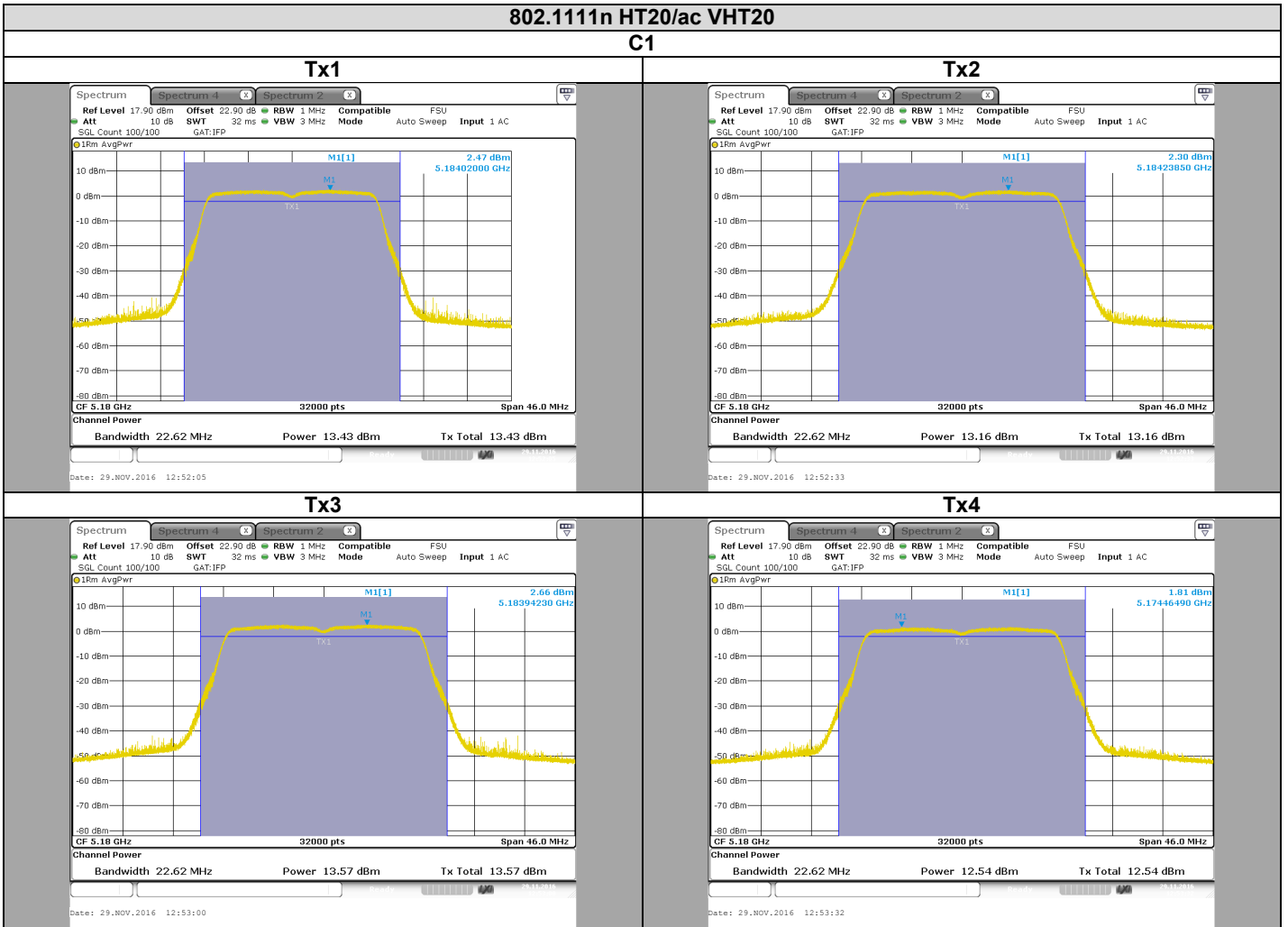


8.5.2. With Beamforming



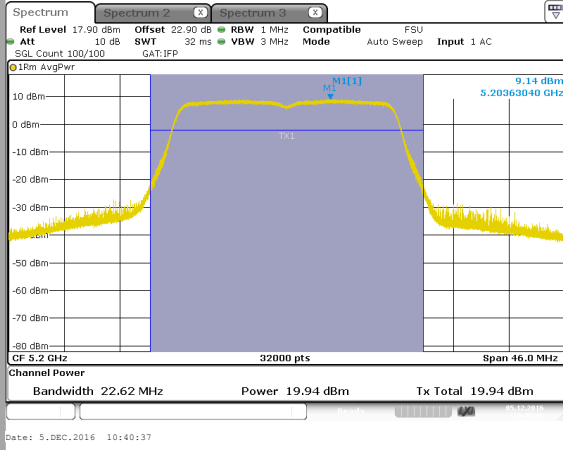


L C I E

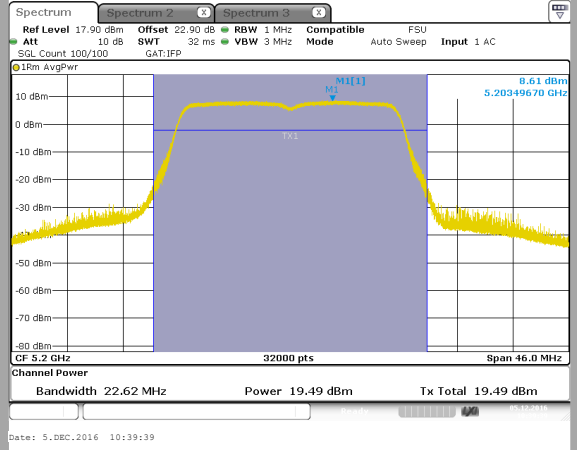
802.1111n HT20/ac VHT20

C2

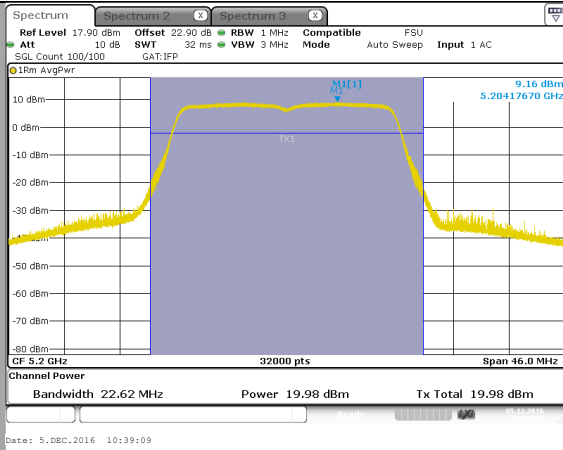
Tx1



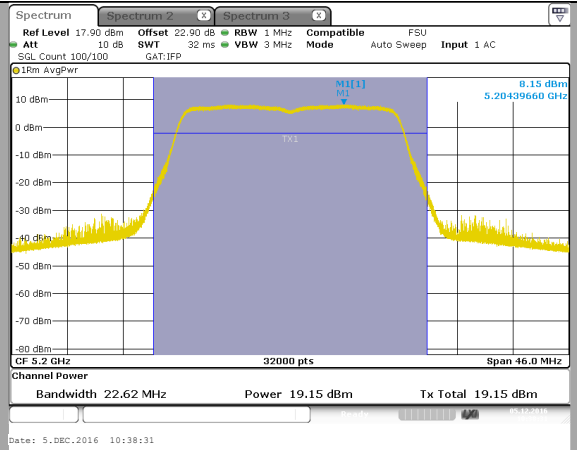
Tx2



Tx3



Tx4



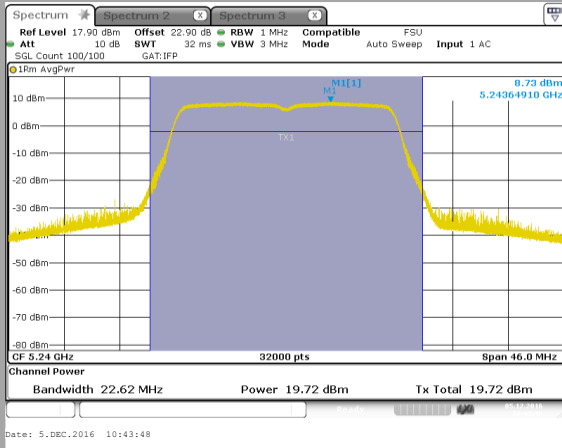


L C I E

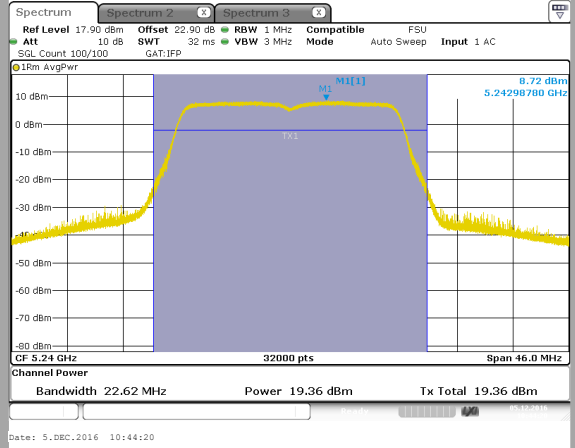
802.1111n HT20/ac VHT20

C3

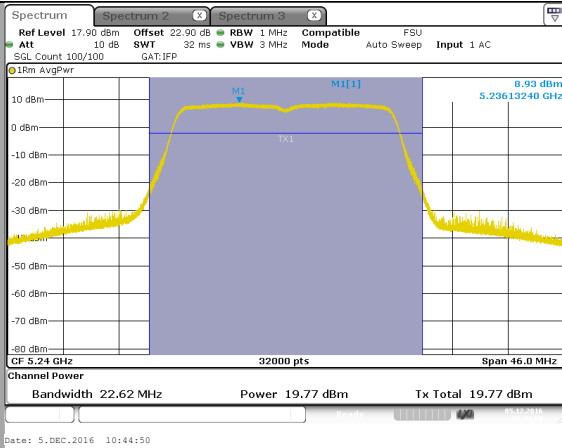
Tx1



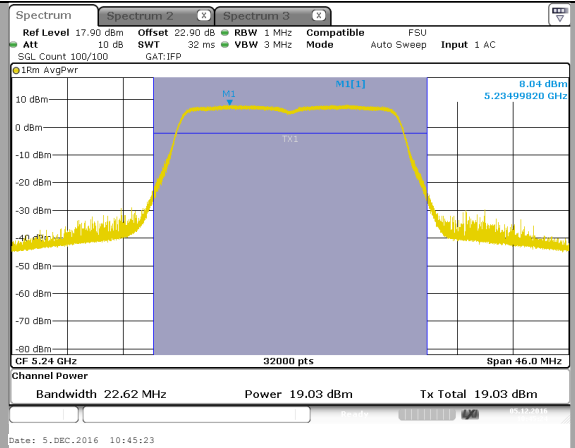
Tx2



Tx3



Tx4



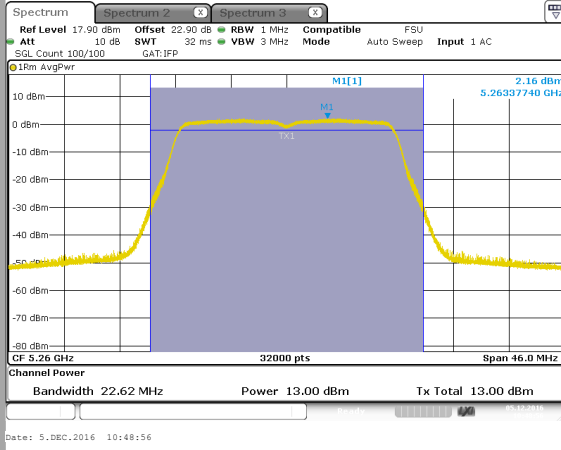


L C I E

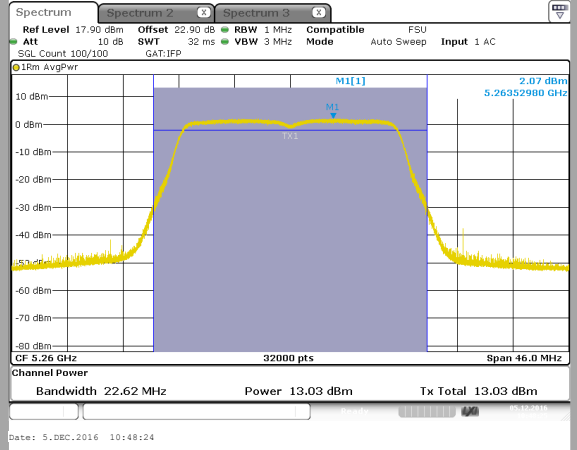
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C4

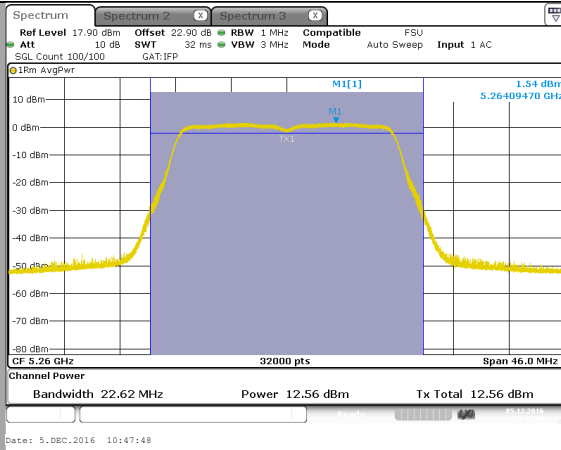
Tx1



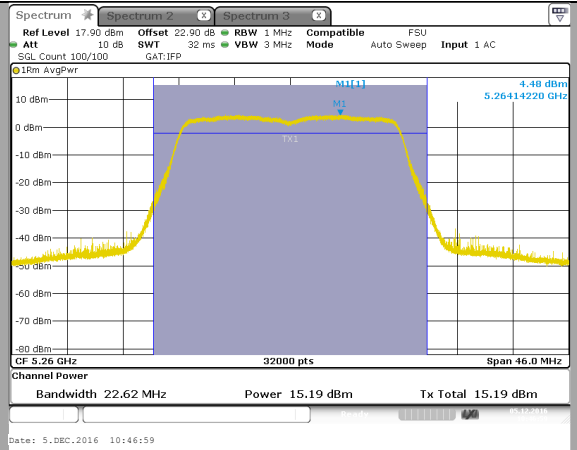
Tx2



Tx3



Tx4



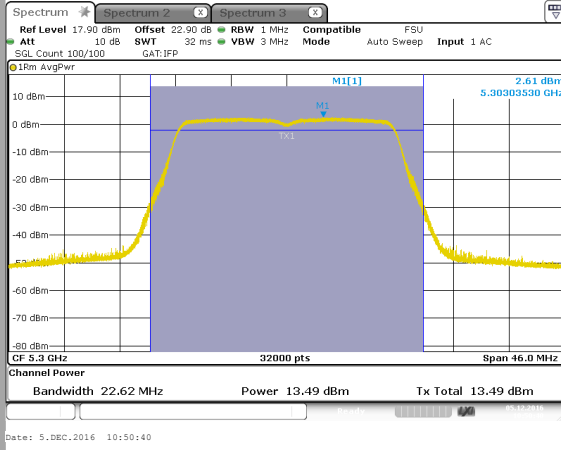


L C I E

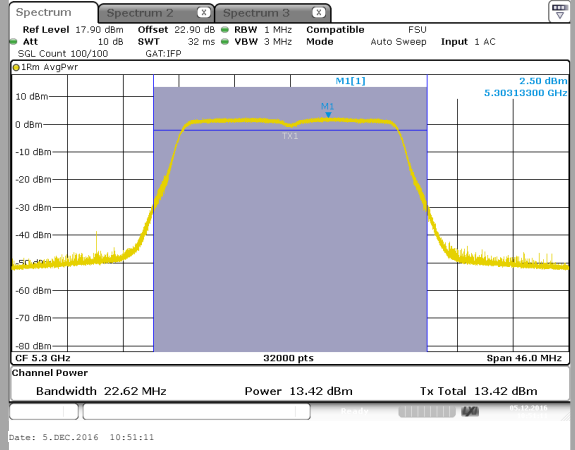
802.1111n HT20/ac VHT20

C5

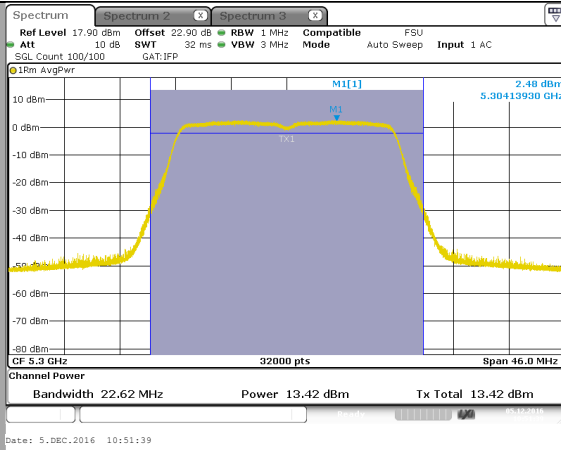
Tx1



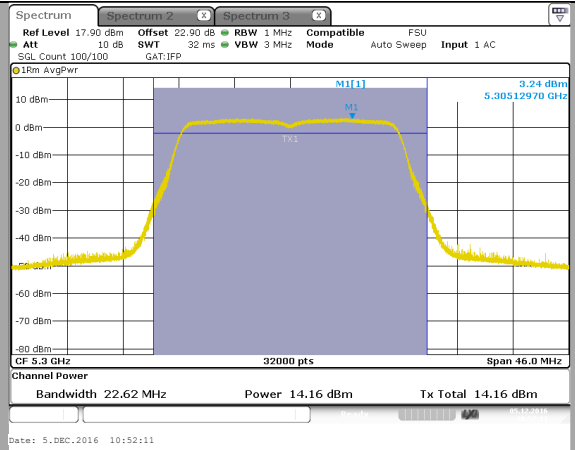
Tx2



Tx3



Tx4



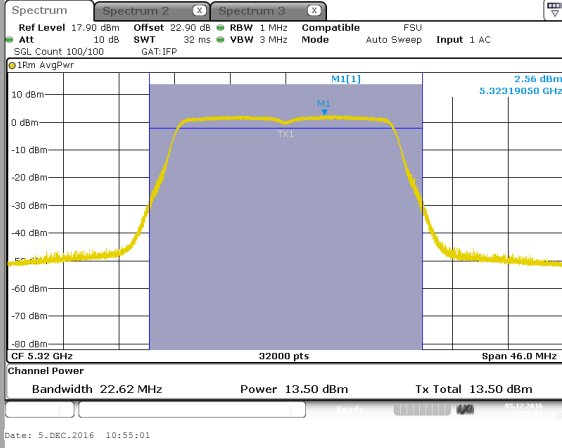


L C I E

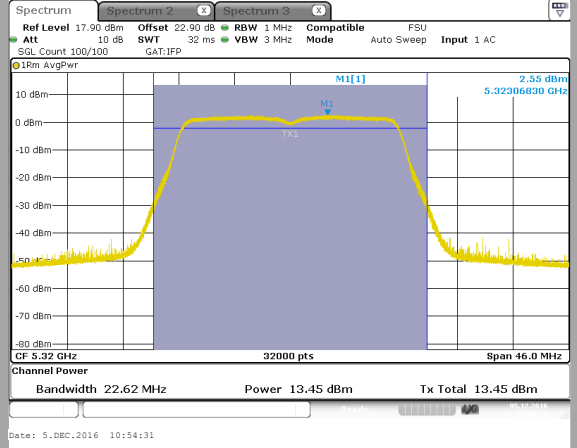
802.1111n HT20/ac VHT20

C6

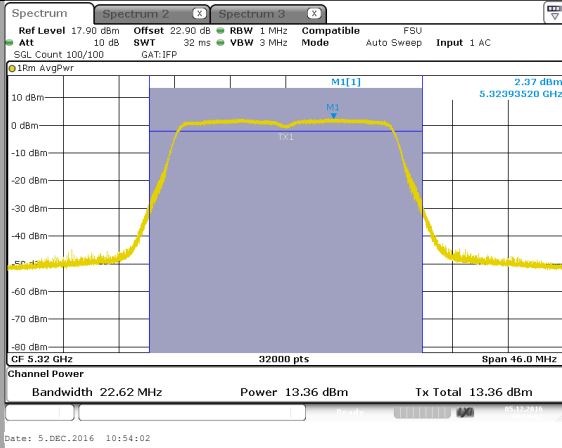
Tx1



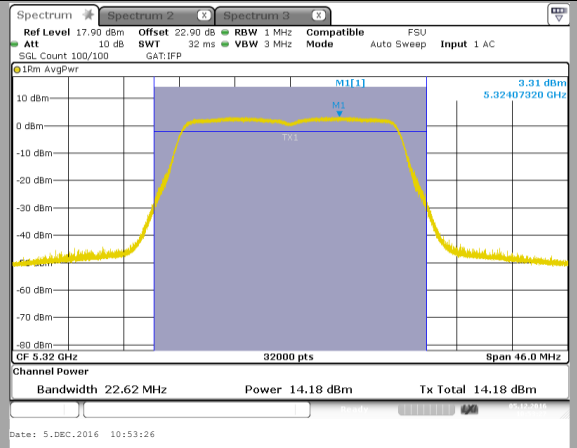
Tx2



Tx3



Tx4



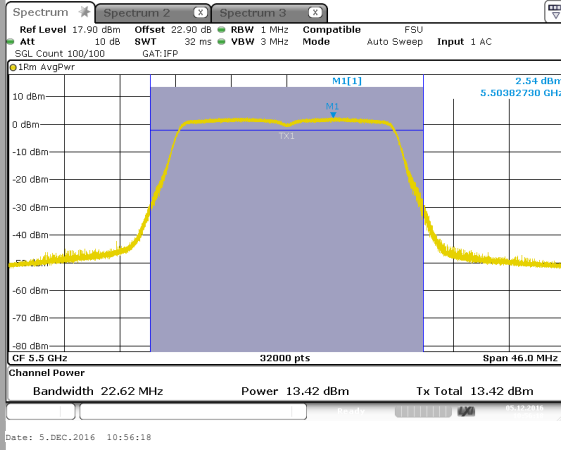


L C I E

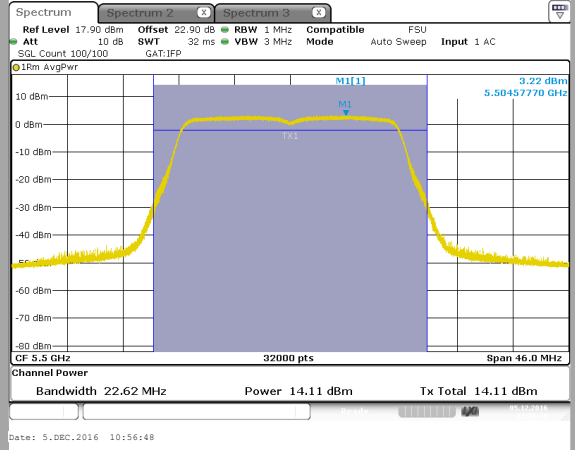
802.1111n HT20/ac VHT20

C7

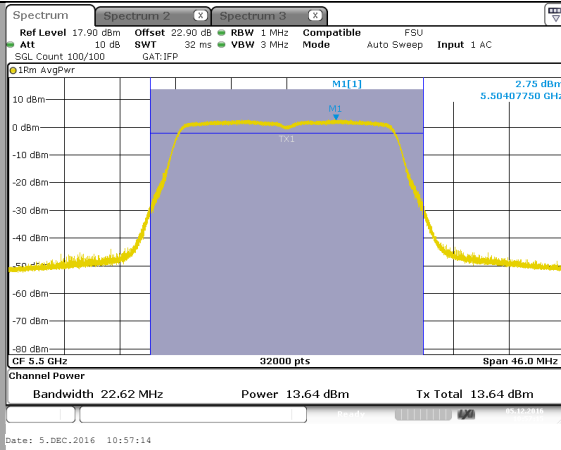
Tx1



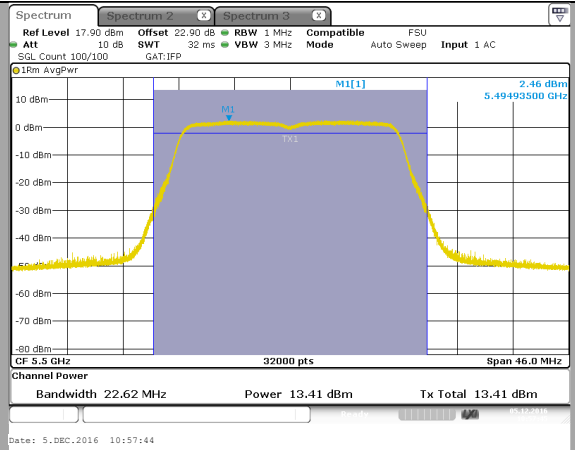
Tx2



Tx3



Tx4



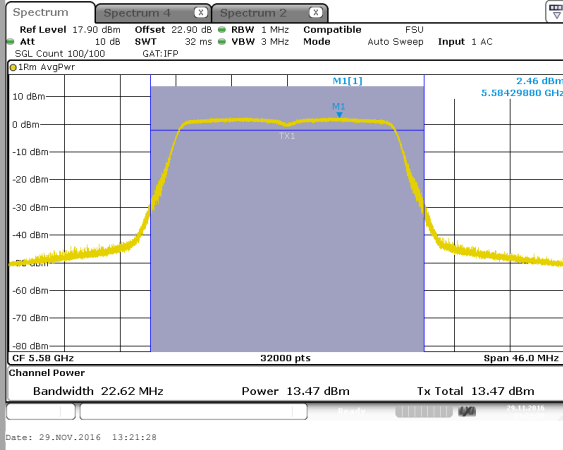


L C I E

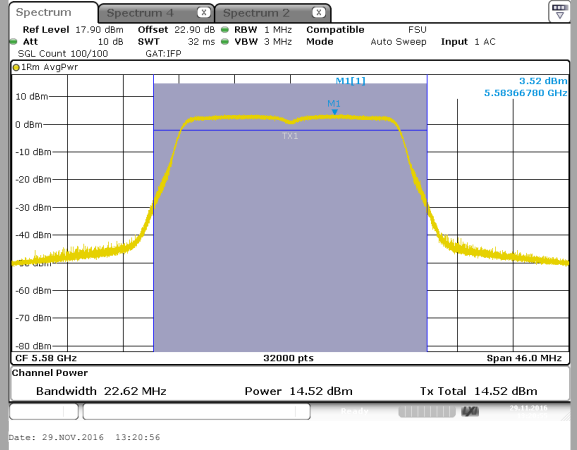
802.1111n HT20/ac VHT20

C8

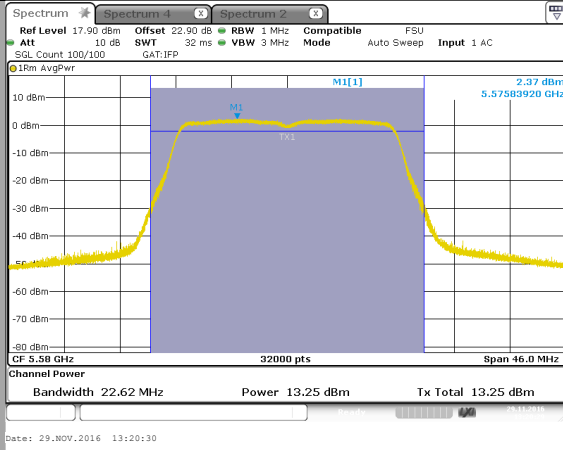
Tx1



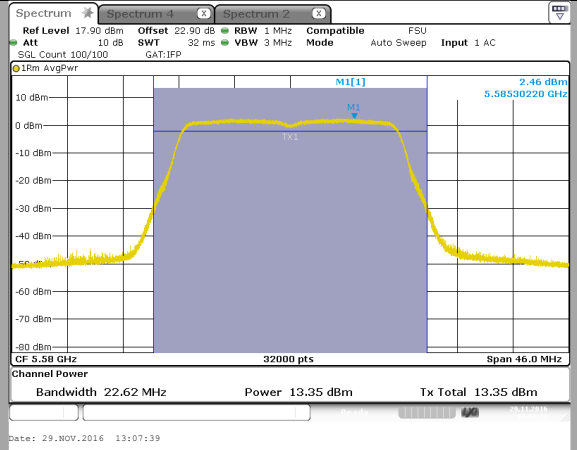
Tx2



Tx3



Tx4



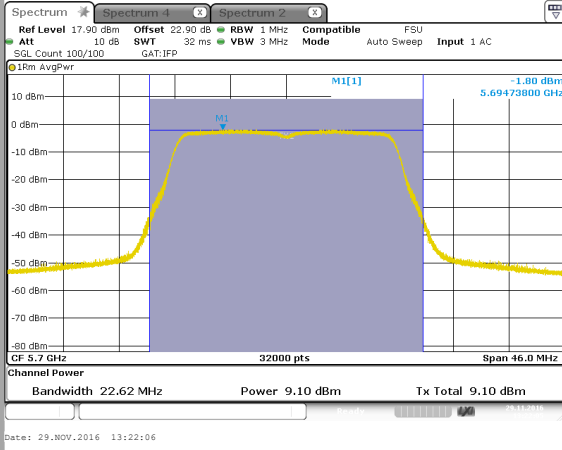


L C I E

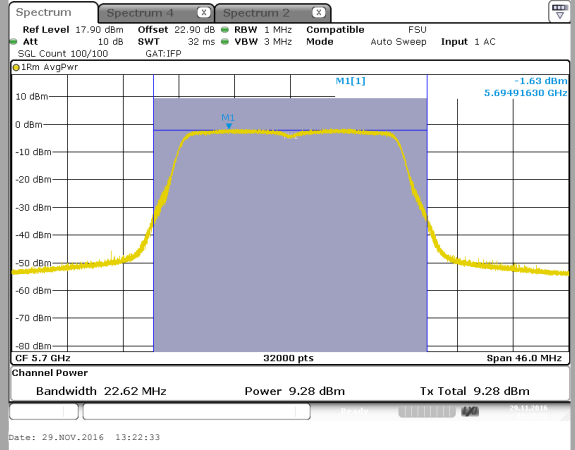
802.1111n HT20/ac VHT20

C9

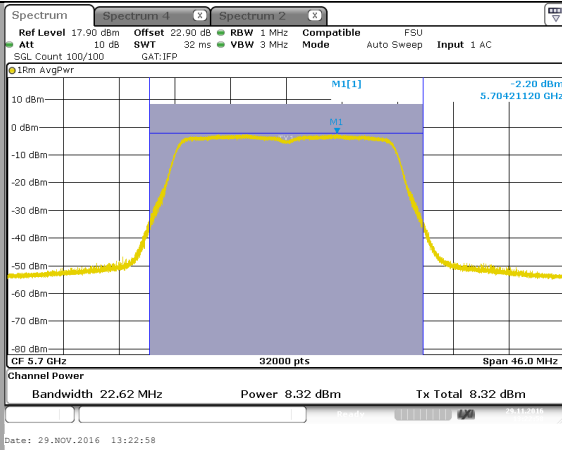
Tx1



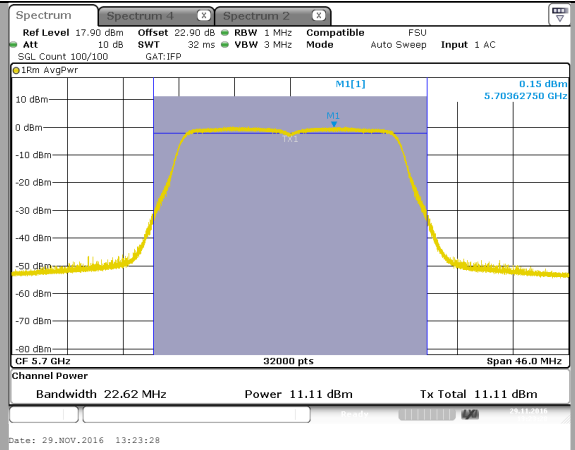
Tx2



Tx3



Tx4

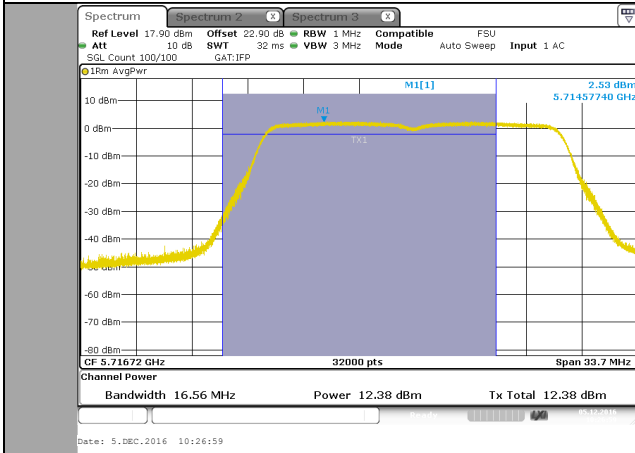




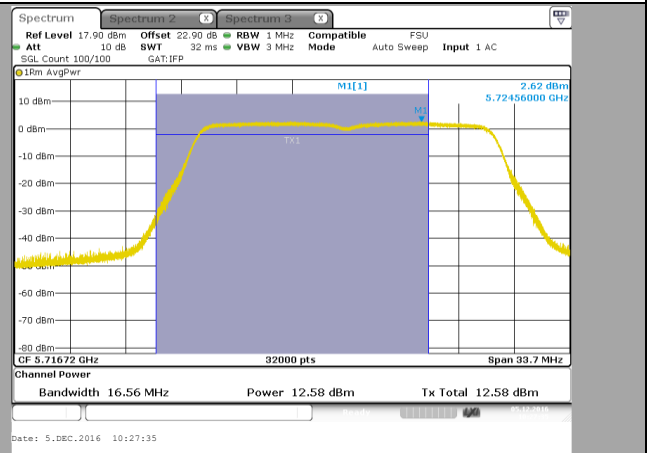
L C I E

802.1111n HT20/ac VHT20
C10 Straddle 5470MHz-5725MHz

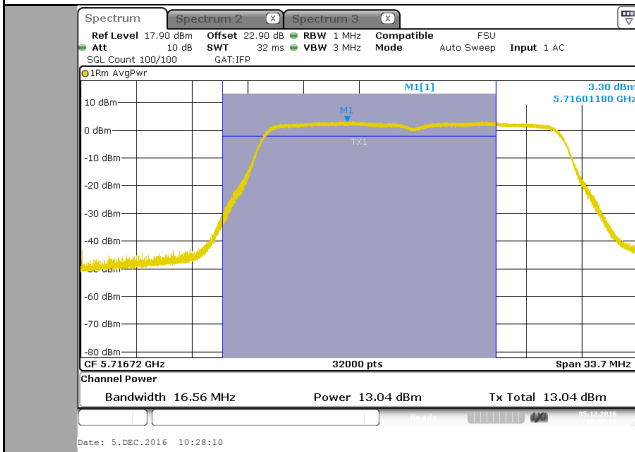
Tx1



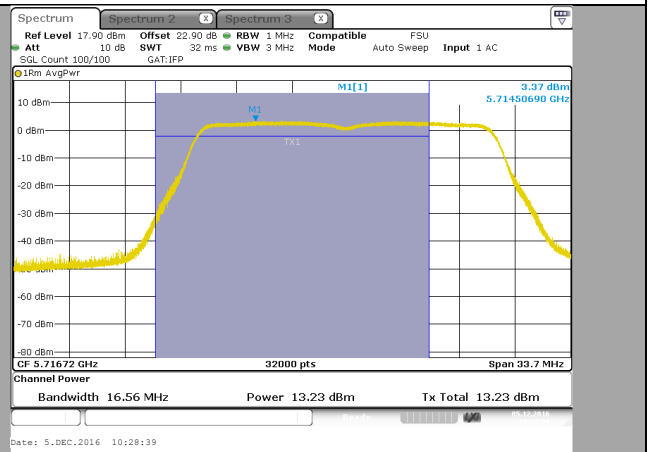
Tx2



Tx3



Tx4



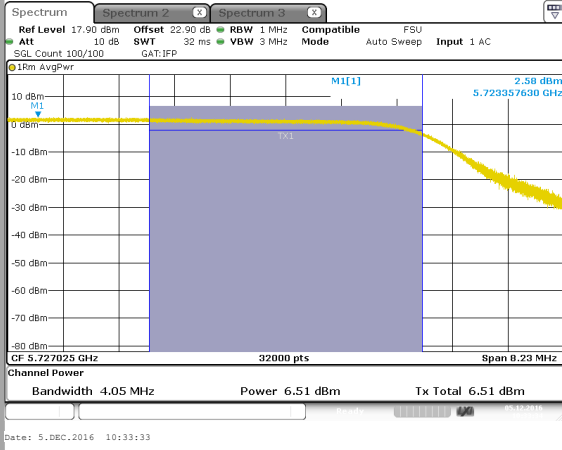
TRUE



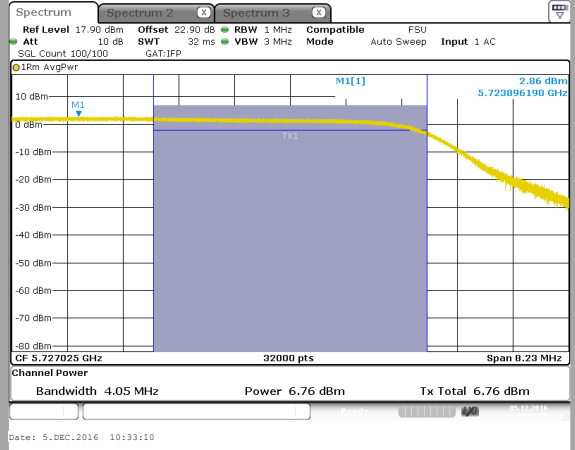
L C I E

802.1111n HT20/ac VHT20
C10 Straddle 5725MHz-5850MHz

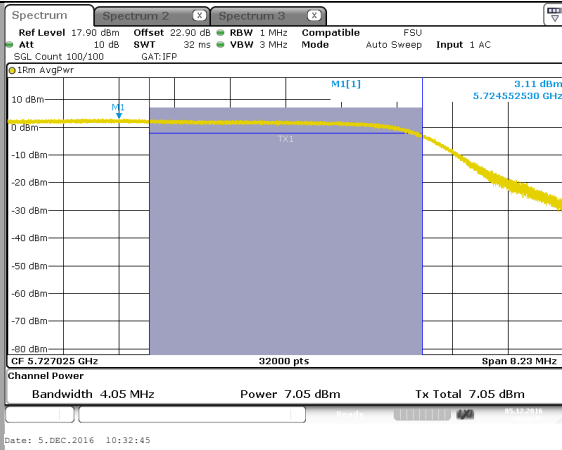
Tx1



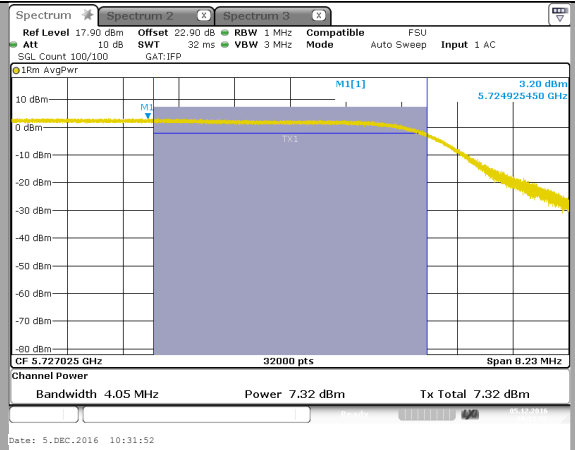
Tx2



Tx3



Tx4

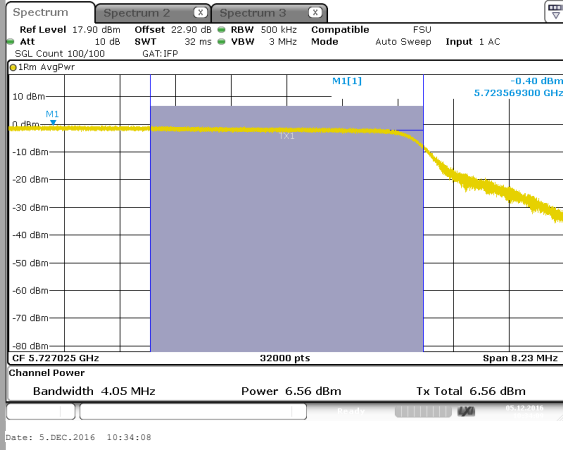




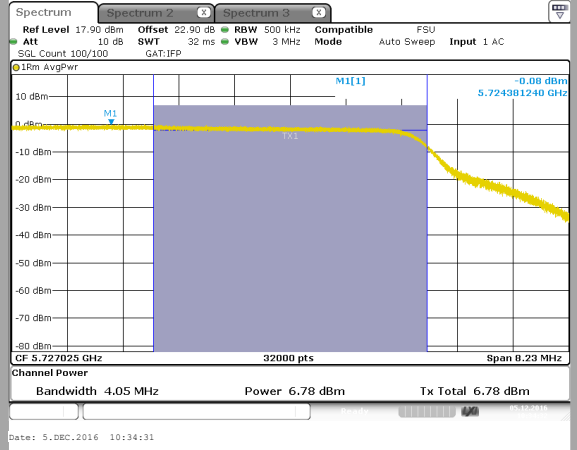
L C I E

802.1111n HT20/ac VHT20
C10 Straddle 5725MHz-5850MHz

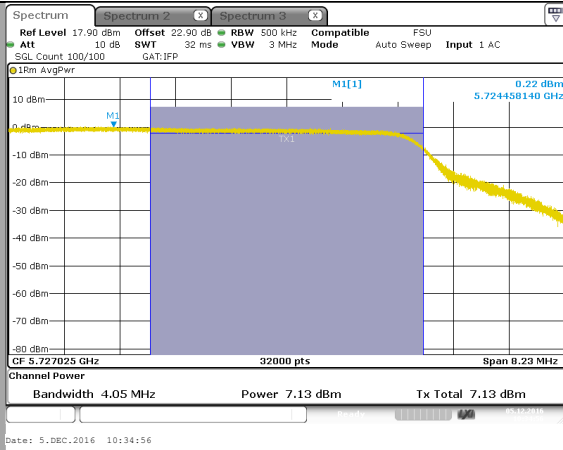
Tx1



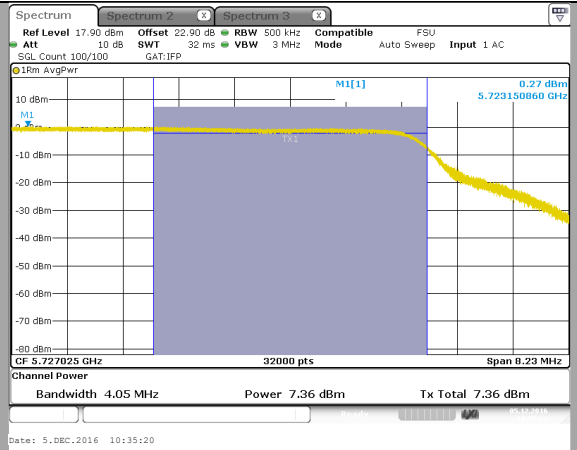
Tx2



Tx3



Tx4



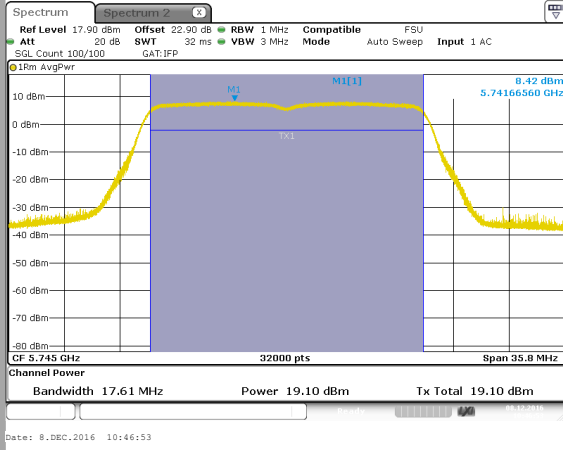


L C I E

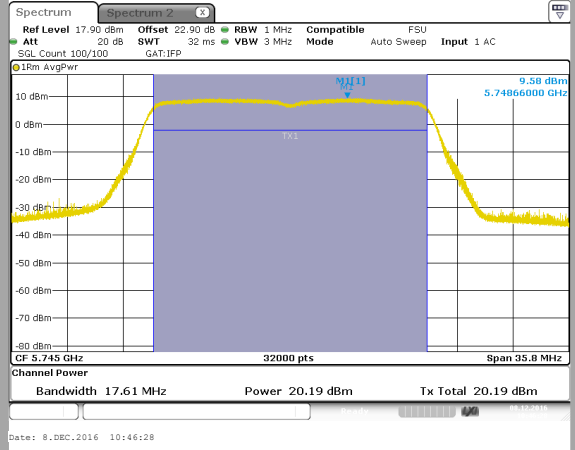
802.1111n HT20/ac VHT20

C11

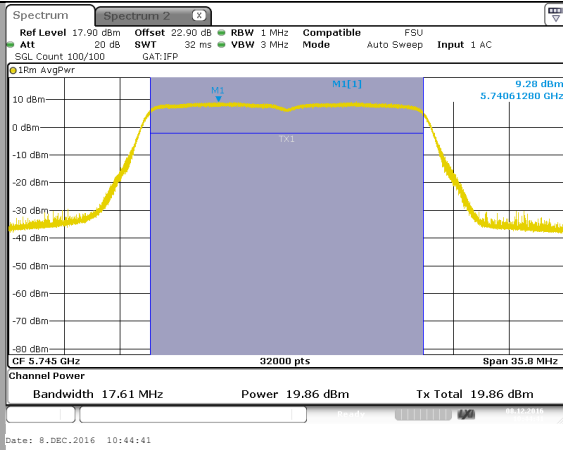
Tx1



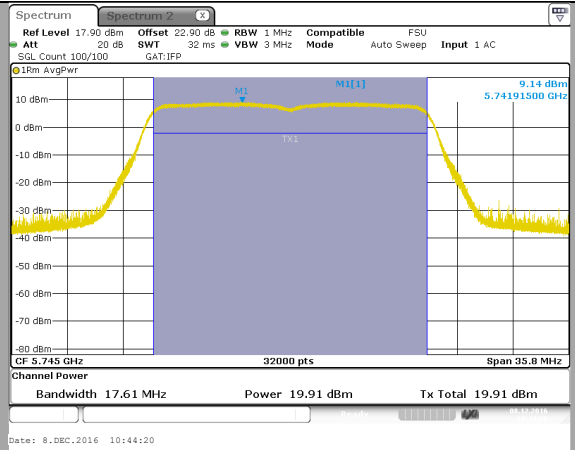
Tx2



Tx3



Tx4



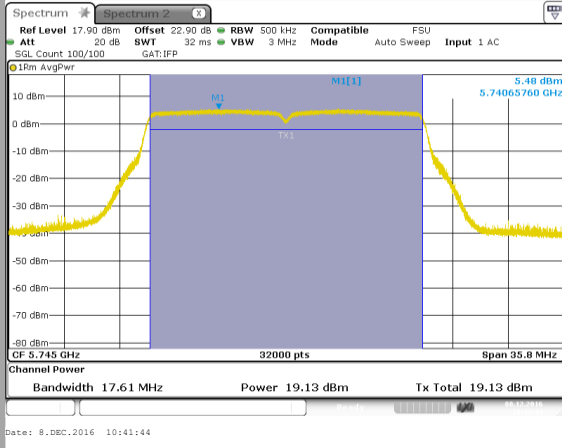


L C I E

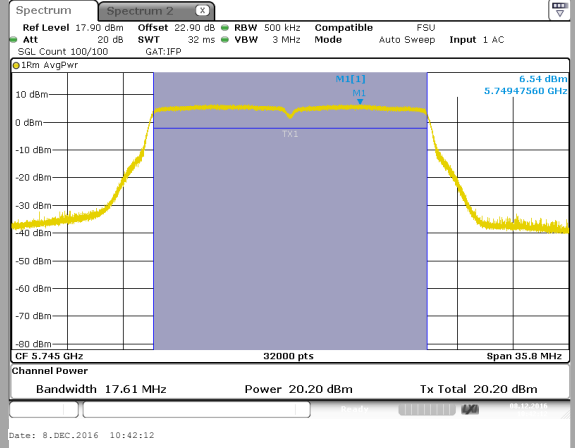
802.1111n HT20/ac VHT20

C11

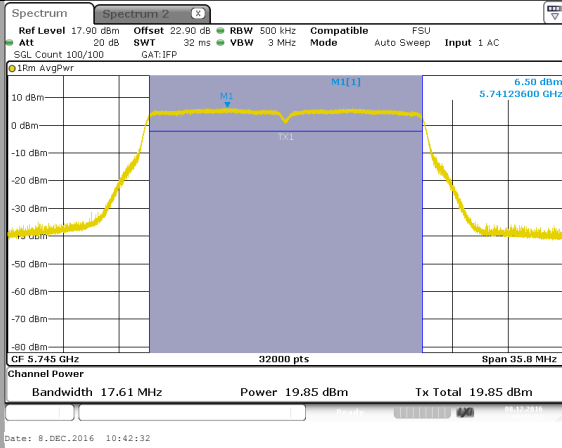
Tx1



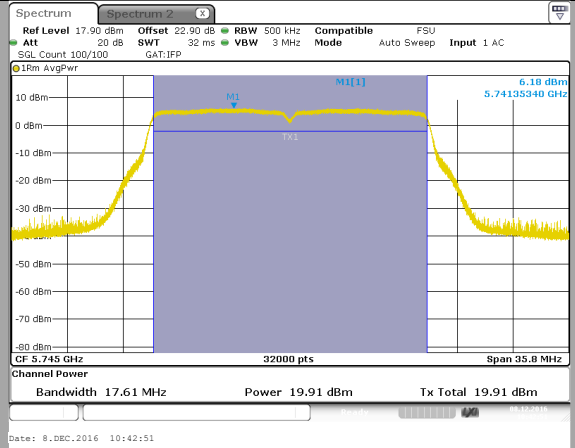
Tx2



Tx3



Tx4



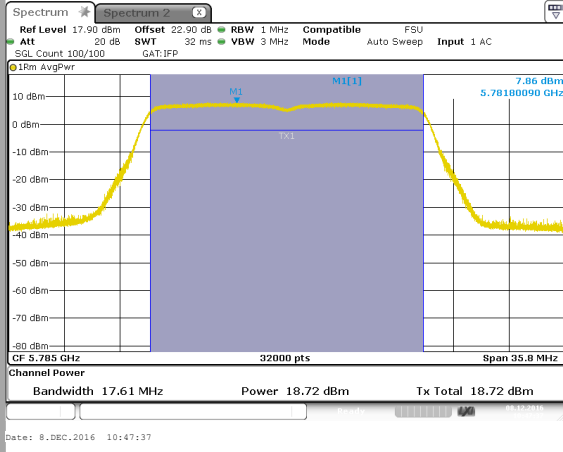


L C I E

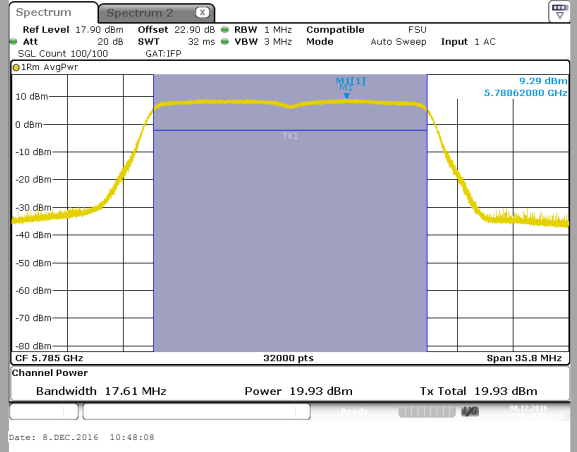
802.1111n HT20/ac VHT20

C12

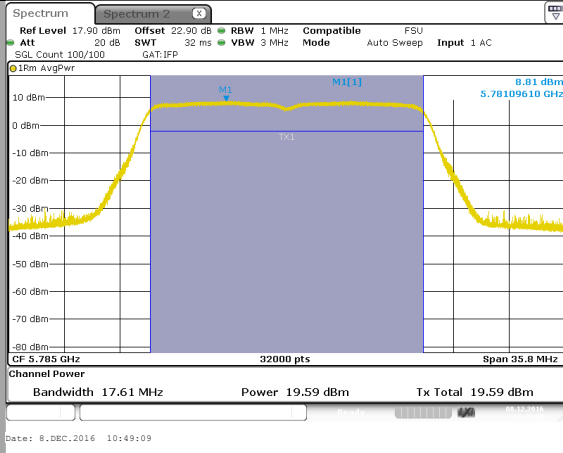
Tx1



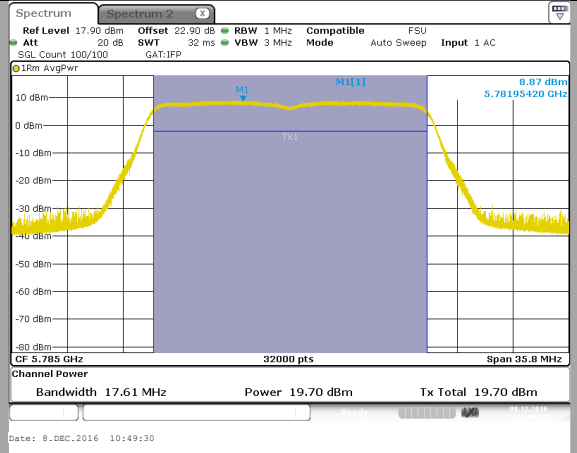
Tx2



Tx3



Tx4



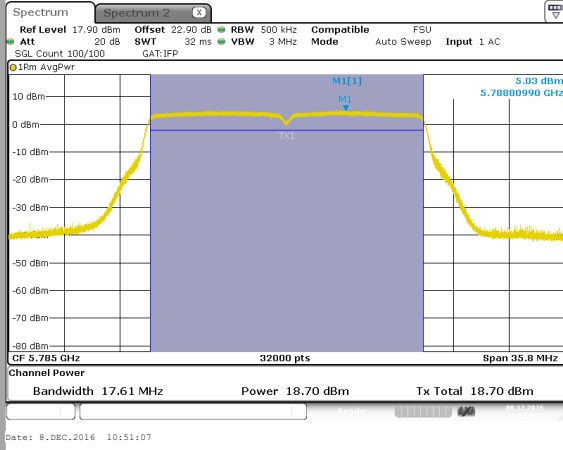


L C I E

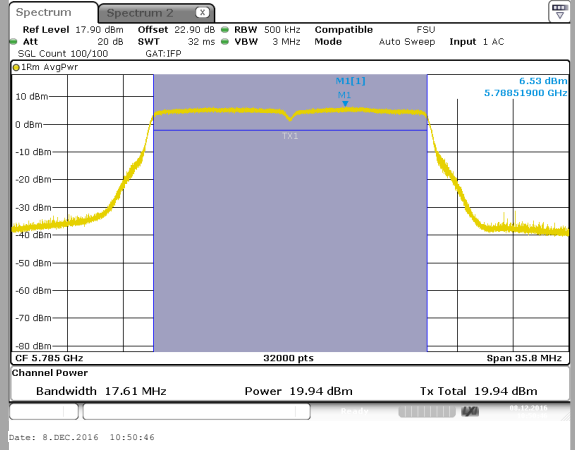
802.1111n HT20/ac VHT20

C12

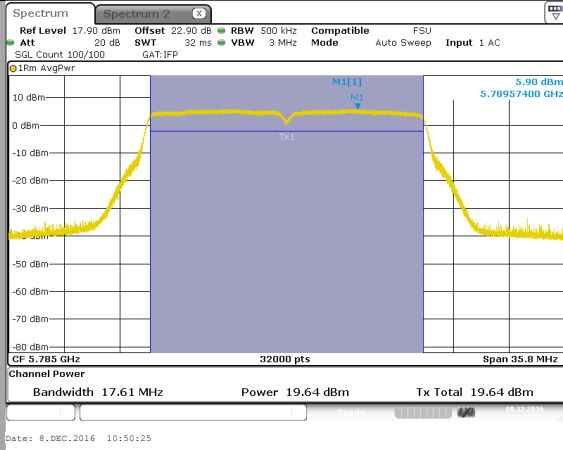
Tx1



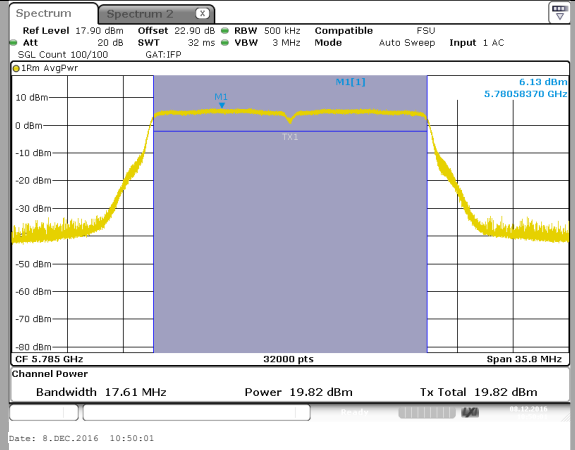
Tx2



Tx3



Tx4



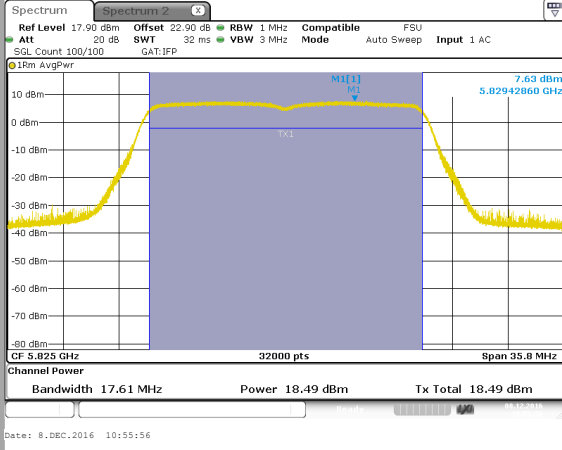


L C I E

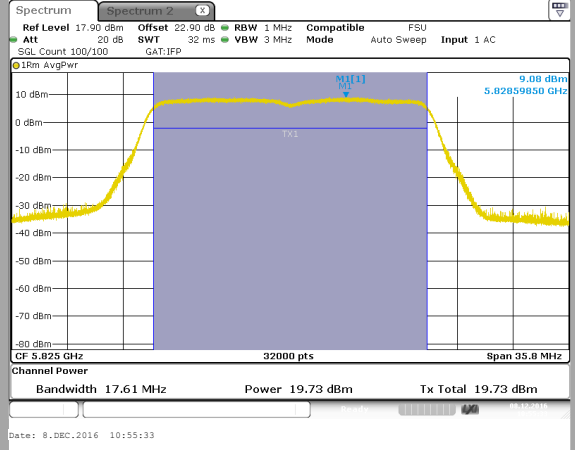
802.1111n HT20/ac VHT20

C13

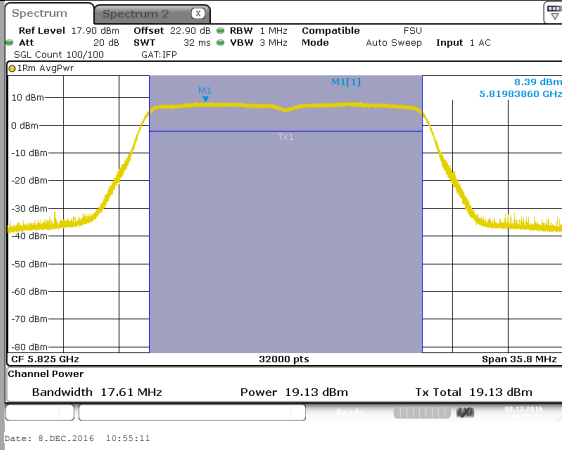
Tx1



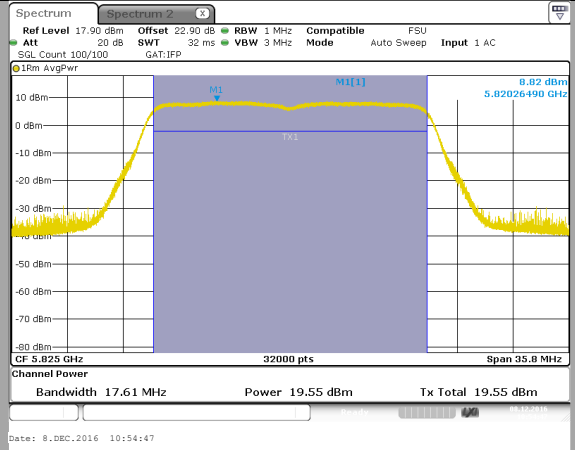
Tx2



Tx3



Tx4



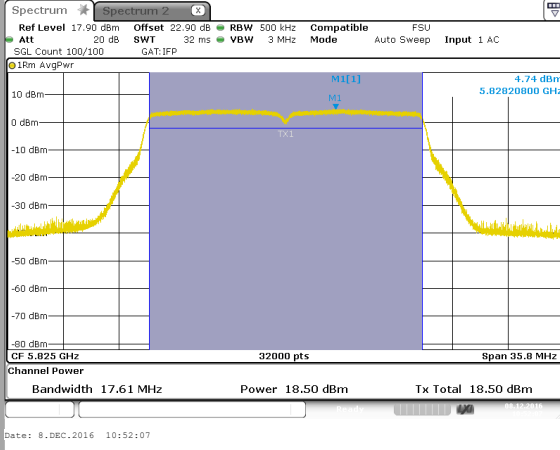


L C I E

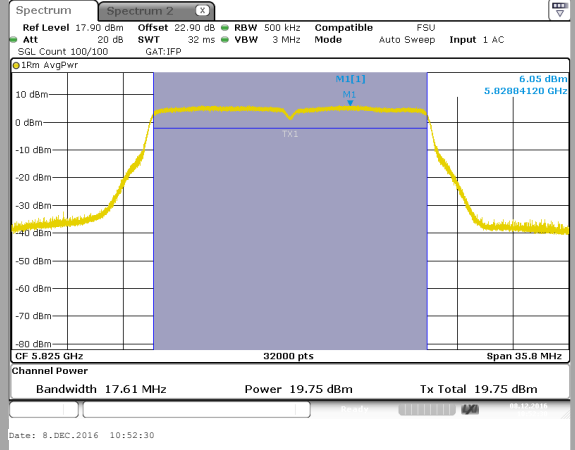
802.1111n HT20/ac VHT20

C13

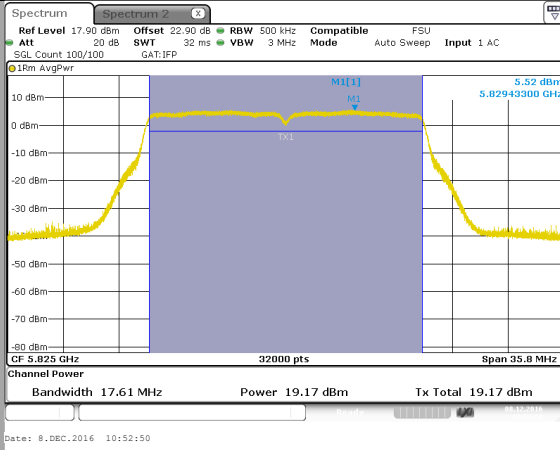
Tx1



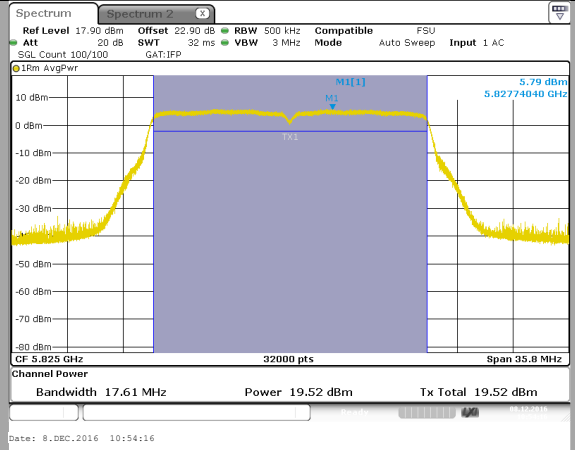
Tx2



Tx3



Tx4



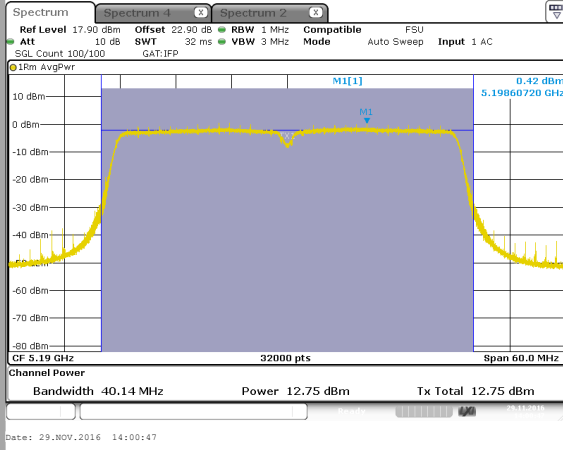


L C I E

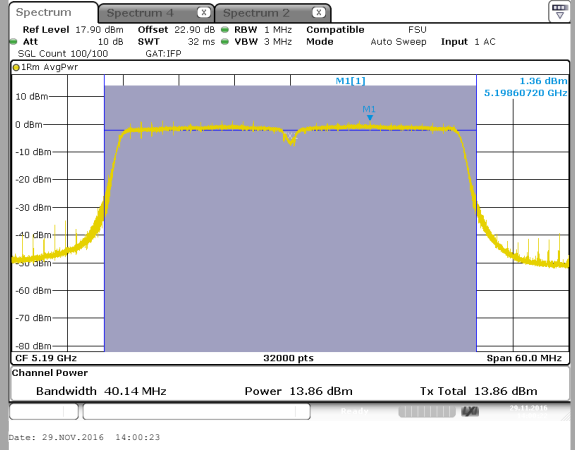
802.1111n HT40/ac VHT40

C14

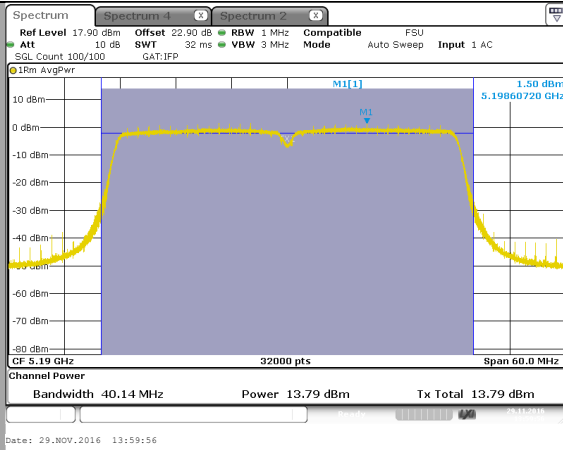
Tx1



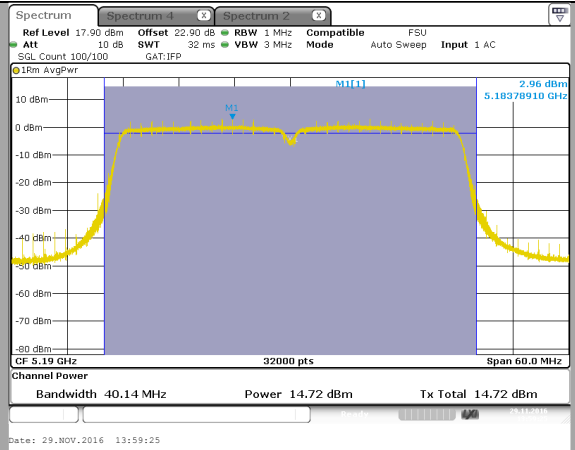
Tx2



Tx3



Tx4



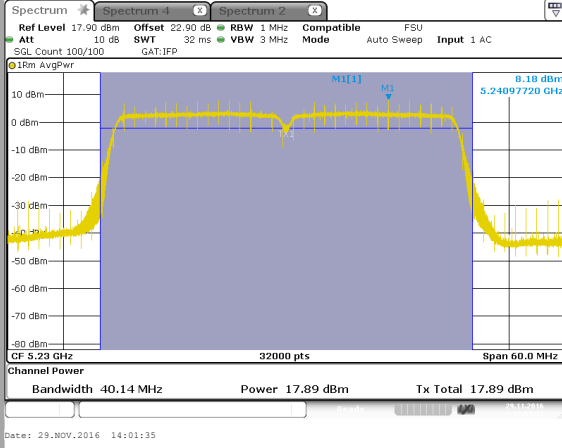


L C I E

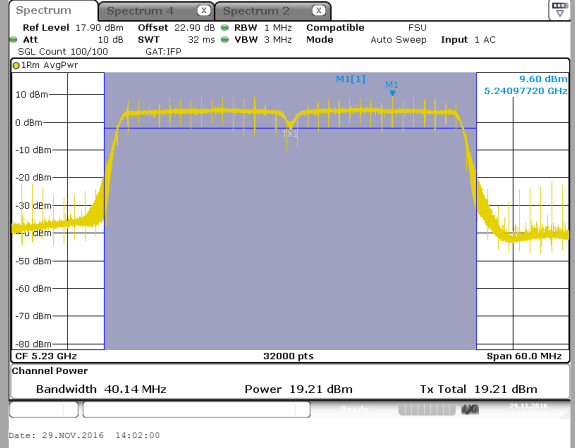
802.1111n HT40/ac VHT40

C15

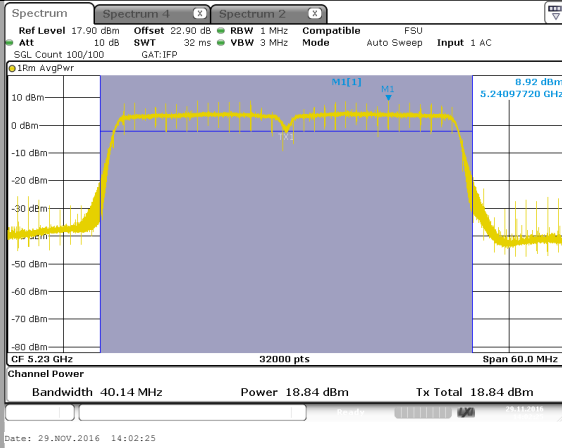
Tx1



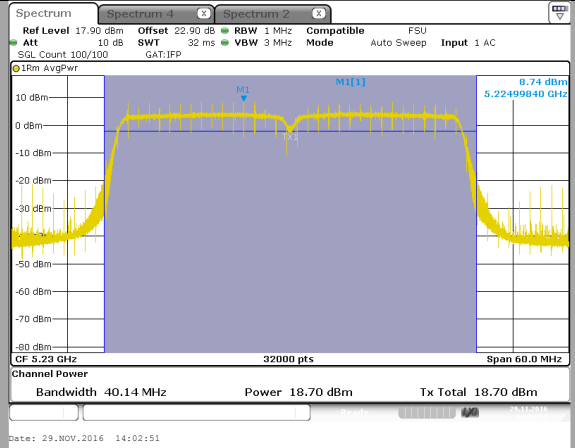
Tx2



Tx3



Tx4



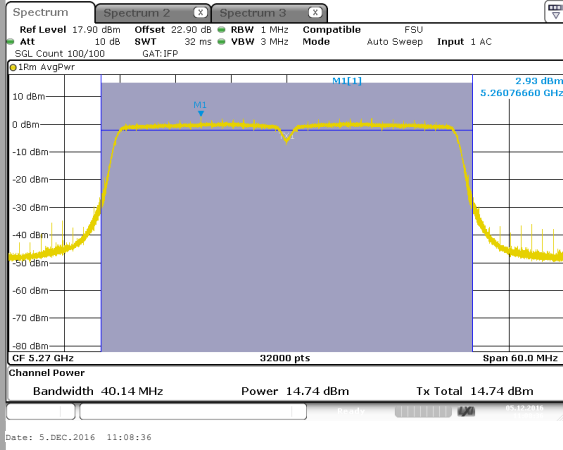


L C I E

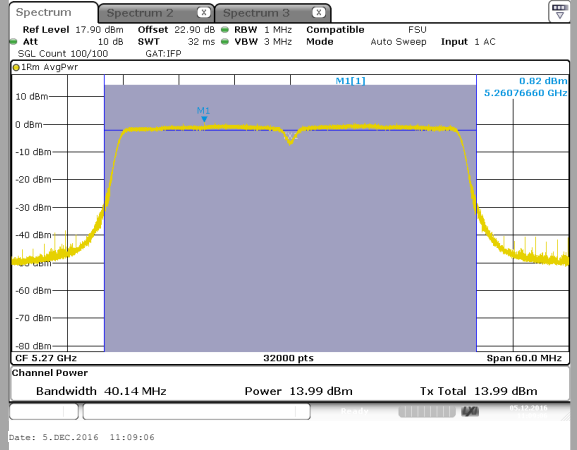
802.1111n HT40/ac VHT40

C16

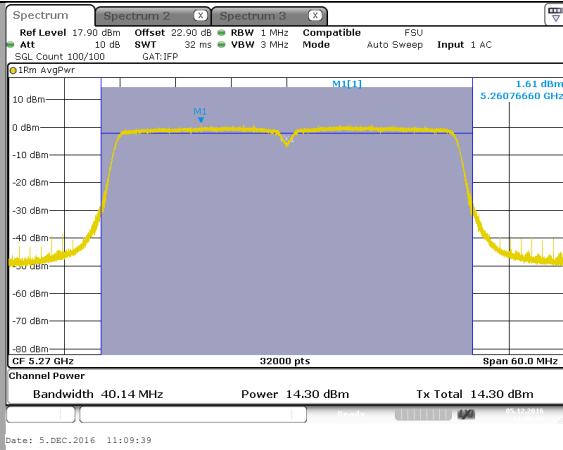
Tx1



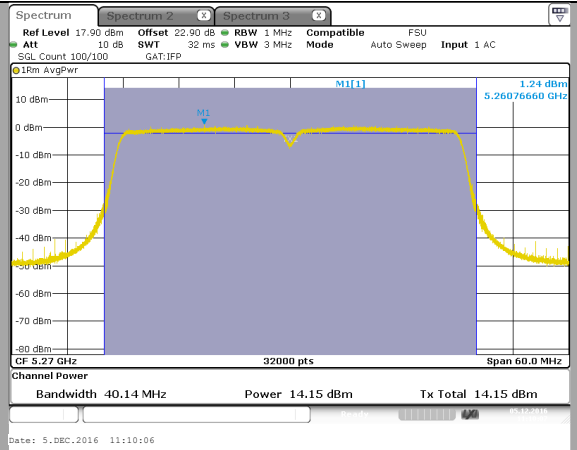
Tx2



Tx3



Tx4



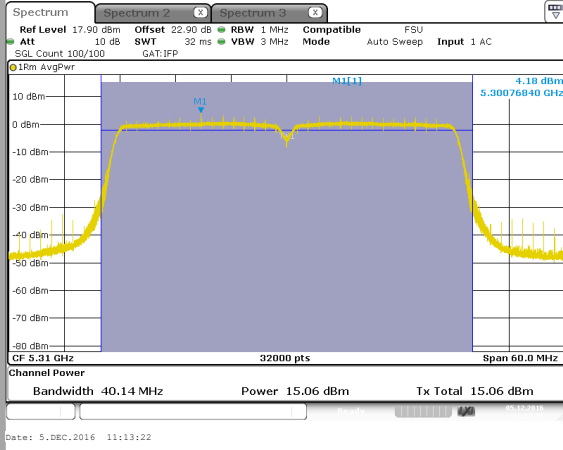


L C I E

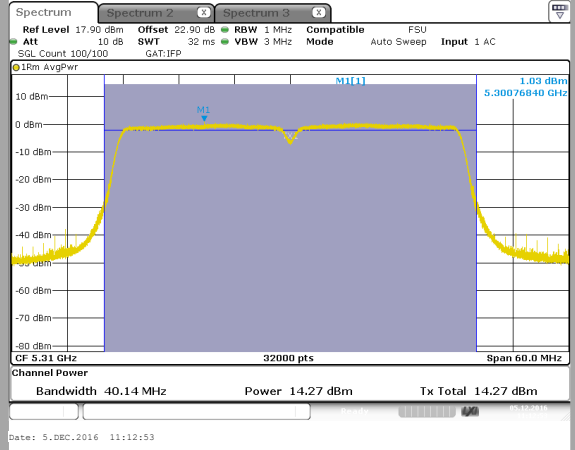
802.1111n HT40/ac VHT40

C17

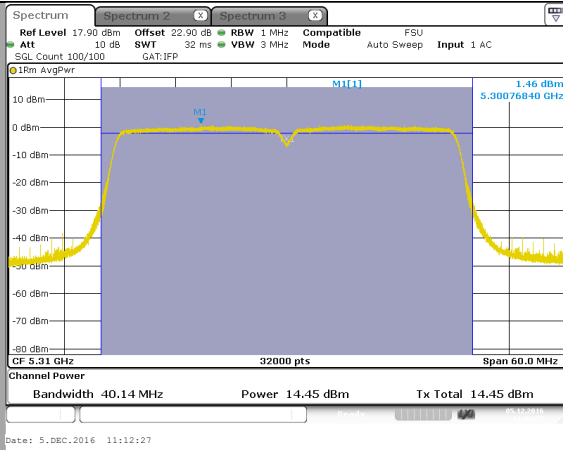
Tx1



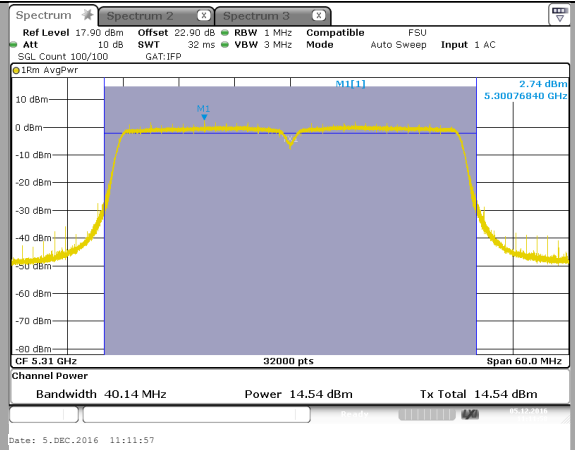
Tx2



Tx3



Tx4



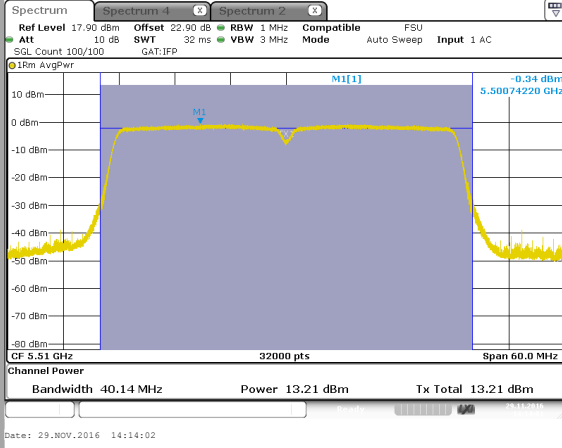


L C I E

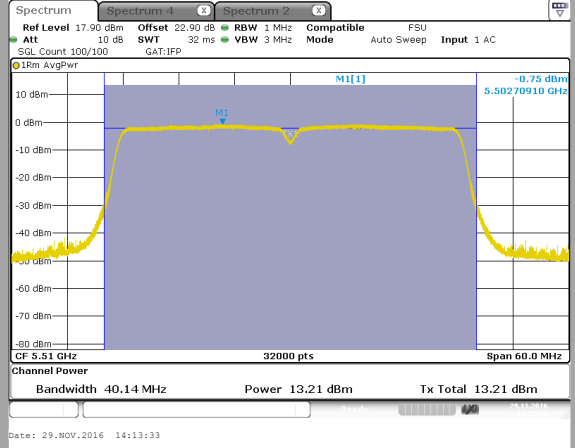
802.1111n HT40/ac VHT40

C18

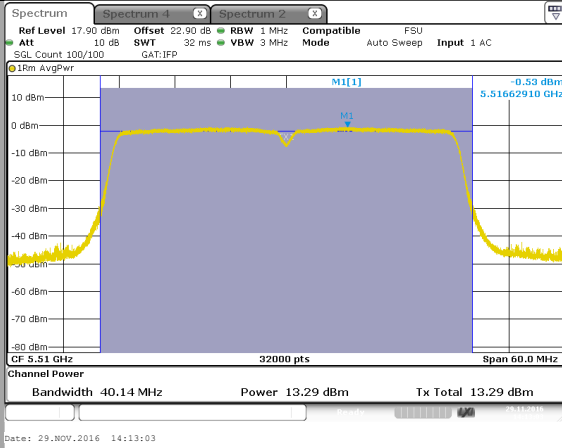
Tx1



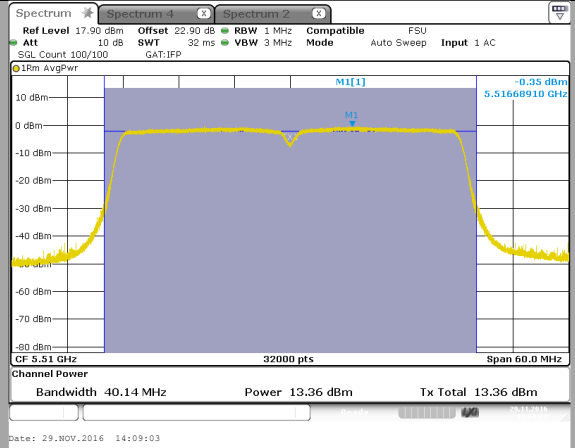
Tx2



Tx3



Tx4



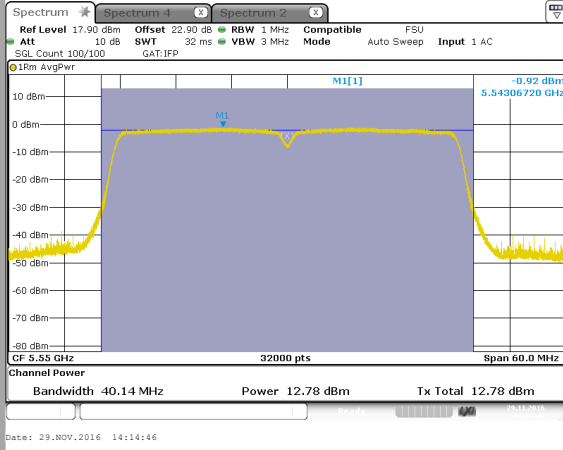


L C I E

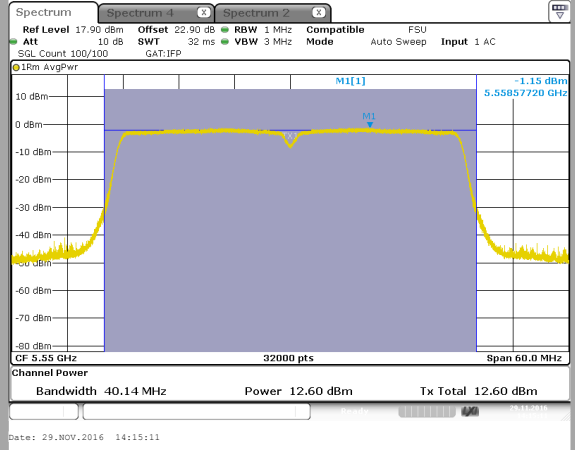
802.1111n HT40/ac VHT40

C19

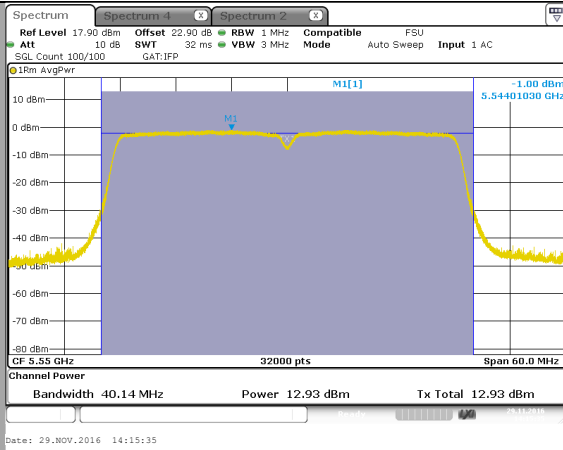
Tx1



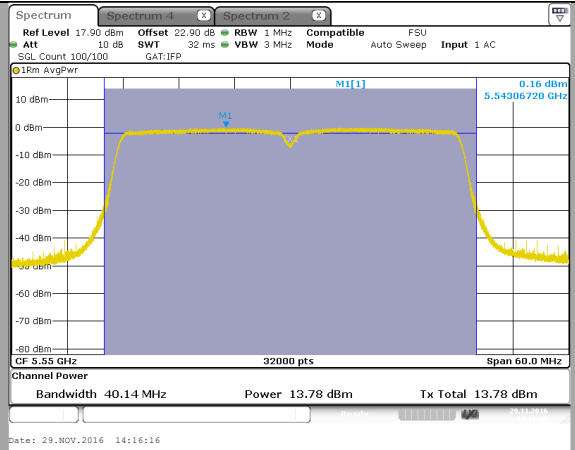
Tx2



Tx3



Tx4



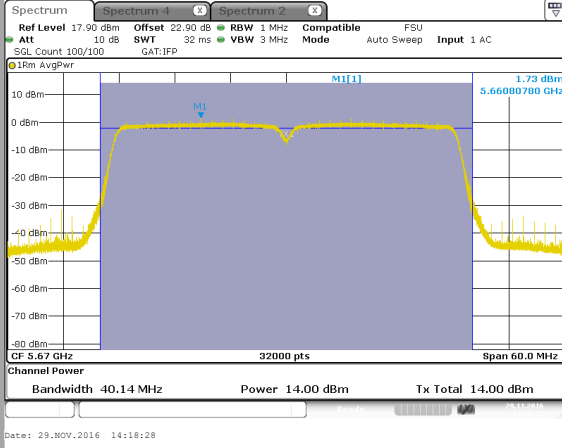


L C I E

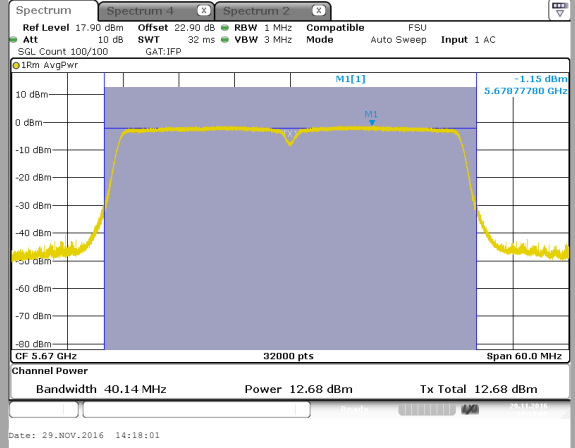
802.1111n HT40/ac VHT40

C20

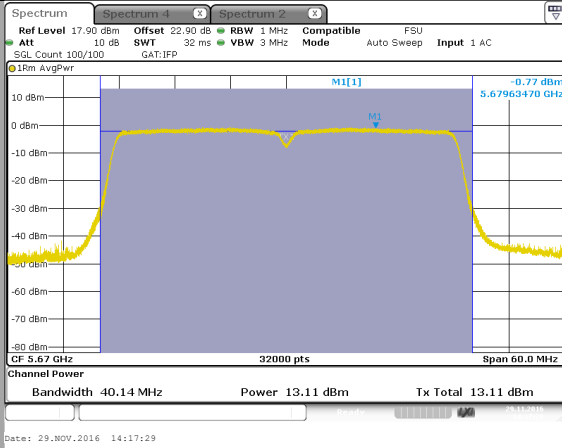
Tx1



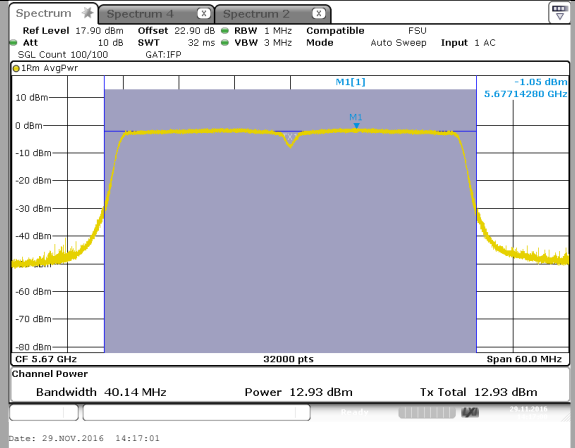
Tx2



Tx3



Tx4

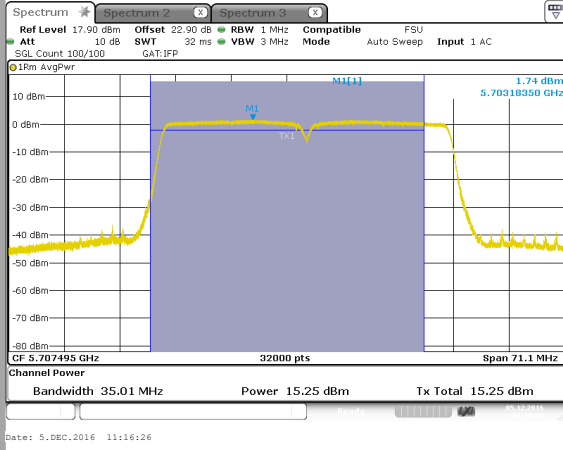




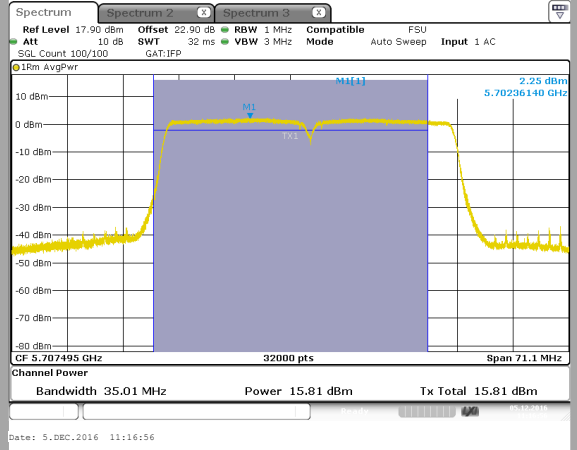
L C I E

802.1111n HT40/ac VHT40
C21 Straddle 5470MHz-5725MHz

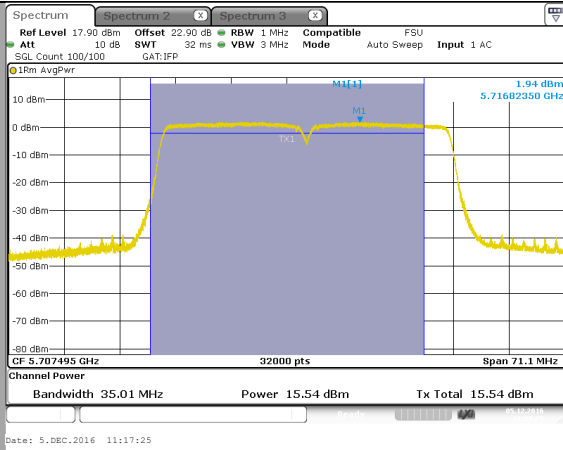
Tx1



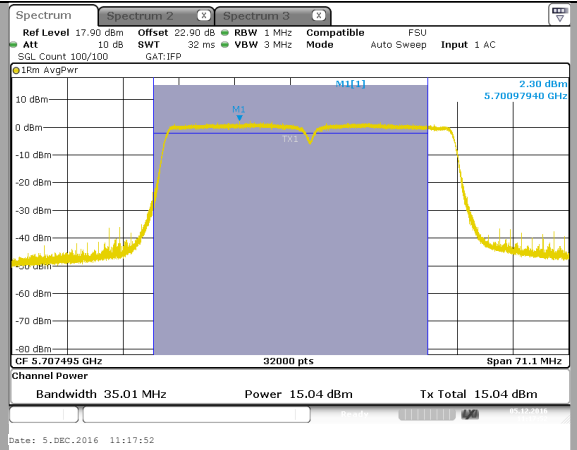
Tx2



Tx3



Tx4

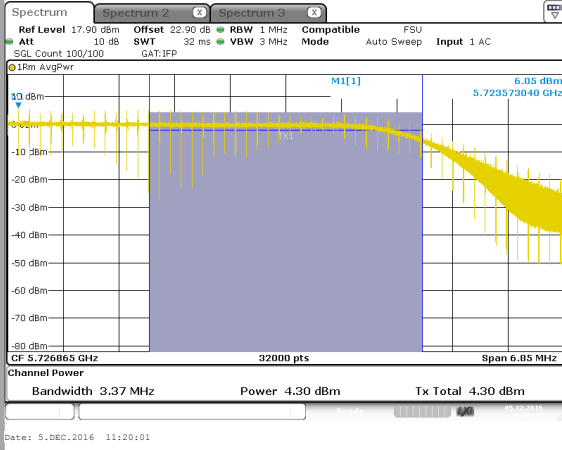




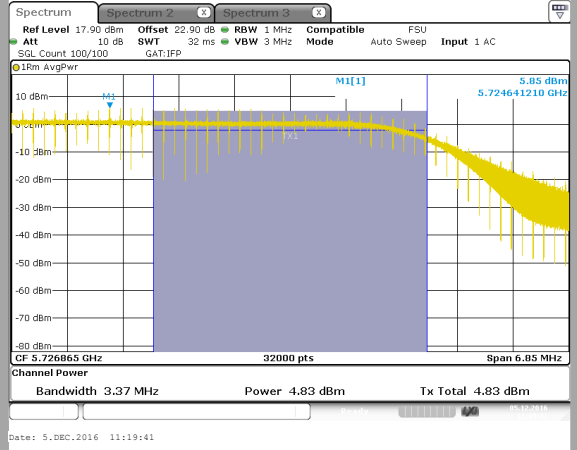
L C I E

802.1111n HT40/ac VHT40
C21 Straddle 5725MHz-5850MHz

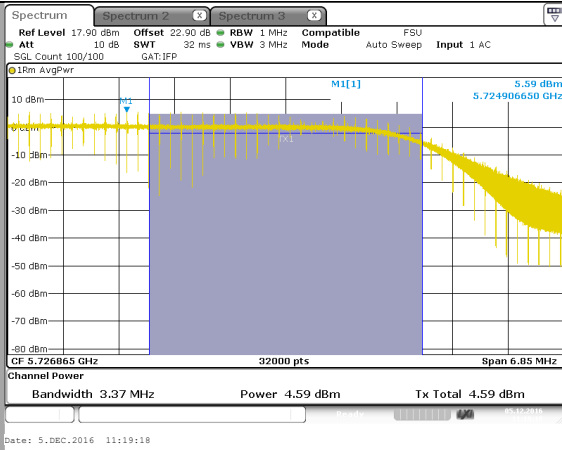
Tx1



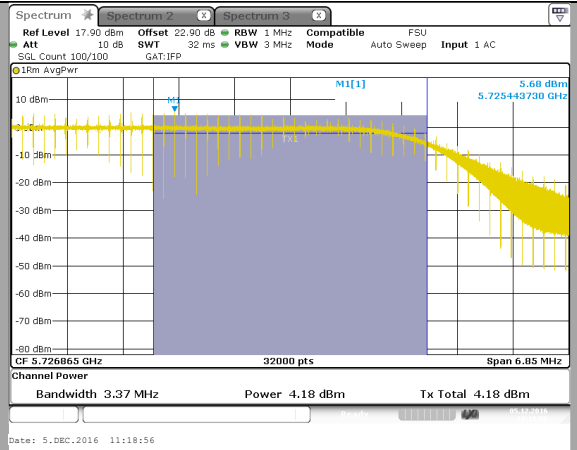
Tx2



Tx3



Tx4

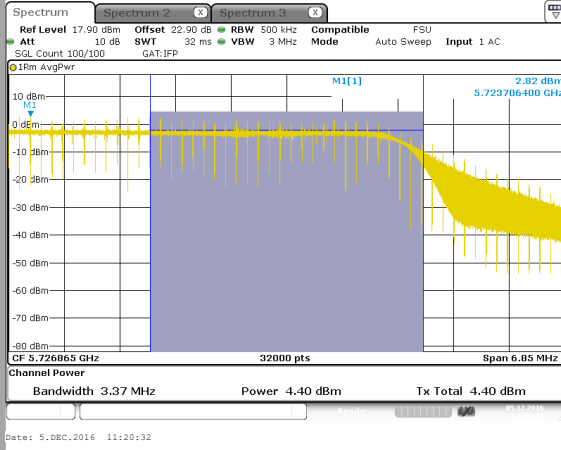




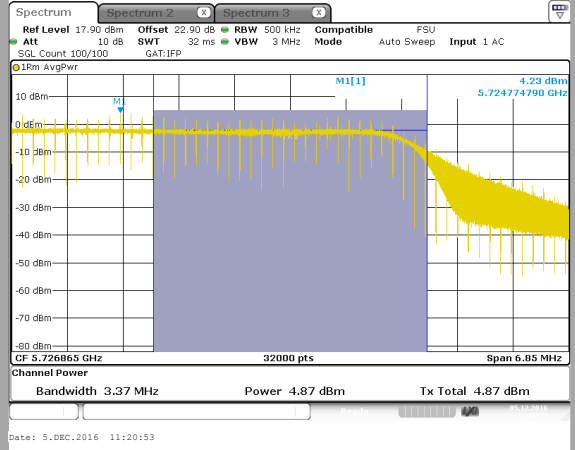
L C I E

802.1111n HT40/ac VHT40
C21 Straddle 5725MHz-5850MHz

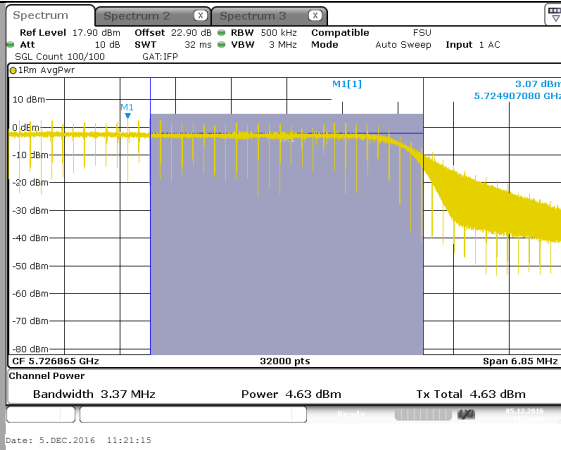
Tx1



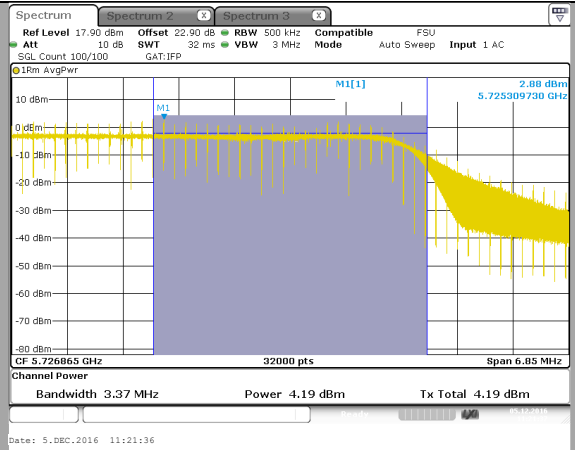
Tx2



Tx3



Tx4



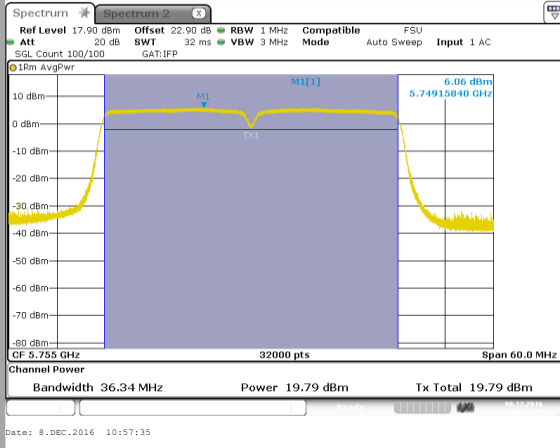


L C I E

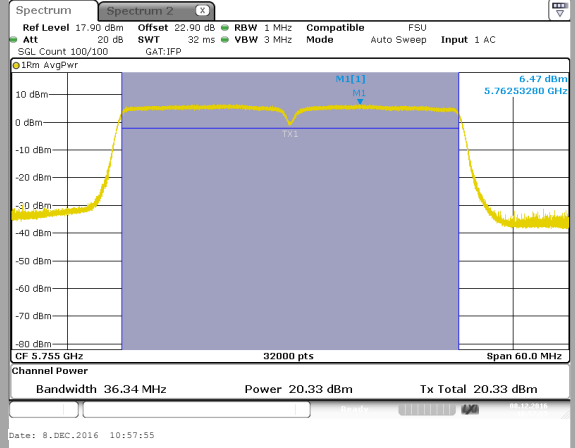
802.1111n HT40/ac VHT40

C22

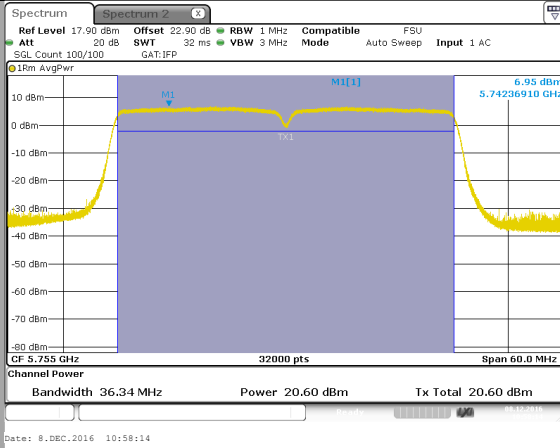
Tx1



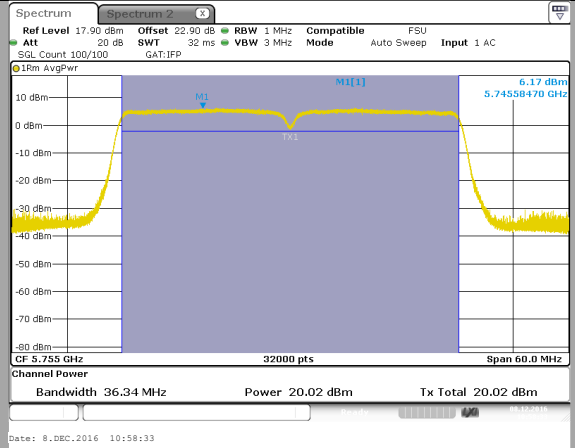
Tx2



Tx3



Tx4



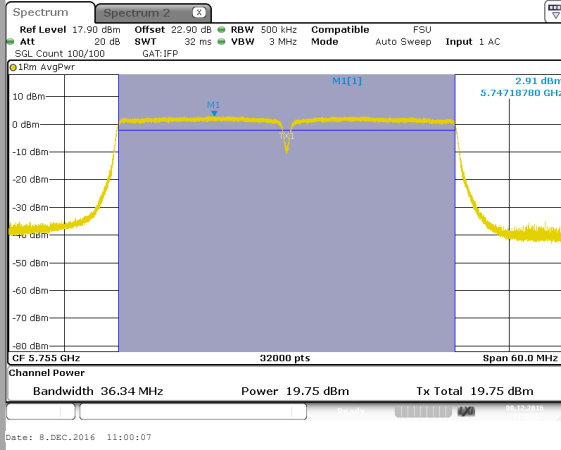


L C I E

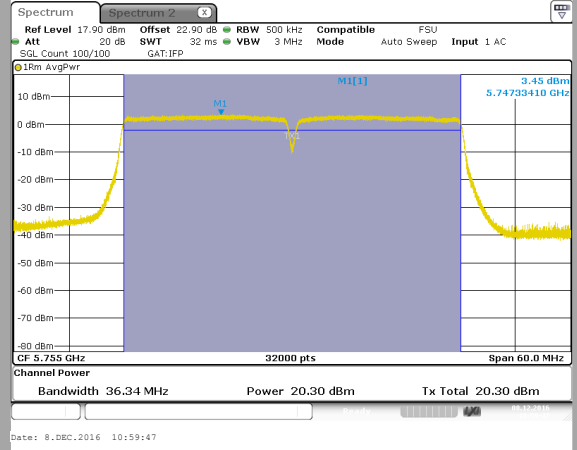
802.1111n HT40/ac VHT40

C22

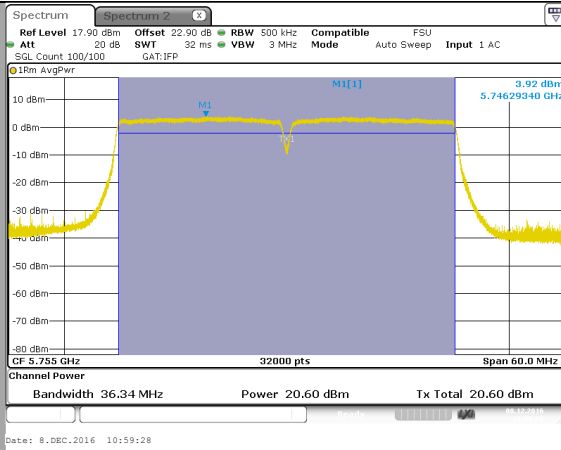
Tx1



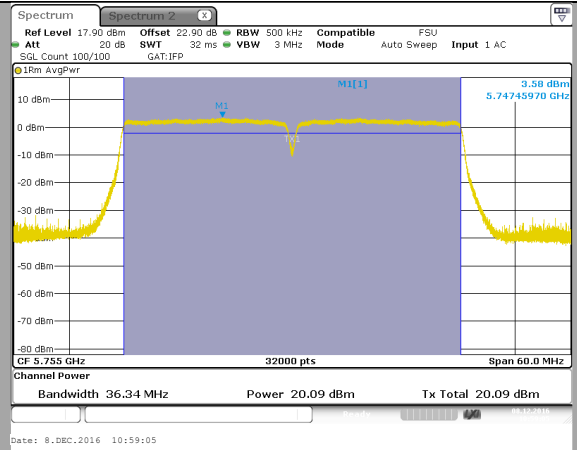
Tx2



Tx3



Tx4



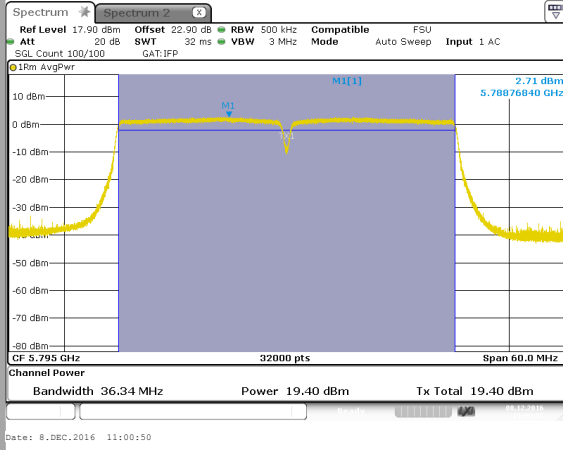


L C I E

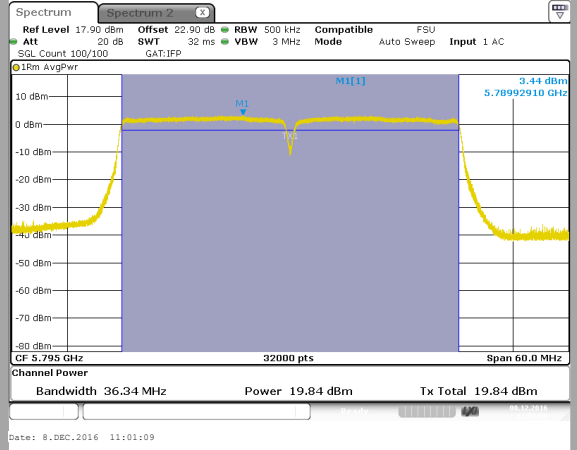
802.1111n HT40/ac VHT40

C23

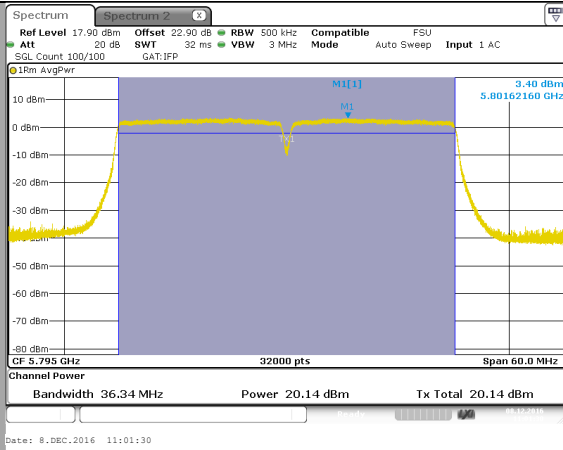
Tx1



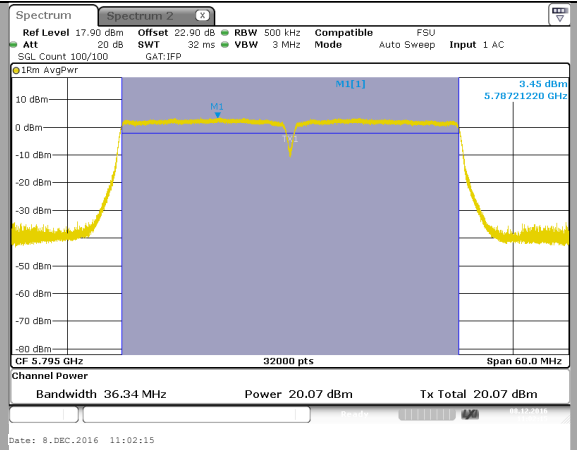
Tx2



Tx3



Tx4



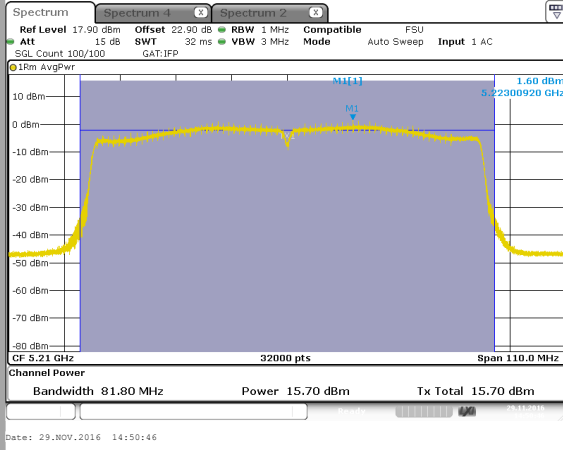


L C I E

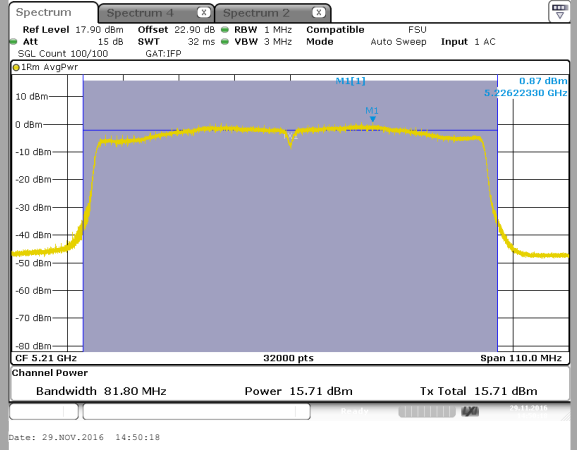
802.11ac VHT80

C24

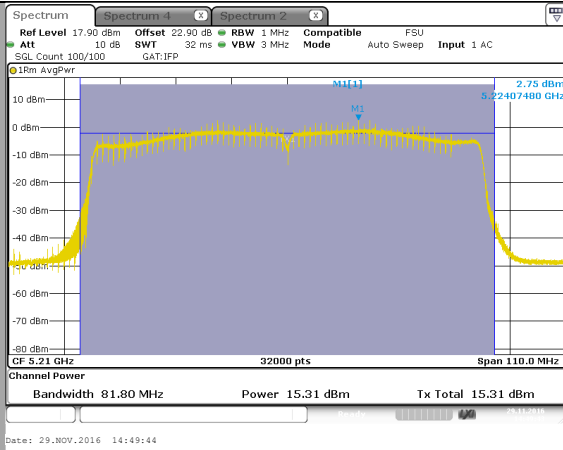
Tx1



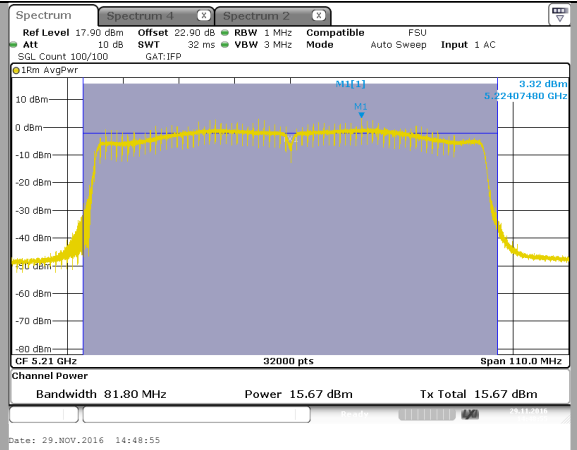
Tx2



Tx3



Tx4



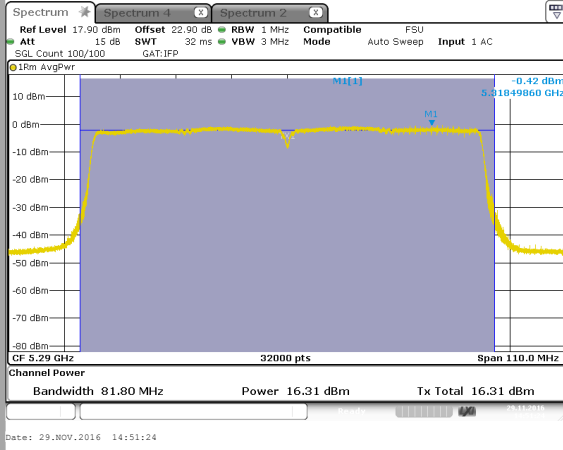


L C I E

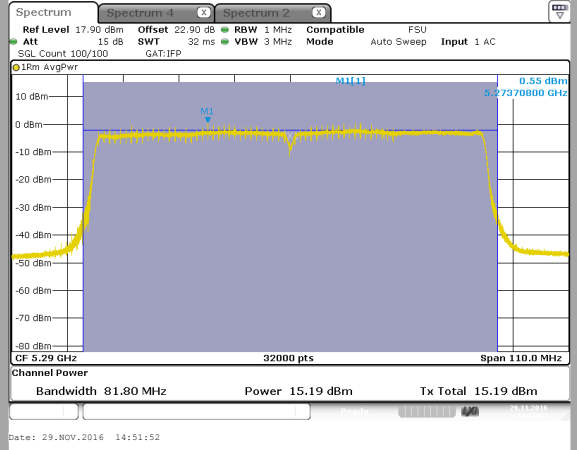
802.11ac VHT80

C25

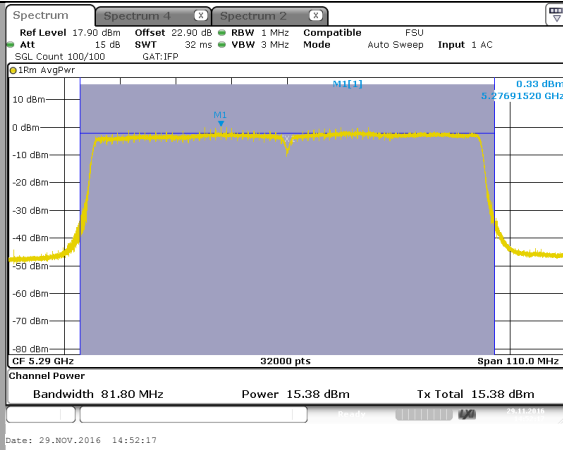
Tx1



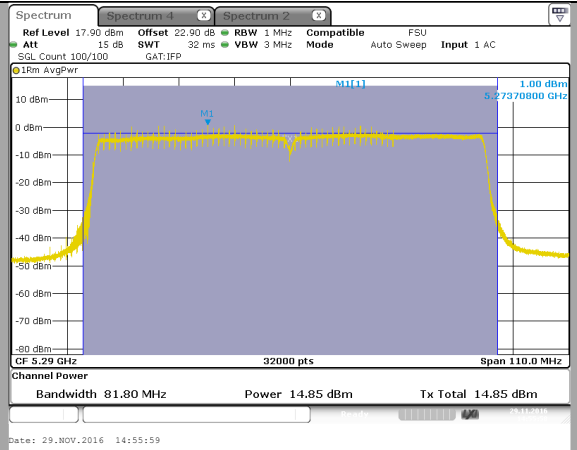
Tx2



Tx3



Tx4



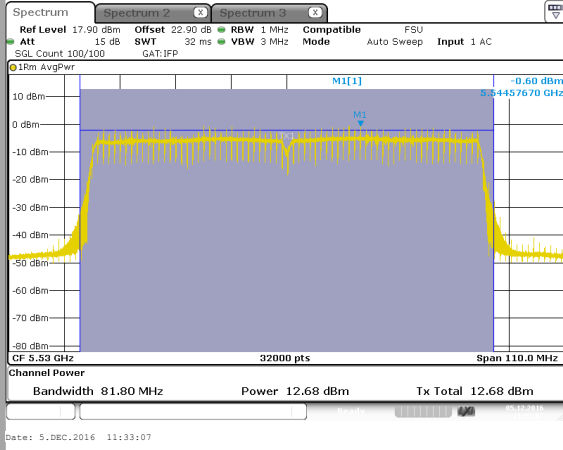


L C I E

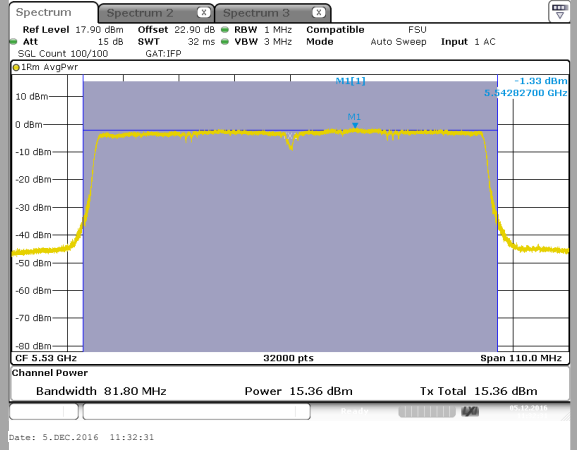
802.11ac VHT80

C26

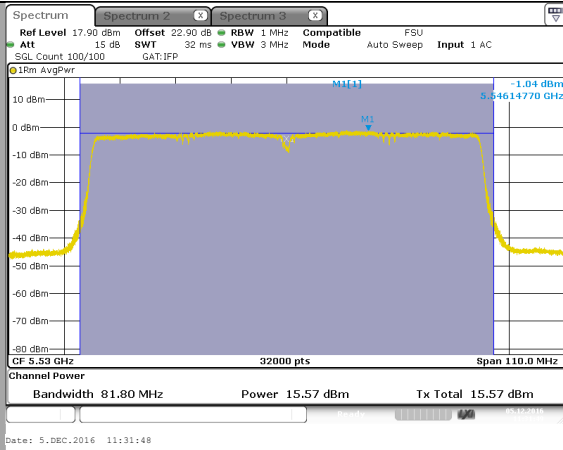
Tx1



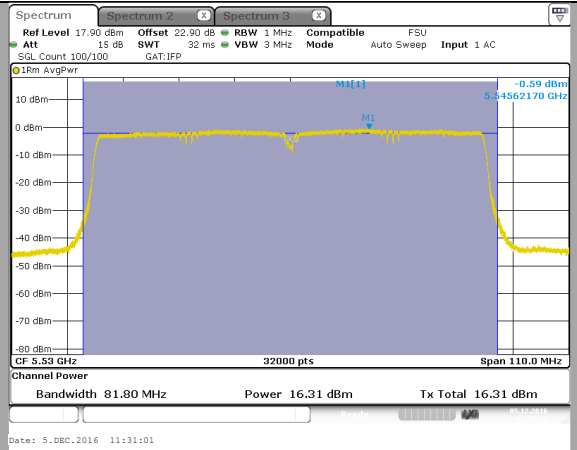
Tx2



Tx3



Tx4



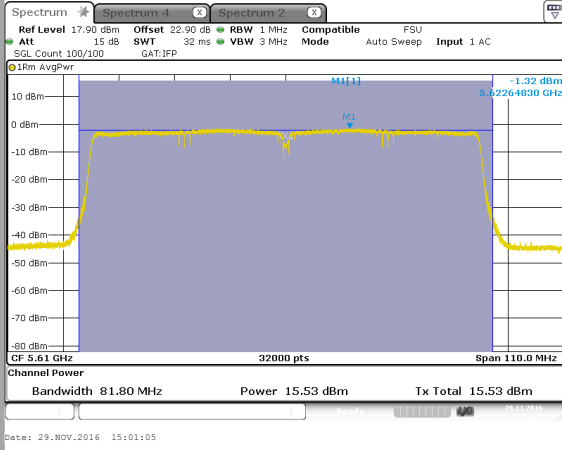


L C I E

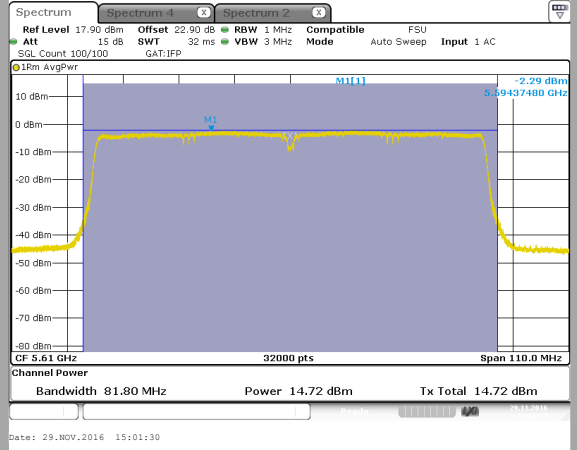
802.11ac VHT80

C27

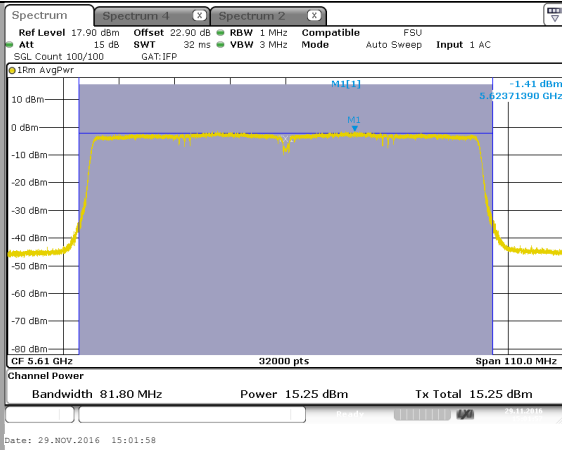
Tx1



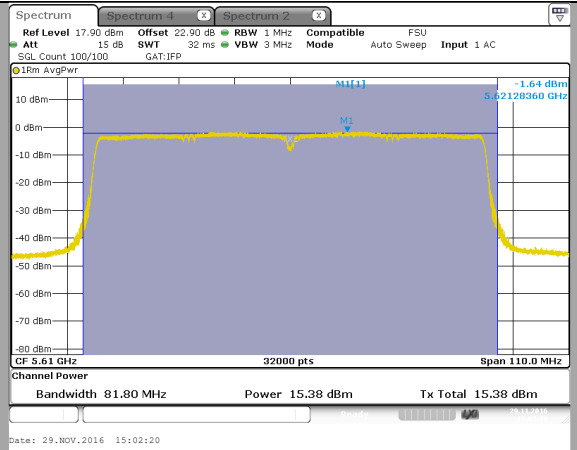
Tx2



Tx3



Tx4



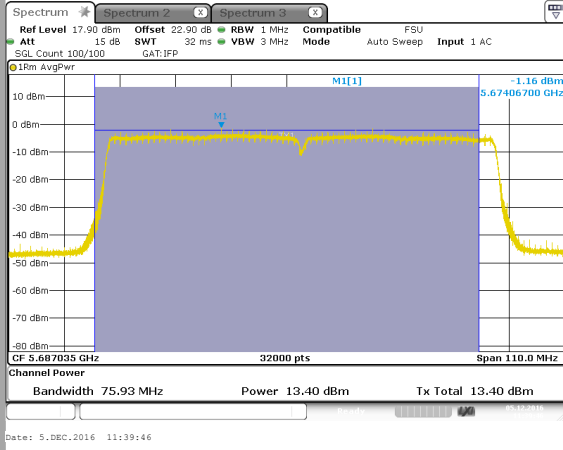


L C I E

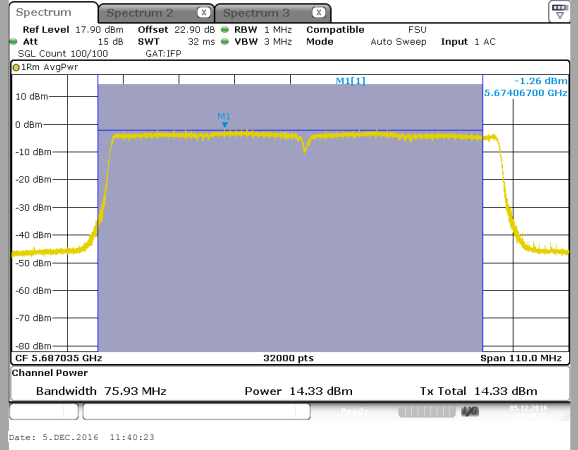
802.11ac VHT80

C28 Straddle 5470MHz-5725MHz

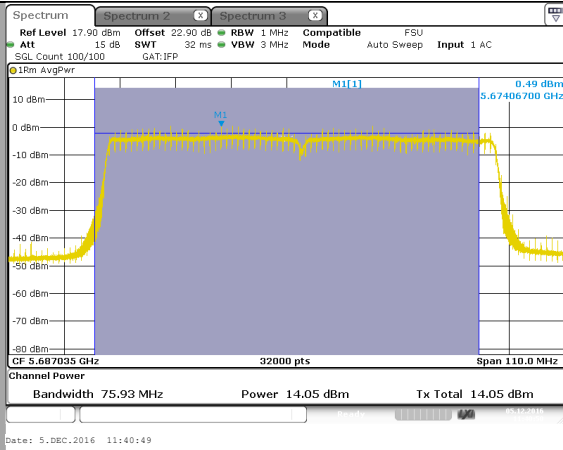
Tx1



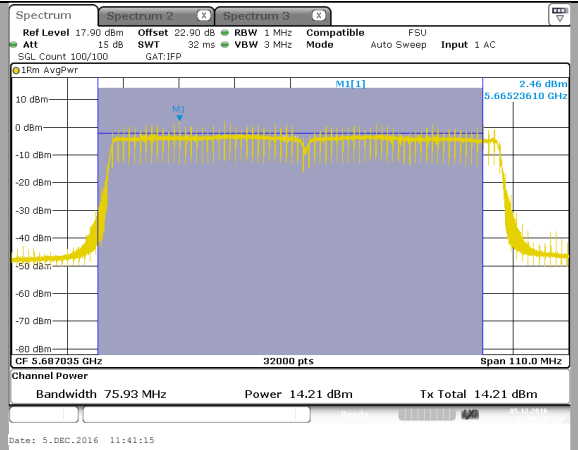
Tx2



Tx3



Tx4



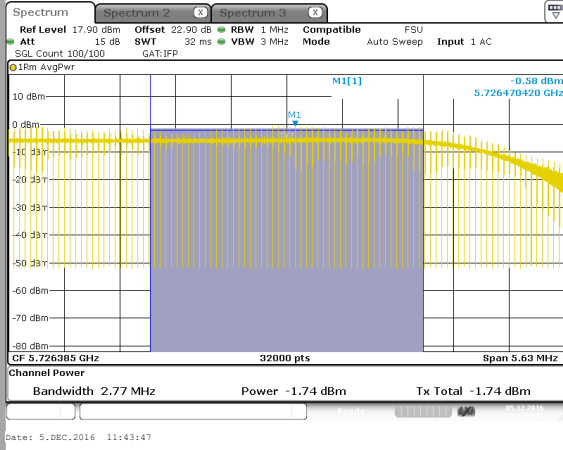


L C I E

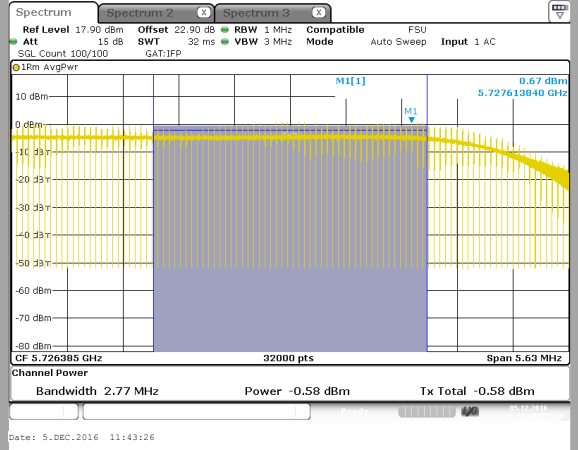
802.11ac VHT80

C28 Straddle 5725MHz-5850MHz

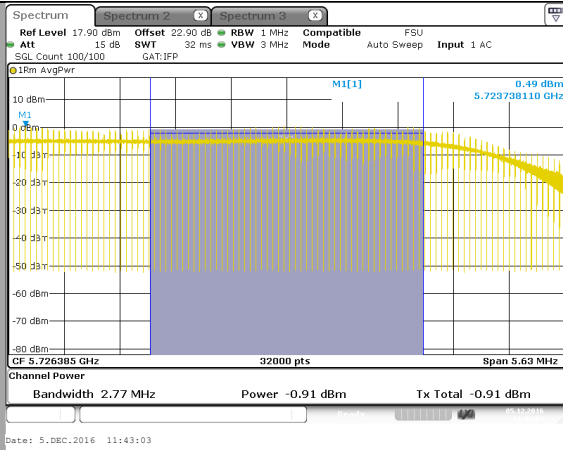
Tx1



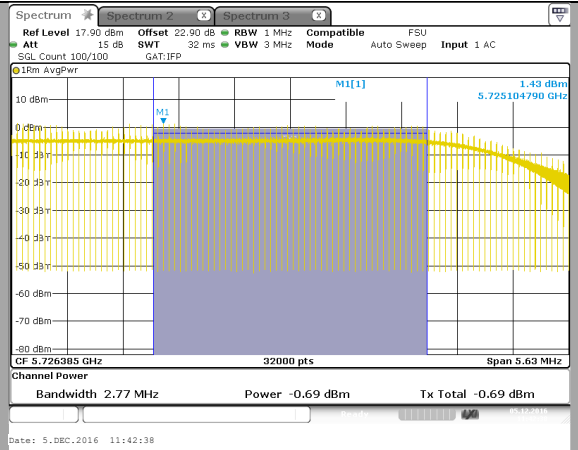
Tx2



Tx3



Tx4



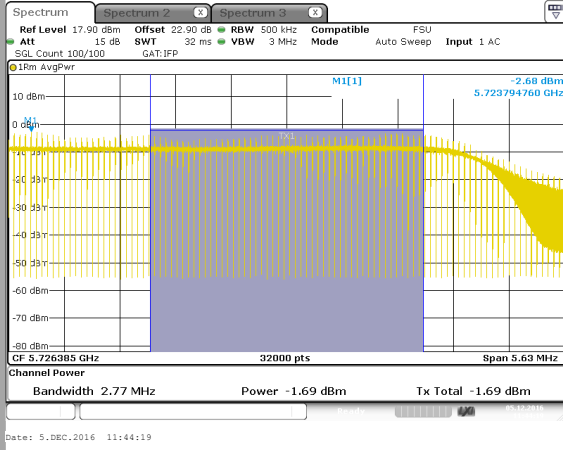


L C I E

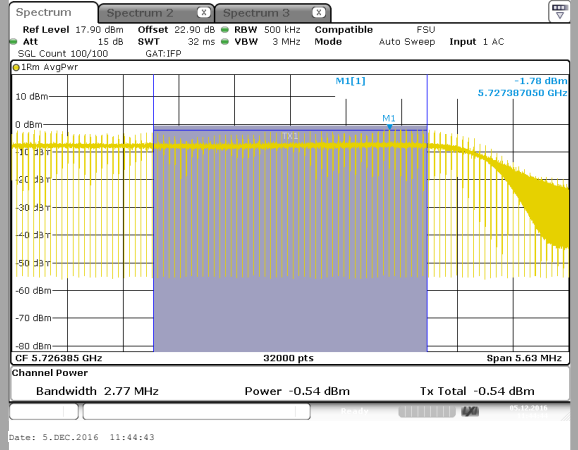
802.11ac VHT80

C28 Straddle 5725MHz-5850MHz

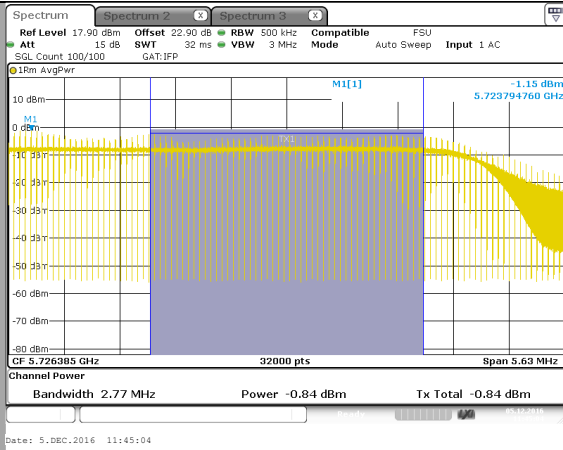
Tx1



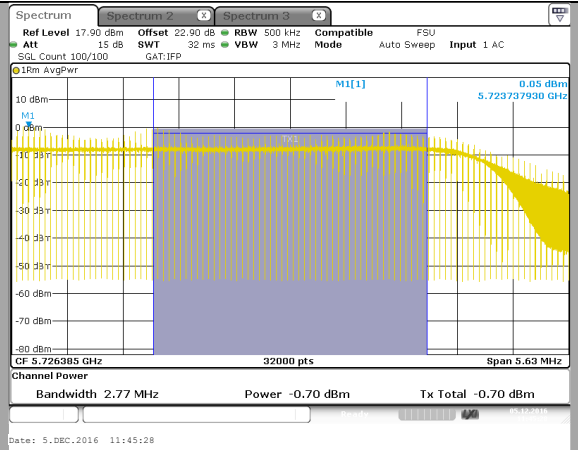
Tx2



Tx3



Tx4



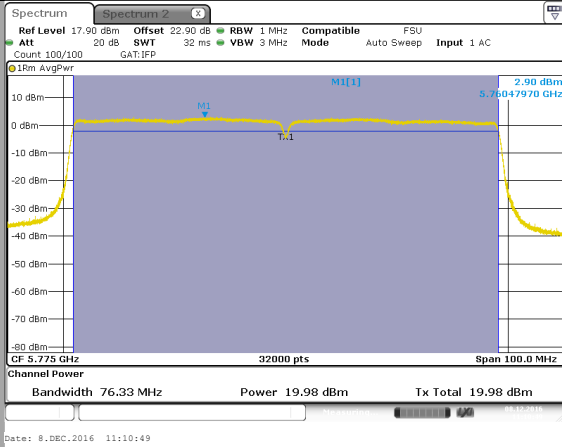


L C I E

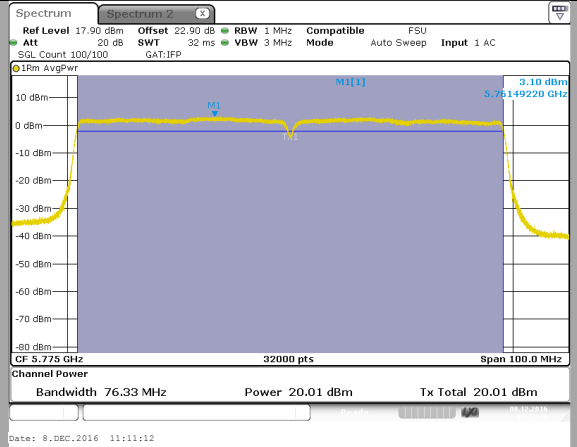
802.11ac VHT80

C29

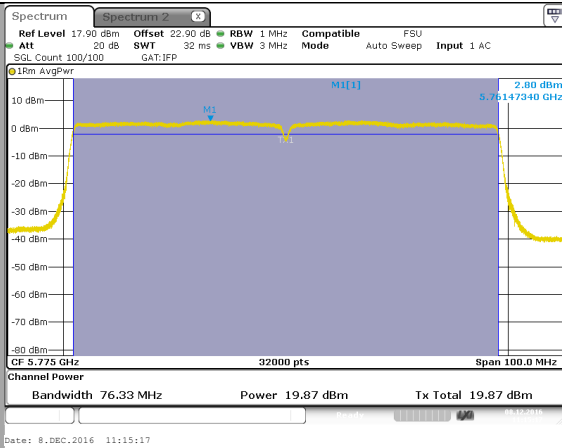
Tx1



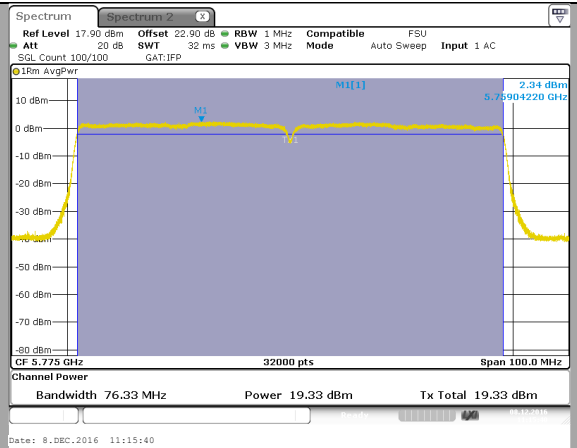
Tx2



Tx3



Tx4



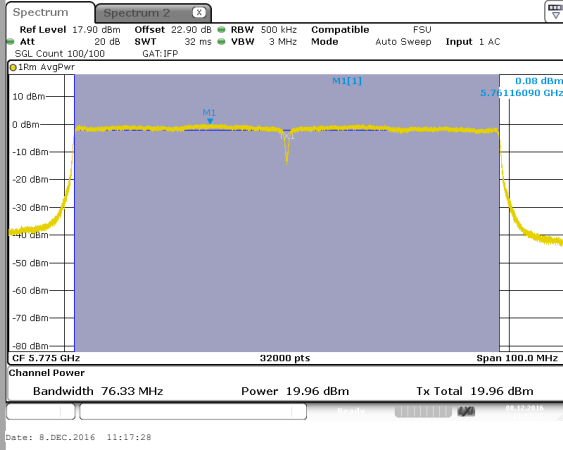


L C I E

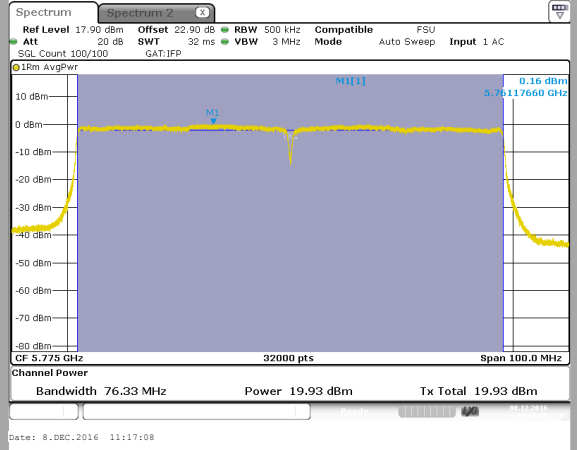
802.11ac VHT80

C29

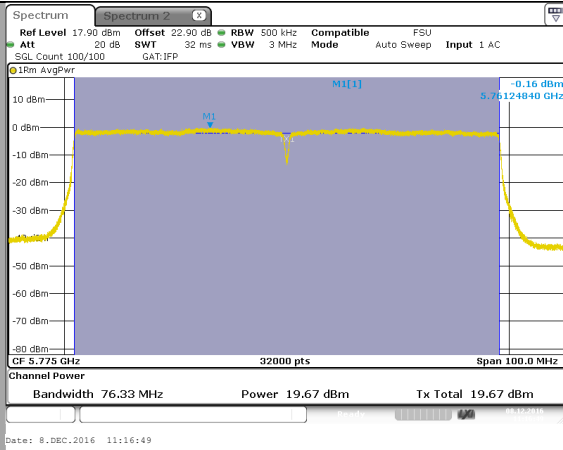
Tx1



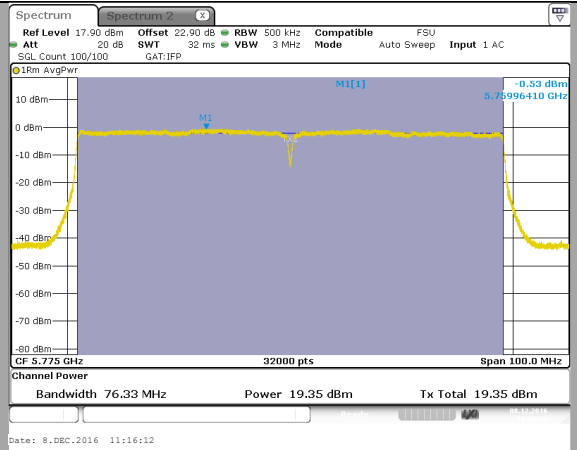
Tx2



Tx3



Tx4



802.11n HT20/ac VHT20 Conducted Output Power

Channel	Tx1 (dBm)	Tx2 (dBm)	Tx3 (dBm)	Tx4 (dBm)	TxAll (dBm)	AG (dBi)	Tx Limit FCC (dBm)	Tx EIRP (dBm)	EIRP Limit FCC (dBm)
C1	13,4	13,2	13,6	12,5	19,2	8,0	28,0	27,2	
C2	19,9	19,5	20,0	19,2	25,7	8,0	28,0	33,7	
C3	19,7	19,4	19,8	19,0	25,5	8,0	28,0	33,5	
C4	13,0	13,0	12,6	15,2	19,6	8,0	22,0	27,6	TPC si EIRP>27dBm
C5	13,5	13,4	13,4	14,2	19,7	8,0	22,0	27,7	TPC si EIRP>27dBm
C6	13,5	13,5	13,4	14,2	19,7	8,0	22,0	27,7	TPC si EIRP>27dBm
C7	13,4	14,1	13,6	13,4	19,7	8,0	22,0	27,7	TPC si EIRP>27dBm
C8	13,5	14,5	13,3	13,4	19,7	8,0	22,0	27,7	TPC si EIRP>27dBm
C9	9,1	9,3	8,3	11,1	15,6	8,0	22,0	23,6	TPC si EIRP>27dBm
C10 Straddle 5470MHz-5725MHz	12,4	12,6	13,0	13,2	18,8	8,0	22,0	26,8	TPC si EIRP>27dBm
C10 Straddle 5725MHz-5850MHz	6,5	6,8	7,1	7,3	12,9	8,0	28,0	20,9	TPC si EIRP>27dBm
C11	19,1	20,2	19,9	19,9	25,8	8,0	28,0		
C12	18,7	19,9	19,6	19,7	25,5	8,0	28,0		
C13	18,5	19,7	19,1	19,6	25,3	8,0	28,0		

802.11n HT20/ac VHT20 Spectral Density

Channel	Tx1 (dBm/MHz)	Tx2 (dBm/MHz)	Tx3 (dBm/MHz)	Tx4 (dBm/MHz)	TxAll (dBm/MHz)	AG (dBi)	Tx Limit FCC (dBm/MHz)
C1	2,47	2,3	2,66	1,81	8,3	8,0	15,0
C2	9,14	8,61	9,16	8,15	14,8	8,0	15,0
C3	8,73	8,72	8,93	8,04	14,6	8,0	15,0
C4	2,16	2,07	1,54	4,48	8,7	8,0	9
C5	2,61	2,5	2,48	3,24	8,7	8,0	9
C6	2,56	2,55	2,37	3,31	8,7	8,0	9
C7	2,54	3,22	2,75	2,46	8,8	8,0	9
C8	2,46	3,52	2,37	2,46	8,7	8,0	9
C9	-1,8	-1,63	-2,2	0,15	4,8	8,0	9
C10 Straddle 5470MHz-5725MHz	2,53	2,62	3,3	3,37	8,99	8,0	9
C10 Straddle 5725MHz-5850MHz	-0,4	-0,08	0,22	0,27	6,0	8,0	28 (/500kHz)
C11	5,48	6,54	6,5	6,18	12,2	8,0	28 (/500kHz)
C12	5,03	6,53	5,9	6,13	12,0	8,0	28 (/500kHz)
C13	4,74	6,05	5,52	5,79	11,6	8,0	28 (/500kHz)



L C I E

802.11n HT40/ac VHT40 Conducted Output Power

Channel	Tx1 (dBm)	Tx2 (dBm)	Tx3 (dBm)	Tx4 (dBm)	TxAll (dBm)	AG (dBi)	Tx Limit FCC (dBm)	Tx EIRP (dBm)	EIRP Limit FCC (dBm)
C14	12,75	13,86	13,79	14,72	19,9	8,0	28,0	27,9	
C15	17,89	19,21	18,84	18,7	24,7	8,0	28,0	32,7	
C16	14,74	13,99	14,3	14,15	20,3	8,0	22	28,3	TPC si EIRP>27dBm
C17	15,06	14,27	14,45	14,54	20,6	8,0	22	28,6	TPC si EIRP>27dBm
C18	13,21	13,21	13,29	13,36	19,3	8,0	22	27,3	TPC si EIRP>27dBm
C19	12,78	12,6	12,93	13,78	19,1	8,0	22	27,1	TPC si EIRP>27dBm
C20	14	12,68	13,11	12,93	19,2	8,0	22	27,2	TPC si EIRP>27dBm
C21 Straddle 5470MHz-5725MHz	15,25	15,81	15,54	15,04	21,4	8,0	22	29,4	TPC si EIRP>27dBm
C21 Straddle 5725MHz-5850MHz	4,3	4,83	4,59	4,18	10,5	8,0	28,0	18,5	TPC si EIRP>27dBm
C22	19,79	20,33	20,6	20,02	26,2	8,0	28,0		
C23	19,34	19,83	20,12	20,07	25,9	8,0	28,0		

802.11n HT40/ac VHT40 Spectral Density

Channel	Tx1 (dBm/MHz)	Tx2 (dBm/MHz)	Tx3 (dBm/MHz)	Tx4 (dBm/MHz)	TxAll (dBm/MHz)	AG (dBi)	Tx Limit FCC (dBm/MHz)
C14	0,42	1,36	1,5	2,96	7,7	8,0	15,0
C15	8,18	9,6	8,92	8,74	14,9	8,0	15,0
C16	2,93	0,82	1,61	1,24	7,7	8,0	9
C17	4,18	1,03	1,46	2,74	8,6	8,0	9
C18	-0,34	-0,75	-0,53	-0,35	5,5	8,0	9
C19	-0,92	-1,15	-1	0,16	5,3	8,0	9
C20	1,73	-1,15	-0,77	-1,05	5,9	8,0	9
C21 Straddle 5470MHz-5725MHz	1,74	2,25	1,94	2,3	8,1	8,0	9
C21 Straddle 5725MHz-5850MHz	2,82	4,23	3,07	2,88	9,3	8,0	28 (/500kHz)
C22	2,91	3,45	3,92	3,58	9,5	8,0	28 (/500kHz)
C23	2,71	3,44	3,4	3,45	9,3	8,0	28 (/500kHz)

802.11ac VHT80 Conducted Output Power

Channel	Tx1 (dBm)	Tx2 (dBm)	Tx3 (dBm)	Tx4 (dBm)	TxAll (dBm)	AG (dBi)	Tx Limit FCC (dBm)	Tx EIRP (dBm)	EIRP Limit FCC (dBm)
C24	15,7	15,71	15,31	15,67	21,6	8,0	28,0	29,6	
C25	16,31	15,19	15,38	14,85	21,5	8,0	22	29,5	TPC si EIRP>27dBm
C26	12,68	15,36	15,57	16,31	21,2	8,0	22	29,2	TPC si EIRP>27dBm
C27	15,53	14,72	15,25	15,38	21,3	8,0	22	29,3	TPC si EIRP>27dBm
C28 Straddle 5470MHz-5725MHz	13,4	14,33	14,05	14,21	20,0	8,0	22	28,0	TPC si EIRP>27dBm
C28 Straddle 5725MHz-5850MHz	-1,74	-0,58	-0,91	-0,69	5,1	8,0	28,0	13,1	
C29	19,98	20,01	19,87	19,33	25,8	8,0	28,0	33,8	

802.11ac VHT80 Spectral Density

Channel	Tx1 (dBm/MHz)	Tx2 (dBm/MHz)	Tx3 (dBm/MHz)	Tx4 (dBm/MHz)	TxAll (dBm/MHz)	AG (dBi)	Tx Limit FCC (dBm/MHz)
C24	1,6	0,87	2,75	3,32	8,3	8,0	15,0
C25	-0,42	0,55	0,33	1	6,4	8,0	9
C26	-0,6	-1,33	-1,04	-0,59	5,1	8,0	9
C27	-1,32	-2,29	-1,41	-1,64	4,4	8,0	9
C28 Straddle 5470MHz-5725MHz	-1,16	-1,26	0,49	2,46	6,4	8,0	9
C28 Straddle 5725MHz-5850MHz	-2,6	-1,78	-1,15	0,05	4,8	8,0	28 (/500kHz)
C29	0,08	0,16	-0,16	-0,53	5,9	8,0	28 (/500kHz)

8.6. CONCLUSION

Maximum Conducted Output Power, Maximum Power Spectral Density, Maximum EIRP, Maximum EIRP Power Spectral Density measurement performed on the sample of the product **SAGEMCOM TheBox (253697282)**, SN: **616400107098** in configuration and description presented in this test report, show levels **compliant** to the **47 CFR PART 15.407** limits.