



FCC ID: M82-AIM75L
Report No.: T201102D09-RP12

IC: 9404A-AIM75L

Page: 1 / 111
Rev.: 00

**FCC 47 CFR PART 24 SUBPART E
+
INDUSTRY CANADA RSS-133**

TEST REPORT

For

Tablet PC

Model No.:

**FCC: AIM-75S-6; AIM-75H-6; AIM-75S-6XXXXXXXXXXXXXXXXXX;
AIM-75H-6XXXXXXXXXXXXXXXXXX; AIM75S-6XXXXXXXXXXXXXXXXXX;
AIM75H-6XXXXXXXXXXXXXXXXXX (where "X" may be any alphanumeric
character, "-" or blank)**

IC: AIM-75S-6; AIM-75H-6

Trade Name: ADVANTECH

Issued to

Advantech Co., Ltd.

**No. 1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 114, Taiwan,
R.O.C.**

Issued by

Compliance Certification Services Inc.

Wugu Laboratory

**No.11, Wugong 6th Rd., Wugu Dist.,
New Taipei City 24891, Taiwan. (R.O.C.)**

Issued Date: September 7, 2021

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.
除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部分複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.



Report No.: T201102D09-RP12

Page: 2 / 111

Rev.: 00

Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	September 7, 2021	Initial Issue	ALL	Doris Chu



TABLE OF CONTENTS

1. TEST RESULT CERTIFICATION.....	4
2. EUT DESCRIPTION.....	6
3. TEST METHODOLOGY.....	9
3.1 EUT CONFIGURATION	9
3.2 DESCRIPTION OF TEST MODES	9
4. TEST SUMMARY.....	11
5. INSTRUMENT CALIBRATION.....	12
5.1 MEASURING INSTRUMENT CALIBRATION	12
5.2 MEASUREMENT EQUIPMENT USED	12
5.3 MEASUREMENT UNCERTAINTY	14
6. FACILITIES AND ACCREDITATIONS.....	15
6.1 FACILITIES.....	15
6.2 EQUIPMENT.....	15
6.3 LABORATORY ACCREDITATIONS AND LISTING	15
7. SETUP OF EQUIPMENT UNDER TEST.....	16
7.1 SETUP CONFIGURATION OF EUT	16
7.2 SUPPORT EQUIPMENT	16
8. FCC PART 24 REQUIREMENTS & INDUSTRY CANADA RSS-133.....	17
8.1 EIRP MEASUREMENT	17
8.2 FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT	24
8.3 OCCUPIED BANDWIDTH MEASUREMENT	26
8.4 PEAK TO AVERAGE POWER RATIO	65
8.5 OUT OF BAND EMISSION AT ANTENNA TERMINALS	79
8.6 SPURIOUS RADIATION MEASUREMENT	104
9. APPENDIX A PHOTOGRAPHS OF TEST SETUP	A-1
APPENDIX 1 - PHOTOGRAPHS OF EUT	



Report No.: T201102D09-RP12

Page: 4 / 111

Rev.: 00

1. TEST RESULT CERTIFICATION

Applicant: Advantech Co., Ltd.
No. 1, Alley 20, Lane 26, Rueiguang Road, Neihu District,
Taipei 114, Taiwan, R.O.C.

Manufacturer: Advantech Co., Ltd.
No. 1, Alley 20, Lane 26, Rueiguang Road, Neihu District,
Taipei 114, Taiwan, R.O.C.

Equipment Under Test: Tablet PC

Trade Name: ADVANTECH

Model No.: FCC: AIM-75S-6; AIM-75H-6;
AIM-75S-6XXXXXXXXXXXXXXXXXX;
AIM-75H-6XXXXXXXXXXXXXXXXXX;
AIM75S-6XXXXXXXXXXXXXXXXXX;
AIM75H-6XXXXXXXXXXXXXXXXXX (where "X" may be any
alphanumeric character, "-" or blank)
IC: AIM-75S-6; AIM-75H-6

Date of Test: December 14, 2020 ~ August 26, 2021



Report No.: T201102D09-RP12

Page: 5 / 111

Rev.: 00

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
FCC 47 CFR PART 24 SUBPART E + RSS-133 Issue 6	No non-compliance noted
Statements of Conformity	
Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.	

We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.26:2015 and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rule FCC PART 24 Subpart E and IC RSS-133 Issue 6.

Approved by:

Kevin Tsai
Deputy Manager
Compliance Certification Services Inc.



Report No.: T201102D09-RP12

Page: 6 / 111

Rev.: 00

2. EUT DESCRIPTION

Product	Tablet PC
Model No.	FCC: AIM-75S-6; AIM-75H-6; AIM-75S-6XXXXXXXXXXXXXXXXXX; AIM-75H-6XXXXXXXXXXXXXXXXXX; AIM75S-6XXXXXXXXXXXXXXXXXX; AIM75H-6XXXXXXXXXXXXXXXXXX (where "X" may be any alphanumeric character, "-" or blank) IC: AIM-75S-6; AIM-75H-6
Model Discrepancy	Please see remark as below.
Trade	ADVANTECH
Received Date	November 2, 2020
Power Supply	1. EUT Power by Adapter. (1) FSP / FSP045-A1BR I/P: 100-240Vac, 50-60Hz, 1.2A O/P: 5Vdc, 3.0A, 15.0W; 9.0Vdc, 3.0A, 27.0W; 12.0Vdc, 3.0A, 36.0W; 15.0Vdc, 3.0A, 45.0W; 20.0Vdc, 2.25A, 45.0W (2) GlobTek, Inc / GTM96605-GEN2-A1-T2 I/P: 100-240Vac, 50-60Hz, 1.5A O/P: 5Vdc, 4.6A; 5.8Vdc, 4.6A; 9Vdc, 4.4A; 12Vdc, 4A; 15Vdc, 3.6A; 20Vdc, 3A (3) DELTA / MEA-045AA2C I/P: 100-240V~1.0A Max. 50-60Hz O/P: 5VDC, 3A; 9VDC, 3A; 10VDC, 3A; 12VDC, 3A; 15VDC, 3A; 20VDC, 2.25A 2. EUT Power by Rechargeable Li-ion Battery. ADVANTECH / AIM-BAT-8 Rating: 3.8Vdc, 4900mAh, 18.62Wh

Frequency Range	LTE Band 25 Channel Bandwidth: 1.4MHz	1850.7 MHz ~1914.3 MHz
	LTE Band 25 Channel Bandwidth: 3MHz	1851.5 MHz ~ 1913.5 MHz
	LTE Band 25 Channel Bandwidth: 5MHz	1852.5 MHz ~1912.5 MHz
	LTE Band 25 Channel Bandwidth: 10MHz	1855.0 MHz ~1910.0 MHz
	LTE Band 25 Channel Bandwidth: 15MHz	1857.5 MHz ~ 1907.5 MHz
	LTE Band 25 Channel Bandwidth: 20MHz	1860.0 MHz ~1905.0 MHz
Modulation Technique	LTE Band 25	QPSK, 16QAM, 64QAM
Transmit Power (EIRP Power)	LTE Band 25 Channel Bandwidth: 1.4MHz	QPSK: 24.70 dBm 16QAM: 23.90 dBm 64QAM: 23.77 dBm
	LTE Band 25 Channel Bandwidth: 3MHz	QPSK: 24.71 dBm 16QAM: 23.91 dBm 64QAM: 24.00 dBm
	LTE Band 25 Channel Bandwidth: 5MHz	QPSK: 24.76 dBm 16QAM: 23.96 dBm 64QAM: 23.64 dBm
	LTE Band 25 Channel Bandwidth: 10MHz	QPSK: 24.84 dBm 16QAM: 23.98 dBm 64QAM: 23.97 dBm
	LTE Band 25 Channel Bandwidth: 15MHz	QPSK: 24.79 dBm 16QAM: 23.99 dBm 64QAM: 24.10 dBm
	LTE Band 25 Channel Bandwidth: 20MHz	QPSK: 24.82 dBm 16QAM: 24.02 dBm 64QAM: 24.00 dBm



Report No.: T201102D09-RP12

Page: 8 / 111

Rev.: 00

Antenna Specification	Antenna type: PIFA 1. YAGEO / 6036B0281601 / Main (TX) Band 25: 2.14 dBi 2. YAGEO / 6036B0281701 / Aux Band 25: 0.76 dBi
HW Version	AX2
SW Version	0.3.6.9_20201021.021551
EUT Serial #	200CT32E00162
Module	Quectel / EM06-A

Remark:

1. For more details, refer to the User's manual of the EUT.
2. Disclaimer: Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.
3. Disclaimer: Variant information between/among model numbers / trademarks are provided by the applicant, test results of this report are applicable to the sample EUT received of main test model name.
4. Model Discrepancy:

Model	Adapter	Tablet color
AIM-75H-6	1. GlobTek, Inc / GTM96605-GEN2-A1-T2 I/P: 100-240VAC, 50-60Hz, 1.5A O/P: 5VDC, 4.6A; 5.8VDC, 4.6A; 9VDC, 4.4A; 12VDC, 4A; 15VDC, 3.6A; 20VDC, 3A 2. DELTA / MEA-045AA2C IP: 100-240V~1.0A Max. 50-60Hz O/P: 5VDC, 3A; 9VDC, 3A; 10VDC, 3A; 12VDC, 3A; 15VDC, 3A; 20VDC, 2.25A	White
AIM-75S-6	1. FSP / FSP045-A1BR I/P: 100-240VAC, 50-60Hz, 1.2A O/P: 5.0VDC, 3.0A 15.0W; 9.0VDC, 3.0A 27.0W; 12.0VDC, 3.0A 36.0W; 15.0VDC, 3.0A 45.0W; 20.0VDC, 2.25A 45.0W	Black
AIM-75S-6XXXXXXXXXXXXXXXXXX; AIM-75H-6XXXXXXXXXXXXXXXXXX; AIM75S-6XXXXXXXXXXXXXXXXXX; AIM75H-6XXXXXXXXXXXXXXXXXX (where "X" may be any alphanumeric character, "-" or blank)	All the above models are identical except for the designation of model numbers. The suffix of (where "X" may be any alphanumeric character, "-" or blank) on model number is just for marketing purpose only.	

3. TEST METHODOLOGY

Both conducted and radiated testing were performed according to FCC CFR 47, Part 2 and Part 24 Subpart E.

The tests documented in this report were performed in accordance with IC RSS-133 and ANSI C63.26: 2015.

3.1 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

3.2 DESCRIPTION OF TEST MODES

The EUT (Model: AIM-75S-6) had been tested under operating condition.
The EUT be set in maximum power transmission via call box during testing.

LTE Band 25: 1850 MHz ~ 1915MHz

Three channels had been tested for each channel bandwidth.

Channel Bandwidth	1.4MHz		3MHz		5MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low channel (L)	26047	1850.7	26055	1851.5	26065	1852.5
Middle channel (M)	26365	1882.5	26365	1882.5	26365	1882.5
High channel (H)	26683	1914.3	26675	1913.5	26665	1912.5

Channel Bandwidth	10MHz		15MHz		20MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low channel (L)	26090	1855.0	26115	1857.5	26140	1860.0
Middle channel (M)	26365	1882.5	26365	1882.5	26365	1882.5
High channel (H)	26640	1910.0	26615	1907.5	26590	1905.0

3.2.1 The worst mode of measurement

Radiated Emission Measurement Above 1G	
Test Condition	Radiated Emission Above 1G
Power supply Mode	Mode 1: EUT power by Adapter. (GlobTek) Mode 2: EUT power by Adapter. (FSP) Mode 3: EUT power by Adapter. (DELTA) Mode 4: EUT power by Battery
Worst Mode	☐ Mode 1 ☒ Mode 2 ☐ Mode 3 ☐ Mode 4
Worst Position	☐ Placed in fixed position. ☒ Placed in fixed position at X-Plane (E2-Plane) ☐ Placed in fixed position at Y-Plane (E1-Plane) ☐ Placed in fixed position at Z-Plane (H-Plane)

Radiated Emission Measurement Below 1G	
Test Condition	Radiated Emission Below 1G
Power supply Mode	Mode 1: EUT power by Adapter. (GlobTek) Mode 2: EUT power by Adapter. (FSP) Mode 3: EUT power by Adapter. (DELTA) Mode 4: EUT power by Battery
Worst Mode	☐ Mode 1 ☒ Mode 2 ☐ Mode 3 ☐ Mode 4

Remark:

1. The worst mode was record in this test report.
2. EUT pre-scanned in three axis ,X,Y, Z and two polarity, for radiated measurement. The worst case(X-Plane) were recorded in this report



Report No.: T201102D09-RP12

Page: 11 / 111

Rev.: 00

4. TEST SUMMARY

FCC Standard Sec.	IC Standard Sec.	Report Section	Test Item	Result
-	-	2	Antenna Requirement	Pass
24.232(c)	RSS-133, section 6.4	8.1	EIRP Measurement	Pass
24.235	RSS-133 section 6.3	8.2	Frequency Stability v.s. temperature measurement	Pass
2.1049	RSS-GEN 6.7	8.3	Occupied Bandwidth Measurement	Pass
24.232(d)	RSS-133, section 6.4	8.4	Peak to Average Ratio	Pass
24.238(a)	RSS-133 section 6.5	8.5	Out of Band Emission at Antenna Terminals	Pass
24.238(a)	RSS-133 section 6.5	8.6	Spurious Radiation Measurement	Pass

5. INSTRUMENT CALIBRATION

5.1 MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

5.2 MEASUREMENT EQUIPMENT USED

Equipment Used for Emissions Measurement

Remark: Each piece of equipment is scheduled for calibration once a year.

RF Conducted Test Site					
Equipment	Manufacturer	Model	S/N	Cal Date	Cal Due
Coaxial Cable	Woken	WC12	CC003	06/29/2020	06/28/2021
Power Divider	Solvang Technology	STI08-0015	008	08/05/2020	08/04/2021
Radio Communication Analyzer	Anritsu	MT-8820C	6201240043	07/17/2020	07/16/2021
Thermostatic/Humidity Chamber	TAICHY	MHG-150LF	930619	09/24/2020	09/23/2021
EXA Signal Analyzer	KEYSIGHT	N9010B	MY55460167	09/07/2020	09/06/2021
Software	N/A				

Test date for August 26, 2021

RF Conducted Test Site					
Equipment	Manufacturer	Model	S/N	Cal Date	Cal Due
Coaxial Cable	Woken	WC12	CC003	06/28/2021	06/27/2022
Coaxial Cable	Woken	WC12	CC001	06/28/2021	06/27/2022
Power Divider	Solvang Technology	STI08-0015	008	07/26/2021	07/25/2022
Thermostatic/Humidity Chamber	TAICHY	MHG-150LF	930619	09/24/2020	09/23/2021
EXA Signal Analyzer	KEYSIGHT	N9010B	MY55460167	09/07/2020	09/06/2021
Wideband Radio Communication Tester	R&S	CMW 500	116875	07/06/2021	07/05/2022
Software	E3 6.11-20180413 & Radio Test Software Ver.21 & LTE Measurement_Power-Ver. 21				

3M 966 Chamber Test Site					
Equipment	Manufacturer	Model	S/N	Cal Date	Cal Due
Band Reject Filters	MICRO TRONICS	BRM 50702	120	02/25/2020	02/24/2021
Bilog Antenna	Sunol Sciences	JB3	A030105	07/24/2020	07/23/2021
Coaxial Cable	HUBER SUHNER	SUCOFLEX 104PEA	20995	02/25/2020	02/24/2021
Coaxial Cable	EMCI	EMC105	190914+327109/4	09/19/2020	09/18/2021
Digital Thermo-Hygro Meter	WISEWIND	1206	D07	01/15/2020	01/14/2021
double Ridged Guide Horn Antenna	ETC	MCTD 1209	DRH13M02003	09/30/2020	09/29/2021
Loop Ant	COM-POWER	AL-130	121051	03/27/2020	03/26/2021
Pre-Amplifier	EMEC	EM330	060609	02/25/2020	02/24/2021
Pre-Amplifier	EMEC	EM01G26G	060570	06/29/2020	06/28/2021
PSA Series Spectrum Analyzer	Agilent	E4446A	MY46180323	07/24/2020	07/23/2021
S.G.	Agilent	E8257C	US42340383	07/21/2020	07/20/2021
Bilog Antenna	Sunol Sciences	JB1	A052609	07/24/2020	07/23/2021
Horn Antenna	ETS LINDGREN	3117	00055165	07/22/2020	07/21/2021
Horn Antenna	EMCO	3116	2487	05/11/2020	05/10/2021
Horn Antenna	ETS LINDGREN	3116	00026370	12/11/2020	12/10/2021
K Type Cable	Huber+Suhner	SUCOFLEX 102	29406/2	12/09/2020	12/08/2021
K Type Cable	Huber+Suhner	SUCOFLEX 102	22470/2	12/09/2020	12/08/2021
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Software	e3 6.11-20180413				

5.3 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
AC Powerline Conducted Emission	+/- 1.2575
Emission bandwidth, 20dB bandwidth	+/- 0.0014
RF output power, conducted	+/- 1.14
Power density, conducted	+/- 1.40
3M Semi Anechoic Chamber / 30M~200M	+/- 4.12
3M Semi Anechoic Chamber / 200M~1000M	+/- 4.68
3M Semi Anechoic Chamber / 1G~8G	+/- 5.18
3M Semi Anechoic Chamber / 8G~18G	+/- 5.47
3M Semi Anechoic Chamber / 18G~26G	+/- 3.81
3M Semi Anechoic Chamber / 26G~40G	+/- 3.87

Remark: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.



Report No.: T201102D09-RP12

Page: 15 / 111

Rev.: 00

6. FACILITIES AND ACCREDITATIONS

6.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

☐ No.199, Chunghsen Road, Hsintien City, Taipei Hsien, Taiwan, R.O.C.

Tel: 886-2-2217-0894 / Fax: 886-2-2217-1029

☒ No.11, Wugong 6th Rd., Wugu Dist., New Taipei City 24891, Taiwan. (R.O.C.)

Tel: 886-2-2299-9720 / Fax: 886-2-2298-4045

Canada Regisreation number: 2324G

The lab has been recognized as the FCC accredited lad under the KDB 974614 D01 and is listed in the FCC pubic Access Link (PAL) database, FCC Registration No. :444940, the FCC Designation No.:TW1309

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10: 2013 and CISPR Publication 22.

6.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

6.3 LABORATORY ACCREDITATIONS AND LISTING

The test facilities used to perform radiated and conducted emissions tests are accredited by American Association for Laboratory Accreditation Program for the specific scope accreditation under Lab Code: 0824-01 to perform Electromagnetic Interference tests according to FCC Part 15 and CISPR 22 requirements. In addition, the test facilities are listed with Industry Canada, Certification and Engineering Bureau, IC 2324G-1 for 3M Semi Anechoic Chamber A, 2324G-2 for 3M Semi Anechoic Chamber B.



Report No.: T201102D09-RP12

Page: 16 / 111

Rev.: 00

7. SETUP OF EQUIPMENT UNDER TEST

7.1 SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix II for the actual connections between EUT and support equipment.

7.2 SUPPORT EQUIPMENT

No	Equipment	Brand	Model	Series No.	FCC ID	IC
1	NB(J)	TOSHIBA	PT345T-00L002	N/A	PD97260H	1000M-7260H

Remark:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.



Report No.: T201102D09-RP12

Page: 17 / 111

Rev.: 00

8. FCC PART 24 REQUIREMENTS & INDUSTRY CANADA RSS-133

8.1 EIRP MEASUREMENT

LIMIT

According to FCC §2.1046

FCC 24.232(b):

The equivalent Isotropic Radiated Power (EIRP) must not exceed 2 Watts.

According to RSS-133, section 6.4

The equivalent isotropically radiated power (e.i.r.p.) for transmitters shall not exceed the limits given in SRSP-510. Moreover, base station transmitters operating in the band 1930-1995 MHz shall not have output power exceeding 2 watts.

TEST PROCEDURES

CONDUCTED POWER MEASUREMENT:

1. The transmitter output power was connected to the call box.
2. Set EUT at maximum output power via call box.
3. Set Call box at lowest, middle and highest channels for each band and modulation.

TEST RESULTS

No non-compliance noted.

Report No.: T201102D09-RP12

Temperature: 25°C

Humidity: 57% RH

Tested by: Jerry Chang

Test Date: May 25, 2021

LTE Band 25

LTE Band 25_Uplink frequency band : 1850 to 1915 MHz											
BW (MHz)	RB Size	RB Offset	Conducted power(dBm)								
			QPSK			16QAM			64QAM		
			CH-Low 26047	CH-Mid 26365	CH-High 26683	CH-Low 26047	CH-Mid 26365	CH-High 26683	CH-Low 26047	CH-Mid 26365	CH-High 26683
			1850.7 MHz	1882.5 MHz	1914.3 MHz	1850.7 MHz	1882.5 MHz	1914.3 MHz	1850.7 MHz	1882.5 MHz	1914.3 MHz
1.4	1	0	22.56	22.43	22.2	21.76	21.57	21.33	21.17	21.61	21.08
	1	5	22.26	22.17	22.19	21.42	21.29	21.25	21.02	21.63	21.21
	3	2	22.34	22.36	22.12	21.35	21.31	21.11	21.21	21.52	21.13
	6	0	21.71	21.53	21.45	20.49	20.27	20.09	20.14	20.43	20.09

LTE Band 25_Uplink frequency band : 1850 to 1915 MHz											
BW (MHz)	RB Size	RB Offset	EIRP (dBm)								
			QPSK			16QAM			64QAM		
			CH-Low 26047	CH-Mid 26365	CH-High 26683	CH-Low 26047	CH-Mid 26365	CH-High 26683	CH-Low 26047	CH-Mid 26365	CH-High 26683
			1850.7 MHz	1882.5 MHz	1914.3 MHz	1850.7 MHz	1882.5 MHz	1914.3 MHz	1850.7 MHz	1882.5 MHz	1914.3 MHz
1.4	1	0	24.7	24.57	24.34	23.9	23.71	23.47	23.31	23.75	23.22
	1	5	24.4	24.31	24.33	23.56	23.43	23.39	23.16	23.77	23.35
	3	2	24.48	24.5	24.26	23.49	23.45	23.25	23.35	23.66	23.27
	6	0	23.85	23.67	23.59	22.63	22.41	22.23	22.28	22.57	22.23

LTE Band 25_Uplink frequency band : 1850 to 1915 MHz											
BW (MHz)	RB Size	RB Offset	Conducted power(dBm)								
			QPSK			16QAM			64QAM		
			CH-Low 26055	CH-Mid 26365	CH-High 26675	CH-Low 26055	CH-Mid 26365	CH-High 26675	CH-Low 26055	CH-Mid 26365	CH-High 26675
			1851.5 MHz	1882.5 MHz	1913.5 MHz	1851.5 MHz	1882.5 MHz	1913.5 MHz	1851.5 MHz	1882.5 MHz	1913.5 MHz
3	1	0	22.57	22.44	22.22	21.77	21.58	21.35	21.82	21.86	21.49
	1	14	22.27	22.18	22.21	21.43	21.3	21.27	21.66	21.76	21.32
	8	4	21.5	21.38	21.17	20.77	20.32	20.06	20.98	20.8	20.29
	15	0	21.72	21.54	21.47	20.5	20.28	20.11	20.89	20.78	20.2

LTE Band 25_Uplink frequency band : 1850 to 1915 MHz											
BW (MHz)	RB Size	RB Offset	EIRP (dBm)								
			QPSK			16QAM			64QAM		
			CH-Low 26055	CH-Mid 26365	CH-High 26675	CH-Low 26055	CH-Mid 26365	CH-High 26675	CH-Low 26055	CH-Mid 26365	CH-High 26675
			1851.5 MHz	1882.5 MHz	1913.5 MHz	1851.5 MHz	1882.5 MHz	1913.5 MHz	1851.5 MHz	1882.5 MHz	1913.5 MHz
3	1	0	24.71	24.58	24.36	23.91	23.72	23.49	23.96	24	23.63
	1	14	24.41	24.32	24.35	23.57	23.44	23.41	23.8	23.9	23.46
	8	4	23.64	23.52	23.31	22.91	22.46	22.2	23.12	22.94	22.43
	15	0	23.86	23.68	23.61	22.64	22.42	22.25	23.03	22.92	22.34

LTE Band 25_Uplink frequency band : 1850 to 1915 MHz											
BW (MHz)	RB Size	RB Offset	Conducted power(dBm)								
			QPSK			16QAM			64QAM		
			CH-Low 26065	CH-Mid 26365	CH-High 26665	CH-Low 26065	CH-Mid 26365	CH-High 26665	CH-Low 26065	CH-Mid 26365	CH-High 26665
			1852.5 MHz	1882.5 MHz	1912.5 MHz	1852.5 MHz	1882.5 MHz	1912.5 MHz	1852.5 MHz	1882.5 MHz	1912.5 MHz
5	1	0	22.62	22.48	22.27	21.82	21.62	21.4	21.14	21.5	21.14
	1	24	22.32	22.22	22.04	21.48	21.34	21.32	20.8	21.42	20.89
	12	6	21.55	21.42	21.22	20.82	20.36	20.11	19.97	20.38	20.02
	25	0	21.77	21.58	21.52	20.55	20.32	20.16	19.98	20.37	19.95

LTE Band 25_Uplink frequency band : 1850 to 1915 MHz											
BW (MHz)	RB Size	RB Offset	EIRP (dBm)								
			QPSK			16QAM			64QAM		
			CH-Low 26065	CH-Mid 26365	CH-High 26665	CH-Low 26065	CH-Mid 26365	CH-High 26665	CH-Low 26065	CH-Mid 26365	CH-High 26665
			1852.5 MHz	1882.5 MHz	1912.5 MHz	1852.5 MHz	1882.5 MHz	1912.5 MHz	1852.5 MHz	1882.5 MHz	1912.5 MHz
5	1	0	24.76	24.62	24.41	23.96	23.76	23.54	23.28	23.64	23.28
	1	24	24.46	24.36	24.18	23.62	23.48	23.46	22.94	23.56	23.03
	12	6	23.69	23.56	23.36	22.96	22.5	22.25	22.11	22.52	22.16
	25	0	23.91	23.72	23.66	22.69	22.46	22.3	22.12	22.51	22.09

LTE Band 25_Uplink frequency band : 1850 to 1915 MHz											
BW (MHz)	RB Size	RB Offset	Conducted power(dBm)								
			QPSK			16QAM			64QAM		
			CH-Low 26090	CH-Mid 26365	CH-High 26640	CH-Low 26090	CH-Mid 26365	CH-High 26640	CH-Low 26090	CH-Mid 26365	CH-High 26640
			1855 MHz	1882.5 MHz	1910 MHz	1855 MHz	1882.5 MHz	1910 MHz	1855 MHz	1882.5 MHz	1910 MHz
10	1	0	22.64	22.5	22.3	21.84	21.64	21.43	21.32	21.56	21.83
	1	49	22.34	22.24	22.7	21.5	21.36	21.35	21.22	21.41	21.61
	25	12	21.57	21.44	21.25	20.84	20.38	20.14	19.92	20.33	20.28
	50	0	21.79	21.6	21.55	20.57	20.34	20.19	19.97	20.47	20.31

LTE Band 25_Uplink frequency band : 1850 to 1915 MHz											
BW (MHz)	RB Size	RB Offset	EIRP (dBm)								
			QPSK			16QAM			64QAM		
			CH-Low 26090	CH-Mid 26365	CH-High 26640	CH-Low 26090	CH-Mid 26365	CH-High 26640	CH-Low 26090	CH-Mid 26365	CH-High 26640
			1855 MHz	1882.5 MHz	1910 MHz	1855 MHz	1882.5 MHz	1910 MHz	1855 MHz	1882.5 MHz	1910 MHz
10	1	0	24.78	24.64	24.44	23.98	23.78	23.57	23.46	23.7	23.97
	1	49	24.48	24.38	24.84	23.64	23.5	23.49	23.36	23.55	23.75
	25	12	23.71	23.58	23.39	22.98	22.52	22.28	22.06	22.47	22.42
	50	0	23.93	23.74	23.69	22.71	22.48	22.33	22.11	22.61	22.45

LTE Band 25_Uplink frequency band : 1850 to 1915 MHz											
BW (MHz)	RB Size	RB Offset	Conducted power(dBm)								
			QPSK			16QAM			64QAM		
			CH-Low	CH-Mid	CH-High	CH-Low	CH-Mid	CH-High	CH-Low	CH-Mid	CH-High
			26115	26365	26615	26115	26365	26615	26115	26365	26615
			1857.5 MHz	1882.5 MHz	1907.5 MHz	1857.5 MHz	1882.5 MHz	1907.5 MHz	1857.5 MHz	1882.5 MHz	1907.5 MHz
15	1	0	22.65	22.51	22.31	21.85	21.65	21.44	21.77	21.82	21.64
	1	74	22.35	22.25	22.08	21.51	21.37	21.36	21.73	21.93	21.96
	36	18	21.58	21.45	21.26	20.85	20.39	20.15	20.49	20.77	19.7
	75	0	21.8	21.61	21.56	20.58	20.35	20.2	20.55	20.81	20.85

LTE Band 25_Uplink frequency band : 1850 to 1915 MHz											
BW (MHz)	RB Size	RB Offset	EIRP (dBm)								
			QPSK			16QAM			64QAM		
			CH-Low	CH-Mid	CH-High	CH-Low	CH-Mid	CH-High	CH-Low	CH-Mid	CH-High
			26115	26365	26615	26115	26365	26615	26115	26365	26615
			1857.5 MHz	1882.5 MHz	1907.5 MHz	1857.5 MHz	1882.5 MHz	1907.5 MHz	1857.5 MHz	1882.5 MHz	1907.5 MHz
15	1	0	24.79	24.65	24.45	23.99	23.79	23.58	23.91	23.96	23.78
	1	74	24.49	24.39	24.22	23.65	23.51	23.5	23.87	24.07	24.1
	36	18	23.72	23.59	23.4	22.99	22.53	22.29	22.63	22.91	21.84
	75	0	23.94	23.75	23.7	22.72	22.49	22.34	22.69	22.95	22.99

LTE Band 25_Uplink frequency band : 1850 to 1915 MHz											
BW (MHz)	RB Size	RB Offset	Conducted power(dBm)								
			QPSK			16QAM			64QAM		
			CH-Low	CH-Mid	CH-High	CH-Low	CH-Mid	CH-High	CH-Low	CH-Mid	CH-High
			26140	26365	26590	26140	26365	26590	26140	26365	26590
			1860 MHz	1882.5 MHz	1905 MHz	1860 MHz	1882.5 MHz	1905 MHz	1860 MHz	1882.5 MHz	1905 MHz
20	1	0	22.68	22.57	22.38	21.88	21.71	21.51	21.74	21.86	21.45
	1	99	22.38	22.31	22.15	21.54	21.43	21.43	21.56	21.8	21.28
	50	24	21.61	21.51	21.33	20.88	20.45	20.22	20.59	20.76	20.48
	100	0	21.83	21.67	21.63	20.61	20.41	20.27	20.75	20.81	20.48

LTE Band 25_Uplink frequency band : 1850 to 1915 MHz											
BW (MHz)	RB Size	RB Offset	EIRP (dBm)								
			QPSK			16QAM			64QAM		
			CH-Low	CH-Mid	CH-High	CH-Low	CH-Mid	CH-High	CH-Low	CH-Mid	CH-High
			26140	26365	26590	26140	26365	26590	26140	26365	26590
			1860 MHz	1882.5 MHz	1905 MHz	1860 MHz	1882.5 MHz	1905 MHz	1860 MHz	1882.5 MHz	1905 MHz
20	1	0	24.82	24.71	24.52	24.02	23.85	23.65	23.88	24	23.59
	1	99	24.52	24.45	24.29	23.68	23.57	23.57	23.7	23.94	23.42
	50	24	23.75	23.65	23.47	23.02	22.59	22.36	22.73	22.9	22.62
	100	0	23.97	23.81	23.77	22.75	22.55	22.41	22.89	22.95	22.62



Report No.: T201102D09-RP12

Page: 24 / 111

Rev.: 00

8.2 FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT

LIMIT

According to FCC §2.1055, FCC §24.235.

Frequency Tolerance: +/- 2.5ppm

According to RSS -133 section 6.3,

The carrier frequency shall not depart from the reference frequency, in excess of ± 2.5 ppm for mobile stations and ± 1.0 ppm for base stations.

In lieu of meeting the above stability values, the test report may show that the frequency stability is sufficient to ensure that the emission bandwidth stays within the operating frequency block when tested to the temperature and supply voltage variations specified in RSS-Gen.

Test Procedure

Use Anritsu 8820 with frequency Error measurement capability.

Temp = -30°C to $+50^{\circ}\text{C}$

Voltage= 85% to 115% of the nominal value for AC powered equipment.

NOTE: The frequency error was recorded frequency error from the communication simulator.

TEST RESULTS

No non-compliance noted.



Report No.: T201102D09-RP12

Page: 25 / 111

Rev.: 00

Test Results

FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT:

Temperature: 25°C

Humidity: 57% RH

Tested by: Jerry Chang

Test Date: May 25, 2021

LTE Band 25 / QPSK

Reference Freq.:		LTE B25 Mid Channel		1882.5 MHz	10M QPSK CH 26365
Power Supply Vdc	Temp. (°C)	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)	
Freq. ERROR vs. VOLTAGE					
5.5	25	1882.500007	7	4706	
5	25	1882.500020	20	4706	
4.75	25	1882.500027	27	4706	
3.7 (End Point)	25	1882.499985	-15	4706	
Freq. ERROR vs. Temp.					
5	-30	1882.499962	-38	4706	
5	-20	1882.499988	-12	4706	
5	-10	1882.500011	11	4706	
5	0	1882.499981	-19	4706	
5	10	1882.499924	-76	4706	
5	20	1882.499941	-59	4706	
5	30	1882.500026	26	4706	
5	40	1882.500047	47	4706	
5	50	1882.500039	39	4706	



Report No.: T201102D09-RP12

Page: 26 / 111

Rev.: 00

8.3 OCCUPIED BANDWIDTH MEASUREMENT

Limits

For Reporting purposes only.

TEST PROCEDURES

KDB 971168 D01

1. The occupied bandwidth was measured with the spectrum analyzer at the lowest, middle and highest channels in each band and different modulation. The 99% and -26dB bandwidth was measured and recorded.
2. RBW = 1-5% of the expected OBW
3. VBW $\geq 3 \times$ RBW
4. Detector = Peak
5. Trace mode = max. hold

TEST RESULTS**Temperature:** 25.3°C**Humidity:** 57.6% RH**Tested by:** Jerry Chang**Test Date:** March 5, 2021**LTE Band 25**

LTE BAND 25 Channel bandwidth: 1.4MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1850.7	26047	1.0861	1.0862	1.0856	1.235	1.231	1.230
1882.5	26365	1.0863	1.0864	1.0862	1.239	1.233	1.235
1914.3	26683	1.0874	1.0875	1.0860	1.244	1.234	1.225

LTE BAND 25 Channel bandwidth: 3MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1851.5	26055	2.6870	2.6913	2.6930	2.975	2.971	2.987
1882.5	26365	2.6866	2.6904	2.6972	2.988	2.977	3.007
1913.5	26675	2.6876	2.6879	2.6964	2.962	3.007	3.013

LTE BAND 25 Channel bandwidth: 5MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1852.5	26065	4.4805	4.4802	4.4862	4.950	4.859	4.933
1882.5	26365	4.4834	4.4892	4.4872	4.976	4.962	4.939
1912.5	26665	4.4939	4.4914	4.4898	4.958	4.973	4.932

LTE BAND 25 Channel bandwidth: 10MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1855.0	26090	8.9773	8.9393	8.9543	9.753	9.720	9.780
1882.5	26365	8.9598	8.9285	8.9564	9.754	9.721	9.766
1910.0	26640	8.9992	8.9696	8.9905	9.790	9.785	9.795



Report No.: T201102D09-RP12

Page: 28 / 111

Rev.: 00

LTE BAND 25 Channel bandwidth: 15MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1857.5	26115	13.485	13.454	13.453	14.59	14.73	14.60
1882.5	26365	13.422	13.413	13.432	14.60	14.65	14.54
1907.5	26615	13.472	13.445	13.440	14.56	14.61	14.48

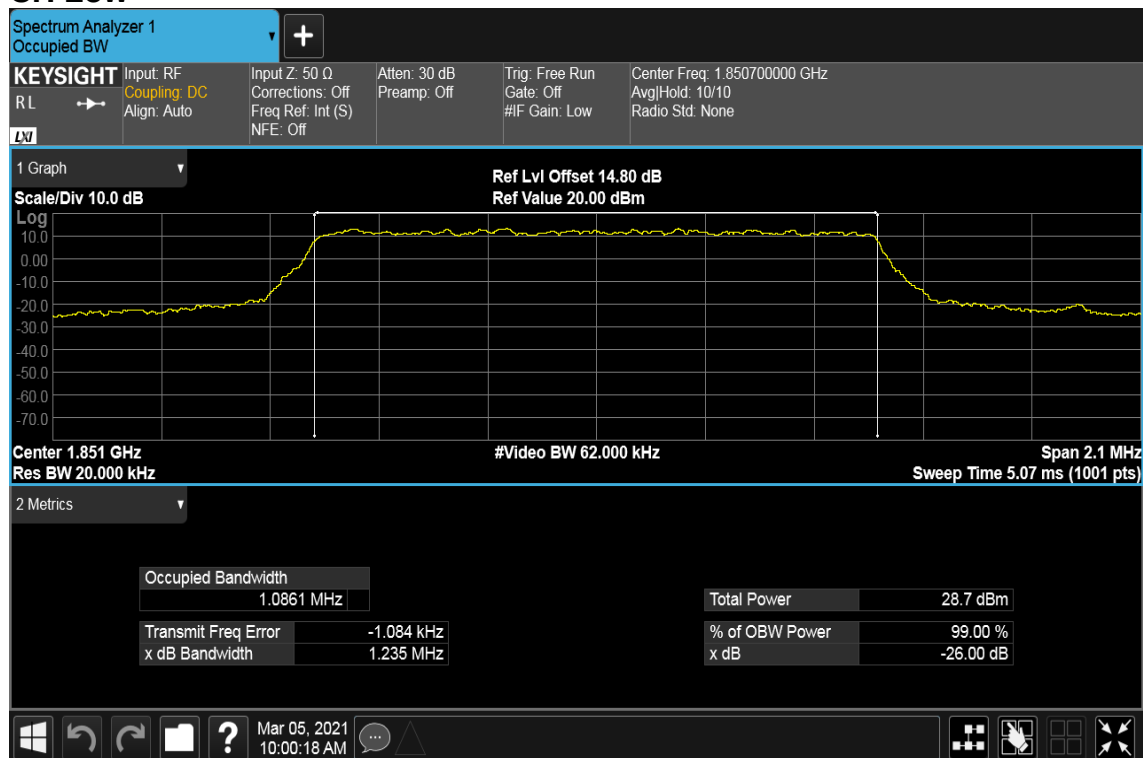
LTE BAND 25 Channel bandwidth: 20MHz							
Freq. (MHz)	CH	99% BW (MHz)			26 dB BW (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
1860.0	26140	17.929	17.950	17.940	19.49	19.42	19.47
1882.5	26365	17.872	17.903	17.879	19.40	19.42	19.45
1905.0	26590	17.881	17.905	17.872	19.38	19.38	19.36

Report No.: T201102D09-RP12

LTE Band 25

CHANNEL BANDWIDTH: 1.4MHz / QPSK / RB =6, RB Offset = 0

CH Low



CH Mid



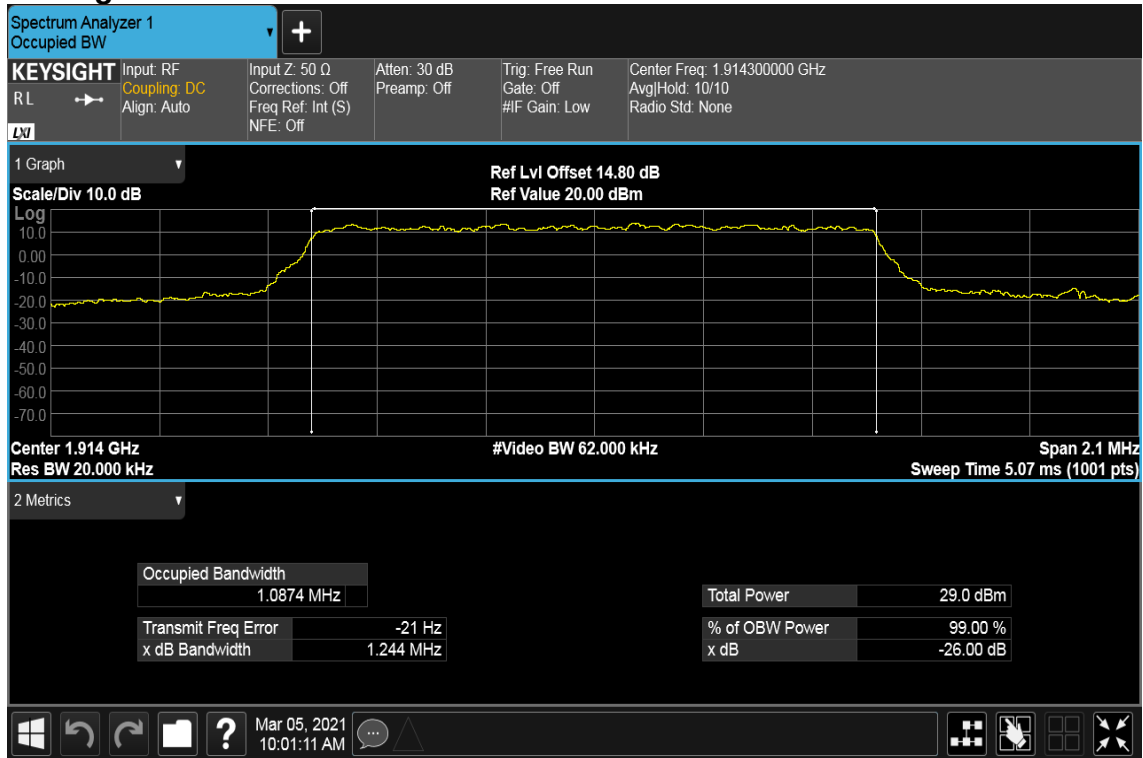


Report No.: T201102D09-RP12

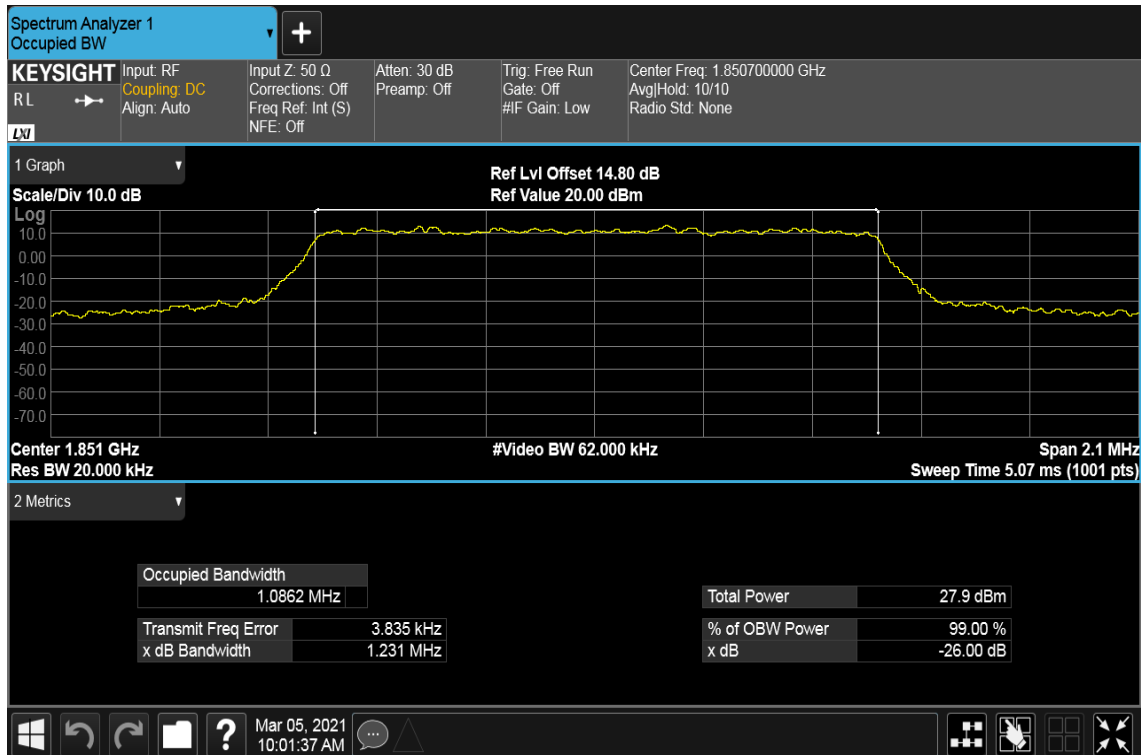
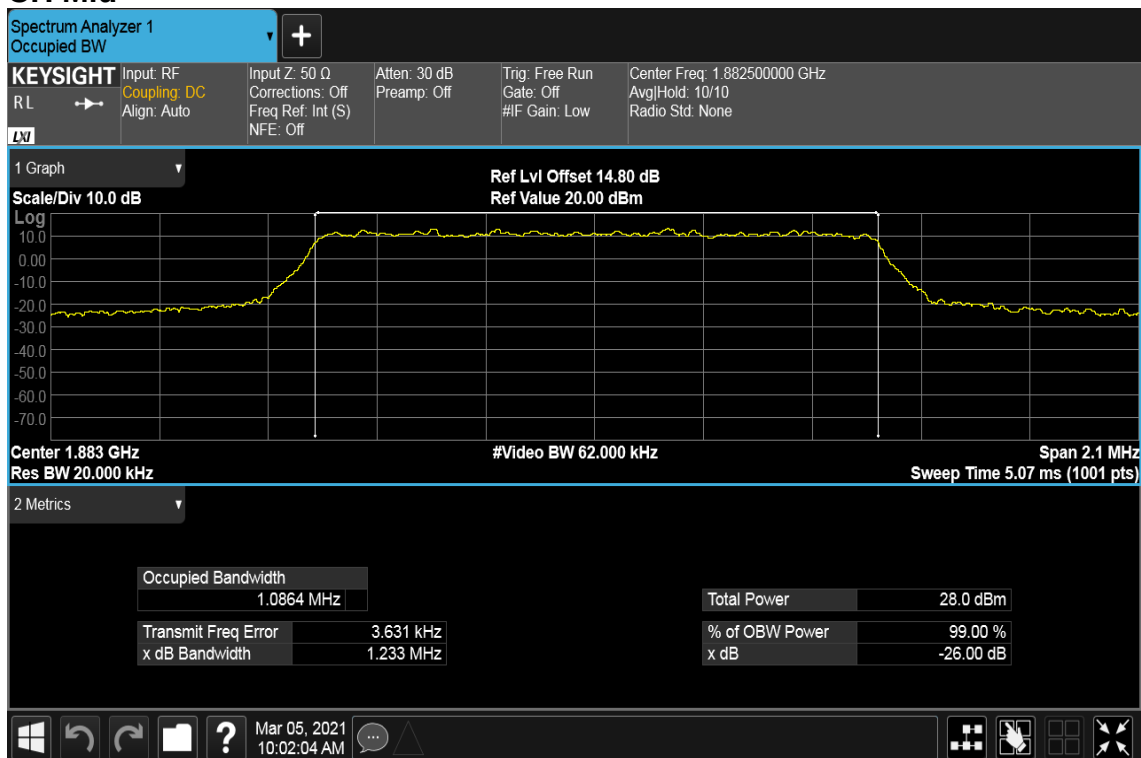
Page: 30 / 111

Rev.: 00

CH High



Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 1.4MHz / 16QAM / RB =6, RB Offset = 0
CH Low**CH Mid**

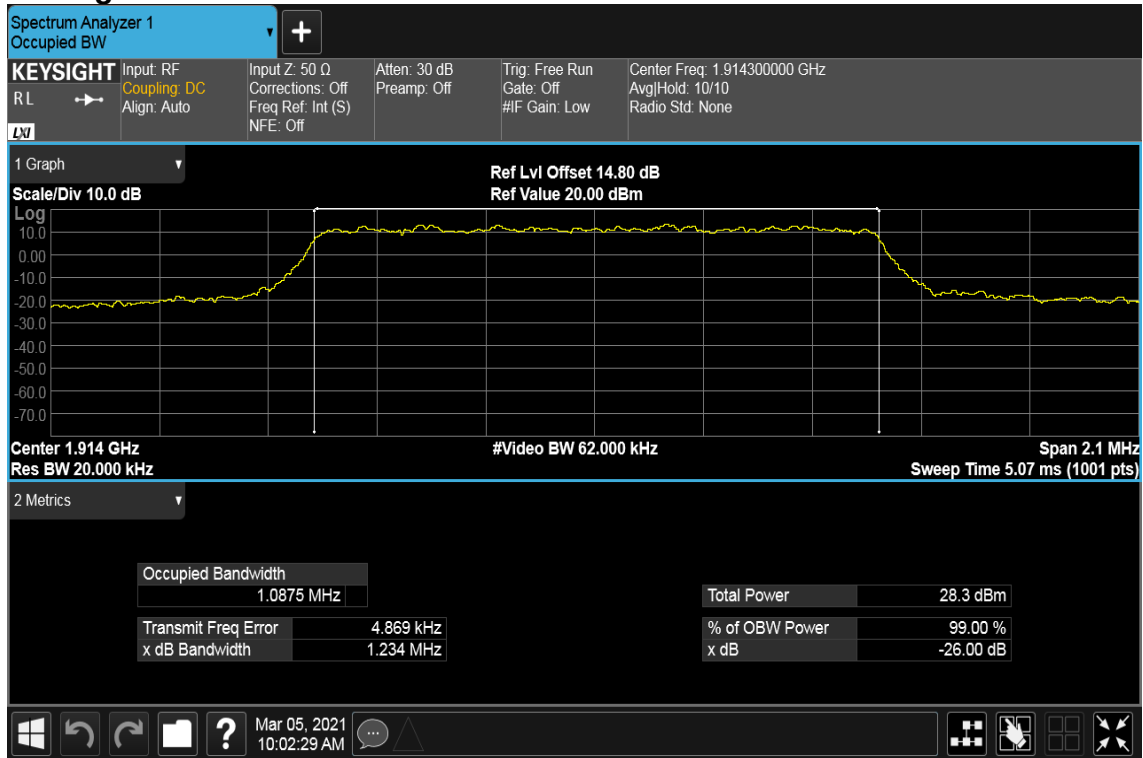


Report No.: T201102D09-RP12

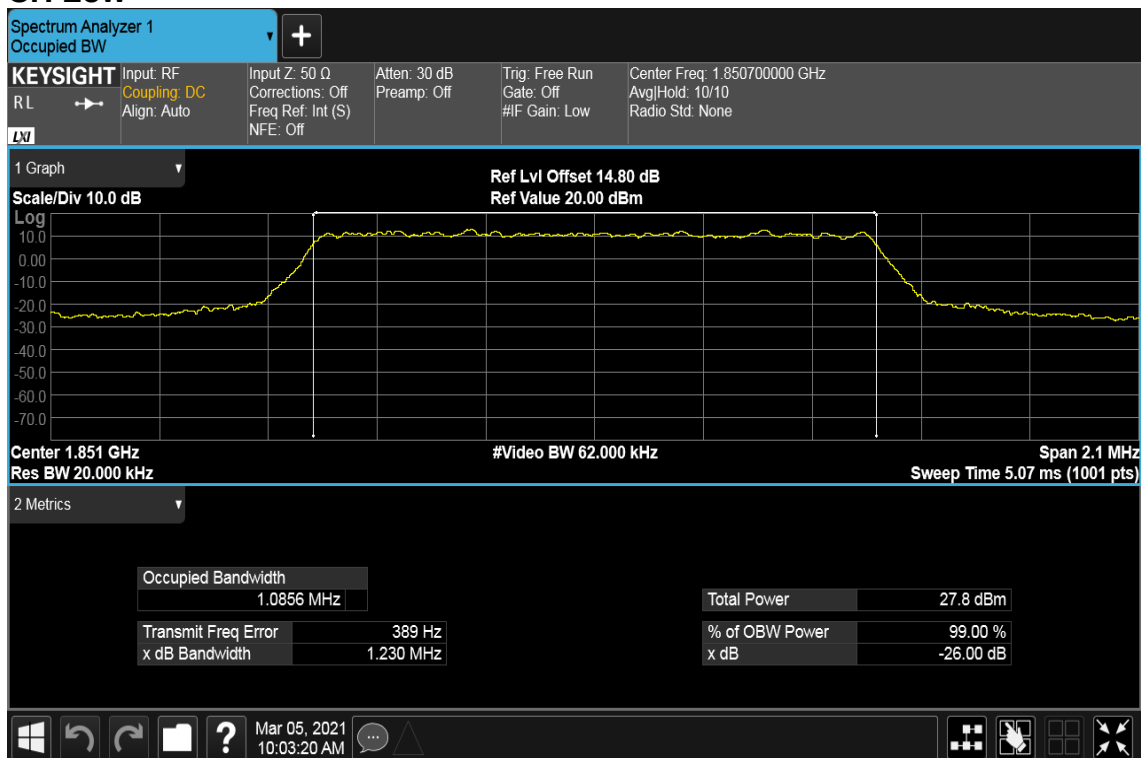
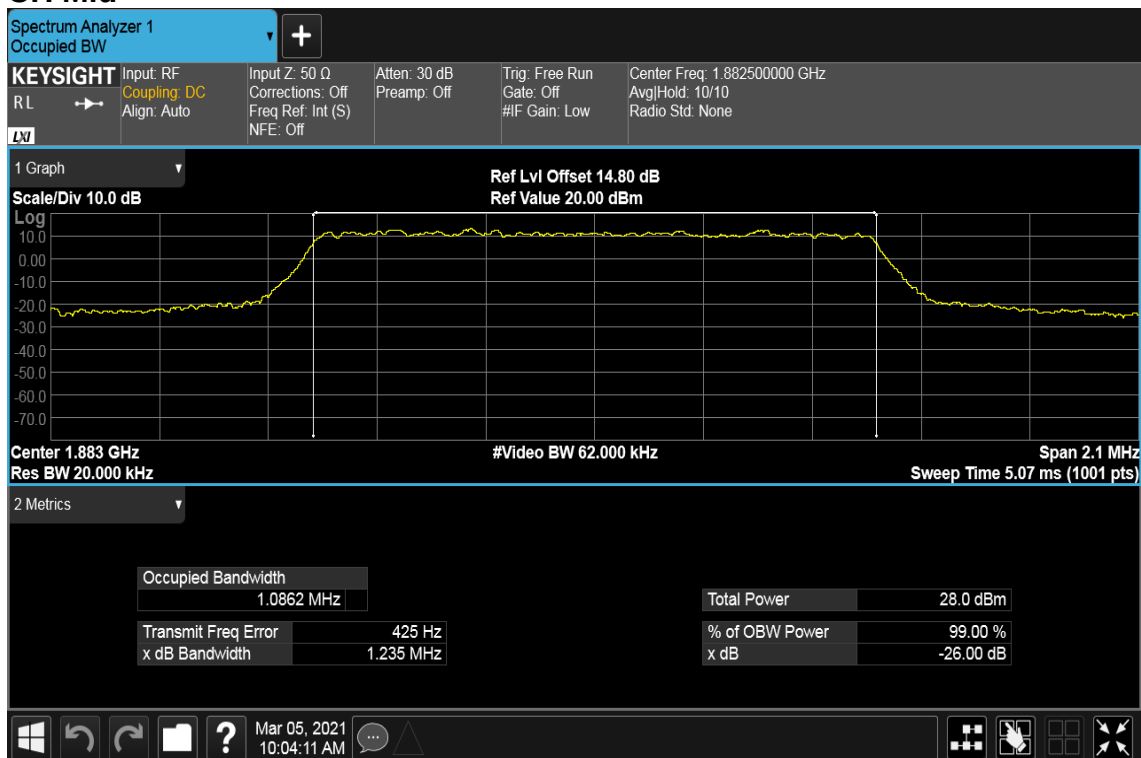
Page: 32 / 111

Rev.: 00

CH High



Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 1.4MHz / 64QAM / RB =6, RB Offset = 0
CH Low**CH Mid**

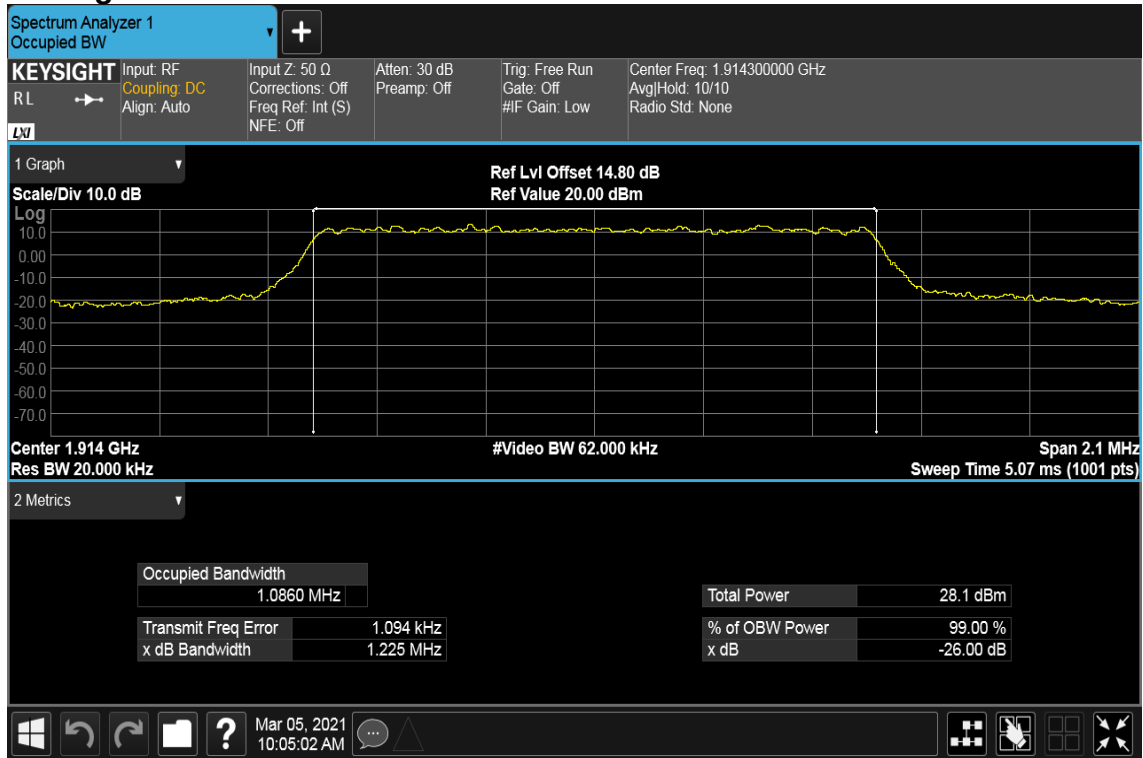


Report No.: T201102D09-RP12

Page: 34 / 111

Rev.: 00

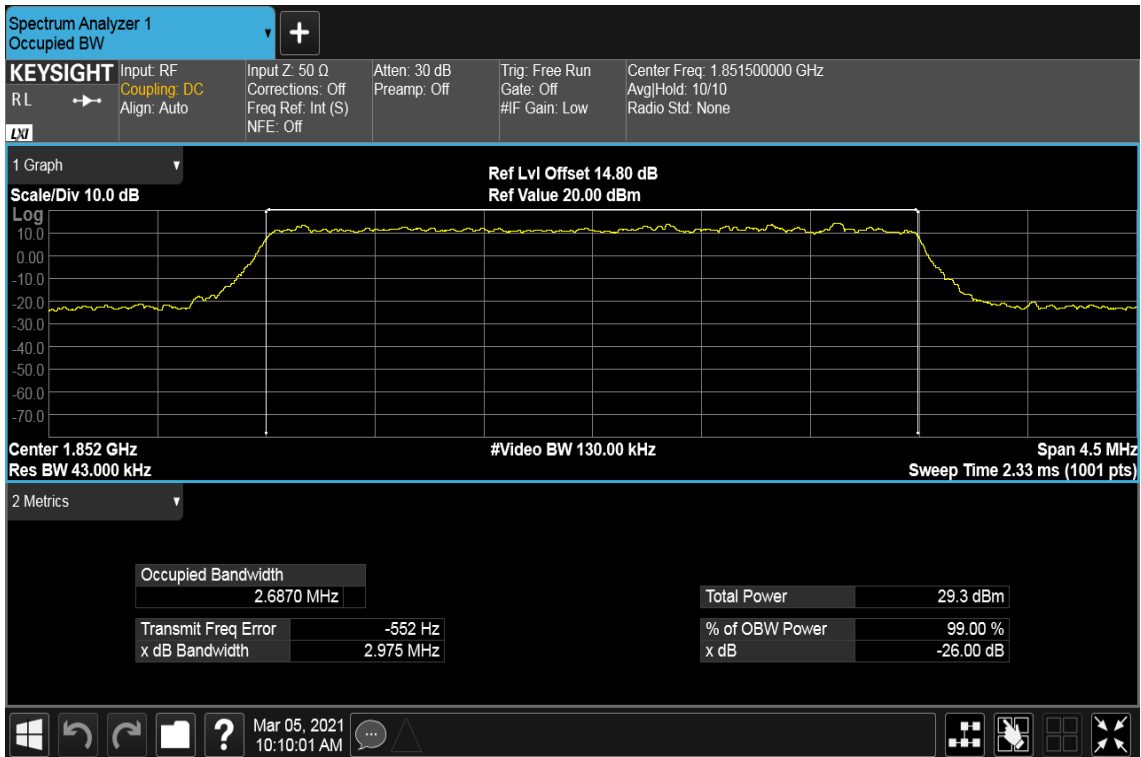
CH High



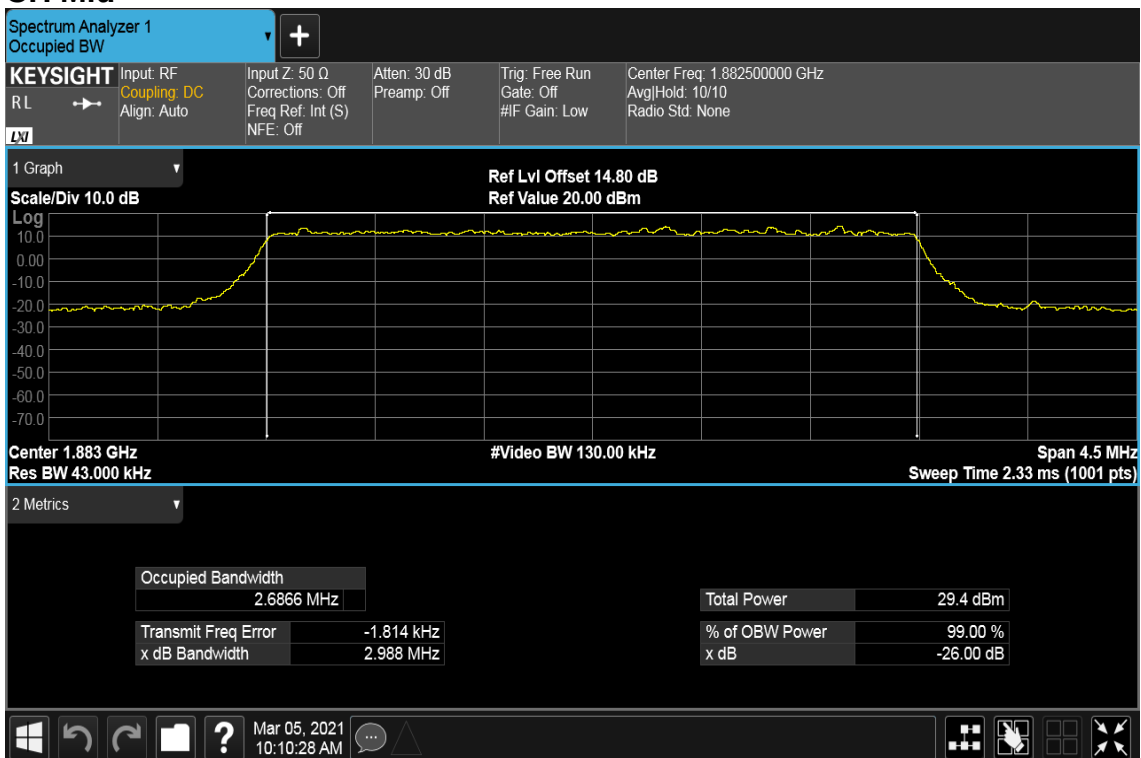
Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 3MHz / QPSK / RB =15, RB Offset = 0

CH Low



CH Mid



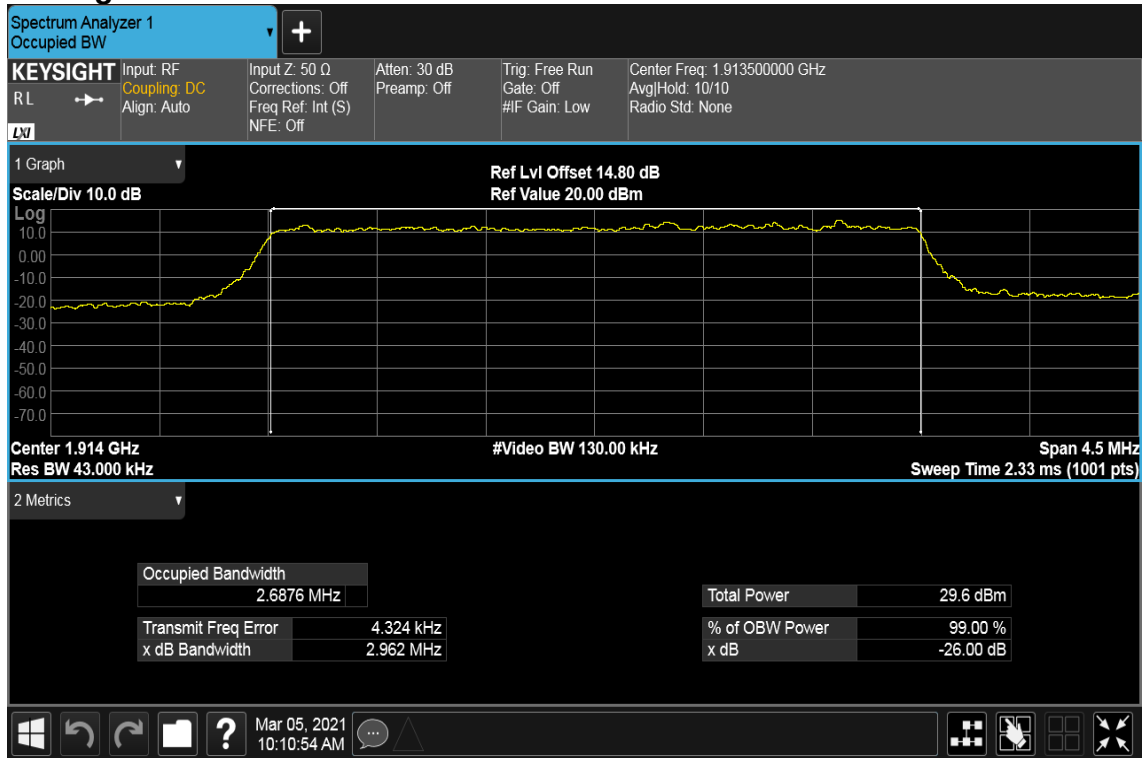


Report No.: T201102D09-RP12

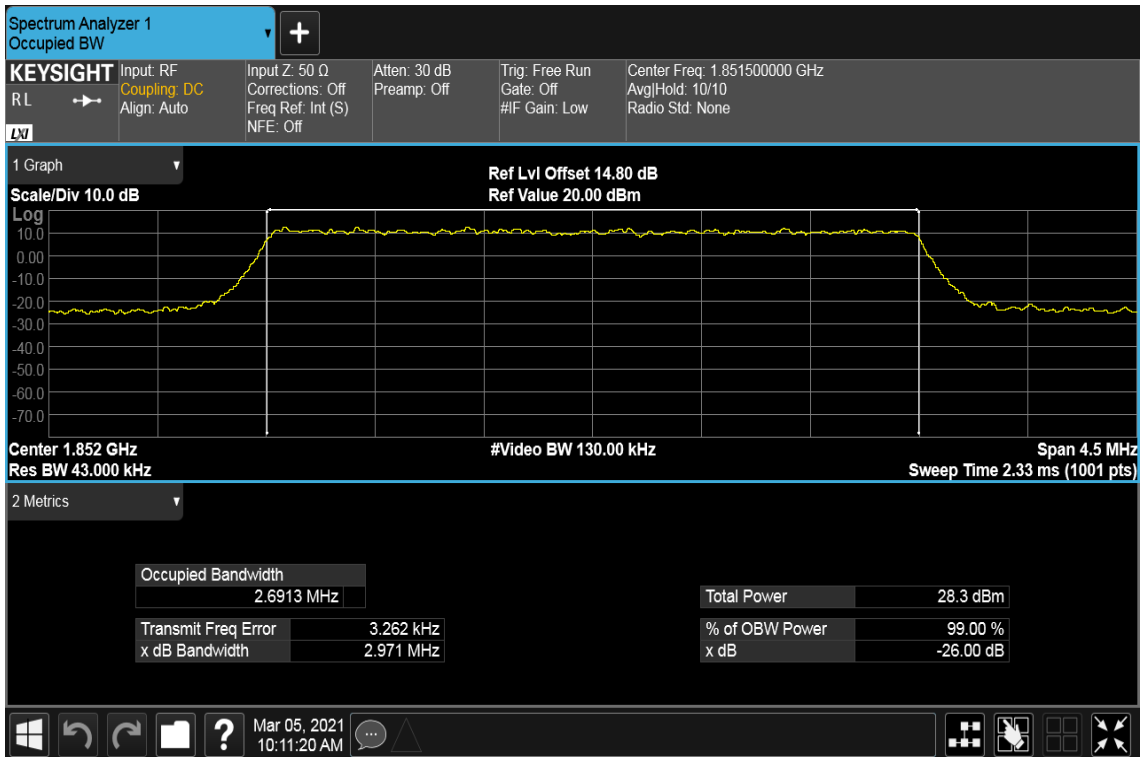
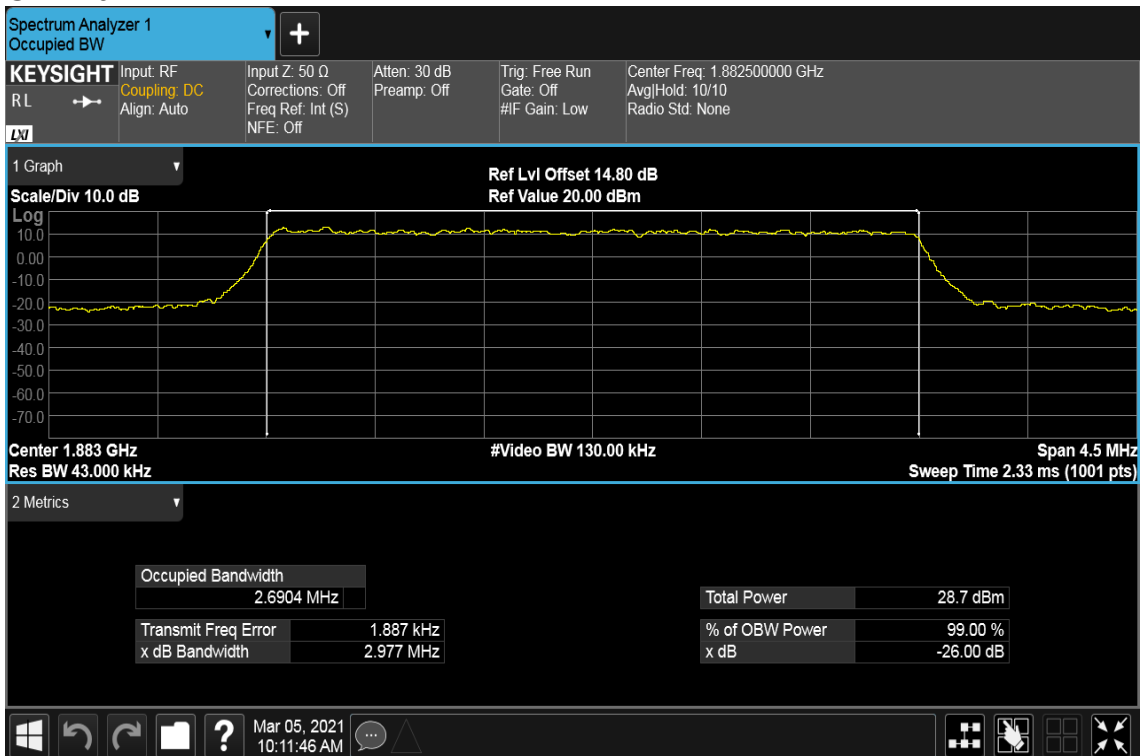
Page: 36 / 111

Rev.: 00

CH High



Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 3MHz / 16QAM / RB =15, RB Offset = 0
CH Low**CH Mid**

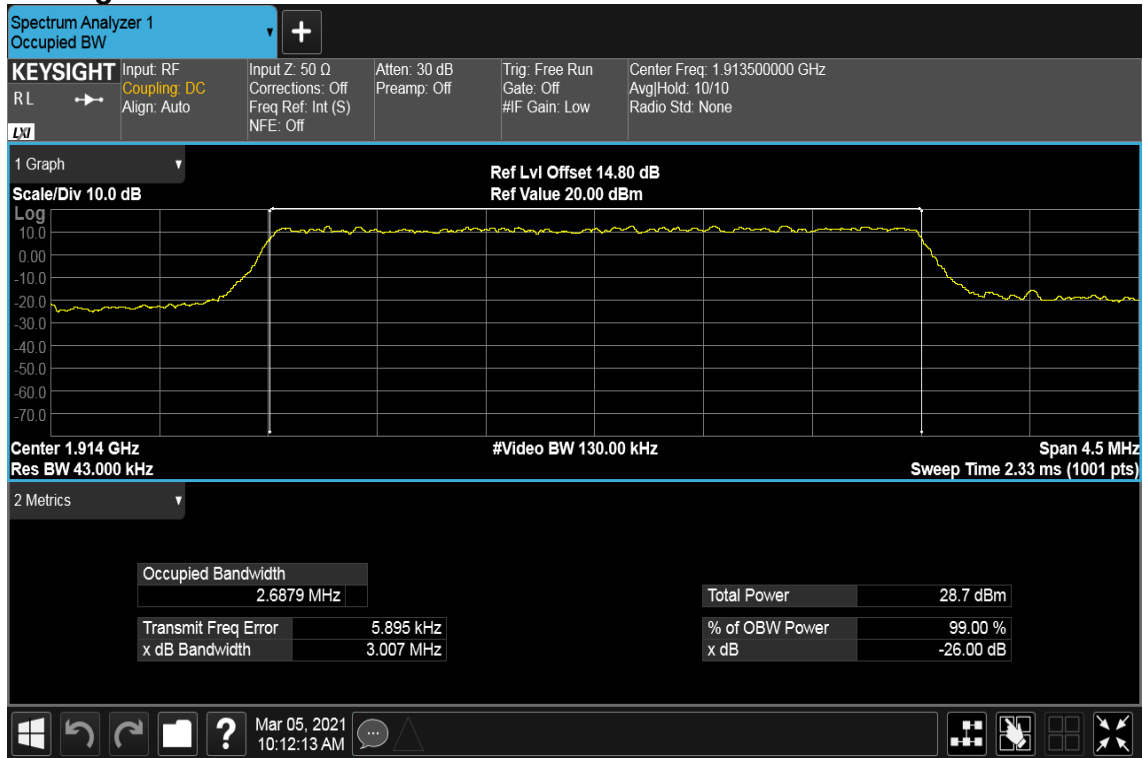


Report No.: T201102D09-RP12

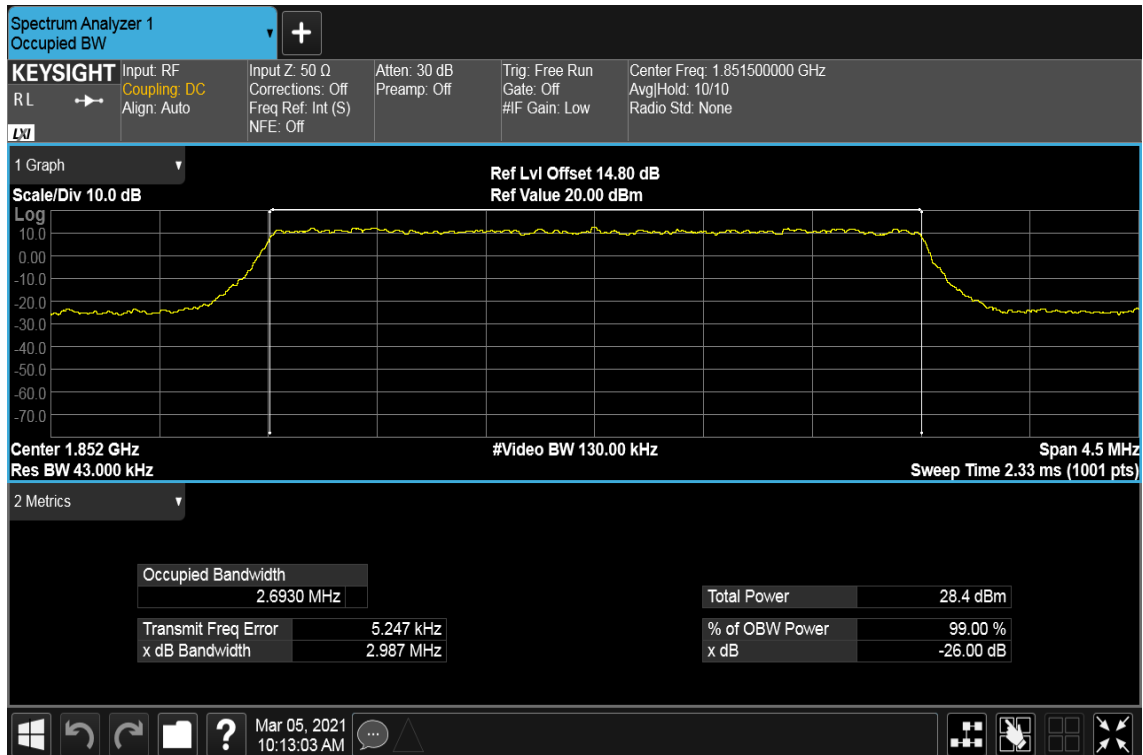
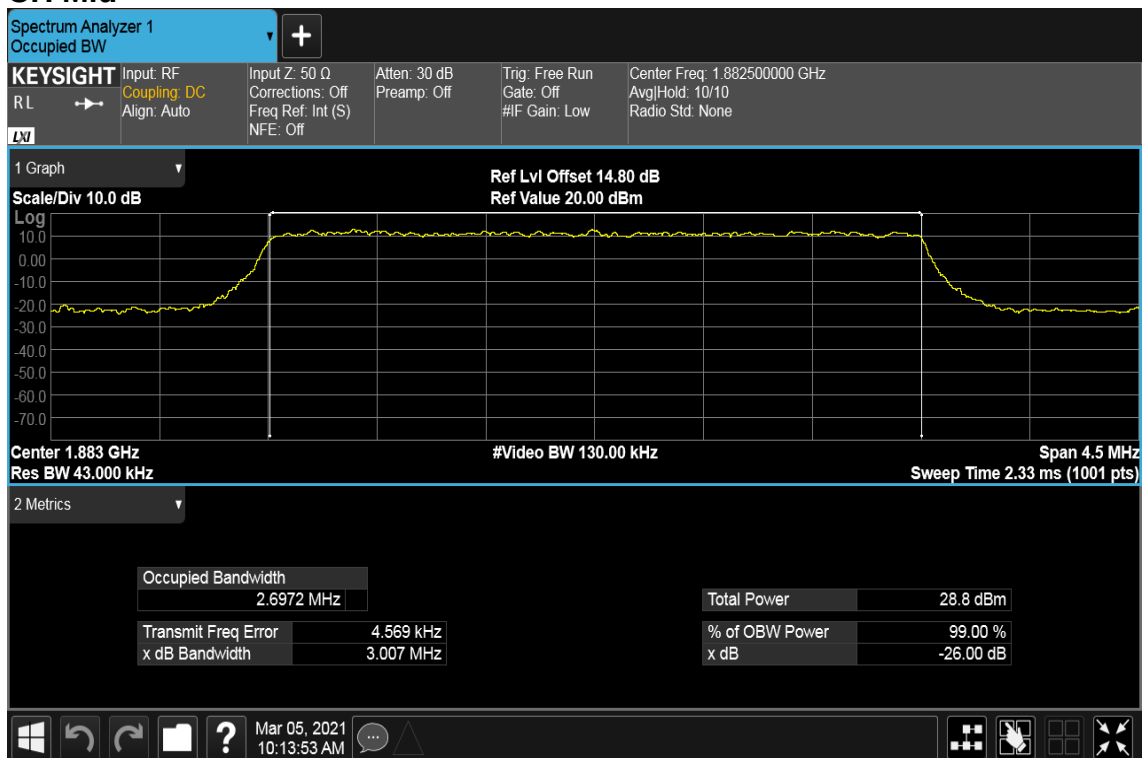
Page: 38 / 111

Rev.: 00

CH High



Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 3MHz / 64QAM / RB =15, RB Offset = 0
CH Low**CH Mid**

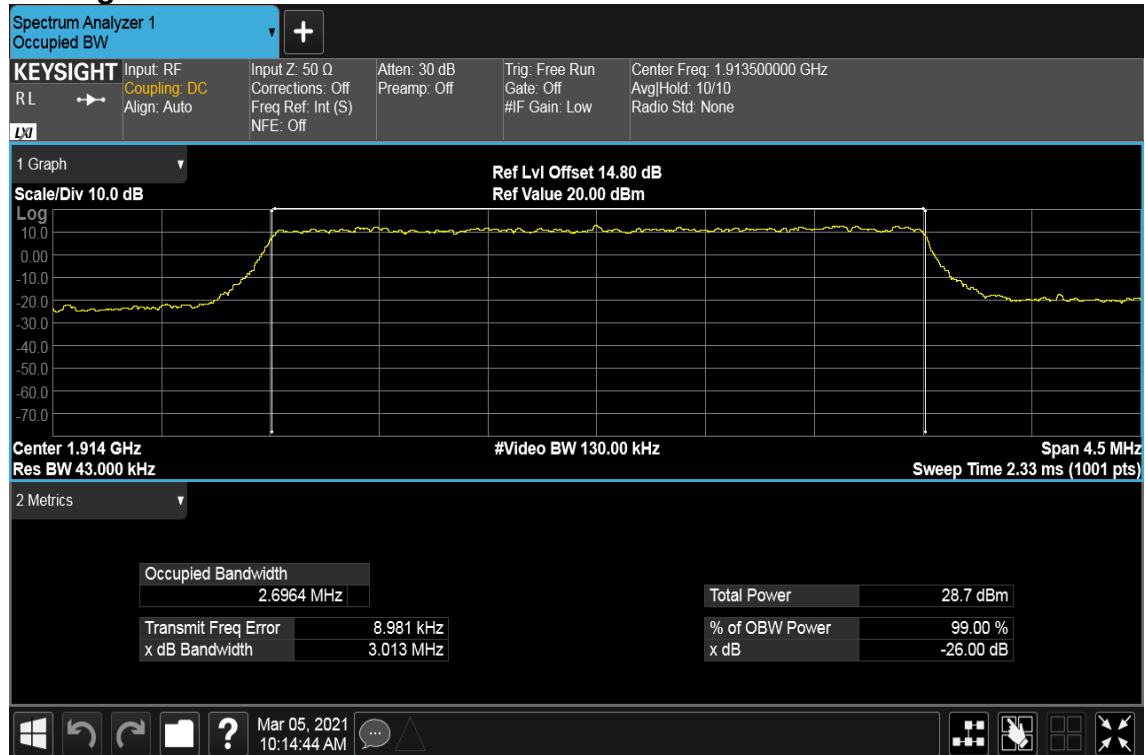


Report No.: T201102D09-RP12

Page: 40 / 111

Rev.: 00

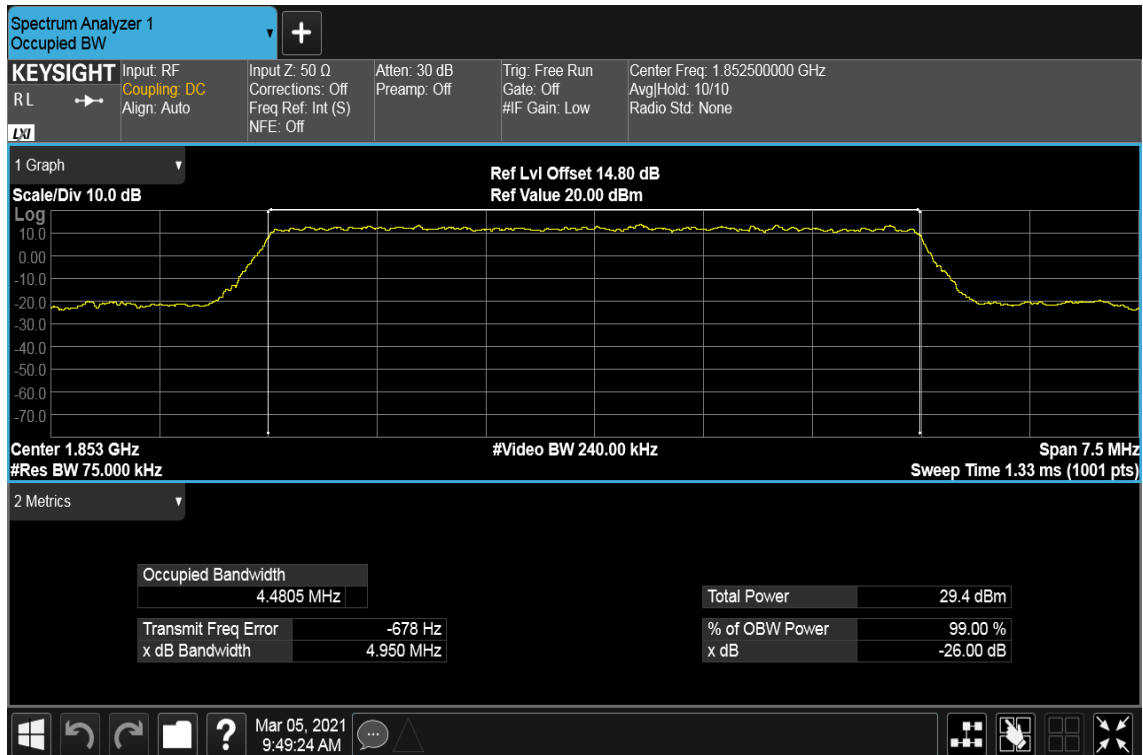
CH High



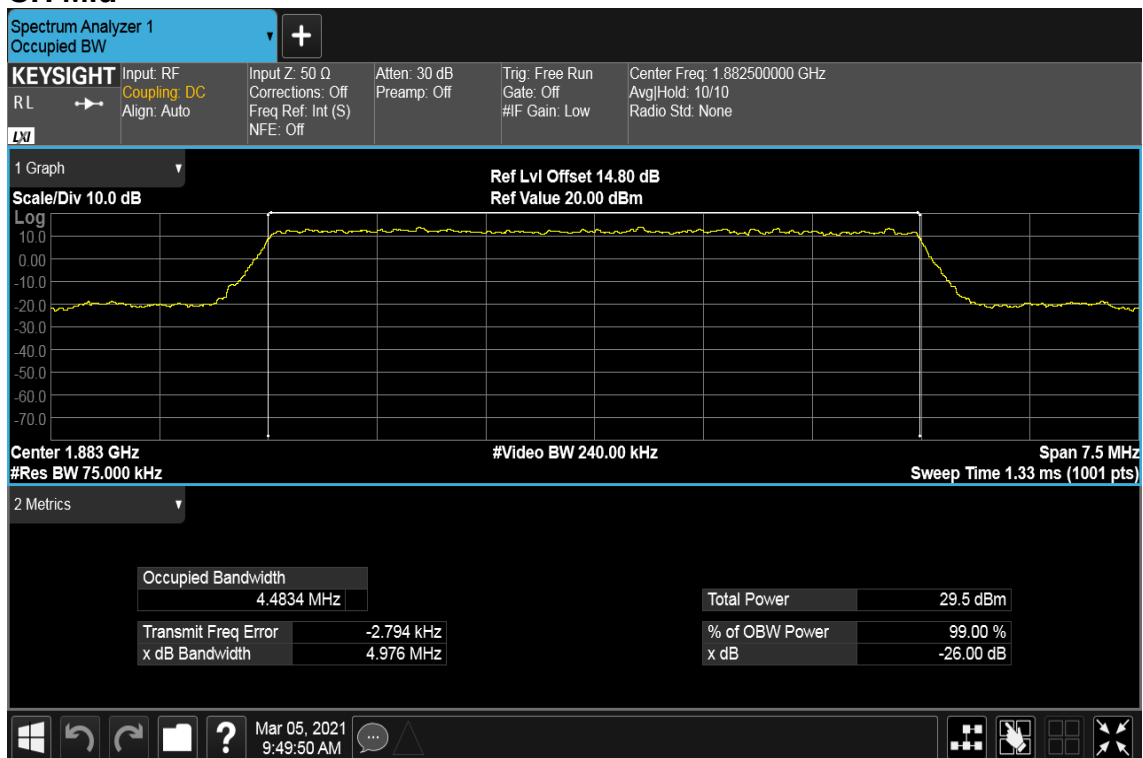
Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 5MHz / QPSK / RB =25, RB Offset = 0

CH Low



CH Mid



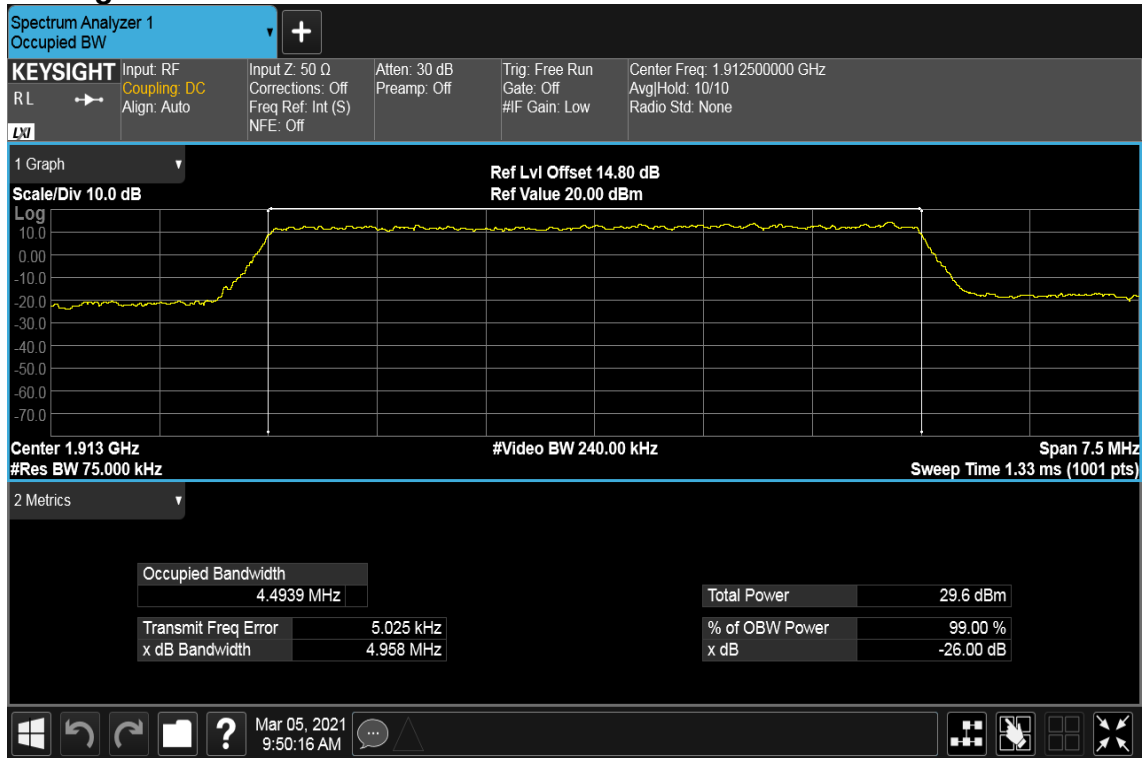


Report No.: T201102D09-RP12

Page: 42 / 111

Rev.: 00

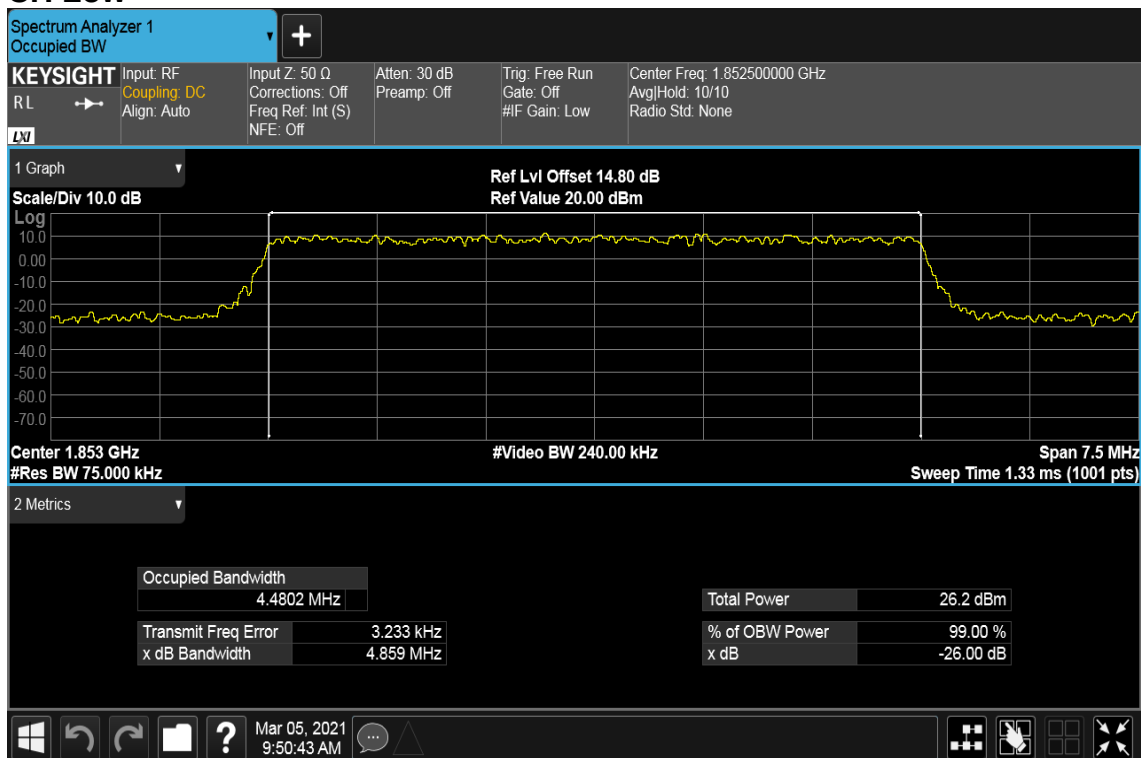
CH High



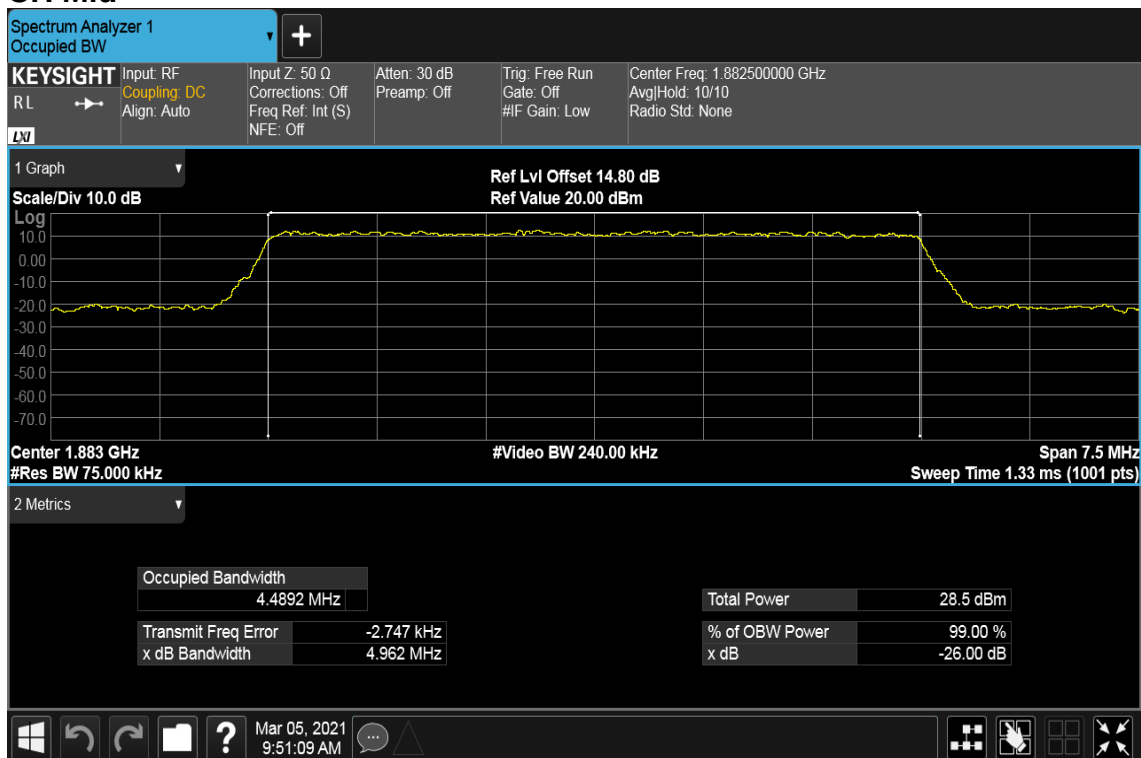
Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 5MHz / 16QAM / RB =25, RB Offset = 0

CH Low



CH Mid



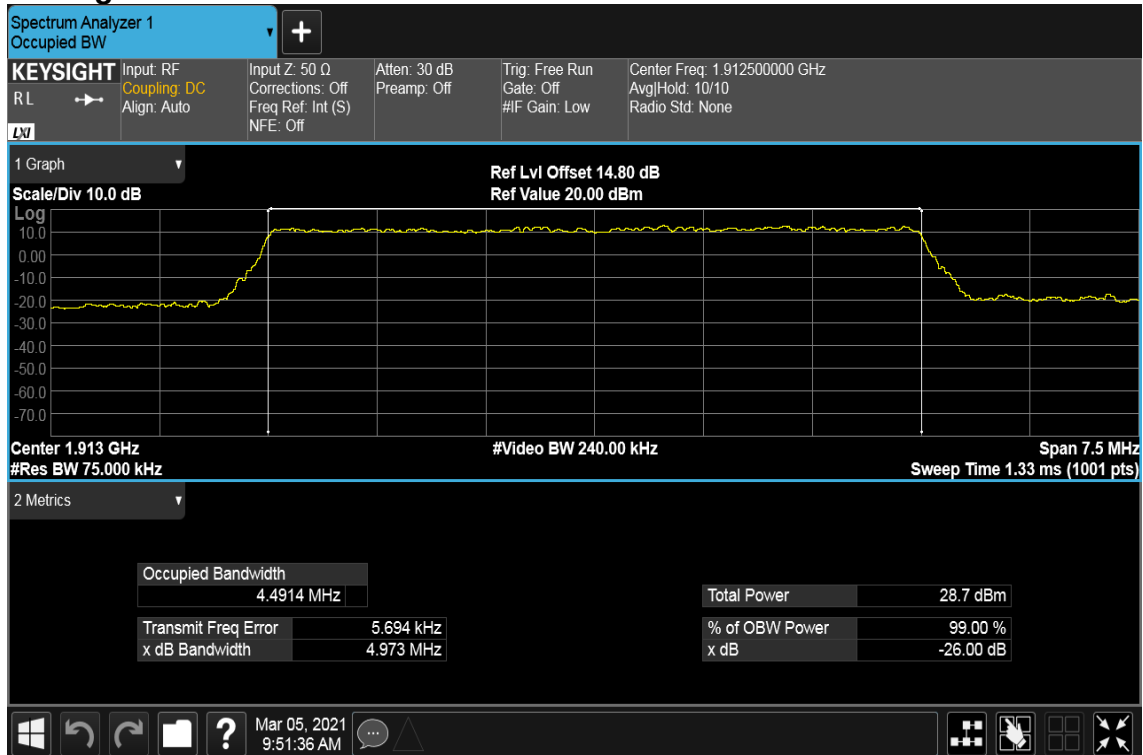


Report No.: T201102D09-RP12

Page: 44 / 111

Rev.: 00

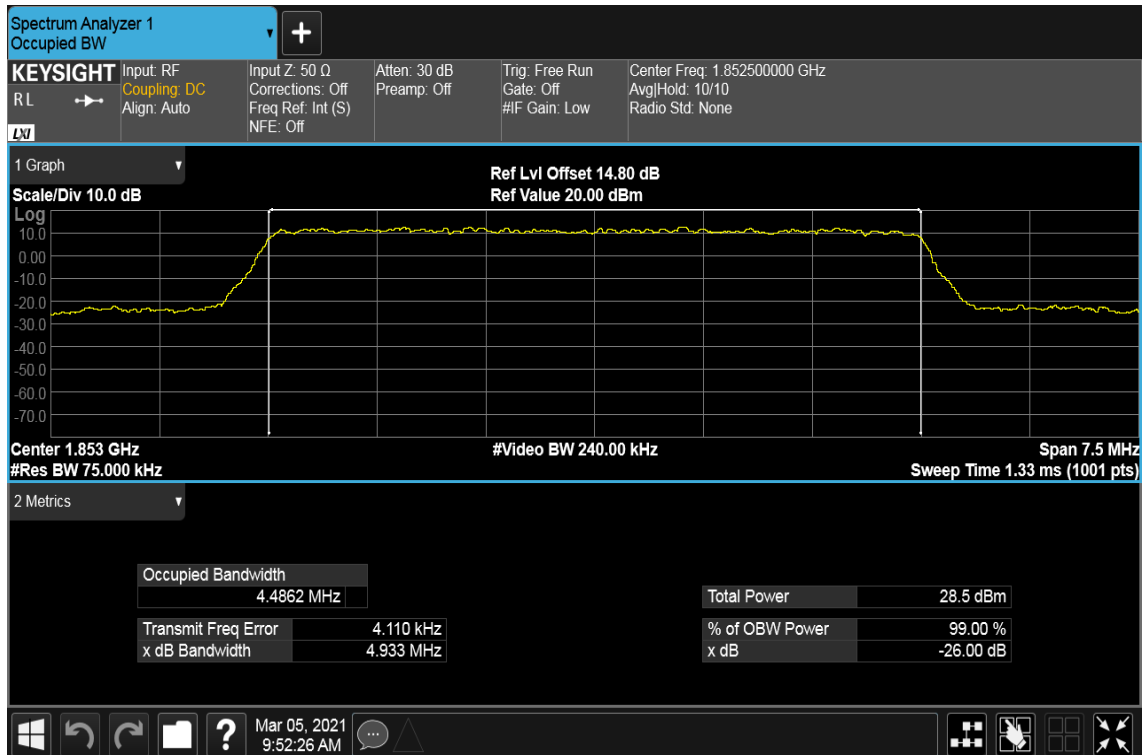
CH High



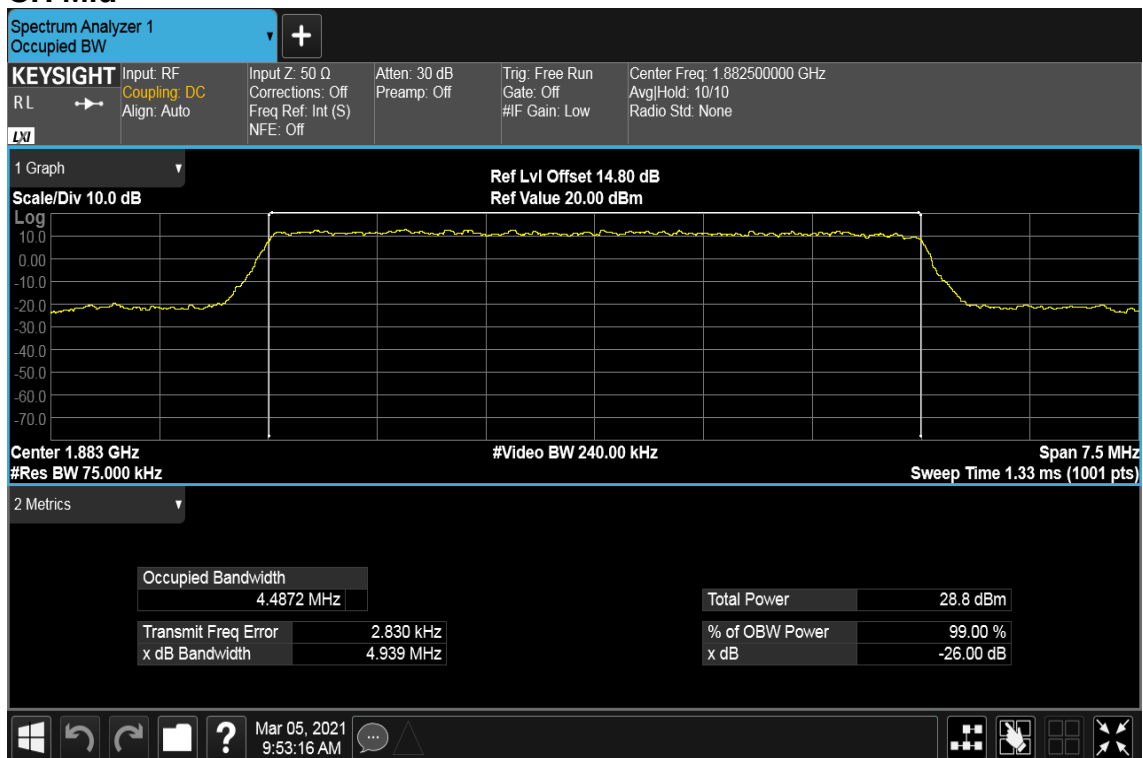
Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 5MHz / 64QAM / RB =25, RB Offset = 0

CH Low



CH Mid



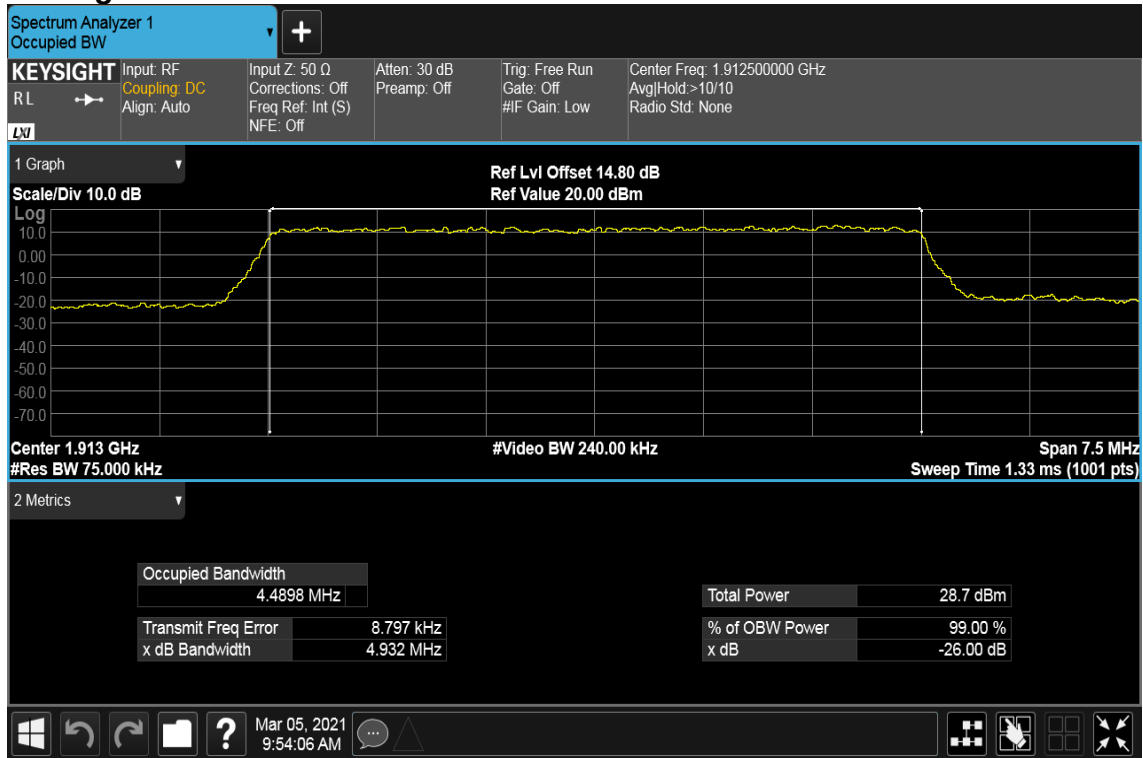


Report No.: T201102D09-RP12

Page: 46 / 111

Rev.: 00

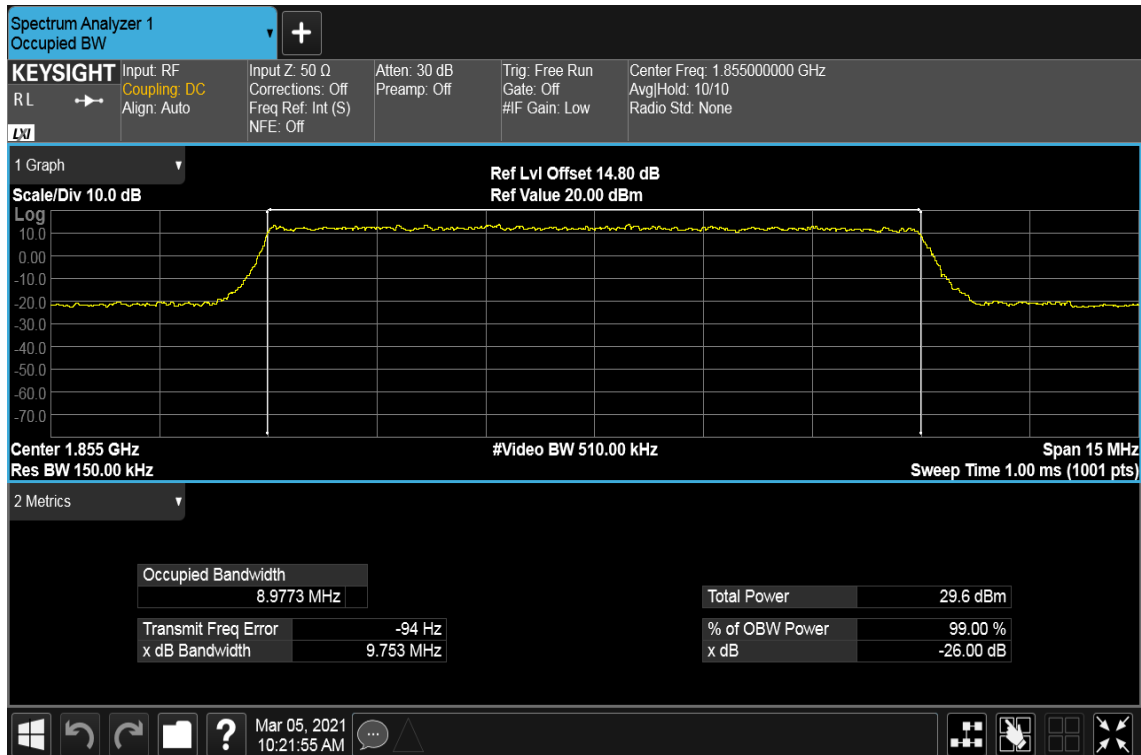
CH High



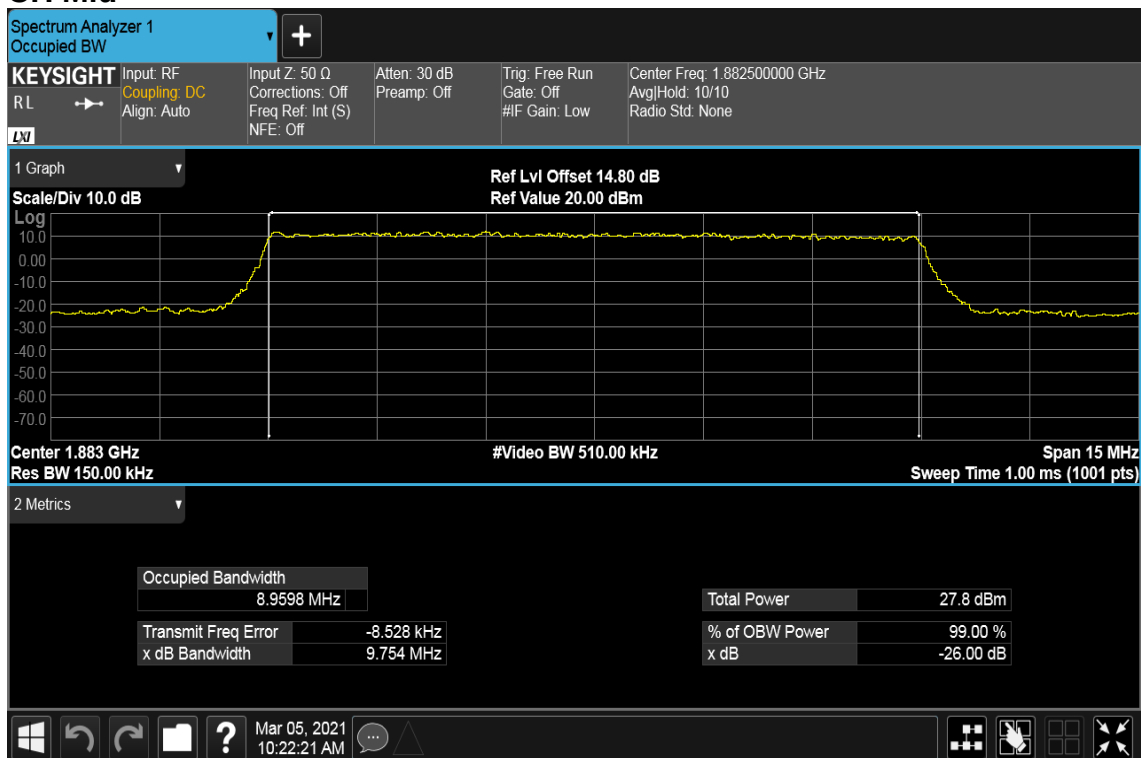
Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 10MHz / QPSK / RB =50, RB Offset = 0

CH Low



CH Mid



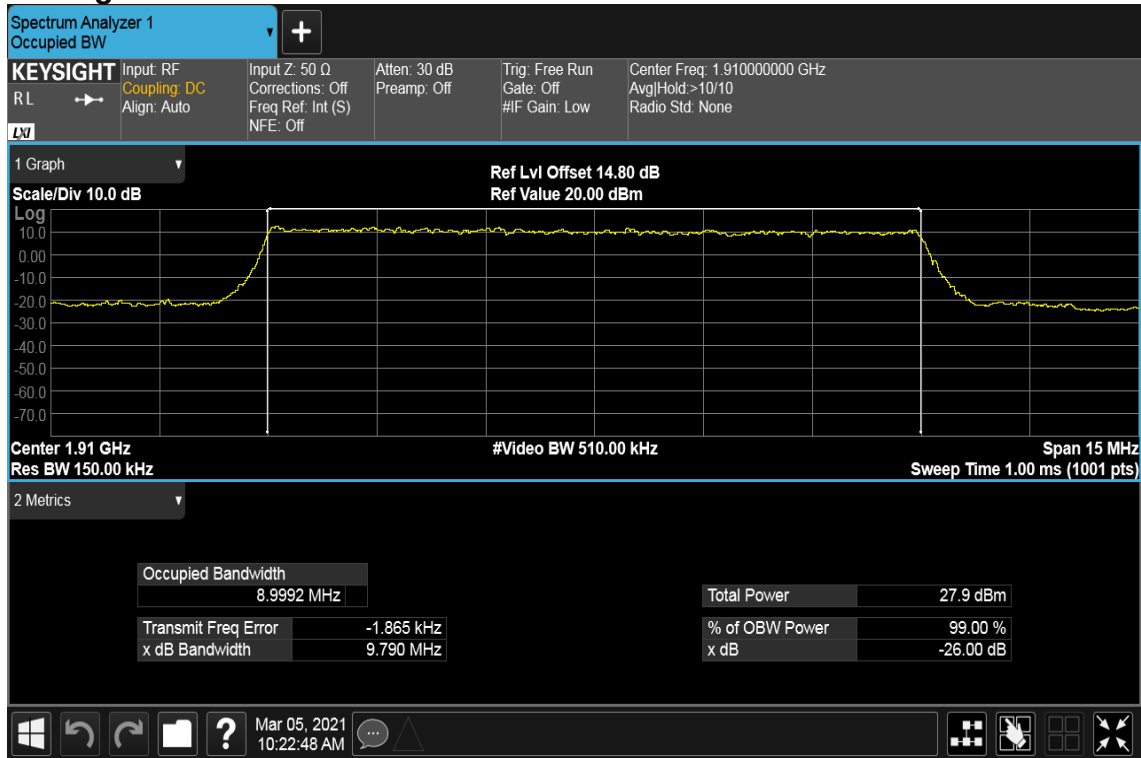


Report No.: T201102D09-RP12

Page: 48 / 111

Rev.: 00

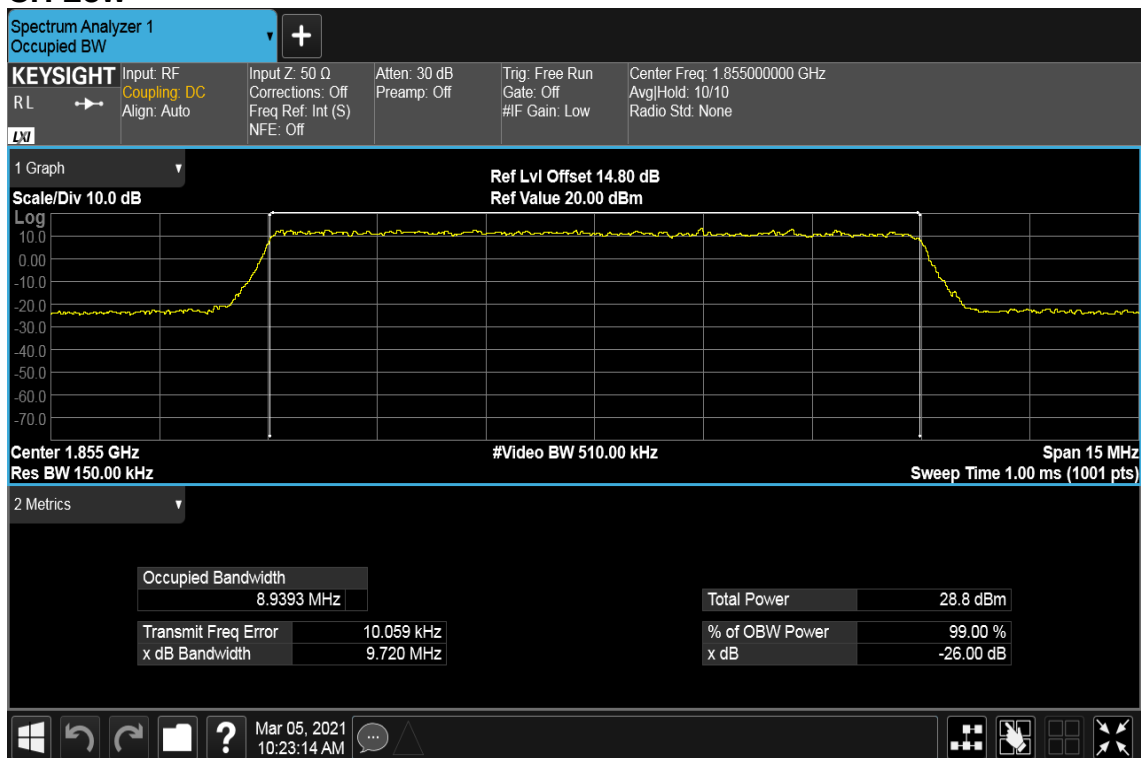
CH High



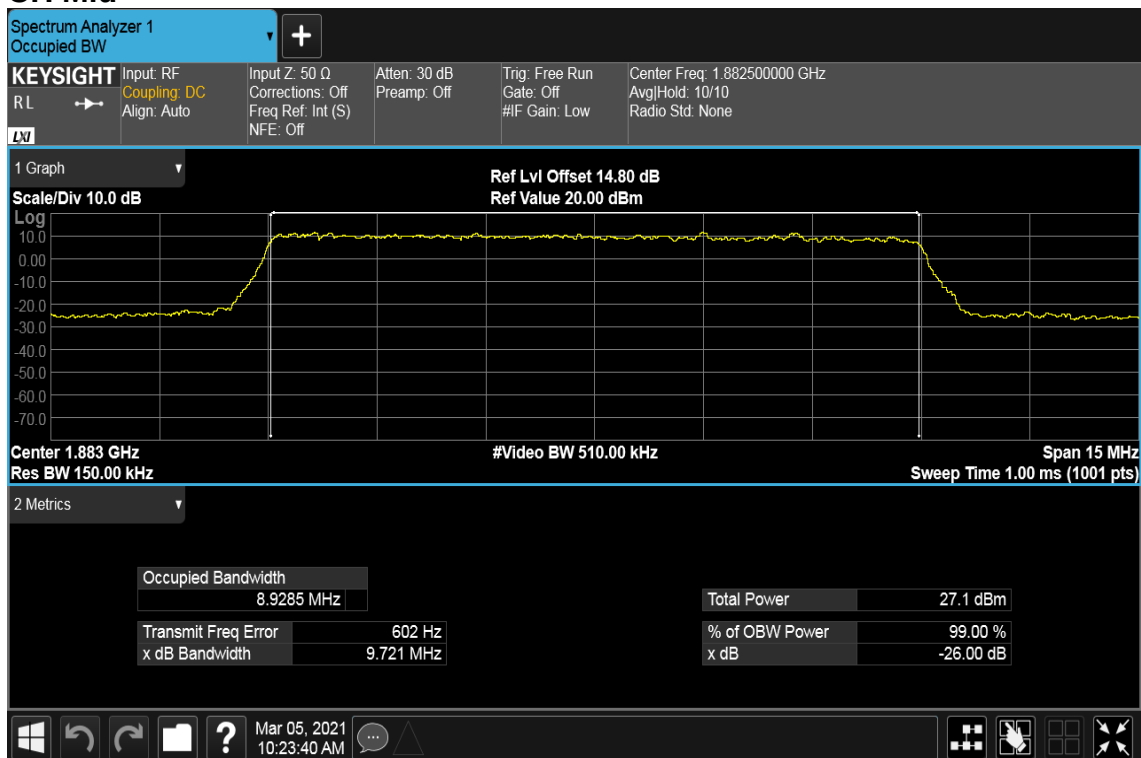
Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 10MHz / 16QAM / RB =50, RB Offset = 0

CH Low



CH Mid



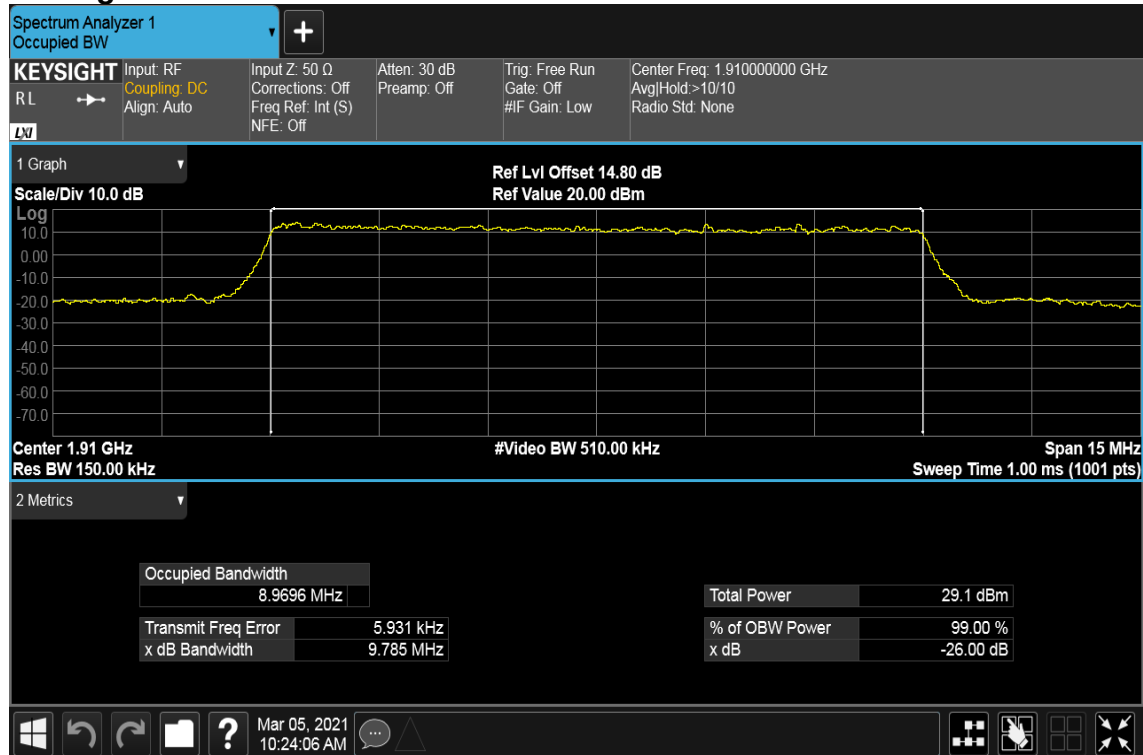


Report No.: T201102D09-RP12

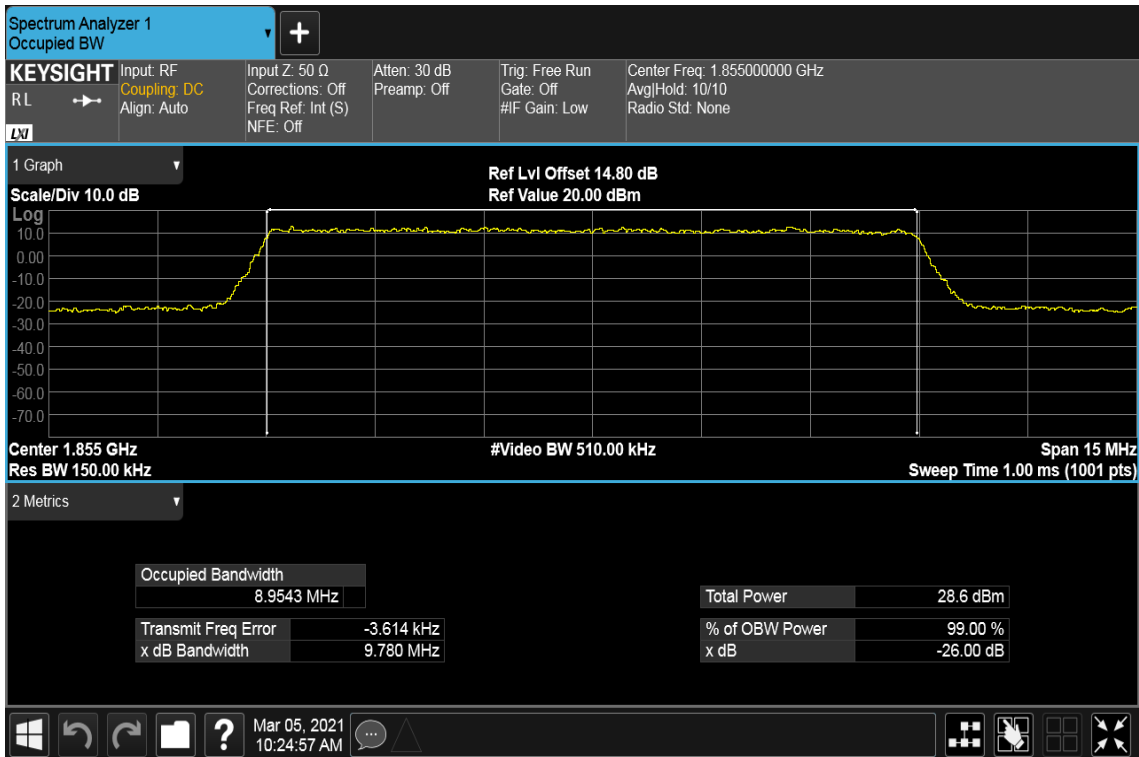
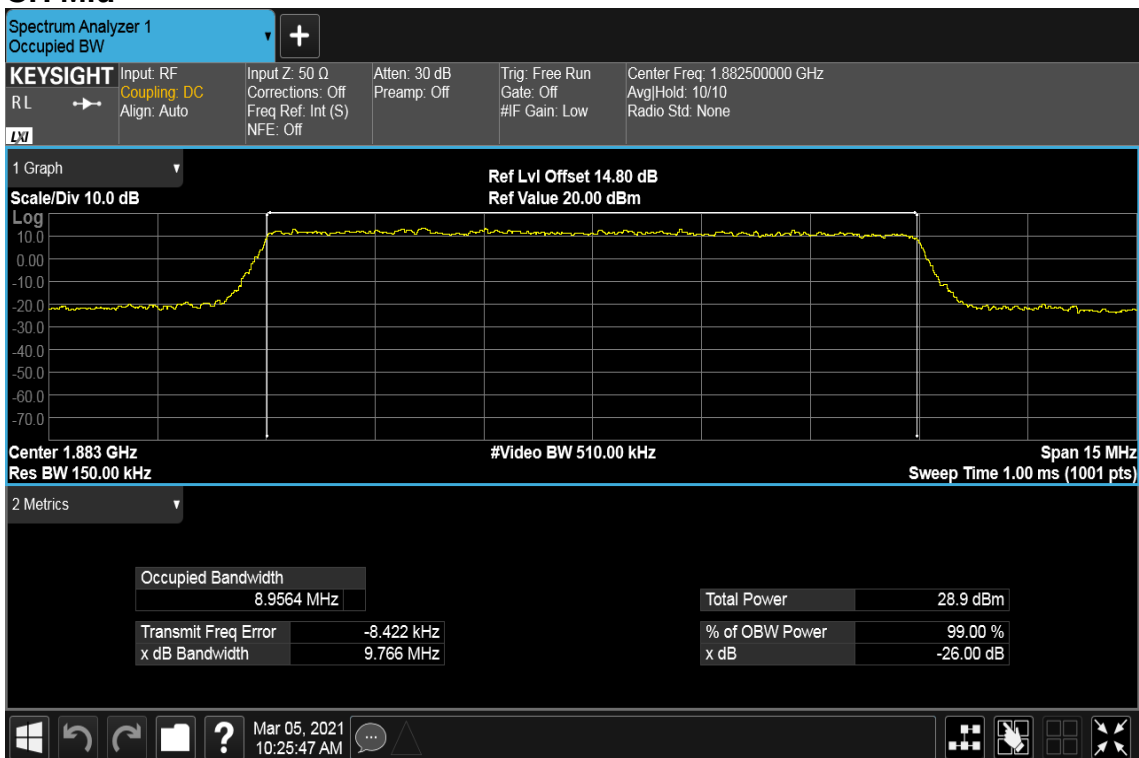
Page: 50 / 111

Rev.: 00

CH High



Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 10MHz / 64QAM / RB =50, RB Offset = 0
CH Low**CH Mid**

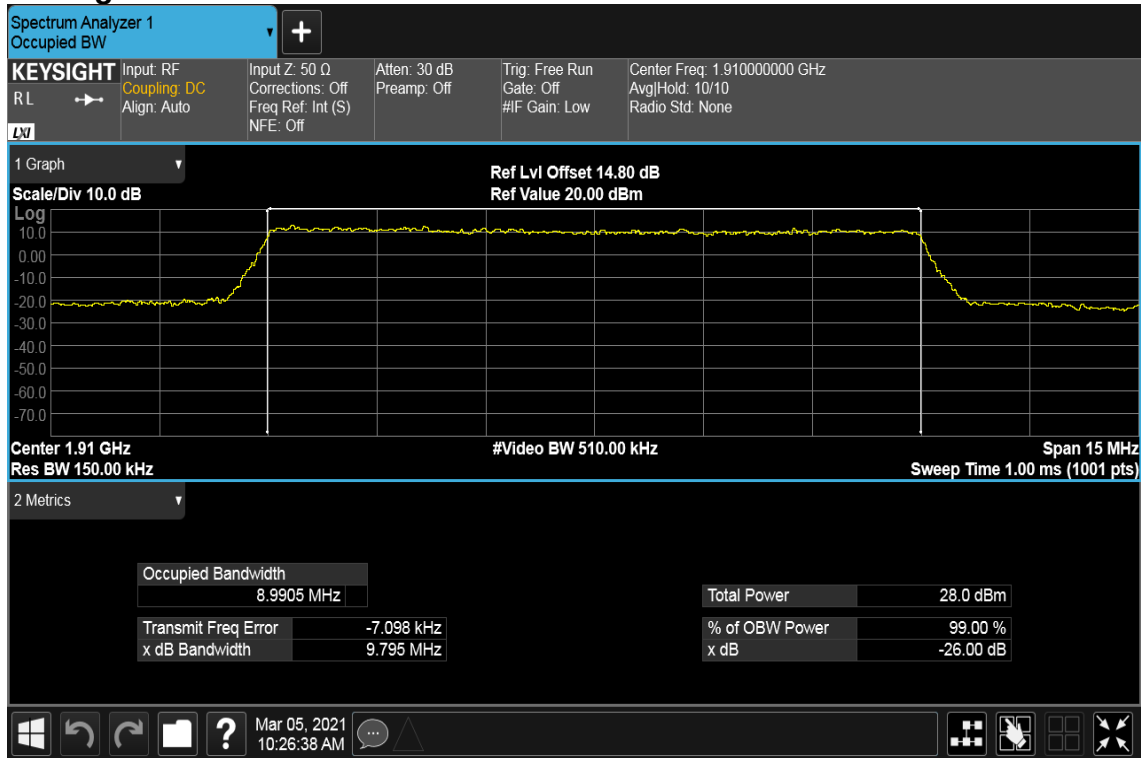


Report No.: T201102D09-RP12

Page: 52 / 111

Rev.: 00

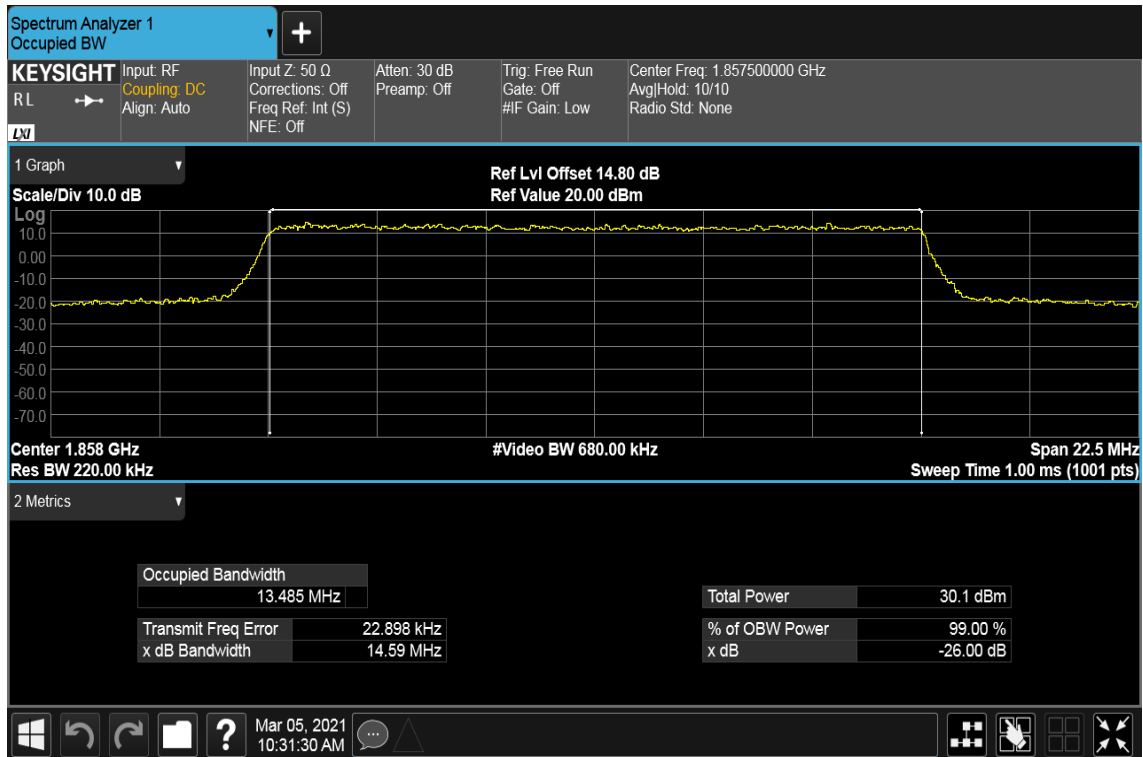
CH High



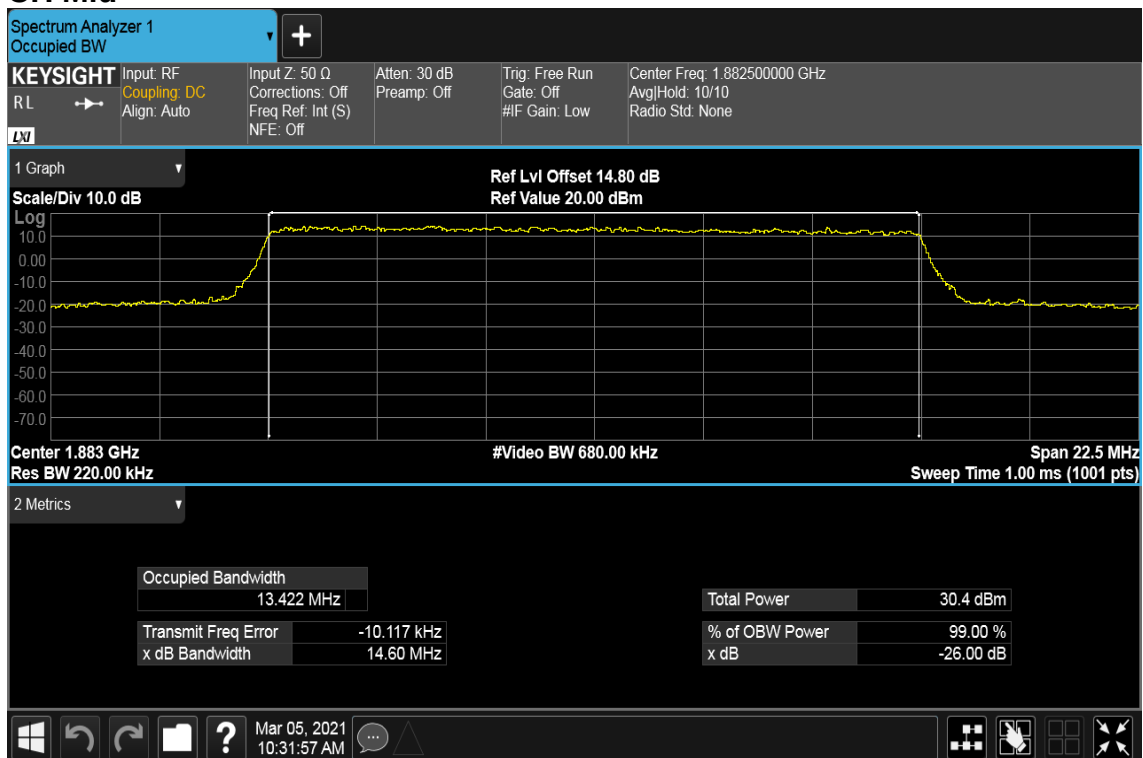
Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 15MHz / QPSK / RB =75, RB Offset = 0

CH Low



CH Mid



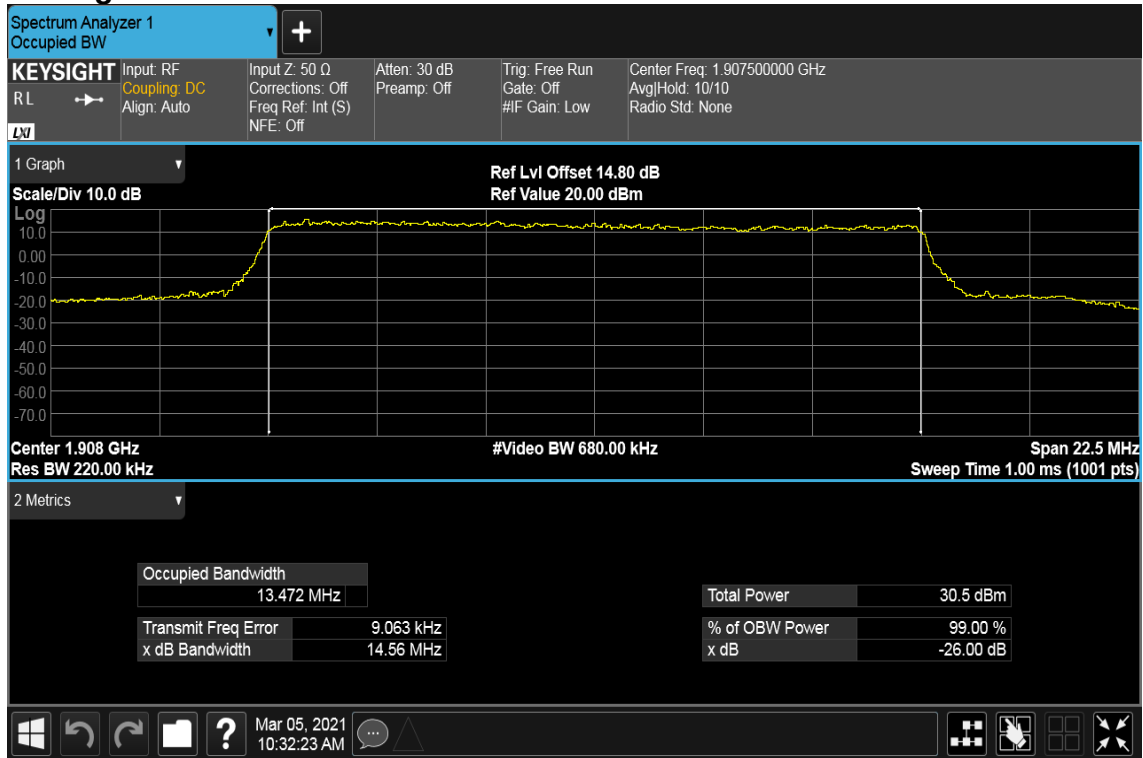


Report No.: T201102D09-RP12

Page: 54 / 111

Rev.: 00

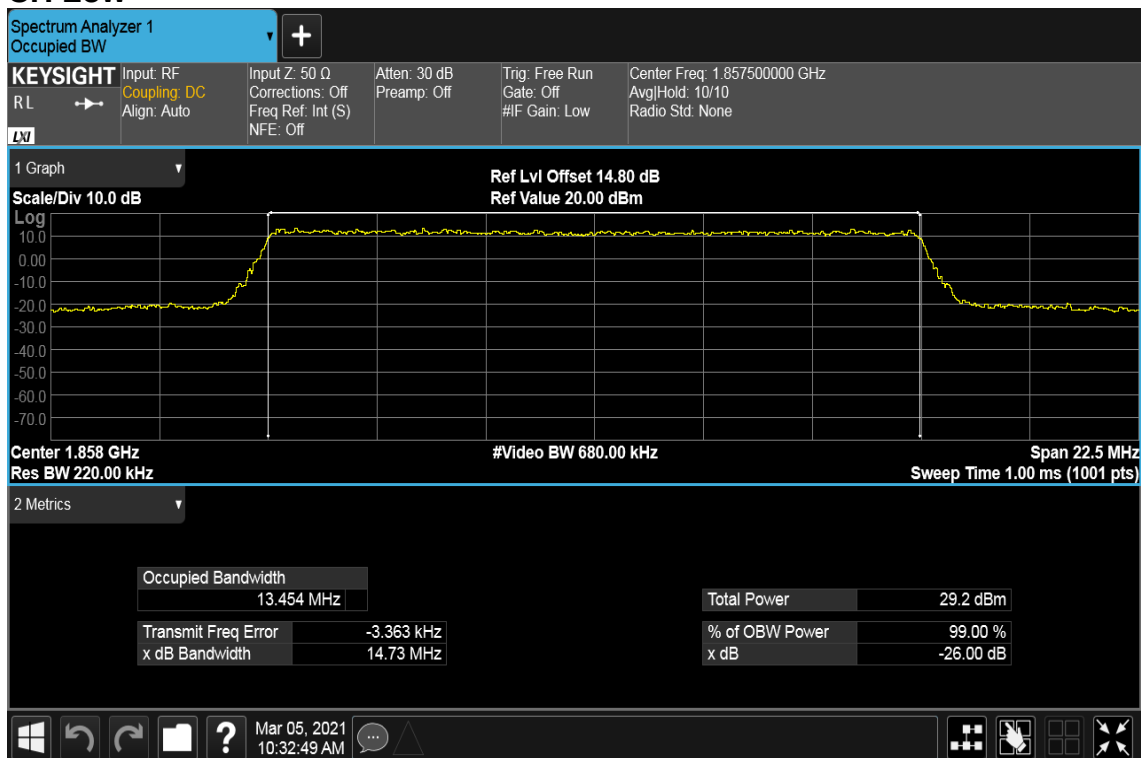
CH High



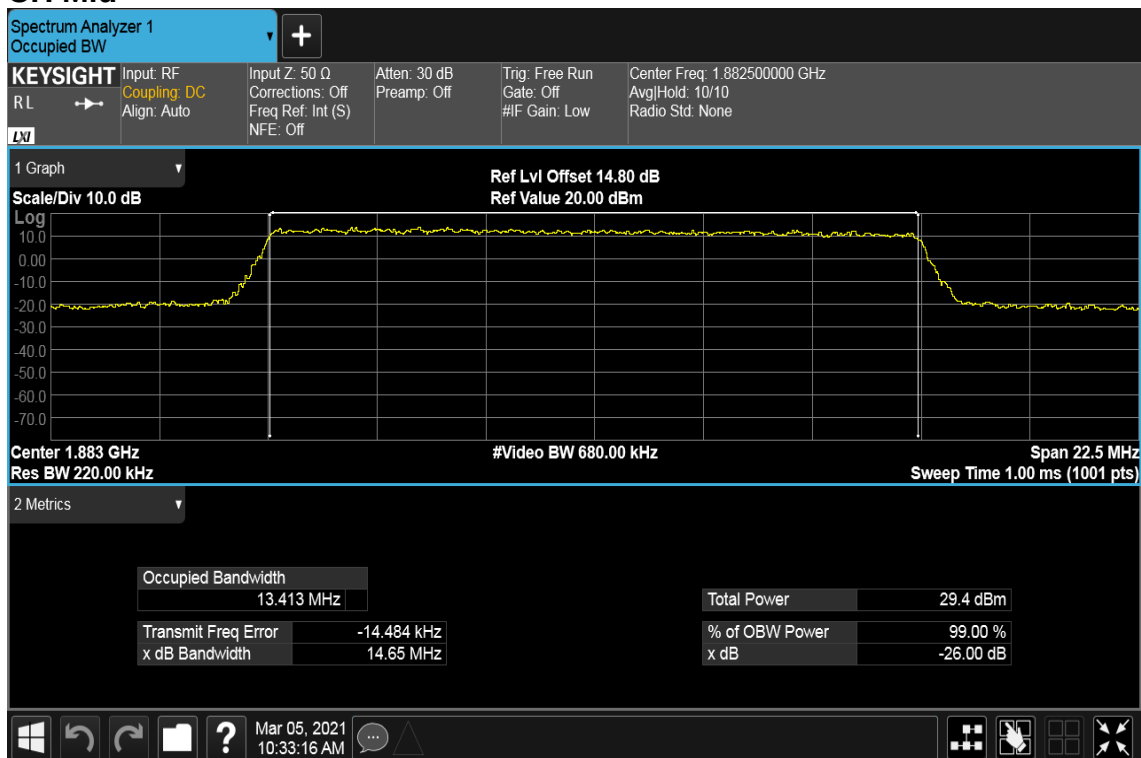
Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 15MHz / 16QAM / RB =75, RB Offset = 0

CH Low



CH Mid



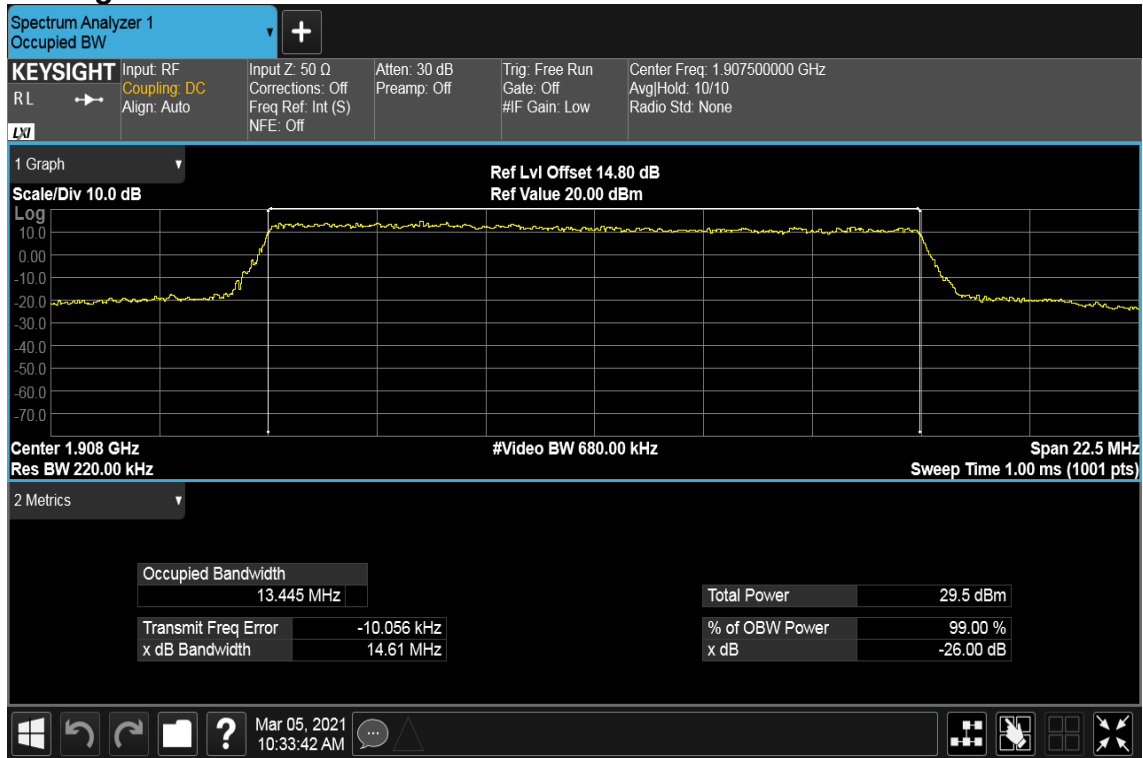


Report No.: T201102D09-RP12

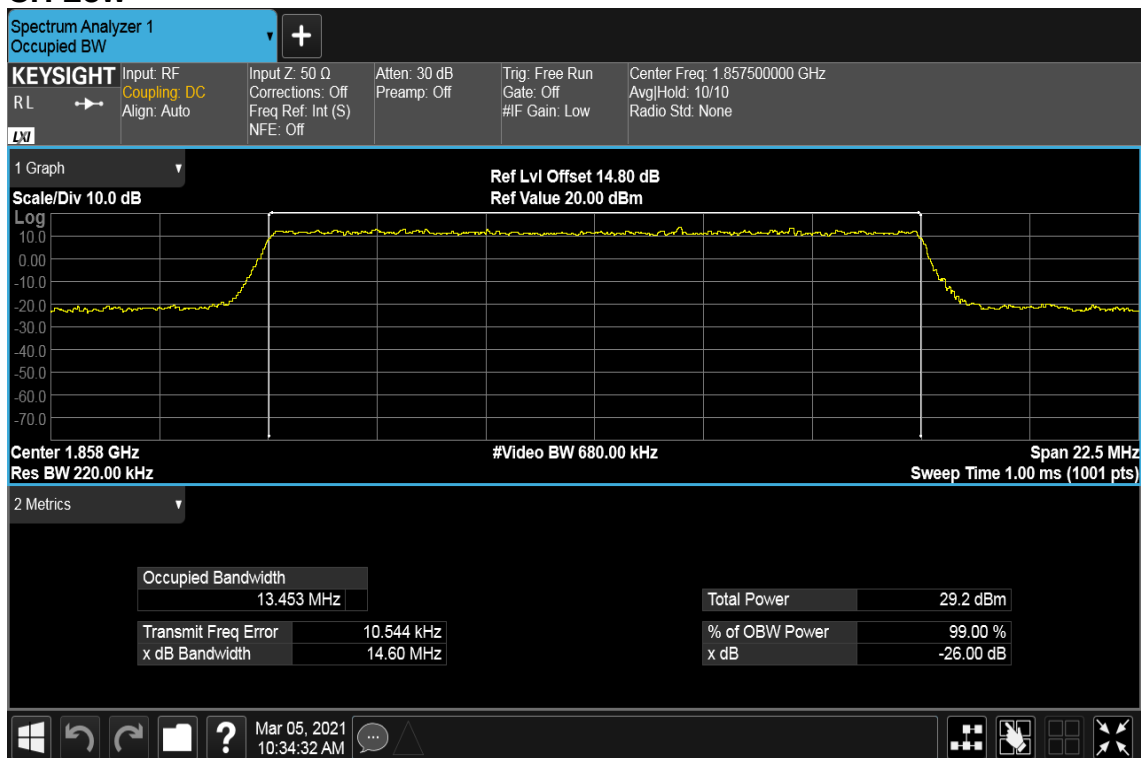
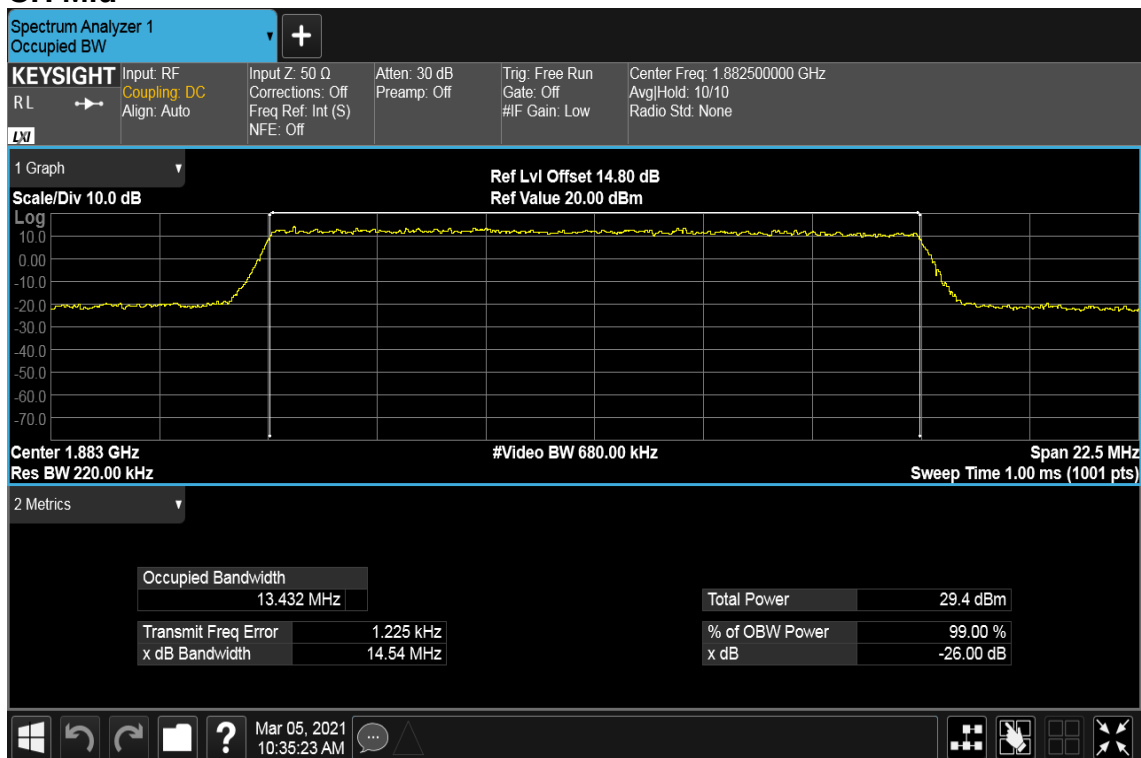
Page: 56 / 111

Rev.: 00

CH High



Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 15MHz / 64QAM / RB =75, RB Offset = 0
CH Low**CH Mid**

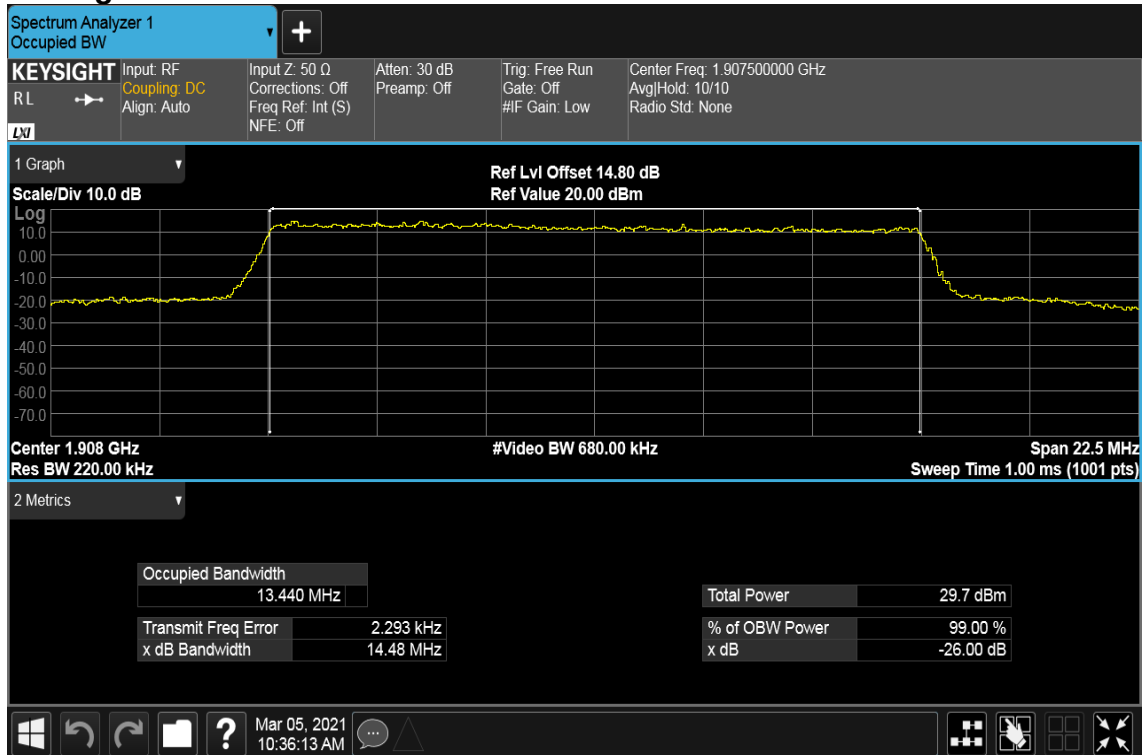


Report No.: T201102D09-RP12

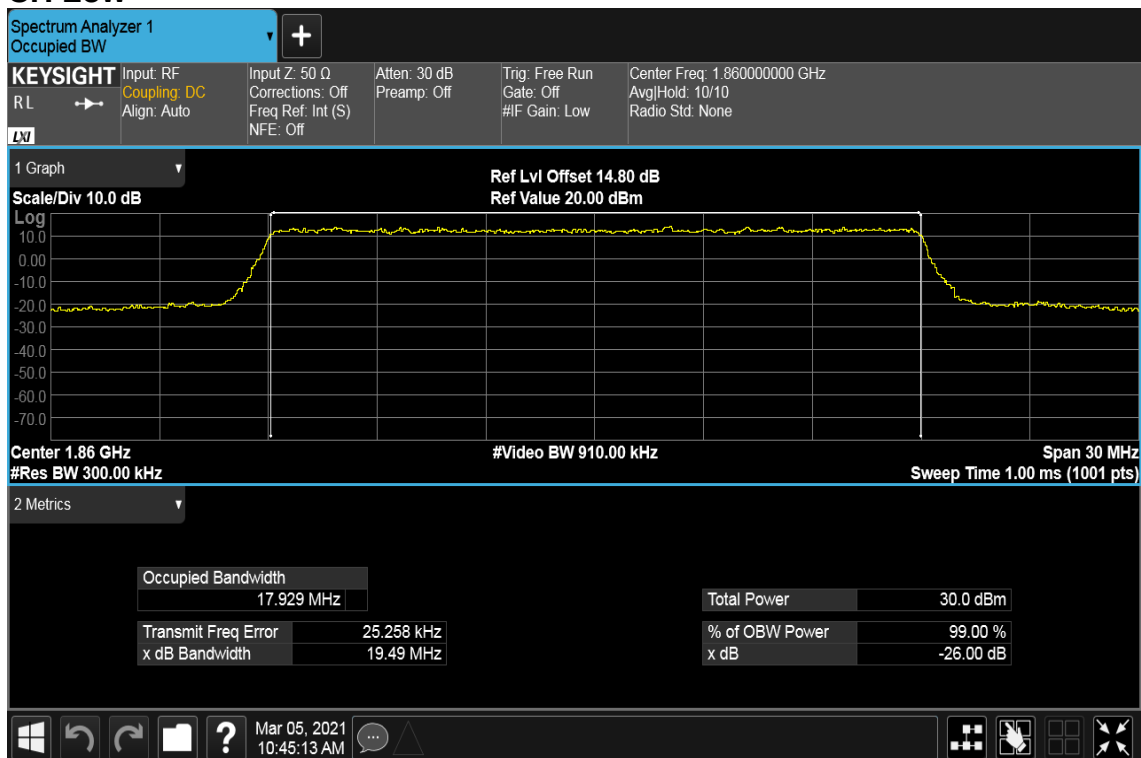
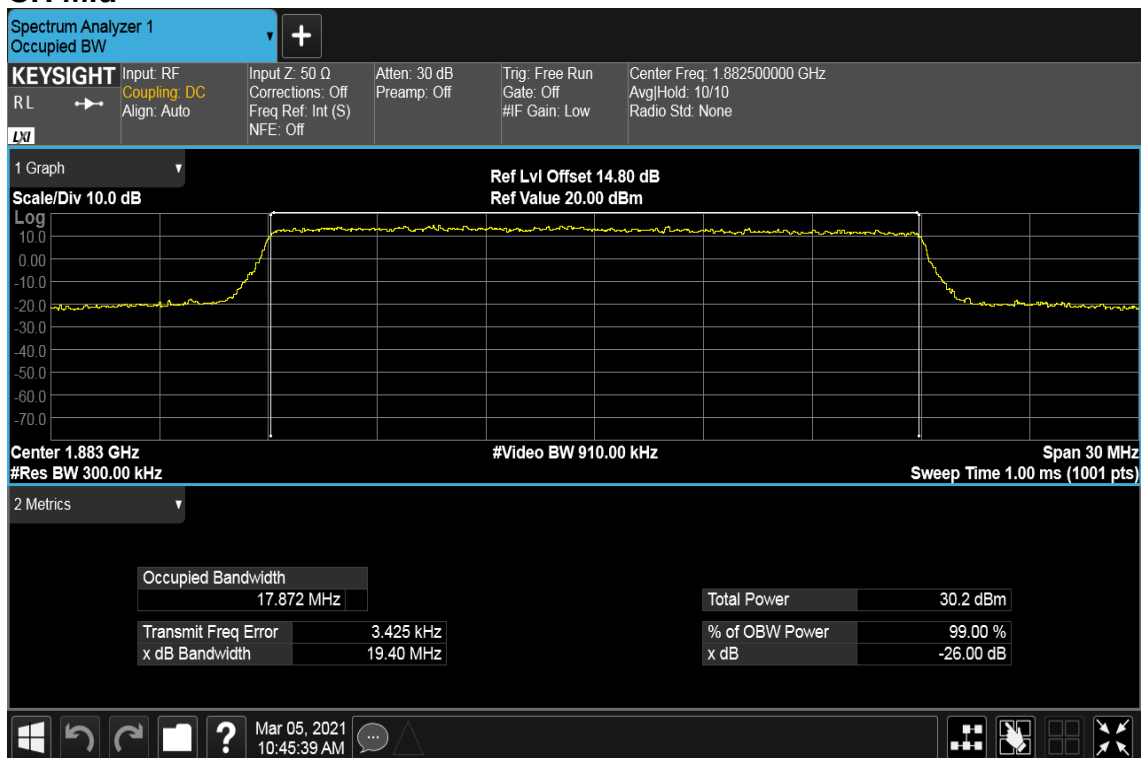
Page: 58 / 111

Rev.: 00

CH High



Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 20MHz / QPSK / RB =100, RB Offset = 0
CH Low**CH Mid**

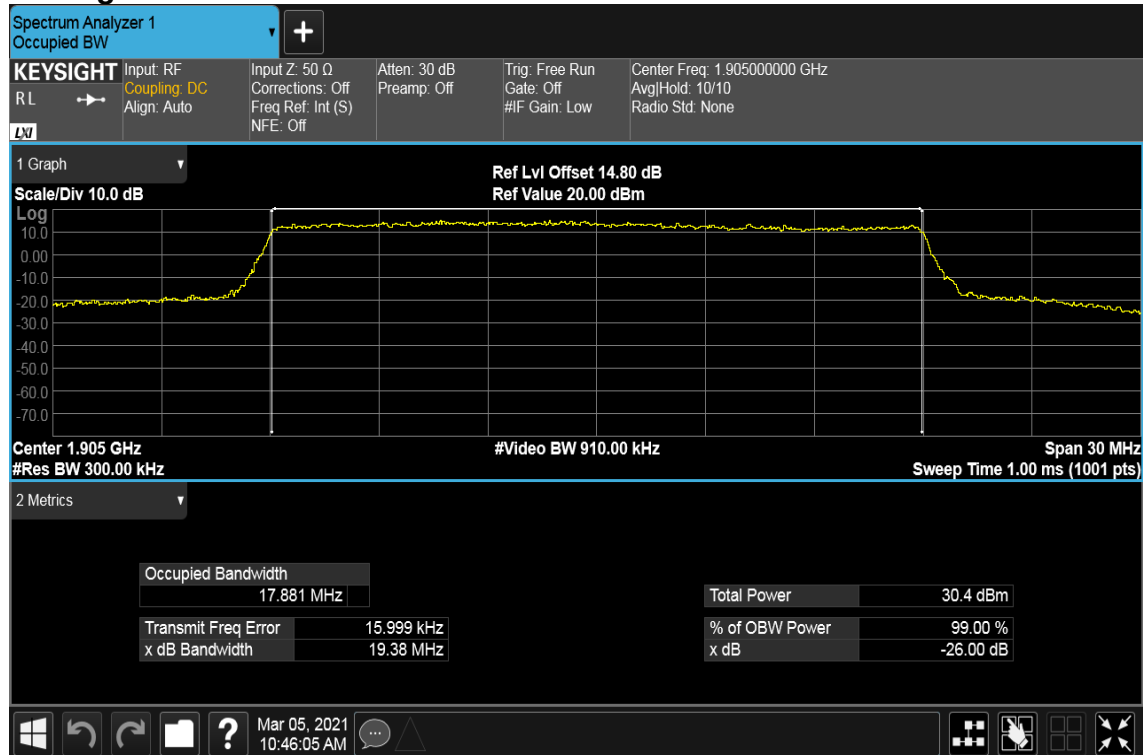


Report No.: T201102D09-RP12

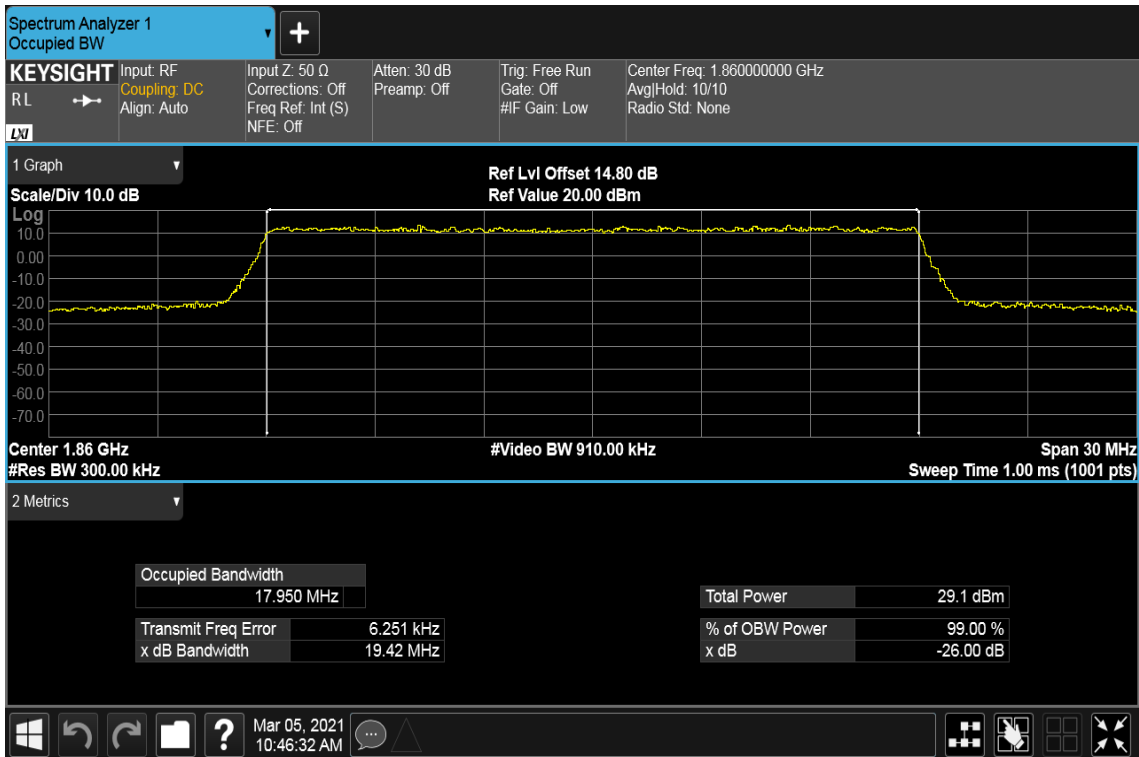
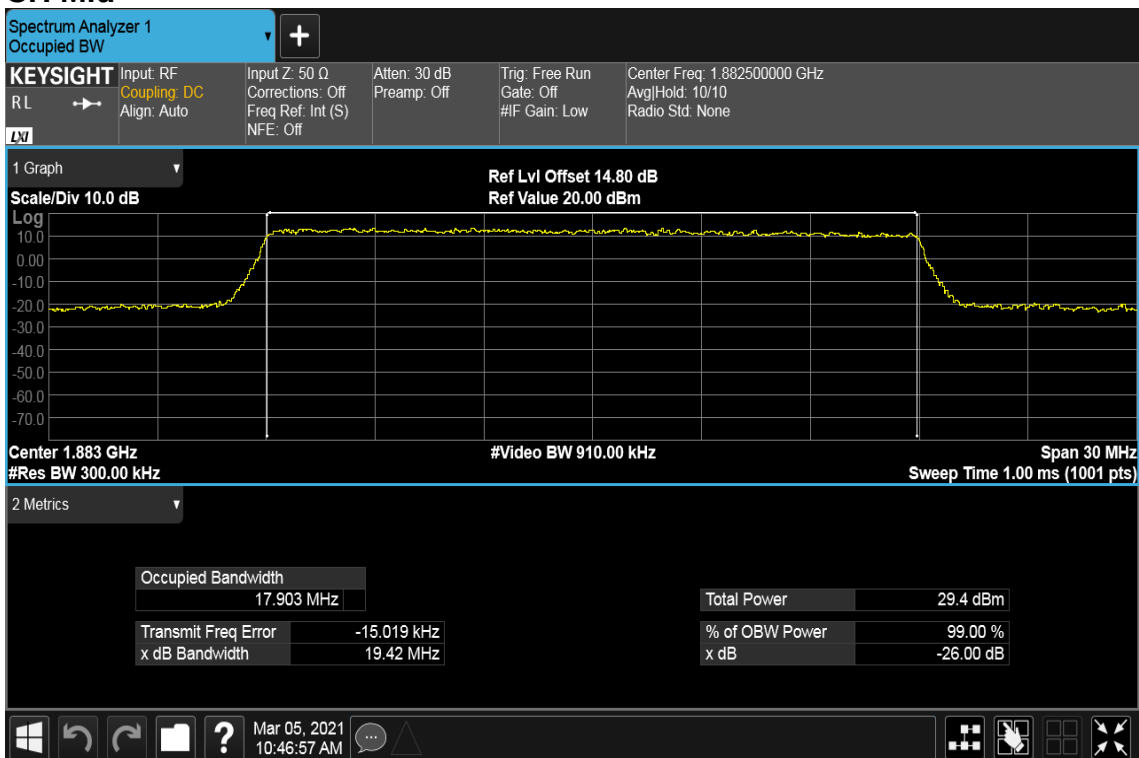
Page: 60 / 111

Rev.: 00

CH High



Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 20MHz / 16QAM / RB =100, RB Offset = 0
CH Low**CH Mid**

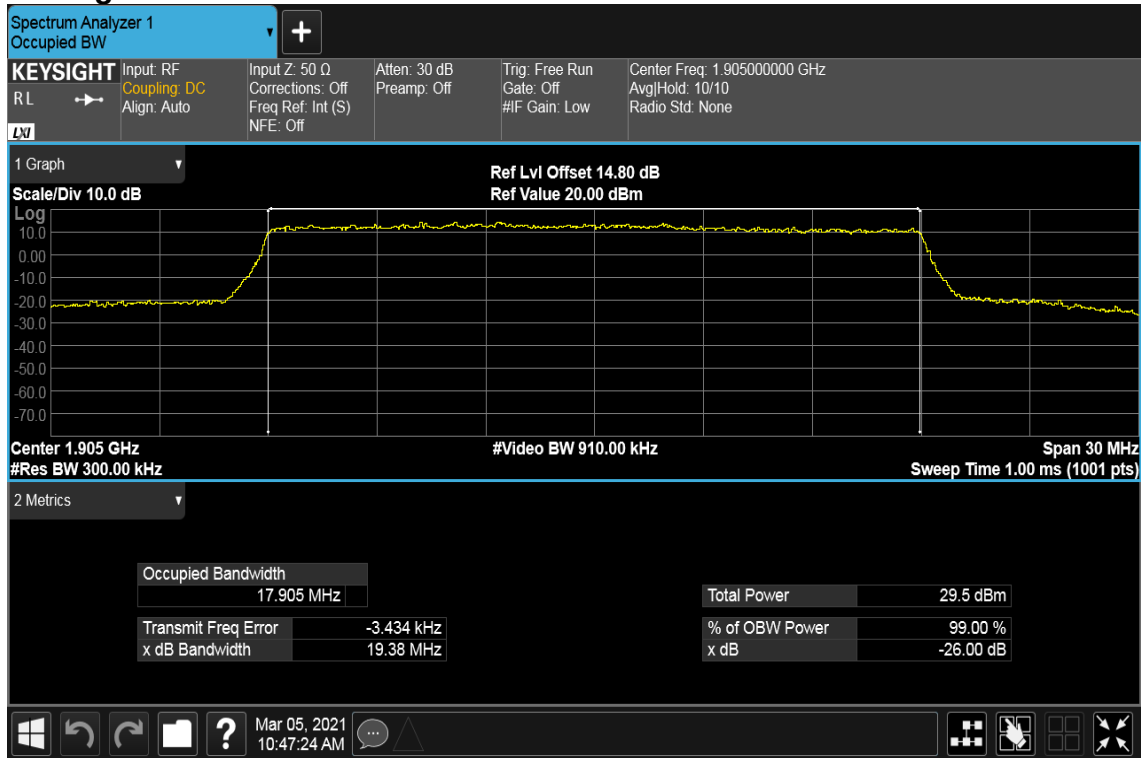


Report No.: T201102D09-RP12

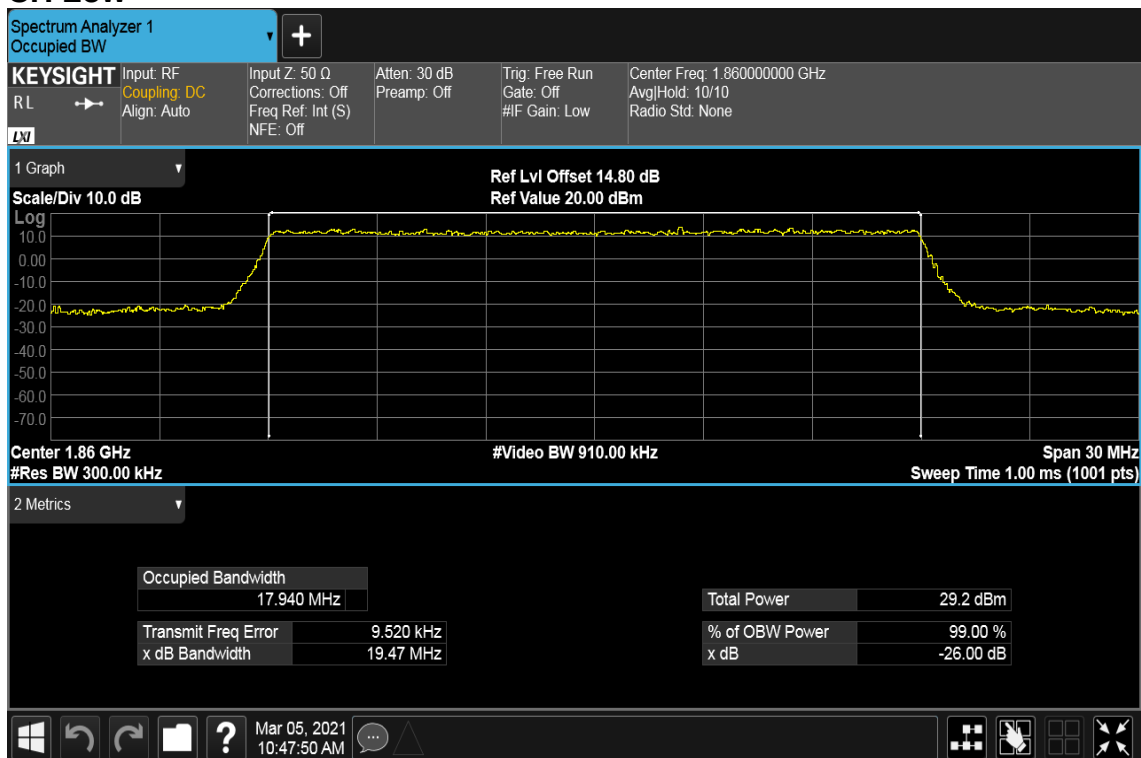
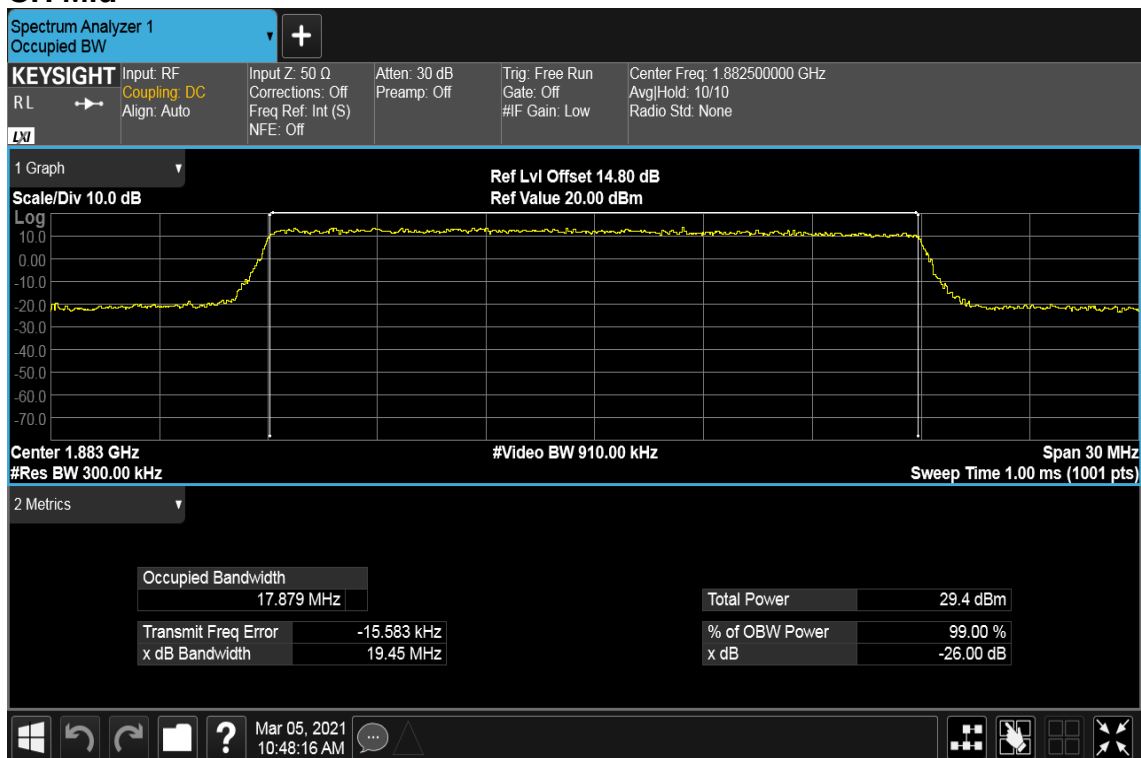
Page: 62 / 111

Rev.: 00

CH High



Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 20MHz / 64QAM / RB =100, RB Offset = 0
CH Low**CH Mid**

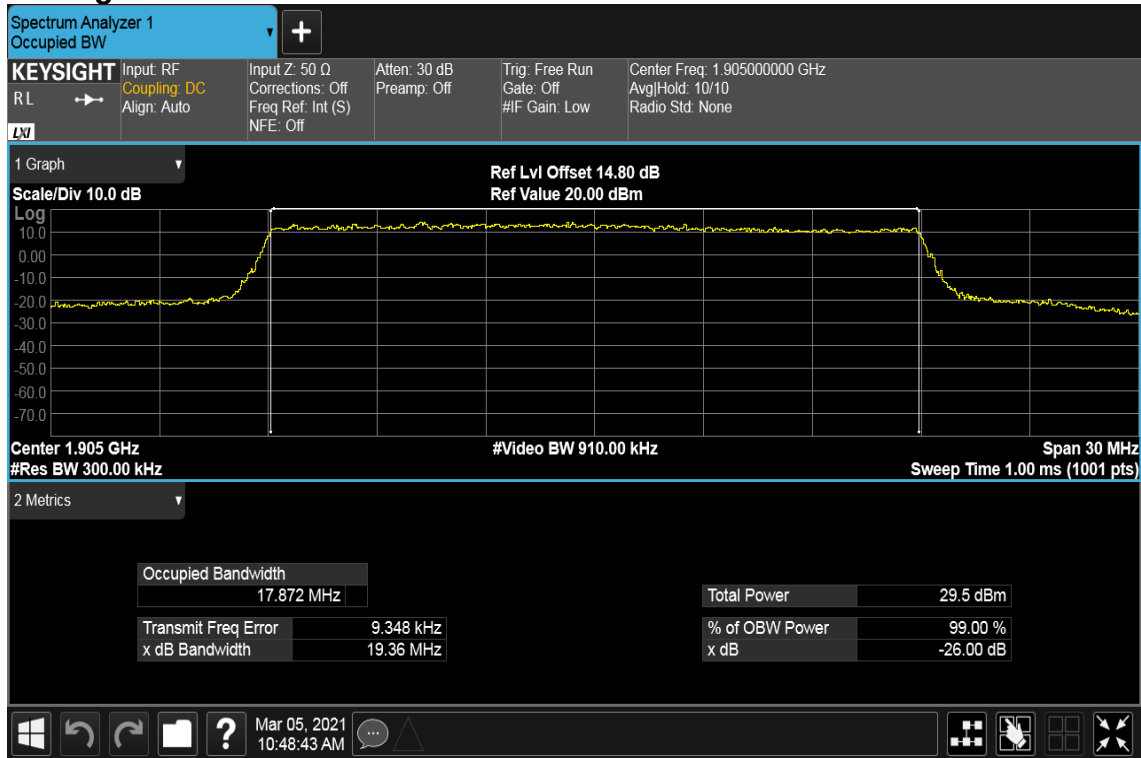


Report No.: T201102D09-RP12

Page: 64 / 111

Rev.: 00

CH High



8.4 PEAK TO AVERAGE POWER RATIO

Limit

In measuring the transmitter's peak-to-average power ratio (PAPR) shall not exceed 13 dB for more than 0.1% of the time using a signal corresponding to the highest PAPR during periods of continuous transmission.

Test Procedures

1. According to KDB 971168 D01,
2. The EUT was connect to spectrum analyzer and call box.
3. Set the CCDF function in spectrum analyzer.
4. The highest RF output power were measured and recorded the maximum PAPR level associated with a probability of 0.1%.
5. Record the Peak to Average Power Ratio.

Note: We selected worst case to performed test in middle channel, the results can be meet other channel.

Test Results**Temperature:** 25.3°C**Humidity:** 57.6% RH**Tested by:** Jerry Chang**Test Date:** March 5, 2021**Temperature:** 25.8°C**Humidity:** 57.4% RH**Tested by:** Jerry Chang**Test Date:** August 26, 2021**LTE Band 25**

LTE BAND 25							
Channel bandwidth: 1.4MHz				Channel bandwidth: 3MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
1850.7	26047	5.76	13	1851.5	26055	5.59	13
1882.5	26365	5.55	13	1882.5	26365	5.56	13
1914.3	26683	5.57	13	1913.5	26675	5.67	13

LTE BAND 25							
Channel bandwidth: 5MHz				Channel bandwidth: 10MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
1852.5	26065	5.41	13	1855.0	26090	5.70	13
1882.5	26365	5.62	13	1882.5	26365	5.71	13
1912.5	26665	5.76	13	1910.0	26640	5.85	13

LTE BAND 25							
Channel bandwidth: 15MHz				Channel bandwidth: 20MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
1857.5	26115	5.67	13	1860.0	26140	5.50	13
1882.5	26365	5.36	13	1882.5	26365	5.56	13
1907.5	26615	5.57	13	1905.0	26590	5.38	13

Note: We selected worst case to performed test in middle channel, the results can be meet other channel.

Report No.: T201102D09-RP12

LTE Band 25

CHANNEL BANDWIDTH: 1.4MHz / 64QAM / RB =6, RB Offset = 0

CH Low



CH Mid





Report No.: T201102D09-RP12

Page: 68 / 111

Rev.: 00

CH High





Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 3MHz / 64QAM / RB =15, RB Offset = 0
CH Low**CH Mid**

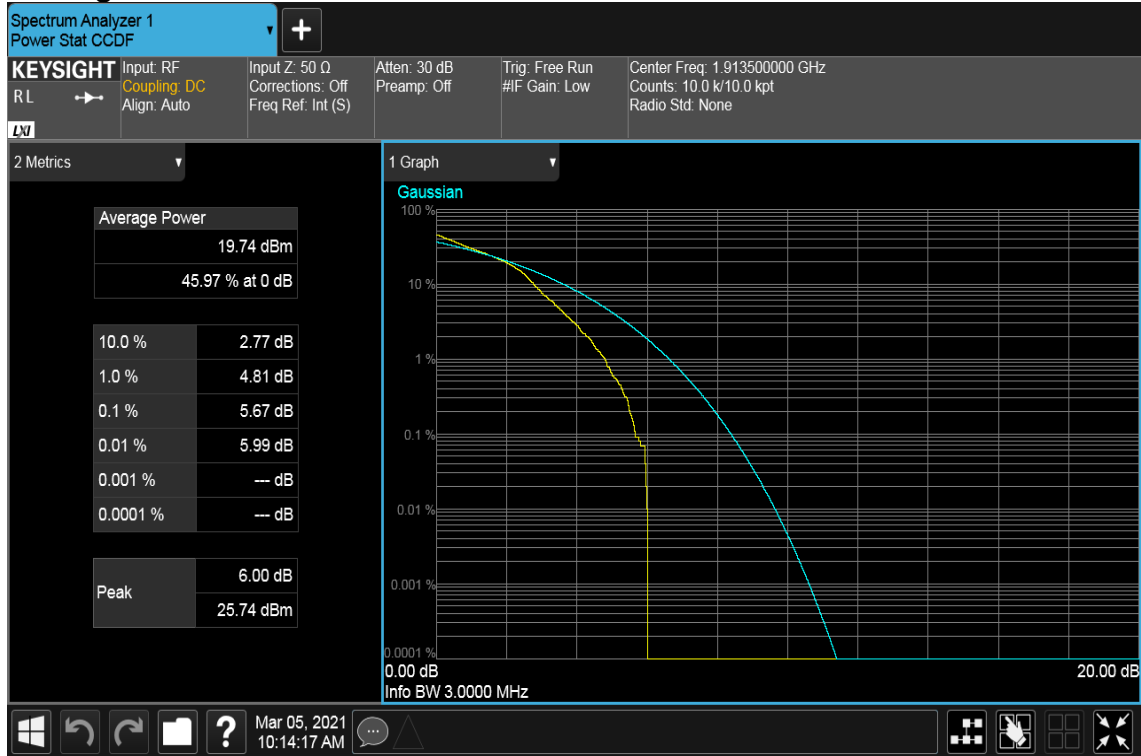


Report No.: T201102D09-RP12

Page: 70 / 111

Rev.: 00

CH High



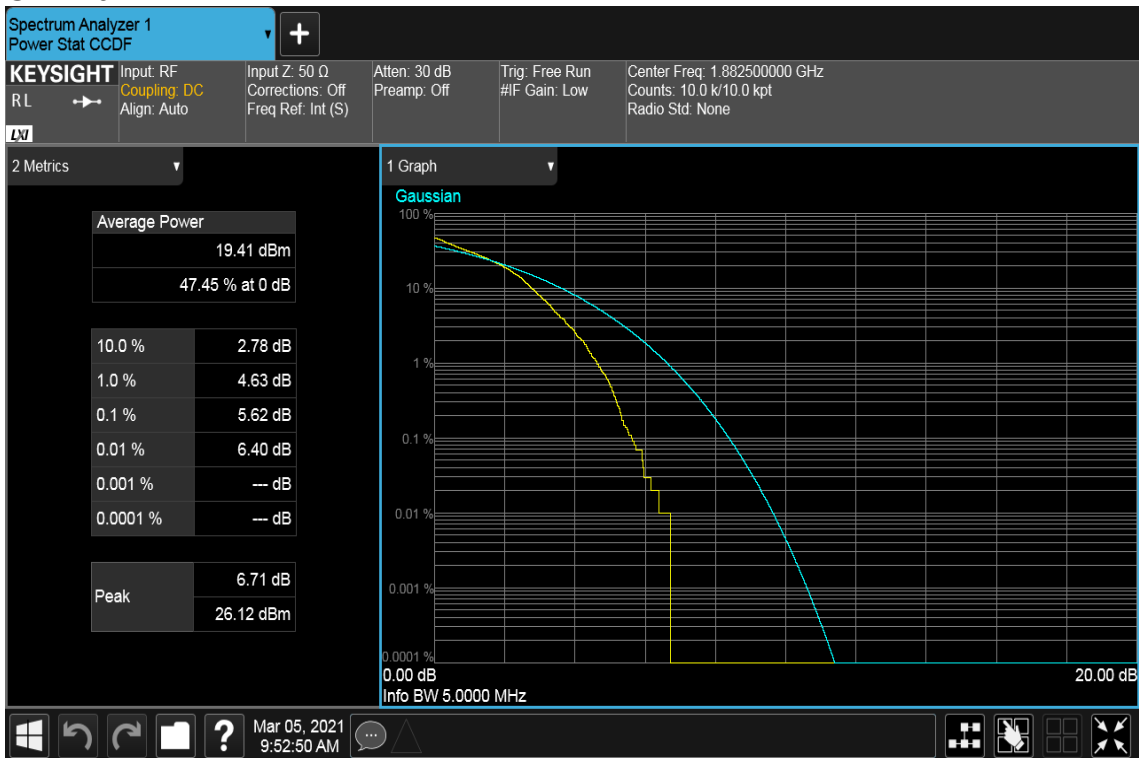
Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 5MHz / 64QAM / RB =25, RB Offset = 0

CH Low



CH Mid



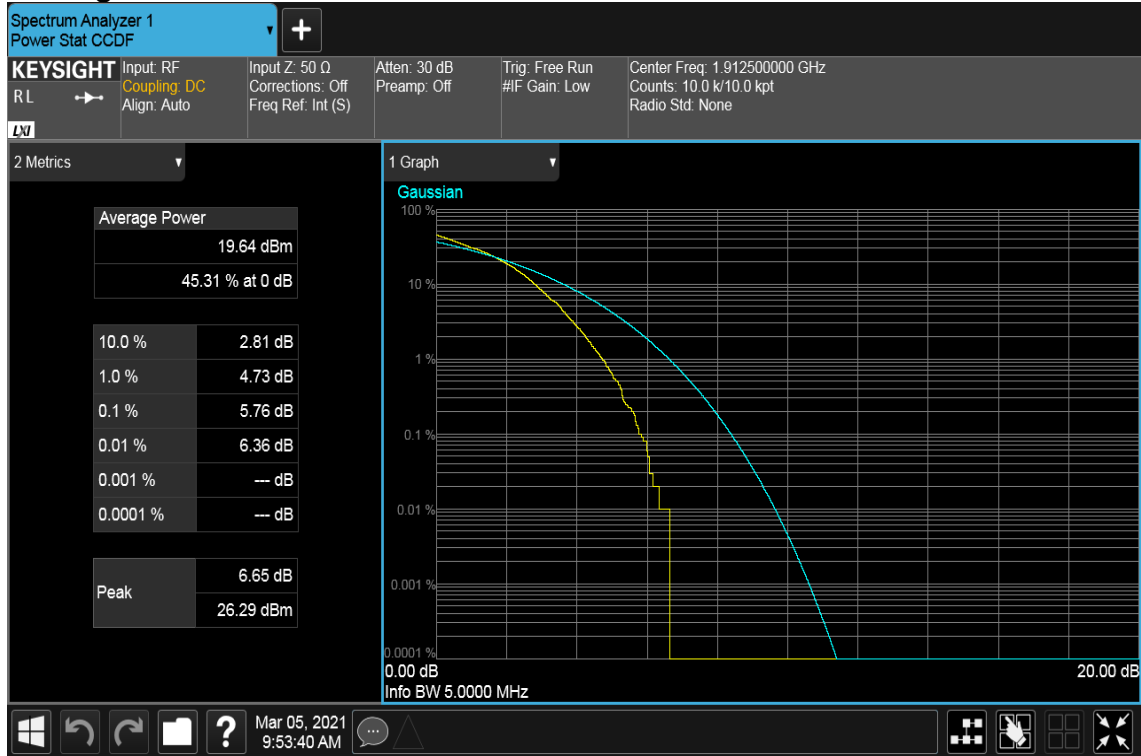


Report No.: T201102D09-RP12

Page: 72 / 111

Rev.: 00

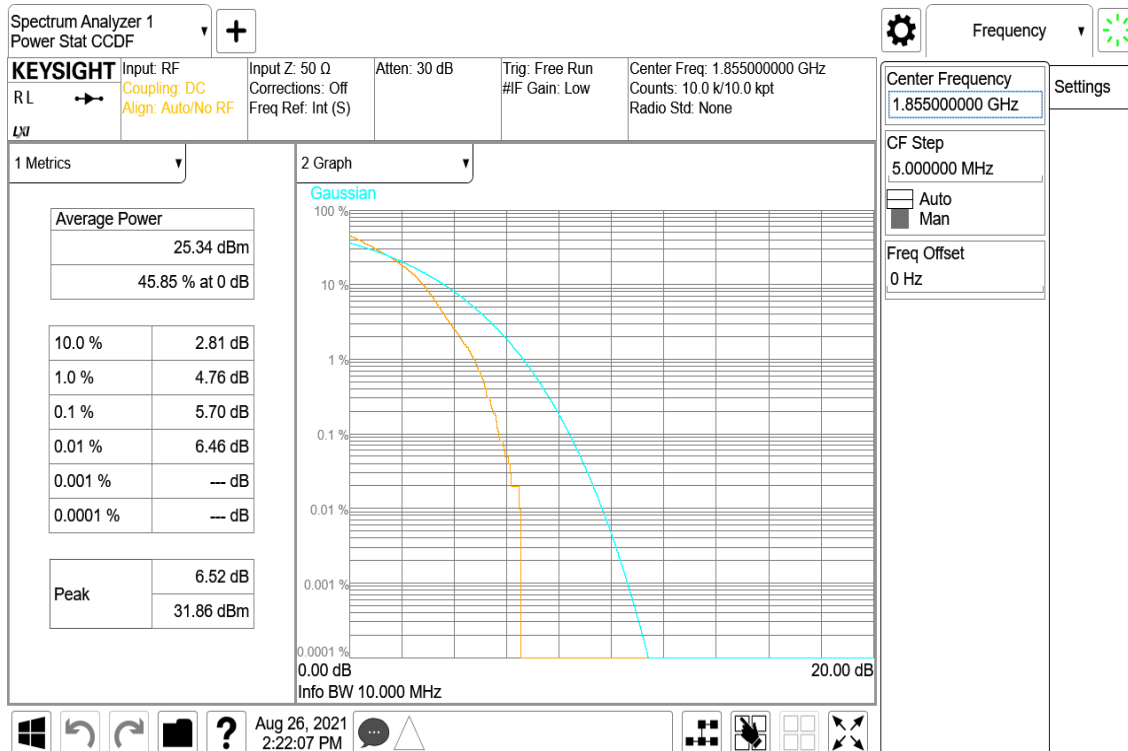
CH High



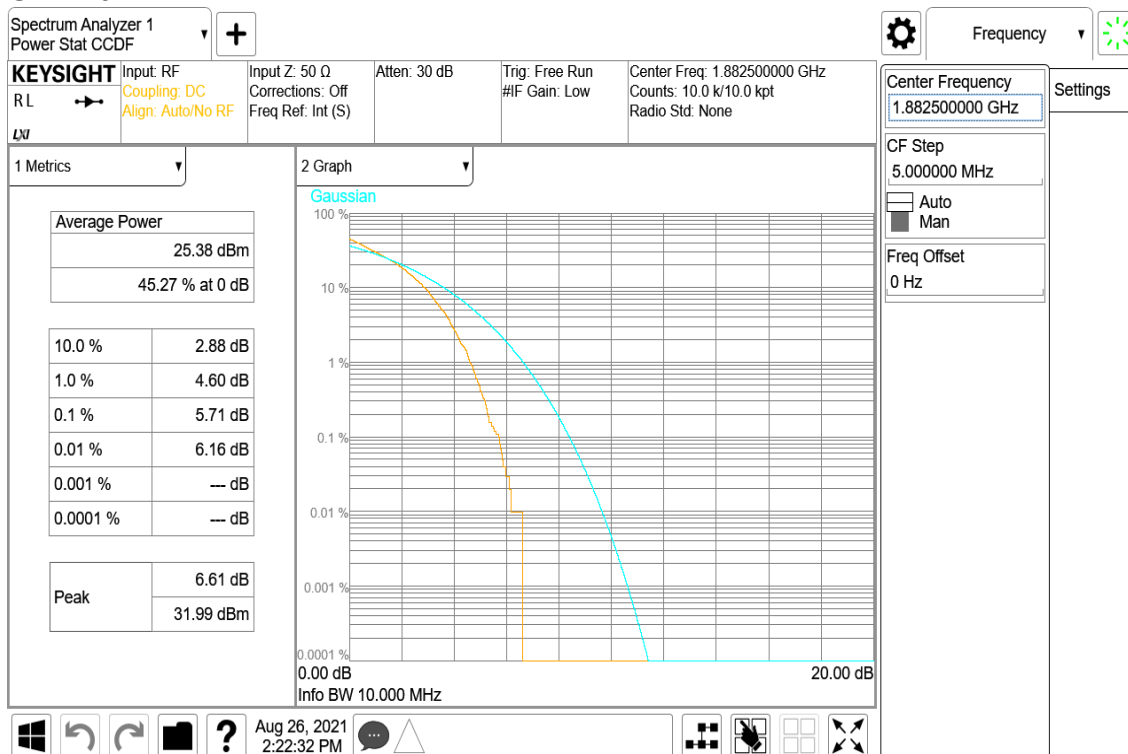
Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 10MHz / 64QAM / RB =50, RB Offset = 0

CH Low



CH Mid



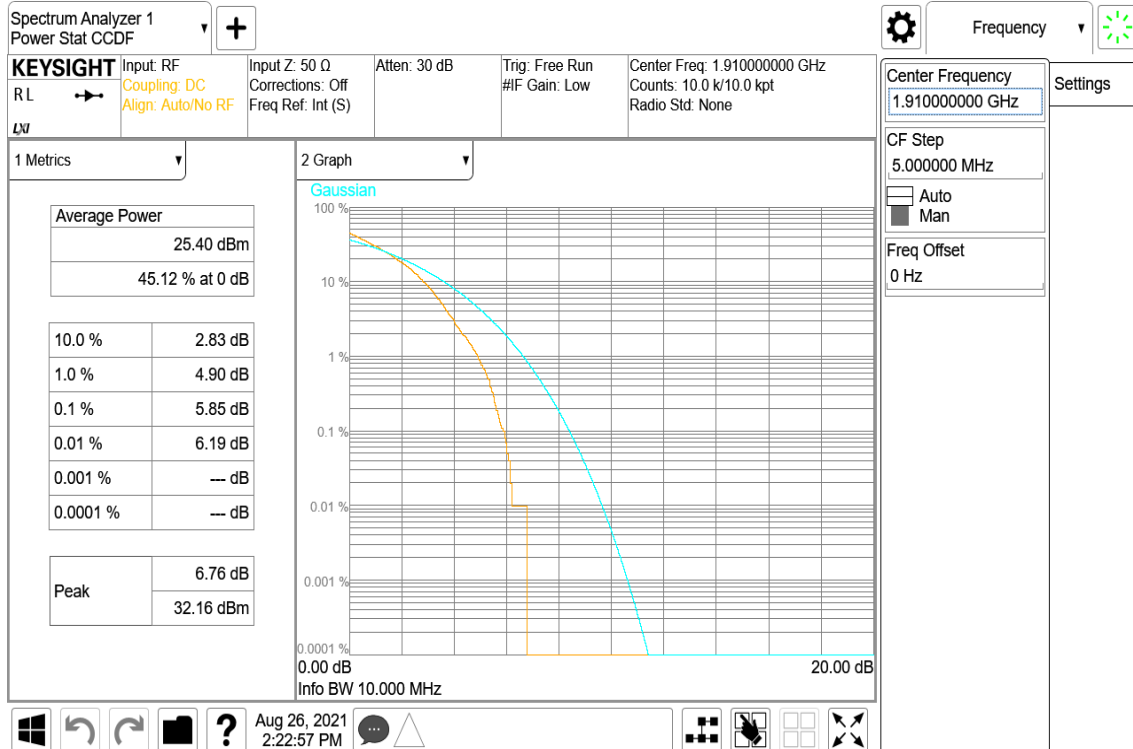


Report No.: T201102D09-RP12

Page: 74 / 111

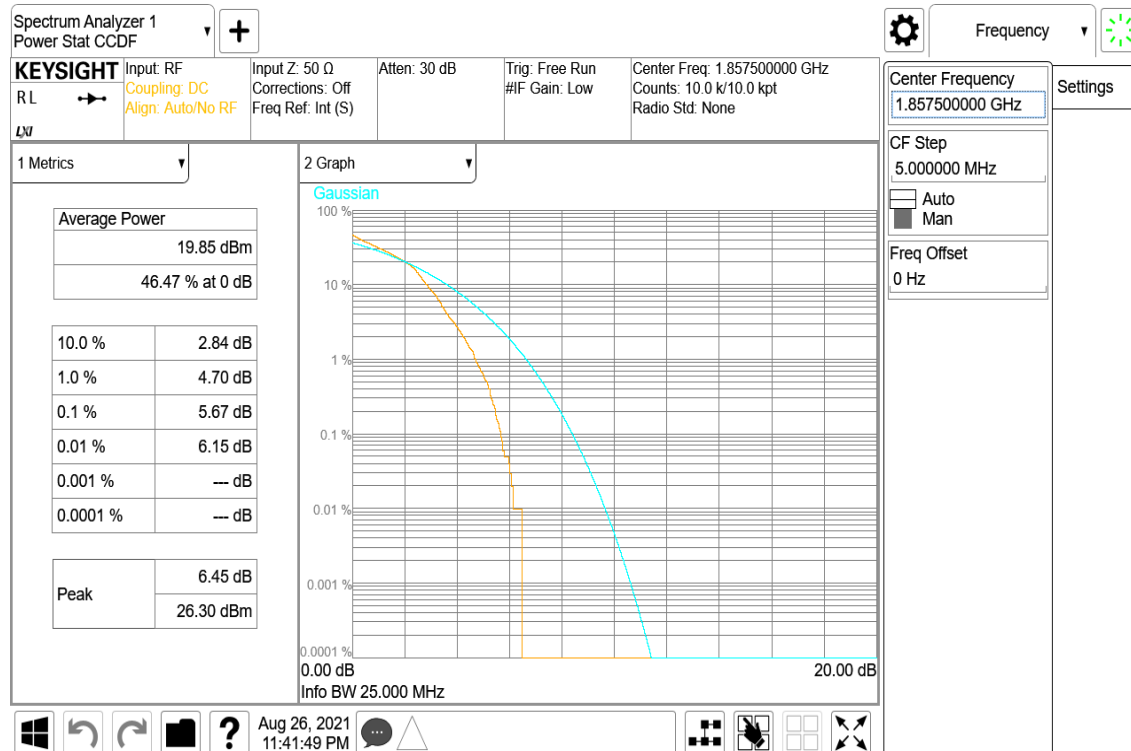
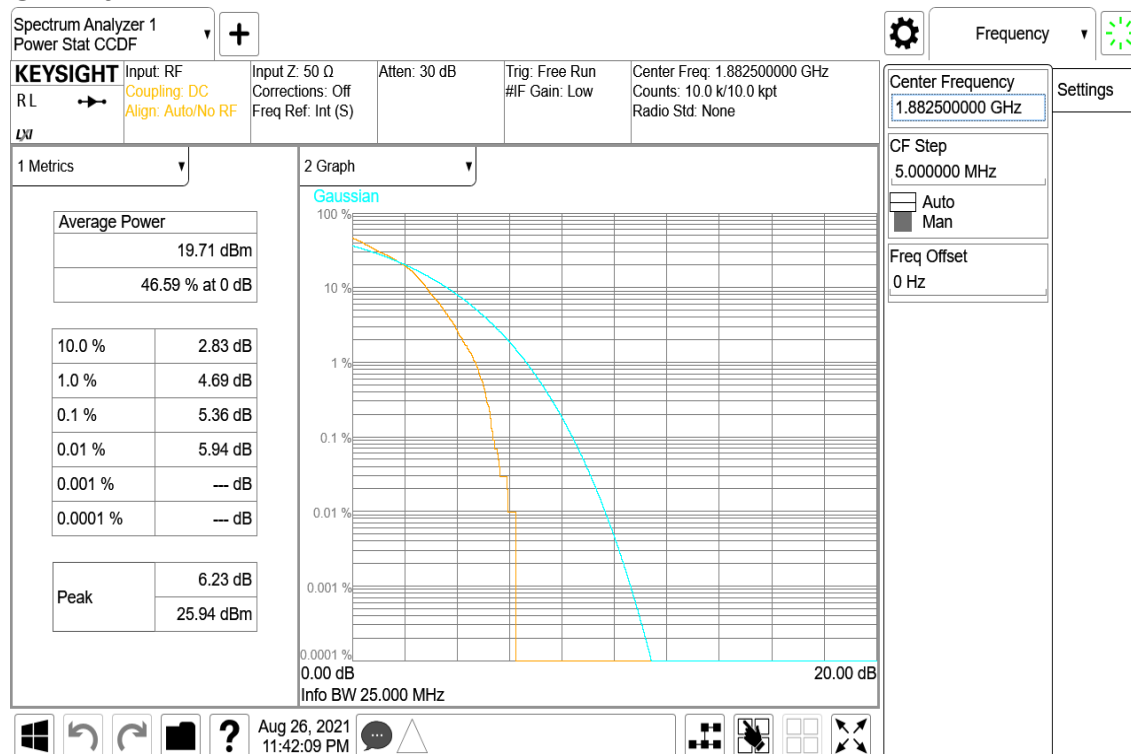
Rev.: 00

CH High



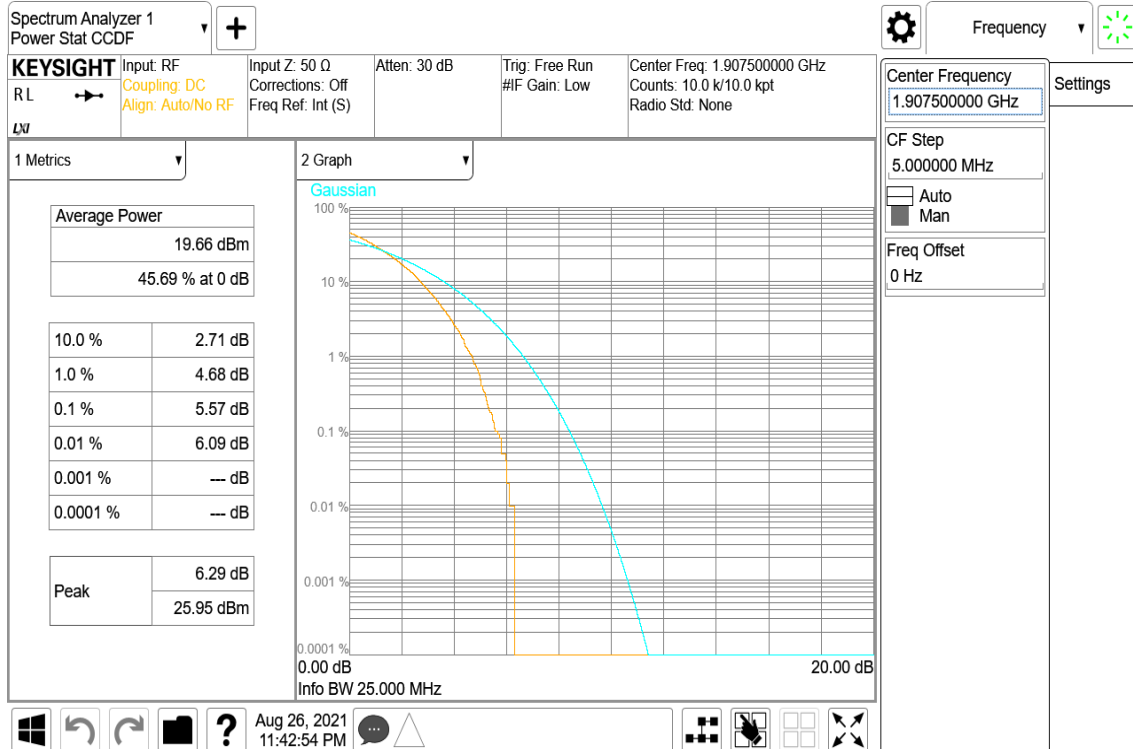


Report No.: T201102D09-RP12

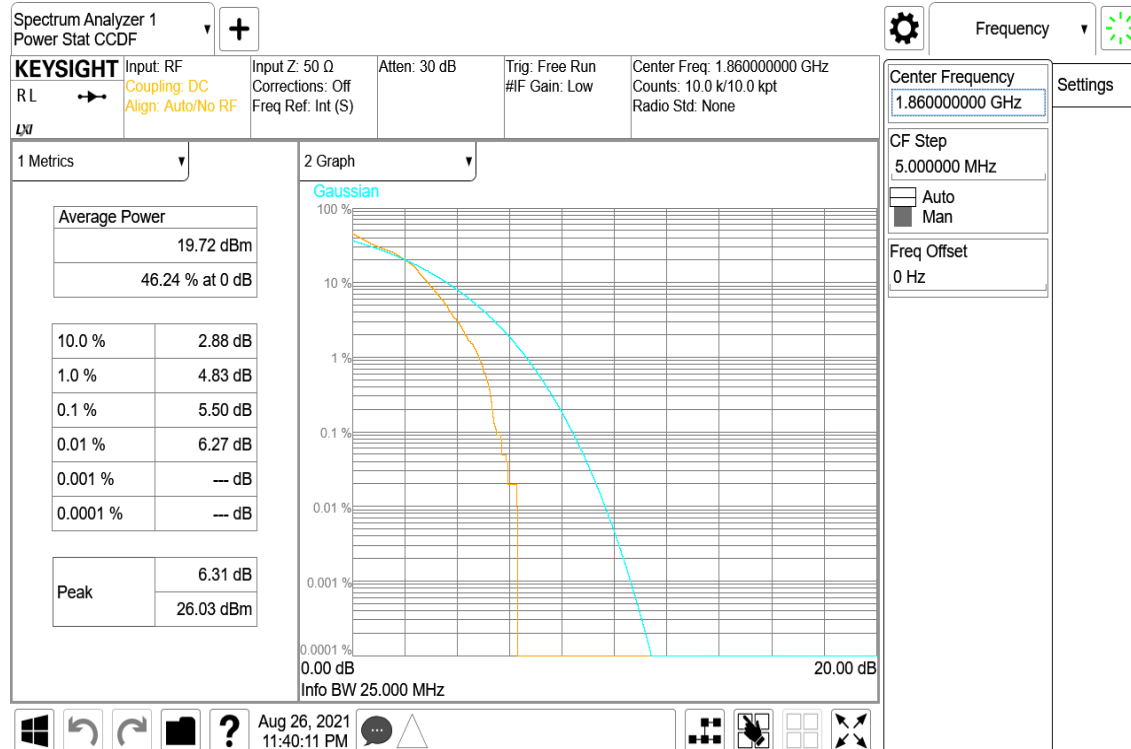
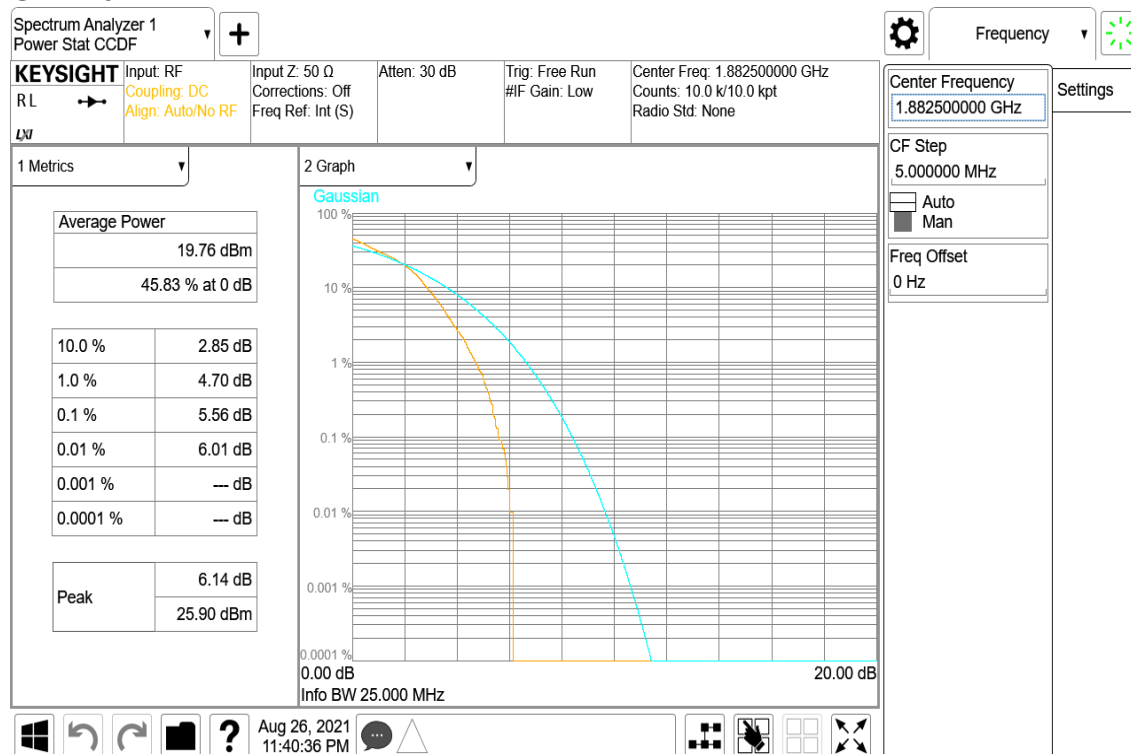
CHANNEL BANDWIDTH: 15MHz / 64QAM / RB =75, RB Offset = 0**CH Low****CH Mid**



Report No.: T201102D09-RP12

CH High

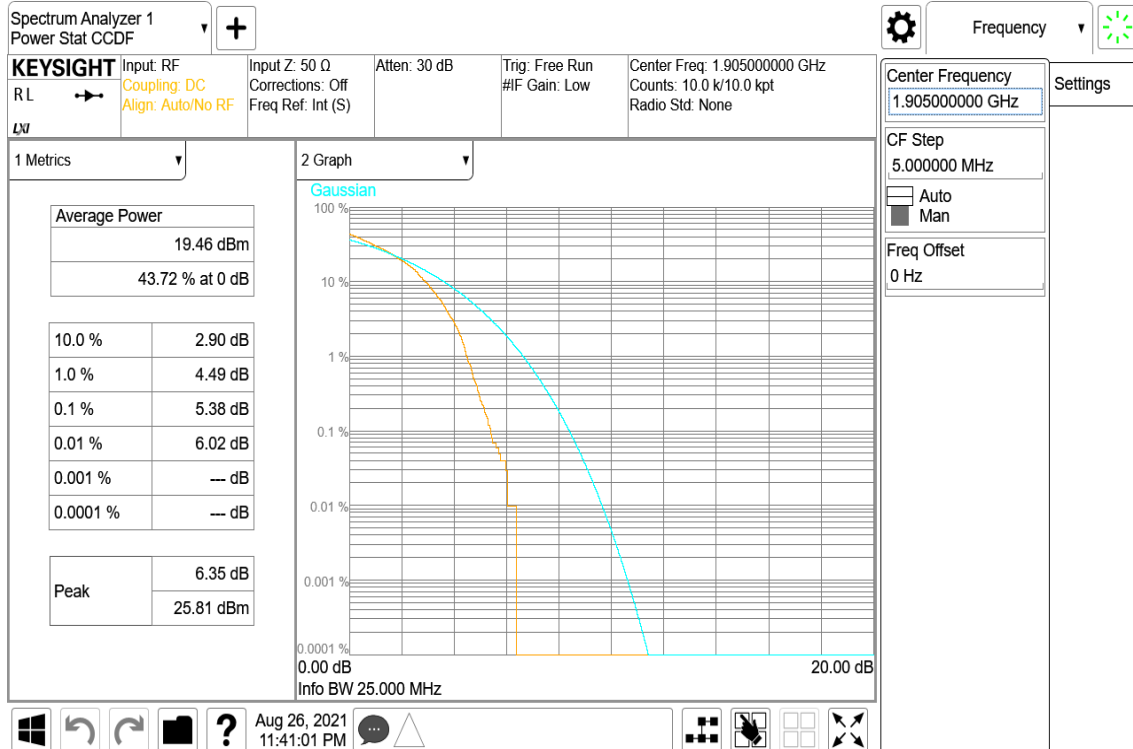
Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 20MHz / 64QAM / RB =100, RB Offset = 0
CH Low

CH Mid




Report No.: T201102D09-RP12

CH High



8.5 OUT OF BAND EMISSION AT ANTENNA TERMINALS

Limit

FCC §24.238(a), Band 25

For operations in the 1850-1910 and 1930-1950 MHz band , Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

ISED RSS-133 §6.5.1 for LTE B25

Equipment shall comply with the limits in (i) and (ii) below.

i. In the 1.0 MHz bands immediately outside and adjacent to the equipment's operating frequency block, the emission power per any 1% of the emission bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10}(P)$ (watts).

ii. After the first 1.0 MHz, the emission power in any 1 MHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dBW) by at least $43 + 10 \log_{10}(P)$ (watts). If the measurement is performed using 1% of the emission bandwidth, power integration over 1.0 MHz is required.

Test Procedures

KDB 971168 D01,

1. RBW $\geq$ 1% of the emission bandwidth
2. VBW $\geq$ 3 x RBW
3. Span was set large enough so as to capture all out of emissions near the band edge.

Test Results:

Temperature: 25.3°C

Humidity: 57.6% RH

Tested by: Jerry Chang

Test Date: March 5, 2021

Temperature: 25.8°C

Humidity: 57.4% RH

Tested by: Jerry Chang

Test Date: August 26, 2021

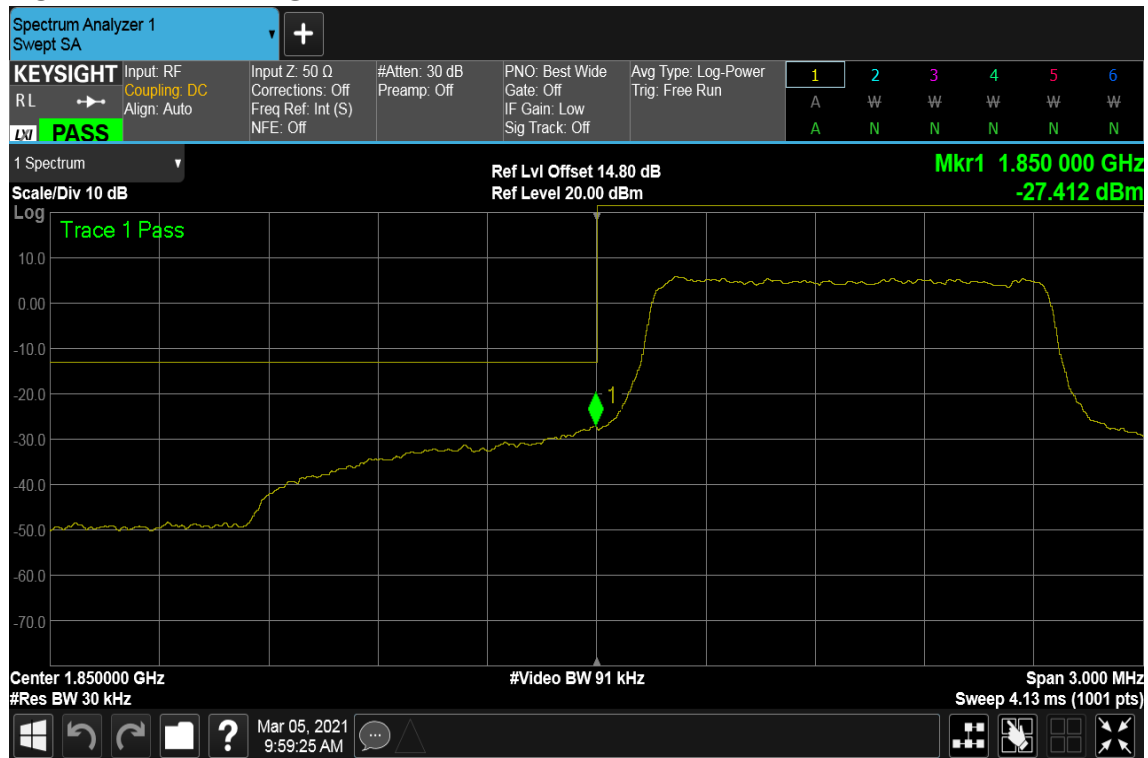
Report No.: T201102D09-RP12

Band Edge

LTE Band 25

CHANNEL BANDWIDTH: 1.4MHz / QPSK / RB =6, RB Offset = 0

LOWER BAND EDGE

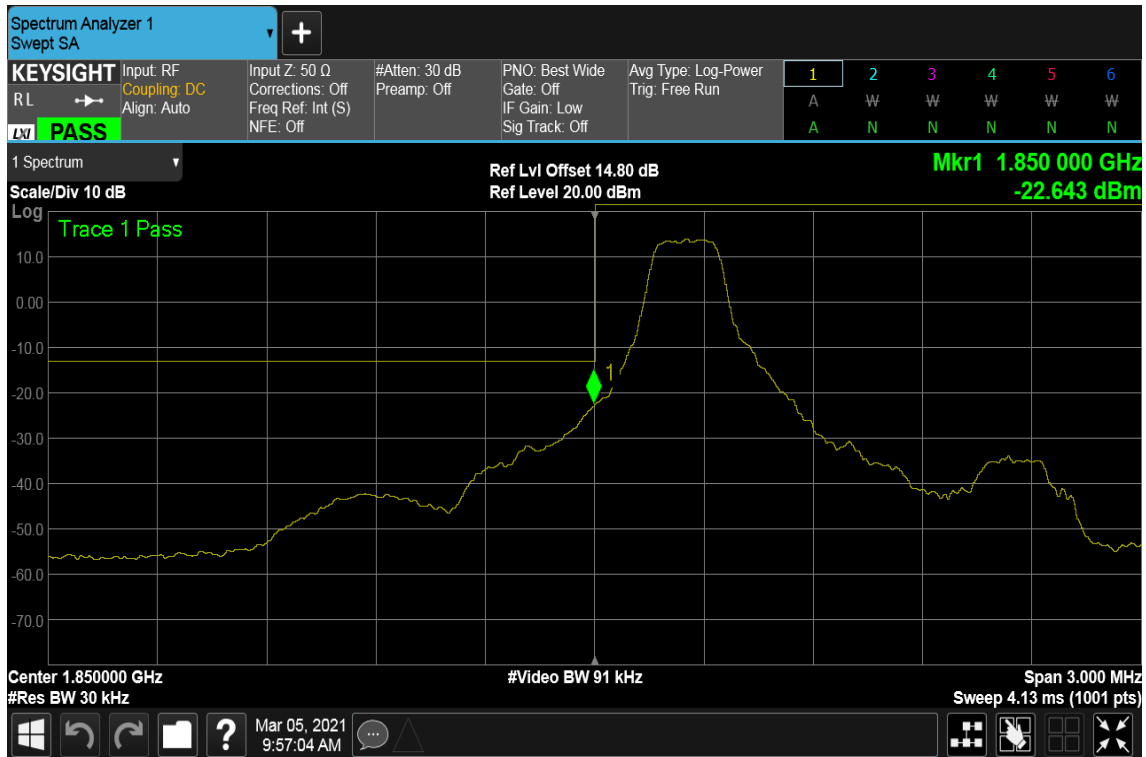


HIGHER BAND EDGE





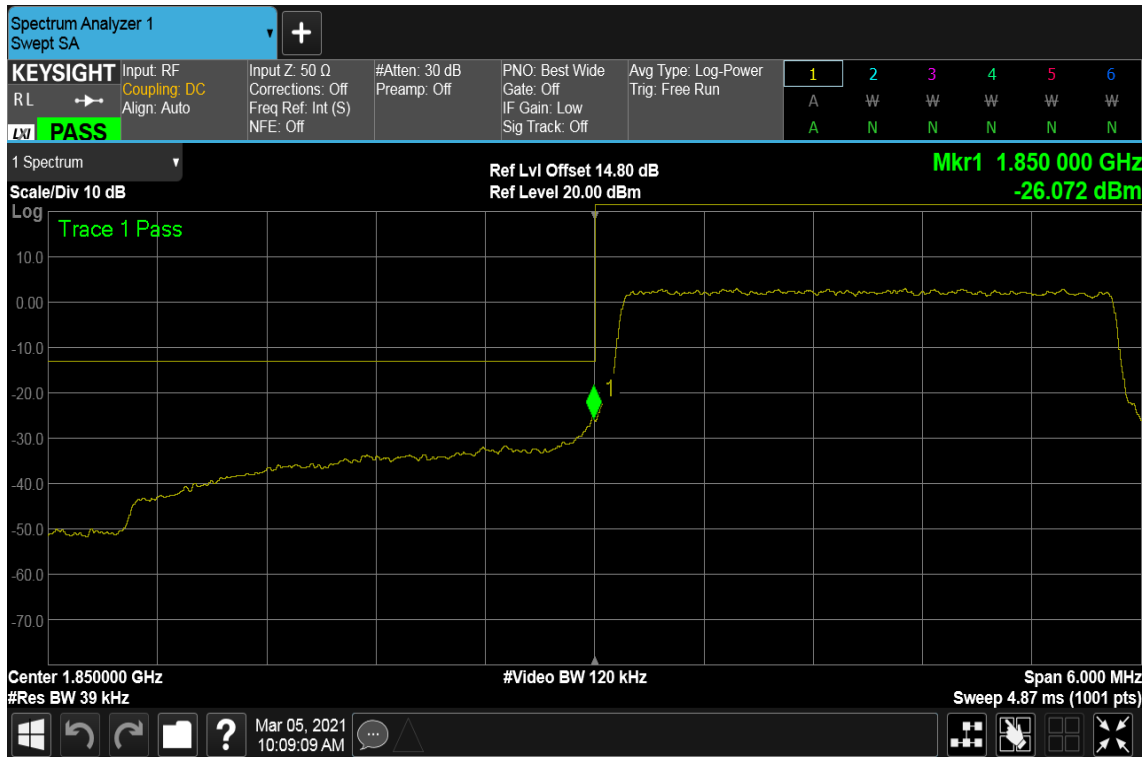
Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 1.4MHz / QPSK / RB =1, RB Offset = 0
LOWER BAND EDGE**CHANNEL BANDWIDTH: 1.4MHz / QPSK / RB =1, RB Offset = 5**
HIGHER BAND EDGE

Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 3MHz / QPSK / RB =15, RB Offset = 0

LOWER BAND EDGE



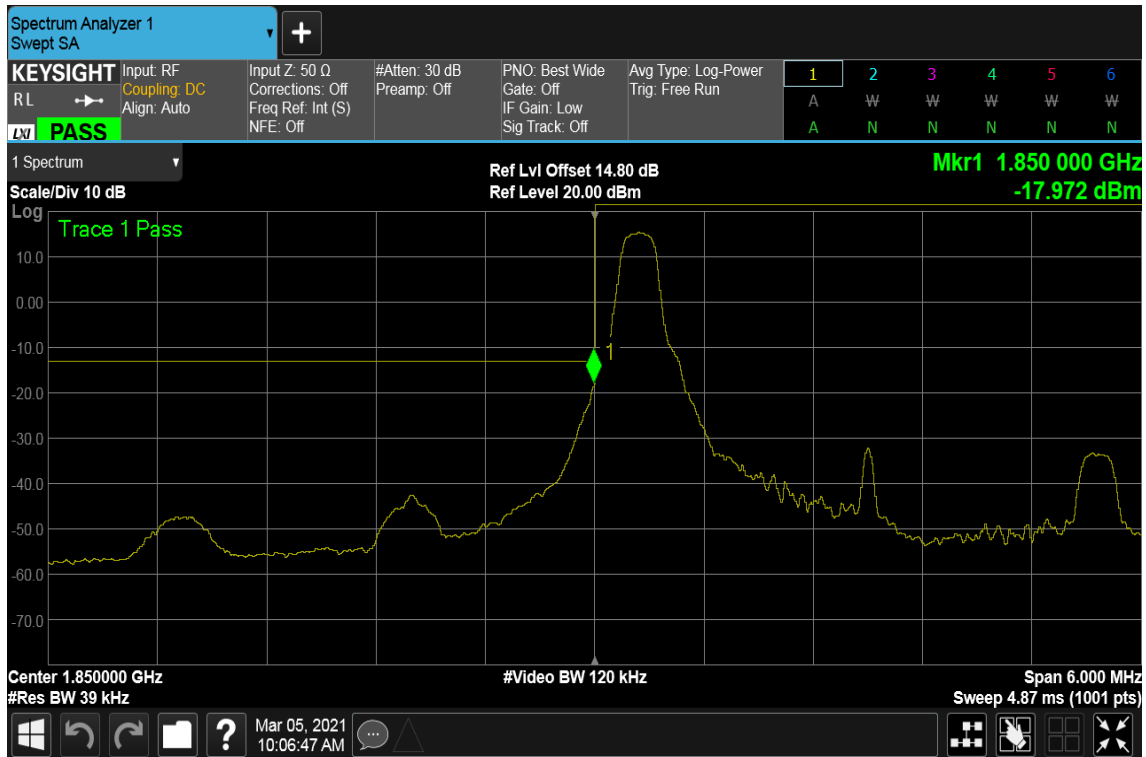
HIGHER BAND EDGE



Report No.: T201102D09-RP12

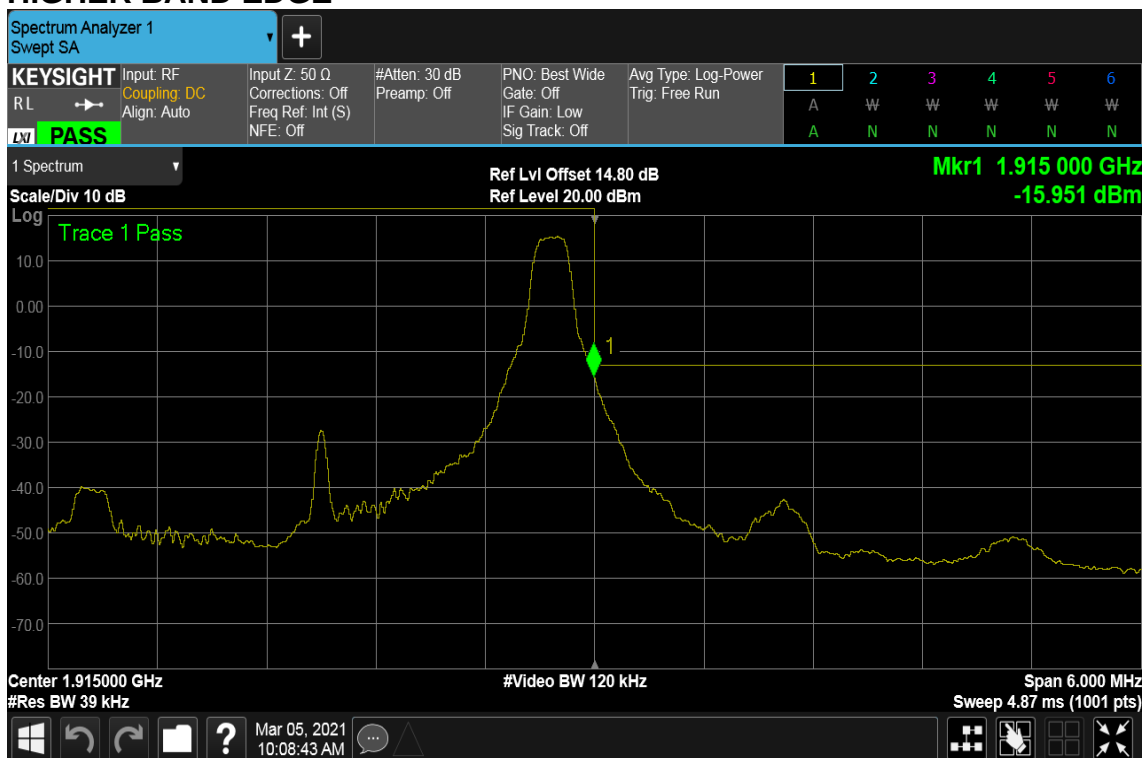
CHANNEL BANDWIDTH: 3MHz / QPSK / RB =1, RB Offset = 0

LOWER BAND EDGE



CHANNEL BANDWIDTH: 3MHz / QPSK / RB =1, RB Offset = 14

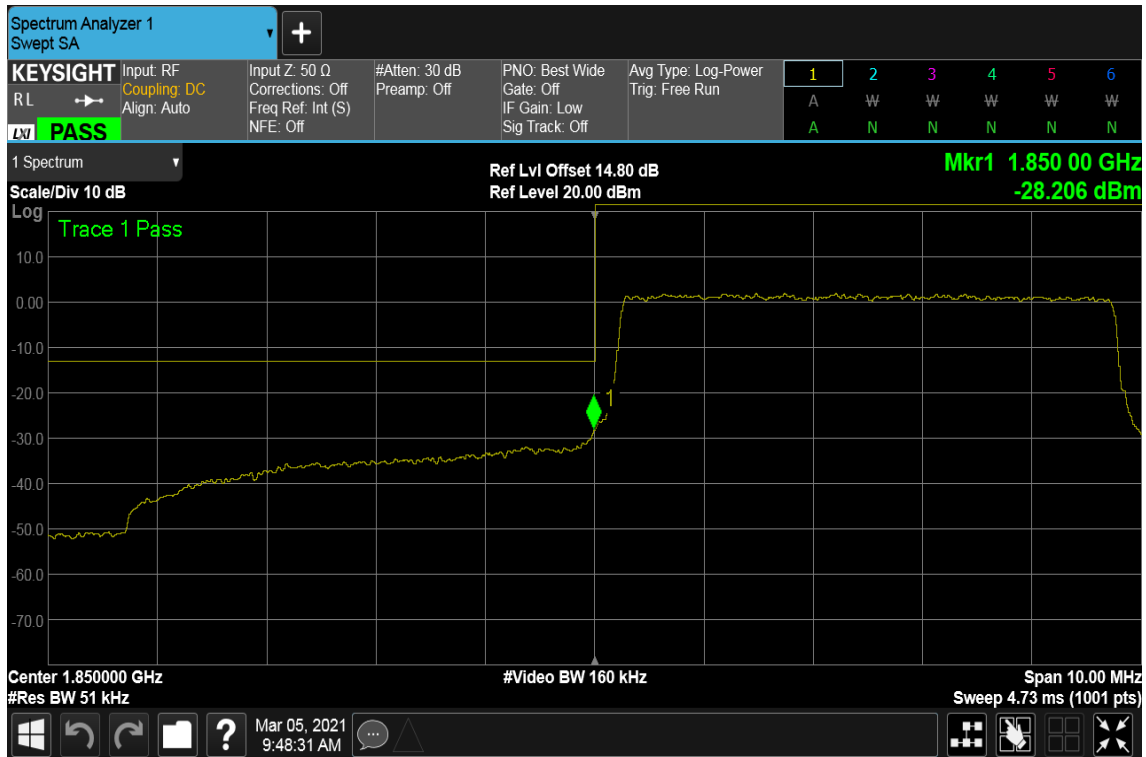
HIGHER BAND EDGE



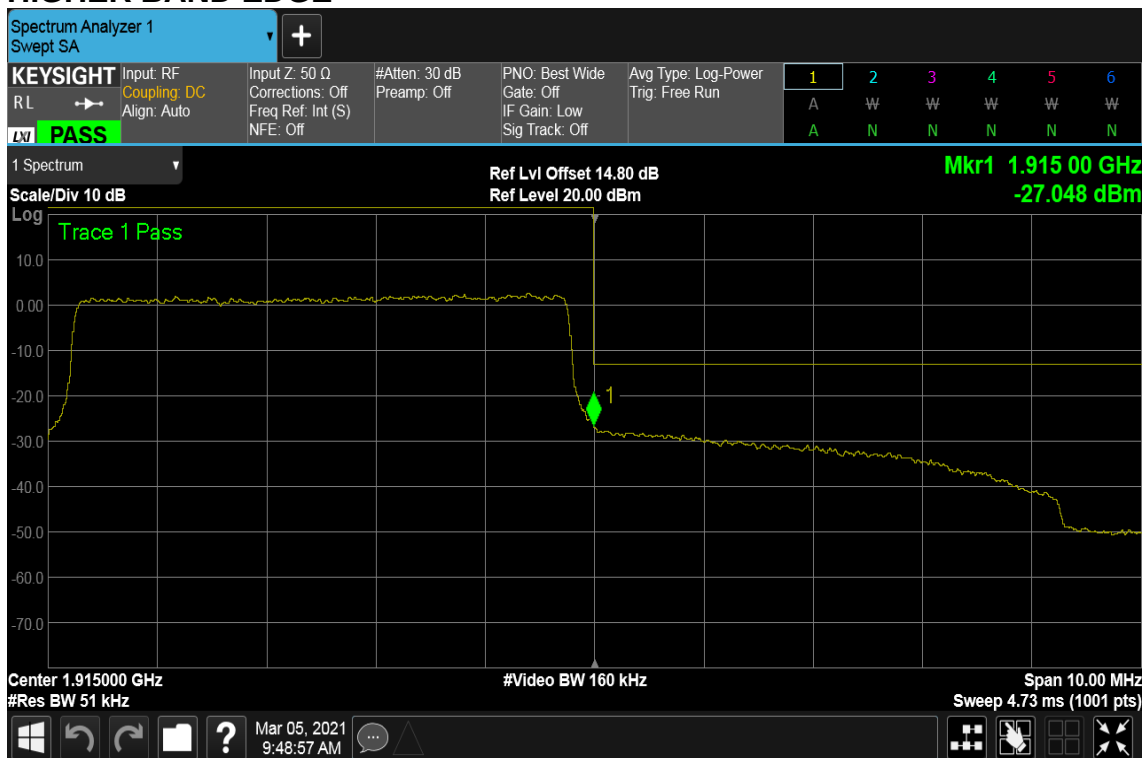
Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 5MHz / QPSK / RB =25, RB Offset = 0

LOWER BAND EDGE

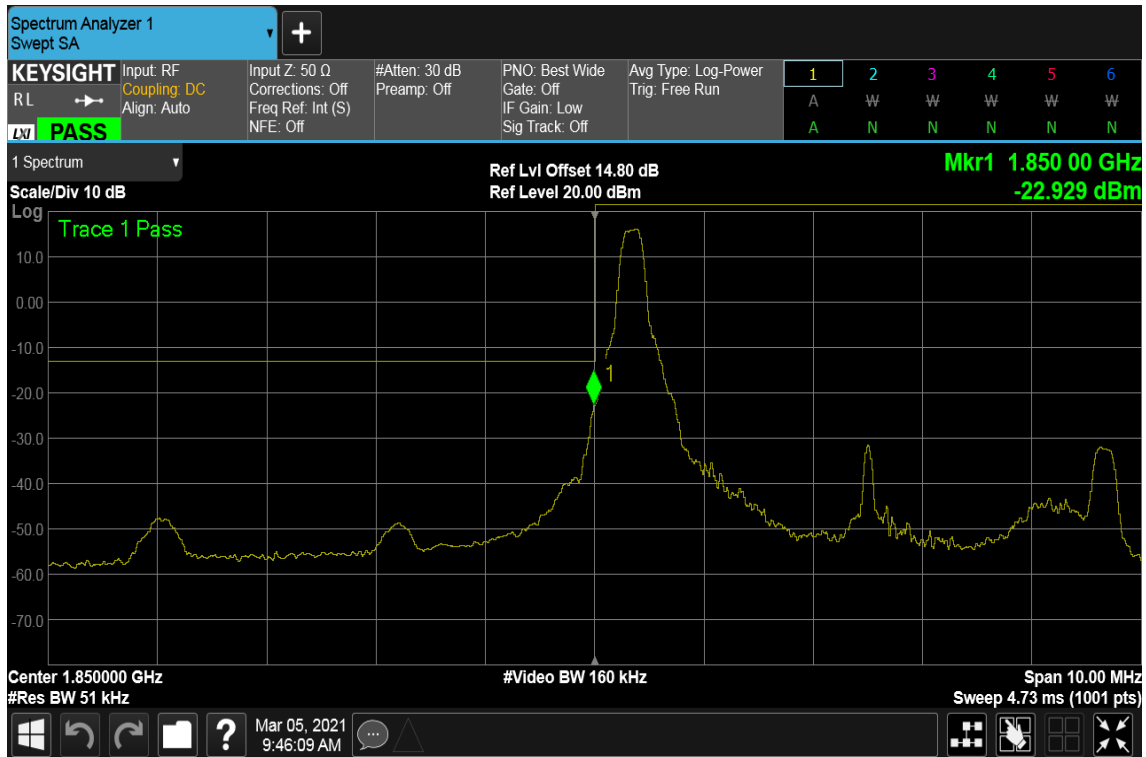


HIGHER BAND EDGE





Report No.: T201102D09-RP12

CHANNEL BANDWIDTH: 5MHz / QPSK / RB =1, RB Offset = 0
LOWER BAND EDGE**CHANNEL BANDWIDTH: 5MHz / QPSK / RB =1, RB Offset = 24**
HIGHER BAND EDGE