

802.11ac (VHT20) - Channel 52

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3515.625 PK	55.21	74	-18.79	-49.43	-48.89	6.09	-40.05
2	3525 AV	34.14	54	-19.86	-70.3	-70.15	6.09	-61.12
3	7012.5 PK	58.89	68.2	-9.31	-44.47	-46.77	6.09	-36.37
4	10534.375 PK	54.08	74	-19.92	-49.62	-51.05	6.09	-41.18
5	10525 AV	33.79	54	-20.21	-70.39	-70.76	6.09	-61.47
6	15782.75 PK	53.94	74	-20.06	-49.98	-50.91	6.09	-41.32
7	15797.125 AV	43.1	54	-10.9	-61.11	-61.41	6.09	-52.16

Note :

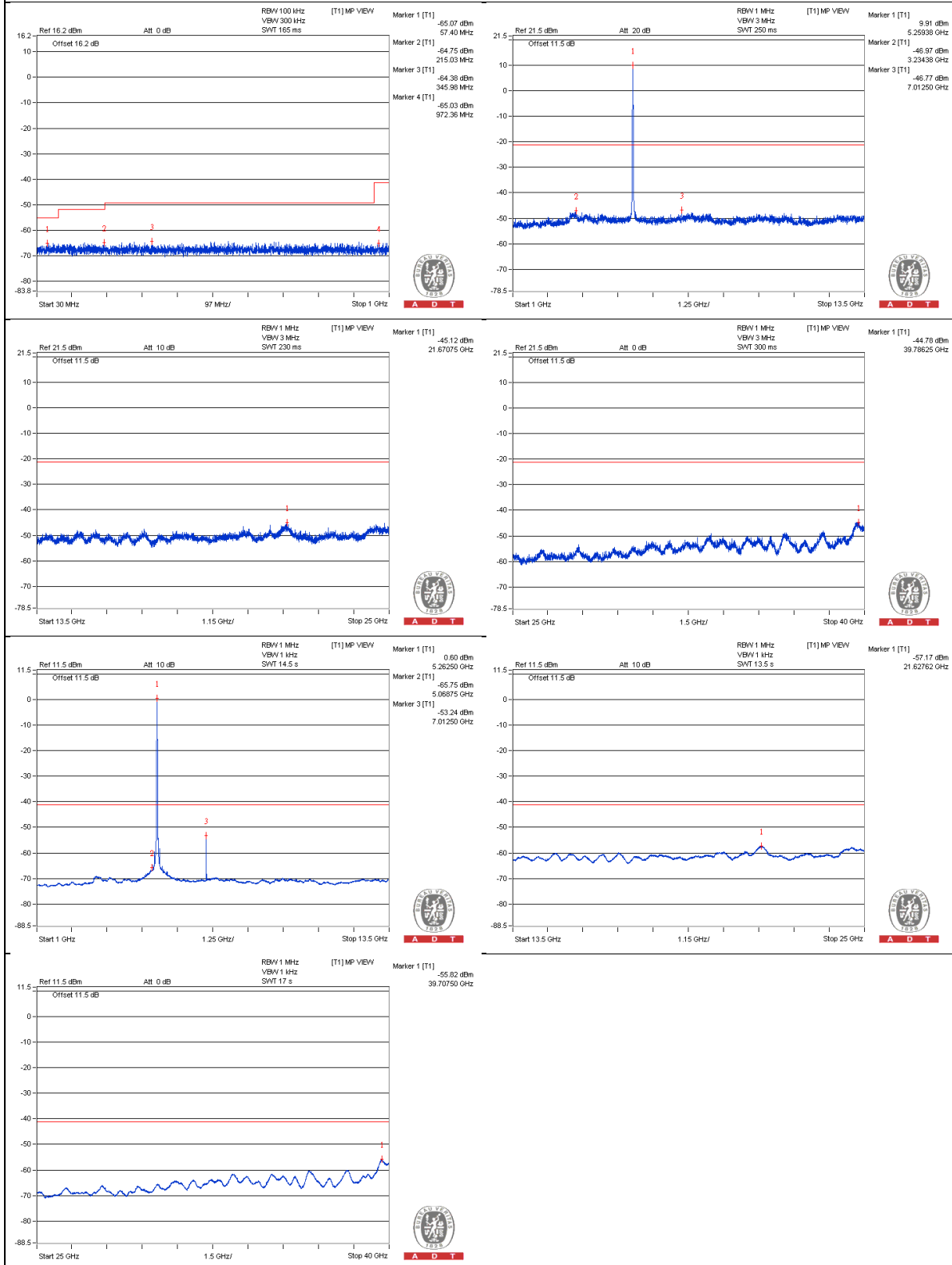
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT20) - Channel 60

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3528.125 PK	55.51	74	-18.49	-49.08	-48.64	6.09	-39.75
2	3550 AV	34.38	54	-19.62	-69.97	-70	6.09	-60.88
3	7068.75 PK	58.52	68.2	-9.68	-45.08	-46.76	6.09	-36.74
4	10606.25 PK	53.96	74	-20.04	-50.57	-50.24	6.09	-41.3
5	10603.125 AV	33.79	54	-20.21	-70.38	-70.76	6.09	-61.47
6	15903.5 PK	54.56	74	-19.44	-50.48	-49.21	6.09	-40.7
7	15880.5 AV	43.03	54	-10.97	-61.3	-61.36	6.09	-52.23

Note :

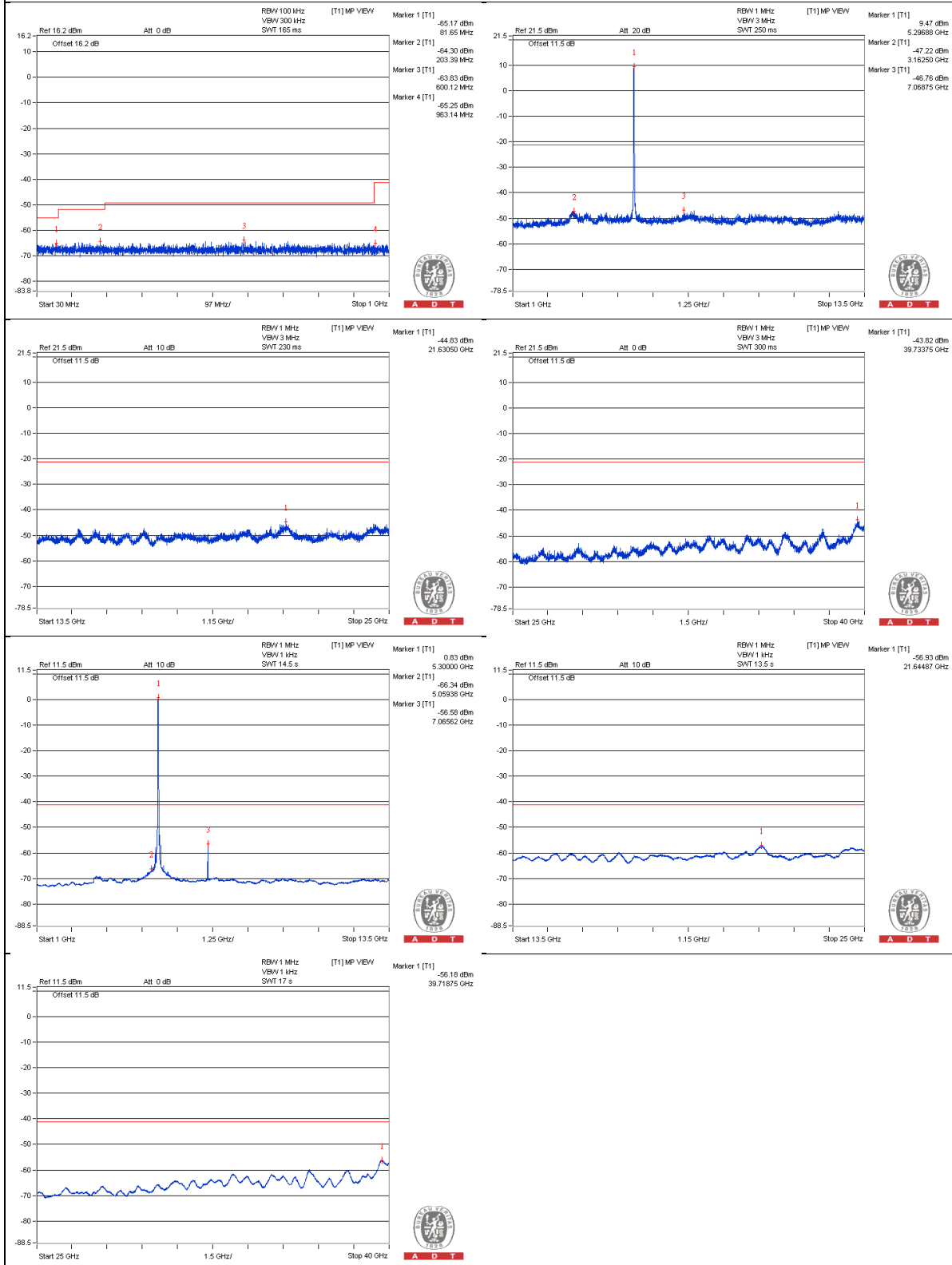
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT20) - Channel 64

Conducted spurious emission table

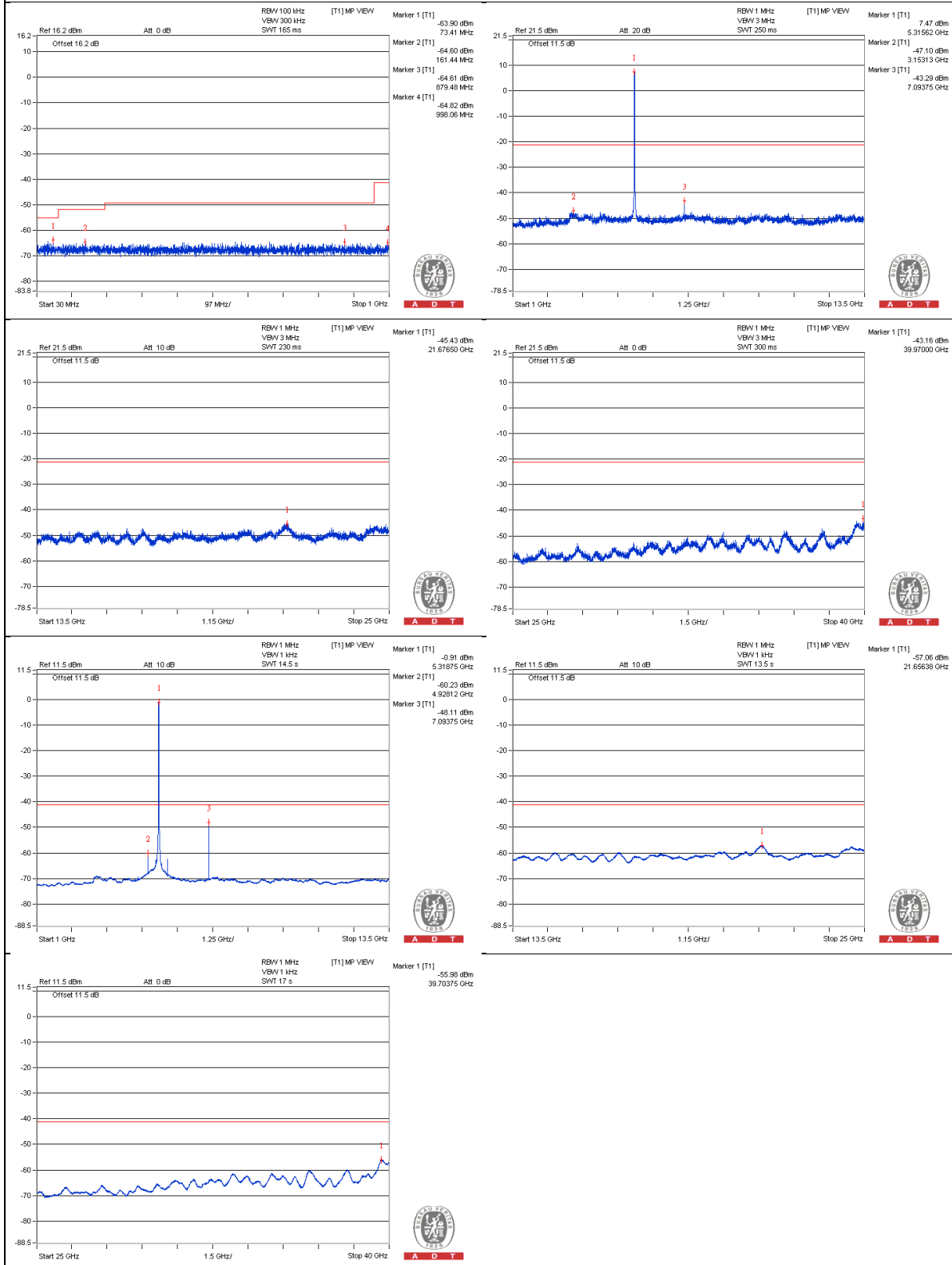
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3556.25 PK	55.33	74	-18.67	-48.21	-50.05	6.09	-39.93
2	3562.5 AV	34.42	54	-19.58	-69.92	-69.96	6.09	-60.84
3	7093.75 PK	59.24	68.2	-8.96	-43.29	-48.36	6.09	-36.02
4	10631.25 PK	54.47	74	-19.53	-50.4	-49.43	6.09	-40.79
5	10659.375 AV	33.58	54	-20.42	-70.79	-70.77	6.09	-61.68
6	15952.375 PK	53.44	74	-20.56	-50.37	-51.54	6.09	-41.82
7	15972.5 AV	42.37	54	-11.63	-61.82	-62.17	6.09	-52.89

Note :

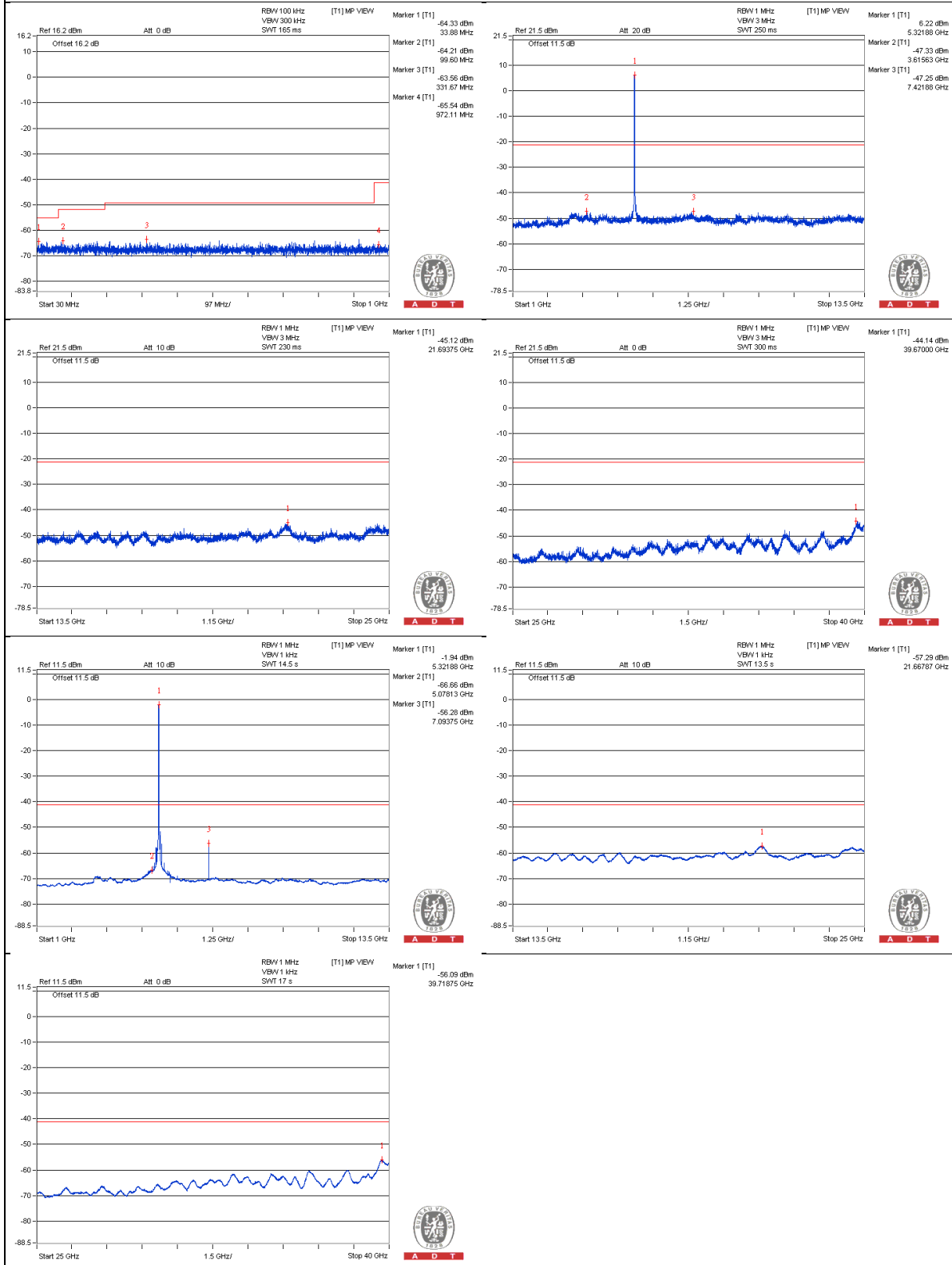
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



Bandedge table

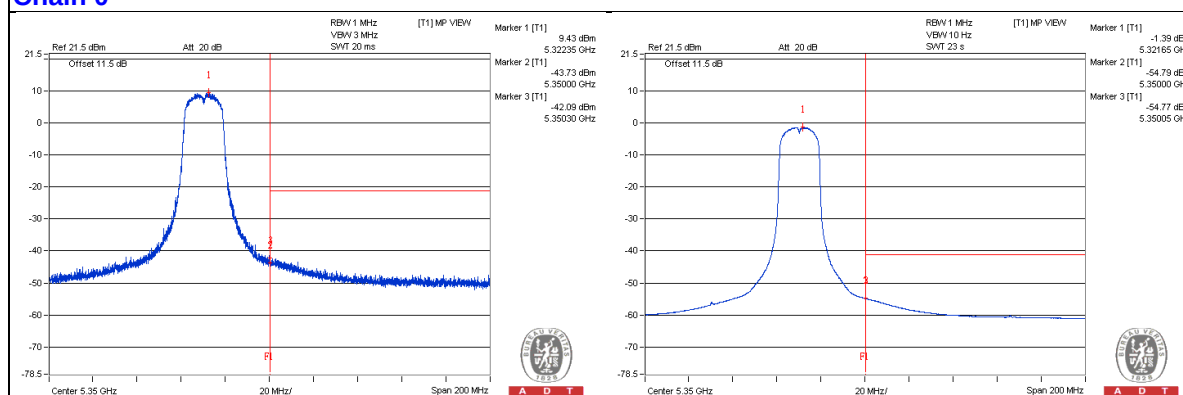
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	5351.45 PK	61.58	74	-12.42	-42.43	-43.17	6.09	-33.68
2	5368 AV	50.58	54	-3.42	-58.11	-51.65	6.09	-44.68

Note :

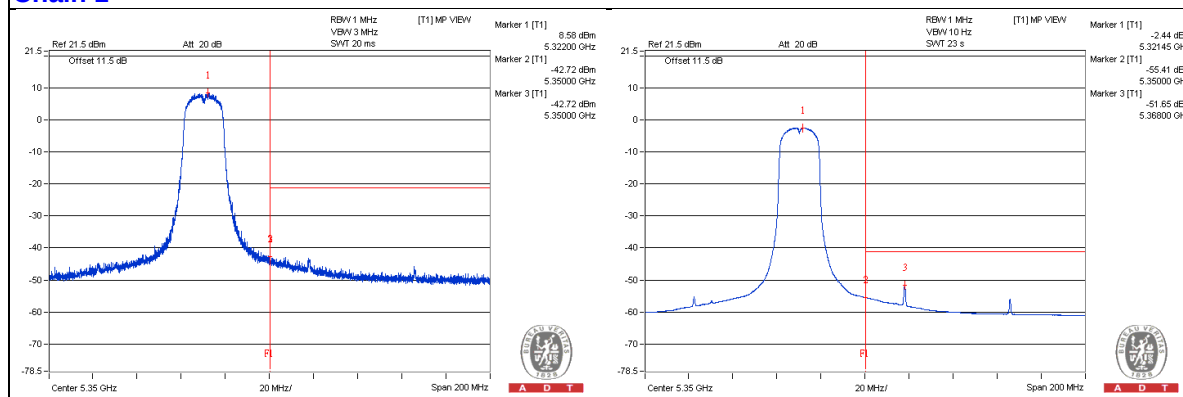
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT20) - Channel 100

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3656.25 PK	56.65	74	-17.35	-49.36	-49.43	7.77	-38.61
2	3653.125 AV	35.95	54	-18.05	-69.95	-70.24	7.77	-59.31
3	7334.375 PK	58.42	74	-15.58	-46.62	-48.93	7.77	-36.84
4	7334.375 AV	49.69	54	-4.31	-53.63	-65.27	7.77	-45.57
5	11018.75 PK	55.63	74	-18.37	-50.56	-50.27	7.77	-39.63
6	11000 AV	34.59	54	-19.41	-71.57	-71.33	7.77	-60.67
7	16501.5 PK	56.21	74	-17.79	-50	-49.66	7.77	-39.05
8	16481.375 AV	44.96	54	-9.04	-61.07	-61.09	7.77	-50.3

Note :

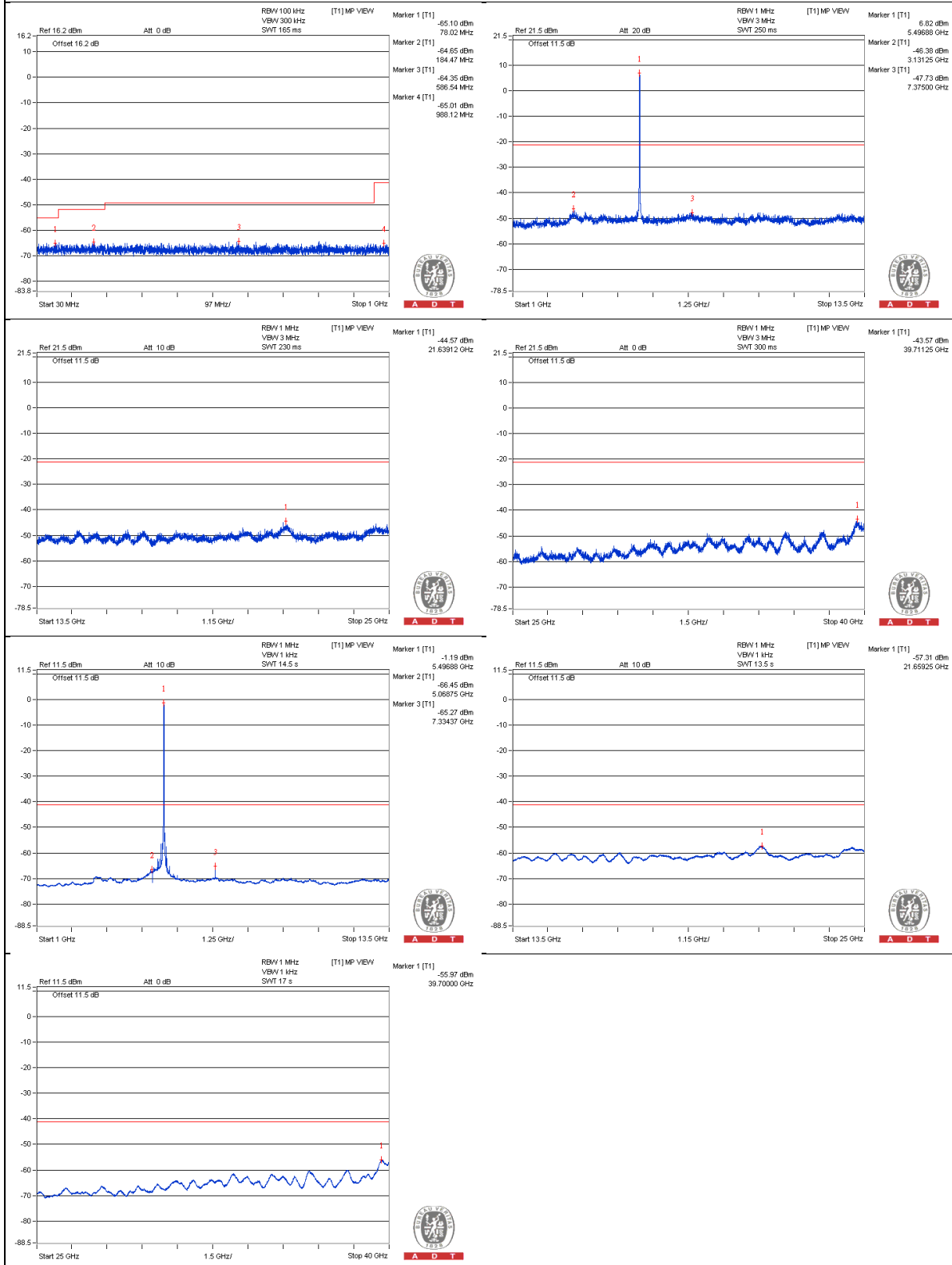
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



Bandedge table

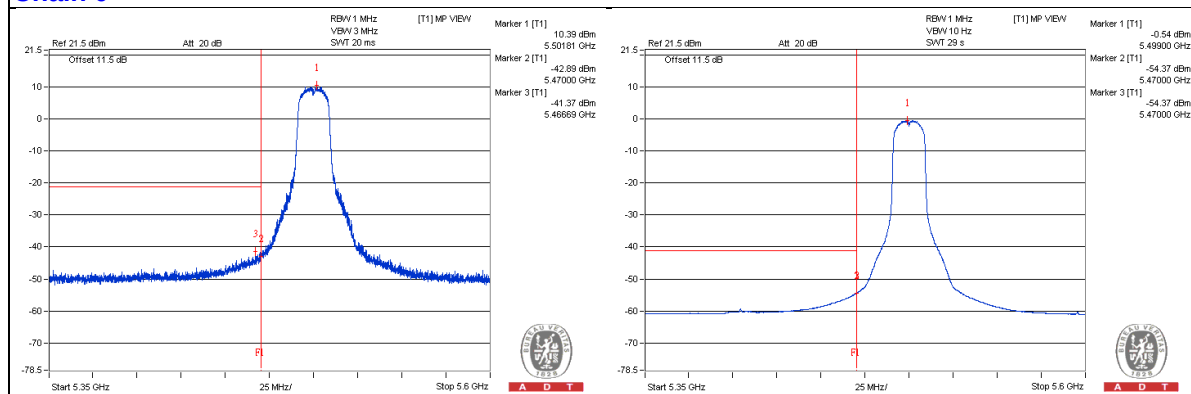
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	5469.1875 PK	63.31	74	-10.69	-42.23	-43.29	7.77	-31.95
2	5470 AV	51.02	54	-2.98	-54.37	-55.79	7.77	-44.24

Note :

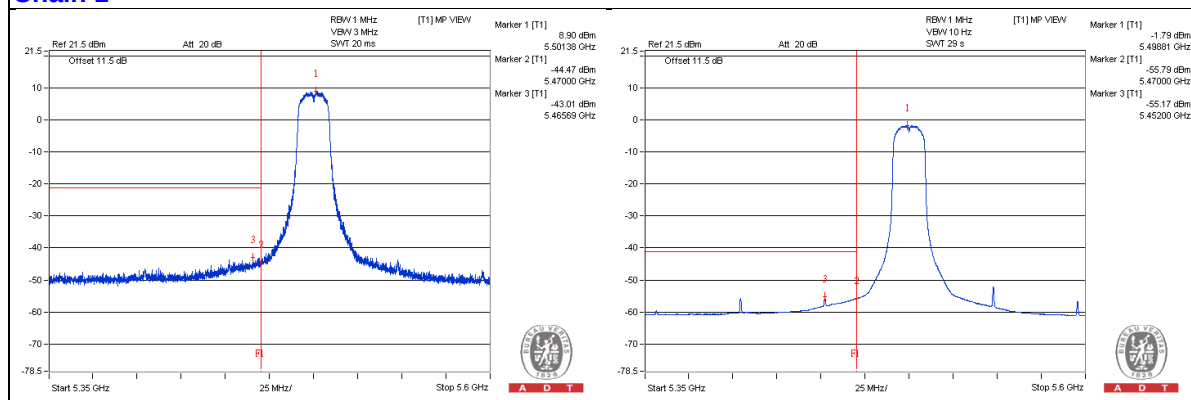
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT20) - Channel 116

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3718.75 PK	57.18	74	-16.82	-48.6	-49.14	7.77	-38.08
2	3728.125 AV	35.83	54	-18.17	-70.25	-70.18	7.77	-59.43
3	7428.125 PK	57.12	74	-16.88	-47.98	-50.12	7.77	-38.14
4	7440.625 AV	44.92	54	-9.08	-58.49	-68.89	7.77	-50.34
5	11159.375 PK	56.22	74	-17.78	-48.55	-51.63	7.77	-39.04
6	11159.375 AV	34.73	54	-19.27	-71.45	-71.18	7.77	-60.53
7	16754.5 PK	54.99	74	-19.01	-51.36	-50.77	7.77	-40.27
8	16748.75 AV	43.89	54	-10.11	-62.08	-62.23	7.77	-51.37

Note :

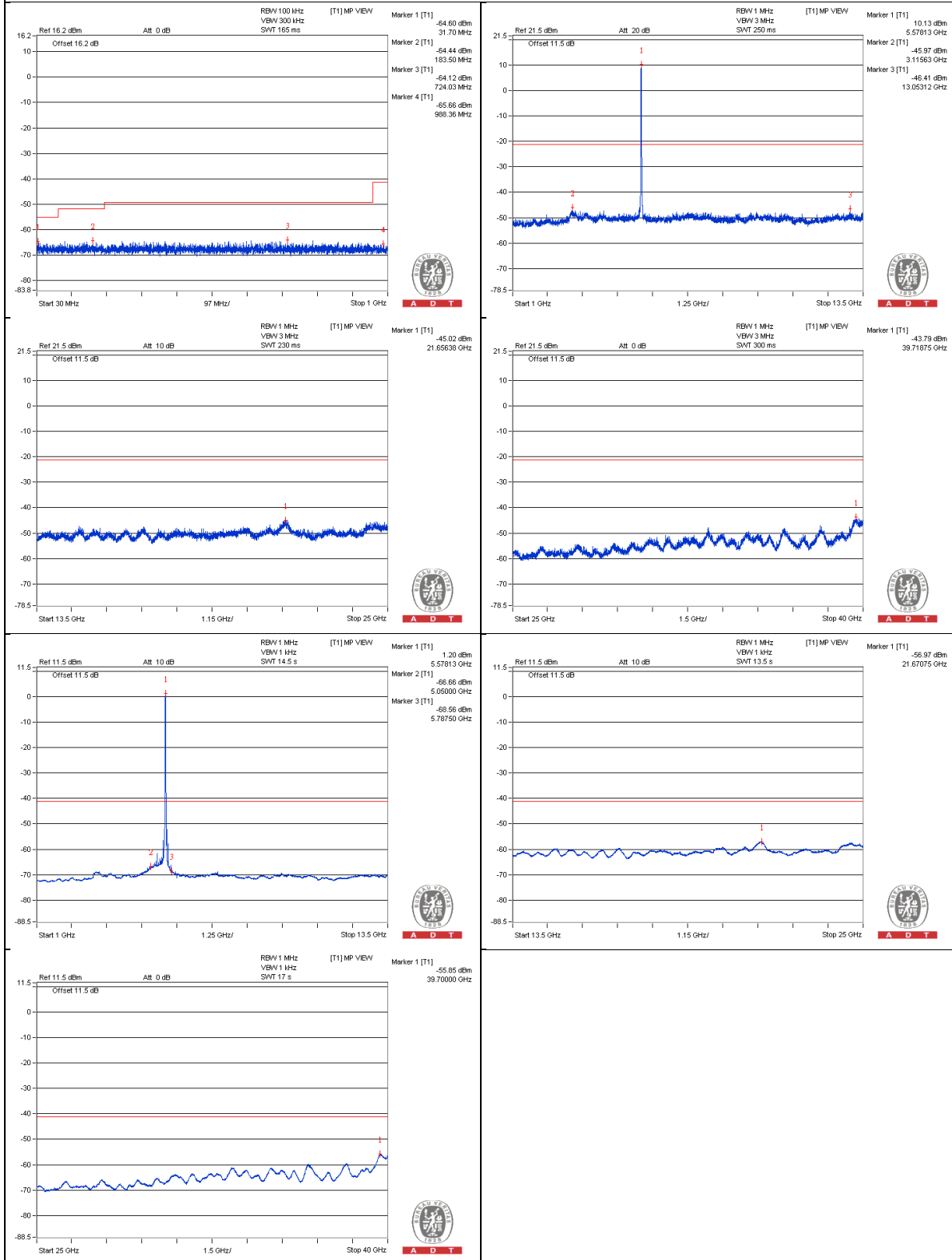
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



Bandedge table

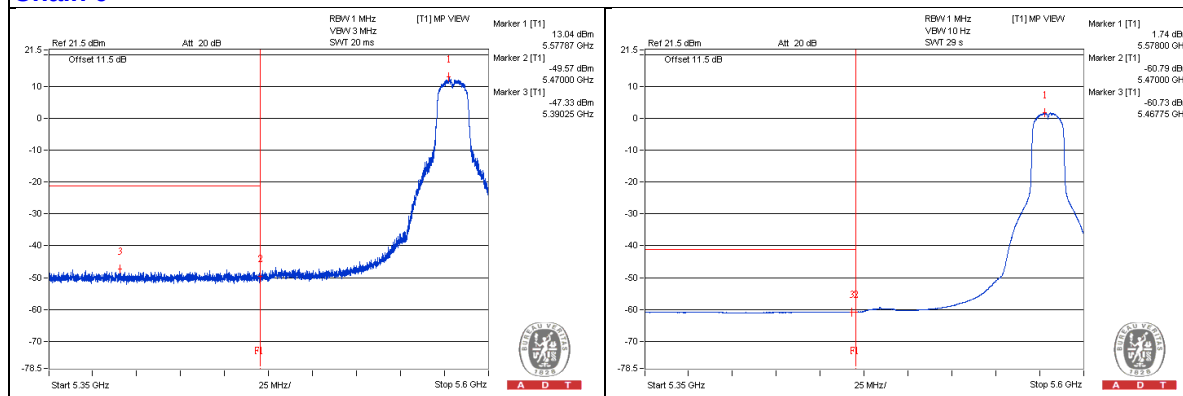
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	5385.5 PK	58.29	74	-15.71	-48.2	-47.34	7.77	-36.97
2	5436 AV	45.82	54	-8.18	-60.91	-59.63	7.77	-49.44

Note :

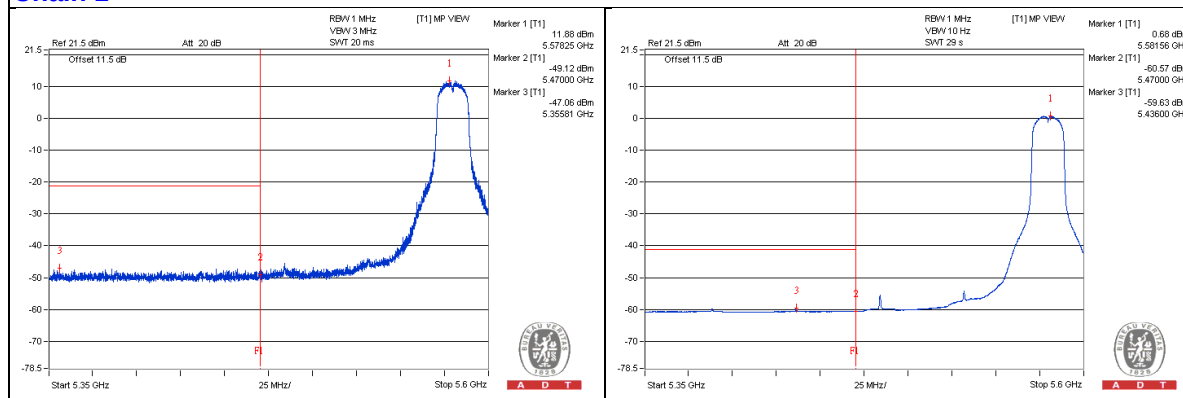
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT20) - Channel 140

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3787.5 PK	56.26	74	-17.74	-49.31	-50.3	7.77	-39
2	3784.375 AV	35.29	54	-18.71	-70.87	-70.64	7.77	-59.97
3	7600 PK	56.59	74	-17.41	-49.93	-49.02	7.77	-38.67
4	7600 AV	40.29	54	-13.71	-63.5	-70.68	7.77	-54.97
5	11412.5 PK	55.08	74	-18.92	-50.46	-51.52	7.77	-40.18
6	11390.625 AV	34.36	54	-19.64	-71.59	-71.77	7.77	-60.9
7	17082.25 PK	55.97	74	-18.03	-49.8	-50.36	7.77	-39.29
8	17090.875 AV	44.67	54	-9.33	-61.44	-61.31	7.77	-50.59

Note :

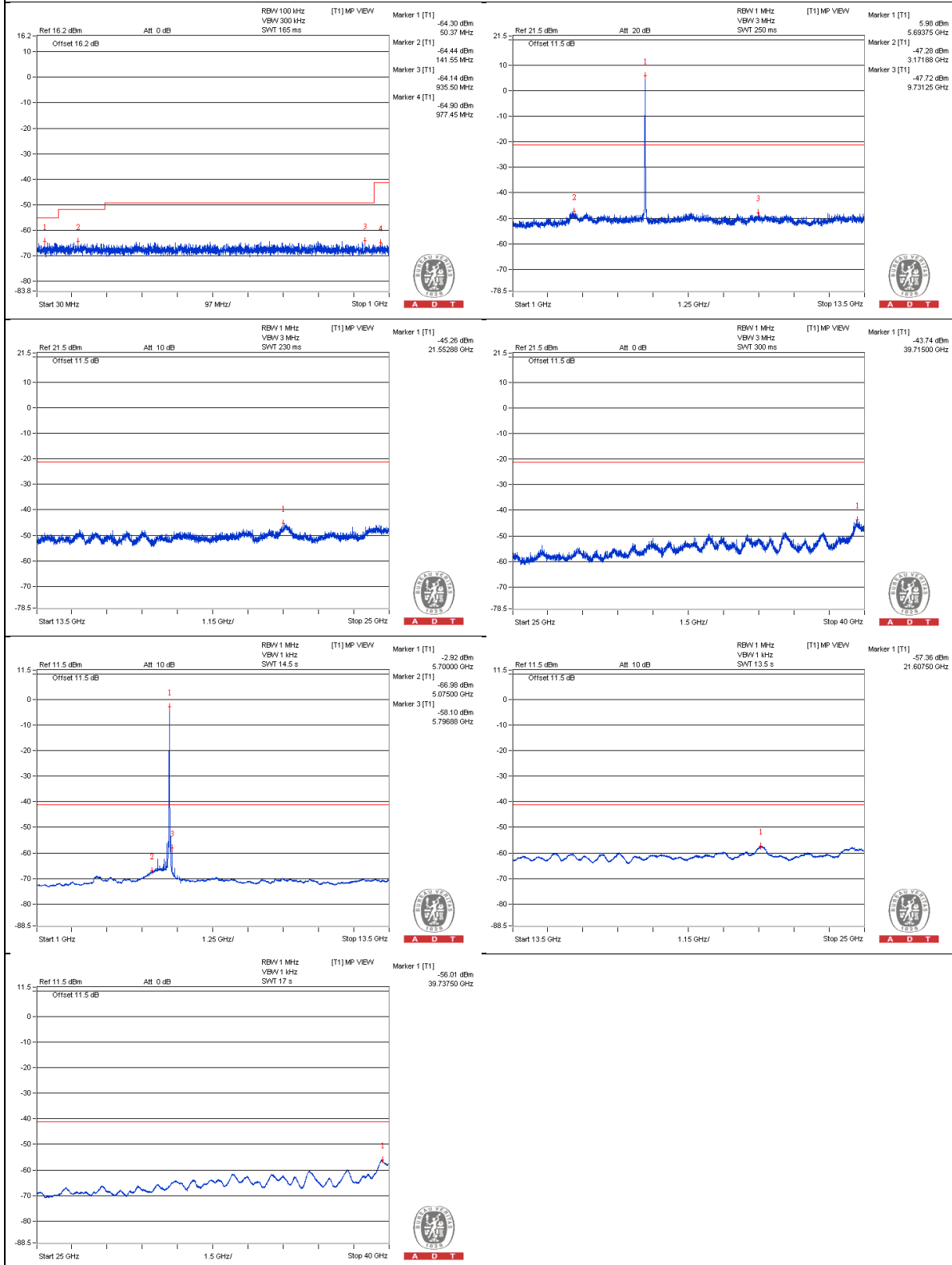
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



Bandedge table

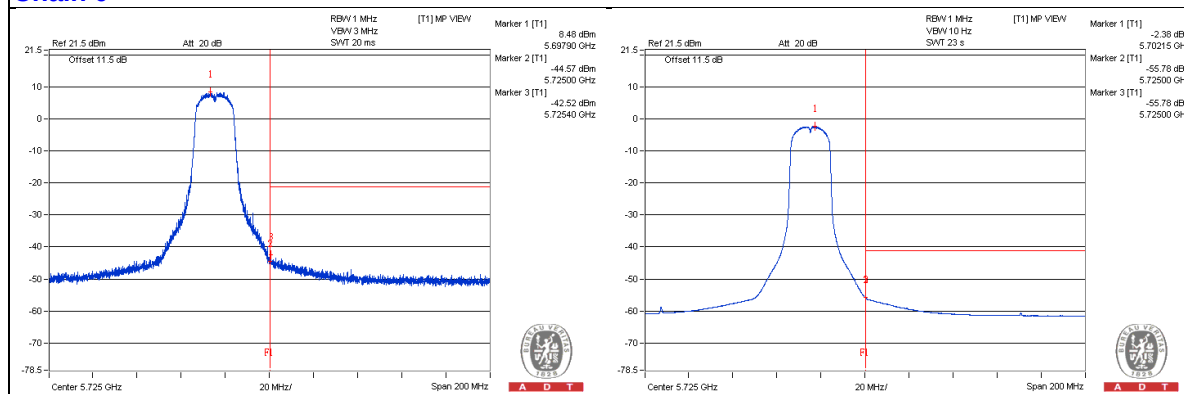
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	5725.5 PK	62.84	74	-11.16	-43.22	-43.19	7.77	-32.42
2	5747.95 AV	51.12	54	-2.88	-59.85	-52.67	7.77	-44.14

Note :

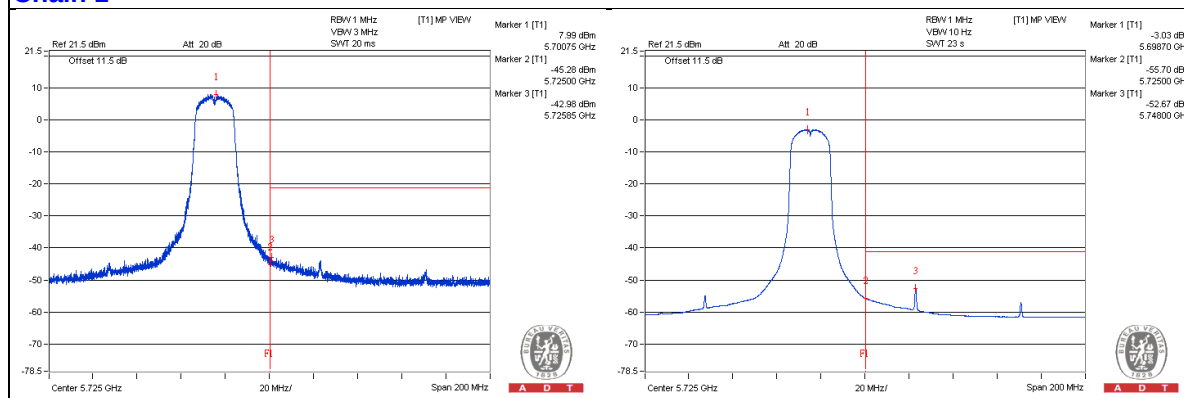
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT20) - Channel 144

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3800 PK	55.65	74	-18.35	-51.35	-49.6	7.77	-39.61
2	3793.75 AV	34.55	54	-19.45	-71.43	-71.56	7.77	-60.71
3	7640.625 PK	56.23	74	-17.77	-48.89	-50.99	7.77	-39.03
4	7628.125 AV	35.83	54	-18.17	-69.29	-71.38	7.77	-59.43
5	11450 PK	55.27	74	-18.73	-50.13	-51.51	7.77	-39.99
6	11440.625 AV	33.77	54	-20.23	-72.5	-72.06	7.77	-61.49
7	17148.375 PK	54.25	74	-19.75	-51.8	-51.79	7.77	-41.01
8	17145.5 AV	43.33	54	-10.67	-62.76	-62.66	7.77	-51.93

Note :

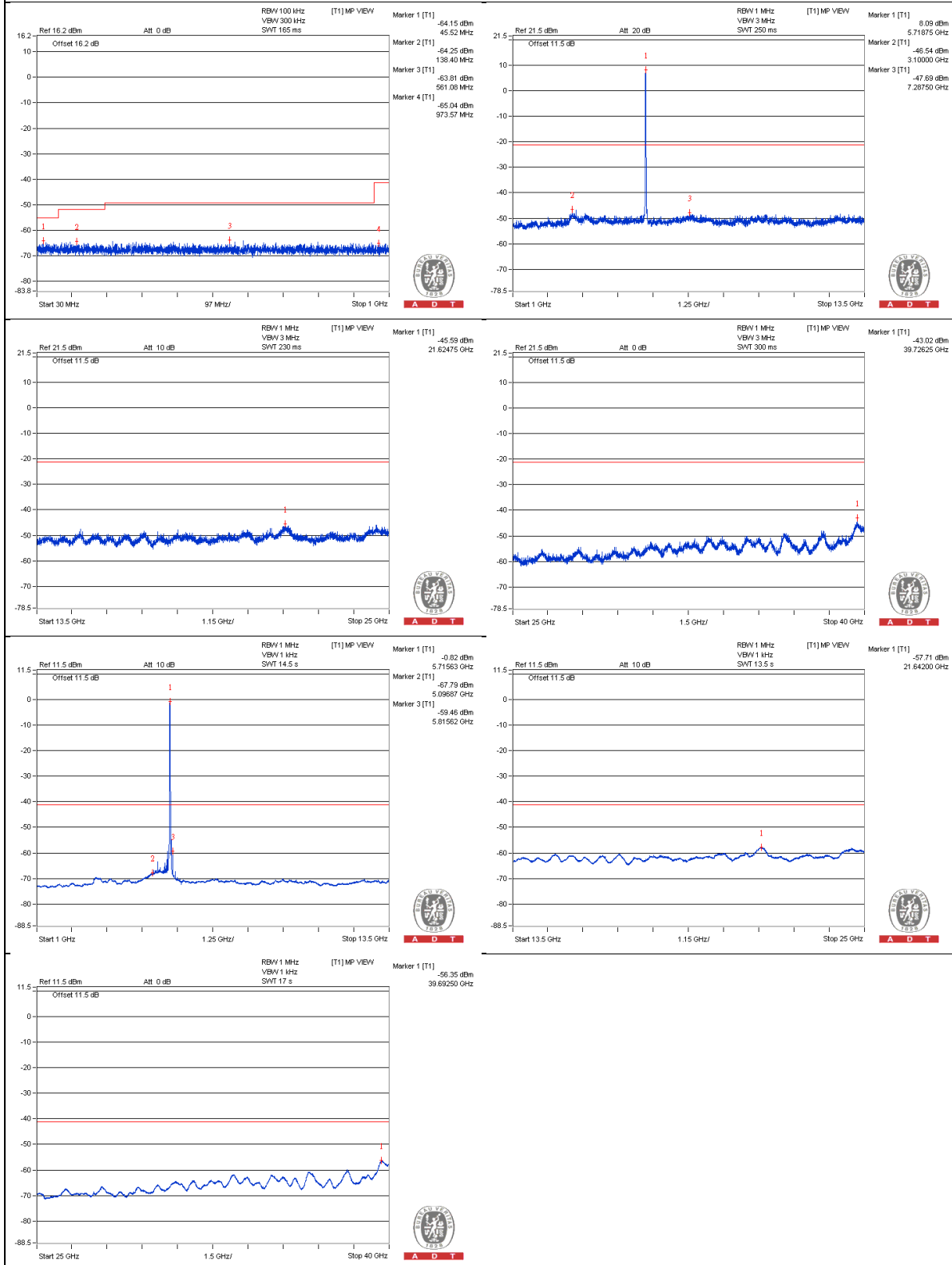
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



Bandedge table

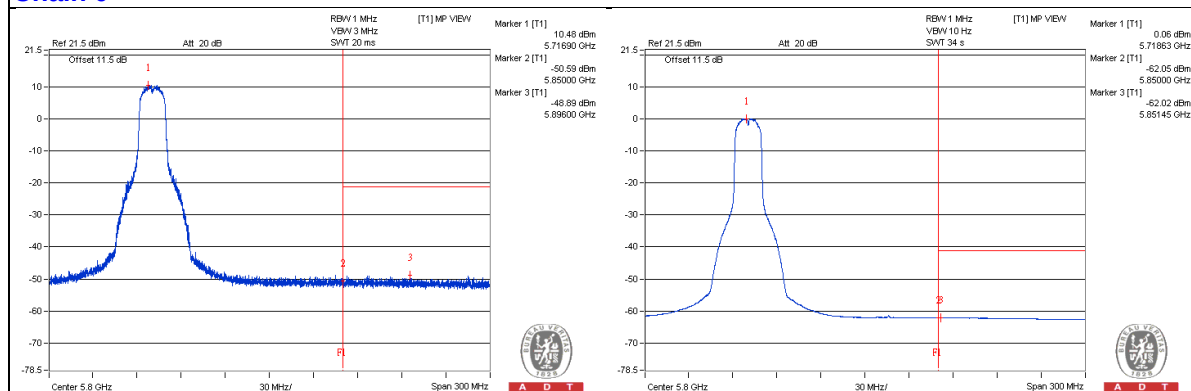
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	5838.325 PK	56.47	74	-17.53	-50.25	-48.98	7.77	-38.79
2	5912.05 AV	44.07	54	-9.93	-62.35	-61.63	7.77	-51.19

Note :

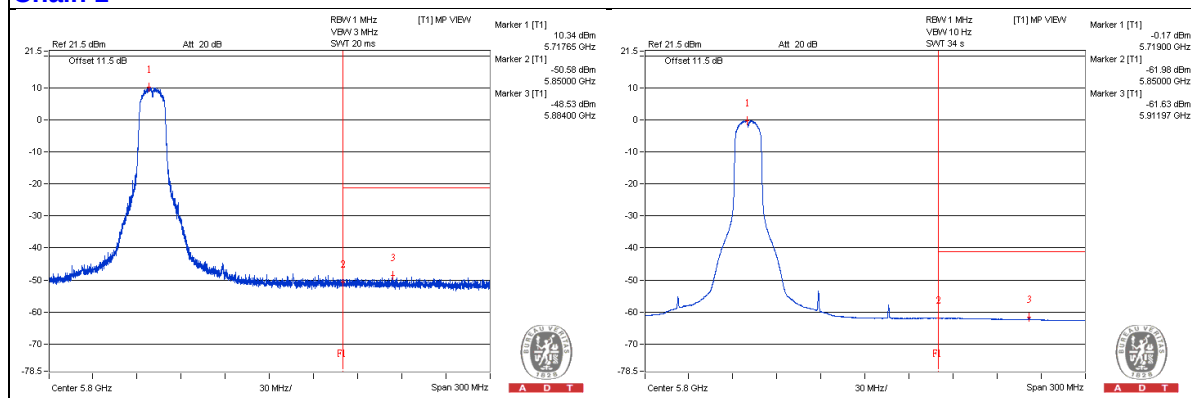
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT20) - Channel 149

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3831.25 PK	56.2	74	-17.8	-50.54	-49.24	7.77	-39.06
2	3831.25 AV	35.59	54	-18.41	-70.45	-70.46	7.77	-59.67
3	7659.375 PK	56.41	74	-17.59	-49.48	-49.79	7.77	-38.85
4	7659.375 AV	38.57	54	-15.43	-66.12	-69.44	7.77	-56.69
5	11490.625 PK	55.85	74	-18.15	-51.09	-49.44	7.77	-39.41
6	11490.625 AV	35.59	54	-18.41	-70.91	-70.03	7.77	-59.67
7	17234.625 PK	54.57	74	-19.43	-52.21	-50.83	7.77	-40.69
8	17234.625 AV	43.66	54	-10.34	-62.41	-62.35	7.77	-51.6

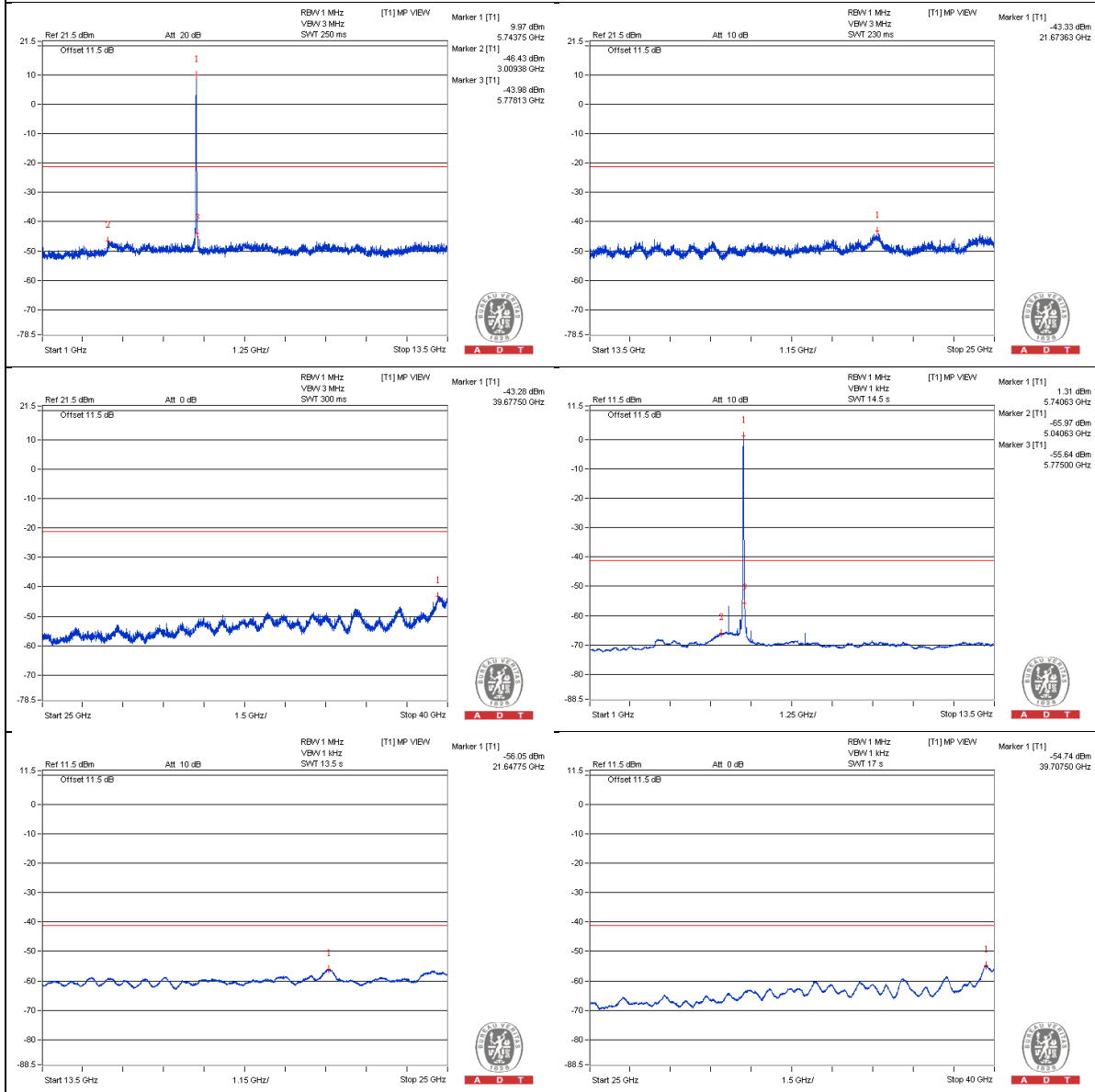
Note :

Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

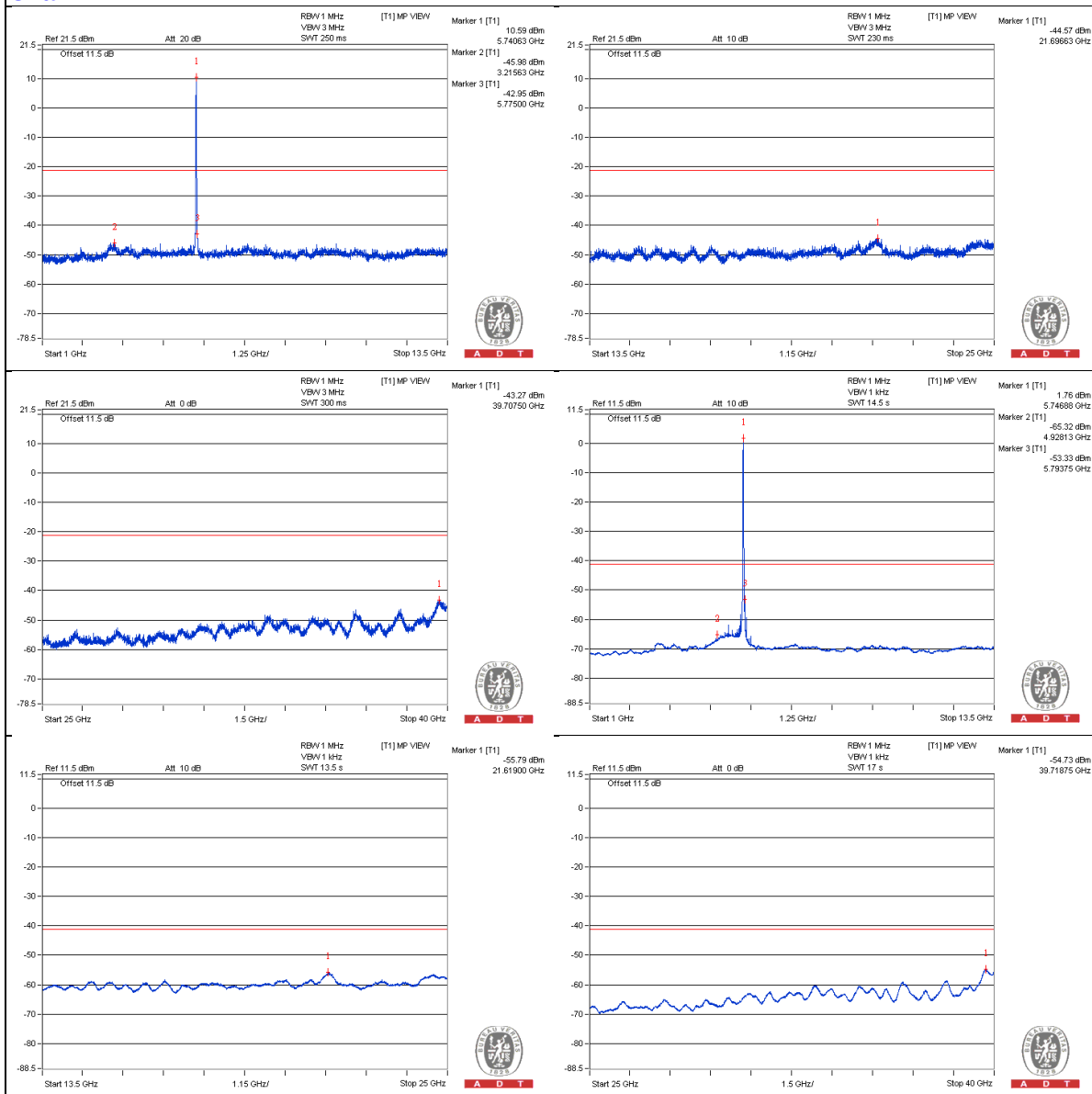
d = measurement distance in 3 meters.

✧ Bandedge spurious emission refer to *Annex A - Conducted Out of Band Emission (OOBE) Measurement (For U-NII-3 band)* item.

Chain 0



Chain 1



802.11ac (VHT20) - Channel 157

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3856.25 PK	55.25	74	-18.75	-50.49	-51.12	7.77	-40.01
2	3856.25 AV	35.46	54	-18.54	-70.6	-70.56	7.77	-59.8
3	7712.5 PK	56.75	74	-17.25	-48.96	-49.64	7.77	-38.51
4	7712.5 AV	37.83	54	-16.17	-67.46	-69.11	7.77	-57.43
5	11568.75 PK	55.04	74	-18.96	-51.34	-50.68	7.77	-40.22
6	11571.875 AV	35.46	54	-18.54	-71.4	-69.89	7.77	-59.8
7	17355.375 PK	54.57	74	-19.43	-51.78	-51.19	7.77	-40.69
8	17355.375 AV	43.93	54	-10.07	-62.12	-62.11	7.77	-51.33

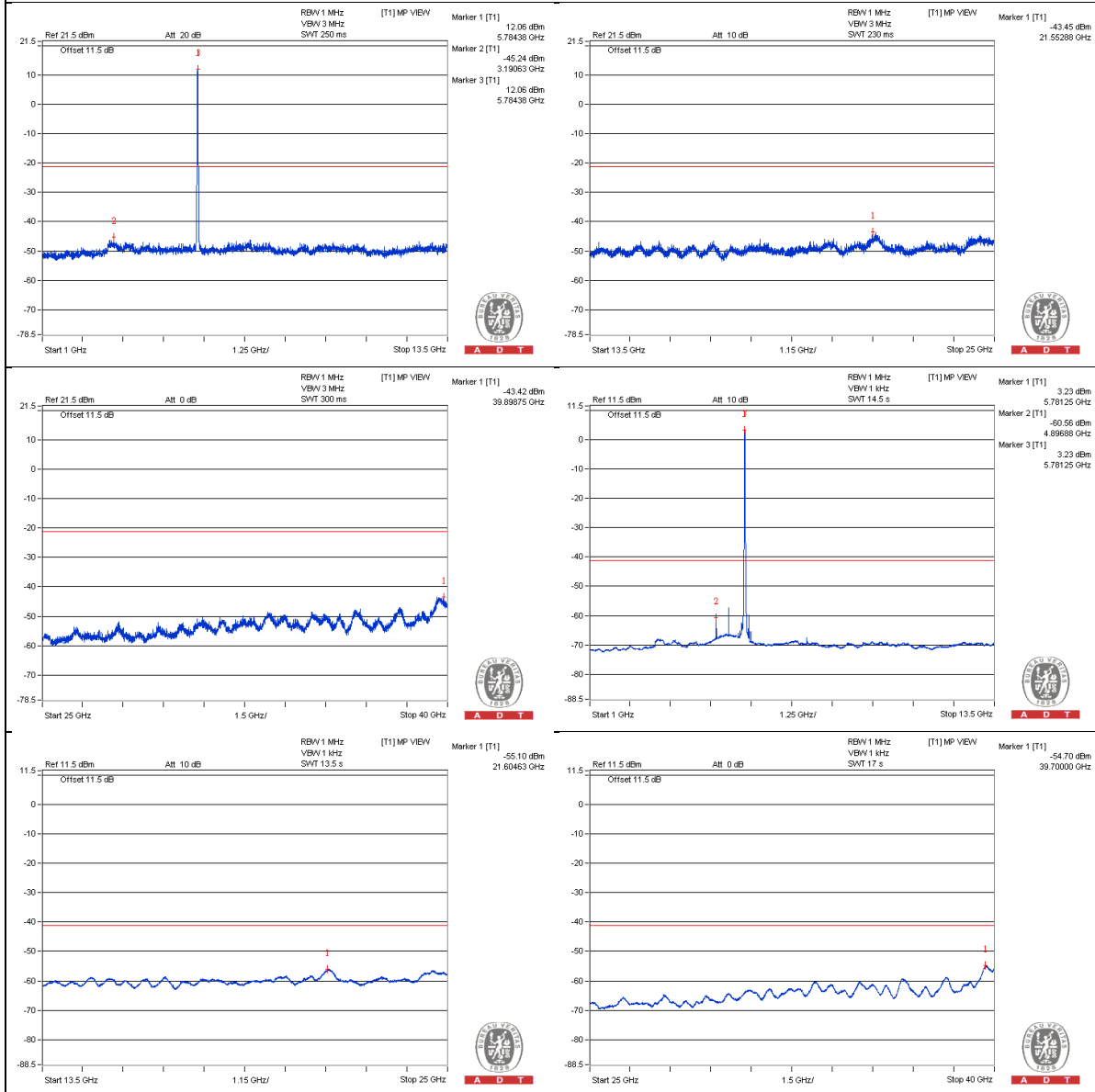
Note :

Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

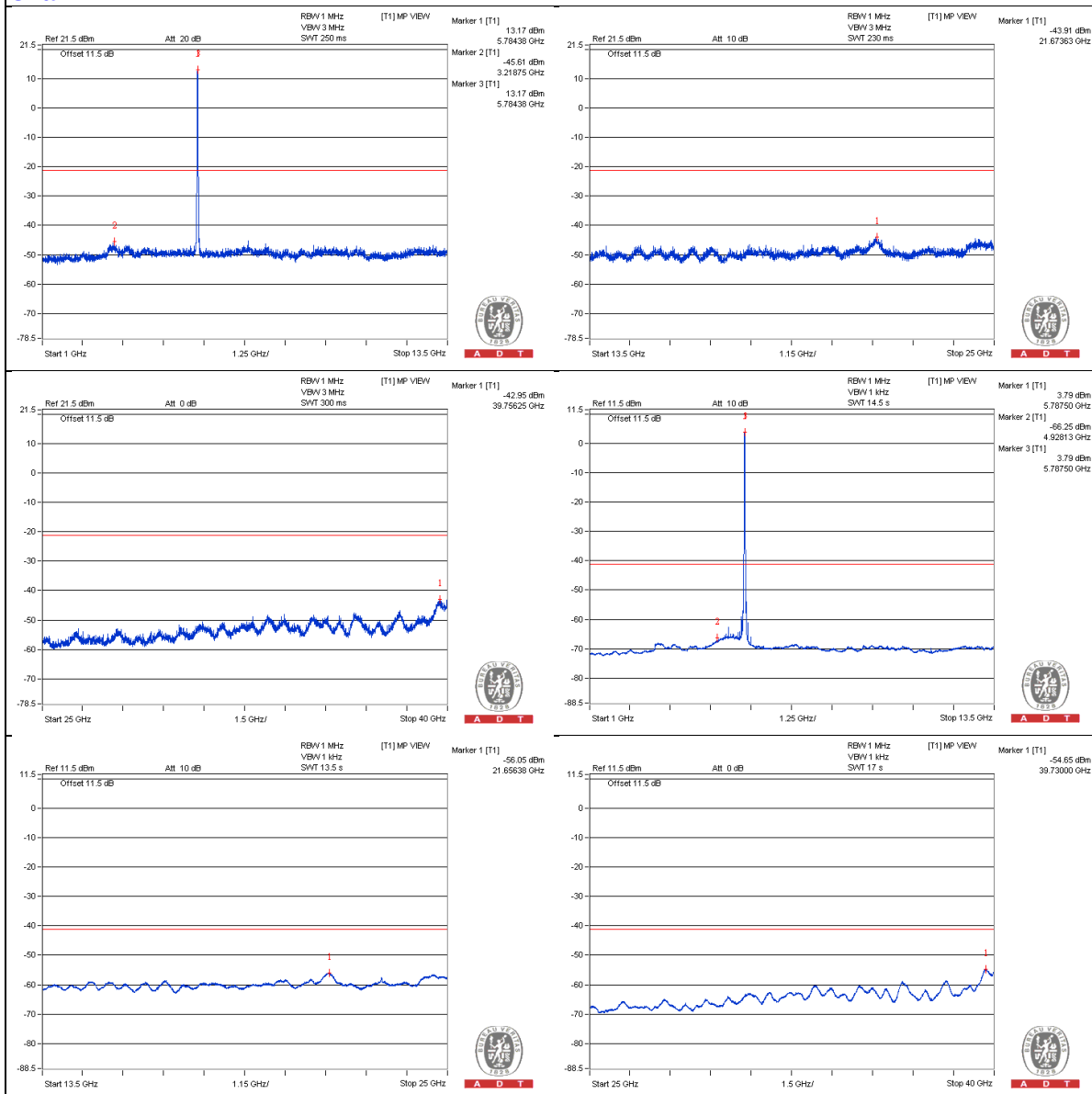
d = measurement distance in 3 meters.

✧ Bandedge spurious emission refer to *Annex A - Conducted Out of Band Emission (OOBE) Measurement (For U-NII-3 band)* item.

Chain 0



Chain 1



802.11ac (VHT20) - Channel 165

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3884.375 PK	56.04	74	-17.96	-49.85	-50.16	7.77	-39.22
2	3884.375 AV	35.65	54	-18.35	-70.37	-70.42	7.77	-59.61
3	7765.625 PK	56.27	74	-17.73	-49.84	-49.71	7.77	-38.99
4	7765.625 AV	37.36	54	-16.64	-68.29	-69.1	7.77	-57.9
5	11650 PK	55.21	74	-18.79	-50.99	-50.68	7.77	-40.05
6	11650 AV	35.73	54	-18.27	-71.14	-69.62	7.77	-59.53
7	17473.25 PK	56.59	74	-17.41	-49.19	-49.72	7.77	-38.67
8	17476.125 AV	45.81	54	-8.19	-60.42	-60.04	7.77	-49.45

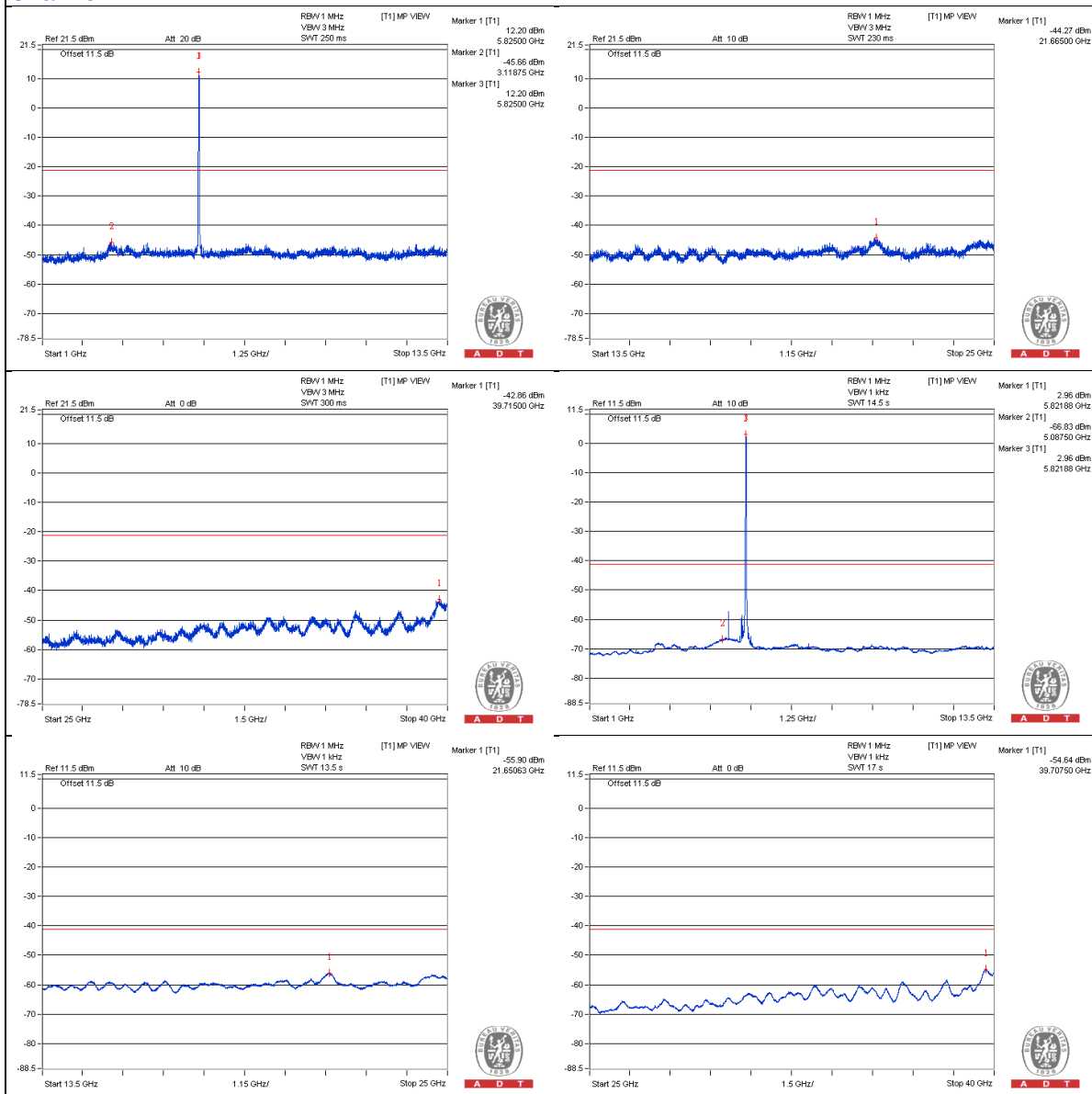
Note :

Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

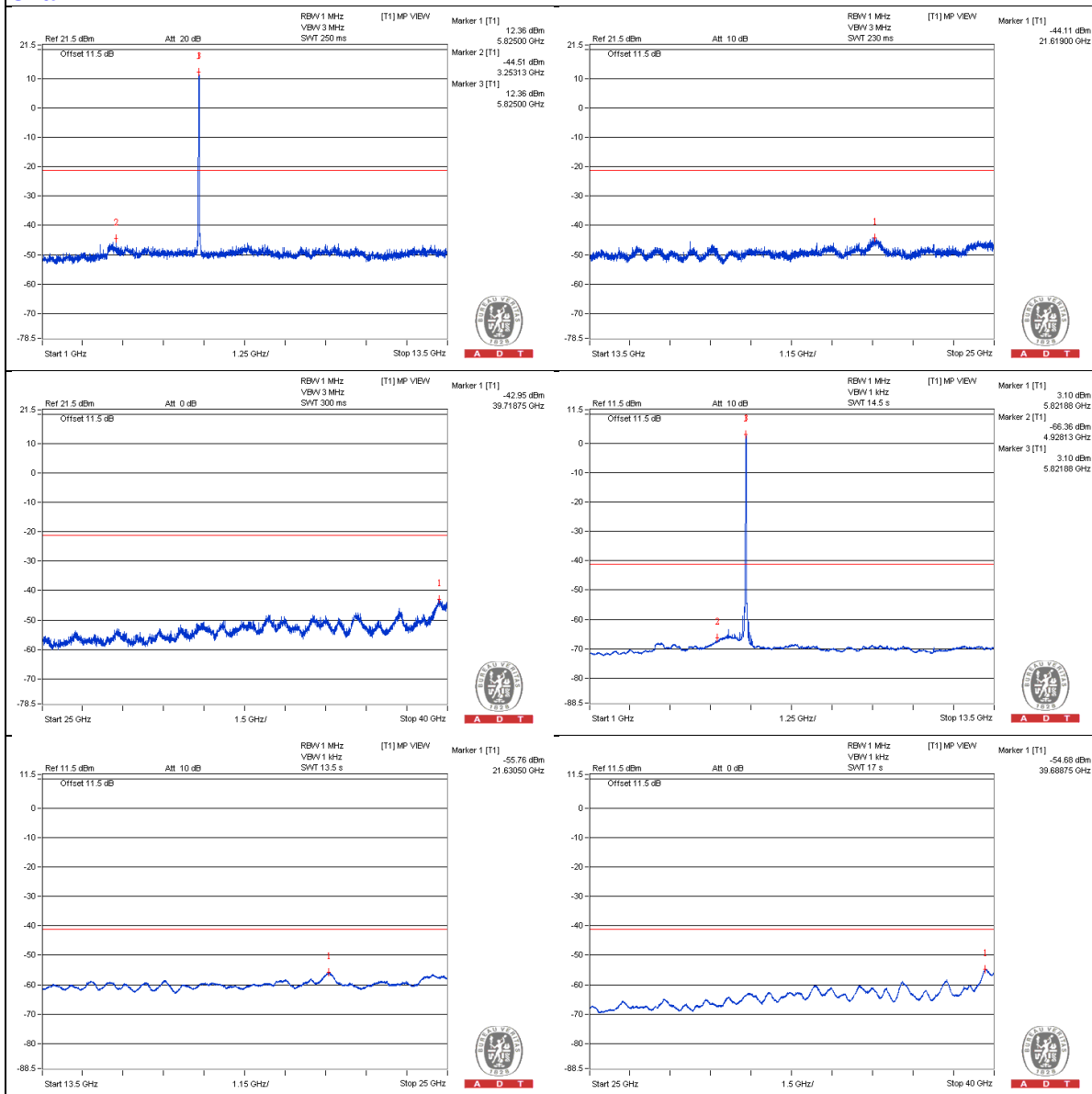
d = measurement distance in 3 meters.

❖ Bandedge spurious emission refer to *Annex A - Conducted Out of Band Emission (OOBE) Measurement (For U-NII-3 band)* item.

Chain 0



Chain 1



802.11ac (VHT40) - Channel 38

Conducted spurious emission table

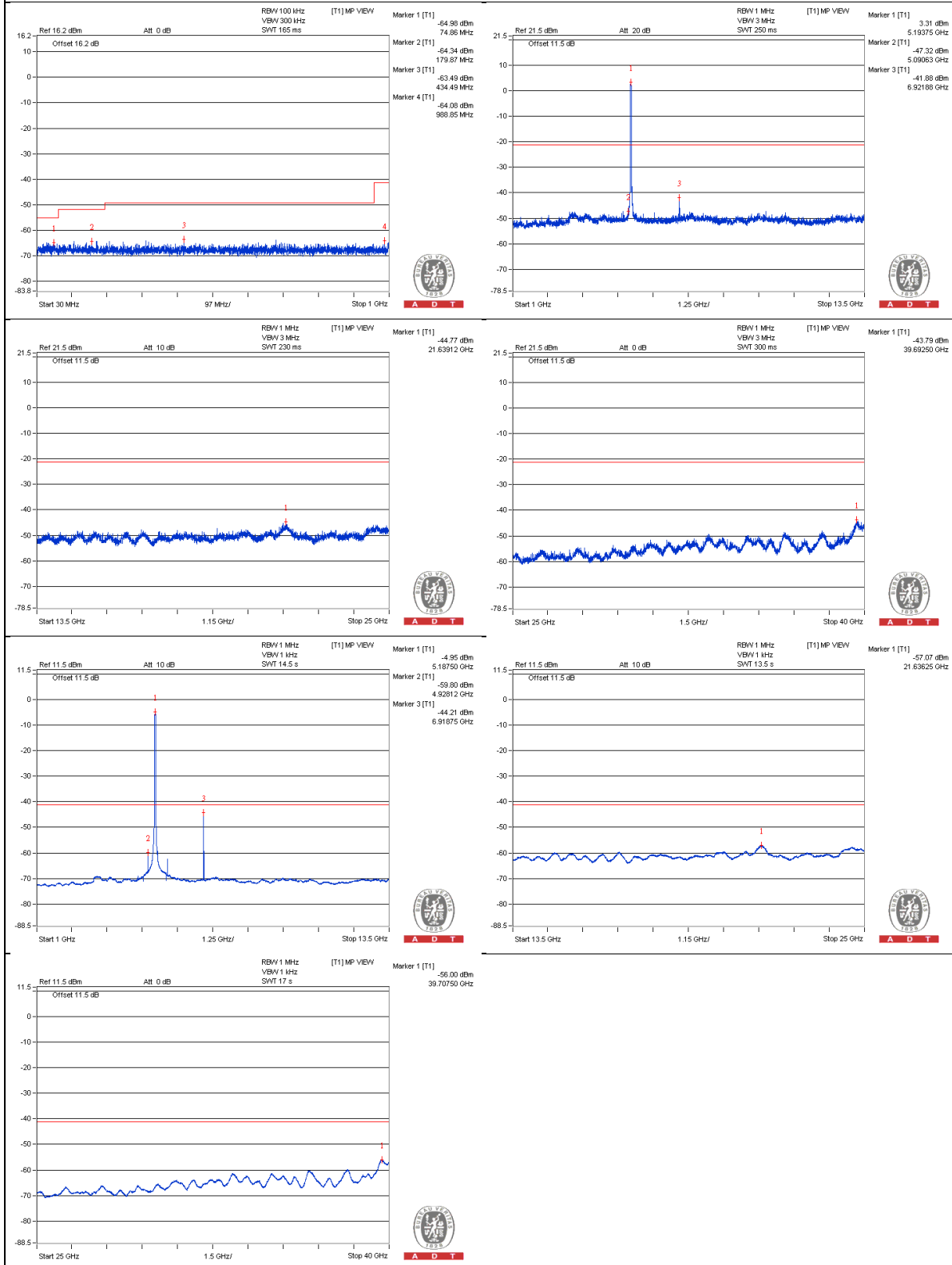
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3450 PK	54.43	74	-19.57	-49.56	-50.34	6.09	-40.83
2	3462.5 AV	33.6	54	-20.4	-70.68	-70.84	6.09	-61.66
3	6921.875 PK	61.64	68.2	-6.56	-41.88	-43.77	6.09	-33.62
4	10387.5 PK	54.48	74	-19.52	-49.46	-50.35	6.09	-40.78
5	10362.5 AV	33.69	54	-20.31	-70.58	-70.77	6.09	-61.57
6	15555.625 PK	53.74	74	-20.26	-49.65	-51.88	6.09	-41.52
7	15552.75 AV	42.57	54	-11.43	-61.82	-61.76	6.09	-52.69

Note :

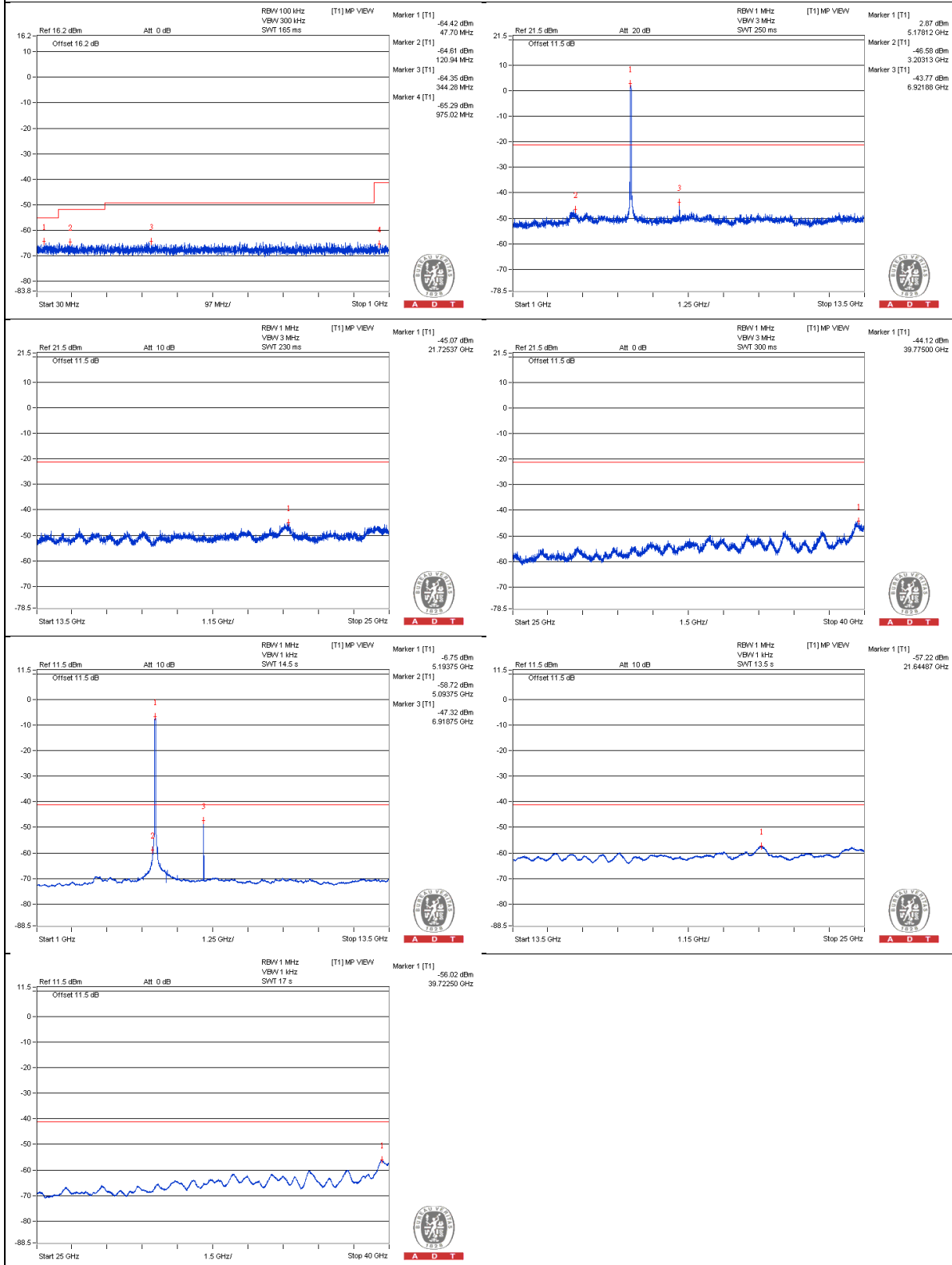
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



Bandedge table

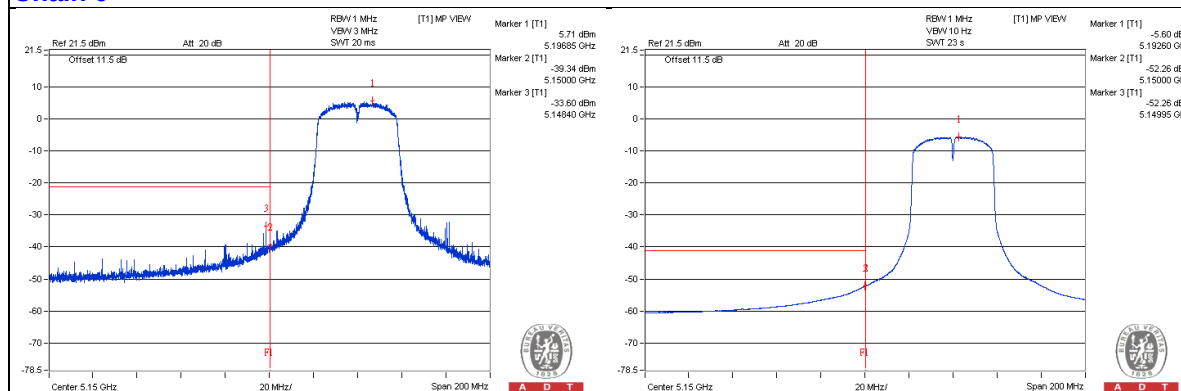
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	5148.4 PK	68.17	74	-5.83	-33.6	-43.57	6.09	-27.09
2	5149.9 AV	51.11	54	-2.89	-52.26	-54.54	6.09	-44.15

Note :

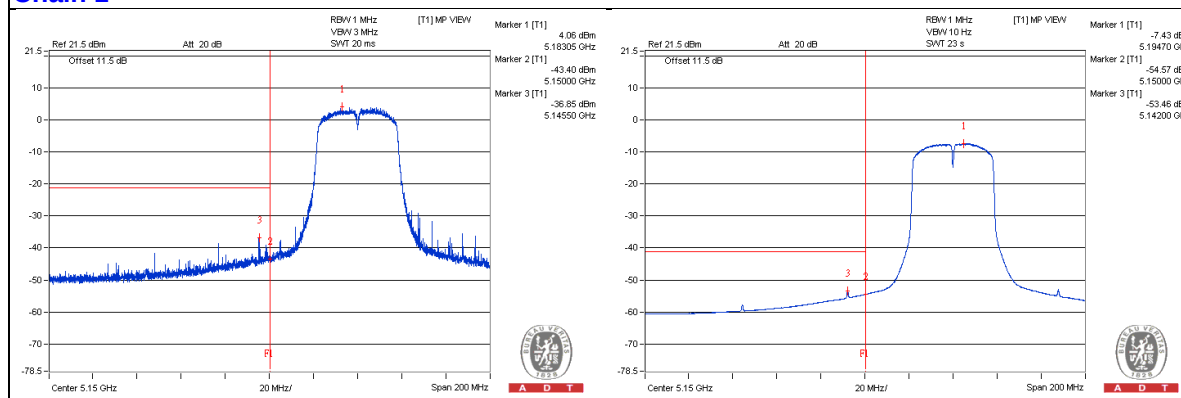
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT40) - Channel 46

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3475 PK	54.96	74	-19.04	-50.4	-48.59	6.09	-40.3
2	3506.25 AV	33.77	54	-20.23	-70.59	-70.6	6.09	-61.49
3	6975 PK	60.63	68.2	-7.57	-42.95	-44.68	6.09	-34.63
4	10478.125 PK	53.89	74	-20.11	-50.15	-50.81	6.09	-41.37
5	10456.25 AV	33.25	54	-20.75	-70.89	-71.35	6.09	-62.01
6	15670.625 PK	53.47	74	-20.53	-50.65	-51.14	6.09	-41.79
7	15702.25 AV	41.97	54	-12.03	-62.34	-62.45	6.09	-53.29

Note :

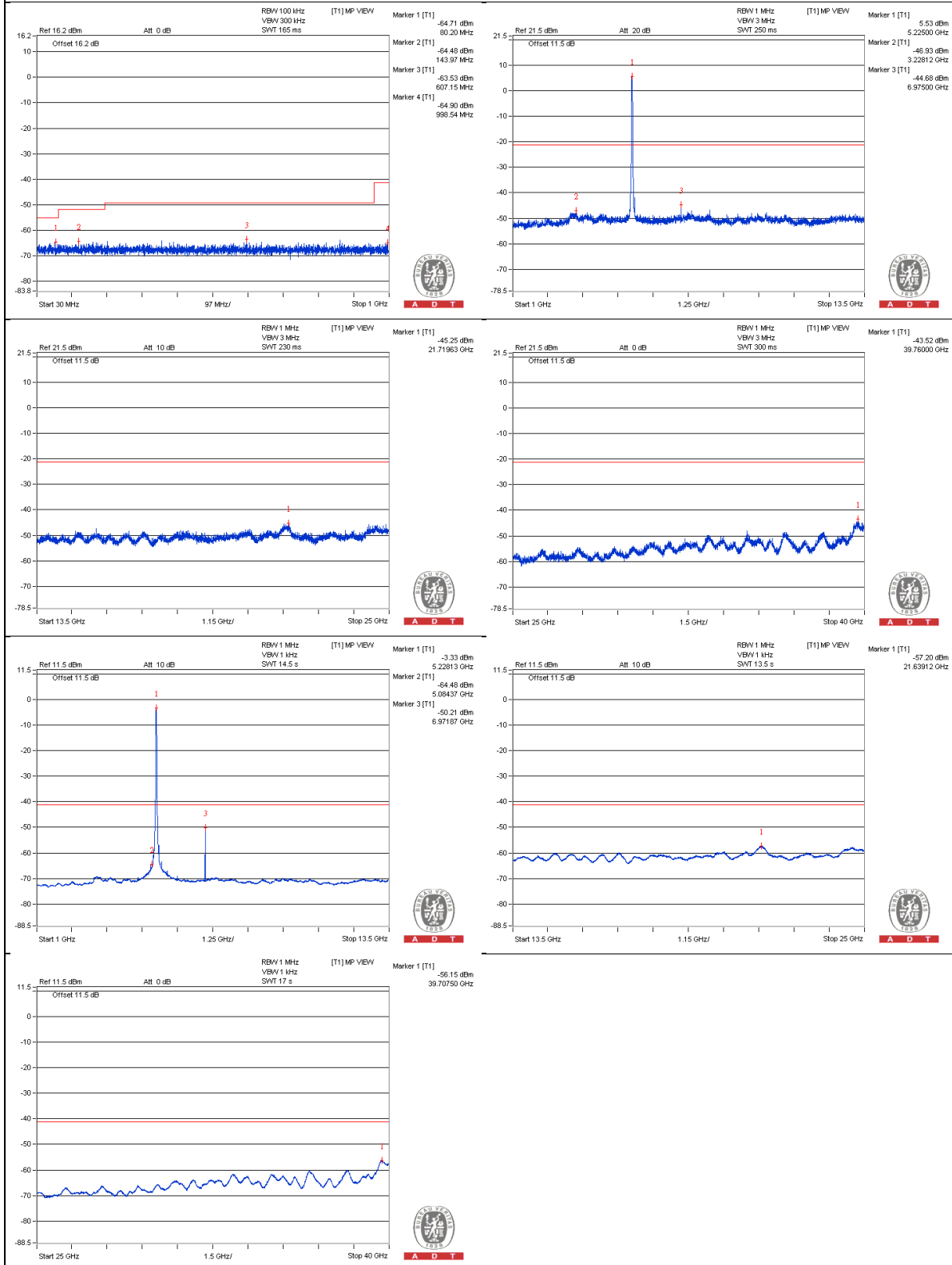
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT40) - Channel 54

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3525 PK	55.35	74	-18.65	-50.33	-48	6.09	-39.91
2	3521.875 AV	34.26	54	-19.74	-70.05	-70.16	6.09	-61
3	7028.125 PK	58.3	74	-15.7	-43.97	-50.23	6.09	-36.96
4	7025 AV	51.46	54	-2.54	-49.93	-70.57	6.09	-43.8
5	10550 PK	54.4	74	-19.6	-49.99	-49.94	6.09	-40.86
6	10546.875 AV	33.62	54	-20.38	-70.68	-70.8	6.09	-61.64
7	15811.5 PK	54.74	74	-19.26	-49.28	-49.99	6.09	-40.52
8	15805.75 AV	43.09	54	-10.91	-61.11	-61.44	6.09	-52.17

Note :

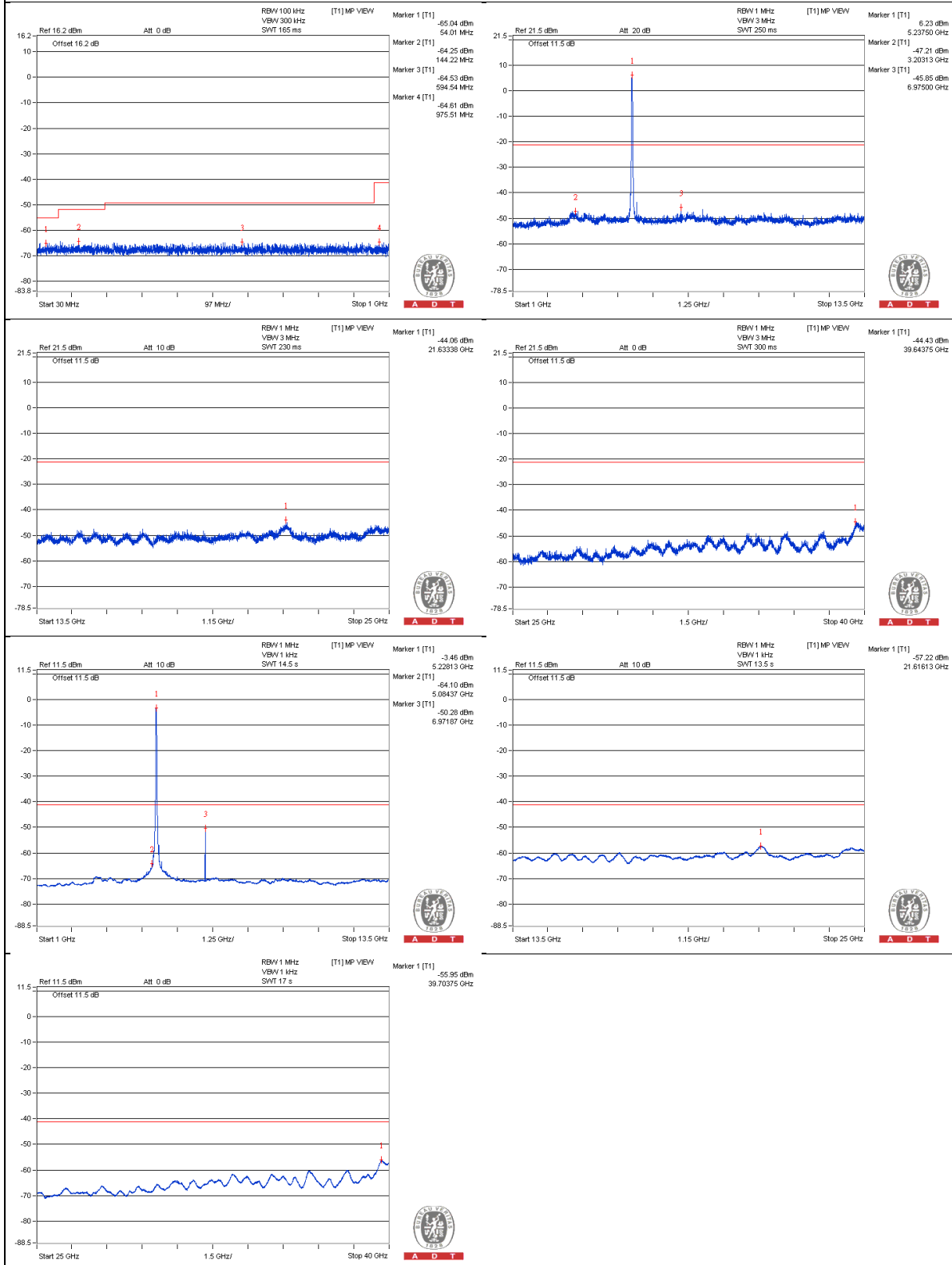
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT40) - Channel 62

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3525 PK	55.49	74	-18.51	-48.28	-49.55	6.09	-39.77
2	3556.25 AV	34.48	54	-19.52	-69.81	-69.96	6.09	-60.78
3	7081.25 PK	59.11	68.2	-9.09	-43.65	-47.81	6.09	-36.15
4	10621.875 PK	54.55	74	-19.45	-48.82	-51.1	6.09	-40.71
5	10618.75 AV	33.51	54	-20.49	-70.88	-70.83	6.09	-61.75
6	15923.625 PK	54.54	74	-19.46	-49.35	-50.34	6.09	-40.72
7	15915 AV	42.55	54	-11.45	-61.69	-61.94	6.09	-52.71

Note :

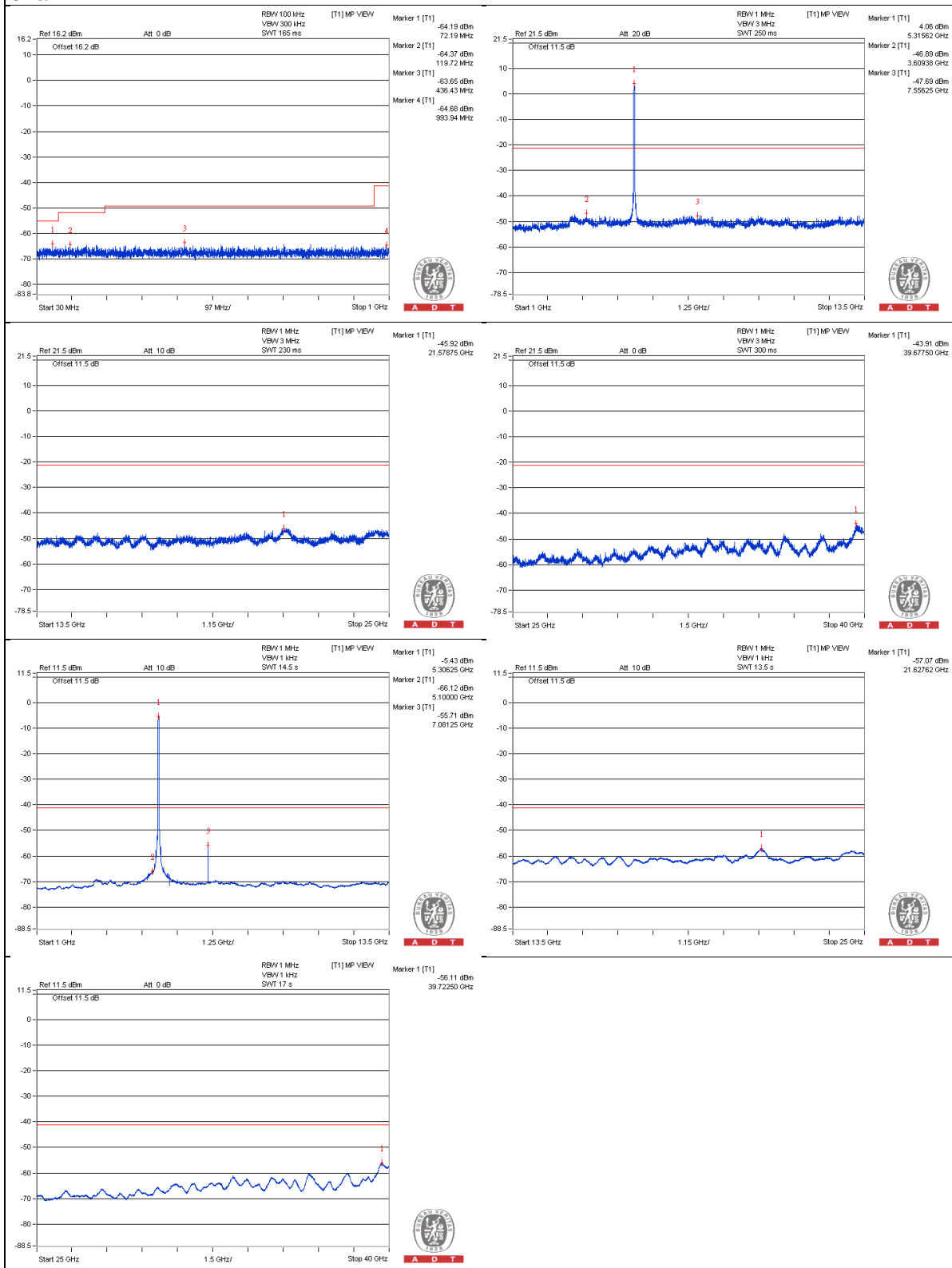
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



Bandedge table

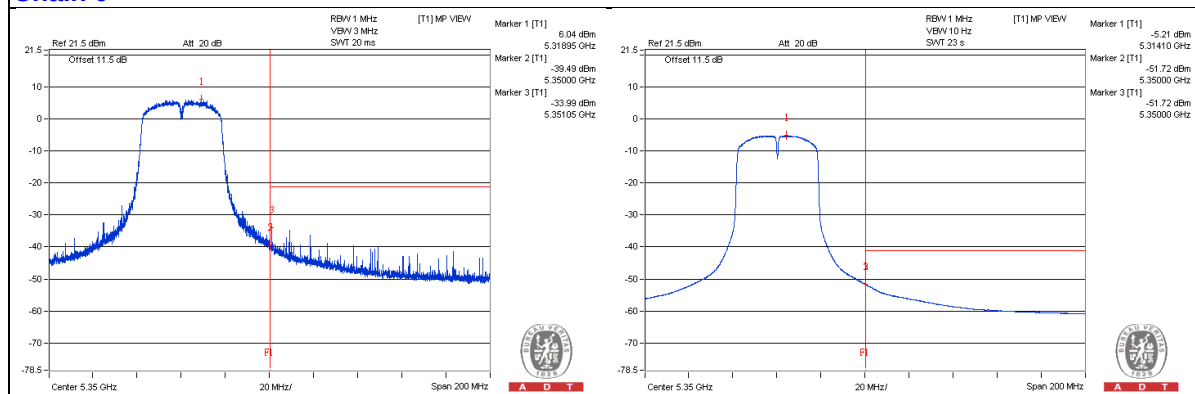
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	5351.05 PK	68.15	74	-5.85	-33.99	-41.02	6.09	-27.11
2	5350 AV	52.17	54	-1.83	-51.72	-52.71	6.09	-43.09

Note :

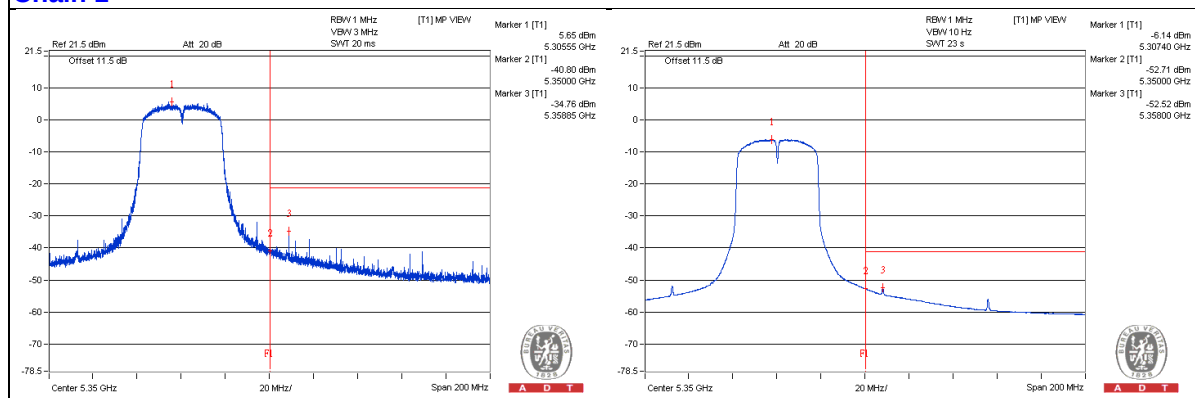
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT40) - Channel 102

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3678.125 PK	57.97	74	-16.03	-50.12	-46.68	7.77	-37.29
2	3656.25 AV	35.69	54	-18.31	-70.31	-70.39	7.77	-59.57
3	7346.875 PK	58.63	74	-15.37	-47.34	-47.48	7.77	-36.63
4	7346.875 AV	50.33	54	-3.67	-52.96	-64.98	7.77	-44.93
5	11000 PK	54.88	74	-19.12	-50.43	-52.04	7.77	-40.38
6	11000 AV	34.26	54	-19.74	-71.95	-71.62	7.77	-61
7	16533.125 PK	55.53	74	-18.47	-49.76	-51.41	7.77	-39.73
8	16510.125 AV	44.48	54	-9.52	-61.58	-61.55	7.77	-50.78

Note :

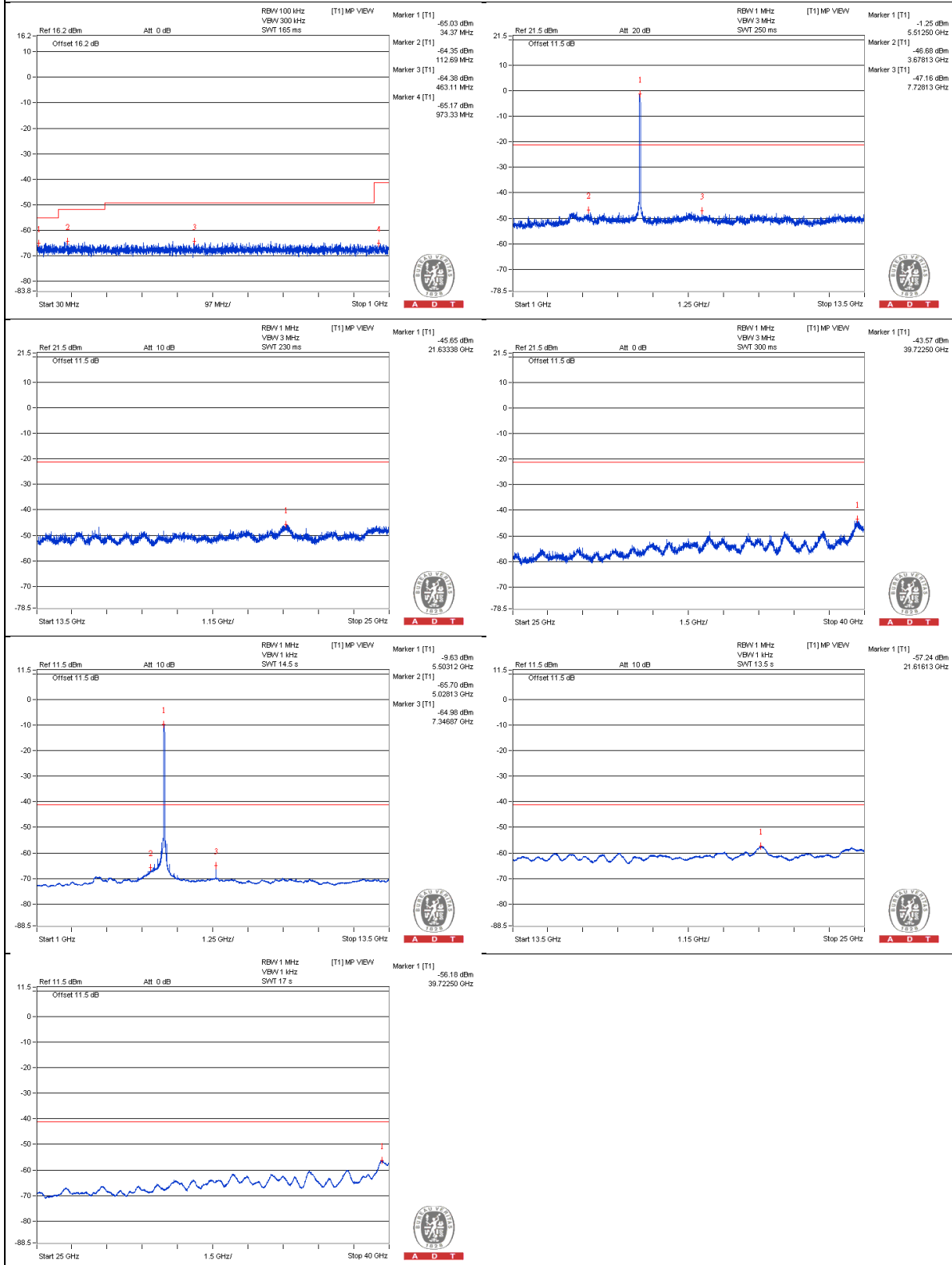
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	5463.5 PK	73	74	-1	-30.23	-43.39	7.77	-22.26
2	5470 AV	56.21	54	* 2.21	-47.64	-54.44	7.77	-39.05

Note :

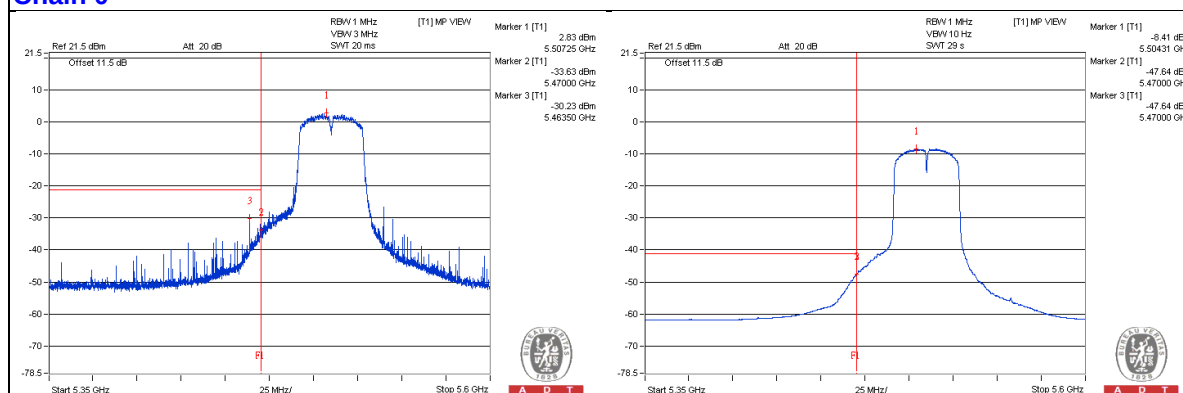
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

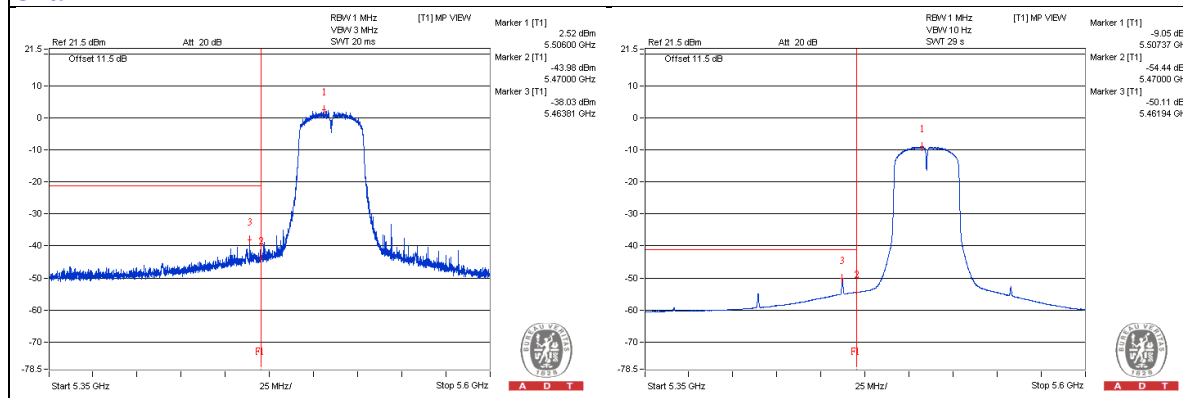
* The unwanted emission was verified and the test result was passed by radiated measurement.

(Please refer APPENDIX A)

Chain 0



Chain 1



802.11ac (VHT40) - Channel 110

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3709.375 PK	56.68	74	-17.32	-48.53	-50.4	7.77	-38.58
2	3693.75 AV	35.85	54	-18.15	-70.26	-70.12	7.77	-59.41
3	7409.375 PK	57.3	74	-16.7	-47.94	-49.73	7.77	-37.96
4	7400 AV	46.02	54	-7.98	-57.37	-68	7.77	-49.24
5	11118.75 PK	55	74	-19	-51.3	-50.79	7.77	-40.26
6	11100 AV	34.3	54	-19.7	-71.91	-71.57	7.77	-60.96
7	16668.25 PK	55.23	74	-18.77	-49.97	-51.86	7.77	-40.03
8	16668.25 AV	43.26	54	-10.74	-62.68	-62.89	7.77	-52

Note :

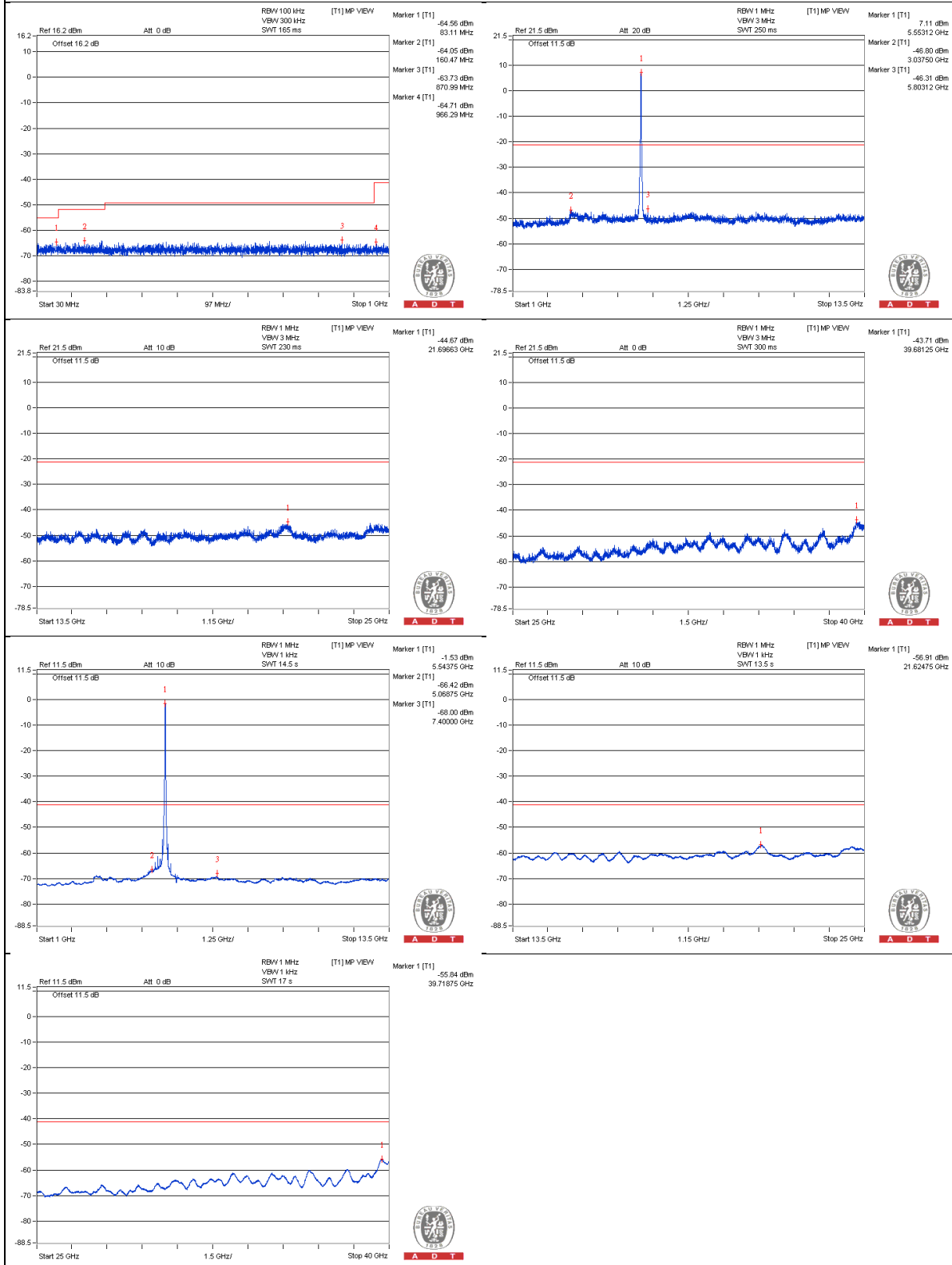
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT40) - Channel 134

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3768.75 PK	56.94	74	-17.06	-48	-50.58	7.77	-38.32
2	3765.625 AV	35.65	54	-18.35	-70.13	-70.67	7.77	-59.61
3	7550 PK	56.78	74	-17.22	-48.78	-49.8	7.77	-38.48
4	7559.375 AV	40.68	54	-13.32	-63.06	-70.56	7.77	-54.58
5	11328.125 PK	55.84	74	-18.16	-51.21	-49.38	7.77	-39.42
6	11325 AV	34.67	54	-19.33	-71.15	-71.6	7.77	-60.59
7	16993.125 PK	56.75	74	-17.25	-48.45	-50.34	7.77	-38.51
8	16990.25 AV	45.97	54	-8.03	-59.8	-60.36	7.77	-49.29

Note :

Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



Bandedge table

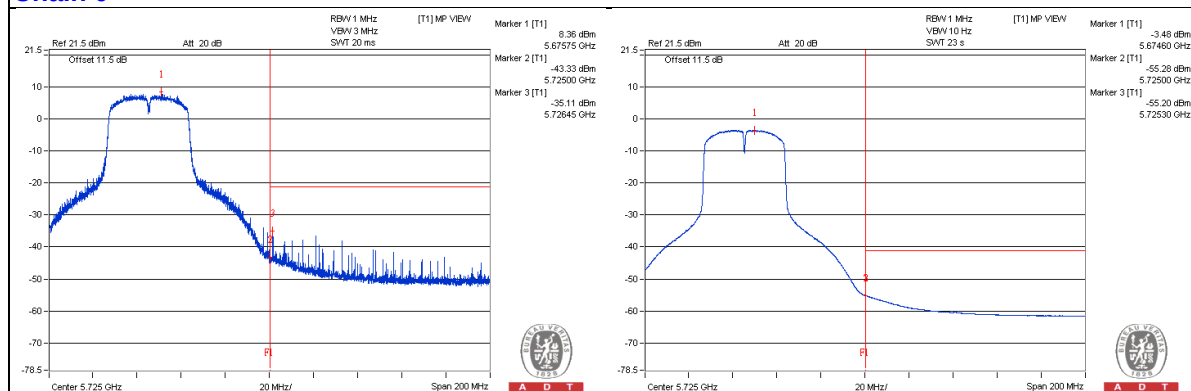
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	5726.45 PK	68.5	74	-5.5	-35.11	-43.56	7.77	-26.76
2	5725.05 AV	50.74	54	-3.26	-55.27	-55.34	7.77	-44.52

Note :

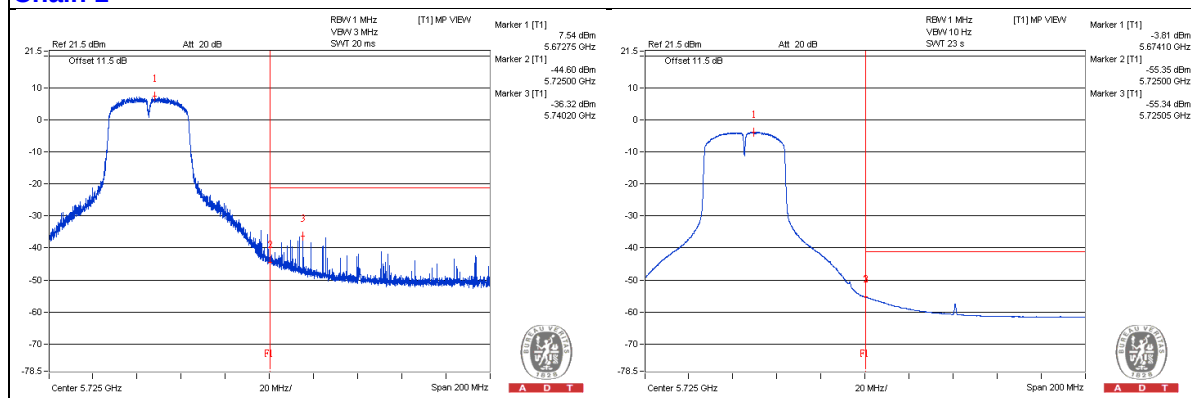
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT40) - Channel 142

Conducted spurious emission table

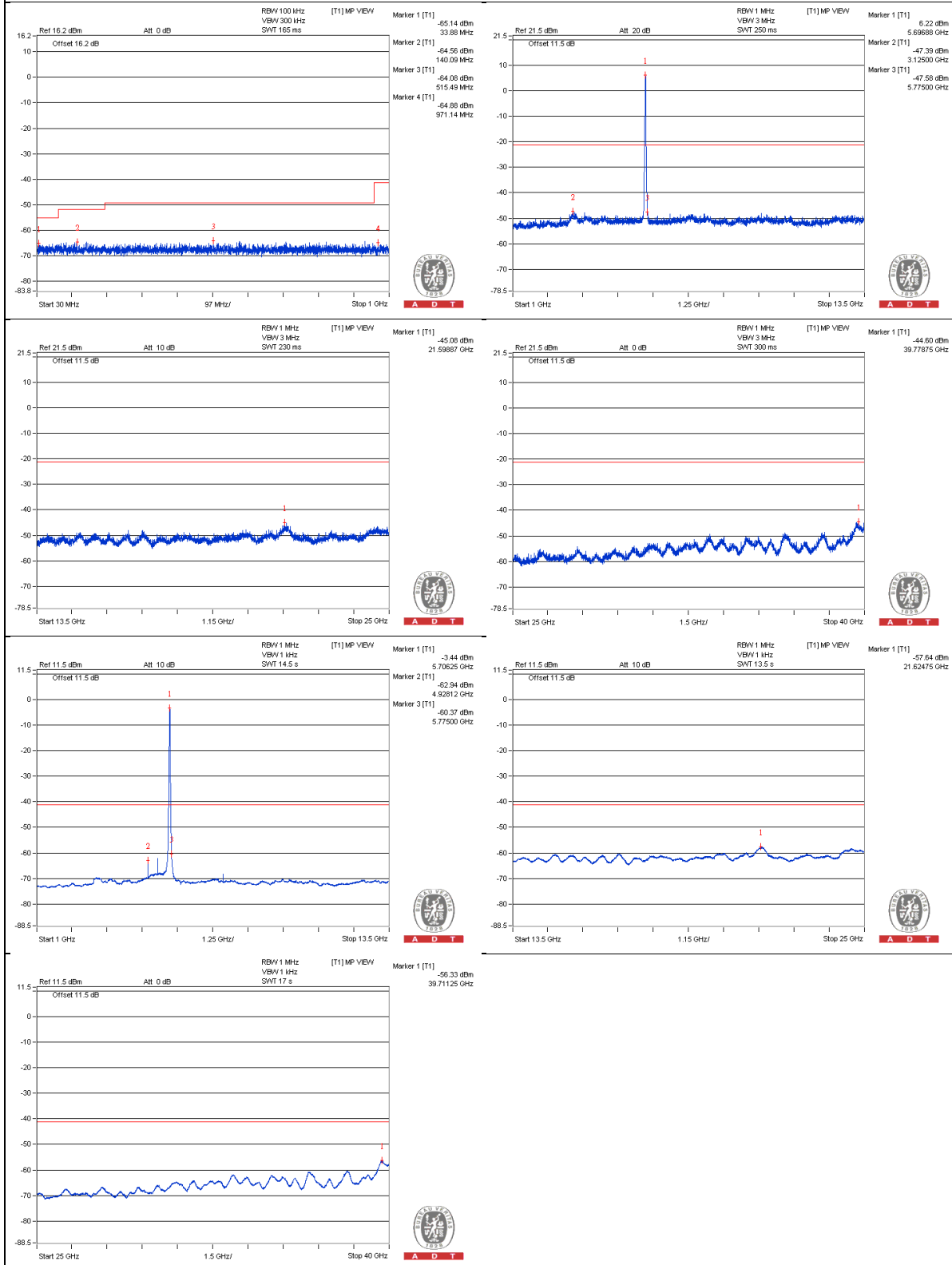
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3796.875 PK	55.67	74	-18.33	-51.47	-49.5	7.77	-39.59
2	3790.625 AV	34.76	54	-19.24	-71.44	-71.13	7.77	-60.5
3	7596.875 PK	56.65	74	-17.35	-50.62	-48.44	7.77	-38.61
4	7612.5 AV	36.42	54	-17.58	-68.38	-71.35	7.77	-58.84
5	11409.375 PK	54.38	74	-19.62	-52.22	-51.17	7.77	-40.88
6	11412.5 AV	33.75	54	-20.25	-72.24	-72.34	7.77	-61.51
7	17128.25 PK	55.03	74	-18.97	-51.93	-50.26	7.77	-40.23
8	17116.75 AV	43.76	54	-10.24	-62.29	-62.28	7.77	-51.5

Note :

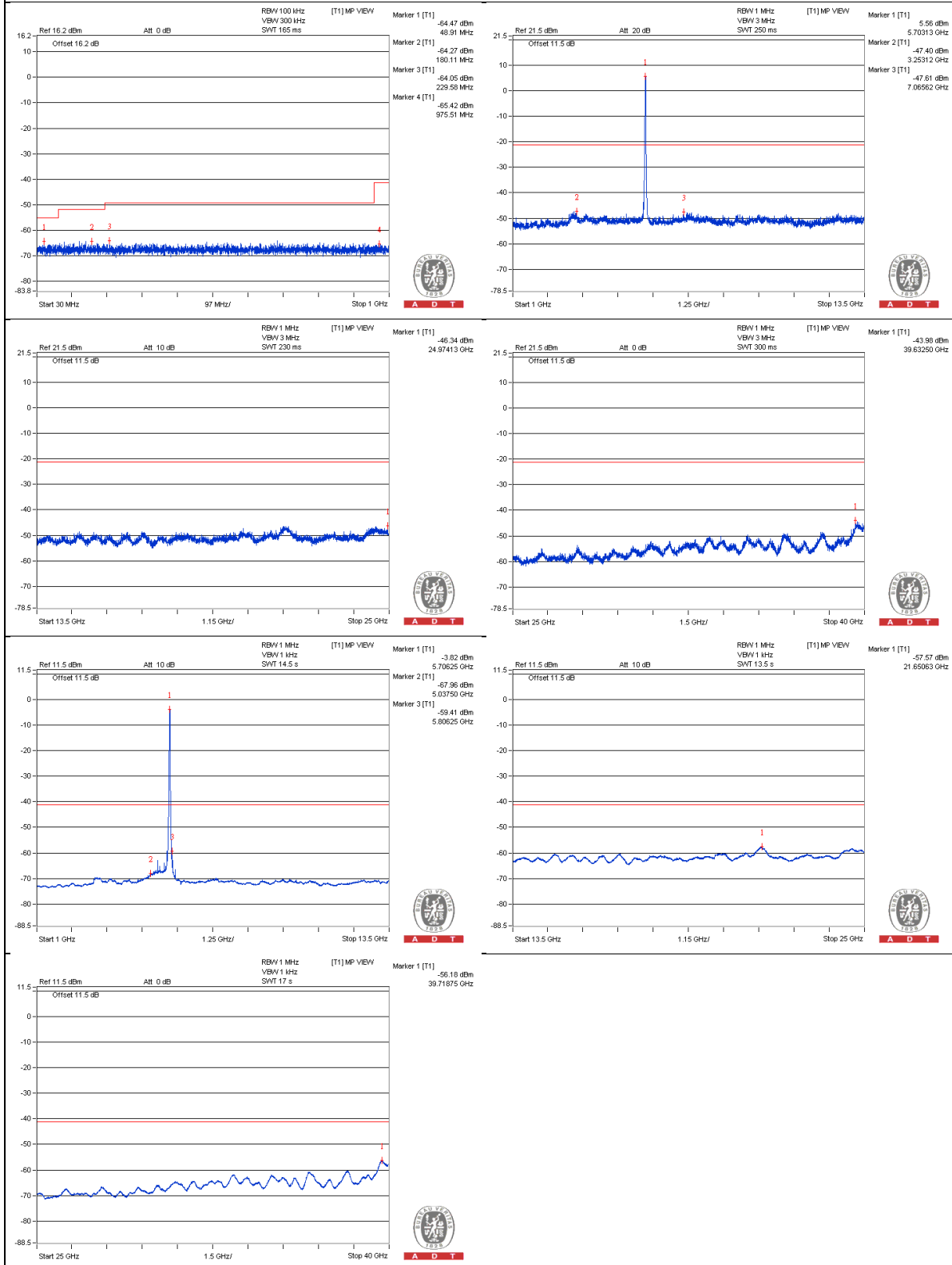
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



Bandedge table

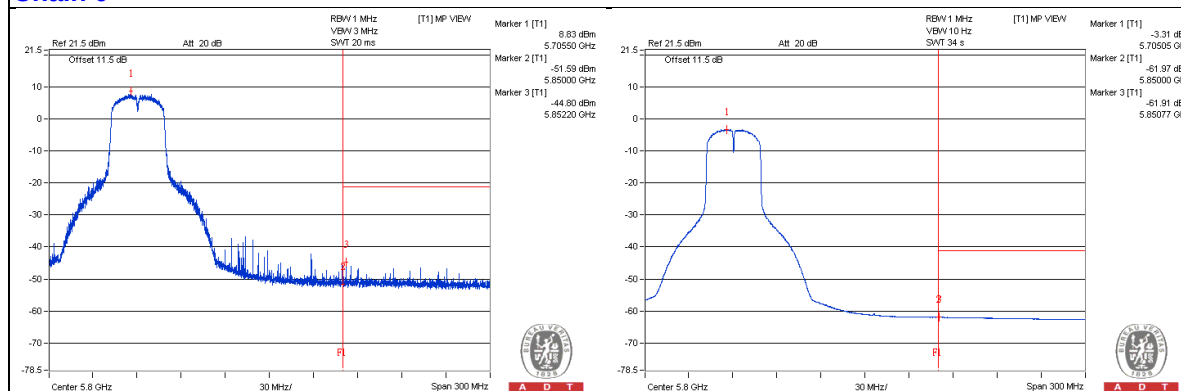
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	5828.125 PK	61.44	74	-12.56	-42.13	-50.89	7.77	-33.82
2	5825.35 AV	44.23	54	-9.77	-61.84	-61.78	7.77	-51.03

Note :

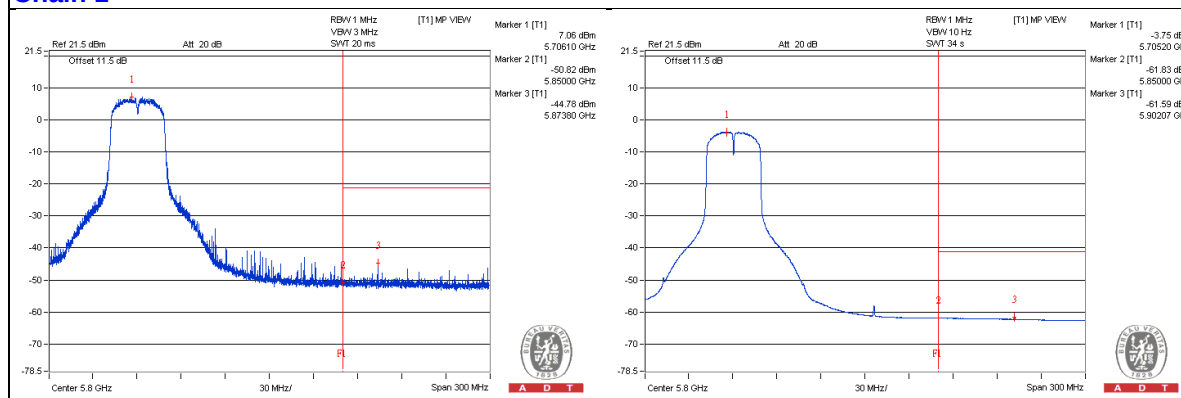
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT40) - Channel 151

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3837.5 PK	55.91	74	-18.09	-50.54	-49.75	7.77	-39.35
2	3837.5 AV	35.61	54	-18.39	-70.27	-70.6	7.77	-59.65
3	7675 PK	57.4	74	-16.6	-48.8	-48.48	7.77	-37.86
4	7675 AV	39.21	54	-14.79	-65.15	-69.62	7.77	-56.05
5	11509.375 PK	55.83	74	-18.17	-50.54	-49.91	7.77	-39.43
6	11509.375 AV	35.21	54	-18.79	-71.07	-70.6	7.77	-60.05
7	17263.375 PK	53.79	74	-20.21	-52.93	-51.67	7.77	-41.47
8	17263.375 AV	43.38	54	-10.62	-62.51	-62.82	7.77	-51.88

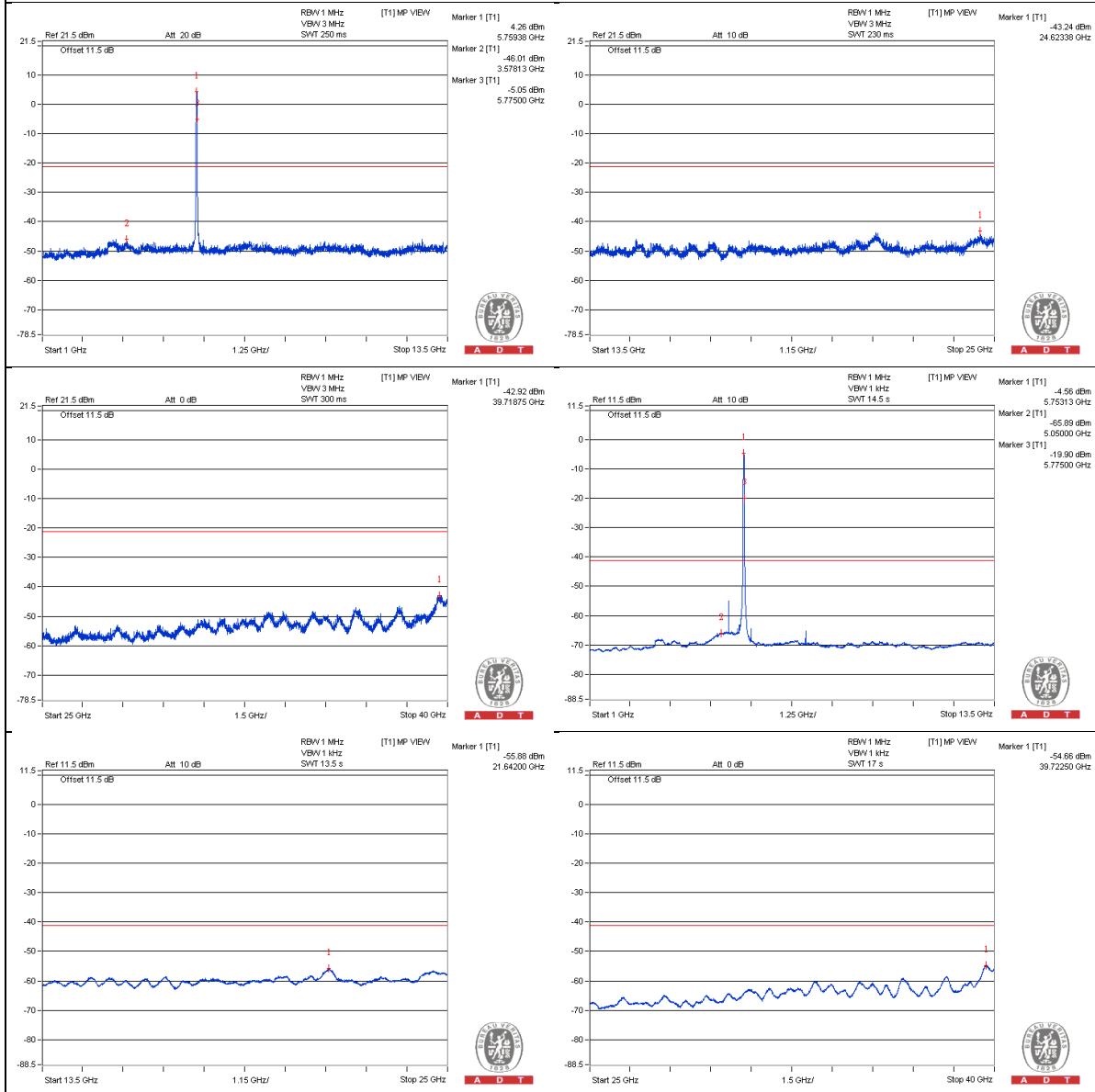
Note :

Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

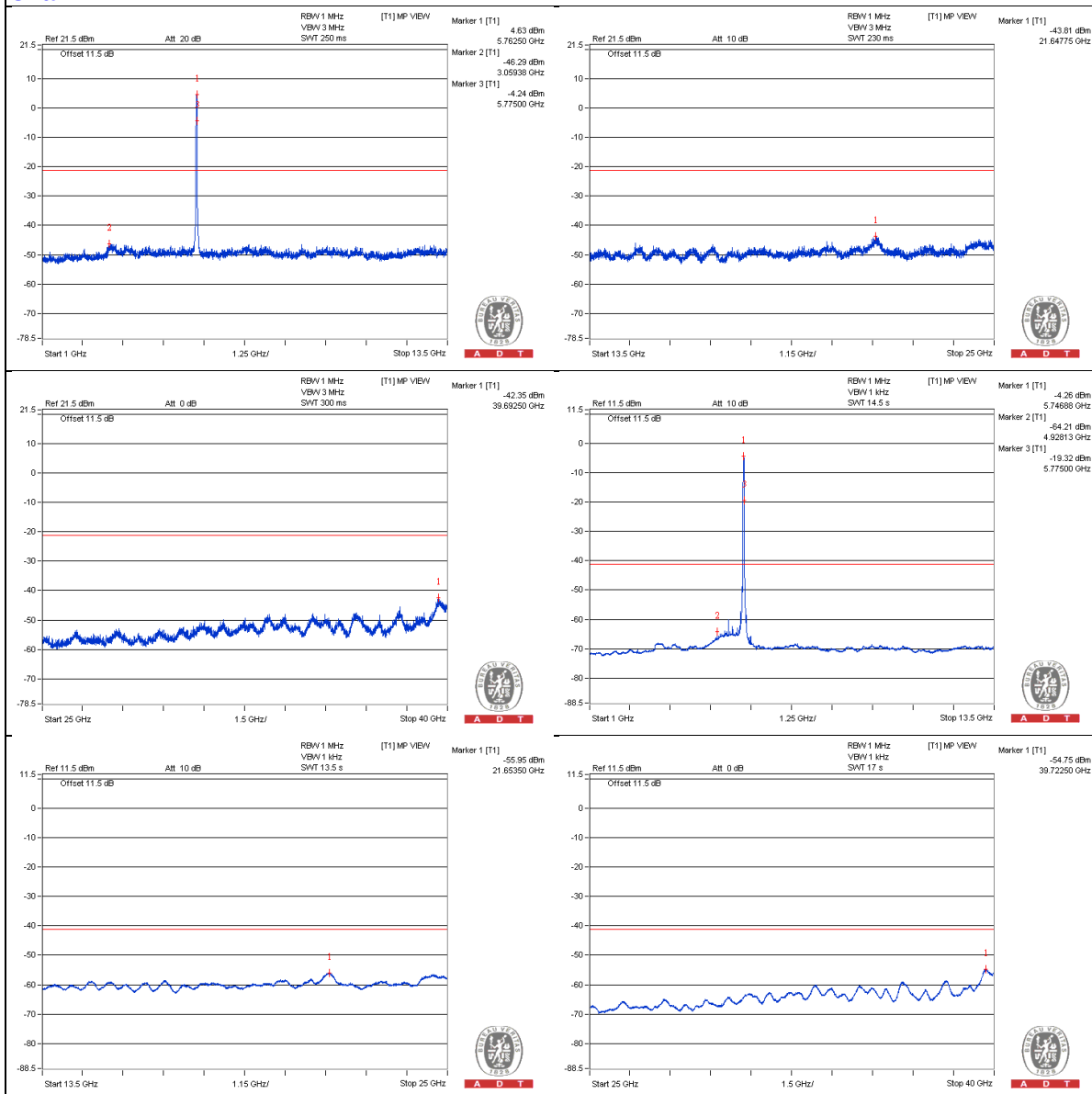
d = measurement distance in 3 meters.

✧ Bandedge spurious emission refer to *Annex A - Conducted Out of Band Emission (OOBE) Measurement (For U-NII-3 band)* item.

Chain 0



Chain 1



802.11ac (VHT40) - Channel 159

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3862.5 PK	55.81	74	-18.19	-49.95	-50.52	7.77	-39.45
2	3862.5 AV	35.41	54	-18.59	-70.54	-70.72	7.77	-59.85
3	7725 PK	56.91	74	-17.09	-49.14	-49.13	7.77	-38.35
4	7728.125 AV	37.55	54	-16.45	-68.02	-69.01	7.77	-57.71
5	11590.625 PK	55.03	74	-18.97	-51.24	-50.79	7.77	-40.23
6	11590.625 AV	35.04	54	-18.96	-71.29	-70.73	7.77	-60.22
7	17384.125 PK	54.9	74	-19.1	-51.43	-50.86	7.77	-40.36
8	17387 AV	44.53	54	-9.47	-61.55	-61.48	7.77	-50.73

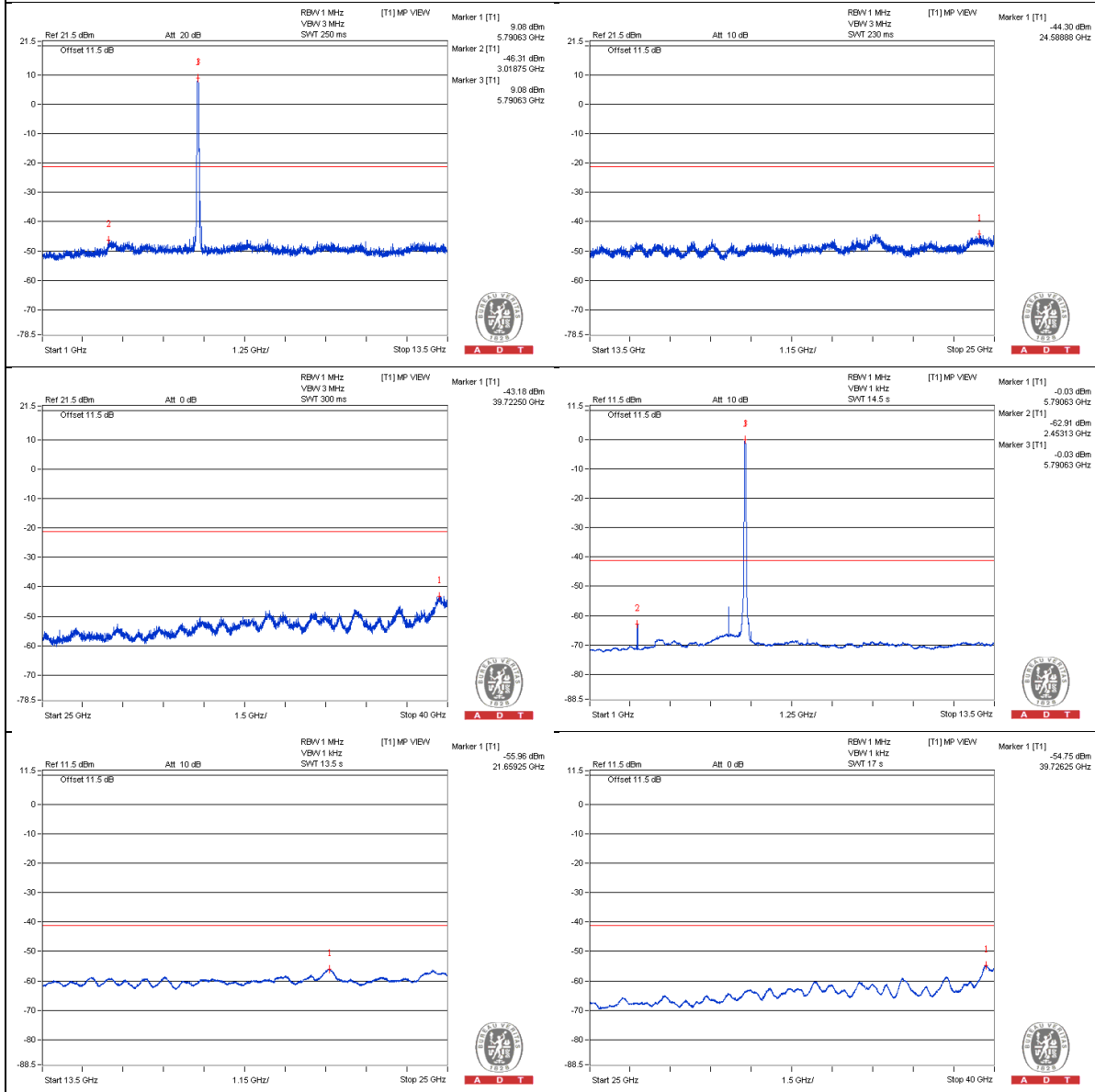
Note :

Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

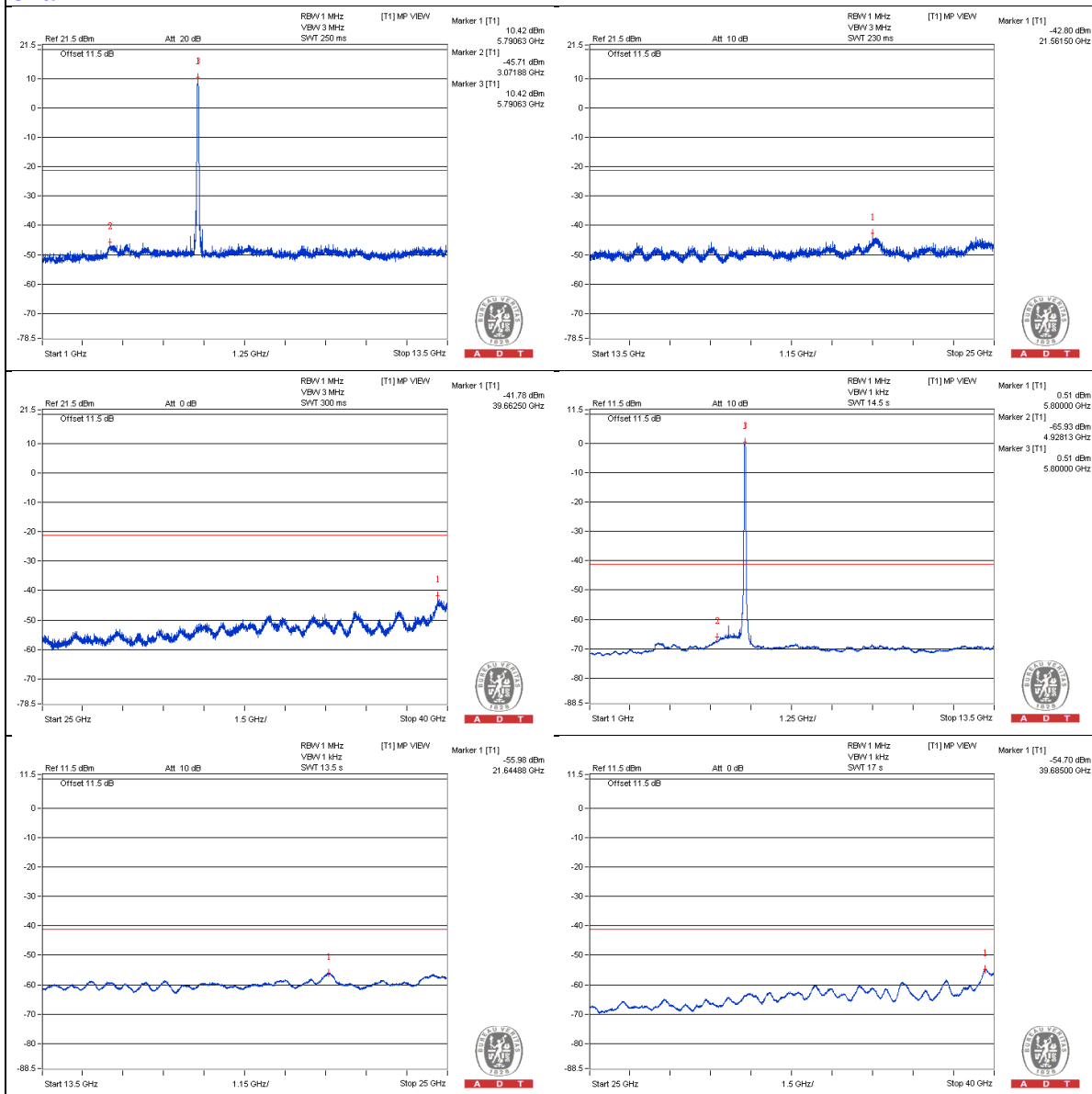
d = measurement distance in 3 meters.

✧ Bandedge spurious emission refer to *Annex A - Conducted Out of Band Emission (OOBE) Measurement (For U-NII-3 band)* item.

Chain 0



Chain 1



802.11ac (VHT80) - Channel 42

Conducted spurious emission table

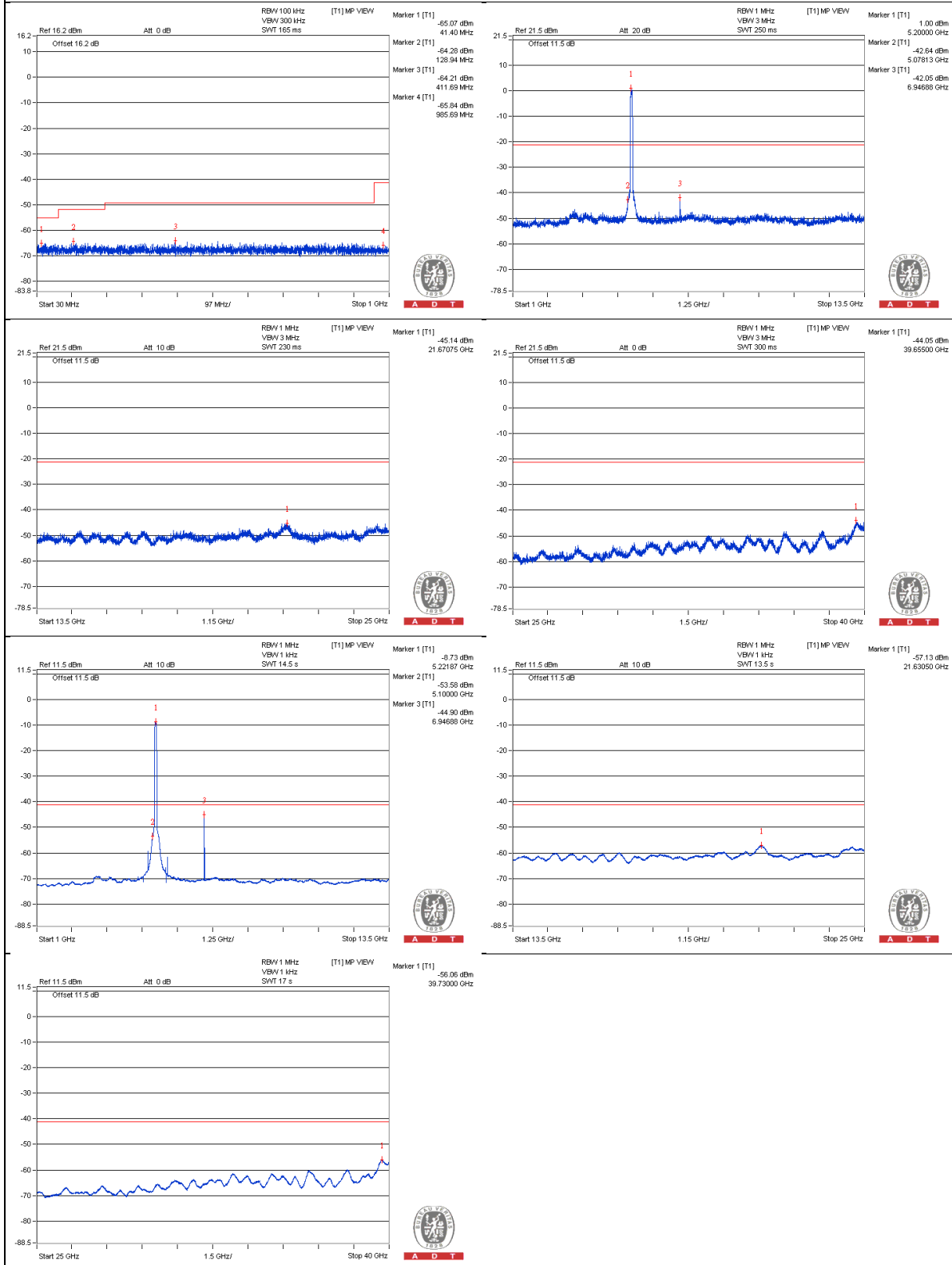
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3484.375 PK	55.15	74	-18.85	-48.12	-50.66	6.09	-40.11
2	3456.25 AV	33.52	54	-20.48	-70.86	-70.83	6.09	-61.74
3	6946.875 PK	61	68.2	-7.2	-42.05	-45.25	6.09	-34.26
4	10406.25 PK	54.61	74	-19.39	-49.82	-49.69	6.09	-40.65
5	10418.75 AV	33.27	54	-20.73	-70.89	-71.29	6.09	-61.99
6	15644.75 PK	52.97	74	-21.03	-50.76	-52.13	6.09	-42.29
7	15641.875 AV	41.85	54	-12.15	-62.46	-62.57	6.09	-53.41

Note :

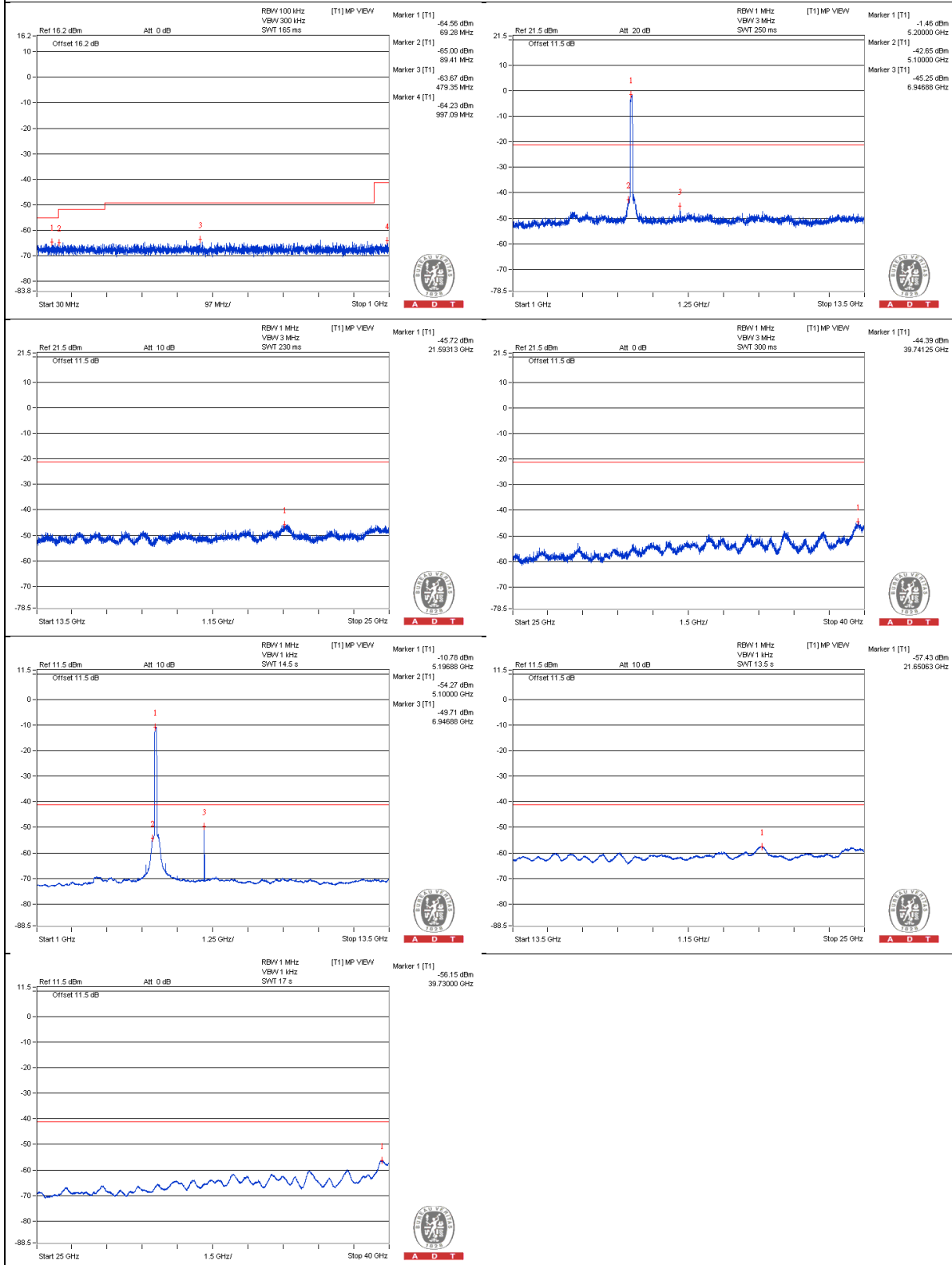
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



Bandedge table

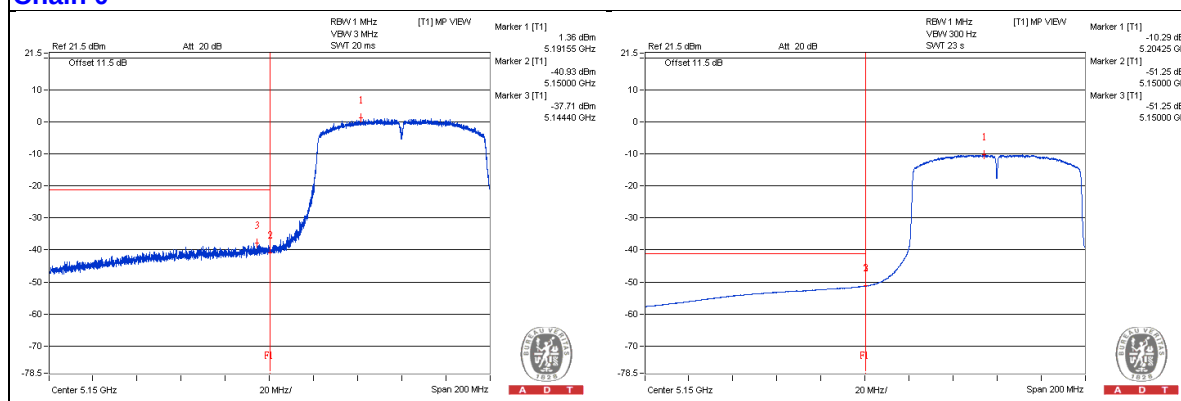
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	5142.65 PK	64.86	74	-9.14	-37.72	-42.57	6.09	-30.4
2	5150 AV	51.95	54	-2.05	-51.25	-54.01	6.09	-43.31

Note :

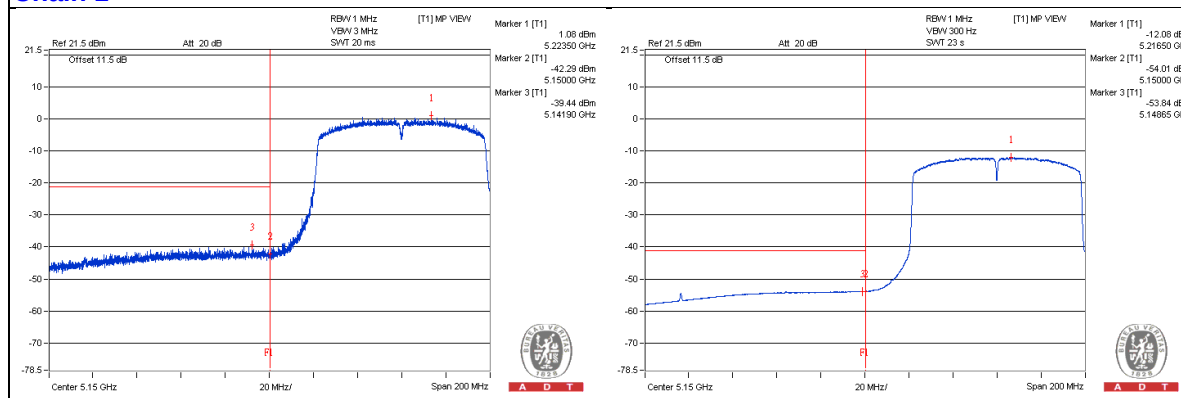
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT80) - Channel 58

Conducted spurious emission table

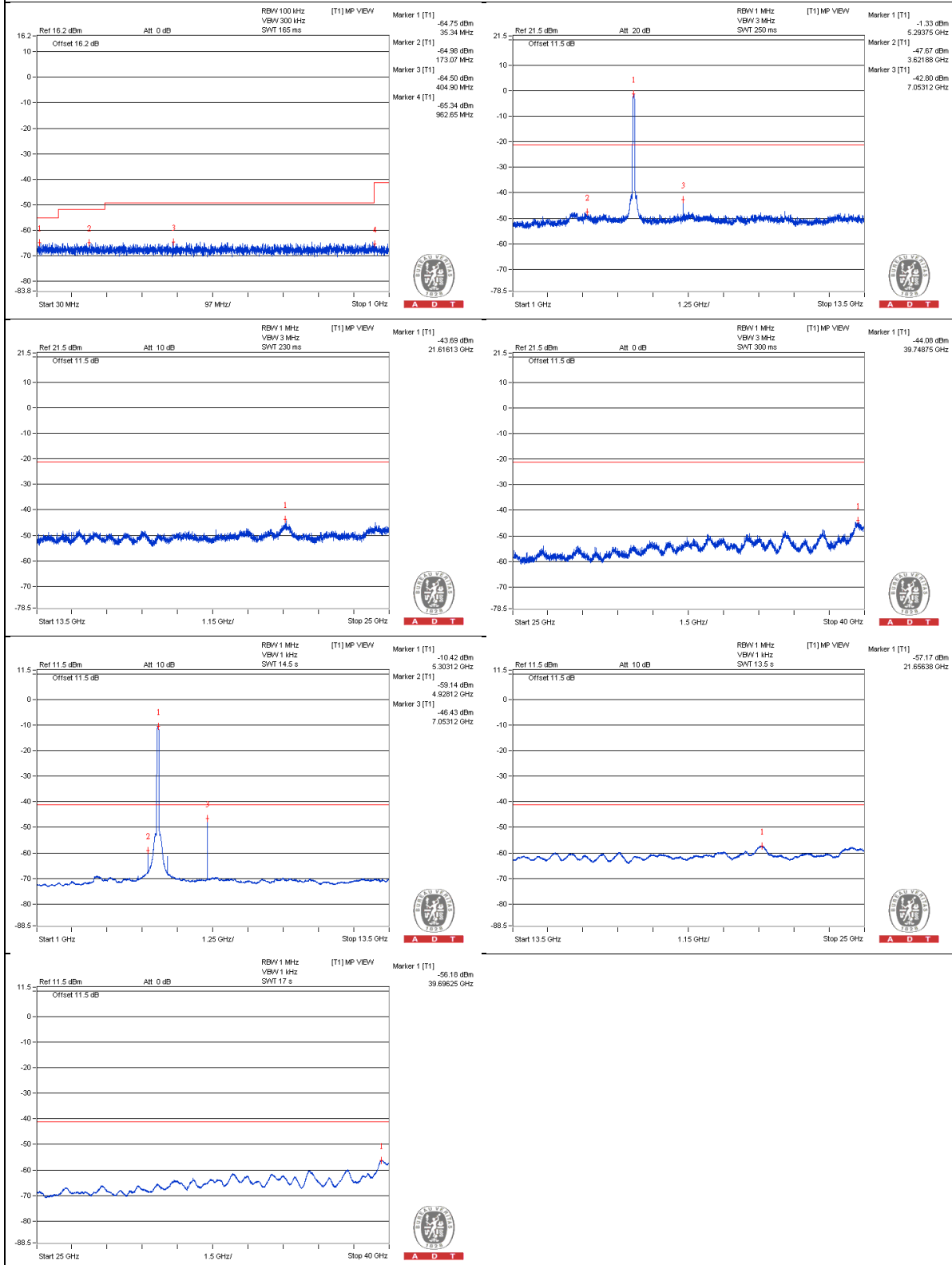
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3531.25 PK	56.02	74	-17.98	-47.92	-48.81	6.09	-39.24
2	3540.625 AV	34.32	54	-19.68	-69.95	-70.13	6.09	-60.94
3	7053.125 PK	60.09	68.2	-8.11	-42.8	-46.51	6.09	-35.17
4	10562.5 PK	54.44	74	-19.56	-50.04	-49.81	6.09	-40.82
5	10581.25 AV	33.39	54	-20.61	-71	-70.95	6.09	-61.87
6	15889.125 PK	54.39	74	-19.61	-49.93	-50.02	6.09	-40.87
7	15863.25 AV	43.14	54	-10.86	-61.3	-61.14	6.09	-52.12

Note :

Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



Bandedge table

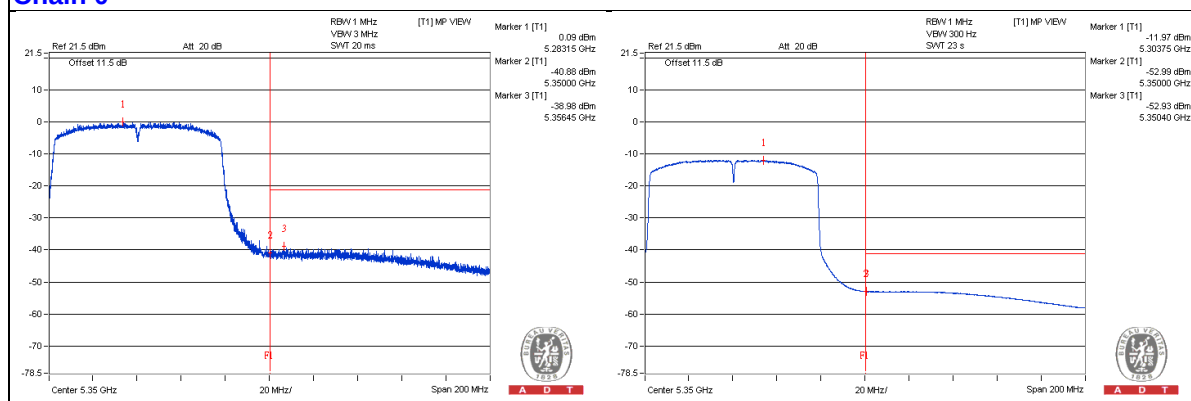
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	5394.7 PK	64.24	74	-9.76	-39.74	-40.53	6.09	-31.02
2	5386 AV	51.83	54	-2.17	-53.22	-51.94	6.09	-43.43

Note :

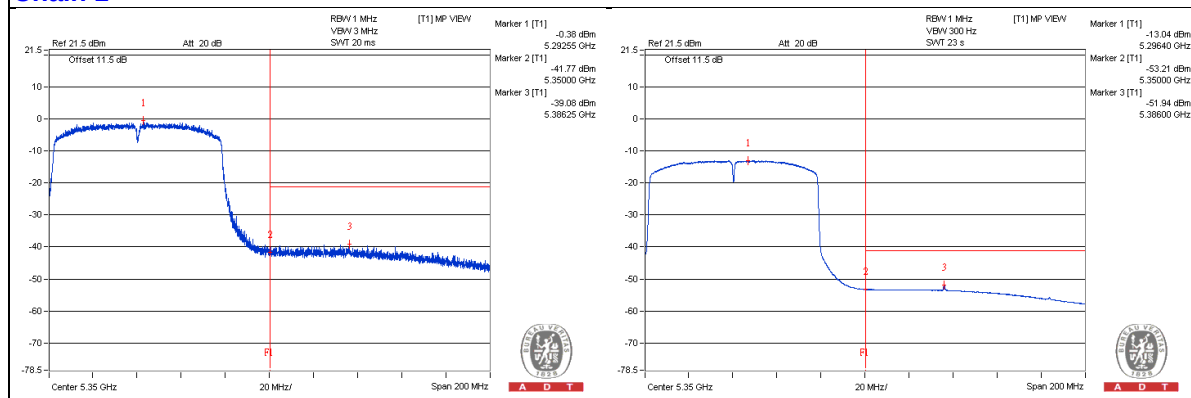
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT80) - Channel 106

Conducted spurious emission table

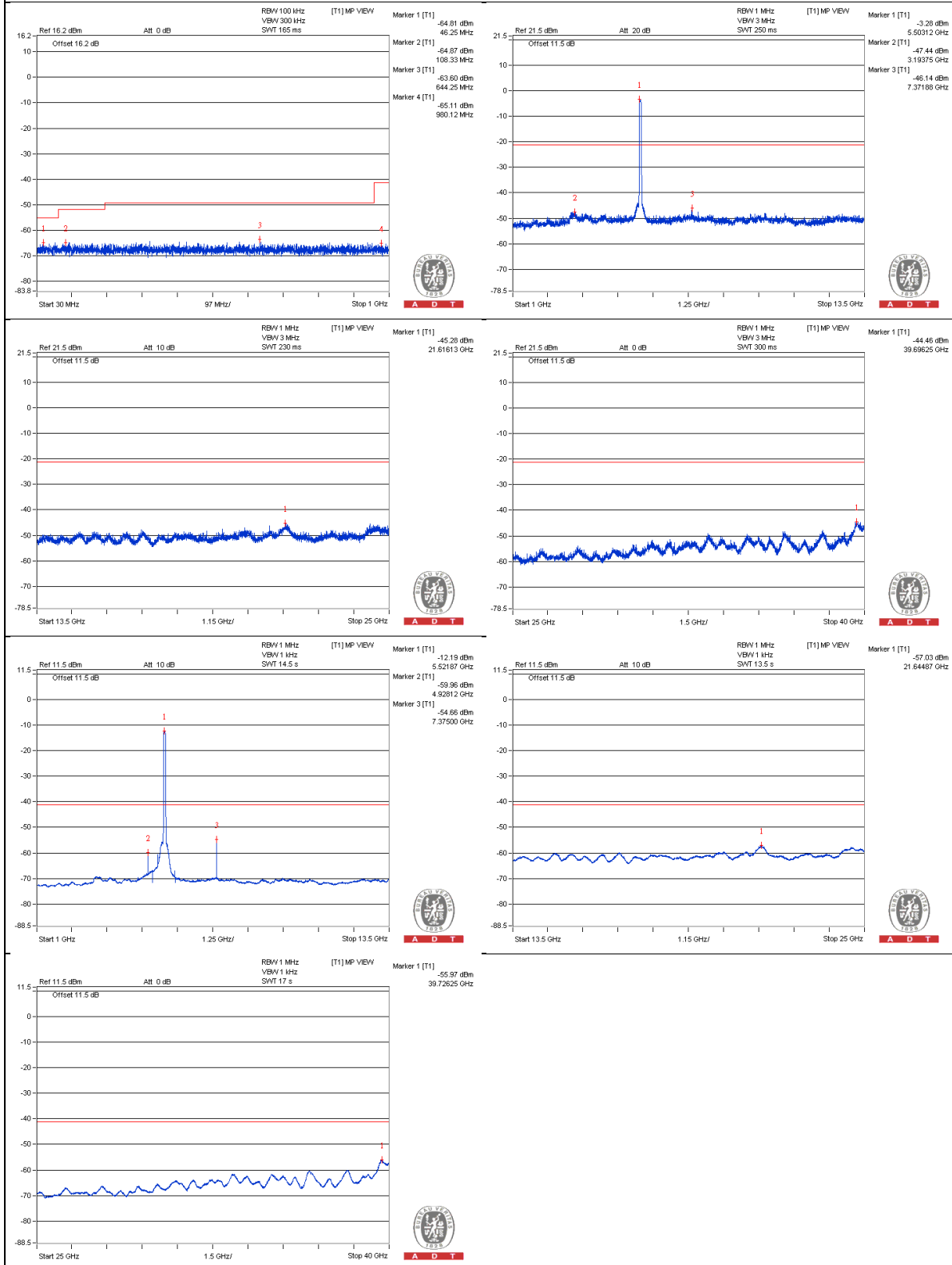
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3678.125 PK	56.87	74	-17.13	-49.7	-48.7	7.77	-38.39
2	3687.5 AV	35.61	54	-18.39	-70.27	-70.59	7.77	-59.65
3	7371.875 PK	58.4	74	-15.6	-46.14	-49.94	7.77	-36.86
4	7371.875 AV	48.5	54	-5.5	-54.67	-69.5	7.77	-46.76
5	11059.375 PK	55.25	74	-18.75	-51.14	-50.47	7.77	-40.01
6	11065.625 AV	33.93	54	-20.07	-71.96	-72.27	7.77	-61.33
7	16582 PK	54.47	74	-19.53	-52.72	-50.67	7.77	-40.79
8	16570.5 AV	43.24	54	-10.76	-62.64	-62.96	7.77	-52.02

Note :

Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



Bandedge table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	5465.6875 PK	71.01	74	-2.99	-44.44	-32.28	7.77	-24.25
2	5468.1875 AV	56.98	54	* 2.98	-55.79	-46.54	7.77	-38.28

Note :

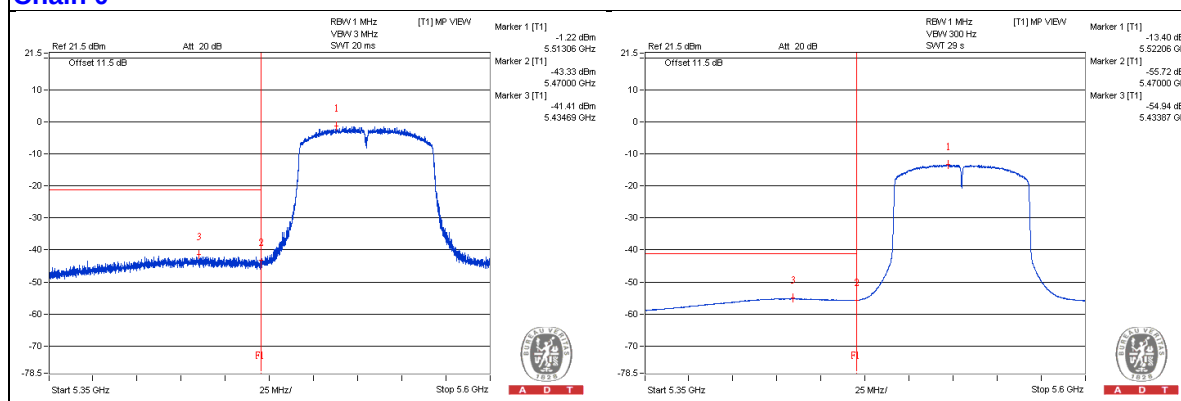
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

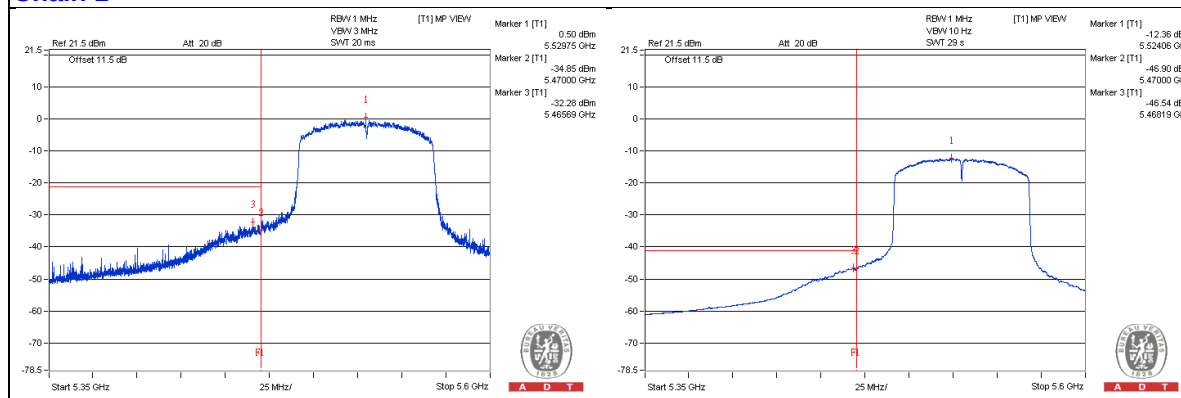
* The unwanted emission was verified and the test result was passed by radiated measurement.

(Please refer APPENDIX A)

Chain 0



Chain 1



802.11ac (VHT80) - Channel 122

Conducted spurious emission table

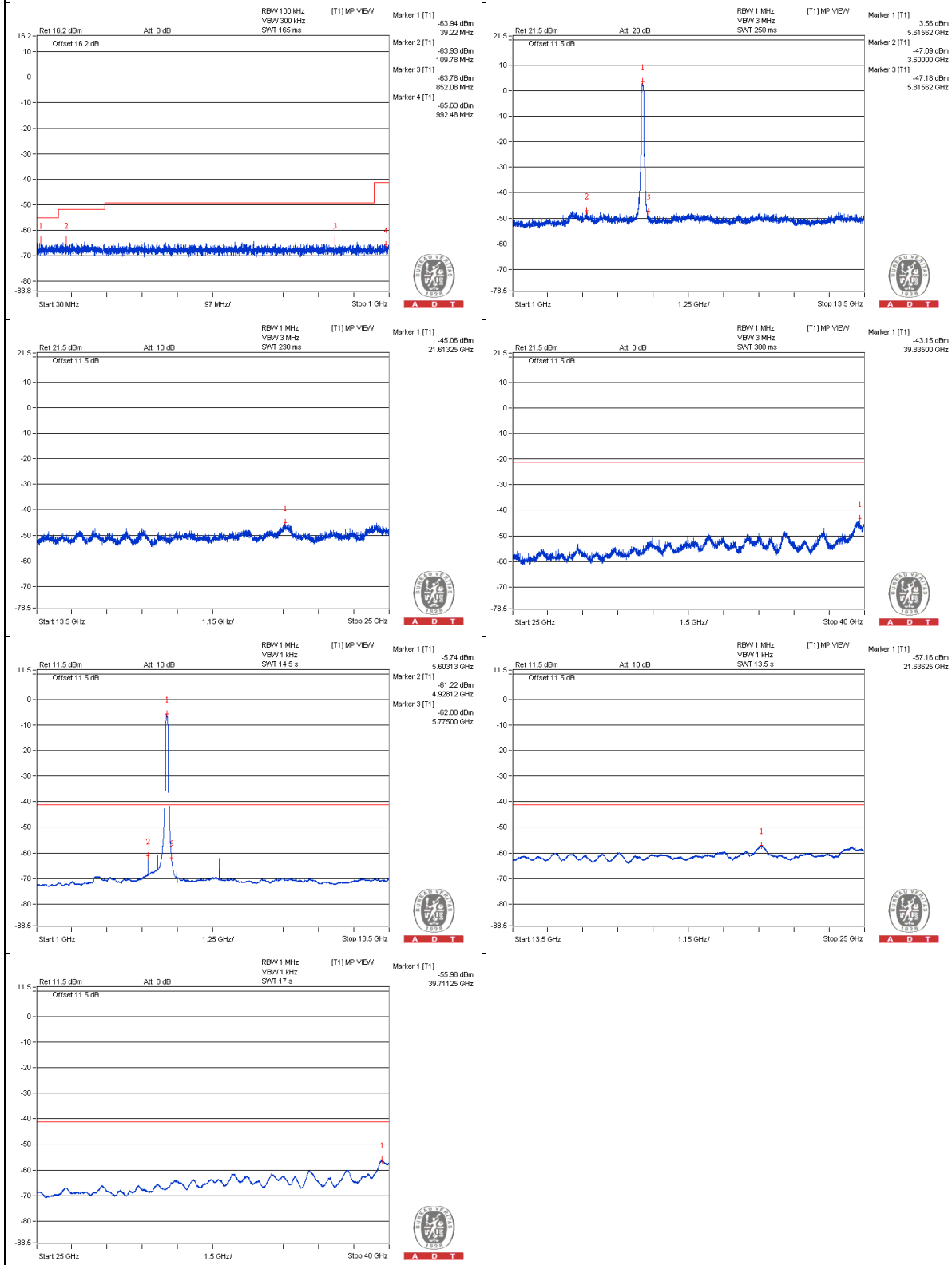
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3750 PK	56.5	74	-17.5	-49.02	-50.13	7.77	-38.76
2	3737.5 AV	35.69	54	-18.31	-70.17	-70.54	7.77	-59.57
3	7493.75 PK	56.52	74	-17.48	-48.74	-50.46	7.77	-38.74
4	7481.25 AV	41.56	54	-12.44	-62.05	-70.52	7.77	-53.7
5	11206.25 PK	55.52	74	-18.48	-50.07	-51.02	7.77	-39.74
6	11221.875 AV	34.58	54	-19.42	-71.52	-71.4	7.77	-60.68
7	16846.5 PK	56.53	74	-17.47	-48.66	-50.56	7.77	-38.73
8	16846.5 AV	44.7	54	-9.3	-61.2	-61.49	7.77	-50.56

Note :

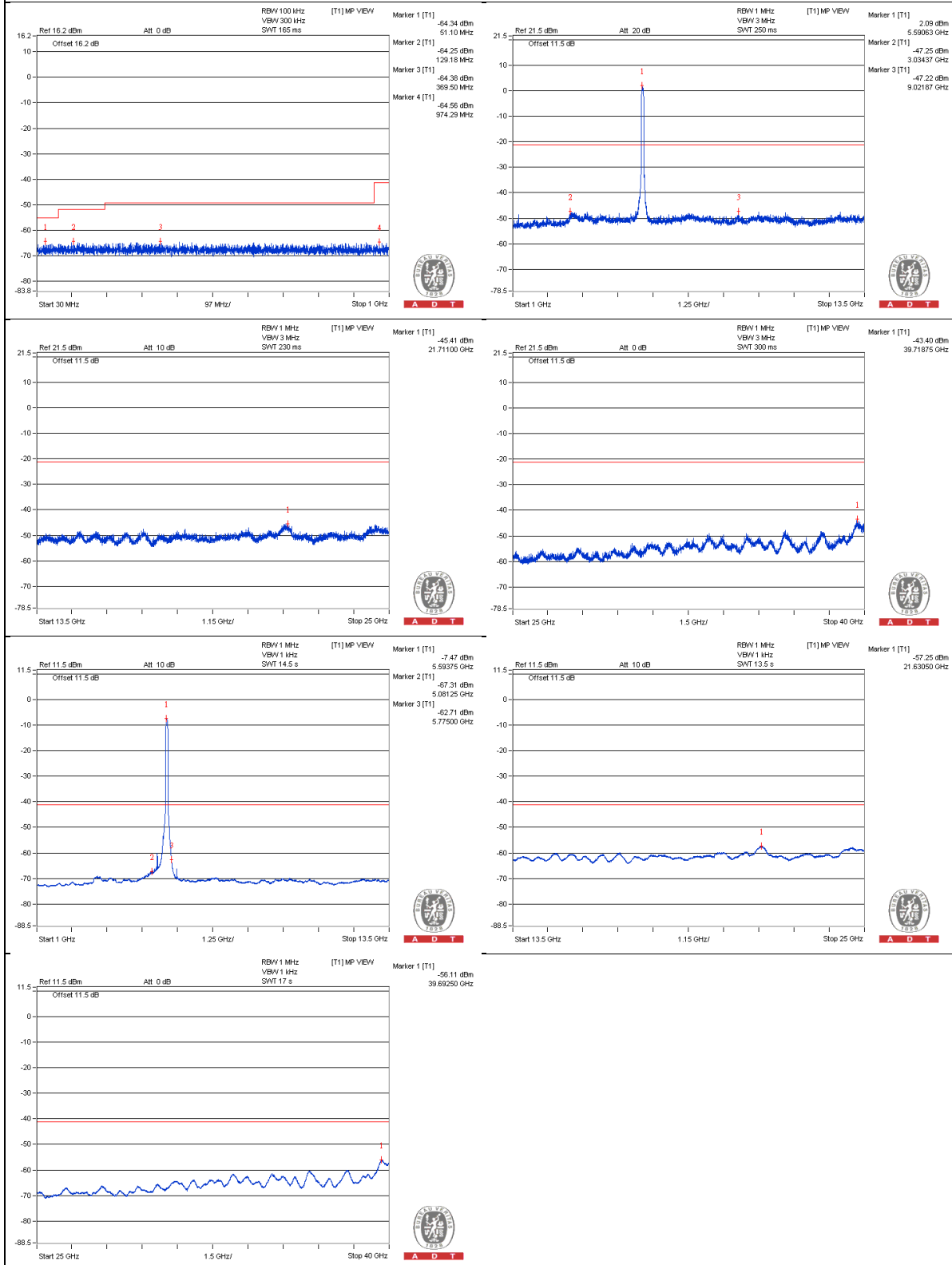
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



Bandedge table

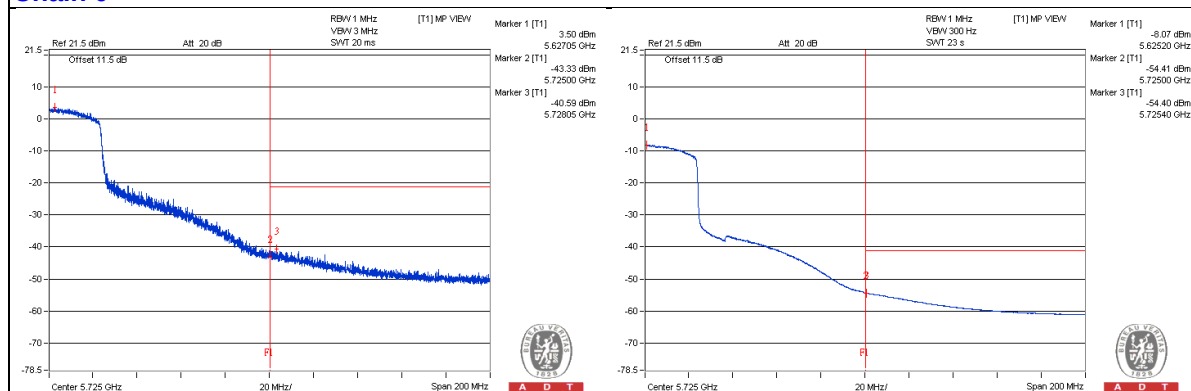
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	5730.15 PK	64.62	74	-9.38	-42.38	-40.64	7.77	-30.64
2	5725 AV	51.3	54	-2.7	-54.41	-55.1	7.77	-43.96

Note :

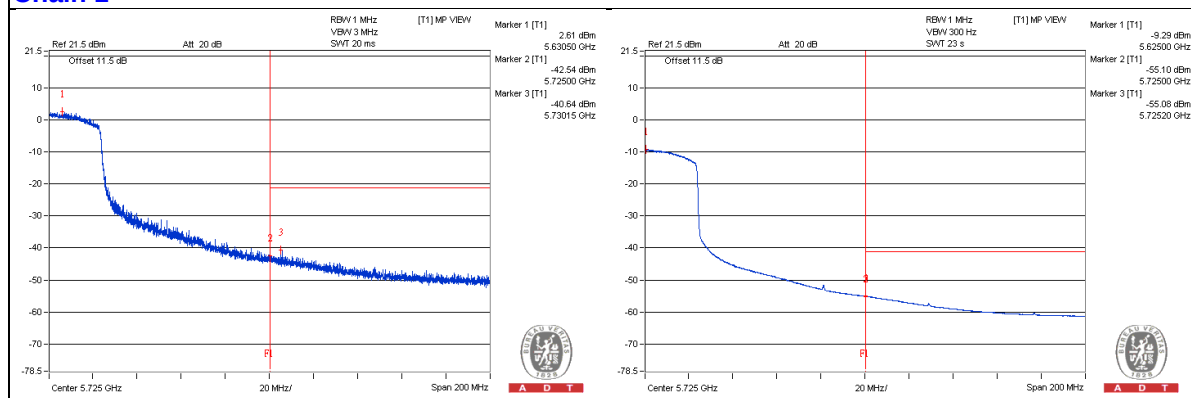
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT80) - Channel 138

Conducted spurious emission table

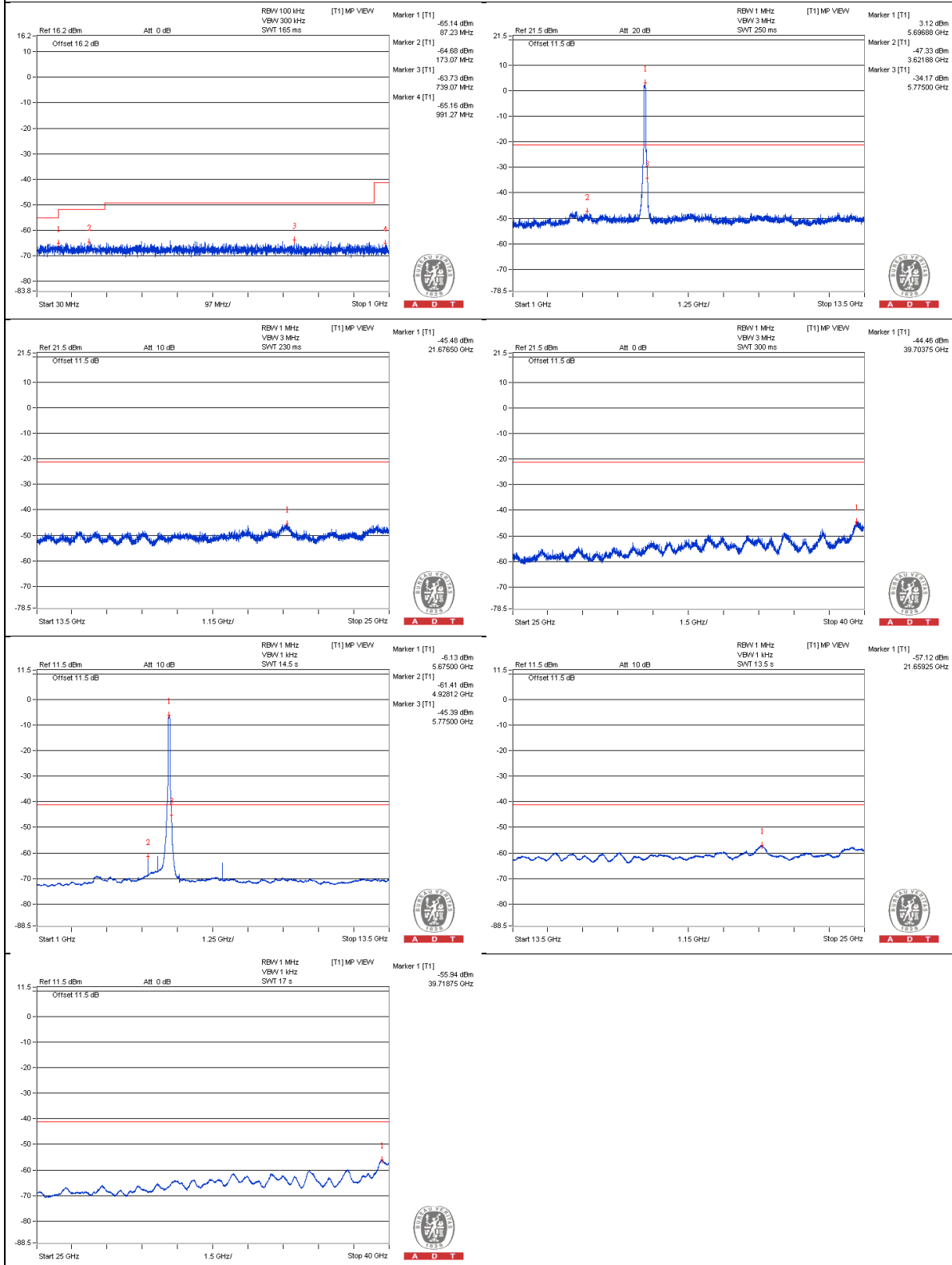
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3784.375 PK	56.51	74	-17.49	-49.83	-49.25	7.77	-38.75
2	3775 AV	35.58	54	-18.42	-70.24	-70.7	7.77	-59.68
3	7606.25 PK	56.79	74	-17.21	-48.6	-50.01	7.77	-38.47
4	7587.5 AV	39.91	54	-14.09	-64	-70.51	7.77	-55.35
5	11375 PK	55.4	74	-18.6	-50.65	-50.63	7.77	-39.86
6	11378.125 AV	34.49	54	-19.51	-71.38	-71.73	7.77	-60.77
7	17070.75 PK	56.68	74	-17.32	-50.22	-48.65	7.77	-38.58
8	17062.125 AV	45.07	54	-8.93	-60.96	-60.99	7.77	-50.19

Note :

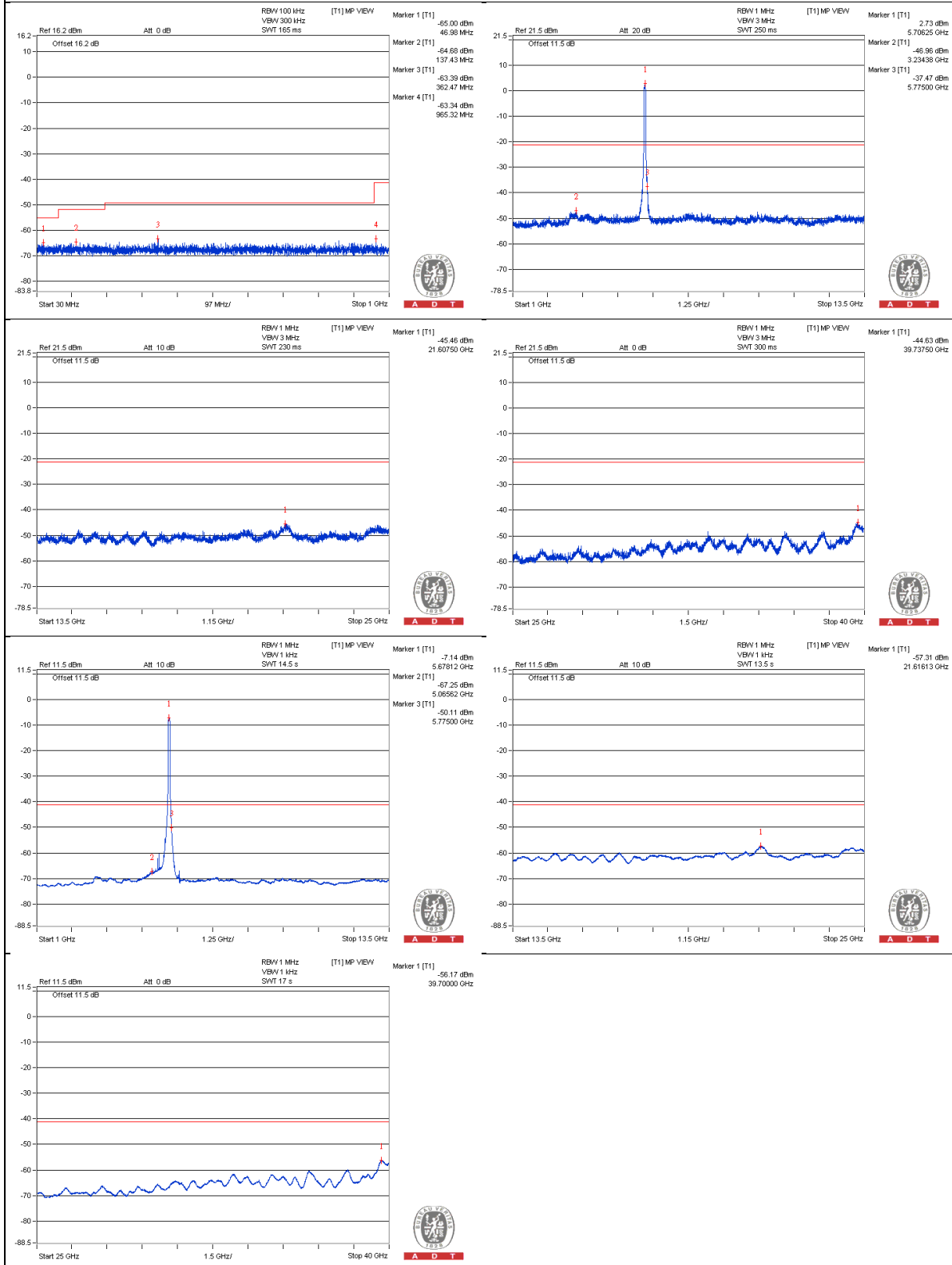
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



Bandedge table

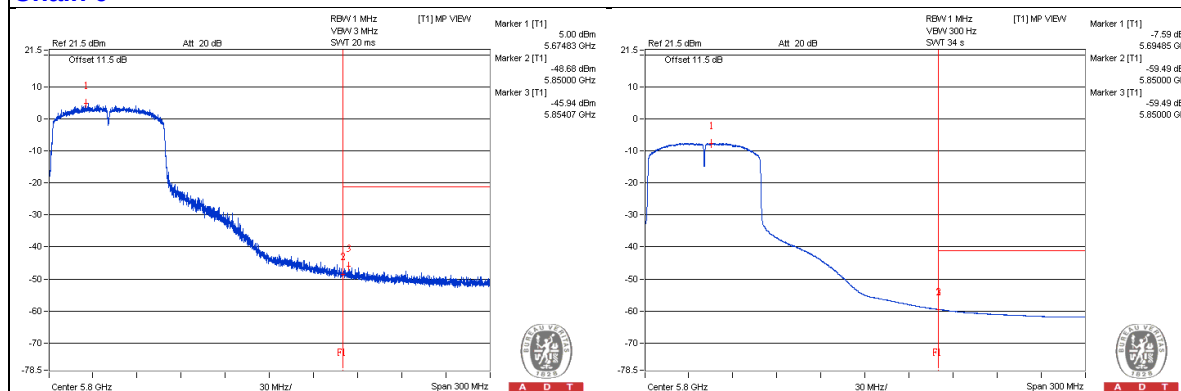
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	5834.05 PK	60.61	74	-13.39	-46.36	-44.66	7.77	-34.65
2	5825.05 AV	48.29	54	-5.71	-57.57	-57.93	7.77	-46.97

Note :

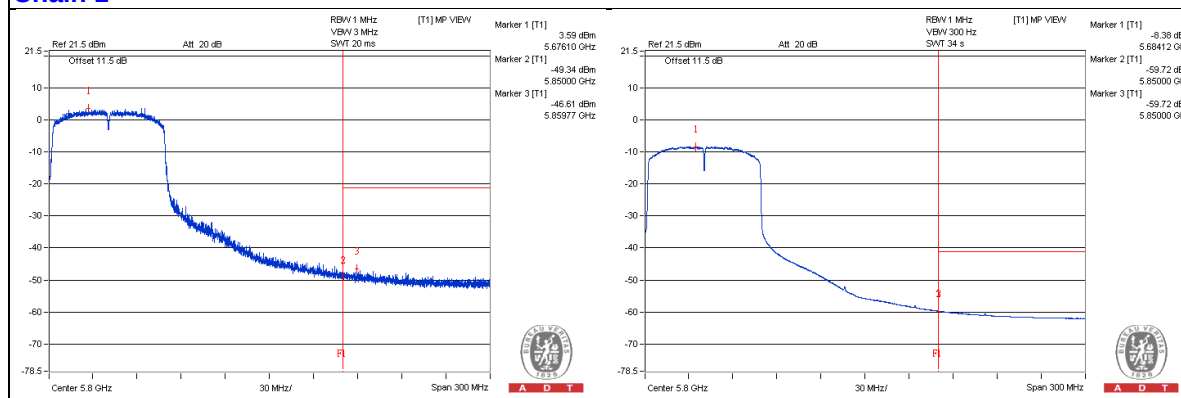
Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.

Chain 0



Chain 1



802.11ac (VHT80) - Channel 155

Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	3850 PK	55.26	74	-18.74	-51.24	-50.37	7.77	-40
2	3850 AV	35.54	54	-18.46	-70.54	-70.46	7.77	-59.72
3	7700 PK	56.48	74	-17.52	-49.67	-49.46	7.77	-38.78
4	7700 AV	39.14	54	-14.86	-65.47	-69.04	7.77	-56.12
5	11550 PK	54.67	74	-19.33	-51.96	-50.85	7.77	-40.59
6	11550 AV	34.82	54	-19.18	-71.45	-71.01	7.77	-60.44
7	17323.75 PK	55.24	74	-18.76	-50.9	-50.7	7.77	-40.02
8	17323.75 AV	43.79	54	-10.21	-62.13	-62.38	7.77	-51.47

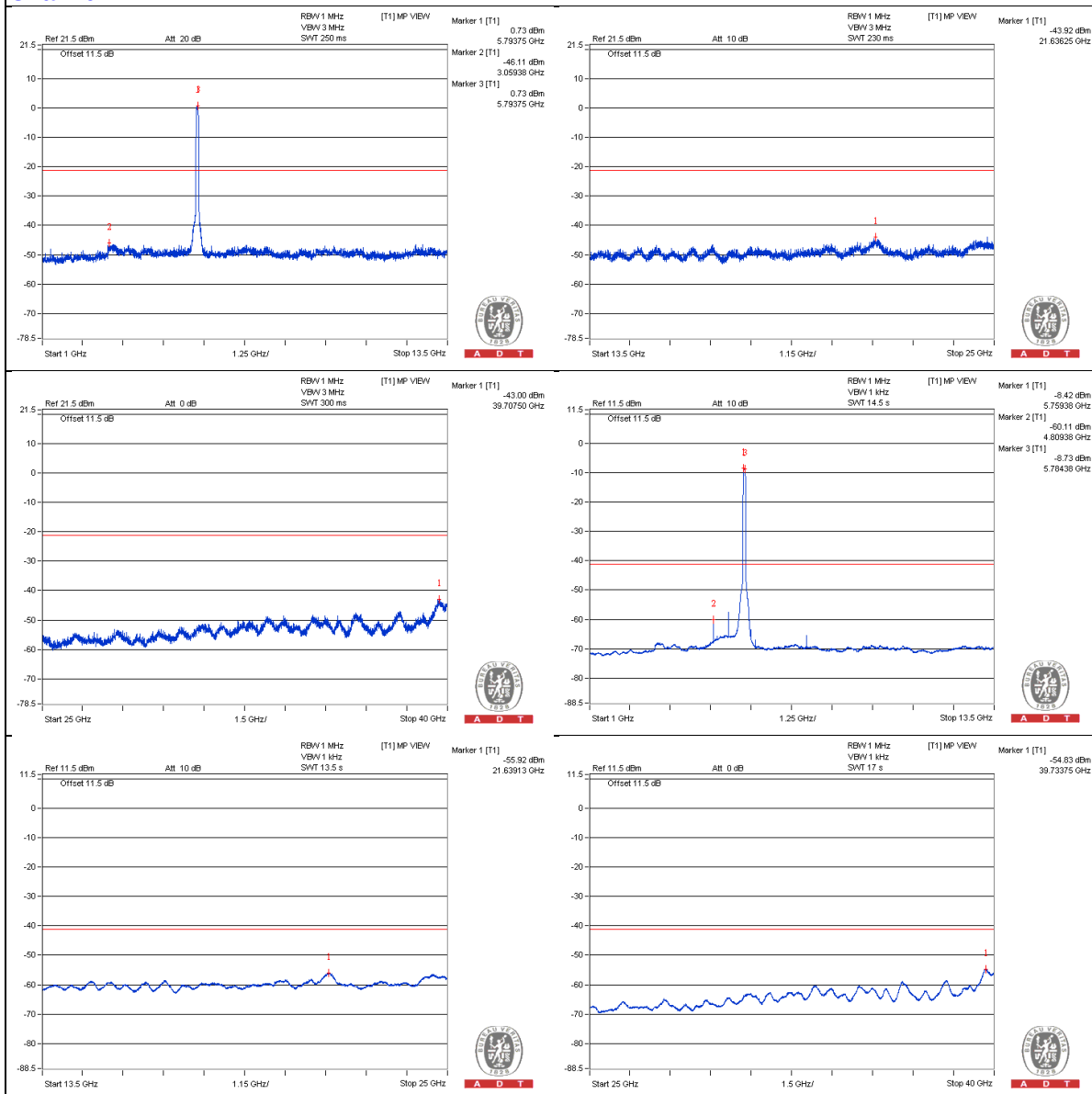
Note :

Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

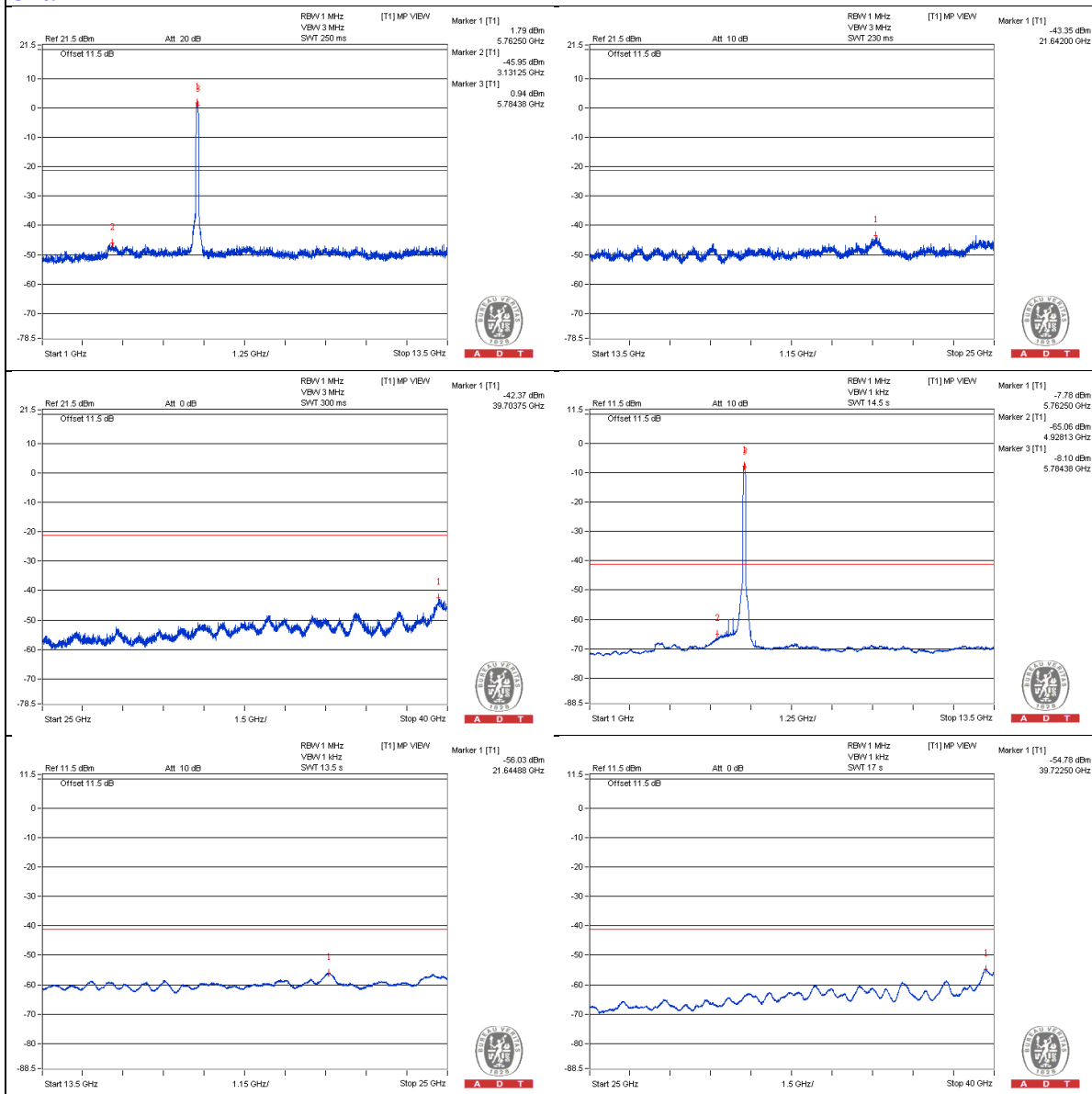
d = measurement distance in 3 meters.

✧ Bandedge spurious emission refer to *Annex A - Conducted Out of Band Emission (OOBE) Measurement (For U-NII-3 band)* item.

Chain 0



Chain 1



Below 1GHz Data

802.11ac (VHT40) - Channel 159

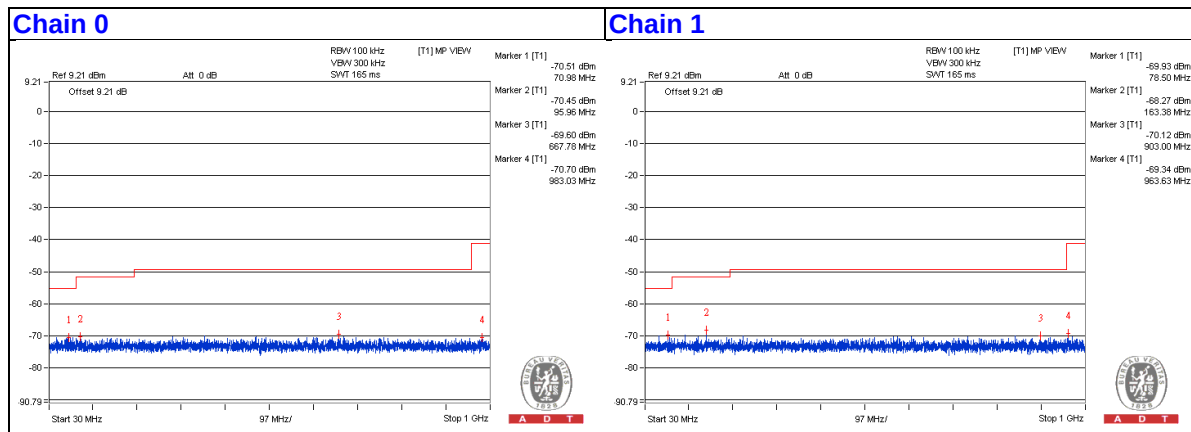
Conducted spurious emission table

No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw Value (dBm)		Correction Factor (dB)	EIRP Level (dBm)
					Chain0	Chain1		
1	78.5	34.65	40	-5.35	-73.59	-69.93	7.77	-60.61
2	163.375	36.15	43.5	-7.35	-72.51	-68.27	7.77	-59.11
3	371.6825	34.53	46	-11.47	-70.07	-73.69	7.77	-60.73
4	426.9725	34.74	46	-11.26	-71.3	-71.31	7.77	-60.52
5	767.4425	35.3	46	-10.7	-70.54	-70.94	7.77	-59.96
6	963.625	35.24	54	-18.76	-73	-69.34	7.77	-60.02

Note :

Emission Level (dBuV/m) = EIRP Level (dBm) – 20log(d) + 104.8

d = measurement distance in 3 meters.



4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Note: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2.2 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS 30	100375	Apr. 29, 2014	Apr. 28, 2015
Line-Impedance Stabilization Network (for EUT) SCHWARZBECK	NSLK-8127	8127-522	Sep. 15, 2014	Sep. 14, 2015
Line-Impedance Stabilization Network (for Peripheral) ROHDE & SCHWARZ	ENV216	100071	Nov. 10, 2014	Nov. 09, 2015
RF Cable (JYEBAO)	5DFB	COCCAB-001	Mar. 10, 2014	Mar. 09, 2015
50 ohms Terminator	N/A	EMC-03	Sep. 22, 2014	Sep. 21, 2015
50 ohms Terminator	N/A	EMC-02	Sep. 30, 2014	Sep. 29, 2015
Software ADT	BV ADT_Cond_V7.3.7. 3	NA	NA	NA

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in Shielded Room No. C.
3. The VCCI Con C Registration No. is C-3611.
4. Tested Date: Feb. 11, 2015

4.2.3 Test Procedure

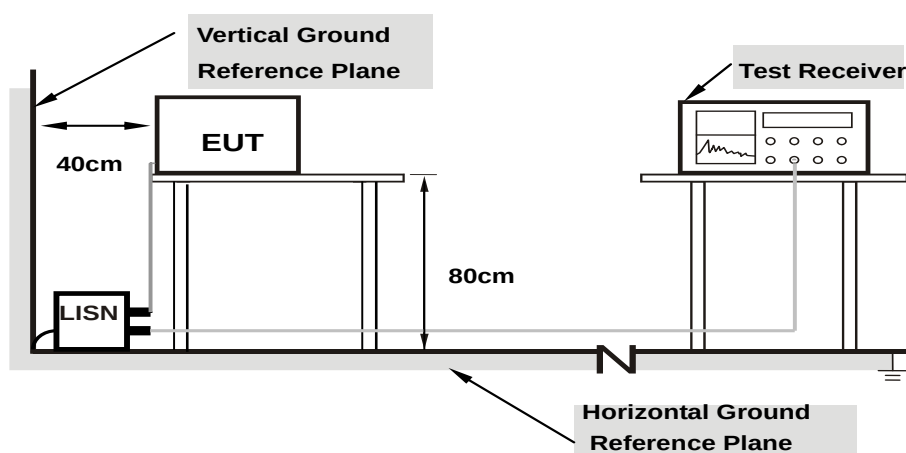
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

Note: All modes of operation were investigated and the worst-case emissions are reported.

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.2.6 EUT Operating Condition

Same as 4.1.6.

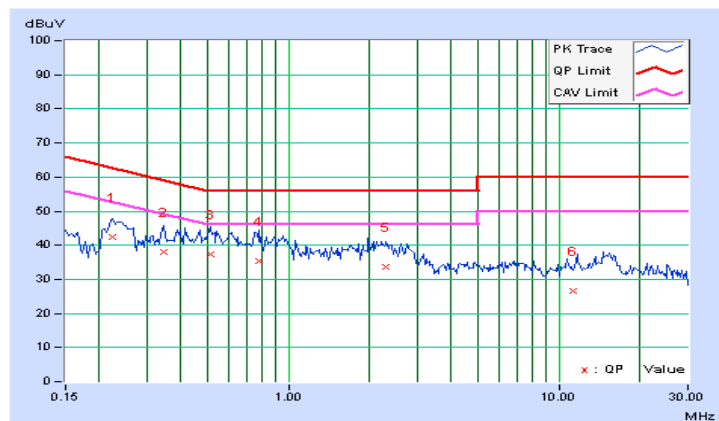
4.2.7 Test Results

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
-------	----------	-------------------	-----------------------------------

No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.22422	0.07	42.46	31.08	42.53	31.15	62.66	52.66	-20.13	-21.51
2	0.34531	0.08	38.02	28.32	38.10	28.40	59.07	49.07	-20.97	-20.67
3	0.51328	0.10	37.20	26.08	37.30	26.18	56.00	46.00	-18.70	-19.82
4	0.78281	0.12	35.36	26.64	35.48	26.76	56.00	46.00	-20.52	-19.24
5	2.30469	0.19	33.38	25.94	33.57	26.13	56.00	46.00	-22.43	-19.87
6	11.27453	0.48	26.15	17.33	26.63	17.81	60.00	50.00	-33.37	-32.19

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

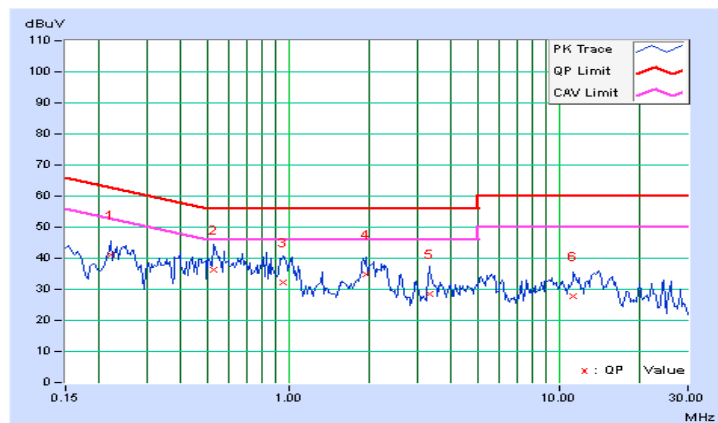


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
-------	-------------	-------------------	--------------------------------

No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.22031	0.06	41.04	30.74	41.10	30.80	62.81	52.81	-21.70	-22.00
2	0.52891	0.10	36.20	25.48	36.30	25.58	56.00	46.00	-19.70	-20.42
3	0.95469	0.13	32.22	24.32	32.35	24.45	56.00	46.00	-23.65	-21.55
4	1.94141	0.18	34.64	28.92	34.82	29.10	56.00	46.00	-21.18	-16.90
5	3.30859	0.23	28.20	20.78	28.43	21.01	56.00	46.00	-27.57	-24.99
6	11.28906	0.50	27.12	18.24	27.62	18.74	60.00	50.00	-32.38	-31.26

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



4.3 Transmit Power Measurement

4.3.1 Limits of Transmit Power Measurement

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Client device	250mW (24 dBm)
U-NII-2A	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	√		250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	√		1 Watt (30 dBm)

*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

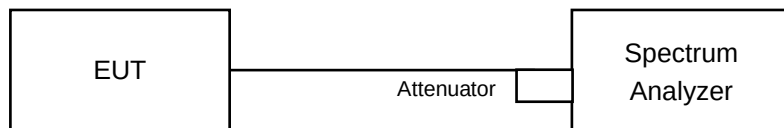
Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

For power measurements on all other devices: Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB.

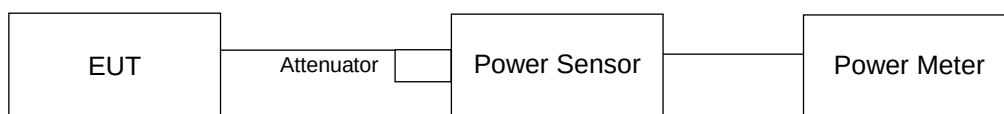
4.3.2 Test Setup

FOR POWER OUTPUT MEASUREMENT

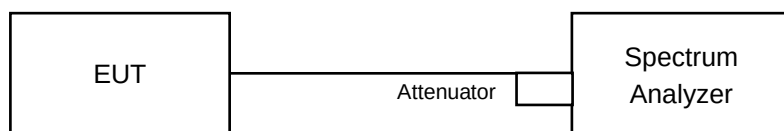
For channel straddling 5725MHz:



For other channels:



FOR 26dB OCCUPIED BANDWIDTH



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

FOR POWER OUTPUT MEASUREMENT

For channel straddling 5725MHz:

Follow FCC KDB 789033 UNII test procedure:

802.11ac (VHT80)

Method SA-2

1. Set span to encompass the emission bandwidth (EBW) of the signal.
2. Set RBW = 1MHz.
3. Set the VBW $\geq 3 \times$ RBW.
4. Number of points in sweep $\geq 2 \text{ Span} / \text{RBW}$.
5. Sweep time = auto.
6. Detector = RMS.
7. Trace average at least 100 traces in power averaging mode
8. Compute power by integrating the spectrum across the 26 dB EBW of the signal.
9. Duty factor need added to measured value (duty cycle < 98 percent).

Other Modulation mode

Method SA-1

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1MHz.
3. Set the VBW $\geq 3 \times$ RBW.
4. Number of points in sweep $\geq 2 \text{ Span} / \text{RBW}$.
5. Sweep time = auto.
6. Set trigger to free run (duty cycle ≥ 98 percent) ; Set video trigger (duty cycle < 98 percent)
7. Detector = RMS.
8. Trace average at least 100 traces in power averaging mode
9. Compute power by integrating the spectrum across the 26 dB EBW of the signal.

For other channels:

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

FOR 26dB OCCUPIED BANDWIDTH

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Condition

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 Test Results

For U-NII-1, U-NII-2A, U-NII-2C:

802.11a

POWER OUTPUT

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	17.53	16.51	101.395	20.06	23.91	Pass
40	5200	17.51	16.59	101.968	20.08	23.91	Pass
48	5240	17.69	16.77	106.283	20.26	23.91	Pass
52	5260	17.28	16.61	99.27	19.97	23.91	Pass
60	5300	17.35	16.49	98.891	19.95	23.91	Pass
64	5320	15.72	14.66	66.567	18.23	23.81	Pass
100	5500	15.40	14.16	60.736	17.83	22.07	Pass
116	5580	17.70	16.57	104.278	20.18	22.23	Pass
140	5700	14.63	14.05	54.45	17.36	22.11	Pass
*144 (UNII-2c Band)	5720	12.95	12.51	37.548	15.75	21.25	Pass
*144 (UNII-3 Band)	5720	5.79	5.22	7.12	8.52	28.23	Pass

* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
*144	5720	44.668	16.5

Note: The total power was calculated through formula and record the value for reference only.

Note:

- 5150~5250MHz: Directional gain = $3.08\text{dBi} + 10\log(2) = 6.09\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $24-(6.09-6)$.
- 5250~5350MHz: Directional gain = $3.08\text{dBi} + 10\log(2) = 6.09\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to "Determined Conducted Limit-(6.09-6)".
- 5470~5725MHz: Directional gain = $4.76\text{dBi} + 10\log(2) = 7.77\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to "Determined Conducted Limit-(7.77-6)".
- 5725~5850MHz: Directional gain = $4.76\text{dBi} + 10\log(2) = 7.77\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to "Determined Conducted Limit-(7.77-6)".

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	21.06	20.13
40	5200	21.85	20.11
48	5240	20.63	20.64
52	5260	20.27	20.71
60	5300	20.46	20.96
64	5320	19.85	19.52
100	5500	20.05	19.25
116	5580	23.80	21.05
140	5700	19.69	19.43
144 (UNII-2c Band)	5720	16.49	15.93

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	20.27	24.06 > 24
60	5300	20.46	24.1 > 24
64	5320	19.52	23.9 < 24
100	5500	19.25	23.84 < 24
116	5580	21.05	24.23 > 24
140	5700	19.43	23.88 < 24
144 (UNII-2c Band)	5720	15.93	23.02 < 24

802.11ac (VHT20)

POWER OUTPUT

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	17.14	17.02	102.111	20.09	23.91	Pass
40	5200	17.85	17.11	112.358	20.51	23.91	Pass
48	5240	17.83	17.30	114.377	20.58	23.91	Pass
52	5260	17.77	17.16	111.841	20.49	23.91	Pass
60	5300	17.88	17.14	113.137	20.54	23.91	Pass
64	5320	15.33	14.42	61.788	17.91	23.91	Pass
100	5500	15.89	14.95	70.076	18.46	22.23	Pass
116	5580	17.40	16.55	100.14	20.01	22.23	Pass
140	5700	14.47	13.91	52.594	17.21	22.23	Pass
*144 (UNII-2c Band)	5720	12.72	12.37	35.965	15.56	21.24	Pass
*144 (UNII-3 Band)	5720	5.93	5.44	7.416	8.70	28.23	Pass

* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
*144	5720	43.381	16.37

Note: The total power was calculated through formula and record the value for reference only.

Note:

- 5150~5250MHz: Directional gain = $3.08\text{dBi} + 10\log(2) = 6.09\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $24-(6.09-6)$.
- 5250~5350MHz: Directional gain = $3.08\text{dBi} + 10\log(2) = 6.09\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to "Determined Conducted Limit-(6.09-6)".
- 5470~5725MHz: Directional gain = $4.76\text{dBi} + 10\log(2) = 7.77\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to "Determined Conducted Limit-(7.77-6)".
- 5725~5850MHz: Directional gain = $4.76\text{dBi} + 10\log(2) = 7.77\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to "Determined Conducted Limit-(7.77-6)".

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	20.98	20.92
40	5200	21.77	22.04
48	5240	21.90	21.74
52	5260	22.72	21.34
60	5300	22.08	21.41
64	5320	20.51	20.20
100	5500	21.34	20.30
116	5580	24.38	21.13
140	5700	20.61	20.71
144 (UNII-2c Band)	5720	17.73	15.90

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	21.34	24.29 > 24
60	5300	21.41	24.3 > 24
64	5320	20.20	24.05 > 24
100	5500	20.30	24.07 > 24
116	5580	21.13	24.24 > 24
140	5700	20.61	24.14 > 24
144 (UNII-2c Band)	5720	15.90	23.01 < 24

802.11ac (VHT40)

POWER OUTPUT

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	14.35	13.25	48.362	16.85	23.91	Pass
46	5230	17.21	16.34	95.655	19.81	23.91	Pass
54	5270	17.24	16.38	96.417	19.84	23.91	Pass
62	5310	15.21	14.37	60.542	17.82	23.91	Pass
102	5510	15.15	14.99	64.284	18.08	22.23	Pass
110	5550	17.50	16.65	102.472	20.11	22.23	Pass
134	5670	17.10	16.75	98.601	19.94	22.23	Pass
*142 (UNII-2c Band)	5710	12.88	12.78	38.376	15.84	22.23	Pass
*142 (UNII-3 Band)	5710	0.93	0.07	2.255	3.53	28.23	Pass

* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
*142	5710	40.631	16.09

Note: The total power was calculated through formula and record the value for reference only.

Note:

5150~5250MHz: Directional gain = 3.08dBi + 10log(2) = 6.09dBi > 6dBi , so the power limit shall be reduced to 24-(6.09-6).

5250~5350MHz: Directional gain = 3.08dBi + 10log(2) = 6.09dBi > 6dBi , so the power limit shall be reduced to "Determined Conducted Limit-(6.09-6)".

5470~5725MHz: Directional gain = 4.76dBi + 10log(2) = 7.77dBi > 6dBi , so the power limit shall be reduced to "Determined Conducted Limit-(7.77-6)".

5725~5850MHz: Directional gain = 4.76dBi + 10log(2) = 7.77dBi > 6dBi , so the power limit shall be reduced to "Determined Conducted Limit-(7.77-6)".

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	42.22	42.05
46	5230	43.06	42.01
54	5270	43.34	42.44
62	5310	42.02	41.70
102	5510	42.20	41.64
110	5550	55.11	41.97
134	5670	42.99	42.37
142 (UNII-2c Band)	5710	40.20	36.74

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	42.44	27.27 > 24
62	5310	41.70	27.2 > 24
102	5510	41.64	27.19 > 24
110	5550	41.97	27.29 > 24
134	5670	42.37	27.22 > 24
142 (UNII-2c Band)	5710	36.74	26.65 > 24

802.11ac (VHT80)

POWER OUTPUT

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	13.71	12.52	41.361	16.17	23.91	Pass
58	5290	12.16	11.60	30.898	14.90	23.91	Pass
106	5530	12.53	12.06	33.975	15.31	22.23	Pass
122	5610	16.88	15.74	86.25	19.36	22.23	Pass
*138 (UNII-2c Band)	5690	11.16	10.78	25.671	14.09	22.23	Pass
*138 (UNII-3 Band)	5690	-4.53	-5.79	0.632	-1.99	28.23	Pass

* Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
138	5690	26.4565	14.23

Note: The total power was calculated through formula and record the value for reference only.

Note:

5150~5250MHz: Directional gain = $3.08\text{dBi} + 10\log(2) = 6.09\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $24-(6.09-6)$.

5250~5350MHz: Directional gain = $3.08\text{dBi} + 10\log(2) = 6.09\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to "Determined Conducted Limit-(6.09-6)".

5470~5725MHz: Directional gain = $4.76\text{dBi} + 10\log(2) = 7.77\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to "Determined Conducted Limit-(7.77-6)".

5725~5850MHz: Directional gain = $4.76\text{dBi} + 10\log(2) = 7.77\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to "Determined Conducted Limit-(7.77-6)".

For CH138: Total power (dBm)= Average power <Chain 0 +1>(dBm) + Duty Factor (0.14dB)

26dB OCCUPIED BANDWIDTH

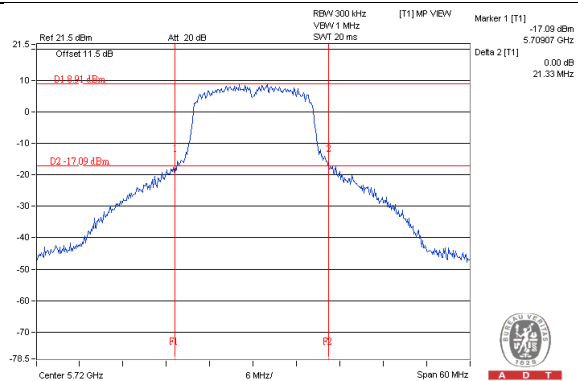
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	83.35	82.53
58	5290	83.22	83.86
106	5530	83.39	82.55
122	5610	92.36	83.58
138 (UNII-2c Band)	5690	77.98	76.93

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

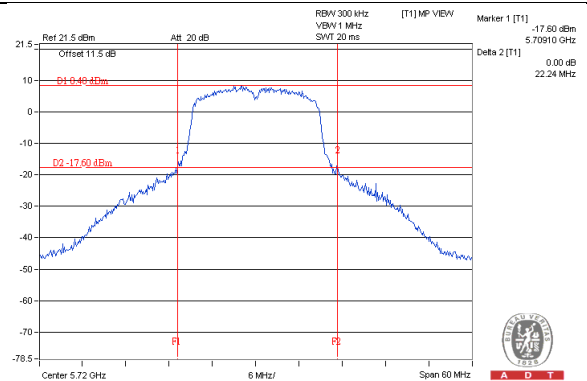
Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	83.22	30.2 > 24
106	5530	82.55	30.16 > 24
122	5610	83.58	30.22 > 24
138 (UNII-2c Band)	5690	76.93	29.86 > 24

Spectrum Plot of Worst Value

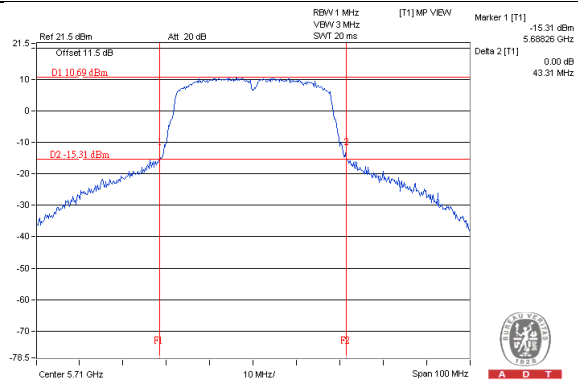
802.11a_Chain 1 / CH144 (UNII-2C)



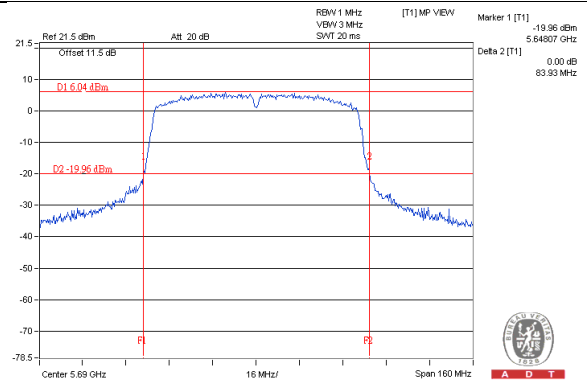
802.11ac (VHT20)_Chain 1 / CH144 (UNII-2C)



802.11ac (VHT40)_Chain 1 / CH142 (UNII-2C)



802.11ac (VHT80)_Chain 1 / CH138 (UNII-2C)



Note:

- For CH144 (U_NII-2C) = 5725MHz - Marker 1
- For CH142 (U_NII-2C) = 5725MHz - Marker 1
- For CH138 (U_NII-2C) = 5725MHz - Marker 1

For U-NII-3:

802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	15.03	15.38	66.356	18.22	28.23	Pass
157	5785	18.03	18.21	129.755	21.13	28.23	Pass
165	5825	18.16	18.00	128.56	21.09	28.23	Pass

Note: Directional gain = 4.76dBi + 10log(2) = 7.77dBi > 6dBi , so the power limit shall be reduced to 30-(7.77-6) = 28.23.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
149	5745	15.04	15.01	63.611	18.04	28.23	Pass
157	5785	18.03	18.23	130.06	21.14	28.23	Pass
165	5825	16.98	17.55	106.773	20.28	28.23	Pass

Note: Directional gain = 4.76dBi + 10log(2) = 7.77dBi > 6dBi , so the power limit shall be reduced to 30-(7.77-6) = 28.23.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
151	5755	12.78	12.37	36.225	15.59	28.23	Pass
159	5795	19.18	18.73	157.439	21.97	28.23	Pass

Note: Directional gain = 4.76dBi + 10log(2) = 7.77dBi > 6dBi , so the power limit shall be reduced to 30-(7.77-6) = 28.23.

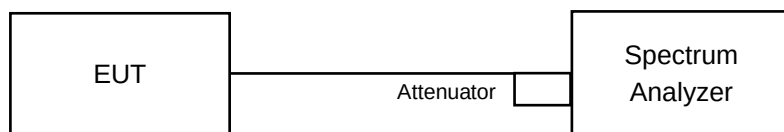
802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
155	5775	11.90	12.15	31.894	15.04	28.23	Pass

Note: Directional gain = 4.76dBi + 10log(2) = 7.77dBi > 6dBi , so the power limit shall be reduced to 30-(7.77-6) = 28.23.

4.4 Occupied Bandwidth Measurement

4.4.1 Test Setup



4.4.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.3 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to SAMPLE. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

4.4.4 Test Results

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		CHAIN 0	CHAIN 1
36	5180	16.44	16.44
40	5200	16.32	16.44
48	5240	16.44	16.32
52	5260	16.44	16.32
60	5300	16.44	16.32
64	5320	16.44	16.44
100	5500	16.32	16.44
116	5580	16.32	16.32
140	5700	16.44	16.32
144 (UNII-2C Band)	5720	13.28	13.28
144 (UNII-3 Band)	5720	3.28	3.16
149	5745	16.32	16.32
157	5785	16.44	16.44
165	5825	16.56	16.44

802.11ac (VHT20)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		CHAIN 0	CHAIN 1
36	5180	17.64	17.52
40	5200	17.64	17.52
48	5240	17.52	17.52
52	5260	17.64	17.52
60	5300	17.52	17.52
64	5320	17.52	17.64
100	5500	17.52	17.52
116	5580	17.52	17.40
140	5700	17.52	17.40
144 (UNII-2C Band)	5720	13.76	13.88
144 (UNII-3 Band)	5720	3.76	3.76
149	5745	17.40	17.40
157	5785	17.64	17.64
165	5825	17.64	17.52

802.11ac (VHT40)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		CHAIN 0	CHAIN 1
38	5190	36.00	36.20
46	5230	36.24	36.24
54	5270	36.20	36.00
62	5310	36.40	36.20
102	5510	36.20	36.20
110	5550	36.24	36.00
134	5670	36.00	36.00
142 (UNII-2C Band)	5710	33.40	33.20
142 (UNII-3 Band)	5710	3.00	3.00
151	5755	36.00	36.00
159	5795	36.40	36.20

802.11ac (VHT80)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		CHAIN 0	CHAIN 1
42	5210	74.88	74.88
58	5290	74.88	75.12
106	5530	74.88	75.84
122	5610	75.12	75.12
138 (UNII-2C Band)	5690	72.92	72.92
138 (UNII-3 Band)	5690	2.44	1.96
155	5775	75.36	75.36