

TEST REPORT



CTK Co., Ltd.
(Ho-dong), 113, Yejik-ro, Cheoin-gu,
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Tel: +82-31-339-9970
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Report No.:
CTK-2018-03328
Page (1) / (1312)
Pages

1. Client

- Name : Samsung Electronics Co., Ltd.
- Address : 19 Chapin Rd., Building D, Pine Brook, New Jersey
- Date of Receipt : 2018-09-19

2. Manufacturer

- Name : Samsung Electronics Co., Ltd.
- Address : 416, Maetan 3-Dong, Yeongtong-Gu, Suwon-Si, Gyeonggi-Do, 16677, Korea

3. Use of Report : For FCC Certification

4. Test Sample / Model: RF4402d-D1A

5. Date of Test : 2018-09-22 to 2018-10-25

6. Test Standard(method) used : FCC 47 CFR Part 2, 24, 27

7. Testing Environment: Temp.: (24 ± 1) °C, Humidity: (43 ± 1) % R.H.

8. Test Results : Compliance

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full.

Affirmation	Tested by	Technical Manager
	Bong-jun, Jang: (Signature)	Young-taek, Lee: (Signature)

2018-10-29

Republic of KOREA **CTK Co., Ltd.**



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Report No.:
CTK-2018-03328
Page (2) / (1312)
Pages

REPORT REVISION HISTORY

Date	Revision	Page No
2018-10-29	Issued (CTK-2018-03328)	All

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Report No.:
CTK-2018-03328
Page (3) / (1312)
Pages

CONTENTS

1. General Information.....	4
2. Facility and Accreditations.....	6
2.1 Test Facility	6
2.2 Laboratory Accreditations and Listings.....	6
2.3 Calibration Details of Equipment Used for Measurement.....	6
3. Test Specifications	7
3.1 Standards	7
3.2 Mode of operation during the test	7
3.3 Maximum Measurement Uncertainty	10
3.4 Standards Environmental Test conditions	10
4. RF output power.....	11
5. Occupied Bandwidth	185
6. Spurious Emission at Antenna Terminal.....	310
7. Radiated Spurious Emission	1304
8. Frequency Stability	1310
APPENDIX A – Test Equipment Used For Tests	1312



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Report No.:
CTK-2018-03328
Page (4) / (1312)
Pages

1. General Information

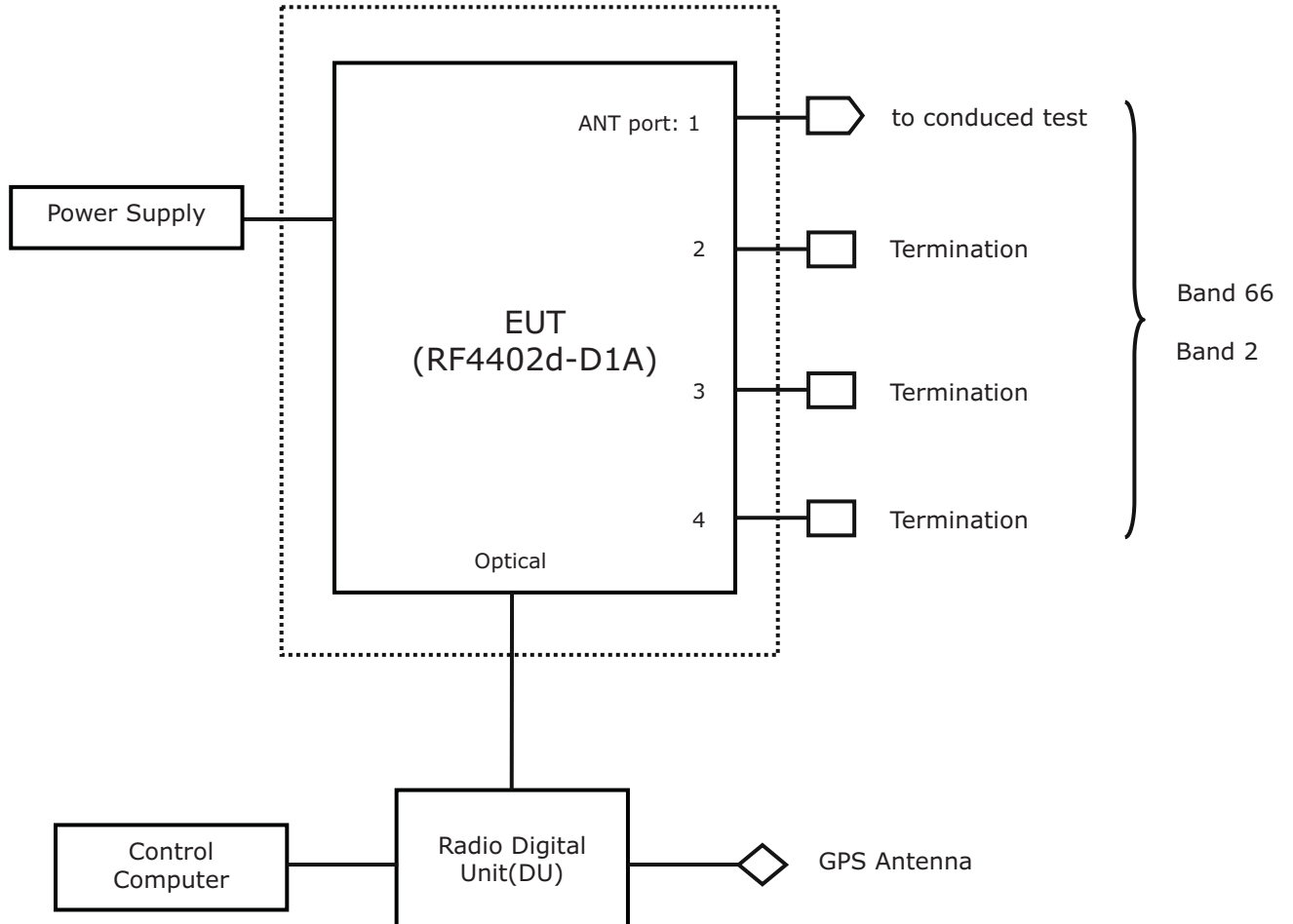
1.1 Client Information

Company	Samsung Electronics Co., Ltd.
Contact Point	129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
Contact Person	Name : Kim, Jong-in E-mail : jered.kim@samsung.com Tel : +82-31-279-3096

1.2 Product Information

FCC ID	A3LRF4402D-D1A
Product Description	RRU (RF4402d)
Model name	RF4402d-D1A
Power Supply	-48 Vdc
Operating Frequency	- Band 66 DL : 2110 MHz- 2180 MHz, UL 1710 MHz - 1780 MHz - Band 2 DL : 1930 MHz- 1990 MHz, UL 1850 MHz - 1910 MHz
RF Output Power	- Band 2 Single(1 Carrier) 4T(Single)BW 5 MHz : 20 W / path(Total 80 W) 4T(Single)BW 10 MHz : 20 W / path(Total 80 W) 4T(Single)BW 15 MHz : 20 W / path(Total 80 W) 4T(Single)BW 20 MHz : 20 W / path(Total 80 W) Multi(2 Carrier) 4T(Contiguous)BW 5 MHz+5 MHz : 10 W+10 W=20 W / path(Total 80 W) 4T(Contiguous)BW 5 MHz+10 MHz: 6.7 W+13.3 W=20 W / path(Total 80 W) 4T(Contiguous)BW 5 MHz+15 MHz: 5 W+15 W=20 W / path(Total 80 W) 4T(Contiguous)BW 10 MHz+10 MHz: 10 W+10 W=20 W / path(Total 80 W) 4T(Non-Contiguous)BW 5 MHz+5 MHz : 10 W+10 W=20 W / path(Total 80 W) 4T(Non-Contiguous)BW 10 MHz+5 MHz: 13.3 W+6.7 W=20 W / path(Total 80 W) 4T(Non-Contiguous)BW 10 MHz+10 MHz: 10 W+10 W=20 W / path(Total 80 W) 4T(Non-Contiguous)BW 15 MHz+5 MHz: 15 W+5 W=20 W / path(Total 80 W)
Channel Bandwidth	5 MHz, 10 MHz, 15 MHz, 20 MHz
Modulation Type	QPSK, 16QAM, 64QAM, 256QAM
Antenna Specification	Antenna type : Sector Peak Gain : 21.4 dBi
FCC Rule	Part 2 : FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS Part 24 : PERSONAL COMMUNICATIONS SERVICES Part 27 : MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES KDB Publication 662911 D01 Multiple Transmitter Output v02r01

1.3 Configurations







2. Facility and Accreditations

2.1 Test Facility

The measurement facility is located at (Ho-dong), 113, Yejik-ro, Cheoin-gu, Yong-in-si, Gyeonggi-do, Korea.

2.2 Laboratory Accreditations and Listings

Country	Agency	Scope of Accreditation	Registration Number	Logo
USA	FCC	FCC Part 15 & 18 EMI (Electromagnetic Interference / Emission)	805871	
CANADA	IC	IC EMI (3/10m test site)	8737A-2	
JAPAN	VCCI	VCCI V-3 EMI (Electromagnetic Interference / Emission)	C-986 T-1843 R-3627 G-387	
KOREA	MSIP	EMI (Electromagnetic Interference / Emission) EMS (Electromagnetic Susceptibility / Immunity)	KR0025	

2.3 Calibration Details of Equipment Used for Measurement

Test equipment and test accessories are calibrated on regular basis. The maximum time between calibrations is one year or what is recommended by the manufacturer, whichever is less. All test equipment calibrations are traceable to the Korea Research Institute of Standards and Science (KRISS), therefore, all test data recorded in this report is traceable to KRISS.



3. Test Specifications

3.1 Standards

The following tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 2, Part 24, part 27.

Section	Test Items	Results
§2.1046, §24.232(a)(2), §27.50(d)(2)	RF output power	Compliant
§2.1049	Occupied bandwidth	Compliant
§2.1051, §24.238, §27.53(h)	Spurious Emissions at Antenna Terminals	Compliant
§2.1051, §24.238, §27.53(h)	Band edge	Compliant
§2.1051, §24.238, §27.53(h)	Spurious Radiated Emissions	Compliant
§2.1055(a)(1), §24.235, §27.54	Frequency Stability over Temperature variation	Compliant
§2.1055(d), §24.235, §27.54	Frequency Stability over Voltage variation	Compliant

3.2 Mode of operation during the test

The EUT is operated in a manner representative of the typical of the equipments. During at testing, system components were manipulated within the confines of typical usage to maximize each emission. All modulation(QPSK, 16QAM, 64QAM, 256QAM) modes were tests. The results are only attached worst cases.



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Report No.:
 CTK-2018-03328
 Page (8) / (1312)
 Pages

Operating band and Frequency range

Band 2	Transmit	1 930 MHz to 1 990 MHz
	Receive	1 850 MHz to 1 910 MHz
Band 66	Transmit	2 110 MHz to 2 180 MHz
	Receive	1 710 MHz to 1 780 MHz

Operating Configurations

Supported configurations	Single carrier, Multi carrier
Spectrum Operation	Contiguous, Non-contiguous

Single carrier rated total output power as a sum of all carriers

Band type	Bandwidth	Positions	Frequency	Power	Total Power(sum)
Band 2	5 MHz	Bottom	1932.5 MHz	20 W	80 W
		Middle	1960.0 MHz	20 W	80 W
		Top	1987.5 MHz	20 W	80 W
	10 MHz	Bottom	1935.0 MHz	20 W	80 W
		Middle	1960.0 MHz	20 W	80 W
		Top	1985.0 MHz	20 W	80 W
	15 MHz	Bottom	1937.5 MHz	20 W	80 W
		Middle	1960.0 MHz	20 W	80 W
		Top	1982.5 MHz	20 W	80 W
	20 MHz	Bottom	1940.0 MHz	20 W	80 W
		Middle	1960.0 MHz	20 W	80 W
		Top	1980.0 MHz	20 W	80 W



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Report No.:
 CTK-2018-03328
 Page (9) / (1312)
 Pages

Multi 2 carrier rated total output power as a sum of all carriers

Type		Bandwidth positions		1 st FA	2 nd FA	Power Sum	Total (sum)
Band 2	Contiguous	Bottom	Bandwidth	5 MHz	5 MHz		
			Frequency	1932.5 MHz	1937.5 MHz		
			Output Power	10 W	10 W	20 W	80 W
		Top	Bandwidth	5 MHz	5 MHz		
			Frequency	1982.5 MHz	1987.5 MHz		
			Output Power	10 W	10 W	20 W	80 W
		Bottom	Bandwidth	5 MHz	10 MHz		
			Frequency	1932.5 MHz	1940.0 MHz		
			Output Power	6.7 W	13.3 W	20 W	80 W
		Top	Bandwidth	5 MHz	10 MHz		
			Frequency	1977.5 MHz	1985.0 MHz		
			Output Power	6.7 W	13.3 W	20 W	80 W
		Bottom	Bandwidth	5 MHz	15 MHz		
			Frequency	1932.5 MHz	1942.5 MHz		
			Output Power	5 W	15 W	20 W	80 W
		Top	Bandwidth	5 MHz	15 MHz		
Frequency	1972.5 MHz		1982.5 MHz				
Output Power	5 W		15 W	20 W	80 W		
Bottom	Bandwidth	10 MHz	10 MHz				
	Frequency	1935.0	1945.0				
	Output Power	10 W	10 W	20 W	80 W		
Top	Bandwidth	10 MHz	10 MHz				
	Frequency	1975.0	1985.0				
	Output Power	10 W	10 W	20 W	80 W		

Multi 2 carrier rated total output power as a sum of all carriers

Type		Bandwidth positions		1 st FA	2 nd FA	Power Sum	Total (sum)
Band 2	Non-Contiguous	Bottom + Top	Bandwidth	5 MHz	5 MHz		
			Frequency	1932.5 MHz	1987.5 MHz		
			Output Power	10 W	10 W	20 W	80 W
		Bottom + Top	Bandwidth	10 MHz	5 MHz		
			Frequency	1935.0 MHz	1987.5 MHz		
			Output Power	13.3 W	6.7 W	20 W	80 W
		Bottom + Top	Bandwidth	10 MHz	10 MHz		
			Frequency	1935.0 MHz	1985.0 MHz		
			Output Power	10 W	10 W	20 W	80 W
		Bottom + Top	Bandwidth	15 MHz	5 MHz		
			Frequency	1937.5 MHz	1987.5 MHz		
			Output Power	15 W	5 W	20 W	80 W



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Report No.:
CTK-2018-03328
Page (10) / (1312)
Pages

3.3 Maximum Measurement Uncertainty

The value of the measurement uncertainty for the measurement of each parameter.
Coverage factor $k = 2$, Confidence levels of 95 %

Description	Uncertainty
Conducted RF output power	1.5 dB
Occupied bandwidth	0.1 MHz
Spurious emission at antenna terminals	3.0 dB
Radiated spurious emissions ($f \leq 1$ GHz)	4.0 dB
Radiated spurious emissions ($f > 1$ GHz)	5.0 dB
Frequency stability	0.1 kHz

3.4 Standards Environmental Test conditions

Temperature	+ 15 °C to + 35 °C
Relative humidity	30 % to 60 %
Air pressure	860 mbar to 1 060 mbar

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4. RF output power

Test Requirements :

§ 2.1046 Measurements required : RF power output :

(a) For transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in §2.1033(c)(8). The electrical characteristics of the radio frequency load attached to the output terminals when this test is made shall be stated.

(b) For single sideband, independent sideband, and single channel, controlled carrier radiotelephone transmitters the procedure specified in paragraph (a) of this section shall be employed and, in addition, the transmitter shall be modulated during the test as follows. In all tests, the input level of the modulating signal shall be such as to develop rated peak envelope power or carrier power, as appropriate, for the transmitter.

(c) For measurements conducted pursuant to paragraphs (a) and (b) of this section, all calculations and methods used by the applicant for determining carrier power or peak envelope power, as appropriate, on the basis of measured power in the radio frequency load attached to the transmitter output terminals shall be shown. Under the test conditions specified, no components of the emission spectrum shall exceed the limits specified in the applicable rule parts as necessary for meeting occupied bandwidth or emission limitations.

§ 24.232 Power and antenna height limits.

(a)(1) Base stations with an emission bandwidth of 1 MHz or less are limited to 1640 watts equivalent isotropically radiated power (EIRP) with an antenna height up to 300 meters HAAT, except as described in paragraph (b) below.

(2) Base stations with an emission bandwidth greater than 1 MHz are limited to 1640 watts/MHz equivalent isotropically radiated power (EIRP) with an antenna height up to 300 meters HAAT, except as described in paragraph (b) below.

§ 27.50 Power limits and duty cycle.

(d)(2) The power of each fixed or base station transmitting in the 1995-2000 MHz, the 2110-2155 MHz 2155-2180 MHz band, or 2180-2200 MHz band and situated in any geographic location other than that described in paragraph (d)(1) of this section is limited to:

(i) An equivalent isotropically radiated power (EIRP) of 1640 watts when transmitting with an emission bandwidth of 1 MHz or less;

(ii) An EIRP of 1640 watts/MHz when transmitting with an emission bandwidth greater than 1 MHz.



Test Procedures :

According to FCC §2.1046 (a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in §2.1033(c). The electrical characteristics of the radio frequency load attached to the output terminals when this is made shall be stated.

- 1) The radio frequency load attached to the EUT antenna terminal was 50 Ohm. The loss of the cables in the test system is calibrated to correct the reading.
- 2) The spectrum analyzer was set to RMS Detector function and Average mode.
- 3) The resolution bandwidth of the spectrum analyzer was comparable to the emission bandwidth.
- 4) The conducted emission level is measured at each antenna port and then summed mathematically to determine the total emission level from the device. (100 mW = 50 mW * 2 Ports)

Note 1 : If applicable, the EIRP[W] = $10^{((\text{channel power[dBm]} + \text{Antenna Gain[dBi]})/10)} / 10^{-3}$

Note 2: EIRP does not exceed the reference value even if the maximum antenna gain is applied according to Note 1.

Note 3 : PSD(Power Spectral Density) dBm/MHz = dBm/Hz + 10log(10^6)



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Report No.:
 CTK-2018-03328
 Page (13) / (1312)
 Pages

Test Results :

Test Data : Band 2, BW 5MHz, Single carrier, 4TX

Type	Test Ant. port	Channel	Modulation	Output Power		Total Power	
				Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 5MHz	1	Bottom	QPSK	41.70	34.71	47.70	40.71
			16QAM	41.70	34.71	47.70	40.71
			64QAM	41.78	34.79	47.78	40.79
			256QAM	41.77	34.78	47.77	40.78
		Middle	QPSK	41.72	34.73	47.72	40.73
			16QAM	41.83	34.84	47.83	40.84
			64QAM	41.92	34.93	47.92	40.93
			256QAM	41.93	34.94	47.93	40.94
		Top	QPSK	41.91	34.92	47.91	40.92
			16QAM	41.87	34.88	47.87	40.88
			64QAM	42.12	35.13	48.12	41.13
			256QAM	42.11	35.12	48.11	41.12
	2	Bottom	QPSK	42.47	35.48	48.47	41.48
			16QAM	42.36	35.37	48.36	41.37
			64QAM	42.33	35.34	48.33	41.34
			256QAM	42.32	35.33	48.32	41.33
		Middle	QPSK	42.28	35.29	48.28	41.29
			16QAM	42.33	35.34	48.33	41.34
			64QAM	42.43	35.44	48.43	41.44
			256QAM	42.44	35.45	48.44	41.45
		Top	QPSK	42.40	35.41	48.40	41.41
			16QAM	42.42	35.43	48.42	41.43
			64QAM	42.55	35.56	48.55	41.56
			256QAM	42.53	35.54	48.53	41.54
	3	Bottom	QPSK	42.33	35.34	48.33	41.34
			16QAM	42.32	35.33	48.32	41.33
			64QAM	42.40	35.41	48.40	41.41
			256QAM	42.41	35.42	48.41	41.42
		Middle	QPSK	42.18	35.19	48.18	41.19
			16QAM	42.16	35.17	48.16	41.17
			64QAM	42.29	35.30	48.29	41.30
			256QAM	42.29	35.30	48.29	41.30
		Top	QPSK	42.44	35.45	48.44	41.45
			16QAM	42.48	35.49	48.48	41.49
			64QAM	42.56	35.57	48.56	41.57
			256QAM	42.57	35.58	48.57	41.58
	4	Bottom	QPSK	41.69	34.70	47.69	40.70
			16QAM	41.72	34.73	47.72	40.73
			64QAM	41.85	34.86	47.85	40.86
			256QAM	41.83	34.84	47.83	40.84
		Middle	QPSK	42.00	35.01	48.00	41.01
			16QAM	41.97	34.98	47.97	40.98
			64QAM	42.09	35.10	48.09	41.10
			256QAM	42.09	35.10	48.09	41.10
		Top	QPSK	42.07	35.08	48.07	41.08
			16QAM	41.98	34.99	47.98	40.99
			64QAM	42.10	35.11	48.10	41.11
			256QAM	42.13	35.14	48.13	41.14



Test Data : Band 2, BW 10MHz, Single carrier, 4TX

Type	Test Ant. port	Channel	Modulation	Output Power		Total Power	
				Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 10MHz	1	Bottom	QPSK	41.92	31.92	47.92	37.92
			16QAM	41.91	31.91	47.91	37.91
			64QAM	41.92	31.92	47.92	37.92
			256QAM	41.90	31.90	47.90	37.90
		Middle	QPSK	42.03	32.03	48.03	38.03
			16QAM	42.01	32.01	48.01	38.01
			64QAM	41.82	31.82	47.82	37.82
			256QAM	41.83	31.83	47.83	37.83
		Top	QPSK	41.90	31.90	47.90	37.90
			16QAM	41.97	31.97	47.97	37.97
			64QAM	41.88	31.88	47.88	37.88
			256QAM	41.89	31.89	47.89	37.89
	2	Bottom	QPSK	42.59	32.59	48.59	38.59
			16QAM	42.44	32.44	48.44	38.44
			64QAM	42.51	32.51	48.51	38.51
			256QAM	42.48	32.48	48.48	38.48
		Middle	QPSK	42.31	32.31	48.31	38.31
			16QAM	42.47	32.47	48.47	38.47
			64QAM	42.33	32.33	48.33	38.33
			256QAM	42.33	32.33	48.33	38.33
		Top	QPSK	42.14	32.14	48.14	38.14
			16QAM	42.23	32.23	48.23	38.23
			64QAM	42.28	32.28	48.28	38.28
			256QAM	42.29	32.29	48.29	38.29
	3	Bottom	QPSK	42.41	32.41	48.41	38.41
			16QAM	42.52	32.52	48.52	38.52
			64QAM	42.56	32.56	48.56	38.56
			256QAM	42.53	32.53	48.53	38.53
		Middle	QPSK	42.20	32.20	48.20	38.20
			16QAM	42.25	32.25	48.25	38.25
			64QAM	42.26	32.26	48.26	38.26
			256QAM	42.32	32.32	48.32	38.32
		Top	QPSK	42.33	32.33	48.33	38.33
			16QAM	42.20	32.20	48.20	38.20
			64QAM	42.30	32.30	48.30	38.30
			256QAM	42.31	32.31	48.31	38.31
	4	Bottom	QPSK	42.22	32.22	48.22	38.22
			16QAM	42.01	32.01	48.01	38.01
			64QAM	42.15	32.15	48.15	38.15
			256QAM	42.10	32.10	48.10	38.10
		Middle	QPSK	41.93	31.93	47.93	37.93
			16QAM	41.98	31.98	47.98	37.98
			64QAM	41.91	31.91	47.91	37.91
			256QAM	41.92	31.92	47.92	37.92
		Top	QPSK	41.88	31.88	47.88	37.88
			16QAM	42.04	32.04	48.04	38.04
			64QAM	41.97	31.97	47.97	37.97
			256QAM	41.99	31.99	47.99	37.99



Test Data : Band 2, BW 15MHz, Single carrier, 4TX

Type	Test Ant. port	Channel	Modulation	Output Power		Total Power	
				Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 15MHz	1	Bottom	QPSK	41.90	30.14	47.90	36.14
			16QAM	41.84	30.08	47.84	36.08
			64QAM	41.92	30.16	47.92	36.16
			256QAM	41.94	30.18	47.94	36.18
		Middle	QPSK	42.00	30.23	48.00	36.23
			16QAM	41.97	30.21	47.97	36.21
			64QAM	41.89	30.13	47.89	36.13
			256QAM	41.92	30.16	47.92	36.16
		Top	QPSK	41.90	30.14	47.90	36.14
			16QAM	41.90	30.14	47.90	36.14
			64QAM	41.89	30.13	47.89	36.13
			256QAM	41.87	30.11	47.87	36.11
	2	Bottom	QPSK	42.46	30.70	48.46	36.70
			16QAM	42.46	30.70	48.46	36.70
			64QAM	42.43	30.66	48.43	36.66
			256QAM	42.50	30.74	48.50	36.74
		Middle	QPSK	42.41	30.65	48.41	36.65
			16QAM	42.32	30.56	48.32	36.56
			64QAM	42.39	30.63	48.39	36.63
			256QAM	42.41	30.65	48.41	36.65
		Top	QPSK	42.30	30.54	48.30	36.54
			16QAM	42.35	30.59	48.35	36.59
			64QAM	42.33	30.57	48.33	36.57
			256QAM	42.32	30.56	48.32	36.56
	3	Bottom	QPSK	42.52	30.76	48.52	36.76
			16QAM	42.46	30.70	48.46	36.70
			64QAM	42.58	30.82	48.58	36.82
			256QAM	42.56	30.80	48.56	36.80
		Middle	QPSK	42.30	30.54	48.30	36.54
			16QAM	42.29	30.53	48.29	36.53
			64QAM	42.30	30.54	48.30	36.54
			256QAM	42.32	30.56	48.32	36.56
		Top	QPSK	42.35	30.59	48.35	36.59
			16QAM	42.40	30.64	48.40	36.64
			64QAM	42.50	30.73	48.50	36.73
			256QAM	42.50	30.74	48.50	36.74
	4	Bottom	QPSK	41.96	30.20	47.96	36.20
			16QAM	41.99	30.23	47.99	36.23
			64QAM	41.95	30.18	47.95	36.18
			256QAM	41.97	30.21	47.97	36.21
		Middle	QPSK	41.93	30.17	47.93	36.17
			16QAM	41.97	30.21	47.97	36.21
			64QAM	41.97	30.21	47.97	36.21
			256QAM	41.99	30.23	47.99	36.23
		Top	QPSK	42.08	30.32	48.08	36.32
			16QAM	42.06	30.30	48.06	36.30
			64QAM	42.09	30.33	48.09	36.33
			256QAM	42.08	30.32	48.08	36.32



Test Data : Band 2, BW 20MHz, Single carrier, 4TX

Type	Test Ant. port	Channel	Modulation	Output Power		Total Power	
				Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 20MHz	1	Bottom	QPSK	41.92	28.91	47.92	34.91
			16QAM	41.83	29.82	47.83	35.82
			64QAM	41.86	28.85	47.86	34.85
			256QAM	41.87	28.86	47.87	34.86
		Middle	QPSK	41.80	28.79	47.80	34.79
			16QAM	41.82	28.81	47.82	34.81
			64QAM	41.85	28.84	47.85	34.84
			256QAM	41.86	28.85	47.86	34.85
		Top	QPSK	41.87	28.86	47.87	34.86
			16QAM	41.88	28.87	47.88	34.87
			64QAM	42.07	29.06	48.07	35.06
			256QAM	42.07	29.06	48.07	35.06
	2	Bottom	QPSK	42.42	29.41	48.42	35.41
			16QAM	42.47	29.46	48.47	35.46
			64QAM	42.43	29.41	48.43	35.41
			256QAM	42.43	29.42	48.43	35.42
		Middle	QPSK	42.36	29.35	48.36	35.35
			16QAM	42.34	29.33	48.34	35.33
			64QAM	42.43	29.41	48.43	35.41
			256QAM	42.44	29.43	48.44	35.43
		Top	QPSK	42.46	29.45	48.46	35.45
			16QAM	42.47	29.46	48.47	35.46
			64QAM	42.51	29.50	48.51	35.50
			256QAM	42.51	29.50	48.51	35.50
	3	Bottom	QPSK	42.50	29.48	48.50	35.48
			16QAM	42.44	29.43	48.44	35.43
			64QAM	42.47	29.46	48.47	35.46
			256QAM	42.48	29.47	48.48	35.47
		Middle	QPSK	42.32	29.31	48.32	35.31
			16QAM	42.24	29.23	48.24	35.23
			64QAM	42.39	29.38	48.39	35.38
			256QAM	42.39	29.38	48.39	35.38
		Top	QPSK	42.45	29.44	48.45	35.44
			16QAM	42.41	29.40	48.41	35.40
			64QAM	42.40	29.39	48.40	35.39
			256QAM	42.42	29.41	48.42	35.41
	4	Bottom	QPSK	42.03	29.02	48.03	35.02
			16QAM	42.13	29.12	48.13	35.12
			64QAM	42.15	29.14	48.15	35.14
			256QAM	42.15	29.14	48.15	35.14
		Middle	QPSK	41.93	28.92	47.93	34.92
			16QAM	41.96	28.95	47.96	34.95
			64QAM	41.96	28.95	47.96	34.95
			256QAM	41.97	28.96	47.97	34.96
		Top	QPSK	42.00	28.99	48.00	34.99
			16QAM	42.05	29.04	48.05	35.04
			64QAM	42.09	29.08	48.09	35.08
			256QAM	42.09	29.08	48.09	35.08



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Report No.:
 CTK-2018-03328
 Page (17) / (1312)
 Pages

Test Data : Band 2, BW 5MHz + BW 5MHz, Multi carrier, 4TX

Type	Carrier	Test Ant. port	Channel	Modulation	Output Power		Total Power	
					Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 5MHz + BW 5MHz	Contiguous	1	Bottom	QPSK	42.05	32.05	48.05	38.05
				16QAM	42.05	32.05	48.05	38.05
				64QAM	42.05	32.05	48.05	38.05
				256QAM	42.03	32.03	48.03	38.03
			Top	QPSK	41.99	31.99	47.99	37.99
				16QAM	42.04	32.04	48.04	38.04
				64QAM	42.12	32.12	48.12	38.12
				256QAM	42.12	32.12	48.12	38.12
		2	Bottom	QPSK	42.69	32.69	48.69	38.69
				16QAM	42.65	32.65	48.65	38.65
				64QAM	42.60	32.60	48.60	38.60
				256QAM	42.53	32.53	48.53	38.53
			Top	QPSK	42.39	32.39	48.39	38.39
				16QAM	42.42	32.42	48.42	38.42
				64QAM	42.28	32.28	48.28	38.28
				256QAM	42.31	32.31	48.31	38.31
		3	Bottom	QPSK	42.66	32.66	48.66	38.66
				16QAM	42.71	32.71	48.71	38.71
				64QAM	42.59	32.59	48.59	38.59
				256QAM	42.56	32.56	48.56	38.56
			Top	QPSK	42.44	32.44	48.44	38.44
				16QAM	42.45	32.45	48.45	38.45
				64QAM	42.28	32.28	48.28	38.28
				256QAM	42.26	32.26	48.26	38.26
		4	Bottom	QPSK	42.30	32.30	48.30	38.30
				16QAM	42.39	32.39	48.39	38.39
				64QAM	42.13	32.13	48.13	38.13
				256QAM	42.23	32.23	48.23	38.23
			Top	QPSK	42.12	32.12	48.12	38.12
				16QAM	42.14	32.14	48.14	38.14
				64QAM	42.07	32.07	48.07	38.07
				256QAM	42.06	32.06	48.06	38.06



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Report No.:
 CTK-2018-03328
 Page (18) / (1312)
 Pages

Test Data : Band 2, BW 5MHz + BW 10MHz, Multi carrier, 4TX

Type	Carrier	Test Ant. port	Channel	Modulation	Output Power		Total Power	
					Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 5MHz + BW 10MHz	Contiguous	1	Bottom	QPSK	41.92	30.16	47.92	36.16
				16QAM	41.71	29.95	47.71	35.95
				64QAM	41.93	30.17	47.93	36.17
				256QAM	41.92	30.16	47.92	36.16
			Top	QPSK	41.82	30.06	47.82	36.06
				16QAM	41.72	29.96	47.72	35.96
				64QAM	41.71	29.95	47.71	35.95
				256QAM	41.67	29.91	47.67	35.91
		2	Bottom	QPSK	42.25	30.49	48.25	36.49
				16QAM	42.28	30.52	48.28	36.52
				64QAM	42.45	30.69	48.45	36.69
				256QAM	42.45	30.69	48.45	36.69
			Top	QPSK	42.16	30.40	48.16	36.40
				16QAM	42.08	30.32	48.08	36.32
				64QAM	42.19	30.43	48.19	36.43
				256QAM	42.18	30.42	48.18	36.42
		3	Bottom	QPSK	42.30	30.54	48.30	36.54
				16QAM	42.28	30.52	48.28	36.52
				64QAM	42.36	30.60	48.36	36.60
				256QAM	42.38	30.61	48.38	36.61
			Top	QPSK	42.25	30.48	48.25	36.48
				16QAM	42.21	30.45	48.21	36.45
				64QAM	42.25	30.49	48.25	36.49
				256QAM	42.29	30.53	48.29	36.53
		4	Bottom	QPSK	42.00	30.24	48.00	36.24
				16QAM	42.05	30.29	48.05	36.29
				64QAM	42.20	30.43	48.20	36.43
				256QAM	42.00	30.24	48.00	36.24
			Top	QPSK	41.93	30.17	47.93	36.17
				16QAM	41.87	30.10	47.87	36.10
				64QAM	42.01	30.25	48.01	36.25
				256QAM	41.97	30.21	47.97	36.21



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Report No.:
 CTK-2018-03328
 Page (19) / (1312)
 Pages

Test Data : Band 2, BW 5MHz + BW 15MHz, Multi carrier, 4TX

Type	Carrier	Test Ant. port	Channel	Modulation	Output Power		Total Power	
					Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 5MHz + BW 15MHz	Contiguous	1	Bottom	QPSK	41.81	28.80	47.81	34.80
				16QAM	41.80	28.79	47.80	34.79
				64QAM	41.98	28.97	47.98	34.97
				256QAM	41.93	28.92	47.93	34.92
			Top	QPSK	41.90	28.89	47.90	34.89
				16QAM	41.93	28.92	47.93	34.92
				64QAM	41.92	28.91	47.92	34.91
				256QAM	41.89	28.88	47.89	34.88
		2	Bottom	QPSK	42.38	29.37	48.38	35.37
				16QAM	42.38	29.37	48.38	35.37
				64QAM	42.43	29.42	48.43	35.42
				256QAM	42.41	29.40	48.41	35.40
			Top	QPSK	42.23	29.22	48.23	35.22
				16QAM	42.24	29.23	48.24	35.23
				64QAM	42.26	29.25	48.26	35.25
				256QAM	42.28	29.27	48.28	35.27
		3	Bottom	QPSK	42.22	29.21	48.22	35.21
				16QAM	42.23	29.22	48.23	35.22
				64QAM	42.14	29.13	48.14	35.13
				256QAM	42.16	29.15	48.16	35.15
			Top	QPSK	42.29	29.28	48.29	35.28
				16QAM	42.30	29.29	48.30	35.29
				64QAM	42.26	29.25	48.26	35.25
				256QAM	42.26	29.25	48.26	35.25
		4	Bottom	QPSK	41.78	28.77	47.78	34.77
				16QAM	41.77	28.76	47.77	34.76
				64QAM	41.73	28.72	47.73	34.72
				256QAM	41.74	28.73	47.74	34.73
			Top	QPSK	41.84	28.83	47.84	34.83
				16QAM	41.79	28.78	47.79	34.78
				64QAM	41.88	28.87	47.88	34.87
				256QAM	41.86	28.85	47.86	34.85



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Report No.:
 CTK-2018-03328
 Page (20) / (1312)
 Pages

Test Data : Band 2, BW 10MHz + BW 10MHz, Multi carrier, 4TX

Type	Carrier	Test Ant. port	Channel	Modulation	Output Power		Total Power	
					Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 10MHz + BW 10MHz	Contiguous	1	Bottom	QPSK	41.67	28.66	47.67	34.66
				16QAM	41.70	28.69	47.70	34.69
				64QAM	41.83	28.82	47.83	34.82
				256QAM	41.80	28.79	47.80	34.79
			Top	QPSK	41.84	28.83	47.84	34.83
				16QAM	41.70	28.69	47.70	34.69
				64QAM	41.98	28.97	47.98	34.97
				256QAM	41.98	28.97	47.98	34.97
		2	Bottom	QPSK	42.35	29.34	48.35	35.34
				16QAM	42.26	29.24	48.26	35.24
				64QAM	42.36	29.34	48.36	35.34
				256QAM	42.37	29.36	48.37	35.36
			Top	QPSK	42.15	29.14	48.15	35.14
				16QAM	42.15	29.14	48.15	35.14
				64QAM	42.46	29.45	48.46	35.45
				256QAM	42.46	29.45	48.46	35.45
		3	Bottom	QPSK	42.34	29.33	48.34	35.33
				16QAM	42.36	29.35	48.36	35.35
				64QAM	42.32	29.31	48.32	35.31
				256QAM	42.31	29.30	48.31	35.30
			Top	QPSK	42.10	29.09	48.10	35.09
				16QAM	42.10	29.09	48.10	35.09
				64QAM	42.51	29.50	48.51	35.50
				256QAM	42.51	29.50	48.51	35.50
		4	Bottom	QPSK	42.01	29.00	48.01	35.00
				16QAM	41.95	28.94	47.95	34.94
				64QAM	42.24	29.23	48.24	35.23
				256QAM	42.11	29.10	48.11	35.10
			Top	QPSK	41.76	28.75	47.76	34.75
				16QAM	41.92	28.91	47.92	34.91
				64QAM	42.22	29.21	48.22	35.21
				256QAM	42.31	29.30	48.31	35.30



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Report No.:
 CTK-2018-03328
 Page (21) / (1312)
 Pages

Test Data : Band 2, BW 5MHz + BW 5MHz, Multi carrier, 4TX

Type	Carrier	Test Ant. port	Channel	Modulation	Output Power		Total Power		
					Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)	
Band 2 BW 5MHz + BW 5MHz	Non-Contiguous	1	Bottom	QPSK	38.55	31.56	44.55	37.56	
				16QAM	38.59	31.60	44.59	37.60	
				64QAM	38.76	31.77	44.76	37.77	
				256QAM	38.75	31.76	44.75	37.76	
			Top	QPSK	38.82	31.84	44.82	37.84	
				16QAM	38.89	31.90	44.89	37.90	
				64QAM	38.81	31.82	44.81	37.82	
				256QAM	38.80	31.81	44.80	37.81	
			2	Bottom	QPSK	39.00	32.01	45.00	38.01
					16QAM	39.01	32.02	45.01	38.02
					64QAM	39.26	32.27	45.26	38.27
					256QAM	39.25	32.26	45.25	38.26
		Top		QPSK	39.35	32.36	45.35	38.36	
				16QAM	39.43	32.44	45.43	38.44	
				64QAM	39.19	32.20	45.19	38.20	
				256QAM	39.15	32.16	45.15	38.16	
		3	Bottom	QPSK	39.29	32.30	45.29	38.30	
				16QAM	39.24	32.25	45.24	38.25	
				64QAM	39.20	32.21	45.20	38.21	
				256QAM	39.24	32.25	45.24	38.25	
			Top	QPSK	39.24	32.25	45.24	38.25	
				16QAM	39.29	32.30	45.29	38.30	
				64QAM	39.17	32.18	45.17	38.18	
				256QAM	39.20	32.21	45.20	38.21	
		4	Bottom	QPSK	39.06	32.07	45.06	38.07	
				16QAM	39.02	32.03	45.02	38.03	
				64QAM	39.00	32.02	45.00	38.02	
				256QAM	38.97	31.98	44.97	37.98	
Top	QPSK		38.95	31.96	44.95	37.96			
	16QAM		38.93	31.94	44.93	37.94			
	64QAM		38.93	31.94	44.93	37.94			
	256QAM		38.96	31.97	44.96	37.97			



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Report No.:
 CTK-2018-03328
 Page (22) / (1312)
 Pages

Test Data : Band 2, BW 10MHz + BW 5MHz, Multi carrier, 4TX

Type	Carrier	Test Ant. port	Channel	Modulation	Output Power		Total Power	
					Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 10MHz + BW 5MHz	Non-Contiguous	1	Bottom	QPSK	39.80	29.80	45.80	35.80
				16QAM	39.85	29.85	45.85	35.85
				64QAM	39.84	29.84	45.84	35.84
				256QAM	39.83	29.83	45.83	35.83
			Top	QPSK	36.93	29.94	42.93	35.94
				16QAM	36.90	29.91	42.90	35.91
				64QAM	37.14	30.15	43.14	36.15
				256QAM	37.09	30.10	43.09	36.10
		2	Bottom	QPSK	40.38	30.38	46.38	36.38
				16QAM	40.34	30.34	46.34	36.34
				64QAM	40.53	30.53	46.53	36.53
				256QAM	40.57	30.57	46.57	36.57
			Top	QPSK	37.28	30.29	43.28	36.29
				16QAM	37.37	30.38	43.37	36.38
				64QAM	37.50	30.51	43.50	36.51
				256QAM	37.43	30.44	43.43	36.44
		3	Bottom	QPSK	40.44	30.44	46.44	36.44
				16QAM	40.51	30.51	46.51	36.51
				64QAM	40.49	30.49	46.49	36.49
				256QAM	40.53	30.53	46.53	36.53
			Top	QPSK	37.48	30.49	43.48	36.49
				16QAM	37.51	30.52	43.51	36.52
				64QAM	37.55	30.56	43.55	36.56
				256QAM	37.53	30.54	43.53	36.54
		4	Bottom	QPSK	40.07	30.07	46.07	36.07
				16QAM	40.06	30.06	46.06	36.06
				64QAM	40.24	30.24	46.24	36.24
				256QAM	40.17	30.17	46.17	36.17
			Top	QPSK	37.17	30.18	43.17	36.18
				16QAM	37.12	30.13	43.12	36.13
				64QAM	37.18	30.19	43.18	36.19
				256QAM	37.12	30.13	43.12	36.13



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Report No.:
 CTK-2018-03328
 Page (23) / (1312)
 Pages

Test Data : Band 2, BW 10MHz + BW 10MHz, Multi carrier, 4TX

Type	Carrier	Test Ant. port	Channel	Modulation	Output Power		Total Power	
					Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 10MHz + BW 10MHz	Non- Contiguous	1	Bottom	QPSK	38.82	28.82	44.82	34.82
				16QAM	38.81	28.81	44.81	34.81
				64QAM	38.90	28.90	44.90	34.90
				256QAM	38.89	28.89	44.89	34.89
			Top	QPSK	38.88	28.88	44.88	34.88
				16QAM	38.70	28.70	44.70	34.70
				64QAM	38.87	28.87	44.87	34.87
				256QAM	38.86	28.86	44.86	34.86
		2	Bottom	QPSK	39.58	29.58	45.58	35.58
				16QAM	39.60	29.60	45.60	35.60
				64QAM	39.56	29.56	45.56	35.56
				256QAM	39.54	29.54	45.54	35.54
			Top	QPSK	39.30	29.30	45.30	35.30
				16QAM	39.33	29.33	45.33	35.33
				64QAM	39.25	29.25	45.25	35.25
				256QAM	39.20	29.20	45.20	35.20
		3	Bottom	QPSK	39.61	29.61	45.61	35.61
				16QAM	39.55	29.55	45.55	35.55
				64QAM	39.57	29.57	45.57	35.57
				256QAM	39.61	29.61	45.61	35.61
			Top	QPSK	39.31	29.31	45.31	35.31
				16QAM	39.21	29.21	45.21	35.21
				64QAM	39.21	29.21	45.21	35.21
				256QAM	39.20	29.20	45.20	35.20
		4	Bottom	QPSK	39.27	29.27	45.27	35.27
				16QAM	39.32	29.32	45.32	35.32
				64QAM	39.37	29.37	45.37	35.37
				256QAM	39.35	29.35	45.35	35.35
Top	QPSK		39.10	29.10	45.10	35.10		
	16QAM		39.01	29.01	45.01	35.01		
	64QAM		38.97	28.97	44.97	34.97		
	256QAM		38.95	28.95	44.95	34.95		



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Report No.:
 CTK-2018-03328
 Page (24) / (1312)
 Pages

Test Data : Band 2, BW 15MHz + BW 5MHz, Multi carrier, 4TX

Type	Carrier	Test Ant. port	Channel	Modulation	Output Power		Total Power	
					Channel Power (dBm)	PSD (dBm/MHz)	Channel Power (dBm)	PSD (dBm/MHz)
Band 2 BW 15MHz + BW 5MHz	Non- Contiguous	1	Bottom	QPSK	40.49	28.73	46.49	34.73
				16QAM	40.59	28.83	46.59	34.83
				64QAM	40.45	28.69	46.45	34.69
				256QAM	40.41	28.65	46.41	34.65
			Top	QPSK	35.68	28.69	41.68	34.69
				16QAM	35.67	28.68	41.67	34.68
				64QAM	35.72	28.73	41.72	34.73
				256QAM	35.82	28.83	41.82	34.83
		2	Bottom	QPSK	40.99	29.23	46.99	35.23
				16QAM	41.12	29.36	47.12	35.36
				64QAM	40.90	29.14	46.90	35.14
				256QAM	40.90	29.14	46.90	35.14
			Top	QPSK	36.17	29.18	42.17	35.18
				16QAM	36.01	29.02	42.01	35.02
				64QAM	36.21	29.22	42.21	35.22
				256QAM	36.19	29.20	42.19	35.20
		3	Bottom	QPSK	41.09	29.33	47.09	35.33
				16QAM	41.02	29.26	47.02	35.26
				64QAM	41.01	29.25	47.01	35.25
				256QAM	41.02	29.26	47.02	35.26
			Top	QPSK	36.05	29.06	42.05	35.06
				16QAM	36.03	29.04	42.03	35.04
				64QAM	36.05	29.06	42.05	35.06
				256QAM	36.05	29.06	42.05	35.06
		4	Bottom	QPSK	40.63	28.87	46.63	34.87
				16QAM	40.75	28.99	46.75	34.99
				64QAM	40.67	28.91	46.67	34.91
				256QAM	40.66	28.90	46.66	34.90
			Top	QPSK	35.58	28.59	41.58	34.59
				16QAM	35.64	28.65	41.64	34.65
				64QAM	35.58	28.59	41.58	34.59
				256QAM	35.56	28.57	41.56	34.57



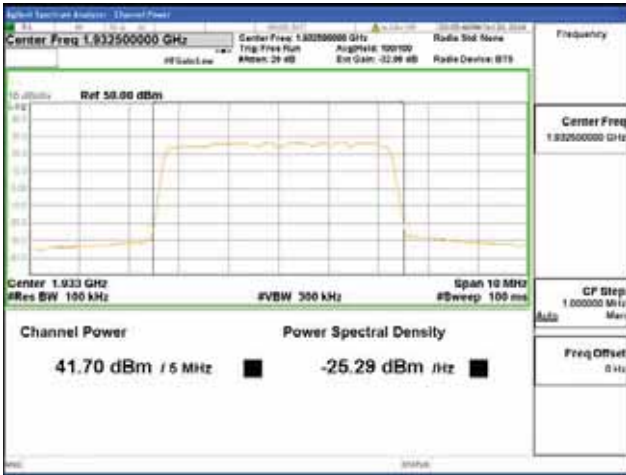
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Report No.:
 CTK-2018-03328
 Page (25) / (1312)
 Pages

**Test Plot at Output Power
 ANT 1
 Band 2, BW 5MHz, Single carrier, 4TX, Bottom**

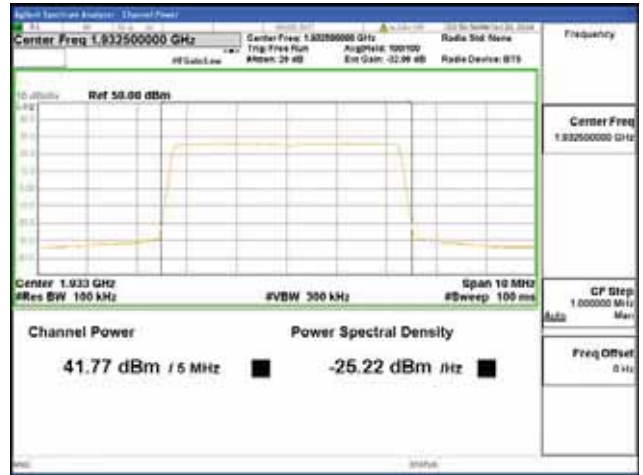
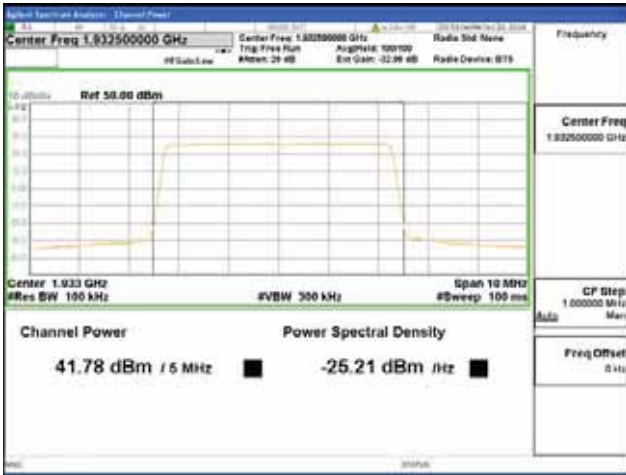
QPSK

16QAM



64QAM

256QAM





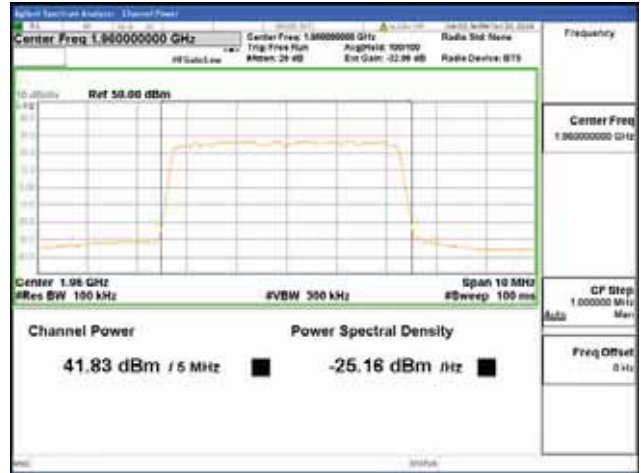
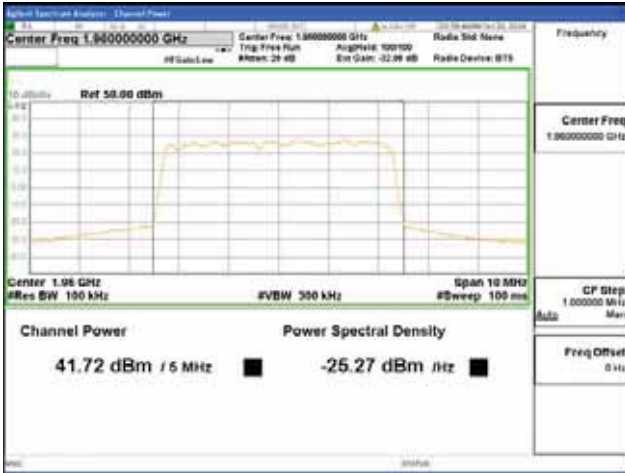
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Report No.:
 CTK-2018-03328
 Page (26) / (1312)
 Pages

Band 2, BW 5MHz, Single carrier, 4TX, Middle

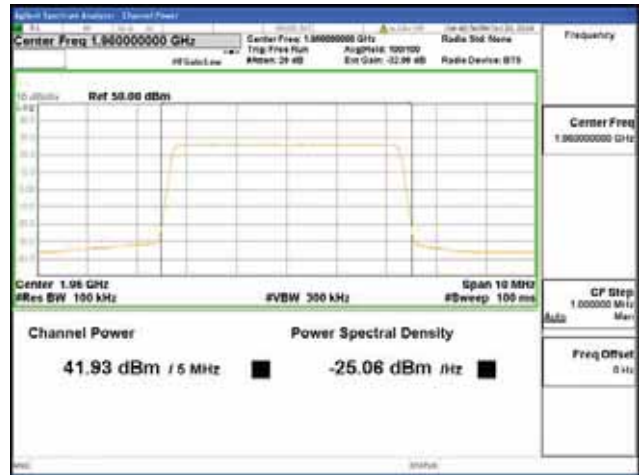
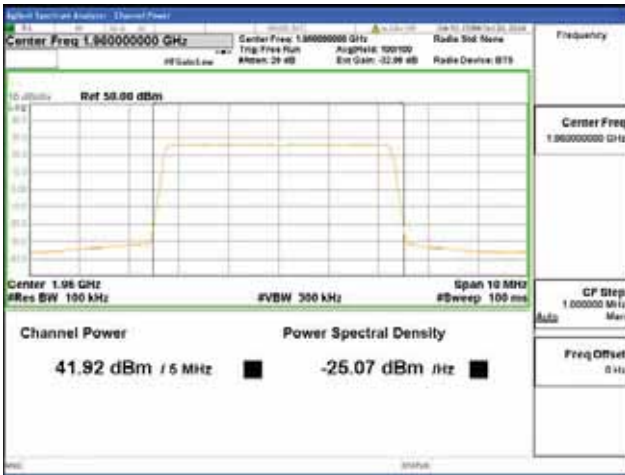
QPSK

16QAM



64QAM

256QAM



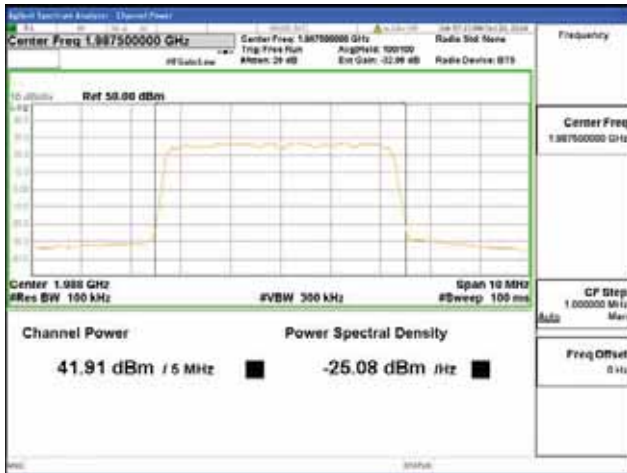


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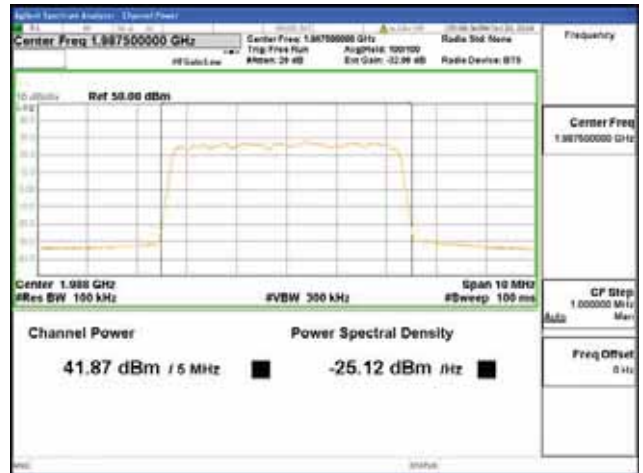
Report No.:
 CTK-2018-03328
 Page (27) / (1312)
 Pages

Band 2, BW 5MHz, Single carrier, 4TX, Top

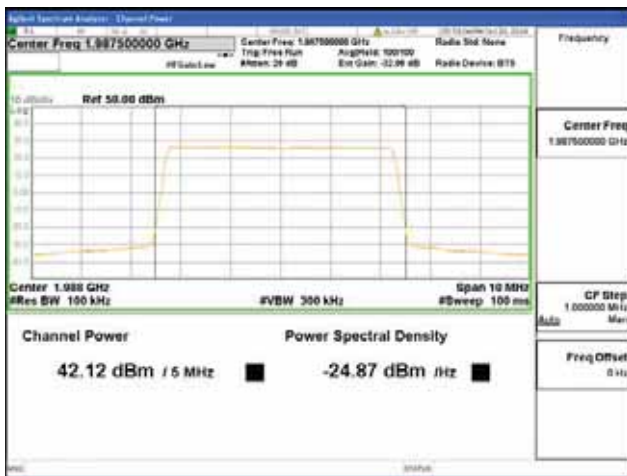
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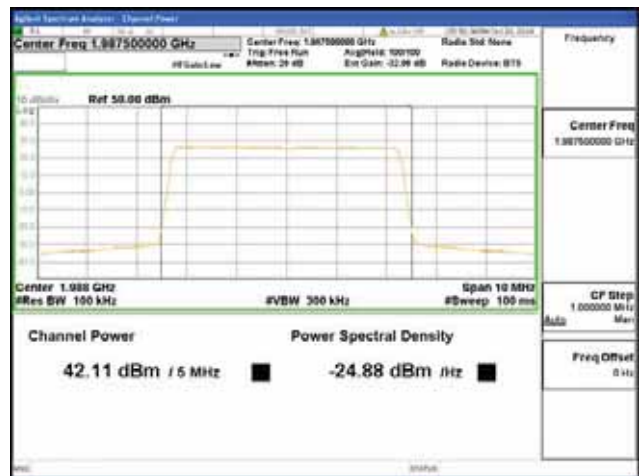
16QAM



64QAM



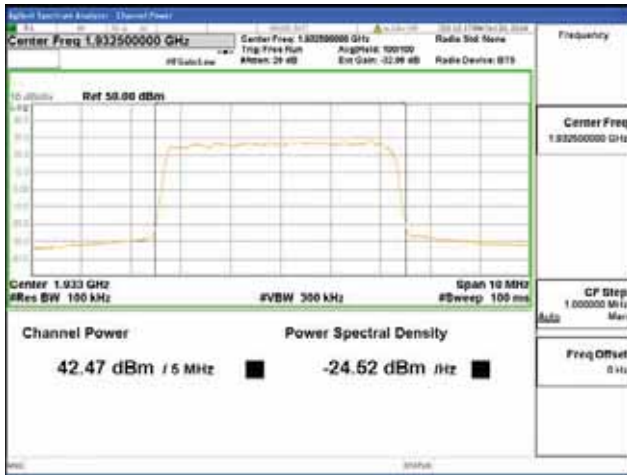
256QAM



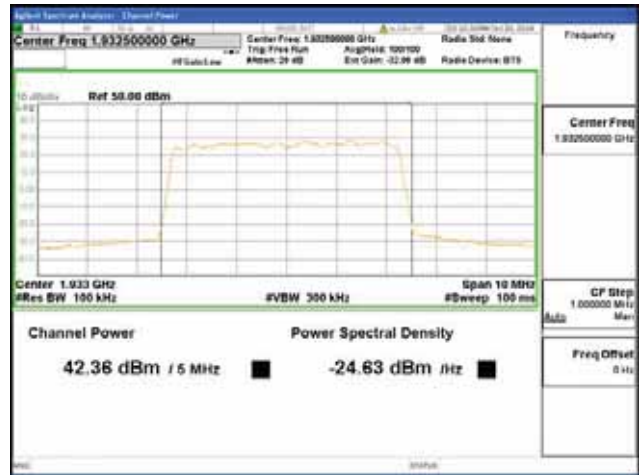


ANT 2
Band 2, BW 5MHz, Single carrier, 4TX, Bottom

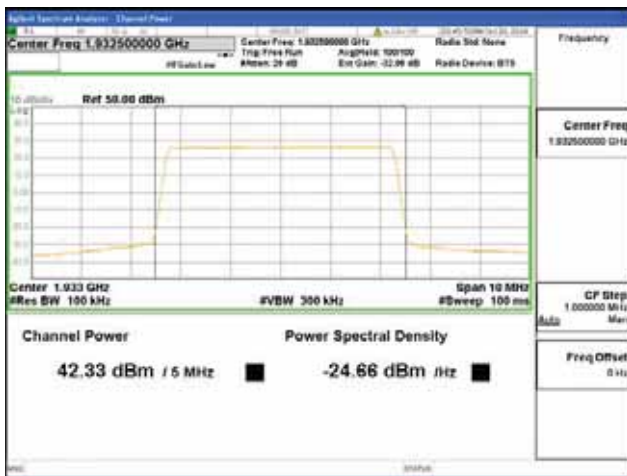
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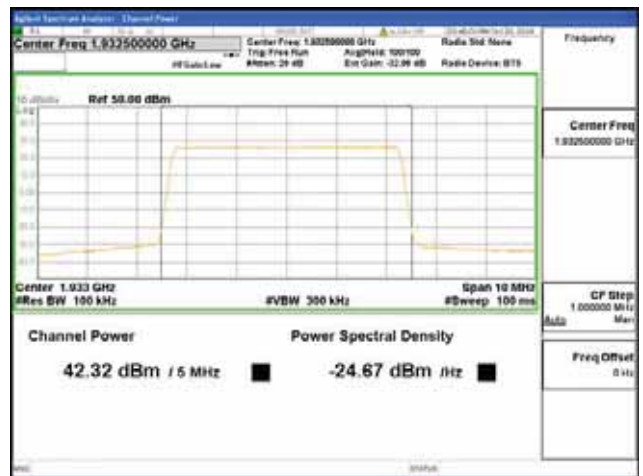
16QAM



64QAM



256QAM





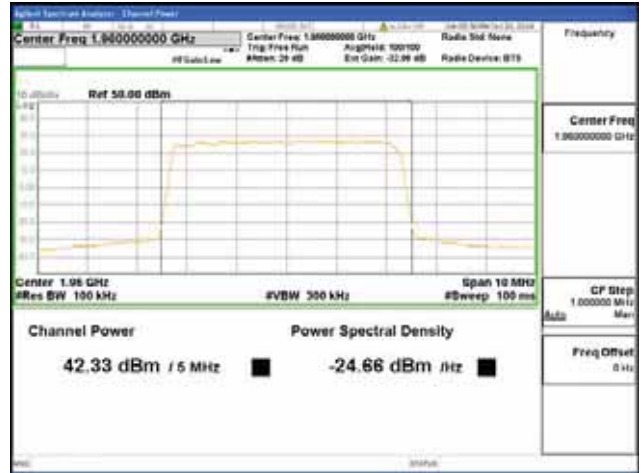
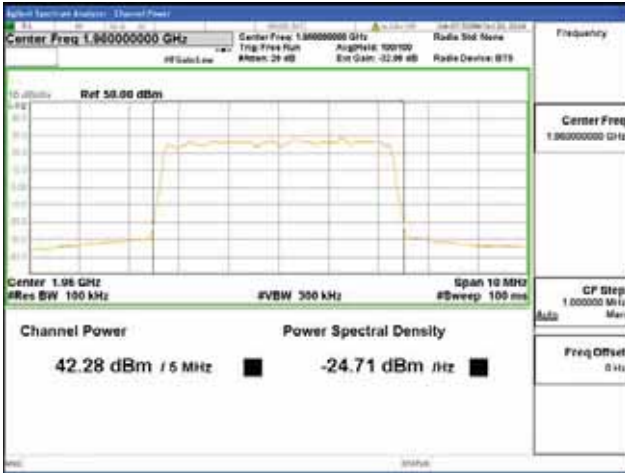
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Report No.:
 CTK-2018-03328
 Page (29) / (1312)
 Pages

Band 2, BW 5MHz, Single carrier, 4TX, Middle

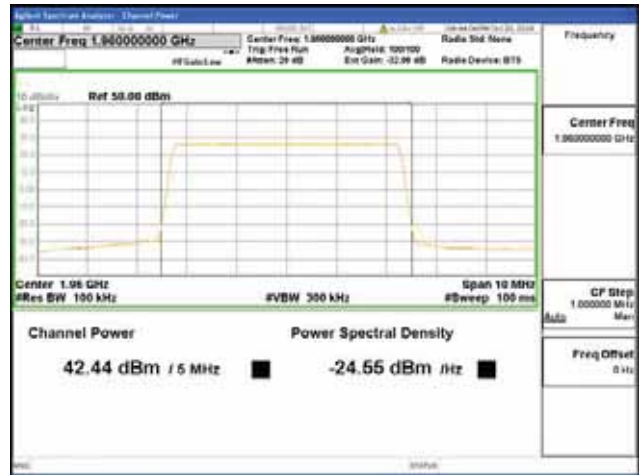
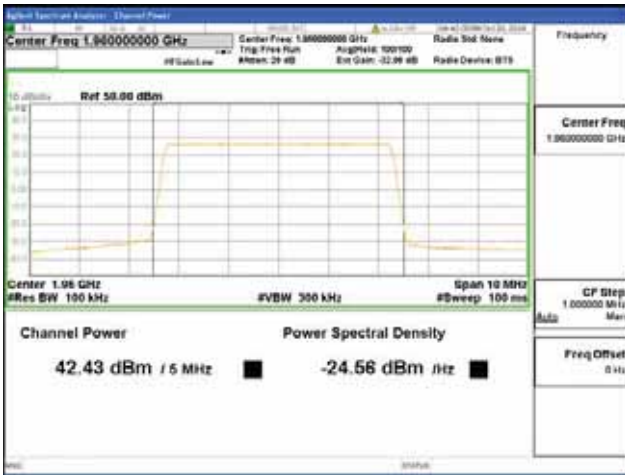
QPSK

16QAM



64QAM

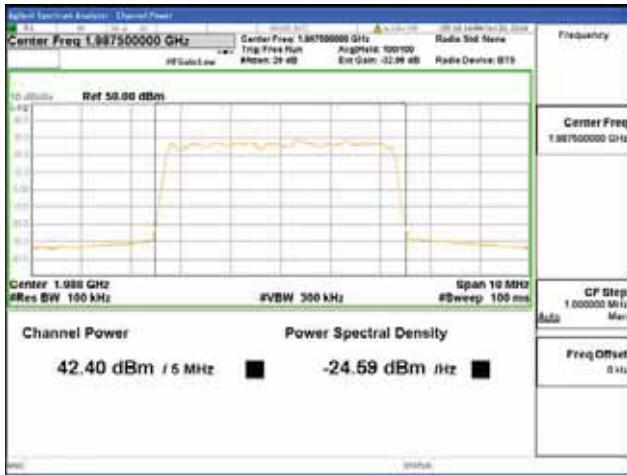
256QAM



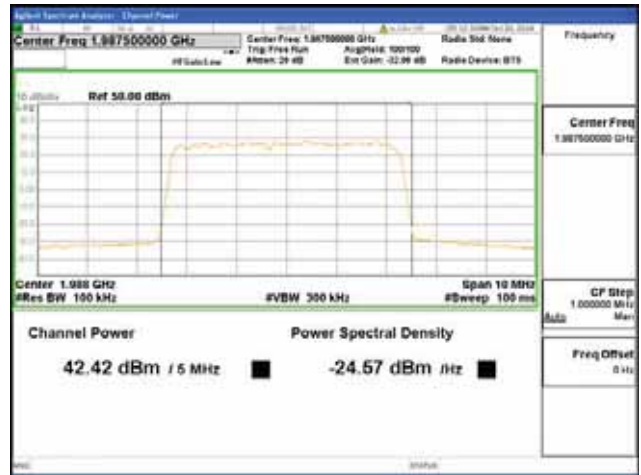


Band 2, BW 5MHz, Single carrier, 4TX, Top

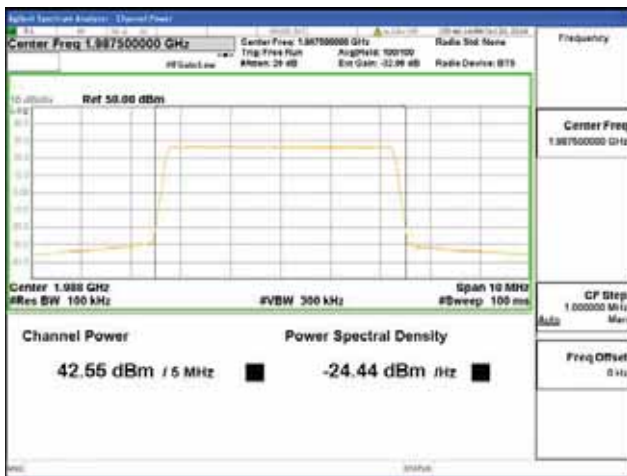
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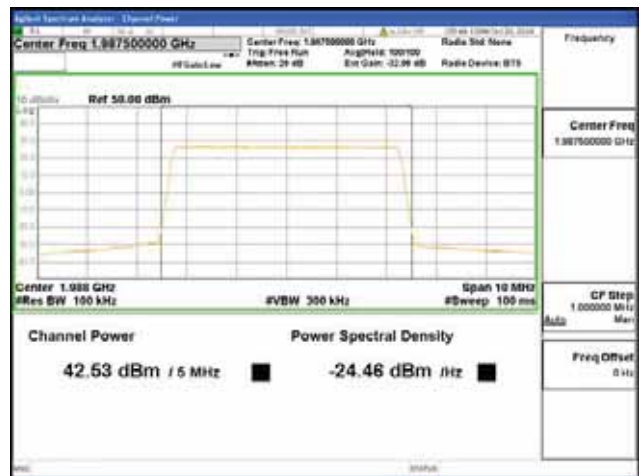
16QAM



64QAM



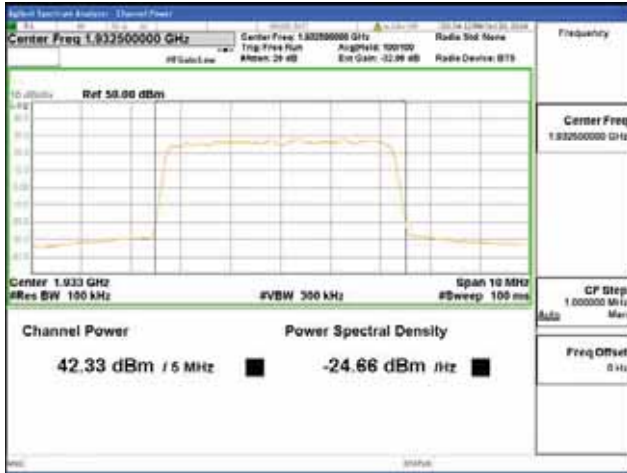
256QAM





ANT 3
Band 2, BW 5MHz, Single carrier, 4TX, Bottom

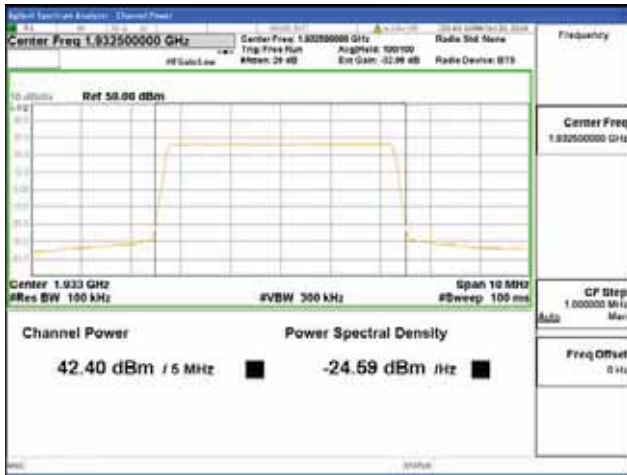
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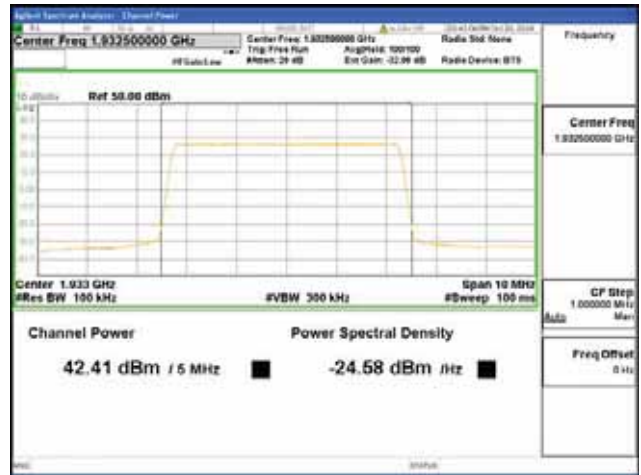
16QAM



64QAM



256QAM





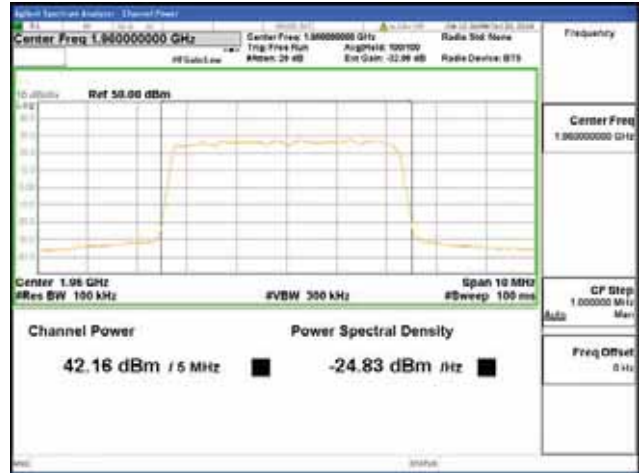
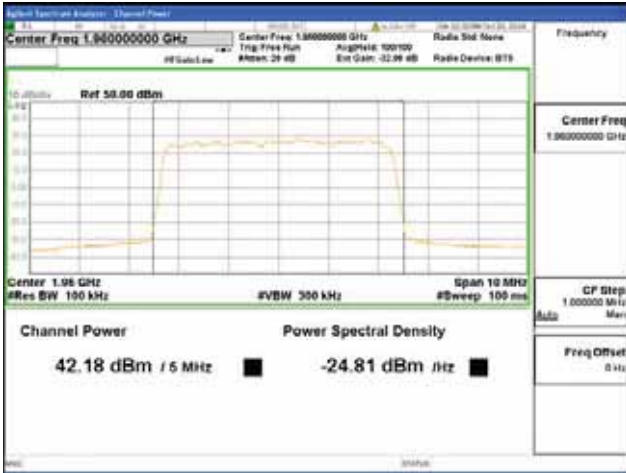
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Report No.:
 CTK-2018-03328
 Page (32) / (1312)
 Pages

Band 2, BW 5MHz, Single carrier, 4TX, Middle

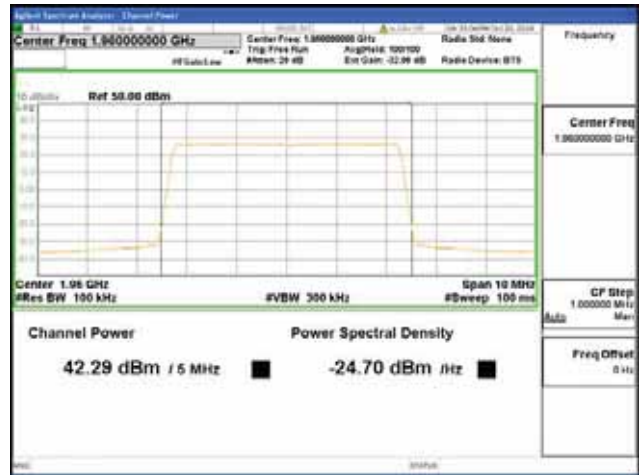
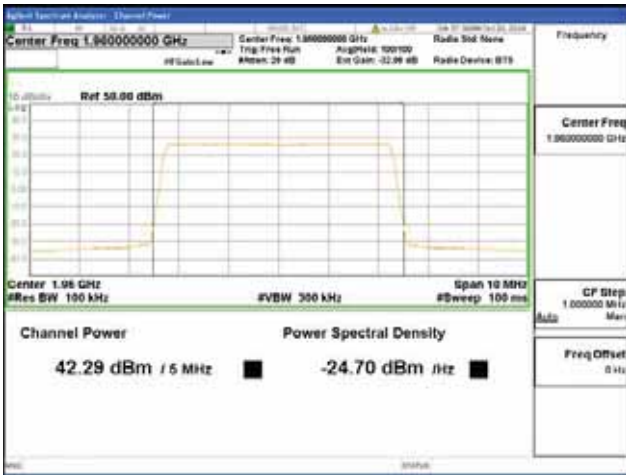
QPSK

16QAM



64QAM

256QAM

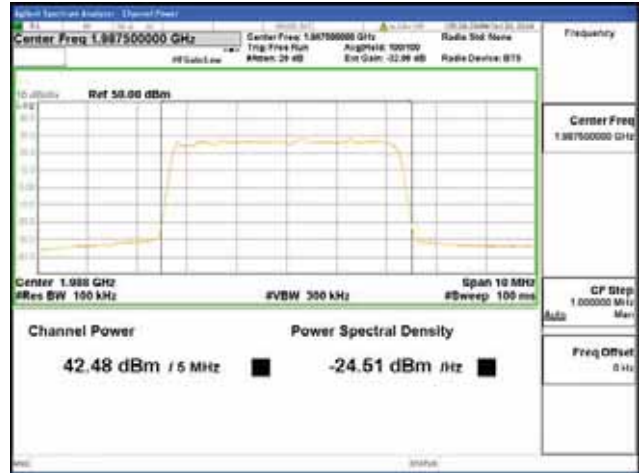
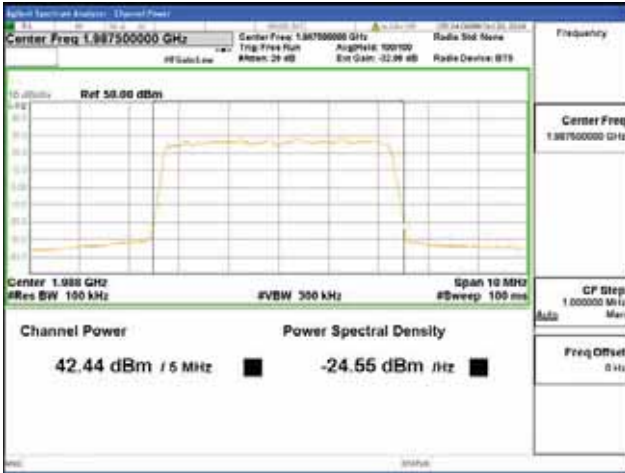




Band 2, BW 5MHz, Single carrier, 4TX Top

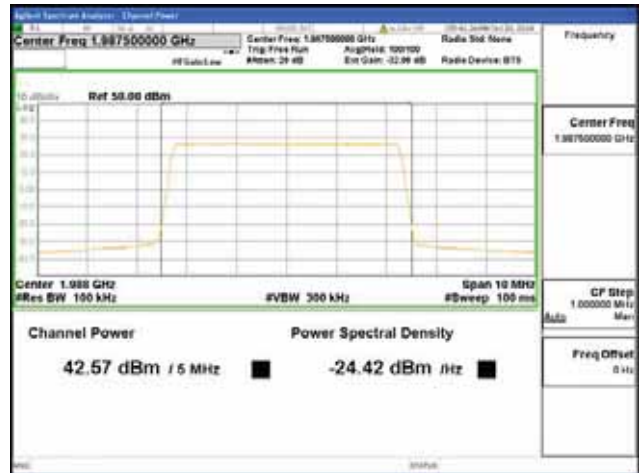
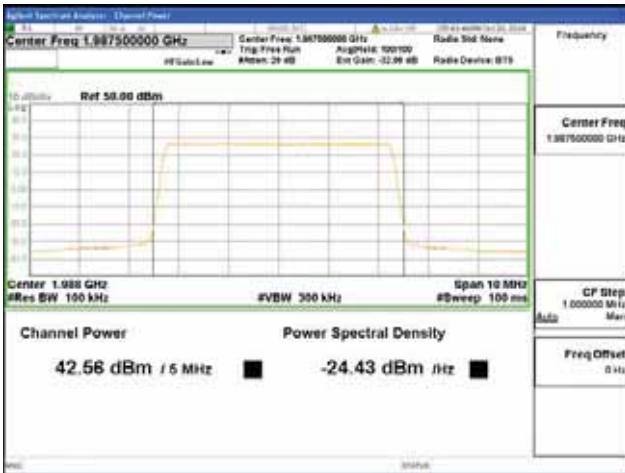
QPSK

16QAM



64QAM

256QAM

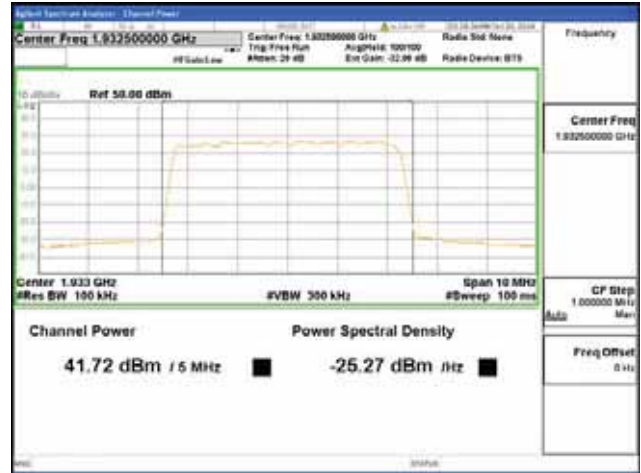
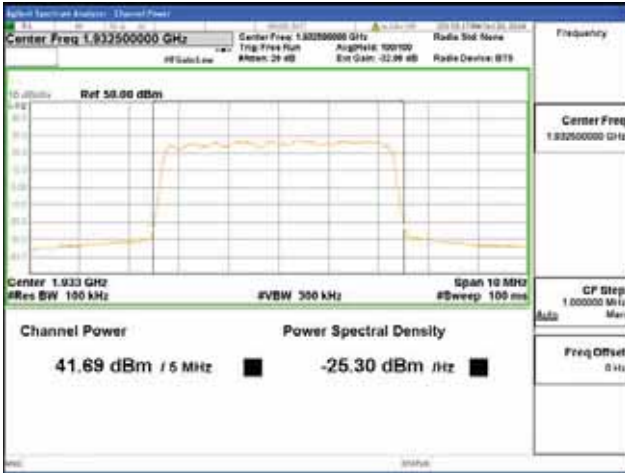




ANT 4
Band 2, BW 5MHz, Single carrier, 4TX, Bottom

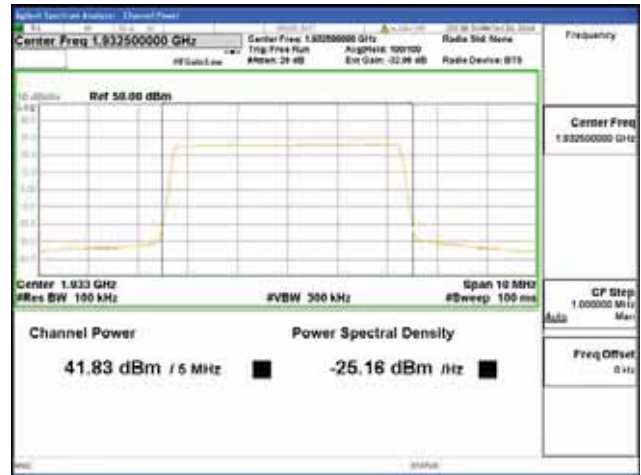
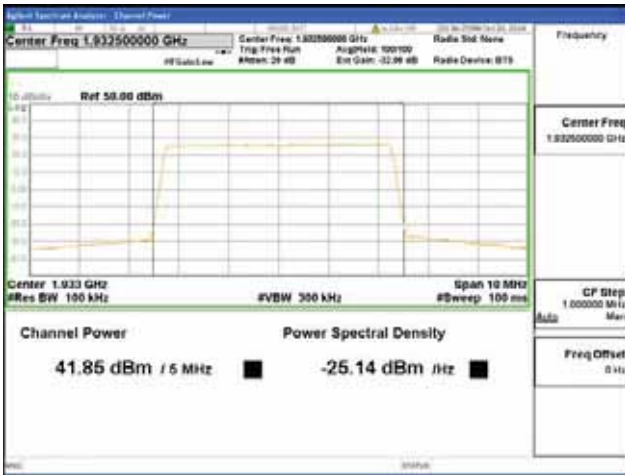
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16QAM



64QAM

256QAM

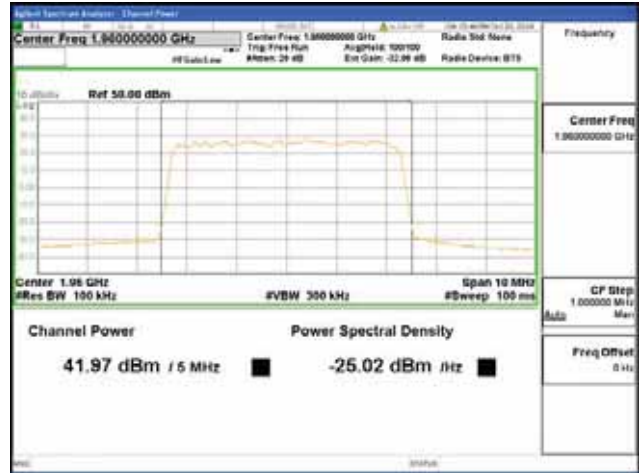
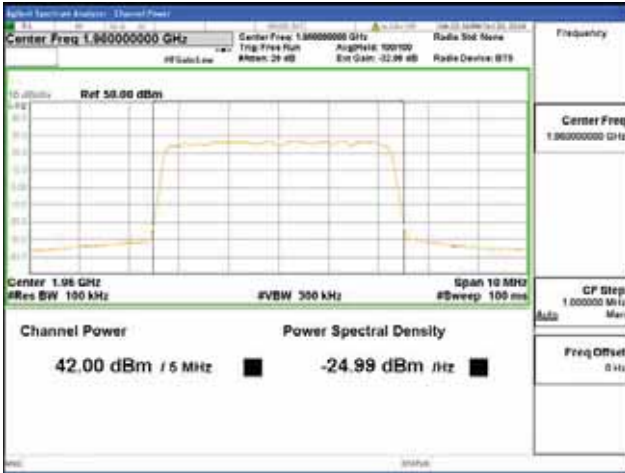




Band 2, BW 5MHz, Single carrier, 4TX, Middle

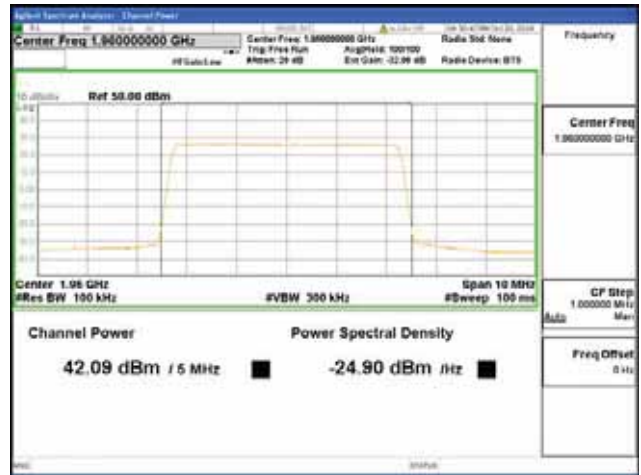
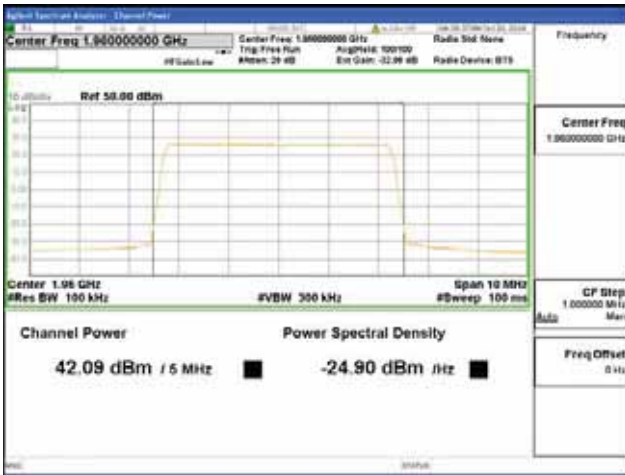
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16QAM



64QAM

256QAM

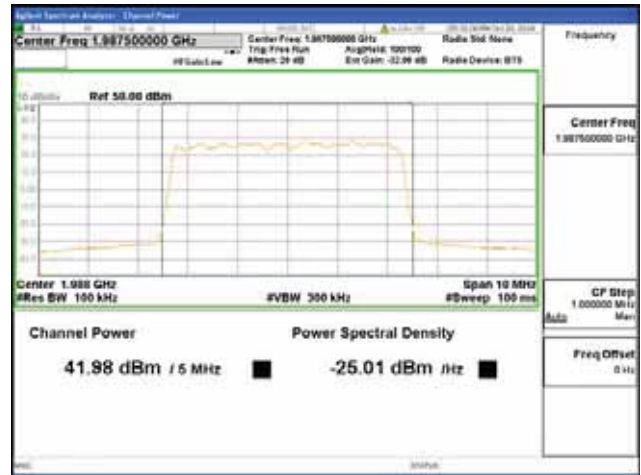
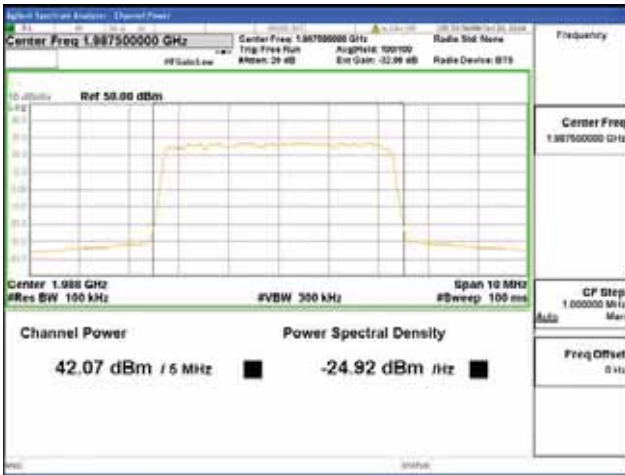




Band 2, BW 5MHz, Single carrier, 4TX, Top

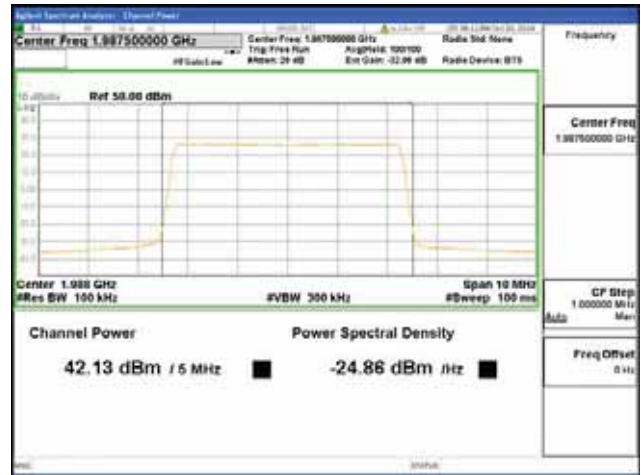
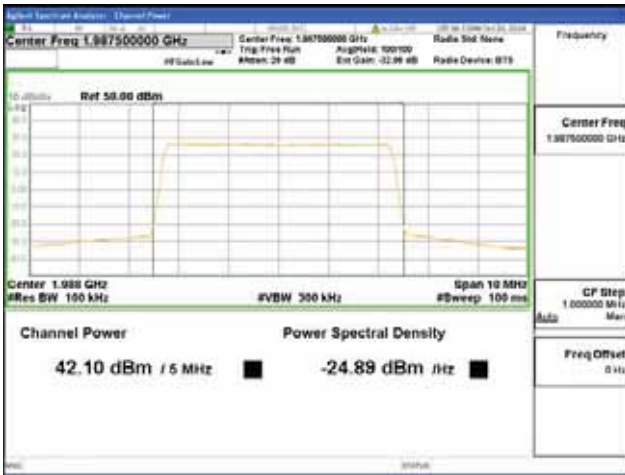
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16QAM



64QAM

256QAM



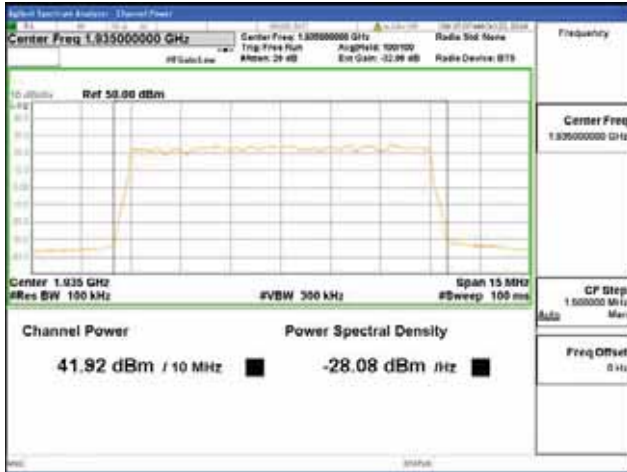


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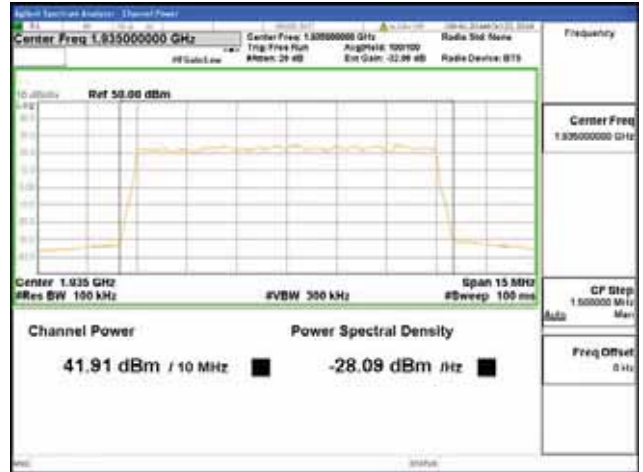
Report No.:
 CTK-2018-03328
 Page (37) / (1312)
 Pages

ANT 1
Band 2, BW 10MHz, Single carrier, 4TX, Bottom

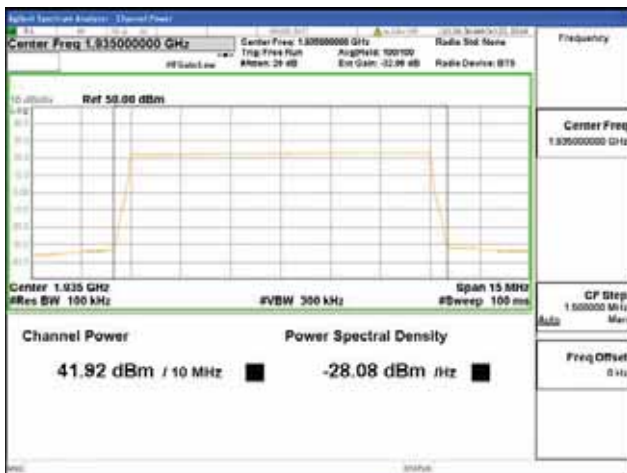
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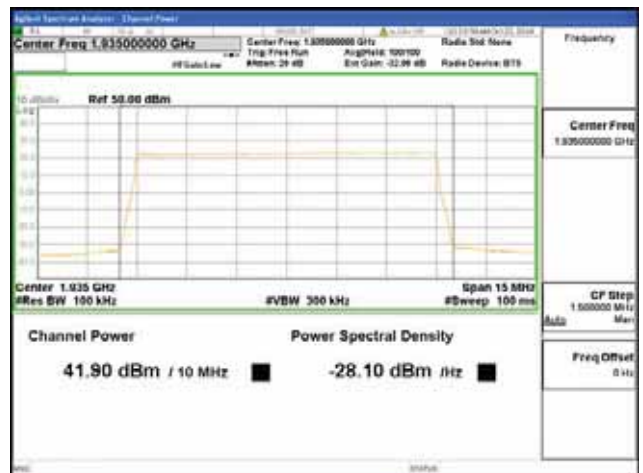
16QAM



64QAM



256QAM





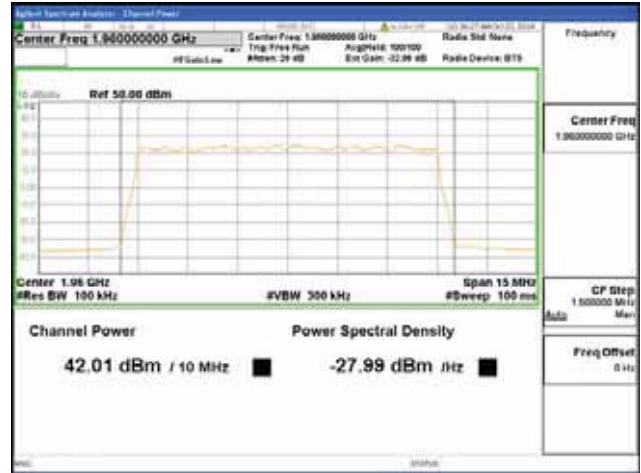
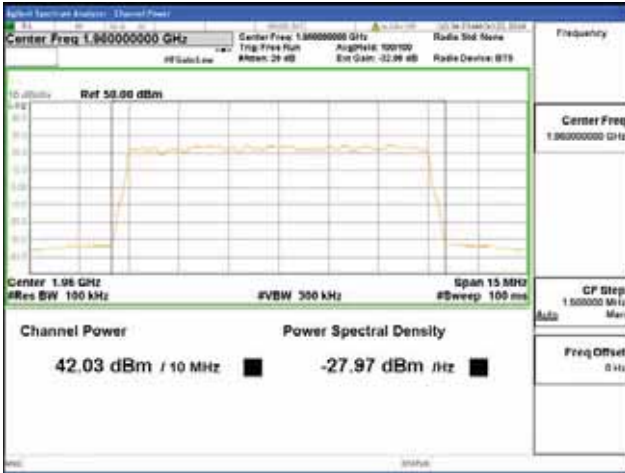
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Report No.:
 CTK-2018-03328
 Page (38) / (1312)
 Pages

Band 2, BW 10MHz, Single carrier, 4TX, Middle

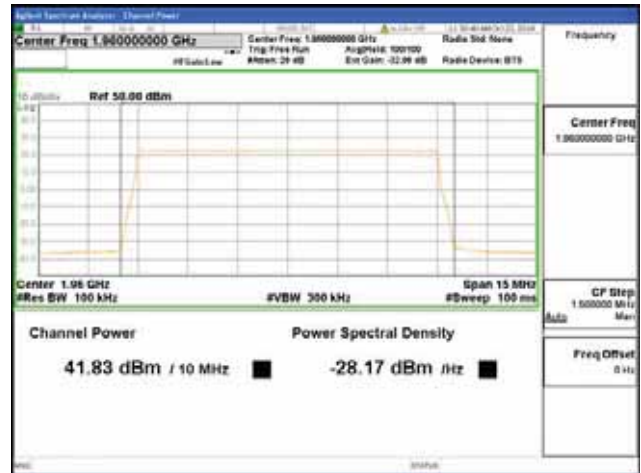
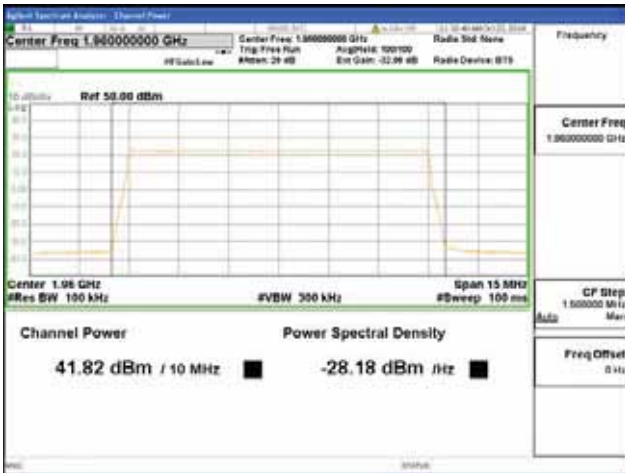
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16QAM



64QAM

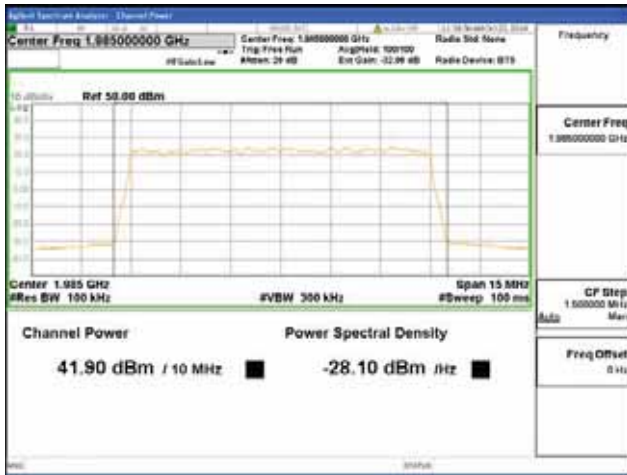
256QAM



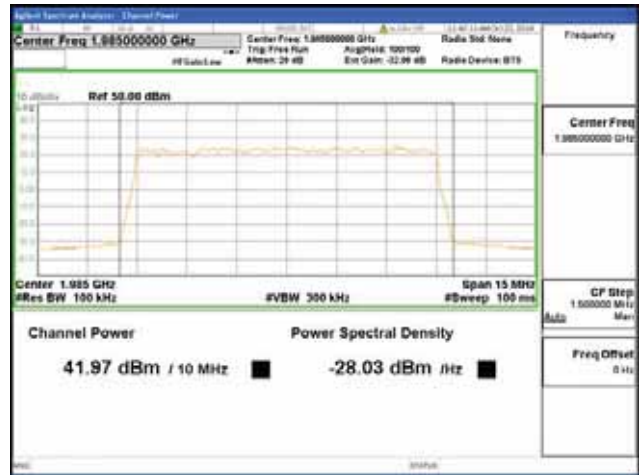


Band 2, BW 10MHz, Single carrier, 4TX, Top

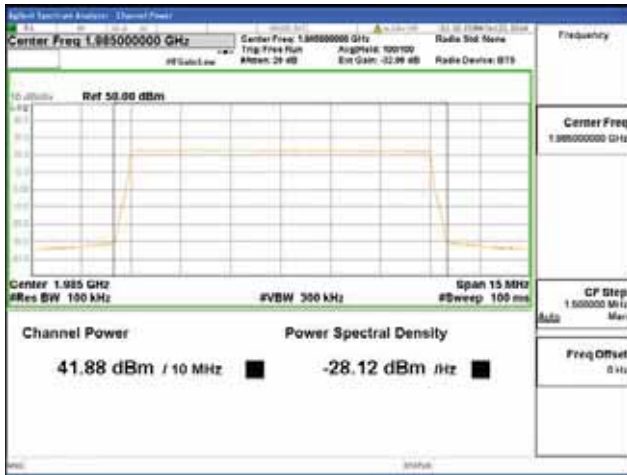
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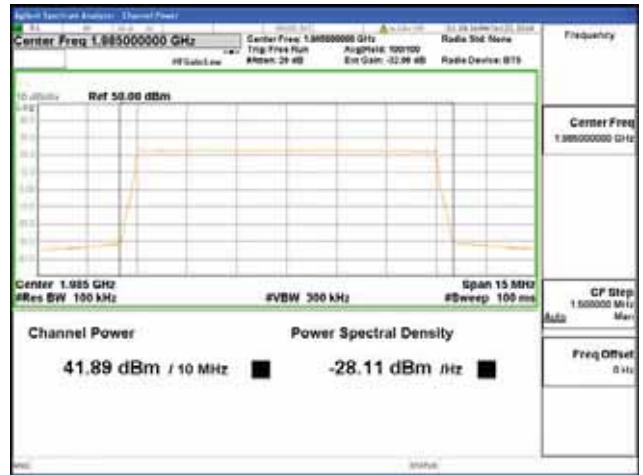
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64QAM



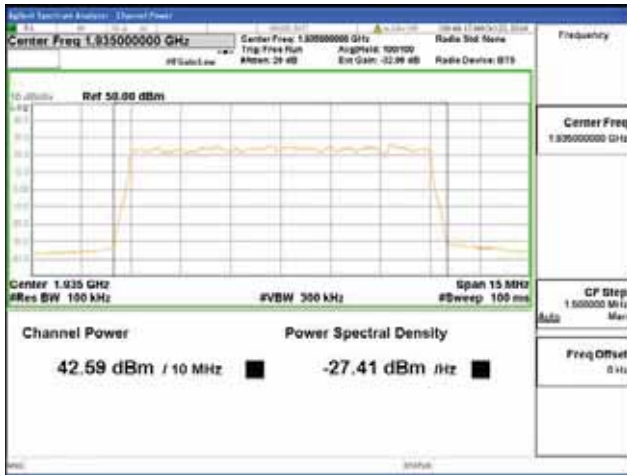
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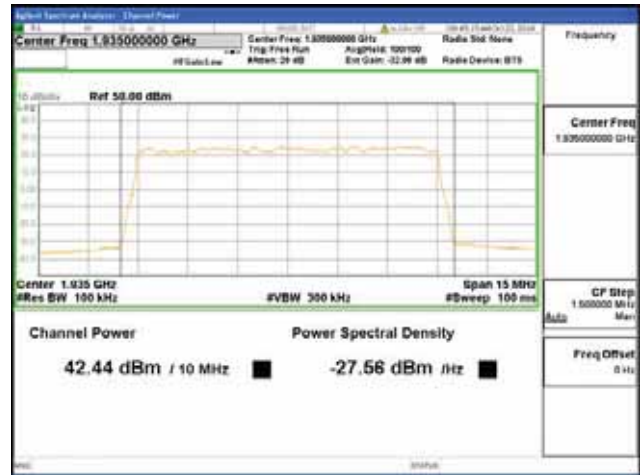


ANT 2
Band 2, BW 10MHz, Single carrier, 4TX, Bottom

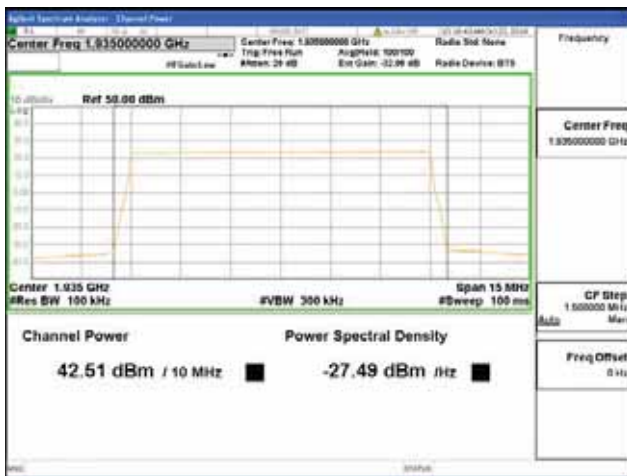
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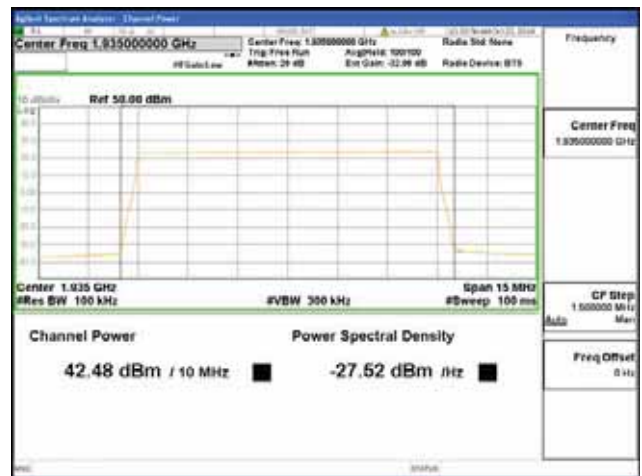
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64QAM



256QAM





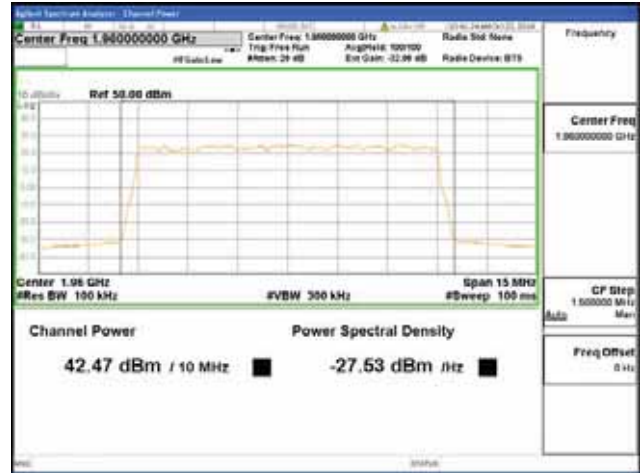
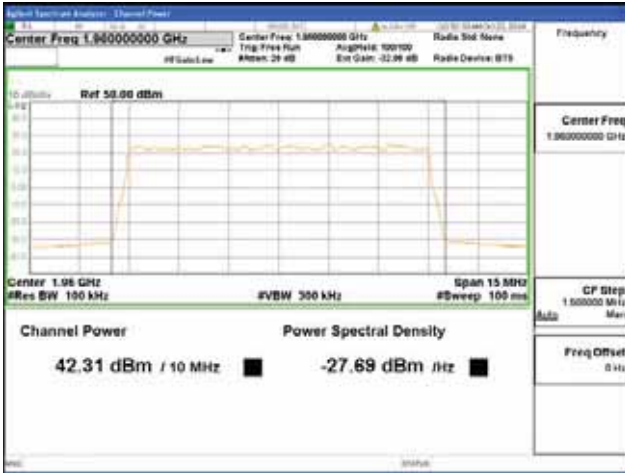
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Report No.:
CTK-2018-03328
Page (41) / (1312)
Pages

Band 2, BW 10MHz, Single carrier, 4TX, Middle

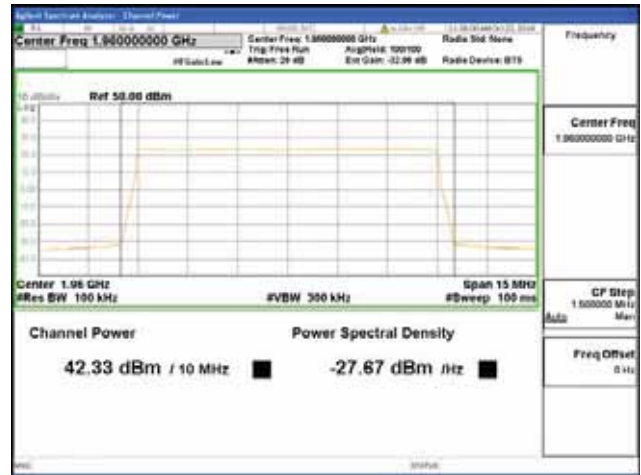
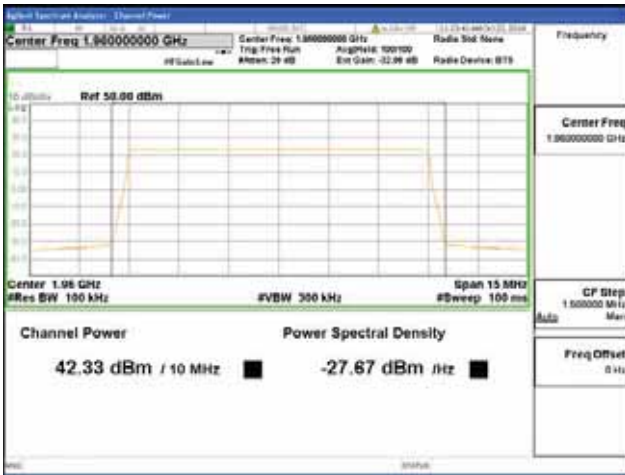
QPSK

16QAM



64QAM

256QAM

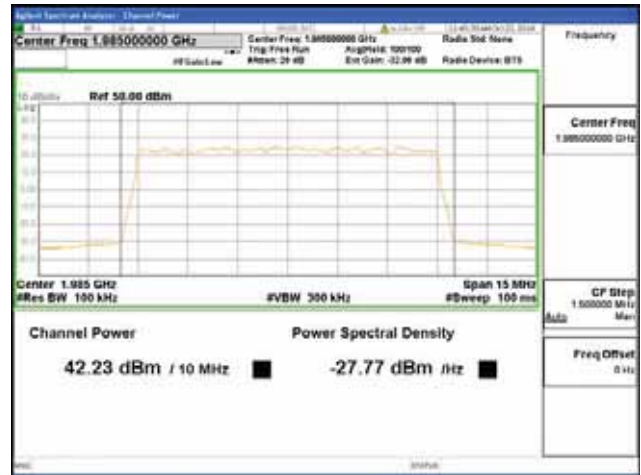
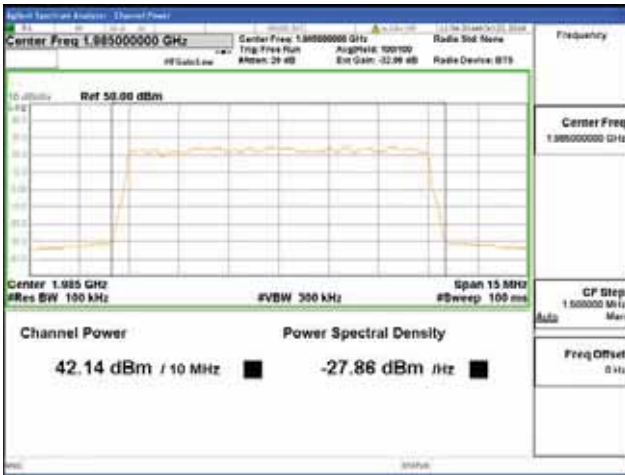




Band 2, BW 10MHz, Single carrier, 4TX, Top

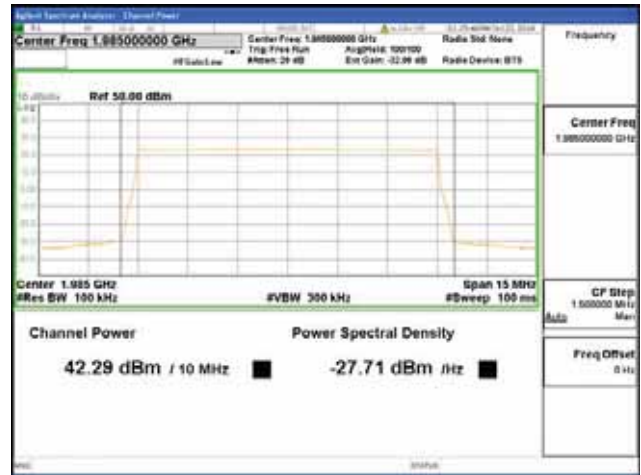
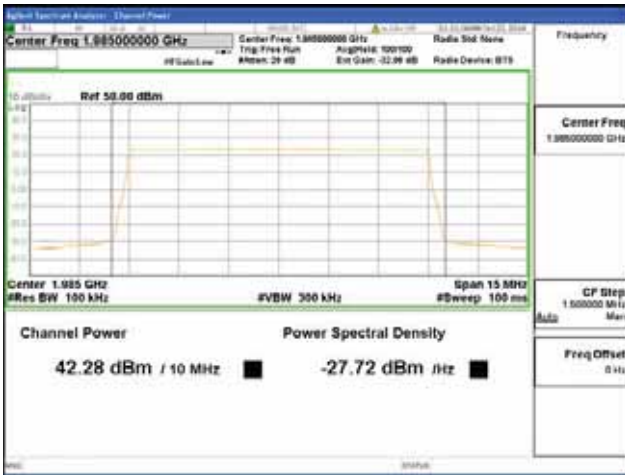
QPSK

16QAM



64QAM

256QAM

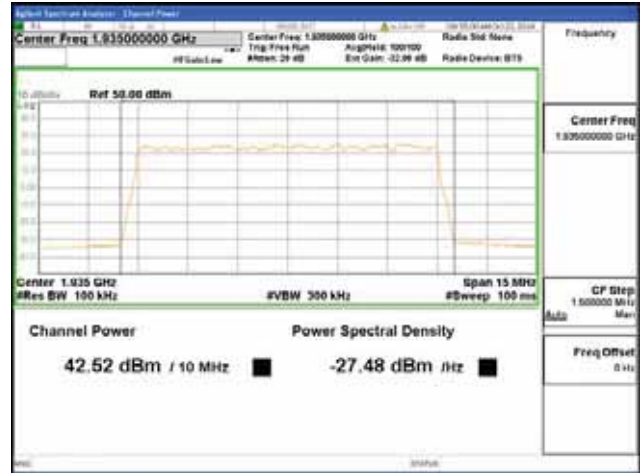
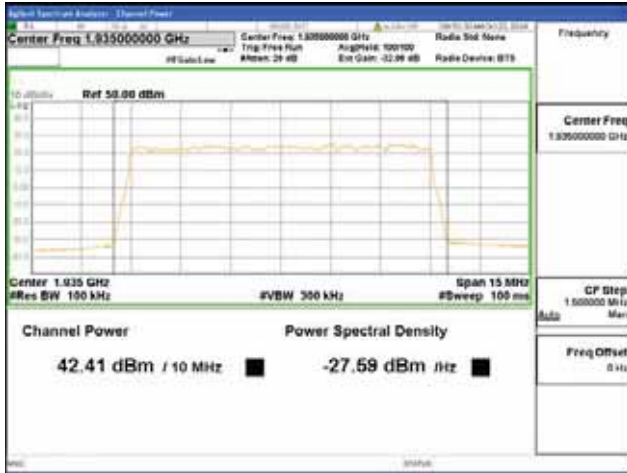




ANT 3
Band 2, BW 10MHz, Single carrier, 4TX, Bottom

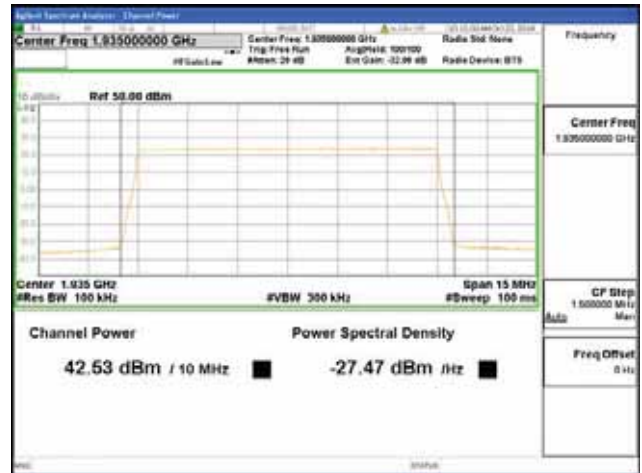
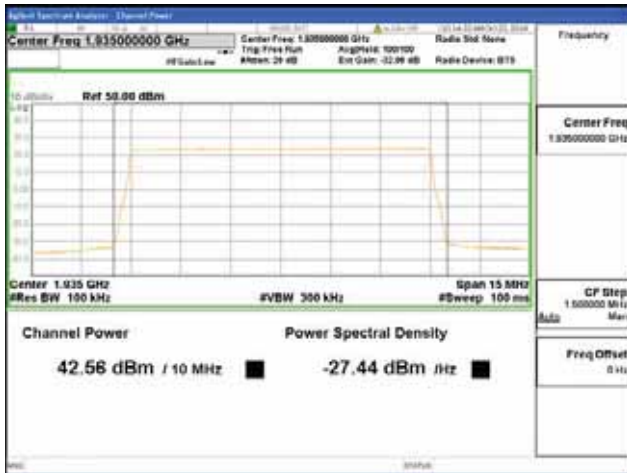
QPSK

16QAM



64QAM

256QAM





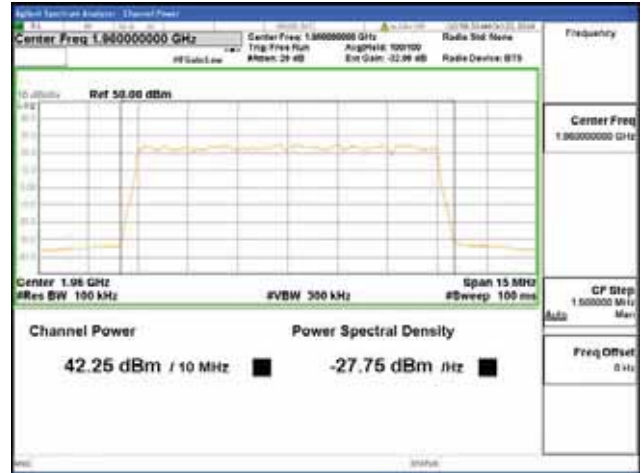
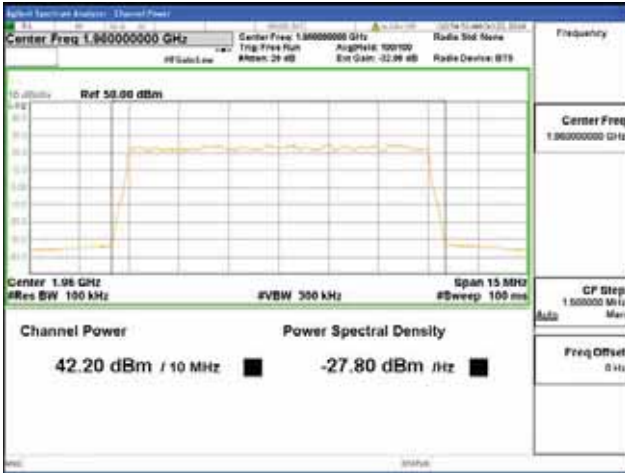
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Report No.:
 CTK-2018-03328
 Page (44) / (1312)
 Pages

Band 2, BW 10MHz, Single carrier, 4TX, Middle

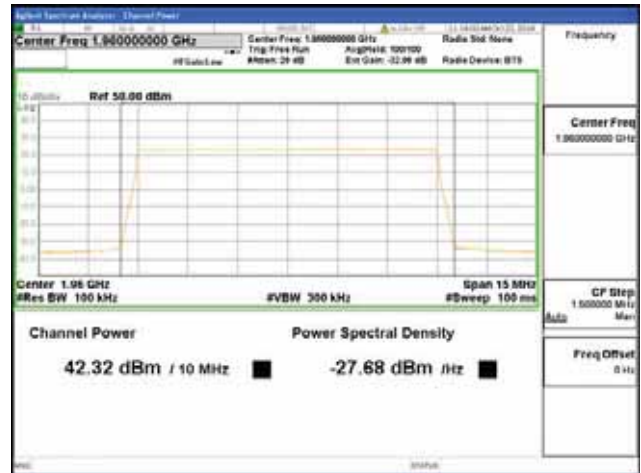
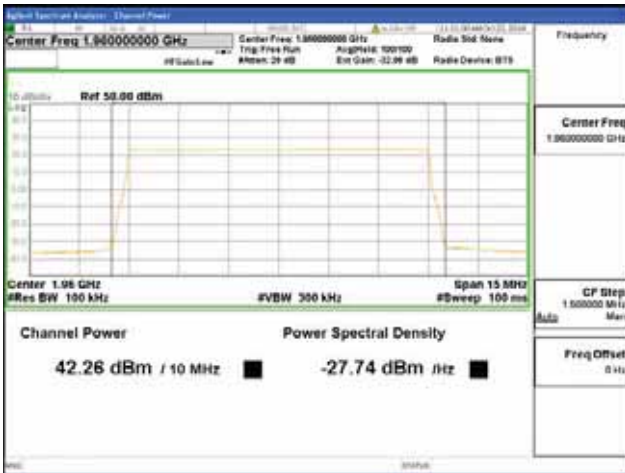
QPSK

16QAM



64QAM

256QAM

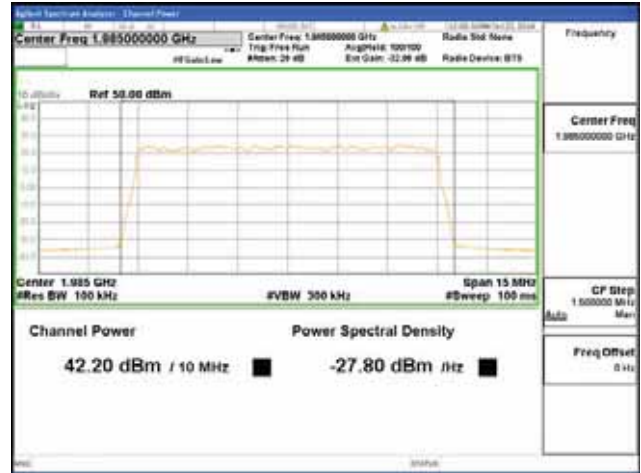
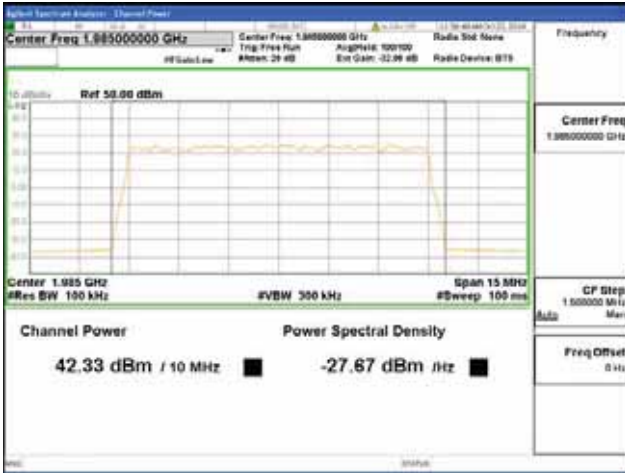




Band 2, BW 10MHz, Single carrier, 4TX, Top

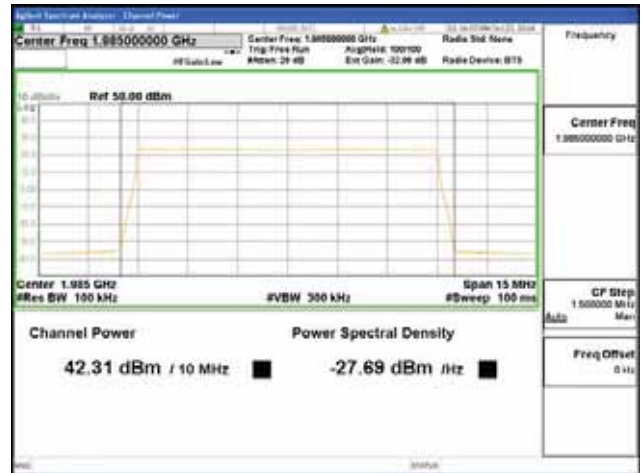
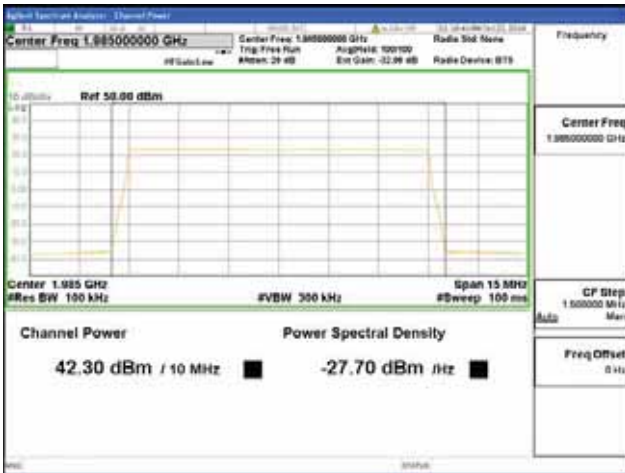
QPSK

16QAM



64QAM

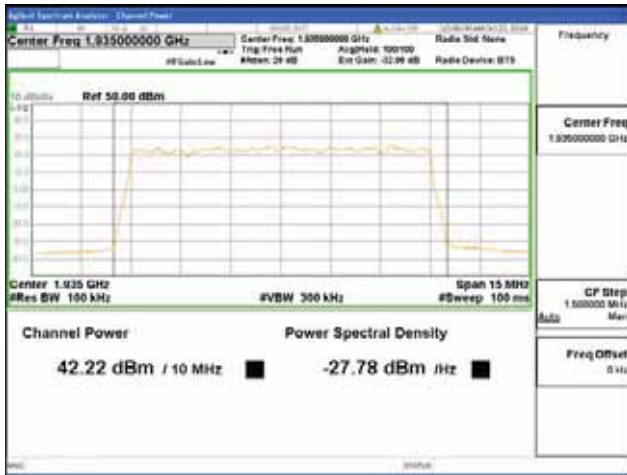
256QAM



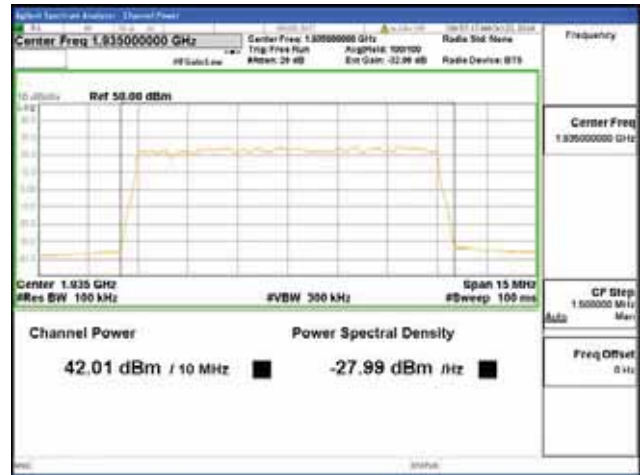


ANT 4
Band 2, BW 10MHz, Single carrier, 4TX, Bottom

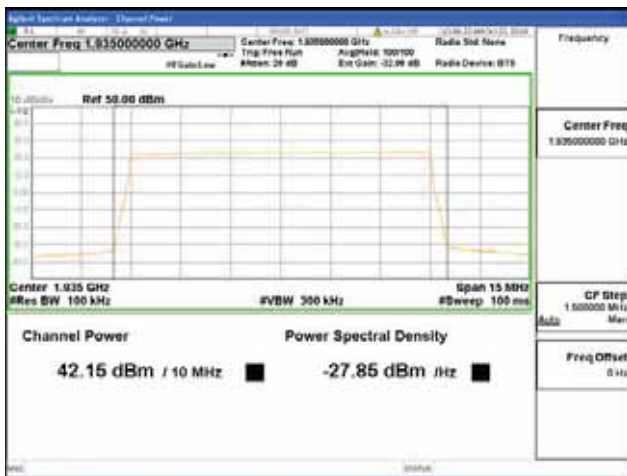
QPSK



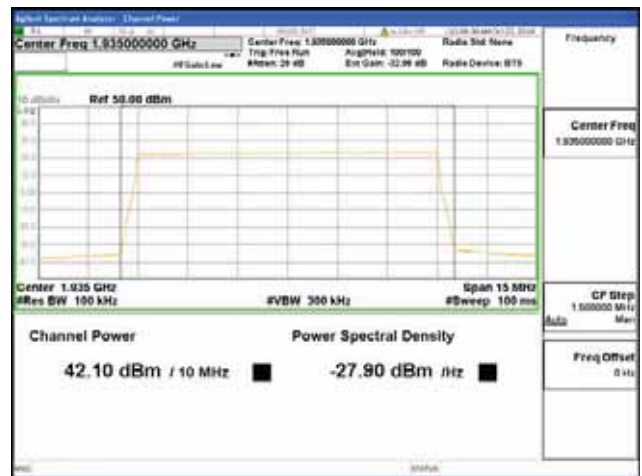
16QAM



64QAM



256QAM

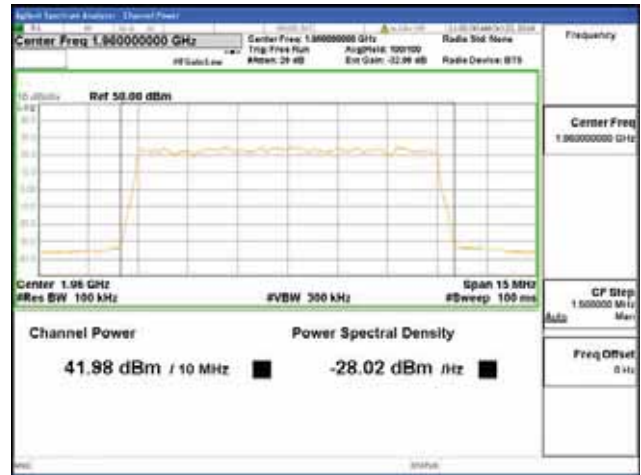
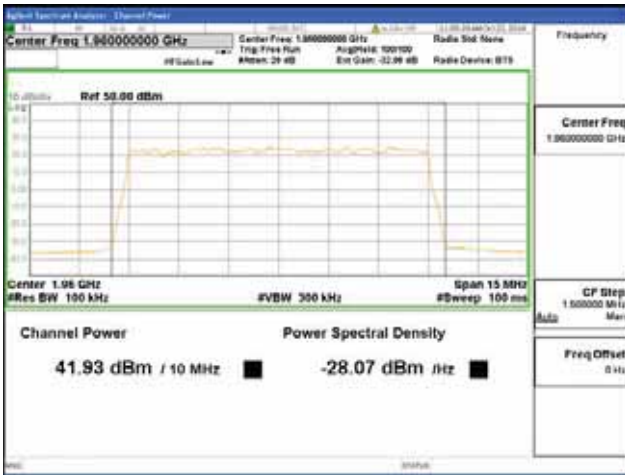




Band 2, BW 10MHz, Single carrier, 4TX, Middle

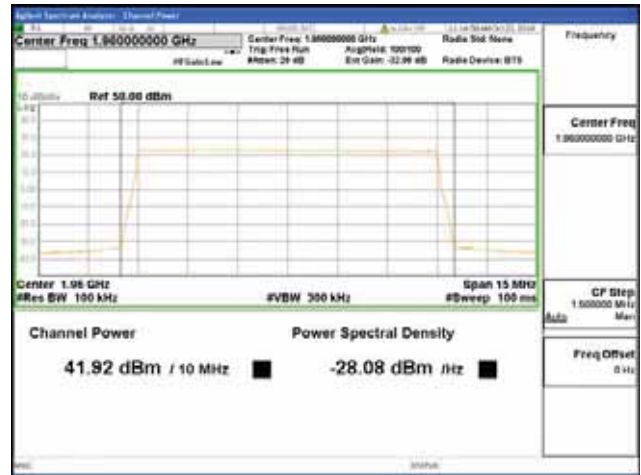
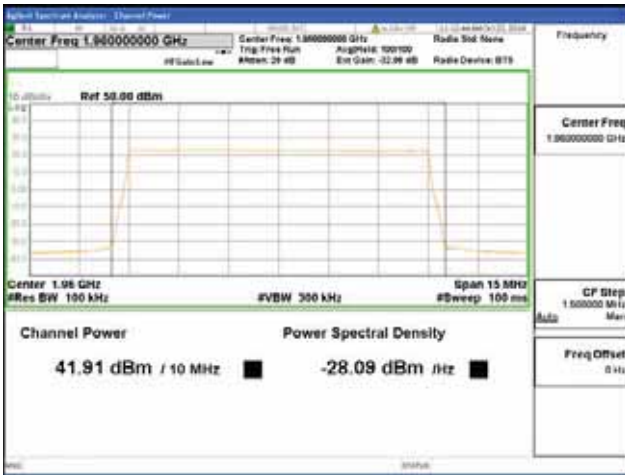
QPSK

16QAM



64QAM

256QAM

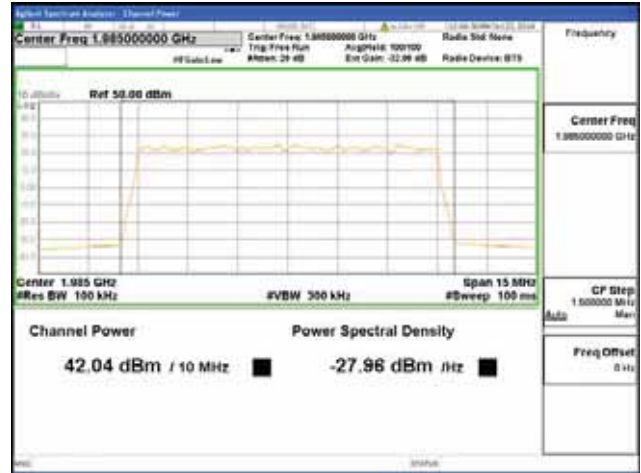
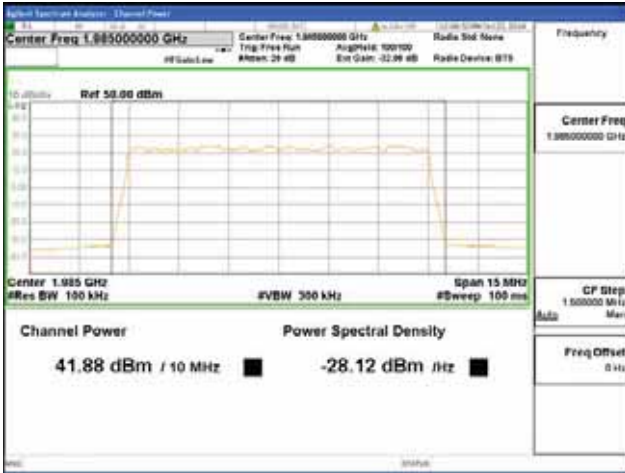




Band 2, BW 10MHz, Single carrier, 4TX, Top

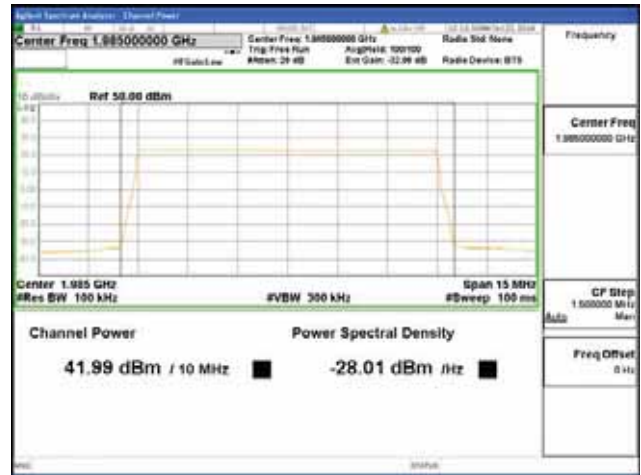
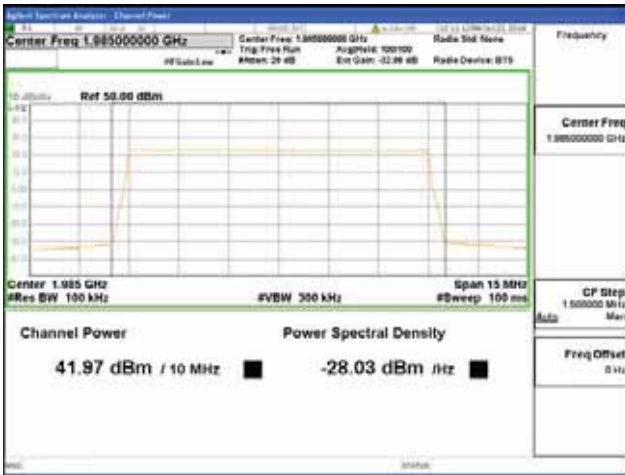
QPSK

16QAM



64QAM

256QAM





ANT 1
Band 2, BW 15MHz, Single carrier, 4TX, Bottom

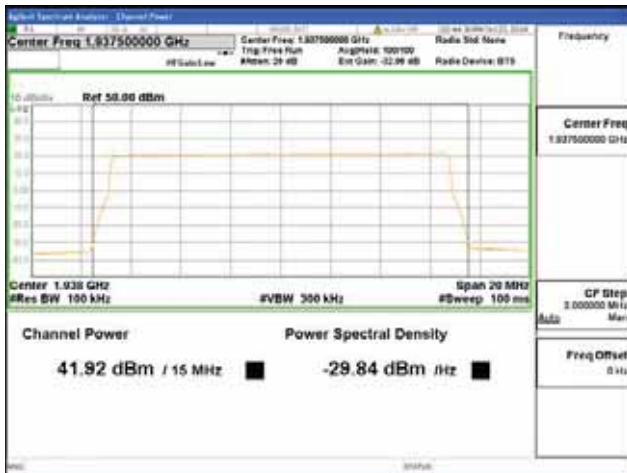
QPSK



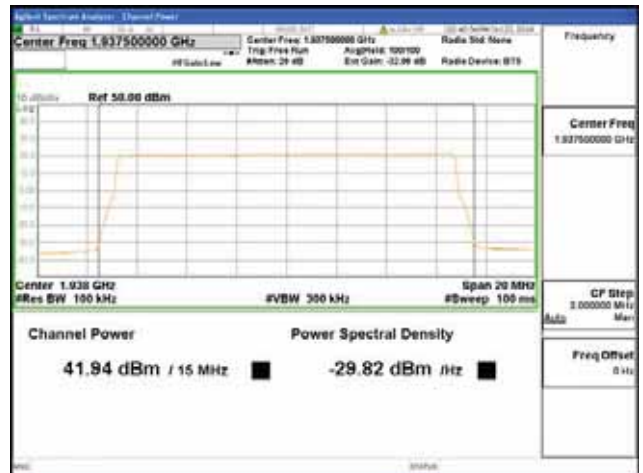
16QAM



64QAM



256QAM



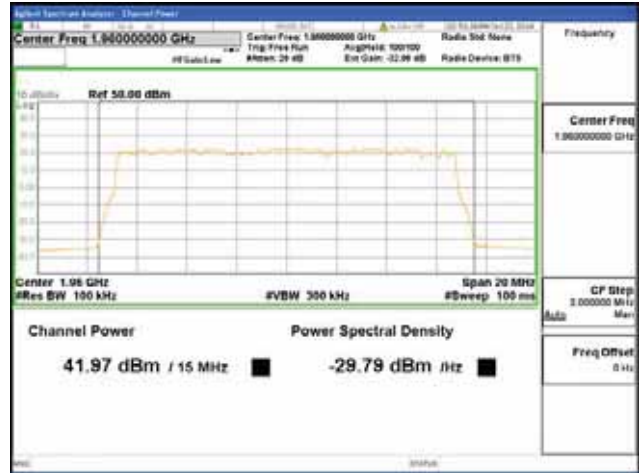


Band 2, BW 15MHz, Single carrier, 4TX, Middle

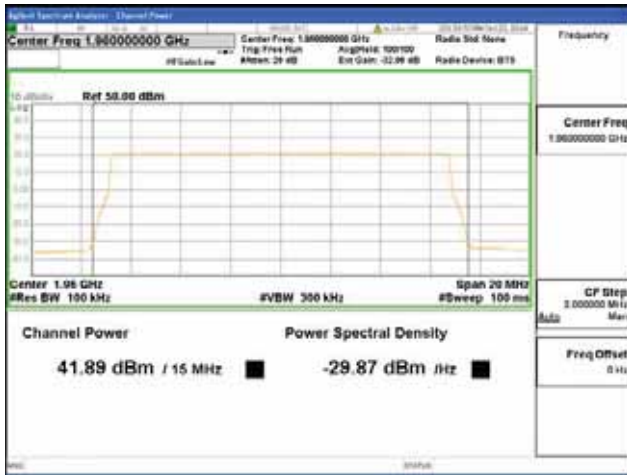
QPSK



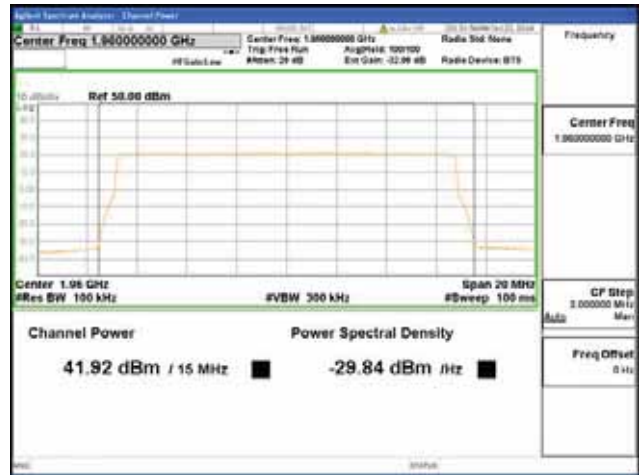
16QAM



64QAM



256QAM





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Report No.:
 CTK-2018-03328
 Page (51) / (1312)
 Pages

Band 2, BW 15MHz, Single carrier, 4TX, Top

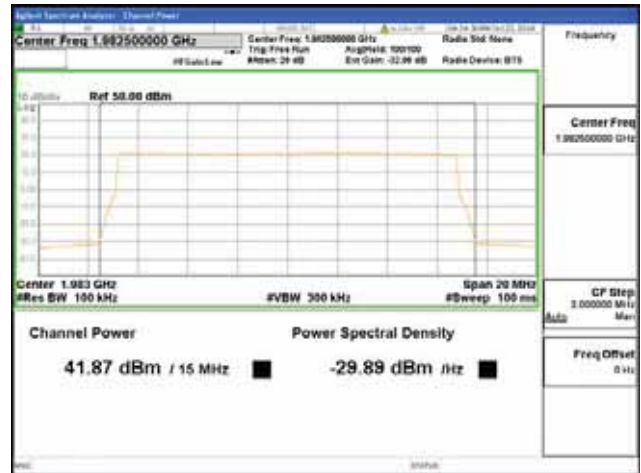
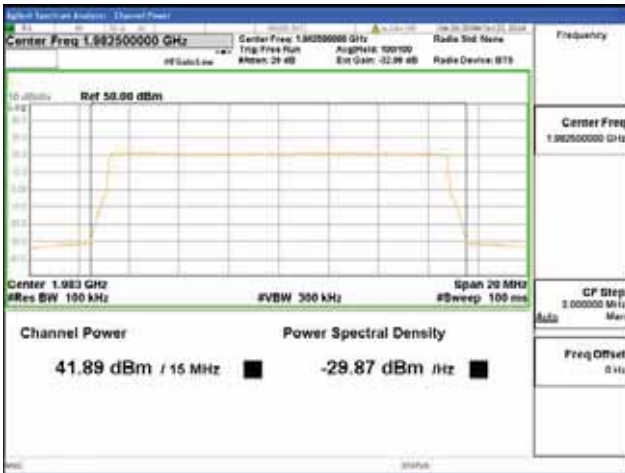
QPSK

16QAM



64QAM

256QAM

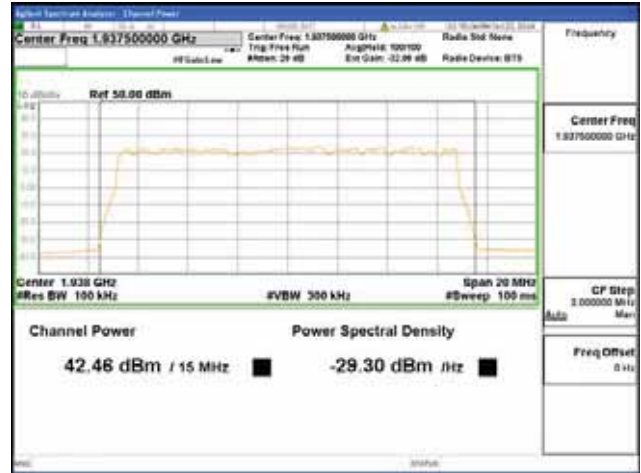
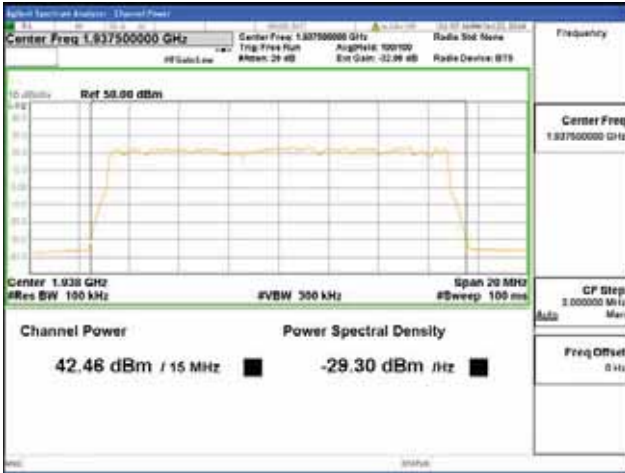




ANT 2
Band 2, BW 15MHz, Single carrier, 4TX, Bottom

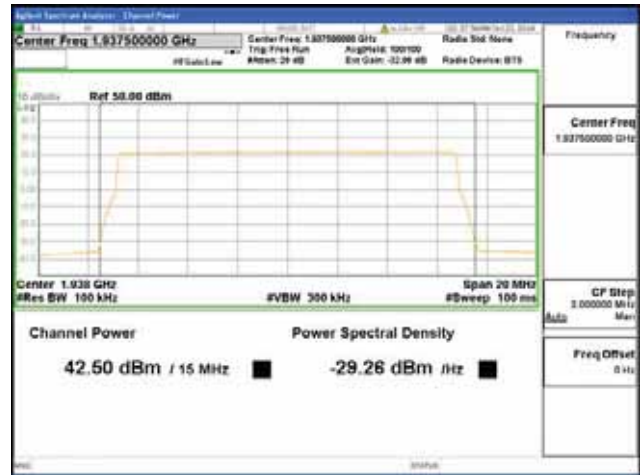
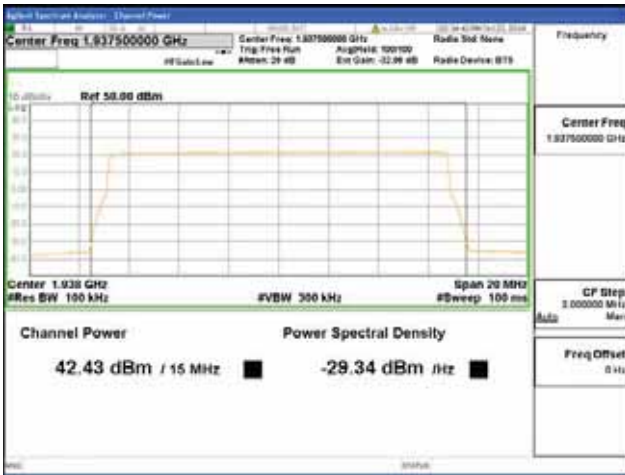
QPSK

16QAM



64QAM

256QAM



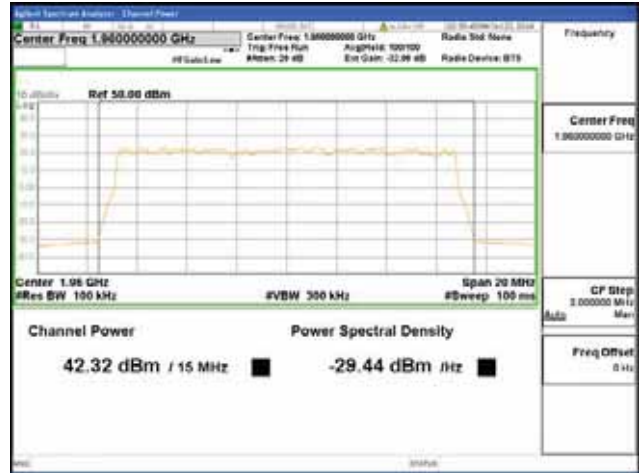


Band 2, BW 15MHz, Single carrier, 4TX, Middle

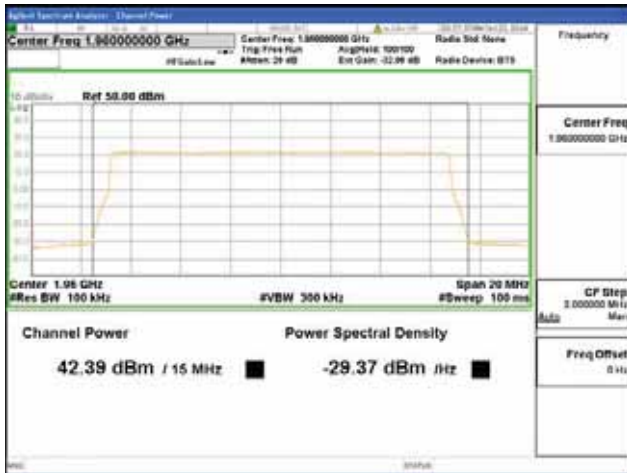
QPSK



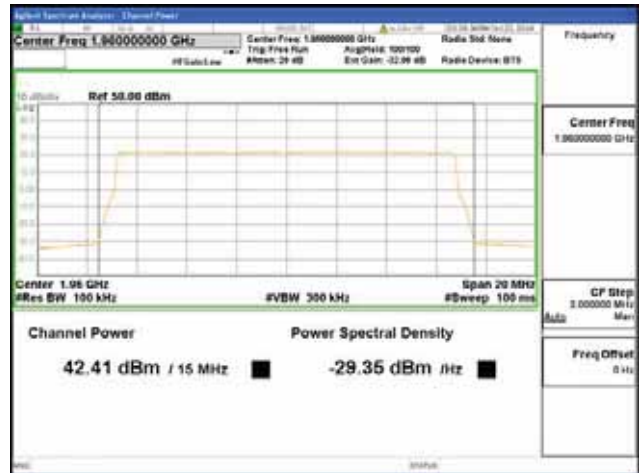
16QAM



64QAM



256QAM





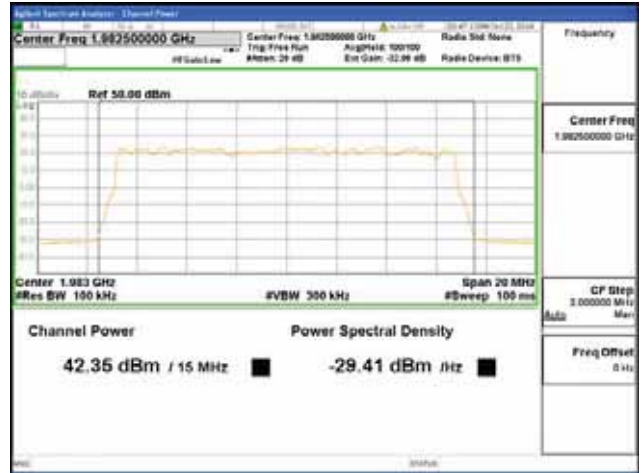
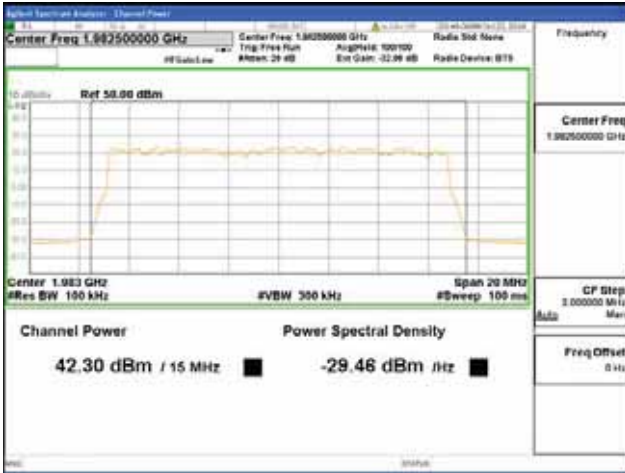
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Report No.:
 CTK-2018-03328
 Page (54) / (1312)
 Pages

Band 2, BW 15MHz, Single carrier, 4TX, Top

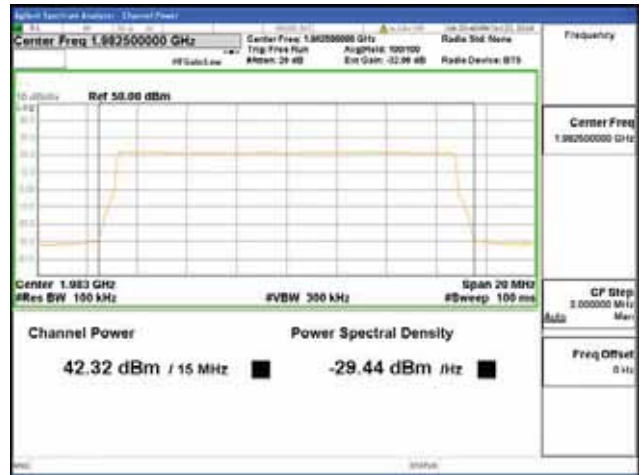
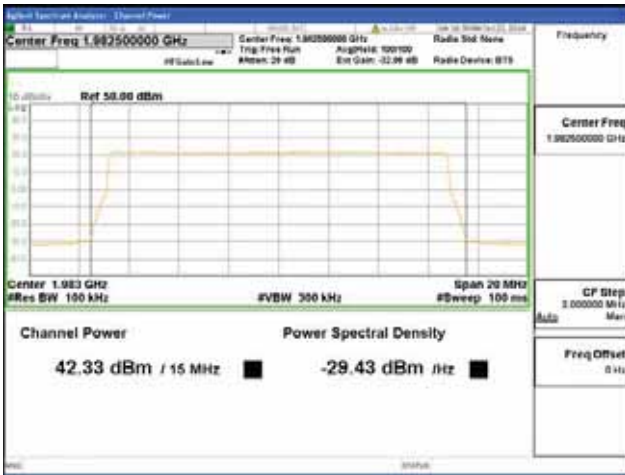
QPSK

16QAM



64QAM

256QAM

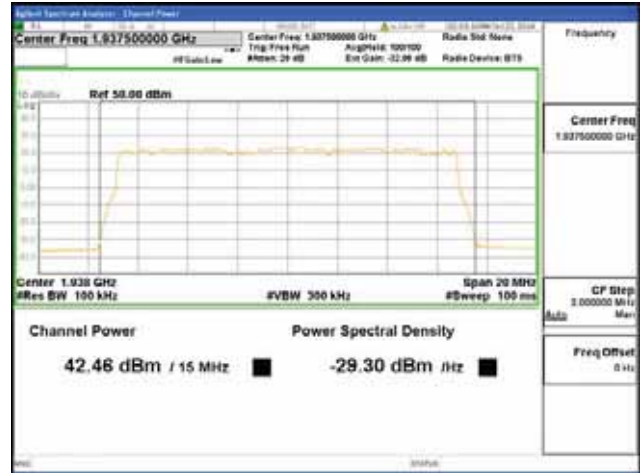
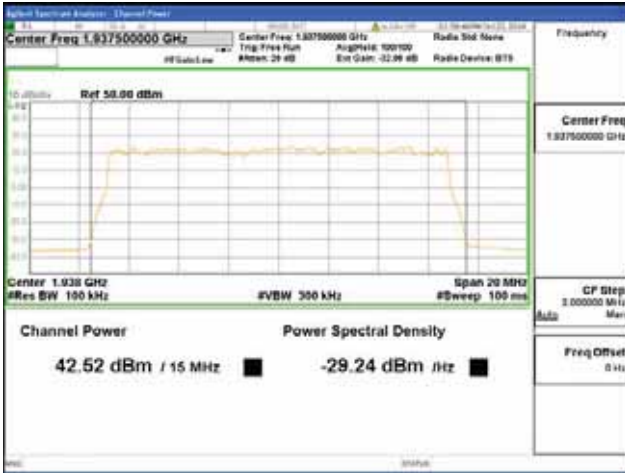




ANT 3
Band 2, BW 15MHz, Single carrier, 4TX, Bottom

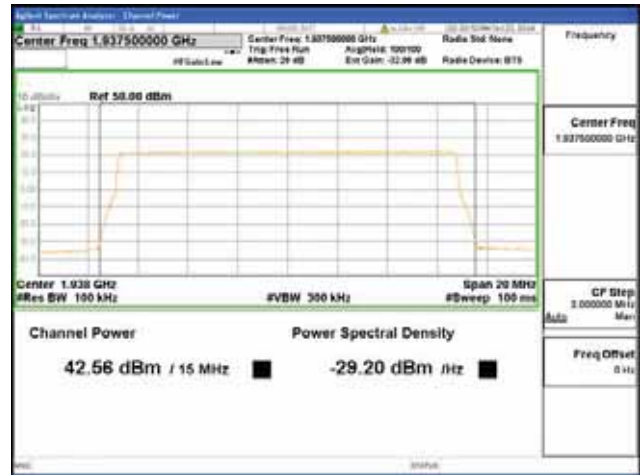
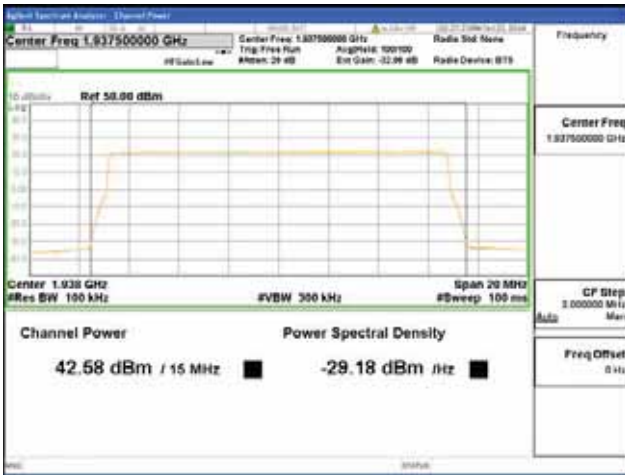
QPSK

16QAM



64QAM

256QAM





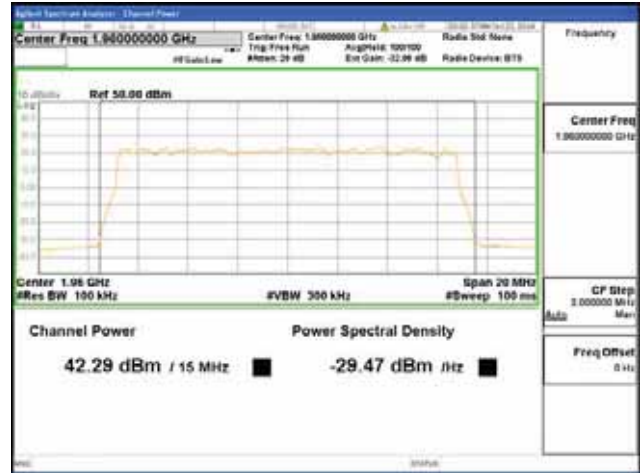
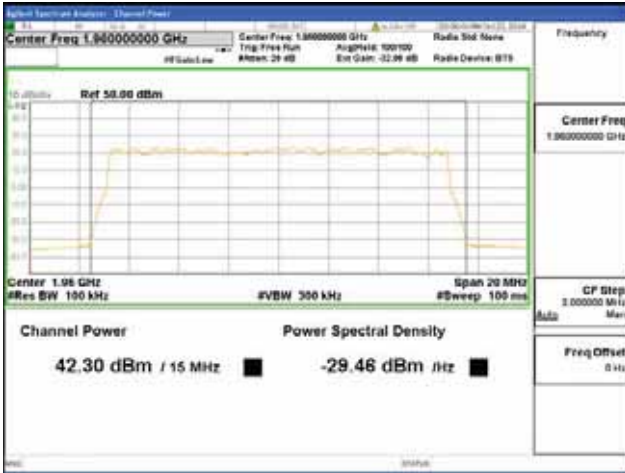
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Report No.:
 CTK-2018-03328
 Page (56) / (1312)
 Pages

Band 2, BW 15MHz, Single carrier, 4TX, Middle

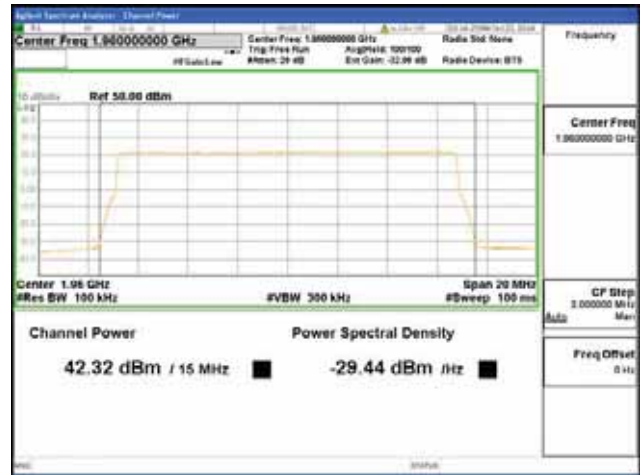
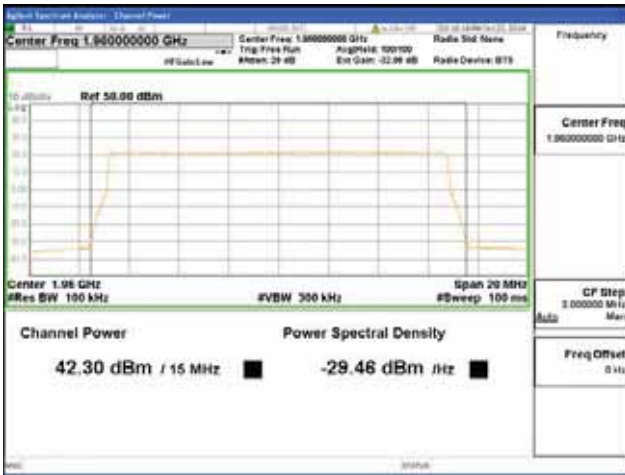
QPSK

16QAM



64QAM

256QAM





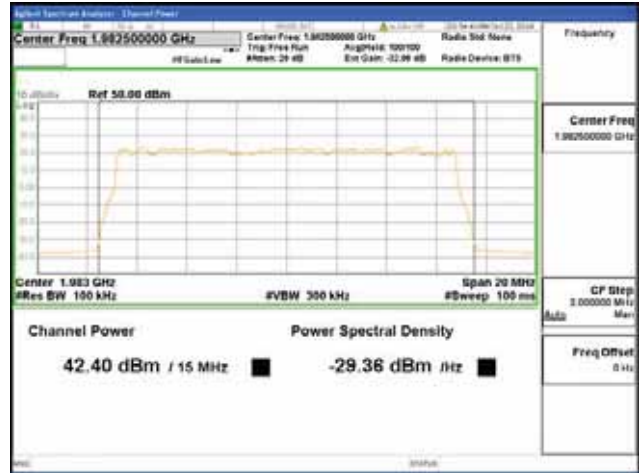
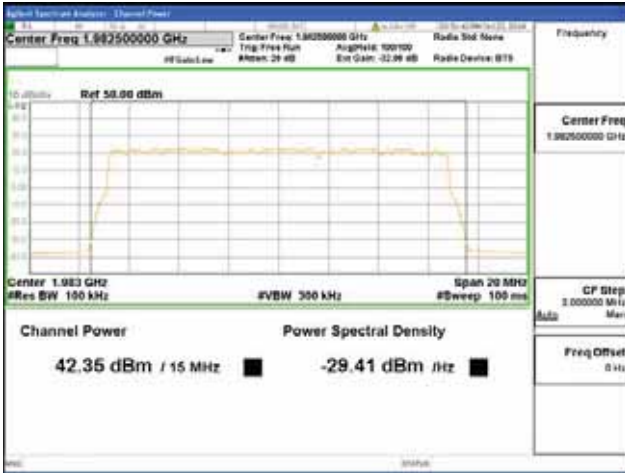
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Report No.:
 CTK-2018-03328
 Page (57) / (1312)
 Pages

Band 2, BW 15MHz, Single carrier, 4TX, Top

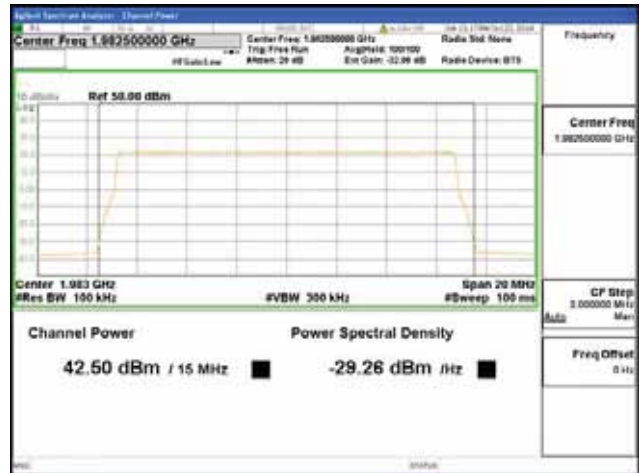
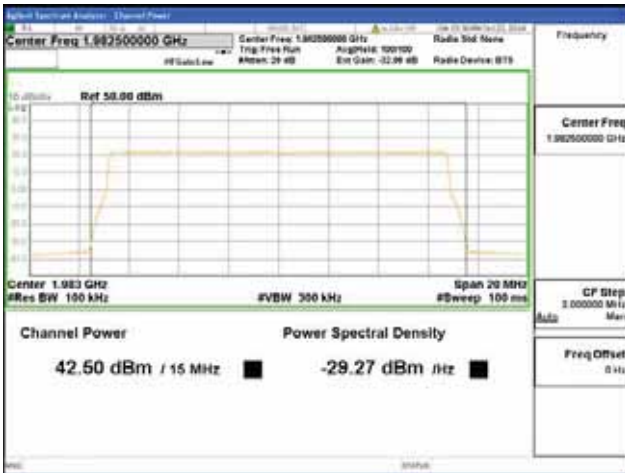
QPSK

16QAM



64QAM

256QAM

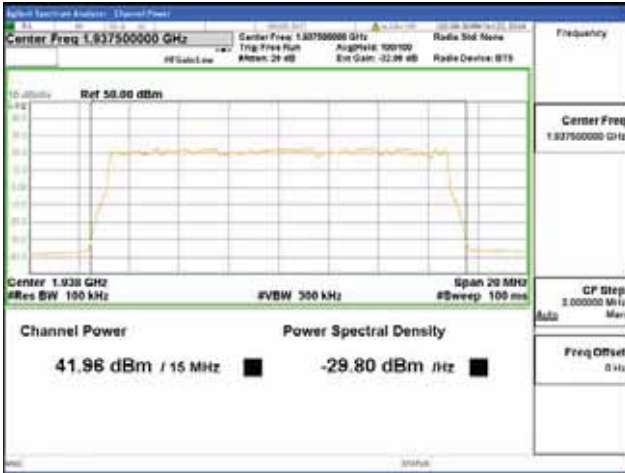




ANT 4
Band 2, BW 15MHz, Single carrier, 4TX, Bottom

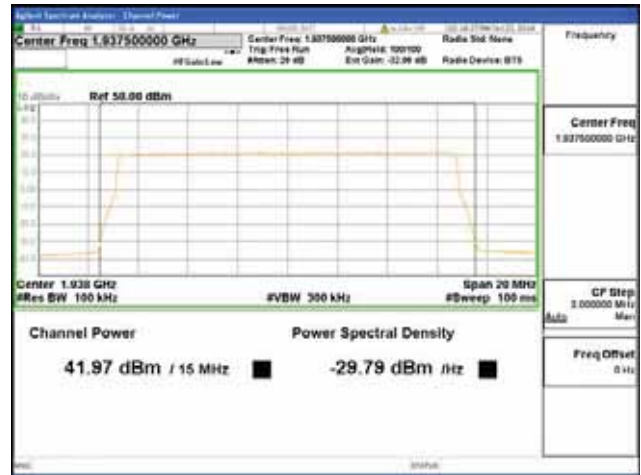
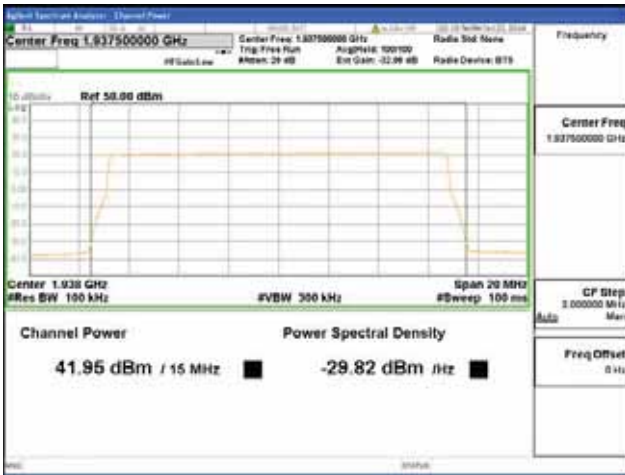
QPSK

16QAM



64QAM

256QAM





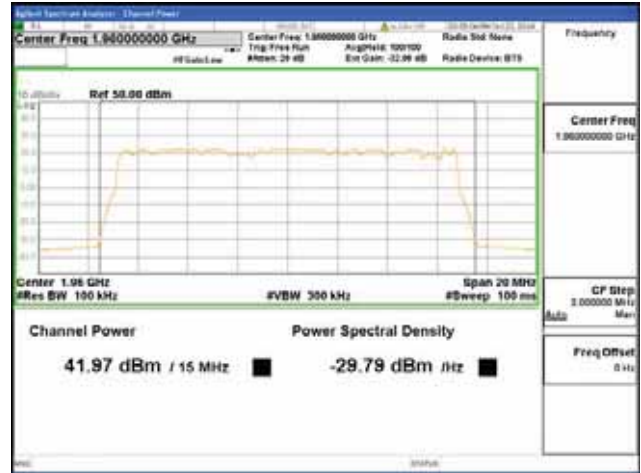
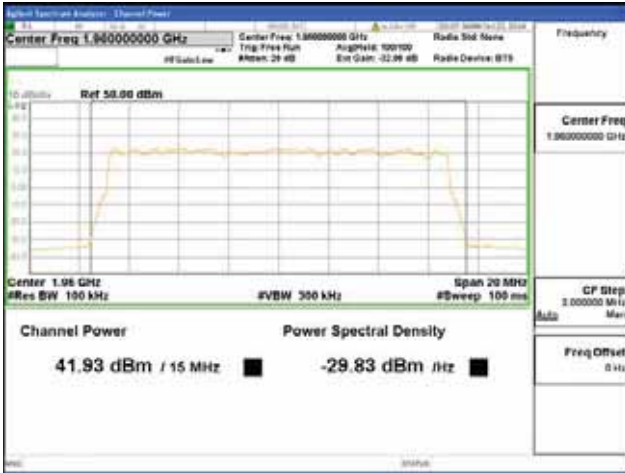
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Report No.:
 CTK-2018-03328
 Page (59) / (1312)
 Pages

Band 2, BW 15MHz, Single carrier, 4TX, Middle

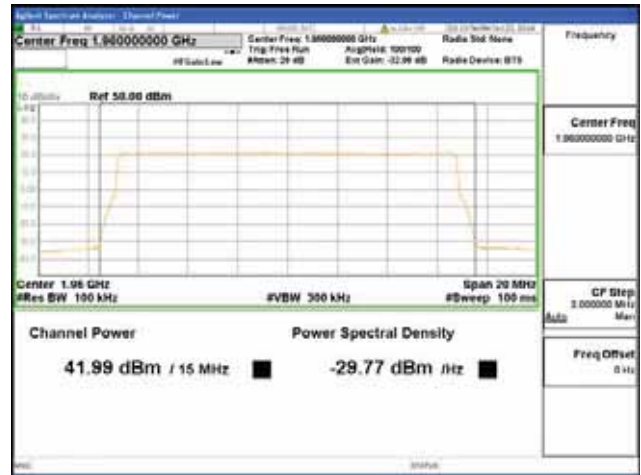
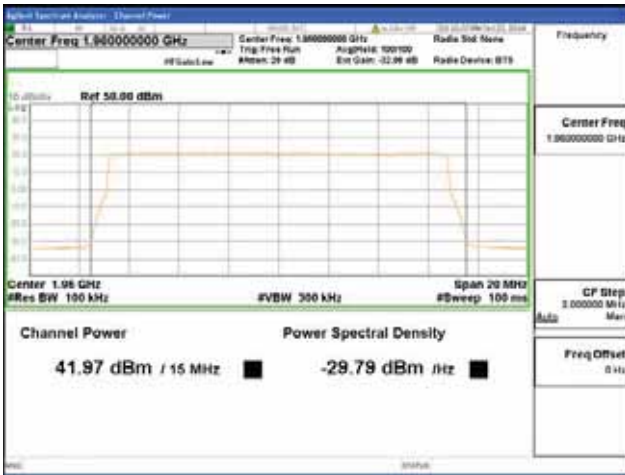
QPSK

16QAM



64QAM

256QAM





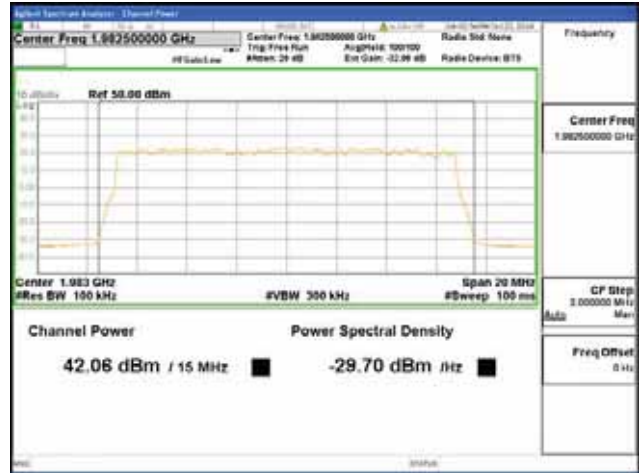
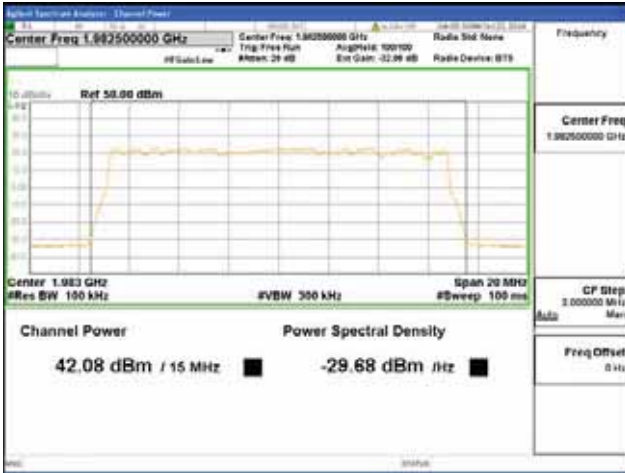
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Report No.:
 CTK-2018-03328
 Page (60) / (1312)
 Pages

Band 2, BW 15MHz, Single carrier, 4TX, Top

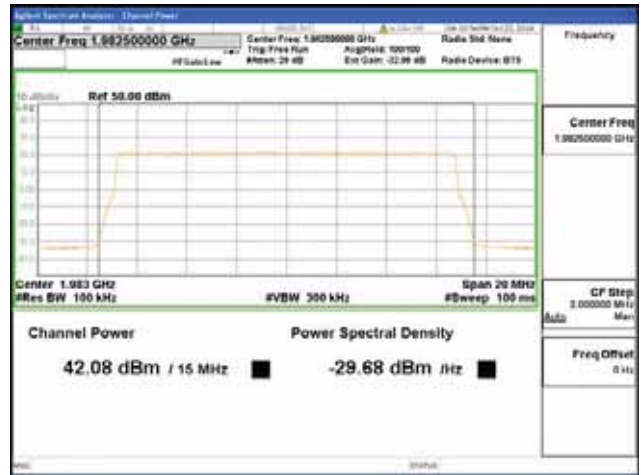
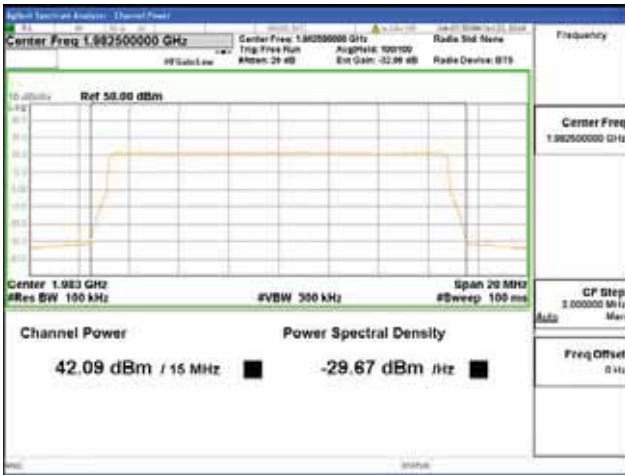
QPSK

16QAM



64QAM

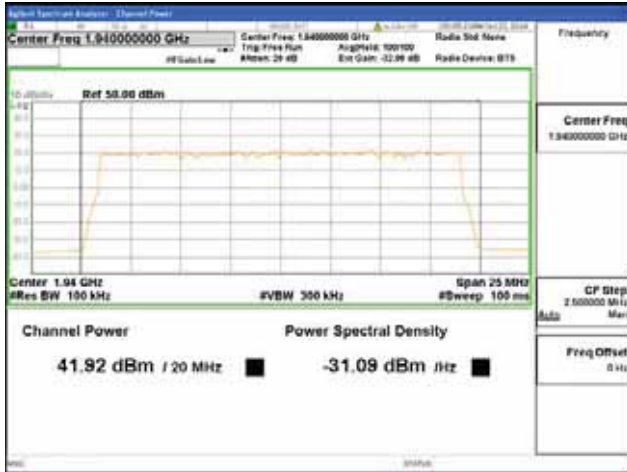
256QAM



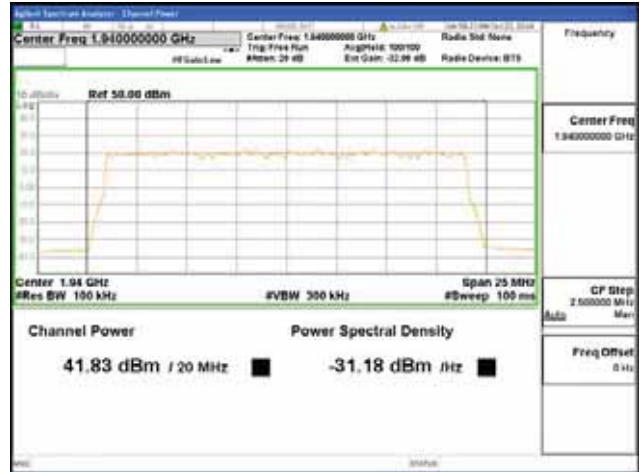


ANT 1
Band 2, BW 20MHz, Single carrier, 4TX, Bottom

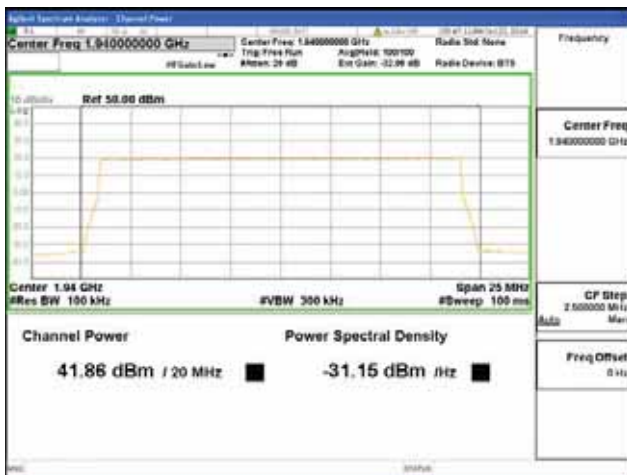
QPSK



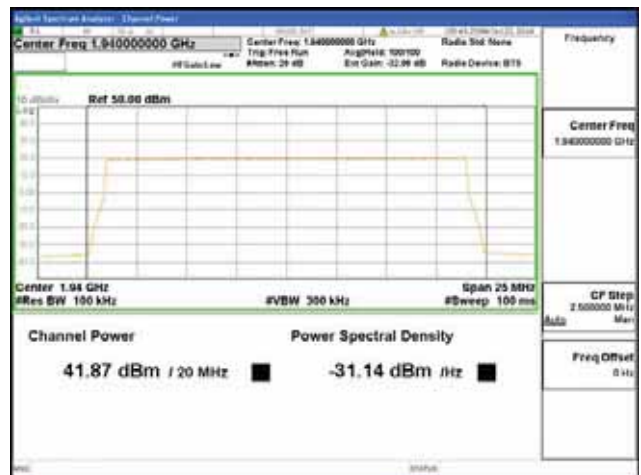
16QAM



64QAM



256QAM





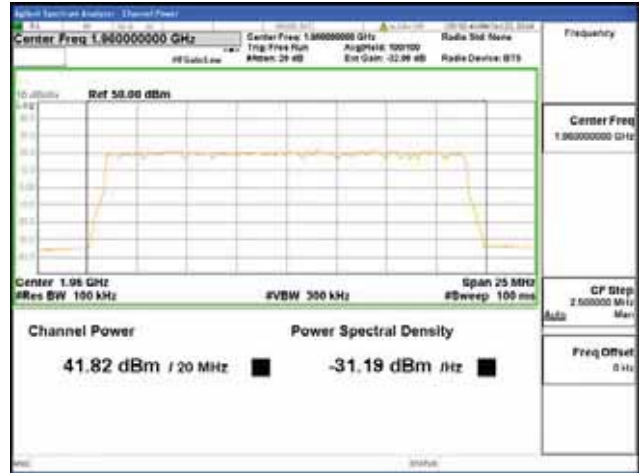
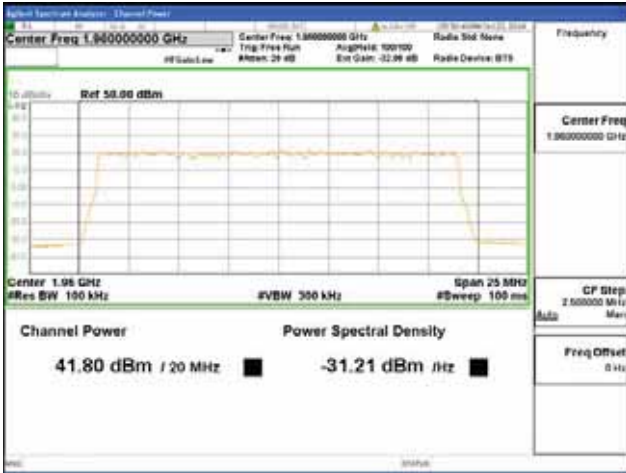
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Report No.:
 CTK-2018-03328
 Page (62) / (1312)
 Pages

Band 2, BW 20MHz, Single carrier, 4TX, Middle

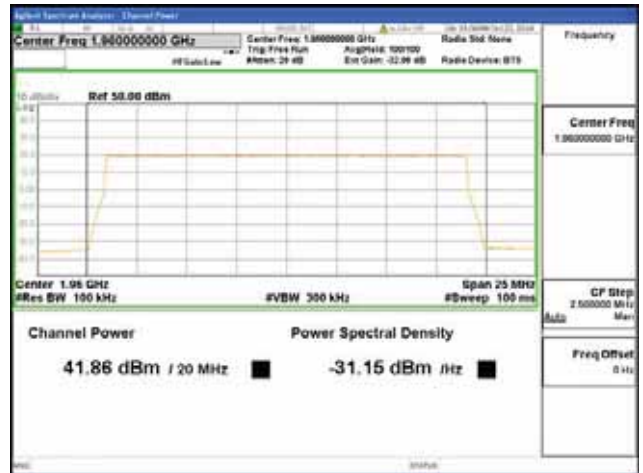
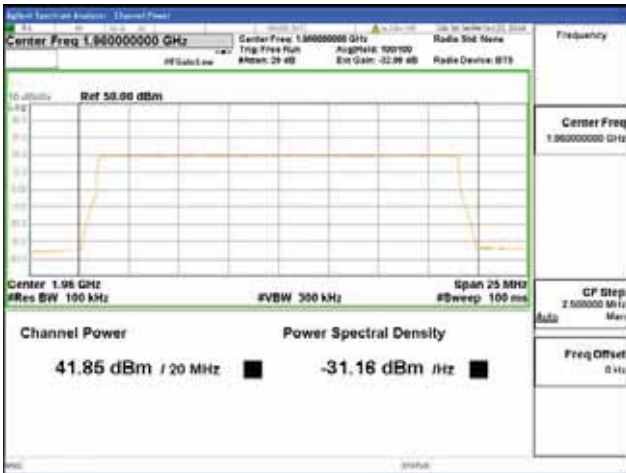
QPSK

16QAM



64QAM

256QAM

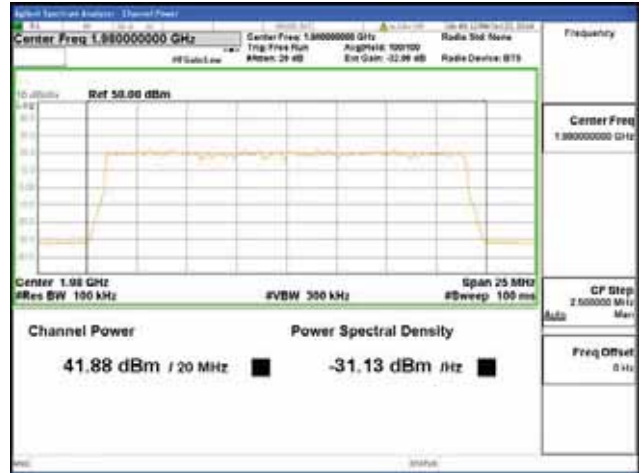
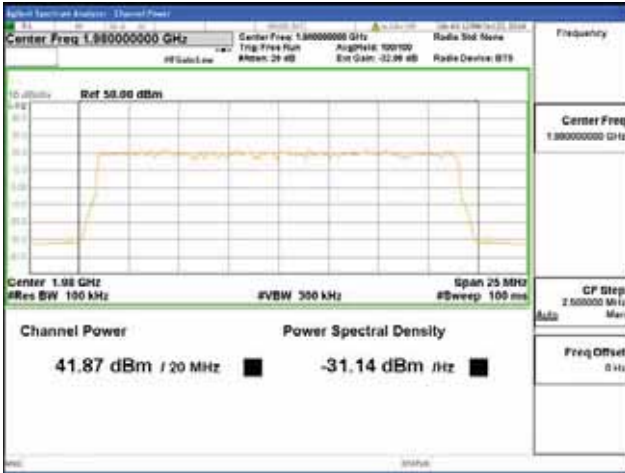




Band 2, BW 20MHz, Single carrier, 4TX, Top

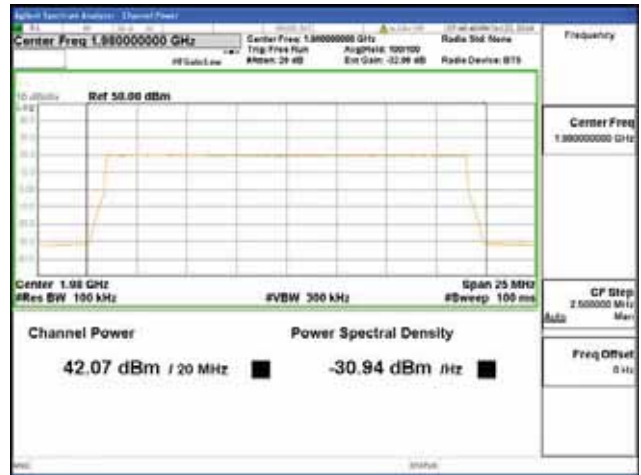
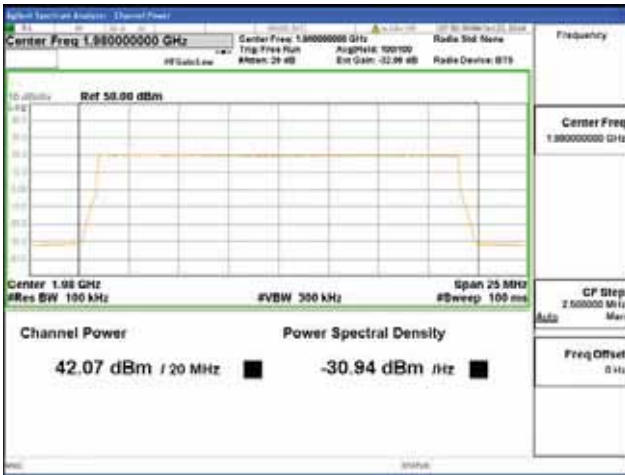
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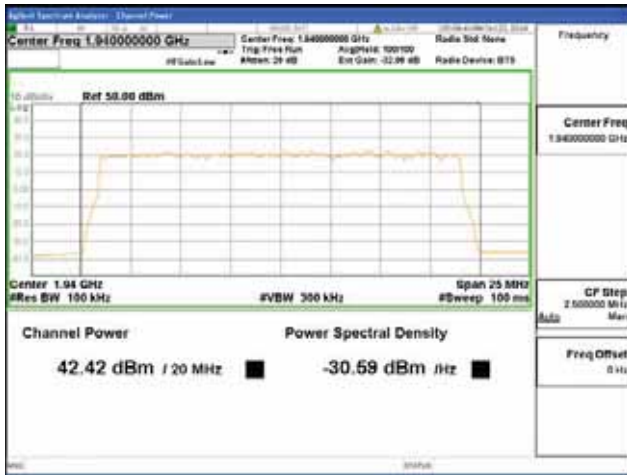
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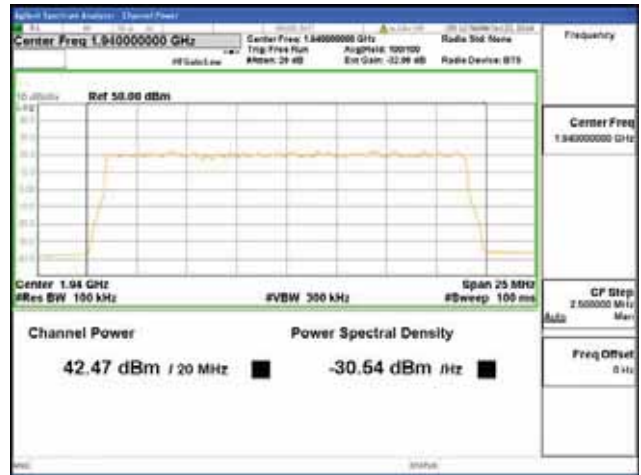


ANT 2
Band 2, BW 20MHz, Single carrier, 4TX, Bottom

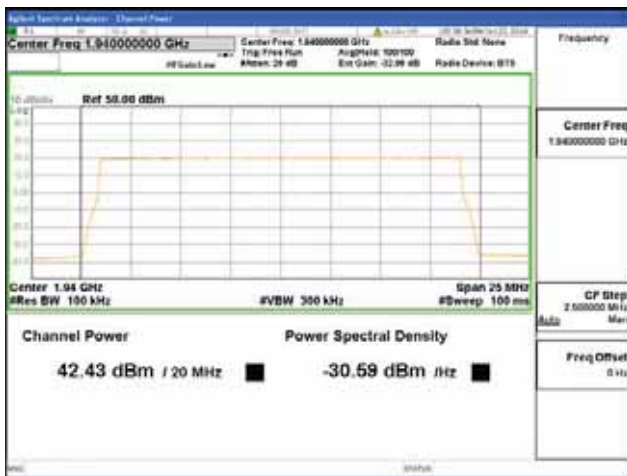
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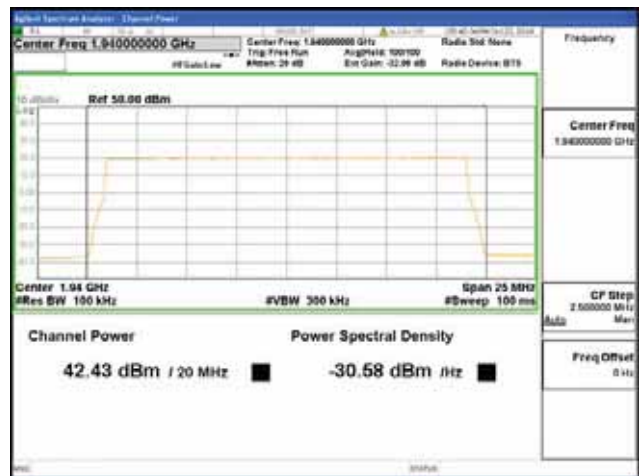
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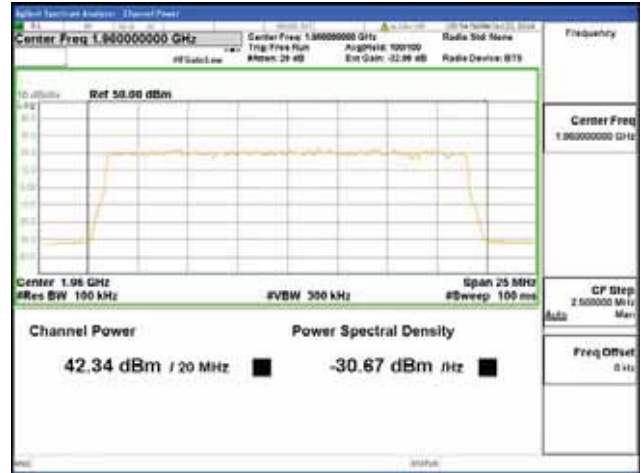
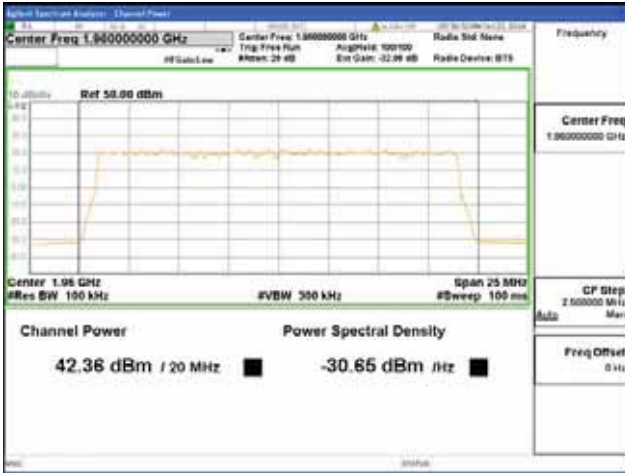




Band 2, BW 20MHz, Single carrier, 4TX, Middle

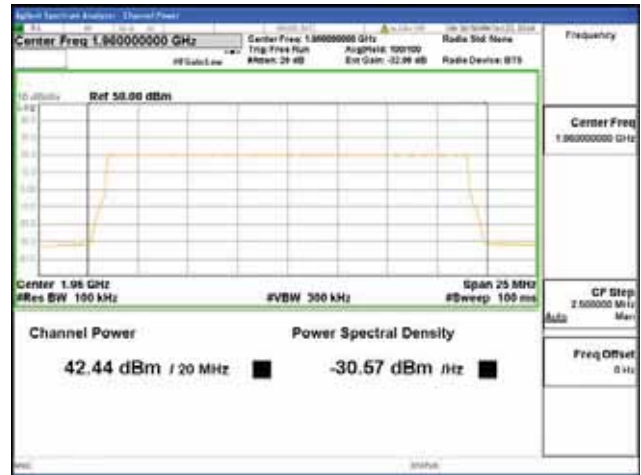
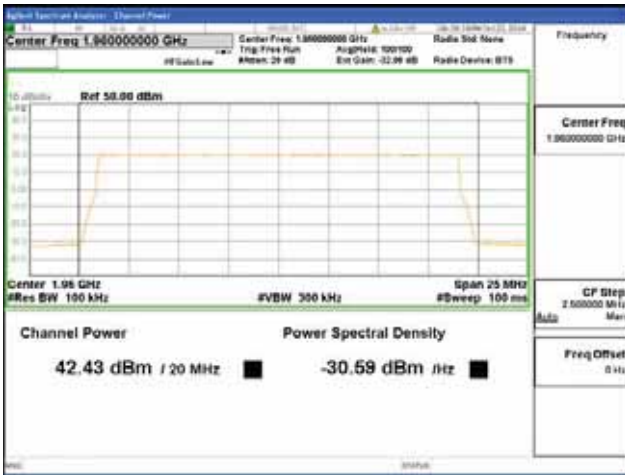
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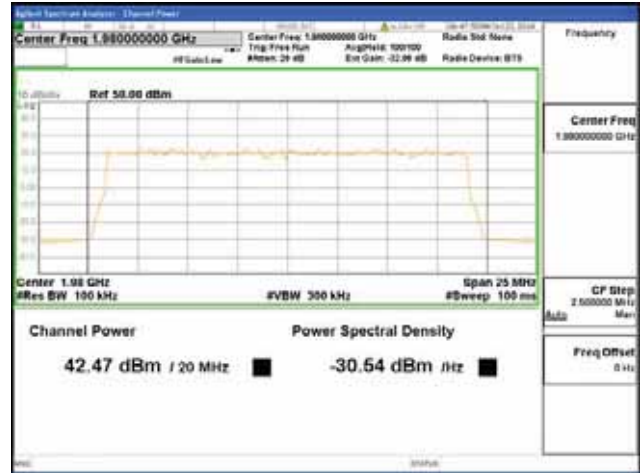
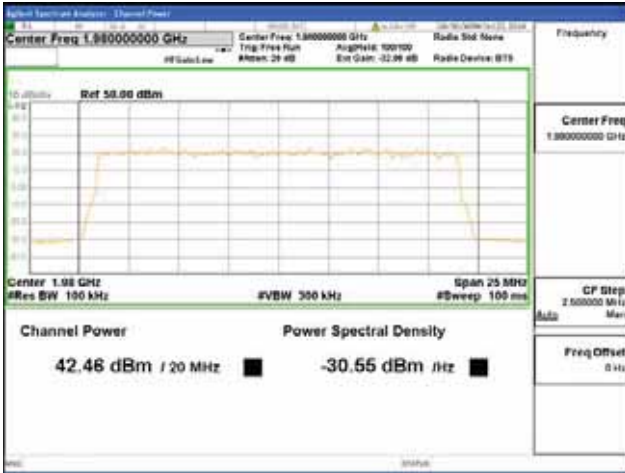




Band 2, BW 20MHz, Single carrier, 4TX, Top

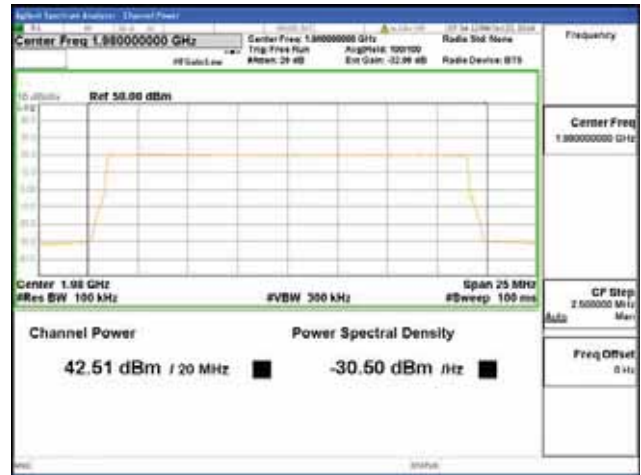
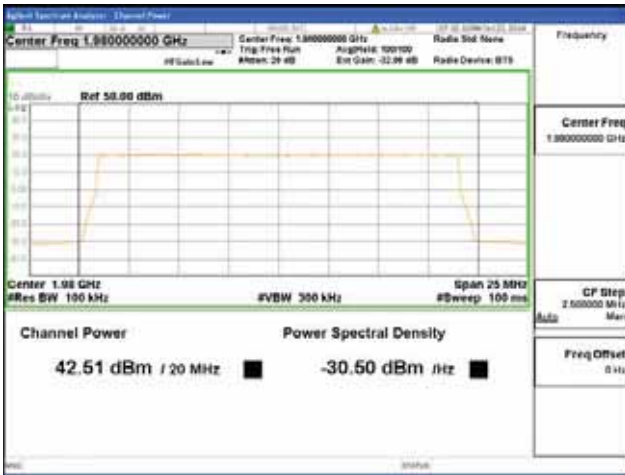
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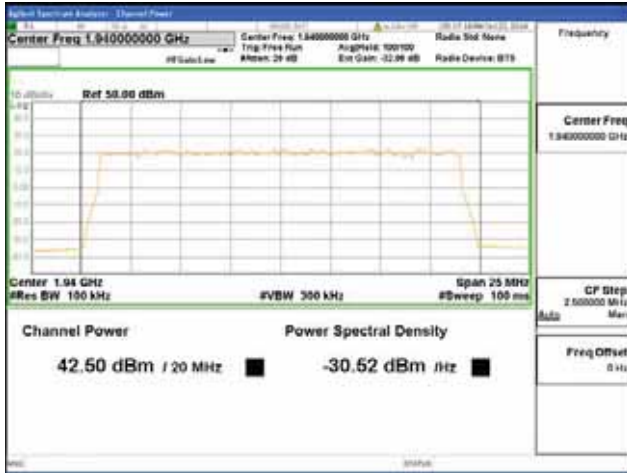


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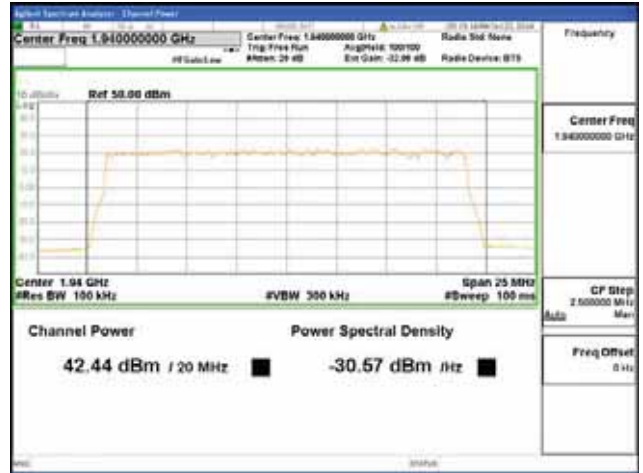
Report No.:
 CTK-2018-03328
 Page (67) / (1312)
 Pages

ANT 3
Band 2, BW 20MHz, Single carrier, 4TX, Bottom

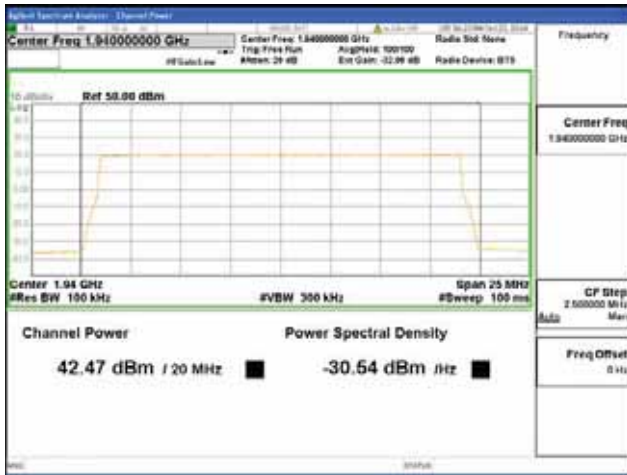
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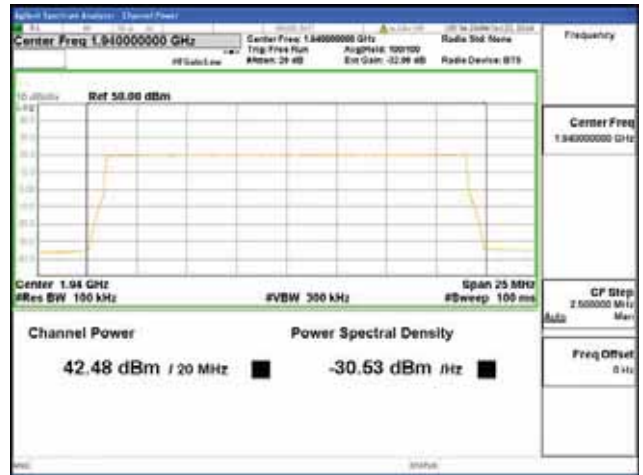
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64QAM



256QAM



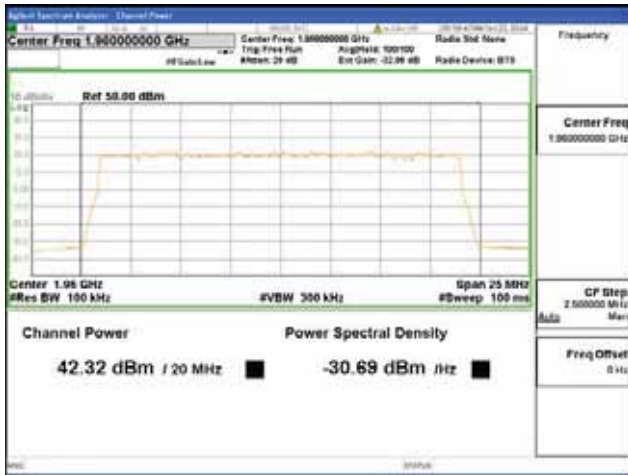


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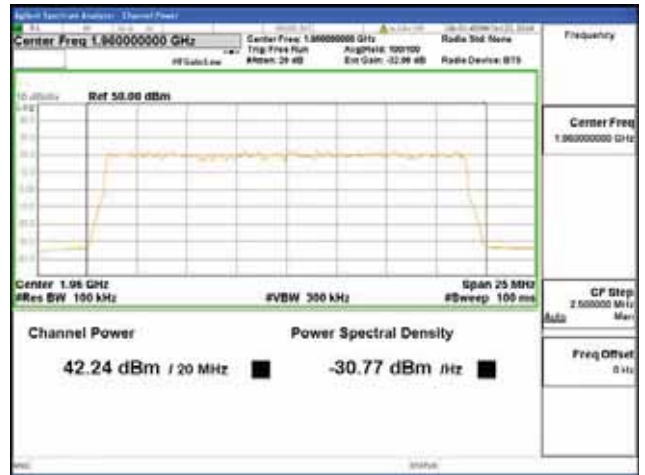
Report No.:
 CTK-2018-03328
 Page (68) / (1312)
 Pages

Band 2, BW 20MHz, Single carrier, 4TX, Middle

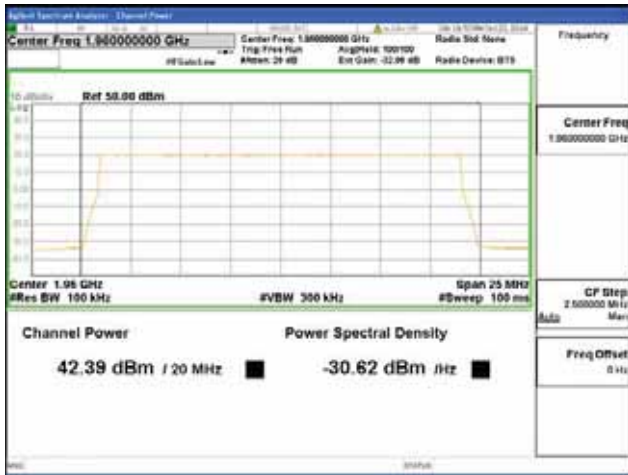
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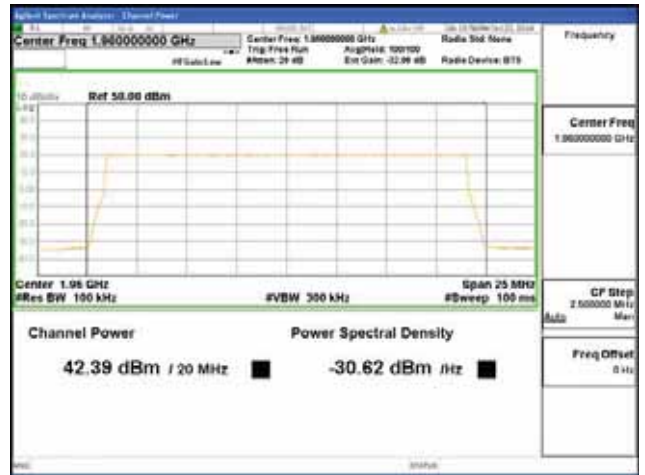
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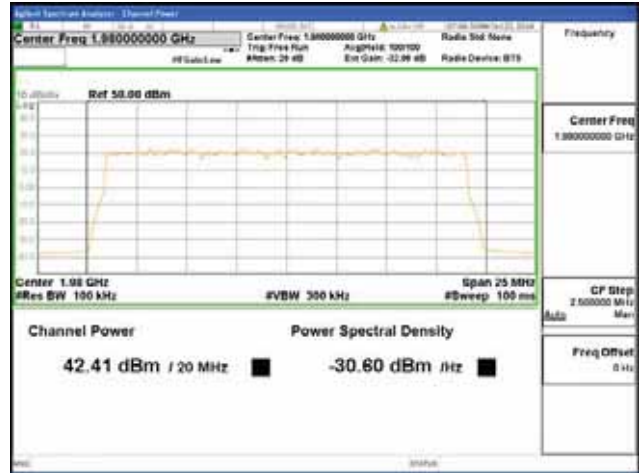
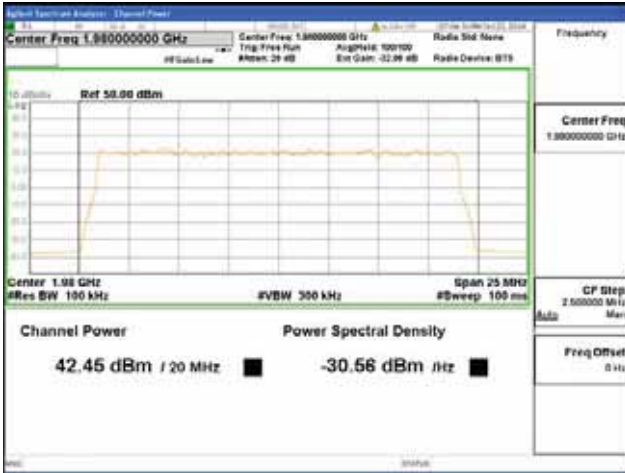




Band 2, BW 20MHz, Single carrier, 4TX, Top

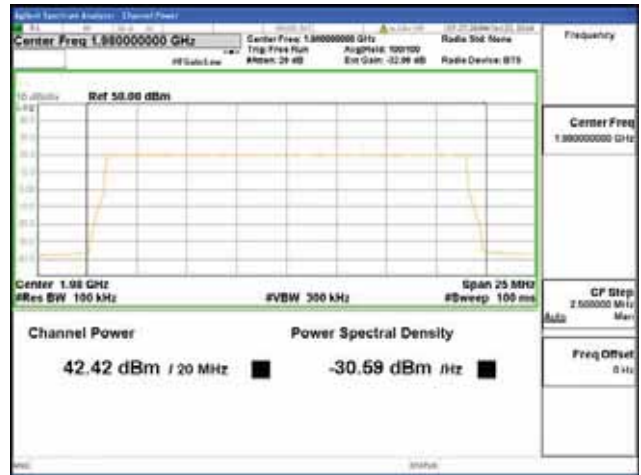
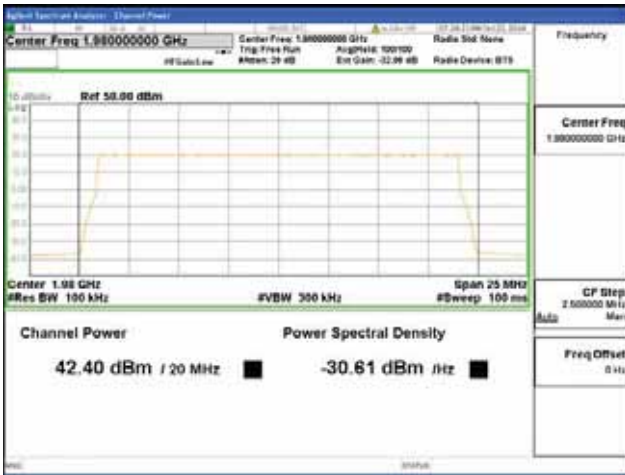
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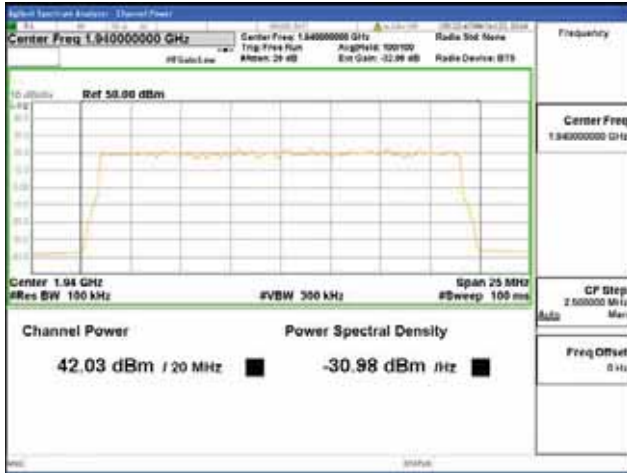
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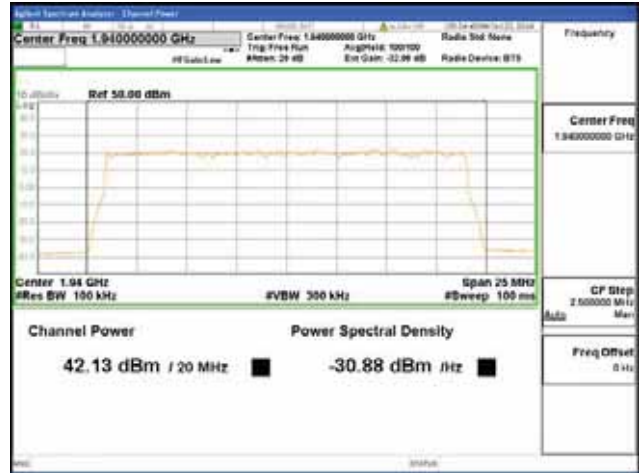


ANT 4
Band 2, BW 20MHz, Single carrier, 4TX, Bottom

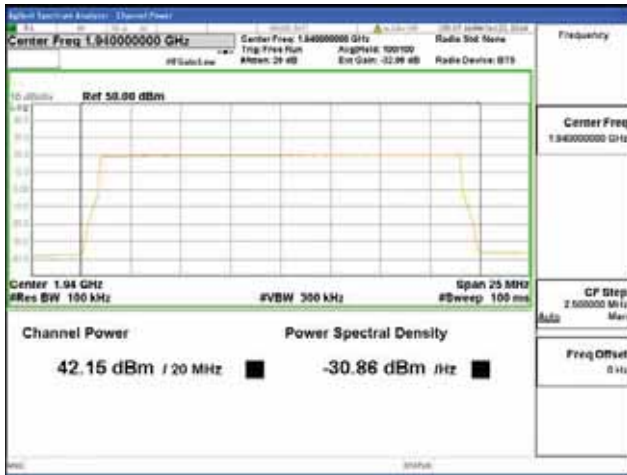
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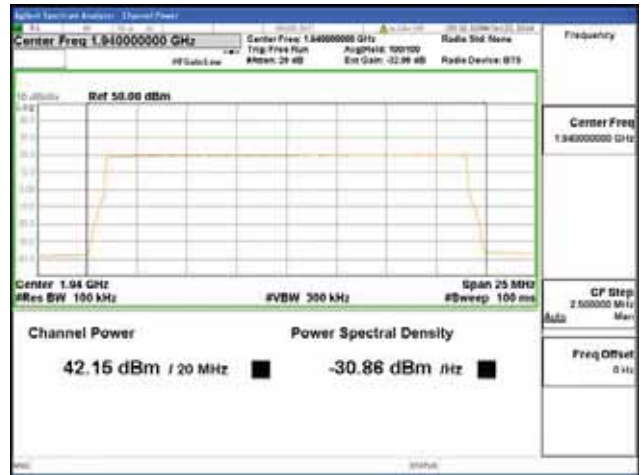
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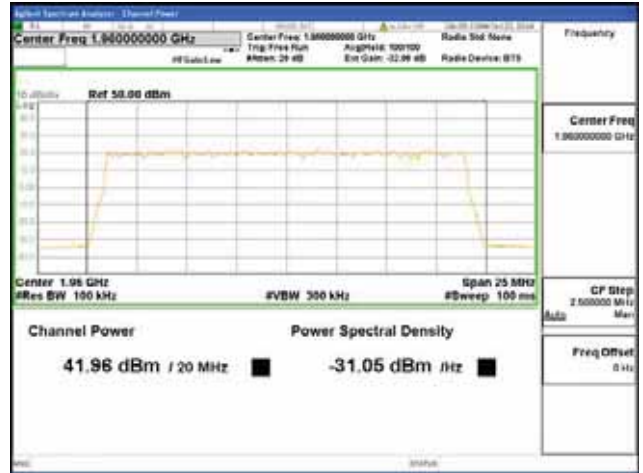
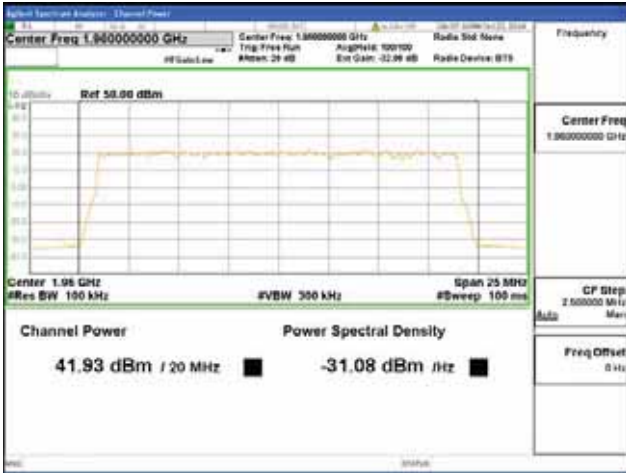
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Report No.:
 CTK-2018-03328
 Page (71) / (1312)
 Pages

Band 2, BW 20MHz, Single carrier, 4TX, Middle

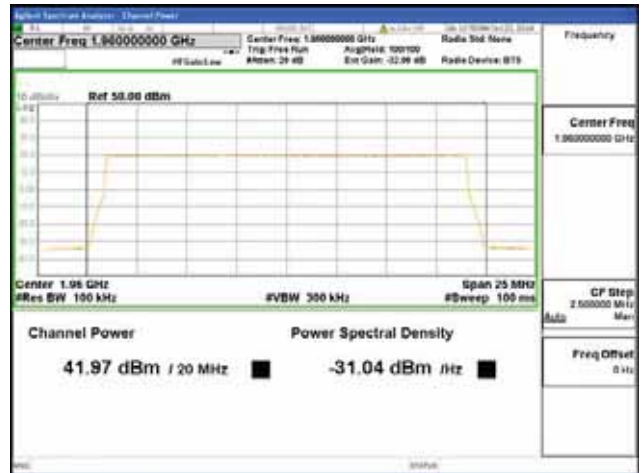
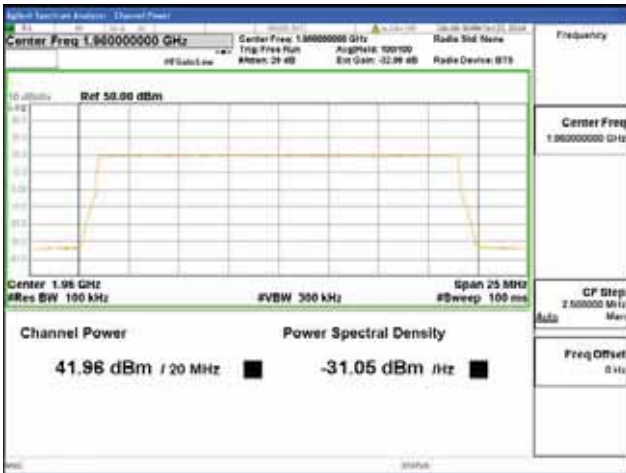
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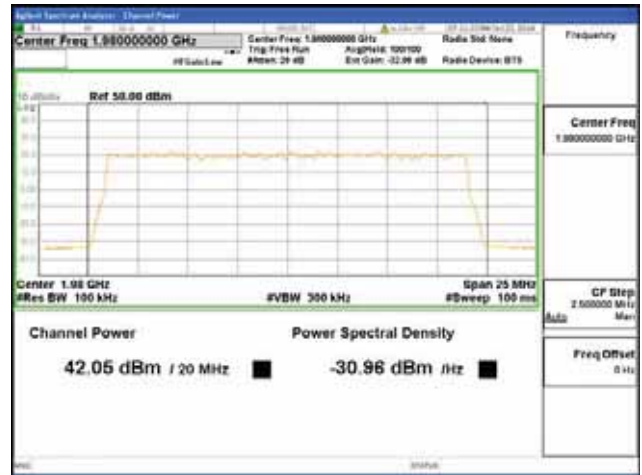
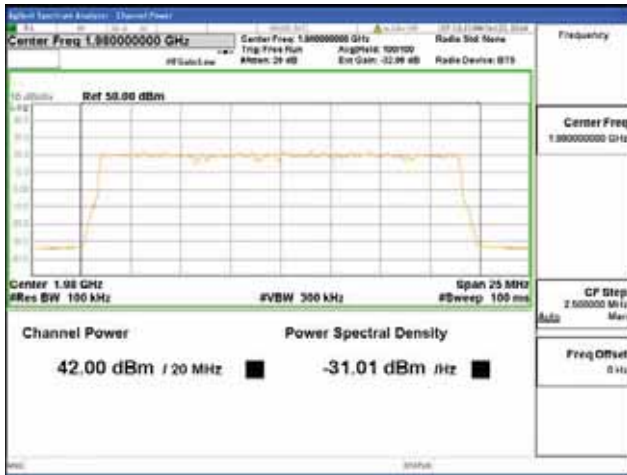
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Report No.:
 CTK-2018-03328
 Page (72) / (1312)
 Pages

Band 2, BW 20MHz, Single carrier, 4TX, Top

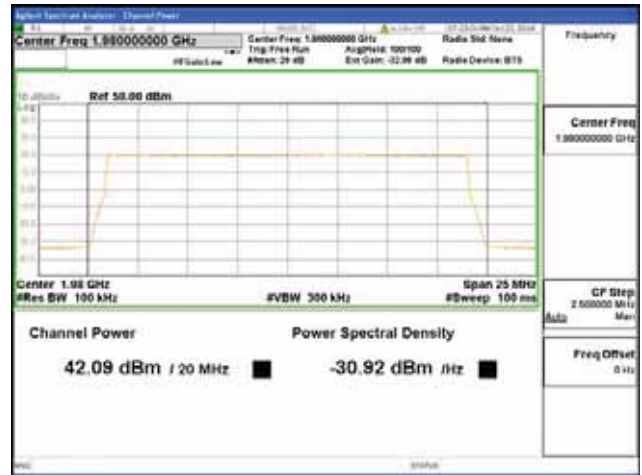
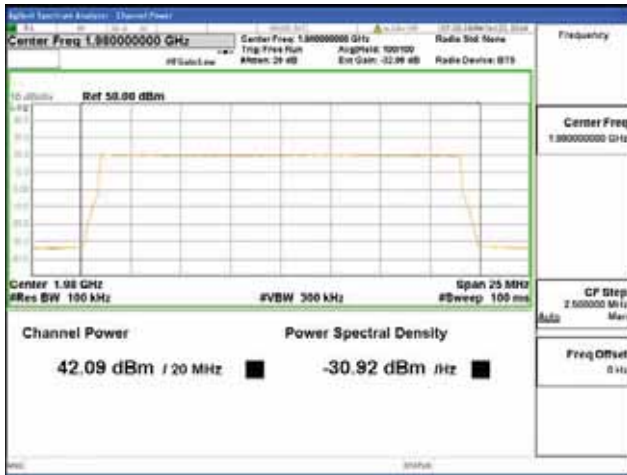
QPSK

16QAM



64QAM

256QAM





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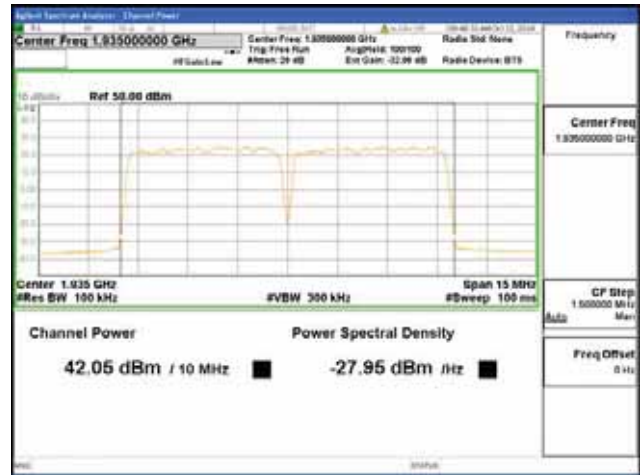
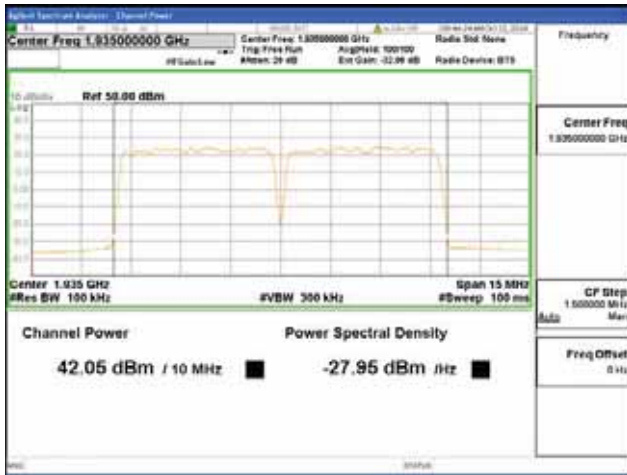
Report No.:
 CTK-2018-03328
 Page (73) / (1312)
 Pages

ANT 1

Band 2, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 4TX, Bottom

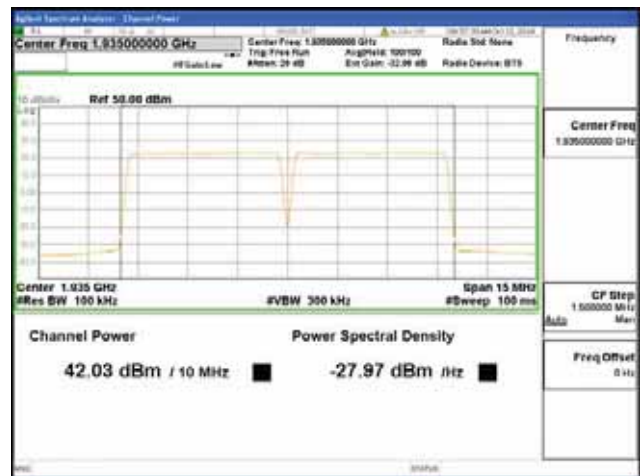
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16QAM



64QAM

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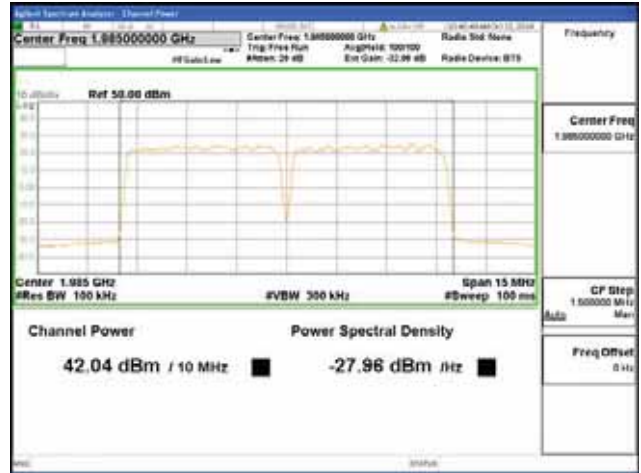
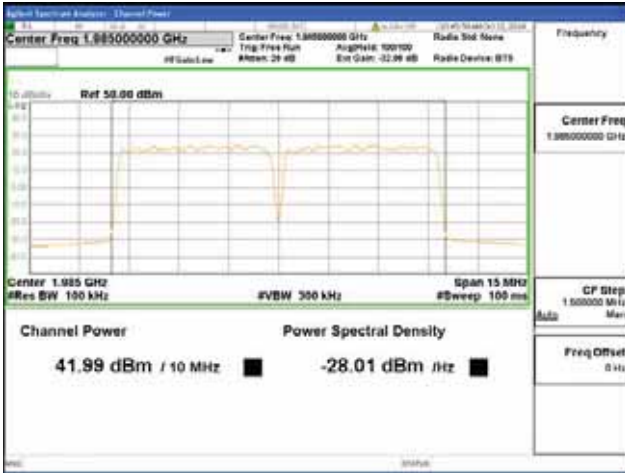




Band 2, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 4TX, Top

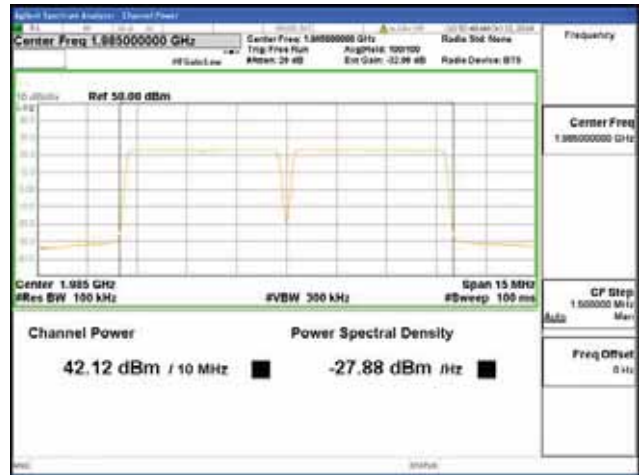
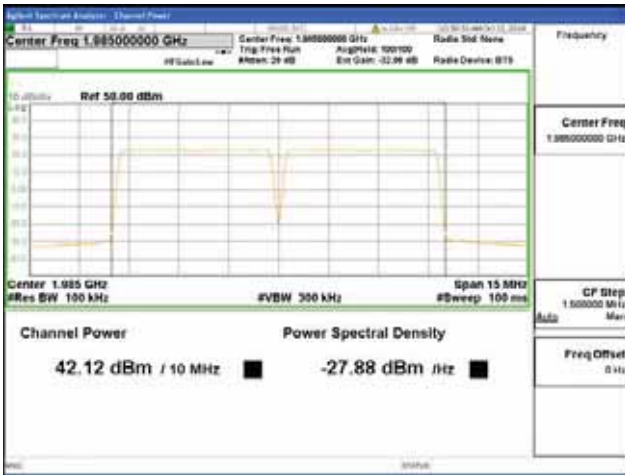
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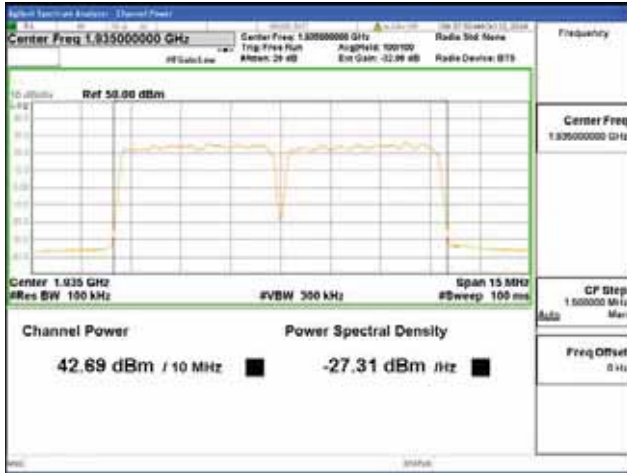
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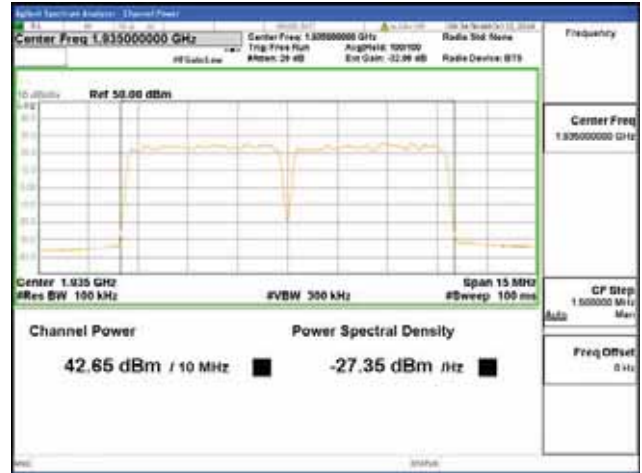


ANT 2
Band 2, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 4TX, Bottom

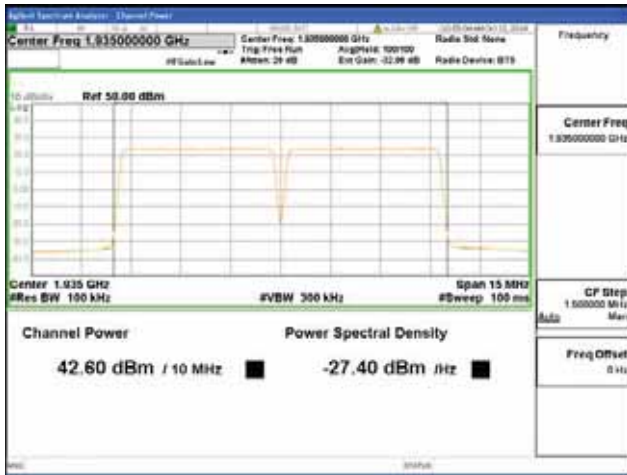
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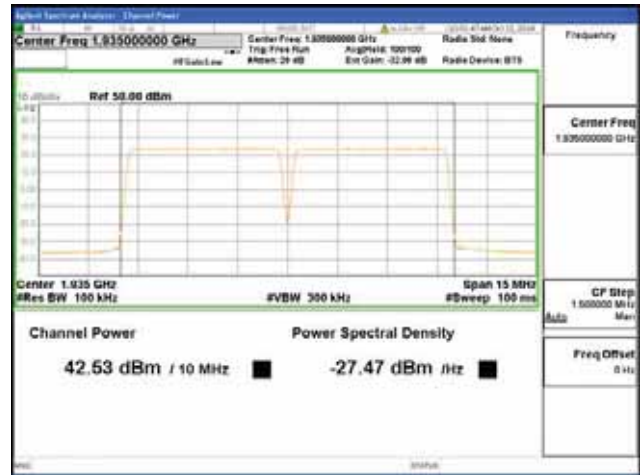
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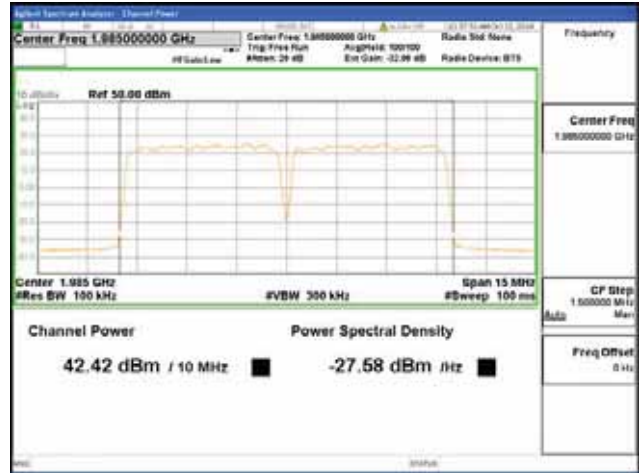
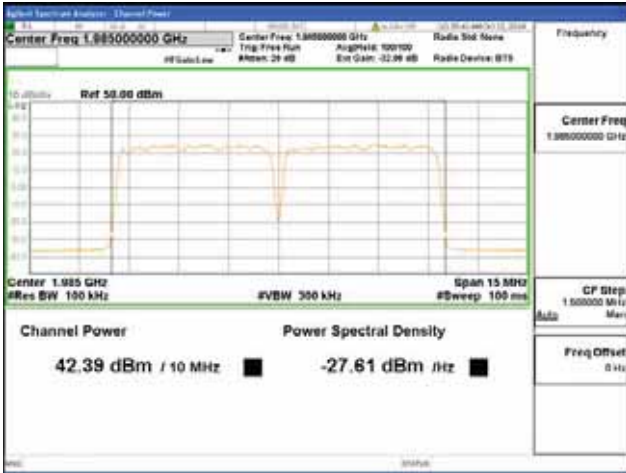




Band 2, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 4TX, Top

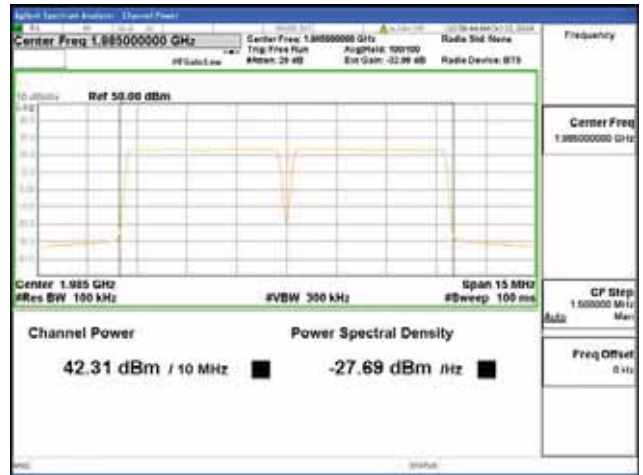
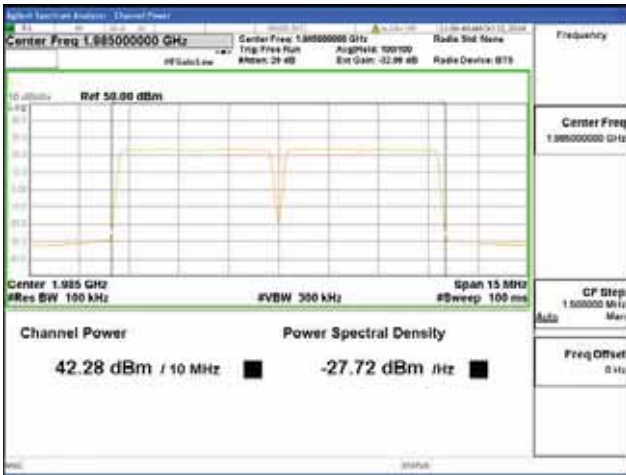
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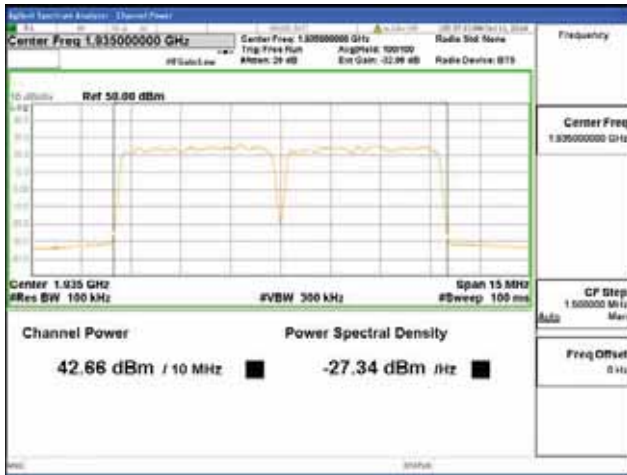
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Report No.:
CTK-2018-03328
Page (77) / (1312)
Pages

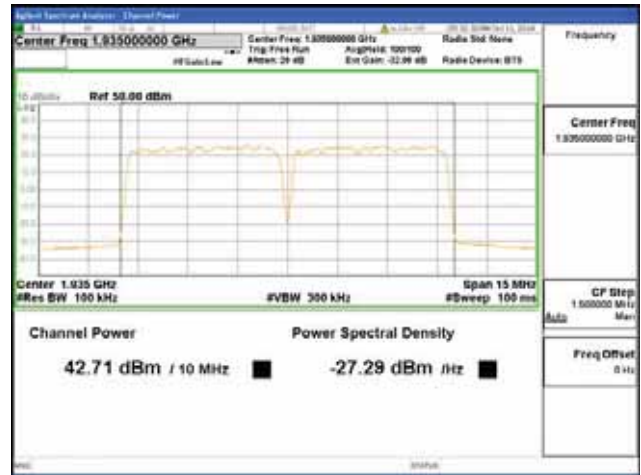
ANT 3

Band 2, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 4TX, Bottom

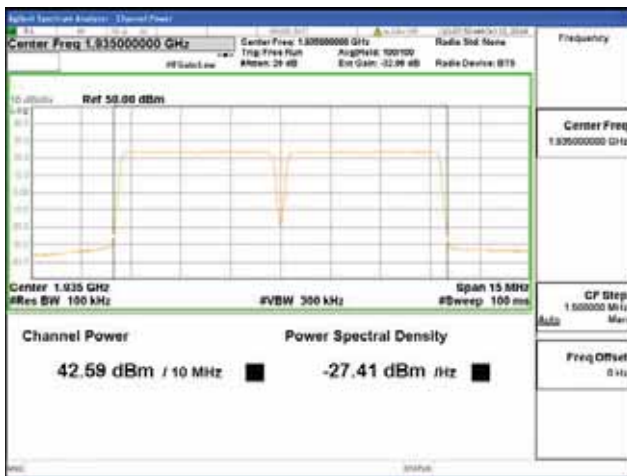
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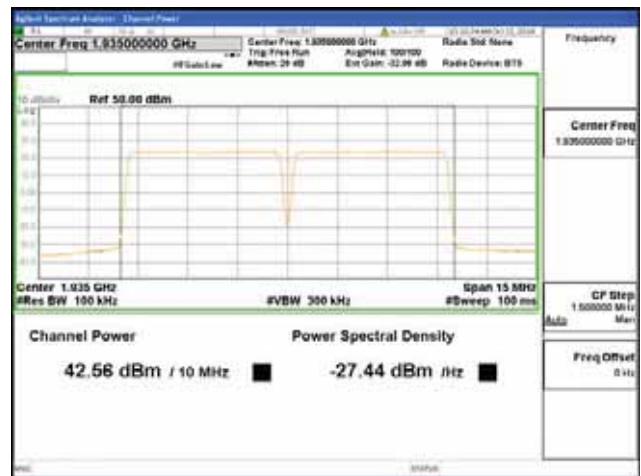
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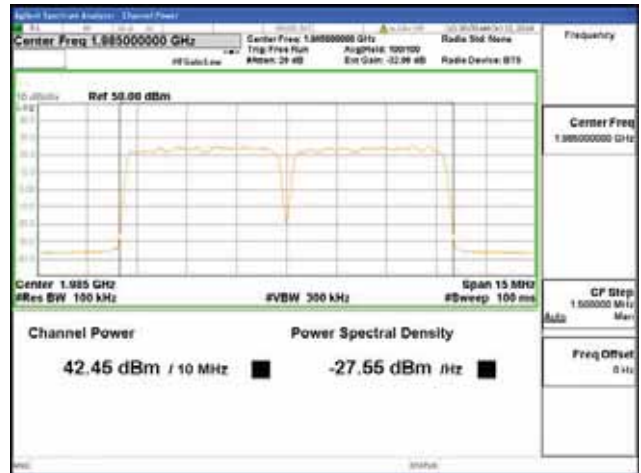
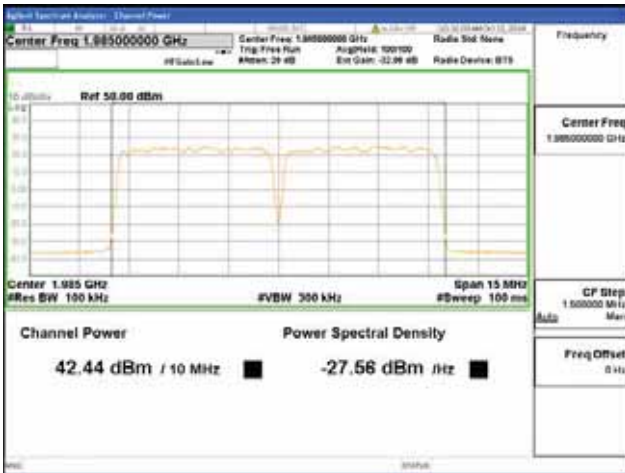




Band 2, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 4TX, Top

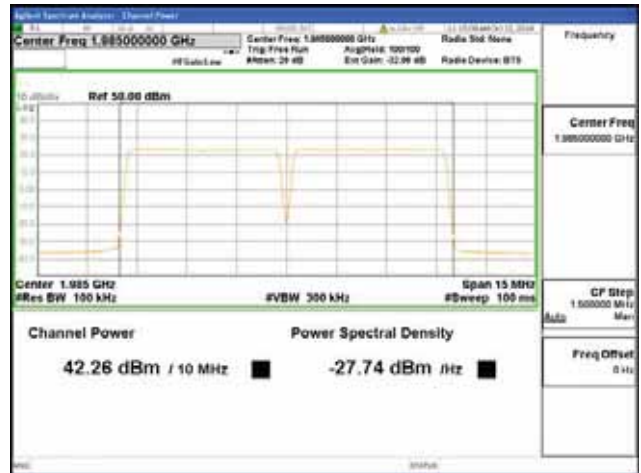
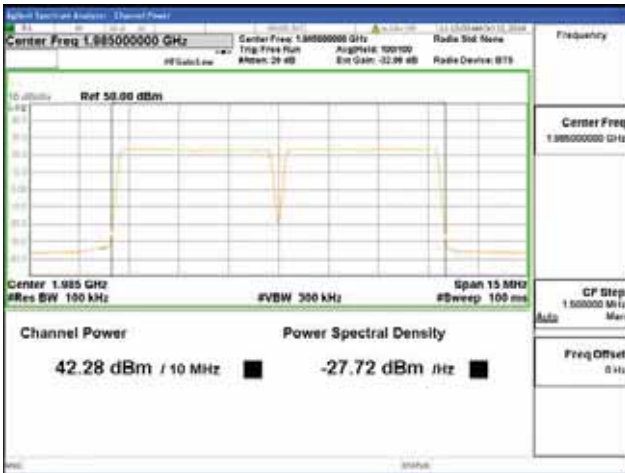
QPSK

16QAM



64QAM

256QAM





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Report No.:
 CTK-2018-03328
 Page (79) / (1312)
 Pages

ANT 4

Band 2, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 4TX, Bottom

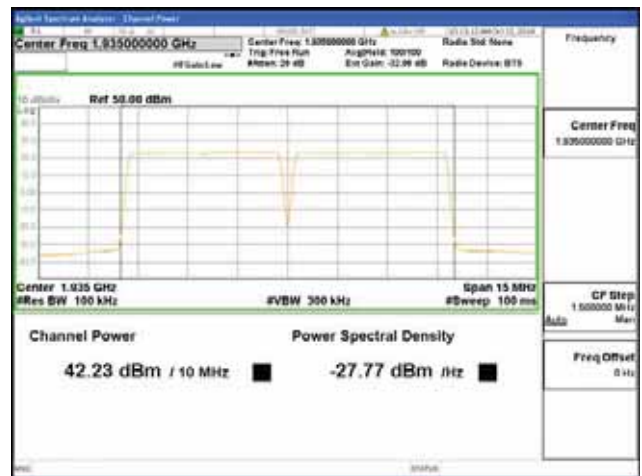
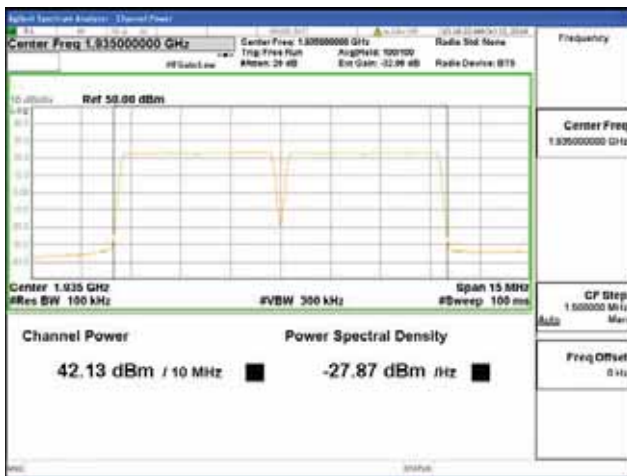
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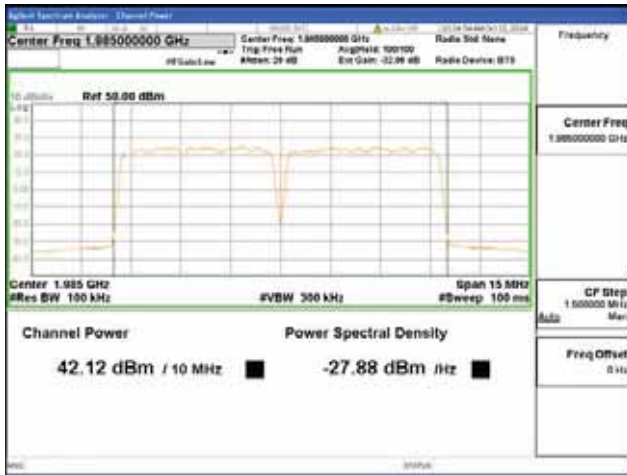


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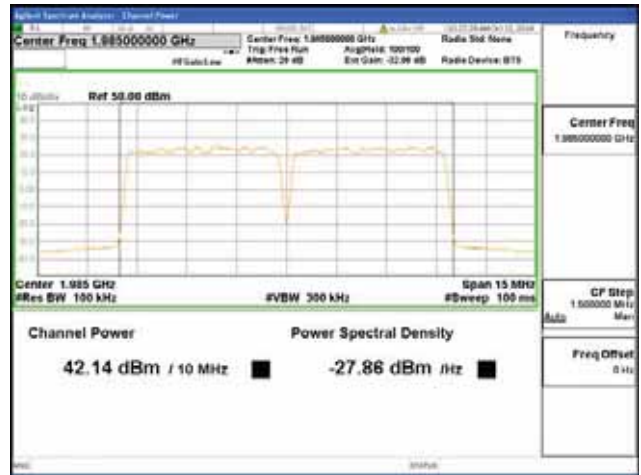
Report No.:
CTK-2018-03328
Page (80) / (1312)
Pages

Band 2, BW 5MHz + BW 5MHz, Multi carrier(Contiguous), 4TX, Top

QPSK



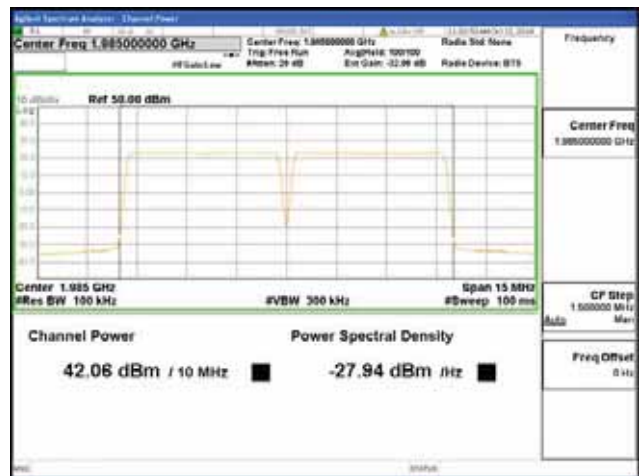
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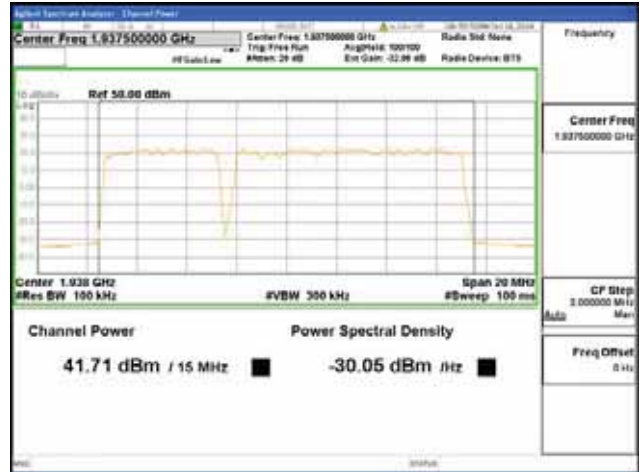
ANT 1

Band 2, BW 5MHz + BW 10MHz, Multi carrier(Contiguous), 4TX, Bottom

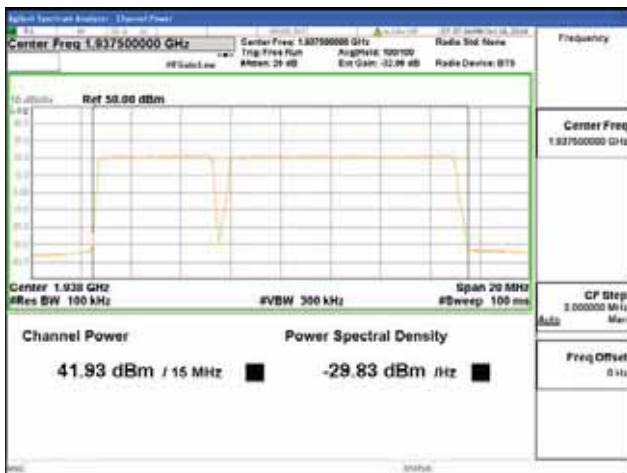
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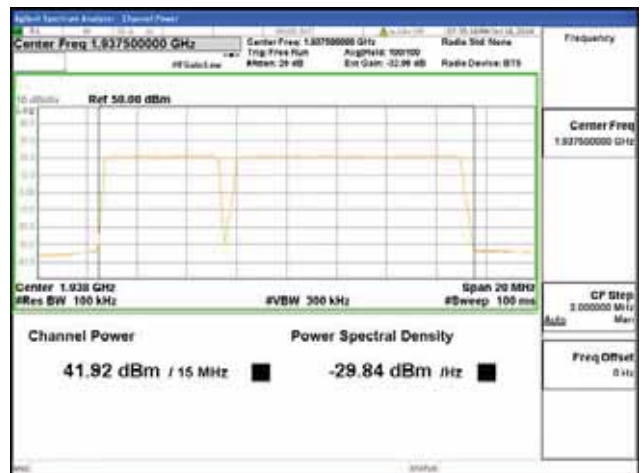
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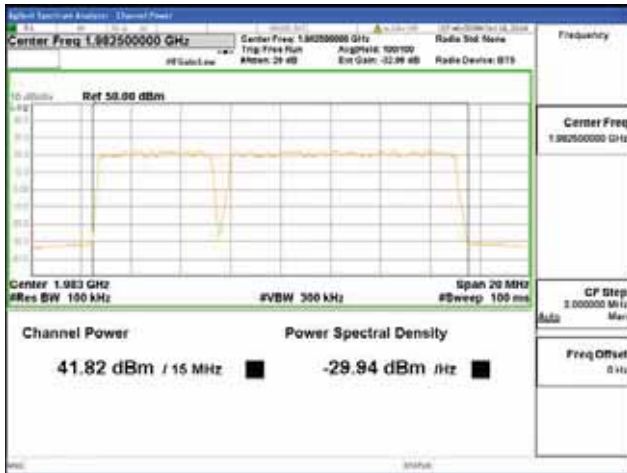
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Report No.:
CTK-2018-03328
Page (82) / (1312)
Pages

Band 2, BW 5MHz + BW 10MHz, Multi carrier(Contiguous), 4TX, Top

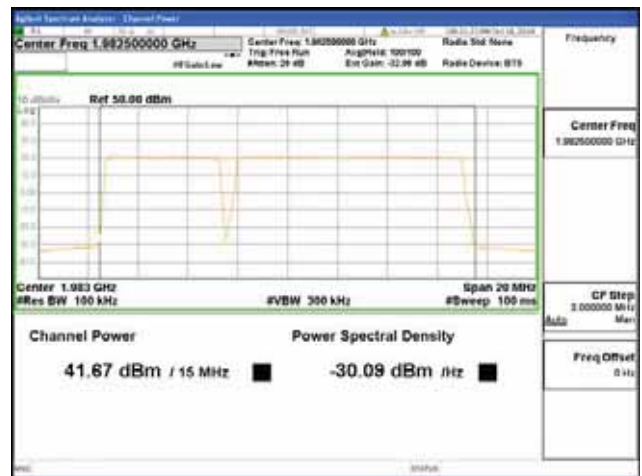
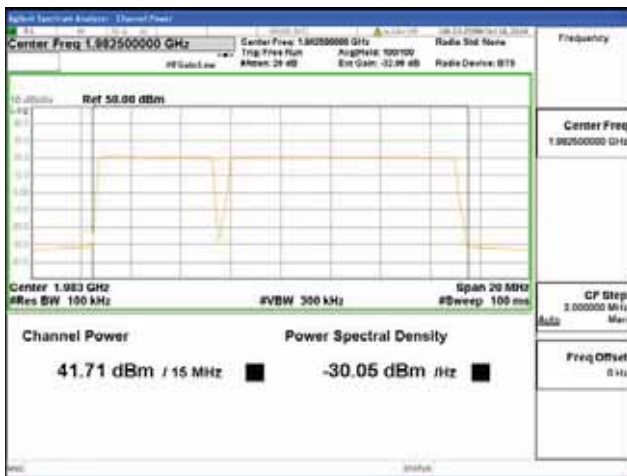
QPSK

16QAM



64QAM

256QAM





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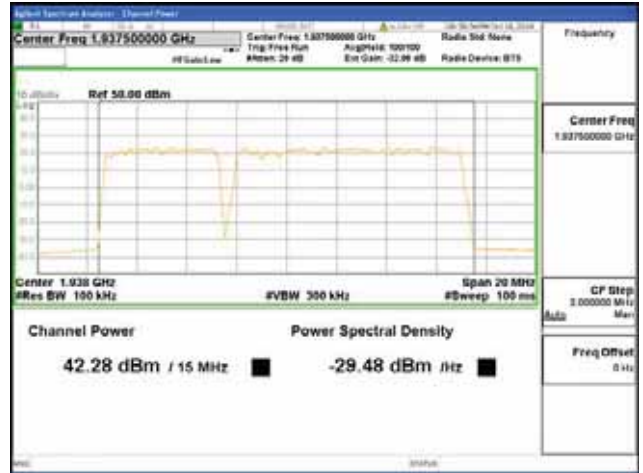
Report No.:
 CTK-2018-03328
 Page (83) / (1312)
 Pages

ANT 2
Band 2, BW 5MHz + BW 10MHz, Multi carrier(Contiguous), 4TX, Bottom

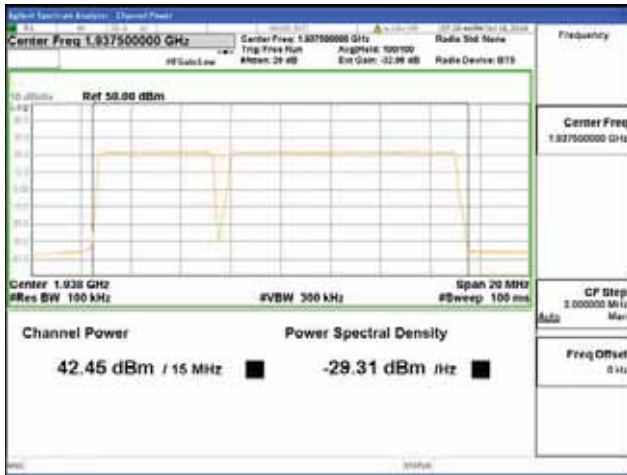
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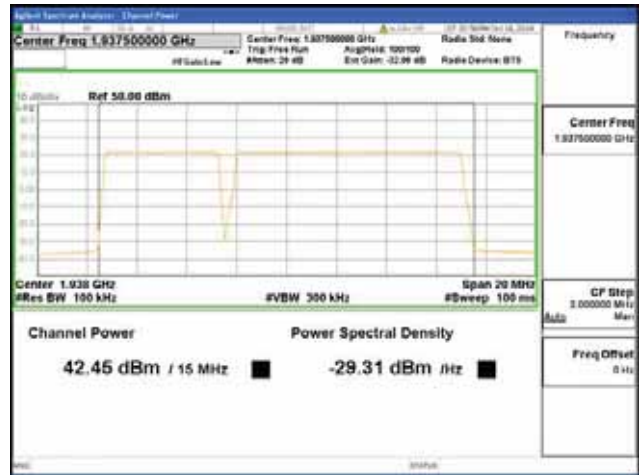
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64QAM



256QAM

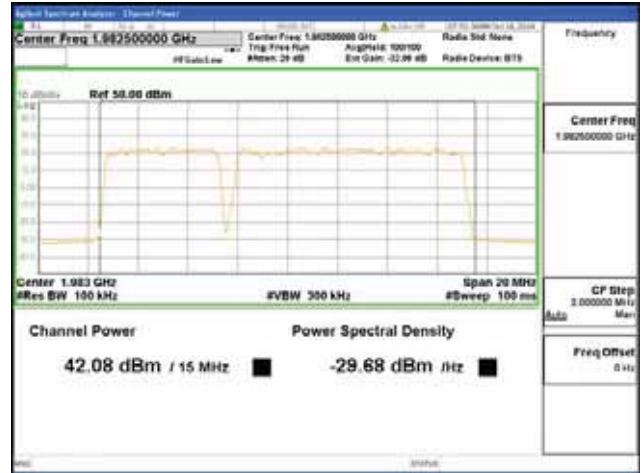
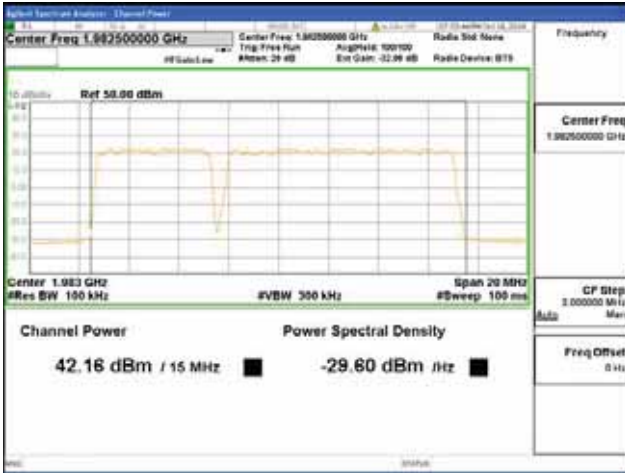




Band 2, BW 5MHz + BW 10MHz, Multi carrier(Contiguous), 4TX, Top

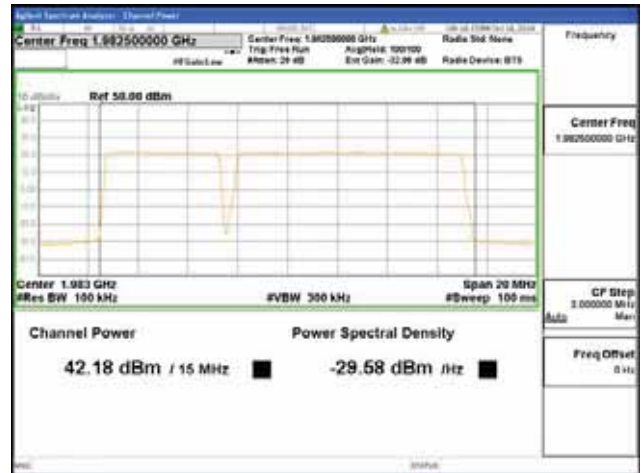
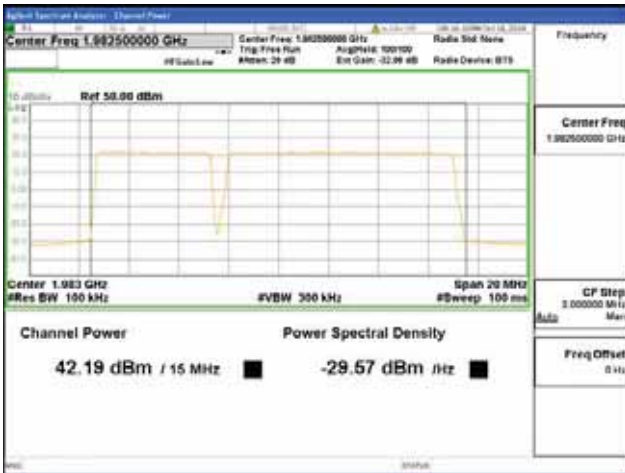
QPSK

16QAM



64QAM

256QAM





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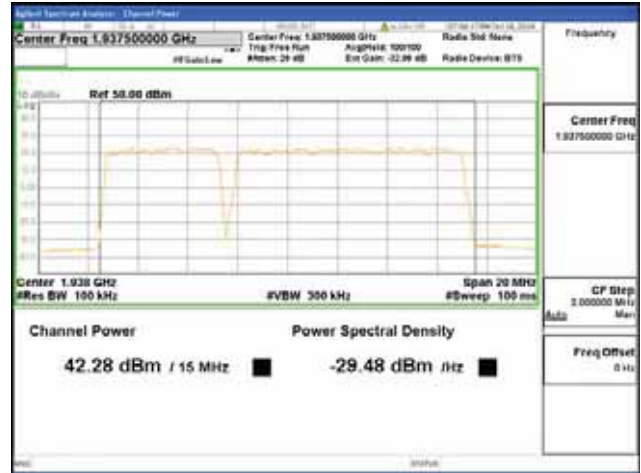
Report No.:
 CTK-2018-03328
 Page (85) / (1312)
 Pages

ANT 3

Band 2, BW 5MHz + BW 10MHz, Multi carrier(Contiguous), 4TX, Bottom

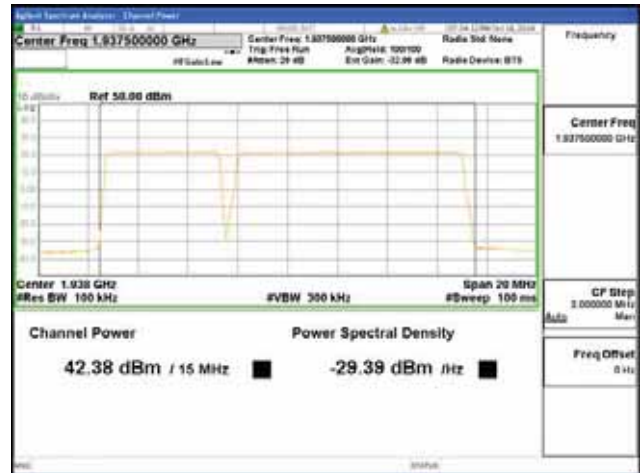
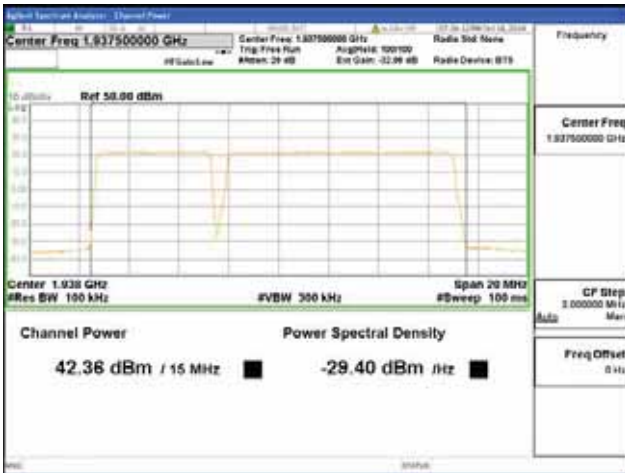
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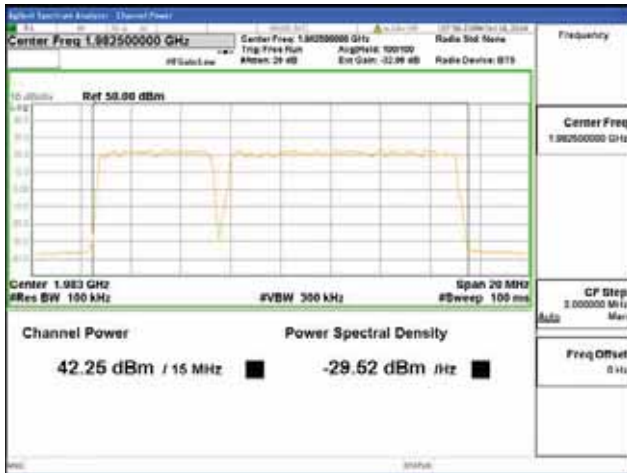
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Report No.:
 CTK-2018-03328
 Page (86) / (1312)
 Pages

Band 2, BW 5MHz + BW 10MHz, Multi carrier(Contiguous), 4TX, Top

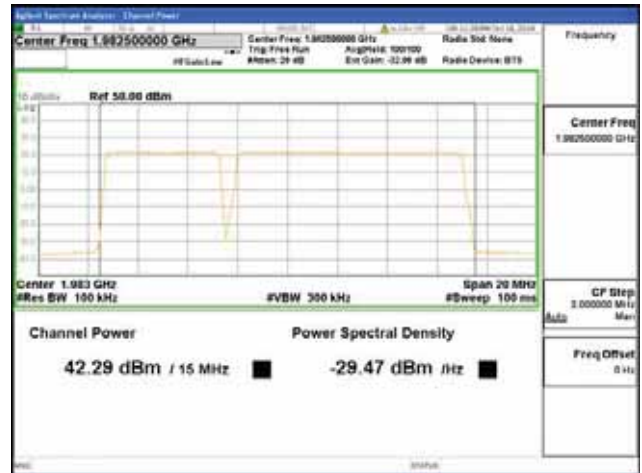
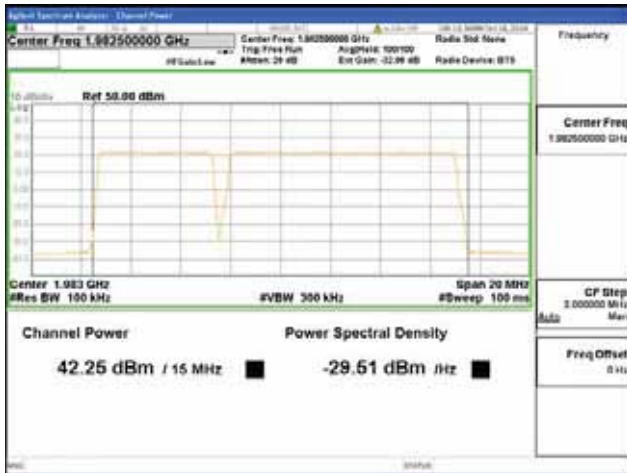
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64QAM

256QAM





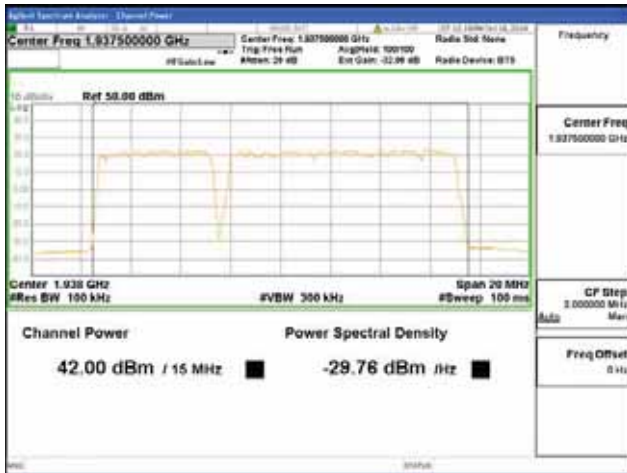
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Report No.:
 CTK-2018-03328
 Page (87) / (1312)
 Pages

ANT 4

Band 2, BW 5MHz + BW 10MHz, Multi carrier(Contiguous), 4TX, Bottom

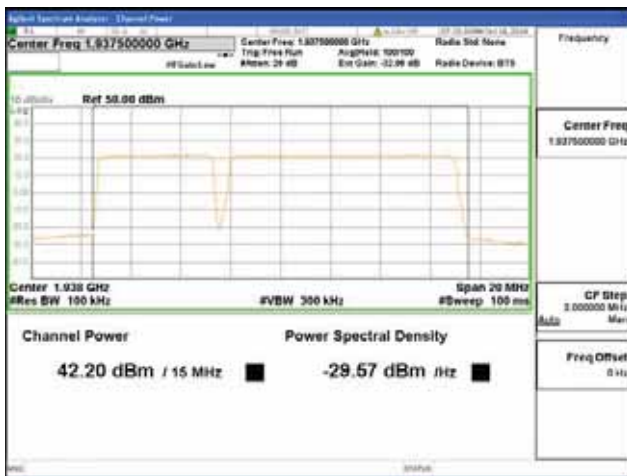
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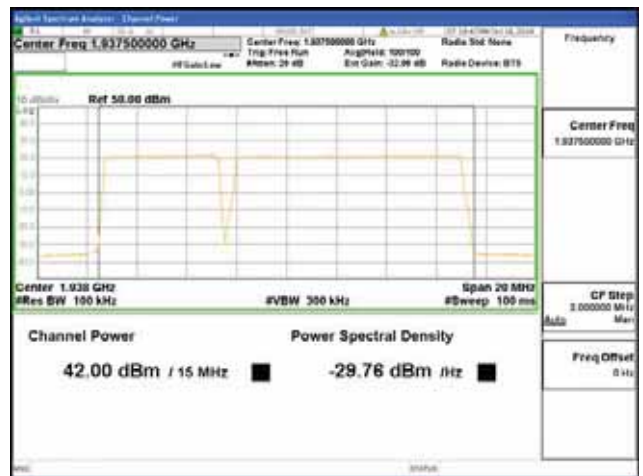
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256QAM

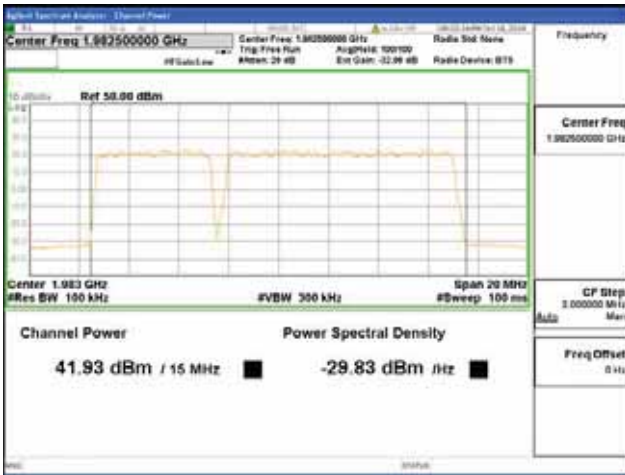




Band 2, BW 5MHz + BW 10MHz, Multi carrier(Contiguous), 4TX, Top

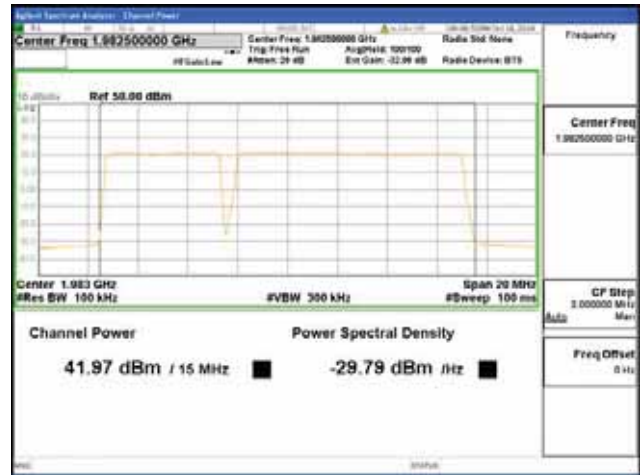
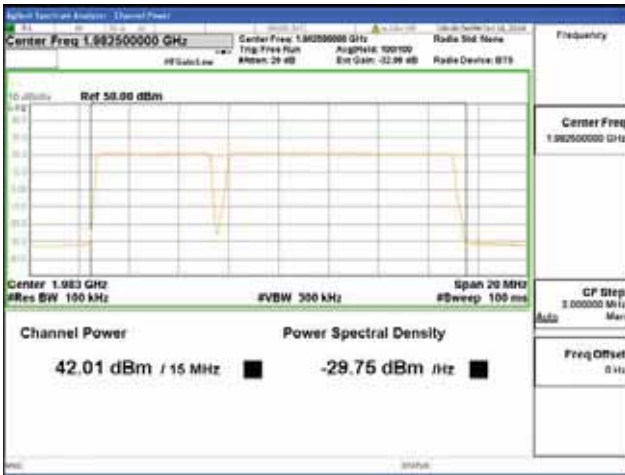
QPSK

16QAM



64QAM

256QAM





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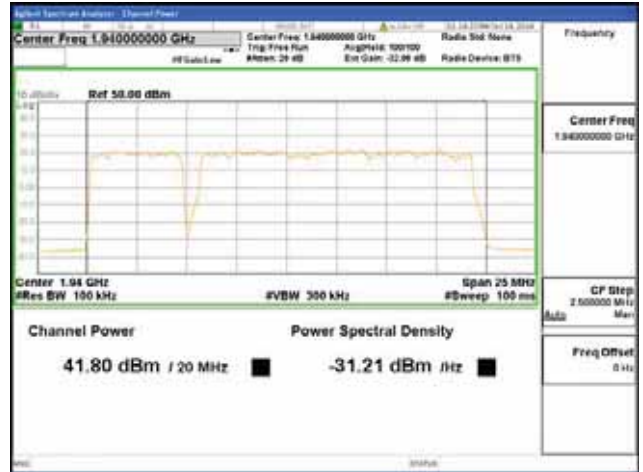
Report No.:
 CTK-2018-03328
 Page (89) / (1312)
 Pages

ANT 1

Band 2, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 4TX, Bottom

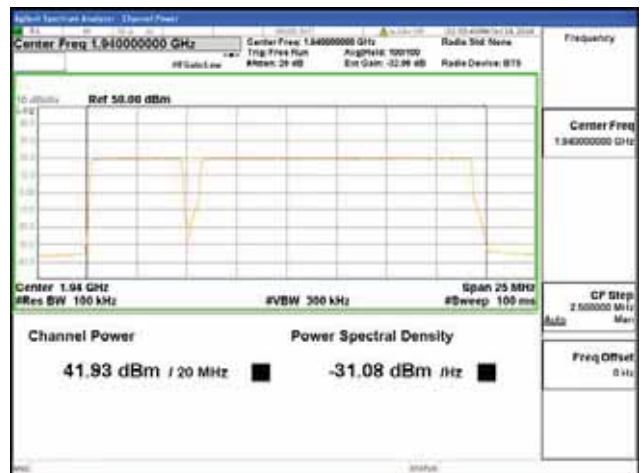
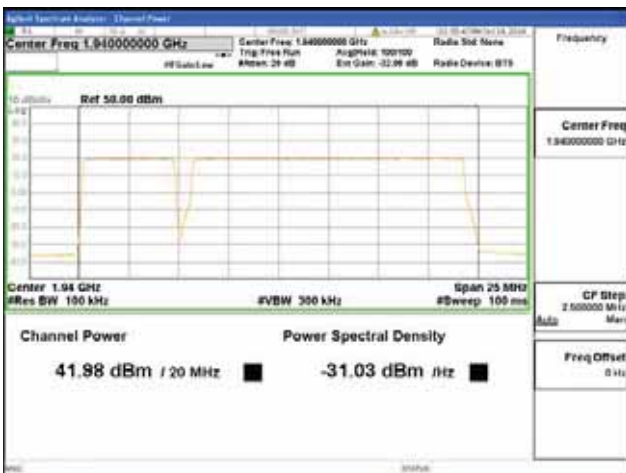
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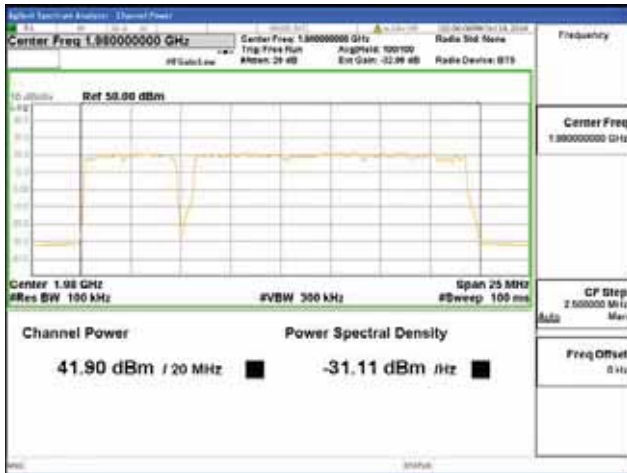


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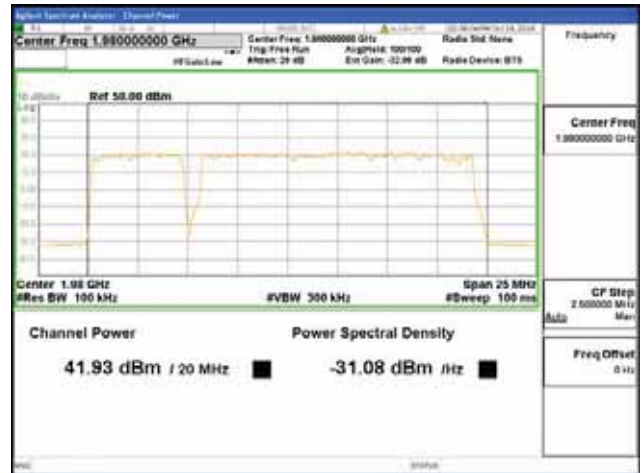
Report No.:
 CTK-2018-03328
 Page (90) / (1312)
 Pages

Band 2, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 4TX, Top

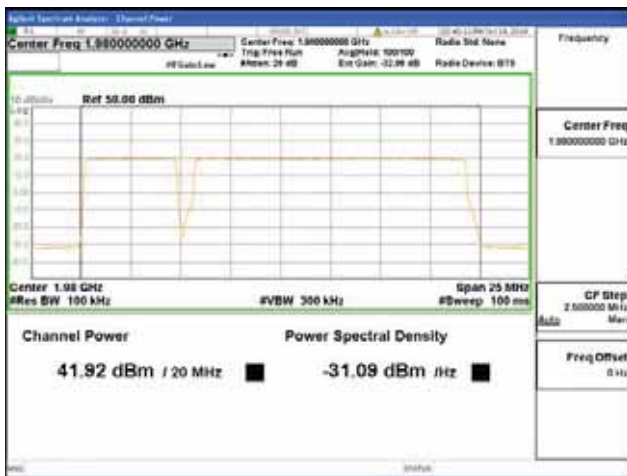
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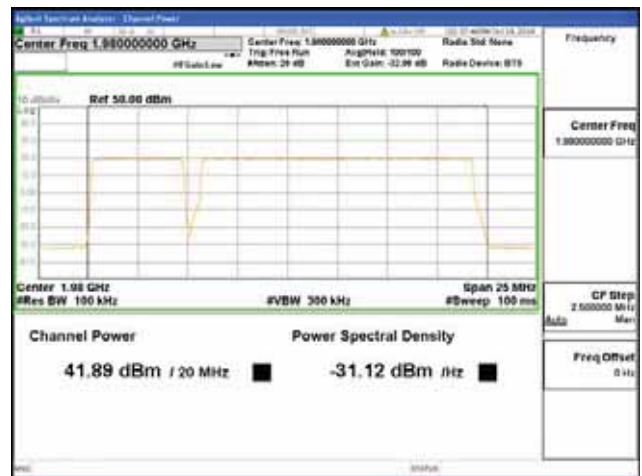
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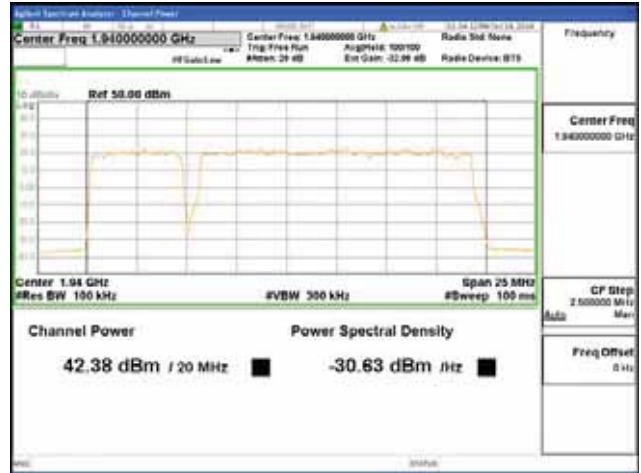


ANT 2
Band 2, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 4TX, Bottom

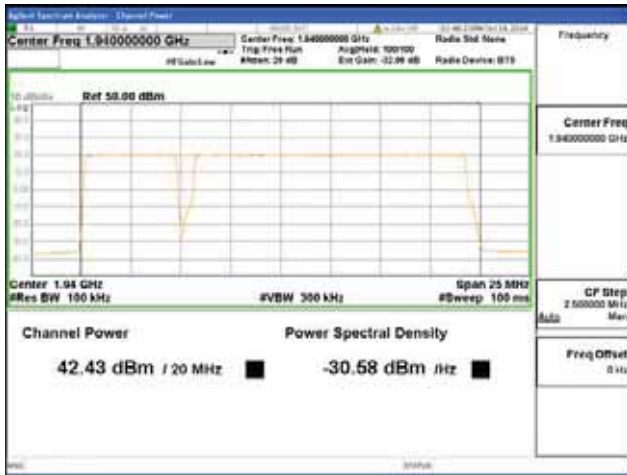
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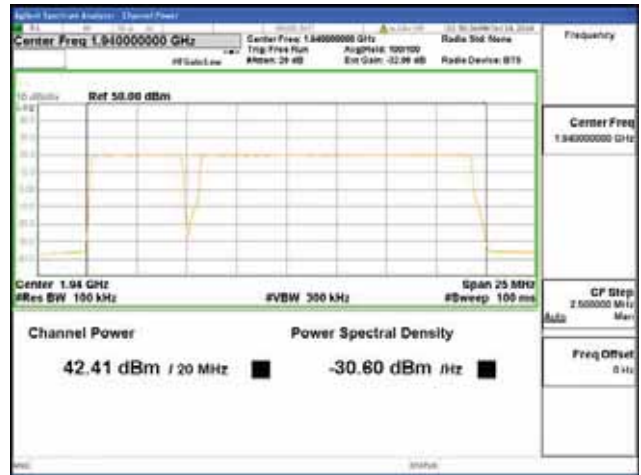
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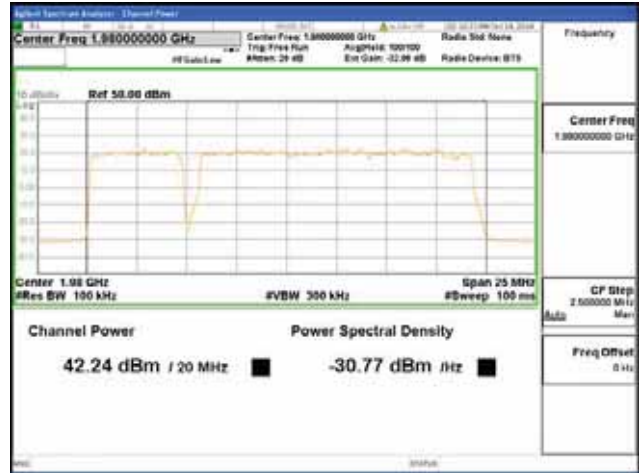
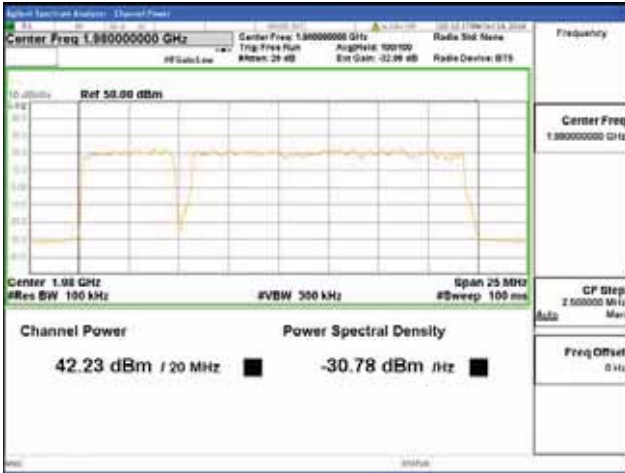




Band 2, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 4TX, Top

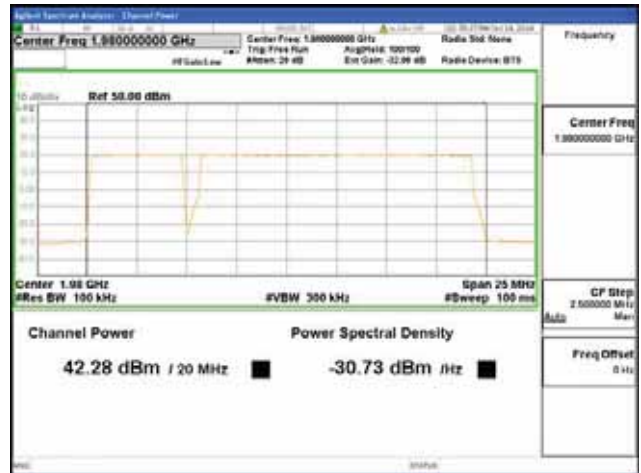
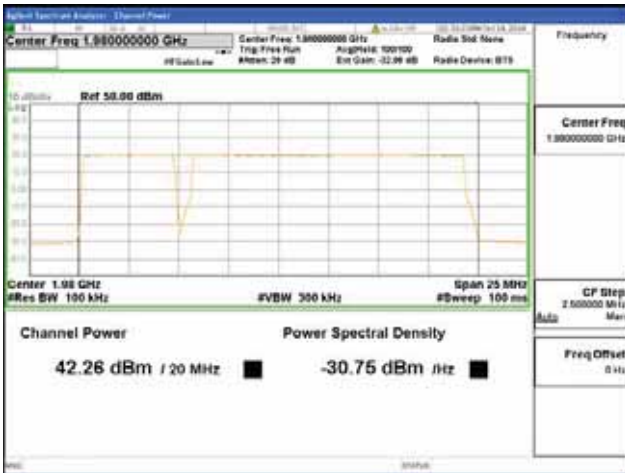
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16QAM



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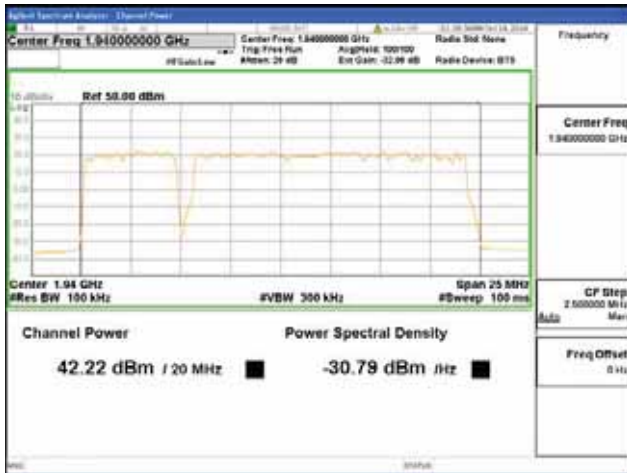
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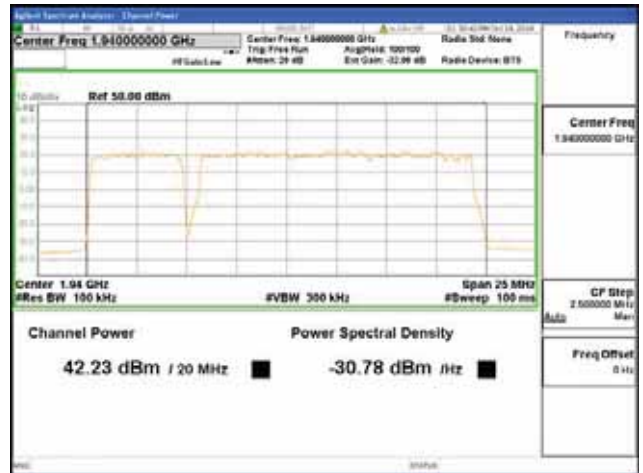


ANT 3
Band 2, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 4TX, Bottom

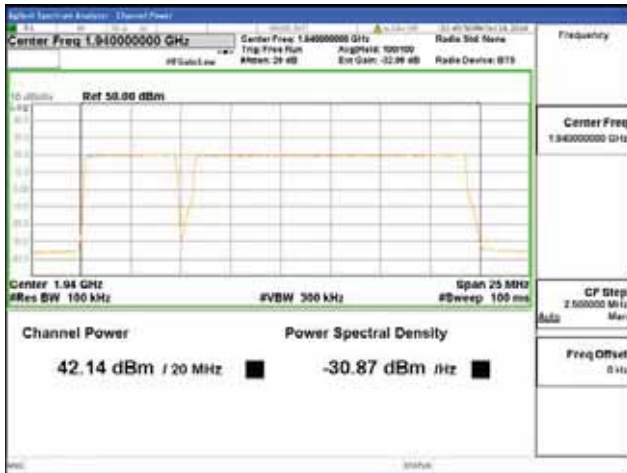
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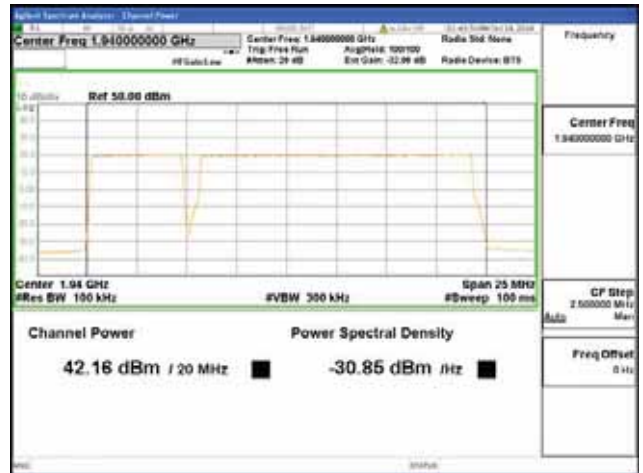
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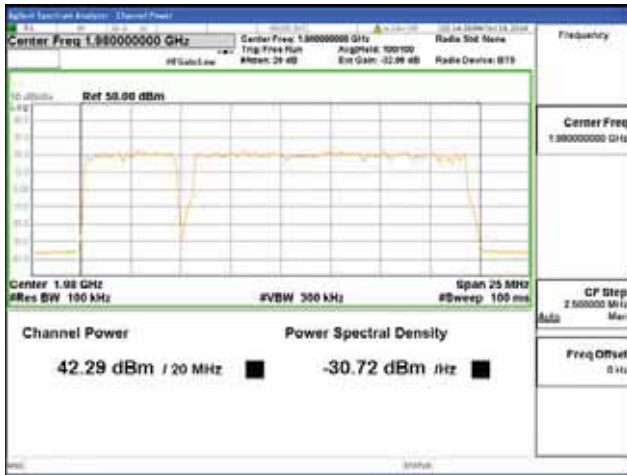
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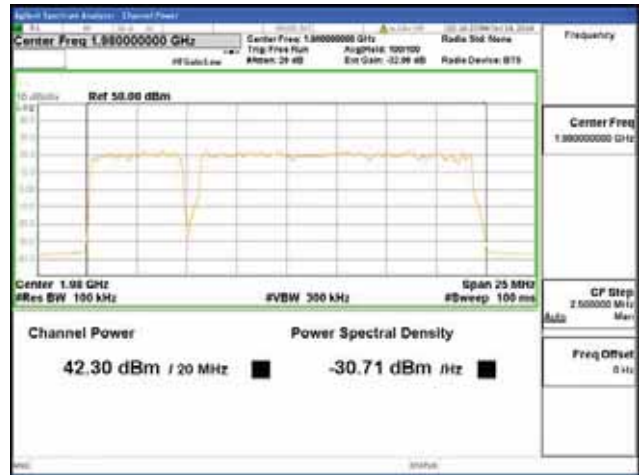


Band 2, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 4TX, Top

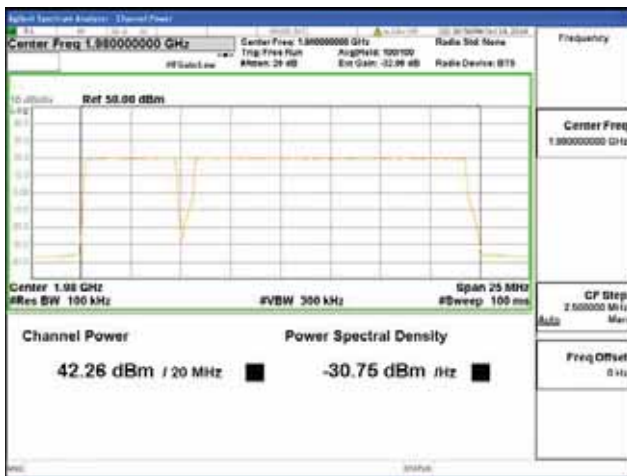
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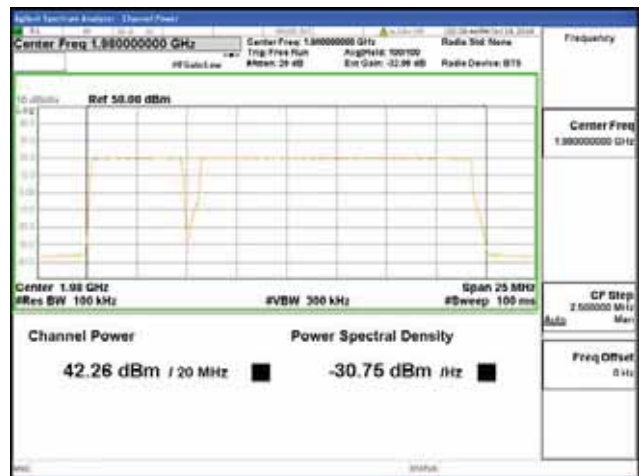
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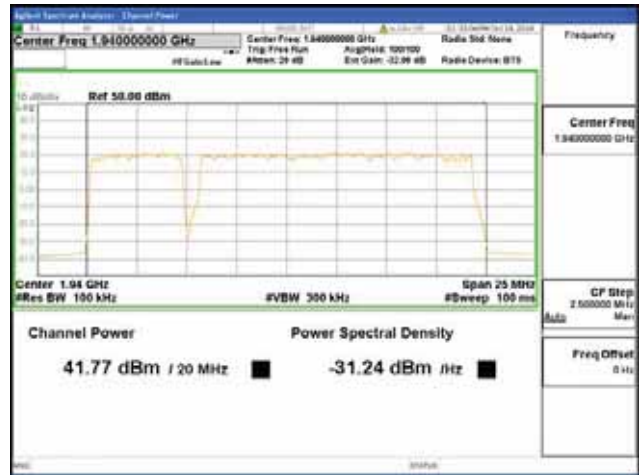
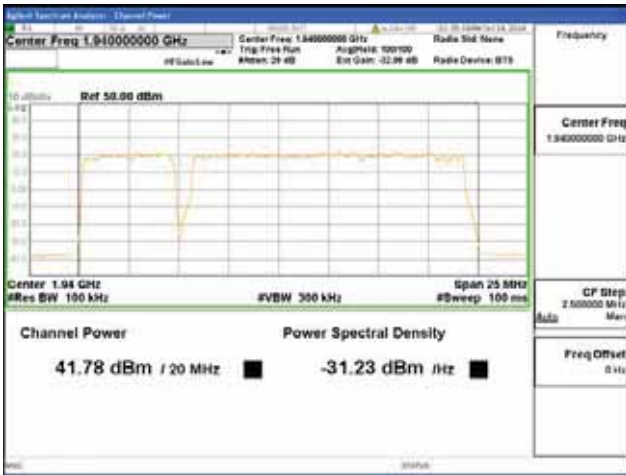




ANT 4
Band 2, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 4TX, Bottom

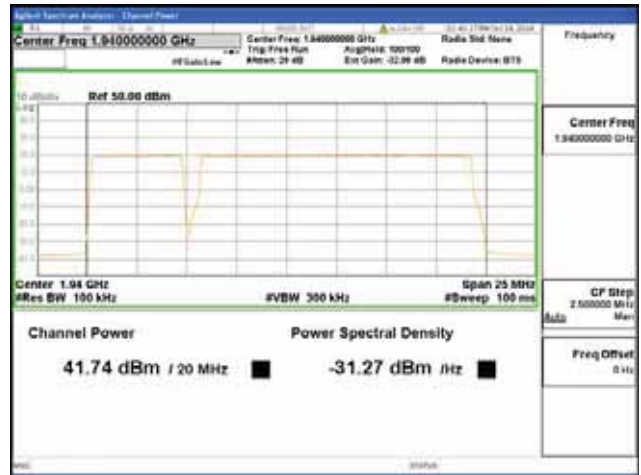
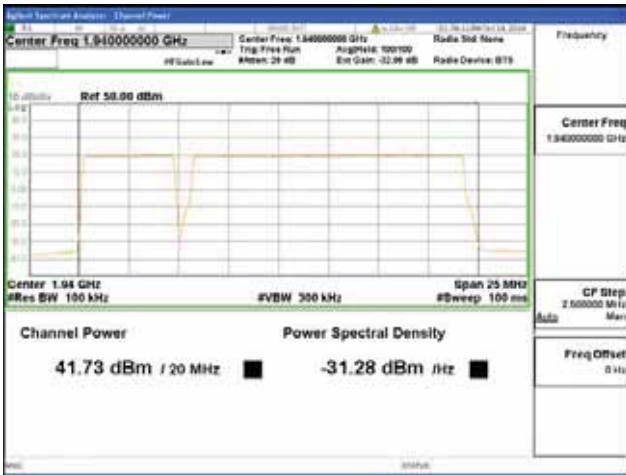
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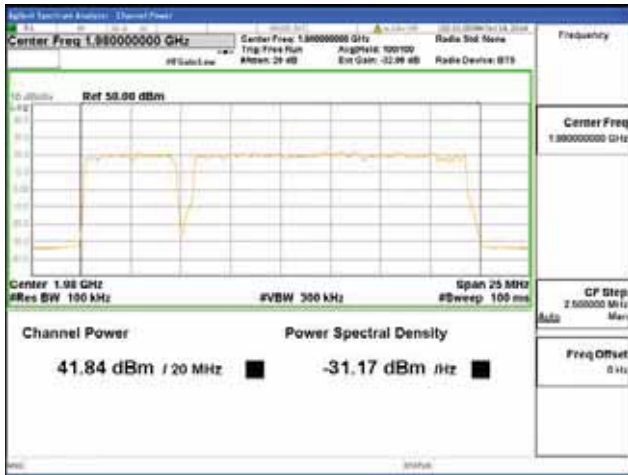
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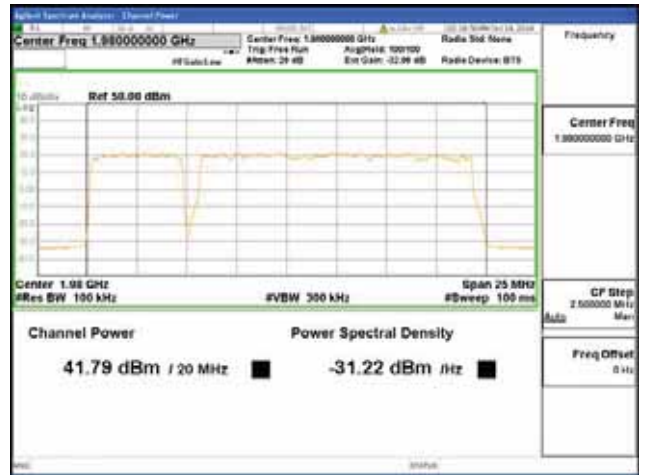


Band 2, BW 5MHz + BW 15MHz, Multi carrier(Contiguous), 4TX, Top

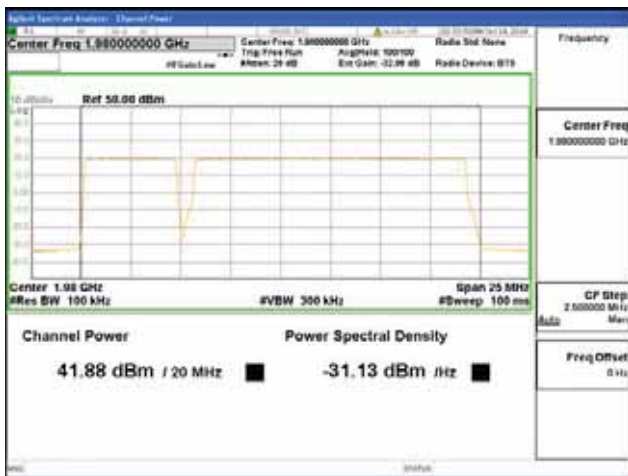
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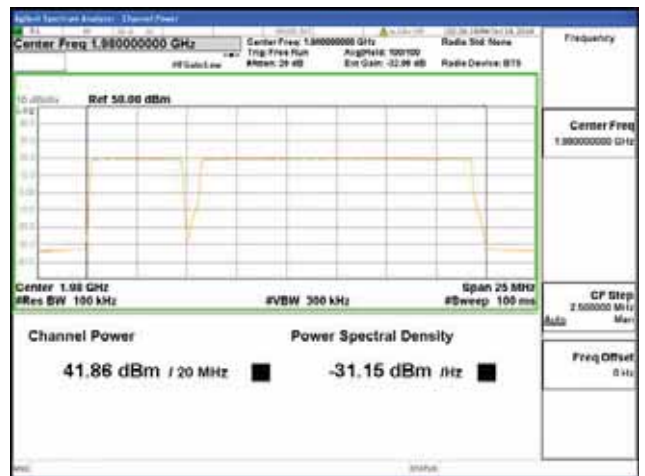
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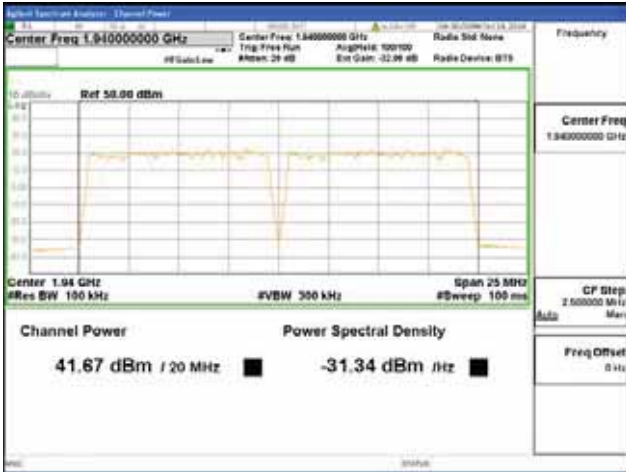


ANT 1

Band 2, BW 10MHz + BW 10MHz, Multi carrier(Contiguous), 4TX, Bottom

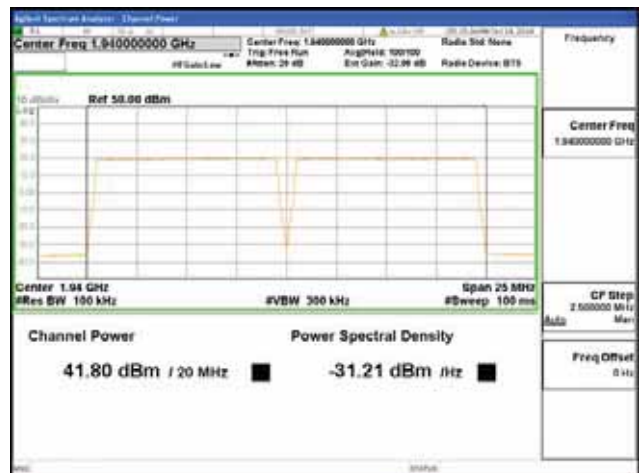
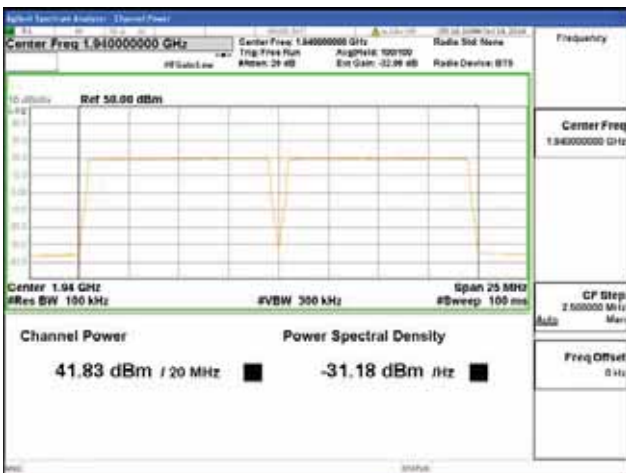
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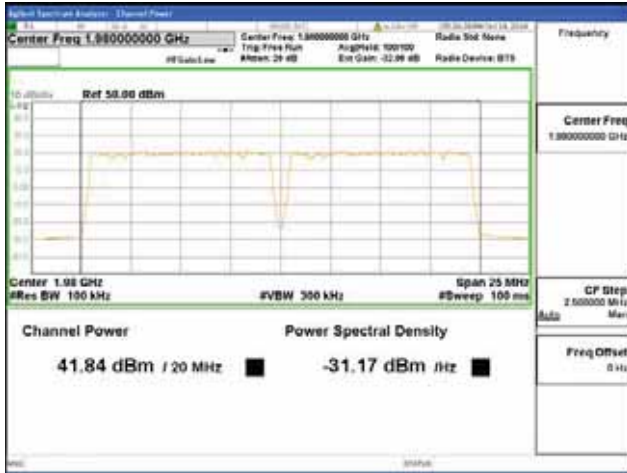
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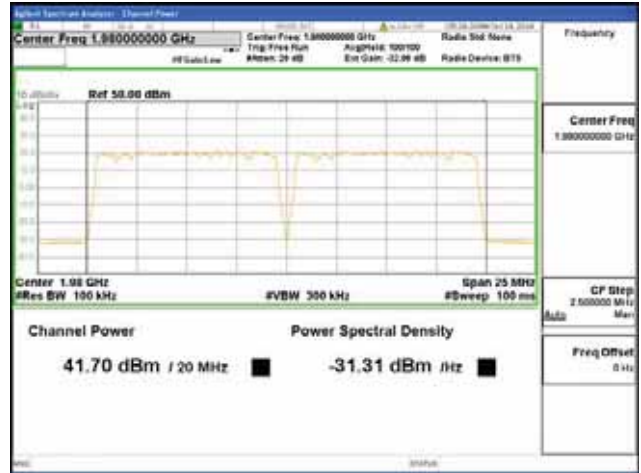


Band 2, BW 10MHz + BW 10MHz, Multi carrier(Contiguous), 4TX, Top

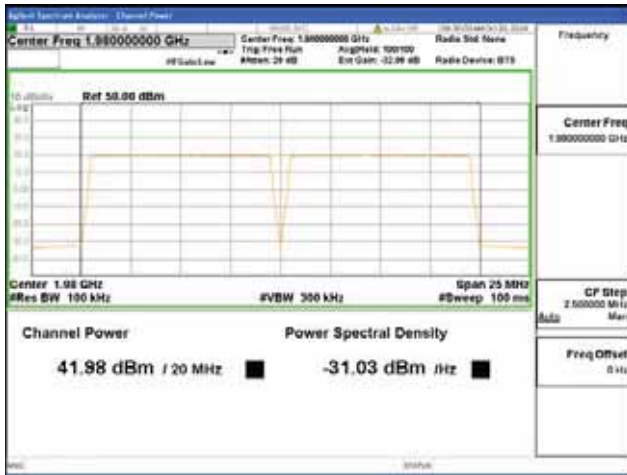
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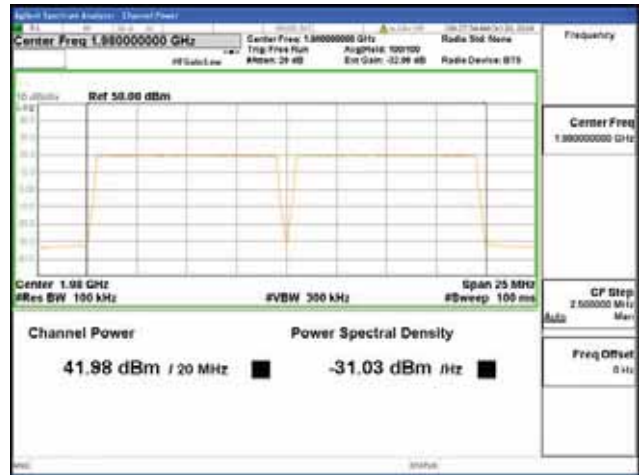
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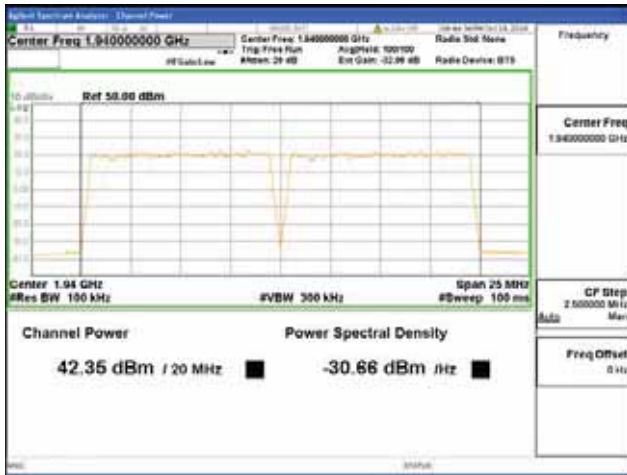
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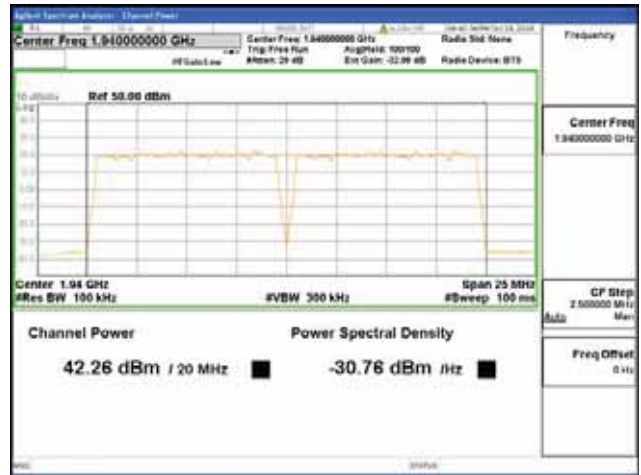


ANT 2
Band 2, BW 10MHz + BW 10MHz, Multi carrier(Contiguous), 4TX, Bottom

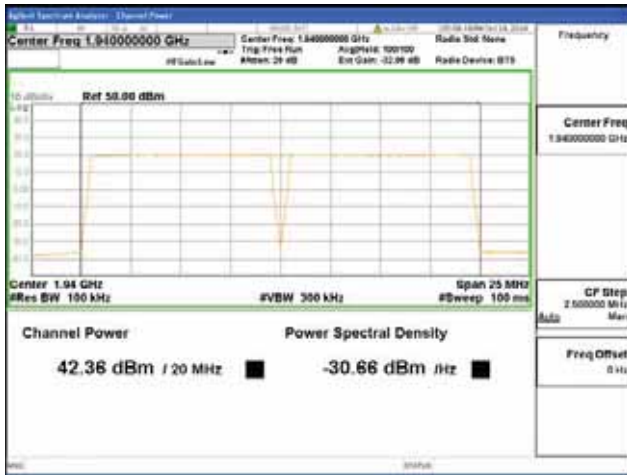
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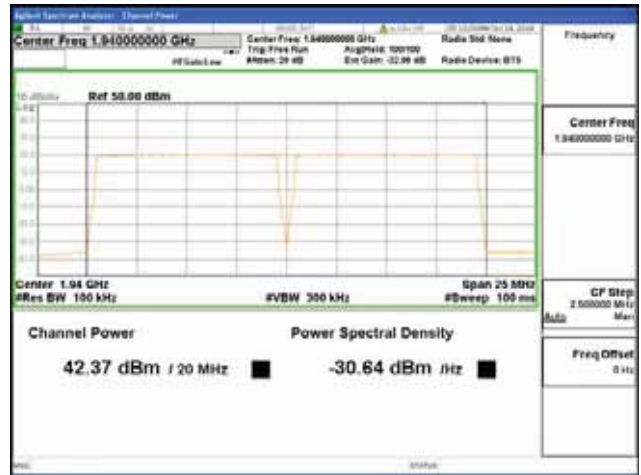
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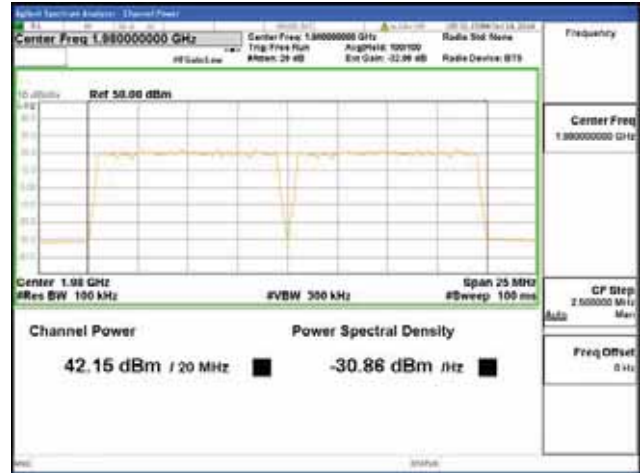
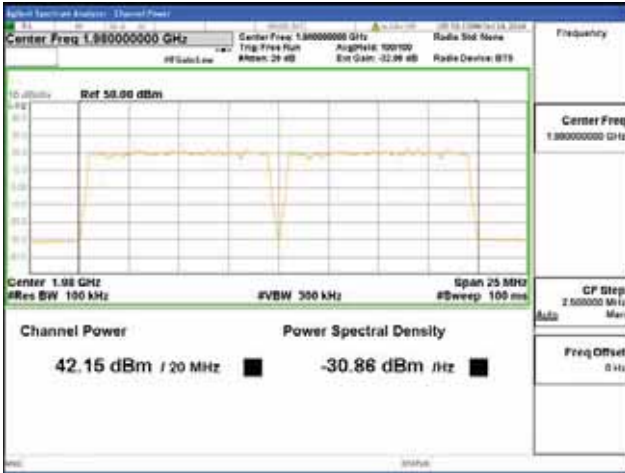
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Report No.:
 CTK-2018-03328
 Page (100) / (1312)
 Pages

Band 2, BW 10MHz + BW 10MHz, Multi carrier(Contiguous), 4TX, Top

QPSK

16QAM



64QAM

256QAM

