REPORT NO: 15U21052-E2V2

FCC ID: SXNWYSBMVGX4I

DATE: OCTOBER 14, 2015
IC ID: 20569-WYSBMVGX4I

# **LOW CHANNEL DATA**

### TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	* 1.223	32.18	PK	29.2	-32.7	0	28.68	-	-	74	-45.32	-	-	0-360	200	Н
2	* 3.885	30.91	PK	33.2	-29.9	0	34.21	-	-	74	-39.79	-	-	0-360	100	Н
3	* 7.333	42.19	PK	35.6	-28.4	0	49.39	-	-	74	-24.61	-	-	0-360	200	Н
4	* 11	29.76	PK	37.9	-23.3	0	44.36	-	-	74	-29.64	-	-	0-360	200	Н
5	* 7.333	41.9	PK	35.6	-28.4	0	49.1	-	-	74	-24.9	-	-	0-360	100	V
6	* 10.999	30.66	PK	37.9	-23.3	0	45.26	-	-	74	-28.74	-	-	0-360	200	V

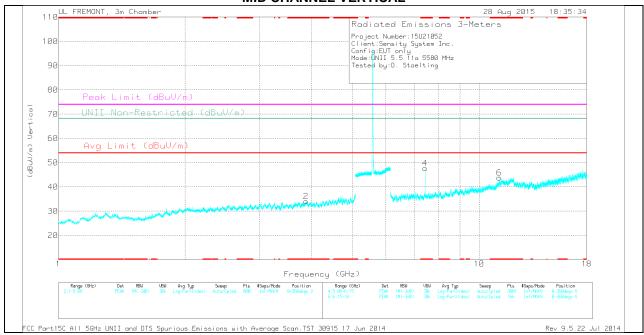
PK - Peak detector

Frequency (GHz)	Meter Reading	Det	AF T119 (dB/m)	Amp/Cbl/Fl tr/Pad (dB)	DC Corr (dB)	Corrected Reading	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non- Restricted	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
(0112)	(dBuV)		(45/111/	11/1 00 (00)		(dBuV/m)	(4547/11)	(45)	(000171117	(40)	(dBuV/m)	(45)	(50,63)	(C)	
* 1.224	42.06	PK1	29.2	-32.7	0	38.56	-	-	74	-35.44	-	-	0	200	Н
* 1.223	30.16	AD1	29.1	-32.7	3.76	30.32	54	-23.68	-	-	-	-	0	200	Н
* 3.886	40.88	PK1	33.2	-29.9	0	44.18	-	-	74	-29.82	-	-	0	100	Н
* 3.886	28.84	AD1	33.2	-29.9	3.76	35.9	54	-18.1	-	-	-	-	0	100	Н
* 7.333	45.25	PK1	35.6	-28.5	0	52.35	-	-	74	-21.65	-	-	271	175	Н
* 7.333	36.94	AD1	35.6	-28.4	3.76	47.9	54	-6.1	-	-	-	-	271	175	Н
* 11	39.63	PK1	37.9	-23.3	0	54.23	-	-	74	-19.77	-	-	15	170	Н
* 11	25.95	AD1	37.9	-23.3	3.76	44.31	54	-9.69	-	-	-	-	15	170	Н
* 7.333	45.7	PK1	35.6	-28.5	0	52.8	-	-	74	-21.2	-	-	317	101	V
* 7.333	38.43	AD1	35.6	-28.4	3.76	49.39	54	-4.61	-	-	-	-	317	101	V
* 11	41.71	PK1	37.9	-23.3	0	56.31	-	-	74	-17.69	-	-	0	341	V
* 10.999	27.31	AD1	37.9	-23.3	3.76	45.67	54	-8.33	-	-	-	,	0	341	V

# MID CHANNEL HORIZONTAL



# MID CHANNEL VERTICAL



REPORT NO: 15U21052-E2V2

FCC ID: SXNWYSBMVGX4I

DATE: OCTOBER 14, 2015
IC ID: 20569-WYSBMVGX4I

# **MID CHANNEL DATA**

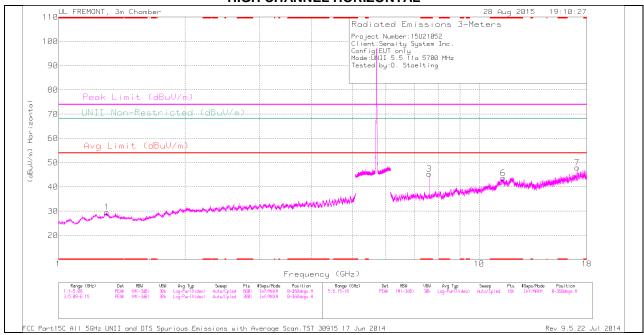
# TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	* 1.307	32.43	PK	29.8	-33	0	29.23	-	-	74	-44.77	-	-	0-360	200	Н
2	* 3.873	31.02	PK	33.2	-30.2	0	34.02	-	-	74	-39.98	-	-	0-360	100	V
3	* 7.44	39.76	PK	35.7	-27.8	0	47.66	-	-	74	-26.34	-	-	0-360	200	Н
5	* 11.342	27.9	PK	38.1	-22.7	0	43.3	-	-	74	-30.7	-	-	0-360	200	Н
4	* 7.44	39.84	PK	35.7	-27.8	0	47.74	-	-	74	-26.26	-	-	0-360	100	V
6	* 11.164	29.36	PK	37.9	-23.5	0	43.76	-	-	74	-30.24	-	-	0-360	200	V

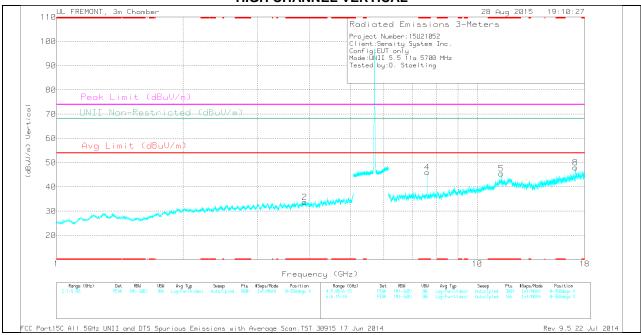
PK - Peak detector

Frequency (GHz)	Meter Reading	Det	AF T119 (dB/m)	Amp/Cbl/Fl tr/Pad (dB)	DC Corr (dB)	Corrected Reading	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non- Restricted	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
(4.1.2)	(dBuV)		(==//	.,,		(dBuV/m)	(===1,,	(/	(===1,,	(==)	(dBuV/m)	(==)	(8-)	()	
* 1.307	41.67	PK1	29.8	-33	0	38.47	-	-	74	-35.53	-	-	0	200	Н
* 1.307	29.92	AD1	29.8	-33	3.76	30.48	54	-23.52	-	-	-	-	0	200	Н
* 3.871	40.57	PK1	33.2	-30.2	0	43.57	-	-	74	-30.43	-	-	0	100	V
* 3.875	28.71	AD1	33.2	-30.2	3.76	35.47	54	-18.53	-	-	-	-	0	100	V
* 7.44	42.82	PK1	35.7	-27.8	0	50.72	-	-	74	-23.28	-	-	54	250	Н
* 7.44	33.01	AD1	35.7	-27.8	3.76	44.67	54	-9.33	-	-	-	-	54	250	Н
* 11.342	36.11	PK1	38.1	-22.7	0	51.51	-	-	74	-22.49	-	-	54	200	Н
* 11.344	24.95	AD1	38.1	-22.7	3.76	44.11	54	-9.89	-	-	-	-	54	200	Н
* 7.44	45.06	PK1	35.7	-27.8	0	52.96	-	-	74	-21.04	-	-	8	393	V
* 7.44	38.44	AD1	35.7	-27.8	3.76	50.1	54	-3.9	-	-	-	-	8	393	V
* 11.164	36.09	PK1	37.9	-23.5	0	50.49	-	-	74	-23.51	-	-	8	200	V
* 11.166	24.76	AD1	37.9	-23.5	3.76	42.92	54	-11.08	-	-	-	-	8	200	V

# **HIGH CHANNEL HORIZONTAL**



# **HIGH CHANNEL VERTICAL**



REPORT NO: 15U21052-E2V2

FCC ID: SXNWYSBMVGX4I

DATE: OCTOBER 14, 2015
IC ID: 20569-WYSBMVGX4I

# **HIGH CHANNEL DATA**

### TRACE MARKERS

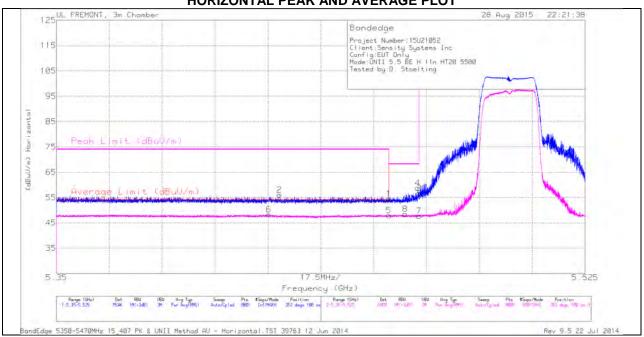
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.302	32.7	PK	29.9	-33	0	29.6	-	-	74	-44.4	-		0-360	200	Н
2	* 3.887	30.51	PK	33.2	-30	0	33.71	-	-	74	-40.29	-		0-360	200	V
3	* 7.6	37.28	PK	35.7	-27.6	0	45.38			74	-28.62	-	-	0-360	100	Н
6	* 11.4	28.6	PK	38.2	-23.1	0	43.7	-	-	74	-30.3	-		0-360	200	Н
4	* 7.6	37.98	PK	35.7	-27.6	0	46.08	-	-	74	-27.92	-	-	0-360	100	V
5	* 11.4	30.36	PK	38.2	-23.1	0	45.46	-	-	74	-28.54	-	-	0-360	200	V
7	17.099	29.72	PK	41.5	-23.2	0	48.02	-	-	-	-	68.2	-20.18	0-360	100	Н
8	17.105	29.65	PK	41.5	-23.2	0	47.95	-	-	-	-	68.2	-20.25	0-360	100	V

PK - Peak detector

Frequency (GHz)	Meter Reading	Det	AF T119 (dB/m)	Amp/Cbl/Fl tr/Pad (dB)	DC Corr (dB)	Corrected Reading	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non- Restricted	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
(GHZ)	(dBuV)		(05/111)	ti/Fau (ub)		(dBuV/m)	(ubuv/iii)	(ub)	(ubuv/iii)	(ub)	(dBuV/m)	(ub)	(Degs)	(ciii)	
* 1.301	42.61	PK1	29.9	-33	0	39.51	-	-	74	-34.49	-	-	0	200	Н
* 1.301	30.19	AD1	29.9	-33	3.76	30.85	54	-23.15	-	-	-	-	0	200	Н
* 3.886	40.2	PK1	33.2	-29.9	0	43.5	-	-	74	-30.5	-	-	0	200	V
* 3.887	28.49	AD1	33.2	-29.9	3.76	35.55	54	-18.45	-	-	-	-	0	200	V
* 7.6	43.71	PK1	35.7	-27.6	0	51.81	-	-	74	-22.19	-	-	290	129	Н
* 7.6	36.21	AD1	35.7	-27.6	3.76	48.07	54	-5.93	-	-	-	-	290	129	Н
* 11.401	39.07	PK1	38.2	-23.1	0	54.17	-	-	74	-19.83	-	-	301	200	Н
* 11.401	25.95	AD1	38.2	-23.1	3.76	44.81	54	-9.19	-	-	-	-	301	200	Н
* 7.6	42.66	PK1	35.7	-27.6	0	50.76	-	-	74	-23.24	-	-	219	326	V
* 7.6	34.04	AD1	35.7	-27.6	3.76	45.9	54	-8.1	-	-	-	-	219	326	V
* 11.4	43.28	PK1	38.2	-23.1	0	58.38	-	-	74	-15.62	-	-	333	201	V
* 11.4	27.88	AD1	38.2	-23.1	3.76	46.74	54	-7.26	-	-	-	-	333	201	V
17.1	41.78	PK1	41.5	-23.2	0	60.08	-	-	-	-	68.2	-8.12	328	228	Н
17.1	26.2	AD1	41.5	-23.2	3.76	48.26	-	-	-	-	-	-	328	228	Н
17.104	40.82	PK1	41.5	-23.2	0	59.12	-	-	-	-	68.2	-9.08	349	308	V
17.105	26.23	AD1	41.5	-23.2	3.76	48.29	-	-	-	-	-	-	349	308	V

# 11.3.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.5 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

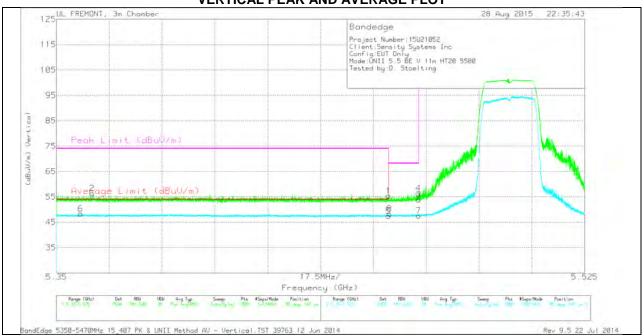
### **HORIZONTAL PEAK AND AVERAGE PLOT**



### **HORIZONTAL DATA**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	5.42	29.94	RMS	34.6	-20.5	4.3	48.34	54	-5.66	-	-	352	100	Н
2	5.424	41.96	PK	34.6	-20.6	0	55.96	-	-	74	-18.04	352	100	Н
1	5.46	40.65	PK	34.6	-20.7	0	54.55	-	-	74	-19.45	352	100	Н
5	5.46	29.71	RMS	34.6	-20.7	4.3	47.91	54	-6.09	-	-	352	100	Н
8	5.465	30.09	RMS	34.6	-20.6	4.3	48.39	-	-	-	-	352	100	Н
3	5.47	42.76	PK	34.6	-20.6	0	56.76	-	-	68.2	-11.44	352	100	Н
4	5.47	44.71	PK	34.6	-20.6	0	58.71	-	-	68.2	-9.49	352	100	Н
7	5.47	29.4	RMS	34.6	-20.6	4.3	47.7		-	-	-	352	100	Н

# **VERTICAL PEAK AND AVERAGE PLOT**

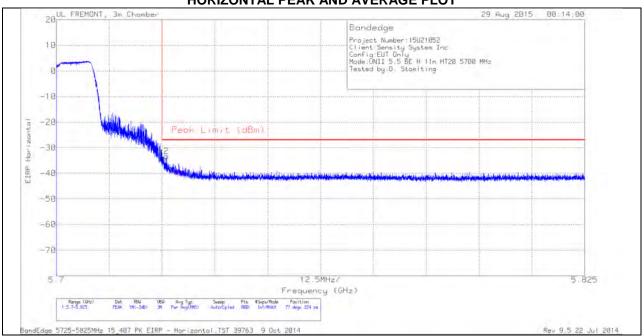


### **VERTICAL DATA**

Marker	Frequency (GHz)	Meter Reading	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading	Average Limit	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
		(dBuV)					(dBuV/m)	(dBuV/m)						
6	5.358	30.11	RMS	34.5	-20.6	4.3	48.31	54	-5.69	-	-	95	147	V
2	5.362	42.38	PK	34.5	-20.5	0	56.38	-	-	74	-17.62	95	147	V
1	5.46	41.43	PK	34.6	-20.7	0	55.33	-	-	74	-18.67	95	147	V
5	5.46	29.22	RMS	34.6	-20.7	4.3	47.42	54	-6.58	-	-	95	147	V
8	5.46	30.13	RMS	34.6	-20.7	4.3	48.33	-	-	-	-	95	147	V
3	5.47	39.94	PK	34.6	-20.6	0	53.94	-	-	68.2	-14.26	95	147	V
4	5.47	42.33	PK	34.6	-20.6	0	56.33	-	-	68.2	-11.87	95	147	V
7	5.47	29.3	RMS	34.6	-20.6	4.3	47.6	-	-	-	-	95	147	V

# **AUTHORIZED BANDEDGE (HIGH CHANNEL)**

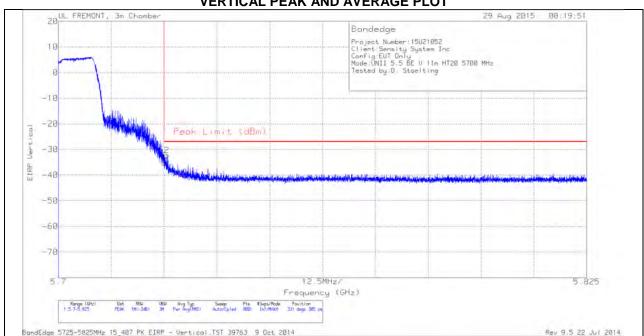
### HORIZONTAL PEAK AND AVERAGE PLOT



### **HORIZONTAL DATA**

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T119 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-60.21	PK	34.8	-20.3	11.8	-33.91	-27	-6.91	77	324	Н
2	5.726	-59.58	PK	34.8	-20.3	11.8	-33.28	-27	-6.28	77	324	Н

# **VERTICAL PEAK AND AVERAGE PLOT**



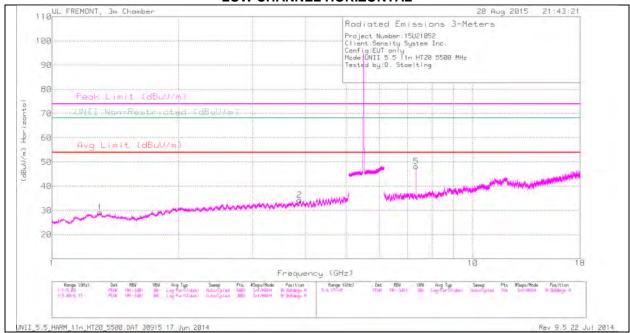
### **VERTICAL DATA**

	Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T119 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
Ī	1	5.725	-61.58	PK	34.8	-20.3	11.8	-35.28	-27	-8.28	331	305	V
Ī	2	5.726	-58.61	PK	34.8	-20.3	11.8	-32.31	-27	-5.31	331	305	V

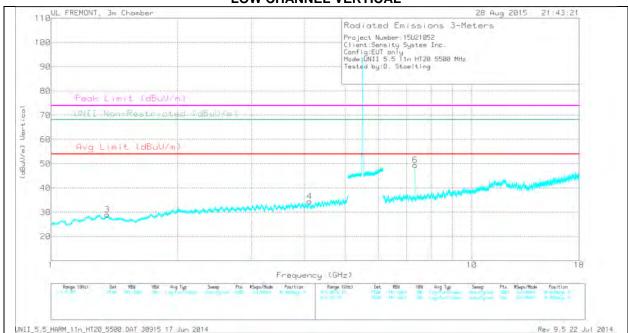
### DATE: OCTOBER 14, 2015 IC ID: 20569-WYSBMVGX4I

### HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL HORIZONTAL



# **LOW CHANNEL VERTICAL**



REPORT NO: 15U21052-E2V2 DATE: OCTOBER 14, 2015
FCC ID: SXNWYSBMVGX4I IC ID: 20569-WYSBMVGX4I

### **LOW CHANNEL DATA**

### TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	1.3	32.34	PK	29.9	-33	0	29.24	-	-	74	-44.76	-	-	0-360	200	Н
3	1.36	32.6	PK	29.1	-32.7	0	29	-	-	74	-45	-	-	0-360	200	V
2	3.876	31.29	PK	33.2	-30.1	0	34.39	-	-	74	-39.61	-	-	0-360	200	Н
4	4.113	31.32	PK	33.3	-30.2	0	34.42	-	-	74	-39.58	-	-	0-360	100	V
5	7.333	41.07	PK	35.6	-28.4	0	48.27	-	-	74	-25.73	-	-	0-360	200	Н
6	7.333	42.31	PK	35.6	-28.4	0	49.51	-	-	74	-24.49	-	-	0-360	100	V

PK - Peak detector

Frequency (GHz)	Meter Reading	Det	AF T119 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non- Restricted	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
	(dBuV)					(dBuV/m)					(dBuV/m)				
1.299	42.35	PK1	29.9	-33	0	39.25	-	-	74	-34.75	-	-	360	200	Н
1.3	30.03	AD1	29.9	-33	4.3	31.23	54	-22.77	-	-	-	-	360	200	Н
1.36	29.92	AD1	29.1	-32.7	4.3	30.62	54	-23.38	-	-	-	-	360	200	V
1.361	42.24	PK1	29.1	-32.7	0	38.64	-	-	74	-35.36	-	-	360	200	V
3.877	28.69	AD1	33.2	-30.1	4.3	36.09	54	-17.91	-	-	-	-	360	200	Н
3.878	40.68	PK1	33.2	-30.1	0	43.78	-	-	74	-30.22	-	-	360	200	Н
4.111	40.43	PK1	33.3	-30.3	0	43.43	-	-	74	-30.57	-	-	360	100	V
4.112	29.06	AD1	33.3	-30.3	4.3	36.36	54	-17.64	-	-	-	-	360	100	V
7.333	44.76	PK1	35.6	-28.4	0	51.96	-	-	74	-22.04	-	-	269	175	Н
7.333	37.77	AD1	35.6	-28.4	4.3	49.27	54	-4.73	-	-	-	-	269	175	Н
7.333	45.4	PK1	35.6	-28.4	0	52.6	-	-	74	-21.4	-	-	320	101	V
7.333	38.03	AD1	35.6	-28.4	4.3	49.53	54	-4.47	-	-	-	-	320	101	V

# MID CHANNEL HORIZONTAL



# **MID CHANNEL VERTICAL**



REPORT NO: 15U21052-E2V2

FCC ID: SXNWYSBMVGX4I

DATE: OCTOBER 14, 2015
IC ID: 20569-WYSBMVGX4I

# **MID CHANNEL DATA**

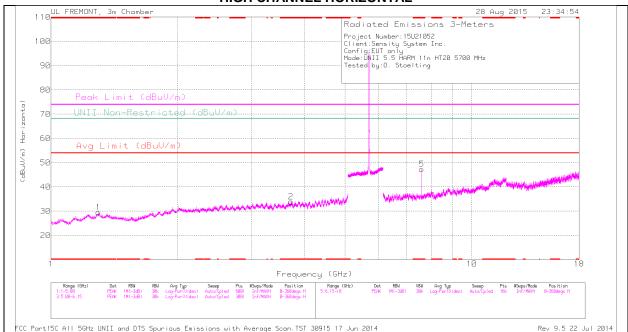
# TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	* 1.366	32.67	PK	29.1	-32.6	0	29.17	-	-	74	-44.83	-	-	0-360	100	Н
2	* 3.727	30.94	PK	33	-30.2	0	33.74	-	-	74	-40.26	-	-	0-360	100	Н
3	* 1.492	32.13	PK	28.1	-32.3	0	27.93	-	-	74	-46.07	-	-	0-360	100	V
4	* 3.878	31.1	PK	33.2	-30.1	0	34.2	-	-	74	-39.8	-	-	0-360	200	V
5	* 7.44	42	PK	35.7	-27.8	0	49.9	-	-	74	-24.1	-	-	0-360	200	Н
6	* 7.44	40.75	PK	35.7	-27.8	0	48.65	-	-	74	-25.35	-	-	0-360	100	V

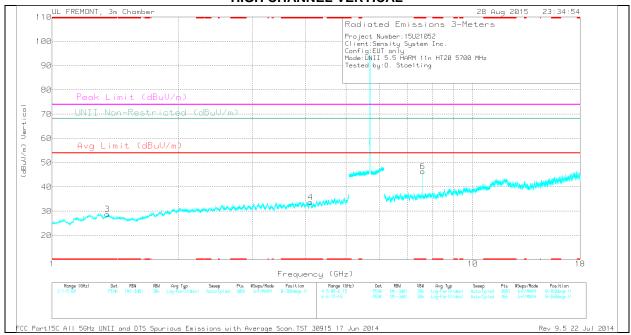
PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non- Restricted	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
						(dBuV/m)					(dBuV/m)				
* 1.366	41.55	PK1	29	-32.6	0	37.95	-	-	74	-36.05	-	-	0	100	Н
* 1.364	29.92	AD1	29.1	-32.6	4.3	30.72	54	-23.28	-	-	-	-	0	100	Н
* 3.726	40.32	PK1	33	-30.2	0	43.12	-	-	74	-30.88	-	-	0	100	Н
* 3.727	28.51	AD1	33	-30.2	4.3	35.61	54	-18.39	-	-	-	-	0	100	Н
* 1.49	41.42	PK1	28.1	-32.3	0	37.22	-	-	74	-36.78	-	-	0	100	V
* 1.492	29.36	AD1	28.1	-32.3	4.3	29.46	54	-24.54	-	-	-	-	0	100	٧
* 3.878	40.24	PK1	33.2	-30.1	0	43.34	-	-	74	-30.66	-	-	0	200	V
* 3.877	28.62	AD1	33.2	-30.1	4.3	36.02	54	-17.98	-	-	-	-	0	200	V
* 7.44	44.11	PK1	35.7	-27.8	0	52.01	-	-	74	-21.99	-	-	315	100	Н
* 7.44	36.27	AD1	35.7	-27.8	4.3	48.47	54	-5.53	-	-	-	-	315	100	Н
* 7.44	45.23	PK1	35.7	-27.8	0	53.13	-	-	74	-20.87	-	-	320	100	٧
* 7.44	37.18	AD1	35.7	-27.8	4.3	49.38	54	-4.62		-	-	-	320	100	V

# **HIGH CHANNEL HORIZONTAL**



# **HIGH CHANNEL VERTICAL**



REPORT NO: 15U21052-E2V2

FCC ID: SXNWYSBMVGX4I

DATE: OCTOBER 14, 2015
IC ID: 20569-WYSBMVGX4I

# **HIGH CHANNEL DATA**

### TRACE MARKERS

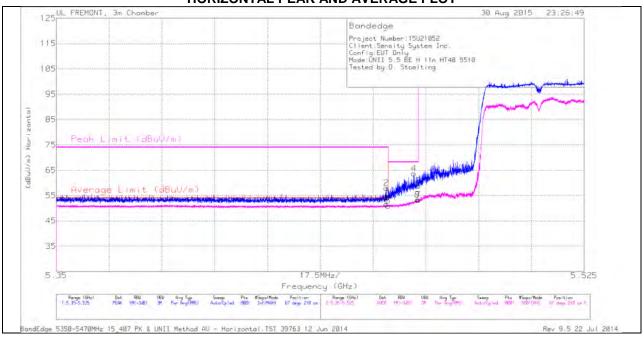
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.296	32.64	PK	29.9	-33	0	29.54	-	-	74	-44.46	-	-	0-360	200	Н
2	* 3.72	31.14	PK	33	-30.2	0	33.94	-	-	74	-40.06	-	-	0-360	200	Н
3	* 1.352	32.26	PK	29.2	-32.7	0	28.76	-	-	74	-45.24	-	-	0-360	100	V
4	* 4.114	30.68	PK	33.3	-30.3	0	33.68	-	-	74	-40.32	-	-	0-360	100	V
5	* 7.6	39.2	PK	35.7	-27.6	0	47.3	-	-	74	-26.7	-	-	0-360	100	Н
6	* 7.6	38.34	PK	35.7	-27.6	0	46.44	-	-	74	-27.56	-	-	0-360	200	V

PK - Peak detector

Frequency (GHz)	Meter Reading	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non- Restricted	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
(5.13)	(dBuV)		(==,,	.,()		(dBuV/m)	(===1,,	(/	(===1,,	(==)	(dBuV/m)	(/	(8-)	()	
* 1.296	41.85	PK1	29.9	-33	0	38.75	-	-	74	-35.25	-	-	360	200	Н
* 1.298	29.89	AD1	29.9	-33	4.3	31.09	54	-22.91	-	-	-	-	360	200	Н
* 3.719	40.92	PK1	33	-30.2	0	43.72	-	-	74	-30.28	-	-	360	200	Н
* 3.72	28.42	AD1	33	-30.2	4.3	35.52	54	-18.48	-	-	-	-	360	200	Н
* 1.353	41.54	PK1	29.2	-32.7	0	38.04	-	-	74	-35.96	-	-	360	100	V
* 1.353	29.66	AD1	29.2	-32.7	4.3	30.46	54	-23.54	-	-	-	-	360	100	V
* 4.112	40.98	PK1	33.3	-30.3	0	43.98	-	-	74	-30.02	-	-	360	100	V
* 4.112	28.94	AD1	33.3	-30.3	4.3	36.24	54	-17.76	-	-	-	-	360	100	V
* 7.6	44.06	PK1	35.7	-27.6	0	52.16	-	-	74	-21.84	-	-	292	111	Н
* 7.6	36.5	AD1	35.7	-27.6	4.3	48.9	54	-5.1	-	-	-	-	292	111	Н
* 7.6	42.88	PK1	35.7	-27.6	0	50.98	-	-	74	-23.02	-	-	215	328	V
* 7.6	35.3	AD1	35.7	-27.6	4.3	47.7	54	-6.3	-	-	-	1	215	328	V

# 11.3.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.5 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

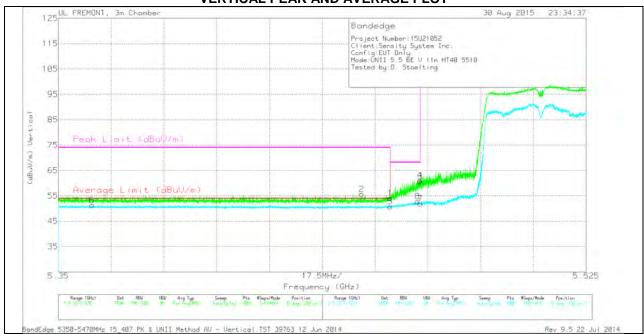
### **HORIZONTAL PEAK AND AVERAGE PLOT**



### **HORIZONTAL DATA**

Marker	Frequency (GHz)	Meter Reading	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading	Average Limit	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
		(dBuV)					(dBuV/m)	(dBuV/m)						
2	5.459	44.04	PK	34.6	-20.7	0	57.94	-	-	74	-16.06	67	210	Н
6	5.459	30.15	RMS	34.6	-20.7	7.45	51.5	54	-2.5	-		67	210	Η
1	5.46	40.93	PK	34.6	-20.7	0	54.83	-	-	74	-19.17	67	210	Н
5	5.46	29.54	RMS	34.6	-20.7	7.45	50.89	54	-3.11	-	-	67	210	Н
4	5.469	49.62	PK	34.6	-20.5	0	63.72	-	-	68.2	-4.48	67	210	Н
3	5.47	44.81	PK	34.6	-20.6	0	58.81	-	-	68.2	-9.39	67	210	Н
7	5.47	31.97	RMS	34.6	-20.6	7.45	53.42	-	-	-	-	67	210	Н
8	5.47	31.87	RMS	34.6	-20.6	7.45	53.32	-	-	-	-	67	210	Н

# **VERTICAL PEAK AND AVERAGE PLOT**

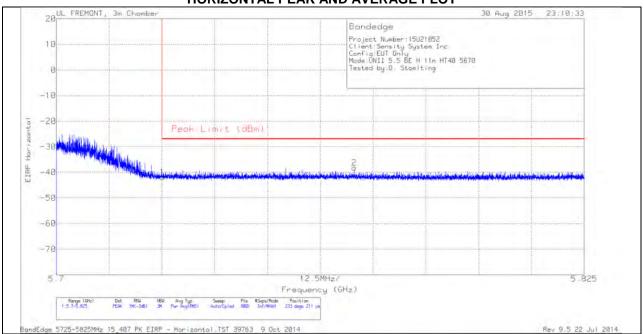


### **VERTICAL DATA**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	5.361	29.84	RMS	34.5	-20.5	7.45	51.29	54	-2.71	-	-	0	330	V
2	5.451	41.64	PK	34.6	-20.6	0	55.64	-	-	74	-18.36	0	330	V
1	5.46	40.29	PK	34.6	-20.7	0	54.19	-	-	74	-19.81	0	330	V
5	5.46	29.44	RMS	34.6	-20.7	7.45	50.79	54	-3.21	-	-	0	330	V
8	5.469	31.33	RMS	34.6	-20.6	7.45	52.78		-	-	-	0	330	V
3	5.47	46.69	PK	34.6	-20.6	0	60.69	-	-	68.2	-7.51	0	330	V
4	5.47	47.15	PK	34.6	-20.6	0	61.15	-	-	68.2	-7.05	0	330	V
7	5.47	30.47	RMS	34.6	-20.6	7.45	51.92	-	-	-	-	0	330	V

# **AUTHORIZED BANDEDGE (HIGH CHANNEL)**

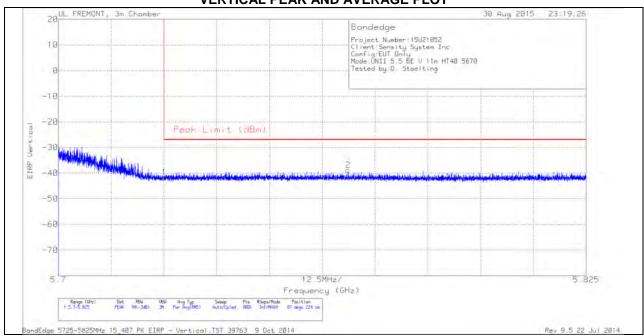
### HORIZONTAL PEAK AND AVERAGE PLOT



#### HORIZONTAL DATA

	Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T119 (dB/m)	Amp/CbI/ Fltr/Pad (dB)	Conversio n Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
Ī	1	5.725	-68.18	PK	34.8	-20.3	11.8	0	-41.88	-27	-14.88	233	211	Н
Ī	2	5.771	-64.29	PK	34.8	-20.5	11.8	0	-38.19	-27	-11.19	233	211	Н

# **VERTICAL PEAK AND AVERAGE PLOT**



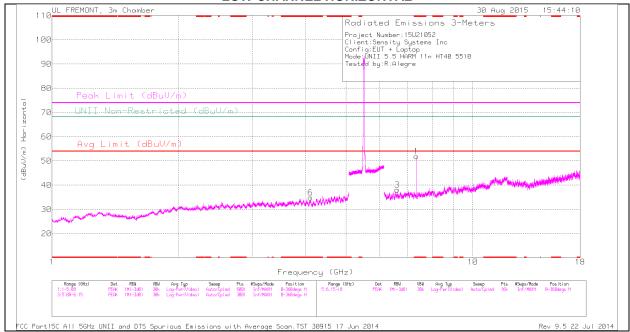
### **VERTICAL DATA**

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T119 (dB/m)	Amp/CbI/ Fltr/Pad (dB)	Conversio n Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-67.89	PK	34.8	-20.3	11.8	0	-41.59	-27	-14.59	87	224	V
2	5.769	-65.01	PK	34.8	-20.4	11.8	0	-38.81	-27	-11.81	87	224	V

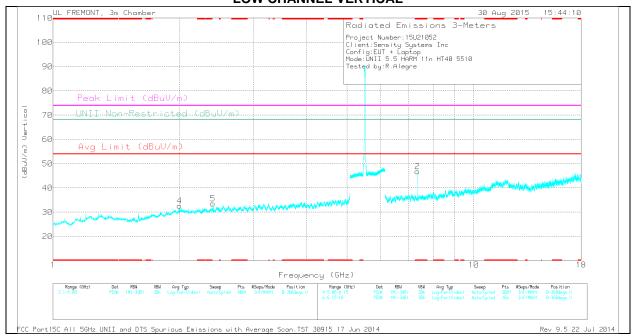
DATE: OCTOBER 14, 2015

### HARMONICS AND SPURIOUS EMISSIONS

### LOW CHANNEL HORIZONTAL



# **LOW CHANNEL VERTICAL**



REPORT NO: 15U21052-E2V2 DATE: OCTOBER 14, 2015
FCC ID: SXNWYSBMVGX4I IC ID: 20569-WYSBMVGX4I

# **LOW CHANNEL DATA**

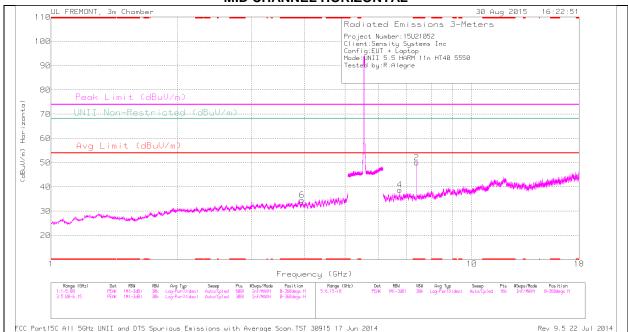
### TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
6	* 4.113	31.76	PK	33.3	-30.2	0	34.86	-	-	74	-39.14	-	-	0-360	100	Н
1	* 7.347	44.41	PK	35.6	-28.2	0	51.81	-	-	74	-22.19	-	-	0-360	200	Н
2	* 7.347	39.4	PK	35.6	-28.2	0	46.8	-	-	74	-27.2	-	-	0-360	200	V
4	1.998	32.5	PK	31.5	-31.3	0	32.7	-	-	-	-	68.2	-35.5	0-360	100	V
5	2.399	33.56	PK	32	-32	0	33.56	-	-	-	-	68.2	-34.64	0-360	100	V
3	6.615	31.13	PK	35.6	-28.6	0	38.13	-	-	-	-	68.2	-30.07	0-360	200	Н

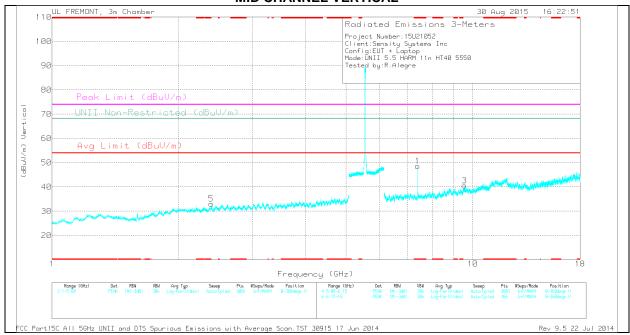
PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Flt r/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
* 4.111	41.05	PK1	33.3	-30.3	0	44.05	-	-	74	-29.95	-	-	10	200	Н
* 4.112	29.41	AD1	33.3	-30.3	7.07	39.48	54	-14.52	-	-	-	-	10	200	Н
* 7.347	45.5	PK1	35.6	-28.2	0	52.9	-	-	74	-21.1	-	-	71	217	Н
* 7.347	36.98	AD1	35.6	-28.2	7.07	51.45	54	-2.55	-	-	-	-	71	217	Н
* 7.346	44.55	PK1	35.6	-28.2	0	51.95	-	-	74	-22.05	-	-	96	178	V
* 7.347	35.31	AD1	35.6	-28.2	7.07	49.78	54	-4.22	-	-	-	-	96	178	V
1.998	42.74	PK1	31.5	-31.3	0	42.94	-	-	-	-	68.2	-25.26	22	205	V
2.397	41.3	PK1	32	-32	0	41.3	-	-	-	-	68.2	-26.9	36	203	V
6.613	39.49	PK1	35.6	-28.7	0	46.39	-	-	-	-	68.2	-21.81	37	198	Н

# MID CHANNEL HORIZONTAL







REPORT NO: 15U21052-E2V2

FCC ID: SXNWYSBMVGX4I

DATE: OCTOBER 14, 2015
IC ID: 20569-WYSBMVGX4I

# **MID CHANNEL DATA**

# TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
6	* 3.953	32.07	PK	33.2	-30.7	0	34.57	-	-	74	-39.43	-	-	0-360	100	Н
2	* 7.4	42	PK	35.6	-27.6	0	50	-	-	74	-24	-	-	0-360	200	Н
1	* 7.4	40.57	PK	35.6	-27.6	0	48.57	-	-	74	-25.43	-	-	0-360	200	V
5	2.391	33.1	PK	32	-32	0	33.1	-	-	-	-	68.2	-35.1	0-360	200	V
4	6.743	31.42	PK	35.6	-28.2	0	38.82	-	-	-	-	68.2	-29.38	0-360	100	Н
3	9.56	27.63	PK	36.6	-23.6	0	40.63	-	-	-	-	68.2	-27.57	0-360	200	V

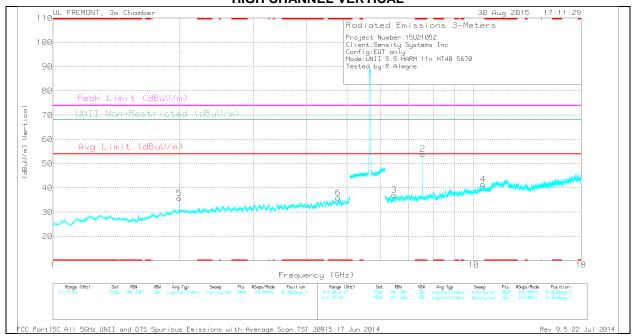
PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbi/Fit r/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
* 3.951	40.94	PK1	33.2	-30.7	0	43.44	-	-	74	-30.56	-	-	65	201	Н
* 3.954	29.18	AD1	33.2	-30.7	7.07	38.75	54	-15.25	-	-	-	-	65	201	Н
* 7.4	45.9	PK1	35.6	-27.6	0	53.9	-	-	74	-20.1	-	-	65	214	Н
* 7.4	36.19	AD1	35.6	-27.7	7.07	51.16	54	-2.84	-	-	-	-	65	214	Н
* 7.4	44.45	PK1	35.6	-27.6	0	52.45	-	-	74	-21.55	-	-	294	200	V
* 7.4	34.49	AD1	35.6	-27.7	7.07	49.46	54	-4.54	-	-	-	-	294	200	V
2.391	44.02	PK1	32	-32	0	44.02	-	-	-	-	68.2	-24.18	65	208	V
6.744	39.8	PK1	35.6	-28.2	0	47.2	-	-	-	-	68.2	-21	74	199	Н
9.56	35.98	PK1	36.6	-23.6	0	48.98	-	-	-	-	68.2	-19.22	85	218	V

# **HIGH CHANNEL HORIZONTAL**



# **HIGH CHANNEL VERTICAL**



REPORT NO: 15U21052-E2V2

FCC ID: SXNWYSBMVGX4I

DATE: OCTOBER 14, 2015
IC ID: 20569-WYSBMVGX4I

# **HIGH CHANNEL DATA**

### TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
6	* 4.763	31.88	PK	34	-29.8	0	36.08	-	-	74	-37.92	-	-	0-360	200	V
1	* 7.56	43.87	PK	35.7	-27.5	0	52.07	-	-	74	-21.93	-	-	0-360	200	Н
2	* 7.56	45.71	PK	35.7	-27.5	0	53.91	-	-	74	-20.09	-	-	0-360	200	V
5	1.995	35.6	PK	31.5	-31.3	0	35.8	-	-	-	-	68.2	-32.4	0-360	100	V
3	6.471	30.28	PK	35.6	-28.8	0	37.08	-	-	-	-	68.2	-31.12	0-360	200	V
4	10.522	27.36	PK	37.5	-23.4	0	41.46	-	-	-	-	68.2	-26.74	0-360	100	V

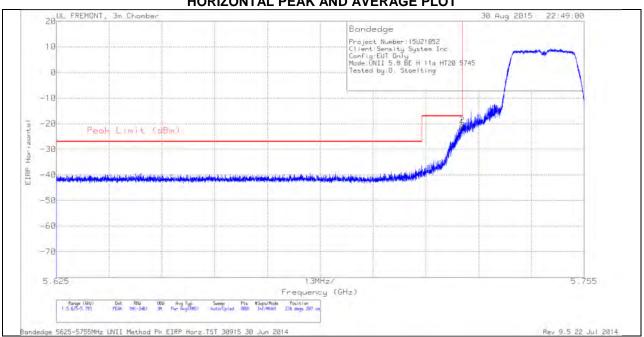
PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Flt r/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
* 4.763	41.81	PK1	34	-29.9	0	45.91	-	-	74	-28.09	-	-	103	200	V
* 4.761	29	AD1	34	-29.9	7.07	40.17	54	-13.83	-	-	-	-	103	200	V
* 7.56	45.43	PK1	35.7	-27.5	0	53.63	-	-	74	-20.37	-	-	57	174	Н
* 7.56	36.27	AD1	35.7	-27.5	7.07	51.54	54	-2.46	-	-	-	-	57	174	Н
* 7.56	46.96	PK1	35.7	-27.5	0	55.16	-	-	74	-18.84	-	-	83	194	V
* 7.56	38.09	AD1	35.7	-27.5	7.07	53.36	54	64	-	-	-	-	83	194	V
1.996	40.05	PK1	31.5	-31.3	0	40.25	-	-	-	-	68.2	-27.95	79	200	V
6.473	40.34	PK1	35.6	-28.8	0	47.14	-	-	-	-	68.2	-21.06	92	200	V
10.522	36.45	PK1	37.5	-23.4	0	50.55	-	-	-	-	68.2	-17.65	94	205	V

# 11.4. 5.8 GHz

# 11.4.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.8 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

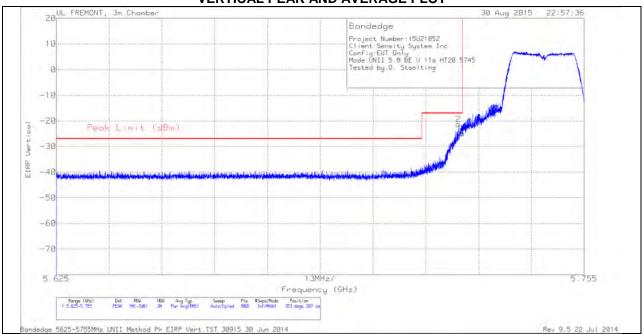
### HORIZONTAL PEAK AND AVERAGE PLOT



### **HORIZONTAL DATA**

	Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T119 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Conversio n Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
Ī	1	5.725	-47.59	PK	34.8	-20.3	11.8	0	-21.29	-17	-4.29	236	207	Н
Ī	2	5.725	-46.89	PK	34.8	-20.3	11.8	0	-20.59	-17	-3.59	236	207	Н

# **VERTICAL PEAK AND AVERAGE PLOT**

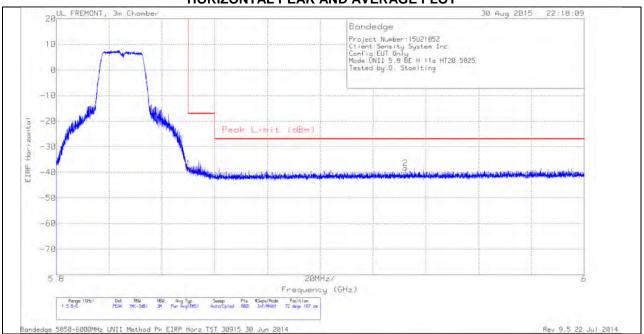


### **VERTICAL DATA**

	Marker	Frequency (GHz)	Meter Reading	Det	AF T119 (dB/m)	Amp/CbI/ Fltr/Pad	Conversio n Factor	DC Corr (dB)	Corrected Reading	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
			(dBm)			(dB)	(dB)		EIRP					
Ī	2	5.724	-47.56	PK	34.8	-20.4	11.8	0	-21.36	-17	-4.36	353	207	V
	1	5.725	-51.23	PK	34.8	-20.3	11.8	0	-24.93	-17	-7.93	353	207	V

# **AUTHORIZED BANDEDGE (HIGH CHANNEL)**

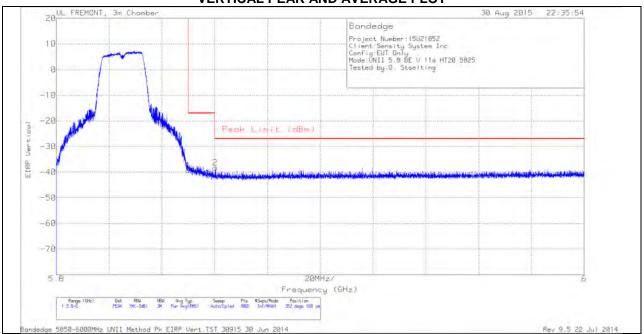
### HORIZONTAL PEAK AND AVERAGE PLOT



#### **HORIZONTAL DATA**

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T119 (dB/m)	Amp/CbI/ Fltr/Pad (dB)	Conversio n Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-64.56	PK	34.9	-20.6	11.8	0	-38.46	-17	-21.46	72	187	Н
2	5.932	-64.9	PK	35.1	-20.3	11.8	0	-38.3	-27	-11.3	72	187	Н

#### **VERTICAL PEAK AND AVERAGE PLOT**

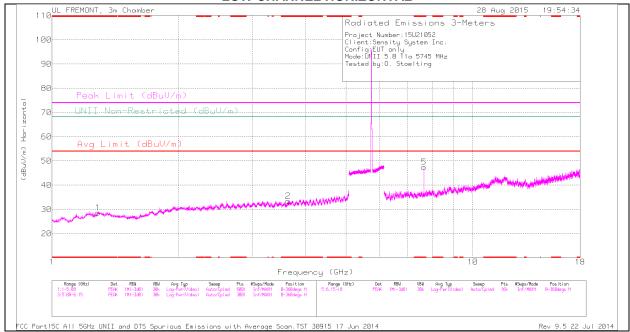


#### **VERTICAL DATA**

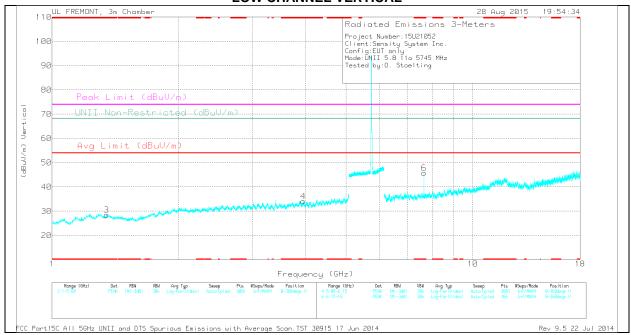
Marker	Frequency (GHz)	Meter Reading	Det	AF T119 (dB/m)	Amp/Cbl/ Fltr/Pad	Conversio n Factor	DC Corr (dB)	Corrected Reading	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
	(3.1.5)	(dBm)		(==,,	(dB)	(dB)	(/	EIRP	(==,	(/	(= 384)	(,	
1	5.85	-65.4	PK	34.9	-20.6	11.8	0	-39.3	-17	-22.3	352	168	V
2	5.86	-64.55	PK	34.9	-20.5	11.8	0	-38.35	-27	-11.35	352	168	V

#### HARMONICS AND SPURIOUS EMISSIONS

#### LOW CHANNEL HORIZONTAL



#### **LOW CHANNEL VERTICAL**



REPORT NO: 15U21052-E2V2

FCC ID: SXNWYSBMVGX4I

DATE: OCTOBER 14, 2015
IC ID: 20569-WYSBMVGX4I

#### **LOW CHANNEL DATA**

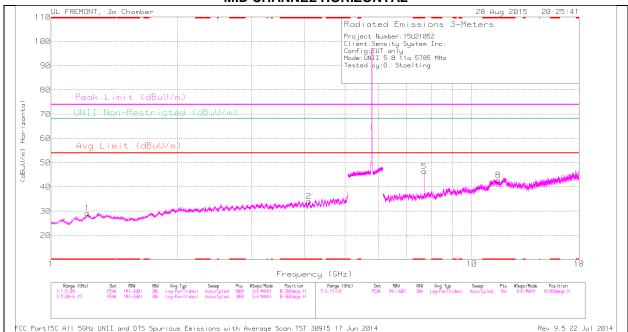
#### TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	* 1.286	31.8	PK	29.8	-33	0	28.6	-	-	74	-45.4	-	-	0-360	100	Н
2	* 3.64	30.95	PK	32.9	-30.4	0	33.45	-	-	74	-40.55	-	-	0-360	200	Н
3	* 1.348	31.95	PK	29.3	-32.7	0	28.55	-	-	74	-45.45	-	-	0-360	100	V
4	* 3.955	31.57	PK	33.2	-30.7	0	34.07	-	-	74	-39.93	-	-	0-360	200	V
5	* 7.66	39.44	PK	35.8	-27.8	0	47.44	-	-	74	-26.56	-	-	0-360	200	Н
6	* 7.66	37.81	PK	35.8	-27.8	0	45.81	-	-	74	-28.19	-	-	0-360	200	V

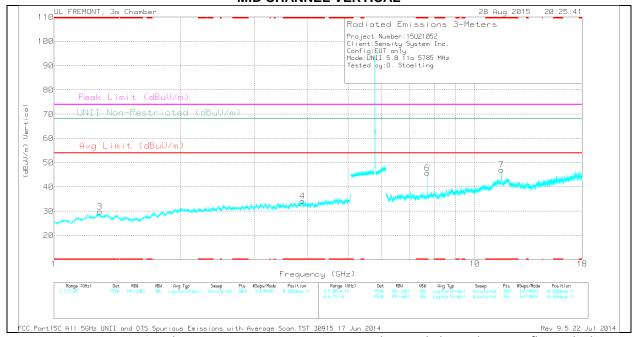
PK - Peak detector

Frequency (GHz)	Meter Reading	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non- Restricted	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
(G.I.Z)	(dBuV)		(05))	171 00 (05)		(dBuV/m)	(454 17.117	(ub)	(4547,)	(45)	(dBuV/m)	(05)	(0083)	(c)	
* 1.286	41.69	PK1	29.8	-33	0	38.49	-	-	74	-35.51	-	-	360	100	Н
* 1.287	29.82	AD1	29.8	-33	3.76	30.38	54	-23.62	-	-	-	-	360	100	Н
* 3.642	40.33	PK1	32.9	-30.4	0	42.83	-	-	74	-31.17	-	-	360	200	Н
* 3.639	28.27	AD1	32.9	-30.5	3.76	34.43	54	-19.57	-	-	-	-	360	200	Н
* 1.348	41.47	PK1	29.3	-32.7	0	38.07	-	-	74	-35.93	-	-	360	100	V
* 1.346	29.9	AD1	29.3	-32.8	3.76	30.16	54	-23.84	-	-	-	-	360	100	V
* 3.956	40.76	PK1	33.2	-30.7	0	43.26	-	-	74	-30.74	-	-	360	200	V
* 3.957	28.94	AD1	33.2	-30.8	3.76	35.1	54	-18.9	-	-	-	-	360	200	V
* 7.66	43.96	PK1	35.8	-27.8	0	51.96	-	-	74	-22.04	-	-	292	150	Н
* 7.66	35.94	AD1	35.8	-27.8	3.76	47.7	54	-6.3	-	-	-	-	292	150	Н
* 7.66	43.75	PK1	35.8	-27.8	0	51.75	-	-	74	-22.25	-	-	221	199	V
* 7.66	35.37	AD1	35.8	-27.8	3.76	47.13	54	-6.87	-	-	-	,	221	199	V

#### MID CHANNEL HORIZONTAL



## **MID CHANNEL VERTICAL**



REPORT NO: 15U21052-E2V2

FCC ID: SXNWYSBMVGX4I

DATE: OCTOBER 14, 2015
IC ID: 20569-WYSBMVGX4I

#### **MID CHANNEL DATA**

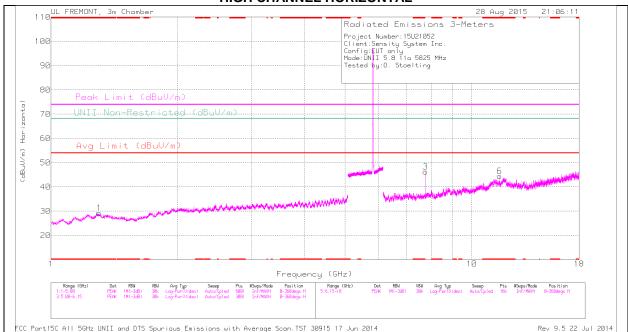
#### TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	* 1.221	32.91	PK	29.1	-32.7	0	29.31	-	-	74	-44.69	-	-	0-360	100	Н
2	* 4.101	30.92	PK	33.3	-30.2	0	34.02	-	-	74	-39.98	-	-	0-360	100	Н
3	* 1.284	33.12	PK	29.7	-33	0	29.82	-	-	74	-44.18	-	-	0-360	200	V
4	* 3.898	30.97	PK	33.2	-30	0	34.17	-	-	74	-39.83	-	-	0-360	100	V
5	* 7.713	38.72	PK	35.8	-28.1	0	46.42	-	-	74	-27.58	-	-	0-360	200	Н
8	* 11.567	26.97	PK	38.5	-22.7	0	42.77	-	-	74	-31.23	-	-	0-360	200	Н
6	* 7.713	38.08	PK	35.8	-28.1	0	45.78	-	-	74	-28.22	-	-	0-360	200	V
7	* 11.568	31.1	PK	38.6	-22.7	0	47	-	-	74	-27	-	-	0-360	200	V

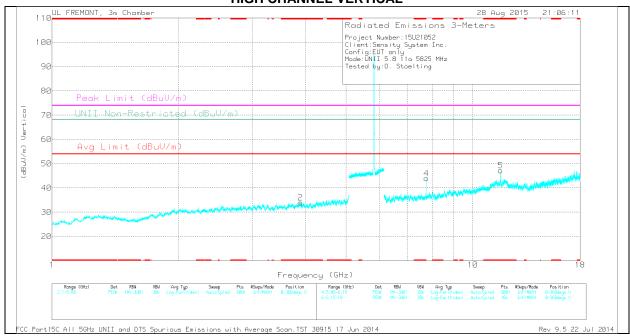
PK - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fl tr/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
* 1.223	41.78	PK1	29.2	-32.7	0	38.28	-	-	74	-35.72	-	-	360	100	Н
* 1.222	30.12	AD1	29.1	-32.7	3.76	30.28	54	-23.72	-	-	-	-	360	100	Н
* 4.1	40.78	PK1	33.3	-30.2	0	43.88	-	-	74	-30.12	-	-	360	100	Н
* 4.101	28.61	AD1	33.3	-30.2	3.76	35.47	54	-18.53	-	-	-	-	360	100	Н
* 3.897	41.05	PK1	33.2	-30	0	44.25	-	-	74	-29.75	-	-	360	100	V
* 3.897	28.78	AD1	33.2	-30	3.76	35.74	54	-18.26	-	-	-	-	360	100	V
* 7.713	45.03	PK1	35.8	-28.1	0	52.73	-	-	74	-21.27	-	-	289	127	Н
* 7.713	37.59	AD1	35.8	-28.1	3.76	49.05	54	-4.95	-	-	-	-	289	127	Н
* 11.568	37.74	PK1	38.6	-22.7	0	53.64	-	-	74	-20.36	-	-	344	253	Н
* 11.568	25.13	AD1	38.6	-22.7	3.76	44.79	54	-9.21	-	-	-	-	344	253	Н
* 7.713	43.67	PK1	35.8	-28.1	0	51.37	-	-	74	-22.63	-	-	12	394	V
* 7.713	35.51	AD1	35.8	-28.1	3.76	46.97	54	-7.03	-	-	-	-	12	394	V
* 11.57	43.41	PK1	38.6	-22.7	0	59.31	-	-	74	-14.69	-	-	329	252	V
* 11.57	28.79	AD1	38.6	-22.7	3.76	48.45	54	-5.55	-	-	-	-	329	252	V

#### **HIGH CHANNEL HORIZONTAL**



#### **HIGH CHANNEL VERTICAL**



REPORT NO: 15U21052-E2V2

FCC ID: SXNWYSBMVGX4I

DATE: OCTOBER 14, 2015
IC ID: 20569-WYSBMVGX4I

#### **HIGH CHANNEL DATA**

#### TRACE MARKERS

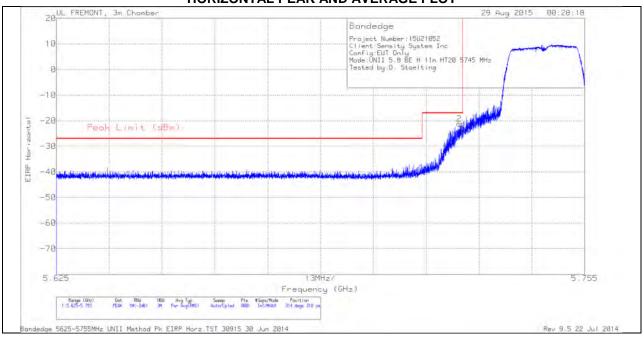
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.301	32.4	PK	29.9	-33	0	29.3	-	-	74	-44.7	-	-	0-360	100	Н
2	* 3.896	30.64	PK	33.2	-29.9	0	33.94	-	-	74	-40.06	-	-	0-360	200	V
6	* 11.649	29.13	PK	38.7	-23.4	0	44.43	-	-	74	-29.57	-	-	0-360	200	Н
5	* 11.653	31.92	PK	38.7	-23.4	0	47.22	-	-	74	-26.78	-	-	0-360	200	V
3	7.767	38.54	PK	35.8	-28	0	46.34	-	-	-	-	68.2	-21.86	0-360	100	Н
4	7.767	36.19	PK	35.8	-28	0	43.99	-	-	-	-	68.2	-24.21	0-360	100	V

PK - Peak detector

Frequency	Meter	Det	AF T119	Amp/Cbl/Fl	DC Corr (dB)	Corrected	Avg Limit	Margin	Peak Limit	PK Margin	UNII Non-	PK Margin	Azimuth	Height	Polarity
(GHz)	Reading		(dB/m)	tr/Pad (dB)		Reading	(dBuV/m)	(dB)	(dBuV/m)	(dB)	Restricted	(dB)	(Degs)	(cm)	
	(dBuV)					(dBuV/m)					(dBuV/m)				
* 1.301	42.12	PK1	29.9	-33	0	39.02	-	-	74	-34.98	-	-	24	211	Н
* 1.3	29.81	AD1	29.9	-33	3.76	30.47	54	-23.53	-	-	-	-	24	211	Н
* 3.897	40.67	PK1	33.2	-29.9	0	43.97	-	-	74	-30.03	-	-	24	200	V
* 3.897	28.52	AD1	33.2	-29.9	3.76	35.58	54	-18.42	-	-	-	-	24	200	V
* 11.65	40.02	PK1	38.7	-23.4	0	55.32	-	-	74	-18.68	-	-	344	303	Н
* 11.65	26.66	AD1	38.7	-23.4	3.76	45.72	54	-8.28	-	-	-	-	344	303	Н
* 11.652	45.73	PK1	38.7	-23.4	0	61.03	-	-	74	-12.97	-	-	329	252	V
* 11.652	30.42	AD1	38.7	-23.4	3.76	49.48	54	-4.52	-	-	-	-	329	252	V
7.767	43.96	PK1	35.8	-28	0	51.76	-	-	-	-	68.2	-16.44	291	106	Н
7.767	35.78	AD1	35.8	-28	3.76	47.34	-	-	-	-	-	-	291	106	Н
7.767	42.55	PK1	35.8	-28	0	50.35	-	-	-	-	68.2	-17.85	40	368	V
7.767	35.03	AD1	35.8	-28	3.76	46.59	-		-	-	-	,	40	368	V

# 11.4.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.8 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

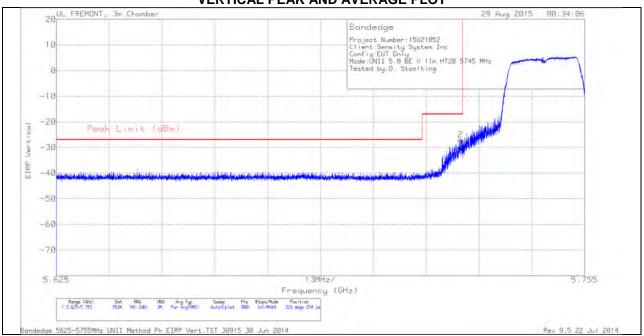
#### **HORIZONTAL PEAK AND AVERAGE PLOT**



#### **HORIZONTAL DATA**

Marker	Frequency	Meter	Det	AF T119	Amp/Cbl/	Conversio	DC Corr	Corrected	Peak Limit	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading		(dB/m)	Fltr/Pad	n Factor	(dB)	Reading	(dBm)	(dB)	(Degs)	(cm)	
		(dBm)			(dB)	(dB)		EIRP					
2	5.724	-47.46	PK	34.8	-20.4	11.8	0	-21.26	-17	-4.26	314	318	Н
1	5.725	-50.2	PK	34.8	-20.3	11.8	0	-23.9	-17	-6.9	314	318	Н

#### **VERTICAL PEAK AND AVERAGE PLOT**

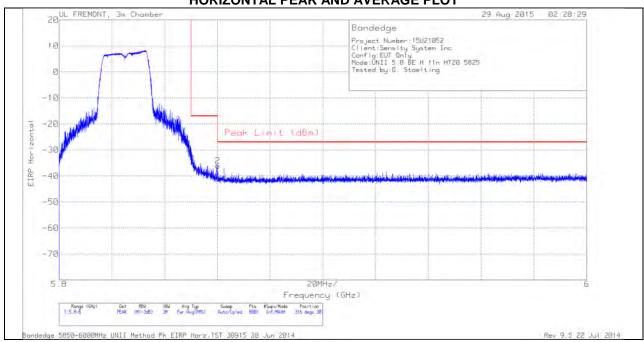


#### **VERTICAL DATA**

Mar	ker F	requency (GHz)	Meter Reading (dBm)	Det	AF T119 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2		5.724	-53.28	PK	34.8	-20.3	11.8	-26.98	-17	-9.98	328	254	V
1		5.725	-56.4	PK	34.8	-20.3	11.8	-30.1	-17	-13.1	328	254	V

# **AUTHORIZED BANDEDGE (HIGH CHANNEL)**

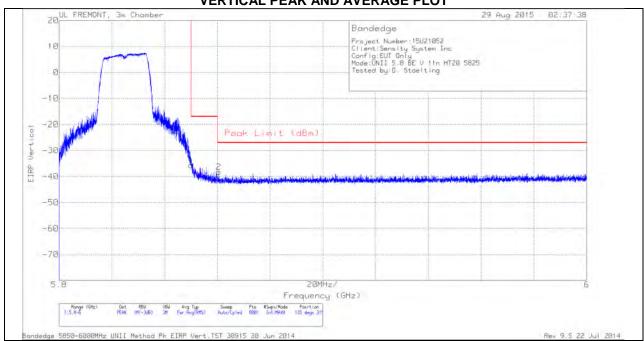
#### HORIZONTAL PEAK AND AVERAGE PLOT



#### **HORIZONTAL DATA**

	Marker	Frequency (GHz)	Meter Reading	Det	AF T119 (dB/m)	Amp/Cbl/ Fltr/Pad	Conversio n Factor	DC Corr (dB)	Corrected Reading	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
			(dBm)			(dB)	(dB)		EIRP					
ſ	1	5.85	-57.87	PK	34.9	-20.6	11.8	0	-31.77	-17	-14.77	316	307	Н
	2	5.86	-62.32	PK	34.9	-20.5	11.8	0	-36.12	-27	-9.12	316	307	Н

#### **VERTICAL PEAK AND AVERAGE PLOT**

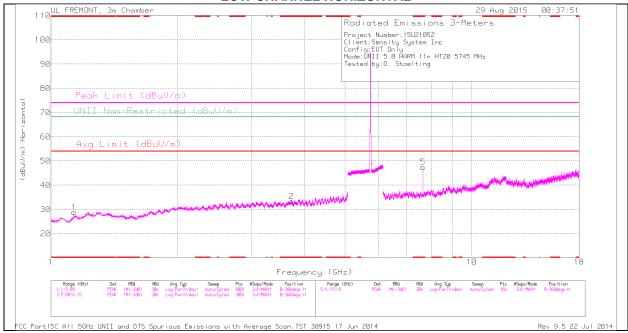


#### **VERTICAL DATA**

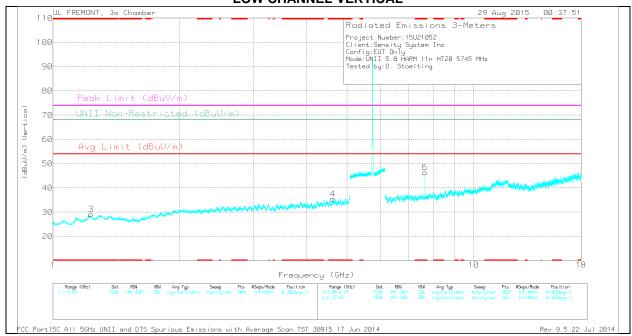
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T119 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-61.83	PK	34.9	-20.6	11.8	-35.73	-17	-18.73	135	315	V
2	5.861	-64.51	PK	34.9	-20.5	11.8	-38.31	-27	-11.31	135	315	V

#### HARMONICS AND SPURIOUS EMISSIONS

#### LOW CHANNEL HORIZONTAL



#### **LOW CHANNEL VERTICAL**



REPORT NO: 15U21052-E2V2 DATE: OCTOBER 14, 2015
FCC ID: SXNWYSBMVGX4I IC ID: 20569-WYSBMVGX4I

#### **LOW CHANNEL DATA**

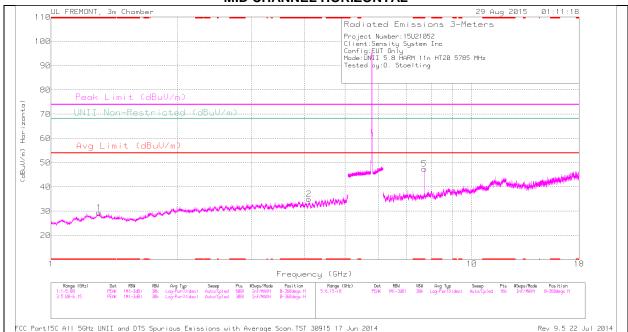
#### TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	* 1.133	33.67	PK	27.9	-32.7	0	28.87	-	-	74	-45.13	-	-	0-360	100	Н
3	* 1.231	32.7	PK	29.2	-32.7	0	29.2	-	-	74	-44.8	-	-	0-360	200	V
2	* 3.73	30.64	PK	33	-30.3	0	33.34	-	-	74	-40.66	-	-	0-360	100	Н
4	* 4.626	31.13	PK	33.9	-29.5	0	35.53	-	-	74	-38.47	-	-	0-360	200	V
5	* 7.66	39.49	PK	35.8	-27.8	0	47.49	-	-	74	-26.51	-	-	0-360	200	Н
6	* 7.66	38.43	PK	35.8	-27.8	0	46.43	-	-	74	-27.57	-	-	0-360	100	V

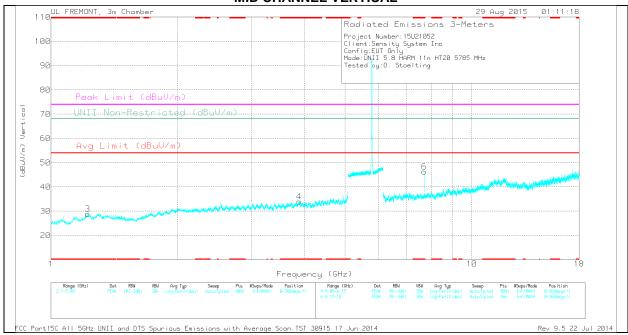
PK - Peak detector

Frequency	Meter	Det	AF T119	Amp/Cbl/Flt	DC Corr (dB)	Corrected	Avg Limit	Margin	Peak Limit	PK Margin	UNII Non-	PK Margin	Azimuth	Height	Polarity
(GHz)	Reading		(dB/m)	r/Pad (dB)		Reading	(dBuV/m)	(dB)	(dBuV/m)	(dB)	Restricted	(dB)	(Degs)	(cm)	
	(dBuV)					(dBuV/m)					(dBuV/m)				
* 1.135	42.04	PK1	27.9	-32.7	0	37.24	-	-	74	-36.76	-	-	360	100	Н
* 1.133	29.95	AD1	27.9	-32.7	4.3	29.45	54	-24.55	-	-	-	-	360	100	Н
* 3.728	40.62	PK1	33	-30.3	0	43.32	-	-	74	-30.68	-	-	360	100	Н
* 3.728	28.5	AD1	33	-30.3	4.3	35.5	54	-18.5	-	-	-	-	360	100	Н
* 1.231	41.93	PK1	29.2	-32.7	0	38.43	-	-	74	-35.57	-	-	360	200	V
* 1.229	29.85	AD1	29.2	-32.7	4.3	30.65	54	-23.35	-	-	-	-	360	200	V
* 4.625	40.81	PK1	33.9	-29.6	0	45.11	-	-	74	-28.89	-	-	360	200	V
* 4.625	28.42	AD1	33.9	-29.6	4.3	37.02	54	-16.98	-	-	-	-	360	200	V
* 7.66	44.34	PK1	35.8	-27.8	0	52.34	-	-	74	-21.66	-	-	290	137	Н
* 7.66	37.4	AD1	35.8	-27.8	4.3	49.7	54	-4.3	-	-	-	-	290	137	Н
* 7.66	43.24	PK1	35.8	-27.8	0	51.24	-	-	74	-22.76	-	-	53	102	V
* 7.66	34.87	AD1	35.8	-27.8	4.3	47.17	54	-6.83	-	-	-	1	53	102	V

#### MID CHANNEL HORIZONTAL



#### **MID CHANNEL VERTICAL**



REPORT NO: 15U21052-E2V2 DATE: OCTOBER 14, 2015
FCC ID: SXNWYSBMVGX4I IC ID: 20569-WYSBMVGX4I

#### **MID CHANNEL DATA**

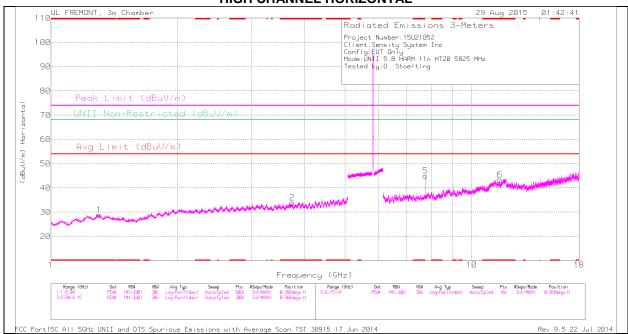
#### TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	* 1.301	32.51	PK	29.9	-33	0	29.41	-	-	74	-44.59	-	-	0-360	200	Н
2	* 4.1	31.83	PK	33.3	-30.2	0	34.93	-	-	74	-39.07	-	-	0-360	100	Н
3	* 1.222	32.46	PK	29.1	-32.7	0	28.86	-	-	74	-45.14	-	-	0-360	200	V
4	* 3.889	30.8	PK	33.2	-30	0	34	-	-	74	-40	-	-	0-360	200	V
5	* 7.713	39.73	PK	35.8	-28.1	0	47.43	-	-	74	-26.57	-	-	0-360	200	Н
6	* 7.713	38.55	PK	35.8	-28.1	0	46.25	-	-	74	-27.75	-	-	0-360	100	V

PK - Peak detector

Frequency (GHz)	Meter Reading	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non- Restricted	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
(5.13)	(dBuV)		(==,,	.,()		(dBuV/m)	(===1,,	(/	(===1,,	(==)	(dBuV/m)	(/	(8-)	()	
* 1.3	41.95	PK1	29.9	-33	0	38.85	-	-	74	-35.15	-	-	0	200	Н
* 1.299	29.95	AD1	29.9	-33	4.3	31.15	54	-22.85	-	-	-	-	0	200	Н
* 4.102	40.49	PK1	33.3	-30.2	0	43.59	-	-	74	-30.41	-	-	0	100	Н
* 4.101	28.56	AD1	33.3	-30.2	4.3	35.96	54	-18.04	-	-	-	-	0	100	Н
* 1.223	41.52	PK1	29.1	-32.7	0	37.92	-	-	74	-36.08	-	-	0	200	V
* 1.222	30.05	AD1	29.1	-32.7	4.3	30.75	54	-23.25	-	-	-	-	0	200	V
* 3.888	40.29	PK1	33.2	-30	0	43.49	-	-	74	-30.51	-	-	0	200	V
* 3.888	28.4	AD1	33.2	-30	4.3	35.9	54	-18.1	-	-	-	-	0	200	V
* 7.713	45.04	PK1	35.8	-28.1	0	52.74	-	-	74	-21.26	-	-	291	130	Н
* 7.713	37.57	AD1	35.8	-28.1	4.3	49.57	54	-4.43	-	-	-	-	291	130	Н
* 7.713	43.13	PK1	35.8	-28.1	0	50.83	-	-	74	-23.17	-	-	14	391	V
* 7.714	34.27	AD1	35.8	-28.1	4.3	46.27	54	-7.73	-	-	-	-	14	391	V

#### **HIGH CHANNEL HORIZONTAL**



## **HIGH CHANNEL VERTICAL**



REPORT NO: 15U21052-E2V2

FCC ID: SXNWYSBMVGX4I

DATE: OCTOBER 14, 2015
IC ID: 20569-WYSBMVGX4I

#### **HIGH CHANNEL DATA**

#### TRACE MARKERS

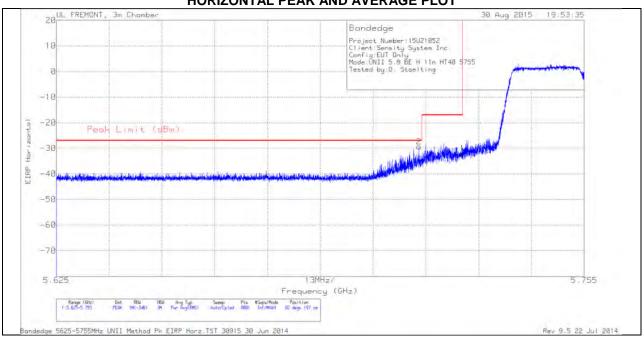
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.301	32.01	PK	29.9	-33	0	28.91	-	-	74	-45.09	-	-	0-360	200	Н
2	* 3.744	31.51	PK	33	-30.6	0	33.91	-	-	74	-40.09	-	-	0-360	200	Н
3	* 1.359	31.87	PK	29.1	-32.7	0	28.27	-	-	74	-45.73	-	-	0-360	100	V
4	* 3.876	31.24	PK	33.2	-30.2	0	34.24	-	-	74	-39.76	-	-	0-360	100	V
6	* 11.658	28.05	PK	38.7	-23.3	0	43.45	-	-	74	-30.55	-	-	0-360	200	Н
8	* 11.65	32.15	PK	38.7	-23.4	0	47.45	-	-	74	-26.55	-	-	0-360	200	V
5	7.767	37.14	PK	35.8	-28	0	44.94	-	-	-	-	68.2	-23.26	0-360	200	Н
7	7.767	36.46	PK	35.8	-28	0	44.26	-	-	-	-	68.2	-23.94	0-360	200	V

PK - Peak detector

Frequency (GHz)	Meter Reading	Det	AF T119 (dB/m)	Amp/Cbl/Fl tr/Pad (dB)	DC Corr (dB)	Corrected Reading	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non- Restricted	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
(GIIL)	(dBuV)		(45/111)	171 00 (05)		(dBuV/m)	(00017)	(45)	(45577)	(45)	(dBuV/m)	(40)	(50,5)	(6.1.)	
* 1.299	41.76	PK1	29.9	-33	0	38.66	-	-	74	-35.34	-	-	0	200	Н
* 1.299	30	AD1	29.9	-33	4.3	31.2	54	-22.8	-	-	-	-	0	200	Н
* 3.746	40.16	PK1	33	-30.7	0	42.46	-	-	74	-31.54	-	-	0	200	Н
* 3.746	28.25	AD1	33	-30.7	4.3	34.85	54	-19.15	-	-	-	-	0	200	Н
* 1.359	41.38	PK1	29.1	-32.7	0	37.78	-	-	74	-36.22	-	-	0	100	V
* 1.361	29.81	AD1	29.1	-32.7	4.3	30.51	54	-23.49	-	-	-	-	0	100	V
* 3.876	40.53	PK1	33.2	-30.2	0	43.53	-	-	74	-30.47	-	-	0	100	V
* 3.876	28.79	AD1	33.2	-30.1	4.3	36.19	54	-17.81	-	-	-	-	0	100	V
* 11.657	39.39	PK1	38.7	-23.3	0	54.79	-	-	74	-19.21	-	-	349	327	Н
* 11.657	25.78	AD1	38.7	-23.3	4.3	45.48	54	-8.52	-	-	-	-	349	327	Н
* 11.649	45.92	PK1	38.7	-23.4	0	61.22	-	-	74	-12.78	-	-	336	322	V
* 11.649	29.56	AD1	38.7	-23.4	4.3	49.16	54	-4.84	-	-	-	-	336	322	V
7.766	43.7	PK1	35.8	-28	0	51.5	-	-	-	-	68.2	-16.7	289	148	Н
7.767	35.57	AD1	35.8	-28	4.3	47.67	-	-	-	-	-	-	289	148	Н
7.767	42.54	PK1	35.8	-28	0	50.34	-	-	-	-	68.2	-17.86	16	103	V
7.767	34.72	AD1	35.8	-28	4.3	46.82	-	-	-	-	-	-	16	103	V

# 11.4.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

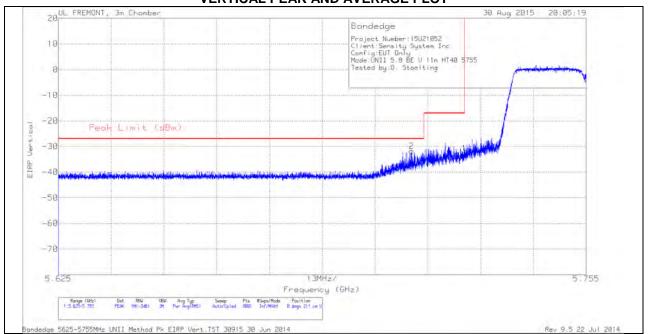
#### **HORIZONTAL PEAK AND AVERAGE PLOT**



#### **HORIZONTAL DATA**

Marker	Frequency	Meter	Det	AF T119	Amp/Cbl/	Conversio	DC Corr	Corrected	Peak Limit	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading		(dB/m)	Fltr/Pad	n Factor	(dB)	Reading	(dBm)	(dB)	(Degs)	(cm)	
		(dBm)			(dB)	(dB)		EIRP					
2	5.714	-55.5	PK	34.8	-20.4	11.8	0	-29.3	-27	-2.3	82	197	Н
1	5.725	-58.31	PK	34.8	-20.3	11.8	0	-32.01	-17	-15.01	82	197	Н

#### **VERTICAL PEAK AND AVERAGE PLOT**

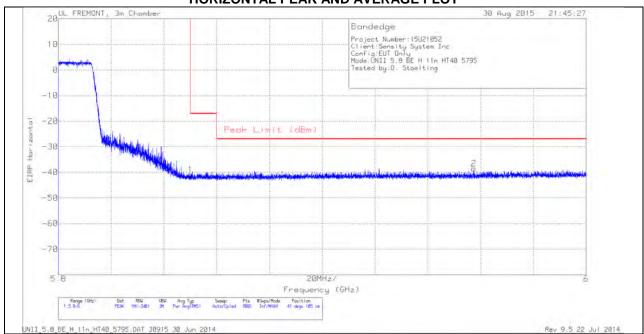


#### **VERTICAL DATA**

Marker	Frequency (GHz)	Meter Reading	Det	AF T119 (dB/m)	Amp/CbI/ Fltr/Pad	Conversio n Factor	DC Corr (dB)	Corrected Reading	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
		(dBm)			(dB)	(dB)		EIRP					
2	5.712	-57.94	PK	34.8	-20.4	11.8	0	-31.74	-27	-4.74	0	211	V
1	5.725	-58.9	PK	34.8	-20.3	11.8	0	-32.6	-17	-15.6	0	211	V

# **AUTHORIZED BANDEDGE (HIGH CHANNEL)**

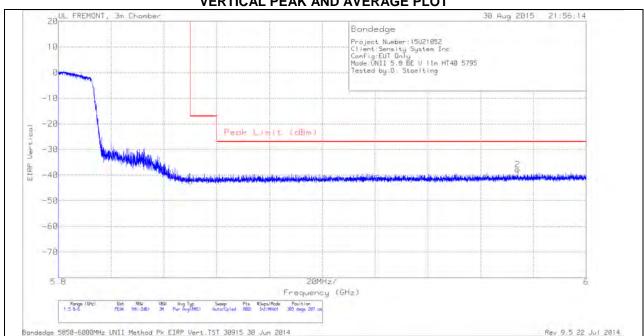
#### HORIZONTAL PEAK AND AVERAGE PLOT



#### **HORIZONTAL DATA**

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T119 (dB/m)	Amp/CbI/ Fltr/Pad (dB)	Conversio n Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-66.98	PK	34.9	-20.6	11.8	0	-40.88	-17	-23.88	41	105	Н
2	5.957	-65.27	PK	35.1	-20.2	11.8	0	-38.57	-27	-11.57	41	105	Н

#### **VERTICAL PEAK AND AVERAGE PLOT**



#### **VERTICAL DATA**

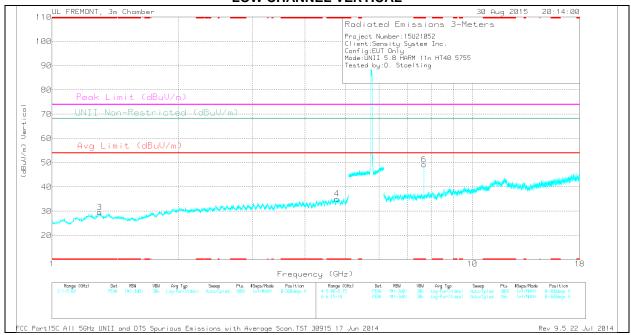
Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T119 (dB/m)	Amp/CbI/ Fltr/Pad (dB)	Conversio n Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-68.54	PK	34.9	-20.6	11.8	0	-42.44	-17	-25.44	305	207	V
2	5.974	-64.59	PK	35.1	-20.1	11.8	0	-37.79	-27	-10.79	305	207	V

#### HARMONICS AND SPURIOUS EMISSIONS

#### LOW CHANNEL HORIZONTAL



## **LOW CHANNEL VERTICAL**



REPORT NO: 15U21052-E2V2

FCC ID: SXNWYSBMVGX4I

DATE: OCTOBER 14, 2015
IC ID: 20569-WYSBMVGX4I

#### **LOW CHANNEL DATA**

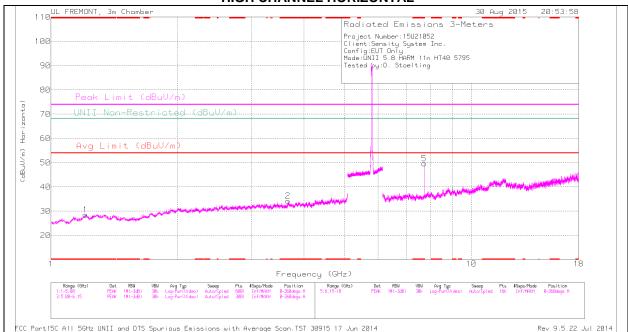
#### TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	* 1.261	32.43	PK	29.5	-32.9	0	29.03	-	-	74	-44.97	-	-	0-360	100	Н
3	* 1.299	32.61	PK	29.9	-33	0	29.51	-	-	74	-44.49	-	-	0-360	200	V
2	* 3.971	32.22	PK	33.2	-30.8	0	34.62	-	-	74	-39.38	-	-	0-360	100	Н
4	* 4.763	30.98	PK	34	-29.8	0	35.18	-	-	74	-38.82	-	-	0-360	100	V
5	* 7.673	42.2	PK	35.8	-27.6	0	50.4	-	-	74	-23.6	-	-	0-360	200	Н
6	* 7.673	41.03	PK	35.8	-27.6	0	49.23	-	-	74	-24.77	-	-	0-360	200	V

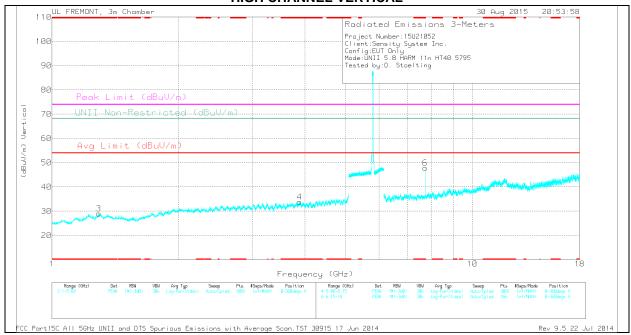
PK - Peak detector

Frequency (GHz)	Meter Reading	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non- Restricted	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
(5.1.5)	(dBuV)		(==,,	.,(,		(dBuV/m)	(===1,,	(/	(===1,,	()	(dBuV/m)	()	(8-)	()	
* 1.263	41.12	PK1	29.5	-32.9	0	37.72	-	-	74	-36.28	-	-	360	100	Н
* 1.263	29.25	AD1	29.5	-32.9	7.45	33.3	54	-20.7	-	-	-	-	360	100	Н
* 3.972	40.73	PK1	33.2	-30.9	0	43.03	-	-	74	-30.97	-	-	360	100	Н
* 3.973	28.96	AD1	33.2	-31	7.45	38.61	54	-15.39	-	-	-	-	360	100	Н
* 1.298	42.17	PK1	29.9	-33	0	39.07	-	-	74	-34.93	-	-	360	200	V
* 1.3	29.94	AD1	29.9	-33	7.45	34.29	54	-19.71	-	-	-	-	360	200	V
* 4.764	41.4	PK1	34	-29.8	0	45.6	-	-	74	-28.4	-	-	360	100	V
* 4.761	28.65	AD1	34	-29.9	7.45	40.2	54	-13.8	-	-	-	-	360	100	V
* 7.673	45.93	PK1	35.8	-27.6	0	54.13	-	-	74	-19.87	-	-	36	209	Н
* 7.673	37.26	AD1	35.8	-27.6	7.45	52.91	54	-1.09	-	-	-	-	36	209	Н
* 7.673	44.97	PK1	35.8	-27.6	0	53.17	-	-	74	-20.83	-	-	43	183	V
* 7.673	35.99	AD1	35.8	-27.6	7.45	51.64	54	-2.36	-	-	-	1	43	183	V

#### **HIGH CHANNEL HORIZONTAL**



## **HIGH CHANNEL VERTICAL**



REPORT NO: 15U21052-E2V2

FCC ID: SXNWYSBMVGX4I

DATE: OCTOBER 14, 2015
IC ID: 20569-WYSBMVGX4I

#### **HIGH CHANNEL DATA**

#### TRACE MARKERS

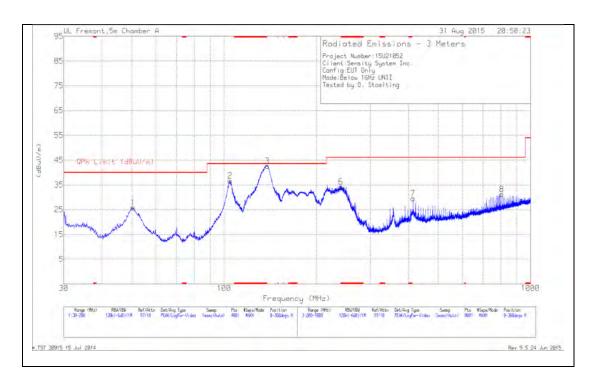
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non- Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.207	32.06	PK	29	-32.6	0	28.46	-	-	74	-45.54	-	-	0-360	100	Н
2	* 3.661	31.36	PK	32.9	-30	0	34.26	-	-	74	-39.74	-	-	0-360	200	Н
3	* 1.292	32.25	PK	29.8	-33	0	29.05	-	-	74	-44.95	-	-	0-360	100	V
4	* 3.881	30.56	PK	33.2	-30	0	33.76	-	-	74	-40.24	-	-	0-360	200	V
5	* 7.727	41.8	PK	35.8	-27.9	0	49.7	-	-	74	-24.3	-	-	0-360	200	Н
6	* 7.727	39.93	PK	35.8	-27.9	0	47.83	-	-	74	-26.17	-	-	0-360	200	V

PK - Peak detector

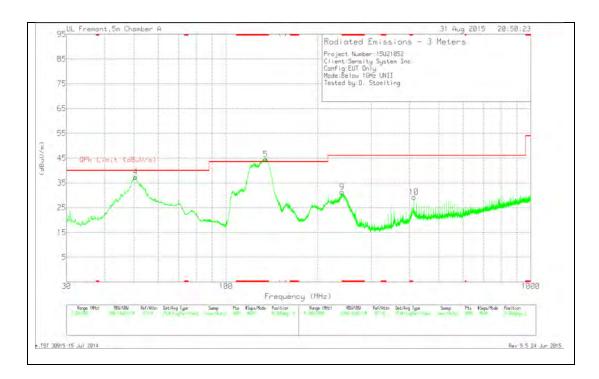
Frequency (GHz)	Meter Reading	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non- Restricted	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
	(dBuV)					(dBuV/m)					(dBuV/m)				
* 1.208	41.79	PK1	29	-32.6	0	38.19	-	-	74	-35.81	-	-	0	100	Н
* 1.206	29.85	AD1	29	-32.6	7.45	33.7	54	-20.3	-	-	-	-	0	100	Н
* 3.661	39.76	PK1	32.9	-30	0	42.66	-	-	74	-31.34	-	-	0	200	Н
* 3.661	28.03	AD1	32.9	-30	7.45	38.38	54	-15.62	-	-	-	-	0	200	Н
* 1.291	41.63	PK1	29.8	-33	0	38.43	-	-	74	-35.57	-	-	0	100	V
* 1.291	29.79	AD1	29.8	-33	7.45	34.04	54	-19.96	-	-	-	-	0	100	V
* 3.883	40.17	PK1	33.2	-29.9	0	43.47	-	-	74	-30.53	-	-	0	200	V
* 3.879	28.17	AD1	33.2	-30.1	7.45	38.72	54	-15.28	-	-	-	-	0	200	V
* 7.727	44.9	PK1	35.8	-27.9	0	52.8	-	-	74	-21.2	-	-	15	128	Н
* 7.727	35.37	AD1	35.8	-27.9	7.45	50.72	54	-3.28	-	-	-	-	15	128	Н
* 7.727	45.72	PK1	35.8	-27.9	0	53.62	-	-	74	-20.38	-	-	41	109	V
* 7.726	37.07	AD1	35.8	-27.9	7.45	52.42	54	-1.58	-	-	-	-	41	109	V

# 12. WORST-CASE BELOW 1 GHz

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



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



# **Below 1G Data**

#### TRACE MARKERS

Marker	Frequency	Meter	Det	AF T477	Amp/Cbl	Corrected	QPk Limit	Margin	Azimuth	Height	Polarity
	(MHz)	Reading (dBuV)		(dB/m)	(dB/m)	Reading (dBuV/m)	(dBuV/m)	(dB)	(Degs)	(cm)	
5	* 135.06	57.47	Pk	17.4	-30.3	44.57	43.52	1.05	0-360	101	V
6	* 240.6	48.48	Pk	15.5	-29.7	34.28	46.02	-11.74	0-360	101	Н
9	* 240.5	45.48	Pk	15.5	-29.7	31.28	46.02	-14.74	0-360	199	V
1	50.5275	45.2	Pk	11.6	-31	25.8	40	-14.2	0-360	399	Н
4	50.57	56.78	Pk	11.6	-31	37.38	40	-2.62	0-360	101	V
2	104.545	51.75	Pk	15.4	-30.5	36.65	43.52	-6.87	0-360	199	Н
3	138.2688	55.8	Pk	17.1	-30.3	42.6	43.52	92	0-360	199	Н
7	413.7	38.42	Pk	20.1	-29	29.52	46.02	-16.5	0-360	101	Н
10	413.7	38.14	Pk	20.1	-29	29.24	46.02	-16.78	0-360	101	V
8	806.9	33.92	Pk	25.3	-28	31.22	46.02	-14.8	0-360	101	Н

PK - Peak detector

Frequency	Meter	Det	AF T477	Amp/Cbl	Corrected	QPk Limit	Margin	Azimuth	Height	Polarity
(MHz)	Reading		(dB/m)	(dB/m)	Reading	(dBuV/m)	(dB)	(Degs)	(cm)	
	(dBuV)				(dBuV/m)					
* 135.1577	54.23	Qp	17.4	-30.3	41.33	43.52	-2.19	237	102	V
* 240.6338	43.08	Qp	15.5	-29.7	28.88	46.02	-17.14	237	102	Н
* 240.5431	30.35	Qp	15.5	-29.7	16.15	46.02	-29.87	237	199	V
50.0229	53.55	Qp	11.8	-31	34.35	40	-5.65	327	114	V
50.4885	39.29	Qp	11.7	-31	19.99	40	-20.01	360	398	Н
104.379	40.79	Qp	15.4	-30.5	25.69	43.52	-17.83	360	200	Н
138.0465	54.41	Qp	17.1	-30.3	41.21	43.52	-2.31	221	222	Н
413.6914	35.17	Qp	20.1	-29	26.27	46.02	-19.75	237	102	V
413.6948	37.4	Qp	20.1	-29	28.5	46.02	-17.52	237	102	Н
806.914	24.6	Qp	25.3	-28	21.9	46.02	-24.12	237	102	Н

REPORT NO: 15U21052-E2V2 DATE: OCTOBER 14, 2015 FCC ID: SXNWYSBMVGX4I IC ID: 20569-WYSBMVGX4I

# 13. AC POWER LINE CONDUCTED EMISSIONS

#### **LIMITS**

FCC §15.207 (a) RSS-Gen 8.8

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

Decreases with the logarithm of the frequency.

### **TEST PROCEDURE**

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

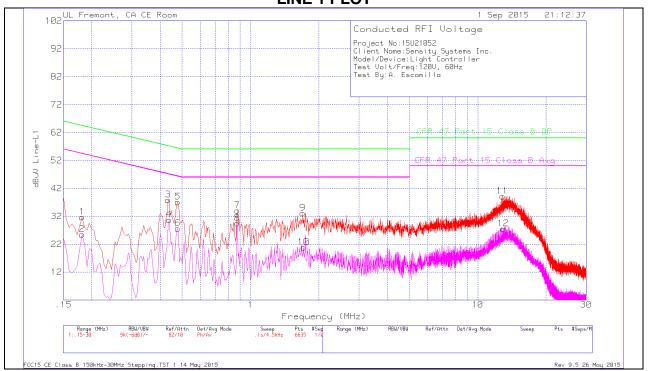
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

#### **RESULTS**

#### **6 WORST EMISSIONS**

#### **LINE 1 PLOT**



#### **LINE 1 RESULTS**

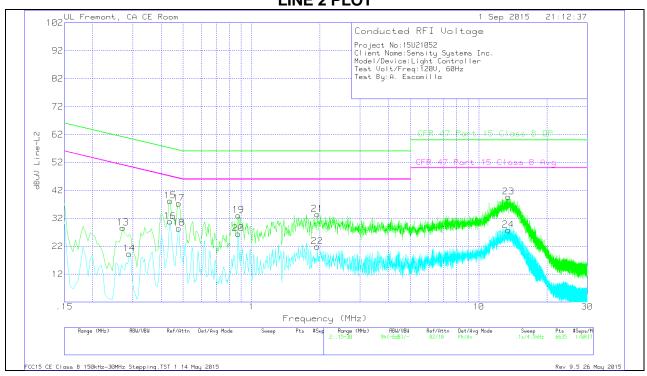
Range 1: Line-L1 .15 - 30MHz

Marker	Frequency	Meter	Det	T24 IL L1	LC Cables	Corrected	CFR 47	Margin	CFR 47	Margin
	(MHz)	Reading			1&3	Reading	Part 15	(dB)	Part 15	(dB)
		(dBuV)				dBuV	Class B QP		Class B	
									Avg	
1	.1815	30.56	Pk	1.1	0	31.66	64.42	-32.76	-	-
2	.1815	24.38	Av	1.1	0	25.48	-	-	54.42	-28.94
3	.4335	37.44	Pk	.4	0	37.84	57.19	-19.35	-	-
4	.438	30.32	Av	.4	0	30.72	-	-	47.1	-16.38
5	.4785	36.71	Pk	.4	0	37.11	56.37	-19.26	-	-
6	.4785	27.23	Av	.4	0	27.63	-	-	46.37	-18.74
7	.8745	33.7	Pk	.3	0	34	56	-22	-	-
8	.8745	29.19	Av	.3	0	29.49	-	-	46	-16.51
9	1.698	32.82	Pk	.2	.1	33.12	56	-22.88	-	-
10	1.7115	20.49	Av	.2	.1	20.79	-	-	46	-25.21
11	12.8535	38.75	Pk	.2	.2	39.15	60	-20.85	-	-
12	12.939	27.12	Av	.2	.2	27.52	-	-	50	-22.48

Pk - Peak detector

Av - Average detection

# **LINE 2 PLOT**



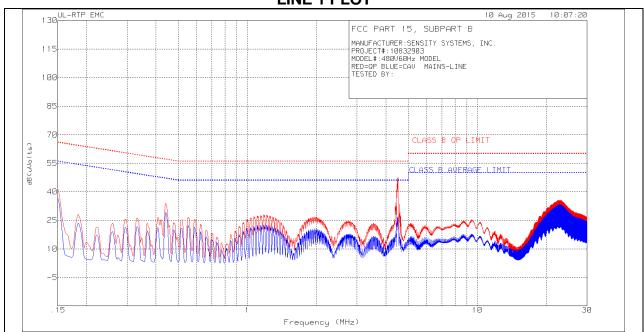
#### **LINE 2 RESULTS**

Range 2: Line-L2 .15 - 30MHz

_										
Marker	Frequency	Meter	Det	T24 IL L2	LC Cables	Corrected	CFR 47	Margin	CFR 47	Margin
	(MHz)	Reading			2&3	Reading	Part 15	(dB)	Part 15	(dB)
		(dBuV)				dBuV	Class B QP		Class B	
									Avg	
13	.2715	27.89	Pk	.7	0	28.59	61.07	-32.48	-	-
14	.2895	18.7	Av	.6	0	19.3	-	-	50.54	-31.24
15	.438	37.86	Pk	.4	0	38.26	57.1	-18.84	-	-
16	.438	30.47	Av	.4	0	30.87	-	-	47.1	-16.23
17	.4785	36.98	Pk	.4	0	37.38	56.37	-18.99	-	-
18	.4785	28.03	Av	.4	0	28.43	-	-	46.37	-17.94
19	.8745	32.75	Pk	.3	0	33.05	56	-22.95	-	-
20	.8745	26.18	Av	.3	0	26.48	-	-	46	-19.52
21	1.9455	33.14	Pk	.2	.1	33.44	56	-22.56	-	-
22	1.9455	21.57	Av	.2	.1	21.87	-	-	46	-24.13
23	13.506	39.24	Pk	.2	.2	39.64	60	-20.36	-	-
24	13.4745	27.39	Av	.2	.2	27.79	_	-	50	-22.21

Pk - Peak detector Av - Average detection

# **LINE 1 PLOT**



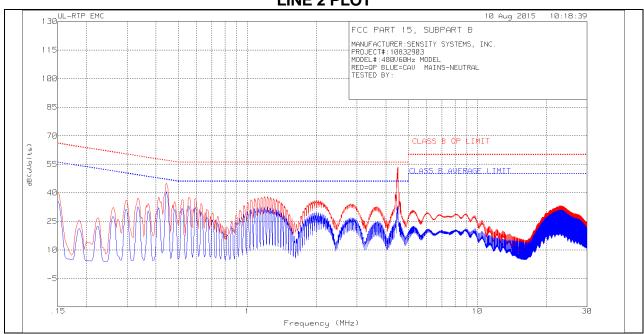
#### **LINE 1 RESULTS**

Range 1: Ran	ge: 2 .15 - 30	MHz							
Frequency (MHz)	Meter Reading (dBuV)	Det	LISN002- 003_Due 2015-09-30	ATA508 & 509 DUE 2016-07-31	Corrected Reading dB(uVolts)	CLASS B QP LIMIT	Margin (dB)	CLASS B AVERAGE LIMIT	Margin (dB)
.15225	29.13	Qр	.4	9.3	38.83	65.88	-27.05	-	-
.15225	24.06	Ca	.4	9.3	33.76	-	-	55.88	-22.12
.18375	18.45	Qp	.3	9.3	28.05	64.31	-36.26	-	-
.18375	13.91	Ca	.3	9.3	23.51	-	-	54.31	-30.8
.4425	24.42	Qр	.1	9.4	33.92	57.01	-23.09	-	-
.4425	19.75	Ca	.1	9.4	29.25	-	-	47.01	-17.76
1.17825	18.47	Qр	0	9.4	27.87	56	-28.13	-	-
1.17825	13.26	Ca	0	9.4	22.66	-	-	46	-23.34
4.515	38.03	Qр	.1	9.3	47.43	56	-8.57	-	-
4.51275	17.71	Ca	.1	9.2	27.01	-	-	46	-18.99
22.84688	25.86	Qр	.3	9.4	35.56	60	-24.44	-	-
22.84575	23.68	Ca	.3	9.4	33.38	-	-	50	-16.62

Qp - Quasi-Peak detector

Ca - CISPR average detection

# **LINE 2 PLOT**



# **LINE 2 RESULTS**

Range 1: Ran	Range 1: Range: 2 .15 - 30MHz												
Frequency (MHz)	Meter Reading (dBuV)	Det	LISN002- 003_Due 2015-09-30	ATA508 & 509 DUE 2016-07-31	Corrected Reading dB(uVolts)	CLASS B QP LIMIT	Margin (dB)	CLASS B AVERAGE LIMIT	Margin (dB)				
.15225	29.31	Qp	.4	9.3	39.01	65.88	-26.87	-	-				
.15225	24.31	Ca	.4	9.3	34.01	-	-	55.88	-21.87				
.44475	35.68	Qp	.1	9.4	45.18	56.97	-11.79	-	-				
.44475	31.05	Ca	.1	9.4	40.55	-	-	46.97	-6.42				
.55725	28.3	Qp	.1	9.3	37.7	56	-18.3	-	-				
.55725	23.67	Ca	.1	9.3	33.07	-	-	46	-12.93				
1.2615	28.16	Qp	0	9.4	37.56	56	-18.44	-	-				
1.25925	22.65	Ca	0	9.4	32.05	-	-	46	-13.95				
4.515	44.22	Qp	.1	9.3	53.62	56	-2.38	-	-				
4.51725	23.95	Ca	.1	9.3	33.35	-	-	46	-12.65				
23.3115	23.32	Qp	.3	9.4	33.02	60	-26.98	-	-				
23.3115	21.33	Ca	.3	9.4	31.03	-	-	50	-18.97				

Qp - Quasi-Peak detector

Ca - CISPR average detection