

KCTL Inc.

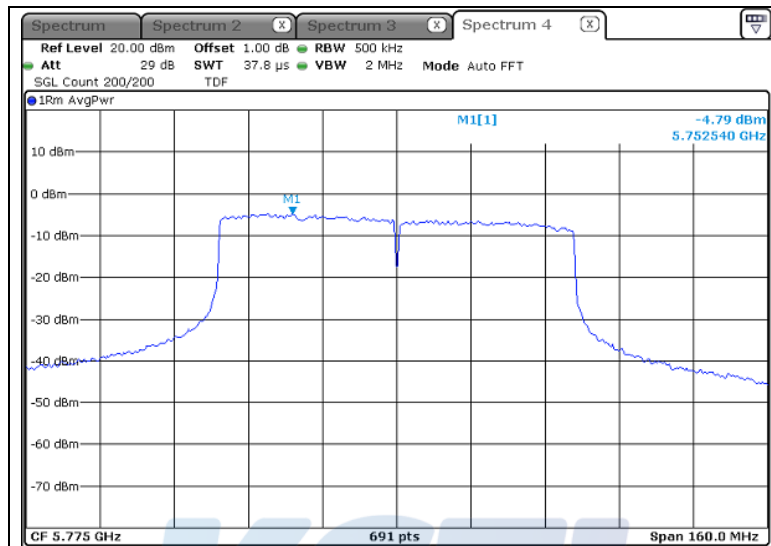
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0056-B
Page (373) of (450)

KCTL

- 802.11ac VHT80

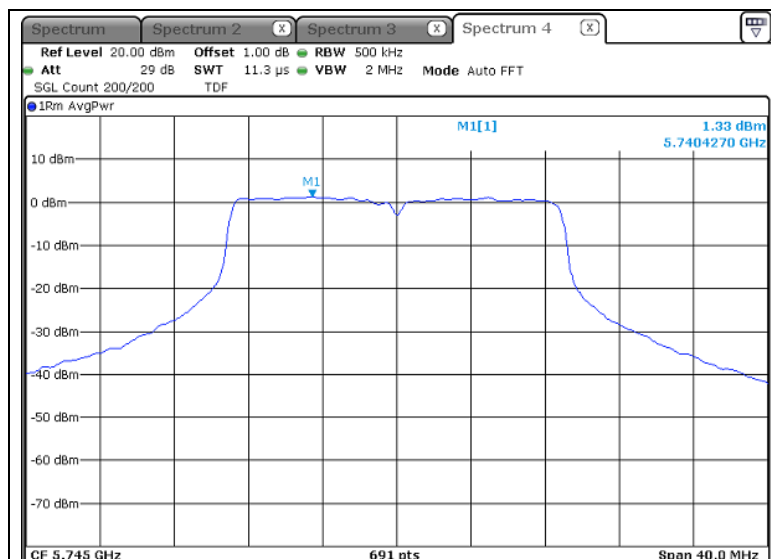
5 775 MHz



- MIMO 3Tx (ANT 0)

- 802.11n HT20

5 745 MHz



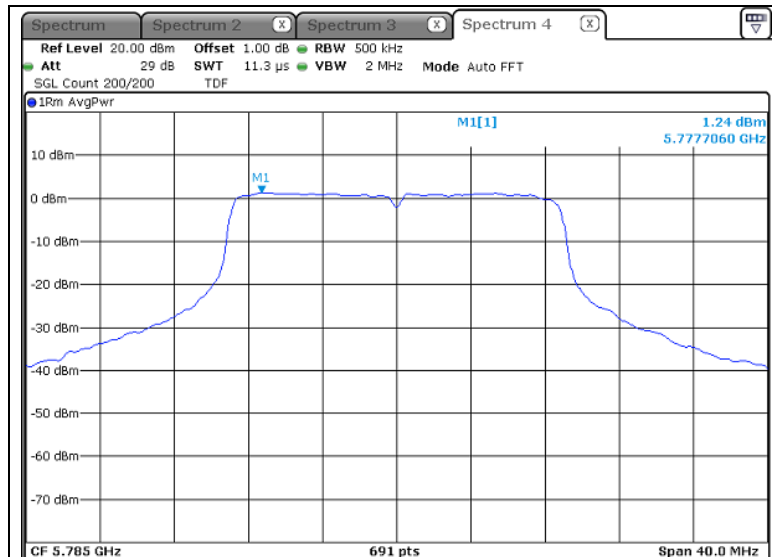
KCTL Inc.

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

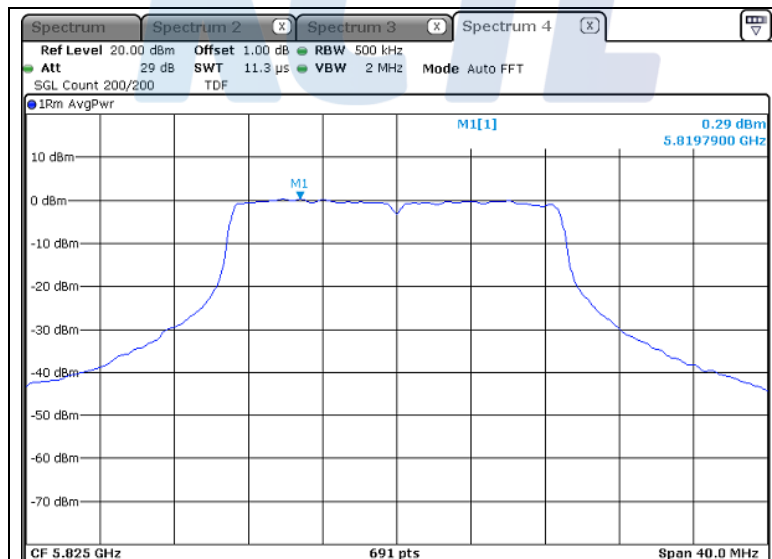
Report No.:
KR17-SRF0056-B
Page (374) of (450)

KCTL

5 785 MHz



5 825 MHz



KCTL Inc.

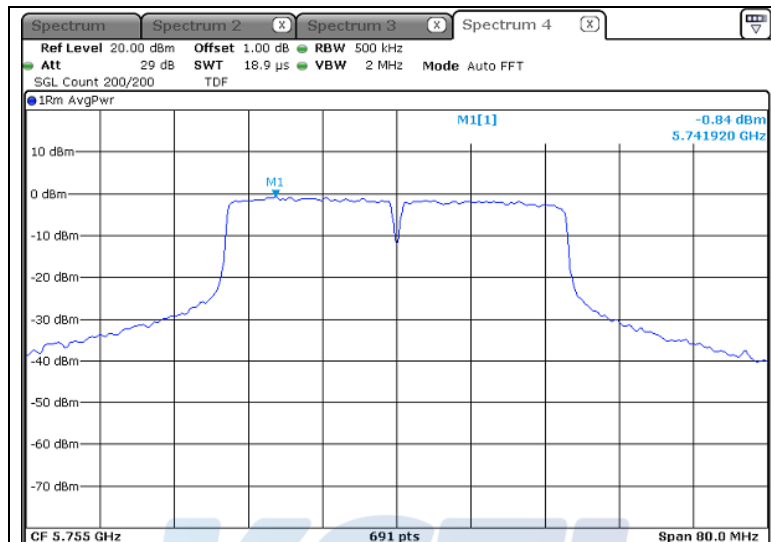
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0056-B
Page (375) of (450)

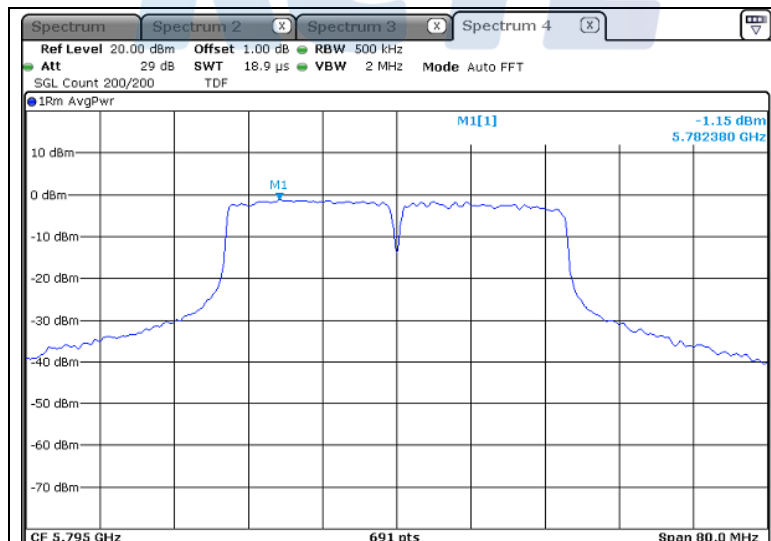
KCTL

- 802.11n HT40

5 755 MHz



5 795 MHz



KCTL Inc.

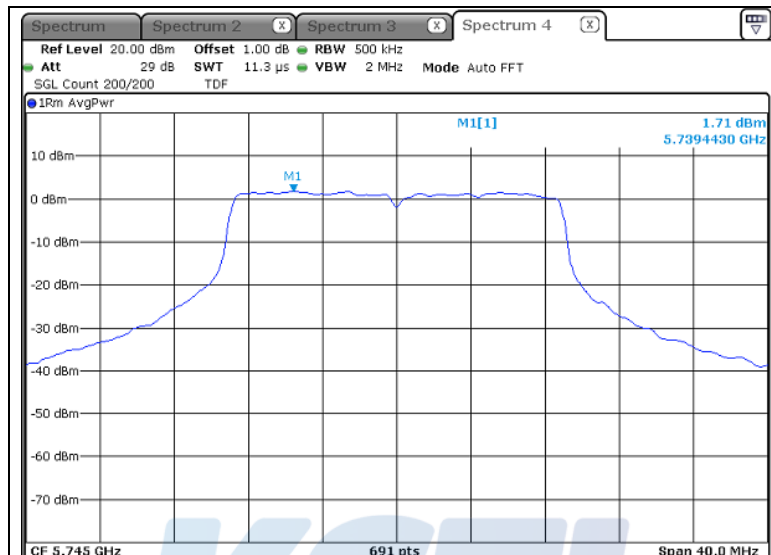
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0056-B
Page (376) of (450)

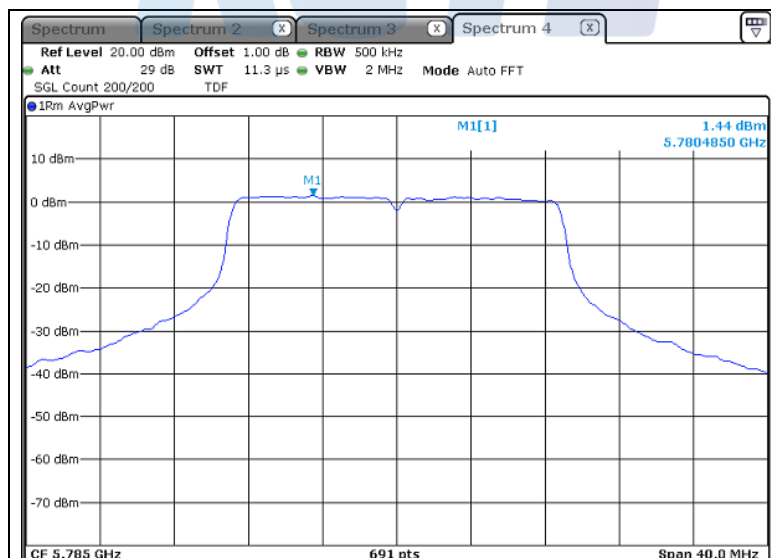
KCTL

- 802.11ac VHT20

5 745 MHz



5 785 MHz



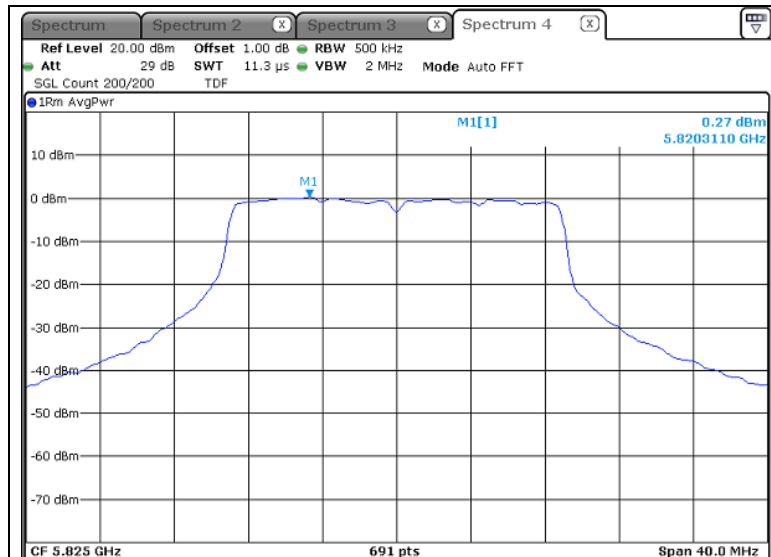
KCTL Inc.

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-SRF0056-B
Page (377) of (450)

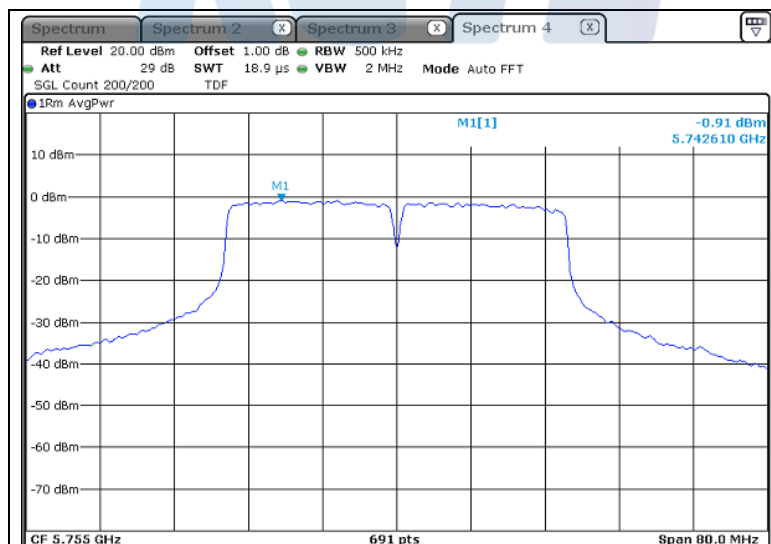
KCTL

5 825 MHz



- 802.11ac VHT40

5 755 MHz



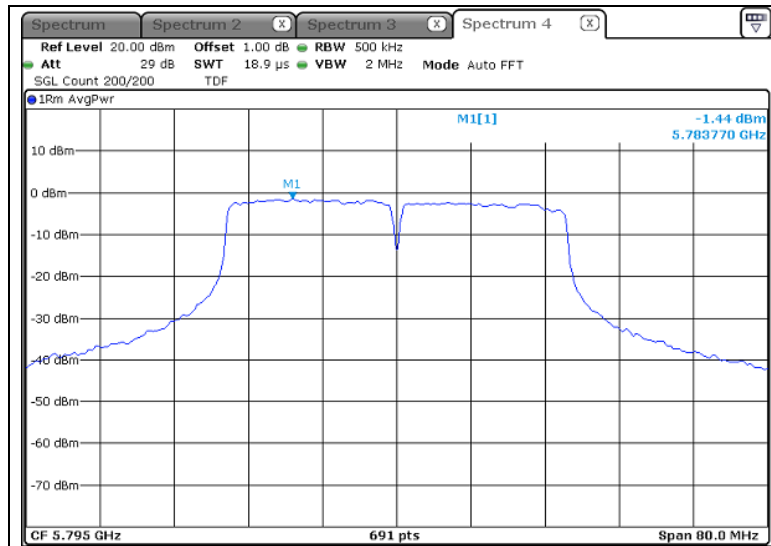
KCTL Inc.

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-SRF0056-B
Page (378) of (450)

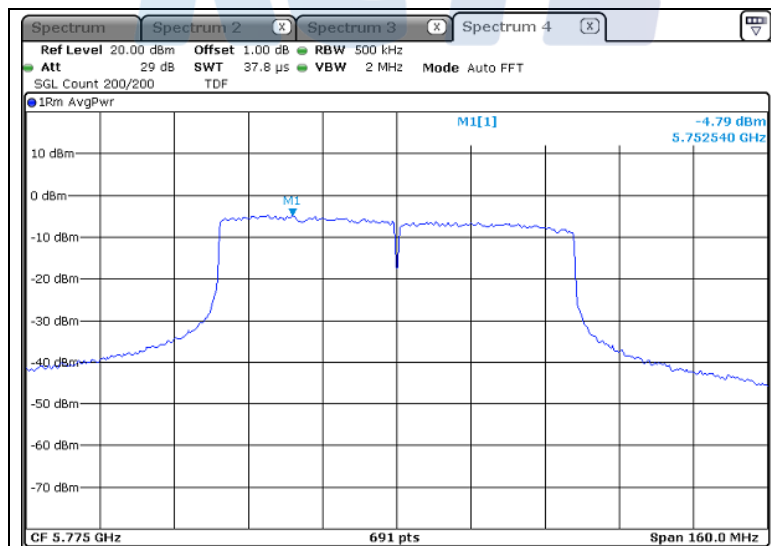
KCTL

5 795 MHz



- 802.11ac VHT80

5 775 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

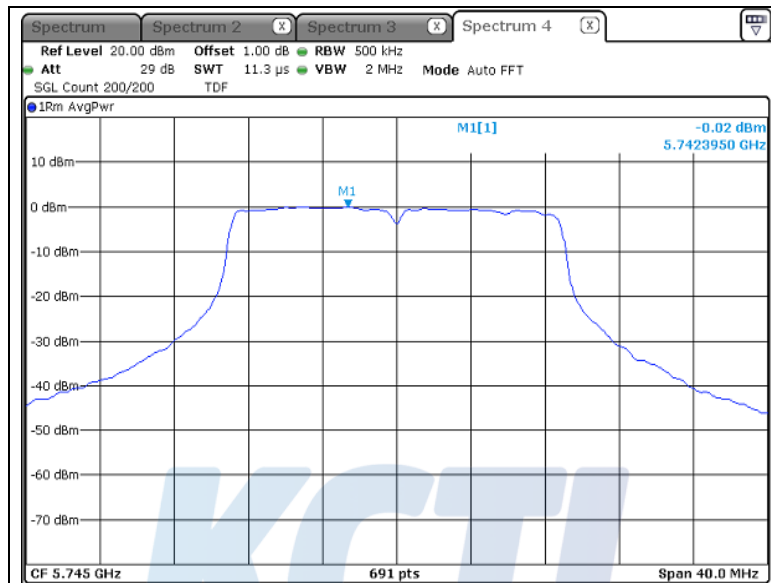
Report No.:
KR17-SRF0056-B
Page (379) of (450)

KCTL

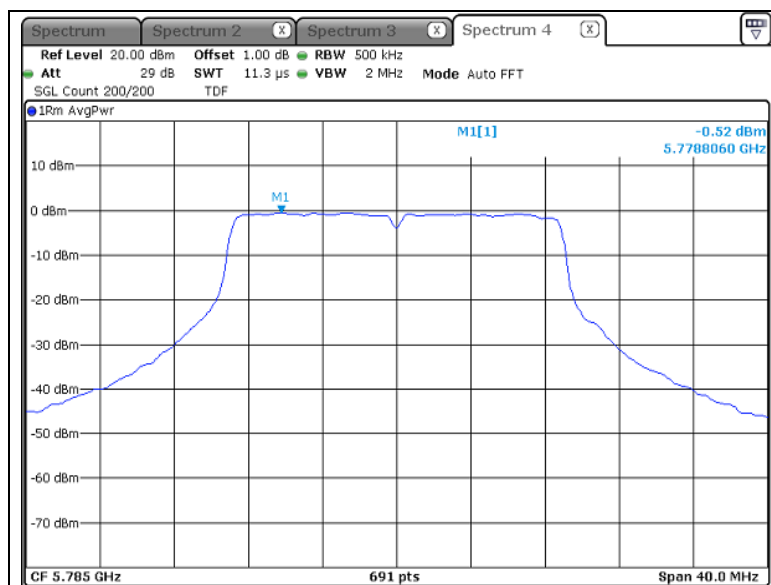
- MIMO 3Tx (ANT 1)

- 802.11n HT20

5 745 MHz



5 785 MHz



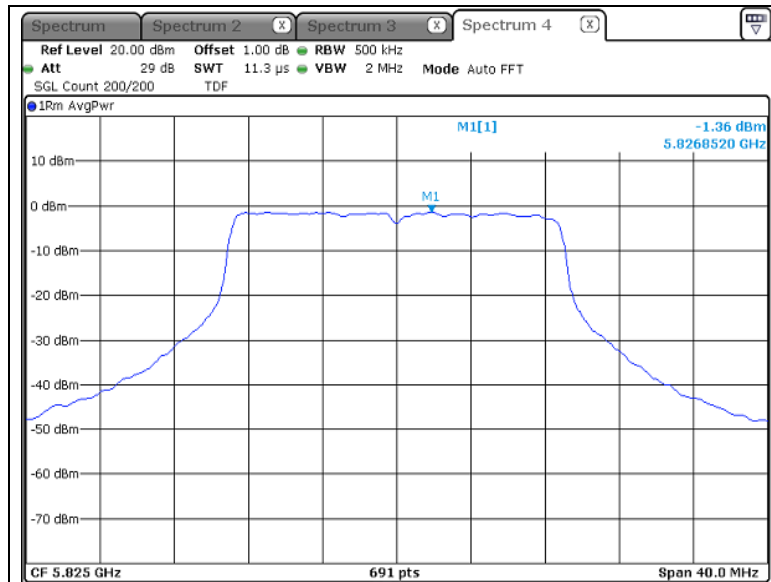
KCTL Inc.

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-SRF0056-B
Page (380) of (450)

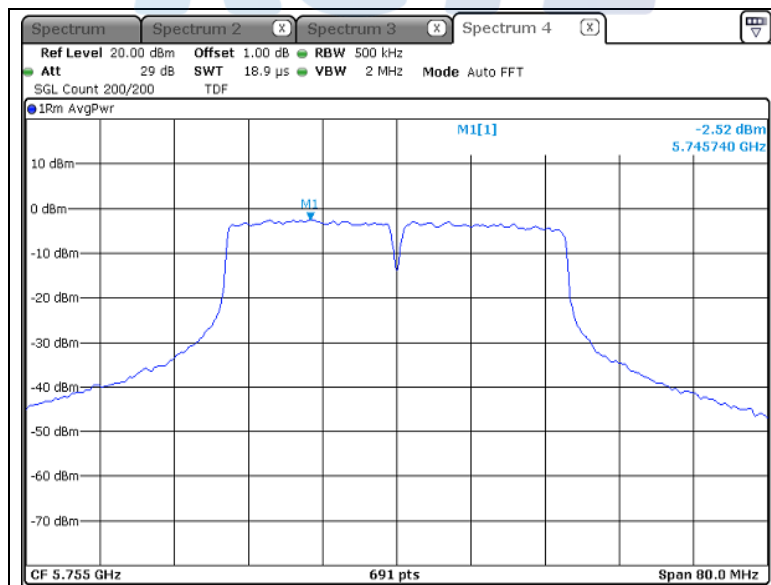
KCTL

5 825 MHz



- 802.11n HT40

5 755 MHz



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

KCTL-TIR001-003/2

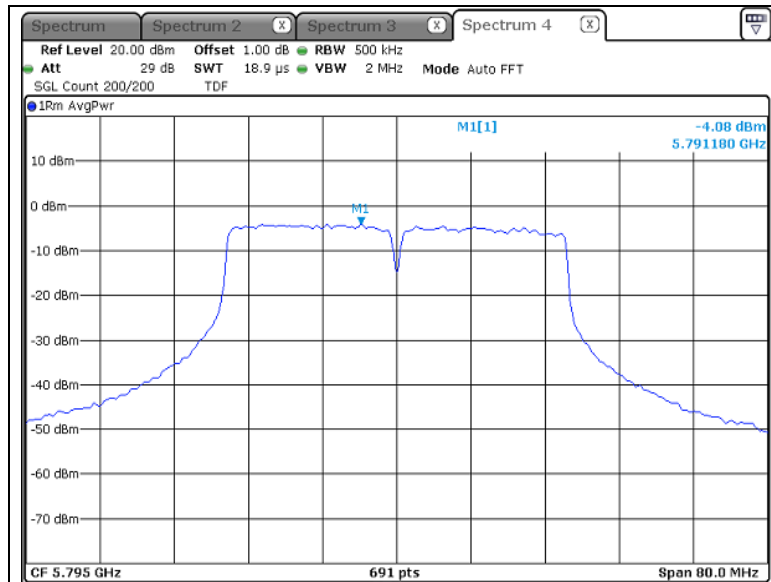
KCTL Inc.

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-SRF0056-B
Page (381) of (450)

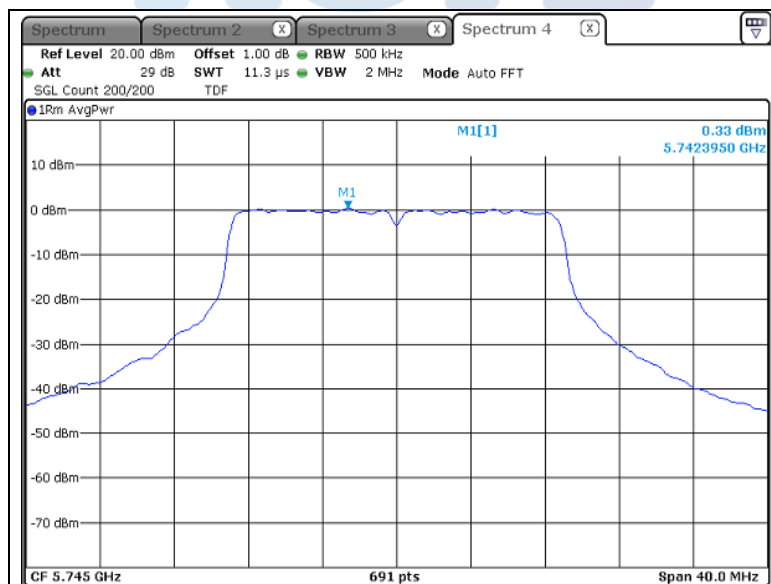
KCTL

5 795 MHz



- 802.11ac VHT20

5 745 MHz



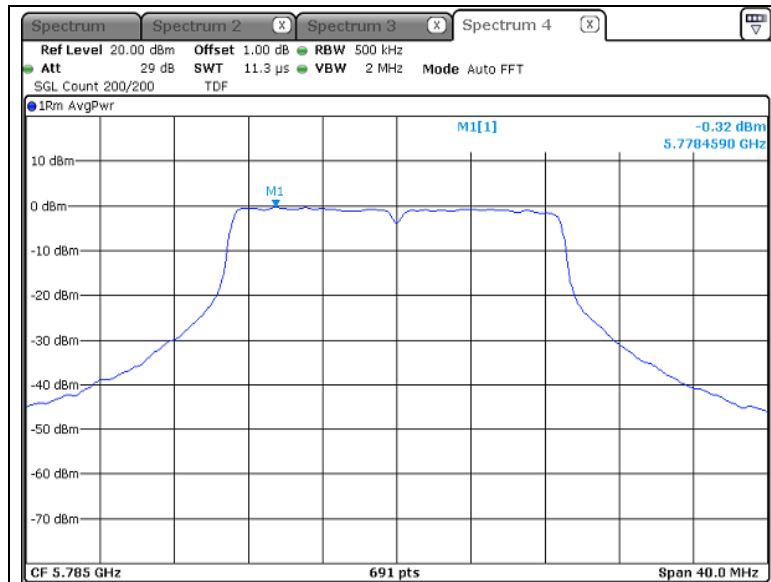
KCTL Inc.

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

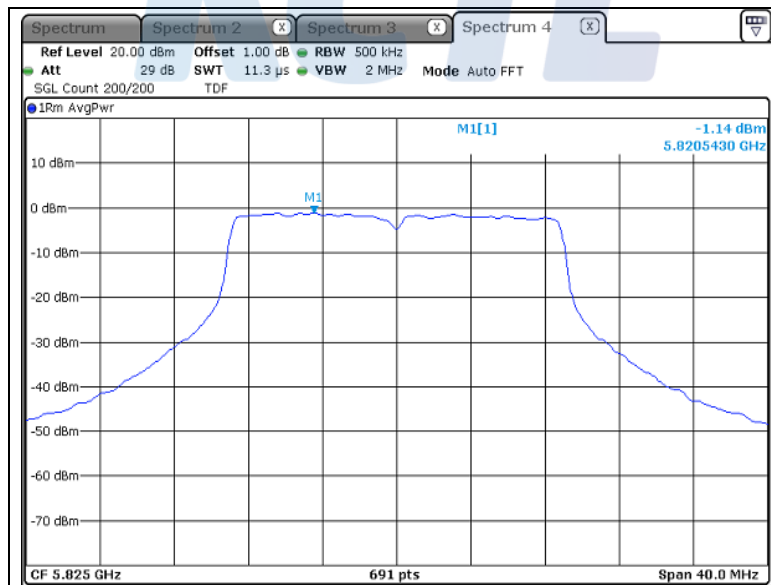
Report No.:
KR17-SRF0056-B
Page (382) of (450)

KCTL

5 785 MHz



5 825 MHz



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

KCTL-TIR001-003/2

KCTL Inc.

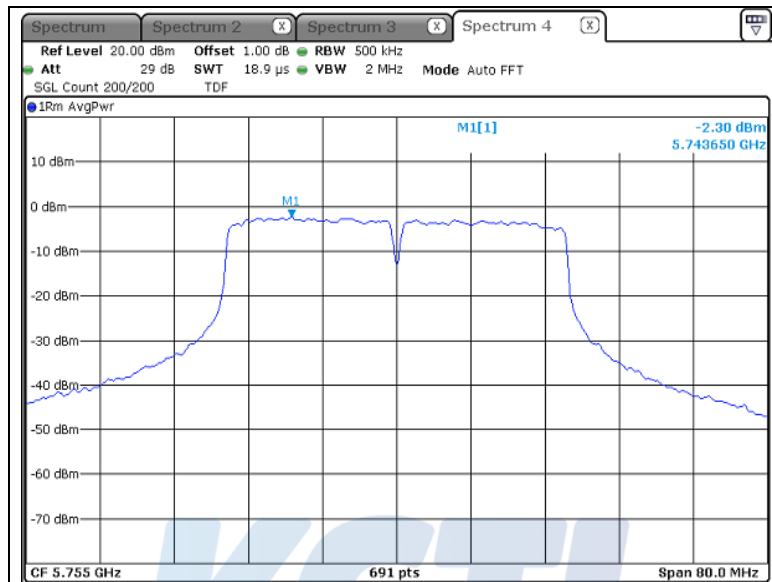
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0056-B
Page (383) of (450)

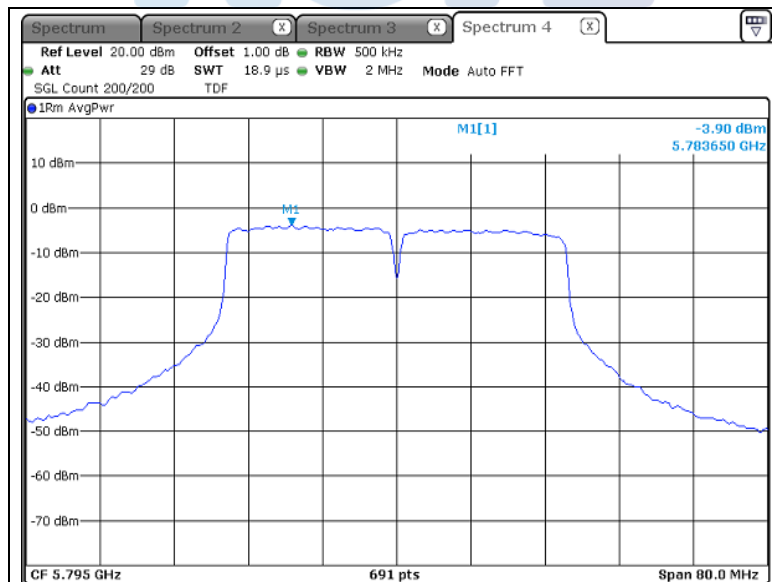
KCTL

- 802.11ac VHT40

5 755 MHz



5 795 MHz



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

KCTL-TIR001-003/2

KCTL Inc.

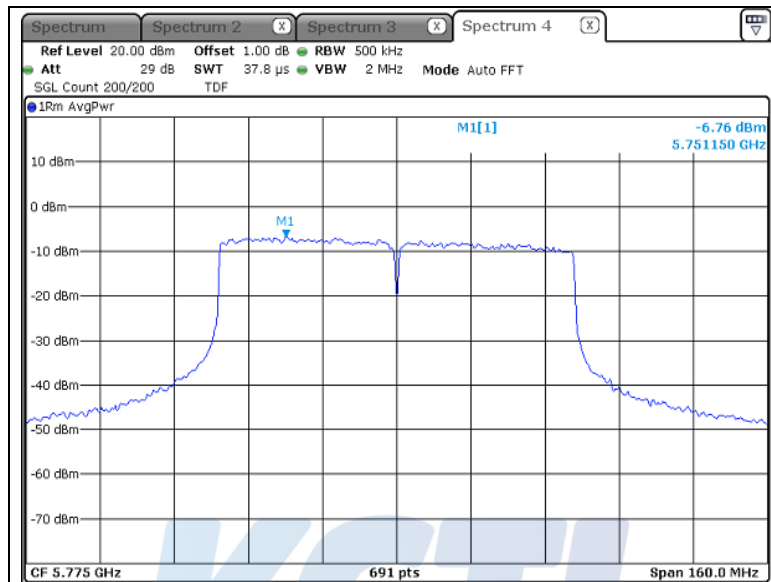
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0056-B
Page (384) of (450)

KCTL

- 802.11ac VHT80

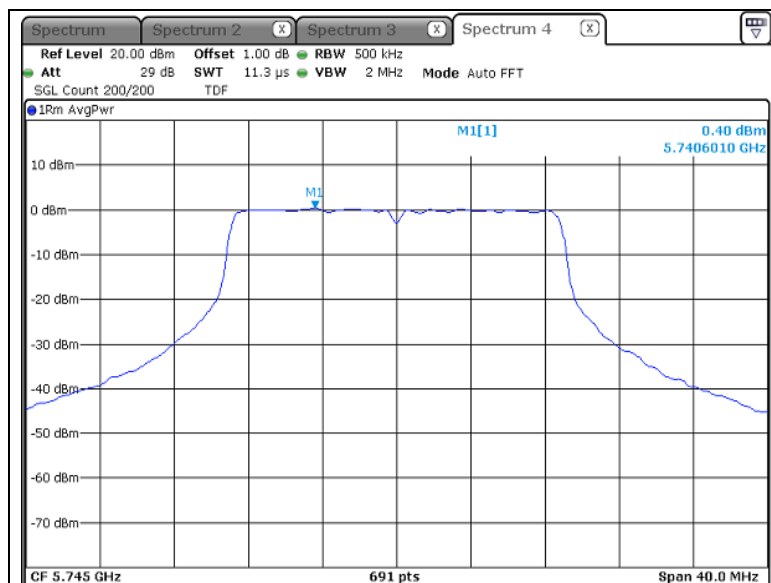
5 775 MHz



- MIMO 3Tx (ANT 2)

- 802.11n HT20

5 745 MHz



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

KCTL-TIR001-003/2

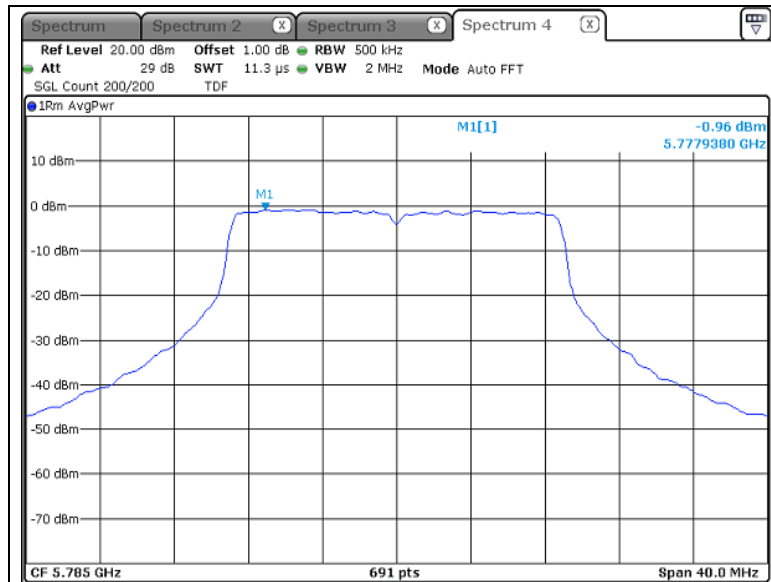
KCTL Inc.

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

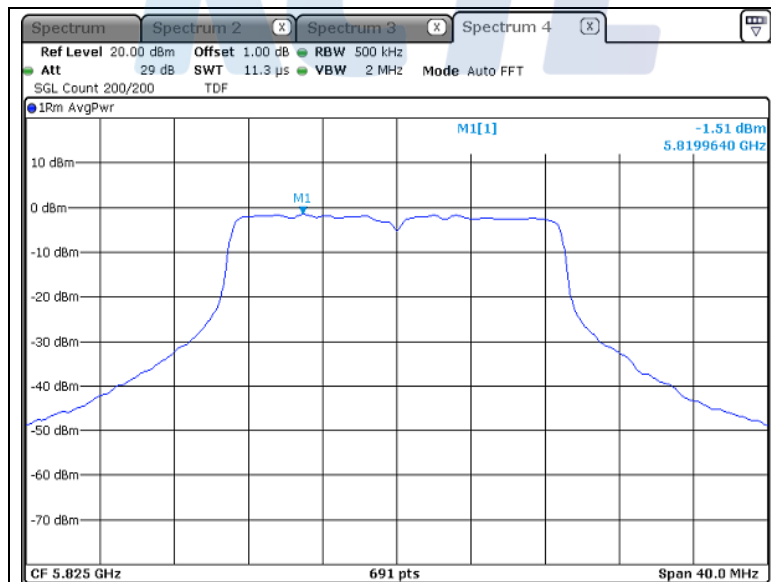
Report No.:
KR17-SRF0056-B
Page (385) of (450)

KCTL

5 785 MHz



5 825 MHz



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

KCTL-TIR001-003/2

KCTL Inc.

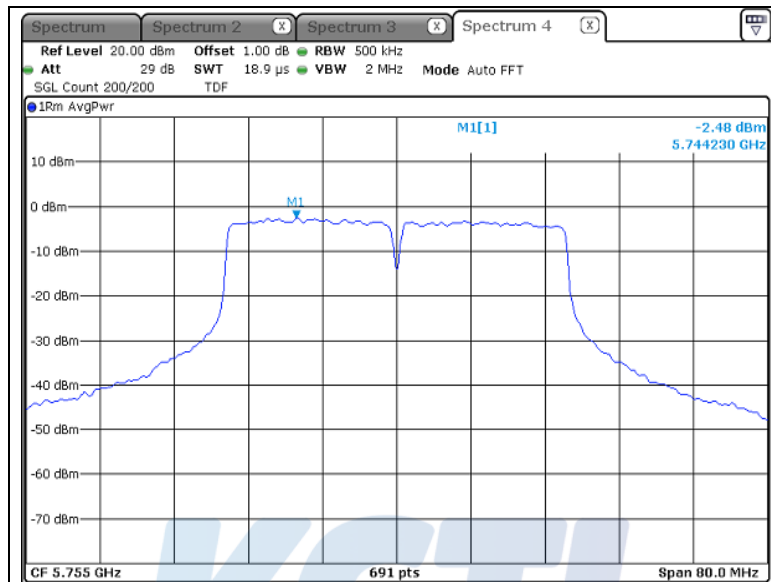
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0056-B
Page (386) of (450)

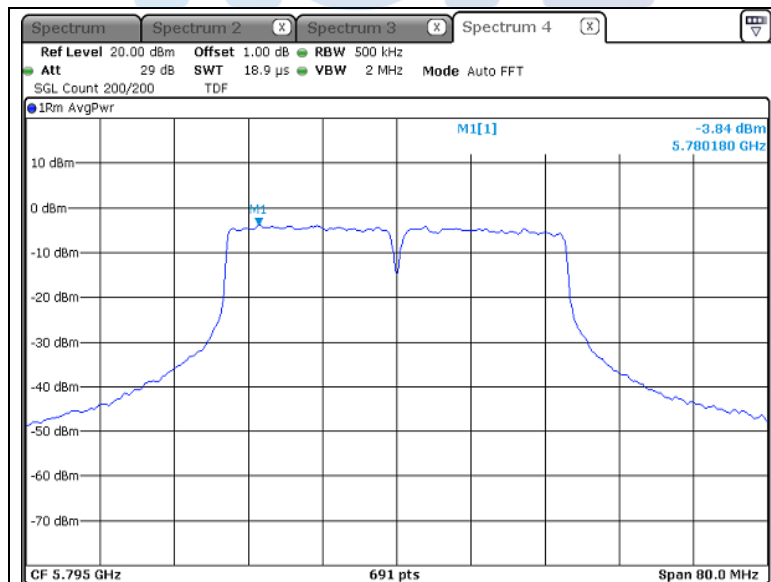
KCTL

- 802.11n HT40

5 755 MHz



5 795 MHz



KCTL Inc.

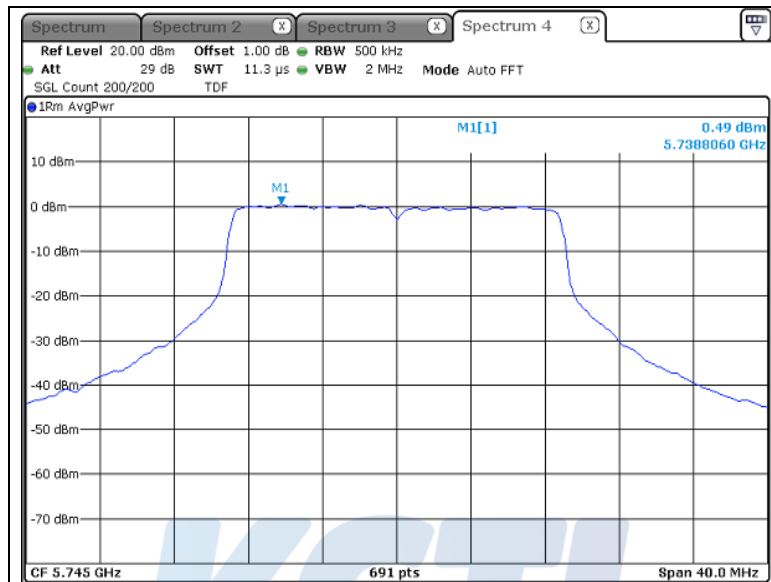
65, Sinwon-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16677, Korea
TEL: 82-31-285-0894 FAX: 82-505-299-8311
www.kctl.co.kr

Report No.:
KR17-SRF0056-B
Page (387) of (450)

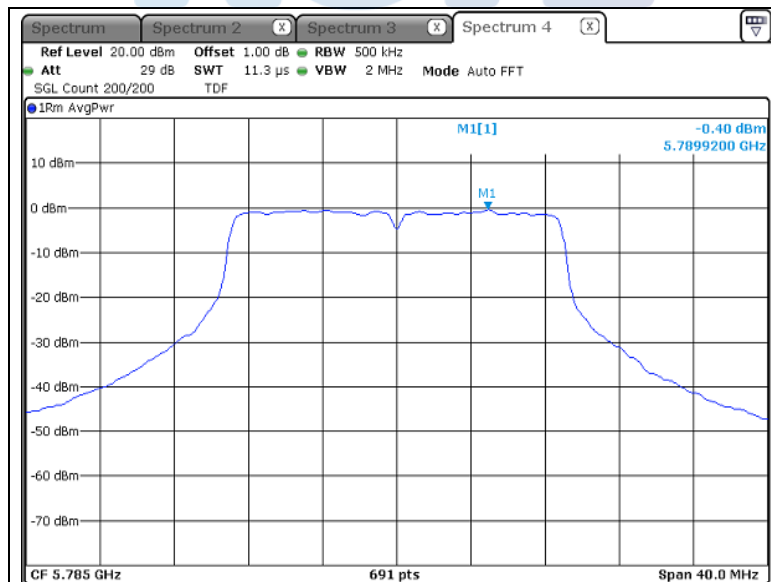
KCTL

- 802.11ac VHT20

5 745 MHz



5 785 MHz



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

KCTL-TIR001-003/2

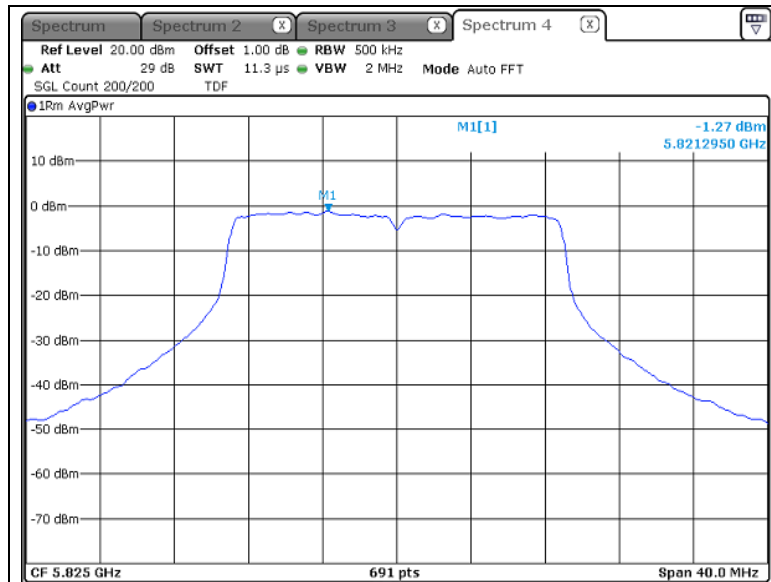
KCTL Inc.

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-SRF0056-B
Page (388) of (450)

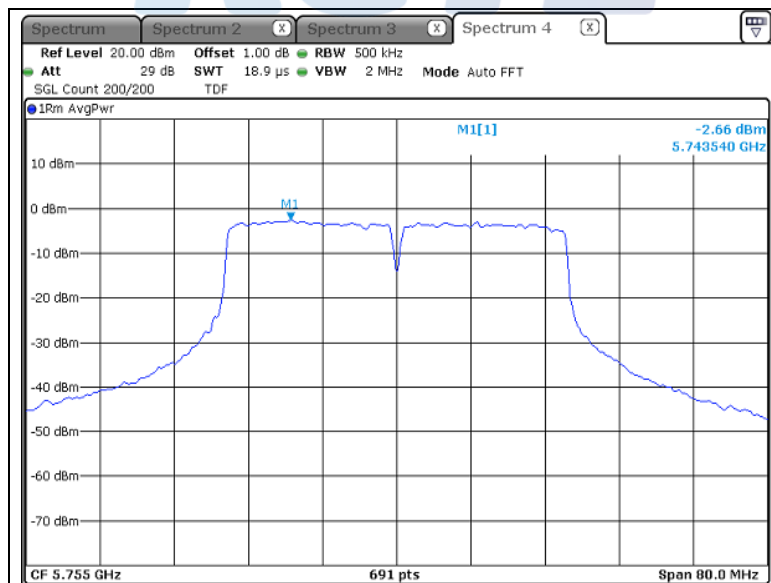
KCTL

5 825 MHz



- 802.11ac VHT40

5 755 MHz



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

KCTL-TIR001-003/2

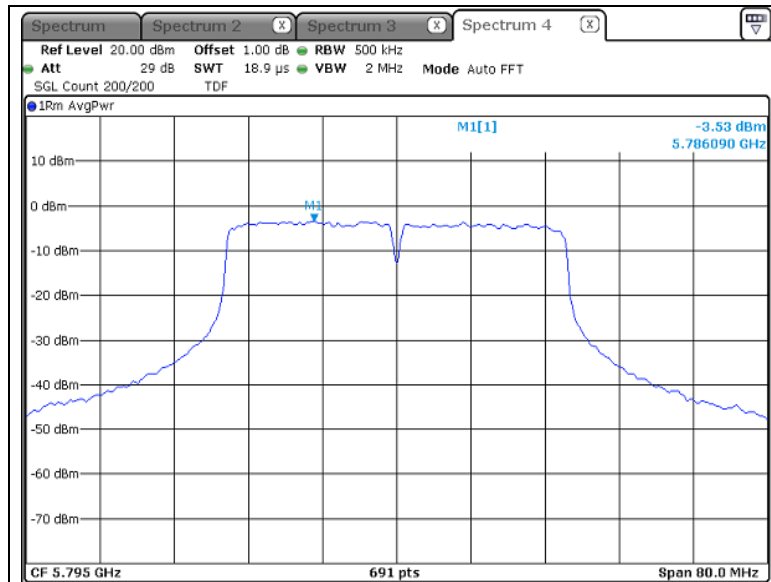
KCTL Inc.

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-SRF0056-B
Page (389) of (450)

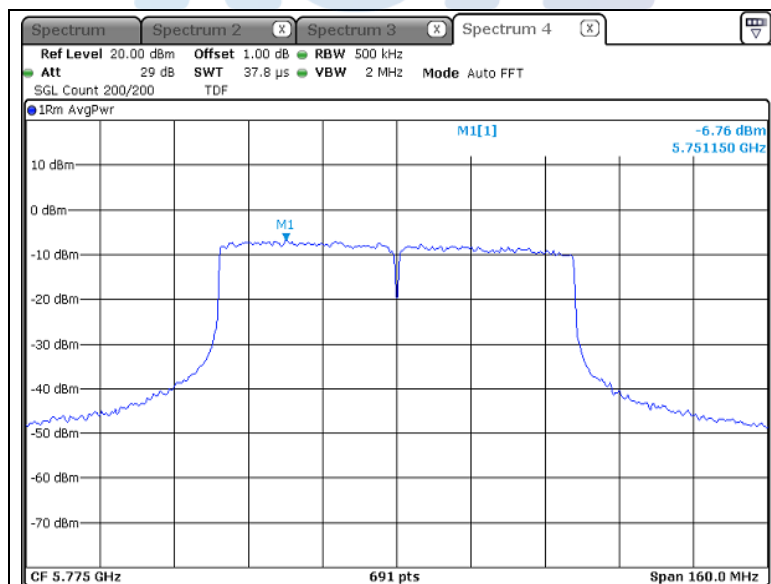
KCTL

5 795 MHz



- 802.11ac VHT80

5 775 MHz



5.5 Spurious Emission, Band Edge And Restricted Bands

5.5.1 Regulation

According to §15.407(b)(1) For transmitters operating in the 5.15–5.25 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.

According to §15.407(b) (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

According to §15.407(b) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

According to §15.407(b) (4) For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

According to §15.407(b)(6) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

According to §15.209(a), Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field strength (µV/m)	Measurement distance (m)
0.009 - 0.490	2 400/F(kHz)	300
0.490 -1.705	24 000/F(kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

** The emission limits shown in the above table are based on measurement instrumentation employing a CISPR quasi-peak detector and above 1000 MHz are based on the average value of measured emissions.

According to §15.407(b)(7) The provisions of §15.205 apply to intentional radiators operating under this section. (8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency block edges as the design of the equipment permits.

According to § 15.205(a) and (b), only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.009 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
0.495 - 0.505	16.694 75 - 16.695 25	608 - 614	5.35 - 5.46
2.173 5 - 2.190 5	16.804 25 - 16.804 75	960 - 1 240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1 300 - 1 427	8.025 - 8.5
4.177 25 - 4.177 75	37.5 - 38.25	1 435 - 1 626.5	9.0 - 9.2
4.207 25 - 4.207 75	73 - 74.6	1 645.5 - 1 646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1 660 - 1 710	10.6 - 12.7
6.267 75 - 6.268 25	108 - 121.94	1 718.8 - 1 722.2	13.25 - 13.4
6.311 75 - 6.312 25	123 - 138	2 200 - 2 300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2 310 - 2 390	15.35 - 16.2
8.362 - 8.366	156.524 75 - 156.525 25	2 483.5 - 2 500	17.7 - 21.4
8.376 25 - 8.386 75	156.7 - 156.9	2 690 - 2 900	22.01 - 23.12
8.414 25 - 8.414 75	162.012 5 - 167.17	3 260 - 3 267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3 332 - 3 339	31.2 - 31.8
12.519 75 - 12.520 25	240 - 285	3 345.8 - 3 358	36.43 - 36.5
12.576 75 - 12.577 25	322 - 335.4	3 600 - 4 400	Above 38.6
13.36 - 13.41			

The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1 000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1 000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurements.

5.5.2 Measurement Procedure

These test measurement settings are specified in section G of 789033 D02 General UNII Test Procedures New Rules v01.

For all radiated emissions tests, measurements must correspond to the direction of maximum emission level for each measured emission (see ANSI C63.10 for guidance).

5.5.2.1 Unwanted Emission Measurement

5.5.2.1.1 1. Unwanted Emissions in the Restricted Bands

- a) For all measurements, follow the requirements in section II.G.3. "General Requirements for Unwanted Emissions Measurements."
- b) At frequencies below 1 000 MHz, use the procedure described in section II.G.4. "Procedure for Unwanted Emissions Measurements Below 1 000 MHz."
- c) At frequencies above 1 000 MHz, measurements performed using the peak and average measurement procedures described in sections II.G.5. and II.G.6, respectively, must satisfy the respective peak and average limits. If all peak measurements satisfy the average limit, then average measurements are not required.
- d) For conducted measurements above 1 000 MHz, EIRP shall be computed as specified in section II.G.3.b) and then field strength shall be computed as follows (see KDB Publication 412172): (i) $E[\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] - 20 \log(d[\text{meters}]) + 104.77$, where E = field strength and d = distance at which field strength limit is specified in the rules; (ii) $E[\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] + 95.2$, for $d = 3$ meters.
- e) For conducted measurements below 1 000 MHz, the field strength shall be computed as specified in d), above, and then an additional 4.7 dB shall be added as an upper bound on the field strength that would be observed on a test range with a ground plane for frequencies between 30 MHz and 1 000 MHz, or an additional 6 dB shall be added for frequencies below 30 MHz.

5.5.2.1.1 2. Unwanted Emissions that fall Outside of the Restricted Bands

- a) For all measurements, follow the requirements in section II.G.3. "General Requirements for Unwanted Emissions Measurements."
- b) At frequencies below 1000 MHz, use the procedure described in section II.G.4. "Procedure for Unwanted Emissions Measurements Below 1000 MHz."
- c) At frequencies above 1000 MHz, use the procedure for maximum emissions described in section II.G.5., "Procedure for Unwanted Maximum Unwanted Emissions Measurements Above 1 000 MHz."
- (i) Section 15.407(b)(1-3) specifies the unwanted emissions limit for the U-NII-1 and 2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz. However, an out-of-band emission that complies with both the average and peak limits of Section 15.209 is not required to satisfy the -27 dBm/MHz dBm/MHz peak emission limit.
- (ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the alternative limit.
- d) If radiated measurements are performed, field strength is then converted to EIRP as follows:
 - (i) $EIRP = ((E \times d)^2) / 30$ where:
 - E is the field strength in V/m;
 - d is the measurement distance in meters;
 - EIRP is the equivalent isotropically radiated power in watts.
 - (ii) Working in dB units, the above equation is equivalent to: $EIRP[dBm] = E[dB\mu V/m] + 20 \log(d[meters]) - 104.77$
 - (iii) Or, if d is 3 meters: $EIRP[dBm] = E[dB\mu V/m] - 95.2$

5.5.2.2 Spurious Radiated Emissions:

1. The preliminary and final radiated measurements were performed to determine the frequency producing the maximum emissions in at a 10m anechoic chamber. The EUT was tested at a distance 3 meters.
2. The EUT was placed on the top of the 0.8-meter height, 1 × 1.5 meter non-metallic table. To find the maximum emission levels, the height of a measuring antenna was changed and the turntable was rotated 360°.
3. The antenna polarization was also changed from vertical to horizontal. The spectrum was scanned from 9 kHz to 30 MHz using the loop antenna, and from 30 to 1 000 MHz using the TRILOG broadband antenna, and from 1 000 MHz to 40 000 MHz using the horn antenna.
4. Each frequency found during preliminary measurements was re-examined and investigated. The test-receiver system was set up to average, peak, and quasi-peak detector function with specified bandwidth.
5. The 0.8m height is measurement for below 1 GHz and 1.5m is for above 1 GHz measurement.

Note

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection and frequency above 1 GHz.

5.5.3 Test Result

-complied

1. Band-edge & Conducted Spurious Emissions was shown in figure 3.
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.

- Below 1 GHz data (Worst-case: 5 725 Band 802.11a_ANT 0)

802.11a_Lowest Channel (5 785 Mhz)

Frequency [MHz]	Receiver Bandwidth [kHz]	Pol. [V/H]	Reading [dB(μV)]	Cable Loss [dB]	Amp Gain [dB]	Antenna Factor [dB]	Factor DCCF [dB]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]
Quasi-Peak DATA. Emissions below 30 MHz										
8.86	9	H	36.40	0.77	-32.67	19.70	-12.20	24.20	69.50	45.30
18.92	9	H	35.40	1.14	-32.68	19.34	-12.20	23.20	69.50	46.30
25.61	9	V	34.10	1.32	-32.68	19.16	-12.20	21.90	69.50	47.60
Quasi-Peak DATA. Emissions below 1 GHz										
149.19	120	H	50.30	5.32	-32.49	8.37	-18.80	31.50	43.50	12.00
624.97	120	H	41.90	8.80	-32.87	19.37	-4.70	37.20	46.00	8.80
875.11	120	H	42.30	9.55	-32.20	21.85	-0.80	41.50	46.00	4.50

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.

- Above 1 GHz data

- 5 150 Band

- ANT 0

802.11a_Lowest channel (5 180 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											
1 125.13 ¹⁾	1 000	H	49.90	3.19	-34.96	28.47	-3.30	-	46.60	74.00	27.40
5 149.75 ¹⁾	1 000	H	49.30	7.13	-35.06	34.43	6.50	-	55.80	74.00	18.20
6 906.81	1 000	H	67.80	5.15	-57.16	35.41	-16.60	-	51.20	68.20	17.00
12 843.69	1 000	H	57.40	8.82	-57.62	38.90	-9.90	-	47.50	68.20	20.70
23 282.46	1 000	H	36.10	14.20	-53.10	45.20	6.30	-	42.40	68.20	25.80
37 771.29	1 000	H	40.10	18.70	-52.20	44.80	11.30	-	51.40	68.20	16.80
Average DATA. Emissions above 1 GHz											
1 125.13 ¹⁾	1 000	H	39.20	3.19	-34.96	28.47	-3.30	0.07	35.97	54.00	18.03
5 149.75 ¹⁾	1 000	H	41.40	7.13	-35.06	34.43	6.50	0.07	47.97	54.00	6.03

¹⁾ Restricted band.

802.11a_Middle channel (5 200 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											
1 200.06 ¹⁾	1 000	H	48.50	3.30	-34.23	28.73	-2.20	-	46.30	74.00	27.70
1 349.94 ¹⁾	1 000	V	45.70	3.52	-33.96	29.24	-1.20	-	44.50	74.00	29.50
6 932.69	1 000	H	66.60	5.12	-57.14	35.42	-16.60	-	50.00	68.20	18.20
13 001.81	1 000	H	58.50	8.81	-57.64	38.93	-9.90	-	48.60	68.20	19.60
23 592.68	1 000	H	36.50	14.30	-53.10	45.00	6.20	-	42.70	68.20	25.50
37 953.90	1 000	H	40.80	18.70	-51.60	44.50	11.60	-	52.40	68.20	15.80
Average DATA. Emissions above 1 GHz											
1 200.06 ¹⁾	1 000	H	38.20	3.30	-34.23	28.73	-2.20	0.07	36.07	54.00	17.93
1 349.94 ¹⁾	1 000	V	42.40	3.52	-33.96	29.24	-1.20	0.07	41.27	54.00	12.73

802.11a_Highest channel (5 240 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											
1 033.00 ¹⁾	1 000	H	61.40	3.06	-34.61	28.15	-3.40	-	58.00	74.00	16.00
1 195.94 ¹⁾	1 000	V	48.20	3.29	-34.30	28.71	-2.30	-	45.90	74.00	28.10
6 985.88	1 000	H	63.00	5.06	-57.12	35.46	-16.60	-	46.40	68.20	21.80
12 822.12	1 000	H	57.10	8.82	-57.61	38.89	-9.90	-	47.20	68.20	21.00
23 273.66	1 000	H	36.50	14.20	-53.10	45.20	6.30	-	42.80	68.20	25.40
37 831.79	1 000	H	40.30	18.70	-52.00	44.70	11.40	-	51.70	68.20	16.50
Average DATA. Emissions above 1 GHz											
1 033.00 ¹⁾	1 000	H	48.20	3.06	-34.61	28.15	-3.40	0.07	44.87	54.00	9.13
1 195.94 ¹⁾	1 000	V	41.20	3.29	-34.30	28.71	-2.30	0.07	38.97	54.00	15.03

¹⁾ Restricted band.

802.11n HT20_Lowest channel (5 180 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											
1 196.63 ¹⁾	1 000	V	47.90	3.30	-34.31	28.71	-2.30	-	45.60	74.00	28.40
5 149.75 ¹⁾	1 000	H	50.50	7.13	-34.26	34.43	7.30	-	57.80	74.00	16.20
6 906.81	1 000	H	68.10	5.15	-57.16	35.41	-16.60	-	51.50	68.20	16.70
12 908.37	1 000	H	57.10	8.81	-57.62	38.91	-9.90	-	47.20	68.20	21.00
23 274.76	1 000	H	35.90	14.20	-53.10	45.20	6.30	-	42.20	68.20	26.00
37 833.99	1 000	H	40.50	18.70	-52.00	44.70	11.40	-	51.90	68.20	16.30
Average DATA. Emissions above 1 GHz											
1 196.63 ¹⁾	1 000	V	37.90	3.30	-34.31	28.71	-2.30	0.08	35.68	54.00	18.32
5 149.75 ¹⁾	1 000	H	40.20	7.13	-34.26	34.43	7.30	0.08	47.58	54.00	6.42

¹⁾ Restricted band.

802.11n HT20_Middle channel (5 200 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											
1 125.13 ¹⁾	1 000	H	48.50	3.19	-34.46	28.47	-2.80	-	45.70	74.00	28.30
1 198.00 ¹⁾	1 000	V	47.10	3.30	-34.32	28.72	-2.30	-	44.80	74.00	29.20
6 932.69	1 000	H	66.10	5.12	-57.14	35.42	-16.60	-	49.50	68.20	18.70
12 809.19	1 000	H	58.40	8.82	-57.61	38.89	-9.90	-	48.50	68.20	19.70
23 282.46	1 000	H	36.10	14.20	-53.10	45.20	6.30	-	42.40	68.20	25.80
37 902.19	1 000	H	40.40	18.70	-51.80	44.60	11.50	-	51.90	68.20	16.30
Average DATA. Emissions above 1 GHz											
1 125.13 ¹⁾	1 000	H	42.60	3.19	-34.46	28.47	-2.80	0.08	39.88	54.00	14.12
1 198.00 ¹⁾	1 000	V	40.90	3.30	-34.32	28.72	-2.30	0.08	38.68	54.00	15.32

802.11n HT20_Highest channel (5 240 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											
1 030.25 ¹⁾	1 000	H	60.90	3.05	-34.19	28.14	-3.00	-	57.90	74.00	16.10
1 125.13 ¹⁾	1 000	H	48.70	3.19	-34.46	28.47	-2.80	-	45.90	74.00	28.10
6 985.88	1 000	H	63.00	5.06	-57.12	35.46	-16.60	-	46.40	68.20	21.80
13 000.37	1 000	H	57.10	8.81	-57.64	38.93	-9.90	-	47.20	68.20	21.00
23 340.77	1 000	H	36.00	14.20	-53.10	45.20	6.30	-	42.30	68.20	25.90
37 890.10	1 000	H	40.20	18.70	-51.80	44.60	11.50	-	51.70	68.20	16.50
Average DATA. Emissions above 1 GHz											
1 030.25 ¹⁾	1 000	H	51.80	3.05	-34.19	28.14	-3.00	0.08	48.88	54.00	5.12
1 125.13 ¹⁾	1 000	H	42.00	3.19	-34.46	28.47	-2.80	0.08	39.28	54.00	14.72

¹⁾ Restricted band.

802.11n HT40_Lowest channel (5 190 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											
1 349.94 ¹⁾	1 000	V	46.00	3.52	-34.66	29.24	-1.90	-	44.10	74.00	29.90
5 147.69 ¹⁾	1 000	H	50.50	7.13	-35.06	34.43	6.50	-	57.00	74.00	17.00
6 919.75	1 000	H	63.20	5.13	-57.14	35.41	-16.60	-	46.60	68.20	21.60
12 945.75	1 000	H	56.80	8.81	-57.63	38.92	-9.90	-	46.90	68.20	21.30
23 482.67	1 000	H	36.30	14.30	-53.20	45.10	6.20	-	42.50	68.20	25.70
37 855.99	1 000	H	41.00	18.70	-51.90	44.60	11.40	-	52.40	68.20	15.80
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	V	41.60	3.52	-34.66	29.24	-1.90	0.14	39.84	54.00	14.16
5 147.69 ¹⁾	1 000	H	44.20	7.13	-35.06	34.43	6.50	0.14	50.84	54.00	3.16

¹⁾ Restricted band.

802.11n HT40_Middle channel (5 230 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											
1 028.88 ¹⁾	1 000	H	50.30	3.05	-34.59	28.14	-3.40	-	46.90	74.00	27.10
1 347.88 ¹⁾	1 000	V	44.60	3.51	-34.64	29.23	-1.90	-	42.70	74.00	31.30
7 016.06	1 000	H	62.10	5.06	-57.14	35.48	-16.60	-	45.50	68.20	22.70
13 011.87	1 000	H	58.00	8.83	-57.66	38.93	-9.90	-	48.10	68.20	20.10
23 283.56	1 000	H	36.30	14.20	-53.10	45.20	6.30	-	42.60	68.20	25.60
37 884.59	1 000	H	41.00	18.70	-51.80	44.60	11.50	-	52.50	68.20	15.70
Average DATA. Emissions above 1 GHz											
1 028.88 ¹⁾	1 000	H	41.10	3.05	-34.59	28.14	-3.40	0.14	37.84	54.00	16.16
1 347.88 ¹⁾	1 000	V	41.40	3.51	-34.64	29.23	-1.90	0.14	39.64	54.00	14.36

802.11ac VHT20_Lowest channel (5 180 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											
1 349.94 ¹⁾	1 000	V	45.40	3.52	-34.66	29.24	-1.90	-	43.50	74.00	30.50
5 147.00 ¹⁾	1 000	H	51.30	7.13	-35.06	34.43	6.50	-	57.80	74.00	16.20
6 906.81	1 000	H	67.40	5.15	-57.16	35.41	-16.60	-	50.80	68.20	17.40
12 911.25	1 000	H	57.30	8.81	-57.62	38.91	-9.90	-	47.40	68.20	20.80
23 252.76	1 000	H	36.20	14.20	-53.10	45.20	6.30	-	42.50	68.20	25.70
37 712.98	1 000	H	40.60	18.70	-52.40	44.90	11.20	-	51.80	68.20	16.40
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	V	42.50	3.52	-34.66	29.24	-1.90	0.08	40.68	54.00	13.32
5 147.00 ¹⁾	1 000	H	39.80	7.13	-35.06	34.43	6.50	0.08	46.38	54.00	7.62

¹⁾ Restricted band.

802.11ac VHT20_Middle channel (5 200 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											
1 125.13 ¹⁾	1 000	H	46.60	3.19	-34.96	28.47	-3.30	-	43.30	74.00	30.70
1 349.94 ¹⁾	1 000	V	45.10	3.52	-34.66	29.24	-1.90	-	43.20	74.00	30.80
6 932.69	1 000	H	65.80	5.12	-57.14	35.42	-16.60	-	49.20	68.20	19.00
12 993.19	1 000	H	57.40	8.81	-57.64	38.93	-9.90	-	47.50	68.20	20.70
23 330.86	1 000	H	36.30	14.20	-53.10	45.20	6.30	-	42.60	68.20	25.60
37 915.40	1 000	H	40.70	18.70	-51.70	44.50	11.50	-	52.20	68.20	16.00
Average DATA. Emissions above 1 GHz											
1 125.13 ¹⁾	1 000	H	41.90	3.19	-34.96	28.47	-3.30	0.08	38.68	54.00	15.32
1 349.94 ¹⁾	1 000	V	40.90	3.52	-34.66	29.24	-1.90	0.08	39.08	54.00	14.92

802.11ac VHT20_Highest channel (5 240 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											
1 030.94 ¹⁾	1 000	H	58.60	3.05	-34.60	28.15	-3.40	-	55.20	74.00	18.80
1 349.94 ¹⁾	1 000	V	44.30	3.52	-34.66	29.24	-1.90	-	42.40	74.00	31.60
6 985.88	1 000	H	62.50	5.06	-57.12	35.46	-16.60	-	45.90	68.20	22.30
12 848.00	1 000	H	58.10	8.82	-57.62	38.90	-9.90	-	48.20	68.20	20.00
23 527.77	1 000	H	36.00	14.30	-53.20	45.10	6.20	-	42.20	68.20	26.00
37 705.28	1 000	H	40.00	18.70	-52.40	44.90	11.20	-	51.20	68.20	17.00
Average DATA. Emissions above 1 GHz											
1 030.94 ¹⁾	1 000	H	51.00	3.05	-34.60	28.15	-3.40	0.08	47.68	54.00	6.32
1 349.94 ¹⁾	1 000	V	41.40	3.52	-34.66	29.24	-1.90	0.08	39.58	54.00	14.42

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-SRF0056-B

Page (400) of (450)

**802.11ac VHT40_Lowest channel (5 190 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											
1 349.94 ¹⁾	1 000	V	45.20	3.52	-34.66	29.24	-1.90	-	43.30	74.00	30.70
5 148.38 ¹⁾	1 000	H	53.30	7.13	-35.06	34.43	6.50	-	59.80	74.00	14.20
6 919.75	1 000	H	61.60	5.13	-57.14	35.41	-16.60	-	45.00	68.20	23.20
12 997.50	1 000	H	57.30	8.81	-57.64	38.93	-9.90	-	47.40	68.20	20.80
23 265.96	1 000	V	36.30	14.20	-53.10	45.20	6.30	-	42.60	68.20	25.60
37 838.39	1 000	H	40.00	18.70	-52.00	44.70	11.40	-	51.40	68.20	16.80
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	V	42.00	3.52	-34.66	29.24	-1.90	0.14	40.24	54.00	13.76
5 148.38 ¹⁾	1 000	H	44.00	7.13	-35.06	34.43	6.50	0.14	50.64	54.00	3.36

¹⁾ Restricted band.

802.11ac VHT40_Middle channel (5 230 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											
1 026.81 ¹⁾	1 000	H	50.00	3.05	-34.58	28.13	-3.40	-	46.60	74.00	27.40
1 347.88 ¹⁾	1 000	V	45.00	3.51	-34.64	29.23	-1.90	-	43.10	74.00	30.90
7 023.25	1 000	H	60.10	5.06	-57.14	35.48	-16.60	-	43.50	68.20	24.70
12 927.06	1 000	H	57.10	8.81	-57.62	38.91	-9.90	-	47.20	68.20	21.00
23 323.16	1 000	H	35.80	14.20	-53.10	45.20	6.30	-	42.10	68.20	26.10
37 842.79	1 000	H	40.30	18.70	-52.00	44.70	11.40	-	51.70	68.20	16.50
Average DATA. Emissions above 1 GHz											
1 026.81 ¹⁾	1 000	H	41.60	3.05	-34.58	28.13	-3.40	0.14	38.34	54.00	15.66
1 347.88 ¹⁾	1 000	V	40.90	3.51	-34.64	29.23	-1.90	0.14	39.14	54.00	14.86

802.11ac VHT80_Highest channel (5 210 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⁾	1 000	V	44.80	3.52	-34.66	29.24	-1.90	-	42.90	74.00	31.10
5 149.75 ¹⁾	1 000	H	52.70	7.13	-35.06	34.43	6.50	-	59.20	74.00	14.80
7 003.13	1 000	H	61.10	5.04	-57.11	35.47	-16.60	-	44.50	68.20	23.70
12 912.69	1 000	H	57.10	8.81	-57.62	38.91	-9.90	-	47.20	68.20	21.00
23 323.16	1 000	H	35.80	14.20	-53.10	45.20	6.30	-	42.10	68.20	26.10
37 842.79	1 000	H	40.30	18.70	-52.00	44.70	11.40	-	51.70	68.20	16.50
Average DATA. Emissions above 1 GHz											
1 350.63 ¹⁾	1 000	V	41.60	3.52	-34.66	29.24	-1.90	0.28	39.98	54.00	14.02
5 149.75 ¹⁾	1 000	H	44.00	7.13	-35.06	34.43	6.50	0.28	50.78	54.00	3.22

¹⁾ Restricted band.

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

- ANT 1

802.11a_Lowest channel (5 180 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											
1 347.88 ¹⁾	1 000	V	45.40	3.51	-34.64	29.23	-1.90	-	43.50	74.00	30.50
5 149.75 ¹⁾	1 000	H	53.20	7.13	-35.06	34.43	6.50	-	59.70	74.00	14.30
6 906.81	1 000	H	67.50	5.15	-57.16	35.41	-16.60	-	50.90	68.20	17.30
12 902.62	1 000	H	57.70	8.81	-57.62	38.91	-9.90	-	47.80	68.20	20.40
23 580.58	1 000	H	35.50	14.30	-53.20	45.10	6.20	-	41.70	68.20	26.50
37 850.49	1 000	H	40.50	18.70	-52.00	44.70	11.40	-	51.90	68.20	16.30
Average DATA. Emissions above 1 GHz											
1 347.88 ¹⁾	1 000	V	42.00	3.51	-34.64	29.23	-1.90	0.07	40.17	54.00	13.83
5 149.75 ¹⁾	1 000	H	43.70	7.13	-35.06	34.43	6.50	0.07	50.27	54.00	3.73

¹⁾ Restricted band.

802.11a_Middle channel (5 200 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											
1 125.13 ¹⁾	1 000	H	44.20	3.19	-34.96	28.47	-3.30	-	40.90	74.00	33.10
1 349.94 ¹⁾	1 000	V	45.20	3.52	-34.66	29.24	-1.90	-	43.30	74.00	30.70
6 932.69	1 000	H	66.30	5.12	-57.14	35.42	-16.60	-	49.70	68.20	18.50
13 030.56	1 000	H	57.00	8.86	-57.68	38.92	-9.90	-	47.10	68.20	21.10
23 323.16	1 000	H	36.00	14.20	-53.10	45.20	6.30	-	42.30	68.20	25.90
37 876.90	1 000	H	41.00	18.70	-51.80	44.60	11.50	-	52.50	68.20	15.70
Average DATA. Emissions above 1 GHz											
1 125.13 ¹⁾	1 000	H	39.90	3.19	-34.96	28.47	-3.30	0.07	36.67	54.00	17.33
1 349.94 ¹⁾	1 000	V	41.10	3.52	-34.66	29.24	-1.90	0.07	39.27	54.00	14.73

802.11a_Highest channel (5 240 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											
1 035.75 ¹⁾	1 000	H	59.40	3.06	-34.62	28.16	-3.40	-	56.00	74.00	18.00
1 349.94 ¹⁾	1 000	V	45.90	3.52	-34.66	29.24	-1.90	-	44.00	74.00	30.00
6 985.88	1 000	H	65.20	5.06	-57.12	35.46	-16.60	-	48.60	68.20	19.60
13 026.25	1 000	H	57.10	8.85	-57.67	38.92	-9.90	-	47.20	68.20	21.00
23 305.56	1 000	H	36.40	14.20	-53.10	45.20	6.30	-	42.70	68.20	25.50
37 802.09	1 000	H	40.10	18.70	-52.10	44.70	11.30	-	51.40	68.20	16.80
Average DATA. Emissions above 1 GHz											
1 035.75 ¹⁾	1 000	H	47.90	3.06	-34.62	28.16	-3.40	0.07	44.57	54.00	9.43
1 349.94 ¹⁾	1 000	V	41.60	3.52	-34.66	29.24	-1.90	0.07	39.77	54.00	14.23

¹⁾ Restricted band.

802.11n HT20_Lowest channel (5 180 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											
1 349.94 ¹⁾	1 000	V	45.00	3.52	-34.66	29.24	-1.90	-	43.10	74.00	30.90
5 149.06 ¹⁾	1 000	H	54.60	7.13	-35.06	34.43	6.50	-	61.10	74.00	12.90
6 906.81	1 000	H	69.10	5.15	-57.16	35.41	-16.60	-	52.50	68.20	15.70
12 883.94	1 000	H	57.50	8.81	-57.62	38.91	-9.90	-	47.60	68.20	20.60
23 591.58	1 000	H	36.30	14.30	-53.10	45.00	6.20	-	42.50	68.20	25.70
37 820.79	1 000	H	40.50	18.70	-52.00	44.70	11.40	-	51.90	68.20	16.30
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	V	41.70	3.52	-34.66	29.24	-1.90	0.08	39.88	54.00	14.12
5 149.06 ¹⁾	1 000	H	43.20	7.13	-35.06	34.43	6.50	0.08	49.78	54.00	4.22

¹⁾ Restricted band.

802.11n HT20_Middle channel (5 200 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											
1 125.13 ¹⁾	1 000	H	45.40	3.19	-34.96	28.47	-3.30	-	42.10	74.00	31.90
1 349.94 ¹⁾	1 000	V	45.10	3.52	-34.66	29.24	-1.90	-	43.20	74.00	30.80
6 932.69	1 000	H	67.40	5.12	-57.14	35.42	-16.60	-	50.80	68.20	17.40
12 919.87	1 000	H	57.20	8.81	-57.62	38.91	-9.90	-	47.30	68.20	20.90
23 284.66	1 000	H	36.70	14.20	-53.10	45.20	6.30	-	43.00	68.20	25.20
37 872.49	1 000	V	39.90	18.70	-51.80	44.60	11.50	-	51.40	68.20	16.80
Average DATA. Emissions above 1 GHz											
1 125.13 ¹⁾	1 000	H	41.60	3.19	-34.96	28.47	-3.30	0.08	38.38	54.00	15.62
1 349.94 ¹⁾	1 000	V	40.90	3.52	-34.66	29.24	-1.90	0.08	39.08	54.00	14.92

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-SRF0056-B
Page (403) of (450)

**802.11n HT20_Highest channel (5 240 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											
1 035.06 ¹⁾	1 000	H	58.60	3.06	-34.52	28.16	-3.40	-	55.20	74.00	18.80
1 349.94 ¹⁾	1 000	V	45.70	3.52	-34.66	29.24	-1.90	-	43.80	74.00	30.20
6 985.88	1 000	H	64.40	5.06	-57.12	35.46	-16.60	-	47.80	68.20	20.40
13 001.81	1 000	H	57.20	8.81	-57.64	38.93	-9.90	-	47.30	68.20	20.90
23 261.56	1 000	V	36.50	14.20	-53.10	45.20	6.30	-	42.80	68.20	25.40
37 782.29	1 000	H	41.20	18.70	-52.20	44.80	11.30	-	52.50	68.20	15.70
Average DATA. Emissions above 1 GHz											
1 035.06 ¹⁾	1 000	H	50.70	3.06	-34.52	28.16	-3.40	0.08	47.38	54.00	6.62
1 349.94 ¹⁾	1 000	V	40.50	3.52	-34.66	29.24	-1.90	0.08	38.68	54.00	15.32

¹⁾ Restricted band.

802.11n HT40_Lowest channel (5 190 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											
1 349.94 ¹⁾	1 000	V	45.00	3.52	-34.66	29.24	-1.90	-	43.10	74.00	30.90
5 144.25 ¹⁾	1 000	H	51.30	7.13	-35.06	34.43	6.50	-	57.80	74.00	16.20
6 919.75	1 000	H	64.60	5.13	-57.14	35.41	-16.60	-	48.00	68.20	20.20
13 101.00	1 000	H	57.90	8.96	-57.87	38.91	-10.00	-	47.90	68.20	20.30
23 283.56	1 000	H	36.30	14.20	-53.10	45.20	6.30	-	42.60	68.20	25.60
37 863.69	1 000	H	41.00	18.70	-51.90	44.60	11.40	-	52.40	68.20	15.80
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	V	41.50	3.52	-34.66	29.24	-1.90	0.14	39.74	54.00	14.26
5 144.25 ¹⁾	1 000	H	44.30	7.13	-35.06	34.43	6.50	0.14	50.94	54.00	3.06

¹⁾ Restricted band.

802.11n HT40_Middle channel (5 230 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											
1 025.44 ¹⁾	1 000	H	47.40	3.05	-34.58	28.13	-3.40	-	44.00	74.00	30.00
1 349.94 ¹⁾	1 000	V	44.90	3.52	-34.66	29.24	-1.90	-	43.00	74.00	31.00
6 972.94	1 000	H	63.30	5.07	-57.12	35.45	-16.60	-	46.70	68.20	21.50
12 971.62	1 000	H	57.20	8.81	-57.63	38.92	-9.90	-	47.30	68.20	20.90
23 358.37	1 000	H	36.30	14.20	-53.00	45.10	6.30	-	42.60	68.20	25.60
37 882.39	1 000	H	40.80	18.70	-51.80	44.60	11.50	-	52.30	68.20	15.90
Average DATA. Emissions above 1 GHz											
1 025.44 ¹⁾	1 000	H	40.30	3.05	-34.58	28.13	-3.40	0.14	37.04	54.00	16.96
1 349.94 ¹⁾	1 000	V	39.60	3.52	-34.66	29.24	-1.90	0.14	37.84	54.00	16.16

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

802.11ac VHT20_Lowest channel (5 180 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											
1 349.94 ¹⁾	1 000	V	44.60	3.52	-34.66	29.24	-1.90	-	42.70	74.00	31.30
5 149.75 ¹⁾	1 000	H	52.50	7.13	-35.06	34.43	6.50	-	59.00	74.00	15.00
6 906.81	1 000	H	68.00	5.15	-57.16	35.41	-16.60	-	51.40	68.20	16.80
12 998.94	1 000	H	57.20	8.81	-57.64	38.93	-9.90	-	47.30	68.20	20.90
23 281.36	1 000	H	36.00	14.20	-53.10	45.20	6.30	-	42.30	68.20	25.90
38 144.21	1 000	H	40.50	18.60	-51.20	44.40	11.80	-	52.30	68.20	15.90
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	V	39.70	3.52	-34.66	29.24	-1.90	0.08	37.88	54.00	16.12
5 149.75 ¹⁾	1 000	H	41.20	7.13	-35.06	34.43	6.50	0.08	47.78	54.00	6.22

¹⁾ Restricted band.

802.11ac VHT20_Middle channel (5 200 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											
1 125.13 ¹⁾	1 000	H	45.10	3.19	-34.96	28.47	-3.30	-	41.80	74.00	32.20
1 347.88 ¹⁾	1 000	V	45.30	3.51	-34.64	29.23	-1.90	-	43.40	74.00	30.60
6 932.69	1 000	H	63.90	5.12	-57.14	35.42	-16.60	-	47.30	68.20	20.90
13 014.75	1 000	H	57.30	8.83	-57.66	38.93	-9.90	-	47.40	68.20	20.80
23 251.66	1 000	H	36.70	14.20	-53.10	45.20	6.30	-	43.00	68.20	25.20
38 577.63	1 000	H	41.80	18.40	-50.50	44.30	12.20	-	54.00	68.20	14.20
Average DATA. Emissions above 1 GHz											
1 125.13 ¹⁾	1 000	H	41.30	3.19	-34.96	28.47	-3.30	0.08	38.08	54.00	15.92
1 347.88 ¹⁾	1 000	V	41.80	3.51	-34.64	29.23	-1.90	0.08	39.98	54.00	14.02

802.11ac VHT20_Highest channel (5 240 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											
1 036.44 ¹⁾	1 000	H	58.50	3.06	-34.62	28.16	-3.40	-	55.10	74.00	18.90
1 349.25 ¹⁾	1 000	V	45.50	3.52	-34.66	29.24	-1.90	-	43.60	74.00	30.40
6 985.88	1 000	H	64.80	5.06	-57.12	35.46	-16.60	-	48.20	68.20	20.00
12 948.62	1 000	H	57.10	8.81	-57.63	38.92	-9.90	-	47.20	68.20	21.00
23 196.66	1 000	H	36.40	14.20	-53.10	45.20	6.30	-	42.70	68.20	25.50
38 129.90	1 000	H	40.40	18.60	-51.20	44.40	11.80	-	52.20	68.20	16.00
Average DATA. Emissions above 1 GHz											
1 036.44 ¹⁾	1 000	H	49.20	3.06	-34.62	28.16	-3.40	0.08	45.88	54.00	8.12
1 349.25 ¹⁾	1 000	V	41.40	3.52	-34.66	29.24	-1.90	0.08	39.58	54.00	14.42

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-SRF0056-B
Page (405) of (450)

**802.11ac VHT40_Lowest channel (5 190 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											
1 349.94 ¹⁾	1 000	V	45.00	3.52	-34.66	29.24	-1.90	-	43.10	74.00	30.90
5 147.00 ¹⁾	1 000	H	52.80	7.13	-35.06	34.43	6.50	-	59.30	74.00	14.70
6 919.75	1 000	H	64.70	5.13	-57.14	35.41	-16.60	-	48.10	68.20	20.10
13 013.31	1 000	H	57.80	8.83	-57.66	38.93	-9.90	-	47.90	68.20	20.30
23 584.98	1 000	H	36.00	14.30	-53.20	45.10	6.20	-	42.20	68.20	26.00
37 906.59	1 000	H	40.80	18.70	-51.80	44.60	11.50	-	52.30	68.20	15.90
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	V	40.70	3.52	-34.66	29.24	-1.90	0.14	38.94	54.00	15.06
5 147.00 ¹⁾	1 000	H	43.80	7.13	-35.06	34.43	6.50	0.14	50.44	54.00	3.56

¹⁾ Restricted band.

802.11ac VHT40_Middle channel (5 230 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											
1 023.38 ¹⁾	1 000	H	47.40	3.04	-34.56	28.12	-3.40	-	44.00	74.00	30.00
1 349.94 ¹⁾	1 000	V	45.50	3.52	-34.66	29.24	-1.90	-	43.60	74.00	30.40
6 972.94	1 000	H	63.90	5.07	-57.12	35.45	-16.60	-	47.30	68.20	20.90
12 983.12	1 000	H	57.00	8.81	-57.64	38.93	-9.90	-	47.10	68.20	21.10
23 267.06	1 000	H	35.90	14.20	-53.10	45.20	6.30	-	42.20	68.20	26.00
38 212.41	1 000	H	40.90	18.60	-51.10	44.40	11.90	-	52.80	68.20	15.40
Average DATA. Emissions above 1 GHz											
1 023.38 ¹⁾	1 000	H	41.30	3.04	-34.56	28.12	-3.40	0.14	38.04	54.00	15.96
1 349.94 ¹⁾	1 000	V	40.60	3.52	-34.66	29.24	-1.90	0.14	38.84	54.00	15.16

802.11ac VHT80_Highest channel (5 210 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											
1 347.88 ¹⁾	1 000	V	45.80	3.51	-34.64	29.23	-1.90	-	43.90	74.00	30.10
5 144.94 ¹⁾	1 000	H	52.00	7.13	-35.06	34.43	6.50	-	58.50	74.00	15.50
6 945.63	1 000	H	62.90	5.10	-57.13	35.43	-16.60	-	46.30	68.20	21.90
13 014.75	1 000	H	56.80	8.83	-57.66	38.93	-9.90	-	46.90	68.20	21.30
23 241.76	1 000	H	36.50	14.20	-53.10	45.20	6.30	-	42.80	68.20	25.40
37 894.50	1 000	H	40.50	18.70	-51.80	44.60	11.50	-	52.00	68.20	16.20
Average DATA. Emissions above 1 GHz											
1 347.88 ¹⁾	1 000	V	41.20	3.51	-34.64	29.23	-1.90	0.28	39.58	54.00	14.42
5 144.94 ¹⁾	1 000	H	43.80	7.13	-35.06	34.43	6.50	0.28	50.58	54.00	3.42

¹⁾ Restricted band.

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

- ANT 2

802.11a_Lowest channel (5 180 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											
1 347.88 ¹⁾	1 000	V	46.10	3.51	-34.64	29.23	-1.90	-	44.20	74.00	29.80
5 118.81 ¹⁾	1 000	H	46.00	7.10	-35.02	34.42	6.50	-	52.50	74.00	21.50
6 906.81	1 000	H	69.10	5.15	-57.16	35.41	-16.60	-	52.50	68.20	15.70
12 914.12	1 000	H	57.30	8.81	-57.62	38.91	-9.90	-	47.40	68.20	20.80
23 320.96	1 000	H	36.40	14.24	-53.10	45.16	6.30	-	42.70	68.20	25.50
37 796.59	1 000	H	40.50	18.71	-52.16	44.75	11.30	-	51.80	68.20	16.40
Average DATA. Emissions above 1 GHz											
1 347.88 ¹⁾	1 000	V	40.10	3.51	-34.64	29.23	-1.90	0.07	38.27	54.00	15.73
5 118.81 ¹⁾	1 000	H	38.80	7.10	-35.02	34.42	6.50	0.07	45.37	54.00	8.63

¹⁾ Restricted band.

802.11a_Middle channel (5 200 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											
1 124.44 ¹⁾	1 000	H	45.90	3.19	-34.96	28.47	-3.30	-	42.60	74.00	31.40
1 349.94 ¹⁾	1 000	V	45.40	3.52	-34.66	29.24	-1.90	-	43.50	74.00	30.50
6 932.69	1 000	H	66.30	5.12	-57.14	35.42	-16.60	-	49.70	68.20	18.50
12 998.94	1 000	H	57.90	8.81	-57.64	38.93	-9.90	-	48.00	68.20	20.20
23 340.77	1 000	H	36.40	14.24	-53.09	45.15	6.30	-	42.70	68.20	25.50
37 836.19	1 000	H	40.30	18.70	-51.98	44.68	11.40	-	51.70	68.20	16.50
Average DATA. Emissions above 1 GHz											
1 124.44 ¹⁾	1 000	H	41.2	3.19	-34.96	28.47	-3.3	0.07	37.97	54.00	16.03
1 349.94 ¹⁾	1 000	V	40.6	3.52	-34.66	29.24	-1.9	0.07	38.77	54.00	15.23

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-SRF0056-B
Page (407) of (450)

**802.11a_Highest channel (5 240 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											
1 034.38 ¹⁾	1 000	H	58.70	3.06	-34.62	28.16	-3.40	-	55.30	74.00	18.70
1 349.94 ¹⁾	1 000	V	45.40	3.52	-34.66	29.24	-1.90	-	43.50	74.00	30.50
6 985.88	1 000	H	64.10	5.06	-57.12	35.46	-16.60	-	47.50	68.20	20.70
12 993.19	1 000	H	57.20	8.81	-57.64	38.93	-9.90	-	47.30	68.20	20.90
23 599.28	1 000	H	36.10	14.27	-53.21	45.04	6.10	-	42.20	68.20	26.00
37 971.50	1 000	H	40.20	18.68	-51.53	44.45	11.60	-	51.80	68.20	16.40
Average DATA. Emissions above 1 GHz											
1 034.38 ¹⁾	1 000	H	47.20	3.06	-34.62	28.16	-3.40	0.07	43.87	54.00	10.13
1 349.94 ¹⁾	1 000	V	40.80	3.52	-34.66	29.24	-1.90	0.07	38.97	54.00	15.03

¹⁾ Restricted band.

802.11n HT20_Lowest channel (5 180 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											
1 349.94 ¹⁾	1 000	H	48.50	3.52	-34.66	29.24	-1.90	-	46.60	74.00	27.40
5 135.31 ¹⁾	1 000	H	46.60	7.12	-35.05	34.43	6.50	-	53.10	74.00	20.90
6 906.81	1 000	H	69.00	5.15	-57.16	35.41	-16.60	-	52.40	68.20	15.80
12 967.31	1 000	H	57.40	8.81	-57.63	38.92	-9.90	-	47.50	68.20	20.70
23 320.96	1 000	H	36.30	14.24	-53.10	45.16	6.30	-	42.60	68.20	25.60
37 831.79	1 000	H	40.50	18.70	-51.99	44.69	11.40	-	51.90	68.20	16.30
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	H	45.50	3.52	-34.66	29.24	-1.90	0.08	43.68	54.00	10.32
5 135.31 ¹⁾	1 000	H	38.70	7.12	-35.05	34.43	6.50	0.08	45.28	54.00	8.72

¹⁾ Restricted band.

802.11n HT20_Middle channel (5 200 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											
1 124.44 ¹⁾	1 000	H	45.50	3.19	-34.96	28.47	-3.30	-	42.20	74.00	31.80
1 349.94 ¹⁾	1 000	H	47.30	3.52	-34.66	29.24	-1.90	-	45.40	74.00	28.60
6 932.69	1 000	H	65.90	5.12	-57.14	35.42	-16.60	-	49.30	68.20	18.90
12 968.75	1 000	H	57.00	8.81	-57.63	38.92	-9.90	-	47.10	68.20	21.10
23 309.96	1 000	H	36.50	14.24	-53.10	45.16	6.30	-	42.80	68.20	25.40
37 975.90	1 000	H	40.50	18.67	-51.51	44.44	11.60	-	52.10	68.20	16.10
Average DATA. Emissions above 1 GHz											
1 124.44 ¹⁾	1 000	H	41.10	3.19	-34.96	28.47	-3.30	0.08	37.88	54.00	16.12
1 349.94 ¹⁾	1 000	H	44.50	3.52	-34.66	29.24	-1.90	0.08	42.68	54.00	11.32

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

802.11n HT20_Highest channel (5 240 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											
1 038.50 ¹⁾	1 000	H	55.90	3.07	-34.64	28.17	-3.40	-	52.50	74.00	21.50
1 347.88 ¹⁾	1 000	V	47.70	3.51	-34.64	29.23	-1.90	-	45.80	74.00	28.20
6 985.88	1 000	H	63.90	5.06	-57.12	35.46	-16.60	-	47.30	68.20	20.90
13 037.75	1 000	H	57.70	8.87	-57.69	38.92	-9.90	-	47.80	68.20	20.40
23 304.46	1 000	H	36.50	14.24	-53.11	45.17	6.30	-	42.80	68.20	25.40
38 039.70	1 000	H	40.80	18.65	-51.34	44.39	11.70	-	52.50	68.20	15.70
Average DATA. Emissions above 1 GHz											
1 038.50 ¹⁾	1 000	H	46.90	3.07	-34.64	28.17	-3.40	0.08	43.58	54.00	10.42
1 347.88 ¹⁾	1 000	V	42.30	3.51	-34.64	29.23	-1.90	0.08	40.48	54.00	13.52

¹⁾ Restricted band.

802.11n HT40_Lowest channel (5 190 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											
1 349.94 ¹⁾	1 000	V	47.50	3.52	-34.66	29.24	-1.90	-	45.60	74.00	28.40
5 149.75 ¹⁾	1 000	H	54.00	7.13	-35.06	34.43	6.50	-	60.50	74.00	13.50
6 919.75	1 000	H	61.70	5.13	-57.14	35.41	-16.60	-	45.10	68.20	23.10
12 915.56	1 000	H	57.50	8.81	-57.62	38.91	-9.90	-	47.60	68.20	20.60
23 309.96	1 000	H	36.50	14.24	-53.10	45.16	6.30	-	42.80	68.20	25.40
37 847.19	1 000	H	41.00	18.70	-51.96	44.66	11.40	-	52.40	68.20	15.80
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	V	42.60	3.52	-34.66	29.24	-1.90	0.14	40.84	54.00	13.16
5 149.75 ¹⁾	1 000	H	44.40	7.13	-35.06	34.43	6.50	0.14	51.04	54.00	2.96

¹⁾ Restricted band.

802.11n HT40_Middle channel (5 230 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											
1 023.38 ¹⁾	1 000	H	51.90	3.04	-34.56	28.12	-3.40	-	48.50	74.00	25.50
1 349.94 ¹⁾	1 000	V	47.80	3.52	-34.66	29.24	-1.90	-	45.90	74.00	28.10
6 845.00	1 000	H	61.20	5.22	-57.18	35.36	-16.60	-	44.60	68.20	23.60
12 980.25	1 000	H	57.90	8.81	-57.64	38.93	-9.90	-	48.00	68.20	20.20
23 315.46	1 000	H	36.40	14.24	-53.10	45.16	6.30	-	42.70	68.20	25.50
37 874.69	1 000	H	41.50	18.70	-51.81	44.61	11.50	-	53.00	68.20	15.20
Average DATA. Emissions above 1 GHz											
1 023.38 ¹⁾	1 000	H	42.80	3.04	-34.56	28.12	-3.40	0.14	39.54	54.00	14.46
1 349.94 ¹⁾	1 000	V	45.20	3.52	-34.66	29.24	-1.90	0.14	43.44	54.00	10.56

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-SRF0056-B
Page (409) of (450)

**802.11ac VHT20_Lowest channel (5 180 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											
1 349.94 ¹⁾	1 000	H	48.30	3.52	-34.66	29.24	-1.90	-	46.40	74.00	27.60
5 149.75 ¹⁾	1 000	H	46.20	7.13	-35.06	34.43	6.50	-	52.70	74.00	21.30
6 905.38	1 000	H	68.50	5.15	-57.15	35.40	-16.60	-	51.90	68.20	16.30
13 036.31	1 000	H	57.40	8.87	-57.69	38.92	-9.90	-	47.50	68.20	20.70
23 267.06	1 000	V	36.40	14.23	-53.11	45.18	6.30	-	42.70	68.20	25.50
37 763.59	1 000	H	39.90	18.72	-52.22	44.80	11.30	-	51.20	68.20	17.00
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	H	44.20	3.52	-34.66	29.24	-1.90	0.08	42.38	54.00	11.62
5 149.75 ¹⁾	1 000	H	37.40	7.13	-35.06	34.43	6.50	0.08	43.98	54.00	10.02

¹⁾ Restricted band.

802.11ac VHT20_Middle channel (5 200 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											
1 124.44 ¹⁾	1 000	H	44.40	3.19	-34.96	28.47	-3.30	-	41.10	74.00	32.90
1 349.94 ¹⁾	1 000	V	48.10	3.52	-34.66	29.24	-1.90	-	46.20	74.00	27.80
6 932.69	1 000	H	66.30	5.12	-57.14	35.42	-16.60	-	49.70	68.20	18.50
12 914.12	1 000	H	57.10	8.81	-57.62	38.91	-9.90	-	47.20	68.20	21.00
23 297.86	1 000	H	36.00	14.24	-53.11	45.17	6.30	-	42.30	68.20	25.90
37 380.77	1 000	H	41.00	18.79	-53.65	45.46	10.60	-	51.60	68.20	16.60
Average DATA. Emissions above 1 GHz											
1 124.44 ¹⁾	1 000	H	41.50	3.19	-34.96	28.47	-3.30	0.08	38.28	54.00	15.72
1 349.94 ¹⁾	1 000	V	44.80	3.52	-34.66	29.24	-1.90	0.08	42.98	54.00	11.02

¹⁾ Restricted band.

802.11ac VHT20_Highest channel (5 240 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											
1 033.69 ¹⁾	1 000	H	57.80	3.06	-34.62	28.16	-3.40	-	54.40	74.00	19.60
1 349.94 ¹⁾	1 000	V	48.30	3.52	-34.66	29.24	-1.90	-	46.40	74.00	27.60
6 985.88	1 000	H	63.80	5.06	-57.12	35.46	-16.60	-	47.20	68.20	21.00
12 991.75	1 000	H	57.80	8.81	-57.64	38.93	-9.90	-	47.90	68.20	20.30
23 269.26	1 000	H	36.10	14.23	-53.11	45.18	6.30	-	42.40	68.20	25.80
37 770.19	1 000	H	40.00	18.72	-52.21	44.79	11.30	-	51.30	68.20	16.90
Average DATA. Emissions above 1 GHz											
1 033.69 ¹⁾	1 000	H	46.70	3.06	-34.62	28.16	-3.40	0.08	43.38	54.00	10.62
1 349.94 ¹⁾	1 000	V	45.20	3.52	-34.66	29.24	-1.90	0.08	43.38	54.00	10.62

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-SRF0056-B
Page (410) of (450)

**802.11ac VHT40_Lowest channel (5 190 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											
1 349.25 ¹⁾	1 000	V	47.30	3.52	-34.66	29.24	-1.90	-	45.40	74.00	28.60
5 146.31 ¹⁾	1 000	H	53.30	7.13	-35.06	34.43	6.50	-	59.80	74.00	14.20
6 919.75	1 000	H	62.70	5.13	-57.14	35.41	-16.60	-	46.10	68.20	22.10
13 001.81	1 000	H	57.60	8.81	-57.64	38.93	-9.90	-	47.70	68.20	20.50
23 293.46	1 000	H	35.80	14.24	-53.11	45.17	6.30	-	42.10	68.20	26.10
37 749.29	1 000	H	40.10	18.72	-52.35	44.83	11.20	-	51.30	68.20	16.90
Average DATA. Emissions above 1 GHz											
1 349.25 ¹⁾	1 000	V	44.80	3.52	-34.66	29.24	-1.90	0.14	43.04	54.00	10.96
5 146.31 ¹⁾	1 000	H	44.00	7.13	-35.06	34.43	6.50	0.14	50.64	54.00	3.36

¹⁾ Restricted band.

802.11ac VHT40_Middle channel (5 230 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											
1 028.19 ¹⁾	1 000	H	50.30	3.05	-34.59	28.14	-3.40	-	46.90	74.00	27.10
1 349.94 ¹⁾	1 000	V	48.20	3.52	-34.66	29.24	-1.90	-	46.30	74.00	27.70
7 062.06	1 000	H	61.30	5.11	-57.30	35.49	-16.70	-	44.60	68.20	23.60
13 004.69	1 000	H	57.30	8.82	-57.65	38.93	-9.90	-	47.40	68.20	20.80
23 567.38	1 000	H	35.60	14.27	-53.13	45.06	6.20	-	41.80	68.20	26.40
37 837.29	1 000	V	40.00	18.70	-51.98	44.68	11.40	-	51.40	68.20	16.80
Average DATA. Emissions above 1 GHz											
1 028.19 ¹⁾	1 000	H	41.70	3.05	-34.59	28.14	-3.40	0.14	38.44	54.00	15.56
1 349.94 ¹⁾	1 000	V	44.30	3.52	-34.66	29.24	-1.90	0.14	42.54	54.00	11.46

¹⁾ Restricted band.

802.11ac VHT80_Highest channel (5 210 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											
1 349.94 ¹⁾	1 000	V	47.40	3.52	-34.66	29.24	-1.90	-	45.50	74.00	28.50
5 147.69 ¹⁾	1 000	H	51.10	7.13	-35.06	34.43	6.50	-	57.60	74.00	16.40
7 031.88	1 000	H	60.50	5.07	-57.15	35.48	-16.60	-	43.90	68.20	24.30
12 911.25	1 000	H	58.60	8.81	-57.62	38.91	-9.90	-	48.70	68.20	19.50
23 309.96	1 000	V	36.60	14.24	-53.10	45.16	6.30	-	42.90	68.20	25.30
37 767.99	1 000	H	39.70	18.72	-52.22	44.80	11.30	-	51.00	68.20	17.20
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	V	43.50	3.52	-34.66	29.24	-1.90	0.28	41.88	54.00	12.12
5 147.69 ¹⁾	1 000	H	43.90	7.13	-35.06	34.43	6.50	0.28	50.68	54.00	3.32

¹⁾ Restricted band.

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

- MIMO (ANT 0+1)

802.11a_Lowest channel (5 180 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											
1 349.94 ¹⁾	1 000	V	47.80	3.52	-34.66	29.24	-1.90	-	45.90	74.00	28.10
5 131.88 ¹⁾	1 000	H	48.00	7.11	-35.03	34.42	6.50	-	54.50	74.00	19.50
6 906.81	1 000	H	69.40	5.15	-57.16	35.41	-16.60	-	52.80	68.20	15.40
13 032.00	1 000	H	56.90	8.86	-57.68	38.92	-9.90	-	47.00	68.20	21.20
23 192.26	1 000	H	47.90	14.22	-53.13	45.21	6.30	-	54.20	68.20	14.00
37 949.50	1 000	V	45.40	18.68	-51.57	44.49	11.60	-	57.00	68.20	11.20
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	V	45.40	3.52	-34.66	29.24	-1.90	0.14	43.64	54.00	10.36
5 131.88 ¹⁾	1 000	H	41.10	7.11	-35.03	34.42	6.50	0.14	47.74	54.00	6.26

¹⁾ Restricted band.

802.11a_Middle channel (5 200 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											
1 125.13 ¹⁾	1 000	H	45.50	3.19	-34.96	28.47	-3.30	-	42.20	74.00	31.80
1 349.94 ¹⁾	1 000	V	47.90	3.52	-34.66	29.24	-1.90	-	46.00	74.00	28.00
6 932.69	1 000	H	66.80	5.12	-57.14	35.42	-16.60	-	50.20	68.20	18.00
12 942.87	1 000	H	57.30	8.81	-57.63	38.92	-9.90	-	47.40	68.20	20.80
23 129.56	1 000	H	47.00	14.22	-53.16	45.24	6.30	-	53.30	68.20	14.90
37 839.49	1 000	V	45.90	18.70	-51.97	44.67	11.40	-	57.30	68.20	10.90
Average DATA. Emissions above 1 GHz											
1 125.13 ¹⁾	1 000	H	40.10	3.19	-34.96	28.47	-3.30	0.14	36.94	54.00	17.06
1 349.94 ¹⁾	1 000	V	44.90	3.52	-34.66	29.24	-1.90	0.14	43.14	54.00	10.86

802.11a_Highest channel (5 240 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											
1 035.75 ¹⁾	1 000	H	60.20	3.06	-34.62	28.16	-3.40	-	56.80	74.00	17.20
1 349.94 ¹⁾	1 000	V	47.90	3.52	-34.66	29.24	-1.90	-	46.00	74.00	28.00
6 985.88	1 000	H	63.40	5.06	-57.12	35.46	-16.60	-	46.80	68.20	21.40
12 993.19	1 000	H	56.70	8.81	-57.64	38.93	-9.90	-	46.80	68.20	21.40
23 518.97	1 000	H	48.10	14.26	-53.14	45.08	6.20	-	54.30	68.20	13.90
38 059.50	1 000	V	45.50	18.64	-51.33	44.39	11.70	-	57.20	68.20	11.00
Average DATA. Emissions above 1 GHz											
1 035.75 ¹⁾	1 000	H	50.70	3.06	-34.62	28.16	-3.40	0.14	47.44	54.00	6.56
1 349.94 ¹⁾	1 000	V	45.20	3.52	-34.66	29.24	-1.90	0.14	43.44	54.00	10.56

¹⁾ Restricted band.

802.11n HT40_Lowest channel (5 190 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											
1 347.88 ¹⁾	1 000	V	48.30	3.51	-34.64	29.23	-1.90	-	46.40	74.00	27.60
5 147.00 ¹⁾	1 000	H	49.70	7.13	-35.06	34.43	6.50	-	56.20	74.00	17.80
6 919.75	1 000	H	65.50	5.13	-57.14	35.41	-16.60	-	48.90	68.20	19.30
12 898.31	1 000	H	57.70	8.81	-57.62	38.91	-9.90	-	47.80	68.20	20.40
23 208.76	1 000	V	47.80	14.23	-53.13	45.20	6.30	-	54.10	68.20	14.10
37 886.79	1 000	H	45.70	18.69	-51.78	44.59	11.50	-	57.20	68.20	11.00
Average DATA. Emissions above 1 GHz											
1 347.88 ¹⁾	1 000	V	45.60	3.51	-34.64	29.23	-1.90	0.24	43.94	54.00	10.06
5 147.00 ¹⁾	1 000	H	41.40	7.13	-35.06	34.43	6.50	0.24	48.14	54.00	5.86

¹⁾ Restricted band.

802.11n HT40_Middle channel (5 230 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											
1 028.88 ¹⁾	1 000	H	52.40	3.05	-34.59	28.14	-3.40	-	49.00	74.00	25.00
1 349.94 ¹⁾	1 000	V	47.80	3.52	-34.66	29.24	-1.90	-	45.90	74.00	28.10
6 972.94	1 000	H	64.30	5.07	-57.12	35.45	-16.60	-	47.70	68.20	20.50
12 925.62	1 000	H	58.00	8.81	-57.62	38.91	-9.90	-	48.10	68.20	20.10
23 135.06	1 000	H	47.50	14.22	-53.15	45.23	6.30	-	53.80	68.20	14.40
38 209.11	1 000	H	45.70	18.57	-51.04	44.37	11.90	-	57.60	68.20	10.60
Average DATA. Emissions above 1 GHz											
1 028.88 ¹⁾	1 000	H	42.50	3.05	-34.59	28.14	-3.40	0.24	39.34	54.00	14.66
1 349.94 ¹⁾	1 000	V	45.30	3.52	-34.66	29.24	-1.90	0.24	43.64	54.00	10.36

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-SRF0056-B
Page (413) of (450)

**802.11ac VHT20_Lowest channel (5 180 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											
1 349.94 ¹⁾	1 000	H	47.20	3.52	-34.66	29.24	-1.90	-	45.30	74.00	28.70
5 130.50 ¹⁾	1 000	H	49.00	7.11	-35.03	34.42	6.50	-	55.50	74.00	18.50
6 906.81	1 000	H	69.90	5.15	-57.16	35.41	-16.60	-	53.30	68.20	14.90
12 942.87	1 000	H	57.00	8.81	-57.63	38.92	-9.90	-	47.10	68.20	21.10
23 515.67	1 000	V	47.90	14.26	-53.14	45.08	6.20	-	54.10	68.20	14.10
38 028.70	1 000	H	46.10	18.66	-51.36	44.40	11.70	-	57.80	68.20	10.40
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	H	45.40	3.52	-34.66	29.24	-1.90	0.15	43.65	54.00	10.35
5 130.50 ¹⁾	1 000	H	40.70	7.11	-35.03	34.42	6.50	0.15	47.35	54.00	6.65

¹⁾ Restricted band.

802.11ac VHT20_Middle channel (5 200 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											
1 125.13 ¹⁾	1 000	H	45.10	3.19	-34.96	28.47	-3.30	-	41.80	74.00	32.20
1 349.94 ¹⁾	1 000	V	47.80	3.52	-34.66	29.24	-1.90	-	45.90	74.00	28.10
6 932.69	1 000	H	67.60	5.12	-57.14	35.42	-16.60	-	51.00	68.20	17.20
12 957.25	1 000	H	57.50	8.81	-57.63	38.92	-9.90	-	47.60	68.20	20.60
23 160.36	1 000	H	47.70	14.22	-53.14	45.22	6.30	-	54.00	68.20	14.20
38 052.90	1 000	H	45.90	18.64	-51.33	44.39	11.70	-	57.60	68.20	10.60
Average DATA. Emissions above 1 GHz											
1 125.13 ¹⁾	1 000	H	41.30	3.19	-34.96	28.47	-3.30	0.15	38.15	54.00	15.85
1 349.94 ¹⁾	1 000	V	45.10	3.52	-34.66	29.24	-1.90	0.15	43.35	54.00	10.65

802.11ac VHT20_Highest channel (5 240 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											
1 035.75 ¹⁾	1 000	H	57.80	3.06	-34.62	28.16	-3.40	-	54.40	74.00	19.60
1 349.94 ¹⁾	1 000	V	47.30	3.52	-34.66	29.24	-1.90	-	45.40	74.00	28.60
6 985.88	1 000	H	64.30	5.06	-57.12	35.46	-16.60	-	47.70	68.20	20.50
12 911.25	1 000	H	57.60	8.81	-57.62	38.91	-9.90	-	47.70	68.20	20.50
23 208.76	1 000	H	47.60	14.23	-53.13	45.20	6.30	-	53.90	68.20	14.30
37 992.40	1 000	H	45.60	18.67	-51.48	44.41	11.60	-	57.20	68.20	11.00
Average DATA. Emissions above 1 GHz											
1 035.75 ¹⁾	1 000	H	48.90	3.06	-34.62	28.16	-3.40	0.15	45.65	54.00	8.35
1 349.94 ¹⁾	1 000	V	44.70	3.52	-34.66	29.24	-1.90	0.15	42.95	54.00	11.05

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-SRF0056-B

Page (414) of (450)

**802.11ac VHT40_Lowest channel (5 190 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											
1 347.88 ¹⁾	1 000	V	47.30	3.51	-34.64	29.23	-1.90	-	45.40	74.00	28.60
5 149.75 ¹⁾	1 000	H	52.00	7.13	-35.06	34.43	6.50	-	58.50	74.00	15.50
6 919.75	1 000	H	66.00	5.13	-57.14	35.41	-16.60	-	49.40	68.20	18.80
13 000.37	1 000	H	57.00	8.81	-57.64	38.93	-9.90	-	47.10	68.20	21.10
23 210.96	1 000	V	47.60	14.23	-53.13	45.20	6.30	-	53.90	68.20	14.30
37 968.20	1 000	H	46.00	18.68	-51.53	44.45	11.60	-	57.60	68.20	10.60
Average DATA. Emissions above 1 GHz											
1 347.88 ¹⁾	1 000	V	44.50	3.51	-34.64	29.23	-1.90	0.25	42.85	54.00	11.15
5 149.75 ¹⁾	1 000	H	42.50	7.13	-35.06	34.43	6.50	0.25	49.25	54.00	4.75

¹⁾ Restricted band.

802.11ac VHT40_Middle channel (5 230 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											
1 025.44 ¹⁾	1 000	H	55.20	3.05	-34.58	28.13	-3.40	-	51.80	74.00	22.20
1 349.94 ¹⁾	1 000	V	47.90	3.52	-34.66	29.24	-1.90	-	46.00	74.00	28.00
6 972.94	1 000	H	63.80	5.07	-57.12	35.45	-16.60	-	47.20	68.20	21.00
13 062.19	1 000	H	57.50	8.91	-57.83	38.92	-10.00	-	47.50	68.20	20.70
23 195.56	1 000	H	47.40	14.22	-53.13	45.21	6.30	-	53.70	68.20	14.50
38 082.60	1 000	H	45.80	18.63	-51.22	44.39	11.80	-	57.60	68.20	10.60
Average DATA. Emissions above 1 GHz											
1 025.44 ¹⁾	1 000	H	44.50	3.05	-34.58	28.13	-3.40	0.25	41.35	54.00	12.65
1 349.94 ¹⁾	1 000	V	45.00	3.52	-34.66	29.24	-1.90	0.25	43.35	54.00	10.65

802.11ac VHT80_Highest channel (5 210 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											
1 349.94 ¹⁾	1 000	V	48.40	3.52	-34.66	29.24	-1.90	-	46.50	74.00	27.50
5 147.69 ¹⁾	1 000	H	51.80	7.13	-35.06	34.43	6.50	-	58.30	74.00	15.70
6 947.06	1 000	H	65.00	5.10	-57.13	35.43	-16.60	-	48.40	68.20	19.80
12 993.19	1 000	H	57.50	8.81	-57.64	38.93	-9.90	-	47.60	68.20	20.60
23 572.88	1 000	V	47.90	14.27	-53.13	45.06	6.20	-	54.10	68.20	14.10
37 918.70	1 000	H	45.70	18.69	-51.73	44.54	11.50	-	57.20	68.20	11.00
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	V	45.70	3.52	-34.66	29.24	-1.90	0.47	44.27	54.00	9.73
5 147.69 ¹⁾	1 000	H	42.30	7.13	-35.06	34.43	6.50	0.47	49.27	54.00	4.73

¹⁾ Restricted band.

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

- MIMO (ANT 0+1+2)

802.11n HT20_Lowest channel (5 180 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											
1 349.94 ¹⁾	1 000	V	48.10	3.52	-34.66	29.24	-1.90	-	46.20	74.00	27.80
5 149.75 ¹⁾	1 000	H	51.50	7.13	-35.06	34.43	6.50	-	58.00	74.00	16.00
6 906.81	1 000	H	67.40	5.15	-57.16	35.41	-16.60	-	50.80	68.20	17.40
12 928.50	1 000	H	57.20	8.81	-57.62	38.91	-9.90	-	47.30	68.20	20.90
23 257.16	1 000	H	47.20	14.23	-53.11	45.18	6.30	-	53.50	68.20	14.70
37 972.60	1 000	H	46.10	18.68	-51.53	44.45	11.60	-	57.70	68.20	10.50
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	V	44.30	3.52	-34.66	29.24	-1.90	0.17	42.57	54.00	11.43
5 149.75 ¹⁾	1 000	H	40.70	7.13	-35.06	34.43	6.50	0.17	47.37	54.00	6.63

¹⁾ Restricted band.

802.11n HT20_Middle channel (5 200 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											
1 125.13 ¹⁾	1 000	H	44.80	3.19	-34.96	28.47	-3.30	-	41.50	74.00	32.50
1 349.94 ¹⁾	1 000	V	47.30	3.52	-34.66	29.24	-1.90	-	45.40	74.00	28.60
6 932.69	1 000	H	64.40	5.12	-57.14	35.42	-16.60	-	47.80	68.20	20.40
13 009.00	1 000	H	57.50	8.82	-57.65	38.93	-9.90	-	47.60	68.20	20.60
23 542.08	1 000	H	47.30	14.27	-53.14	45.07	6.20	-	53.50	68.20	14.70
37 688.78	1 000	H	46.20	18.73	-52.56	44.93	11.10	-	57.30	68.20	10.90
Average DATA. Emissions above 1 GHz											
1 125.13 ¹⁾	1 000	H	40.70	3.19	-34.96	28.47	-3.30	0.17	37.57	54.00	16.43
1 349.94 ¹⁾	1 000	V	43.30	3.52	-34.66	29.24	-1.90	0.17	41.57	54.00	12.43

802.11n HT20_Highest channel (5 240 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											
1 035.75 ¹⁾	1 000	H	58.10	3.06	-34.62	28.16	-3.40	-	54.70	74.00	19.30
1 349.94 ¹⁾	1 000	V	47.30	3.52	-34.66	29.24	-1.90	-	45.40	74.00	28.60
6 985.88	1 000	H	63.20	5.06	-57.12	35.46	-16.60	-	46.60	68.20	21.60
13 019.06	1 000	H	57.00	8.84	-57.67	38.93	-9.90	-	47.10	68.20	21.10
23 421.07	1 000	H	47.90	14.25	-53.17	45.12	6.20	-	54.10	68.20	14.10
36 851.64	1 000	V	47.40	18.61	-54.48	46.37	10.50	-	57.90	68.20	10.30
Average DATA. Emissions above 1 GHz											
1 035.75 ¹⁾	1 000	H	49.80	3.06	-34.62	28.16	-3.40	0.17	46.57	54.00	7.43
1 349.94 ¹⁾	1 000	V	44.70	3.52	-34.66	29.24	-1.90	0.17	42.97	54.00	11.03

¹⁾ Restricted band.

802.11n HT40_Lowest channel (5 190 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											
1 349.94 ¹⁾	1 000	V	47.40	3.52	-34.66	29.24	-1.90	-	45.50	74.00	28.50
5 149.06 ¹⁾	1 000	H	49.00	7.13	-35.06	34.43	6.50	-	55.50	74.00	18.50
6 919.75	1 000	H	64.50	5.13	-57.14	35.41	-16.60	-	47.90	68.20	20.30
13 029.12	1 000	H	57.70	8.85	-57.67	38.92	-9.90	-	47.80	68.20	20.40
23 173.56	1 000	H	47.20	14.22	-53.14	45.22	6.30	-	53.50	68.20	14.70
37 859.29	1 000	H	45.70	18.70	-51.94	44.64	11.40	-	57.10	68.20	11.10
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	V	44.80	3.52	-34.66	29.24	-1.90	0.33	43.23	54.00	10.77
5 149.06 ¹⁾	1 000	H	41.10	7.13	-35.06	34.43	6.50	0.33	47.93	54.00	6.07

¹⁾ Restricted band.

802.11n HT40_Middle channel (5 230 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											
1 028.19 ¹⁾	1 000	H	51.60	3.05	-34.59	28.14	-3.40	-	48.20	74.00	25.80
1 349.94 ¹⁾	1 000	V	46.90	3.52	-34.66	29.24	-1.90	-	45.00	74.00	29.00
6 972.94	1 000	H	62.70	5.07	-57.12	35.45	-16.60	-	46.10	68.20	22.10
13 072.25	1 000	H	57.40	8.92	-57.84	38.92	-10.00	-	47.40	68.20	20.80
23 289.06	1 000	H	47.80	14.23	-53.10	45.17	6.30	-	54.10	68.20	14.10
37 340.06	1 000	H	46.50	18.80	-53.73	45.53	10.60	-	57.10	68.20	11.10
Average DATA. Emissions above 1 GHz											
1 028.19 ¹⁾	1 000	H	43.20	3.05	-34.59	28.14	-3.40	0.33	40.13	54.00	13.87
1 349.94 ¹⁾	1 000	V	42.80	3.52	-34.66	29.24	-1.90	0.33	41.23	54.00	12.77

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-SRF0056-B
Page (417) of (450)

**802.11ac VHT20_Lowest channel (5 180 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											
1 347.88 ¹⁾	1 000	V	46.50	3.51	-34.64	29.23	-1.90	-	44.60	74.00	29.40
5 144.25 ¹⁾	1 000	H	50.30	7.13	-35.06	34.43	6.50	-	56.80	74.00	17.20
6 906.81	1 000	H	67.30	5.15	-57.16	35.41	-16.60	-	50.70	68.20	17.50
13 003.25	1 000	H	57.60	8.81	-57.64	38.93	-9.90	-	47.70	68.20	20.50
23 286.86	1 000	H	49.00	14.23	-53.10	45.17	6.30	-	55.30	68.20	12.90
37 897.79	1 000	H	45.70	18.69	-51.76	44.57	11.50	-	57.20	68.20	11.00
Average DATA. Emissions above 1 GHz											
1 347.88 ¹⁾	1 000	V	43.70	3.51	-34.64	29.23	-1.90	0.16	41.96	54.00	12.04
5 144.25 ¹⁾	1 000	H	40.30	7.13	-35.06	34.43	6.50	0.16	46.96	54.00	7.04

¹⁾ Restricted band.

802.11ac VHT20_Middle channel (5 200 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											
1 124.44 ¹⁾	1 000	H	45.80	3.19	-34.96	28.47	-3.30	-	42.50	74.00	31.50
1 347.88 ¹⁾	1 000	V	47.10	3.51	-34.64	29.23	-1.90	-	45.20	74.00	28.80
6 932.69	1 000	H	65.50	5.12	-57.14	35.42	-16.60	-	48.90	68.20	19.30
12 911.25	1 000	H	58.60	8.81	-57.62	38.91	-9.90	-	48.70	68.20	19.50
23 477.17	1 000	H	48.90	14.26	-53.15	45.09	6.20	-	55.10	68.20	13.10
37 509.47	1 000	H	46.10	18.77	-53.21	45.24	10.80	-	56.90	68.20	11.30
Average DATA. Emissions above 1 GHz											
1 124.44 ¹⁾	1 000	H	40.30	3.19	-34.96	28.47	-3.30	0.16	37.16	54.00	16.84
1 347.88 ¹⁾	1 000	V	45.10	3.51	-34.64	29.23	-1.90	0.16	43.36	54.00	10.64

802.11ac VHT20_Highest channel (5 240 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											
1 030.94 ¹⁾	1 000	H	58.90	3.05	-34.60	28.15	-3.40	-	55.50	74.00	18.50
1 347.88 ¹⁾	1 000	V	47.70	3.51	-34.64	29.23	-1.90	-	45.80	74.00	28.20
6 985.88	1 000	H	63.80	5.06	-57.12	35.46	-16.60	-	47.20	68.20	21.00
13 024.81	1 000	H	57.40	8.85	-57.68	38.93	-9.90	-	47.50	68.20	20.70
23 323.16	1 000	H	47.80	14.24	-53.10	45.16	6.30	-	54.10	68.20	14.10
37 175.06	1 000	H	46.60	18.83	-54.24	45.81	10.40	-	57.00	74.00	17.00
Average DATA. Emissions above 1 GHz											
1 030.94 ¹⁾	1 000	H	50.10	3.05	-34.60	28.15	-3.40	0.16	46.86	54.00	7.14
1 347.88 ¹⁾	1 000	V	44.80	3.51	-34.64	29.23	-1.90	0.16	43.06	54.00	10.94

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-SRF0056-B

Page (418) of (450)

**802.11ac VHT40_Lowest channel (5 190 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											
1 349.94 ¹⁾	1 000	V	47.00	3.52	-34.66	29.24	-1.90	-	45.10	74.00	28.90
5 146.31 ¹⁾	1 000	H	49.20	7.13	-35.06	34.43	6.50	-	55.70	74.00	18.30
6 919.75	1 000	H	64.80	5.13	-57.14	35.41	-16.60	-	48.20	68.20	20.00
13 037.75	1 000	H	57.40	8.87	-57.69	38.92	-9.90	-	47.50	68.20	20.70
23 495.87	1 000	V	47.90	14.26	-53.15	45.09	6.20	-	54.10	68.20	14.10
37 892.30	1 000	H	45.40	18.69	-51.77	44.58	11.50	-	56.90	68.20	11.30
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	V	43.80	3.52	-34.66	29.24	-1.90	0.33	42.23	54.00	11.77
5 146.31 ¹⁾	1 000	H	40.60	7.13	-35.06	34.43	6.50	0.33	47.43	54.00	6.57

¹⁾ Restricted band.

802.11ac VHT40_Middle channel (5 230 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											
1 022.00 ¹⁾	1 000	H	53.90	3.04	-34.56	28.12	-3.40	-	50.50	74.00	23.50
1 349.94 ¹⁾	1 000	V	46.60	3.52	-34.66	29.24	-1.90	-	44.70	74.00	29.30
6 972.94	1 000	H	63.20	5.07	-57.12	35.45	-16.60	-	46.60	68.20	21.60
13 033.44	1 000	H	57.00	8.86	-57.68	38.92	-9.90	-	47.10	68.20	21.10
23 199.96	1 000	H	47.50	14.22	-53.13	45.21	6.30	-	53.80	68.20	14.40
37 253.16	1 000	H	46.90	18.82	-54.00	45.68	10.50	-	57.40	68.20	10.80
Average DATA. Emissions above 1 GHz											
1 022.00 ¹⁾	1 000	H	45.60	3.04	-34.56	28.12	-3.40	0.33	42.53	54.00	11.47
1 349.94 ¹⁾	1 000	V	42.70	3.52	-34.66	29.24	-1.90	0.33	41.13	54.00	12.87

802.11ac VHT80_Highest channel (5 210 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											
1 349.94 ¹⁾	1 000	V	47.10	3.52	-34.66	29.24	-1.90	-	45.20	74.00	28.80
5 148.38 ¹⁾	1 000	H	51.50	7.13	-35.06	34.43	6.50	-	58.00	74.00	16.00
6 947.06	1 000	H	64.50	5.10	-57.13	35.43	-16.60	-	47.90	68.20	20.30
12 991.75	1 000	H	57.60	8.81	-57.64	38.93	-9.90	-	47.70	68.20	20.50
23 554.18	1 000	V	48.00	14.27	-53.13	45.06	6.20	-	54.20	68.20	14.00
37 903.30	1 000	H	45.40	18.69	-51.76	44.57	11.50	-	56.90	68.20	11.30
Average DATA. Emissions above 1 GHz											
1 349.94 ¹⁾	1 000	V	42.80	3.52	-34.66	29.24	-1.90	0.63	41.53	54.00	12.47
5 148.38 ¹⁾	1 000	H	41.40	7.13	-35.06	34.43	6.50	0.63	48.53	54.00	5.47

¹⁾ Restricted band.

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

- 5 725 Band

- ANT 0

802.11a_Lowest channel (5 745 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											
1 539.69 ¹⁾	1 000	H	55.80	3.79	-35.98	29.89	-2.30	-	53.50	74.00	20.50
5 338.13	1 000	H	54.20	7.32	-35.53	34.51	6.30	-	60.50	68.20	7.70
9 904.00	1 000	H	59.80	7.44	-58.84	36.90	-14.50	-	45.30	68.20	22.90
14 804.44	1 000	H	57.10	10.30	-58.53	39.53	-8.70	-	48.40	68.20	19.80
25 368.17	1 000	H	45.50	15.00	-53.61	45.81	7.20	-	52.70	68.20	15.50
37 574.38	1 000	H	45.80	18.76	-52.99	45.13	10.90	-	56.70	68.20	11.50
Average DATA. Emissions above 1 GHz											
1 539.69 ¹⁾	1 000	H	46.20	3.79	-35.98	29.89	-2.30	0.09	43.99	54.00	10.01

¹⁾ Restricted band.

802.11a_Middle channel (5 785 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											
1 578.19 ¹⁾	1 000	H	57.70	3.85	-35.97	30.02	-2.10	-	55.60	74.00	18.40
5 265.25	1 000	H	53.90	7.25	-35.43	34.48	6.30	-	60.20	68.20	8.00
10 571.00	1 000	H	58.80	7.71	-58.27	37.46	-13.10	-	45.70	68.20	22.50
15 186.81	1 000	H	56.10	10.62	-58.27	39.85	-7.80	-	48.30	68.20	19.90
25 402.27	1 000	H	45.10	15.00	-53.44	45.84	7.40	-	52.50	68.20	15.70
37 588.68	1 000	H	45.80	18.75	-52.95	45.10	10.90	-	56.70	68.20	11.50
Average DATA. Emissions above 1 GHz											
1 578.19 ¹⁾	1 000	H	47.60	3.85	-35.97	30.02	-2.10	0.09	45.59	54.00	8.41

802.11a_Middle channel (5 785 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											
1 617.38 ¹⁾	1 000	H	56.50	3.91	-35.97	30.16	-1.90	-	54.60	74.00	19.40
5 281.75	1 000	H	55.70	7.27	-35.56	34.49	6.20	-	61.90	68.20	6.30
10 060.69	1 000	H	59.60	7.50	-58.75	37.05	-14.20	-	45.40	68.20	22.80
14 916.56	1 000	H	58.60	10.29	-58.34	39.65	-8.40	-	50.20	68.20	18.00
25 414.37	1 000	H	45.30	15.00	-53.45	45.85	7.40	-	52.70	68.20	15.50
37 667.88	1 000	H	46.20	18.74	-52.61	44.97	11.10	-	57.30	68.20	10.90
Average DATA. Emissions above 1 GHz											
1 617.38 ¹⁾	1 000	H	46.70	3.91	-35.97	30.16	-1.90	0.09	44.89	54.00	9.11

¹⁾ Restricted band.

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

802.11n HT20_Lowest channel (5 745 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											
1 539.69 ¹⁾	1 000	H	53.00	3.79	-35.98	29.89	-2.30	-	50.70	74.00	23.30
5 238.44	1 000	H	54.20	7.22	-35.29	34.47	6.40	-	60.60	68.20	7.60
10 218.81	1 000	H	59.40	7.57	-58.65	37.18	-13.90	-	45.50	68.20	22.70
14 913.69	1 000	H	56.50	10.29	-58.33	39.64	-8.40	-	48.10	68.20	20.10
37 828.49	1 000	H	45.20	18.70	-51.99	44.69	11.40	-	56.60	68.20	11.60
25 173.46	1 000	H	46.00	15.03	-54.16	45.63	6.50	-	52.50	68.20	15.70
Average DATA. Emissions above 1 GHz											
1 539.69 ¹⁾	1 000	H	42.70	3.79	-35.98	29.89	-2.30	0.09	40.49	54.00	13.51

¹⁾ Restricted band.

802.11n HT20_Middle channel (5 785 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											
1 576.81 ¹⁾	1 000	H	54.80	3.85	-35.97	30.02	-2.10	-	52.70	74.00	21.30
5 257.69	1 000	H	54.00	7.24	-35.42	34.48	6.30	-	60.30	68.20	7.90
10 026.19	1 000	H	60.40	7.49	-58.71	37.02	-14.20	-	46.20	68.20	22.00
15 034.44	1 000	H	56.80	10.35	-58.20	39.75	-8.10	-	48.70	68.20	19.50
25 297.76	1 000	H	45.70	15.01	-53.86	45.75	6.90	-	52.60	68.20	15.60
37 894.50	1 000	H	45.40	18.69	-51.77	44.58	11.50	-	56.90	68.20	11.30
Average DATA. Emissions above 1 GHz											
1 576.81 ¹⁾	1 000	H	45.10	3.85	-35.97	30.02	-2.10	0.09	43.09	54.00	10.91

802.11n HT20_Highest channel (5 825 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											
1 621.50 ¹⁾	1 000	H	56.00	3.91	-35.88	30.17	-1.80	-	54.20	74.00	19.80
5 327.13	1 000	H	54.50	7.31	-35.61	34.50	6.20	-	60.70	68.20	7.50
10 069.31	1 000	H	59.40	7.51	-58.77	37.06	-14.20	-	45.20	68.20	23.00
15 063.19	1 000	H	56.20	10.40	-58.27	39.77	-8.10	-	48.10	68.20	20.10
25 383.57	1 000	H	44.50	15.00	-53.52	45.82	7.30	-	51.80	68.20	16.40
37 948.40	1 000	H	45.10	18.68	-51.57	44.49	11.60	-	56.70	68.20	11.50
Average DATA. Emissions above 1 GHz											
1 621.50 ¹⁾	1 000	H	45.90	3.91	-35.88	30.17	-1.80	0.09	44.19	54.00	9.81

¹⁾ Restricted band.

802.11n HT40_Lowest channel (5 755 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											
1 548.63 ¹⁾	1 000	H	54.30	3.81	-36.03	29.92	-2.30	-	52.00	74.00	22.00
5 314.06	1 000	H	54.10	7.30	-35.60	34.50	6.20	-	60.30	68.20	7.90
10 144.06	1 000	H	59.30	7.54	-58.66	37.12	-14.00	-	45.30	68.20	22.90
15 287.44	1 000	H	56.10	10.80	-58.21	39.91	-7.50	-	48.60	68.20	19.60
25 448.47	1 000	H	44.40	14.99	-53.27	45.88	7.60	-	52.00	68.20	16.20
37 963.80	1 000	H	45.60	18.68	-51.54	44.46	11.60	-	57.20	68.20	11.00
Average DATA. Emissions above 1 GHz											
1 548.63 ¹⁾	1 000	H	44.70	3.81	-36.03	29.92	-2.30	0.15	42.55	54.00	11.45

¹⁾ Restricted band.

802.11n HT40_Middle channel (5 795 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											
1 590.56 ¹⁾	1 000	H	56.70	3.87	-36.04	30.07	-2.10	-	54.60	74.00	19.40
5 221.25	1 000	H	55.40	7.21	-35.17	34.46	6.50	-	61.90	68.20	6.30
9 817.75	1 000	H	60.20	7.40	-58.81	36.81	-14.60	-	45.60	68.20	22.60
15 160.94	1 000	H	56.50	10.57	-58.20	39.83	-7.80	-	48.70	68.20	19.50
37 988.00	1 000	H	45.00	18.67	-51.49	44.42	11.60	-	56.60	68.20	11.60
25 510.07	1 000	H	44.40	14.98	-53.01	45.93	7.90	-	52.30	68.20	15.90
Average DATA. Emissions above 1 GHz											
1 590.56 ¹⁾	1 000	H	46.20	3.87	-36.04	30.07	-2.10	0.15	44.25	54.00	9.75

802.11ac VHT20_Lowest channel (5 745 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											
1 541.06 ¹⁾	1 000	H	54.40	3.79	-35.99	29.90	-2.30	-	52.10	74.00	21.90
5 466.69	1 000	H	53.20	7.46	-35.52	34.56	6.50	-	59.70	68.20	8.50
10 131.12	1 000	H	59.20	7.53	-58.73	37.10	-14.10	-	45.10	68.20	23.10
15 247.19	1 000	H	55.70	10.73	-58.21	39.88	-7.60	-	48.10	68.20	20.10
25 241.66	1 000	H	45.30	15.02	-54.02	45.70	6.70	-	52.00	68.20	16.20
37 728.38	1 000	H	45.30	18.72	-52.38	44.86	11.20	-	56.50	68.20	11.70
Average DATA. Emissions above 1 GHz											
1 541.06 ¹⁾	1 000	H	43.90	3.79	-35.99	29.90	-2.30	0.09	41.69	54.00	12.31

¹⁾ Restricted band.

802.11ac VHT20_Middle channel (5 785 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											
1 580.25 ¹⁾	1 000	H	57.50	3.85	-35.98	30.03	-2.10	-	55.40	74.00	18.60
5 314.06	1 000	H	54.90	7.30	-35.60	34.50	6.20	-	61.10	68.20	7.10
10 280.62	1 000	H	58.90	7.60	-58.62	37.22	-13.80	-	45.10	68.20	23.10
15 149.44	1 000	H	55.50	10.55	-58.27	39.82	-7.90	-	47.60	68.20	20.60
37 667.88	1 000	H	46.20	18.74	-52.61	44.97	11.10	-	57.30	68.20	10.90
25 363.77	1 000	H	44.70	15.00	-53.60	45.80	7.20	-	51.90	68.20	16.30
Average DATA. Emissions above 1 GHz											
1 580.25 ¹⁾	1 000	H	47.90	3.85	-35.98	30.03	-2.10	0.09	45.89	54.00	8.11

802.11ac VHT20_Highest channel (5 825 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											
1 621.50 ¹⁾	1 000	H	56.00	3.91	-35.88	30.17	-1.80	-	54.20	74.00	19.80
5 327.13	1 000	H	54.50	7.31	-35.61	34.50	6.20	-	60.70	68.20	7.50
10 192.94	1 000	H	59.40	7.56	-58.71	37.15	-14.00	-	45.40	68.20	22.80
15 313.31	1 000	H	56.00	10.84	-58.26	39.92	-7.50	-	48.50	68.20	19.70
25 430.87	1 000	H	44.70	14.99	-53.35	45.86	7.50	-	52.20	68.20	16.00
37 824.09	1 000	H	45.20	18.71	-52.01	44.70	11.40	-	56.60	68.20	11.60
Average DATA. Emissions above 1 GHz											
1 621.50 ¹⁾	1 000	H	47.10	3.91	-35.88	30.17	-1.80	0.09	45.39	54.00	8.61

¹⁾ Restricted band.

802.11ac VHT40_Lowest channel (5 755 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											
1 549.31 ¹⁾	1 000	H	51.50	3.81	-36.03	29.92	-2.30	-	49.20	74.00	24.80
5 301.69	1 000	H	51.70	7.29	-35.58	34.49	6.20	-	57.90	68.20	10.30
10 195.81	1 000	H	58.90	7.56	-58.62	37.16	-13.90	-	45.00	68.20	23.20
14 864.81	1 000	H	57.20	10.30	-58.39	39.59	-8.50	-	48.70	68.20	19.50
25 486.97	1 000	H	44.40	14.99	-53.10	45.91	7.80	-	52.20	68.20	16.00
37 524.88	1 000	H	46.50	18.77	-53.18	45.21	10.80	-	57.30	68.20	10.90
Average DATA. Emissions above 1 GHz											
1 549.31 ¹⁾	1 000	H	42.50	3.81	-36.03	29.92	-2.30	0.15	40.35	54.00	13.65

¹⁾ Restricted band.

802.11ac VHT40_Middle channel (5 795 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											
1 587.81 ¹⁾	1 000	H	56.20	3.86	-36.02	30.06	-2.10	-	54.10	74.00	19.90
5 298.25	1 000	H	55.90	7.28	-35.57	34.49	6.20	-	62.10	68.20	6.10
10 213.06	1 000	H	59.50	7.57	-58.64	37.17	-13.90	-	45.60	68.20	22.60
14 889.25	1 000	H	56.70	10.30	-58.42	39.62	-8.50	-	48.20	68.20	20.00
25 408.87	1 000	V	45.30	15.00	-53.44	45.84	7.40	-	52.70	68.20	15.50
37 728.38	1 000	H	45.40	18.72	-52.38	44.86	11.20	-	56.60	68.20	11.60
Average DATA. Emissions above 1 GHz											
1 587.81 ¹⁾	1 000	H	47.30	3.86	-36.02	30.06	-2.10	0.15	45.35	54.00	8.65

802.11ac VHT80_Highest channel (5 775 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											
1 574.06 ¹⁾	1 000	H	52.90	3.84	-36.05	30.01	-2.20	-	50.70	74.00	23.30
5 237.75	1 000	H	54.20	7.22	-35.29	34.47	6.40	-	60.60	68.20	7.60
10 036.25	1 000	H	59.90	7.49	-58.72	37.03	-14.20	-	45.70	68.20	22.50
14 919.44	1 000	H	57.00	10.29	-58.34	39.65	-8.40	-	48.60	68.20	19.60
25 354.97	1 000	H	44.50	15.00	-53.70	45.80	7.10	-	51.60	68.20	16.60
37 675.58	1 000	H	46.00	18.73	-52.58	44.95	11.10	-	57.10	68.20	11.10
Average DATA. Emissions above 1 GHz											
1 574.06 ¹⁾	1 000	H	42.70	3.84	-36.05	30.01	-2.20	0.26	40.76	54.00	13.24

¹⁾ Restricted band.

- ANT 1

802.11a_Lowest channel (5 745 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											
1 543.13 ¹⁾	1 000	H	56.50	3.80	-36.00	29.90	-2.30	-	54.20	74.00	19.80
5 207.50	1 000	H	54.60	7.19	-35.15	34.46	6.50	-	61.10	68.20	7.10
10 185.75	1 000	H	59.30	7.56	-58.71	37.15	-14.00	-	45.30	68.20	22.90
15 206.94	1 000	H	56.20	10.66	-58.22	39.86	-7.70	-	48.50	68.20	19.70
24 900.64	1 000	H	45.50	14.98	-54.10	45.42	6.30	-	51.80	68.20	16.40
37 678.88	1 000	H	45.50	18.73	-52.58	44.95	11.10	-	56.60	68.20	11.60
Average DATA. Emissions above 1 GHz											
1 543.13 ¹⁾	1 000	H	45.80	3.80	-36.00	29.90	-2.30	0.09	43.59	54.00	10.41

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-SRF0056-B

Page (424) of (450)

**802.11a_Middle channel (5 785 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											
1 574.06 ¹⁾	1 000	H	55.50	3.84	-36.05	30.01	-2.20	-	53.30	74.00	20.70
5 217.81	1 000	H	55.60	7.20	-35.16	34.46	6.50	-	62.10	68.20	6.10
10 119.62	1 000	H	59.40	7.53	-58.73	37.10	-14.10	-	45.30	68.20	22.90
15 186.81	1 000	H	56.00	10.62	-58.27	39.85	-7.80	-	48.20	68.20	20.00
25 231.76	1 000	H	45.50	15.02	-54.01	45.69	6.70	-	52.20	68.20	16.00
37 927.50	1 000	H	45.40	18.68	-51.70	44.52	11.50	-	56.90	68.20	11.30
Average DATA. Emissions above 1 GHz											
1 574.06 ¹⁾	1 000	H	45.20	3.84	-36.05	30.01	-2.20	0.09	43.09	54.00	10.91

802.11a_Middle channel (5 785 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											
1 620.13 ¹⁾	1 000	H	53.50	3.91	-35.88	30.17	-1.80	-	51.70	74.00	22.30
5 178.63	1 000	H	58.70	7.16	-35.10	34.44	6.50	-	65.20	68.20	3.00
10 195.81	1 000	H	59.60	7.56	-58.62	37.16	-13.90	-	45.70	68.20	22.50
15 018.62	1 000	H	56.60	10.32	-58.26	39.74	-8.20	-	48.40	68.20	19.80
25 257.06	1 000	H	45.50	15.02	-53.93	45.71	6.80	-	52.30	68.20	15.90
37 478.67	1 000	H	45.20	18.77	-53.26	45.29	10.80	-	56.00	68.20	12.20
Average DATA. Emissions above 1 GHz											
1 620.13 ¹⁾	1 000	H	44.20	3.91	-35.88	30.17	-1.80	0.09	42.49	54.00	11.51

¹⁾ Restricted band.

802.11n HT20_Lowest channel (5 745 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											
1 539.00 ¹⁾	1 000	H	53.00	3.79	-35.98	29.89	-2.30	-	50.70	74.00	23.30
5 482.50	1 000	H	55.00	7.47	-35.54	34.57	6.50	-	61.50	68.20	6.70
10 230.31	1 000	H	60.10	7.57	-58.65	37.18	-13.90	-	46.20	68.20	22.00
14 938.12	1 000	H	56.20	10.29	-58.26	39.67	-8.30	-	47.90	68.20	20.30
25 154.76	1 000	V	45.30	15.03	-54.15	45.62	6.50	-	51.80	68.20	16.40
37 563.38	1 000	H	45.10	18.76	-53.01	45.15	10.90	-	56.00	68.20	12.20
Average DATA. Emissions above 1 GHz											
1 539.00 ¹⁾	1 000	H	42.90	3.79	-35.98	29.89	-2.30	0.09	40.69	54.00	13.31

¹⁾ Restricted band.

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

802.11n HT20_Middle channel (5 785 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											
1 579.56 ¹⁾	1 000	H	55.00	3.85	-35.98	30.03	-2.10	-	52.90	74.00	21.10
5 152.50	1 000	H	56.10	7.14	-35.07	34.43	6.50	-	62.60	68.20	5.60
10 109.56	1 000	H	59.30	7.52	-58.71	37.09	-14.10	-	45.20	68.20	23.00
14 942.44	1 000	H	58.40	10.29	-58.26	39.67	-8.30	-	50.10	68.20	18.10
25 004.05	1 000	H	47.30	15.05	-54.23	45.48	6.30	-	53.60	68.20	14.60
37 947.30	1 000	H	45.20	18.68	-51.57	44.49	11.60	-	56.80	68.20	11.40
Average DATA. Emissions above 1 GHz											
1 579.56 ¹⁾	1 000	H	44.80	3.85	-35.98	30.03	-2.10	0.09	42.79	54.00	11.21

802.11n HT20_Highest channel (5 825 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											
1 617.38 ¹⁾	1 000	H	54.60	3.91	-35.97	30.16	-1.90	-	52.70	74.00	21.30
5 179.31	1 000	H	55.90	7.16	-35.10	34.44	6.50	-	62.40	68.20	5.80
9 916.94	1 000	H	59.90	7.44	-58.75	36.91	-14.40	-	45.50	68.20	22.70
15 168.12	1 000	H	56.40	10.59	-58.22	39.83	-7.80	-	48.60	68.20	19.60
25 009.55	1 000	H	45.40	15.05	-54.24	45.49	6.30	-	51.70	68.20	16.50
37 882.39	1 000	H	45.80	18.69	-51.79	44.60	11.50	-	57.30	68.20	10.90
Average DATA. Emissions above 1 GHz											
1 617.38 ¹⁾	1 000	H	43.50	3.91	-35.97	30.16	-1.90	0.09	41.69	54.00	12.31

¹⁾ Restricted band.

802.11n HT40_Lowest channel (5 755 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											
1 547.94 ¹⁾	1 000	H	53.00	3.80	-36.02	29.92	-2.30	-	50.70	74.00	23.30
5 196.50	1 000	H	54.00	7.18	-35.13	34.45	6.50	-	60.50	68.20	7.70
9 755.94	1 000	H	60.70	7.37	-58.82	36.75	-14.70	-	46.00	68.20	22.20
15 247.19	1 000	H	56.20	10.73	-58.21	39.88	-7.60	-	48.60	68.20	19.60
25 470.47	1 000	V	45.30	15.00	-53.20	45.90	7.70	-	53.00	68.20	15.20
37 838.39	1 000	H	45.30	18.70	-52.00	44.70	11.40	-	56.70	68.20	11.50
Average DATA. Emissions above 1 GHz											
1 547.94 ¹⁾	1 000	H	44.60	3.80	-36.02	29.92	-2.30	0.15	42.45	54.00	11.55

¹⁾ Restricted band.

802.11n HT40_Middle channel (5 795 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											
1 588.50 ¹⁾	1 000	H	55.10	3.86	-36.02	30.06	-2.10	-	53.00	74.00	21.00
5 162.81	1 000	H	58.00	7.15	-35.09	34.44	6.50	-	64.50	68.20	3.70
10 174.25	1 000	H	59.80	7.55	-58.69	37.14	-14.00	-	45.80	68.20	22.40
15 188.25	1 000	H	56.50	10.62	-58.27	39.85	-7.80	-	48.70	68.20	19.50
25 622.28	1 000	H	44.40	14.97	-52.50	46.03	8.50	-	52.90	68.20	15.30
37 696.48	1 000	H	45.90	18.73	-52.55	44.92	11.10	-	57.00	68.20	11.20
Average DATA. Emissions above 1 GHz											
1 588.50 ¹⁾	1 000	H	46.30	3.86	-36.02	30.06	-2.10	0.15	44.35	54.00	9.65

802.11ac VHT20_Lowest channel (5 745 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											
1 538.31 ¹⁾	1 000	H	55.70	3.79	-35.98	29.89	-2.30	-	53.40	74.00	20.60
5 238.44	1 000	H	53.80	7.22	-35.29	34.47	6.40	-	60.20	68.20	8.00
9 840.75	1 000	H	60.20	7.41	-58.85	36.84	-14.60	-	45.60	68.20	22.60
15 001.37	1 000	H	56.60	10.29	-58.22	39.73	-8.20	-	48.40	68.20	19.80
25 508.97	1 000	H	44.30	14.98	-53.01	45.93	7.90	-	52.20	68.20	16.00
37 690.98	1 000	H	46.30	18.73	-52.56	44.93	11.10	-	57.40	68.20	10.80
Average DATA. Emissions above 1 GHz											
1 538.31 ¹⁾	1 000	H	45.60	3.79	-35.98	29.89	-2.30	0.09	43.39	54.00	10.61

¹⁾ Restricted band.

802.11ac VHT20_Middle channel (5 785 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											
1 580.94 ¹⁾	1 000	H	55.50	3.85	-35.98	30.03	-2.10	-	53.40	74.00	20.60
5 152.50	1 000	H	55.60	7.14	-35.07	34.43	6.50	-	62.10	68.20	6.10
9 826.37	1 000	H	60.20	7.40	-58.82	36.82	-14.60	-	45.60	68.20	22.60
15 083.31	1 000	H	56.50	10.44	-58.22	39.78	-8.00	-	48.50	68.20	19.70
25 708.08	1 000	H	44.20	14.96	-52.17	46.11	8.90	-	53.10	68.20	15.10
37 915.40	1 000	H	45.00	18.69	-51.73	44.54	11.50	-	56.50	68.20	11.70
Average DATA. Emissions above 1 GHz											
1 580.94 ¹⁾	1 000	H	44.70	3.85	-35.98	30.03	-2.10	0.09	42.69	54.00	11.31

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-SRF0056-B
Page (427) of (450)

**802.11ac VHT20_Highest channel (5 825 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											
1 620.81 ¹⁾	1 000	H	55.20	3.91	-35.88	30.17	-1.80	-	53.40	74.00	20.60
5 176.56	1 000	H	56.80	7.16	-35.10	34.44	6.50	-	63.30	68.20	4.90
10 582.50	1 000	H	58.90	7.72	-58.29	37.47	-13.10	-	45.80	68.20	22.40
15 196.87	1 000	H	56.70	10.64	-58.19	39.85	-7.70	-	49.00	68.20	19.20
25 471.57	1 000	H	44.00	14.99	-53.19	45.90	7.70	-	51.70	68.20	16.50
37 708.58	1 000	H	45.30	18.73	-52.43	44.90	11.20	-	56.50	68.20	11.70
Average DATA. Emissions above 1 GHz											
1 620.81 ¹⁾	1 000	H	44.30	3.91	-35.88	30.17	-1.80	0.09	42.59	54.00	11.41

¹⁾ Restricted band.

802.11ac VHT40_Lowest channel (5 755 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											
1 554.81 ¹⁾	1 000	H	53.30	3.81	-36.05	29.94	-2.30	-	51.00	74.00	23.00
5 194.44	1 000	H	53.10	7.18	-35.13	34.45	6.50	-	59.60	68.20	8.60
10 040.56	1 000	H	60.60	7.50	-58.73	37.03	-14.20	-	46.40	68.20	21.80
14 942.44	1 000	H	56.20	10.29	-58.26	39.67	-8.30	-	47.90	68.20	20.30
25 556.28	1 000	H	44.90	14.98	-52.86	45.98	8.10	-	53.00	68.20	15.20
37 937.40	1 000	H	46.20	18.68	-51.59	44.51	11.60	-	57.80	68.20	10.40
Average DATA. Emissions above 1 GHz											
1 554.81 ¹⁾	1 000	H	42.90	3.81	-36.05	29.94	-2.30	0.15	40.75	54.00	13.25

¹⁾ Restricted band.

802.11ac VHT40_Middle channel (5 795 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											
1 587.13 ¹⁾	1 000	H	55.20	3.86	-36.01	30.05	-2.10	-	53.10	74.00	20.90
5 266.63	1 000	H	56.10	7.25	-35.43	34.48	6.30	-	62.40	68.20	5.80
9 819.19	1 000	H	61.10	7.40	-58.81	36.81	-14.60	-	46.50	68.20	21.70
15 089.06	1 000	H	56.00	10.45	-58.24	39.79	-8.00	-	48.00	68.20	20.20
25 375.87	1 000	H	44.30	15.00	-53.61	45.81	7.20	-	51.50	68.20	16.70
37 817.49	1 000	H	45.40	18.71	-52.02	44.71	11.40	-	56.80	68.20	11.40
Average DATA. Emissions above 1 GHz											
1 587.13 ¹⁾	1 000	H	47.90	3.86	-36.01	30.05	-2.10	0.15	45.95	54.00	8.05

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-SRF0056-B
Page (428) of (450)

**802.11ac VHT80_Highest channel (5 775 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											
1 561.00 ¹⁾	1 000	H	51.30	3.82	-35.98	29.96	-2.20	-	49.10	74.00	24.90
5 285.19	1 000	H	56.30	7.27	-35.56	34.49	6.20	-	62.50	68.20	5.70
10 184.31	1 000	H	59.20	7.56	-58.71	37.15	-14.00	-	45.20	68.20	23.00
14 859.06	1 000	H	56.90	10.30	-58.39	39.59	-8.50	-	48.40	68.20	19.80
25 541.98	1 000	H	44.00	14.98	-52.94	45.96	8.00	-	52.00	68.20	16.20
37 841.69	1 000	H	45.00	18.70	-51.97	44.67	11.40	-	56.40	68.20	11.80
Average DATA. Emissions above 1 GHz											
1 561.00 ¹⁾	1 000	H	40.80	3.82	-35.98	29.96	-2.20	0.26	38.86	54.00	15.14

¹⁾ Restricted band.

- ANT 2

802.11a_Lowest channel (5 745 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											
1 539.00 ¹⁾	1 000	H	52.50	3.79	-35.98	29.89	-2.30	-	50.20	74.00	23.80
5 249.44	1 000	H	56.00	7.23	-35.30	34.47	6.40	-	62.40	68.20	5.80
9 991.69	1 000	H	59.50	7.48	-58.77	36.99	-14.30	-	45.20	68.20	23.00
15 245.75	1 000	H	55.50	10.72	-58.20	39.88	-7.60	-	47.90	68.20	20.30
25 280.16	1 000	H	45.00	15.01	-53.94	45.73	6.80	-	51.80	68.20	16.40
37 939.60	1 000	H	44.70	18.68	-51.58	44.50	11.60	-	56.30	68.20	11.90
Average DATA. Emissions above 1 GHz											
1 539.00 ¹⁾	1 000	H	42.70	3.79	-35.98	29.89	-2.30	0.09	40.49	54.00	13.51

¹⁾ Restricted band.

802.11a_Middle channel (5 785 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											
1 578.88 ¹⁾	1 000	H	52.40	3.85	-35.98	30.03	-2.10	-	50.30	74.00	23.70
5 197.19	1 000	H	55.10	7.18	-35.13	34.45	6.50	-	61.60	68.20	6.60
9 879.56	1 000	H	60.10	7.43	-58.81	36.88	-14.50	-	45.60	68.20	22.60
15 196.87	1 000	H	57.30	10.64	-58.19	39.85	-7.70	-	49.60	68.20	18.60
25 050.25	1 000	H	45.30	15.04	-54.26	45.52	6.30	-	51.60	68.20	16.60
37 727.29	1 000	H	45.50	18.72	-52.39	44.87	11.20	-	56.70	68.20	11.50
Average DATA. Emissions above 1 GHz											
1 578.88 ¹⁾	1 000	H	43.10	3.85	-35.98	30.03	-2.10	0.09	41.09	54.00	12.91

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

802.11a_Middle channel (5 785 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											
1 618.06 ¹⁾	1 000	H	49.50	3.91	-35.87	30.16	-1.80	-	47.70	74.00	26.30
5 186.19	1 000	H	54.80	7.17	-35.12	34.45	6.50	-	61.30	68.20	6.90
10 167.06	1 000	H	59.10	7.55	-58.68	37.13	-14.00	-	45.10	68.20	23.10
15 198.31	1 000	H	55.70	10.64	-58.19	39.85	-7.70	-	48.00	68.20	20.20
25 588.18	1 000	H	43.50	14.97	-52.67	46.00	8.30	-	51.80	68.20	16.40
37 558.98	1 000	H	45.90	18.76	-53.01	45.15	10.90	-	56.80	68.20	11.40
Average DATA. Emissions above 1 GHz											
1 618.06 ¹⁾	1 000	H	40.40	3.91	-35.87	30.16	-1.80	0.09	38.69	54.00	15.31

¹⁾ Restricted band.

802.11n HT20_Lowest channel (5 745 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											
1 539.69 ¹⁾	1 000	H	53.30	3.79	-35.98	29.89	-2.30	-	51.00	74.00	23.00
5 197.88	1 000	H	55.20	7.18	-35.13	34.45	6.50	-	61.70	68.20	6.50
9 865.19	1 000	H	60.00	7.42	-58.78	36.86	-14.50	-	45.50	68.20	22.70
14 994.19	1 000	H	56.40	10.29	-58.21	39.72	-8.20	-	48.20	68.20	20.00
25 484.77	1 000	H	43.80	14.99	-53.10	45.91	7.80	-	51.60	68.20	16.60
37 563.38	1 000	H	46.20	18.76	-53.01	45.15	10.90	-	57.10	68.20	11.10
Average DATA. Emissions above 1 GHz											
1 539.69 ¹⁾	1 000	H	43.20	3.79	-35.98	29.89	-2.30	0.09	40.99	54.00	13.01

¹⁾ Restricted band.

802.11n HT20_Middle channel (5 785 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											
1 581.63 ¹⁾	1 000	H	49.30	3.85	-35.98	30.03	-2.10	-	47.20	74.00	26.80
5 176.56	1 000	H	55.40	7.16	-35.10	34.44	6.50	-	61.90	68.20	6.30
9 954.31	1 000	H	60.00	7.46	-58.81	36.95	-14.40	-	45.60	68.20	22.60
14 939.56	1 000	H	56.70	10.29	-58.26	39.67	-8.30	-	48.40	68.20	19.80
25 493.57	1 000	H	44.30	14.99	-53.11	45.92	7.80	-	52.10	68.20	16.10
37 661.28	1 000	H	45.90	18.74	-52.62	44.98	11.10	-	57.00	68.20	11.20
Average DATA. Emissions above 1 GHz											
1 581.63 ¹⁾	1 000	H	40.50	3.85	-35.98	30.03	-2.10	0.09	38.49	54.00	15.51

802.11n HT20_Highest channel (5 825 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											
1 620.81 ¹⁾	1 000	H	48.10	3.91	-35.88	30.17	-1.80	-	46.30	74.00	27.70
5 215.06	1 000	H	55.70	7.20	-35.16	34.46	6.50	-	62.20	68.20	6.00
10 131.12	1 000	H	59.30	7.53	-58.73	37.10	-14.10	-	45.20	68.20	23.00
15 153.75	1 000	H	56.10	10.56	-58.19	39.83	-7.80	-	48.30	68.20	19.90
25 402.27	1 000	H	44.70	15.00	-53.44	45.84	7.40	-	52.10	68.20	16.10
37 728.38	1 000	H	45.50	18.72	-52.38	44.86	11.20	-	56.70	68.20	11.50
Average DATA. Emissions above 1 GHz											
1 620.81 ¹⁾	1 000	H	39.70	3.91	-35.88	30.17	-1.80	0.09	37.99	54.00	16.01

¹⁾ Restricted band.

802.11n HT40_Lowest channel (5 755 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											
1 547.94 ¹⁾	1 000	H	49.00	3.80	-36.02	29.92	-2.30	-	46.70	74.00	27.30
5 219.19	1 000	H	53.70	7.20	-35.16	34.46	6.50	-	60.20	68.20	8.00
10 007.50	1 000	H	59.90	7.48	-58.79	37.01	-14.30	-	45.60	68.20	22.60
15 196.87	1 000	H	56.40	10.64	-58.19	39.85	-7.70	-	48.70	68.20	19.50
25 537.58	1 000	H	43.60	14.98	-52.94	45.96	8.00	-	51.60	68.20	16.60
37 685.48	1 000	H	44.70	18.73	-52.57	44.94	11.10	-	55.80	68.20	12.40
Average DATA. Emissions above 1 GHz											
1 547.94 ¹⁾	1 000	H	40.40	3.80	-36.02	29.92	-2.30	0.15	38.25	54.00	15.75

¹⁾ Restricted band.

802.11n HT40_Middle channel (5 795 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											
1 589.19 ¹⁾	1 000	H	48.60	3.86	-36.02	30.06	-2.10	-	46.50	74.00	27.50
5 210.94	1 000	H	54.80	7.20	-35.16	34.46	6.50	-	61.30	68.20	6.90
10 139.75	1 000	H	59.10	7.54	-58.65	37.11	-14.00	-	45.10	68.20	23.10
15 221.31	1 000	H	56.20	10.68	-58.25	39.87	-7.70	-	48.50	68.20	19.70
25 419.87	1 000	H	44.20	15.00	-53.45	45.85	7.40	-	51.60	68.20	16.60
37 909.90	1 000	H	44.50	18.69	-51.74	44.55	11.50	-	56.00	68.20	12.20
Average DATA. Emissions above 1 GHz											
1 589.19 ¹⁾	1 000	H	38.90	3.86	-36.02	30.06	-2.10	0.15	36.95	54.00	17.05

802.11ac VHT20_Lowest channel (5 745 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											
1 542.44 ¹⁾	1 000	H	53.70	3.80	-36.00	29.90	-2.30	-	51.40	74.00	22.60
5 171.75	1 000	H	55.90	7.16	-35.10	34.44	6.50	-	62.40	68.20	5.80
10 024.75	1 000	H	59.40	7.49	-58.71	37.02	-14.20	-	45.20	68.20	23.00
15 185.37	1 000	H	56.10	10.62	-58.26	39.84	-7.80	-	48.30	68.20	19.90
25 357.17	1 000	H	44.80	15.00	-53.60	45.80	7.20	-	52.00	68.20	16.20
37 852.69	1 000	H	45.00	18.70	-51.95	44.65	11.40	-	56.40	68.20	11.80
Average DATA. Emissions above 1 GHz											
1 542.44 ¹⁾	1 000	H	43.50	3.80	-36.00	29.90	-2.30	0.09	41.29	54.00	12.71

¹⁾ Restricted band.

802.11ac VHT20_Middle channel (5 785 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											
1 578.88 ¹⁾	1 000	H	52.40	3.85	-35.98	30.03	-2.10	-	50.30	74.00	23.70
5 197.19	1 000	H	55.10	7.18	-35.13	34.45	6.50	-	61.60	68.20	6.60
10 067.87	1 000	H	59.50	7.51	-58.76	37.05	-14.20	-	45.30	68.20	22.90
14 907.94	1 000	H	56.50	10.29	-58.33	39.64	-8.40	-	48.10	68.20	20.10
25 426.47	1 000	H	43.60	14.99	-53.35	45.86	7.50	-	51.10	68.20	17.10
37 881.30	1 000	H	44.60	18.69	-51.79	44.60	11.50	-	56.10	68.20	12.10
Average DATA. Emissions above 1 GHz											
1 578.88 ¹⁾	1 000	H	42.70	3.85	-35.98	30.03	-2.10	0.09	40.69	54.00	13.31

802.11ac VHT20_Highest channel (5 825 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											
1 621.50 ¹⁾	1 000	H	49.20	3.91	-35.88	30.17	-1.80	-	47.40	74.00	26.60
5 185.50	1 000	H	54.60	7.17	-35.12	34.45	6.50	-	61.10	68.20	7.10
9 869.50	1 000	H	59.90	7.42	-58.79	36.87	-14.50	-	45.40	68.20	22.80
15 227.06	1 000	H	56.10	10.69	-58.26	39.87	-7.70	-	48.40	68.20	19.80
25 261.46	1 000	H	45.10	15.02	-53.93	45.71	6.80	-	51.90	68.20	16.30
37 791.09	1 000	H	44.60	18.71	-52.17	44.76	11.30	-	55.90	68.20	12.30
Average DATA. Emissions above 1 GHz											
1 621.50 ¹⁾	1 000	H	39.80	3.91	-35.88	30.17	-1.80	0.09	38.09	54.00	15.91

¹⁾ Restricted band.

802.11ac VHT40_Lowest channel (5 755 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											
1 550.00 ¹⁾	1 000	H	50.20	3.81	-36.04	29.93	-2.30	-	47.90	74.00	26.10
5 225.38	1 000	H	53.80	7.21	-35.17	34.46	6.50	-	60.30	68.20	7.90
10 132.56	1 000	H	59.40	7.53	-58.74	37.11	-14.10	-	45.30	68.20	22.90
14 896.44	1 000	H	57.80	10.30	-58.33	39.63	-8.40	-	49.40	68.20	18.80
25 303.26	1 000	H	44.30	15.01	-53.86	45.75	6.90	-	51.20	68.20	17.00
37 648.08	1 000	H	44.70	18.74	-52.64	45.00	11.10	-	55.80	68.20	12.40
Average DATA. Emissions above 1 GHz											
1 550.00 ¹⁾	1 000	H	40.60	3.81	-36.04	29.93	-2.30	0.15	38.45	54.00	15.55

¹⁾ Restricted band.

802.11ac VHT40_Middle channel (5 795 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											
1 590.56 ¹⁾	1 000	H	49.70	3.87	-36.04	30.07	-2.10	-	47.60	74.00	26.40
5 239.81	1 000	H	55.40	7.22	-35.29	34.47	6.40	-	61.80	68.20	6.40
10 203.00	1 000	H	60.00	7.56	-58.62	37.16	-13.90	-	46.10	68.20	22.10
15 119.25	1 000	H	55.90	10.50	-58.20	39.80	-7.90	-	48.00	68.20	20.20
25 400.07	1 000	H	44.30	15.00	-53.54	45.84	7.30	-	51.60	68.20	16.60
37 988.00	1 000	V	45.40	18.67	-51.49	44.42	11.60	-	57.00	68.20	11.20
Average DATA. Emissions above 1 GHz											
1 590.56 ¹⁾	1 000	H	39.80	3.87	-36.04	30.07	-2.10	0.15	37.85	54.00	16.15

802.11ac VHT80_Highest channel (5 775 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											
1 569.25 ¹⁾	1 000	H	46.70	3.84	-36.03	29.99	-2.20	-	44.50	74.00	29.50
5 190.31	1 000	H	55.40	7.17	-35.12	34.45	6.50	-	61.90	68.20	6.30
10 149.81	1 000	H	59.20	7.54	-58.66	37.12	-14.00	-	45.20	68.20	23.00
14 907.94	1 000	H	56.30	10.29	-58.33	39.64	-8.40	-	47.90	68.20	20.30
25 390.17	1 000	V	43.90	15.00	-53.53	45.83	7.30	-	51.20	68.20	17.00
37 595.28	1 000	H	45.00	18.75	-52.84	45.09	11.00	-	56.00	68.20	12.20
Average DATA. Emissions above 1 GHz											
1 569.25 ¹⁾	1 000	H	37.30	3.84	-36.03	29.99	-2.20	0.26	35.36	54.00	18.64

¹⁾ Restricted band.

- MIMO (ANT 0+1)

802.11n HT20_Lowest channel (5 745 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											
1 538.31 ¹⁾	1 000	H	57.10	3.79	-35.98	29.89	-2.30	-	54.80	74.00	19.20
5 298.94	1 000	H	58.90	7.28	-35.57	34.49	6.20	-	65.10	68.20	3.10
10 105.25	1 000	H	59.60	7.52	-58.70	37.08	-14.10	-	45.50	68.20	22.70
15 166.69	1 000	H	55.90	10.59	-58.22	39.83	-7.80	-	48.10	68.20	20.10
25 475.97	1 000	H	43.20	14.99	-53.19	45.90	7.70	-	50.90	68.20	17.30
37 604.08	1 000	H	44.80	18.75	-52.83	45.08	11.00	-	55.80	68.20	12.40
Average DATA. Emissions above 1 GHz											
1 538.31 ¹⁾	1 000	H	46.90	3.79	-35.98	29.89	-2.30	0.14	44.74	54.00	9.26

¹⁾ Restricted band.

802.11n HT20_Middle channel (5 785 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											
1 579.56 ¹⁾	1 000	H	57.90	3.85	-35.98	30.03	-2.10	-	55.80	74.00	18.20
5 246.00	1 000	H	57.20	7.23	-35.30	34.47	6.40	-	63.60	68.20	4.60
9 839.31	1 000	H	60.60	7.41	-58.84	36.83	-14.60	-	46.00	68.20	22.20
15 199.75	1 000	H	56.30	10.64	-58.19	39.85	-7.70	-	48.60	68.20	19.60
25 266.96	1 000	H	44.60	15.02	-53.94	45.72	6.80	-	51.40	68.20	16.80
37 886.79	1 000	H	43.90	18.69	-51.78	44.59	11.50	-	55.40	68.20	12.80
Average DATA. Emissions above 1 GHz											
1 579.56 ¹⁾	1 000	H	47.60	3.85	-35.98	30.03	-2.10	0.14	45.64	54.00	8.36

802.11n HT20_Highest channel (5 825 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											
1 624.94 ¹⁾	1 000	H	56.10	3.92	-35.90	30.18	-1.80	-	54.30	74.00	19.70
5 194.44	1 000	H	57.90	7.18	-35.13	34.45	6.50	-	64.40	68.20	3.80
10 024.75	1 000	H	59.30	7.49	-58.71	37.02	-14.20	-	45.10	68.20	23.10
14 962.56	1 000	H	56.70	10.29	-58.28	39.69	-8.30	-	48.40	68.20	19.80
25 257.06	1 000	H	44.30	15.02	-53.93	45.71	6.80	-	51.10	68.20	17.10
37 891.19	1 000	H	44.20	18.69	-51.78	44.59	11.50	-	55.70	68.20	12.50
Average DATA. Emissions above 1 GHz											
1 624.94 ¹⁾	1 000	H	45.80	3.92	-35.90	30.18	-1.80	0.14	44.14	54.00	9.86

¹⁾ Restricted band.

802.11n HT40_Lowest channel (5 755 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											
1 556.88 ¹⁾	1 000	H	56.30	3.82	-35.97	29.95	-2.20	-	54.10	74.00	19.90
5 261.81	1 000	H	56.30	7.25	-35.43	34.48	6.30	-	62.60	68.20	5.60
10 154.12	1 000	H	59.60	7.54	-58.66	37.12	-14.00	-	45.60	68.20	22.60
15 255.81	1 000	H	56.30	10.74	-58.23	39.89	-7.60	-	48.70	68.20	19.50
25 077.75	1 000	H	44.20	15.04	-54.29	45.55	6.30	-	50.50	68.20	17.70
37 731.69	1 000	H	45.60	18.72	-52.38	44.86	11.20	-	56.80	68.20	11.40
Average DATA. Emissions above 1 GHz											
1 556.88 ¹⁾	1 000	H	45.70	3.82	-35.97	29.95	-2.20	0.24	43.74	54.00	10.26

¹⁾ Restricted band.

802.11n HT40_Middle channel (5 795 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											
1 590.56 ¹⁾	1 000	H	58.00	3.87	-36.04	30.07	-2.10	-	55.90	74.00	18.10
5 250.81	1 000	H	57.10	7.24	-35.31	34.47	6.40	-	63.50	68.20	4.70
9 952.87	1 000	H	59.70	7.46	-58.81	36.95	-14.40	-	45.30	68.20	22.90
15 248.62	1 000	H	55.90	10.73	-58.21	39.88	-7.60	-	48.30	68.20	19.90
25 427.57	1 000	H	43.20	14.99	-53.35	45.86	7.50	-	50.70	68.20	17.50
37 863.69	1 000	H	44.80	18.70	-51.93	44.63	11.40	-	56.20	68.20	12.00
Average DATA. Emissions above 1 GHz											
1 590.56 ¹⁾	1 000	H	47.90	3.87	-36.04	30.07	-2.10	0.24	46.04	54.00	7.96

802.11ac VHT20_Lowest channel (5 745 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											
1 541.06 ¹⁾	1 000	H	58.80	3.79	-35.99	29.90	-2.30	-	56.50	74.00	17.50
5 179.31	1 000	H	56.70	7.16	-35.10	34.44	6.50	-	63.20	68.20	5.00
10 053.50	1 000	H	59.50	7.50	-58.74	37.04	-14.20	-	45.30	68.20	22.90
14 889.25	1 000	H	56.30	10.30	-58.42	39.62	-8.50	-	47.80	68.20	20.40
25 600.28	1 000	H	43.00	14.97	-52.68	46.01	8.30	-	51.30	68.20	16.90
37 738.29	1 000	V	45.20	18.72	-52.37	44.85	11.20	-	56.40	68.20	11.80
Average DATA. Emissions above 1 GHz											
1 541.06 ¹⁾	1 000	H	48.50	3.79	-35.99	29.90	-2.30	0.14	46.34	54.00	7.66

¹⁾ Restricted band.

802.11ac VHT20_Middle channel (5 785 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											
1 587.13 ¹⁾	1 000	H	59.60	3.86	-36.01	30.05	-2.10	-	57.50	74.00	16.50
5 237.06	1 000	H	56.30	7.22	-35.29	34.47	6.40	-	62.70	68.20	5.50
10 134.00	1 000	H	59.90	7.53	-58.74	37.11	-14.10	-	45.80	68.20	22.40
14 932.37	1 000	H	56.80	10.29	-58.35	39.66	-8.40	-	48.40	68.20	19.80
25 609.08	1 000	H	42.80	14.97	-52.59	46.02	8.40	-	51.20	68.20	17.00
37 938.50	1 000	H	44.00	18.68	-51.59	44.51	11.60	-	55.60	68.20	12.60
Average DATA. Emissions above 1 GHz											
1 587.13 ¹⁾	1 000	H	49.20	3.86	-36.01	30.05	-2.10	0.14	47.24	54.00	6.76

802.11ac VHT20_Highest channel (5 825 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											
1 616.00 ¹⁾	1 000	H	58.30	3.90	-35.95	30.15	-1.90	-	56.40	74.00	17.60
5 239.13	1 000	H	57.70	7.22	-35.29	34.47	6.40	-	64.10	68.20	4.10
9 879.56	1 000	H	60.20	7.43	-58.81	36.88	-14.50	-	45.70	68.20	22.50
15 192.56	1 000	H	57.10	10.63	-58.28	39.85	-7.80	-	49.30	68.20	18.90
25 547.48	1 000	H	43.30	14.98	-52.85	45.97	8.10	-	51.40	68.20	16.80
37 839.49	1 000	H	44.70	18.70	-51.97	44.67	11.40	-	56.10	68.20	12.10
Average DATA. Emissions above 1 GHz											
1 616.00 ¹⁾	1 000	H	49.10	3.90	-35.95	30.15	-1.90	0.14	47.34	54.00	6.66

¹⁾ Restricted band.

802.11ac VHT40_Lowest channel (5 755 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											
1 548.63 ¹⁾	1 000	H	58.00	3.81	-36.03	29.92	-2.30	-	55.70	74.00	18.30
5 492.81	1 000	H	56.60	7.48	-35.45	34.57	6.60	-	63.20	68.20	5.00
9 878.12	1 000	H	60.10	7.43	-58.80	36.87	-14.50	-	45.60	68.20	22.60
15 106.31	1 000	H	56.30	10.48	-58.28	39.80	-8.00	-	48.30	68.20	19.90
25 363.77	1 000	H	43.60	15.00	-53.60	45.80	7.20	-	50.80	68.20	17.40
37 740.49	1 000	H	44.90	18.72	-52.36	44.84	11.20	-	56.10	68.20	12.10
Average DATA. Emissions above 1 GHz											
1 548.62 ¹⁾	1 000	H	47.90	3.81	-36.03	29.92	-2.30	0.26	45.86	54.00	8.14

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-SRF0056-B

Page (436) of (450)

**802.11ac VHT40_Middle channel (5 795 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											
1 591.25 ¹⁾	1 000	H	57.30	3.87	-36.04	30.07	-2.10	-	55.20	74.00	18.80
5 157.31	1 000	H	57.50	7.14	-35.07	34.43	6.50	-	64.00	68.20	4.20
9 935.62	1 000	H	60.00	7.45	-58.78	36.93	-14.40	-	45.60	68.20	22.60
14 961.12	1 000	H	56.70	10.29	-58.28	39.69	-8.30	-	48.40	68.20	19.80
25 123.95	1 000	H	44.80	15.03	-54.22	45.59	6.40	-	51.20	68.20	17.00
37 783.39	1 000	H	44.30	18.71	-52.18	44.77	11.30	-	55.60	68.20	12.60
Average DATA. Emissions above 1 GHz											
1 591.25 ¹⁾	1 000	H	46.80	3.87	-36.04	30.07	-2.10	0.26	44.96	54.00	9.04

802.11ac VHT80_Highest channel (5 775 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											
1 572.69 ¹⁾	1 000	H	53.90	3.84	-36.04	30.00	-2.20	-	51.70	74.00	22.30
5 193.75	1 000	H	57.50	7.18	-35.13	34.45	6.50	-	64.00	68.20	4.20
9 850.81	1 000	H	59.90	7.41	-58.86	36.85	-14.60	-	45.30	68.20	22.90
14 863.37	1 000	H	56.50	10.30	-58.39	39.59	-8.50	-	48.00	68.20	20.20
25 348.37	1 000	H	44.00	15.00	-53.69	45.79	7.10	-	51.10	68.20	17.10
37 992.40	1 000	H	44.50	18.67	-51.48	44.41	11.60	-	56.10	68.20	12.10
Average DATA. Emissions above 1 GHz											
1 572.69 ¹⁾	1 000	H	44.10	3.84	-36.04	30.00	-2.20	0.49	42.39	54.00	11.61

¹⁾ Restricted band.

- MIMO (ANT 0+1+2)

802.11n HT20_Lowest channel (5 745 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											
1 538.31 ¹⁾	1 000	H	56.20	3.79	-35.98	29.89	-2.30	-	53.90	74.00	20.10
5 334.00	1 000	H	58.30	7.32	-35.53	34.51	6.30	-	64.60	68.20	3.60
10 069.31	1 000	H	60.10	7.51	-58.77	37.06	-14.20	-	45.90	68.20	22.30
14 851.87	1 000	H	56.70	10.30	-58.38	39.58	-8.50	-	48.20	68.20	20.00
25 259.26	1 000	H	44.60	15.02	-53.93	45.71	6.80	-	51.40	68.20	16.80
37 941.80	1 000	H	44.50	18.68	-51.58	44.50	11.60	-	56.10	68.20	12.10
Average DATA. Emissions above 1 GHz											
1 538.31 ¹⁾	1 000	H	45.50	3.79	-35.98	29.89	-2.30	0.20	43.40	54.00	10.60

¹⁾ Restricted band.

802.11n HT20_Middle channel (5 785 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											
1 585.06 ¹⁾	1 000	H	55.50	3.86	-36.01	30.05	-2.10	-	53.40	74.00	20.60
5 189.63	1 000	H	57.20	7.17	-35.12	34.45	6.50	-	63.70	68.20	4.50
9 873.81	1 000	H	59.80	7.42	-58.79	36.87	-14.50	-	45.30	68.20	22.90
15 057.44	1 000	H	56.30	10.39	-58.26	39.77	-8.10	-	48.20	68.20	20.00
25 359.37	1 000	H	43.60	15.00	-53.60	45.80	7.20	-	50.80	68.20	17.40
37 892.30	1 000	H	44.40	18.69	-51.77	44.58	11.50	-	55.90	68.20	12.30
Average DATA. Emissions above 1 GHz											
1 585.06 ¹⁾	1 000	H	45.10	3.86	-36.01	30.05	-2.10	0.20	43.20	54.00	10.80

802.11n HT20_Middle channel (5 785 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											
1 619.44 ¹⁾	1 000	H	53.90	3.91	-35.87	30.16	-1.80	-	52.10	74.00	21.90
5 157.31	1 000	H	57.40	7.14	-35.07	34.43	6.50	-	63.90	68.20	4.30
10 034.81	1 000	H	59.50	7.49	-58.72	37.03	-14.20	-	45.30	68.20	22.90
14 857.62	1 000	H	57.20	10.30	-58.39	39.59	-8.50	-	48.70	68.20	19.50
25 183.36	1 000	H	44.40	15.03	-54.17	45.64	6.50	-	50.90	68.20	17.30
37 866.99	1 000	H	44.10	18.70	-51.93	44.63	11.40	-	55.50	68.20	12.70
Average DATA. Emissions above 1 GHz											
1 619.43 ¹⁾	1 000	H	43.60	3.91	-35.87	30.16	-1.80	0.20	42.00	54.00	12.00

¹⁾ Restricted band.

802.11n HT40_Lowest channel (5 755 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											
1 550.00 ¹⁾	1 000	H	57.30	3.81	-36.04	29.93	-2.30	-	55.00	74.00	19.00
5 184.81	1 000	H	56.00	7.17	-35.12	34.45	6.50	-	62.50	68.20	5.70
10 016.12	1 000	H	60.10	7.49	-58.80	37.01	-14.30	-	45.80	68.20	22.40
14 851.87	1 000	H	57.30	10.30	-58.38	39.58	-8.50	-	48.80	68.20	19.40
25 346.17	1 000	H	43.90	15.00	-53.69	45.79	7.10	-	51.00	68.20	17.20
37 822.99	1 000	V	43.90	18.71	-52.01	44.70	11.40	-	55.30	68.20	12.90
Average DATA. Emissions above 1 GHz											
1 550.00 ¹⁾	1 000	H	47.60	3.81	-36.04	29.93	-2.30	0.33	45.63	54.00	8.37

¹⁾ Restricted band.

802.11n HT40_Middle channel (5 795 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											
1 585.06 ¹⁾	1 000	H	56.50	3.86	-36.01	30.05	-2.10	-	54.40	74.00	19.60
5 211.63	1 000	H	57.40	7.20	-35.16	34.46	6.50	-	63.90	68.20	4.30
10 138.31	1 000	H	60.10	7.54	-58.75	37.11	-14.10	-	46.00	68.20	22.20
15 122.12	1 000	H	56.20	10.51	-58.22	39.81	-7.90	-	48.30	68.20	19.90
25 446.27	1 000	H	43.20	14.99	-53.27	45.88	7.60	-	50.80	68.20	17.40
38 114.50	1 000	H	44.20	18.61	-51.20	44.39	11.80	-	56.00	68.20	12.20
Average DATA. Emissions above 1 GHz											
1 585.06 ¹⁾	1 000	H	45.40	3.86	-36.01	30.05	-2.10	0.33	43.63	54.00	10.37

802.11ac VHT20_Lowest channel (5 745 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											
1 538.31 ¹⁾	1 000	H	57.20	3.79	-35.98	29.89	-2.30	-	54.90	74.00	19.10
5 191.00	1 000	H	55.80	7.17	-35.12	34.45	6.50	-	62.30	68.20	5.90
9 911.19	1 000	H	60.00	7.44	-58.75	36.91	-14.40	-	45.60	68.20	22.60
14 928.06	1 000	H	56.40	10.29	-58.35	39.66	-8.40	-	48.00	68.20	20.20
25 418.77	1 000	H	43.40	15.00	-53.45	45.85	7.40	-	50.80	68.20	17.40
37 715.18	1 000	H	44.40	18.73	-52.42	44.89	11.20	-	55.60	68.20	12.60
Average DATA. Emissions above 1 GHz											
1 538.31 ¹⁾	1 000	H	46.90	3.79	-35.98	29.89	-2.30	0.18	44.78	54.00	9.22

¹⁾ Restricted band.

802.11ac VHT20_Middle channel (5 785 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											
1 581.63 ¹⁾	1 000	H	55.30	3.85	-35.98	30.03	-2.10	-	53.20	74.00	20.80
5 213.69	1 000	H	57.20	7.20	-35.16	34.46	6.50	-	63.70	68.20	4.50
10 146.94	1 000	H	59.30	7.54	-58.66	37.12	-14.00	-	45.30	68.20	22.90
15 044.50	1 000	H	56.60	10.37	-58.23	39.76	-8.10	-	48.50	68.20	19.70
25 371.47	1 000	H	43.90	15.00	-53.61	45.81	7.20	-	51.10	68.20	17.10
37 991.30	1 000	H	44.30	18.67	-51.48	44.41	11.60	-	55.90	68.20	12.30
Average DATA. Emissions above 1 GHz											
1 581.63 ¹⁾	1 000	H	44.70	3.85	-35.98	30.03	-2.10	0.18	42.78	54.00	11.22

802.11ac VHT20_Highest channel (5 825 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											
1 619.44 ¹⁾	1 000	H	55.20	3.91	-35.87	30.16	-1.80	-	53.40	74.00	20.60
5 202.00	1 000	H	56.90	7.19	-35.14	34.45	6.50	-	63.40	68.20	4.80
10 129.69	1 000	H	59.20	7.53	-58.73	37.10	-14.10	-	45.10	68.20	23.10
15 192.56	1 000	H	56.30	10.63	-58.28	39.85	-7.80	-	48.50	68.20	19.70
25 611.28	1 000	H	43.10	14.97	-52.59	46.02	8.40	-	51.50	68.20	16.70
37 939.60	1 000	H	44.90	18.68	-51.58	44.50	11.60	-	56.50	68.20	11.70
Average DATA. Emissions above 1 GHz											
1 619.44 ¹⁾	1 000	H	45.80	3.91	-35.87	30.16	-1.80	0.18	44.18	54.00	9.82

¹⁾ Restricted band.

802.11ac VHT40_Lowest channel (5 755 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											
1 547.94 ¹⁾	1 000	H	57.00	3.80	-36.02	29.92	-2.30	-	54.70	74.00	19.30
5 226.06	1 000	H	56.30	7.21	-35.17	34.46	6.50	-	62.80	68.20	5.40
10 136.87	1 000	H	59.60	7.54	-58.75	37.11	-14.10	-	45.50	68.20	22.70
15 112.06	1 000	H	56.00	10.49	-58.19	39.80	-7.90	-	48.10	68.20	20.10
25 417.67	1 000	H	43.30	15.00	-53.45	45.85	7.40	-	50.70	68.20	17.50
37 901.10	1 000	H	44.40	18.69	-51.76	44.57	11.50	-	55.90	68.20	12.30
Average DATA. Emissions above 1 GHz											
1 547.94 ¹⁾	1 000	H	47.00	3.80	-36.02	29.92	-2.30	0.31	45.01	54.00	8.99

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-SRF0056-B
Page (440) of (450)

**802.11ac VHT40_Middle channel (5 795 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											
1 589.19 ¹⁾	1 000	H	56.30	3.86	-36.02	30.06	-2.10	-	54.20	74.00	19.80
5 207.50	1 000	H	56.80	7.19	-35.15	34.46	6.50	-	63.30	68.20	4.90
10 148.37	1 000	H	59.80	7.54	-58.66	37.12	-14.00	-	45.80	68.20	22.40
15 090.50	1 000	H	56.40	10.45	-58.24	39.79	-8.00	-	48.40	68.20	19.80
25 480.37	1 000	H	43.20	14.99	-53.20	45.91	7.70	-	50.90	68.20	17.30
37 620.58	1 000	H	44.50	18.75	-52.80	45.05	11.00	-	55.50	68.20	12.70
Average DATA. Emissions above 1 GHz											
1 589.19 ¹⁾	1 000	H	45.90	3.86	-36.02	30.06	-2.10	0.31	44.11	54.00	9.89

802.11ac VHT80_Highest channel (5 775 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											
1 578.88 ¹⁾	1 000	H	55.60	3.85	-35.98	30.03	-2.10	-	53.50	74.00	20.50
5 189.63	1 000	H	57.10	7.17	-35.12	34.45	6.50	-	63.60	68.20	4.60
9 832.12	1 000	H	60.00	7.41	-58.84	36.83	-14.60	-	45.40	68.20	22.80
14 953.94	1 000	H	56.60	10.29	-58.27	39.68	-8.30	-	48.30	68.20	19.90
25 419.87	1 000	H	43.50	15.00	-53.45	45.85	7.40	-	50.90	68.20	17.30
38 078.20	1 000	H	43.50	18.63	-51.22	44.39	11.80	-	55.30	68.20	12.90
Average DATA. Emissions above 1 GHz											
1 578.88 ¹⁾	1 000	H	46.00	3.85	-35.98	30.03	-2.10	0.61	44.51	54.00	9.49

¹⁾ Restricted band.

5.6 Frequency Stability

5.6.1 Regulation

According to §15.407 (g) Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

5.6.2 Measurement Procedure

The frequency stability of the carrier frequency of the intentional radiator shall be maintained all conditions of normal operation as specified in the users manual. The frequency stability shall be maintained over a temperature variation of specified in the users manual at normal supply voltage, and over a variation in the primary supply voltage of specified in the users manual of the rated supply voltage at a temperature of 20 °C. For equipment that is capable only of operating from a battery, the frequency stability tests shall be performed using a new battery without any further requirement to vary supply voltage.

1. The EUT was placed inside the environmental test chamber.
2. The temperature was incremented by 10 °C intervals from lowest temperature.
3. Each increase step of temperature measured the frequency.
4. The test temperature was set 20°C and the supply voltage was then adjusted on the EUT from 85 % to 115% and the frequency record.

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-SRF0056-B

Page (442) of (450)



5.6.3 Test Result

-Complied

- 5 150 Band

-5 180 MHz

Voltage [%]	Power [W]	Temp. [°C]	Reading Frequency [Hz]	Frequency Error [Hz]	Frequency Error [%]
100	5.00	-20	5 180 033 100	-33 100	-0.000 6
		-10	5 180 043 750	-43 750	-0.000 8
		0	5 179 999 350	650	0.000 0
		10	5 180 054 400	-54 400	-0.001 1
		20	5 180 011 850	-11 850	-0.000 2
		30	5 179 933 600	66 400	0.001 3
		40	5 179 968 750	31 250	0.000 6
		50	5 180 014 400	-14 400	-0.000 3
85	4.25	20	5 180 006 250	-6 250	-0.000 1
115	5.75	20	5 180 006 250	-6 250	-0.000 1

-5 200 MHz

Voltage [%]	Power [W]	Temp. [°C]	Reading Frequency [Hz]	Frequency Error [Hz]	Frequency Error [%]
100	5.00	-20	5 200 076 250	-76 250	-0.001 5
		-10	5 200 076 250	-76 250	-0.001 5
		0	5 199 971 850	28 150	0.000 5
		10	5 200 033 750	-33 750	-0.000 6
		20	5 199 948 100	51 900	0.001 0
		30	5 200 018 750	-18 750	-0.000 4
		40	5 200 005 000	-5 000	-0.000 1
		50	5 199 976 250	23 750	0.000 5
85	4.25	20	5 199 956 250	43 750	0.000 8
115	5.75	20	5 199 954 400	45 600	0.000 9

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-SRF0056-B

Page (443) of (450)



-5 240 MHz

Voltage [%]	Power [W]	Temp. [°C]	Reading Frequency [Hz]	Frequency Error [Hz]	Frequency Error [%]
100	5.00	-20	5 240 096 850	-96 850	-0.001 8
		-10	5 239 996 250	3 750	0.000 1
		0	5 240 010 650	-10 650	-0.000 2
		10	5 239 949 400	50 600	0.001 0
		20	5 239 981 250	18 750	0.000 4
		30	5 239 948 750	51 250	0.001 0
		40	5 240 056 850	-56 850	-0.001 1
		50	5 239 996 250	3 750	0.000 1
85	4.25	20	5 239 971 250	28 750	0.000 5
115	5.75	20	5 239 996 250	3 750	0.000 1

-5 190 MHz

Voltage [%]	Power [W]	Temp. [°C]	Reading Frequency [Hz]	Frequency Error [Hz]	Frequency Error [%]
100	5.00	-20	5 190 186 250	-186 250	-0.003 6
		-10	5 190 066 250	-66 250	-0.001 3
		0	5 190 057 500	-57 500	-0.001 1
		10	5 190 023 750	-23 750	-0.000 5
		20	5 189 920 000	80 000	0.001 5
		30	5 190 003 750	-3 750	-0.000 1
		40	5 189 887 500	112 500	0.002 2
		50	5 189 991 250	8 750	0.000 2
85	4.25	20	5 190 097 500	-97 500	-0.001 9
115	5.75	20	5 189 945 000	55 000	0.001 1

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-SRF0056-B

Page (444) of (450)

KCTL

-5 230 MHz

Voltage [%]	Power [W]	Temp. [°C]	Reading Frequency [Hz]	Frequency Error [Hz]	Frequency Error [%]
100	5.00	-20	5 230 001 250	-1 250	0.000 0
		-10	5 230 010 000	-10 000	-0.000 2
		0	5 229 928 750	71 250	0.001 4
		10	5 230 078 750	-78 750	-0.001 5
		20	5 229 870 000	130 000	0.002 5
		30	5 229 953 750	46 250	0.000 9
		40	5 229 943 750	56 250	0.001 1
		50	5 229 902 500	97 500	0.001 9
85	4.25	20	5 230 132 500	-132 500	-0.002 5
115	5.75	20	5 229 985 000	15 000	0.000 3

-5 210 MHz

Voltage [%]	Power [W]	Temp. [°C]	Reading Frequency [Hz]	Frequency Error [Hz]	Frequency Error [%]
100	5.00	-20	5 210 062 500	-62 500	-0.001 2
		-10	5 210 007 500	-7 500	-0.000 1
		0	5 210 132 500	-132 500	-0.002 5
		10	5 209 910 000	90 000	0.001 7
		20	5 210 085 000	-85 000	-0.001 6
		30	5 209 937 500	62 500	0.001 2
		40	5 210 030 000	-30 000	-0.000 6
		50	5 210 075 000	-75 000	-0.001 4
85	4.25	20	5 209 997 500	2 500	0.000 0
115	5.75	20	5 210 065 000	-65 000	-0.001 2

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-SRF0056-B

Page (445) of (450)

KCTL**- 5 725 Band****-5 745 MHz**

Voltage [%]	Power [W]	Temp. [°C]	Reading Frequency [Hz]	Frequency Error [Hz]	Frequency Error [%]
100	3.30	-20	5 744 978 750	21 250	0.000 4
		-10	5 745 032 500	-32 500	-0.000 6
		0	5 744 945 600	54 400	0.000 9
		10	5 745 021 900	-21 900	-0.000 4
		20	5 744 933 750	66 250	0.001 2
		30	5 744 982 500	17 500	0.000 3
		40	5 744 933 750	66 250	0.001 2
		50	5 744 991 850	8 150	0.000 1
85	2.81	20	5 744 989 350	10 650	0.000 2
115	3.80	20	5 744 963 150	36 850	0.000 6

-5 785 MHz

Voltage [%]	Power [W]	Temp. [°C]	Reading Frequency [Hz]	Frequency Error [Hz]	Frequency Error [%]
100	3.30	-20	5 784 954 350	45 650	0.000 8
		-10	5 785 036 850	-36 850	-0.000 6
		0	5 784 959 350	40 650	0.000 7
		10	5 785 025 600	-25 600	-0.000 4
		20	5 784 972 500	27 500	0.000 5
		30	5 785 007 500	-7 500	-0.000 1
		40	5 784 982 500	17 500	0.000 3
		50	5 784 982 500	17 500	0.000 3
85	2.81	20	5 784 975 000	25 000	0.000 4
115	3.80	20	5 784 990 000	10 000	0.000 2

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-SRF0056-B

Page (446) of (450)



-5 825 MHz

Voltage [%]	Power [W]	Temp. [°C]	Reading Frequency [Hz]	Frequency Error [Hz]	Frequency Error [%]
100	3.30	-20	5 825 057 500	-57 500	-0.001 0
		-10	5 824 963 750	36 250	0.000 6
		0	5 824 999 400	600	0.000 0
		10	5 824 970 000	30 000	0.000 5
		20	5 824 979 400	20 600	0.000 4
		30	5 824 966 900	33 100	0.000 6
		40	5 824 949 400	50 600	0.000 9
		50	5 824 948 150	51 850	0.000 9
85	2.81	20	5 824 963 100	36 900	0.000 6
115	3.80	20	5 824 970 600	29 400	0.000 5

-5 755 MHz

Voltage [%]	Power [W]	Temp. [°C]	Reading Frequency [Hz]	Frequency Error [Hz]	Frequency Error [%]
100	3.30	-20	5 755 023 750	-23 750	-0.000 4
		-10	5 754 953 750	46 250	0.000 8
		0	5 755 008 750	-8 750	-0.000 2
		10	5 755 060 000	-60 000	-0.001 0
		20	5 754 912 500	87 500	0.001 5
		30	5 754 895 000	105 000	0.001 8
		40	5 754 865 000	135 000	0.002 3
		50	5 754 875 000	125 000	0.002 2
85	2.81	20	5 754 972 500	27 500	0.000 5
115	3.80	20	5 754 898 750	101 250	0.001 8

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-SRF0056-B

Page (447) of (450)

KCTL

-5 795 MHz

Voltage [%]	Power [W]	Temp. [°C]	Reading Frequency [Hz]	Frequency Error [Hz]	Frequency Error [%]
100	3.30	-20	5 794 936 250	63 750	0.001 1
		-10	5 794 962 500	37 500	0.000 6
		0	5 794 892 500	107 500	0.001 9
		10	5 794 965 000	35 000	0.000 6
		20	5 794 851 250	148 750	0.002 6
		30	5 794 928 750	71 250	0.001 2
		40	5 794 962 500	37 500	0.000 6
		50	5 794 853 750	146 250	0.002 5
85	2.81	20	5 794 998 750	1 250	0.000 0
115	3.80	20	5 794 995 000	5 000	0.000 1

-5 775 MHz

Voltage [%]	Power [W]	Temp. [°C]	Reading Frequency [Hz]	Frequency Error [Hz]	Frequency Error [%]
100	3.30	-20	5 774 912 500	87 500	0.001 5
		-10	5 774 927 500	72 500	0.001 3
		0	5 774 875 000	125 000	0.002 2
		10	5 774 927 500	72 500	0.001 3
		20	5 774 865 000	135 000	0.002 3
		30	5 774 855 000	145 000	0.002 5
		40	5 774 847 500	152 500	0.002 6
		50	5 774 917 500	82 500	0.001 4
85	2.81	20	5 774 715 000	285 000	0.004 9
115	3.80	20	5 774 970 000	30 000	0.000 5

5.7 Conducted Emission

5.7.1 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.

5.7.2 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.

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-SRF0056-B
Page (449) of (450)

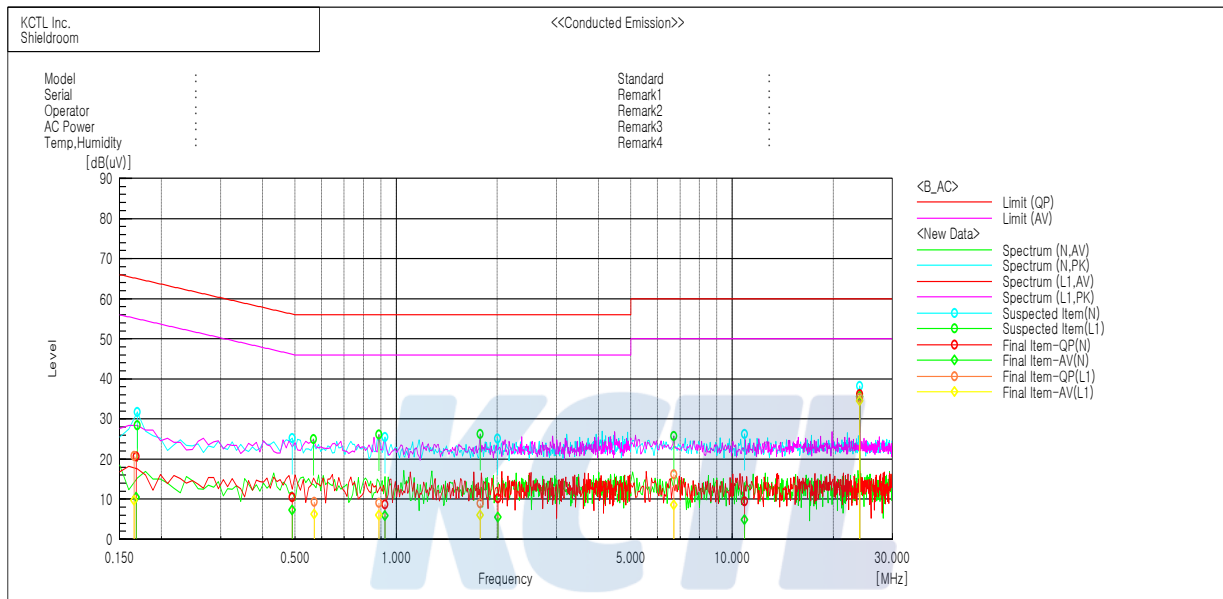


5.7.3 Test Result

- Complied

Figure 4. plot of Conducted Emission

- Conducted worst-case data : 802.11a_ANT 0_Lowest Chanel (5 785 MHz)



Final Result

--- N Phase ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading CAV [dB(μV)]	c.f. [dB]	Result QP [dB(μV)]	Result CAV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin CAV [dB]
1	0.16832	10.5	0.3	10.1	20.6	10.4	65.0	55.0	44.4	44.6
2	0.48954	0.6	-2.5	9.8	10.4	7.3	56.2	46.2	45.8	38.9
3	0.92462	-1.1	-3.8	9.7	8.6	5.9	56.0	46.0	47.4	40.1
4	2.00746	0.4	-4.2	9.7	10.1	5.5	56.0	46.0	45.9	40.5
5	10.9016	-0.5	-5.1	9.9	9.4	4.8	60.0	50.0	50.6	45.2
6	23.99776	26.1	25.4	10.1	36.2	35.5	60.0	50.0	23.8	14.5

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading CAV [dB(μV)]	c.f. [dB]	Result QP [dB(μV)]	Result CAV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin CAV [dB]
1	0.16594	10.7	-0.5	10.1	20.8	9.6	65.2	55.2	44.4	45.6
2	0.56928	-0.6	-3.7	9.9	9.3	6.2	56.0	46.0	46.7	39.8
3	0.88878	-0.8	-3.8	9.8	9.0	6.0	56.0	46.0	47.0	40.0
4	1.7758	-0.9	-3.8	9.8	8.9	6.0	56.0	46.0	47.1	40.0
5	6.70102	6.3	-1.3	9.9	16.2	8.6	60.0	50.0	43.8	41.4
6	24.00142	25.2	24.5	10.1	35.3	34.6	60.0	50.0	24.7	15.4

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-SRF0056-B
Page (450) of (450)



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	18.08.25
■	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
■	High Pass Filter	WT	WT-A1699-HS	WT160411002	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	-	-
■	Cable Assembly	JUNFLON	MWX221-DMSDMS	J1012214	-
■	Turn Table	Innco Systems	DT2000S-1t	79	-