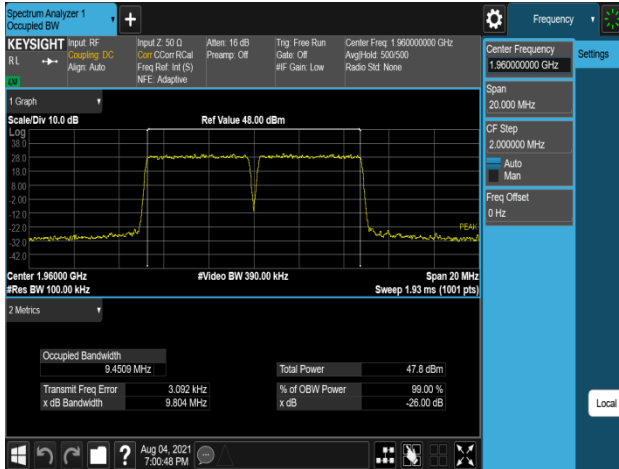
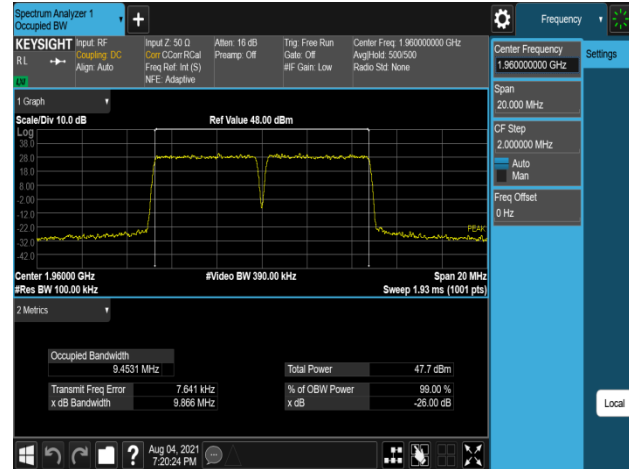
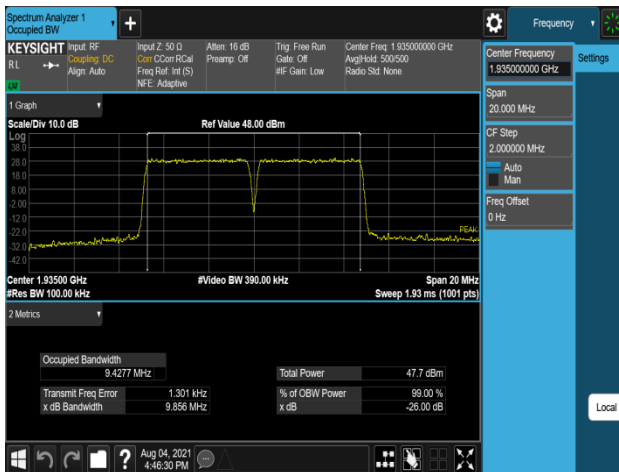




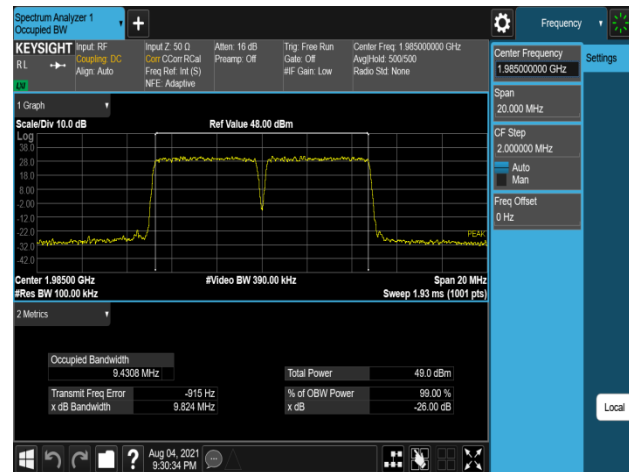
Plot 7-55. Occupied Bandwidth Plot
(B2_5M+5M_2C_64QAM - Mid Channel, Port 1)



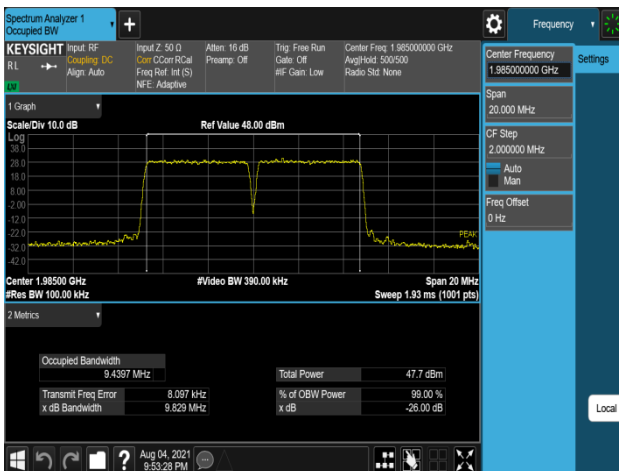
Plot 7-56. Occupied Bandwidth Plot
(B2_5M+5M_2C_256QAM - Mid Channel, Port 0)



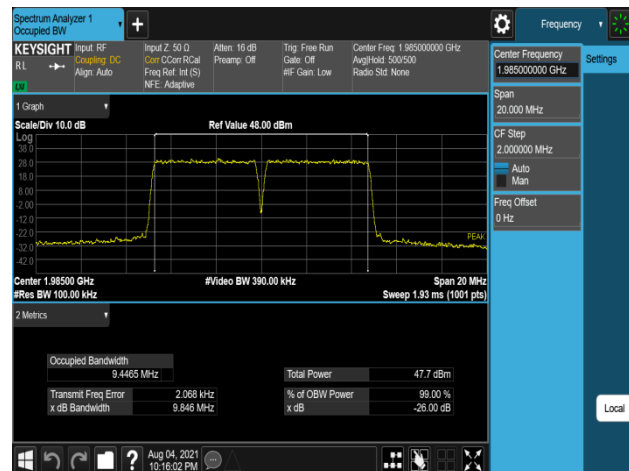
Plot 7-57. Occupied Bandwidth Plot
(B2_5M+5M_2C_QPSK - High Channel, Port 2)



Plot 7-58. Occupied Bandwidth Plot
(B2_5M+5M_2C_16QAM - High Channel, Port 1)

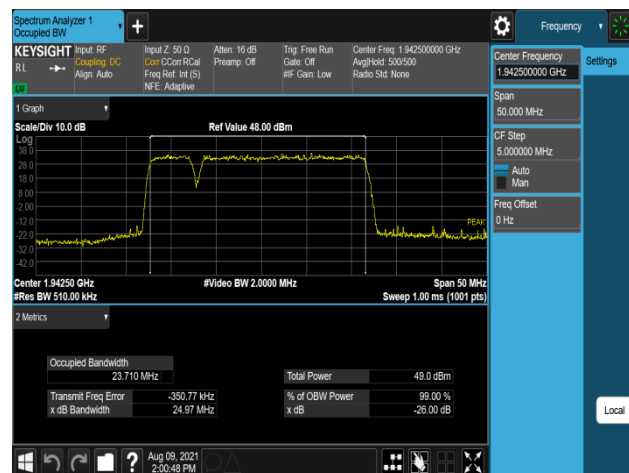
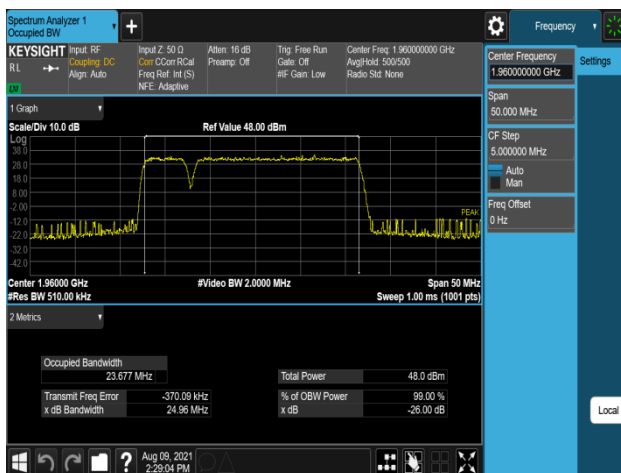
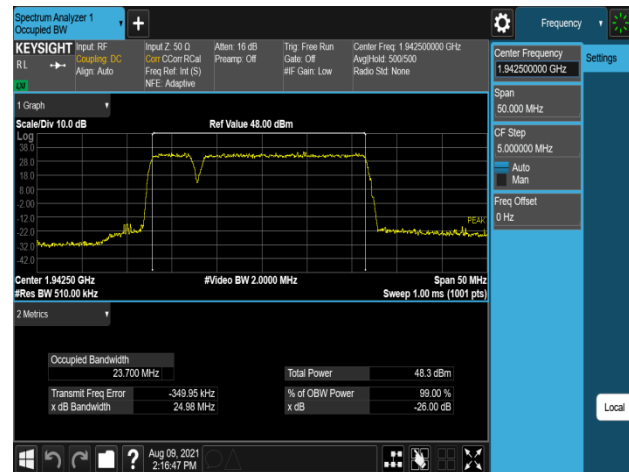
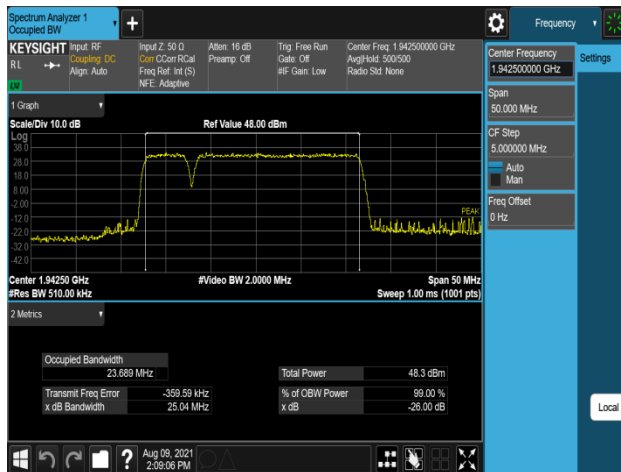
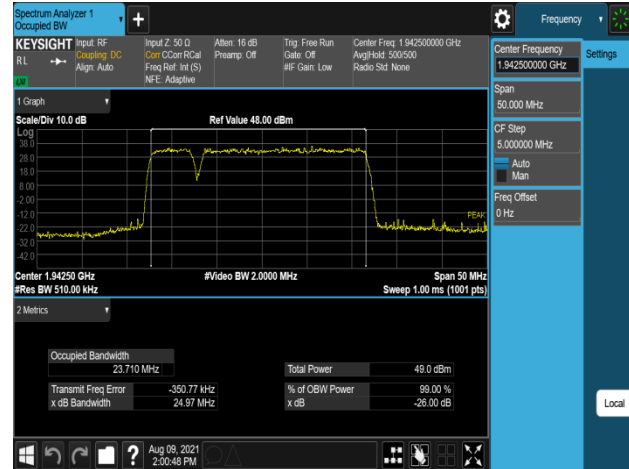
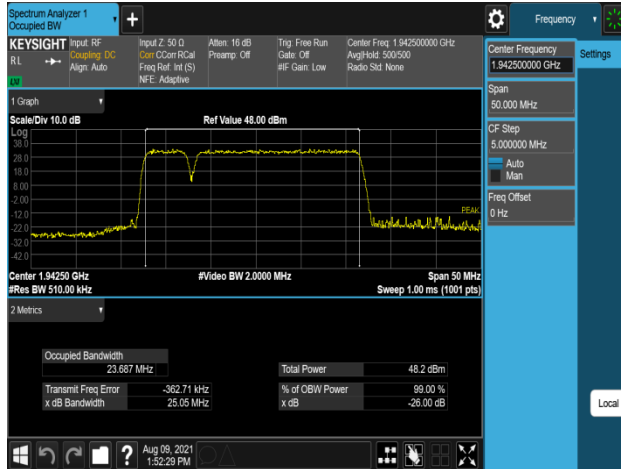


Plot 7-59. Occupied Bandwidth Plot
(B2_5M+5M_2C_64QAM - High Channel, Port 0)

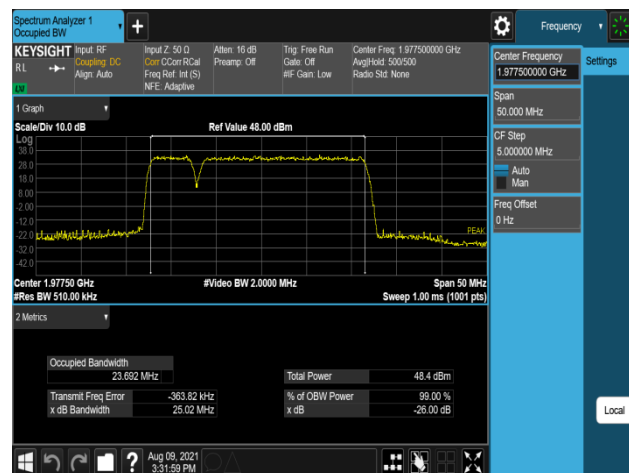
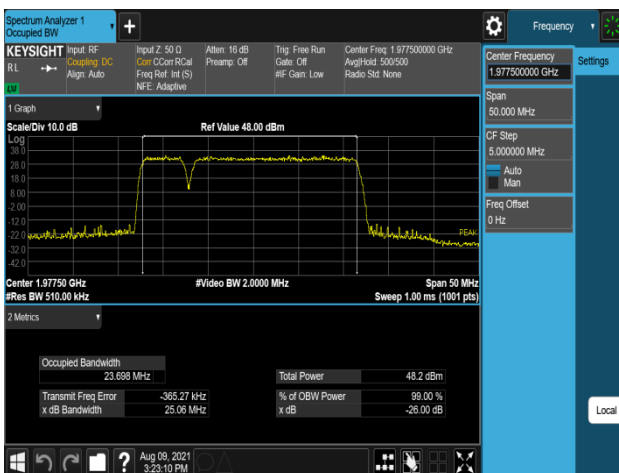
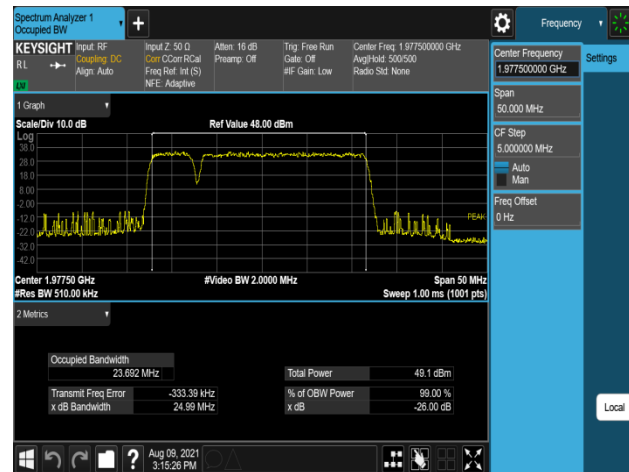
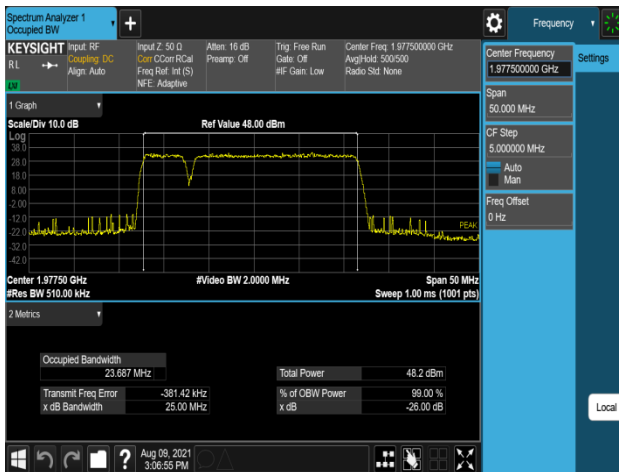
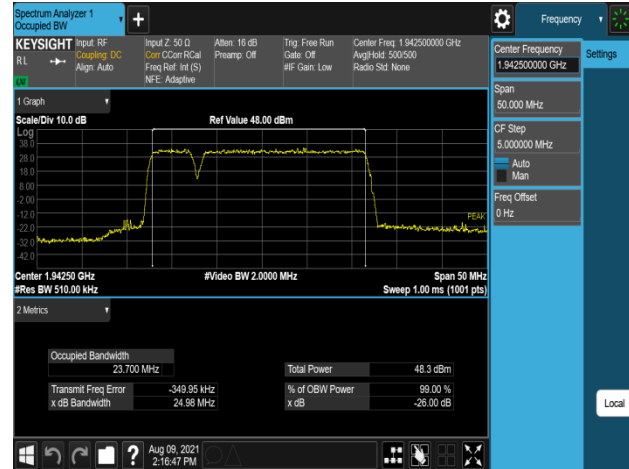
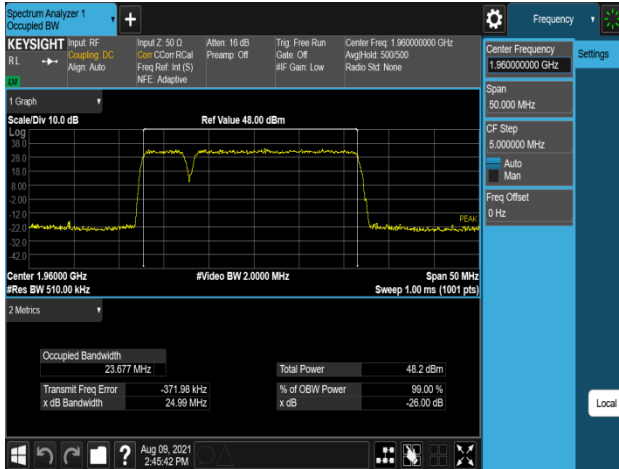


Plot 7-60. Occupied Bandwidth Plot
(B2_5M+5M_2C_256QAM - High Channel, Port 0)

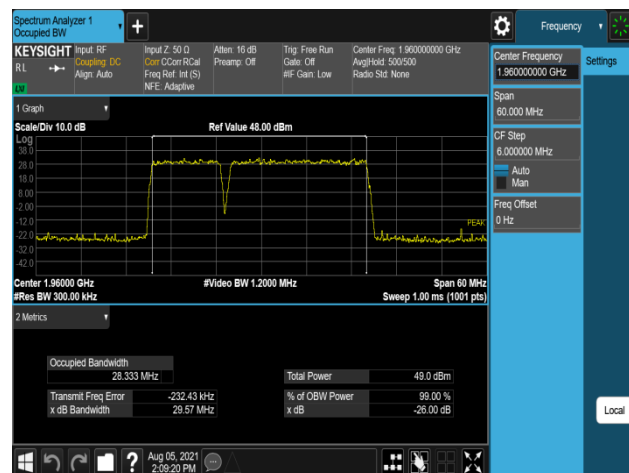
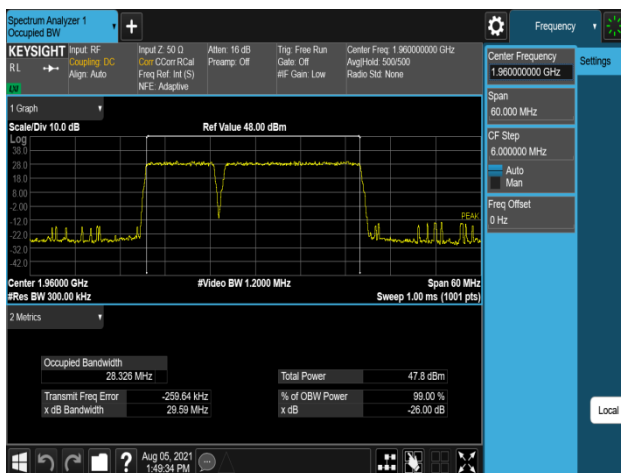
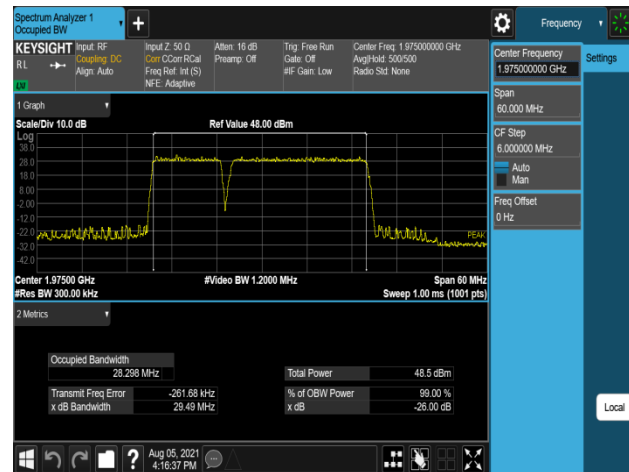
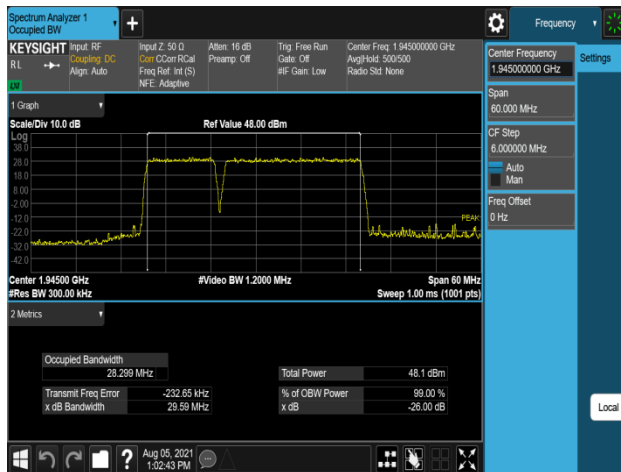
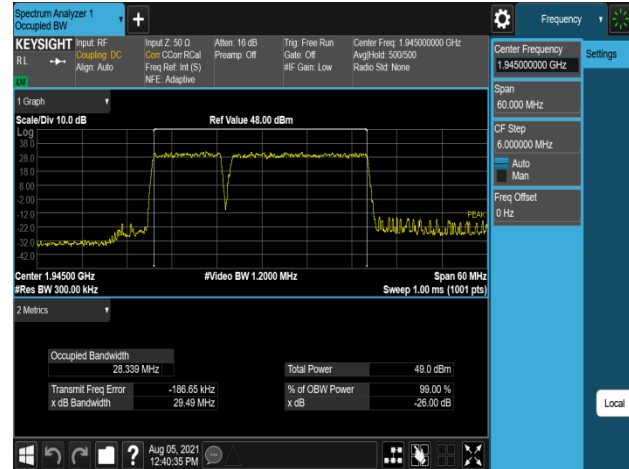
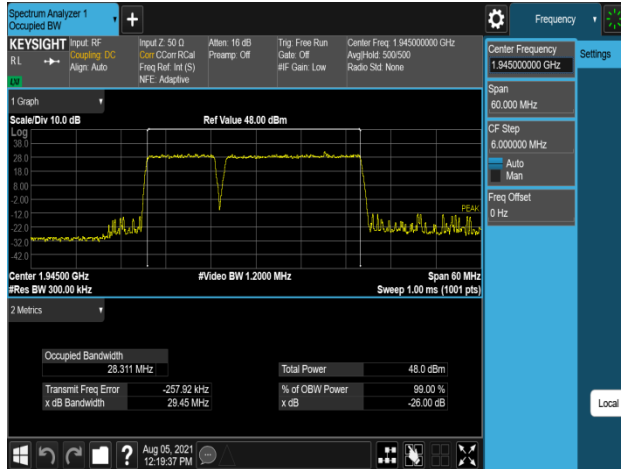
FCC ID: A3LRF4437D-25C	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-R2.A3L	Test Dates: 07/19/2021-08/13/2021	EUT Type: RRU(RF4437d)		Page 30 of 420



FCC ID: A3LRF4437D-25C	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-R2.A3L	Test Dates: 07/19/2021-08/13/2021	EUT Type: RRU(RF4437d)		Page 31 of 420



FCC ID: A3LRF4437D-25C	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-R2.A3L	Test Dates: 07/19/2021-08/13/2021	EUT Type: RRU(RF4437d)		Page 32 of 420

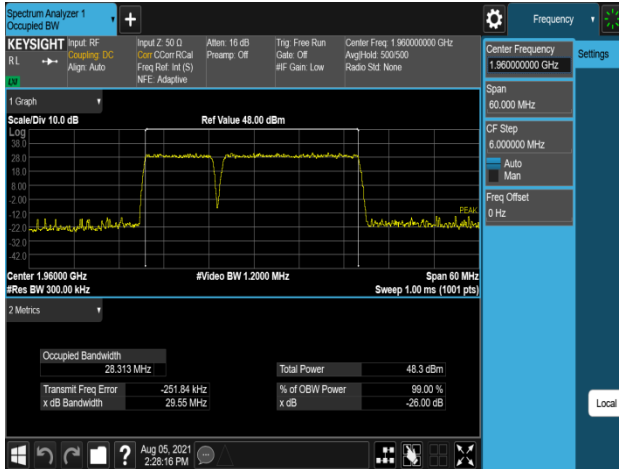


FCC ID: A3LRF4437D-25C	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-R2.A3L	Test Dates: 07/19/2021-08/13/2021	EUT Type: RRU(RF4437d)		Page 33 of 420

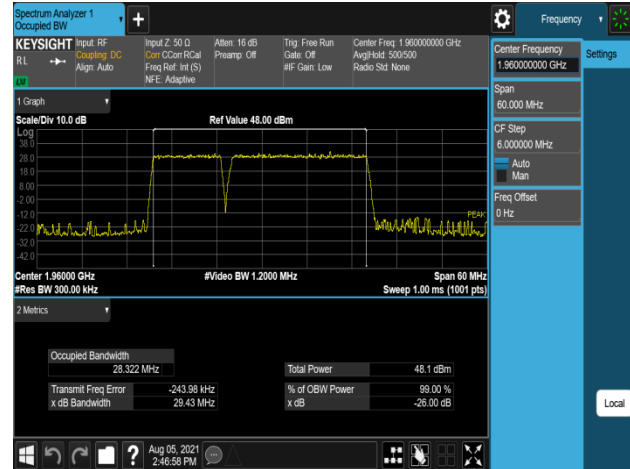
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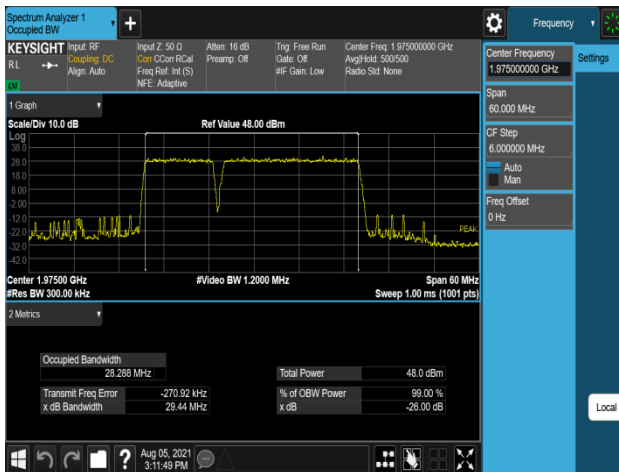
PK-QP-16-14 Rev.01



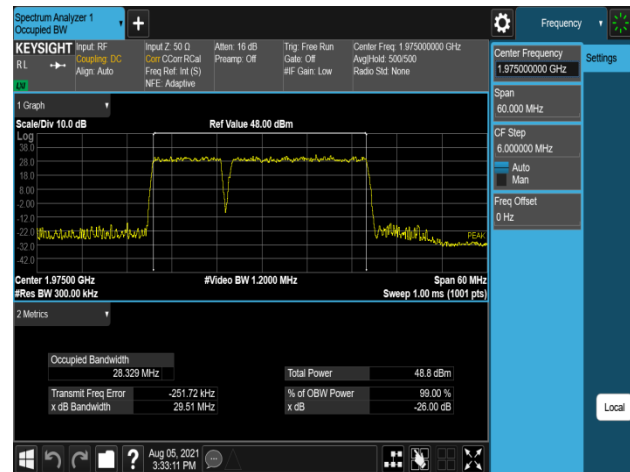
Plot 7-79. Occupied Bandwidth Plot
(B2_10M+20M_2C_64QAM - Mid Channel, Port 2)



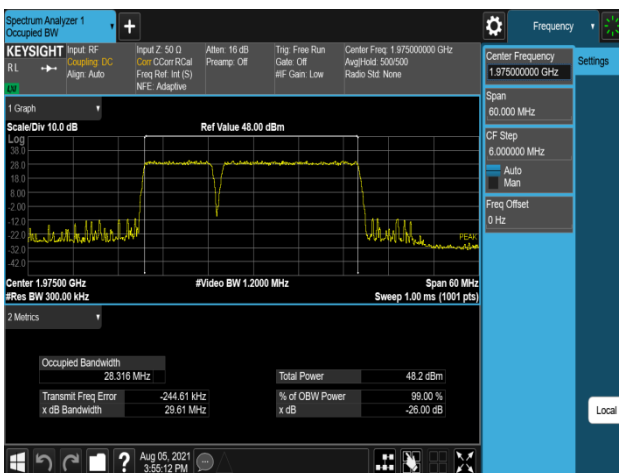
Plot 7-80. Occupied Bandwidth Plot
(B2_10M+20M_2C_256QAM – Mid Channel, Port 0)



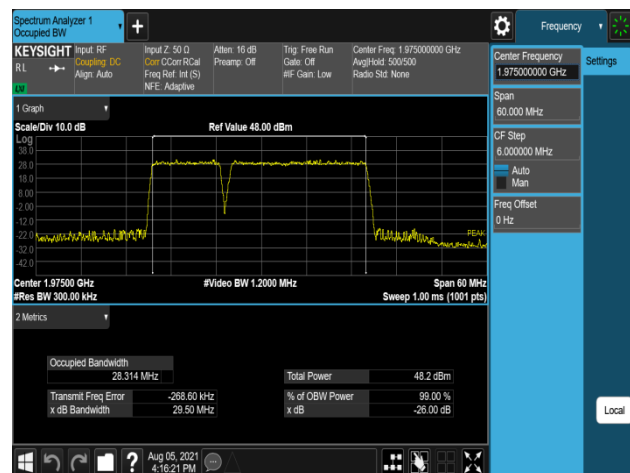
Plot 7-81. Occupied Bandwidth Plot
(B2_10M+20M_2C_QPSK - High Channel, Port 1)



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-25C	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-R2.A3L	Test Dates: 07/19/2021-08/13/2021	EUT Type: RRU(RF4437d)		Page 34 of 420

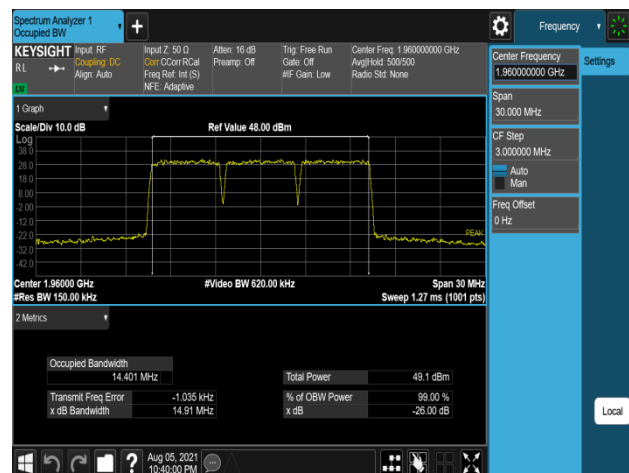
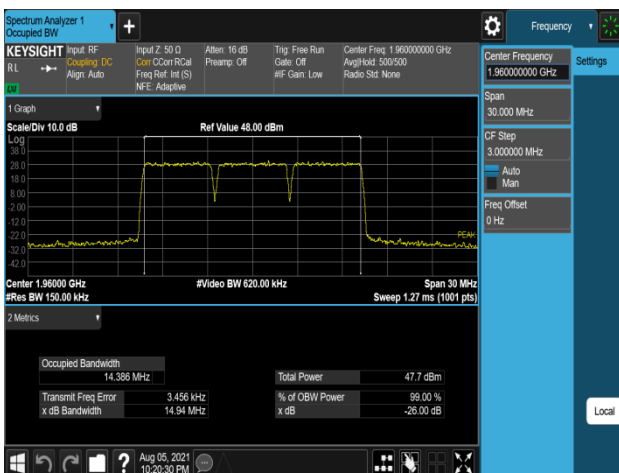
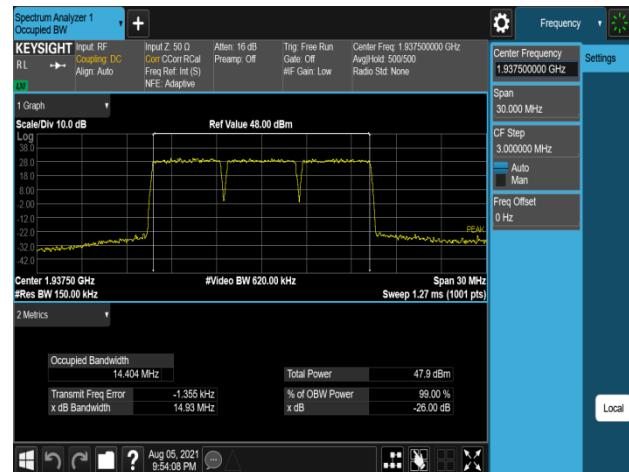
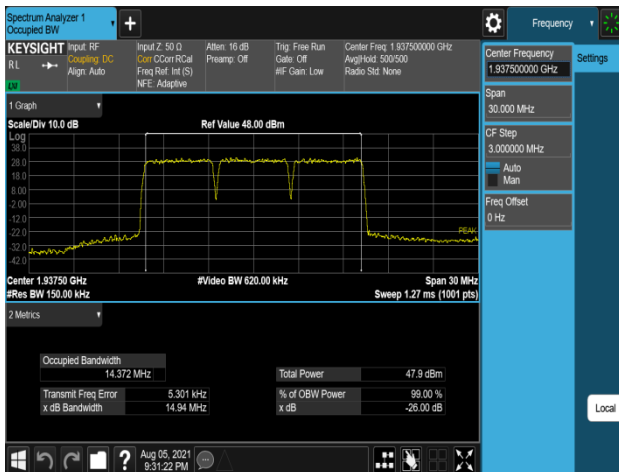
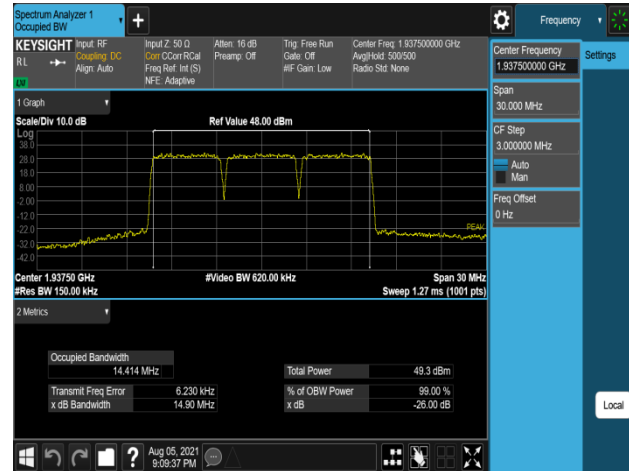
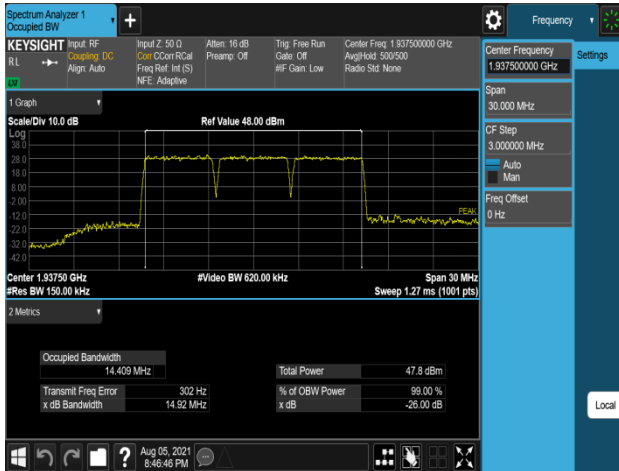
Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	14.38	14.36	14.37	14.38
	1	14.38	14.36	14.37	14.40
	2	14.39	14.38	14.37	14.40
	3	14.41	14.41	14.37	14.39
Middle	0	14.39	14.39	14.38	14.40
	1	14.39	14.39	14.41	14.39
	2	14.38	14.40	14.37	14.40
	3	14.38	14.37	14.38	14.40
High	0	14.39	14.37	14.40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

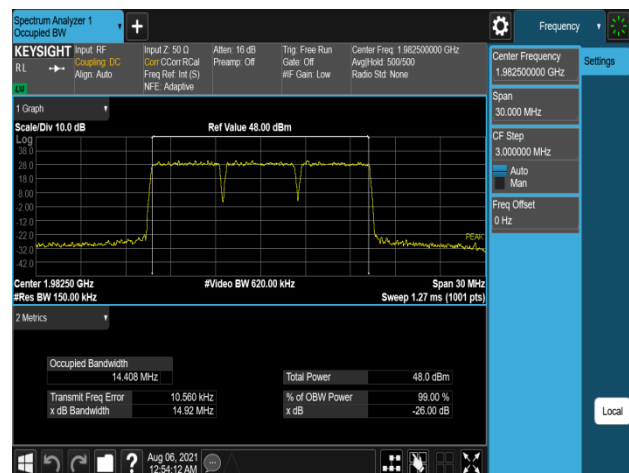
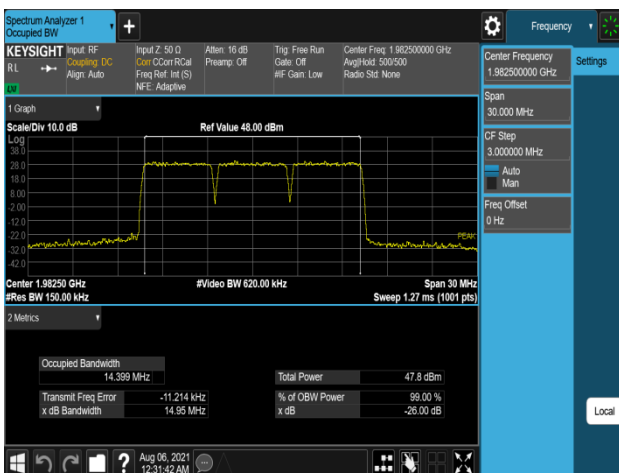
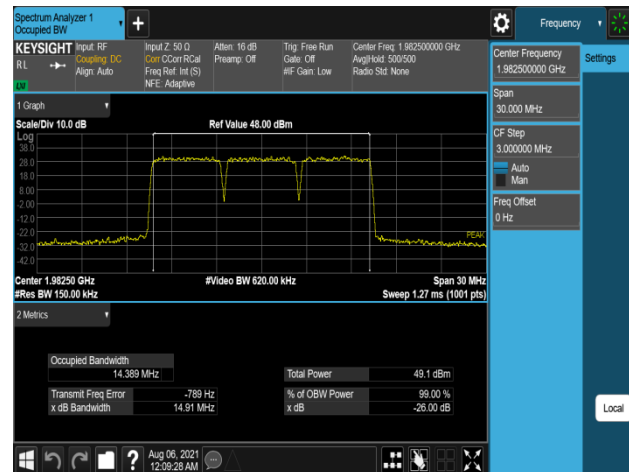
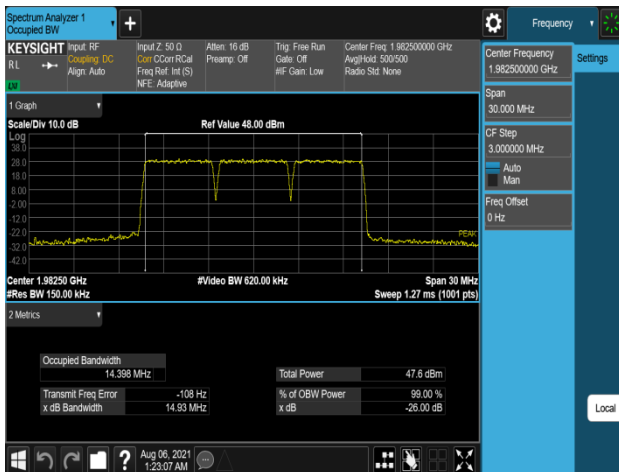
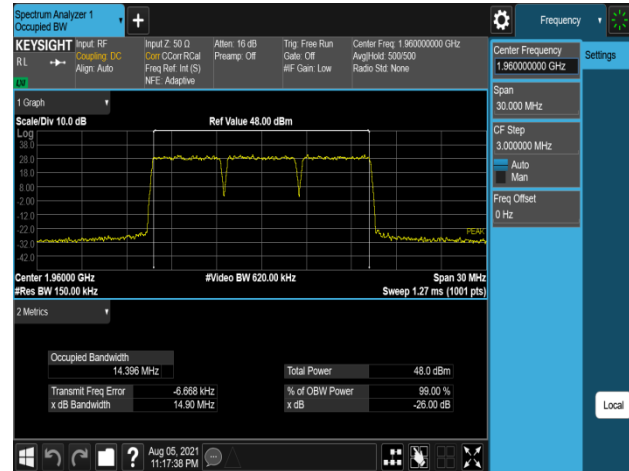
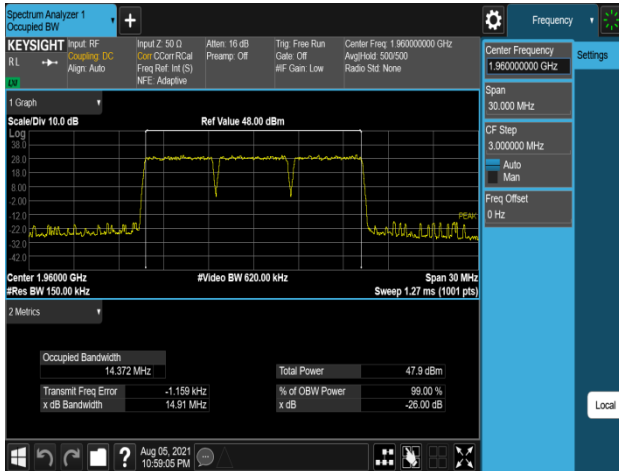
Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	28.58	28.47	28.52	28.56
	1	28.51	28.52	28.51	28.57
	2	28.57	28.46	28.54	28.53
	3	28.56	28.47	28.53	28.54
Middle	0	28.57	28.53	28.56	28.55
	1	28.54	28.49	28.51	28.55
	2	28.55	28.44	28.51	28.56
	3	28.54	28.45	28.54	28.57
High	0	28.53	28.49	28.50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

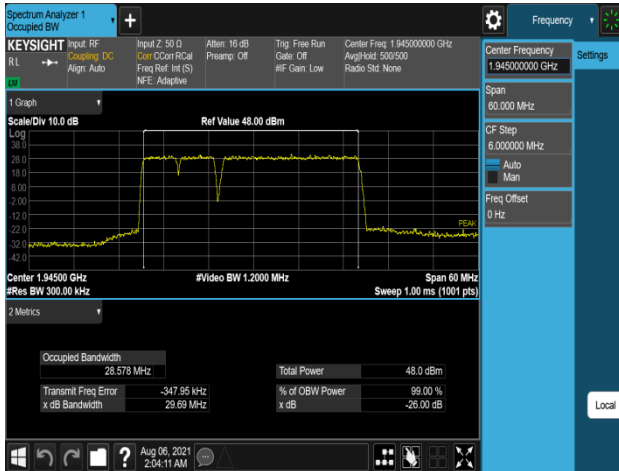
FCC ID: A3LRF4437D-25C		MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 8K21071202-R2.A3L	Test Dates: 07/19/2021-08/13/2021	EUT Type: RRU(RF4437d)		Page 35 of 420



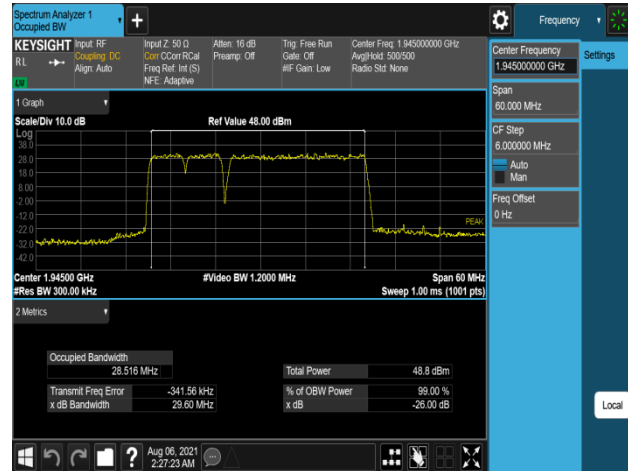
FCC ID: A3LRF4437D-25C	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-R2.A3L	Test Dates: 07/19/2021-08/13/2021	EUT Type: RRU(RF4437d)		Page 36 of 420



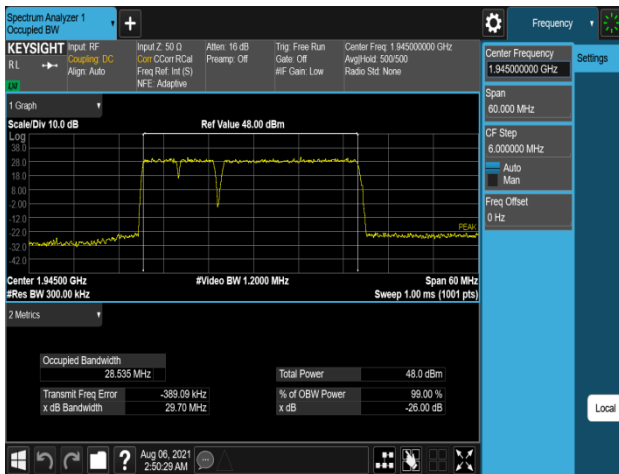
FCC ID: A3LRF4437D-25C	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-R2.A3L	Test Dates: 07/19/2021-08/13/2021	EUT Type: RRU(RF4437d)		Page 37 of 420



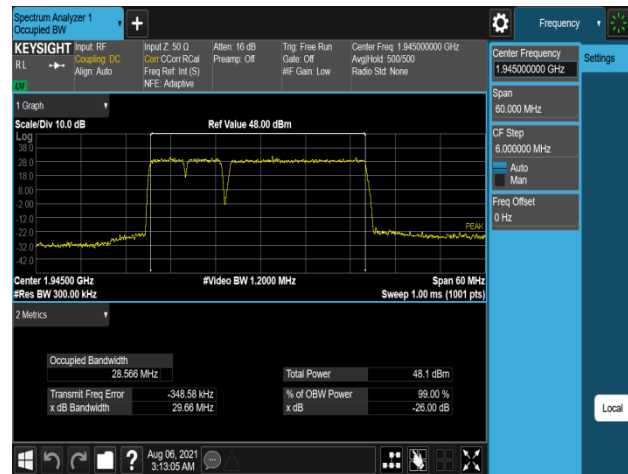
Plot 7-97. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_QPSK - Low Channel, Port 0)



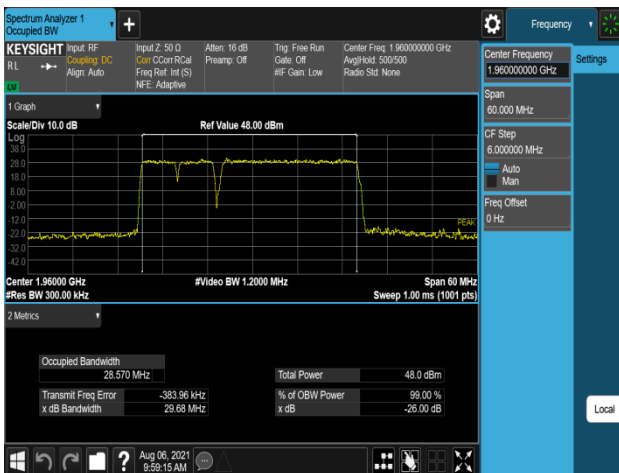
Plot 7-98. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_16QAM - Low Channel, Port 1)



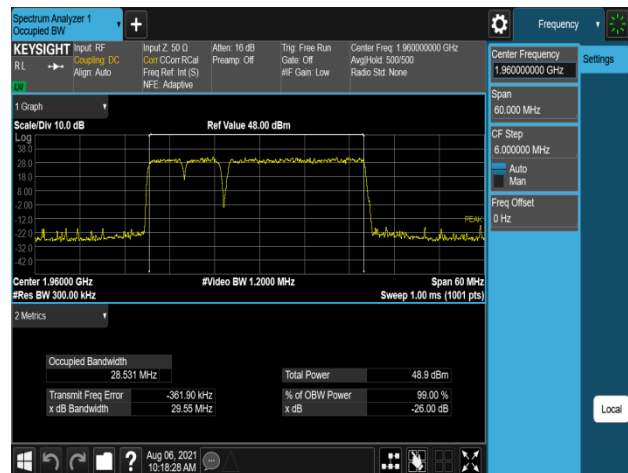
Plot 7-99. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_64QAM - Low Channel, Port 2)



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

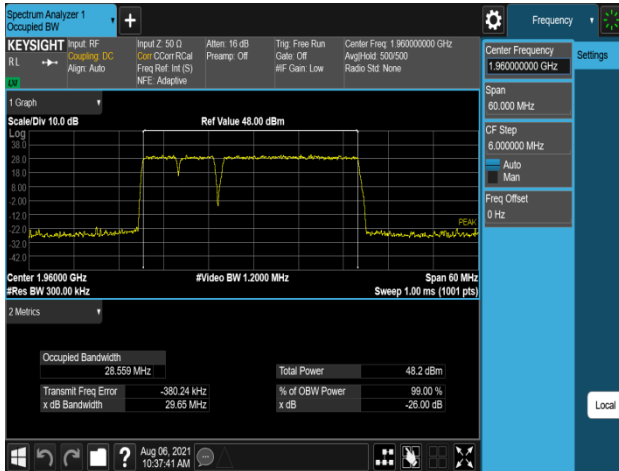


Plot 7-101. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_QPSK - Mid Channel, Port 0)

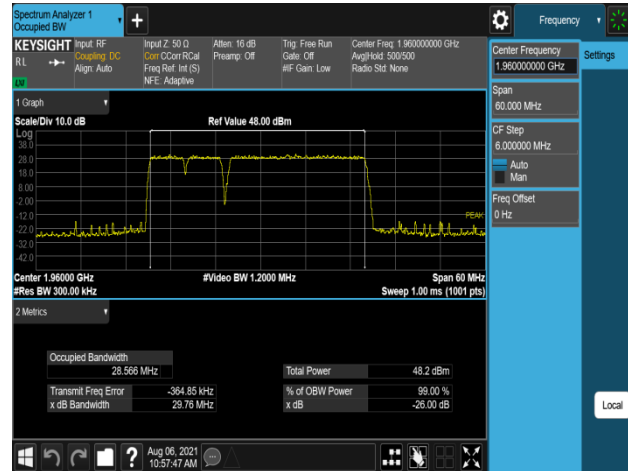


Plot 7-102. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_16QAM - Mid Channel, Port 0)

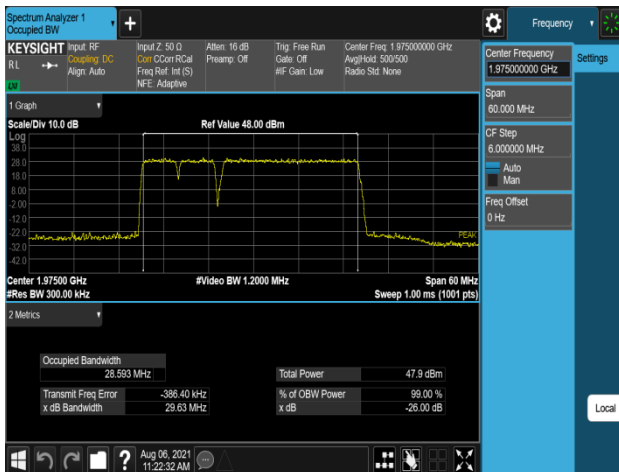
FCC ID: A3LRF4437D-25C	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-R2.A3L	Test Dates: 07/19/2021-08/13/2021	EUT Type: RRU(RF4437d)		Page 38 of 420



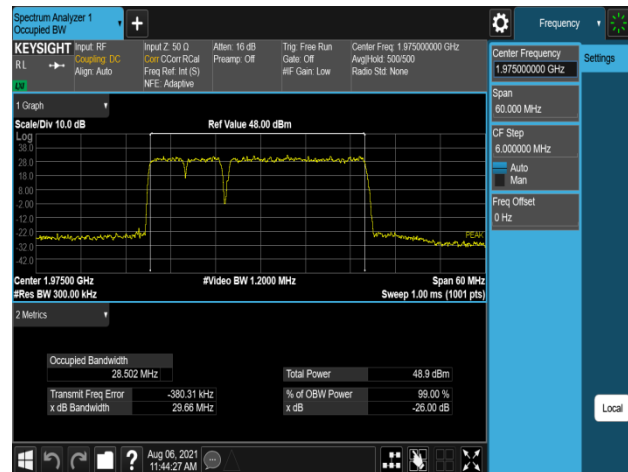
Plot 7-103. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_64QAM - Mid Channel, Port 0)



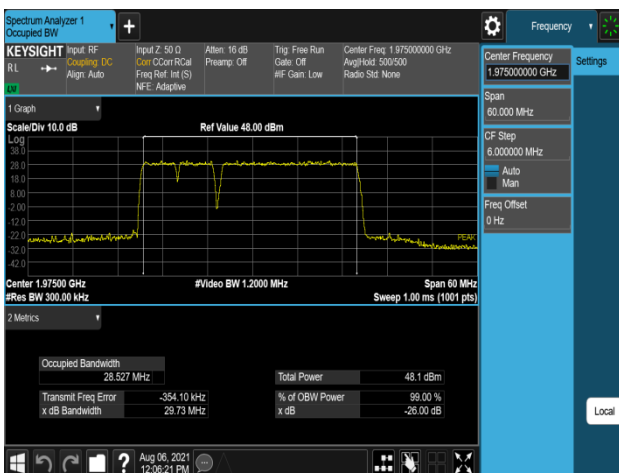
Plot 7-104. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_256QAM – Mid Channel, Port 3)



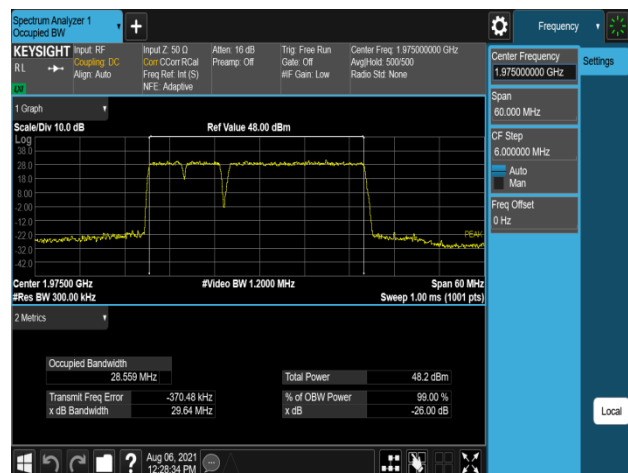
Plot 7-105. Occupied Bandwidth Plot
(B2_5M+5M+20M_3C_QPSK - High Channel, Port 1)



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-25C	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-R2.A3L	Test Dates: 07/19/2021-08/13/2021	EUT Type: RRU(RF4437d)		Page 39 of 420

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-25C		MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 8K21071202-R2.A3L	Test Dates: 07/19/2021-08/13/2021	EUT Type: RRU(RF4437d)		Page 40 of 420

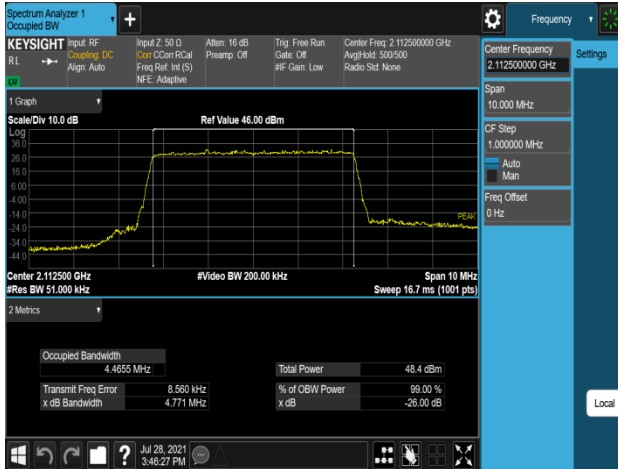
Channel	Port	OBW (MHz)			
		QPSK	16QAM	64QAM	256QAM
Low	0	13.42	13.41	13.40	13.40
	1	13.43	13.42	13.42	13.44
	2	13.42	13.44	13.42	13.40
	3	13.40	13.42	13.39	13.42
Middle	0	13.43	13.43	13.44	13.44
	1	13.42	13.43	13.44	13.46
	2	13.42	13.42	13.45	13.43
	3	13.43	13.43	13.45	13.41
High	0	13.44	13.44	13.44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

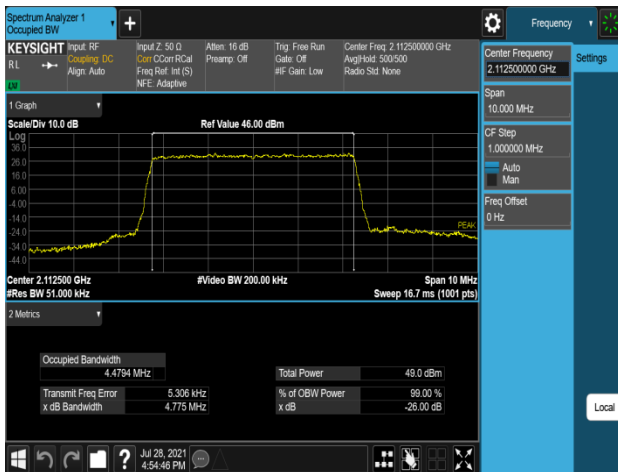
FCC ID: A3LRF4437D-25C		MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 8K21071202-R2.A3L	Test Dates: 07/19/2021-08/13/2021	EUT Type: RRU(RF4437d)		Page 41 of 420



Plot 7-109. Occupied Bandwidth Plot
(B66_5M_1C_QPSK - Low Channel, Port 0)



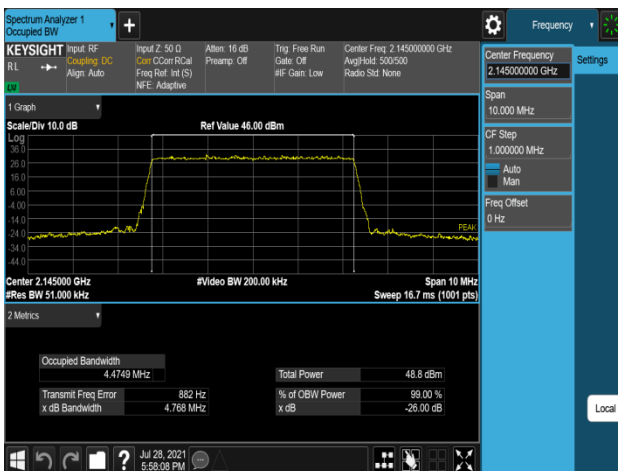
Plot 7-110. Occupied Bandwidth Plot
(B66_5M_1C_16QAM - Low Channel, Port 0)



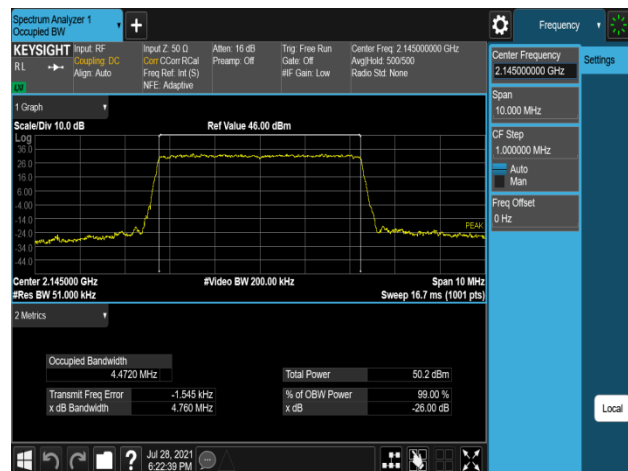
Plot 7-111. Occupied Bandwidth Plot
(B66_5M_1C_64QAM - Low Channel, Port 1)



Plot 7-112. Occupied Bandwidth Plot
(B66_5M_1C_256QAM - Low Channel, Port 1)



Plot 7-113. Occupied Bandwidth Plot
(B66_5M_1C_QPSK - Mid Channel, Port 0)



Plot 7-114. Occupied Bandwidth Plot
(B66_5M_1C_16QAM - Mid Channel, Port 0)

FCC ID: A3LRF4437D-25C	PCTEST ENGINEERING LABORATORY, INC.	MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager
Test Report S/N: 8K21071202-R2.A3L	Test Dates: 07/19/2021-08/13/2021	EUT Type: RRU(RF4437d)		Page 42 of 420