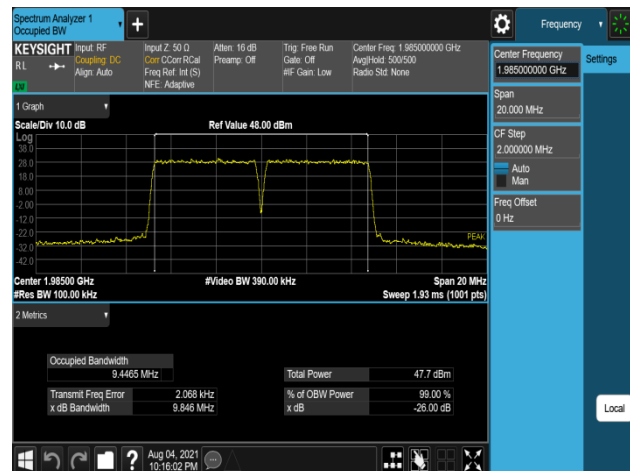
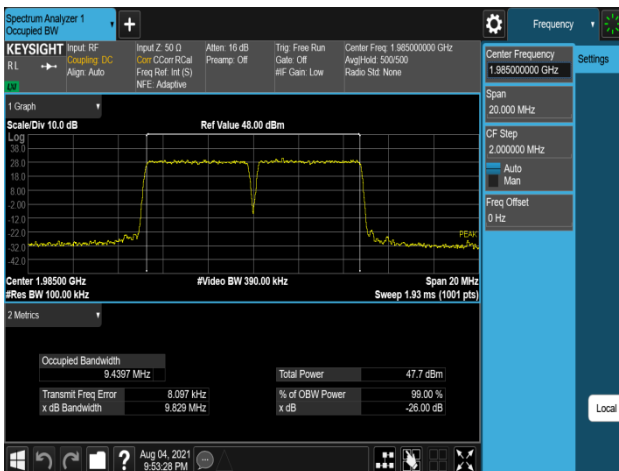
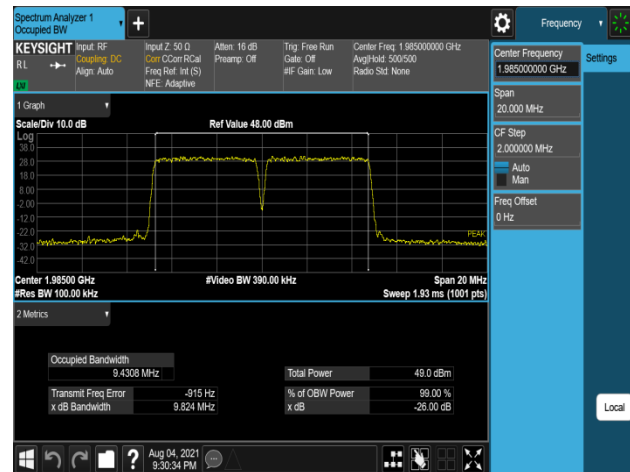
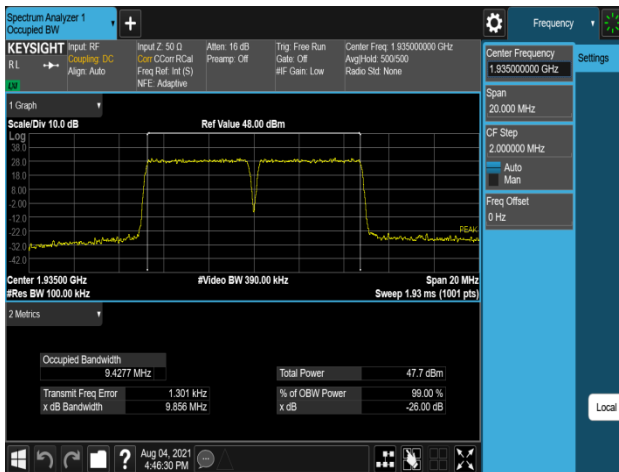
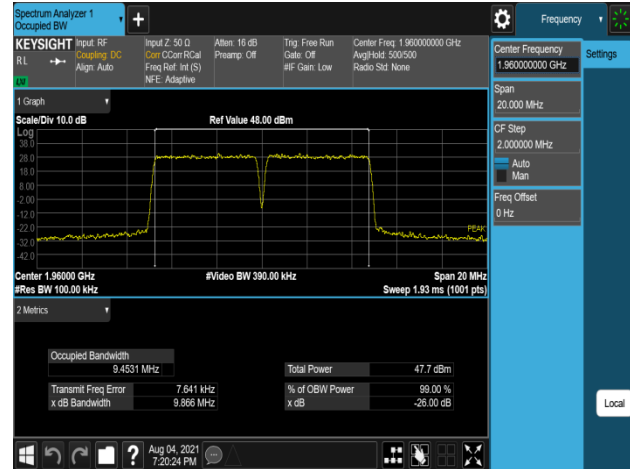
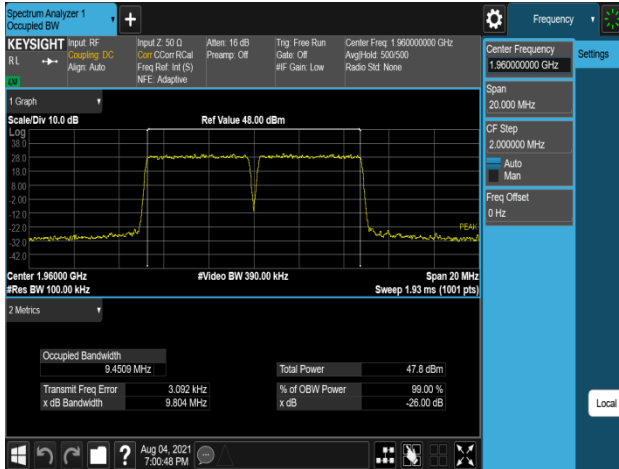
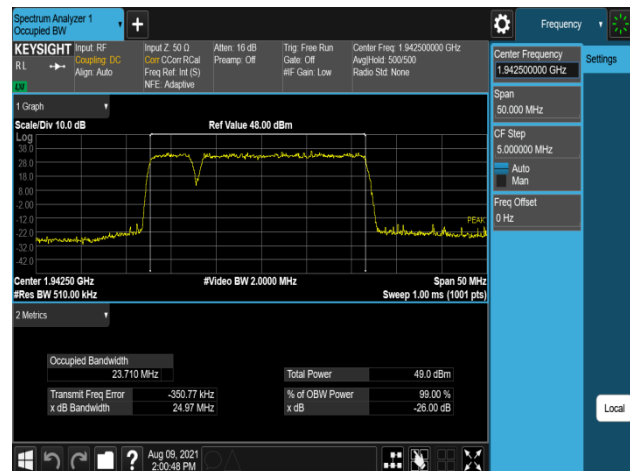
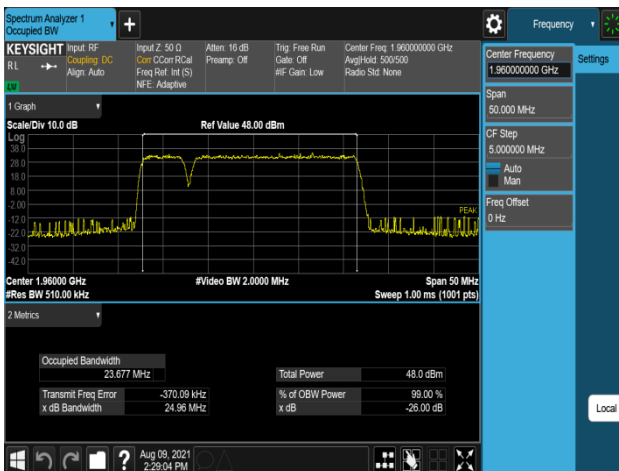
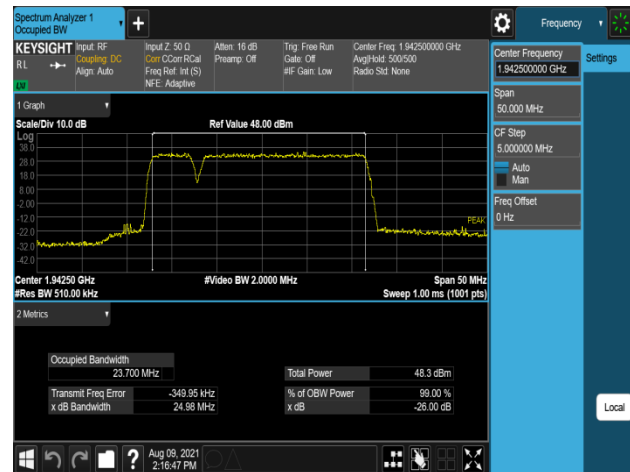
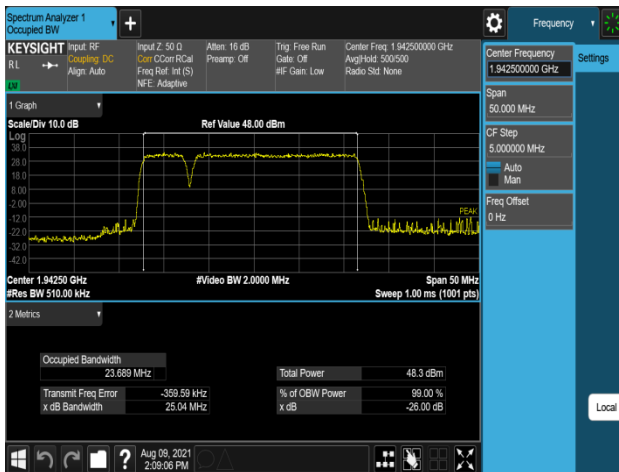
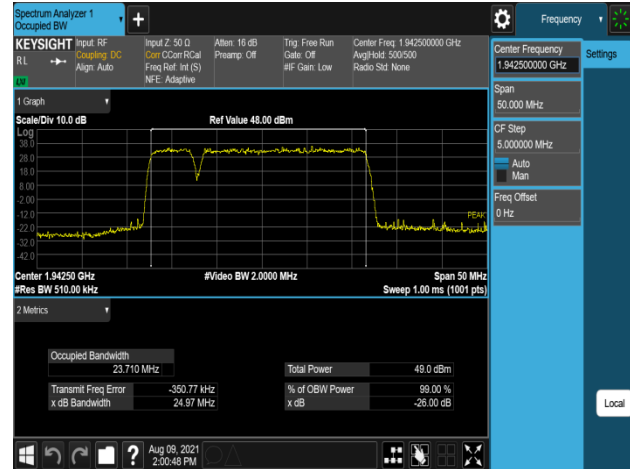
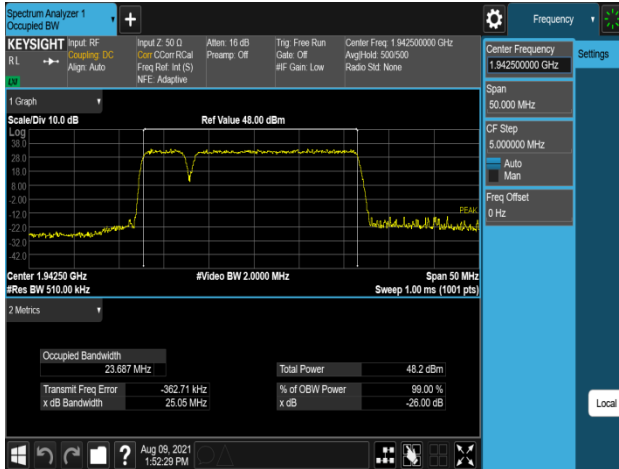
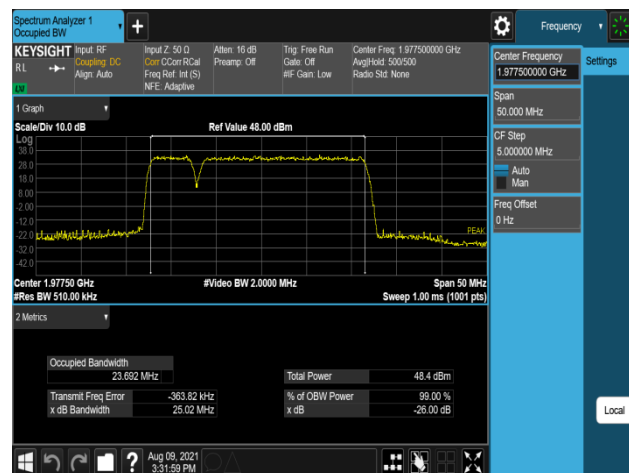
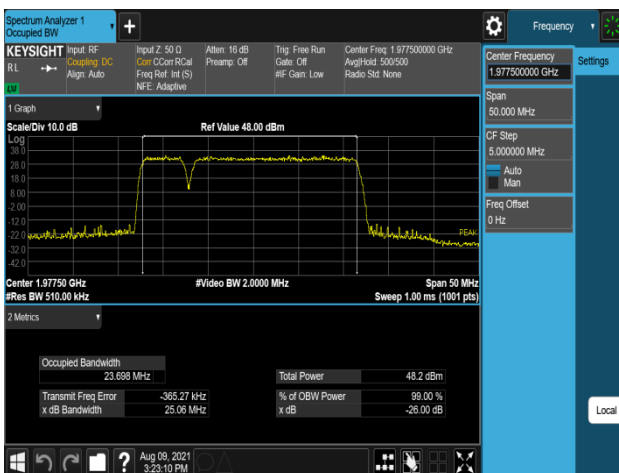
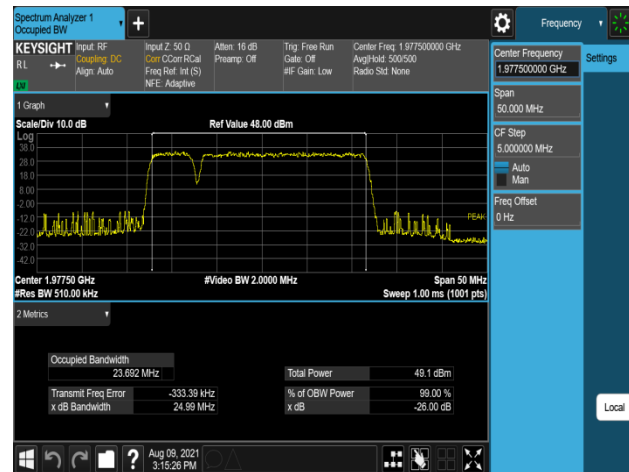
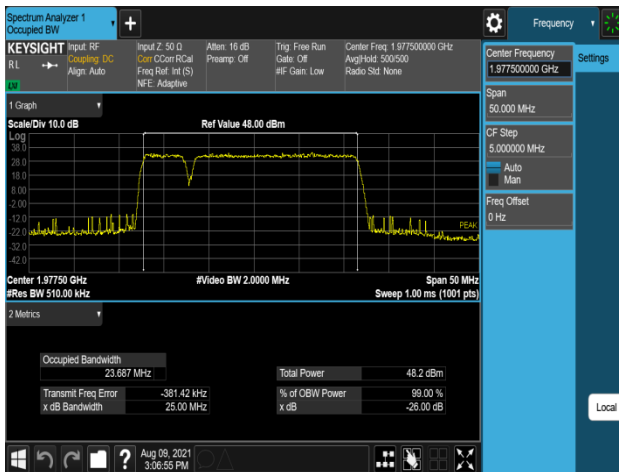
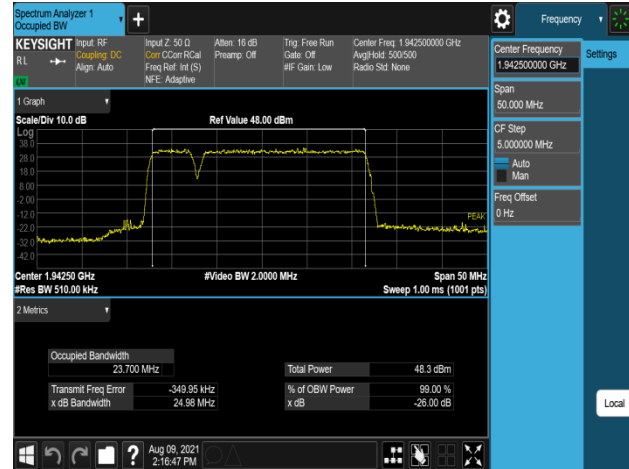
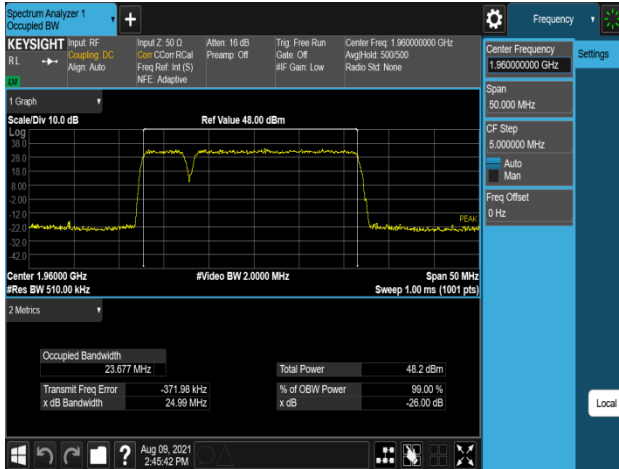




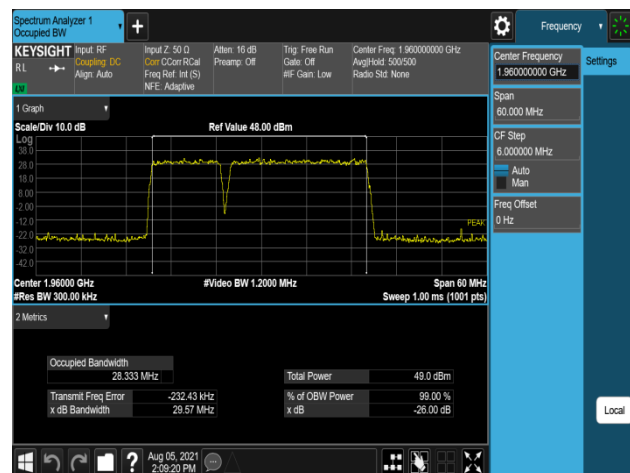
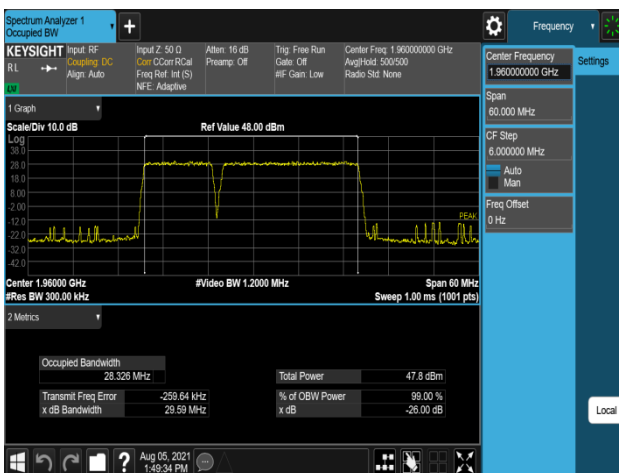
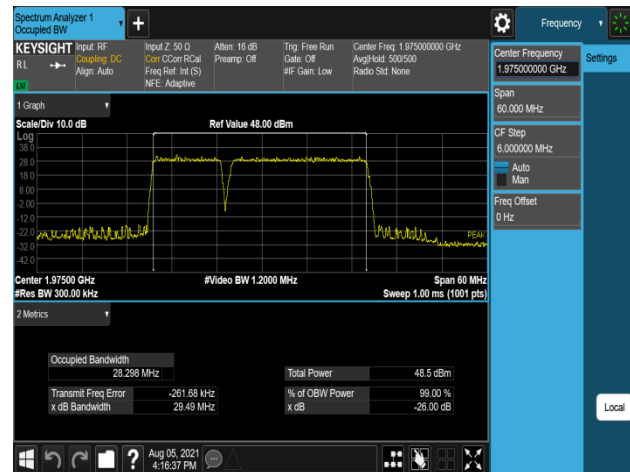
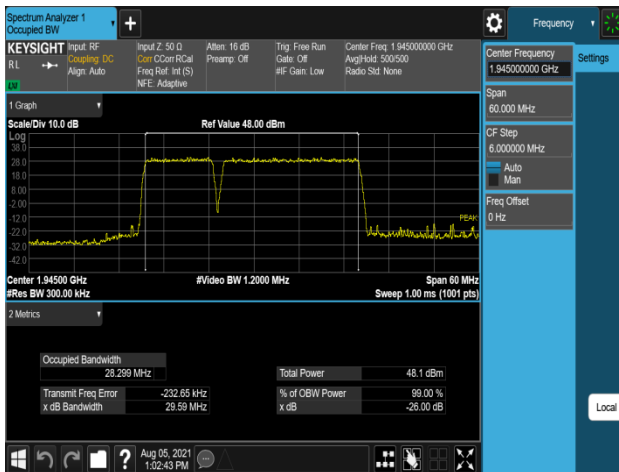
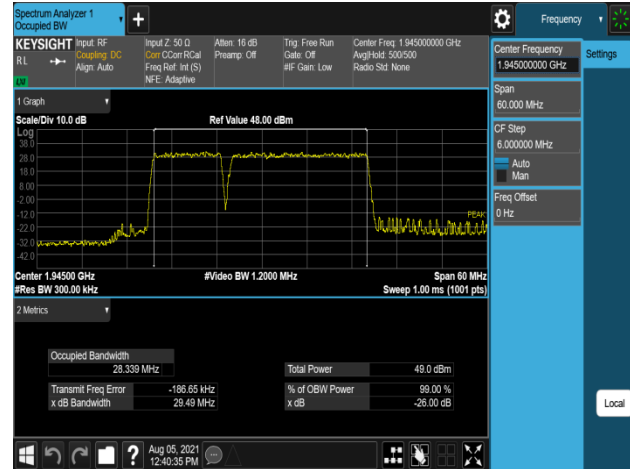
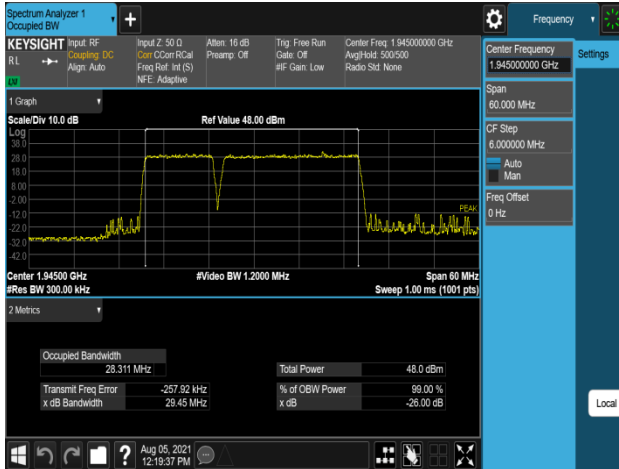
FCC ID: A3LRF4437D-25D	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-02-R2.A3L	Test Dates: 07/19/2021-08/18/2021	EUT Type: RRU(RF4437d)		Page 30 of 430



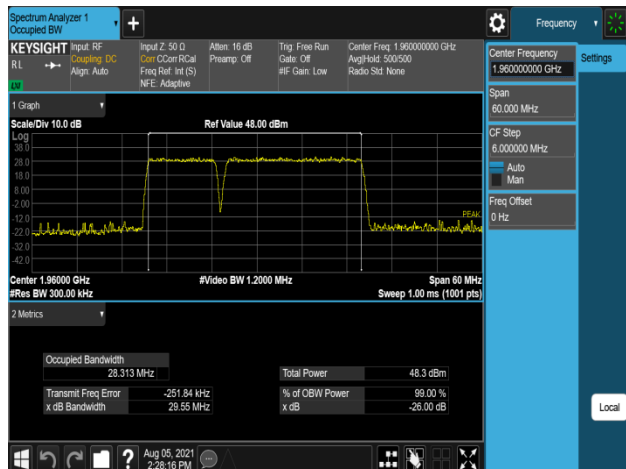
FCC ID: A3LRF4437D-25D	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-02-R2.A3L	Test Dates: 07/19/2021-08/18/2021	EUT Type: RRU(RF4437d)		Page 31 of 430



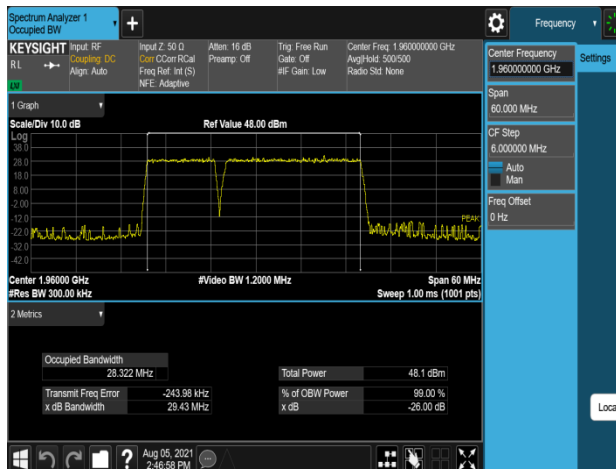
FCC ID: A3LRF4437D-25D	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-02-R2.A3L	Test Dates: 07/19/2021-08/18/2021	EUT Type: RRU(RF4437d)		Page 32 of 430



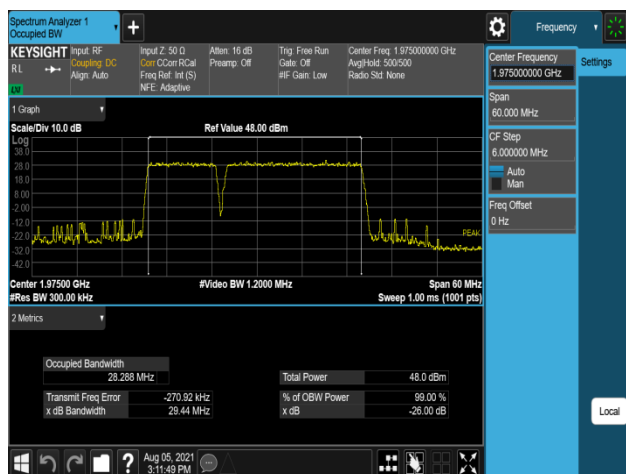
FCC ID: A3LRF4437D-25D	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-02-R2.A3L	Test Dates: 07/19/2021-08/18/2021	EUT Type: RRU(RF4437d)		Page 33 of 430



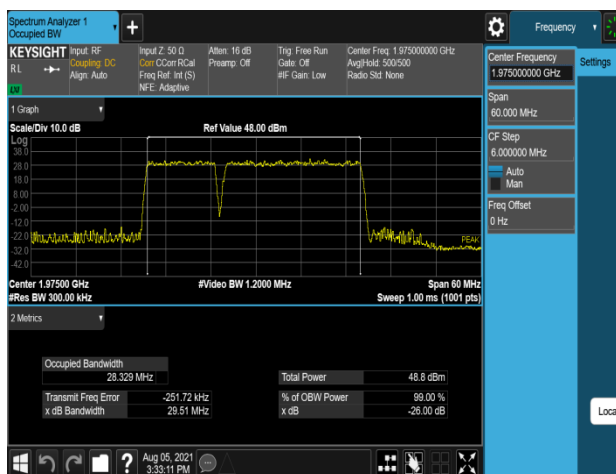
Plot 7-79. Occupied Bandwidth Plot
(B2 10M+20M 2C 64QAM - Mid Channel, Port 2)



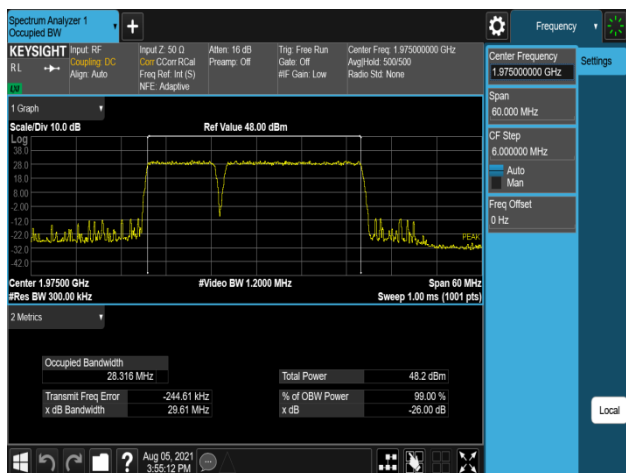
Plot 7-80. Occupied Bandwidth Plot
(B2 10M+20M 2C 256QAM – Mid Channel, Port 0)



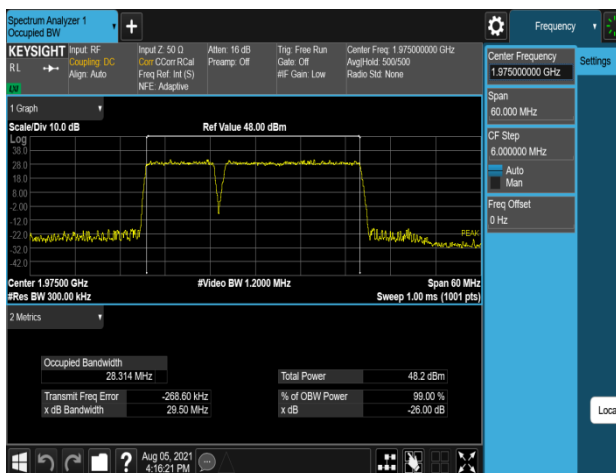
Plot 7-81. Occupied Bandwidth Plot
(B2 10M+20M 2C QPSK - High Channel, Port 1)



Plot 7-82. Occupied Bandwidth Plot
(B2 10M+20M 2C 16QAM – High Channel, Port 1)



Plot 7-83. Occupied Bandwidth Plot
(B2 10M+20M 2C 64QAM - High Channel, Port 3)



Plot 7-84. Occupied Bandwidth Plot
(B2 10M+20M 2C 256QAM – High Channel, Port 2)

FCC ID: A3LRF4437D-25D	 MEASUREMENT REPORT 		Approved by: Technical Manager
Test Report S/N: 8K21071202-02-R2.A3L	Test Dates: 07/19/2021-08/18/2021	EUT Type: RRU(RF4437d)	Page 34 of 430

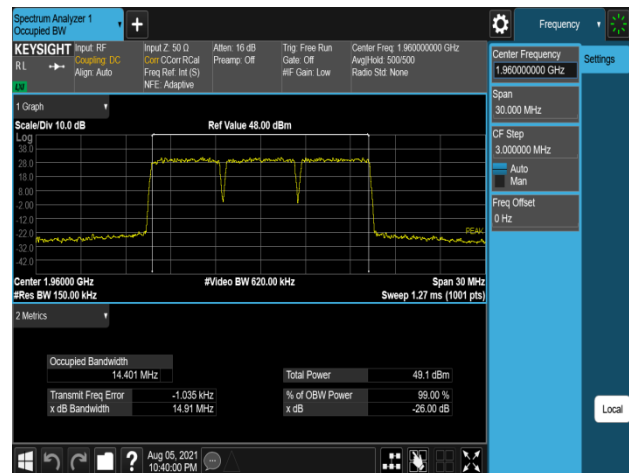
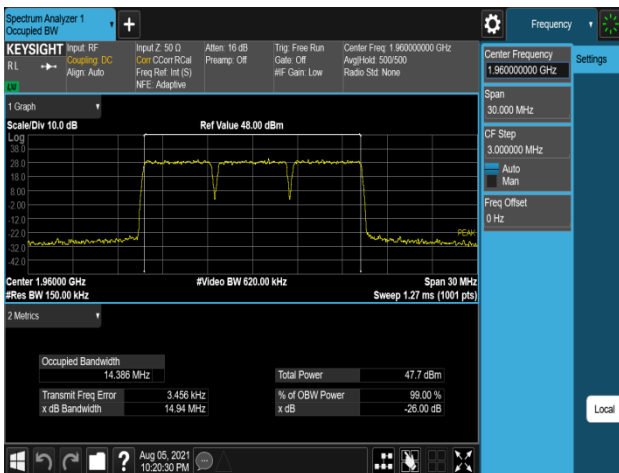
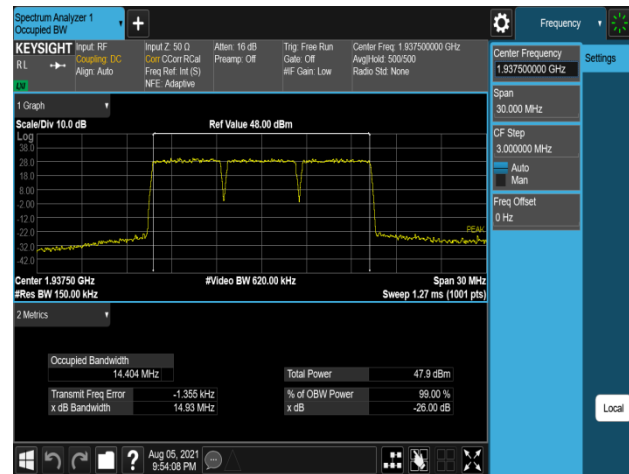
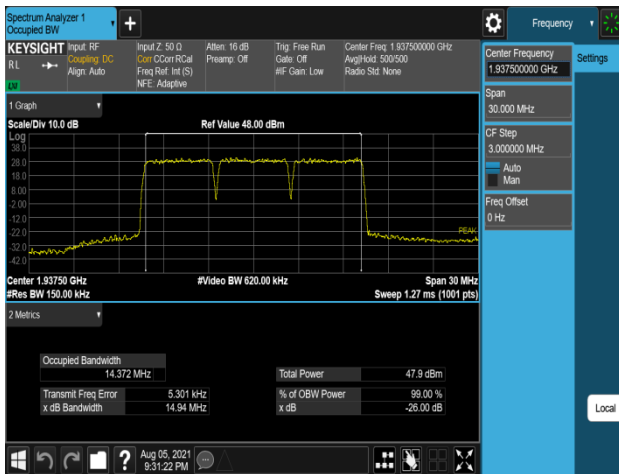
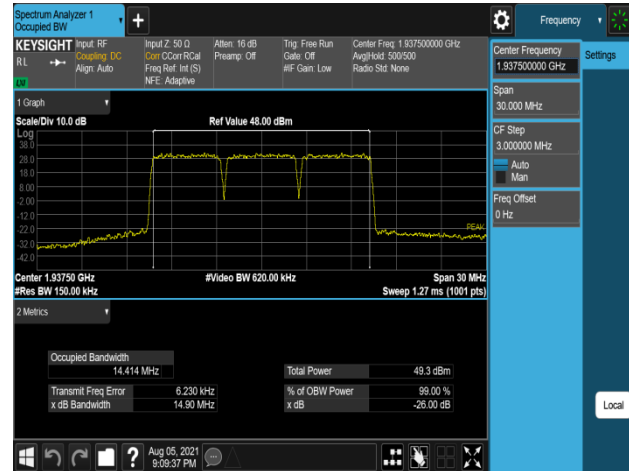
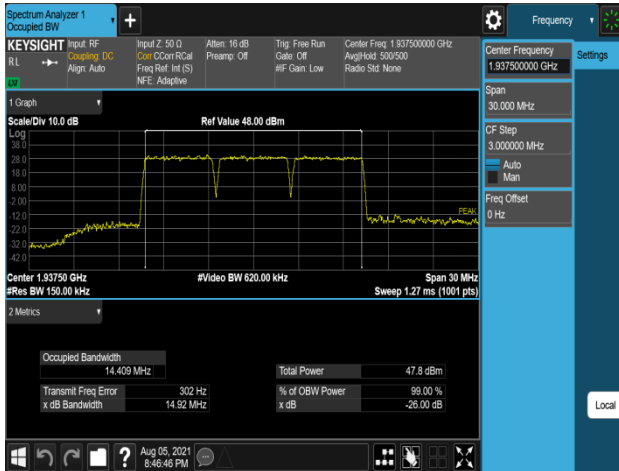
Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	14.38	14.36	14.37	14.38
	1	14.38	14.36	14.37	14.40
	2	14.39	14.38	14.37	14.40
	3	14.41	14.41	14.37	14.39
Middle	0	14.39	14.39	14.38	14.40
	1	14.39	14.39	14.41	14.39
	2	14.38	14.40	14.37	14.40
	3	14.38	14.37	14.38	14.40
High	0	14.39	14.37	14.40	14.41
	1	14.40	14.39	14.40	14.40
	2	14.39	14.37	14.39	14.40
	3	14.40	14.37	14.38	14.38

Table 7-9. Occupied Bandwidth Summary Data (B2_5M+5M+5M_3C)

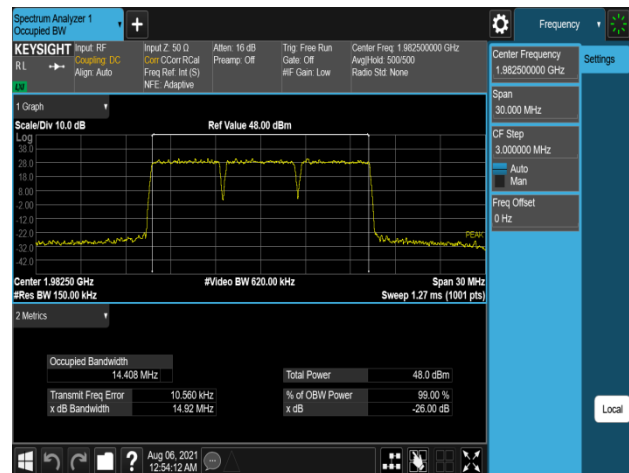
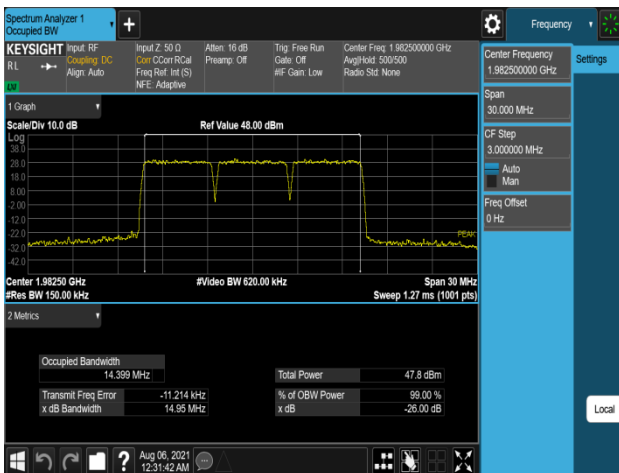
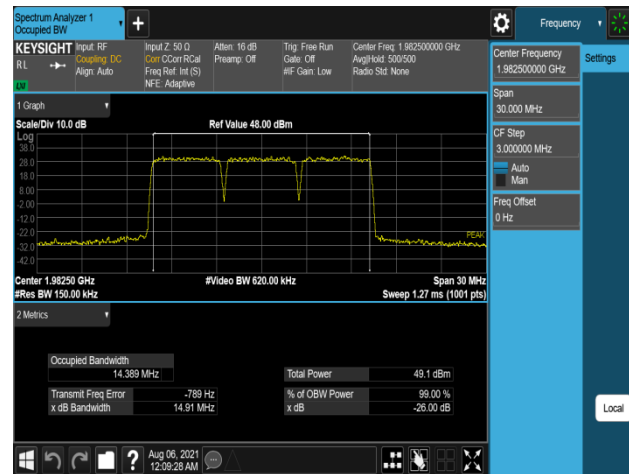
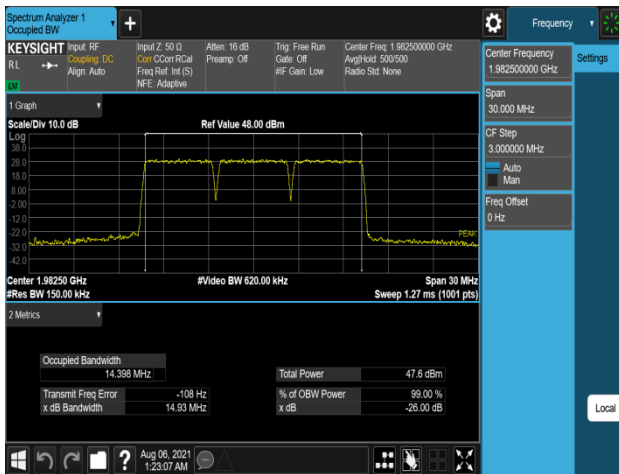
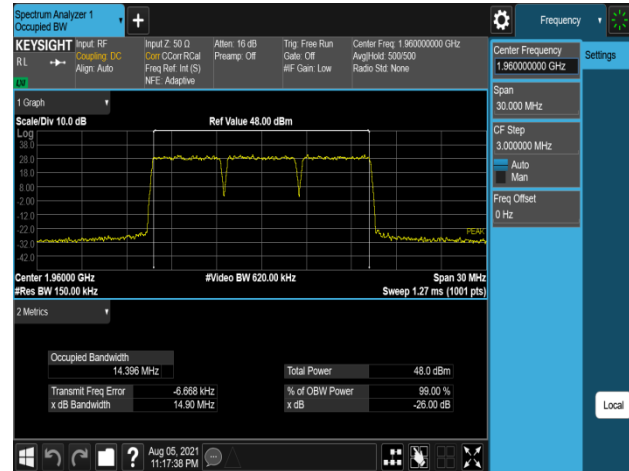
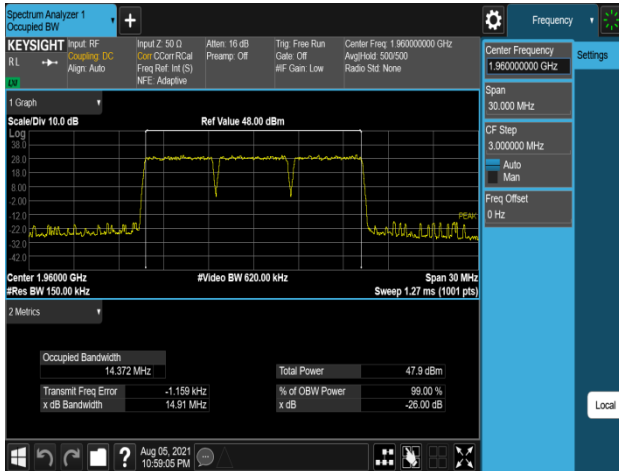
Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	28.58	28.47	28.52	28.56
	1	28.51	28.52	28.51	28.57
	2	28.57	28.46	28.54	28.53
	3	28.56	28.47	28.53	28.54
Middle	0	28.57	28.53	28.56	28.55
	1	28.54	28.49	28.51	28.55
	2	28.55	28.44	28.51	28.56
	3	28.54	28.45	28.54	28.57
High	0	28.53	28.49	28.50	28.53
	1	28.59	28.50	28.53	28.55
	2	28.54	28.47	28.51	28.56
	3	28.57	28.49	28.51	28.54

Table 7-10. Occupied Bandwidth Summary Data (B2_5M+5M+20M_3C)

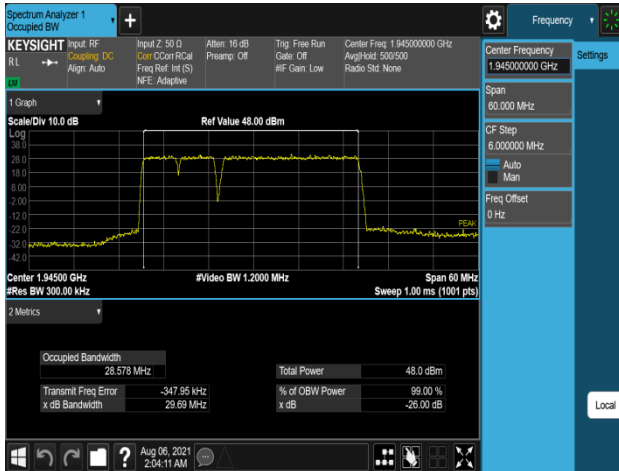
FCC ID: A3LRF4437D-25D		MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 8K21071202-02-R2.A3L	Test Dates: 07/19/2021-08/18/2021	EUT Type: RRU(RF4437d)		Page 35 of 430



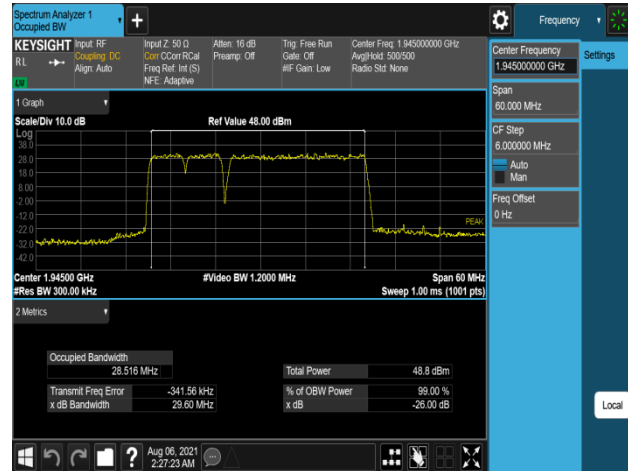
FCC ID: A3LRF4437D-25D	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-02-R2.A3L	Test Dates: 07/19/2021-08/18/2021	EUT Type: RRU(RF4437d)		Page 36 of 430



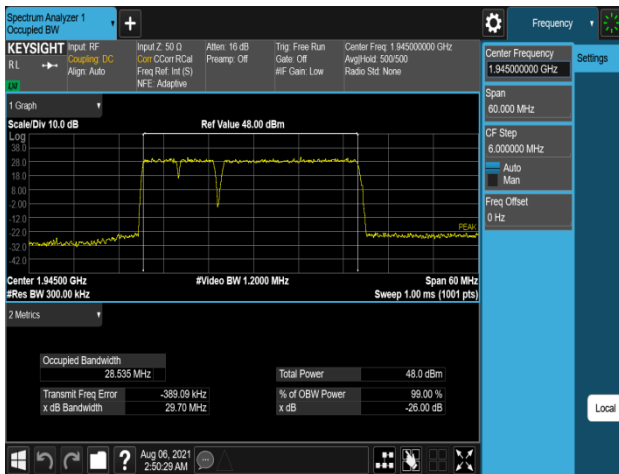
FCC ID: A3LRF4437D-25D	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-02-R2.A3L	Test Dates: 07/19/2021-08/18/2021	EUT Type: RRU(RF4437d)		Page 37 of 430



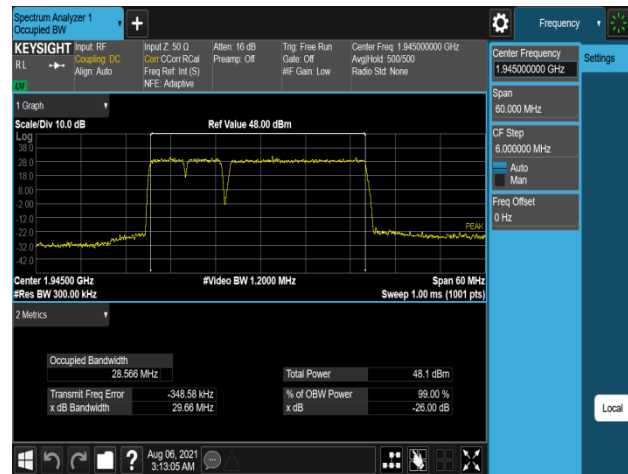
Plot 7-97. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_QPSK - Low Channel, Port 0)



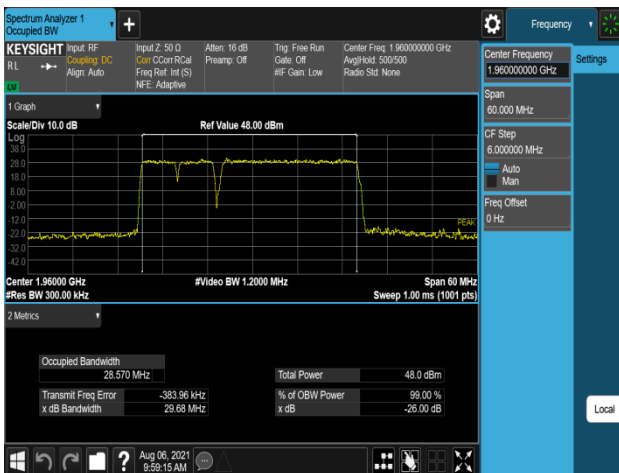
Plot 7-98. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_16QAM - Low Channel, Port 1)



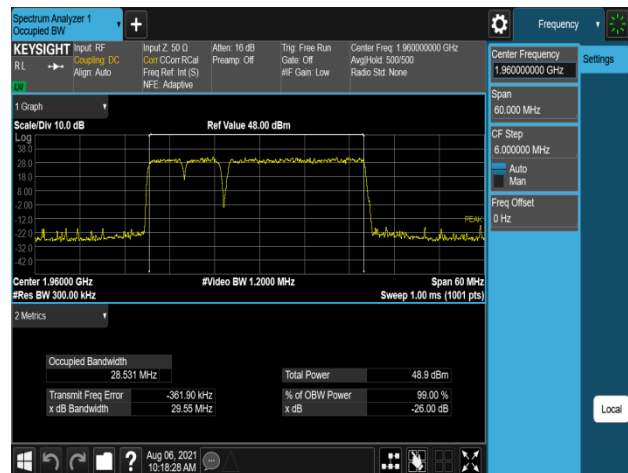
Plot 7-99. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_64QAM - Low Channel, Port 2)



Plot 7-100. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_256QAM - Low Channel, Port 1)



Plot 7-101. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_QPSK - Mid Channel, Port 0)



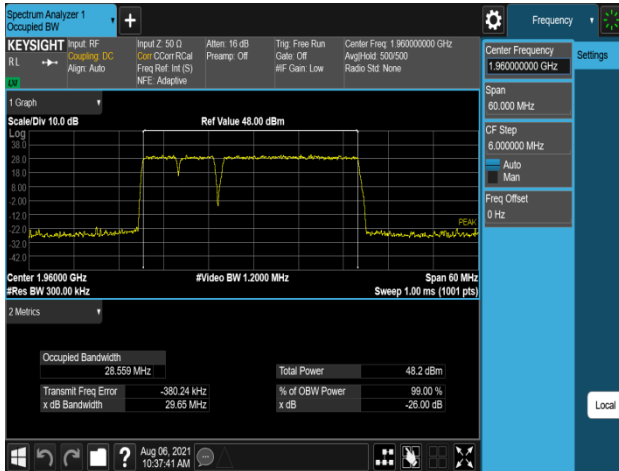
Plot 7-102. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_16QAM - Mid Channel, Port 0)

FCC ID: A3LRF4437D-25D	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-02-R2.A3L	Test Dates: 07/19/2021-08/18/2021	EUT Type: RRU(RF4437d)		Page 38 of 430

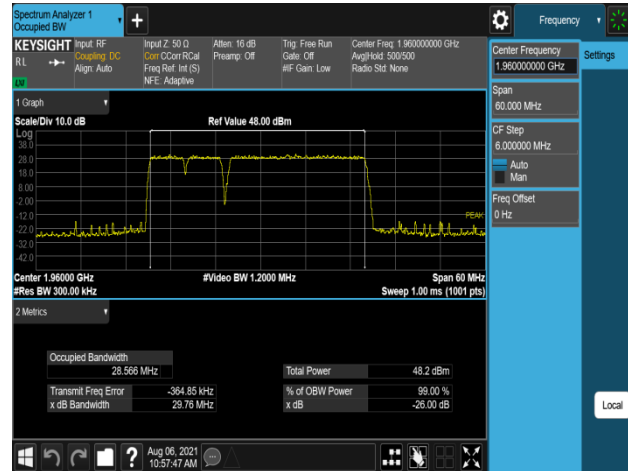
© 2021 PCTEST

All rights reserved. Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from PCTEST Engineering Laboratory, Inc. If you have any questions about this international copyright or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact INFO@PCTEST.COM.

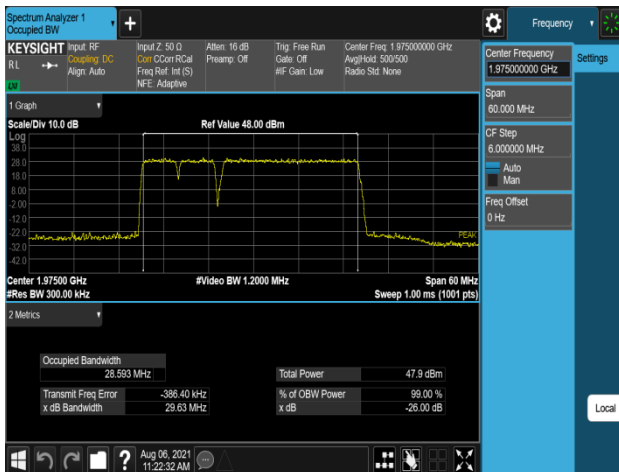
PK-QP-16-14 Rev.01



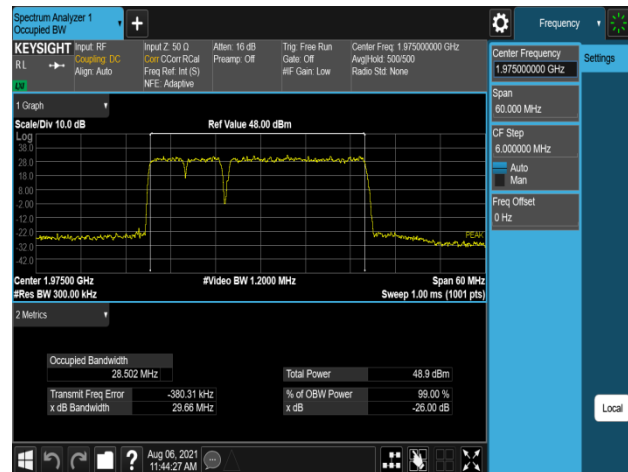
Plot 7-103. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_64QAM - Mid Channel, Port 0)



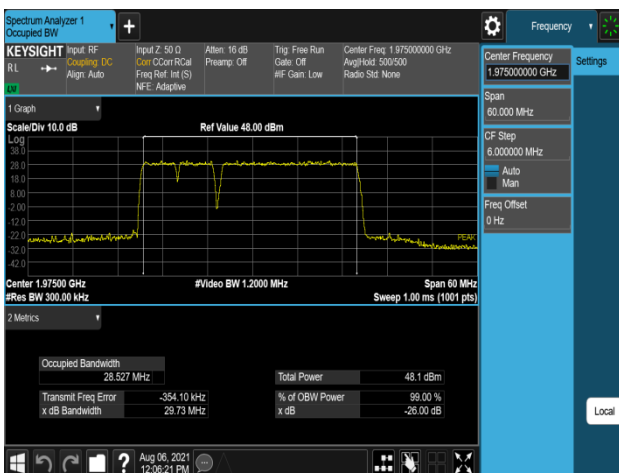
Plot 7-104. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_256QAM – Mid Channel, Port 3)



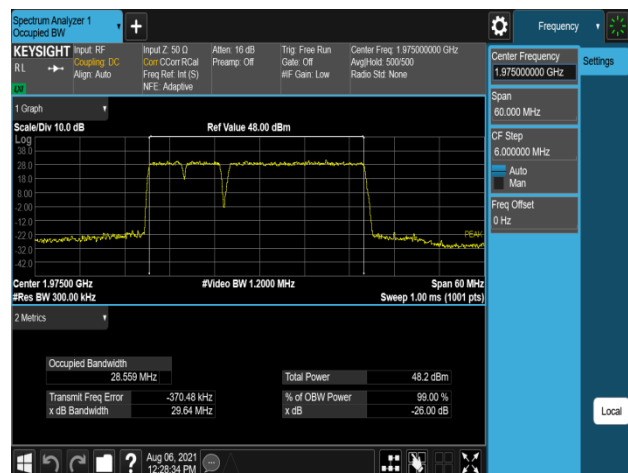
Plot 7-105. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_QPSK - High Channel, Port 1)



Plot 7-106. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_16QAM – High Channel, Port 1)



Plot 7-107. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_64QAM - High Channel, Port 1)



Plot 7-108. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_256QAM – High Channel, Port 2)

FCC ID: A3LRF4437D-25D	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-02-R2.A3L	Test Dates: 07/19/2021-08/18/2021	EUT Type: RRU(RF4437d)		Page 39 of 430

Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	4.47	4.47	4.47	4.47
	1	4.47	4.47	4.48	4.48
	2	4.47	4.46	4.48	4.48
	3	4.46	4.46	4.48	4.47
Middle	0	4.47	4.47	4.48	4.48
	1	4.47	4.47	4.48	4.48
	2	4.47	4.47	4.48	4.48
	3	4.47	4.47	4.49	4.48
High	0	4.47	4.47	4.49	4.48
	1	4.47	4.47	4.49	4.48
	2	4.48	4.48	4.49	4.48
	3	4.47	4.47	4.49	4.48

Table 7-11. Occupied Bandwidth Summary Data (B66_5M_1C)

Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	8.95	8.95	8.93	8.94
	1	8.96	8.94	8.96	8.95
	2	8.96	8.95	8.95	8.96
	3	8.94	8.96	8.96	8.93
Middle	0	8.95	8.96	8.97	8.95
	1	8.96	8.98	8.97	8.96
	2	8.96	8.97	8.96	8.97
	3	8.97	8.97	8.99	8.95
High	0	8.95	8.97	8.97	8.95
	1	8.95	8.97	8.97	8.96
	2	8.96	8.97	8.97	8.95
	3	8.97	8.96	8.98	8.96

Table 7-12. Occupied Bandwidth Summary Data (B66_10M_1C)

FCC ID: A3LRF4437D-25D		MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 8K21071202-02-R2.A3L	Test Dates: 07/19/2021-08/18/2021	EUT Type: RRU(RF4437d)		Page 40 of 430

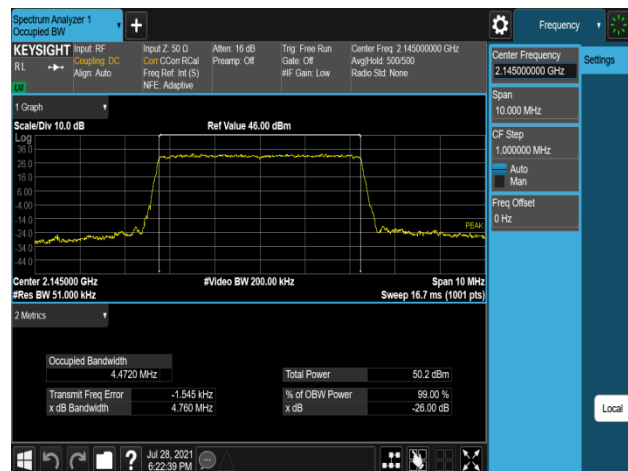
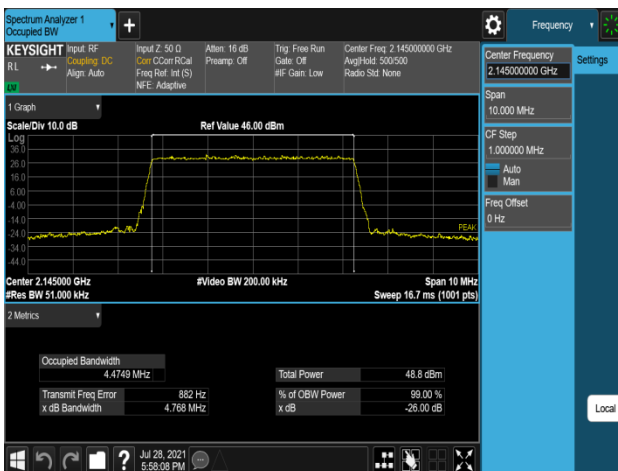
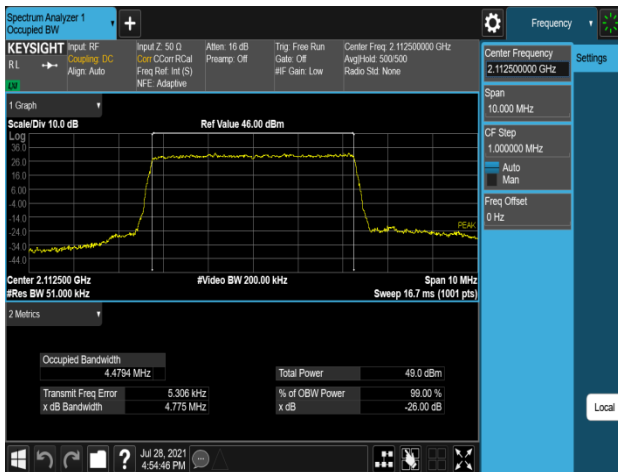
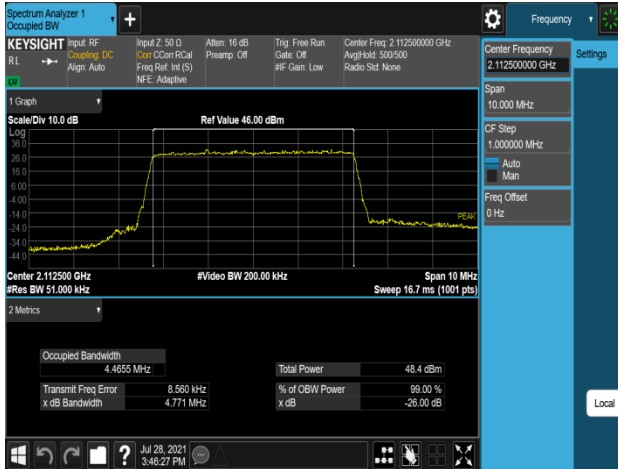
Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	13.42	13.41	13.40	13.40
	1	13.43	13.42	13.42	13.44
	2	13.42	13.44	13.42	13.40
	3	13.40	13.42	13.39	13.42
Middle	0	13.43	13.43	13.44	13.44
	1	13.42	13.43	13.44	13.46
	2	13.42	13.42	13.45	13.43
	3	13.43	13.43	13.45	13.41
High	0	13.44	13.44	13.44	13.43
	1	13.42	13.44	13.43	13.43
	2	13.42	13.43	13.42	13.46
	3	13.44	13.43	13.42	13.42

Table 7-13. Occupied Bandwidth Summary Data (B66_15M_1C)

Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	17.86	17.89	17.87	17.83
	1	17.83	17.90	17.89	17.88
	2	17.88	17.94	17.89	17.89
	3	17.89	17.90	17.88	17.87
Middle	0	17.86	17.88	17.87	17.87
	1	17.87	17.91	17.94	17.87
	2	17.86	17.88	17.88	17.88
	3	17.89	17.92	17.89	17.86
High	0	17.84	17.92	17.88	17.90
	1	17.87	17.88	17.92	17.86
	2	17.88	17.91	17.91	17.88
	3	17.84	17.91	17.89	17.88

Table 7-14. Occupied Bandwidth Summary Data (B66_20M_1C)

FCC ID: A3LRF4437D-25D		MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 8K21071202-02-R2.A3L	Test Dates: 07/19/2021-08/18/2021	EUT Type: RRU(RF4437d)		Page 41 of 430



FCC ID: A3LRF4437D-25D	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-02-R2.A3L	Test Dates: 07/19/2021-08/18/2021	EUT Type: RRU(RF4437d)		Page 42 of 430