

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (152) of (227)



5.5.3 Test Result

- Complied

1. Band edge & Conducted Spurious Emissions was shown in figure 3 & 4.
Note: We took the insertion loss of the cable into consideration within the measuring instrument.
2. Measured value of the Field strength of spurious Emissions (Radiated)
3. It tested x,y and z – 3 axis each, mentioned only worst case data at this report.

※ Noise was not measured. (Margin was more than 20 dB)

- Below 1 GHz data (worst-case: 802.11b_ANT 2)

Middle channel (2 437 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Quasi-Peak DATA. Emissions below 30 MHz										
11.68	9	V	35.90	0.94	-32.67	19.63	-12.10	23.80	69.50	45.70
18.34	9	V	35.40	1.11	-32.68	19.37	-12.20	23.20	69.50	46.30
23.04	9	H	34.30	1.34	-32.68	19.24	-12.10	22.20	69.50	47.30
Quasi-Peak DATA. Emissions below 1 GHz										
149.55	120	H	51.20	5.31	-32.49	8.38	-18.80	32.40	43.50	11.10
875.11	120	H	43.40	9.55	-32.20	21.85	-0.80	42.60	46.00	3.40
900.09	120	H	42.70	9.66	-32.06	22.20	-0.20	42.50	46.00	3.50

NOTE 1. Factor = Cable loss + Amp gain + Antenna factor

NOTE 2. Although these tests were performed other than open field test site, adequate comparison measurements were confirmed against 30 m open field test site.

Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (153) of (227)

**- Above 1 GHz data**

- ANT 0

802.11b_Lowest channel (2 412 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.00	1 000	V	44.50	3.52	-34.66	29.24	-1.90	-	42.60	74.00	31.40
2 390.00 ¹⁾	1 000	H	45.60	4.86	-33.99	31.93	2.80	-	48.40	74.00	25.60
4 823.13	1 000	V	67.70	4.31	-57.47	34.16	-19.00	-	48.70	74.00	25.30
7 237.38	1 000	H	71.10	4.97	-57.43	35.56	-16.90	-	54.20	74.00	19.80
19 163.44	1 000	H	48.60	12.80	-52.50	44.60	4.90	-	53.50	74.00	20.50
25 642.56	1 000	H	44.10	15.00	-52.50	46.10	8.60	-	52.70	74.00	21.30
Average DATA. Emissions above 1 GHz											
1 350.00	1 000	V	41.10	3.52	-34.66	29.24	-1.90	0.04	39.24	54.00	14.76
2 390.00 ¹⁾	1 000	H	40.10	4.86	-33.99	31.93	2.80	0.04	42.94	54.00	11.06
4 823.13	1 000	V	63.20	4.31	-57.47	34.16	-19.00	0.04	44.24	54.00	9.76
7 237.38	1 000	H	66.80	4.97	-57.43	35.56	-16.90	0.04	49.94	54.00	4.06
19 163.44	1 000	H	37.40	12.80	-52.50	44.60	4.90	0.04	42.34	54.00	11.66
25 642.56	1 000	H	33.40	15.00	-52.50	46.10	8.60	0.04	42.04	54.00	11.96

¹⁾ Restricted band.

802.11b_Middle channel (2 437 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.31	1 000	V	44.30	3.52	-34.66	29.24	-1.90	-	42.40	74.00	31.60
1 875.31	1 000	V	42.90	4.28	-34.32	31.04	1.00	-	43.90	74.00	30.10
4 873.88	1 000	V	66.50	4.27	-57.19	34.22	-18.70	-	47.80	74.00	26.20
7 311.69	1 000	H	70.70	5.17	-57.46	35.59	-16.70	-	54.00	74.00	20.00
19 044.44	1 000	V	49.90	12.80	-52.50	44.50	4.80	-	54.70	74.00	19.30
25 573.50	1 000	V	44.60	15.00	-52.80	46.00	8.20	-	52.80	74.00	21.20
Average DATA. Emissions above 1 GHz											
1 350.31	1 000	V	38.70	3.52	-34.66	29.24	-1.90	0.04	36.84	54.00	17.16
1 875.31	1 000	V	36.70	4.28	-34.32	31.04	1.00	0.04	37.74	54.00	16.26
4 873.88	1 000	V	62.40	4.27	-57.19	34.22	-18.70	0.04	43.74	54.00	10.26
7 311.69	1 000	H	66.10	5.17	-57.46	35.59	-16.70	0.04	49.44	54.00	4.56
19 044.44	1 000	V	37.30	12.80	-52.50	44.50	4.80	0.04	42.14	54.00	11.86
25 573.50	1 000	V	33.50	15.00	-52.80	46.00	8.20	0.04	41.74	54.00	12.26

This test report shall not be reproduced, except in full, without the written approval

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (154) of (227)

**802.11b_Highest channel (2 462 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.00	1 000	V	44.40	3.52	-34.66	29.24	-1.90	-	42.50	74.00	31.50
2 487.50 ¹⁾	1 000	H	52.90	4.96	-34.51	32.05	2.50	-	55.40	74.00	18.60
4 922.81	1 000	V	62.30	4.22	-57.20	34.28	-18.70	-	43.60	74.00	30.40
7 386.00	1 000	H	68.80	5.37	-57.49	35.62	-16.50	-	52.30	74.00	21.70
19 067.81	1 000	V	49.30	12.80	-52.40	44.50	4.90	-	54.20	74.00	19.80
25 677.62	1 000	H	44.10	15.00	-52.40	46.10	8.70	-	52.80	74.00	21.20
Average DATA. Emissions above 1 GHz											
1 350.00	1 000	V	40.20	3.52	-34.66	29.24	-1.90	0.04	38.34	54.00	15.66
2 487.50 ¹⁾	1 000	H	38.40	4.96	-34.51	32.05	2.50	0.04	40.94	54.00	13.06
4 922.81	1 000	V	58.60	4.22	-57.20	34.28	-18.70	0.04	39.94	54.00	14.06
7 386.00	1 000	H	64.20	5.37	-57.49	35.62	-16.50	0.04	47.74	54.00	6.26
19 067.81	1 000	V	37.30	12.80	-52.40	44.50	4.90	0.04	42.24	54.00	11.76
25 677.62	1 000	H	33.50	15.00	-52.40	46.10	8.70	0.04	42.24	54.00	11.76

¹⁾ Restricted band.

802.11g_Lowest channel (2 412 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.31	1 000	V	44.20	3.52	-34.66	29.24	-1.90	-	42.30	74.00	31.70
2 388.44 ¹⁾	1 000	H	55.90	4.86	-33.99	31.93	2.80	-	58.70	74.00	15.30
7 233.75	1 000	H	62.60	4.96	-57.42	35.56	-16.90	-	45.70	74.00	28.30
12 638.62	1 000	H	58.10	8.53	-57.18	38.85	-9.80	-	48.30	74.00	25.70
19 166.62	1 000	H	48.10	12.80	-52.50	44.60	4.90	-	53.00	74.00	21.00
25 661.69	1 000	H	43.60	15.00	-52.40	46.10	8.70	-	52.30	74.00	21.70
Average DATA. Emissions above 1 GHz											
1 350.31	1 000	V	40.50	3.52	-34.66	29.24	-1.90	0.07	38.67	54.00	15.33
2 388.44 ¹⁾	1 000	H	46.70	4.86	-33.99	31.93	2.80	0.07	49.57	54.00	4.43
7 233.75	1 000	H	54.20	4.96	-57.42	35.56	-16.90	0.07	37.37	54.00	16.63
12 638.62	1 000	H	47.90	8.53	-57.18	38.85	-9.80	0.07	38.17	54.00	15.83
19 166.62	1 000	H	37.40	12.80	-52.50	44.60	4.90	0.07	42.37	54.00	11.63
25 661.69	1 000	H	33.50	15.00	-52.40	46.10	8.70	0.07	42.27	54.00	11.73

¹⁾ Restricted band.

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (155) of (227)

**802.11g_Middle channel (2 437 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	45.40	3.19	-34.96	28.47	-3.30	-	42.10	74.00	31.90
1 350.31	1 000	V	44.70	3.52	-34.66	29.24	-1.90	-	42.80	74.00	31.20
7 320.75	1 000	V	69.10	5.20	-57.49	35.59	-16.70	-	52.40	74.00	21.60
12 727.44	1 000	H	58.40	8.51	-57.38	38.87	-10.00	-	48.40	74.00	25.60
19 082.69	1 000	H	47.70	12.80	-52.40	44.50	4.90	-	52.60	74.00	21.40
25 562.87	1 000	V	44.40	15.00	-52.80	46.00	8.20	-	52.60	74.00	21.40
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	40.80	3.19	-34.96	28.47	-3.30	0.07	37.57	54.00	16.43
1 350.31	1 000	V	41.20	3.52	-34.66	29.24	-1.90	0.07	39.37	54.00	14.63
7 320.75	1 000	V	59.40	5.20	-57.49	35.59	-16.70	0.07	42.77	54.00	11.23
12 727.44	1 000	H	47.60	8.51	-57.38	38.87	-10.00	0.07	37.67	54.00	16.33
19 082.69	1 000	H	37.40	12.80	-52.40	44.50	4.90	0.07	42.37	54.00	11.63
25 562.87	1 000	V	33.30	15.00	-52.80	46.00	8.20	0.07	41.57	54.00	12.43

802.11g_Highest channel (2 462 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.00	1 000	V	44.20	3.52	-34.66	29.24	-1.90	-	42.30	74.00	31.70
2 490.63 ¹⁾	1 000	H	54.60	4.96	-34.51	32.05	2.50	-	57.10	74.00	16.90
7 556.37	1 000	H	62.10	5.83	-57.51	35.68	-16.00	-	46.10	74.00	27.90
12 520.81	1 000	H	59.40	8.56	-57.19	38.83	-9.80	-	49.60	74.00	24.40
19 200.62	1 000	H	48.20	12.80	-52.50	44.60	4.90	-	53.10	74.00	20.90
25 757.31	1 000	H	43.40	15.00	-52.00	46.20	9.20	-	52.60	74.00	21.40
Average DATA. Emissions above 1 GHz											
1 350.00	1 000	V	40.20	3.52	-34.66	29.24	-1.90	0.07	38.37	54.00	15.63
2 490.63 ¹⁾	1 000	H	47.30	4.96	-34.51	32.05	2.50	0.07	49.87	54.00	4.13
7 556.37	1 000	H	54.60	5.83	-57.51	35.68	-16.00	0.07	38.67	54.00	15.33
12 520.81	1 000	H	48.10	8.56	-57.19	38.83	-9.80	0.07	38.37	54.00	15.63
19 200.62	1 000	H	37.30	12.80	-52.50	44.60	4.90	0.07	42.27	54.00	11.73
25 757.31	1 000	H	33.40	15.00	-52.00	46.20	9.20	0.07	42.67	54.00	11.33

¹⁾ Restricted band.

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (156) of (227)

**802.11n HT20_Lowest channel (2 412 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.00	1 000	V	44.30	3.52	-34.66	29.24	-1.90	-	42.40	74.00	31.60
2 389.38 ¹⁾	1 000	H	55.70	4.86	-33.99	31.93	2.80	-	58.50	74.00	15.50
7 248.25	1 000	H	67.60	5.00	-57.46	35.56	-16.90	-	50.70	74.00	23.30
12 031.44	1 000	H	60.40	8.70	-58.63	38.73	-11.20	-	49.20	74.00	24.80
19 069.94	1 000	H	48.30	12.80	-52.40	44.50	4.90	-	53.20	74.00	20.80
25 684.00	1 000	H	44.70	15.00	-52.30	46.10	8.80	-	53.50	74.00	20.50
Average DATA. Emissions above 1 GHz											
1 350.00	1 000	V	41.20	3.52	-34.66	29.24	-1.90	0.08	39.38	54.00	14.62
2 389.38 ¹⁾	1 000	H	46.40	4.86	-33.99	31.93	2.80	0.08	49.28	54.00	4.72
7 248.25	1 000	H	54.10	5.00	-57.46	35.56	-16.90	0.08	37.28	54.00	16.72
12 031.44	1 000	H	49.30	8.70	-58.63	38.73	-11.20	0.08	38.18	54.00	15.82
19 069.94	1 000	H	37.40	12.80	-52.40	44.50	4.90	0.08	42.38	54.00	11.62
25 684.00	1 000	H	37.40	15.00	-52.30	46.10	8.80	0.08	46.28	54.00	7.72

¹⁾ Restricted band.

802.11n HT20_Middle channel (2 437 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.31	1 000	H	47.10	3.19	-34.96	28.47	-3.30	-	43.80	74.00	30.20
1 349.69	1 000	V	43.30	3.52	-34.66	29.24	-1.90	-	41.40	74.00	32.60
4 866.63	1 000	H	68.80	4.27	-57.28	34.21	-18.80	-	50.00	74.00	24.00
7 315.31	1 000	H	71.20	5.18	-57.47	35.59	-16.70	-	54.50	74.00	19.50
19 183.62	1 000	H	48.20	12.80	-52.50	44.60	4.90	-	53.10	74.00	20.90
25 663.81	1 000	H	44.10	15.00	-52.40	46.10	8.70	-	52.80	74.00	21.20
Average DATA. Emissions above 1 GHz											
1 125.31	1 000	H	40.30	3.19	-34.96	28.47	-3.30	0.08	37.08	54.00	16.92
1 349.69	1 000	V	39.00	3.52	-34.66	29.24	-1.90	0.08	37.18	54.00	16.82
4 866.63	1 000	H	60.10	4.27	-57.28	34.21	-18.80	0.08	41.38	54.00	12.62
7 315.31	1 000	H	60.80	5.18	-57.47	35.59	-16.70	0.08	44.18	54.00	9.82
19 183.62	1 000	H	37.40	12.80	-52.50	44.60	4.90	0.08	42.38	54.00	11.62
25 663.81	1 000	H	33.30	15.00	-52.40	46.10	8.70	0.08	42.08	54.00	11.92

This test report shall not be reproduced, except in full, without the written approval

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (157) of (227)

**802.11n HT20_Highest channel (2 462 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 349.69	1 000	V	44.30	3.52	-34.66	29.24	-1.90	-	42.40	74.00	31.60
2 483.75 ¹⁾	1 000	H	53.00	4.95	-34.49	32.04	2.50	-	55.50	74.00	18.50
7 380.56	1 000	H	65.60	5.36	-57.47	35.61	-16.50	-	49.10	74.00	24.90
12 586.06	1 000	H	59.00	8.55	-57.19	38.84	-9.80	-	49.20	74.00	24.80
19 058.25	1 000	H	49.20	12.80	-52.40	44.50	4.90	-	54.10	74.00	19.90
25 693.56	1 000	H	44.00	15.00	-52.30	46.10	8.80	-	52.80	74.00	21.20
Average DATA. Emissions above 1 GHz											
1 349.69	1 000	V	41.60	3.52	-34.66	29.24	-1.90	0.08	39.78	54.00	14.22
2 483.75 ¹⁾	1 000	H	45.60	4.95	-34.49	32.04	2.50	0.08	48.18	54.00	5.82
7 380.56	1 000	H	53.20	5.36	-57.47	35.61	-16.50	0.08	36.78	54.00	17.22
12 586.06	1 000	H	49.50	8.55	-57.19	38.84	-9.80	0.08	39.78	54.00	14.22
19 058.25	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.08	42.28	54.00	11.72
25 693.56	1 000	H	33.30	15.00	-52.30	46.10	8.80	0.08	42.18	54.00	11.82

¹⁾ Restricted band.

802.11n HT40_Lowest channel (2 422 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.00	1 000	V	44.60	3.52	-34.66	29.24	-1.90	-	42.70	74.00	31.30
2 389.69 ¹⁾	1 000	H	50.50	4.86	-33.99	31.93	2.80	-	53.30	74.00	20.70
7 630.69	1 000	H	61.30	6.03	-57.54	35.71	-15.80	-	45.50	74.00	28.50
12 595.12	1 000	H	59.60	8.54	-57.18	38.84	-9.80	-	49.80	74.00	24.20
19 032.75	1 000	H	48.40	12.80	-52.50	44.50	4.80	-	53.20	74.00	20.80
25 674.44	1 000	H	44.30	15.00	-52.40	46.10	8.70	-	53.00	74.00	21.00
Average DATA. Emissions above 1 GHz											
1 350.00	1 000	V	39.60	3.52	-34.66	29.24	-1.90	0.16	37.86	54.00	16.14
2 389.69 ¹⁾	1 000	H	43.00	4.86	-33.99	31.93	2.80	0.16	45.96	54.00	8.04
7 630.69	1 000	H	51.70	6.03	-57.54	35.71	-15.80	0.16	36.06	54.00	17.94
12 595.12	1 000	H	48.90	8.54	-57.18	38.84	-9.80	0.16	39.26	54.00	14.74
19 032.75	1 000	H	37.30	12.80	-52.50	44.50	4.80	0.16	42.26	54.00	11.74
25 674.44	1 000	H	33.30	15.00	-52.40	46.10	8.70	0.16	42.16	54.00	11.84

¹⁾ Restricted band.

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (158) of (227)

**802.11n HT40_Middle channel (2 437 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	44.70	3.19	-34.96	28.47	-3.30	-	41.40	74.00	32.60
1 350.31	1 000	V	43.50	3.52	-34.66	29.24	-1.90	-	41.60	74.00	32.40
7 328.00	1 000	H	63.20	5.22	-57.41	35.59	-16.60	-	46.60	74.00	27.40
12 544.37	1 000	H	59.50	8.56	-57.19	38.83	-9.80	-	49.70	74.00	24.30
19 146.44	1 000	H	48.30	12.80	-52.50	44.60	4.90	-	53.20	74.00	20.80
25 682.94	1 000	H	44.20	15.00	-52.30	46.10	8.80	-	53.00	74.00	21.00
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	40.10	3.19	-34.96	28.47	-3.30	0.16	36.96	54.00	17.04
1 350.31	1 000	V	39.70	3.52	-34.66	29.24	-1.90	0.16	37.96	54.00	16.04
7 328.00	1 000	H	53.00	5.22	-57.41	35.59	-16.60	0.16	36.56	54.00	17.44
12 544.37	1 000	H	48.70	8.56	-57.19	38.83	-9.80	0.16	39.06	54.00	14.94
19 146.44	1 000	H	37.40	12.80	-52.50	44.60	4.90	0.16	42.46	54.00	11.54
25 682.94	1 000	H	33.40	15.00	-52.30	46.10	8.80	0.16	42.36	54.00	11.64

802.11n HT40_Highest channel (2 452 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.00	1 000	V	43.60	3.52	-34.66	29.24	-1.90	-	41.70	74.00	32.30
2 484.38 ¹⁾	1 000	H	57.40	4.95	-34.49	32.04	2.50	-	59.90	74.00	14.10
7 634.31	1 000	H	61.40	6.04	-57.55	35.71	-15.80	-	45.60	74.00	28.40
12 538.94	1 000	H	59.10	8.56	-57.19	38.83	-9.80	-	49.30	74.00	24.70
19 131.56	1 000	H	48.50	12.80	-52.40	44.50	4.90	-	53.40	74.00	20.60
25 746.69	1 000	H	43.50	15.00	-52.00	46.10	9.10	-	52.60	74.00	21.40
Average DATA. Emissions above 1 GHz											
1 350.00	1 000	V	39.40	3.52	-34.66	29.24	-1.90	0.16	37.66	54.00	16.34
2 484.38 ¹⁾	1 000	H	47.70	4.95	-34.49	32.04	2.50	0.16	50.36	54.00	3.64
7 634.31	1 000	H	51.50	6.04	-57.55	35.71	-15.80	0.16	35.86	54.00	18.14
12 538.94	1 000	H	48.60	8.56	-57.19	38.83	-9.80	0.16	38.96	54.00	15.04
19 131.56	1 000	H	37.20	12.80	-52.40	44.50	4.90	0.16	42.26	54.00	11.74
25 746.69	1 000	H	33.50	15.00	-52.00	46.10	9.10	0.16	42.76	54.00	11.24

¹⁾ Restricted band.

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (159) of (227)



- ANT 1

802.11b_Lowest channel (2 412 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.00	1 000	V	43.30	3.52	-34.66	29.24	-1.90	-	41.40	74.00	32.60
2 389.38 ¹⁾	1 000	H	45.90	4.86	-33.99	31.93	2.80	-	48.70	74.00	25.30
4 823.13	1 000	H	70.30	4.31	-57.47	34.16	-19.00	-	51.30	74.00	22.70
7 237.38	1 000	H	70.20	4.97	-57.43	35.56	-16.90	-	53.30	74.00	20.70
19 148.56	1 000	V	48.70	12.80	-52.50	44.60	4.90	-	53.60	74.00	20.40
25 573.50	1 000	H	44.10	15.00	-52.80	46.00	8.20	-	52.30	74.00	21.70
Average DATA. Emissions above 1 GHz											
1 350.00	1 000	V	39.70	3.52	-34.66	29.24	-1.90	0.04	37.84	54.00	16.16
2 389.38 ¹⁾	1 000	H	37.70	4.86	-33.99	31.93	2.80	0.04	40.54	54.00	13.46
4 823.13	1 000	H	67.30	4.31	-57.47	34.16	-19.00	0.04	48.34	54.00	5.66
7 237.38	1 000	H	62.20	4.97	-57.43	35.56	-16.90	0.04	45.34	54.00	8.66
19 148.56	1 000	V	37.30	12.80	-52.50	44.60	4.90	0.04	42.24	54.00	11.76
25 573.50	1 000	H	33.40	15.00	-52.80	46.00	8.20	0.04	41.64	54.00	12.36

¹⁾ Restricted band.

802.11b_Middle channel (2 437 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.31	1 000	H	46.10	3.19	-34.96	28.47	-3.30	-	42.80	74.00	31.20
1 350.31	1 000	V	44.50	3.52	-34.66	29.24	-1.90	-	42.60	74.00	31.40
4 873.88	1 000	H	70.20	4.27	-57.19	34.22	-18.70	-	51.50	74.00	22.50
7 311.69	1 000	H	72.60	5.17	-57.46	35.59	-16.70	-	55.90	74.00	18.10
19 114.56	1 000	H	48.70	12.80	-52.40	44.50	4.90	-	53.60	74.00	20.40
25 631.94	1 000	H	43.90	15.00	-52.50	46.00	8.50	-	52.40	74.00	21.60
Average DATA. Emissions above 1 GHz											
1 125.31	1 000	H	41.80	3.19	-34.96	28.47	-3.30	0.04	38.54	54.00	15.46
1 350.31	1 000	V	40.80	3.52	-34.66	29.24	-1.90	0.04	38.94	54.00	15.06
4 873.88	1 000	H	65.80	4.27	-57.19	34.22	-18.70	0.04	47.14	54.00	6.86
7 311.69	1 000	H	67.20	5.17	-57.46	35.59	-16.70	0.04	50.54	54.00	3.46
19 114.56	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.04	42.24	54.00	11.76
25 631.94	1 000	H	33.40	15.00	-52.50	46.00	8.50	0.04	41.94	54.00	12.06

This test report shall not be reproduced, except in full, without the written approval

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (160) of (227)

**802.11b_Highest channel (2 462 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.31	1 000	V	44.80	3.52	-34.66	29.24	-1.90	-	42.90	74.00	31.10
2 484.38 ¹⁾	1 000	H	47.00	4.95	-34.49	32.04	2.50	-	49.50	74.00	24.50
4 922.81	1 000	H	64.50	4.22	-57.20	34.28	-18.70	-	45.80	74.00	28.20
7 386.00	1 000	H	73.70	5.37	-57.49	35.62	-16.50	-	57.20	74.00	16.80
19 166.62	1 000	H	49.50	12.80	-52.50	44.60	4.90	-	54.40	74.00	19.60
25 107.06	1 000	V	45.60	15.00	-54.20	45.60	6.40	-	52.00	74.00	22.00
Average DATA. Emissions above 1 GHz											
1 350.31	1 000	V	39.80	3.52	-34.66	29.24	-1.90	0.04	37.94	54.00	16.06
2 484.38 ¹⁾	1 000	H	39.70	4.95	-34.49	32.04	2.50	0.04	42.24	54.00	11.76
4 922.81	1 000	H	61.60	4.22	-57.20	34.28	-18.70	0.04	42.94	54.00	11.06
7 386.00	1 000	H	67.40	5.37	-57.49	35.62	-16.50	0.04	50.94	54.00	3.06
19 166.62	1 000	H	37.30	12.80	-52.50	44.60	4.90	0.04	42.24	54.00	11.76
25 107.06	1 000	V	33.40	15.00	-54.20	45.60	6.40	0.04	39.84	54.00	14.16

¹⁾ Restricted band.

802.11g_Lowest channel (2 412 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.00	1 000	V	45.50	3.52	-34.66	29.24	-1.90	-	43.60	74.00	30.40
2 390.00 ¹⁾	1 000	H	60.70	4.86	-33.99	31.93	2.80	-	63.50	74.00	10.50
7 246.44	1 000	H	62.60	5.00	-57.46	35.56	-16.90	-	45.70	74.00	28.30
12 620.50	1 000	H	58.40	8.54	-57.19	38.85	-9.80	-	48.60	74.00	25.40
19 188.94	1 000	H	48.80	12.80	-52.50	44.60	4.90	-	53.70	74.00	20.30
25 657.44	1 000	H	44.00	15.00	-52.50	46.10	8.60	-	52.60	74.00	21.40
Average DATA. Emissions above 1 GHz											
1 350.00	1 000	V	40.20	3.52	-34.66	29.24	-1.90	0.07	38.37	54.00	15.63
2 390.00 ¹⁾	1 000	H	47.80	4.86	-33.99	31.93	2.80	0.07	50.67	54.00	3.33
7 246.44	1 000	H	51.30	5.00	-57.46	35.56	-16.90	0.07	34.47	54.00	19.53
12 620.50	1 000	H	48.60	8.54	-57.19	38.85	-9.80	0.07	38.87	54.00	15.13
19 188.94	1 000	H	37.40	12.80	-52.50	44.60	4.90	0.07	42.37	54.00	11.63
25 657.44	1 000	H	33.30	15.00	-52.50	46.10	8.60	0.07	41.97	54.00	12.03

¹⁾ Restricted band.

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (161) of (227)

**802.11g_Middle channel (2 437 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	45.40	3.19	-34.96	28.47	-3.30	-	42.10	74.00	31.90
1 350.31	1 000	V	44.70	3.52	-34.66	29.24	-1.90	-	42.80	74.00	31.20
4 875.69	1 000	H	67.90	4.26	-57.18	34.22	-18.70	-	49.20	74.00	24.80
7 313.50	1 000	H	71.30	5.18	-57.47	35.59	-16.70	-	54.60	74.00	19.40
19 025.31	1 000	H	49.00	12.80	-52.50	44.50	4.80	-	53.80	74.00	20.20
25 677.62	1 000	H	43.50	15.00	-52.40	46.10	8.70	-	52.20	74.00	21.80
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	40.80	3.19	-34.96	28.47	-3.30	0.07	37.57	54.00	16.43
1 350.31	1 000	V	41.20	3.52	-34.66	29.24	-1.90	0.07	39.37	54.00	14.63
4 875.69	1 000	H	59.70	4.26	-57.18	34.22	-18.70	0.07	41.07	54.00	12.93
7 313.50	1 000	H	61.50	5.18	-57.47	35.59	-16.70	0.07	44.87	54.00	9.13
19 025.31	1 000	H	37.30	12.80	-52.50	44.50	4.80	0.07	42.17	54.00	11.83
25 677.62	1 000	H	33.50	15.00	-52.40	46.10	8.70	0.07	42.27	54.00	11.73

802.11g_Highest channel (2 462 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.00	1 000	V	43.70	3.52	-34.66	29.24	-1.90	-	41.80	74.00	32.20
2 484.06 ¹⁾	1 000	H	57.50	4.95	-34.49	32.04	2.50	-	60.00	74.00	14.00
7 387.81	1 000	H	65.20	5.38	-57.50	35.62	-16.50	-	48.70	74.00	25.30
12 609.62	1 000	H	59.00	8.54	-57.19	38.85	-9.80	-	49.20	74.00	24.80
19 094.37	1 000	V	48.10	12.80	-52.40	44.50	4.90	-	53.00	74.00	21.00
25 644.69	1 000	V	44.30	15.00	-52.50	46.10	8.60	-	52.90	74.00	21.10
Average DATA. Emissions above 1 GHz											
1 350.00	1 000	V	39.50	3.52	-34.66	29.24	-1.90	0.07	37.67	54.00	16.33
2 484.06 ¹⁾	1 000	H	48.30	4.95	-34.49	32.04	2.50	0.07	50.87	54.00	3.13
7 387.81	1 000	H	56.90	5.38	-57.50	35.62	-16.50	0.07	40.47	54.00	13.53
12 609.62	1 000	H	48.70	8.54	-57.19	38.85	-9.80	0.07	38.97	54.00	15.03
19 094.37	1 000	V	37.30	12.80	-52.40	44.50	4.90	0.07	42.27	54.00	11.73
25 644.69	1 000	V	33.50	15.00	-52.50	46.10	8.60	0.07	42.17	54.00	11.83

¹⁾ Restricted band.

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (162) of (227)

**802.11n HT20_Lowest channel (2 412 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.63	1 000	V	44.00	3.52	-34.66	29.24	-1.90	-	42.10	74.00	31.90
2 389.38 ¹⁾	1 000	H	58.20	4.86	-33.99	31.93	2.80	-	61.00	74.00	13.00
7 663.31	1 000	H	61.60	6.12	-57.54	35.72	-15.70	-	45.90	74.00	28.10
12 548.00	1 000	H	59.00	8.56	-57.20	38.84	-9.80	-	49.20	74.00	24.80
19 029.56	1 000	H	48.40	12.80	-52.50	44.50	4.80	-	53.20	74.00	20.80
25 595.81	1 000	H	44.20	15.00	-52.70	46.00	8.30	-	52.50	74.00	21.50
Average DATA. Emissions above 1 GHz											
1 350.63	1 000	V	41.00	3.52	-34.66	29.24	-1.90	0.08	39.18	54.00	14.82
2 389.38 ¹⁾	1 000	H	48.20	4.86	-33.99	31.93	2.80	0.08	51.08	54.00	2.92
7 663.31	1 000	H	51.40	6.12	-57.54	35.72	-15.70	0.08	35.78	54.00	18.22
12 548.00	1 000	H	49.10	8.56	-57.20	38.84	-9.80	0.08	39.38	54.00	14.62
19 029.56	1 000	H	37.40	12.80	-52.50	44.50	4.80	0.08	42.28	54.00	11.72
25 595.81	1 000	H	33.30	15.00	-52.70	46.00	8.30	0.08	41.68	54.00	12.32

¹⁾ Restricted band.

802.11n HT20_Middle channel (2 437 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.31	1 000	H	46.30	3.19	-34.96	28.47	-3.30	-	43.00	74.00	31.00
1 350.31	1 000	V	44.10	3.52	-34.66	29.24	-1.90	-	42.20	74.00	31.80
4 877.50	1 000	H	66.90	4.26	-57.18	34.22	-18.70	-	48.20	74.00	25.80
7 315.31	1 000	H	70.40	5.18	-57.47	35.59	-16.70	-	53.70	74.00	20.30
19 131.56	1 000	H	48.20	12.80	-52.40	44.50	4.90	-	53.10	74.00	20.90
25 595.81	1 000	H	44.00	15.00	-52.70	46.00	8.30	-	52.30	74.00	21.70
Average DATA. Emissions above 1 GHz											
1 125.31	1 000	H	41.20	3.19	-34.96	28.47	-3.30	0.08	37.98	54.00	16.02
1 350.31	1 000	V	40.40	3.52	-34.66	29.24	-1.90	0.08	38.58	54.00	15.42
4 877.50	1 000	H	58.70	4.26	-57.18	34.22	-18.70	0.08	40.08	54.00	13.92
7 315.31	1 000	H	60.40	5.18	-57.47	35.59	-16.70	0.08	43.78	54.00	10.22
19 131.56	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.08	42.28	54.00	11.72
25 595.81	1 000	H	33.50	15.00	-52.70	46.00	8.30	0.08	41.88	54.00	12.12

This test report shall not be reproduced, except in full, without the written approval

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (163) of (227)

**802.11n HT20_Highest channel (2 462 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.00	1 000	V	44.20	3.52	-34.66	29.24	-1.90	-	42.30	74.00	31.70
2 485.00 ¹⁾	1 000	H	59.90	4.95	-34.49	32.04	2.50	-	62.40	74.00	11.60
7 395.06	1 000	H	64.00	5.40	-57.42	35.62	-16.40	-	47.60	74.00	26.40
11 801.25	1 000	H	60.60	8.58	-58.52	38.54	-11.40	-	49.20	74.00	24.80
19 130.50	1 000	H	48.30	12.80	-52.40	44.50	4.90	-	53.20	74.00	20.80
25 582.00	1 000	H	44.70	15.00	-52.80	46.00	8.20	-	52.90	74.00	21.10
Average DATA. Emissions above 1 GHz											
1 350.00	1 000	V	40.10	3.52	-34.66	29.24	-1.90	0.08	38.28	54.00	15.72
2 485.00 ¹⁾	1 000	H	48.20	4.95	-34.49	32.04	2.50	0.08	50.78	54.00	3.22
7 395.06	1 000	H	56.50	5.40	-57.42	35.62	-16.40	0.08	40.18	54.00	13.82
11 801.25	1 000	H	48.60	8.58	-58.52	38.54	-11.40	0.08	37.28	54.00	16.72
19 130.50	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.08	42.28	54.00	11.72
25 582.00	1 000	H	33.40	15.00	-52.80	46.00	8.20	0.08	41.68	54.00	12.32

¹⁾ Restricted band.

802.11n HT40_Lowest channel (2 422 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.31	1 000	V	44.60	3.52	-34.66	29.24	-1.90	-	42.70	74.00	31.30
2 384.69 ¹⁾	1 000	H	57.50	4.85	-33.97	31.92	2.80	-	60.30	74.00	13.70
7 599.87	1 000	H	61.30	5.95	-57.55	35.70	-15.90	-	45.40	74.00	28.60
12 573.37	1 000	H	58.90	8.55	-57.19	38.84	-9.80	-	49.10	74.00	24.90
19 110.31	1 000	V	48.60	12.80	-52.40	44.50	4.90	-	53.50	74.00	20.50
25 604.31	1 000	H	44.20	15.00	-52.60	46.00	8.40	-	52.60	74.00	21.40
Average DATA. Emissions above 1 GHz											
1 350.31	1 000	V	41.20	3.52	-34.66	29.24	-1.90	0.16	39.46	54.00	14.54
2 384.69 ¹⁾	1 000	H	48.10	4.85	-33.97	31.92	2.80	0.16	51.06	54.00	2.94
7 599.87	1 000	H	51.80	5.95	-57.55	35.70	-15.90	0.16	36.06	54.00	17.94
12 573.37	1 000	H	49.00	8.55	-57.19	38.84	-9.80	0.16	39.36	54.00	14.64
19 110.31	1 000	V	37.40	12.80	-52.40	44.50	4.90	0.16	42.46	54.00	11.54
25 604.31	1 000	H	33.30	15.00	-52.60	46.00	8.40	0.16	41.86	54.00	12.14

¹⁾ Restricted band.

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (164) of (227)

**802.11n HT40_Middle channel (2 437 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	47.10	3.19	-34.96	28.47	-3.30	-	43.80	74.00	30.20
1 350.00	1 000	V	44.20	3.52	-34.66	29.24	-1.90	-	42.30	74.00	31.70
7 324.38	1 000	H	63.50	5.21	-57.50	35.59	-16.70	-	46.80	74.00	27.20
12 548.00	1 000	H	59.40	8.56	-57.20	38.84	-9.80	-	49.60	74.00	24.40
19 098.62	1 000	H	48.00	12.80	-52.40	44.50	4.90	-	52.90	74.00	21.10
25 699.94	1 000	H	44.10	15.00	-52.20	46.10	8.90	-	53.00	74.00	21.00
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	41.50	3.19	-34.96	28.47	-3.30	0.16	38.36	54.00	15.64
1 350.00	1 000	V	40.80	3.52	-34.66	29.24	-1.90	0.16	39.06	54.00	14.94
7 324.38	1 000	H	53.60	5.21	-57.50	35.59	-16.70	0.16	37.06	54.00	16.94
12 548.00	1 000	H	48.40	8.56	-57.20	38.84	-9.80	0.16	38.76	54.00	15.24
19 098.62	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.16	42.36	54.00	11.64
25 699.94	1 000	H	33.40	15.00	-52.20	46.10	8.90	0.16	42.46	54.00	11.54

802.11n HT40_Highest channel (2 452 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.00	1 000	V	43.60	3.52	-34.66	29.24	-1.90	-	41.70	74.00	32.30
2 485.00 ¹⁾	1 000	H	60.50	4.95	-34.49	32.04	2.50	-	63.00	74.00	11.00
7 618.00	1 000	H	62.00	6.00	-57.50	35.70	-15.80	-	46.20	74.00	27.80
12 562.50	1 000	H	58.90	8.55	-57.19	38.84	-9.80	-	49.10	74.00	24.90
19 082.69	1 000	H	48.00	12.80	-52.40	44.50	4.90	-	52.90	74.00	21.10
25 737.12	1 000	H	44.00	15.00	-52.00	46.10	9.10	-	53.10	74.00	20.90
Average DATA. Emissions above 1 GHz											
1 350.00	1 000	V	40.70	3.52	-34.66	29.24	-1.90	0.16	38.96	54.00	15.04
2 485.00 ¹⁾	1 000	H	48.10	4.95	-34.49	32.04	2.50	0.16	50.76	54.00	3.24
7 618.00	1 000	H	52.00	6.00	-57.50	35.70	-15.80	0.16	36.36	54.00	17.64
12 562.50	1 000	H	48.50	8.55	-57.19	38.84	-9.80	0.16	38.86	54.00	15.14
19 082.69	1 000	H	37.40	12.80	-52.40	44.50	4.90	0.16	42.46	54.00	11.54
25 737.12	1 000	H	33.40	15.00	-52.00	46.10	9.10	0.16	42.66	54.00	11.34

¹⁾ Restricted band.

This test report shall not be reproduced, except in full, without the written approval

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (165) of (227)



- ANT 2

802.11b_Lowest channel (2 412 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 350.00	1 000	V	43.50	3.52	-34.66	29.24	-1.90	-	41.60	74.00	32.40
2 384.38 ¹⁾	1 000	H	49.70	4.85	-33.97	31.92	2.80	-	52.50	74.00	21.50
7 233.75	1 000	H	67.80	4.96	-57.42	35.56	-16.90	-	50.90	74.00	23.10
9 648.00	1 000	V	65.50	6.98	-58.02	36.64	-14.40	-	51.10	74.00	22.90
19 068.87	1 000	H	48.40	12.80	-52.40	44.50	4.90	-	53.30	74.00	20.70
25 622.37	1 000	H	43.90	15.00	-52.50	46.00	8.50	-	52.40	74.00	21.60
Average DATA. Emissions above 1 GHz											
1 350.00	1 000	V	40.20	3.52	-34.66	29.24	-1.90	0.04	38.34	54.00	15.66
2 384.38 ¹⁾	1 000	H	37.50	4.85	-33.97	31.92	2.80	0.04	40.34	54.00	13.66
7 233.75	1 000	H	61.40	4.96	-57.42	35.56	-16.90	0.04	44.54	54.00	9.46
9 648.00	1 000	V	60.40	6.98	-58.02	36.64	-14.40	0.04	46.04	54.00	7.96
19 068.87	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.04	42.24	54.00	11.76
25 622.37	1 000	H	33.40	15.00	-52.50	46.00	8.50	0.04	41.94	54.00	12.06

¹⁾ Restricted band.

802.11b_Middle channel (2 437 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	46.40	3.19	-34.96	28.47	-3.30	-	43.10	74.00	30.90
1 349.69	1 000	V	44.60	3.52	-34.66	29.24	-1.90	-	42.70	74.00	31.30
7 311.69	1 000	H	68.70	4.96	-57.22	35.56	-16.70	-	52.00	74.00	22.00
9 747.69	1 000	V	64.70	6.98	-57.92	36.64	-14.30	-	50.40	74.00	23.60
19 065.69	1 000	H	48.30	12.80	-52.40	44.50	4.90	-	53.20	74.00	20.80
25 648.94	1 000	H	44.00	15.00	-52.50	46.10	8.60	-	52.60	74.00	21.40
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	41.70	3.19	-34.96	28.47	-3.30	0.04	38.44	54.00	15.56
1 349.69	1 000	V	40.80	3.52	-34.66	29.24	-1.90	0.04	38.94	54.00	15.06
7 311.69	1 000	H	63.10	4.96	-57.22	35.56	-16.70	0.04	46.44	54.00	7.56
9 747.69	1 000	V	55.40	6.98	-57.92	36.64	-14.30	0.04	41.14	54.00	12.86
19 065.69	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.04	42.24	54.00	11.76
25 648.94	1 000	H	33.50	15.00	-52.50	46.10	8.60	0.04	42.14	54.00	11.86

This test report shall not be reproduced, except in full, without the written approval

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (166) of (227)

**802.11b_Highest channel (2 462 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 349.69	1 000	V	43.50	3.52	-34.66	29.24	-1.90	-	41.60	74.00	32.40
2 484.69 ¹⁾	1 000	H	47.30	4.95	-34.49	32.04	2.50	-	49.80	74.00	24.20
7 386.00	1 000	H	65.40	5.37	-57.49	35.62	-16.50	-	48.90	74.00	25.10
9 724.12	1 000	V	61.10	7.12	-58.14	36.72	-14.30	-	46.80	74.00	27.20
19 062.50	1 000	H	48.10	12.80	-52.40	44.50	4.90	-	53.00	74.00	21.00
25 651.06	1 000	H	45.00	15.00	-52.50	46.10	8.60	-	53.60	74.00	20.40
Average DATA. Emissions above 1 GHz											
1 349.69	1 000	V	40.90	3.52	-34.66	29.24	-1.90	0.04	39.04	54.00	14.96
2 484.69 ¹⁾	1 000	H	36.80	4.95	-34.49	32.04	2.50	0.04	39.34	54.00	14.66
7 386.00	1 000	H	61.80	5.37	-57.49	35.62	-16.50	0.04	45.34	54.00	8.66
9 724.12	1 000	V	52.60	7.12	-58.14	36.72	-14.30	0.04	38.34	54.00	15.66
19 062.50	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.04	42.24	54.00	11.76
25 651.06	1 000	H	33.30	15.00	-52.50	46.10	8.60	0.04	41.94	54.00	12.06

¹⁾ Restricted band.

802.11g_Lowest channel (2 412 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	49.10	3.19	-34.96	28.47	-3.30	-	45.80	74.00	28.20
2 389.38 ¹⁾	1 000	H	58.20	4.86	-33.99	31.93	2.80	-	61.00	74.00	13.00
7 643.37	1 000	H	62.10	6.07	-57.58	35.71	-15.80	-	46.30	74.00	27.70
12 448.31	1 000	H	59.50	8.58	-57.19	38.81	-9.80	-	49.70	74.00	24.30
19 060.37	1 000	H	48.00	12.80	-52.40	44.50	4.90	-	52.90	74.00	21.10
25 565.00	1 000	H	44.20	15.00	-52.80	46.00	8.20	-	52.40	74.00	21.60
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	44.10	3.19	-34.96	28.47	-3.30	0.07	40.87	54.00	13.13
2 389.38 ¹⁾	1 000	H	47.50	4.86	-33.99	31.93	2.80	0.07	50.37	54.00	3.63
7 643.37	1 000	H	51.50	6.07	-57.58	35.71	-15.80	0.07	35.77	54.00	18.23
12 448.31	1 000	H	49.30	8.58	-57.19	38.81	-9.80	0.07	39.57	54.00	14.43
19 060.37	1 000	H	37.40	12.80	-52.40	44.50	4.90	0.07	42.37	54.00	11.63
25 565.00	1 000	H	33.40	15.00	-52.80	46.00	8.20	0.07	41.67	54.00	12.33

¹⁾ Restricted band.

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (167) of (227)

**802.11g_Middle channel (2 437 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.31	1 000	H	48.80	3.19	-34.96	28.47	-3.30	-	45.50	74.00	28.50
1 350.31	1 000	V	44.10	3.52	-34.66	29.24	-1.90	-	42.20	74.00	31.80
7 306.25	1 000	H	67.60	5.16	-57.45	35.59	-16.70	-	50.90	74.00	23.10
12 586.06	1 000	H	59.30	8.55	-57.19	38.84	-9.80	-	49.50	74.00	24.50
19 047.62	1 000	H	48.80	12.80	-52.40	44.50	4.90	-	53.70	74.00	20.30
25 671.25	1 000	H	45.90	15.00	-52.40	46.10	8.70	-	54.60	74.00	19.40
Average DATA. Emissions above 1 GHz											
1 125.31	1 000	H	42.20	3.19	-34.96	28.47	-3.30	0.07	38.97	54.00	15.03
1 350.31	1 000	V	40.60	3.52	-34.66	29.24	-1.90	0.07	38.77	54.00	15.23
7 306.25	1 000	H	59.20	5.16	-57.45	35.59	-16.70	0.07	42.57	54.00	11.43
12 586.06	1 000	H	48.90	8.55	-57.19	38.84	-9.80	0.07	39.17	54.00	14.83
19 047.62	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.07	42.27	54.00	11.73
25 671.25	1 000	H	33.40	15.00	-52.40	46.10	8.70	0.07	42.17	54.00	11.83

802.11g_Highest channel (2 462 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	48.70	3.19	-34.96	28.47	-3.30	-	45.40	74.00	28.60
2 484.38 ¹⁾	1 000	H	48.10	4.95	-34.49	32.04	2.50	-	50.60	74.00	23.40
7 946.06	1 000	H	61.40	6.88	-58.21	35.83	-15.50	-	45.90	74.00	28.10
12 546.19	1 000	H	59.50	8.56	-57.19	38.83	-9.80	-	49.70	74.00	24.30
19 044.44	1 000	H	48.60	12.80	-52.50	44.50	4.80	-	53.40	74.00	20.60
25 600.06	1 000	H	44.50	15.00	-52.70	46.00	8.30	-	52.80	74.00	21.20
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	42.10	3.19	-34.96	28.47	-3.30	0.07	38.87	54.00	15.13
2 484.38 ¹⁾	1 000	H	36.40	4.95	-34.49	32.04	2.50	0.07	38.97	54.00	15.03
7 946.06	1 000	H	52.30	6.88	-58.21	35.83	-15.50	0.07	36.87	54.00	17.13
12 546.19	1 000	H	49.10	8.56	-57.19	38.83	-9.80	0.07	39.37	54.00	14.63
19 044.44	1 000	H	37.30	12.80	-52.50	44.50	4.80	0.07	42.17	54.00	11.83
25 600.06	1 000	H	33.40	15.00	-52.70	46.00	8.30	0.07	41.77	54.00	12.23

¹⁾ Restricted band.

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (168) of (227)

**802.11n HT20_Lowest channel (2 412 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.31	1 000	H	48.60	3.19	-34.96	28.47	-3.30	-	45.30	74.00	28.70
2 389.06 ¹⁾	1 000	H	60.10	4.86	-33.99	31.93	2.80	-	62.90	74.00	11.10
7 637.94	1 000	H	61.80	6.05	-57.56	35.71	-15.80	-	46.00	74.00	28.00
12 185.50	1 000	H	60.00	8.66	-58.22	38.76	-10.80	-	49.20	74.00	24.80
19 075.25	1 000	H	48.20	12.80	-52.40	44.50	4.90	-	53.10	74.00	20.90
25 644.69	1 000	H	45.50	15.00	-52.50	46.10	8.60	-	54.10	74.00	19.90
Average DATA. Emissions above 1 GHz											
1 125.31	1 000	H	43.10	3.19	-34.96	28.47	-3.30	0.08	39.88	54.00	14.12
2 389.06 ¹⁾	1 000	H	48.00	4.86	-33.99	31.93	2.80	0.08	50.88	54.00	3.12
7 637.94	1 000	H	52.00	6.05	-57.56	35.71	-15.80	0.08	36.28	54.00	17.72
12 185.50	1 000	H	49.30	8.66	-58.22	38.76	-10.80	0.08	38.58	54.00	15.42
19 075.25	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.08	42.28	54.00	11.72
25 644.69	1 000	H	33.40	15.00	-52.50	46.10	8.60	0.08	42.08	54.00	11.92

¹⁾ Restricted band.

802.11n HT20_Middle channel (2 437 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	49.90	3.19	-34.96	28.47	-3.30	-	46.60	74.00	27.40
1 350.31	1 000	V	44.80	3.52	-34.66	29.24	-1.90	-	42.90	74.00	31.10
7 306.25	1 000	H	67.00	5.16	-57.45	35.59	-16.70	-	50.30	74.00	23.70
11 906.37	1 000	H	60.50	8.65	-58.58	38.63	-11.30	-	49.20	74.00	24.80
19 103.94	1 000	H	48.30	12.80	-52.40	44.50	4.90	-	53.20	74.00	20.80
25 660.62	1 000	H	44.30	15.00	-52.40	46.10	8.70	-	53.00	74.00	21.00
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	42.50	3.19	-34.96	28.47	-3.30	0.08	39.28	54.00	14.72
1 350.31	1 000	V	40.90	3.52	-34.66	29.24	-1.90	0.08	39.08	54.00	14.92
7 306.25	1 000	H	58.70	5.16	-57.45	35.59	-16.70	0.08	42.08	54.00	11.92
11 906.37	1 000	H	47.50	8.65	-58.58	38.63	-11.30	0.08	36.28	54.00	17.72
19 103.94	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.08	42.28	54.00	11.72
25 660.62	1 000	H	33.40	15.00	-52.40	46.10	8.70	0.08	42.18	54.00	11.82

This test report shall not be reproduced, except in full, without the written approval

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (169) of (227)

**802.11n HT20_Highest channel (2 462 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	50.30	3.19	-34.96	28.47	-3.30	-	47.00	74.00	27.00
2 483.75 ¹⁾	1 000	H	46.50	4.95	-34.49	32.04	2.50	-	49.00	74.00	25.00
7 550.94	1 000	H	61.50	5.82	-57.50	35.68	-16.00	-	45.50	74.00	28.50
12 557.06	1 000	H	59.20	8.55	-57.19	38.84	-9.80	-	49.40	74.00	24.60
19 109.25	1 000	H	48.20	12.80	-52.40	44.50	4.90	-	53.10	74.00	20.90
25 474.69	1 000	H	45.30	15.00	-53.20	45.90	7.70	-	53.00	74.00	21.00
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	42.70	3.19	-34.96	28.47	-3.30	0.08	39.48	54.00	14.52
2 483.75 ¹⁾	1 000	H	38.60	4.95	-34.49	32.04	2.50	0.08	41.18	54.00	12.82
7 550.94	1 000	H	51.60	5.82	-57.50	35.68	-16.00	0.08	35.68	54.00	18.32
12 557.06	1 000	H	47.00	8.55	-57.19	38.84	-9.80	0.08	37.28	54.00	16.72
19 109.25	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.08	42.28	54.00	11.72
25 474.69	1 000	H	33.50	15.00	-53.20	45.90	7.70	0.08	41.28	54.00	12.72

¹⁾ Restricted band.

802.11n HT40_Lowest channel (2 422 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	51.30	3.19	-34.96	28.47	-3.30	-	48.00	74.00	26.00
2 388.75 ¹⁾	1 000	H	54.60	4.86	-33.99	31.93	2.80	-	57.40	74.00	16.60
7 679.62	1 000	H	62.00	6.16	-57.59	35.73	-15.70	-	46.30	74.00	27.70
12 451.94	1 000	H	59.00	8.58	-57.19	38.81	-9.80	-	49.20	74.00	24.80
19 109.25	1 000	H	47.80	12.80	-52.40	44.50	4.90	-	52.70	74.00	21.30
25 516.12	1 000	H	44.50	15.00	-53.00	45.90	7.90	-	52.40	74.00	21.60
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	43.20	3.19	-34.96	28.47	-3.30	0.16	40.06	54.00	13.94
2 388.75 ¹⁾	1 000	H	46.20	4.86	-33.99	31.93	2.80	0.16	49.16	54.00	4.84
7 679.62	1 000	H	51.60	6.16	-57.59	35.73	-15.70	0.16	36.06	54.00	17.94
12 451.94	1 000	H	48.10	8.58	-57.19	38.81	-9.80	0.16	38.46	54.00	15.54
19 109.25	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.16	42.36	54.00	11.64
25 516.12	1 000	H	33.40	15.00	-53.00	45.90	7.90	0.16	41.46	54.00	12.54

¹⁾ Restricted band.

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (170) of (227)

**802.11n HT40_Middle channel (2 437 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	50.80	3.19	-34.96	28.47	-3.30	-	47.50	74.00	26.50
1 350.00	1 000	V	45.40	3.52	-34.66	29.24	-1.90	-	43.50	74.00	30.50
7 424.06	1 000	H	62.20	5.47	-57.40	35.63	-16.30	-	45.90	74.00	28.10
12 334.12	1 000	H	59.10	8.62	-57.51	38.79	-10.10	-	49.00	74.00	25.00
19 169.81	1 000	H	49.10	12.80	-52.50	44.60	4.90	-	54.00	74.00	20.00
25 665.94	1 000	H	43.90	15.00	-52.40	46.10	8.70	-	52.60	74.00	21.40
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	43.50	3.19	-34.96	28.47	-3.30	0.16	40.36	54.00	13.64
1 350.00	1 000	V	41.70	3.52	-34.66	29.24	-1.90	0.16	39.96	54.00	14.04
7 424.06	1 000	H	51.30	5.47	-57.40	35.63	-16.30	0.16	35.16	54.00	18.84
12 334.12	1 000	H	48.70	8.62	-57.51	38.79	-10.10	0.16	38.76	54.00	15.24
19 169.81	1 000	H	37.30	12.80	-52.50	44.60	4.90	0.16	42.36	54.00	11.64
25 665.94	1 000	H	33.50	15.00	-52.40	46.10	8.70	0.16	42.36	54.00	11.64

802.11n HT40_Highest channel (2 452 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.31	1 000	H	51.00	3.19	-34.96	28.47	-3.30	-	47.70	74.00	26.30
2 484.06 ¹⁾	1 000	H	55.60	4.95	-34.49	32.04	2.50	-	58.10	74.00	15.90
7 623.44	1 000	H	61.60	6.01	-57.52	35.71	-15.80	-	45.80	74.00	28.20
12 720.19	1 000	H	59.10	8.51	-57.38	38.87	-10.00	-	49.10	74.00	24.90
19 058.25	1 000	H	48.30	12.80	-52.40	44.50	4.90	-	53.20	74.00	20.80
25 627.69	1 000	H	43.90	15.00	-52.50	46.00	8.50	-	52.40	74.00	21.60
Average DATA. Emissions above 1 GHz											
1 125.31	1 000	H	42.80	3.19	-34.96	28.47	-3.30	0.16	39.66	54.00	14.34
2 484.06 ¹⁾	1 000	H	48.50	4.95	-34.49	32.04	2.50	0.16	51.16	54.00	2.84
7 623.44	1 000	H	52.30	6.01	-57.52	35.71	-15.80	0.16	36.66	54.00	17.34
12 720.19	1 000	H	47.90	8.51	-57.38	38.87	-10.00	0.16	38.06	54.00	15.94
19 058.25	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.16	42.36	54.00	11.64
25 627.69	1 000	H	33.50	15.00	-52.50	46.00	8.50	0.16	42.16	54.00	11.84

¹⁾ Restricted band.

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (171) of (227)



- MIMO (ANT 0+1)

802.11n HT20_Lowest channel (2 412 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	49.80	3.19	-34.96	28.47	-3.30	-	46.50	74.00	27.50
2 389.38 ¹⁾	1 000	H	55.30	4.86	-33.99	31.93	2.80	-	58.10	74.00	15.90
7 429.50	1 000	H	62.20	5.49	-57.42	35.63	-16.30	-	45.90	74.00	28.10
12 809.00	1 000	H	59.60	8.48	-57.47	38.89	-10.10	-	49.50	74.00	24.50
19 140.06	1 000	H	48.10	12.80	-52.50	44.60	4.90	-	53.00	74.00	21.00
25 697.81	1 000	H	43.50	15.00	-52.20	46.10	8.90	-	52.40	74.00	21.60
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	41.70	3.19	-34.96	28.47	-3.30	0.16	38.56	54.00	15.44
2 389.38 ¹⁾	1 000	H	47.00	4.86	-33.99	31.93	2.80	0.16	49.96	54.00	4.04
7 429.50	1 000	H	51.60	5.49	-57.42	35.63	-16.30	0.16	35.46	54.00	18.54
12 809.00	1 000	H	48.80	8.48	-57.47	38.89	-10.10	0.16	38.86	54.00	15.14
19 140.06	1 000	H	37.30	12.80	-52.50	44.60	4.90	0.16	42.36	54.00	11.64
25 697.81	1 000	H	33.40	15.00	-52.20	46.10	8.90	0.16	42.46	54.00	11.54

¹⁾ Restricted band.

802.11n HT20_Middle channel (2 437 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.31	1 000	H	51.00	3.19	-34.96	28.47	-3.30	-	47.70	74.00	26.30
1 350.00	1 000	V	45.30	3.52	-34.66	29.24	-1.90	-	43.40	74.00	30.60
7 315.31	1 000	H	68.10	5.18	-57.47	35.59	-16.70	-	51.40	74.00	22.60
12 325.06	1 000	H	59.60	8.62	-57.61	38.79	-10.20	-	49.40	74.00	24.60
19 031.69	1 000	H	49.00	12.80	-52.50	44.50	4.80	-	53.80	74.00	20.20
25 674.44	1 000	H	44.00	15.00	-52.40	46.10	8.70	-	52.70	74.00	21.30
Average DATA. Emissions above 1 GHz											
1 125.31	1 000	H	42.30	3.19	-34.96	28.47	-3.30	0.16	39.16	54.00	14.84
1 350.00	1 000	V	40.60	3.52	-34.66	29.24	-1.90	0.16	38.86	54.00	15.14
7 315.31	1 000	H	60.20	5.18	-57.47	35.59	-16.70	0.16	43.66	54.00	10.34
12 325.06	1 000	H	48.80	8.62	-57.61	38.79	-10.20	0.16	38.76	54.00	15.24
19 031.69	1 000	H	37.40	12.80	-52.50	44.50	4.80	0.16	42.36	54.00	11.64
25 674.44	1 000	H	33.30	15.00	-52.40	46.10	8.70	0.16	42.16	54.00	11.84

This test report shall not be reproduced, except in full, without the written approval

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (172) of (227)

**802.11n HT20_Highest channel (2 462 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 124.69	1 000	H	51.30	3.19	-34.96	28.47	-3.30	-	48.00	74.00	26.00
2 487.19 ¹⁾	1 000	H	51.60	4.96	-34.50	32.04	2.50	-	54.10	74.00	19.90
7 473.00	1 000	H	62.00	5.61	-57.46	35.65	-16.20	-	45.80	74.00	28.20
12 490.00	1 000	H	58.90	8.57	-57.19	38.82	-9.80	-	49.10	74.00	24.90
19 047.62	1 000	V	48.60	12.80	-52.40	44.50	4.90	-	53.50	74.00	20.50
25 589.44	1 000	H	43.80	15.00	-52.70	46.00	8.30	-	52.10	74.00	21.90
Average DATA. Emissions above 1 GHz											
1 124.69	1 000	H	42.20	3.19	-34.96	28.47	-3.30	0.16	39.06	54.00	14.94
2 487.19 ¹⁾	1 000	H	40.80	4.96	-34.50	32.04	2.50	0.16	43.46	54.00	10.54
7 473.00	1 000	H	51.90	5.61	-57.46	35.65	-16.20	0.16	35.86	54.00	18.14
12 490.00	1 000	H	48.30	8.57	-57.19	38.82	-9.80	0.16	38.66	54.00	15.34
19 047.62	1 000	V	37.40	12.80	-52.40	44.50	4.90	0.16	42.46	54.00	11.54
25 589.44	1 000	H	33.40	15.00	-52.70	46.00	8.30	0.16	41.86	54.00	12.14

¹⁾ Restricted band.

802.11n HT40_Lowest channel (2 422 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.31	1 000	H	50.10	3.19	-34.96	28.47	-3.30	-	46.80	74.00	27.20
2 387.50 ¹⁾	1 000	H	57.10	4.86	-33.99	31.93	2.80	-	59.90	74.00	14.10
7 574.50	1 000	H	62.20	5.88	-57.47	35.69	-15.90	-	46.30	74.00	27.70
11 362.62	1 000	H	61.10	8.31	-58.44	38.13	-12.00	-	49.10	74.00	24.90
19 063.56	1 000	H	48.60	12.80	-52.40	44.50	4.90	-	53.50	74.00	20.50
25 554.37	1 000	H	44.60	15.00	-52.90	46.00	8.10	-	52.70	74.00	21.30
Average DATA. Emissions above 1 GHz											
1 125.31	1 000	H	43.10	3.19	-34.96	28.47	-3.30	0.26	40.06	54.00	13.94
2 387.50 ¹⁾	1 000	H	46.50	4.86	-33.99	31.93	2.80	0.26	49.56	54.00	4.44
7 574.50	1 000	H	51.60	5.88	-57.47	35.69	-15.90	0.26	35.96	54.00	18.04
11 362.62	1 000	H	48.50	8.31	-58.44	38.13	-12.00	0.26	36.76	54.00	17.24
19 063.56	1 000	H	37.40	12.80	-52.40	44.50	4.90	0.26	42.56	54.00	11.44
25 554.37	1 000	H	33.40	15.00	-52.90	46.00	8.10	0.26	41.76	54.00	12.24

¹⁾ Restricted band.

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (173) of (227)

**802.11n HT40_Middle channel (2 437 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	50.90	3.19	-34.96	28.47	-3.30	-	47.60	74.00	26.40
1 350.00	1 000	V	44.80	3.52	-34.66	29.24	-1.90	-	42.90	74.00	31.10
7 650.62	1 000	H	61.80	6.09	-57.61	35.72	-15.80	-	46.00	74.00	28.00
11 833.87	1 000	H	60.30	8.61	-58.58	38.57	-11.40	-	48.90	74.00	25.10
19 066.75	1 000	H	49.00	12.80	-52.40	44.50	4.90	-	53.90	74.00	20.10
25 563.94	1 000	H	44.50	15.00	-52.80	46.00	8.20	-	52.70	74.00	21.30
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	43.30	3.19	-34.96	28.47	-3.30	0.26	40.26	54.00	13.74
1 350.00	1 000	V	39.80	3.52	-34.66	29.24	-1.90	0.26	38.16	54.00	15.84
7 650.62	1 000	H	51.40	6.09	-57.61	35.72	-15.80	0.26	35.86	54.00	18.14
11 833.87	1 000	H	48.80	8.61	-58.58	38.57	-11.40	0.26	37.66	54.00	16.34
19 066.75	1 000	H	37.40	12.80	-52.40	44.50	4.90	0.26	42.56	54.00	11.44
25 563.94	1 000	H	33.40	15.00	-52.80	46.00	8.20	0.26	41.86	54.00	12.14

802.11n HT40_Highest channel (2 452 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 124.69	1 000	H	50.70	3.19	-34.96	28.47	-3.30	-	47.40	74.00	26.60
2 483.75 ¹⁾	1 000	H	55.20	4.95	-34.49	32.04	2.50	-	57.70	74.00	16.30
7 648.81	1 000	H	62.30	6.08	-57.60	35.72	-15.80	-	46.50	74.00	27.50
12 752.81	1 000	H	59.00	8.50	-57.38	38.88	-10.00	-	49.00	74.00	25.00
19 054.00	1 000	H	48.60	12.80	-52.40	44.50	4.90	-	53.50	74.00	20.50
25 575.62	1 000	H	45.80	15.00	-52.80	46.00	8.20	-	54.00	74.00	20.00
Average DATA. Emissions above 1 GHz											
1 124.69	1 000	H	42.80	3.19	-34.96	28.47	-3.30	0.26	39.76	54.00	14.24
2 483.75 ¹⁾	1 000	H	46.00	4.95	-34.49	32.04	2.50	0.26	48.76	54.00	5.24
7 648.81	1 000	H	51.60	6.08	-57.60	35.72	-15.80	0.26	36.06	54.00	17.94
12 752.81	1 000	H	47.90	8.50	-57.38	38.88	-10.00	0.26	38.16	54.00	15.84
19 054.00	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.26	42.46	54.00	11.54
25 575.62	1 000	H	33.40	15.00	-52.80	46.00	8.20	0.26	41.86	54.00	12.14

¹⁾ Restricted band.

This test report shall not be reproduced, except in full, without the written approval

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (174) of (227)



- MIMO (ANT 0+1+2)

802.11n HT20_Lowest channel (2 412 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	51.50	3.19	-34.96	28.47	-3.30	-	48.20	74.00	25.80
2 390.00 ¹⁾	1 000	H	54.90	4.86	-33.99	31.93	2.80	-	57.70	74.00	16.30
7 748.50	1 000	H	61.20	6.35	-57.70	35.75	-15.60	-	45.60	74.00	28.40
12 548.00	1 000	H	59.10	8.56	-57.20	38.84	-9.80	-	49.30	74.00	24.70
18 477.06	1 000	H	48.20	12.60	-52.30	44.20	4.50	-	52.70	74.00	21.30
25 662.75	1 000	H	44.40	15.00	-52.40	46.10	8.70	-	53.10	74.00	20.90
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	42.70	3.19	-34.96	28.47	-3.30	0.19	39.59	54.00	14.41
2 390.00 ¹⁾	1 000	H	45.90	4.86	-33.99	31.93	2.80	0.19	48.89	54.00	5.11
7 748.50	1 000	H	51.30	6.35	-57.70	35.75	-15.60	0.19	35.89	54.00	18.11
12 548.00	1 000	H	47.90	8.56	-57.20	38.84	-9.80	0.19	38.29	54.00	15.71
18 477.06	1 000	H	37.40	12.60	-52.30	44.20	4.50	0.19	42.09	54.00	11.91
25 662.75	1 000	H	33.40	15.00	-52.40	46.10	8.70	0.19	42.29	54.00	11.71

¹⁾ Restricted band.

802.11n HT20_Middle channel (2 437 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	49.00	3.19	-34.96	28.47	-3.30	-	45.70	74.00	28.30
1 350.00	1 000	V	44.80	3.52	-34.66	29.24	-1.90	-	42.90	74.00	31.10
7 311.69	1 000	H	68.00	5.17	-57.46	35.59	-16.70	-	51.30	74.00	22.70
12 548.00	1 000	H	58.40	8.56	-57.20	38.84	-9.80	-	48.60	74.00	25.40
18 671.50	1 000	V	47.70	12.60	-52.20	44.30	4.70	-	52.40	74.00	21.60
25 594.75	1 000	H	43.90	15.00	-52.70	46.00	8.30	-	52.20	74.00	21.80
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	41.40	3.19	-34.96	28.47	-3.30	0.19	38.29	54.00	15.71
1 350.00	1 000	V	40.60	3.52	-34.66	29.24	-1.90	0.19	38.89	54.00	15.11
7 311.69	1 000	H	55.10	5.17	-57.46	35.59	-16.70	0.19	38.59	54.00	15.41
12 548.00	1 000	H	48.30	8.56	-57.20	38.84	-9.80	0.19	38.69	54.00	15.31
18 671.50	1 000	V	36.90	12.60	-52.20	44.30	4.70	0.19	41.79	54.00	12.21
25 594.75	1 000	H	33.40	15.00	-52.70	46.00	8.30	0.19	41.89	54.00	12.11

This test report shall not be reproduced, except in full, without the written approval

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (175) of (227)

**802.11n HT20_Highest channel (2 462 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	51.20	3.19	-34.96	28.47	-3.30	-	47.90	74.00	26.10
2 489.69 ¹⁾	1 000	H	53.40	4.96	-34.51	32.05	2.50	-	55.90	74.00	18.10
7 608.94	1 000	H	61.50	5.97	-57.47	35.70	-15.80	-	45.70	74.00	28.30
11 190.44	1 000	H	61.20	8.20	-58.18	37.98	-12.00	-	49.20	74.00	24.80
19 100.75	1 000	H	48.30	12.80	-52.40	44.50	4.90	-	53.20	74.00	20.80
25 699.94	1 000	H	43.90	15.00	-52.20	46.10	8.90	-	52.80	74.00	21.20
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	42.50	3.19	-34.96	28.47	-3.30	0.19	39.39	54.00	14.61
2 489.69 ¹⁾	1 000	H	40.90	4.96	-34.51	32.05	2.50	0.19	43.59	54.00	10.41
7 608.94	1 000	H	52.00	5.97	-57.47	35.70	-15.80	0.19	36.39	54.00	17.61
11 190.44	1 000	H	48.90	8.20	-58.18	37.98	-12.00	0.19	37.09	54.00	16.91
19 100.75	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.19	42.39	54.00	11.61
25 699.94	1 000	H	33.40	15.00	-52.20	46.10	8.90	0.19	42.49	54.00	11.51

¹⁾ Restricted band.

802.11n HT40_Lowest channel (2 422 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	51.30	3.19	-34.96	28.47	-3.30	-	48.00	74.00	26.00
2 389.38 ¹⁾	1 000	H	53.70	4.86	-33.99	31.93	2.80	-	56.50	74.00	17.50
7 976.88	1 000	H	61.30	6.97	-58.31	35.84	-15.50	-	45.80	74.00	28.20
11 951.69	1 000	H	60.70	8.68	-58.66	38.68	-11.30	-	49.40	74.00	24.60
19 129.44	1 000	H	48.60	12.80	-52.40	44.50	4.90	-	53.50	74.00	20.50
25 599.00	1 000	H	44.20	15.00	-52.70	46.00	8.30	-	52.50	74.00	21.50
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	43.40	3.19	-34.96	28.47	-3.30	0.38	40.48	54.00	13.52
2 389.38 ¹⁾	1 000	H	45.70	4.86	-33.99	31.93	2.80	0.38	48.88	54.00	5.12
7 976.88	1 000	H	51.40	6.97	-58.31	35.84	-15.50	0.38	36.28	54.00	17.72
11 951.69	1 000	H	48.90	8.68	-58.66	38.68	-11.30	0.38	37.98	54.00	16.02
19 129.44	1 000	H	37.40	12.80	-52.40	44.50	4.90	0.38	42.68	54.00	11.32
25 599.00	1 000	H	33.40	15.00	-52.70	46.00	8.30	0.38	42.08	54.00	11.92

¹⁾ Restricted band.

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (176) of (227)

**802.11n HT40_Middle channel (2 437 MHz)**

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	49.90	3.19	-34.96	28.47	-3.30	-	46.60	74.00	27.40
1 350.31	1 000	V	44.60	3.52	-34.66	29.24	-1.90	-	42.70	74.00	31.30
7 463.94	1 000	H	62.90	5.58	-57.43	35.65	-16.20	-	46.70	74.00	27.30
12 421.12	1 000	H	59.80	8.59	-57.30	38.81	-9.90	-	49.90	74.00	24.10
19 140.06	1 000	H	48.70	12.80	-52.50	44.60	4.90	-	53.60	74.00	20.40
25 550.12	1 000	H	44.40	15.00	-52.90	46.00	8.10	-	52.50	74.00	21.50
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	41.60	3.19	-34.96	28.47	-3.30	0.38	38.68	54.00	15.32
1 350.31	1 000	V	40.80	3.52	-34.66	29.24	-1.90	0.38	39.28	54.00	14.72
7 463.94	1 000	H	51.80	5.58	-57.43	35.65	-16.20	0.38	35.98	54.00	18.02
12 421.12	1 000	H	49.00	8.59	-57.30	38.81	-9.90	0.38	39.48	54.00	14.52
19 140.06	1 000	H	37.20	12.80	-52.50	44.60	4.90	0.38	42.48	54.00	11.52
25 550.12	1 000	H	33.40	15.00	-52.90	46.00	8.10	0.38	41.88	54.00	12.12

802.11n HT40_Highest channel (2 452 MHz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μ V)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor [dB]	DCCF [dB]	Result [dB(μ V/m)]	Limit [dB(μ V/m)]	Margin [dB]
Peak DATA. Emissions above 1 GHz											
1 125.00	1 000	H	50.50	3.19	-34.96	28.47	-3.30	-	47.20	74.00	26.80
2 483.75 ¹⁾	1 000	H	56.70	4.95	-34.49	32.04	2.50	-	59.20	74.00	14.80
7 694.12	1 000	H	62.00	6.20	-57.63	35.73	-15.70	-	46.30	74.00	27.70
12 567.94	1 000	H	58.90	8.55	-57.19	38.84	-9.80	-	49.10	74.00	24.90
19 066.75	1 000	H	49.00	12.80	-52.40	44.50	4.90	-	53.90	74.00	20.10
25 669.12	1 000	V	44.70	15.00	-52.40	46.10	8.70	-	53.40	74.00	20.60
Average DATA. Emissions above 1 GHz											
1 125.00	1 000	H	42.60	3.19	-34.96	28.47	-3.30	0.38	39.68	54.00	14.32
2 483.75 ¹⁾	1 000	H	46.40	4.95	-34.49	32.04	2.50	0.38	49.28	54.00	4.72
7 694.12	1 000	H	52.10	6.20	-57.63	35.73	-15.70	0.38	36.78	54.00	17.22
12 567.94	1 000	H	47.50	8.55	-57.19	38.84	-9.80	0.38	38.08	54.00	15.92
19 066.75	1 000	H	37.30	12.80	-52.40	44.50	4.90	0.38	42.58	54.00	11.42
25 669.12	1 000	V	33.50	15.00	-52.40	46.10	8.70	0.38	42.58	54.00	11.42

¹⁾ Restricted band.

This test report shall not be reproduced, except in full, without the written approval

5.7.4 Test Plot

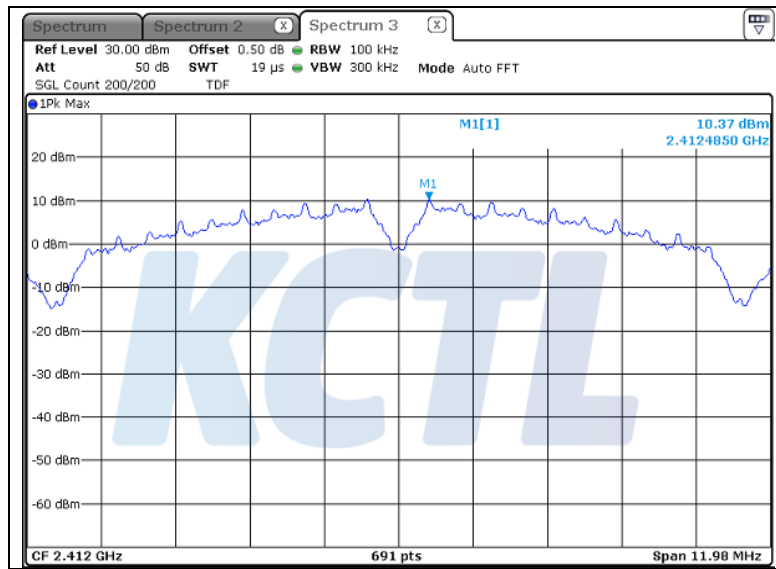
Figure 3. Plot of the Band-edge & Conducted Spurious Emissions

- ANT 0

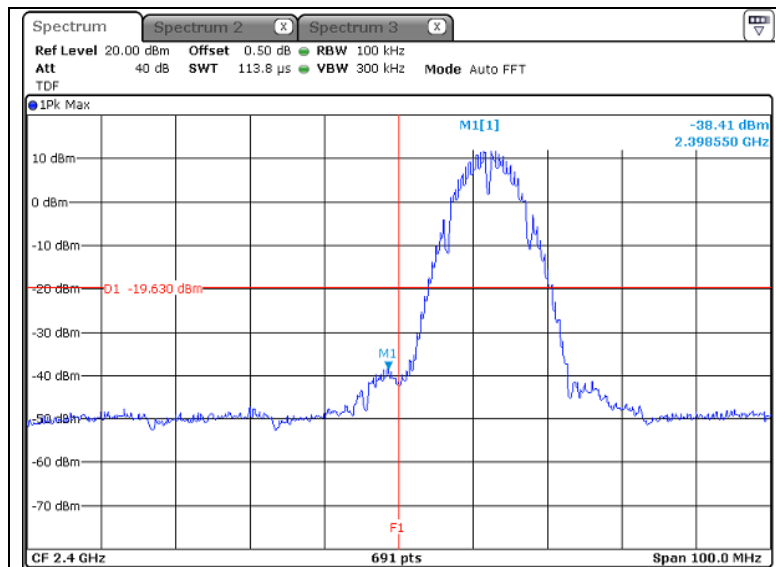
- 802.11b

Lowest Channel (2 412 MHz)

Reference



Band-edge



- Result of 2 400.0 MHz

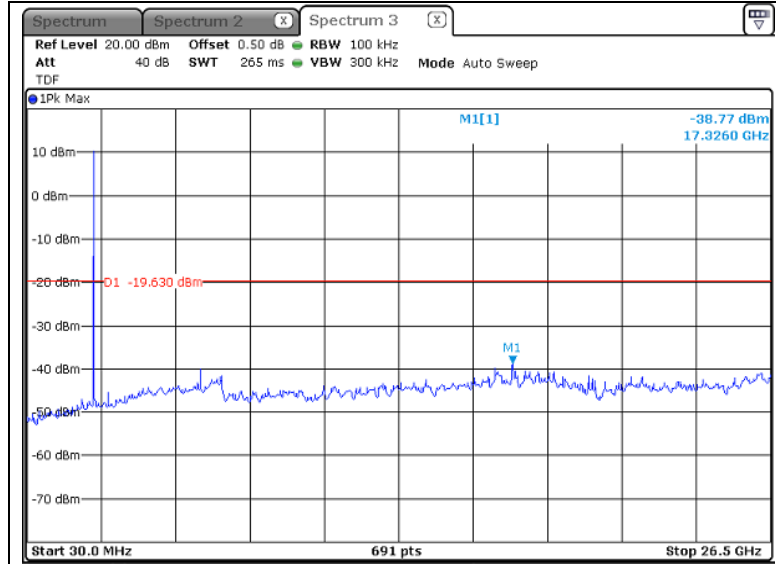
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (178) of (227)

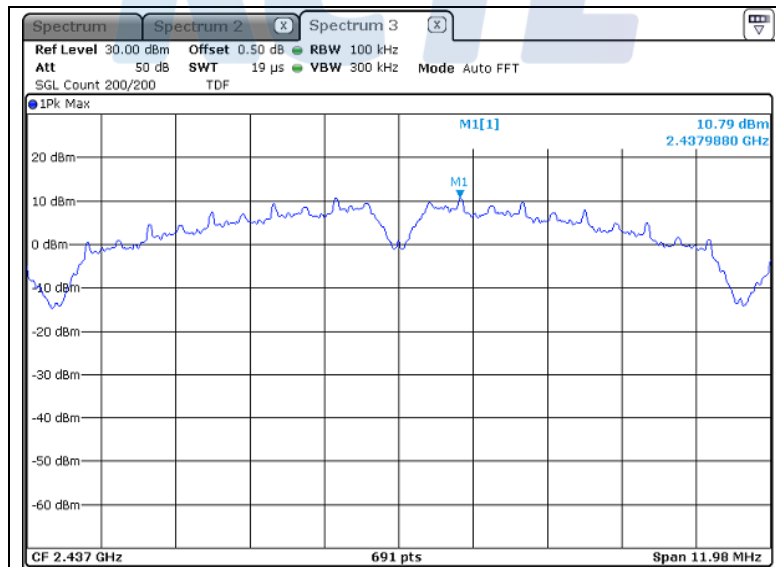


Conducted Spurious Emissions



Middle Channel (2 437 MHz)

Reference



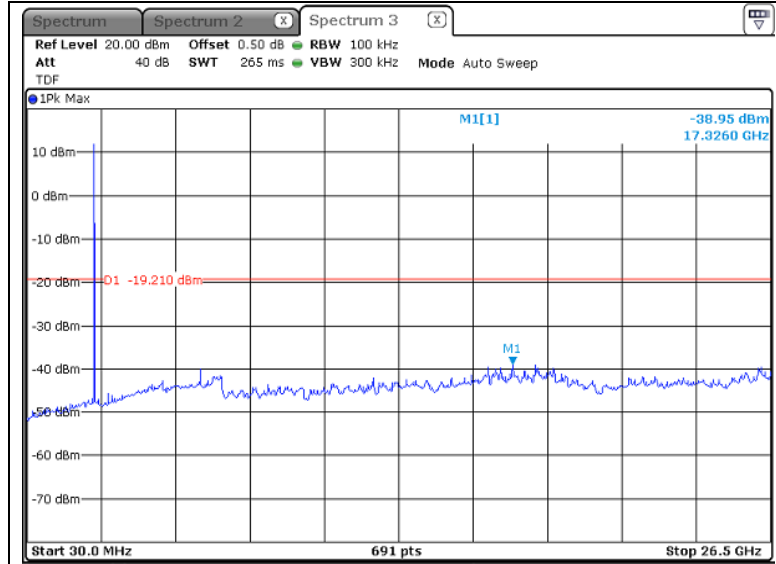
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (179) of (227)

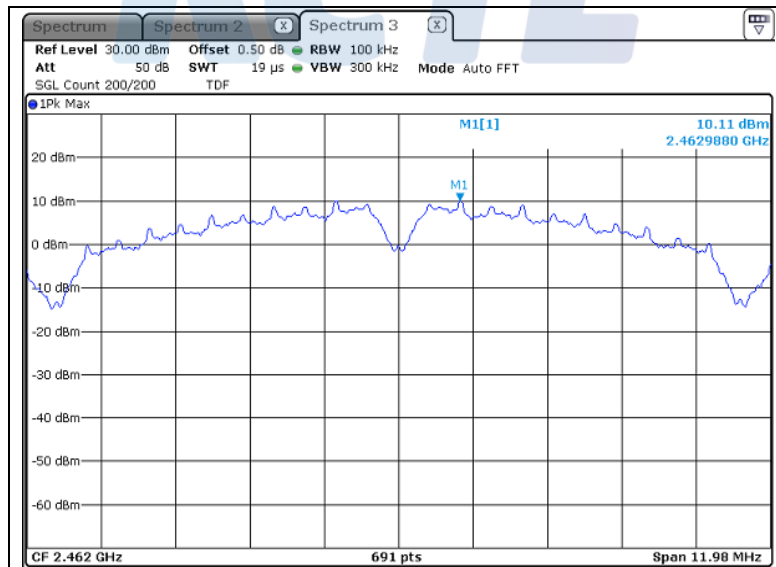


Conducted Spurious Emissions



Highest Channel (2 462 MHz)

Reference



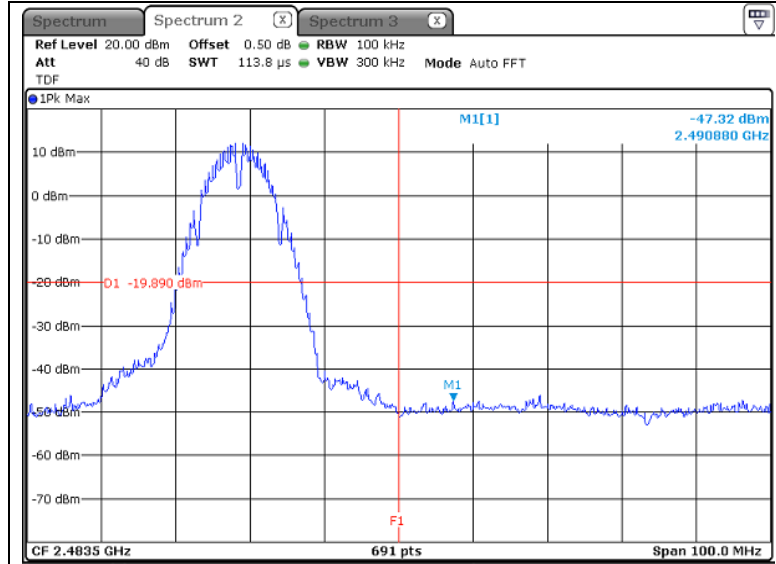
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (180) of (227)

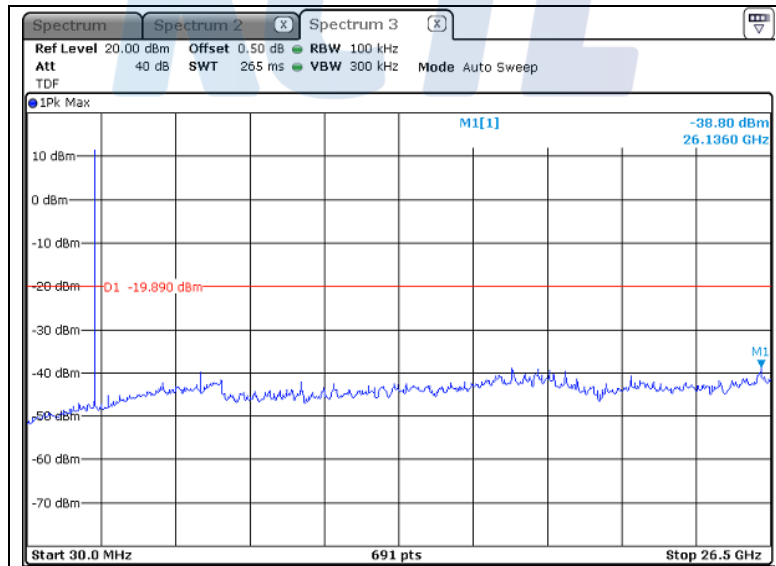


Band-edge



- Result of 2 483.5 MHz

Conducted Spurious Emissions



KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

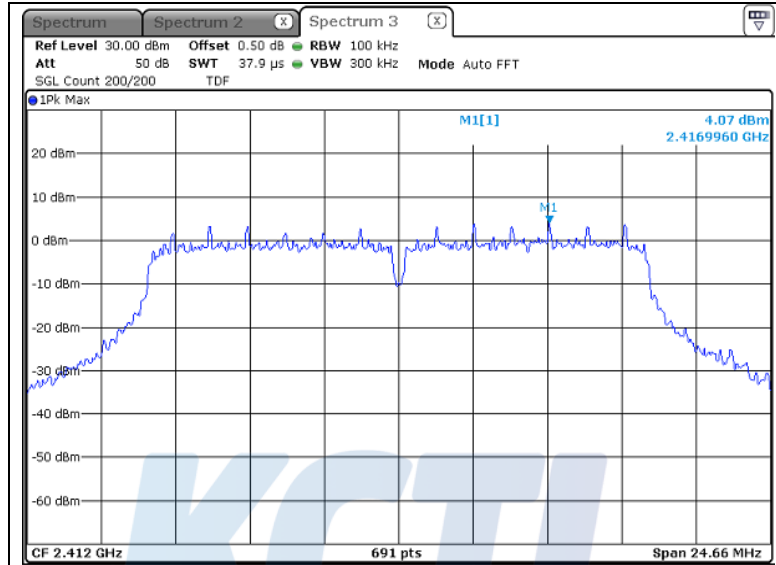
Report No.:
KR17-SRF0055-B
Page (181) of (227)



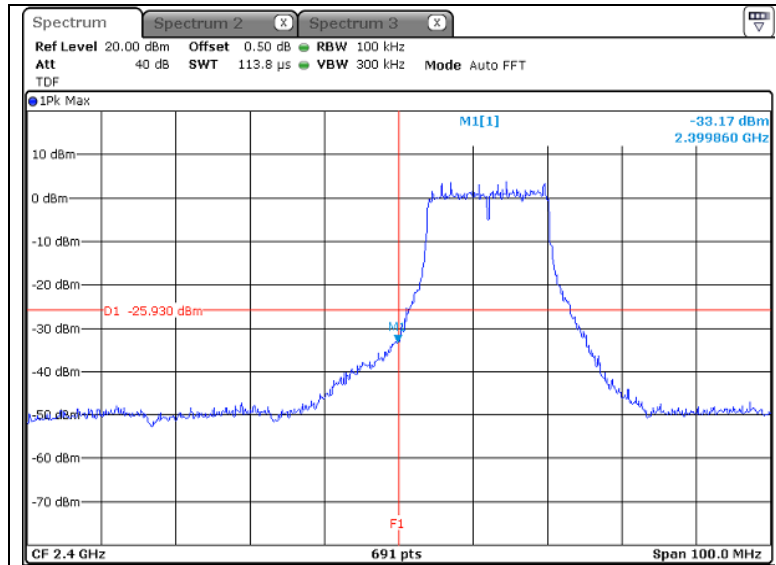
- 802.11g

Lowest Channel (2 412 MHz)

Reference



Band-edge



- Result of 2 400.0 MHz

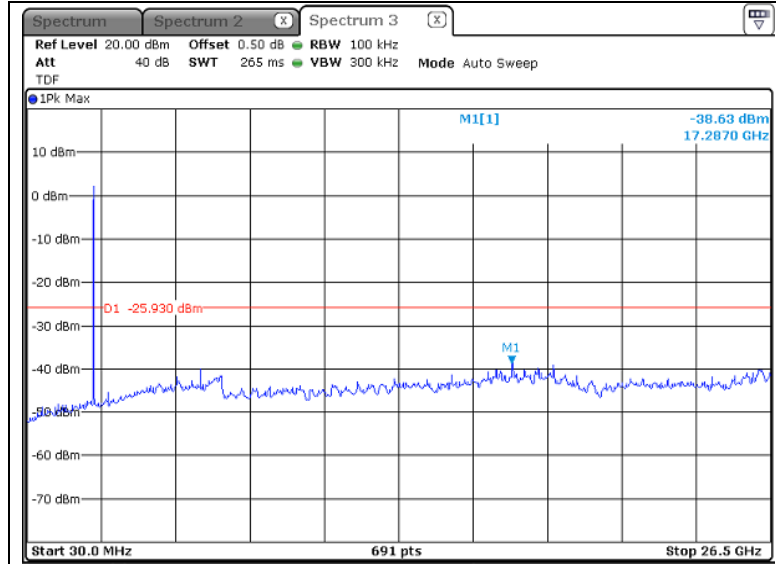
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (182) of (227)

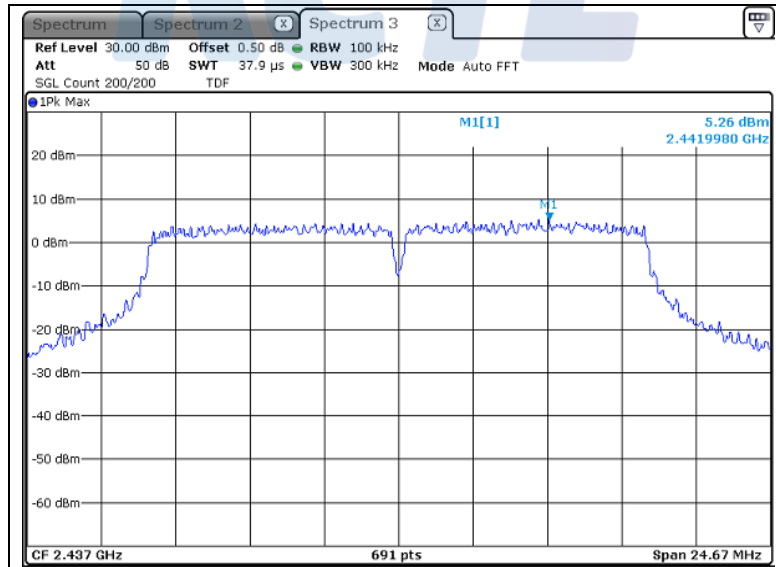


Conducted Spurious Emissions



Middle Channel (2 437 MHz)

Reference



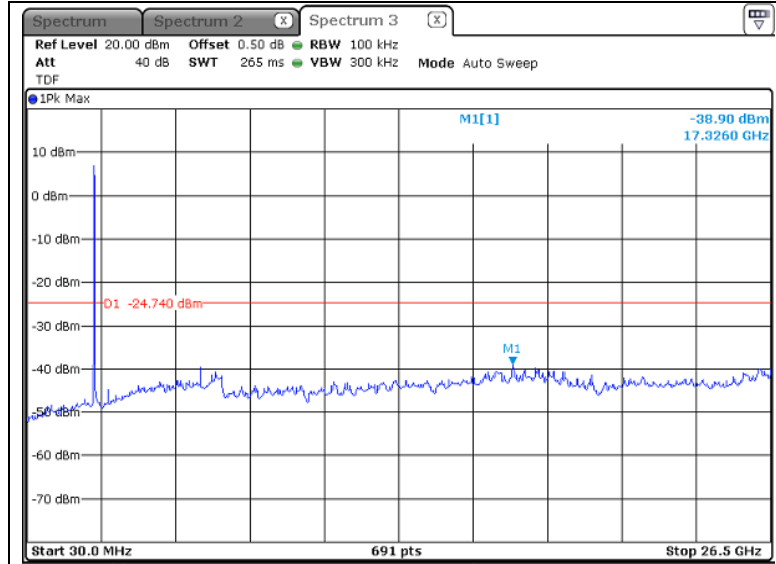
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (183) of (227)

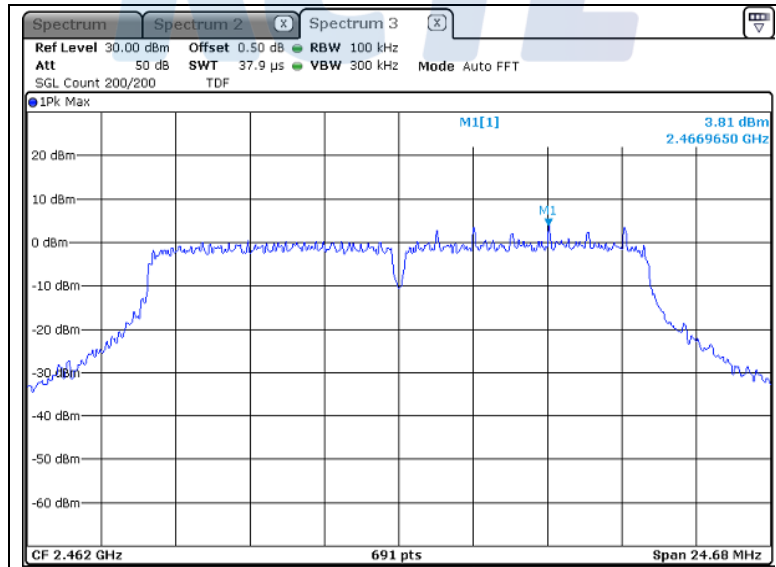


Conducted Spurious Emissions



Highest Channel (2 462 MHz)

Reference



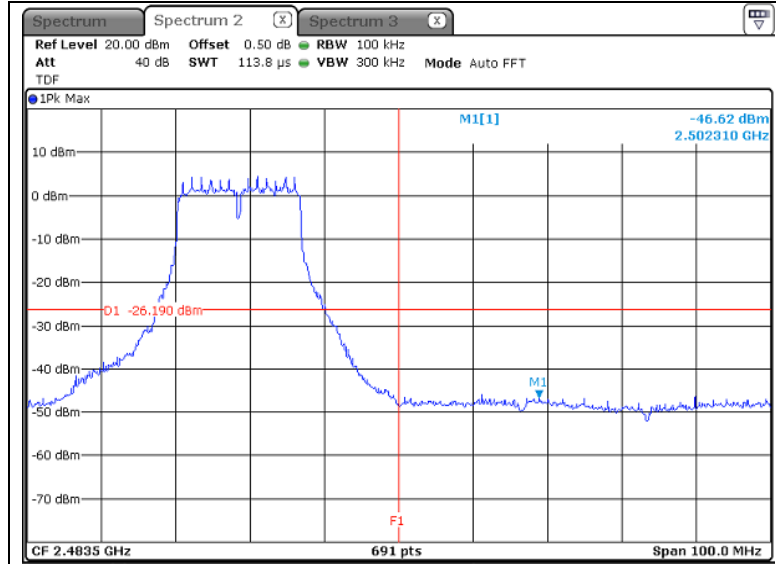
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (184) of (227)

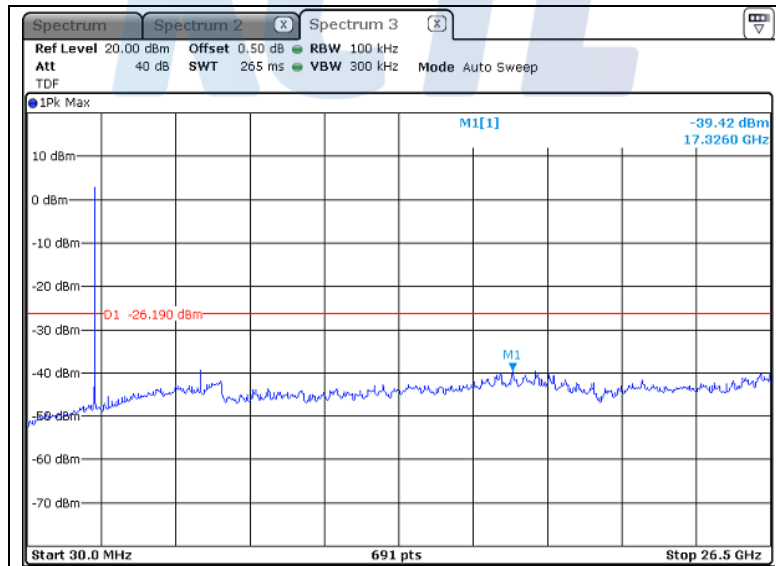


Band-edge



- Result of 2 483.5 Mhz

Conducted Spurious Emissions



KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

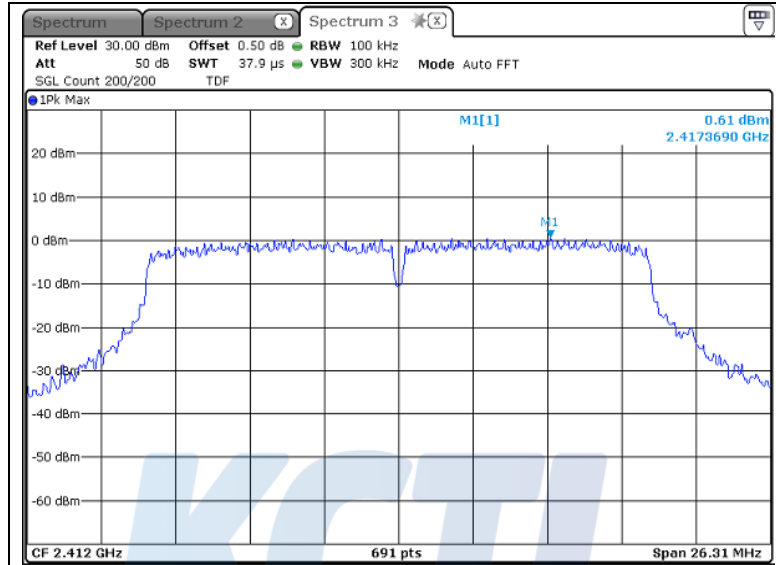
Report No.:
KR17-SRF0055-B
Page (185) of (227)



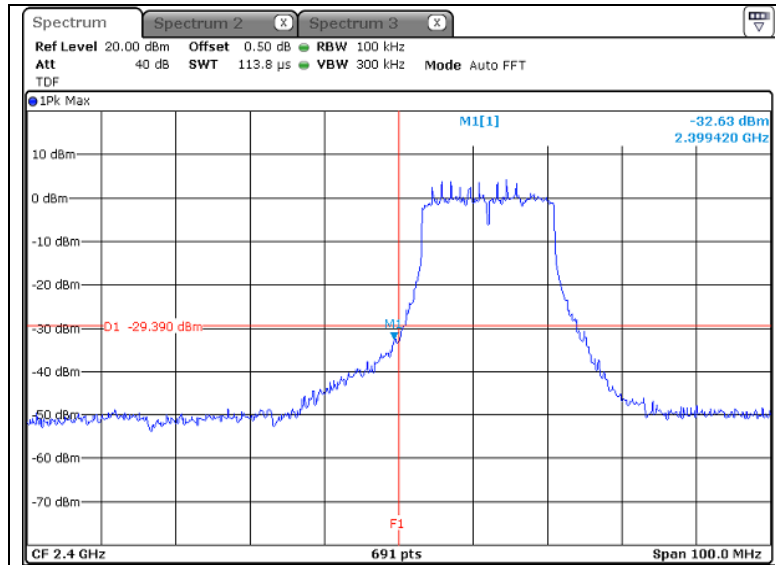
- 802.11n HT20

Lowest Channel (2 412 MHz)

Reference



Band-edge



- Result of 2 400.0 MHz

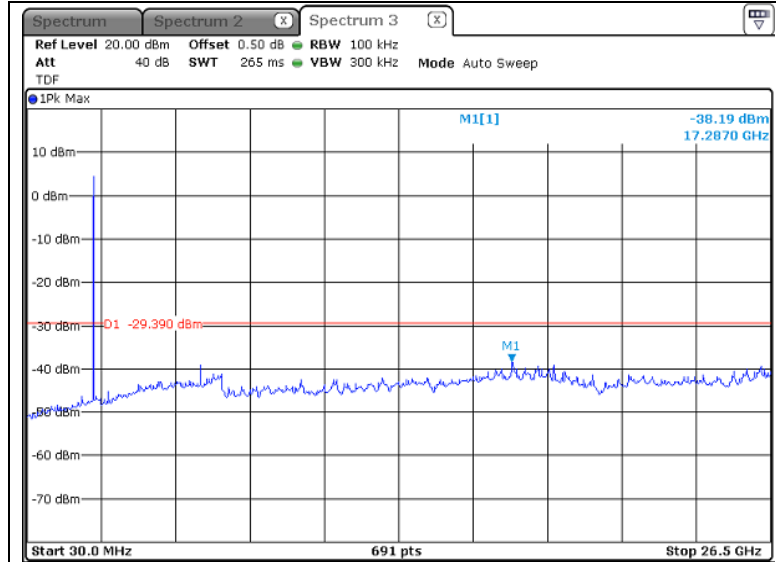
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (186) of (227)

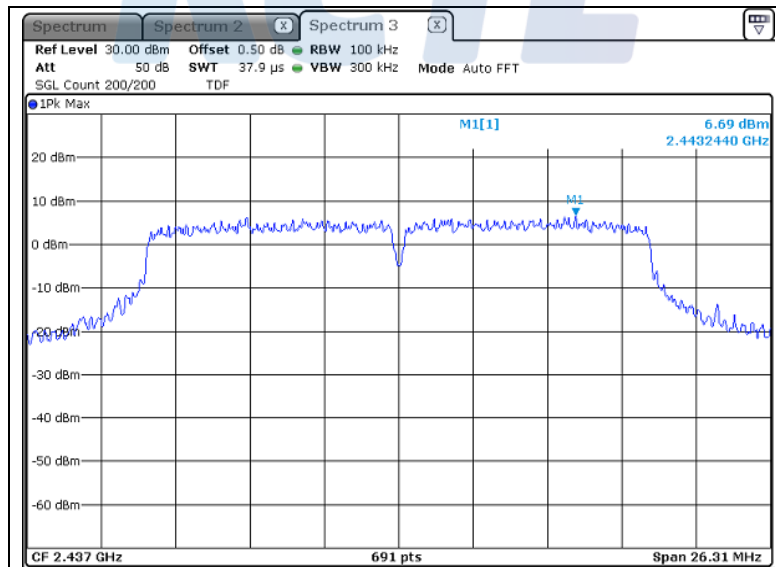


Conducted Spurious Emissions



Middle Channel (2 437 MHz)

Reference



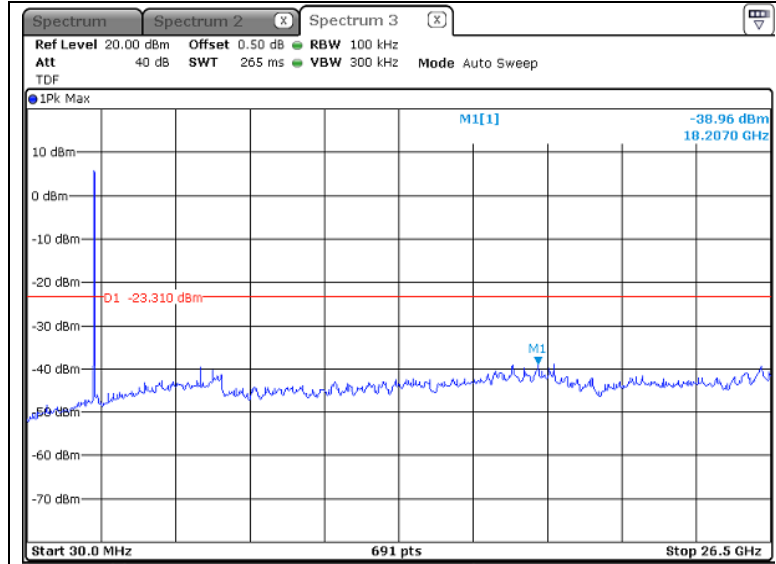
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (187) of (227)

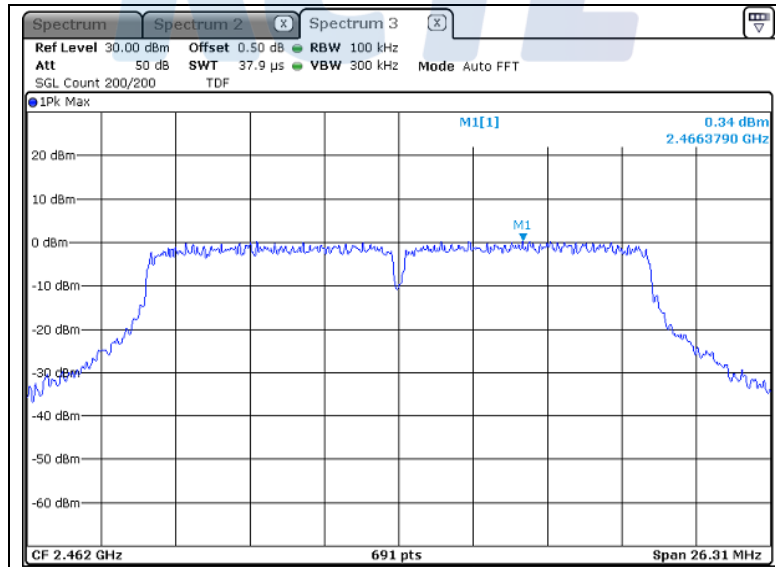


Conducted Spurious Emissions



Highest Channel (2 462 MHz)

Reference



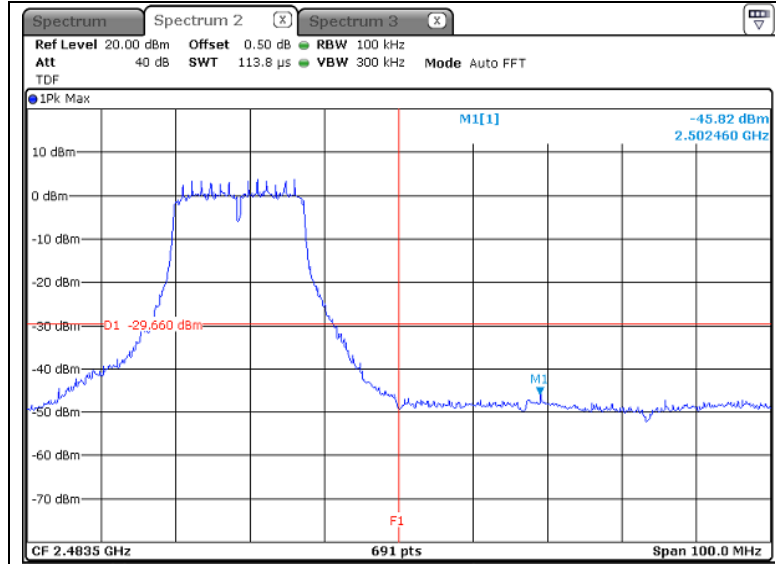
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (188) of (227)

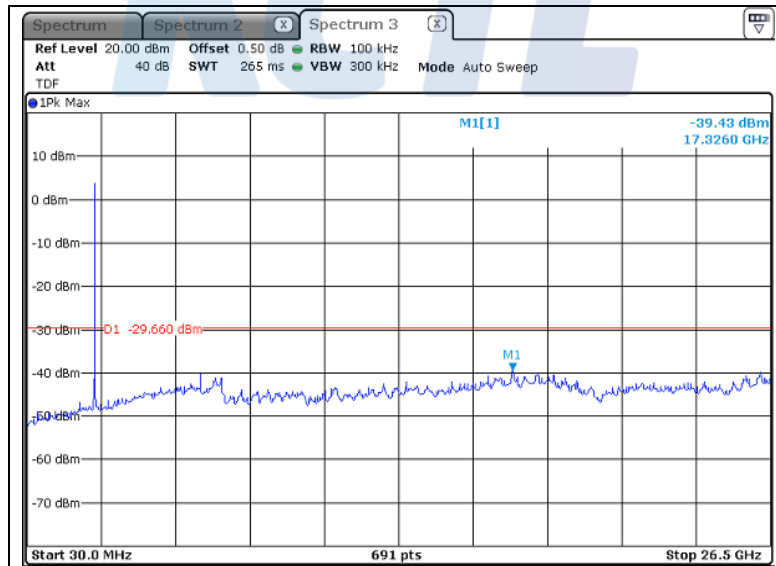


Band-edge



- Result of 2 483.5 MHz

Conducted Spurious Emissions



KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

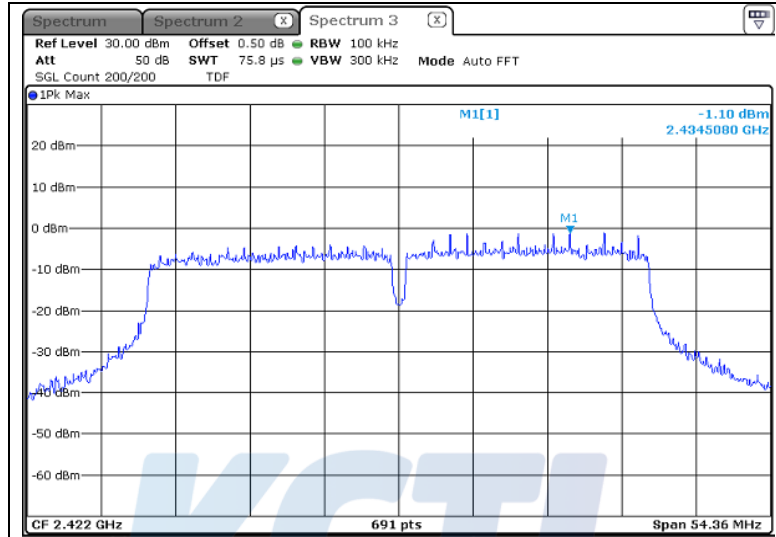
Report No.:
KR17-SRF0055-B
Page (189) of (227)



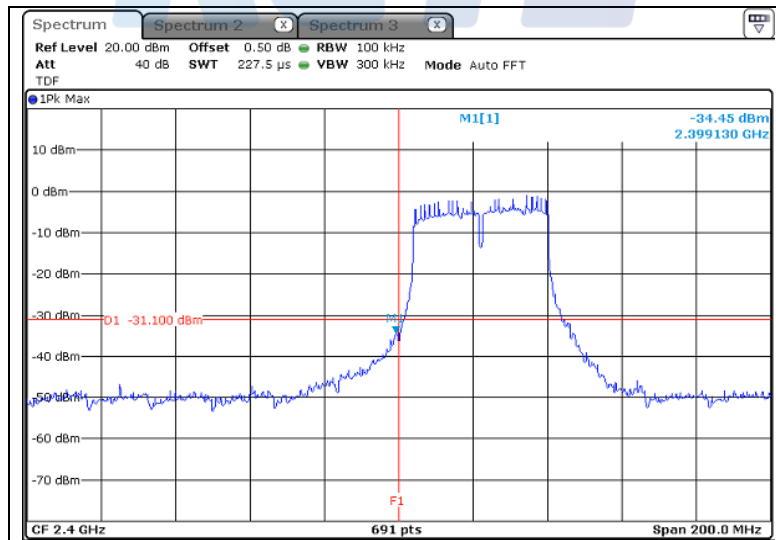
- 802.11n HT40

Lowest Channel (2 422 MHz)

Reference



Band-edge



- Result of 2 400.0 MHz

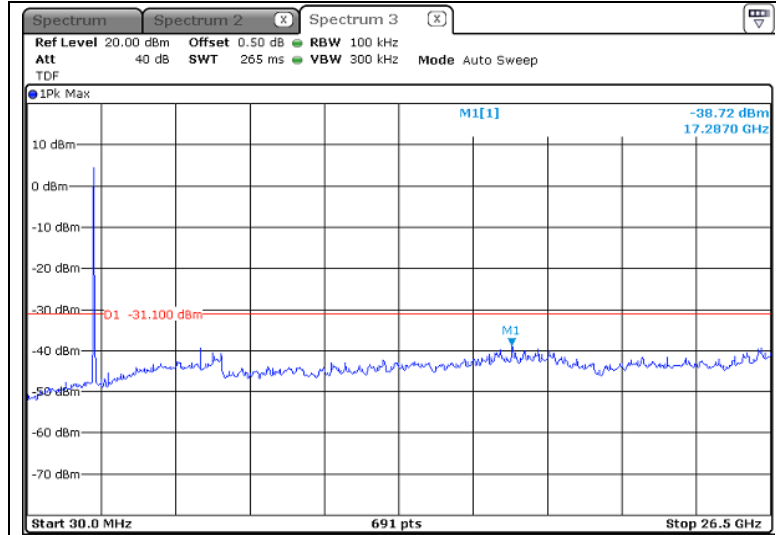
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (190) of (227)

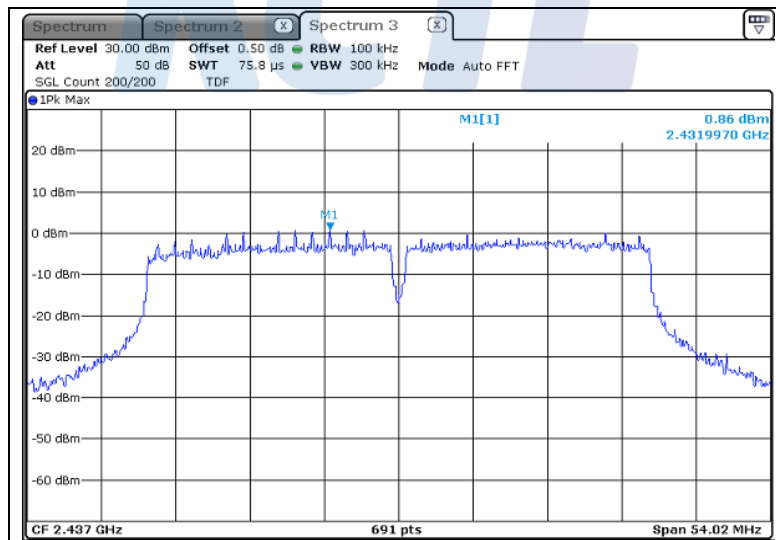


Conducted Spurious Emissions



Middle Channel (2 437 MHz)

Reference



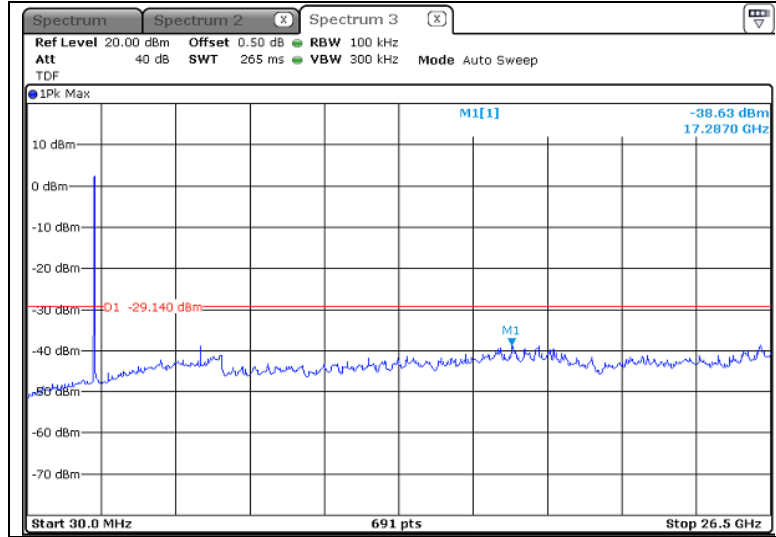
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (191) of (227)

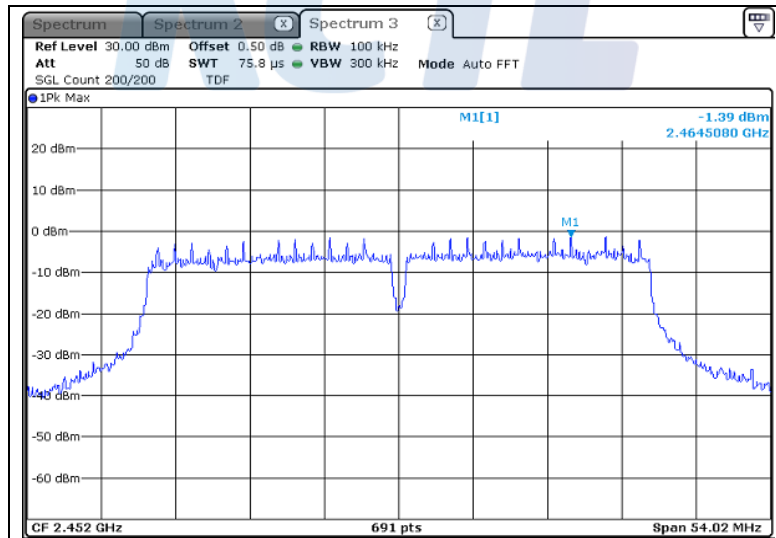


Conducted Spurious Emissions



Highest Channel (2 452 MHz)

Reference



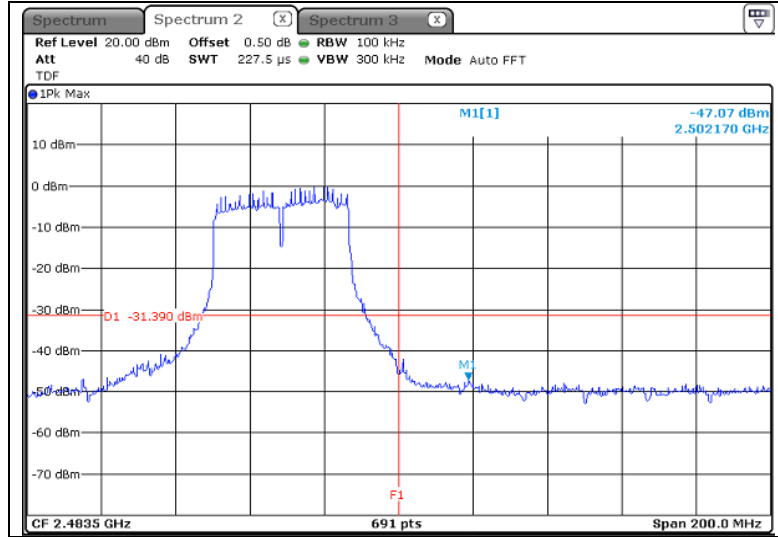
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (192) of (227)

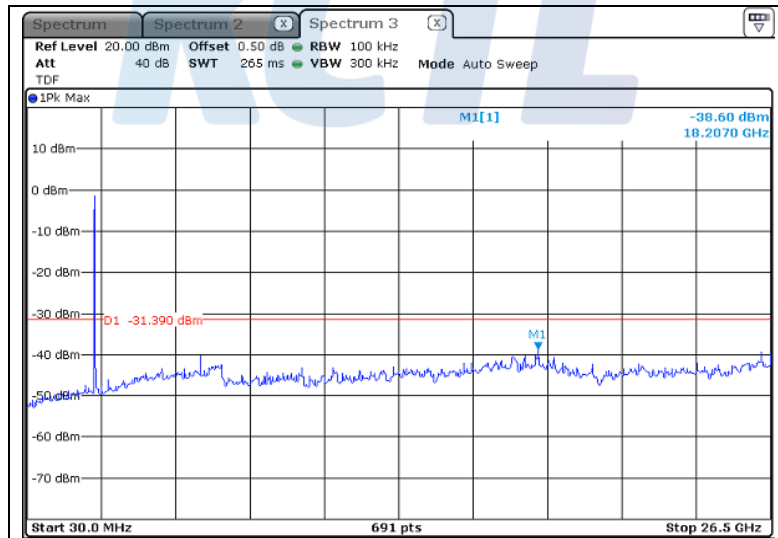


Band-edge



- Result of 2 483.5 MHz

Conducted Spurious Emissions



KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (193) of (227)

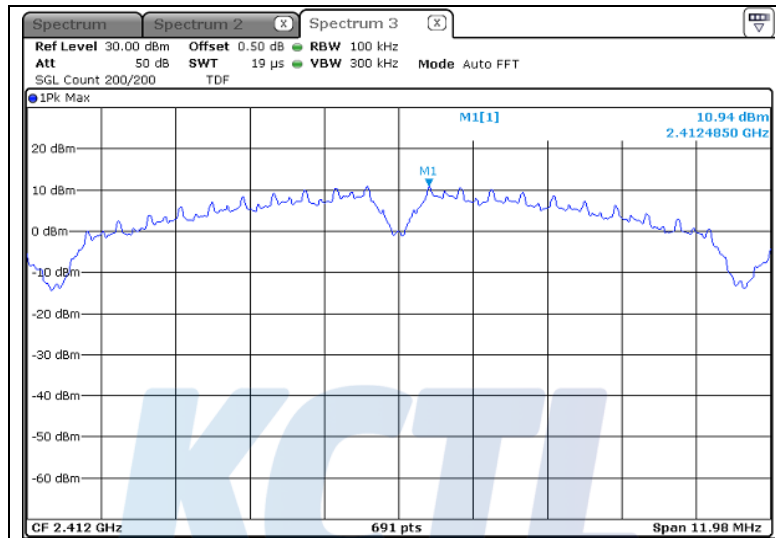


- ANT 1

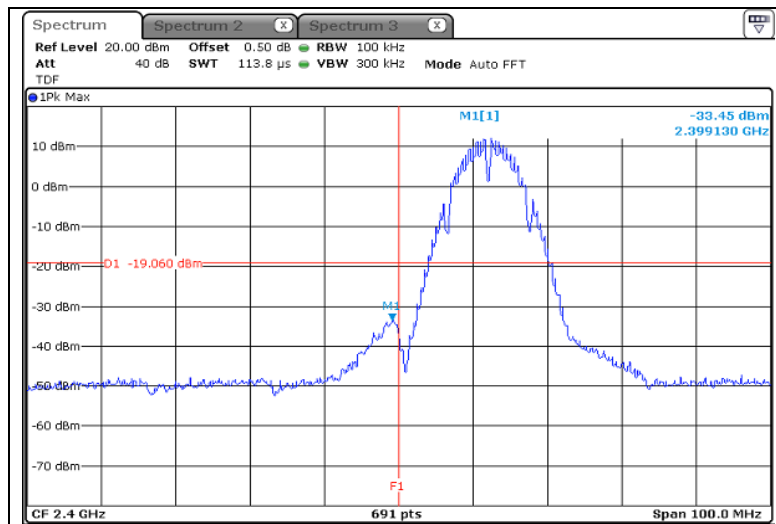
- 802.11b

Lowest Channel (2 412 MHz)

Reference



Band-edge



- Result of 2 400.0 MHz

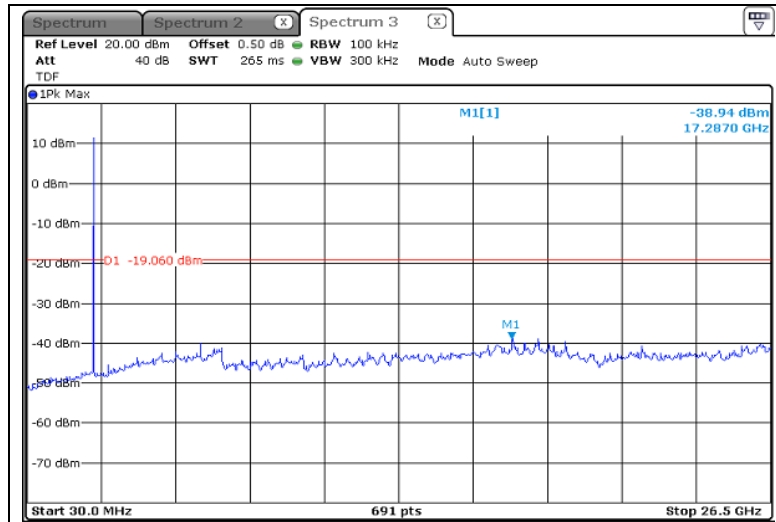
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (194) of (227)

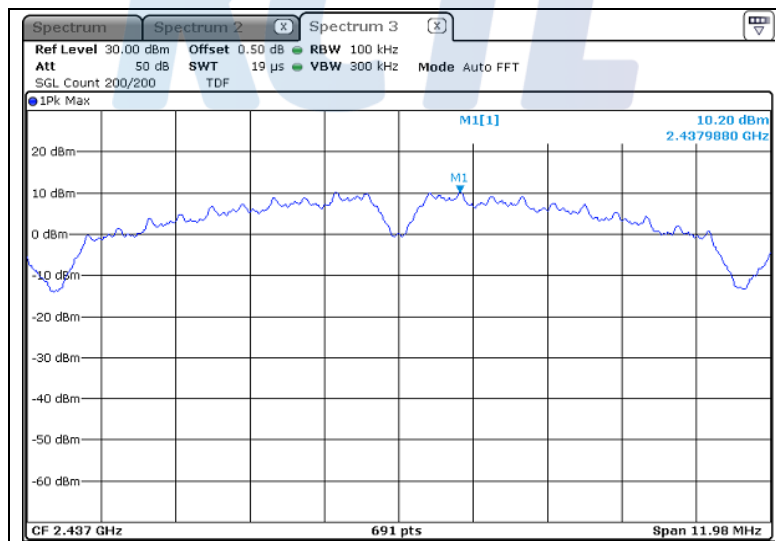


Conducted Spurious Emissions



Middle Channel (2 437 MHz)

Reference



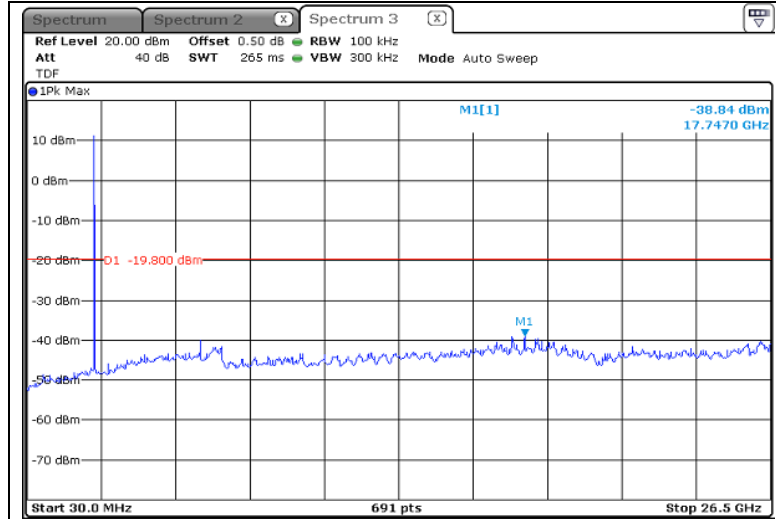
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (195) of (227)

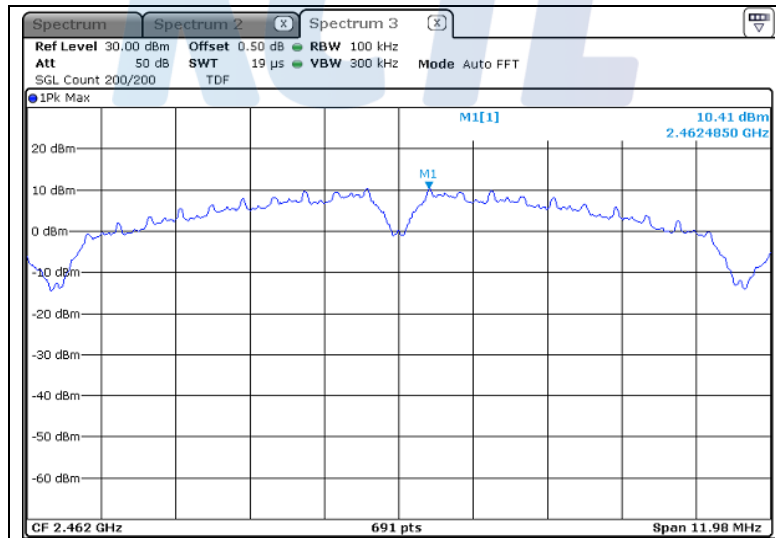


Conducted Spurious Emissions



Highest Channel (2 462 MHz)

Reference



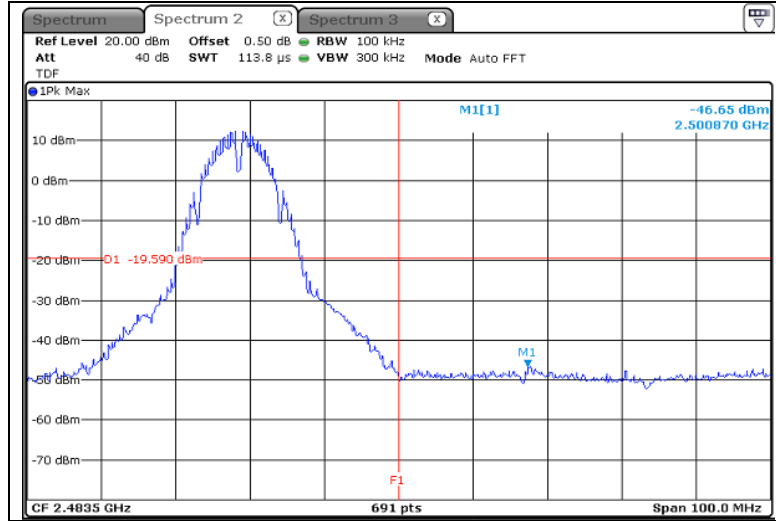
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (196) of (227)

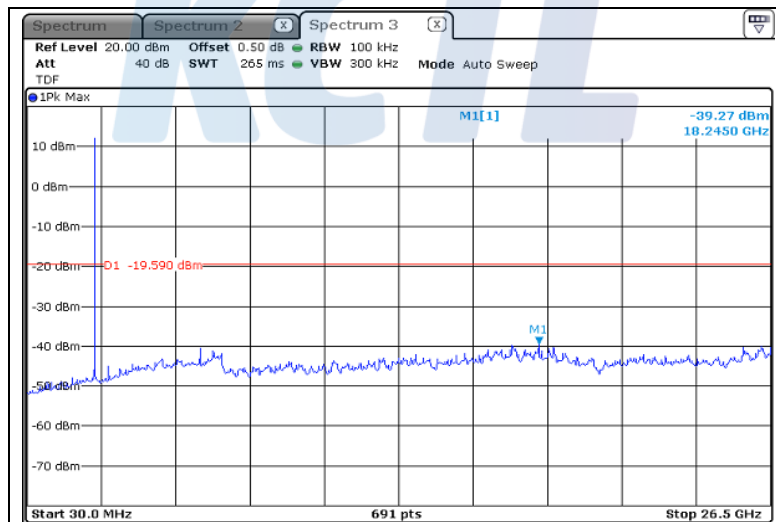


Band-edge



- Result of 2 483.5 MHz

Conducted Spurious Emissions



KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

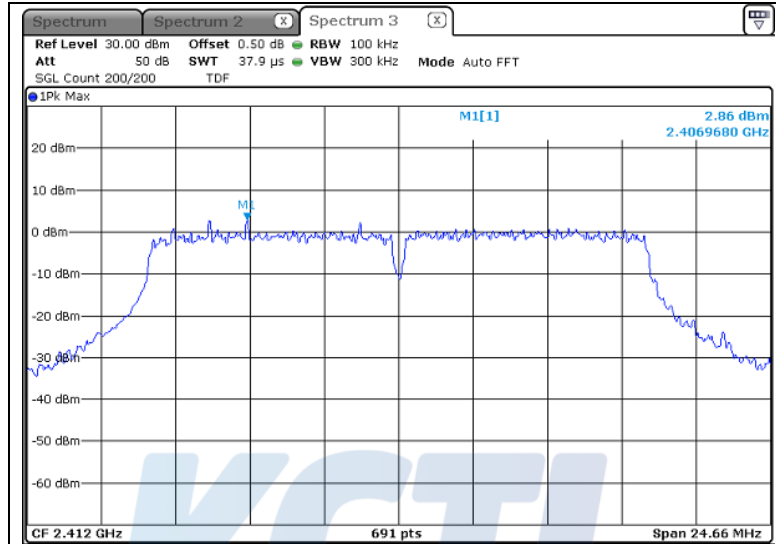
Report No.:
KR17-SRF0055-B
Page (197) of (227)



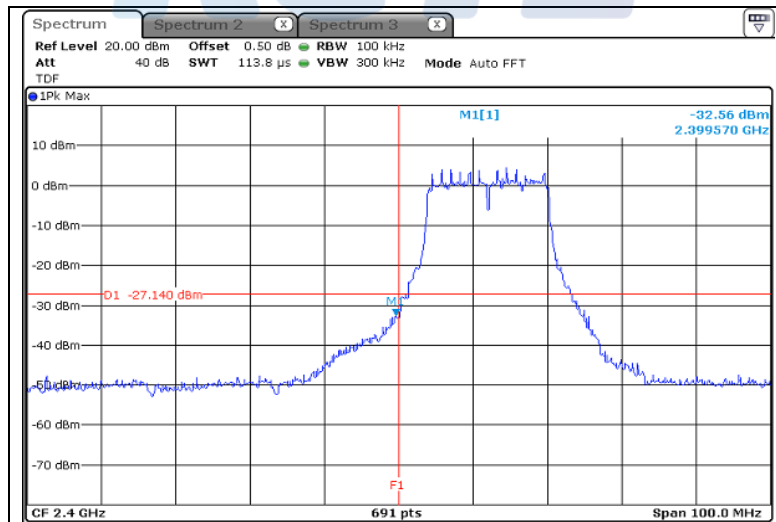
- 802.11g

Lowest Channel (2 412 MHz)

Reference



Band-edge



- Result of 2 400.0 MHz

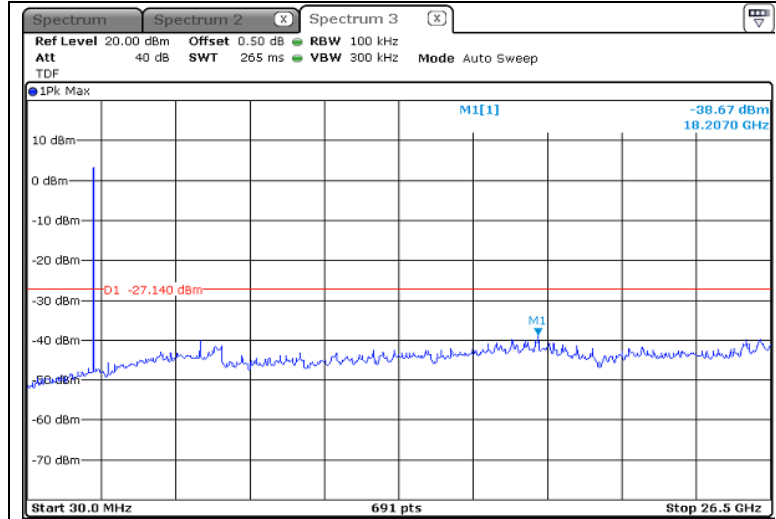
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (198) of (227)

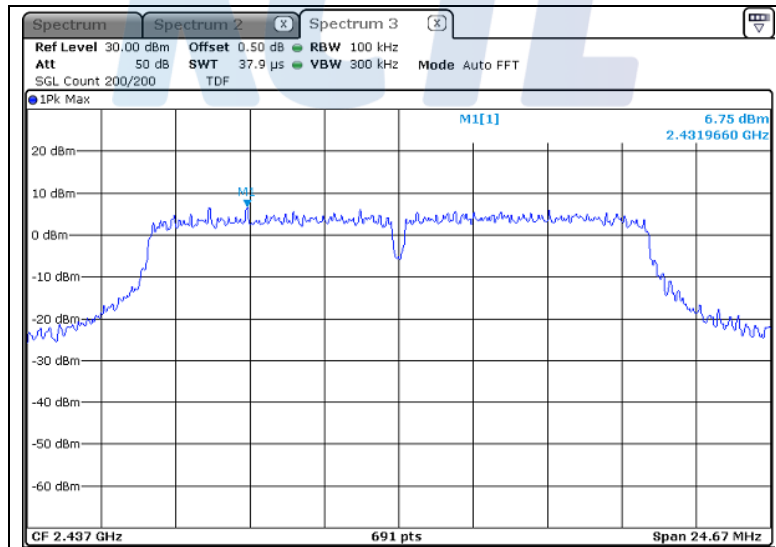


Conducted Spurious Emissions



Middle Channel (2 437 MHz)

Reference



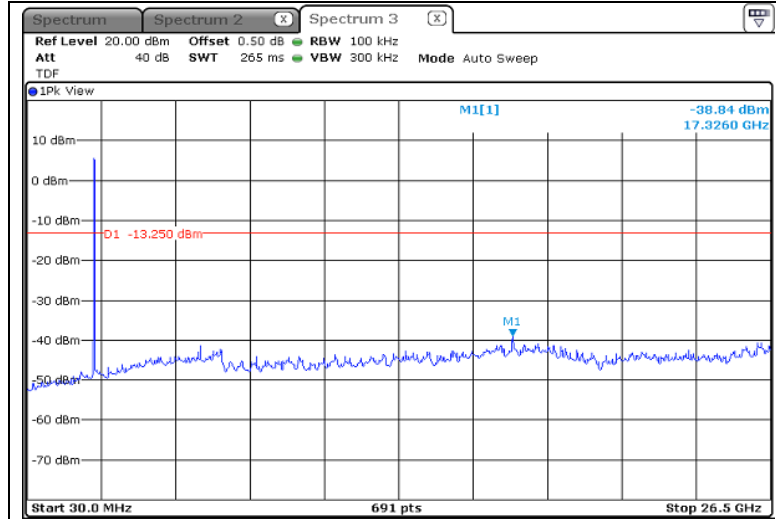
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (199) of (227)

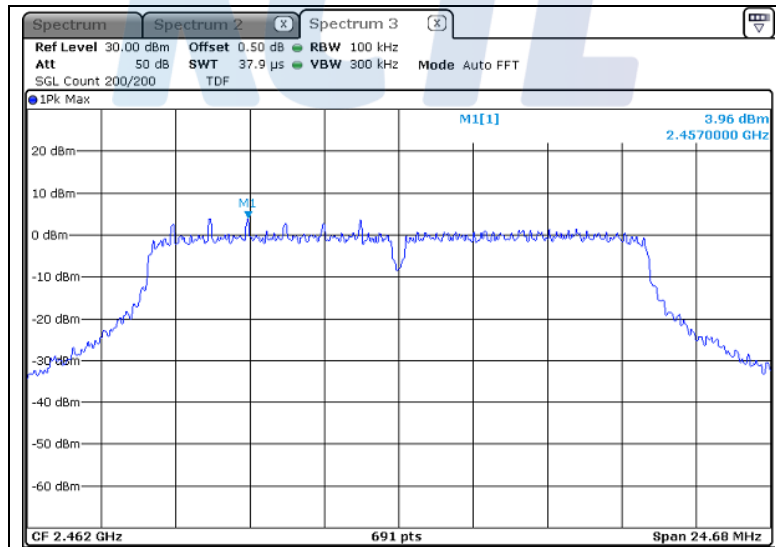


Conducted Spurious Emissions



Highest Channel (2 462 MHz)

Reference



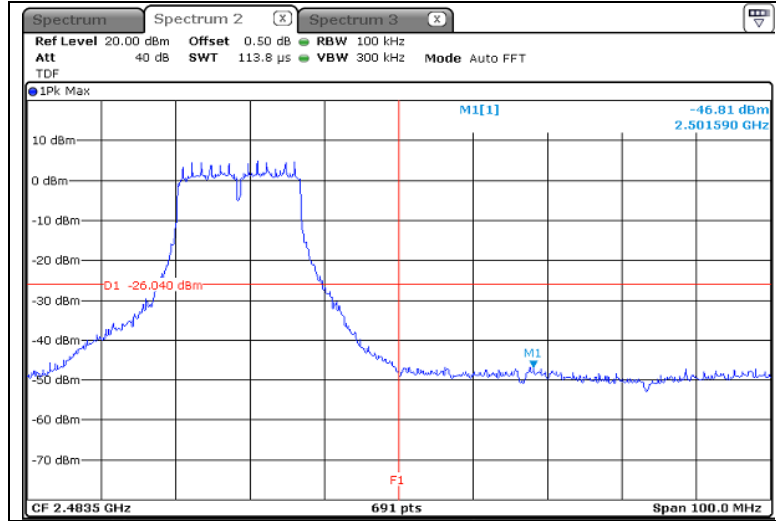
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (200) of (227)

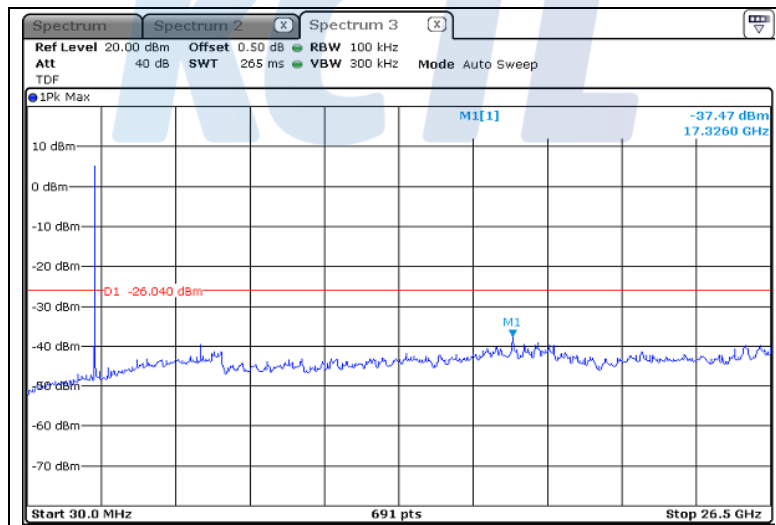


Band-edge



- Result of 2 483.5 MHz

Conducted Spurious Emissions



KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

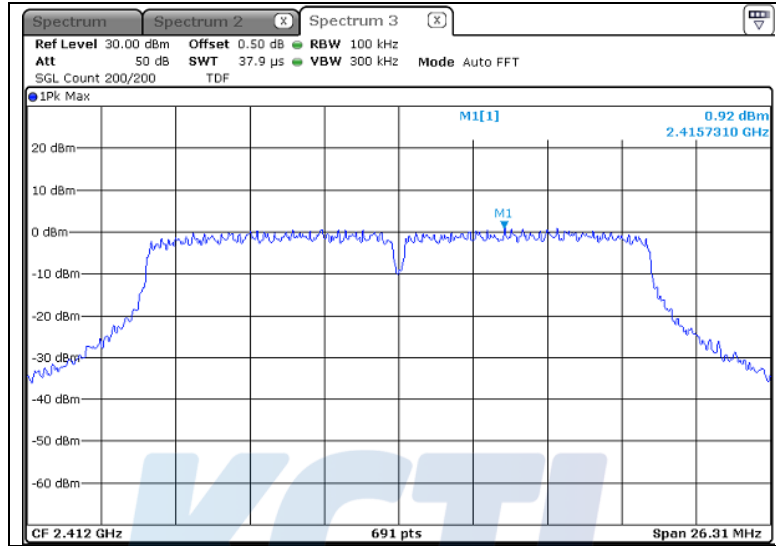
Report No.:
KR17-SRF0055-B
Page (201) of (227)



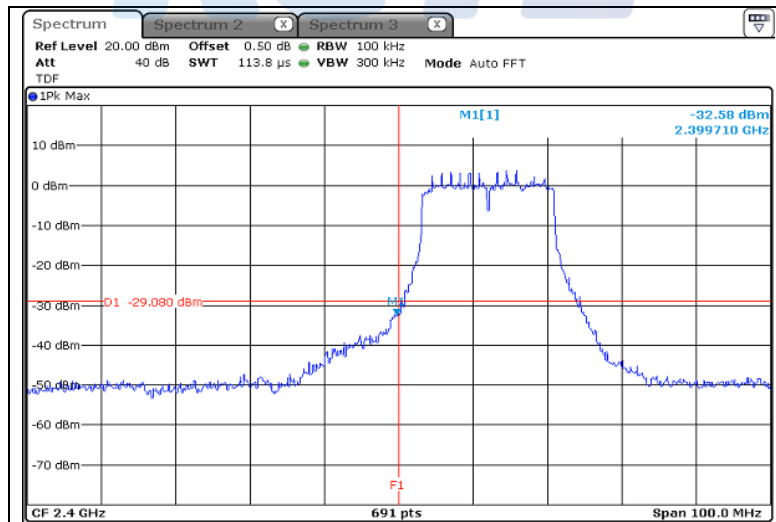
- 802.11n HT20

Lowest Channel (2 412 MHz)

Reference



Band-edge



- Result of 2 400.0 MHz

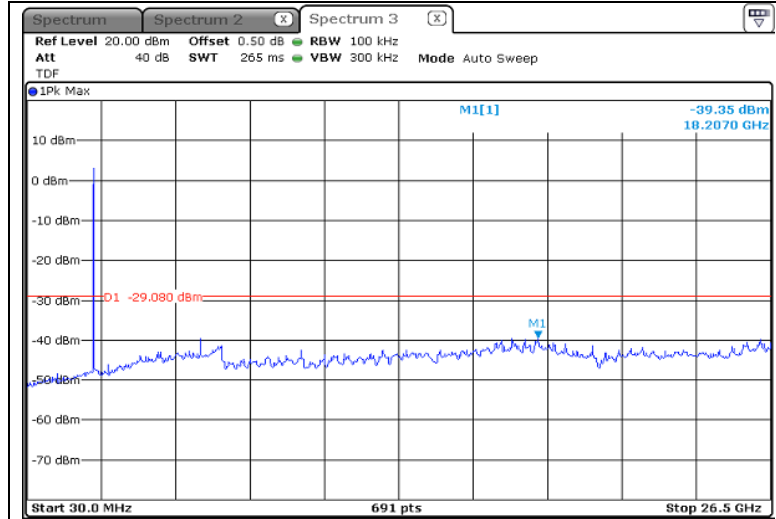
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (202) of (227)

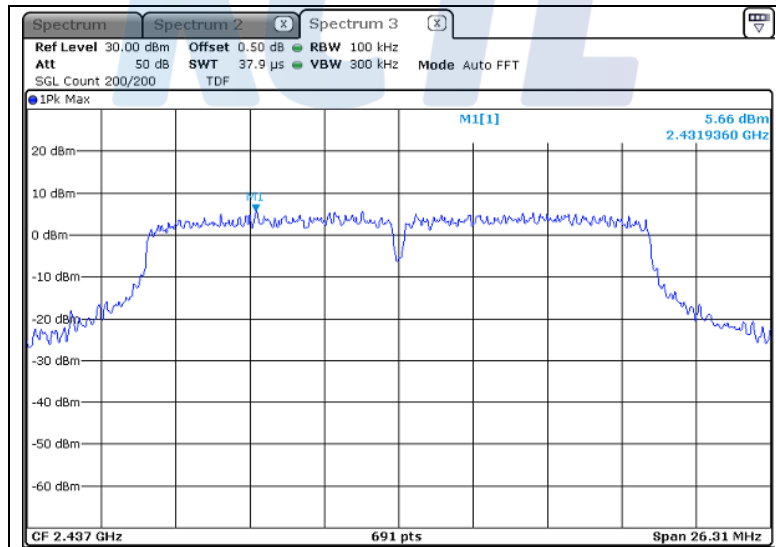


Conducted Spurious Emissions



Middle Channel (2 437 MHz)

Reference



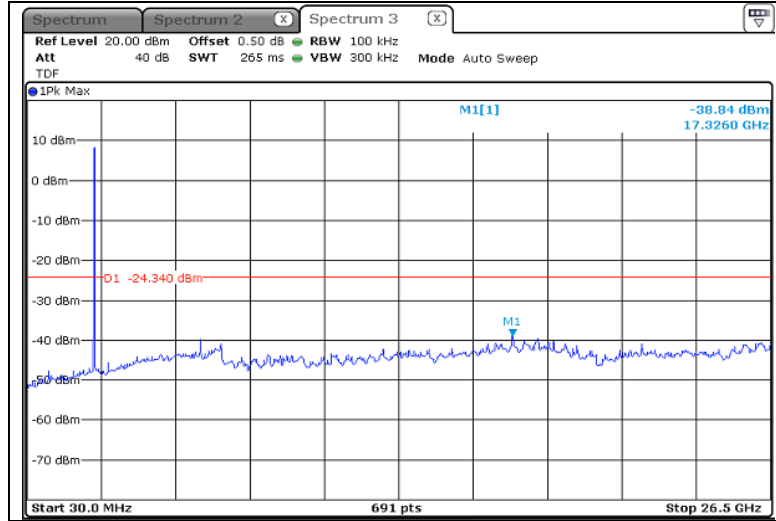
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (203) of (227)

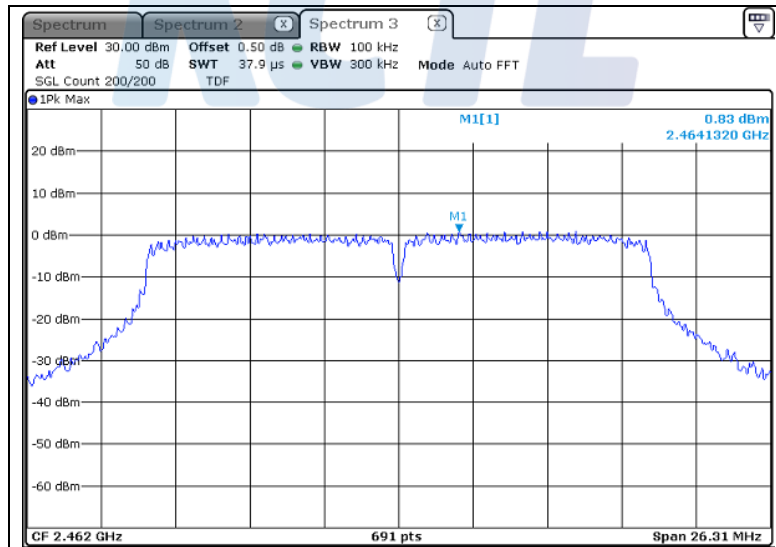


Conducted Spurious Emissions



Highest Channel (2 462 MHz)

Reference



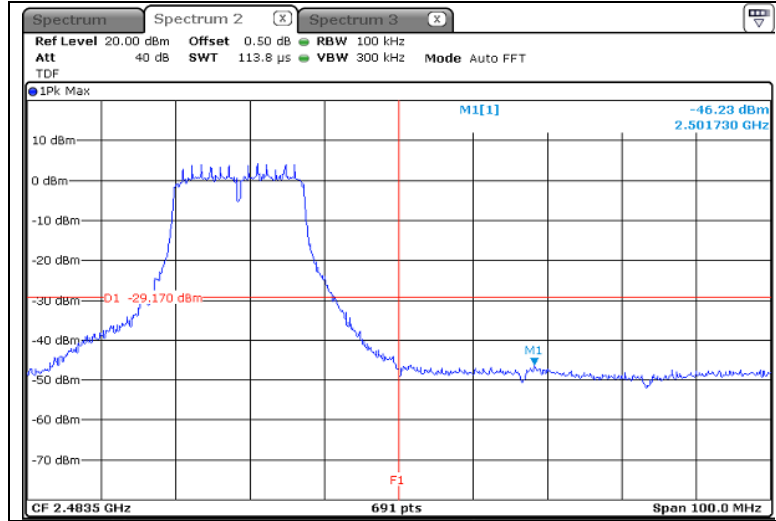
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (204) of (227)

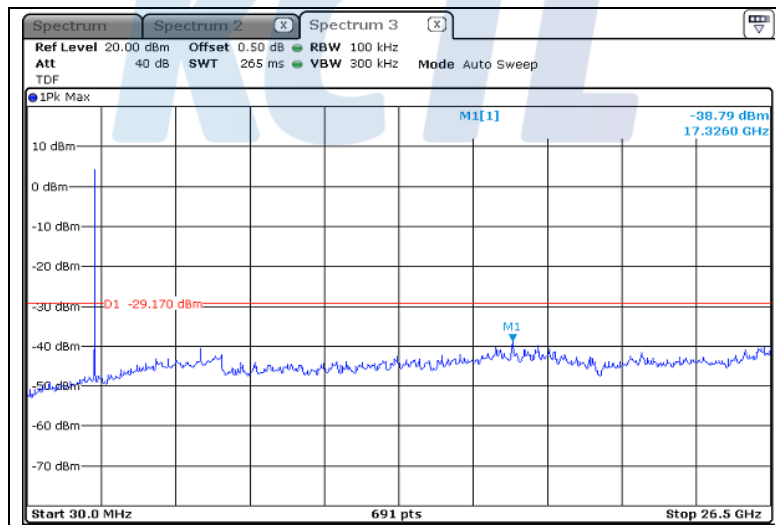


Band-edge



- Result of 2 483.5 MHz

Conducted Spurious Emissions



KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

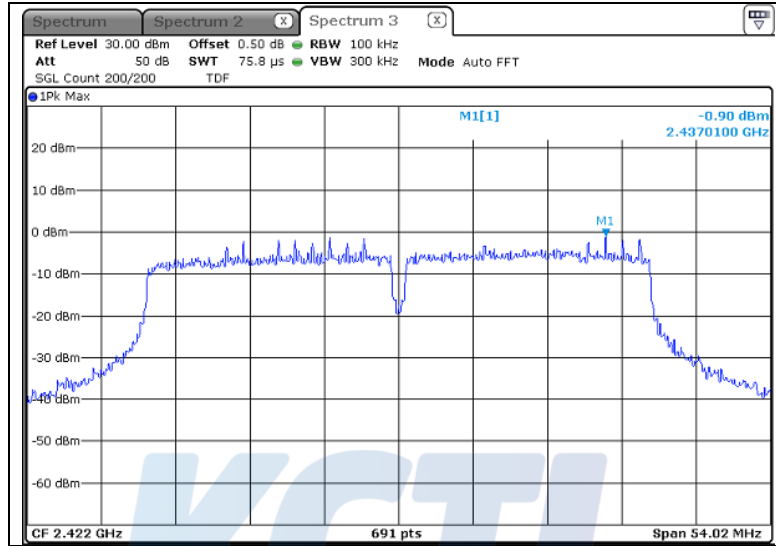
Report No.:
KR17-SRF0055-B
Page (205) of (227)



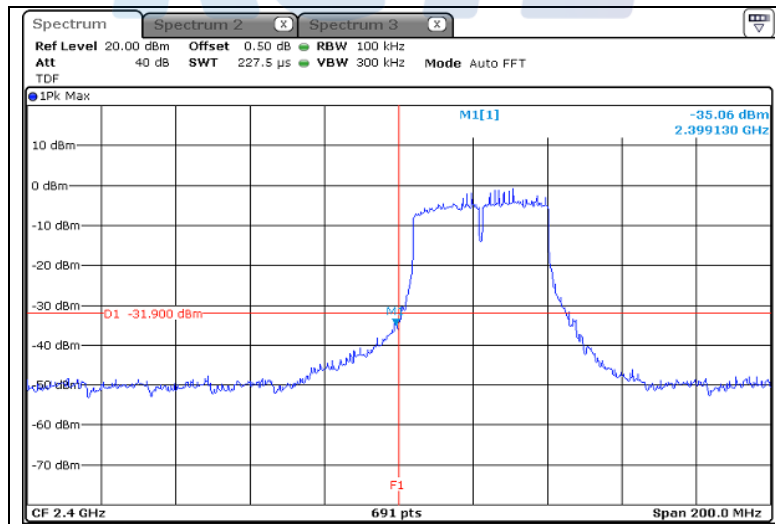
- 802.11n HT40

Lowest Channel (2 422 MHz)

Reference



Band-edge



- Result of 2 400.0 MHz

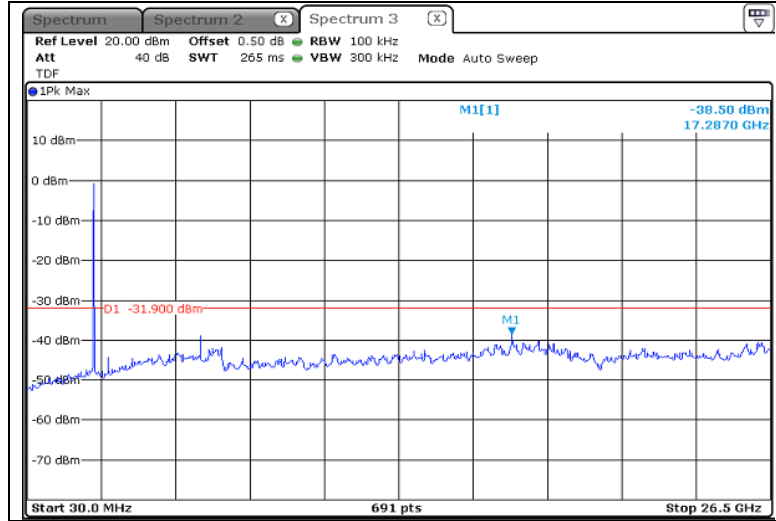
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (206) of (227)

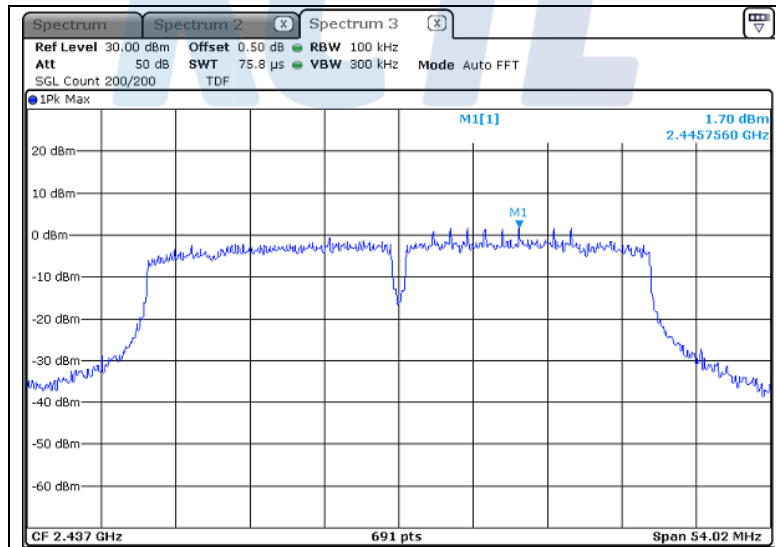


Conducted Spurious Emissions



Middle Channel (2 437 MHz)

Reference



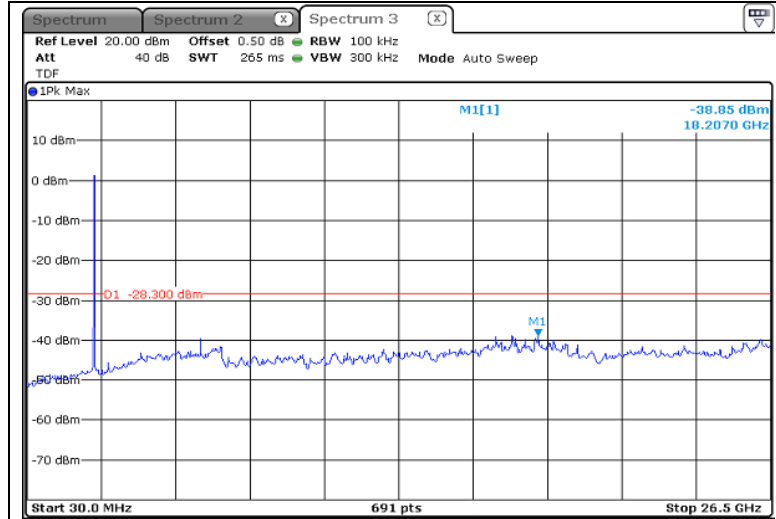
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (207) of (227)

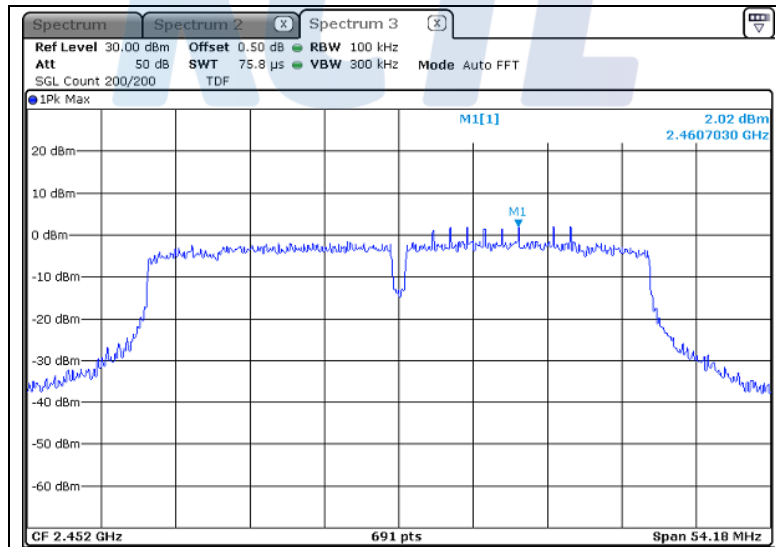


Conducted Spurious Emissions



Highest Channel (2 452 MHz)

Reference



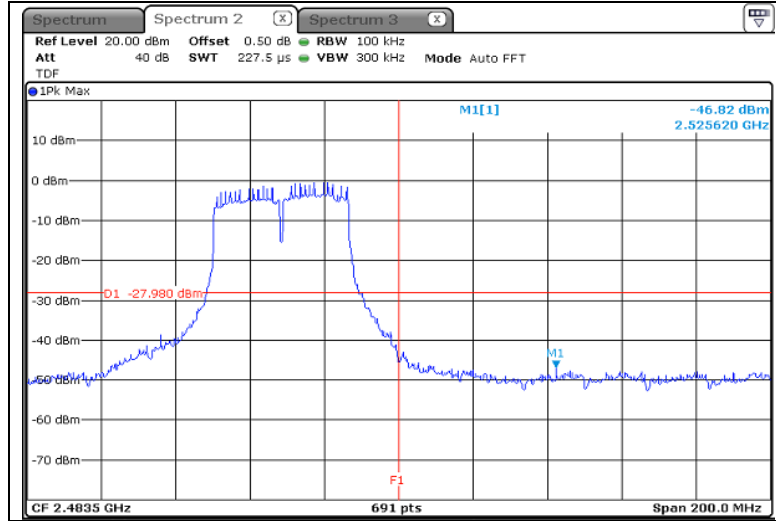
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (208) of (227)

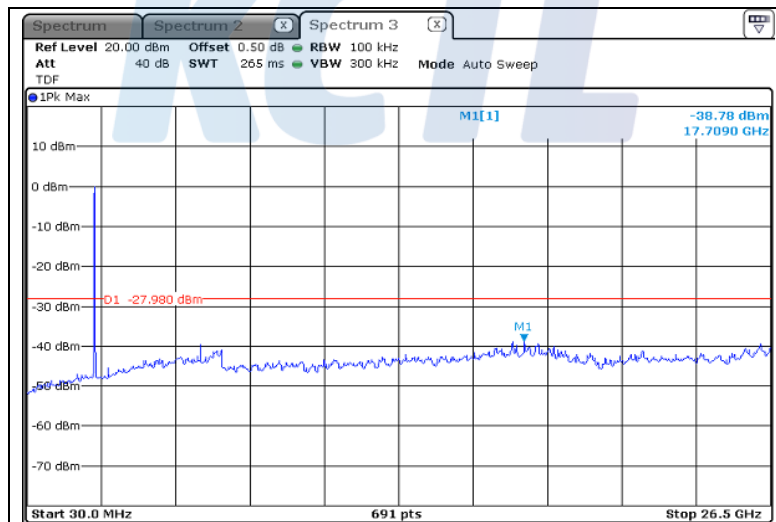


Band-edge



- Result of 2 483.5 MHz

Conducted Spurious Emissions



KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (209) of (227)

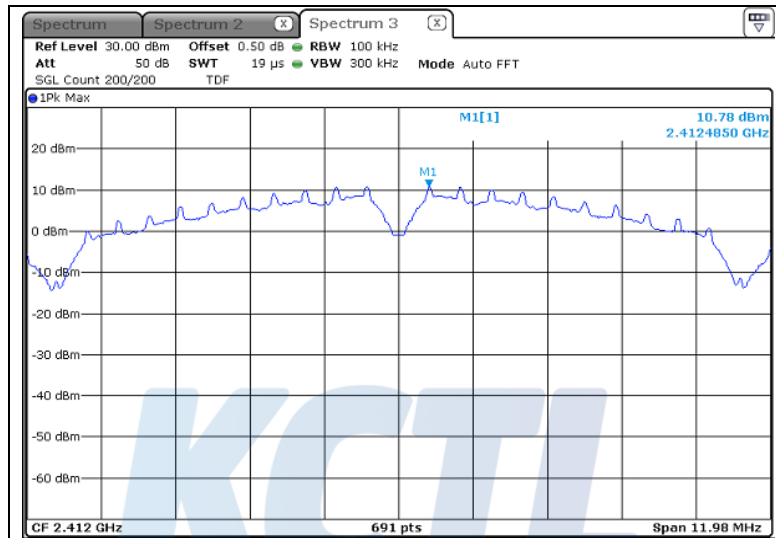


- ANT 2

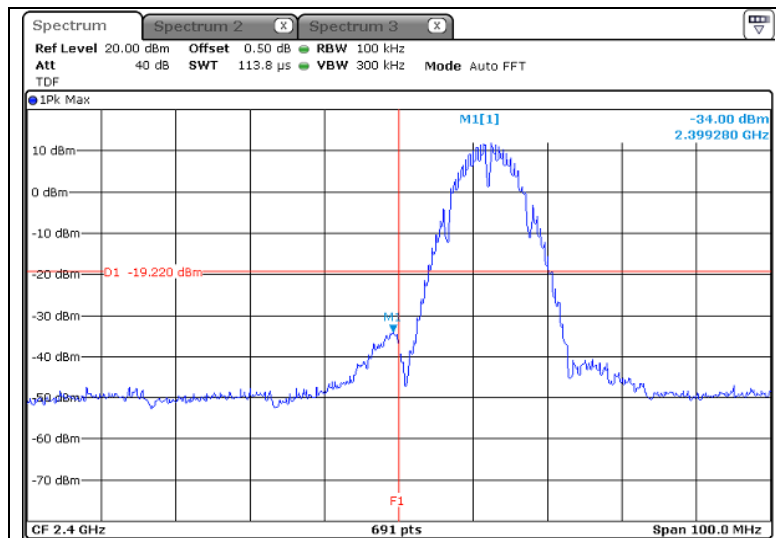
- 802.11b

Lowest Channel (2 412 MHz)

Reference



Band-edge



- Result of 2 400.0 MHz

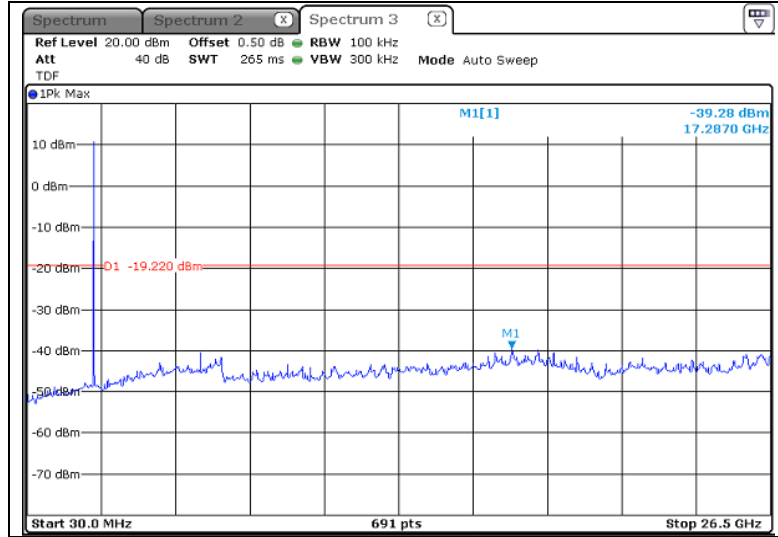
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (210) of (227)

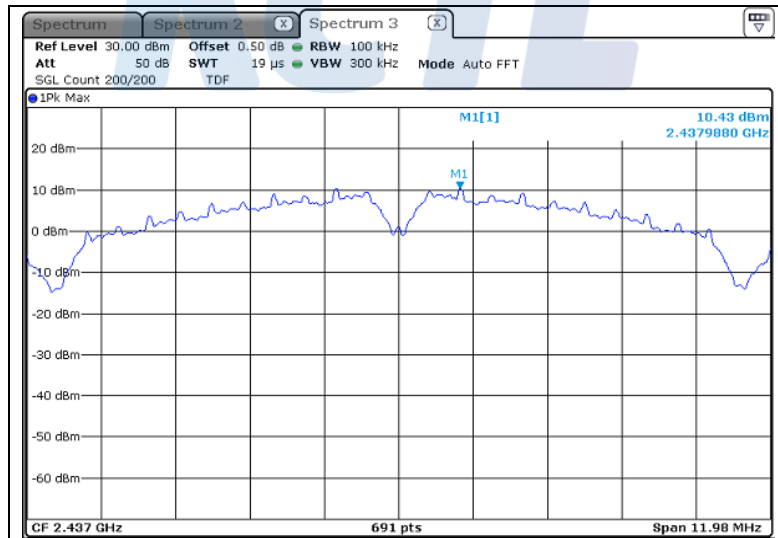


Conducted Spurious Emissions



Middle Channel (2 437 MHz)

Reference



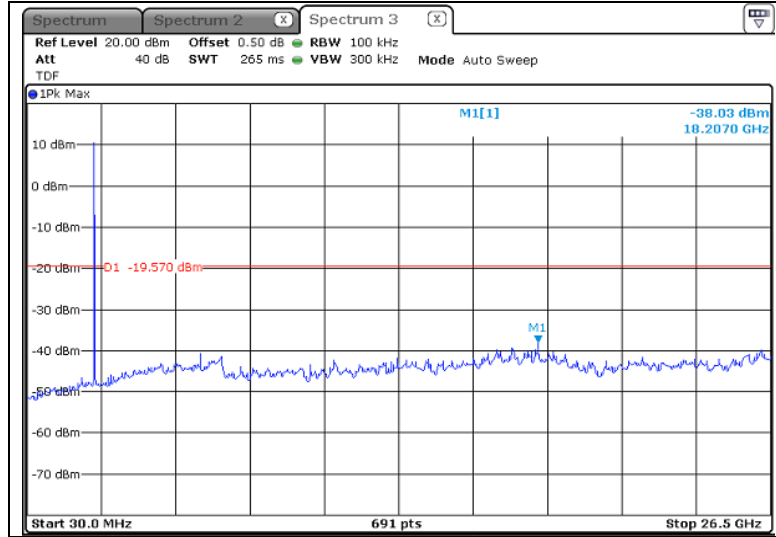
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (211) of (227)

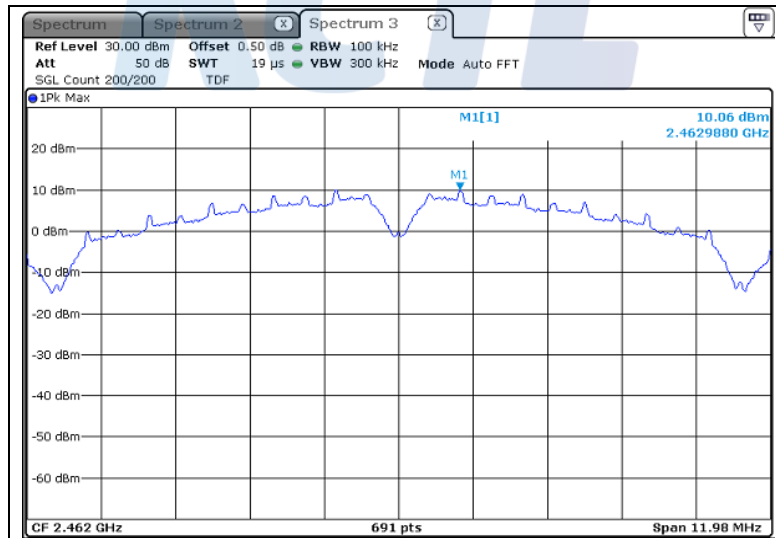


Conducted Spurious Emissions



Highest Channel (2 462 MHz)

Reference



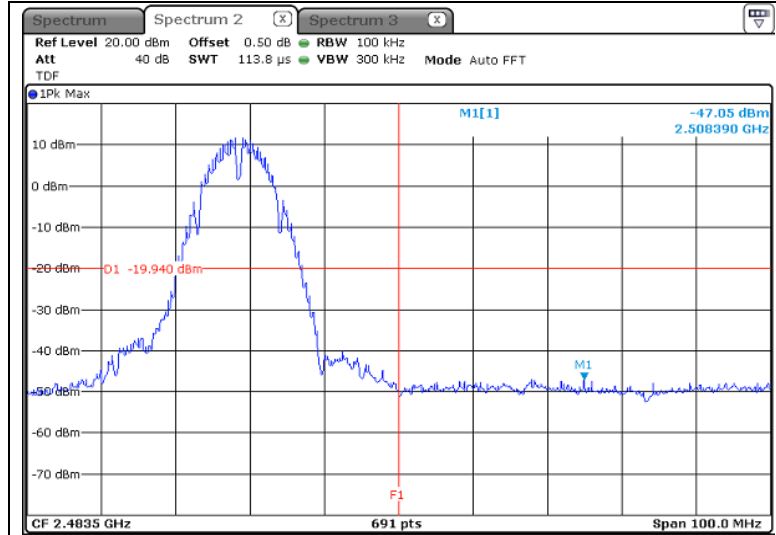
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (212) of (227)

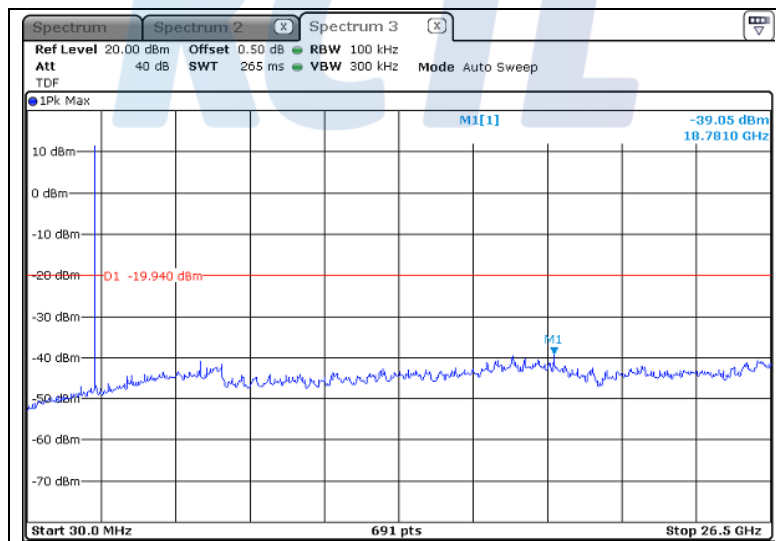


Band-edge



- Result of 2 483.5 MHz

Conducted Spurious Emissions



KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

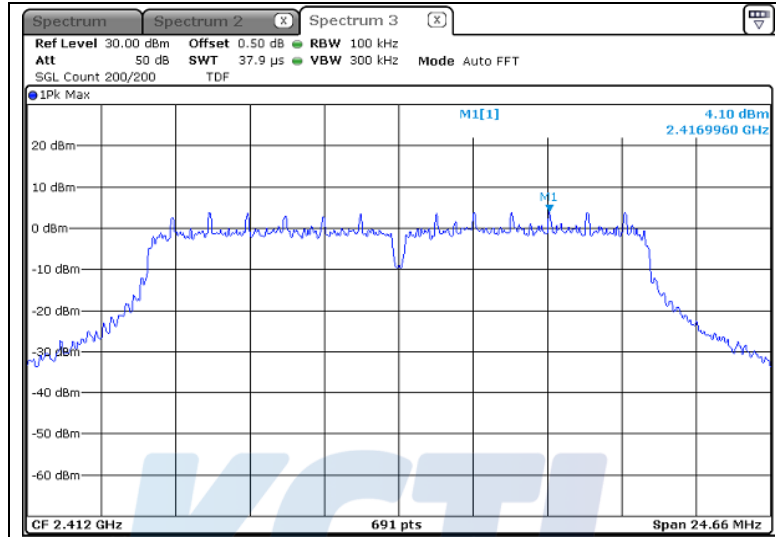
Report No.:
KR17-SRF0055-B
Page (213) of (227)



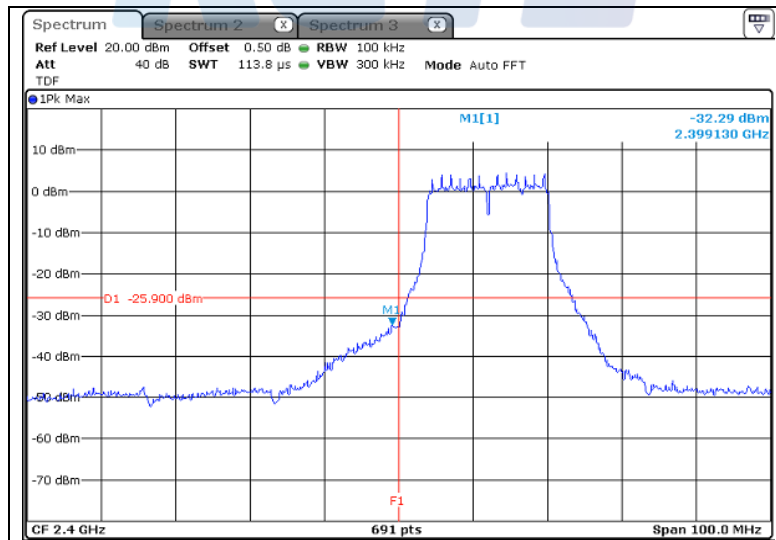
- 802.11g

Lowest Channel (2 412 MHz)

Reference



Band-edge



- Result of 2 400.0 MHz

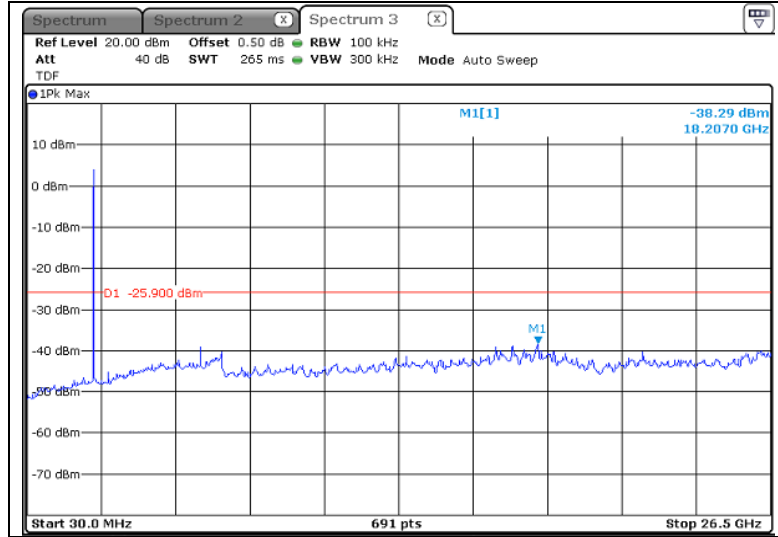
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (214) of (227)

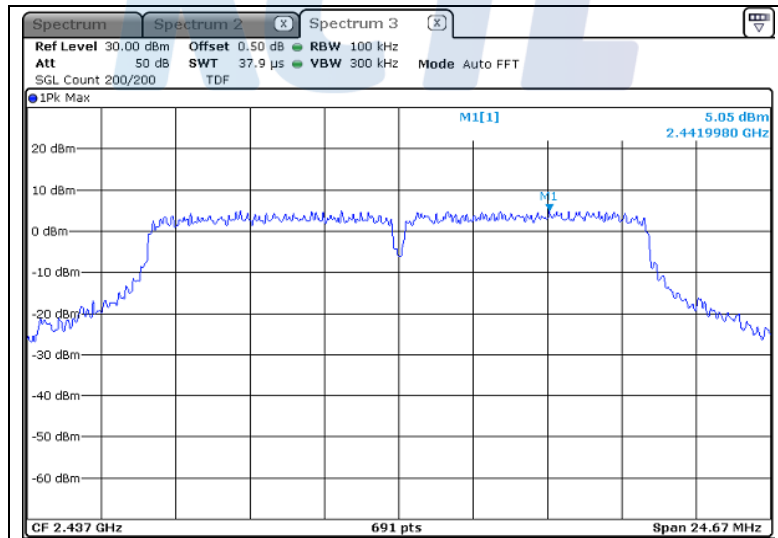


Conducted Spurious Emissions



Middle Channel (2 437 MHz)

Reference



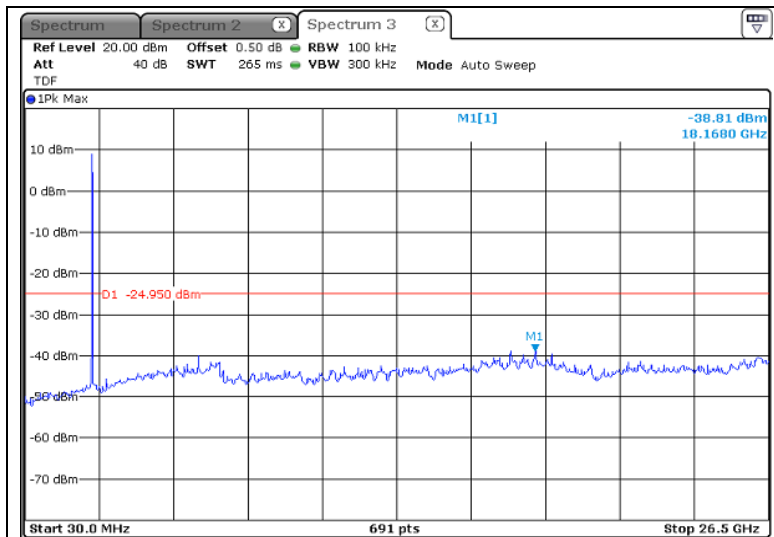
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (215) of (227)

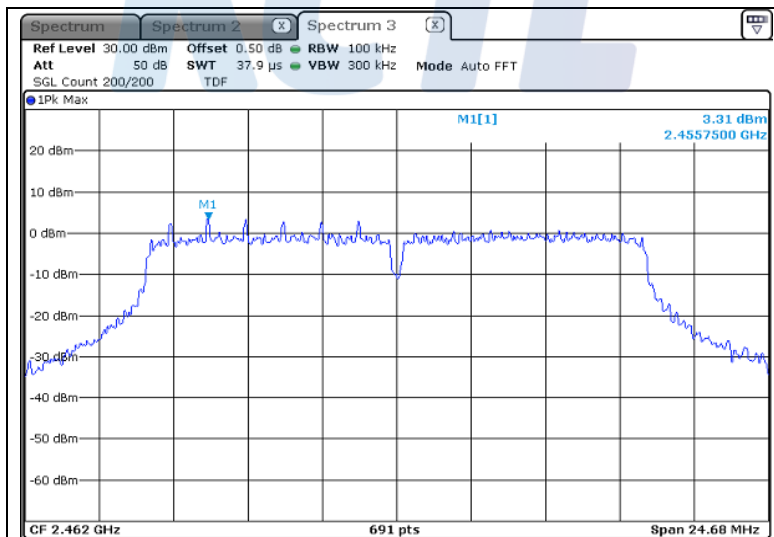


Conducted Spurious Emissions



Highest Channel (2 462 MHz)

Reference



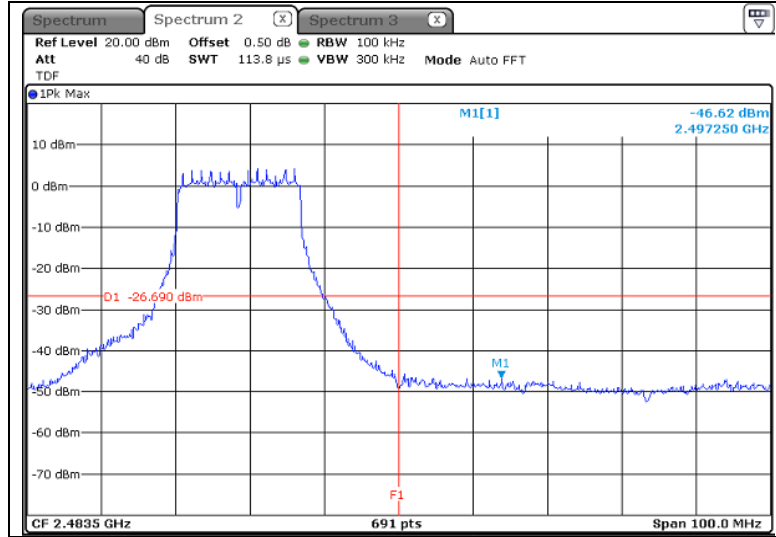
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (216) of (227)

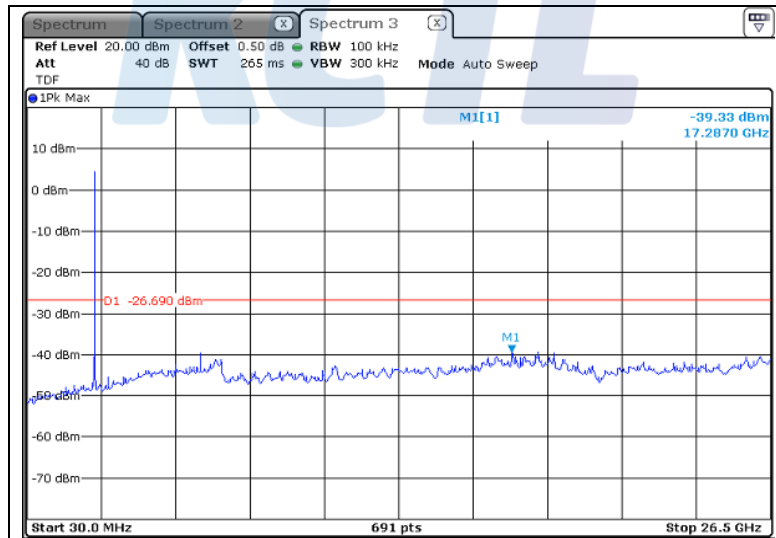


Band-edge



- Result of 2 483.5 MHz

Conducted Spurious Emissions



KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

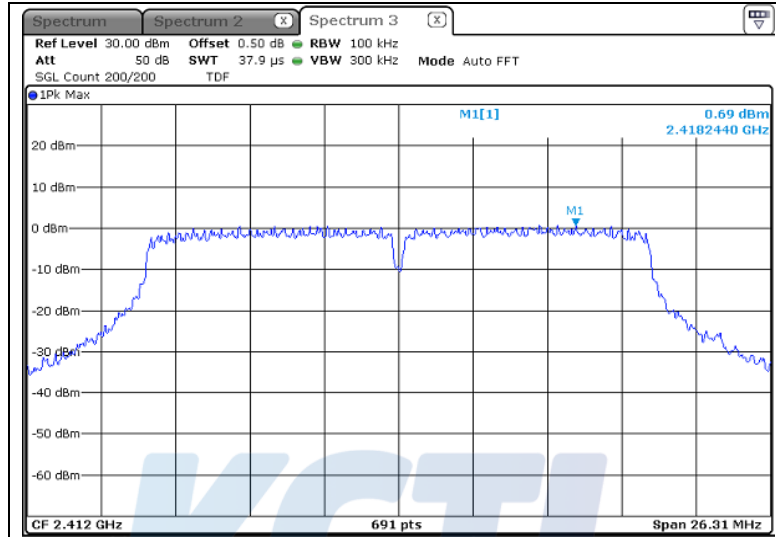
Report No.:
KR17-SRF0055-B
Page (217) of (227)



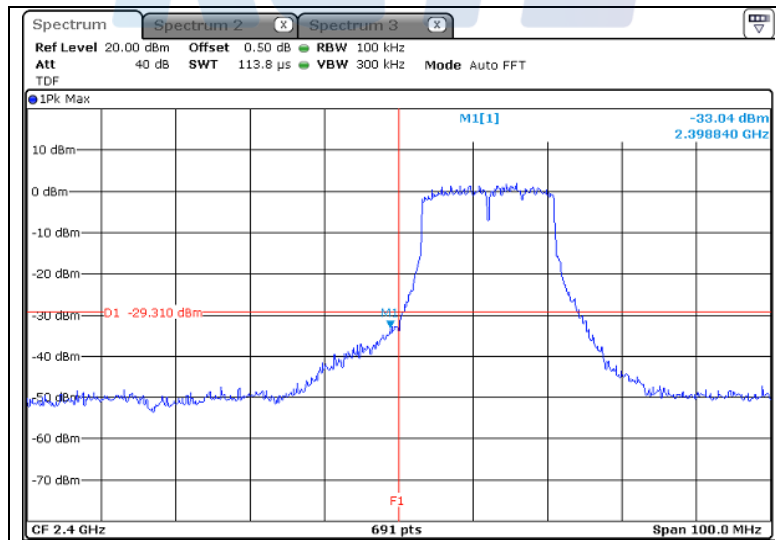
- 802.11n HT20

Lowest Channel (2 412 MHz)

Reference



Band-edge



- Result of 2 400.0 MHz

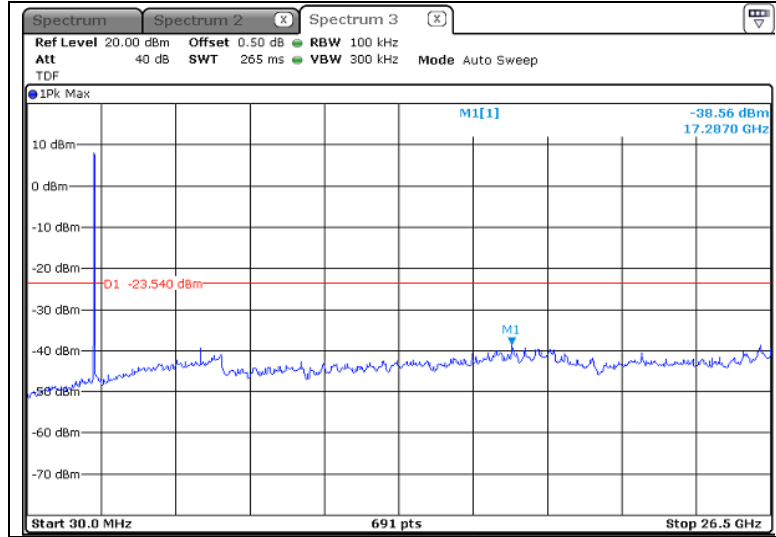
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (218) of (227)

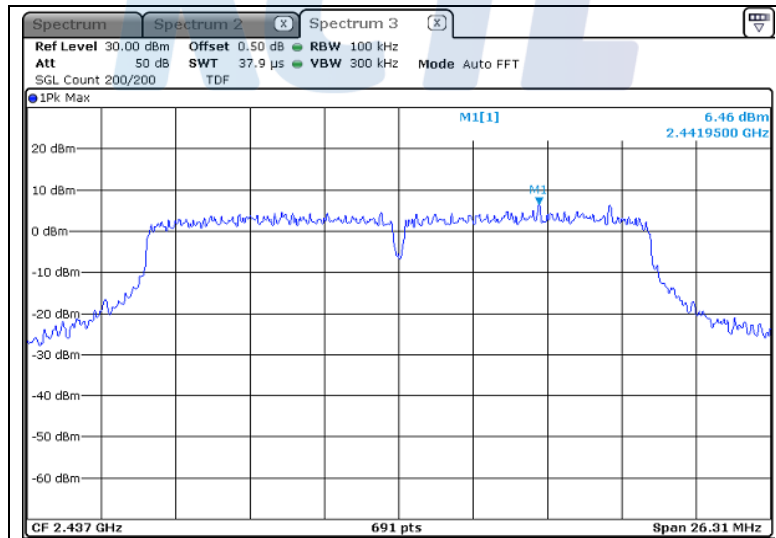


Conducted Spurious Emissions



Middle Channel (2 437 MHz)

Reference



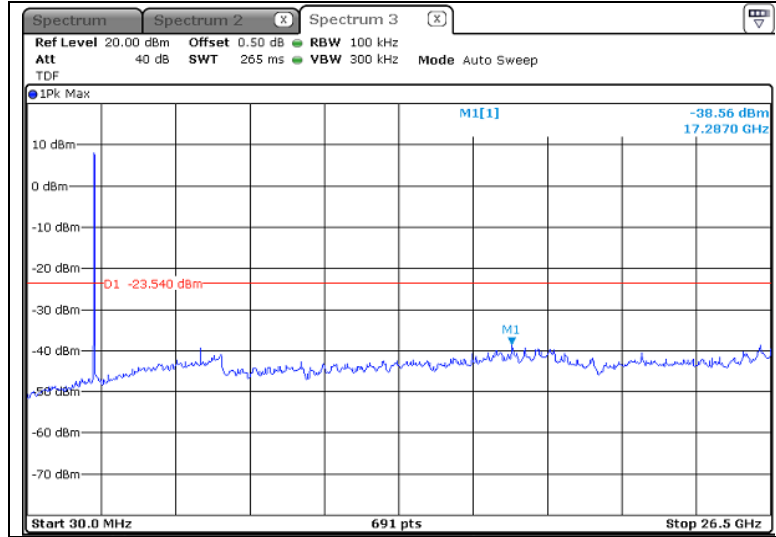
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (219) of (227)

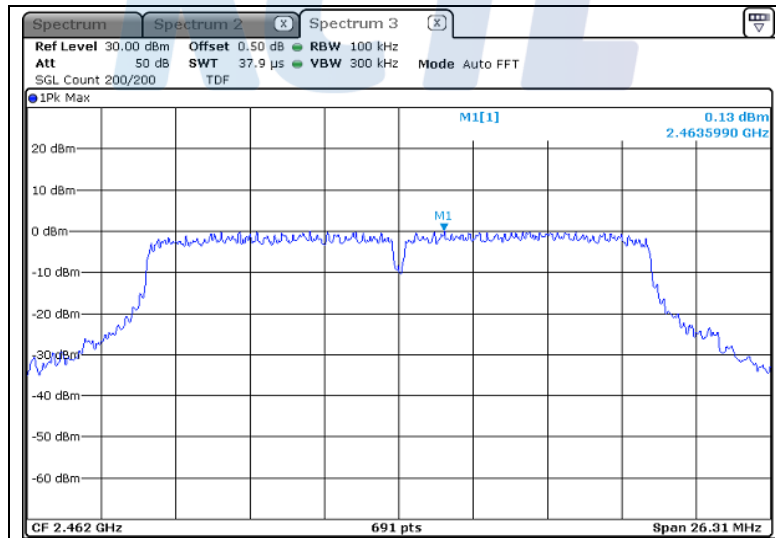


Conducted Spurious Emissions



Highest Channel (2 462 MHz)

Reference



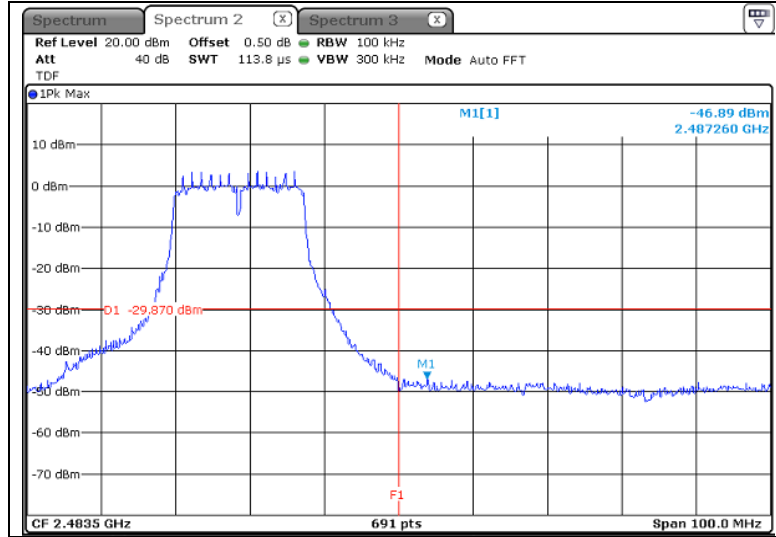
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (220) of (227)

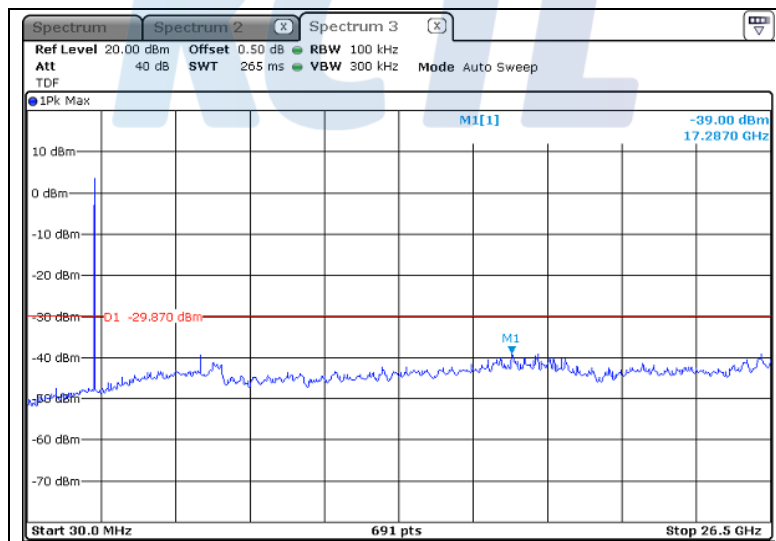


Band-edge



- Result of 2 483.5 MHz

Conducted Spurious Emissions



KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

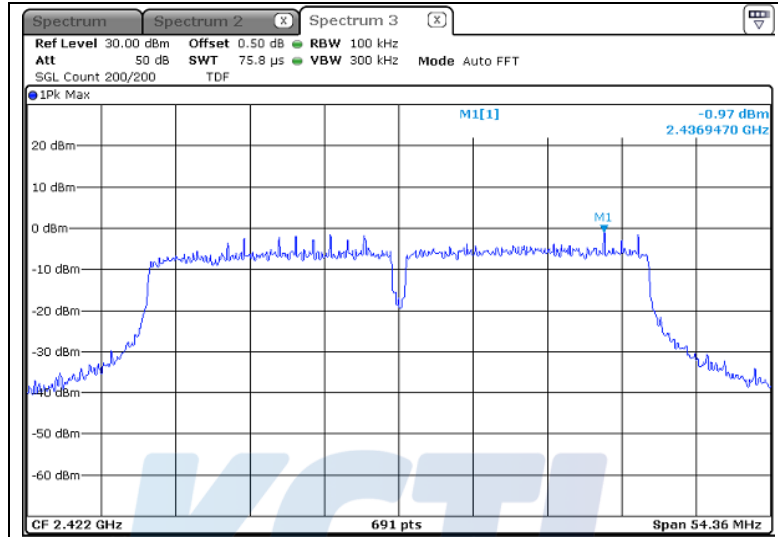
Report No.:
KR17-SRF0055-B
Page (221) of (227)



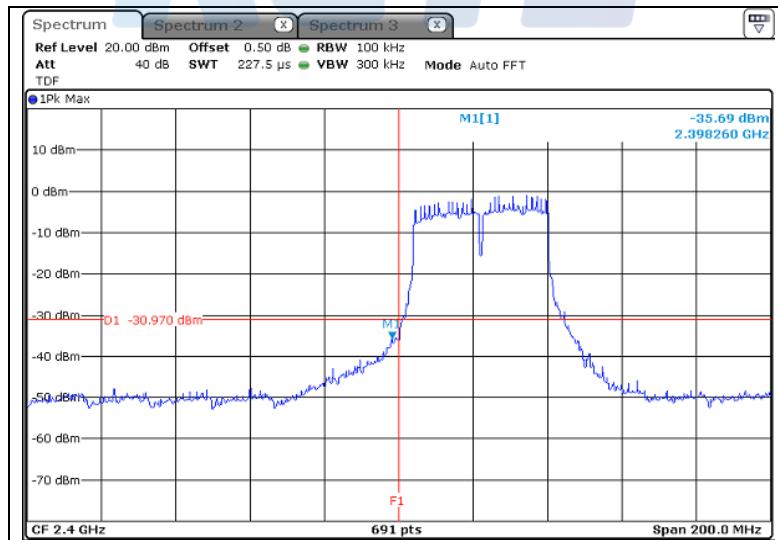
- 802.11n HT40

Lowest Channel (2 422 MHz)

Reference



Band-edge



- Result of 2 400.0 MHz

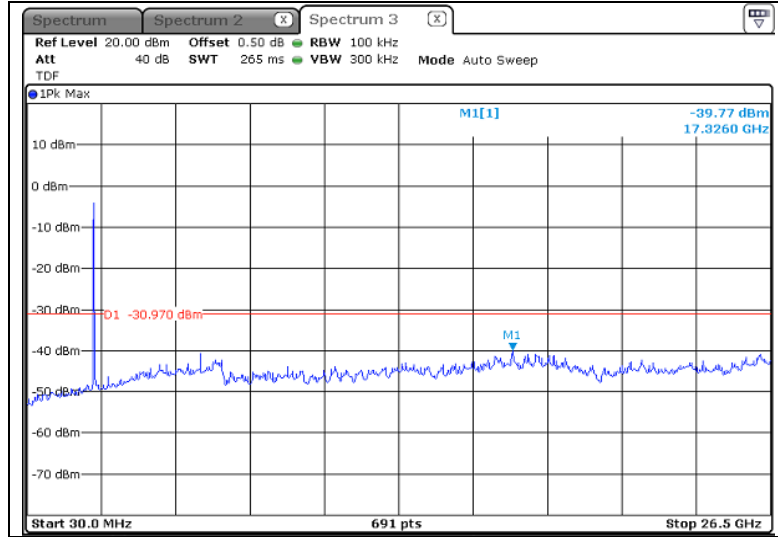
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (222) of (227)

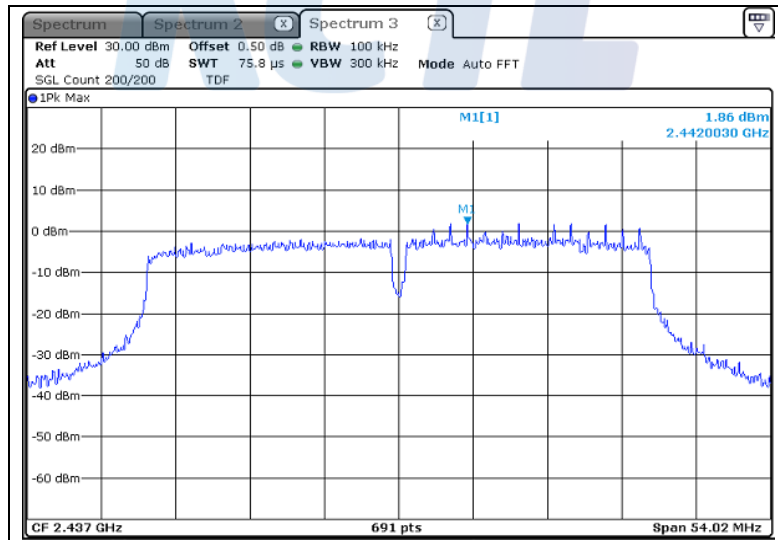


Conducted Spurious Emissions



Middle Channel (2 437 MHz)

Reference



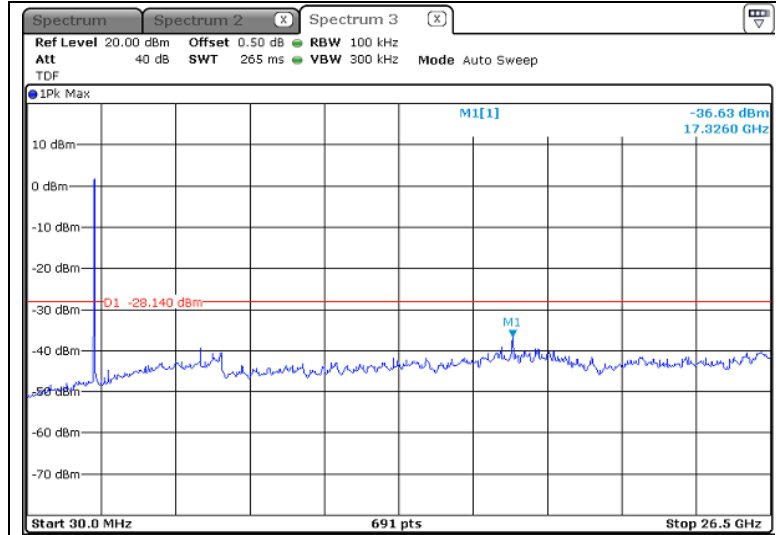
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (223) of (227)

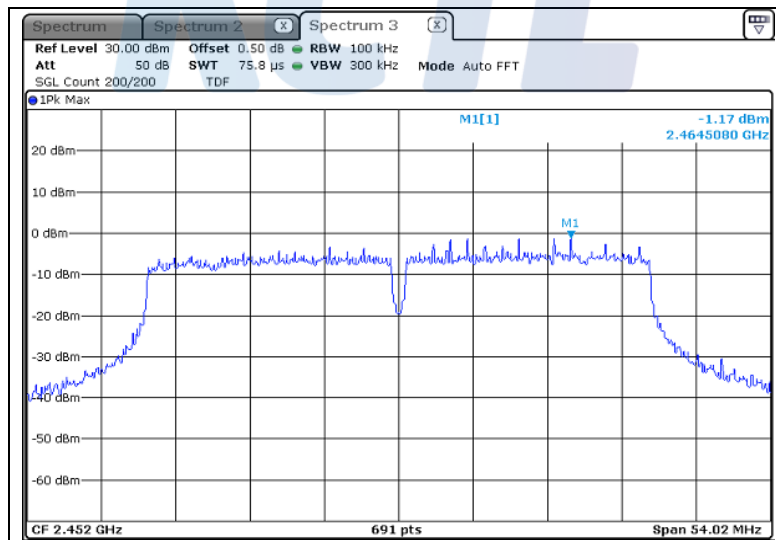


Conducted Spurious Emissions



Highest Channel (2 452 MHz)

Reference



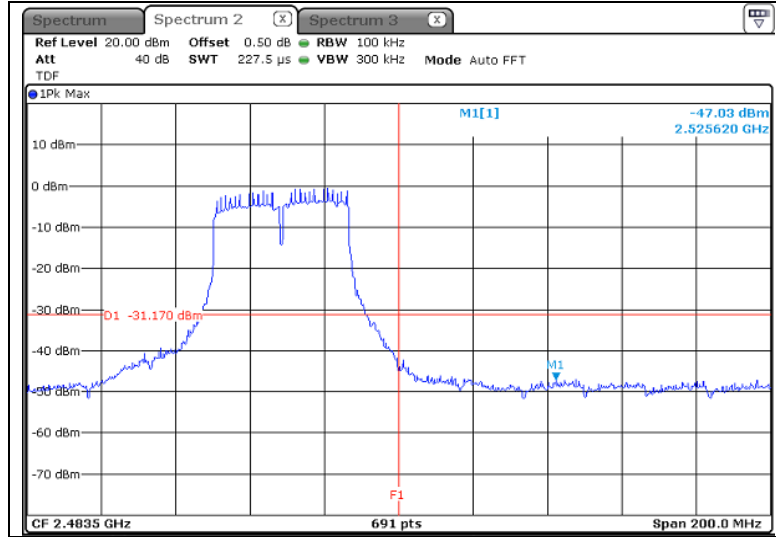
KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B
Page (224) of (227)

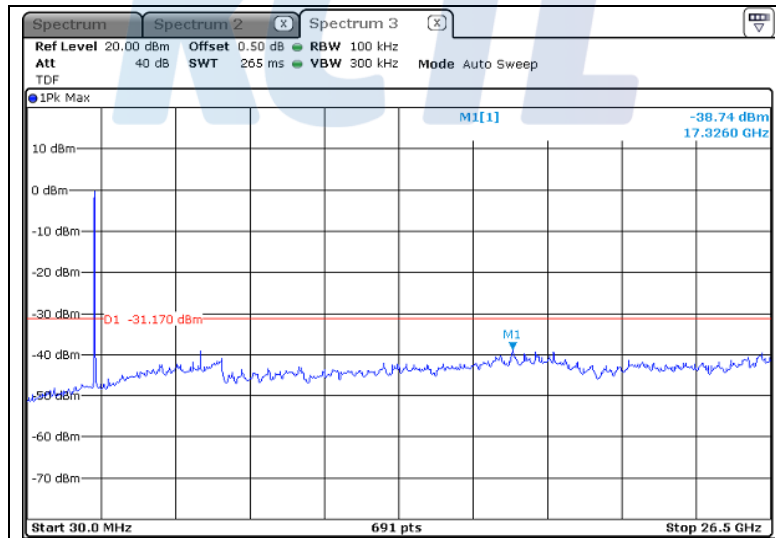


Band-edge



- Result of 2 483.5 MHz

Conducted Spurious Emissions



5.6 Conducted Emission

5.6.1 Regulation

According to §15.207(a), for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56 *	56 to 46 *
0.5 – 5	56	46
5 – 30	60	50

* Decreases with the logarithm of the frequency.

According to §15.107(a), for unintentional device, except for Class A digital devices, line conducted emission limits are the same as the above table.

5.6.2 Measurement Procedure

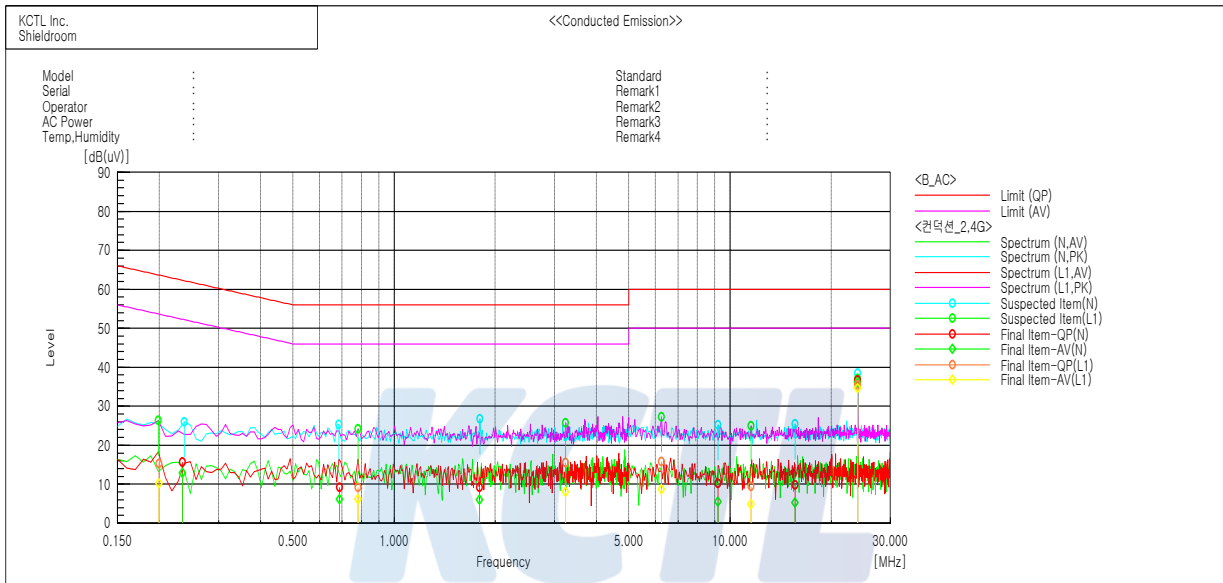
- 1) The EUT was placed on a wooden table of size, 1 m by 1.5 m, raised 80 cm in which is located 40 cm away from the vertical wall and 1.5m away from the side wall of the shielded room.
- 2) Each current-carrying conductor of the EUT power cord was individually connected through a 50 Ω /50 μ H LISN, which is an input transducer to a Spectrum Analyzer or an EMI/Field Intensity Meter, to the input power source.
- 3) Exploratory measurements were made to identify the frequency of the emission that had the highest amplitude relative to the limit by operating the EUT in a range of typical modes of operation, cable position, and with a typical system equipment configuration and arrangement. Based on the exploratory tests of the EUT, the one EUT cable configuration and arrangement and mode of operation that had produced the emission with the highest amplitude relative to the limit was selected for the final measurement.
- 4) The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment is the system) was then performed over the frequency range of 0.15 MHz to 30 MHz.
- 5) The measurements were made with the detector set to PEAK amplitude within a bandwidth of 10 kHz or to QUASI-PEAK and AVERAGE within a bandwidth of 9 kHz. The EUT was in transmitting mode during the measurements.

5.6.3 Test Result

- Complied

Figure 6. plot of Conducted Emission

- Conducted worst-case data: 802.11b_ANT 2_Middle channel (2 437 MHz)



Final Result

--- N Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.23422	6.1	3.3	9.6	15.7	12.9	62.3	52.3	46.6	39.4
2	0.68742	-0.6	-3.7	9.8	9.2	6.1	56.0	46.0	46.8	39.9
3	1.79622	-0.5	-3.7	9.7	9.2	6.0	56.0	46.0	46.8	40.0
4	9.19764	0.3	-4.5	9.9	10.2	5.4	60.0	50.0	49.8	44.6
5	15.60414	-0.2	-4.8	10.0	9.8	5.2	60.0	50.0	50.2	44.8
6	23.99824	26.6	26.0	10.1	36.7	36.1	60.0	50.0	23.3	13.9

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.19948	5.3	0.2	10.0	15.3	10.2	63.6	53.6	48.3	43.4
2	0.78082	-0.7	-3.7	9.9	9.2	6.2	56.0	46.0	46.8	39.8
3	3.23614	5.8	-1.8	9.8	15.6	8.0	56.0	46.0	40.4	38.0
4	6.24594	5.9	-1.2	9.9	15.8	8.7	60.0	50.0	44.2	41.3
5	11.54852	-0.5	-5.1	10.0	9.5	4.9	60.0	50.0	50.5	45.1
6	24.00136	25.2	24.6	10.1	35.3	34.7	60.0	50.0	24.7	15.3

KCTL Inc.

65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0055-B

Page (227) of (227)



6. Test equipment used for test

	Equipment Name	Manufacturer	Model No.	Serial No.	Next Cal. Date
■	Spectrum Analyzer	R & S	FSV30	100806	17.08.31
■	Spectrum Analyzer	R & S	FSV40	100988	18.01.06
■	DC Power Supply	Agilent	E3632A	MY40004791	17.07.07
■	Signal Generator	R & S	SMR40	100007	18.05.15
■	EMI TEST RECEIVER	R & S	ESCI	101408	17.08.25
■	EMI TEST RECEIVER	R & S	ESCI	100732	17.08.25
■	Bi-Log Antenna	SCHWARZBECK	VULB 9163	552	18.06.27
■	AMPLIFIER	SONOMA INSTRUMENT	310N	186280	18.04.06
■	AMPLIFIER	SONOMA INSTRUMENT	310N	344922	17.08.26
■	Attenuator	HP	8491A	16861	18.04.06
■	Horn antenna	ETS.lindgren	3116	86635	18.04.25
■	Horn antenna	ETS.lindgren	3117	155787	17.11.28
■	Broadband PreAmplifier	SCHWARZBECK	BBV9718	216	17.08.29
■	AMPLIFIER	L-3 Narda-MITEQ	AMF-7D-01001800-22-10P	2031196	18.03.27
■	AMPLIFIER	L-3 Narda-MITEQ	JS44-18004000-33-8P	2000996	17.08.26
■	LOOP Antenna	R & S	HFH2-Z2	100355	18.03.03
■	Highpass Filter	WT	WT-A1698-HS	WT160411001	17.07.08
■	Vector Signal Generator	R & S	SMBV100A	257566	18.01.06
■	TWO-LINE V - NETWORK	R & S	ENV216	101352	17.08.26
■	Antenna Mast	MATURO	AM4.0	079/3440509	-
■	Turn Table	MATURO	CO2000-SOFT	-	-