

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	(dg)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.39	39.63	Pk	31.9	-24	0	47.53	-	-	74	-26.47	40	111	V
2	* ** 2.38939	42.91	Pk	31.9	-24	0	50.81	1	-	74	-23.19	40	111	V
3	* ** 2.39	26.73	RMS	31.9	-24	.2	34.83	54	-19.17	-	-	40	111	V
4	* ** 2.38946	27.14	RMS	31.9	-24	.2	35.24	54	-18.76	-	-	40	111	V

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

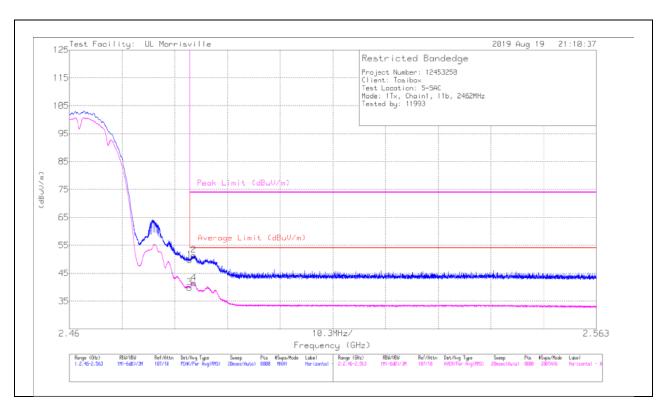
RMS - RMS detection

DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band

# **BANDEDGE (HIGH CHANNEL, CH 11)**

### **HORIZONTAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	Margin (dR)	Peak Limit (dBuV/m)	Margin	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.4835	41.93	Pk	32.3	-24.5	0	49.73	-	-	74	-24.27	182	182	Н
2	* ** 2.48429	43.67	Pk	32.3	-24.5	0	51.47	-	-	74	-22.53	182	182	Н
3	* ** 2.4835	31.85	RMS	32.3	-24.5	.2	39.85	54	-14.15	-	-	182	182	Н
4	* ** 2.48434	33.51	RMS	32.3	-24.5	.2	41.51	54	-12.49	-	-	182	182	Н

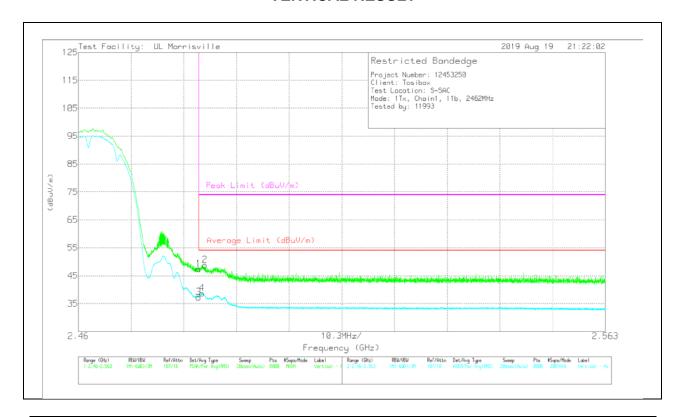
<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	(dg)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.4835	39.6	Pk	32.3	-24.5	0	47.4	-	-	74	-26.6	204	256	V
3	* ** 2.4835	29.23	RMS	32.3	-24.5	.2	37.23	54	-16.77	1	-	204	256	V
4	* ** 2.48414	30.67	RMS	32.3	-24.5	.2	38.67	54	-15.33	-	-	204	256	V
2	* ** 2.48467	40.99	Pk	32.3	-24.5	0	48.79	-	-	74	-25.21	204	256	V

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

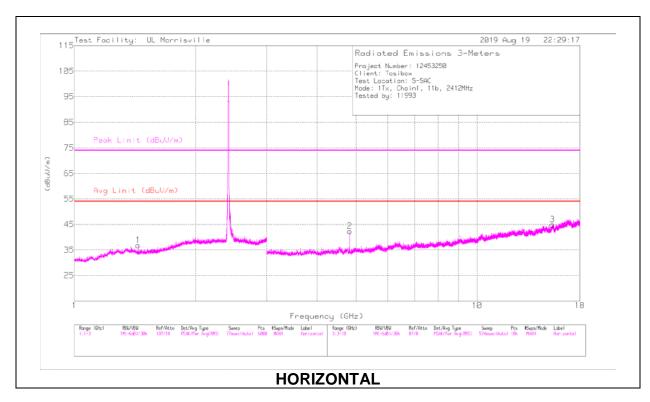
RMS - RMS detection

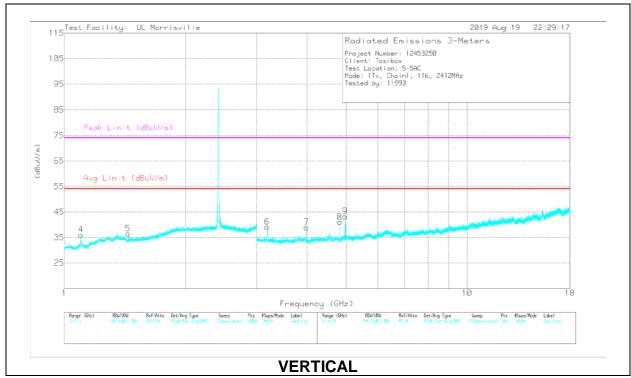
DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band

#### HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL, CH 1 RESULTS





DATE: 2019-09-04 IC: 25009-LOCK500IC

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit		Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 1.44011	36.58	PK2	28.1	-22.7	0	41.98	-	-	74	-32.02	63	163	Н
	* ** 1.43997	27.38	MAv1	28.1	-22.7	.2	32.98	54	-21.02	-	-	63	163	Н
4	* ** 1.09788	39.89	PK2	27.6	-24.3	0	43.19	-	-	74	-30.81	52	199	V
	* ** 1.09793	24.07	MAv1	27.6	-24.3	.2	27.57	54	-26.43	-	-	52	199	V
5	* ** 1.44	37.76	PK2	28.1	-22.7	0	43.16	-	-	74	-30.84	217	143	V
	* ** 1.44002	28.11	MAv1	28.1	-22.7	.2	33.71	54	-20.29	-	-	217	143	V
2	* ** 4.82375	43.77	PK2	34.1	-30.9	0	46.97	-	-	74	-27.03	243	143	Н
	* ** 4.82399	38.09	MAv1	34.1	-30.9	.2	41.49	54	-12.51	-	-	243	143	Н
3	* ** 15.37822	33.83	PK2	39.9	-21.7	0	52.03	-	-	74	-21.97	0	235	Н
	* ** 15.37812	21.68	MAv1	39.9	-21.7	.2	40.08	54	-13.92	-	-	0	235	Н
7	* ** 3.99657	46.67	PK2	33.4	-31.8	0	48.27	-	-	74	-25.73	130	229	V
	* ** 3.99722	28.11	MAv1	33.4	-31.8	.2	29.91	54	-24.09	-	-	130	229	V
8	* ** 4.82378	40.78	PK2	34.1	-30.9	0	43.98	-	-	74	-30.02	135	192	V
	* ** 4.82392	31.53	MAv1	34.1	-30.9	.2	34.93	54	-19.07	-	1	135	192	V
9	* ** 4.97736	50.16	PK2	34.1	-31.1	0	53.16	-	-	74	-20.84	81	102	V
	* ** 4.9775	28.21	MAv1	34.1	-31.1	.2	31.41	54	-22.59	-	-	81	102	V
6	3.18584	38.54	Pk	33.1	-32.5	0	39.14	-	-	-	-	0-360	199	V

PK2 - Maximum Peak

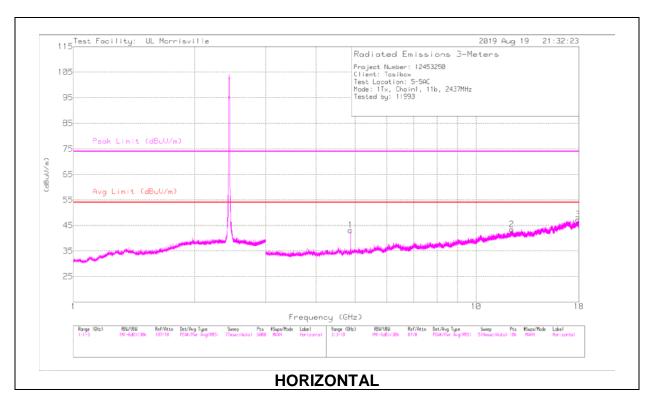
MAv1 - Maximum RMS Average

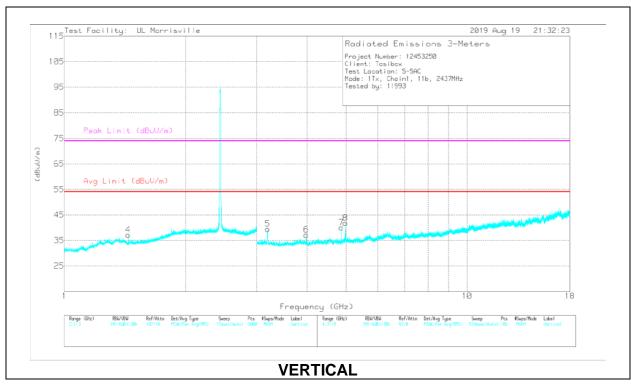
Pk - Peak detector

DATE: 2019-09-04

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band \*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

# MID CHANNEL, CH 6 RESULTS





DATE: 2019-09-04

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	(dB)	Corrected Reading (dBuV/m)	Avg Limit	_	Peak Limit (dBuV/m)		Azimuth (Degs)	Height (cm)	Polarity
4	* ** 1.44015	37.69	PK2	28.1	-22.7	0	43.09	-	-	74	-30.91	14	103	V
	* ** 1.44001	28.45	MAv1	28.1	-22.7	.2	34.05	54	-19.95	-	-	14	103	V
1	* ** 4.87393	43.91	PK2	34	-30.7	0	47.21	-	-	74	-26.79	240	144	Н
	* ** 4.87391	38.58	MAv1	34	-30.7	.2	42.08	54	-11.92	-	-	240	144	Н
2	* ** 12.26557	34.02	PK2	38.9	-23.7	0	49.22	-	-	74	-24.78	339	281	Н
	* ** 12.26551	22.2	MAv1	38.9	-23.7	.2	37.6	54	-16.4	-	-	339	281	Н
3	* ** 17.93915	33.02	PK2	41.2	-21.2	0	53.02	-	-	74	-20.98	217	260	Н
	* ** 17.93873	21.52	MAv1	41.2	-21.2	.2	41.72	54	-12.28	-	-	217	260	Н
6	* ** 3.98968	45.66	PK2	33.4	-31.7	0	47.36	-	-	74	-26.64	50	105	V
	* ** 3.98901	27.72	MAv1	33.4	-31.7	.2	29.62	54	-24.38	-	-	50	105	V
7	* ** 4.87401	41.84	PK2	34	-30.7	0	45.14	-	-	74	-28.86	219	116	V
	* ** 4.87392	35.64	MAv1	34	-30.7	.2	39.14	54	-14.86	-	-	219	116	V
8	* ** 4.9889	46.95	PK2	34.1	-31.1	0	49.95	-	-	74	-24.05	76	149	V
	* ** 4.98889	27.65	MAv1	34.1	-31.1	.2	30.85	54	-23.15	-	-	76	149	V
5	3.19918	38.89	Pk	33.1	-32.5	0	39.49	-	-	-	-	0-360	101	V

PK2 - Maximum Peak

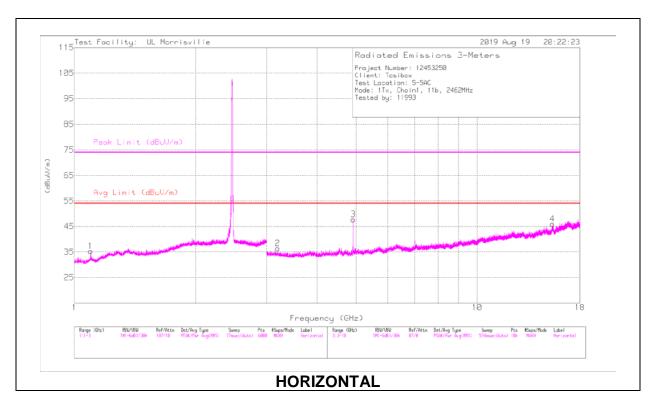
MAv1 - Maximum RMS Average

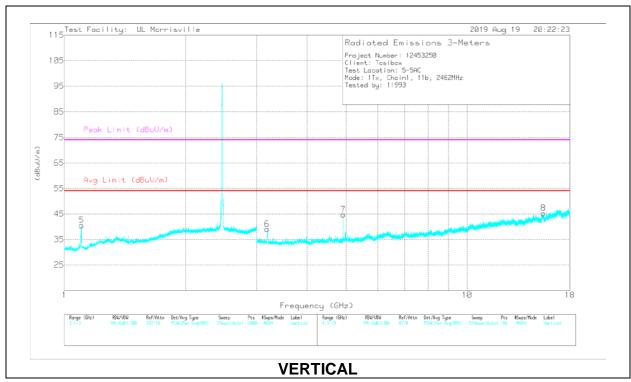
Pk - Peak detector

DATE: 2019-09-04

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band \*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

# **HIGH CHANNEL, CH 11 RESULTS**





DATE: 2019-09-04

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	(dB)	Corrected Reading (dBuV/m)	Avg Limit	(dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 1.09855	37.82	PK2	27.6	-24.3	0	41.12	-	-	74	-32.88	148	139	Н
	* ** 1.09788	23.93	MAv1	27.6	-24.3	.2	27.43	54	-26.57	-	-	148	139	Н
5	* ** 1.10324	36.38	PK2	27.7	-24.2	0	39.88	-	-	74	-34.12	354	173	V
	* ** 1.10346	23.83	MAv1	27.7	-24.2	.2	27.53	54	-26.47	-	-	354	173	V
3	* ** 4.92399	46.68	PK2	34	-30.8	0	49.88	-	-	74	-24.12	237	137	Н
	* ** 4.92396	43.55	MAv1	34	-30.8	.2	46.95	54	-7.05	-	-	237	137	Н
4	* ** 15.37993	34.04	PK2	39.9	-21.6	0	52.34	-	-	74	-21.66	275	299	Н
	* ** 15.38011	21.87	MAv1	39.9	-21.6	.2	40.37	54	-13.63	-	-	275	299	Н
7	* ** 4.92388	45.24	PK2	34	-30.8	0	48.44	-	-	74	-25.56	221	142	V
	* ** 4.92397	40.78	MAv1	34	-30.8	.2	44.18	54	-9.82	-	-	221	142	V
8	* ** 15.47286	34.09	PK2	39.9	-22.3	0	51.69	-	-	74	-22.31	3	218	V
	* ** 15.47245	22.23	MAv1	39.9	-22.3	.2	40.03	54	-13.97	-	-	3	218	V
6	3.18668	38.45	Pk	33.1	-32.5	0	39.05	-	-	-	-	0-360	101	V
2	3.19918	35.79	Pk	33.1	-32.5	0	36.39	-	-	-	-	0-360	101	Н

PK2 - Maximum Peak

MAv1 - Maximum RMS Average

Pk - Peak detector

DATE: 2019-09-04

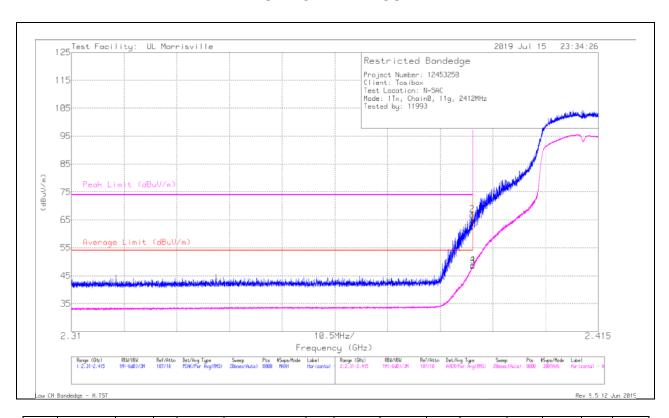
<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band \*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

# 9.1.2. TX 1-18 GHz 802.11g MODE IN THE 2.4 GHz BAND

#### 1TX Antenna 1 MODE

# **BANDEDGE (LOW CHANNEL, CH 1)**

#### HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)		AT0067 AF (dBuV/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	(dR)	Peak Limit (dBuV/m)	iviargin	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.39	56.94	Pk	32	-24.4	0	64.54	-	-	74	-9.46	316	370	Н
2	* ** 2.38988	59.26	Pk	32	-24.4	0	66.86	-	-	74	-7.14	316	370	Н
3	* ** 2.39	39.84	RMS	32	-24.4	1.06	48.5	54	-5.5	-	-	316	370	Н
4	* ** 2.38998	40.12	RMS	32	-24.4	1.06	48.78	54	-5.22	-	-	316	370	Н

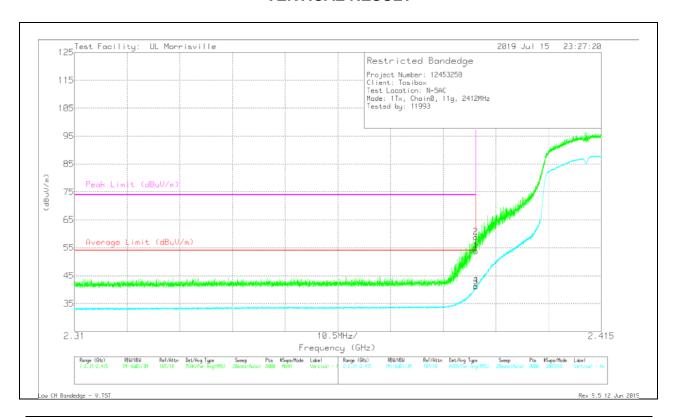
<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band



Marker	Frequency (GHz)	Meter Reading (dBuV)		AT0067 AF (dBuV/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	(dR)	Peak Limit (dBuV/m)		Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.39	46.19	Pk	32	-24.4	0	53.79	-	-	74	-20.21	342	136	V
2	* ** 2.38992	51.19	Pk	32	-24.4	0	58.79	-	-	74	-15.21	342	136	V
3	* ** 2.39	32.46	RMS	32	-24.4	1.06	41.12	54	-12.88	-	-	342	136	V
4	* ** 2.38998	32.71	RMS	32	-24.4	1.06	41.37	54	-12.63	-	-	342	136	V

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

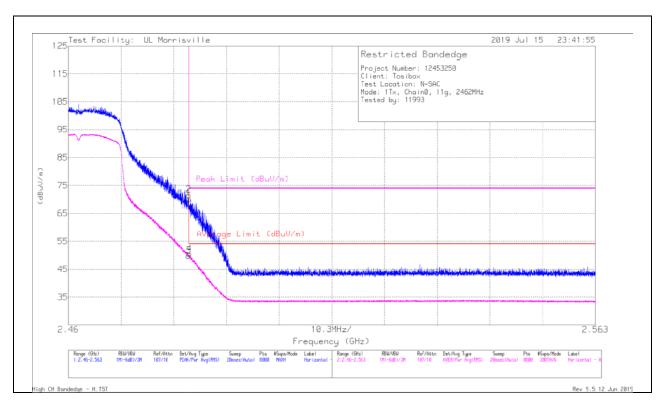
RMS - RMS detection

DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band

# **BANDEDGE (HIGH CHANNEL, CH 11)**

### **HORIZONTAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBuV)		AT0067 AF (dBuV/m)	Amp/CbI/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Limit	(dB)	Peak Limit (dBuV/m)		Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.4835	62.08	Pk	32.4	-24.3	0	70.18	-	-	74	-3.82	19	365	Н
2	* ** 2.48351	63.54	Pk	32.4	-24.3	0	71.64	-	-	74	-2.36	19	365	Н
3	* ** 2.4835	41.69	RMS	32.4	-24.3	1.06	50.85	54	-3.15	-	-	19	365	Н
4	* ** 2.48364	42.37	RMS	32.4	-24.3	1.06	51.53	54	-2.47	-	-	19	365	Н

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band



Marker	Frequency (GHz)	Meter Reading (dBuV)		AT0067 AF (dBuV/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	Margin (dR)	Peak Limit (dBuV/m)	Margin	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.4835	59.67	Pk	32.4	-24.3	0	67.77	1	-	74	-6.23	256	348	V
2	* ** 2.4836	59.75	Pk	32.4	-24.3	0	67.85	-	-	74	-6.15	256	348	V
3	* ** 2.4835	39.47	RMS	32.4	-24.3	1.06	48.63	54	-5.37	-	-	256	348	V
4	* ** 2.48362	40.14	RMS	32.4	-24.3	1.06	49.3	54	-4.7	-	-	256	348	V

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

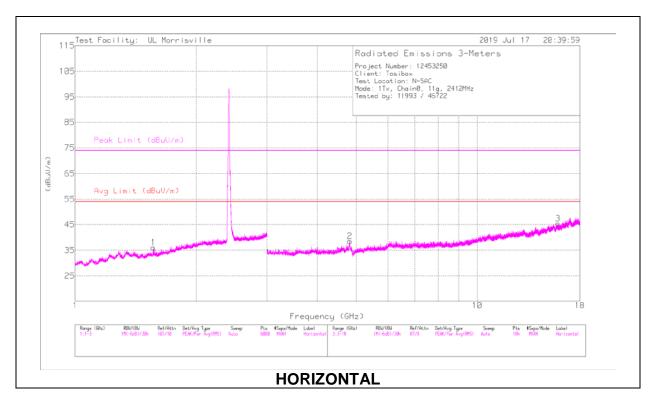
RMS - RMS detection

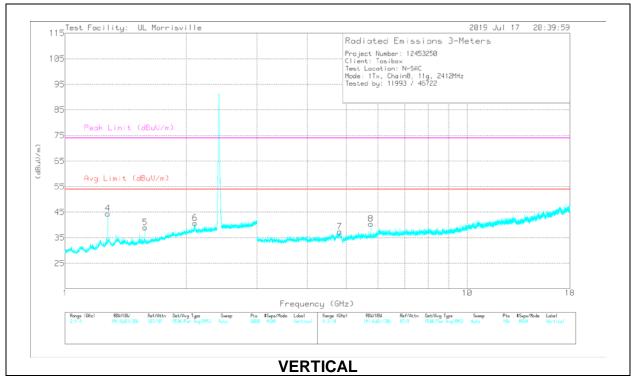
DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band

#### HARMONICS AND SPURIOUS EMISSIONS

# LOW CHANNEL, CH 1 RESULTS





DATE: 2019-09-04 IC: 25009-LOCK500IC

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 AF (dBuV/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit	(dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 1.564	41.35	PK2	28.1	-24.6	0	44.85	-		74	-29.15	76	215	Н
	* ** 1.56458	24.56	MAv1	28	-24.6	1.06	29.02	54	-24.98	-	-	76	215	Н
4	* 1.27911	39.74	PK2	29.3	-25.7	0	43.34	-	-	74	-30.66	306	128	V
	* 1.27961	24.87	MAv1	29.3	-25.7	1.06	29.53	54	-24.47	-	1	306	128	V
5	* ** 1.5793	41.8	PK2	28	-24.6	0	45.2	-	-	74	-28.8	88	108	V
	* ** 1.58118	24.58	MAv1	28	-24.6	1.06	29.04	54	-24.96	-	1	88	108	V
2	* ** 4.82054	45.77	PK2	34.1	-31.5	0	48.37	-	-	74	-25.63	190	123	Н
	* ** 4.82103	32.78	MAv1	34.1	-31.5	1.06	36.44	54	-17.56	-	-	190	123	Н
3	* ** 15.87318	36.53	PK2	40.3	-25.6	0	51.23	-	-	74	-22.77	166	182	Н
	* ** 15.87247	24.53	MAv1	40.3	-25.5	1.06	40.39	54	-13.61	-	-	166	182	Н
7	* ** 4.81503	41.71	PK2	34.1	-31.6	0	44.21	-	-	74	-29.79	91	342	V
	* ** 4.81531	30.24	MAv1	34.1	-31.6	1.06	33.8	54	-20.2	-	-	91	342	V
6	2.10352	33.4	Pk	31.8	-24.5	0	40.7	-	-	-	-	0-360	199	V
8	5.76016	36.98	Pk	34.7	-31.3	0	40.38	-	-	-	-	0-360	199	V

PK2 - Maximum Peak

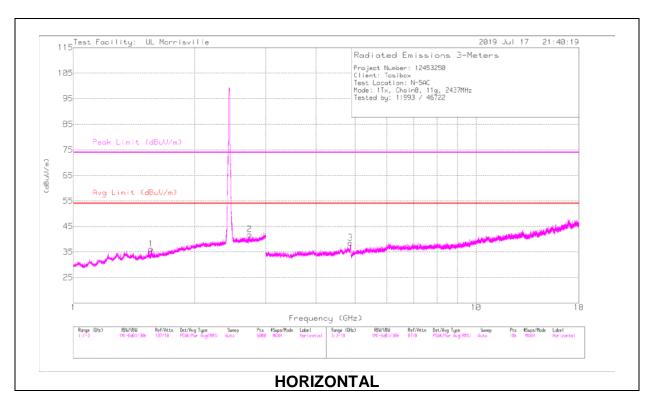
MAv1 - Maximum RMS Average

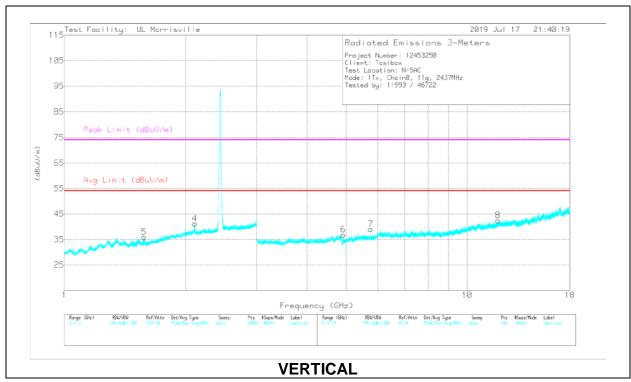
Pk - Peak detector

DATE: 2019-09-04

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band \*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

# MID CHANNEL, CH 6 RESULTS





DATE: 2019-09-04

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 AF (dBuV/m)	Amp/Cbl/Fltr/Pad (dB)	(dB)	Reading	Avg Limit	(dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 1.5587	41.31	PK2	28.1	-24.7	0	44.71	-	-	74	-29.29	77	184	Н
	* ** 1.55844	24.63	MAv1	28.1	-24.7	1.06	29.09	54	-24.91	-	-	77	184	Н
2	* ** 2.73943	38.25	PK2	32.2	-23.9	0	46.55	-	-	74	-27.45	312	218	Н
	* ** 2.7395	25.37	MAv1	32.2	-23.9	1.06	34.73	54	-19.27	-	-	312	218	Н
5	* ** 1.57426	43.35	PK2	28	-24.6	0	46.75	-	-	74	-27.25	140	109	V
	* ** 1.57488	24.68	MAv1	28	-24.6	1.06	29.14	54	-24.86	-	-	140	109	V
3	* ** 4.87331	44.29	PK2	34	-31.3	0	46.99	-	-	74	-27.01	166	194	Н
	* ** 4.87339	31.36	MAv1	34	-31.3	1.06	35.12	54	-18.88	-	-	166	194	Н
6	* ** 4.92562	44.22	PK2	33.9	-31.8	0	46.32	-	-	74	-27.68	192	284	V
	* ** 4.92569	28.51	MAv1	33.9	-31.8	1.06	31.67	54	-22.33	-	-	192	284	V
8	* ** 11.93481	35.58	PK2	38.6	-26	0	48.18	-	-	74	-25.82	232	104	V
	* ** 11.93481	24.3	MAv1	38.6	-26	1.06	37.96	54	-16.04	-	-	232	104	V
4	2.10752	33.76	Pk	31.8	-24.4	0	41.16	-	-	-	-	0-360	199	V
7	5.76016	35.66	Pk	34.7	-31.3	0	39.06	-	-	-	-	0-360	102	V

PK2 - Maximum Peak

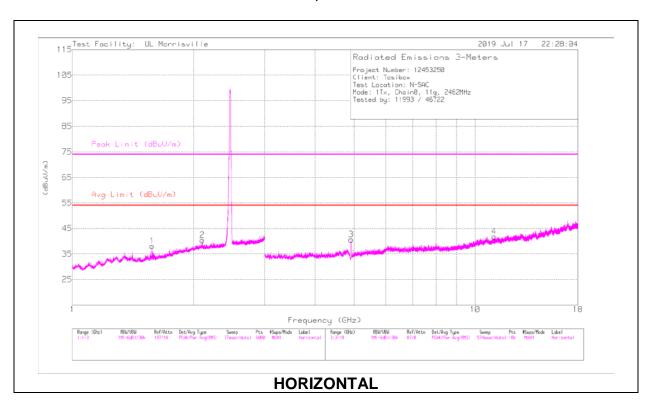
MAv1 - Maximum RMS Average

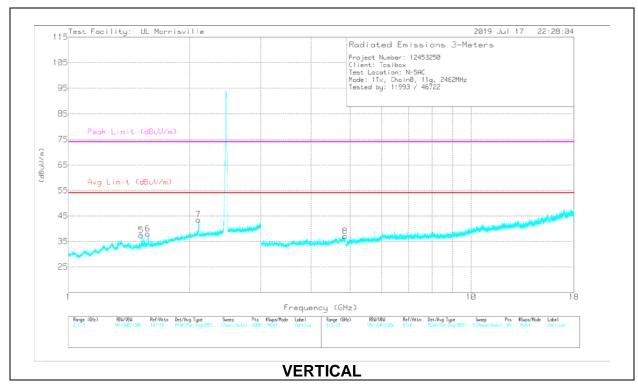
Pk - Peak detector

DATE: 2019-09-04

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band \*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

# **HIGH CHANNEL, CH 11 RESULTS**





DATE: 2019-09-04

Marker	Frequency (GHz)	Meter Reading (dBuV)		AT0067 AF (dBuV/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr	Corrected Reading (dBuV/m)	Avg Limit	Margin (dB)	Peak Limit (dBuV/m)		Azimuth (Degs)	Height (cm)	Polarity
1	* ** 1.57859	48.95	PK2	28	-24.6	0	52.35	-	-	74	-21.65	73	270	Н
	* ** 1.57864	24.99	MAv1	28	-24.6	1.06	29.45	54	-24.55	-	-	73	270	Н
5	* ** 1.51935	38.42	PK2	28.2	-24.8	0	41.82	-	-	74	-32.18	142	218	V
	* ** 1.5178	24.74	MAv1	28.1	-24.8	1.06	29.1	54	-24.9	-	-	142	218	V
6	* ** 1.57589	43.67	PK2	28	-24.6	0	47.07	-	-	74	-26.93	337	106	V
	* ** 1.57608	24.84	MAv1	28	-24.6	1.06	29.3	54	-24.7	-	-	337	106	V
3	* ** 4.92321	46.94	PK2	33.9	-31.8	0	49.04	-	-	74	-24.96	266	213	Н
	* ** 4.92322	33.89	MAv1	33.9	-31.8	1.06	37.05	54	-16.95	-	-	266	213	Н
4	* ** 11.16219	36.17	PK2	37.7	-26	0	47.87	-	-	74	-26.13	162	209	Н
	* ** 11.16162	24.19	MAv1	37.7	-26	1.06	36.95	54	-17.05	-	-	162	209	Н
8	* ** 4.86617	38.53	PK2	34	-31.4	0	41.13	-	-	74	-32.87	176	361	V
	* ** 4.86372	27.63	MAv1	34	-31.4	1.06	31.29	54	-22.71	-	-	176	361	V
7	2.10152	36.09	Pk	31.8	-24.4	0	43.49	-	-	-	-	0-360	102	V
2	2.10352	33.11	Pk	31.8	-24.5	0	40.41	-	-	-	-	0-360	199	Н

PK2 - Maximum Peak

MAv1 - Maximum RMS Average

Pk - Peak detector

DATE: 2019-09-04

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band \*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

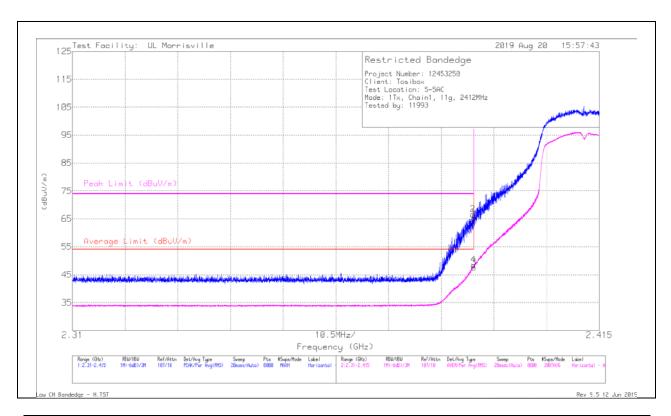
#### 1TX Antenna 2 MODE

# **BANDEDGE (LOW CHANNEL, CH 1)**

#### HORIZONTAL RESULT

DATE: 2019-09-04

IC: 25009-LOCK500IC



Marke	r Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	(dg)	Peak Limit (dBuV/m)	iviargin	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.39	57.26	Pk	31.9	-24	0	65.16	-	-	74	-8.84	154	136	Н
2	* ** 2.3898	58.66	Pk	31.9	-24	0	66.56	-	-	74	-7.44	154	136	Н
3	* ** 2.39	38.68	RMS	31.9	-24	1.06	47.64	54	-6.36	-	-	154	136	Н
4	* ** 2.38992	39.48	RMS	31.9	-24	1.06	48.44	54	-5.56	-	-	154	136	Н

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	(dg)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.39	55.08	Pk	31.9	-24	0	62.98	-	-	74	-11.02	338	111	V
2	* ** 2.38985	56.23	Pk	31.9	-24	0	64.13	-	-	74	-9.87	338	111	V
3	* ** 2.39	35.56	RMS	31.9	-24	1.06	44.52	54	-9.48	-	-	338	111	V
4	* ** 2.38996	36.4	RMS	31.9	-24	1.06	45.36	54	-8.64	-	-	338	111	V

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

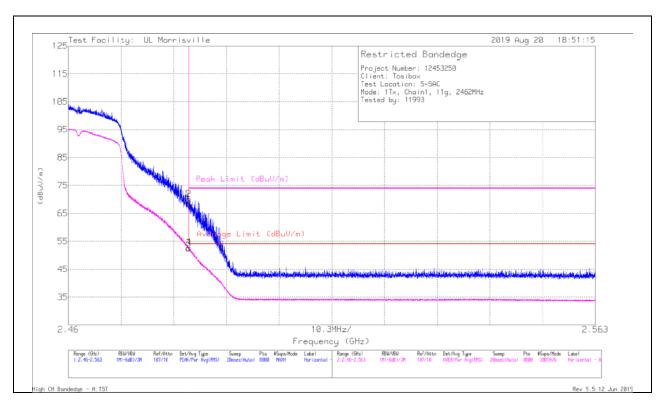
RMS - RMS detection

DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band

# **BANDEDGE (HIGH CHANNEL, CH 11)**

### **HORIZONTAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	(dR)	Peak Limit (dBuV/m)	Margin	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.4835	60.46	Pk	32.3	-24.5	0	68.26	-	-	74	-5.74	79	343	Н
2	* ** 2.48358	62.19	Pk	32.3	-24.5	0	69.99	-	-	74	-4.01	79	343	Н
3	* ** 2.4835	43.55	RMS	32.3	-24.5	1.06	52.41	54	-1.59	-	-	79	343	Н
4	* ** 2.48353	43.79	RMS	32.3	-24.5	1.06	52.65	54	-1.35	-	-	79	343	Н

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	(dg)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.4835	59.41	Pk	32.3	-24.5	0	67.21	ı	-	74	-6.79	151	352	V
2	* ** 2.48363	61.21	Pk	32.3	-24.5	0	69.01	1	-	74	-4.99	151	352	V
3	* ** 2.4835	41.94	RMS	32.3	-24.5	1.06	50.8	54	-3.2	-	-	151	352	V
4	* ** 2.48353	41.91	RMS	32.3	-24.5	1.06	50.77	54	-3.23	-	-	151	352	V

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

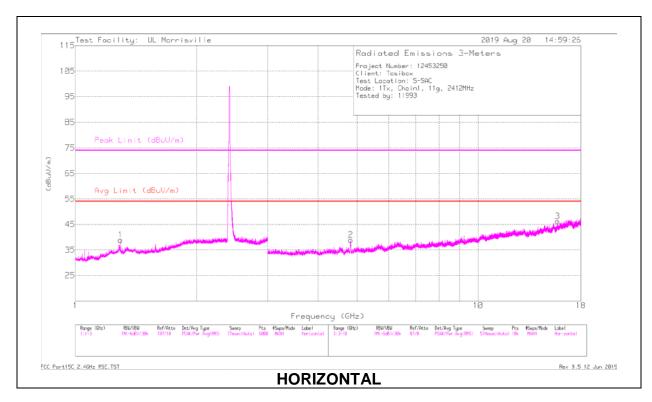
RMS - RMS detection

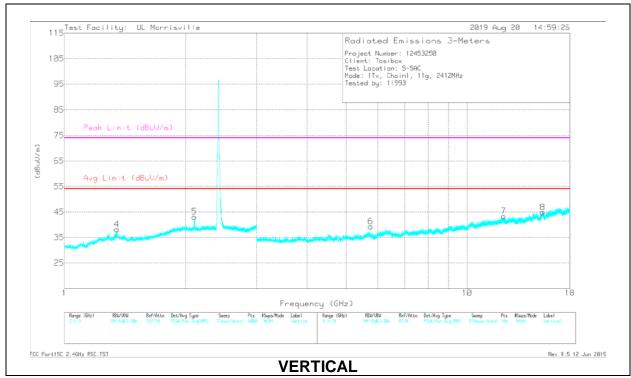
DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band

### HARMONICS AND SPURIOUS EMISSIONS

# LOW CHANNEL, CH 1 RESULTS





DATE: 2019-09-04 IC: 25009-LOCK500IC

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr	Corrected Reading (dBuV/m)	Avg Limit	(dB)	Peak Limit (dBuV/m)		Azimuth (Degs)	Height (cm)	Polarity
1	* 1.2961	38.39	PK2	28.9	-23.2	0	44.09	-	-	74	-29.91	241	115	Н
	* 1.29237	24.03	MAv1	29	-23.2	1.06	30.89	54	-23.11	-	ı	241	115	Н
4	* ** 1.34888	39.02	PK2	29.2	-22.9	0	45.32	-	-	74	-28.68	242	197	V
	* ** 1.34823	24.03	MAv1	29.2	-22.9	1.06	31.39	54	-22.61	-	1	242	197	V
2	* ** 4.82274	43.72	PK2	34.1	-30.9	0	46.92	-	-	74	-27.08	181	276	Н
	* ** 4.82235	30.02	MAv1	34.1	-30.9	1.06	34.28	54	-19.72	-	1	181	276	Н
3	* ** 15.76153	33.08	PK2	40.3	-22.3	0	51.08	-	-	74	-22.92	307	272	Н
	* ** 15.76445	21.66	MAv1	40.3	-22.3	1.06	40.72	54	-13.28	-	-	307	272	Н
7	* ** 12.33004	33.86	PK2	38.8	-23.8	0	48.86	-	-	74	-25.14	283	392	V
	* ** 12.33033	21.86	MAv1	38.8	-23.8	1.06	37.92	54	-16.08	-	-	283	392	V
8	* ** 15.404	32.57	PK2	39.9	-21.5	0	50.97	-	-	74	-23.03	153	281	V
	* ** 15.40217	21.45	MAv1	39.9	-21.4	1.06	41.01	54	-12.99	-	-	153	281	V
6	5.75932	34.53	Pk	34.8	-30	0	39.33	-	-	-	-	0-360	101	V

PK2 - Maximum Peak

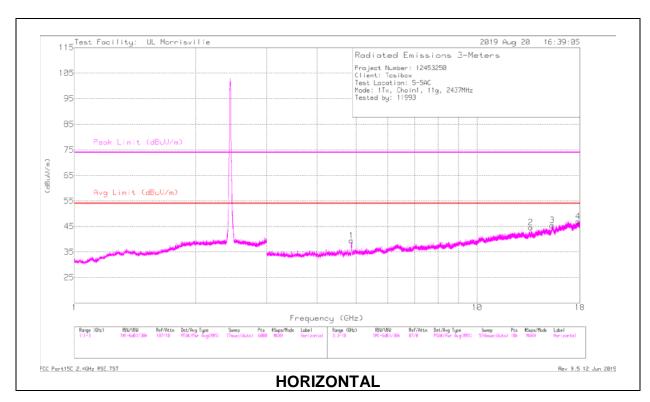
MAv1 - Maximum RMS Average

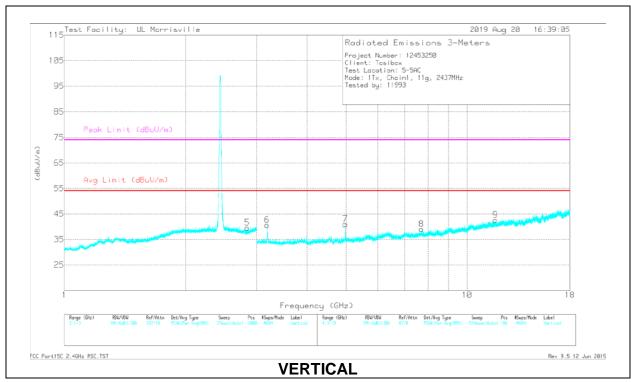
Pk - Peak detector

DATE: 2019-09-04

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band \*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

# MID CHANNEL, CH 6 RESULTS





DATE: 2019-09-04

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit	_	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* ** 2.84628	37.93	PK2	32.2	-25.9	0	44.23	-	-	74	-29.77	259	216	V
	* ** 2.84581	25.73	MAv1	32.2	-25.9	1.06	33.09	54	-20.91	-	1	259	216	V
1	* ** 4.87673	41.72	PK2	34	-30.6	0	45.12	-	-	74	-28.88	178	172	Н
	* ** 4.87608	29.12	MAv1	34	-30.6	1.06	33.58	54	-20.42	-	1	178	172	Н
3	* ** 15.36217	34.31	PK2	39.9	-22.1	0	52.11	-	-	74	-21.89	249	400	Н
	* ** 15.36235	21.5	MAv1	39.9	-22.1	1.06	40.36	54	-13.64	-	1	249	400	Н
4	* ** 17.81731	33.59	PK2	41.2	-20.8	0	53.99	-	-	74	-20.01	126	295	Н
	* ** 17.81821	21.65	MAv1	41.2	-20.8	1.06	43.11	54	-10.89	-	-	126	295	Н
7	* ** 4.98051	49.16	PK2	34.1	-31.1	0	52.16	-	-	74	-21.84	81	105	V
	* ** 4.98027	27.75	MAv1	34.1	-31.1	1.06	31.81	54	-22.19	-	-	81	105	V
8	* ** 7.70762	36.21	PK2	36	-27.6	0	44.61	-	-	74	-29.39	193	276	V
	* ** 7.70735	24.09	MAv1	36	-27.6	1.06	33.55	54	-20.45	-	-	193	276	V
6	3.18668	40.04	Pk	33.1	-32.5	0	40.64	-	-	-	-	0-360	199	V
2	13.60309	30.47	Pk	38.7	-24.6	0	44.57	-	-	-	-	0-360	101	Н

PK2 - Maximum Peak

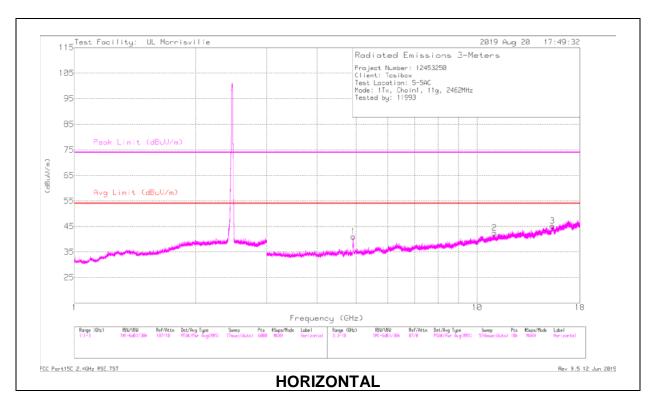
MAv1 - Maximum RMS Average

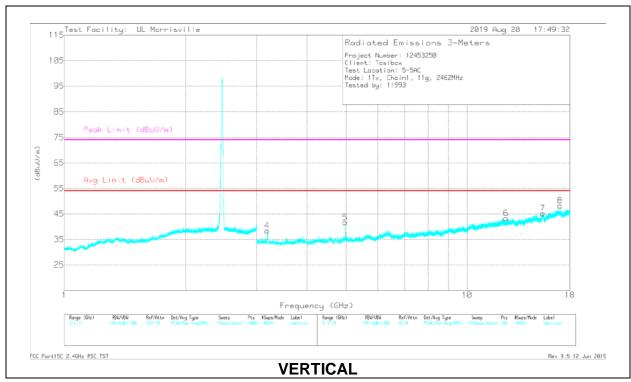
Pk - Peak detector

DATE: 2019-09-04

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band \*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

# **HIGH CHANNEL, CH 11 RESULTS**





DATE: 2019-09-04

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit	_	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 4.92533	46.78	PK2	34	-30.9	0	49.88	-	-	74	-24.12	236	101	Н
	* ** 4.92536	32.41	MAv1	34	-30.9	1.06	36.57	54	-17.43	-	-	236	101	Н
2	* ** 11.04611	33.89	PK2	37.9	-23.7	0	48.09	-	-	74	-25.91	23	137	Н
	* ** 11.0461	21.98	MAv1	37.9	-23.7	1.06	37.24	54	-16.76	-	-	23	137	Н
3	* ** 15.38953	33.22	PK2	39.9	-21.4	0	51.72	-	-	74	-22.28	1	232	Н
	* ** 15.38864	21.6	MAv1	39.9	-21.4	1.06	41.16	54	-12.84	-	-	1	232	Н
5	* ** 4.97914	48.3	PK2	34.1	-31.1	0	51.3	-	-	74	-22.7	152	134	V
	* ** 4.97948	27.74	MAv1	34.1	-31.1	1.06	31.8	54	-22.2	-	-	152	134	V
6	* ** 12.50725	34.01	PK2	39	-24.2	0	48.81	-	-	74	-25.19	77	297	V
	* ** 12.50716	22.07	MAv1	39	-24.2	1.06	37.93	54	-16.07	-	-	77	297	V
7	* ** 15.42186	33.55	PK2	39.9	-21.8	0	51.65	-	-	74	-22.35	289	376	V
	* ** 15.4222	21.72	MAv1	39.9	-21.8	1.06	40.88	54	-13.12	-	-	289	376	V
4	3.18668	37.86	Pk	33.1	-32.5	0	38.46	-	-	-	-	0-360	101	V
8	17.04162	29.51	Pk	41.6	-22.9	0	48.21	-	-	-	-	0-360	199	V

PK2 - Maximum Peak

MAv1 - Maximum RMS Average

Pk - Peak detector

DATE: 2019-09-04

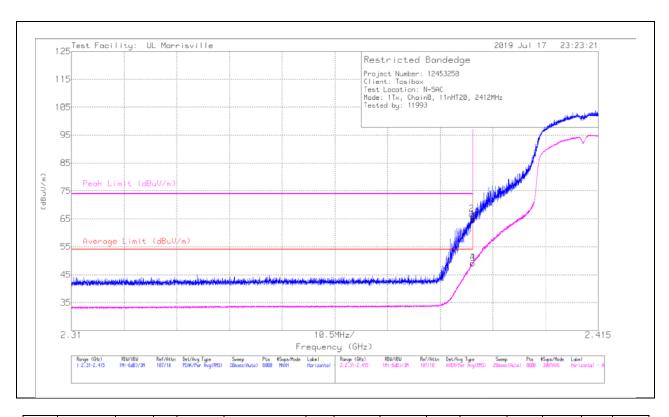
<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band \*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

### 9.1.3. TX 1-18 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND

#### 1TX Antenna 1 MODE

# **BANDEDGE (LOW CHANNEL, CH 1)**

#### HORIZONTAL RESULT



Marke	r Frequency (GHz)	Meter Reading (dBuV)		AT0067 AF (dBuV/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	(dR)	Peak Limit (dBuV/m)	iviargin	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.39	57.17	Pk	32	-24.4	0	64.77	-	-	74	-9.23	206	238	Н
2	* ** 2.38972	59.09	Pk	32	-24.4	0	66.69	-	-	74	-7.31	206	238	Н
3	* ** 2.39	40.38	RMS	32	-24.4	1.15	49.13	54	-4.87	-	-	206	238	Н
4	* ** 2.38996	40.43	RMS	32	-24.4	1.15	49.18	54	-4.82	-	-	206	238	Н

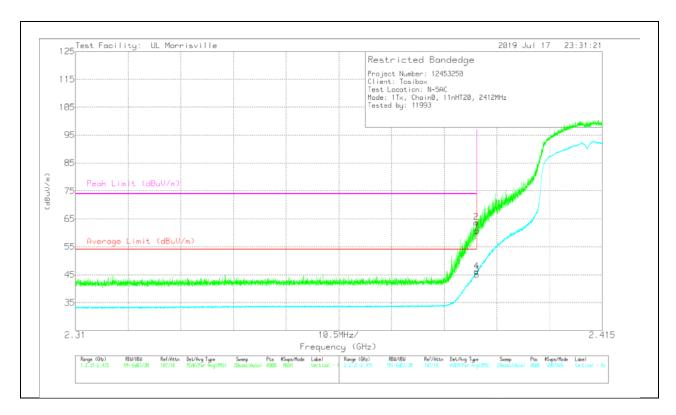
<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band



Marker	Frequency (GHz)	Meter Reading (dBuV)		AT0067 AF (dBuV/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	(AB)	Peak Limit (dBuV/m)	Margin	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.39	53.06	Pk	32	-24.4	0	60.66	-	-	74	-13.34	242	302	V
2	* ** 2.38985	56.16	Pk	32	-24.4	0	63.76	-	-	74	-10.24	242	302	V
3	* ** 2.39	36.38	RMS	32	-24.4	1.15	45.13	54	-8.87	-	-	242	302	V
4	* ** 2.38992	37.37	RMS	32	-24.4	1.15	46.12	54	-7.88	-	-	242	302	V

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

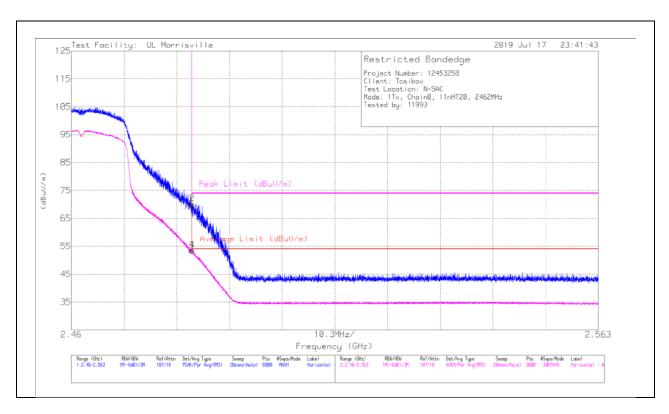
RMS - RMS detection

DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band

# **BANDEDGE (HIGH CHANNEL, CH 11)**

### **HORIZONTAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBuV)		AT0067 AF (dBuV/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	Margin (dR)	Peak Limit (dBuV/m)	Margin	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.4835	61.64	Pk	32.4	-24.3	0	69.74	-	-	74	-4.26	210	211	Н
2	* ** 2.48359	62.17	Pk	32.4	-24.3	0	70.27	-	-	74	-3.73	210	211	Н
3	* ** 2.4835	44.19	RMS	32.4	-24.3	1.15	53.44	54	56	-	-	210	211	Н
4	* ** 2.48362	44.36	RMS	32.4	-24.3	1.15	53.61	54	39	-	-	210	211	Н

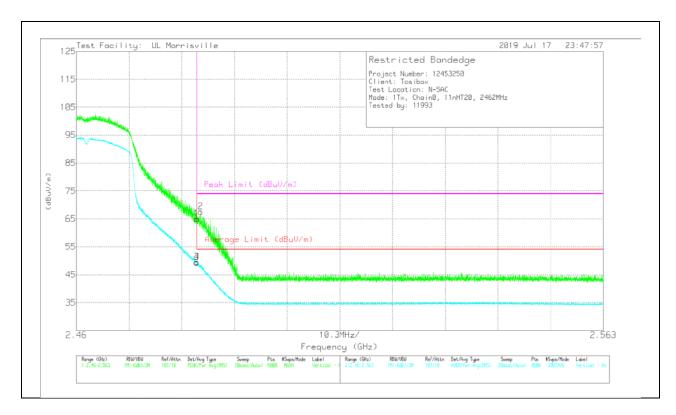
<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band



Marke	Frequency (GHz)	Meter Reading (dBuV)		AT0067 AF (dBuV/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	Margin (dR)	Peak Limit (dBuV/m)	Margin	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.4835	56.91	Pk	32.4	-24.3	0	65.01	1	-	74	-8.99	244	268	V
2	* ** 2.48425	59.46	Pk	32.4	-24.3	0	67.56	-	-	74	-6.44	244	268	V
3	* ** 2.4835	40.2	RMS	32.4	-24.3	1.15	49.45	54	-4.55	-	-	244	268	V
4	* ** 2.48354	40.16	RMS	32.4	-24.3	1.15	49.41	54	-4.59	-	-	244	268	V

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

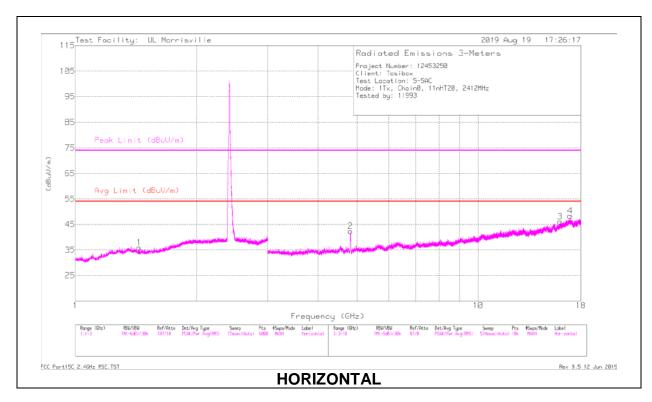
RMS - RMS detection

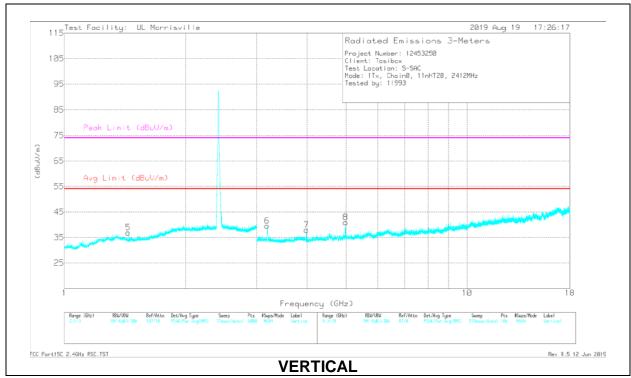
DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band

#### HARMONICS AND SPURIOUS EMISSIONS

# LOW CHANNEL, CH 1 RESULTS





DATE: 2019-09-04 IC: 25009-LOCK500IC

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	(dB)	Corrected Reading (dBuV/m)	Avg Limit	(dR)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 1.44021	36.91	PK2	28.1	-22.7	0	42.31	-	-	74	-31.69	56	136	Н
	* ** 1.43998	27.61	MAv1	28.1	-22.7	1.15	34.16	54	-19.84	-	-	56	136	Н
5	* ** 1.43994	37.51	PK2	28.1	-22.7	0	42.91	-	-	74	-31.09	222	103	V
	* ** 1.44003	29.22	MAv1	28.1	-22.7	1.15	35.77	54	-18.23	-	-	222	103	V
2	* ** 4.82039	46.49	PK2	34.1	-30.9	0	49.69	-	-	74	-24.31	249	173	Н
	* ** 4.821	33.43	MAv1	34.1	-30.9	1.15	37.78	54	-16.22	-	-	249	173	Н
3	* ** 15.9833	35.19	PK2	40.7	-23.5	0	52.39	-	-	74	-21.61	276	391	Н
	* ** 15.98639	23.34	MAv1	40.7	-23.5	1.15	41.69	54	-12.31	-	-	276	391	Н
7	* ** 3.99615	46.43	PK2	33.4	-31.8	0	48.03	-	-	74	-25.97	122	123	V
	* ** 3.9962	28.06	MAv1	33.4	-31.8	1.15	30.81	54	-23.19	-	-	122	123	V
8	* ** 4.98978	49.52	PK2	34.1	-31.1	0	52.52	-	-	74	-21.48	82	105	V
	* ** 4.99023	28.27	MAv1	34.1	-31.1	1.15	32.42	54	-21.58	-	-	82	105	V
6	3.18751	38.94	Pk	33.1	-32.5	0	39.54	-	-	-	-	0-360	101	V
4	16.92995	29.63	Pk	41.8	-23.1	0	48.33	-	-	-	-	0-360	101	Н

PK2 - Maximum Peak

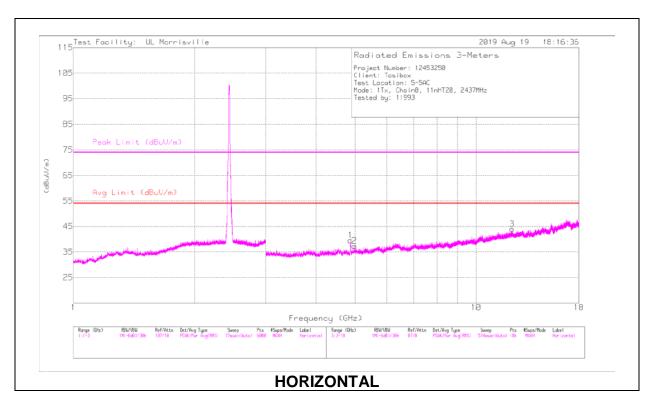
MAv1 - Maximum RMS Average

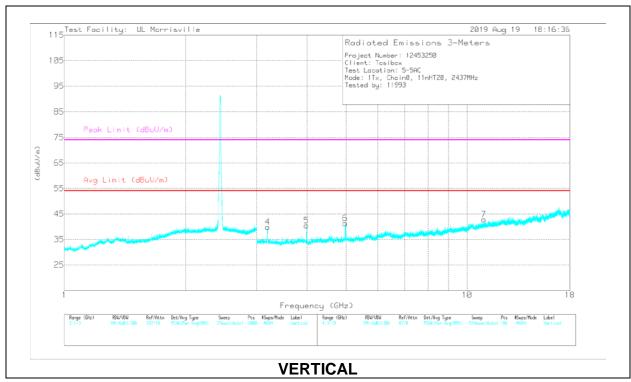
Pk - Peak detector

DATE: 2019-09-04

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band \*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

# MID CHANNEL, CH 6 RESULTS





DATE: 2019-09-04

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr	Corrected Reading (dBuV/m)	(dBuV/m)	(dB)	Peak Limit (dBuV/m)		Azimuth (Degs)	Height (cm)	Polarity
1	* ** 4.8778	45.46	PK2	34	-30.6	0	48.86	-	-	74	-25.14	335	203	Н
	* ** 4.8779	30.88	MAv1	34	-30.6	1.15	35.43	54	-18.57	-	-	335	203	Н
2	* ** 4.98768	40.46	PK2	34.1	-31.1	0	43.46	-	-	74	-30.54	271	201	Н
	* ** 4.98769	27.66	MAv1	34.1	-31.1	1.15	31.81	54	-22.19	-	-	271	201	Н
3	* ** 12.28148	33.71	PK2	38.9	-23.7	0	48.91	-	-	74	-25.09	256	130	Н
	* ** 12.28191	22.23	MAv1	38.9	-23.7	1.15	38.58	54	-15.42	-	-	256	130	Н
5	* ** 3.99395	45.86	PK2	33.4	-31.8	0	47.46	-	-	74	-26.54	127	220	V
	* ** 3.99238	27.79	MAv1	33.4	-31.8	1.15	30.54	54	-23.46	-	-	127	220	V
6	* ** 4.97843	50.63	PK2	34.1	-31.1	0	53.63	-	-	74	-20.37	80	104	V
	* ** 4.97794	28.65	MAv1	34.1	-31.1	1.15	32.8	54	-21.2	-	-	80	104	V
7	* ** 10.9962	34.71	PK2	37.9	-24	0	48.61	-	-	74	-25.39	69	175	V
	* ** 10.99664	22.14	MAv1	37.9	-24	1.15	37.19	54	-16.81	-	-	69	175	V
4	3.19751	39.26	Pk	33.1	-32.5	0	39.86	-	-	-	-	0-360	101	V

PK2 - Maximum Peak

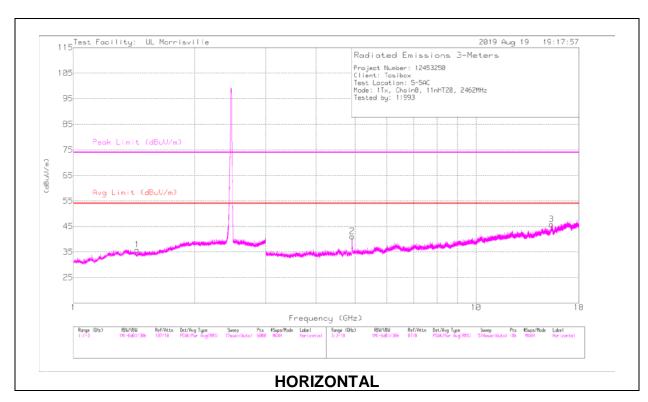
MAv1 - Maximum RMS Average

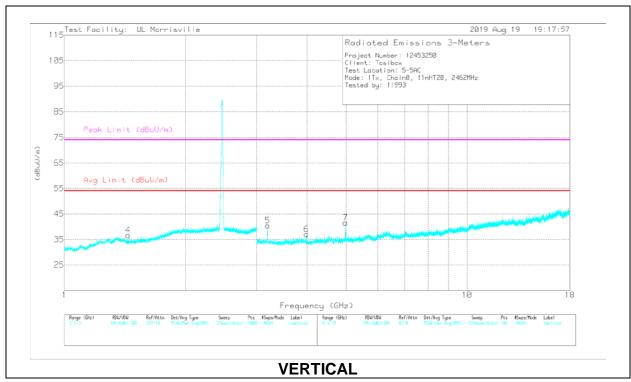
Pk - Peak detector

DATE: 2019-09-04

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band \*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

# **HIGH CHANNEL, CH 11 RESULTS**





DATE: 2019-09-04

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit		Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 1.43995	37.03	PK2	28.1	-22.7	0	42.43	-	-	74	-31.57	333	135	Н
	* ** 1.44003	27.73	MAv1	28.1	-22.7	1.15	34.28	54	-19.72	-	-	333	135	Н
4	* ** 1.44015	38.14	PK2	28.1	-22.7	0	43.54	-	-	74	-30.46	224	109	V
	* ** 1.44001	28.93	MAv1	28.1	-22.7	1.15	35.48	54	-18.52	-	-	224	109	V
2	* ** 4.92162	44.72	PK2	34	-30.8	0	47.92	-	-	74	-26.08	325	182	Н
	* ** 4.92152	30.77	MAv1	34	-30.8	1.15	35.12	54	-18.88	-	-	325	182	Н
3	* ** 15.39653	33.55	PK2	39.9	-21.3	0	52.15	-	-	74	-21.85	131	227	Н
	* ** 15.39642	21.26	MAv1	39.9	-21.3	1.15	41.01	54	-12.99	-	-	131	227	Н
6	* ** 3.99161	45.45	PK2	33.4	-31.7	0	47.15	-	-	74	-26.85	138	226	V
	* ** 3.99166	27.68	MAv1	33.4	-31.7	1.15	30.53	54	-23.47	-	-	138	226	V
7	* ** 4.98772	48.68	PK2	34.1	-31.1	0	51.68	-	-	74	-22.32	177	102	V
	* ** 4.98755	27.91	MAv1	34.1	-31.1	1.15	32.06	54	-21.94	-	-	177	102	V
5	3.19918	39.82	Pk	33.1	-32.5	0	40.42	-	-	-	-	0-360	101	V

PK2 - Maximum Peak

MAv1 - Maximum RMS Average

Pk - Peak detector

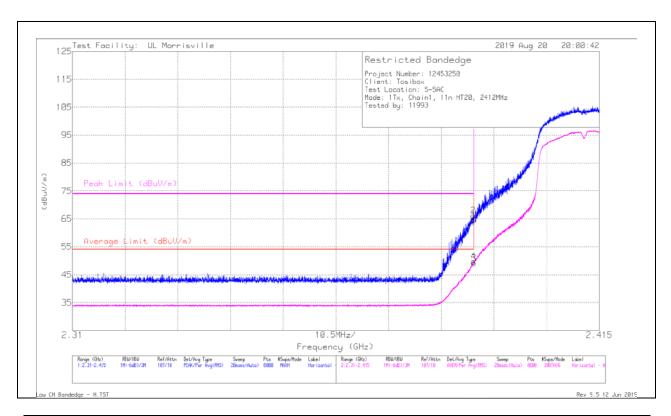
DATE: 2019-09-04

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band \*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

### 1TX Antenna 2 MODE

# **BANDEDGE (LOW CHANNEL, CH 1)**

### HORIZONTAL RESULT



Marke	r Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Reading	Average Limit (dBuV/m)	(dg)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.39	56.7	Pk	31.9	-24	0	64.6	-	-	74	-9.4	78	373	Н
2	* ** 2.38988	58.15	Pk	31.9	-24	0	66.05	-	-	74	-7.95	78	373	Н
3	* ** 2.39	40.1	RMS	31.9	-24	1.15	49.15	54	-4.85	-	-	78	373	Н
4	* ** 2.38992	40.61	RMS	31.9	-24	1.15	49.63	54	-4.34	-	-	78	373	Н

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

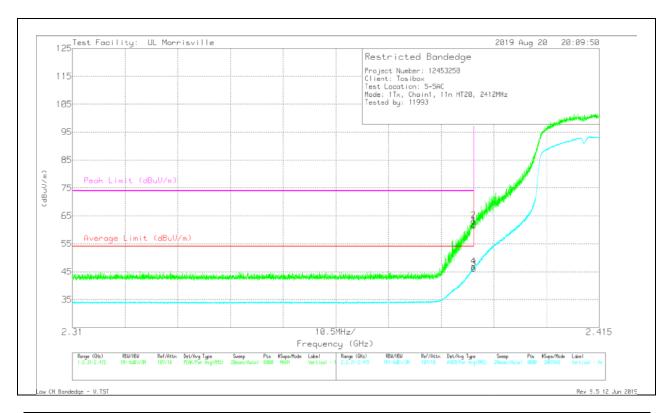
Pk - Peak detector

RMS - RMS detection

DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band

### **VERTICAL RESULT**



Marke	r Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	(dg)	Peak Limit (dBuV/m)	Margin	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.39	53.72	Pk	31.9	-24	0	61.62	-	-	74	-12.38	152	232	V
2	* ** 2.38992	55.34	Pk	31.9	-24	0	63.24	1	-	74	-10.76	152	232	V
3	* ** 2.39	37.12	RMS	31.9	-24	1.15	46.17	54	-7.83	-	-	152	232	V
4	* ** 2.38994	37.81	RMS	31.9	-24	1.15	46.86	54	-7.14	1	-	152	232	V

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

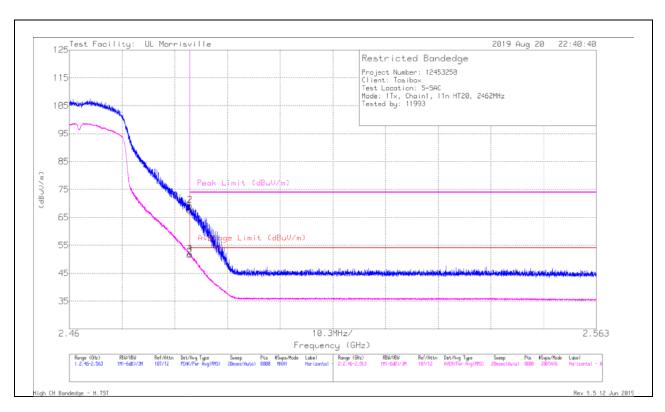
RMS - RMS detection

DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band

# **BANDEDGE (HIGH CHANNEL, CH 11)**

### **HORIZONTAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	(dg)	Peak Limit (dBuV/m)	Margin	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.4835	59.78	Pk	32.3	-24.5	0	67.58	-	-	74	-6.42	184	148	Н
2	* ** 2.4836	61.51	Pk	32.3	-24.5	0	69.31	-	-	74	-4.69	184	148	Н
3	* ** 2.4835	42.72	RMS	32.3	-24.5	1.15	51.67	54	-2.33	1	-	184	148	Н
4	* ** 2.48359	43.03	RMS	32.3	-24.5	1.15	51.98	54	-2.02	-	-	184	148	Н

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

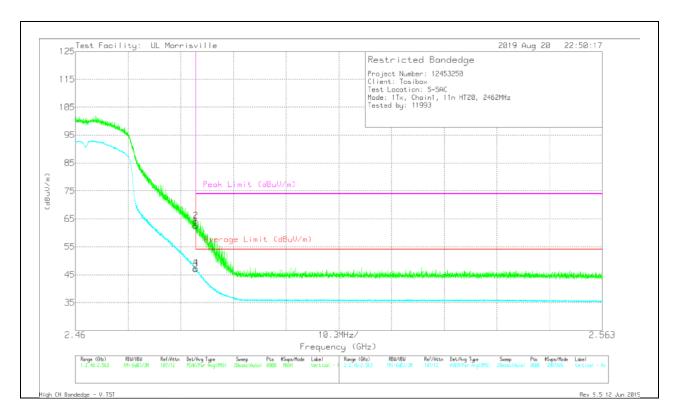
Pk - Peak detector

RMS - RMS detection

DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band

### **VERTICAL RESULT**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corr	Corrected Reading (dBuV/m)	Limit	(dg)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 2.4835	54.71	Pk	32.3	-24.5	0	62.51	ı	-	74	-11.49	329	105	V
2	* ** 2.48353	56.44	Pk	32.3	-24.5	0	64.24	1	-	74	-9.76	329	105	V
3	* ** 2.4835	38.12	RMS	32.3	-24.5	1.15	47.07	54	-6.93	1	-	329	105	V
4	* ** 2.48351	38.34	RMS	32.3	-24.5	1.15	47.29	54	-6.71	-	-	329	105	V

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

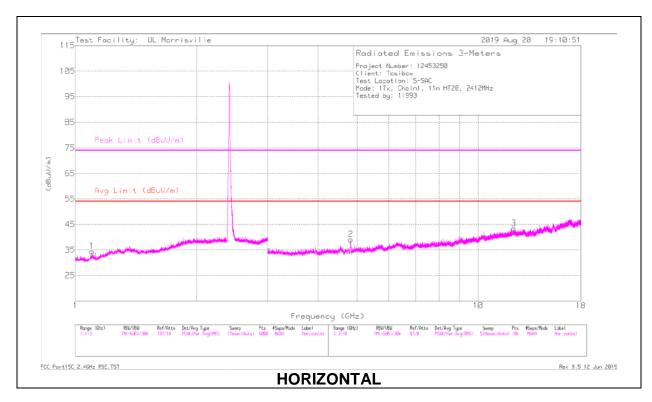
RMS - RMS detection

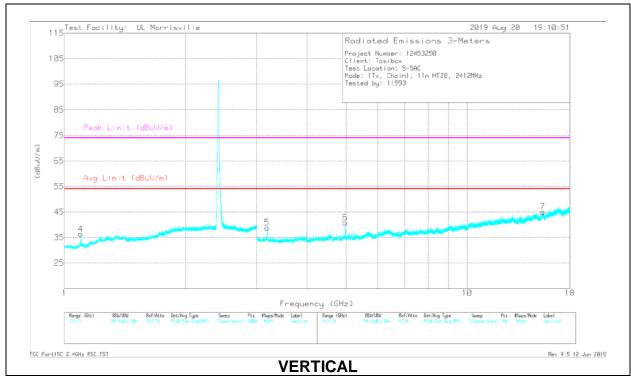
DATE: 2019-09-04

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band

### HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL, CH 1 RESULTS





DATE: 2019-09-04 IC: 25009-LOCK500IC

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	(dBuV/m)		Peak Limit (dBuV/m)		Azimuth (Degs)	Height (cm)	Polarity
1	* ** 1.10118	37.92	PK2	27.7	-24.3	0	41.32	-	-	74	-32.68	80	120	Н
	* ** 1.10096	23.98	MAv1	27.7	-24.3	1.15	28.53	54	-25.47	-	-	80	120	Н
4	* ** 1.09933	35.79	PK2	27.6	-24.3	0	39.09	-	-	74	-34.91	134	141	V
	* ** 1.09937	24.02	MAv1	27.6	-24.3	1.15	28.47	54	-25.53	-	-	134	141	V
2	* ** 4.82211	44.74	PK2	34.1	-30.9	0	47.94	-	-	74	-26.06	192	181	Н
	* ** 4.82155	31.35	MAv1	34.1	-30.9	1.15	35.7	54	-18.3	-	-	192	181	Н
3	* ** 12.26368	34.24	PK2	38.9	-23.7	0	49.44	-	-	74	-24.56	254	119	Н
	* ** 12.26351	22.19	MAv1	38.9	-23.7	1.15	38.54	54	-15.46	-	-	254	119	Н
6	* ** 4.97944	47.08	PK2	34.1	-31.1	0	50.08	-	-	74	-23.92	76	117	V
	* ** 4.97942	27.69	MAv1	34.1	-31.1	1.15	31.84	54	-22.16	-	-	76	117	V
7	* ** 15.40661	33.59	PK2	39.9	-21.5	0	51.99	-	-	74	-22.01	46	362	V
	* ** 15.40631	21.44	MAv1	39.9	-21.5	1.15	40.99	54	-13.01	-	-	46	362	V
5	3.18584	38.24	Pk	33.1	-32.5	0	38.84	-	-	-	-	0-360	101	V

PK2 - Maximum Peak

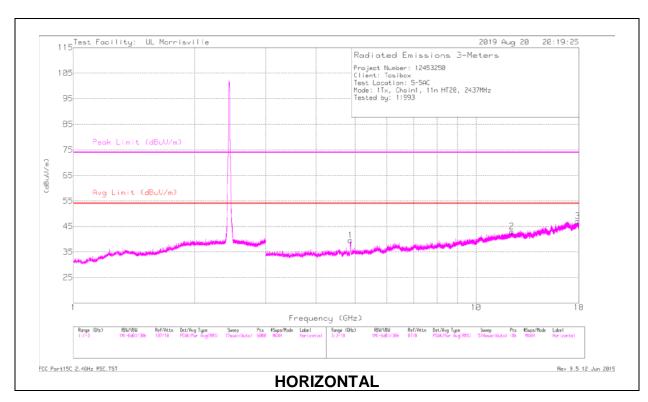
MAv1 - Maximum RMS Average

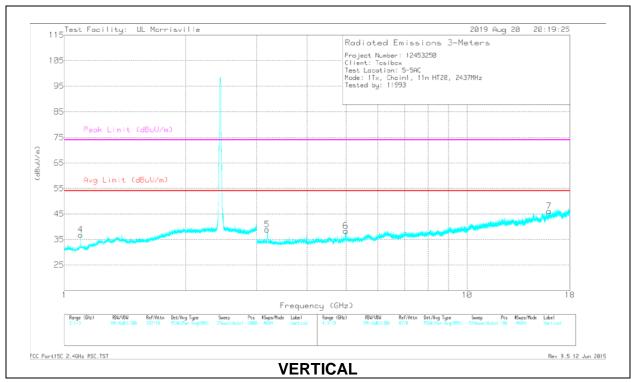
Pk - Peak detector

DATE: 2019-09-04

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band \*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

# MID CHANNEL, CH 6 RESULTS





DATE: 2019-09-04

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit	(dB)	Peak Limit (dBuV/m)		Azimuth (Degs)	Height (cm)	Polarity
4	* ** 1.09843	36.65	PK2	27.6	-24.3	0	39.95	-	-	74	-34.05	185	139	V
	* ** 1.09869	23.99	MAv1	27.6	-24.3	1.15	28.44	54	-25.56	-	-	185	139	V
1	* ** 4.87704	44.06	PK2	34	-30.6	0	47.46	-	-	74	-26.54	190	138	Н
	* ** 4.87683	30.37	MAv1	34	-30.6	1.15	34.92	54	-19.08	-	-	190	138	Н
2	* ** 12.26504	34.02	PK2	38.9	-23.7	0	49.22	-	-	74	-24.78	64	312	Н
	* ** 12.26479	22.11	MAv1	38.9	-23.7	1.15	38.46	54	-15.54	-	-	64	312	Н
3	* ** 17.86108	33.08	PK2	41.2	-20.7	0	53.58	-	-	74	-20.42	2	337	Н
	* ** 17.86078	21.13	MAv1	41.2	-20.7	1.15	42.78	54	-11.22	-	-	2	337	Н
6	* ** 4.99869	48.57	PK2	34.2	-31.1	0	51.67	-	-	74	-22.33	78	101	V
	* ** 4.99807	27.83	MAv1	34.2	-31.1	1.15	32.08	54	-21.92	-	-	78	101	V
7	* ** 15.97992	35.2	PK2	40.7	-23.5	0	52.4	-	-	74	-21.6	170	264	V
	* ** 15.98041	23.19	MAv1	40.7	-23.5	1.15	41.54	54	-12.46	-	-	170	264	V
5	3.18584	38.28	Pk	33.1	-32.5	0	38.88	-	-	-	-	0-360	101	V

PK2 - Maximum Peak

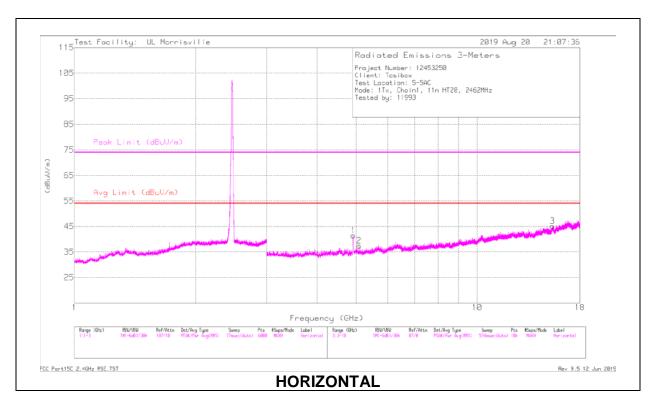
MAv1 - Maximum RMS Average

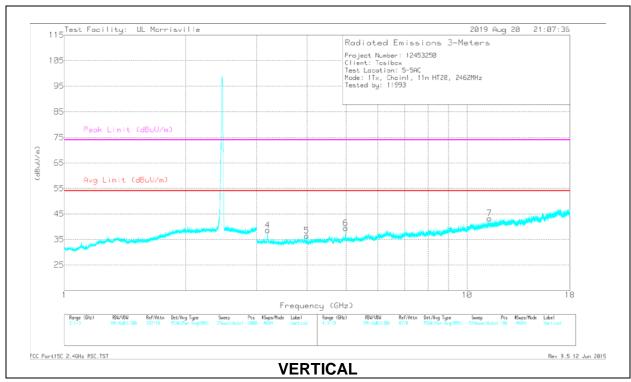
Pk - Peak detector

DATE: 2019-09-04

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band \*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

# **HIGH CHANNEL, CH 11 RESULTS**





DATE: 2019-09-04

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Reading	(dBuV/m)	_	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 4.92376	47.52	PK2	34	-30.8	0	50.72	-	-	74	-23.28	195	148	Н
	* ** 4.92348	33.66	MAv1	34	-30.8	1.15	38.01	54	-15.99	-	-	195	148	Н
2	* ** 5.09154	39.6	PK2	34.2	-31.1	0	42.7	-	-	74	-31.3	198	175	Н
	* ** 5.0916	27.32	MAv1	34.2	-31.1	1.15	31.57	54	-22.43	-	-	198	175	Н
3	* ** 15.39411	33.49	PK2	39.9	-21.3	0	52.09	-	-	74	-21.91	351	239	Н
	* ** 15.39452	21.53	MAv1	39.9	-21.3	1.15	41.28	54	-12.72	-	-	351	239	Н
5	* ** 3.99898	48	PK2	33.4	-31.9	0	49.5	-	-	74	-24.5	116	159	V
	* ** 3.99936	28.14	MAv1	33.4	-31.9	1.15	30.79	54	-23.21	-	-	116	159	V
6	* ** 4.99217	49.07	PK2	34.1	-31.1	0	52.07	-	-	74	-21.93	82	115	V
	* ** 4.99214	27.87	MAv1	34.1	-31.1	1.15	32.02	54	-21.98	-	-	82	115	V
7	* ** 11.36068	33.61	PK2	38.1	-23	0	48.71	-	-	74	-25.29	240	238	V
_	* ** 11.36085	21.51	MAv1	38.1	-23	1.15	37.76	54	-16.24	-	-	240	238	V
4	3.19834	38.02	Pk	33.1	-32.5	0	38.62	-	-	-	-	0-360	101	V

PK2 - Maximum Peak

MAv1 - Maximum RMS Average

Pk - Peak detector

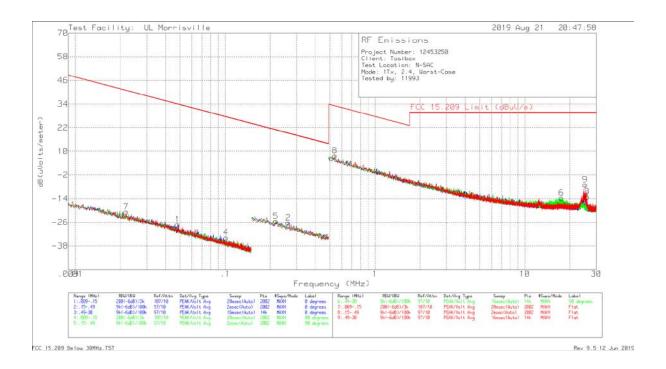
DATE: 2019-09-04

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band \*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band

### 9.1. TRANSMITTER WORST-CASE CONFIGURATION

### 9.1.1. TX SPURIOUS 0.009-30 MHz

Note: All measurements were made at a test distance of 3 m. The measured data was extrapolated from the test distance (3m) to the specification distance (300 m from 9-490 kHz and 30 m from 490 kHz – 30 MHz) to clearly show the relative levels of fundamental and spurious emissions and demonstrate compliance with the requirement that the level of any spurious emissions be below the level of the intentionally transmitted signal. The extrapolation factor for the limits were 40\*Log (test distance / specification distance).

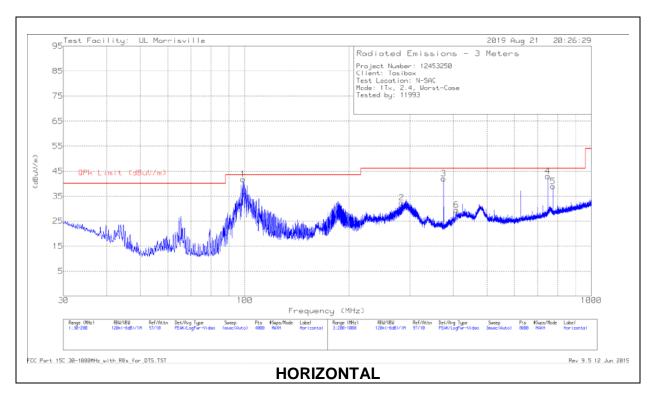


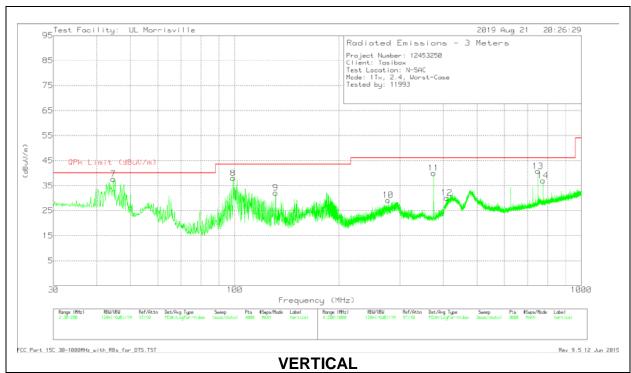
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0079 AF (dB/m)	Cbl (dB)	Dist. Corr. Factor (dB)	Corrected Reading dB(uV/m)	FCC 15.209 QP/AV Limit (dBuV/m)	FCC 15.209 PK Limit (dBuV/m)	Worst- Case Margin (dB)	Azimuth (Degs)	Antenna Face
7	.02188	45.45	Pk	13.8	.1	-80	-20.65	40.8	60.8	-61.45	0-360	Flat
1	.04834	41.1	Pk	11.7	.1	-80	-27.1	33.92	53.92	-61.02	0-360	On
4	.10168	35.14	Pk	11.1	.1	-80	-33.66	27.46	ı	-61.12	0-360	Off
5	.21766	43.42	Pk	11	.1	-80	-25.48	20.85	60.85	-46.33	0-360	Off
2	.26424	42.64	Pk	11	.1	-80	-26.26	19.16	39.16	-45.42	0-360	On
8	.54059	36.68	Pk	11	.1	-40	7.78	32.95	ı	-25.17	0-360	Flat
6	17.52264	16.11	Pk	9.6	.7	-40	-13.59	29.54	-	-43.13	0-360	Off
9	25.34754	23.39	Pk	8.8	.9	-40	-6.91	29.54	-	-36.45	0-360	Flat
3	26.01788	17.47	Pk	8.6	.9	-40	-13.03	29.54	-	-42.57	0-360	On

Pk - Peak detector

DATE: 2019-09-04

### 9.1.2. TX SPURIOUS 30-1000 MHz



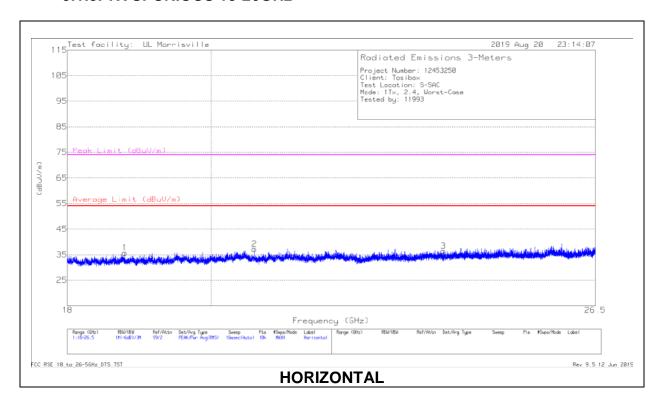


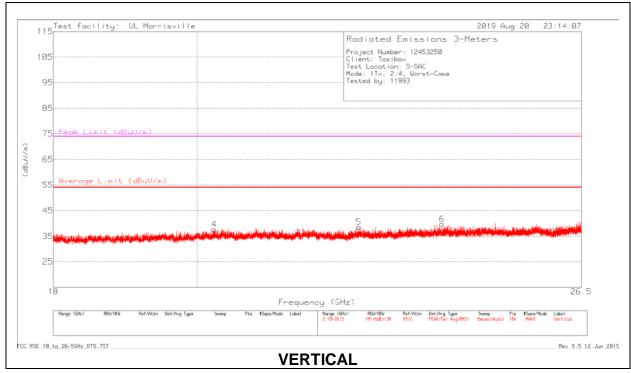
DATE: 2019-09-04 IC: 25009-LOCK500IC

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0074 AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
9	* ** 131.2612	42.77	Pk	20.1	-30.7	32.17	43.52	-11.35	0-360	102	V
2	* ** 284.2109	42.08	Pk	19.8	-29.5	32.38	46.02	-13.64	0-360	102	Н
5	** 774.9747	38.85	Pk	27.6	-27.5	38.95	46.02	-7.07	0-360	102	Н
6	* ** 408.5771	35.74	Pk	22.5	-28.8	29.44	46.02	-16.58	0-360	102	Н
10	* ** 277.01	39.01	Pk	19.8	-29.6	29.21	46.02	-16.81	0-360	199	V
12	* ** 409.5272	36.39	Pk	22.5	-28.8	30.09	46.02	-15.93	0-360	102	V
14	** 774.9747	36.94	Pk	27.6	-27.5	37.04	46.02	-8.98	0-360	102	V
7	44.6663	51.93	Pk	17.2	-31.5	37.63	40	-2.37	0-360	102	V
8	98.9528	52.82	Pk	16.1	-30.9	38.02	43.52	-5.5	0-360	102	V
1	98.9954	56.54	Pk	16.1	-30.9	41.74	43.52	-1.78	0-360	199	Н
3	375.0228	49.4	Pk	21.7	-29.1	42	46.02	-4.02	0-360	102	Н
11	375.0228	47.39	Pk	21.7	-29.1	39.99	46.02	-6.03	0-360	199	V
4	749.9715	43.3	Pk	27.3	-27.6	43	46.02	-3.02	0-360	102	Н
13	749.9715	41.06	Pk	27.3	-27.6	40.76	46.02	-5.26	0-360	102	V

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band \*\* - indicates frequency in Taiwan NCC LP0002 Restricted Band Pk - Peak detector

### 9.1.3. TX SPURIOUS 18-26GHz





DATE: 2019-09-04

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0076 AF (dB/m)	Cbl/Amp (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* ** 18.77165	42.21	Pk	32.6	-39.1	35.71	54	-18.29	74	-38.29	0-360	299	Н
2	* ** 20.63987	42.15	Pk	33	-38	37.15	54	-16.85	74	-36.85	0-360	249	Н
3	* ** 23.70995	39.81	Pk	34	-37.4	36.41	54	-17.59	74	-37.59	0-360	101	Н
4	* ** 20.25215	43.08	Pk	33	-38.4	37.68	54	-16.32	74	-36.32	0-360	151	V
5	* ** 22.51233	43.13	Pk	33.5	-38.1	38.53	54	-15.47	74	-35.47	0-360	101	V
6	* ** 23.92766	43.03	Pk	34	-37.3	39.73	54	-14.27	74	-34.27	0-360	151	V

<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

<sup>\*\* -</sup> indicates frequency in Taiwan NCC LP0002 Restricted Band

Pk - Peak detector

# 10. AC POWER LINE CONDUCTED EMISSIONS

### **LIMITS**

FCC §15.207 (a) RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dBuV)			
	Quasi-peak	Average		
0.15-0.5	66 to 56 *	56 to 46 *		
0.5-5	56	46		
5-30	60	50		

Decreases with the logarithm of the frequency.

### **TEST PROCEDURE**

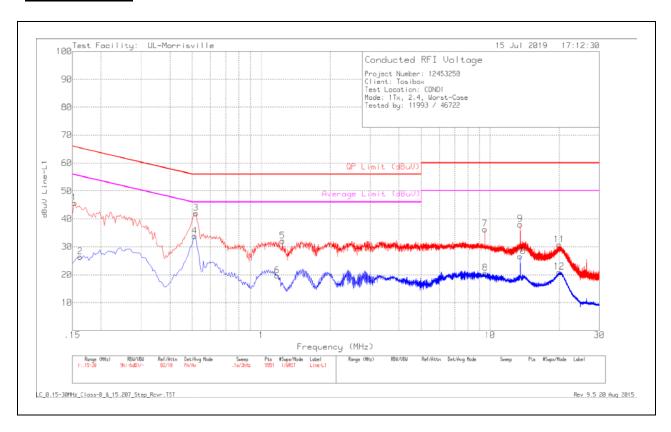
The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both Line 1 and Line 2.

DATE: 2019-09-04

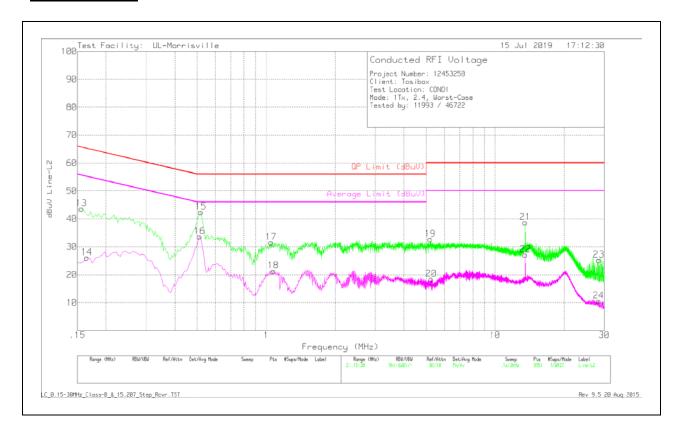
### **LINE 1 RESULTS**



	Range 1: Line-L1 .15 - 30MHz									
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
1	.153	35.52	Pk	.2	10	45.72	65.84	-20.12	-	-
2	.162	16.25	Av	.2	10	26.45	-	-	55.36	-28.91
3	.519	32.05	Pk	0	10	42.05	56	-13.95	-	-
4	.513	23.83	Av	0	10	33.83	1	-	46	-12.17
5	1.239	22.07	Pk	0	10	32.07	56	-23.93	-	-
6	1.176	9.67	Av	0	10	19.67	ı	-	46	-26.33
7	9.477	25.94	Pk	.1	10.3	36.34	60	-23.66	-	-
8	9.507	10.13	Av	.1	10.3	20.53	-	-	50	-29.47
9	13.56	27.57	Pk	.1	10.4	38.07	60	-21.93	-	-
10	13.56	16.05	Av	.1	10.4	26.55	-	-	50	-23.45
11	20.019	19.91	Pk	.2	10.6	30.71	60	-29.29	-	-
12	20.028	10.17	Av	.2	10.6	20.97	=	-	50	-29.03

Pk – Peak Detector Av – Average Detector DATE: 2019-09-04

### **LINE 2 RESULTS**



	Range 2: Line-L2 .15 - 30MHz									
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
13	.156	33.45	Pk	.2	10	43.65	65.67	-22.02	-	-
14	.165	15.93	Av	.2	10	26.13	ı	-	55.21	-29.08
15	.519	32.47	Pk	0	10	42.47	56	-13.53	-	1
16	.513	23.68	Av	0	10	33.68	-	-	46	-12.32
17	1.053	21.6	Pk	0	10	31.6	56	-24.4	-	1
18	1.077	11.35	Av	0	10	21.35	-	-	46	-24.65
19	5.214	22.38	Pk	.1	10.2	32.68	60	-27.32	-	1
20	5.265	8.18	Av	.1	10.2	18.48	-	-	50	-31.52
21	13.56	28.25	Pk	.1	10.4	38.75	60	-21.25	-	-
22	13.56	16.72	Av	.1	10.4	27.22	-	-	50	-22.78
23	28.383	14.27	Pk	.3	10.7	25.27	60	-34.73	-	1
24	28.35	39	Av	.3	10.7	10.61	-	-	50	-39.39

Pk – Peak Detector Av – Average Detector DATE: 2019-09-04

REPORT NO: R12453250-E1 FCC ID: 2AHCNLOCK500I

#### 11. **SETUP PHOTOS**

Please refer toR12453250-EP1 for setup photos.

# **END OF TEST REPORT**

DATE: 2019-09-04