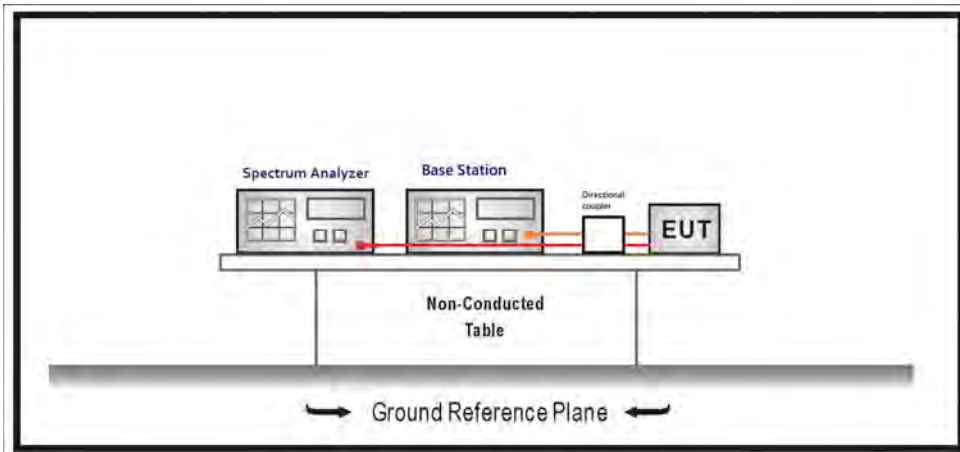


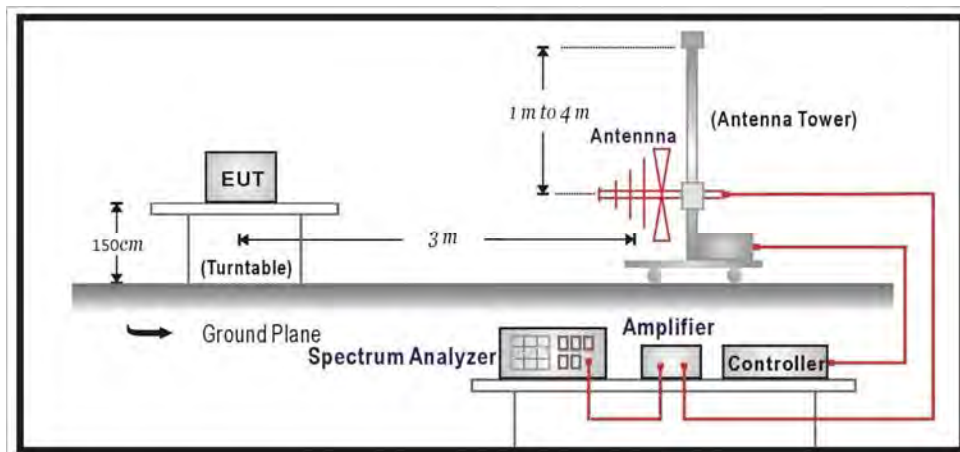
6. Spurious Emissions

6.1. Test Setup

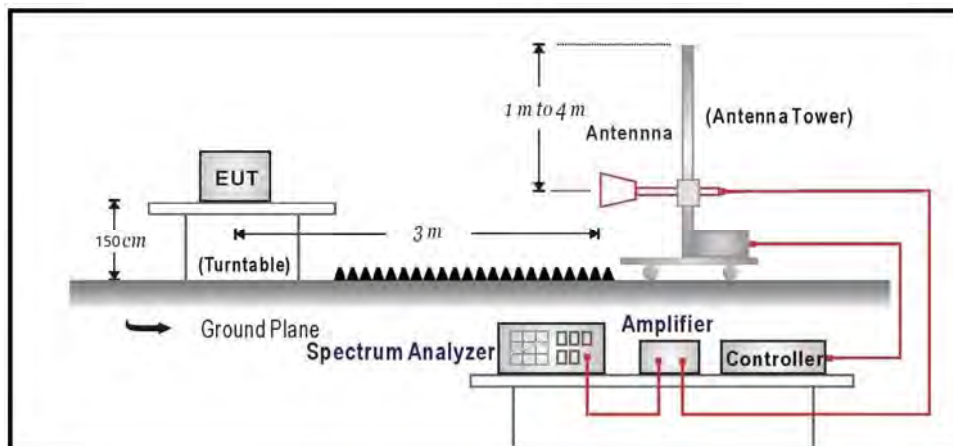
Conducted Spurious Measurement: below 1GHz



Radiated Spurious Measurement: below 1GHz



Radiated Spurious Measurement: above 1GHz



6.2. Test Procedure

Conducted Spurious Measurement:

- a) Place the EUT on a bench and set it in transmitting mode.
- b) Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMW500 by a Directional Couple.
- c) EUT Communicate with CMW500, then select a channel for testing.
- d) Add a correction factor to the display of spectrum, and then test.
- e) The resolution bandwidth of the spectrum analyzer was set at 1 MHz, sufficient scans were taken to show the out of band Emission if any up to 10th harmonic.

Radiated Spurious Measurement:

- a) The EUT was placed on a rotatable wooden table with 1.5 meter above ground.
- b) The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
- c) The table was rotated 360 degrees to determine the position of the highest spurious emission.
- d) The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
- e) Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 1MHz, Sweep 500ms, Taking the record of maximum spurious emission.
- f) A horn antenna was substituted in place of the EUT and was driven by a signal generator.
- g) Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
- h) Taking the record of output power at antenna port.
- i) Repeat step 7 to step 8 for another polarization.
- j) $EIRP = SG - \text{Cable loss} + \text{Antenna Gain}$

6.3. Test Method

Conducted Spurious Measurement:

KDB 971168 D01 Power Meas License Digital Systems v03 sub-clause6.1
ANSI C63.26-2015 Sub-clause 5.7

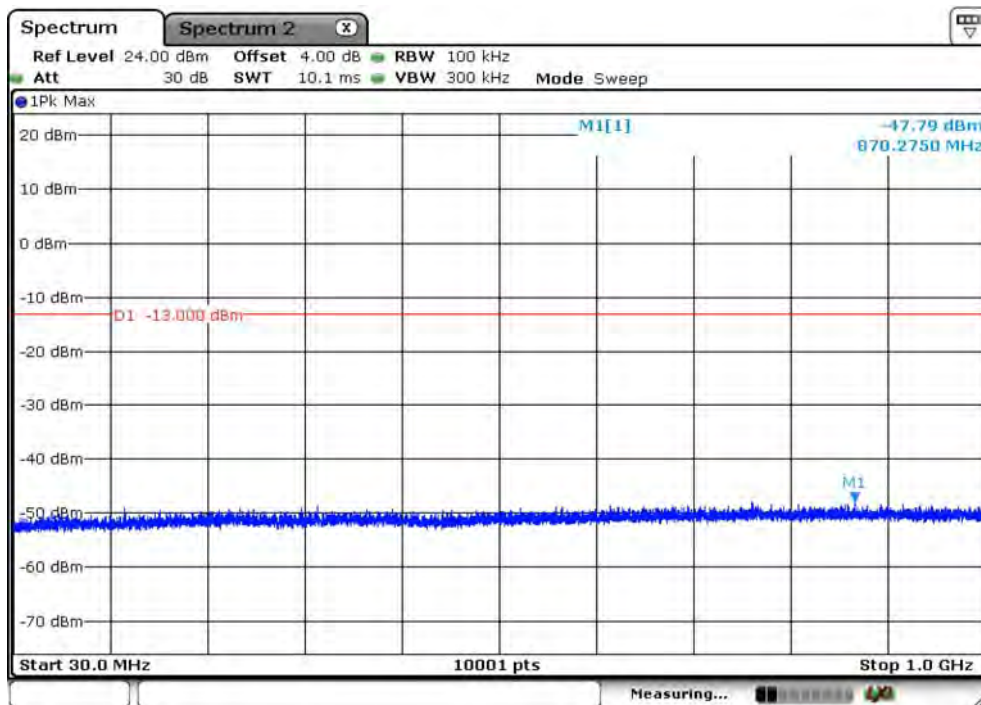
Radiated Spurious Measurement:

KDB 971168 D01 Power Meas License Digital Systems v03 sub-clause5.8
ANSI C63.26-2015 Sub-clause 5.5.3.2

6.4. Test Result Conducted Spurious Emission

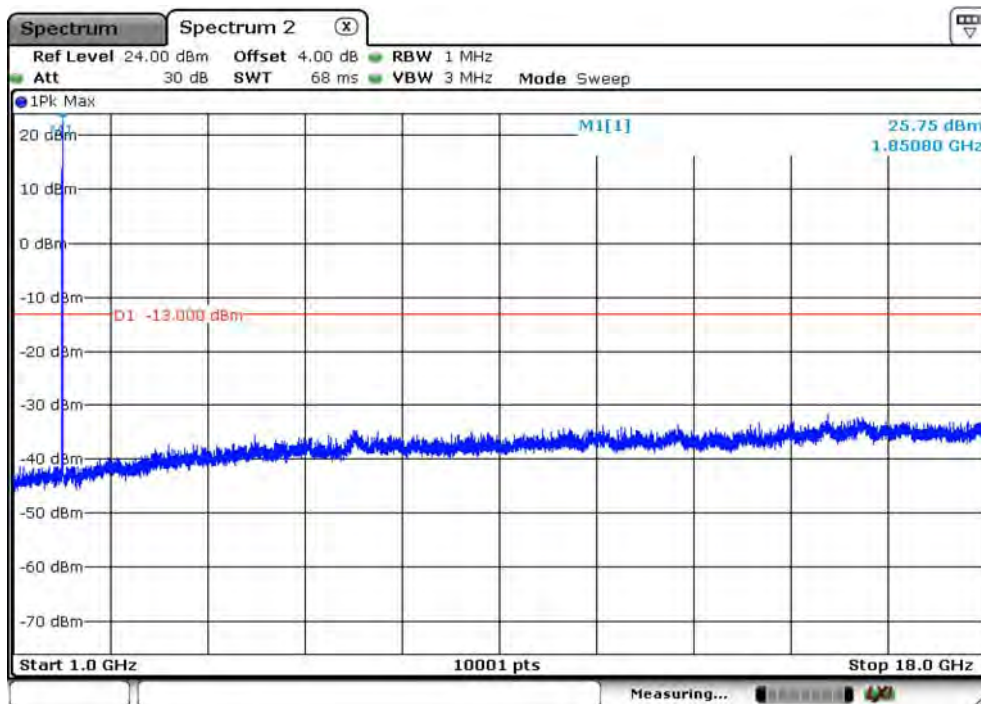
Product	Module		
Test Item	Conducted Spurious Emission		
Test Mode	Mode 1: LTE Band 2/25		
Date of Test	2020/08/26	Test Site	SR12-H
Temperature(°C)	24	Humidity (%RH)	66

B25_CH26047_1.4M_1RB2__QPSK_Below 1G



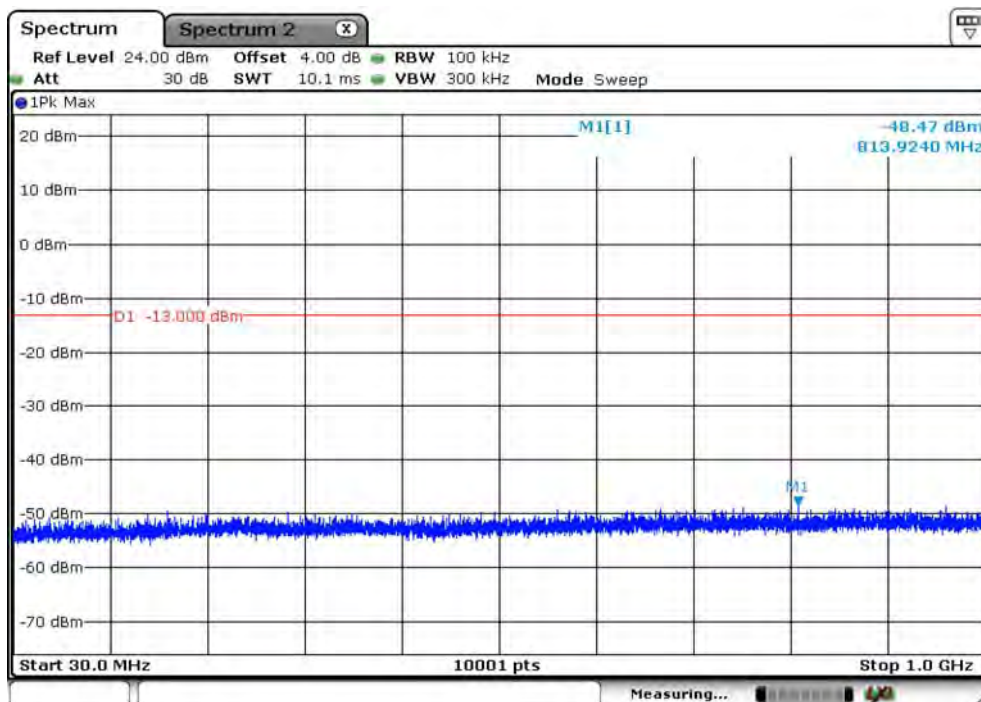
Date: 26.AUG.2020 19:28:39

B25_CH26047_1.4M_1RB2__QPSK_Above 1G



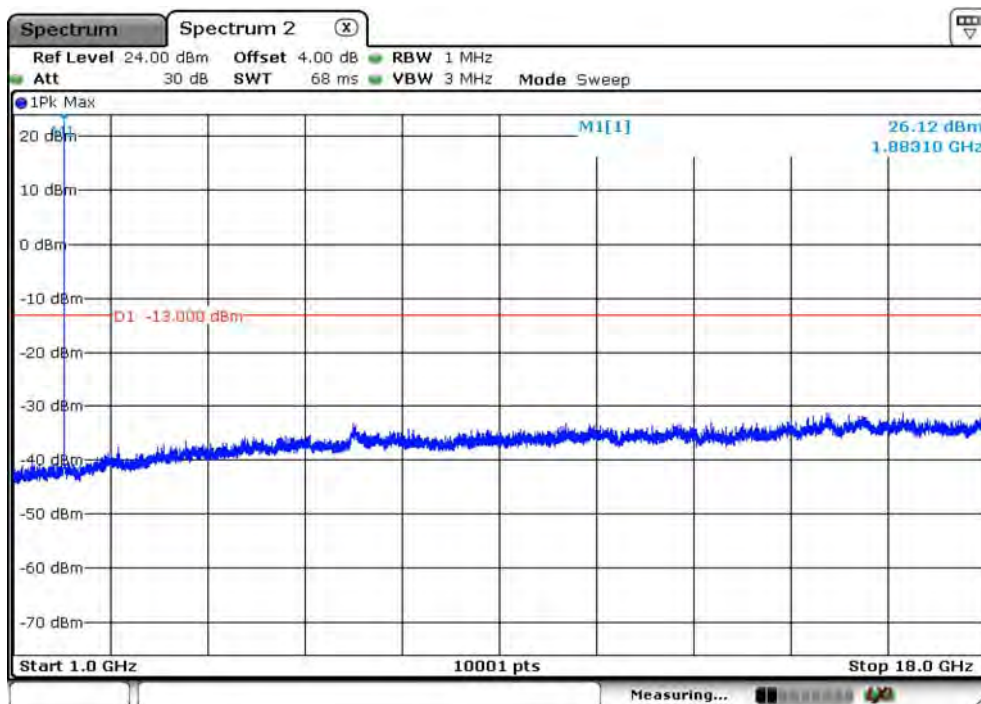
Date: 26.AUG.2020 19:29:10

B25_CH26365_1.4M_1RB0_QPSK_Below 1G



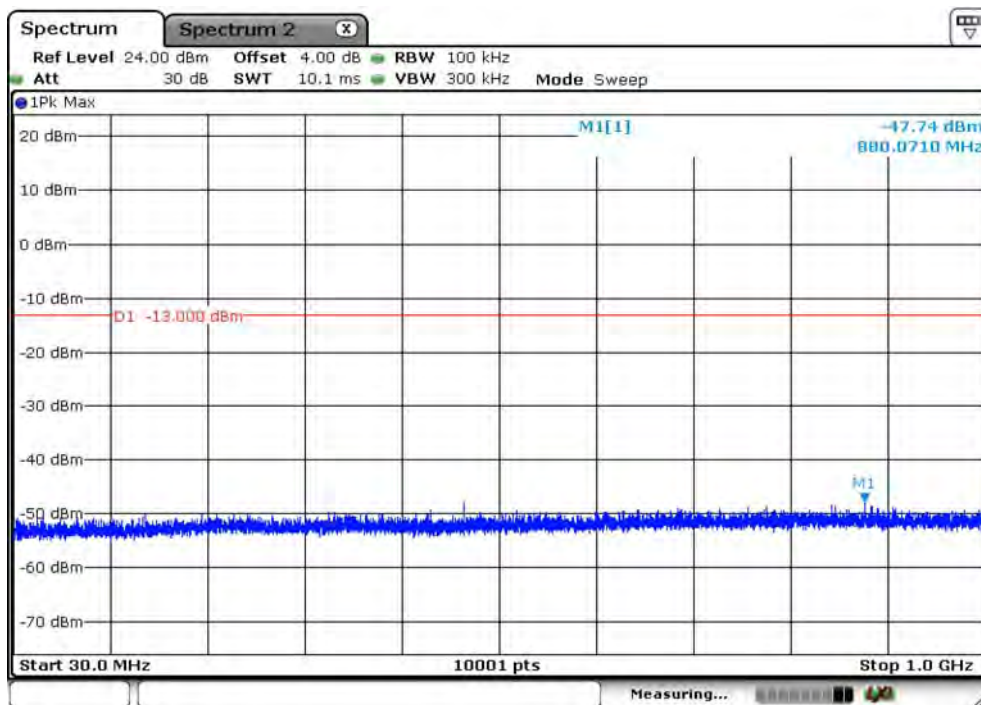
Date: 26.AUG.2020 19:09:25

B25_CH26365_1.4M_1RB0_QPSK_Above 1G



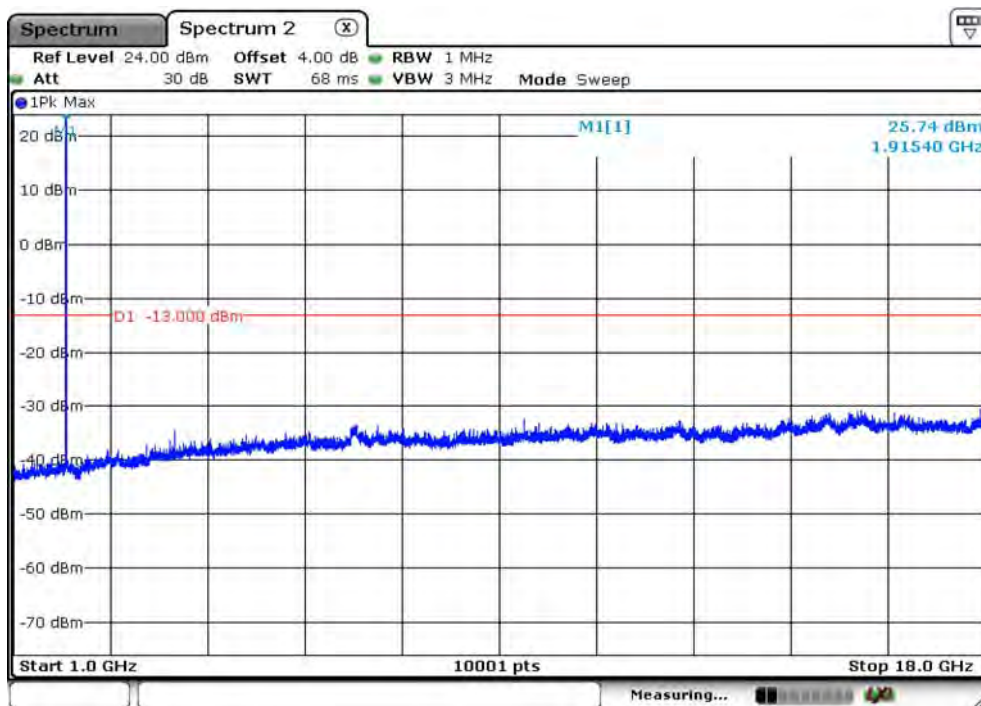
Date: 26.AUG.2020 19:08:25

B25_CH26683_1.4M_1RB2_QPSK_Below 1G



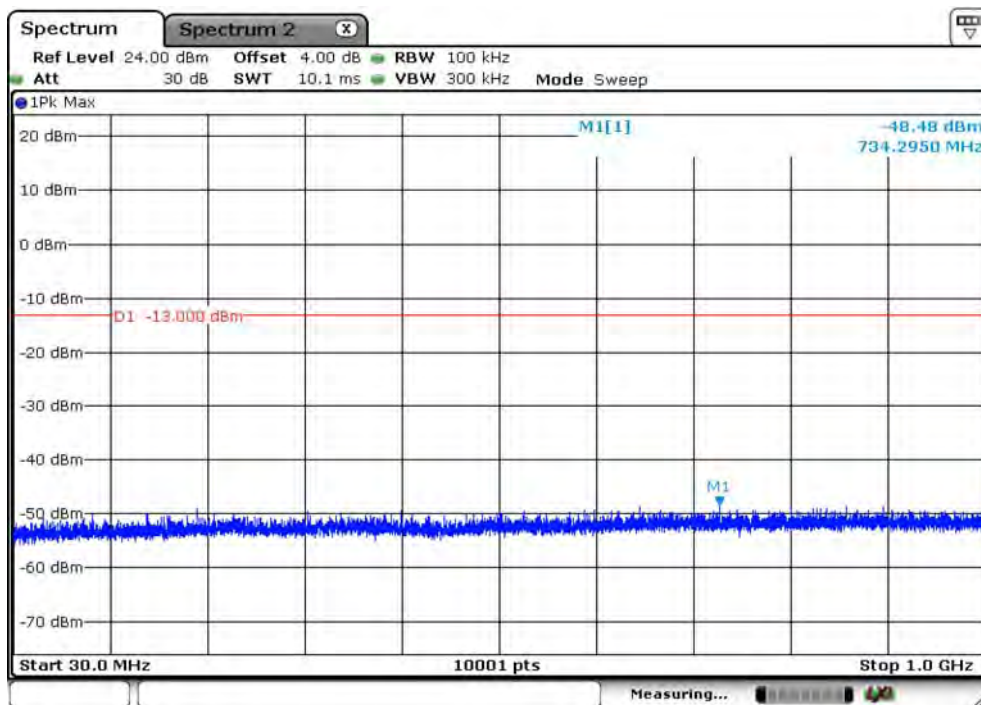
Date: 26.AUG.2020 19:33:11

B25_CH26683_1.4M_1RB2_QPSK_Above 1G



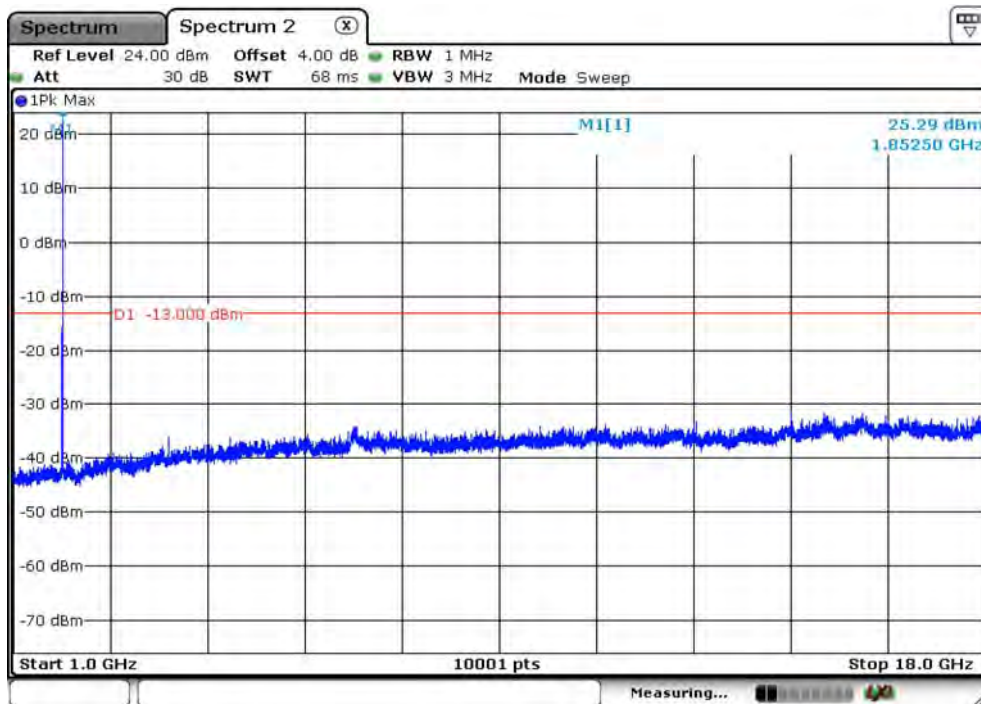
Date: 26.AUG.2020 19:32:39

B25_CH26055_3M_1RB7_QPSK_Below 1G



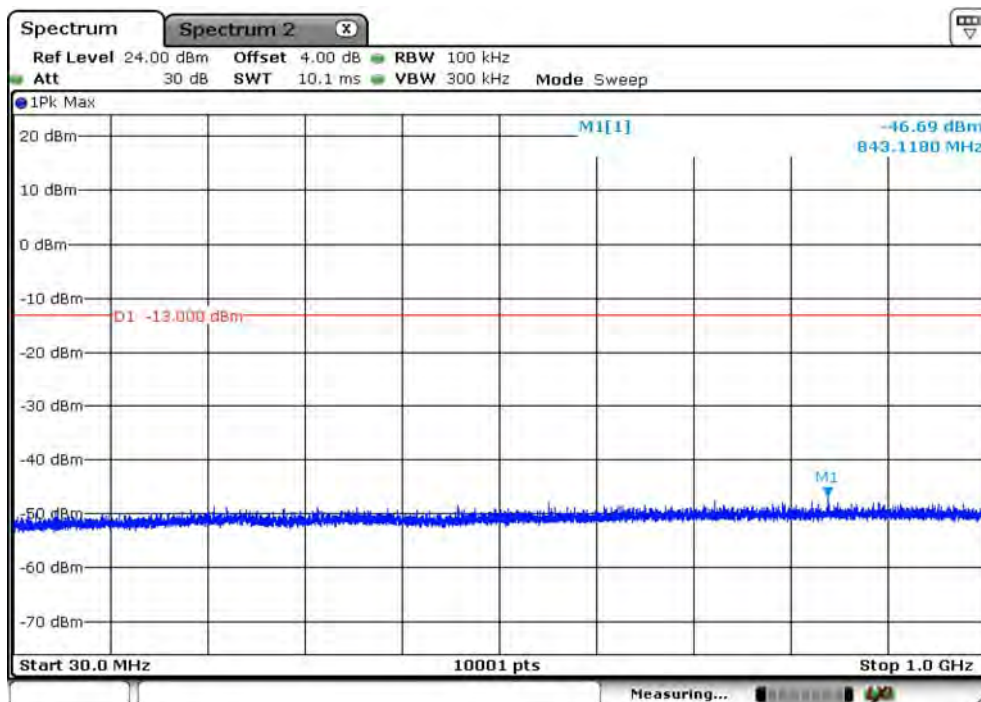
Date: 26.AUG.2020 19:42:46

B25_CH26055_3M_1RB7_QPSK_Above 1G



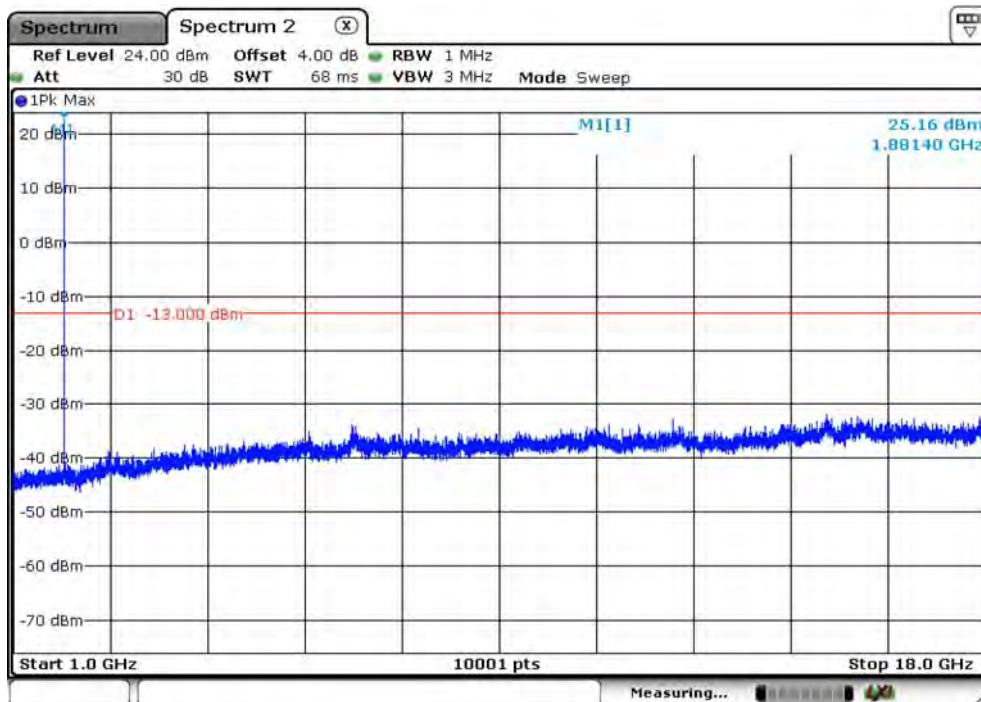
Date: 26.AUG.2020 19:42:21

B25_CH26365_3M_1RB0_QPSK_Below 1G



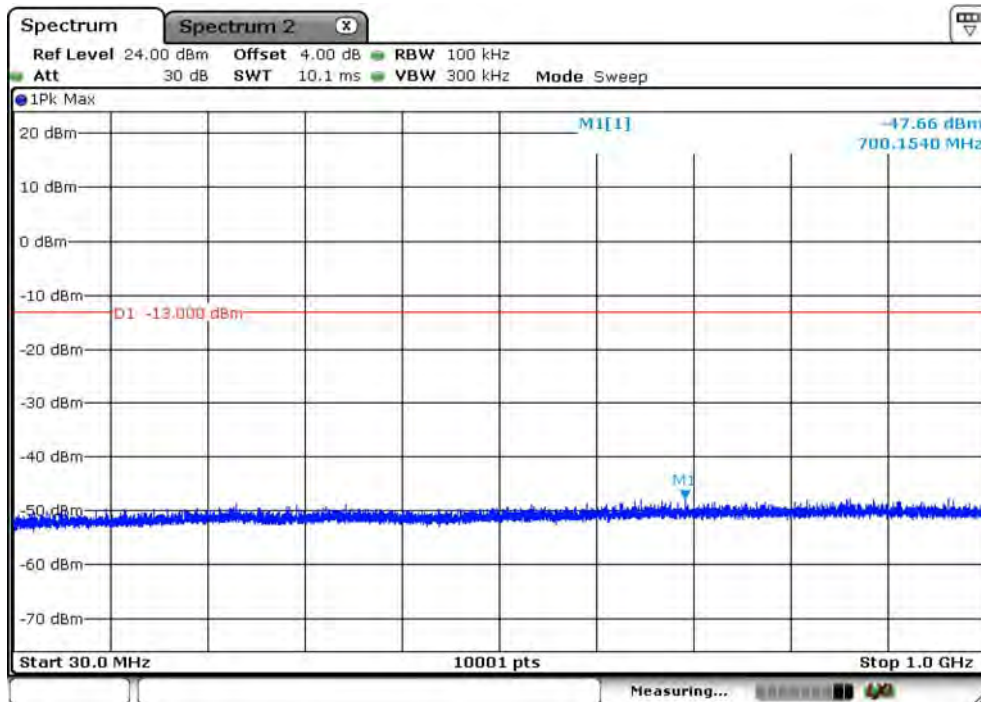
Date: 26.AUG.2020 19:40:59

B25_CH26365_3M_1RB0_QPSK_Above 1G



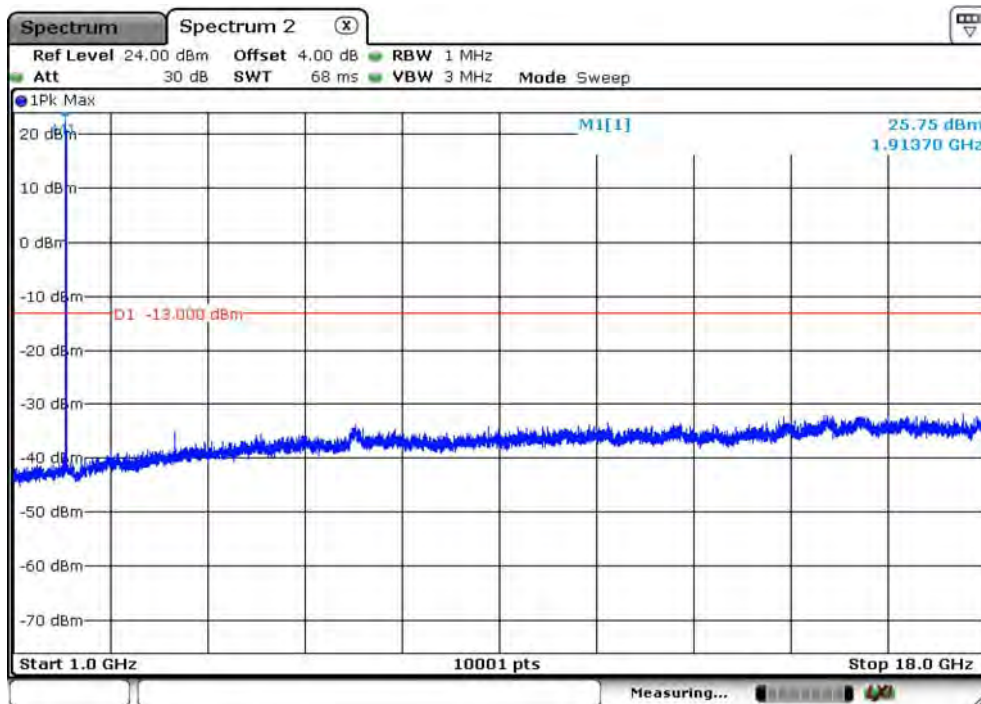
Date: 26.AUG.2020 19:41:30

B25_CH26675_3M_1RB7_QPSK_Below 1G



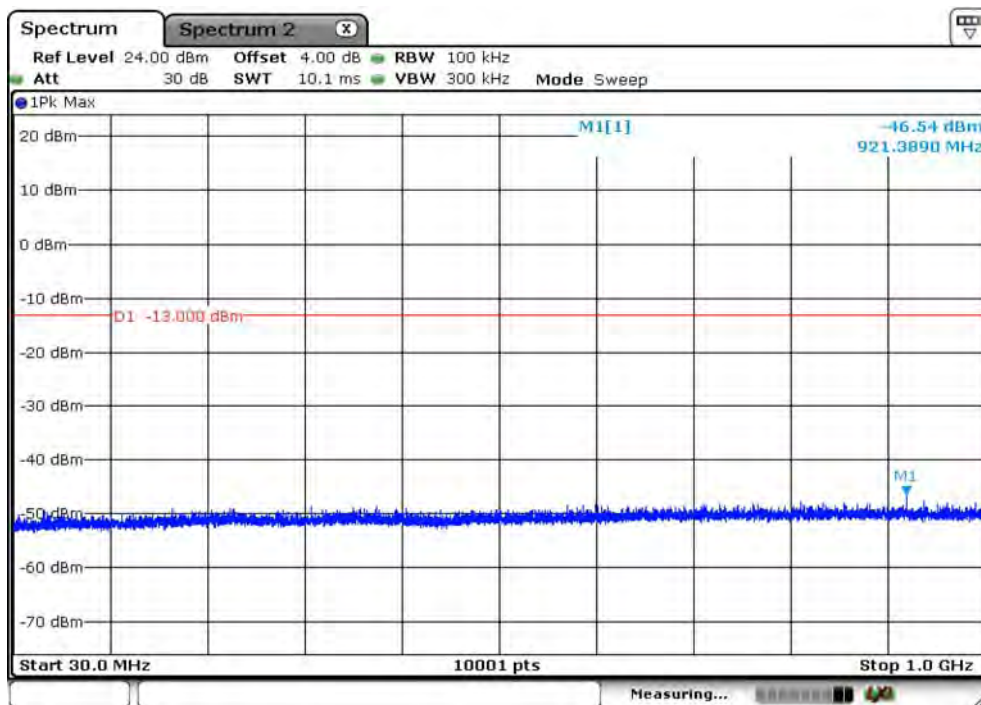
Date: 26.AUG.2020 19:45:32

B25_CH26675_3M_1RB7_QPSK_Above 1G

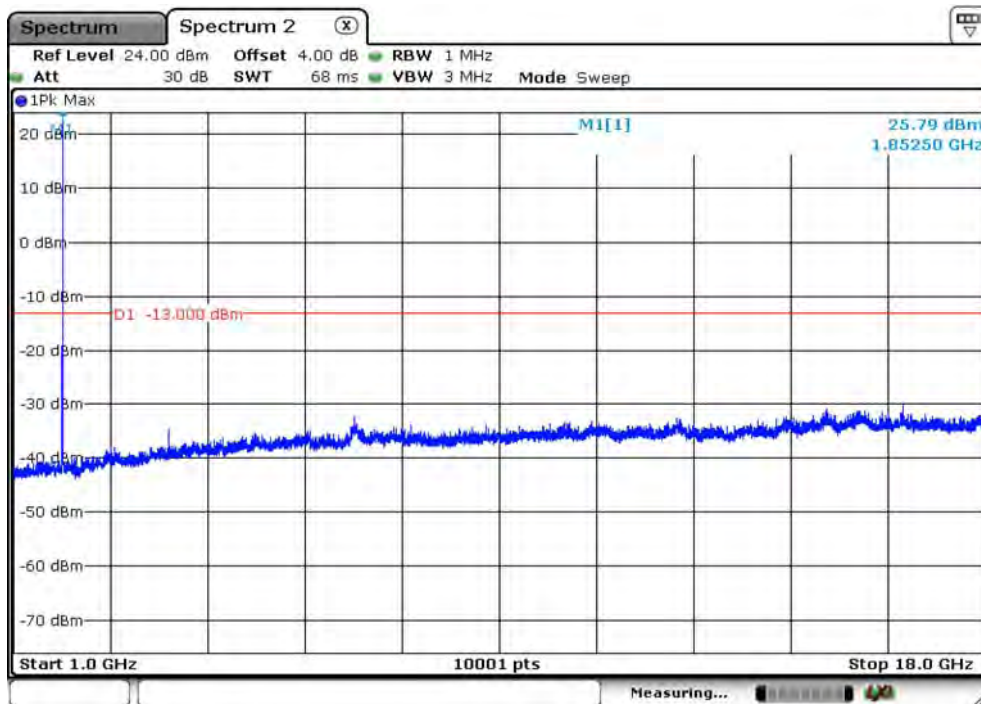


Date: 26.AUG.2020 19:46:20

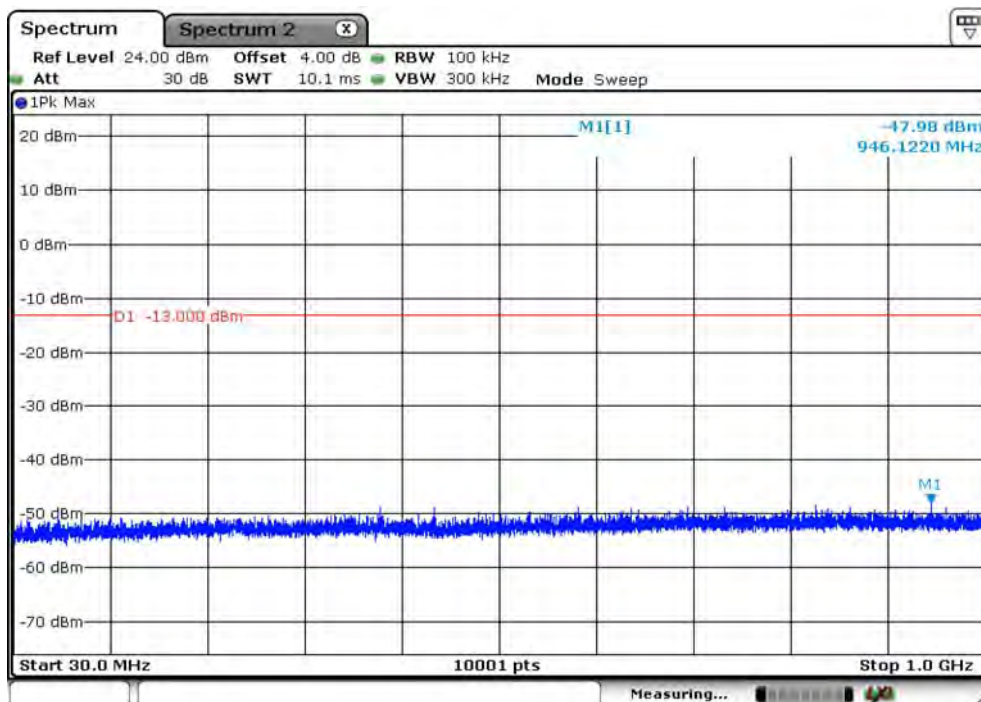
B25_CH26055_3M_1RB7_QPSK_Below 1G



B25_CH26055_3M_1RB7_QPSK_Above 1G

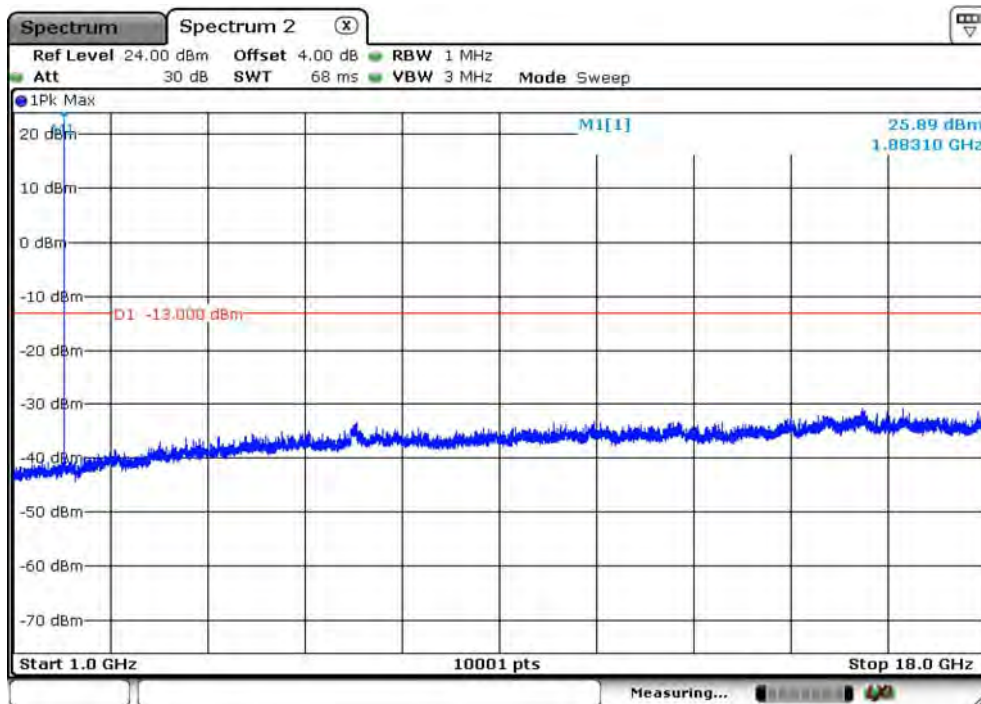


B25_CH26365_3M_1RB0_QPSK_Below 1G



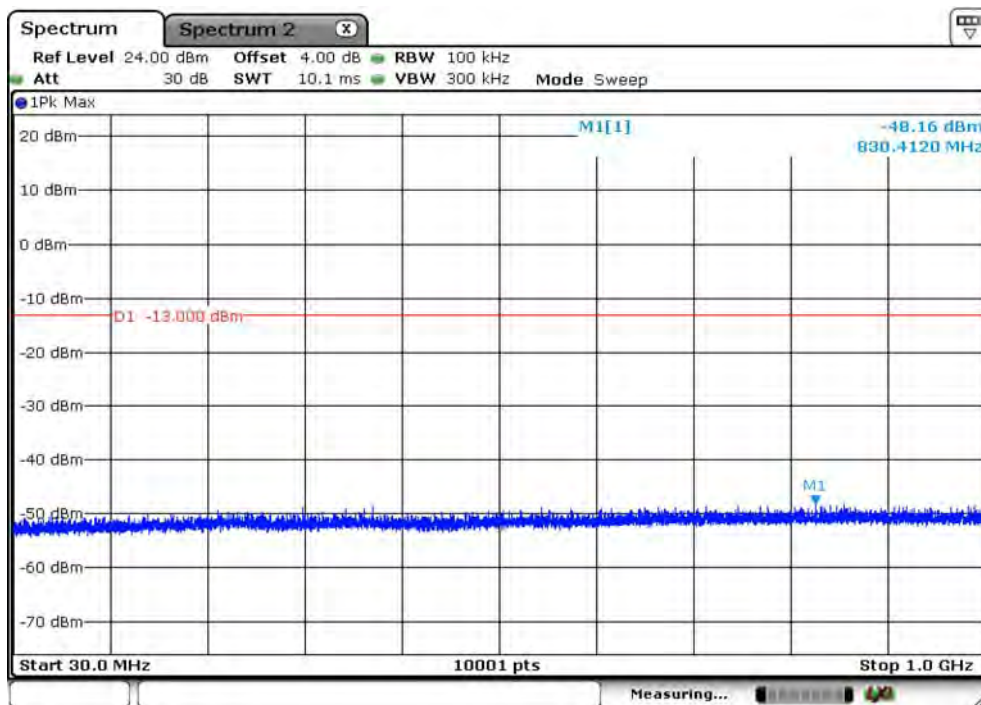
Date: 26.AUG.2020 19:50:00

B25_CH26365_3M_1RB0_QPSK_Above 1G



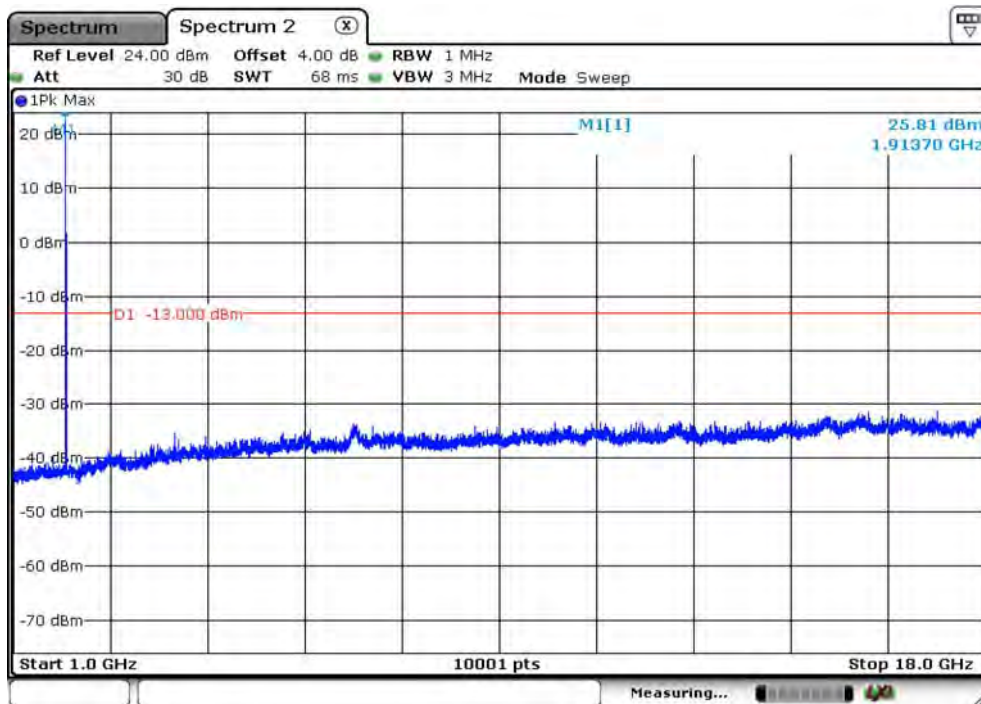
Date: 26.AUG.2020 19:47:57

B25_CH26675_3M_1RB7_QPSK_Below 1G



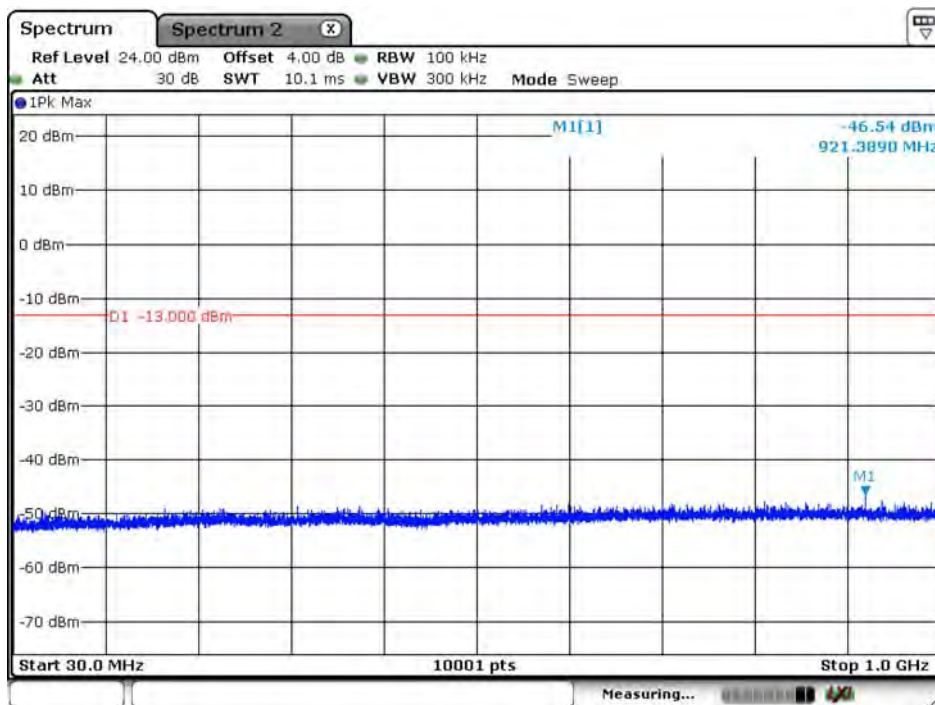
Date: 26.AUG.2020 20:02:19

B25_CH26675_3M_1RB7_QPSK_Above 1G



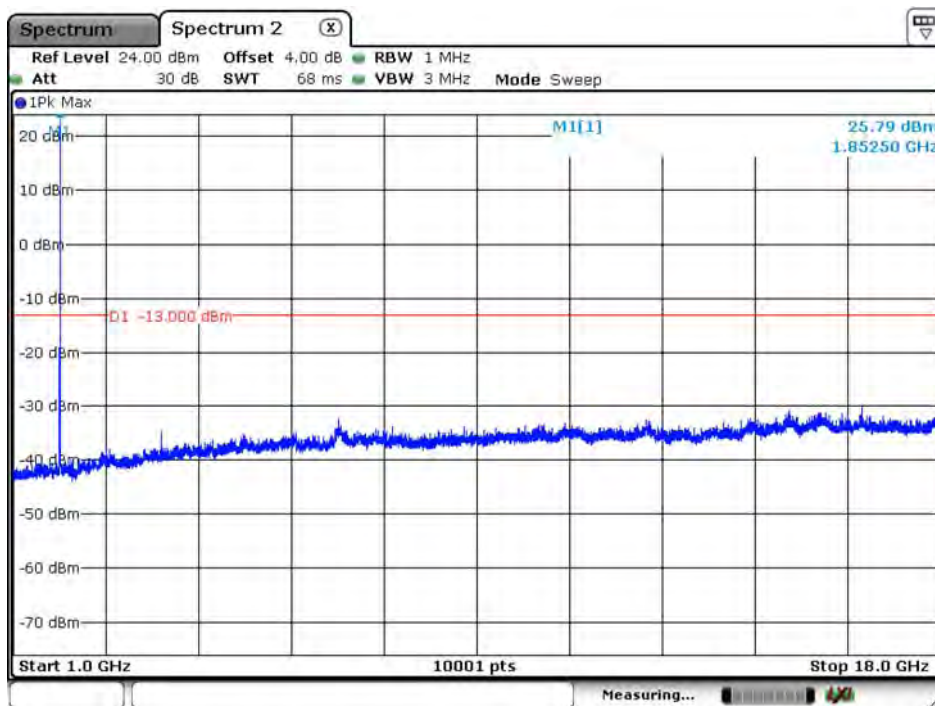
Date: 26.AUG.2020 20:01:20

B25_CH26065_5M_1RB12_QPSK_Below 1G



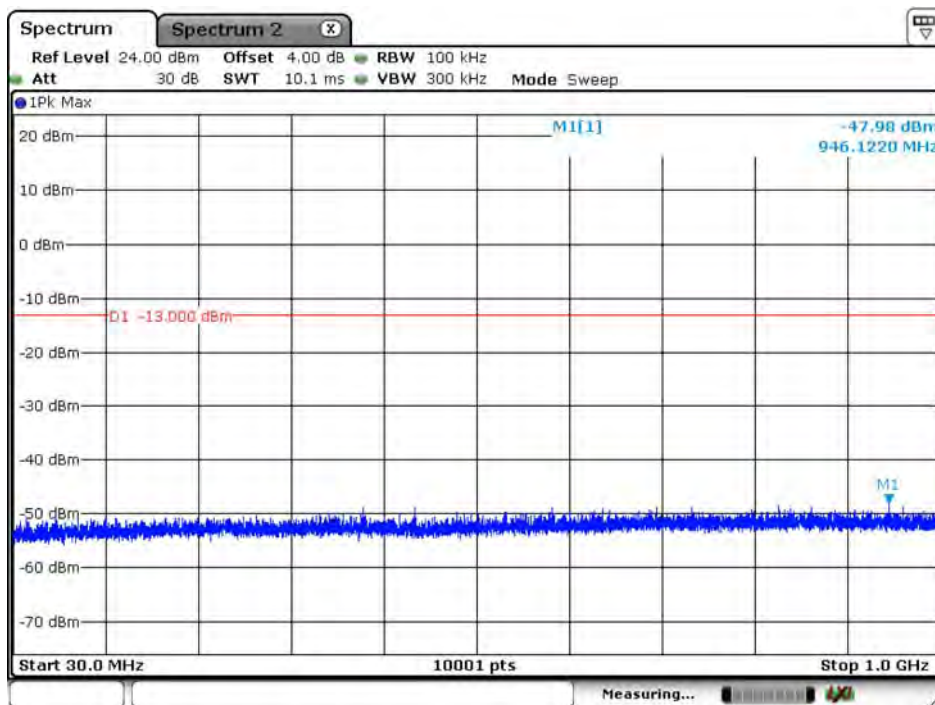
Date: 26.AUG.2020 19:57:48

B25_CH26065_5M_1RB12_QPSK_Above 1G



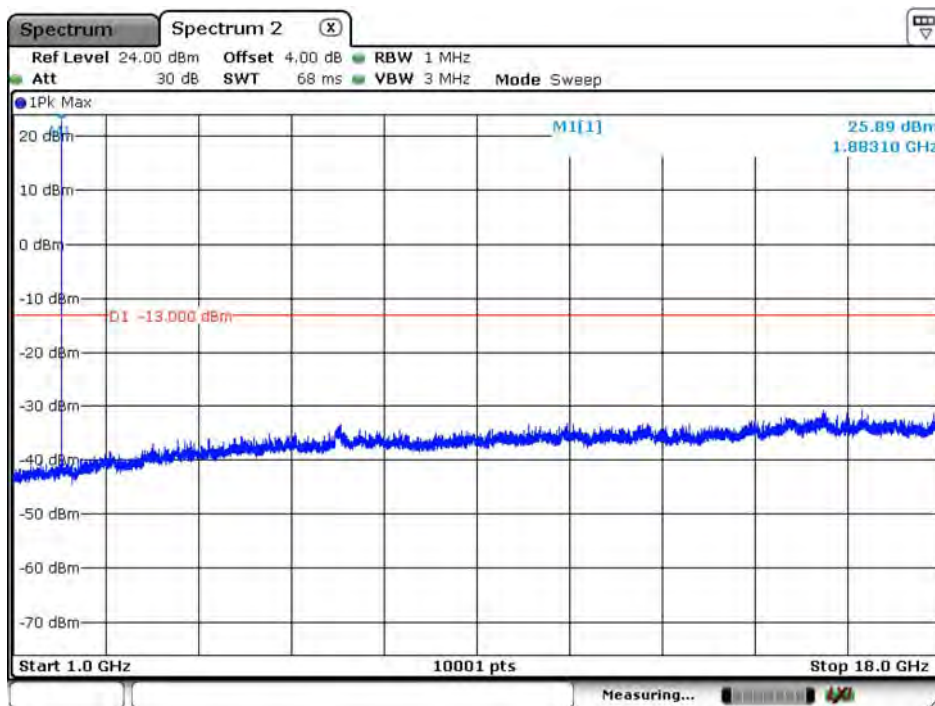
Date: 26.AUG.2020 20:00:16

B25_CH26365_5M_1RB12_QPSK_Below 1G



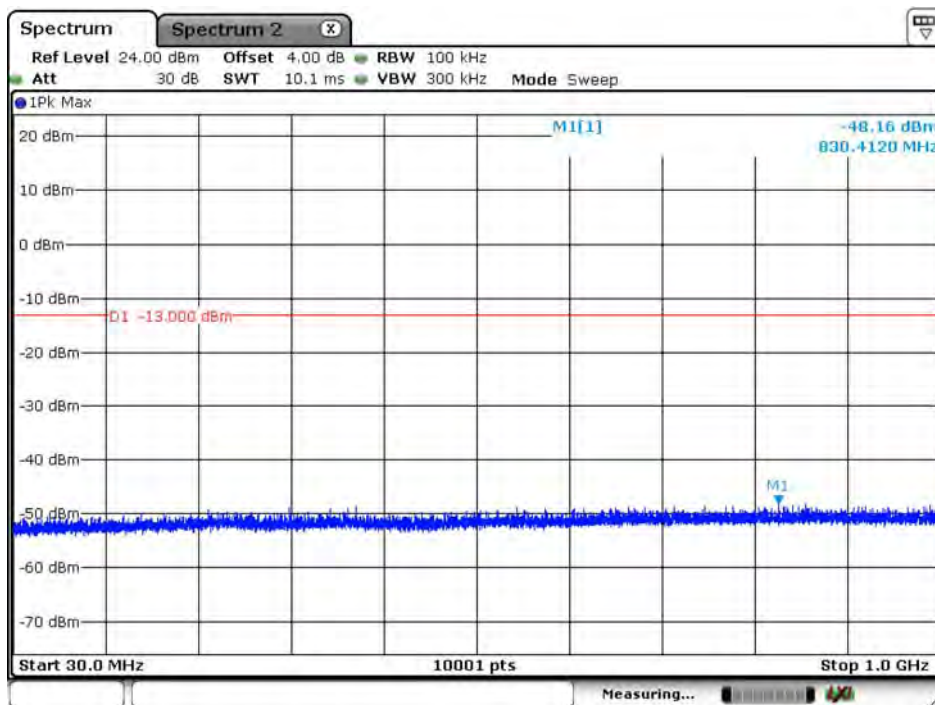
Date: 26.AUG.2020 19:50:00

B25_CH26365_5M_1RB12_QPSK_Above 1G



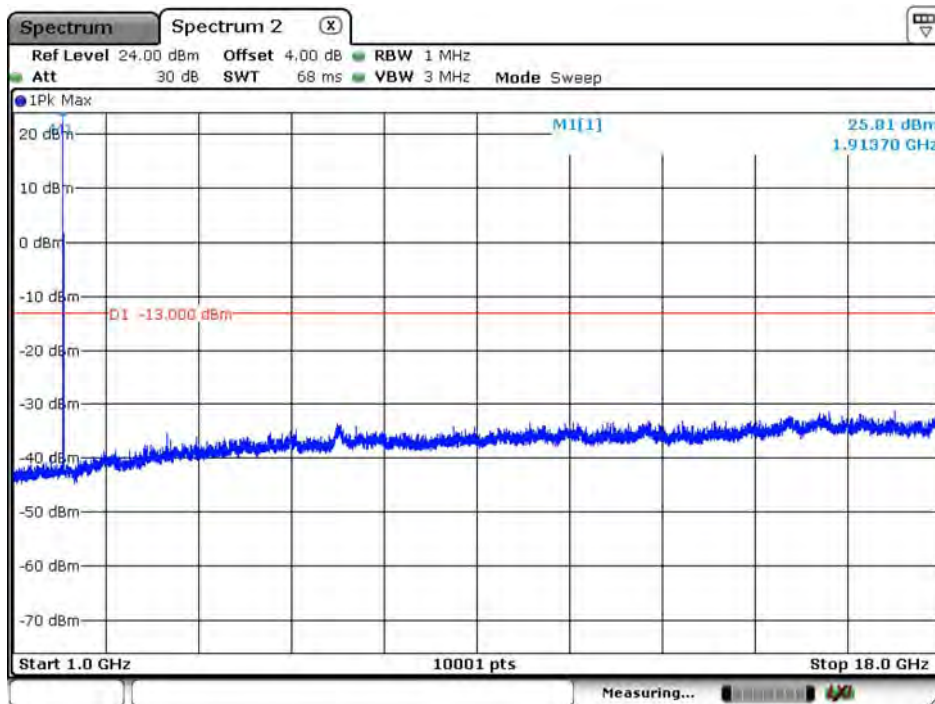
Date: 26.AUG.2020 19:47:57

B25_CH26665_5M_1RB12_QPSK_Below 1G



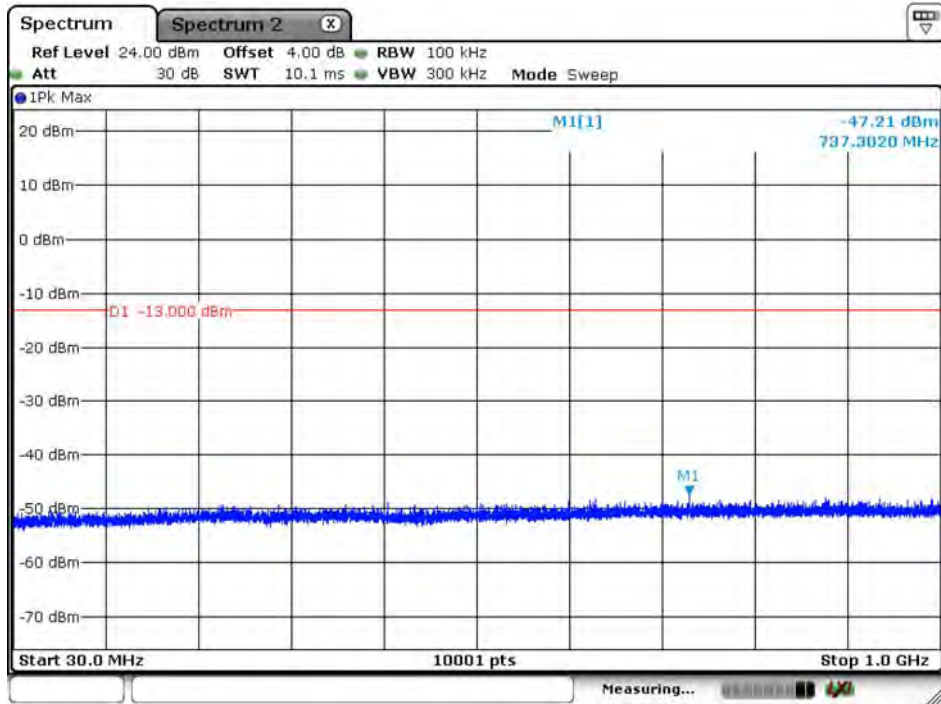
Date: 26.AUG.2020 20:02:19

B25_CH26665_5M_1RB12_QPSK_Above 1G



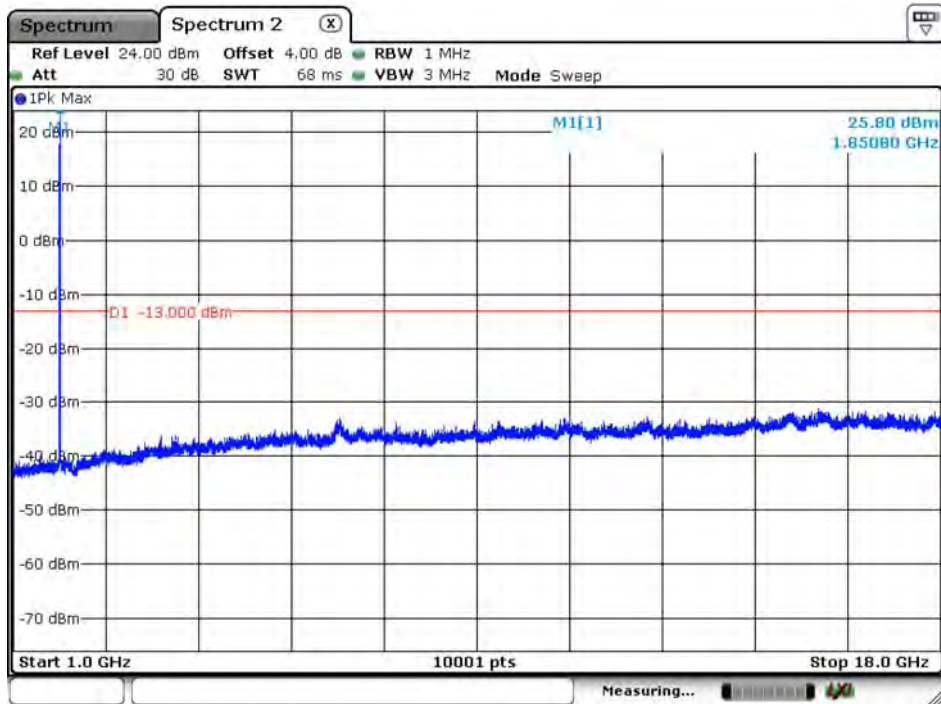
Date: 26.AUG.2020 20:01:20

B25_CH26090_10M_1RB0_QPSK_Below 1G



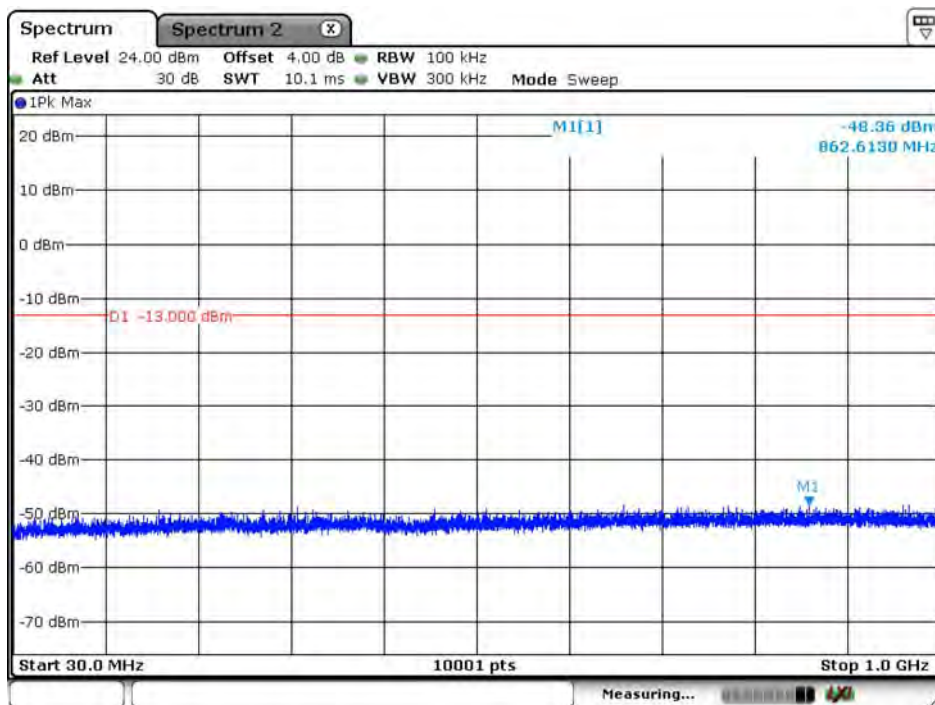
Date: 26.AUG.2020 20:12:09

B25_CH26090_10M_1RB0_QPSK_Above 1G



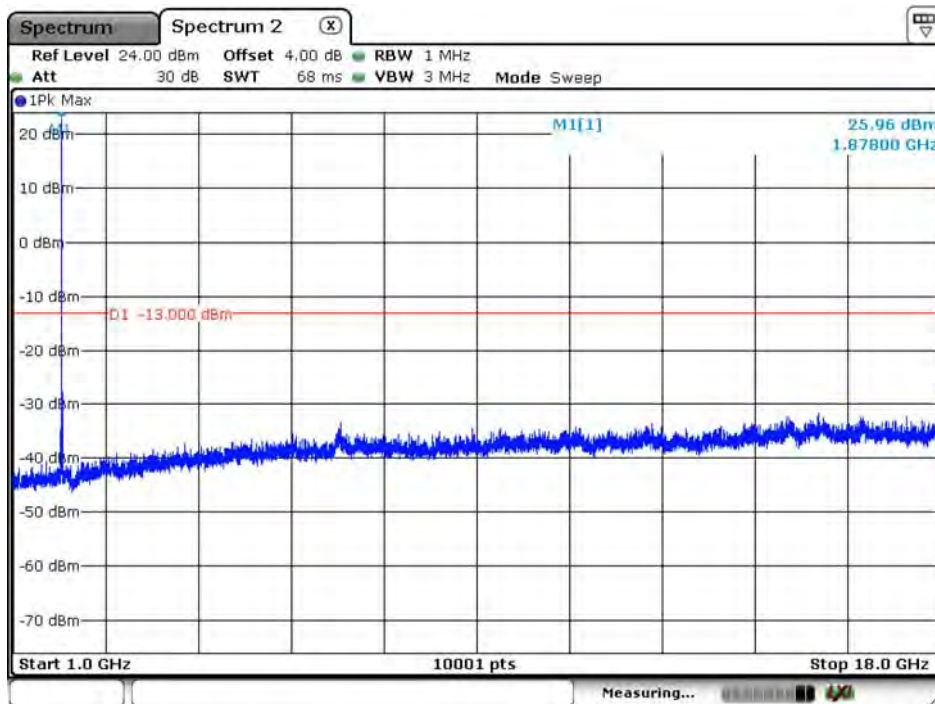
Date: 26.AUG.2020 20:10:25

B25_CH26365_10M_1RB0_QPSK_Below 1G



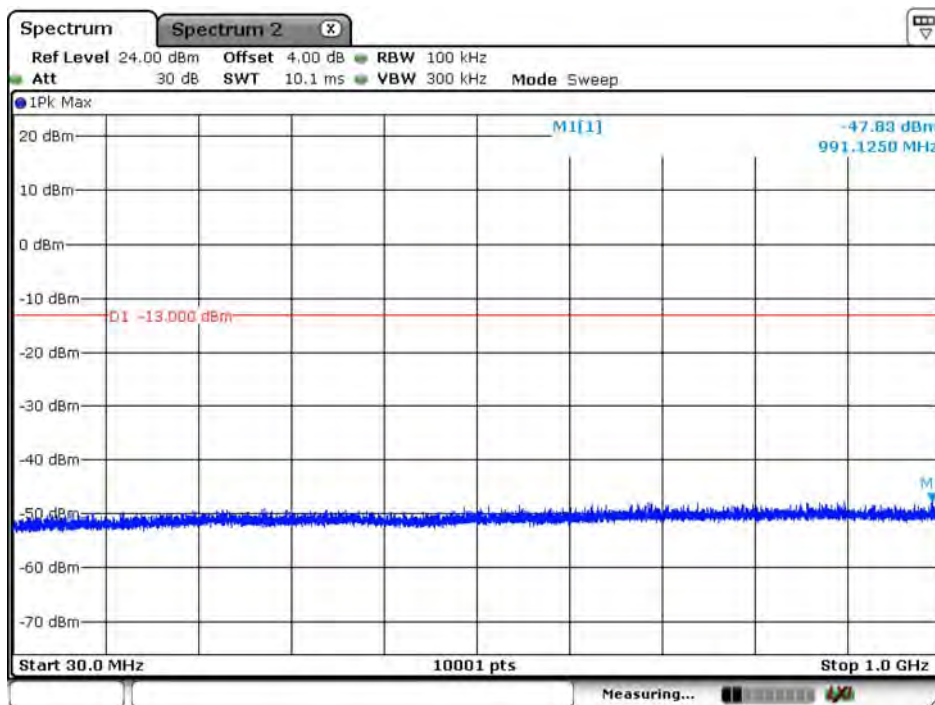
Date: 26.AUG.2020 20:04:32

B25_CH26365_10M_1RB0_QPSK_Above 1G



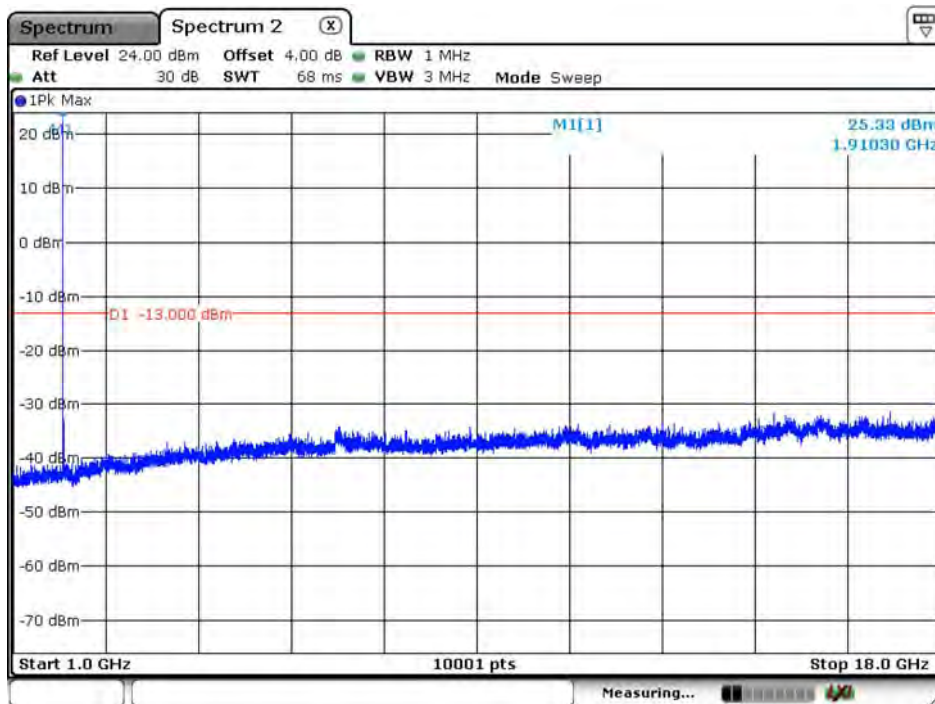
Date: 26.AUG.2020 20:04:53

B25_CH26640_10M_1RB24_QPSK_Below 1G



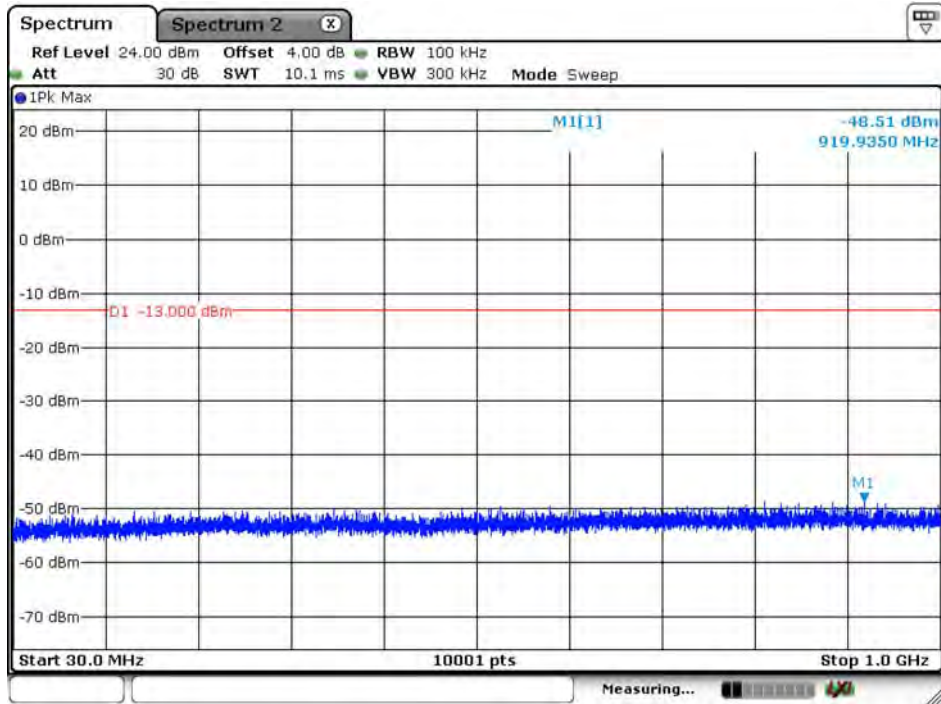
Date: 26.AUG.2020 20:15:10

B25_CH26640_10M_1RB24_QPSK_Above 1G



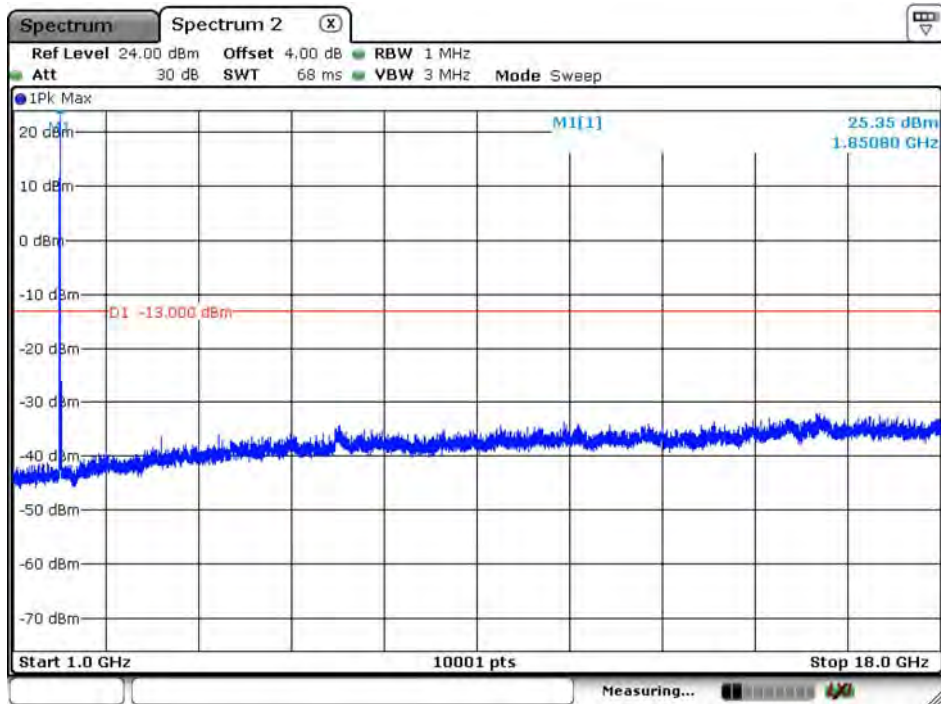
Date: 26.AUG.2020 20:15:31

B25_CH26115_15M_1RB0_QPSK_Below 1G



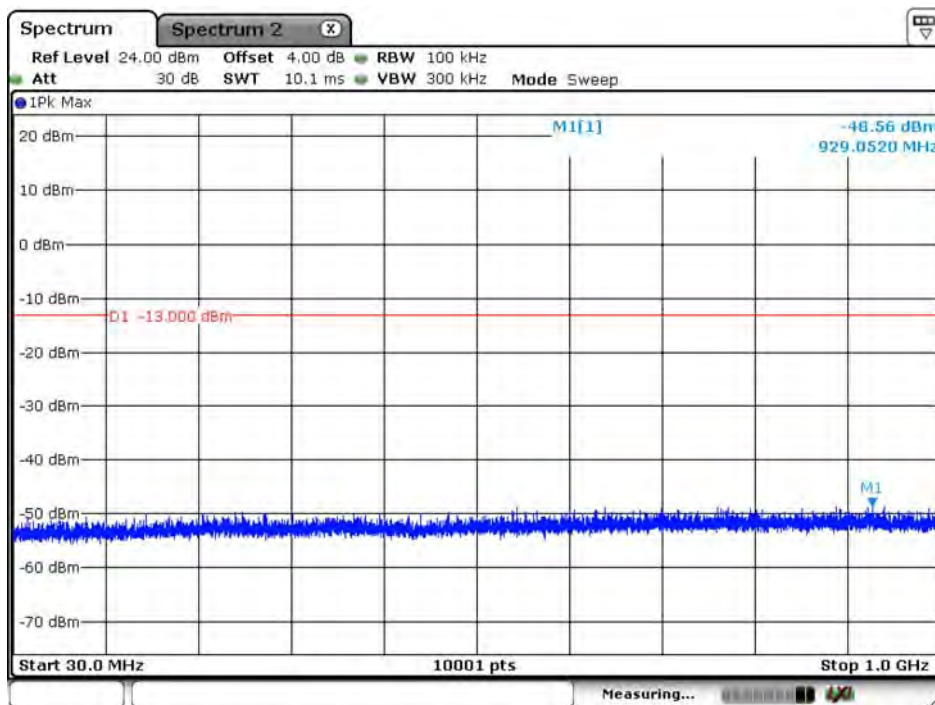
Date: 26.AUG.2020 20:28:08

B25_CH26115_15M_1RB0_QPSK_Above 1G



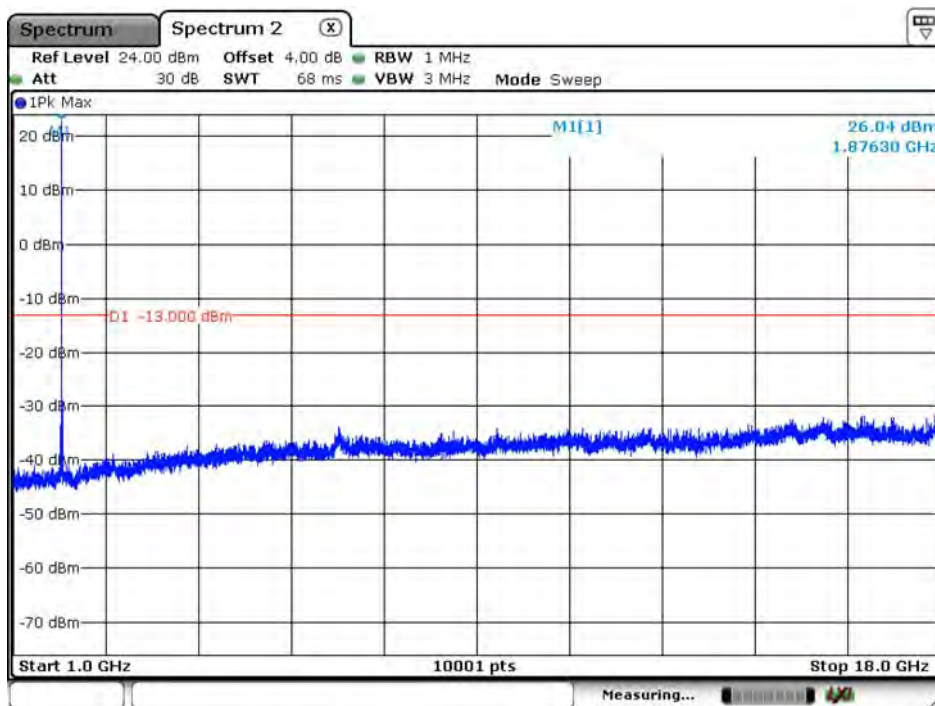
Date: 26.AUG.2020 20:28:26

B25_CH26365_15M_1RB0_QPSK_Below 1G



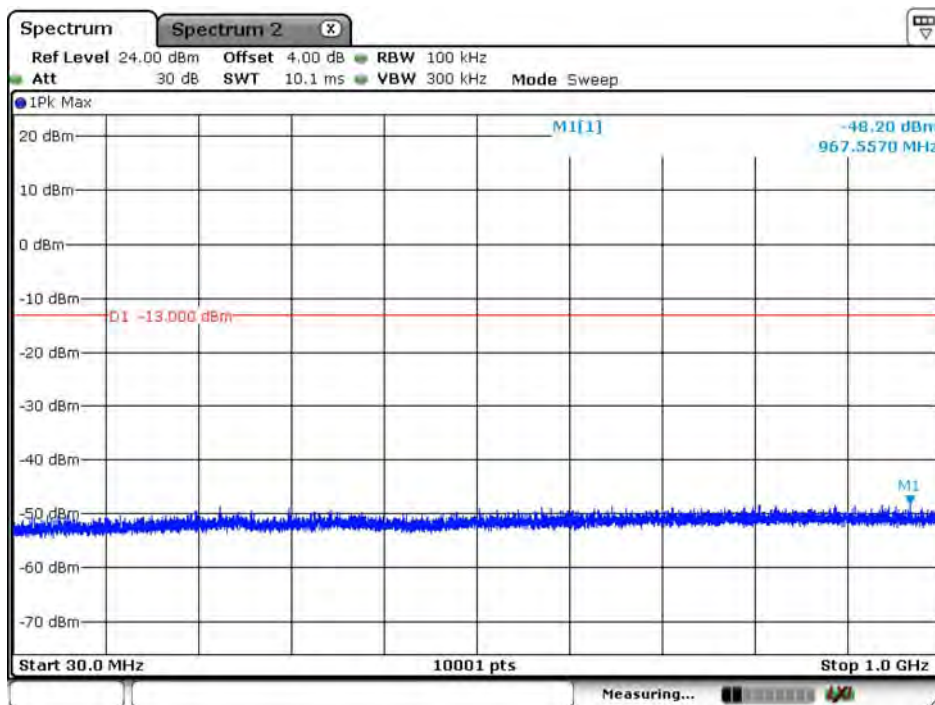
Date: 26.AUG.2020 20:25:46

B25_CH26365_15M_1RB0_QPSK_Above 1G



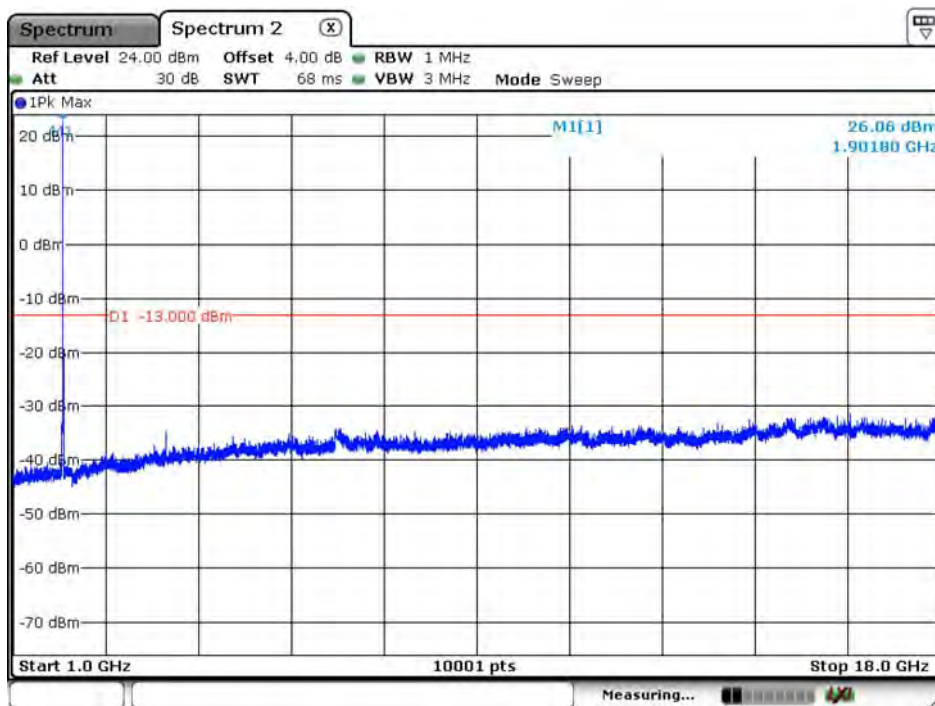
Date: 26.AUG.2020 20:25:20

B25_CH26615_15M_1RB0_QPSK_Below 1G



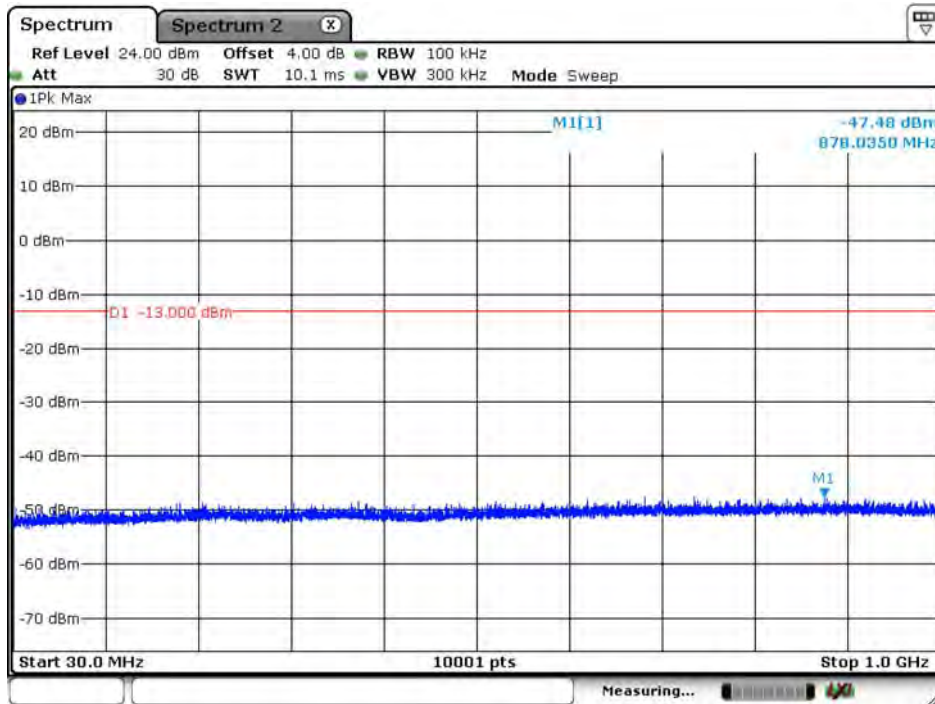
Date: 26.AUG.2020 20:30:06

B25_CH26615_15M_1RB0_QPSK_Above 1G



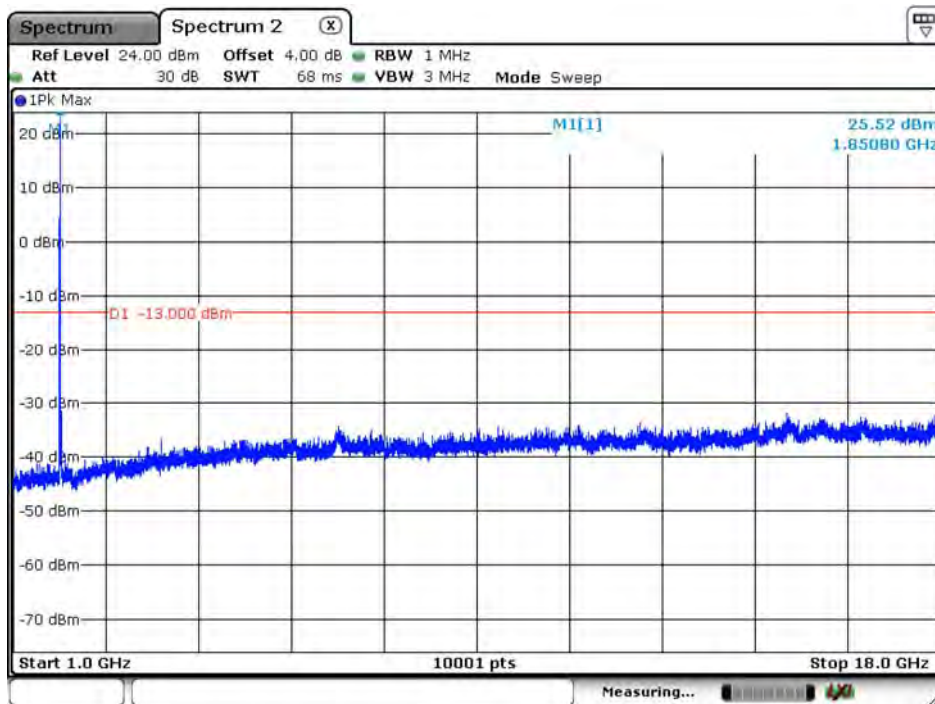
Date: 26.AUG.2020 20:29:19

B25_CH26140_20M_1RB0_QPSK_Below 1G



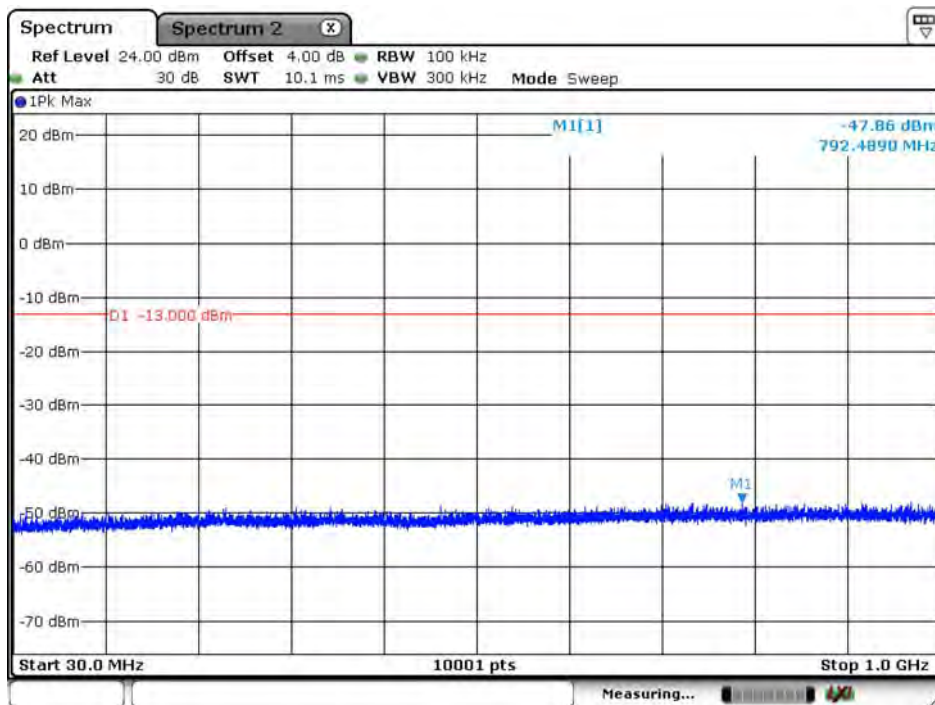
Date: 26.AUG.2020 20:57:45

B25_CH26140_20M_1RB0_QPSK_Above 1G



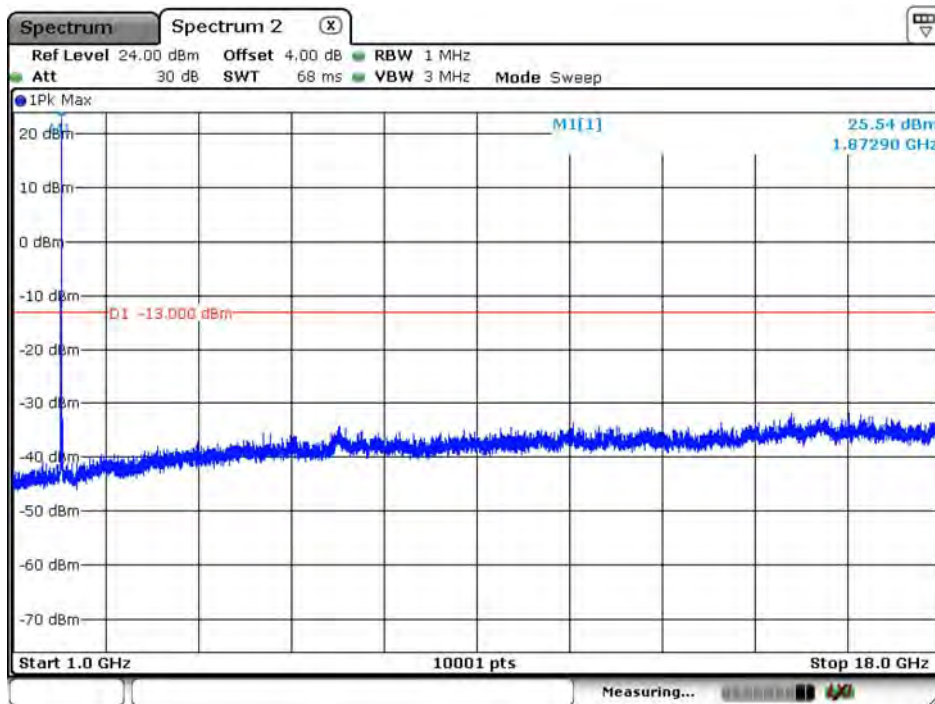
Date: 26.AUG.2020 20:52:56

B25_CH26365_20M_1RB0_QPSK_Below 1G



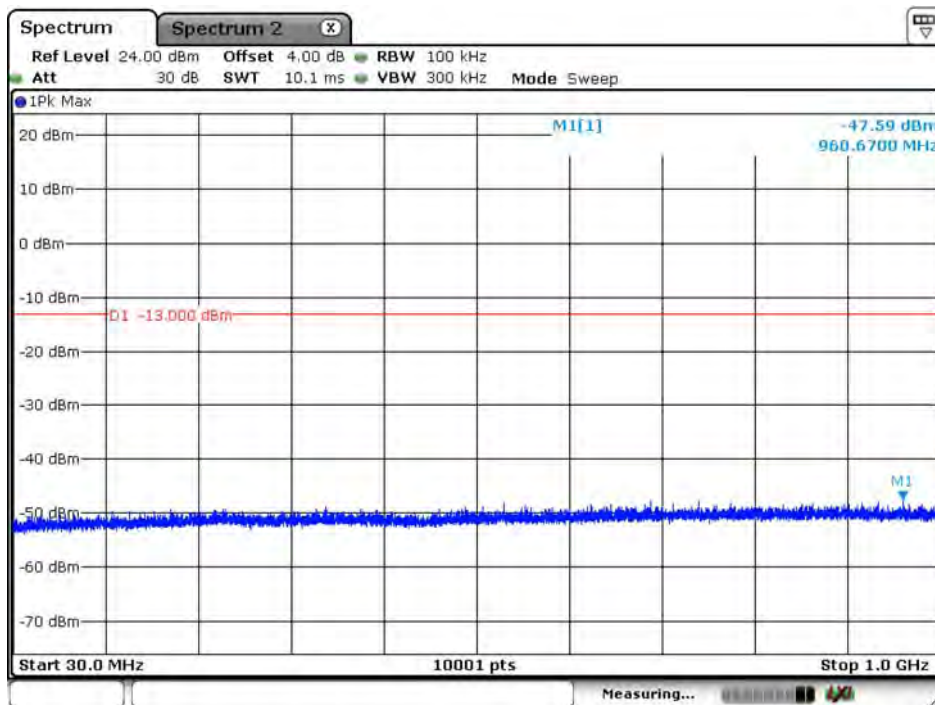
Date: 26.AUG.2020 20:46:02

B25_CH26365_20M_1RB0_QPSK_Above 1G

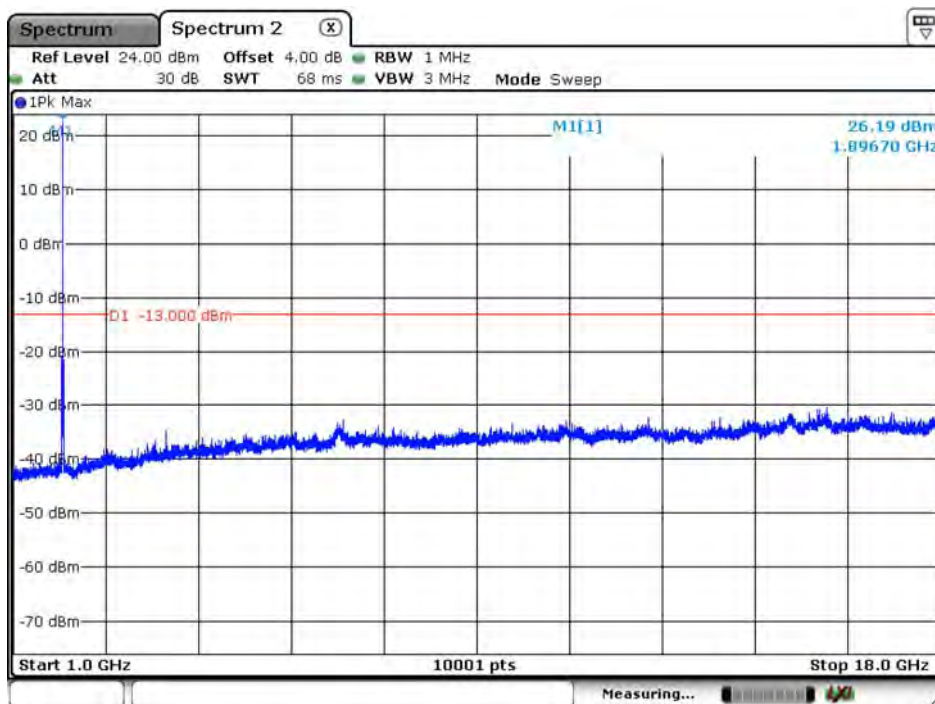


Date: 26.AUG.2020 20:46:17

B25_CH26590_20M_1RB0_QPSK_Below 1G

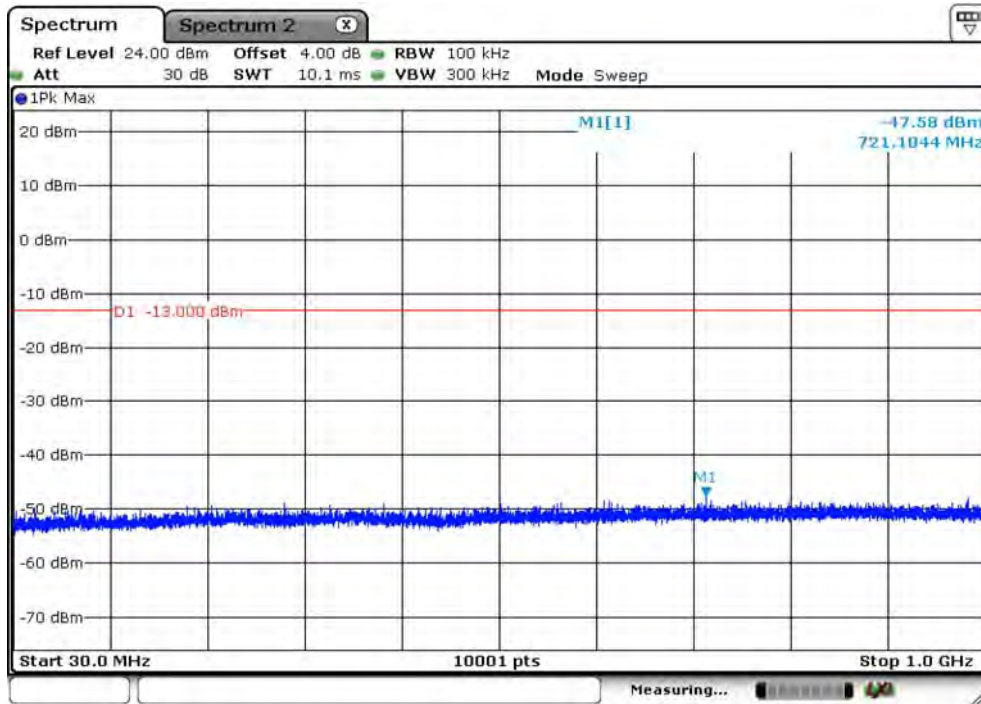


B25_CH26590_20M_1RB0_QPSK_Above 1G



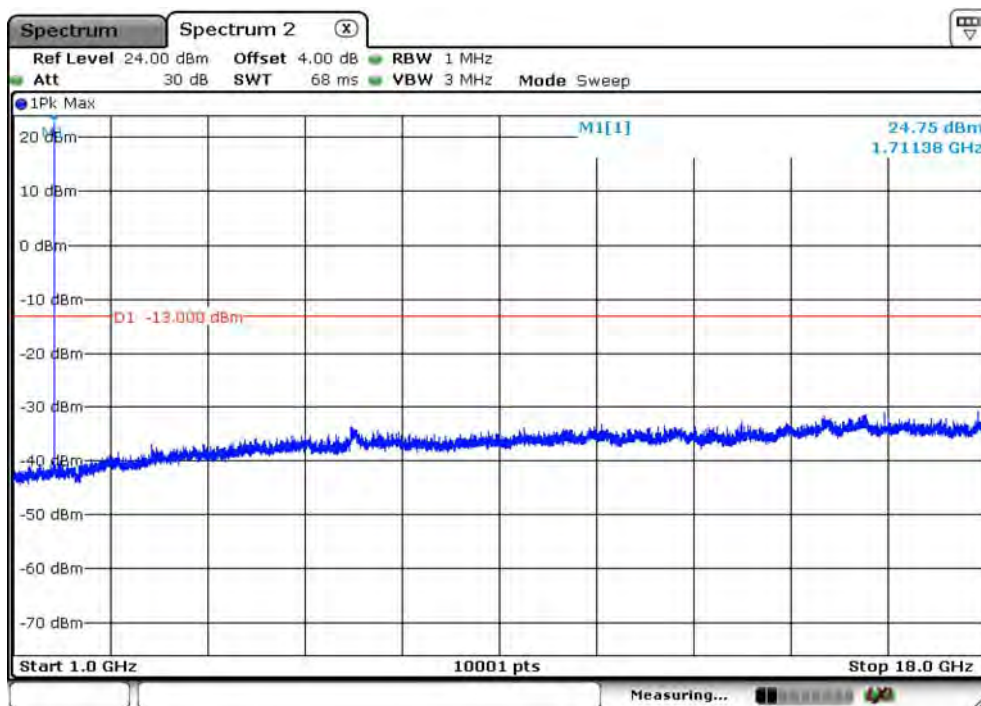
Product	Module		
Test Item	Conducted Spurious Emission		
Test Mode	Mode 2: LTE Band 4/66		
Date of Test	2020/08/26	Test Site	SR12-H
Temperature(°C)	24	Humidity (%RH)	66

B66_CH131979_1.4M_1RB2_QPSK_Below 1G



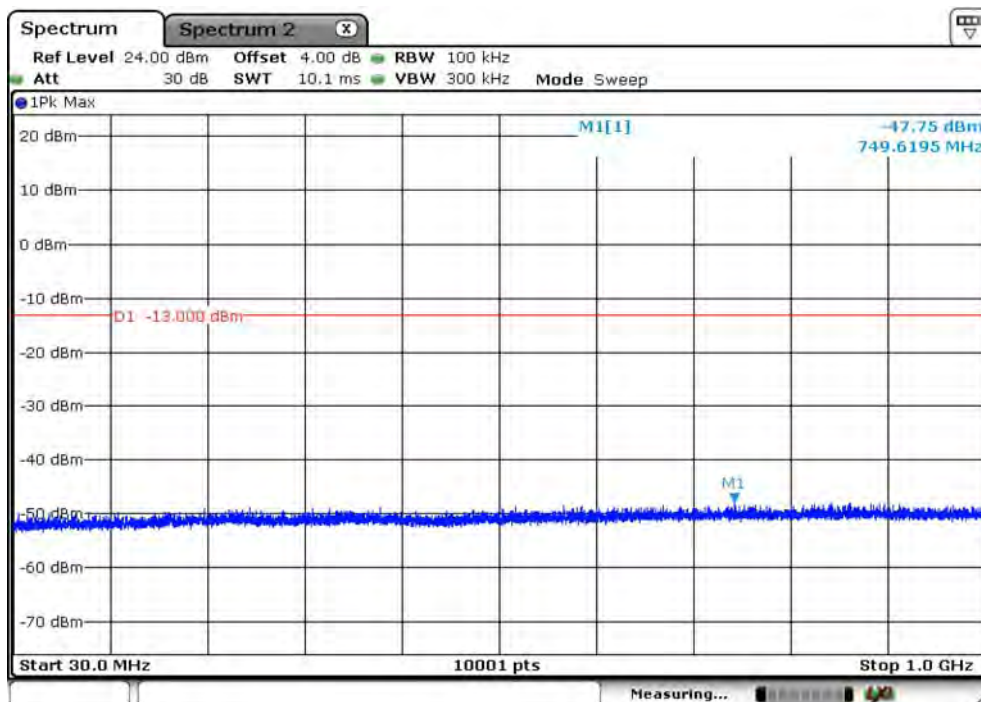
Date: 27.AUG.2020 13:29:28

B66_CH131979_1.4M_1RB2_QPSK_Above 1G



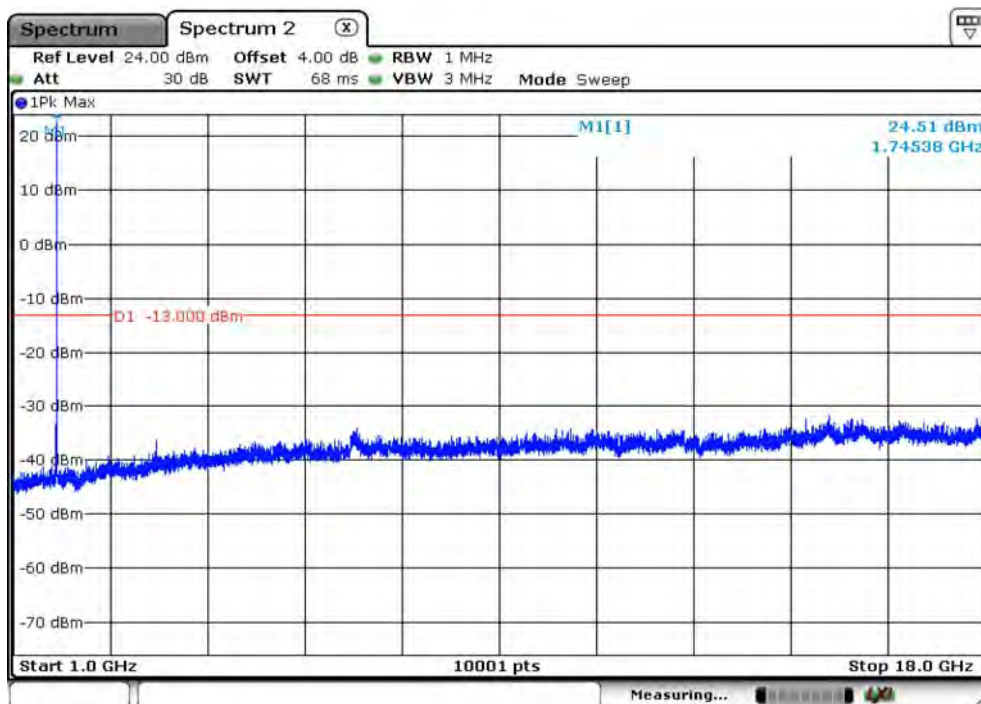
Date: 27.AUG.2020 13:28:26

B66_CH132322_1.4M_1RB2_QPSK_Below 1G



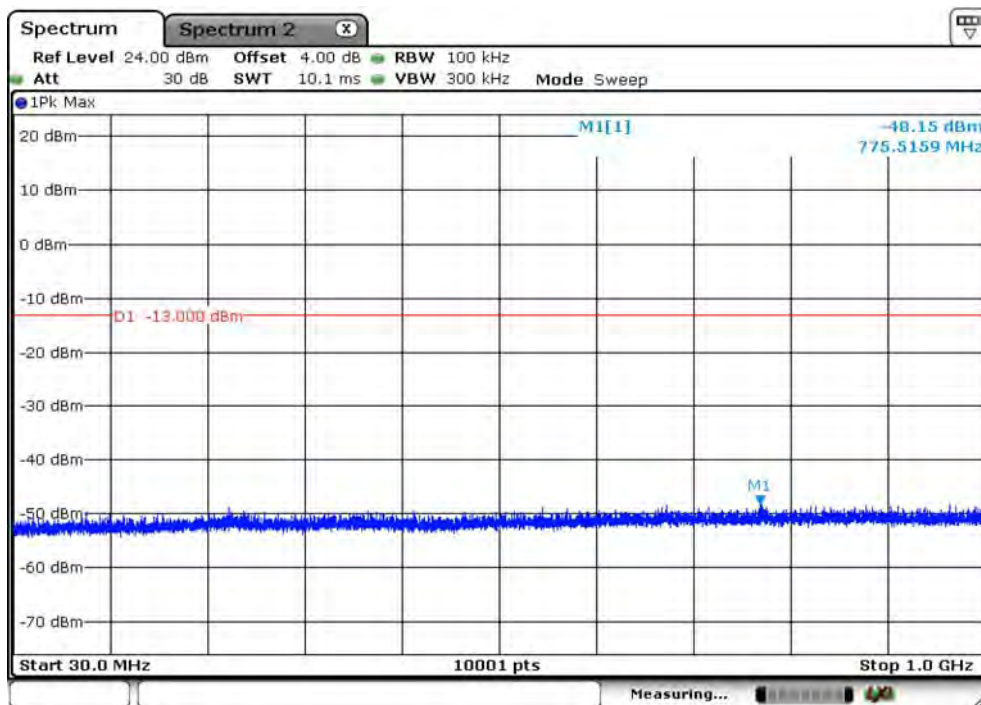
Date: 27.AUG.2020 13:25:28

B66_CH132322_1.4M_1RB2_QPSK_Above 1G

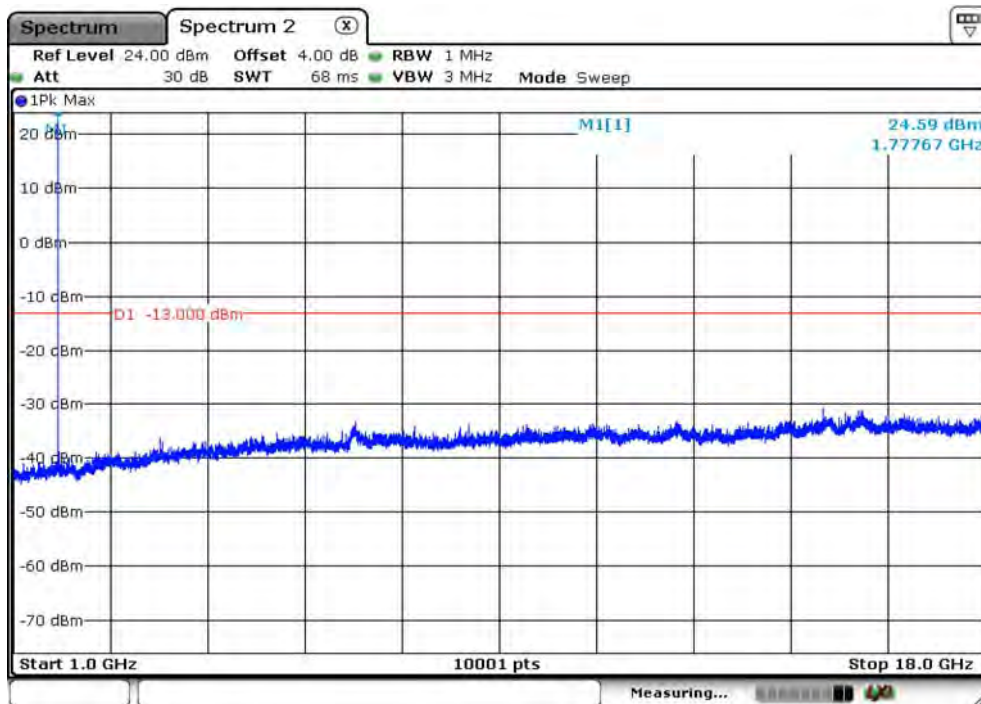


Date: 27.AUG.2020 13:26:09

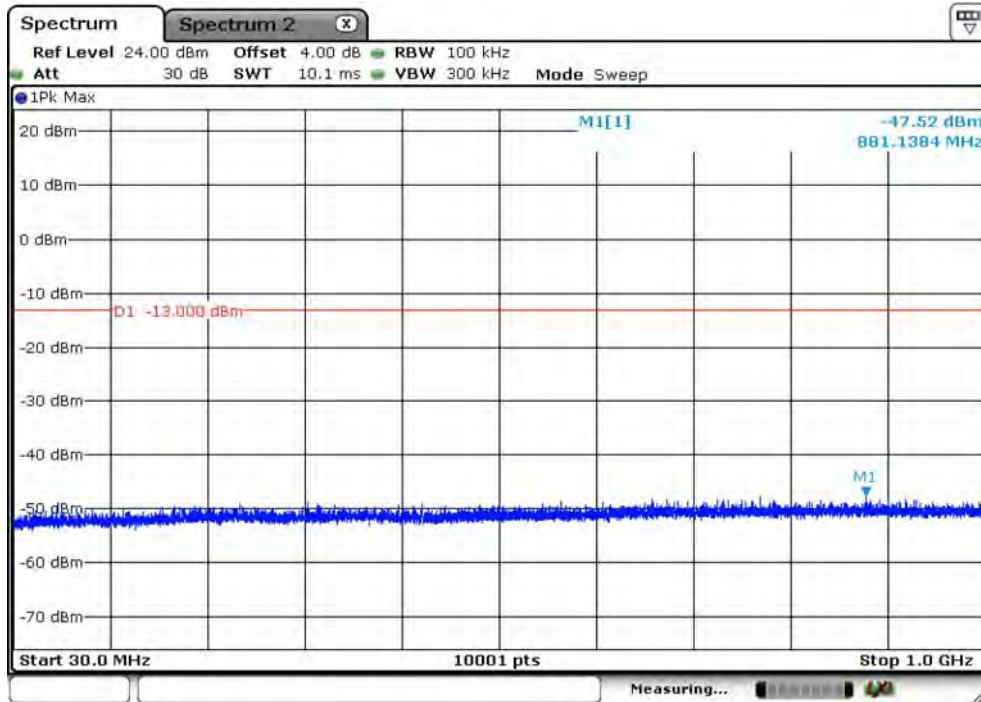
B66_CH132665_1.4M_1RB0_QPSK_Below 1G



B66_CH132665_1.4M_1RB0_QPSK_Above 1G

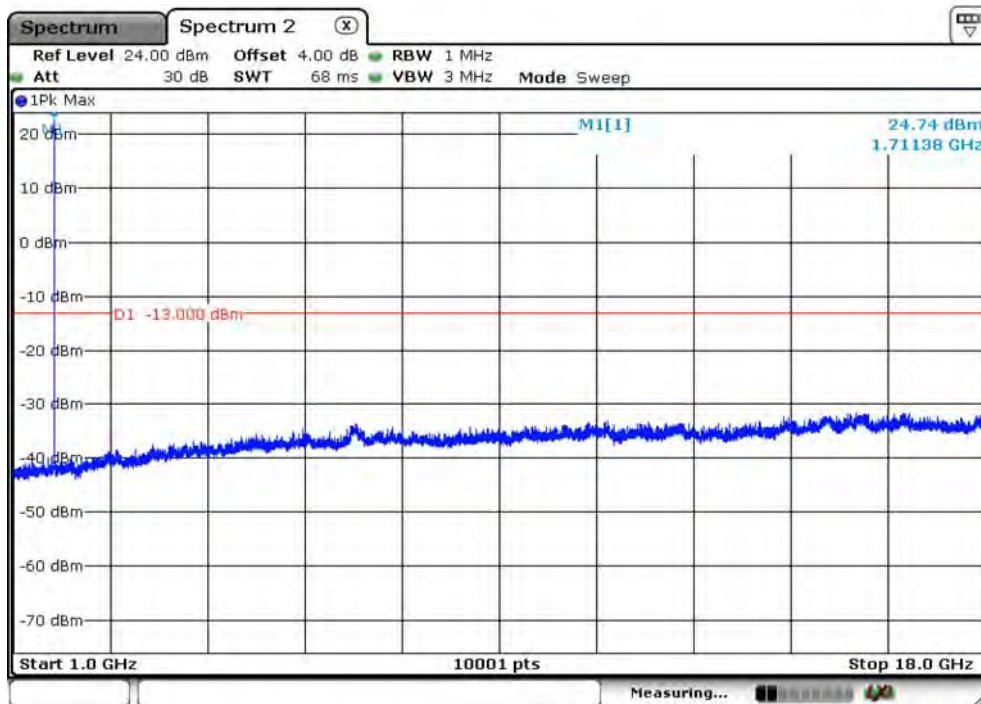


B66_CH131987_3M_1RB7_QPSK_Below 1G



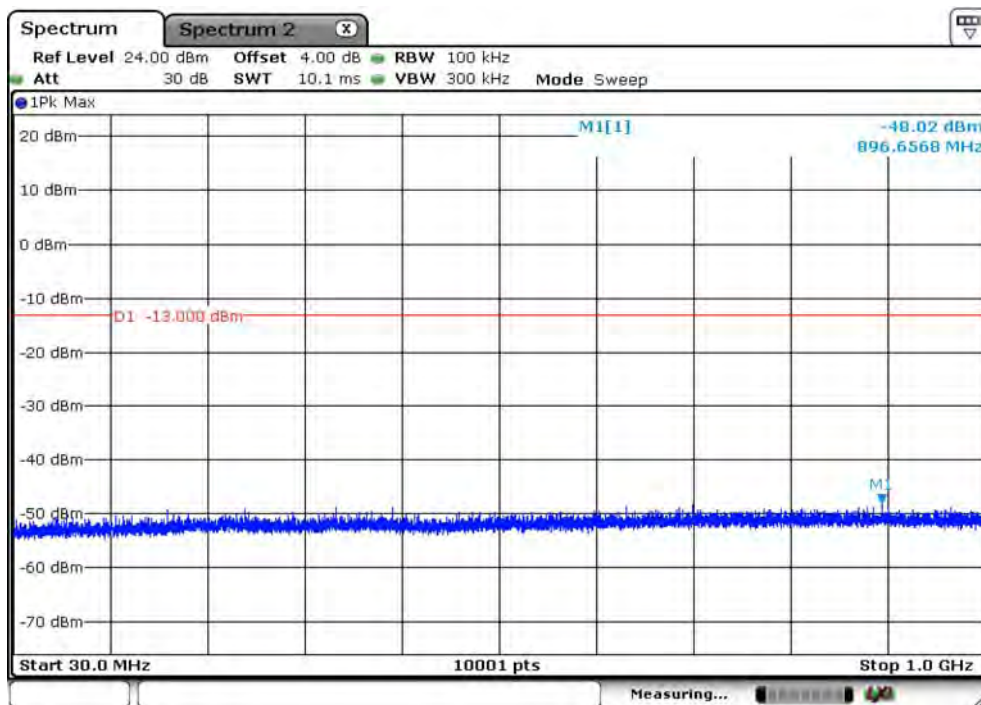
Date: 27.AUG.2020 13:44:26

B66_CH131987_3M_1RB7_QPSK_Above 1G



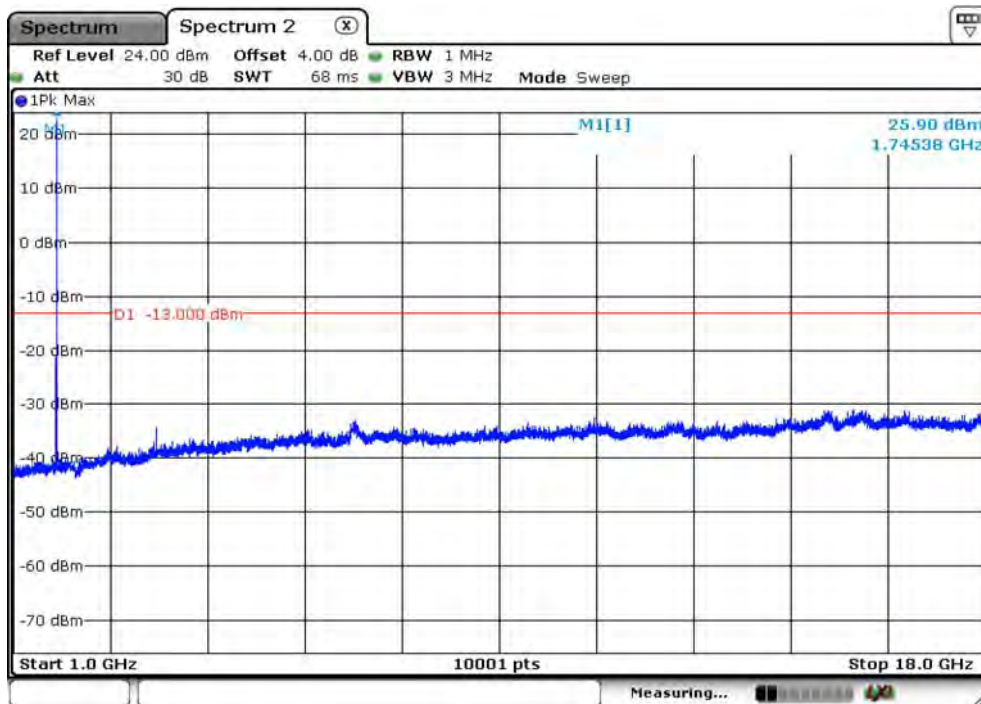
Date: 27.AUG.2020 13:46:57

B66_CH132322_3M_1RB7__QPSK_Below 1G



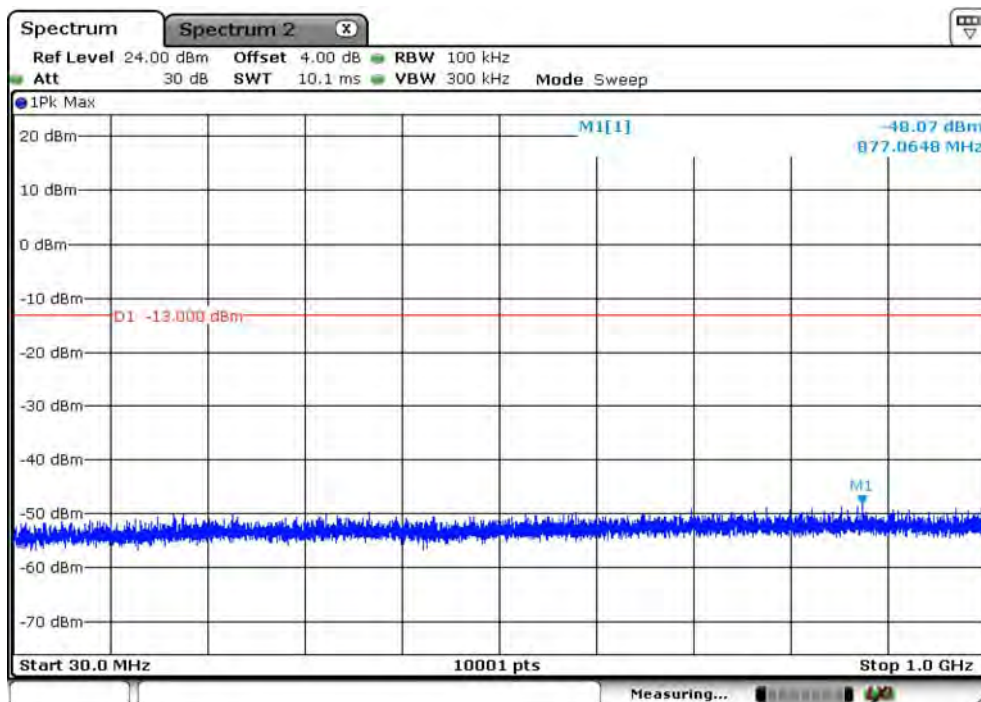
Date: 27.AUG.2020 13:41:10

B66_CH132322_3M_1RB7__QPSK_Above 1G



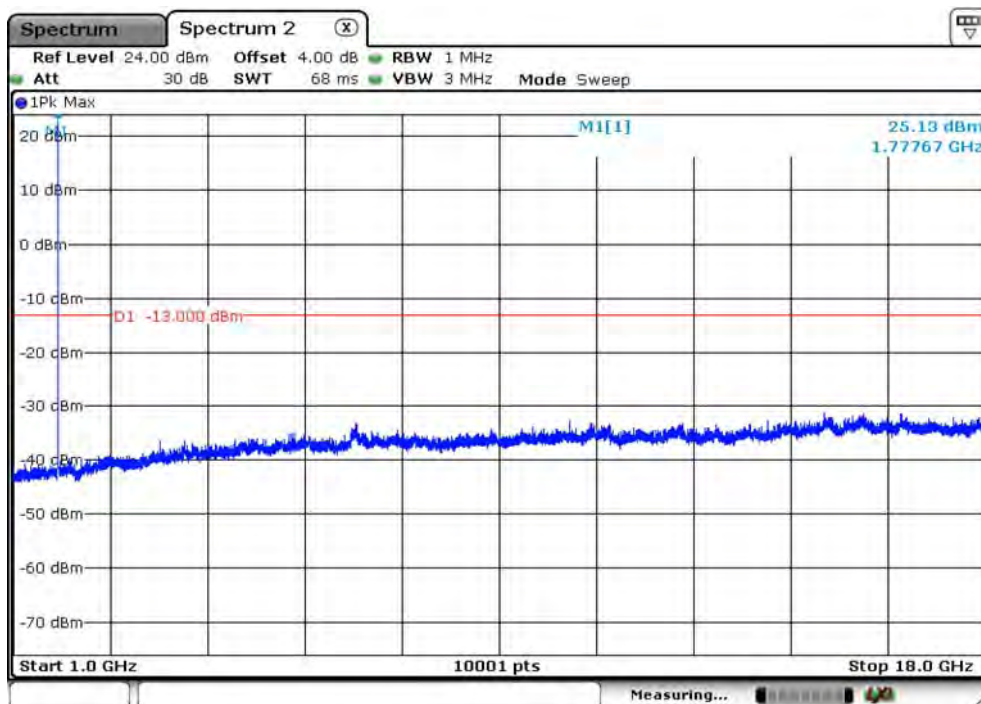
Date: 27.AUG.2020 13:40:31

B66_CH132657_3M_1RB0_QPSK_Below 1G



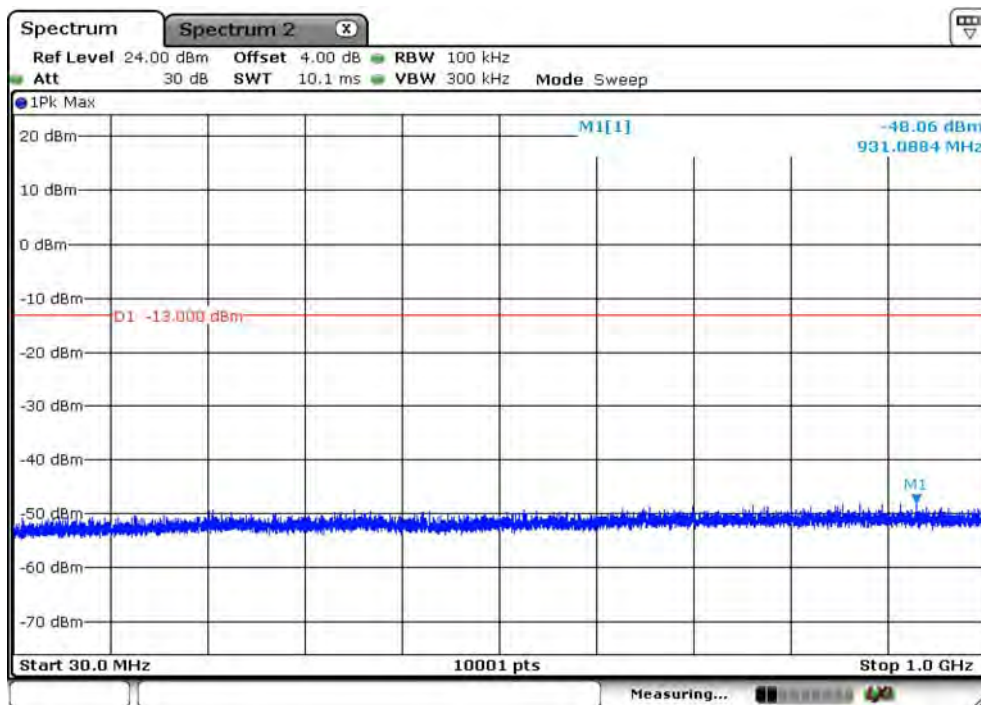
Date: 27.AUG.2020 13:49:18

B66_CH132657_3M_1RB0_QPSK_Above 1G



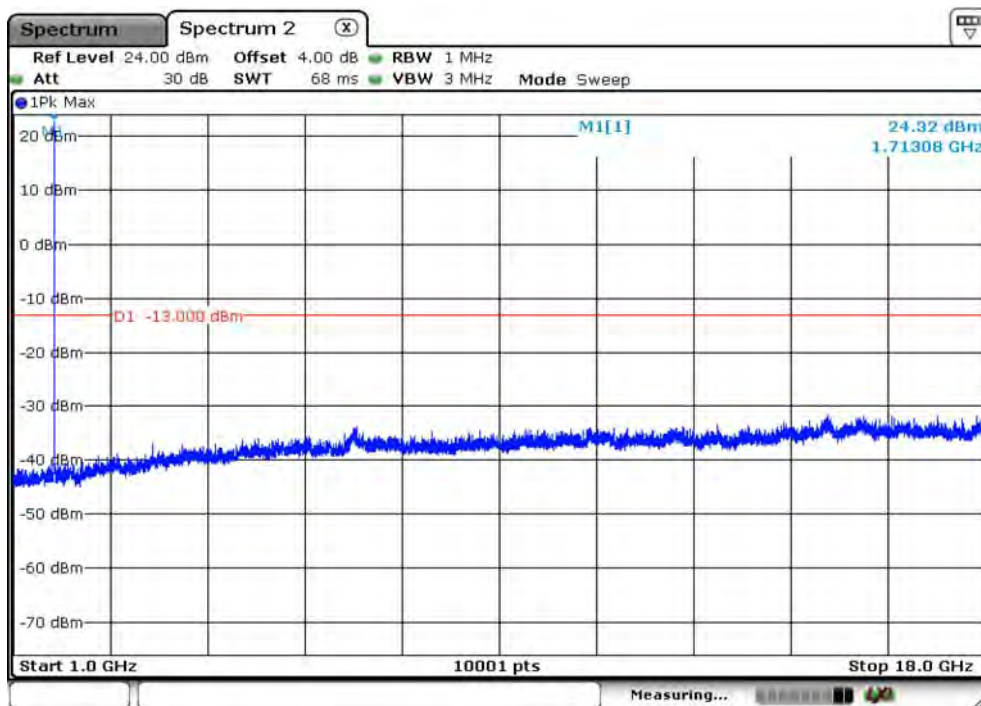
Date: 27.AUG.2020 13:48:59

B66_CH131997_5M_1RB12_QPSK_Below 1G



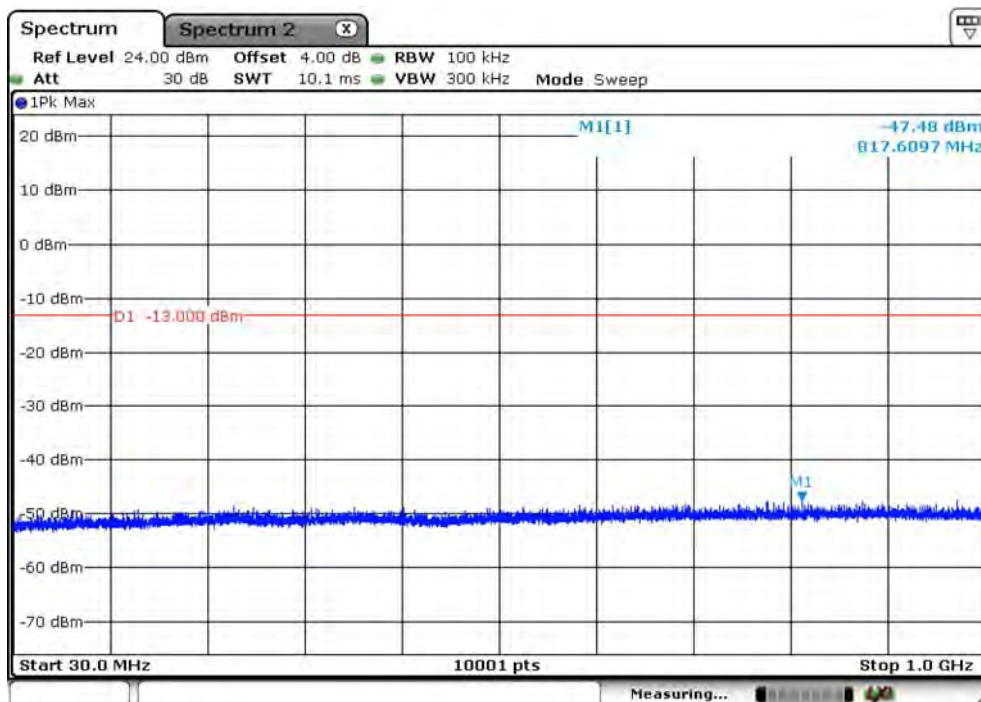
Date: 27.AUG.2020 14:03:25

B66_CH131997_5M_1RB12_QPSK_Above 1G



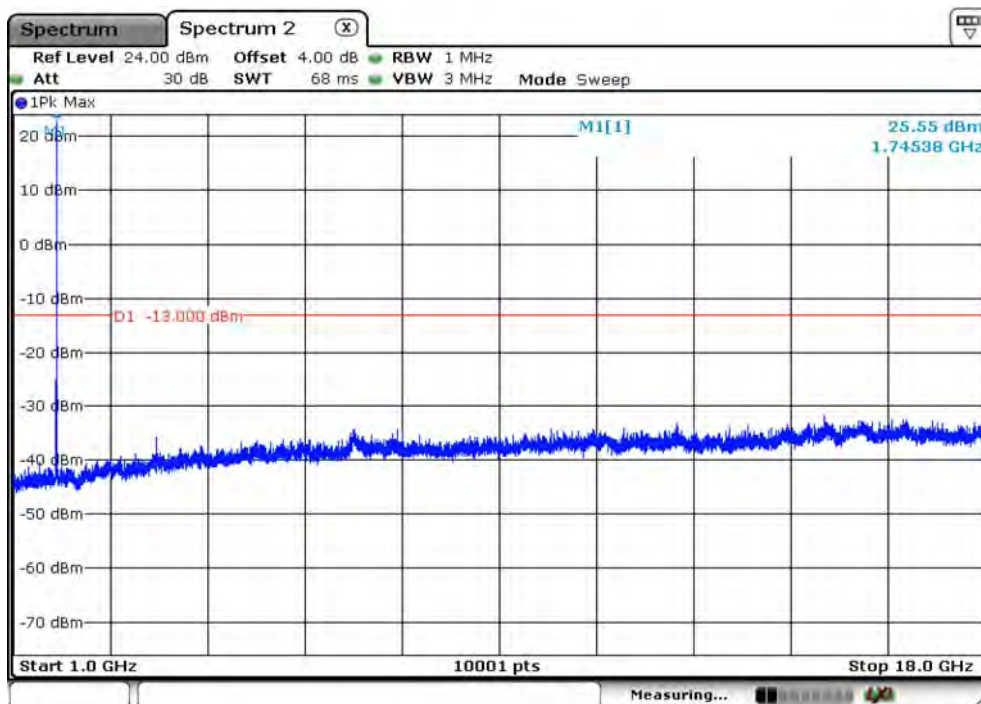
Date: 27.AUG.2020 14:02:42

B66_CH132322_5M_1RB12_QPSK_Below 1G



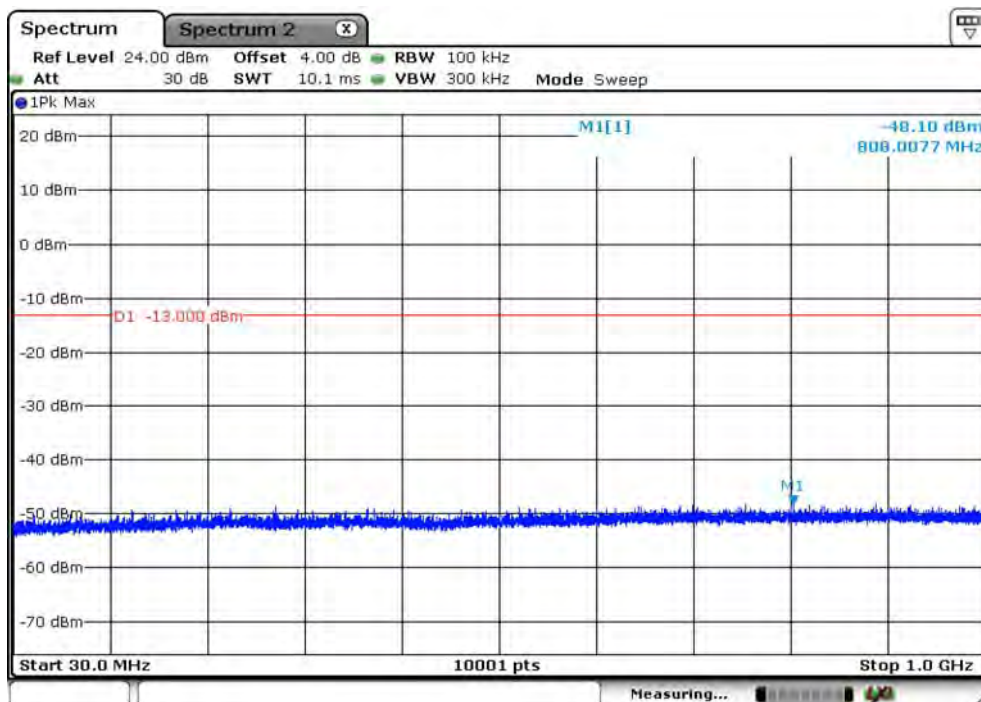
Date: 27.AUG.2020 13:58:13

B66_CH132322_5M_1RB12_QPSK_Above 1G



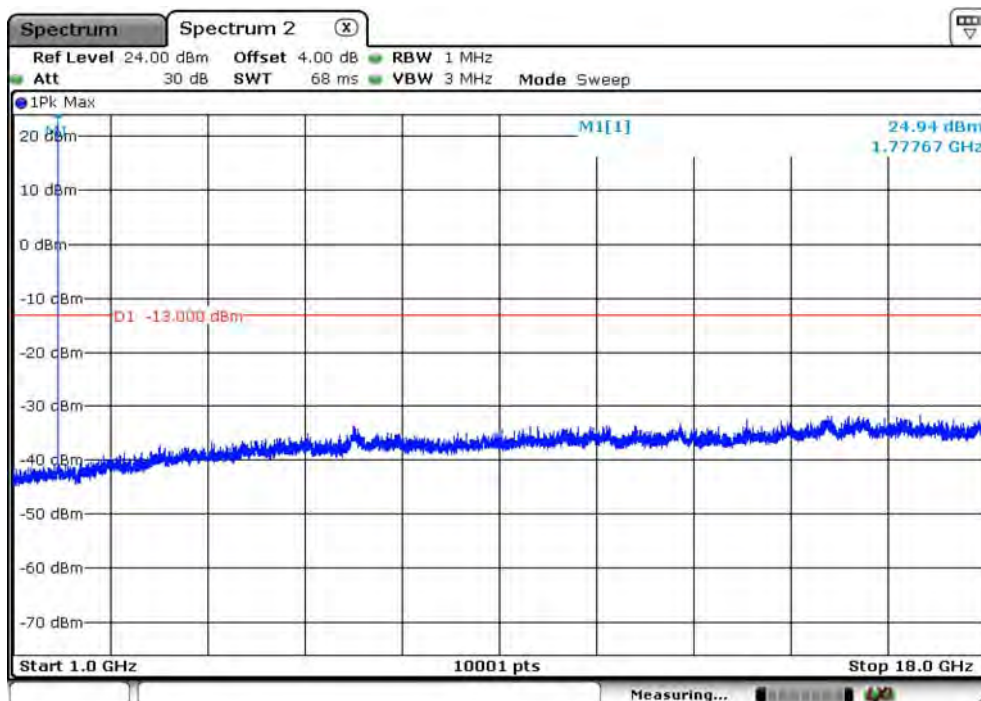
Date: 27.AUG.2020 13:58:36

B66_CH132647_5M_1RB12_QPSK_Below 1G



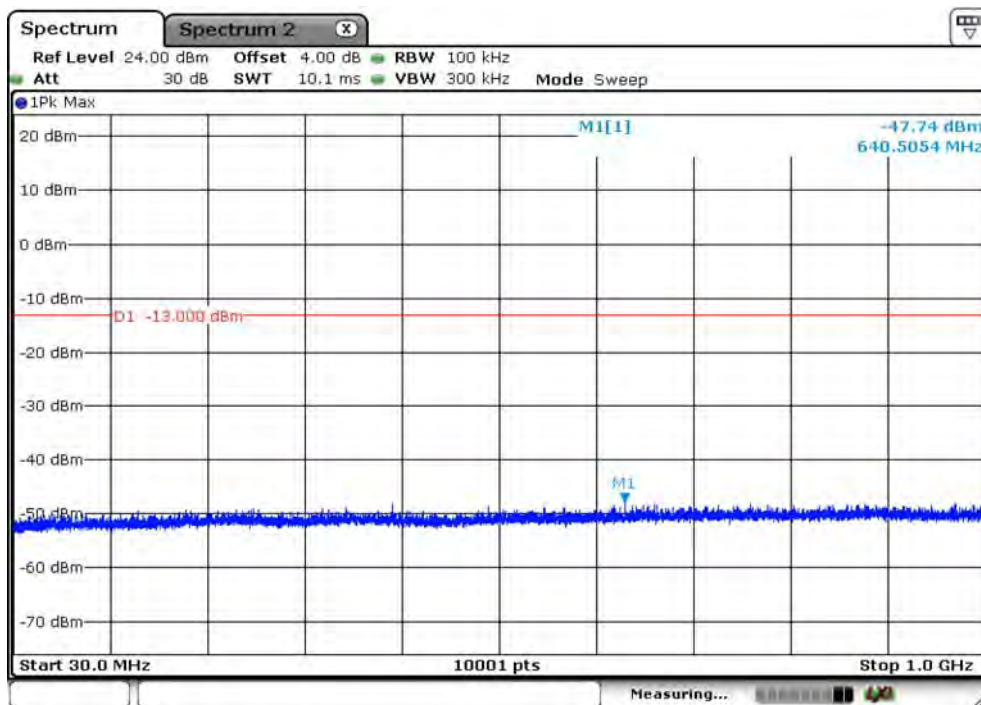
Date: 27.AUG.2020 14:05:09

B66_CH132647_5M_1RB12_QPSK_Above 1G



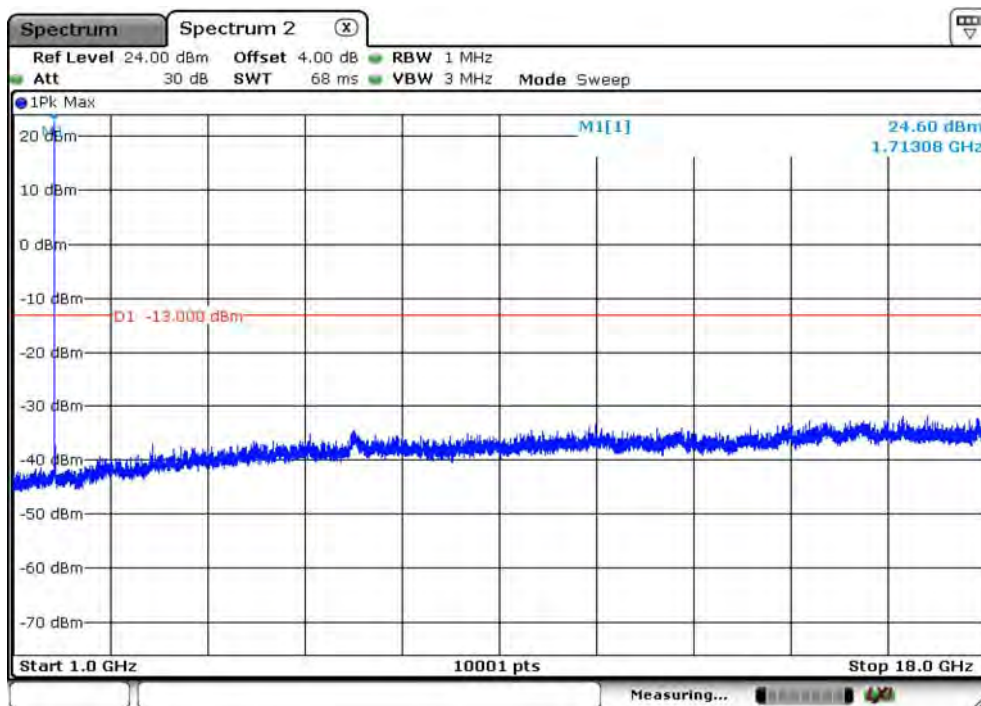
Date: 27.AUG.2020 14:05:58

B66_CH132022_10M_1RB0_QPSK_Below 1G



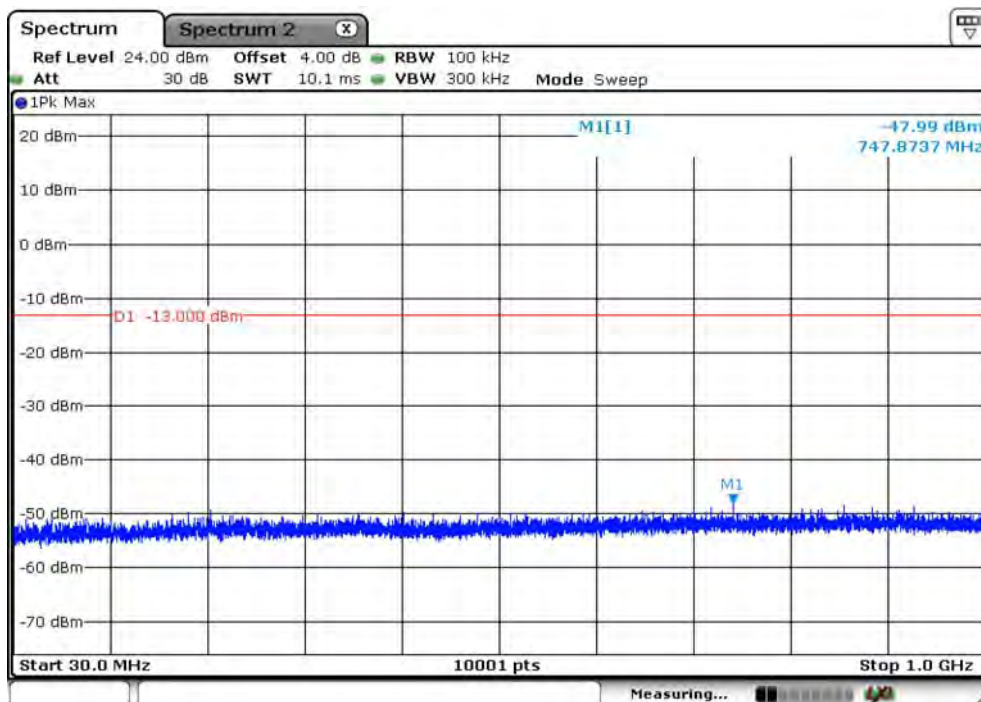
Date: 27.AUG.2020 14:15:26

B66_CH132022_10M_1RB0_QPSK_Above 1G



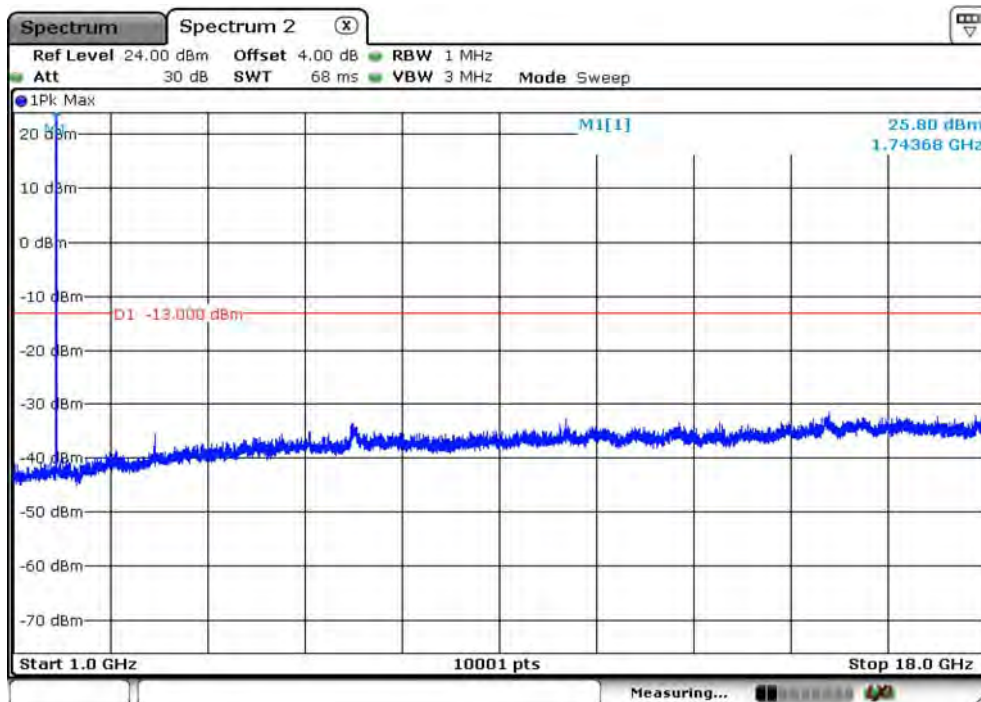
Date: 27.AUG.2020 14:15:55

B66_CH132322_10M_1RB0_QPSK_Below 1G



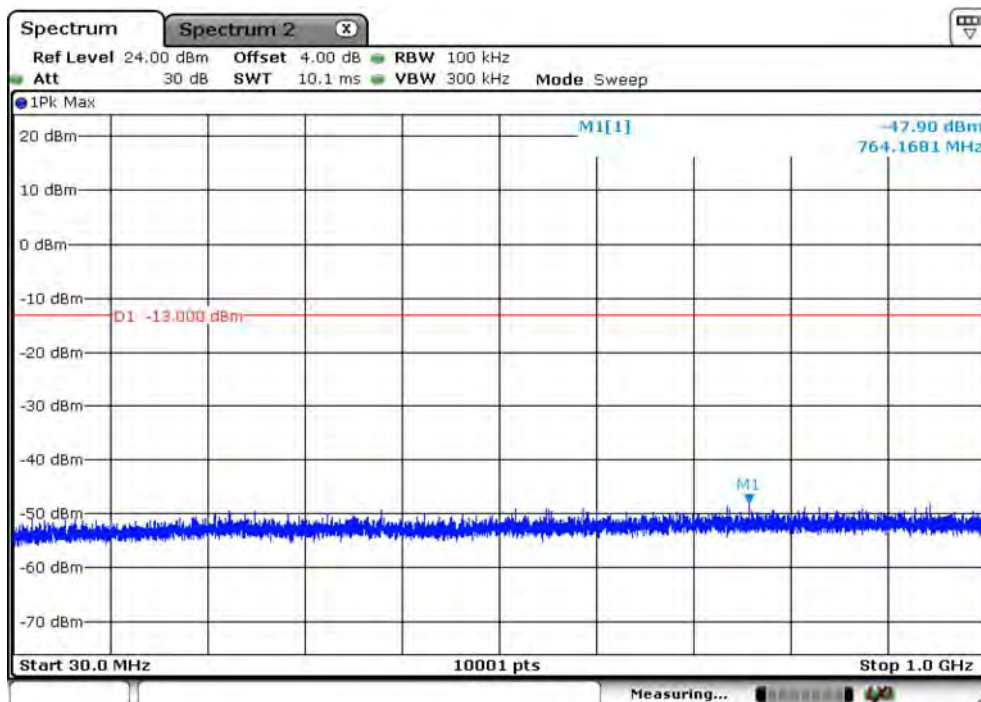
Date: 27.AUG.2020 14:07:33

B66_CH132322_10M_1RB0_QPSK_Above 1G



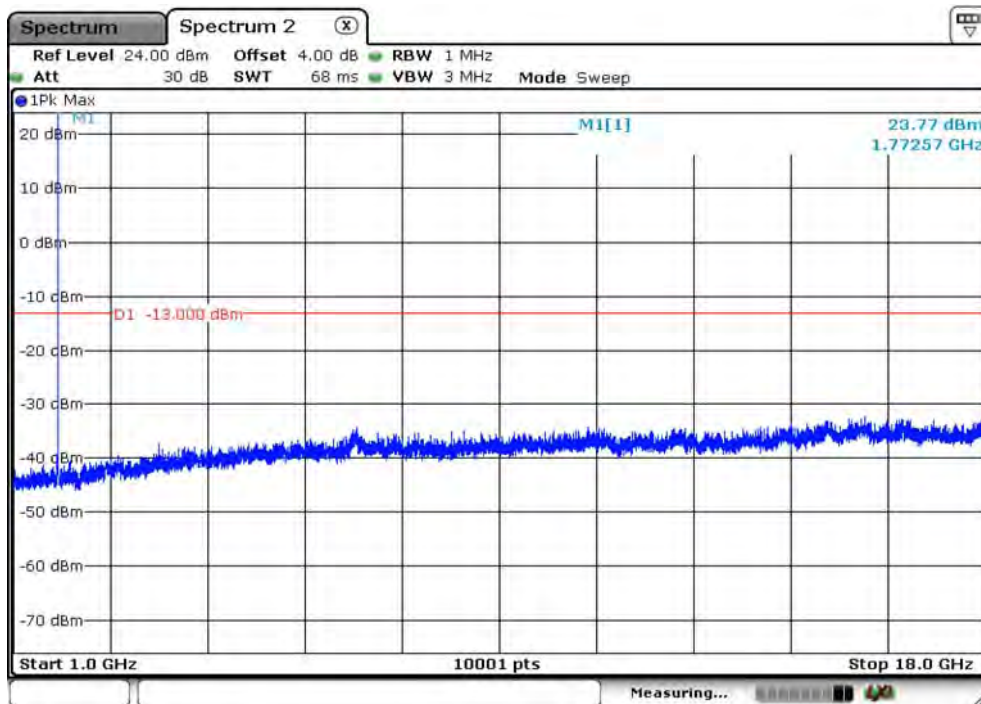
Date: 27.AUG.2020 14:07:05

B66_CH132622_10M_1RB0_QPSK_Below 1G



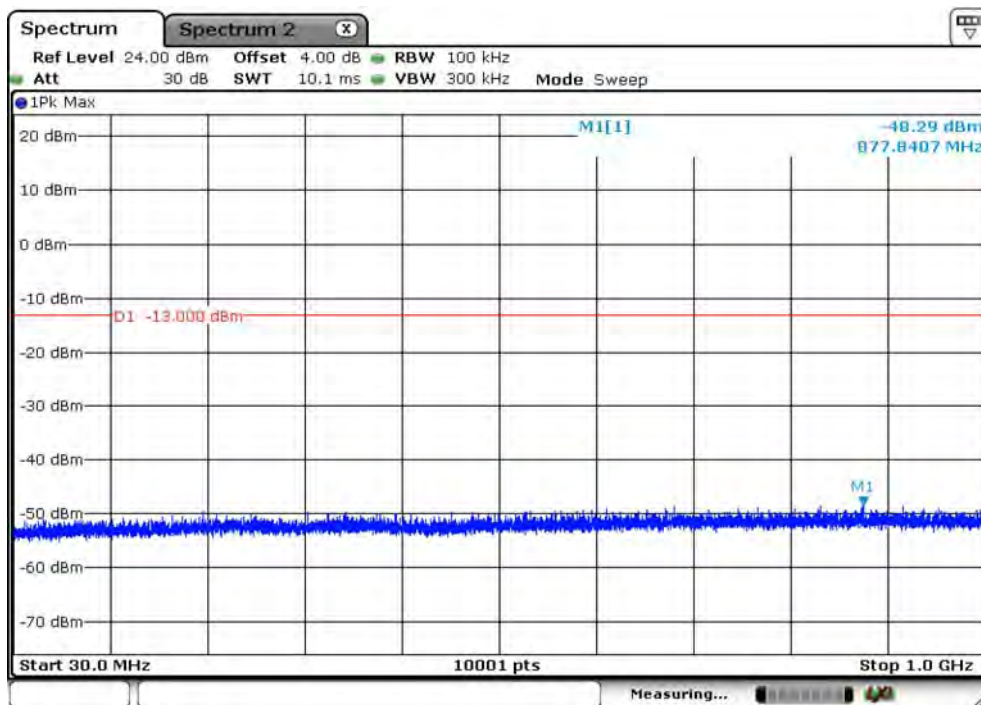
Date: 27.AUG.2020 14:25:25

B66_CH132622_10M_1RB0_QPSK_Above 1G



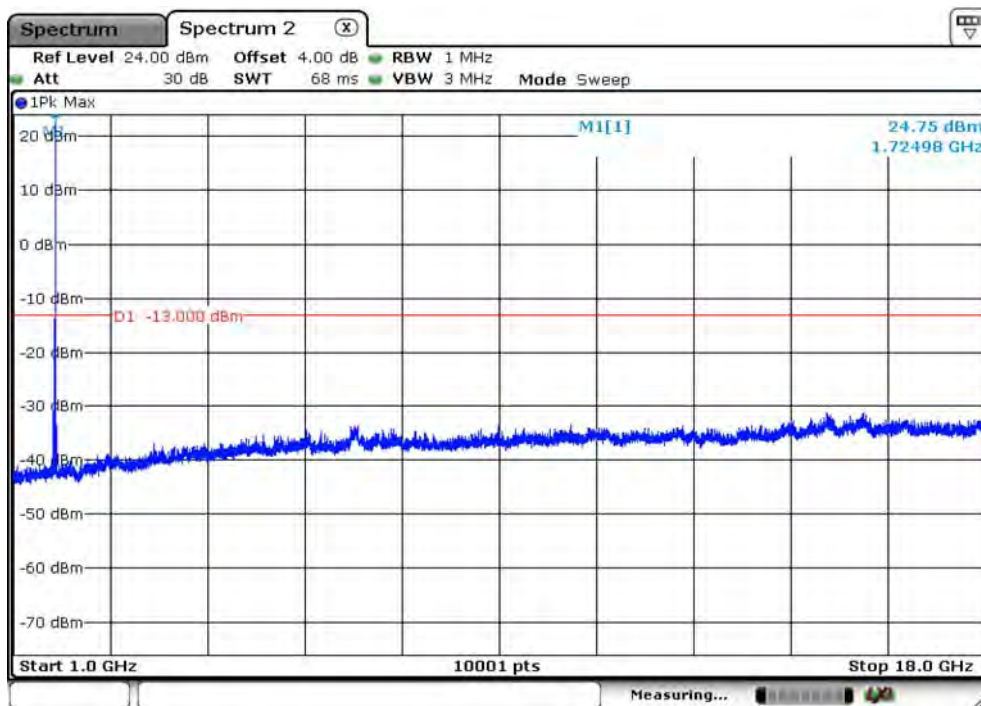
Date: 27.AUG.2020 14:25:07

B66_CH132047_15M_1RB74_QPSK_Below 1G



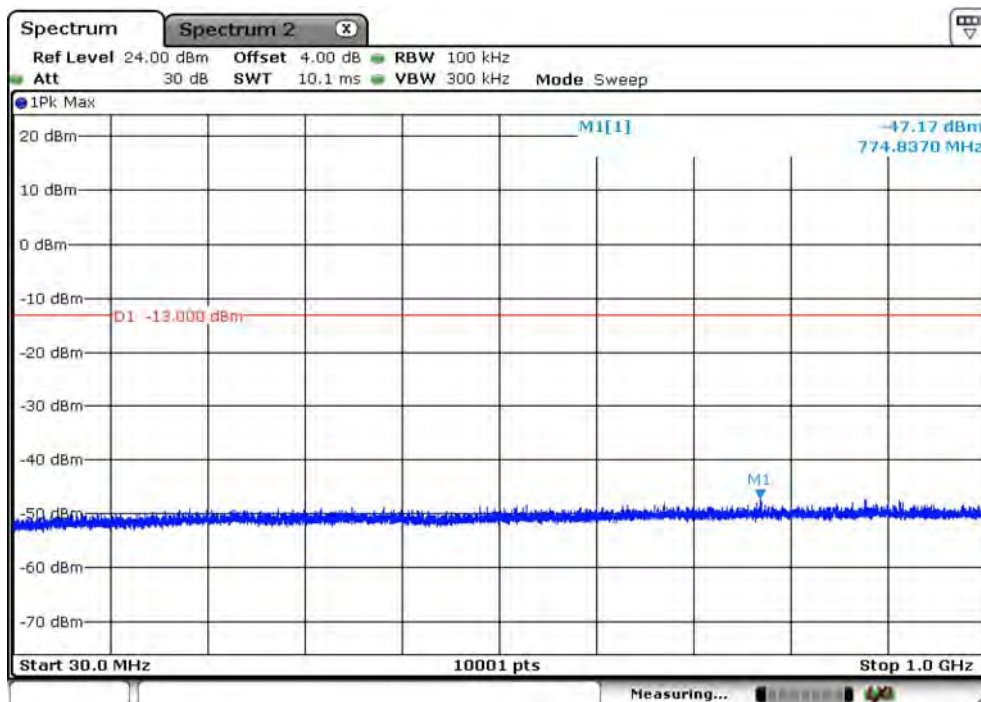
Date: 27.AUG.2020 14:35:35

B66_CH132047_15M_1RB74_QPSK_Above 1G

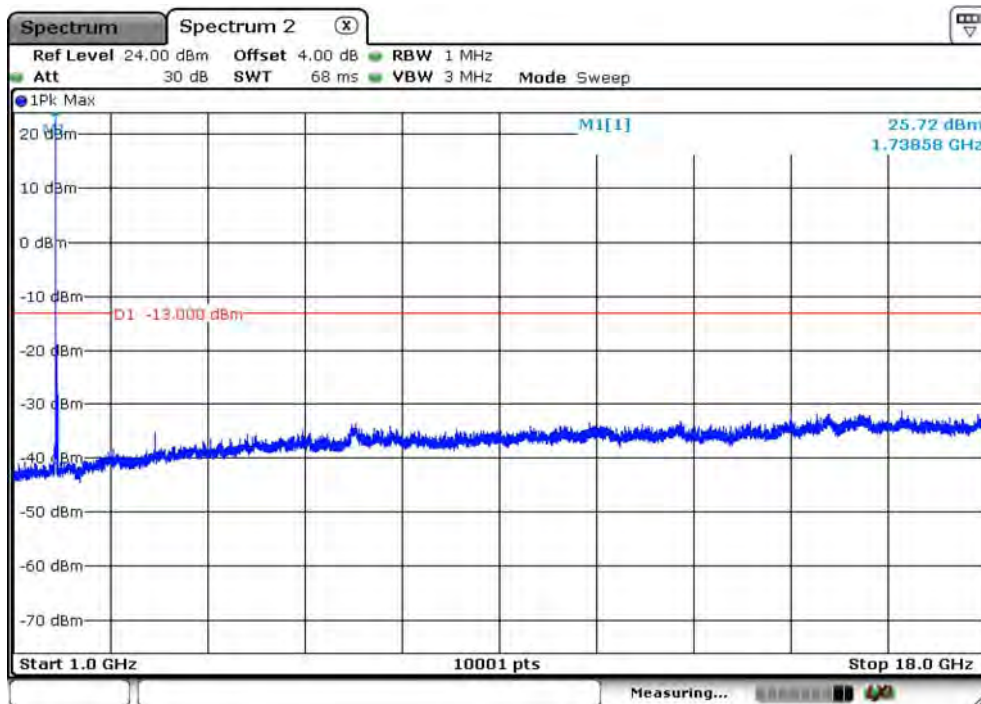


Date: 27.AUG.2020 14:35:03

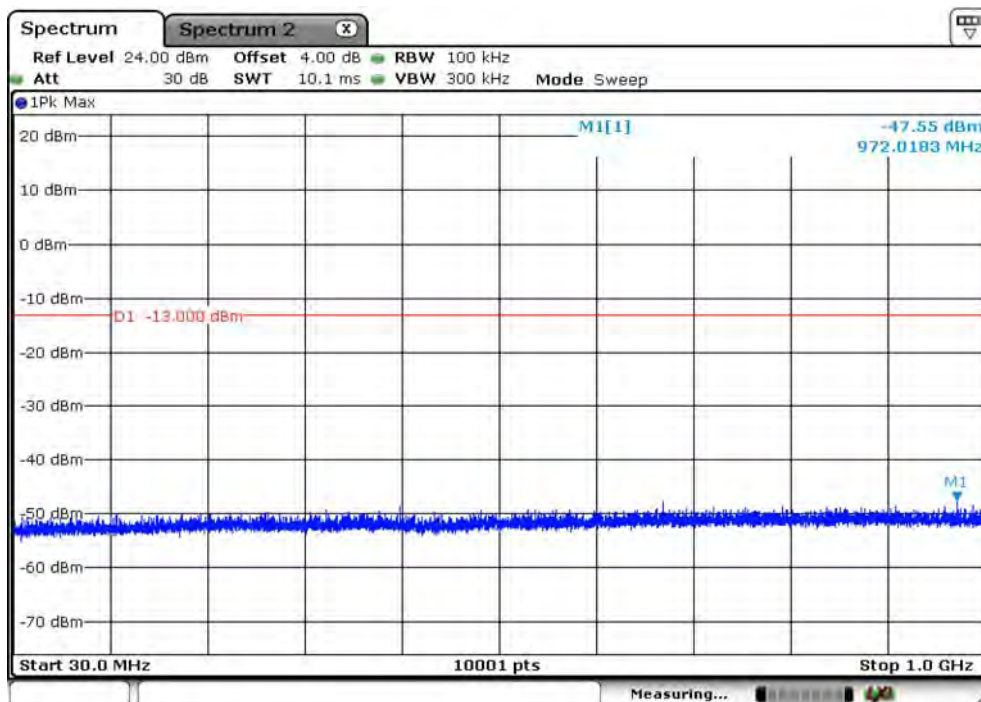
B66_CH132322_15M_1RB0_QPSK_Below 1G



B66_CH132322_15M_1RB0_QPSK_Above 1G

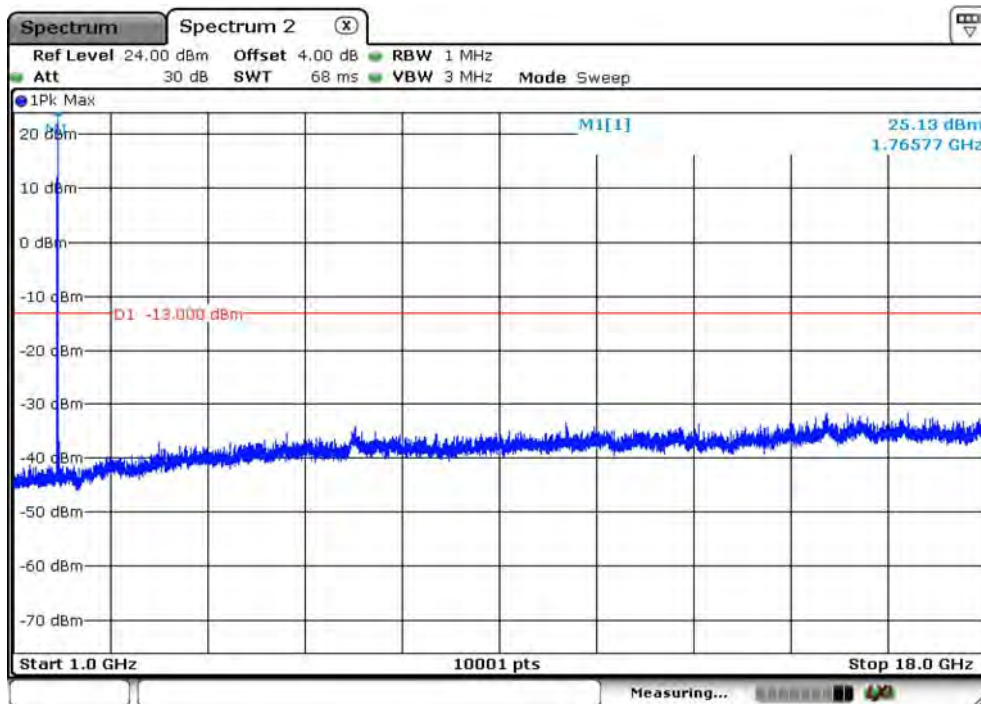


B66_CH132597_15M_1RB0_QPSK_Below 1G



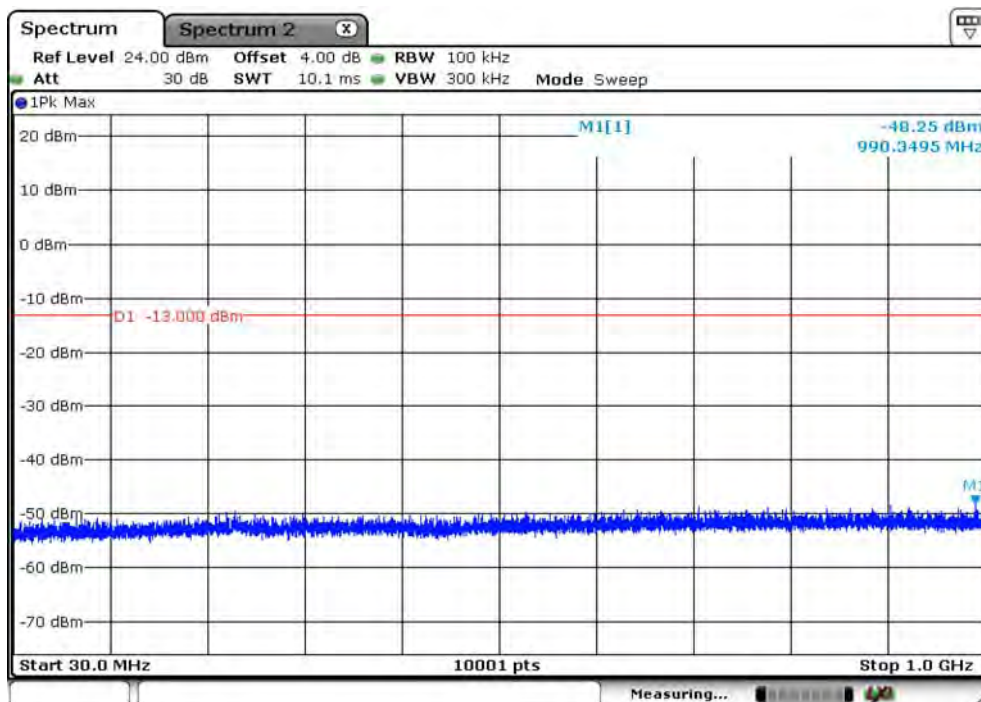
Date: 27.AUG.2020 14:41:36

B66_CH132597_15M_1RB0_QPSK_Above 1G



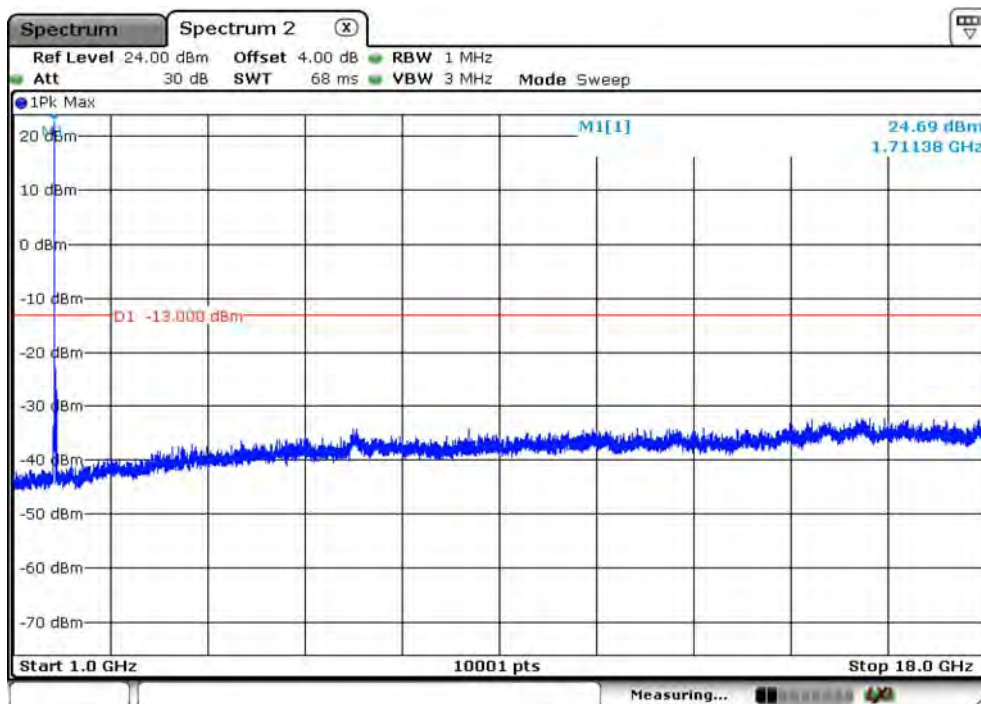
Date: 27.AUG.2020 14:41:54

B66_CH132072_20M_1RB0_QPSK_Below 1G



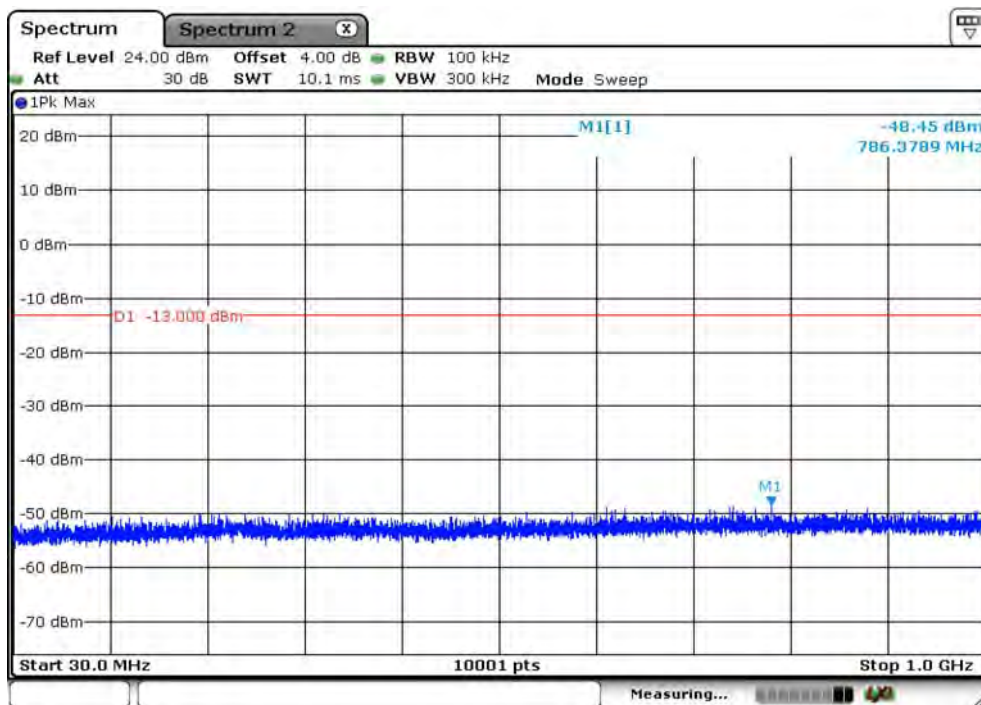
Date: 27.AUG.2020 14:43:17

B66_CH132072_20M_1RB0_QPSK_Above 1G



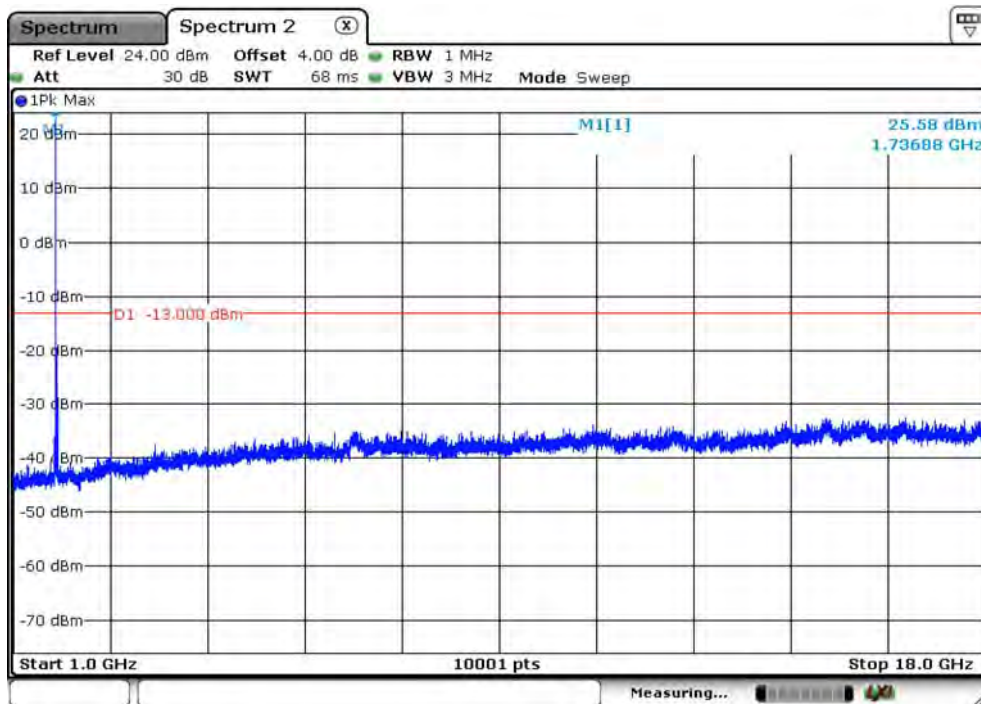
Date: 27.AUG.2020 14:43:36

B66_CH132322_20M_1RB0_QPSK_Below 1G



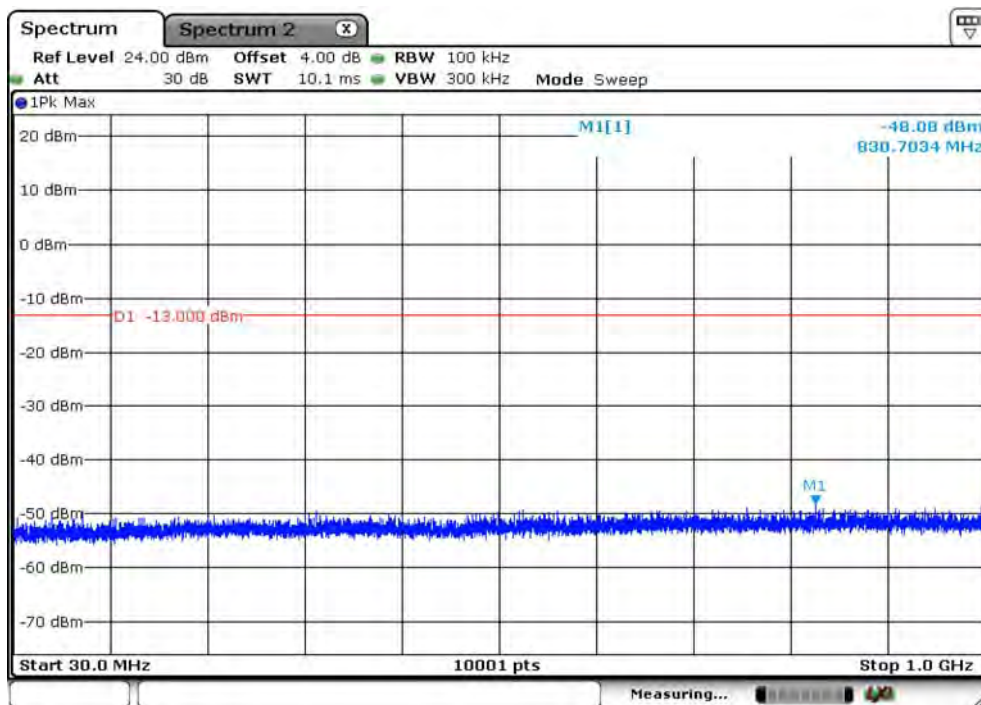
Date: 27.AUG.2020 14:42:50

B66_CH132322_20M_1RB0_QPSK_Above 1G

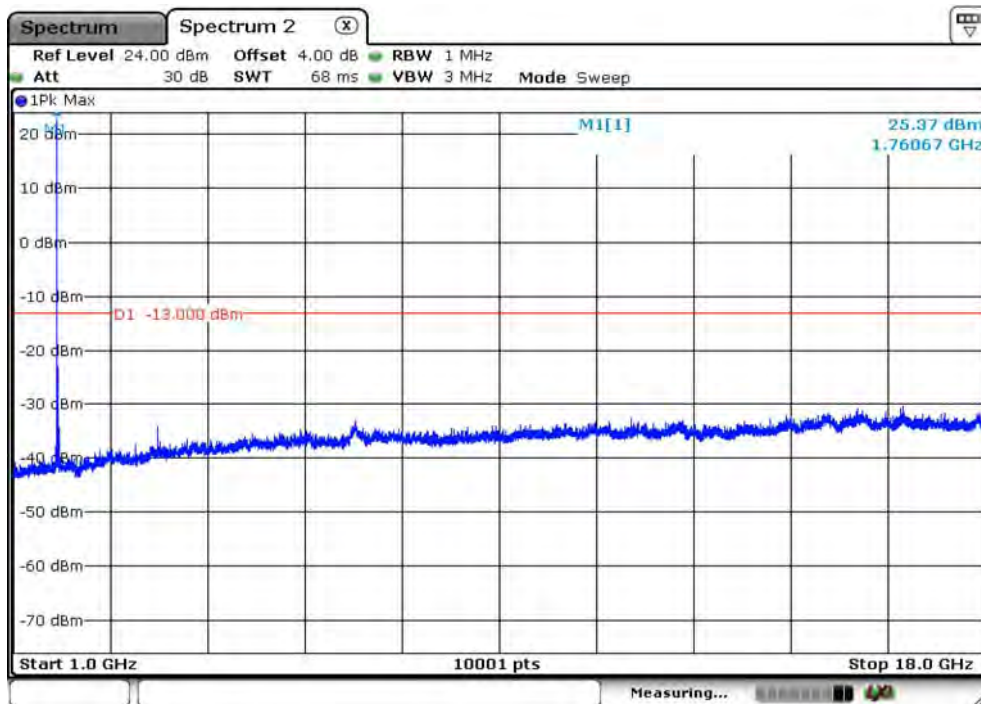


Date: 27.AUG.2020 14:42:35

B66_CH132572_20M_1RB0_QPSK_Below 1G

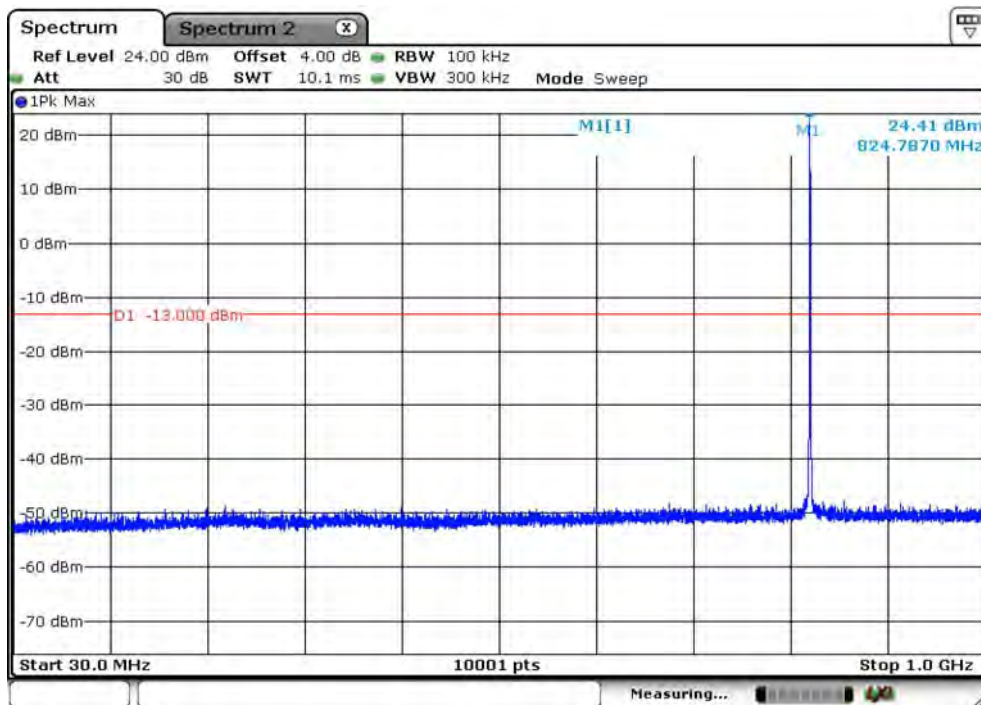


B66_CH132572_20M_1RB0_QPSK_Above 1G



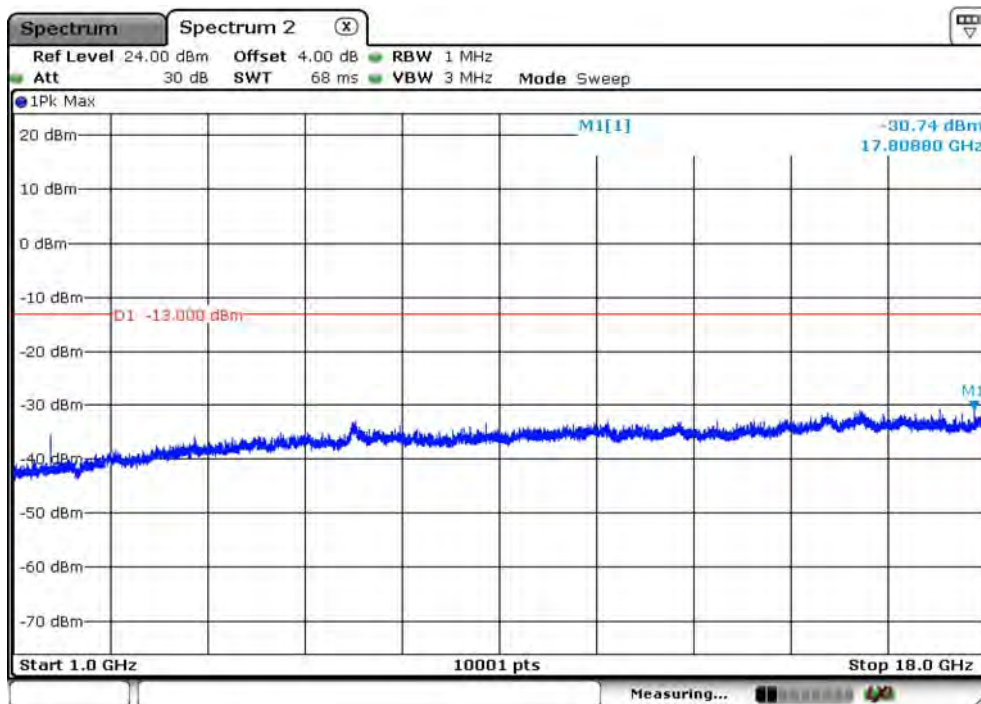
Product	Module		
Test Item	Conducted Spurious Emission		
Test Mode	Mode 3: LTE Band 5/26 (Part 22)		
Date of Test	2020/08/26	Test Site	SR12-H
Temperature(°C)	24	Humidity (%RH)	66

B26_CH26797_1.4M_1RB2__QPSK_Below 1G



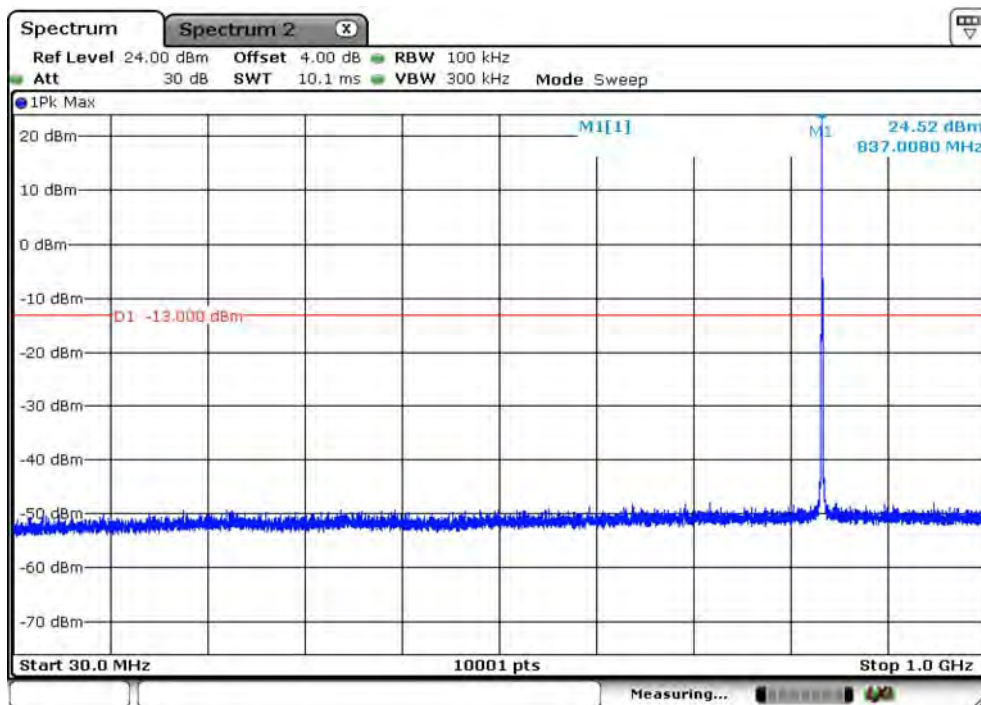
Date: 26.AUG.2020 21:17:38

B26_CH26797_1.4M_1RB2__QPSK_Above 1G



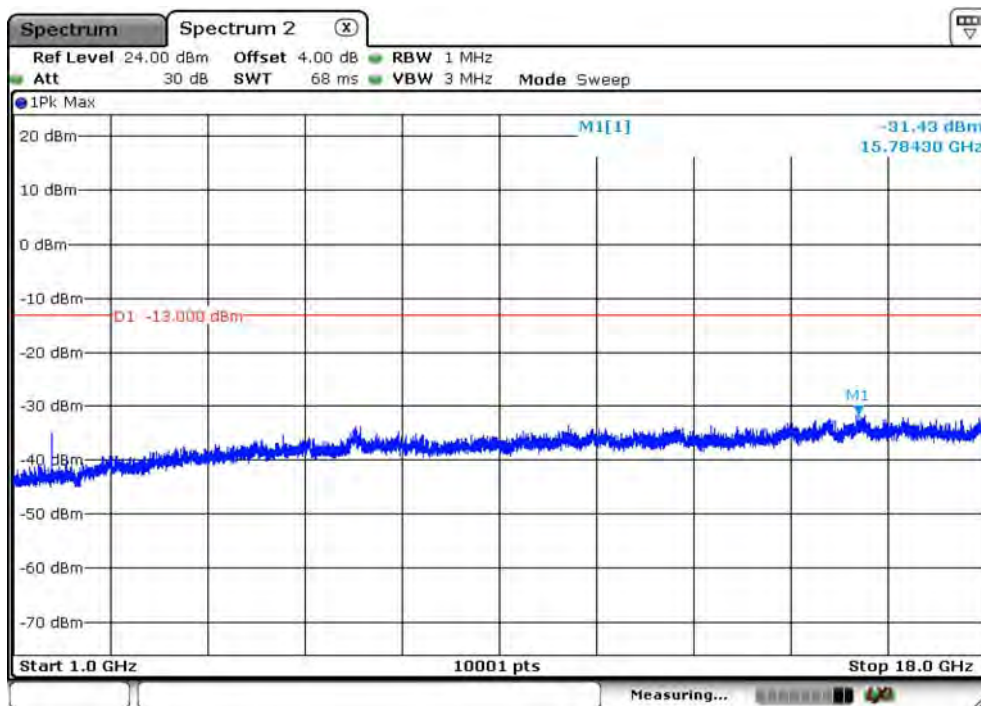
Date: 26.AUG.2020 21:21:09

B26_CH26915_1.4M_1RB5_QPSK_Below 1G



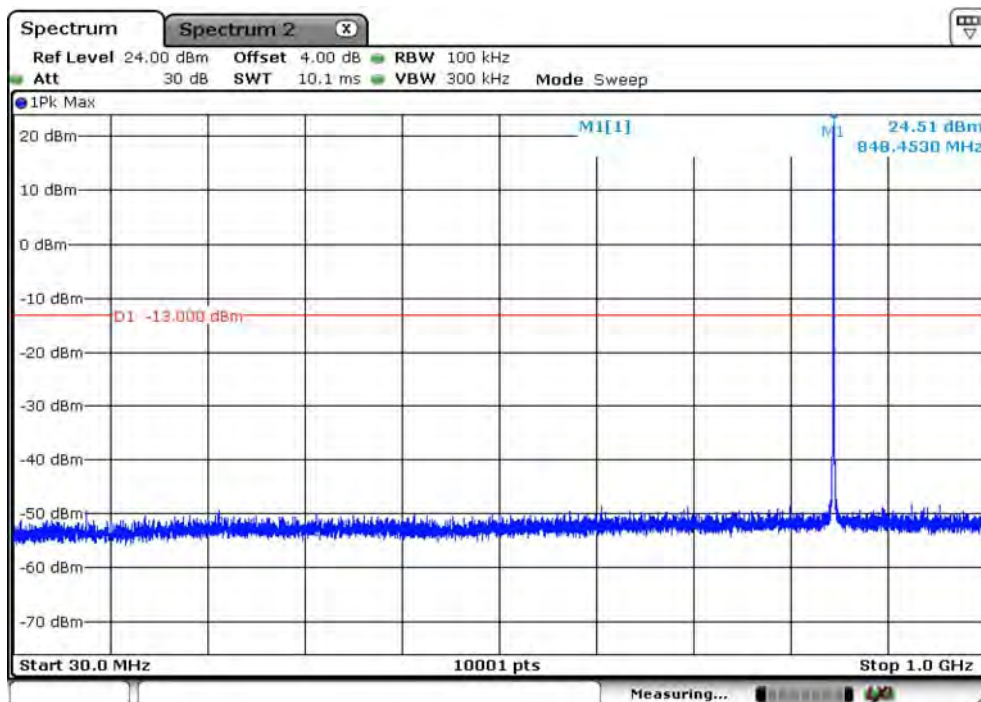
Date: 26.AUG.2020 21:15:41

B26_CH26915_1.4M_1RB5_QPSK_Above 1G



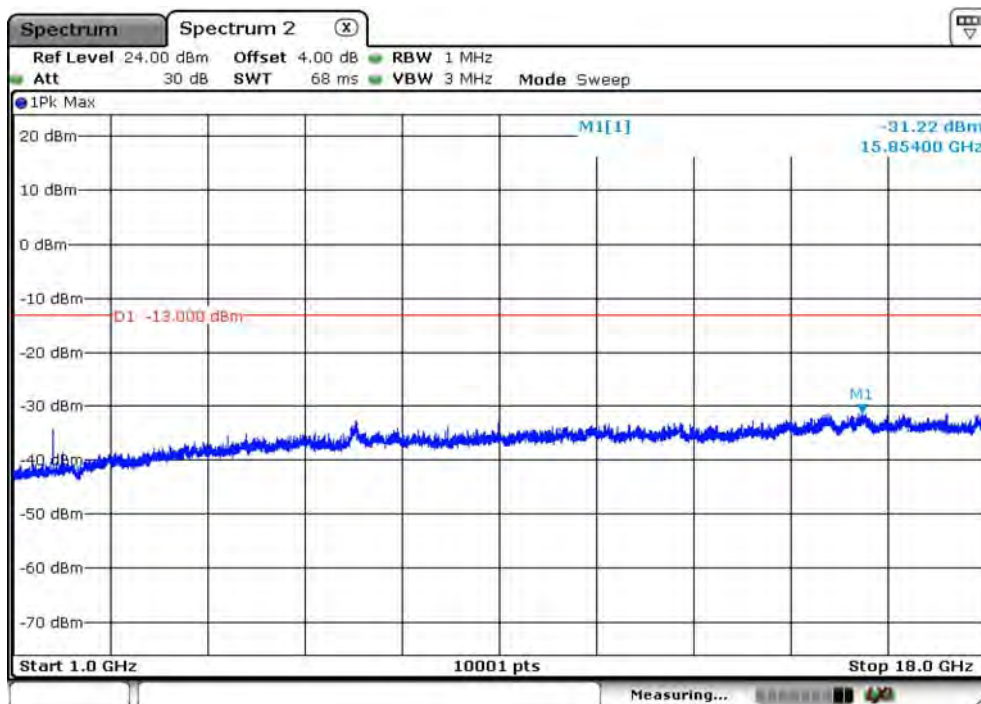
Date: 26.AUG.2020 21:14:01

B26_CH27033_1.4M_1RB2_QPSK_Below 1G



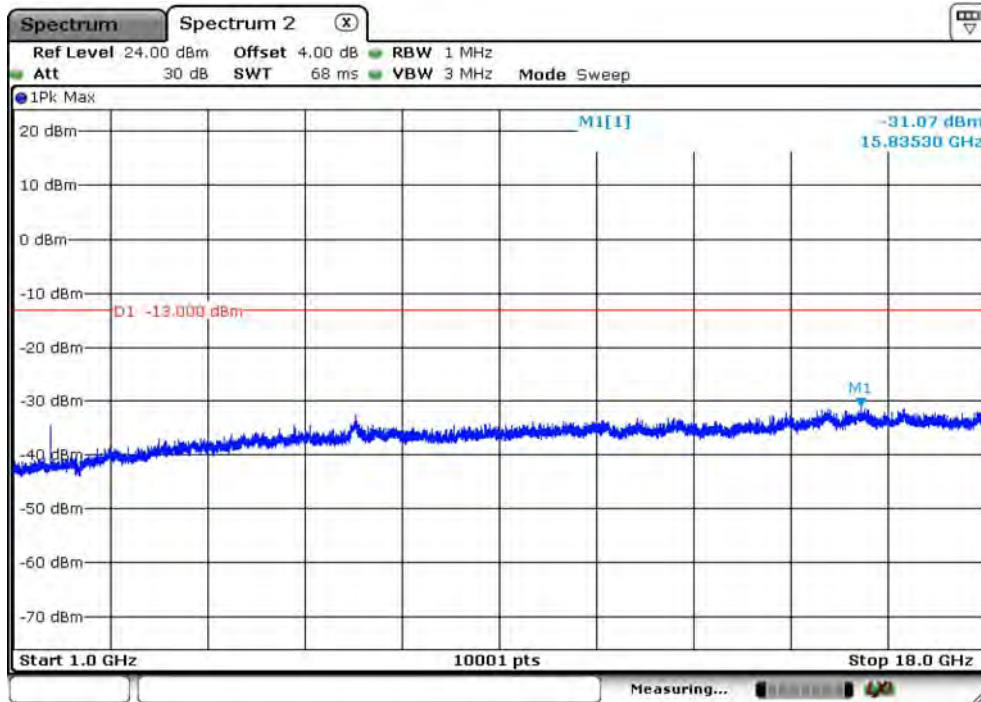
Date: 26.AUG.2020 21:25:09

B26_CH27033_1.4M_1RB2_QPSK_Above 1G



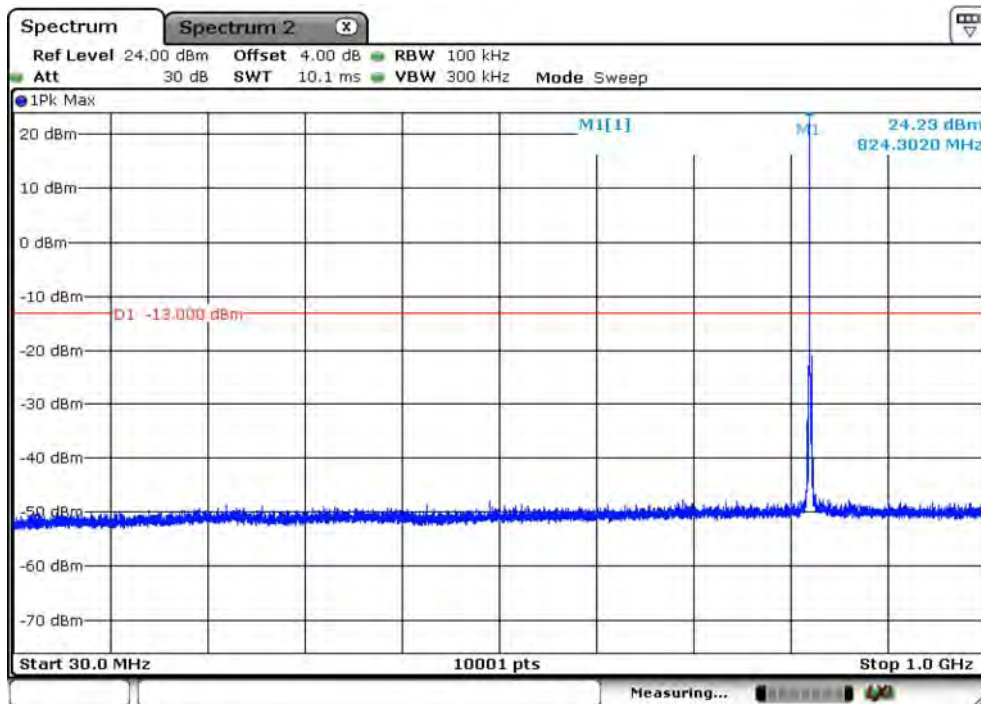
Date: 26.AUG.2020 21:24:19

B26_CH26805_3M_1RB0_QPSK_Above 1G



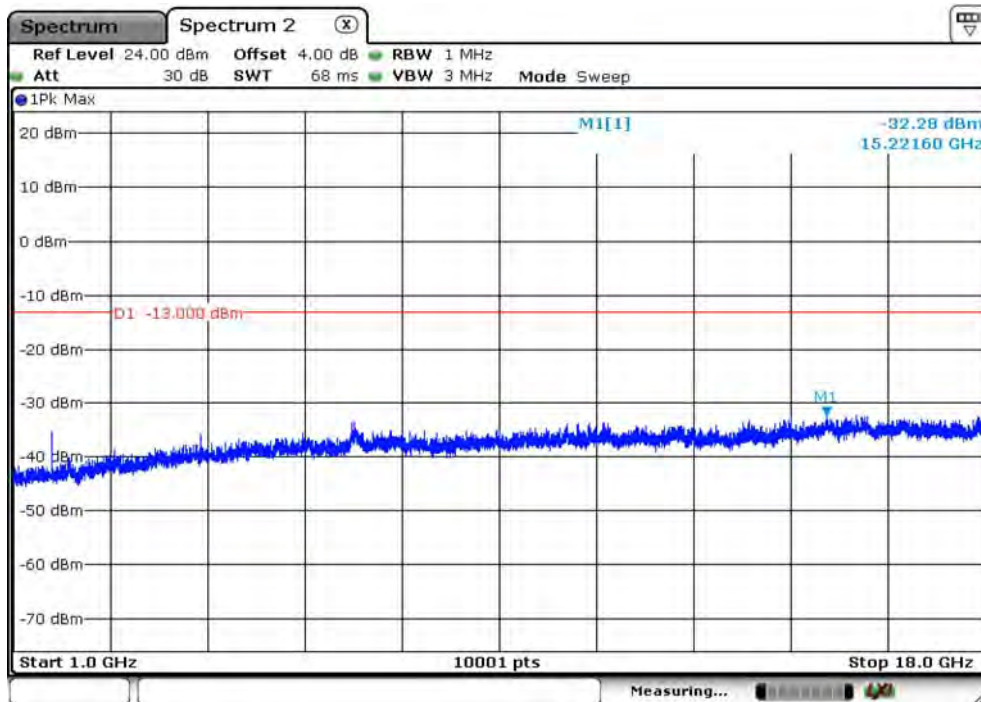
Date: 26.AUG.2020 21:48:45

B26_CH26805_3M_1RB0_QPSK_Below 1G



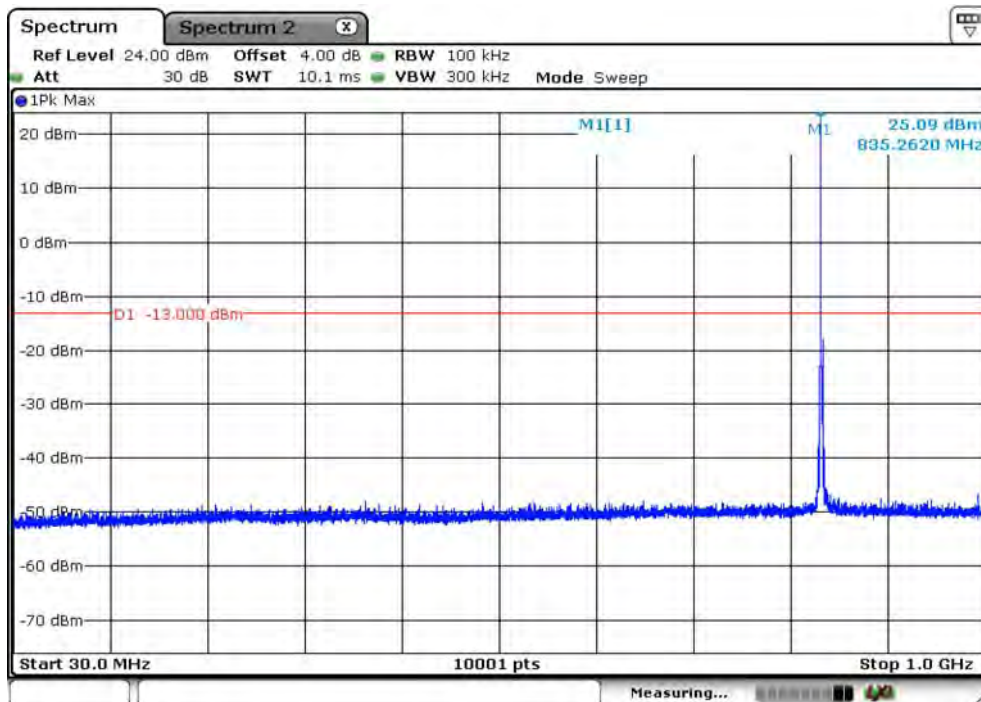
Date: 26.AUG.2020 21:52:19

B26_CH26915_3M_1RB0_QPSK_Above 1G



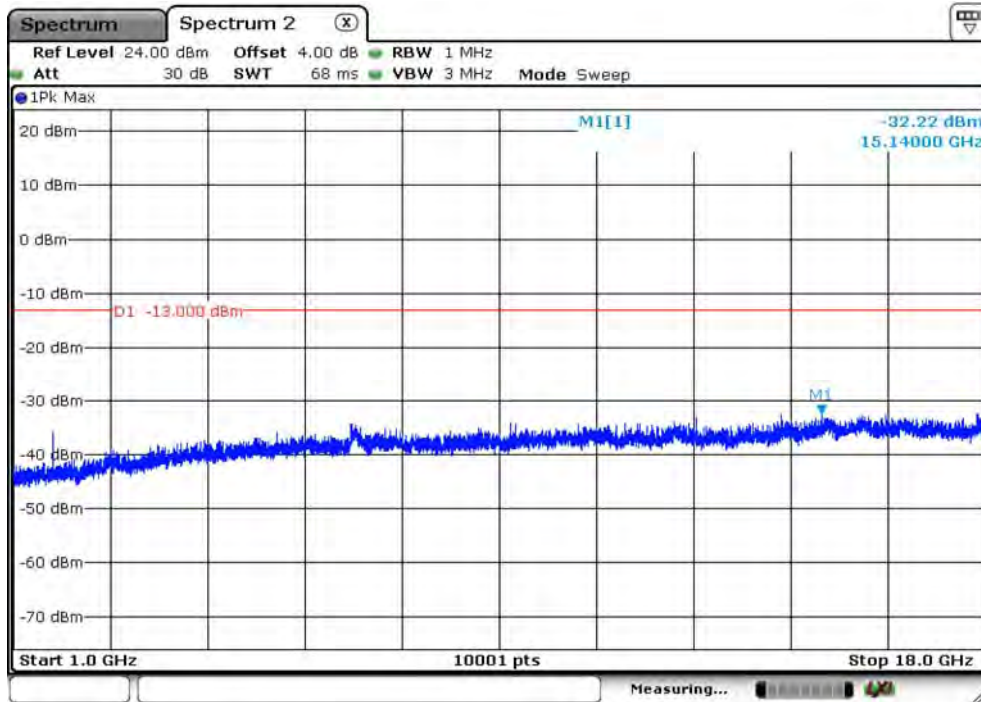
Date: 26.AUG.2020 21:33:58

B26_CH26915_3M_1RB0_QPSK_Below 1G



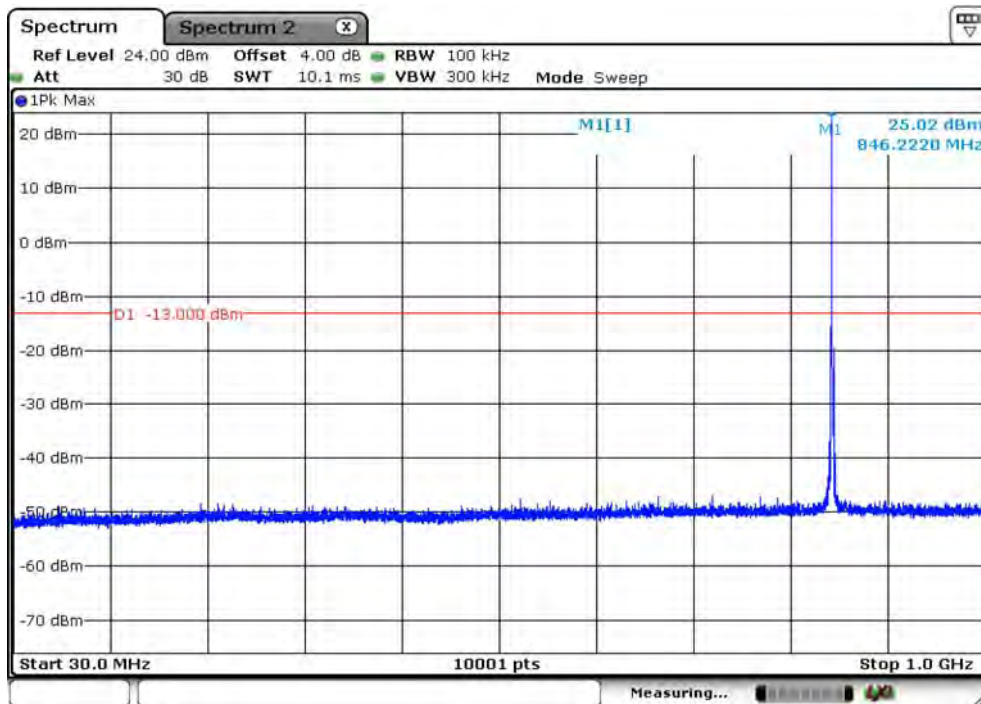
Date: 26.AUG.2020 21:33:38

B26_CH27025_3M_1RB0_QPSK_Above 1G



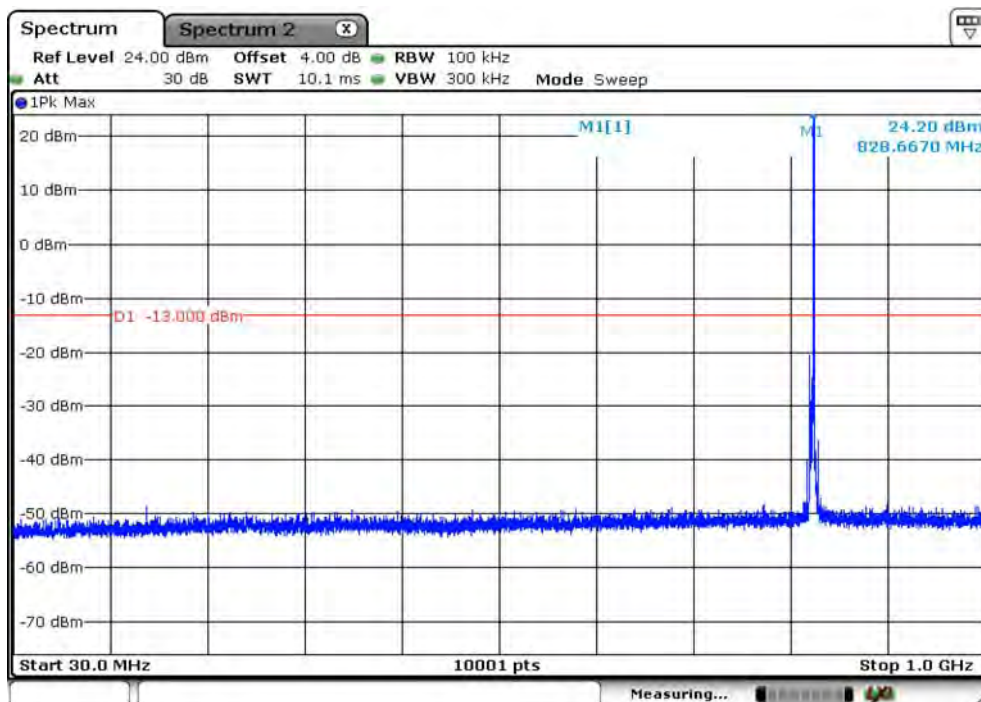
Date: 26.AUG.2020 21:59:10

B26_CH27025_3M_1RB0_QPSK_Below 1G



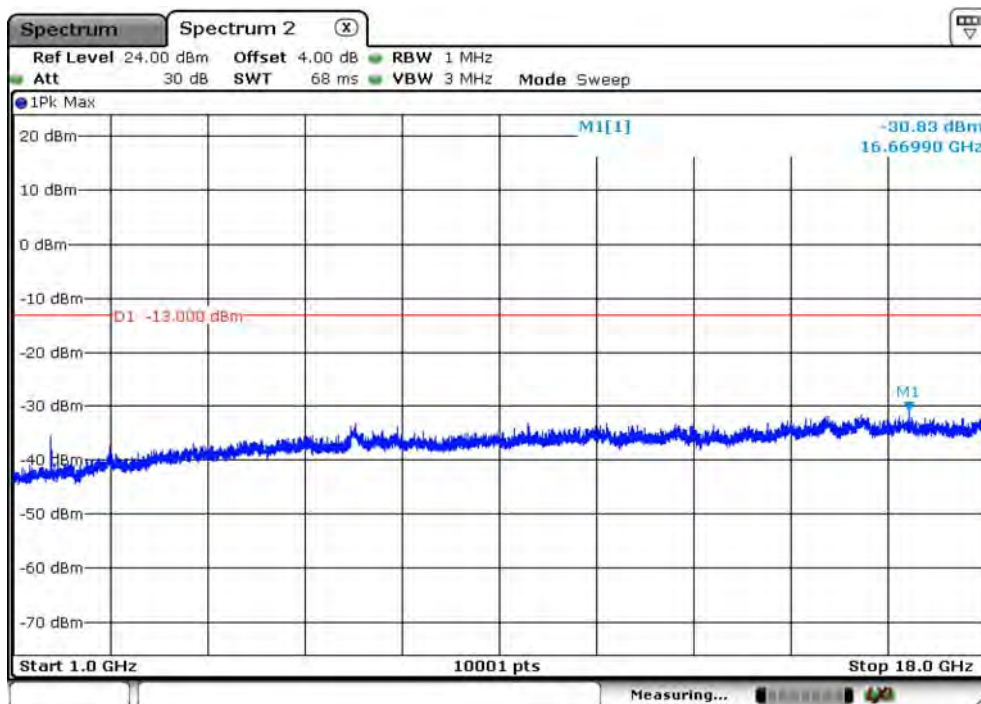
Date: 26.AUG.2020 21:58:51

B26_CH26815_5M_1RB24_QPSK_Below 1G



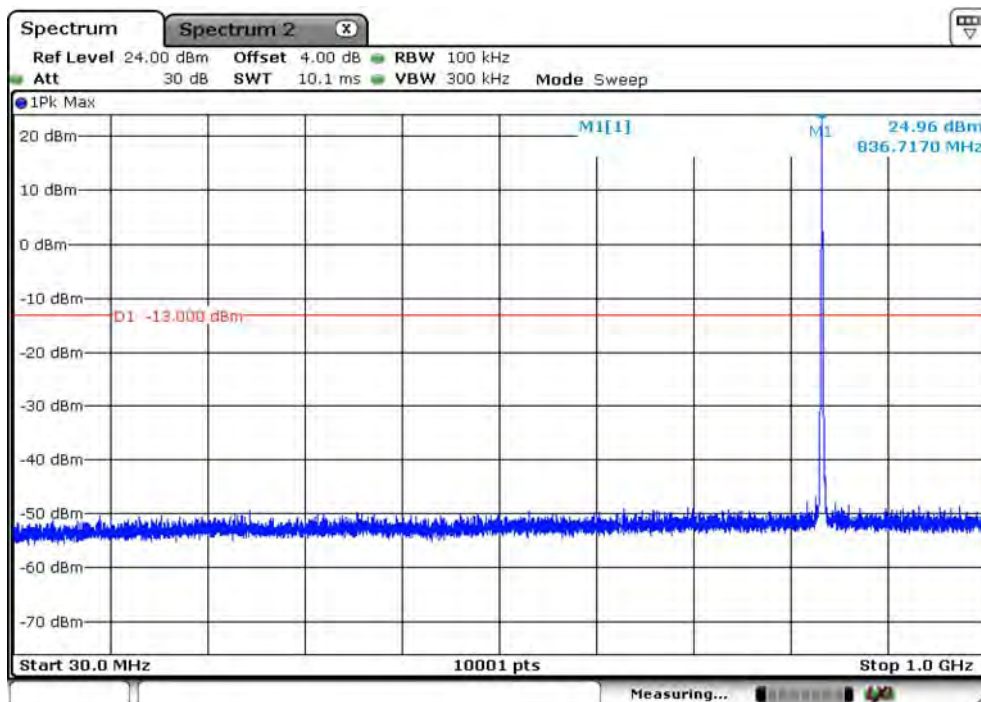
Date: 26.AUG.2020 22:10:10

B26_CH26815_5M_1RB24_QPSK_Above 1G



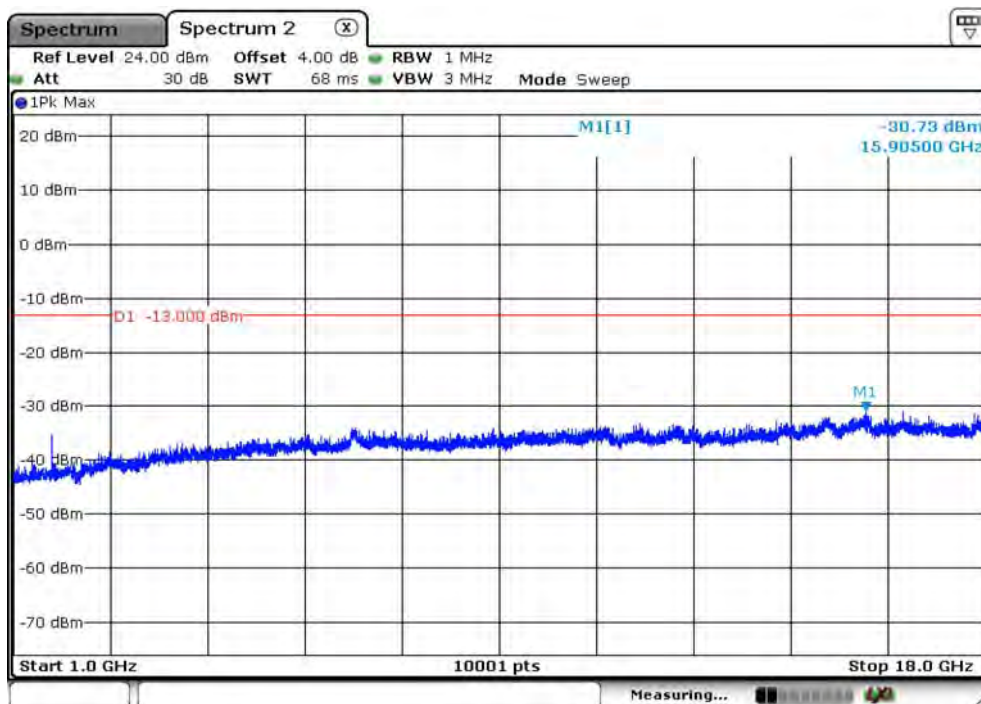
Date: 26.AUG.2020 22:11:24

B26_CH26915_5M_1RB0_QPSK_Below 1G



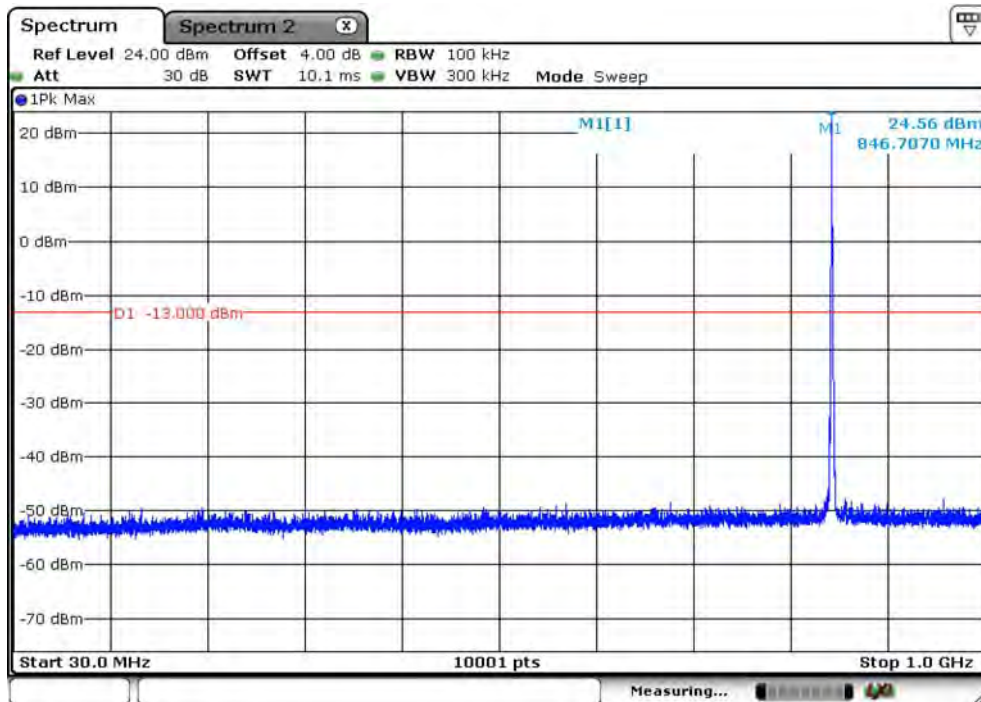
Date: 26.AUG.2020 22:02:40

B26_CH26915_5M_1RB0_QPSK_Above 1G



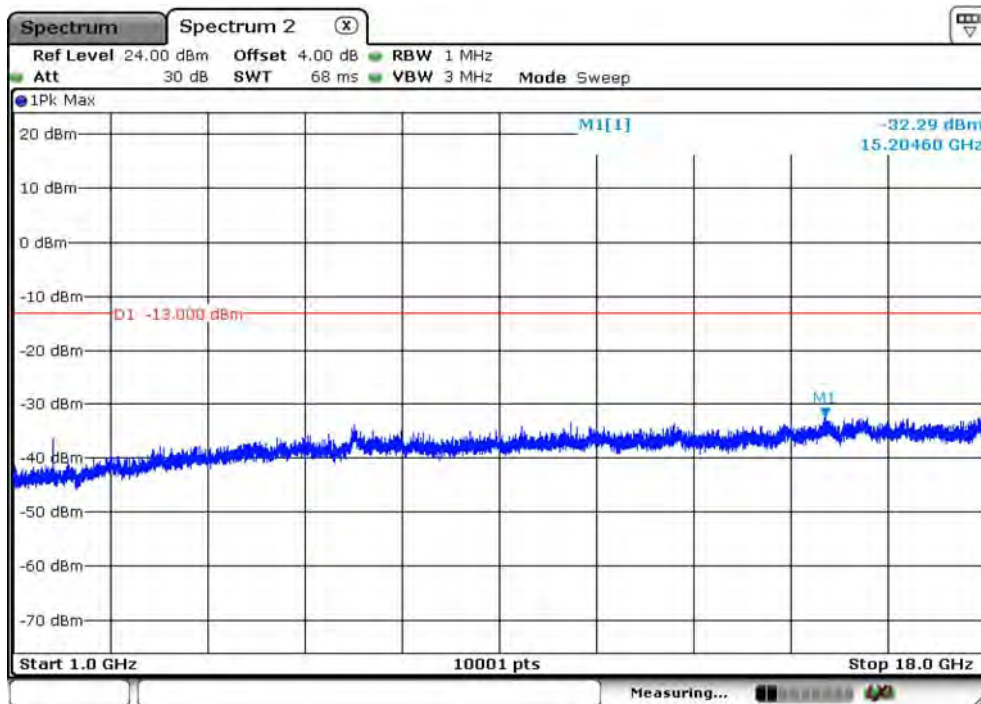
Date: 26.AUG.2020 22:02:08

B26_CH27015_5M_1RB12_QPSK_Below 1G



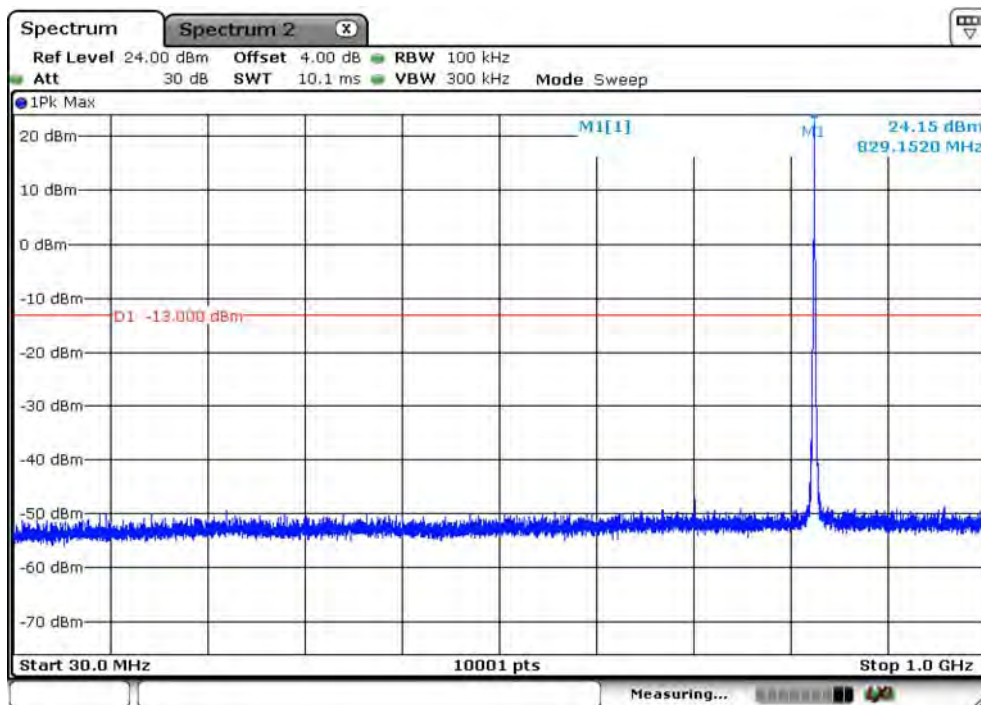
Date: 26.AUG.2020 22:16:57

B26_CH27015_5M_1RB12_QPSK_Above 1G



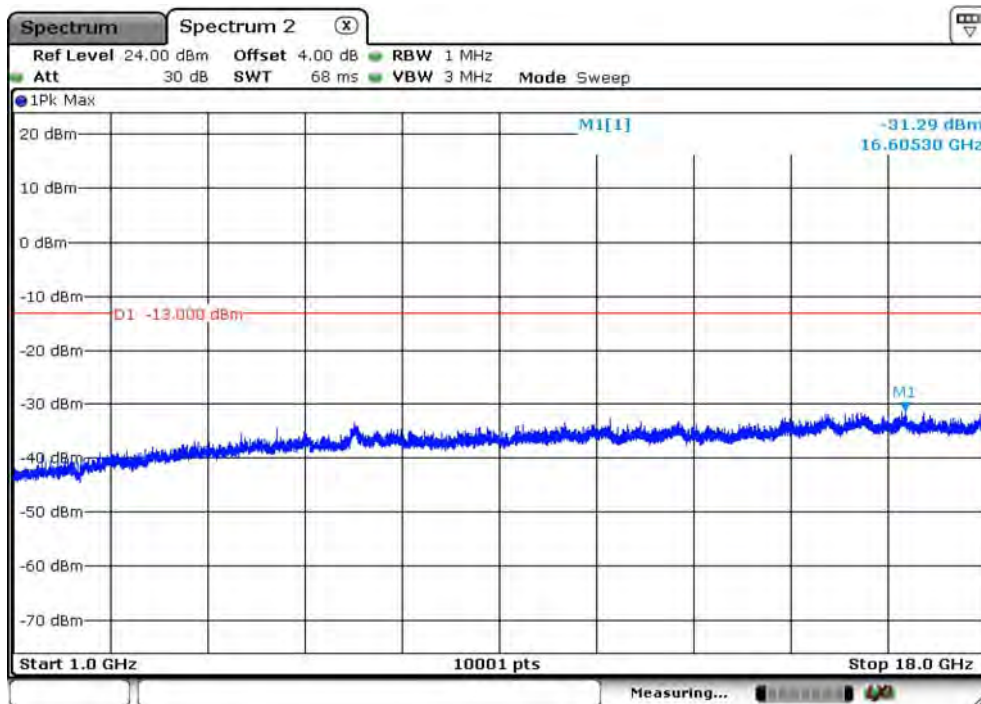
Date: 26.AUG.2020 22:16:20

B26_CH26840_10M_1RB24_QPSK_Below 1G



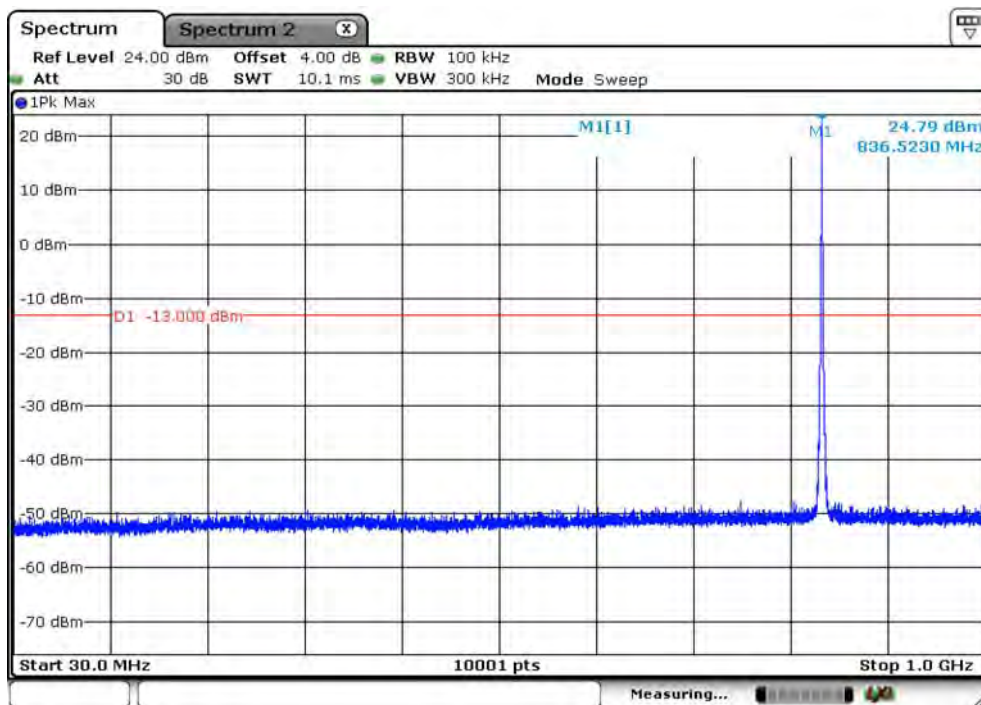
Date: 26.AUG.2020 22:21:56

B26_CH26840_10M_1RB24_QPSK_Above 1G



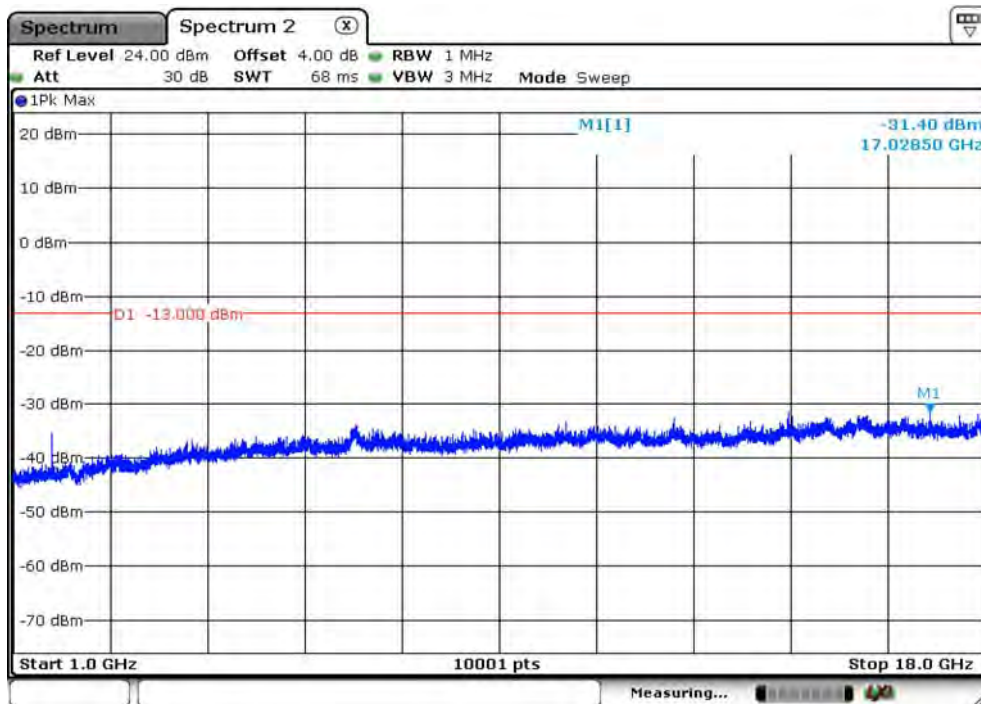
Date: 26.AUG.2020 22:21:01

B26_CH26915_10M_1RB24_QPSK_Below 1G



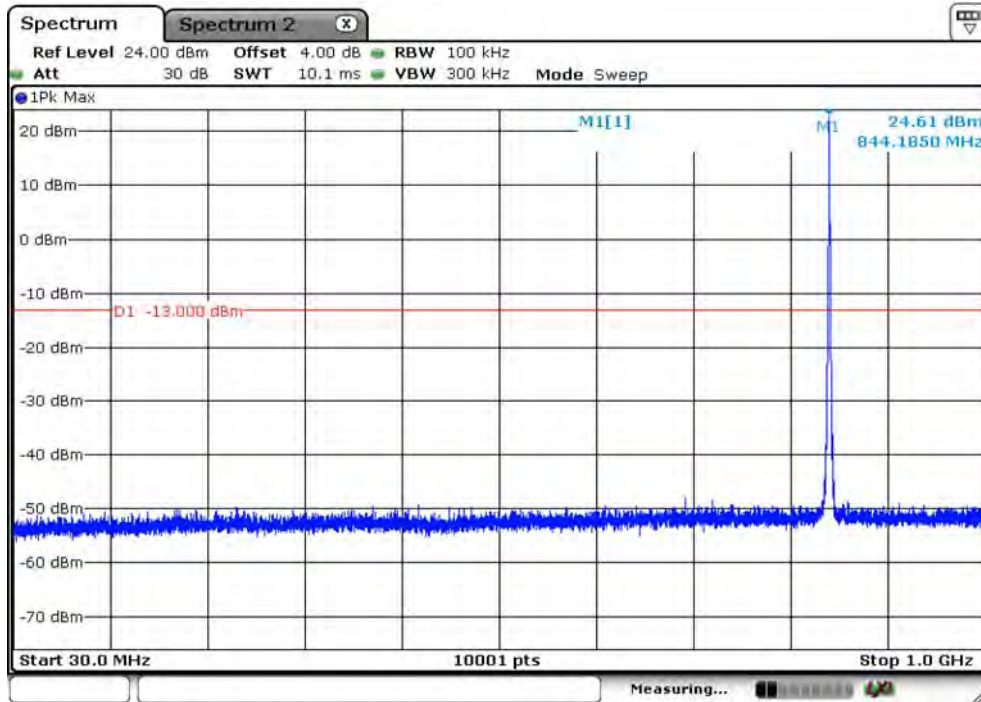
Date: 26.AUG.2020 22:18:42

B26_CH26915_10M_1RB24_QPSK_Above 1G



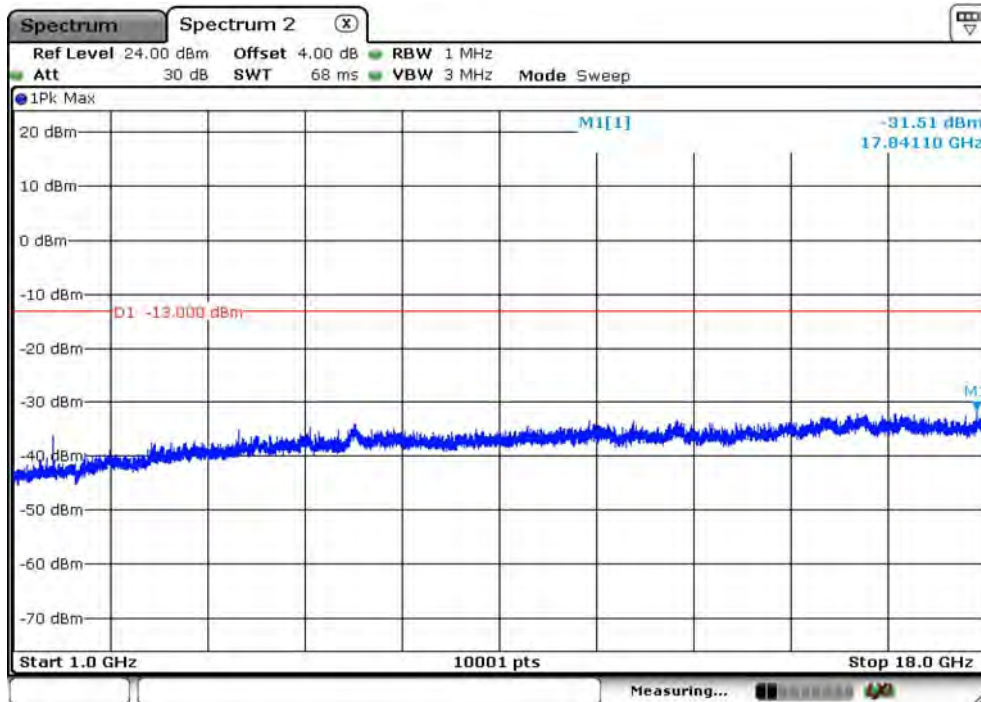
Date: 26.AUG.2020 22:19:17

B26_CH26990_10M_1RB24_QPSK_Below 1G



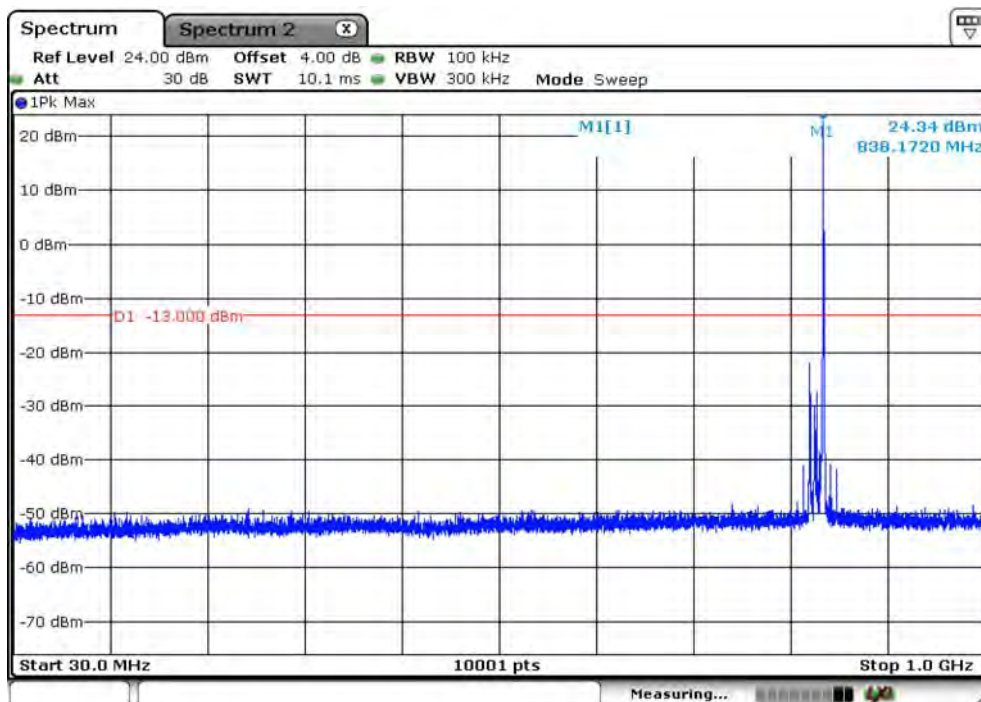
Date: 26.AUG.2020 22:22:45

B26_CH26990_10M_1RB24_QPSK_Above 1G



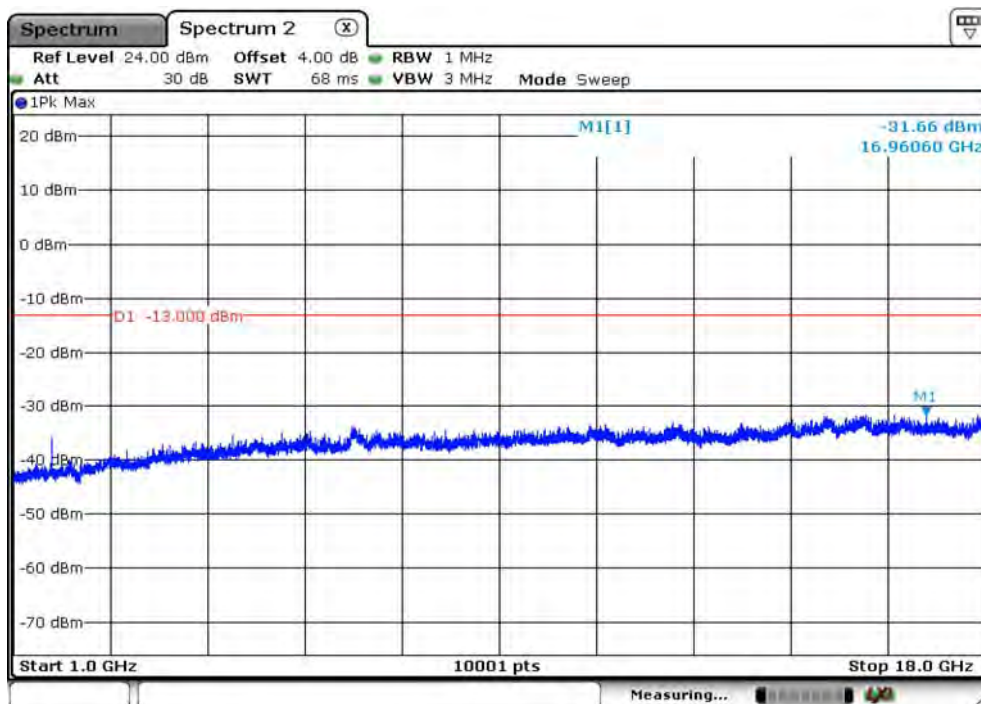
Date: 26.AUG.2020 22:23:22

B26_CH26865_15M_1RB0_QPSK_Below 1G



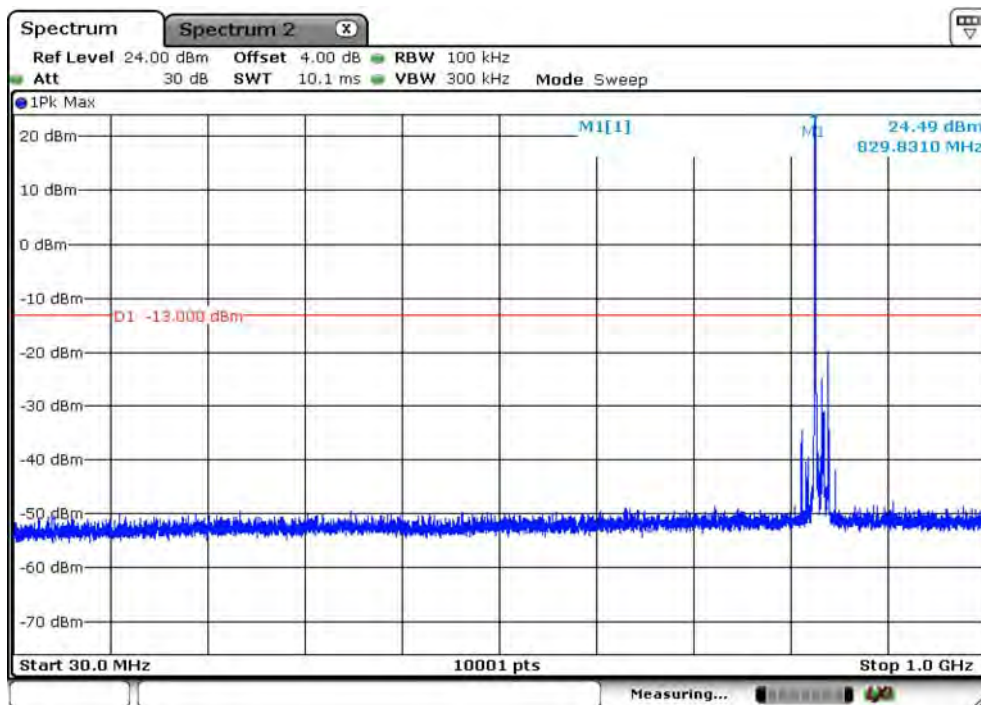
Date: 26.AUG.2020 22:29:32

B26_CH26865_15M_1RB0_QPSK_Above 1G



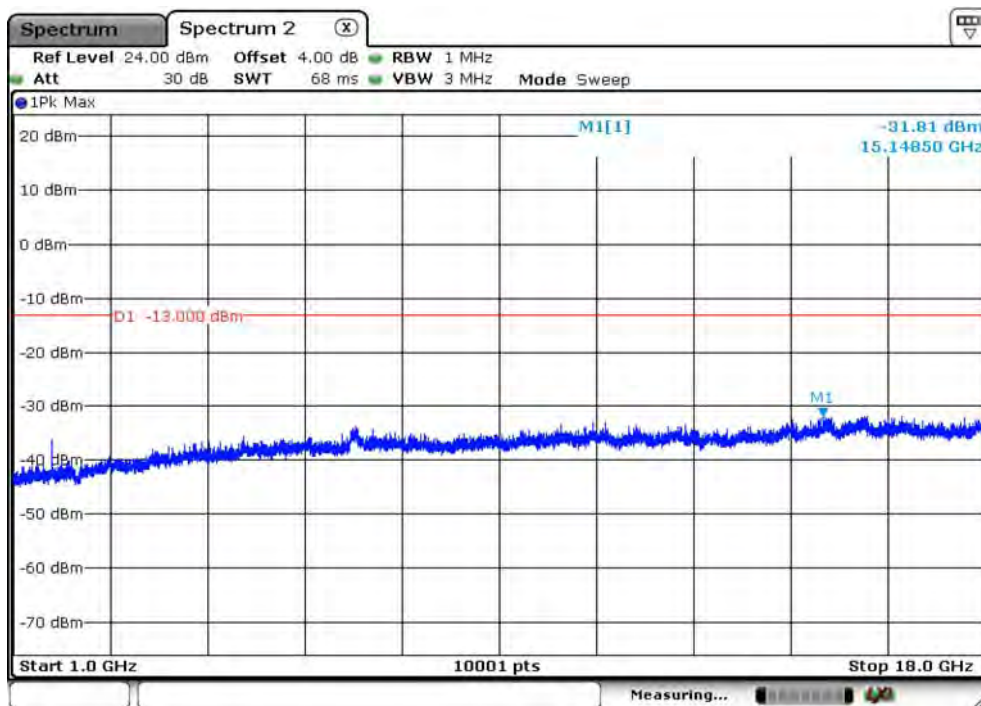
Date: 26.AUG.2020 22:28:59

B26_CH26915_15M_1RB0_QPSK_Below 1G



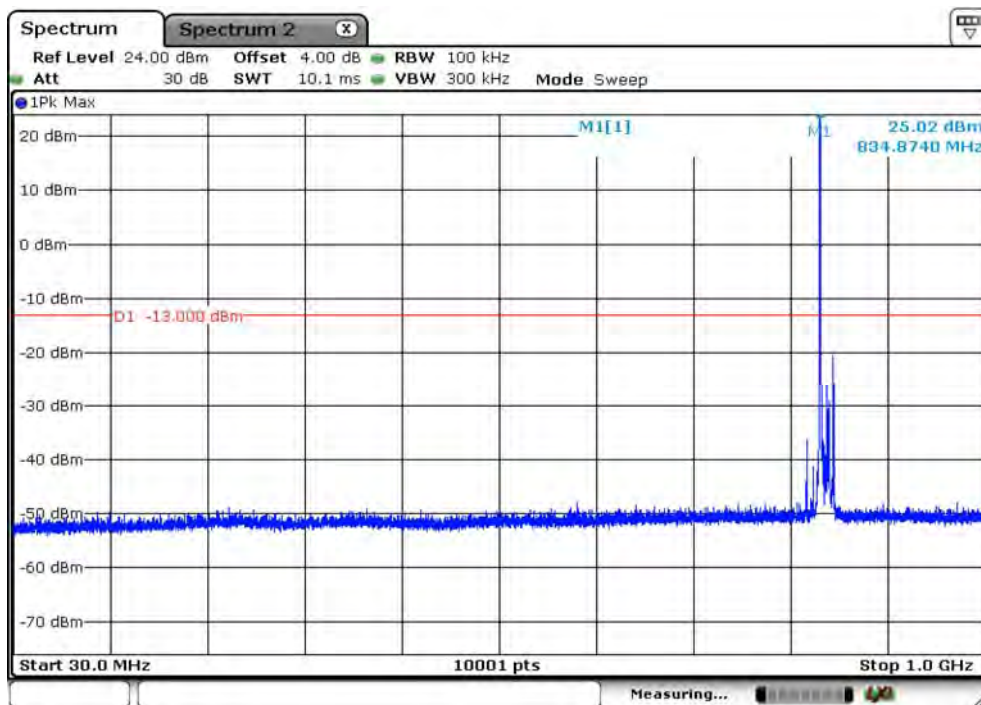
Date: 26.AUG.2020 22:25:04

B26_CH26915_15M_1RB0_QPSK_Above 1G



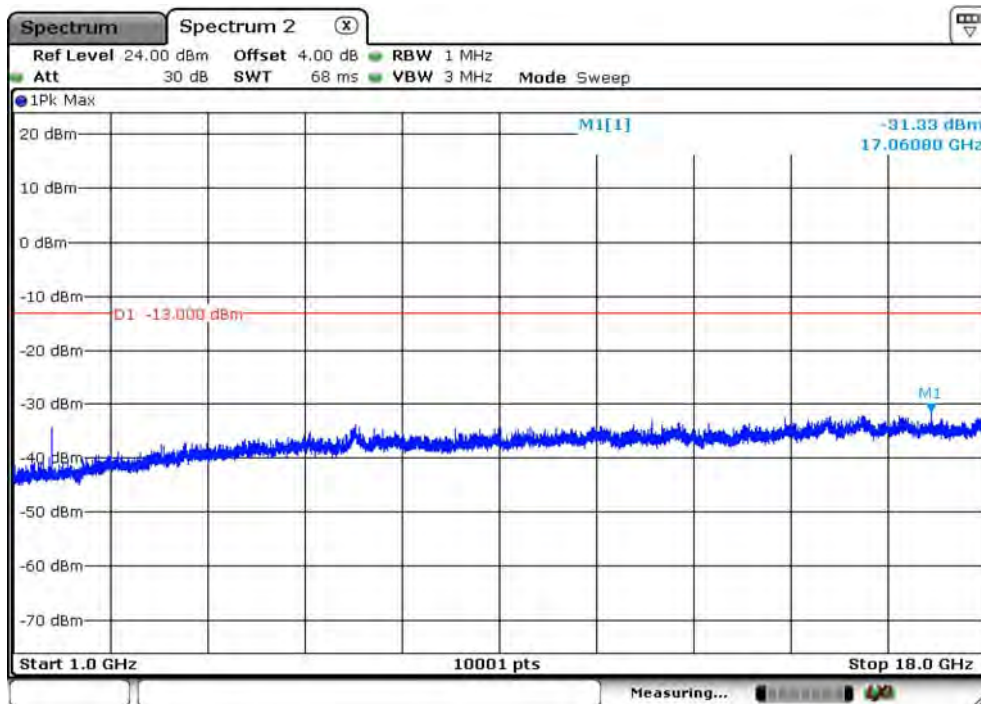
Date: 26.AUG.2020 22:24:41

B26_CH26965_15M_1RB0_QPSK_Below 1G



Date: 26.AUG.2020 22:26:47

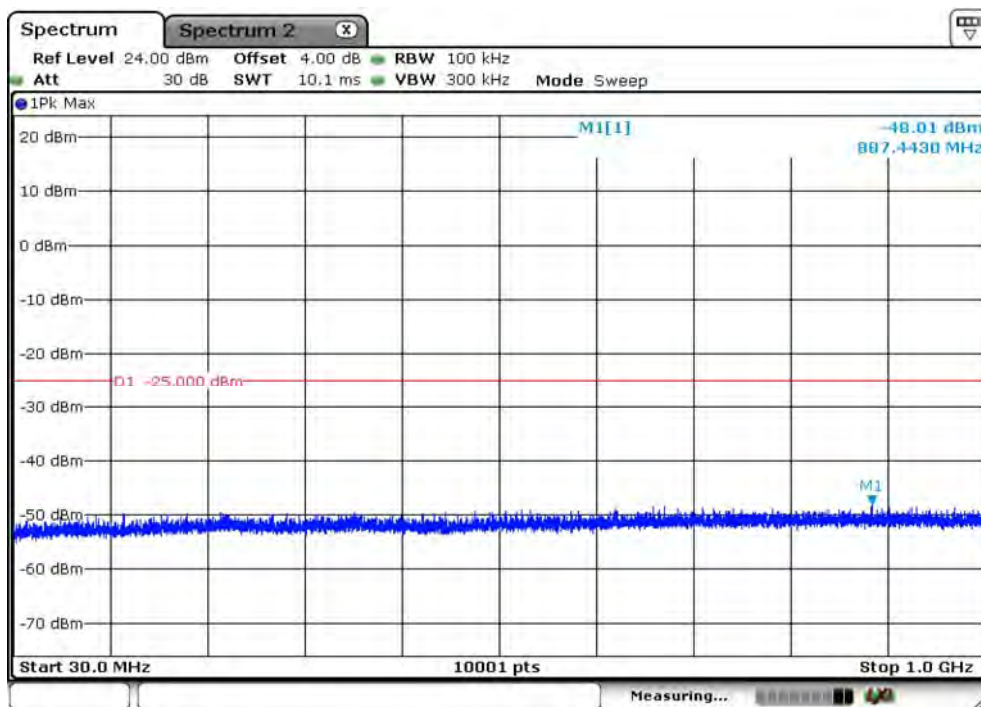
B26_CH26965_15M_1RB0_QPSK_Above 1G



Date: 26.AUG.2020 22:27:33

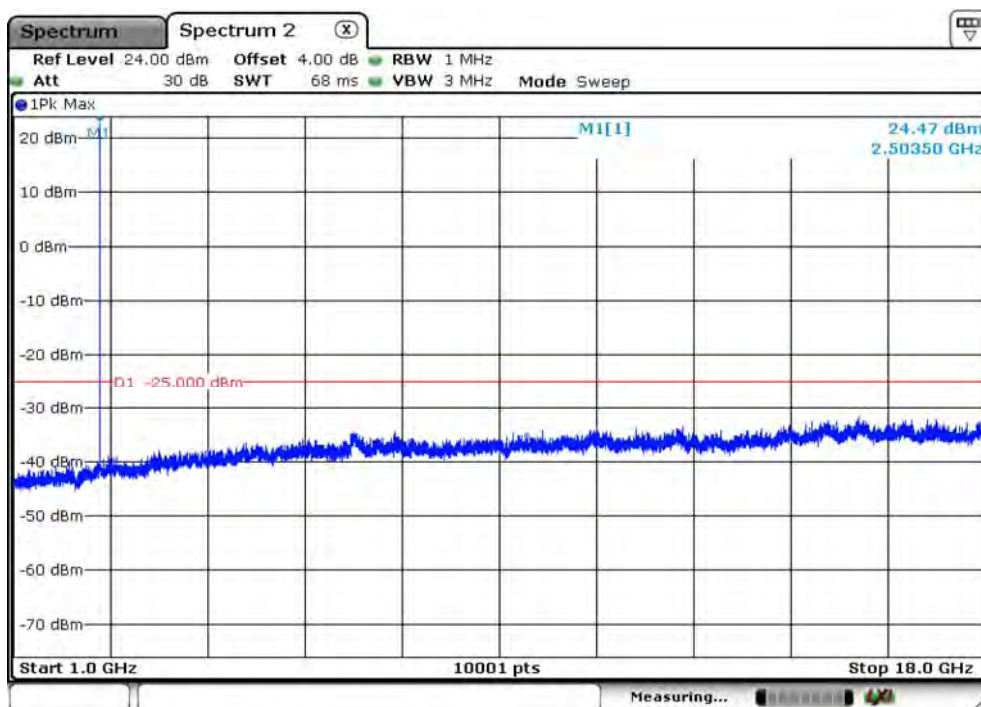
Product	Module		
Test Item	Conducted Spurious Emission		
Test Mode	Mode 4: LTE Band 7		
Date of Test	2020/08/26	Test Site	SR12-H
Temperature(°C)	24	Humidity (%RH)	66

B7_CH20775_5M_1RB12_QPSK_Below 1G



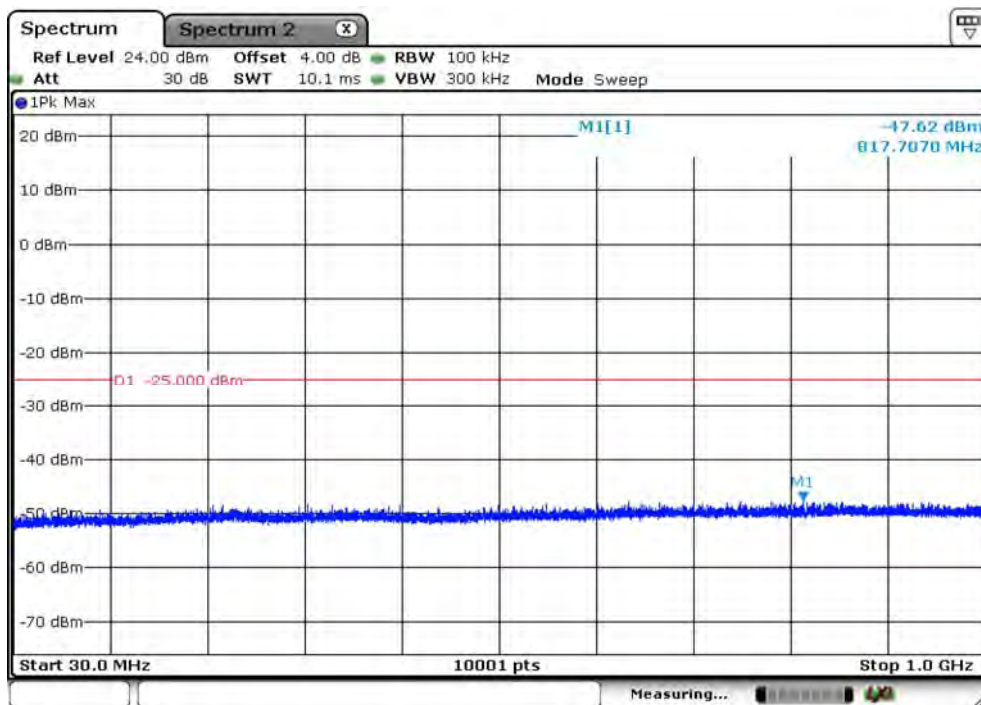
Date: 26.AUG.2020 14:37:50

B7_CH20775_5M_1RB12_QPSK_Above 1G



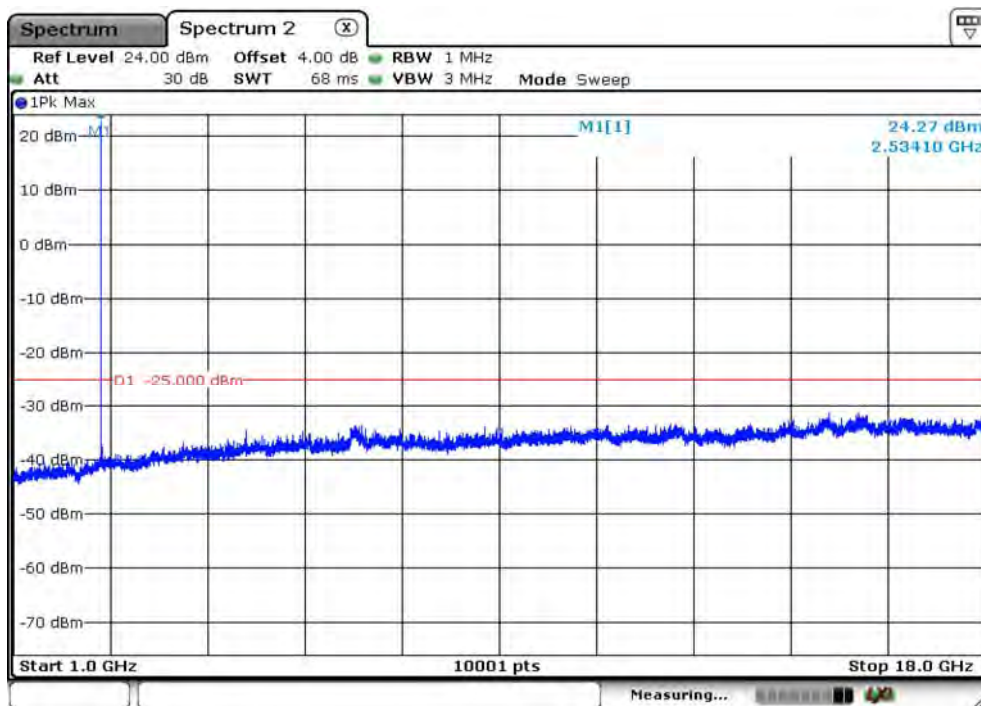
Date: 26.AUG.2020 16:33:12

B7_CH21100_5M_1RB12_QPSK_Below 1G



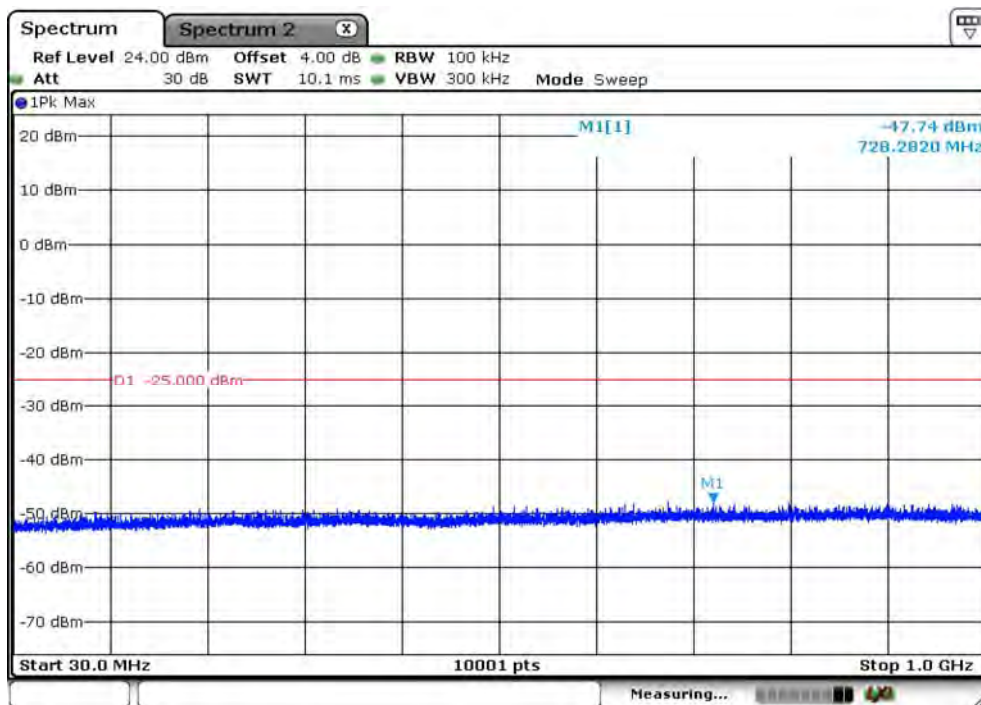
Date: 26.AUG.2020 14:54:56

B7_CH21100_5M_1RB12_QPSK_Above 1G



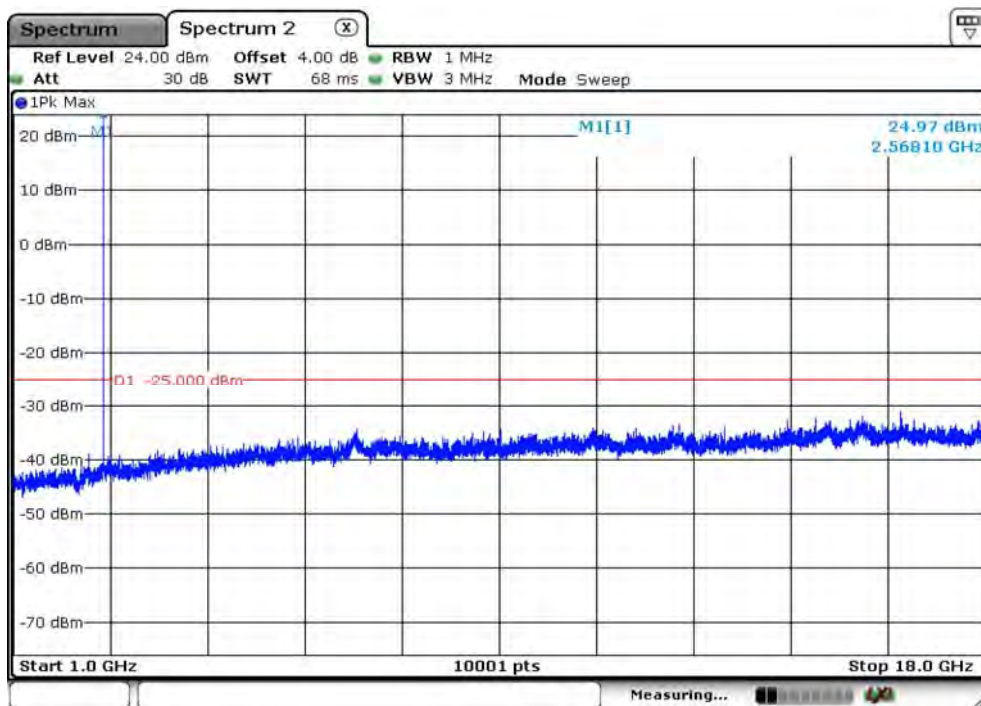
Date: 26.AUG.2020 16:34:54

B7_CH21425_5M_1RB12_QPSK_Below 1G



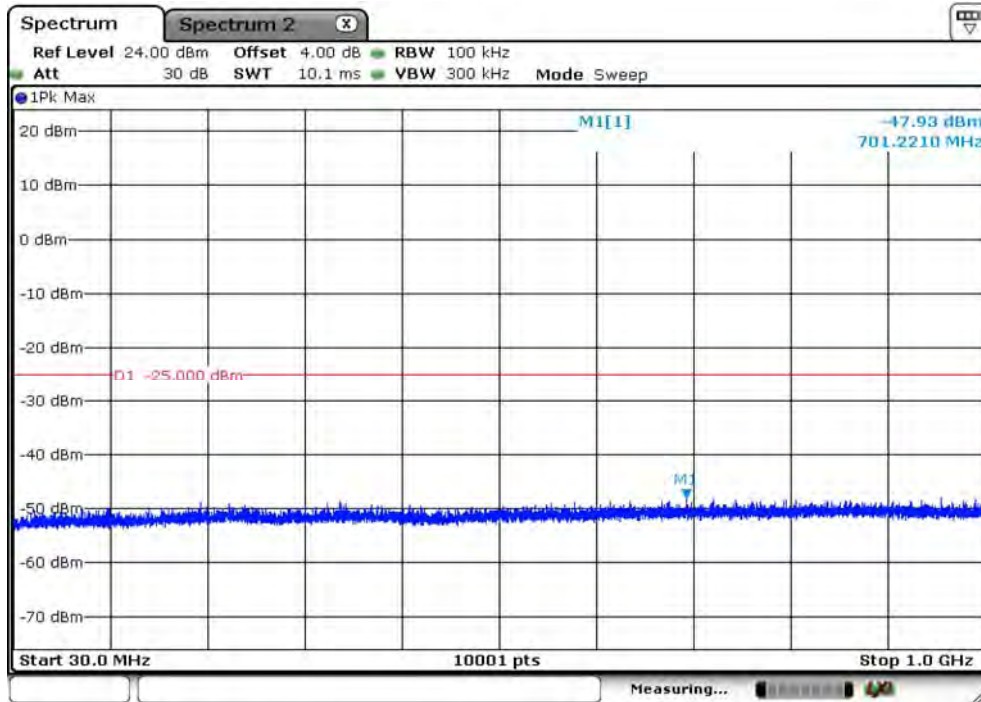
Date: 26.AUG.2020 14:57:38

B7_CH21425_5M_1RB12_QPSK_Above 1G

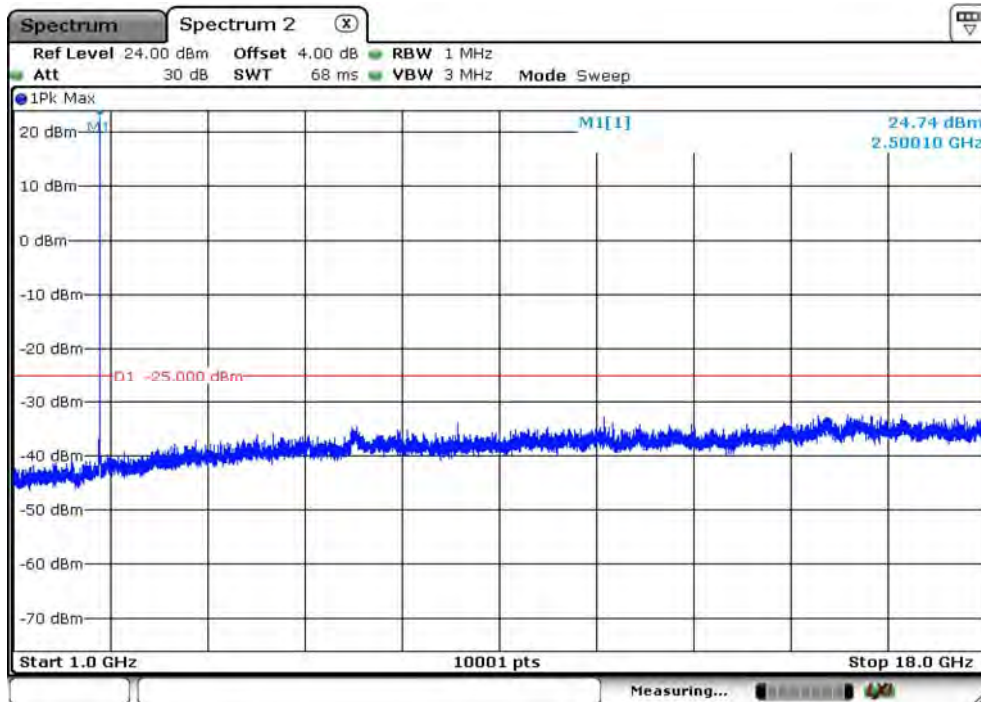


Date: 26.AUG.2020 16:33:34

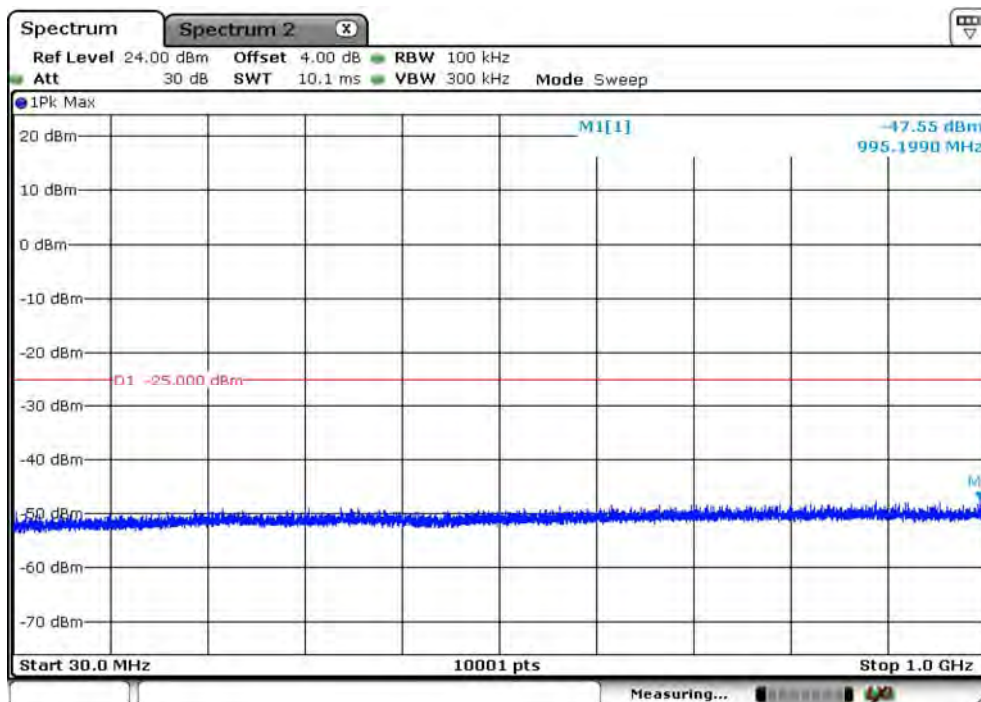
B7_CH20800_10M_1RB0_QPSK_Below 1G



B7_CH20800_10M_1RB0_QPSK_Above 1G

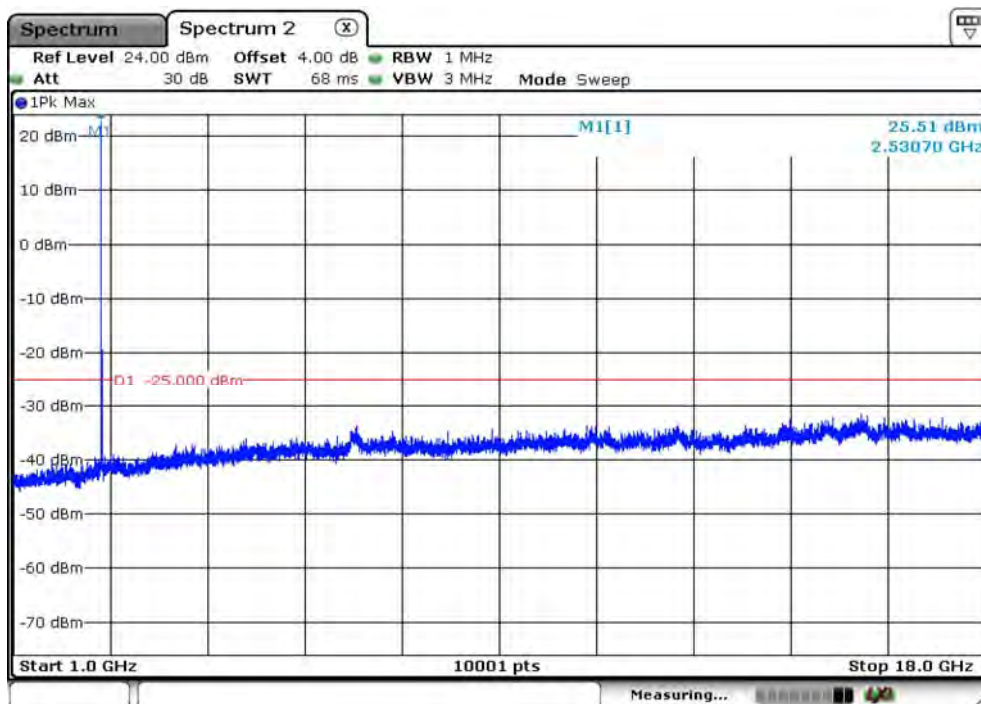


B7_CH21100_10M_1RB0_QPSK_Below 1G



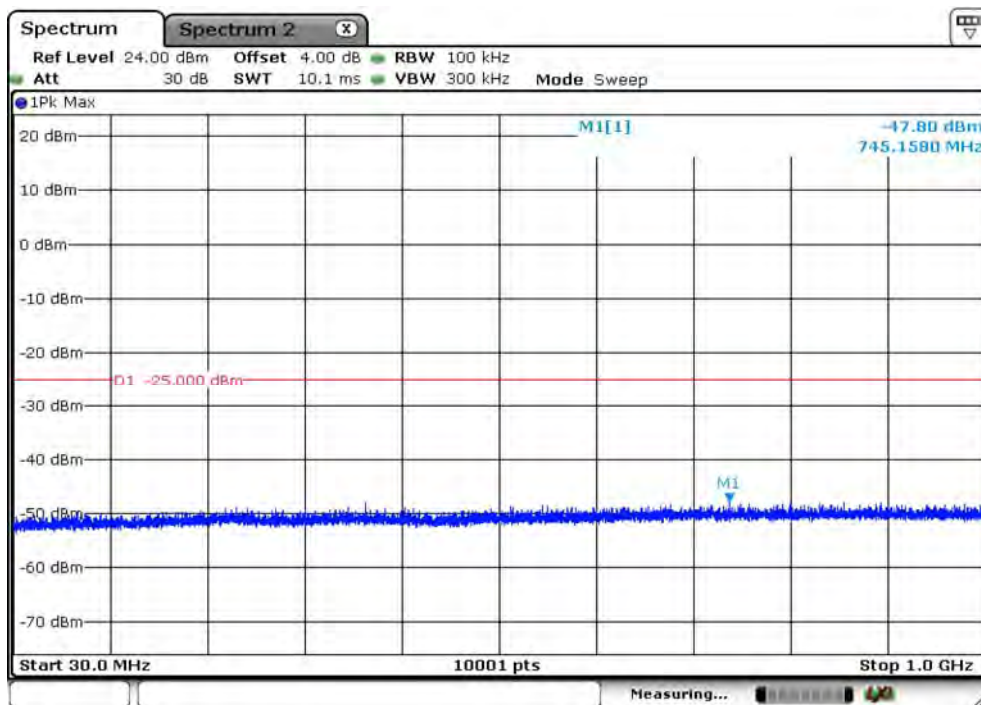
Date: 26.AUG.2020 15:15:10

B7_CH21100_10M_1RB0_QPSK_Above 1G



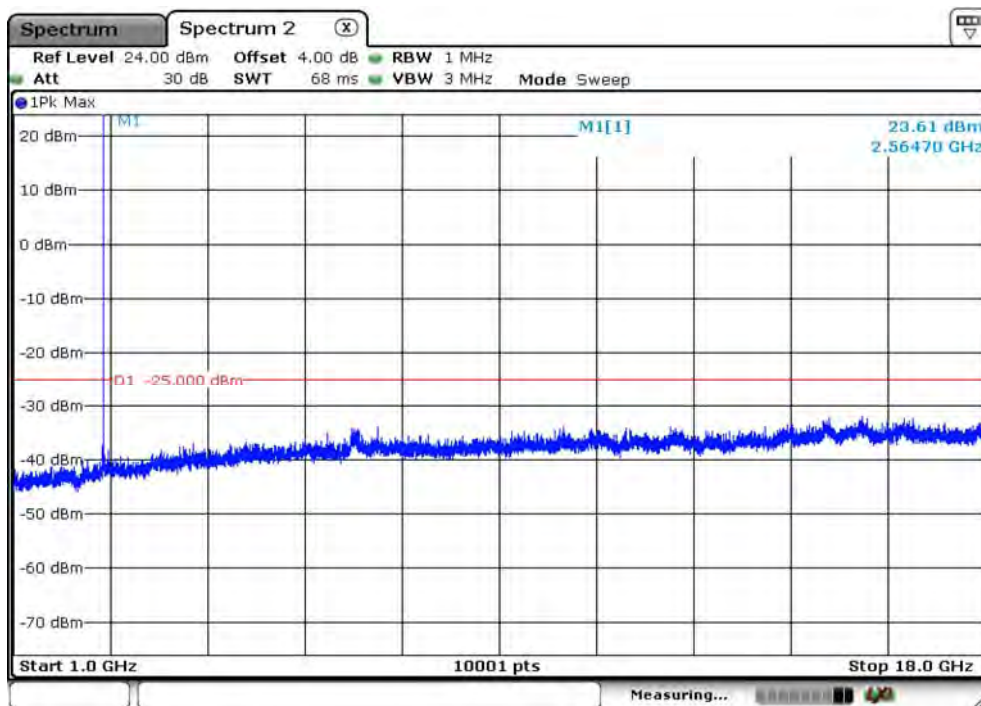
Date: 26.AUG.2020 16:30:57

B7_CH21400_10M_1RB24_QPSK_Below 1G



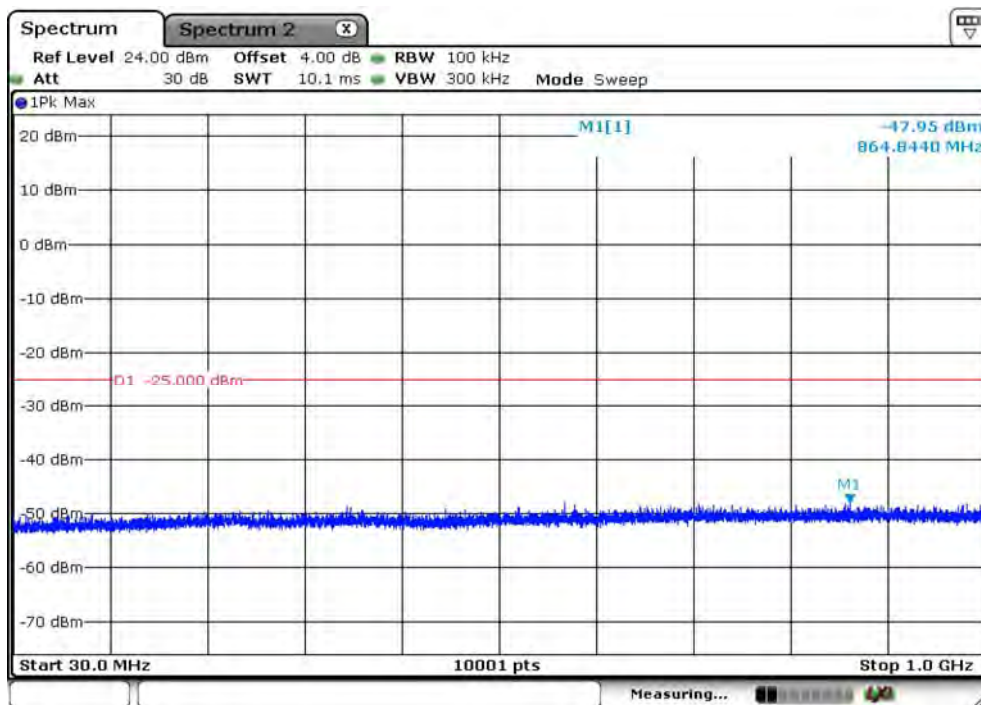
Date: 26.AUG.2020 15:26:02

B7_CH21400_10M_1RB24_QPSK_Above 1G



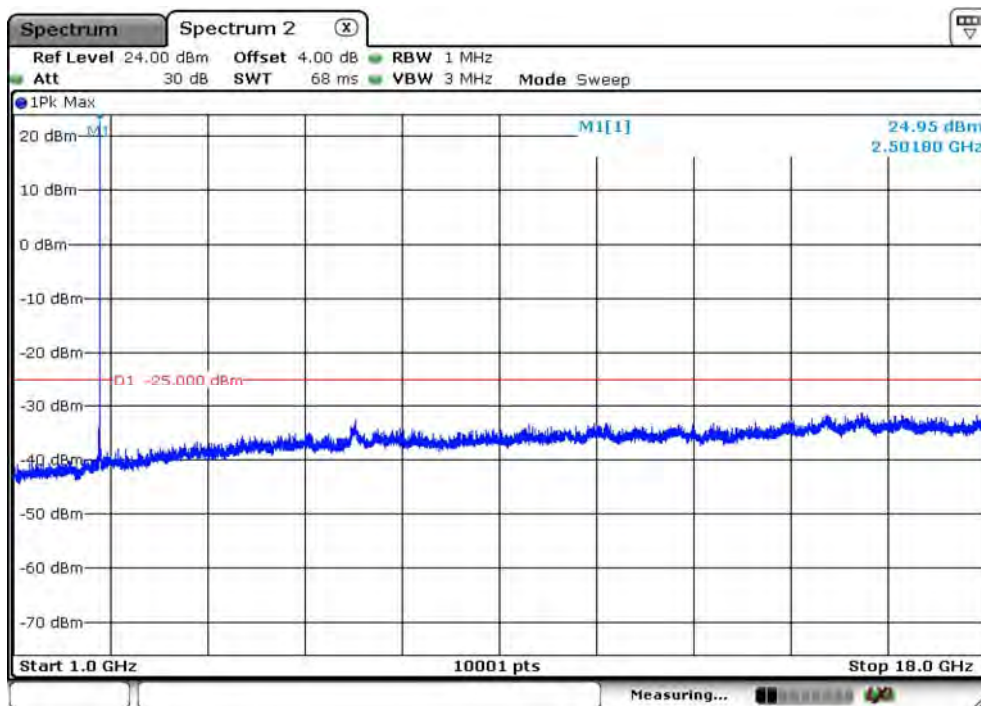
Date: 26.AUG.2020 16:32:19

B7_CH20825_15M_1RB0_QPSK_Below 1G



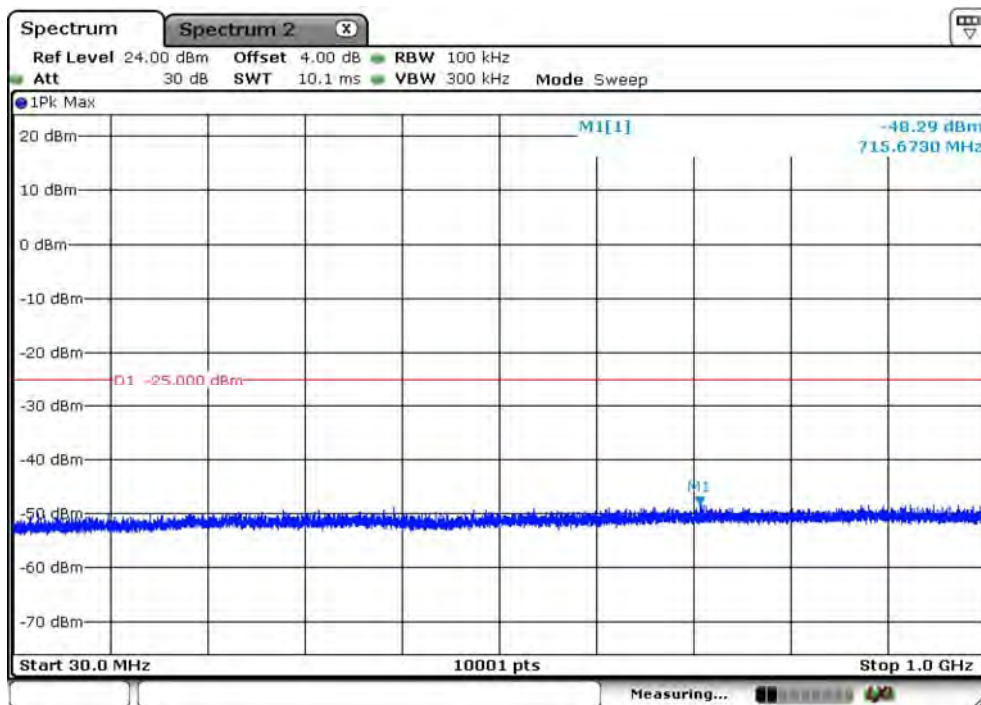
Date: 26.AUG.2020 15:29:01

B7_CH20825_15M_1RB0_QPSK_Above 1G



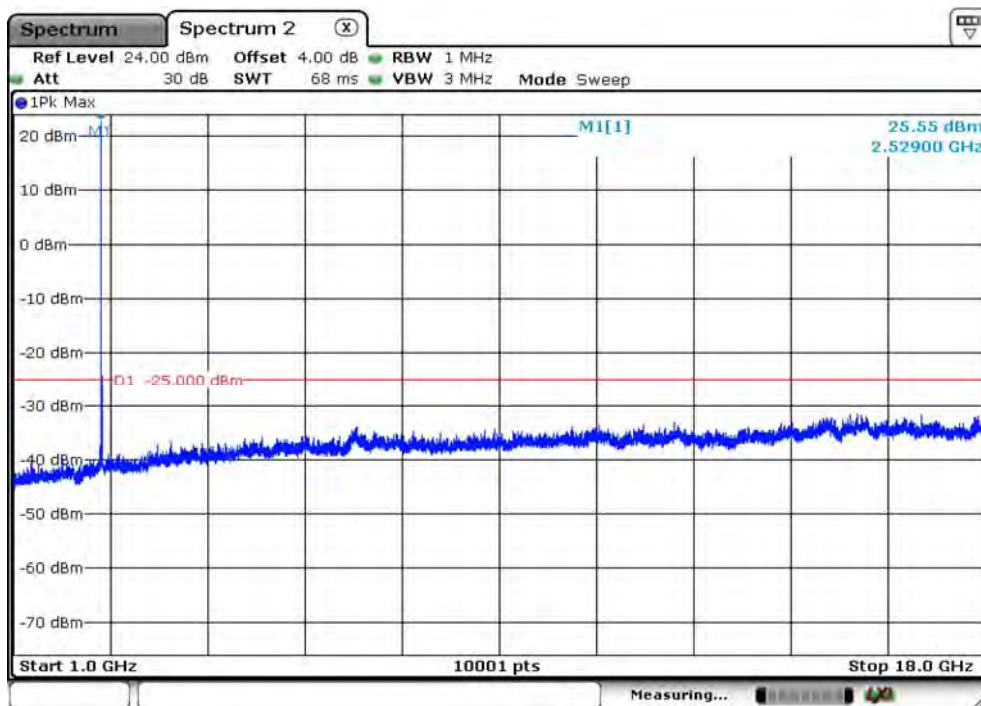
Date: 26.AUG.2020 16:38:13

B7_CH21100_15M_1RB0_QPSK_Below 1G



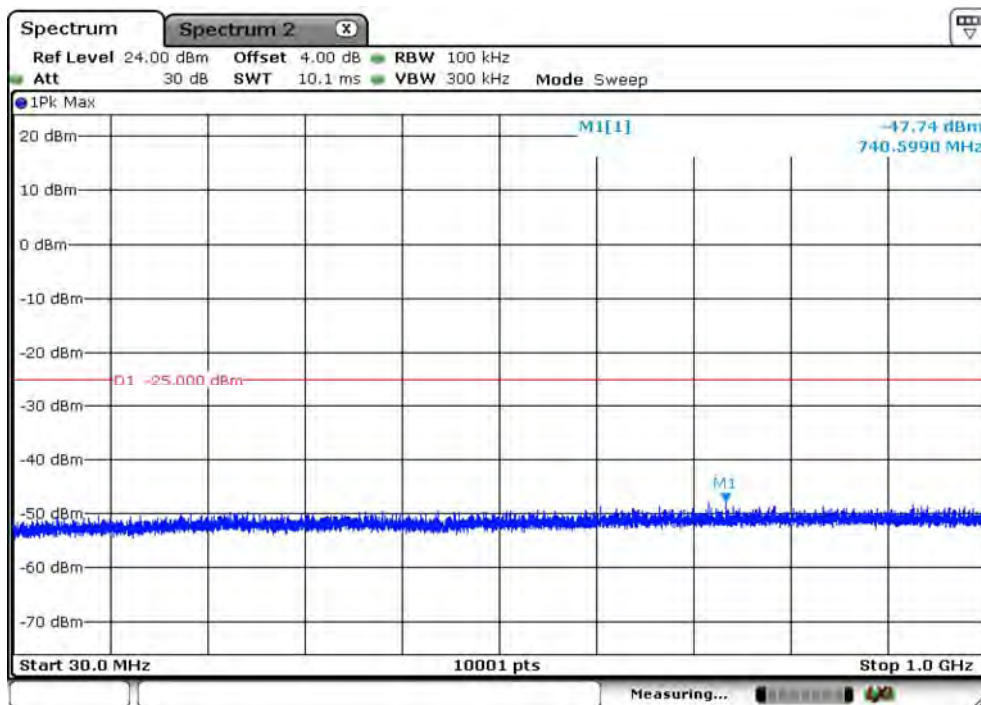
Date: 26.AUG.2020 15:36:46

B7_CH21100_15M_1RB0_QPSK_Above 1G

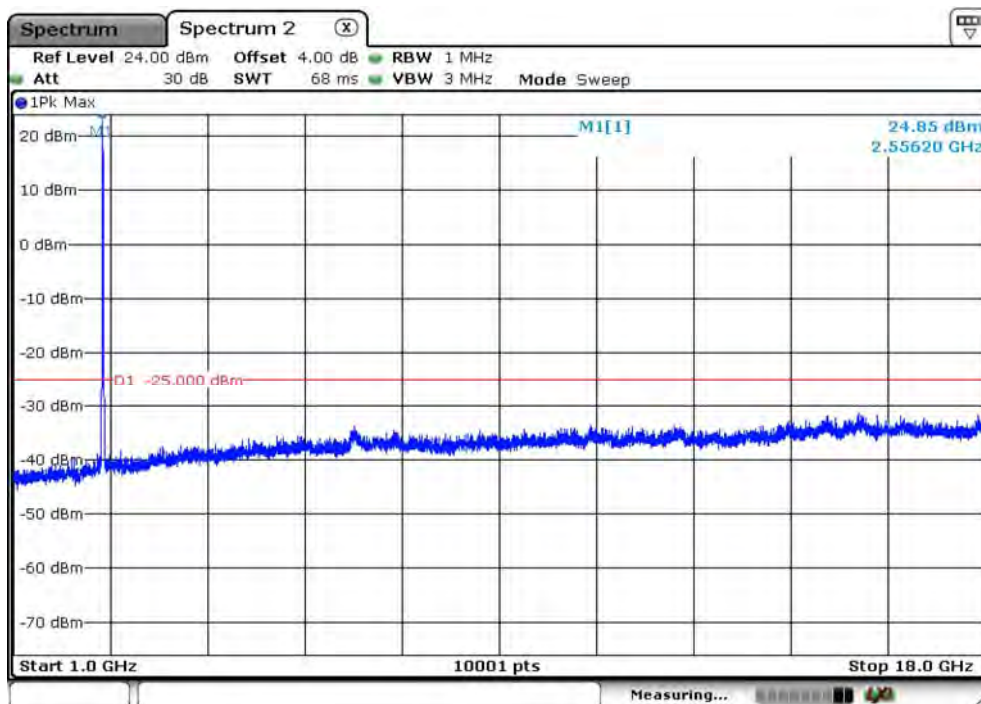


Date: 26.AUG.2020 16:35:58

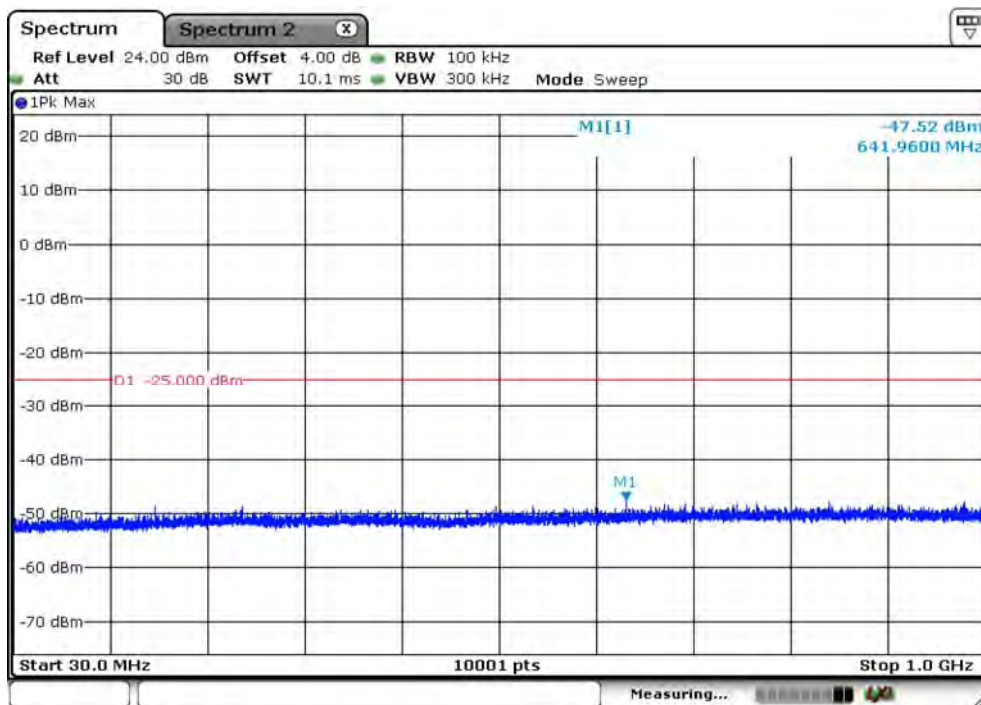
B7_CH21375_15M_1RB0_QPSK_Below 1G



B7_CH21375_15M_1RB0_QPSK_Above 1G

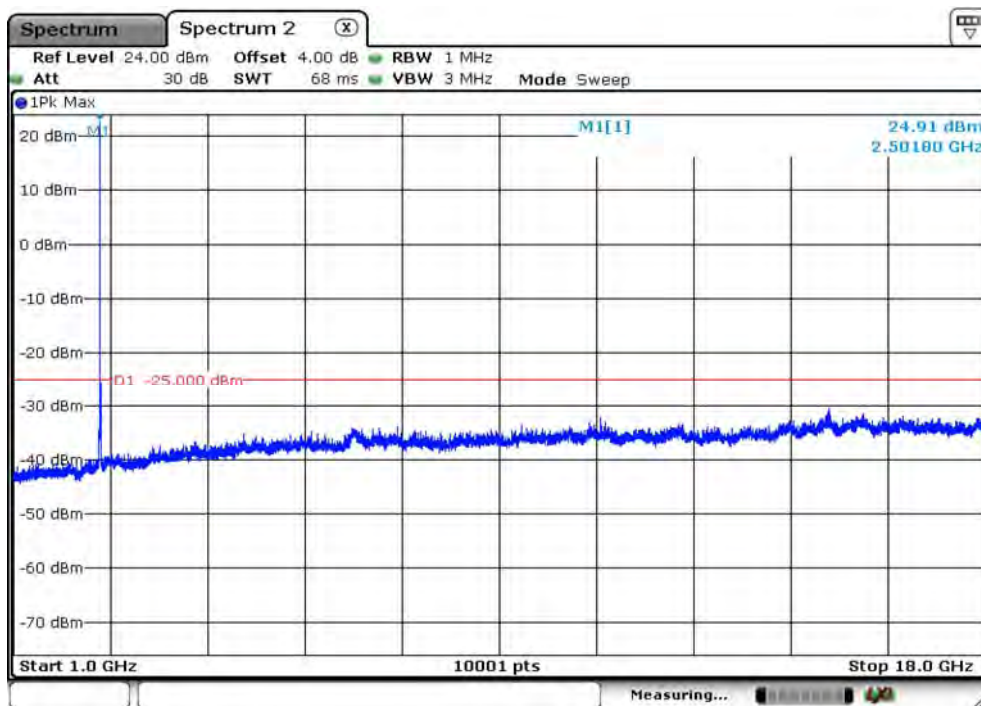


B7_CH20850_20M_1RB0_QPSK_Below 1G



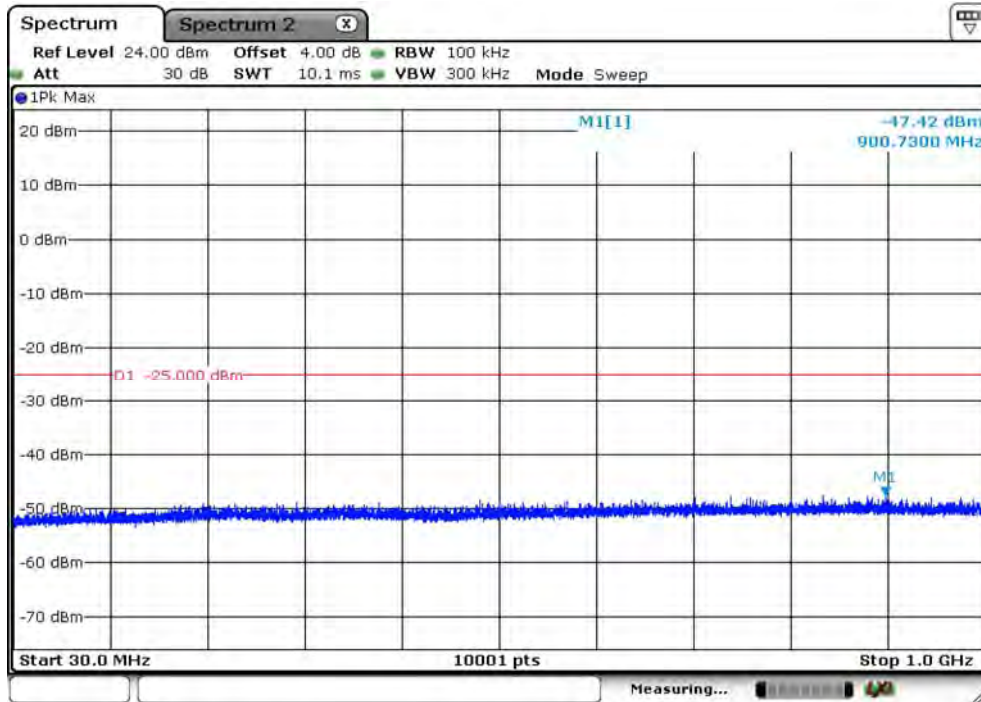
Date: 26.AUG.2020 16:07:33

B7_CH20850_20M_1RB0_QPSK_Above 1G



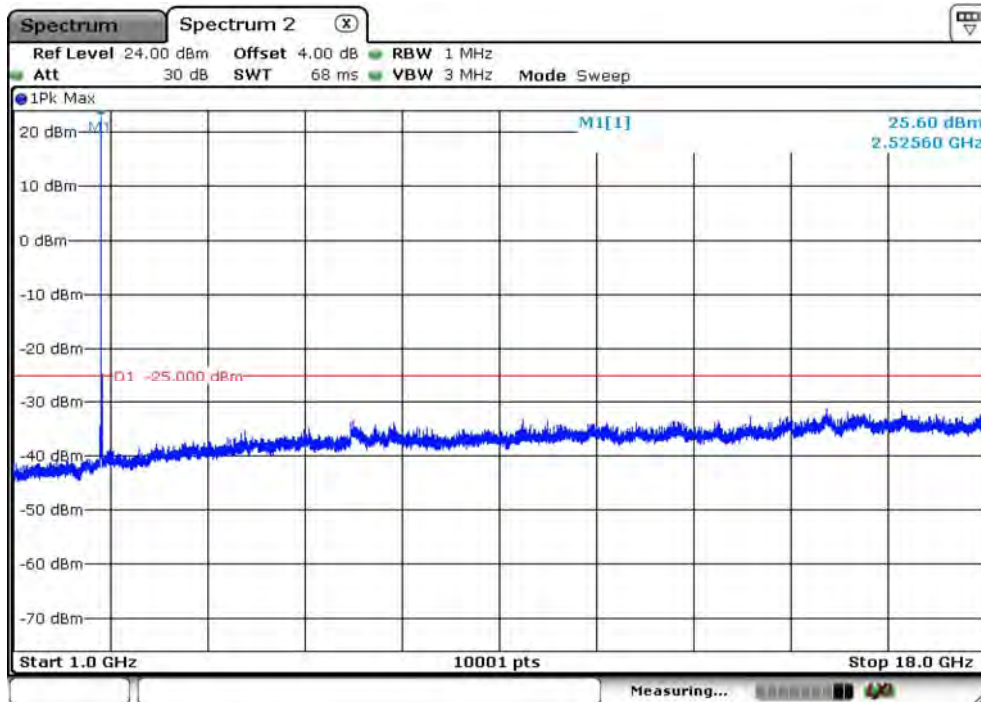
Date: 26.AUG.2020 16:42:53

B7_CH21100_20M_1RB0_QPSK_Below 1G



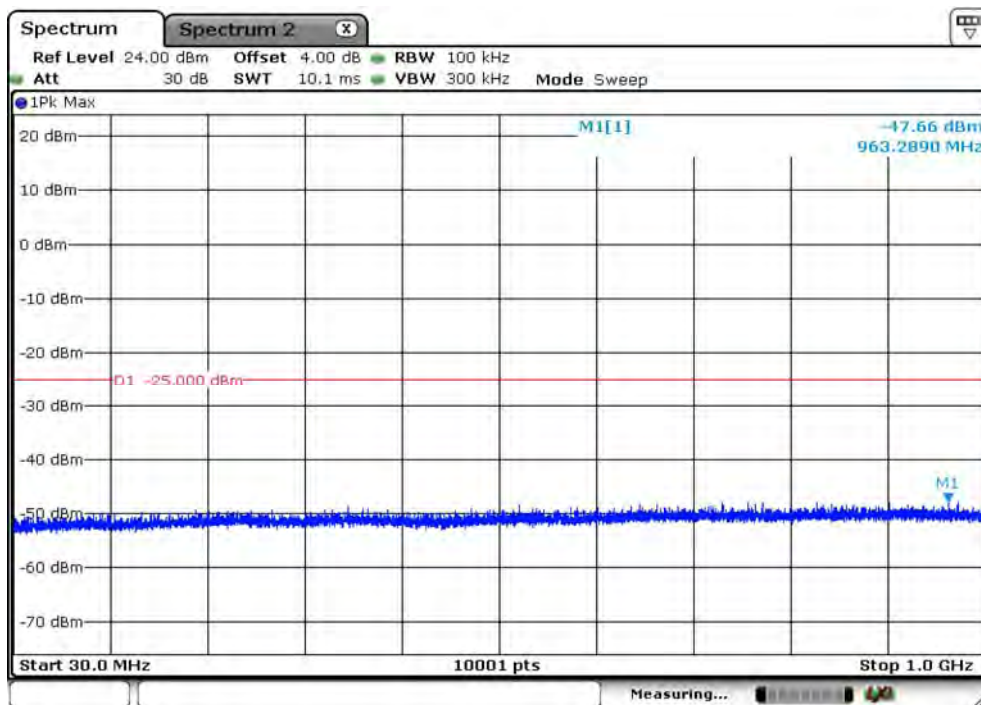
Date: 26.AUG.2020 16:14:48

B7_CH21100_20M_1RB0_QPSK_Above 1G



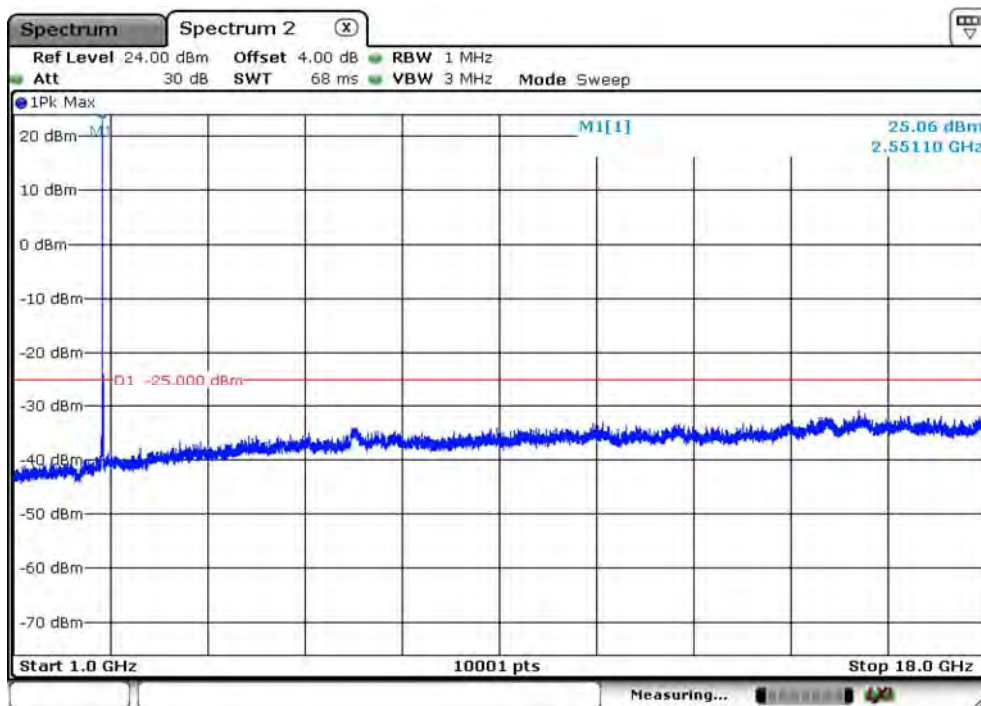
Date: 26.AUG.2020 16:43:49

B7_CH21350_20M_1RB0_QPSK_Below 1G



Date: 26.AUG.2020 16:17:18

B7_CH21350_20M_1RB0_QPSK_Above 1G



Date: 26.AUG.2020 16:45:25