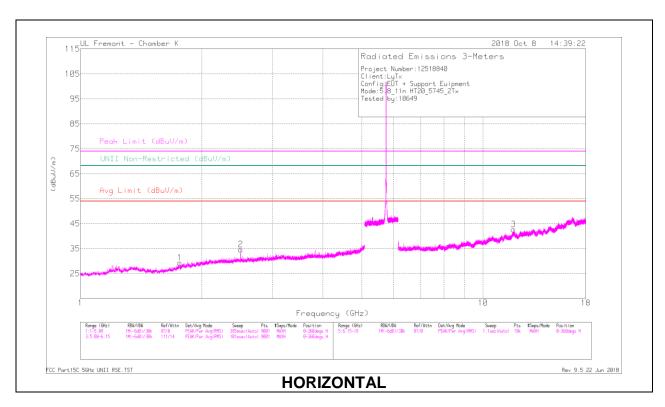
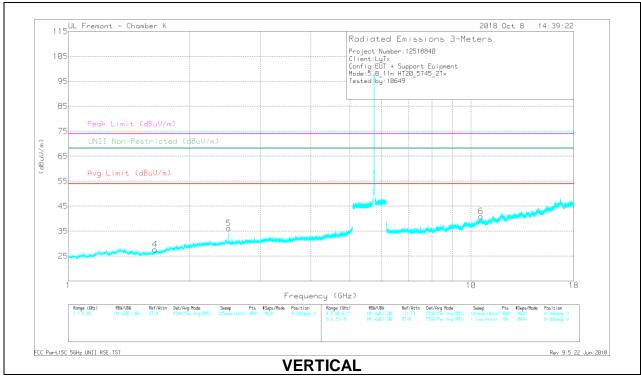
### HARMONICS AND SPURIOUS EMISSIONS

# LOW CHANNEL RESULTS





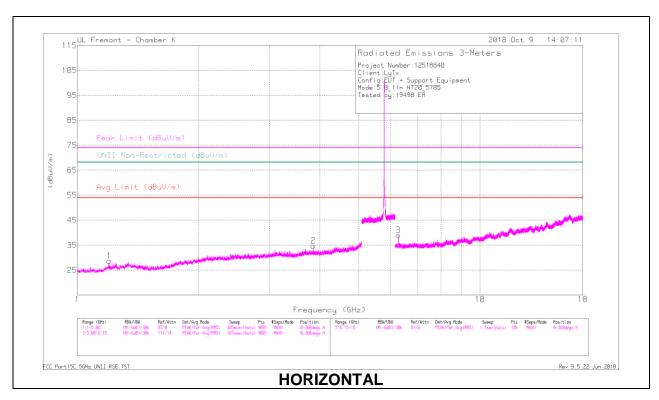
# **RADIATED EMISSIONS**

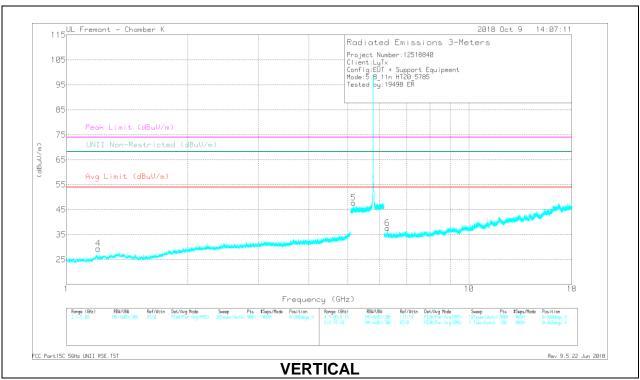
Markers	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.764	40.43	PK-U	29.8	-35.2	0	35.03				-	68.2	-33.17	146	362	H
2	* 2.5	45.49	PK-U	32.3	-35	0	42.79		-	74	-31.21			66	292	Н
	* 2.5	38.19	ADR	32.3	-35	.5	35.99	54	-18.01		-		-	66	292	H
4	1.641	41.29	PK-U	28.4	-35.2	0	34.49		-			68.2	-33.71	265	212	V
5	* 2.5	45.96	PK-U	32.3	-35	0	43.26			74	-30.74			20	142	V
	* 2.5	38.68	ADR	32.3	-35	.5	36.48	54	-17.52		-			20	142	V
3	* 11.906	28.87	PK-U	38.4	-20.3	0	46.97			74	-27.03		-	99	190	Н
	* 11.904	21.14	ADR	38.4	-20.3	.5	39.74	54	-14.26		-		-	99	190	Н
6	10.58	31.75	PK-U	37.7	-22.3	0	47.15					68.2	-21.05	205	123	V

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

PK-U - U-NII: Maximum Peak

# MID CHANNEL RESULTS





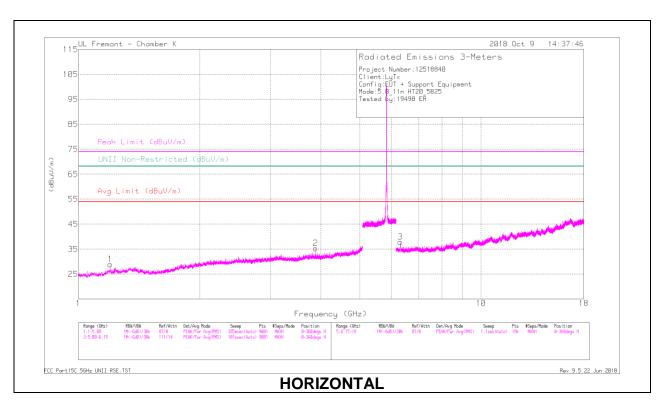
# **RADIATED EMISSIONS**

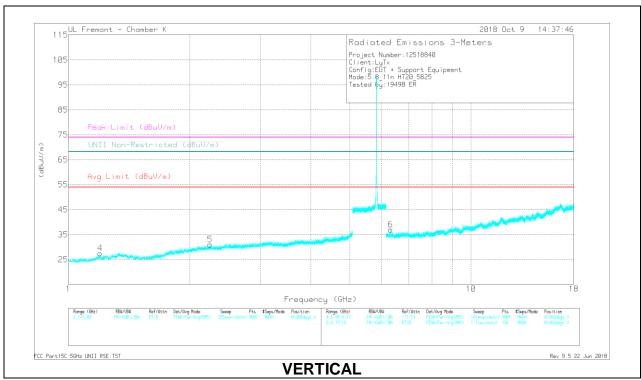
Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.2	42.05	PK-U	28.2	-35.2	0	35.05			74	-38.95			235	100	Н
* 1.2	34.15	ADR	28.2	-35.2	.5	27.65	54	-26.35					235	100	Н
* 3.857	40.92	PK-U	33.4	-31.6	0	42.72		-	74	-31.28			11	167	Н
* 3.857	31.98	ADR	33.4	-31.6	.5	34.28	54	-19.72		-			11	167	Н
* 1.2	42.57	PK-U	28.2	-35.2	0	35.57		-	74	-38.43			276	366	V
* 1.2	33.55	ADR	28.2	-35.2	.5	27.05	54	-26.95		-			276	366	V
5.162	36.32	PK-U	34.4	-20.1	0	50.62		-		-	68.2	-17.58	201	133	V
6.271	37.87	PK-U	35.3	-27.5	0	45.67					68.2	-22.53	24	188	Н
6.267	34.07	PK-U	35.3	-27.5	0	41.87			-		68.2	-26.33	251	249	V

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

PK-U - U-NII: Maximum Peak

# **HIGH CHANNEL RESULTS**





# **RADIATED EMISSIONS**

Fre quenc y (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.2	42.45	PK-U	28.2	-35.2	0	35.45			74	-38.55			234	102	Н
* 1.2	34.02	ADR	28.2	-35.2	.5	27.52	54	-26.48					234	102	Н
* 3.883	40.35	PK-U	33.4	-31.7	0	42.05			74	-31.95			0	193	Н
* 3.883	32.16	ADR	33.4	-31.7	.5	34.36	54	-19.64					0	193	Н
* 1.201	41.37	PK-U	28.3	-35.2	0	34.47			74	-39.53			27	132	V
* 1.2	32.08	ADR	28.2	-35.2	.5	25.58	54	-28.42					27	132	V
* 2.248	40.78	PK-U	31.9	-35.2	0	37.48		-	74	-36.52		-	123	143	V
* 2.248	30.89	ADR	31.9	-35.2	.5	28.09	54	-25.91					123	143	V
6.306	36.8	PK-U	35.4	-27.4	0	44.8					68.2	-23.4	198	189	Н
6.313	33.14	PK-U	35.4	-27.4	0	41.14					68.2	-27.06	74	159	V

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

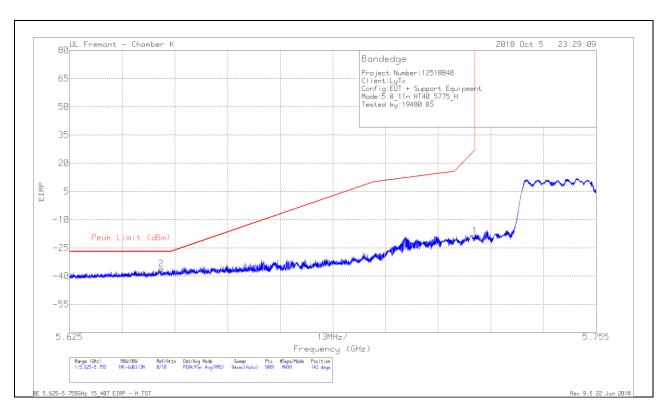
PK-U - U-NII: Maximum Peak

# 9.1.2. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND

#### 2TX Antenna 1 + Antenna 2 CDD MODE

# **BANDEDGE (LOW CHANNEL)**

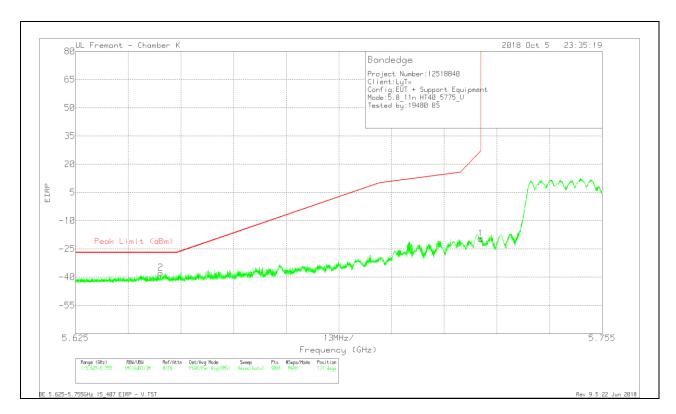
#### HORIZONTAL RESULT



Marker	Frequenc y (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/ Pad (dB)	Conversion Factor (dB)	DC Corr (dB)	Correcte d Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-46.3	Pk	34.9	-19	11.8	0	-18.6	26.99	-45.59	142	266	Н
2	5.648	-63.33	Pk	34.6	-19.4	11.8	0	-36.33	-27	-9.33	142	266	Н

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

# **VERTICAL RESULT**



Marker	Frequenc y (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/ Pad (dB)	Conversion Factor (dB)	DC Corr (dB)	Correcte d Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-47.3	Pk	34.9	-19	11.8	0	-19.6	26.99	-46.59	137	182	V
2	5.646	-64.8	Pk	34.6	-19.4	11.8	0	-37.8	-27	-10.8	137	182	V

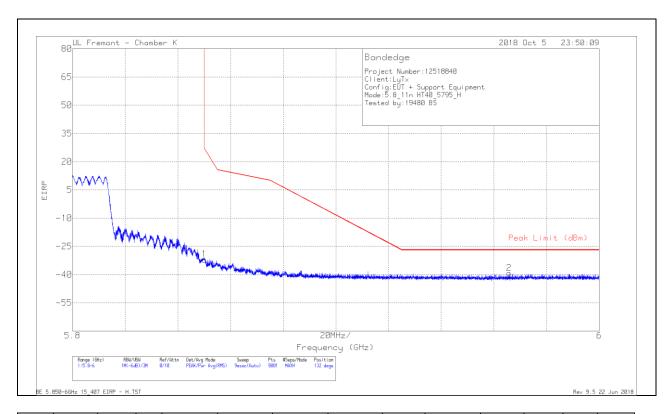
<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band Pk - Peak detector

DATE: 5/15/2019

IC: 6778A-UN1DKD

# **BANDEDGE (HIGH CHANNEL)**

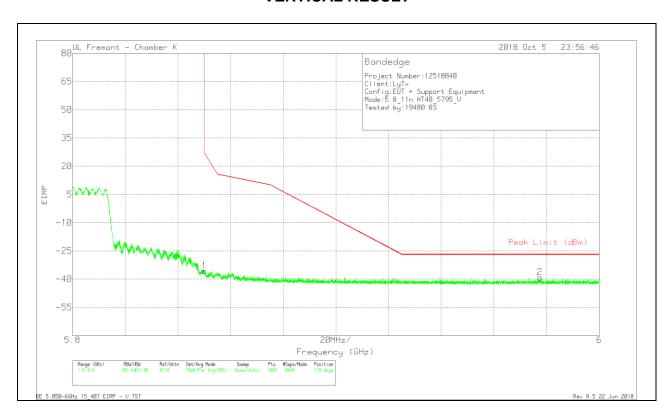
# **HORIZONTAL RESULT**



М	larker	Frequenc y (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/ Pad (dB)	Conversion Factor (dB)	DC Corr (dB)	Correcte d Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
	1	5.85	-59.9	Pk	35	-18.9	11.8	0	-32	26.95	-58.95	132	254	Н
	2	5.966	-67.55	Pk	35.1	-18.7	11.8	0	-39.35	-27	-12.35	132	254	Н

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

# **VERTICAL RESULT**



Marker	Frequenc y (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/ Pad (dB)	Conversion Factor (dB)	DC Corr (dB)	Correcte d Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-63.57	Pk	35	-18.9	11.8	0	-35.67	26.95	-62.62	139	232	V
2	5.977	-67.47	Pk	35.1	-18.6	11.8	0	-39.17	-27	-12.17	139	232	V

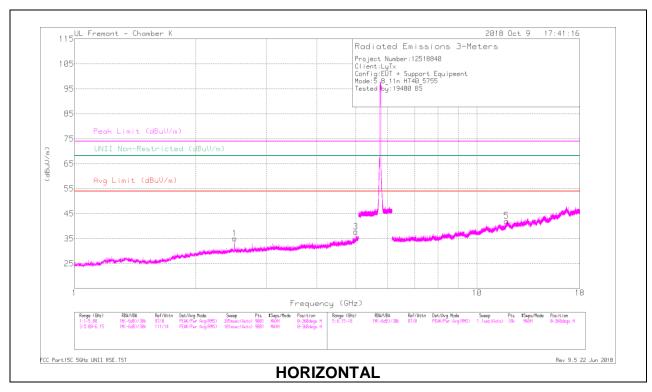
Pk - Peak detector

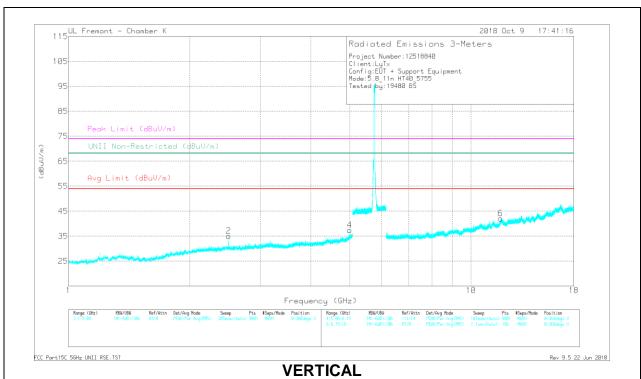
DATE: 5/15/2019

IC: 6778A-UN1DKD

### HARMONICS AND SPURIOUS EMISSIONS

# **LOW CHANNEL RESULTS**





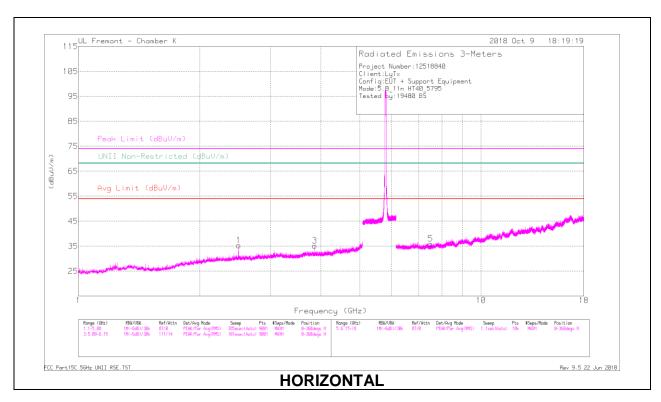
# **RADIATED EMISSIONS**

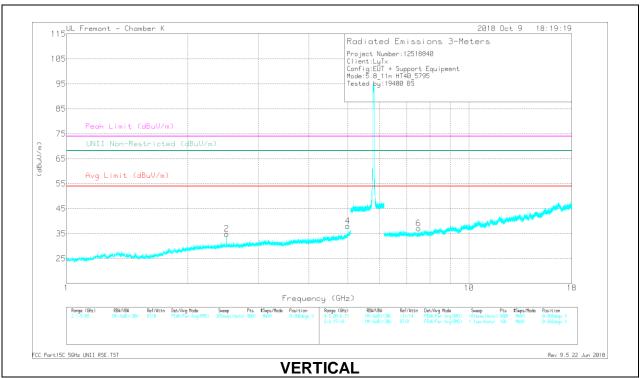
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.5	44.83	PK-U	32.3	-35	0	42.13	-	-	74	-31.87		-	278	130	Н
* 2.5	37.15	ADR	32.3	-35	.77	35.22	54	-18.78					278	130	Н
* 5	38.25	PK-U	34.3	-28.9	0	43.65			74	-30.35			225	190	Н
* 5	31.06	ADR	34.3	-28.9	.77	37.23	54	-16.77					225	190	Н
* 2.5	44.85	PK-U	32.3	-35	0	42.15			74	-31.85			280	197	V
* 2.5	36.85	ADR	32.3	-35	.77	34.92	54	-19.08					280	197	V
* 5	39.32	PK-U	34.3	-28.9	0	44.72			74	-29.28		-	209	241	V
* 5	32.03	ADR	34.3	-28.9	.77	38.2	54	-15.8					209	241	V
* 11.842	30.32	PK-U	38.4	-20.8	0	47.92			74	-26.08			232	159	Н
* 11.84	21.01	ADR	38.4	-20.8	.77	39.38	54	-14.62					232	159	Н
* 11.839	30.37	PK-U	38.4	-20.8	0	47.97			74	-26.03			342	329	V
* 11.838	20.72	ADR	38.4	-20.8	.77	39.09	54	-14.91					342	329	V

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

PK-U - U-NII: Maximum Peak

# **HIGH CHANNEL RESULTS**





# **RADIATED EMISSIONS**

Fre quenc y (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.5	44.7	PK-U	32.3	-35	0	42			74	-32			170	147	Н
* 2.5	36.4	ADR	32.3	-35	.77	34.47	54	-19.53					170	147	Н
* 3.864	37.94	PK-U	33.4	-31.8	0	39.54			74	-34.46			51	134	Н
* 3.864	29.25	ADR	33.4	-31.8	.77	31.62	54	-22.38					51	134	Н
* 2.5	46.23	PK-U	32.3	-35	0	43.53		-	74	-30.47		-	208	115	V
* 2.5	40.14	ADR	32.3	-35	.77	38.21	54	-15.79					208	115	V
* 5	39.7	PK-U	34.3	-28.9	0	45.1		-	74	-28.9		-	212	116	V
* 5	33.03	ADR	34.3	-28.9	.77	39.2	54	-14.8					212	116	V
* 7.5	33.92	PK-U	35.6	-26.6	0	42.92			74	-31.08			149	118	Н
* 7.5	24.37	ADR	35.6	-26.6	.77	34.14	54	-19.86				-	149	118	Н
* 7.5	34.1	PK-U	35.6	-26.6	0	43.1			74	-30.9			143	231	V
* 7.5	25.23	ADR	35.6	-26.6	.77	35	54	-19				-	143	231	V

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

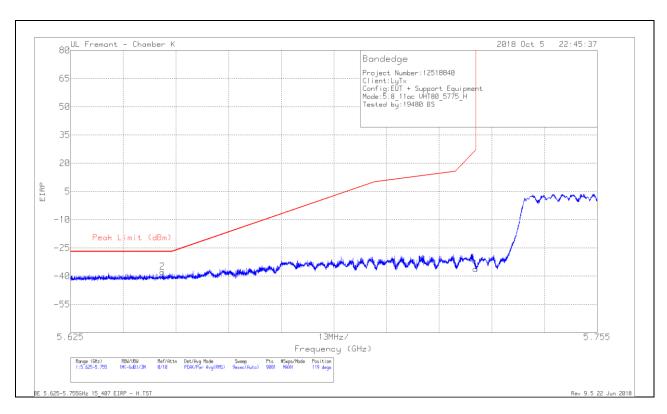
PK-U - U-NII: Maximum Peak

# 9.1.3. TX ABOVE 1 GHz 802.11ac VHT80 MODE IN THE 5.8 GHz BAND

#### 2TX Antenna 1 + Antenna 2 CDD MODE

# **BANDEDGE (CHANNEL 155 LOW EDGE)**

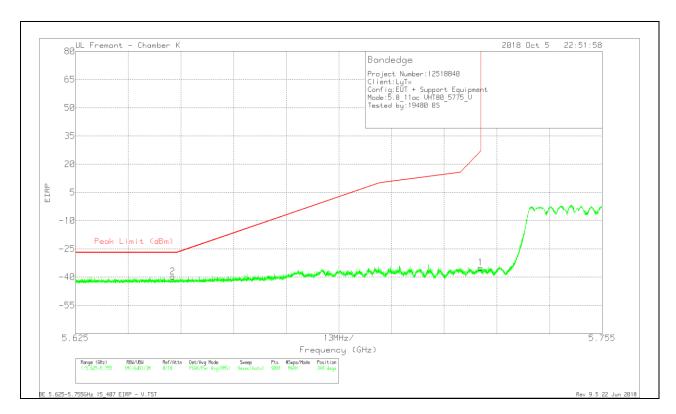
#### HORIZONTAL RESULT



Marker	Frequenc y (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/ Pad (dB)	Conversion Factor (dB)	DC Corr (dB)	Correcte d Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-63.94	Pk	34.9	-19	11.8	0	-36.24	26.99	-63.23	119	342	Н
2	5.648	-64.84	Pk	34.6	-19.4	11.8	0	-37.84	-27	-10.84	119	342	Н

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

# **VERTICAL RESULT**



Marker	Frequenc y (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/ Pad (dB)	Conversion Factor (dB)	DC Corr (dB)	Correcte d Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-62.8	Pk	34.9	-19	11.8	0	-35.1	26.99	-62.09	348	296	V
2	5.649	-66.89	Pk	34.6	-19.4	11.8	0	-39.89	-27	-12.89	348	296	V

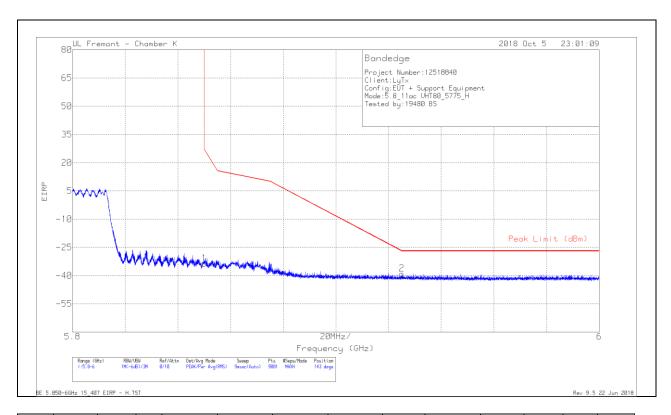
<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band Pk - Peak detector

DATE: 5/15/2019

IC: 6778A-UN1DKD

# **BANDEDGE (CHANNEL 155 HIGH EDGE)**

# **HORIZONTAL RESULT**

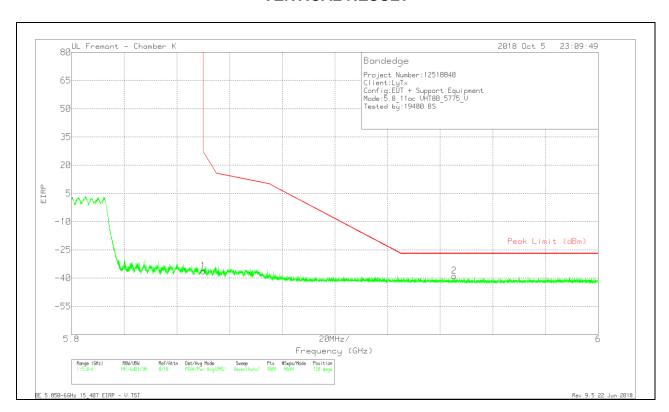


Marker	Frequenc y (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/ Pad (dB)	Conversion Factor (dB)	DC Corr (dB)	Correcte d Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-61.47	Pk	35	-18.9	11.8	0	-33.57	26.95	-60.52	143	269	Н
2	5.925	-67.16	Pk	35.1	-18.8	11.8	0	-39.06	-27	-12.06	143	269	H

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

DATE: 5/15/2019

# **VERTICAL RESULT**



Marker	Frequenc y (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/P ad (dB)	Conversion Factor (dB)	Correcte d Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-64.19	Pk	35	-18.9	11.8	-36.29	26.95	-63.24	128	211	V
2	5.945	-67.13	Pk	35.1	-18.7	11.8	-38.93	-27	-11.93	128	211	V

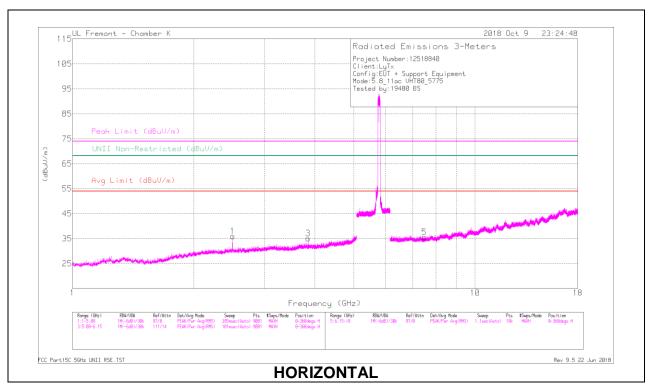
<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band Pk - Peak detector

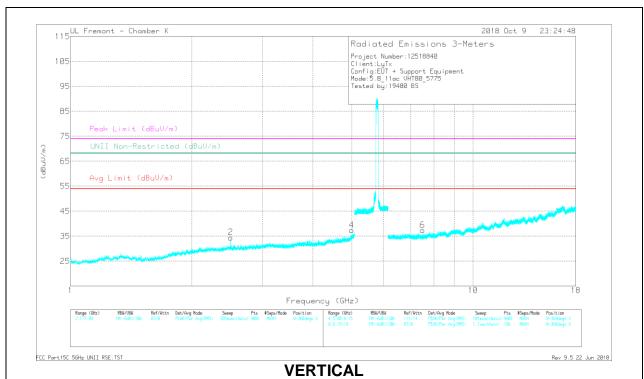
DATE: 5/15/2019

IC: 6778A-UN1DKD

### HARMONICS AND SPURIOUS EMISSIONS

#### MID CHANNEL RESULTS





# **RADIATED EMISSIONS**

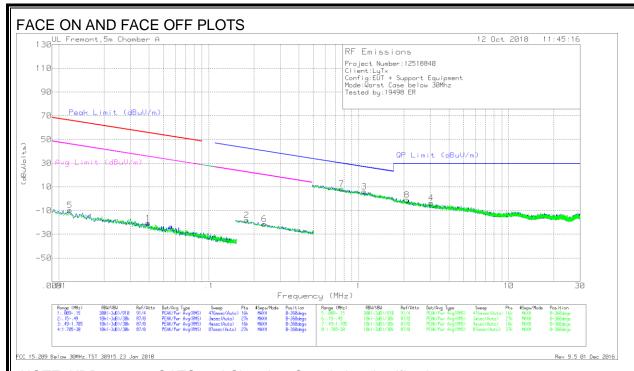
Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.5	45.47	PK-U	32.3	-35	0	42.77		-	74	-31.23		-	262	113	Н
* 2.5	37.02	ADR	32.3	-35	.68	35	54	-19					262	113	Н
* 3.85	39.13	PK-U	33.4	-31.7	0	40.83			74	-33.17			166	102	Н
* 3.85	32.03	ADR	33.4	-31.7	.68	34.41	54	-19.59					166	102	Н
* 2.5	44.94	PK-U	32.3	-35	0	42.24			74	-31.76			20	233	V
* 2.5	36.96	ADR	32.3	-35	.68	34.94	54	-19.06					20	233	V
* 5	39.06	PK-U	34.3	-28.9	0	44.46		-	74	-29.54		-	215	256	V
* 5	31.86	ADR	34.3	-28.9	.68	37.94	54	-16.06					215	256	V
* 7.489	34.06	PK-U	35.6	-26.6	0	43.06			74	-30.94			68	300	Н
* 7.488	23.88	ADR	35.6	-26.6	.68	33.56	54	-20.44					68	300	Н
* 7.5	35.05	PK-U	35.6	-26.6	0	44.05			74	-29.95			156	190	V
* 7.5	26.78	ADR	35.6	-26.6	.68	36.46	54	-17.54					156	190	V

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

PK-U - U-NII: Maximum Peak

# 9.2. WORST-CASE BELOW 30 MHz

#### SPURIOUS EMISSIONS BELOW 30 MHz (WORST-CASE CONFIGURATION)



NOTE: KDB 414788 OATS and Chamber Correlation Justification

- Based on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.
- OATs and chamber correlation testing had been performed and chamber measured test result is the worst-case test result.

#### Trace Markers

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300 m	Corrected Reading (dBuVolts )	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
5	.01185	54.97	Pk	15.1	.1	-80	-9.83	66.11	-75.94	46.11	-55.94	0-360
1	.03943	44.55	Pk	14.8	.1	-80	-20.55	55.67	-76.22	35.67	-56.22	0-360
2	.17927	47.77	Pk	13.8	.1	-80	-18.33	42.55	-60.88	22.55	-40.88	0-360
6	.23475	44.59	Pk	13.8	.1	-80	-21.51	40.2	-61.71	20.2	-41.71	0-360

#### Pk - Peak detector

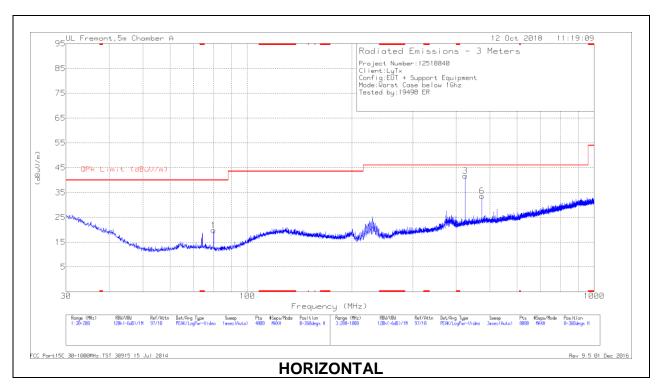
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
7	.76888	34.42	Pk	13.9	.1	-40	8.42	29.9	-21.48	0-360
3	1.08835	31.46	Pk	14.2	.2	-40	5.86	26.89	-21.03	0-360
8	2.09695	24.69	Pk	14.2	.2	-40	91	29.5	-30.41	0-360
4	3.04277	21.86	Pk	14.3	.3	-40	-3.54	29.5	-33.04	0-360

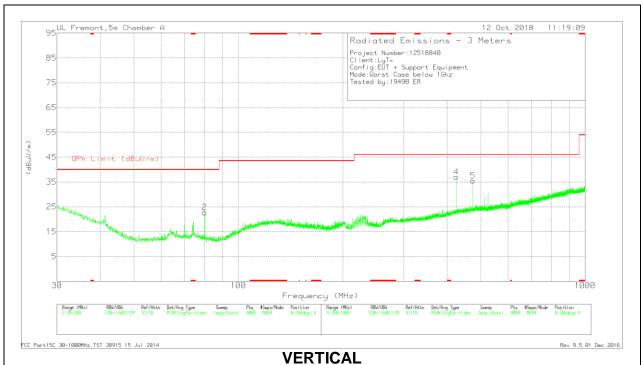
Pk - Peak detector

DATE: 5/15/2019

IC: 6778A-UN1DKD

# 9.3. WORST CASE 30 MHz - 1 GHz





# **Below 1GHz DATA**

#### **Trace Markers**

Marker	Frequency	Meter	Det	AF T130 (dB/m)	Amp/Cbl (dB/m)	Corrected	QPk Limit (dBuV/m)	Margin	Azimuth	Height	Polarity
	(MHz)	Reading				Reading		(dB)	(Degs)	(cm)	
		(dBuV)				(dBuV/m)					
1	79.9929	34.86	Pk	11.5	-26.6	19.76	40	-20.24	0-360	101	Н
2	79.9929	37.85	Pk	11.5	-26.6	22.75	40	-17.25	0-360	100	V
4	424.9292	41.86	Pk	20.4	-25.2	37.06	46.02	-8.96	0-360	101	V
3	425.0293	46.48	Pk	20.4	-25.2	41.68	46.02	-4.34	0-360	100	Н
6	474.9357	37.43	Pk	21.5	-25.3	33.63	46.02	-12.39	0-360	100	Н
5	474.9357	39.36	Pk	21.5	-25.3	35.56	46.02	-10.46	0-360	101	V

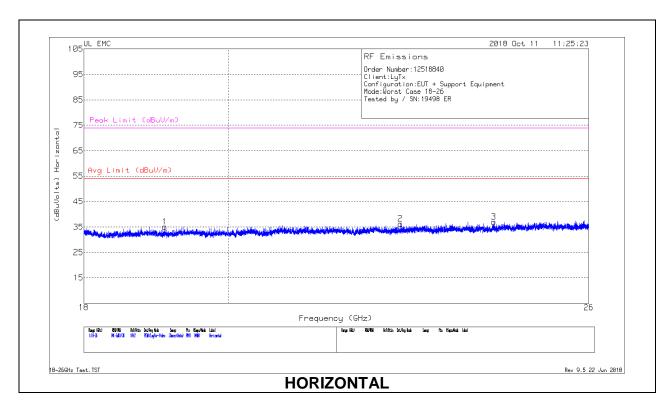
#### Pk - Peak detector

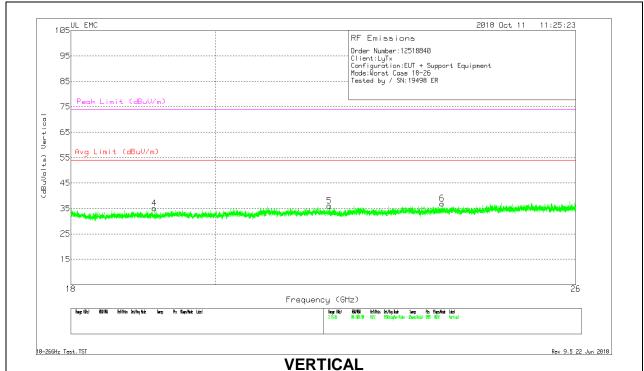
# **Radiated Emissions**

Frequency	Meter	Det	AF T130 (dB/m)	Amp/Cbl (dB/m)	Corrected	QPk Limit	Margin	Azimuth	Height	Polarity
(MHz)	Reading				Reading	(dBuV/m)	(dB)	(Degs)	(cm)	
	(dBuV)				(dBuV/m)					
424.9712	46.15	Qp	20.4	-25.2	41.35	46.02	-4.67	283	101	Н

Qp - Quasi-Peak detector

# 9.4. WORST CASE 18-26 GHz





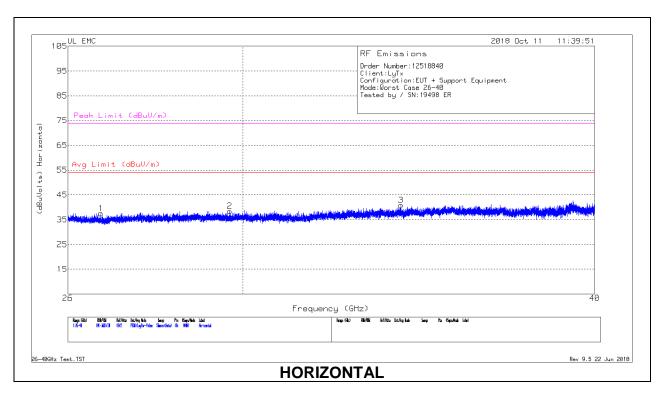
# 18 - 26GHz DATA

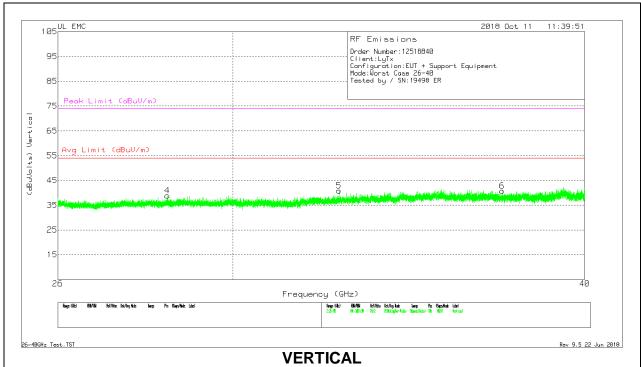
Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	T448 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	19.093	69.44	Pk	32.6	-57.5	-9.5	35.04	54	-18.96	74	-38.96
2	22.667	69.84	Pk	33.4	-57.5	-9.5	36.24	54	-17.76	74	-37.76
3	24.262	68.92	Pk	34	-56.4	-9.5	37.02	54	-16.98	74	-36.98
4	19.13	69.43	Pk	32.5	-57.4	-9.5	35.03	54	-18.97	74	-38.97
5	21.73	69.84	Pk	33.2	-57.5	-9.5	36.04	54	-17.96	74	-37.96
6	23.588	69.4	Pk	33.9	-56.9	-9.5	36.9	54	-17.1	74	-37.1

Pk - Peak detector

DATE: 5/15/2019

# 9.5. WORST CASE 26-40 GHz





# 26 - 40GHz DATA

# **Trace Markers**

Marker	Frequency (GHz)	Meter Reading	Det	T446 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
		(dBuV)					(dBuVolts)				
1	26.716	69.32	Pk	35.3	-57.6	-9.5	37.52	54	-16.48	74	-36.48
2	29.68	65.43	Pk	36	-53.5	-9.5	38.43	54	-15.57	74	-35.57
3	34.138	67.53	Pk	36.9	-54.1	-9.5	40.83	54	-13.17	74	-33.17
4	28.438	66.36	Pk	35.7	-53.7	-9.5	38.86	54	-15.14	74	-35.14
5	32.72	67.75	Pk	36.5	-53.9	-9.5	40.85	54	-13.15	74	-33.15
6	37.389	68.57	Pk	37.3	-55.6	-9.5	40.77	54	-13.23	74	-33.23

Pk - Peak detector