



**CTK Co., Ltd.**

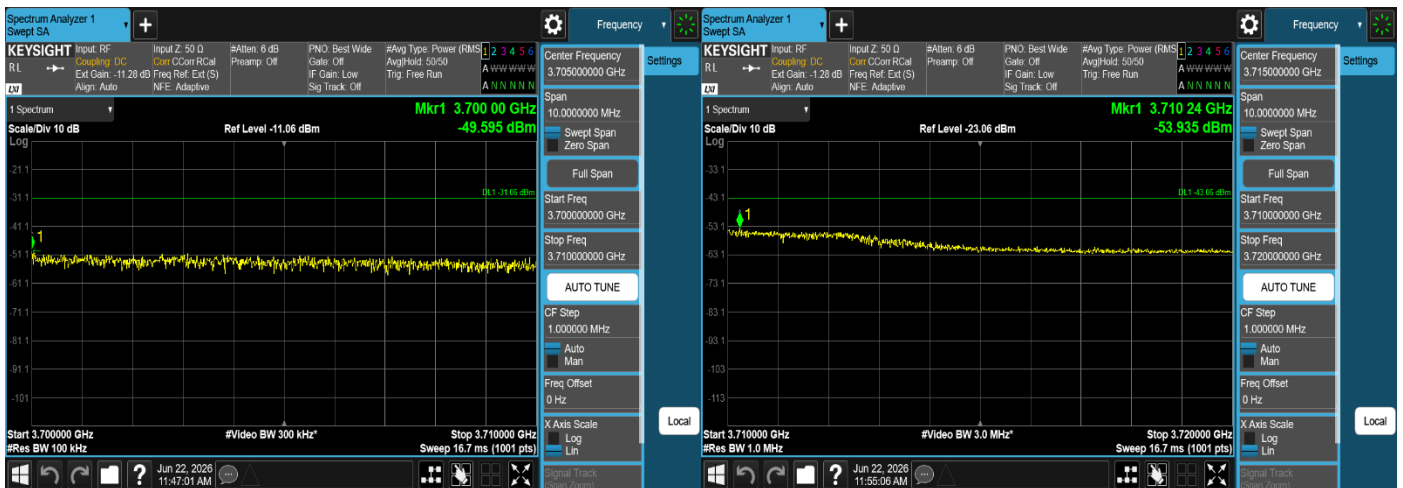
(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (102) / (169) pages



Plot 8-45. Channel Edge Plot 3530 to 3660MHz  
(NR\_n48\_2C\_10M+20M\_QPSK - High Channel, Port 41)

Plot 8-46. Channel Edge Plot 3660 to 3670MHz  
(NR\_n48\_2C\_10M+20M\_QPSK - High Channel, Port 41)



Plot 8-47. Channel Edge Plot 3700 to 3710MHz  
(NR\_n48\_2C\_10M+20M\_QPSK - High Channel, Port 41)

Plot 8-48. Channel Edge Plot 3710 to 3720MHz  
(NR\_n48\_2C\_10M+20M\_QPSK - High Channel, Port 41)



Plot 8-49. Channel Edge Plot 3530 to 3640MHz  
(NR\_n48\_3C\_10M+20M+20M\_QPSK - High Channel, Port 51)

Plot 8-50. Channel Edge Plot 3640 to 3670MHz  
(NR\_n48\_3C\_10M+20M+20M\_QPSK - High Channel, Port 51)



**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (103) / (169) pages



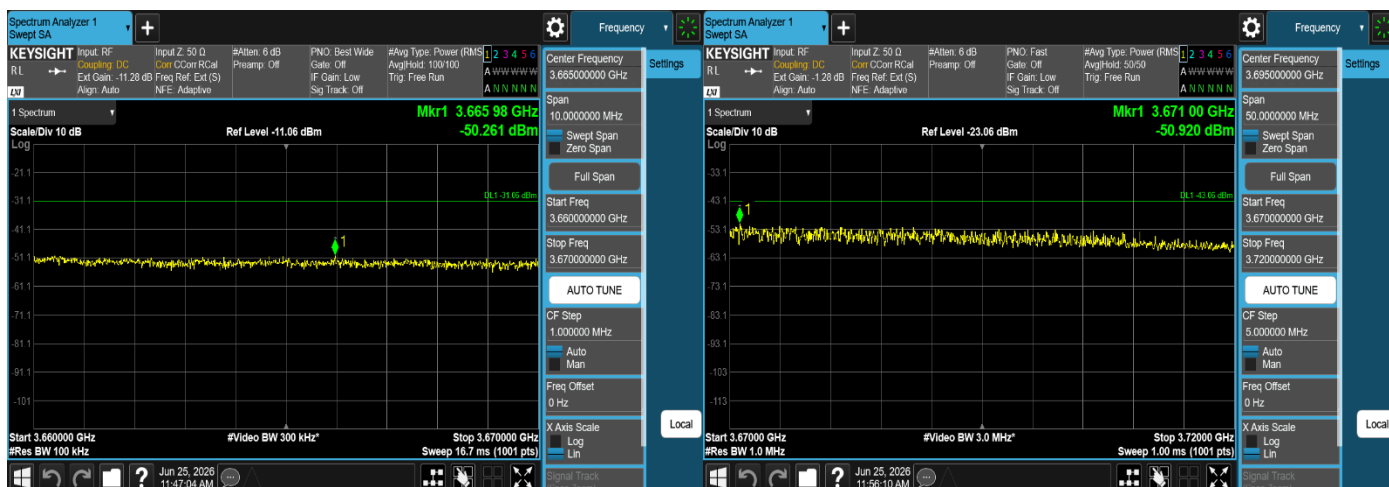
Plot 8-51. Channel Edge Plot 3700 to 3710MHz  
(NR\_n48\_3C\_10M+20M+20M\_QPSK - High Channel, Port 51)

Plot 8-52. Channel Edge Plot 3710 to 3720MHz  
(NR\_n48\_3C\_10M+20M+20M\_QPSK - High Channel, Port 51)



Plot 8-53. Channel Edge Plot 3530 to 3580MHz  
(NR\_n48\_3C\_10M+20M+40M\_QPSK - Mid Channel, Port 49)

Plot 8-54. Channel Edge Plot 3580 to 3590MHz  
(NR\_n48\_3C\_10M+20M+40M\_QPSK - Mid Channel, Port 49)



Plot 8-55. Channel Edge Plot 3660 to 3670MHz  
(NR\_n48\_3C\_10M+20M+40M\_QPSK - Mid Channel, Port 49)

Plot 8-56. Channel Edge Plot 3670 to 3720MHz  
(NR\_n48\_3C\_10M+20M+40M\_QPSK - Mid Channel, Port 49)



# CTK Co., Ltd.

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (104) / (169) pages



Plot 8-57. Channel Edge Plot 3530 to 3540MHz  
(NR\_n48\_2NC\_10M+20M\_QPSK - Mid Channel, Port 49)

Plot 8-58. Channel Edge Plot 3540 to 3550MHz  
(NR\_n48\_2NC\_10M+20M\_QPSK - Mid Channel, Port 49)



Plot 8-59. Channel Edge Plot 3560 to 3570MHz  
(NR\_n48\_2NC\_10M+20M\_QPSK - Mid Channel, Port 49)

Plot 8-60. Channel Edge Plot 3570 to 3580MHz  
(NR\_n48\_2NC\_10M+20M\_QPSK - Mid Channel, Port 49)



Plot 8-61. Channel Edge Plot 3670 to 3680MHz  
(NR\_n48\_2NC\_10M+20M\_QPSK - Mid Channel, Port 49)

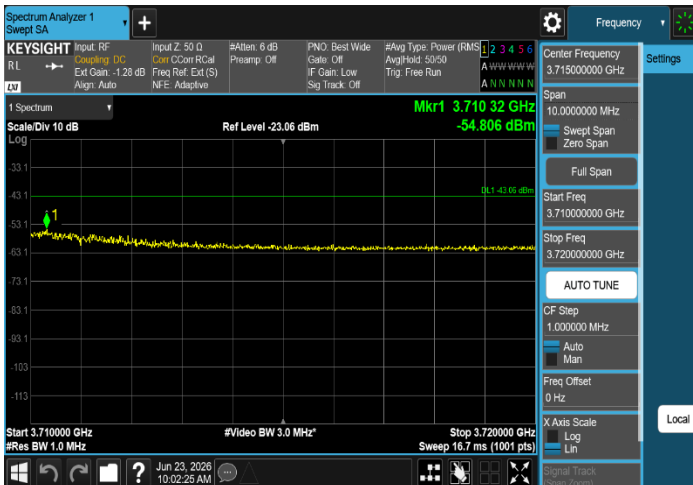
Plot 8-62. Channel Edge Plot 3700 to 3710MHz  
(NR\_n48\_2NC\_10M+20M\_QPSK - Mid Channel, Port 49)



# CTK Co., Ltd.

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

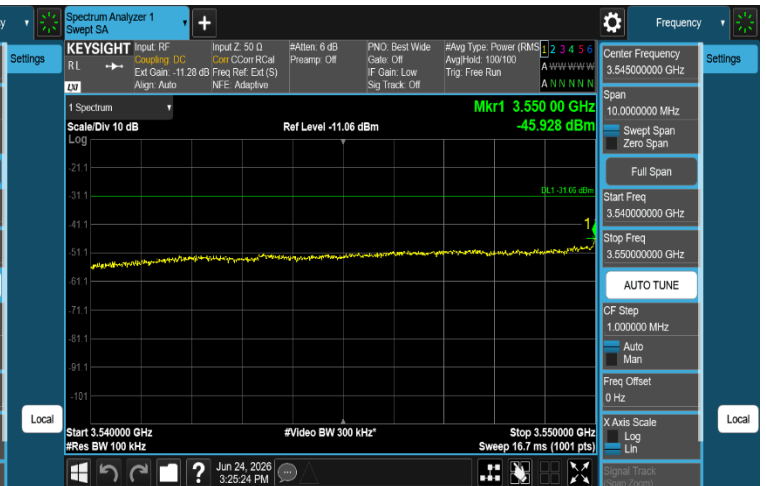
REPORT No.:  
CTK-2026-01690  
Page (105) / (169) pages



Plot 8-63. Channel Edge Plot 3710 to 3720MHz  
(NR\_n48\_2NC\_10M+20M\_QPSK - Mid Channel, Port 49)



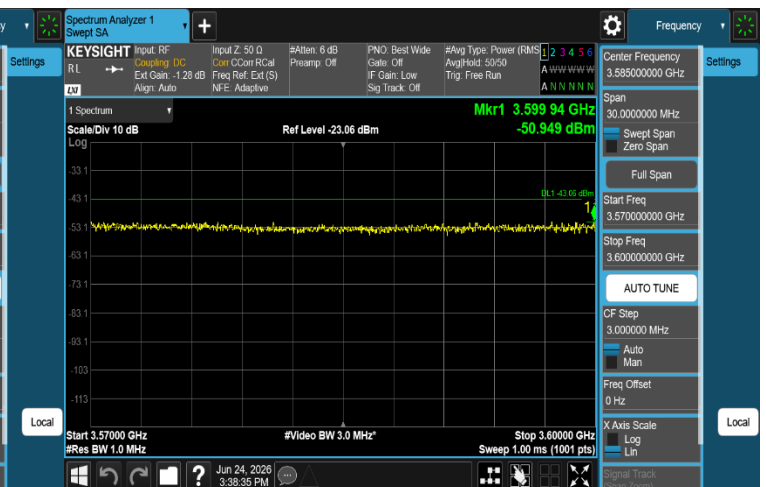
Plot 8-64. Channel Edge Plot 3530 to 3540MHz  
(NR\_n48\_3NC\_10M+20M+20M\_QPSK - Mid Channel, Port 41)



Plot 8-65. Channel Edge Plot 3540 to 3550MHz  
(NR\_n48\_3NC\_10M+20M+20M\_QPSK - Mid Channel, Port 41)



Plot 8-66. Channel Edge Plot 3560 to 3570MHz  
(NR\_n48\_3NC\_10M+20M+20M\_QPSK - Mid Channel, Port 41)



Plot 8-67. Channel Edge Plot 3570 to 3600MHz  
(NR\_n48\_3NC\_10M+20M+20M\_QPSK - Mid Channel, Port 41)



**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (106) / (169) pages



Plot 8-68. Channel Edge Plot 3600 to 3610MHz  
(NR\_n48\_3NC\_10M+20M+20M\_QPSK - Mid Channel, Port 41)

Plot 8-69. Channel Edge Plot 3630 to 3640MHz  
(NR\_n48\_3NC\_10M+20M+20M\_QPSK - Mid Channel, Port 41)



Plot 8-70. Channel Edge Plot 3640 to 3670MHz  
(NR\_n48\_3NC\_10M+20M+20M\_QPSK - Mid Channel, Port 41)

Plot 8-71. Channel Edge Plot 3670 to 3680MHz  
(NR\_n48\_3NC\_10M+20M+20M\_QPSK - Mid Channel, Port 41)



Plot 8-72. Channel Edge Plot 3700 to 3710MHz  
(NR\_n48\_3NC\_10M+20M+20M\_QPSK - Mid Channel, Port 41)

Plot 8-73. Channel Edge Plot 3710 to 3720MHz  
(NR\_n48\_3NC\_10M+20M+20M\_QPSK - Mid Channel, Port 41)



**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (107) / (169) pages



Plot 8-74. Channel Edge Plot 3530 to 3540MHz  
(NR\_n48\_3NC\_10M+20M+40M\_QPSK - Mid Channel, Port 32)

Plot 8-75. Channel Edge Plot 3540 to 3550MHz  
(NR\_n48\_3NC\_10M+20M+40M\_QPSK - Mid Channel, Port 32)



Plot 8-76. Channel Edge Plot 3560 to 3570MHz  
(NR\_n48\_3NC\_10M+20M+40M\_QPSK - Mid Channel, Port 32)

Plot 8-77. Channel Edge Plot 3570 to 3580MHz  
(NR\_n48\_3NC\_10M+20M+40M\_QPSK - Mid Channel, Port 32)



Plot 8-78. Channel Edge Plot 3590 to 3600MHz  
(NR\_n48\_3NC\_10M+20M+40M\_QPSK - Mid Channel, Port 32)

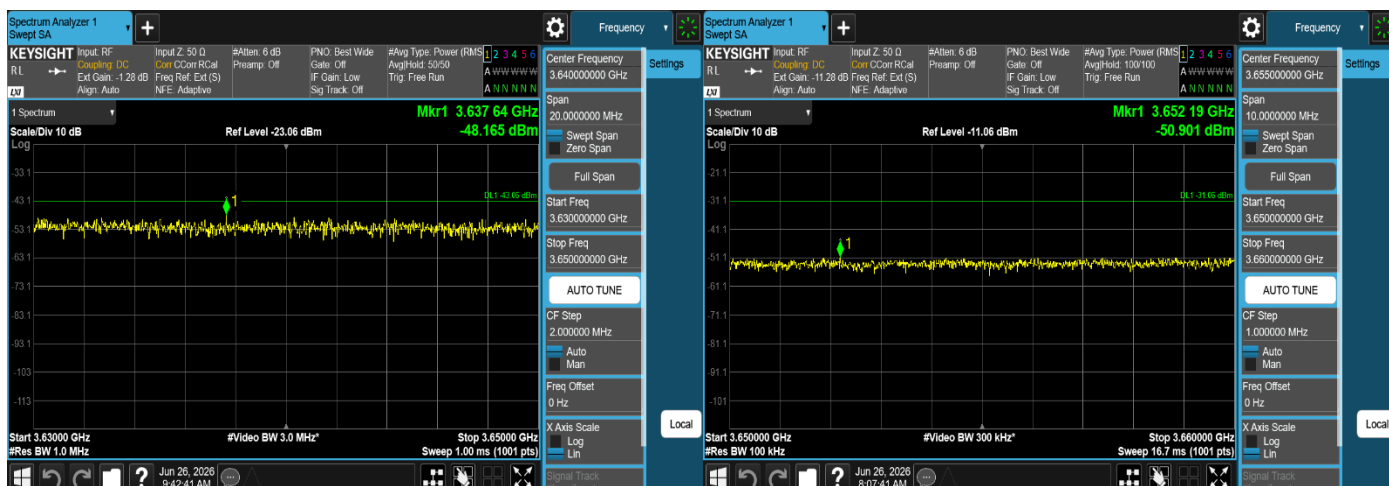
Plot 8-79. Channel Edge Plot 3620 to 3630MHz  
(NR\_n48\_3NC\_10M+20M+40M\_QPSK - Mid Channel, Port 32)



# CTK Co., Ltd.

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (108) / (169) pages



Plot 8-80. Channel Edge Plot 3630 to 3650MHz (NR\_n48\_3NC\_10M+20M+40M\_QPSK - Mid Channel, Port 32)

Plot 8-81. Channel Edge Plot 3650 to 3660MHz (NR\_n48\_3NC\_10M+20M+40M\_QPSK - Mid Channel, Port 32)



Plot 8-82. Channel Edge Plot 3700 to 3710MHz (NR\_n48\_3NC\_10M+20M+40M\_QPSK - Mid Channel, Port 32)

Plot 8-83. Channel Edge Plot 3710 to 3720MHz (NR\_n48\_3NC\_10M+20M+40M\_QPSK - Mid Channel, Port 32)

## 8.7 Spurious Emissions

### Test Overview

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10<sup>th</sup> harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

### Test Procedure Used

KDB 971168 D01 v03r01 – Section 6

KDB 662911 D01 v02r01 – Section E)3) Out-of-Band and Spurious Emission Measurements

a) Absolute Emission Limits

iii) Measure and sum spectral maxima across the outputs as described in section E)2)b).

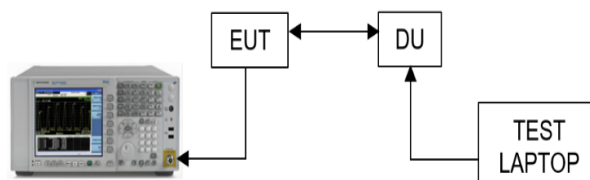
ANSI C63.26-2015 – Section 5.7

### Test Setting

1. Start frequency was set to 30 MHz and stop frequency was set to at least 10 \* the fundamental frequency excluding the frequency range of the band edge measurement.
2. RBW: 1 MHz (the reference bandwidth)
3. VBW  $\geq 3 \times$  RBW
4. Detector = RMS
5. Number of sweep points  $\geq 2 \times$  Span/RBW
6. Trace mode = trace average
7. Sweep time = auto couple
8. The trace was allowed to stabilize

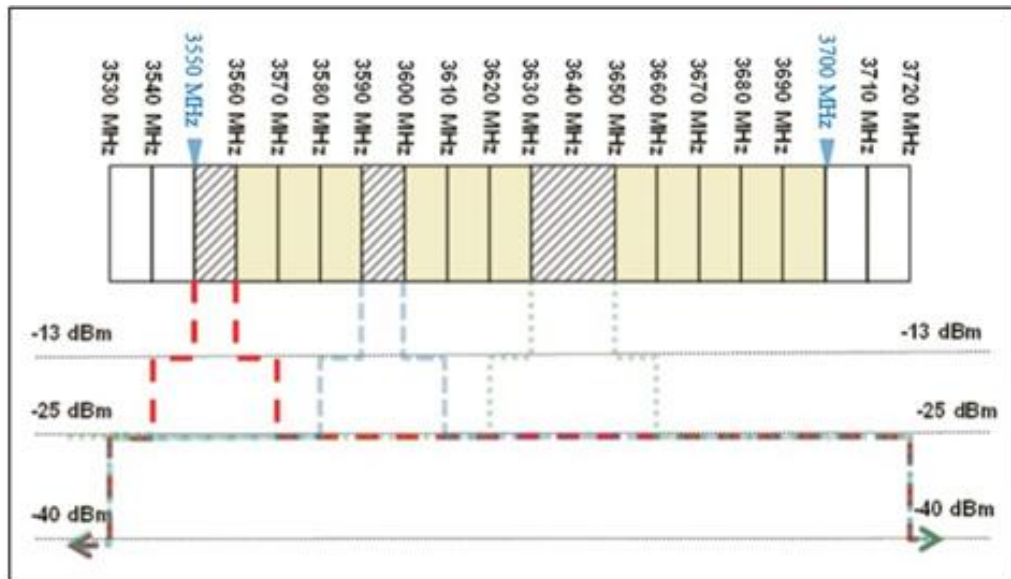
### Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



**Figure 8-6. Test Instrument & Measurement Setup**

# Limit § 96.41 (e)



**Figure 1—Emission limits for example SAS-assigned channels**

- Within 0 MHz to 10 MHz above and below the assigned channel  $\leq -13$  dBm/MHz (The results are recorded in Section 8.6.)
- Greater than 10 MHz above and below the assigned channel  $\leq -25$  dBm/MHz (The results are recorded in Section 8.6.)
- Any emission below 3530 MHz and above 3720 MHz  $\leq -40$  dBm/MHz

## Test Notes

1. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's authorized frequency channel, a resolution bandwidth of no less than one percent of the fundamental emission bandwidth may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full reference bandwidth (*i.e.*, 1 MHz or 1 percent of emission bandwidth, as specified).
2. Detect with a margin of under 1dB to limit, the integration method was performed using the spectrum analyzer's band power functions according to ANSI C63.26-2015 – Section 5.7. The integration value was set to a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter.
3. Narrower RBW parameter is applied according to Section 5.7 of ANSI C63.26-2015 for some edge channels due to improving measurement accuracy. RBW factor was applied as a correction factor to each data point of the Ext gain, as calculated below:

$$\text{RBW Factor} = 10 \cdot \log(\text{reference bandwidth} / \text{measurement bandwidth})$$

4. Consider the following factors for MIMO:  
Measure and sum spectral maxima across the outputs as described in section E)2)b).
5. The output power per port (dBm/MHz or dBm) is converted to a linear value (mW). A summation of linear powers for all ports gives us the total MIMO Conducted Power (mW). We convert this back to logarithmic scale for further output power calculations.

**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (111) / (169) pages

6. Sample Calculation for NR\_n48\_1C\_10M\_QPSK - 30 to 3530MHz:

Let us assume the following numbers:

a) Total 64T MIMO emission Power (dBm) as = 0.0000069 mW

b)

|                                          | Factors                  | Value     | Unit |
|------------------------------------------|--------------------------|-----------|------|
| Summed MIMO Conducted Power (linear sum) |                          | 0.0000069 | mW   |
| Summed MIMO Conducted Power (dBm)        | = 10 * log (0.0000069) = | -51.57    | dBm  |

**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (112) / (169) pages

| Channel | Modulation | Port    | Measured Range |                |              |             |
|---------|------------|---------|----------------|----------------|--------------|-------------|
|         |            |         | 30 to 3530MHz  | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| Low     | QPSK       | Port 0  | -70.36         | -68.77         | -69.72       | -74.66      |
|         |            | Port 1  | -70.11         | -69.93         | -70.19       | -74.59      |
|         |            | Port 2  | -70.59         | -70.63         | -70.20       | -74.88      |
|         |            | Port 3  | -70.09         | -69.09         | -69.98       | -74.97      |
|         |            | Port 4  | -68.91         | -67.57         | -70.35       | -74.86      |
|         |            | Port 5  | -68.69         | -66.75         | -69.90       | -74.66      |
|         |            | Port 6  | -70.91         | -70.77         | -70.09       | -74.38      |
|         |            | Port 7  | -70.24         | -70.54         | -69.74       | -74.83      |
|         |            | Port 8  | -68.49         | -66.24         | -70.06       | -74.83      |
|         |            | Port 9  | -70.32         | -68.92         | -69.94       | -74.85      |
|         |            | Port 10 | -70.54         | -71.07         | -70.26       | -74.70      |
|         |            | Port 11 | -70.57         | -70.55         | -70.00       | -74.92      |
|         |            | Port 12 | -69.31         | -68.14         | -69.77       | -74.81      |
|         |            | Port 13 | -70.53         | -69.46         | -69.96       | -74.66      |
|         |            | Port 14 | -69.62         | -69.11         | -70.23       | -74.72      |
|         |            | Port 15 | -70.42         | -69.84         | -69.98       | -74.75      |
|         |            | Port 16 | -68.31         | -66.21         | -69.98       | -75.09      |
|         |            | Port 17 | -70.33         | -68.92         | -69.90       | -74.84      |
|         |            | Port 18 | -70.71         | -69.83         | -70.15       | -74.88      |
|         |            | Port 19 | -70.36         | -68.09         | -70.26       | -74.68      |
|         |            | Port 20 | -69.90         | -68.74         | -69.92       | -74.76      |
|         |            | Port 21 | -70.12         | -68.25         | -70.03       | -75.06      |
|         |            | Port 22 | -70.96         | -70.52         | -69.95       | -74.93      |
|         |            | Port 23 | -70.61         | -70.83         | -70.35       | -74.96      |
|         |            | Port 24 | -69.42         | -69.04         | -70.32       | -75.10      |
|         |            | Port 25 | -70.48         | -69.38         | -70.15       | -75.04      |
|         |            | Port 26 | -70.72         | -70.12         | -70.10       | -74.88      |
|         |            | Port 27 | -70.10         | -69.77         | -70.04       | -74.61      |
|         |            | Port 28 | -71.02         | -66.93         | -70.17       | -74.90      |
|         |            | Port 29 | -71.05         | -71.20         | -70.33       | -74.94      |
|         |            | Port 30 | -70.24         | -68.62         | -70.22       | -74.99      |
|         |            | Port 31 | -69.11         | -67.63         | -69.92       | -75.04      |
|         |            | Port 32 | -67.67         | -66.00         | -69.92       | -74.93      |
|         |            | Port 33 | -69.34         | -67.72         | -70.29       | -74.88      |
|         |            | Port 34 | -68.45         | -66.68         | -70.13       | -75.06      |
|         |            | Port 35 | -68.55         | -66.77         | -70.07       | -74.62      |
|         |            | Port 36 | -68.54         | -66.96         | -70.20       | -75.00      |
|         |            | Port 37 | -68.12         | -66.45         | -70.19       | -74.89      |
|         |            | Port 38 | -70.24         | -69.40         | -69.50       | -75.07      |
|         |            | Port 39 | -69.90         | -68.86         | -70.30       | -74.91      |
|         |            | Port 40 | -69.73         | -68.52         | -70.04       | -75.05      |
|         |            | Port 41 | -68.83         | -68.37         | -70.13       | -74.82      |
|         |            | Port 42 | -69.39         | -67.10         | -70.20       | -74.60      |
|         |            | Port 43 | -70.11         | -69.46         | -70.18       | -74.81      |
|         |            | Port 44 | -68.25         | -66.30         | -69.97       | -74.93      |
|         |            | Port 45 | -69.77         | -68.69         | -70.09       | -74.70      |
|         |            | Port 46 | -70.36         | -69.58         | -69.80       | -75.03      |
|         |            | Port 47 | -69.48         | -68.74         | -70.22       | -75.18      |
|         |            | Port 48 | -69.87         | -68.79         | -70.15       | -75.01      |
|         |            | Port 49 | -68.70         | -66.83         | -69.79       | -74.90      |
|         |            | Port 50 | -68.55         | -67.65         | -69.86       | -74.88      |
|         |            | Port 51 | -69.02         | -67.77         | -70.14       | -74.69      |
|         |            | Port 52 | -70.09         | -70.53         | -69.71       | -74.88      |
|         |            | Port 53 | -68.79         | -65.91         | -70.04       | -74.91      |

**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (113) / (169) pages

|         |            | Port 54     | -69.28         | -68.07         | -70.23       | -75.15      |
|---------|------------|-------------|----------------|----------------|--------------|-------------|
|         |            | Port 55     | -69.91         | -70.32         | -70.21       | -75.07      |
|         |            | Port 56     | -70.39         | -70.24         | -69.96       | -74.91      |
|         |            | Port 57     | -70.25         | -69.98         | -70.01       | -74.94      |
|         |            | Port 58     | -68.72         | -68.05         | -70.17       | -75.11      |
|         |            | Port 59     | -70.09         | -69.49         | -70.14       | -75.09      |
|         |            | Port 60     | -68.96         | -67.57         | -70.03       | -75.00      |
|         |            | Port 61     | -69.64         | -68.20         | -69.85       | -74.75      |
|         |            | Port 62     | -69.01         | -66.21         | -69.90       | -74.70      |
|         |            | Port 63     | -70.54         | -71.09         | -70.12       | -74.65      |
|         |            | Sum of data | -51.57         | -50.34         | -51.99       | -56.81      |
|         |            | Limit (dBm) | -40.00         | -40.00         | -40.00       | -40.00      |
|         |            | Margin(dB)  | -11.57         | -10.34         | -11.99       | -16.81      |
| Channel | Modulation | Port        | Measured Range |                |              |             |
|         |            |             | 30 to 3530MHz  | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| Low     | 16QAM      | Port 0      | -70.28         | -68.62         | -70.18       | -74.84      |
|         |            | Port 1      | -70.35         | -69.80         | -70.30       | -74.87      |
|         |            | Port 2      | -71.25         | -70.68         | -70.21       | -75.04      |
|         |            | Port 3      | -70.15         | -68.96         | -70.01       | -74.92      |
|         |            | Port 4      | -68.98         | -67.15         | -70.03       | -74.73      |
|         |            | Port 5      | -68.83         | -66.56         | -70.03       | -74.96      |
|         |            | Port 6      | -71.14         | -70.97         | -70.26       | -75.01      |
|         |            | Port 7      | -70.78         | -70.55         | -70.07       | -74.96      |
|         |            | Port 8      | -68.77         | -66.06         | -69.97       | -74.56      |
|         |            | Port 9      | -70.25         | -69.18         | -70.17       | -75.14      |
|         |            | Port 10     | -70.80         | -70.88         | -70.12       | -75.11      |
|         |            | Port 11     | -70.81         | -70.30         | -70.10       | -75.19      |
|         |            | Port 12     | -69.40         | -67.96         | -69.99       | -74.87      |
|         |            | Port 13     | -70.20         | -69.70         | -70.20       | -74.72      |
|         |            | Port 14     | -70.19         | -68.95         | -70.12       | -75.01      |
|         |            | Port 15     | -70.26         | -69.72         | -70.14       | -75.14      |
|         |            | Port 16     | -68.40         | -65.59         | -70.14       | -75.03      |
|         |            | Port 17     | -69.53         | -67.77         | -70.04       | -74.97      |
|         |            | Port 18     | -70.66         | -69.83         | -70.15       | -74.90      |
|         |            | Port 19     | -70.62         | -70.11         | -70.31       | -74.97      |
|         |            | Port 20     | -69.50         | -68.73         | -70.14       | -74.88      |
|         |            | Port 21     | -69.90         | -68.87         | -70.08       | -75.12      |
|         |            | Port 22     | -70.58         | -70.70         | -70.07       | -75.06      |
|         |            | Port 23     | -71.33         | -71.08         | -69.96       | -74.70      |
|         |            | Port 24     | -70.04         | -68.83         | -70.22       | -75.06      |
|         |            | Port 25     | -70.17         | -69.66         | -70.09       | -75.11      |
|         |            | Port 26     | -70.97         | -70.07         | -70.00       | -74.84      |
|         |            | Port 27     | -70.30         | -70.02         | -70.06       | -74.85      |
|         |            | Port 28     | -70.69         | -70.76         | -70.20       | -75.06      |
|         |            | Port 29     | -70.93         | -70.83         | -70.16       | -74.77      |
|         |            | Port 30     | -69.86         | -68.38         | -70.15       | -75.03      |
|         |            | Port 31     | -68.97         | -67.67         | -69.84       | -75.00      |
|         |            | Port 32     | -67.92         | -66.07         | -70.01       | -75.00      |
|         |            | Port 33     | -69.06         | -68.10         | -69.93       | -75.05      |
|         |            | Port 34     | -68.43         | -66.85         | -70.23       | -74.86      |
|         |            | Port 35     | -68.70         | -66.32         | -70.22       | -75.02      |
|         |            | Port 36     | -68.22         | -67.07         | -70.23       | -74.62      |
|         |            | Port 37     | -68.15         | -66.47         | -69.52       | -75.12      |
|         |            | Port 38     | -69.72         | -69.73         | -70.13       | -74.95      |
|         |            | Port 39     | -69.63         | -69.11         | -70.01       | -74.93      |
|         |            | Port 40     | -68.97         | -68.71         | -69.93       | -75.14      |

**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (114) / (169) pages

|         |            | Port 41     | -68.79         | -68.16         | -70.29       | -75.09      |
|---------|------------|-------------|----------------|----------------|--------------|-------------|
|         |            | Port 42     | -69.37         | -67.25         | -70.22       | -75.05      |
|         |            | Port 43     | -69.68         | -69.27         | -70.22       | -75.24      |
|         |            | Port 44     | -68.18         | -66.72         | -70.00       | -74.80      |
|         |            | Port 45     | -69.89         | -68.71         | -69.53       | -75.03      |
|         |            | Port 46     | -70.40         | -69.46         | -70.22       | -74.96      |
|         |            | Port 47     | -69.76         | -68.75         | -70.28       | -75.04      |
|         |            | Port 48     | -69.63         | -69.15         | -70.26       | -75.16      |
|         |            | Port 49     | -68.69         | -66.97         | -69.95       | -75.07      |
|         |            | Port 50     | -68.73         | -67.70         | -69.93       | -74.65      |
|         |            | Port 51     | -68.85         | -68.04         | -70.04       | -74.91      |
|         |            | Port 52     | -70.11         | -70.09         | -70.09       | -75.14      |
|         |            | Port 53     | -68.18         | -66.25         | -70.16       | -75.09      |
|         |            | Port 54     | -68.97         | -68.15         | -70.11       | -74.52      |
|         |            | Port 55     | -70.37         | -70.34         | -70.13       | -75.09      |
|         |            | Port 56     | -70.54         | -69.94         | -69.96       | -75.03      |
|         |            | Port 57     | -70.01         | -69.65         | -69.93       | -75.20      |
|         |            | Port 58     | -69.37         | -68.11         | -70.24       | -74.60      |
|         |            | Port 59     | -69.97         | -69.44         | -70.27       | -75.17      |
|         |            | Port 60     | -68.67         | -67.52         | -69.49       | -74.85      |
|         |            | Port 61     | -69.27         | -67.96         | -70.25       | -74.91      |
|         |            | Port 62     | -68.61         | -66.90         | -70.21       | -75.12      |
|         |            | Port 63     | -71.09         | -70.69         | -70.01       | -75.23      |
|         |            | Sum of data | -51.55         | -50.41         | -52.02       | -56.90      |
|         |            | Limit (dBm) | -40.00         | -40.00         | -40.00       | -40.00      |
|         |            | Margin(dB)  | -11.55         | -10.41         | -12.02       | -16.90      |
| Channel | Modulation | Port        | Measured Range |                |              |             |
|         |            |             | 30 to 3530MHz  | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| Low     | 64QAM      | Port 0      | -70.49         | -68.88         | -69.94       | -74.91      |
|         |            | Port 1      | -68.90         | -69.91         | -70.05       | -74.86      |
|         |            | Port 2      | -70.96         | -70.49         | -70.29       | -75.11      |
|         |            | Port 3      | -69.94         | -68.93         | -70.18       | -75.06      |
|         |            | Port 4      | -69.03         | -67.41         | -70.07       | -74.87      |
|         |            | Port 5      | -68.89         | -66.21         | -69.94       | -74.69      |
|         |            | Port 6      | -70.87         | -71.15         | -70.26       | -74.82      |
|         |            | Port 7      | -70.41         | -70.83         | -70.08       | -74.94      |
|         |            | Port 8      | -68.43         | -66.19         | -70.11       | -75.02      |
|         |            | Port 9      | -70.24         | -68.92         | -69.91       | -75.18      |
|         |            | Port 10     | -71.07         | -70.67         | -70.24       | -75.20      |
|         |            | Port 11     | -70.25         | -70.17         | -70.17       | -75.22      |
|         |            | Port 12     | -69.22         | -68.19         | -70.11       | -74.77      |
|         |            | Port 13     | -69.44         | -69.78         | -69.97       | -74.71      |
|         |            | Port 14     | -70.04         | -69.13         | -69.96       | -75.15      |
|         |            | Port 15     | -70.32         | -68.80         | -70.34       | -74.89      |
|         |            | Port 16     | -68.47         | -65.94         | -70.17       | -74.79      |
|         |            | Port 17     | -69.77         | -68.73         | -70.12       | -75.18      |
|         |            | Port 18     | -69.82         | -69.69         | -70.05       | -75.05      |
|         |            | Port 19     | -70.90         | -70.24         | -69.95       | -75.13      |
|         |            | Port 20     | -69.34         | -68.68         | -70.01       | -75.07      |
|         |            | Port 21     | -69.96         | -68.91         | -70.05       | -74.89      |
|         |            | Port 22     | -70.57         | -70.42         | -70.09       | -74.48      |
|         |            | Port 23     | -71.06         | -70.79         | -70.22       | -75.10      |
|         |            | Port 24     | -69.87         | -69.06         | -69.92       | -75.23      |
|         |            | Port 25     | -69.71         | -69.67         | -70.31       | -74.87      |
|         |            | Port 26     | -70.61         | -69.68         | -69.97       | -75.02      |
|         |            | Port 27     | -70.56         | -69.89         | -70.09       | -74.87      |

**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (115) / (169) pages

|         |            | Port 28     | -70.42         | -70.13         | -70.03       | -75.14      |
|---------|------------|-------------|----------------|----------------|--------------|-------------|
|         |            | Port 29     | -70.82         | -70.47         | -69.84       | -75.19      |
|         |            | Port 30     | -69.94         | -68.57         | -70.02       | -74.98      |
|         |            | Port 31     | -69.19         | -67.38         | -69.79       | -75.13      |
|         |            | Port 32     | -67.55         | -66.21         | -70.33       | -74.92      |
|         |            | Port 33     | -69.51         | -67.81         | -70.13       | -74.48      |
|         |            | Port 34     | -68.36         | -66.52         | -69.89       | -74.83      |
|         |            | Port 35     | -68.60         | -66.49         | -70.09       | -75.09      |
|         |            | Port 36     | -68.45         | -67.15         | -70.01       | -75.07      |
|         |            | Port 37     | -68.15         | -66.42         | -70.02       | -75.22      |
|         |            | Port 38     | -69.89         | -69.58         | -69.76       | -75.01      |
|         |            | Port 39     | -69.95         | -68.99         | -69.97       | -74.94      |
|         |            | Port 40     | -68.68         | -68.39         | -70.09       | -75.15      |
|         |            | Port 41     | -68.97         | -68.34         | -70.05       | -74.83      |
|         |            | Port 42     | -69.04         | -67.10         | -70.12       | -74.92      |
|         |            | Port 43     | -70.11         | -69.29         | -69.99       | -75.01      |
|         |            | Port 44     | -68.04         | -66.41         | -70.08       | -75.12      |
|         |            | Port 45     | -69.50         | -68.42         | -70.17       | -75.03      |
|         |            | Port 46     | -70.60         | -70.23         | -70.11       | -74.95      |
|         |            | Port 47     | -69.58         | -68.49         | -69.85       | -74.90      |
|         |            | Port 48     | -69.65         | -68.93         | -70.17       | -75.06      |
|         |            | Port 49     | -68.99         | -66.65         | -70.12       | -75.15      |
|         |            | Port 50     | -68.74         | -67.35         | -69.81       | -74.95      |
|         |            | Port 51     | -68.86         | -68.06         | -70.05       | -75.03      |
|         |            | Port 52     | -70.60         | -70.52         | -70.30       | -74.54      |
|         |            | Port 53     | -68.56         | -66.27         | -70.08       | -75.15      |
|         |            | Port 54     | -68.78         | -67.79         | -70.20       | -75.20      |
|         |            | Port 55     | -70.38         | -69.99         | -70.15       | -75.24      |
|         |            | Port 56     | -70.36         | -70.29         | -70.07       | -75.04      |
|         |            | Port 57     | -70.28         | -69.12         | -70.18       | -75.21      |
|         |            | Port 58     | -69.27         | -67.07         | -69.96       | -74.95      |
|         |            | Port 59     | -69.47         | -69.23         | -69.91       | -75.04      |
|         |            | Port 60     | -68.65         | -67.25         | -69.81       | -75.04      |
|         |            | Port 61     | -69.14         | -67.92         | -70.29       | -74.92      |
|         |            | Port 62     | -68.49         | -66.19         | -70.28       | -74.98      |
|         |            | Port 63     | -70.40         | -70.90         | -70.12       | -75.16      |
|         |            | Sum of data | -51.46         | -50.33         | -52.00       | -56.93      |
|         |            | Limit (dBm) | -40.00         | -40.00         | -40.00       | -40.00      |
|         |            | Margin(dB)  | -11.46         | -10.33         | -12.00       | -16.93      |
| Channel | Modulation | Port        | Measured Range |                |              |             |
|         |            |             | 30 to 3530MHz  | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| Low     | 256QAM     | Port 0      | -69.66         | -68.58         | -70.07       | -75.14      |
|         |            | Port 1      | -70.40         | -69.86         | -70.10       | -75.11      |
|         |            | Port 2      | -70.80         | -70.50         | -70.20       | -75.07      |
|         |            | Port 3      | -69.68         | -68.92         | -70.04       | -75.19      |
|         |            | Port 4      | -68.85         | -67.28         | -70.03       | -75.32      |
|         |            | Port 5      | -68.75         | -66.37         | -70.20       | -74.65      |
|         |            | Port 6      | -70.83         | -70.97         | -70.14       | -75.08      |
|         |            | Port 7      | -70.74         | -70.40         | -70.11       | -74.69      |
|         |            | Port 8      | -68.49         | -66.24         | -70.19       | -75.10      |
|         |            | Port 9      | -69.87         | -69.04         | -69.87       | -75.13      |
|         |            | Port 10     | -71.26         | -71.08         | -70.09       | -75.10      |
|         |            | Port 11     | -70.15         | -70.29         | -70.32       | -75.10      |
|         |            | Port 12     | -69.25         | -68.42         | -70.01       | -75.05      |
|         |            | Port 13     | -70.23         | -69.86         | -70.06       | -74.80      |
|         |            | Port 14     | -69.92         | -69.18         | -70.10       | -75.17      |

**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (116) / (169) pages

|         |            |             |                |                |              |             |
|---------|------------|-------------|----------------|----------------|--------------|-------------|
|         |            | Port 15     | -70.72         | -69.46         | -70.02       | -75.11      |
|         |            | Port 16     | -68.48         | -65.79         | -69.83       | -75.11      |
|         |            | Port 17     | -69.90         | -68.82         | -70.21       | -75.00      |
|         |            | Port 18     | -70.31         | -70.12         | -70.03       | -75.11      |
|         |            | Port 19     | -70.81         | -70.44         | -69.95       | -75.00      |
|         |            | Port 20     | -69.49         | -68.53         | -69.81       | -75.14      |
|         |            | Port 21     | -69.93         | -69.28         | -70.06       | -75.02      |
|         |            | Port 22     | -70.64         | -70.27         | -70.18       | -75.04      |
|         |            | Port 23     | -71.06         | -71.23         | -69.58       | -75.25      |
|         |            | Port 24     | -68.99         | -69.23         | -69.82       | -75.22      |
|         |            | Port 25     | -69.04         | -69.69         | -70.21       | -74.57      |
|         |            | Port 26     | -70.03         | -69.94         | -70.07       | -75.19      |
|         |            | Port 27     | -70.21         | -69.79         | -70.02       | -74.75      |
|         |            | Port 28     | -70.63         | -70.61         | -70.08       | -74.72      |
|         |            | Port 29     | -70.65         | -70.72         | -70.02       | -75.22      |
|         |            | Port 30     | -69.46         | -68.54         | -70.14       | -75.18      |
|         |            | Port 31     | -69.27         | -67.46         | -70.36       | -75.08      |
|         |            | Port 32     | -68.01         | -66.43         | -70.08       | -74.80      |
|         |            | Port 33     | -69.38         | -68.27         | -70.08       | -75.24      |
|         |            | Port 34     | -68.49         | -66.91         | -70.07       | -74.91      |
|         |            | Port 35     | -68.30         | -66.69         | -70.23       | -74.84      |
|         |            | Port 36     | -68.69         | -67.49         | -70.20       | -75.03      |
|         |            | Port 37     | -68.35         | -66.74         | -70.35       | -75.19      |
|         |            | Port 38     | -70.34         | -69.58         | -70.02       | -75.12      |
|         |            | Port 39     | -69.87         | -68.25         | -69.98       | -75.07      |
|         |            | Port 40     | -69.51         | -68.49         | -70.13       | -75.22      |
|         |            | Port 41     | -69.06         | -68.04         | -70.08       | -75.06      |
|         |            | Port 42     | -69.47         | -67.11         | -70.07       | -74.88      |
|         |            | Port 43     | -70.45         | -69.32         | -70.32       | -74.81      |
|         |            | Port 44     | -68.36         | -66.85         | -70.24       | -75.25      |
|         |            | Port 45     | -69.73         | -68.52         | -69.98       | -74.79      |
|         |            | Port 46     | -70.68         | -69.64         | -70.00       | -74.68      |
|         |            | Port 47     | -69.55         | -68.94         | -69.83       | -74.95      |
|         |            | Port 48     | -69.85         | -68.82         | -70.08       | -75.13      |
|         |            | Port 49     | -68.35         | -66.99         | -70.11       | -75.14      |
|         |            | Port 50     | -68.97         | -68.03         | -70.21       | -75.13      |
|         |            | Port 51     | -68.89         | -68.09         | -70.39       | -75.20      |
|         |            | Port 52     | -70.72         | -70.53         | -69.92       | -75.01      |
|         |            | Port 53     | -68.23         | -66.61         | -69.89       | -74.97      |
|         |            | Port 54     | -68.88         | -67.98         | -70.20       | -75.04      |
|         |            | Port 55     | -70.48         | -70.19         | -70.06       | -74.93      |
|         |            | Port 56     | -70.54         | -70.46         | -70.23       | -75.07      |
|         |            | Port 57     | -70.07         | -70.15         | -70.19       | -74.92      |
|         |            | Port 58     | -69.30         | -67.81         | -69.95       | -75.00      |
|         |            | Port 59     | -69.49         | -69.28         | -69.98       | -75.06      |
|         |            | Port 60     | -69.00         | -67.33         | -70.28       | -74.74      |
|         |            | Port 61     | -69.06         | -67.96         | -69.88       | -74.84      |
|         |            | Port 62     | -68.64         | -66.78         | -70.29       | -75.24      |
|         |            | Port 63     | -70.97         | -70.84         | -70.07       | -75.11      |
|         |            | Sum of data | -51.51         | -50.48         | -52.02       | -56.96      |
|         |            | Limit (dBm) | -40.00         | -40.00         | -40.00       | -40.00      |
|         |            | Margin(dB)  | -11.51         | -10.48         | -12.02       | -16.96      |
| Channel | Modulation | Port        | Measured Range |                |              |             |
|         |            |             | 30 to 3530MHz  | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| Mid     | QPSK       | Port 0      | -70.61         | -68.48         | -70.11       | -75.11      |
|         |            | Port 1      | -69.35         | -69.46         | -70.28       | -75.20      |

**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (117) / (169) pages

|  |  |         |               |               |               |               |
|--|--|---------|---------------|---------------|---------------|---------------|
|  |  | Port 2  | -71.38        | -70.87        | -69.94        | -75.07        |
|  |  | Port 3  | -70.17        | -68.70        | -70.15        | -75.23        |
|  |  | Port 4  | -69.24        | -67.18        | -69.91        | -74.94        |
|  |  | Port 5  | -68.94        | -66.49        | -70.14        | -75.02        |
|  |  | Port 6  | -70.60        | -70.69        | -69.97        | -75.15        |
|  |  | Port 7  | -70.99        | -69.86        | -70.10        | -75.13        |
|  |  | Port 8  | -68.94        | -66.22        | -70.08        | -75.06        |
|  |  | Port 9  | -70.20        | -68.69        | -69.91        | -75.26        |
|  |  | Port 10 | -70.16        | -70.63        | -69.98        | -75.24        |
|  |  | Port 11 | -70.56        | -70.18        | -70.29        | -75.24        |
|  |  | Port 12 | -69.85        | -66.88        | -70.04        | -75.17        |
|  |  | Port 13 | -70.39        | -69.51        | -70.24        | -75.12        |
|  |  | Port 14 | -70.06        | -69.26        | -70.09        | -74.91        |
|  |  | Port 15 | -70.73        | -69.57        | -70.21        | -75.20        |
|  |  | Port 16 | -68.49        | -65.80        | -69.89        | -75.14        |
|  |  | Port 17 | -70.24        | -69.01        | -70.13        | -75.10        |
|  |  | Port 18 | -71.04        | -69.78        | -70.15        | -75.09        |
|  |  | Port 19 | -71.07        | -70.12        | -70.25        | -75.09        |
|  |  | Port 20 | -69.96        | -68.27        | -70.06        | -74.88        |
|  |  | Port 21 | -69.91        | -68.94        | -69.98        | -75.22        |
|  |  | Port 22 | -71.15        | -70.17        | -70.22        | -74.90        |
|  |  | Port 23 | -70.45        | -70.99        | -70.01        | -75.24        |
|  |  | Port 24 | -70.45        | -68.65        | -70.20        | -75.09        |
|  |  | Port 25 | -70.64        | -69.30        | -70.04        | -75.17        |
|  |  | Port 26 | -70.68        | -69.77        | -70.25        | -75.04        |
|  |  | Port 27 | -70.06        | -69.71        | -69.80        | -75.27        |
|  |  | Port 28 | -70.67        | -70.04        | -69.94        | -75.12        |
|  |  | Port 29 | -71.24        | -70.59        | -70.14        | -74.97        |
|  |  | Port 30 | -69.70        | -68.51        | -70.10        | -74.95        |
|  |  | Port 31 | -69.44        | -66.96        | -70.09        | -75.23        |
|  |  | Port 32 | <b>-68.26</b> | <b>-65.10</b> | <b>-70.38</b> | <b>-75.33</b> |
|  |  | Port 33 | -69.62        | -68.01        | -70.23        | -74.88        |
|  |  | Port 34 | -68.50        | -66.47        | -70.28        | -75.01        |
|  |  | Port 35 | -68.74        | -66.07        | -70.34        | -75.10        |
|  |  | Port 36 | -68.40        | -67.17        | -70.24        | -74.88        |
|  |  | Port 37 | -67.95        | -66.32        | -70.32        | -75.02        |
|  |  | Port 38 | -70.13        | -69.54        | -70.12        | -75.21        |
|  |  | Port 39 | -70.19        | -69.26        | -69.96        | -74.96        |
|  |  | Port 40 | -69.28        | -68.37        | -70.11        | -74.72        |
|  |  | Port 41 | -69.18        | -67.74        | -69.64        | -74.92        |
|  |  | Port 42 | -69.72        | -66.80        | -69.96        | -75.02        |
|  |  | Port 43 | -70.20        | -69.10        | -69.93        | -75.38        |
|  |  | Port 44 | -68.47        | -66.74        | -69.84        | -74.59        |
|  |  | Port 45 | -69.90        | -68.62        | -69.72        | -74.97        |
|  |  | Port 46 | -70.43        | -69.71        | -70.21        | -75.10        |
|  |  | Port 47 | -69.92        | -68.34        | -70.27        | -75.22        |
|  |  | Port 48 | -69.93        | -68.83        | -70.17        | -75.03        |
|  |  | Port 49 | -68.73        | -66.72        | -70.31        | -75.01        |
|  |  | Port 50 | -69.00        | -67.81        | -70.01        | -75.09        |
|  |  | Port 51 | -69.35        | -67.69        | -70.22        | -75.08        |
|  |  | Port 52 | -70.43        | -70.38        | -70.16        | -74.70        |
|  |  | Port 53 | -68.47        | -66.64        | -69.96        | -75.04        |
|  |  | Port 54 | -69.00        | -67.83        | -70.08        | -75.05        |
|  |  | Port 55 | -70.42        | -70.01        | -70.20        | -74.98        |
|  |  | Port 56 | -70.55        | -70.27        | -70.25        | -75.10        |
|  |  | Port 57 | -70.74        | -69.79        | -70.13        | -74.86        |

**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (118) / (169) pages

|         |            | Port 58     | -69.23         | -67.85         | -69.98       | -75.15      |
|---------|------------|-------------|----------------|----------------|--------------|-------------|
|         |            | Port 59     | -70.19         | -69.30         | -70.41       | -74.56      |
|         |            | Port 60     | -68.89         | -67.39         | -70.14       | -75.09      |
|         |            | Port 61     | -69.47         | -68.13         | -70.09       | -75.20      |
|         |            | Port 62     | -68.90         | -66.59         | -70.09       | -75.20      |
|         |            | Port 63     | -71.31         | -70.68         | -69.95       | -75.15      |
|         |            | Sum of data | -51.71         | -50.25         | -52.04       | -57.00      |
|         |            | Limit (dBm) | -40.00         | -40.00         | -40.00       | -40.00      |
|         |            | Margin(dB)  | -11.71         | -10.25         | -12.04       | -17.00      |
| Channel | Modulation | Port        | Measured Range |                |              |             |
|         |            |             | 30 to 3530MHz  | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| Mid     | 16QAM      | Port 0      | -70.45         | -68.53         | -70.09       | -75.13      |
|         |            | Port 1      | -70.43         | -69.65         | -69.96       | -75.26      |
|         |            | Port 2      | -71.22         | -70.33         | -70.05       | -74.84      |
|         |            | Port 3      | -70.05         | -68.39         | -70.11       | -75.15      |
|         |            | Port 4      | -67.21         | -66.98         | -70.17       | -75.27      |
|         |            | Port 5      | -68.80         | -66.83         | -69.77       | -74.92      |
|         |            | Port 6      | -71.21         | -70.79         | -70.00       | -74.80      |
|         |            | Port 7      | -71.16         | -70.47         | -70.07       | -75.24      |
|         |            | Port 8      | -68.74         | -65.85         | -70.21       | -75.12      |
|         |            | Port 9      | -70.61         | -68.26         | -70.08       | -75.17      |
|         |            | Port 10     | -70.39         | -70.57         | -69.98       | -75.18      |
|         |            | Port 11     | -70.57         | -70.54         | -69.96       | -75.06      |
|         |            | Port 12     | -69.74         | -68.09         | -70.13       | -75.06      |
|         |            | Port 13     | -70.25         | -69.66         | -70.09       | -75.30      |
|         |            | Port 14     | -69.48         | -69.19         | -69.99       | -75.13      |
|         |            | Port 15     | -71.03         | -69.63         | -70.01       | -75.05      |
|         |            | Port 16     | -68.62         | -65.61         | -70.12       | -74.86      |
|         |            | Port 17     | -69.79         | -69.21         | -70.15       | -74.97      |
|         |            | Port 18     | -70.96         | -69.60         | -69.98       | -74.98      |
|         |            | Port 19     | -70.40         | -70.24         | -70.16       | -75.13      |
|         |            | Port 20     | -69.49         | -68.25         | -70.22       | -75.23      |
|         |            | Port 21     | -69.96         | -68.89         | -70.24       | -74.84      |
|         |            | Port 22     | -69.77         | -70.28         | -69.93       | -75.22      |
|         |            | Port 23     | -71.15         | -70.67         | -69.99       | -75.12      |
|         |            | Port 24     | -69.90         | -68.91         | -70.05       | -75.08      |
|         |            | Port 25     | -70.08         | -69.20         | -70.13       | -75.25      |
|         |            | Port 26     | -70.94         | -69.83         | -70.32       | -75.18      |
|         |            | Port 27     | -70.62         | -69.87         | -70.12       | -75.18      |
|         |            | Port 28     | -70.81         | -70.48         | -70.13       | -75.16      |
|         |            | Port 29     | -71.30         | -70.58         | -70.33       | -75.09      |
|         |            | Port 30     | -69.61         | -68.52         | -69.92       | -74.92      |
|         |            | Port 31     | -69.34         | -67.12         | -70.25       | -75.21      |
|         |            | Port 32     | -67.63         | -66.26         | -69.91       | -75.03      |
|         |            | Port 33     | -69.36         | -67.94         | -69.99       | -75.14      |
|         |            | Port 34     | -68.48         | -66.81         | -70.12       | -75.17      |
|         |            | Port 35     | -68.66         | -66.17         | -70.21       | -74.86      |
|         |            | Port 36     | -69.07         | -67.39         | -70.18       | -74.89      |
|         |            | Port 37     | -68.31         | -66.29         | -70.12       | -74.99      |
|         |            | Port 38     | -70.22         | -69.37         | -70.20       | -75.07      |
|         |            | Port 39     | -70.30         | -68.87         | -70.23       | -75.07      |
|         |            | Port 40     | -69.14         | -68.12         | -70.20       | -75.11      |
|         |            | Port 41     | -69.27         | -68.41         | -69.76       | -75.17      |
|         |            | Port 42     | -69.81         | -66.44         | -70.24       | -74.96      |
|         |            | Port 43     | -70.16         | -68.73         | -69.95       | -75.19      |
|         |            | Port 44     | -68.66         | -66.38         | -70.11       | -75.26      |

**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (119) / (169) pages

|         |            |             |                |                |              |             |
|---------|------------|-------------|----------------|----------------|--------------|-------------|
|         |            | Port 45     | -69.70         | -68.66         | -69.97       | -75.14      |
|         |            | Port 46     | -70.66         | -69.54         | -69.99       | -75.12      |
|         |            | Port 47     | -70.02         | -68.58         | -69.90       | -75.21      |
|         |            | Port 48     | -69.87         | -68.56         | -70.09       | -75.06      |
|         |            | Port 49     | -69.11         | -66.48         | -70.32       | -75.07      |
|         |            | Port 50     | -68.88         | -67.26         | -70.23       | -75.02      |
|         |            | Port 51     | -69.29         | -67.77         | -70.04       | -75.01      |
|         |            | Port 52     | -70.50         | -70.37         | -70.16       | -75.09      |
|         |            | Port 53     | -68.30         | -66.71         | -70.03       | -75.16      |
|         |            | Port 54     | -69.18         | -67.58         | -70.03       | -74.99      |
|         |            | Port 55     | -70.38         | -69.73         | -69.92       | -75.06      |
|         |            | Port 56     | -70.63         | -69.95         | -69.75       | -74.98      |
|         |            | Port 57     | -70.41         | -70.09         | -70.13       | -75.30      |
|         |            | Port 58     | -69.57         | -68.07         | -69.87       | -74.92      |
|         |            | Port 59     | -69.91         | -69.39         | -70.30       | -74.75      |
|         |            | Port 60     | -68.95         | -67.24         | -70.11       | -75.18      |
|         |            | Port 61     | -69.72         | -68.33         | -70.03       | -75.24      |
|         |            | Port 62     | -68.33         | -66.74         | -70.00       | -75.10      |
|         |            | Port 63     | -71.65         | -69.84         | -70.20       | -74.99      |
|         |            | Sum of data | -51.65         | -50.28         | -52.01       | -57.02      |
|         |            | Limit (dBm) | -40.00         | -40.00         | -40.00       | -40.00      |
|         |            | Margin(dB)  | -11.65         | -10.28         | -12.01       | -17.02      |
| Channel | Modulation | Port        | Measured Range |                |              |             |
|         |            |             | 30 to 3530MHz  | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| Mid     | 64QAM      | Port 0      | -69.75         | -68.81         | -70.22       | -75.03      |
|         |            | Port 1      | -70.67         | -69.92         | -69.96       | -75.08      |
|         |            | Port 2      | -68.44         | -70.74         | -69.94       | -75.03      |
|         |            | Port 3      | -69.99         | -69.04         | -69.89       | -75.13      |
|         |            | Port 4      | -68.78         | -66.80         | -70.16       | -74.96      |
|         |            | Port 5      | -68.85         | -67.14         | -70.10       | -75.29      |
|         |            | Port 6      | -71.29         | -70.90         | -70.06       | -74.94      |
|         |            | Port 7      | -70.94         | -70.54         | -70.28       | -75.11      |
|         |            | Port 8      | -68.82         | -65.90         | -69.88       | -74.98      |
|         |            | Port 9      | -70.40         | -68.71         | -70.22       | -75.18      |
|         |            | Port 10     | -70.68         | -70.39         | -70.14       | -75.02      |
|         |            | Port 11     | -68.31         | -70.09         | -70.11       | -75.12      |
|         |            | Port 12     | -69.46         | -67.90         | -70.07       | -74.88      |
|         |            | Port 13     | -70.57         | -69.54         | -70.25       | -75.26      |
|         |            | Port 14     | -70.32         | -69.50         | -70.18       | -75.21      |
|         |            | Port 15     | -70.52         | -69.74         | -70.15       | -74.96      |
|         |            | Port 16     | -68.49         | -65.99         | -69.91       | -75.20      |
|         |            | Port 17     | -68.38         | -68.75         | -70.08       | -75.25      |
|         |            | Port 18     | -68.60         | -69.82         | -70.14       | -74.87      |
|         |            | Port 19     | -70.77         | -70.37         | -70.00       | -75.15      |
|         |            | Port 20     | -69.77         | -68.59         | -70.13       | -75.21      |
|         |            | Port 21     | -70.33         | -68.87         | -69.72       | -75.25      |
|         |            | Port 22     | -70.96         | -70.48         | -70.17       | -75.21      |
|         |            | Port 23     | -71.27         | -70.91         | -70.14       | -75.11      |
|         |            | Port 24     | -69.58         | -69.18         | -70.27       | -75.08      |
|         |            | Port 25     | -70.71         | -69.30         | -70.11       | -75.32      |
|         |            | Port 26     | -70.44         | -70.02         | -70.21       | -75.24      |
|         |            | Port 27     | -70.36         | -70.02         | -70.21       | -75.05      |
|         |            | Port 28     | -70.41         | -70.39         | -70.01       | -74.85      |
|         |            | Port 29     | -70.03         | -70.64         | -69.94       | -74.72      |
|         |            | Port 30     | -69.31         | -68.74         | -70.02       | -74.89      |
|         |            | Port 31     | -69.24         | -67.45         | -70.05       | -74.96      |

**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (120) / (169) pages

|         |            |             |                |                |              |             |
|---------|------------|-------------|----------------|----------------|--------------|-------------|
|         |            | Port 32     | -68.32         | -66.02         | -70.02       | -74.85      |
|         |            | Port 33     | -69.53         | -67.55         | -69.98       | -75.22      |
|         |            | Port 34     | -67.99         | -66.58         | -70.23       | -75.33      |
|         |            | Port 35     | -69.19         | -66.45         | -70.06       | -74.96      |
|         |            | Port 36     | -68.63         | -67.12         | -70.00       | -75.26      |
|         |            | Port 37     | -68.43         | -66.54         | -70.26       | -74.94      |
|         |            | Port 38     | -70.12         | -69.52         | -70.04       | -75.09      |
|         |            | Port 39     | -70.00         | -69.07         | -70.09       | -75.20      |
|         |            | Port 40     | -69.33         | -68.09         | -70.15       | -74.99      |
|         |            | Port 41     | -69.13         | -68.23         | -70.13       | -75.17      |
|         |            | Port 42     | -69.69         | -66.99         | -70.17       | -74.85      |
|         |            | Port 43     | -70.01         | -69.46         | -70.22       | -75.30      |
|         |            | Port 44     | -68.22         | -66.54         | -70.14       | -74.92      |
|         |            | Port 45     | -69.93         | -68.28         | -70.25       | -75.10      |
|         |            | Port 46     | -70.79         | -69.94         | -70.01       | -74.98      |
|         |            | Port 47     | -69.99         | -68.69         | -70.17       | -75.17      |
|         |            | Port 48     | -70.03         | -68.51         | -70.27       | -75.34      |
|         |            | Port 49     | -69.15         | -66.85         | -69.78       | -75.07      |
|         |            | Port 50     | -68.99         | -67.86         | -70.17       | -75.11      |
|         |            | Port 51     | -69.11         | -67.41         | -69.79       | -75.10      |
|         |            | Port 52     | -70.41         | -70.70         | -70.03       | -75.34      |
|         |            | Port 53     | -68.63         | -66.61         | -70.11       | -75.35      |
|         |            | Port 54     | -69.54         | -67.66         | -70.14       | -75.18      |
|         |            | Port 55     | -70.43         | -70.10         | -70.07       | -74.93      |
|         |            | Port 56     | -70.59         | -70.47         | -70.02       | -75.07      |
|         |            | Port 57     | -70.62         | -69.97         | -70.05       | -75.16      |
|         |            | Port 58     | -69.30         | -67.96         | -70.38       | -75.15      |
|         |            | Port 59     | -69.26         | -69.32         | -70.11       | -75.16      |
|         |            | Port 60     | -69.09         | -67.62         | -69.76       | -75.06      |
|         |            | Port 61     | -69.51         | -68.23         | -69.88       | -75.09      |
|         |            | Port 62     | -68.47         | -67.00         | -69.96       | -75.24      |
|         |            | Port 63     | -71.39         | -70.75         | -70.14       | -74.37      |
|         |            | Sum of data | -51.54         | -50.40         | -52.02       | -57.02      |
|         |            | Limit (dBm) | -40.00         | -40.00         | -40.00       | -40.00      |
|         |            | Margin(dB)  | -11.54         | -10.40         | -12.02       | -17.02      |
| Channel | Modulation | Port        | Measured Range |                |              |             |
|         |            |             | 30 to 3530MHz  | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| Mid     | 256QAM     | Port 0      | -70.22         | -68.65         | -70.21       | -74.95      |
|         |            | Port 1      | -70.28         | -69.03         | -70.30       | -75.09      |
|         |            | Port 2      | -70.94         | -70.66         | -69.98       | -75.18      |
|         |            | Port 3      | -69.78         | -68.71         | -69.81       | -75.04      |
|         |            | Port 4      | -68.72         | -67.14         | -70.00       | -74.96      |
|         |            | Port 5      | -68.84         | -66.97         | -69.79       | -75.18      |
|         |            | Port 6      | -70.83         | -70.77         | -70.04       | -74.86      |
|         |            | Port 7      | -70.23         | -70.46         | -69.75       | -75.01      |
|         |            | Port 8      | -68.14         | -66.51         | -69.85       | -74.68      |
|         |            | Port 9      | -70.23         | -69.13         | -69.93       | -75.18      |
|         |            | Port 10     | -71.15         | -70.79         | -70.02       | -74.97      |
|         |            | Port 11     | -70.16         | -70.12         | -70.05       | -75.17      |
|         |            | Port 12     | -69.99         | -67.92         | -70.09       | -75.11      |
|         |            | Port 13     | -70.67         | -69.22         | -70.29       | -75.11      |
|         |            | Port 14     | -70.31         | -69.18         | -69.97       | -75.16      |
|         |            | Port 15     | -70.51         | -69.90         | -69.94       | -75.03      |
|         |            | Port 16     | -68.32         | -65.89         | -70.07       | -75.00      |
|         |            | Port 17     | -69.74         | -69.20         | -70.24       | -75.16      |
|         |            | Port 18     | -70.32         | -69.63         | -70.18       | -74.98      |

**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (121) / (169) pages

|         |            |             |                |                |              |             |
|---------|------------|-------------|----------------|----------------|--------------|-------------|
|         |            | Port 19     | -70.72         | -70.44         | -70.13       | -75.15      |
|         |            | Port 20     | -69.63         | -68.70         | -70.18       | -75.05      |
|         |            | Port 21     | -69.37         | -68.41         | -70.25       | -74.86      |
|         |            | Port 22     | -70.82         | -69.80         | -69.99       | -74.74      |
|         |            | Port 23     | -70.89         | -70.73         | -69.84       | -75.32      |
|         |            | Port 24     | -69.77         | -69.11         | -70.29       | -75.25      |
|         |            | Port 25     | -70.20         | -69.51         | -69.90       | -75.18      |
|         |            | Port 26     | -70.75         | -70.15         | -70.02       | -75.25      |
|         |            | Port 27     | -70.38         | -70.02         | -69.89       | -75.09      |
|         |            | Port 28     | -70.66         | -69.91         | -70.03       | -74.85      |
|         |            | Port 29     | -70.93         | -70.30         | -69.96       | -75.13      |
|         |            | Port 30     | -69.93         | -68.81         | -70.27       | -75.02      |
|         |            | Port 31     | -68.87         | -67.34         | -70.12       | -74.94      |
|         |            | Port 32     | -67.90         | -66.04         | -69.68       | -75.18      |
|         |            | Port 33     | -68.94         | -68.26         | -70.10       | -75.03      |
|         |            | Port 34     | -68.28         | -66.69         | -70.07       | -75.06      |
|         |            | Port 35     | -68.45         | -66.41         | -70.23       | -75.22      |
|         |            | Port 36     | -68.19         | -67.21         | -69.88       | -74.68      |
|         |            | Port 37     | -67.97         | -66.56         | -70.12       | -75.29      |
|         |            | Port 38     | -70.01         | -69.32         | -69.85       | -75.11      |
|         |            | Port 39     | -69.72         | -69.44         | -70.13       | -75.19      |
|         |            | Port 40     | -68.81         | -68.25         | -70.01       | -75.07      |
|         |            | Port 41     | -68.77         | -68.32         | -70.07       | -75.11      |
|         |            | Port 42     | -69.36         | -66.96         | -70.05       | -75.20      |
|         |            | Port 43     | -69.95         | -68.99         | -70.21       | -75.21      |
|         |            | Port 44     | -68.10         | -66.62         | -70.01       | -75.13      |
|         |            | Port 45     | -69.38         | -68.38         | -69.88       | -75.07      |
|         |            | Port 46     | -70.77         | -70.21         | -70.01       | -75.25      |
|         |            | Port 47     | -69.16         | -68.89         | -70.10       | -74.94      |
|         |            | Port 48     | -69.90         | -68.92         | -70.20       | -75.09      |
|         |            | Port 49     | -68.48         | -66.50         | -69.81       | -75.18      |
|         |            | Port 50     | -68.49         | -68.02         | -70.08       | -75.09      |
|         |            | Port 51     | -68.55         | -68.24         | -70.21       | -75.30      |
|         |            | Port 52     | -70.52         | -70.59         | -70.17       | -74.98      |
|         |            | Port 53     | -68.34         | -66.45         | -69.90       | -75.05      |
|         |            | Port 54     | -68.78         | -68.27         | -70.14       | -74.92      |
|         |            | Port 55     | -70.10         | -70.17         | -70.09       | -74.87      |
|         |            | Port 56     | -70.43         | -70.44         | -69.85       | -74.94      |
|         |            | Port 57     | -70.48         | -70.13         | -70.01       | -75.05      |
|         |            | Port 58     | -69.21         | -68.20         | -69.91       | -75.16      |
|         |            | Port 59     | -69.83         | -69.67         | -70.26       | -75.18      |
|         |            | Port 60     | -68.73         | -67.19         | -70.07       | -74.93      |
|         |            | Port 61     | -69.36         | -67.83         | -70.14       | -74.99      |
|         |            | Port 62     | -68.80         | -66.87         | -69.79       | -75.06      |
|         |            | Port 63     | -70.62         | -70.93         | -70.27       | -74.55      |
|         |            | Sum of data | -51.47         | -50.42         | -51.98       | -56.99      |
|         |            | Limit (dBm) | -40.00         | -40.00         | -40.00       | -40.00      |
|         |            | Margin(dB)  | -11.47         | -10.42         | -11.98       | -16.99      |
| Channel | Modulation | Port        | Measured Range |                |              |             |
|         |            |             | 30 to 3530MHz  | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| High    | QPSK       | Port 0      | -70.18         | -68.45         | -70.02       | -75.07      |
|         |            | Port 1      | -70.21         | -69.91         | -70.14       | -75.05      |
|         |            | Port 2      | -70.71         | -70.11         | -70.19       | -74.89      |
|         |            | Port 3      | -70.03         | -68.85         | -70.24       | -75.24      |
|         |            | Port 4      | -68.44         | -66.98         | -69.70       | -74.83      |
|         |            | Port 5      | -68.68         | -66.72         | -70.08       | -75.13      |

**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (122) / (169) pages

|  |  |         |        |        |        |        |
|--|--|---------|--------|--------|--------|--------|
|  |  | Port 6  | -71.15 | -71.12 | -70.01 | -75.04 |
|  |  | Port 7  | -70.70 | -70.30 | -70.15 | -75.02 |
|  |  | Port 8  | -68.24 | -66.39 | -70.16 | -74.94 |
|  |  | Port 9  | -70.23 | -68.51 | -70.30 | -75.14 |
|  |  | Port 10 | -71.04 | -70.93 | -70.23 | -74.98 |
|  |  | Port 11 | -70.07 | -70.12 | -69.96 | -75.08 |
|  |  | Port 12 | -69.75 | -68.28 | -69.66 | -75.03 |
|  |  | Port 13 | -70.45 | -69.73 | -69.95 | -74.89 |
|  |  | Port 14 | -69.95 | -69.10 | -70.04 | -75.09 |
|  |  | Port 15 | -70.53 | -69.96 | -69.80 | -74.49 |
|  |  | Port 16 | -68.41 | -66.18 | -70.04 | -75.10 |
|  |  | Port 17 | -69.63 | -69.34 | -70.08 | -74.71 |
|  |  | Port 18 | -70.41 | -70.11 | -69.97 | -74.64 |
|  |  | Port 19 | -70.42 | -69.96 | -70.07 | -74.84 |
|  |  | Port 20 | -69.06 | -68.93 | -70.10 | -74.89 |
|  |  | Port 21 | -69.73 | -68.56 | -70.14 | -74.69 |
|  |  | Port 22 | -70.90 | -70.54 | -70.22 | -75.03 |
|  |  | Port 23 | -70.74 | -70.47 | -70.37 | -75.05 |
|  |  | Port 24 | -69.99 | -69.11 | -70.22 | -75.17 |
|  |  | Port 25 | -70.35 | -69.55 | -70.00 | -74.66 |
|  |  | Port 26 | -70.74 | -69.94 | -70.19 | -74.65 |
|  |  | Port 27 | -70.53 | -70.11 | -69.90 | -74.71 |
|  |  | Port 28 | -70.93 | -69.98 | -69.77 | -74.87 |
|  |  | Port 29 | -70.86 | -70.69 | -69.92 | -74.85 |
|  |  | Port 30 | -69.67 | -68.57 | -70.09 | -75.06 |
|  |  | Port 31 | -69.27 | -67.12 | -70.29 | -75.06 |
|  |  | Port 32 | -67.95 | -65.75 | -70.27 | -75.03 |
|  |  | Port 33 | -69.22 | -67.81 | -70.10 | -74.82 |
|  |  | Port 34 | -68.44 | -66.17 | -70.16 | -75.17 |
|  |  | Port 35 | -68.54 | -66.47 | -70.31 | -74.91 |
|  |  | Port 36 | -68.31 | -67.33 | -69.93 | -75.09 |
|  |  | Port 37 | -67.99 | -66.47 | -69.64 | -75.14 |
|  |  | Port 38 | -69.96 | -69.71 | -69.93 | -74.93 |
|  |  | Port 39 | -69.91 | -69.06 | -70.02 | -75.01 |
|  |  | Port 40 | -69.68 | -68.41 | -69.85 | -75.07 |
|  |  | Port 41 | -68.85 | -68.10 | -69.77 | -75.11 |
|  |  | Port 42 | -69.68 | -67.06 | -70.08 | -75.05 |
|  |  | Port 43 | -69.87 | -69.25 | -70.09 | -75.11 |
|  |  | Port 44 | -67.99 | -66.78 | -70.14 | -75.12 |
|  |  | Port 45 | -69.61 | -68.69 | -70.31 | -75.01 |
|  |  | Port 46 | -70.49 | -70.27 | -69.90 | -74.82 |
|  |  | Port 47 | -69.70 | -69.02 | -70.15 | -74.99 |
|  |  | Port 48 | -69.72 | -68.98 | -70.00 | -74.76 |
|  |  | Port 49 | -68.96 | -66.93 | -69.99 | -75.12 |
|  |  | Port 50 | -68.60 | -68.06 | -69.86 | -74.91 |
|  |  | Port 51 | -68.70 | -67.86 | -70.12 | -75.07 |
|  |  | Port 52 | -70.27 | -70.65 | -70.19 | -74.66 |
|  |  | Port 53 | -68.28 | -66.69 | -70.14 | -75.11 |
|  |  | Port 54 | -69.23 | -68.06 | -70.33 | -74.97 |
|  |  | Port 55 | -70.37 | -69.95 | -70.10 | -74.85 |
|  |  | Port 56 | -70.54 | -70.29 | -69.85 | -75.04 |
|  |  | Port 57 | -70.51 | -69.79 | -70.08 | -75.11 |
|  |  | Port 58 | -69.61 | -68.38 | -69.96 | -74.89 |
|  |  | Port 59 | -69.87 | -69.41 | -70.22 | -74.62 |
|  |  | Port 60 | -68.90 | -66.98 | -70.16 | -74.74 |
|  |  | Port 61 | -69.52 | -68.18 | -70.21 | -74.77 |

**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (123) / (169) pages

|         |            |             |                |                |              |             |
|---------|------------|-------------|----------------|----------------|--------------|-------------|
|         |            | Port 62     | -68.87         | -66.65         | -70.18       | -74.91      |
|         |            | Port 63     | -70.55         | -70.86         | -70.18       | -74.89      |
|         |            | Sum of data | -51.55         | -50.42         | -52.00       | -56.88      |
|         |            | Limit (dBm) | -40.00         | -40.00         | -40.00       | -40.00      |
|         |            | Margin(dB)  | -11.55         | -10.42         | -12.00       | -16.88      |
| Channel | Modulation | Port        | Measured Range |                |              |             |
|         |            |             | 30 to 3530MHz  | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| High    | 16QAM      | Port 0      | -70.25         | -68.54         | -70.16       | -74.53      |
|         |            | Port 1      | -70.76         | -69.61         | -69.99       | -75.02      |
|         |            | Port 2      | -71.10         | -70.30         | -70.03       | -75.22      |
|         |            | Port 3      | -70.04         | -69.06         | -70.12       | -75.08      |
|         |            | Port 4      | -69.15         | -67.25         | -69.95       | -74.64      |
|         |            | Port 5      | -69.12         | -66.55         | -70.11       | -75.10      |
|         |            | Port 6      | -71.35         | -70.74         | -70.30       | -74.84      |
|         |            | Port 7      | -70.94         | -70.44         | -70.20       | -75.01      |
|         |            | Port 8      | -68.64         | -65.99         | -70.21       | -75.02      |
|         |            | Port 9      | -69.93         | -68.75         | -69.82       | -74.87      |
|         |            | Port 10     | -71.10         | -70.80         | -69.82       | -75.04      |
|         |            | Port 11     | -70.45         | -70.51         | -69.79       | -75.15      |
|         |            | Port 12     | -69.61         | -68.17         | -70.07       | -74.82      |
|         |            | Port 13     | -70.60         | -69.77         | -70.01       | -74.88      |
|         |            | Port 14     | -70.08         | -68.87         | -69.92       | -74.95      |
|         |            | Port 15     | -70.18         | -69.51         | -70.32       | -74.96      |
|         |            | Port 16     | -68.10         | -65.84         | -70.13       | -75.15      |
|         |            | Port 17     | -69.99         | -68.98         | -69.99       | -75.18      |
|         |            | Port 18     | -70.64         | -69.90         | -70.13       | -75.10      |
|         |            | Port 19     | -70.94         | -70.29         | -69.92       | -75.06      |
|         |            | Port 20     | -69.62         | -68.24         | -70.28       | -74.86      |
|         |            | Port 21     | -69.97         | -69.10         | -70.01       | -75.07      |
|         |            | Port 22     | -70.95         | -70.48         | -69.88       | -74.91      |
|         |            | Port 23     | -71.27         | -70.32         | -70.09       | -74.86      |
|         |            | Port 24     | -70.11         | -68.81         | -69.71       | -74.96      |
|         |            | Port 25     | -70.32         | -69.20         | -70.24       | -74.92      |
|         |            | Port 26     | -70.65         | -69.72         | -69.48       | -75.08      |
|         |            | Port 27     | -70.66         | -69.86         | -70.08       | -74.84      |
|         |            | Port 28     | -70.70         | -70.16         | -69.96       | -74.98      |
|         |            | Port 29     | -71.10         | -70.46         | -69.97       | -75.10      |
|         |            | Port 30     | -70.02         | -68.50         | -70.20       | -74.52      |
|         |            | Port 31     | -68.78         | -66.84         | -69.86       | -75.27      |
|         |            | Port 32     | -68.04         | -65.65         | -69.83       | -75.07      |
|         |            | Port 33     | -69.37         | -67.77         | -69.68       | -74.69      |
|         |            | Port 34     | -68.40         | -66.83         | -70.02       | -75.00      |
|         |            | Port 35     | -68.57         | -66.37         | -70.22       | -74.88      |
|         |            | Port 36     | -68.84         | -66.62         | -69.93       | -74.94      |
|         |            | Port 37     | -68.35         | -65.85         | -70.08       | -75.06      |
|         |            | Port 38     | -69.97         | -69.14         | -70.16       | -74.98      |
|         |            | Port 39     | -69.83         | -69.00         | -70.07       | -74.94      |
|         |            | Port 40     | -69.45         | -68.54         | -70.32       | -74.87      |
|         |            | Port 41     | -69.11         | -68.20         | -70.15       | -74.72      |
|         |            | Port 42     | -69.34         | -66.96         | -69.79       | -75.13      |
|         |            | Port 43     | -69.93         | -69.25         | -70.21       | -75.23      |
|         |            | Port 44     | -68.27         | -66.46         | -70.00       | -75.01      |
|         |            | Port 45     | -69.53         | -68.39         | -70.21       | -74.43      |
|         |            | Port 46     | -70.55         | -69.88         | -70.09       | -74.77      |
|         |            | Port 47     | -69.74         | -68.53         | -69.62       | -74.72      |
|         |            | Port 48     | -69.50         | -68.81         | -70.00       | -74.94      |

**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (124) / (169) pages

|         |            |             |                |                |              |             |
|---------|------------|-------------|----------------|----------------|--------------|-------------|
|         |            | Port 49     | -68.98         | -66.80         | -70.17       | -74.80      |
|         |            | Port 50     | -68.57         | -67.72         | -70.27       | -75.02      |
|         |            | Port 51     | -69.10         | -67.84         | -70.31       | -75.07      |
|         |            | Port 52     | -70.06         | -70.13         | -70.34       | -75.21      |
|         |            | Port 53     | -68.21         | -67.14         | -70.09       | -74.87      |
|         |            | Port 54     | -69.29         | -68.23         | -70.27       | -74.89      |
|         |            | Port 55     | -70.15         | -70.04         | -70.11       | -75.10      |
|         |            | Port 56     | -70.42         | -70.42         | -69.99       | -74.80      |
|         |            | Port 57     | -70.58         | -69.80         | -70.24       | -75.07      |
|         |            | Port 58     | -68.97         | -68.10         | -70.21       | -75.00      |
|         |            | Port 59     | -69.48         | -69.79         | -70.19       | -74.97      |
|         |            | Port 60     | -68.76         | -67.60         | -70.21       | -74.64      |
|         |            | Port 61     | -69.18         | -68.05         | -70.20       | -74.75      |
|         |            | Port 62     | -68.61         | -66.55         | -69.91       | -74.56      |
|         |            | Port 63     | -70.74         | -71.15         | -69.95       | -75.07      |
|         |            | Sum of data | -51.61         | -50.33         | -51.99       | -56.87      |
|         |            | Limit (dBm) | -40.00         | -40.00         | -40.00       | -40.00      |
|         |            | Margin(dB)  | -11.61         | -10.33         | -11.99       | -16.87      |
| Channel | Modulation | Port        | Measured Range |                |              |             |
|         |            |             | 30 to 3530MHz  | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| High    | 64QAM      | Port 0      | -70.14         | -68.03         | -69.94       | -75.01      |
|         |            | Port 1      | -70.96         | -69.92         | -69.94       | -75.10      |
|         |            | Port 2      | -71.45         | -70.70         | -70.26       | -74.85      |
|         |            | Port 3      | -69.85         | -68.75         | -70.23       | -75.11      |
|         |            | Port 4      | -68.88         | -67.11         | -70.07       | -75.01      |
|         |            | Port 5      | -69.03         | -66.68         | -70.04       | -74.83      |
|         |            | Port 6      | -71.48         | -70.88         | -69.93       | -75.07      |
|         |            | Port 7      | -71.24         | -70.57         | -70.16       | -75.03      |
|         |            | Port 8      | -68.75         | -65.95         | -69.94       | -74.98      |
|         |            | Port 9      | -70.17         | -68.58         | -70.24       | -75.07      |
|         |            | Port 10     | -71.64         | -70.84         | -69.98       | -75.04      |
|         |            | Port 11     | -70.86         | -70.24         | -69.90       | -74.71      |
|         |            | Port 12     | -70.01         | -67.75         | -70.12       | -75.03      |
|         |            | Port 13     | -70.87         | -69.42         | -70.21       | -75.14      |
|         |            | Port 14     | -70.13         | -69.26         | -70.15       | -74.76      |
|         |            | Port 15     | -71.03         | -69.90         | -70.23       | -74.99      |
|         |            | Port 16     | -68.78         | -66.07         | -70.09       | -75.11      |
|         |            | Port 17     | -70.14         | -68.92         | -69.90       | -74.80      |
|         |            | Port 18     | -70.78         | -69.81         | -70.00       | -74.91      |
|         |            | Port 19     | -71.10         | -70.53         | -70.18       | -74.94      |
|         |            | Port 20     | -70.01         | -68.82         | -70.01       | -75.16      |
|         |            | Port 21     | -70.12         | -68.91         | -70.02       | -75.23      |
|         |            | Port 22     | -71.13         | -70.19         | -69.96       | -74.91      |
|         |            | Port 23     | -71.46         | -70.83         | -70.00       | -74.91      |
|         |            | Port 24     | -70.41         | -69.23         | -70.19       | -75.07      |
|         |            | Port 25     | -70.67         | -69.39         | -70.05       | -75.00      |
|         |            | Port 26     | -71.18         | -70.27         | -70.06       | -75.00      |
|         |            | Port 27     | -70.30         | -70.02         | -70.22       | -74.85      |
|         |            | Port 28     | -71.05         | -70.39         | -69.82       | -75.06      |
|         |            | Port 29     | -71.33         | -70.39         | -70.17       | -75.00      |
|         |            | Port 30     | -70.05         | -68.71         | -70.24       | -74.80      |
|         |            | Port 31     | -67.38         | -67.57         | -69.77       | -74.93      |
|         |            | Port 32     | -68.02         | -65.89         | -69.91       | -75.09      |
|         |            | Port 33     | -69.60         | -67.64         | -70.00       | -74.92      |
|         |            | Port 34     | -68.35         | -66.63         | -69.91       | -75.08      |
|         |            | Port 35     | -68.93         | -66.45         | -70.29       | -74.82      |

**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (125) / (169) pages

|         |            |             |                |                |              |             |
|---------|------------|-------------|----------------|----------------|--------------|-------------|
|         |            | Port 36     | -68.84         | -67.13         | -70.13       | -74.65      |
|         |            | Port 37     | -68.02         | -65.81         | -70.33       | -74.84      |
|         |            | Port 38     | -70.37         | -69.70         | -70.15       | -75.09      |
|         |            | Port 39     | -69.82         | -69.22         | -70.28       | -74.71      |
|         |            | Port 40     | -69.48         | -68.40         | -70.09       | -74.50      |
|         |            | Port 41     | -69.31         | -67.99         | -70.22       | -74.99      |
|         |            | Port 42     | -69.57         | -66.86         | -70.04       | -74.42      |
|         |            | Port 43     | -70.52         | -69.12         | -70.07       | -75.02      |
|         |            | Port 44     | -68.41         | -66.79         | -70.27       | -75.17      |
|         |            | Port 45     | -69.86         | -68.07         | -70.12       | -75.07      |
|         |            | Port 46     | -70.88         | -69.90         | -69.97       | -74.87      |
|         |            | Port 47     | -70.09         | -68.62         | -69.95       | -75.05      |
|         |            | Port 48     | -69.97         | -69.07         | -70.23       | -74.70      |
|         |            | Port 49     | -68.86         | -67.10         | -69.82       | -74.83      |
|         |            | Port 50     | -69.03         | -67.88         | -70.15       | -75.06      |
|         |            | Port 51     | -68.95         | -67.69         | -70.16       | -75.18      |
|         |            | Port 52     | -70.67         | -70.55         | -70.10       | -75.16      |
|         |            | Port 53     | -68.88         | -66.57         | -70.04       | -74.98      |
|         |            | Port 54     | -68.76         | -67.92         | -70.23       | -75.08      |
|         |            | Port 55     | -70.38         | -70.06         | -70.31       | -74.76      |
|         |            | Port 56     | -70.72         | -70.47         | -69.94       | -74.95      |
|         |            | Port 57     | -70.60         | -70.18         | -69.87       | -74.95      |
|         |            | Port 58     | -69.44         | -68.25         | -70.03       | -74.96      |
|         |            | Port 59     | -70.05         | -69.46         | -70.08       | -74.95      |
|         |            | Port 60     | -69.09         | -67.45         | -70.05       | -74.95      |
|         |            | Port 61     | -69.81         | -68.07         | -70.02       | -74.62      |
|         |            | Port 62     | -68.94         | -66.70         | -70.14       | -74.96      |
|         |            | Port 63     | -70.91         | -70.65         | -70.18       | -75.21      |
|         |            | Sum of data | -51.78         | -50.38         | -52.02       | -56.89      |
|         |            | Limit (dBm) | -40.00         | -40.00         | -40.00       | -40.00      |
|         |            | Margin(dB)  | -11.78         | -10.38         | -12.02       | -16.89      |
| Channel | Modulation | Port        | Measured Range |                |              |             |
|         |            |             | 30 to 3530MHz  | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| High    | 256QAM     | Port 0      | -70.17         | -68.76         | -70.23       | -75.02      |
|         |            | Port 1      | -70.50         | -69.51         | -69.43       | -74.92      |
|         |            | Port 2      | -71.01         | -70.59         | -70.27       | -75.14      |
|         |            | Port 3      | -69.60         | -68.57         | -70.19       | -74.78      |
|         |            | Port 4      | -68.75         | -67.19         | -69.91       | -74.75      |
|         |            | Port 5      | -68.91         | -66.77         | -70.14       | -75.02      |
|         |            | Port 6      | -70.87         | -71.21         | -70.16       | -74.77      |
|         |            | Port 7      | -70.95         | -70.73         | -70.19       | -75.06      |
|         |            | Port 8      | -68.53         | -66.08         | -70.09       | -74.79      |
|         |            | Port 9      | -70.27         | -69.07         | -70.00       | -74.97      |
|         |            | Port 10     | -71.14         | -70.80         | -69.99       | -74.97      |
|         |            | Port 11     | -70.34         | -70.32         | -70.04       | -74.75      |
|         |            | Port 12     | -69.44         | -68.15         | -70.18       | -75.00      |
|         |            | Port 13     | -70.19         | -69.78         | -70.06       | -75.11      |
|         |            | Port 14     | -69.85         | -69.33         | -70.30       | -75.00      |
|         |            | Port 15     | -70.34         | -69.72         | -69.88       | -74.90      |
|         |            | Port 16     | -68.34         | -65.95         | -69.69       | -75.03      |
|         |            | Port 17     | -70.05         | -68.63         | -69.78       | -74.96      |
|         |            | Port 18     | -70.63         | -70.16         | -70.03       | -74.76      |
|         |            | Port 19     | -70.79         | -70.51         | -69.93       | -75.03      |
|         |            | Port 20     | -69.61         | -69.03         | -69.90       | -74.74      |
|         |            | Port 21     | -69.58         | -69.00         | -70.25       | -75.06      |
|         |            | Port 22     | -70.79         | -70.57         | -70.19       | -75.08      |

**CTK Co., Ltd.**

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (126) / (169) pages

|  |  |             |        |        |        |        |
|--|--|-------------|--------|--------|--------|--------|
|  |  | Port 23     | -71.01 | -70.56 | -69.96 | -75.11 |
|  |  | Port 24     | -70.13 | -68.27 | -70.28 | -75.01 |
|  |  | Port 25     | -70.23 | -69.63 | -70.11 | -74.80 |
|  |  | Port 26     | -70.83 | -69.57 | -70.06 | -75.06 |
|  |  | Port 27     | -70.50 | -70.36 | -70.08 | -75.12 |
|  |  | Port 28     | -70.74 | -70.35 | -70.05 | -74.91 |
|  |  | Port 29     | -70.92 | -70.24 | -70.16 | -74.69 |
|  |  | Port 30     | -69.81 | -68.77 | -70.04 | -74.67 |
|  |  | Port 31     | -69.27 | -65.72 | -70.07 | -74.84 |
|  |  | Port 32     | -67.77 | -66.19 | -70.10 | -74.93 |
|  |  | Port 33     | -69.25 | -68.01 | -70.12 | -74.69 |
|  |  | Port 34     | -68.51 | -66.70 | -70.06 | -74.80 |
|  |  | Port 35     | -68.68 | -66.14 | -69.78 | -74.99 |
|  |  | Port 36     | -68.65 | -67.27 | -70.28 | -74.78 |
|  |  | Port 37     | -68.07 | -66.23 | -70.07 | -74.97 |
|  |  | Port 38     | -70.25 | -69.51 | -70.14 | -74.86 |
|  |  | Port 39     | -70.10 | -69.18 | -70.09 | -75.07 |
|  |  | Port 40     | -69.22 | -68.40 | -70.01 | -75.06 |
|  |  | Port 41     | -68.64 | -68.31 | -69.92 | -75.04 |
|  |  | Port 42     | -69.50 | -66.66 | -70.07 | -74.87 |
|  |  | Port 43     | -69.72 | -68.94 | -69.85 | -74.92 |
|  |  | Port 44     | -68.16 | -66.75 | -70.04 | -74.99 |
|  |  | Port 45     | -69.69 | -68.88 | -70.05 | -75.04 |
|  |  | Port 46     | -70.80 | -70.12 | -70.02 | -75.01 |
|  |  | Port 47     | -69.58 | -69.03 | -70.16 | -74.62 |
|  |  | Port 48     | -69.75 | -69.24 | -69.81 | -74.98 |
|  |  | Port 49     | -68.48 | -67.00 | -69.96 | -74.73 |
|  |  | Port 50     | -68.66 | -67.98 | -69.95 | -74.80 |
|  |  | Port 51     | -68.88 | -67.57 | -70.10 | -75.06 |
|  |  | Port 52     | -70.38 | -70.06 | -70.16 | -75.06 |
|  |  | Port 53     | -68.60 | -66.80 | -69.87 | -75.20 |
|  |  | Port 54     | -69.02 | -68.08 | -69.82 | -75.02 |
|  |  | Port 55     | -70.40 | -70.30 | -69.81 | -75.14 |
|  |  | Port 56     | -70.20 | -70.56 | -70.11 | -75.00 |
|  |  | Port 57     | -70.22 | -69.87 | -69.92 | -75.00 |
|  |  | Port 58     | -69.39 | -68.23 | -69.64 | -74.89 |
|  |  | Port 59     | -69.90 | -69.24 | -70.10 | -74.61 |
|  |  | Port 60     | -68.78 | -67.35 | -69.87 | -74.95 |
|  |  | Port 61     | -69.44 | -68.18 | -70.10 | -75.15 |
|  |  | Port 62     | -68.73 | -66.37 | -69.96 | -74.94 |
|  |  | Port 63     | -70.67 | -70.59 | -70.00 | -75.01 |
|  |  | Sum of data | -51.57 | -50.39 | -51.96 | -56.87 |
|  |  | Limit (dBm) | -40.00 | -40.00 | -40.00 | -40.00 |
|  |  | Margin(dB)  | -11.57 | -10.39 | -11.96 | -16.87 |

**Table 8-27 CSE Test Result Table (NR\_n48\_1C\_10M)**



# CTK Co., Ltd.

(Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17142, Korea  
Tel: +82-1551-9871  
Fax: +82-31-624-9501

REPORT No.:  
CTK-2026-01690  
Page (127) / (169) pages

| Channel | Modulation | Worst Port       | Measured Range (MHz) |                |              |             |
|---------|------------|------------------|----------------------|----------------|--------------|-------------|
|         |            |                  | 30 to 3530MHz        | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| Low     | QPSK       | Port 16          | -68.47               | -65.89         | -69.84       | -74.57      |
|         |            | MIMO Limit (dBm) | -48.06               | -48.06         | -48.06       | -48.06      |
|         |            | Margin (dB)      | -20.41               | -17.83         | -21.78       | -26.51      |
| Channel | Modulation | Worst Port       | Measured Range (MHz) |                |              |             |
|         |            |                  | 30 to 3530MHz        | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| Mid     | QPSK       | Port 37          | -68.93               | -66.78         | -70.13       | -74.68      |
|         |            | MIMO Limit (dBm) | -48.06               | -48.06         | -48.06       | -48.06      |
|         |            | Margin (dB)      | -20.87               | -18.72         | -22.07       | -26.62      |
| Channel | Modulation | Worst Port       | Measured Range (MHz) |                |              |             |
|         |            |                  | 30 to 3530MHz        | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| High    | QPSK       | Port 49          | -68.93               | -66.78         | -69.94       | -74.69      |
|         |            | MIMO Limit (dBm) | -48.06               | -48.06         | -48.06       | -48.06      |
|         |            | Margin (dB)      | -20.87               | -18.72         | -21.88       | -26.63      |

Table 8-28 CSE Test Result Table (NR\_n48\_2C\_10M+20M)

| Channel | Modulation | Worst Port       | Measured Range (MHz) |                |              |             |
|---------|------------|------------------|----------------------|----------------|--------------|-------------|
|         |            |                  | 30 to 3530MHz        | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| Low     | QPSK       | Port 16          | -68.68               | -65.81         | -69.90       | -74.57      |
|         |            | MIMO Limit (dBm) | -48.06               | -48.06         | -48.06       | -48.06      |
|         |            | Margin (dB)      | -20.62               | -17.75         | -21.84       | -26.51      |
| Channel | Modulation | Worst Port       | Measured Range (MHz) |                |              |             |
|         |            |                  | 30 to 3530MHz        | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| Mid     | QPSK       | Port 42          | -69.23               | -66.79         | -70.10       | -74.70      |
|         |            | MIMO Limit (dBm) | -48.06               | -48.06         | -48.06       | -48.06      |
|         |            | Margin (dB)      | -21.17               | -18.73         | -22.04       | -26.64      |
| Channel | Modulation | Worst Port       | Measured Range (MHz) |                |              |             |
|         |            |                  | 30 to 3530MHz        | 3.72 to 6.2GHz | 6.2 to 18GHz | 18 to 40GHz |
| High    | QPSK       | Port 44          | -68.11               | -66.69         | -69.83       | -74.56      |
|         |            | MIMO Limit (dBm) | -48.06               | -48.06         | -48.06       | -48.06      |
|         |            | Margin (dB)      | -20.05               | -18.63         | -21.77       | -26.50      |

Table 8-29 CSE Test Result Table (NR\_n48\_3C\_10M+20M+20M)