

FCC RF TEST REPORT

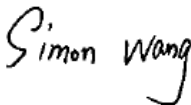
Applicant:	Continental Automotive Systems, Inc.
Address:	21440 W Lake Cook Rd., Deer Park, IL 60010, USA

Manufacturer or Supplier:	Continental Automotive Systems, Inc.
Address:	21440 W Lake Cook Rd., Deer Park, IL 60010, USA
Product:	FE5NA0010, FE5NA0011
Brand Name:	Continental
Model Name:	FE5NA0010, FE5NA0011
FCC ID:	LHJ-FE5NA0010
HW version:	P4.1
SW version:	MODEMSA515M_LE2.1_01.12.13
Registration No:	525120
Designation No:	CN1171
Date of tests:	Mar. 15, 2022 ~ Sep. 07, 2022

The tests have been carried out according to the requirements of the following standard:

- ☒ **FCC Part 27, Subpart C, M** ☒ **ANSI/TIA/EIA-603-D**
☒ **FCC Part 2** ☒ **ANSI/TIA/EIA-603-E** ☒ **ANSI C63.26-2015**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Prepared by Simon Wang Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
	
Date: Sep. 07, 2022	Date: Sep. 07, 2022

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SA

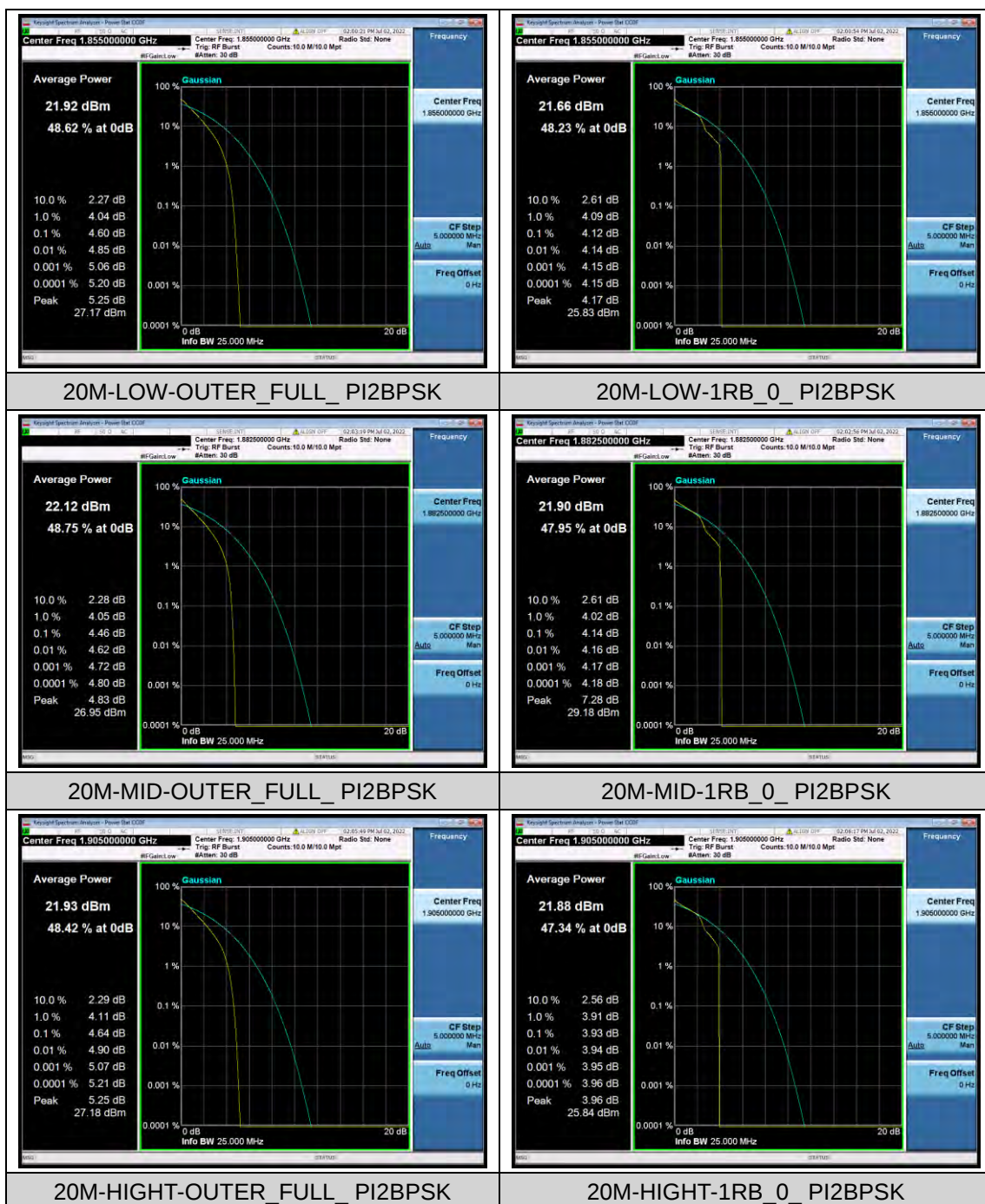
N25

PEAK-TO-AVERAGE RATIO(PAPR)

TEST RESULT

BAND: N25 / BANDWIDTH: 20MHZ / NTNVDFT_15KHZ							
MODULATION	RB ALLOCATION		PEAK-AVERAGE RATIO (DB)				VERDICT
	SIZE	OFFSET	LCH	MCH	HCH	LIMIT	
PI2BPSK	OUTER_FULL	0	4.60	4.46	4.64	<=13	PASS
PI2BPSK	1	0	4.12	4.14	3.93	<=13	PASS

TEST GRAPHS



26DB BANDWIDTH AND OCCUPIED BANDWIDTH

TEST RESULT

BAND	SCS	BANDWIDTH	MODULATION	CHANNEL	RB CONFIG	RESULT (99%)	RESULT (26DB)	VERDICT
N25	15KHZ	5MHZ	DFT-PI2BPSK	MID	OUTER_F ULL	4.5097	5.078	PASS
N25	15KHZ	5MHZ	DFT-QPSK	MID	OUTER_F ULL	4.4749	5.080	PASS
N25	15KHZ	5MHZ	DFT-16QAM	MID	OUTER_F ULL	4.4851	4.955	PASS
N25	15KHZ	5MHZ	DFT-64QAM	MID	OUTER_F ULL	4.4849	5.011	PASS
N25	15KHZ	5MHZ	DFT-256QAM	MID	OUTER_F ULL	4.4933	4.904	PASS
N25	15KHZ	10MHZ	DFT-PI2BPSK	MID	OUTER_F ULL	8.8866	9.381	PASS
N25	15KHZ	10MHZ	DFT-QPSK	MID	OUTER_F ULL	8.8701	9.376	PASS
N25	15KHZ	10MHZ	DFT-16QAM	MID	OUTER_F ULL	8.8740	9.432	PASS
N25	15KHZ	10MHZ	DFT-64QAM	MID	OUTER_F ULL	8.8683	9.375	PASS
N25	15KHZ	10MHZ	DFT-256QAM	MID	OUTER_F ULL	8.8722	9.379	PASS
N25	15KHZ	15MHZ	DFT-PI2BPSK	MID	OUTER_F ULL	13.500	14.24	PASS
N25	15KHZ	15MHZ	DFT-QPSK	MID	OUTER_F ULL	13.461	14.20	PASS
N25	15KHZ	15MHZ	DFT-16QAM	MID	OUTER_F ULL	13.452	14.17	PASS
N25	15KHZ	15MHZ	DFT-64QAM	MID	OUTER_F ULL	13.494	14.22	PASS
N25	15KHZ	15MHZ	DFT-256QAM	MID	OUTER_F ULL	13.463	14.27	PASS
N25	15KHZ	20MHZ	DFT-PI2BPSK	MID	OUTER_F ULL	17.884	18.73	PASS
N25	15KHZ	20MHZ	DFT-QPSK	MID	OUTER_F ULL	17.936	18.69	PASS
N25	15KHZ	20MHZ	DFT-16QAM	MID	OUTER_F ULL	17.895	18.76	PASS



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N25	15KHZ	20MHZ	DFT-64QAM	MID	OUTER_F ULL	17.900	18.70	PASS
N25	15KHZ	20MHZ	DFT-256QA M	MID	OUTER_F ULL	17.894	18.86	PASS

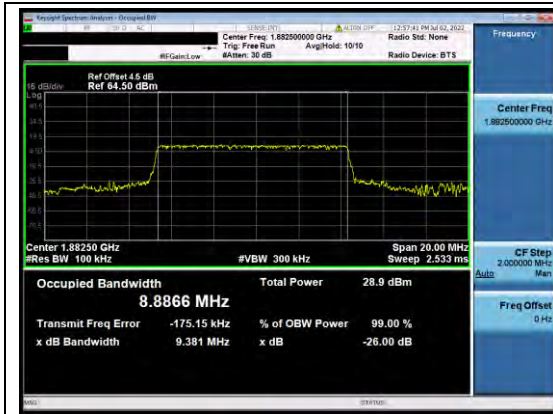
TEST GRAPHS



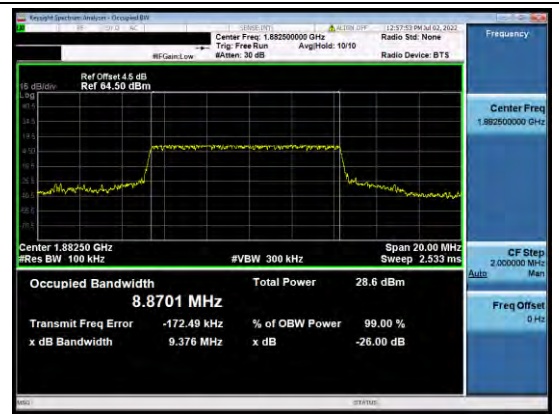


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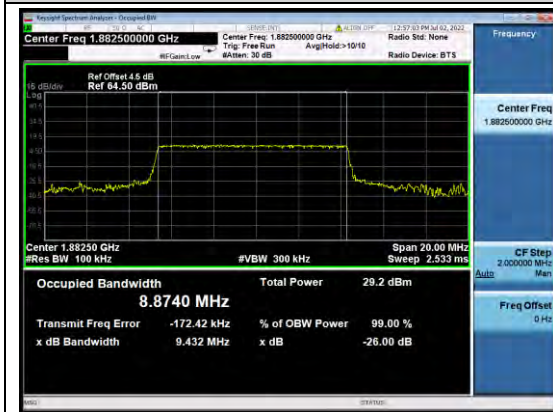
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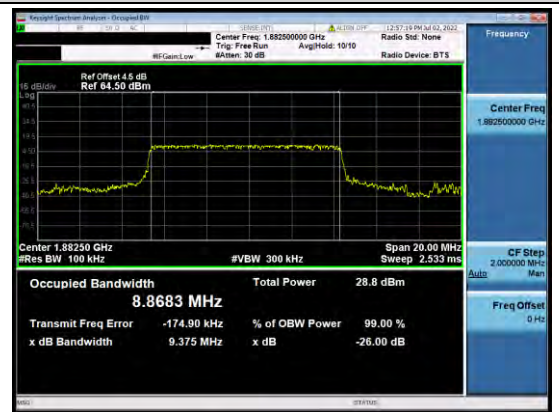
10M-MID-OUTER_FULL_PI2BPSK



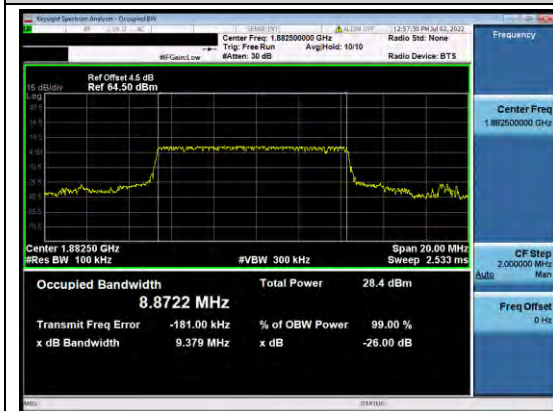
10M-MID-OUTER_FULL_QPSK



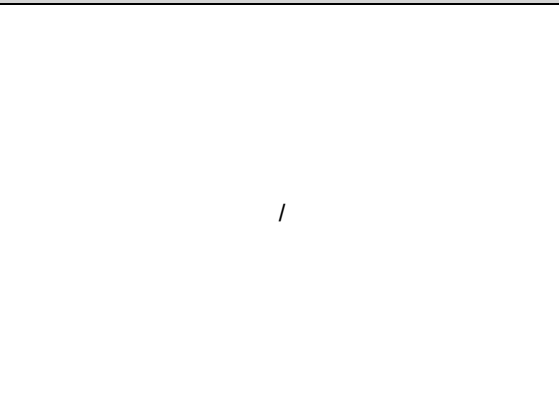
10M-MID-OUTER_FULL_16QAM



10M-MID-OUTER_FULL_64QAM



10M- MID-OUTER_FULL_256QAM

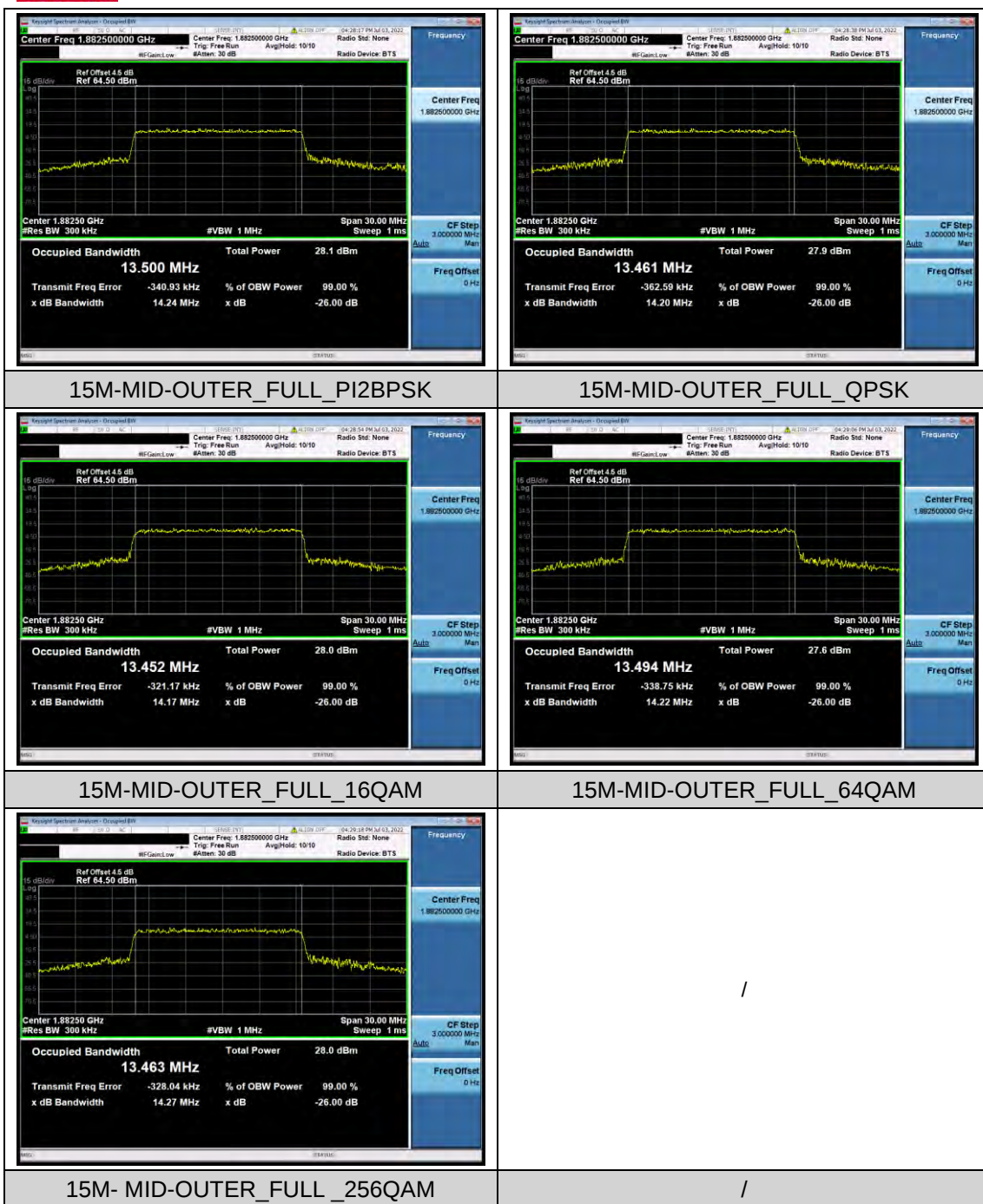


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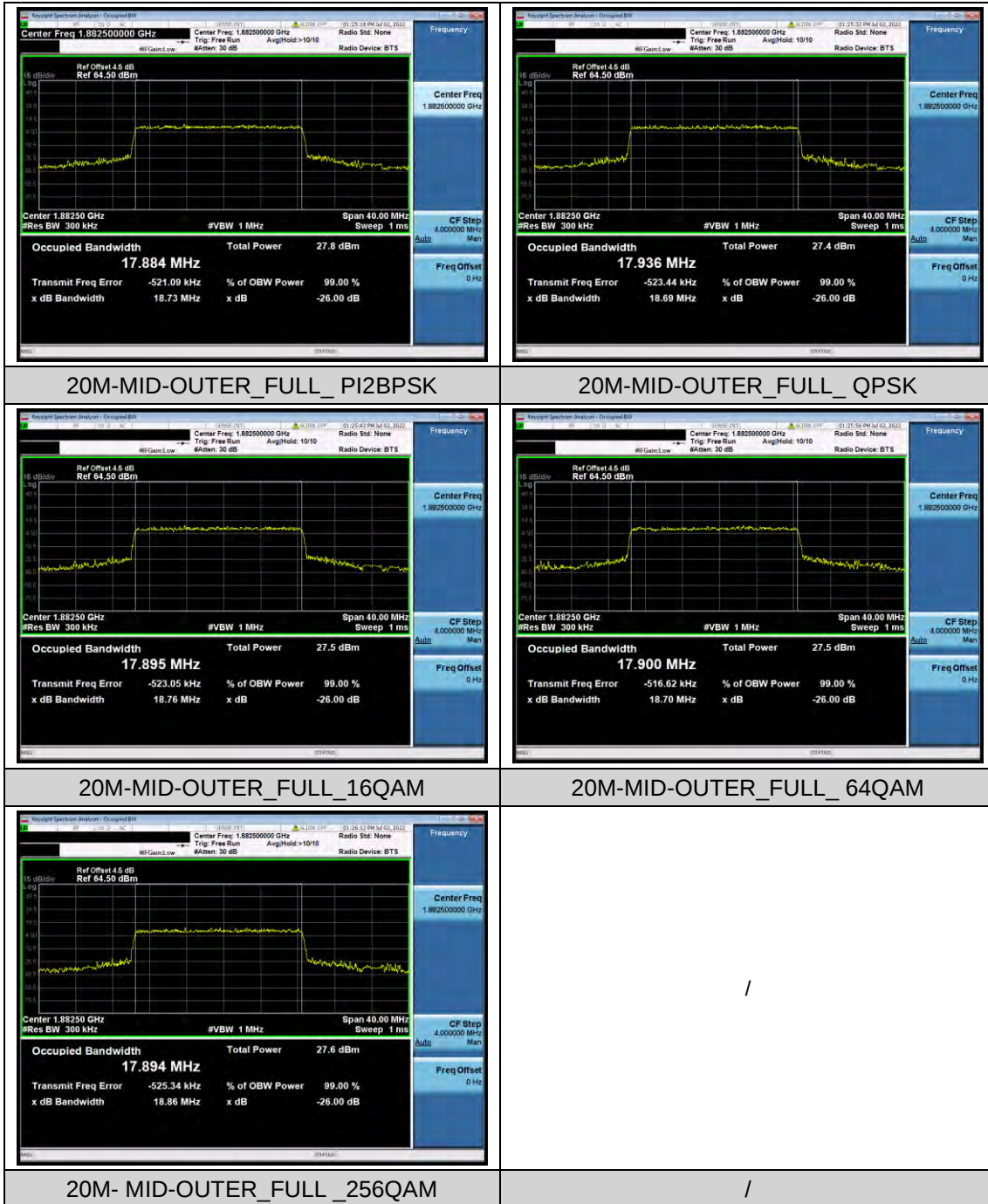
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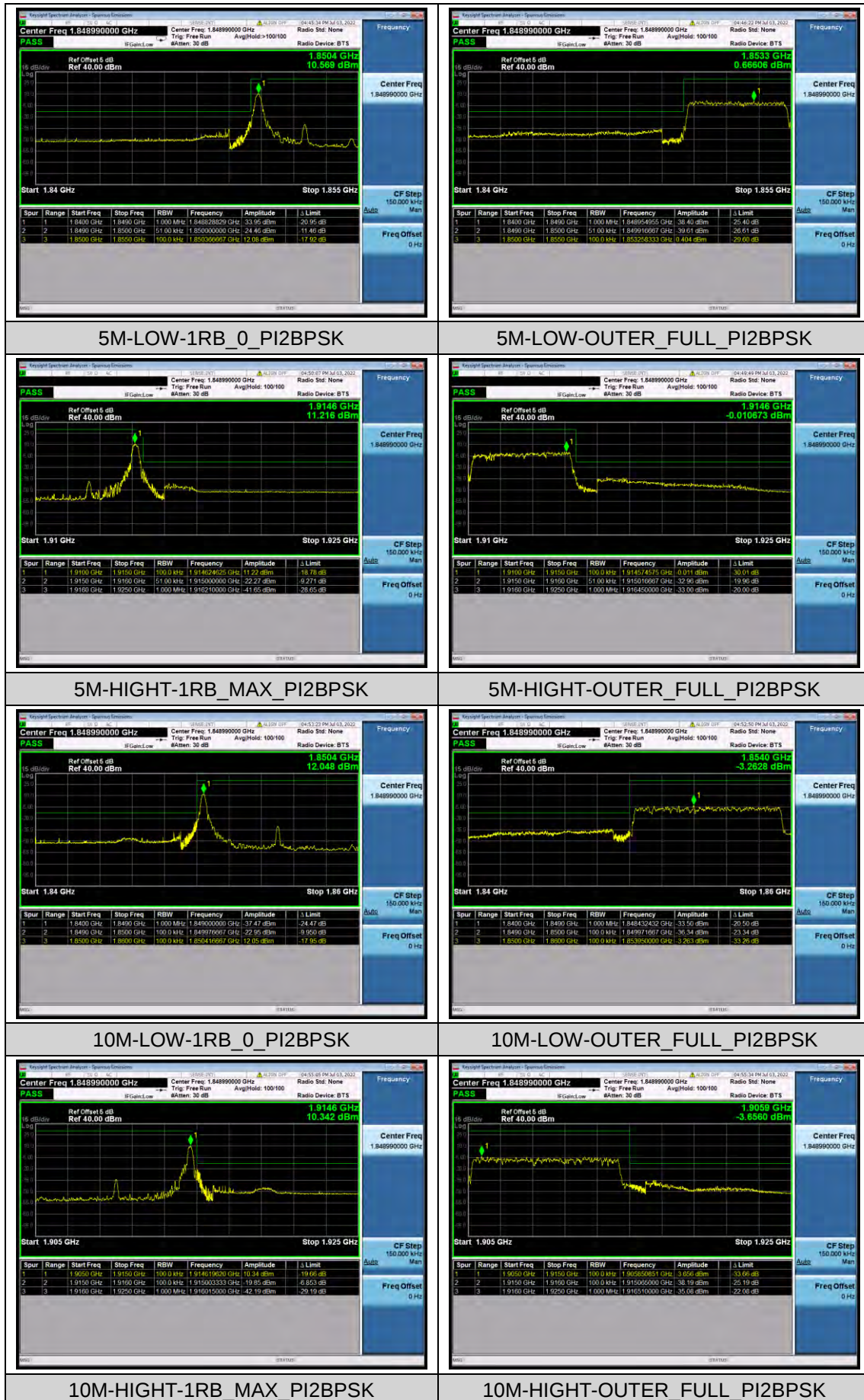


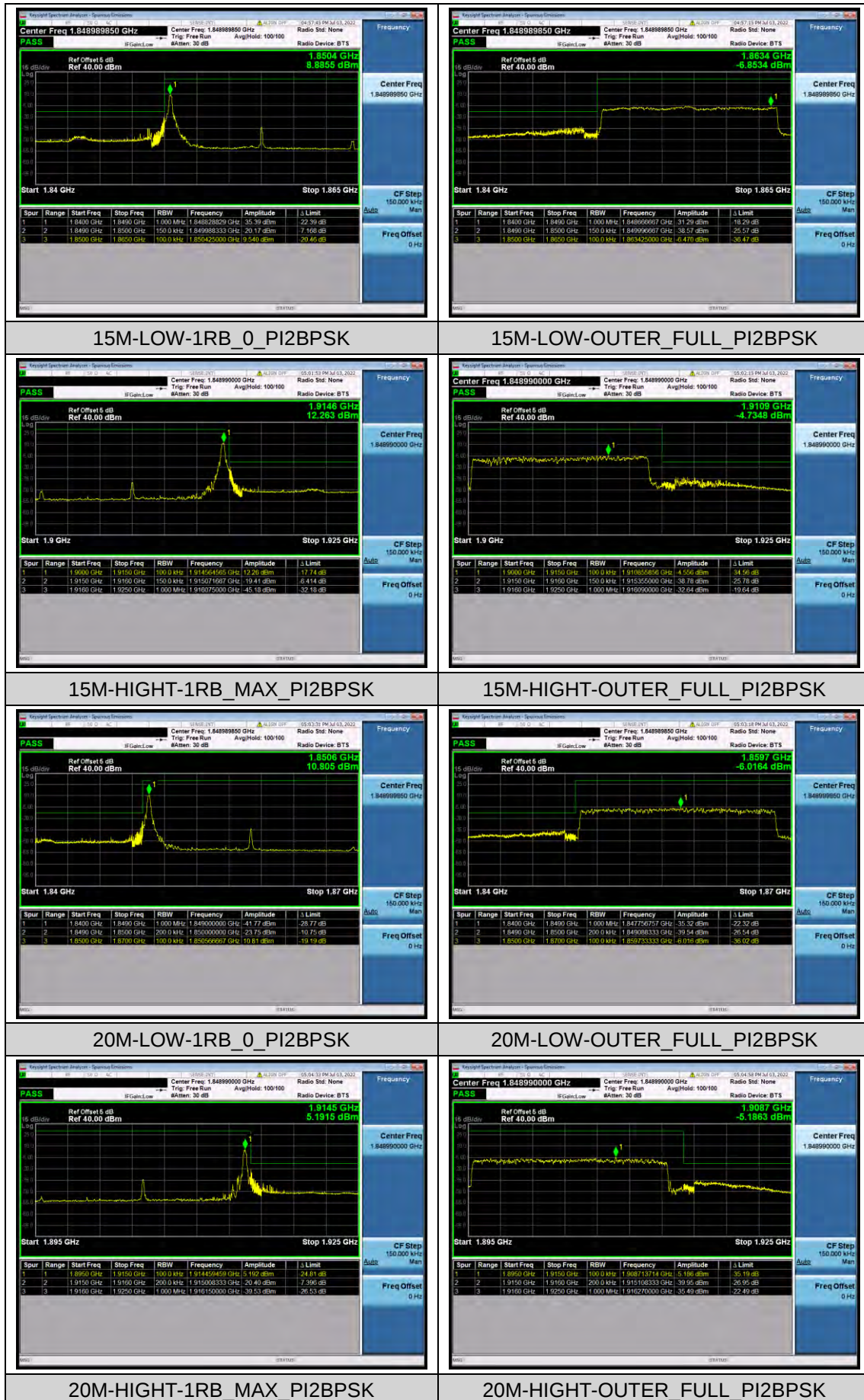
BAND EDGE

TEST RESULT

BAND	SCS	BANDWIDTH	MODULATION	CHANNEL	RB CONFIG (NR)	RESULT	VERDICT
N25	15KHZ	5MHZ	DFT-PI2BP SK	LOW	1RB_0	SEE GRAPH	PASS
N25	15KHZ	5MHZ	DFT-PI2BP SK	LOW	OUTER_FULL	SEE GRAPH	PASS
N25	15KHZ	5MHZ	DFT-PI2BP SK	HIGH	1RB_MAX	SEE GRAPH	PASS
N25	15KHZ	5MHZ	DFT-PI2BP SK	HIGH	OUTER_FULL	SEE GRAPH	PASS
N25	15KHZ	10MHZ	DFT-PI2BP SK	LOW	1RB_0	SEE GRAPH	PASS
N25	15KHZ	10MHZ	DFT-PI2BP SK	LOW	OUTER_FULL	SEE GRAPH	PASS
N25	15KHZ	10MHZ	DFT-PI2BP SK	HIGH	1RB_MAX	SEE GRAPH	PASS
N25	15KHZ	10MHZ	DFT-PI2BP SK	HIGH	OUTER_FULL	SEE GRAPH	PASS
N25	15KHZ	15MHZ	DFT-PI2BP SK	LOW	1RB_0	SEE GRAPH	PASS
N25	15KHZ	15MHZ	DFT-PI2BP SK	LOW	OUTER_FULL	SEE GRAPH	PASS
N25	15KHZ	15MHZ	DFT-PI2BP SK	HIGH	1RB_MAX	SEE GRAPH	PASS
N25	15KHZ	15MHZ	DFT-PI2BP SK	HIGH	OUTER_FULL	SEE GRAPH	PASS
N25	15KHZ	20MHZ	DFT-PI2BP SK	LOW	1RB_0	SEE GRAPH	PASS
N25	15KHZ	20MHZ	DFT-PI2BP SK	LOW	OUTER_FULL	SEE GRAPH	PASS
N25	15KHZ	20MHZ	DFT-PI2BP SK	HIGH	1RB_MAX	SEE GRAPH	PASS
N25	15KHZ	20MHZ	DFT-PI2BP SK	HIGH	OUTER_FULL	SEE GRAPH	PASS

TEST GRAPHS







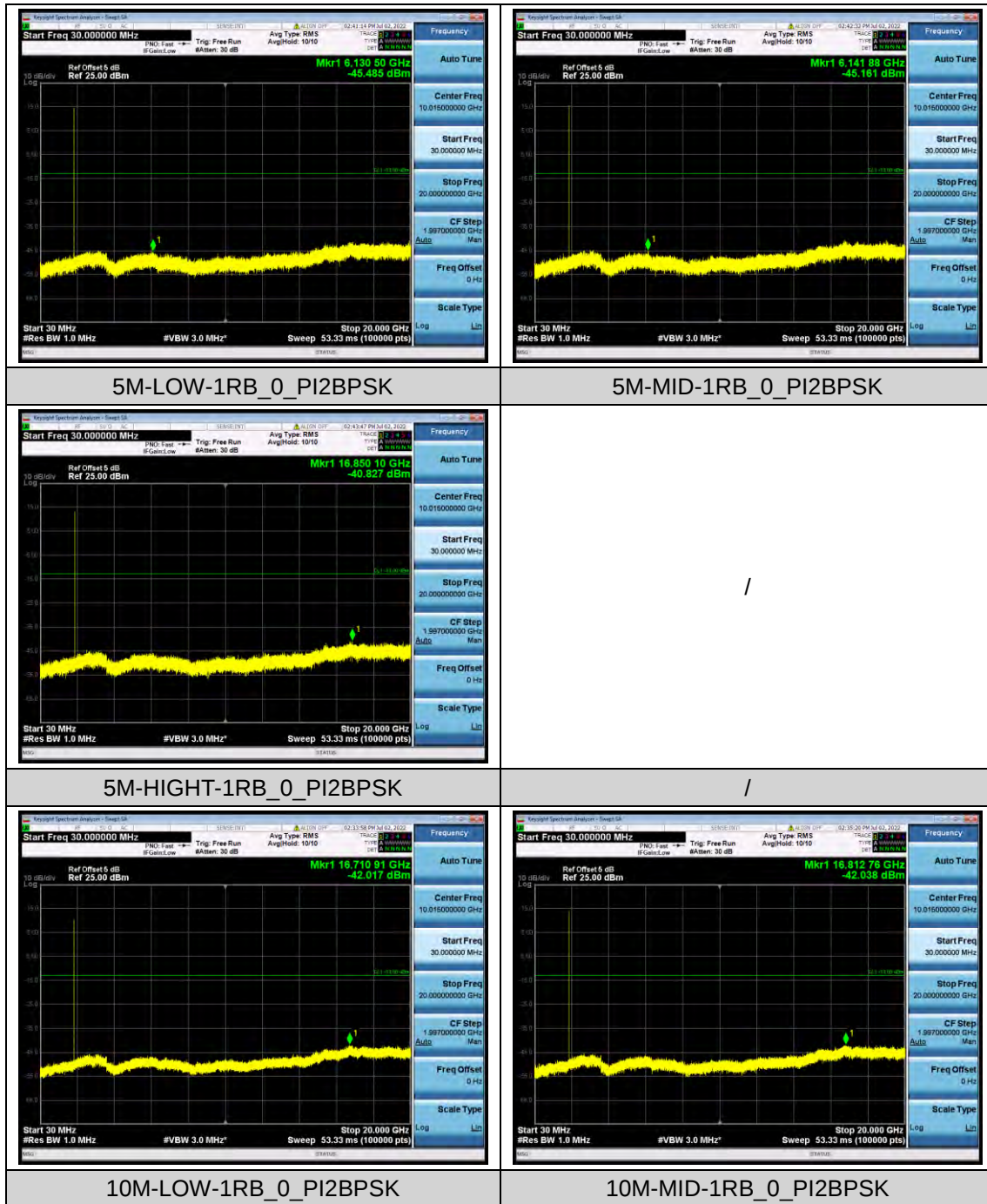
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CONDUCTED SPURIOUS EMISSION

TEST RESULT

BAND	SCS	BAND WIDTH	MODULATI ON	CHANN EL	RB CONFIG (NR)	STARTF REQ	STOPFR EQ	RESULT	LIMIT (dBm)	VERDI CT
N25	15KH Z	5MHZ	DFT-PI2B PSK	LOW	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N25	15KH Z	5MHZ	DFT-PI2B PSK	MID	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N25	15KH Z	5MHZ	DFT-PI2B PSK	HIGH	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N25	15KH Z	10MHZ	DFT-PI2B PSK	LOW	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N25	15KH Z	10MHZ	DFT-PI2B PSK	MID	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N25	15KH Z	10MHZ	DFT-PI2B PSK	HIGH	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N25	15KH Z	15MHZ	DFT-PI2B PSK	LOW	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N25	15KH Z	15MHZ	DFT-PI2B PSK	MID	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N25	15KH Z	15MHZ	DFT-PI2B PSK	HIGH	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N25	15KH Z	20MHZ	DFT-PI2B PSK	LOW	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N25	15KH Z	20MHZ	DFT-PI2B PSK	MID	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N25	15KH Z	20MHZ	DFT-PI2B PSK	HIGH	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS

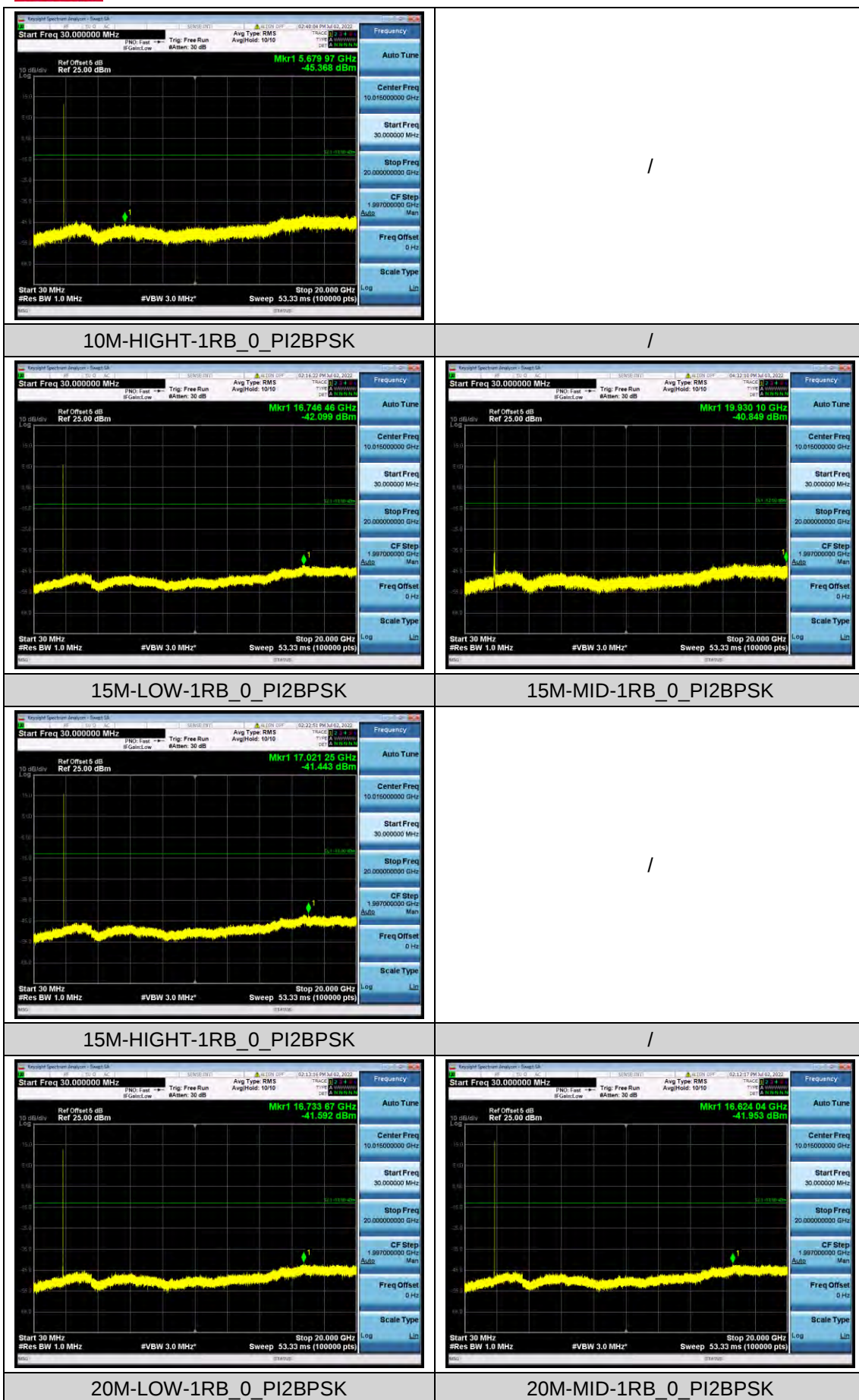
TEST GRAPHS

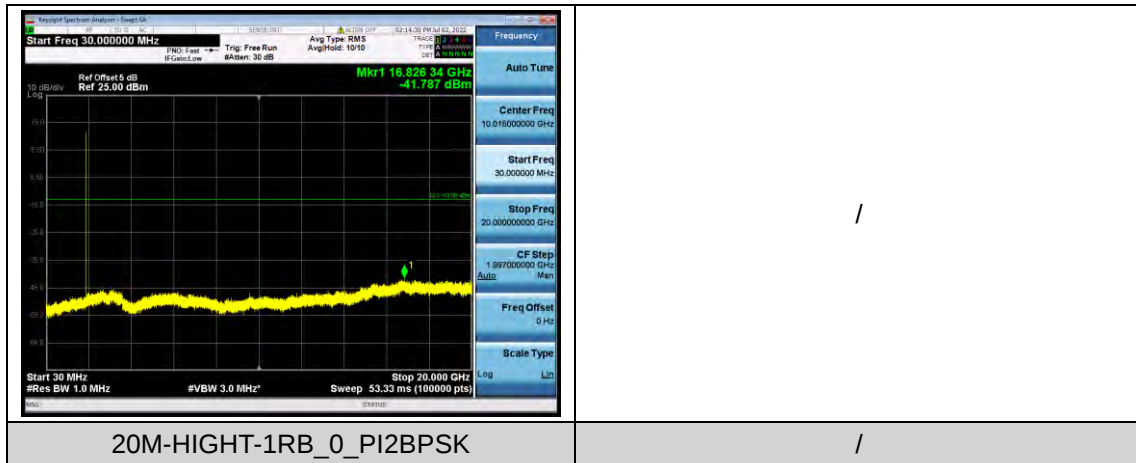




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FREQUENCY STABILITY

TEST RESULT

EN_N25 / BANDWIDTH: 20MHZ / NTV												
MOD.	RB		TEMP. (°C)	VOLTAGE (VDC)	FREQ. ERROR (HZ)			FREQ. VS. RATED (PPM)				VERDICT
	ALLOCATION	SIZE OFFSET			LCH	MCH	HCH	LCH	MCH	HCH	LIMIT	
PI2BPSK	FULL	0	20	3.6	1.22	1.58	1.36	0.0007	0.0008	0.0007	-2.5 TO 2.5	PASS
				4.0	-1.86	-1.74	-1.74	-0.0010	-0.0009	-0.0009	-2.5 TO 2.5	PASS
				4.4	1.36	1.52	1.58	0.0007	0.0008	0.0008	-2.5 TO 2.5	PASS
			-30	4.0	-9.65	-10.29	-9.74	-0.0052	-0.0055	-0.0051	-2.5 TO 2.5	PASS
			-20	4.0	-8.54	-9.11	-8.59	-0.0046	-0.0048	-0.0045	-2.5 TO 2.5	PASS
			-10	4.0	-7.42	-7.91	-7.44	-0.0040	-0.0042	-0.0039	-2.5 TO 2.5	PASS
			0	4.0	-6.32	-6.74	-6.30	-0.0034	-0.0036	-0.0033	-2.5 TO 2.5	PASS
			10	4.0	-5.25	-5.60	-5.16	-0.0028	-0.0030	-0.0027	-2.5 TO 2.5	PASS
			30	4.0	-3.84	-4.10	-3.69	-0.0021	-0.0022	-0.0019	-2.5 TO 2.5	PASS
			40	4.0	-2.45	-2.61	-2.25	-0.0013	-0.0014	-0.0012	-2.5 TO 2.5	PASS
			50	4.0	-1.62	-1.73	-1.47	-0.0009	-0.0009	-0.0008	-2.5 TO 2.5	PASS



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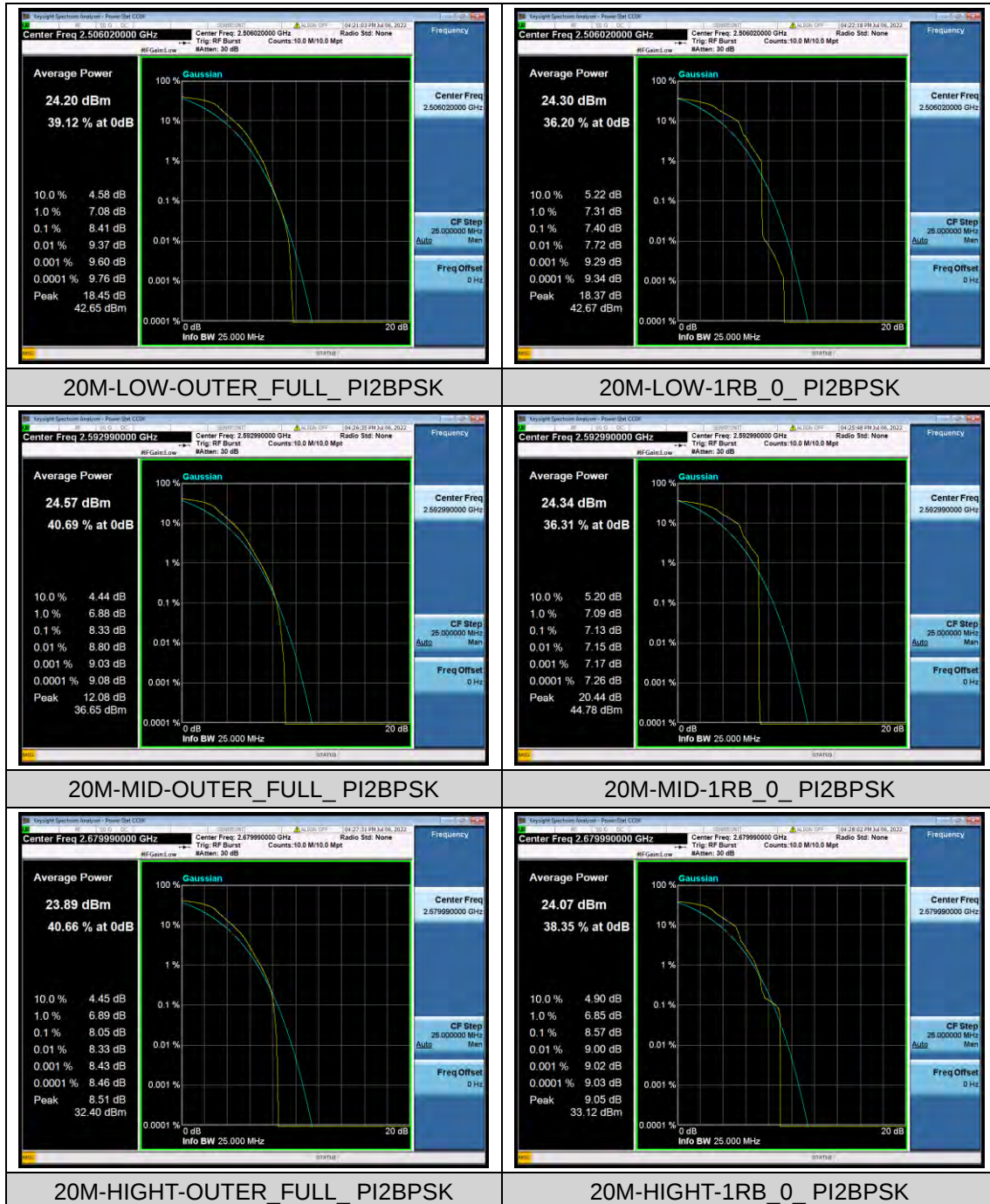
N41

PEAK-TO-AVERAGE RATIO(PAPR)

TEST RESULT

BAND: N41 / BANDWIDTH: 20MHZ / NTV_DFT_30KHZ							
MODULATION	RB ALLOCATION		PEAK-AVERAGE RATIO (DB)				VERDICT
	SIZE	OFFSET	LCH	MCH	HCH	LIMIT	
PI2BPSK	OUTER_FULL	0	8.41	8.33	8.05	<=13	PASS
PI2BPSK	1	0	7.40	7.13	8.57	<=13	PASS

TEST GRAPHS



26DB BANDWIDTH AND OCCUPIED BANDWIDTH FOR NSA

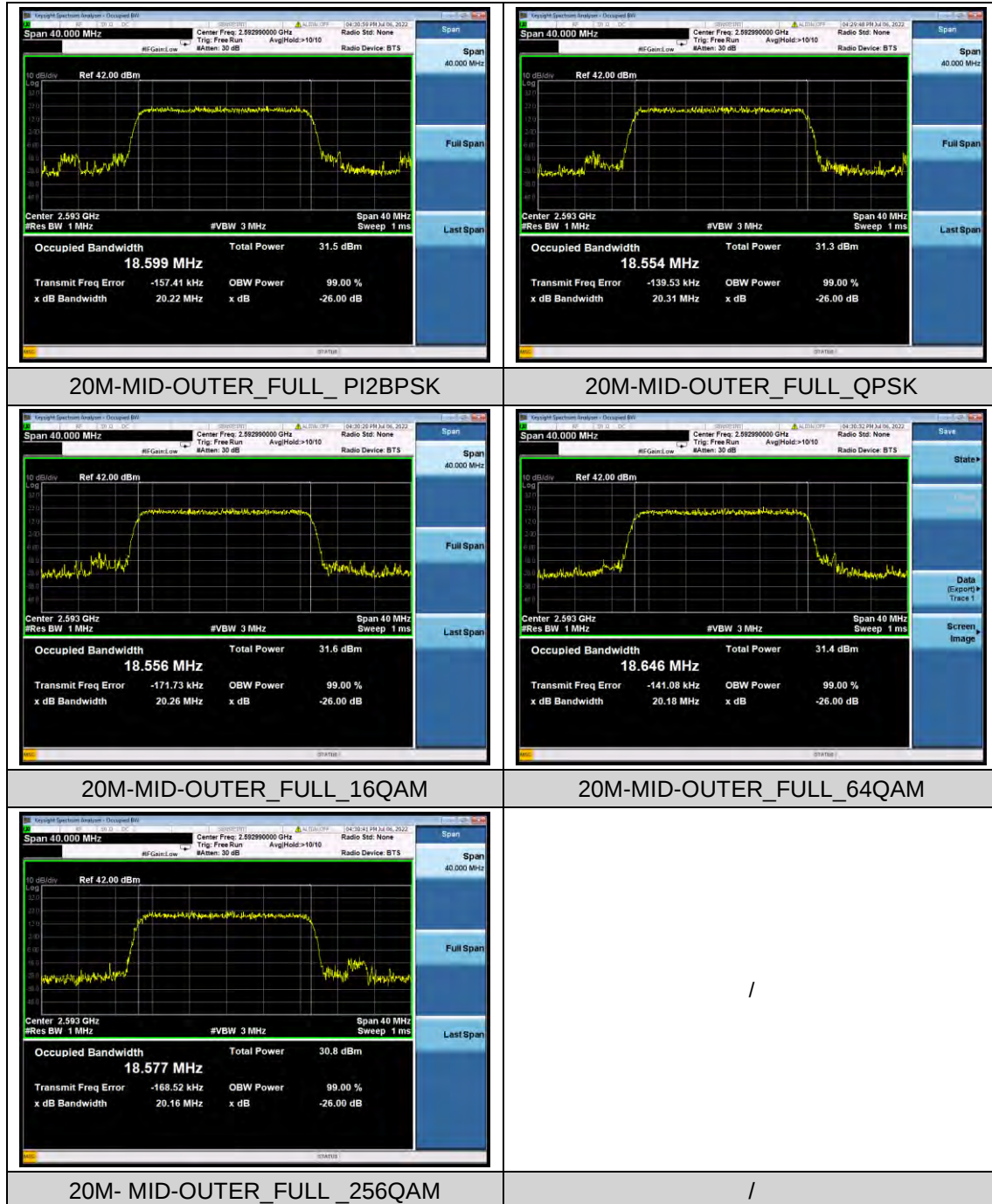
TEST RESULT

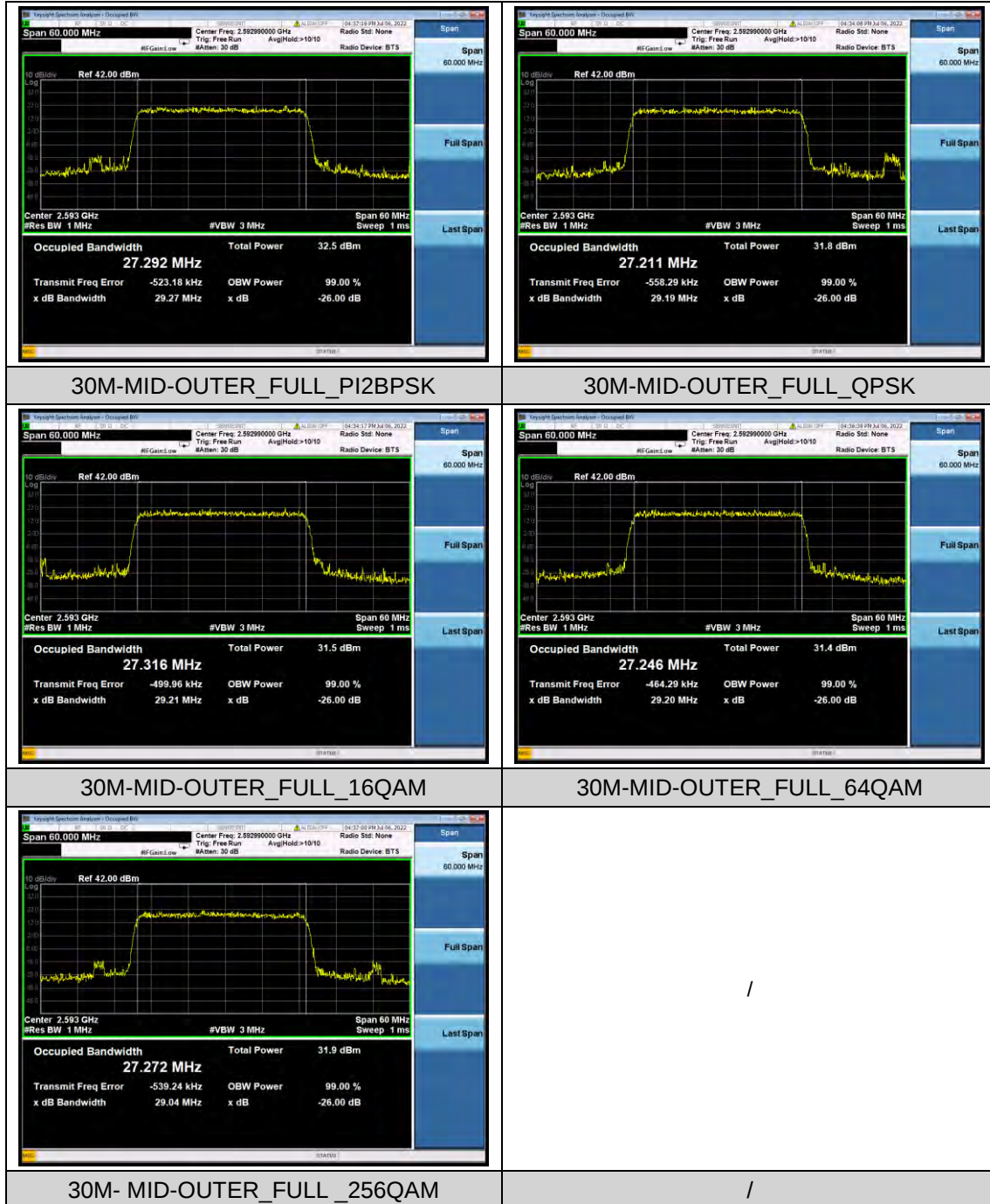
BAND	SCS	BANDWIDTH	MODULATION	CHANNEL	RB CONFIG	RESULT (99%)	RESULT (26DB)	VERDICT
N41	30KHZ	20MHZ	DFT-PI2BPSK	MID	OUTER_F ULL	18.599	20.22	PASS
N41	30KHZ	20MHZ	DFT-QPSK	MID	OUTER_F ULL	18.554	20.31	PASS
N41	30KHZ	20MHZ	DFT-16QAM	MID	OUTER_F ULL	18.556	20.26	PASS
N41	30KHZ	20MHZ	DFT-64QAM	MID	OUTER_F ULL	18.646	20.18	PASS
N41	30KHZ	20MHZ	DFT-256QAM	MID	OUTER_F ULL	18.577	20.16	PASS
N41	30KHZ	30MHZ	DFT-PI2BPSK	MID	OUTER_F ULL	27.292	29.27	PASS
N41	30KHZ	30MHZ	DFT-QPSK	MID	OUTER_F ULL	27.211	29.19	PASS
N41	30KHZ	30MHZ	DFT-16QAM	MID	OUTER_F ULL	27.316	29.21	PASS
N41	30KHZ	30MHZ	DFT-64QAM	MID	OUTER_F ULL	27.246	29.20	PASS
N41	30KHZ	30MHZ	DFT-256QAM	MID	OUTER_F ULL	27.272	29.04	PASS
N41	30KHZ	40MHZ	DFT-PI2BPSK	MID	OUTER_F ULL	36.146	38.22	PASS
N41	30KHZ	40MHZ	DFT-QPSK	MID	OUTER_F ULL	36.033	38.20	PASS
N41	30KHZ	40MHZ	DFT-16QAM	MID	OUTER_F ULL	36.102	38.15	PASS
N41	30KHZ	40MHZ	DFT-64QAM	MID	OUTER_F ULL	36.021	38.13	PASS
N41	30KHZ	40MHZ	DFT-256QAM	MID	OUTER_F ULL	36.143	38.15	PASS

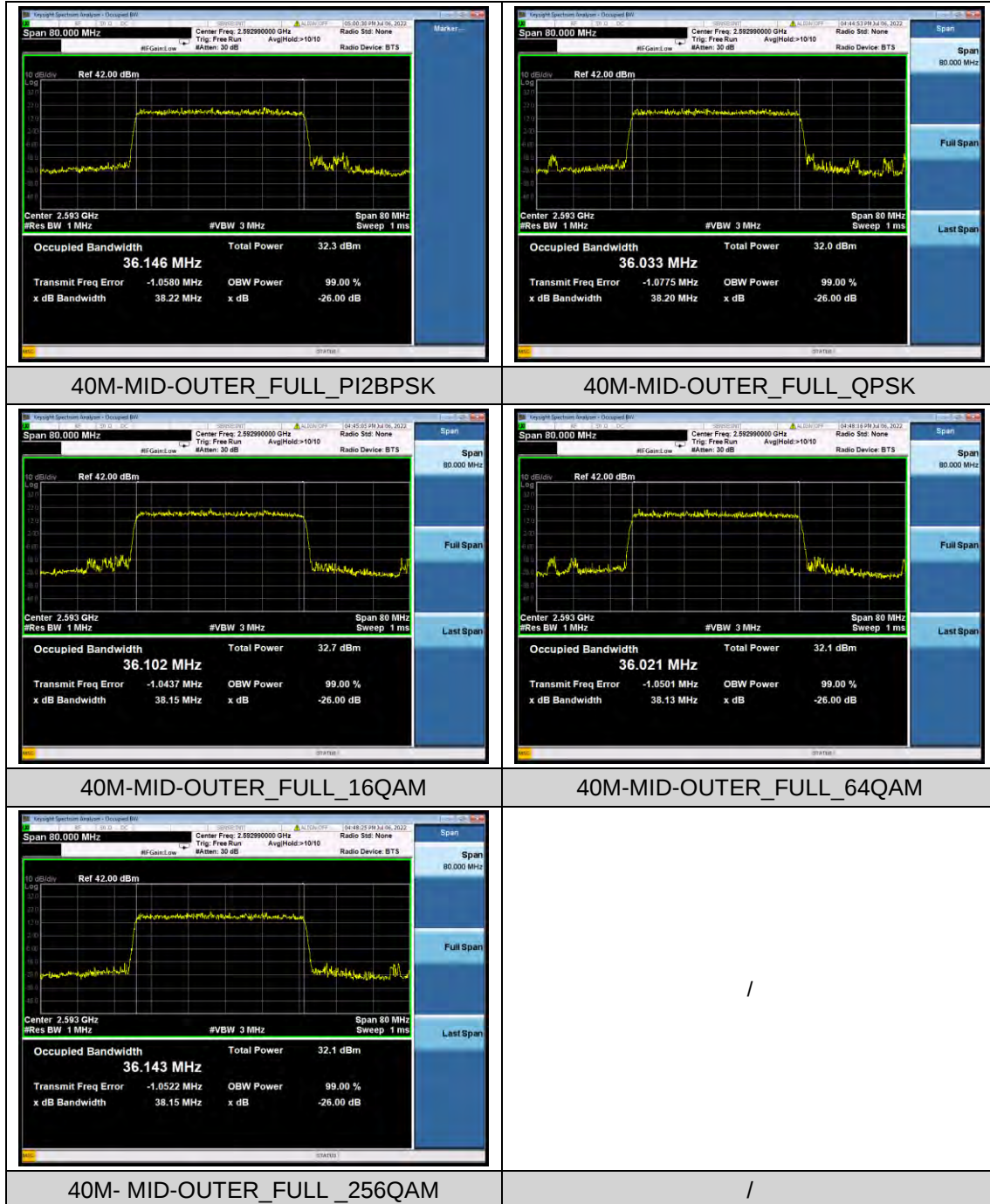
N41	30KHZ	50MHZ	DFT-PI2BPS K	MID	OUTER_F ULL	45.907	48.25	PASS
N41	30KHZ	50MHZ	DFT-QPSK	MID	OUTER_F ULL	46.149	48.13	PASS
N41	30KHZ	50MHZ	DFT-16QAM	MID	OUTER_F ULL	46.088	48.19	PASS
N41	30KHZ	50MHZ	DFT-64QAM	MID	OUTER_F ULL	46.020	48.22	PASS
N41	30KHZ	50MHZ	DFT-256QA M	MID	OUTER_F ULL	45.973	48.33	PASS
N41	30KHZ	60MHZ	DFT-PI2BPS K	MID	OUTER_F ULL	58.099	60.29	PASS
N41	30KHZ	60MHZ	DFT-QPSK	MID	OUTER_F ULL	58.150	60.54	PASS
N41	30KHZ	60MHZ	DFT-16QAM	MID	OUTER_F ULL	58.211	60.51	PASS
N41	30KHZ	60MHZ	DFT-64QAM	MID	OUTER_F ULL	58.141	60.54	PASS
N41	30KHZ	60MHZ	DFT-256QA M	MID	OUTER_F ULL	58.194	60.58	PASS
N41	30KHZ	80MHZ	DFT-PI2BPS K	MID	OUTER_F ULL	77.386	79.94	PASS
N41	30KHZ	80MHZ	DFT-QPSK	MID	OUTER_F ULL	77.222	79.86	PASS
N41	30KHZ	80MHZ	DFT-16QAM	MID	OUTER_F ULL	77.149	79.97	PASS
N41	30KHZ	80MHZ	DFT-64QAM	MID	OUTER_F ULL	77.406	79.94	PASS
N41	30KHZ	80MHZ	DFT-256QA M	MID	OUTER_F ULL	77.464	91.99	PASS
N41	30KHZ	90MHZ	DFT-PI2BPS K	MID	OUTER_F ULL	85.716	88.56	PASS
N41	30KHZ	90MHZ	DFT-QPSK	MID	OUTER_F ULL	85.798	88.61	PASS
N41	30KHZ	90MHZ	DFT-16QAM	MID	OUTER_F ULL	85.647	88.57	PASS
N41	30KHZ	90MHZ	DFT-64QAM	MID	OUTER_F ULL	85.647	88.62	PASS
N41	30KHZ	90MHZ	DFT-256QA M	MID	OUTER_F ULL	85.696	88.58	PASS
N41	30KHZ	100MHZ	DFT-PI2BPS K	MID	OUTER_F ULL	96.094	99.41	PASS
N41	30KHZ	100MHZ	DFT-QPSK	MID	OUTER_F ULL	96.221	99.43	PASS

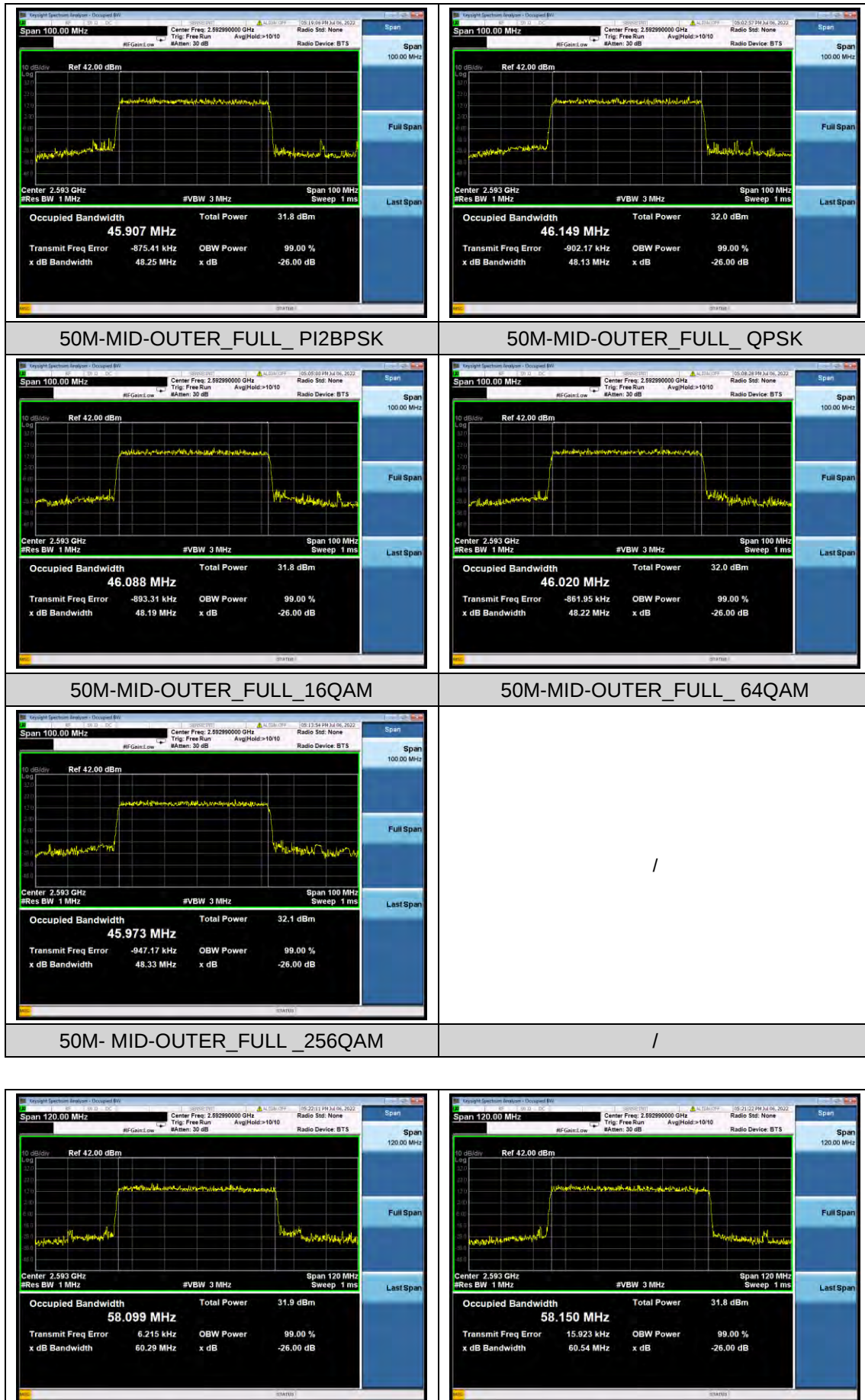
N41	30KHZ	100MHZ	DFT-16QAM	MID	OUTER_F ULL	96.146	99.42	PASS
N41	30KHZ	100MHZ	DFT-64QAM	MID	OUTER_F ULL	96.243	99.28	PASS
N41	30KHZ	100MHZ	DFT-256QA M	MID	OUTER_F ULL	96.108	99.45	PASS

TEST GRAPHS

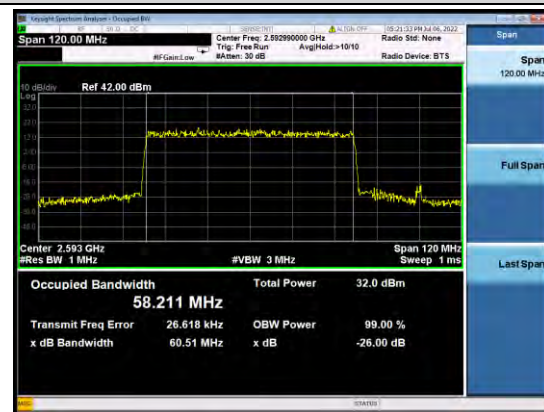




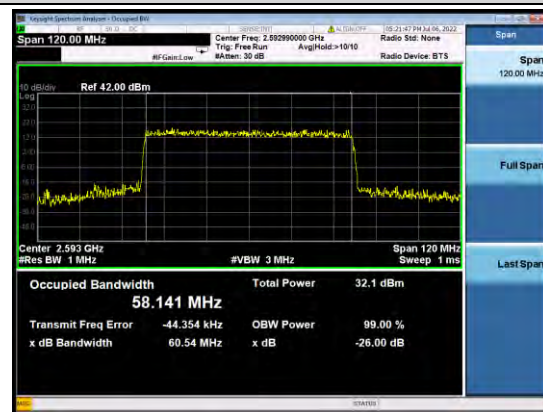




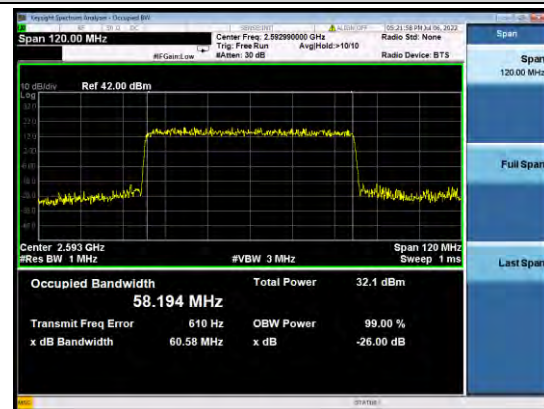
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60M-MID-OUTER_FULL_QPSK



60M-MID-OUTER_FULL_16QAM

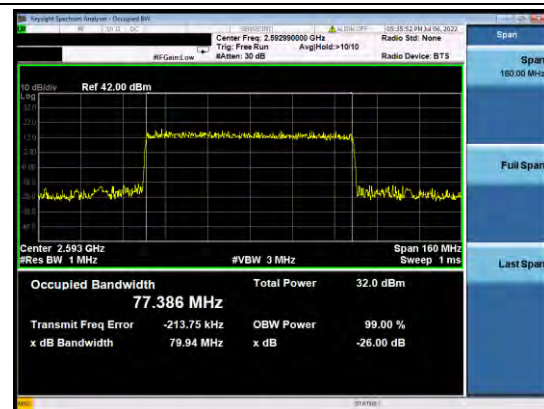


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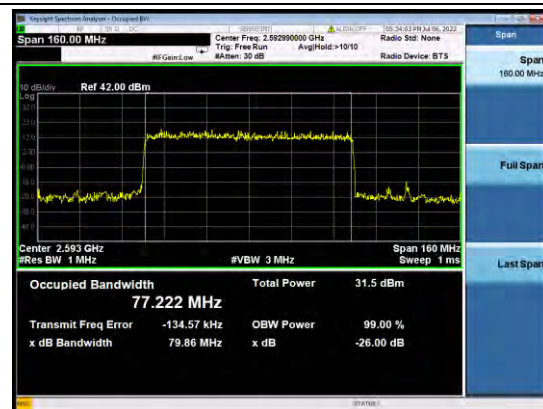
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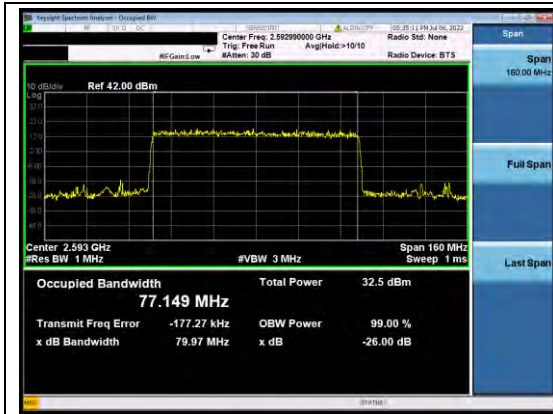
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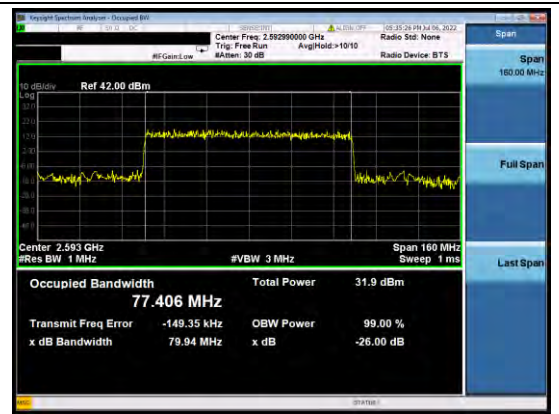
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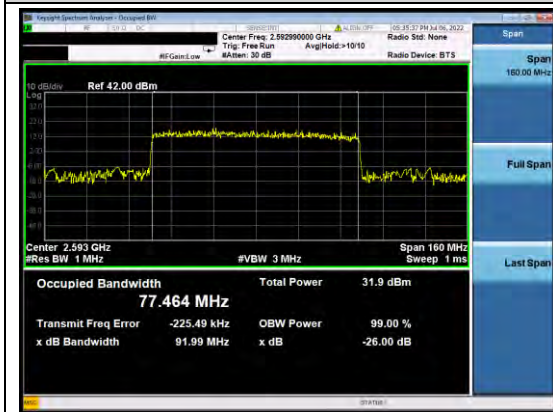
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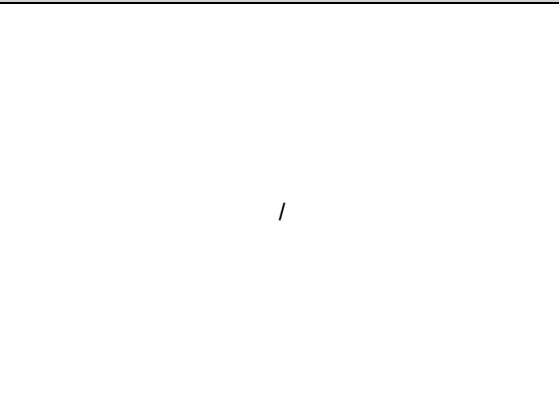
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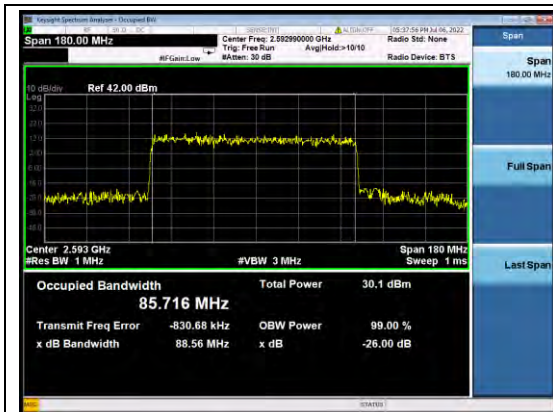
80M-MID-OUTER_FULL_64QAM



80M-MID-OUTER_FULL_256QAM



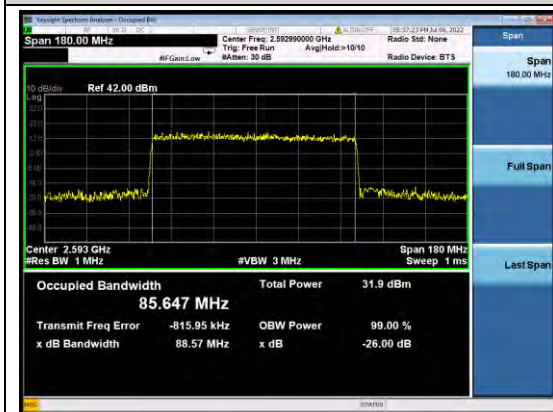
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90M-MID-OUTER_FULL_PI2BPSK



90M-MID-OUTER_FULL_QPSK

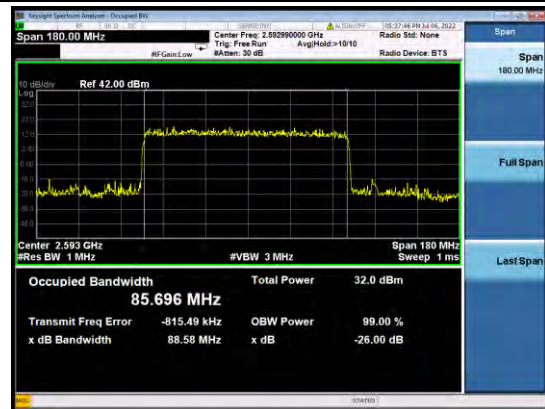




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90M-MID-OUTER_FULL_16QAM

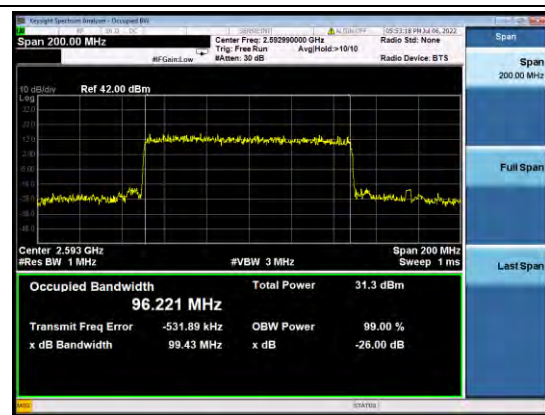
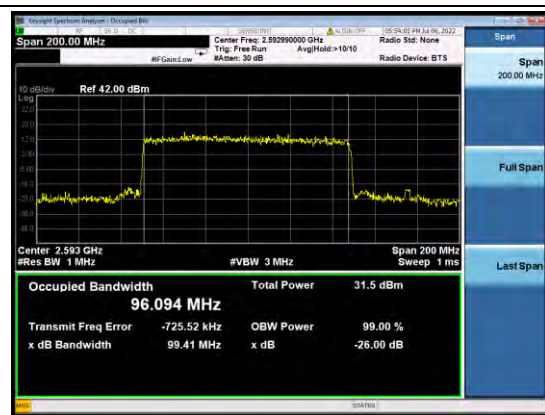


90M-MID-OUTER_FULL_64QAM

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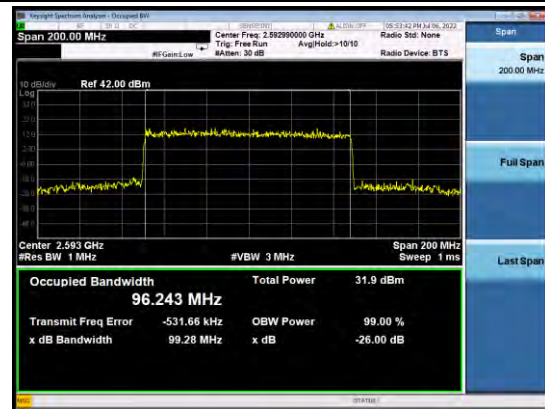
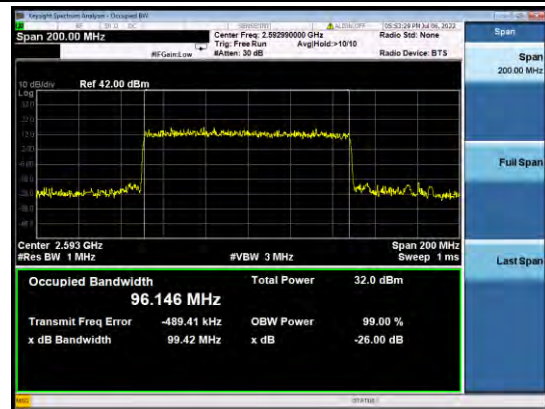
90M-MID-OUTER_FULL_256QAM

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100M-MID-OUTER_FULL_PI2BPSK

100M-MID-OUTER_FULL_QPSK



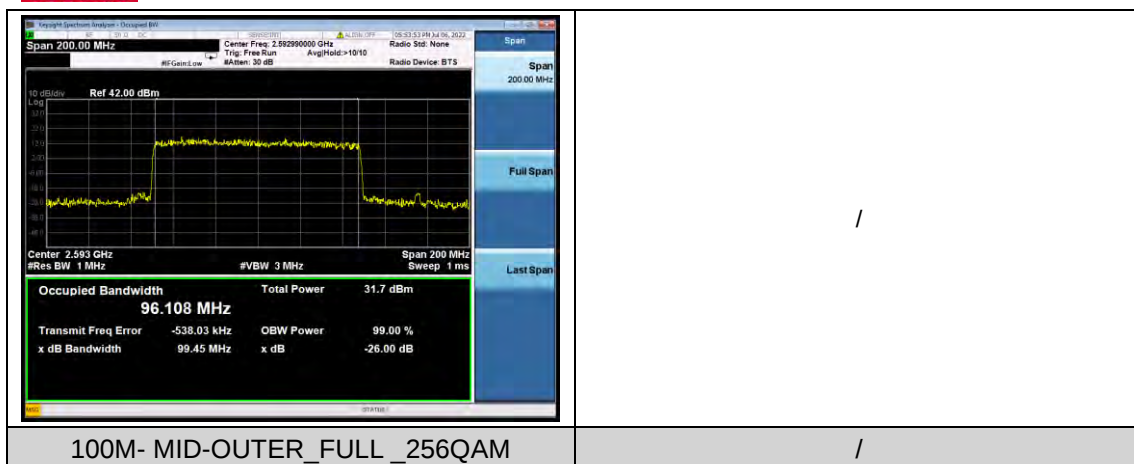
100M-MID-OUTER_FULL_16QAM

100M-MID-OUTER_FULL_64QAM



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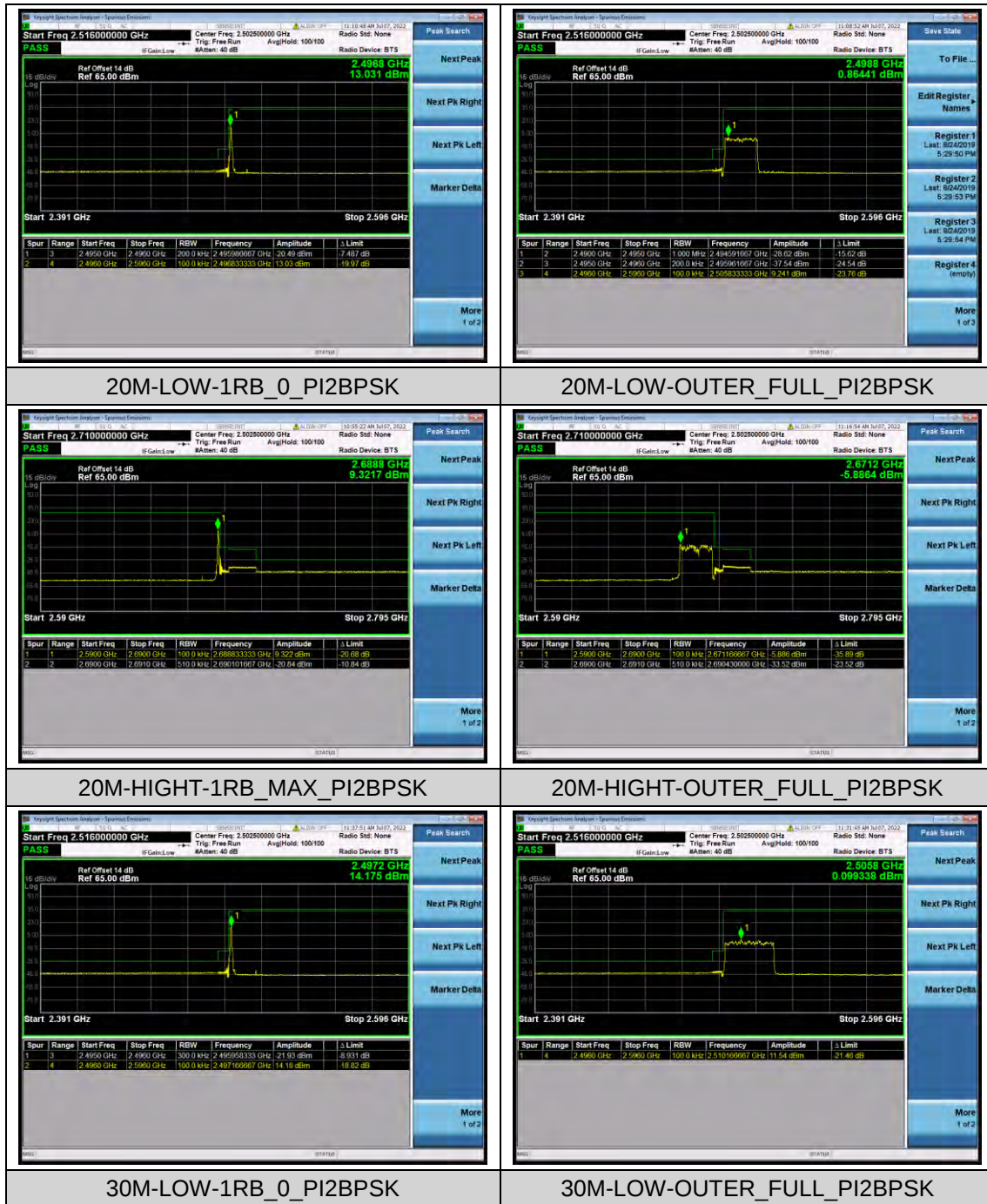
BAND EDGE

TEST RESULT

BAND	SCS	BANDWIDTH	MODULATION	CHANNEL	RB CONFIG (NR)	RESULT	VERDICT
N41	30KHZ	20MHZ	DFT-PI2BPSK	LOW	1RB_0	SEE GRAPH	PASS
N41	30KHZ	20MHZ	DFT-PI2BPSK	LOW	OUTER_FULL	SEE GRAPH	PASS
N41	30KHZ	20MHZ	DFT-PI2BPSK	HIGH	1RB_MAX	SEE GRAPH	PASS
N41	30KHZ	20MHZ	DFT-PI2BPSK	HIGH	OUTER_FULL	SEE GRAPH	PASS
N41	30KHZ	30MHZ	DFT-PI2BPSK	LOW	1RB_0	SEE GRAPH	PASS
N41	30KHZ	30MHZ	DFT-PI2BPSK	LOW	OUTER_FULL	SEE GRAPH	PASS
N41	30KHZ	30MHZ	DFT-PI2BPSK	HIGH	1RB_MAX	SEE GRAPH	PASS
N41	30KHZ	30MHZ	DFT-PI2BPSK	HIGH	OUTER_FULL	SEE GRAPH	PASS
N41	30KHZ	40MHZ	DFT-PI2BPSK	LOW	1RB_0	SEE GRAPH	PASS
N41	30KHZ	40MHZ	DFT-PI2BPSK	LOW	OUTER_FULL	SEE GRAPH	PASS
N41	30KHZ	40MHZ	DFT-PI2BPSK	HIGH	1RB_MAX	SEE GRAPH	PASS
N41	30KHZ	40MHZ	DFT-PI2BPSK	HIGH	OUTER_FULL	SEE GRAPH	PASS
N41	30KHZ	50MHZ	DFT-PI2BPSK	LOW	1RB_0	SEE GRAPH	PASS
N41	30KHZ	50MHZ	DFT-PI2BPSK	LOW	OUTER_FULL	SEE GRAPH	PASS
N41	30KHZ	50MHZ	DFT-PI2BPSK	HIGH	1RB_MAX	SEE GRAPH	PASS
N41	30KHZ	50MHZ	DFT-PI2BPSK	HIGH	OUTER_FULL	SEE GRAPH	PASS

N41	30KHZ	60MHZ	DFT-PI2BP SK	LOW	1RB_0	SEE GRAPH	PASS
N41	30KHZ	60MHZ	DFT-PI2BP SK	LOW	OUTER_FULL	SEE GRAPH	PASS
N41	30KHZ	60MHZ	DFT-PI2BP SK	HIGH	1RB_MAX	SEE GRAPH	PASS
N41	30KHZ	60MHZ	DFT-PI2BP SK	HIGH	OUTER_FULL	SEE GRAPH	PASS
N41	30KHZ	80MHZ	DFT-PI2BP SK	LOW	1RB_0	SEE GRAPH	PASS
N41	30KHZ	80MHZ	DFT-PI2BP SK	LOW	OUTER_FULL	SEE GRAPH	PASS
N41	30KHZ	80MHZ	DFT-PI2BP SK	HIGH	1RB_MAX	SEE GRAPH	PASS
N41	30KHZ	80MHZ	DFT-PI2BP SK	HIGH	OUTER_FULL	SEE GRAPH	PASS
N41	30KHZ	90MHZ	DFT-PI2BP SK	LOW	1RB_0	SEE GRAPH	PASS
N41	30KHZ	90MHZ	DFT-PI2BP SK	LOW	OUTER_FULL	SEE GRAPH	PASS
N41	30KHZ	90MHZ	DFT-PI2BP SK	HIGH	1RB_MAX	SEE GRAPH	PASS
N41	30KHZ	90MHZ	DFT-PI2BP SK	HIGH	OUTER_FULL	SEE GRAPH	PASS
N41	30KHZ	100MHZ	DFT-PI2BP SK	LOW	1RB_0	SEE GRAPH	PASS
N41	30KHZ	100MHZ	DFT-PI2BP SK	LOW	OUTER_FULL	SEE GRAPH	PASS
N41	30KHZ	100MHZ	DFT-PI2BP SK	HIGH	1RB_MAX	SEE GRAPH	PASS
N41	30KHZ	100MHZ	DFT-PI2BP SK	HIGH	OUTER_FULL	SEE GRAPH	PASS

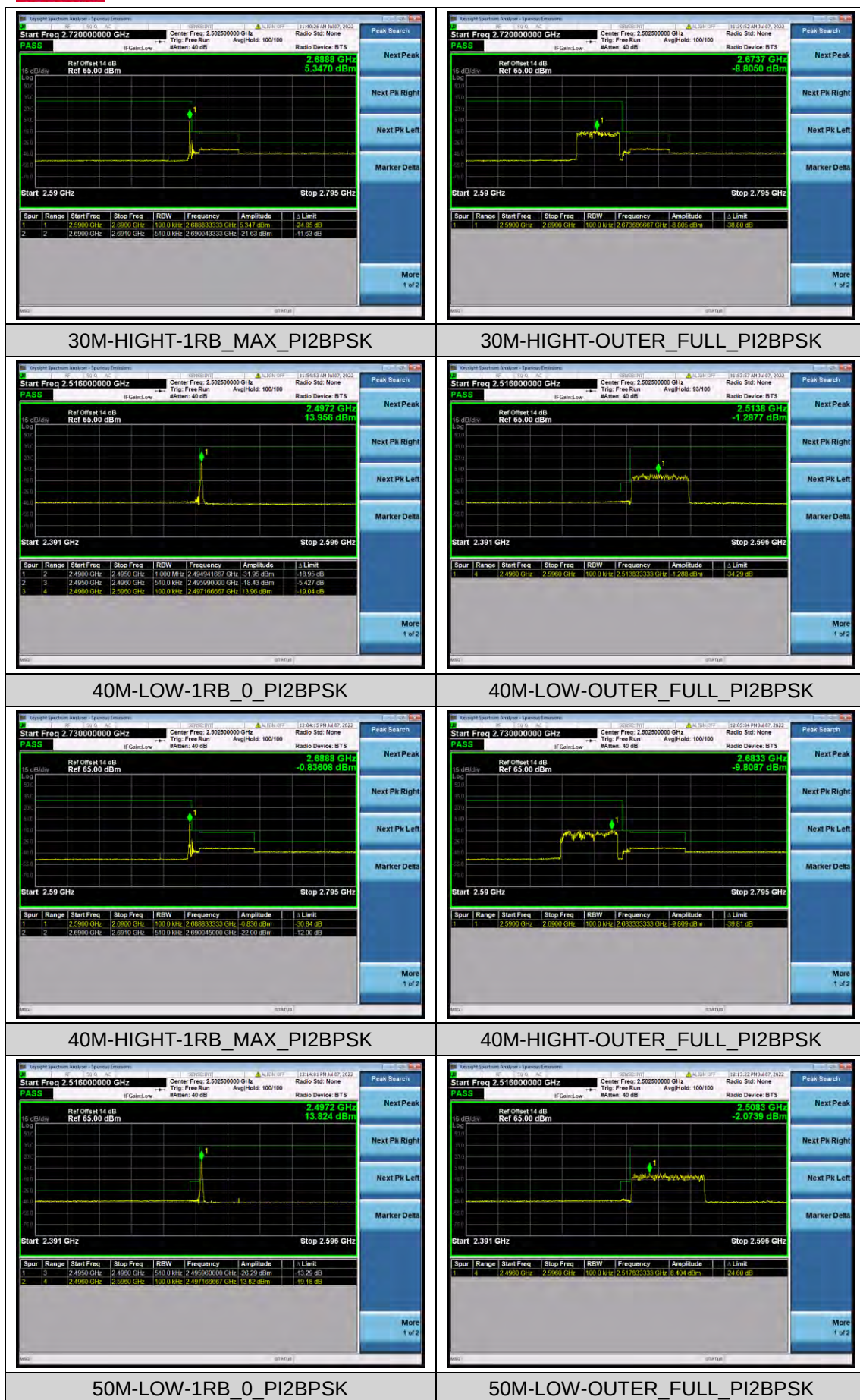
TEST GRAPHS





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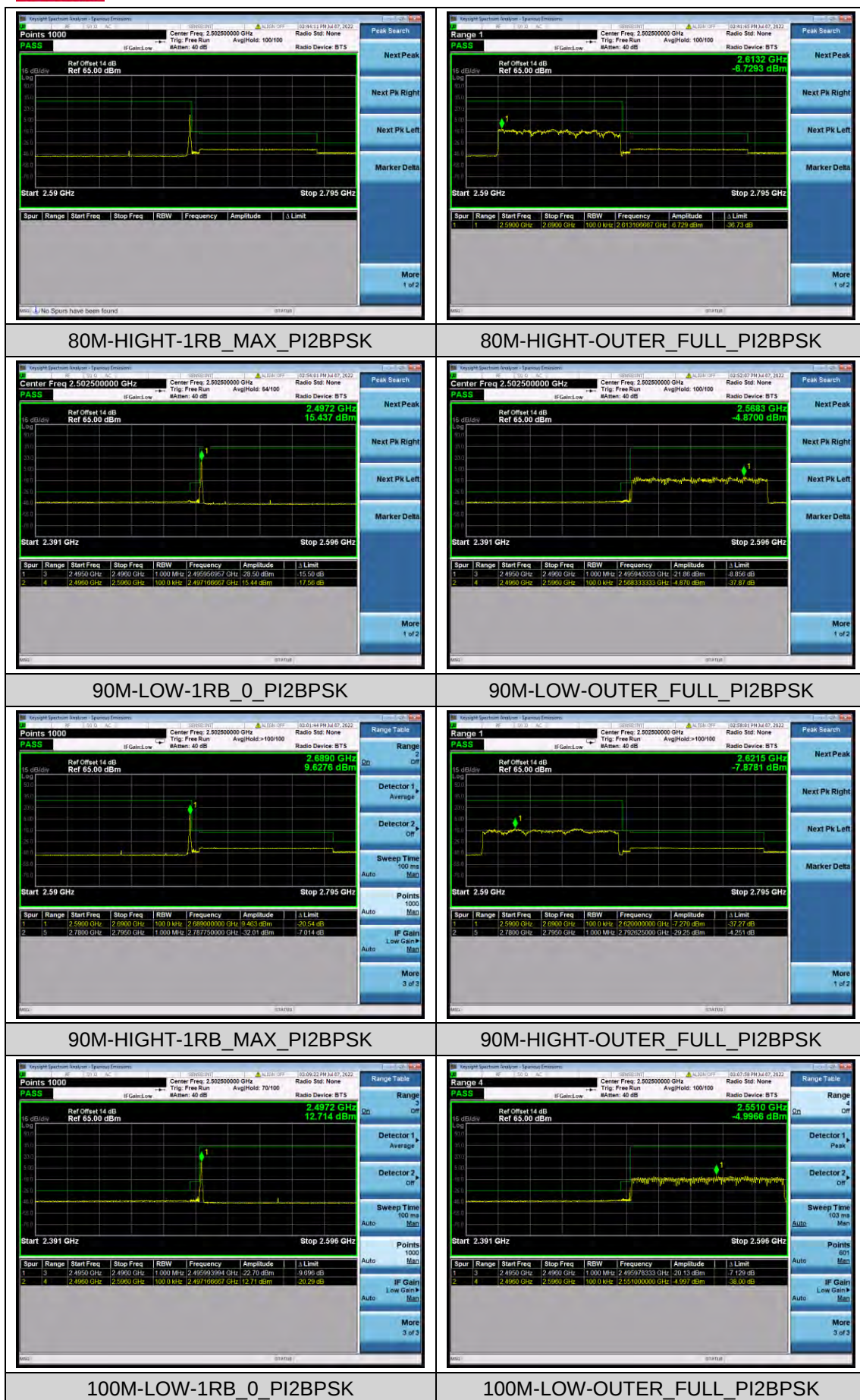
Test Report No.: W7L-220214W001RF06





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CONDUCTED SPURIOUS EMISSION FOR SA

TEST RESULT

BAND	SCS	BAND WIDTH	MODULATI ON	CHANN EL	RB CONFIG (NR)	STARTF REQ	STOPFR EQ	RESULT	LIMIT (dBm)	VERDI CT
N41	30KHZ	20MHZ	DFT-PI2B PSK	LOW	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KHZ	20MHZ	DFT-PI2B PSK	MID	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KHZ	20MHZ	DFT-PI2B PSK	HIGH	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KHZ	30MHZ	DFT-PI2B PSK	LOW	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KHZ	30MHZ	DFT-PI2B PSK	MID	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KHZ	30MHZ	DFT-PI2B PSK	HIGH	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KHZ	40MHZ	DFT-PI2B PSK	LOW	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KHZ	40MHZ	DFT-PI2B PSK	MID	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KHZ	40MHZ	DFT-PI2B PSK	HIGH	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KHZ	50MHZ	DFT-PI2B PSK	LOW	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KHZ	50MHZ	DFT-PI2B PSK	MID	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KHZ	50MHZ	DFT-PI2B PSK	HIGH	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KHZ	60MHZ	DFT-PI2B PSK	LOW	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KHZ	60MHZ	DFT-PI2B PSK	MID	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KHZ	60MHZ	DFT-PI2B PSK	HIGH	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KHZ	80MHZ	DFT-PI2B PSK	LOW	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KHZ	80MHZ	DFT-PI2B PSK	MID	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS

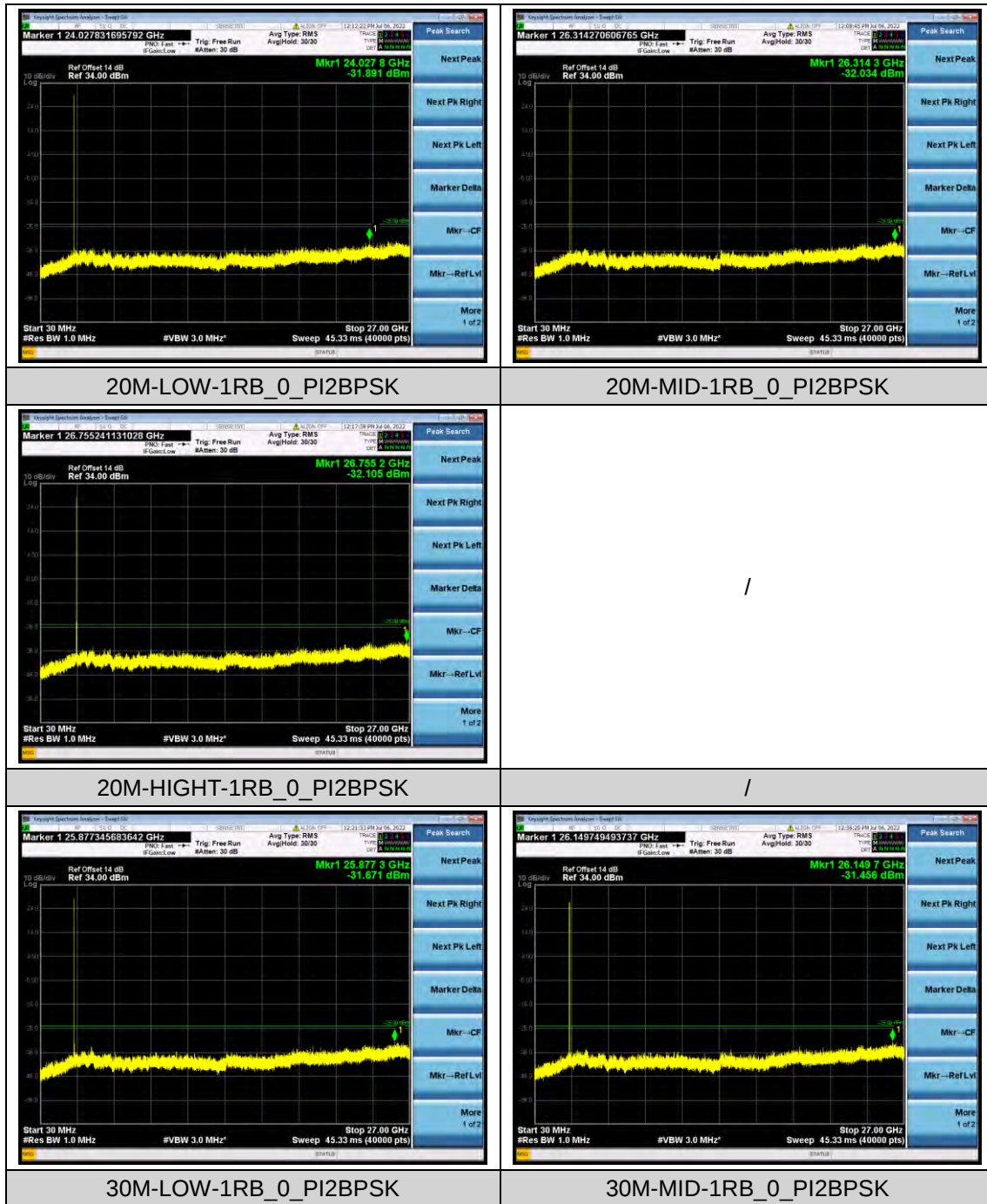


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VERITAS**

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N41	30KH Z	80MHZ	DFT-PI2B PSK	HIGH	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KH Z	90MHZ	DFT-PI2B PSK	LOW	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KH Z	90MHZ	DFT-PI2B PSK	MID	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KH Z	90MHZ	DFT-PI2B PSK	HIGH	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KH Z	100MH Z	DFT-PI2B PSK	LOW	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KH Z	100MH Z	DFT-PI2B PSK	MID	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS
N41	30KH Z	100MH Z	DFT-PI2B PSK	HIGH	1RB_0	30MHZ	20GHZ	SEE GRAPH	-13	PASS

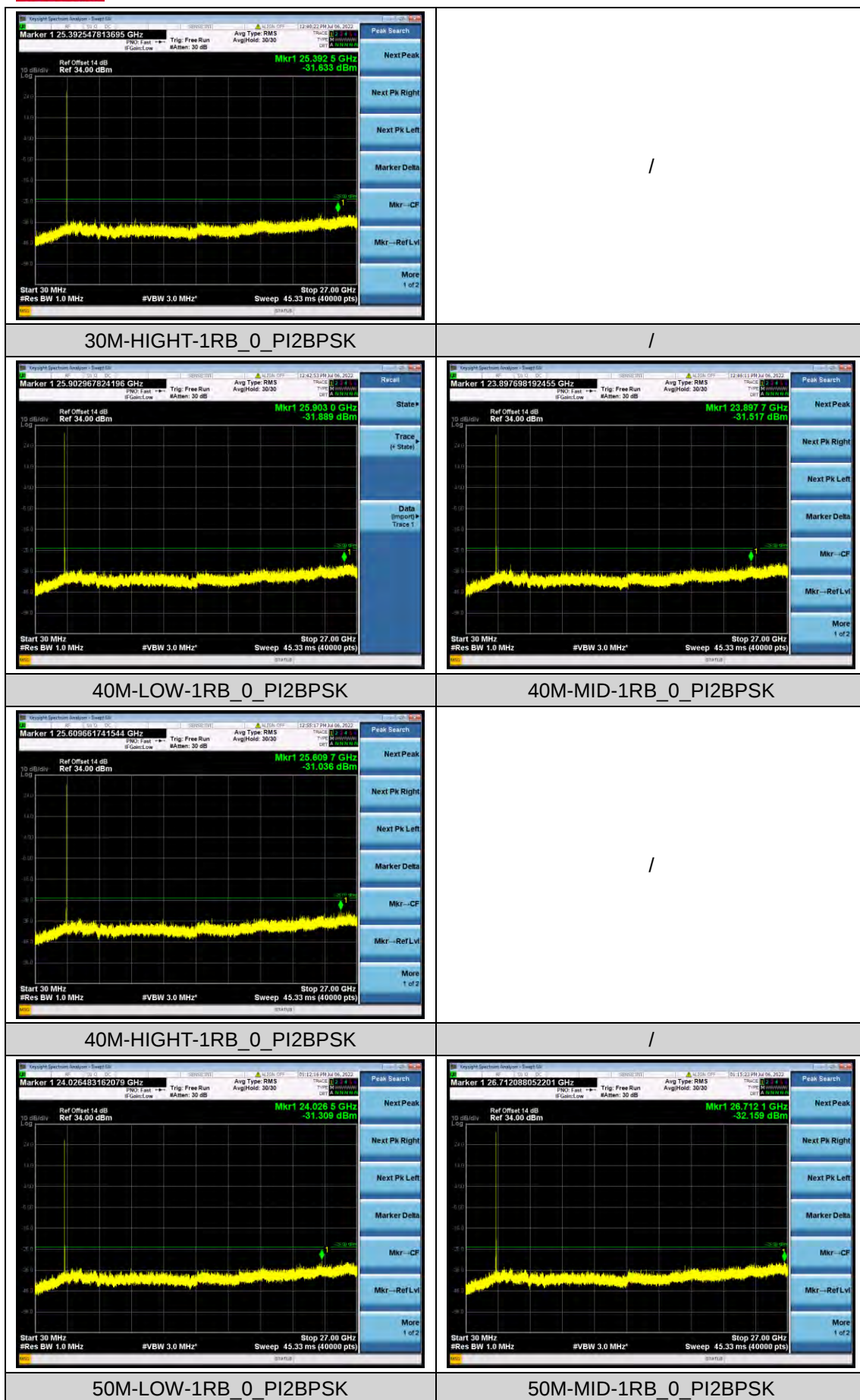
TEST GRAPHS





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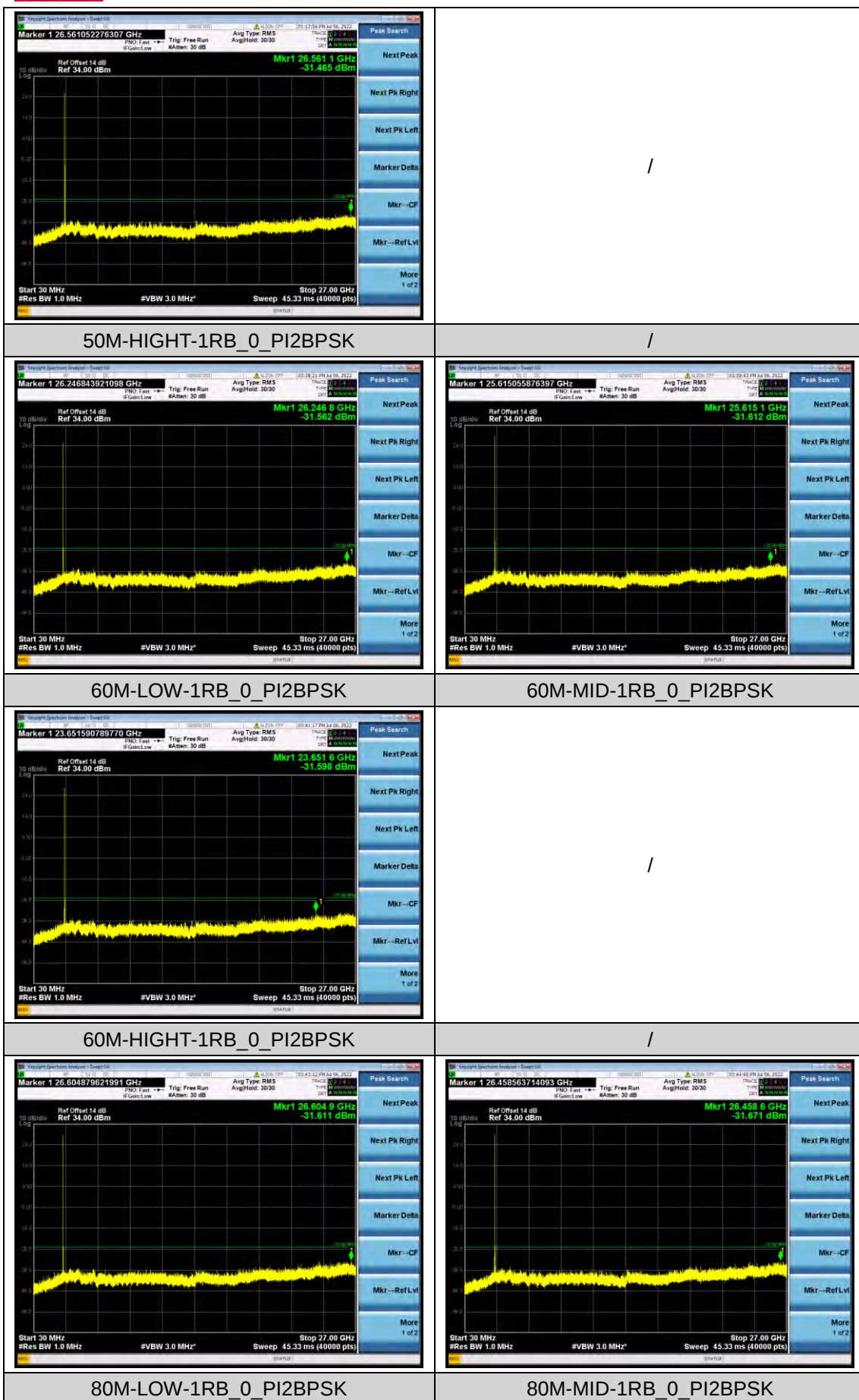
Test Report No.: W7L-220214W001RF06





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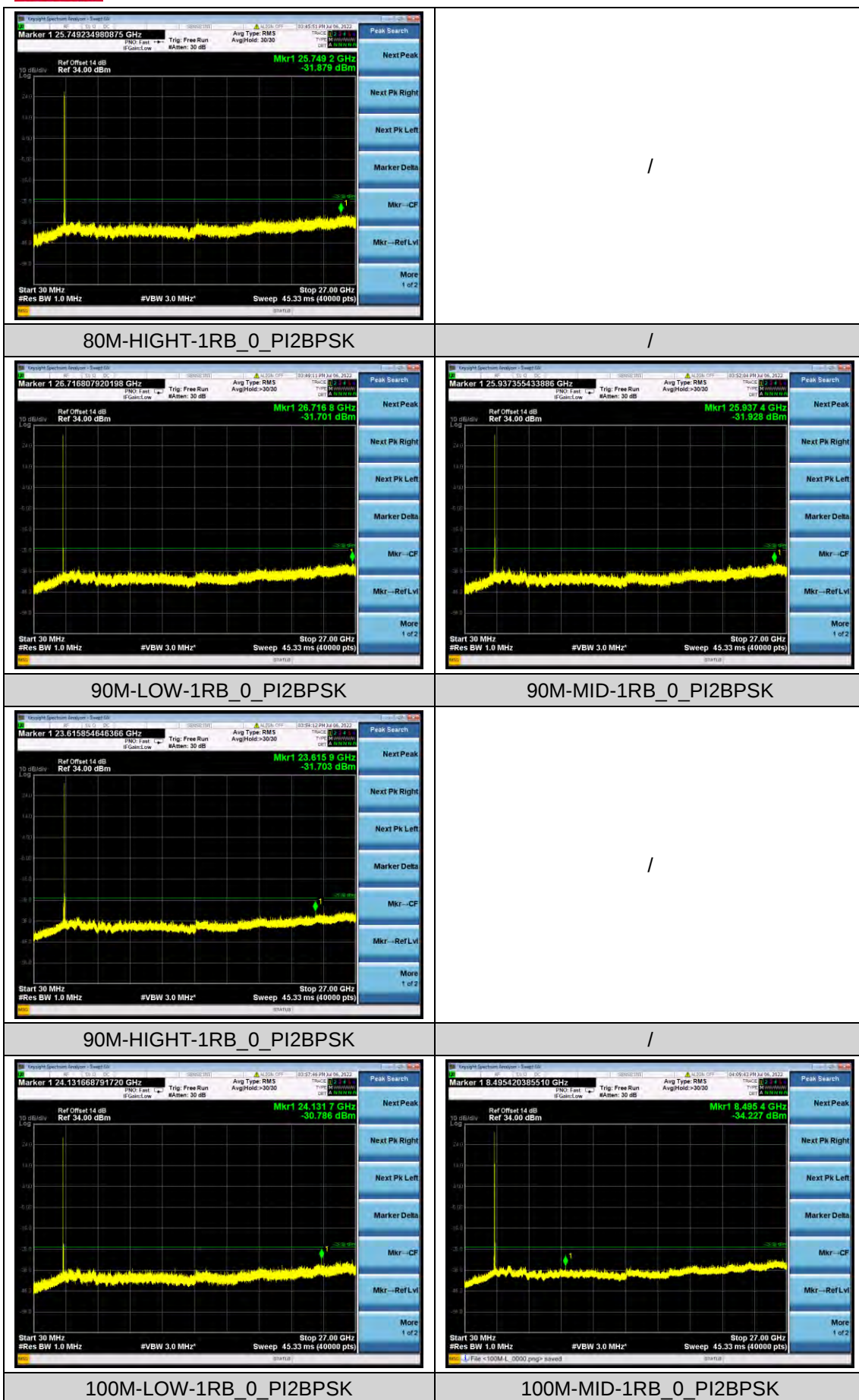
Test Report No.: W7L-220214W001RF06





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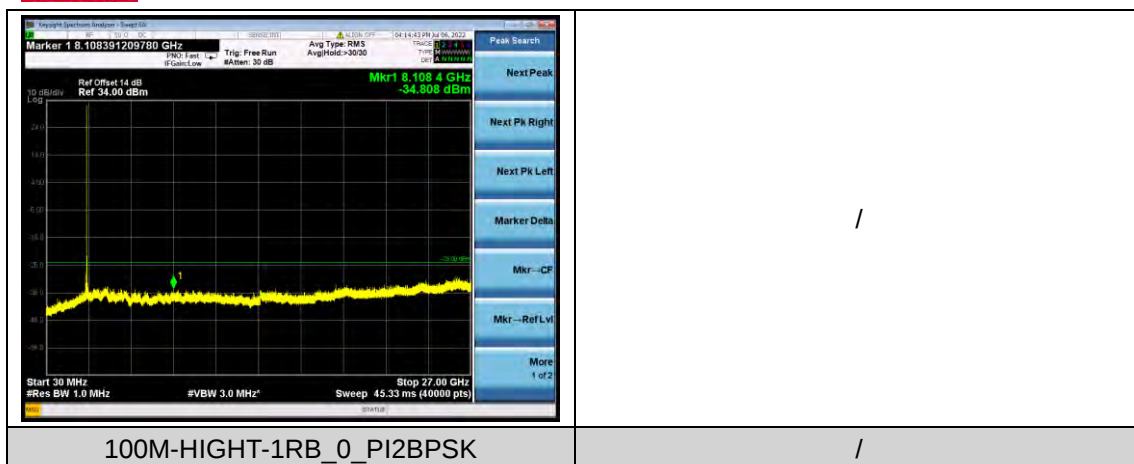
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FREQUENCY STABILITY FOR NSA

TEST RESULT

EN_N41 / BANDWIDTH: 100MHZ / NTN												
MOD.	RB ALLOCATION		TEMP. (°C)	VOLTAGE (VDC)	FREQ. ERROR (HZ)			FREQ. VS. RATED (PPM)				VERDICT
	SIZE	OFFSET			LCH	MCH	HCH	LCH	MCH	HCH	LIMIT	
PI2BPSK	FULL	0	20	3.6	1.36	1.46	1.36	0.0005	0.0006	0.0005	-2.5 TO 2.5	PASS
				4.0	-1.87	-1.54	-1.54	-0.0007	-0.0006	-0.0006	-2.5 TO 2.5	PASS
				4.4	1.32	1.75	1.29	0.0005	0.0007	0.0005	-2.5 TO 2.5	PASS
			-30	4.0	-9.42	-10.17	-9.65	-0.0037	-0.0039	-0.0037	-2.5 TO 2.5	PASS
			-20	4.0	-8.16	-8.85	-8.49	-0.0032	-0.0034	-0.0032	-2.5 TO 2.5	PASS
			-10	4.0	-7.47	-7.85	-7.58	-0.0029	-0.0030	-0.0029	-2.5 TO 2.5	PASS
			0	4.0	-6.36	-6.65	-6.47	-0.0025	-0.0026	-0.0025	-2.5 TO 2.5	PASS
			10	4.0	-5.26	-5.21	-5.29	-0.0021	-0.0020	-0.0020	-2.5 TO 2.5	PASS
			30	4.0	-4.39	-4.26	-4.27	-0.0017	-0.0016	-0.0016	-2.5 TO 2.5	PASS
			40	4.0	-3.18	-3.36	-3.37	-0.0012	-0.0013	-0.0013	-2.5 TO 2.5	PASS
			50	4.0	-1.84	-1.87	-1.89	-0.0007	-0.0007	-0.0007	-2.5 TO 2.5	PASS



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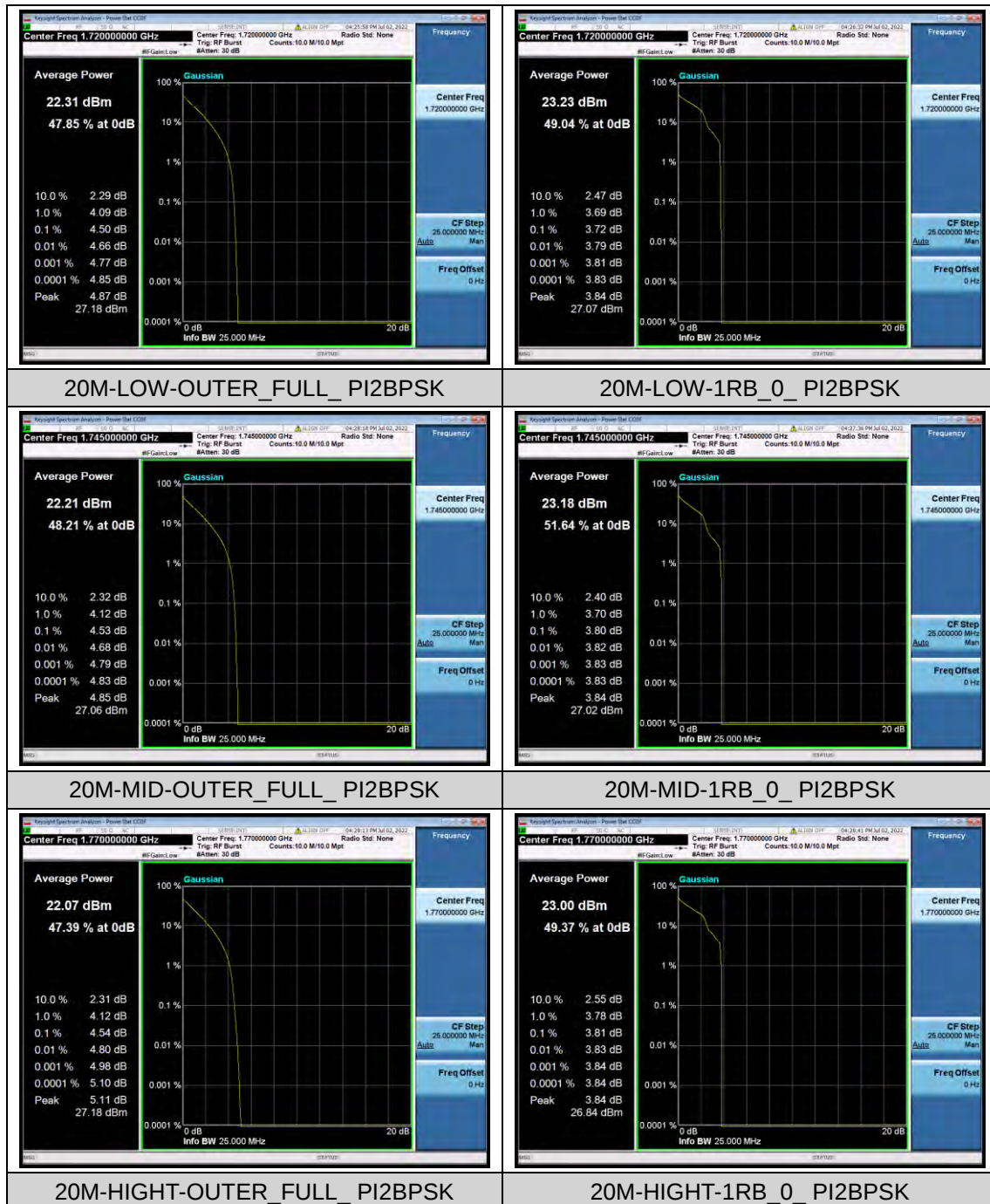
N66

PEAK-TO-AVERAGE RATIO(PAPR)

TEST RESULT

BAND: N66 / BANDWIDTH: 20MHZ / NTV_DFT_15KHZ							
MODULATION	RB ALLOCATION		PEAK-AVERAGE RATIO (DB)				VERDICT
	SIZE	OFFSET	LCH	MCH	HCH	LIMIT	
PI2BPSK	OUTER_FULL	0	4.50	4.53	4.54	<=13	PASS
PI2BPSK	1	0	3.72	3.80	3.81	<=13	PASS

TEST GRAPHS



26DB BANDWIDTH AND OCCUPIED BANDWIDTH FOR NSA

TEST RESULT

BAND	SCS	BANDWIDTH	MODULATION	CHANNEL	RB CONFIG	RESULT (99%)	RESULT (26DB)	VERDICT
N66	15KHZ	5MHZ	DFT-PI2BPSK	MID	OUTER_F ULL	4.4668	4.949	PASS
N66	15KHZ	5MHZ	DFT-QPSK	MID	OUTER_F ULL	4.4615	4.940	PASS
N66	15KHZ	5MHZ	DFT-16QAM	MID	OUTER_F ULL	4.4696	4.945	PASS
N66	15KHZ	5MHZ	DFT-64QAM	MID	OUTER_F ULL	4.4744	4.900	PASS
N66	15KHZ	5MHZ	DFT-256QAM	MID	OUTER_F ULL	4.4729	4.911	PASS
N66	15KHZ	10MHZ	DFT-PI2BPSK	MID	OUTER_F ULL	8.9032	9.324	PASS
N66	15KHZ	10MHZ	DFT-QPSK	MID	OUTER_F ULL	8.9160	9.315	PASS
N66	15KHZ	10MHZ	DFT-16QAM	MID	OUTER_F ULL	8.8960	9.375	PASS
N66	15KHZ	10MHZ	DFT-64QAM	MID	OUTER_F ULL	8.8898	9.495	PASS
N66	15KHZ	10MHZ	DFT-256QAM	MID	OUTER_F ULL	8.8938	9.438	PASS
N66	15KHZ	15MHZ	DFT-PI2BPSK	MID	OUTER_F ULL	13.563	14.22	PASS
N66	15KHZ	15MHZ	DFT-QPSK	MID	OUTER_F ULL	13.502	14.24	PASS
N66	15KHZ	15MHZ	DFT-16QAM	MID	OUTER_F ULL	13.500	14.16	PASS
N66	15KHZ	15MHZ	DFT-64QAM	MID	OUTER_F ULL	13.486	14.20	PASS
N66	15KHZ	15MHZ	DFT-256QAM	MID	OUTER_F ULL	13.502	14.18	PASS
N66	15KHZ	20MHZ	DFT-PI2BPSK	MID	OUTER_F ULL	17.879	18.68	PASS

N66	15KHZ	20MHZ	DFT-QPSK	MID	OUTER_F ULL	17.945	18.71	PASS
N66	15KHZ	20MHZ	DFT-16QAM	MID	OUTER_F ULL	17.922	18.75	PASS
N66	15KHZ	20MHZ	DFT-64QAM	MID	OUTER_F ULL	17.906	18.66	PASS
N66	15KHZ	20MHZ	DFT-256QA M	MID	OUTER_F ULL	17.932	18.63	PASS
N66	15KHZ	30MHZ	DFT-PI2BPS K	MID	OUTER_F ULL	28.980	31.01	PASS
N66	15KHZ	30MHZ	DFT-QPSK	MID	OUTER_F ULL	28.982	31.05	PASS
N66	15KHZ	30MHZ	DFT-16QAM	MID	OUTER_F ULL	29.015	30.93	PASS
N66	15KHZ	30MHZ	DFT-64QAM	MID	OUTER_F ULL	28.958	30.99	PASS
N66	15KHZ	30MHZ	DFT-256QA M	MID	OUTER_F ULL	29.060	31.02	PASS
N66	15KHZ	40MHZ	DFT-PI2BPS K	MID	OUTER_F ULL	38.772	40.92	PASS
N66	15KHZ	40MHZ	DFT-QPSK	MID	OUTER_F ULL	38.882	41.07	PASS
N66	15KHZ	40MHZ	DFT-16QAM	MID	OUTER_F ULL	38.861	41.07	PASS
N66	15KHZ	40MHZ	DFT-64QAM	MID	OUTER_F ULL	38.892	41.07	PASS
N66	15KHZ	40MHZ	DFT-256QA M	MID	OUTER_F ULL	38.763	41.00	PASS