

TABLE OF CONTENTS

A.1 CONDUCTED EMISSION	2
A.2 RADIATED EMISSION	6
A.2.1 Emissions within Restricted Frequency Bands.....	6
A.2.2 Emissions outside the frequency band:.....	16
A.2.3 Emissions in Non-restricted Frequency Bands:.....	17
A.3 20dB BANDWIDTH	18
A.3.1 20dB Bandwidth Result.....	18
A.3.2 Measurement Plots	19
A.4 CARRIER FREQUENCY SEPARATION	20
A.5 TIME OF OCCUPANCY.....	22
A.5.1 Time of Occupancy	22
A.6 NUMBER OF HOPPING CHANNELS	32
A.7 MAXIMUM PEAK OUTPUT POWER	33
A.7.1 Maximum Peak Output Power.....	33
A.7.2 Measurement Plots	34
A.8 EMISSION LIMITATIONS MEASUREMENT	35
A.8.1 Band Edge.....	35
A.8.2 Spurious Emission	37

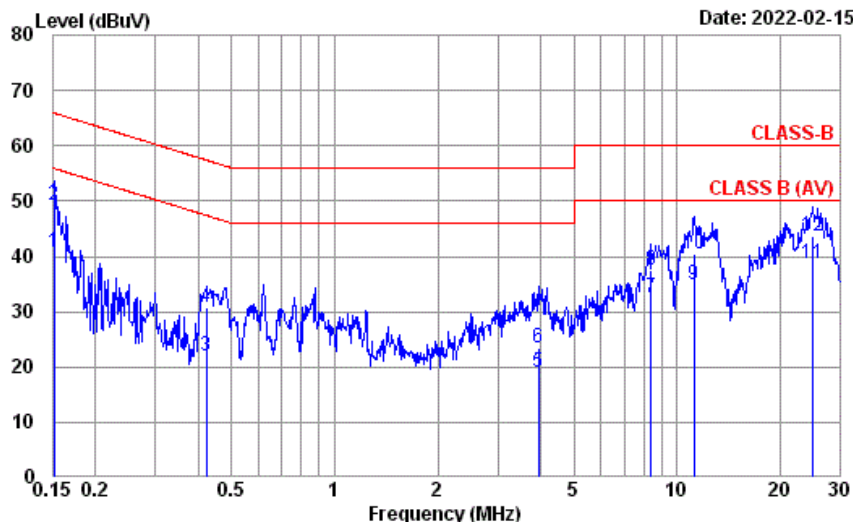
Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

A.1 CONDUCTED EMISSION

Test Date	2022/02/15	Temp./Hum.	23°C/60%
Test Voltage	AC 120V 60Hz (Via AC Adapter)	Tested By	Chucky Chiu
Test SKU	SKU #1 (with INPAQ Antenna)		

Data: 1 File: D:\test data\REPORT\2022\C1M2201XXX\C1M2201240\C1M2201240-C-D-RF-EM6 (4) Date: 2022-02-15



Site No. : No.8 Shielded Room Data No. : 1
Instrument 1 : Receiver ESR3(774)
Instrument 2 : ENH432 (567)(A)|CE-08|ESH3-Z2 (354)
Limit : LP0002 Phase : NEUTRAL
Environment : 23°C / 60% Engineer : Chucky Chiu
EUT Model : 15Z90Q Test Rating : 120Vac/60Hz
Test Mode : Operating
Luxshare

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBμV)	Emission Level (dBμV)	Limits (dBμV)	Margin (dB)	Remark
1	0.152	10.41	0.03	9.85	20.52	40.81	55.91	15.10	Average
2	0.152	10.41	0.03	9.85	28.86	49.15	65.91	16.76	QP
3	0.421	10.37	0.03	9.85	1.81	22.06	47.42	25.36	Average
4	0.421	10.37	0.03	9.85	10.45	30.70	57.42	26.72	QP
5	3.943	10.45	0.09	9.86	-1.30	19.10	46.00	26.90	Average
6	3.943	10.45	0.09	9.86	3.09	23.49	56.00	32.51	QP
7	8.367	10.64	0.12	9.88	11.94	32.58	50.00	17.42	Average
8	8.367	10.64	0.12	9.88	16.88	37.52	60.00	22.48	QP
9	11.198	10.75	0.15	9.90	14.07	34.87	50.00	15.13	Average
10	11.198	10.75	0.15	9.90	19.61	40.41	60.00	19.59	QP
11	24.922	11.25	0.22	9.97	17.20	38.64	50.00	11.36	Average
12	24.922	11.25	0.22	9.97	22.13	43.57	60.00	16.43	QP

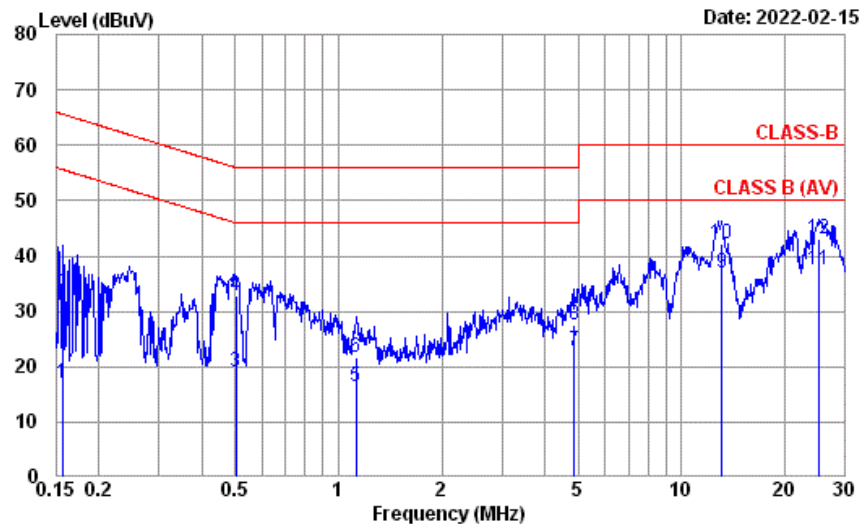
Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when using a quasi-peak detector,
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

Test Date	2022/02/15	Temp./Hum.	23°C/60%
Test Voltage	AC 120V 60Hz (Via AC Adapter)	Tested By	Chucky Chiu
Test SKU	SKU #1 (with INPAQ Antenna)		

Data: 2 File: D:\test data\REPORT\2022\C1M2201XXX\C1M2201240\C1M2201240-C-D-RF.EM6 (4



Site No. : No.8 Shielded Room Data No. : 2
Instrument 1 : Receiver ESR3(774)
Instrument 2 : EHV432 (567)(A)|CE-08|ESH3-Z2 (354)
Limit : LP0002 Phase : LINE
Environment : 23°C / 60% Engineer : Chucky Chiu
EUT Model : 15Z90Q Test Rating : 120Vac/60Hz
Test Mode : Operating
Luxshare

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBμV)	Emission Level (dBμV)	Limits (dBμV)	Margin (dB)	Remark
1	0.156	10.40	0.03	9.85	-3.30	16.98	55.65	38.67	Average
2	0.156	10.40	0.03	9.85	12.90	33.18	65.65	32.47	QP
3	0.502	10.37	0.03	9.85	-1.16	19.09	46.00	26.91	Average
4	0.502	10.37	0.03	9.85	12.52	32.77	56.00	23.23	QP
5	1.123	10.38	0.04	9.85	-3.81	16.46	46.00	29.54	Average
6	1.123	10.38	0.04	9.85	1.56	21.83	56.00	34.17	QP
7	4.874	10.45	0.10	9.87	2.53	22.95	46.00	23.05	Average
8	4.874	10.45	0.10	9.87	7.18	27.60	56.00	28.40	QP
9	13.127	10.64	0.16	9.90	16.12	36.82	50.00	13.18	Average
10	13.127	10.64	0.16	9.90	21.57	42.27	60.00	17.73	QP
11	25.188	10.83	0.22	9.97	16.52	37.54	50.00	12.46	Average
12	25.188	10.83	0.22	9.97	21.91	42.93	60.00	17.07	QP

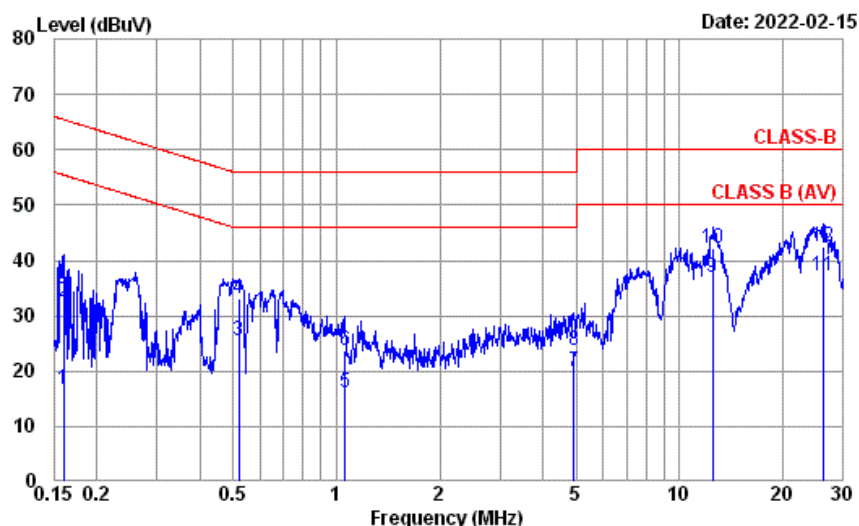
Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when using a quasi-peak detector,
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

Test Date	2022/02/15	Temp./Hum.	23°C/60%
Test Voltage	AC 120V 60Hz (Via AC Adapter)	Tested By	Chucky Chiu
Test SKU	SKU #2 (with LUXSHARE-ICT Antenna)		

Data: 3 File: D:\test data\REPORT\2022\1M2201XXX\1M2201240\1M2201240-C-D-RF.EM6 (4



Site No. : No.8 Shielded Room Data No. : 3
Instrument 1 : Receiver ESR3(774)
Instrument 2 : ENH432 (567)(A)|CE-08|ESH3-Z2 (354)
Limit : LP0002 Phase : NEUTRAL
Environment : 23°C / 60% Engineer : Chucky Chiu
EUT Model : 15Z90Q Test Rating : 120Vac/60Hz
Test Mode : Operating
INPAQ

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBμV)	Emission Level (dBμV)	Limits (dBμV)	Margin (dB)	Remark
1	0.160	10.41	0.03	9.85	-3.70	16.59	55.47	38.88	Average
2	0.160	10.41	0.03	9.85	12.10	32.39	65.47	33.08	QP
3	0.518	10.37	0.03	9.85	5.22	25.47	46.00	20.53	Average
4	0.518	10.37	0.03	9.85	12.83	33.08	56.00	22.92	QP
5	1.060	10.38	0.04	9.85	-4.12	16.15	46.00	29.85	Average
6	1.060	10.38	0.04	9.85	3.54	23.81	56.00	32.19	QP
7	4.926	10.50	0.10	9.87	-0.44	20.03	46.00	25.97	Average
8	4.926	10.50	0.10	9.87	3.24	23.71	56.00	32.29	QP
9	12.516	10.81	0.15	9.90	16.11	36.97	50.00	13.03	Average
10	12.516	10.81	0.15	9.90	21.46	42.32	60.00	17.68	QP
11	26.139	11.28	0.22	9.98	15.73	37.21	50.00	12.79	Average
12	26.139	11.28	0.22	9.98	21.11	42.59	60.00	17.41	QP

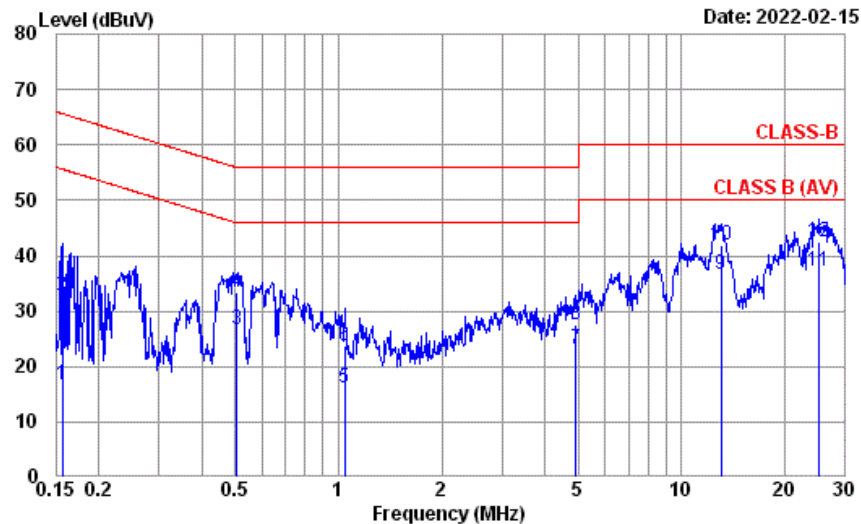
Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when using a quasi-peak detector,
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

Test Date	2022/02/15	Temp./Hum.	23°C/60%
Test Voltage	AC 120V 60Hz (Via AC Adapter)	Tested By	Chucky Chiu
Test SKU	SKU #2 (with LUXSHARE-ICT Antenna)		

Data: 4 File: D:\test data\REPORT\2022\C1M2201XXX\C1M2201240\C1M2201240-C-D-RF.EM6 (4



Site No. : No.8 Shielded Room Data No. : 4
Instrument 1 : Receiver ESR3(774)
Instrument 2 : EHV432 (567)(A)|CE-08|ESH3-Z2 (354)
Limit : LP0002 Phase : LINE
Environment : 23°C / 60% Engineer : Chucky Chiu
EUT Model : 15290Q Test Rating : 120Vac/60Hz
Test Mode : Operating
INPAQ

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBμV)	Emission Level (dBμV)	Limits (dBμV)	Margin (dB)	Remark
1	0.156	10.40	0.03	9.85	-3.55	16.73	55.65	38.92	Average
2	0.156	10.40	0.03	9.85	12.62	32.90	65.65	32.75	QP
3	0.505	10.37	0.03	9.85	6.42	26.67	46.00	19.33	Average
4	0.505	10.37	0.03	9.85	13.06	33.31	56.00	22.69	QP
5	1.043	10.38	0.04	9.85	-4.24	16.03	46.00	29.97	Average
6	1.043	10.38	0.04	9.85	3.34	23.61	56.00	32.39	QP
7	4.926	10.45	0.10	9.87	2.79	23.21	46.00	22.79	Average
8	4.926	10.45	0.10	9.87	7.22	27.64	56.00	28.36	QP
9	13.057	10.64	0.16	9.90	15.79	36.49	50.00	13.51	Average
10	13.057	10.64	0.16	9.90	21.26	41.96	60.00	18.04	QP
11	25.055	10.83	0.22	9.97	16.26	37.28	50.00	12.72	Average
12	25.055	10.83	0.22	9.97	21.55	42.57	60.00	17.43	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when using a quasi-peak detector,
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

A.2 RADIATED EMISSION

Test Date	2022/01/22 ~ 02/14	Temp./Hum.	19 ~ 22°C/66 ~ 68%
Test Voltage	AC 120V 60Hz (Via AC Adapter)	Tested By	Kuper Hsu
Test SKU	SKU #2 (with LUXSHARE-ICT Antenna)		

A.2.1 Emissions within Restricted Frequency Bands

A.2.1.1 Frequency 9kHz~30MHz

The emissions (9kHz~30MHz) not reported for there is no emission be found.

A.2.1.2 Frequency Below 1GHz

- **Test SKU #1 (with INPAQ Antenna)**

Mode	GFSK	Frequency	TX 2480MHz
------	------	-----------	------------

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
84.320	13.72	2.08	32.37	42.96	26.39	40.00	13.61	Peak
215.270	16.12	3.53	32.24	45.17	32.58	43.50	10.92	Peak
223.030	16.61	3.60	32.24	52.00	39.97	46.00	6.03	Peak
596.480	24.28	6.76	32.31	35.12	33.85	46.00	12.15	Peak
896.210	26.29	8.42	31.50	35.26	38.47	46.00	7.53	Peak
977.690	26.96	8.86	30.73	30.37	35.46	54.00	18.54	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
31.940	22.86	1.22	32.43	45.47	37.12	40.00	2.88	Peak
126.030	17.66	2.59	32.31	43.74	31.68	43.50	11.82	Peak
223.030	16.61	3.60	32.24	48.24	36.21	46.00	9.79	Peak
470.380	22.65	6.19	32.22	35.30	31.92	46.00	14.08	Peak
896.210	26.29	8.42	31.50	37.08	40.29	46.00	5.71	Peak
970.900	26.91	8.83	30.81	31.07	36.00	54.00	18.00	Peak

● **Test SKU #2 (with LUXSHARE-ICT Antenna)**

Mode	GFSK	Frequency	TX 2480MHz
------	------	-----------	------------

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
81.410	13.17	2.05	32.37	45.58	28.43	40.00	11.57	Peak
152.220	16.17	2.88	32.28	45.48	32.25	43.50	11.25	Peak
223.030	16.61	3.60	32.24	54.00	41.97	46.00	4.03	Peak
563.500	23.89	6.65	32.28	34.75	33.01	46.00	12.99	Peak
896.210	26.29	8.42	31.50	34.21	37.42	46.00	8.58	Peak
965.080	26.85	8.79	30.89	31.13	35.88	54.00	18.12	Peak

Antenna at Vertical Polarization

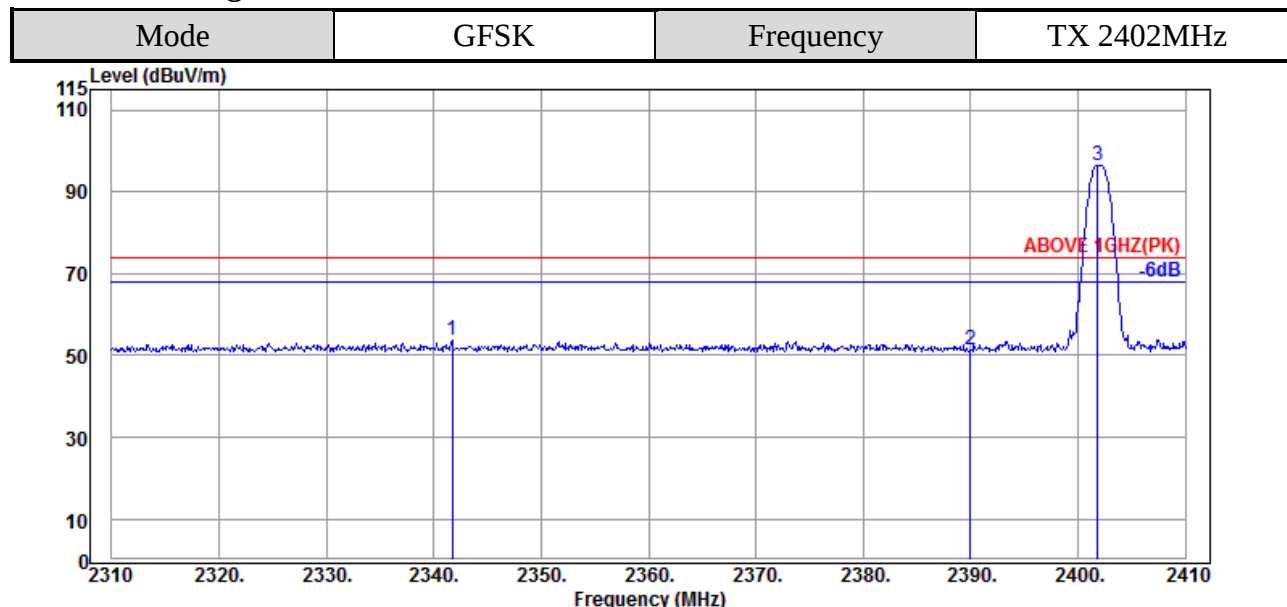
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
32.910	22.52	1.24	32.43	45.08	36.41	40.00	3.59	Peak
128.940	17.50	2.62	32.31	44.24	32.05	43.50	11.45	Peak
371.440	20.80	5.22	32.24	43.95	37.73	46.00	8.27	Peak
593.570	24.23	6.75	32.31	35.40	34.07	46.00	11.93	Peak
896.210	26.29	8.42	31.50	37.08	40.29	46.00	5.71	Peak
968.960	26.88	8.81	30.81	31.87	36.75	54.00	17.25	Peak

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

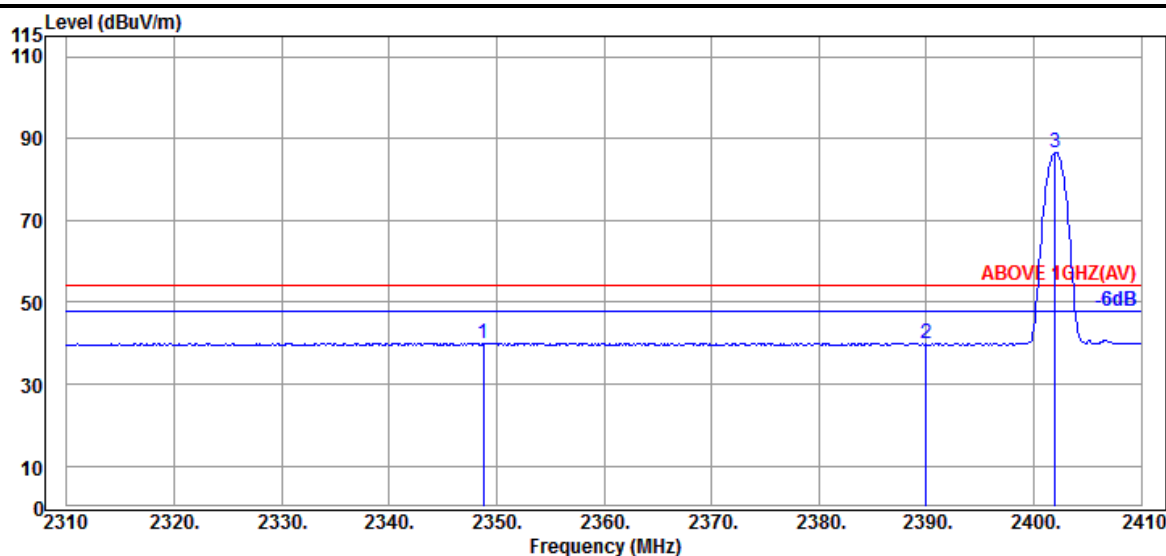
A.2.1.3 Frequency Above 1 GHz to 10th harmonics

Band Edge:



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2341.700	32.05	5.96	34.53	50.09	53.57	74.00	20.43	Peak
2390.000	31.89	6.04	34.54	47.80	51.19	74.00	22.81	Peak
@ 2401.800	31.80	6.04	34.54	93.31	96.61	---	---	Peak



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2348.800	32.07	5.96	34.53	36.61	40.11	54.00	13.89	Average
2390.000	31.89	6.04	34.54	36.35	39.74	54.00	14.26	Average
@ 2402.000	31.80	6.04	34.54	83.34	86.64	---	---	Average

Remark: The “@” means fundamental frequency, it is ignored in this section.

File Number: C1M2201240

Report Number: EM-F220087

This test report may be reproduced in full only. The document may only be updated by Audix Technology Corp. personnel. Any changes will be noted in the Document History section of the report.

Audix Technology Corp.

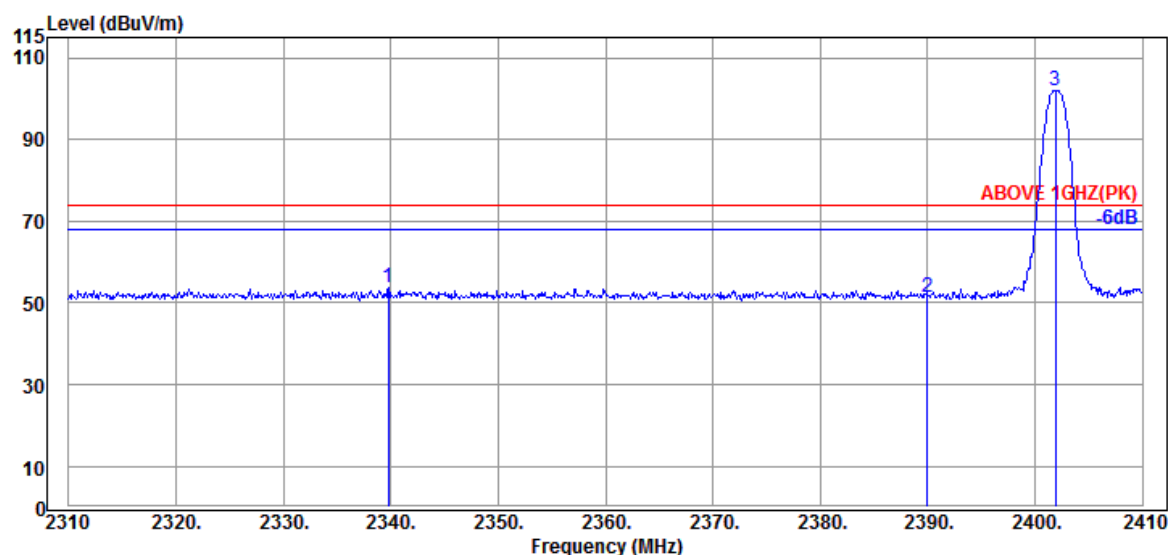
No. 491, Zhongfu Rd., Linkou Dist.,

New Taipei City244, Taiwan

Tel: +886 2 26099301

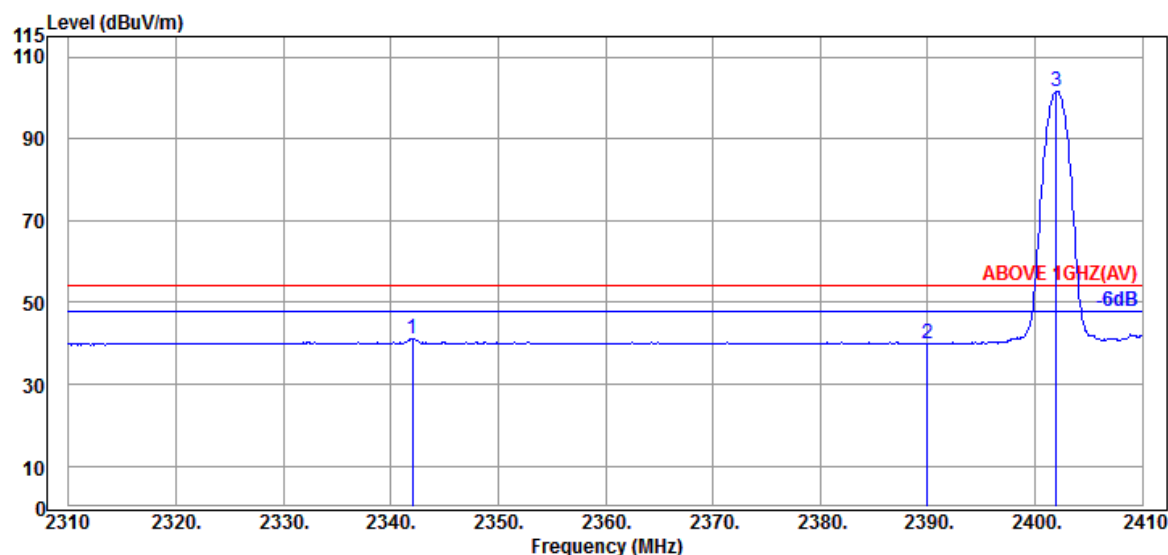
Fax: +886 2 26099303

Mode	GFSK	Frequency	TX 2402MHz
------	------	-----------	------------



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
2339.800	32.05	5.96	34.53	50.18	53.66	74.00	20.34	Peak
2390.000	31.89	6.04	34.54	47.93	51.32	74.00	22.68	Peak
@ 2401.900	31.80	6.04	34.54	98.56	101.86	---	---	Peak



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
2342.000	32.05	5.96	34.53	37.51	40.99	54.00	13.01	Average
2390.000	31.89	6.04	34.54	36.45	39.84	54.00	14.16	Average
@ 2402.000	31.80	6.04	34.54	98.39	101.69	---	---	Average

Remark: The “@” means fundamental frequency, it is ignored in this section.

File Number: C1M2201240

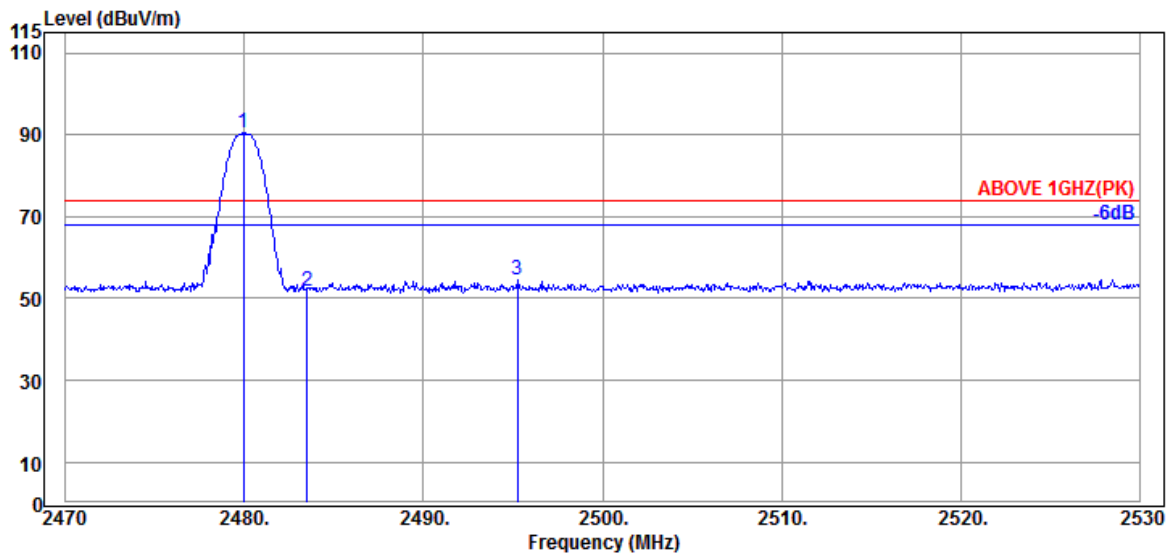
Report Number: EM-F220087

This test report may be reproduced in full only. The document may only be updated by Audix Technology Corp. personnel. Any changes will be noted in the Document History section of the report.

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

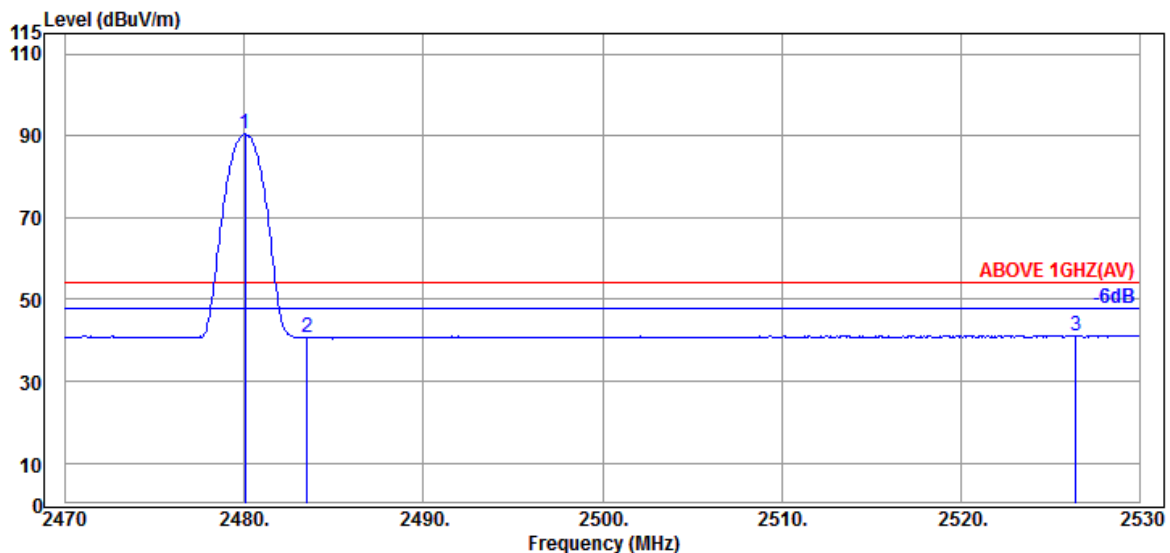
Tel: +886 2 26099301
Fax: +886 2 26099303

Mode	GFSK	Frequency	TX 2480MHz
------	------	-----------	------------



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
@ 2479.960	32.30	6.18	34.55	86.40	90.33	---	---	Peak
2483.500	32.30	6.18	34.55	47.86	51.79	74.00	22.21	Peak
2495.260	32.30	6.21	34.56	50.46	54.41	74.00	19.59	Peak



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
@ 2480.020	32.30	6.18	34.55	86.44	90.37	---	---	Average
2483.500	32.30	6.18	34.55	36.83	40.76	54.00	13.24	Average
2526.460	32.41	6.25	34.57	37.14	41.23	54.00	12.77	Average

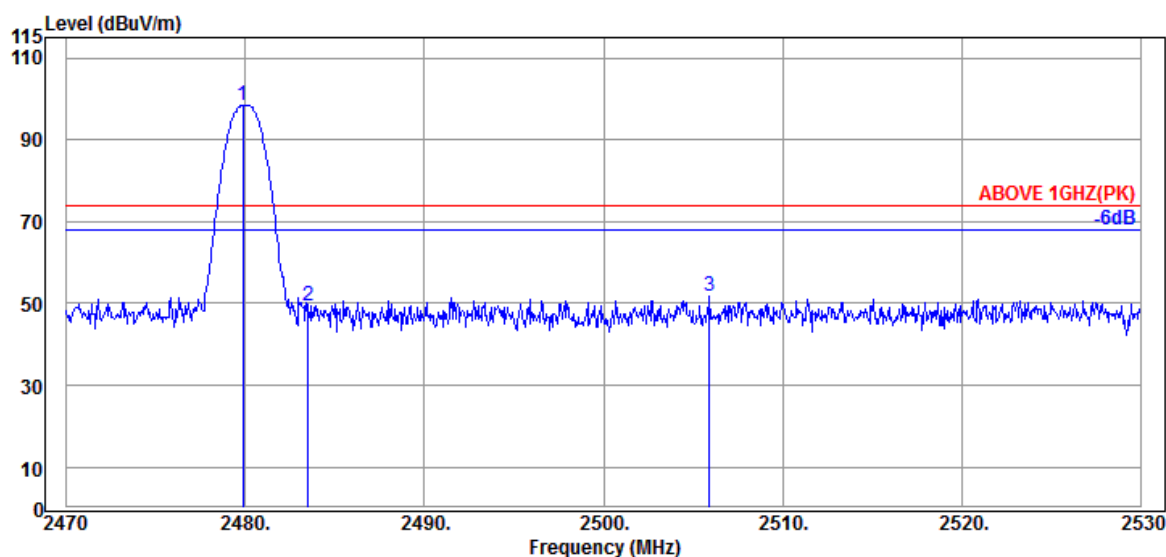
Remark: The “@” means fundamental frequency, it is ignored in this section.

File Number: C1M2201240

Report Number: EM-F220087

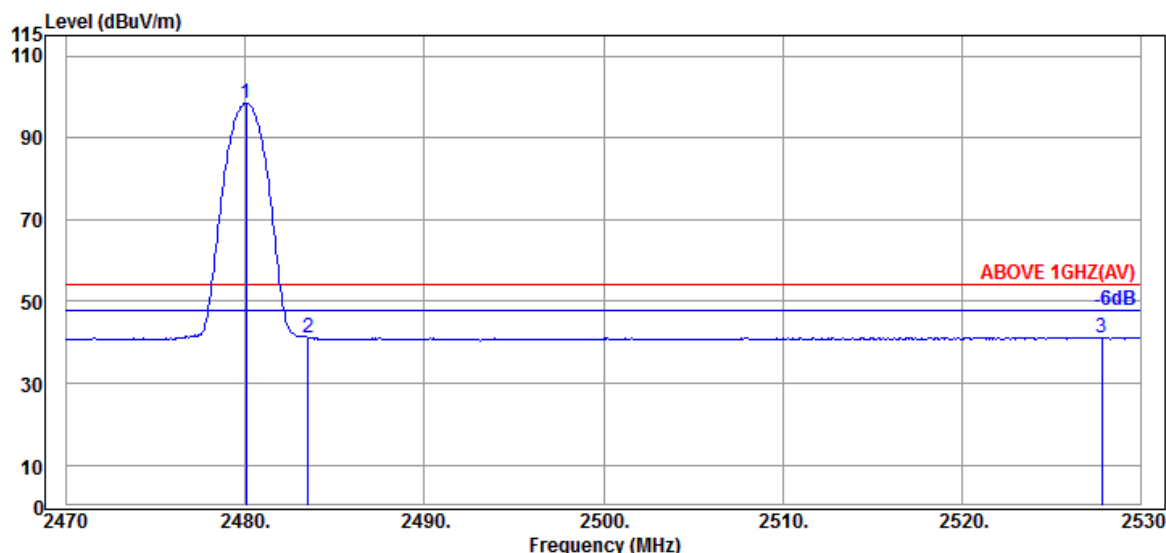
This test report may be reproduced in full only. The document may only be updated by Audix Technology Corp. personnel. Any changes will be noted in the Document History section of the report.

Mode	GFSK	Frequency	TX 2480MHz
------	------	-----------	------------



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
@ 2479.840	32.30	6.18	34.55	94.46	98.39	---	---	Peak
2483.500	32.30	6.18	34.55	45.34	49.27	74.00	24.73	Peak
2505.940	32.33	6.23	34.56	47.77	51.77	74.00	22.23	Peak



Antenna at Vertical Polarization

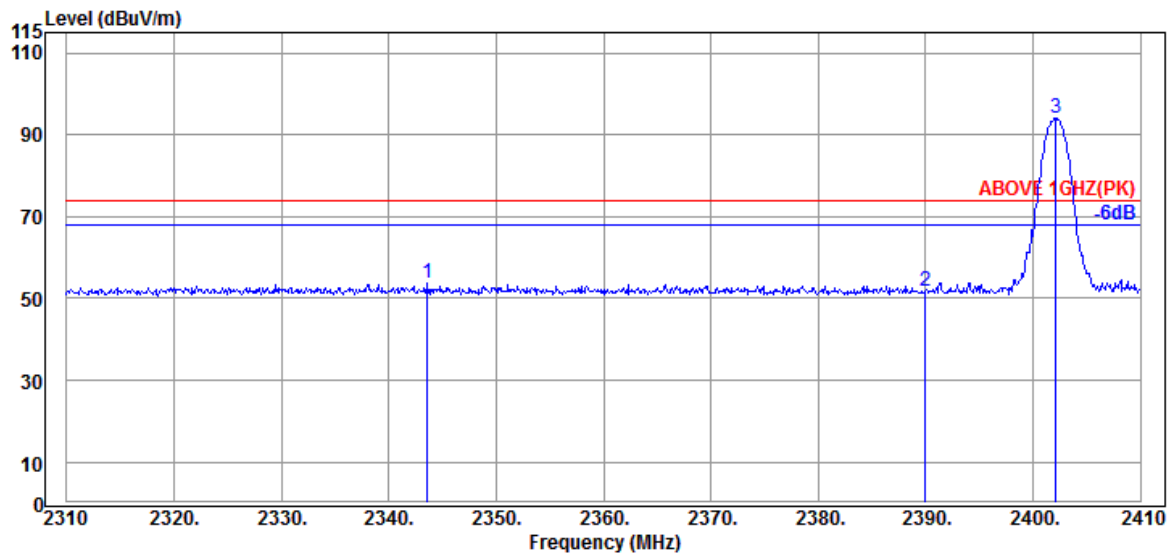
Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
@ 2480.020	32.30	6.18	34.55	94.41	98.34	---	---	Average
2483.500	32.30	6.18	34.55	37.25	41.18	54.00	12.82	Average
2527.840	32.41	6.25	34.57	37.13	41.22	54.00	12.78	Average

Remark: The “@” means fundamental frequency, it is ignored in this section.

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

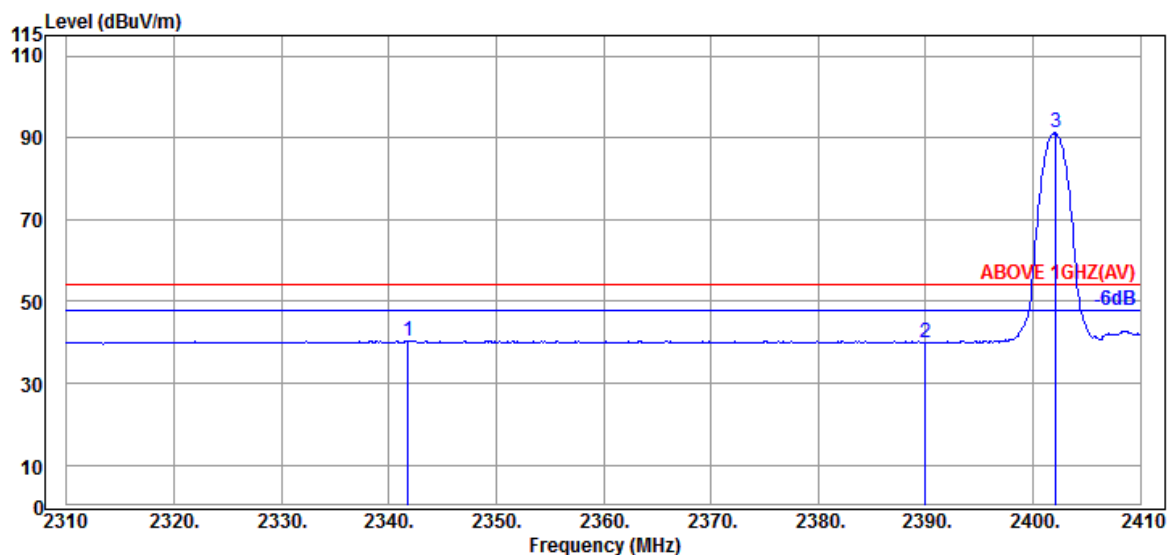
Tel: +886 2 26099301
Fax: +886 2 26099303

Mode	8-DPSK	Frequency	TX 2402MHz
------	--------	-----------	------------



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
2343.600	32.07	5.96	34.53	50.15	53.65	74.00	20.35	Peak
2390.000	31.89	6.04	34.54	48.54	51.93	74.00	22.07	Peak
@ 2402.100	31.80	6.04	34.54	90.69	93.99	---	---	Peak



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
2341.800	32.05	5.96	34.53	36.97	40.45	54.00	13.55	Average
2390.000	31.89	6.04	34.54	36.65	40.04	54.00	13.96	Average
@ 2402.100	31.80	6.04	34.54	87.83	91.13	---	---	Average

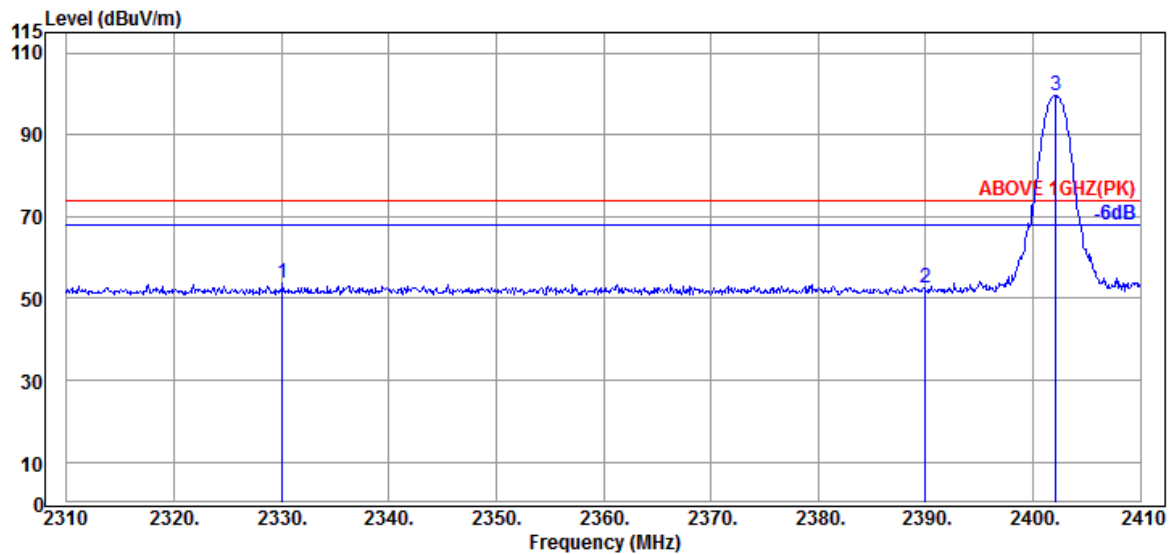
Remark: The “@” means fundamental frequency, it is ignored in this section.

File Number: C1M2201240

Report Number: EM-F220087

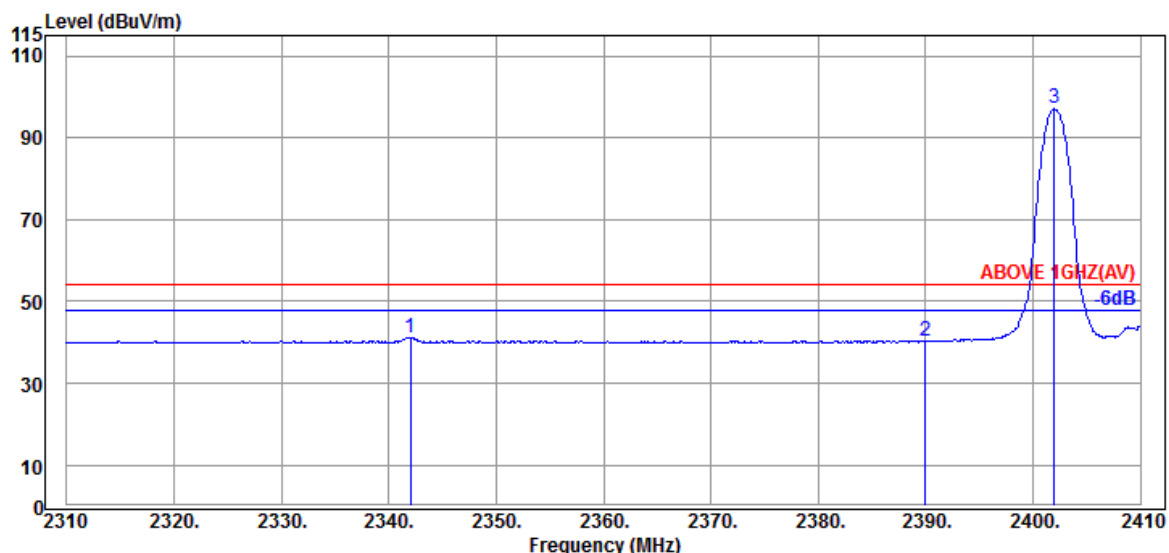
This test report may be reproduced in full only. The document may only be updated by Audix Technology Corp. personnel. Any changes will be noted in the Document History section of the report.

Mode	8-DPSK	Frequency	TX 2402MHz
------	--------	-----------	------------



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
2330.100	32.02	5.93	34.52	50.40	53.83	74.00	20.17	Peak
2390.000	31.89	6.04	34.54	49.02	52.41	74.00	21.59	Peak
@ 2402.100	31.80	6.04	34.54	96.26	99.56	---	---	Peak

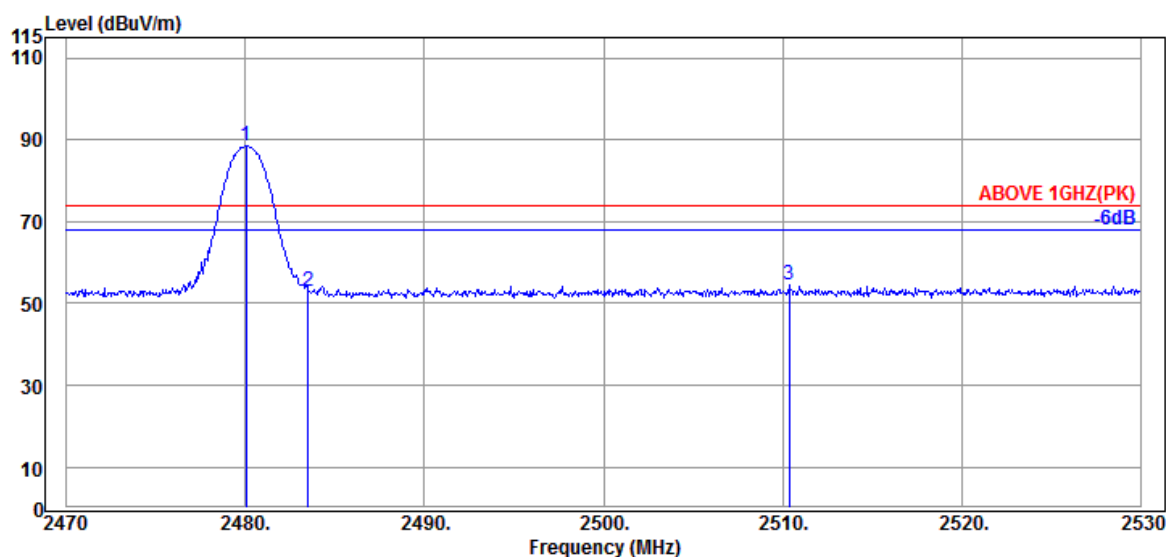


Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Detector
2342.000	32.05	5.96	34.53	37.73	41.21	54.00	12.79	Average
2390.000	31.89	6.04	34.54	36.88	40.27	54.00	13.73	Average
@ 2402.000	31.80	6.04	34.54	93.74	97.04	---	---	Average

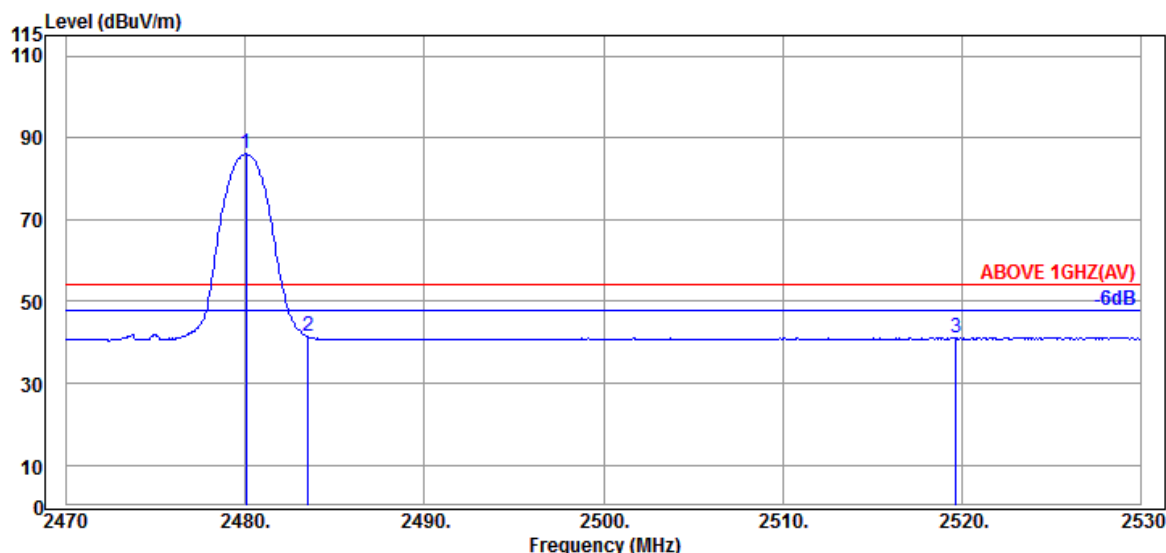
Remark: The “@” means fundamental frequency, it is ignored in this section.

Mode	8-DPSK	Frequency	TX 2480MHz
------	--------	-----------	------------



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2480.020	32.30	6.18	34.55	84.58	88.51	---	---	Peak
2483.500	32.30	6.18	34.55	48.96	52.89	74.00	21.11	Peak
2510.380	32.33	6.23	34.56	50.43	54.43	74.00	19.57	Peak

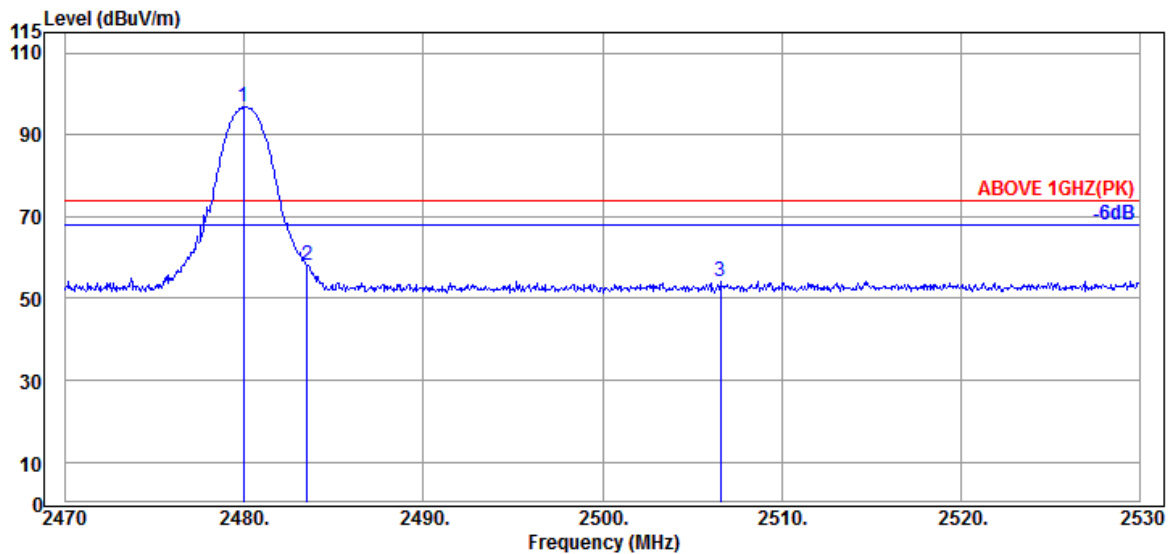


Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2480.020	32.30	6.18	34.55	82.11	86.04	---	---	Average
2483.500	32.30	6.18	34.55	37.61	41.54	54.00	12.46	Average
2519.680	32.39	6.23	34.57	37.19	41.24	54.00	12.76	Average

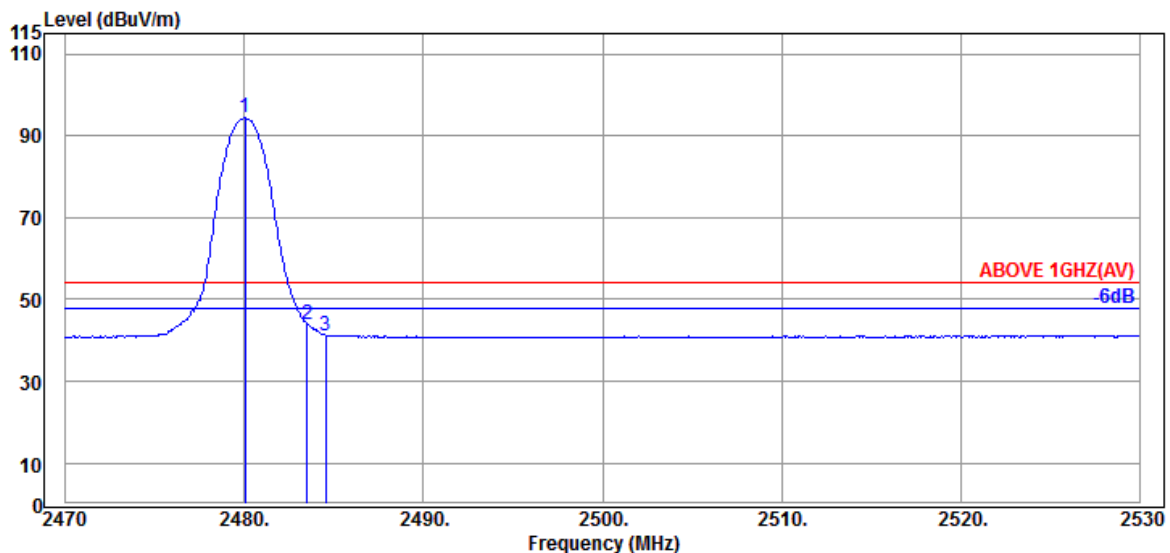
Remark: The “@” means fundamental frequency, it is ignored in this section.

Mode	8-DPSK	Frequency	TX 2480MHz
------	--------	-----------	------------



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2479.960	32.30	6.18	34.55	92.89	96.82	---	---	Peak
2483.500	32.30	6.18	34.55	54.13	58.06	74.00	15.94	Peak
2506.600	32.33	6.23	34.56	50.31	54.31	74.00	19.69	Peak



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
@ 2480.020	32.30	6.18	34.55	90.40	94.33	---	---	Average
2483.500	32.30	6.18	34.55	40.02	43.95	54.00	10.05	Average
2484.520	32.30	6.18	34.55	37.28	41.21	54.00	12.79	Average

Remark: The “@” means fundamental frequency, it is ignored in this section.

A.2.2 Emissions outside the frequency band:

The emissions (up to 25GHz) not reported for there is no emission be found.

Mode	GFSK	Frequency	TX 2402MHz
------	------	-----------	------------

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4804.000	33.60	8.68	34.44	32.41	40.25	54.00	13.75	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4804.000	33.60	8.68	34.44	33.37	41.21	54.00	12.79	Peak

Mode	GFSK	Frequency	TX 2441MHz
------	------	-----------	------------

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4882.000	33.88	8.72	34.43	32.87	41.04	54.00	12.96	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4882.000	33.88	8.72	34.43	33.41	41.58	54.00	12.42	Peak

Mode	GFSK	Frequency	TX 2480MHz
------	------	-----------	------------

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4960.000	33.83	8.77	34.41	33.47	41.66	54.00	12.34	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Gain (dB)	Read Level (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4960.000	33.83	8.77	34.41	33.81	42.00	54.00	12.00	Peak

Audix Technology Corp.

No. 491, Zhongfu Rd., Linkou Dist.,

New Taipei City 244, Taiwan

Tel: +886 2 26099301

Fax: +886 2 26099303

A.2.3 Emissions in Non-restricted Frequency Bands:

All emission levels below the FCC 15.209(a)/RSS-Gen Section 8.9 table 4 general radiated emissions limits is not required.

A.3 20dB BANDWIDTH

Test Date	2021/12/17	Temp./Hum.	21°C/60%
Cable Loss	1.00dB	Tested By	Kuper Hsu
Test Voltage	AC 120V 60Hz (Via AC Adapter)		

A.3.1 20dB Bandwidth Result

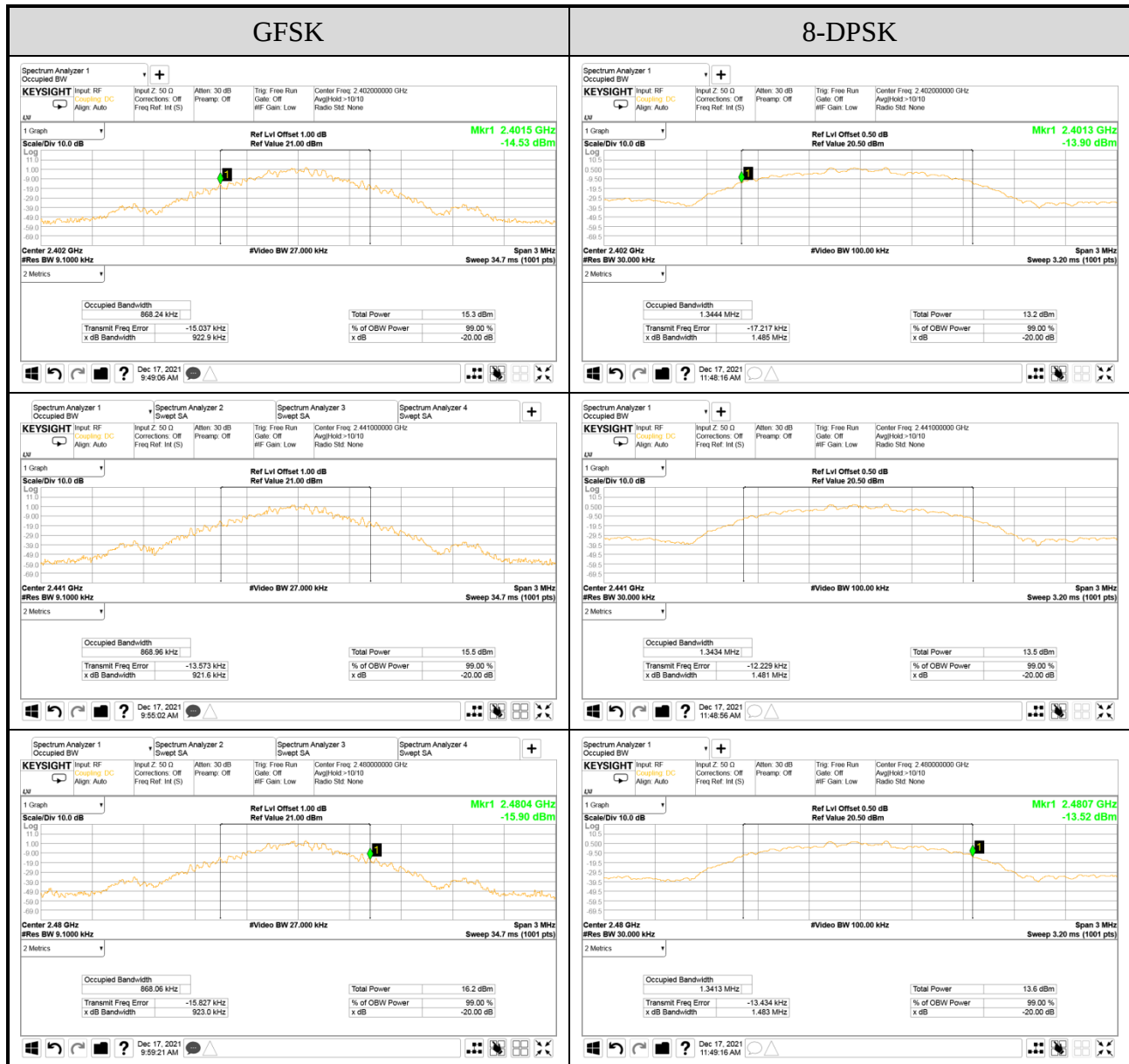
Mode	Centre Frequency (MHz)	20dB Bandwidth (MHz)	99%Occupied Bandwidth (MHz) (Reference only)	2/3 (20dB Bandwidth)
GFSK	2402	0.9229	0.86824	0.615
	2441	0.9216	0.86896	0.614
	2480	0.9230	0.86806	0.615
8-DPSK	2402	1.485	1.3444	0.990
	2441	1.481	1.3434	0.987
	2480	1.483	1.3413	0.989

Remark: The maximum two-thirds of the 20dB bandwidth is the limit for carrier frequency separation presented.

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City 244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

A.3.2 Measurement Plots

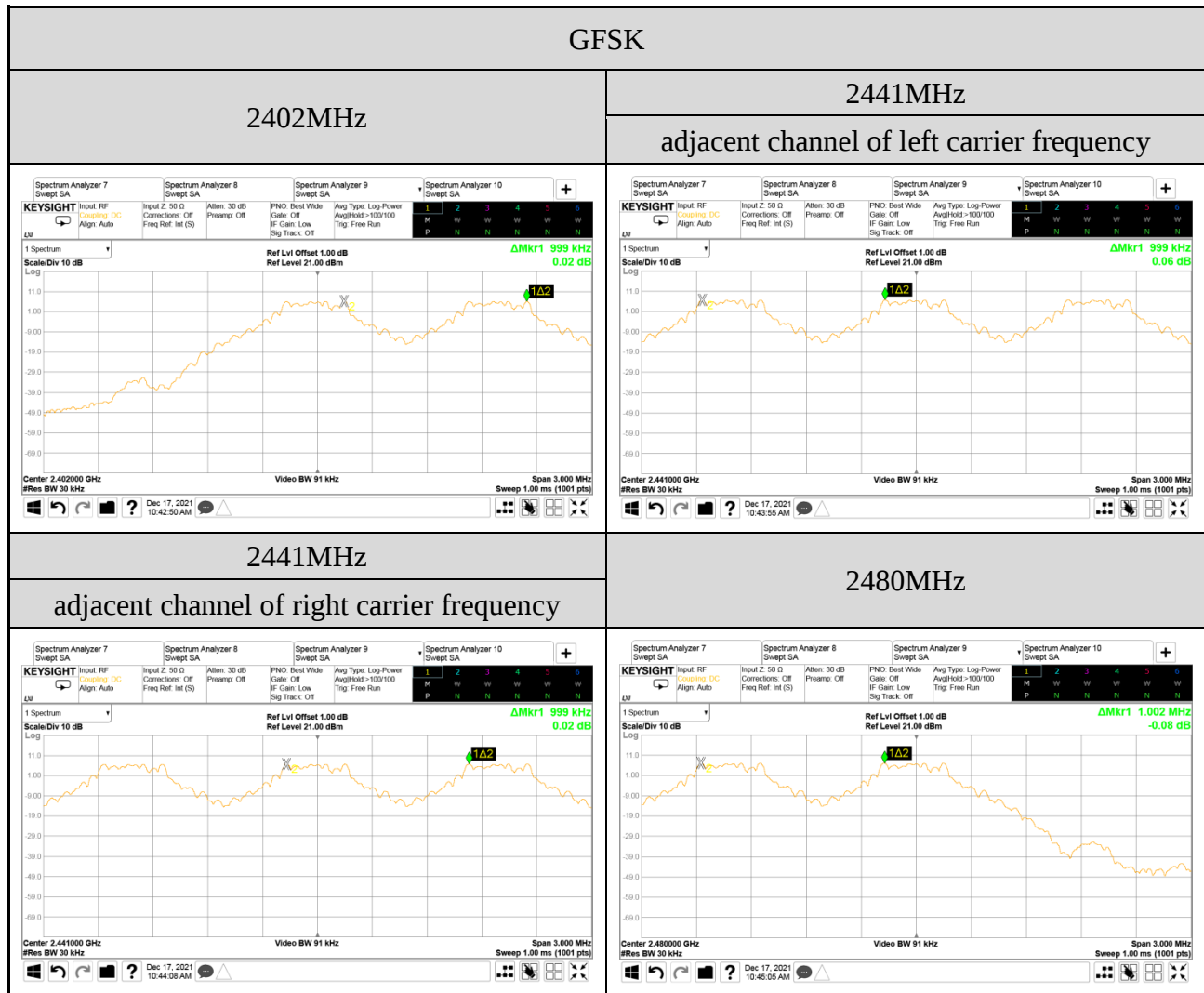


Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City 244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

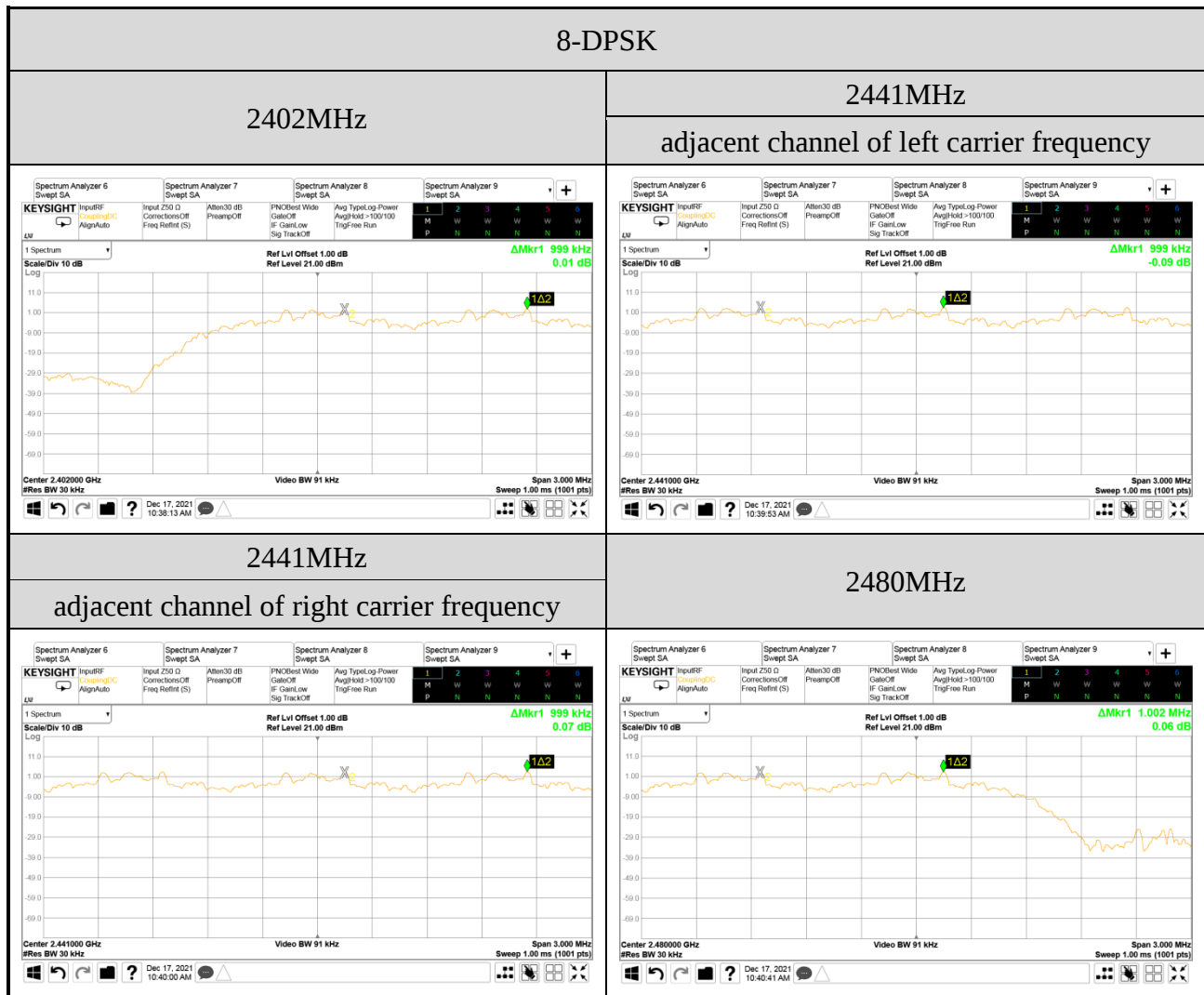
A.4 CARRIER FREQUENCY SEPARATION

Test Date	2021/12/17	Temp./Hum.	21°C/60%
Cable Loss	1.00dB	Tested By	Kuper Hsu
Test Voltage	AC 120V 60Hz (Via AC Adapter)		



Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City 244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303



A.5 TIME OF OCCUPANCY

Test Date	2021/12/17	Temp./Hum.	21°C/60%
Cable Loss	1.00dB	Tested By	Kuper Hsu
Test Voltage	AC 120V 60Hz (Via AC Adapter)		

A.5.1 Time of Occupancy

Mode	Centre Frequency (MHz)	Mode	Each second appearance transmission	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
GFSK	2402	DH1	10	0.380	120.080	<400
		DH3	5	1.630	257.540	<400
		DH5	3	2.890	273.972	<400

Observation Period:

$$79 \text{ channels} * 0.4 \text{ seconds} = 31.6 \text{ seconds}$$

DH1 Mode

For each second of 10 transmission appearance, the longest time of occupancy is
 $10 \text{ transmission} * 31.6 \text{ seconds} * 0.380 \text{ ms} = 120.080 \text{ ms} (<400\text{ms})$

DH3 Mode

For each second of 5 transmission appearance, the longest time of occupancy is
 $5 \text{ transmission} * 31.6 \text{ seconds} * 1.630 \text{ ms} = 257.540 \text{ ms} (<400\text{ms})$

DH5 Mode

For each second of 3 transmission appearance, the longest time of occupancy is
 $3 \text{ transmission} * 31.6 \text{ seconds} * 2.890 \text{ ms} = 273.972 \text{ ms} (<400\text{ms})$

Mode	Centre Frequency (MHz)	Mode	Each second appearance transmission	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
GFSK	2441	DH1	10	0.380	120.080	<400
		DH3	5	1.640	259.120	<400
		DH5	3	2.880	273.024	<400

Observation Period:

$$79 \text{ channels} * 0.4 \text{ seconds} = 31.6 \text{ seconds}$$

DH1 Mode

For each second of 10 transmission appearance, the longest time of occupancy is
 $10 \text{ transmission} * 31.6 \text{ seconds} * 0.380 \text{ ms} = 120.080 \text{ ms} (<400\text{ms})$

DH3 Mode

For each second of 5 transmission appearance, the longest time of occupancy is
 $5 \text{ transmission} * 31.6 \text{ seconds} * 1.640 \text{ ms} = 259.120 \text{ ms} (<400\text{ms})$

DH5 Mode

For each second of 3 transmission appearance, the longest time of occupancy is
 $3 \text{ transmission} * 31.6 \text{ seconds} * 2.880 \text{ ms} = 273.024 \text{ ms} (<400\text{ms})$

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City 244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

Mode	Centre Frequency (MHz)	Mode	Each second appearance transmission	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
GFSK	2480	DH1	10	0.380	120.080	<400
		DH3	5	1.640	259.120	<400
		DH5	3	2.880	273.024	<400

Observation Period:

79 channels* 0.4 seconds= 31.6 seconds

DH1 Mode

For each second of 10 transmission appearance, the longest time of occupancy is
10 transmission* 31.6 seconds* 0.380 ms= 120.080 ms (<400ms)

DH3 Mode

For each second of 5 transmission appearance, the longest time of occupancy is
5 transmission* 31.6 seconds* 1.640 ms= 259.120 ms (<400ms)

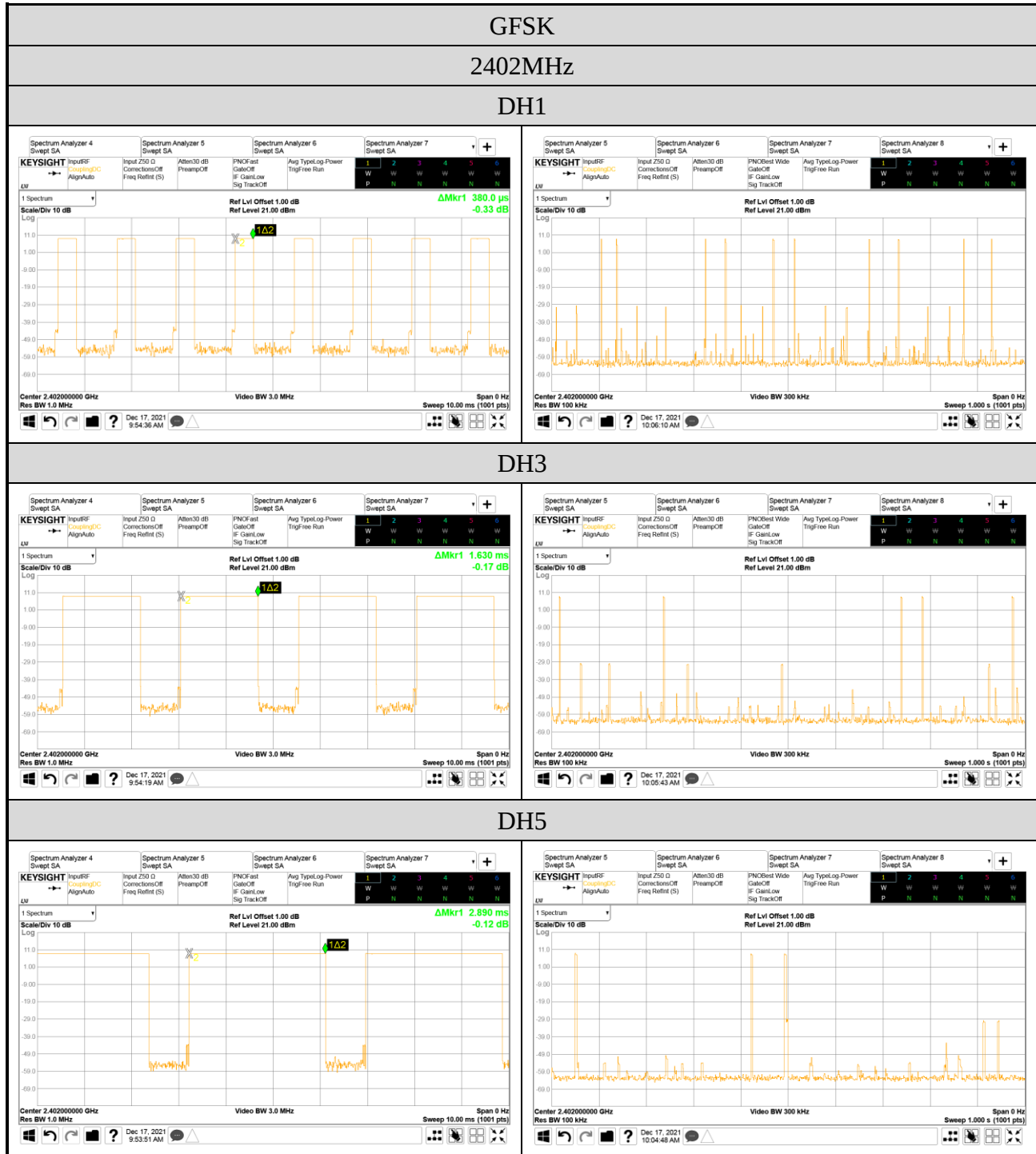
DH5 Mode

For each second of 3 transmission appearance, the longest time of occupancy is
3 transmission* 31.6 seconds* 2.880 ms= 273.024 ms (<400ms)

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City 244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

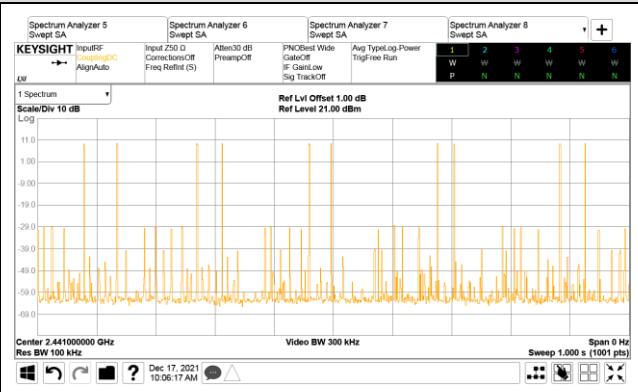
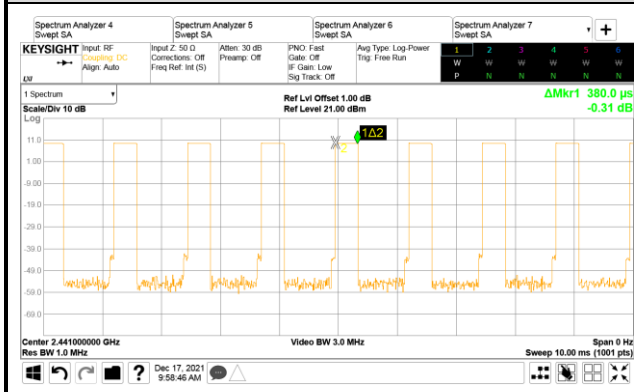
● Measurement Plots



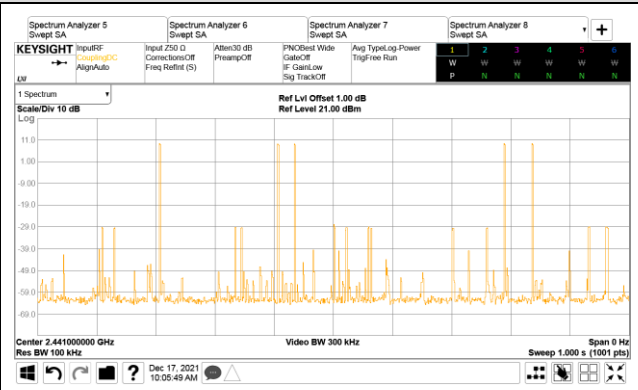
GFSK

2441MHz

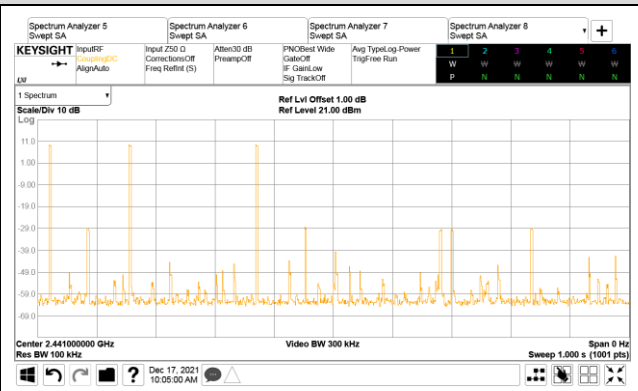
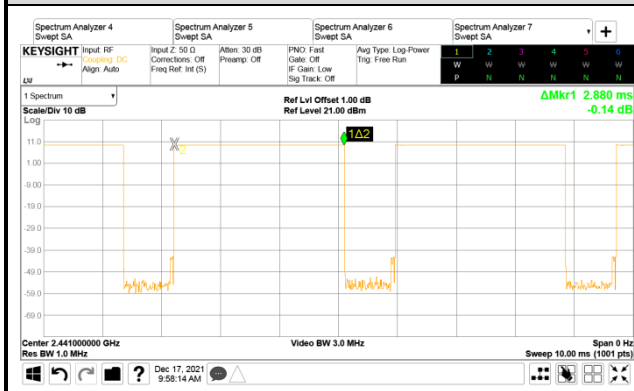
DH1



DH3



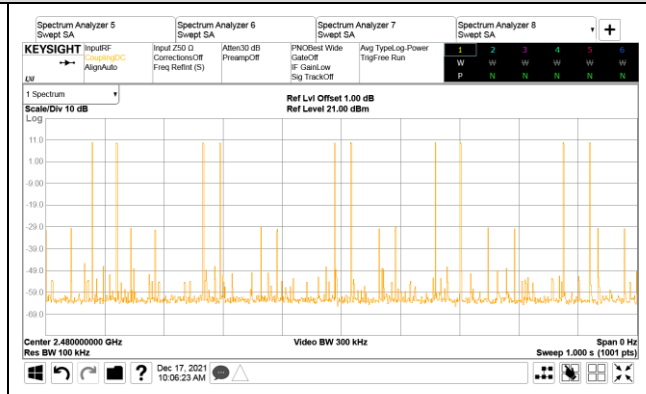
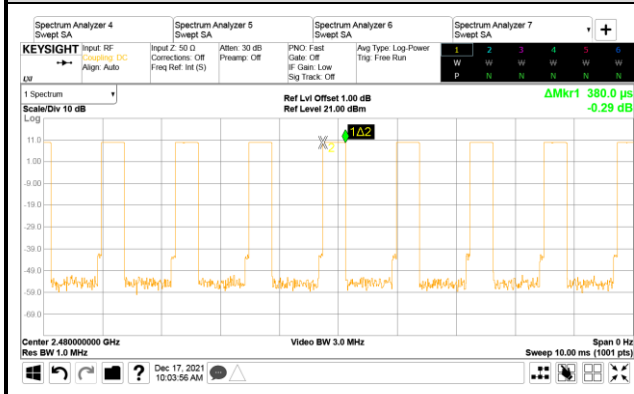
DH5



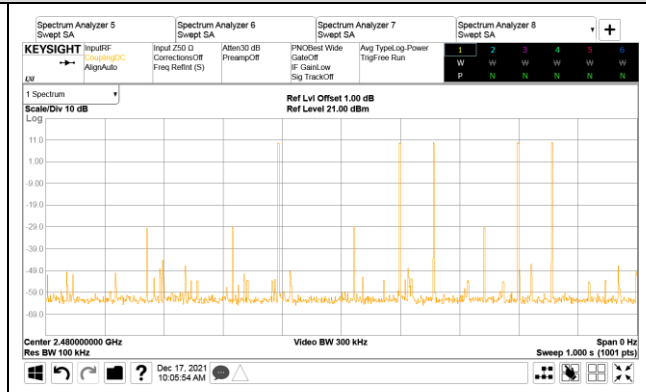
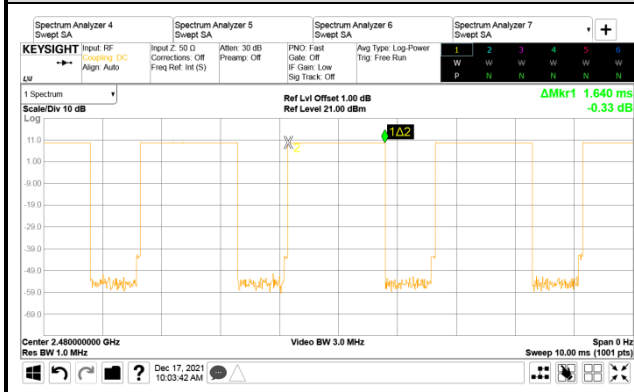
GFSK

2480MHz

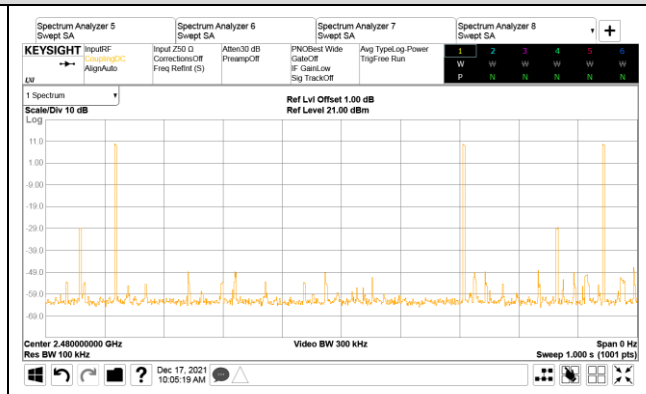
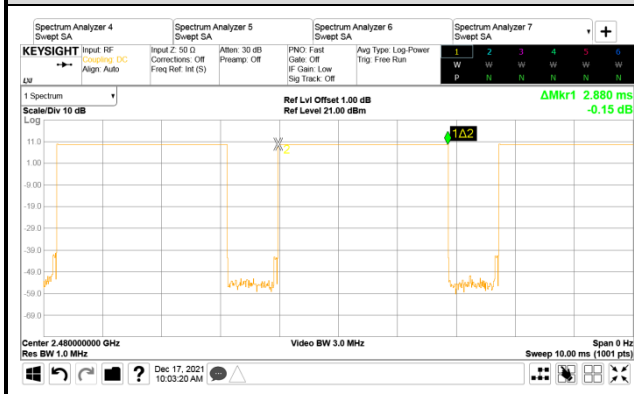
DH1



DH3



DH5



Mode	Centre Frequency (MHz)	Mode	Each second appearance transmission	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
8-DPSK	2402	3DH1	10	0.380	120.080	<400
		3DH3	5	1.640	259.120	<400
		3DH5	3	2.890	273.972	<400

Observation Period:

79 channels* 0.4 seconds= 31.6 seconds

3DH1 Mode

For each second of 10 transmission appearance, the longest time of occupancy is
10 transmission* 31.6 seconds* 0.380 ms= 120.080 ms (<400ms)

3DH3 Mode

For each second of 5 transmission appearance, the longest time of occupancy is
5 transmission* 31.6 seconds* 1.640 ms= 259.120 ms (<400ms)

3DH5 Mode

For each second of 3 transmission appearance, the longest time of occupancy is
3 transmission* 31.6 seconds* 2.890 ms= 273.972 ms (<400ms)

Mode	Centre Frequency (MHz)	Mode	Each second appearance transmission	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
8-DPSK	2441	3DH1	10	0.390	123.240	<400
		3DH3	5	1.640	259.120	<400
		3DH5	3	2.890	273.972	<400

Observation Period:

79 channels* 0.4 seconds= 31.6 seconds

3DH1 Mode

For each second of 10 transmission appearance, the longest time of occupancy is
10 transmission* 31.6 seconds* 0.390 ms= 123.240 ms (<400ms)

3DH3 Mode

For each second of 5 transmission appearance, the longest time of occupancy is
5 transmission* 31.6 seconds* 1.640 ms= 259.120 ms (<400ms)

3DH5 Mode

For each second of 3 transmission appearance, the longest time of occupancy is
3 transmission* 31.6 seconds* 2.890 ms= 273.972 ms (<400ms)

Mode	Centre Frequency (MHz)	Mode	Each second appearance transmission	Time of Occupancy (ms)	Maximum accumulated Time of Occupancy (ms)	Limit (ms)
8-DPSK	2480	3DH1	10	0.390	123.240	<400
		3DH3	5	1.640	259.120	<400
		3DH5	3	2.890	273.972	<400

Observation Period:

79 channels* 0.4 seconds= 31.6 seconds

3DH1 Mode

For each second of 10 transmission appearance,the longest time of occupancy is
10 transmission* 31.6 seconds* 0.390 ms= 123.240 ms (<400ms)

3DH3 Mode

For each second of 5 transmission appearance,the longest time of occupancy is
5 transmission* 31.6 seconds* 1.640 ms= 259.120 ms (<400ms)

3DH5 Mode

For each second of 3 transmission appearance,the longest time of occupancy is
3 transmission* 31.6 seconds* 2.890 ms= 273.972 ms (<400ms)

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

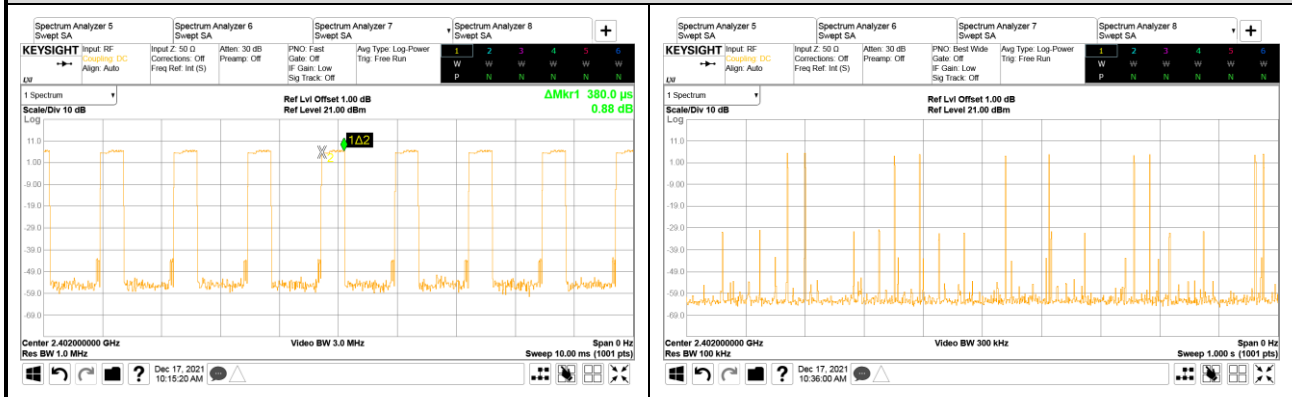
Tel: +886 2 26099301
Fax: +886 2 26099303

● Measurement Plots

8-DPSK

2402MHz

3DH1



3DH3



3DH5



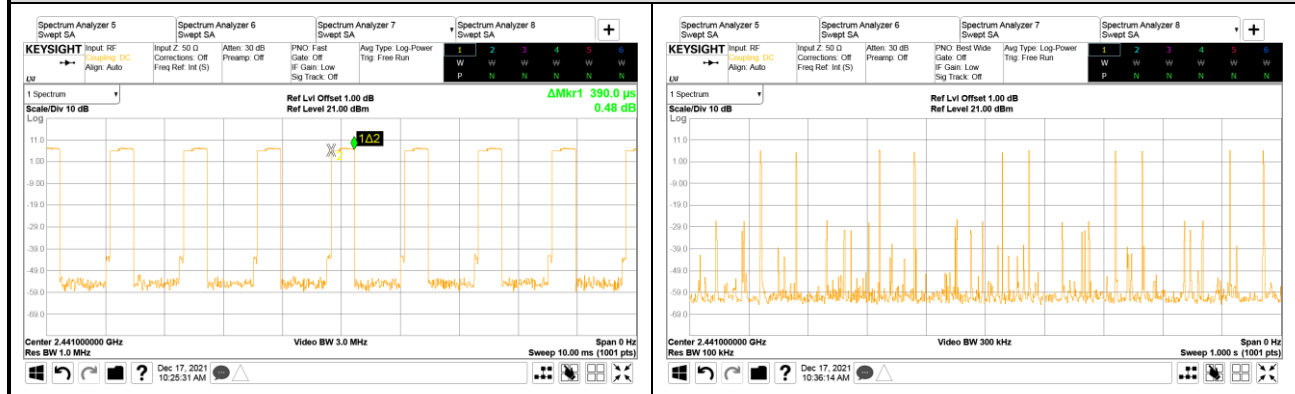
Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City 244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

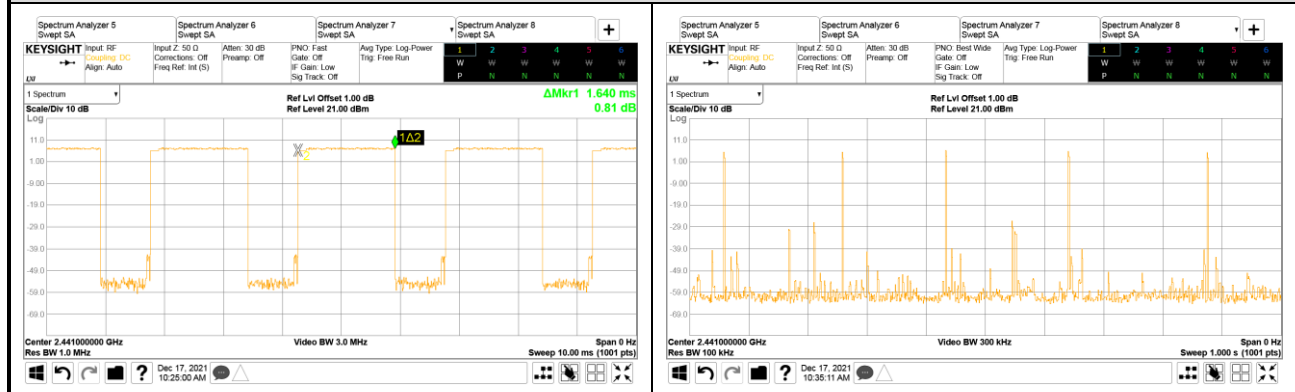
8-DPSK

2441MHz

3DH1



3DH3



3DH5



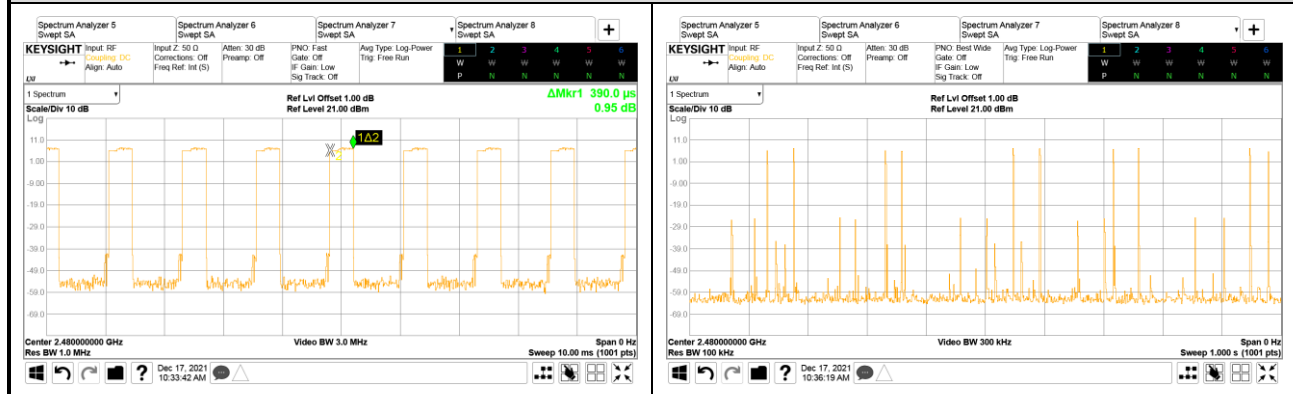
Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City 244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

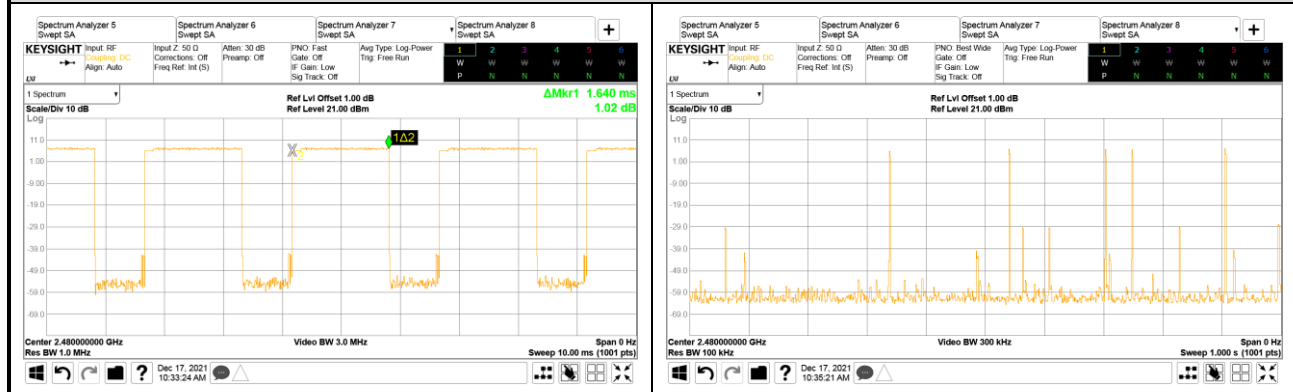
8-DPSK

2480MHz

3DH1



3DH3



3DH5

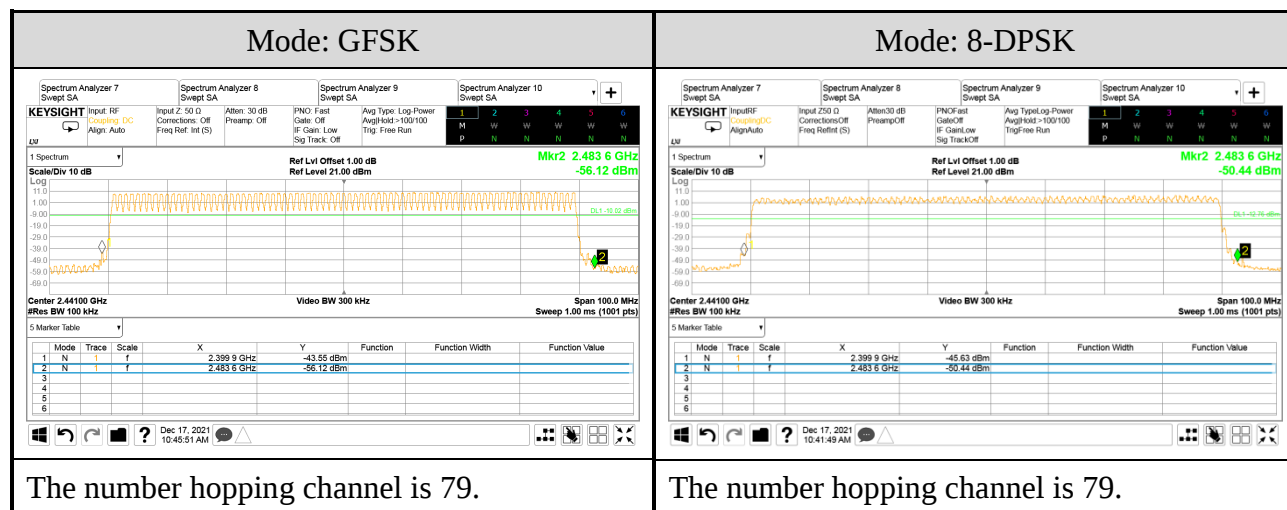


Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

A.6 NUMBER OF HOPPING CHANNELS

Test Date	2021/12/17	Temp./Hum.	21°C /60%
Cable Loss	1.00dB	Tested By	Kuper Hsu
Test Voltage	AC 120V 60Hz (Via AC Adapter)		



A.7 MAXIMUM PEAK OUTPUT POWER

Test Date	2021/12/17, 2022/01/28	Temp./Hum.	21°C/60%, 18°C/70%
Cable Loss	1.00dB	Tested By	Kuper Hsu
Test Voltage	AC 120V 60Hz (Via AC Adapter)		

A.7.1 Maximum Peak Output Power

- SPOT CHECK

Mode	Centre Frequency (MHz)	Maximum Peak Output Power		Limit
		dBm	W	
GFSK	2402	8.65	0.007	21dBm (0.125W)
	2441	9.36	0.009	
	2480	9.83	0.010	
8-DPSK	2402	6.82	0.005	
	2441	7.63	0.006	
	2480	7.57	0.006	

- FCC ID: BEJNT-16Z90Q & IC: 2703H-16Z90Q Power

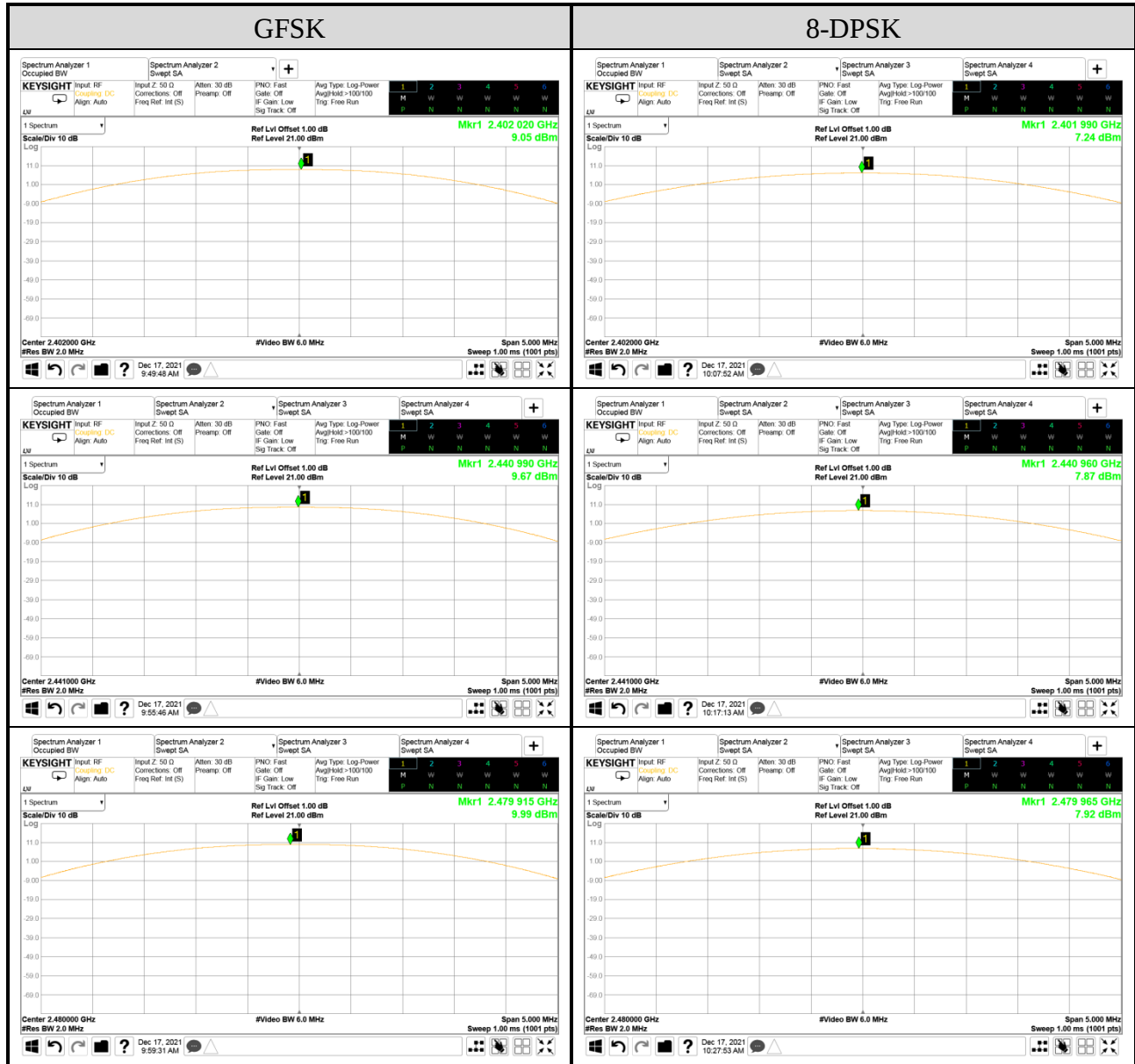
Mode	Centre Frequency (MHz)	Maximum Peak Output Power		Limit
		dBm	W	
GFSK	2402	9.05	0.008	21dBm (0.125W)
	2441	9.67	0.009	
	2480	9.99	0.010	
8-DPSK	2402	7.24	0.005	
	2441	7.87	0.006	
	2480	7.92	0.006	

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

A.7.2 Measurement Plots

- FCC ID: BEJNT-16Z90Q & IC: 2703H-16Z90Q Power



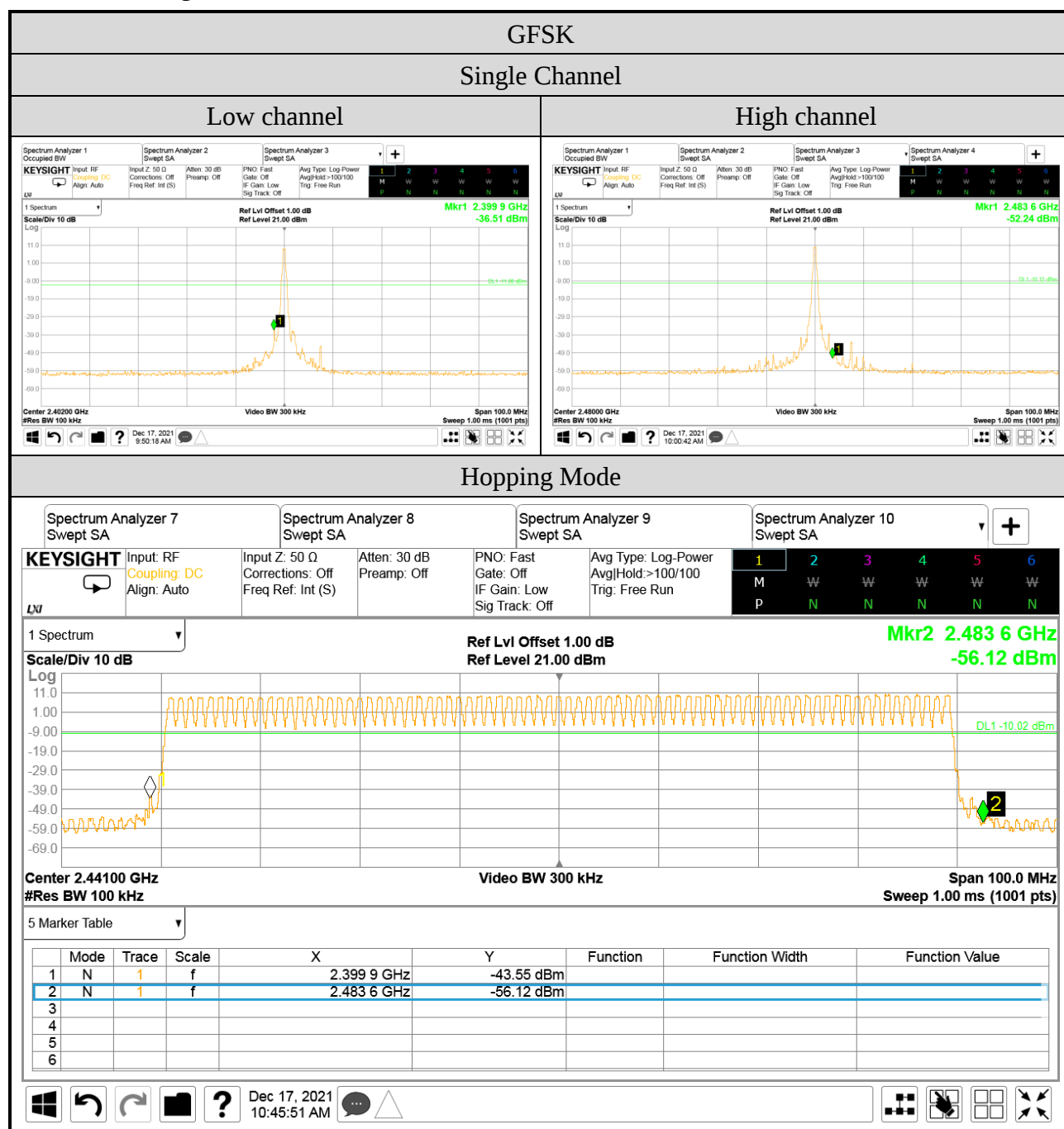
Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

A.8 EMISSION LIMITATIONS MEASUREMENT

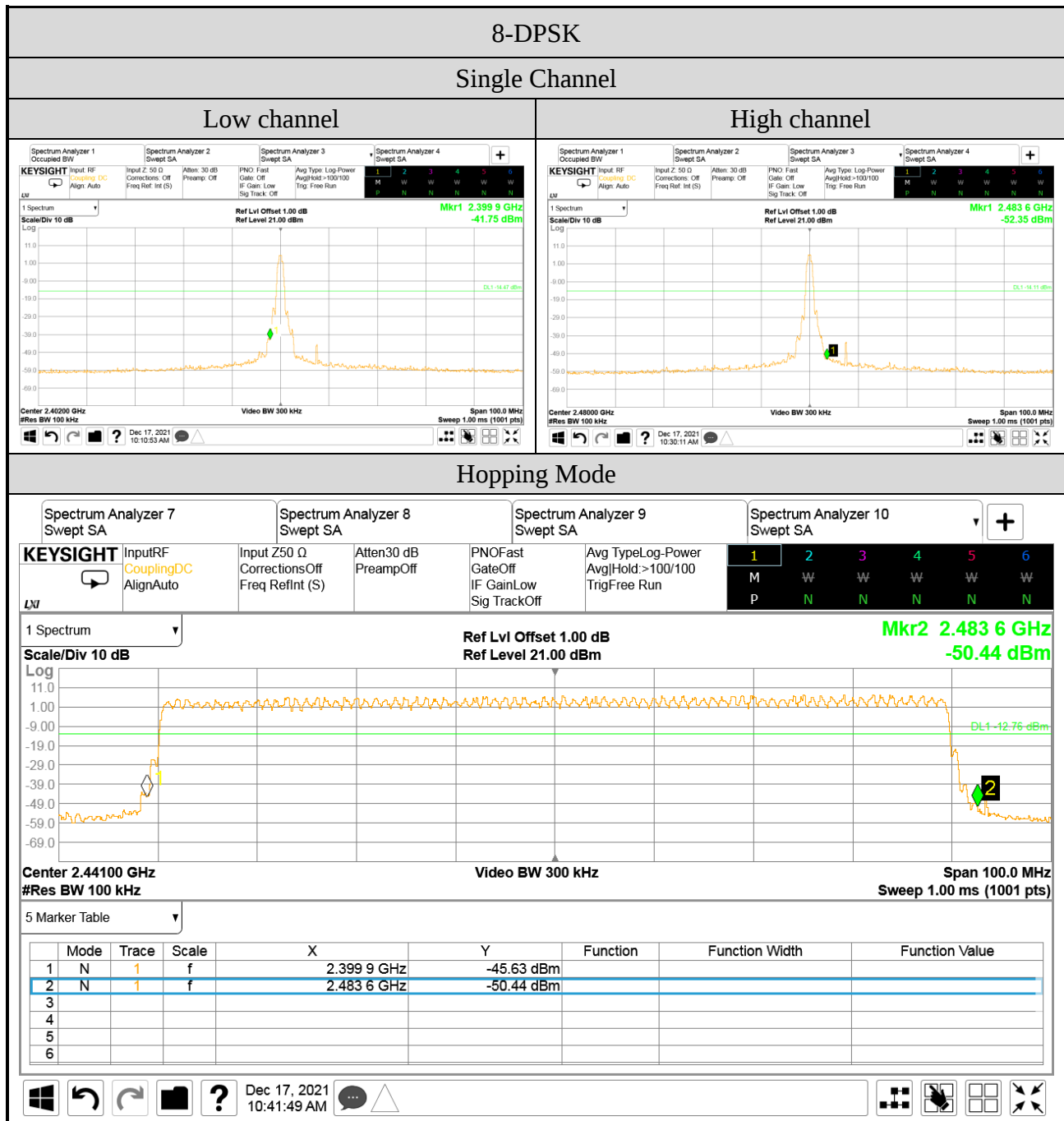
Test Date	2021/12/17	Temp./Hum.	21°C/60%
Cable Loss	1.00dB	Tested By	Kuper Hsu
Test Voltage	AC 120V 60Hz (Via AC Adapter)		

A.8.1 Band Edge



Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City 244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303



Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303

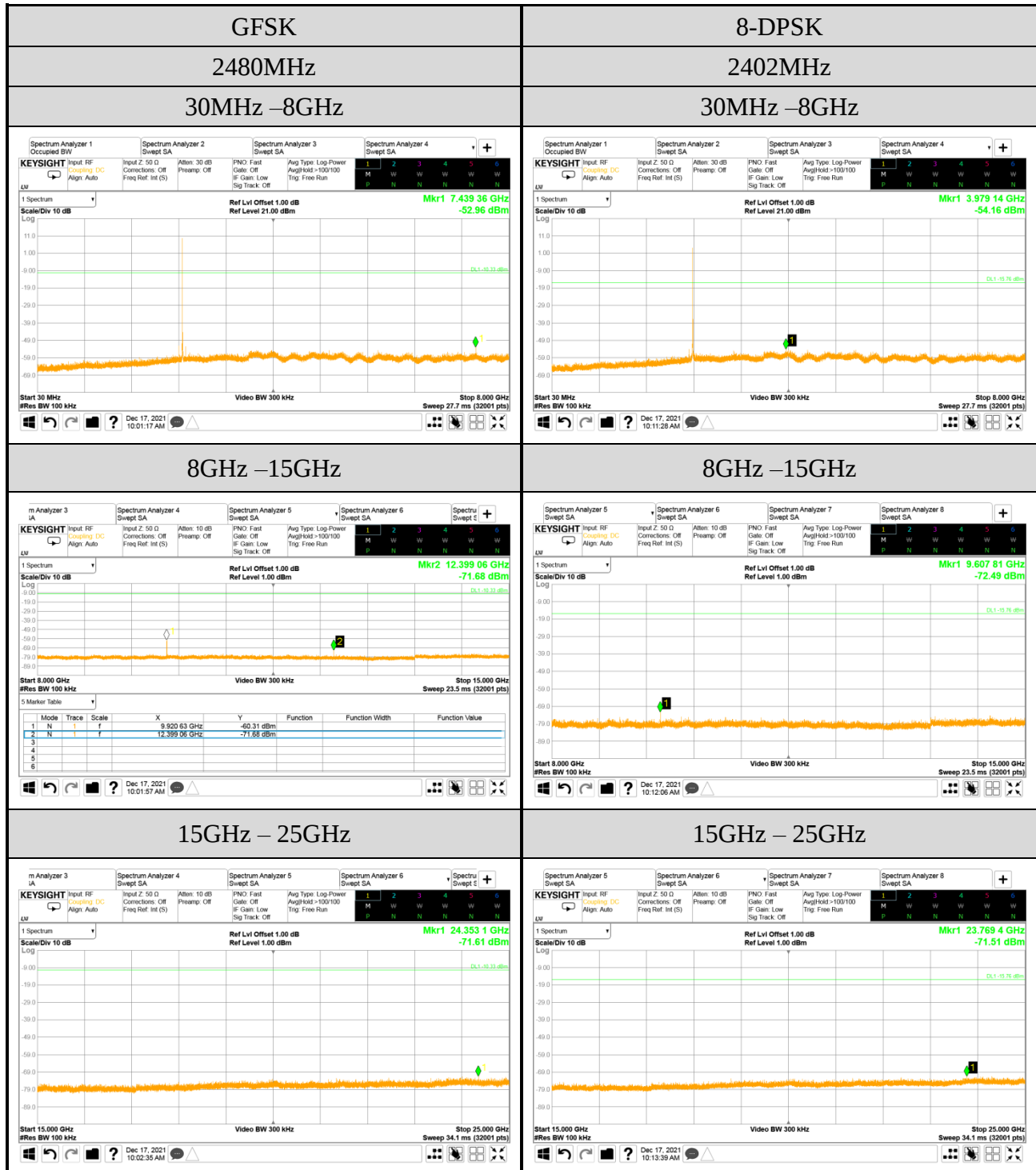
A.8.2 Spurious Emission



Note: All results have been included cable loss.

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

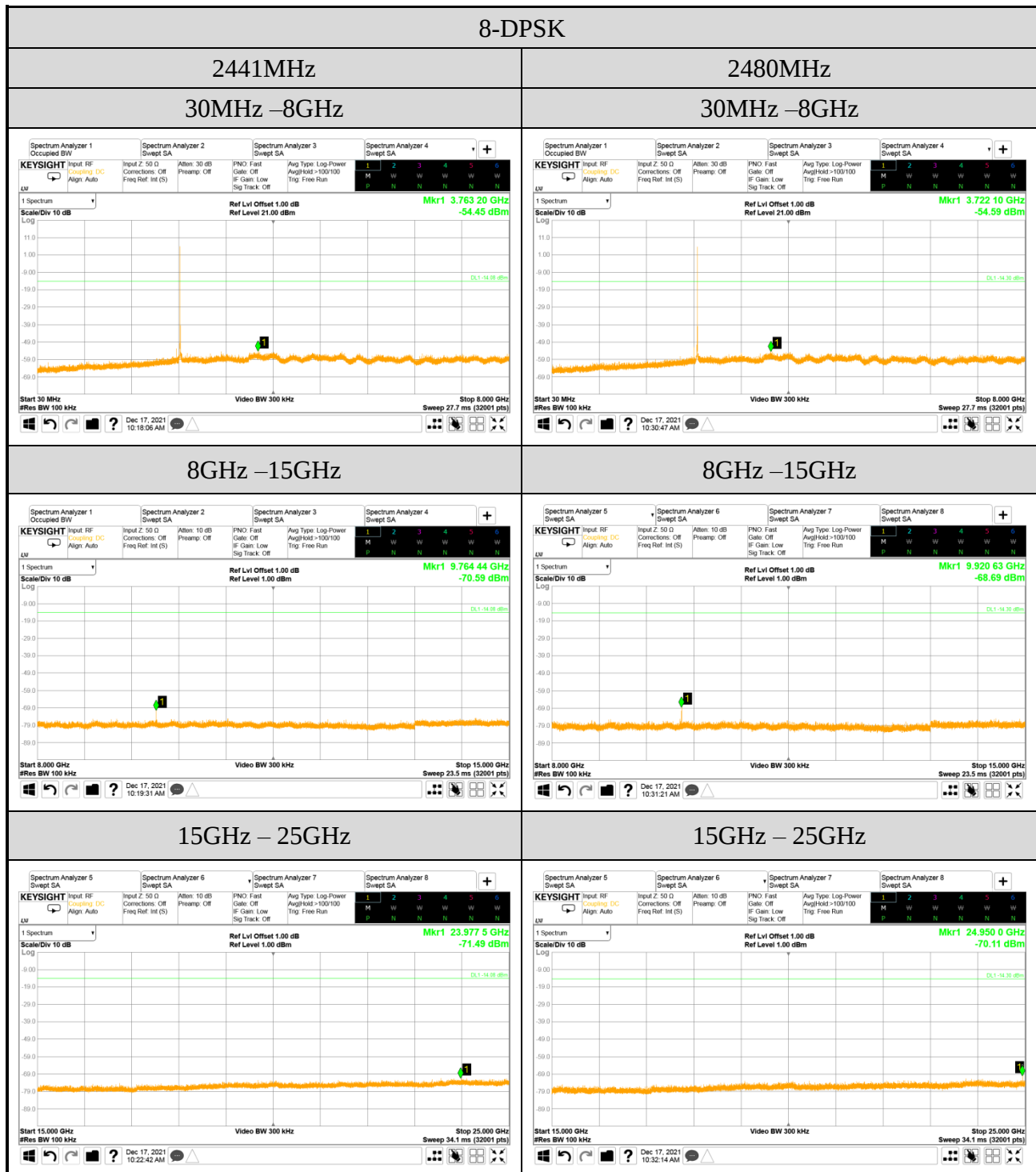
Tel: +886 2 26099301
Fax: +886 2 26099303



Note: All results have been included cable loss.

Audix Technology Corp.
No. 491, Zhongfu Rd., Linkou Dist.,
New Taipei City244, Taiwan

Tel: +886 2 26099301
Fax: +886 2 26099303



Note: All results have been included cable loss.