

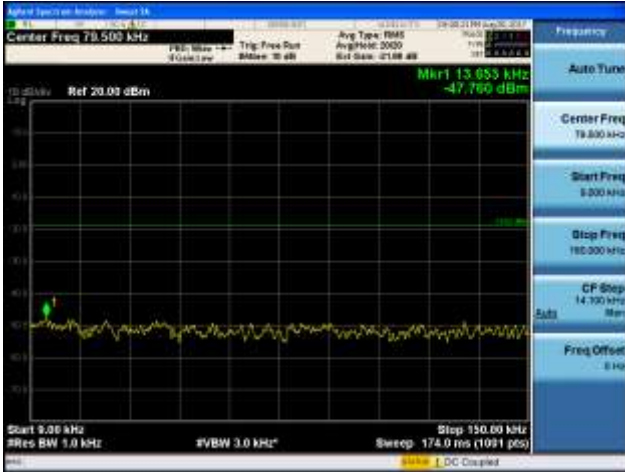


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (390) / (893)  
 Pages

**Band 66, BW 5MHz + BW 20MHz, Multi 2 carrier(Contiguous), 4TX, Bottom**  
 [QPSK]

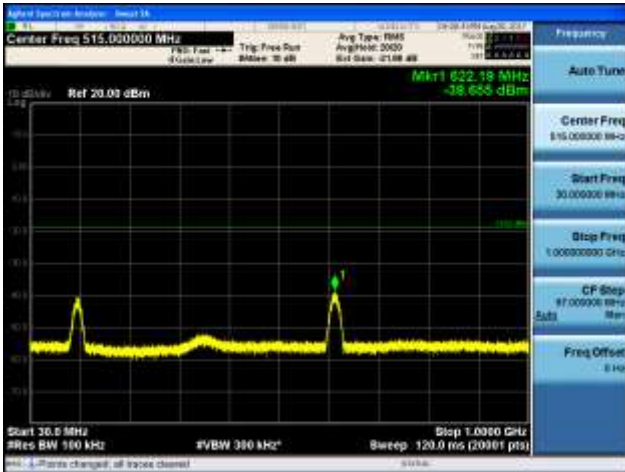
9 kHz - 150 kHz



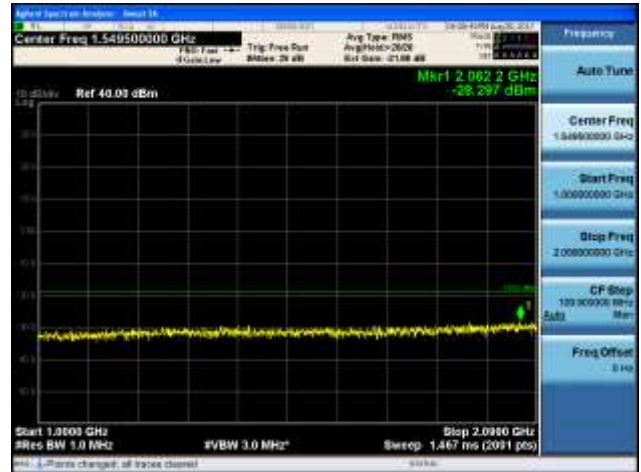
150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

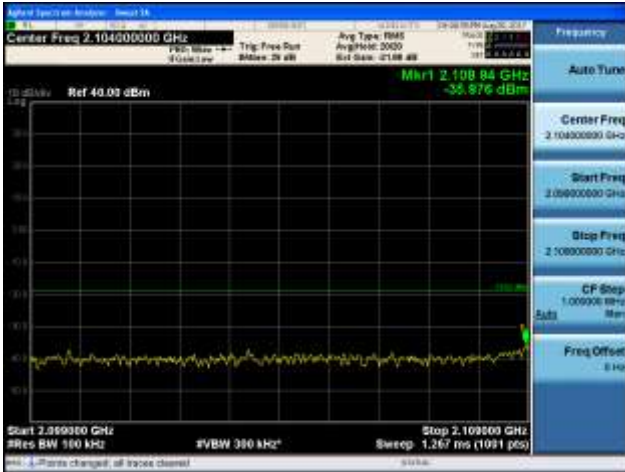




**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

Report No.:  
CTK-2017-01618-1  
Page (391) / (893)  
Pages

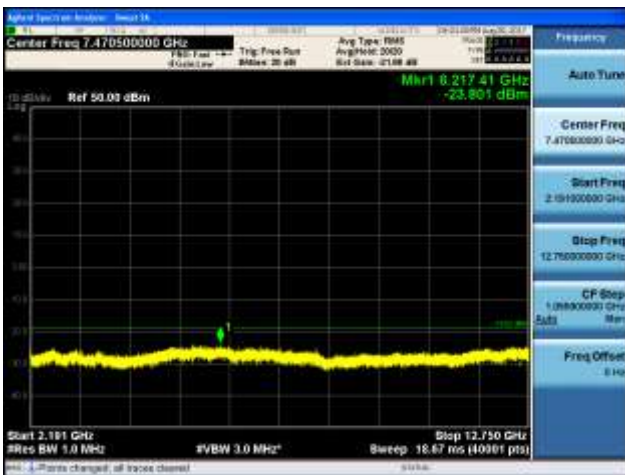
2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



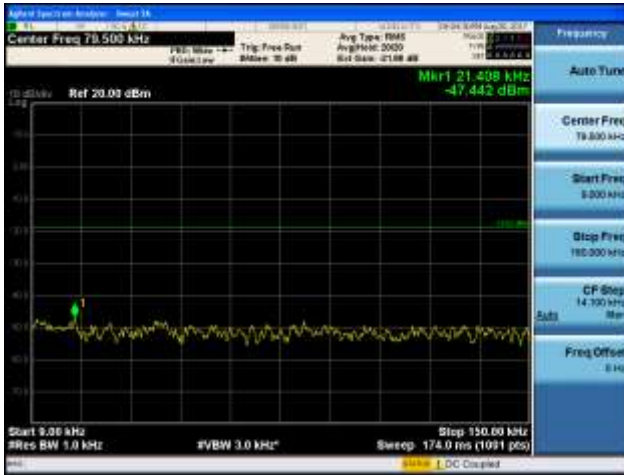


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

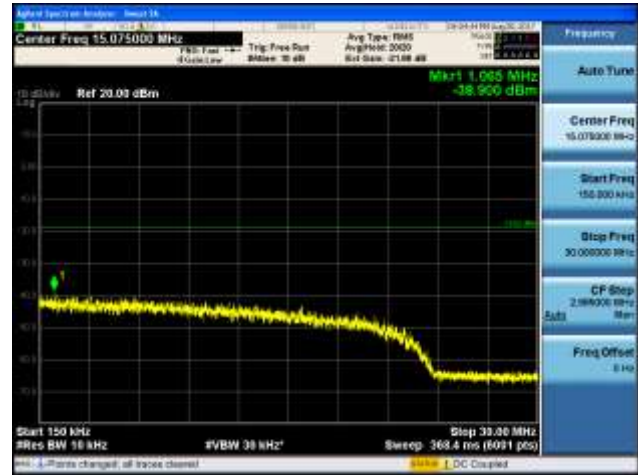
Report No.:  
 CTK-2017-01618-1  
 Page (392) / (893)  
 Pages

[16QAM]

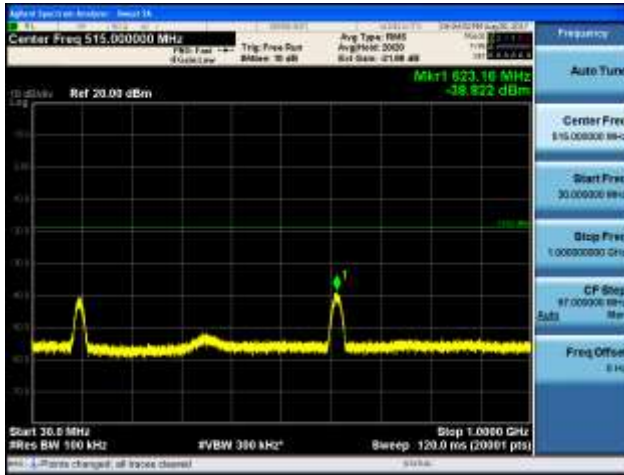
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

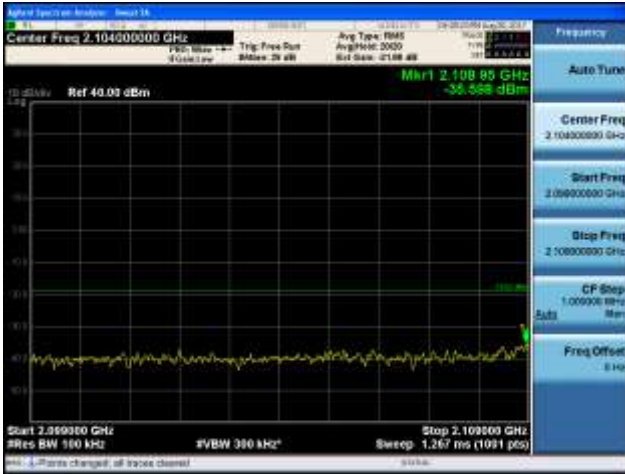




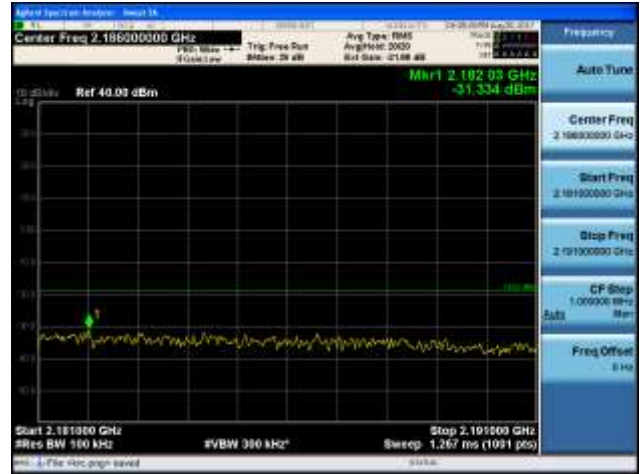
**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

Report No.:  
CTK-2017-01618-1  
Page (393) / (893)  
Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



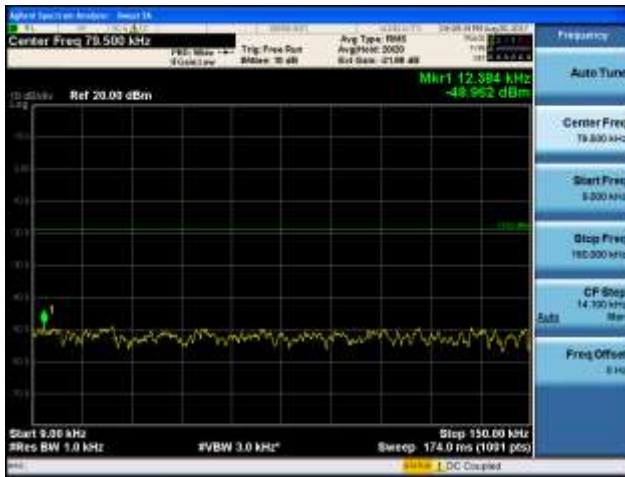


**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

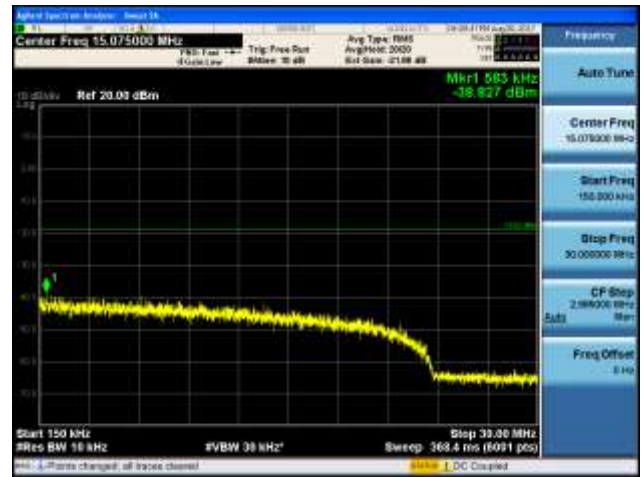
Report No.:  
CTK-2017-01618-1  
Page (394) / (893)  
Pages

[64QAM]

9 kHz - 150 kHz



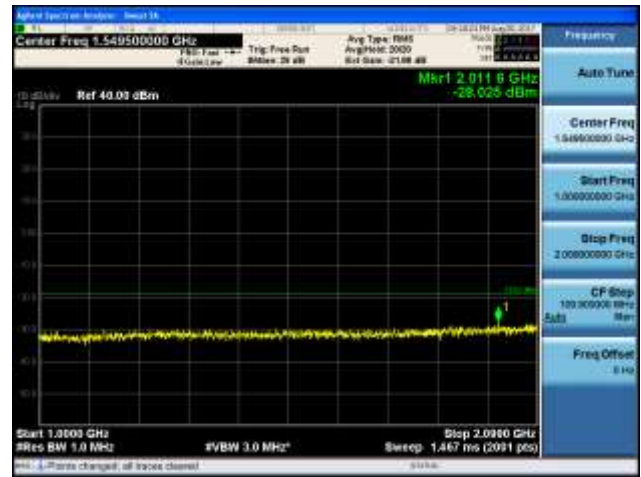
150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (395) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



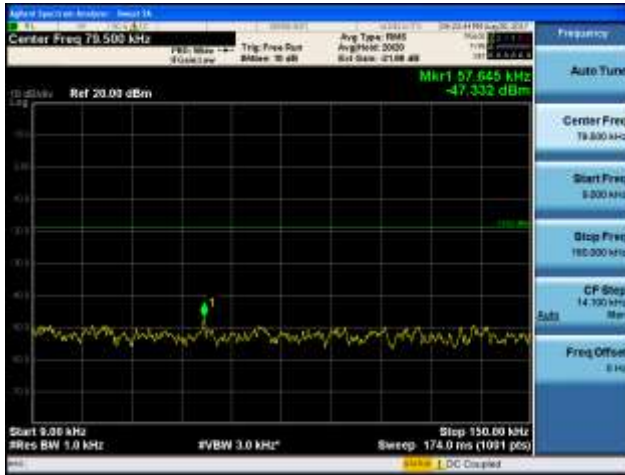


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

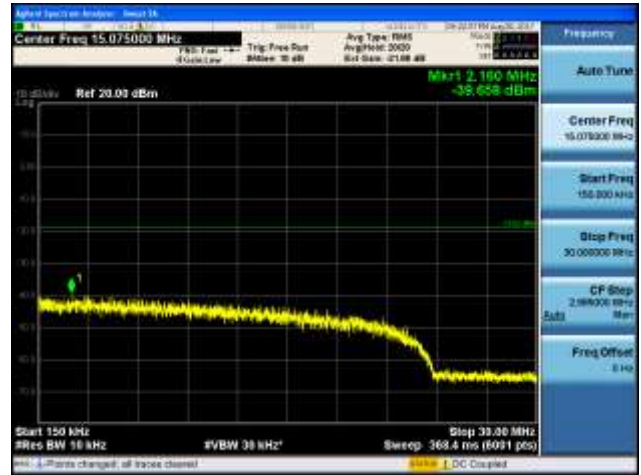
Report No.:  
 CTK-2017-01618-1  
 Page (396) / (893)  
 Pages

[256QAM]

9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz





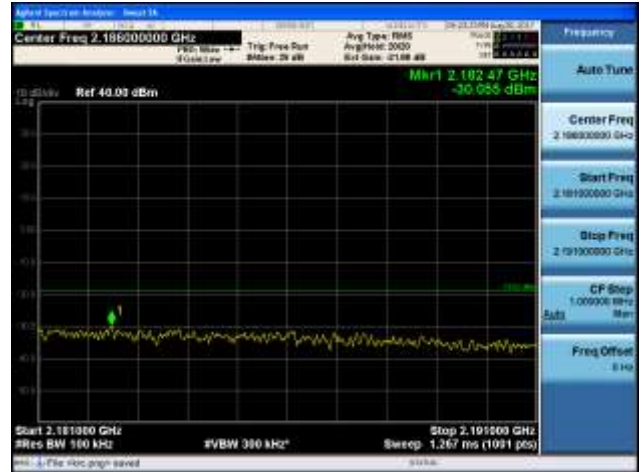
**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (397) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



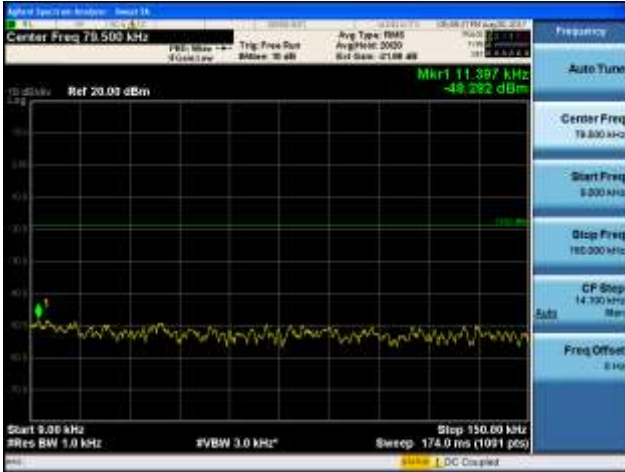


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

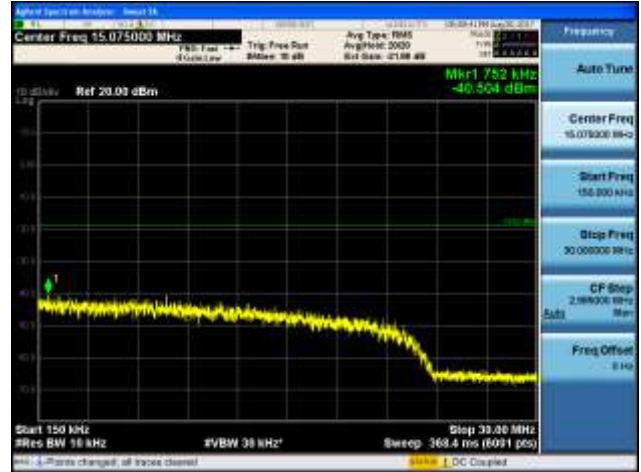
Report No.:  
 CTK-2017-01618-1  
 Page (398) / (893)  
 Pages

**Band 66, BW 5MHz + BW 20MHz, Multi 2 carrier(Contiguous), 4TX, Top**  
 [QPSK]

9 kHz - 150 kHz



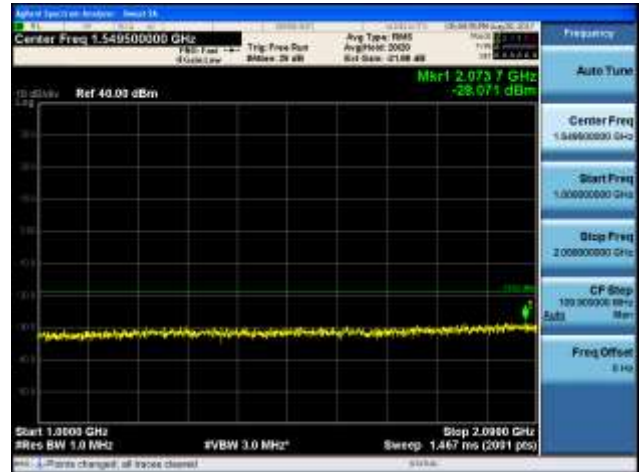
150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

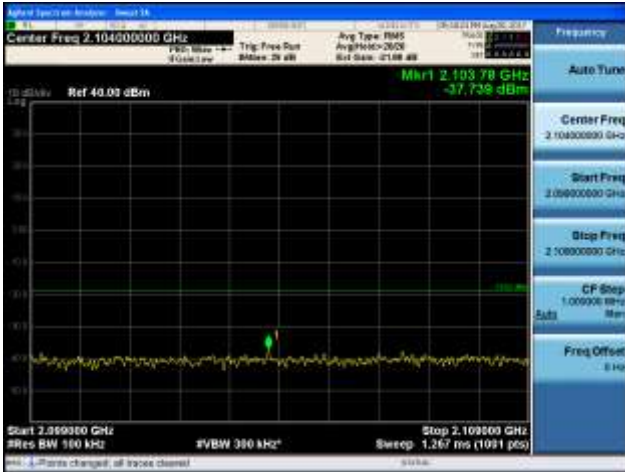




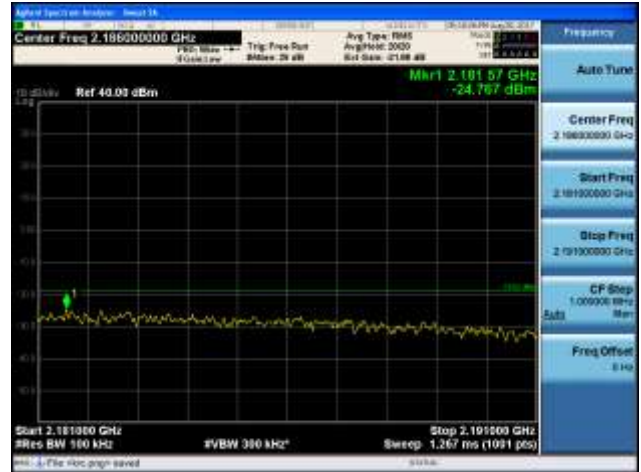
**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (399) / (893)  
 Pages

2099 MHz - 2109 MHz



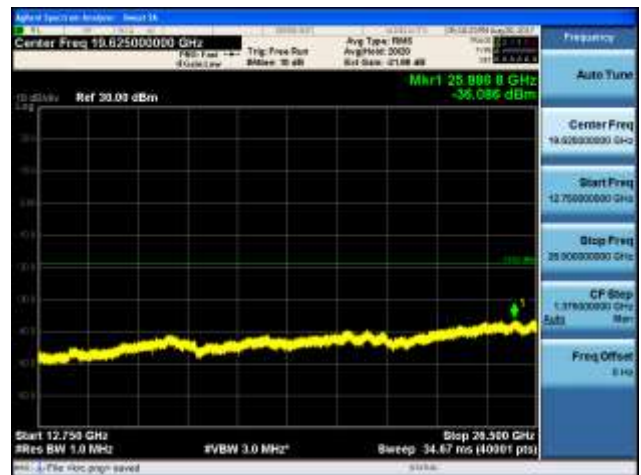
2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



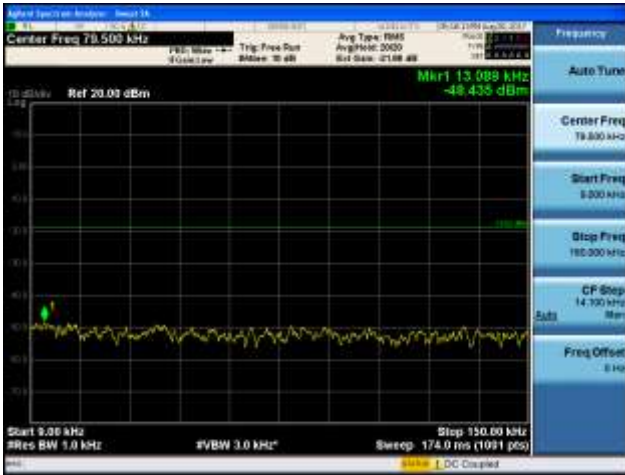


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

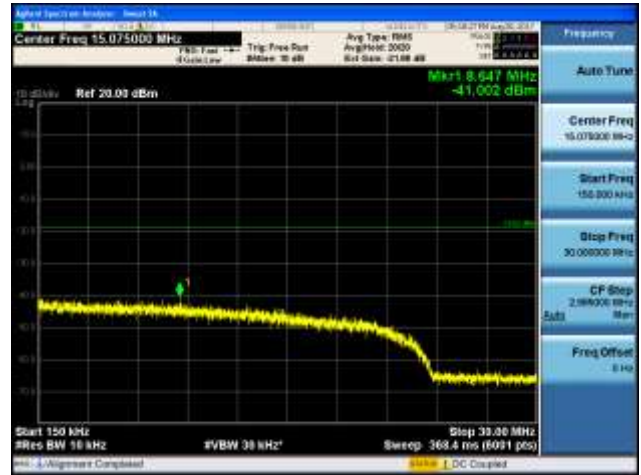
Report No.:  
 CTK-2017-01618-1  
 Page (400) / (893)  
 Pages

[16QAM]

9 kHz - 150 kHz



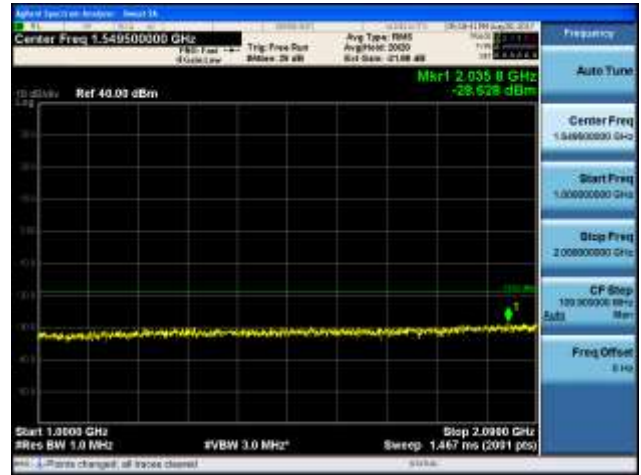
150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

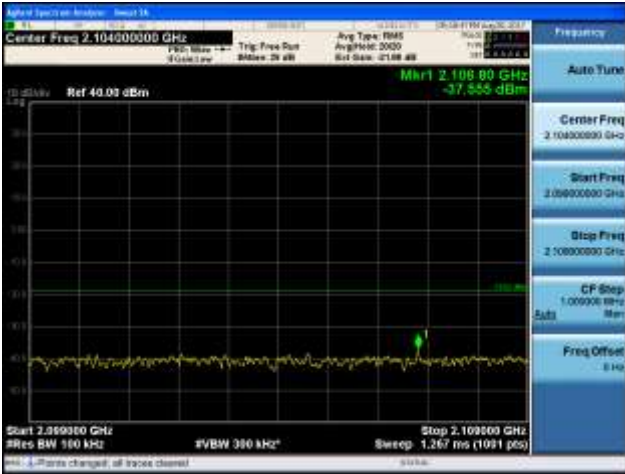




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (401) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

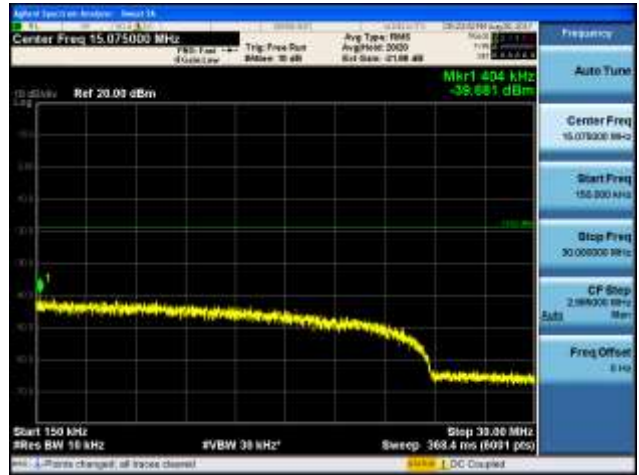
Report No.:  
 CTK-2017-01618-1  
 Page (402) / (893)  
 Pages

[64QAM]

9 kHz - 150 kHz



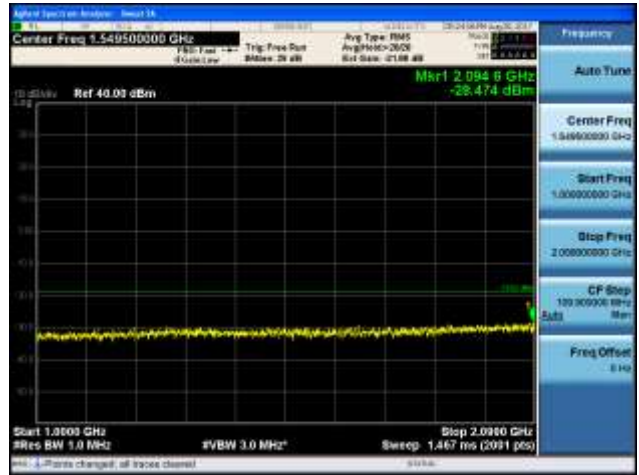
150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

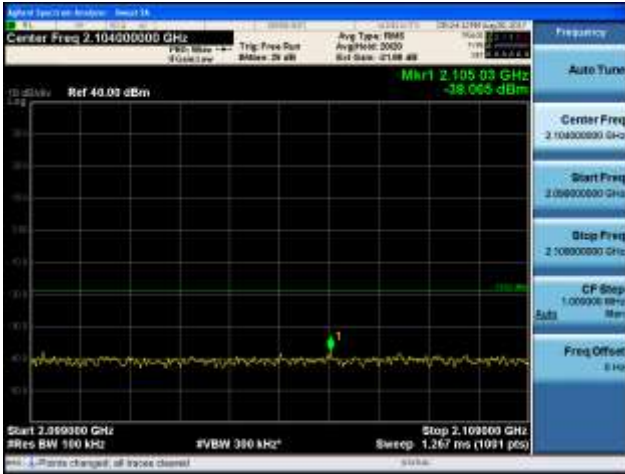




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (403) / (893)  
 Pages

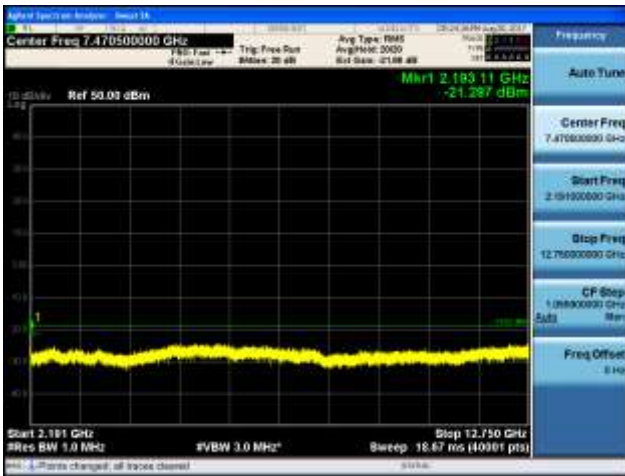
2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



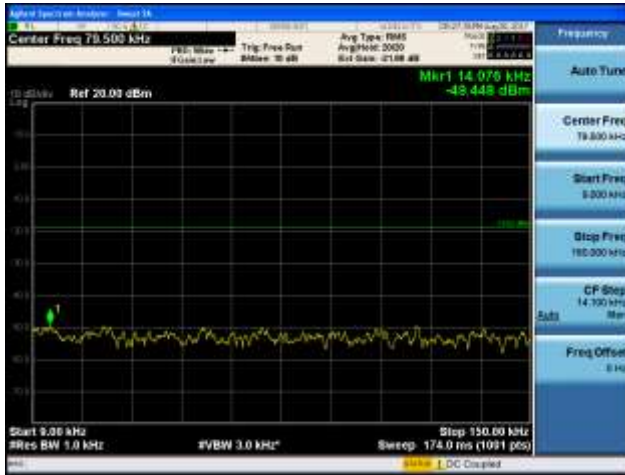


**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

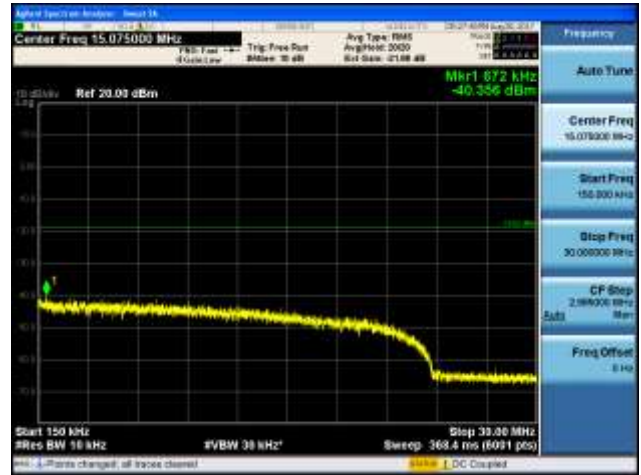
Report No.:  
CTK-2017-01618-1  
Page (404) / (893)  
Pages

[256QAM]

9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

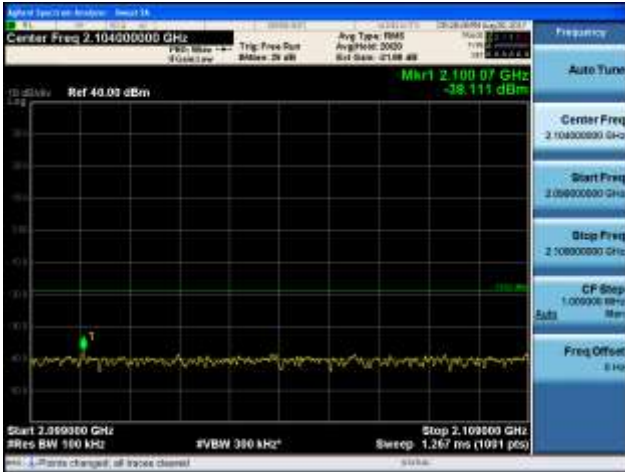




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (405) / (893)  
 Pages

2099 MHz - 2109 MHz



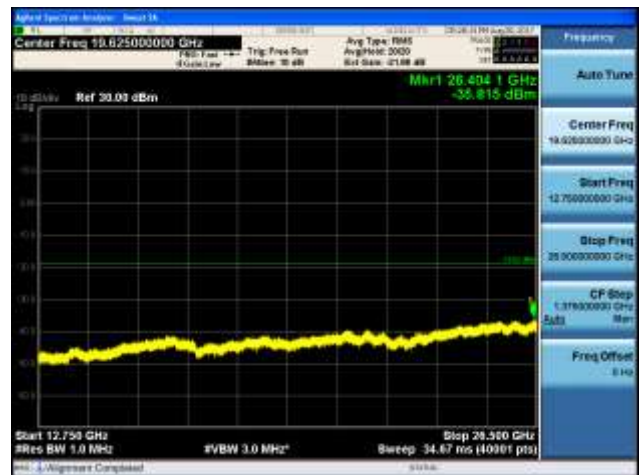
2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



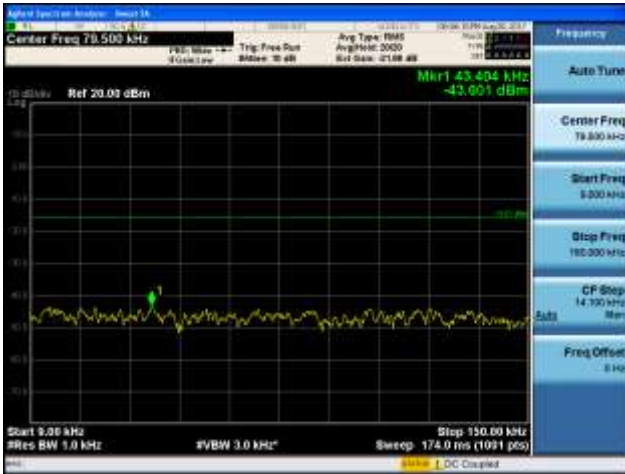


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (406) / (893)  
 Pages

**Band 66, BW 10MHz + BW 10MHz, Multi 2 carrier(Contiguous), 2TX, Bottom**  
 [QPSK]

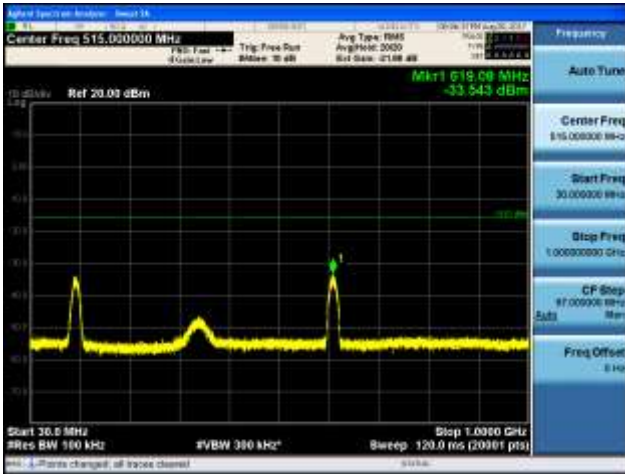
9 kHz - 150 kHz



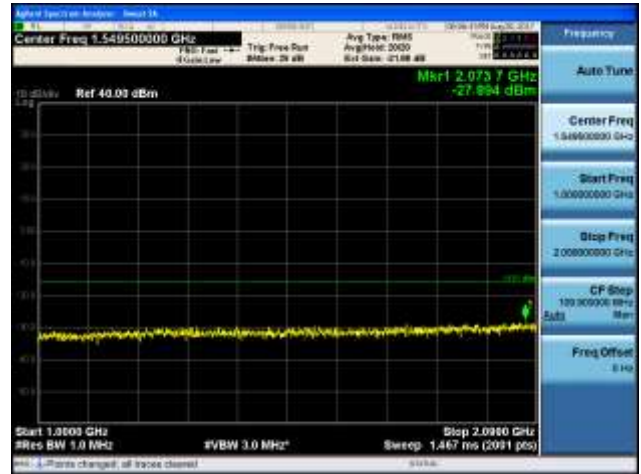
150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (407) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



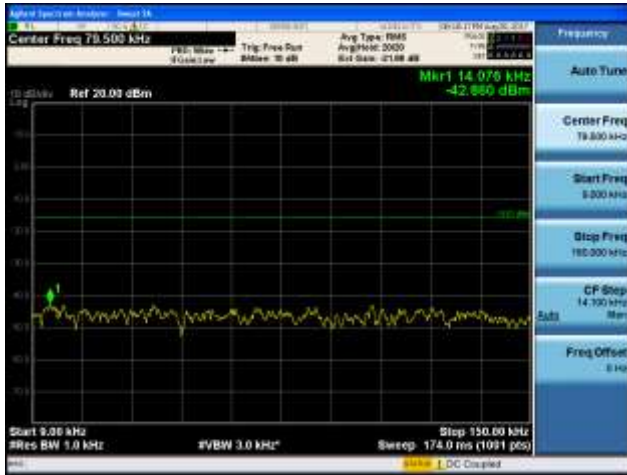


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (408) / (893)  
 Pages

[16QAM]

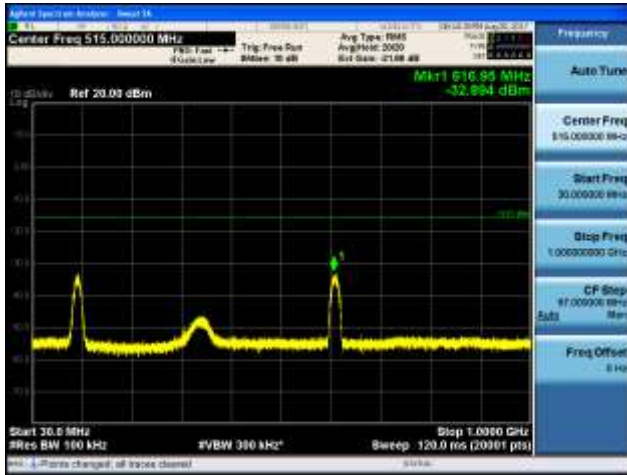
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

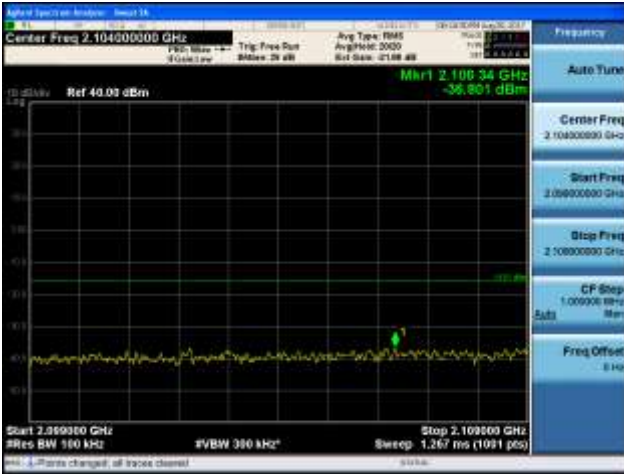




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (409) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (410) / (893)  
 Pages

[64QAM]

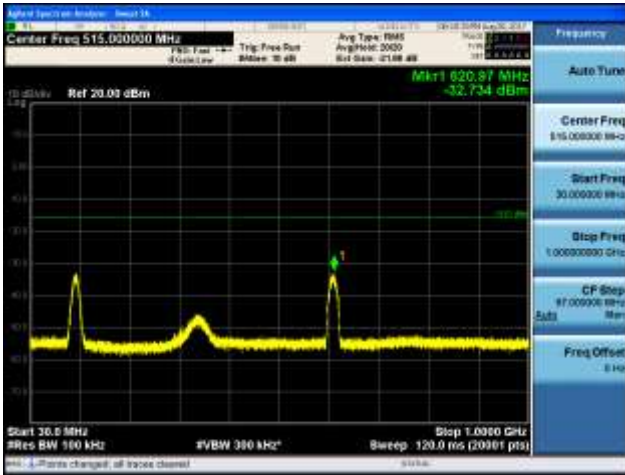
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (411) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



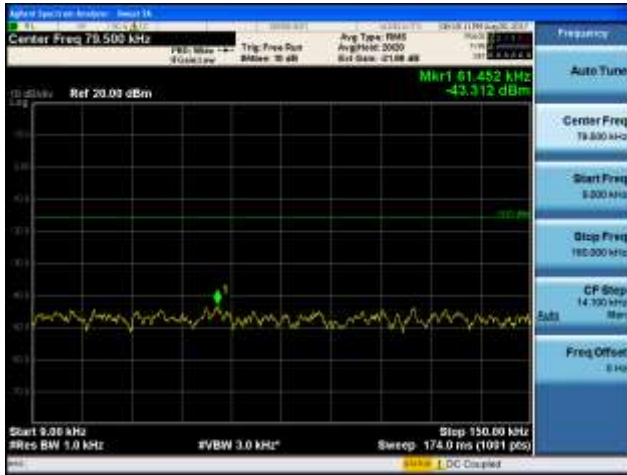


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

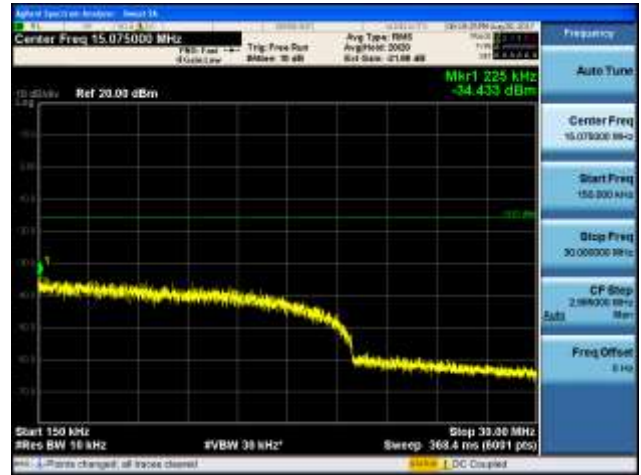
Report No.:  
 CTK-2017-01618-1  
 Page (412) / (893)  
 Pages

[256QAM]

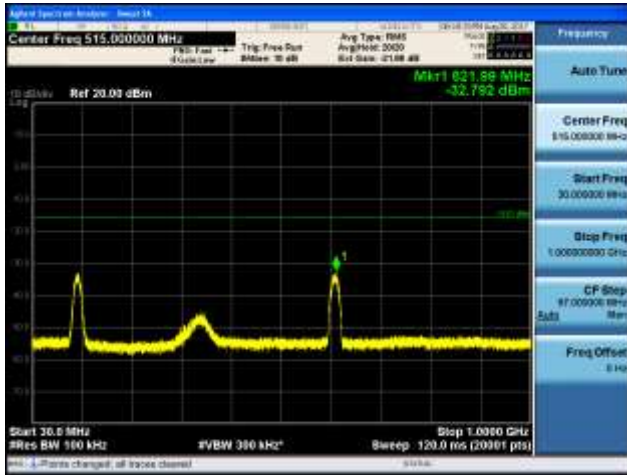
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

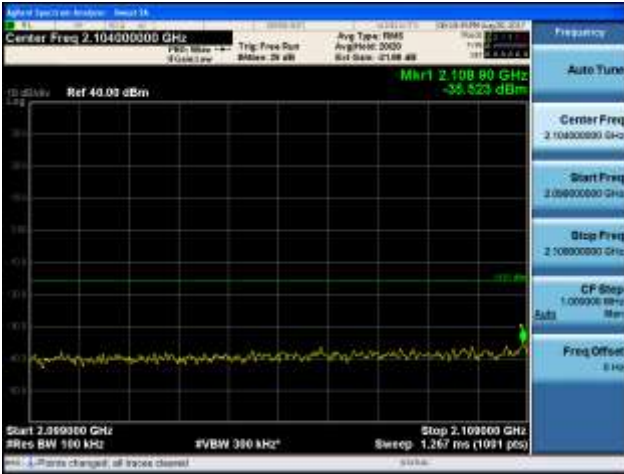




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (413) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (414) / (893)  
 Pages

**Band 66, BW 10MHz + BW 10MHz, Multi 2 carrier(Contiguous), 2TX, Top**  
 [QPSK]

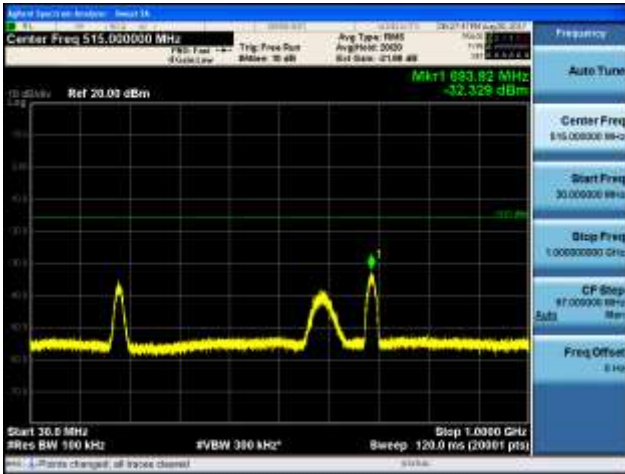
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (415) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (416) / (893)  
 Pages

[16QAM]

9 kHz - 150 kHz



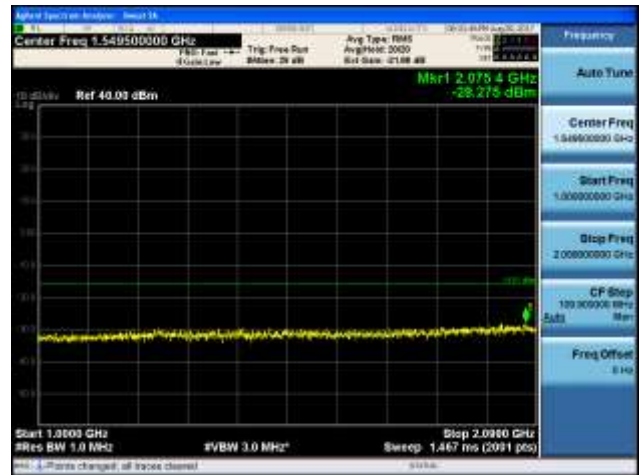
150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz





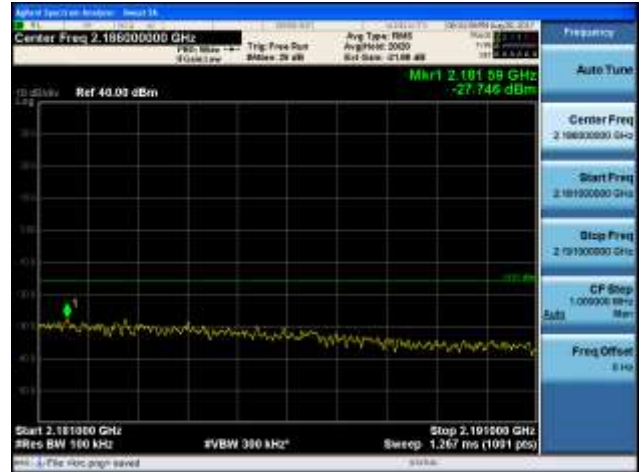
**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (417) / (893)  
 Pages

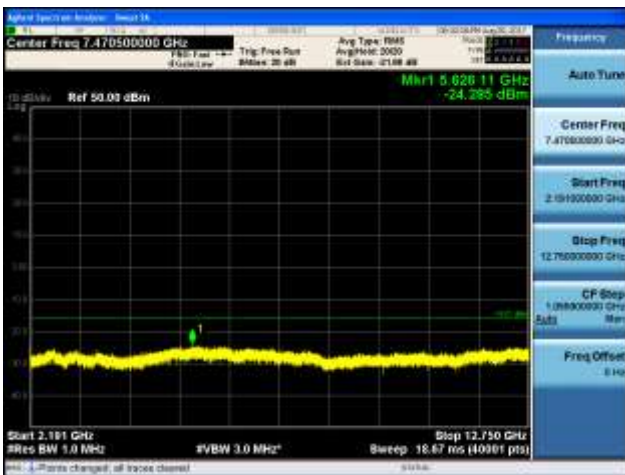
2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (418) / (893)  
 Pages

[64QAM]

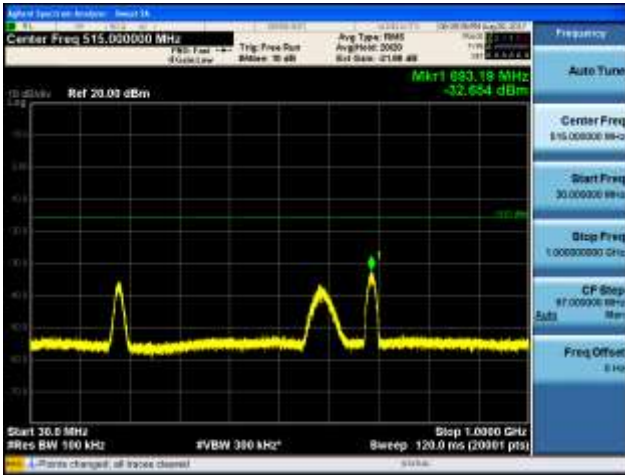
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (419) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



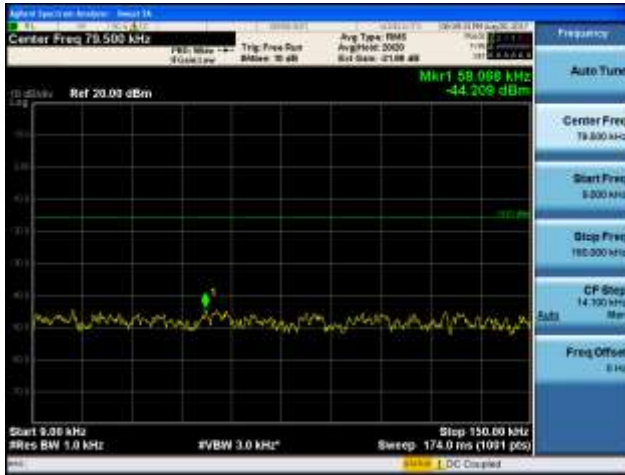


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (420) / (893)  
 Pages

[256QAM]

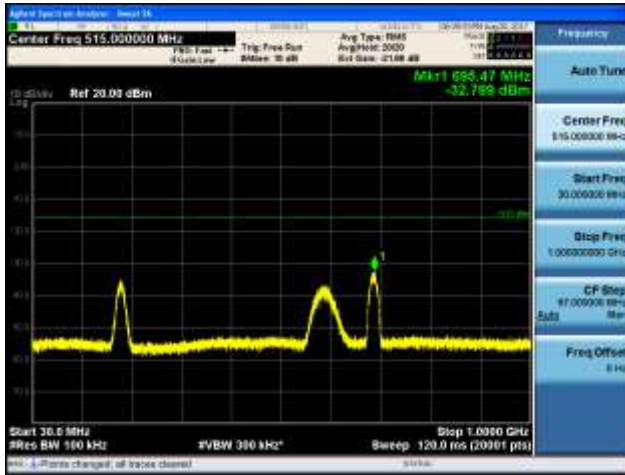
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

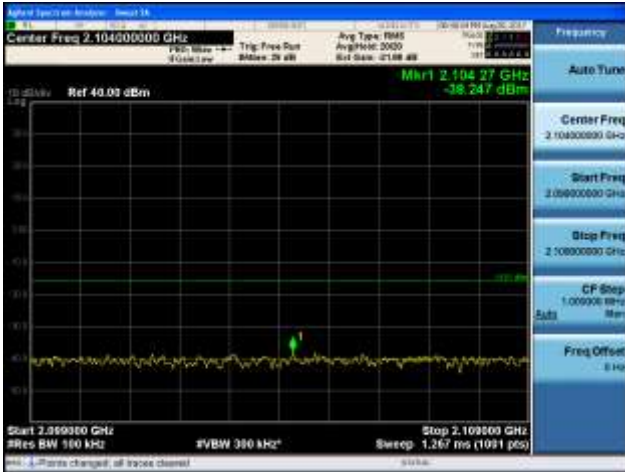




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (421) / (893)  
 Pages

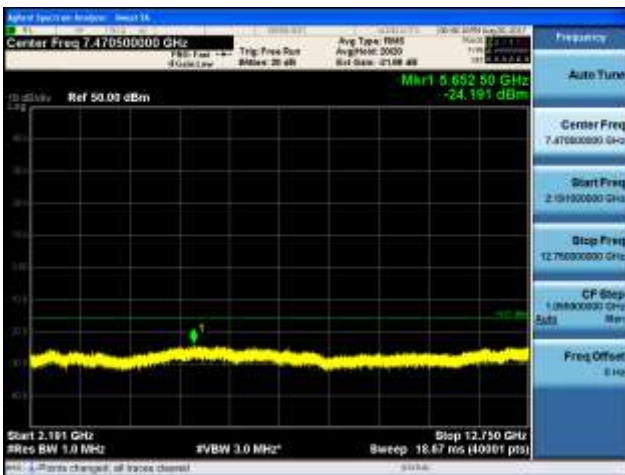
2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



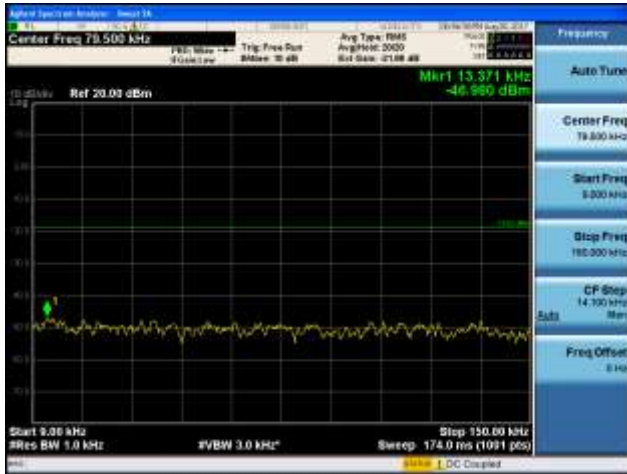


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

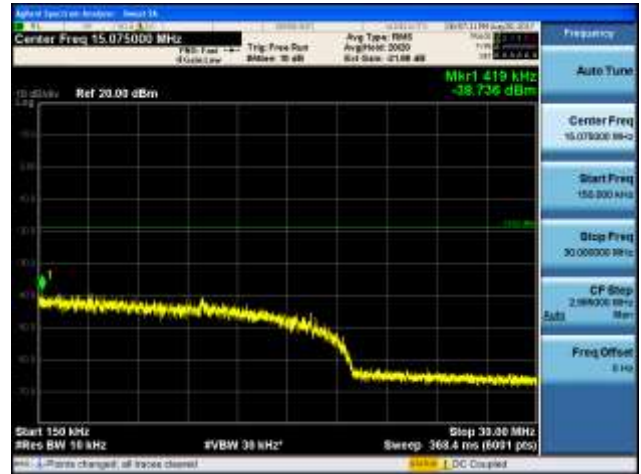
Report No.:  
 CTK-2017-01618-1  
 Page (422) / (893)  
 Pages

**Band 66, BW 10MHz + BW 10MHz, Multi 2 carrier(Contiguous), 4TX, Bottom**  
 [QPSK]

9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

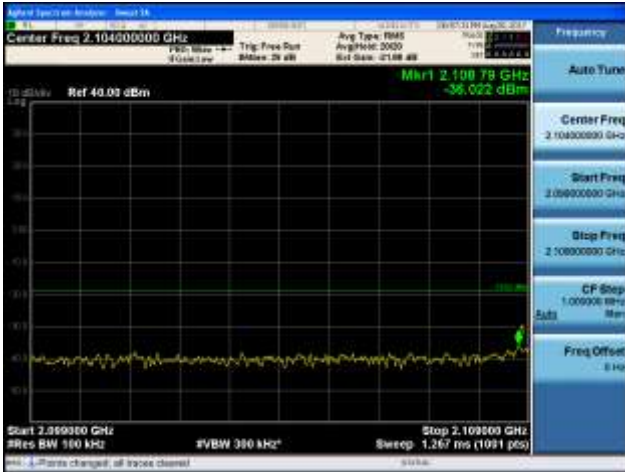




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (423) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



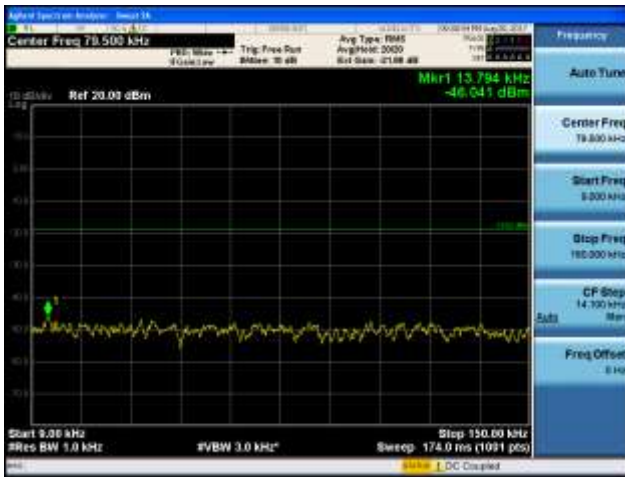


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (424) / (893)  
 Pages

[16QAM]

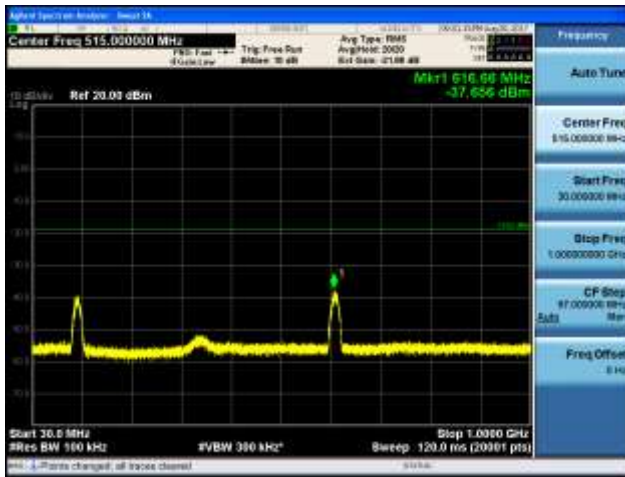
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

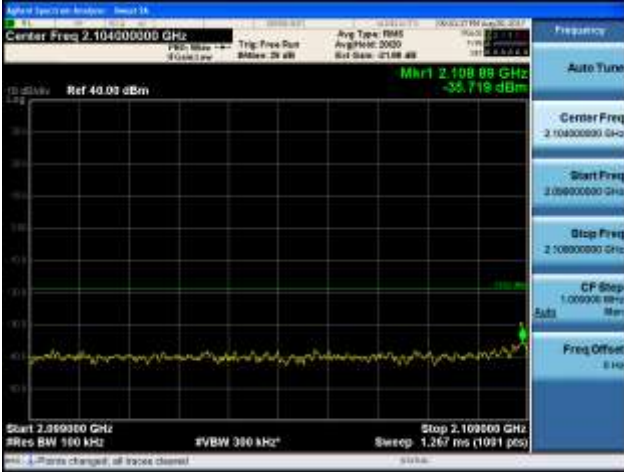




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (425) / (893)  
 Pages

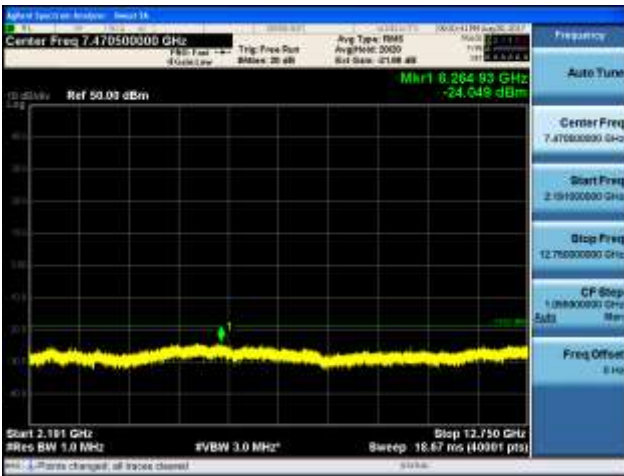
2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz





**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

Report No.:  
CTK-2017-01618-1  
Page (426) / (893)  
Pages

[64QAM]

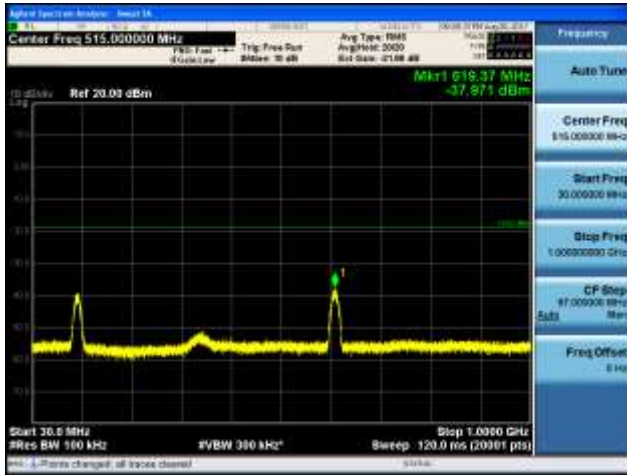
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz





**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

Report No.:  
CTK-2017-01618-1  
Page (427) / (893)  
Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



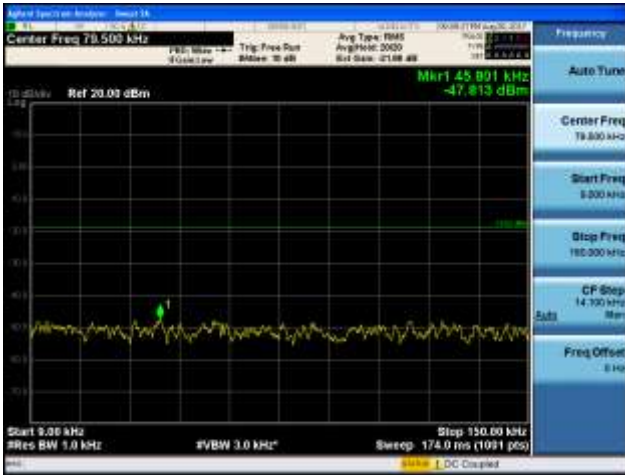


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

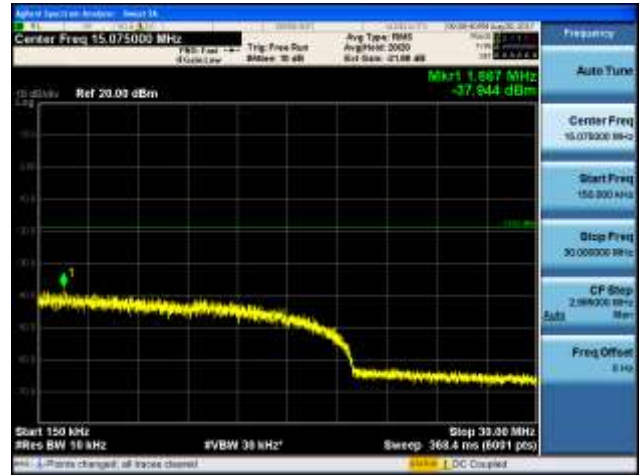
Report No.:  
 CTK-2017-01618-1  
 Page (428) / (893)  
 Pages

[256QAM]

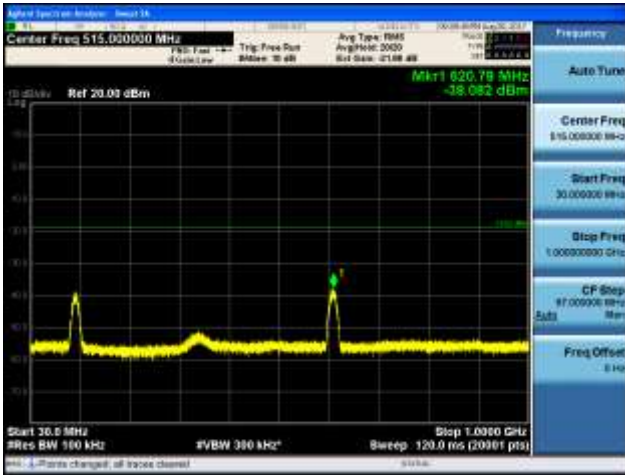
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

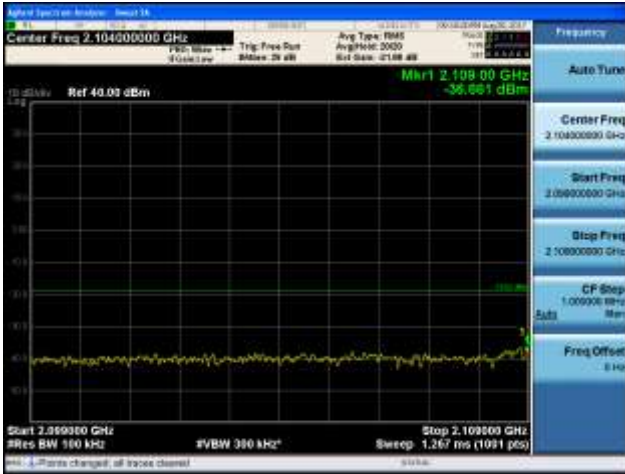




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (429) / (893)  
 Pages

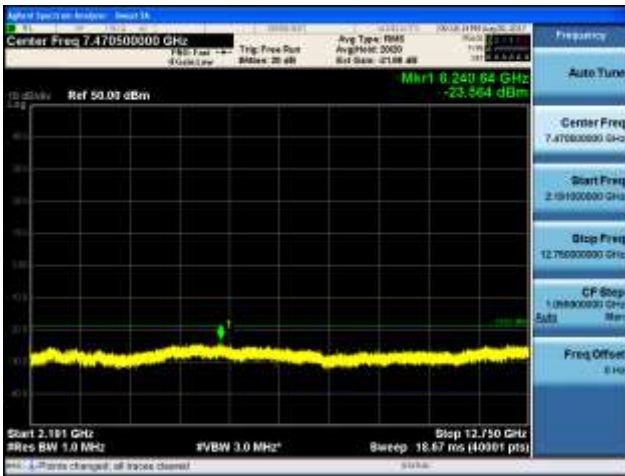
2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



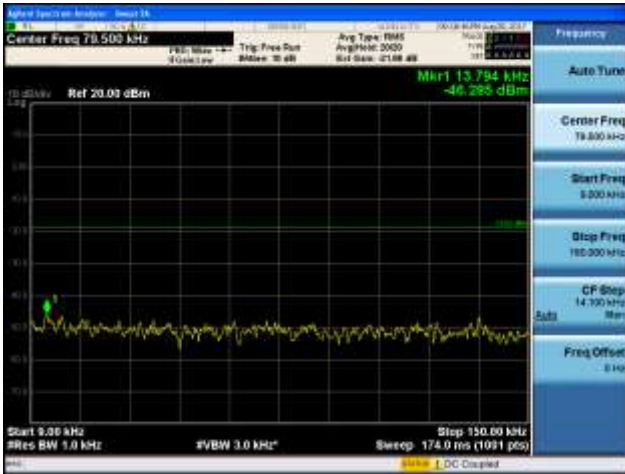


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (430) / (893)  
 Pages

**Band 66, BW 10MHz + BW 10MHz, Multi 2 carrier(Contiguous), 4TX, Top**  
 [QPSK]

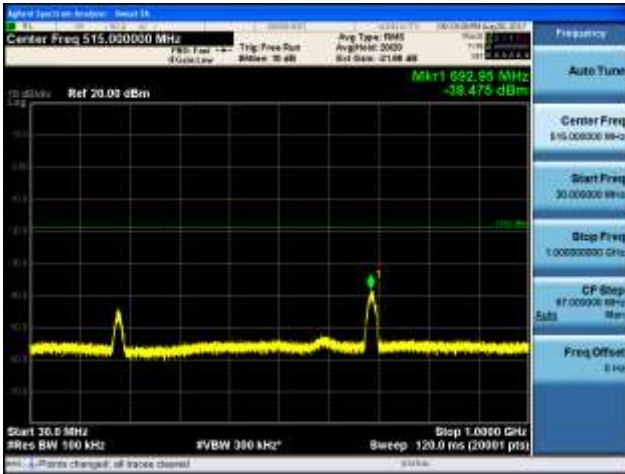
9 kHz - 150 kHz



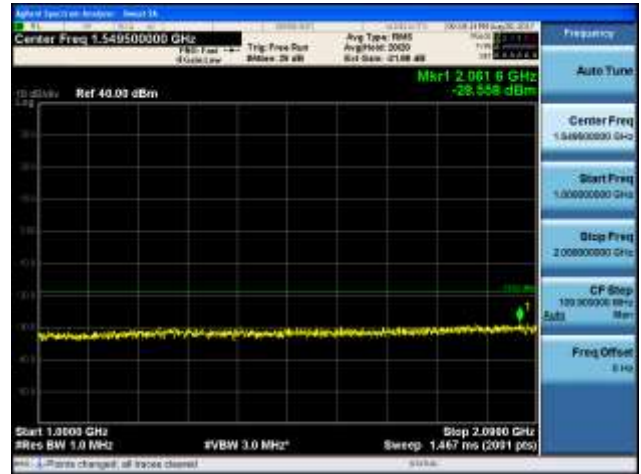
150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz





**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

Report No.:  
CTK-2017-01618-1  
Page (431) / (893)  
Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



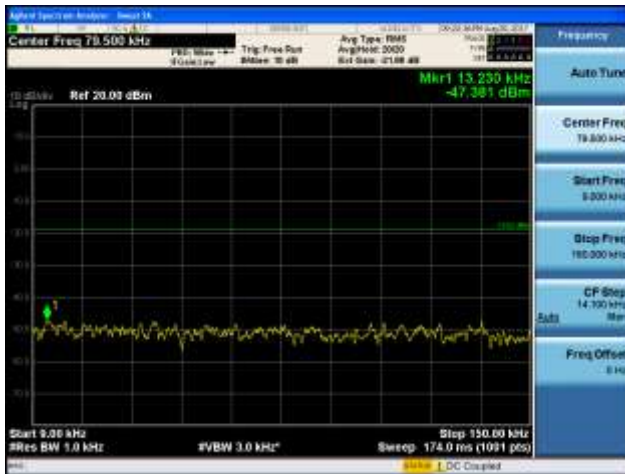


**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

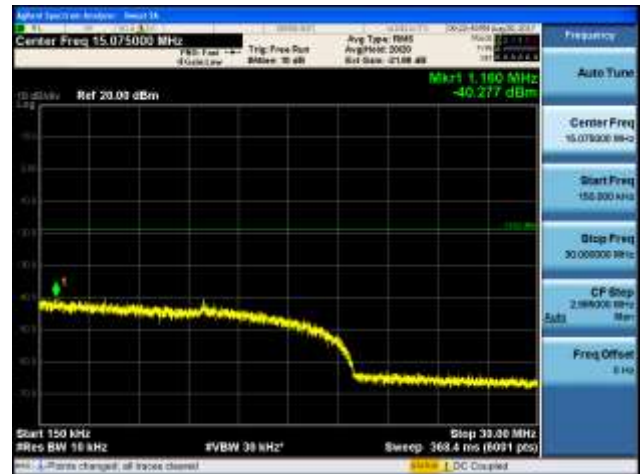
Report No.:  
CTK-2017-01618-1  
Page (432) / (893)  
Pages

[16QAM]

9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

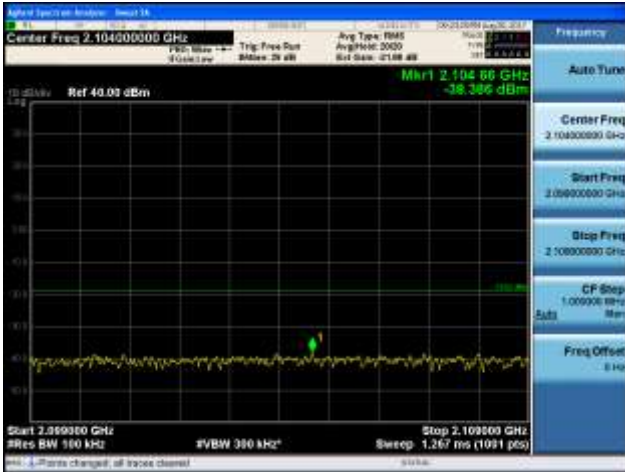




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (433) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

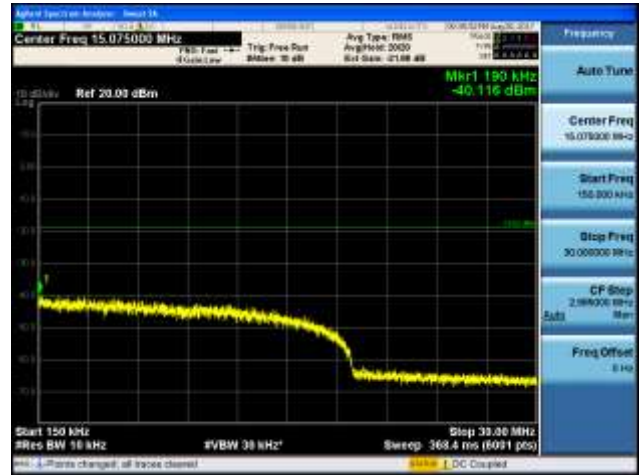
Report No.:  
 CTK-2017-01618-1  
 Page (434) / (893)  
 Pages

[64QAM]

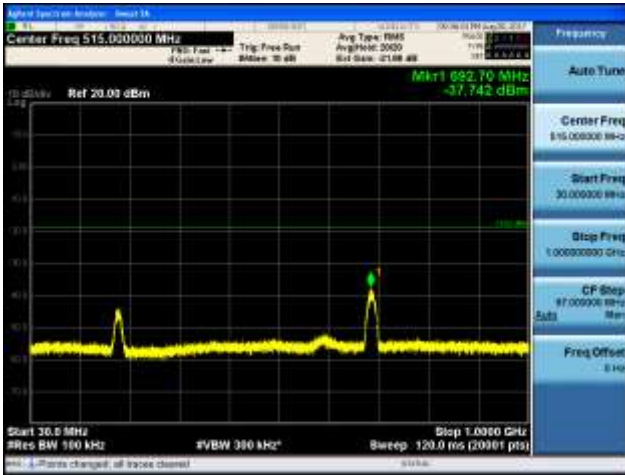
9 kHz - 150 kHz



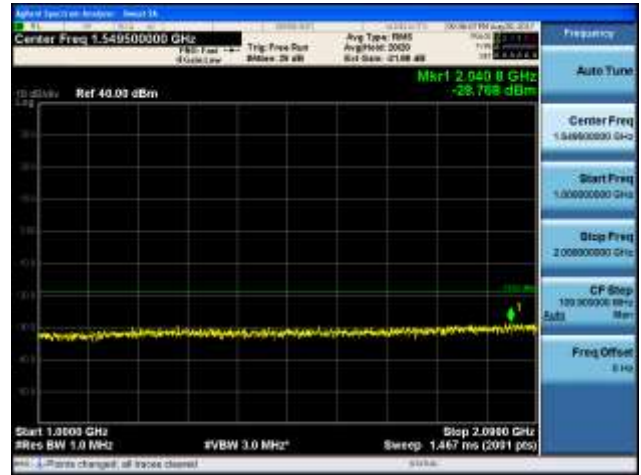
150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz





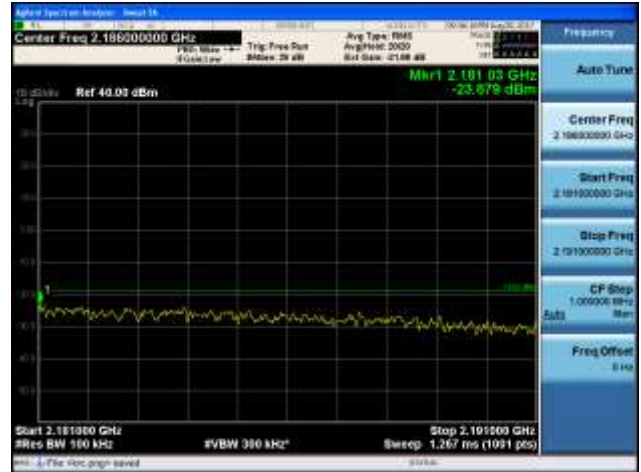
**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (435) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



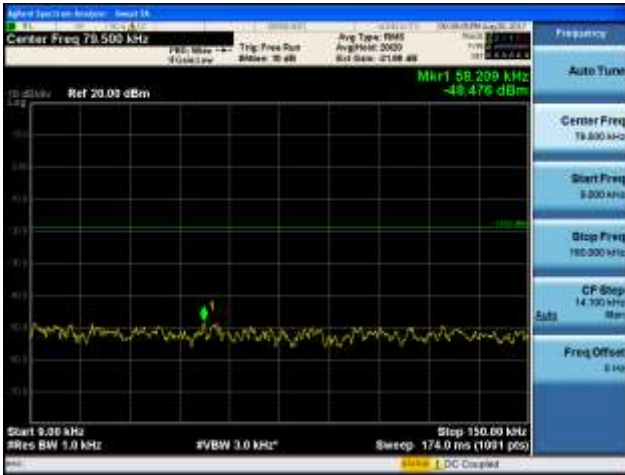


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (436) / (893)  
 Pages

[256QAM]

9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

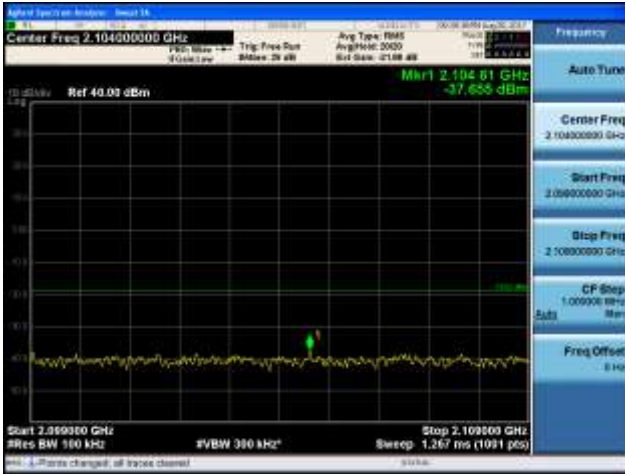




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (437) / (893)  
 Pages

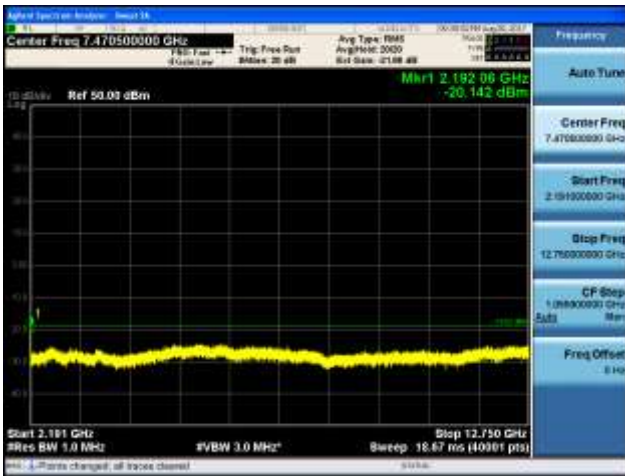
2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

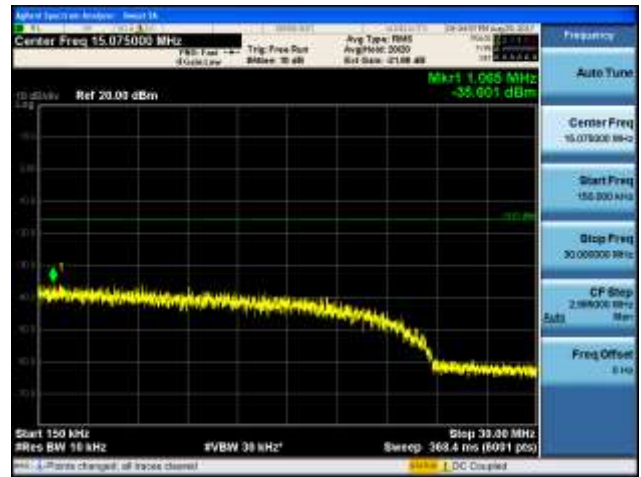
Report No.:  
 CTK-2017-01618-1  
 Page (438) / (893)  
 Pages

**Band 66, BW 10MHz + BW 15MHz, Multi 2 carrier(Contiguous), 2TX, Bottom [QPSK]**

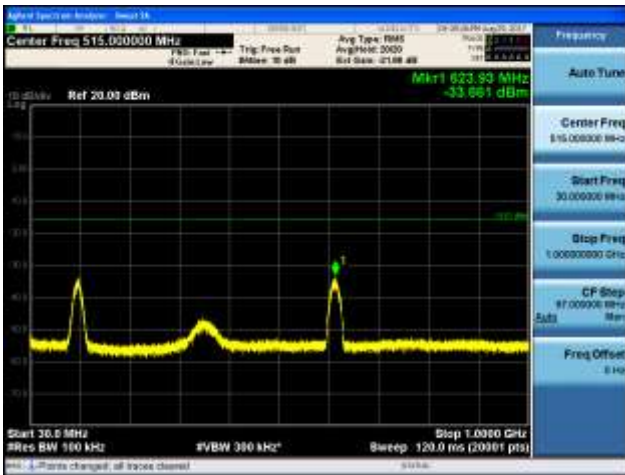
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (439) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



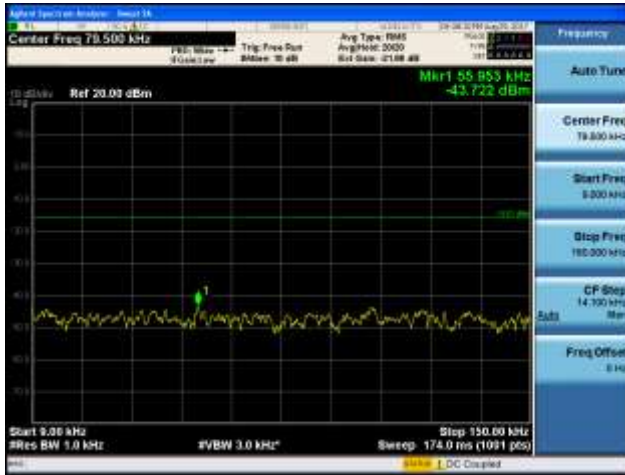


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

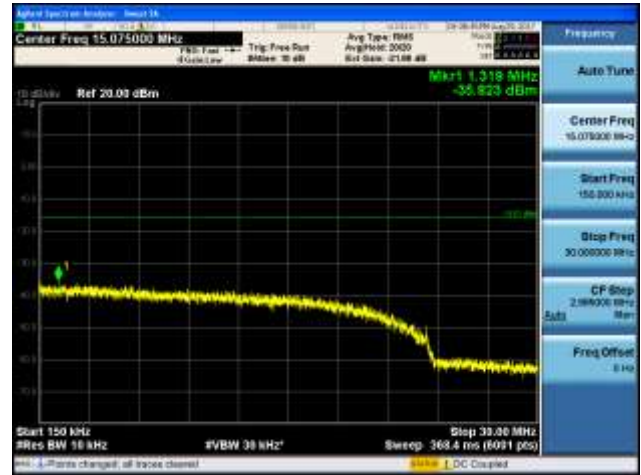
Report No.:  
 CTK-2017-01618-1  
 Page (440) / (893)  
 Pages

[16QAM]

9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (441) / (893)  
 Pages

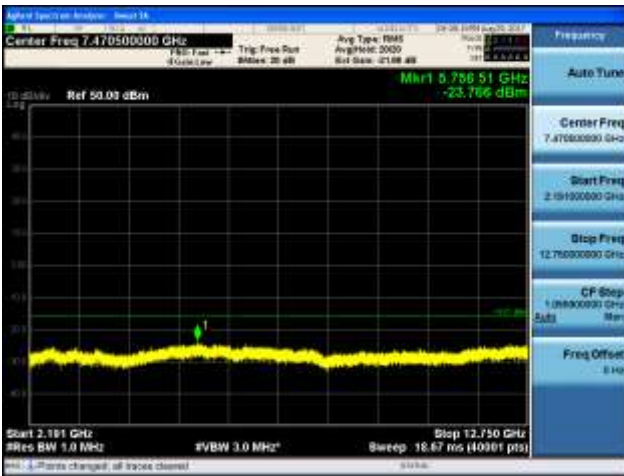
2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (442) / (893)  
 Pages

[64QAM]

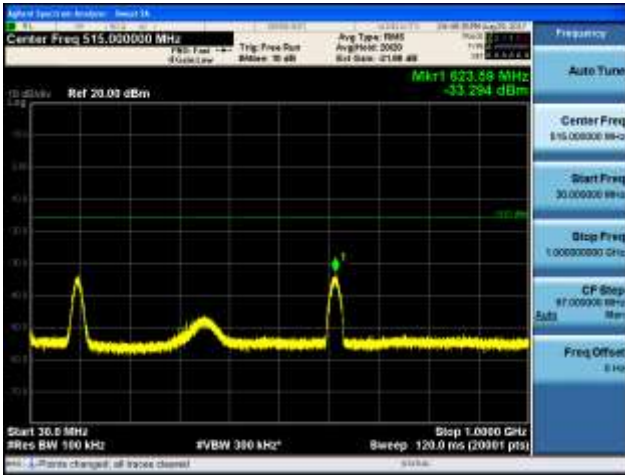
9 kHz - 150 kHz



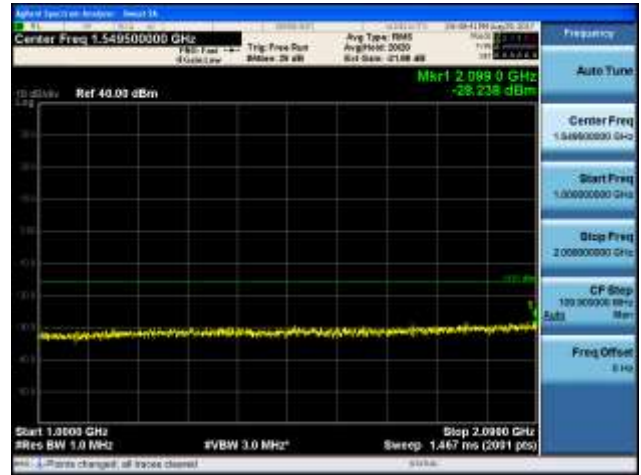
150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (443) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



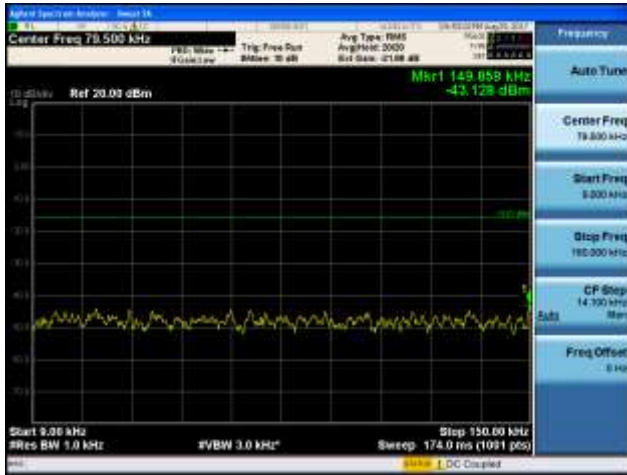


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

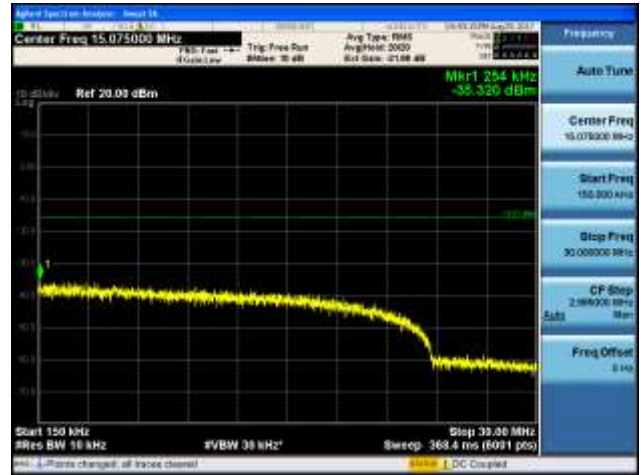
Report No.:  
 CTK-2017-01618-1  
 Page (444) / (893)  
 Pages

[256QAM]

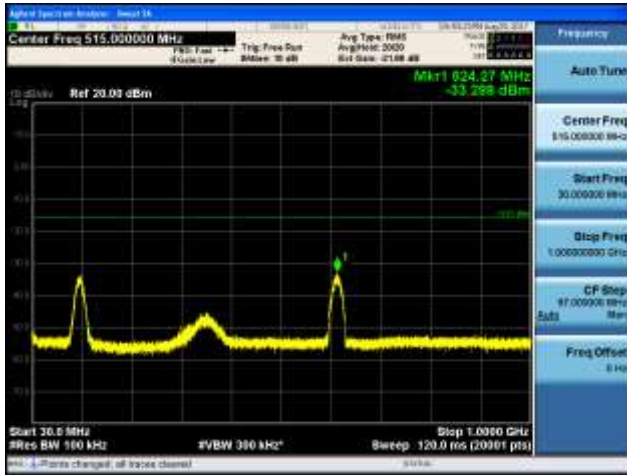
9 kHz - 150 kHz



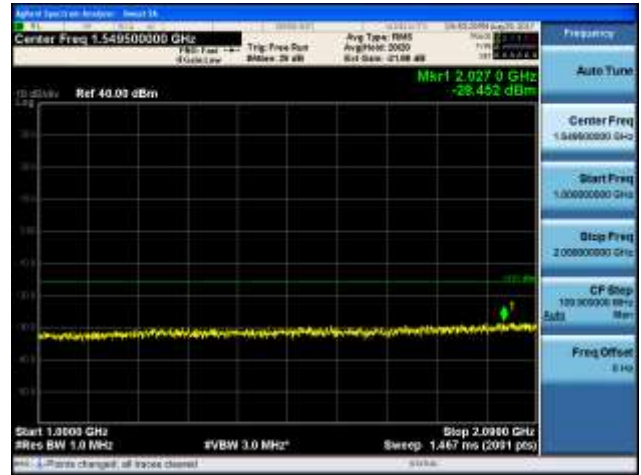
150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

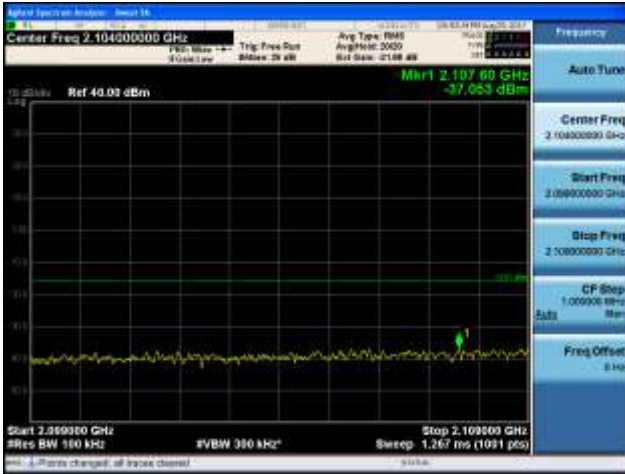




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (445) / (893)  
 Pages

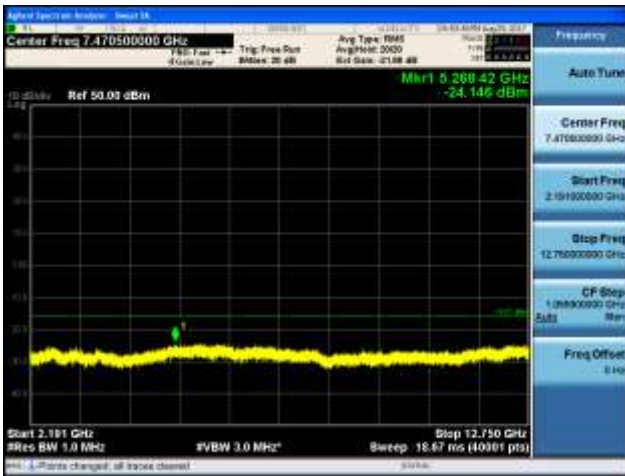
2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (446) / (893)  
 Pages

**Band 66, BW 10MHz + BW 15MHz, Multi 2 carrier(Contiguous), 2TX, Top**  
 [QPSK]

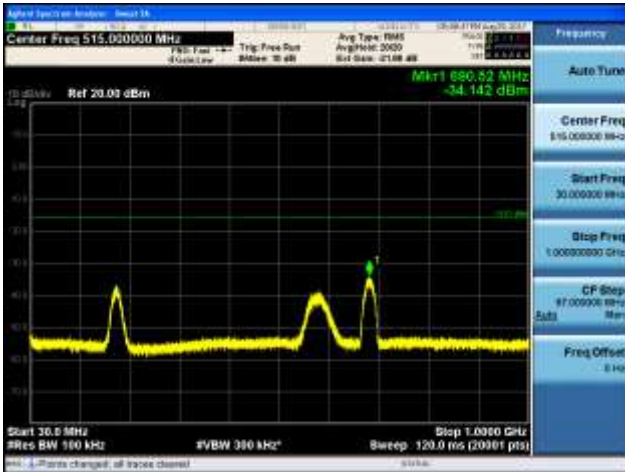
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

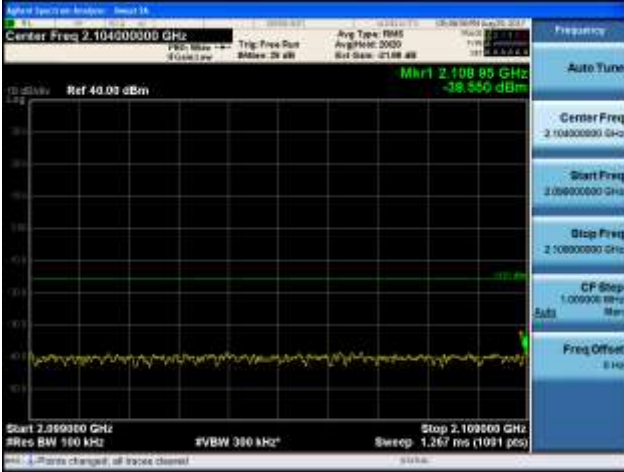




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (447) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



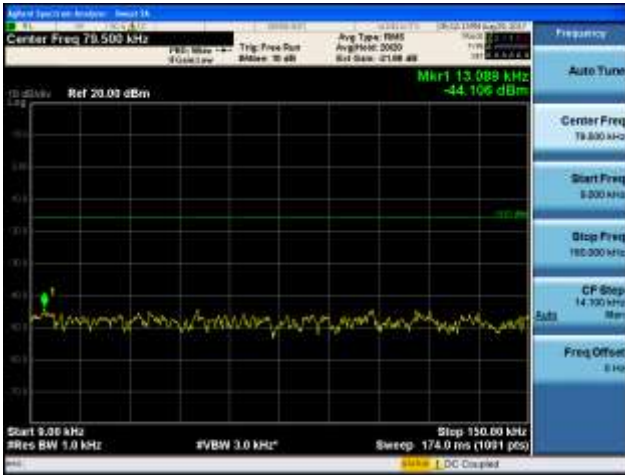


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (448) / (893)  
 Pages

[16QAM]

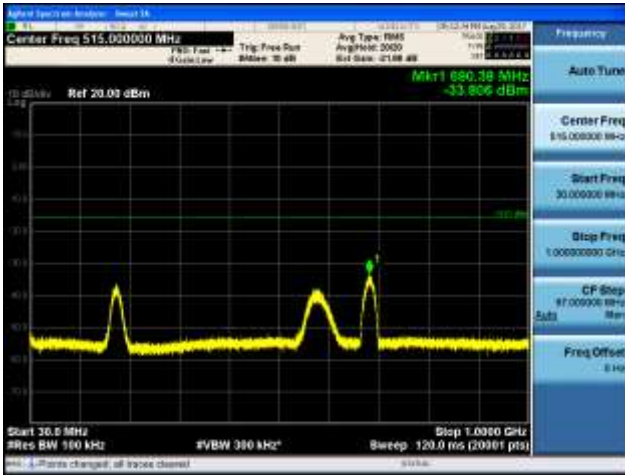
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz





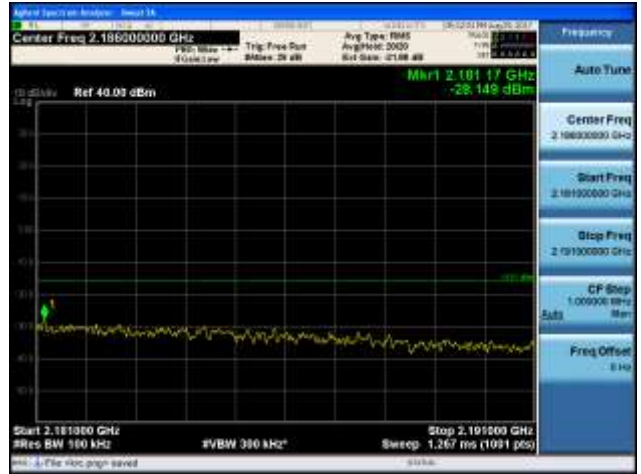
**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (449) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz





**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

Report No.:  
CTK-2017-01618-1  
Page (450) / (893)  
Pages

[64QAM]

9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

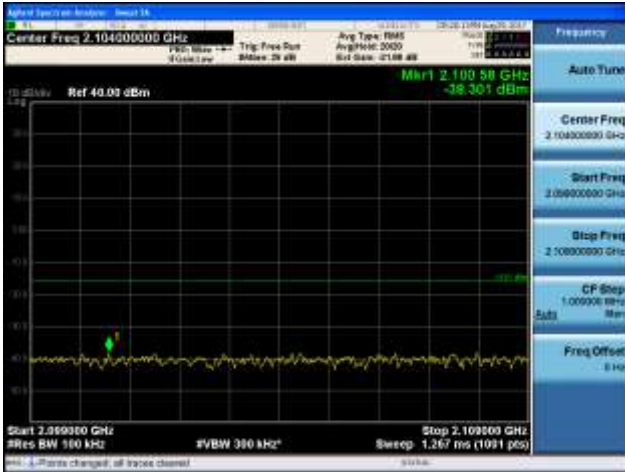




**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

Report No.:  
CTK-2017-01618-1  
Page (451) / (893)  
Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

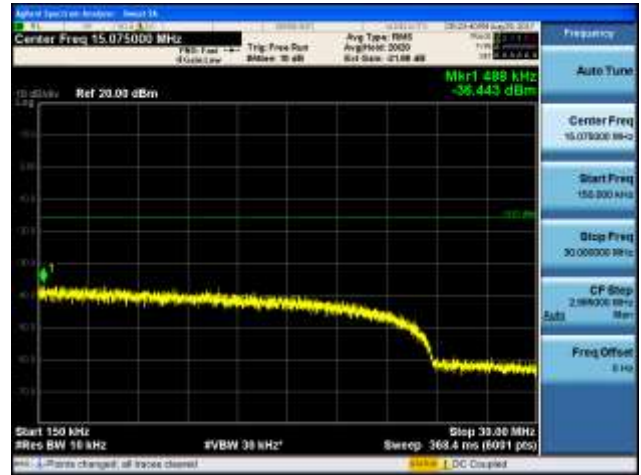
Report No.:  
 CTK-2017-01618-1  
 Page (452) / (893)  
 Pages

[256QAM]

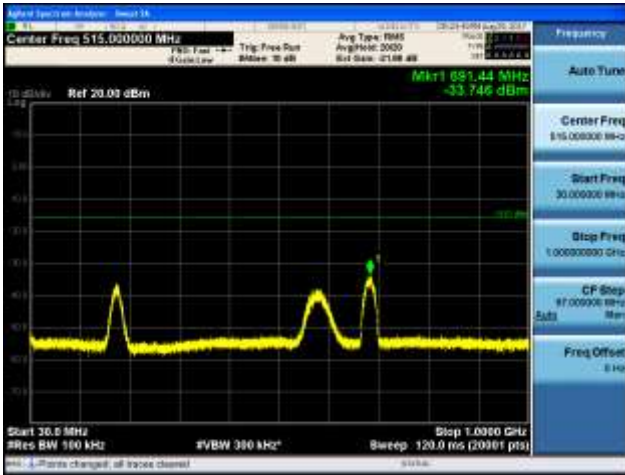
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

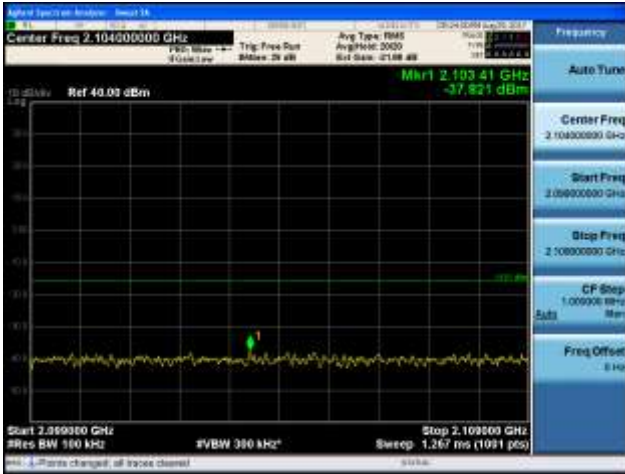




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (453) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



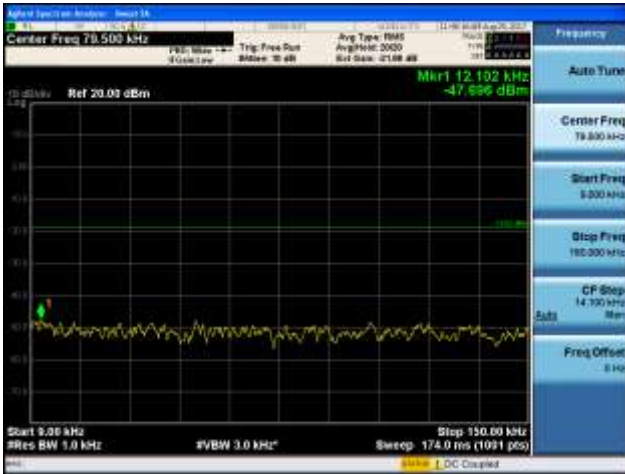


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (454) / (893)  
 Pages

**Band 66, BW 10MHz + BW 15MHz, Multi 2 carrier(Contiguous), 4TX, Bottom**  
 [QPSK]

9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

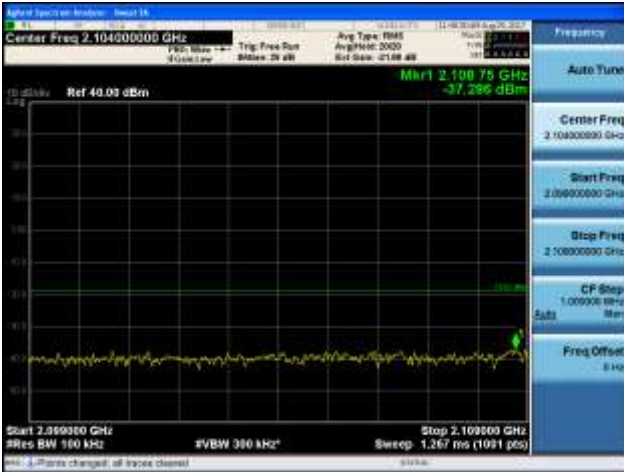




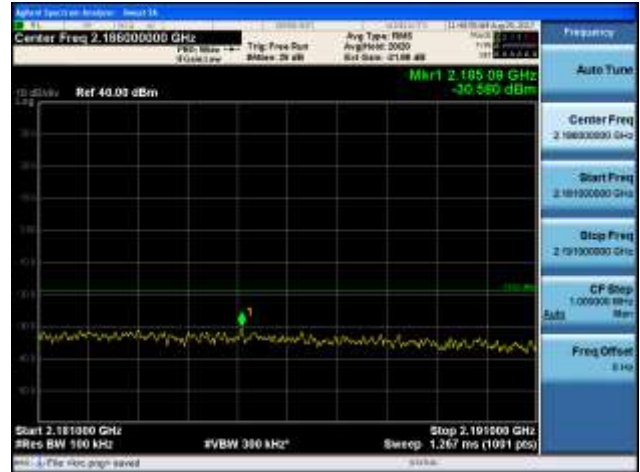
**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (455) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



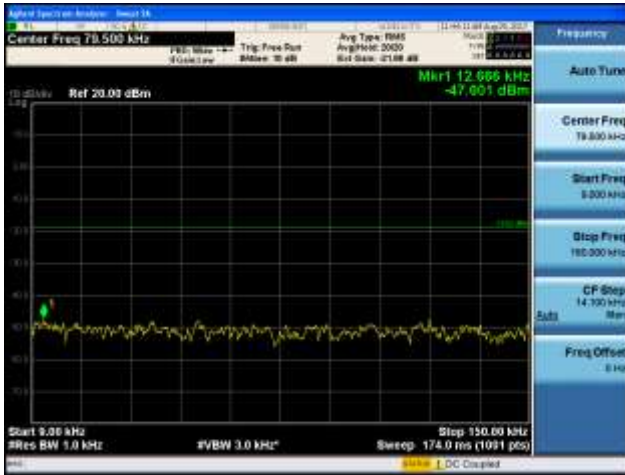


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (456) / (893)  
 Pages

[16QAM]

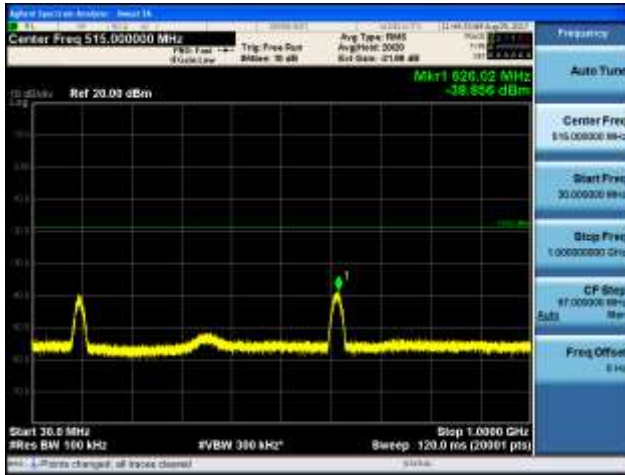
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

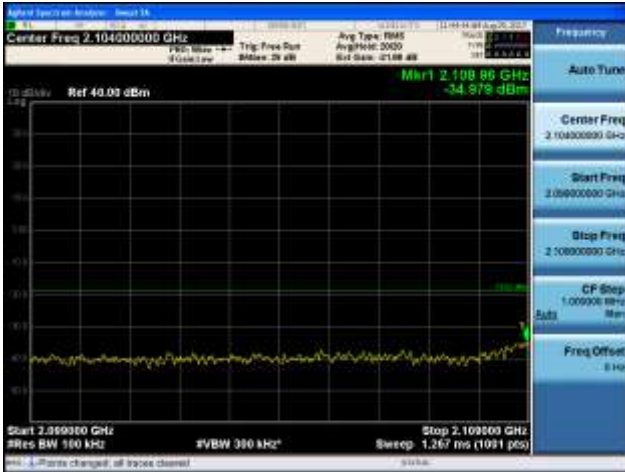




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (457) / (893)  
 Pages

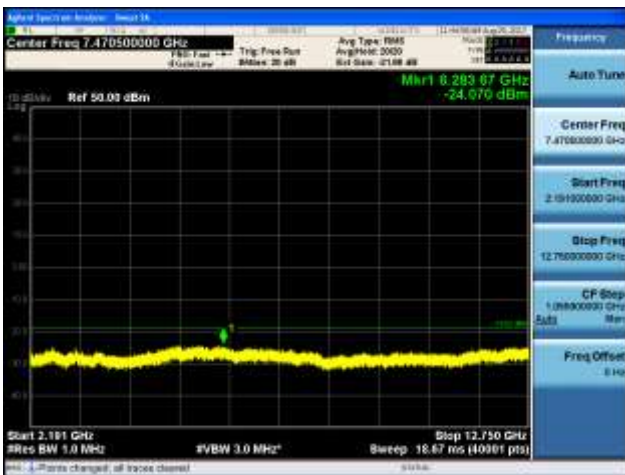
2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



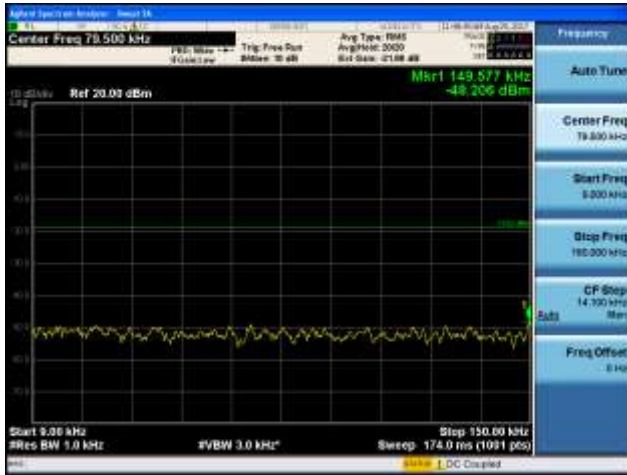


**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

Report No.:  
CTK-2017-01618-1  
Page (458) / (893)  
Pages

[64QAM]

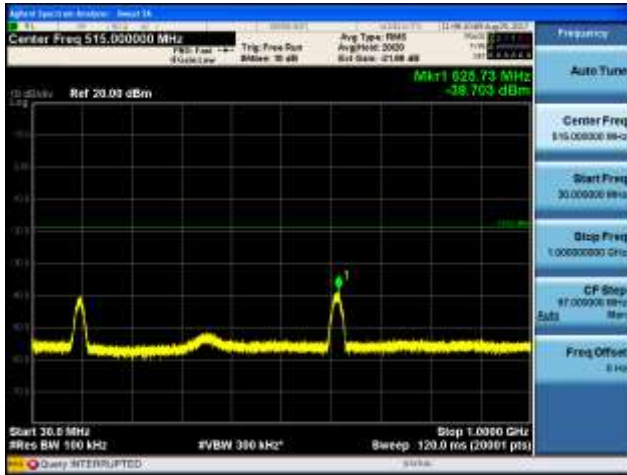
9 kHz - 150 kHz



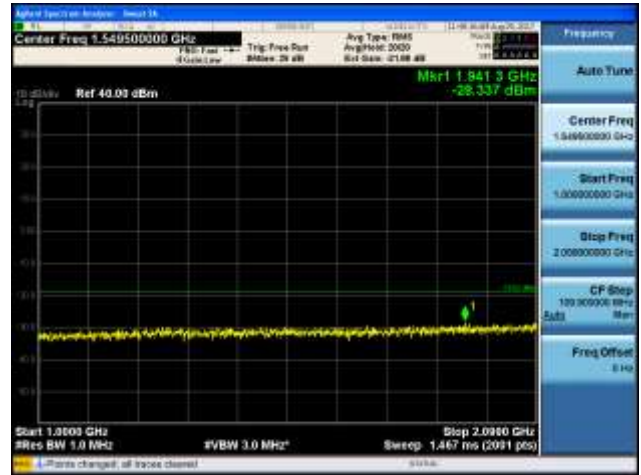
150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz





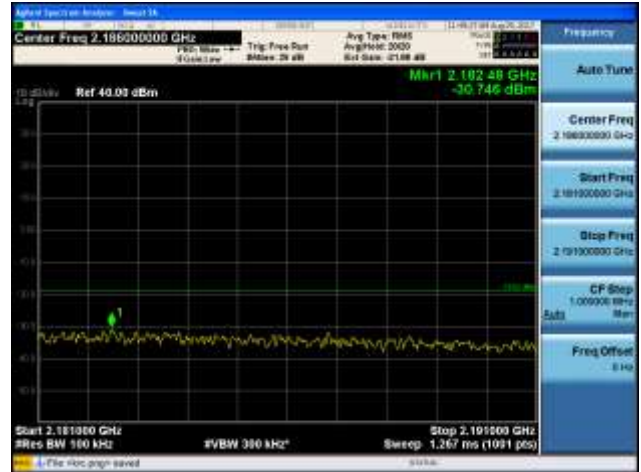
**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (459) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



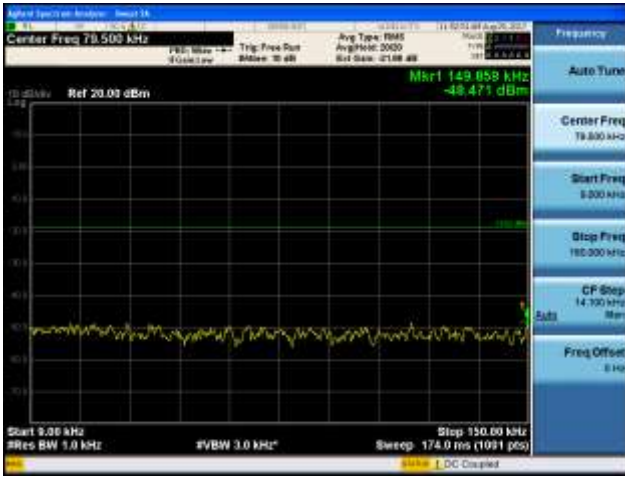


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

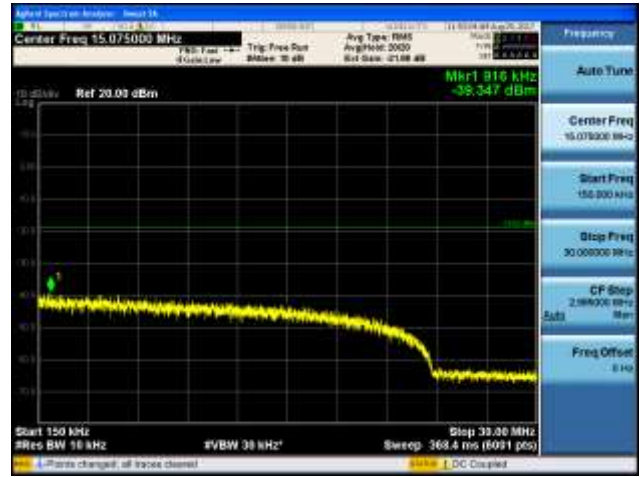
Report No.:  
 CTK-2017-01618-1  
 Page (460) / (893)  
 Pages

[256QAM]

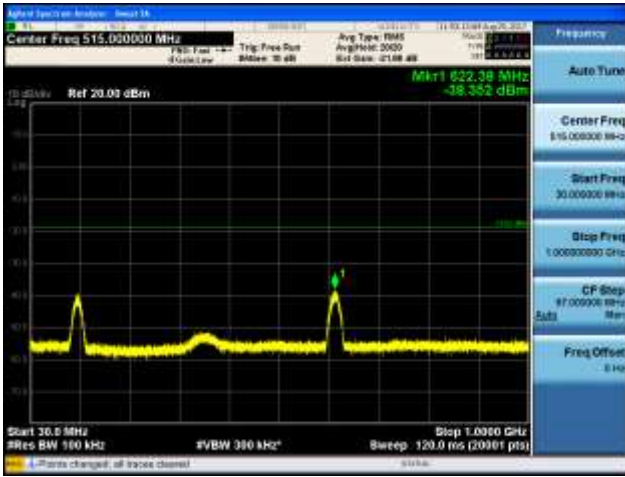
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

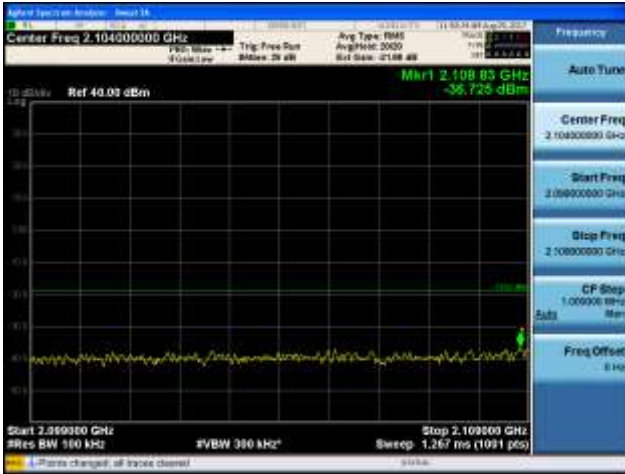




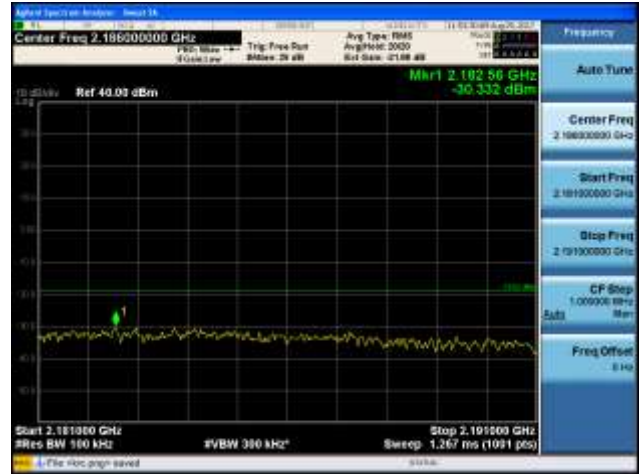
**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (461) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (462) / (893)  
 Pages

**Band 66, BW 10MHz + BW 15MHz, Multi 2 carrier(Contiguous), 4TX, Top**  
 [QPSK]

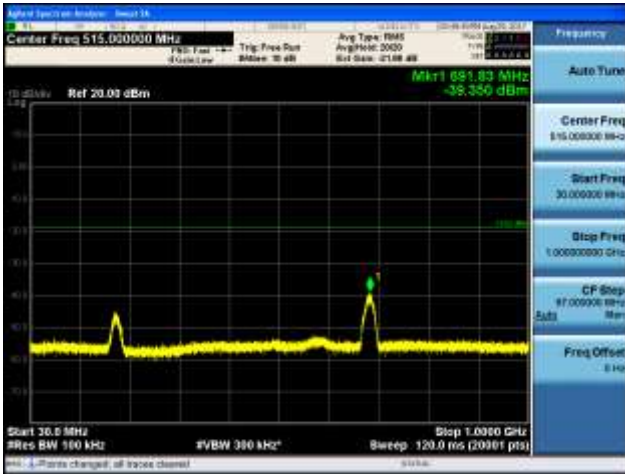
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

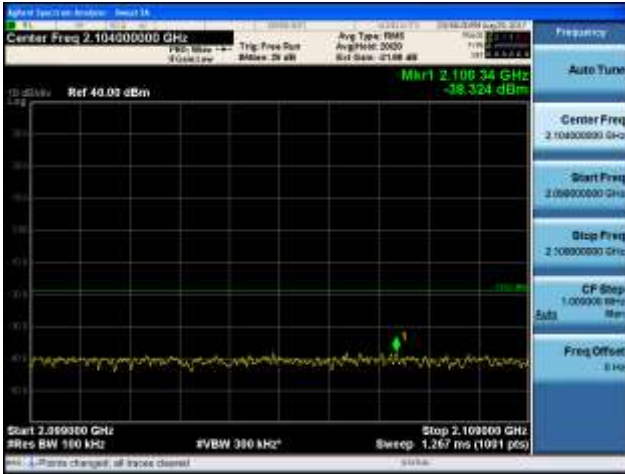




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (463) / (893)  
 Pages

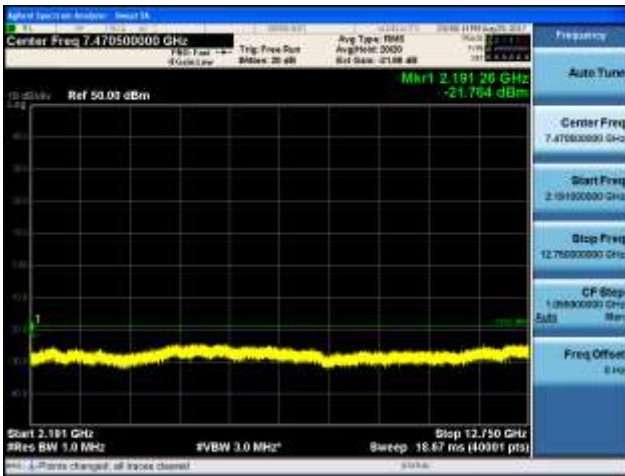
2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



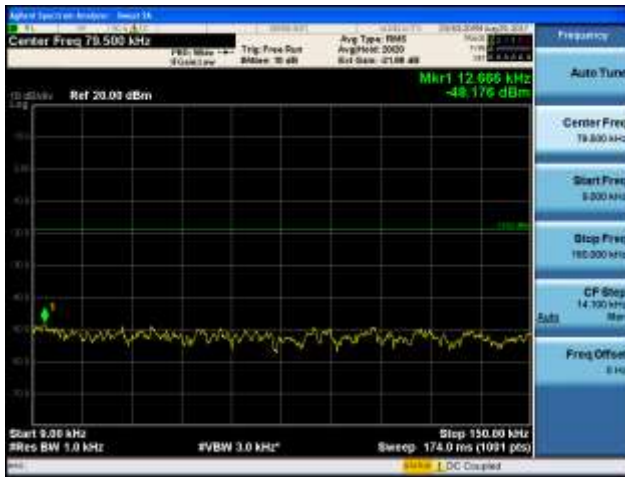


**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

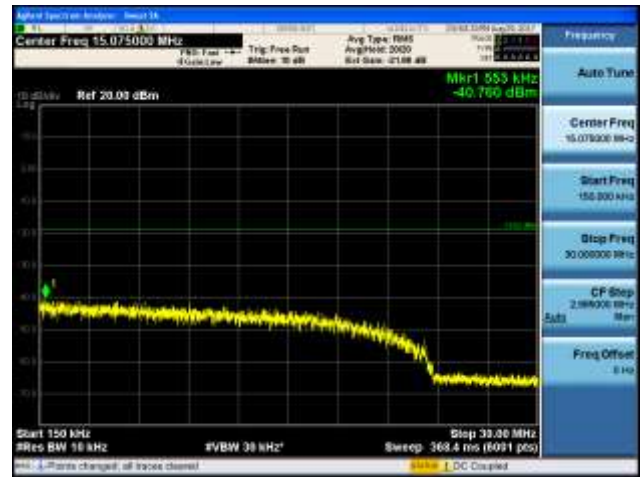
Report No.:  
CTK-2017-01618-1  
Page (464) / (893)  
Pages

[16QAM]

9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz





**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

Report No.:  
CTK-2017-01618-1  
Page (465) / (893)  
Pages

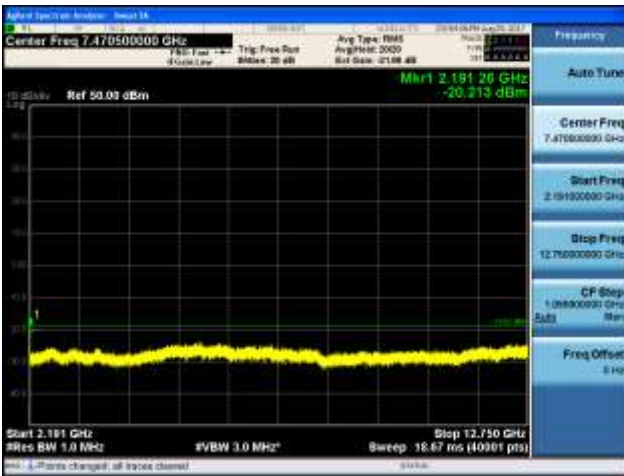
2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



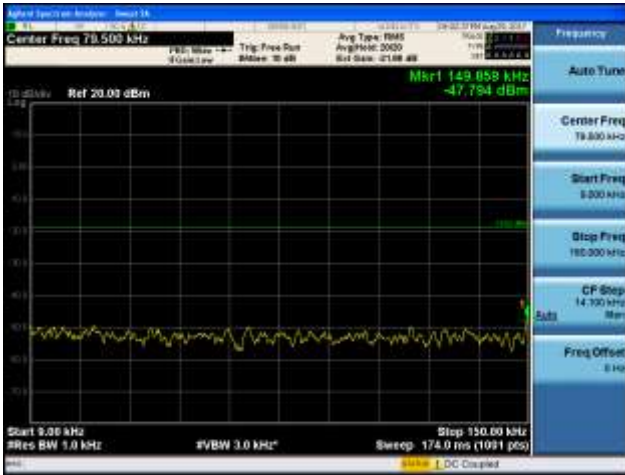


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

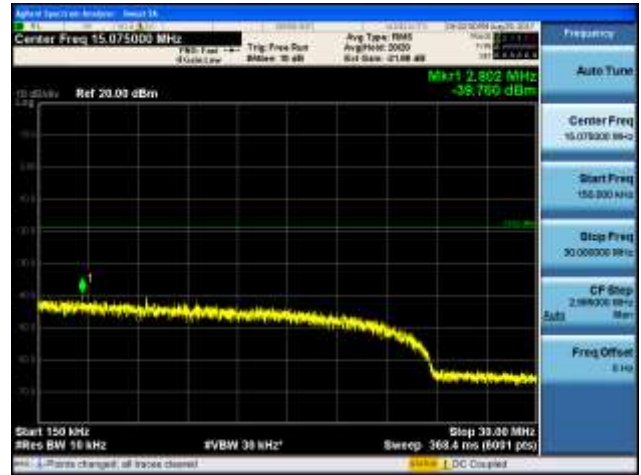
Report No.:  
 CTK-2017-01618-1  
 Page (466) / (893)  
 Pages

[64QAM]

9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

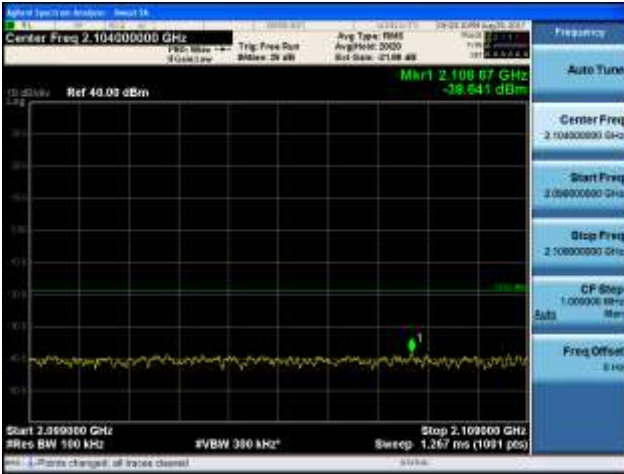




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (467) / (893)  
 Pages

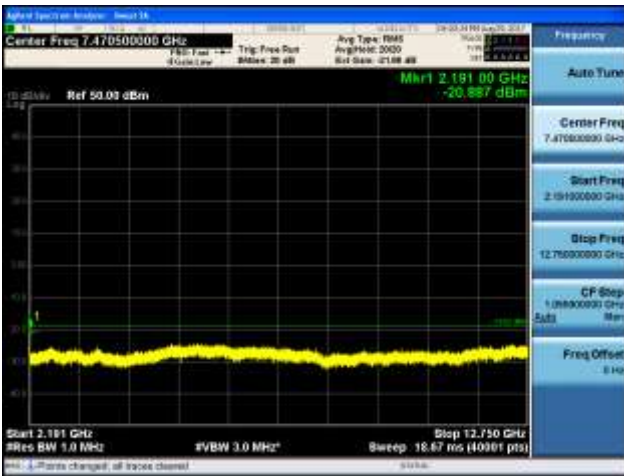
2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

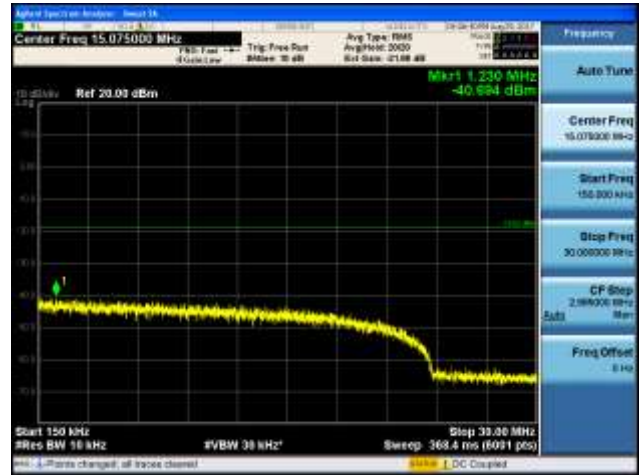
Report No.:  
 CTK-2017-01618-1  
 Page (468) / (893)  
 Pages

[256QAM]

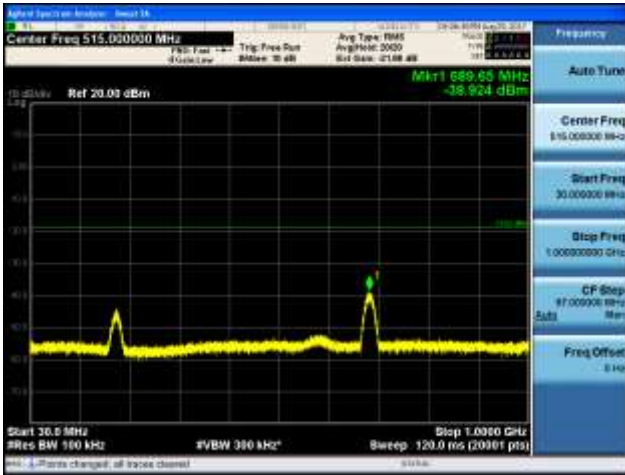
9 kHz - 150 kHz



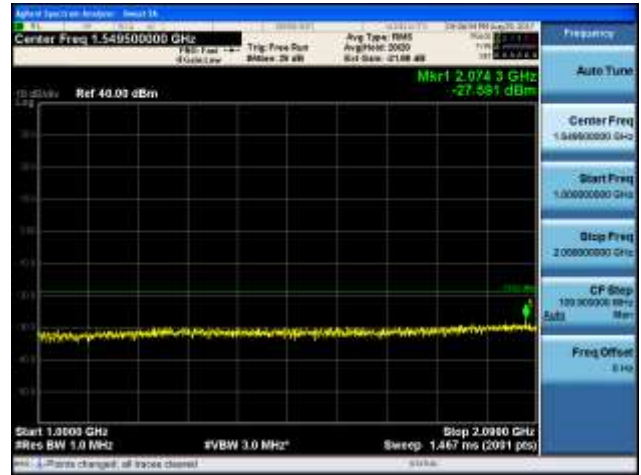
150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

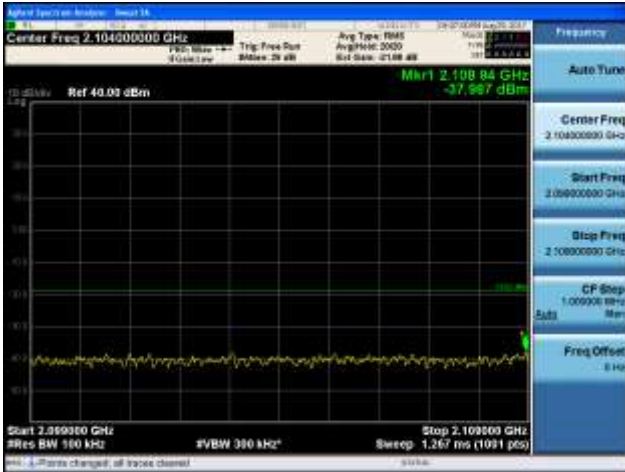




**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

Report No.:  
CTK-2017-01618-1  
Page (469) / (893)  
Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz





**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (470) / (893)  
 Pages

**Band 66, BW 10MHz + BW 20MHz, Multi 2 carrier(Contiguous), 2TX, Bottom [QPSK]**

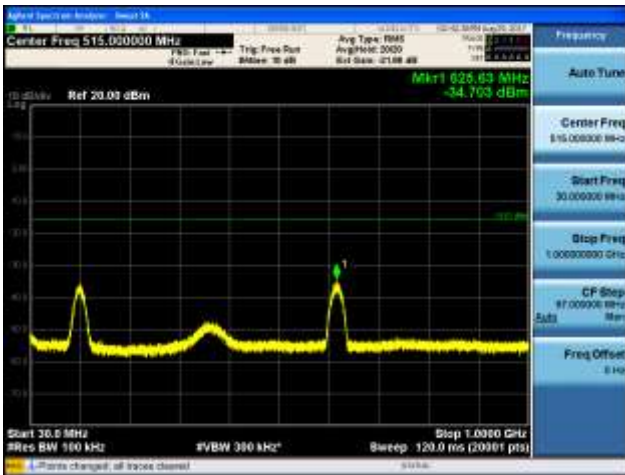
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

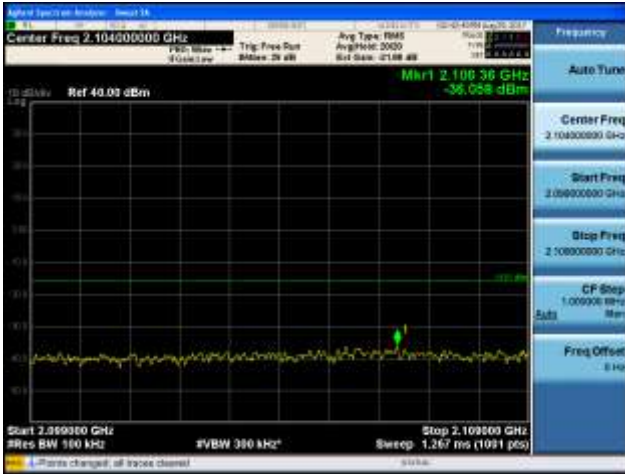




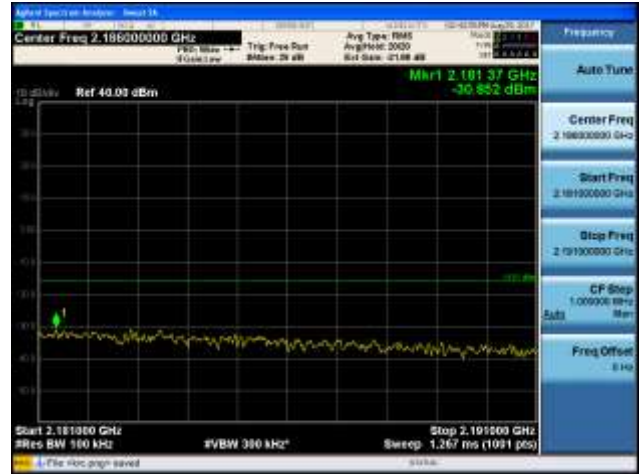
**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (471) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



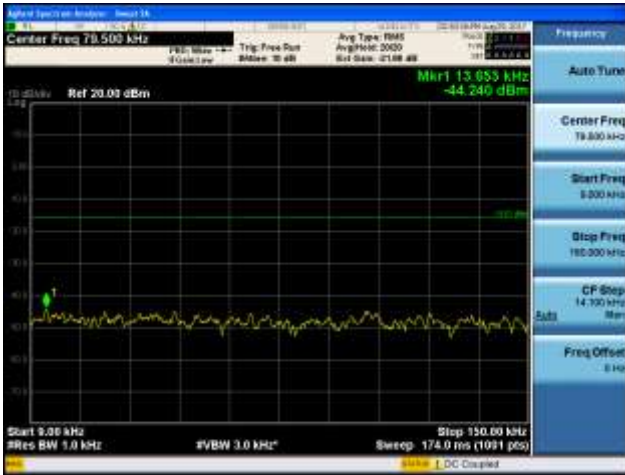


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

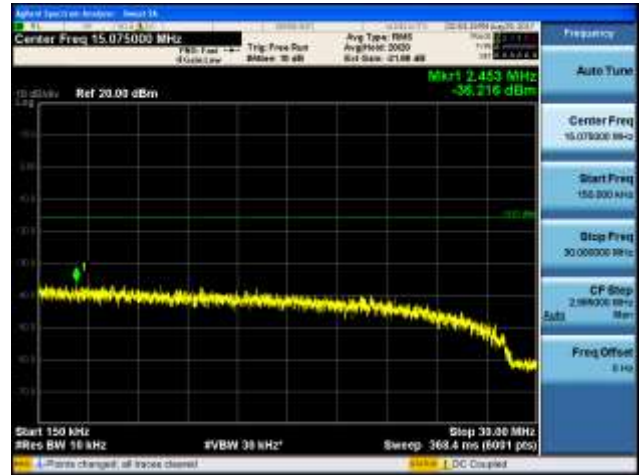
Report No.:  
 CTK-2017-01618-1  
 Page (472) / (893)  
 Pages

[16QAM]

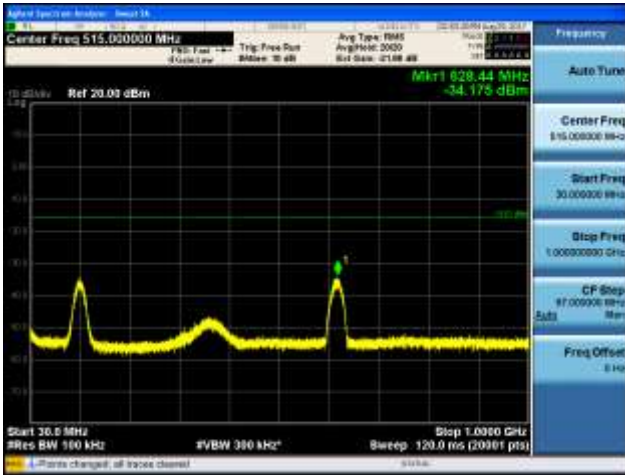
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

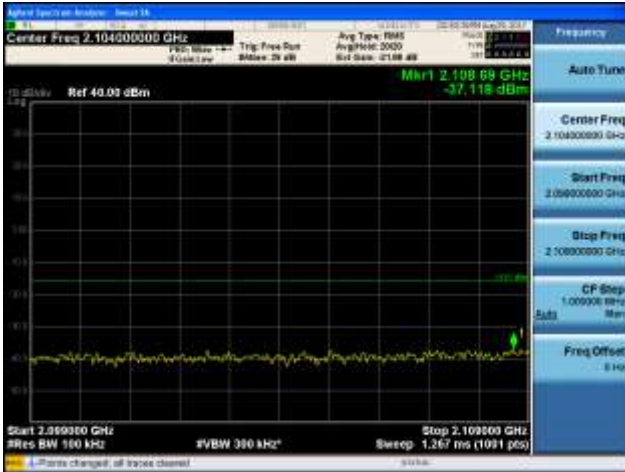




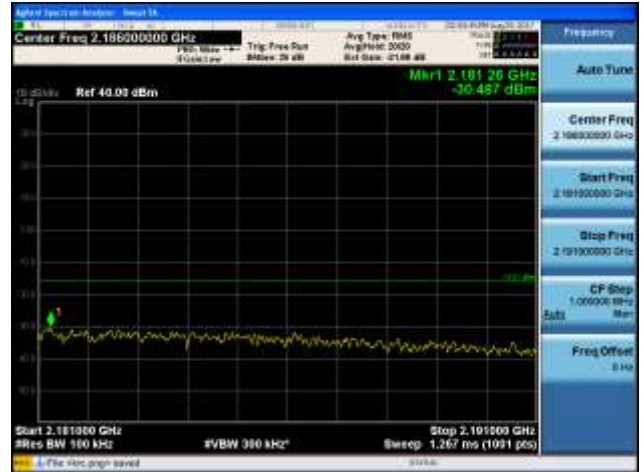
**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

Report No.:  
CTK-2017-01618-1  
Page (473) / (893)  
Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz

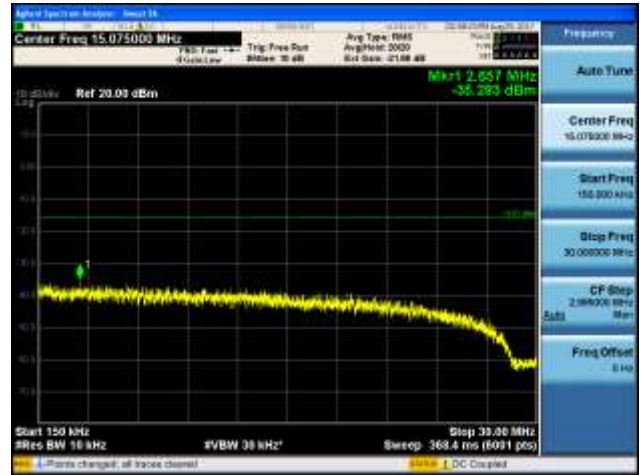


[64QAM]

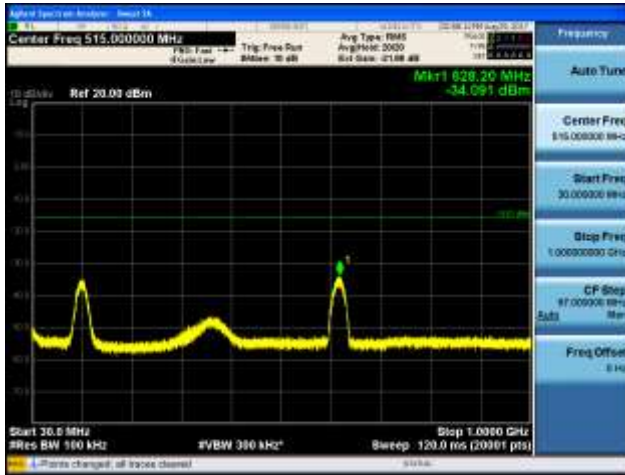
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

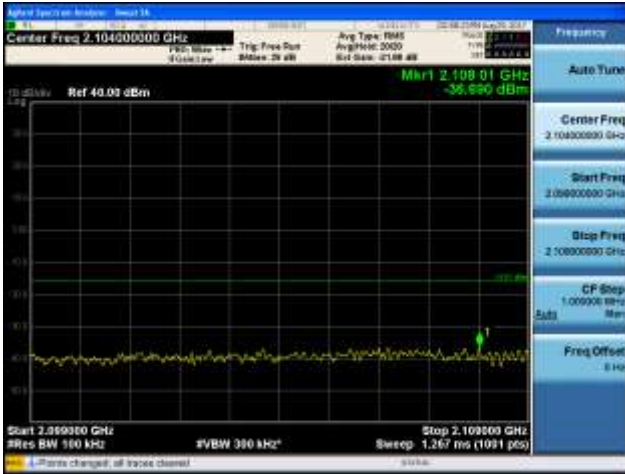




**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

Report No.:  
CTK-2017-01618-1  
Page (475) / (893)  
Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz





**CTK Co., Ltd.**  
(Ho-dong), 113, Yejik-ro, Cheoin-gu,  
Yongin-si, Gyeonggi-do, Korea  
Tel: +82-31-339-9970  
Fax: +82-31-624-9501

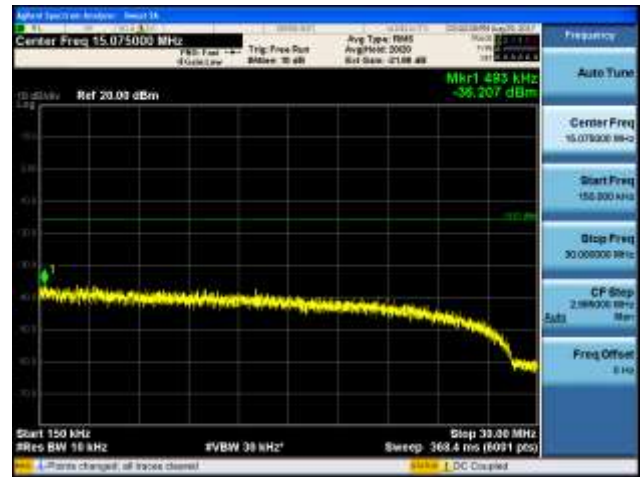
Report No.:  
CTK-2017-01618-1  
Page (476) / (893)  
Pages

[256QAM]

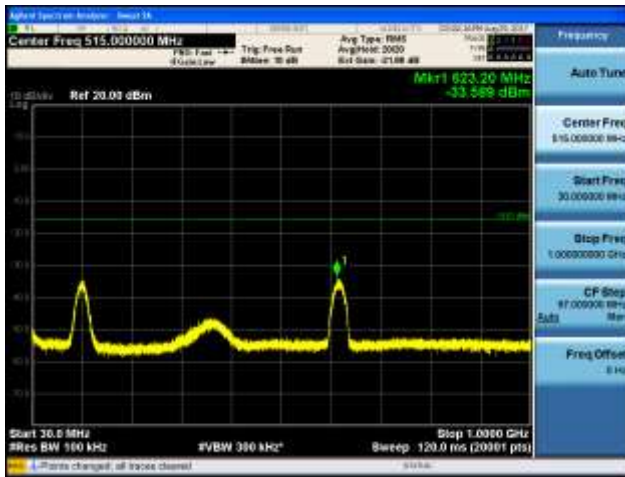
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

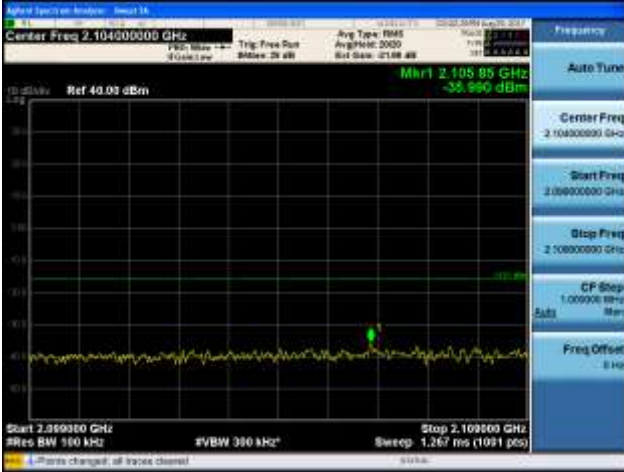




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (477) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



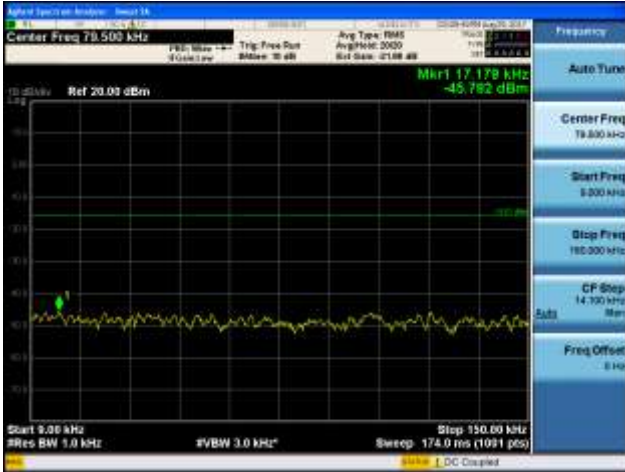


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (478) / (893)  
 Pages

**Band 66, BW 10MHz + BW 20MHz, Multi 2 carrier(Contiguous), 2TX, Top**  
 [QPSK]

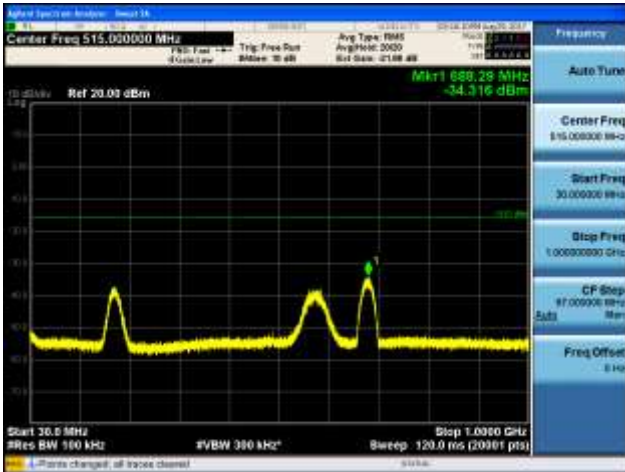
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

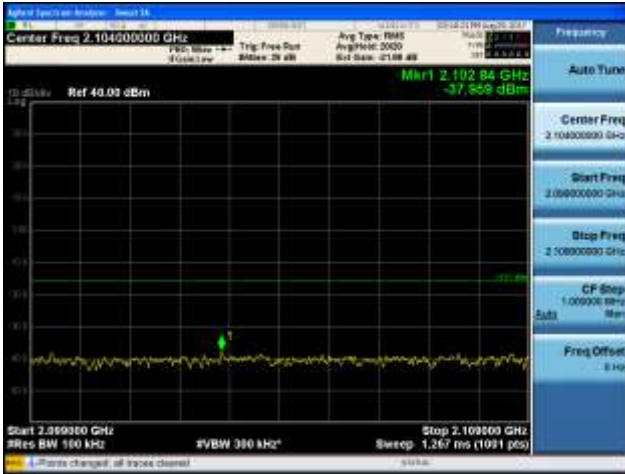




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (479) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



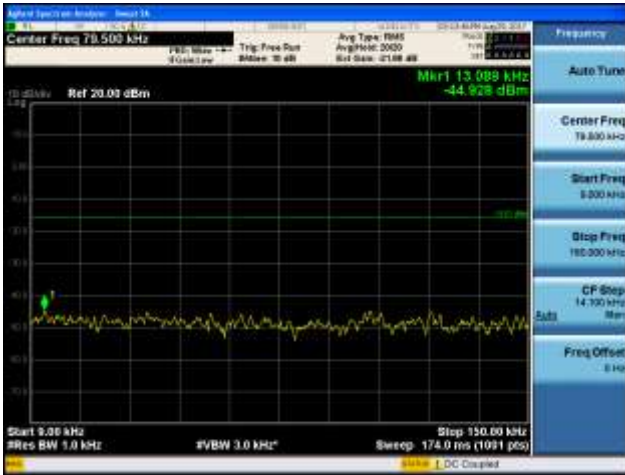


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (480) / (893)  
 Pages

[16QAM]

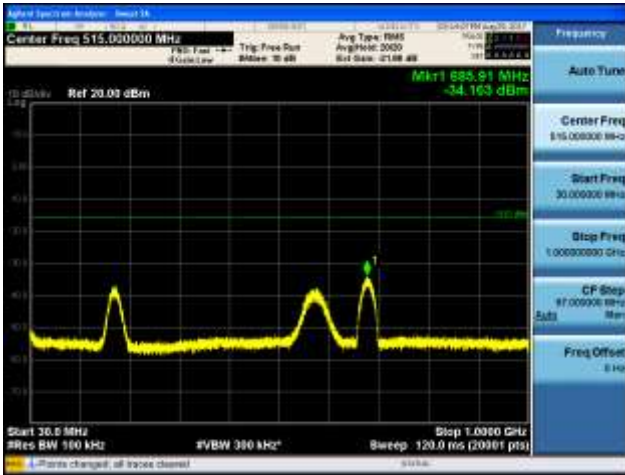
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

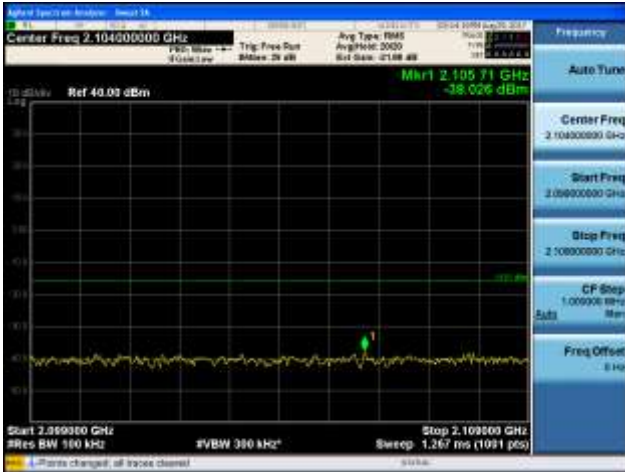




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (481) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



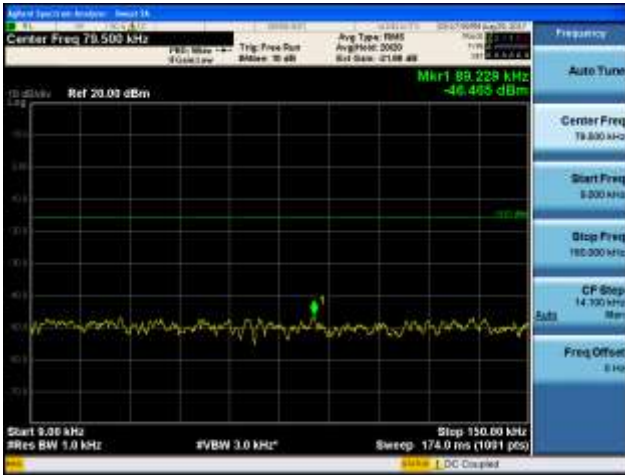


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

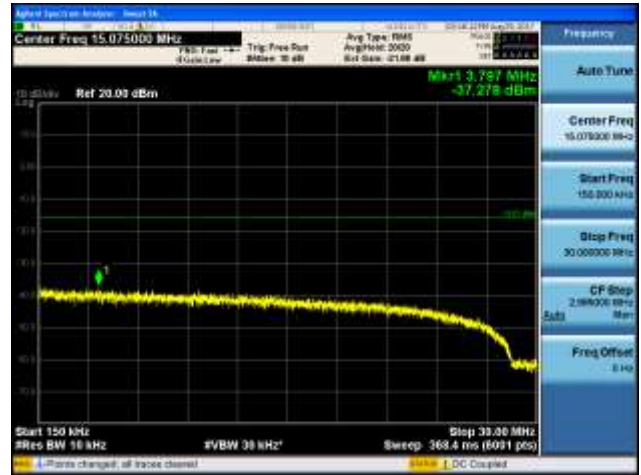
Report No.:  
 CTK-2017-01618-1  
 Page (482) / (893)  
 Pages

[64QAM]

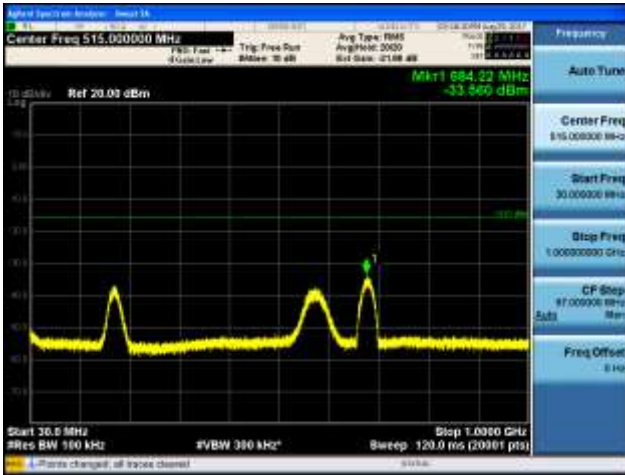
9 kHz - 150 kHz



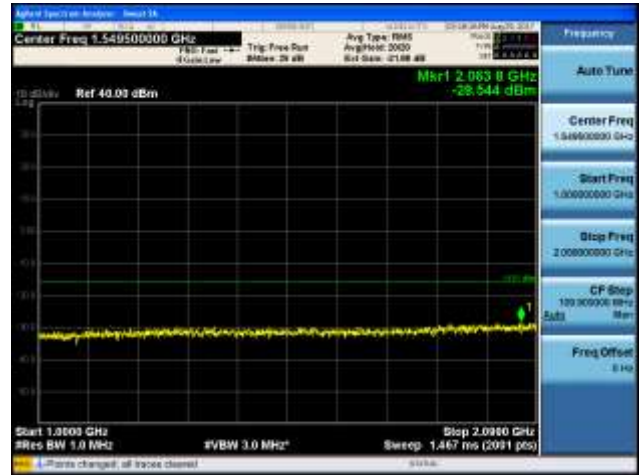
150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

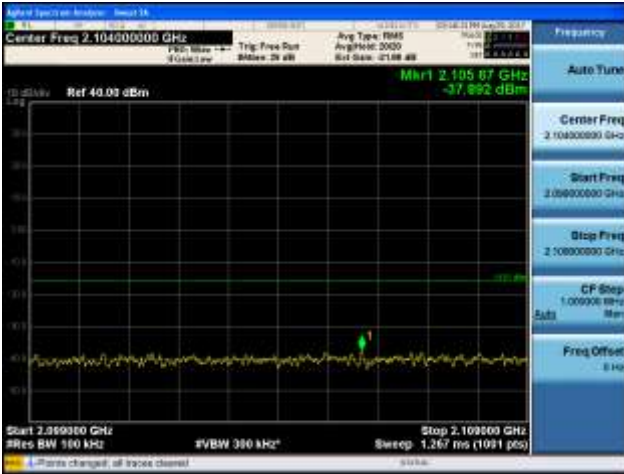




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (483) / (893)  
 Pages

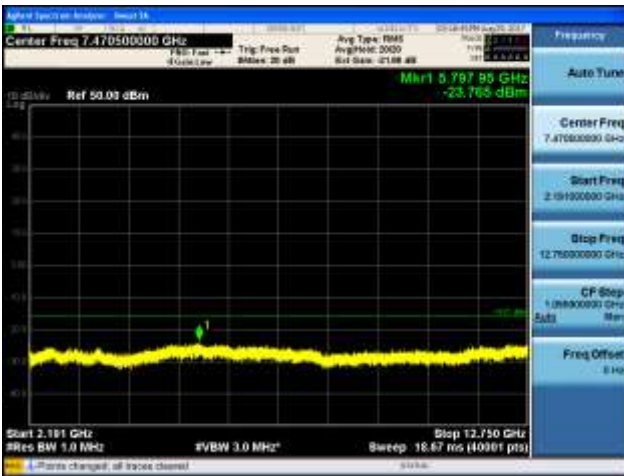
2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz



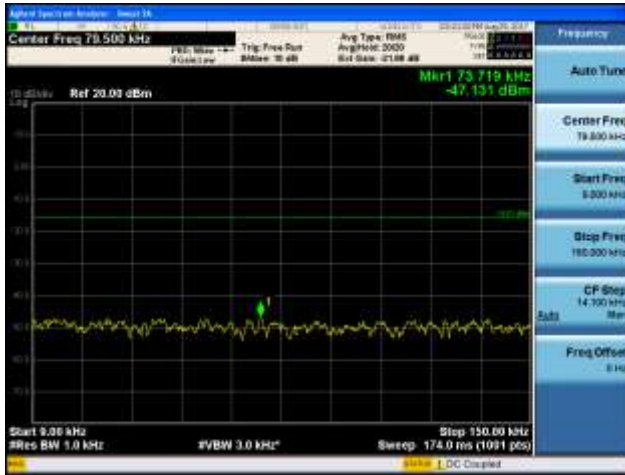


**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (484) / (893)  
 Pages

[256QAM]

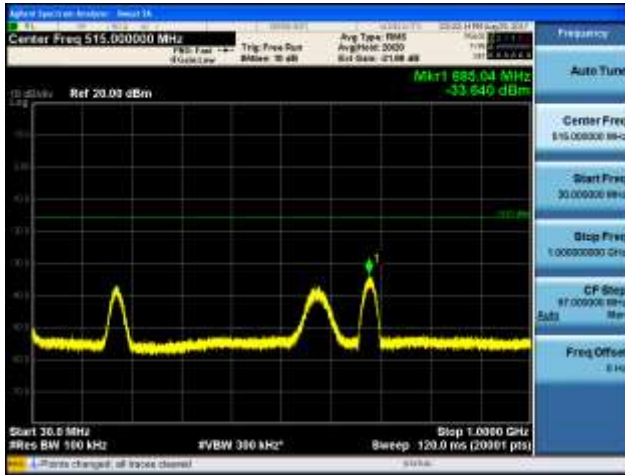
9 kHz - 150 kHz



150 kHz - 30 MHz



30 MHz - 1000 MHz



1000 MHz - 2099 MHz

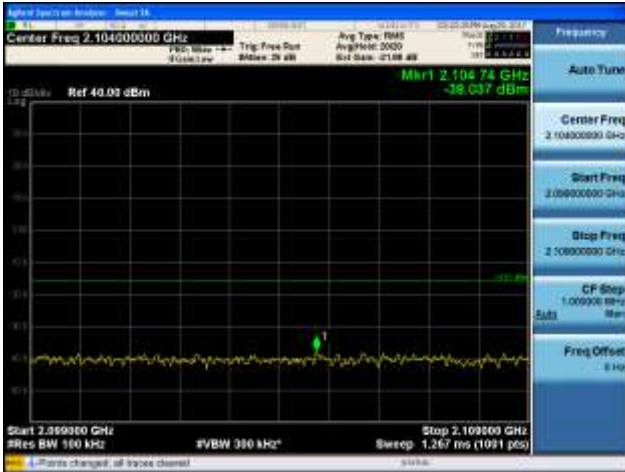




**CTK Co., Ltd.**  
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,  
 Yongin-si, Gyeonggi-do, Korea  
 Tel: +82-31-339-9970  
 Fax: +82-31-624-9501

Report No.:  
 CTK-2017-01618-1  
 Page (485) / (893)  
 Pages

2099 MHz - 2109 MHz



2181 MHz - 2191 MHz



2191 MHz - 12.75 GHz



12.75 GHz - 26.5 GHz

