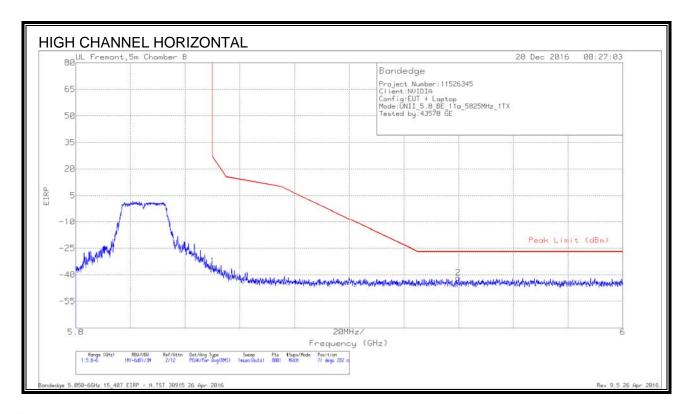
REPORT NO: 11526345-E4V3 **DATE: January 15, 2017** IC: 7361A-P3310 FCC ID: VOB-P3310

## **AUTHORIZED BANDEDGE (HIGH CHANNEL)**

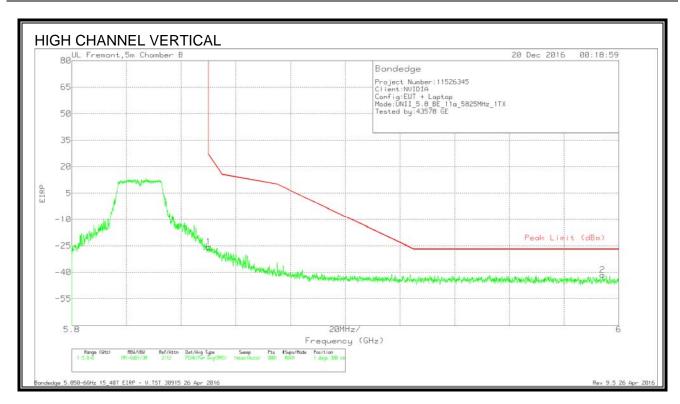
# **FCC**



Marker	Frequency (GHz)	Meter Reading	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
		(dBm)					EIRP					
1	5.85	-60.61	Pk	35.2	-21.6	11.8	-35.21	26.94	-62.15	71	282	Н
2	5.94	-67.34	Pk	35.3	-21.5	11.8	-41.74	-27	-14.74	71	282	Н

Pk - Peak detector

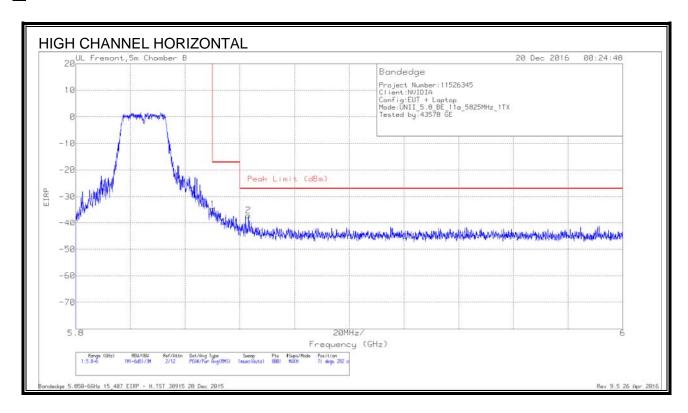
REPORT NO: 11526345-E4V3 DATE: January 15, 2017 IC: 7361A-P3310 FCC ID: VOB-P3310



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-51.01	Pk	35.2	-21.6	11.8	-25.61	26.94	-52.55	1	300	V
2	5.994	-67.2	Pk	35.2	-21.3	11.8	-41.5	-27	-14.5	1	300	V

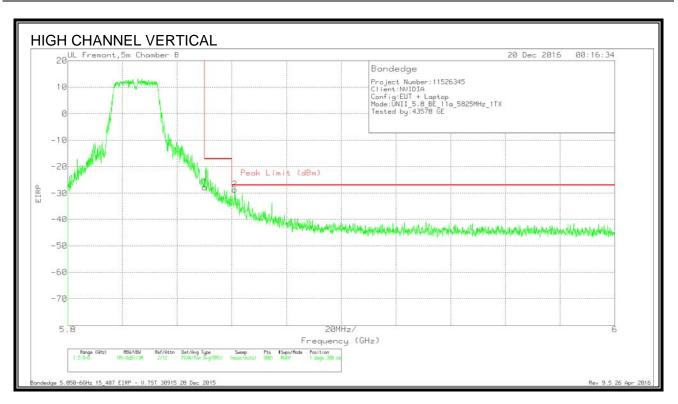
Pk - Peak detector

<u>IC</u>



Marker	Frequency	Meter	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad	Conversion Factor	Corrected	Peak Limit (dBm)	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading			(dB)	(dB)	Reading		(dB)	(Degs)	(cm)	
		(dBm)					EIRP					
1	5.85	-60.19	Pk	35.2	-21.6	11.8	-34.79	-17	-17.79	71	282	Н
2	5.863	-62.75	Pk	35.2	-21.3	11.8	-37.05	-27	-10.05	71	282	Н

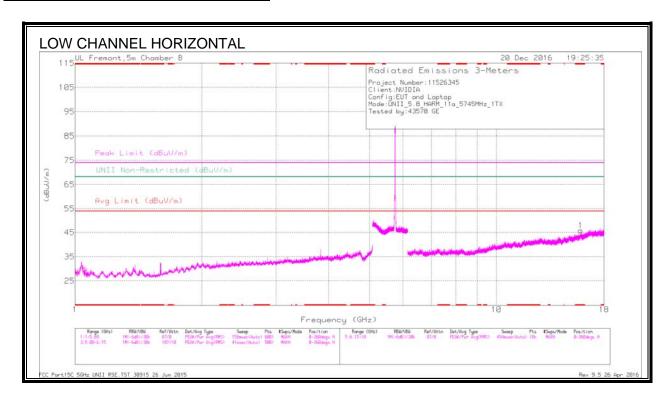
Pk - Peak detector

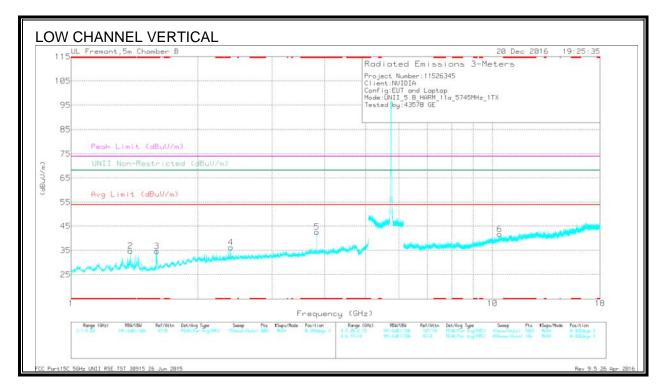


Mar	er Frequ	,	Meter Reading	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
	(GI	2)	(dBm)			(ub)	(ub)	EIRP		(ub)	(Degs)	(CIII)	
1	5.8	5	-53.11	Pk	35.2	-21.6	11.8	-27.71	-17	-10.71	1	300	V
2	5.80	51	-53.95	Pk	35.2	-21.6	11.8	-28.55	-27	-1.55	1	300	V

Pk - Peak detector

### **HARMONICS AND SPURIOUS EMISSIONS**





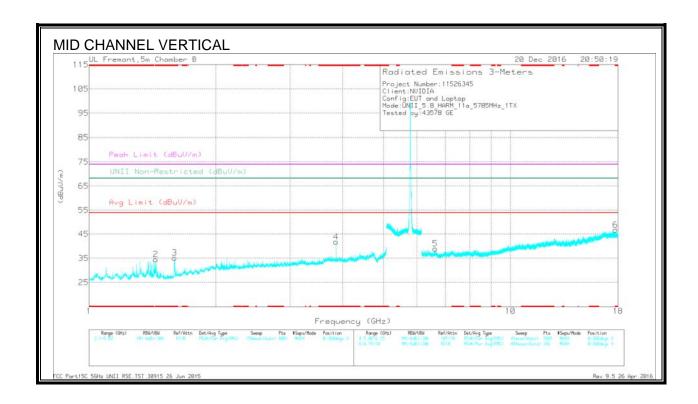
DATE: January 15, 2017 IC: 7361A-P3310

### Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected 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	* 1.383	52.21	PK-U	28.9	-35	0	46.11	-	-	74	-27.89	-	-	124	304	V
	* 1.383	32.37	ADR	28.9	-35	.29	26.56	54	-27.44		-	-	-	124	304	V
3	* 1.593	55.4	PK-U	28.1	-35.3	0	48.2	-	-	74	-25.8	-	-	98	349	V
	* 1.596	33.46	ADR	28.1	-35.2	.29	26.65	54	-27.35	-	-	-	-	98	349	V
5	* 3.83	46.66	PK-U	33.4	-33	0	47.06	-	-	74	-26.94	-	-	252	272	V
	* 3.83	35.28	ADR	33.4	-33	.29	35.97	54	-18.03		-	-	-	252	272	V
1	* 15.853	32.39	PK-U	40.6	-22.6	0	50.39	-	-	74	-23.61	-	-	106	126	Н
	* 15.852	22.04	ADR	40.6	-22.6	.29	40.33	54	-13.67		-	-	-	106	126	Н
4	2.398	46.58	PK-U	32.2	-34.7	0	44.08	-		-		68.2	-24.12	76	253	V
6	10.397	33.25	PK-U	37.6	-25.5	0	45.35	-	-	-	-	68.2	-22.85	216	110	V

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

PK-U - U-NII: Maximum Peak



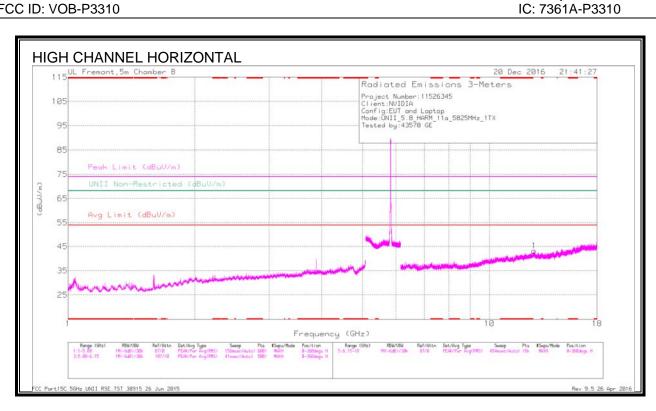
DATE: January 15, 2017 IC: 7361A-P3310

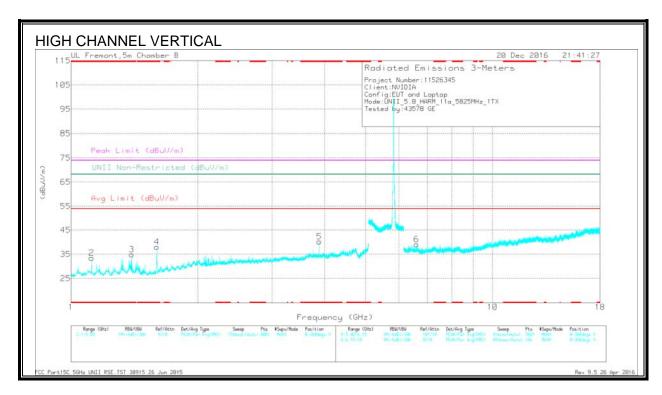
### Radiated Emissions

Marker	Frequency (GHz)	Meter Reading	Det	AF T345 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading	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
		(dBuV)					(dBuV/m)									
1	* 1.031	46.31	PK-U	27.8	-36.1	0	38.01	-		74	-35.99	-	-	298	293	Н
	* 1.034	32.06	ADR	27.8	-36.1	.29	24.05	54	-29.95	-				298	293	H
2	* 1.437	52.51	PK-U	28.5	-35.1	0	45.91	-	-	74	-28.09	-	-	142	377	V
	* 1.437	32.94	ADR	28.5	-35.1	.29	26.63	54	-27.37	-	-	-	-	142	377	V
3	* 1.597	55.88	PK-U	28.1	-35.2	0	48.78	*	-	74	-25.22	-	-	102	168	V
	* 1.6	34.67	ADR	28.1	-35.1	.29	27.96	54	-26.04	-	-	-	-	102	168	V
4	* 3.857	45.72	PK-U	33.4	-33.1	0	46.02	-	-	74	-27.98	-	-	134	352	V
	* 3.857	34.2	ADR	33.4	-33.1	.29	34.79	54	-19.21	-	-	-	-	134	352	V
6	* 17.761	32.45	PK-U	41.4	-23	0	50.85	-		74	-23.15	-	-	5	152	V
	* 17.761	22.26	ADR	41.4	-23	.29	40.95	54	-13.05	-	-	-	-	5	152	V
5	6.627	38.2	PK-U	35.5	-29.8	0	43.9	-	-	-	-	68.2	-24.3	98	117	V

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

PK-U - U-NII: Maximum Peak





DATE: January 15, 2017

### Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected 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	* 1.119	41.48	PK-U	28	-35.5	0	33.98	-	-	74	-40.02	-	-	343	185	V
	* 1.118	30.45	ADR	28	-35.5	.29	23.24	54	-30.76	-	-		-	343	185	V
3	* 1.392	53.08	PK-U	28.9	-35	0	46.98	-	-	74	-27.02	-	-	134	397	V
	* 1.391	31.83	ADR	28.9	-35	.29	26.02	54	-27.98	-	-	-	-	134	397	V
4	* 1.599	57.08	PK-U	28.1	-35.1	0	50.08	-	-	74	-23.92	-	-	102	392	V
	* 1.595	34.43	ADR	28.1	-35.2	.29	27.62	54	-26.38	-	-		-	102	392	V
5	* 3.883	43.61	PK-U	33.3	-32.8	0	44.11	-	-	74	-29.89	-	-	286	286	V
	* 3.883	33.37	ADR	33.3	-32.8	.29	34.16	54	-19.84	-	-		-	286	286	V
6	6.606	38.74	PK-U	35.5	-30.3	0	43.94	-		-		68.2	-24.26	315	161	V
1	12.769	33.75	PK-U	39.4	-25.1	0	48.05	-	-	-	-	68.2	-20.15	347	131	Н

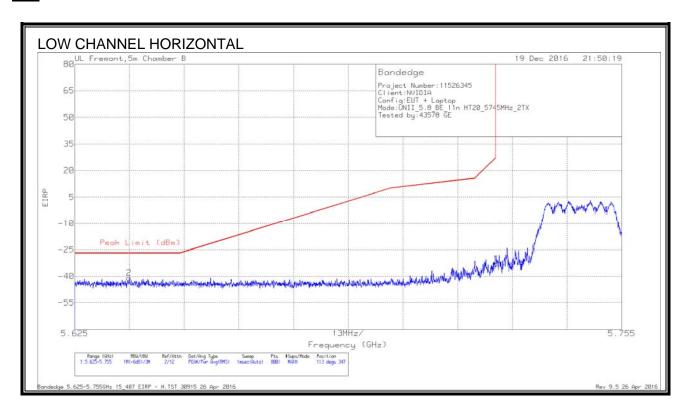
<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

## 11.1.18.11n HT20 2TX CDD MIMO MODE IN THE 5.8GHz BAND

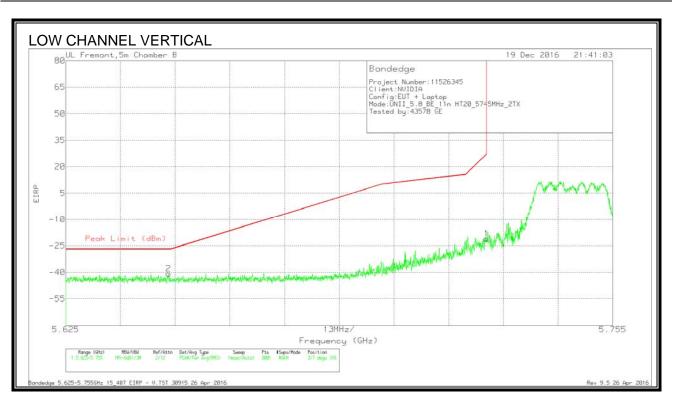
### **RESTRICTED BANDEDGE (LOW CHANNEL)**

## **FCC**



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.638	-66.07	Pk	34.7	-21.4	11.8	-40.97	-27	-13.97	113	347	Н
1	5.725	-58.06	Pk	34.9	-21.7	11.8	-33.06	26.97	-60.03	113	347	Н

Pk - Peak detector

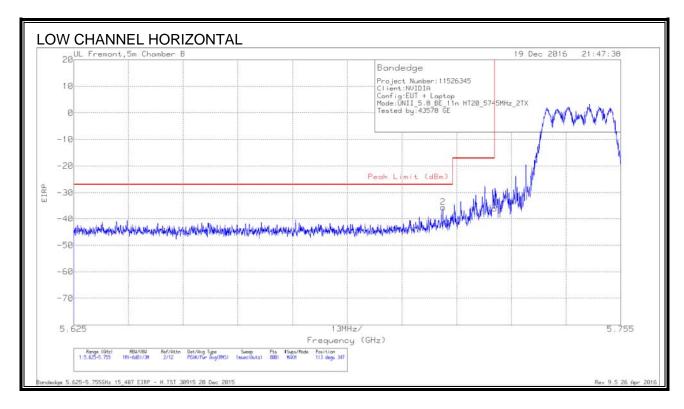


Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.649	-65.63	Pk	34.7	-21.6	11.8	-40.73	-27	-13.73	317	316	V
1	5.725	-46.1	Pk	34.9	-21.7	11.8	-21.1	26.97	-48.07	317	316	V

Pk - Peak detector

REPORT NO: 11526345-E4V3 DATE: January 15, 2017 IC: 7361A-P3310 FCC ID: VOB-P3310

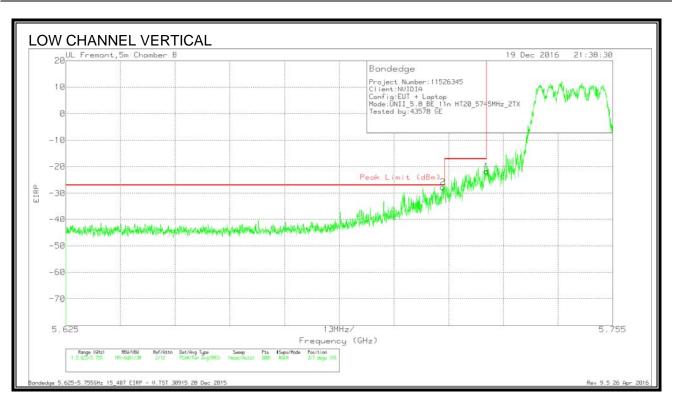
<u>IC</u>



Marker	Frequency	Meter	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad	Conversion Factor	Corrected	Peak Limit (dBm)	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading			(dB)	(dB)	Reading		(dB)	(Degs)	(cm)	
		(dBm)					EIRP					
2	5.713	-60.5	Pk	34.9	-21.7	11.8	-35.5	-27	-8.5	113	347	Н
1	5.725	-61	Pk	34.9	-21.7	11.8	-36	-17	-19	113	347	Н

Pk - Peak detector

REPORT NO: 11526345-E4V3 DATE: January 15, 2017 IC: 7361A-P3310 FCC ID: VOB-P3310

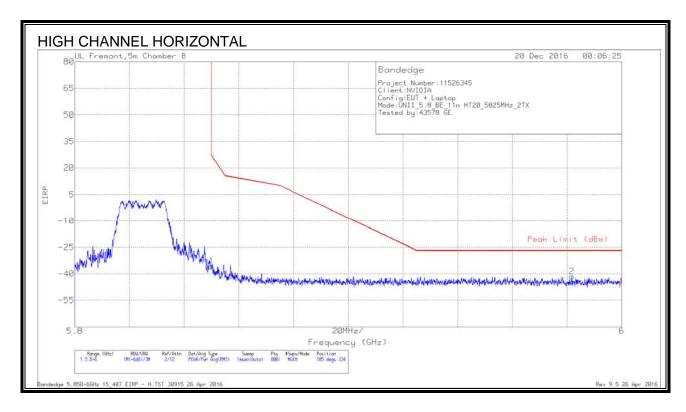


Marker	Frequency	Meter	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad	Conversion Factor	Corrected	Peak Limit (dBm)	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading			(dB)	(dB)	Reading		(dB)	(Degs)	(cm)	i l
		(dBm)					EIRP					
2	5.715	-52.72	Pk	34.9	-21.7	11.8	-27.72	-27	72	317	316	V
1	5.725	-46.75	Pk	34.9	-21.7	11.8	-21.75	-17	-4.75	317	316	V

Pk - Peak detector

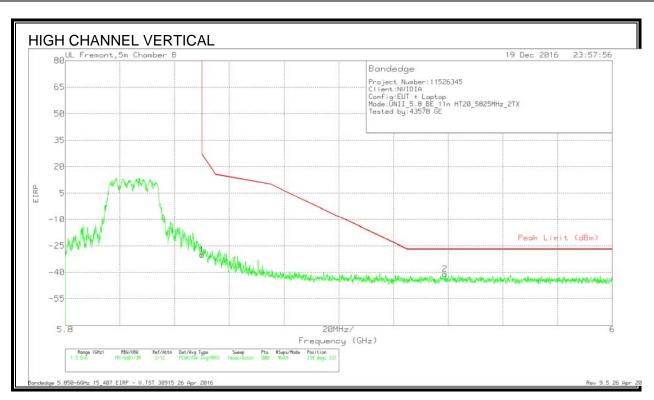
## **AUTHORIZED BANDEDGE (HIGH CHANNEL)**

# **FCC**



Marker	Frequency	Meter	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad	Conversion Factor	Corrected	Peak Limit (dBm)	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading			(dB)	(dB)	Reading		(dB)	(Degs)	(cm)	
		(dBm)					EIRP					
1	5.85	-61.24	Pk	35.2	-21.6	11.8	-35.84	26.94	-62.78	105	334	Н
2	5.982	-67.07	Pk	35.2	-21.5	11.8	-41.57	-27	-14.57	105	334	Н

Pk - Peak detector

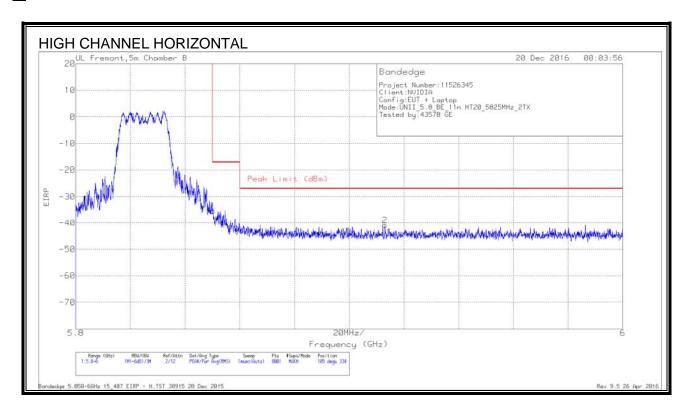


M	larker	Frequency	Meter	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad	Conversion Factor	Corrected	Peak Limit (dBm)	PK Margin	Azimuth	Height	Polarity
		(GHz)	Reading			(dB)	(dB)	Reading		(dB)	(Degs)	(cm)	1
			(dBm)					EIRP					1
	1	5.85	-55.43	Pk	35.2	-21.6	11.8	-30.03	26.94	-56.97	239	333	V
	2	5.939	-66.65	Pk	35.3	-21.5	11.8	-41.05	-27	-14.05	239	333	V

Pk - Peak detector

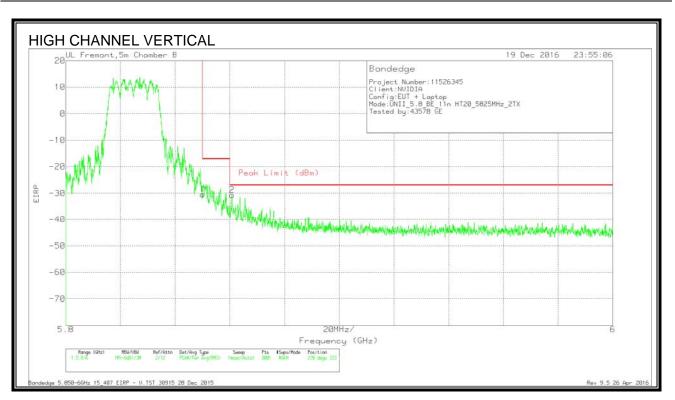
REPORT NO: 11526345-E4V3 DATE: January 15, 2017 IC: 7361A-P3310 FCC ID: VOB-P3310

<u>IC</u>



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-60.79	Pk	35.2	-21.6	11.8	-35.39	-17	-18.39	105	334	Н
2	5.913	-66.41	Pk	35.3	-21.6	11.8	-40.91	-27	-13.91	105	334	Н

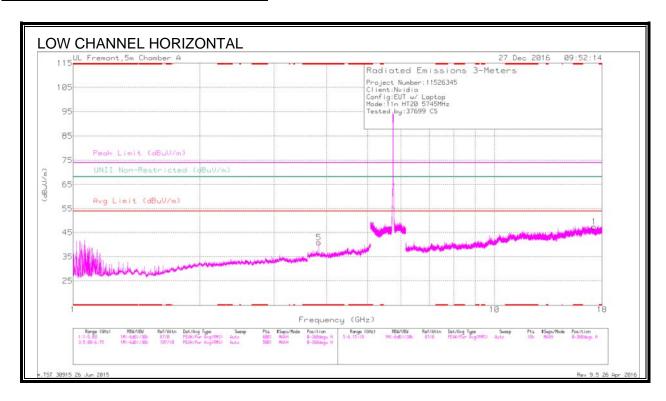
Pk - Peak detector

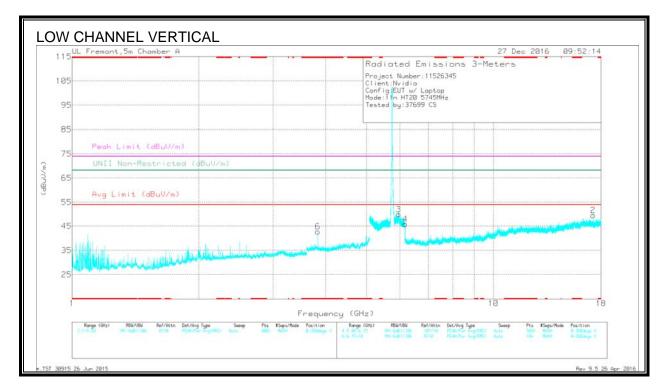


Marker	Frequency	Meter	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad	Conversion Factor	Corrected	Peak Limit (dBm)	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading			(dB)	(dB)	Reading		(dB)	(Degs)	(cm)	
		(dBm)					EIRP					
1	5.85	-55.81	Pk	35.2	-21.6	11.8	-30.41	-17	-13.41	239	333	V
2	5.861	-56.11	Pk	35.2	-21.6	11.8	-30.71	-27	-3.71	239	333	V

Pk - Peak detector

### **HARMONICS AND SPURIOUS EMISSIONS**





DATE: January 15, 2017 IC: 7361A-P3310

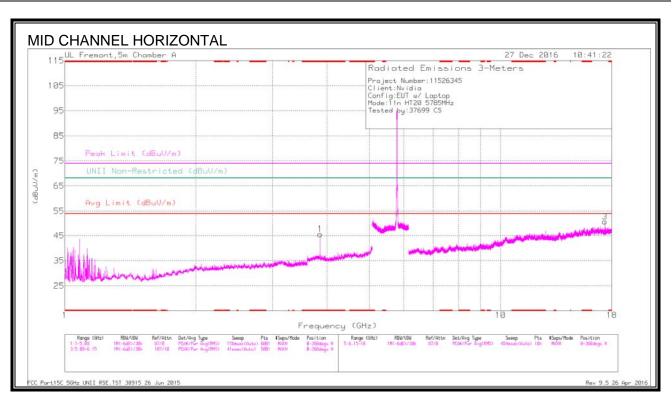
### Radiated Emissions

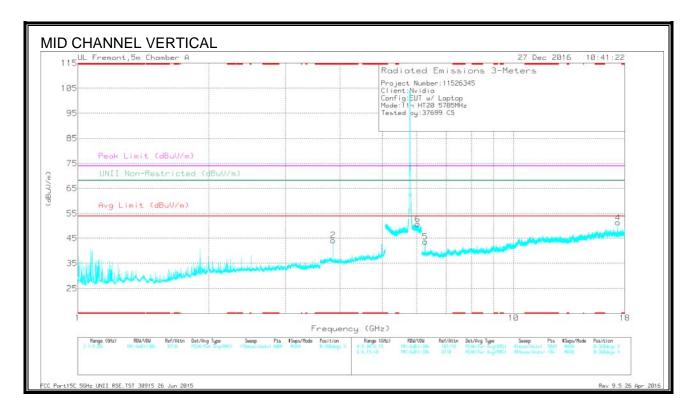
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 3.83	42.57	PK-U	33.6	-29.8	0	46.37	-	-	74	-27.63	-	-	241	112	Н
	* 3.83	34.44	ADR	33.6	-29.8	.31	38.55	54	-15.45	-	-	-	-	241	112	Н
6	* 3.83	42.59	PK-U	33.6	-29.8	0	46.39			74	-27.61	-		350	261	V
	* 3.83	36.87	ADR	33.6	-29.8	.31	40.98	54	-13.02	-	-	-	-	350	261	٧
3	5.96	40.04	PK-U	35.2	-18.6	0	56.64	-	-	-	-	68.2	-11.56	314	115	٧
4	6.169	41.99	PK-U	35.5	-26.2	0	51.29	-	-	-	-	68.2	-16.91	50	204	٧
2	17.23	35.48	PK-U	41.1	-21	0	55.58	-	-	-	-	68.2	-12.62	53	195	Н
1	17.233	38.34	PK-U	41	-21	0	58.34	-	-	-	-	68.2	-9.86	204	231	٧

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

PK-U - U-NII: Maximum Peak

REPORT NO: 11526345-E4V3 DATE: January 15, 2017 FCC ID: VOB-P3310





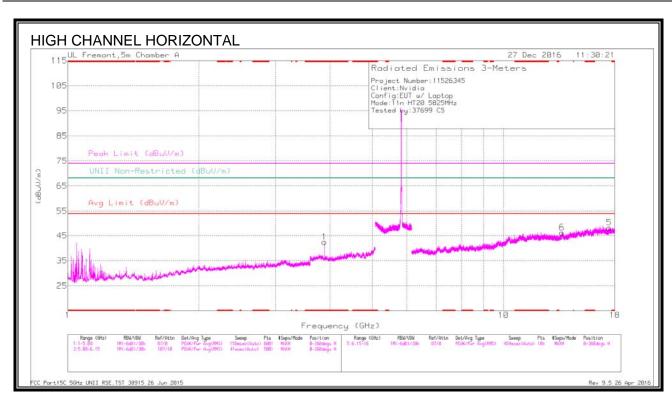
IC: 7361A-P3310

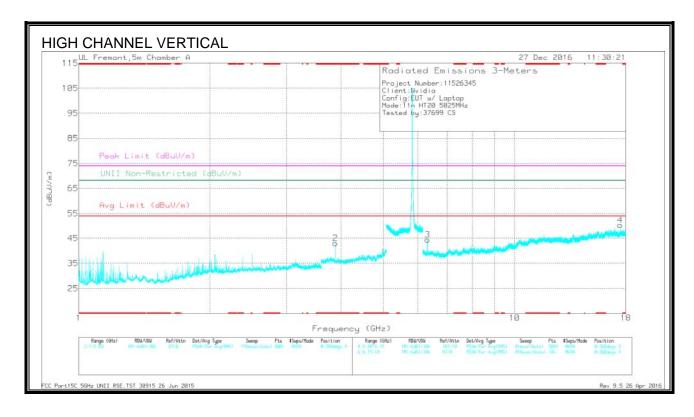
### Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected 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	* 3.856	44.29	PK-U	33.6	-30.1	0	47.79	-	-	74	-26.21	-	-	230	171	Н
	* 3.857	36.09	ADR	33.6	-30.1	.31	39.9	54	-14.1	-	-	-	-	230	171	Н
2	* 3.857	45.25	PK-U	33.6	-30.1	0	48.75	-		74	-25.25	-		187	377	V
	* 3.857	40.88	ADR	33.6	-30.1	.31	44.69	54	-9.31	-	-	-	-	187	377	٧
6	6.024	40.24	PK-U	35.3	-18.4	0	57.14	-	-	-	-	68.2	-11.06	40	170	٧
5	6.272	41.75	PK-U	35.5	-26.2	0	51.05	-		-		68.2	-17.15	59	188	V
4	17.354	37.26	PK-U	40.9	-21.1	0	57.06	-	-	-	-	68.2	-11.14	208	226	V
3	17.365	36.73	PK-U	40.9	-21.1	0	56.53	-	-	-	-	68.2	-11.67	112	287	Н

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

PK-U - U-NII: Maximum Peak





### Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (db/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected 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	* 3.883	45.51	PK-U	33.6	-30.5	0	48.61	-	-	74	-25.39	-	-	234	155	Н
	* 3.883	38.04	ADR	33.6	-30.5	.31	41.45	54	-12.55	-		-	-	234	155	Н
2	* 3.883	44.09	PK-U	33.6	-30.5	0	47.19	-	-	74	-26.81	-	-	233	106	V
	* 3.883	37.48	ADR	33.6	-30.5	.31	40.89	54	-13.11	-	-	-	-	233	106	V
3	6.308	39.96	PK-U	35.5	-25.9	0	49.56	-	-	-	-	68.2	-18.64	92	204	٧
6	13.621	33.41	PK-U	39	-20.5	0	51.91	-	-	-		68.2	-16.29	156	200	Н
5	17.469	33.82	PK-U	40.8	-20.7	0	53.92	-	-	-	-	68.2	-14.28	53	176	Н
4	17.474	37.14	PK-U	40.8	-20.7	0	57.24	-	-	-	-	68.2	-10.96	204	213	V

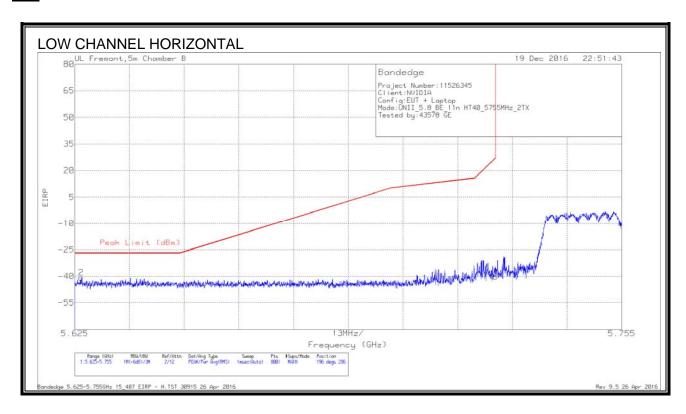
<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

## 11.1.19.11n HT40 2TX CDD MIMO MODE IN THE 5.8GHz BAND

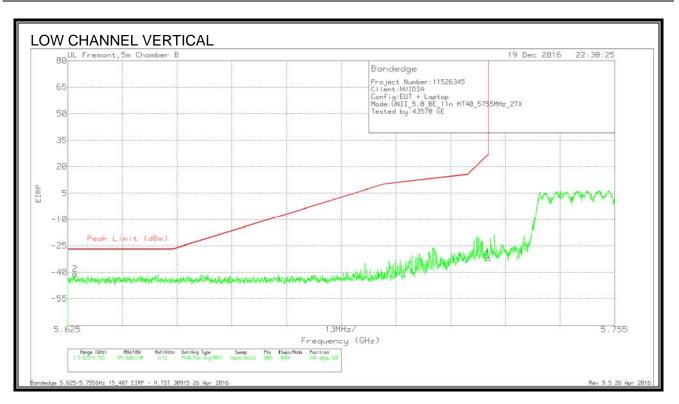
### **RESTRICTED BANDEDGE (LOW CHANNEL)**

## **FCC**



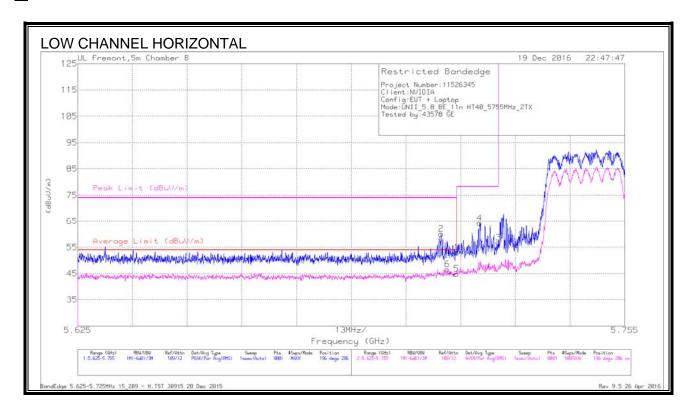
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.627	-66.13	Pk	34.6	-21.1	11.8	-40.83	-27	-13.83	196	286	Н
1	5.725	-65.19	Pk	34.9	-21.7	11.8	-40.19	26.97	-67.16	196	286	Н

Pk - Peak detector



Marker	Frequency	Meter	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad	Conversion Factor	Corrected	Peak Limit (dBm)	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading			(dB)	(dB)	Reading		(dB)	(Degs)	(cm)	
		(dBm)					EIRP					
2	5.627	-66.34	Pk	34.6	-21.1	11.8	-41.04	-27	-14.04	244	326	V
1	5.725	-57.21	Pk	34.9	-21.7	11.8	-32.21	26.97	-59.18	244	326	V

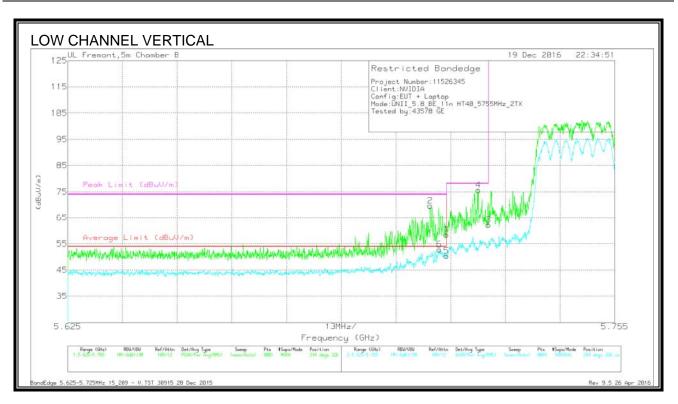
Pk - Peak detector



### **Trace Markers**

Marker	Frequency (GHz)	Meter Reading	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
		(dBuV)					(dBuV/m)							
2	5.711	46.75	Pk	34.9	-21.6	0	60.05	-	-	74	-13.95	196	286	Н
6	5.713	32.76	RMS	34.9	-21.7	.62	46.58	54	-7.42	-		196	286	Н
1	5.715	39.77	Pk	34.9	-21.6	0	53.07	-	-	74	-20.93	196	286	Н
5	5.715	30.87	RMS	34.9	-21.6	.62	44.79	54	-9.21	-	-	196	286	Н
4	5.721	50.86	Pk	34.9	-21.4	0	64.36			78.2	-13.84	196	286	Н
3	5.725	43.54	Pk	34.9	-21.7	0	56.74	-	-	78.2	-21.46	196	286	Н

Pk - Peak detector RMS - RMS detection REPORT NO: 11526345-E4V3 DATE: January 15, 2017 IC: 7361A-P3310 FCC ID: VOB-P3310



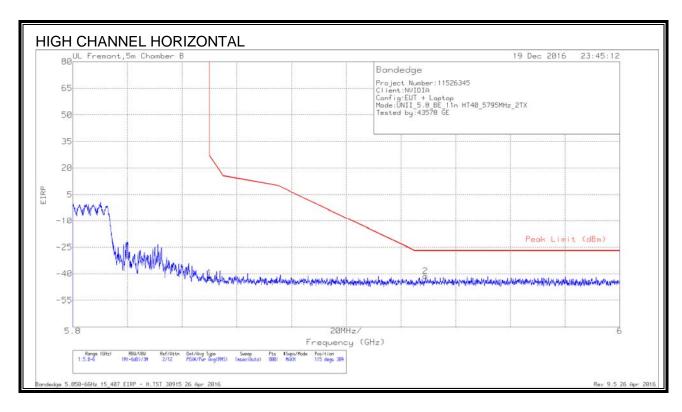
## **Trace Markers**

Marker	Frequency	Meter	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected	Average Limit (dBuV/m)	Margin	Peak Limit (dBuV/m)	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading					Reading		(dB)		(dB)	(Degs)	(cm)	
		(dBuV)					(dBuV/m)							
2	5.711	56.28	Pk	34.9	-21.5	0	69.68	-		74	-4.32	244	326	٧
6	5.713	38.91	RMS	34.9	-21.7	.62	52.73	54	-1.27			244	326	V
1	5.715	45.22	Pk	34.9	-21.6	0	58.52	-		74	-15.48	244	326	V
5	5.715	36.46	RMS	34.9	-21.6	.62	50.38	54	-3.62	-	-	244	326	V
4	5.723	62.43	Pk	34.9	-21.7	0	75.63	-	-	78.2	-2.57	244	326	٧
3	5.725	49.04	Pk	34.9	-21.7	0	62.24	-		78.2	-15.96	244	326	٧

Pk - Peak detector RMS - RMS detection

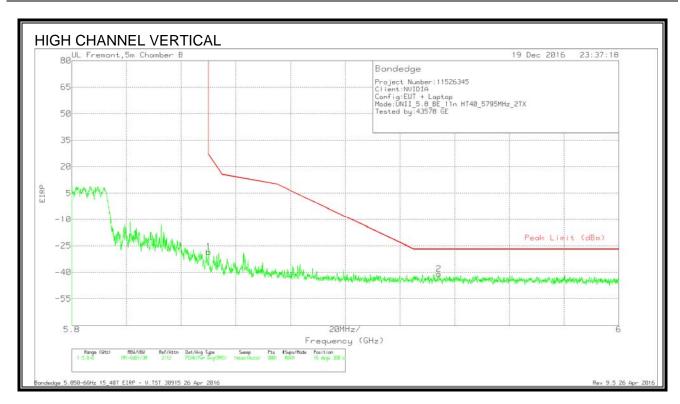
## **AUTHORIZED BANDEDGE (HIGH CHANNEL)**

# **FCC**



Marker	Frequency	Meter	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad	Conversion Factor	Corrected	Peak Limit (dBm)	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading			(dB)	(dB)	Reading		(dB)	(Degs)	(cm)	
		(dBm)					EIRP					
1	5.85	-67.74	Pk	35.2	-21.6	11.8	-42.34	26.94	-69.28	115	309	Н
2	5.929	-66.97	Pk	35.3	-21.5	11.8	-41.37	-27	-14.37	115	309	Н

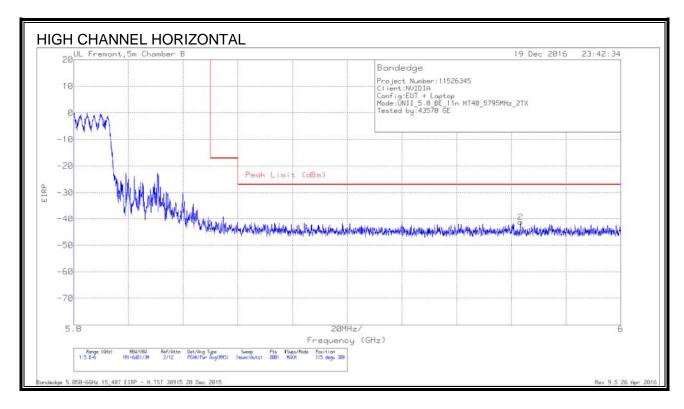
Pk - Peak detector



ſ	Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
ŀ	1	5.85	-53.93	Pk	35.2	-21.6	11.8	-28.53	26.94	-55.47	16	380	V
Ī	2	5.934	-66.46	Pk	35.3	-21.6	11.8	-40.96	-27	-13.96	16	380	V

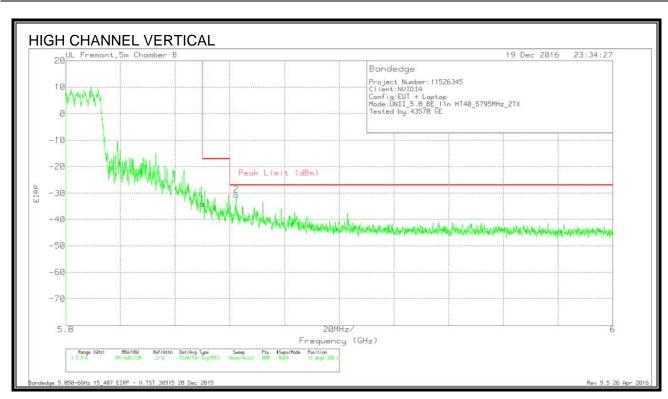
Pk - Peak detector

<u>IC</u>



Marker	Frequency	Meter	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad	Conversion Factor	Corrected	Peak Limit (dBm)	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading			(dB)	(dB)	Reading		(dB)	(Degs)	(cm)	
		(dBm)					EIRP					1
1	5.85	-69.14	Pk	35.2	-21.6	11.8	-43.74	-17	-26.74	115	309	Н
2	5.963	-67.01	Pk	35.2	-21.2	11.8	-41.21	-27	-14.21	115	309	Н

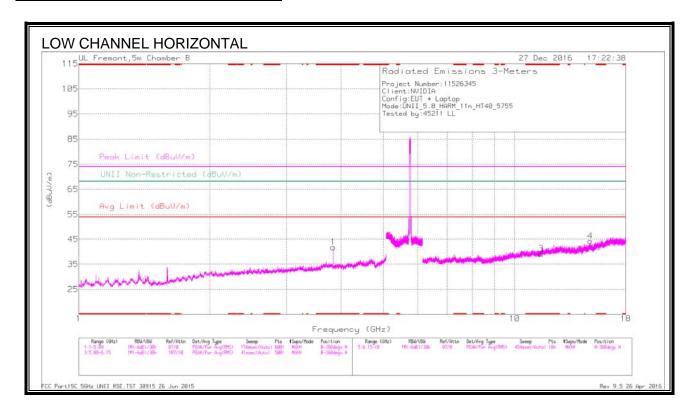
Pk - Peak detector

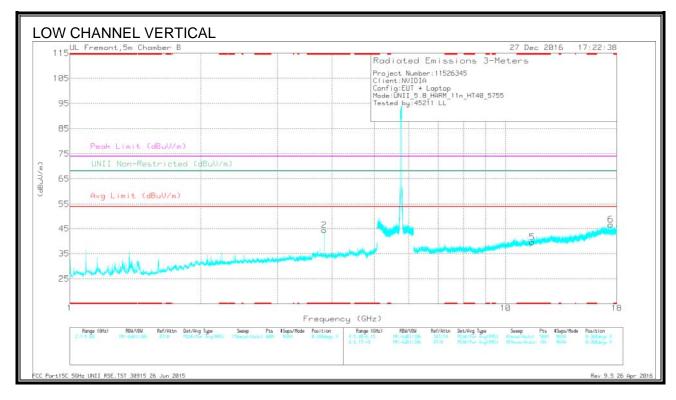


Marker	Frequency	Meter	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad	Conversion Factor	Corrected	Peak Limit (dBm)	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading			(dB)	(dB)	Reading		(dB)	(Degs)	(cm)	
		(dBm)					EIRP					
1	5.85	-59.43	Pk	35.2	-21.6	11.8	-34.03	-17	-17.03	16	380	V
2	5.862	-56.22	Pk	35.2	-21.3	11.8	-30.52	-27	-3.52	16	380	V

Pk - Peak detector

## **HARMONICS AND SPURIOUS EMISSIONS**



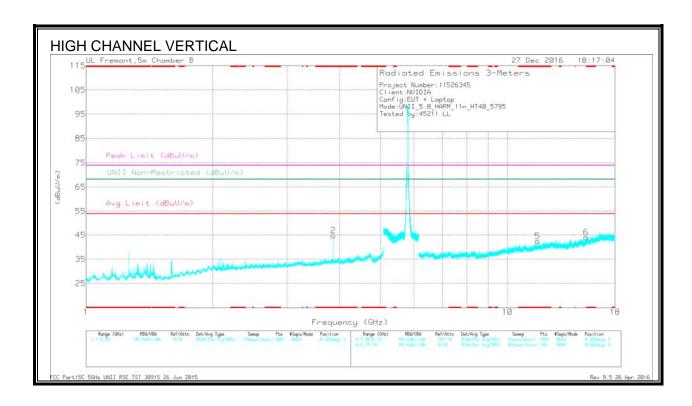


### Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected 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	* 3.837	43.58	PK-U	33.4	-33.1	0	43.88	-	-	74	-30.12	-	-	23	112	Н
	* 3.837	36.57	ADR	33.4	-33.1	.62	37.49	54	-16.51	-	-	-	-	23	112	Н
2	* 3.837	47.28	PK-U	33.4	-33.1	0	47.58	-	-	74	-26.42	•	-	132	174	V
	* 3.837	43.7	ADR	33.4	-33.1	.62	44.62	54	-9.38	-	-	-	-	132	174	V
3	* 11.502	33.14	PK-U	38.3	-25.8	0	45.64	-	-	74	-28.36	-	-	159	176	Н
	* 11.499	22.77	ADR	38.3	-25.8	.62	35.89	54	-18.11	-	-	*	-	159	176	Н
5	* 11.5	33.82	PK-U	38.3	-25.8	0	46.32	-	-	74	-27.68	-	-	224	105	V
	* 11.508	22.49	ADR	38.3	-25.7	.62	35.71	54	-18.29	-	-	-	-	224	105	٧
4	14.913	33.67	PK-U	39.8	-24.8	0	48.67	-	-	-	-	68.2	-19.53	234	129	Н
6	17.433	32.28	PK-U	41.3	-22.1	0	51.48	-	-	-	-	68.2	-16.72	179	165	V

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

PK-U - U-NII: Maximum Peak



DATE: January 15, 2017 IC: 7361A-P3310

### Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected 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	* 3.863	44.8	PK-U	33.4	-33	0	45.2	-	-	74	-28.8	-	-	43	140	Н
	* 3.863	38.73	ADR	33.4	-33	.62	39.75	54	-14.25	-	-	-	-	43	140	Н
2	* 3.863	47.74	PK-U	33.4	-33	0	48.14	-	-	74	-25.86	-	-	130	212	V
	* 3.863	44.19	ADR	33.4	-33	.62	45.21	54	-8.79	-	-	-	-	130	212	V
3	* 11.598	32.39	PK-U	38.4	-25	0	45.79	-	-	74	-28.21	-	-	311	221	Н
	* 11.576	21.78	ADR	38.4	-24.8	.62	36	54	-18		-	-	-	311	221	Н
5	* 11.799	33.03	PK-U	38.7	-25.5	0	46.23	-	-	74	-27.77	-	-	100	221	V
	* 11.799	22.19	ADR	38.7	-25.5	.62	36.01	54	-17.99	-	-	-	-	100	221	V
6	* 15.604	33.12	PK-U	40.3	-24.4	0	49.02	-	-	74	-24.98	-	-	207	168	٧
	* 15.681	22.4	ADR	40.4	-24.7	.62	38.72	54	-15.28	-	,	-		207	168	V
4	17.375	34.6	PK-U	41.3	-22.6	0	53.3	-	-	-	-	68.2	-14.9	170	205	Н

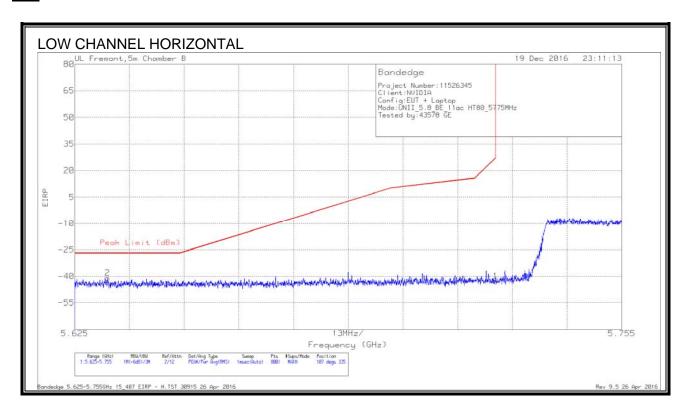
<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

# 11.1.20.11ac HT80 2TX CDD MIMO MODE IN THE 5.8GHz BAND

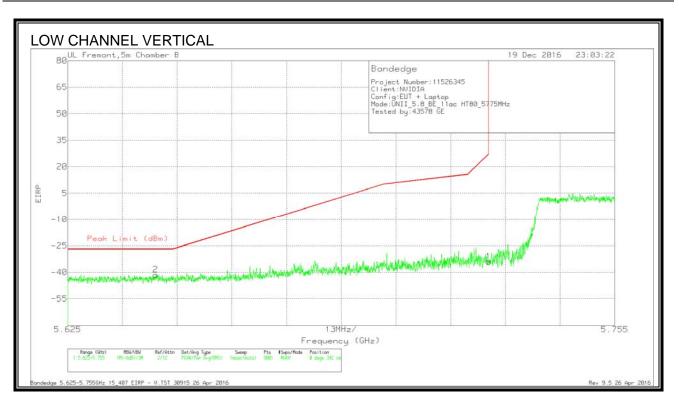
#### **RESTRICTED BANDEDGE (LOW CHANNEL)**

# **FCC**



Marker	Frequency (GHz)	Meter Reading	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
		(dBm)					EIRP					
2	5.633	-65.82	Pk	34.6	-21.5	11.8	-40.92	-27	-13.92	107	335	Н
1	5.725	-67.79	Pk	34.9	-21.7	11.8	-42.79	26.97	-69.76	107	335	Н

Pk - Peak detector

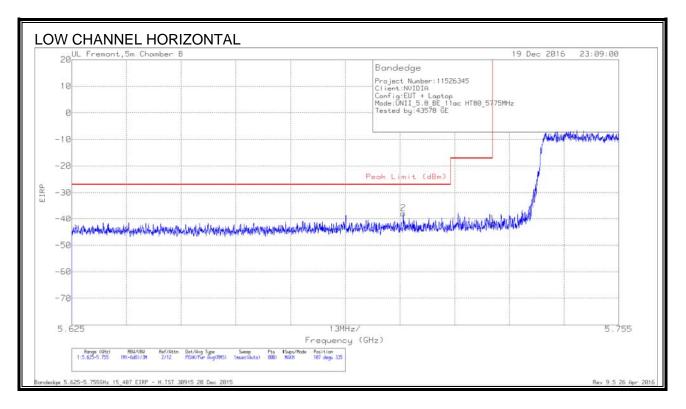


Marker	Frequency	Meter	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad	Conversion Factor	Corrected	Peak Limit (dBm)	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading			(dB)	(dB)	Reading		(dB)	(Degs)	(cm)	
		(dBm)					EIRP					
2	5.646	-66.44	Pk	34.7	-21.5	11.8	-41.44	-27	-14.44	0	342	V
1	5.725	-59.06	Pk	34.9	-21.7	11.8	-34.06	26.97	-61.03	0	342	V

Pk - Peak detector

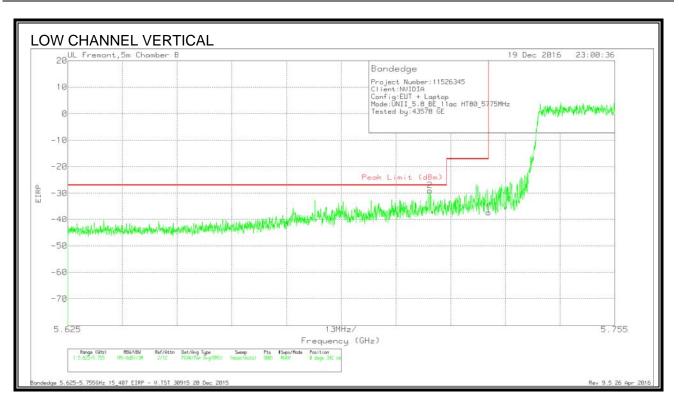
REPORT NO: 11526345-E4V3 DATE: January 15, 2017 IC: 7361A-P3310 FCC ID: VOB-P3310

<u>IC</u>



Marker	Frequency	Meter	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad	Conversion Factor	Corrected	Peak Limit (dBm)	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading			(dB)	(dB)	Reading		(dB)	(Degs)	(cm)	
		(dBm)					EIRP					
2	5.704	-62.75	Pk	34.9	-21.7	11.8	-37.75	-27	-10.75	107	335	Н
1	5.725	-66.78	Pk	34.9	-21.7	11.8	-41.78	-17	-24.78	107	335	Н

Pk - Peak detector

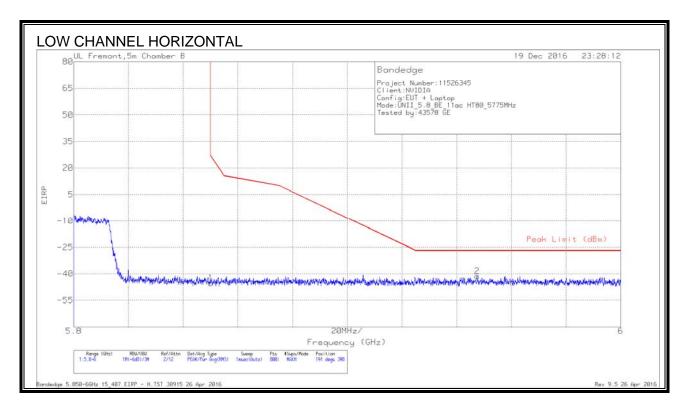


Marker	Frequency	Meter	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad	Conversion Factor	Corrected	Peak Limit (dBm)	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading			(dB)	(dB)	Reading		(dB)	(Degs)	(cm)	
		(dBm)					EIRP					
2	5.711	-54.13	Pk	34.9	-21.5	11.8	-28.93	-27	-1.93	0	342	V
1	5.725	-62.2	Pk	34.9	-21.7	11.8	-37.2	-17	-20.2	0	342	V

Pk - Peak detector

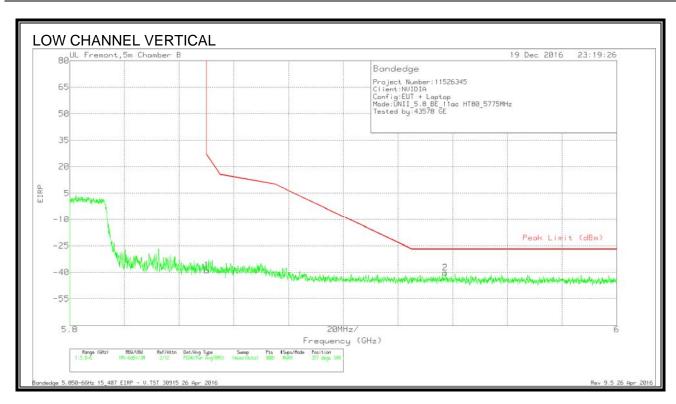
# **AUTHORIZED BANDEDGE (HIGH CHANNEL)**

# **FCC**



Marker	Frequency (GHz)	Meter Reading	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
		(dBm)					EIRP					
1	5.85	-70.61	Pk	35.2	-21.6	11.8	-45.21	26.94	-72.15	191	398	Н
2	5.947	-67.09	Pk	35.2	-21.3	11.8	-41.39	-27	-14.39	191	398	Н

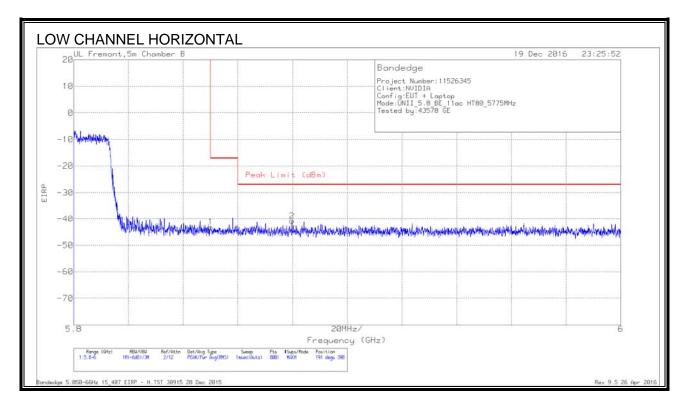
Pk - Peak detector



N	larker	Frequency (GHz)	Meter Reading	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
			(dBm)					EIRP					
	1	5.85	-64.29	Pk	35.2	-21.6	11.8	-38.89	26.94	-65.83	357	349	V
	2	5.937	-66.2	Pk	35.3	-21.2	11.8	-40.3	-27	-13.3	357	349	V

Pk - Peak detector

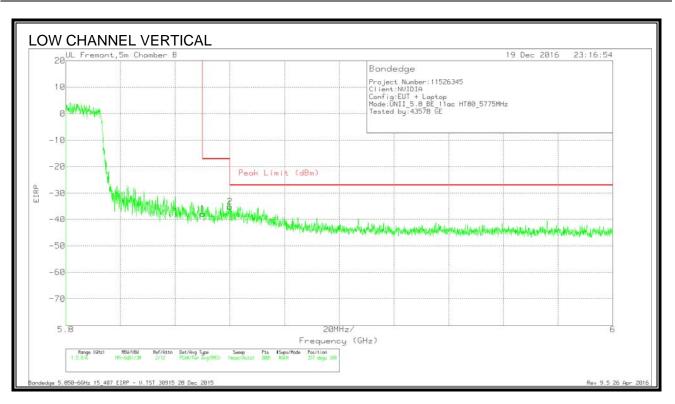
<u>IC</u>



Marker	Frequency	Meter	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad	Conversion Factor	Corrected	Peak Limit (dBm)	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading			(dB)	(dB)	Reading		(dB)	(Degs)	(cm)	
		(dBm)					EIRP					
1	5.85	-68.56	Pk	35.2	-21.6	11.8	-43.16	-17	-26.16	191	398	Н
2	5.88	-66.32	Pk	35.2	-21.4	11.8	-40.72	-27	-13.72	191	398	Н

Pk - Peak detector

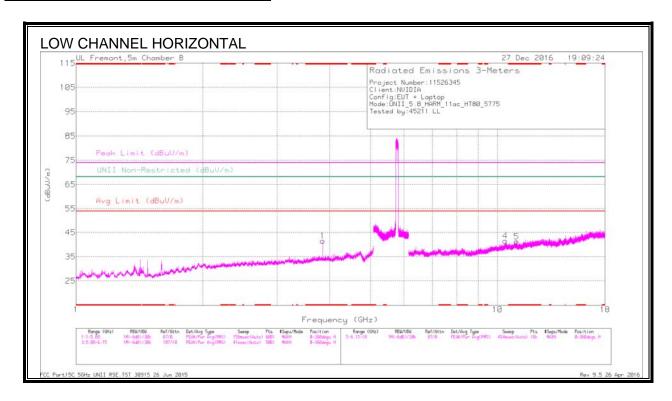
REPORT NO: 11526345-E4V3 DATE: January 15, 2017 IC: 7361A-P3310 FCC ID: VOB-P3310

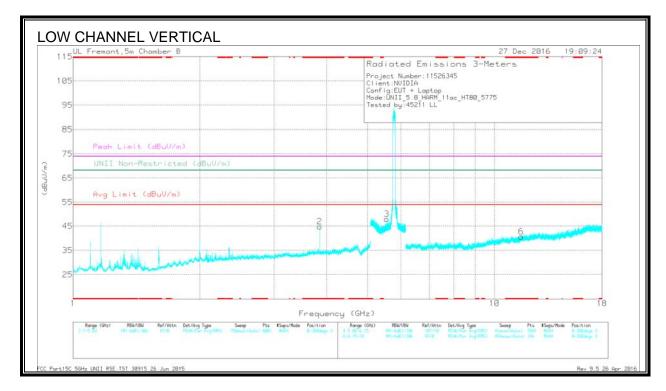


ſ	Marker	Frequency (GHz)	Meter Reading	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
			(dBm)					EIRP					
Г	1	5.85	-63.2	Pk	35.2	-21.6	11.8	-37.8	-17	-20.8	357	349	V
	2	5.86	-60.52	Pk	35.2	-21.6	11.8	-35.12	-27	-8.12	357	349	V

Pk - Peak detector

#### **HARMONICS AND SPURIOUS EMISSIONS**





DATE: January 15, 2017 IC: 7361A-P3310

#### **Radiated Emissions**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected 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	* 3.85	45.29	PK-U	33.4	-33.2	0	45.49	-	-	74	-28.51	-	-	29	116	Н
	* 3.85	39.89	ADR	33.4	-33.2	1.84	41.93	54	-12.07	-	-	-	-	29	116	Н
2	* 3.85	48.02	PK-U	33.4	-33.2	0	48.22	-	-	74	-25.78	-	-	132	216	V
	* 3.85	43.88	ADR	33.4	-33.2	1.84	45.92	54	-8.08	-	-	-	-	132	216	V
5	* 11.113	33.45	PK-U	37.9	-26.1	0	45.25	-	-	74	-28.75	-	-	5	213	Н
	* 11.094	22.76	ADR	37.9	-26.1	1.84	36.4	54	-17.6	-	-	-	-	5	213	Н
6	* 11.558	33.34	PK-U	38.4	-25	0	46.74	-	-	74	-27.26	-	-	291	224	V
	* 11.567	21.89	ADR	38.4	-25	1.84	37.13	54	-16.87	-	-	-	-	291	224	V
3	5.553	39.32	PK-U	34.5	-21.1	0	52.72	-		-		68.2	-15.48	45	328	V
4	10.442	33.67	PK-U	37.7	-25.5	0	45.87	-	-	-	-	68.2	-22.33	30	275	Н

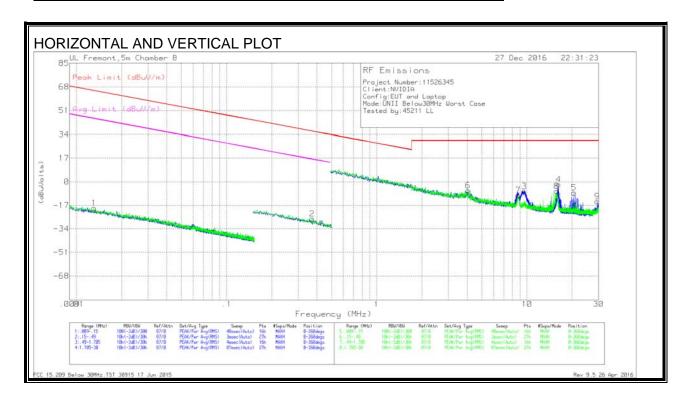
<sup>\* -</sup> indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

# 11.1. WORST-CASE BELOW 30 MHz

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



#### **DATA**

# **Trace Markers**

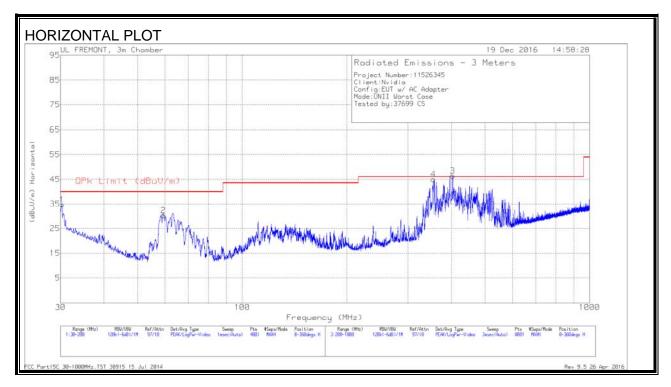
Marker	Frequency	Meter	Det	Loop Antenna	Cbl (dB)	Dist Corr 300m	Corrected	Peak Limit	Margin	Avg Limit	Margin	Azimuth
	(MHz)	Reading		(dB/m)			Reading	(dBuV/m)	(dB)	(dBuV/m)	(dB)	(Degs)
		(dBuV)					(dBuVolts)					
1	.01308	43.03	Pk	16.7	1.4	-80	-18.87	65.27	-84.14	45.27	-64.14	0-360
2	.37129	41.01	Pk	10.7	1.5	-80	-26.79	36.21	-63	16.21	-43	0-360

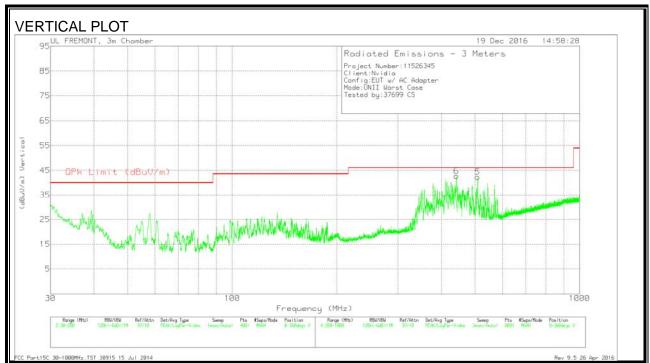
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
6	4.05514	21.31	Pk	10.9	1.5	-40	-6.29	29.54	-35.83	-	-	0-360
7	8.75699	18.08	Pk	10.8	1.5	-40	-9.62	29.54	-39.16	-	-	0-360
3	9.59539	20.93	Pk	10.8	1.5	-40	-6.77	29.54	-36.31	-	-	0-360
8	15.75868	21.31	Pk	10.5	1.6	-40	-6.59	29.54	-36.13	-	-	0-360
4	16.2329	25.91	Pk	10.5	1.6	-40	-1.99	29.54	-31.53	-	-	0-360
5	20.54228	20.41	Pk	10	1.7	-40	-7.89	29.54	-37.43	-	-	0-360
9	29.3874	16.03	Pk	8.1	1.7	-40	-14.17	29.54	-43.71	-	-	0-360

Pk - Peak detector

#### 11.2. **WORST-CASE BELOW 1 GHz**

#### SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION)





# <u>DATA</u>

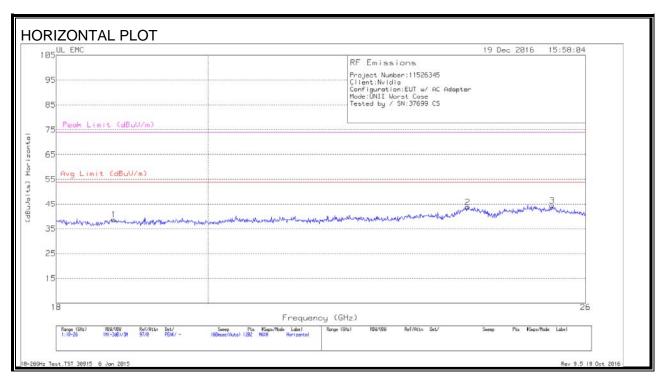
# **Radiated Emissions**

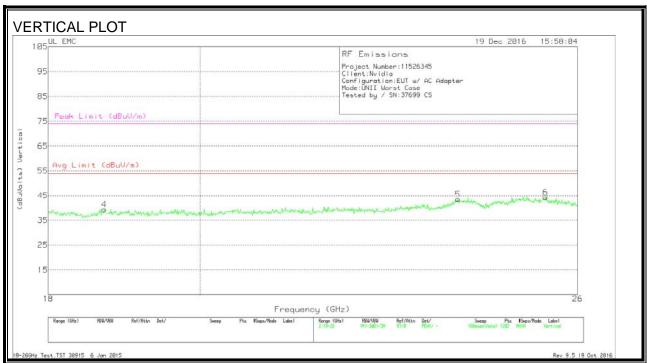
Marker	Frequency	Meter	Det	AF T122 (dB/m)	Amp/Cbl (dB)	Corrected	QPk Limit	Margin	Azimuth	Height	Polarity
	(MHz)	Reading				Reading	(dBuV/m)	(dB)	(Degs)	(cm)	
		(dBuV)				(dBuV/m)					
1	30.1623	23.72	Qp	25.2	-27.3	21.62	40	-18.38	36	152	Н
4	355.555	39.43	Qp	18.4	-24.3	33.53	46.02	-12.49	153	102	Н
3	400.925	37.75	Qp	19.5	-24.5	32.75	46.02	-13.27	157	241	Н
6	442.53	34.11	Qp	20.7	-24.7	30.11	46.02	-15.91	204	139	V
5	509.37	29.79	Qp	21.7	-24.6	26.89	46.02	-19.13	179	133	V
2	59.3675	45.8	Pk	11.3	-26.8	30.3	40	-9.7	0-360	200	Н

Qp - Quasi-Peak detector

# 11.3. WORST-CASE 18 to 26 GHz

#### SPURIOUS EMISSIONS 18 TO 26 GHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)





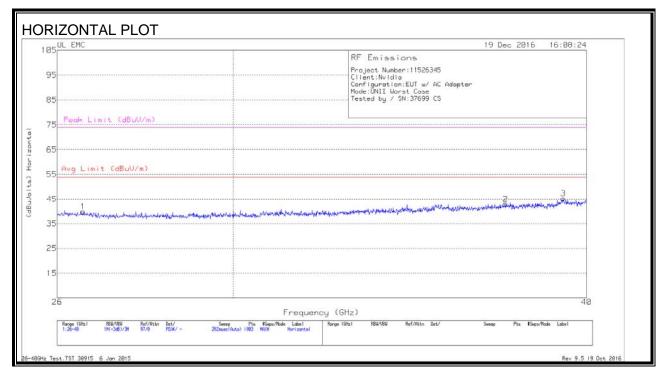
# **DATA**

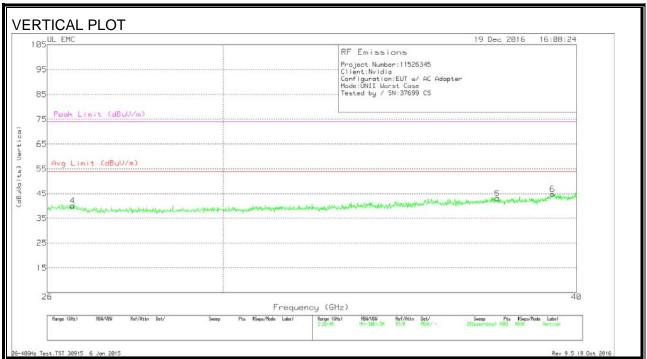
# **Trace Markers**

Marker	Frequency (GHz)	Meter Reading	Det	AF T449 (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	18.733	40.47	Pk	32.4	-24.7	-9.5	38.67	54	-15.33	74	-35.33
2	23.955	43.63	Pk	34	-24.3	-9.5	43.83	54	-10.17	74	-30.17
3	25.401	44.1	Pk	34.3	-24.4	-9.5	44.5	54	-9.5	74	-29.5
4	18.713	40.93	Pk	32.4	-24.5	-9.5	39.33	54	-14.67	74	-34.67
5	23.928	43	Pk	34	-24	-9.5	43.5	54	-10.5	74	-30.5
6	25.427	43.73	Pk	34.4	-24.3	-9.5	44.33	54	-9.67	74	-29.67

# 11.4. WORST-CASE 26 to 40 GHz

# SPURIOUS EMISSIONS 26 TO 40 GHz (WORST-CASE CONFIGURATION)





# **DATA**

# **Trace Markers**

Marker	Frequency	Meter	Det	T90 AF	Amp/Cbl (dB)	Dist Corr	Corrected	Avg Limit	Margin	Peak Limit	PK Margin
	(GHz)	Reading		(dB/m)		(dB)	Reading	(dBuV/m)	(dB)	(dBuV/m)	(dB)
		(dBuV)					(dBuVolts)				
1	26.552	44.93	Pk	35.5	-31.1	-9.5	39.83	54	-14.17	74	-34.17
2	37.444	49.6	Pk	37.3	-34.4	-9.5	43	54	-11	74	-31
3	39.246	48.63	Pk	38.6	-32.4	-9.5	45.33	54	-8.67	74	-28.67
4	26.54	45.2	Pk	35.5	-31.2	-9.5	40	54	-14	74	-34
5	37.506	49.4	Pk	37.3	-34.2	-9.5	43	54	-11	74	-31
6	39.223	48.23	Pk	38.5	-32.4	-9.5	44.83	54	-9.17	74	-29.17

# 12. AC POWER LINE CONDUCTED EMISSIONS

# **LIMITS**

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dB <sub>µ</sub> V)				
	Quasi-peak	Average			
0.15-0.5	66 to 56 *	56 to 46 *			
0.5-5	56	46			
5-30	60	50			

<sup>\*</sup>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 NEUTRAL and HOT lines.

#### **RESULTS**

# 12.1. EUT POWERED BY AC/DC ADAPTER

# **LINE 1 RESULTS**



#### **WORST EMISSIONS**

Range 1: Line-L1 .15 - 30MHz

Marker	Frequency	Meter	Det	LISN L1	LC Cables 1&3	Limiter (dB)	Corrected	CFR 47 Part 15	QP Margin	CFR 47 Part 15	Av(CISPR)Margi
	(MHz)	Reading					Reading	Class B QP	(dB)	Class B Avg	n
		(dBuV)					dBuV				(dB)
1	.35925	28.35	Qp	0	0	10.1	38.45	58.75	-20.3	-	-
2	.35925	19.76	Ca	0	0	10.1	29.86	-	-	48.75	-18.89
3	.62475	14.97	Qp	0	0	10.1	25.07	56	-30.93	-	-
4	.636	4.24	Ca	0	0	10.1	14.34	-	-	46	-31.66
5	12.35625	16.95	Qp	.1	.2	10.2	27.45	60	-32.55	-	-
6	12.36075	9.21	Ca	.1	.2	10.2	19.71	-	-	50	-30.29

Qp - Quasi-Peak detector

Ca - CISPR average detection

# **LINE 2 RESULTS**



#### **WORST EMISSIONS**

Range 2: Line-L2 .15 - 30MHz

Marker	Frequency	Meter	Det	LISN L2	LC Cables 2&3	Limiter (dB)	Corrected	CFR 47 Part 15	QP Margin	CFR 47 Part 15	Av(CISPR)Margi
	(MHz)	Reading					Reading	Class B QP	(dB)	Class B Avg	n
		(dBuV)					dBuV				(dB)
7	.35925	28.57	Qp	0	0	10.1	38.67	58.75	-20.08	-	-
8	.35925	19.55	Ca	0	0	10.1	29.65	-	-	48.75	-19.1
9	.62475	16.24	Qp	0	0	10.1	26.34	56	-29.66	-	-
10	.63375	5.97	Ca	0	0	10.1	16.07	-	-	46	-29.93
11	12.3	17.34	Qp	.1	.2	10.2	27.84	60	-32.16	-	-
12	12.3	9	Ca	.1	.2	10.2	19.5	-	-	50	-30.5

Qp - Quasi-Peak detector

Ca - CISPR average detection