



CHANNEL	TX Channel 19	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4880.000	29.69	31.03	7.01	34.03	33.70	54.00	-20.30	Average
4880.000	39.50	31.03	7.01	34.03	43.51	74.00	-30.49	Peak
7320.000	28.11	35.67	8.97	34.49	38.26	54.00	-15.74	Average
7320.000	38.26	35.67	8.97	34.49	48.41	74.00	-25.59	Peak
9760.000	28.98	38.51	11.16	34.20	44.45	54.00	-9.55	Average
9760.000	38.41	38.51	11.16	34.20	53.88	74.00	-20.12	Peak
2440.000	94.70	27.67	4.18	36.00	90.55	74.00	16.55	Peak

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4880.000	29.36	31.03	7.01	34.03	33.37	54.00	-20.63	Average
4880.000	39.19	31.03	7.01	34.03	43.20	74.00	-30.80	Peak
7320.000	28.01	35.67	8.97	34.49	38.16	54.00	-15.84	Average
7320.000	37.75	35.67	8.97	34.49	47.90	74.00	-26.10	Peak
9760.000	28.86	38.51	11.16	34.20	44.33	54.00	-9.67	Average
9760.000	38.69	38.51	11.16	34.20	54.16	74.00	-19.84	Peak
2440.000	94.49	27.67	4.18	36.00	90.34	74.00	16.34	Peak

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 2440MHz: Fundamental frequency.



CHANNEL	TX Channel 39	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2480.234	92.26	27.76	4.19	36.10	88.11	74.00	14.11	Peak
2483.500	43.13	27.76	4.19	36.11	38.97	74.00	-35.03	Peak
2484.524	45.37	27.77	4.19	36.11	41.22	74.00	-32.78	Peak
2500.000	41.37	27.80	4.19	36.15	37.21	74.00	-36.79	Peak
2479.937	92.26	27.76	4.19	36.10	88.11	54.00	34.11	Average
2483.500	31.37	27.76	4.19	36.11	27.21	54.00	-26.79	Average
2500.000	29.98	27.80	4.19	36.15	25.82	54.00	-28.18	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2480.267	91.55	27.76	4.19	36.10	87.40	74.00	13.40	Peak
2483.500	42.13	27.76	4.19	36.11	37.97	74.00	-36.03	Peak
2483.897	44.15	27.76	4.19	36.11	39.99	74.00	-34.01	Peak
2500.000	42.00	27.80	4.19	36.15	37.84	74.00	-36.16	Peak
2480.003	90.94	27.76	4.19	36.10	86.79	54.00	32.79	Average
2483.500	31.06	27.76	4.19	36.11	26.90	54.00	-27.10	Average
2500.000	29.95	27.80	4.19	36.15	25.79	54.00	-28.21	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 2480MHz: Fundamental frequency.



**BUREAU
VERITAS**

Test Report No.: W7L-P22090015-4RF02

BT-LE_2M

CHANNEL	TX Channel 0	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310.000	42.44	27.38	4.08	35.68	38.22	74.00	-35.78	Peak
2310.920	44.74	27.38	4.08	35.68	40.52	74.00	-33.48	Peak
2390.000	42.23	27.56	4.16	35.88	38.07	74.00	-35.93	Peak
2402.585	96.85	27.59	4.17	35.91	92.70	74.00	18.70	Peak
2310.000	30.47	27.38	4.08	35.68	26.25	54.00	-27.75	Average
2390.000	30.86	27.56	4.16	35.88	26.70	54.00	-27.30	Average
2402.060	95.00	27.58	4.17	35.91	90.84	54.00	36.84	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310.000	43.11	27.38	4.08	35.68	38.89	74.00	-35.11	Peak
2389.250	45.80	27.56	4.16	35.87	41.65	74.00	-32.35	Peak
2390.000	43.35	27.56	4.16	35.88	39.19	74.00	-34.81	Peak
2401.535	96.36	27.58	4.17	35.90	92.21	74.00	18.21	Peak
2310.000	30.27	27.38	4.08	35.68	26.05	54.00	-27.95	Average
2390.000	30.91	27.56	4.16	35.88	26.75	54.00	-27.25	Average
2402.060	94.40	27.58	4.17	35.91	90.24	54.00	36.24	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 2402MHz: Fundamental frequency.



CHANNEL	TX Channel 19	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4880.000	30.69	31.03	7.01	34.03	34.70	54.00	-19.30	Average
4880.000	40.50	31.03	7.01	34.03	44.51	74.00	-29.49	Peak
7320.000	29.11	35.67	8.97	34.49	39.26	54.00	-14.74	Average
7320.000	39.26	35.67	8.97	34.49	49.41	74.00	-24.59	Peak
9760.000	29.98	38.51	11.16	34.20	45.45	54.00	-8.55	Average
9760.000	39.41	38.51	11.16	34.20	54.88	74.00	-19.12	Peak
2440.000	95.17	27.67	4.18	36.00	91.02	74.00	17.02	Peak

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4880.000	30.36	31.03	7.01	34.03	34.37	54.00	-19.63	Average
4880.000	40.19	31.03	7.01	34.03	44.20	74.00	-29.80	Peak
7320.000	29.01	35.67	8.97	34.49	39.16	54.00	-14.84	Average
7320.000	38.75	35.67	8.97	34.49	48.90	74.00	-25.10	Peak
9760.000	29.86	38.51	11.16	34.20	45.33	54.00	-8.67	Average
9760.000	39.69	38.51	11.16	34.20	55.16	74.00	-18.84	Peak
2440.000	95.44	27.67	4.18	36.00	91.29	74.00	17.29	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 2440MHz: Fundamental frequency.



CHANNEL	TX Channel 39	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2480.498	93.03	27.76	4.19	36.10	88.88	74.00	14.88	Peak
2483.500	52.45	27.76	4.19	36.11	48.29	74.00	-25.71	Peak
2483.732	54.98	27.76	4.19	36.11	50.82	74.00	-23.18	Peak
2500.000	43.12	27.80	4.19	36.15	38.96	74.00	-35.04	Peak
2479.970	90.91	27.76	4.19	36.10	86.76	54.00	32.76	Average
2483.500	32.02	27.76	4.19	36.11	27.86	54.00	-26.14	Average
2500.000	29.89	27.80	4.19	36.15	25.73	54.00	-28.27	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2480.465	91.38	27.76	4.19	36.10	87.23	74.00	13.23	Peak
2483.500	54.10	27.76	4.19	36.11	49.94	74.00	-24.06	Peak
2483.600	56.50	27.76	4.19	36.11	52.34	74.00	-21.66	Peak
2500.000	42.92	27.80	4.19	36.15	38.76	74.00	-35.24	Peak
2480.003	89.27	27.76	4.19	36.10	85.12	54.00	31.12	Average
2483.500	31.20	27.76	4.19	36.11	27.04	54.00	-26.96	Average
2500.000	30.12	27.80	4.19	36.15	25.96	54.00	-28.04	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 2480MHz: Fundamental frequency.



BT-LE _S2

CHANNEL	TX Channel 0	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310.000	42.21	27.38	4.08	35.68	37.99	74.00	-36.01	Peak
2322.050	46.32	27.41	4.09	35.71	42.11	74.00	-31.89	Peak
2390.000	43.22	27.56	4.16	35.88	39.06	74.00	-34.94	Peak
2402.270	95.65	27.58	4.17	35.91	91.49	74.00	17.49	Peak
2310.000	29.94	27.38	4.08	35.68	25.72	54.00	-28.28	Average
2390.000	30.39	27.56	4.16	35.88	26.23	54.00	-27.77	Average
2402.060	95.46	27.58	4.17	35.91	91.30	54.00	37.30	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310.000	42.39	27.38	4.08	35.68	38.17	74.00	-35.83	Peak
2385.260	44.42	27.55	4.16	35.86	40.27	74.00	-33.73	Peak
2390.000	42.59	27.56	4.16	35.88	38.43	74.00	-35.57	Peak
2402.270	95.08	27.58	4.17	35.91	90.92	74.00	16.92	Peak
2310.000	29.91	27.38	4.08	35.68	25.69	54.00	-28.31	Average
2390.000	30.39	27.56	4.16	35.88	26.23	54.00	-27.77	Average
2402.060	94.55	27.58	4.17	35.91	90.39	54.00	36.39	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 2402MHz: Fundamental frequency.



CHANNEL	TX Channel 19	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4880.000	31.69	31.03	7.01	34.03	35.70	54.00	-18.30	Average
4880.000	41.50	31.03	7.01	34.03	45.51	74.00	-28.49	Peak
7320.000	28.11	35.67	8.97	34.49	38.26	54.00	-15.74	Average
7320.000	38.26	35.67	8.97	34.49	48.41	74.00	-25.59	Peak
9760.000	30.98	38.51	11.16	34.20	46.45	54.00	-7.55	Average
9760.000	38.41	38.51	11.16	34.20	53.88	74.00	-20.12	Peak
2440.000	94.52	27.67	4.18	36.00	90.37	74.00	16.37	Peak

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4880.000	31.36	31.03	7.01	34.03	35.37	54.00	-18.63	Average
4880.000	41.19	31.03	7.01	34.03	45.20	74.00	-28.80	Peak
7320.000	30.01	35.67	8.97	34.49	40.16	54.00	-13.84	Average
7320.000	37.75	35.67	8.97	34.49	47.90	74.00	-26.10	Peak
9760.000	28.86	38.51	11.16	34.20	44.33	54.00	-9.67	Average
9760.000	38.69	38.51	11.16	34.20	54.16	74.00	-19.84	Peak
2440.000	92.55	27.67	4.18	36.00	88.40	74.00	14.40	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 2440MHz: Fundamental frequency.



CHANNEL	TX Channel 39	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2479.739	90.80	27.76	4.19	36.10	86.65	74.00	12.65	Peak
2483.500	43.28	27.76	4.19	36.11	39.12	74.00	-34.88	Peak
2487.758	43.89	27.77	4.19	36.12	39.73	74.00	-34.27	Peak
2500.000	41.62	27.80	4.19	36.15	37.46	74.00	-36.54	Peak
2480.003	91.21	27.76	4.19	36.10	87.06	54.00	33.06	Average
2483.500	30.97	27.76	4.19	36.11	26.81	54.00	-27.19	Average
2500.000	29.91	27.80	4.19	36.15	25.75	54.00	-28.25	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2480.267	90.06	27.76	4.19	36.10	85.91	74.00	11.91	Peak
2483.500	42.64	27.76	4.19	36.11	38.48	74.00	-35.52	Peak
2485.514	44.14	27.77	4.19	36.11	39.99	74.00	-34.01	Peak
2500.000	42.50	27.80	4.19	36.15	38.34	74.00	-35.66	Peak
2480.003	89.37	27.76	4.19	36.10	85.22	54.00	31.22	Average
2483.500	30.69	27.76	4.19	36.11	26.53	54.00	-27.47	Average
2500.000	29.99	27.80	4.19	36.15	25.83	54.00	-28.17	Average

REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
- 2480MHz: Fundamental frequency.



BT-LE_S8

CHANNEL	TX Channel 0	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310.000	42.21	27.38	4.08	35.68	37.99	74.00	-36.01	Peak
2382.530	44.94	27.54	4.15	35.86	40.77	74.00	-33.23	Peak
2390.000	43.02	27.56	4.16	35.88	38.86	74.00	-35.14	Peak
2402.270	95.98	27.58	4.17	35.91	91.82	74.00	17.82	Peak
2310.000	29.46	27.38	4.08	35.68	25.24	54.00	-28.76	Average
2390.000	29.85	27.56	4.16	35.88	25.69	54.00	-28.31	Average
2402.060	92.76	27.58	4.17	35.91	88.60	54.00	34.60	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310.000	42.31	27.38	4.08	35.68	38.09	74.00	-35.91	Peak
2356.385	44.26	27.48	4.13	35.79	40.08	74.00	-33.92	Peak
2390.000	42.35	27.56	4.16	35.88	38.19	74.00	-35.81	Peak
2402.270	94.22	27.58	4.17	35.91	90.06	74.00	16.06	Peak
2310.000	29.43	27.38	4.08	35.68	25.21	54.00	-28.79	Average
2390.000	29.82	27.56	4.16	35.88	25.66	54.00	-28.34	Average
2402.060	90.72	27.58	4.17	35.91	86.56	54.00	32.56	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 2402MHz: Fundamental frequency.



CHANNEL	TX Channel 19	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4880.000	31.94	31.03	7.01	34.03	35.95	54.00	-18.05	Average
4880.000	41.99	31.03	7.01	34.03	46.00	74.00	-28.00	Peak
7320.000	29.43	35.67	8.97	34.49	39.58	54.00	-14.42	Average
7320.000	39.57	35.67	8.97	34.49	49.72	74.00	-24.28	Peak
9760.000	27.87	38.51	11.16	34.20	43.34	54.00	-10.66	Average
9760.000	38.12	38.51	11.16	34.20	53.59	74.00	-20.41	Peak
2440.000	94.95	27.67	4.18	36.00	90.80	74.00	16.80	Peak

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4880.000	31.96	31.03	7.01	34.03	35.97	54.00	-18.03	Average
4880.000	42.50	31.03	7.01	34.03	46.51	74.00	-27.49	Peak
7320.000	29.29	35.67	8.97	34.49	39.44	54.00	-14.56	Average
7320.000	39.66	35.67	8.97	34.49	49.81	74.00	-24.19	Peak
9760.000	27.36	38.51	11.16	34.20	42.83	54.00	-11.17	Average
9760.000	38.16	38.51	11.16	34.20	53.63	74.00	-20.37	Peak
2440.000	92.03	27.67	4.18	36.00	87.88	74.00	13.88	Peak

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 2440MHz: Fundamental frequency.



CHANNEL	TX Channel 39	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2480.234	91.20	27.76	4.19	36.10	87.05	74.00	13.05	Peak
2483.500	43.09	27.76	4.19	36.11	38.93	74.00	-35.07	Peak
2485.679	44.06	27.77	4.19	36.11	39.91	74.00	-34.09	Peak
2500.000	41.04	27.80	4.19	36.15	36.88	74.00	-37.12	Peak
2480.003	89.64	27.76	4.19	36.10	85.49	54.00	31.49	Average
2483.500	30.55	27.76	4.19	36.11	26.39	54.00	-27.61	Average
2500.000	29.26	27.80	4.19	36.15	25.10	54.00	-28.90	Average

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2480.234	91.95	27.76	4.19	36.10	87.80	74.00	13.80	Peak
2483.500	43.02	27.76	4.19	36.11	38.86	74.00	-35.14	Peak
2484.161	44.07	27.77	4.19	36.11	39.92	74.00	-34.08	Peak
2500.001	41.16	27.80	4.20	36.15	37.01	74.00	-36.99	Peak
2480.003	89.86	27.76	4.19	36.10	85.71	54.00	31.71	Average
2483.500	30.55	27.76	4.19	36.11	26.39	54.00	-27.61	Average
2500.000	29.22	27.80	4.19	36.15	25.06	54.00	-28.94	Average

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Emission level – Limit value.
2. 2480MHz: Fundamental frequency.



3.3 6 dB BANDWIDTH MEASUREMENT

3.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

3.3.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Meter	ANRITSU	ML2495A	1506002	Feb. 25,21	Feb. 24,22
Power Meter	ANRITSU	ML2495A	1506002	Feb. 24,22	Feb. 23,23
EXA Signal Analyzer	KEYSIGHT	N9010A-526	MY54510322	Feb. 25,21	Feb. 24,22
EXA Signal Analyzer	KEYSIGHT	N9010A-526	MY54510322	Feb. 24,22	Feb. 23,23
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	Apr. 26,21	Apr. 25,22
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	Apr. 25,22	Apr. 24,23
Power Sensor	ANRITSU	MA2411B	1339352	Feb. 25,21	Feb. 24,22
Power Sensor	ANRITSU	MA2411B	1339352	Feb. 24,22	Feb. 23,23

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in RF Oven room.

3.3.3 TEST PROCEDURE

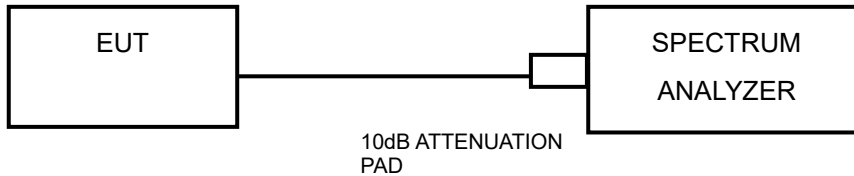
1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) \geq 3 RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



3.3.4 DEVIATION FROM TEST STANDARD

No deviation.

3.3.5 TEST SETUP



3.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.



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3.3.7 TEST RESULTS

Please Refer to Appendix1/2 Of this test report.



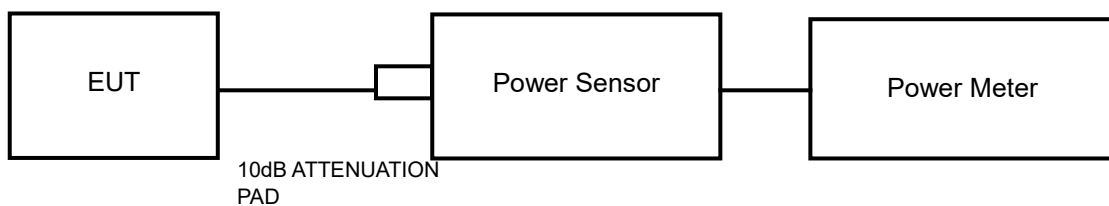
3.4 CONDUCTED OUTPUT POWER

3.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

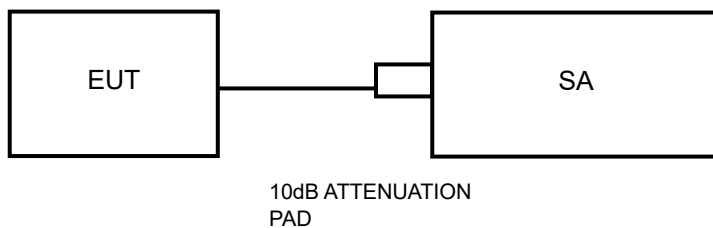
For systems using digital modulation in the 2400–2483.5 MHz band: 1 Watt (30dBm)

3.4.2 TEST SETUP

BT:



2.4G wifi:



3.4.3 TEST INSTRUMENTS

Refer to section 3.2.2 to get information of above instrument.

3.4.4 TEST PROCEDURES

A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the power level.

3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.



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3.4.7 TEST RESULTS

3.4.7.1 MAXIMUM PEAK OUTPUT POWER

Please Refer to Appendix1/2 Of this test report.



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3.4.7.2 AVERAGE OUTPUT POWER (FOR REFERENCE)

The average power sensor was used on the output port of the EUT. A power meter was used to read the response of the power sensor. Record the power level.

Please Refer to Appendix1/2 Of this test report.

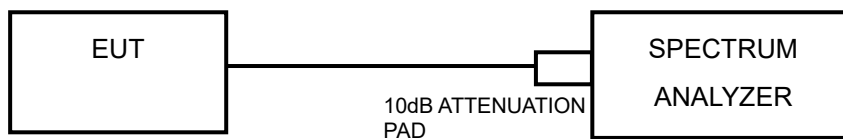


3.5 POWER SPECTRAL DENSITY MEASUREMENT

3.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm/3KHz.

3.5.2 TEST SETUP



3.5.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.5.4 TEST PROCEDURE

1. Set the span to 1.5 times the DTS bandwidth
2. Set the RBW = 3 kHz, VBW \geq 3 x RBW, Detector = peak.
3. Sweep time = auto couple, Trace mode = max hold, allow trace to fully stabilize.
4. Use the peak marker function to determine the maximum amplitude level.

3.5.5 DEVIATION FROM TEST STANDARD

No deviation.

3.5.6 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.



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3.5.7 TEST RESULTS

Please Refer to Appendix1/2 Of this test report.

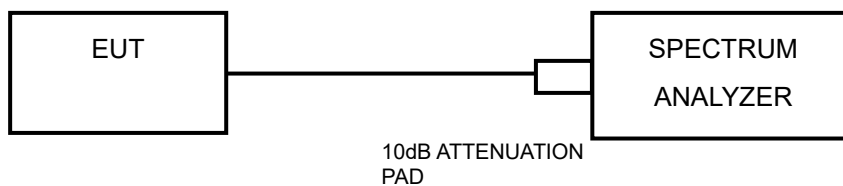


3.6 OUT OF BAND EMISSION MEASUREMENT

3.6.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

Below -20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

3.6.2 TEST SETUP



3.6.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.6.4 TEST PROCEDURE

MEASUREMENT PROCEDURE REF

1. Set the RBW = 100 kHz.
2. Set the VBW \geq 300 kHz.
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.



MEASUREMENT PROCEDURE OOB

1. Set RBW = 100 kHz.
2. Set VBW \geq 300 kHz.
3. Set span to encompass the spectrum to be examined
4. Detector = peak.
5. Trace Mode = max hold.
6. Sweep = auto couple.

3.6.5 DEVIATION FROM TEST STANDARD

No deviation.

3.6.6 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.6.7 TEST RESULTS

The spectrum plots are attached on the following images. D1 line indicates the highest level. D2 line indicates the 20dB offset below D1. It shows compliance to the requirement.

Please Refer to Appendix 1/2 Of this test report.



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4 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).



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VERITAS

5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.



6 Appendix 1 BLE

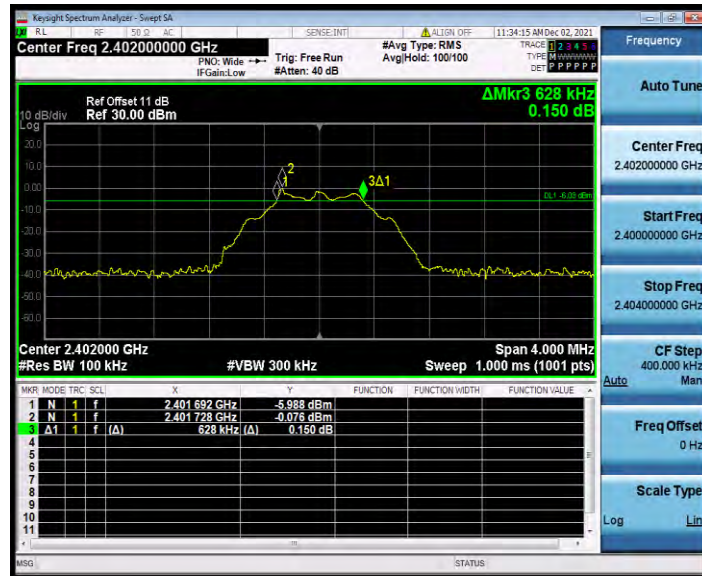
DTS BANDWIDTH

TEST RESULT

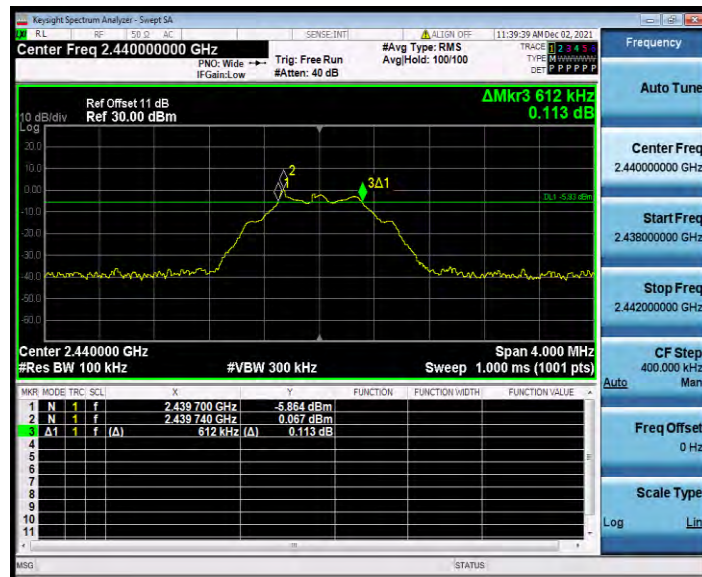
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_125K	Ant1	2402	0.628	2401.692	2402.320	0.5	PASS
		2440	0.612	2439.700	2440.312	0.5	PASS
		2480	0.684	2479.664	2480.348	0.5	PASS
BLE_1M	Ant1	2402	0.668	2401.668	2402.336	0.5	PASS
		2440	0.672	2439.672	2440.344	0.5	PASS
		2480	0.652	2479.684	2480.336	0.5	PASS
BLE_2M	Ant1	2402	1.144	2401.432	2402.576	0.5	PASS
		2440	1.172	2439.420	2440.592	0.5	PASS
		2480	1.236	2479.356	2480.592	0.5	PASS
BLE_500K	Ant1	2402	0.672	2401.676	2402.348	0.5	PASS
		2440	0.656	2439.684	2440.340	0.5	PASS
		2480	0.660	2479.684	2480.344	0.5	PASS



BLE_125K_Ant1_2402



BLE_125K_Ant1_2440

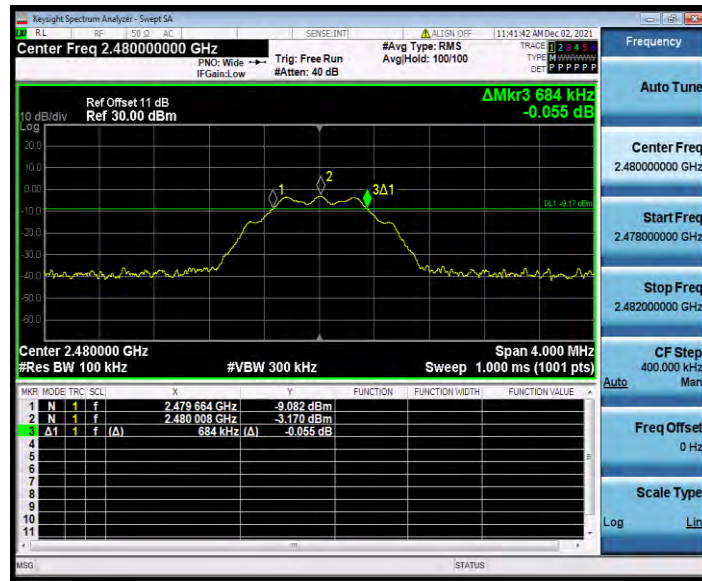


BLE_125K_Ant1_2480



BUREAU VERITAS

Test Report No.: W7L-P22090015-4RF02



BLE_1M_Ant1_2402

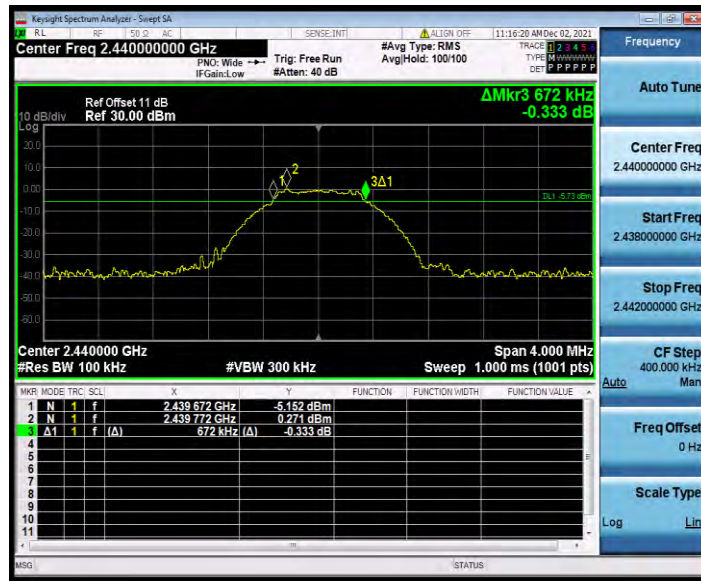


BLE_1M_Ant1_2440

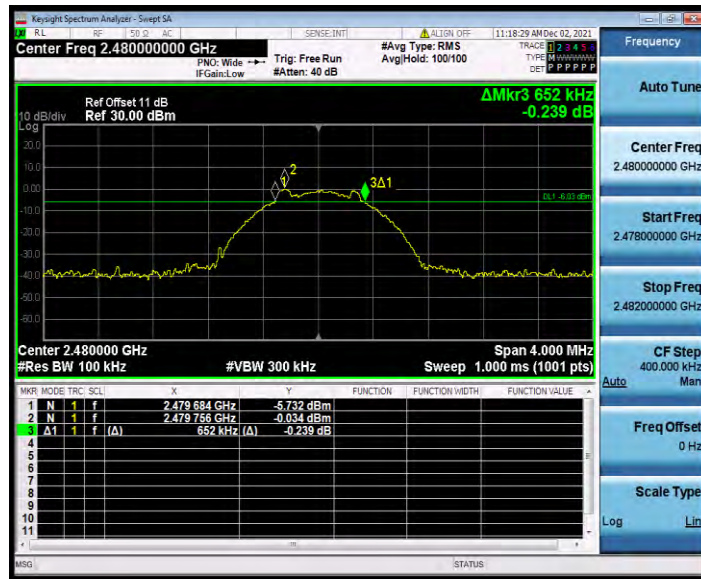


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Test Report No.: W7L-P22090015-4RF02



BLE_1M_Ant1_2480



BLE_2M_Ant1_2402

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Test Report No.: W7L-P22090015-4RF02



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

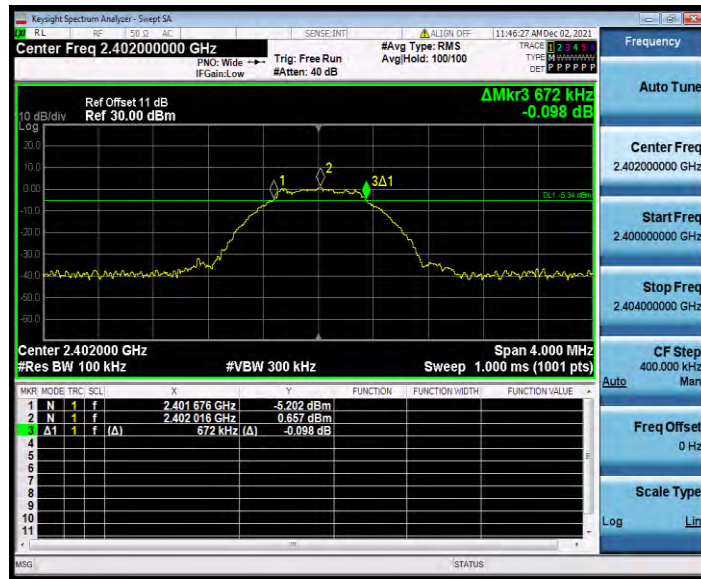


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BLE_500K_Ant1_2402

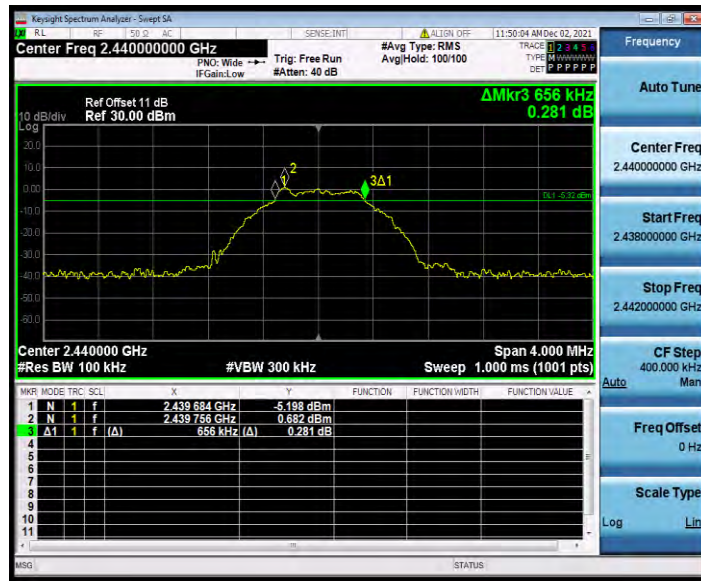


BLE_500K_Ant1_2440



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BLE_500K_Ant1_2480



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OCCUPIED CHANNEL BANDWIDTH

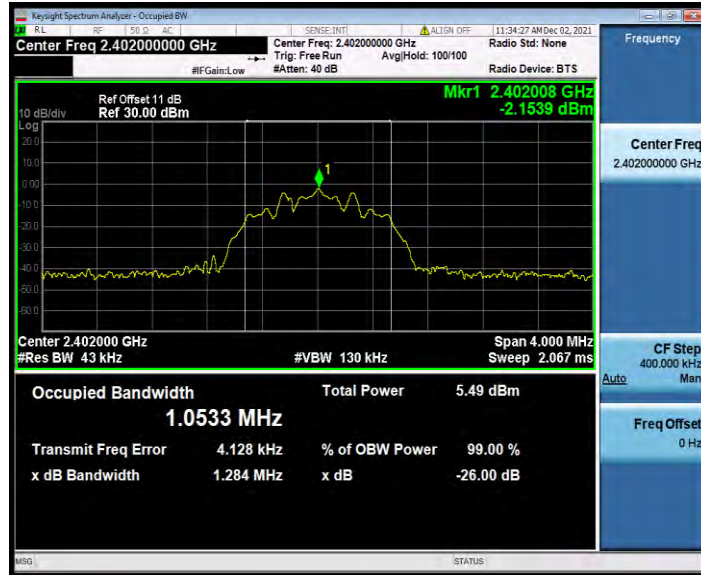
TEST RESULT

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_125K	Ant1	2402	1.0533	2401.477	2402.531	---	PASS
		2440	1.0570	2439.479	2440.536	---	PASS
		2480	1.0559	2479.477	2480.533	---	PASS
BLE_1M	Ant1	2402	1.0137	2401.502	2402.516	---	PASS
		2440	1.0187	2439.501	2440.519	---	PASS
		2480	1.0153	2479.500	2480.515	---	PASS
BLE_2M	Ant1	2402	2.0492	2401.001	2403.050	---	PASS
		2440	2.0543	2439.001	2441.055	---	PASS
		2480	2.0411	2478.993	2481.034	---	PASS
BLE_500K	Ant1	2402	1.0038	2401.497	2402.501	---	PASS
		2440	1.0165	2439.502	2440.518	---	PASS
		2480	1.0115	2479.501	2480.512	---	PASS



TEST GRAPHS

BLE_125K_Ant1_2402



BLE_125K_Ant1_2440



BLE_125K_Ant1_2480



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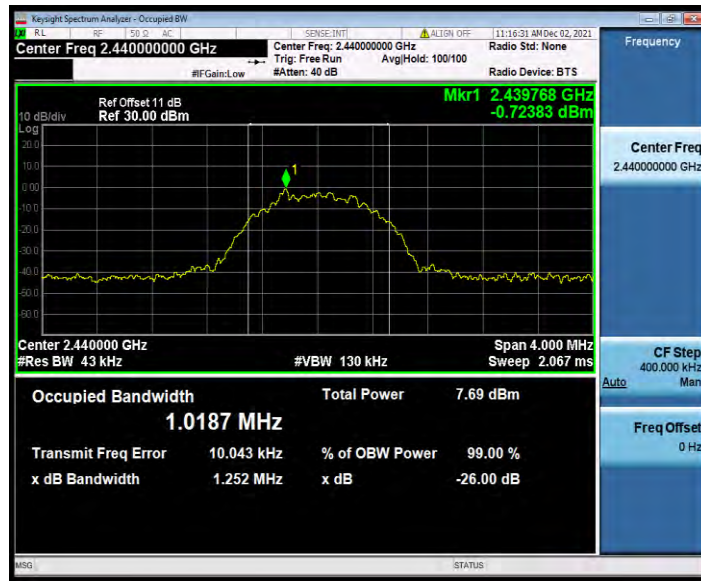
Test Report No.: W7L-P22090015-4RF02



BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



BLE_2M_Ant1_2402



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Test Report No.: W7L-P22090015-4RF02



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



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Test Report No.: W7L-P22090015-4RF02



BLE_500K_Ant1_2402

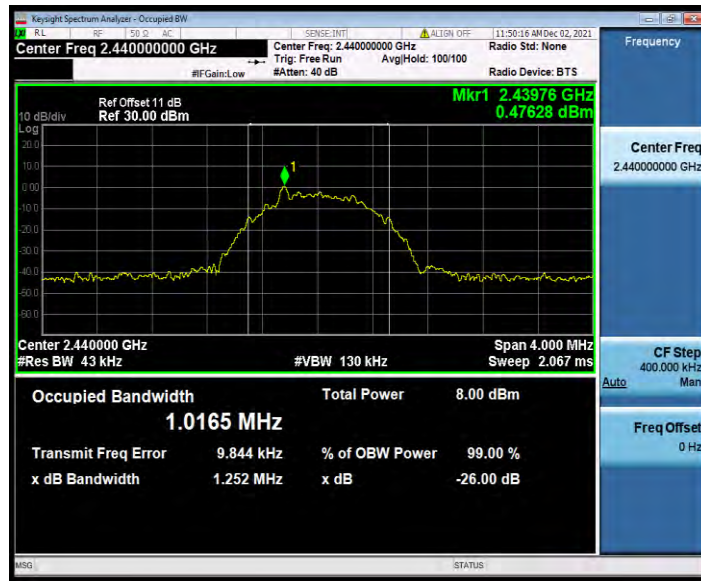


BLE_500K_Ant1_2440



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Test Report No.: W7L-P22090015-4RF02



BLE_500K_Ant1_2480





MAXIMUM CONDUCTED OUTPUT POWER PEAK POWER TEST RESULT

TestMode	Antenna	Channel	Result[dBm]	Result[mW]	Limit[dBm]	Verdict	Power setting
1M	Ant1	2402	1.68	1.47	≤30	PASS	default
		2440	1.35	1.36	≤30	PASS	default
		2480	0.26	1.06	≤30	PASS	default
2M	Ant1	2402	1.72	1.49	≤30	PASS	default
		2440	1.28	1.34	≤30	PASS	default
		2480	0.31	1.07	≤30	PASS	default
BLE_125K	Ant1	2402	1.58	1.44	≤30	PASS	default
		2440	1.16	1.31	≤30	PASS	default
		2480	0.25	1.06	≤30	PASS	default
BLE_500K	Ant1	2402	1.70	1.48	≤30	PASS	default
		2440	1.32	1.36	≤30	PASS	default
		2480	0.29	1.07	≤30	PASS	default

AVERAGE POWER TEST RESULT

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict	Power setting
1M	Ant1	2402	0.60	/	PASS	default
		2440	0.25	/	PASS	default
		2480	-0.94	/	PASS	default
2M	Ant1	2402	-0.85	/	PASS	default
		2440	-1.22	/	PASS	default
		2480	-2.16	/	PASS	default
BLE_125K	Ant1	2402	1.15	/	PASS	default
		2440	0.75	/	PASS	default
		2480	-0.33	/	PASS	default
BLE_500K	Ant1	2402	0.26	/	PASS	default
		2440	-0.12	/	PASS	default
		2480	-1.22	/	PASS	default



MAXIMUM POWER SPECTRAL DENSITY TEST RESULT

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_125K	Ant1	2402	-5.04	≤8	PASS
		2440	-5.47	≤8	PASS
		2480	-6.14	≤8	PASS
BLE_1M	Ant1	2402	-14.99	≤8	PASS
		2440	-15.54	≤8	PASS
		2480	-16.05	≤8	PASS
BLE_2M	Ant1	2402	-18.10	≤8	PASS
		2440	-18.68	≤8	PASS
		2480	-19.41	≤8	PASS
BLE_500K	Ant1	2402	-5.01	≤8	PASS
		2440	-5.55	≤8	PASS
		2480	-6.20	≤8	PASS



**BUREAU
VERITAS**

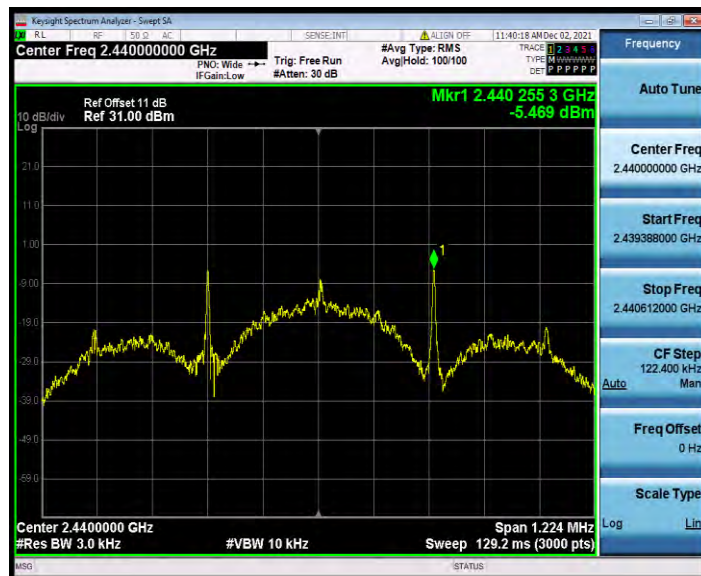
Test Report No.: W7L-P22090015-4RF02

TEST GRAPHS

BLE_125K_Ant1_2402



BLE_125K_Ant1_2440



BLE_125K_Ant1_2480

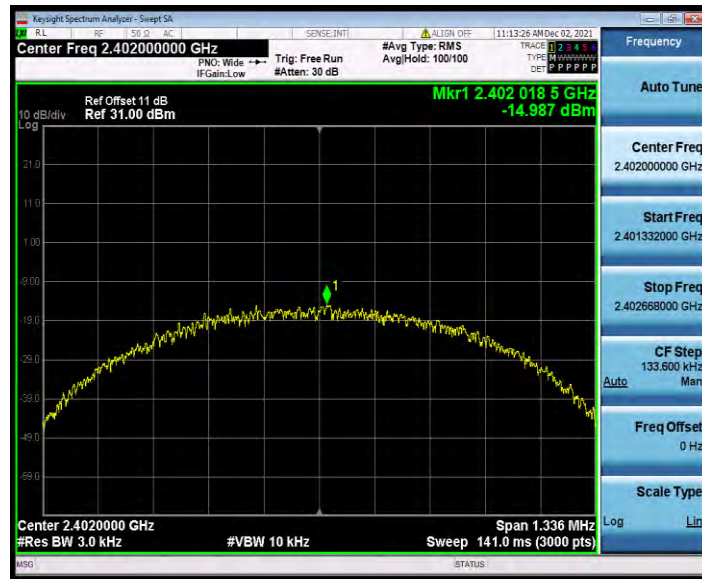


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BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



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Test Report No.: W7L-P22090015-4RF02



BLE_1M_Ant1_2480



BLE_2M_Ant1_2402



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Test Report No.: W7L-P22090015-4RF02



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480