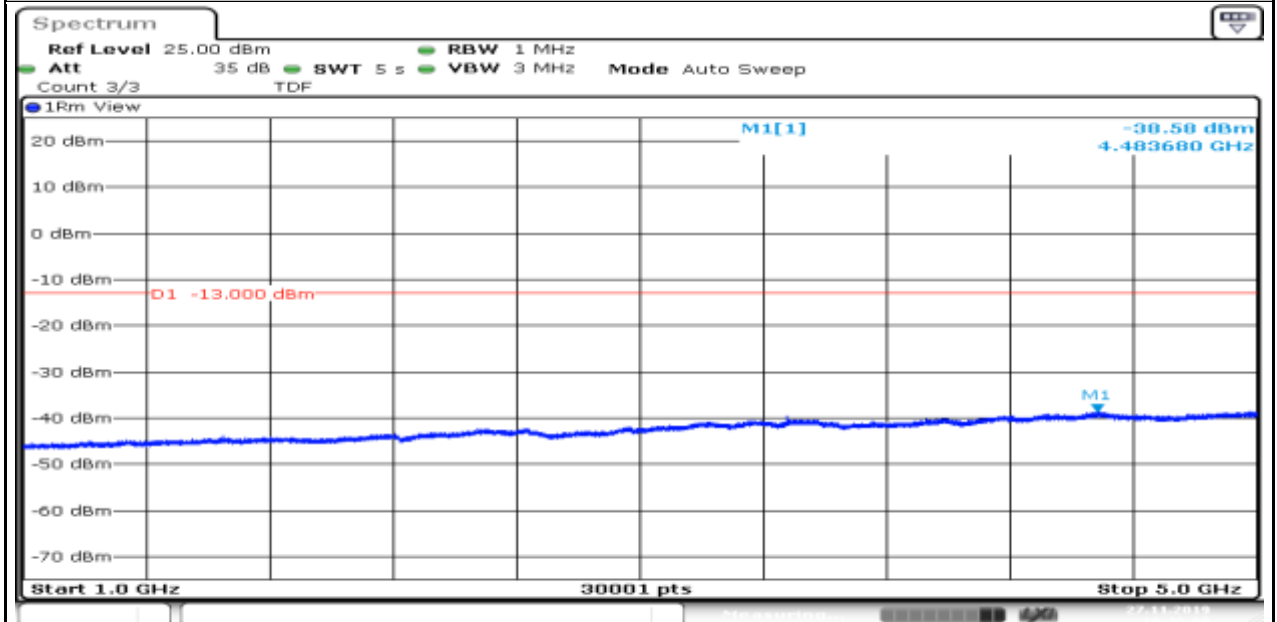
Band26\_1.4MHz\_16QAM\_26797\_1\_0\_Low\_30\_1000\_-35.93\_PASS\_

Produkte  
Products



Date: 27.NOV.2019 10:34:45

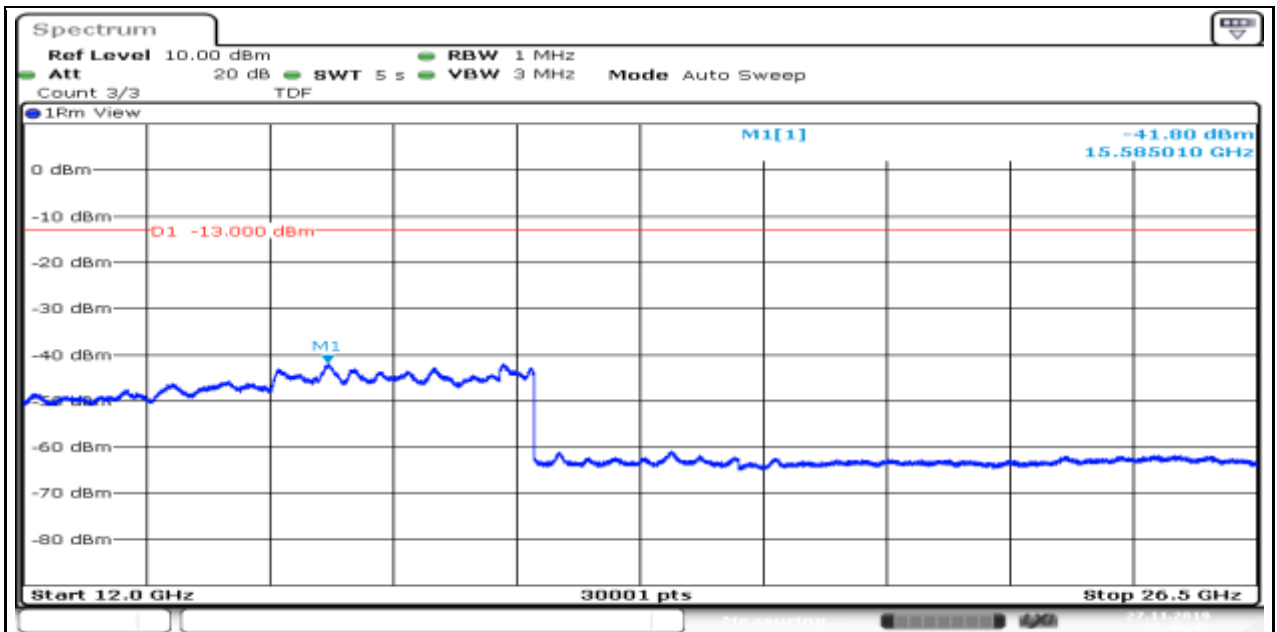
Band26\_1.4MHz\_16QAM\_26797\_6\_0\_Low\_1000\_5000\_-38.58\_PASS\_



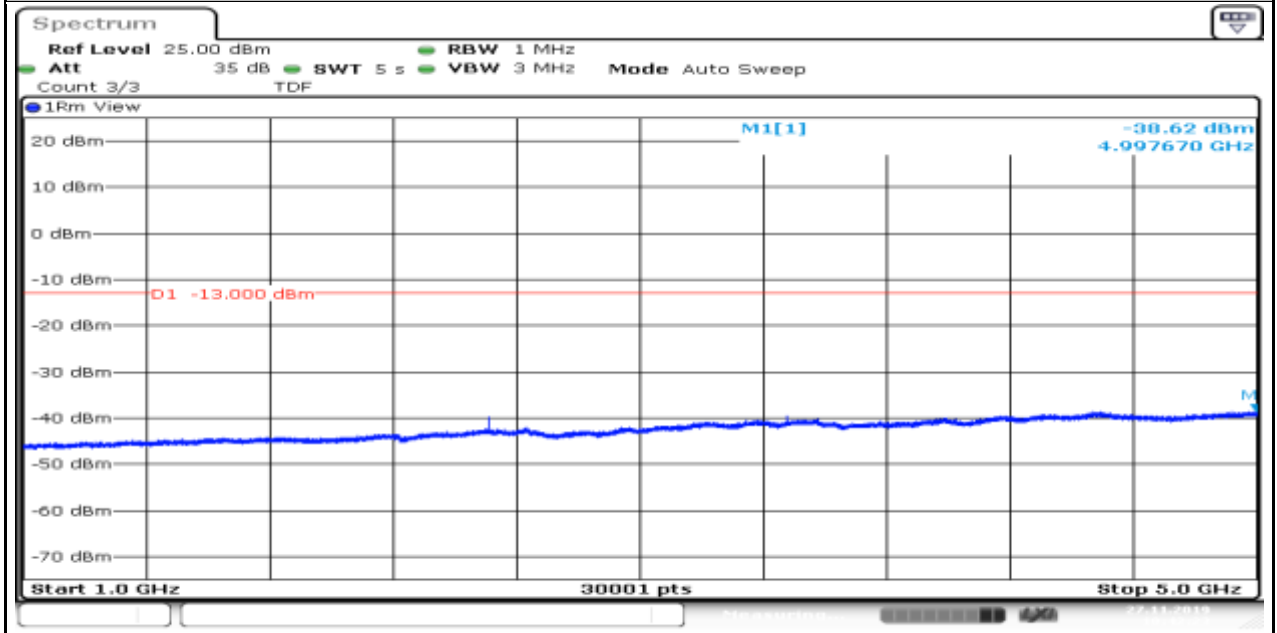
Date: 27.NOV.2019 10:38:00

Band26\_1.4MHz\_16QAM\_26915\_6\_0\_Low\_12000\_26500\_-41.8\_PASS\_

Produkte  
Products



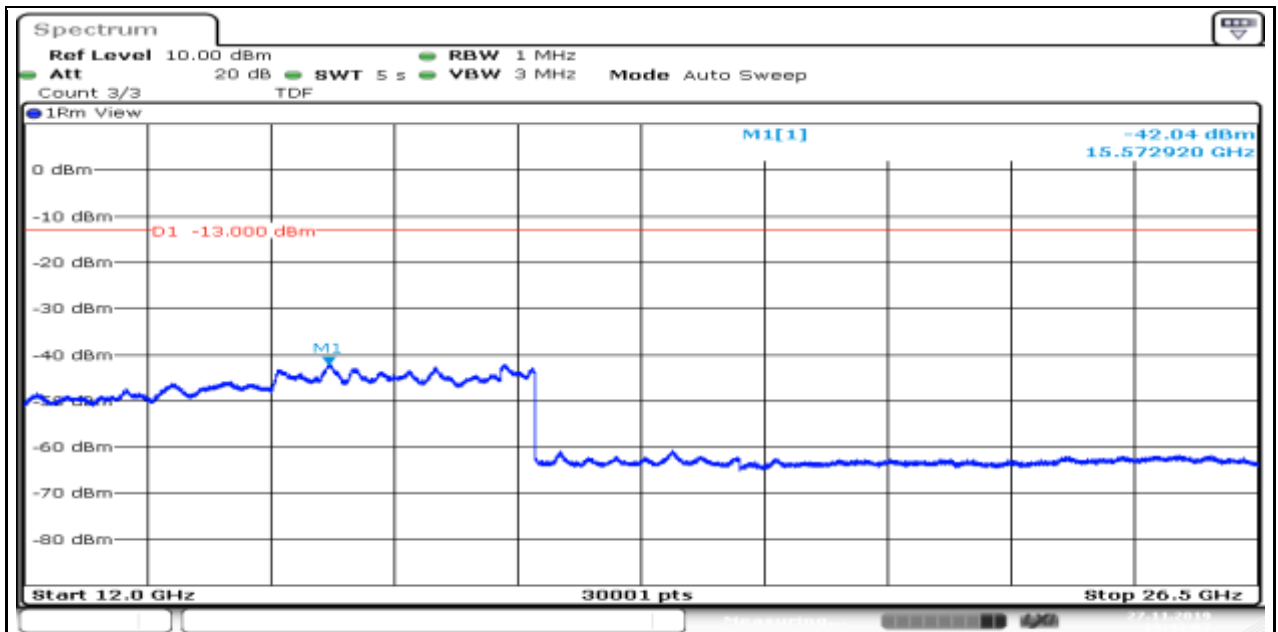
Band26\_1.4MHz\_16QAM\_26915\_1\_0\_Low\_1000\_5000\_-38.62\_PASS\_



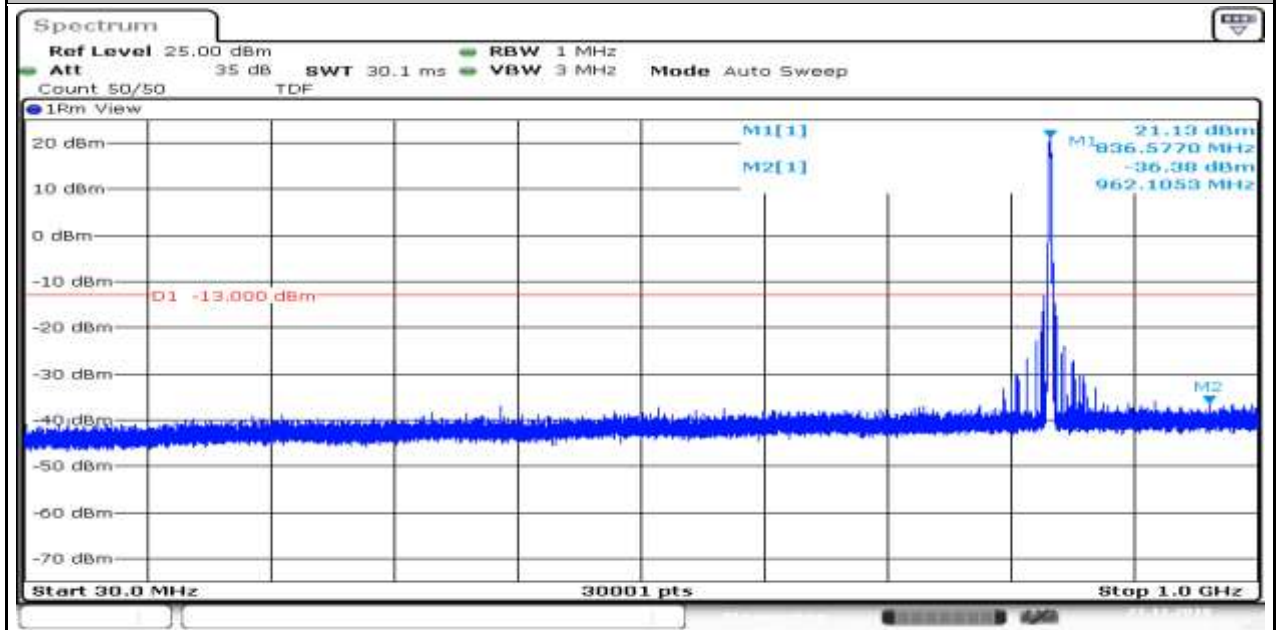
Band26\_1.4MHz\_16QAM\_26915\_1\_0\_Low\_12000\_26500\_-42.04\_PASS\_



Produkte  
Products

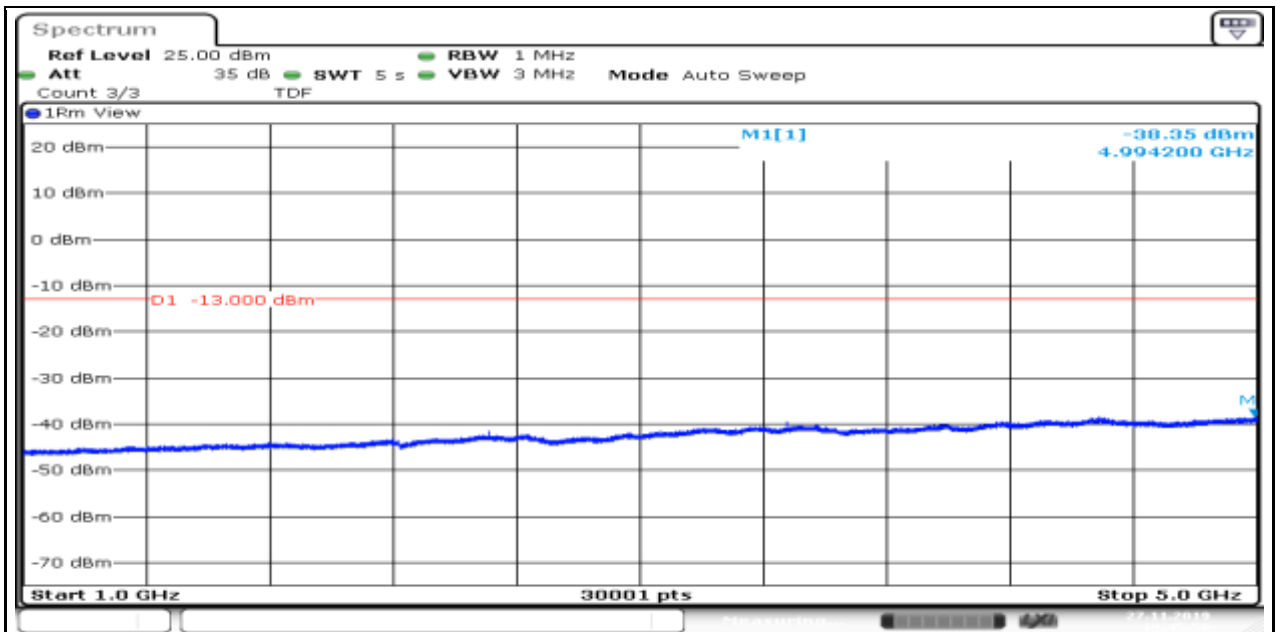


Band26\_1.4MHz\_16QAM\_26915\_6\_0\_Low\_30\_1000\_-36.38\_PASS\_

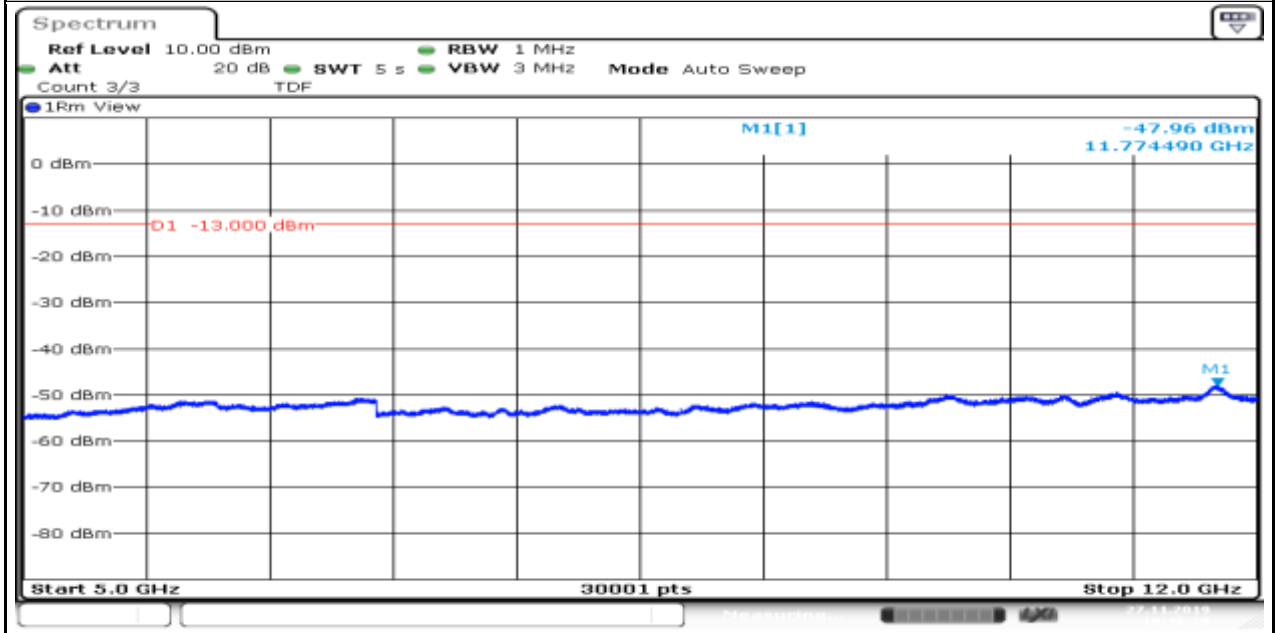


Band26\_1.4MHz\_16QAM\_26915\_6\_0\_Low\_1000\_5000\_-38.35\_PASS\_

Produkte  
Products

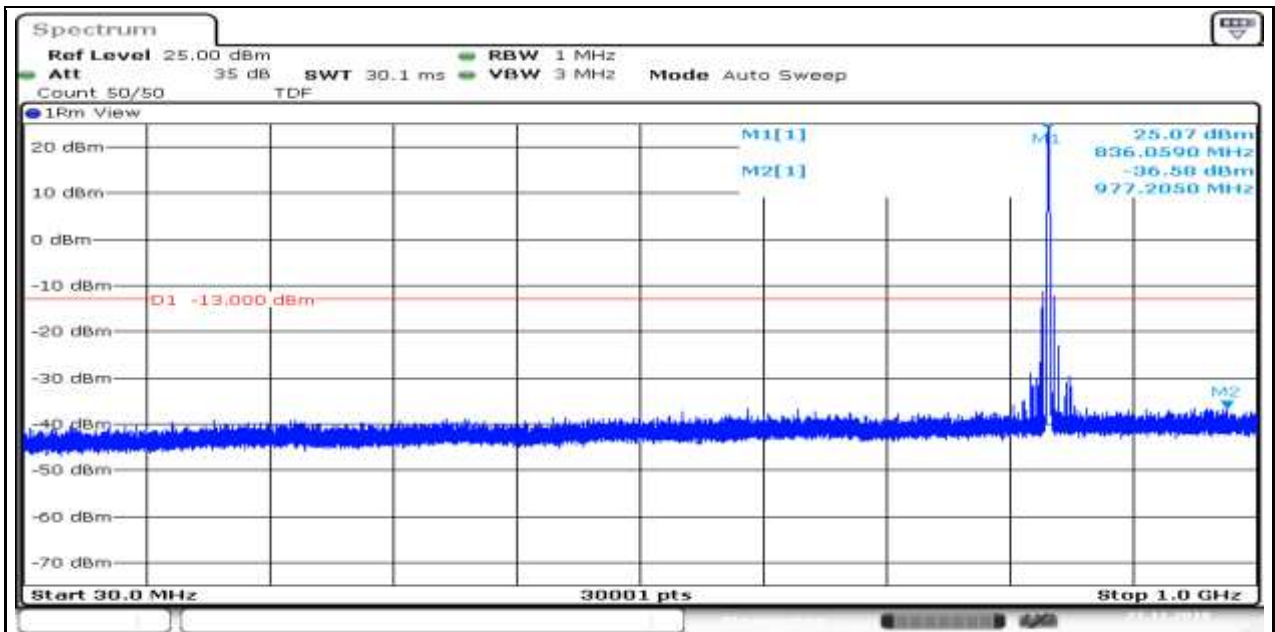


Band26\_1.4MHz\_16QAM\_26915\_6\_0\_Low\_5000\_12000\_-47.96\_PASS\_



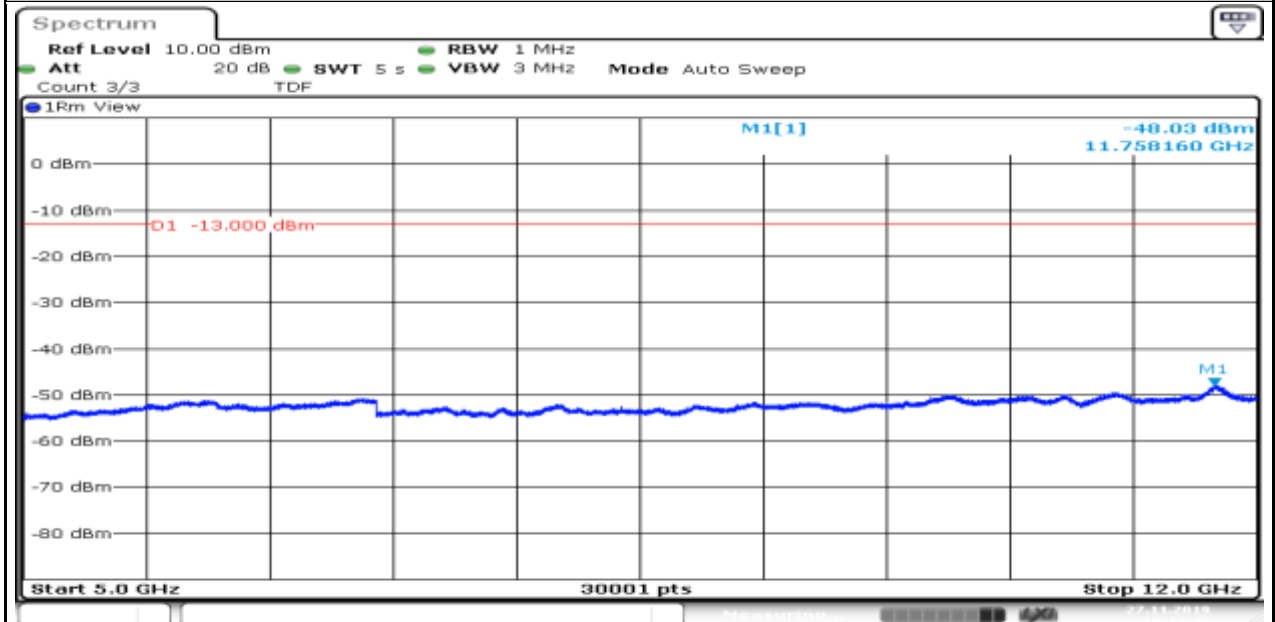
Band26\_1.4MHz\_16QAM\_26915\_1\_0\_Low\_30\_1000\_-36.58\_PASS\_

Produkte  
Products



Date: 27.NOV.2019 10:42:01

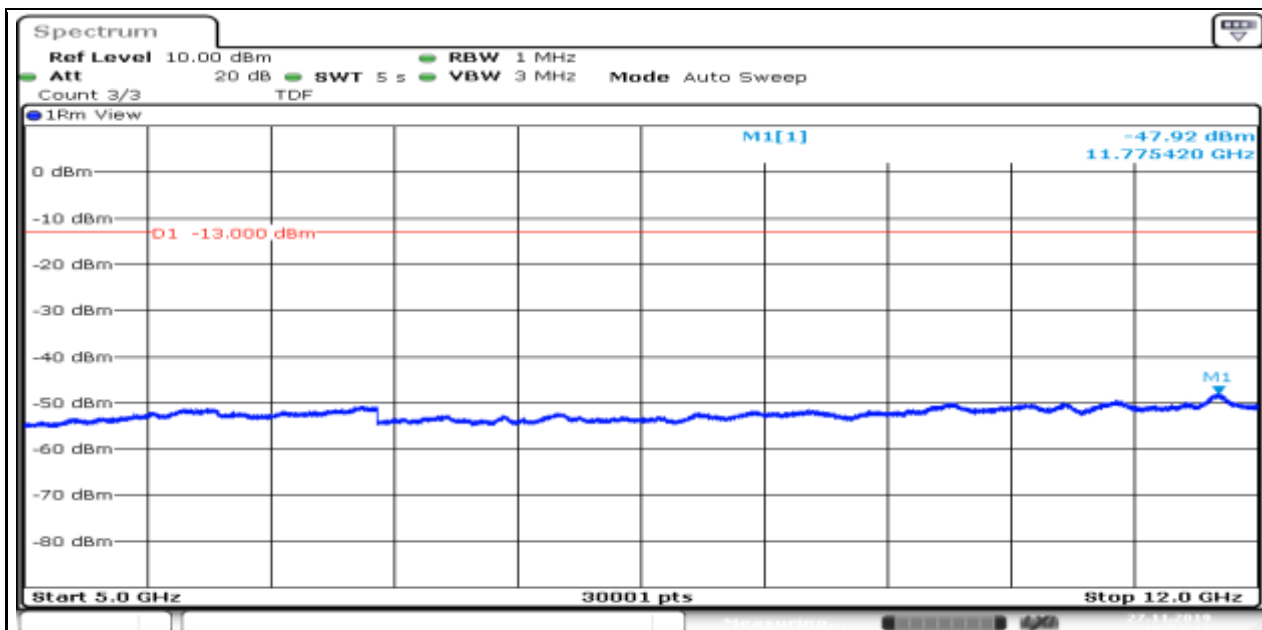
Band26\_1.4MHz\_16QAM\_26915\_1\_0\_Low\_5000\_12000\_-48.03\_PASS\_



Date: 27.NOV.2019 10:42:45

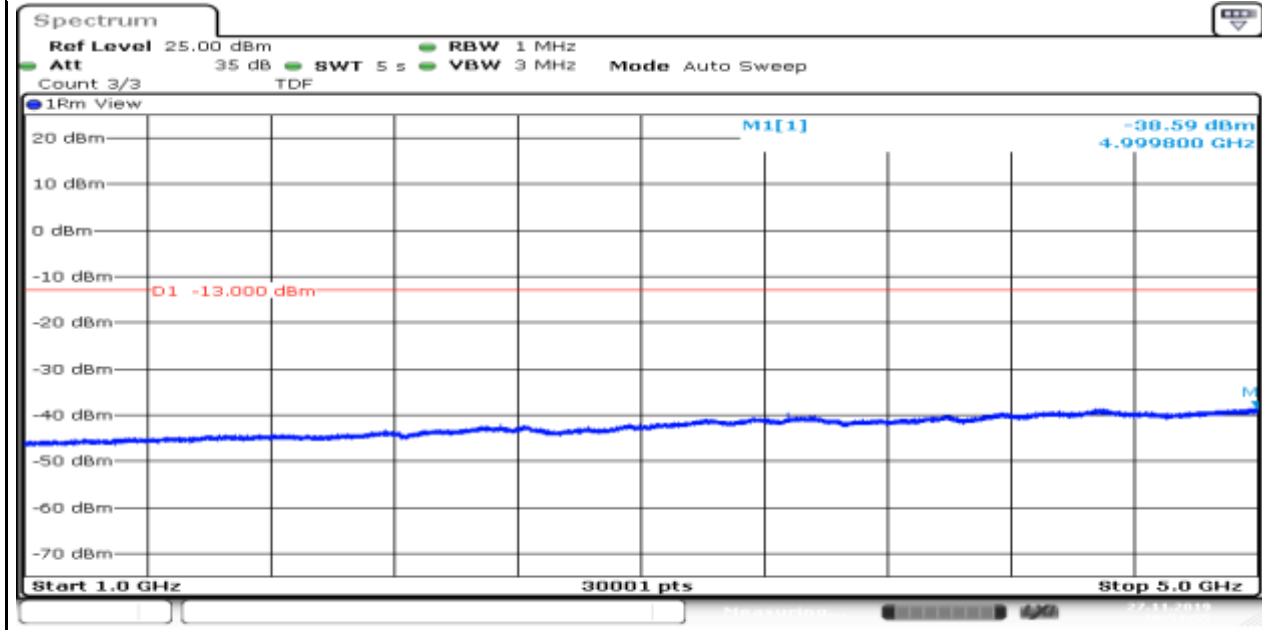
Band26\_1.4MHz\_16QAM\_27033\_6\_0\_Low\_5000\_12000\_-47.92\_PASS\_

Produkte  
Products



Date: 27.NOV.2019 10:52:17

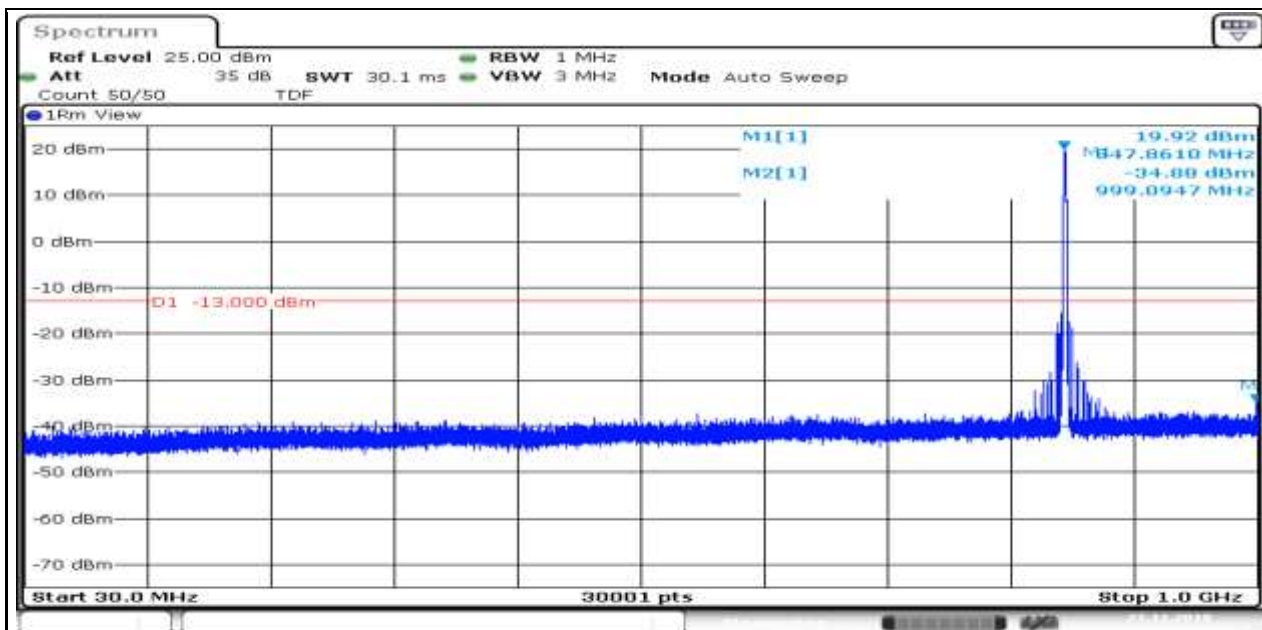
Band26\_1.4MHz\_16QAM\_27033\_6\_0\_Low\_1000\_5000\_-38.59\_PASS\_



Date: 27.NOV.2019 10:51:55

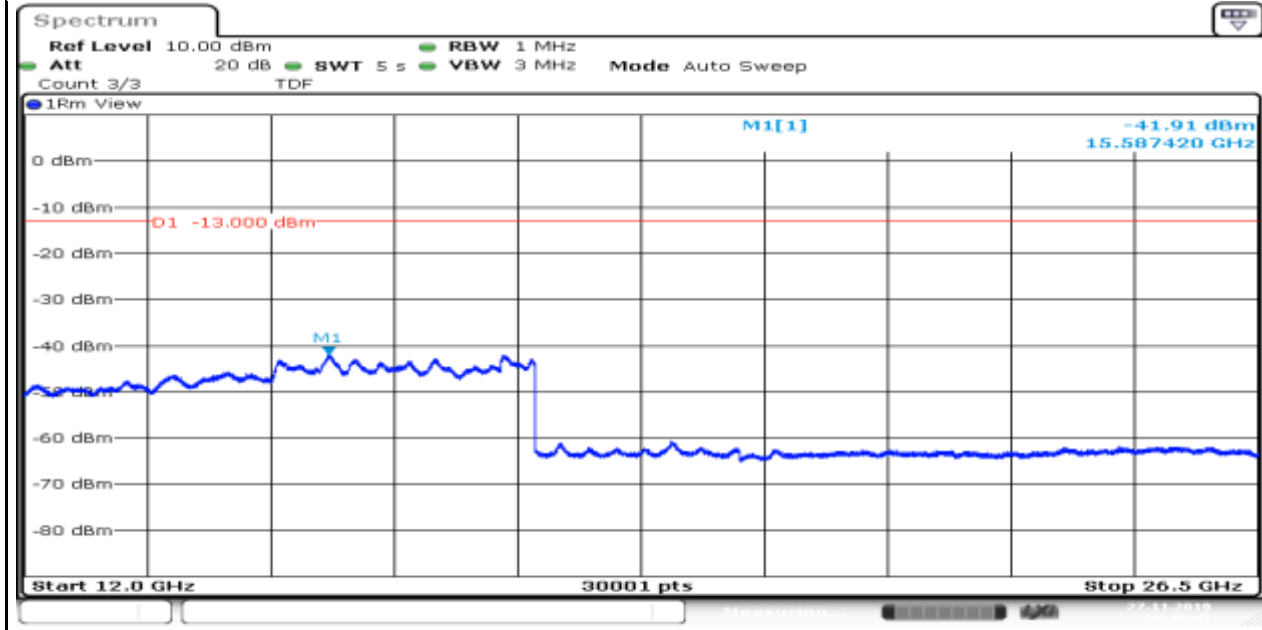
Band26\_1.4MHz\_16QAM\_27033\_6\_0\_Low\_30\_1000\_-34.88\_PASS\_

Produkte  
Products



Date: 27.NOV.2019 10:51:33

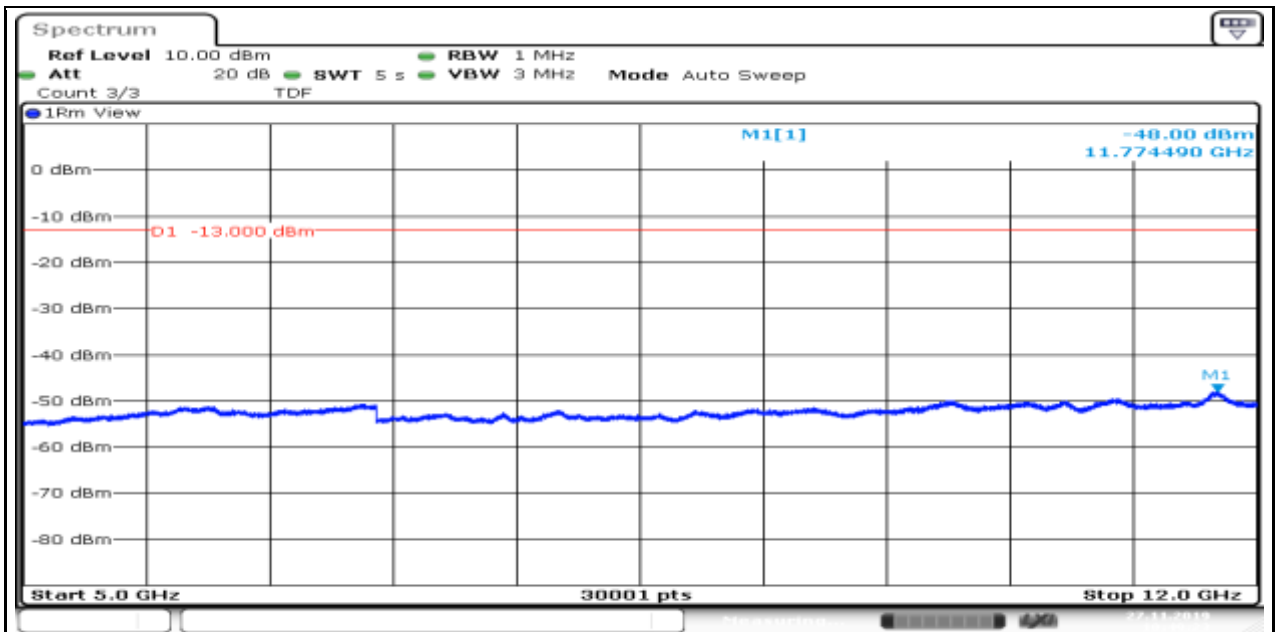
Band26\_1.4MHz\_16QAM\_27033\_1\_5\_Low\_12000\_26500\_-41.91\_PASS\_



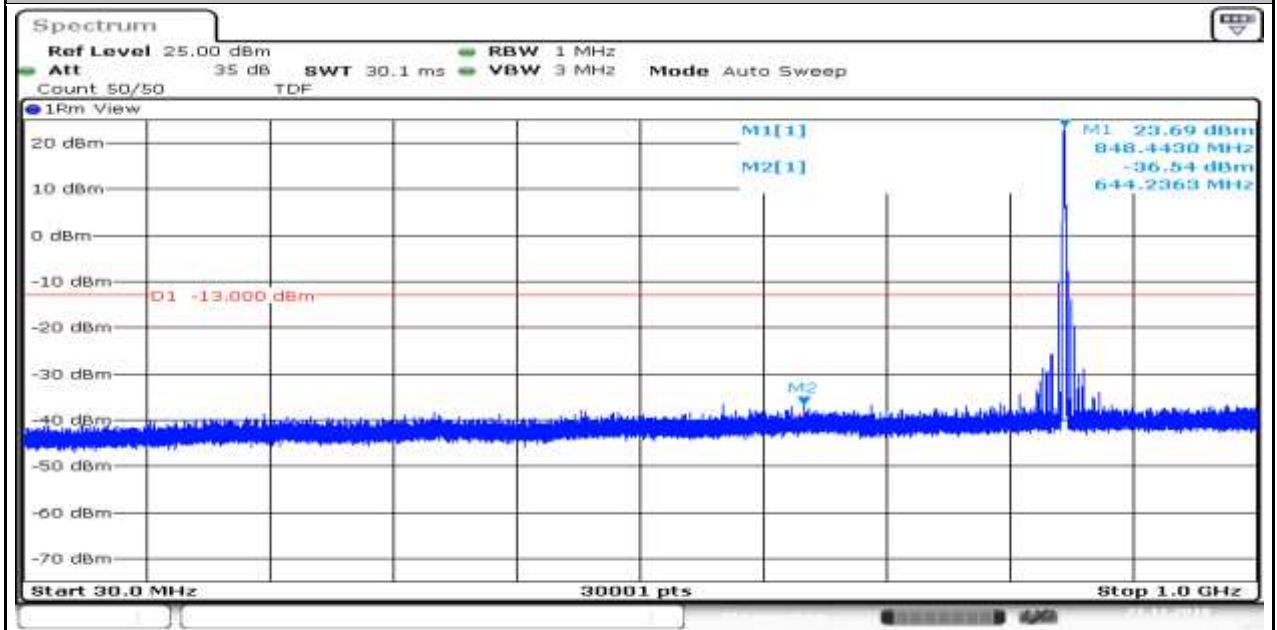
Date: 27.NOV.2019 10:49:45

Band26\_1.4MHz\_16QAM\_27033\_1\_5\_Low\_5000\_12000\_-48\_PASS\_

Produkte  
Products

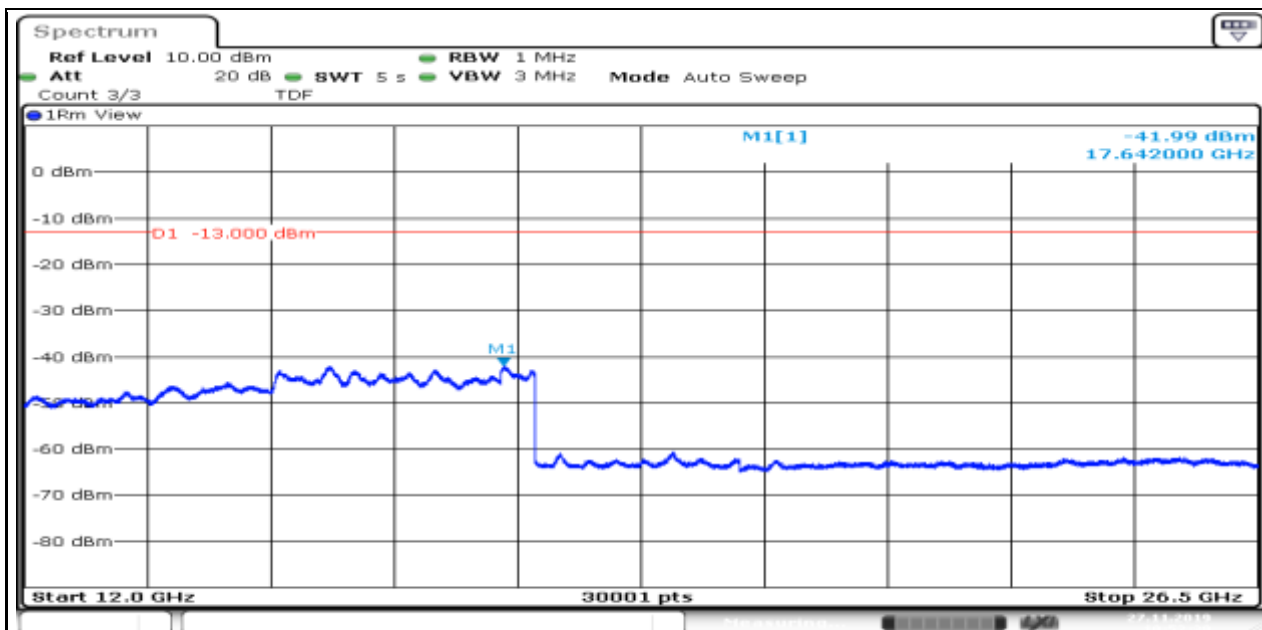


Band26\_1.4MHz\_16QAM\_27033\_1\_5\_Low\_30\_1000\_-36.54\_PASS\_

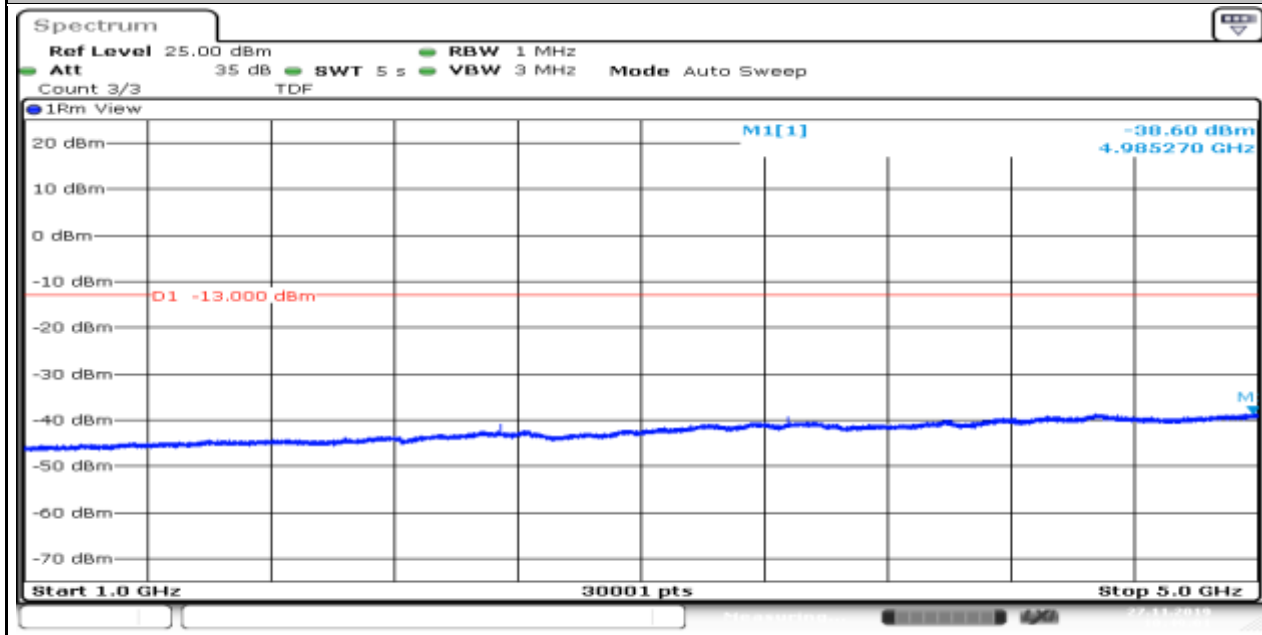


Band26\_1.4MHz\_16QAM\_27033\_6\_0\_Low\_12000\_26500\_-41.99\_PASS\_

Produkte  
Products



Band26\_1.4MHz\_16QAM\_27033\_1\_5\_Low\_1000\_5000\_-38.6\_PASS\_\_



## Appendix H.6: Frequency Stability for M1

### Test Result

Voltage												
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band26	1.4MHz	QPSK	26915	1	0	Low	LV	NT	-22.32	-0.02668	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	HV	NT	-20.53	-0.02454	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	NT	-23.52	-0.02812	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	HV	NT	80.02	0.09566	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	LV	NT	84.66	0.101207	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	NT	79.92	0.095541	±2.5	PASS

Temperature												
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	30	-21.49	-0.02569	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	85	-18.05	-0.02158	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	80	-24.16	-0.02888	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	70	-15.94	-0.01906	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	60	-21.09	-0.02521	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	50	-23.19	-0.02772	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	40	-16.32	-0.01951	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	10	-18.12	-0.02166	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	0	-16.26	-0.01944	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	-10	-15.34	-0.01834	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	-20	-15.54	-0.01858	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	-40	-15.32	-0.01831	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	20	-26.08	-0.03118	±2.5	PASS
Band26	1.4MHz	QPSK	26915	1	0	Low	NV	-30	-24.1	-0.02881	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	80	79.61	0.09517	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	60	81.15	0.097011	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	85	79.91	0.095529	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	70	83.43	0.099737	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	50	79.41	0.094931	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	-40	81.28	0.097167	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	-30	81.9	0.097908	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	-20	83.5	0.099821	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	-10	81.47	0.097394	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	0	79.79	0.095386	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	10	80.32	0.096019	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	20	80.02	0.09566	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	40	78.81	0.094214	±2.5	PASS
Band26	1.4MHz	16QAM	26915	1	0	Low	NV	30	78.61	0.093975	±2.5	PASS