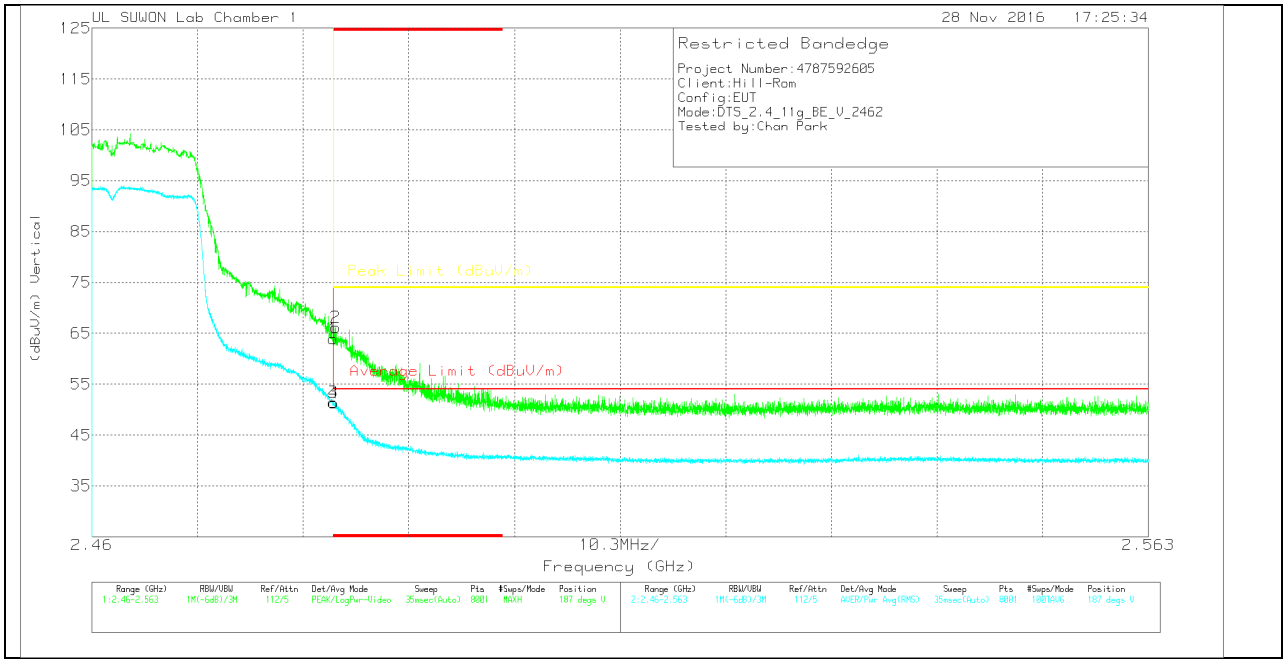
VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	10dB[dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	60.23	Pk	32	-28.3	63.93	-	-	74	-10.07	187	202	V
2	* 2.484	62.51	Pk	32	-28.3	66.21	-	-	74	-7.79	187	202	V
3	* 2.484	47.75	RMS	32	-28.3	51.45	54	-2.55	-	-	187	202	V
4	* 2.484	47.63	RMS	32	-28.3	51.33	54	-2.67	-	-	187	202	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

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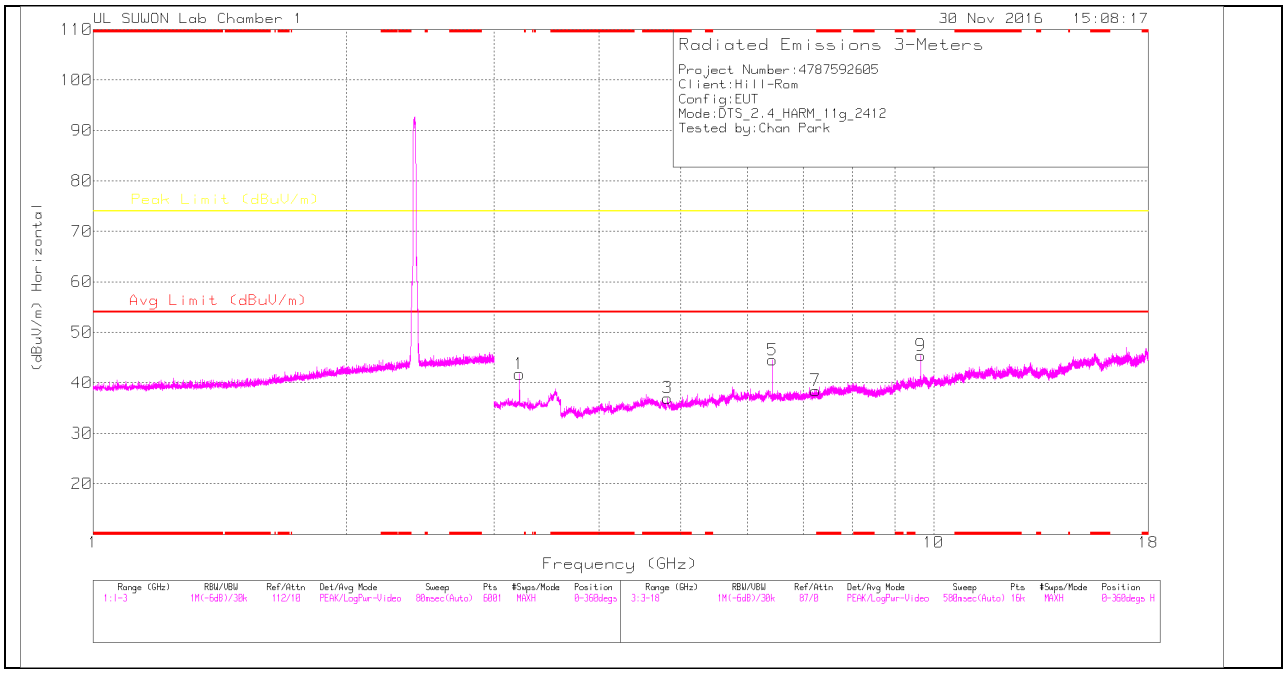
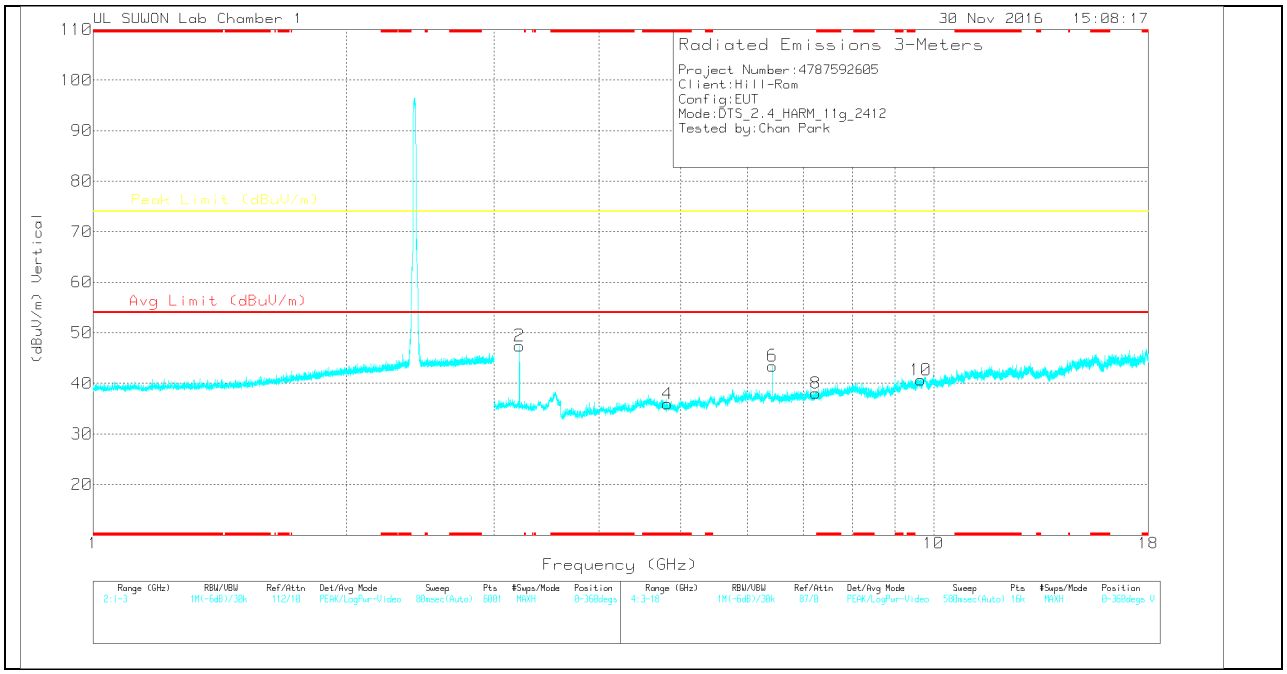
HARMONICS AND SPURIOUS EMISSIONS

1 CHANNEL HORIZONTAL



1 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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1 CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.216	45.24	PK	32.6	-36.1	41.74	-	-	74	-32.26	0-360	150	H
3	* 4.823	36.49	PK	34	-33.5	36.99	-	-	74	-37.01	0-360	150	H
5	6.432	40	PK	35.4	-30.9	44.5	-	-	74	-29.5	0-360	250	H
7	7.235	33.55	PK	35.7	-30.8	38.45	-	-	74	-35.55	0-360	250	H
9	9.648	35.71	PK	37.1	-27.4	45.41	-	-	74	-28.59	0-360	250	H
2	3.216	50.93	PK	32.6	-36.1	47.43	-	-	74	-26.57	0-360	150	V
4	* 4.822	35.41	PK	34	-33.5	35.91	-	-	74	-38.09	0-360	250	V
6	6.432	38.94	PK	35.4	-30.9	43.44	-	-	74	-30.56	0-360	250	V
8	7.236	33.04	PK	35.7	-30.7	38.04	-	-	74	-35.96	0-360	250	V
10	9.654	30.95	PK	37.1	-27.4	40.65	-	-	74	-33.35	0-360	250	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.216	52.76	PK2	32.6	-36.1	49.26	-	-	74	-24.74	319	285	H
6.432	46.99	PK2	35.4	-30.9	51.49	-	-	74	-22.51	293	242	H
9.648	42.42	PK2	37.1	-27.4	52.12	-	-	74	-21.88	291	199	H
3.216	56.75	PK2	32.6	-36.1	53.25	-	-	74	-20.75	169	141	V
6.432	46.77	PK2	35.4	-30.9	51.27	-	-	74	-22.73	207	229	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

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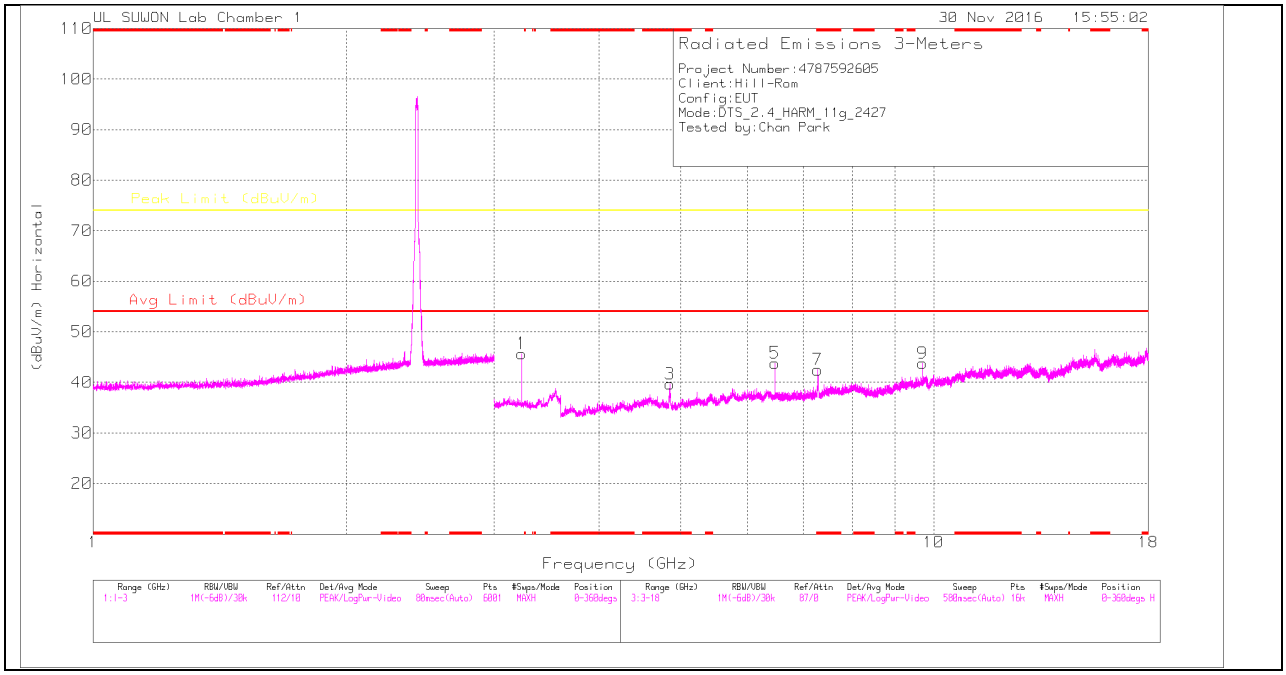
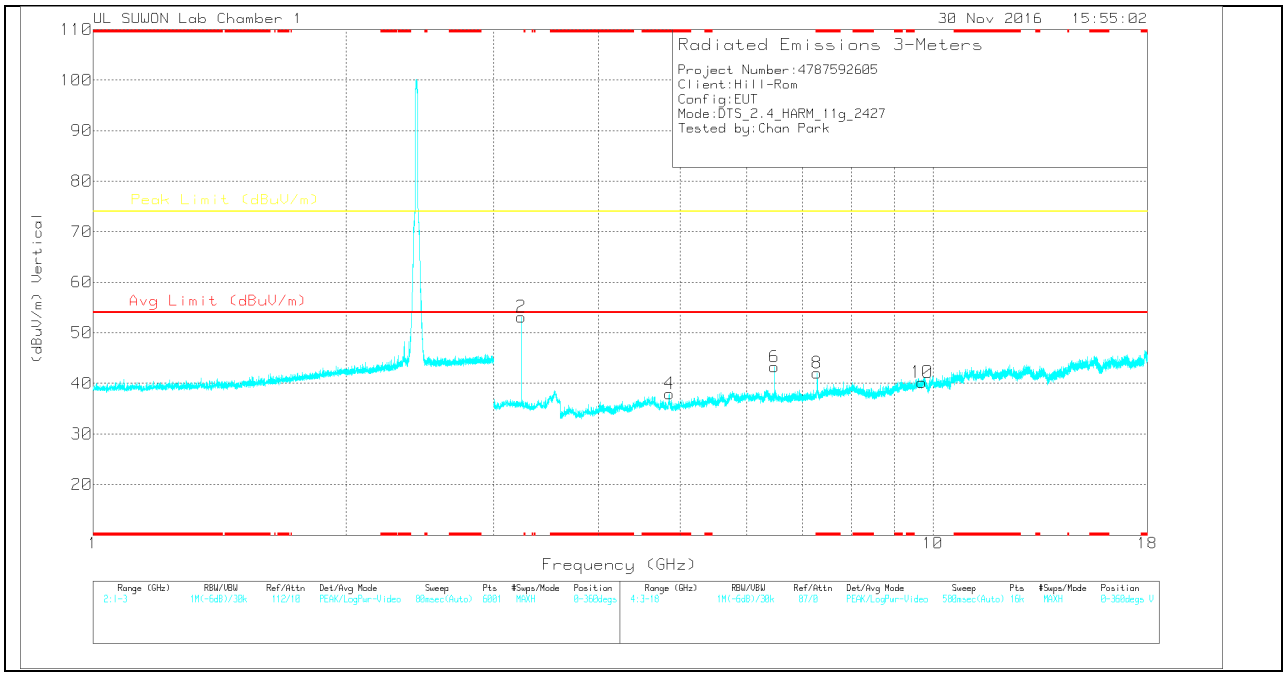
4 CHANNEL HORIZONTAL



4 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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4 CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.235	48.99	PK	32.6	-35.9	45.69	-	-	74	-28.31	0-360	250	H
3	* 4.855	39.24	PK	34	-33.6	39.64	-	-	74	-34.36	0-360	150	H
5	6.472	39.4	PK	35.4	-31	43.8	-	-	74	-30.2	0-360	250	H
7	* 7.279	37.58	PK	35.7	-30.8	42.48	-	-	74	-31.52	0-360	250	H
9	9.707	34.28	PK	37.1	-27.6	43.78	-	-	74	-30.22	0-360	250	H
2	3.235	56.46	PK	32.6	-35.9	53.16	-	-	74	-20.84	0-360	150	V
4	* 4.855	37.57	PK	34	-33.6	37.97	-	-	74	-36.03	0-360	150	V
6	6.472	38.86	PK	35.4	-31	43.26	-	-	74	-30.74	0-360	150	V
8	* 7.281	37.05	PK	35.7	-30.7	42.05	-	-	74	-31.95	0-360	150	V
10	9.707	30.72	PK	37.1	-27.6	40.22	-	-	74	-33.78	0-360	250	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.236	54.41	PK2	32.6	-35.9	51.11	-	-	74	-22.89	282	276	H
* 4.855	51.37	PK2	34	-33.6	51.77	-	-	74	-22.23	247	157	H
* 4.856	39.42	MAv1	34	-33.6	39.82	54	-14.18	-	-	247	157	H
6.472	46.61	PK2	35.4	-31	51.01	-	-	74	-22.99	293	246	H
* 7.28	51.89	PK2	35.7	-30.8	56.79	-	-	74	-17.21	252	199	H
* 7.282	35.48	MAv1	35.7	-30.7	40.48	54	-13.52	-	-	252	199	H
9.708	43.68	PK2	37.1	-27.6	53.18	-	-	74	-20.82	293	207	H
3.236	59.23	PK2	32.6	-35.9	55.93	-	-	74	-18.07	163	149	V
6.472	46.38	PK2	35.4	-31	50.78	-	-	74	-23.22	209	223	V
* 7.278	51.32	PK2	35.7	-30.8	56.22	-	-	74	-17.78	324	375	V
* 7.28	35.53	MAv1	35.7	-30.7	40.53	54	-13.47	-	-	324	375	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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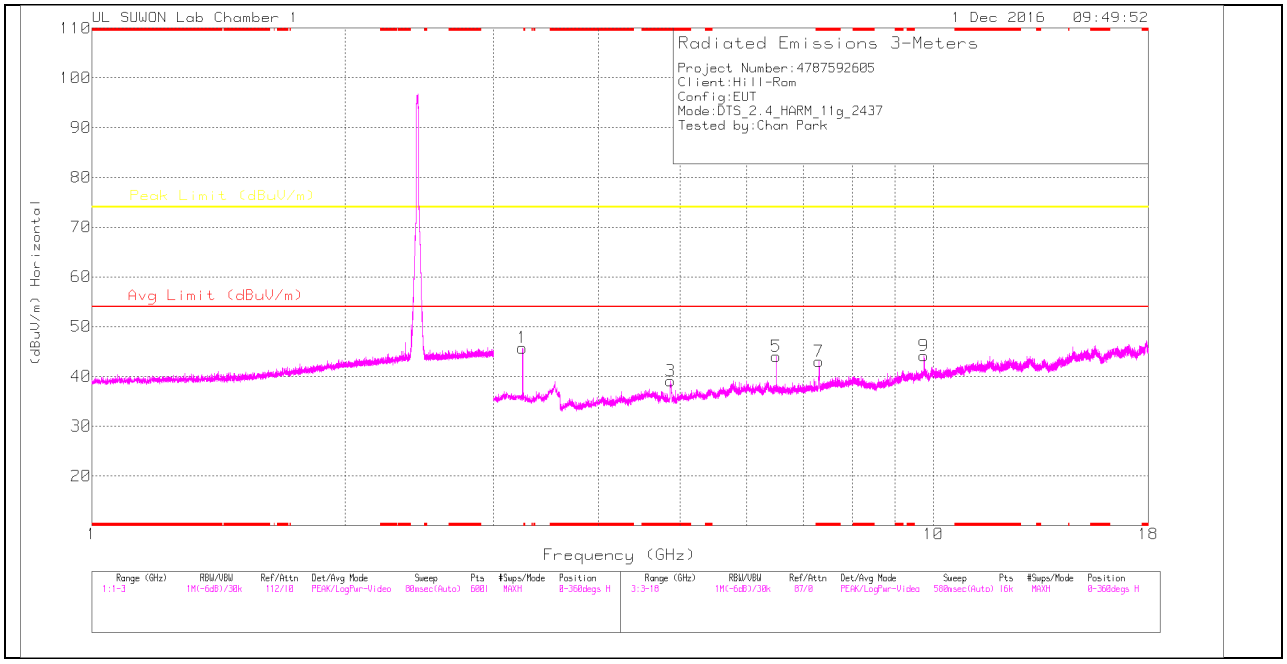
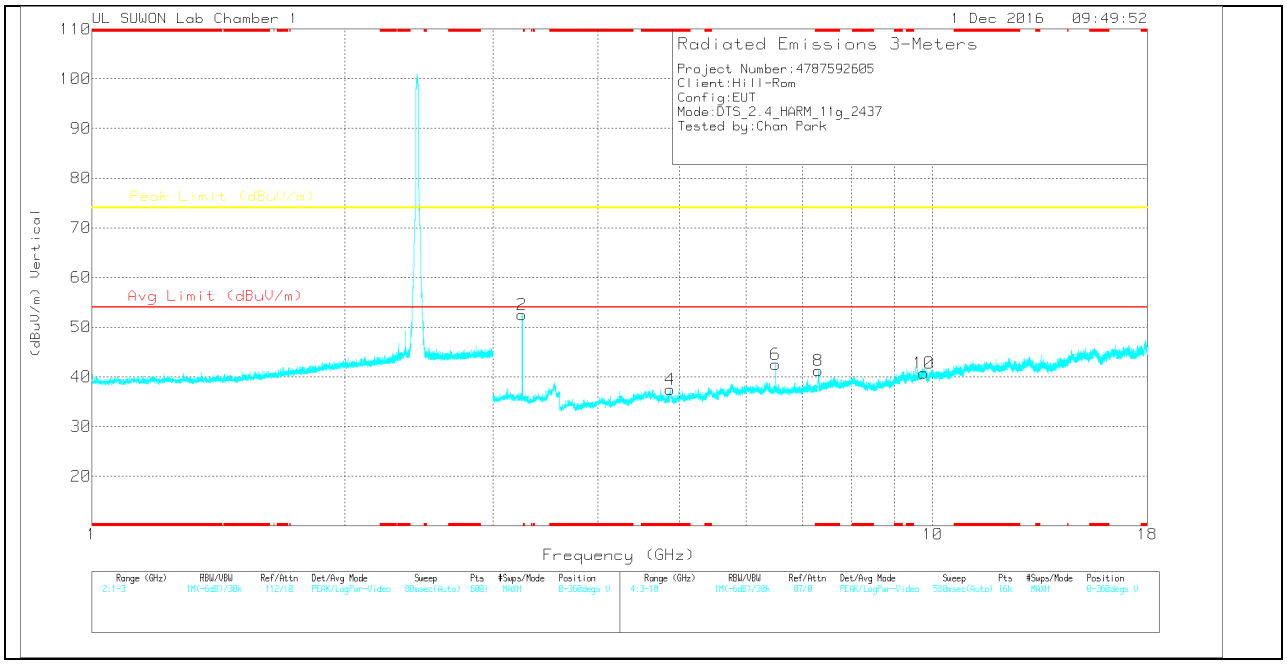
6 CHANNEL HORIZONTAL



6 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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6 CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.248	48.94	PK	32.6	-35.8	45.74	-	-	74	-28.26	0-360	250	H
3	* 4.869	38.71	PK	34	-33.6	39.11	-	-	74	-34.89	0-360	150	H
5	6.499	39.32	PK	35.4	-30.7	44.02	-	-	74	-29.98	0-360	150	H
7	* 7.311	37.87	PK	35.7	-30.5	43.07	-	-	74	-30.93	0-360	250	H
9	9.748	33.74	PK	37.2	-26.8	44.14	-	-	74	-29.86	0-360	150	H
2	3.248	55.74	PK	32.6	-35.8	52.54	-	-	74	-21.46	0-360	150	V
4	* 4.872	37.09	PK	34	-33.6	37.49	-	-	74	-36.51	0-360	150	V
6	6.499	37.87	PK	35.4	-30.7	42.57	-	-	74	-31.43	0-360	250	V
8	* 7.315	36.1	PK	35.8	-30.6	41.3	-	-	74	-32.7	0-360	250	V
10	9.751	30.3	PK	37.2	-26.8	40.7	-	-	74	-33.3	0-360	150	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.249	53.83	PK2	32.6	-35.8	50.63	-	-	74	-23.37	281	163	H
6.499	47.55	PK2	35.4	-30.7	52.25	-	-	74	-21.75	295	304	H
* 7.312	51.81	PK2	35.7	-30.5	57.01	-	-	74	-16.99	251	213	H
* 7.311	34.82	MAv1	35.7	-30.5	40.02	54	-13.98	-	-	251	213	H
9.748	42.95	PK2	37.2	-26.8	53.35	-	-	74	-20.65	272	149	H
3.249	59.08	PK2	32.6	-35.8	55.88	-	-	74	-18.12	160	154	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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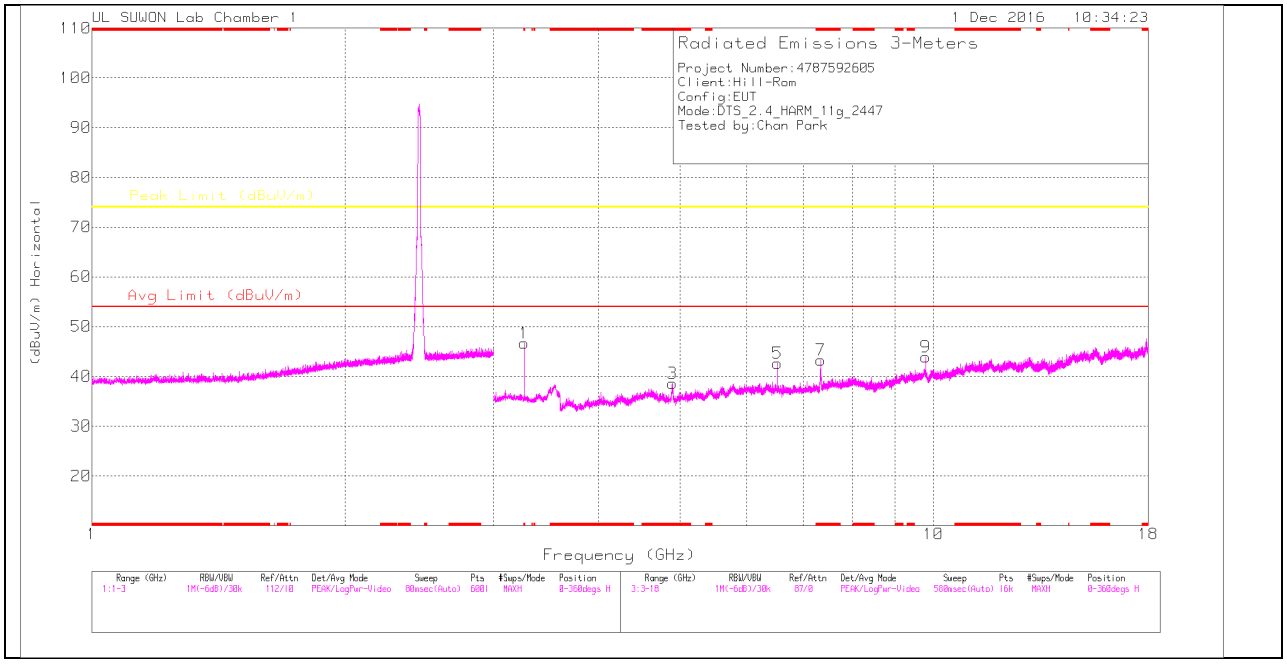
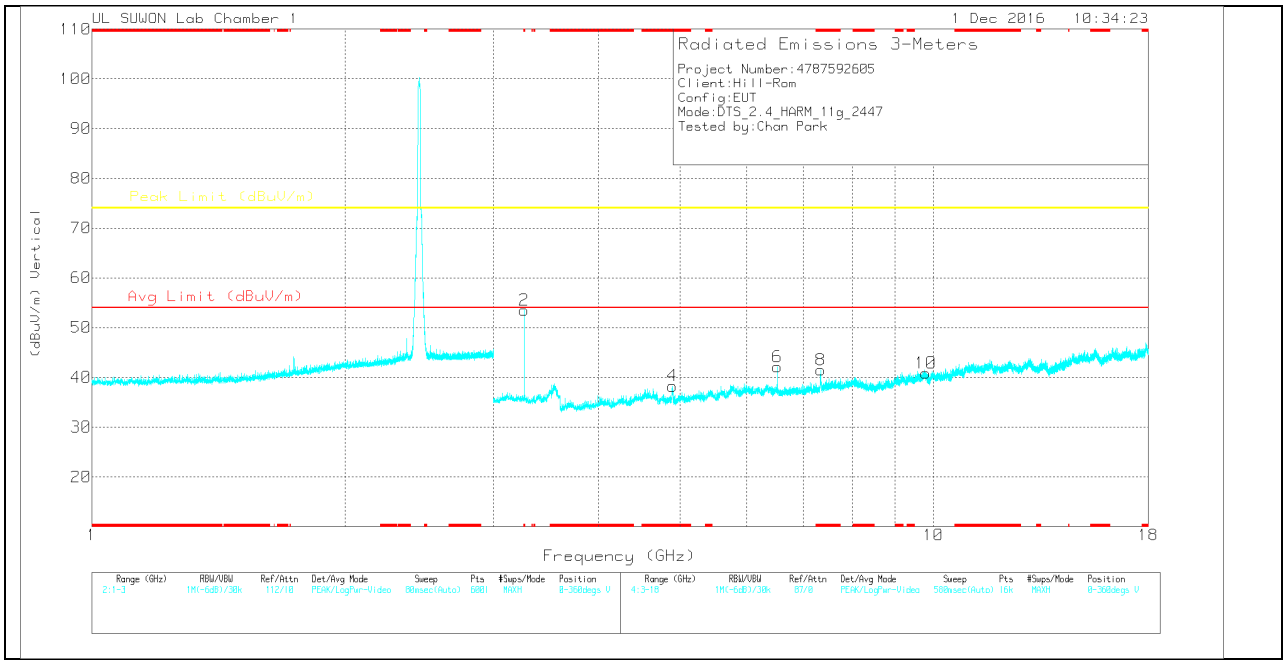
8 CHANNEL HORIZONTAL



8 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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8 CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.262	49.79	PK	32.6	-35.7	46.69	-	-	74	-27.31	0-360	250	H
3	* 4.896	38.05	PK	34	-33.5	38.55	-	-	74	-35.45	0-360	150	H
5	6.525	38.09	PK	35.4	-30.8	42.69	-	-	74	-31.31	0-360	250	H
7	* 7.342	37.92	PK	35.8	-30.5	43.22	-	-	74	-30.78	0-360	250	H
9	9.788	33.26	PK	37.2	-26.5	43.96	-	-	74	-30.04	0-360	150	H
2	* 3.262	56.59	PK	32.6	-35.7	53.49	-	-	74	-20.51	0-360	150	V
4	* 4.896	37.78	PK	34	-33.5	38.28	-	-	74	-35.72	0-360	150	V
6	6.525	37.49	PK	35.4	-30.8	42.09	-	-	74	-31.91	0-360	250	V
8	* 7.345	36.22	PK	35.8	-30.5	41.52	-	-	74	-32.48	0-360	250	V
10	9.786	30.19	PK	37.2	-26.5	40.89	-	-	74	-33.11	0-360	250	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.262	54.64	PK2	32.6	-35.7	51.54	-	-	74	-22.46	284	225	H
* 3.263	49.03	MAv1	32.6	-35.7	45.93	54	-8.07	-	-	284	225	H
6.525	46.77	PK2	35.4	-30.8	51.37	-	-	74	-22.63	295	304	H
* 7.342	52.36	PK2	35.8	-30.5	57.66	-	-	74	-16.34	251	218	H
* 7.341	35.64	MAv1	35.8	-30.5	40.94	54	-13.06	-	-	251	218	H
9.788	43.04	PK2	37.2	-26.5	53.74	-	-	74	-20.26	303	181	H
* 3.263	59.59	PK2	32.6	-35.7	56.49	-	-	74	-17.51	165	171	V
* 3.263	56.48	MAv1	32.6	-35.7	53.38	54	-.62	-	-	165	171	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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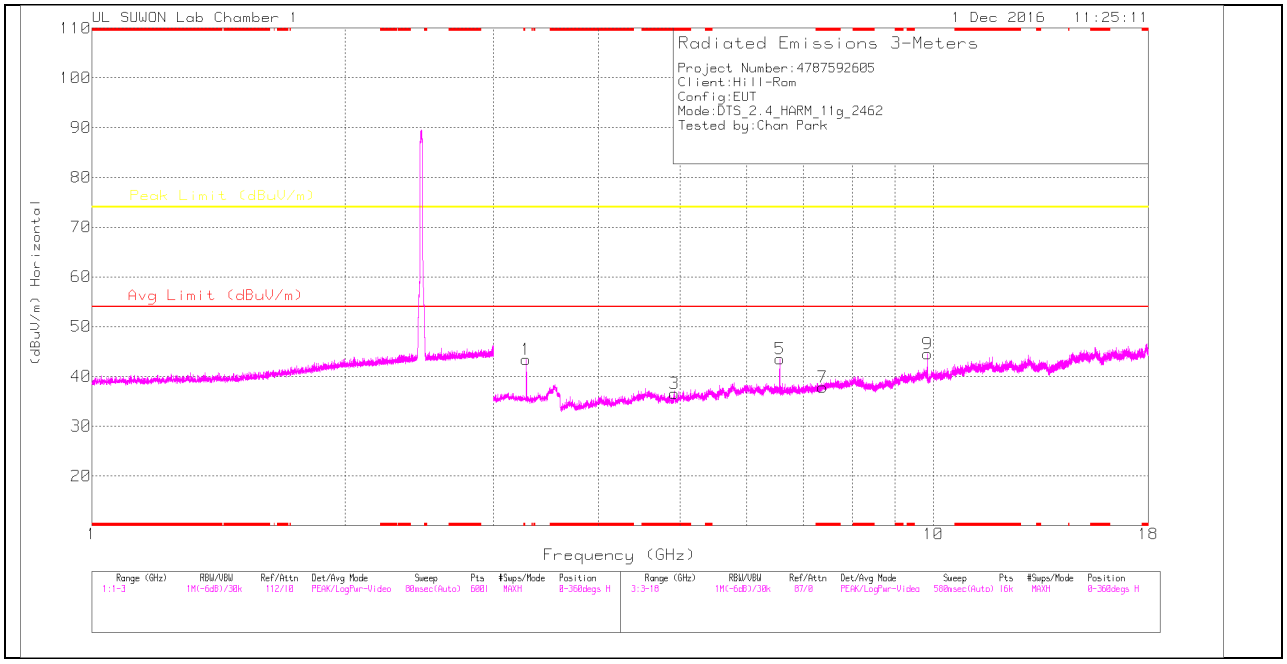
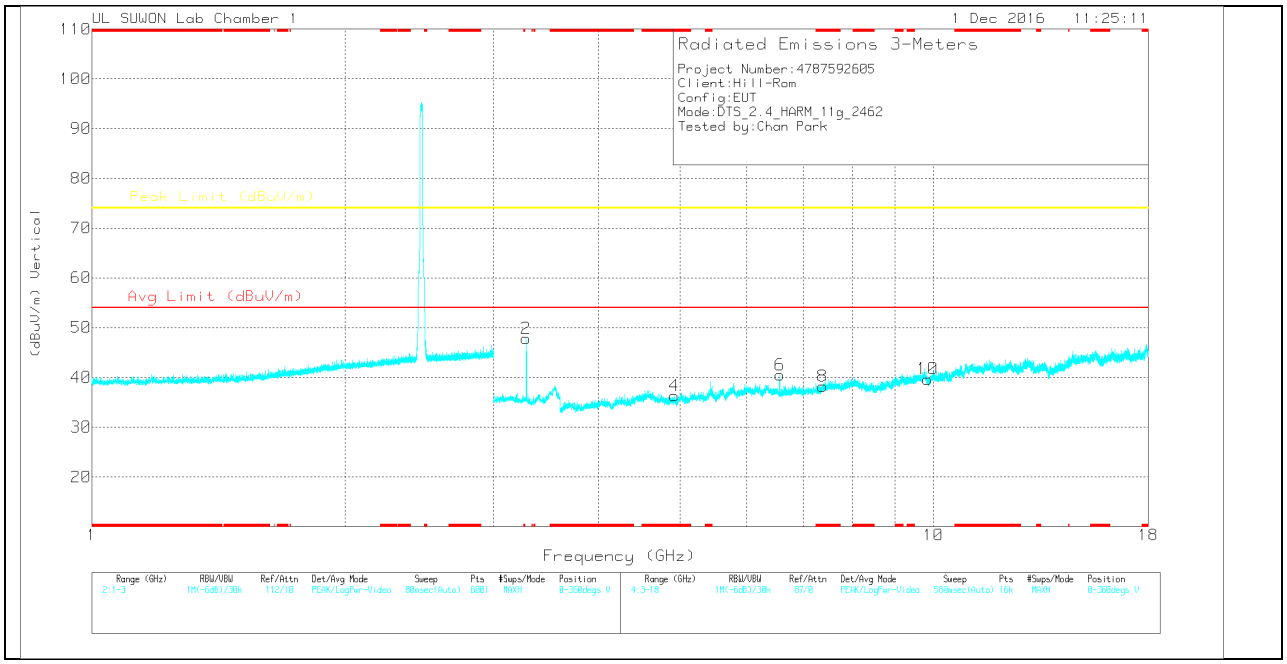
11 CHANNEL HORIZONTAL



11 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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11 CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.282	46.46	PK	32.6	-35.7	43.36	-	-	74	-30.64	0-360	250	H
3	* 4.922	35.99	PK	34	-33.4	36.59	-	-	74	-37.41	0-360	150	H
5	6.565	38.91	PK	35.5	-30.9	43.51	-	-	74	-30.49	0-360	250	H
7	* 7.387	32.58	PK	35.8	-30.5	37.88	-	-	74	-36.12	0-360	150	H
9	9.848	34.71	PK	37.3	-27.5	44.51	-	-	74	-29.49	0-360	150	H
2	3.282	50.9	PK	32.6	-35.7	47.8	-	-	74	-26.2	0-360	150	V
4	* 4.926	35.7	PK	34	-33.4	36.3	-	-	74	-37.7	0-360	250	V
6	6.565	35.91	PK	35.5	-30.9	40.51	-	-	74	-33.49	0-360	250	V
8	* 7.382	33.06	PK	35.8	-30.6	38.26	-	-	74	-35.74	0-360	250	V
10	9.849	29.87	PK	37.3	-27.5	39.67	-	-	74	-34.33	0-360	250	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.283	52.21	PK2	32.6	-35.7	49.11	-	-	74	-24.89	229	183	H
6.566	47.06	PK2	35.5	-30.9	51.66	-	-	74	-22.34	298	324	H
9.848	43.29	PK2	37.3	-27.5	53.09	-	-	74	-20.91	303	149	H
3.283	56.04	PK2	32.6	-35.7	52.94	-	-	74	-21.06	162	148	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

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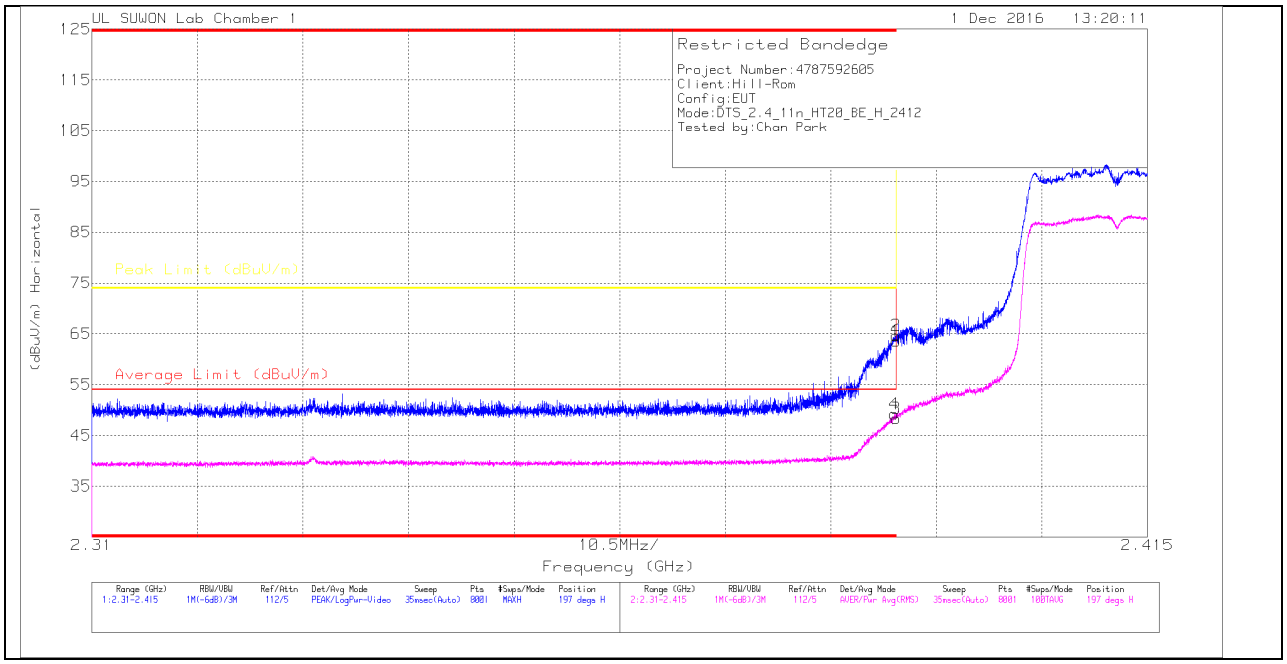
11.2.3. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (1 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	10dB[dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	60.12	Pk	31.8	-28.4	63.52	-	-	74	-10.48	197	130	H
2	* 2.39	61.31	Pk	31.8	-28.4	64.71	-	-	74	-9.29	197	130	H
3	* 2.39	45	RMS	31.8	-28.4	48.4	54	-5.6	-	-	197	130	H
4	* 2.39	45.87	RMS	31.8	-28.4	49.27	54	-4.73	-	-	197	130	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

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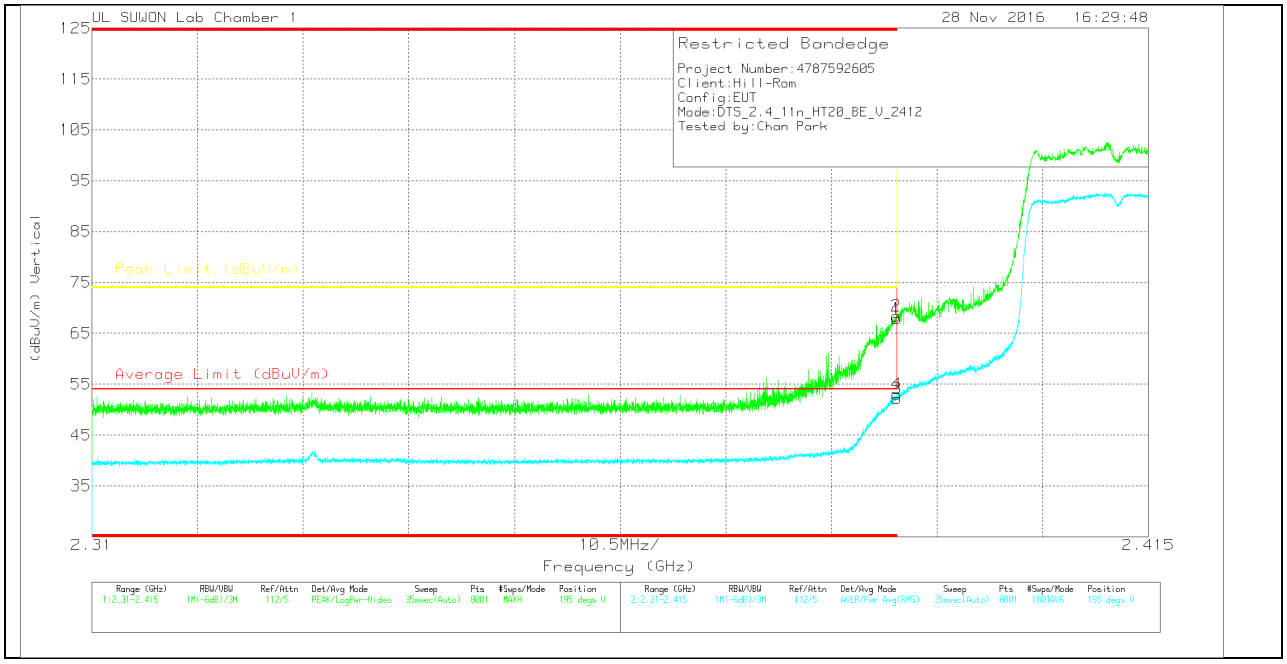
VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	10dB[dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	64.54	Pk	31.8	-28.4	67.94	-	-	74	-6.06	195	186	V
2	* 2.39	65.01	Pk	31.8	-28.4	68.41	-	-	74	-5.59	195	186	V
3	* 2.39	48.83	RMS	31.8	-28.4	52.23	54	-1.77	-	-	195	186	V
4	* 2.39	49.65	RMS	31.8	-28.4	53.05	54	-.95	-	-	195	186	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

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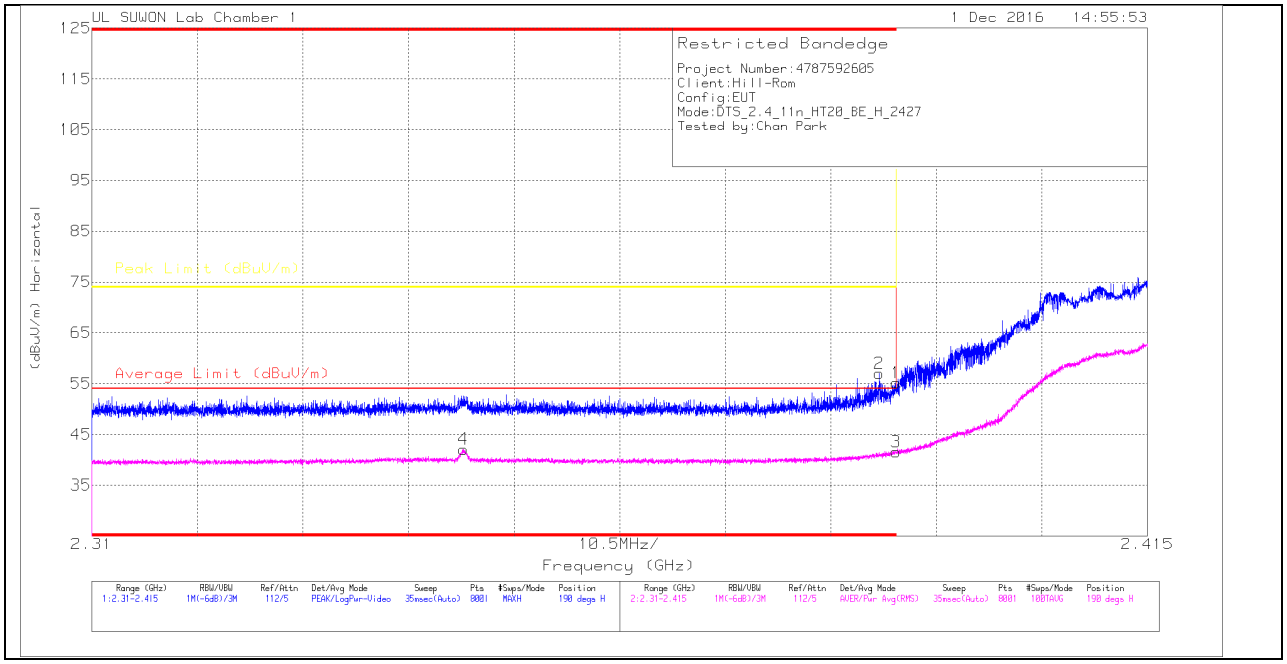
RESTRICTED BANDEDGE (4 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	10dB[dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	51.8	Pk	31.8	-28.4	55.2	-	-	74	-18.8	190	149	H
2	* 2.388	53.59	Pk	31.8	-28.4	56.99	-	-	74	-17.01	190	149	H
3	* 2.39	38.16	RMS	31.8	-28.4	41.56	54	-12.44	-	-	190	149	H
4	* 2.347	38.9	RMS	31.7	-28.5	42.1	54	-11.9	-	-	190	149	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

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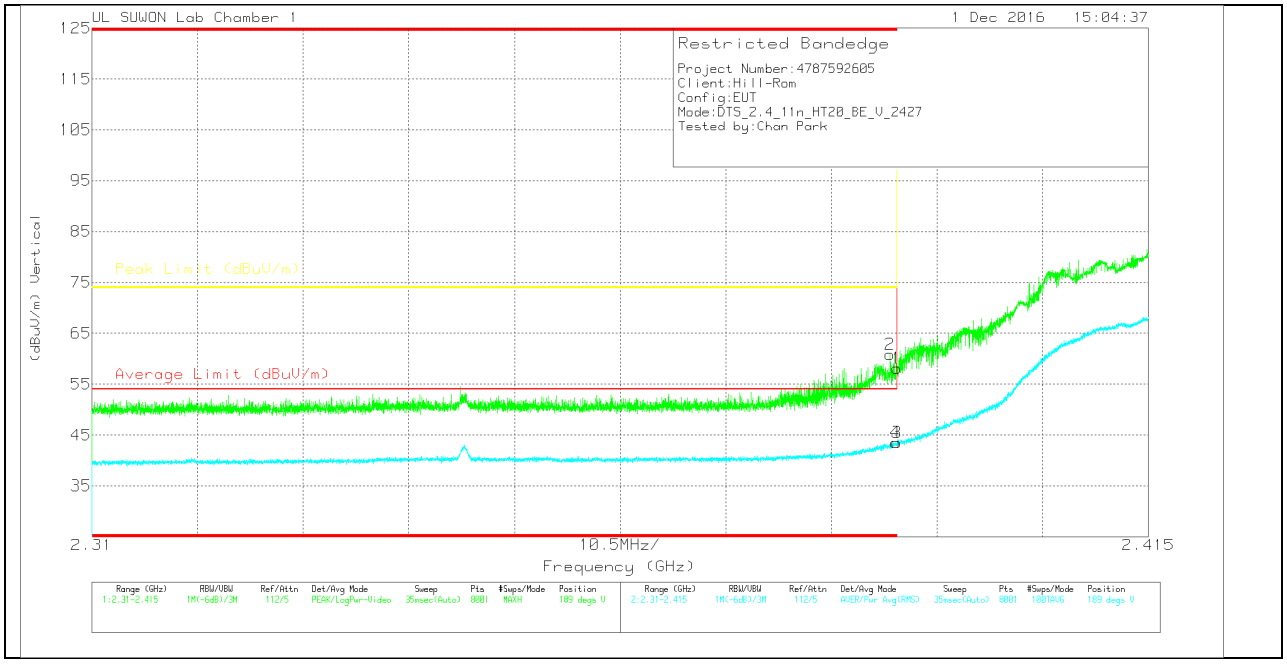
VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(0016 8717)_150 619	10dB[dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	54.73	Pk	31.8	-28.4	58.13	-	-	74	-15.87	189	205	V
2	* 2.389	57.42	Pk	31.8	-28.4	60.82	-	-	74	-13.18	189	205	V
3	* 2.39	40.07	RMS	31.8	-28.4	43.47	54	-10.53	-	-	189	205	V
4	* 2.39	40.16	RMS	31.8	-28.4	43.56	54	-10.44	-	-	189	205	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

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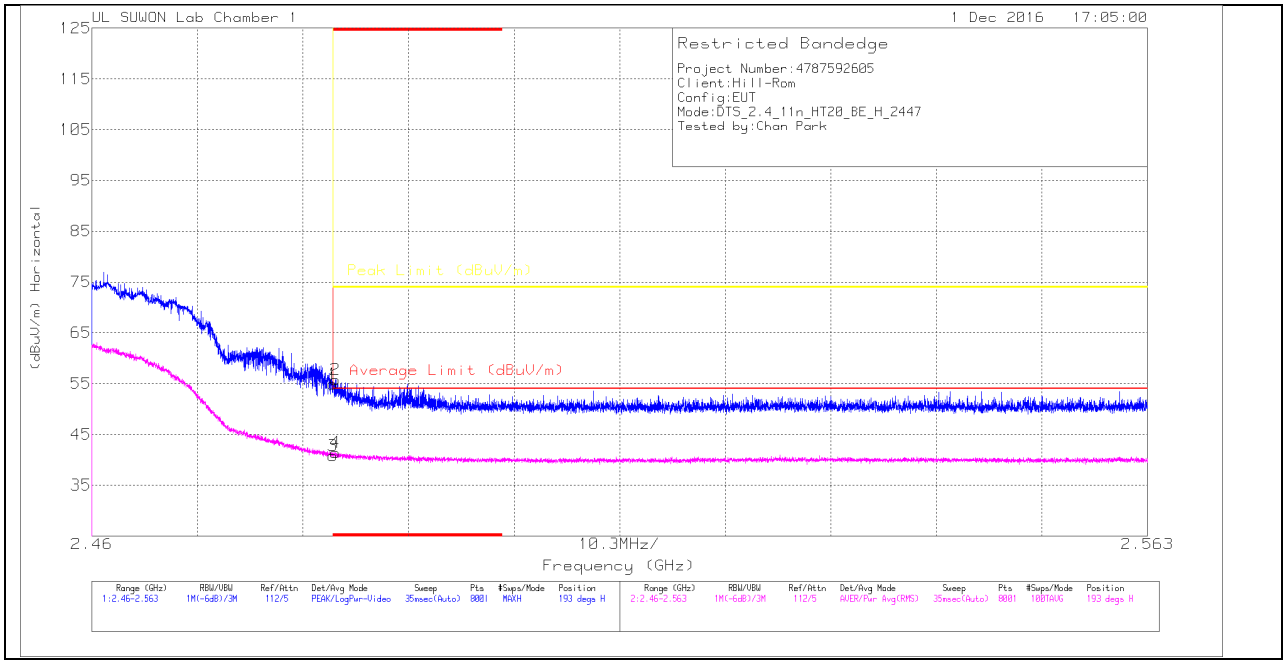
RESTRICTED BANDEDGE (8 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	10dB[dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	51.18	Pk	32	-28.3	54.88	-	-	74	-19.12	193	148	H
2	* 2.484	52.11	Pk	32	-28.3	55.81	-	-	74	-18.19	193	148	H
3	* 2.484	37.13	RMS	32	-28.3	40.83	54	-13.17	-	-	193	148	H
4	* 2.484	37.75	RMS	32	-28.3	41.45	54	-12.55	-	-	193	148	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

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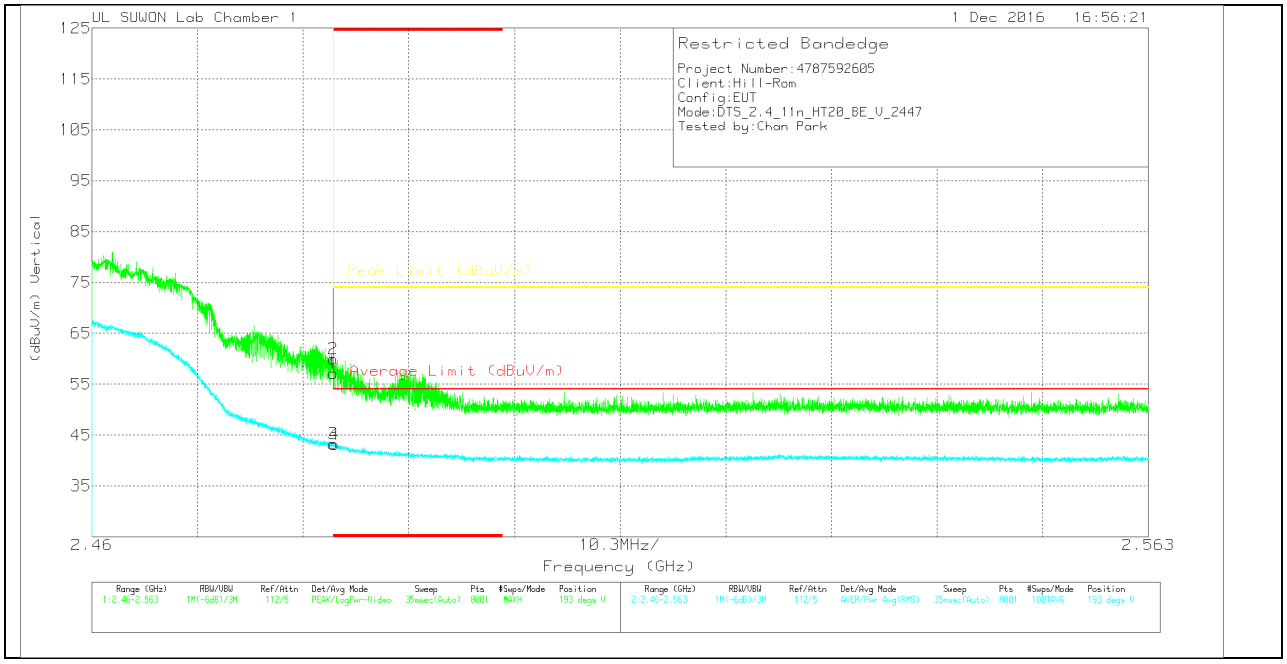
VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	10dB[dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	53.45	Pk	32	-28.3	57.15	-	-	74	-16.85	193	145	V
2	* 2.484	56.23	Pk	32	-28.3	59.93	-	-	74	-14.07	193	145	V
3	* 2.484	39.54	RMS	32	-28.3	43.24	54	-10.76	-	-	193	145	V
4	* 2.484	39.49	RMS	32	-28.3	43.19	54	-10.81	-	-	193	145	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

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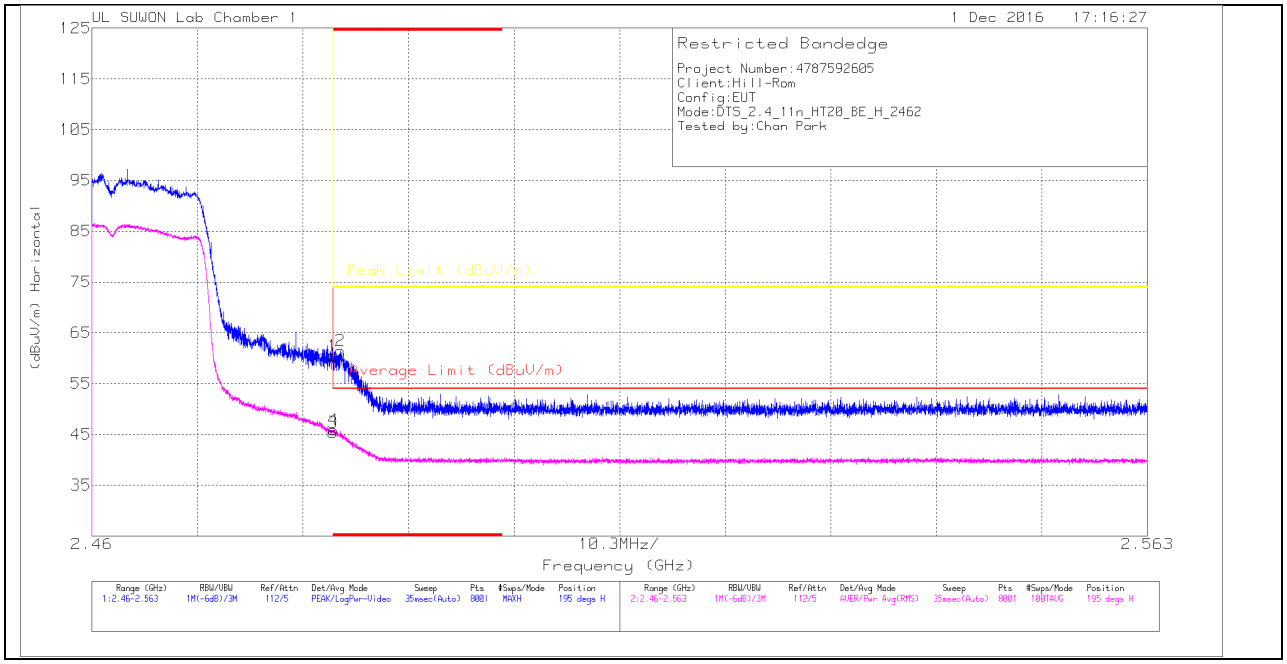
RESTRICTED BANDEDGE (11 CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	10dB[dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	56.76	Pk	32	-28.3	60.46	-	-	74	-13.54	195	130	H
2	* 2.484	57.79	Pk	32	-28.3	61.49	-	-	74	-12.51	195	130	H
3	* 2.484	41.71	RMS	32	-28.3	45.41	54	-8.59	-	-	195	130	H
4	* 2.484	42.22	RMS	32	-28.3	45.92	54	-8.08	-	-	195	130	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

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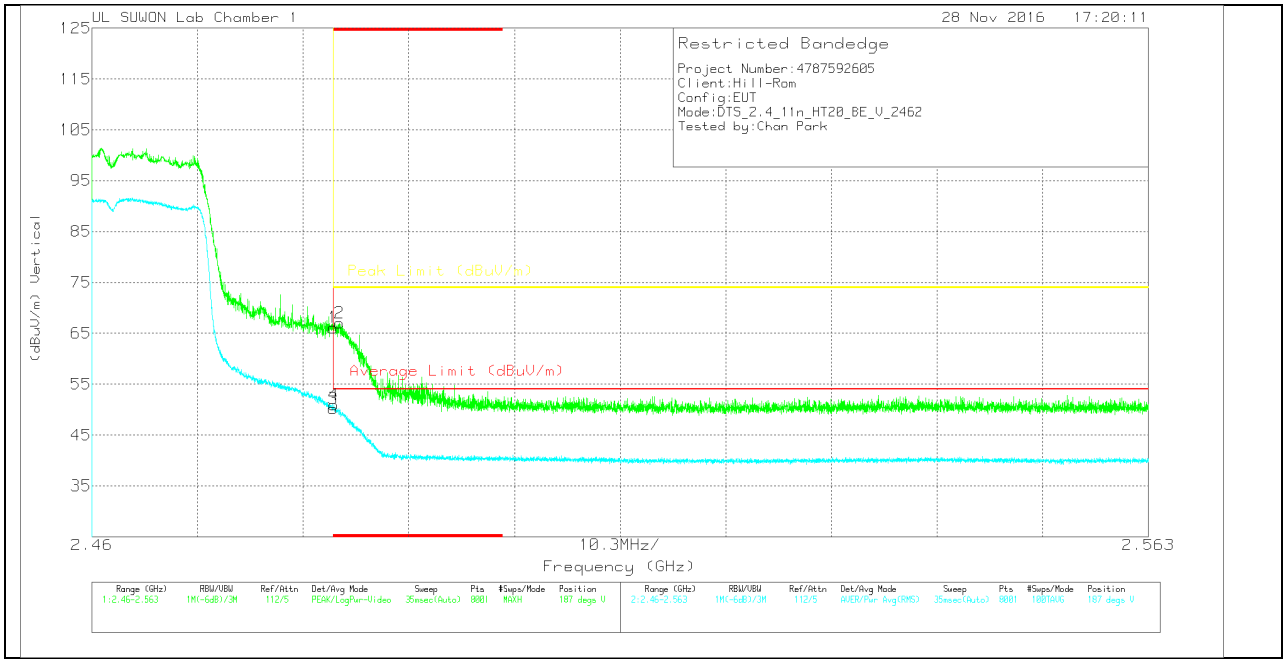
VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	10dB[dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	62.4	Pk	32	-28.3	66.1	-	-	74	-7.9	187	202	V
2	* 2.484	63.32	Pk	32	-28.3	67.02	-	-	74	-6.98	187	202	V
3	* 2.484	46.5	RMS	32	-28.3	50.2	54	-3.8	-	-	187	202	V
4	* 2.484	47.2	RMS	32	-28.3	50.9	54	-3.1	-	-	187	202	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

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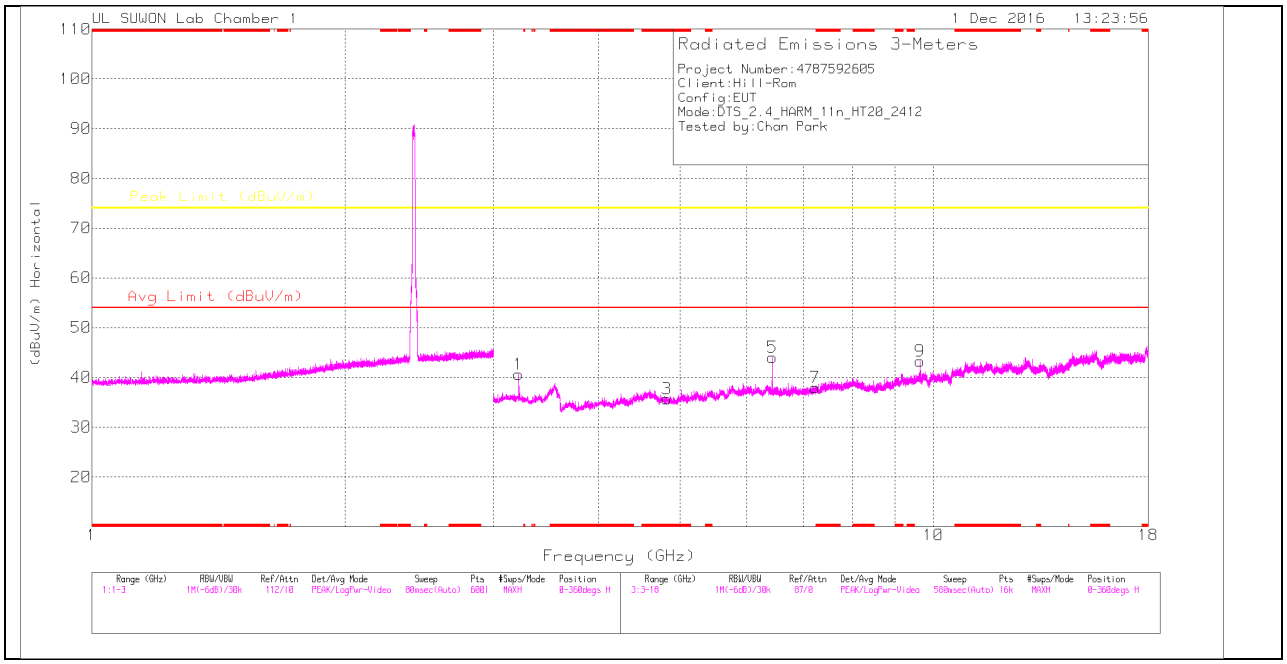
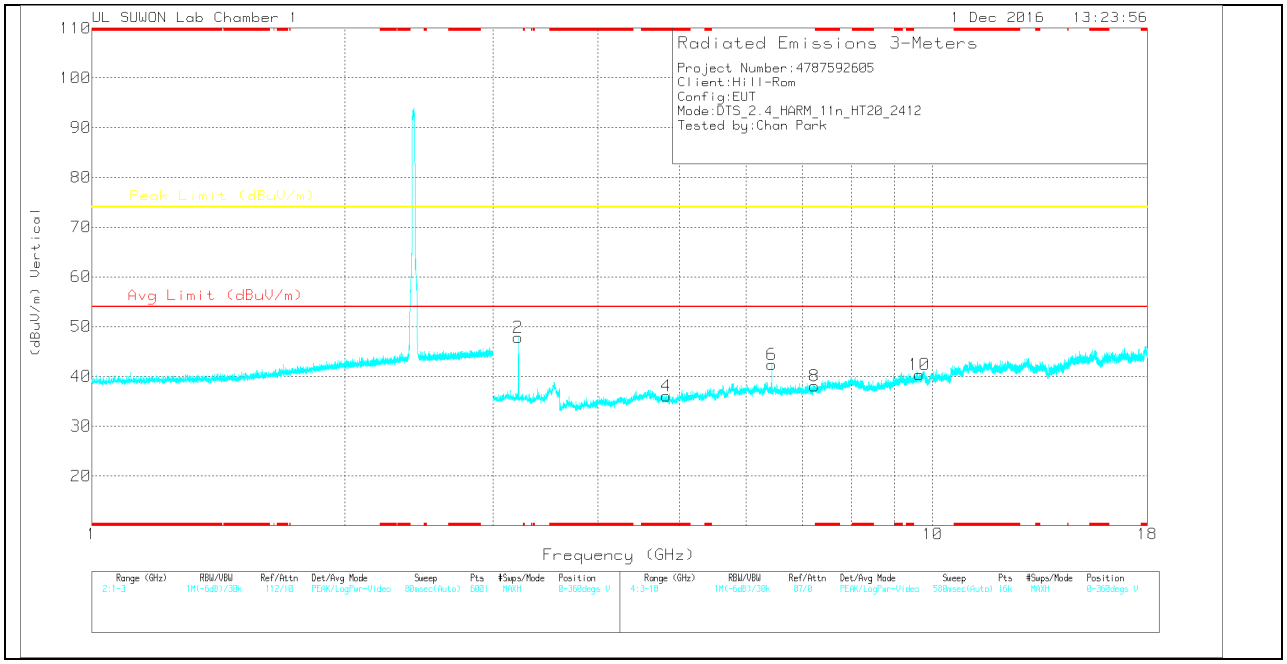
HARMONICS AND SPURIOUS EMISSIONS

1 CHANNEL HORIZONTAL



1 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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1 CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.216	44.07	PK	32.6	-36.1	40.57	-	-	74	-33.43	0-360	250	H
3	* 4.824	35.16	PK	34	-33.5	35.66	-	-	74	-38.34	0-360	250	H
5	6.432	39.49	PK	35.4	-30.9	43.99	-	-	74	-30.01	0-360	250	H
7	7.237	32.96	PK	35.7	-30.7	37.96	-	-	74	-36.04	0-360	250	H
9	9.648	33.56	PK	37.1	-27.4	43.26	-	-	74	-30.74	0-360	250	H
2	3.216	51.37	PK	32.6	-36.1	47.87	-	-	74	-26.13	0-360	150	V
4	* 4.825	35.53	PK	34	-33.5	36.03	-	-	74	-37.97	0-360	150	V
6	6.432	37.94	PK	35.4	-30.9	42.44	-	-	74	-31.56	0-360	250	V
8	7.24	33.09	PK	35.7	-30.7	38.09	-	-	74	-35.91	0-360	150	V
10	9.644	30.64	PK	37.1	-27.4	40.34	-	-	74	-33.66	0-360	250	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.216	52.5	PK2	32.6	-36.1	49	-	-	74	-25	283	209	H
6.432	46.98	PK2	35.4	-30.9	51.48	-	-	74	-22.52	294	311	H
9.648	43.16	PK2	37.1	-27.4	52.86	-	-	74	-21.14	303	178	H
3.216	52.55	PK2	32.6	-36.1	49.05	-	-	74	-24.95	282	209	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

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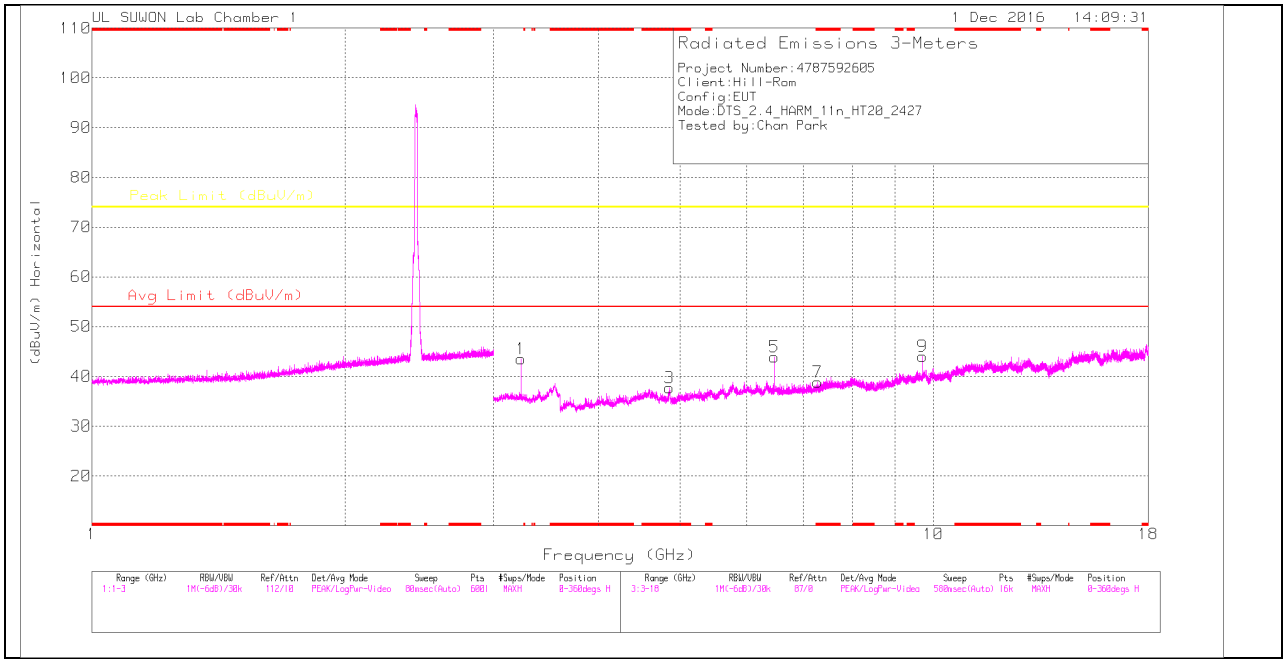
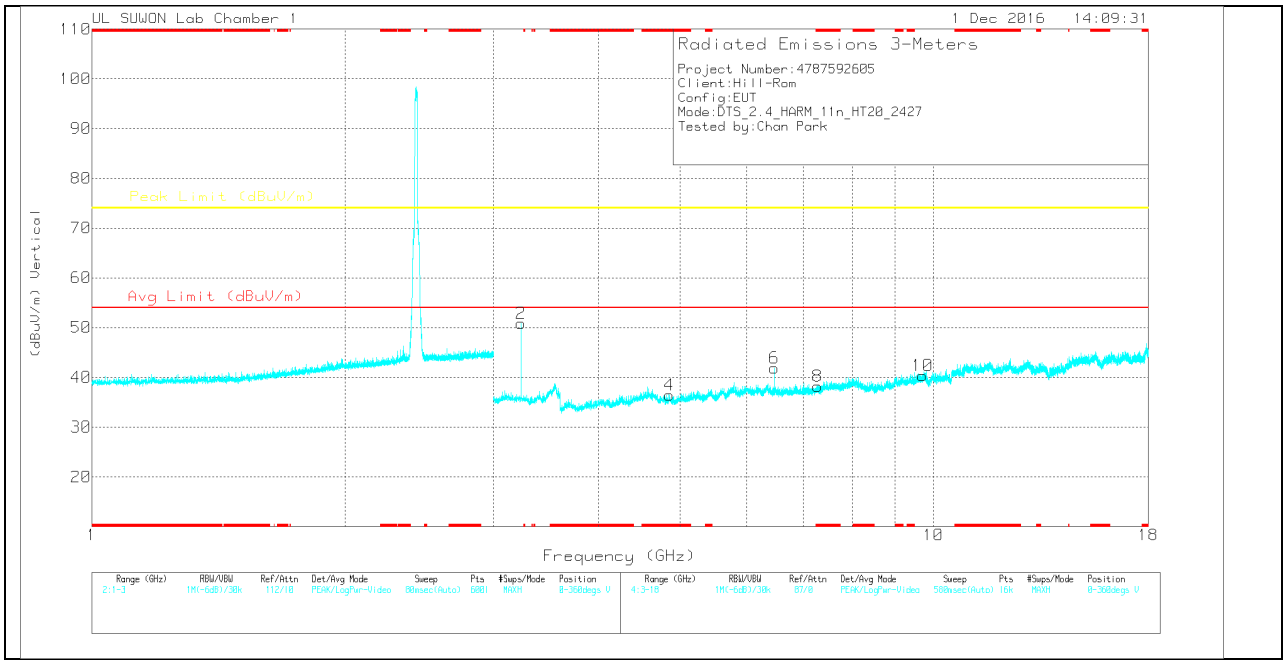
4 CHANNEL HORIZONTAL



4 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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4 CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.235	46.84	PK	32.6	-35.9	43.54	-	-	74	-30.46	0-360	250	H
3	* 4.853	37.31	PK	34	-33.6	37.71	-	-	74	-36.29	0-360	150	H
5	6.472	39.46	PK	35.4	-31	43.86	-	-	74	-30.14	0-360	150	H
7	* 7.282	33.8	PK	35.7	-30.7	38.8	-	-	74	-35.2	0-360	250	H
9	9.707	34.54	PK	37.1	-27.6	44.04	-	-	74	-29.96	0-360	250	H
2	3.235	54.15	PK	32.6	-35.9	50.85	-	-	74	-23.15	0-360	150	V
4	* 4.853	36.04	PK	34	-33.6	36.44	-	-	74	-37.56	0-360	250	V
6	6.471	37.45	PK	35.4	-31	41.85	-	-	74	-32.15	0-360	150	V
8	* 7.284	33.21	PK	35.7	-30.7	38.21	-	-	74	-35.79	0-360	150	V
10	9.707	30.82	PK	37.1	-27.6	40.32	-	-	74	-33.68	0-360	150	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.236	53.45	PK2	32.6	-35.9	50.15	-	-	74	-23.85	285	271	H
6.472	47.2	PK2	35.4	-31	51.6	-	-	74	-22.4	296	306	H
9.708	43.78	PK2	37.1	-27.6	53.28	-	-	74	-20.72	303	187	H
3.236	56.62	PK2	32.6	-35.9	53.32	-	-	74	-20.68	161	159	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

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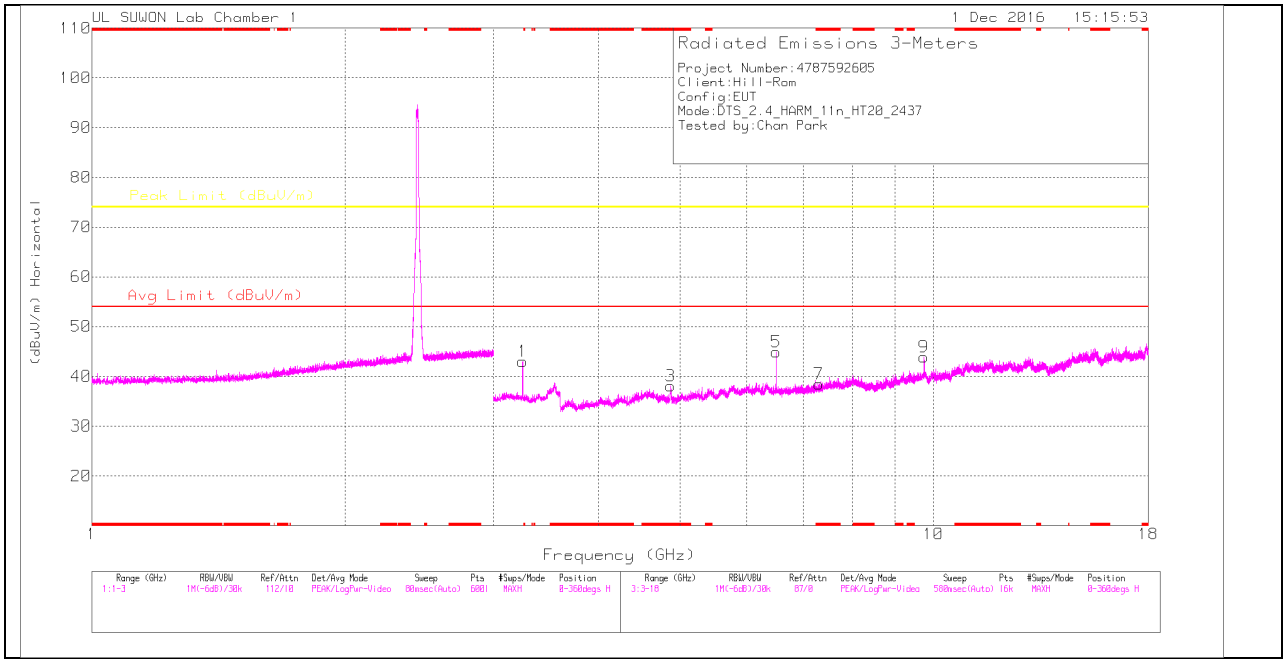
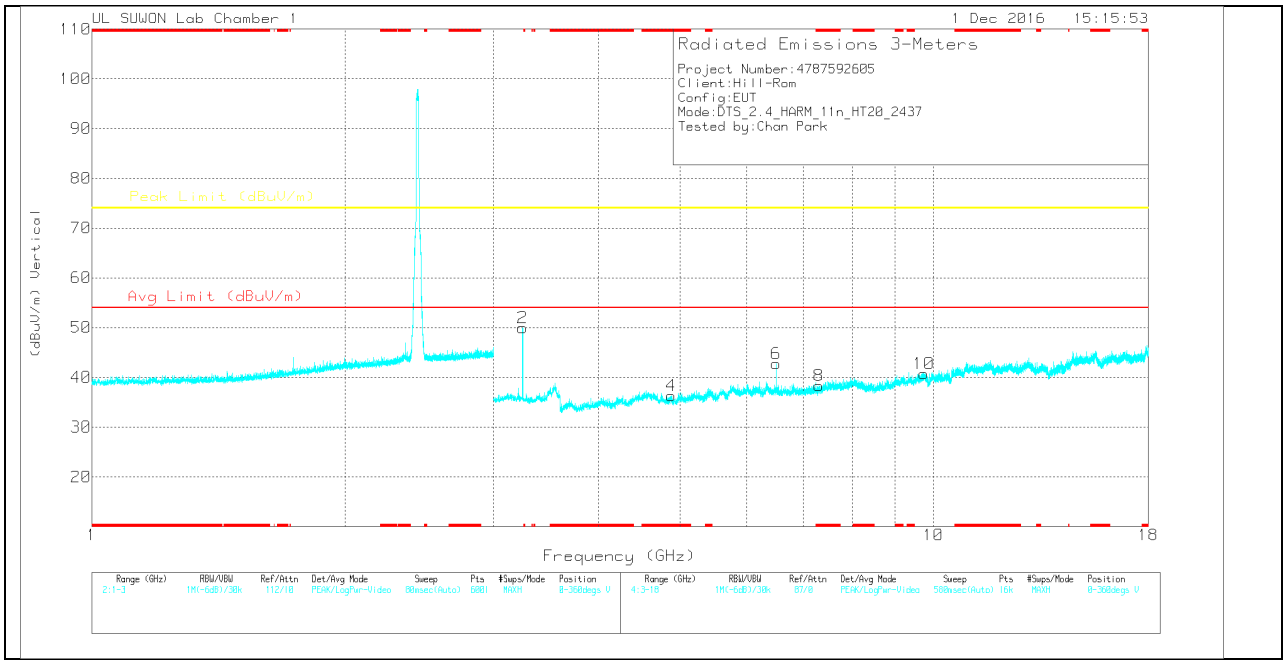
6 CHANNEL HORIZONTAL



6 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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6 CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.249	46.18	PK	32.6	-35.8	42.98	-	-	74	-31.02	0-360	250	H
3	* 4.869	37.64	PK	34	-33.6	38.04	-	-	74	-35.96	0-360	150	H
5	6.499	40.17	PK	35.4	-30.7	44.87	-	-	74	-29.13	0-360	250	H
7	* 7.311	33.28	PK	35.7	-30.5	38.48	-	-	74	-35.52	0-360	150	H
9	9.748	33.54	PK	37.2	-26.8	43.94	-	-	74	-30.06	0-360	250	H
2	3.249	53.14	PK	32.6	-35.8	49.94	-	-	74	-24.06	0-360	150	V
4	* 4.88	35.86	PK	34	-33.5	36.36	-	-	74	-37.64	0-360	250	V
6	6.499	38.04	PK	35.4	-30.7	42.74	-	-	74	-31.26	0-360	250	V
8	* 7.311	33.19	PK	35.7	-30.5	38.39	-	-	74	-35.61	0-360	150	V
10	9.743	30.46	PK	37.2	-26.9	40.76	-	-	74	-33.24	0-360	150	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.249	52.79	PK2	32.6	-35.8	49.59	-	-	74	-24.41	281	165	H
6.499	46.89	PK2	35.4	-30.7	51.59	-	-	74	-22.41	298	306	H
9.748	42.76	PK2	37.2	-26.8	53.16	-	-	74	-20.84	303	179	H
3.249	56.92	PK2	32.6	-35.8	53.72	-	-	74	-20.28	161	154	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

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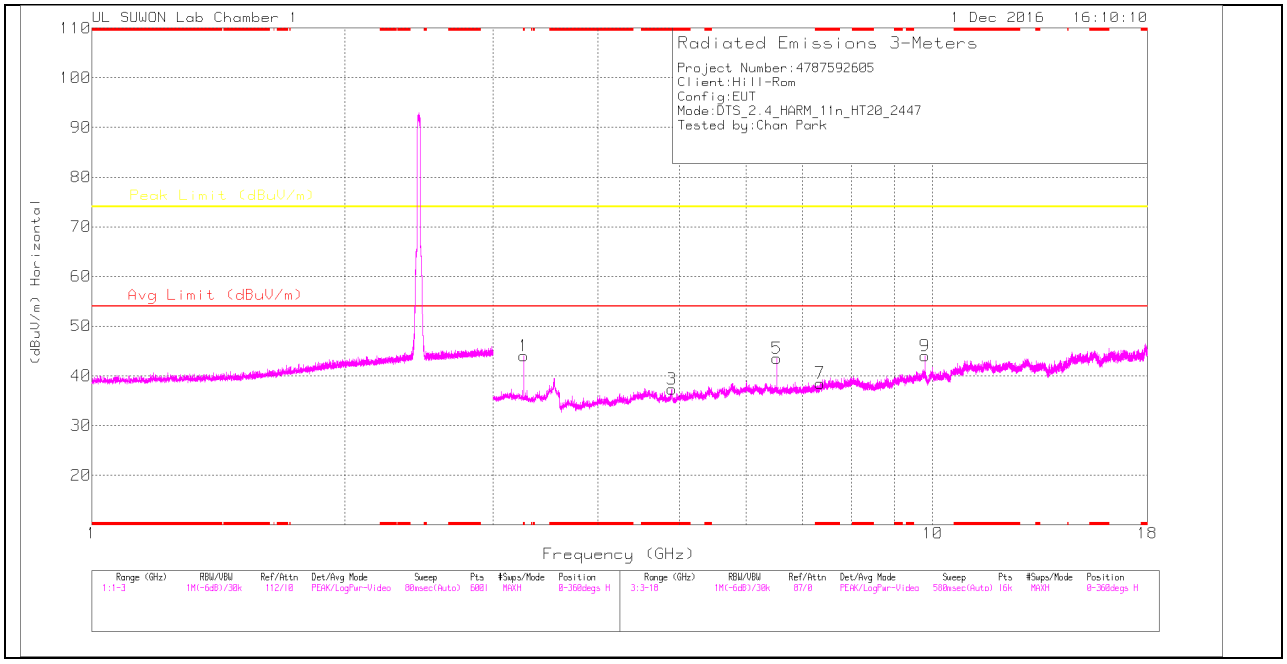
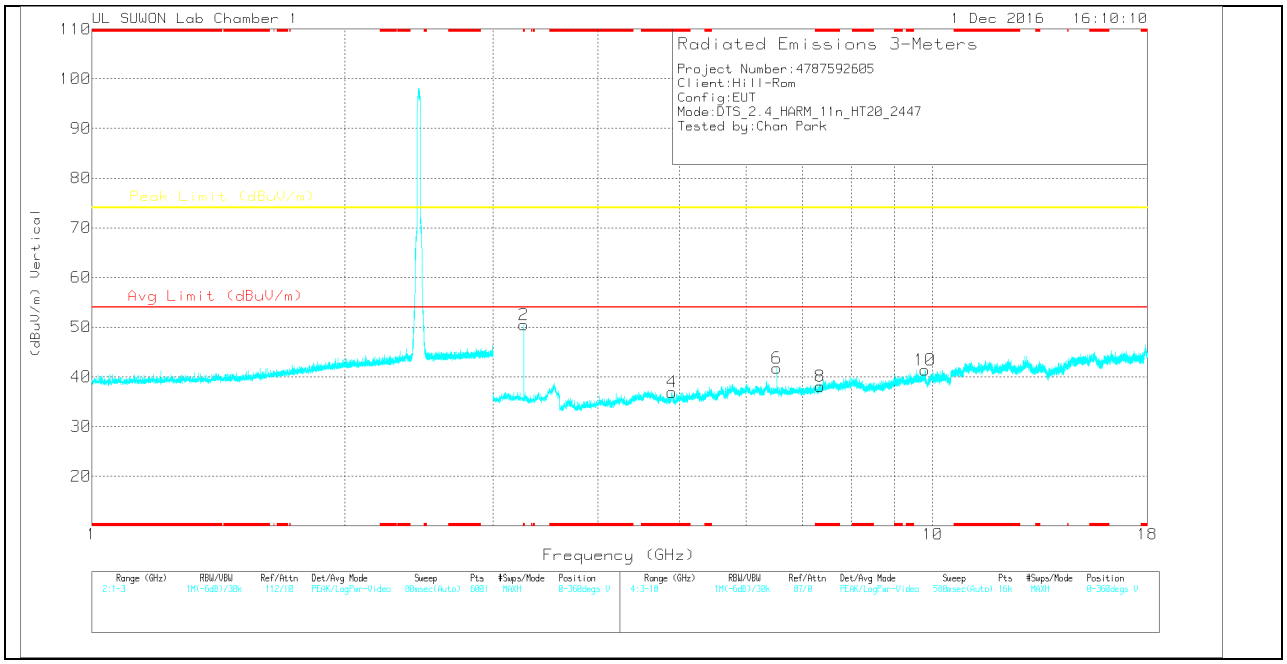
8 CHANNEL HORIZONTAL



8 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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8 CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.262	47.12	PK	32.6	-35.7	44.02	-	-	74	-29.98	0-360	250	H
3	* 4.896	36.88	PK	34	-33.5	37.38	-	-	74	-36.62	0-360	150	H
5	6.525	38.96	PK	35.4	-30.8	43.56	-	-	74	-30.44	0-360	150	H
7	* 7.342	33.23	PK	35.8	-30.5	38.53	-	-	74	-35.47	0-360	150	H
9	9.788	33.36	PK	37.2	-26.5	44.06	-	-	74	-29.94	0-360	150	H
2	* 3.262	53.58	PK	32.6	-35.7	50.48	-	-	74	-23.52	0-360	150	V
4	* 4.894	36.29	PK	34	-33.4	36.89	-	-	74	-37.11	0-360	250	V
6	6.525	37.17	PK	35.4	-30.8	41.77	-	-	74	-32.23	0-360	150	V
8	* 7.344	32.84	PK	35.8	-30.5	38.14	-	-	74	-35.86	0-360	250	V
10	9.785	30.66	PK	37.2	-26.5	41.36	-	-	74	-32.64	0-360	250	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.262	53.05	PK2	32.6	-35.7	49.95	-	-	74	-24.05	283	224	H
* 3.263	46.22	MAv1	32.6	-35.7	43.12	54	-10.88	-	-	283	224	H
6.525	46.53	PK2	35.4	-30.8	51.13	-	-	74	-22.87	298	305	H
9.788	42.54	PK2	37.2	-26.5	53.24	-	-	74	-20.76	303	149	H
* 3.263	57.37	PK2	32.6	-35.7	54.27	-	-	74	-19.73	168	160	V
* 3.263	53.17	MAv1	32.6	-35.7	50.07	54	-3.93	-	-	168	160	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

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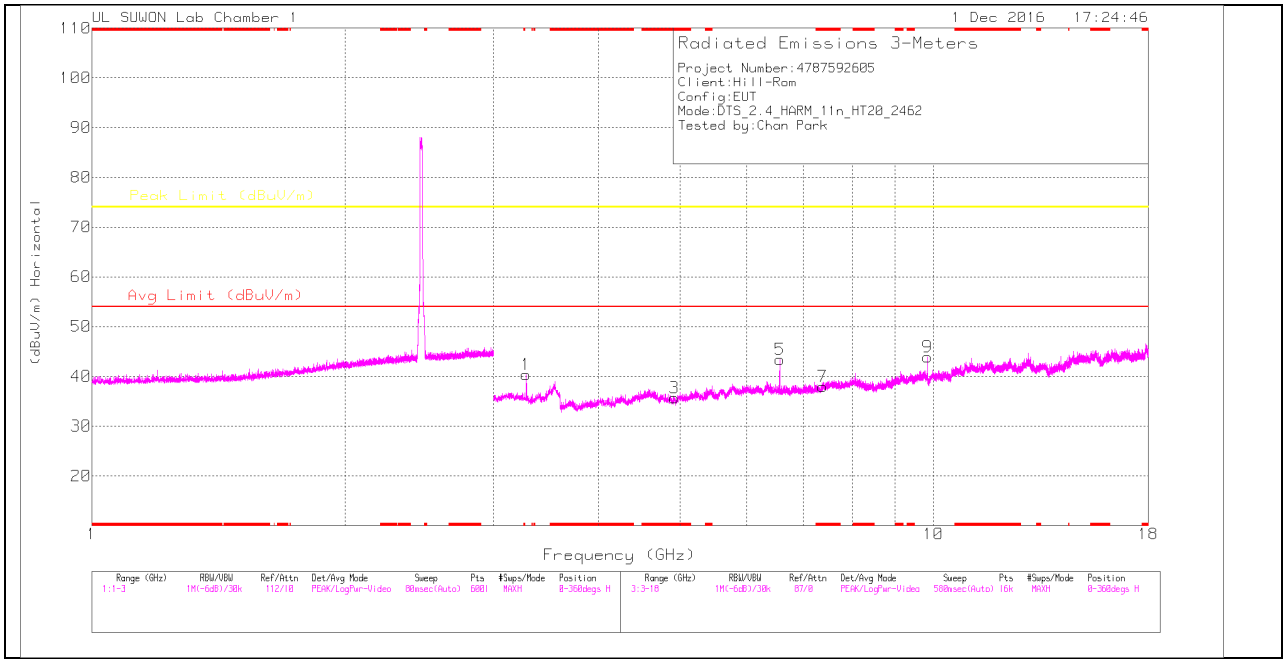
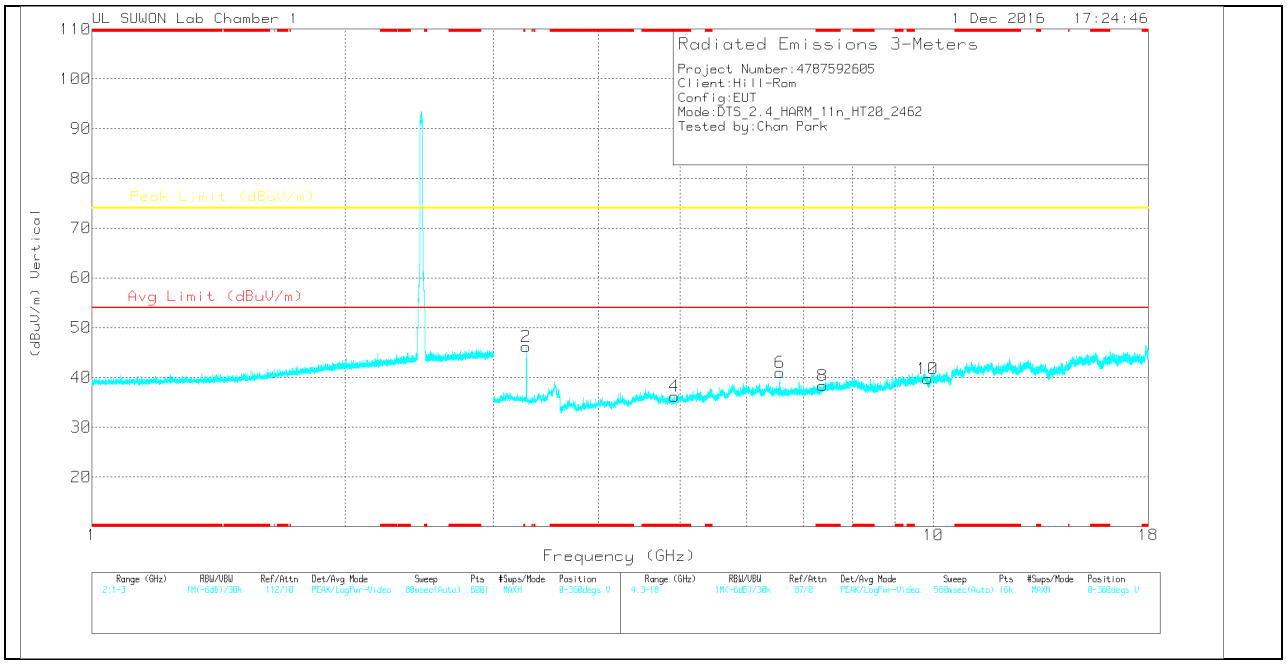
11 CHANNEL HORIZONTAL



11 CHANNEL VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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11 CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.282	43.42	PK	32.6	-35.7	40.32	-	-	74	-33.68	0-360	250	H
3	* 4.923	35.1	PK	34	-33.4	35.7	-	-	74	-38.3	0-360	250	H
5	6.565	38.8	PK	35.5	-30.9	43.4	-	-	74	-30.6	0-360	150	H
7	* 7.386	32.71	PK	35.8	-30.6	37.91	-	-	74	-36.09	0-360	150	H
9	9.848	34.15	PK	37.3	-27.5	43.95	-	-	74	-30.05	0-360	250	H
2	3.282	49.23	PK	32.6	-35.7	46.13	-	-	74	-27.87	0-360	150	V
4	* 4.923	35.6	PK	34	-33.4	36.2	-	-	74	-37.8	0-360	150	V
6	6.565	36.37	PK	35.5	-30.9	40.97	-	-	74	-33.03	0-360	250	V
8	* 7.383	33.1	PK	35.8	-30.6	38.3	-	-	74	-35.7	0-360	150	V
10	9.848	29.95	PK	37.3	-27.5	39.75	-	-	74	-34.25	0-360	150	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.283	51.92	PK2	32.6	-35.7	48.82	-	-	74	-25.18	288	264	H
6.565	47.18	PK2	35.5	-30.9	51.78	-	-	74	-22.22	297	304	H
9.848	42.68	PK2	37.3	-27.5	52.48	-	-	74	-21.52	303	150	H
3.283	54.46	PK2	32.6	-35.7	51.36	-	-	74	-22.64	163	147	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

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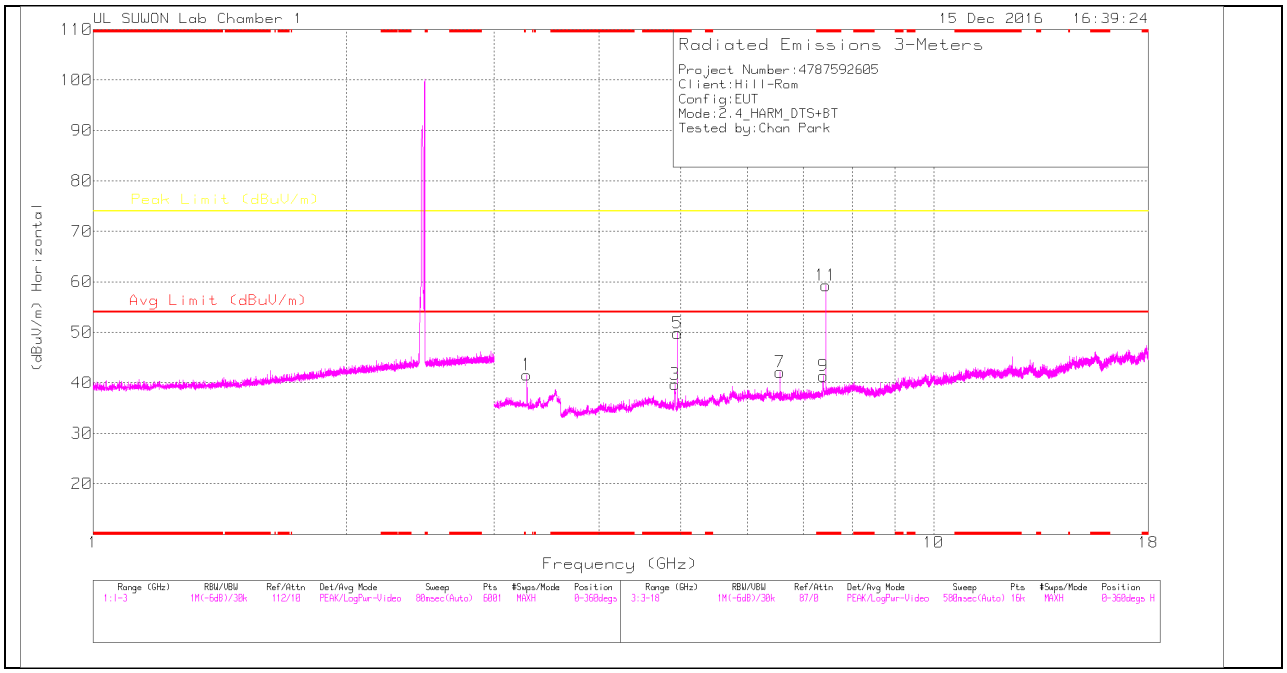
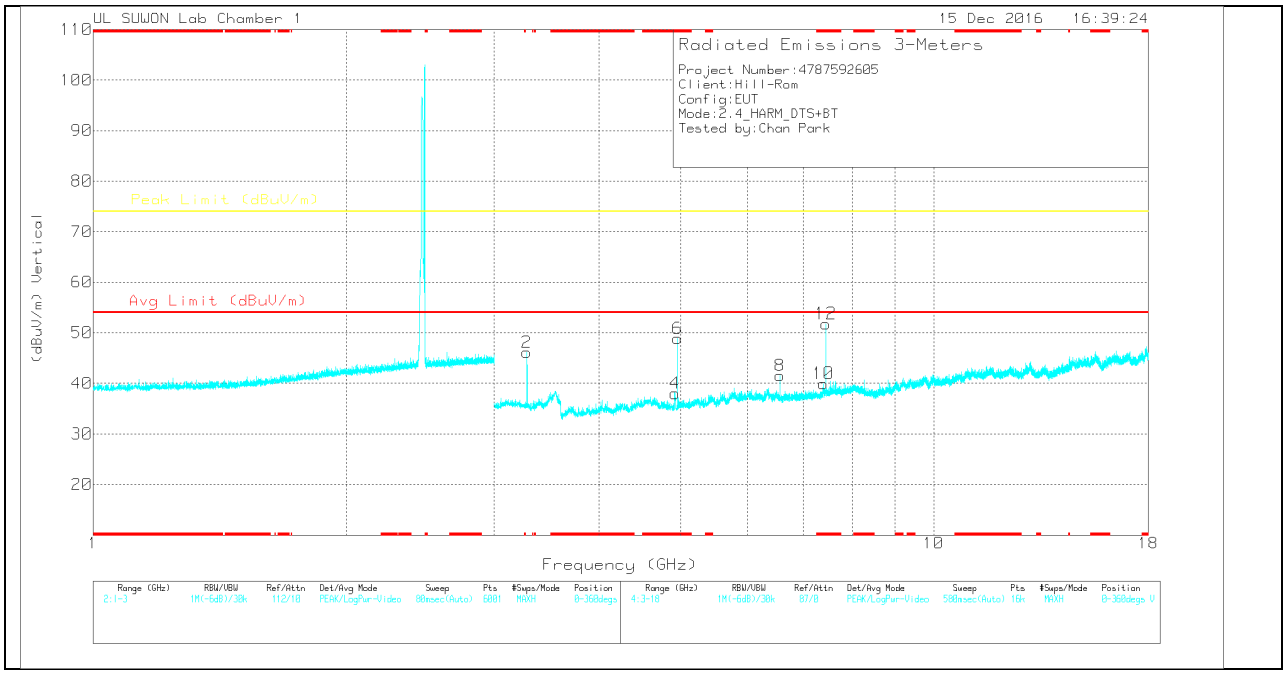
11.2.4. Simultaneous TX Radiated Spurious Emissions Measurements

Bluetooth 2.4GHz & WLAN 2.4GHz HORIZONTAL



Bluetooth 2.4GHz & WLAN 2.4GHz VERTICAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

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8 CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.282	44.68	PK	32.6	-35.7	41.58	-	-	74	-32.42	0-360	250	H
3	* 4.924	39.1	PK	34	-33.4	39.7	-	-	74	-34.3	0-360	150	H
5	* 4.959	49.43	PK	34	-33.6	49.83	-	-	74	-24.17	0-360	150	H
7	6.565	37.51	PK	35.5	-30.9	42.11	-	-	74	-31.89	0-360	250	H
9	* 7.388	36.06	PK	35.8	-30.5	41.36	-	-	74	-32.64	0-360	250	H
11	* 7.44	53.89	PK	35.8	-30.4	59.29	-	-	74	-14.71	0-360	250	H
2	3.282	49.24	PK	32.6	-35.7	46.14	-	-	74	-27.86	0-360	150	V
4	* 4.923	37.41	PK	34	-33.4	38.01	-	-	74	-35.99	0-360	250	V
6	* 4.96	48.46	PK	34	-33.6	48.86	-	-	74	-25.14	0-360	150	V
8	6.565	36.93	PK	35.5	-30.9	41.53	-	-	74	-32.47	0-360	250	V
10	* 7.388	34.64	PK	35.8	-30.5	39.94	-	-	74	-34.06	0-360	150	V
12	* 7.44	46.39	PK	35.8	-30.4	51.79	-	-	74	-22.21	0-360	250	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117(00168717)_150619	3GHz_HP[dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.283	51.46	PK2	32.6	-35.7	48.36	-	-	74	-25.64	90	148	H
* 4.96	53.75	PK2	34	-33.6	54.15	-	-	74	-19.85	77	144	H
* 4.96	39.68	VA1T	34	-33.6	40.08	54	-13.92	-	-	77	144	H
* 7.439	56.06	PK2	35.8	-30.4	61.46	-	-	74	-12.54	124	144	H
* 7.44	39.94	VA1T	35.8	-30.4	45.34	54	-8.66	-	-	124	144	H
3.283	54.68	PK2	32.6	-35.7	51.58	-	-	74	-22.42	158	146	V
* 4.96	53.64	PK2	34	-33.6	54.04	-	-	74	-19.96	346	131	V
* 4.96	39.65	VA1T	34	-33.6	40.05	54	-13.95	-	-	346	131	V
* 7.44	52.48	PK2	35.8	-30.4	57.88	-	-	74	-16.12	64	168	V
* 7.44	37.73	VA1T	35.8	-30.4	43.13	54	-10.87	-	-	64	168	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

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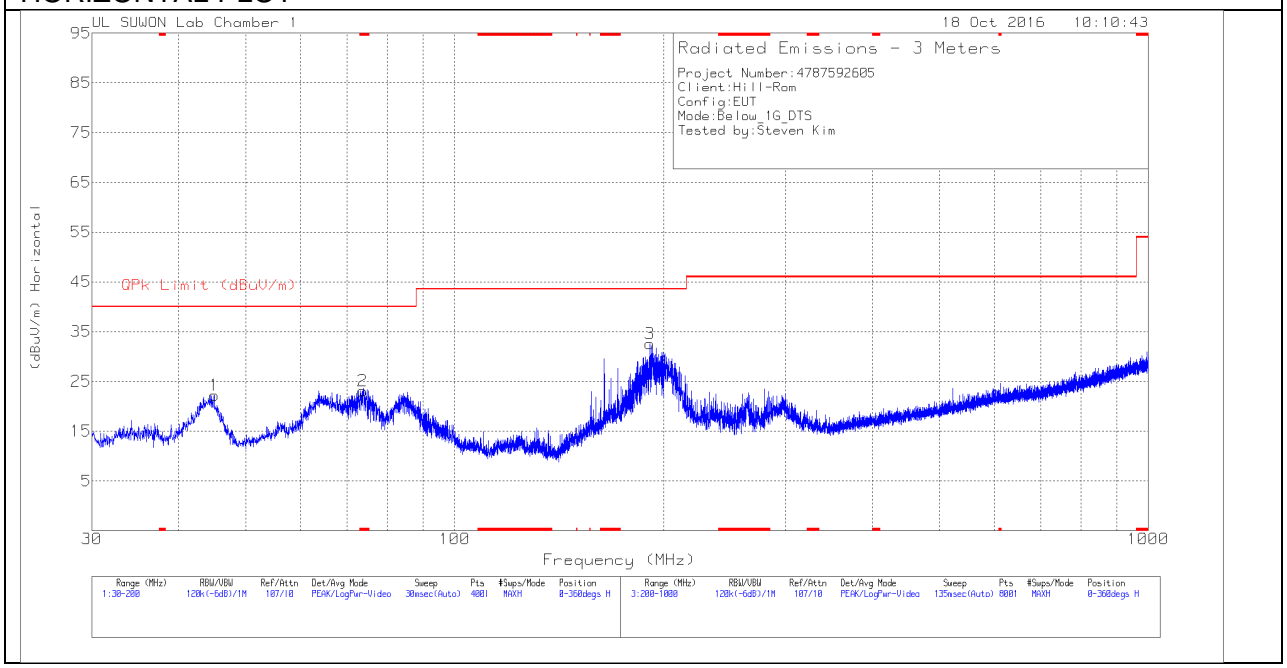
11.3. WORST-CASE BELOW 1 GHz

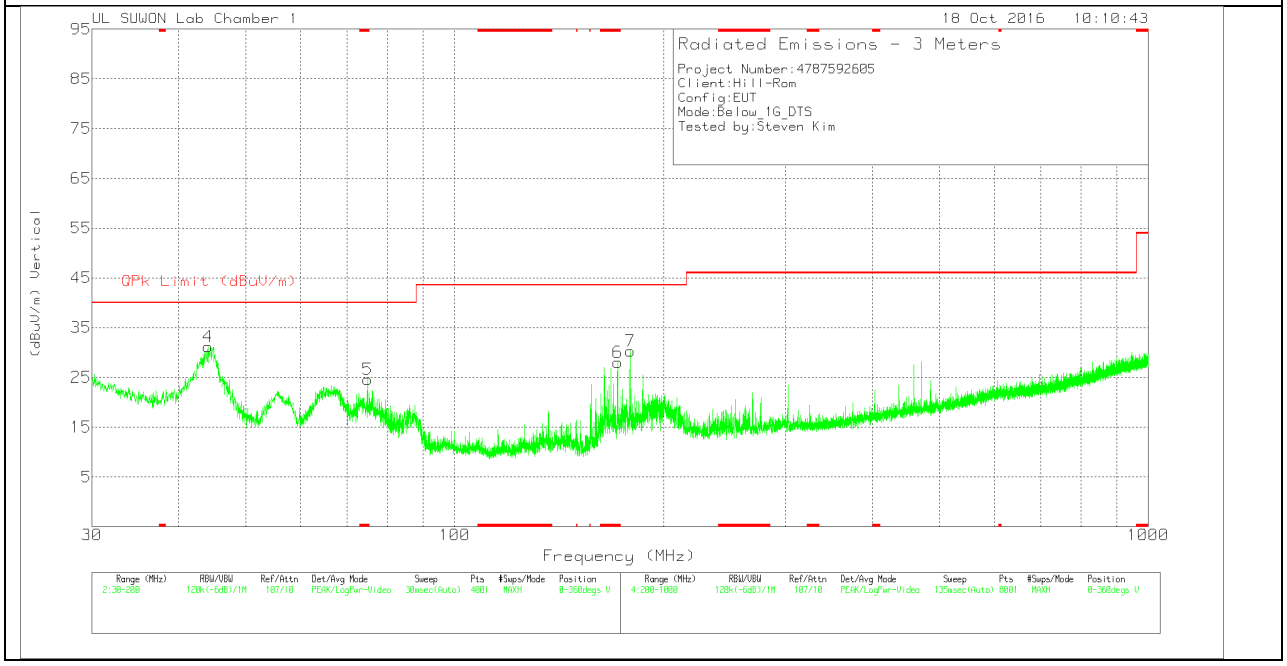
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT



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

VERTICAL PLOT



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Below 1G Data

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163-750	Bi-Log	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	45.0025	38.75	Pk	13.6	-30.2	22.15	40	-17.85	0-360	300	H
2	* 73.7325	44.16	Pk	8.6	-29.7	23.06	40	-16.94	0-360	300	H
3	191.2875	50.4	Pk	10.5	-28.3	32.6	43.52	-10.92	0-360	100	H
4	44.11	48.01	Pk	13.4	-30.2	31.21	40	-8.79	0-360	100	V
5	* 74.88	46.04	Pk	8.3	-29.7	24.64	40	-15.36	0-360	200	V
6	* 171.8225	47.45	Pk	9	-28.4	28.05	43.52	-15.47	0-360	200	V
7	179.26	49.24	Pk	9.4	-28.3	30.34	43.52	-13.18	0-360	200	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

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12. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

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 NEUTRAL and HOT lines.

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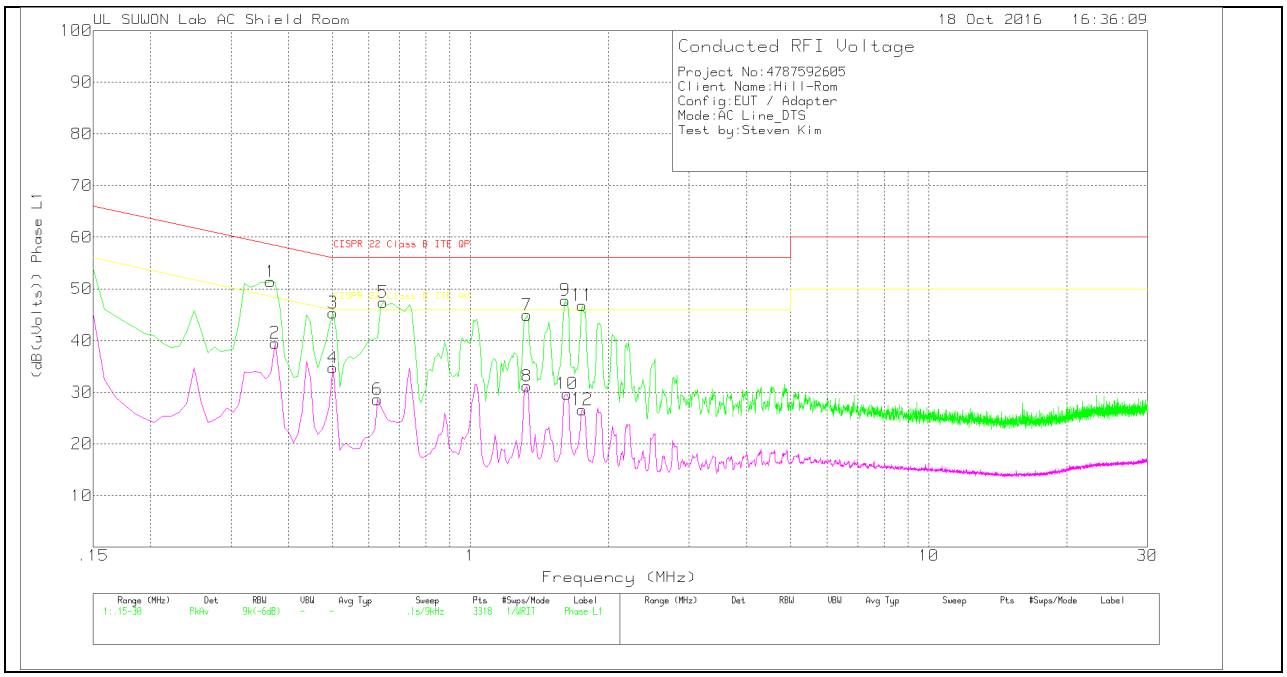
RESULTS

WORST EMISSIONS

LINE 1 PLOT



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LINE 1 RESULTS

Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_with ex-cord_L1	CE Shield Room	Corrected Reading (dB(uVolts))	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
1	.366	41.5	Pk	9.9	0	51.4	58.59	-7.19	-	-
2	.375	29.63	Av	9.9	0	39.53	-	-	48.39	-8.86
3	.501	35.46	Pk	9.9	0	45.36	56	-10.64	-	-
4	.501	24.83	Av	9.9	0	34.73	-	-	46	-11.27
5	.645	37.51	Pk	9.9	0	47.41	56	-8.59	-	-
6	.627	18.7	Av	9.9	0	28.6	-	-	46	-17.4
7	1.329	35.02	Pk	9.8	.1	44.92	56	-11.08	-	-
8	1.329	21.29	Av	9.8	.1	31.19	-	-	46	-14.81
9	1.608	38	Pk	9.7	.1	47.8	56	-8.2	-	-
10	1.626	19.89	Av	9.7	.1	29.69	-	-	46	-16.31
11	1.752	37.02	Pk	9.7	.1	46.82	56	-9.18	-	-
12	1.752	16.83	Av	9.7	.1	26.63	-	-	46	-19.37

Pk - Peak detector

Av - Average detection

Quasi-Peak Emissions

Phase L1 .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_with ex-cord_L1	CE Shield Room	Corrected Reading (dB(uVolts))	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
.3705	38.7	Qp	9.9	0	48.6	58.49	-9.89	-	-
.7323	32.88	Qp	9.9	0	42.78	56	-13.22	-	-
1.6044	32.81	Qp	9.7	.1	42.61	56	-13.39	-	-
1.7475	31.2	Qp	9.7	.1	41	56	-15	-	-

Qp - Quasi-Peak detector

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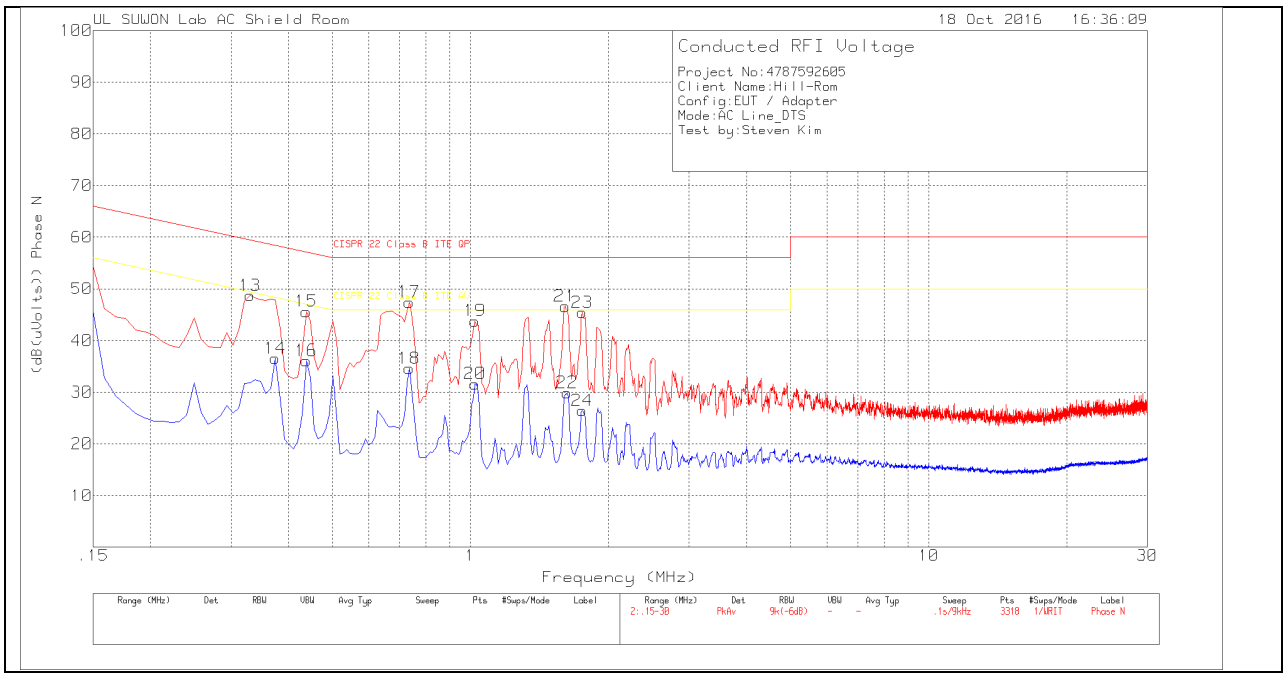
LINE 2 PLOT



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LINE 2 RESULTS

Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101837_with ex-cord_N	CE Shield Room	Corrected Reading (dB(uVolts))	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
13	.33	38.9	Pk	9.8	0	48.7	59.45	-10.75	-	-
14	.375	26.64	Av	9.9	0	36.54	-	-	48.39	-11.85
15	.438	35.72	Pk	9.9	0	45.62	57.1	-11.48	-	-
16	.438	26.19	Av	9.9	0	36.09	-	-	47.1	-11.01
17	.735	37.54	Pk	9.9	0	47.44	56	-8.56	-	-
18	.735	24.69	Av	9.9	0	34.59	-	-	46	-11.41
19	1.023	34	Pk	9.8	0	43.8	56	-12.2	-	-
20	1.023	21.83	Av	9.8	0	31.63	-	-	46	-14.37
21	1.608	36.81	Pk	9.7	.1	46.61	56	-9.39	-	-
22	1.626	20.1	Av	9.7	.1	29.9	-	-	46	-16.1
23	1.752	35.63	Pk	9.7	.1	45.43	56	-10.57	-	-
24	1.752	16.63	Av	9.7	.1	26.43	-	-	46	-19.57

Pk - Peak detector

Av - Average detection

Quasi-Peak Emissions

Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101837_with ex-cord_N	CE Shield Room	Corrected Reading (dB(uVolts))	CISPR 22 Class B ITE QP	Margin (dB)	CISPR 22 Class B ITE AV	Margin (dB)
.7386	32.71	Qp	9.9	0	42.61	56	-13.39	-	-
1.6035	31.74	Qp	9.7	.1	41.54	56	-14.46	-	-
1.7583	30.27	Qp	9.7	.1	40.07	56	-15.93	-	-

Qp - Quasi-Peak detector

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