

2.Occupied Bandwidth Measurement

Test Mode	Test Channel	Ant	OBW[MHz]	Limit[MHz]	Verdict
11A	5180	Ant2	17.370	---	PASS
11A	5180	Ant3	17.370	---	PASS
11A	5180	Ant4	17.400	---	PASS
11A	5180	Ant5	17.340	---	PASS
11A	5200	Ant2	17.370	---	PASS
11A	5200	Ant3	17.400	---	PASS
11A	5200	Ant4	17.370	---	PASS
11A	5200	Ant5	17.340	---	PASS
11A	5240	Ant2	17.370	---	PASS
11A	5240	Ant3	17.370	---	PASS
11A	5240	Ant4	17.370	---	PASS
11A	5240	Ant5	17.370	---	PASS
11A	5745	Ant2	17.700	---	PASS
11A	5745	Ant3	17.670	---	PASS
11A	5745	Ant4	18.420	---	PASS
11A	5745	Ant5	19.020	---	PASS
11A	5785	Ant2	17.640	---	PASS
11A	5785	Ant3	17.610	---	PASS
11A	5785	Ant4	18.090	---	PASS
11A	5785	Ant5	18.420	---	PASS
11A	5825	Ant2	17.760	---	PASS
11A	5825	Ant3	17.910	---	PASS
11A	5825	Ant4	18.150	---	PASS
11A	5825	Ant5	18.180	---	PASS
11N20	5180	Ant2	18.330	---	PASS
11N20	5180	Ant3	18.330	---	PASS
11N20	5180	Ant4	18.330	---	PASS
11N20	5180	Ant5	18.360	---	PASS
11N20	5200	Ant2	18.330	---	PASS
11N20	5200	Ant3	18.360	---	PASS
11N20	5200	Ant4	18.360	---	PASS
11N20	5200	Ant5	18.330	---	PASS



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM170700716202
Page: 237 of 380

11N20	5240	Ant2	18.360	---	PASS
11N20	5240	Ant3	18.330	---	PASS
11N20	5240	Ant4	18.330	---	PASS
11N20	5240	Ant5	18.330	---	PASS
11N20	5745	Ant2	18.450	---	PASS
11N20	5745	Ant3	18.480	---	PASS
11N20	5745	Ant4	18.660	---	PASS
11N20	5745	Ant5	18.840	---	PASS
11N20	5785	Ant2	18.450	---	PASS
11N20	5785	Ant3	18.480	---	PASS
11N20	5785	Ant4	18.630	---	PASS
11N20	5785	Ant5	18.660	---	PASS
11N20	5825	Ant2	18.510	---	PASS
11N20	5825	Ant3	18.510	---	PASS
11N20	5825	Ant4	18.780	---	PASS
11N20	5825	Ant5	18.600	---	PASS
11N40	5190	Ant2	36.600	---	PASS
11N40	5190	Ant3	36.600	---	PASS
11N40	5190	Ant4	36.600	---	PASS
11N40	5190	Ant5	36.600	---	PASS
11N40	5230	Ant2	36.600	---	PASS
11N40	5230	Ant3	36.600	---	PASS
11N40	5230	Ant4	36.660	---	PASS
11N40	5230	Ant5	36.600	---	PASS
11N40	5755	Ant2	36.840	---	PASS
11N40	5755	Ant3	36.780	---	PASS
11N40	5755	Ant4	36.960	---	PASS
11N40	5755	Ant5	37.020	---	PASS
11N40	5795	Ant2	36.780	---	PASS
11N40	5795	Ant3	36.780	---	PASS
11N40	5795	Ant4	37.080	---	PASS
11N40	5795	Ant5	36.960	---	PASS
11AC20	5180	Ant2	18.360	---	PASS
11AC20	5180	Ant3	18.330	---	PASS



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM170700716202
Page: 238 of 380

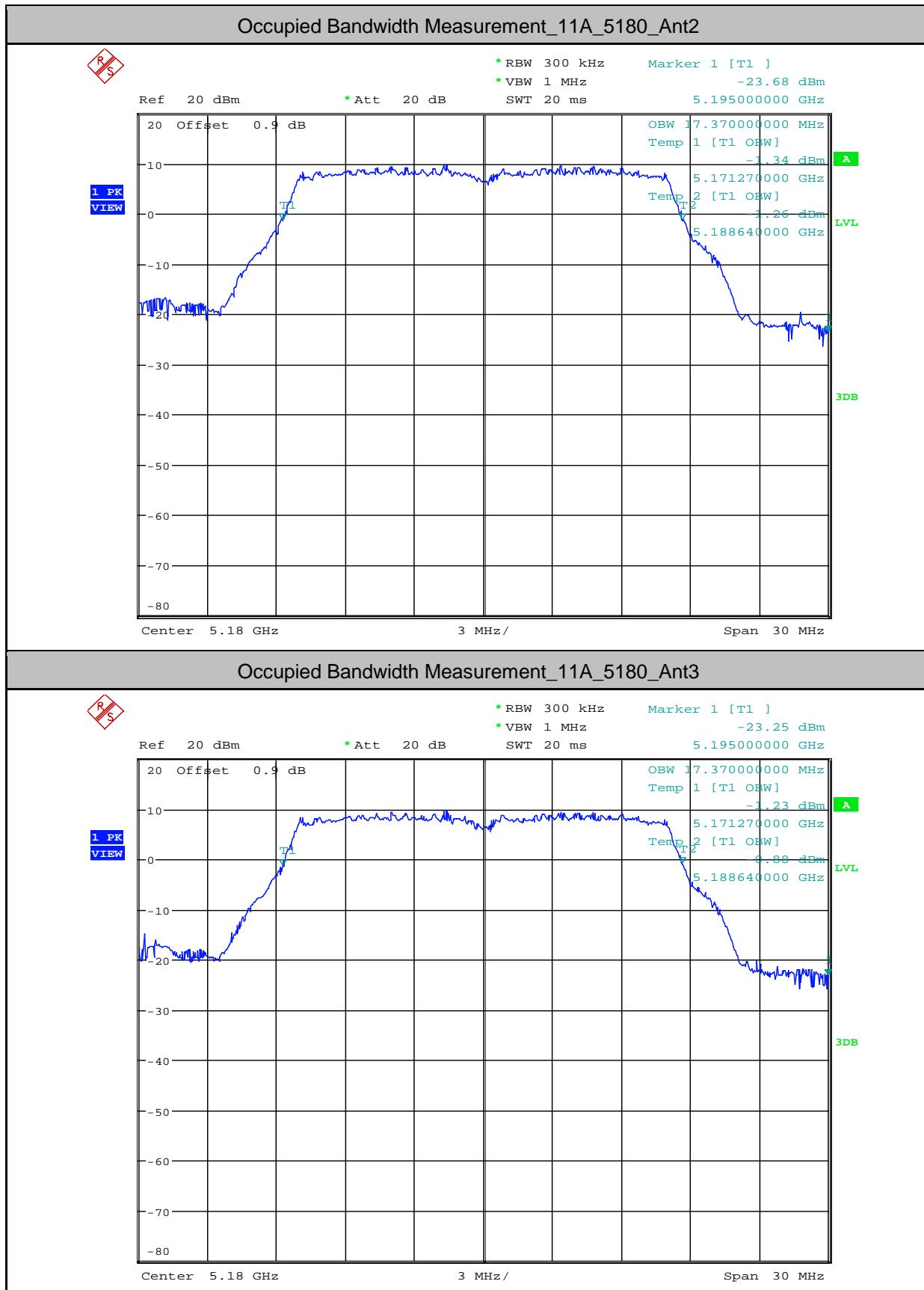
11AC20	5180	Ant4	18.330	---	PASS
11AC20	5180	Ant5	18.360	---	PASS
11AC20	5200	Ant2	18.360	---	PASS
11AC20	5200	Ant3	18.360	---	PASS
11AC20	5200	Ant4	18.360	---	PASS
11AC20	5200	Ant5	18.330	---	PASS
11AC20	5240	Ant2	18.360	---	PASS
11AC20	5240	Ant3	18.330	---	PASS
11AC20	5240	Ant4	18.360	---	PASS
11AC20	5240	Ant5	18.300	---	PASS
11AC20	5745	Ant2	18.480	---	PASS
11AC20	5745	Ant3	18.480	---	PASS
11AC20	5745	Ant4	18.720	---	PASS
11AC20	5745	Ant5	18.840	---	PASS
11AC20	5785	Ant2	18.450	---	PASS
11AC20	5785	Ant3	18.480	---	PASS
11AC20	5785	Ant4	18.510	---	PASS
11AC20	5785	Ant5	18.630	---	PASS
11AC20	5825	Ant2	18.540	---	PASS
11AC20	5825	Ant3	18.540	---	PASS
11AC20	5825	Ant4	18.630	---	PASS
11AC20	5825	Ant5	18.570	---	PASS
11AC40	5190	Ant2	36.660	---	PASS
11AC40	5190	Ant3	36.600	---	PASS
11AC40	5190	Ant4	36.540	---	PASS
11AC40	5190	Ant5	36.600	---	PASS
11AC40	5230	Ant2	36.660	---	PASS
11AC40	5230	Ant3	36.600	---	PASS
11AC40	5230	Ant4	36.600	---	PASS
11AC40	5230	Ant5	36.600	---	PASS
11AC40	5755	Ant2	36.840	---	PASS
11AC40	5755	Ant3	36.840	---	PASS
11AC40	5755	Ant4	37.020	---	PASS
11AC40	5755	Ant5	37.020	---	PASS

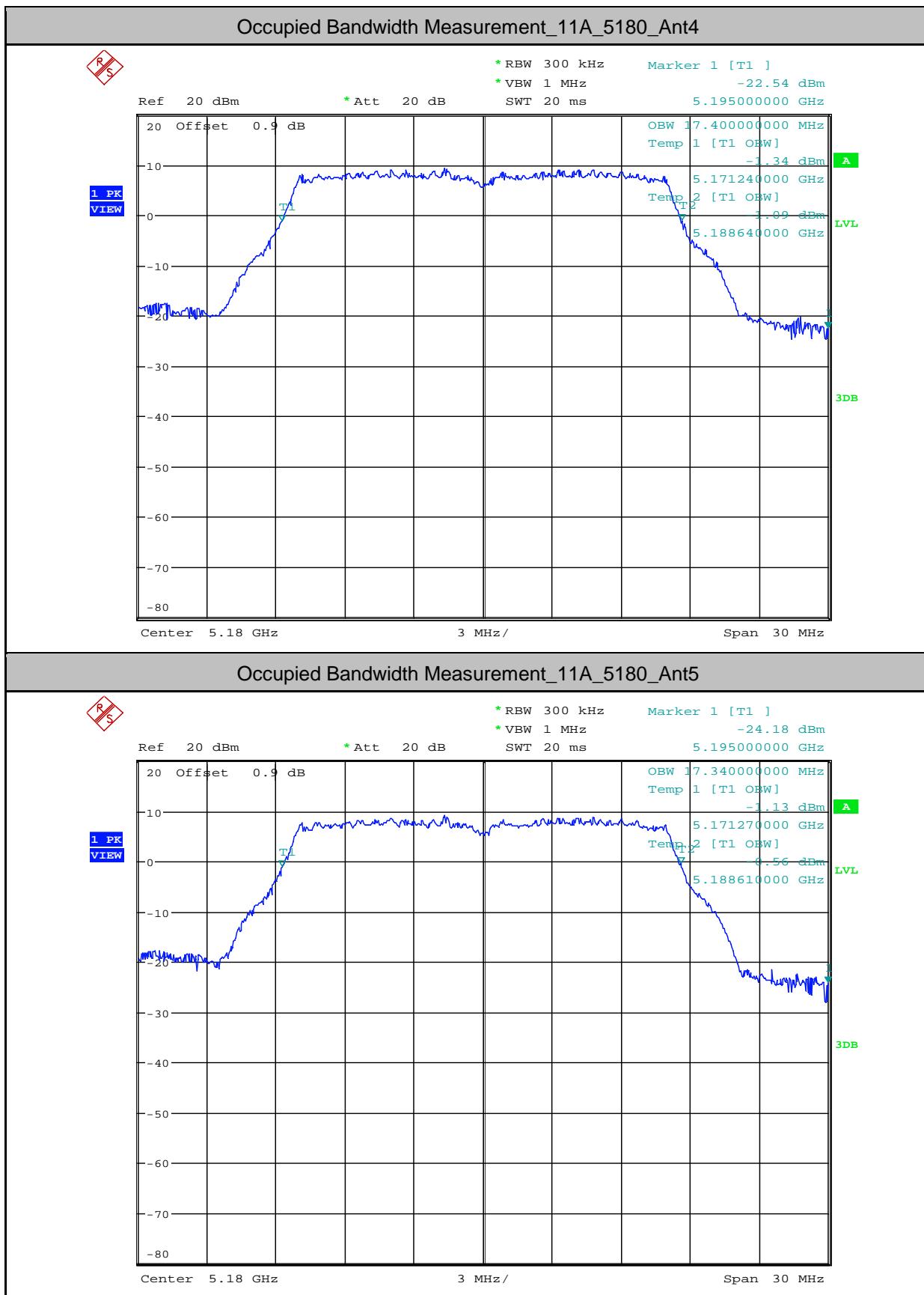


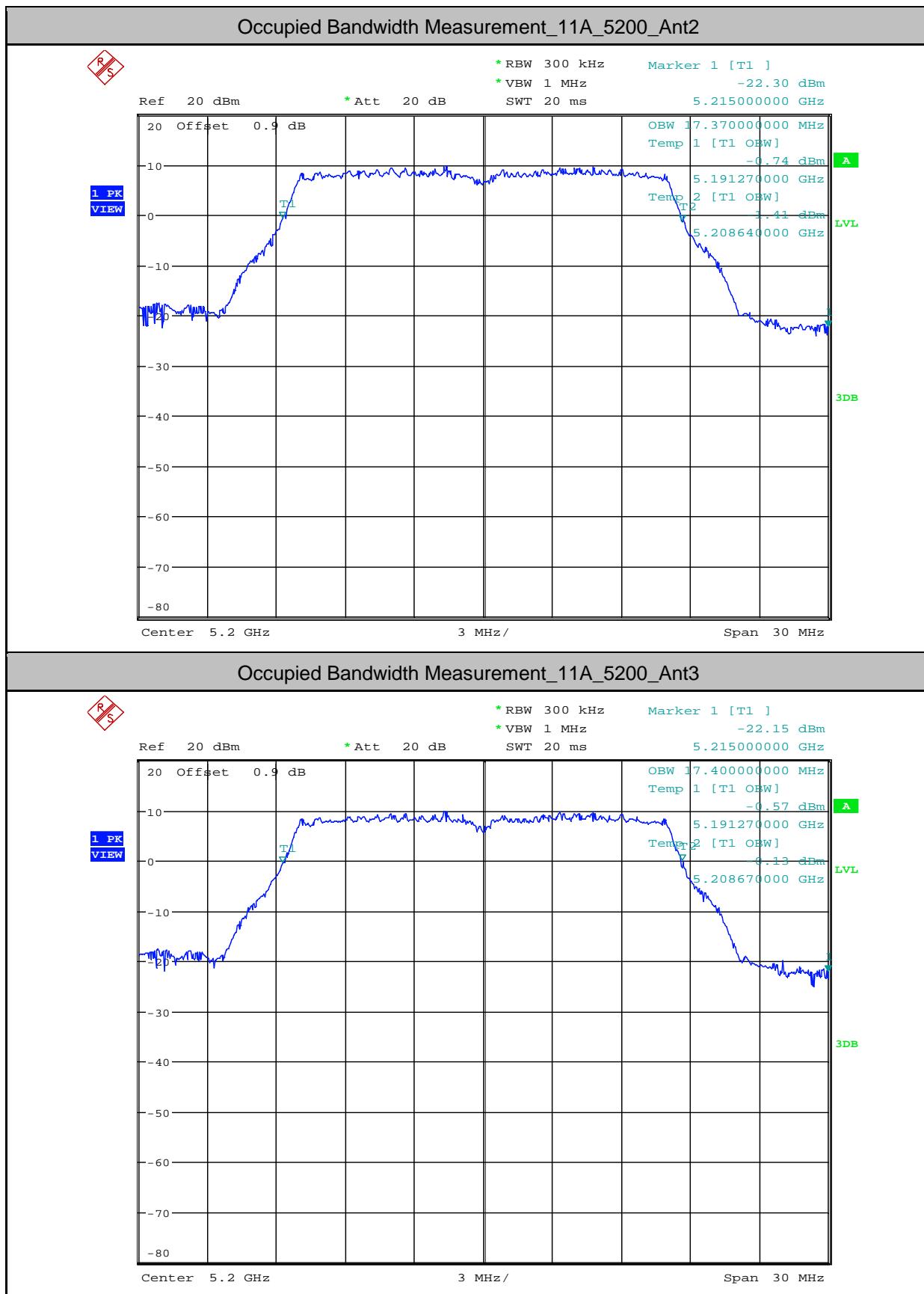
**SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch**

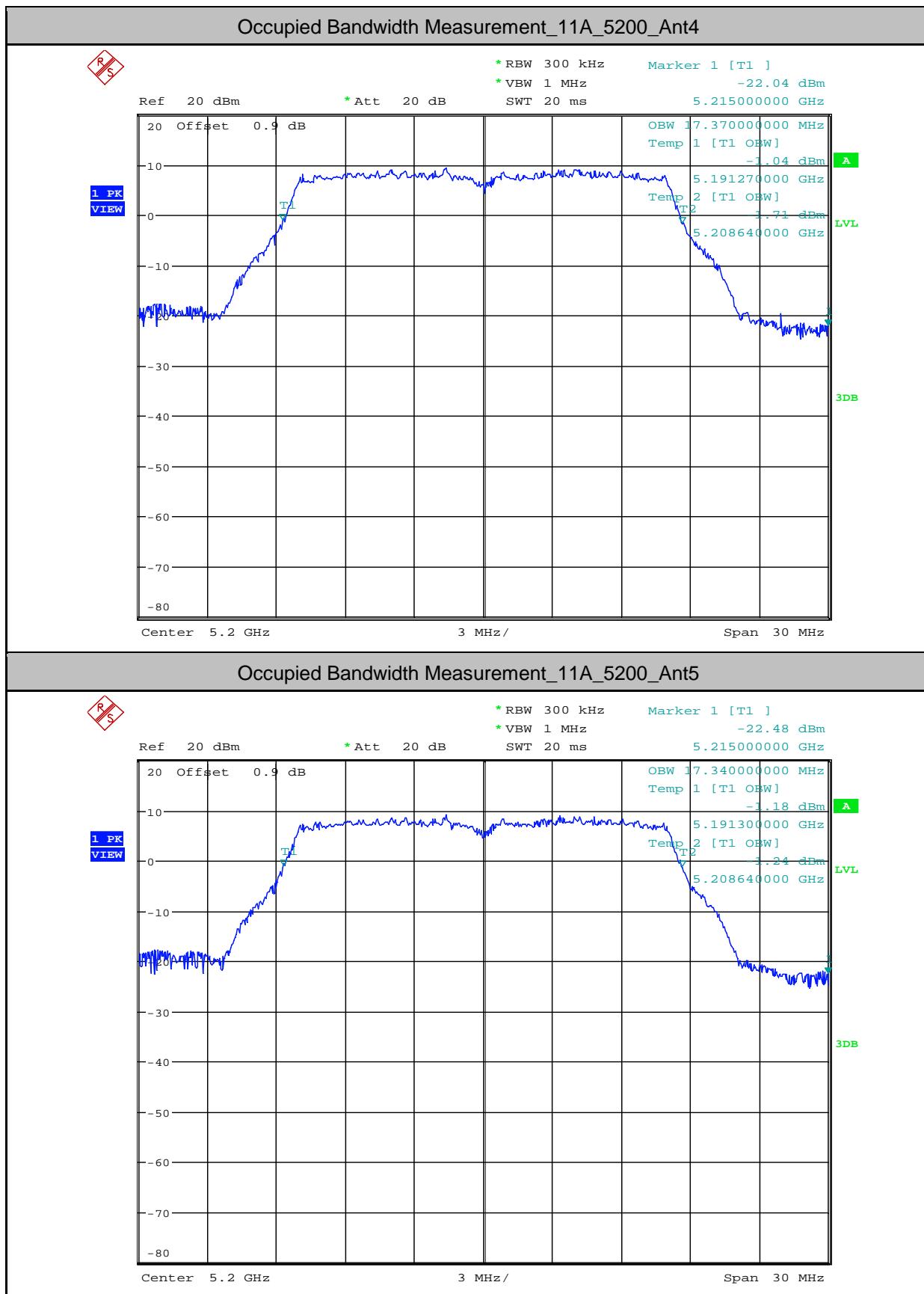
Report No.: SZEM170700716202
Page: 239 of 380

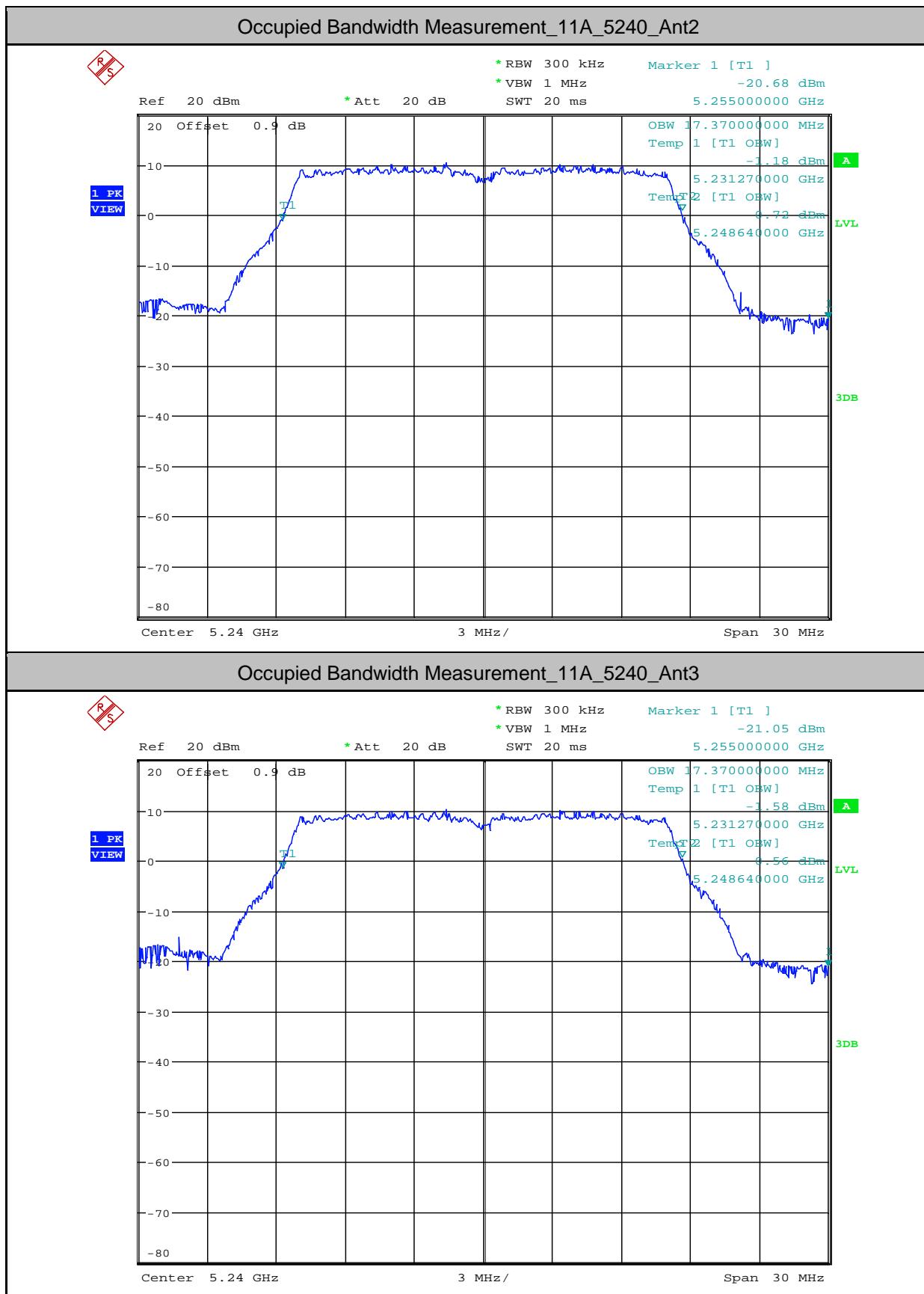
11AC40	5795	Ant2	36.840	---	PASS
11AC40	5795	Ant3	36.780	---	PASS
11AC40	5795	Ant4	37.080	---	PASS
11AC40	5795	Ant5	36.960	---	PASS
11AC80	5210	Ant2	75.120	---	PASS
11AC80	5210	Ant3	75.120	---	PASS
11AC80	5210	Ant4	75.120	---	PASS
11AC80	5210	Ant5	75.120	---	PASS
11AC80	5775	Ant2	76.200	---	PASS
11AC80	5775	Ant3	76.320	---	PASS
11AC80	5775	Ant4	76.560	---	PASS
11AC80	5775	Ant5	76.680	---	PASS

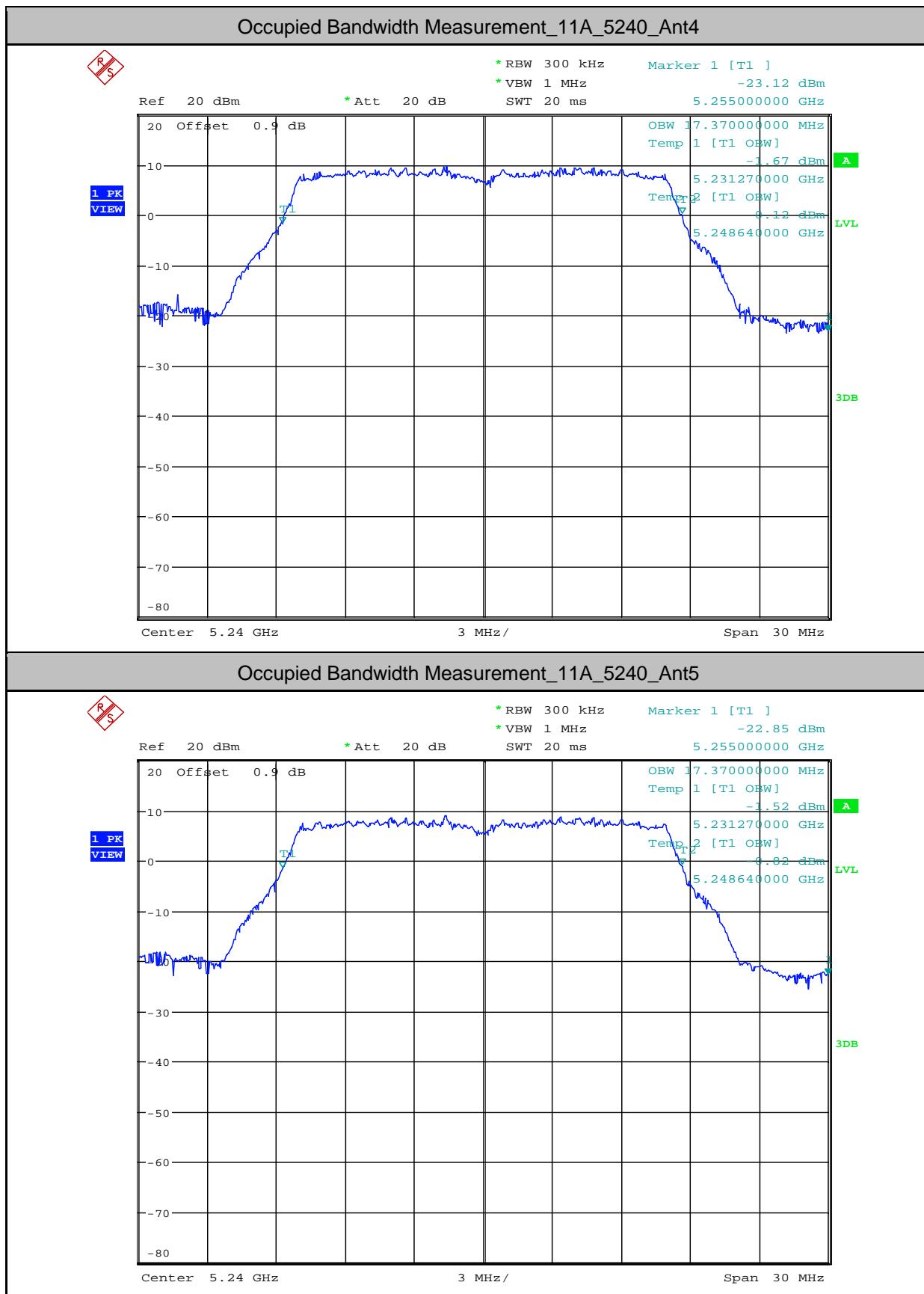


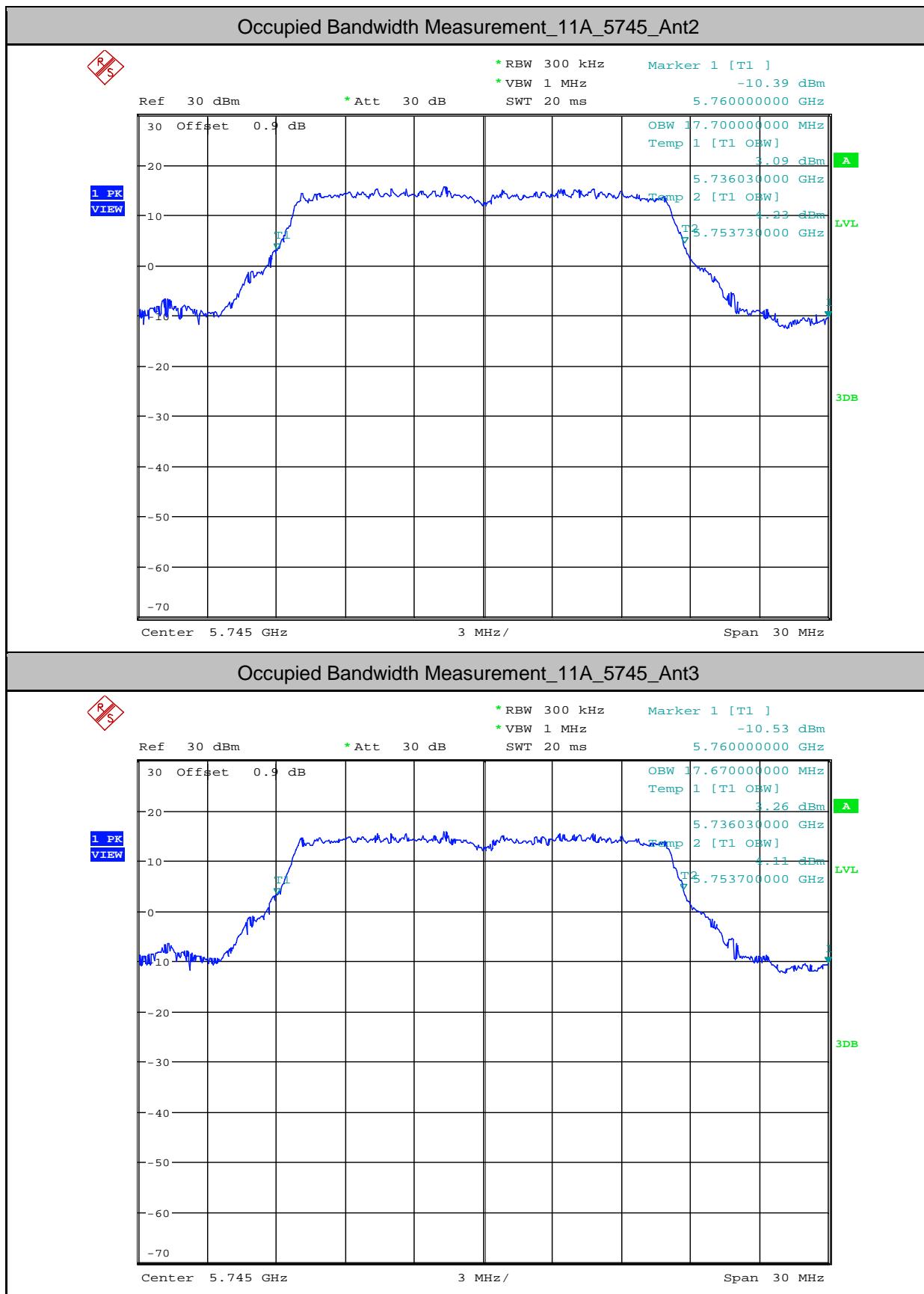


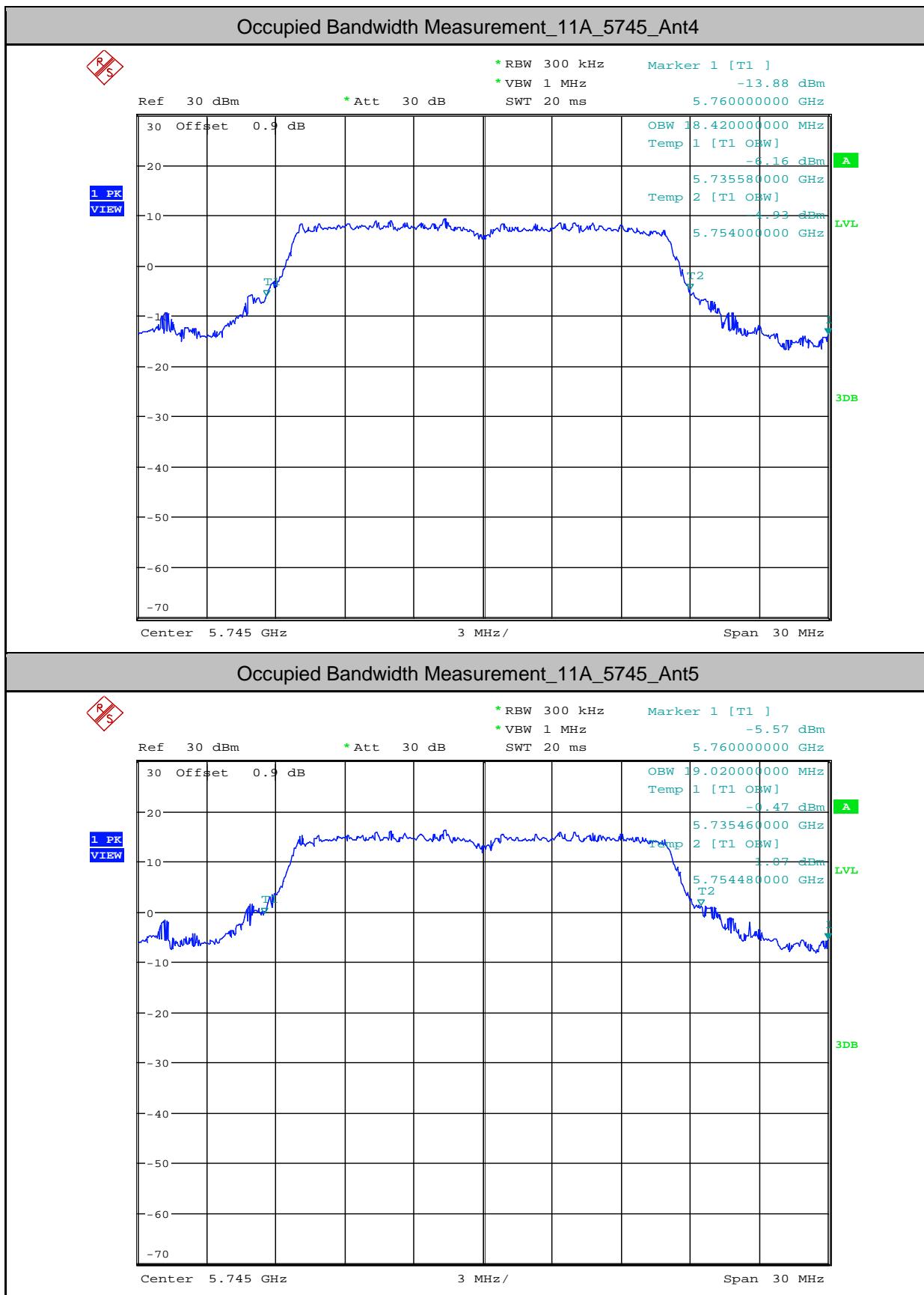


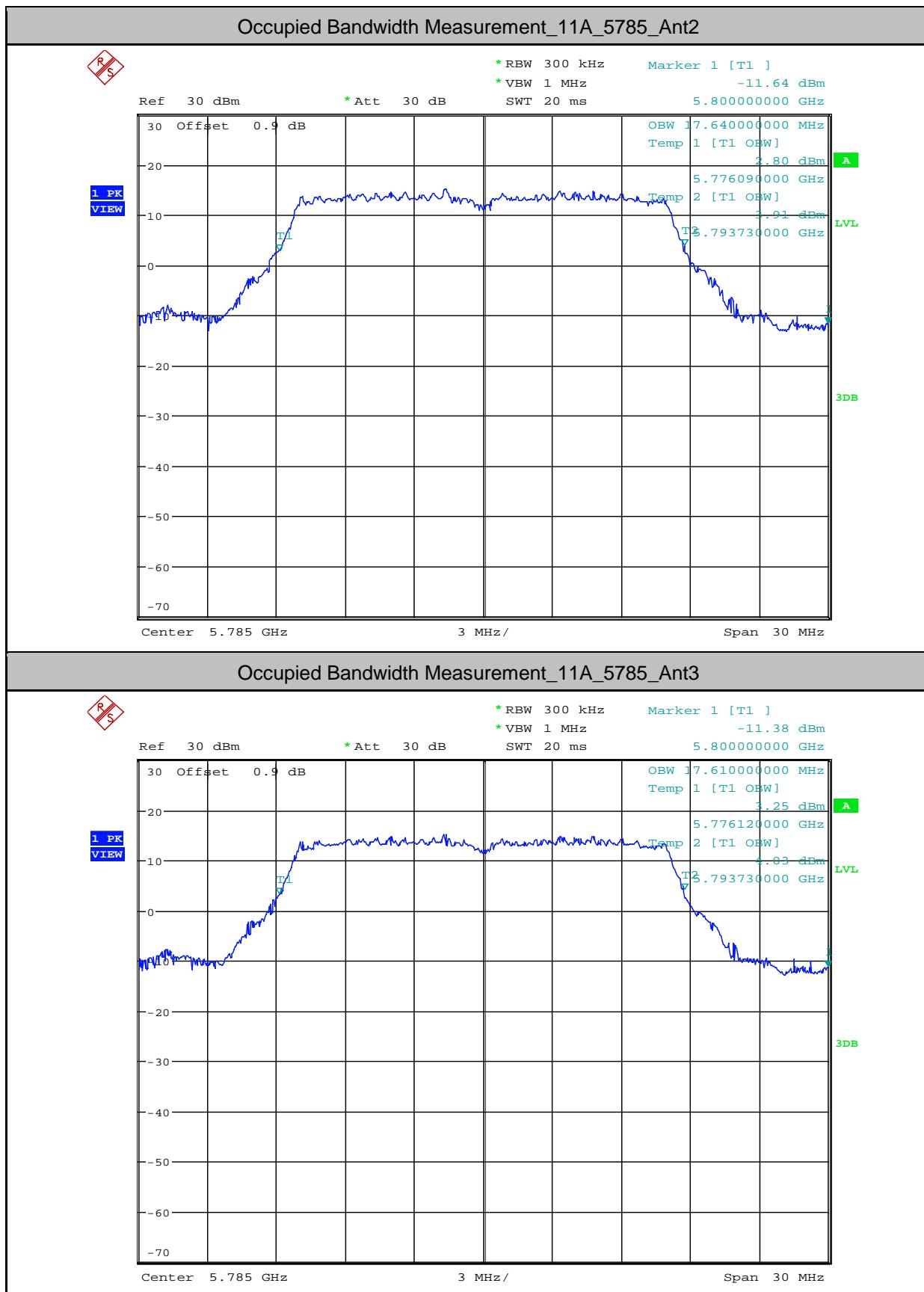


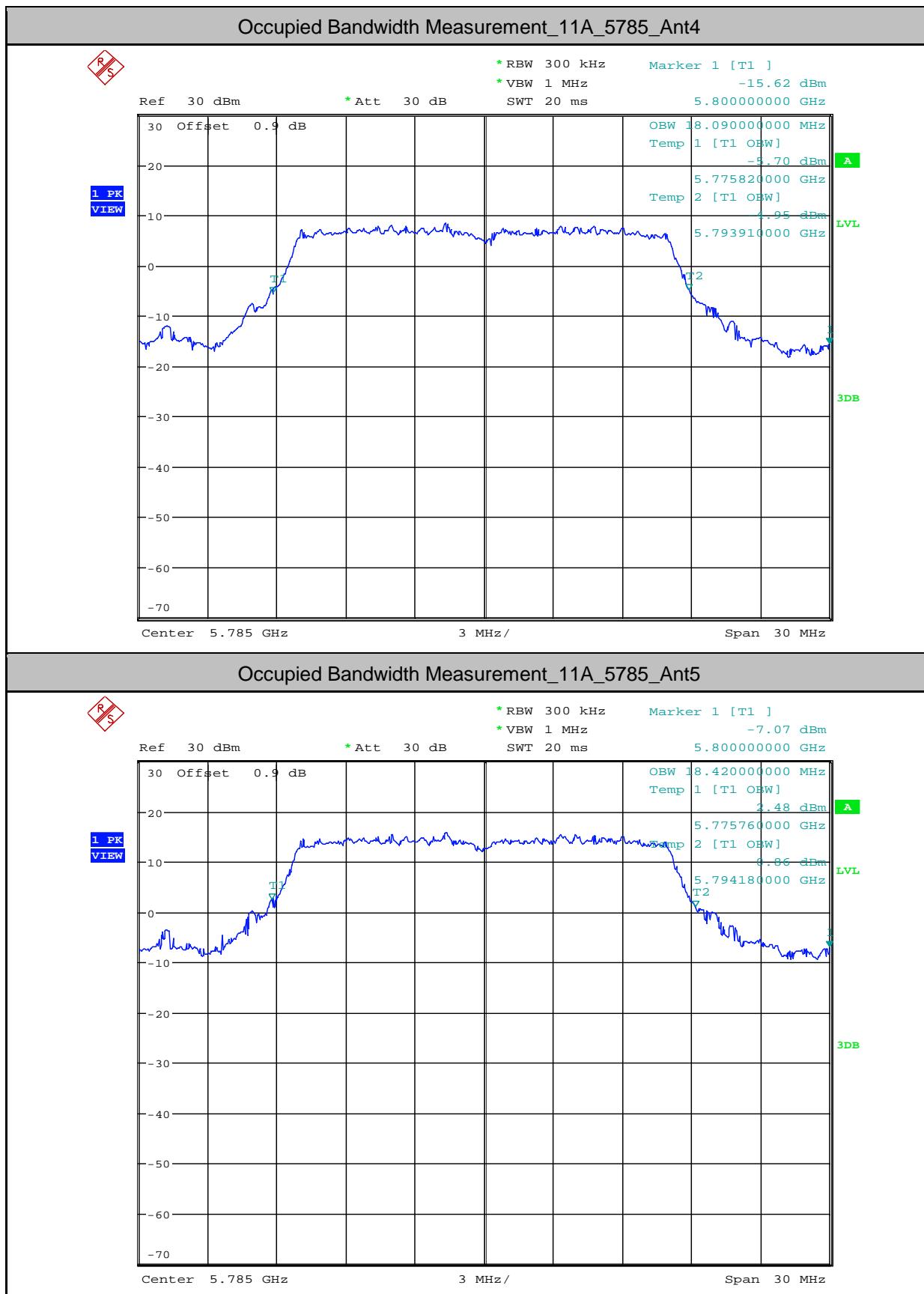


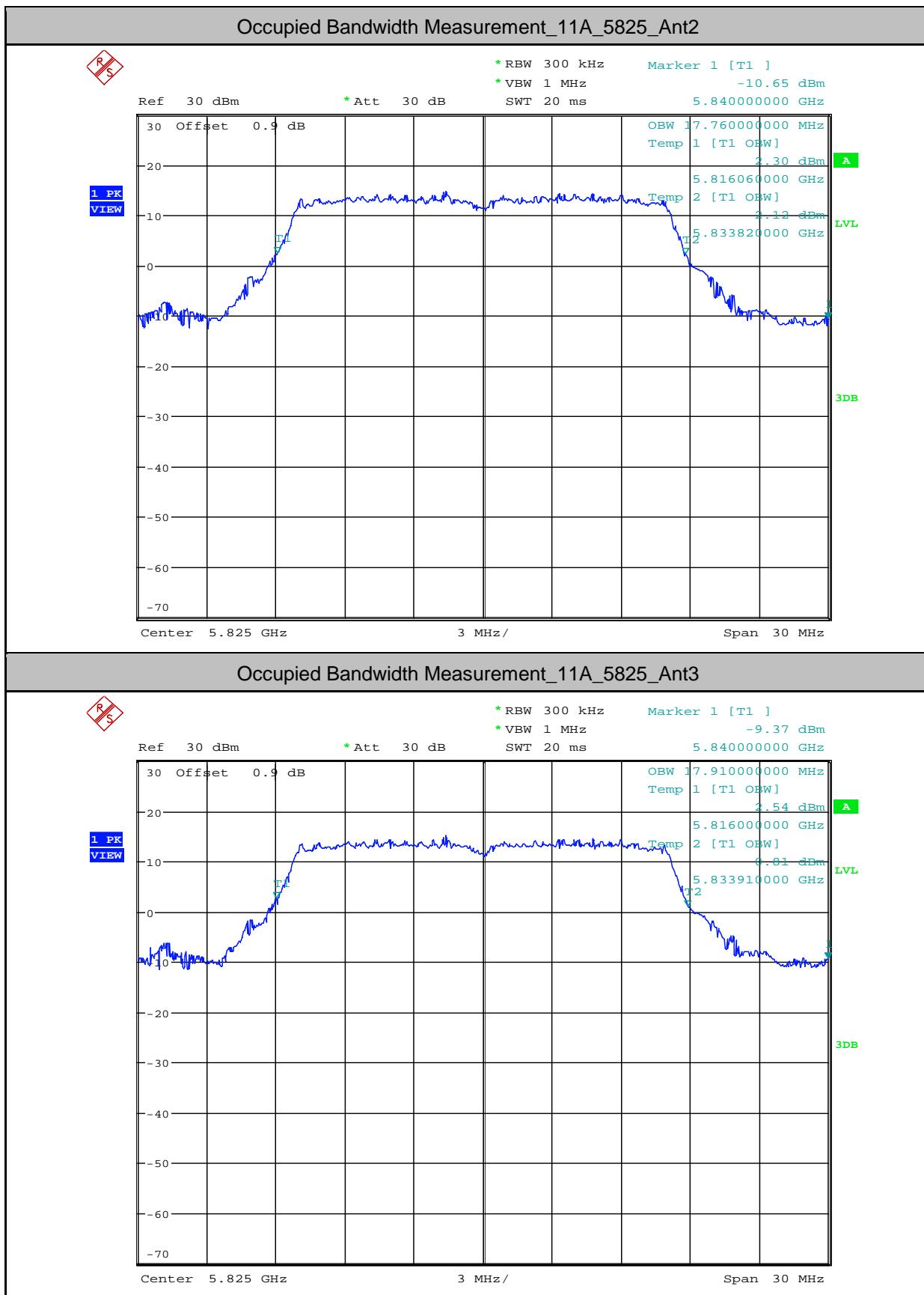


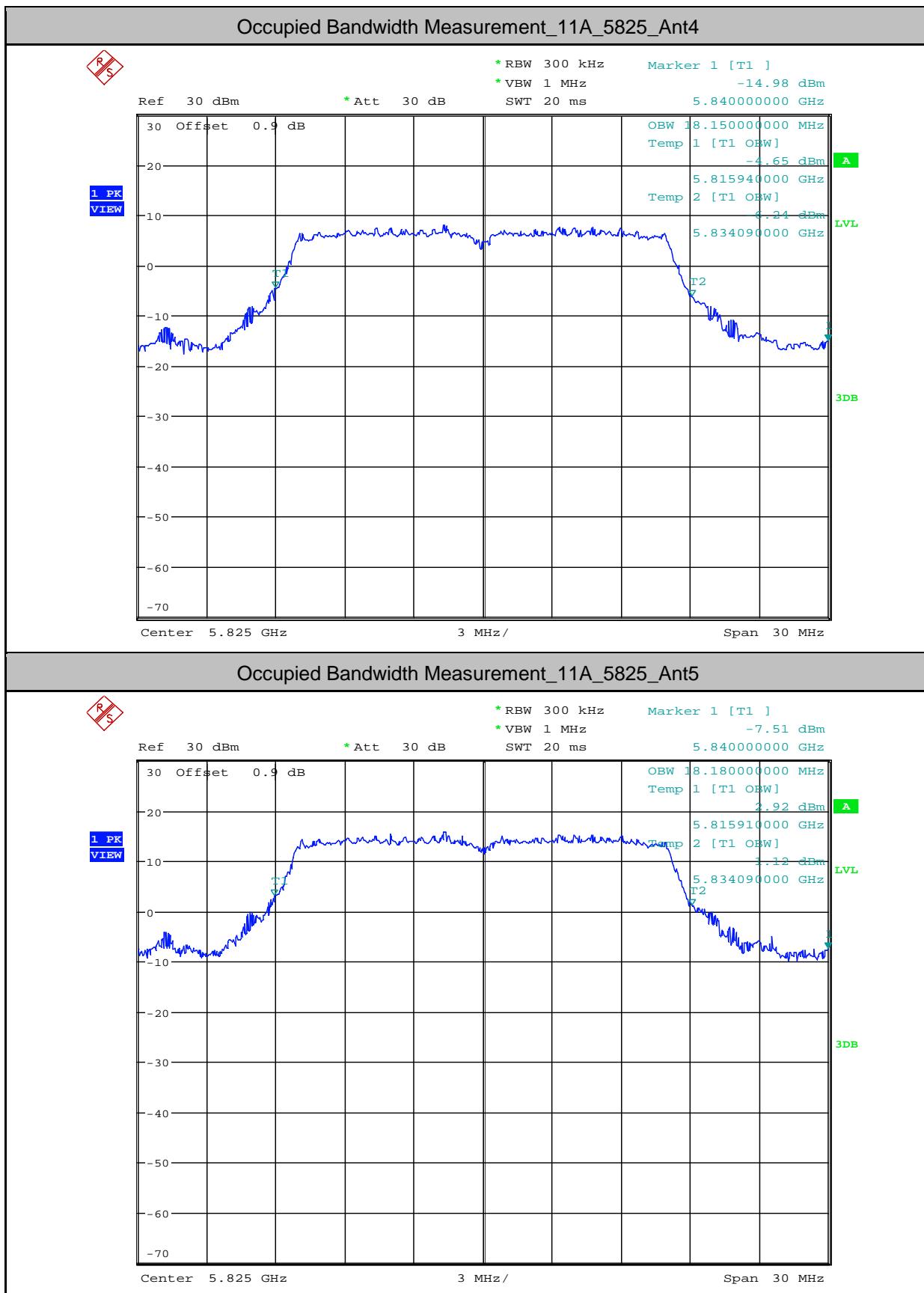


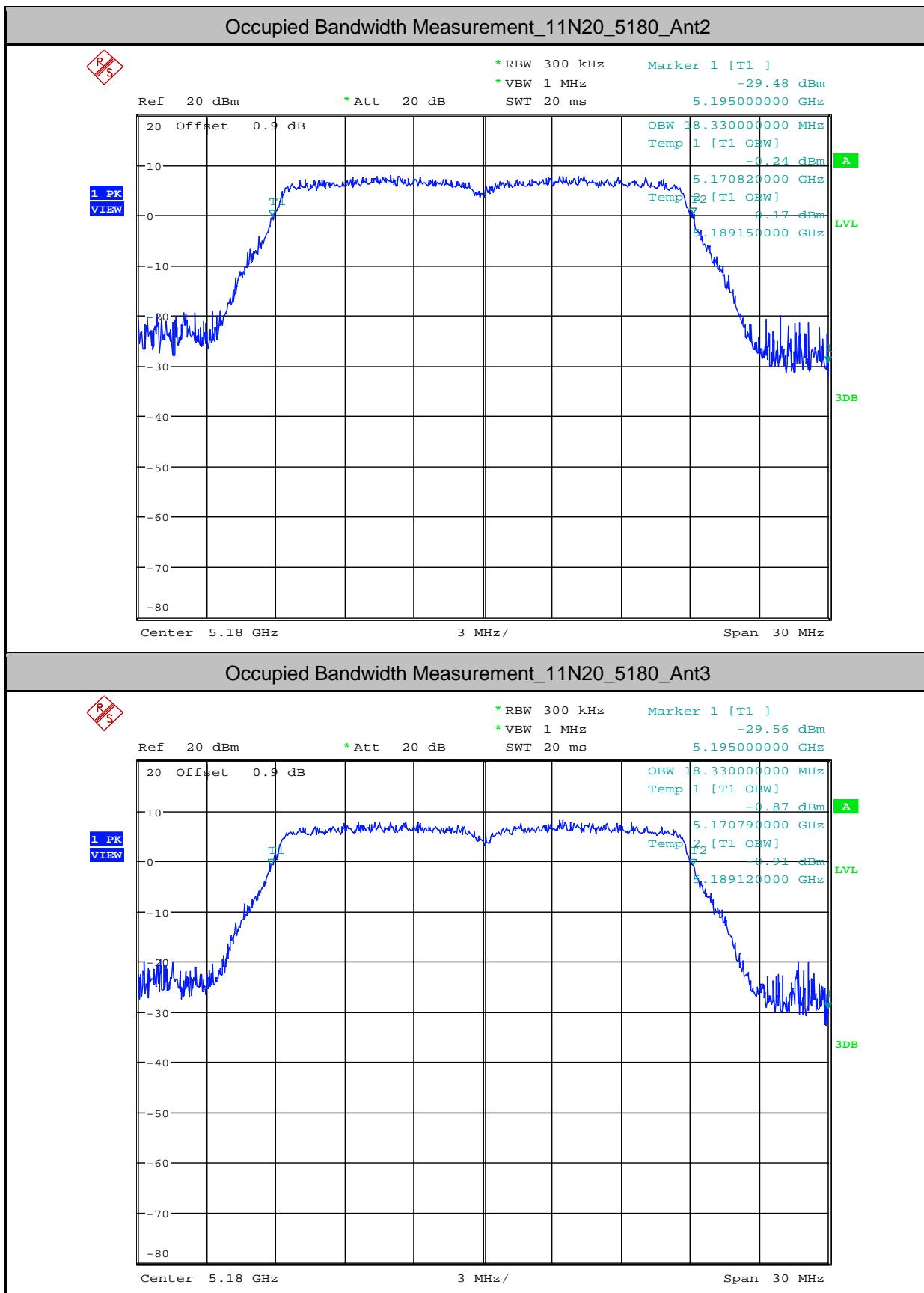


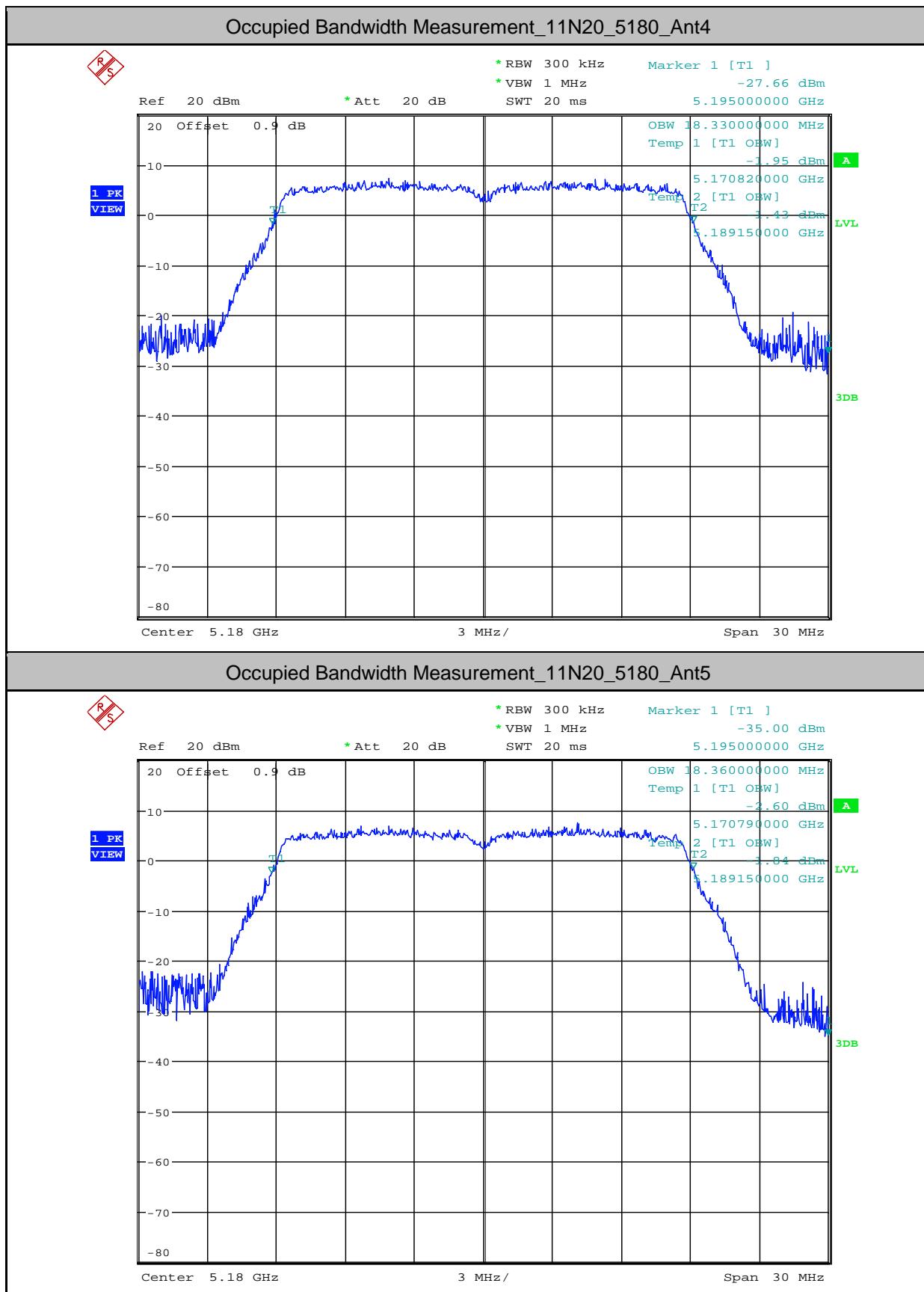


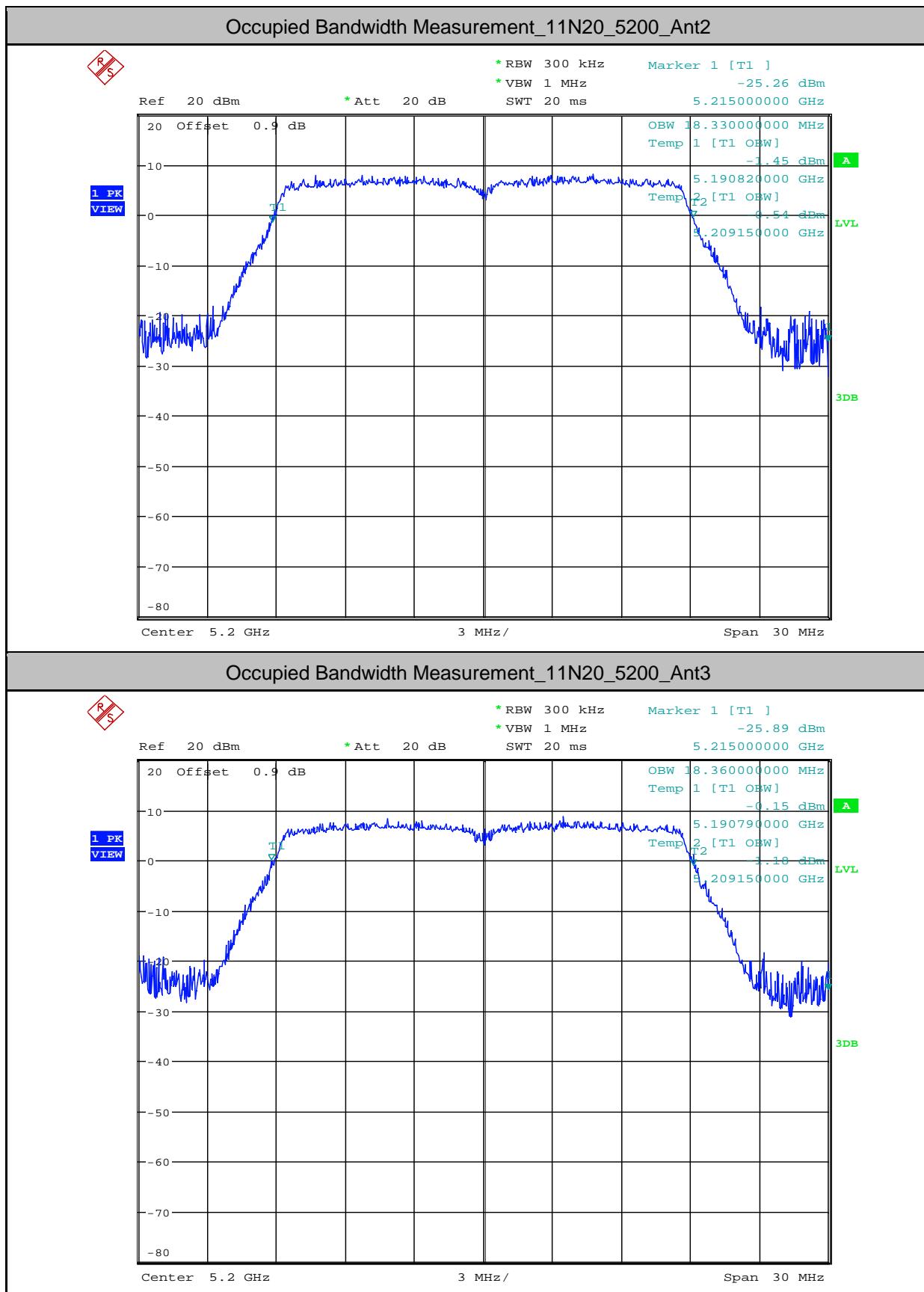


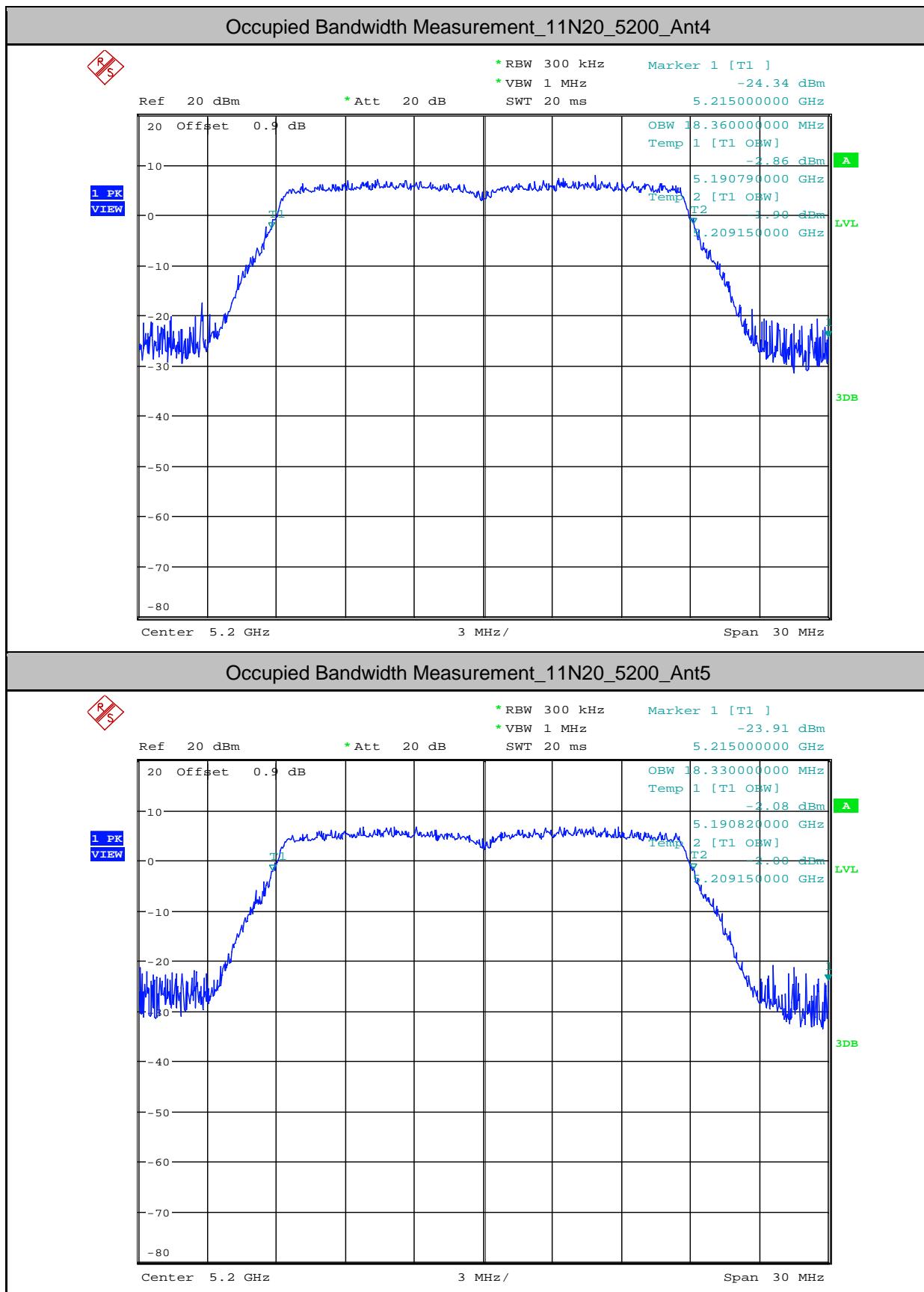


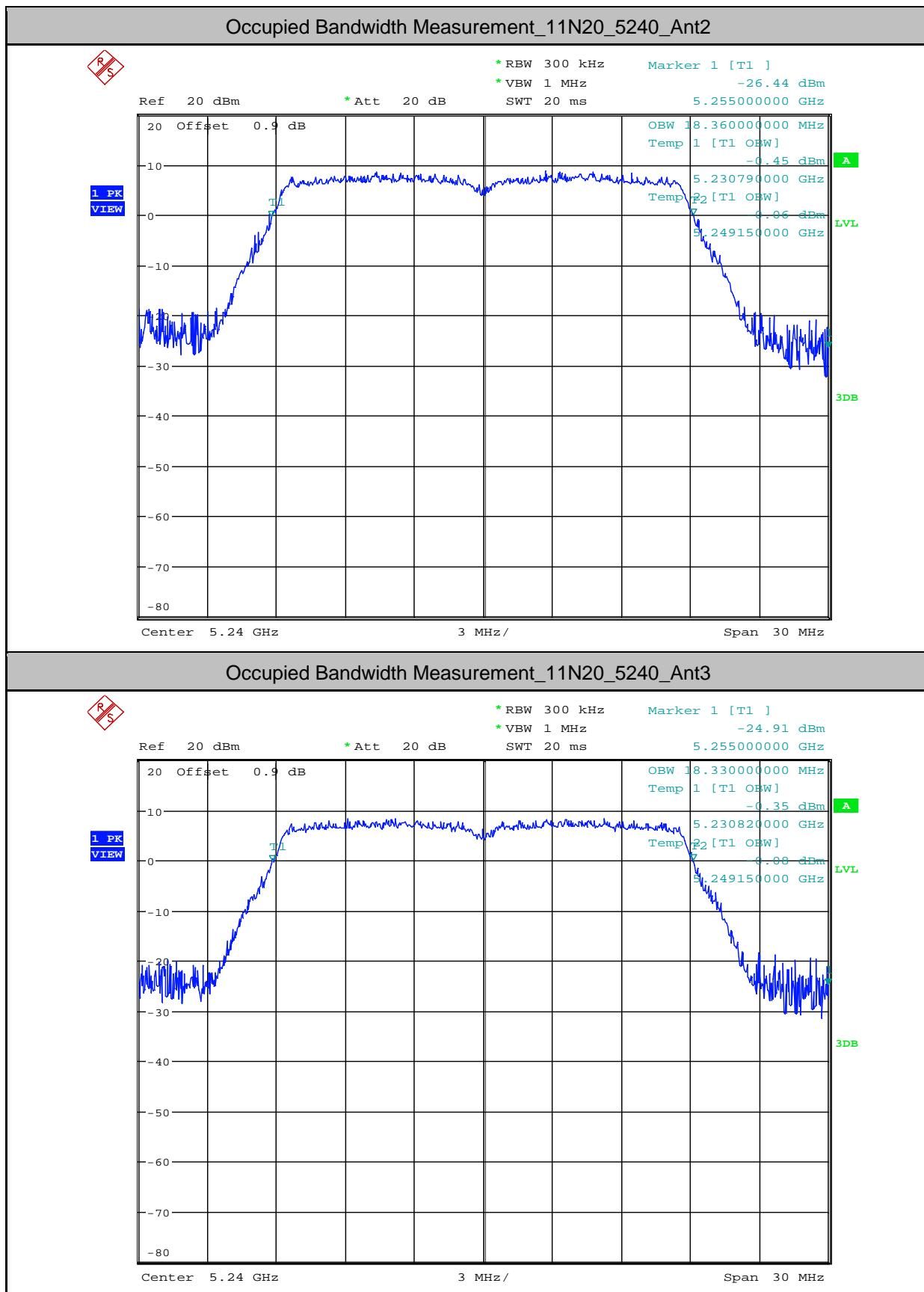


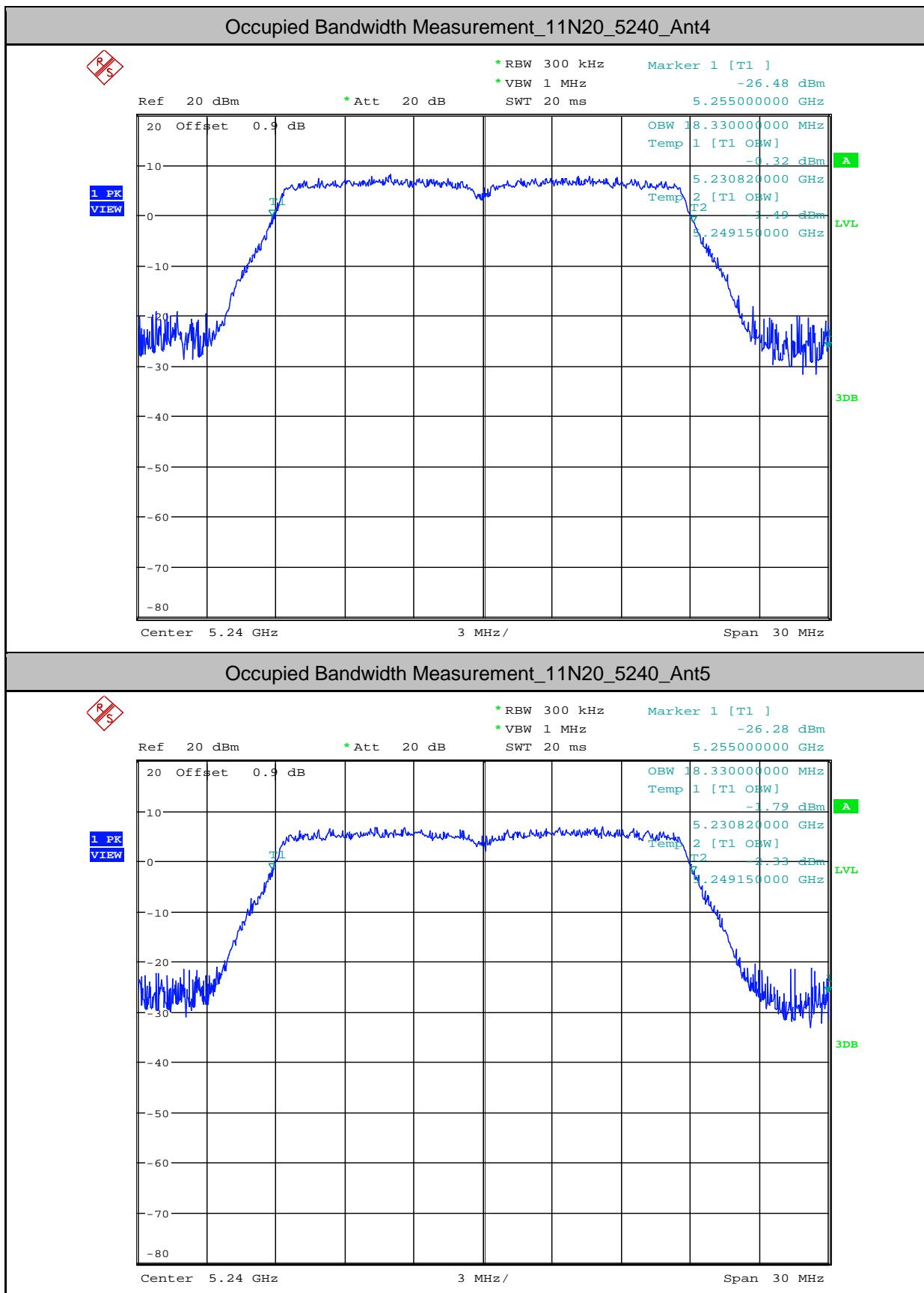


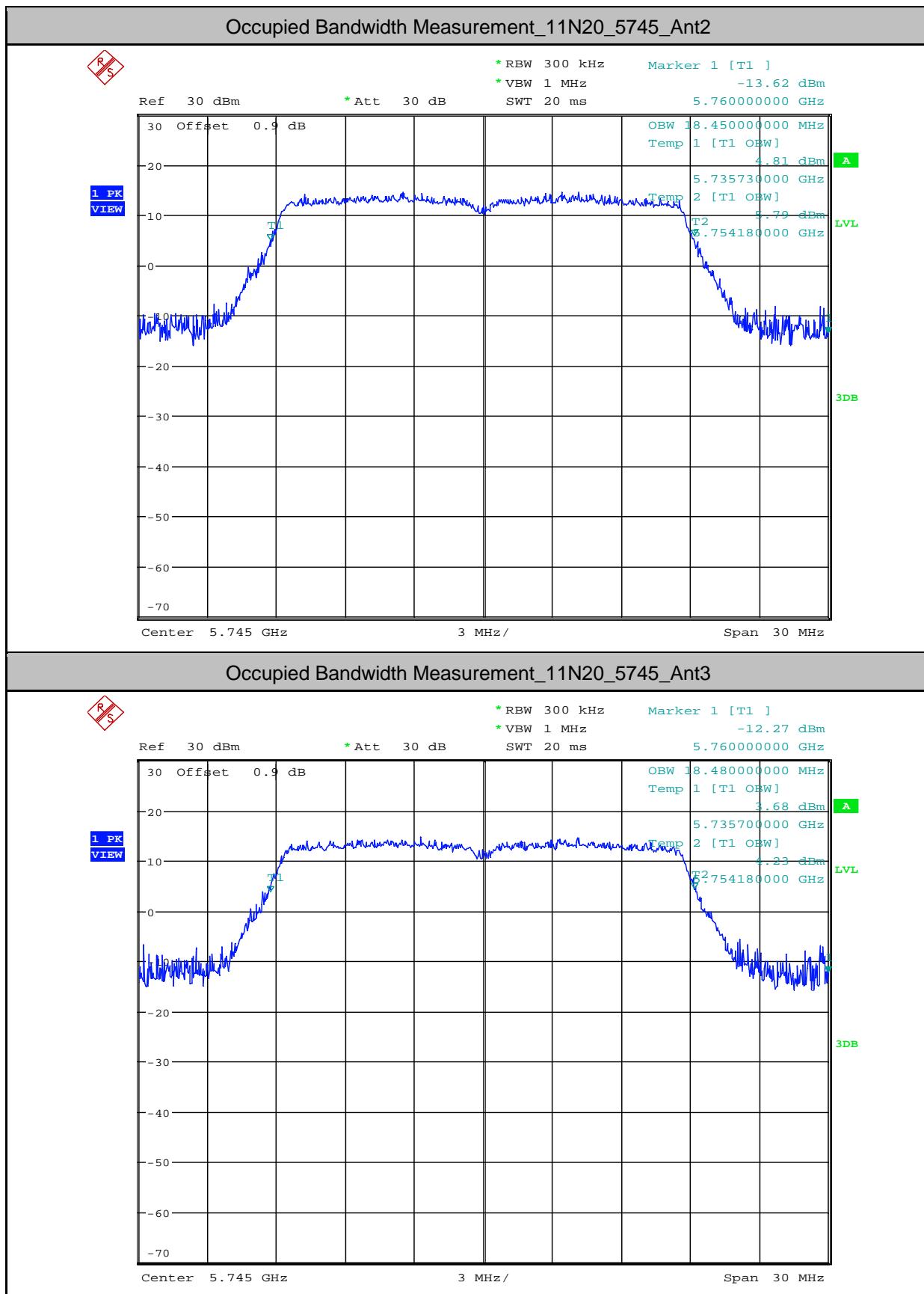


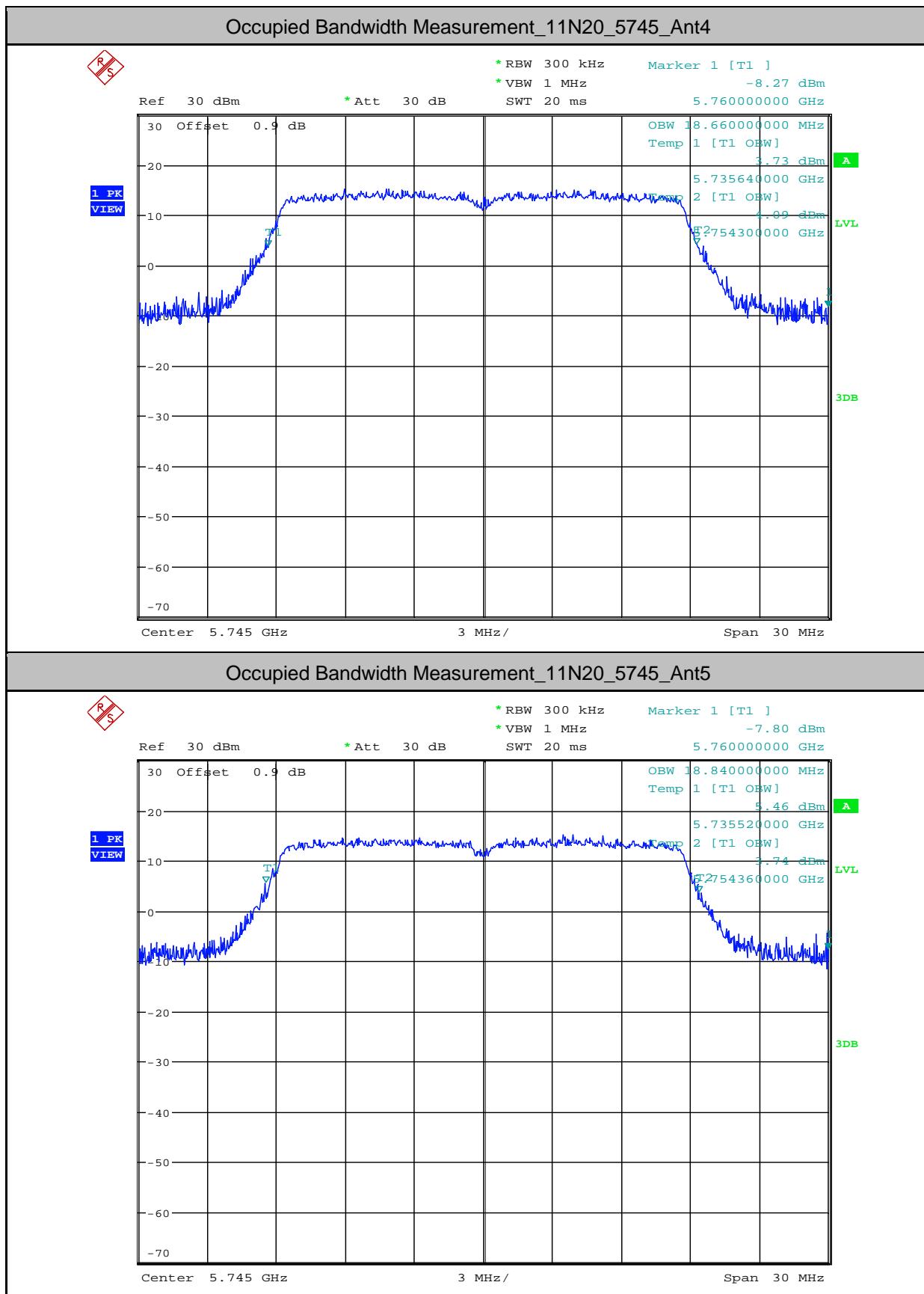


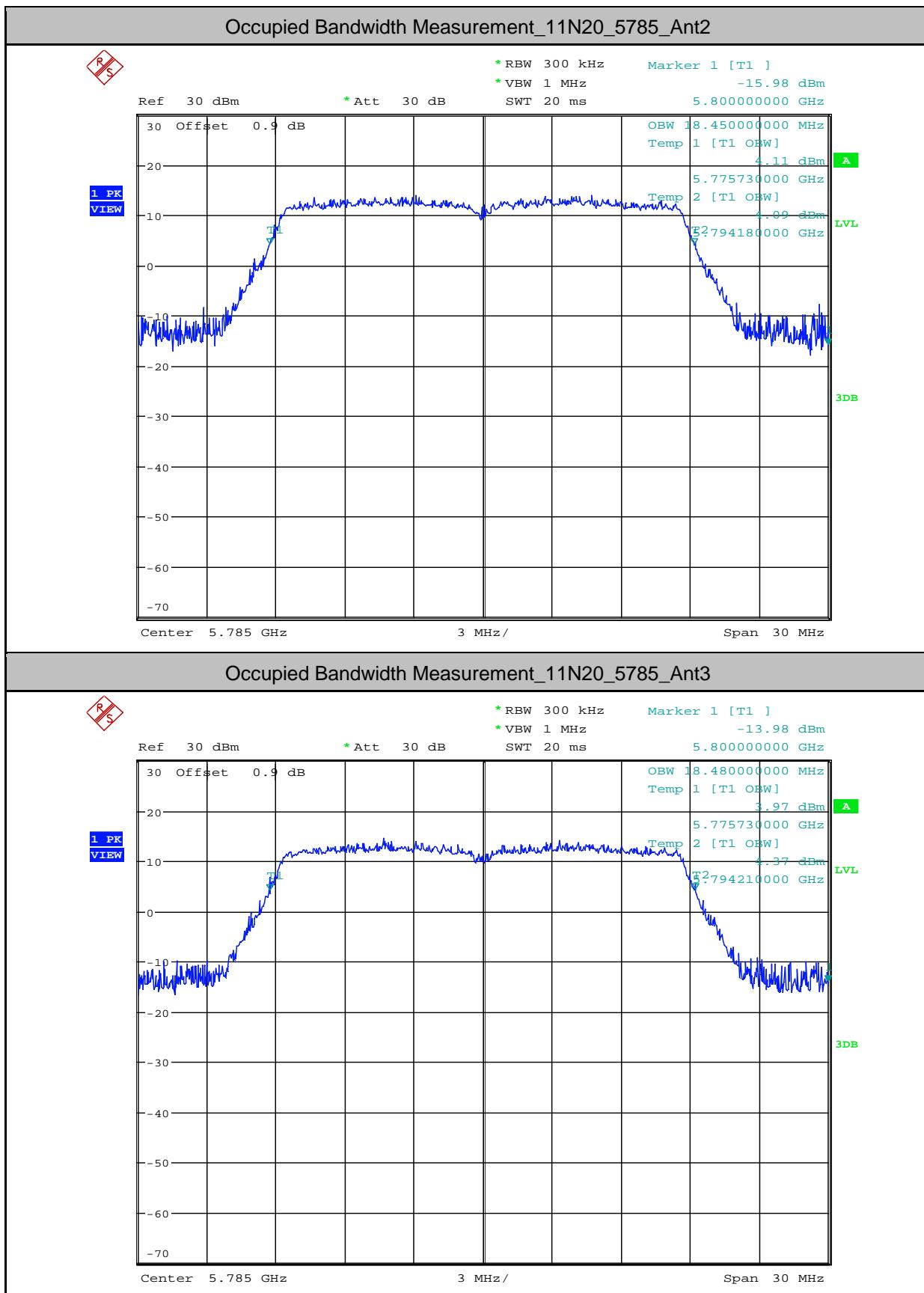


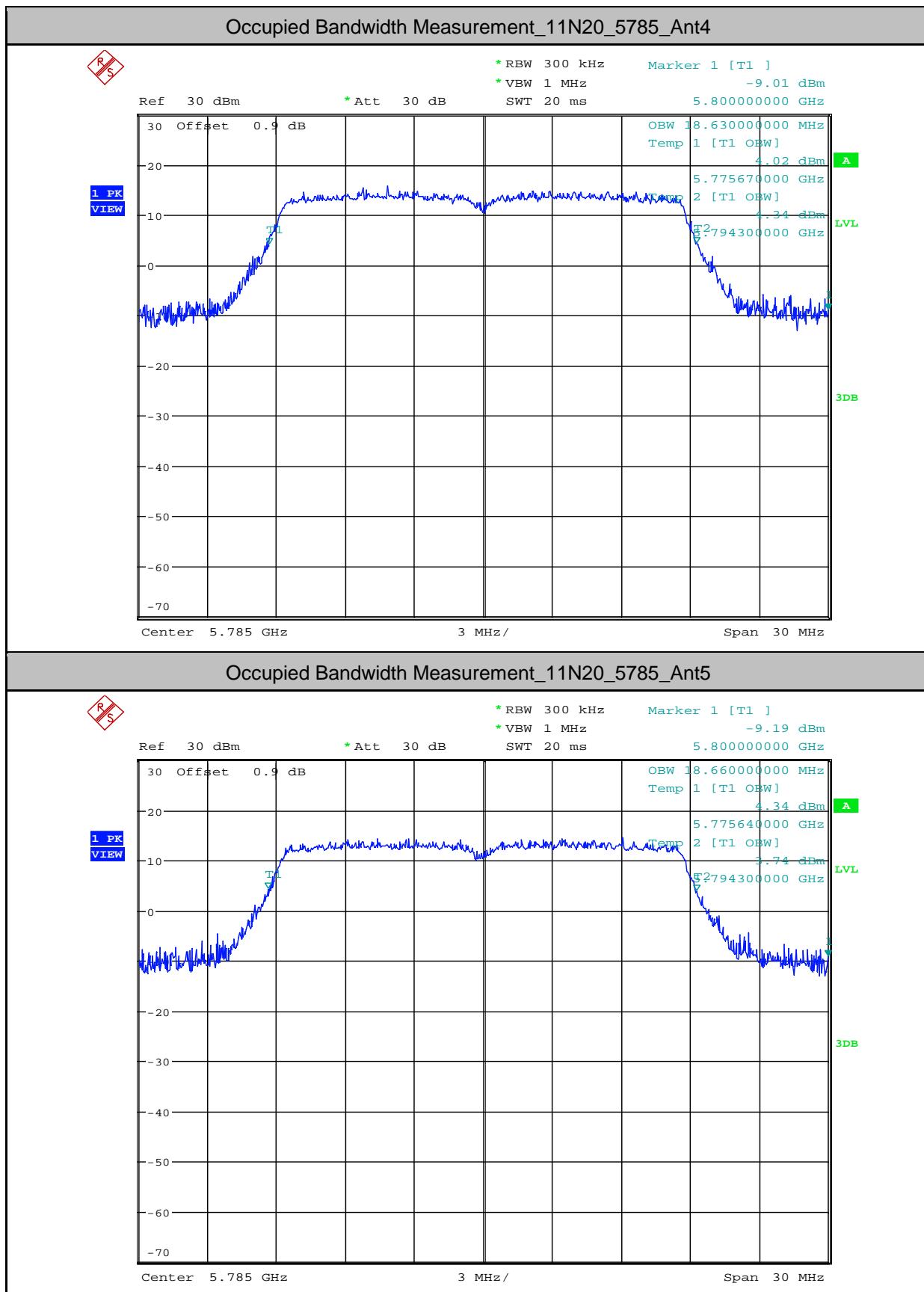


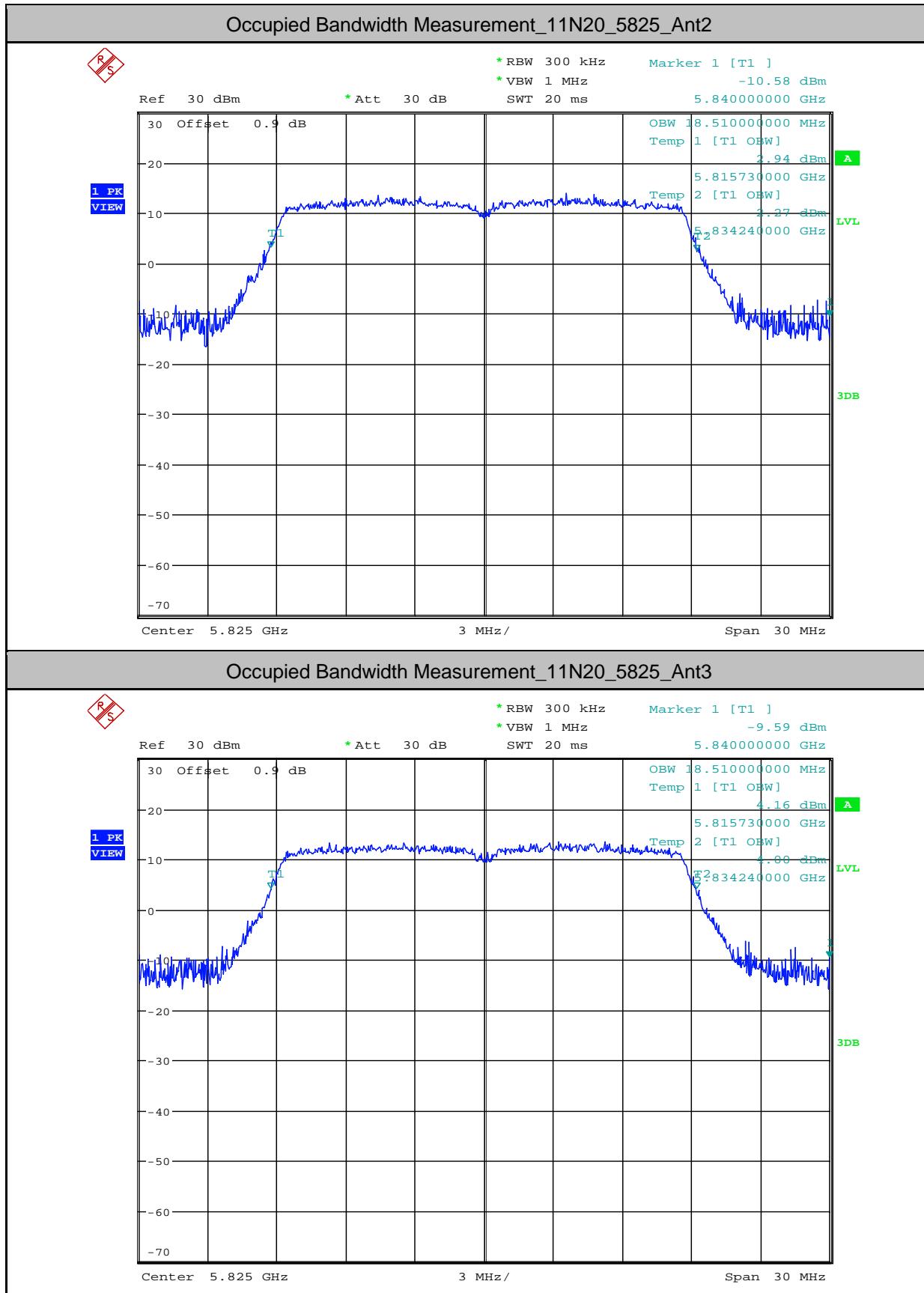


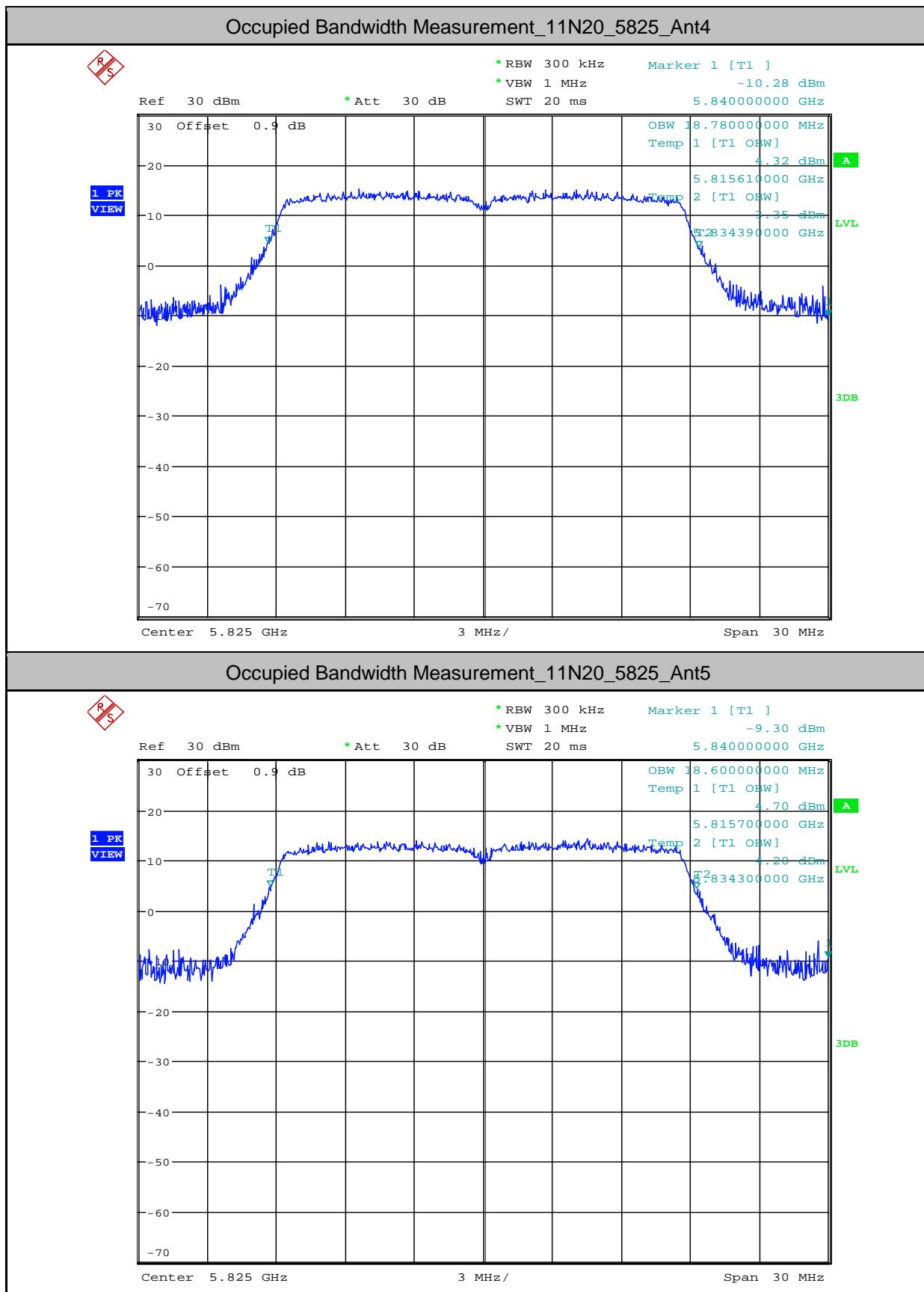


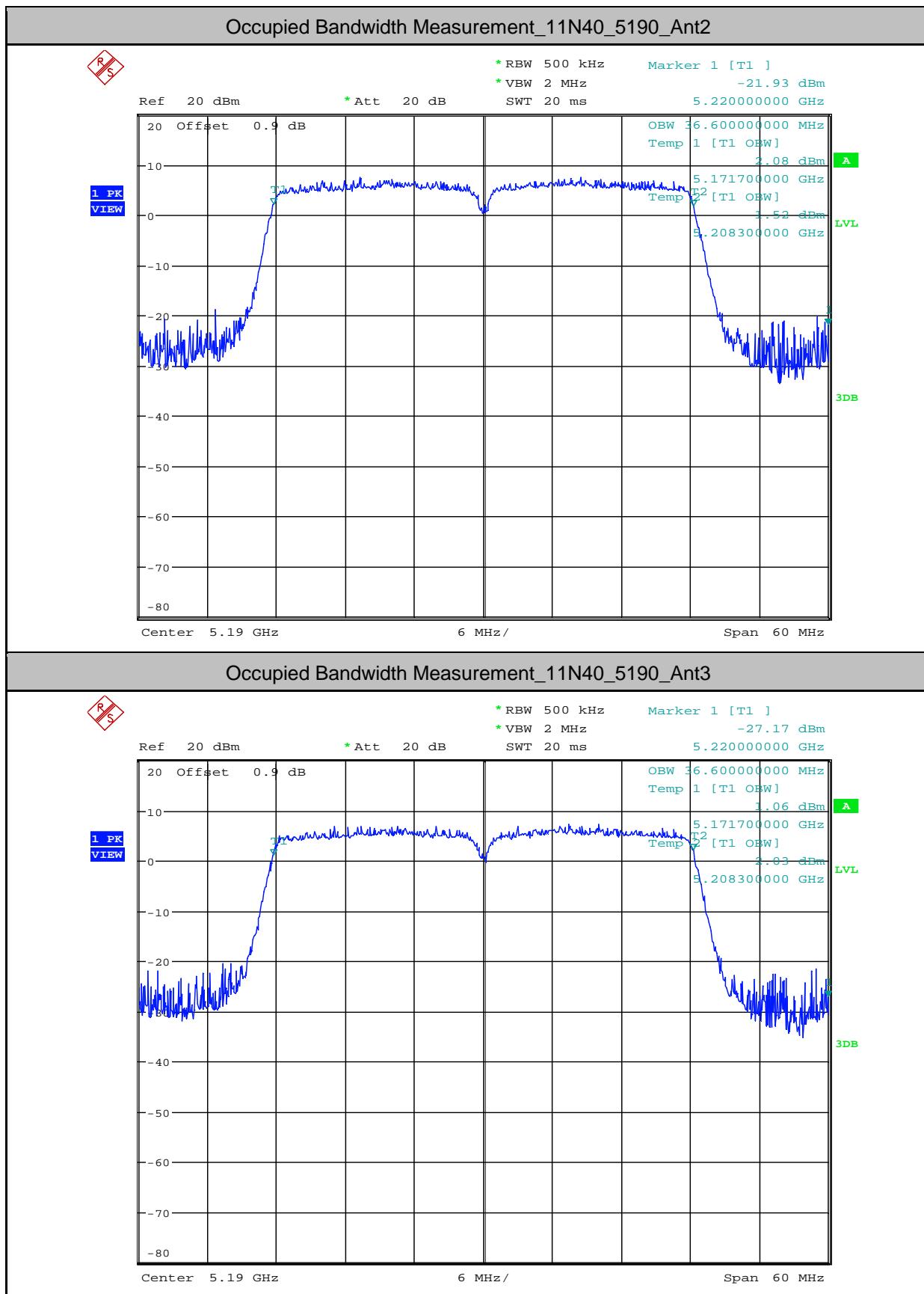


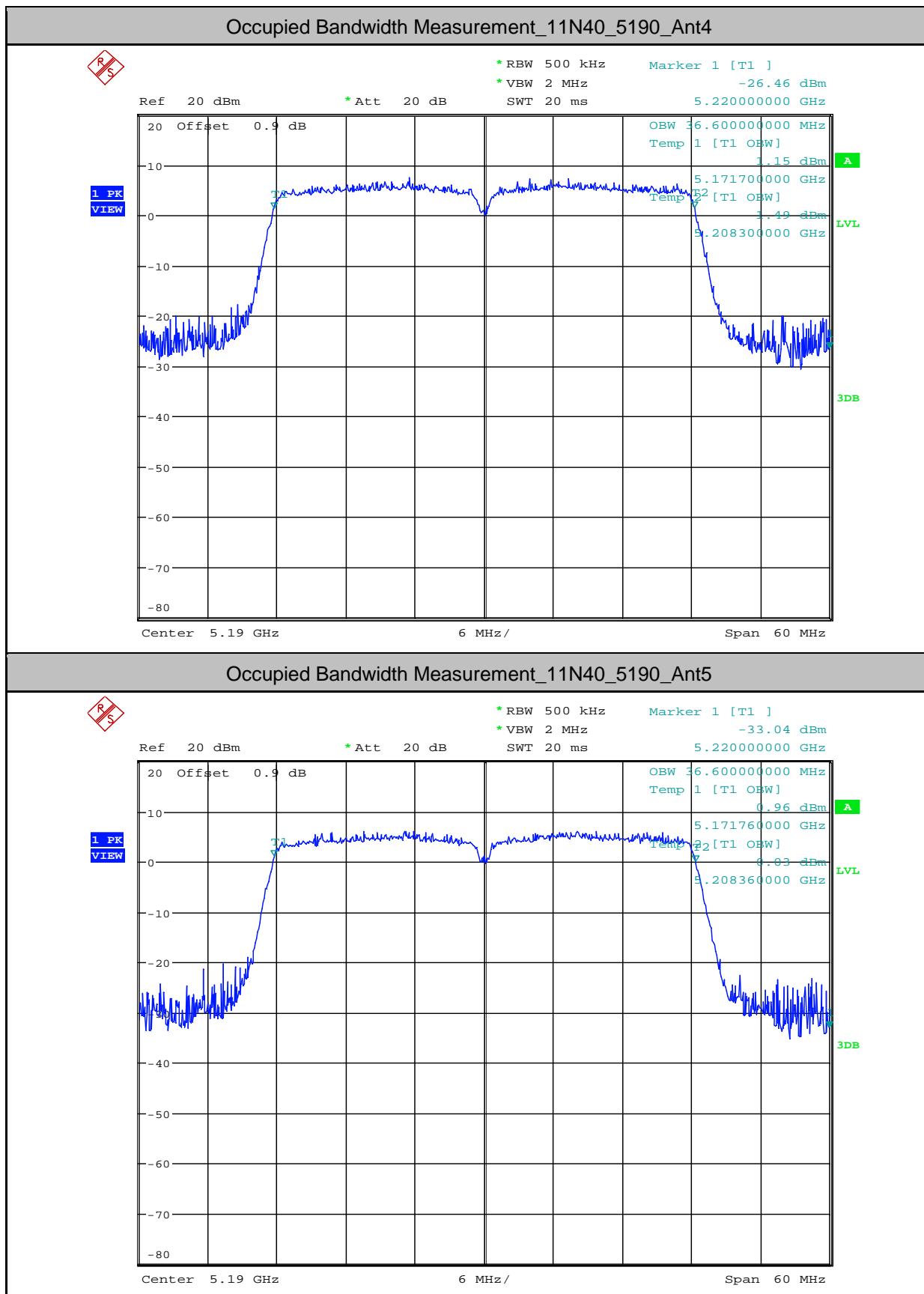


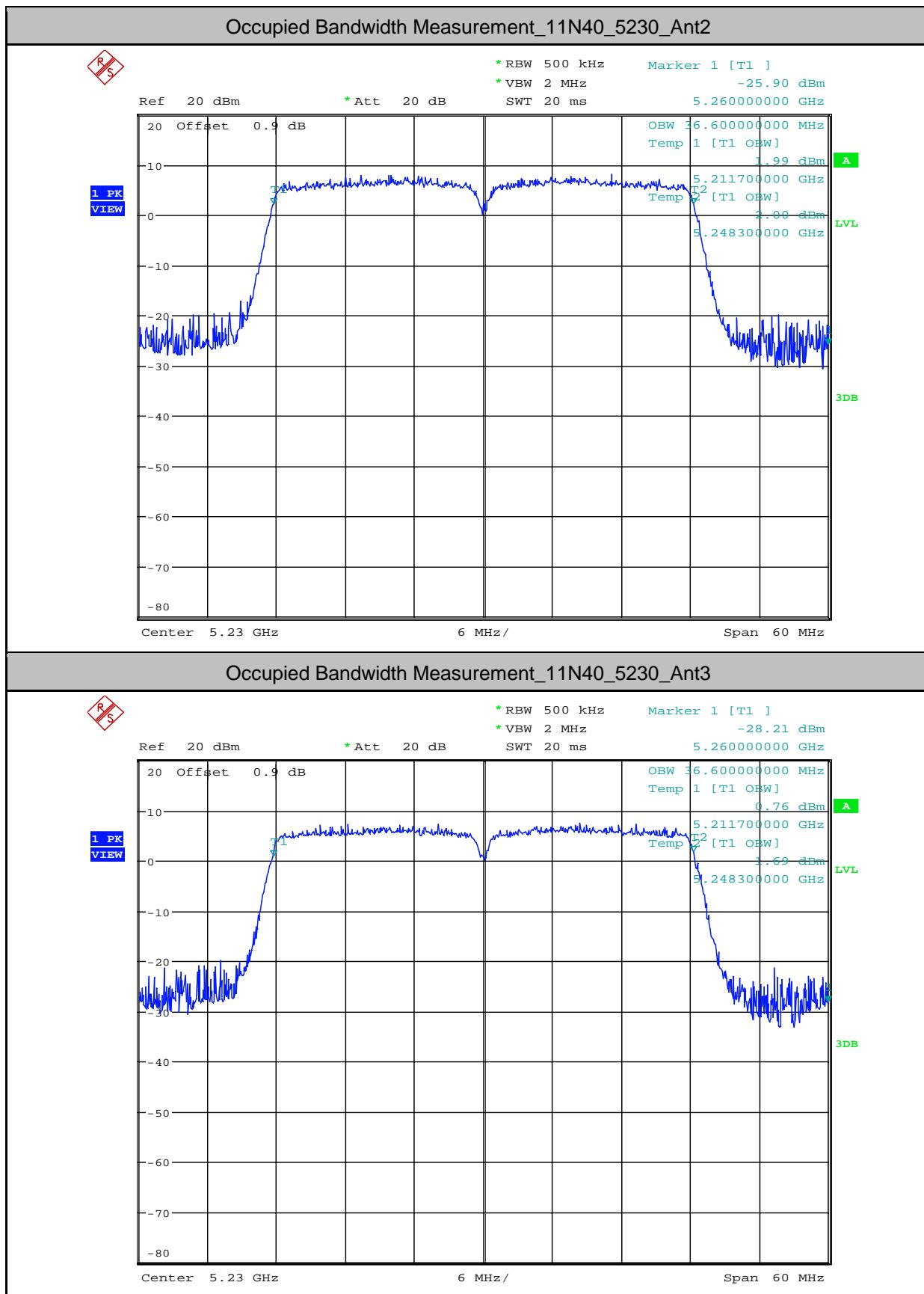


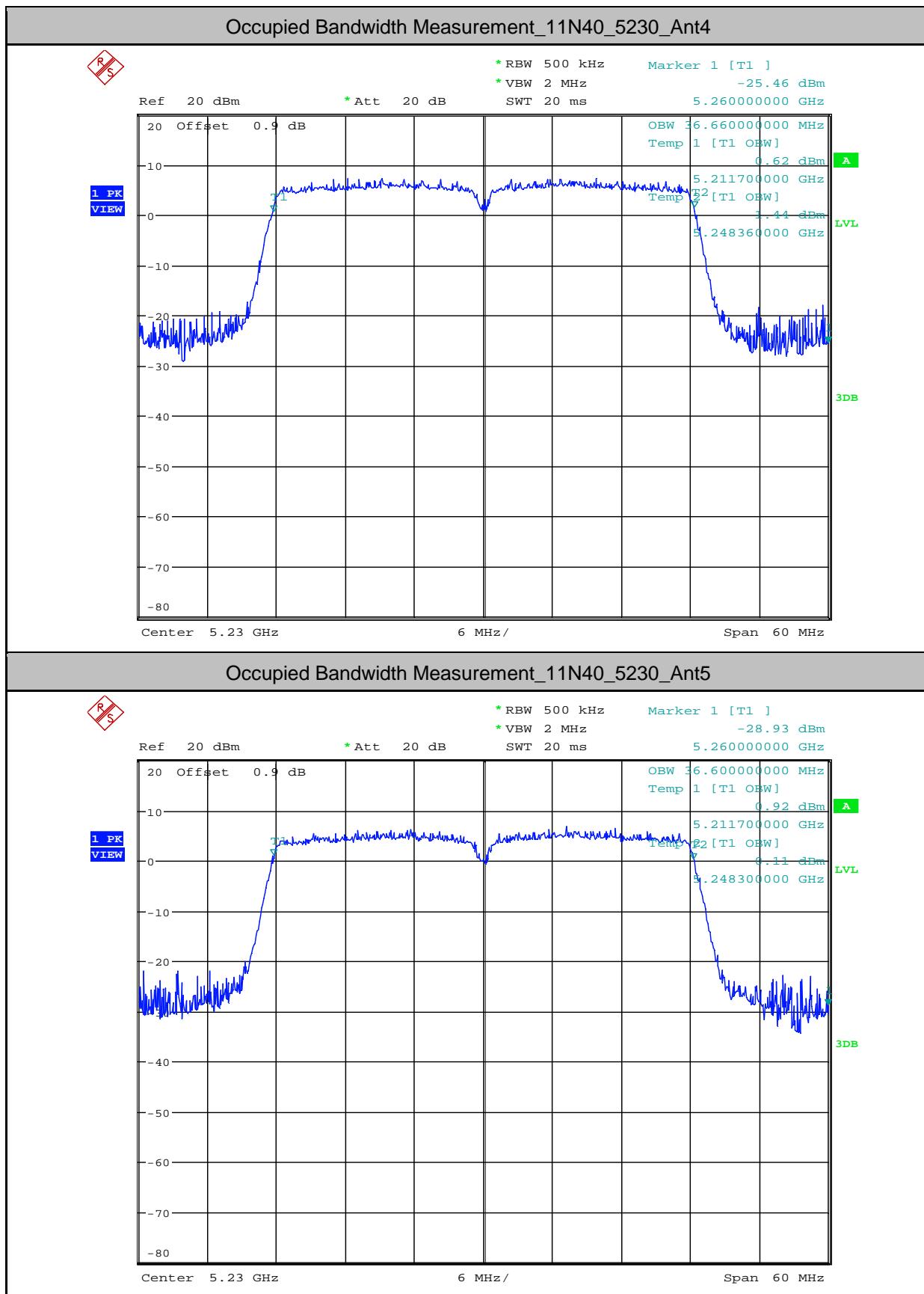


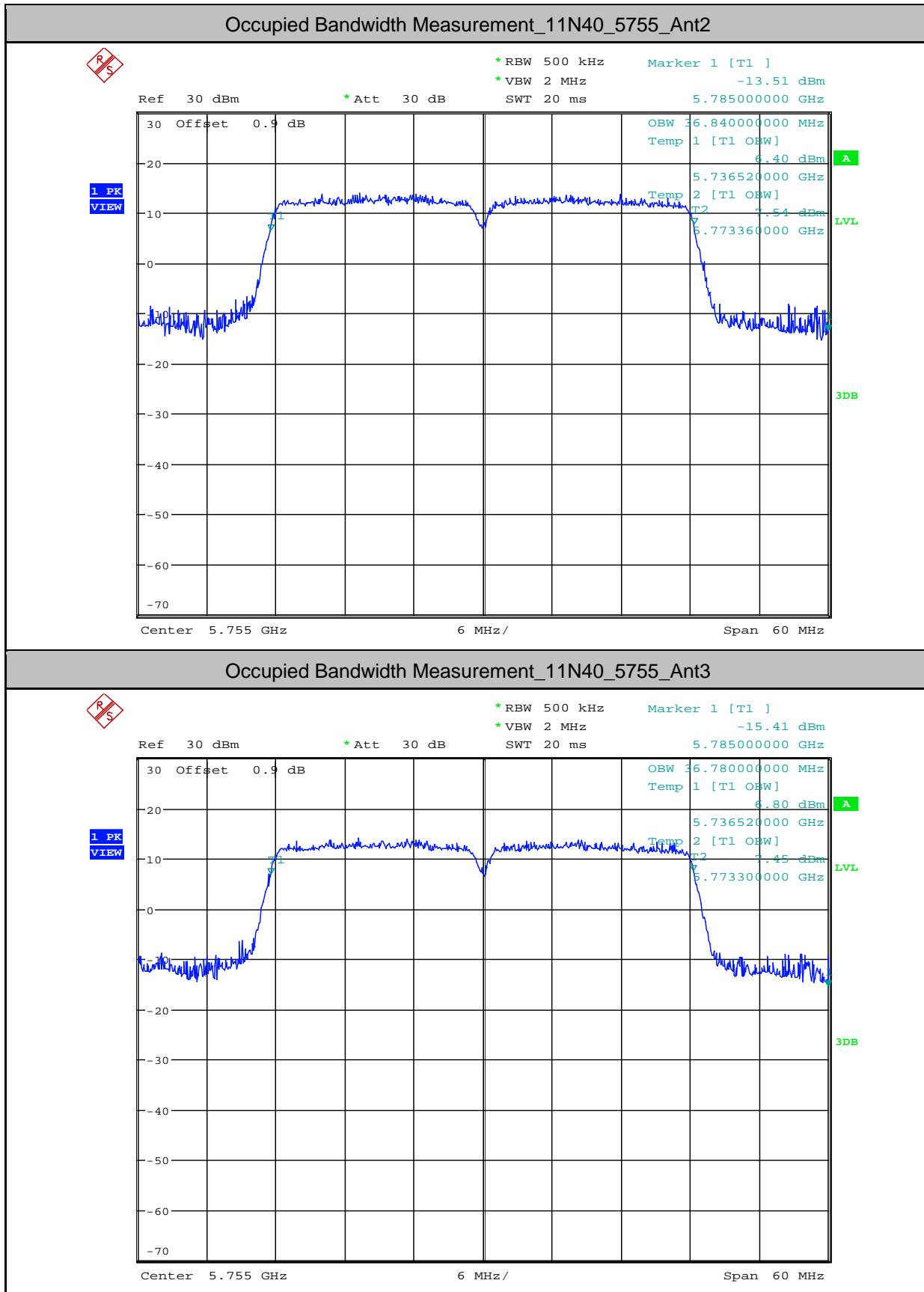


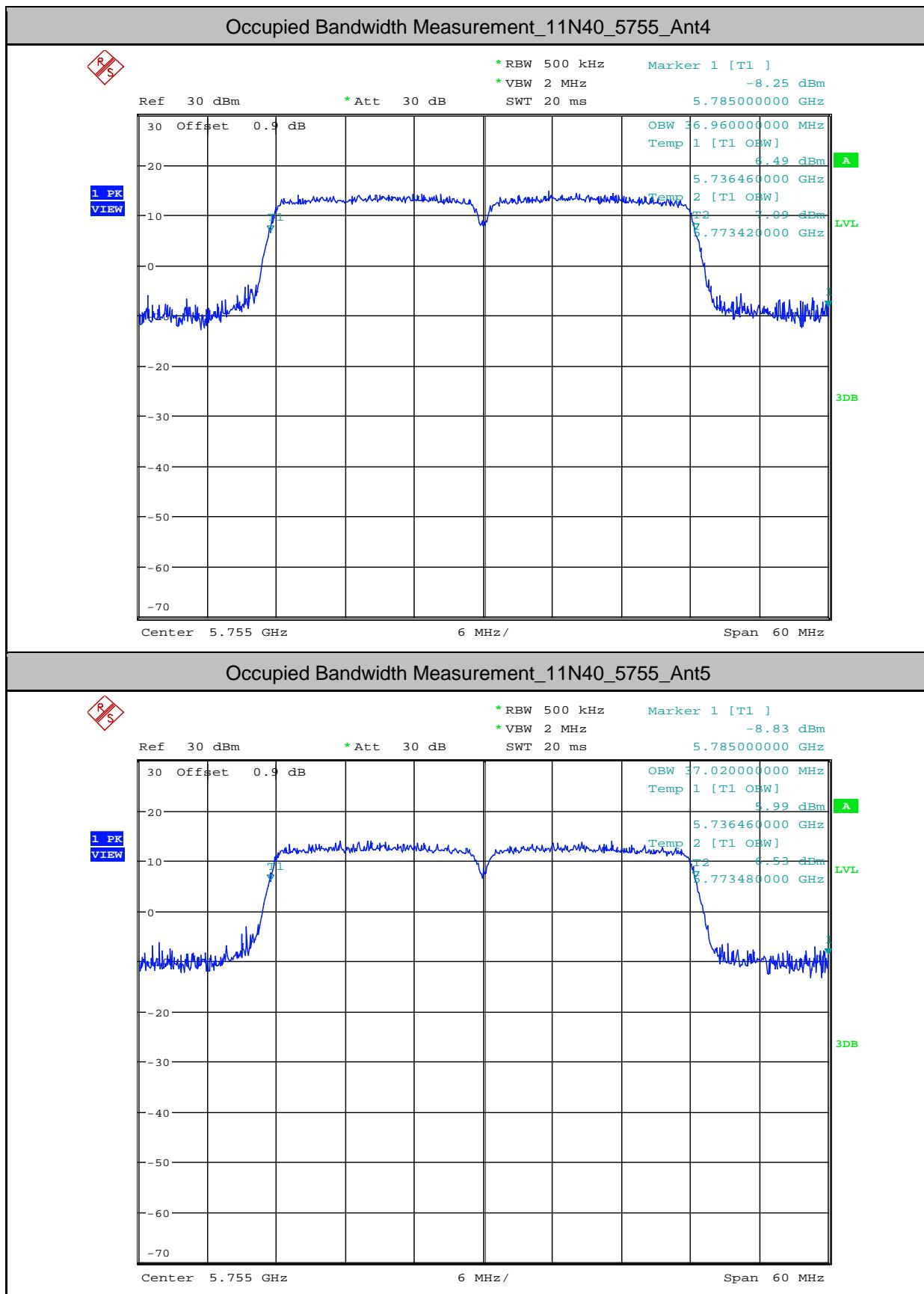


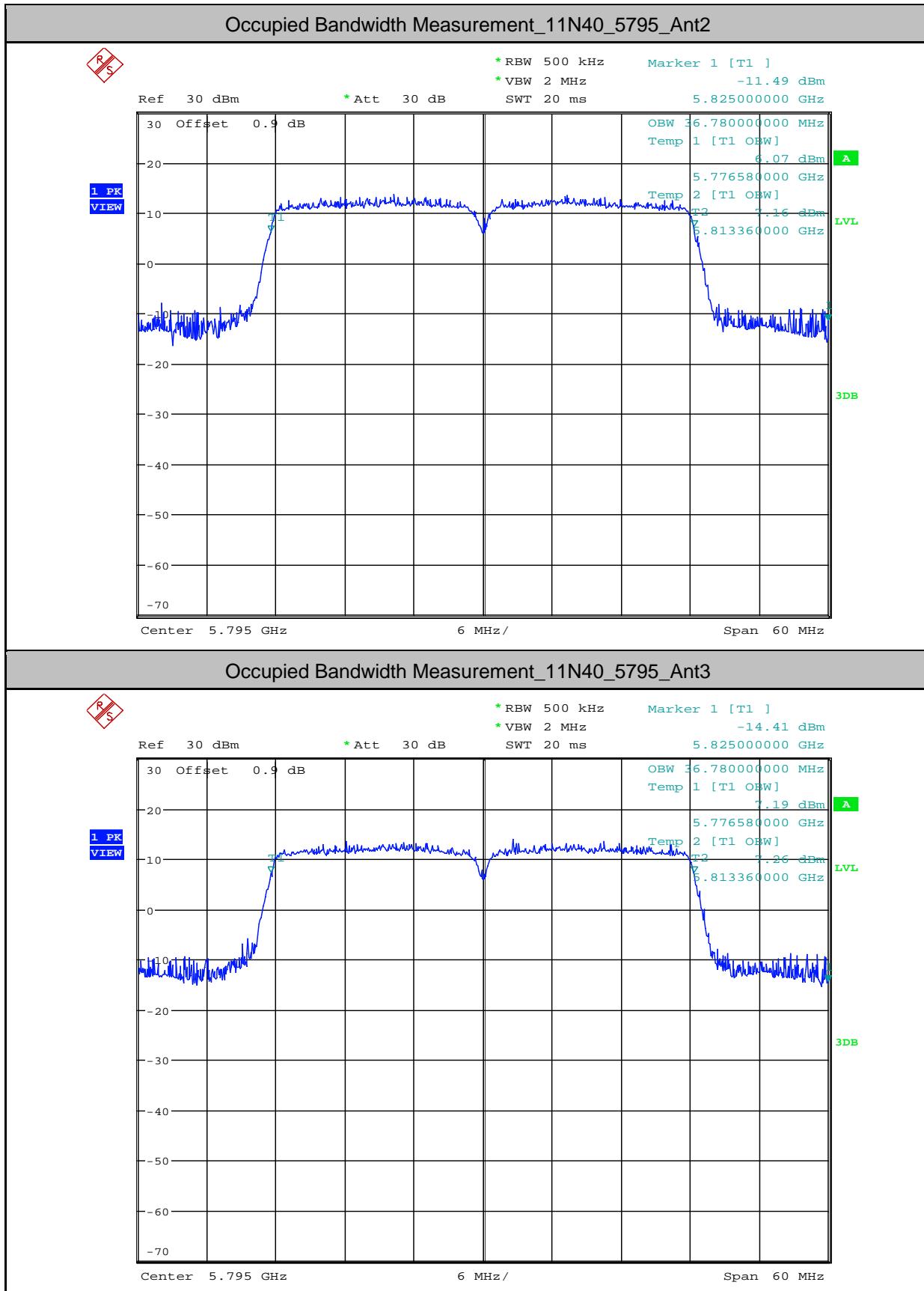


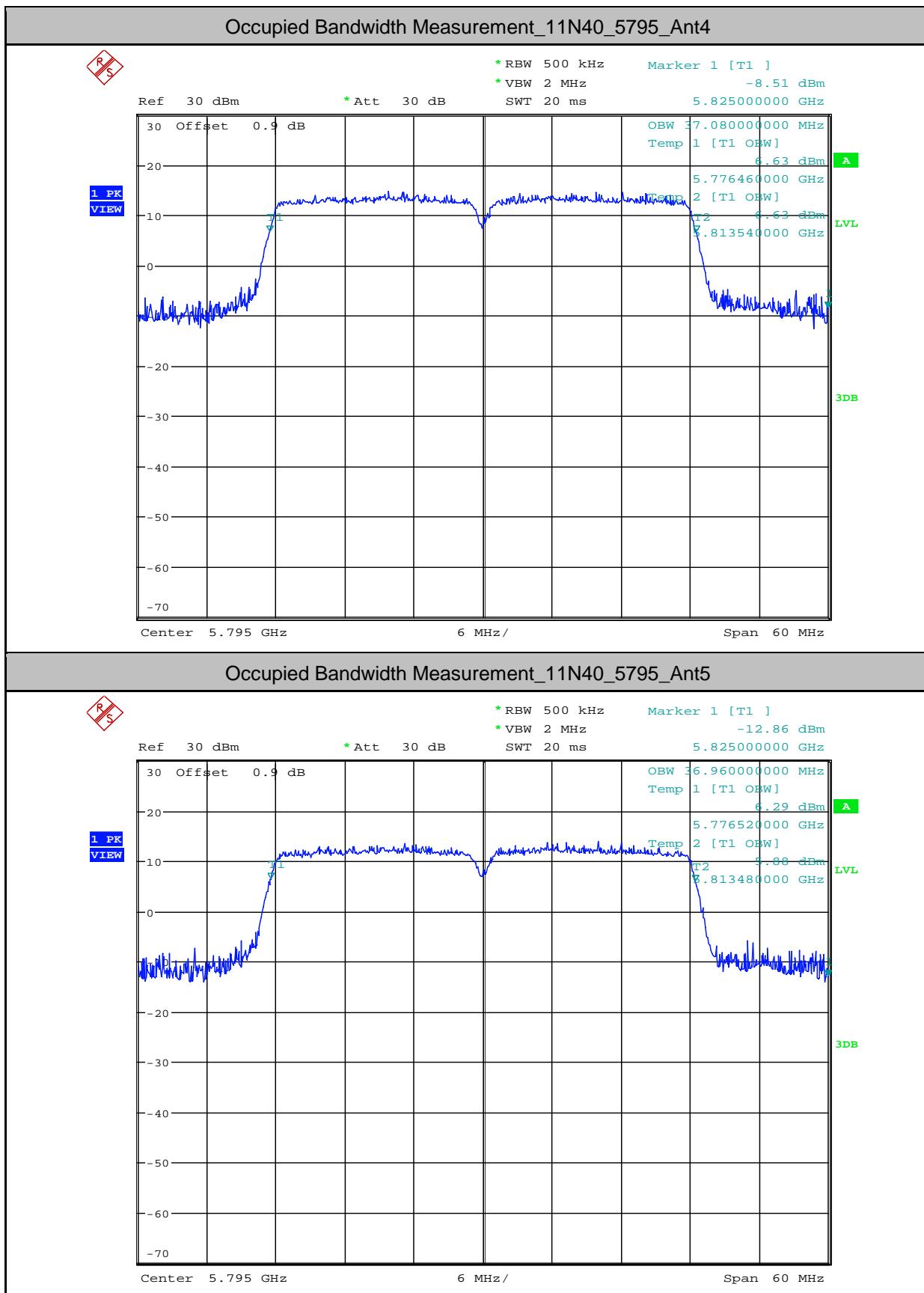


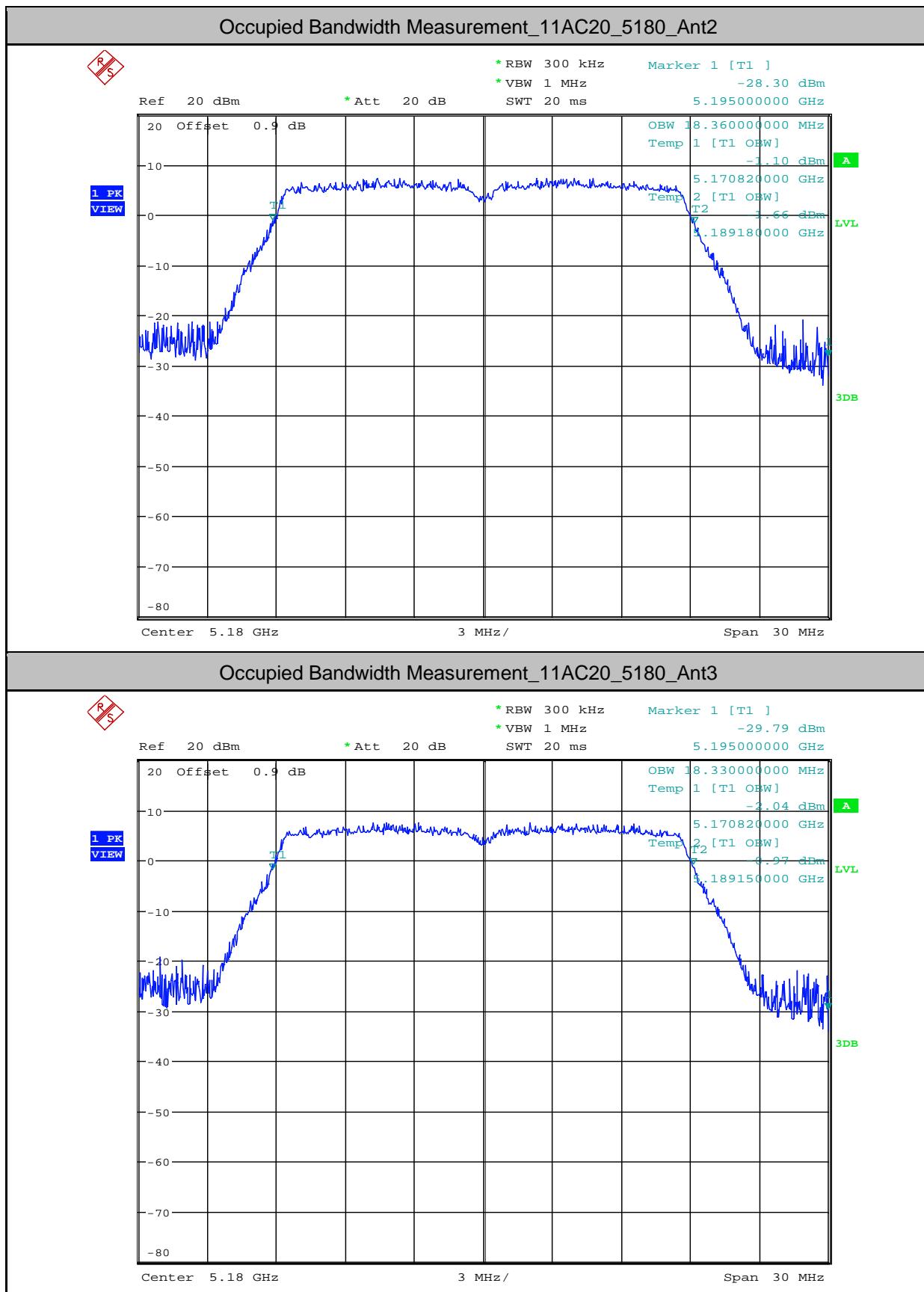


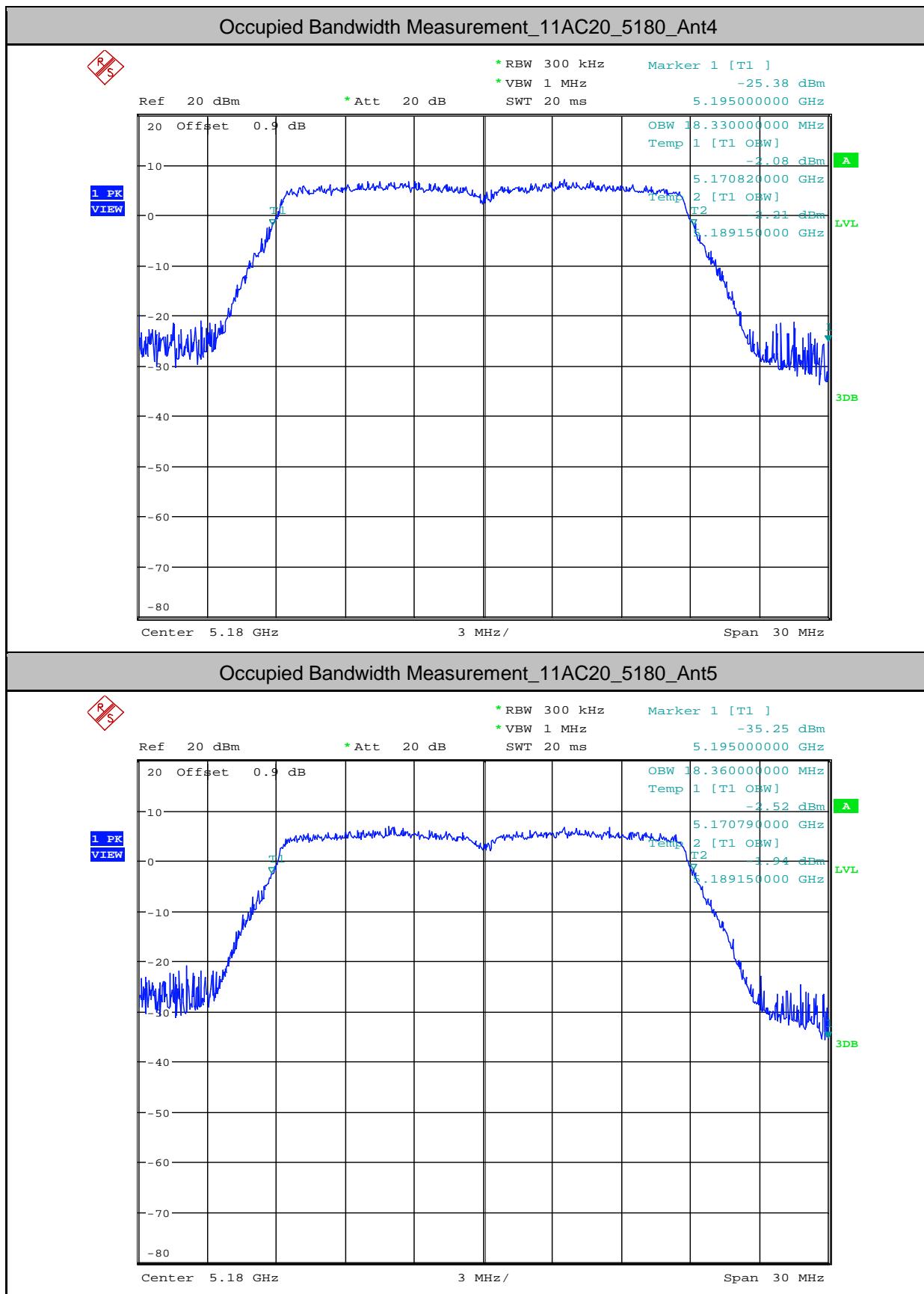


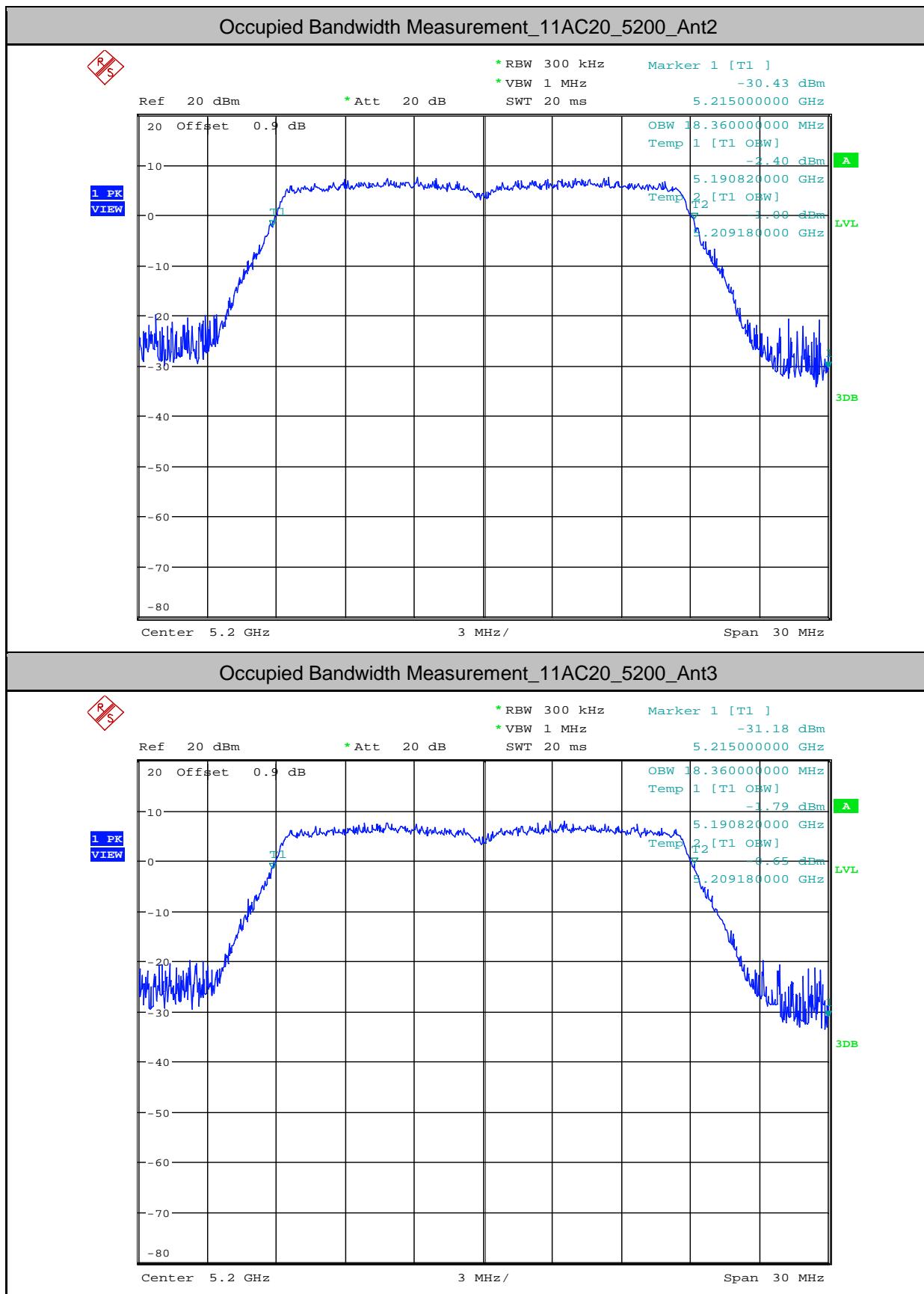


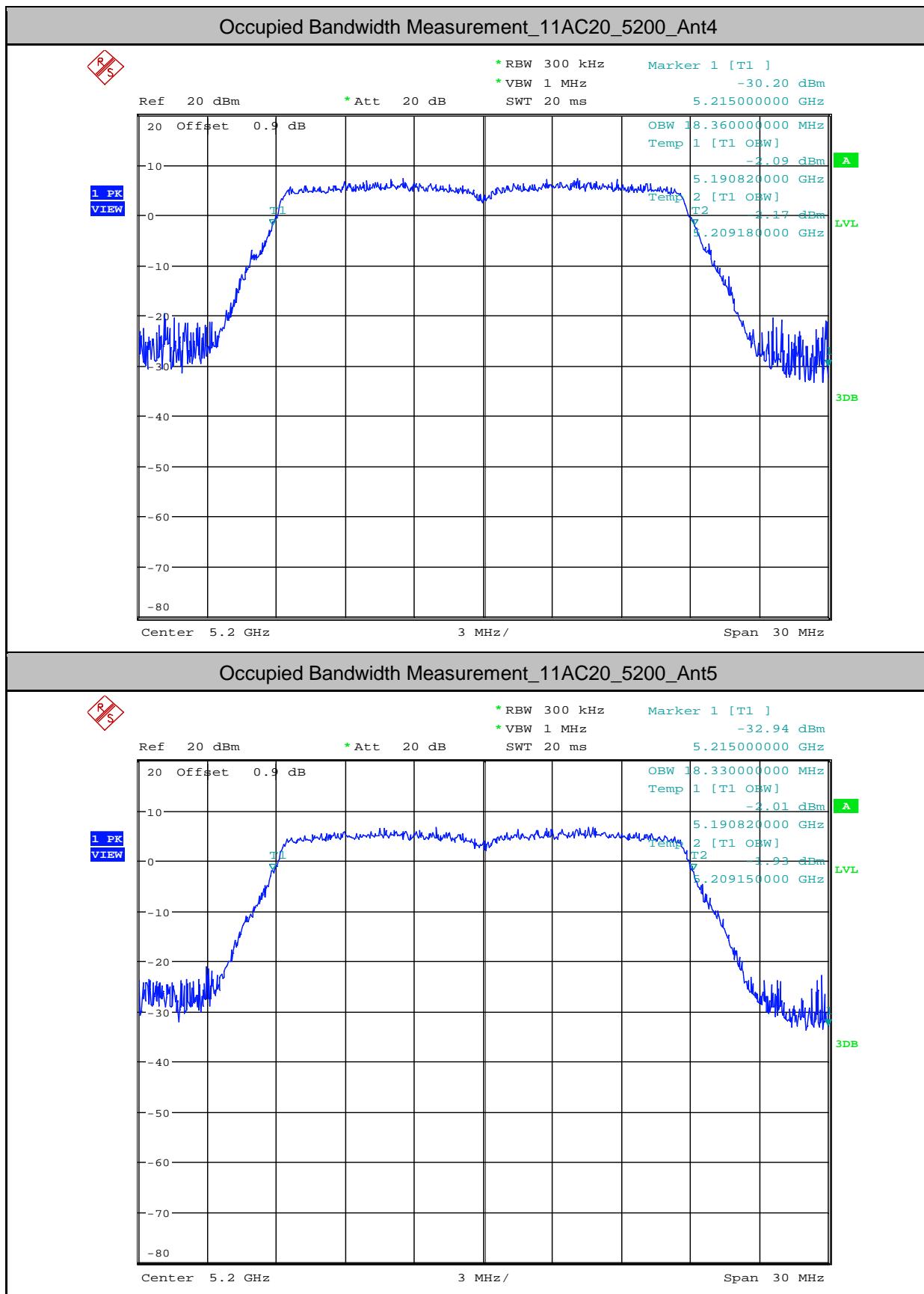


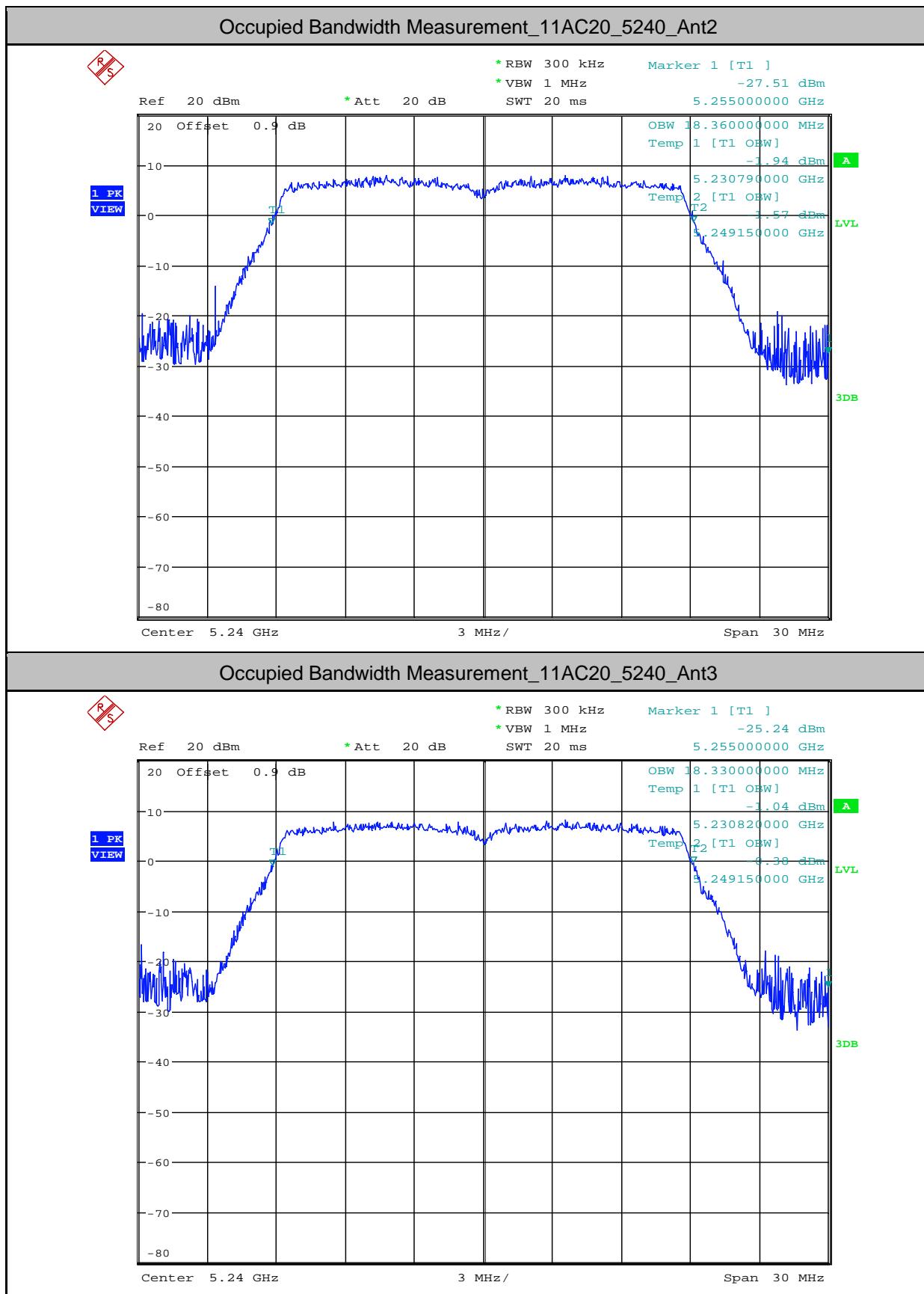


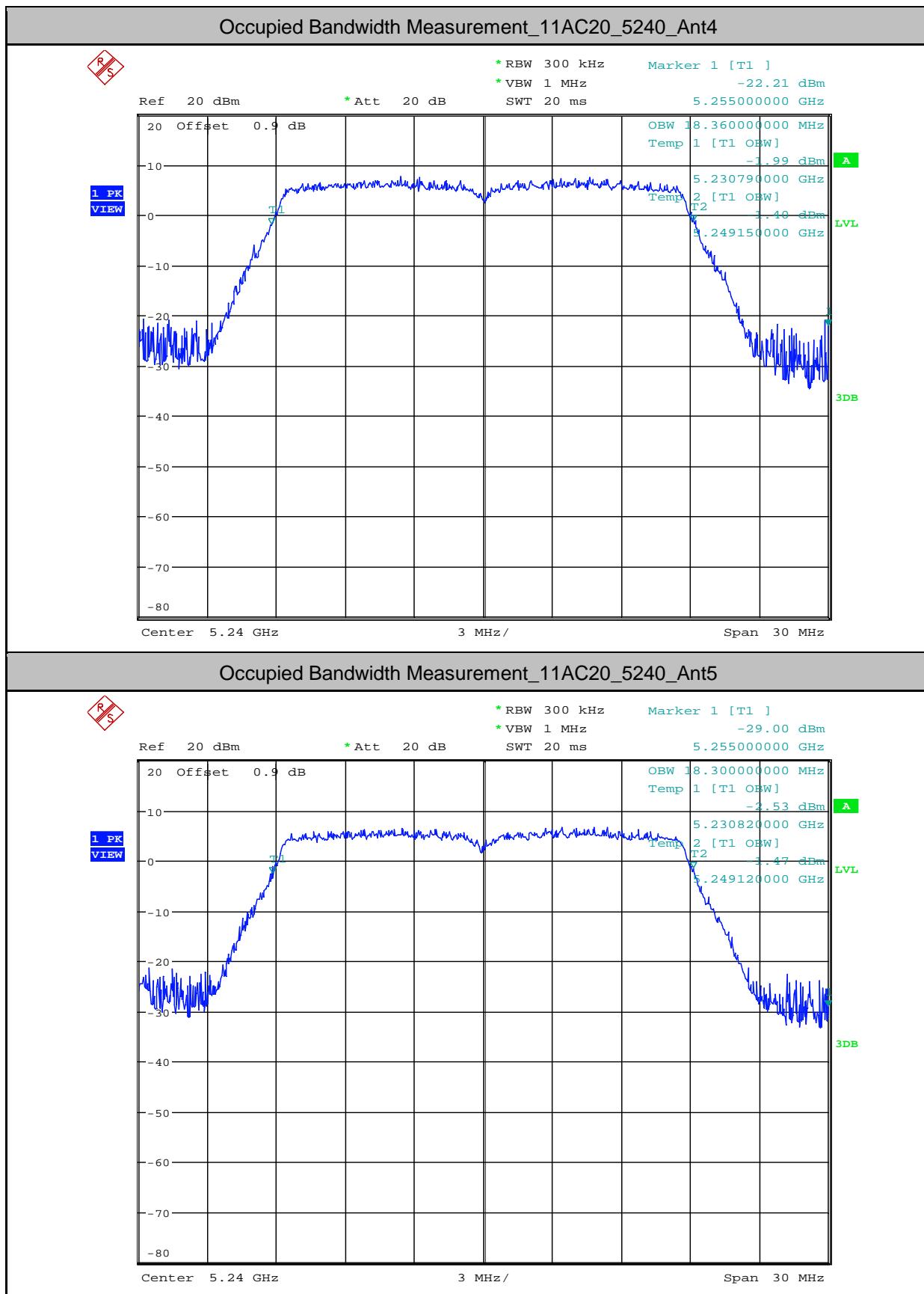


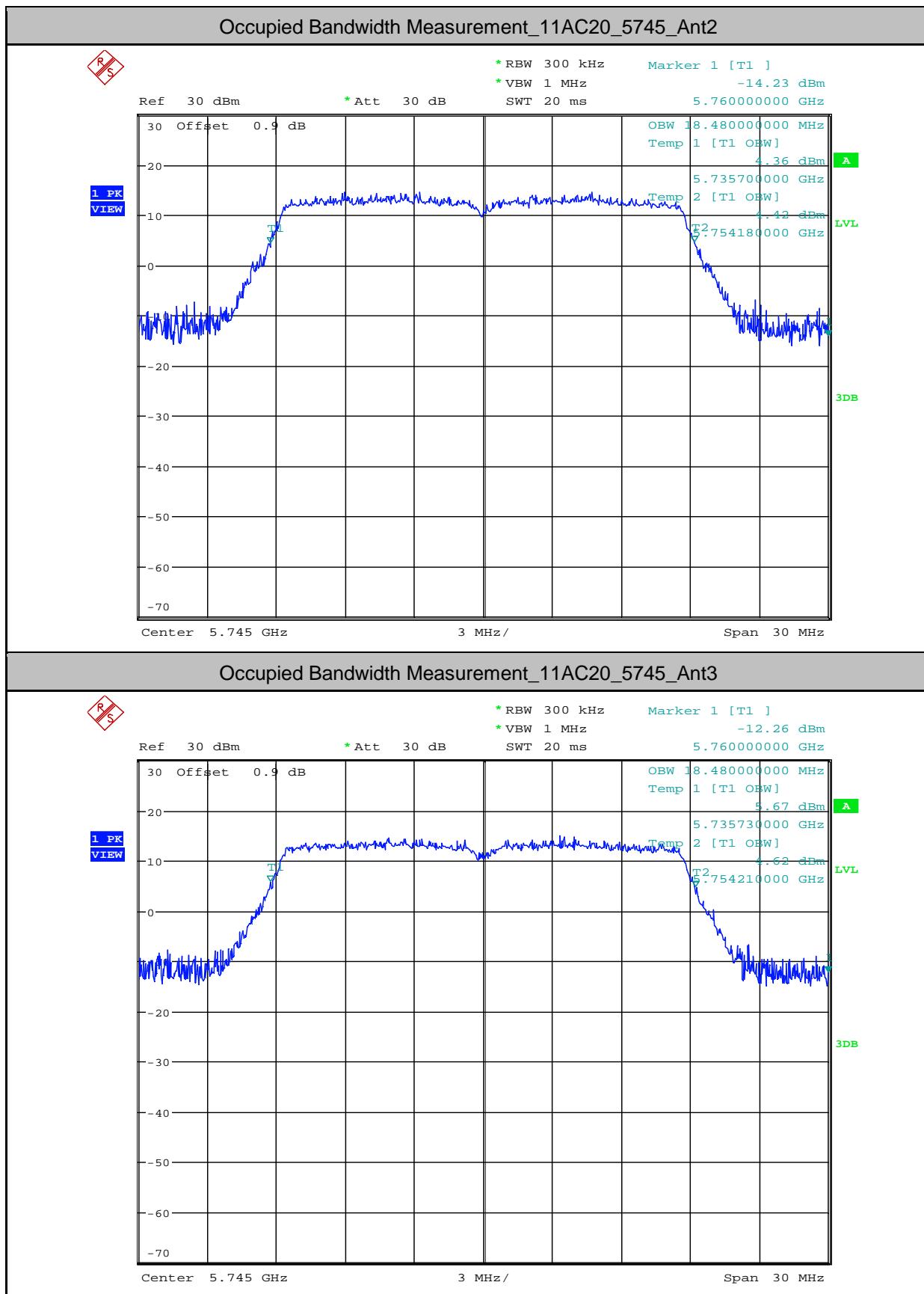


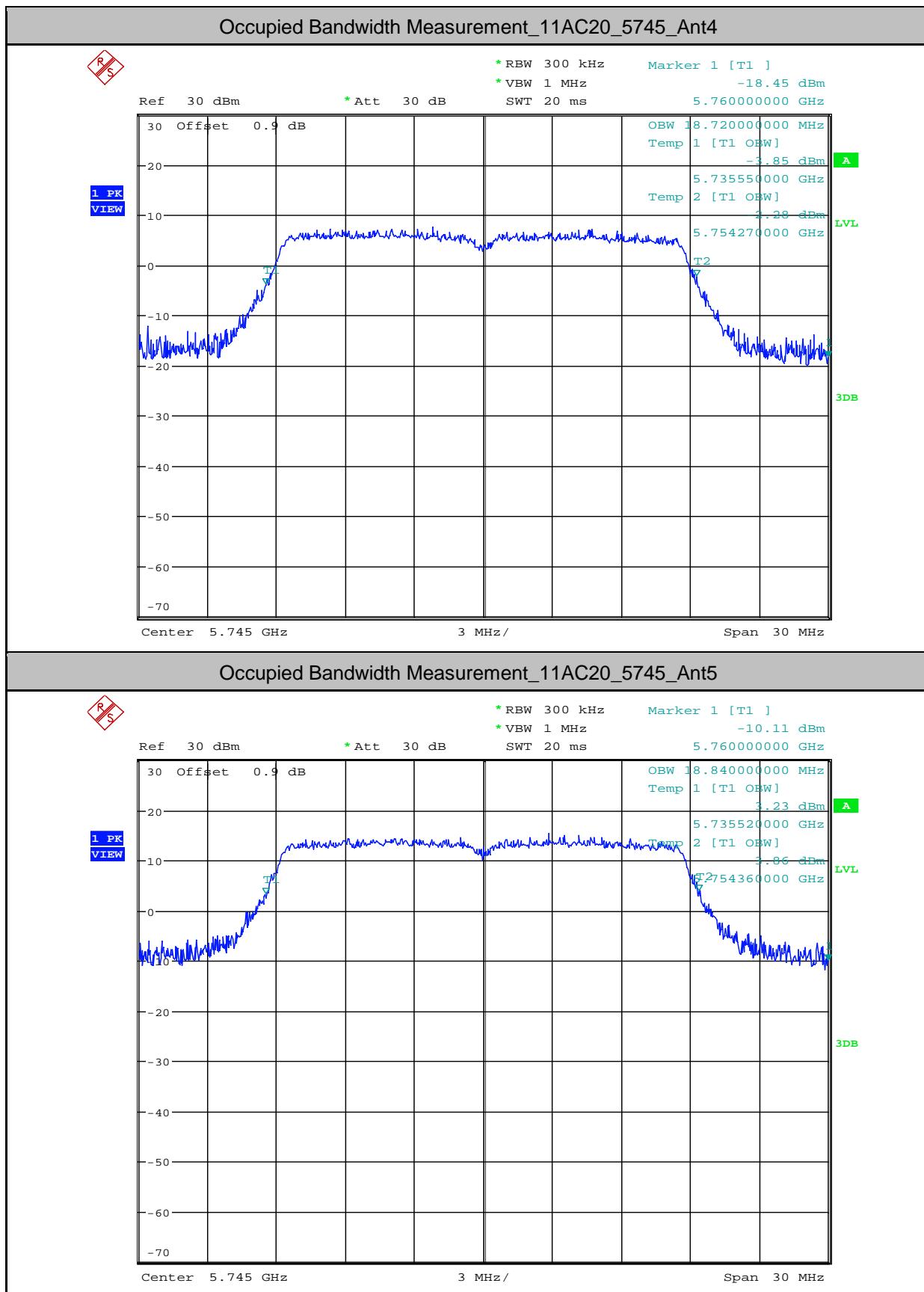


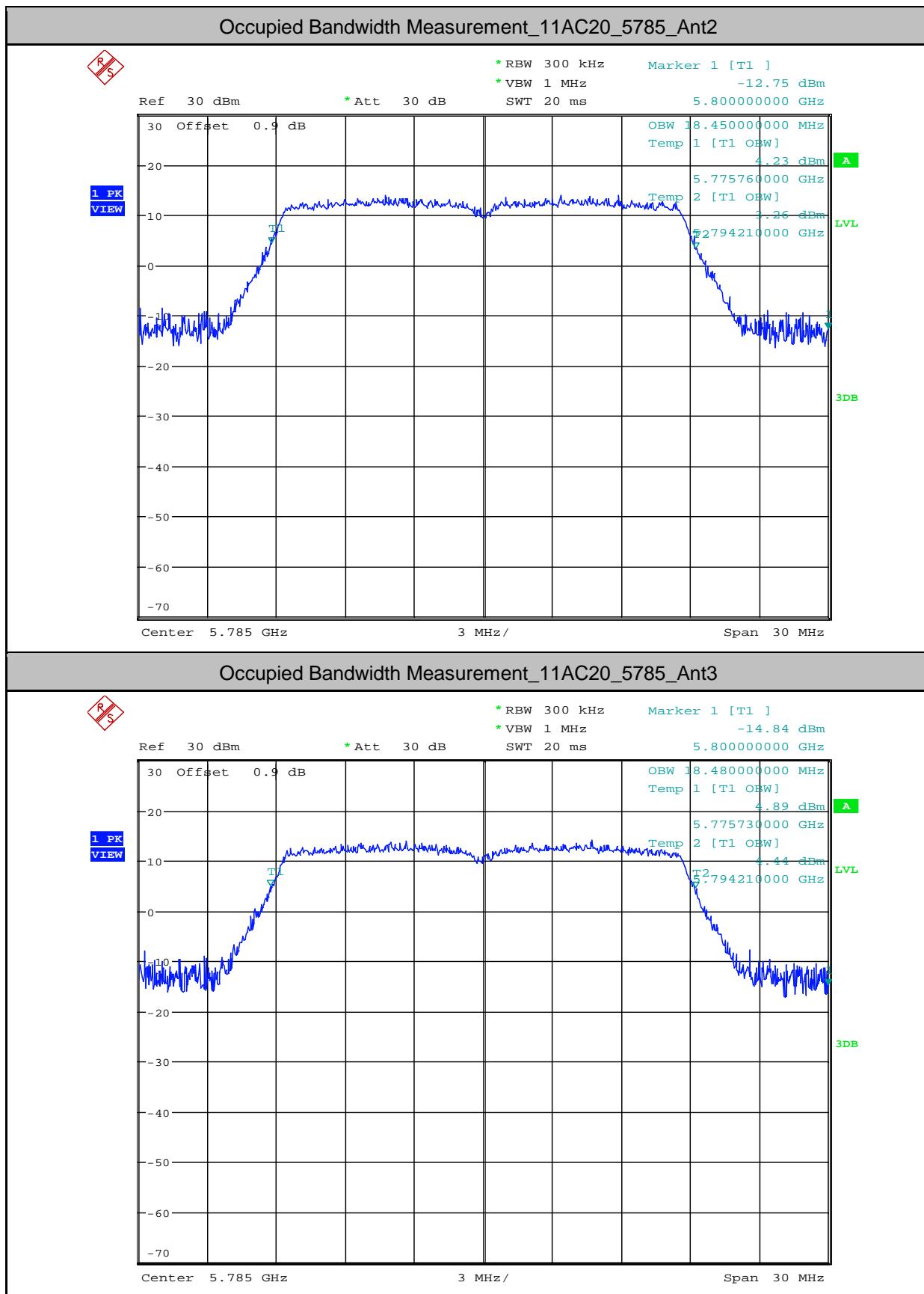


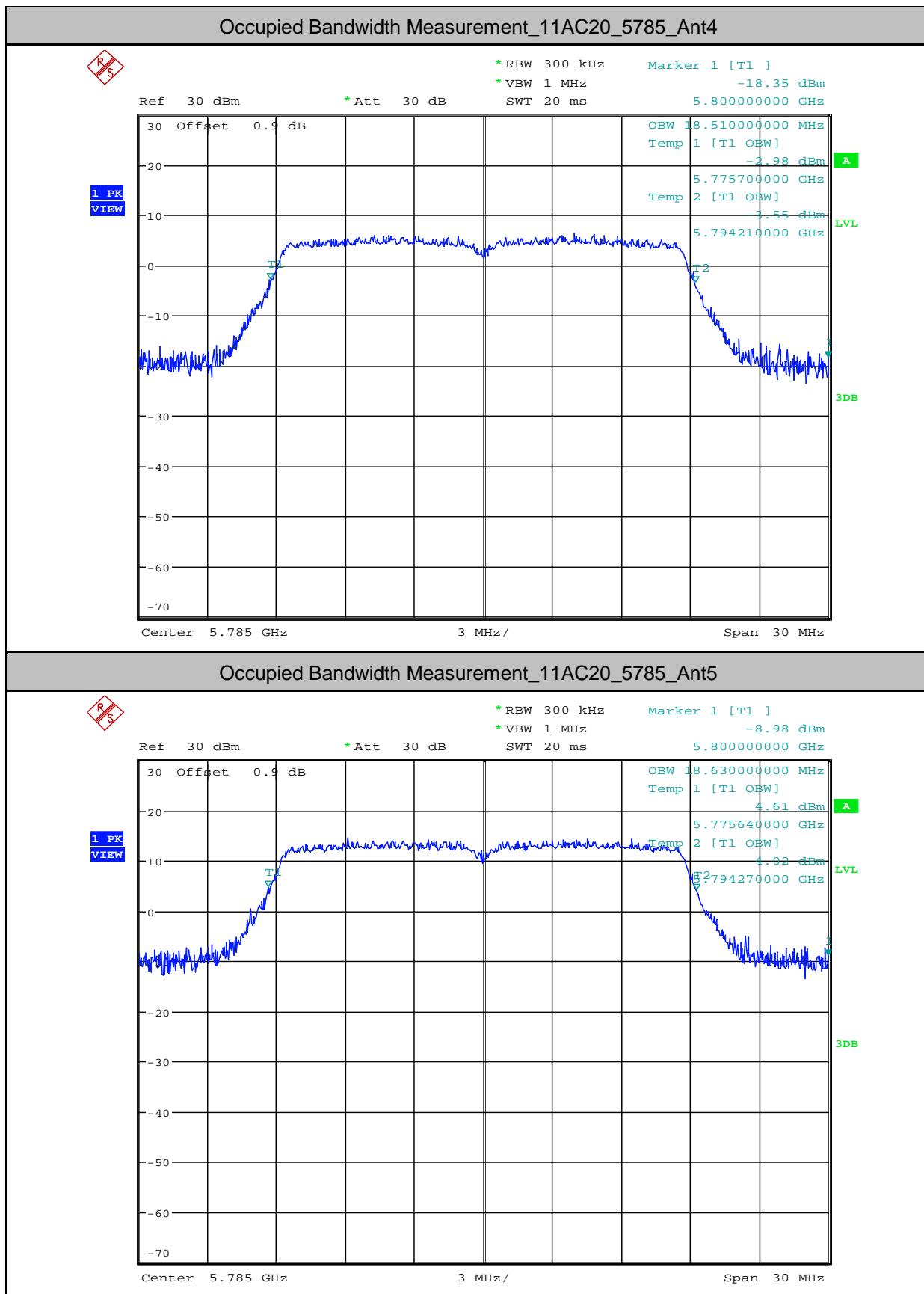


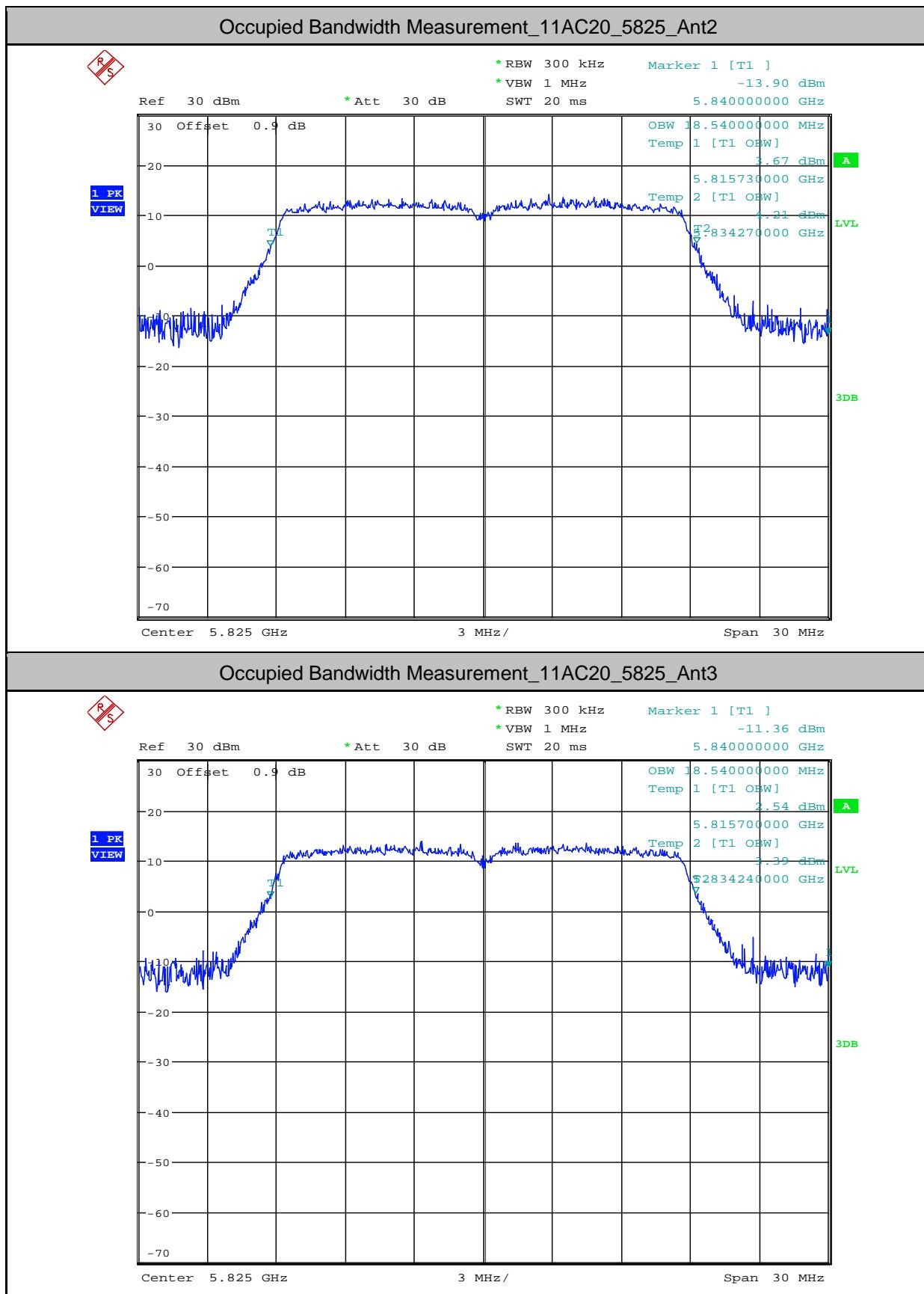


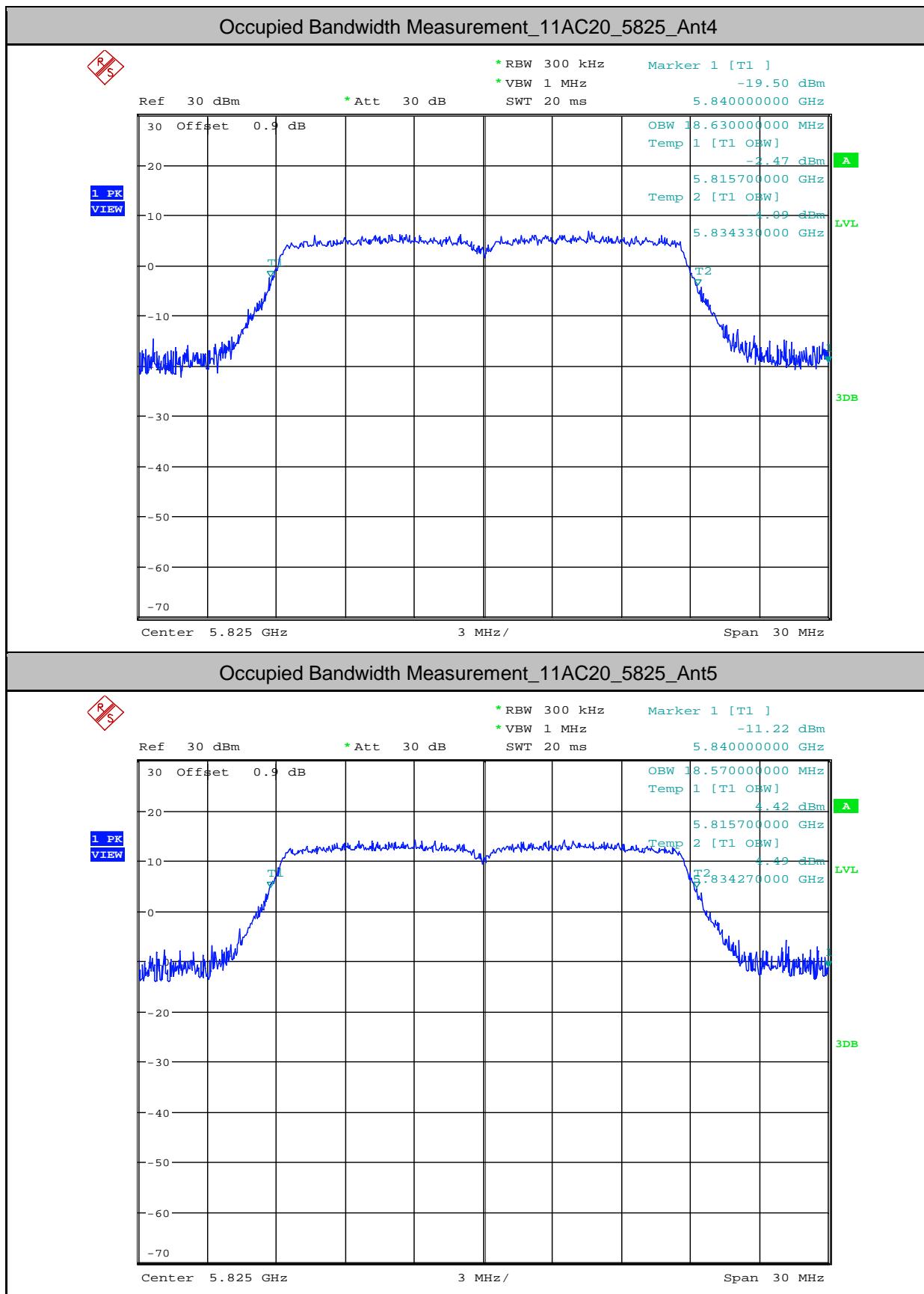


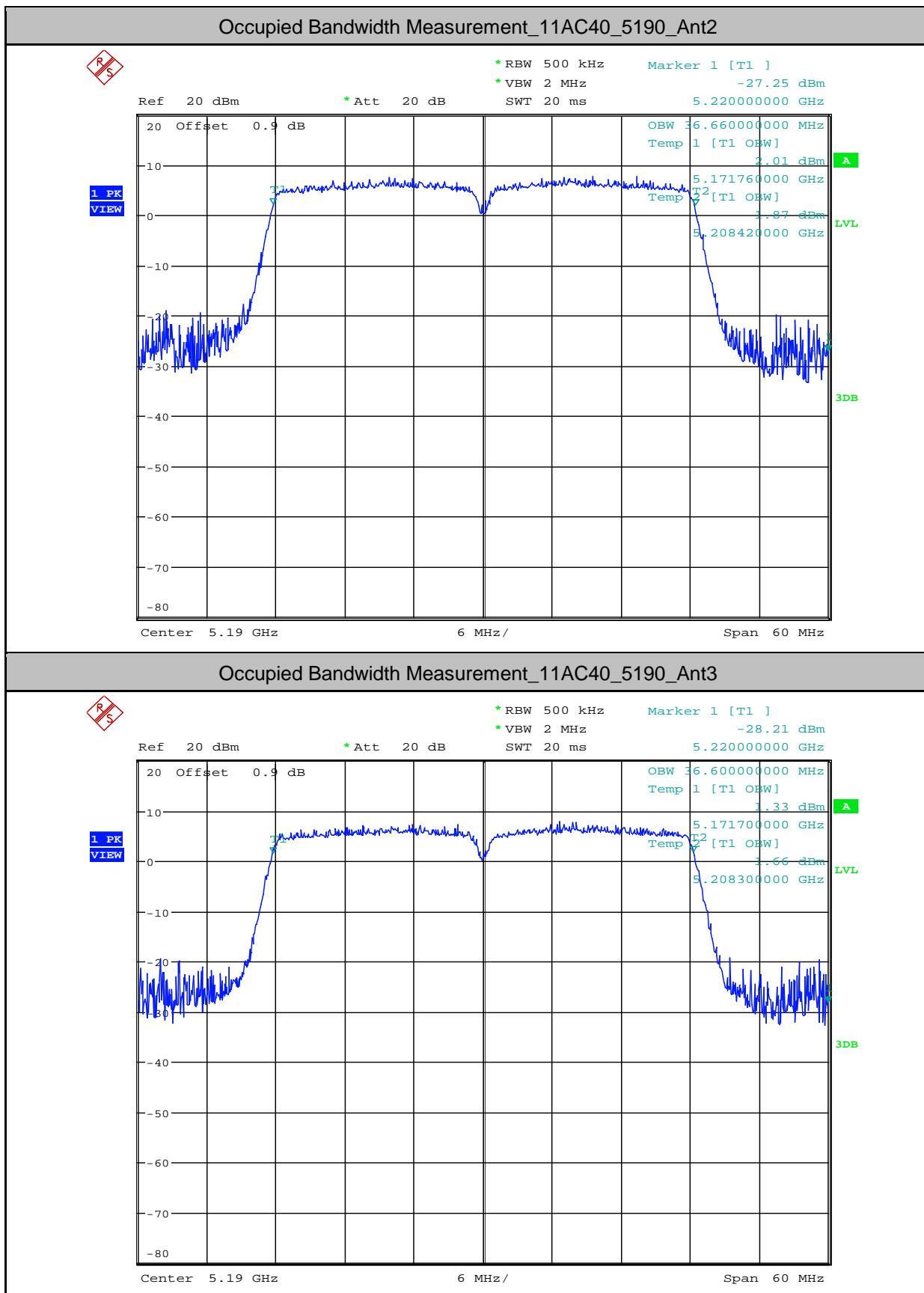


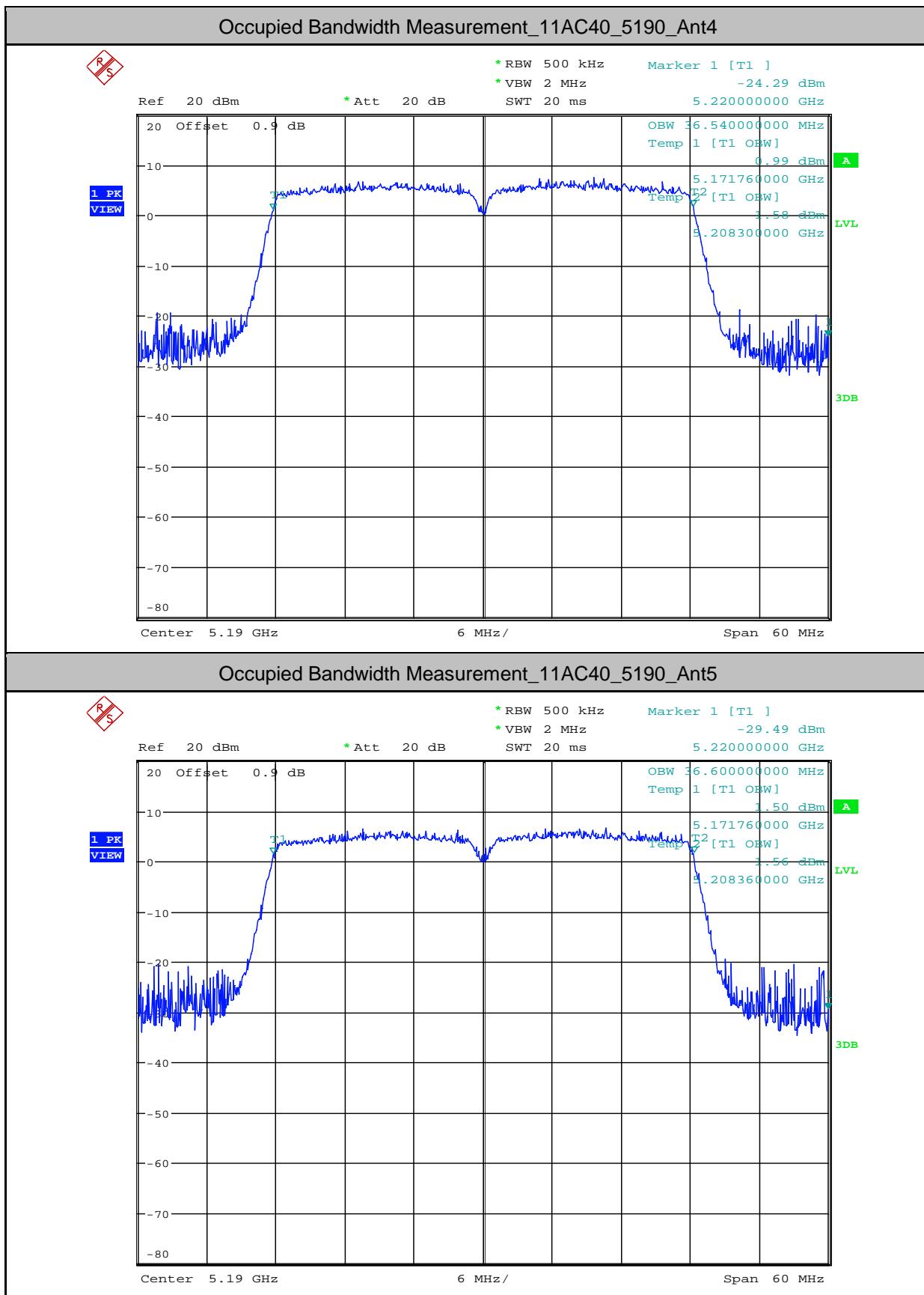


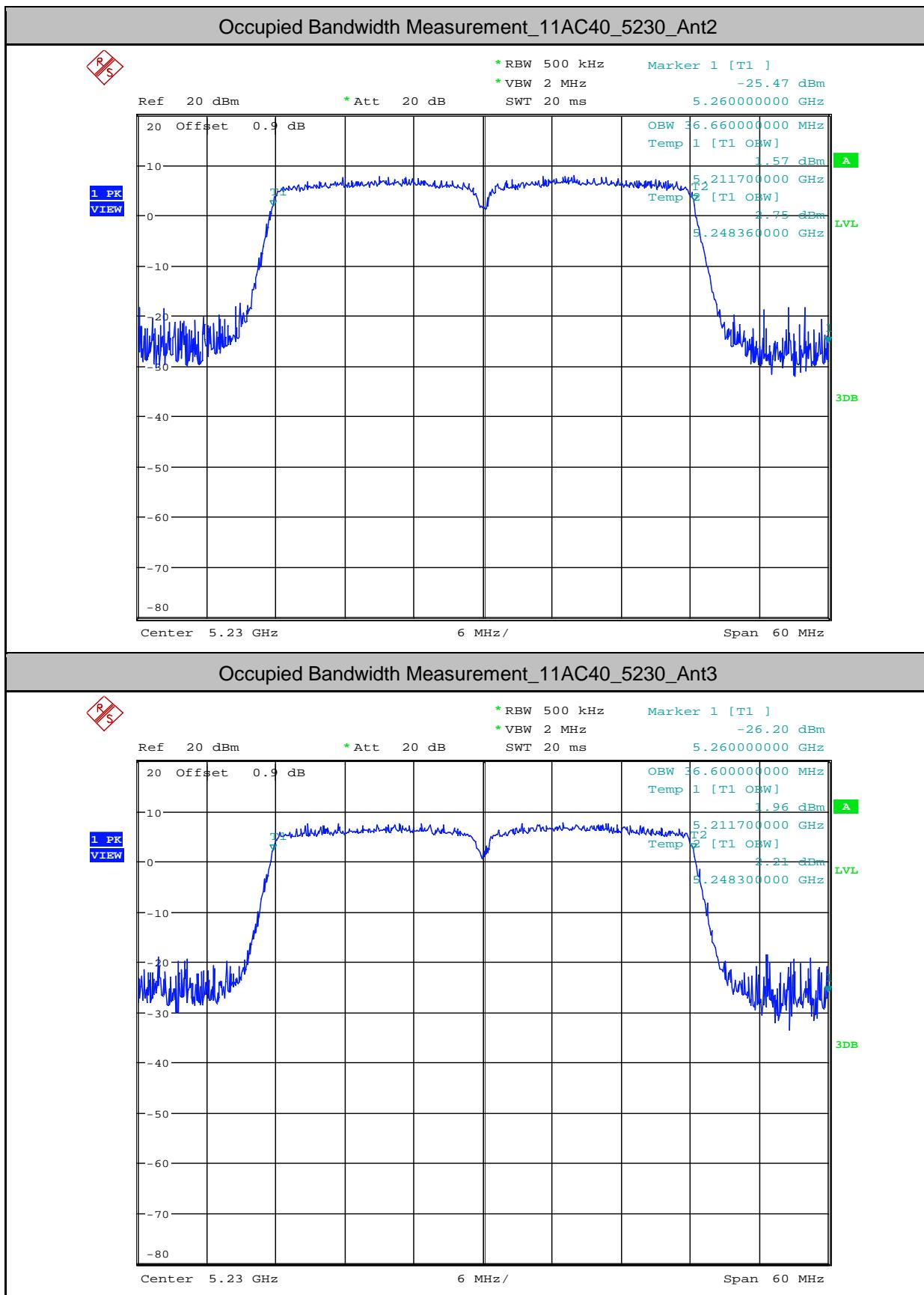


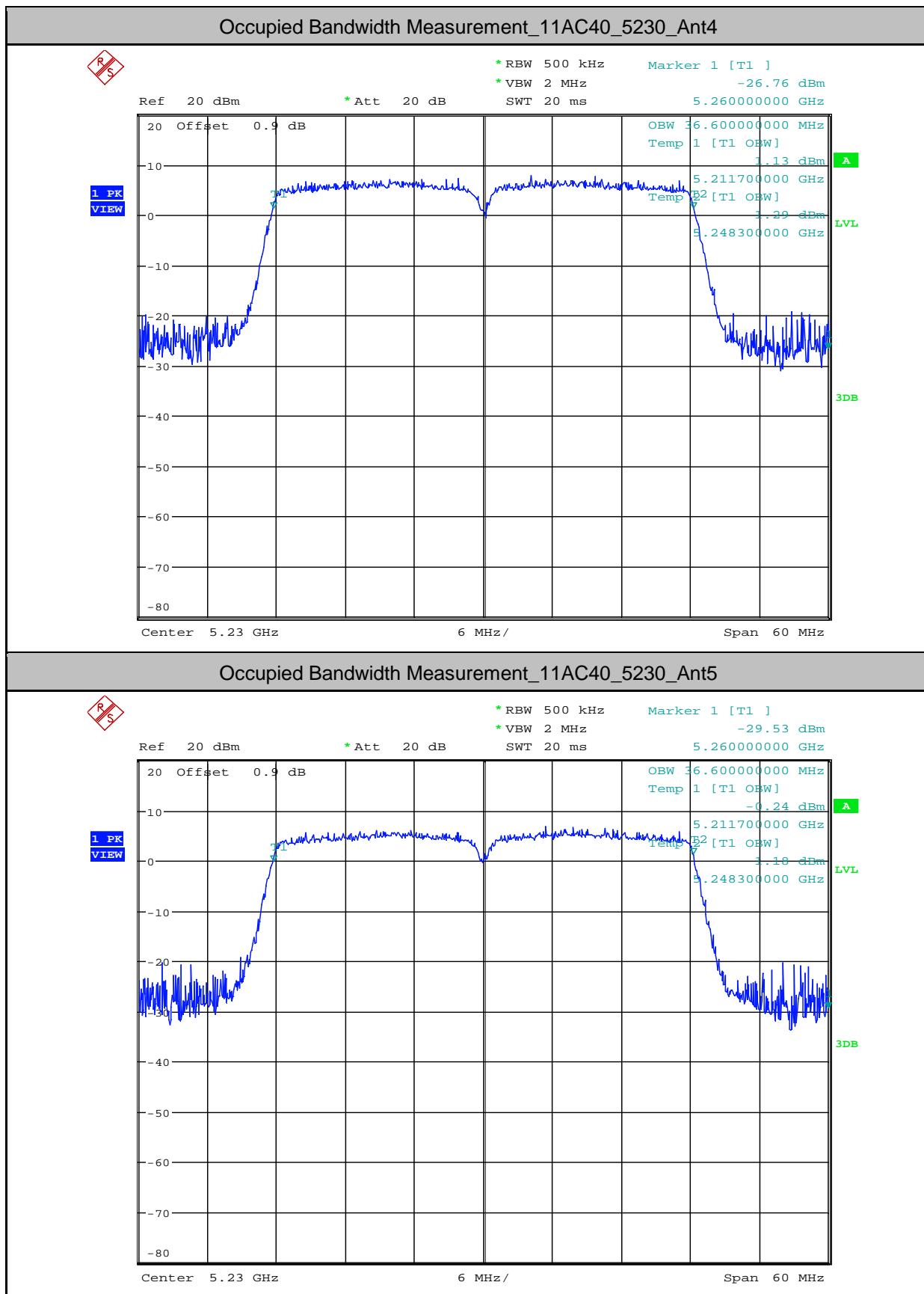


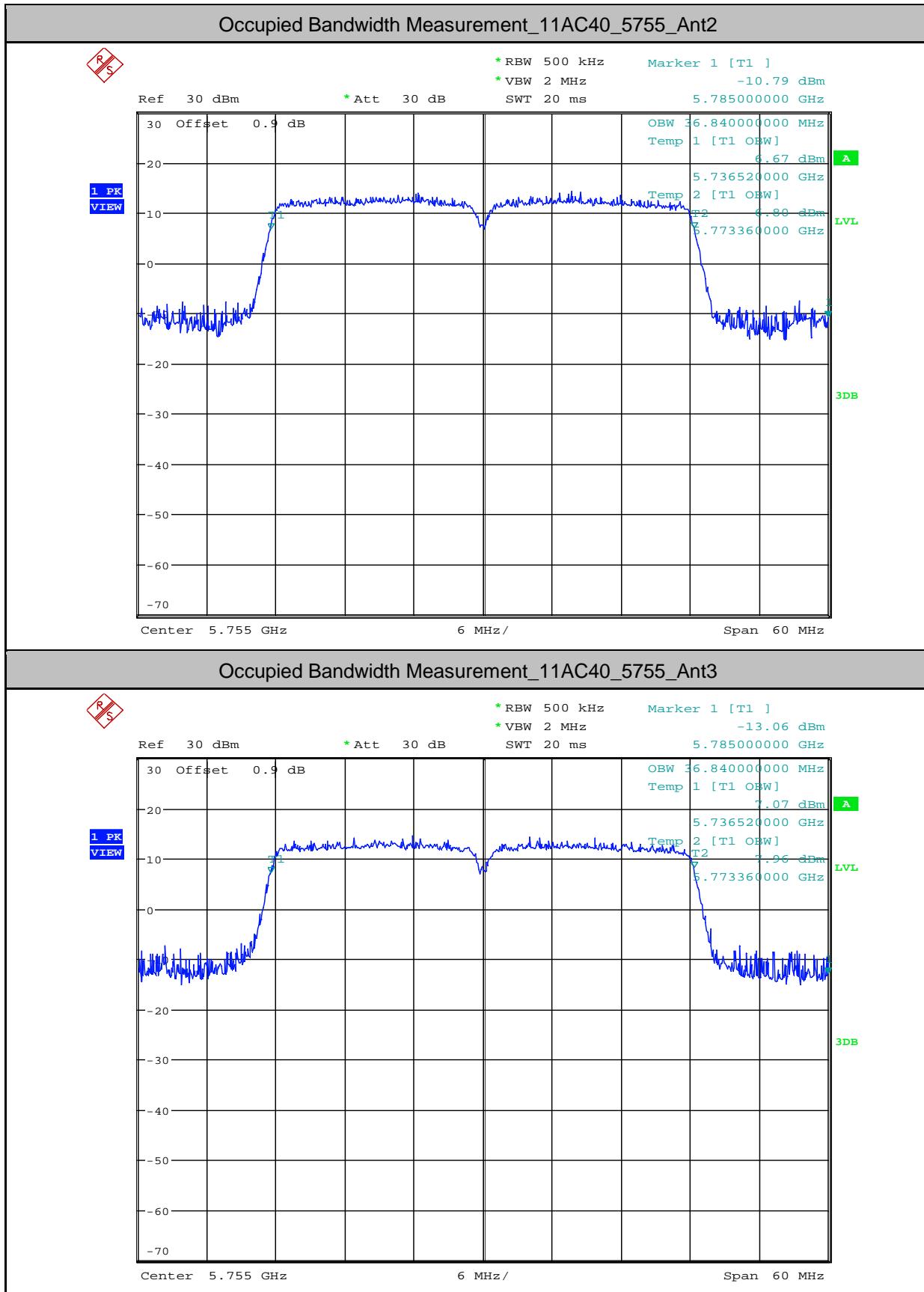


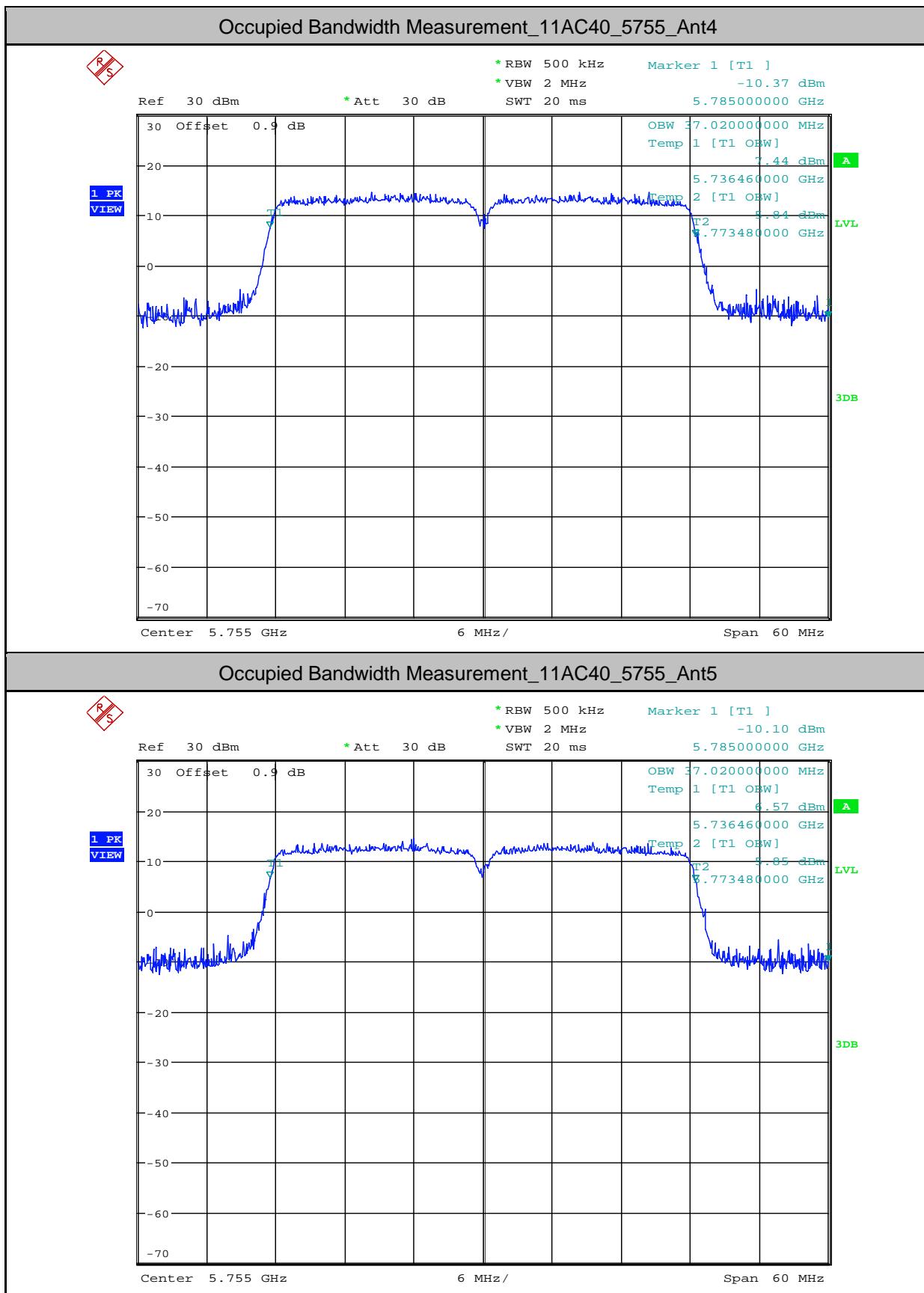


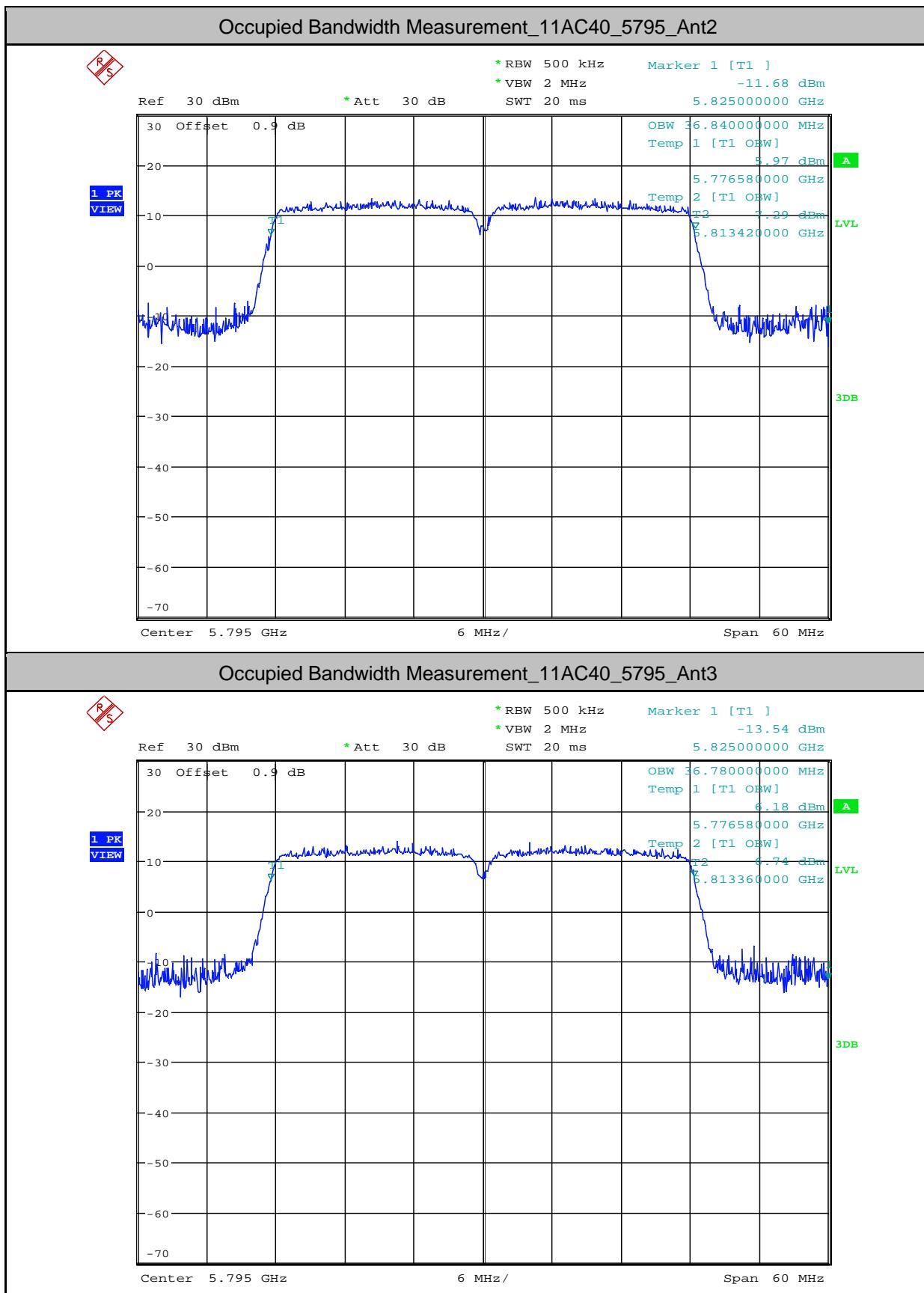


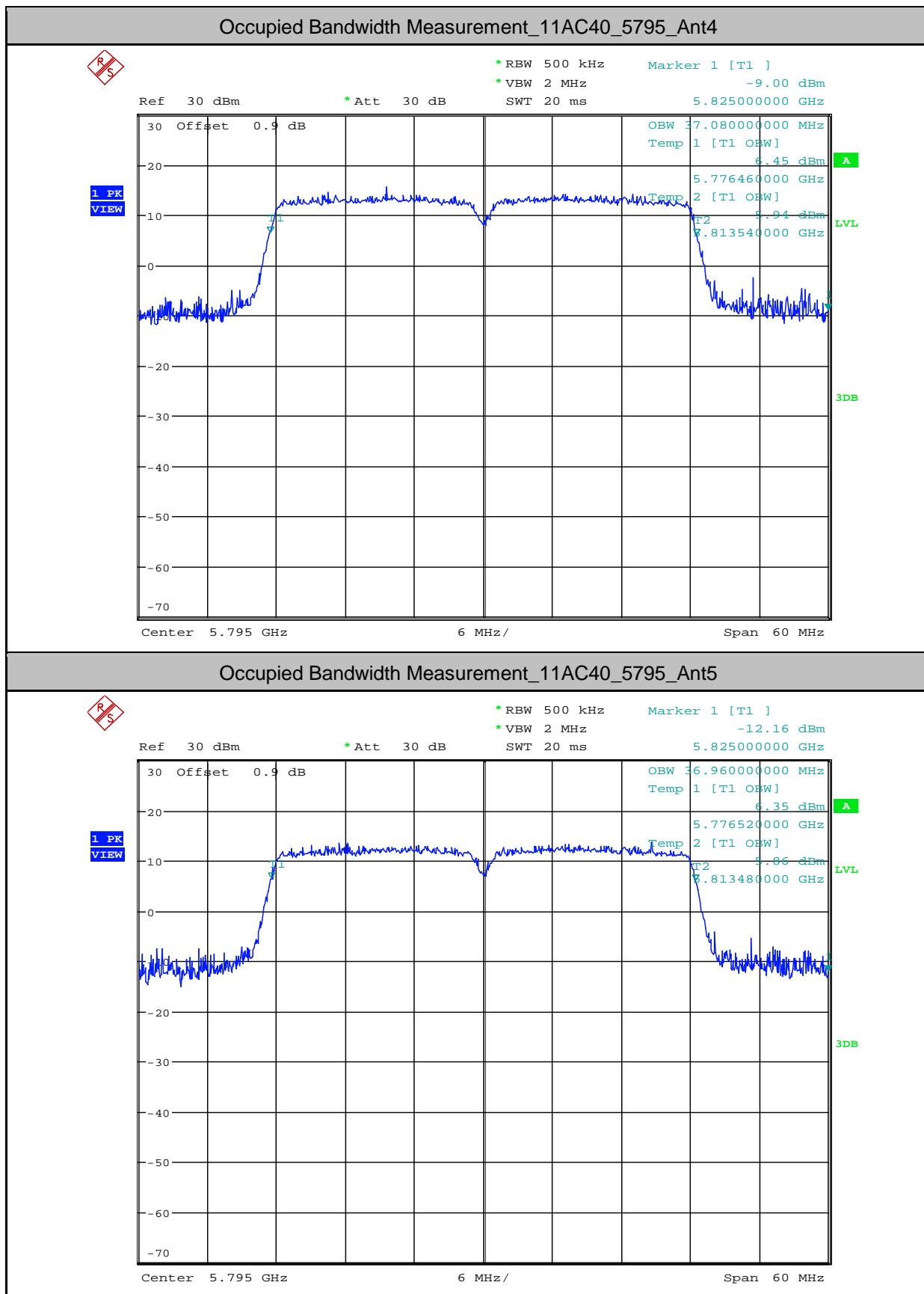


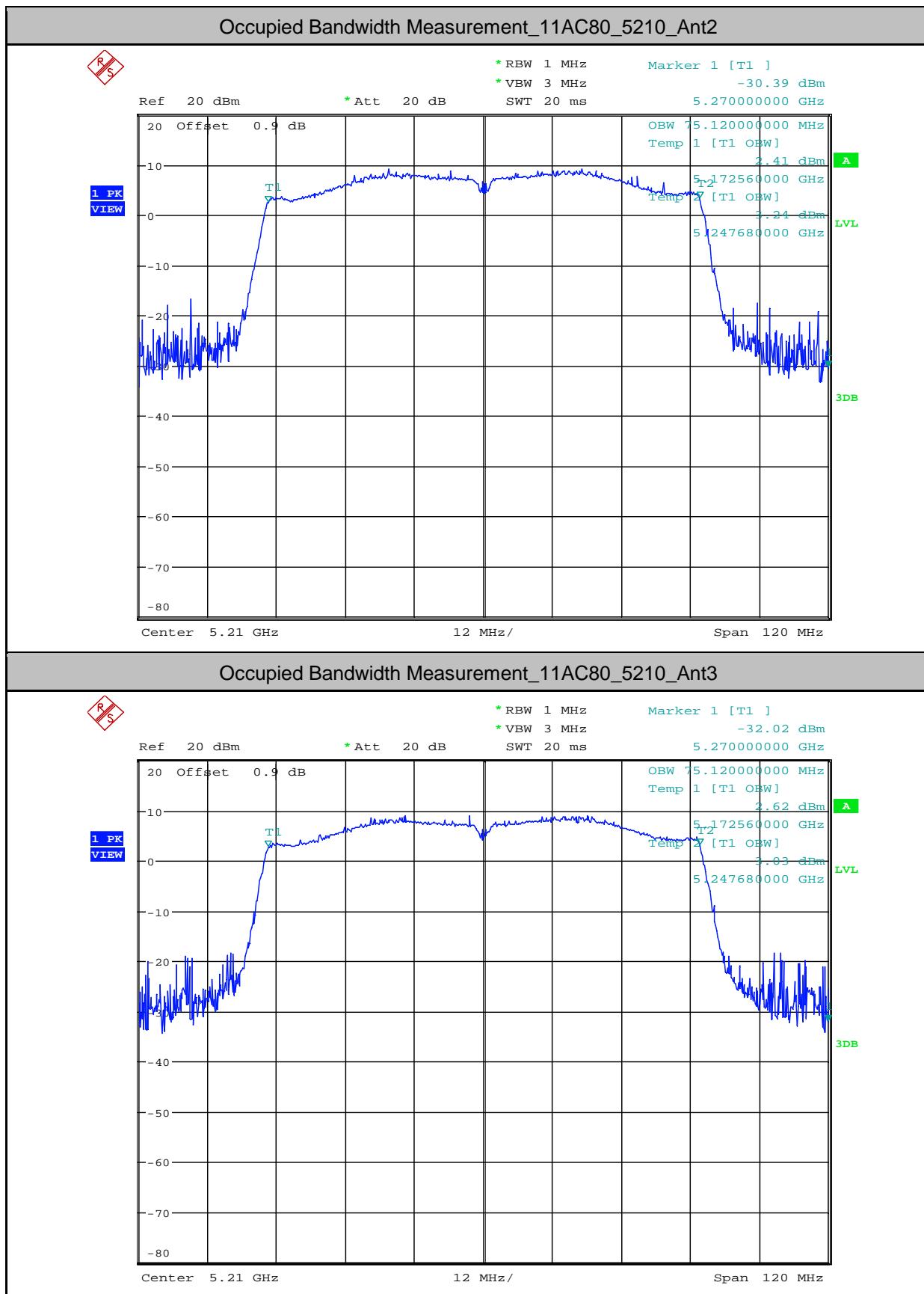


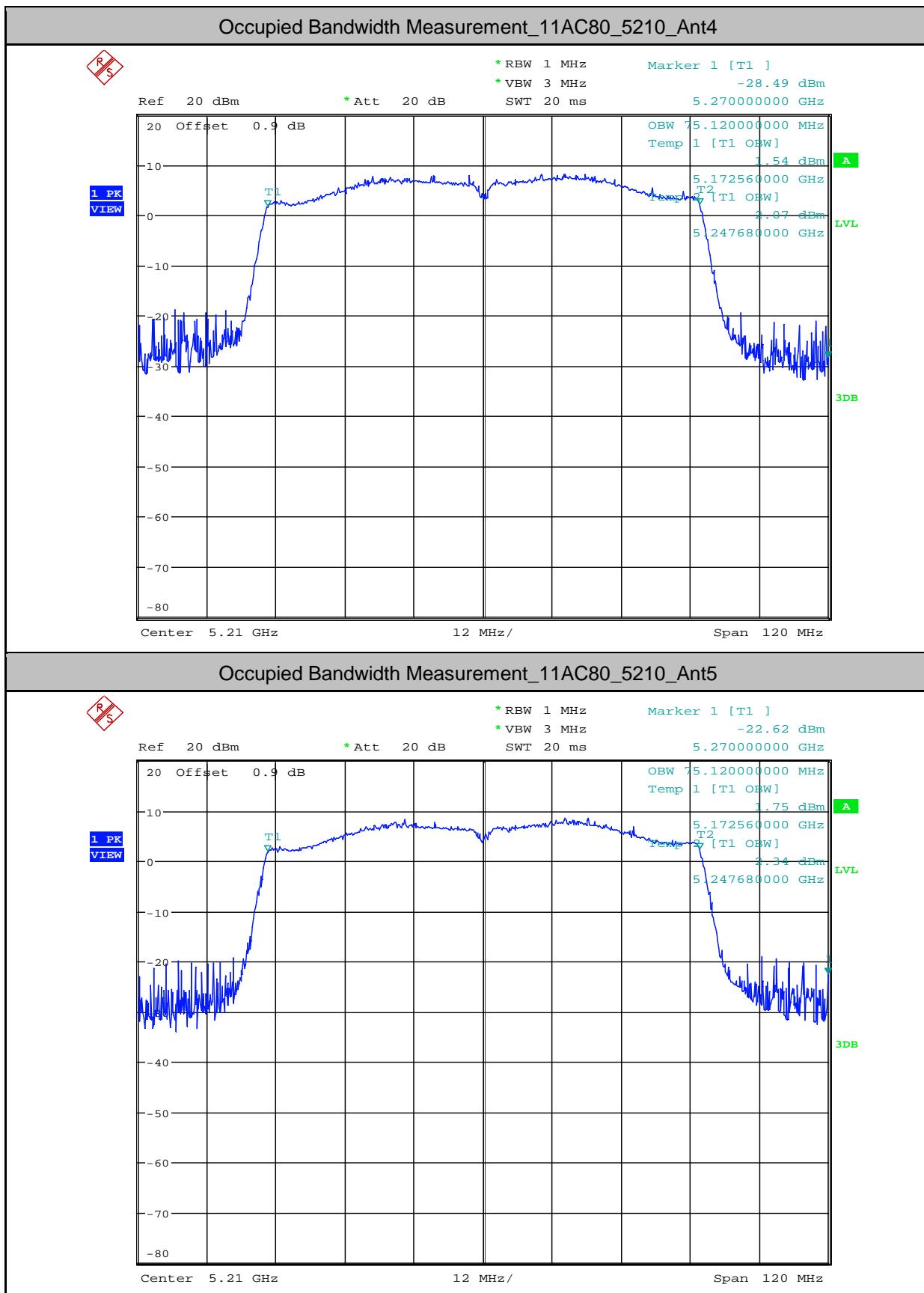


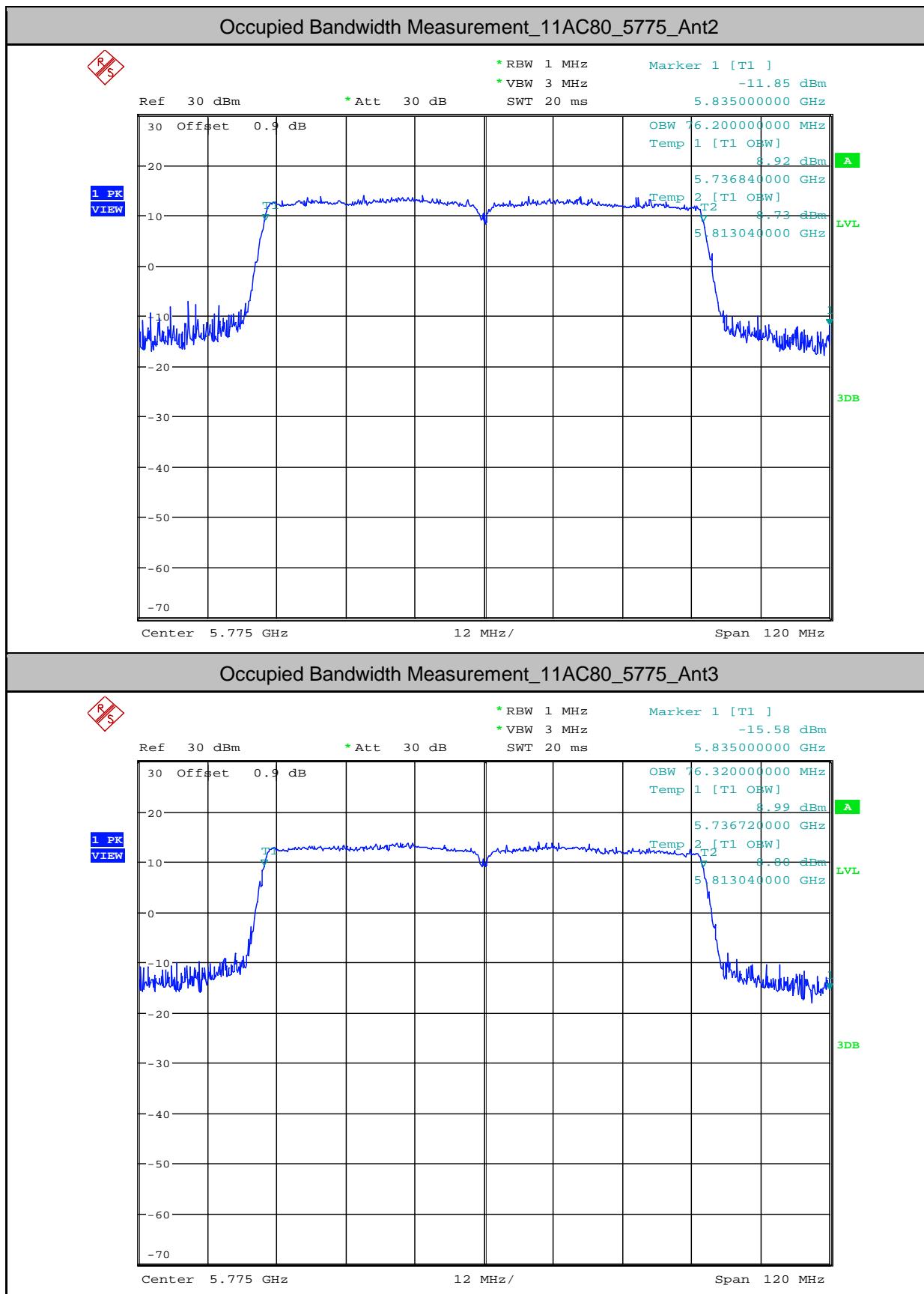


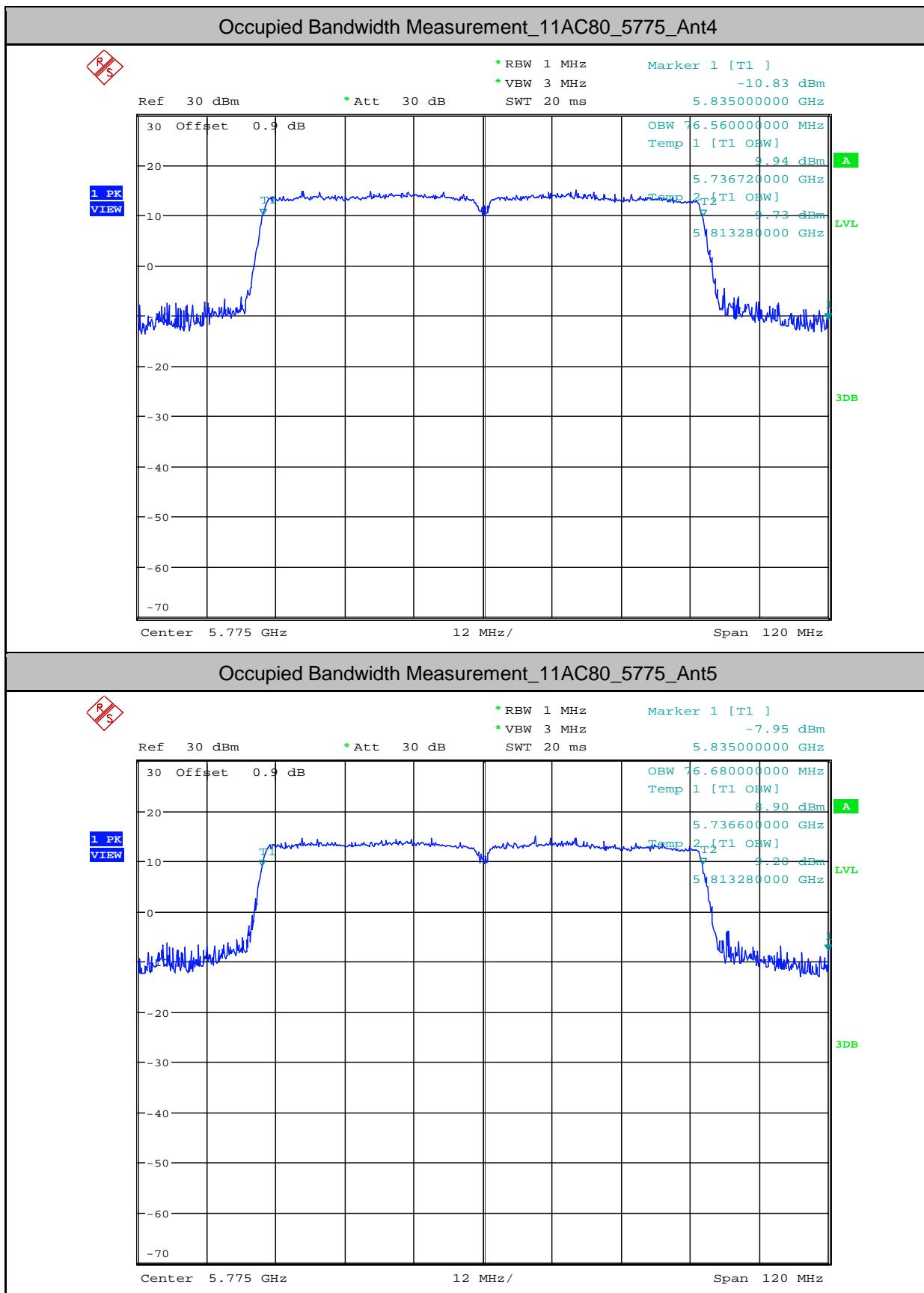












3. Maximum Conduct Output Power

802.11a mode						
Frequency (MHz)	Conducted Output Power (dBm)				Limit (dBm)	Result
	Ant.2	Ant.3	Ant.4	Ant.5		
5180.00	21.33	20.31	21.07	21.38	30.00	Pass
5200.00	22.89	21.02	21.50	21.89	30.00	Pass
5240.00	22.77	20.95	20.72	22.16	30.00	Pass
5745.00	25.25	23.66	24.01	24.28	30.00	Pass
5785.00	25.29	23.12	23.54	24.13	30.00	Pass
5825.00	25.22	22.98	23.35	24.11	30.00	Pass
802.11 n20 mode						
Frequency (MHz)	Conducted Output Power (dBm)					Result
	Ant.2	Ant.3	Ant.4	Ant.5	Total	
5180.00	21.05	21.06	20.87	21.26	27.08	28.42
5200.00	21.79	21.79	21.39	21.75	27.70	28.42
5240.00	21.59	21.96	21.75	22.02	27.85	28.42
5745.00	22.73	22.06	22.84	21.78	28.40	28.73
5785.00	22.56	21.40	22.24	21.77	28.03	28.73
5825.00	22.60	21.22	22.21	21.60	27.96	28.73
802.11 ac 20 mode						
Frequency (MHz)	Conducted Output Power (dBm)					Result
	Ant.2	Ant.3	Ant.4	Ant.5	Total	
5180.00	21.20	21.23	20.42	21.63	27.16	28.42
5200.00	21.89	22.04	21.66	21.86	27.89	28.42
5240.00	21.72	22.13	21.79	22.20	27.99	28.42
5745.00	22.95	22.54	22.88	21.92	28.61	28.73
5785.00	22.98	21.65	22.87	22.14	28.46	28.73
5825.00	23.24	21.37	23.25	21.79	28.51	28.73
802.11 n 40 mode						
Frequency (MHz)	Conducted Output Power (dBm)					Result
	Ant.2	Ant.3	Ant.4	Ant.5	Total	
5190.00	18.94	18.77	18.03	18.63	24.63	28.42
5230.00	22.86	22.48	21.53	22.70	28.44	28.42
5755.00	22.09	21.84	22.54	21.83	28.11	28.73
5795.00	21.93	21.25	22.33	21.76	27.85	28.73
802.11ac 40 mode						
Frequency (MHz)	Conducted Output Power (dBm)					Result
	Ant.2	Ant.3	Ant.4	Ant.5	Total	
5190.00	19.01	18.82	18.22	18.80	24.74	28.42
5230.00	22.62	22.42	21.71	22.47	28.34	28.42
5755.00	22.91	20.94	21.51	21.90	27.89	28.73
5795.00	22.88	21.40	21.29	21.95	27.95	28.73
802.11ac 80 mode						
Frequency (MHz)	Conducted Output Power (dBm)					Result
	Ant.2	Ant.3	Ant.4	Ant.5	Total	
5210.00	18.79	18.42	17.97	18.36	24.42	28.42
5775.00	21.95	21.13	20.08	21.66	27.28	28.73

4. Maximum Power Spectral Density

802.11a mode				
Band	Duty cycle factor			
	Ant.2	Ant.3	Ant.4	Ant.5
Band 1	0.06	0.05	0.06	0.06
Band 3	0.06	0.05	0.06	0.06
802.11 n20 mode				
Frequency (MHz)	Duty cycle factor			
	Ant.2	Ant.3	Ant.4	Ant.5
Band 1	0.05	0.06	0.06	0.06
Band 3	0.06	0.06	0.06	0.06
802.11ac 20 mode				
Frequency (MHz)	Duty cycle factor			
	Ant.2	Ant.3	Ant.4	Ant.5
Band 1	0.07	0.05	0.08	0.06
Band 3	0.08	0.06	0.06	0.06
802.11 n40 mode				
Frequency (MHz)	Duty cycle factor			
	Ant.2	Ant.3	Ant.4	Ant.5
Band 1	0.05	0.07	0.07	0.07
Band 3	0.05	0.07	0.07	0.07
802.11ac 40 mode				
Frequency (MHz)	Duty cycle factor			
	Ant.2	Ant.3	Ant.4	Ant.5
Band 1	0.06	0.07	0.07	0.07
Band 3	0.08	0.07	0.07	0.07
802.11ac 80 mode				
Frequency (MHz)	Duty cycle factor			
	Ant.2	Ant.3	Ant.4	Ant.5
Band 1	0.07	0.05	0.08	0.08
Band 3	0.08	0.08	0.08	0.08

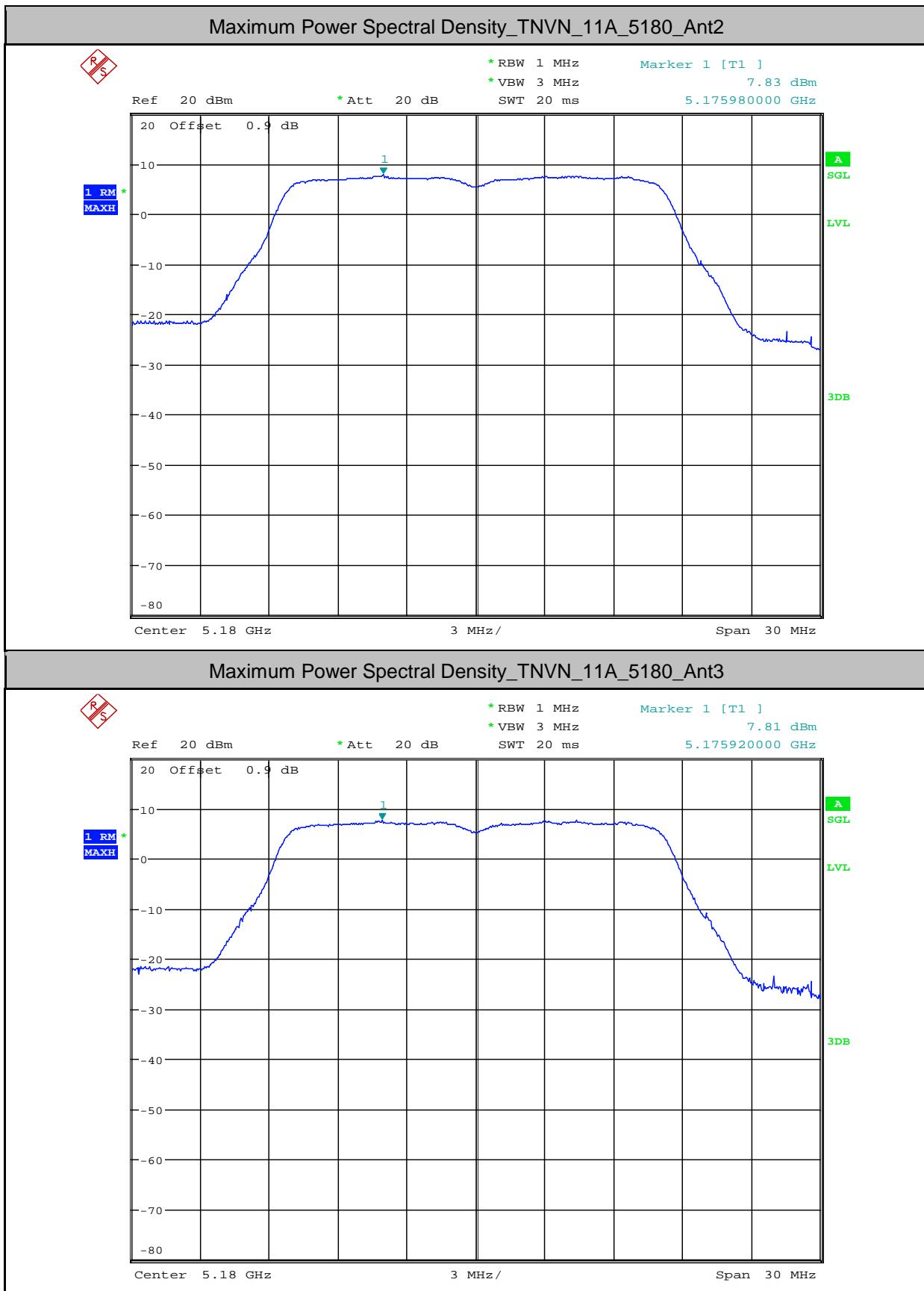


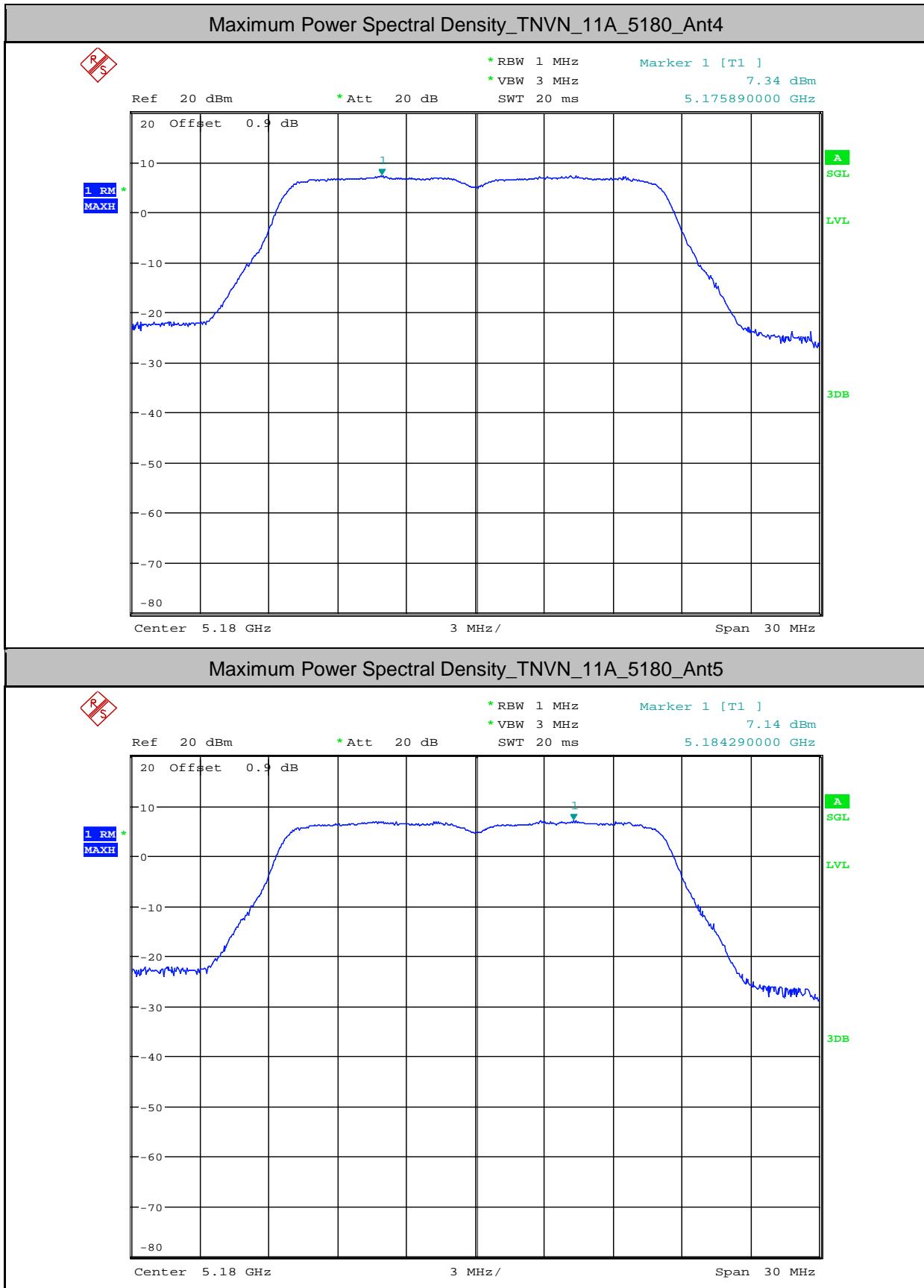
SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

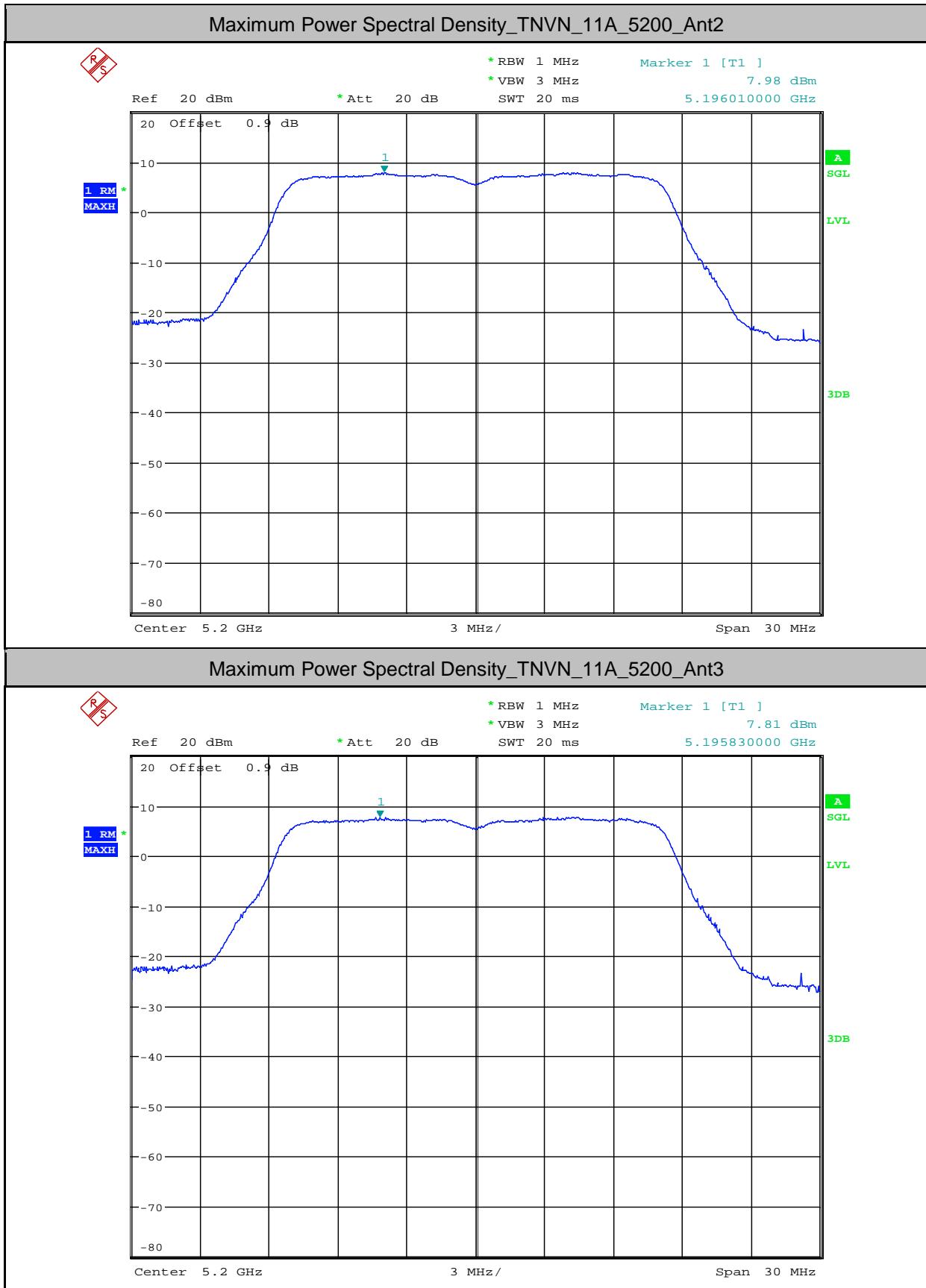
Report No.: SZEM170700716202
Page: 298 of 380

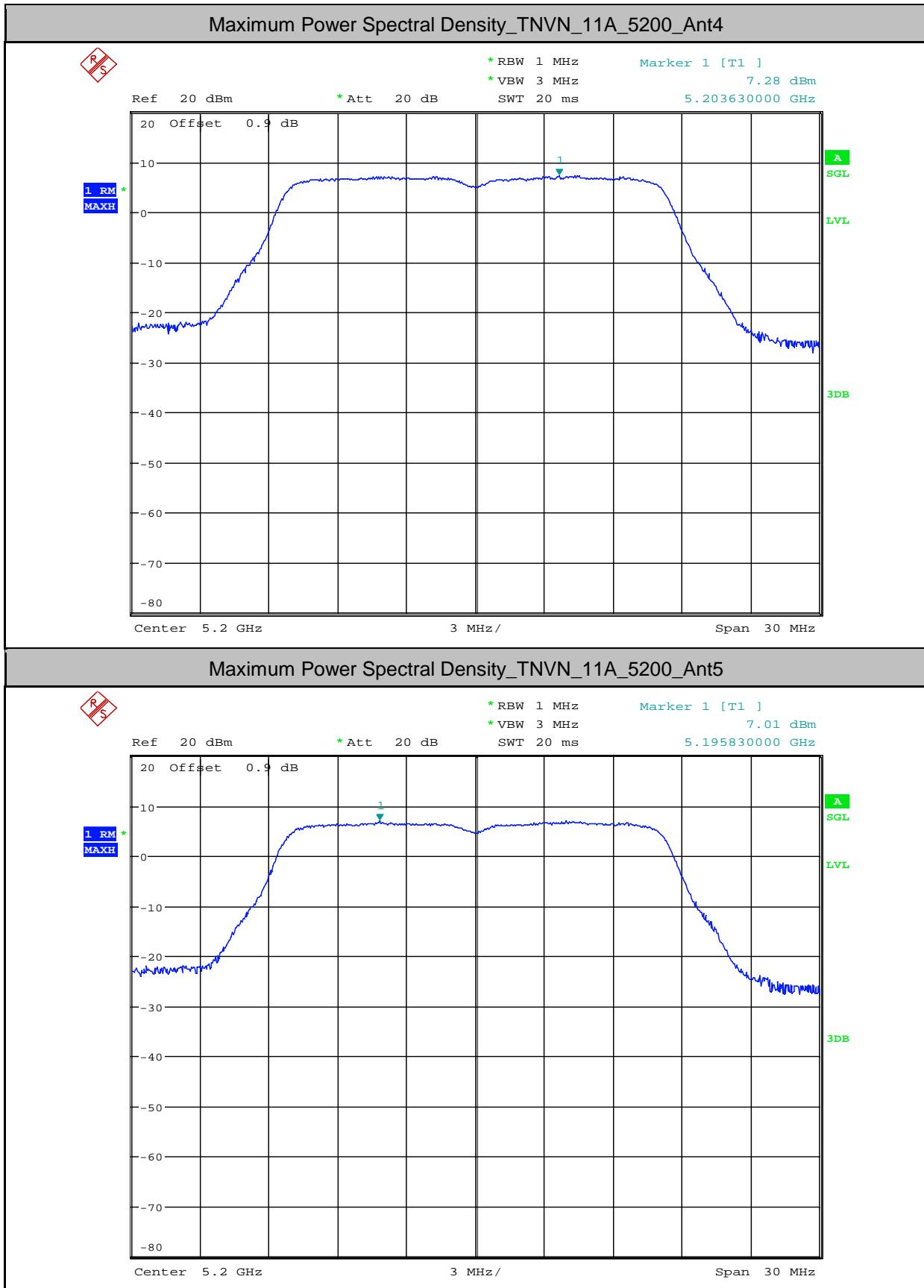
802.11a mode							
Frequency (MHz)	Power Spectral Density				Limit	Result	
	Ant.2	Ant.3	Ant.4	Ant.5			
5180.00	7.89	7.86	7.40	7.20	17 dBm/1MHz	Pass	
5200.00	8.04	7.86	7.34	7.07	17 dBm/1MHz	Pass	
5240.00	8.55	8.26	7.81	6.97	17 dBm/1MHz	Pass	
5745.00	11.33	11.31	5.12	12.03	30 dBm/500kHz	Pass	
5785.00	10.61	10.80	3.85	11.53	30 dBm/500kHz	Pass	
5825.00	10.42	10.60	3.72	11.38	30 dBm/500kHz	Pass	
802.11n20 mode							
Frequency (MHz)	Power Spectral Density					Result	
	Ant.2	Ant.3	Ant.4	Ant.5	Total		
5180.00	5.93	6.01	5.12	4.76	10.48	12.10 dBm/1MHz	Pass
5200.00	6.10	6.22	5.12	4.93	10.61	12.10 dBm/1MHz	Pass
5240.00	6.57	6.40	5.88	4.74	11.07	12.10 dBm/1MHz	Pass
5745.00	10.11	10.28	11.01	10.56	15.26	25.10 dBm/500kHz	Pass
5785.00	9.52	9.75	10.90	10.26	14.87	25.10 dBm/500kHz	Pass
5825.00	9.10	9.17	10.81	9.88	14.54	25.10 dBm/500kHz	Pass
802.11ac 20 mode							
Frequency (MHz)	Power Spectral Density					Result	
	Ant.2	Ant.3	Ant.4	Ant.5	Total		
5180.00	2.91	2.58	2.54	1.85	7.45	12.10 dBm/1MHz	Pass
5200.00	3.13	2.95	2.95	1.76	7.79	12.10 dBm/1MHz	Pass
5240.00	5.36	5.39	4.78	4.62	9.96	12.10 dBm/1MHz	Pass
5745.00	7.24	7.31	8.28	7.25	12.41	25.10 dBm/500kHz	Pass
5785.00	6.79	6.74	8.17	6.91	12.06	25.10 dBm/500kHz	Pass
5825.00	10.39	10.32	3.09	10.66	13.76	25.10 dBm/500kHz	Pass
802.11n40 mode							
Frequency (MHz)	Power Spectral Density					Result	
	Ant.2	Ant.3	Ant.4	Ant.5	Total		
5190.00	5.41	5.63	5.05	4.49	10.14	12.10 dBm/1MHz	Pass
5230.00	5.90	5.93	5.40	4.69	10.52	12.10 dBm/1MHz	Pass
5755.00	9.84	9.74	2.33	10.40	13.18	25.10 dBm/500kHz	Pass
5795.00	9.39	9.52	2.38	10.22	12.87	25.10 dBm/500kHz	Pass
802.11ac 40 mode							
Frequency (MHz)	Power Spectral Density					Result	
	Ant.2	Ant.3	Ant.4	Ant.5	Total		
5190.00	2.91	3.00	2.56	2.28	7.60	12.10 dBm/1MHz	Pass
5230.00	3.34	3.32	3.00	1.93	7.99	12.10 dBm/1MHz	Pass
5755.00	7.50	7.66	8.05	7.68	12.52	25.10 dBm/500kHz	Pass
5795.00	6.81	6.94	8.09	7.09	12.09	25.10 dBm/500kHz	Pass
802.11ac 80 mode							
Frequency (MHz)	Power Spectral Density					Result	
	Ant.2	Ant.3	Ant.4	Ant.5	Total		
5210.00	0.95	0.97	-0.01	0.21	5.43	12.10 dBm/1MHz	Pass
5775.00	3.71	4.18	5.31	4.97	9.22	25.10 dBm/500kHz	Pass

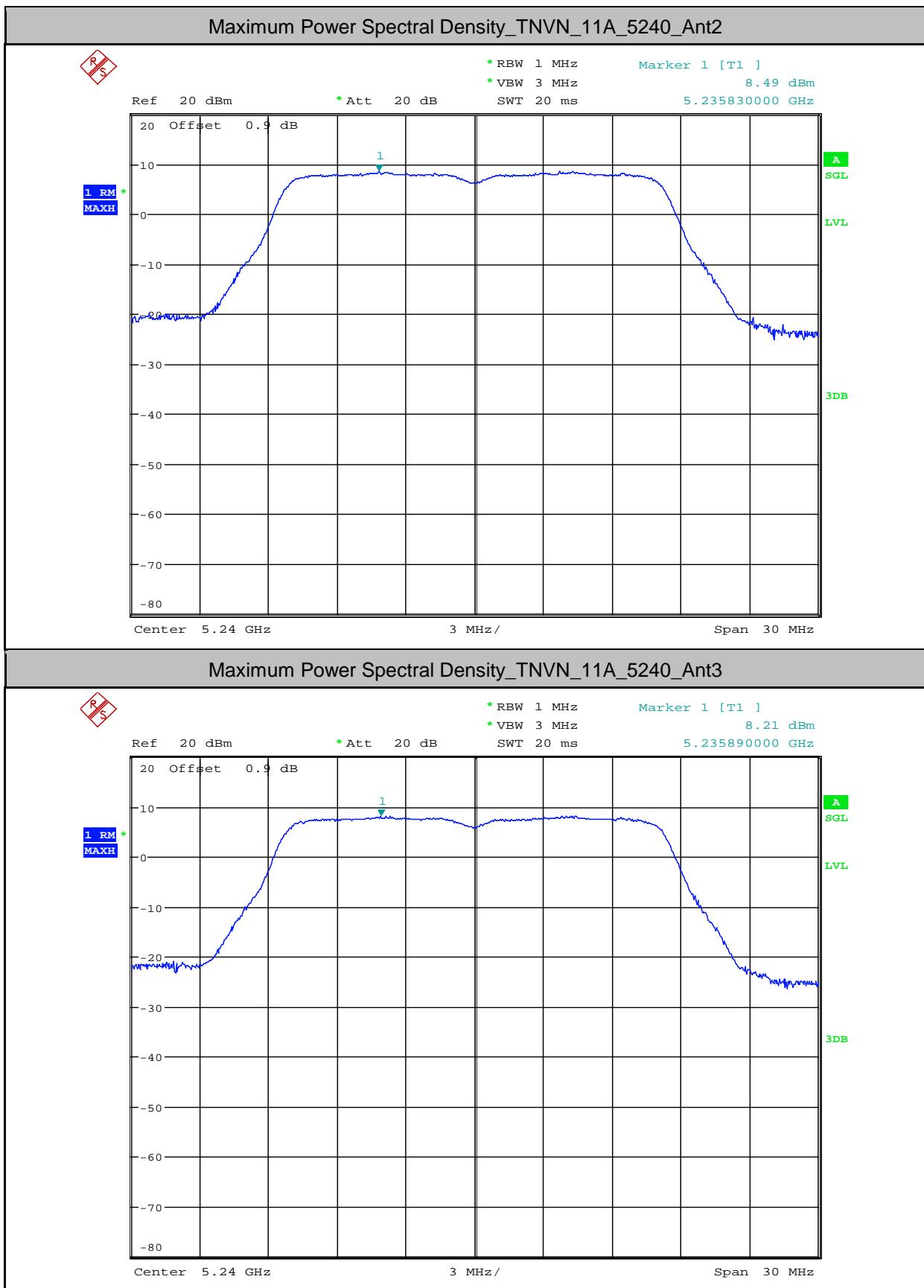
Remark: Power Spectral density = Measure power density + duty cycle factor

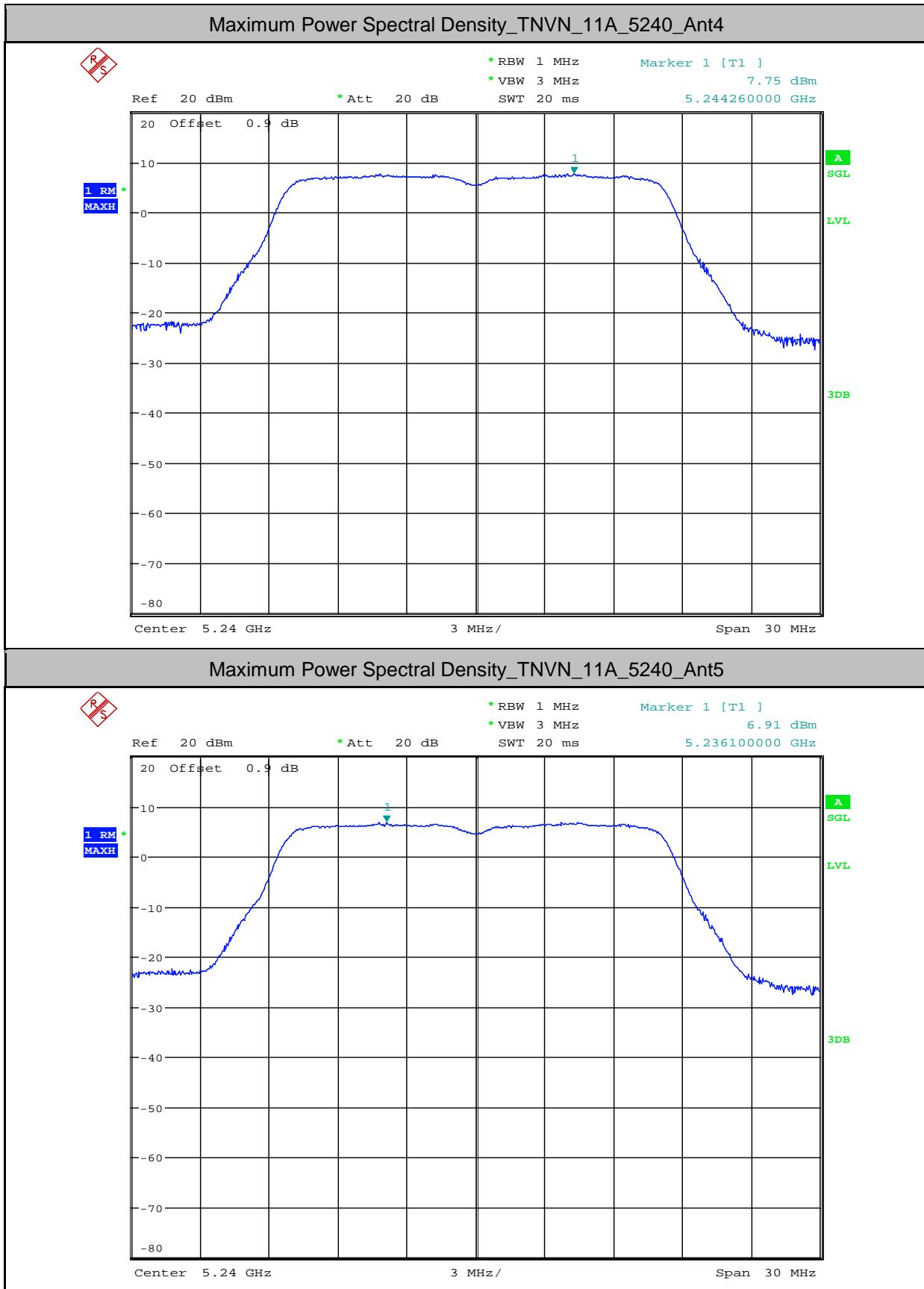


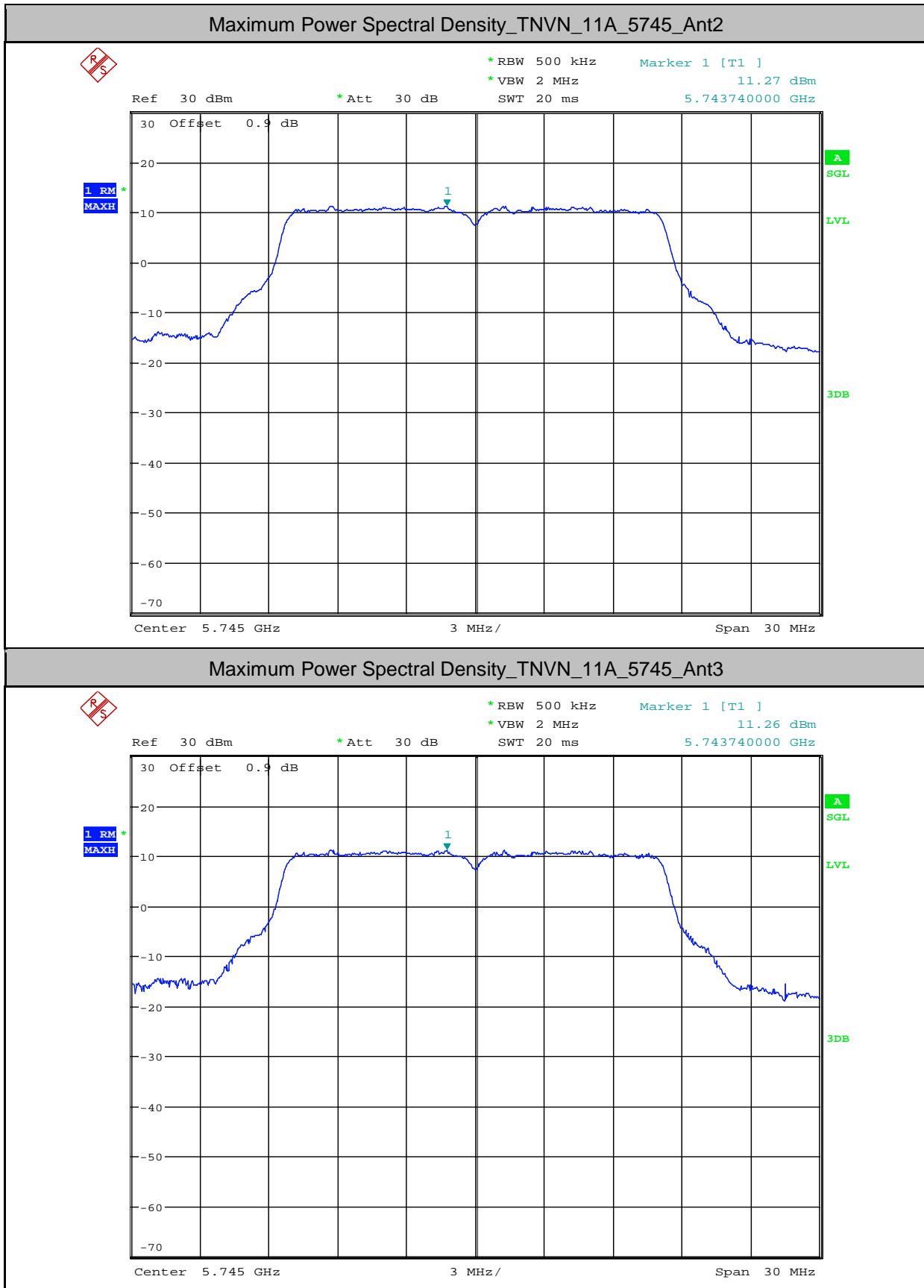


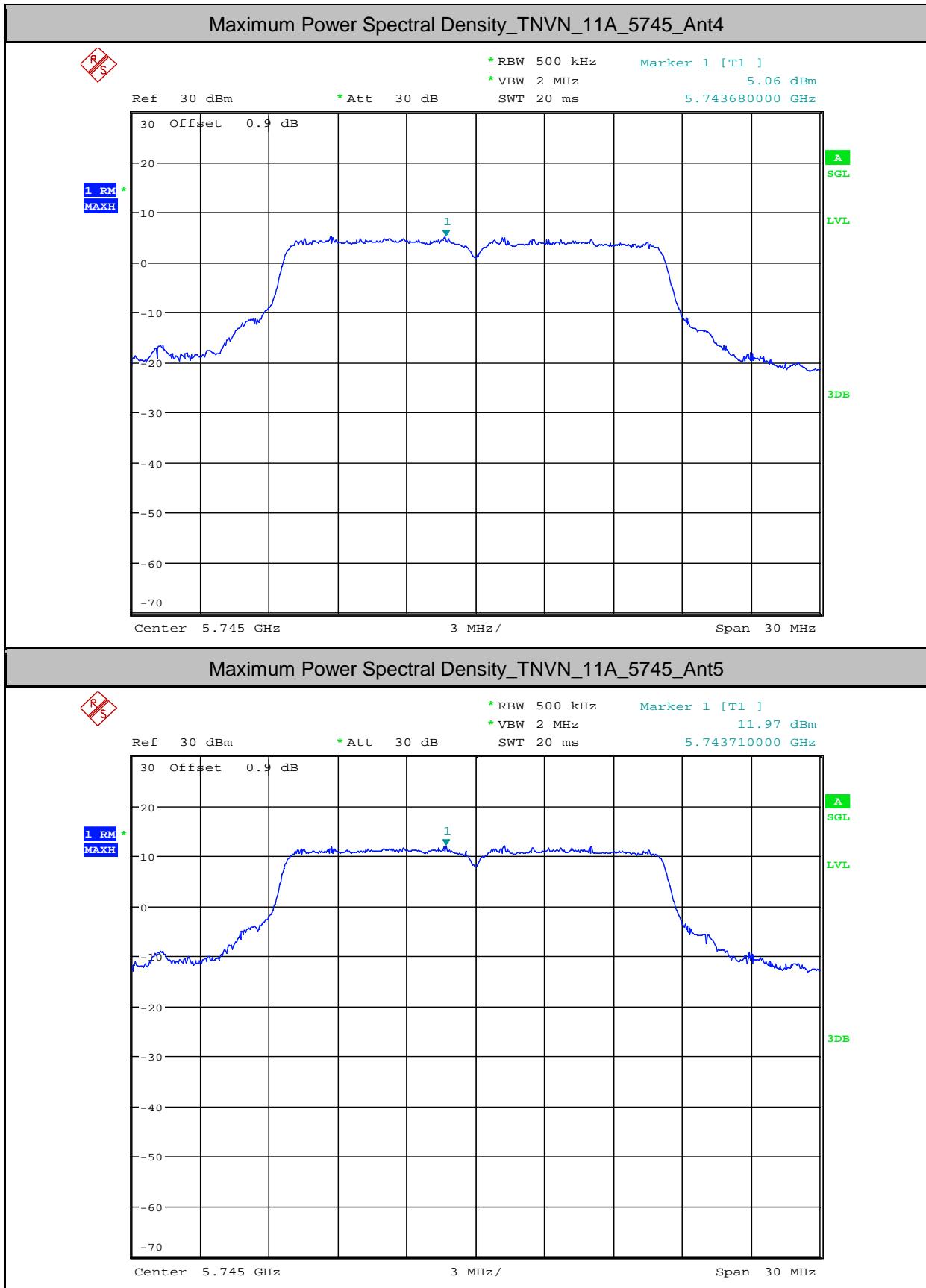


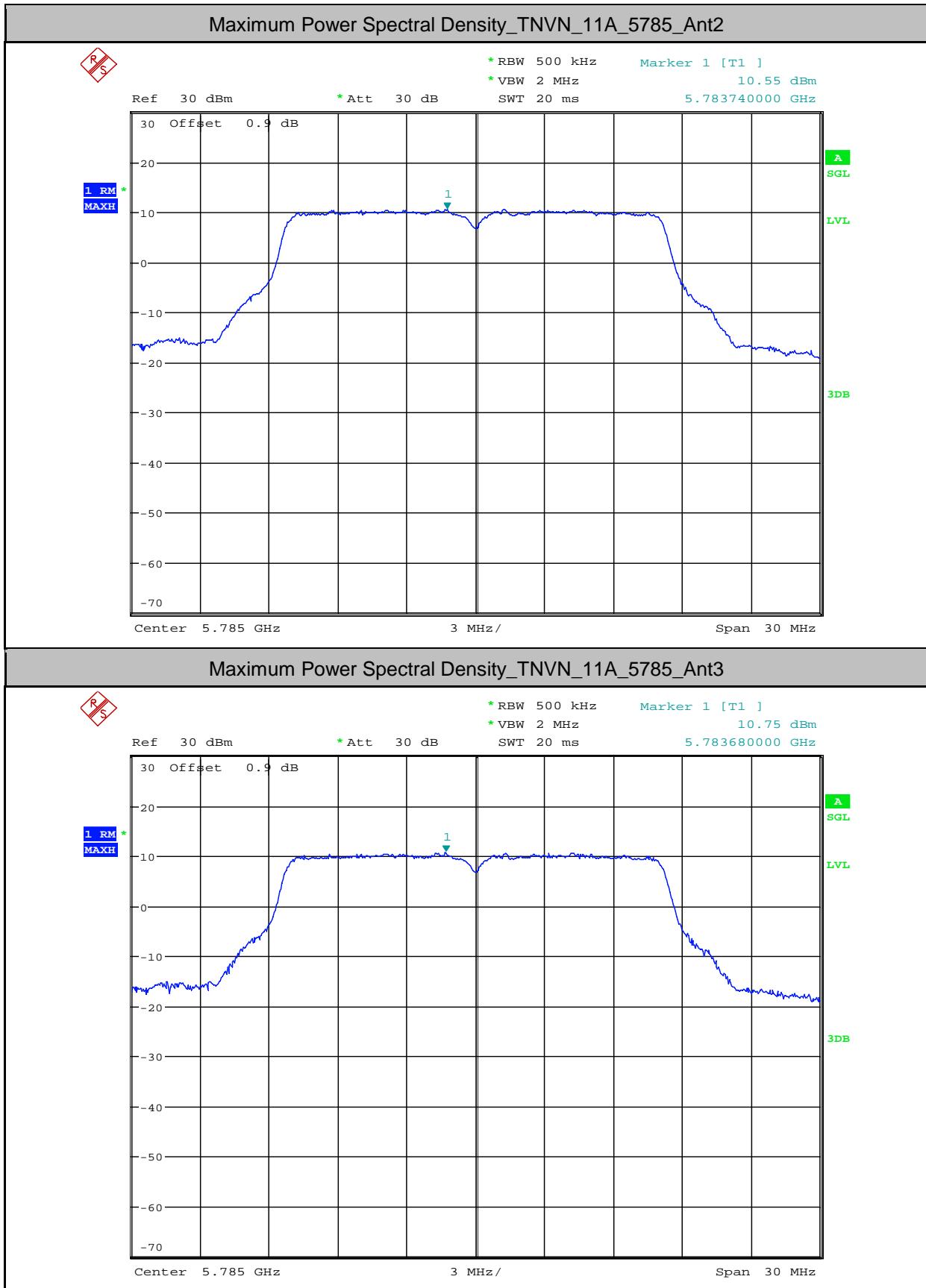


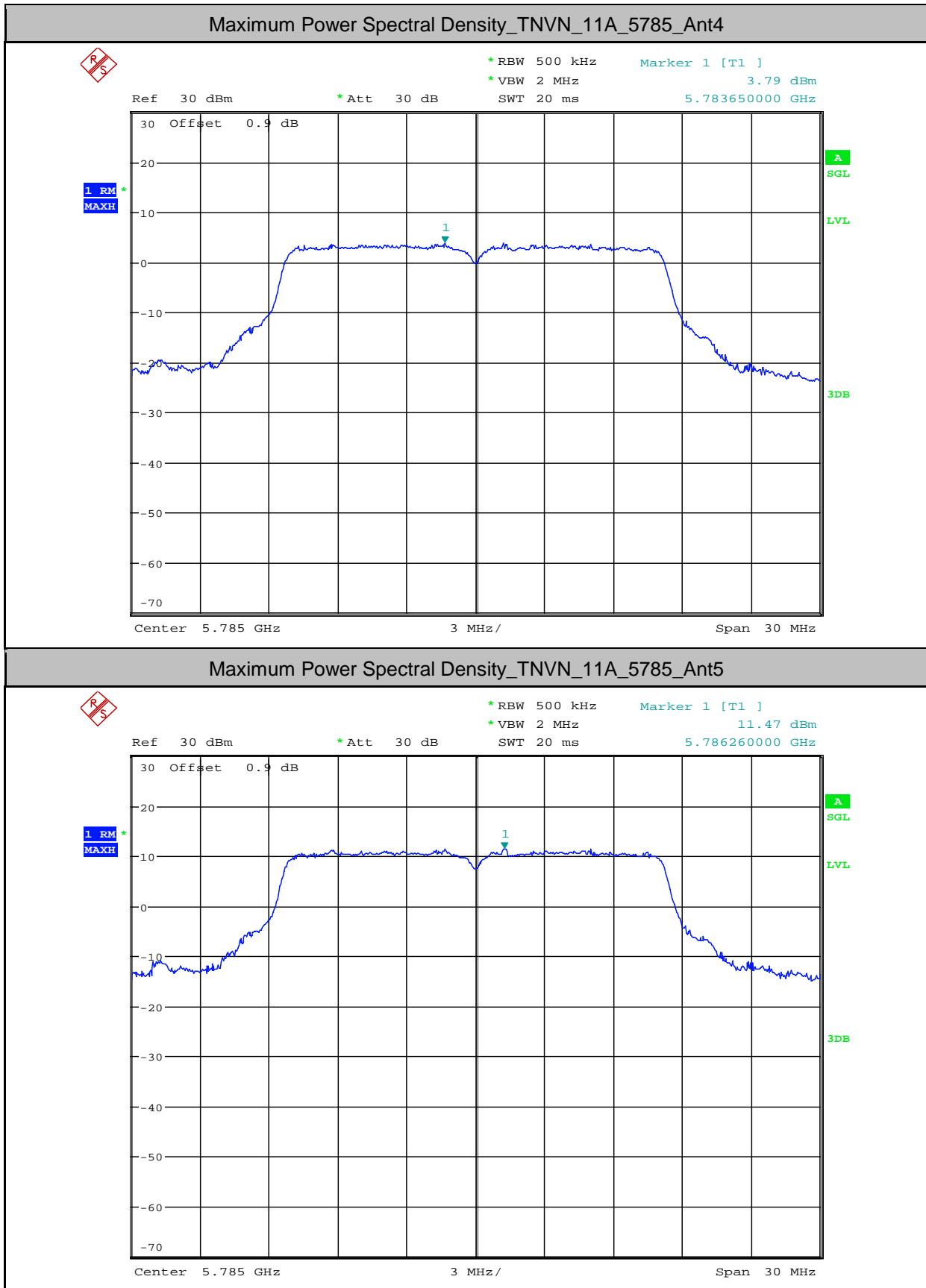


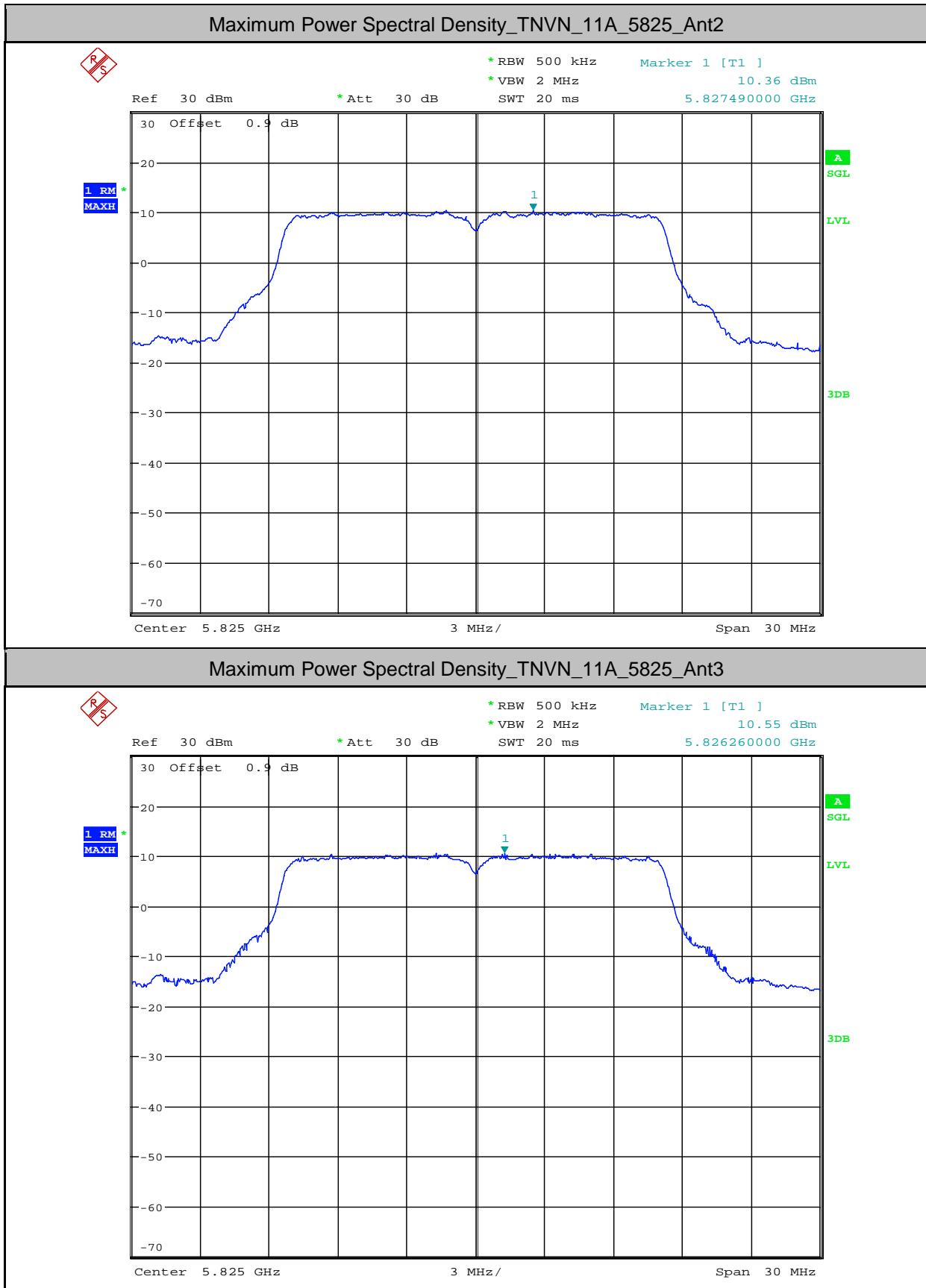


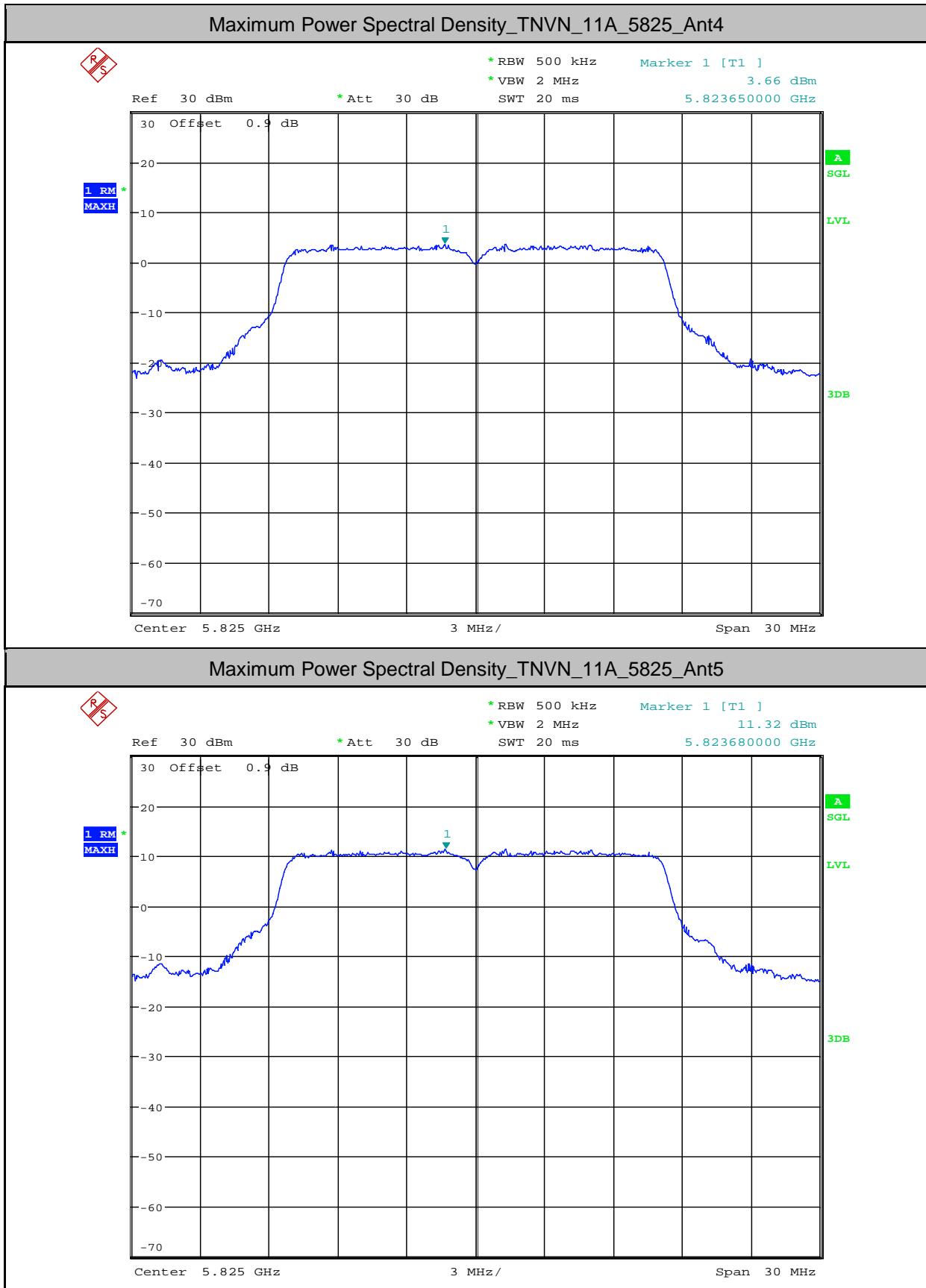


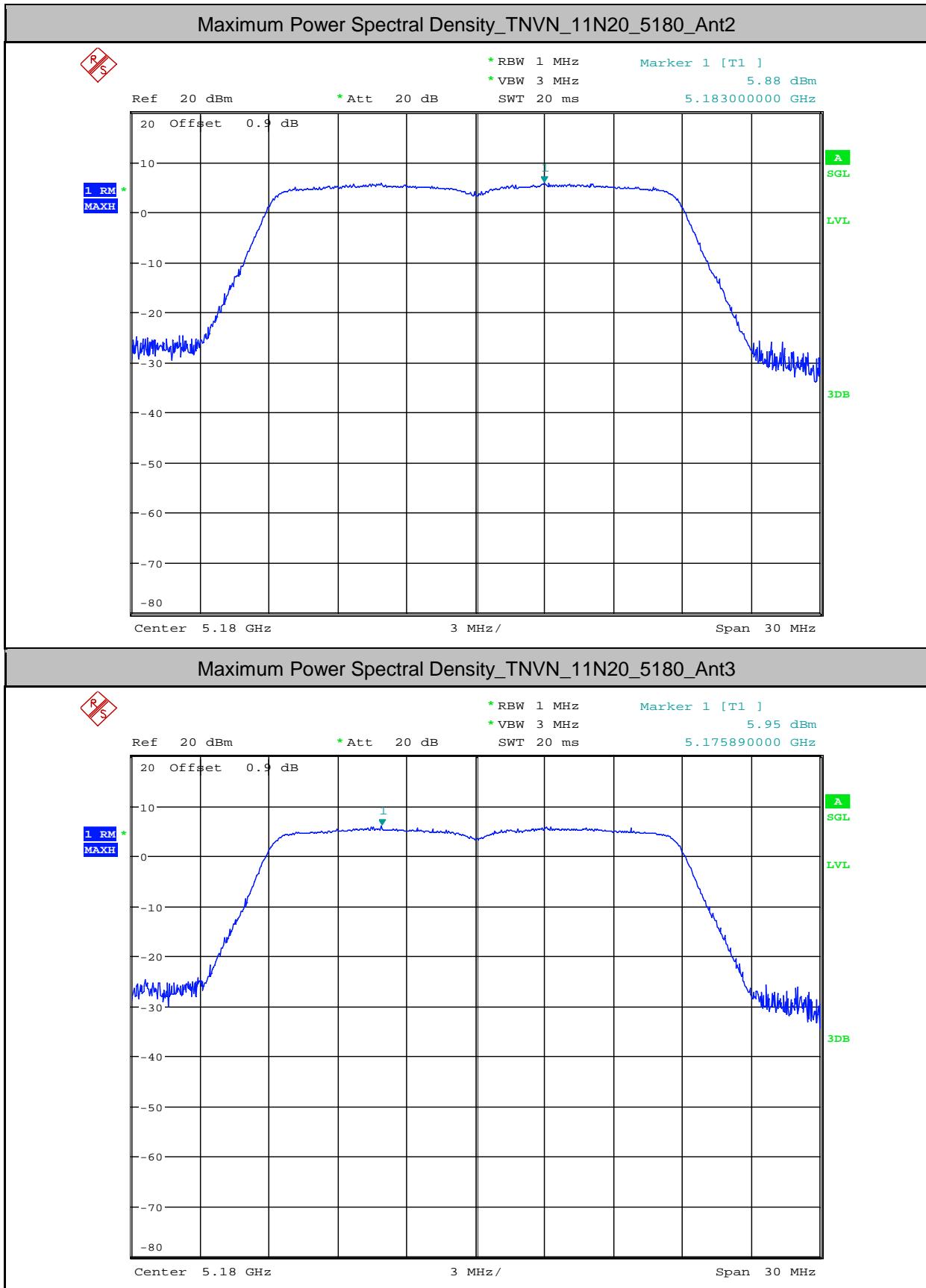


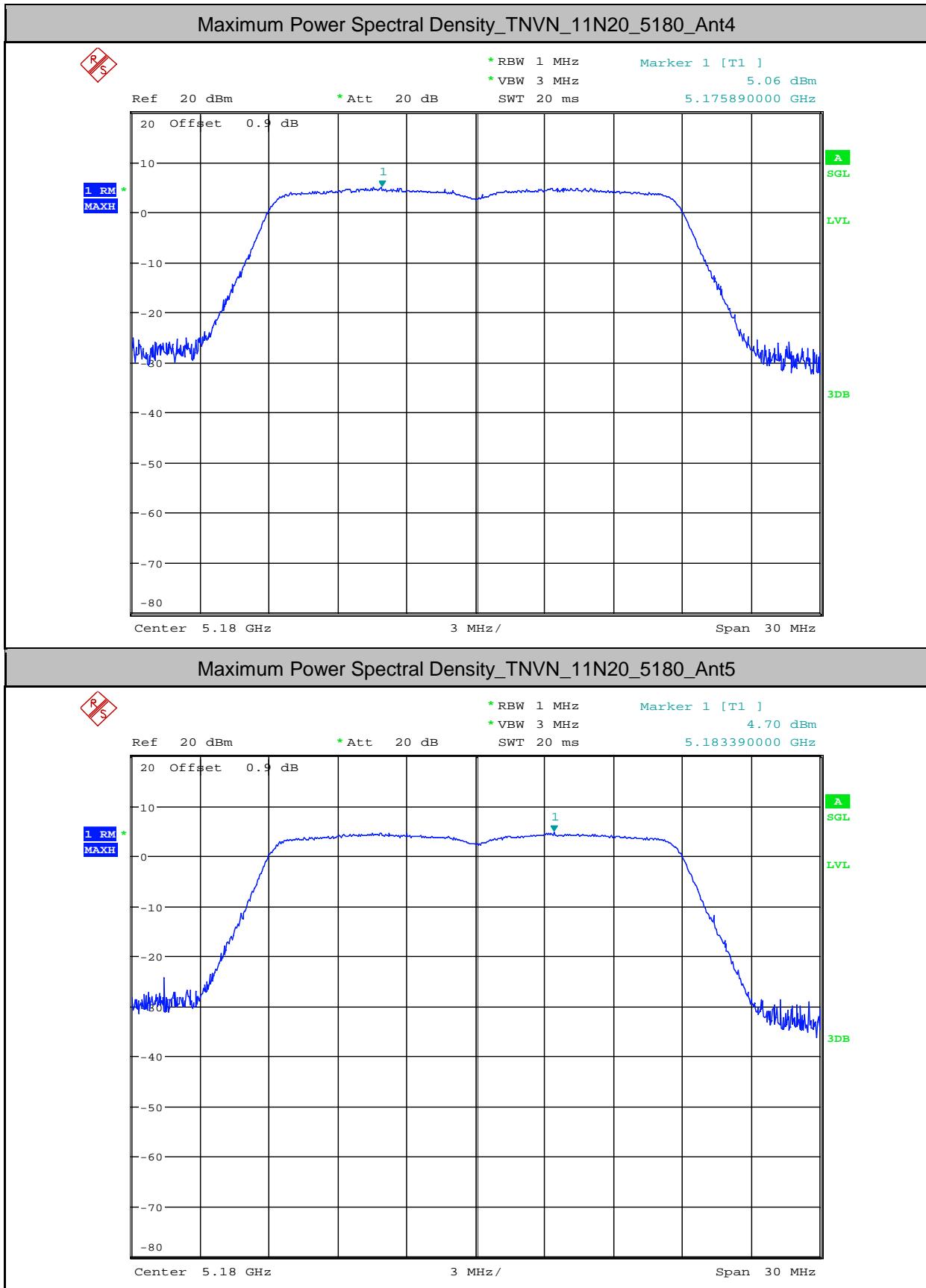


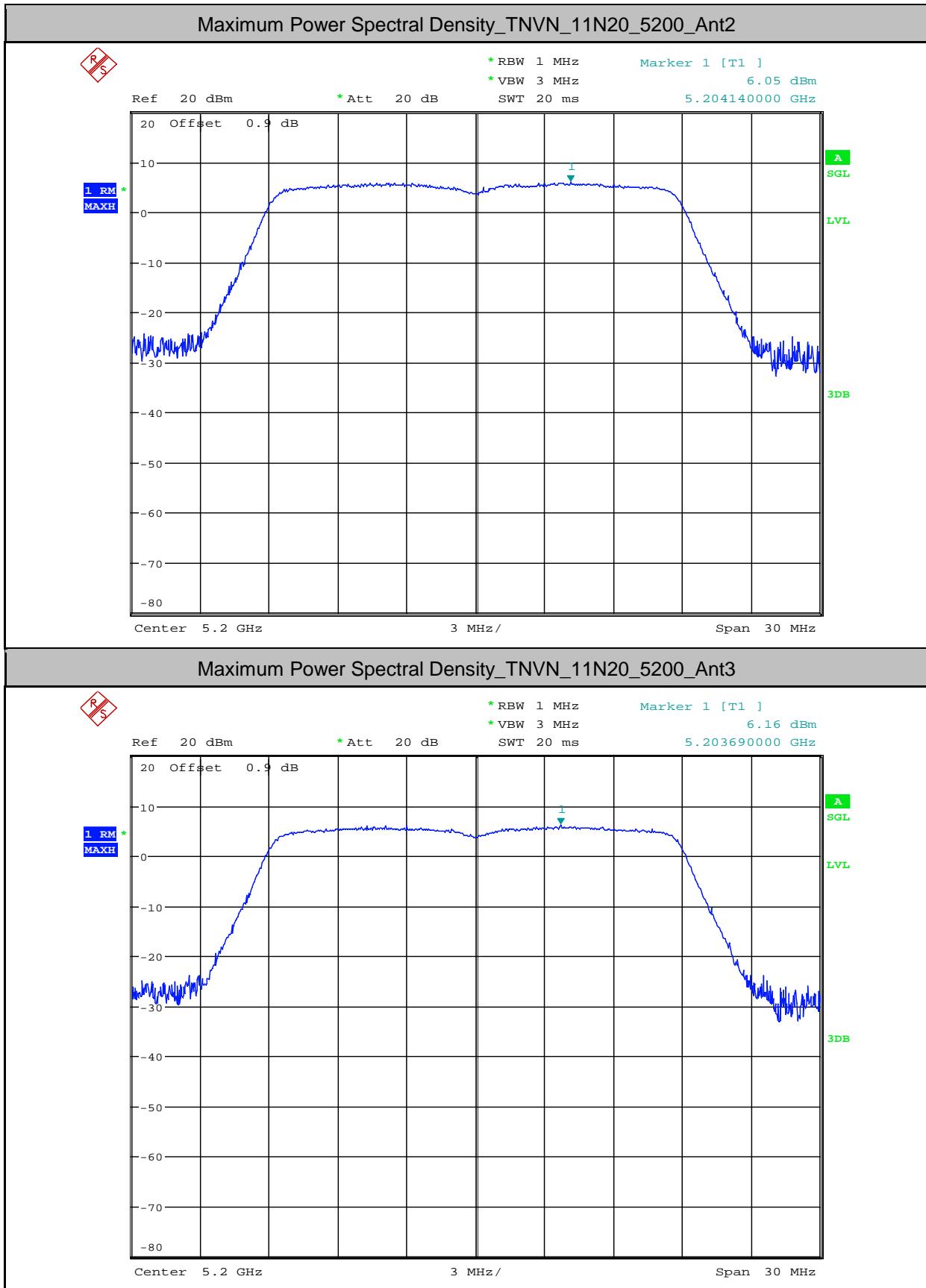


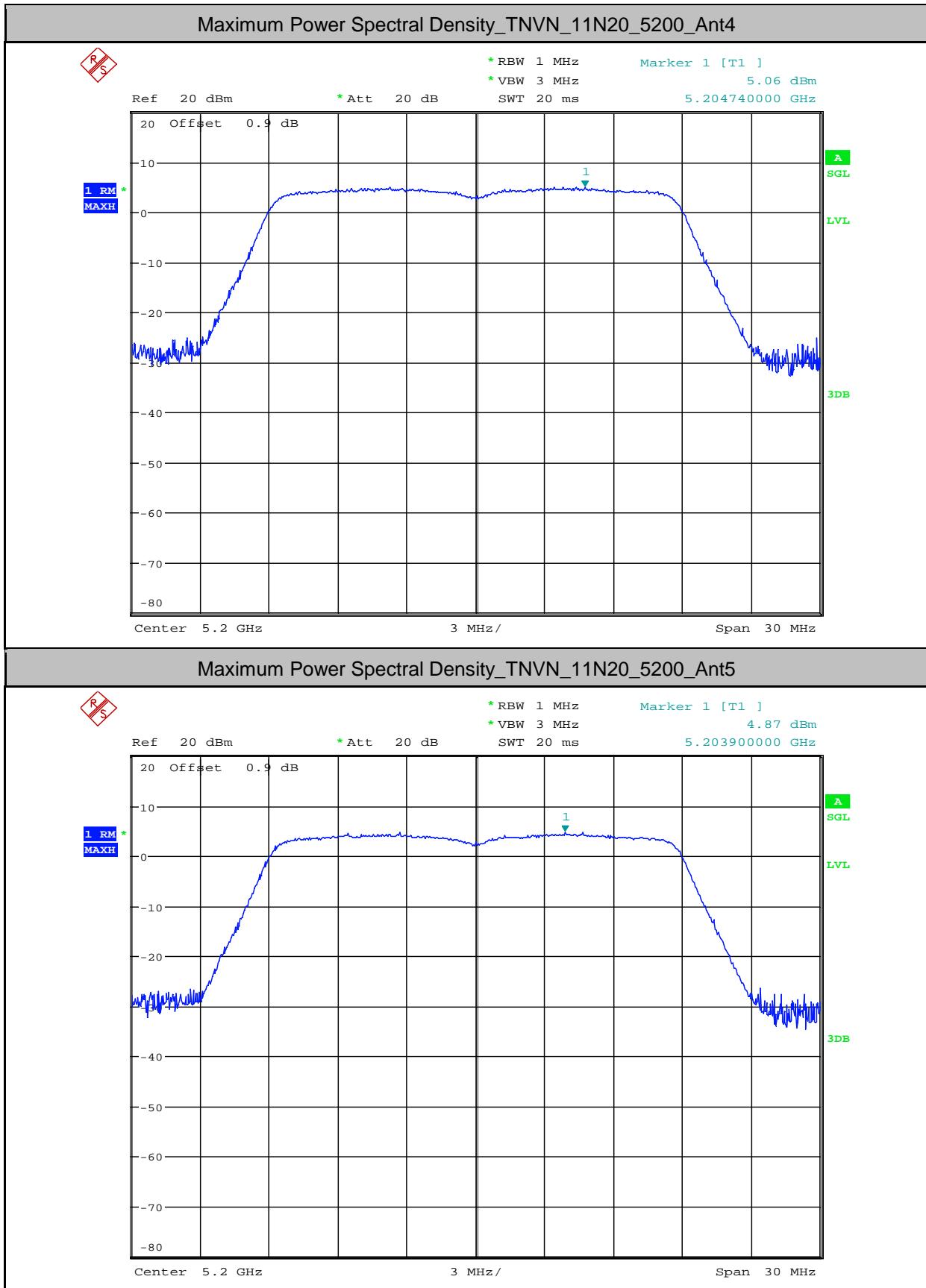


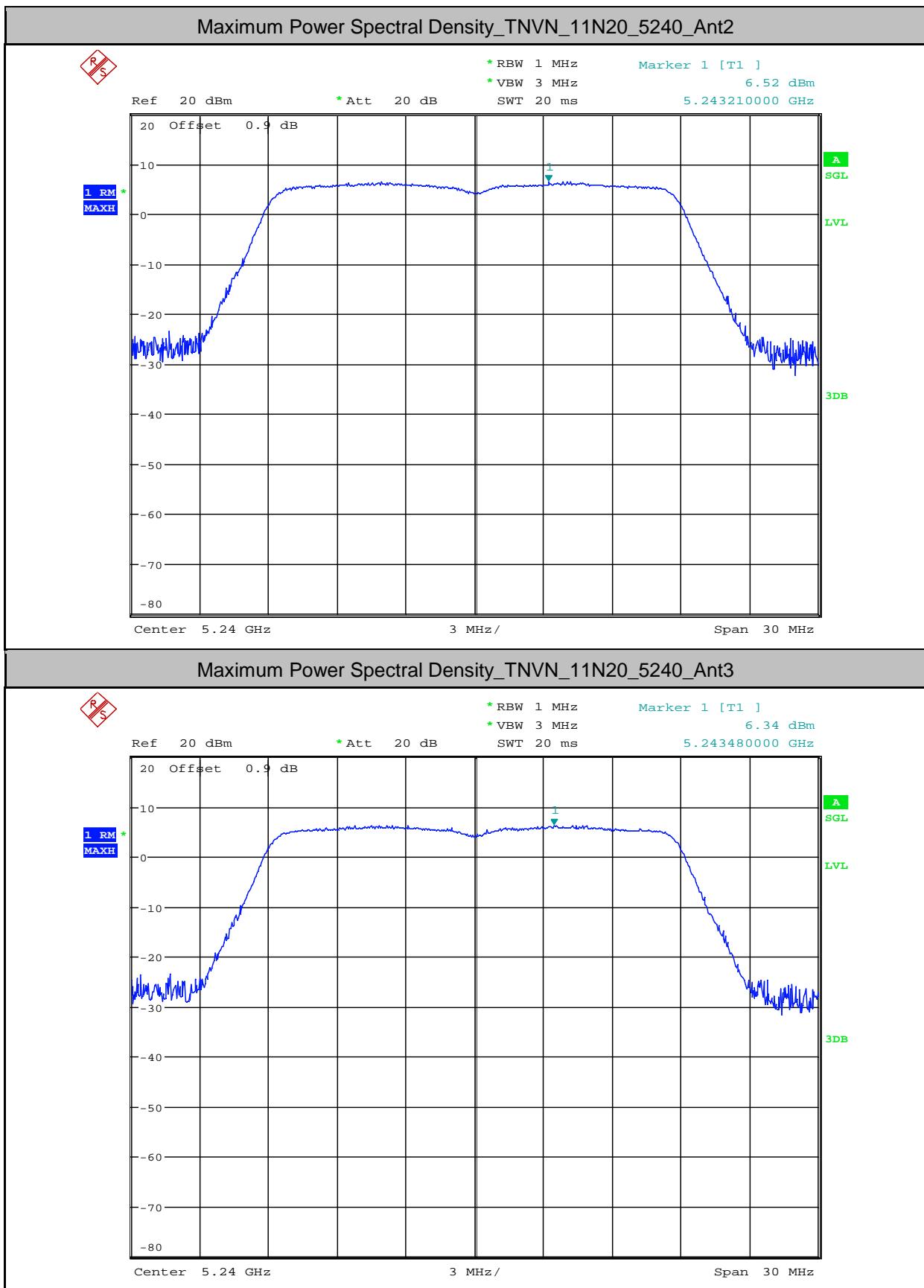


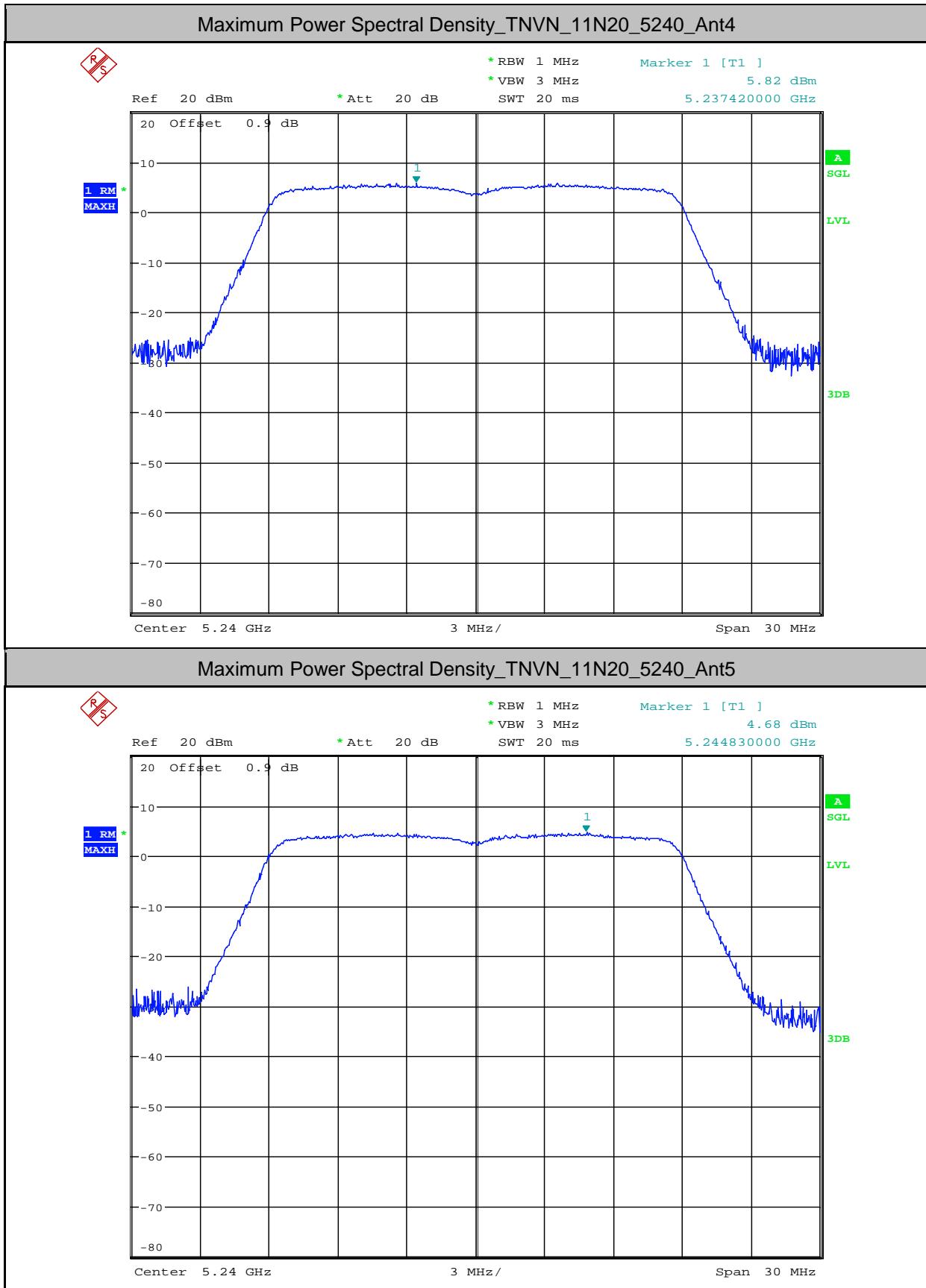


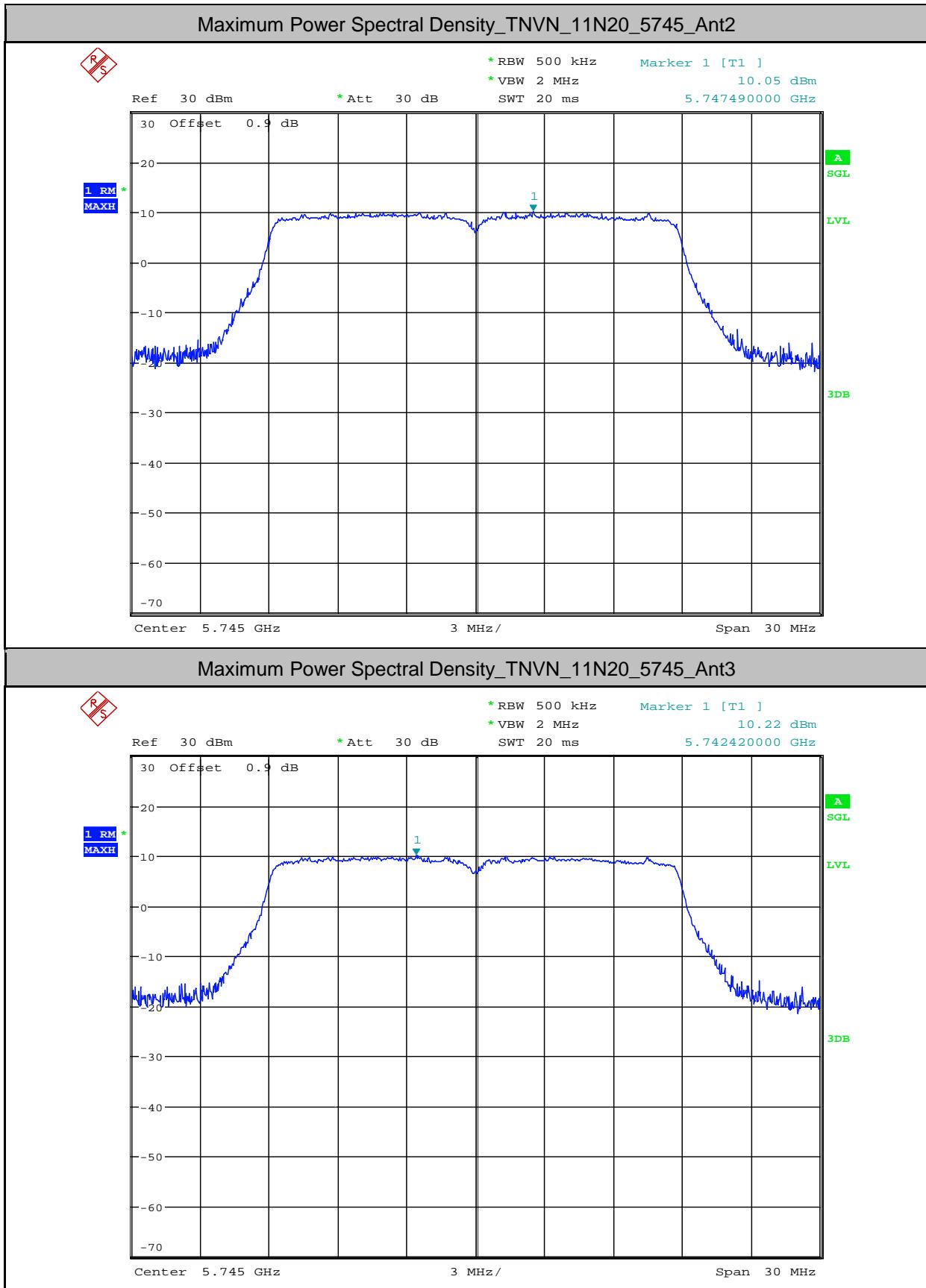


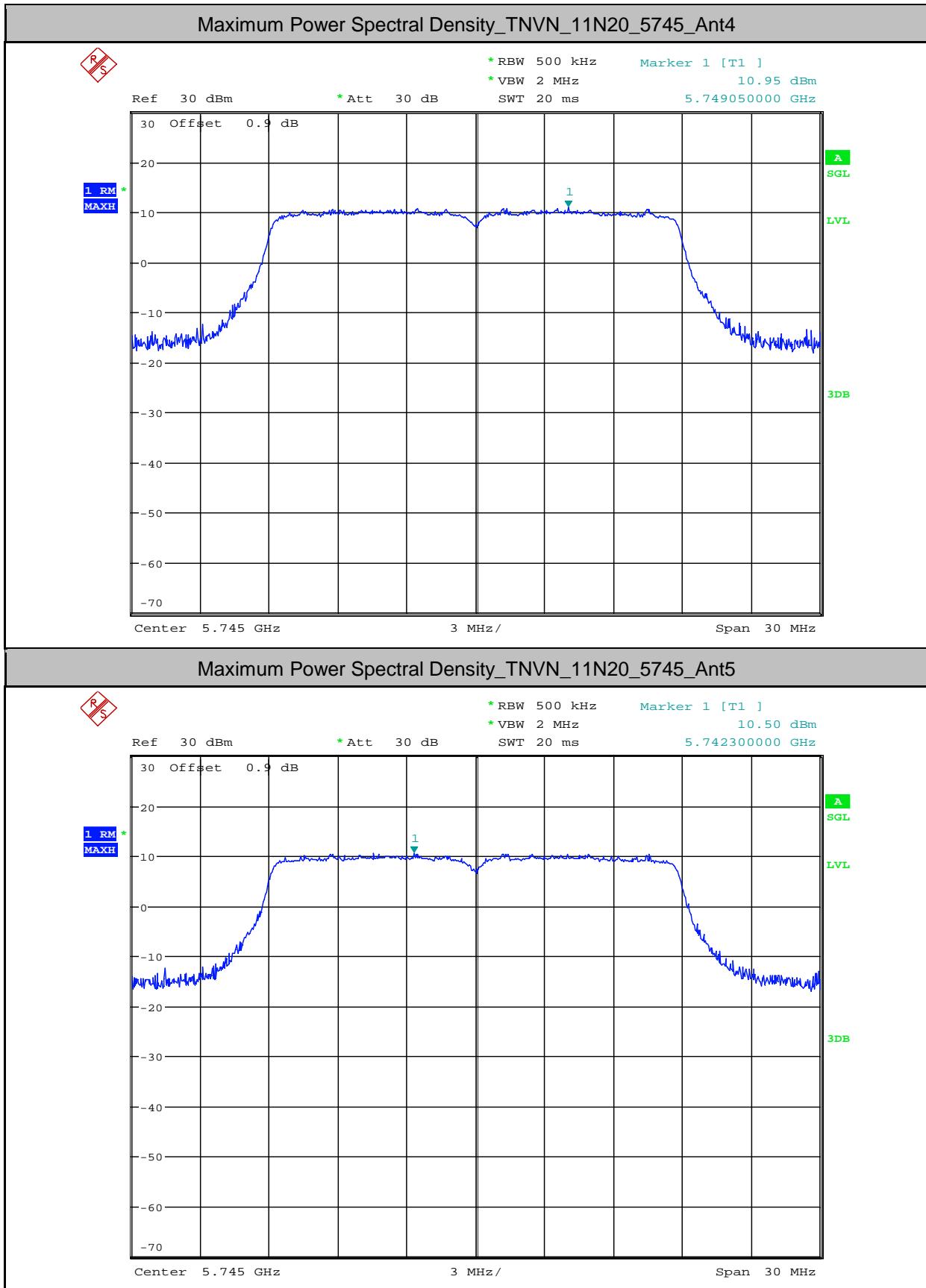


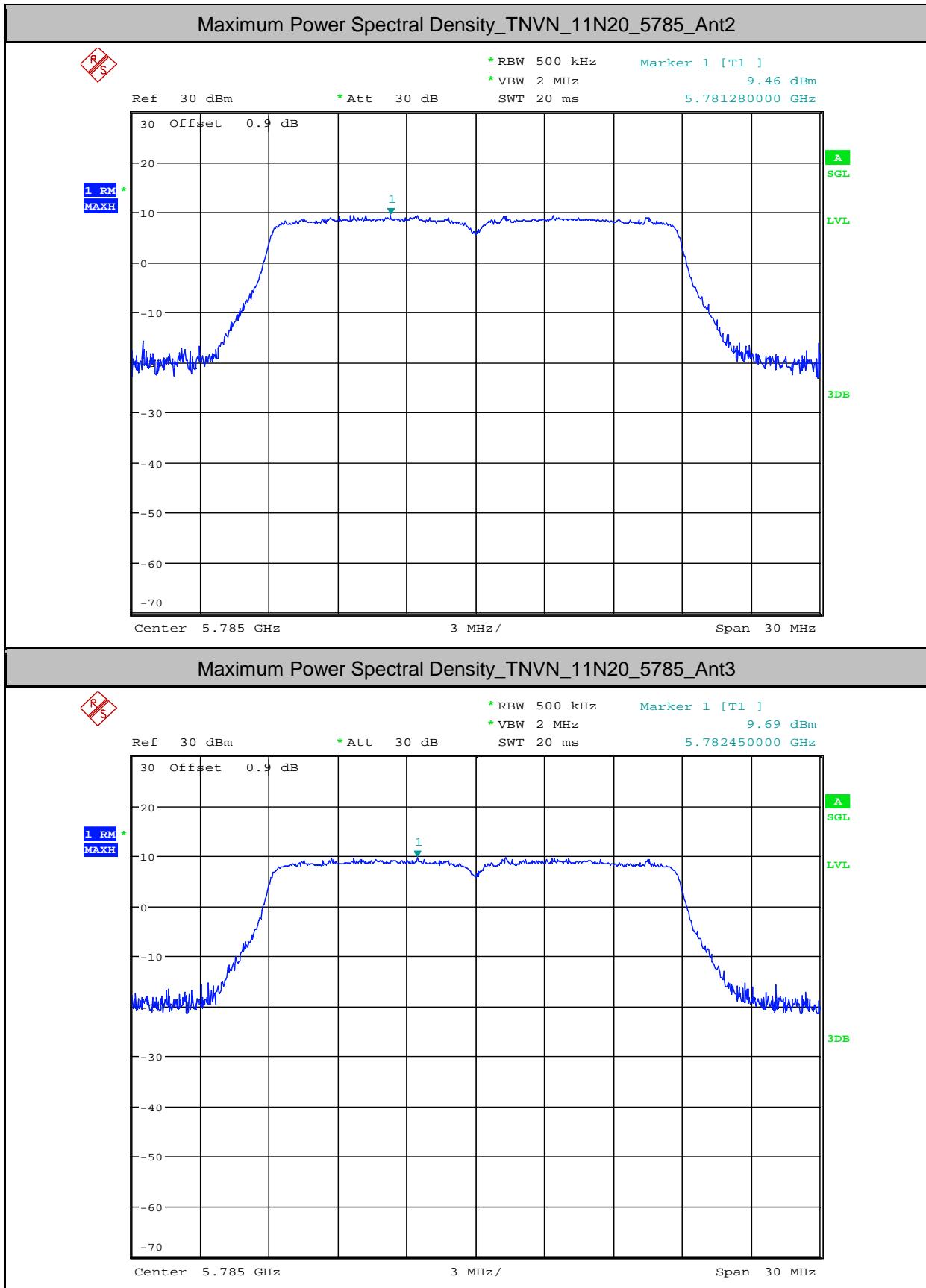


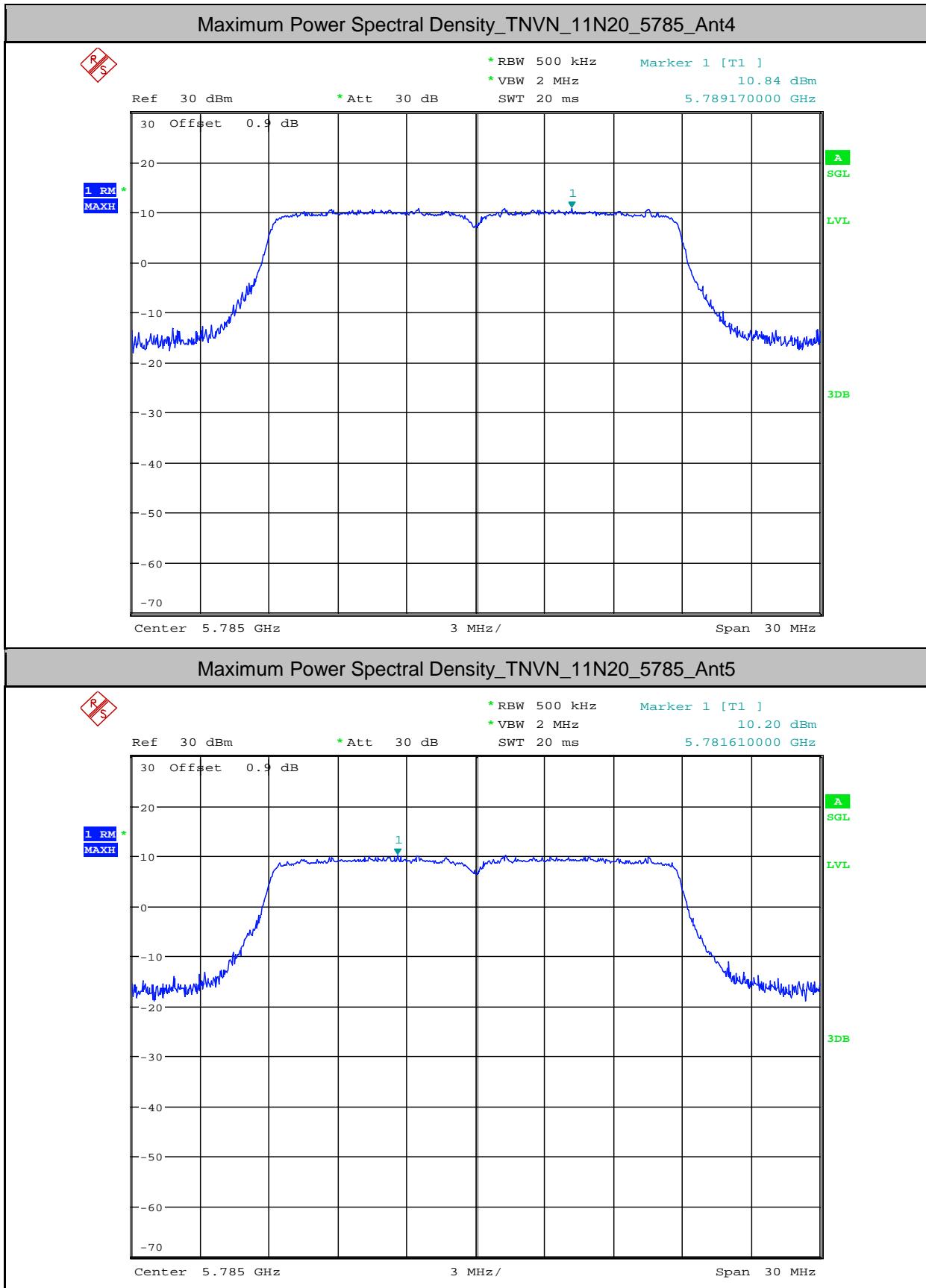


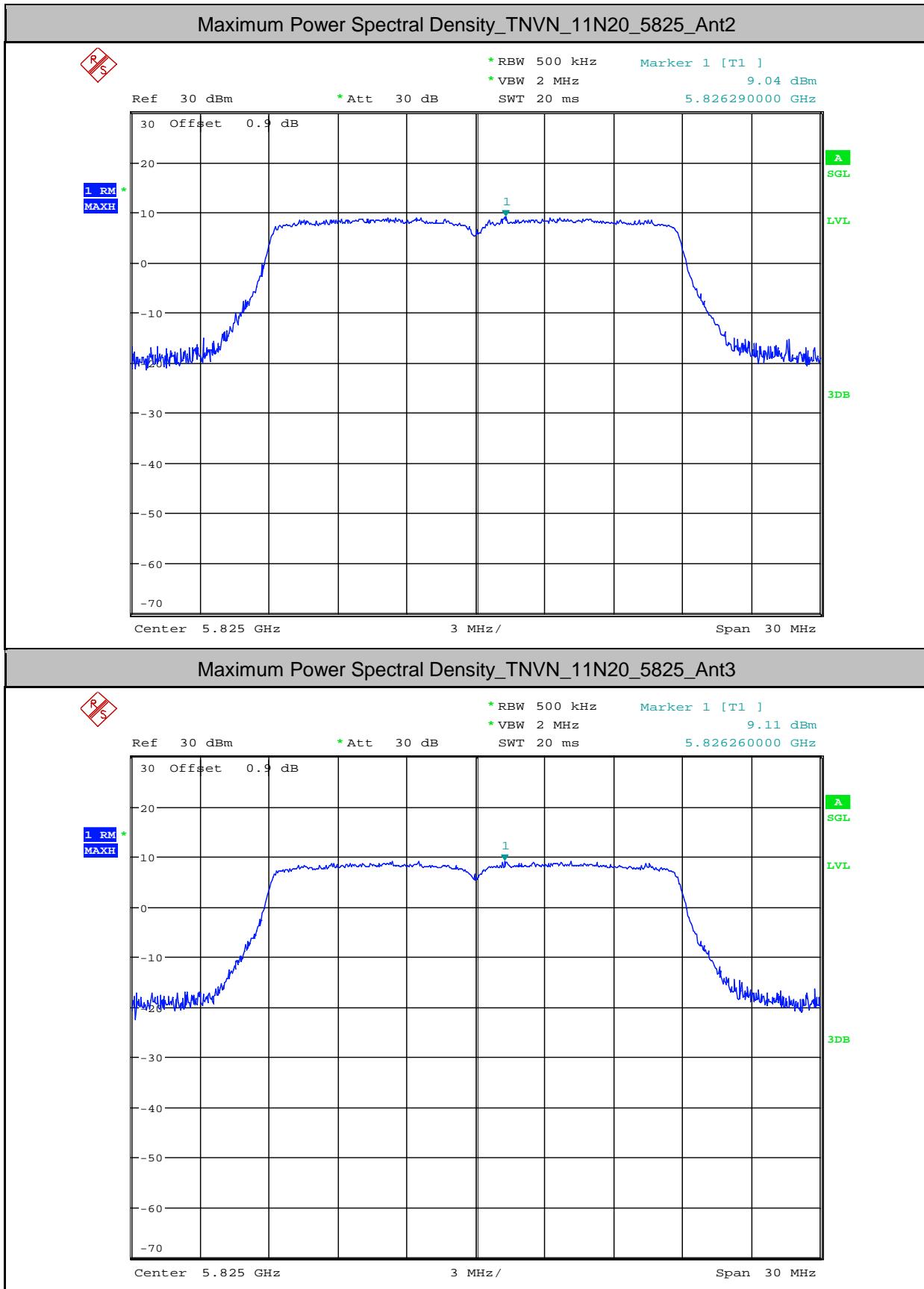


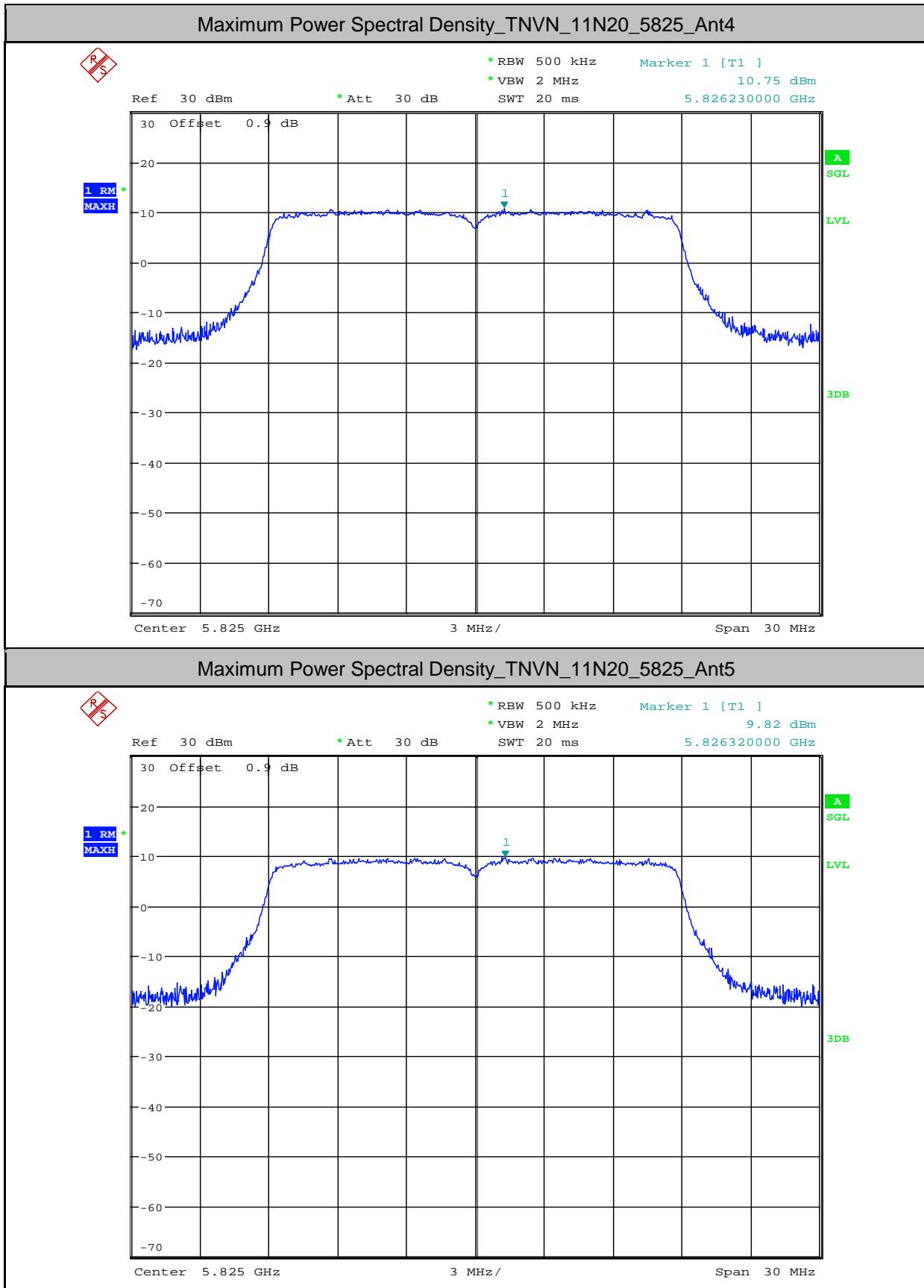


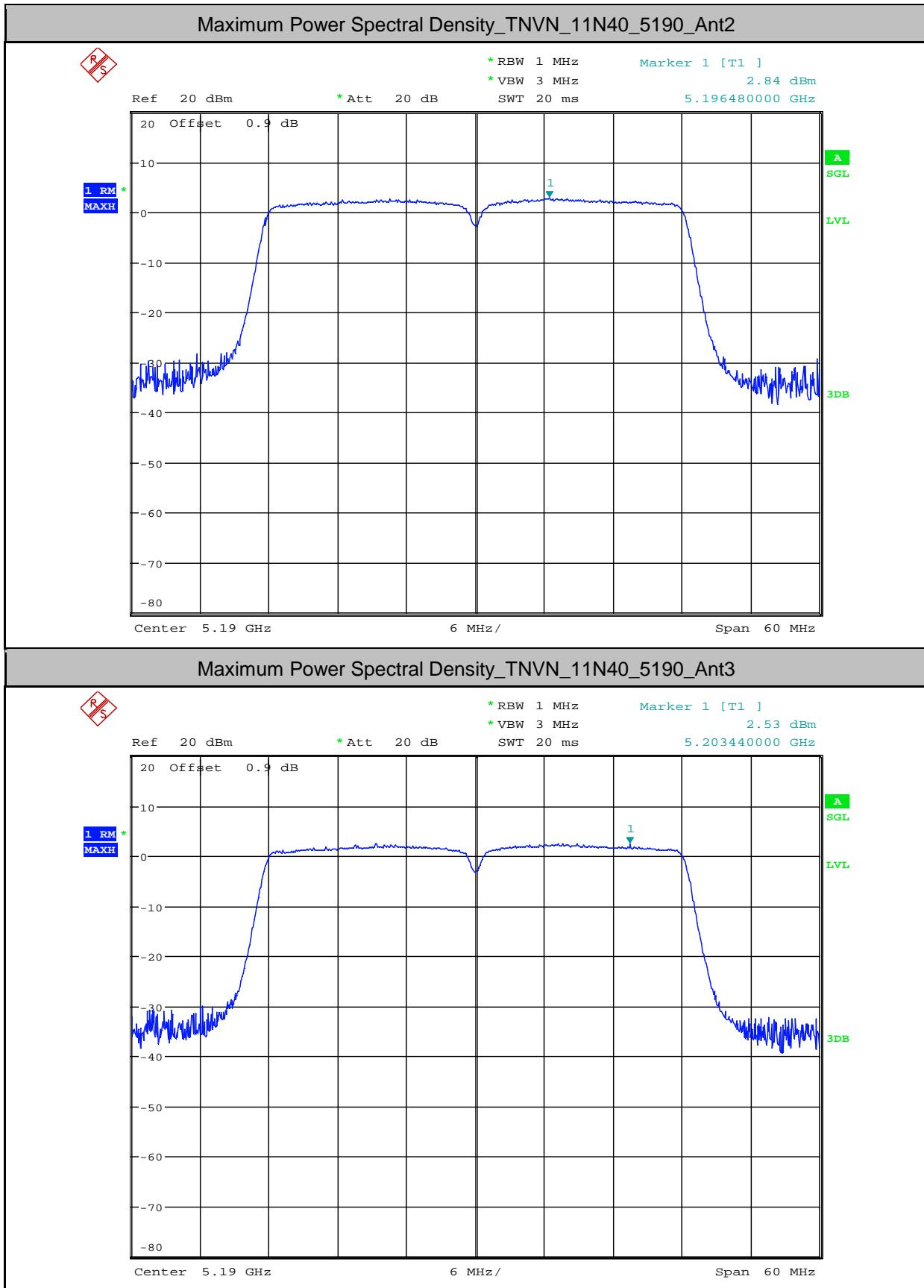


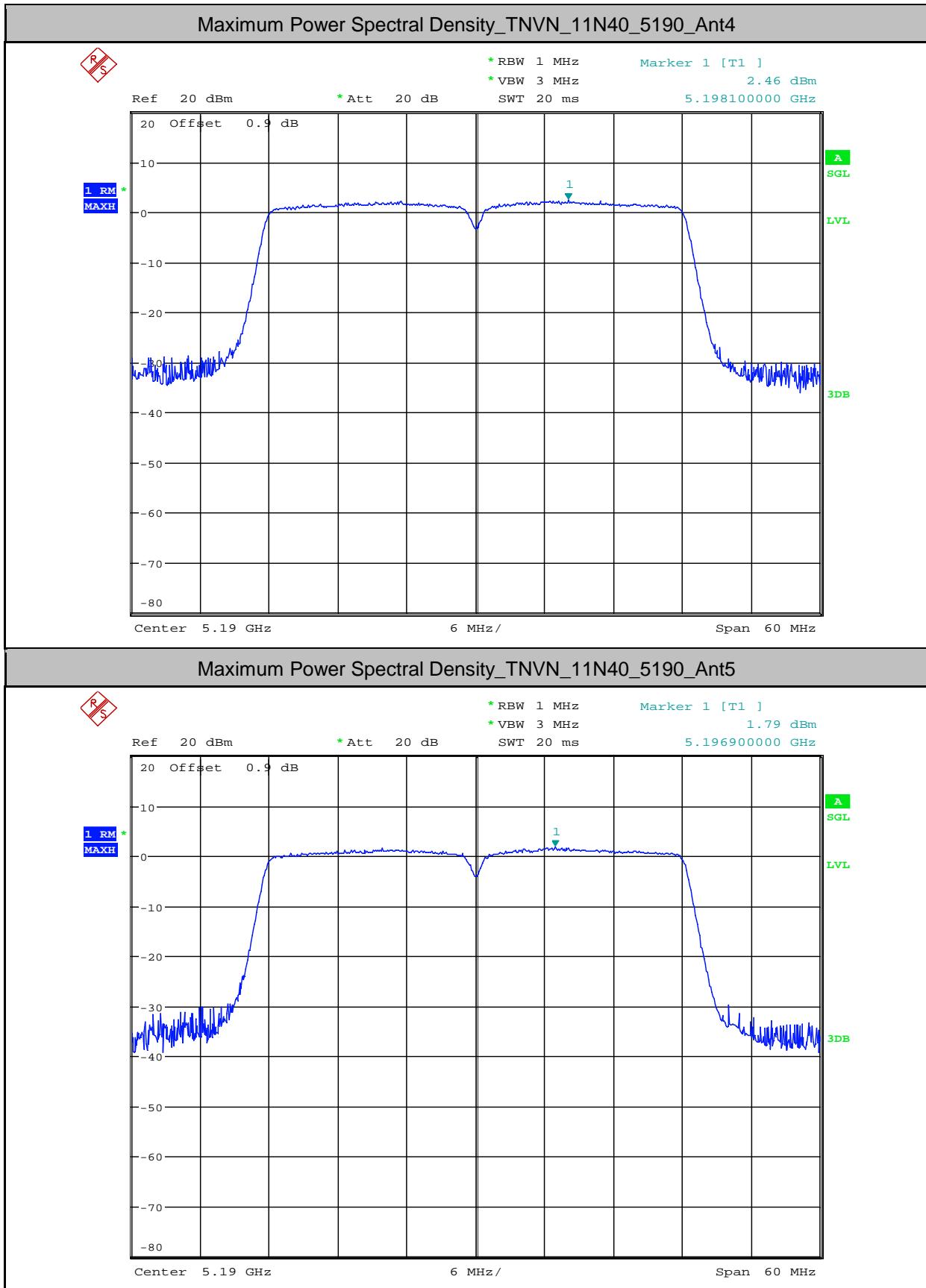


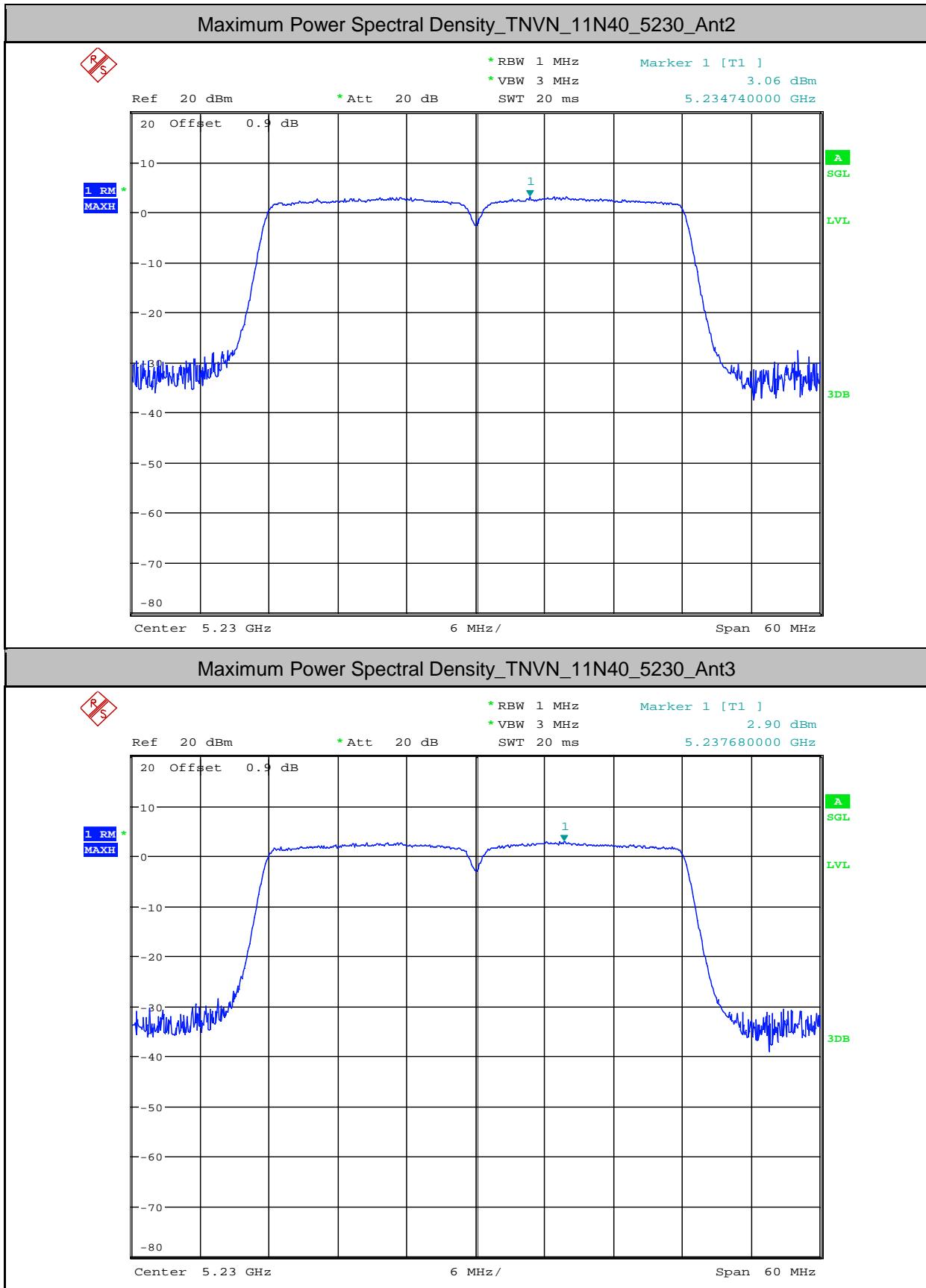


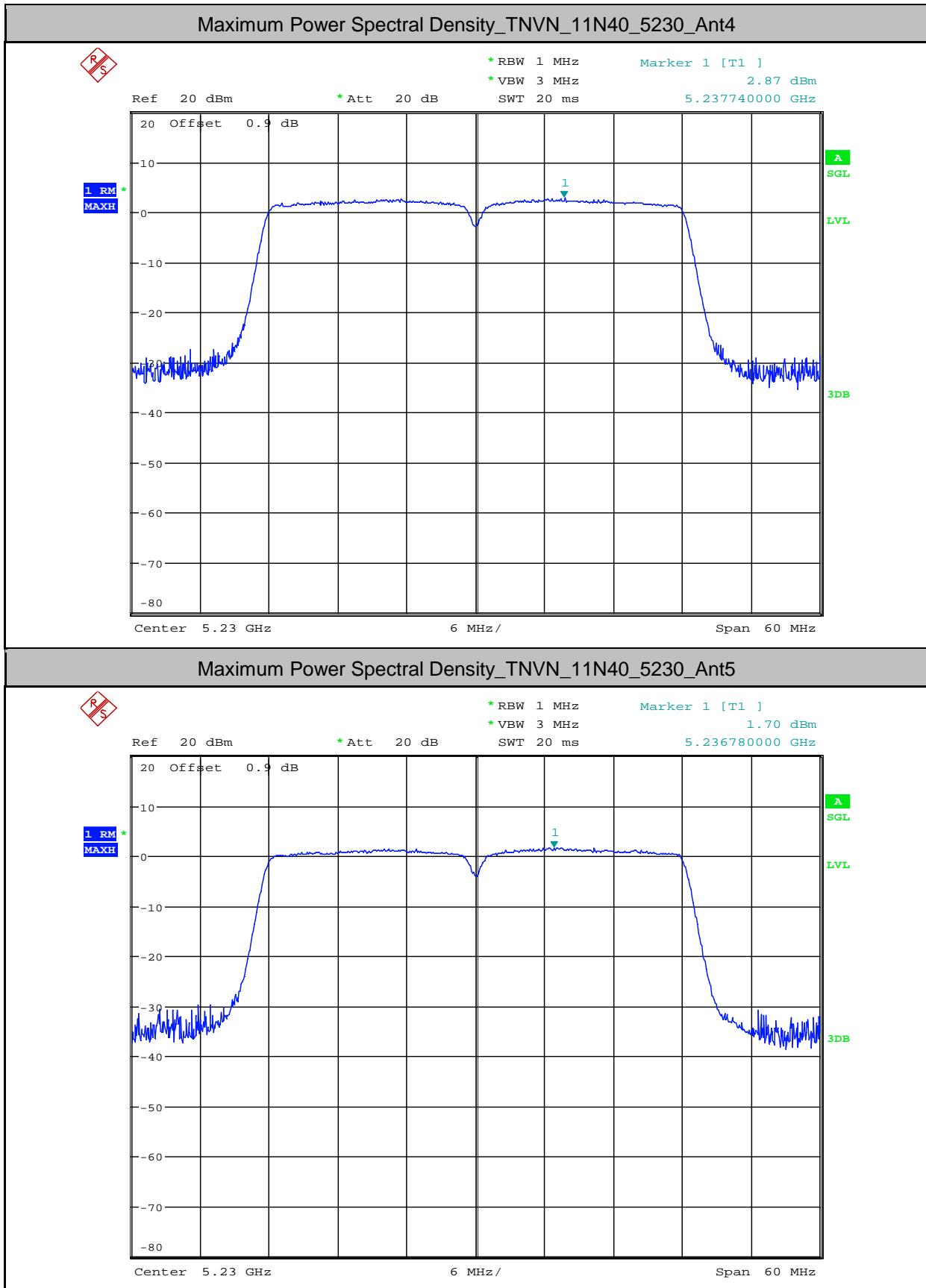


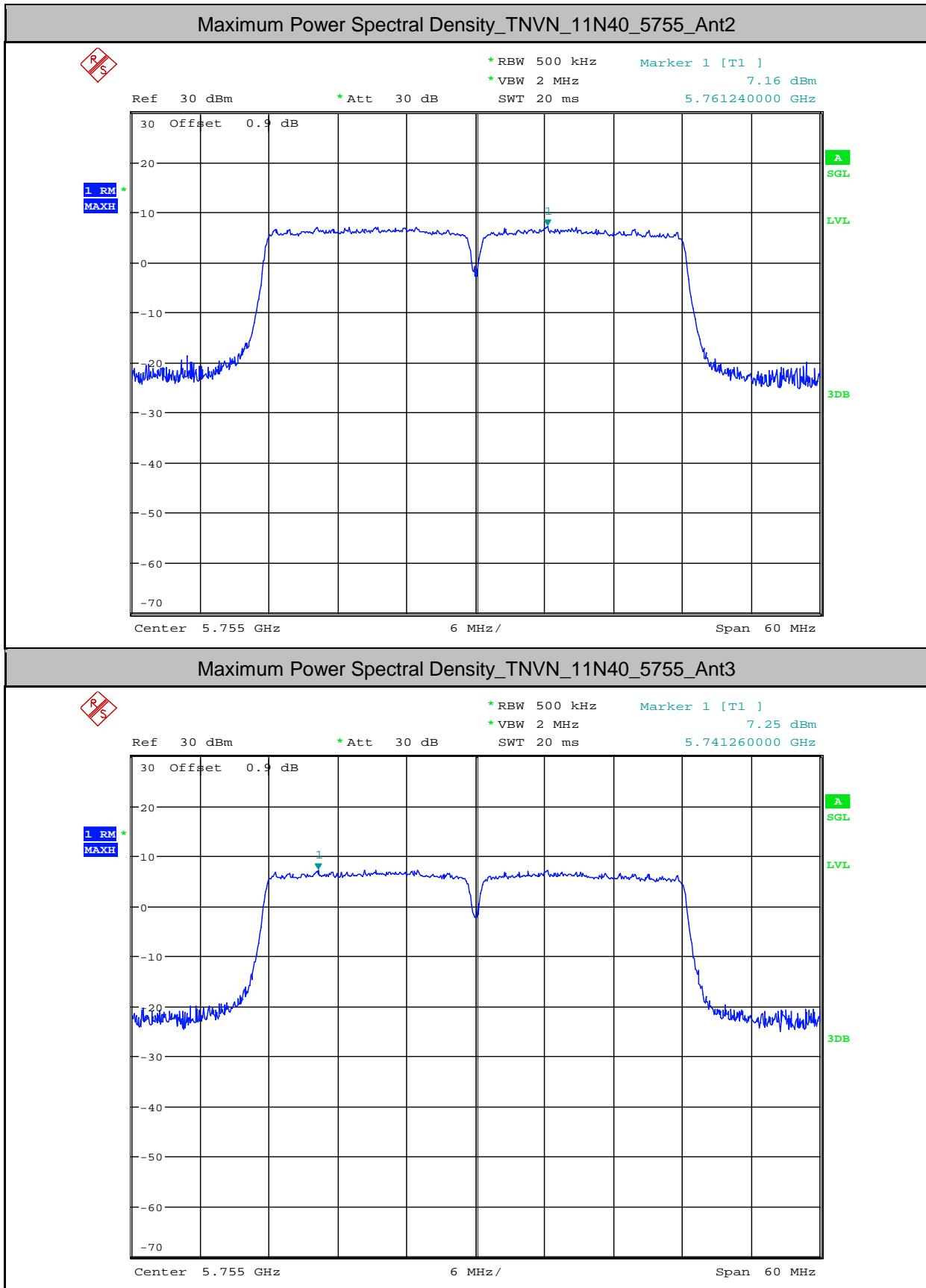


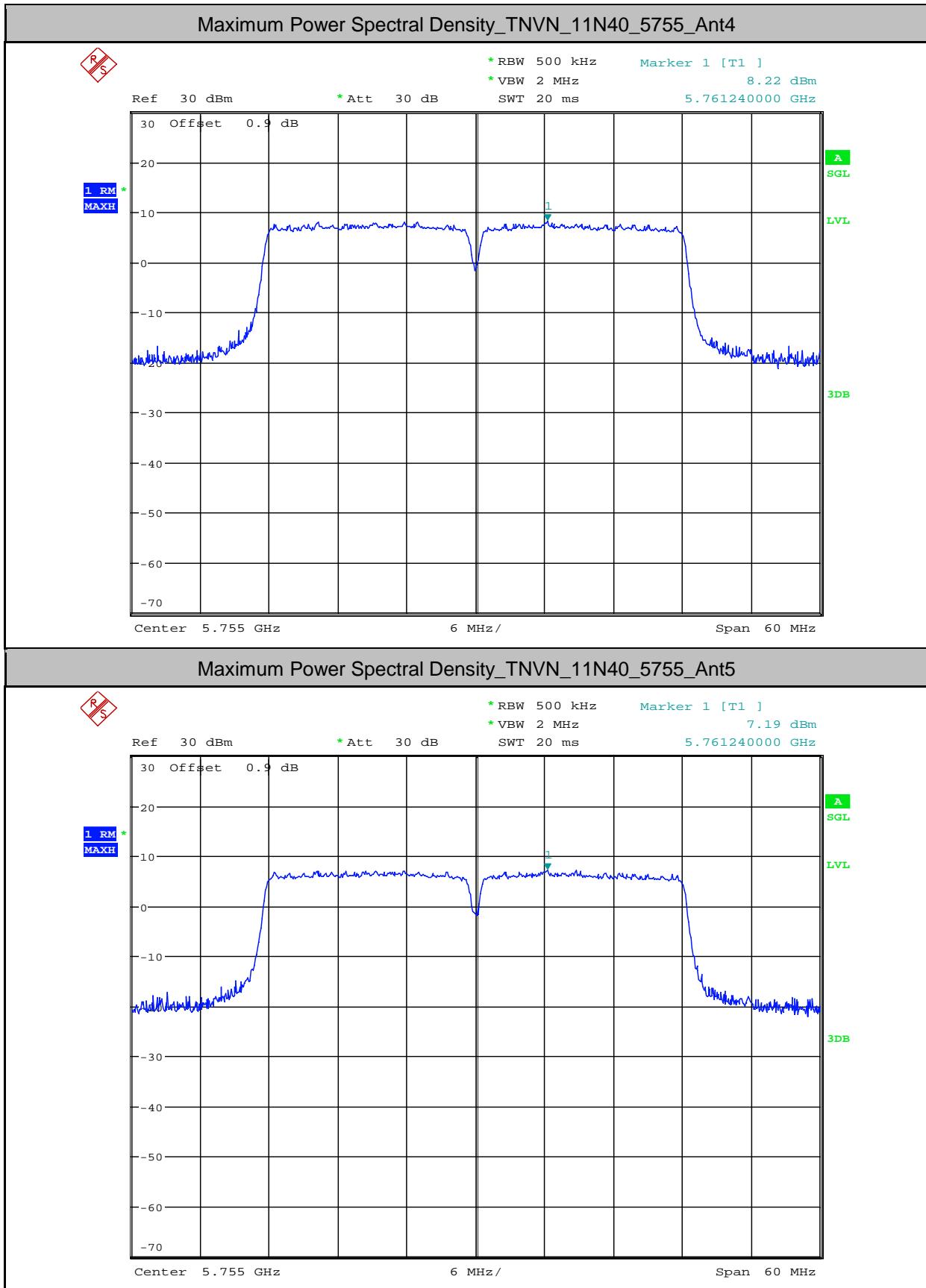


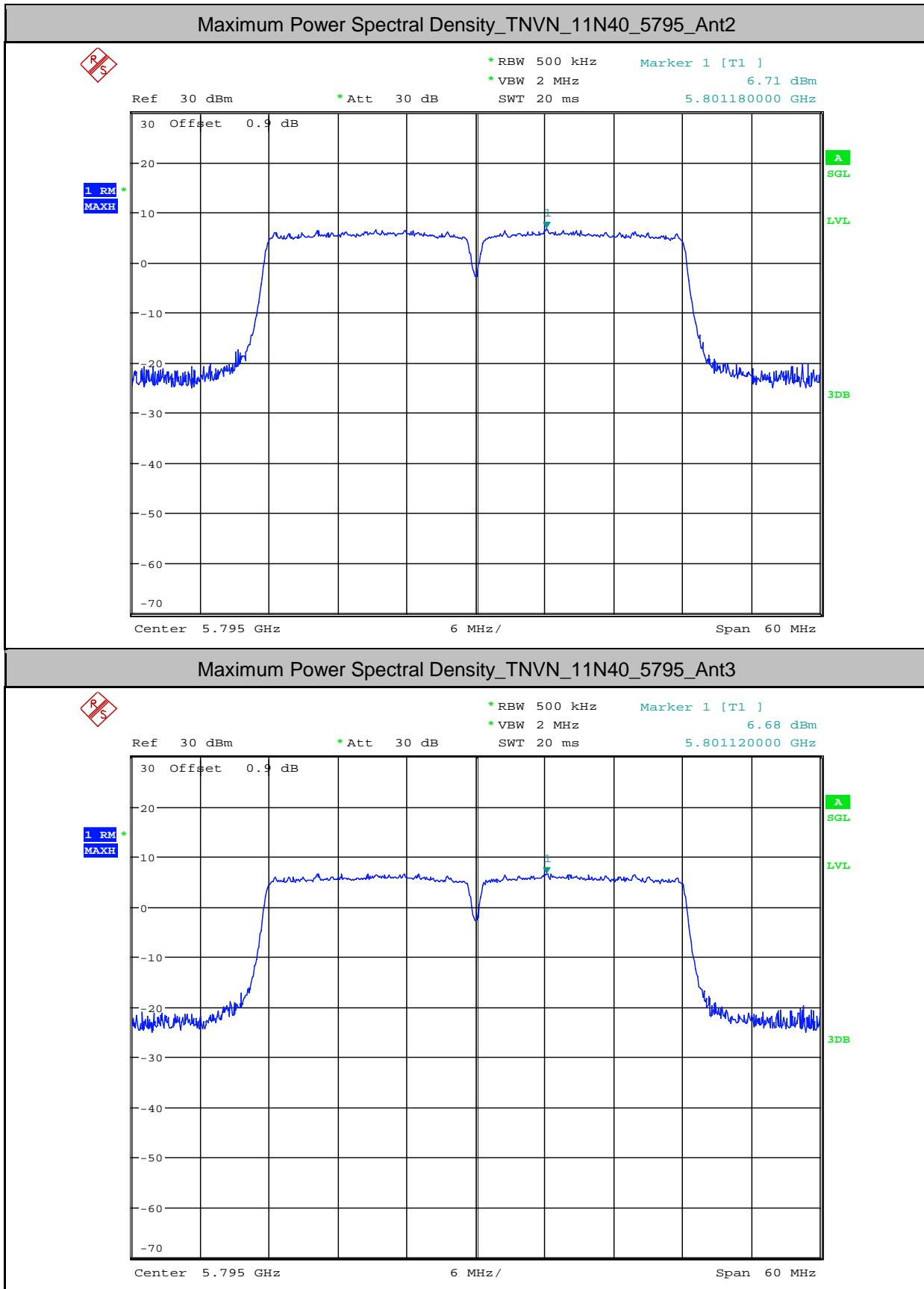


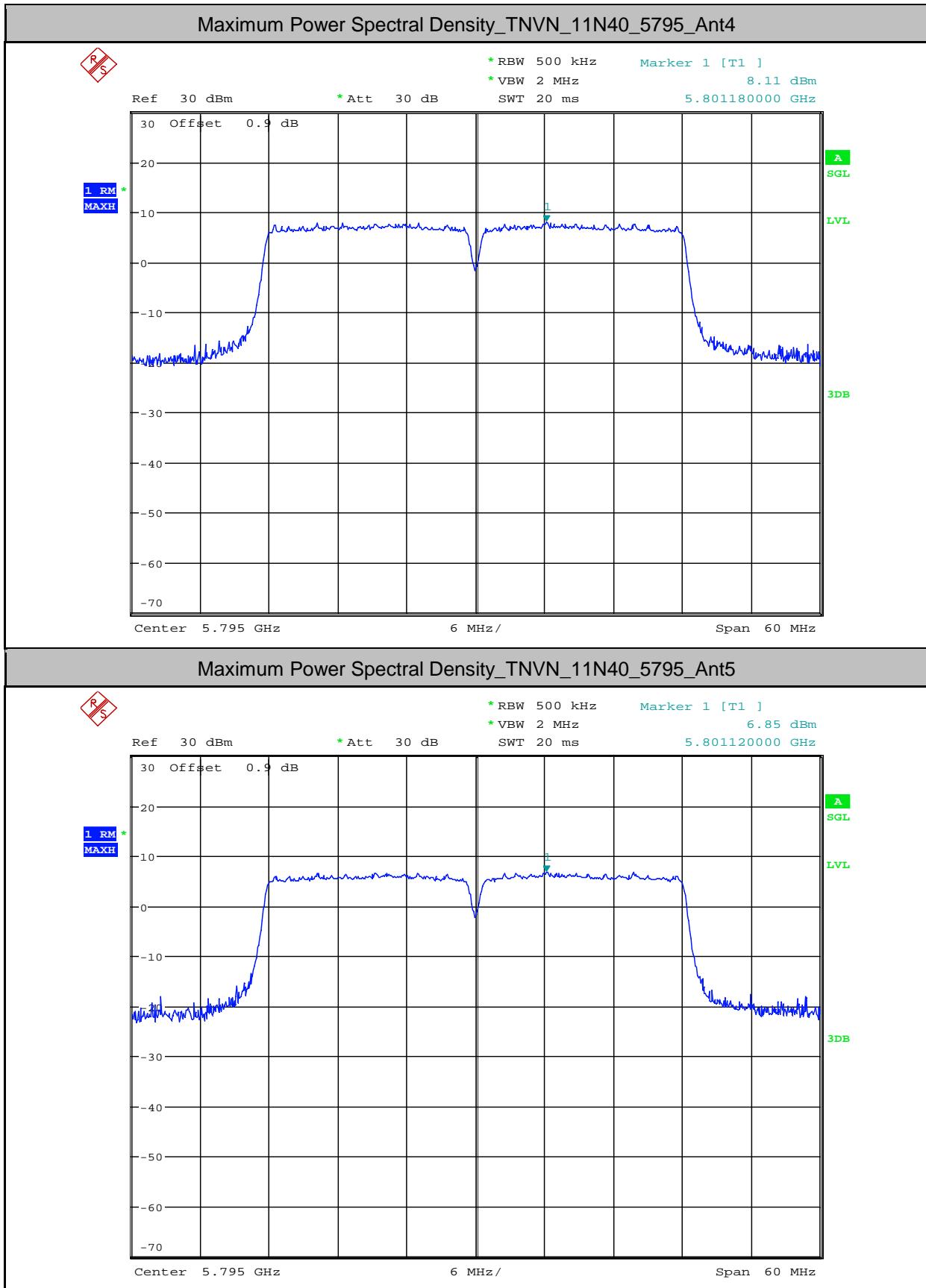


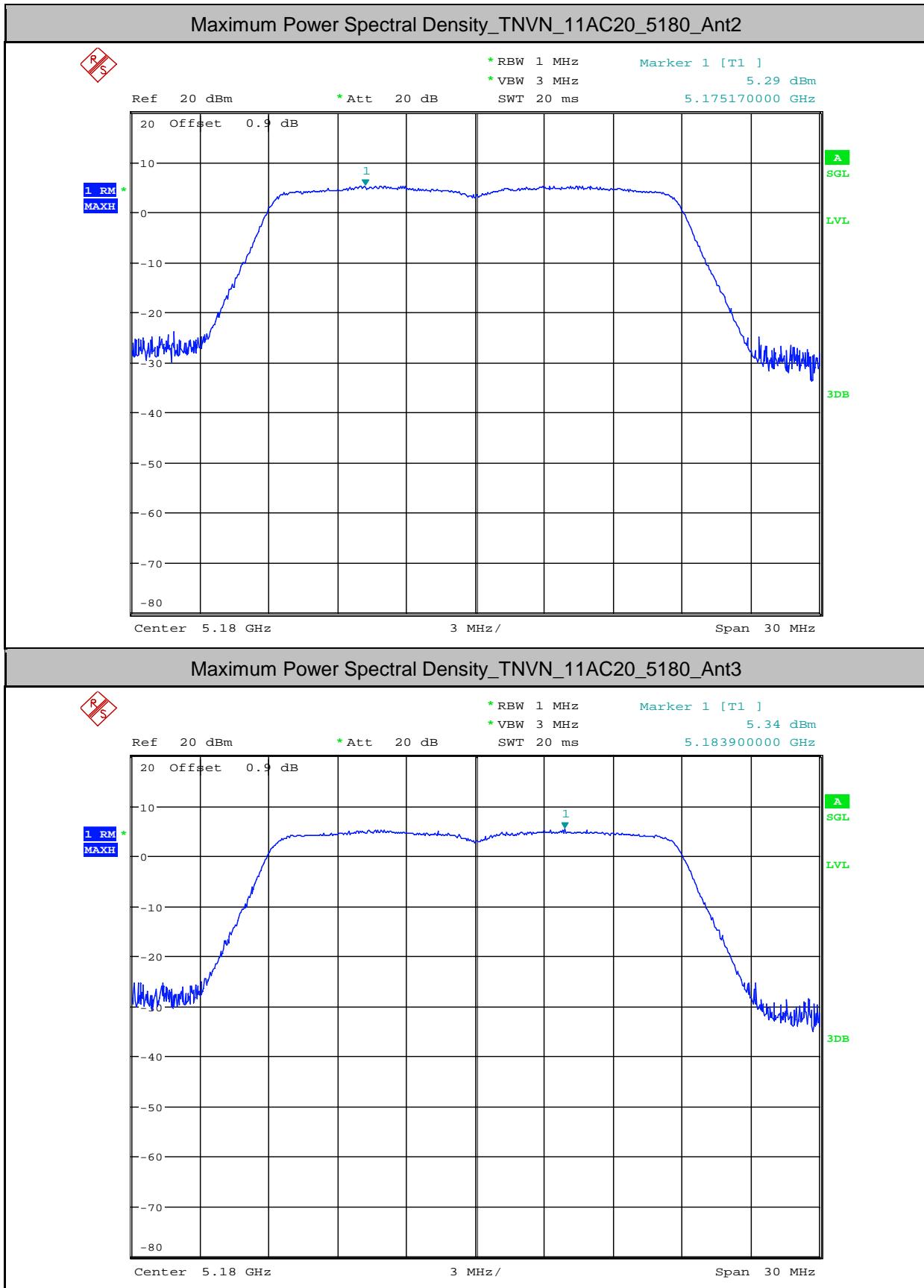


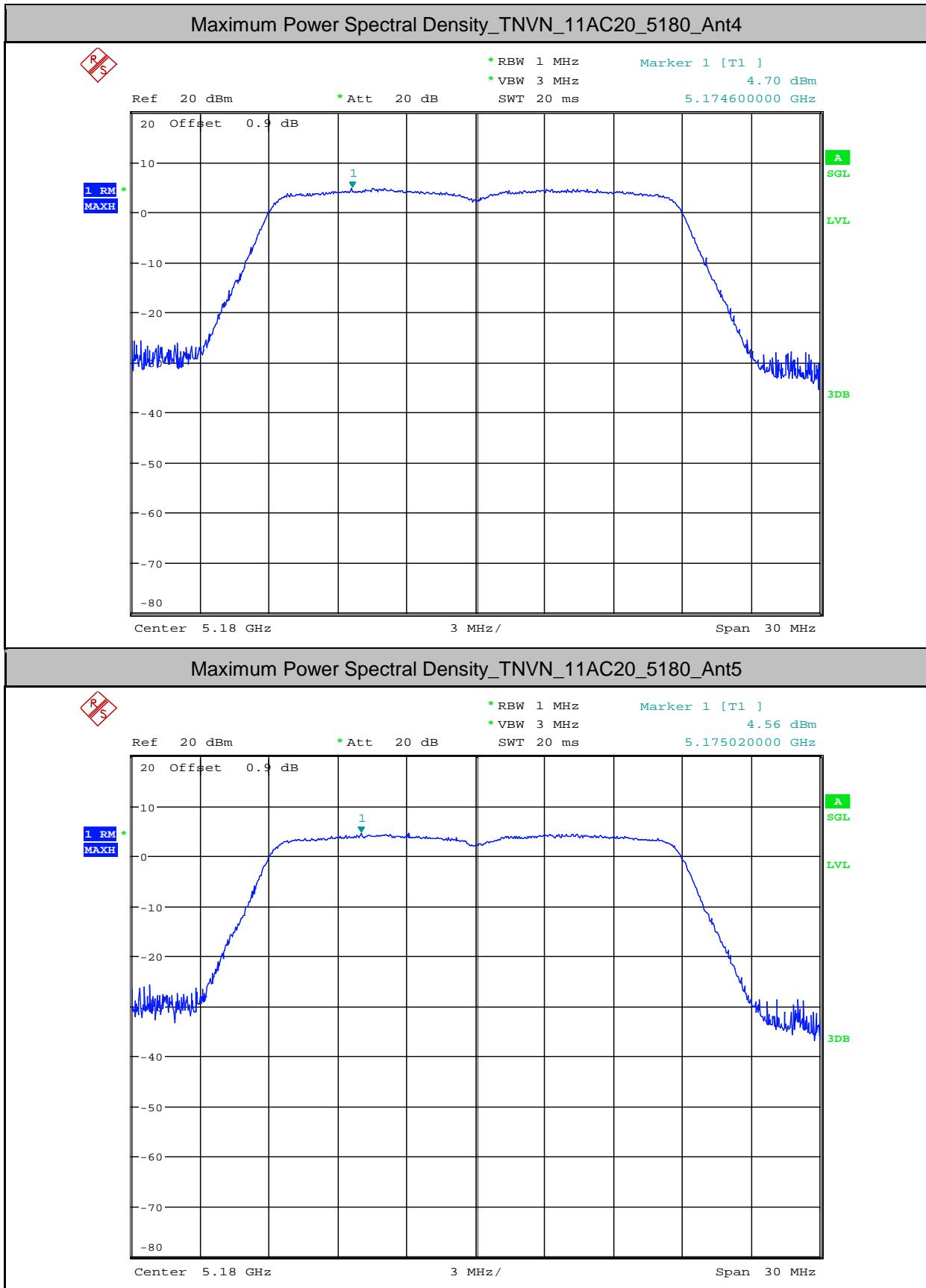


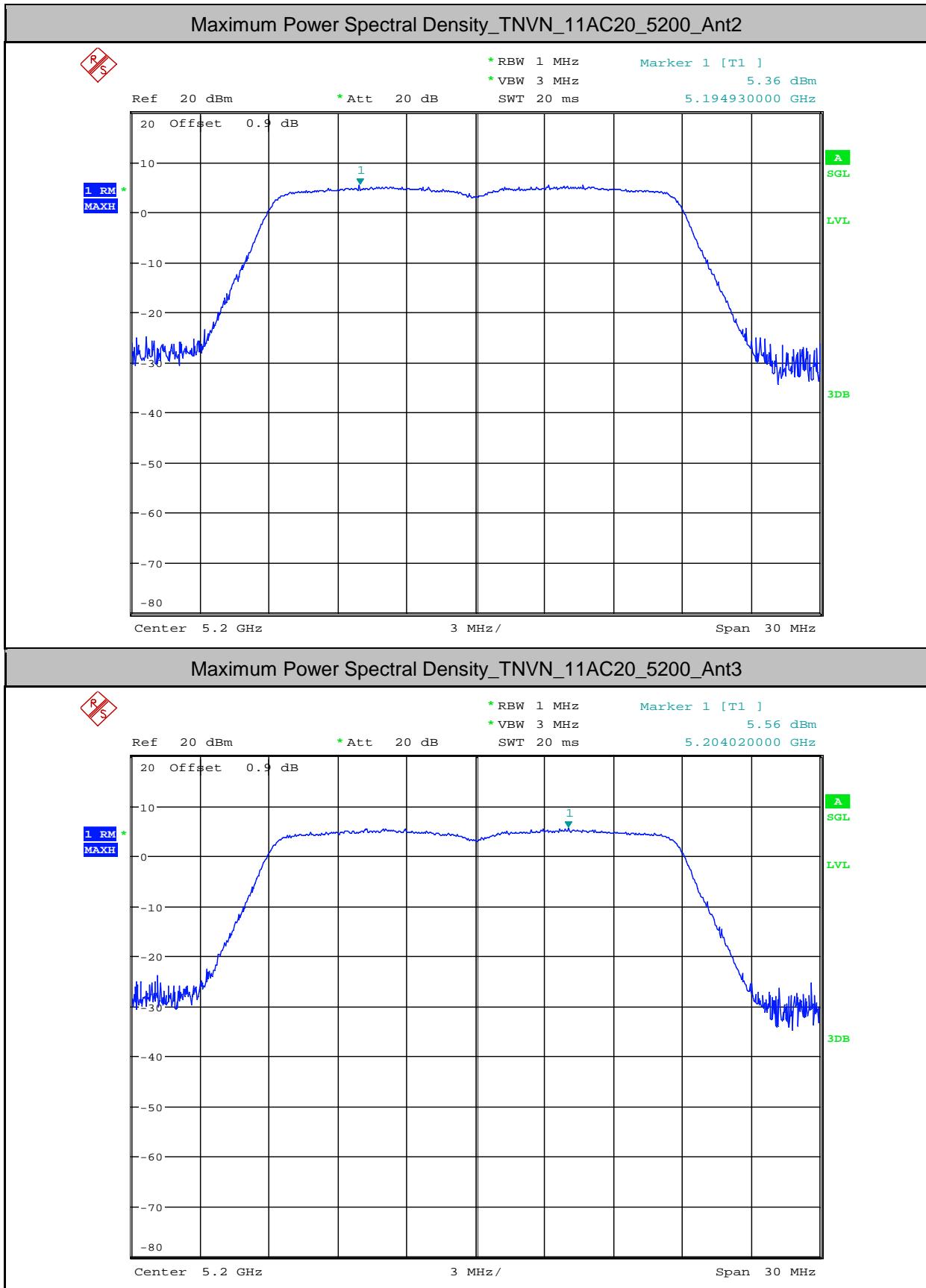


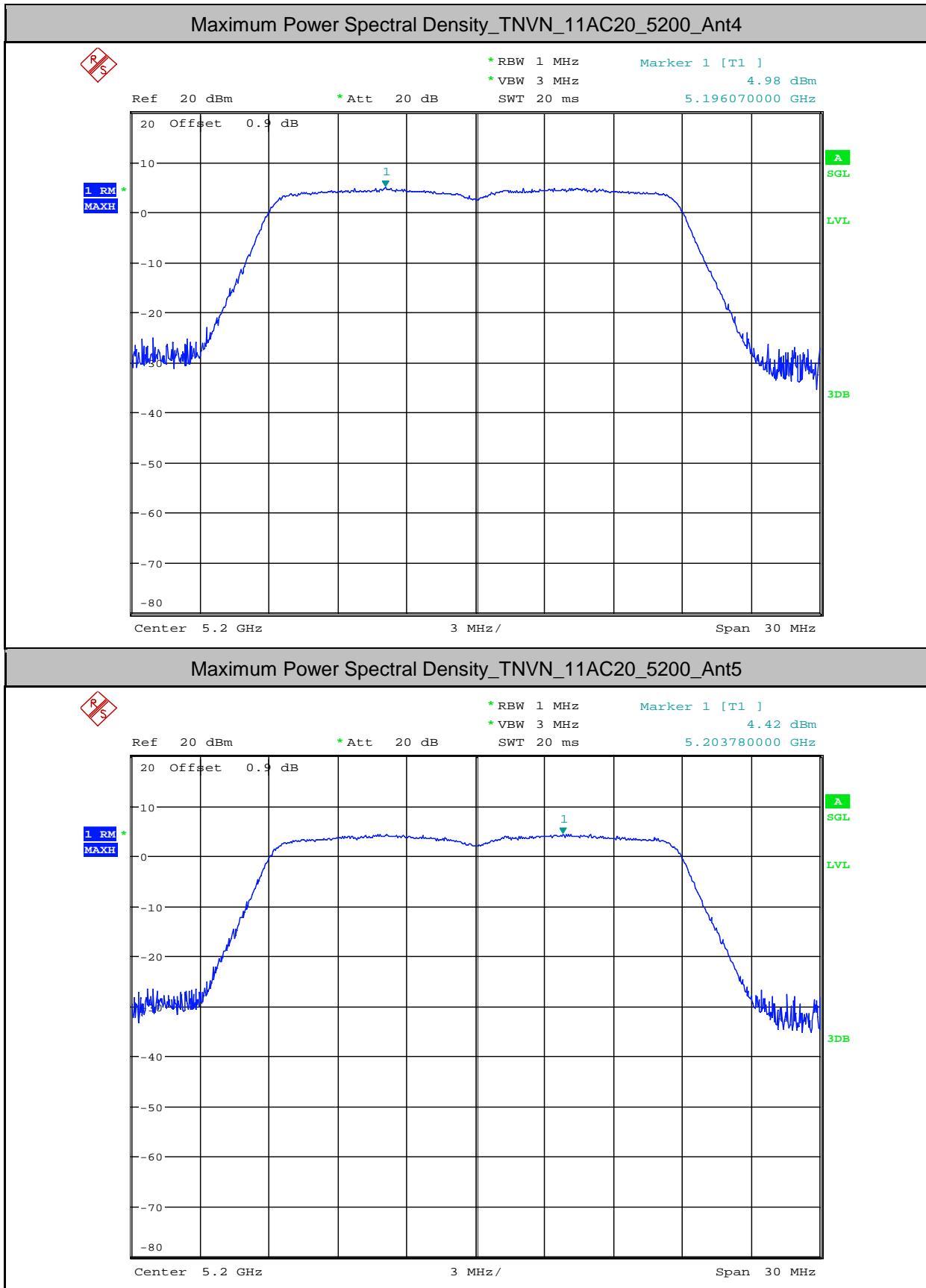


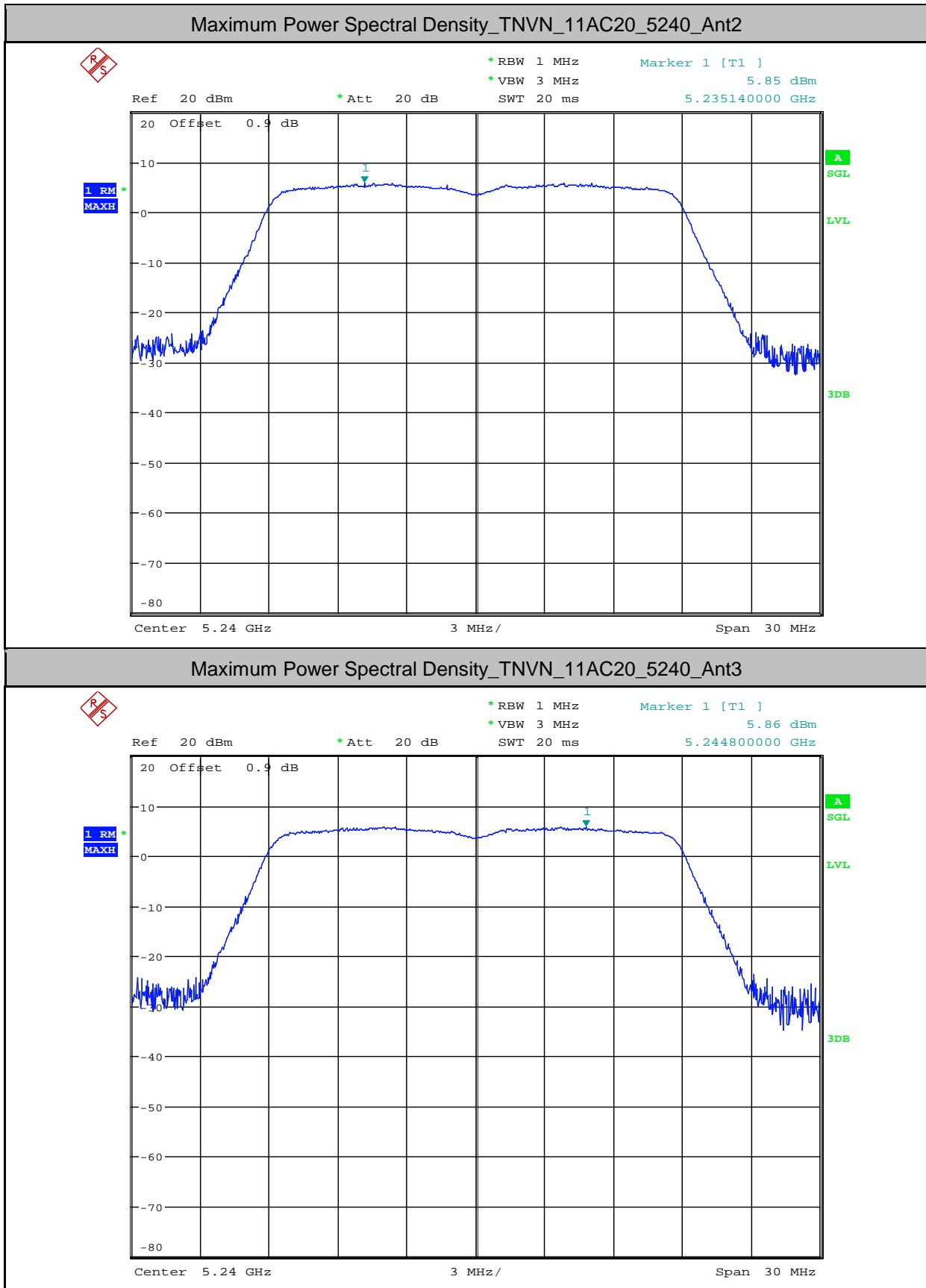


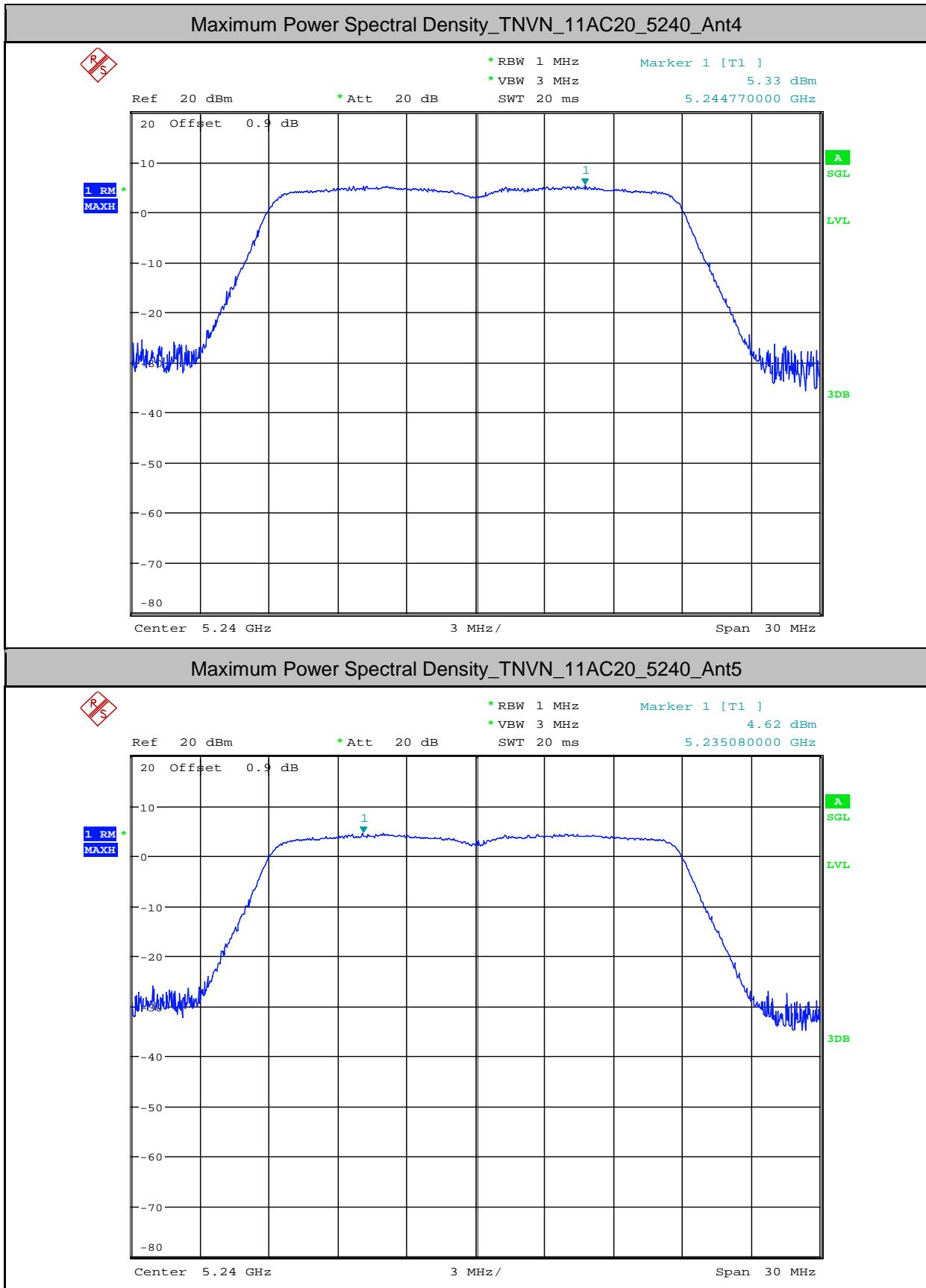


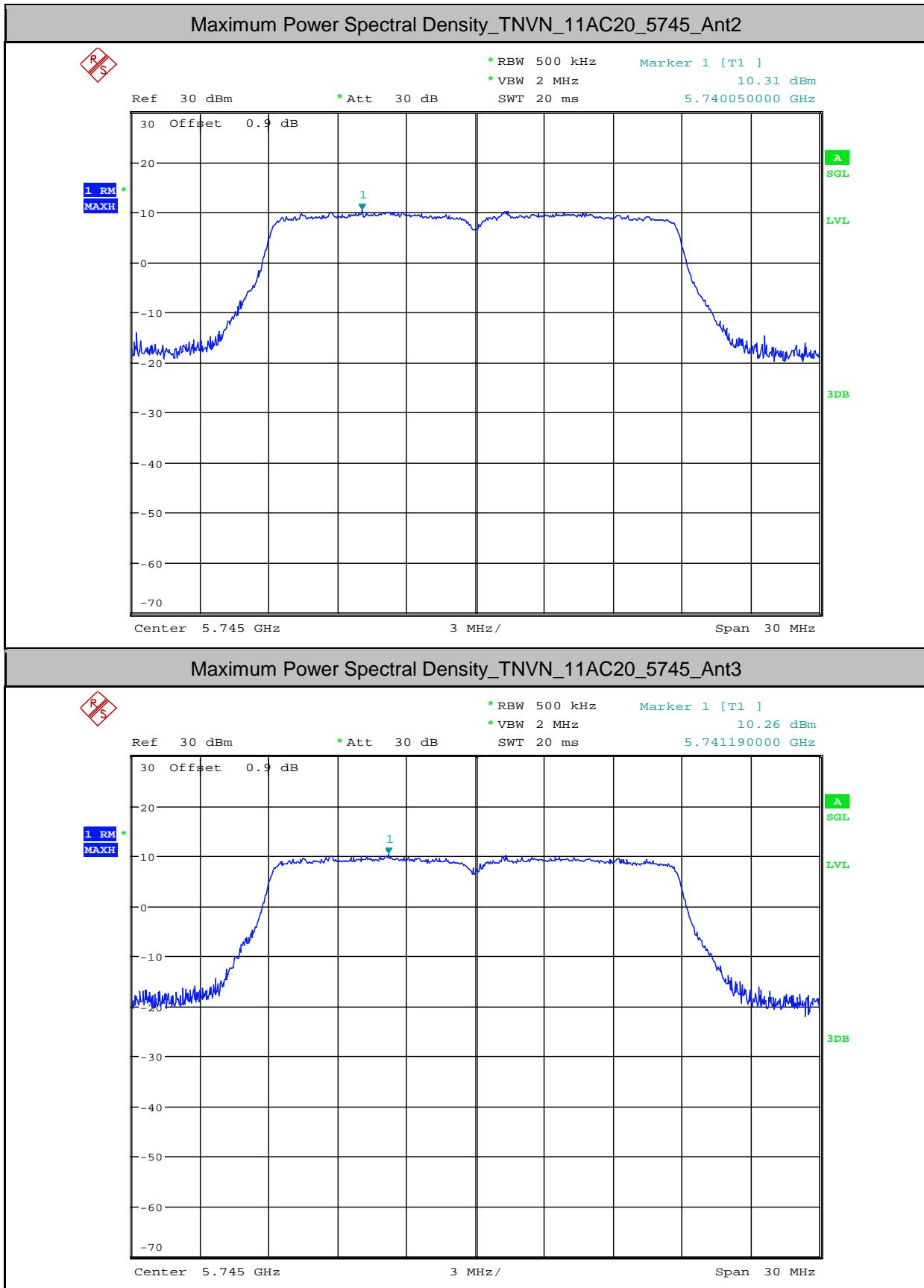


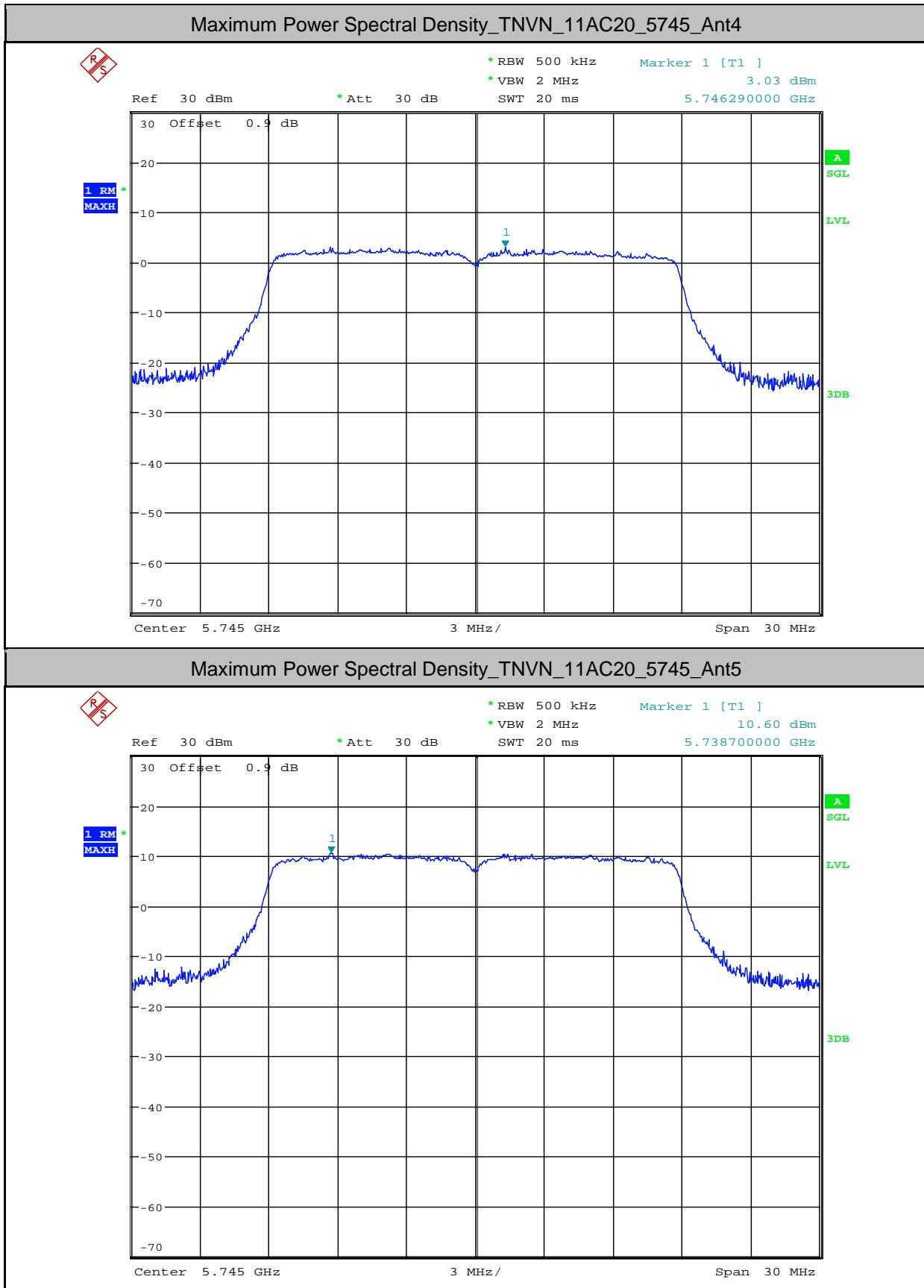


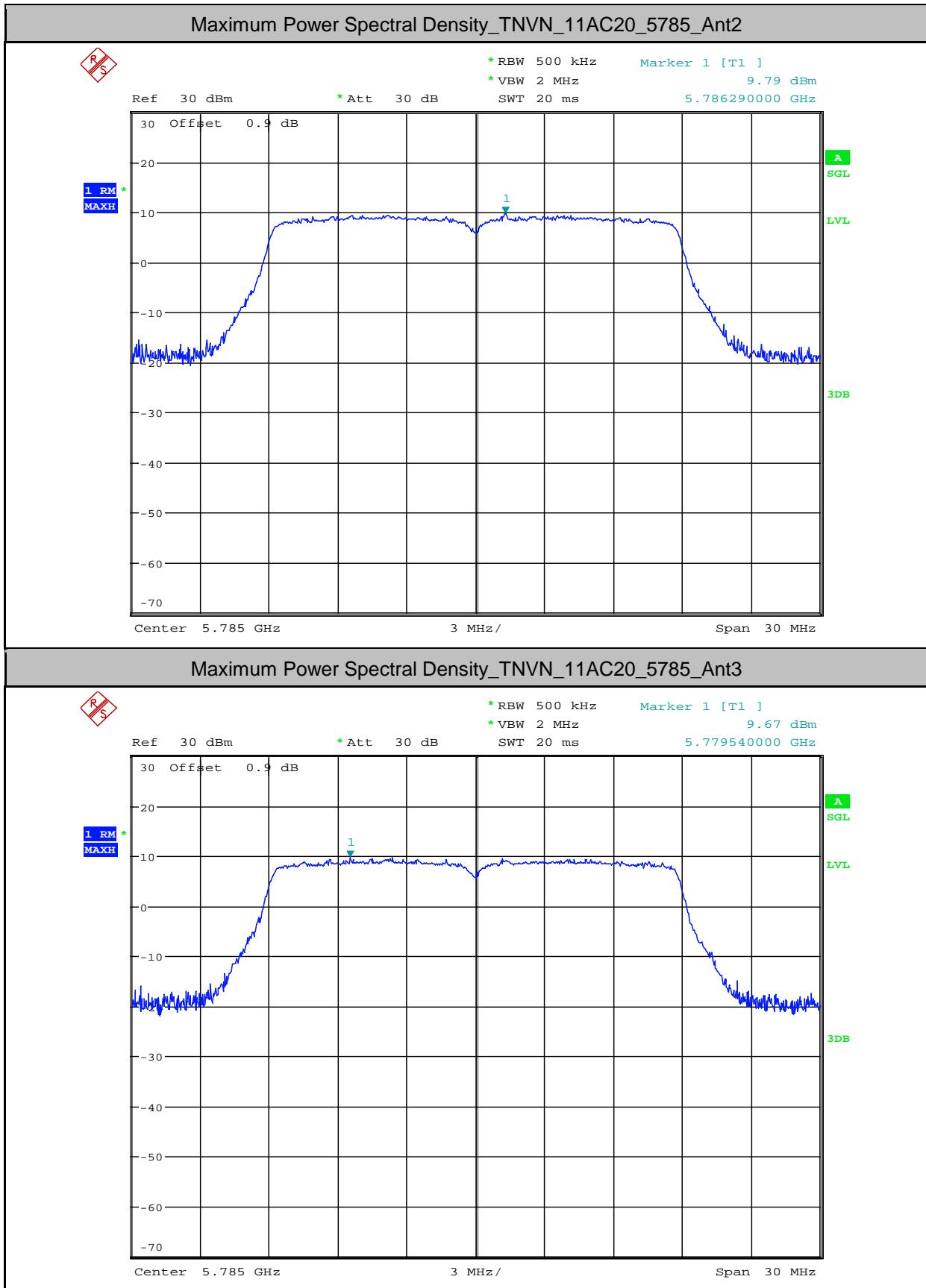


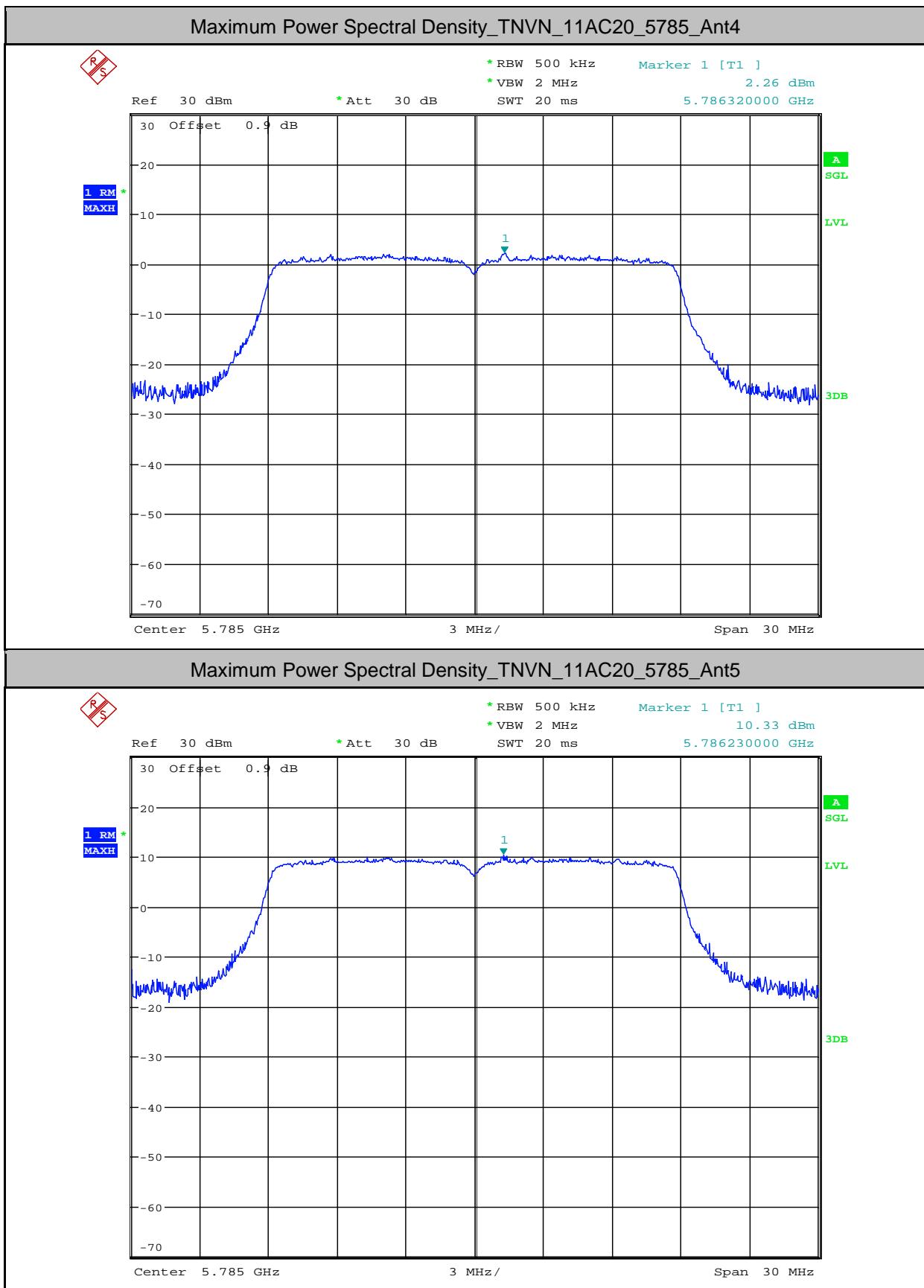


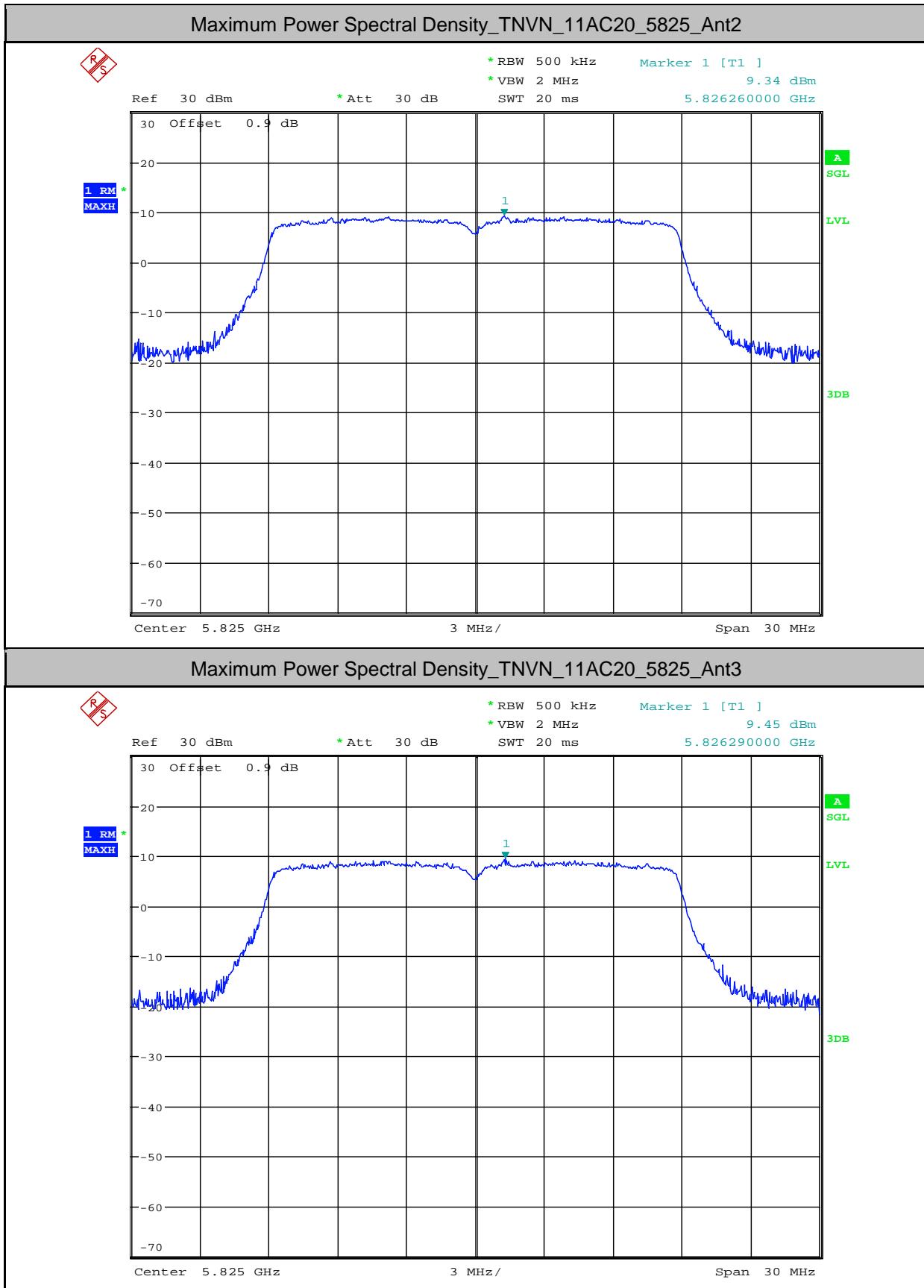


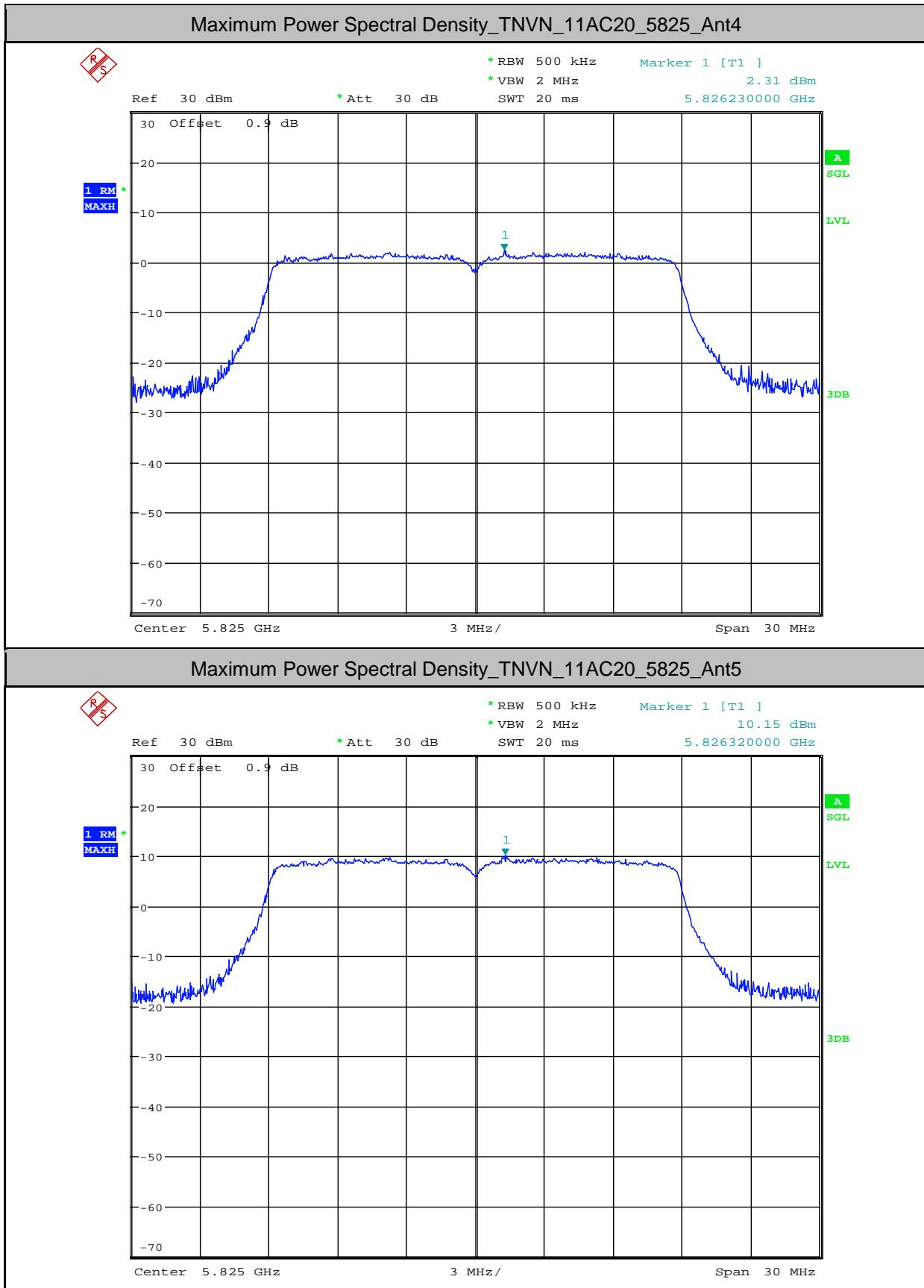


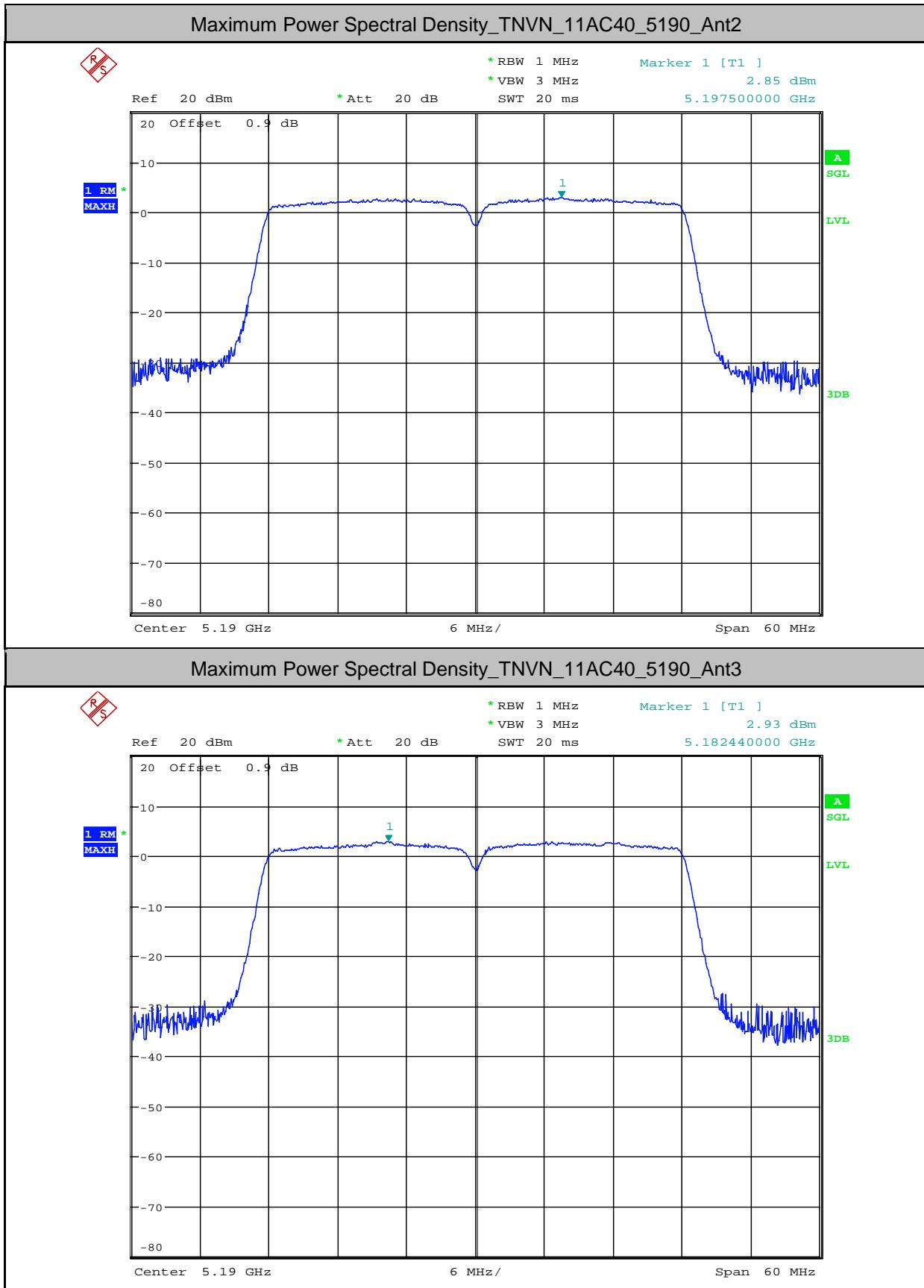


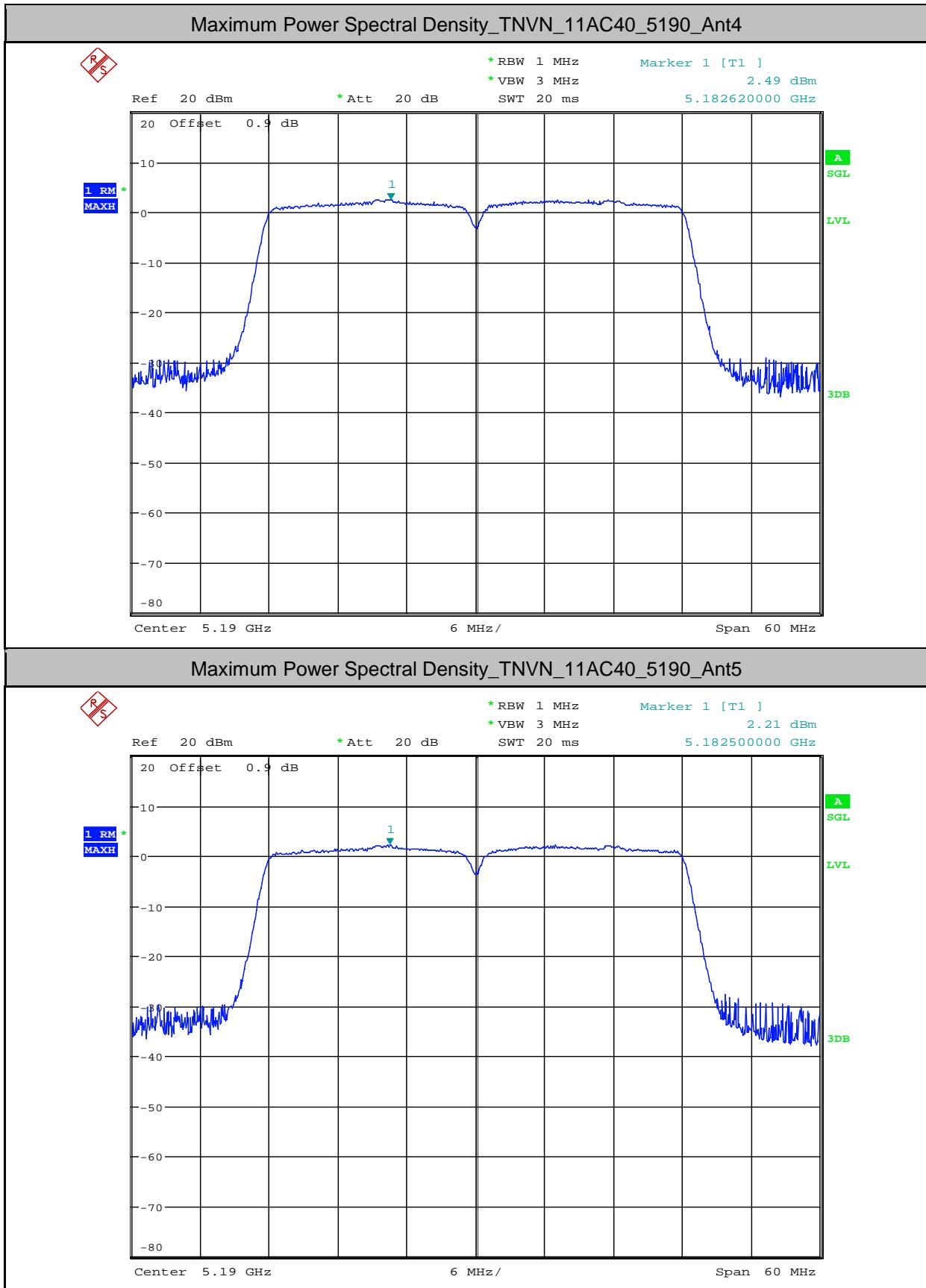


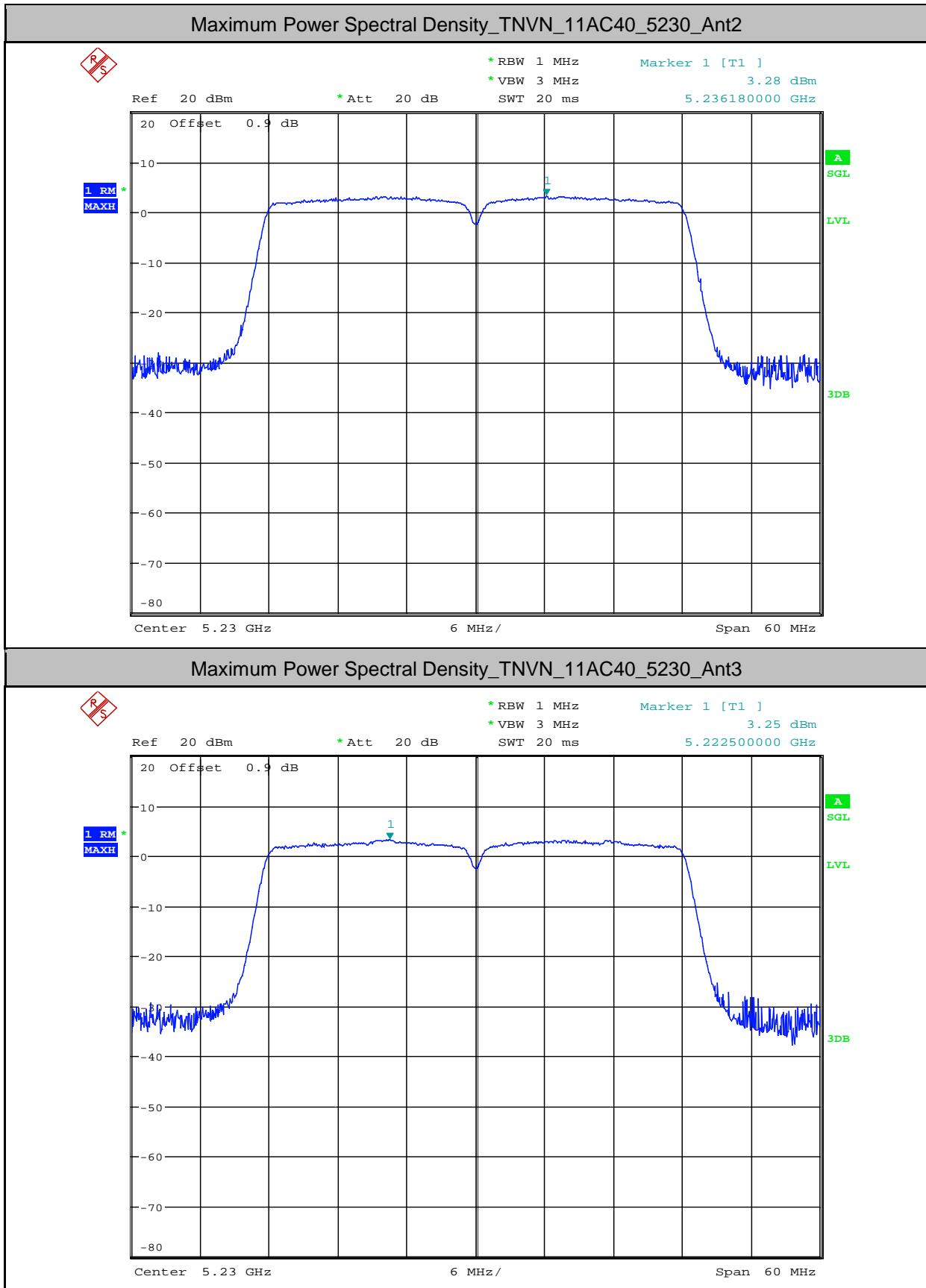


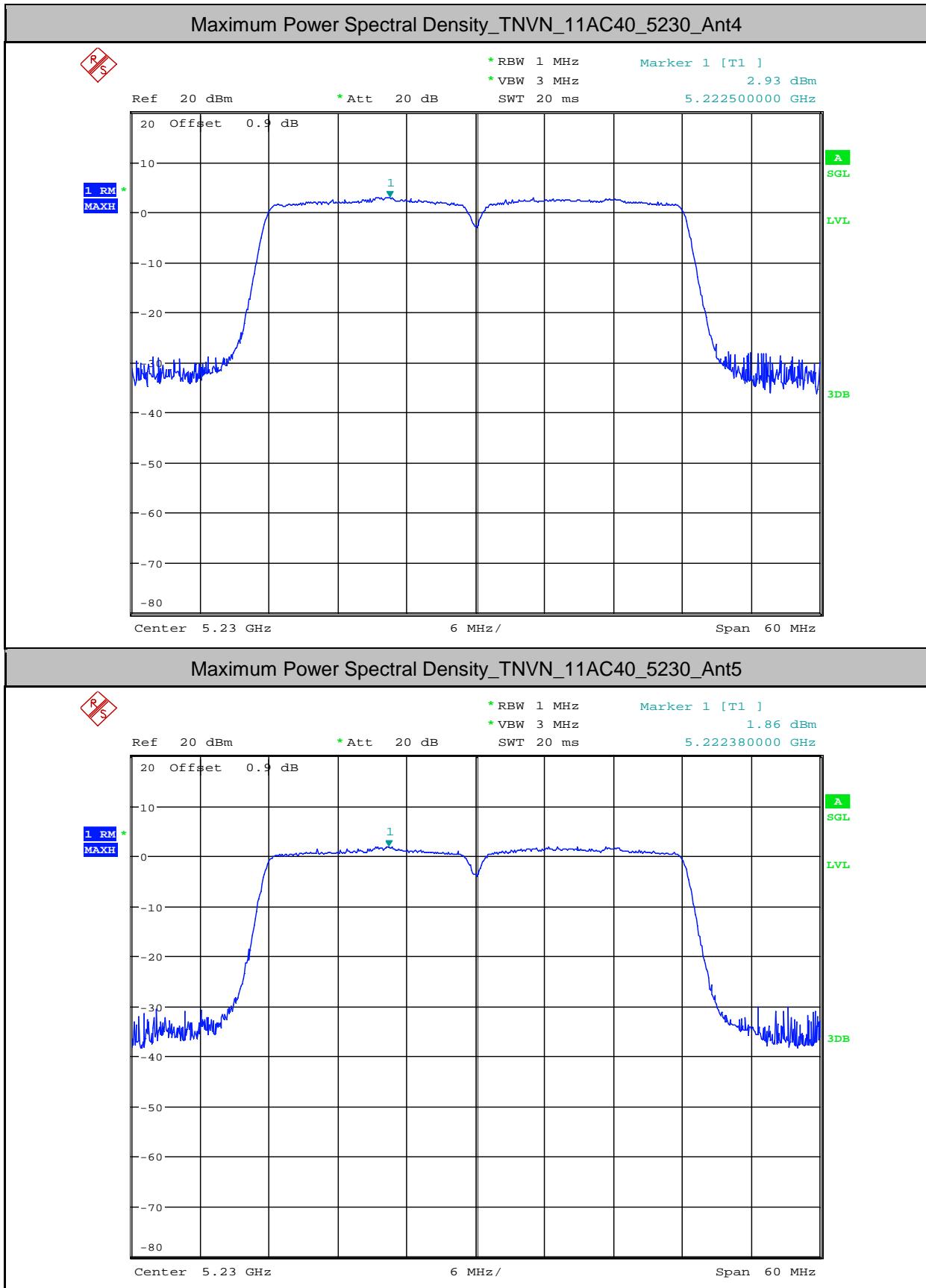


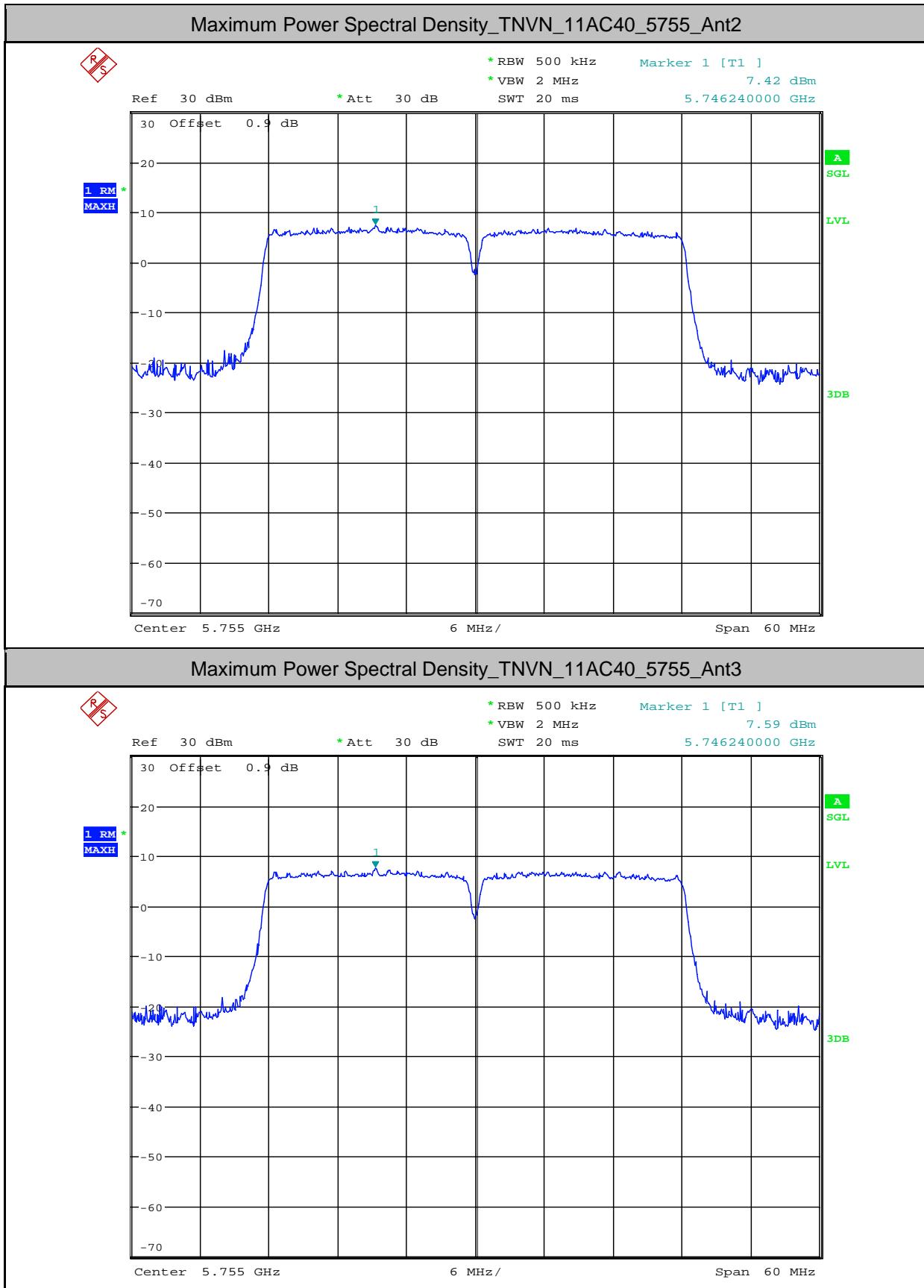


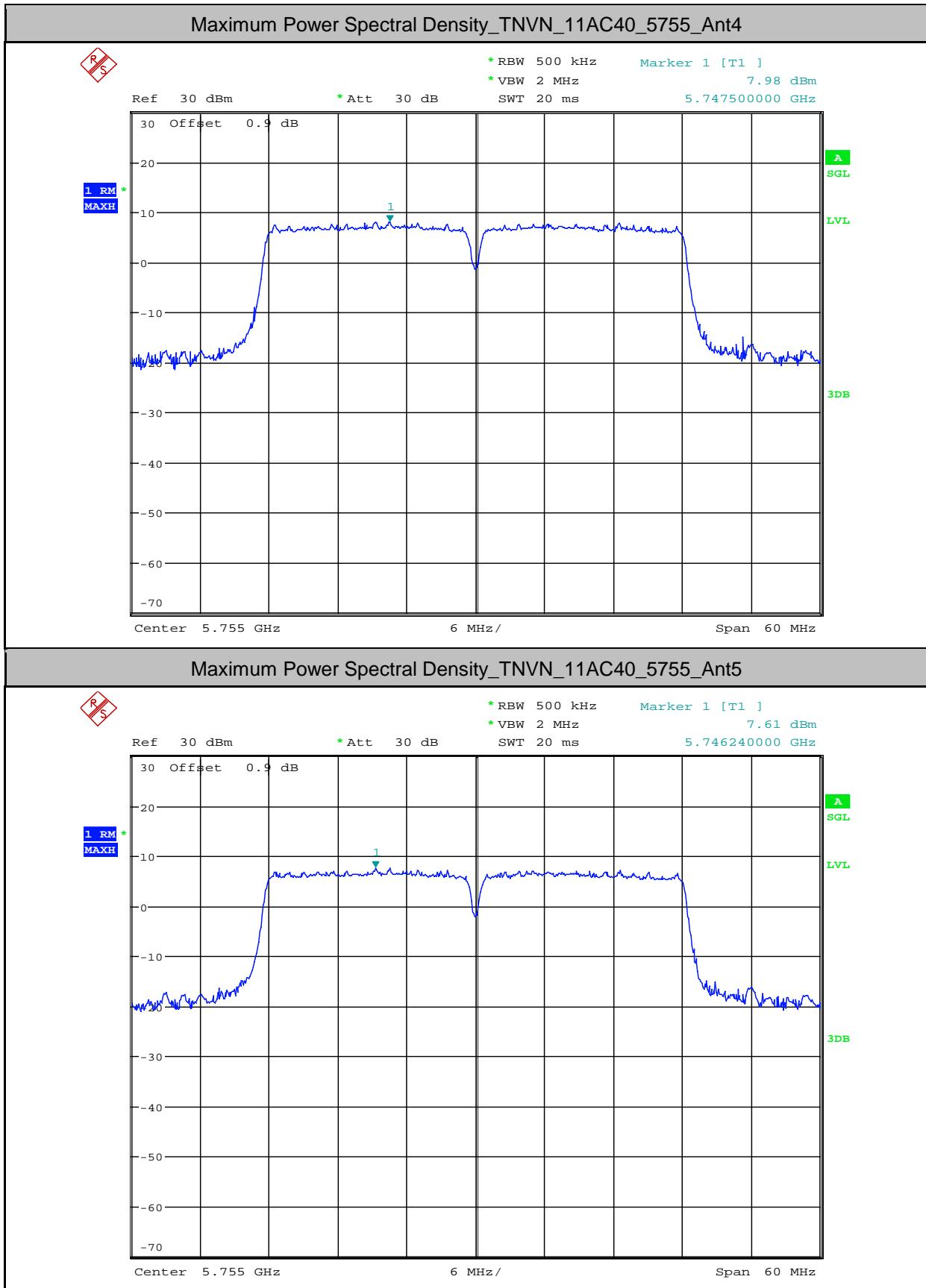


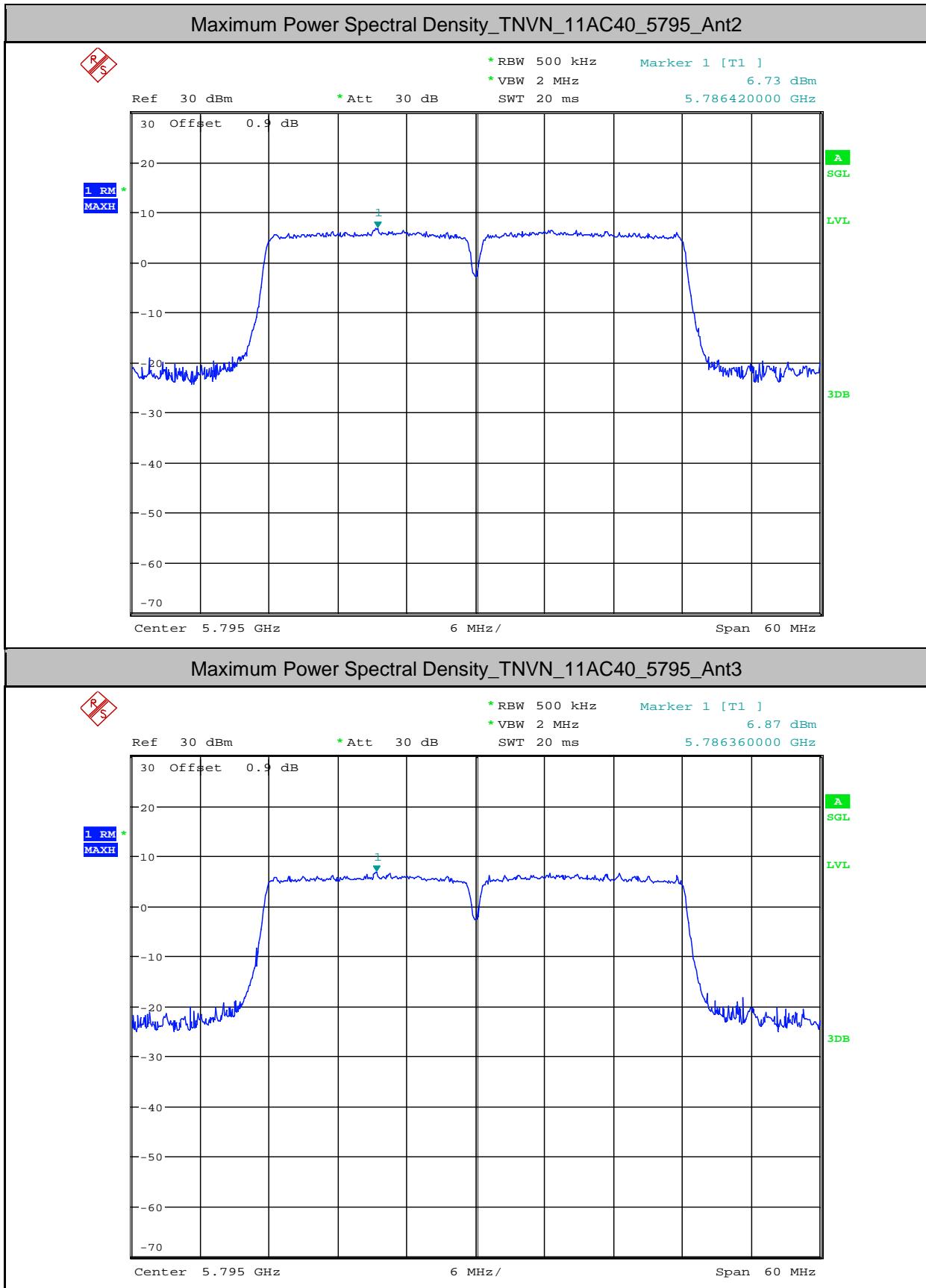


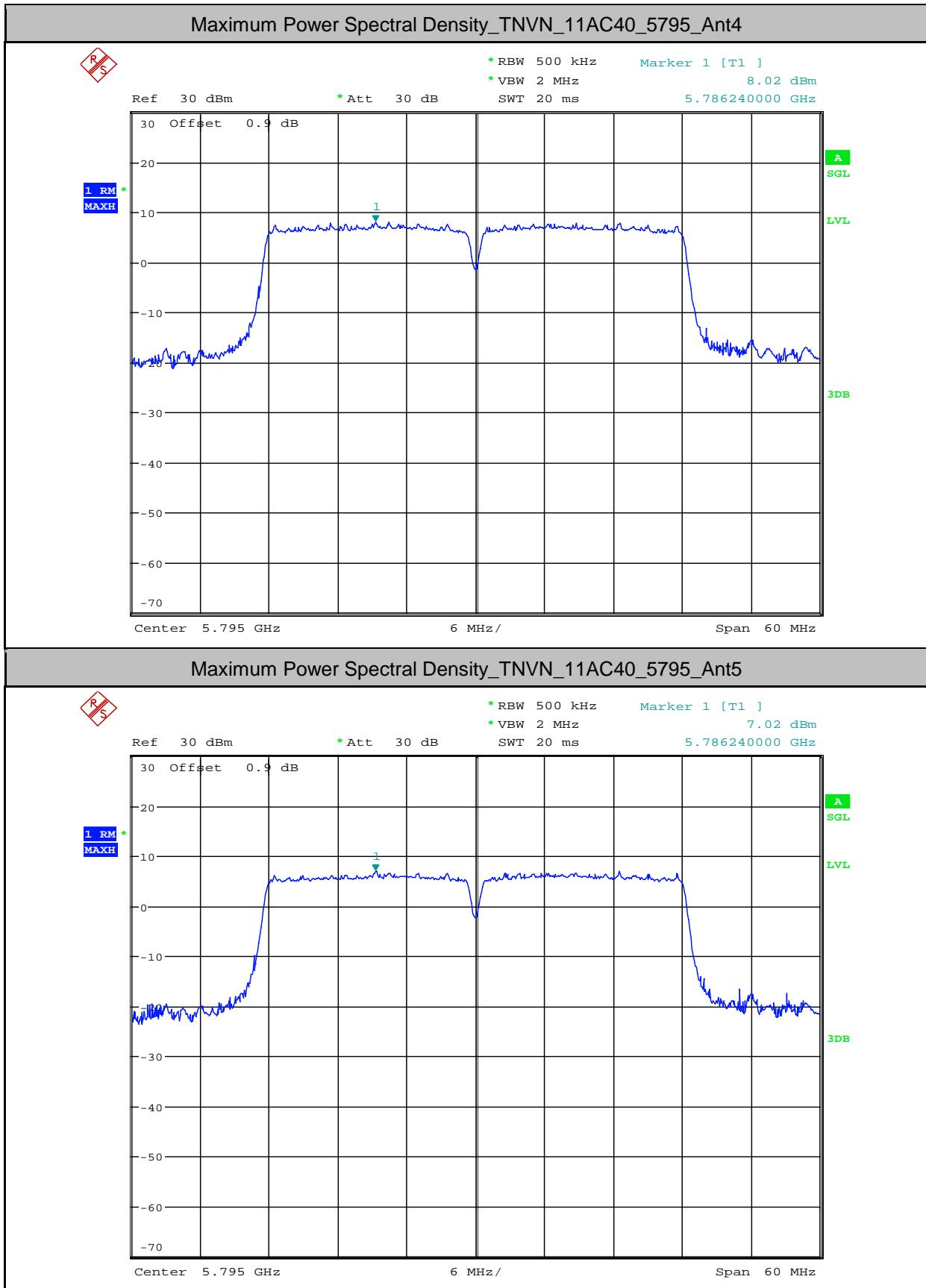


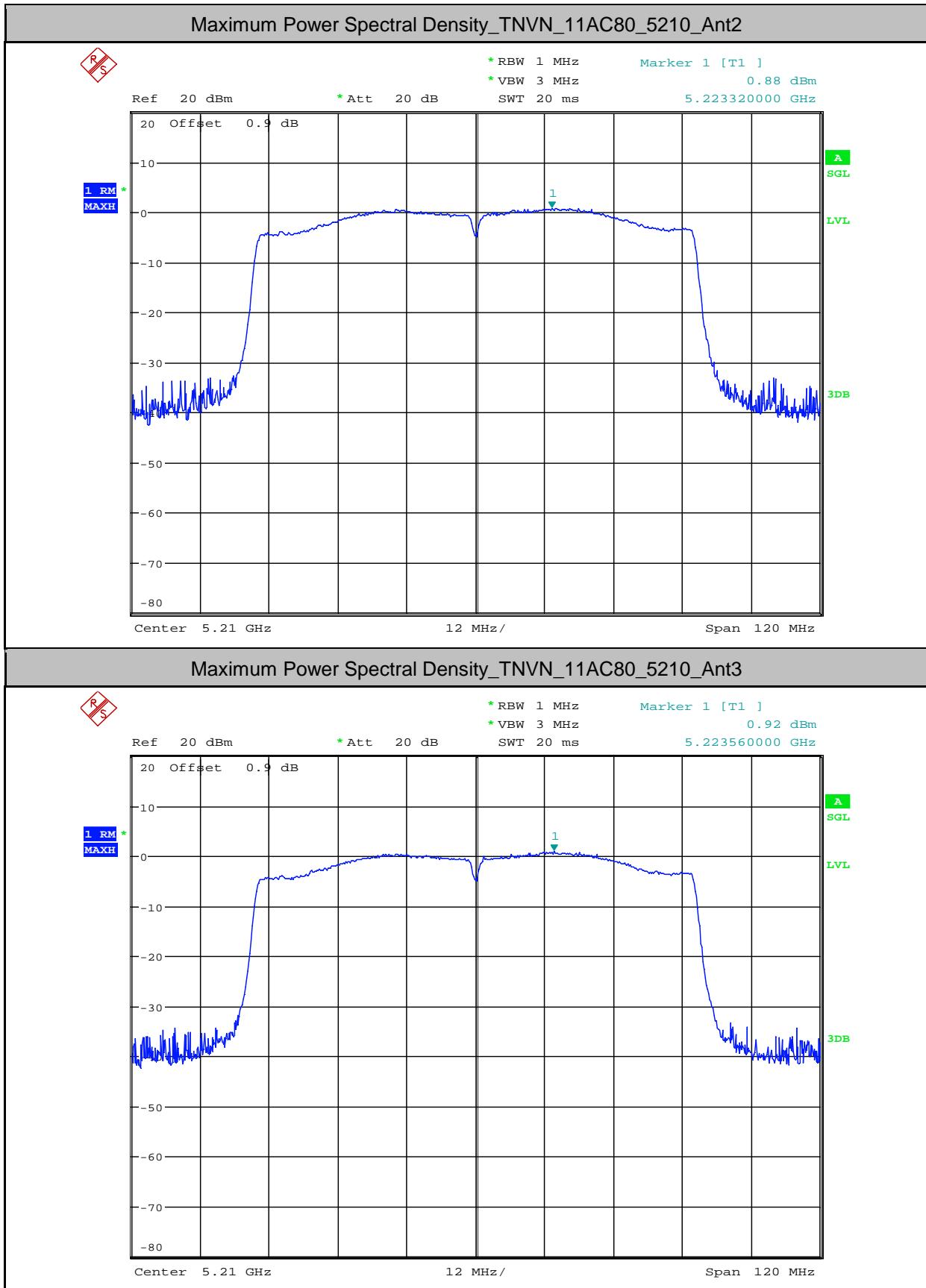


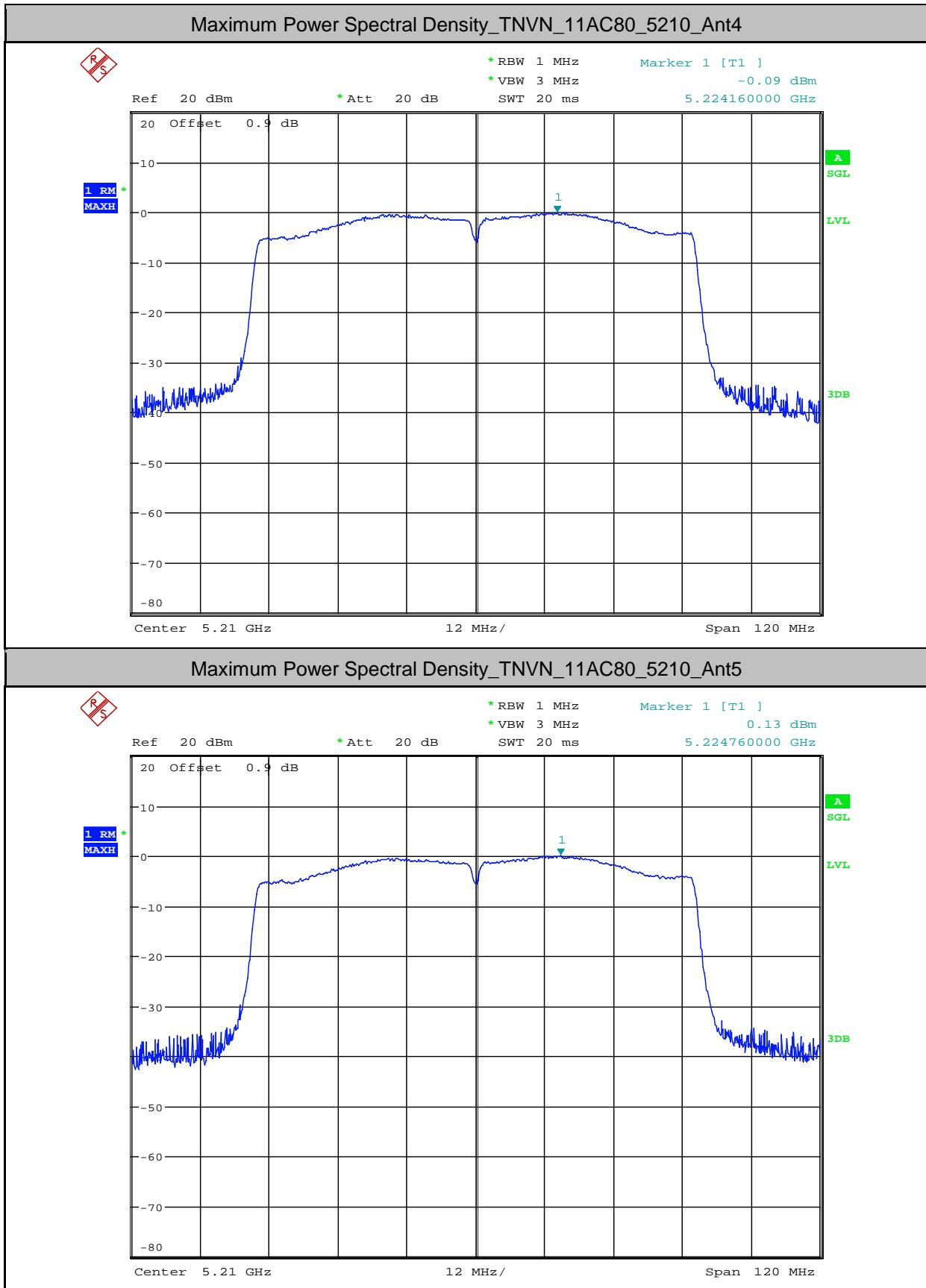


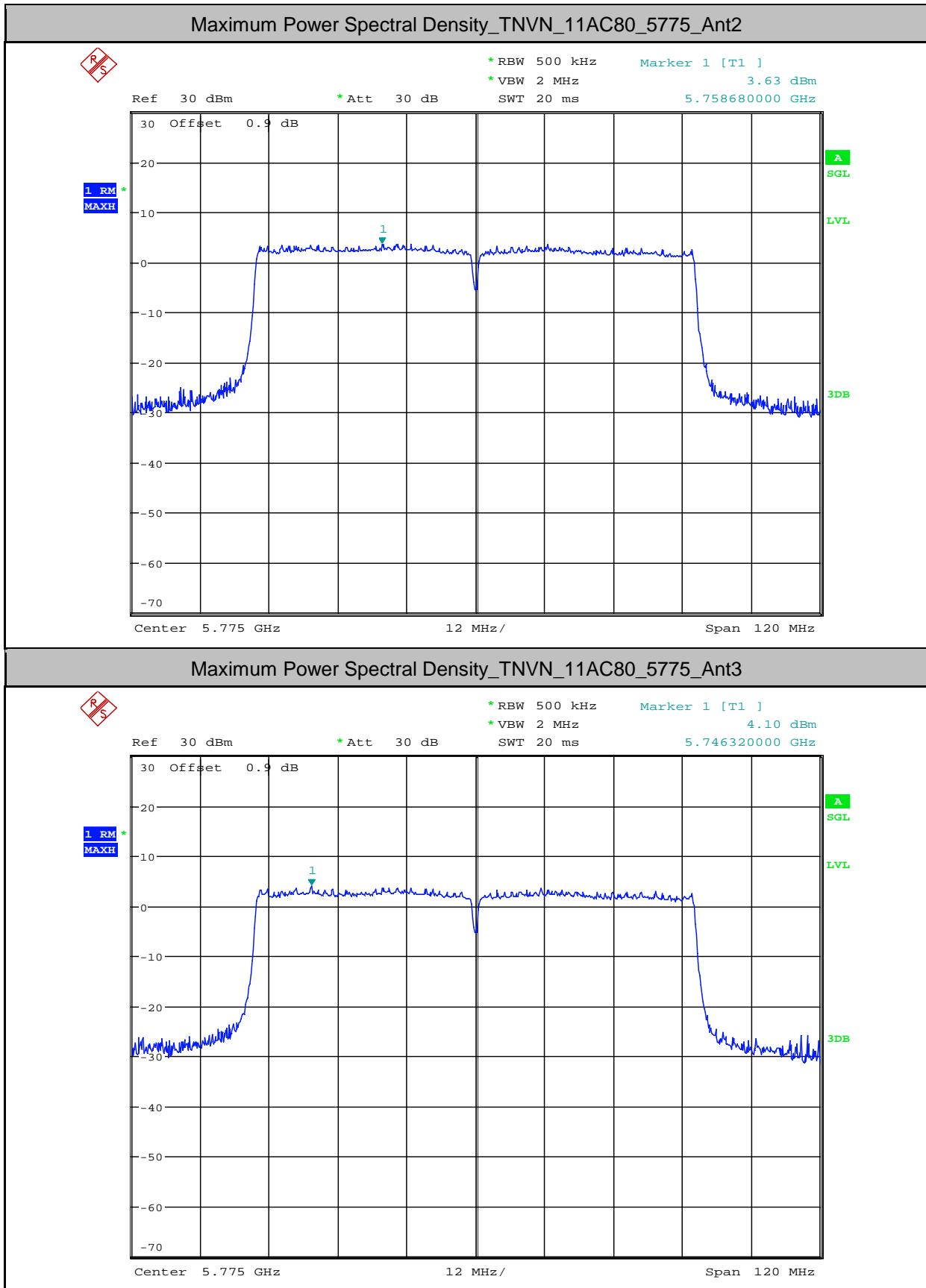


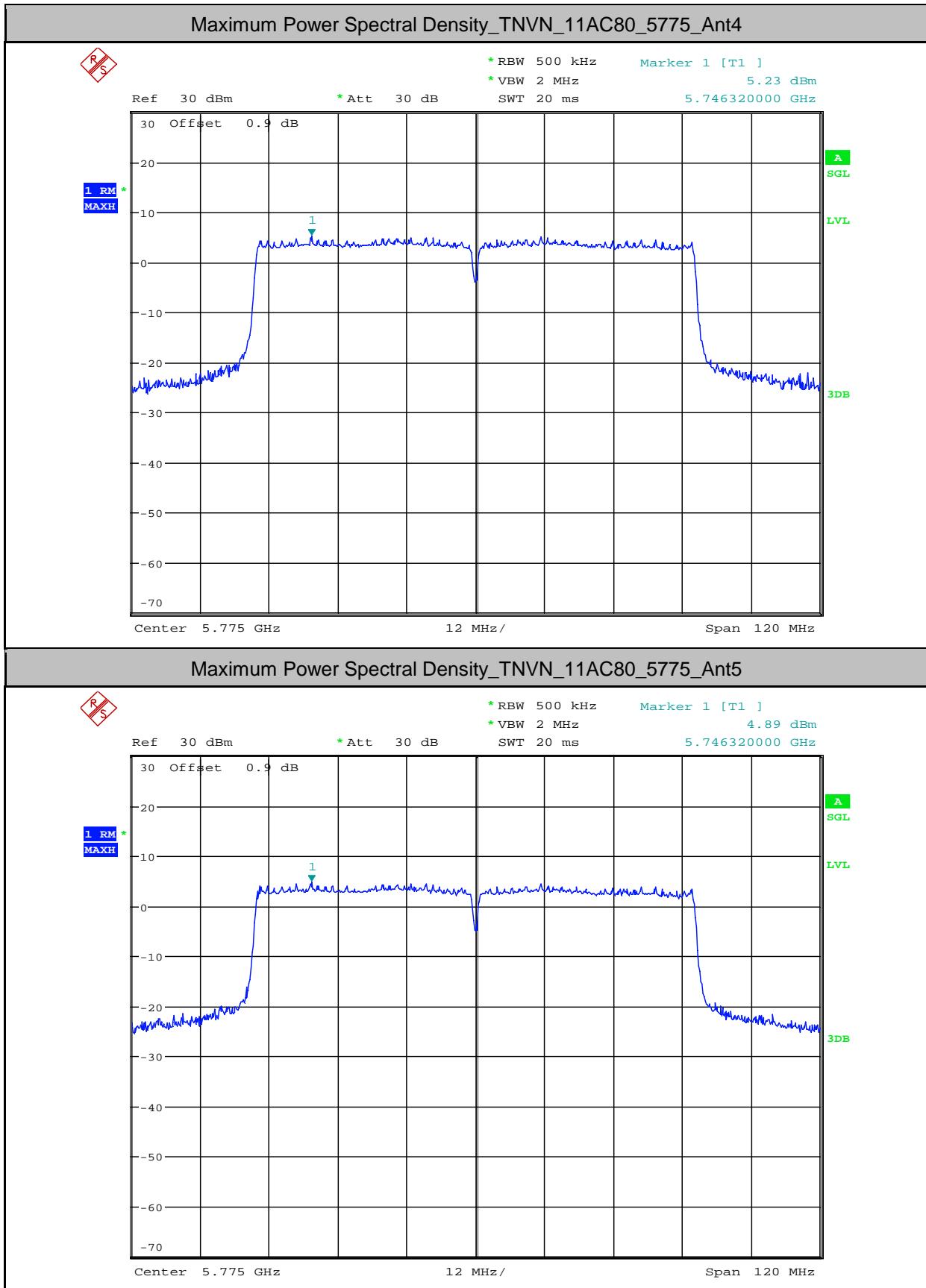












5.Duty Cycle (x)

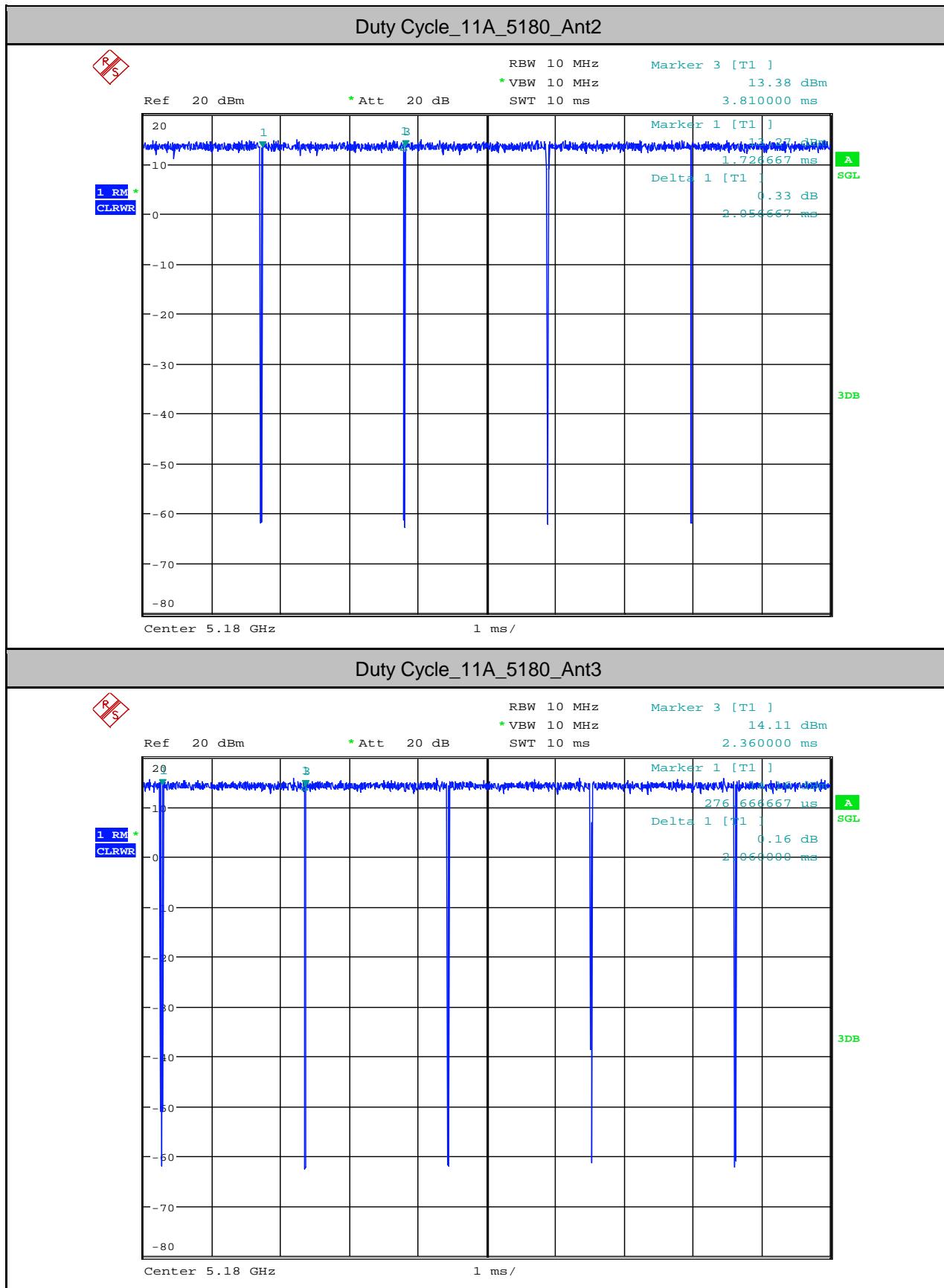
Test Mode	Test Channel	Ant	Duty Cycle[%]	10log(1/x) Factor[dB]
11A	5180	Ant1	98.72	0.06
11A	5180	Ant2	98.88	0.05
11A	5180	Ant3	98.72	0.06
11A	5180	Ant4	98.72	0.06
11A	5745	Ant1	98.72	0.06
11A	5745	Ant2	98.88	0.05
11A	5745	Ant3	98.72	0.06
11A	5745	Ant4	98.72	0.06
11N20	5180	Ant1	98.8	0.05
11N20	5180	Ant2	98.63	0.06
11N20	5180	Ant3	98.63	0.06
11N20	5180	Ant4	98.63	0.06
11N20	5745	Ant1	98.63	0.06
11N20	5745	Ant2	98.63	0.06
11N20	5745	Ant3	98.63	0.06
11N20	5745	Ant4	98.63	0.06
11N40	5190	Ant1	98.78	0.05
11N40	5190	Ant2	98.37	0.07
11N40	5190	Ant3	98.37	0.07
11N40	5190	Ant4	98.37	0.07
11N40	5755	Ant1	98.77	0.05
11N40	5755	Ant2	98.37	0.07
11N40	5755	Ant3	98.37	0.07
11N40	5755	Ant4	98.37	0.07
11AC20	5180	Ant1	98.3	0.07
11AC20	5180	Ant2	98.8	0.05
11AC20	5180	Ant3	98.13	0.08
11AC20	5180	Ant4	98.63	0.06
11AC20	5745	Ant1	98.13	0.08
11AC20	5745	Ant2	98.63	0.06
11AC20	5745	Ant3	98.63	0.06

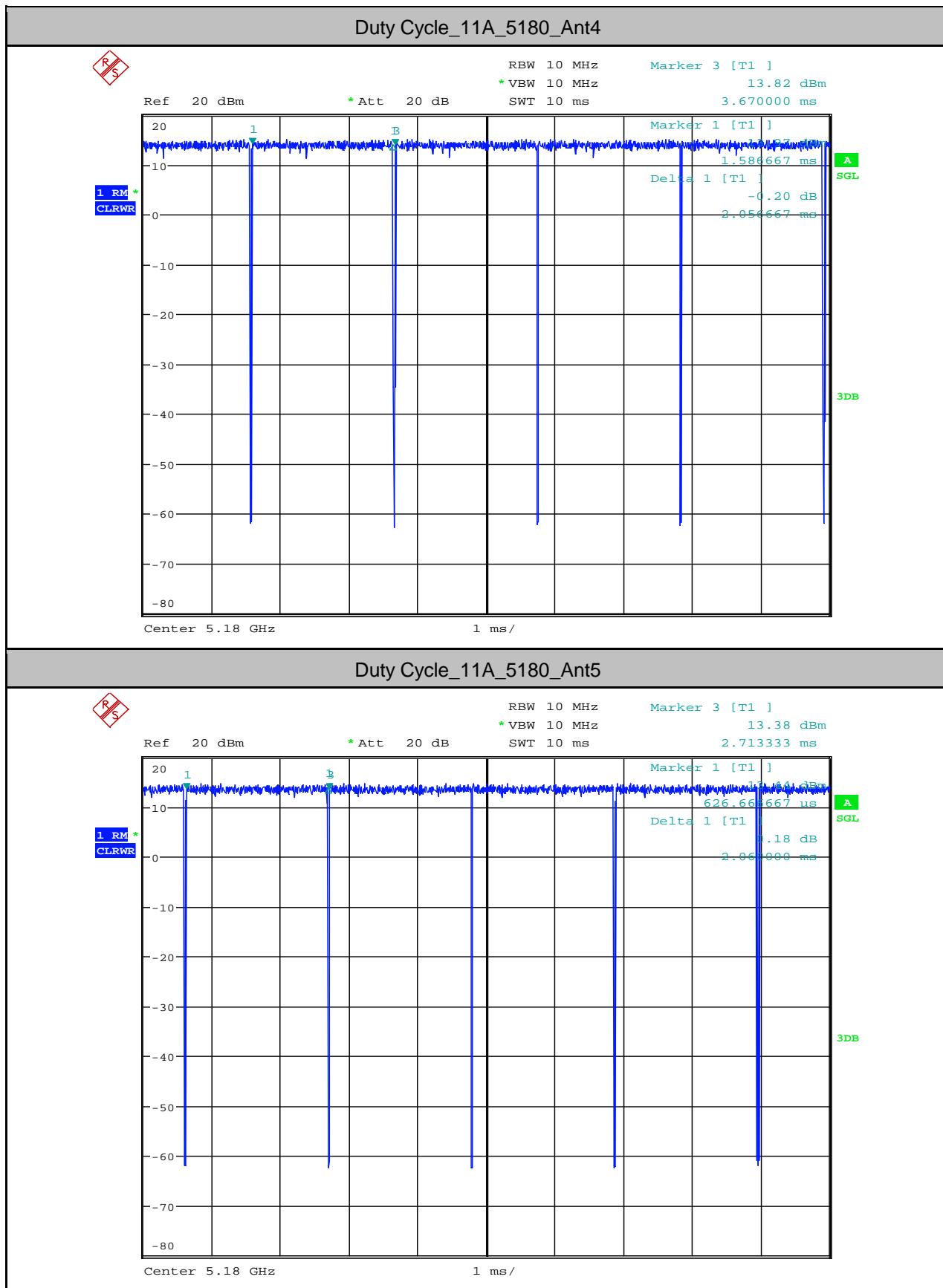


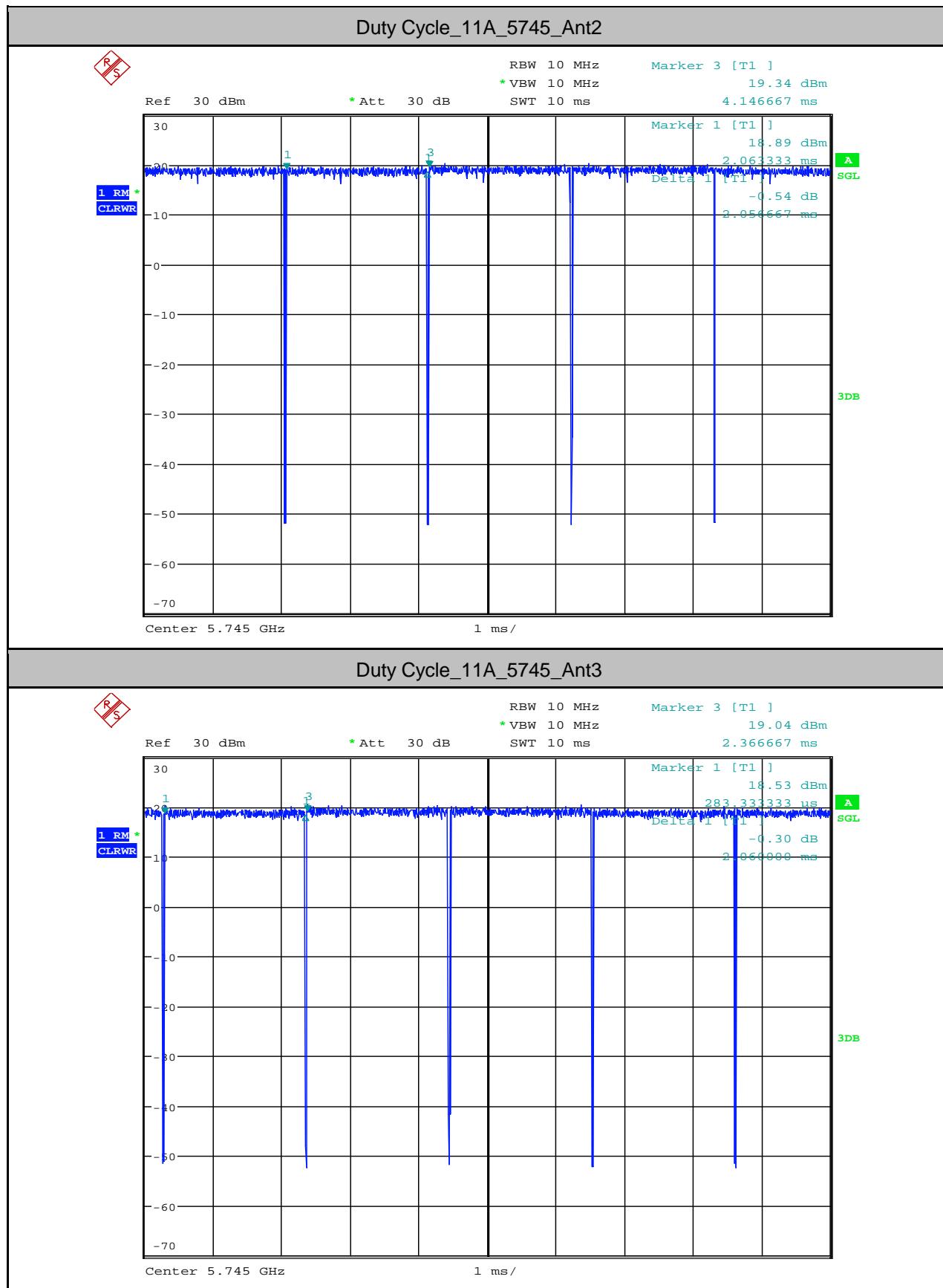
SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

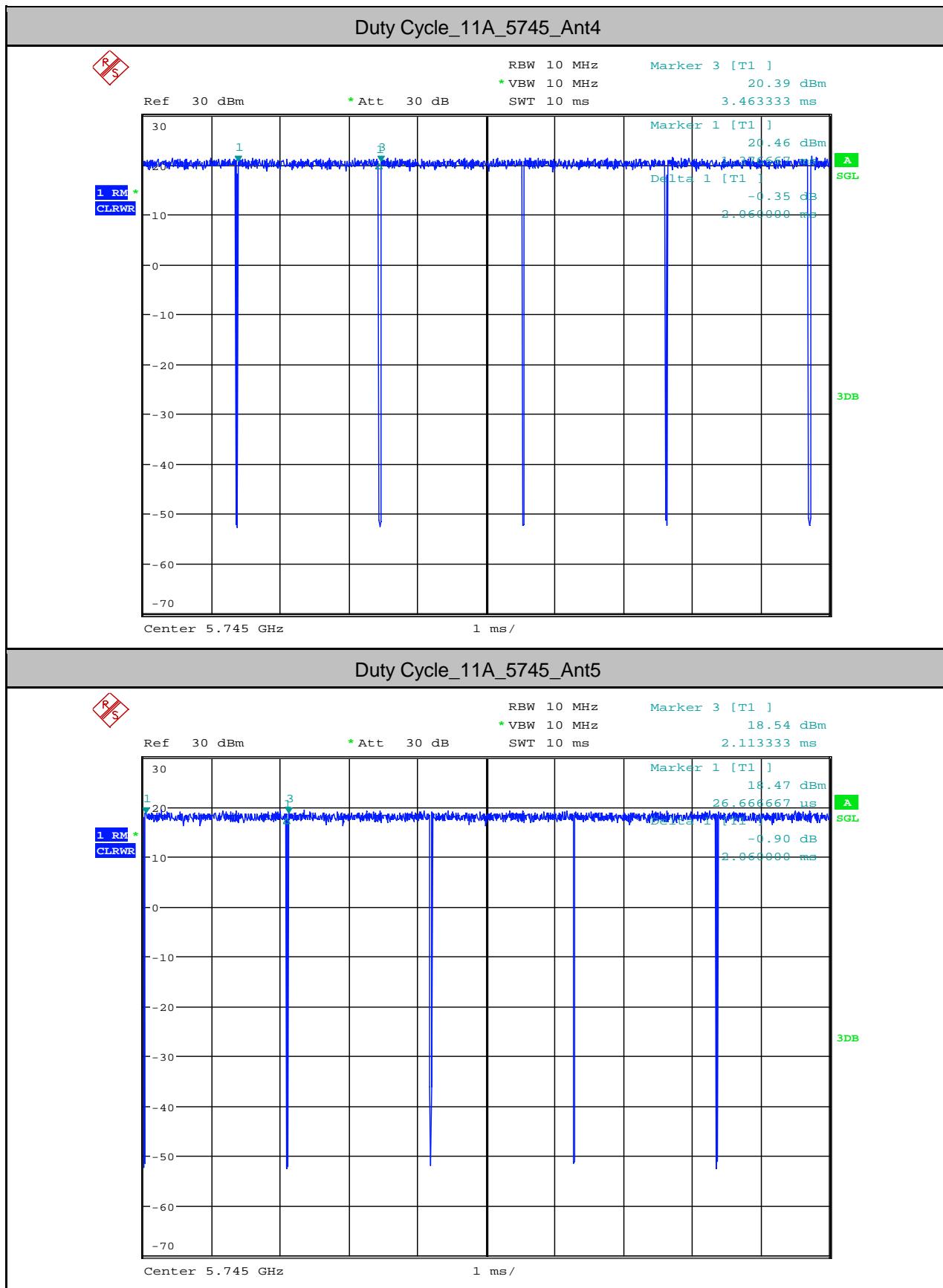
Report No.: SZEM170700716202
Page: 356 of 380

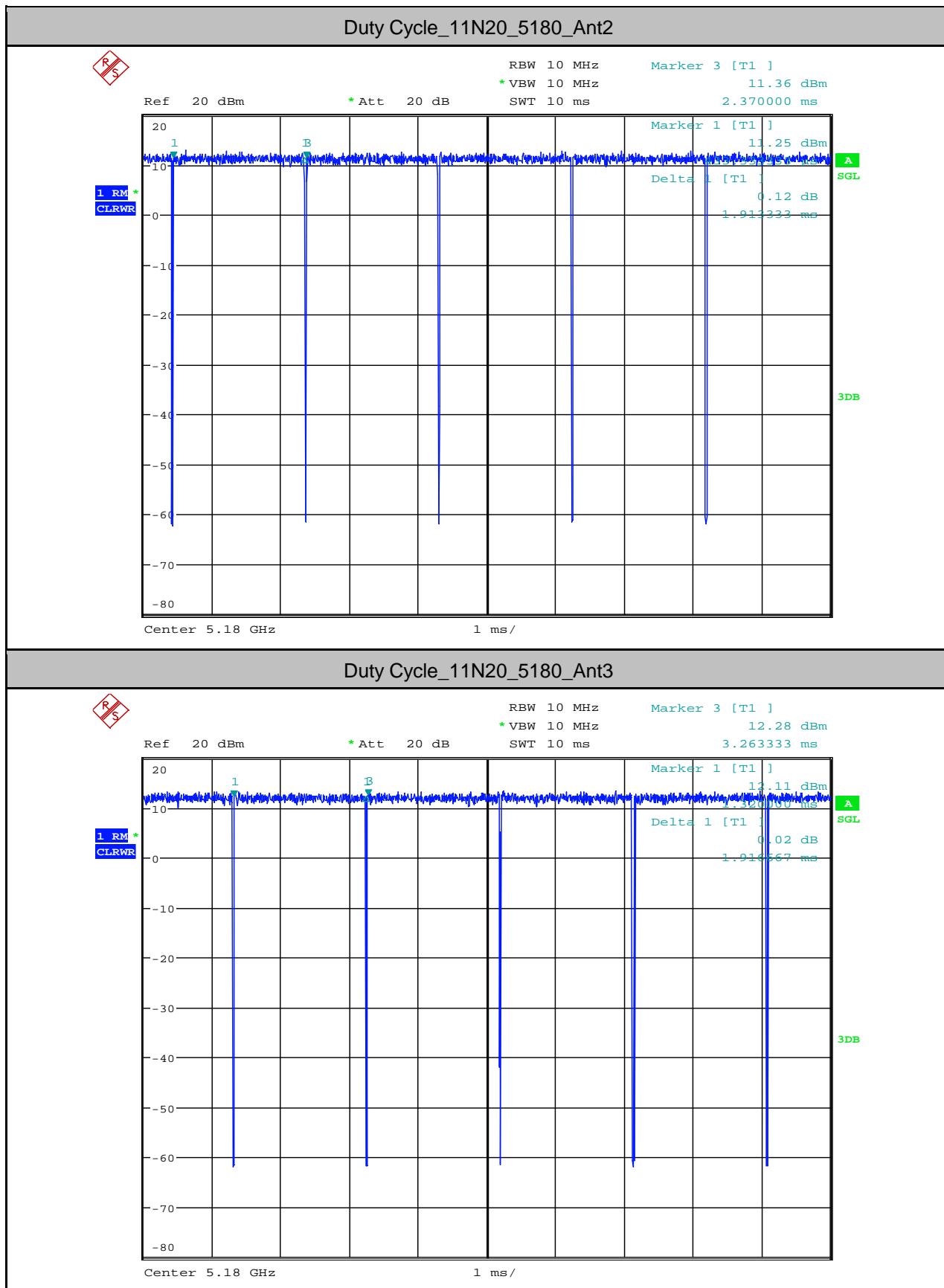
11AC20	5745	Ant4	98.63	0.06
11AC40	5190	Ant1	98.65	0.06
11AC40	5190	Ant2	98.37	0.07
11AC40	5190	Ant3	98.37	0.07
11AC40	5190	Ant4	98.37	0.07
11AC40	5755	Ant1	98.15	0.08
11AC40	5755	Ant2	98.37	0.07
11AC40	5755	Ant3	98.37	0.07
11AC40	5755	Ant4	98.37	0.07
11AC80	5210	Ant1	98.38	0.07
11AC80	5210	Ant2	98.82	0.05
11AC80	5210	Ant3	98.24	0.08
11AC80	5210	Ant4	98.24	0.08
11AC80	5775	Ant1	98.23	0.08
11AC80	5775	Ant2	98.24	0.08
11AC80	5775	Ant3	98.23	0.08
11AC80	5775	Ant4	98.24	0.08



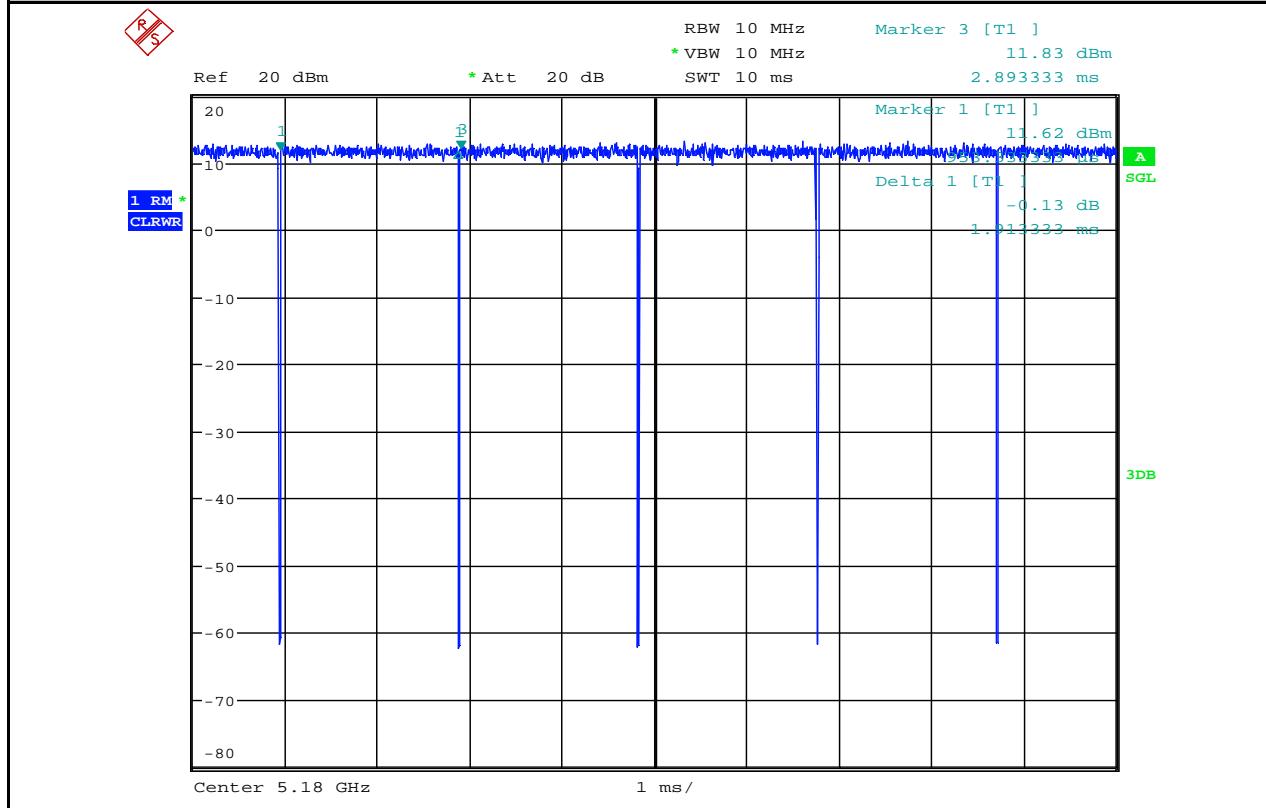




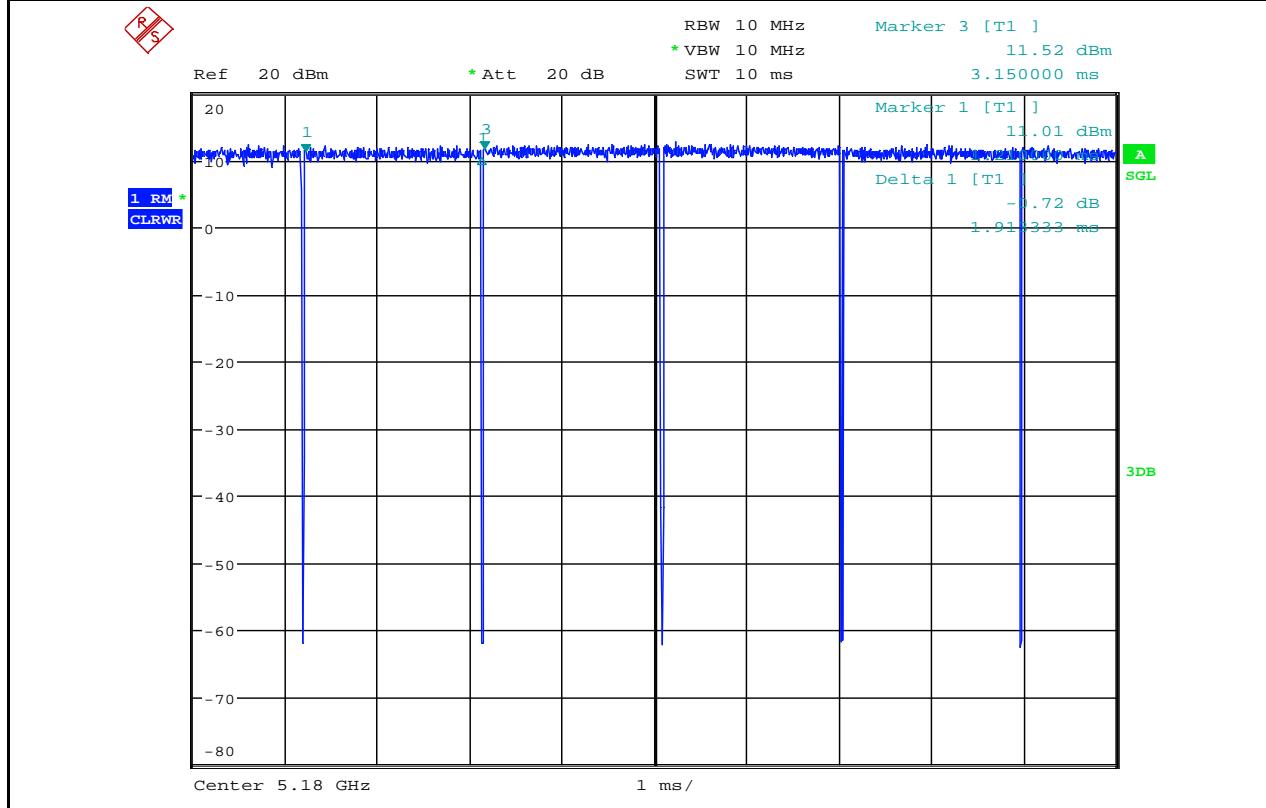


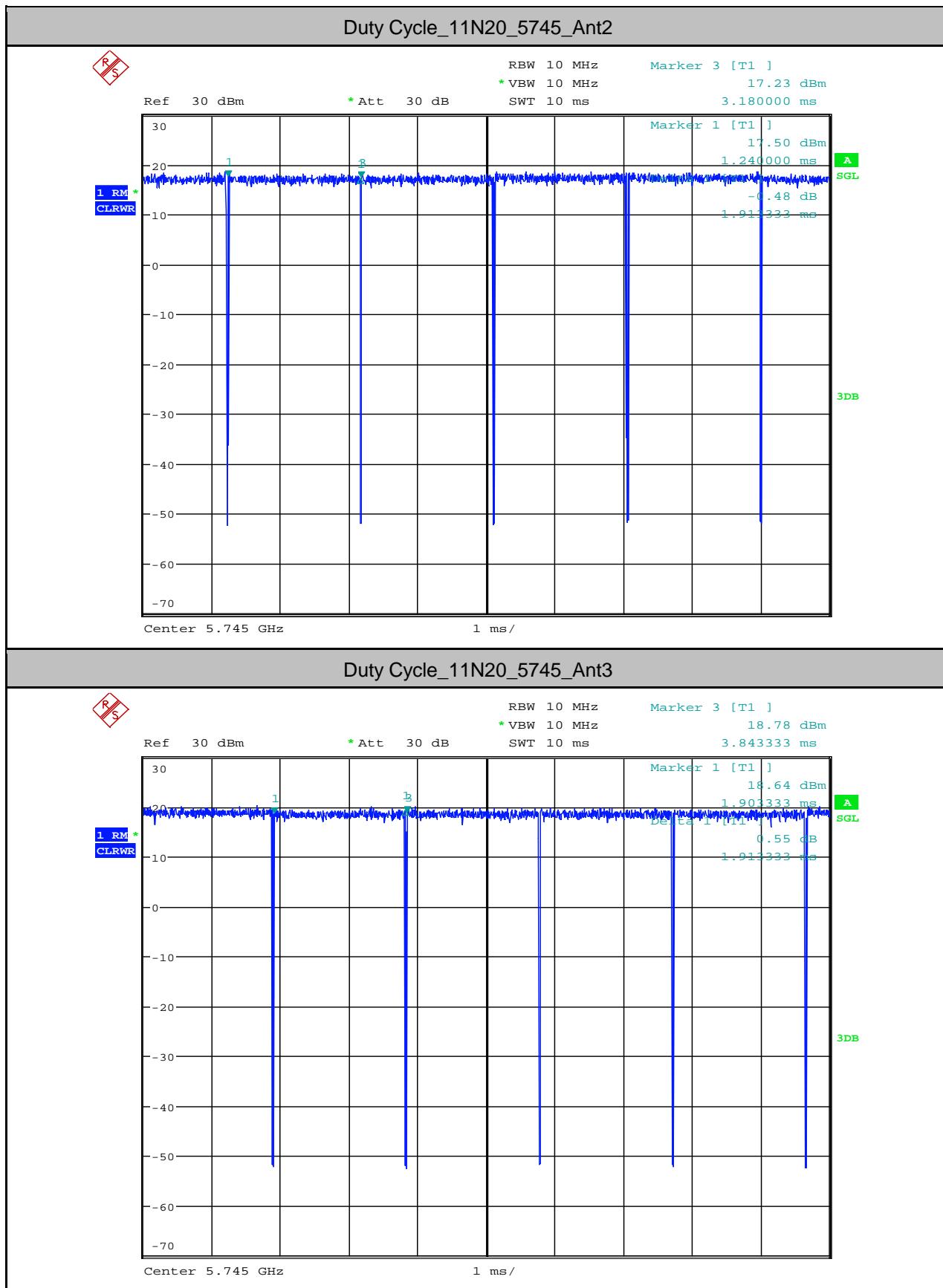


Duty Cycle_11N20_5180_Ant4



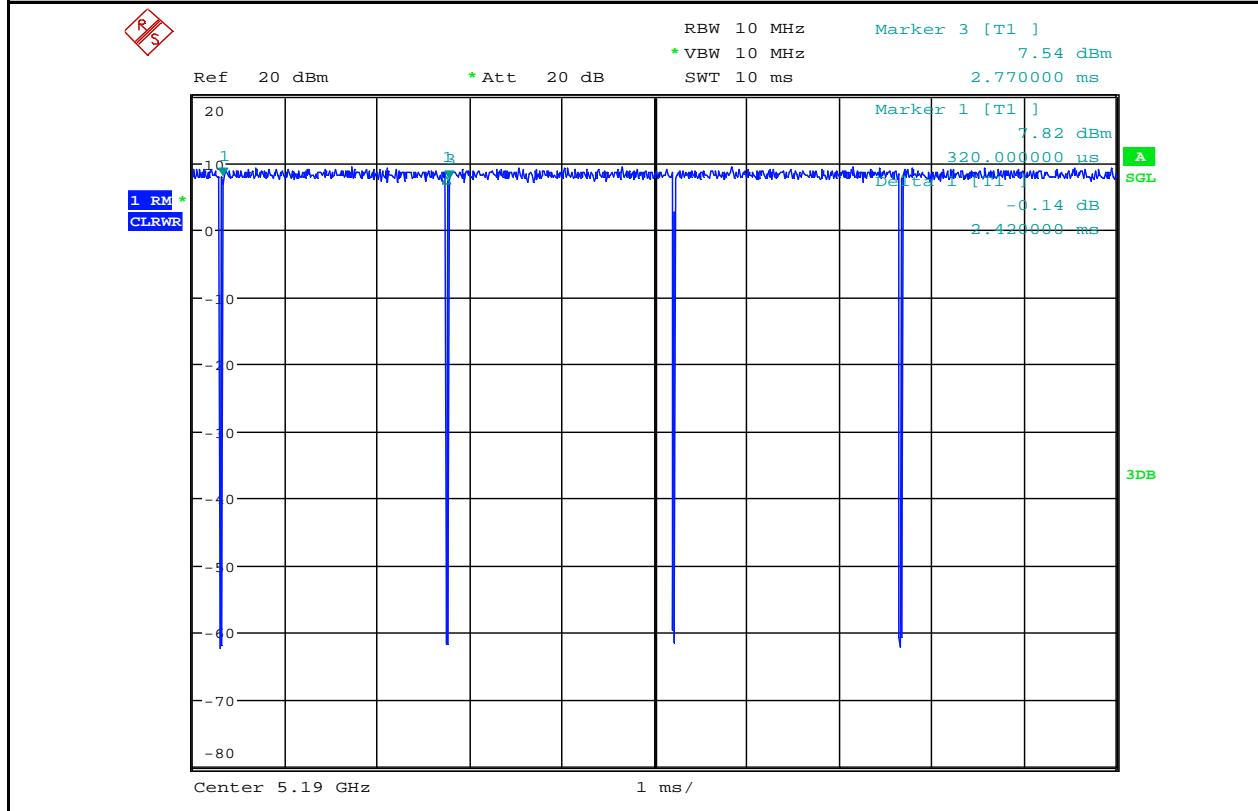
Duty Cycle_11N20_5180_Ant5



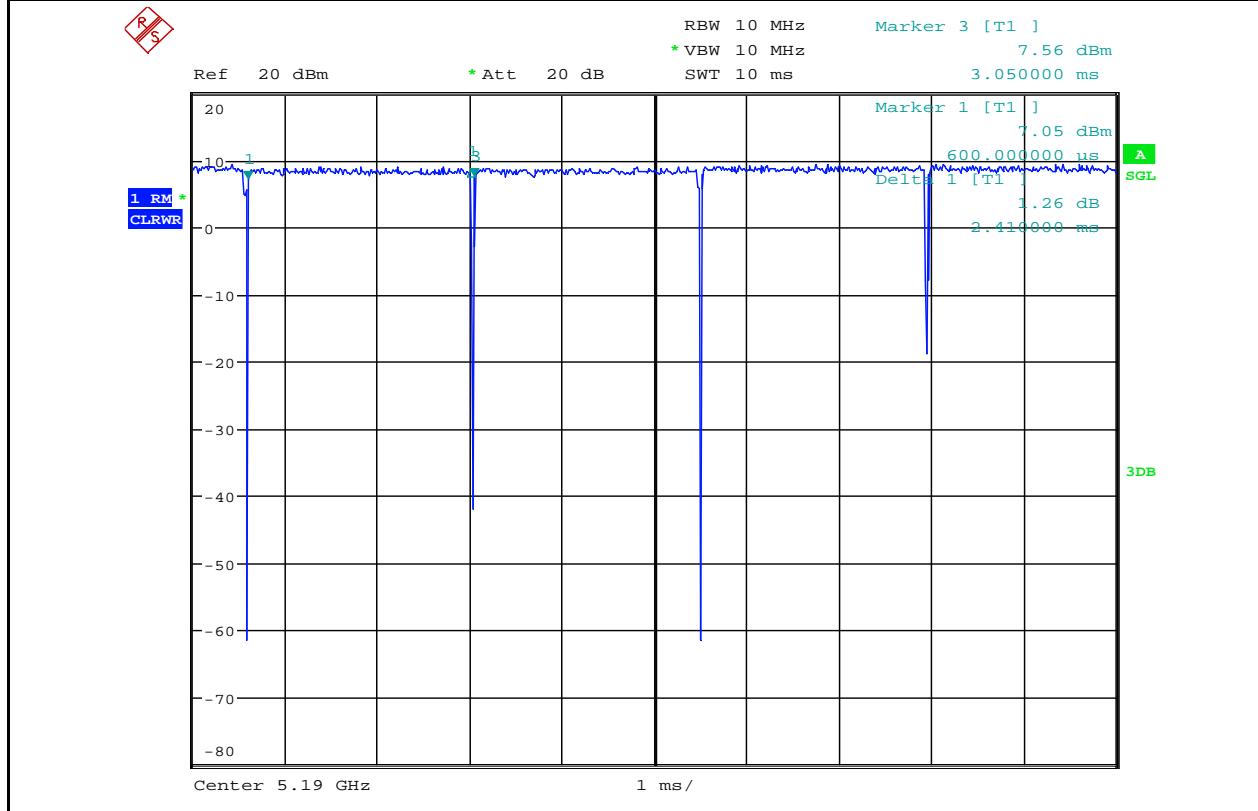


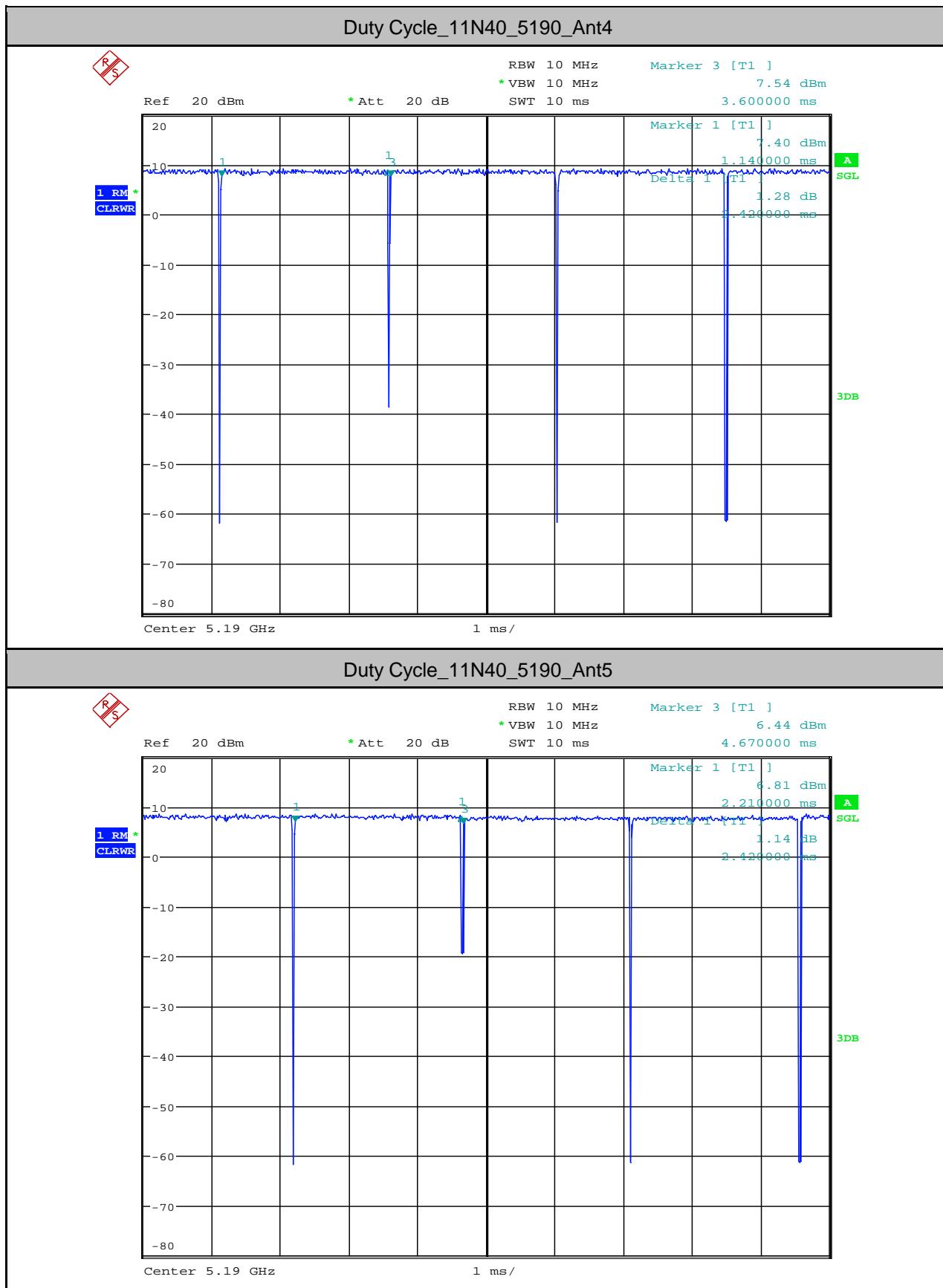


Duty Cycle_11N40_5190_Ant2

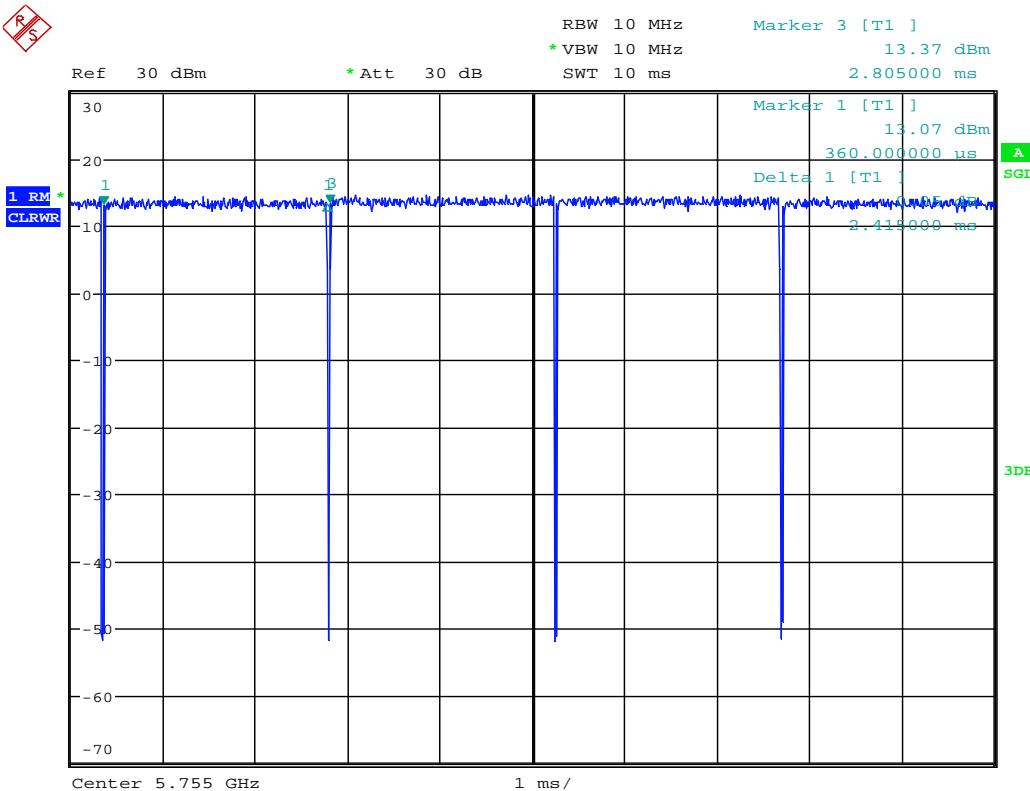


Duty Cycle_11N40_5190_Ant3

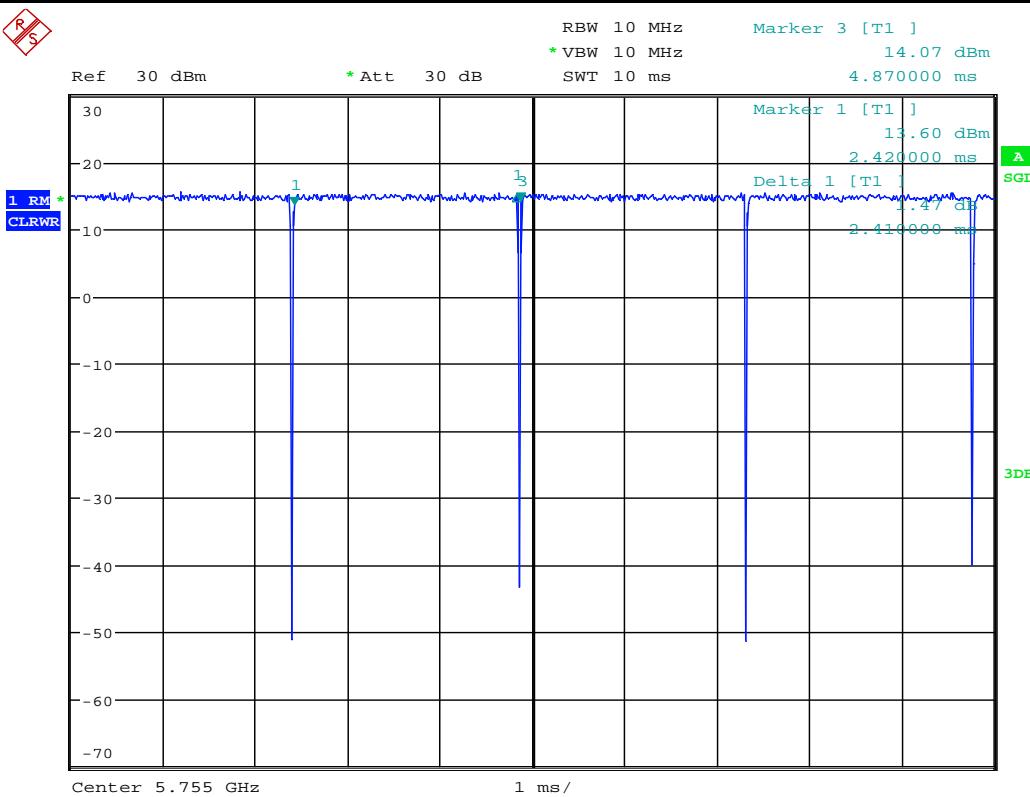


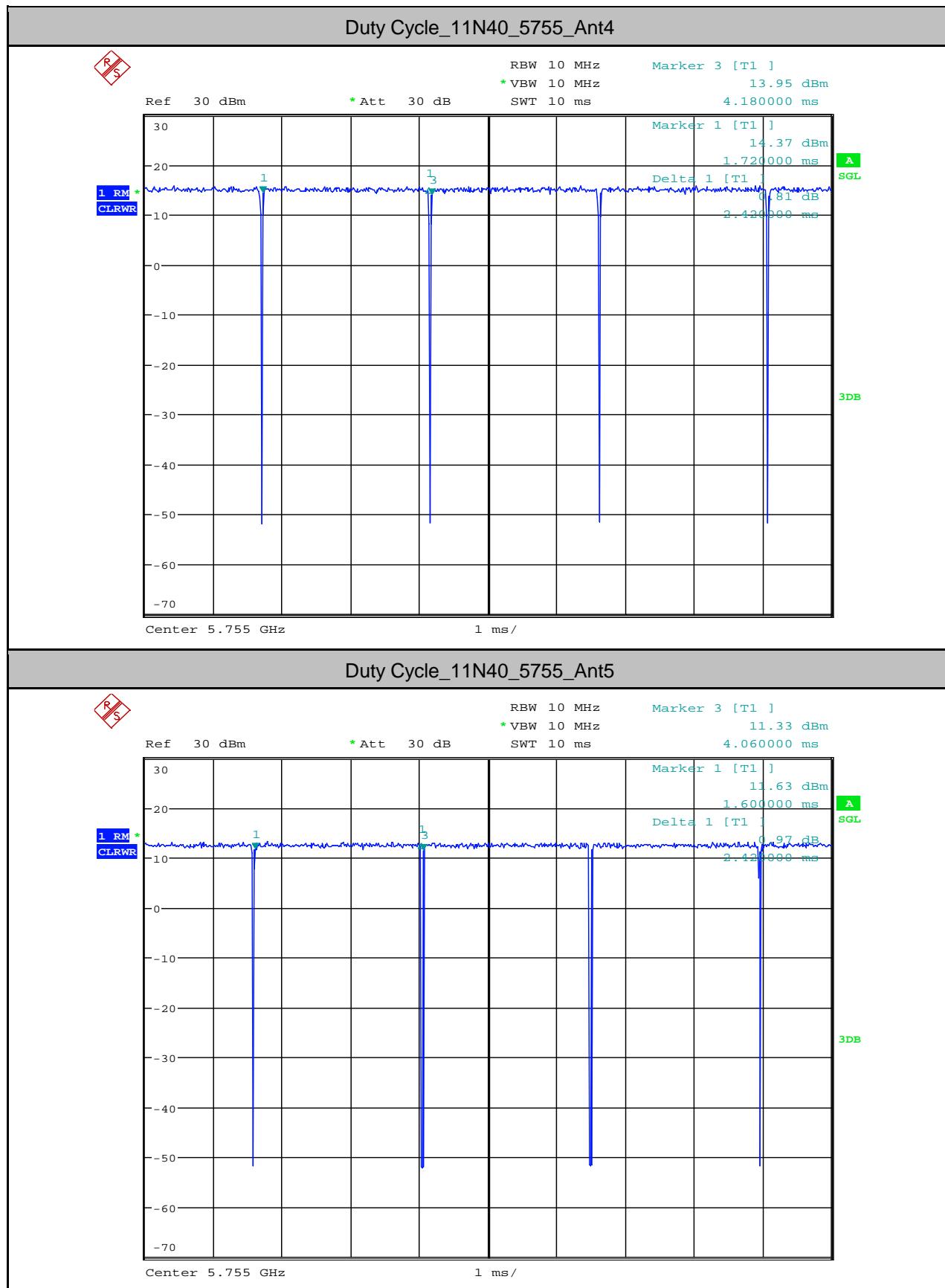


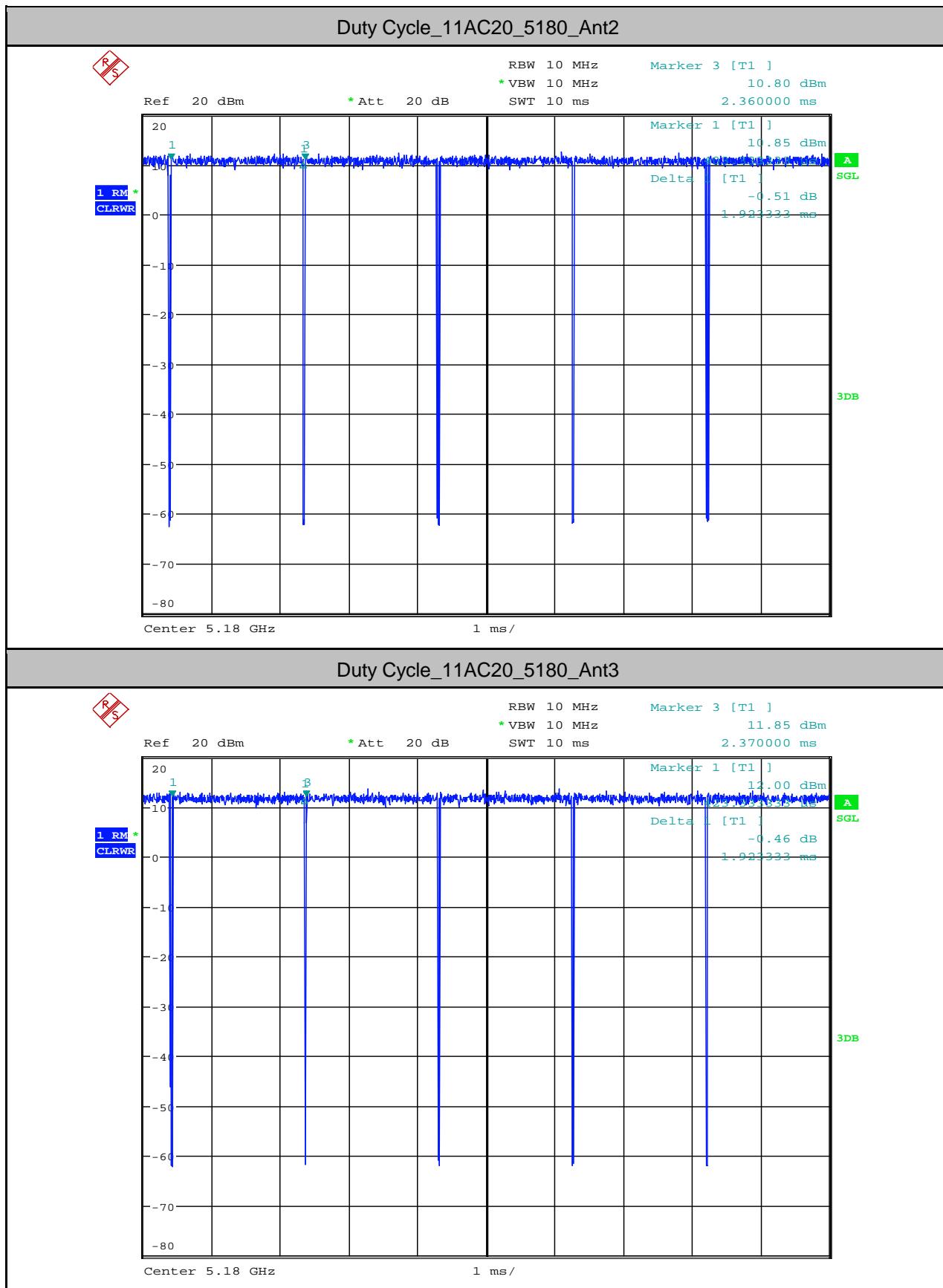
Duty Cycle_11N40_5755_Ant2

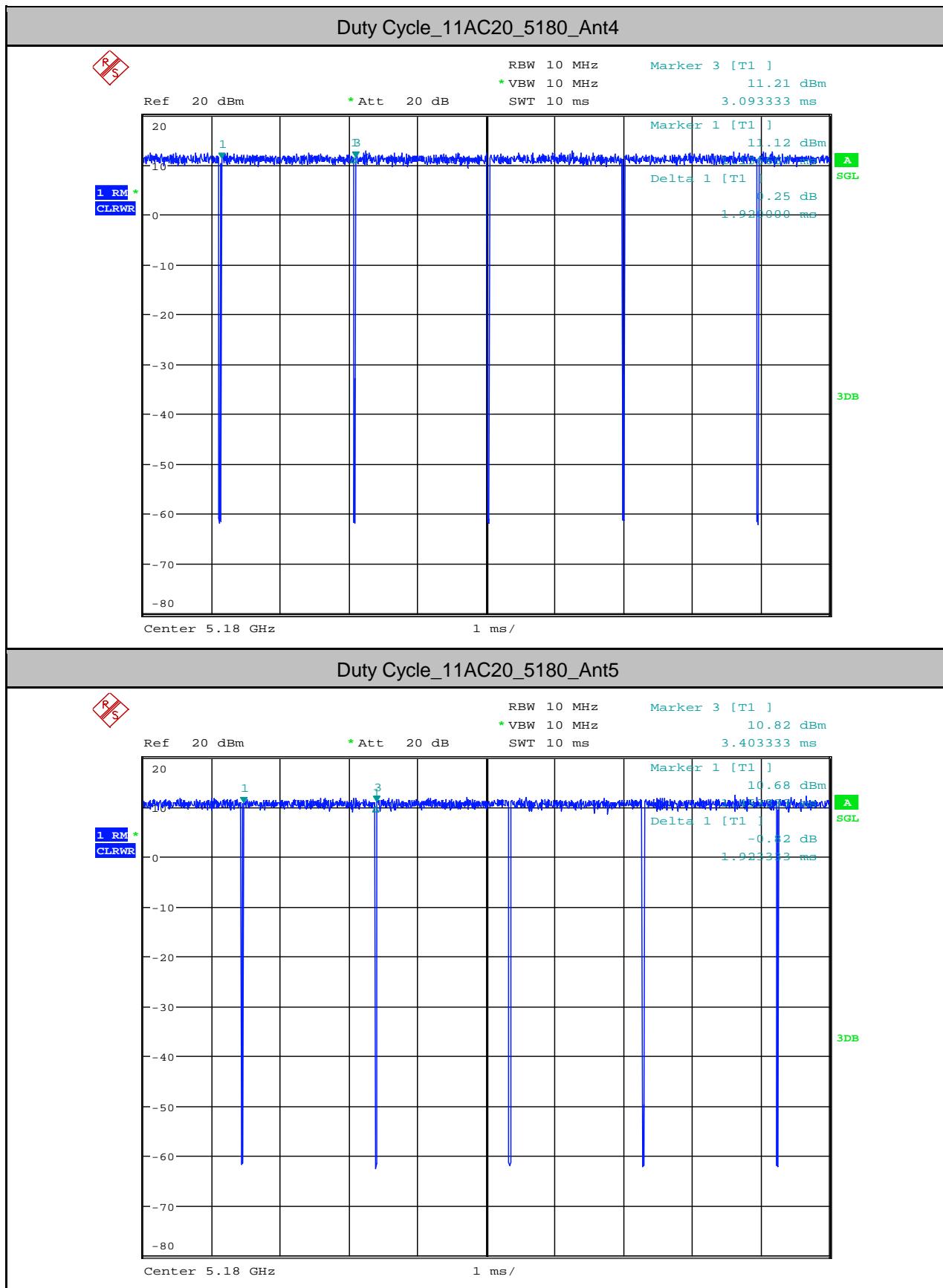


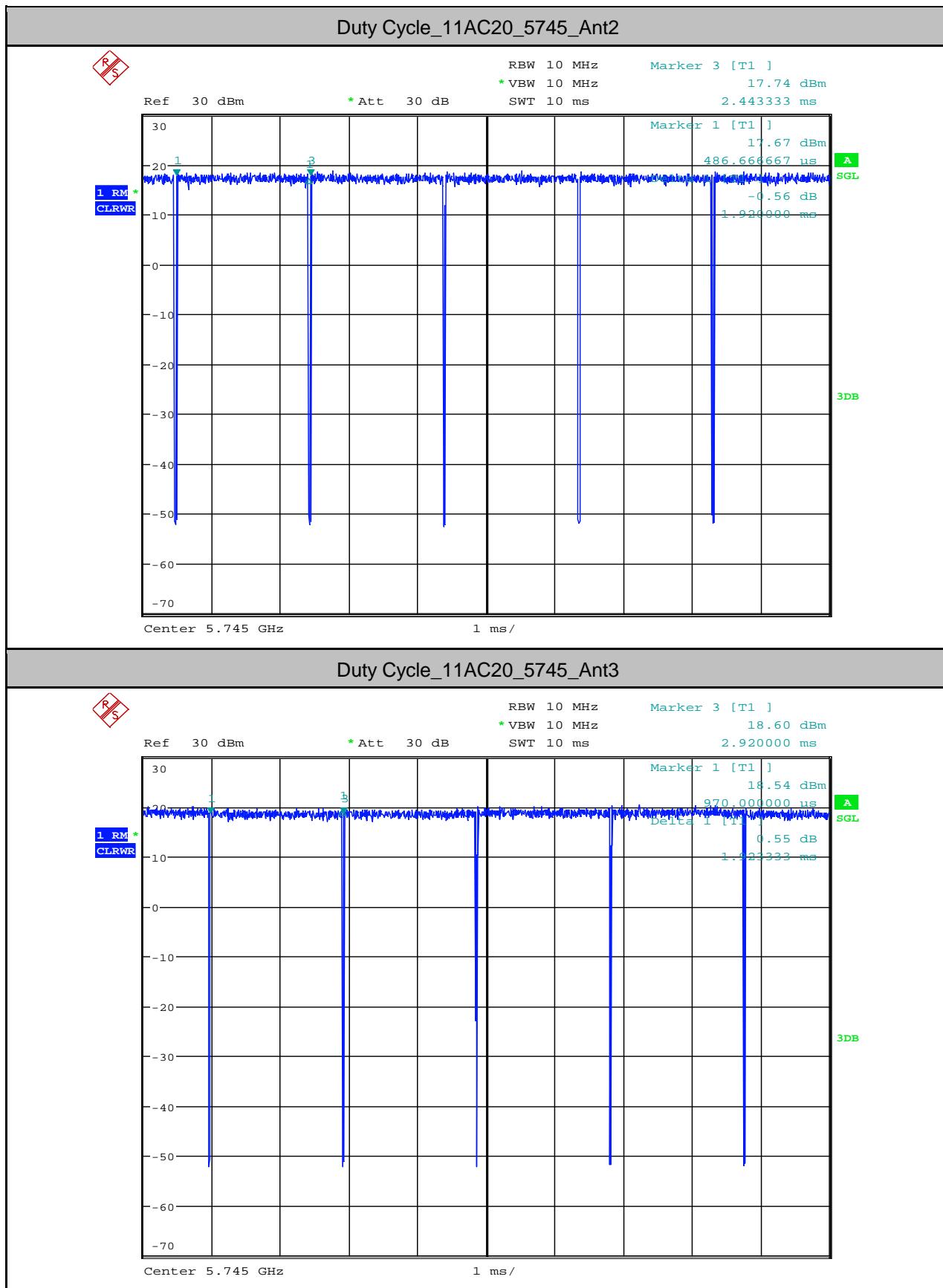
Duty Cycle_11N40_5755_Ant3



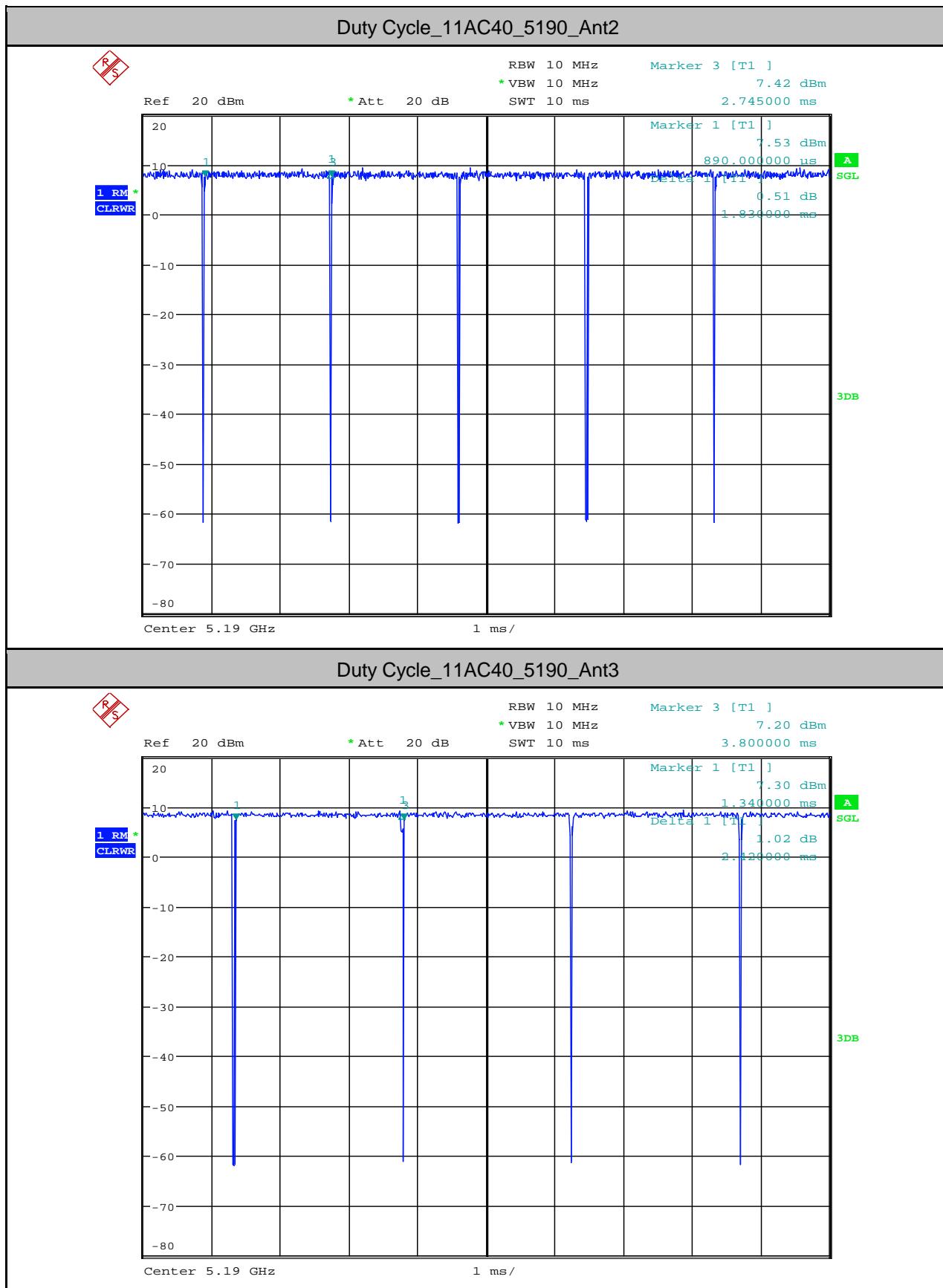






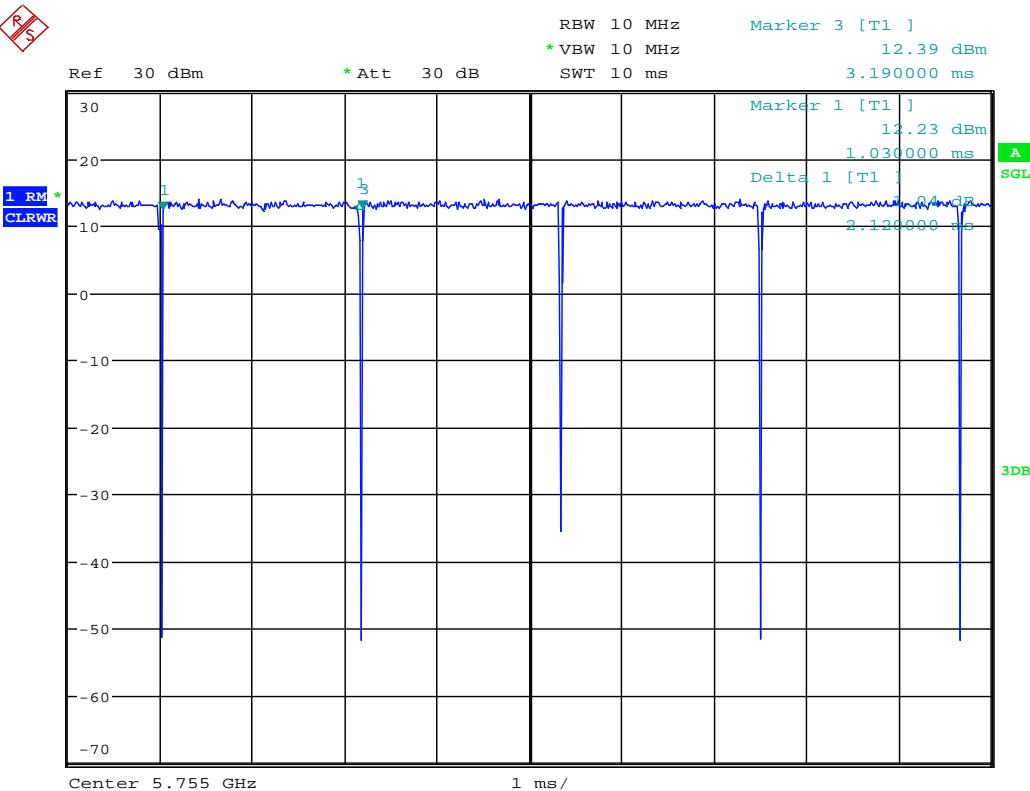




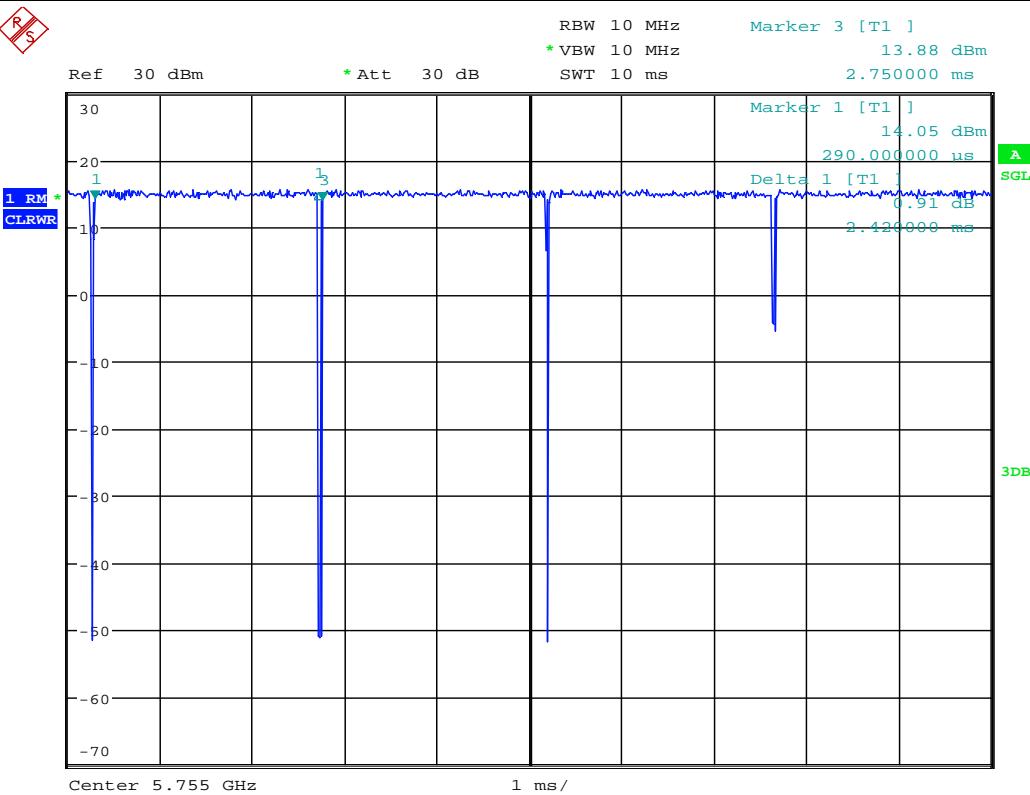


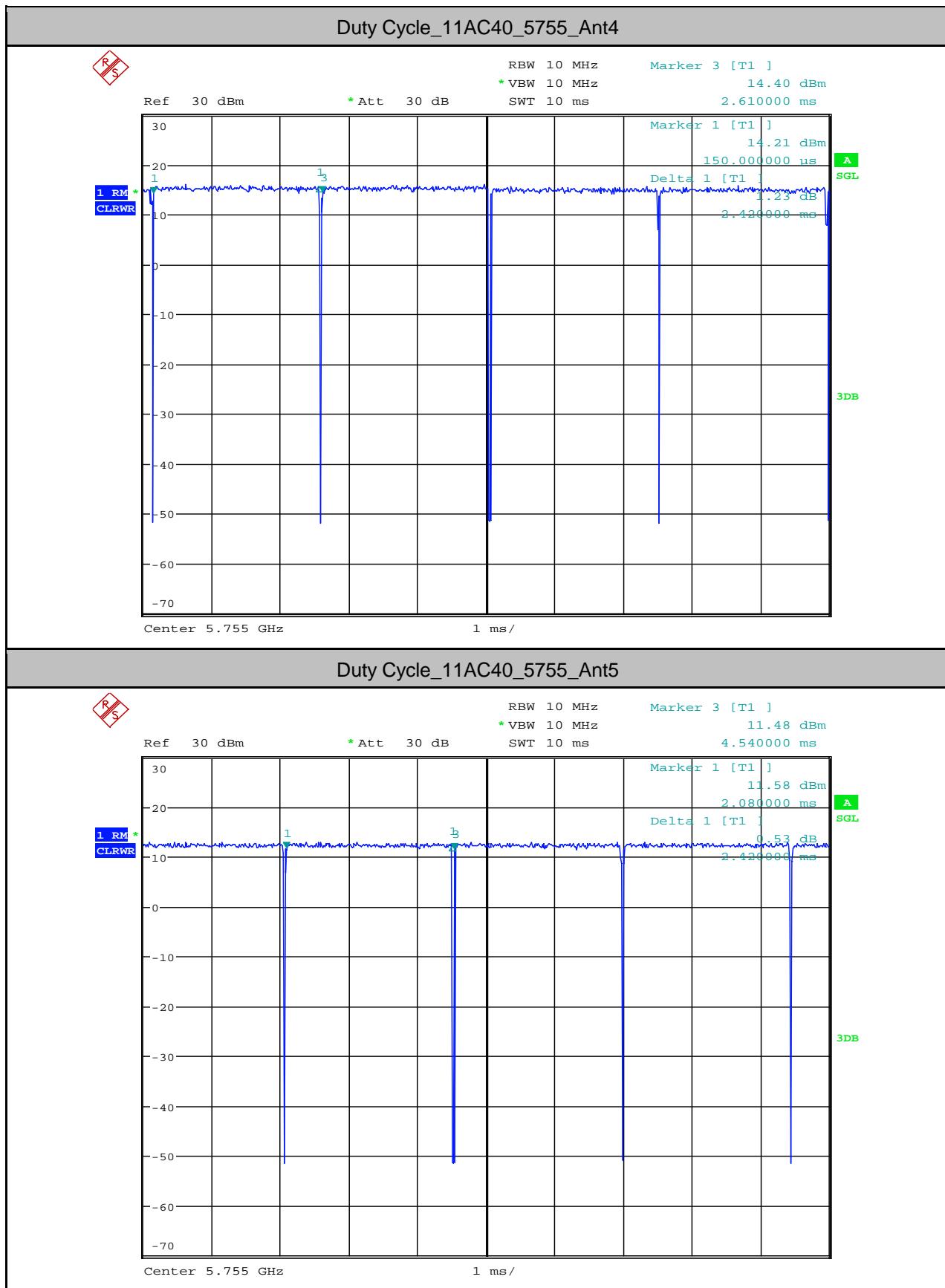


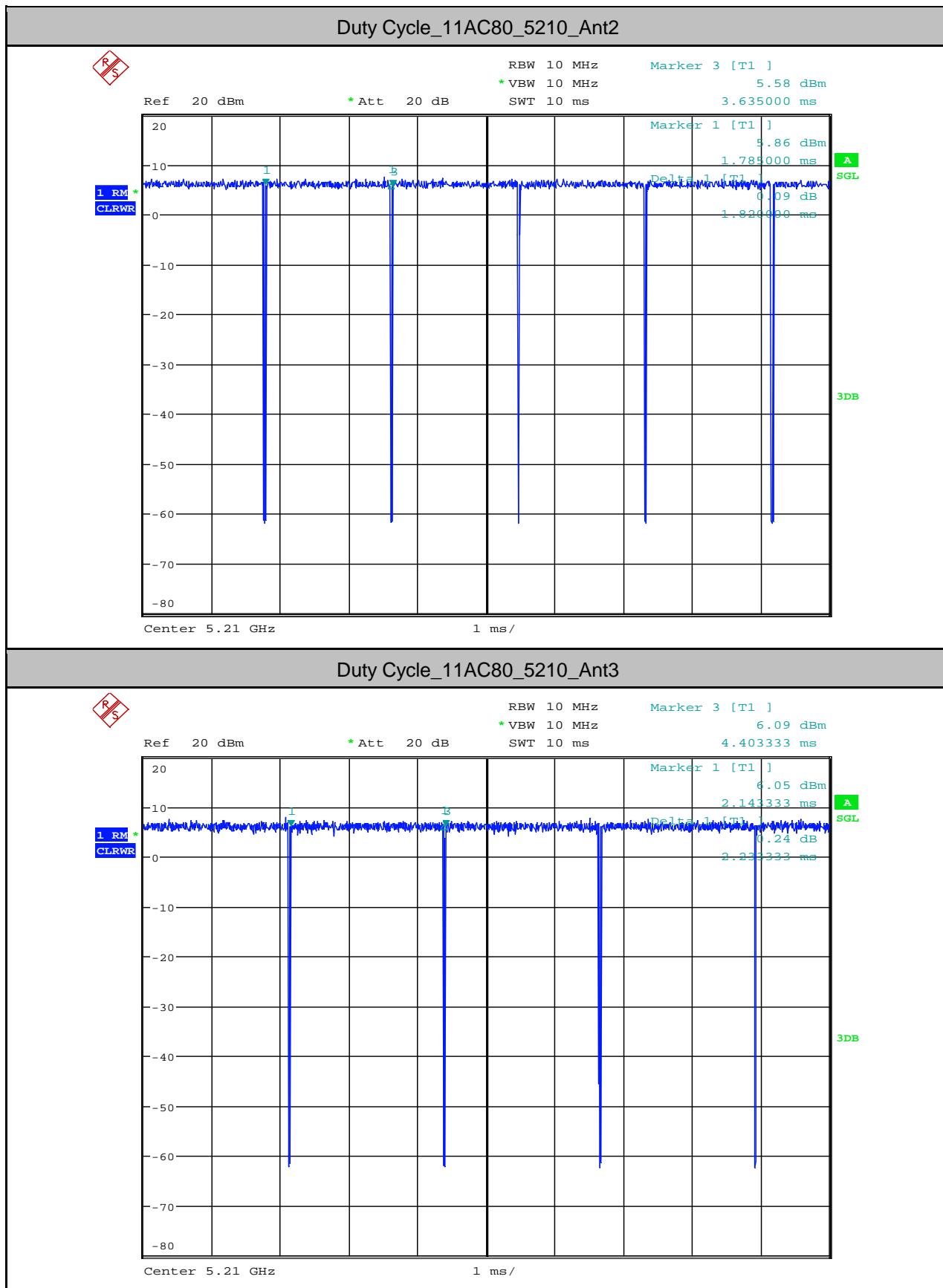
Duty Cycle_11AC40_5755_Ant2



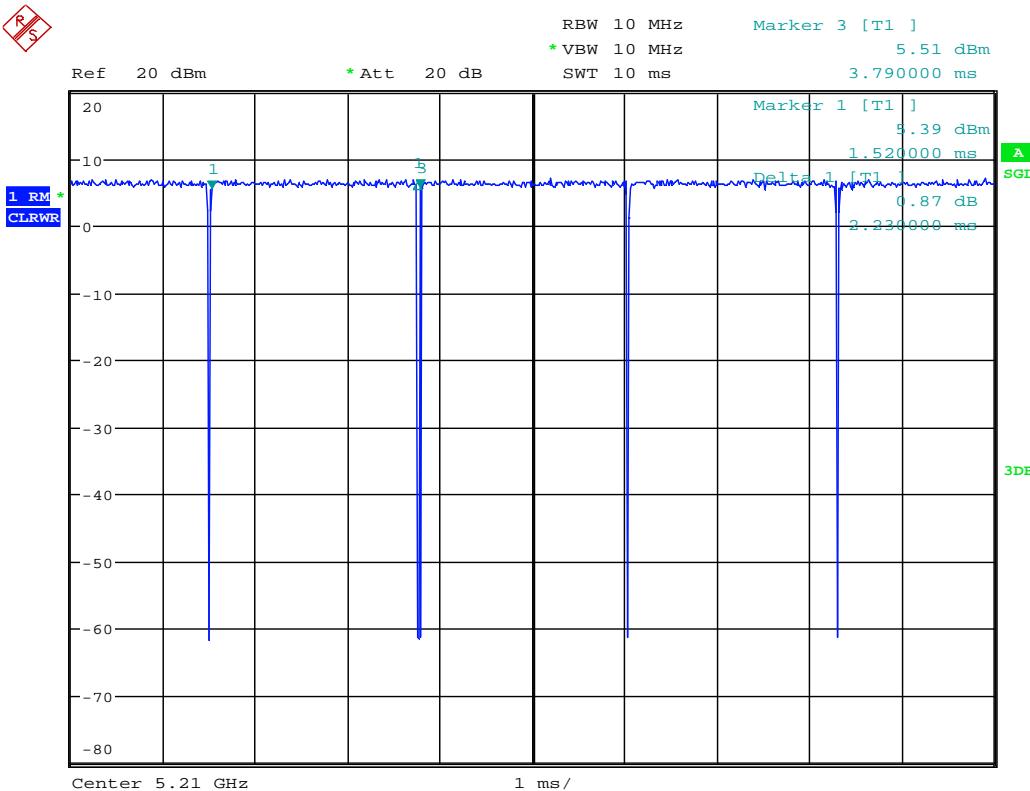
Duty Cycle_11AC40_5755_Ant3



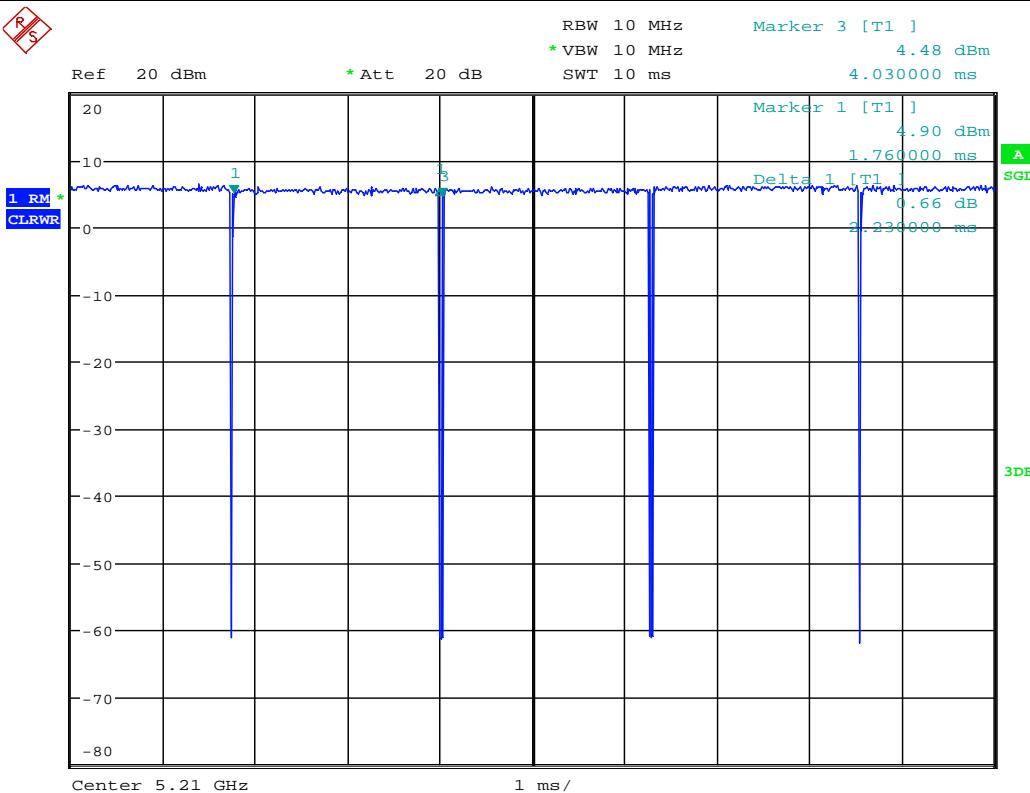


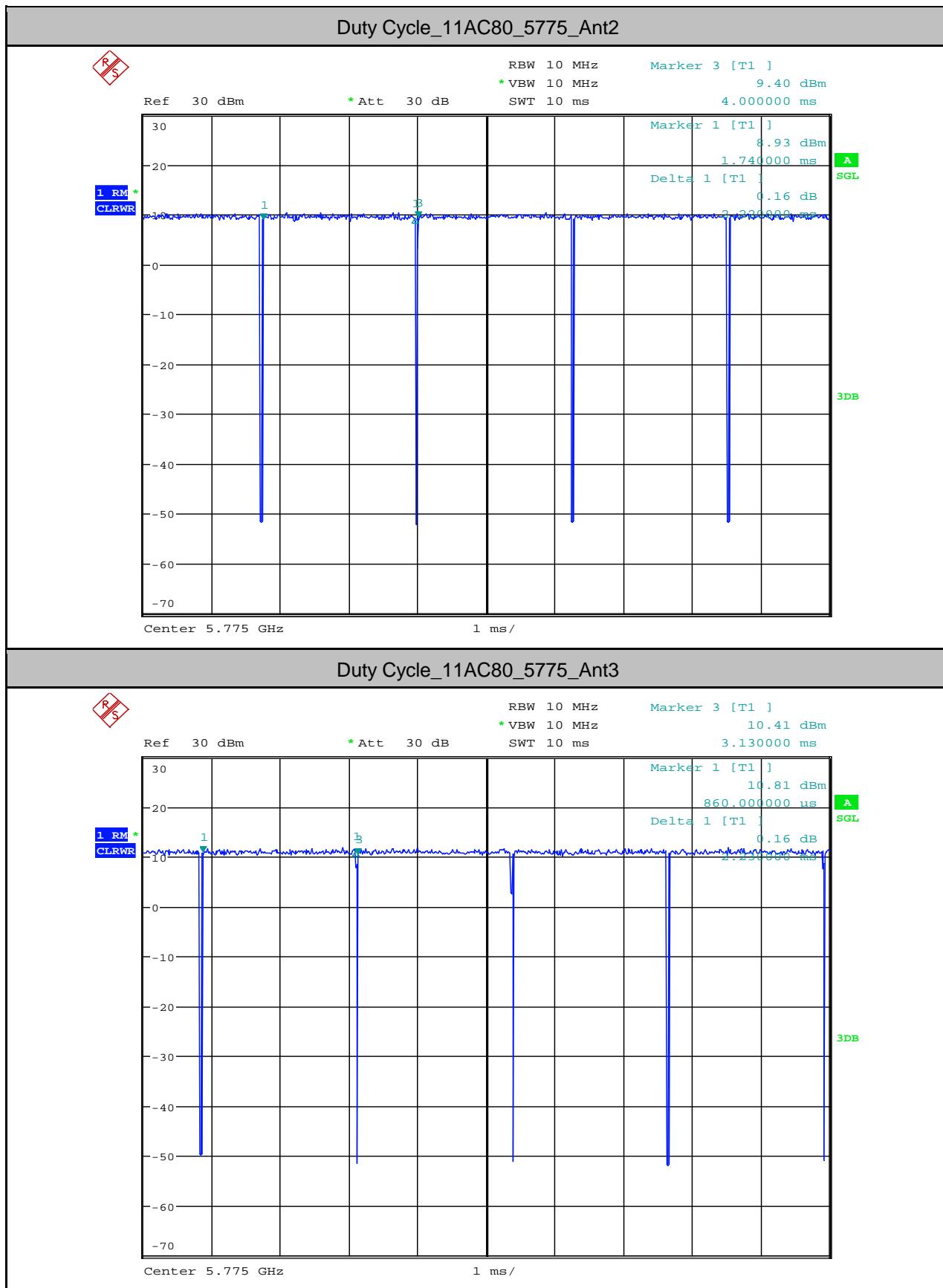


Duty Cycle_11AC80_5210_Ant4

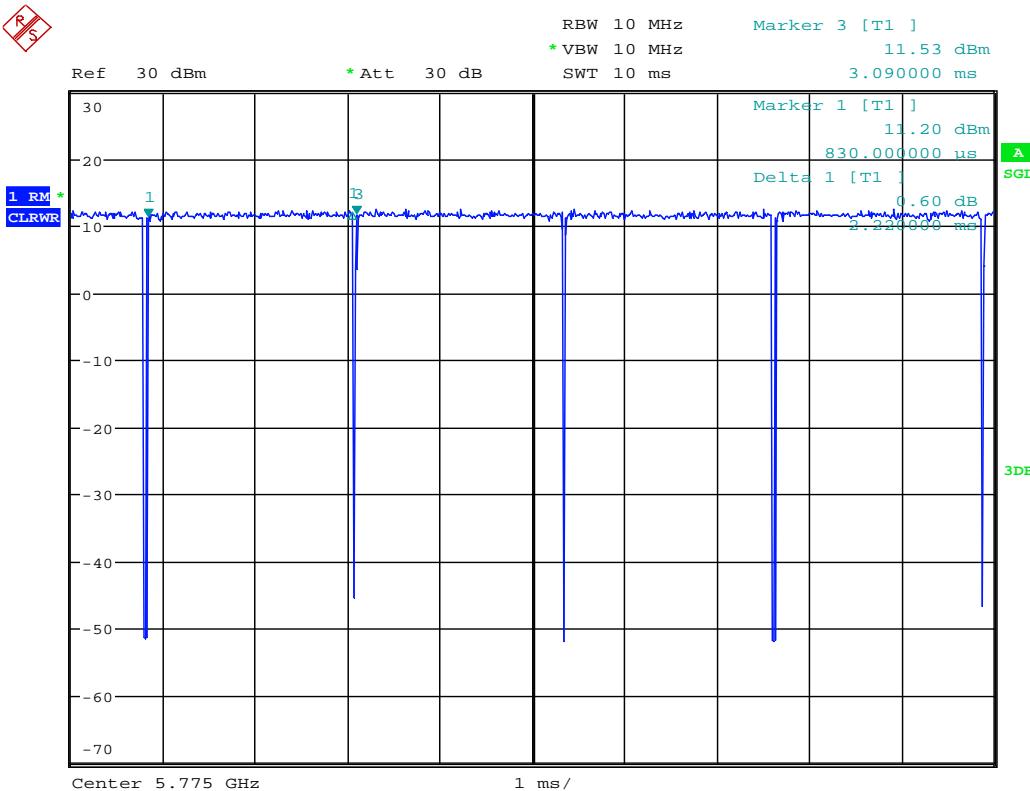


Duty Cycle_11AC80_5210_Ant5





Duty Cycle_11AC80_5775_Ant4



Duty Cycle_11AC80_5775_Ant5

