

6 Field Strength of Spurious Radiation (Restricted Bands)

6.1 Test Result

Test Description	Test Specification		Test Result
Radiated Spurious Emissions	15.247(d) and 15.209	RSS-247 S5.5	Compliant

6.2 Test Method

The measurement methods defined in ANSI C63.10: 2013 were used.

Lowest, middle, and highest channels were investigated – the device was commanded to continuously transmit on low, middle, and high channels.

Test distance:

- 9k to 30 MHz – Near field prescan to determine if there were any emissions
- 30 to 1000 MHz - The EUT to measurement antenna distance was 3 meters
- 1 to 18 GHz - The EUT to measurement antenna distance was 3 meters
- 18 to 26 GHz - The EUT to measurement antenna distance was 3 meters

Limits within restricted bands of operation:

Frequency	Limits ⁽¹⁾		Peak Limits dBuV/m
	Microvolts/m	dBuV/m	
30 - 88 MHz	100	40 ⁽²⁾	--
88 - 216 MHz	150	43.5 ⁽²⁾	--
216 - 960 MHz	200	46 ⁽²⁾	--
960 - 1000 MHz	500	54 ⁽²⁾	--
1 - 40 GHz	500	54 ⁽³⁾	74

(1) These limits are applicable to emissions outside of the intentional transmit frequency band.

(2) Quasi-peak limit

(3) Average limit

6.3 Test Site

3m Absorber Lined Shielded Enclosure (ALSE), San Diego, CA

Environmental Conditions

Temperature: 19.1 – 21.7 °C

Relative Humidity: 50 - 53 %

6.4 Additional Observation

- The low frequency band started from 9kHz to 30MHz was pre-scanned and the results was 20dB lower than the limit per 15.31(o); therefore, no data was presented in this test report.
- The high frequency band beyond 18GHz was pre-scanned and the results was 20dB lower than the limit; therefore, no data was presented in this test report.

6.5 Test Equipment

Test Dates: March 12 - 13, 2024

Tester: Andreas Gillmeier/Alex Chang

Asset No.	Type of Equipment	Model	Serial No.	Manufacturer	Cal Date	Cal Due Date
Radiated Emission < 1 GHz						
2017	EMI Receiver	N9038B	MY59050132	Keysight	10/24/2023	10/24/2024
2029	ETS Lindgren	Loop Antenna, H-Field	6512	00249642	08/31/2022	08/31/2024
2034	Biconilog Antenna 26M-6000MHz	3142E	00243882	ETS Lindgren	06/29/2023	06/29/2025
-	Test Software	TILE!	V7.8.1.7	ETS Lindgren	N/A	-
Radiated Emission > 1 GHz						
2017	EMI Receiver	N9038B	MY59050132	Keysight	10/24/2023	10/24/2024
2026	RF Microwave Systems Amplifier	RAMP00M45GA	00089204010	RF-Lambda	NCR	NCR
2033	DRG Horn Antenna 1G-18GHz	3117	00251986	ETS Lindgren	07/27/2022	07/27/2024
2032	ETS Lindgren	DRG Horn Antenna 10G-40GHz	3116C	00251668	06/16/2022	06/16/2024
-	Test Software	TILE!	V7.8.1.7	ETS Lindgren	N/A	-
Miscellaneous						
2036	Temp/Humidity Data Logger	GSP-8	CMA231100002	Elitech	05/24/2023	

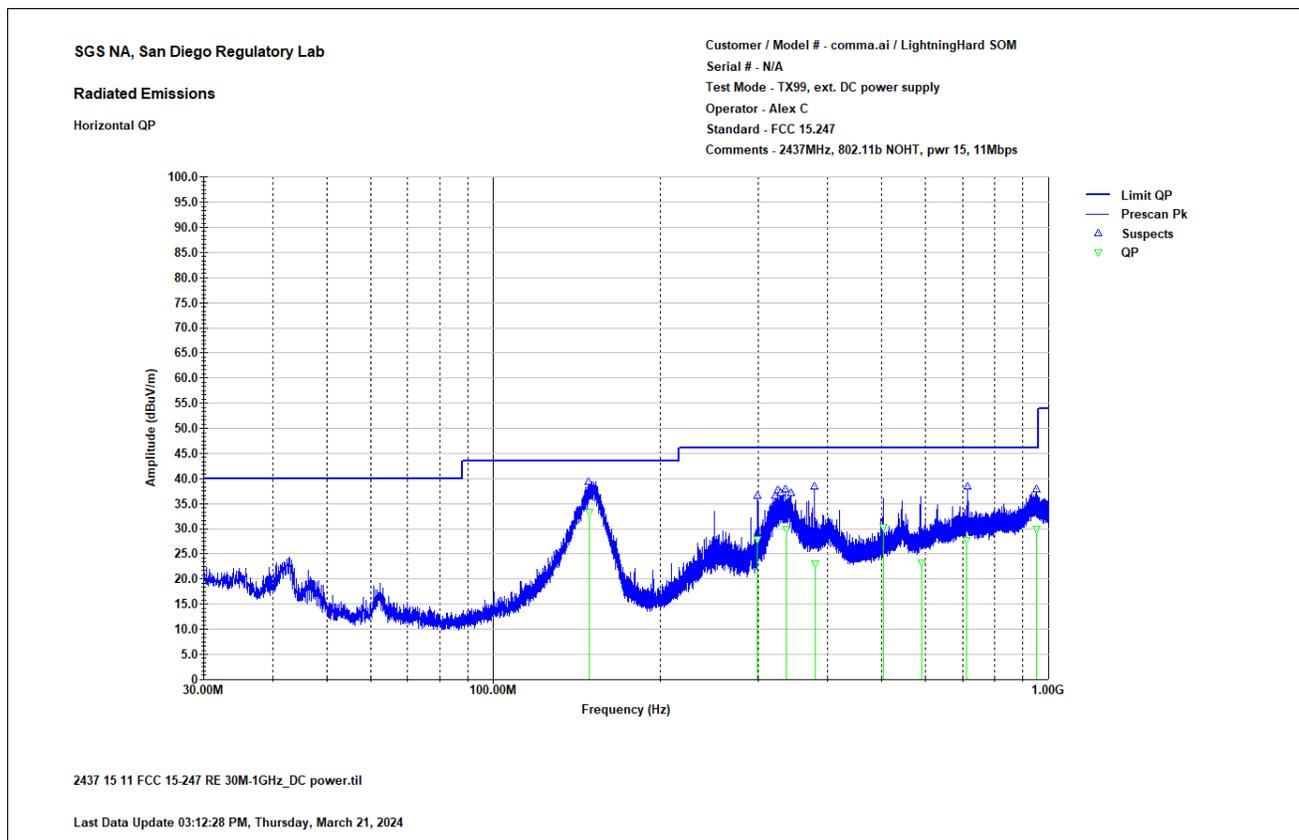
6.6 Test Setup Photographs

Test setup photographs are located in a separate exhibit.

6.7 ***Test Data***

- Radiated Spurious Emissions test performed from 30MHz to 18GHz.
- No emissions beyond 12GHz. 12GHz and up only noise floor figures. No test perform beyond 18GHz.

Horizontal Radiated Spurious Emissions Plot – 30 to 1000 MHz (802.11b NOHT, 2437MHz)
Worst-Case presented



Quasi-Peak Data

Freq. (MHz)	Final QP (dBμV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
148.8283	33.25	-28.22	-10.27	43.52	145	151
299.434807	27.93	-23.52	-18.09	46.02	100	336
336.970746	29.88	-22.12	-16.14	46.02	100	316
380.746891	23.09	-19.89	-22.93	46.02	233	127
503.954726	30.22	-16.59	-15.8	46.02	100	271
590.698458	23.19	-14.62	-22.83	46.02	303	-11
711.172276	27.69	-11.88	-18.33	46.02	264	217
951.800602	29.85	-8.44	-16.17	46.02	287	178

Vertical Radiated Spurious Emissions Plot – 30 to 1000 MHz (802.11b NOHT, 2437MHz)

SGS NA, San Diego Regulatory Lab

Radiated Emissions

Vertical QP

Customer / Model # - comma.ai / LightningHard SOM

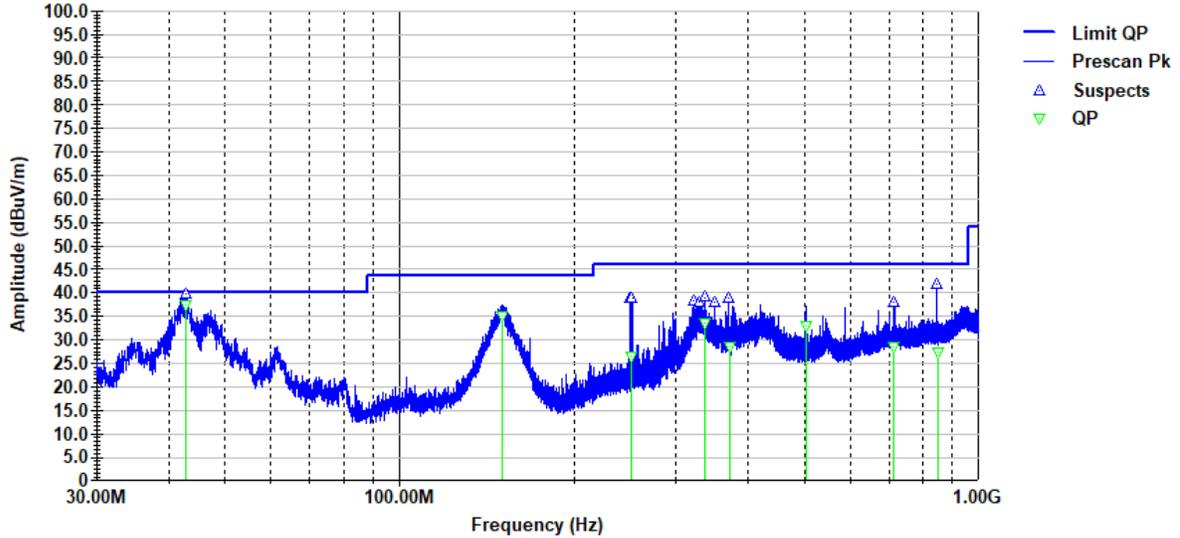
Serial # - N/A

Test Mode - TX99, ext. DC power supply

Operator - Alex C

Standard - FCC 15.247

Comments - 2437MHz, 802.11b NOHT, pwr 15, 11Mbps



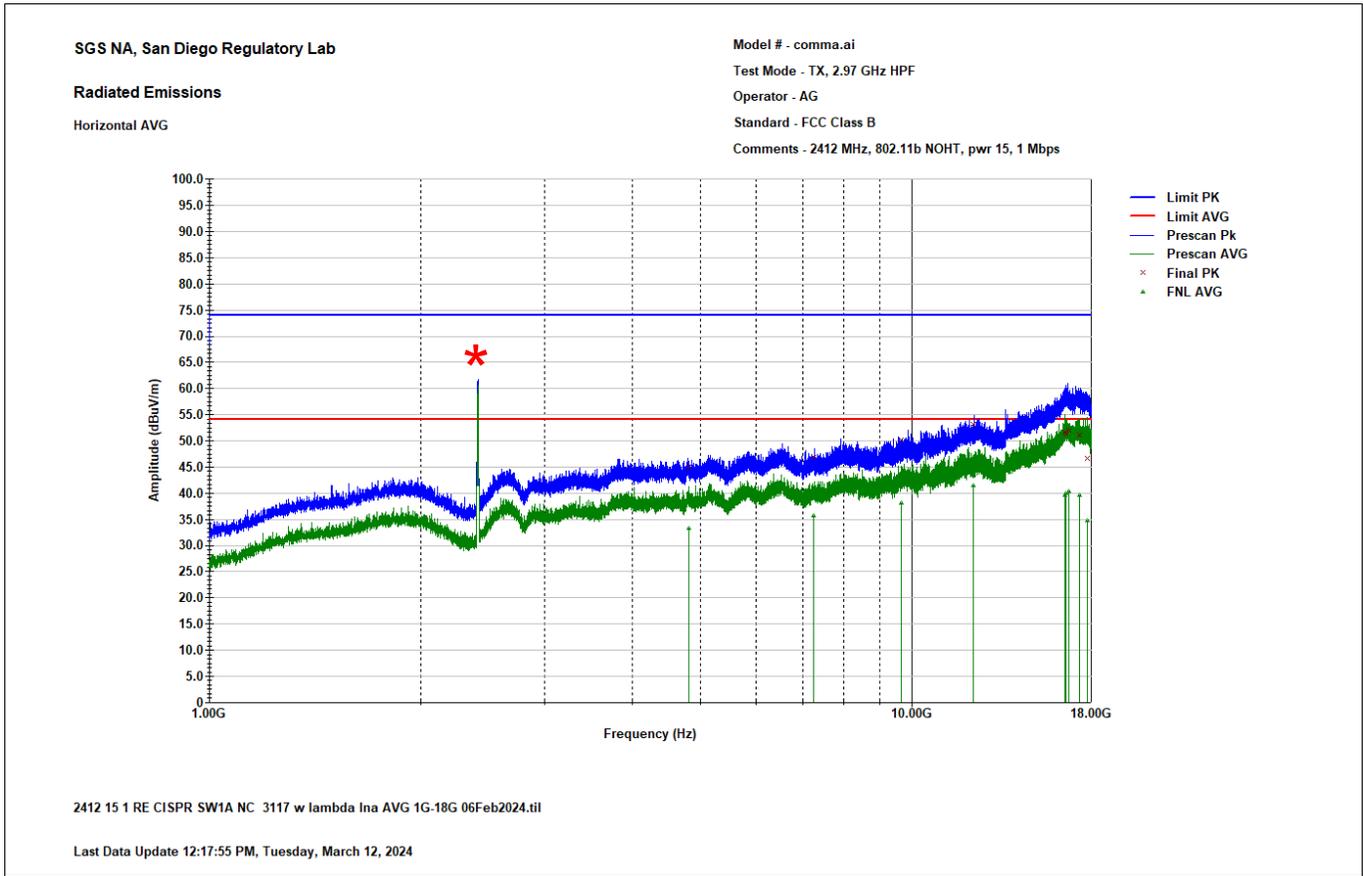
2437 15 11 FCC 15-247 RE 30M-1GHz_DC power.til

Last Data Update 02:53:27 PM, Thursday, March 21, 2024

Quasi-Peak Data

Freq. (MHz)	Final QP (dB μ V/m)	Total Corr. (dB)	Margin (dB)	Limit (dB μ V/m)	Ant. Height (cm)	Azimuth (deg.)
42.842366	37.41	-28.4	-2.59	40	100	380
150.334066	34.97	-27.72	-8.55	43.52	162	222
251.834577	26.44	-24.29	-19.58	46.02	100	346
336.05831	33.65	-22.2	-12.37	46.02	114	273
370.784836	28.58	-20.1	-17.44	46.02	130	41
503.847062	33.07	-16.6	-12.95	46.02	100	-2
712.228691	28.41	-11.89	-17.61	46.02	122	247
848.219698	27.4	-11.1	-18.62	46.02	330	358

Horizontal Radiated Spurious Emissions Plot – 1-18GHz (802.11b NOHT, 2412MHz)



(*) marks TX signal from the EUT which are excluded from measurement

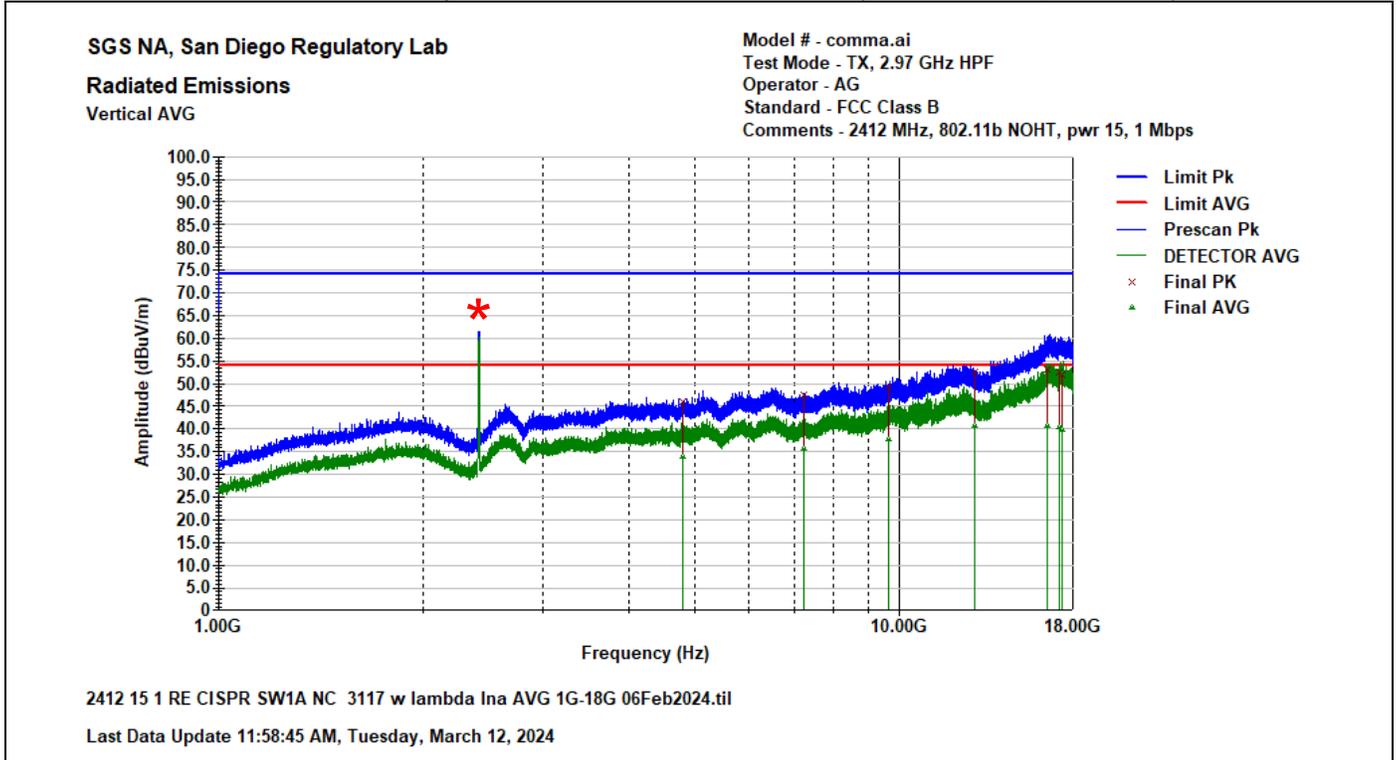
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4814.13	44.97	6.77	-29.03	74	200	332
7245.07	46.82	12.54	-27.18	74	200	206
9679.76	50.09	18.68	-23.91	74	200	184
12258.08388	53.22	25.81	-20.78	74	200	44
16508.2541	51.6	33.14	-22.4	74	200	163
16574.6883	51.35	33.42	-22.65	74	200	293
16723.93588	51.95	33.59	-22.05	74	200	314
17324.46375	51.01	32.45	-22.99	74	200	0
17812.488	46.62	31.85	-27.38	74	200	288

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4814.13	33.33	0	6.77	-20.67	54	200	332
7245.07	35.65	0	12.54	-18.35	54	200	206
9679.76	38.05	0	18.68	-15.95	54	200	184
12258.08388	41.42	0	25.81	-12.58	54	200	44
16508.2541	39.58	0	33.14	-14.42	54	200	163
16574.6883	39.92	0	33.42	-14.08	54	200	293
16723.93588	40.33	0	33.59	-13.67	54	200	314
17324.46375	39.52	0	32.45	-14.48	54	200	0
17812.488	34.69	0	31.85	-19.31	54	200	288

Vertical Radiated Spurious Emissions Plot – 1-18GHz (802.11b NOHT, 2412MHz)



(*) marks TX signal from the EUT which are excluded from measurement

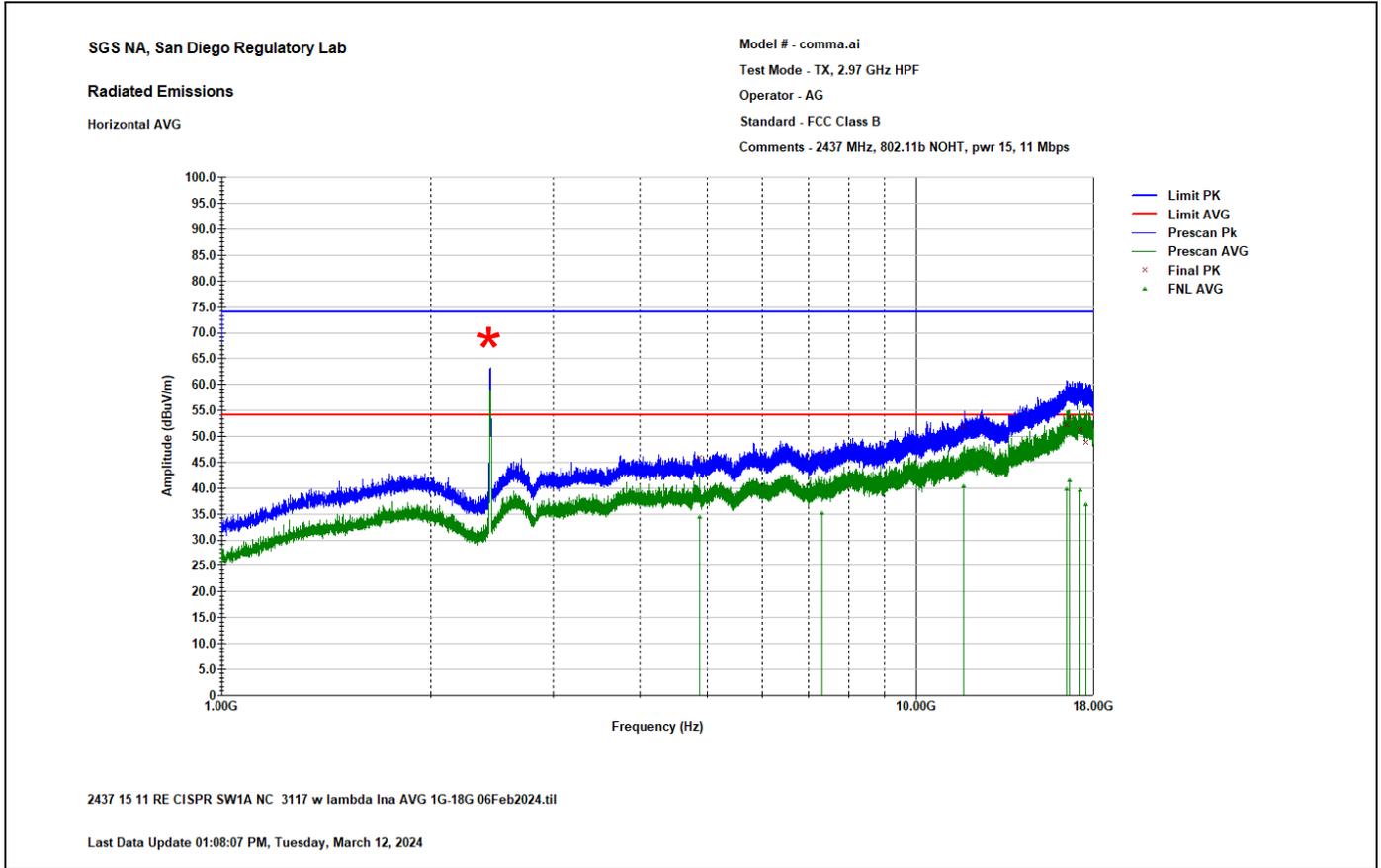
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4800.88	45.92	6.59	-28.08	74	150	209
7232.32	47.42	12.5	-26.58	74	150	336
9644.26	49.1	18.67	-24.9	74	150	380
12885.00235	52.37	26.08	-21.63	74	150	98
16498.38135	53.04	33.09	-20.96	74	150	16
17174.8381	52.6	32.8	-21.4	74	150	213
17348.1025	52.06	32.39	-21.94	74	150	238

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4800.88	33.99	0	6.59	-20.01	54	150	209
7232.32	35.61	0	12.5	-18.39	54	150	336
9644.26	37.63	0	18.67	-16.37	54	150	380
12885.00235	40.64	0	26.08	-13.36	54	150	98
16498.38135	40.6	0	33.09	-13.4	54	150	16
17174.8381	40.42	0	32.8	-13.58	54	150	213
17348.1025	39.63	0	32.39	-14.37	54	150	238

Horizontal Radiated Spurious Emissions Plot – 1-18GHz (802.11b NOHT, 2437MHz)



(*) marks TX signal from the EUT which are excluded from measurement

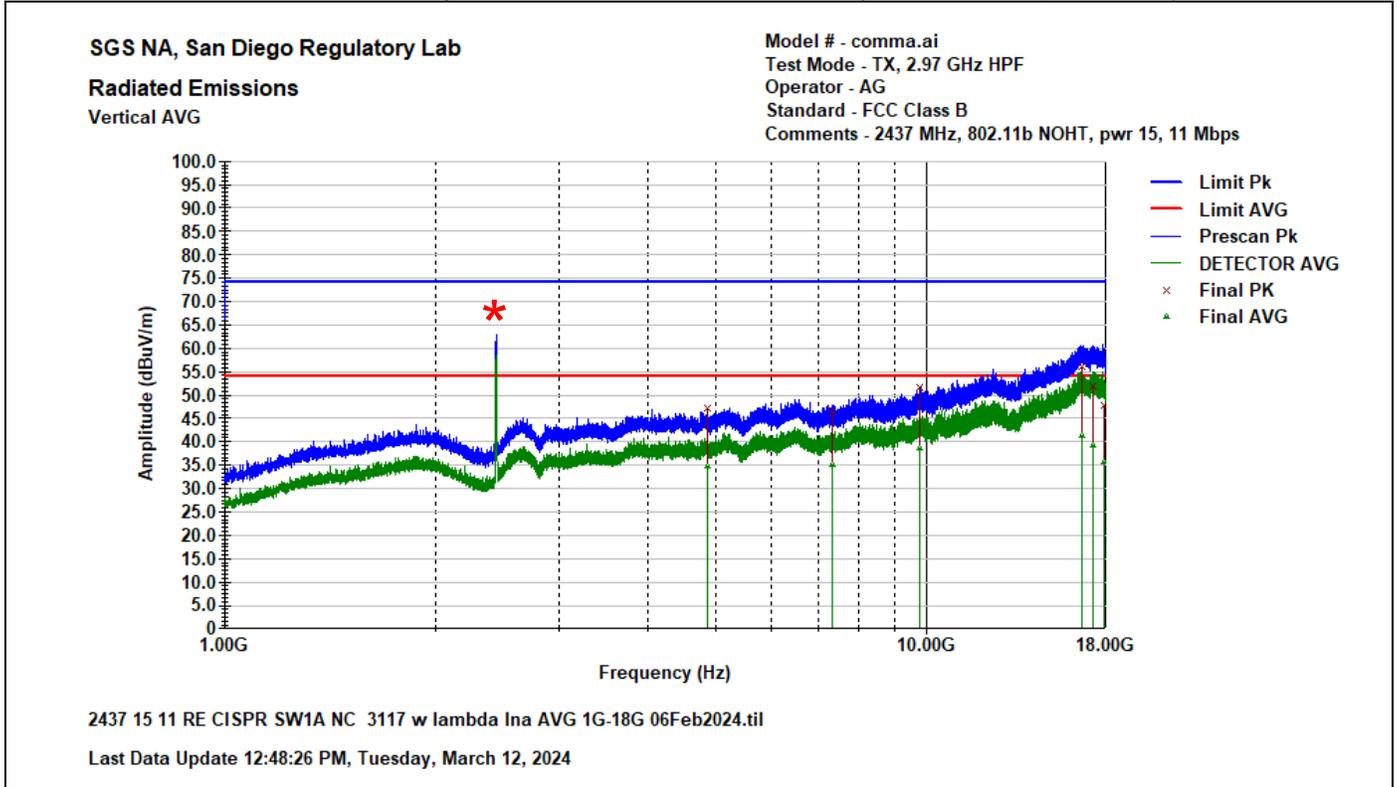
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4875.13	45.87	6.8	-28.13	74	200	13
7311.445	46.97	12.71	-27.03	74	200	20
11721.328	51.92	24.65	-22.08	74	200	306
16486.613	52.31	33.04	-21.69	74	200	158
16661.0209	53.67	33.62	-20.33	74	200	143
17262.0931	51.34	32.63	-22.66	74	200	162
17549.8805	48.92	32.09	-25.08	74	200	202

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4875.13	34.43	0.11	6.8	-19.57	54	200	13
7311.445	35.22	0.11	12.71	-18.78	54	200	20
11721.33	40.38	0.11	24.65	-13.62	54	200	306
16486.61	39.92	0.11	33.04	-14.08	54	200	158
16661.02	41.56	0.11	33.62	-12.44	54	200	143
17262.09	39.78	0.11	32.63	-14.22	54	200	162
17549.88	36.88	0.11	32.09	-17.12	54	200	202

Vertical Radiated Spurious Emissions Plot – 1-18GHz (802.11b NOHT, 2437MHz)



(*) marks TX signal from the EUT which are excluded from measurement

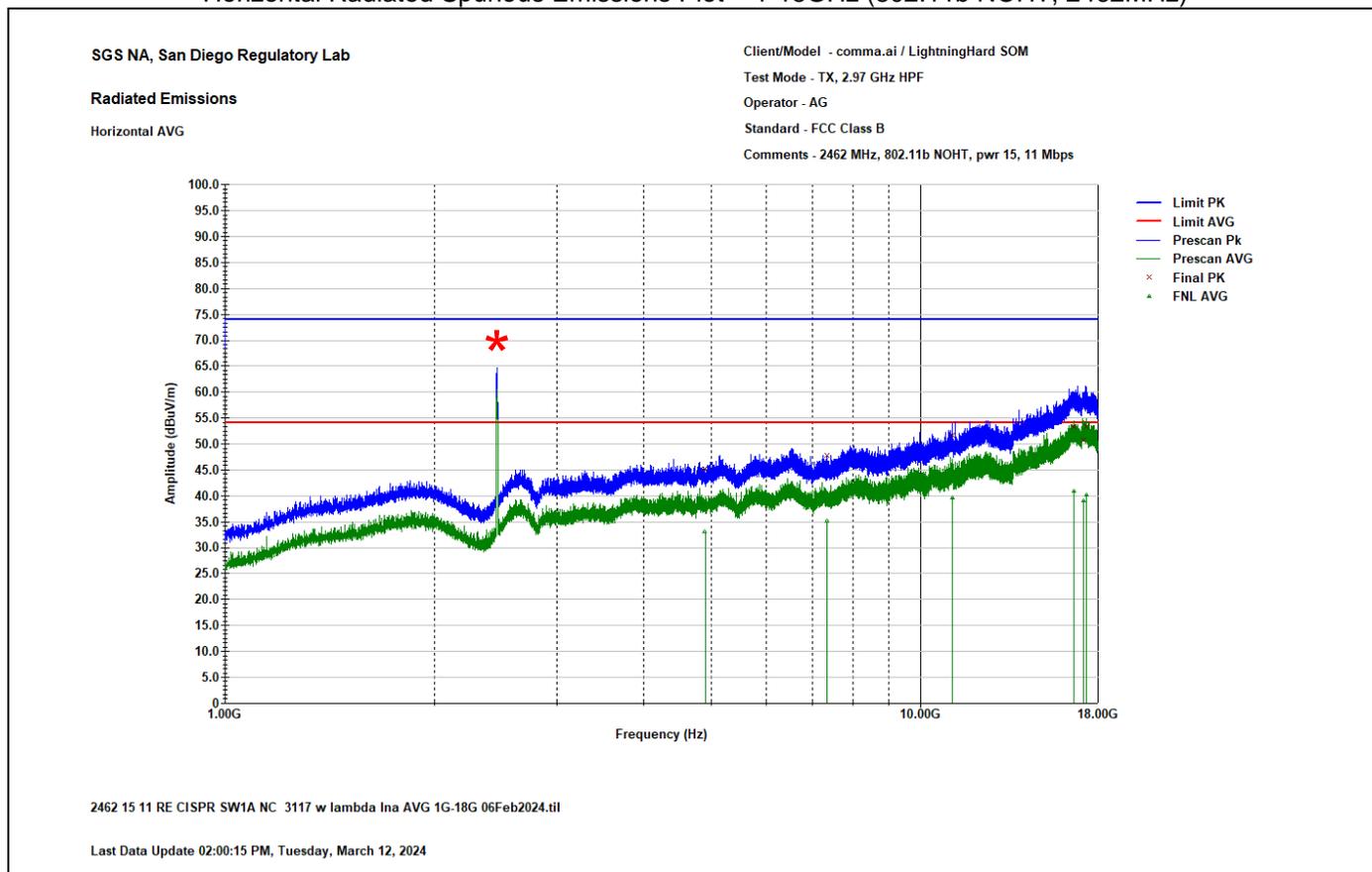
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4875.38	47.05	6.79	-26.95	74	200	20
7334.445	46.67	12.78	-27.33	74	291	380
9787.26	51.76	19.18	-22.24	74	400	100
16659.906	55.99	33.62	-18.01	74	400	-20
17287.24575	51.8	32.55	-22.2	74	400	313
17898.65325	47.7	32.01	-26.3	74	400	7
4875.38	47.05	6.79	-26.95	74	200	20

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4875.38	34.98	0.11	6.79	-19.02	54	200	20
7334.445	35.16	0.11	12.78	-18.84	54	291	380
9787.26	38.68	0.11	19.18	-15.32	54	400	100
16659.906	41.31	0.11	33.62	-12.69	54	400	-20
17287.24575	39.21	0.11	32.55	-14.79	54	400	313
17898.65325	35.87	0.11	32.01	-18.13	54	400	7
4875.38	34.98	0.11	6.79	-19.02	54	200	20

Horizontal Radiated Spurious Emissions Plot – 1-18GHz (802.11b NOHT, 2462MHz)



(*) marks TX signal from the EUT which are excluded from measurement

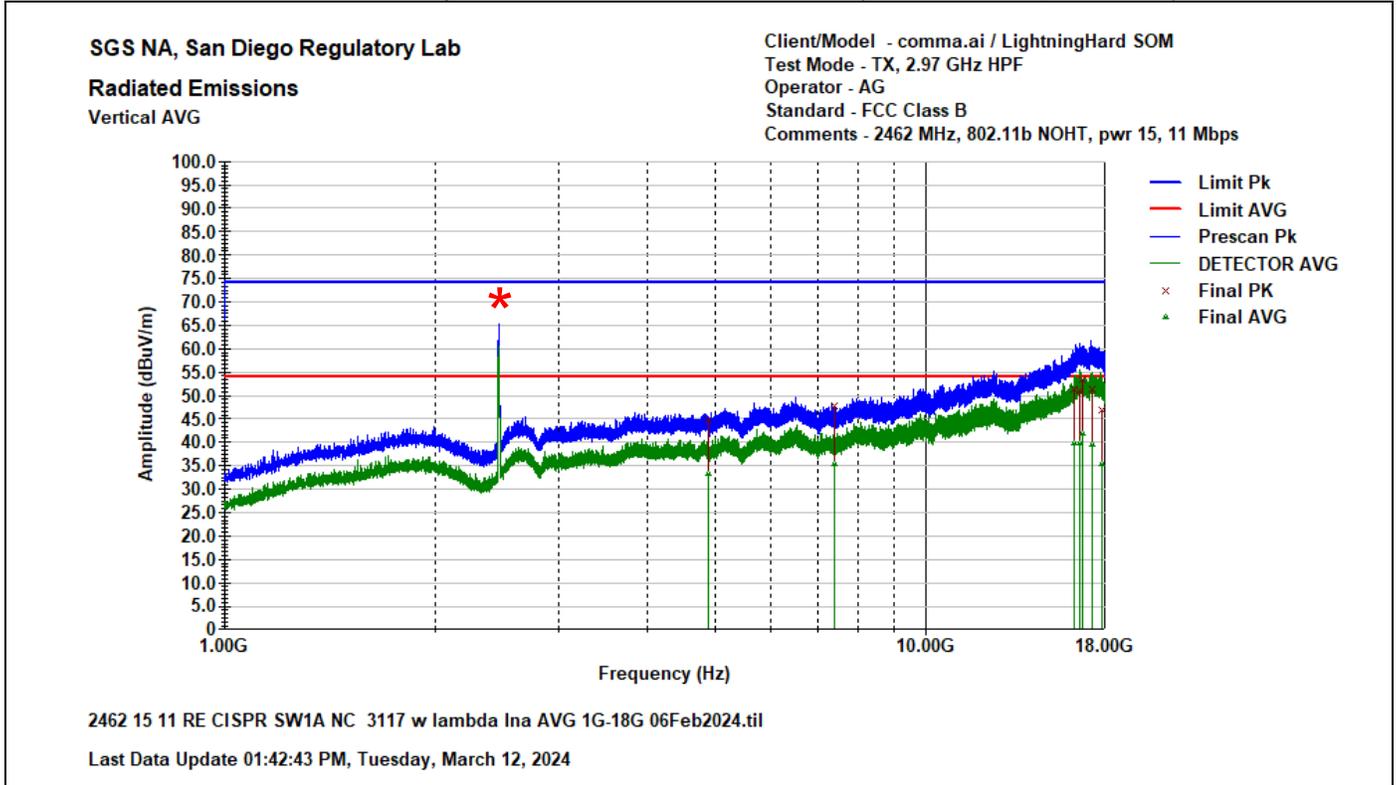
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4903.88	45.1	6.5	-28.9	74	295	249
7352.82	47.86	12.85	-26.14	74	287	49
11109.8324	51.6	22.56	-22.4	74	285	1
16659.55315	53.25	33.62	-20.75	74	241	228
17185.39875	50.79	32.8	-23.21	74	310	366

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4903.88	33.21	0.11	6.5	-20.79	54	295	249
7352.82	35.14	0.11	12.85	-18.86	54	287	49
11109.8324	39.61	0.11	22.56	-14.39	54	285	1
16659.55315	40.93	0.11	33.62	-13.07	54	241	228
17185.39875	39.09	0.11	32.8	-14.91	54	310	366

Vertical Radiated Spurious Emissions Plot – 1-18GHz (802.11b NOHT, 2462MHz)



(*) marks TX signal from the EUT which are excluded from measurement

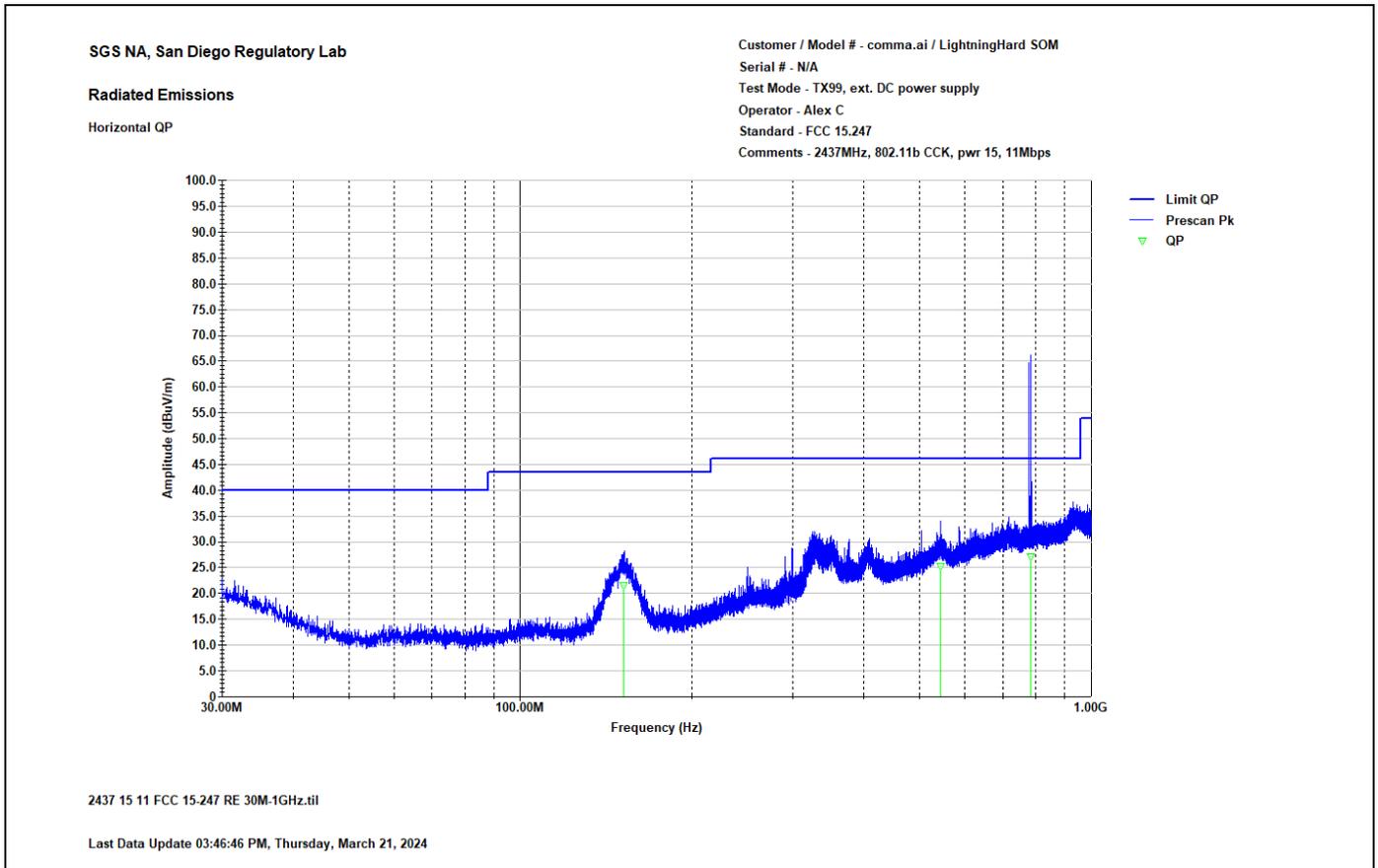
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4900.63	44.84	6.53	-29.16	74	330	96
7397.82	47.63	13.01	-26.37	74	394	65
16236.0829	51.3	31.93	-22.7	74	400	318
16585.3504	51.1	33.47	-22.9	74	256	156
16674.876	53.32	33.62	-20.68	74	400	159
17261.4024	51.35	32.63	-22.65	74	171	237
17799.64725	46.93	31.83	-27.07	74	311	-9

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4900.63	33.52	0.11	6.53	-20.48	54	330	96
7397.82	35.33	0.11	13.01	-18.67	54	394	65
16236.0829	39.77	0.11	31.93	-14.23	54	400	318
16585.3504	39.81	0.11	33.47	-14.19	54	256	156
16674.876	42.06	0.11	33.62	-11.94	54	400	159
17261.4024	39.63	0.11	32.63	-14.37	54	171	237

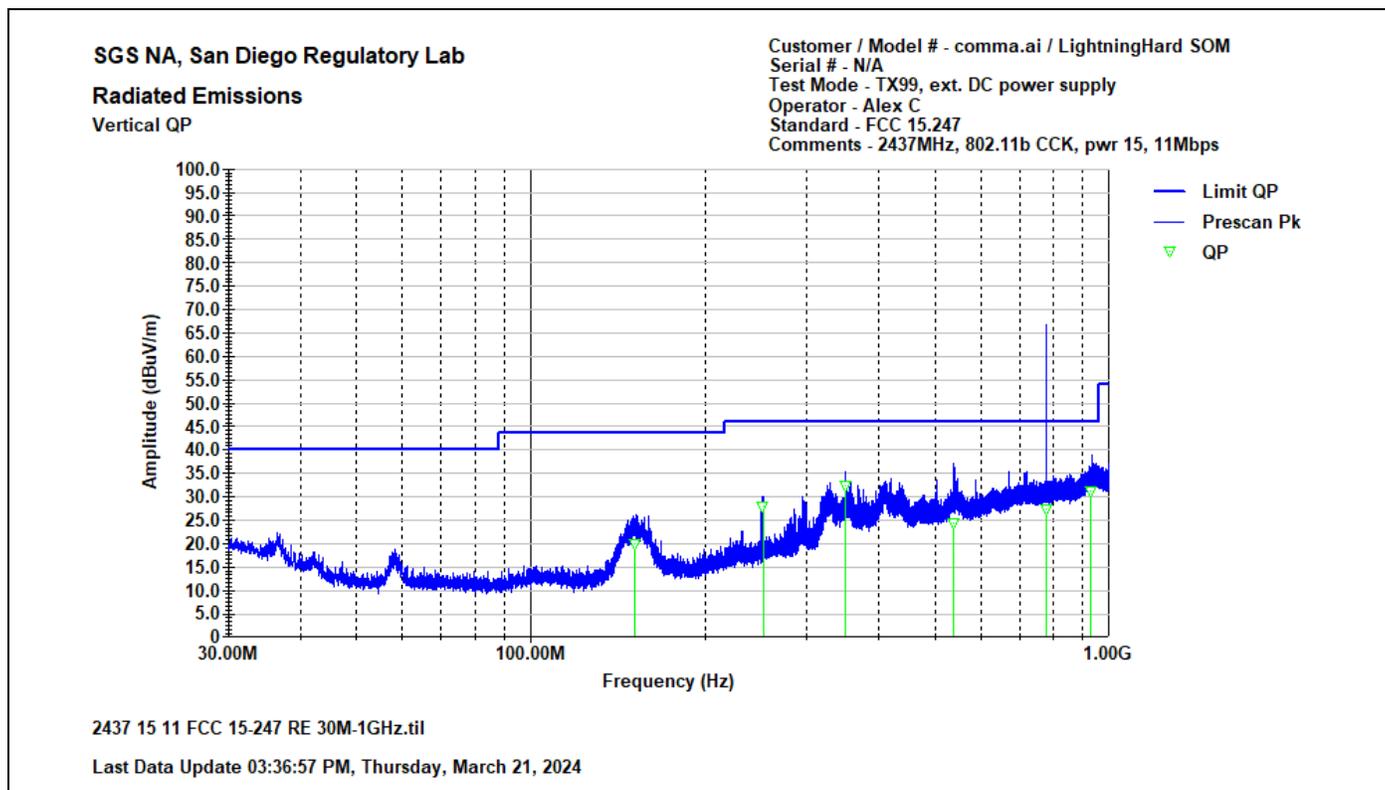
Horizontal Radiated Spurious Emissions Plot – 30 to 1000 MHz (802.11b CCK, 2437MHz)
Worst-Case presented



Quasi-Peak Data

Freq. (MHz)	Final QP (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
151.644127	21.63	-27.31	-21.89	43.52	185	343
545.919877	25.34	-13.86	-20.68	46.02	100	316
785.254957	27.15	-11.73	-18.87	46.02	400	-20

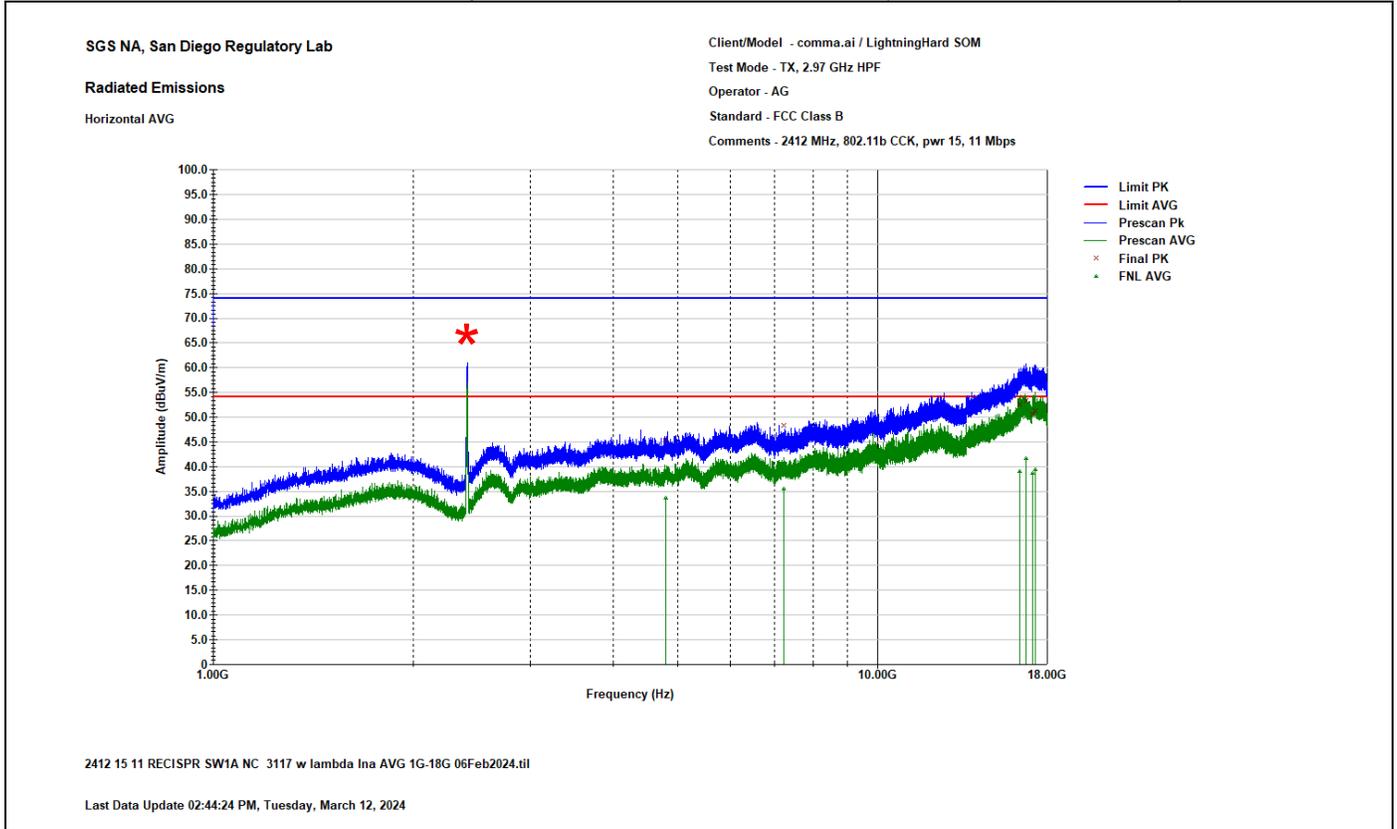
Vertical Radiated Spurious Emissions Plot – 30 to 1000 MHz (802.11b CCK, 2437MHz)
Worst-Case presented



Quasi-Peak Data

Freq. (MHz)	Final QP (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
151.660404	19.82	-27.31	-23.7	43.52	106	193
251.99632	27.85	-24.27	-18.17	46.02	100	-10
350.004727	32.41	-21.02	-13.61	46.02	130	355
538.618522	24.4	-13.99	-21.62	46.02	100	67
778.108907	27.33	-11.69	-18.69	46.02	299	10
929.939261	31.3	-8.51	-14.72	46.02	339	366

Horizontal Radiated Spurious Emissions Plot – 1-18GHz (802.11b CCK, 2412MHz)



(*) marks TX signal from the EUT which are excluded from measurement

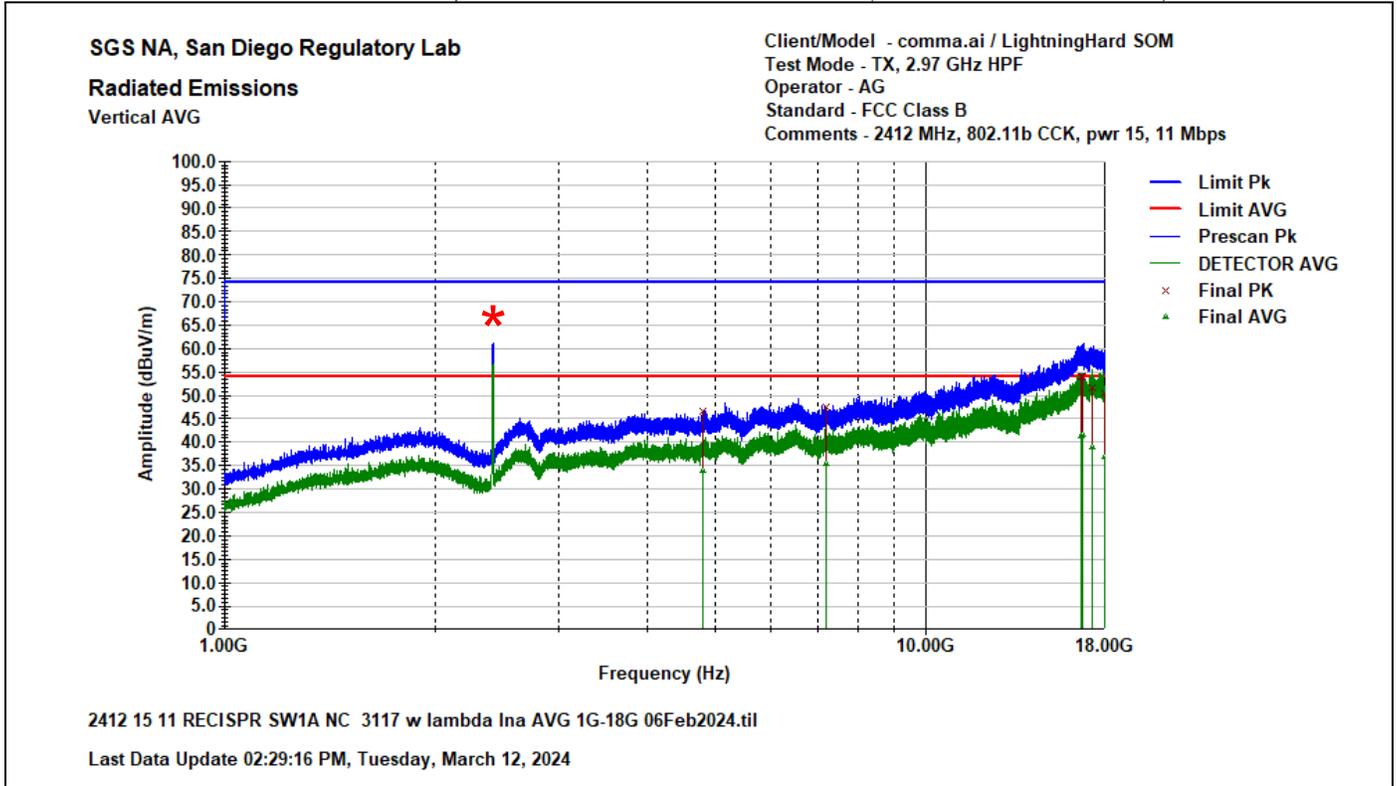
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4801.38	45.37	6.6	-28.63	74	217	54
7221.32	48.35	12.47	-25.65	74	163	337
16386.0645	52.56	32.58	-21.44	74	263	143
16749.54265	53.35	33.57	-20.65	74	255	266
17112.0084	50.6	32.77	-23.4	74	355	64
17286.4984	51.26	32.55	-22.74	74	302	50

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4801.38	33.74	0.11	6.6	-20.26	54	217	54
7221.32	35.58	0.11	12.47	-18.42	54	163	337
16386.0645	39.16	0.11	32.58	-14.84	54	263	143
16749.54265	41.7	0.11	33.57	-12.3	54	255	266
17112.0084	38.78	0.11	32.77	-15.22	54	355	64
17286.4984	39.44	0.11	32.55	-14.56	54	302	50

Vertical Radiated Spurious Emissions Plot – 1-18GHz (802.11b CCK, 2412MHz)



(*) marks TX signal from the EUT which are excluded from measurement

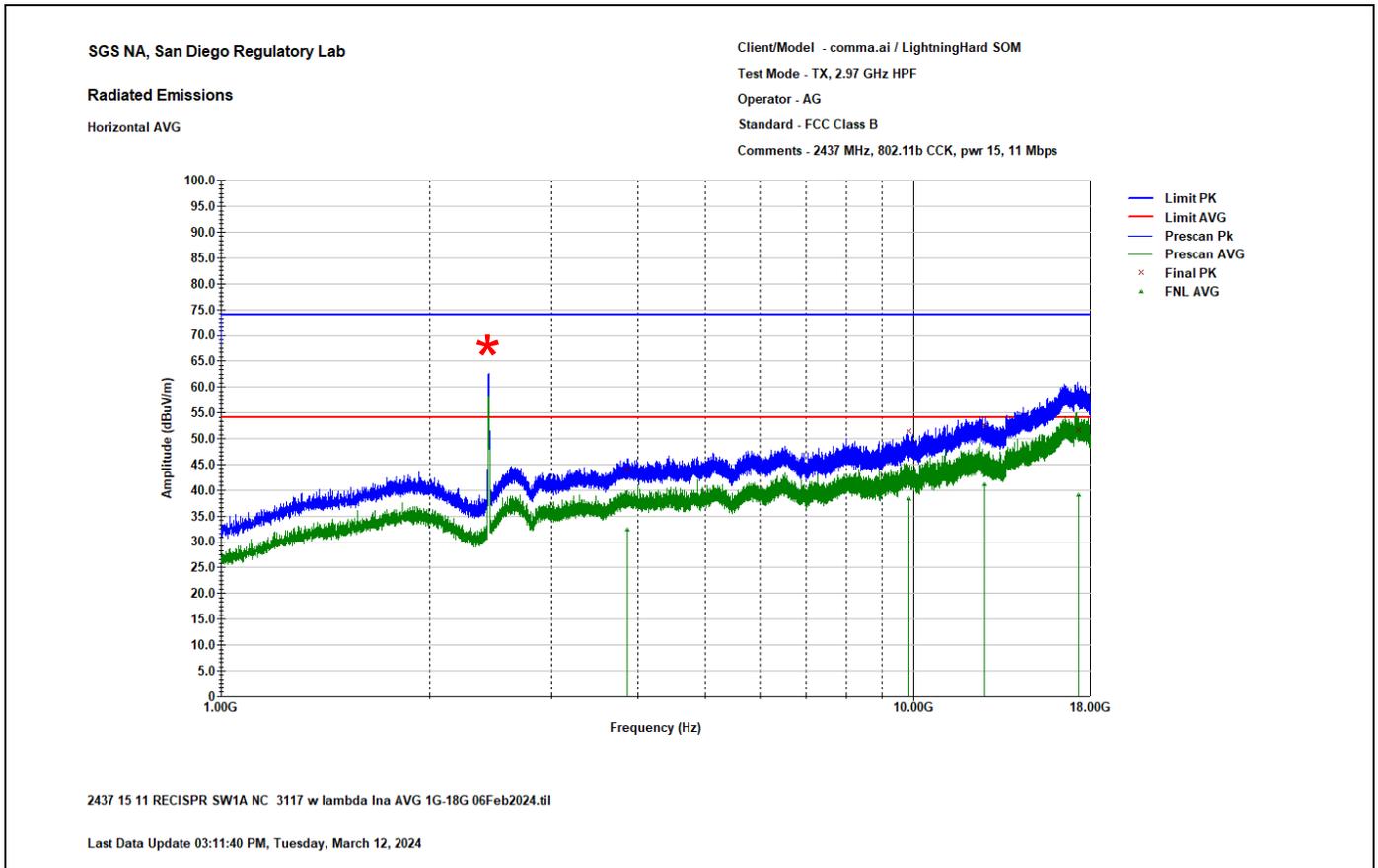
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4799.88	46.71	6.58	-27.29	74	264	171
7210.57	47.45	12.45	-26.55	74	265	58
16636.52085	53.87	33.63	-20.13	74	311	55
16673.821	54.1	33.62	-19.9	74	233	275
17237.2484	51.49	32.7	-22.51	74	150	279
17960.9229	50.41	31.23	-23.59	74	150	317

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4799.88	33.86	0.11	6.58	-20.14	54	264	171
7210.57	35.5	0.11	12.45	-18.5	54	265	58
16636.52085	41.25	0.11	33.63	-12.75	54	311	55
16673.821	41.71	0.11	33.62	-12.29	54	233	275
17237.2484	38.87	0.11	32.7	-15.13	54	150	279
17960.9229	36.97	0.11	31.23	-17.03	54	150	317

Horizontal Radiated Spurious Emissions Plot – 1-18GHz (802.11b CCK, 2437MHz)



(*) marks TX signal from the EUT which are excluded from measurement

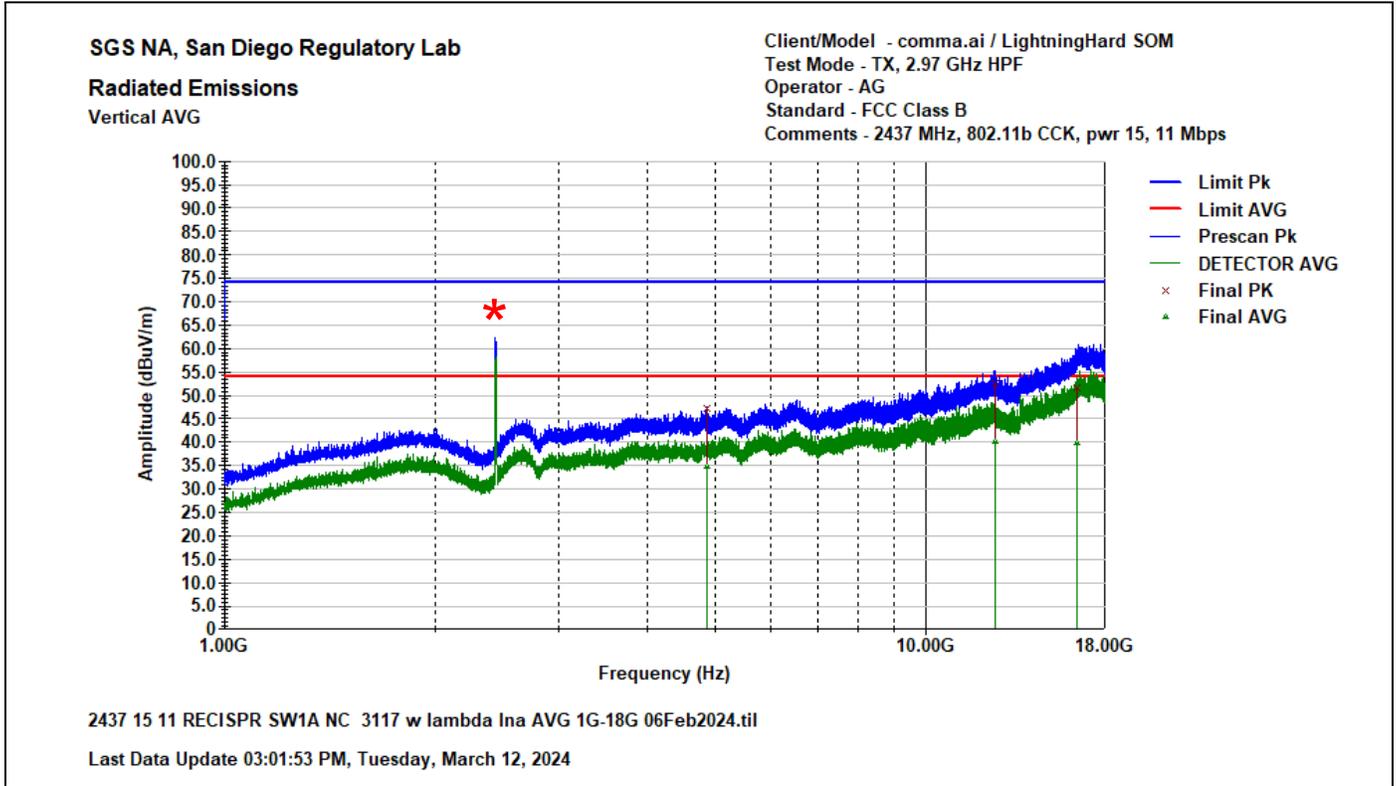
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
3864.9275	44.08	3.7	-29.92	74	247	87
9865.002	51.41	19.06	-22.59	74	309	-20
12699.8954	52.54	26.13	-21.46	74	316	343
17349.27595	51.68	32.39	-22.32	74	150	380

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
3864.9275	32.4	0.11	3.7	-21.6	54	247	87
9865.002	38.31	0.11	19.06	-15.69	54	309	-20
12699.8954	41.15	0.11	26.13	-12.85	54	316	343
17349.27595	39.1	0.11	32.39	-14.9	54	150	380

Vertical Radiated Spurious Emissions Plot – 1-18GHz (802.11b CCK, 2437MHz)



(*) marks TX signal from the EUT which are excluded from measurement

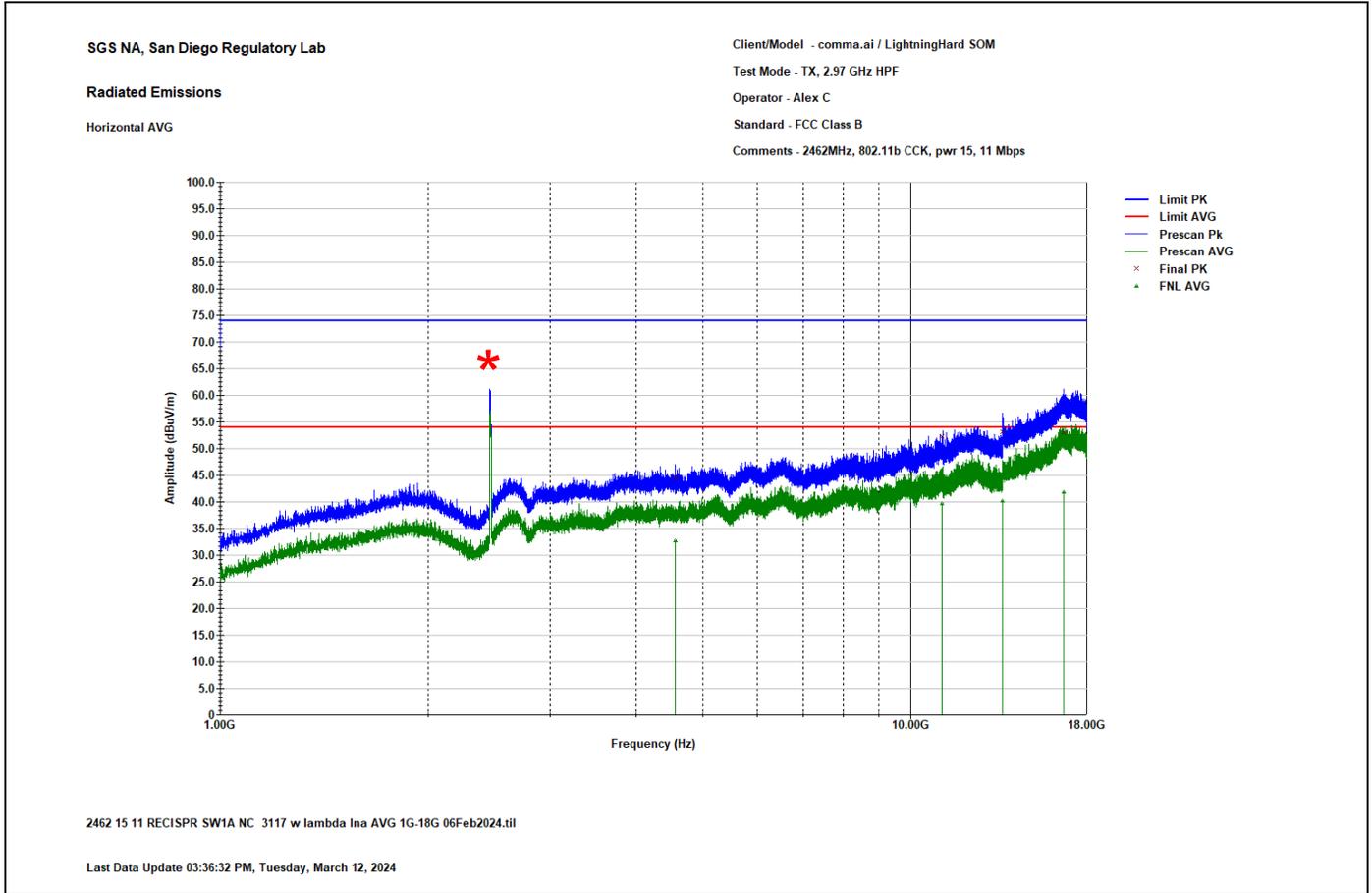
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4878.005625	47.05	6.77	-26.95	74	265	65
12571.79025	52.51	26.07	-21.49	74	400	113
16398.77985	51.52	32.64	-22.48	74	350	372

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4878.005625	34.73	0.11	6.77	-19.27	54	265	65
12571.79025	40.18	0.11	26.07	-13.82	54	400	113
16398.77985	39.91	0.11	32.64	-14.09	54	350	372

Horizontal Radiated Spurious Emissions Plot – 1-18GHz (802.11b CCK, 2462MHz)



(*) marks TX signal from the EUT which are excluded from measurement

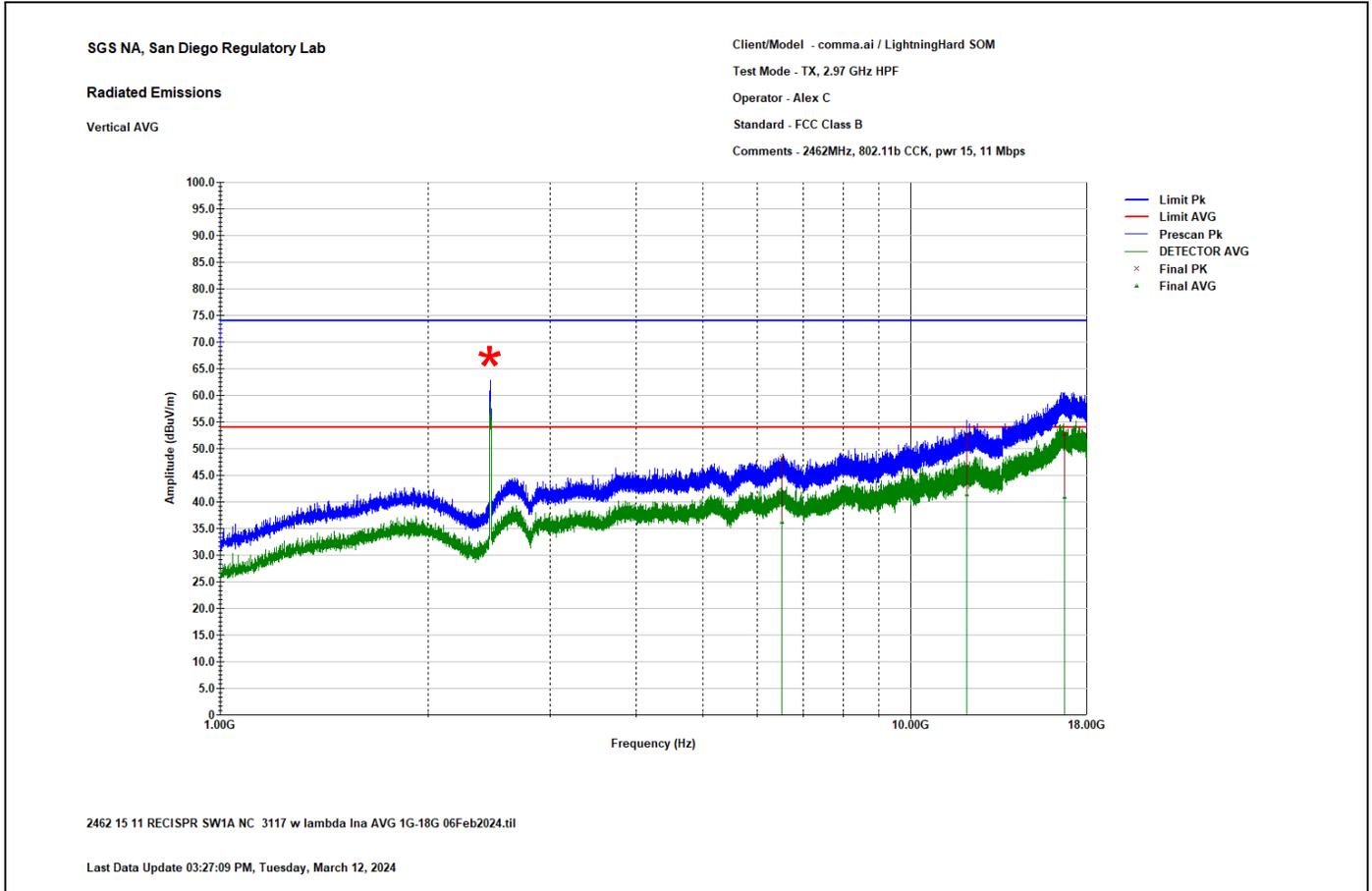
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4562.498375	44.52	5.81	-29.48	74	155	157
11118.72825	52.39	22.59	-21.61	74	370	1
13585.7301	53.15	26.26	-20.85	74	279	317
16659.5235	52.95	33.62	-21.05	74	271	36

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4562.498375	32.74	0.11	5.81	-21.26	54	155	157
11118.72825	39.84	0.11	22.59	-14.16	54	370	1
13585.7301	40.36	0.11	26.26	-13.64	54	279	317
16659.5235	41.88	0.11	33.62	-12.12	54	271	36

Vertical Radiated Spurious Emissions Plot – 1-18GHz (802.11b CCK, 2462MHz)



(*) marks TX signal from the EUT which are excluded from measurement

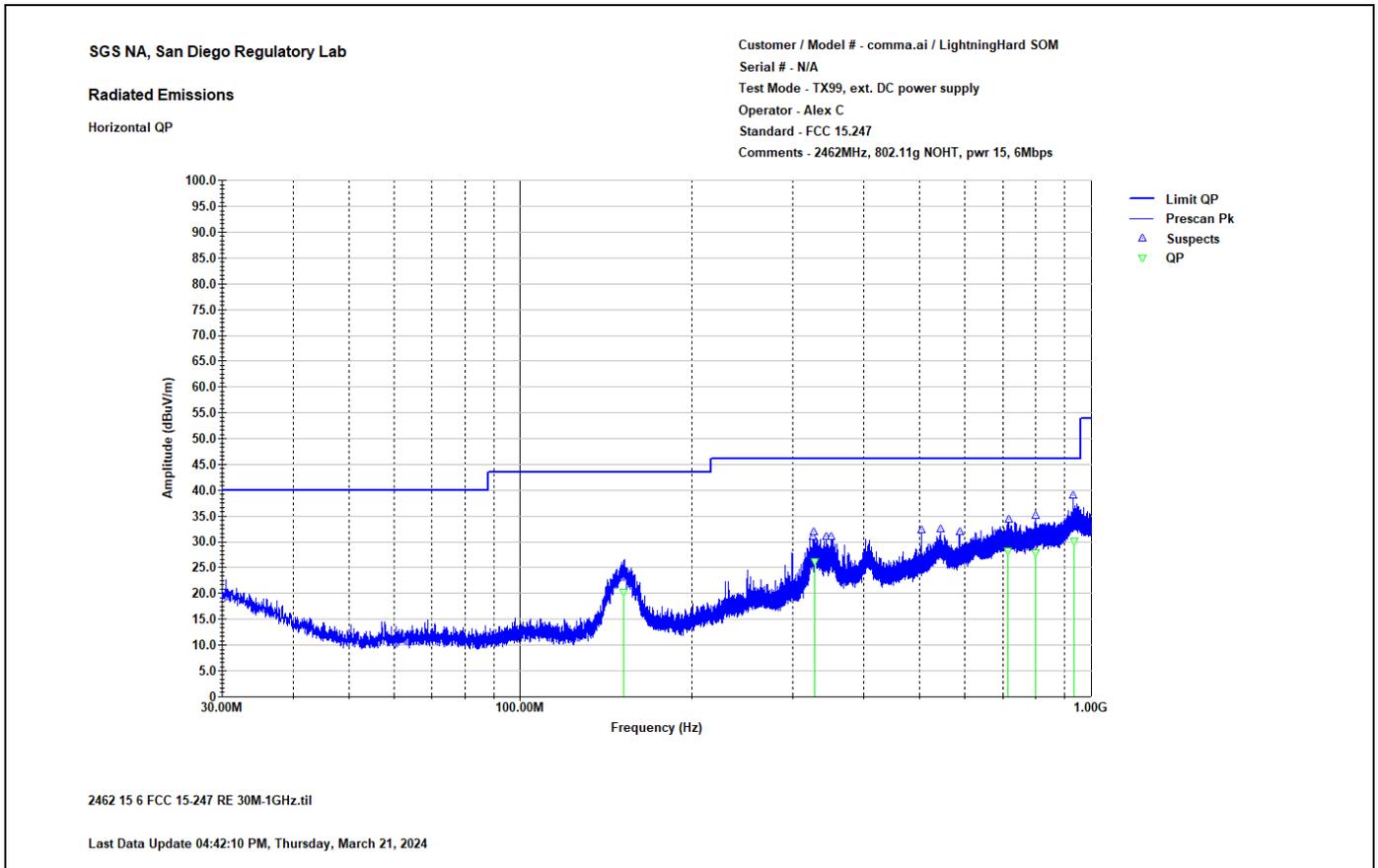
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
6514.521375	48.26	10.97	-25.74	74	163	16
12060.4735	52.66	25.36	-21.34	74	217	304
16699.1085	52.85	33.61	-21.15	74	163	0

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
6514.521375	36.29	0.11	10.97	-17.71	54	163	16
12060.4735	41.46	0.11	25.36	-12.54	54	217	304
16699.1085	40.99	0.11	33.61	-13.01	54	163	0

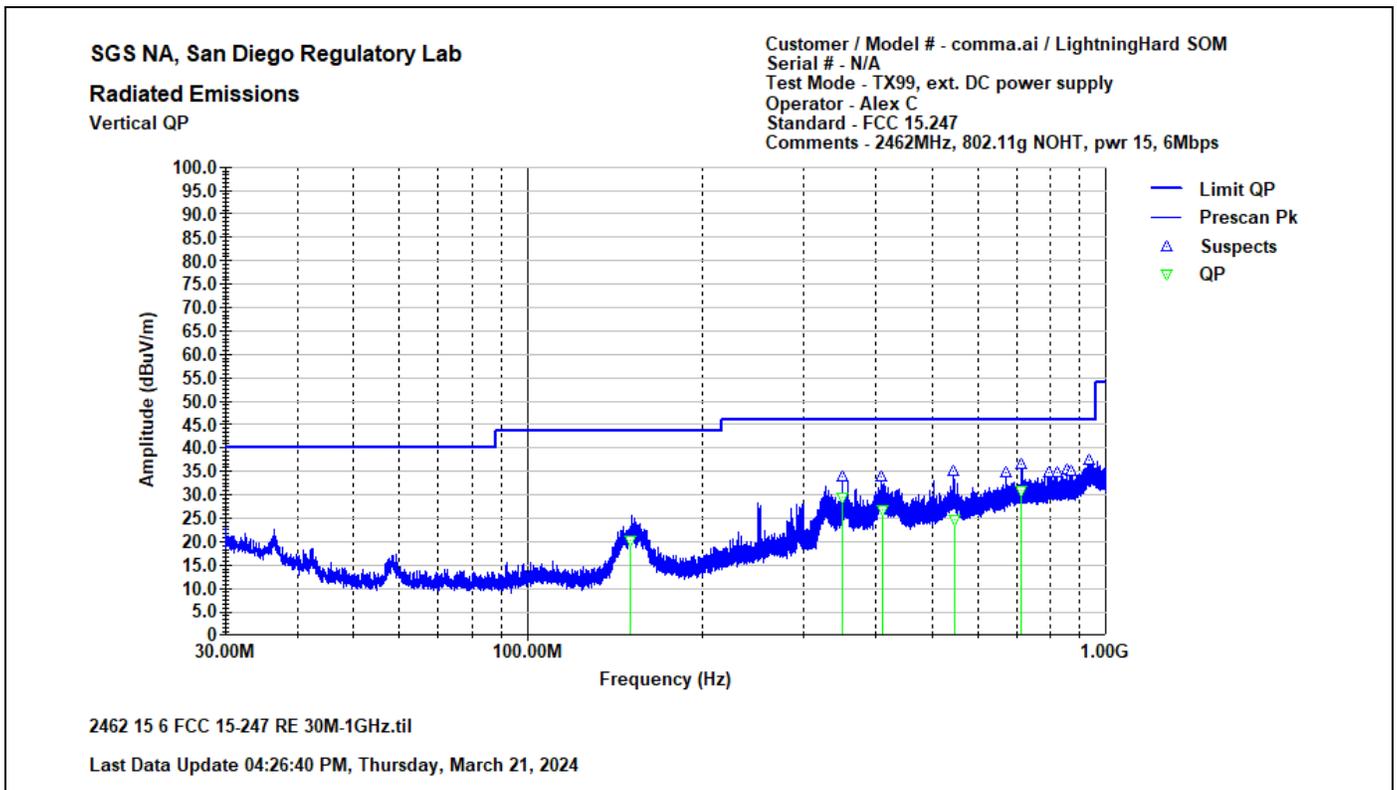
Horizontal Radiated Spurious Emissions Plot – 30 to 1000 MHz (802.11g NOHT, 2462MHz)
Worst-Case presented



Quasi-Peak Data

Freq. (MHz)	Final QP (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
151.754366	20.15	-27.28	-23.37	43.52	101	160
327.891127	26.23	-22.71	-19.79	46.02	106	301
713.75923	28.26	-11.91	-17.76	46.02	311	208
801.032662	27.86	-11.32	-18.16	46.02	400	331
933.407618	30.16	-8.41	-15.86	46.02	312	281

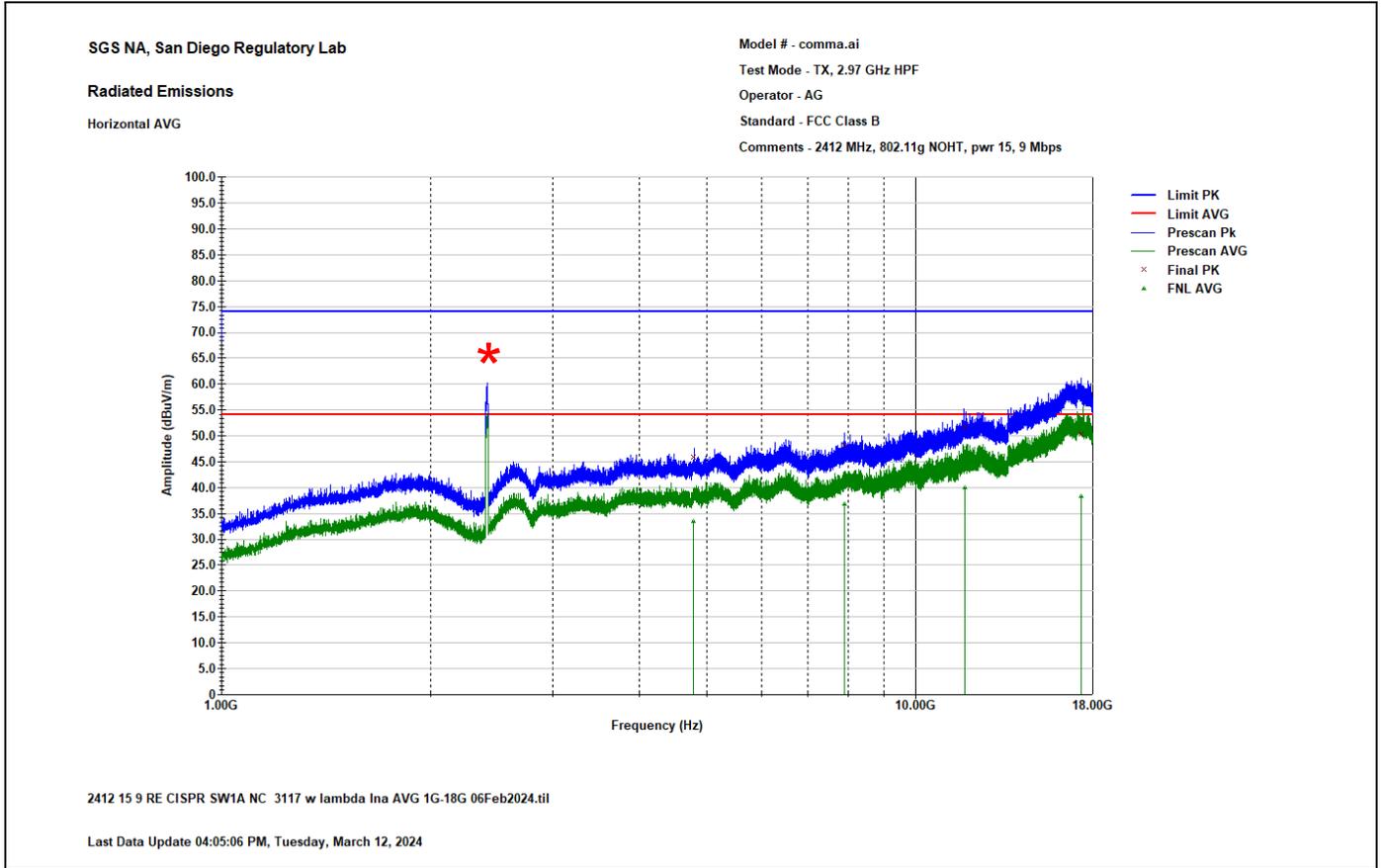
Vertical Radiated Spurious Emissions Plot – 30 to 1000 MHz (802.11g NOHT, 2462MHz)
Worst-Case presented



Quasi-Peak Data

Freq. (MHz)	Final QP (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
150.776186	20.12	-27.59	-23.4	43.52	146	234
349.96	29.41	-21.02	-16.61	46.02	145	369
409.904798	26.73	-17.95	-19.29	46.02	146	13
547.666392	24.54	-13.94	-21.48	46.02	106	347
713.435284	30.79	-11.9	-15.23	46.02	100	195

Horizontal Radiated Spurious Emissions Plot – 1-18GHz (802.11g NOHT, 2412MHz)



(*) marks TX signal from the EUT which are excluded from measurement

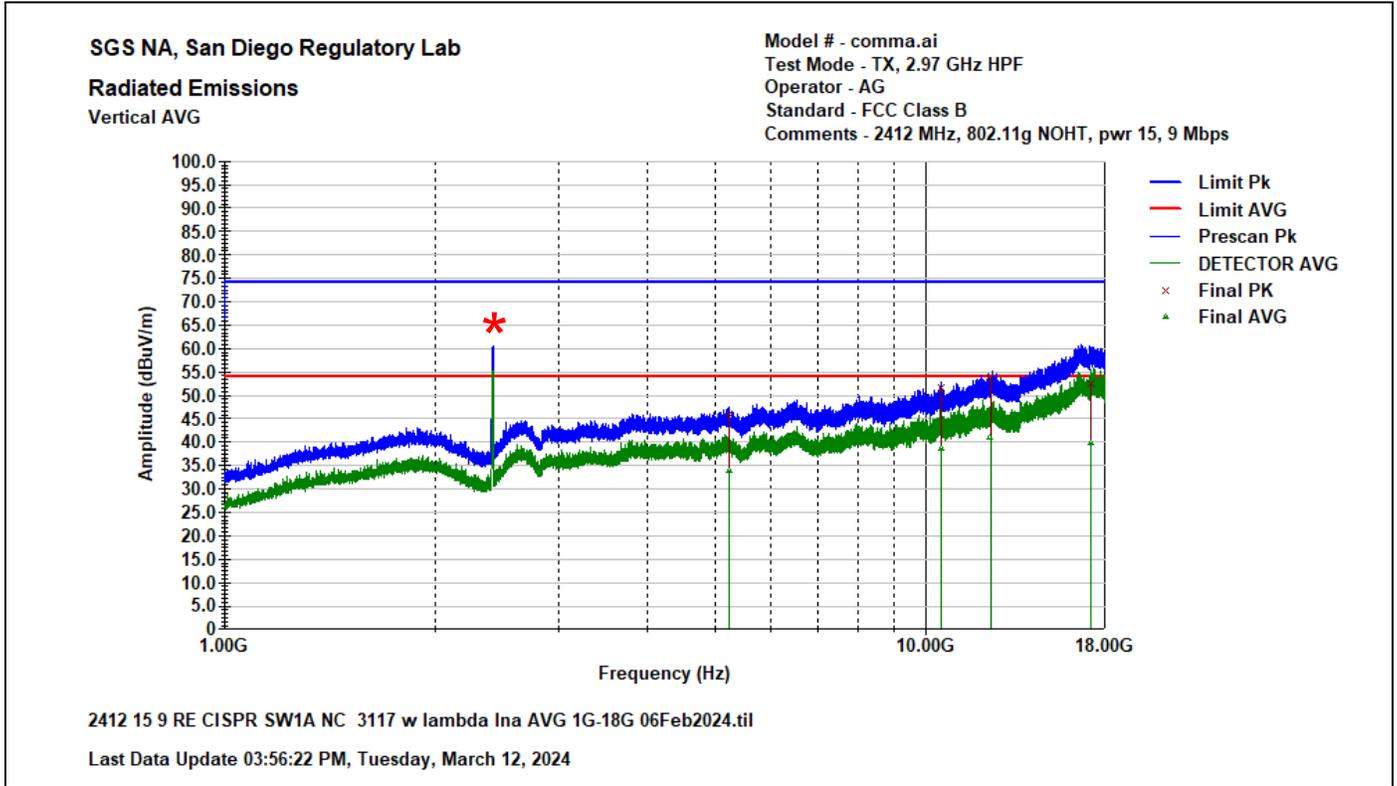
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4784.36425	45.85	6.37	-28.15	74	200	187
7895.0325	48.16	14.66	-25.84	74	200	115
11797.16535	51.75	24.92	-22.25	74	200	12
17361.99835	50.35	32.35	-23.65	74	200	75

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4784.36425	33.63	0.11	6.37	-20.37	54	200	187
7895.0325	36.99	0.11	14.66	-17.01	54	200	115
11797.16535	40.12	0.11	24.92	-13.88	54	200	12
17361.99835	38.46	0.11	32.35	-15.54	54	200	75

Vertical Radiated Spurious Emissions Plot – 1-18GHz (802.11g NOHT, 2412MHz)



(*) marks TX signal from the EUT which are excluded from measurement

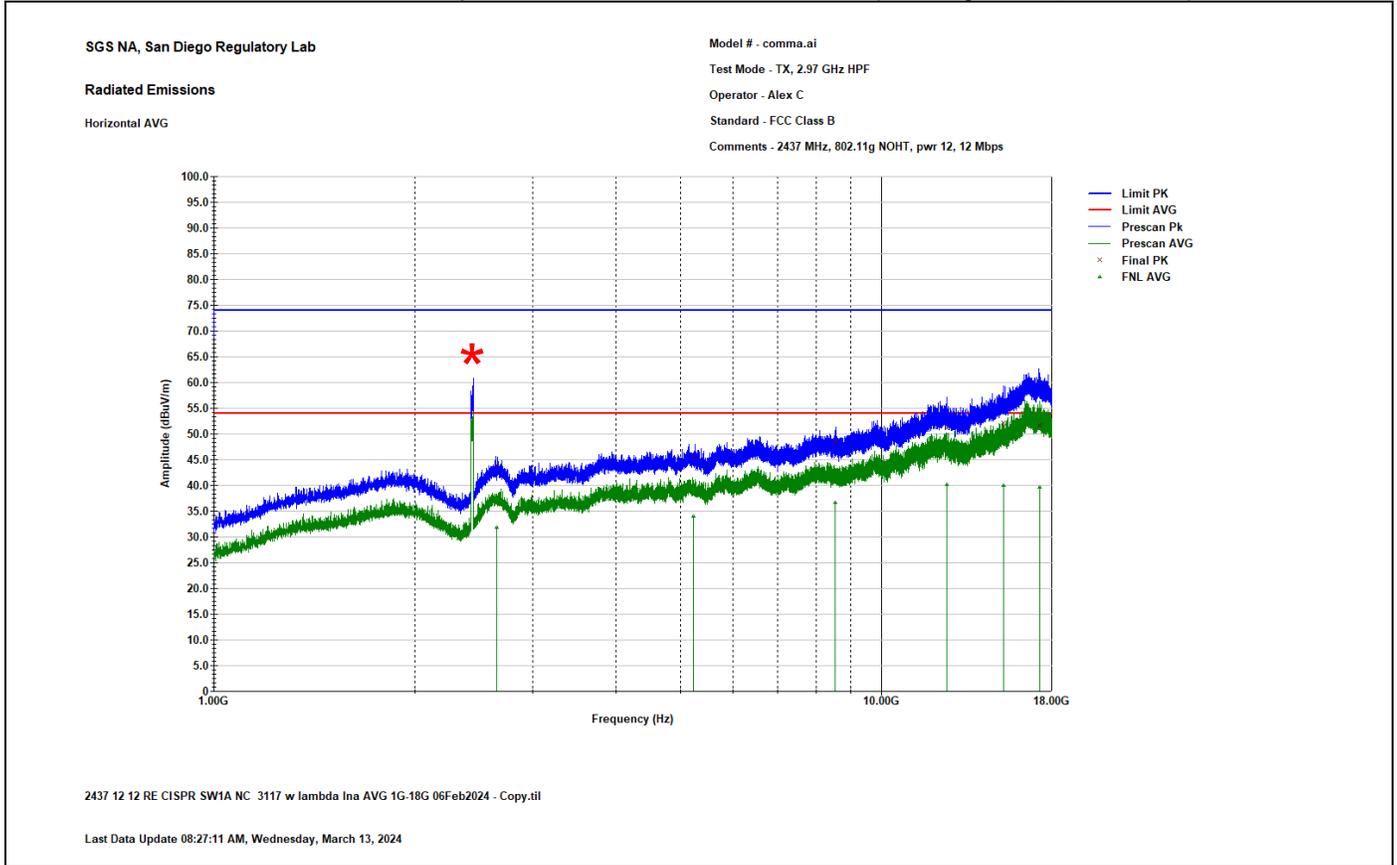
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
5251.585	46.02	7.42	-27.98	74	400	260
10493.22215	51.74	20.55	-22.26	74	400	145
12349.97865	53.6	25.91	-20.4	74	400	139
17172.35075	52.43	32.8	-21.57	74	400	61

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
5251.585	34.09	0.11	7.42	-19.91	54	400	260
10493.22215	38.79	0.11	20.55	-15.21	54	400	145
12349.97865	41.14	0.11	25.91	-12.86	54	400	139
17172.35075	39.84	0.11	32.8	-14.16	54	400	61

Horizontal Radiated Spurious Emissions Plot – 1-18GHz (802.11g NOHT, 2437MHz)



(*) marks TX signal from the EUT which are excluded from measurement

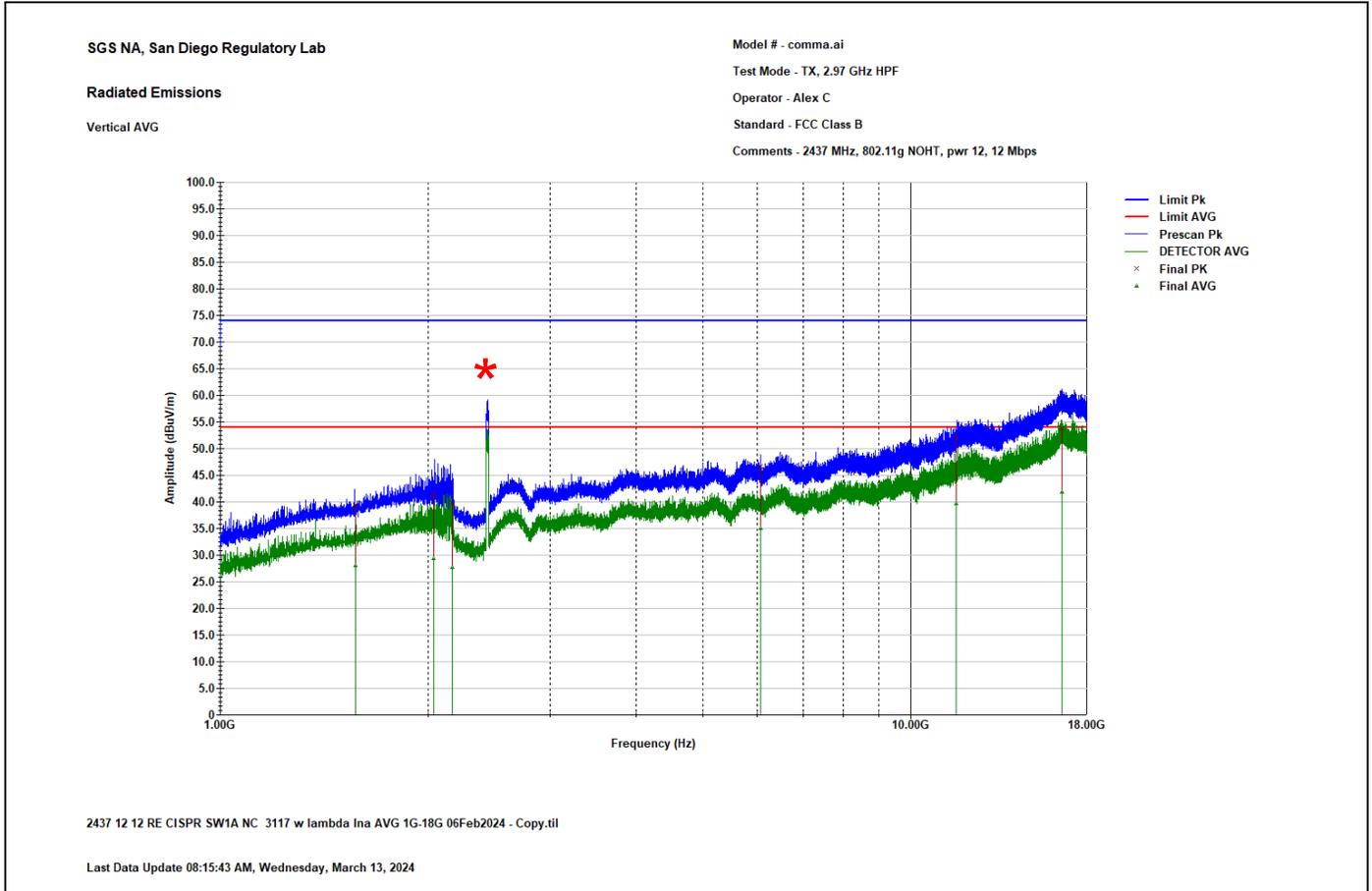
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2653.0635	43.83	0.85	-30.17	74	200	380
5228.210125	45.45	7.4	-28.55	74	200	108
8541.970125	48.36	16.15	-25.64	74	200	195
12545.71575	51.17	26.05	-22.83	74	200	-11
15233.8209	52.23	28.95	-21.77	74	200	308
17261.77175	51.62	32.63	-22.38	74	200	119

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2653.0635	32.05	0.15	0.85	-21.95	54	200	380
5228.210125	34.08	0.15	7.4	-19.92	54	200	108
8541.970125	36.88	0.15	16.15	-17.12	54	200	195
12545.71575	40.33	0.15	26.05	-13.67	54	200	-11
15233.8209	40.1	0.15	28.95	-13.9	54	200	308
17261.77175	39.77	0.15	32.63	-14.23	54	200	119

Vertical Radiated Spurious Emissions Plot – 1-18GHz (802.11g NOHT, 2437MHz)



(*) marks TX signal from the EUT which are excluded from measurement

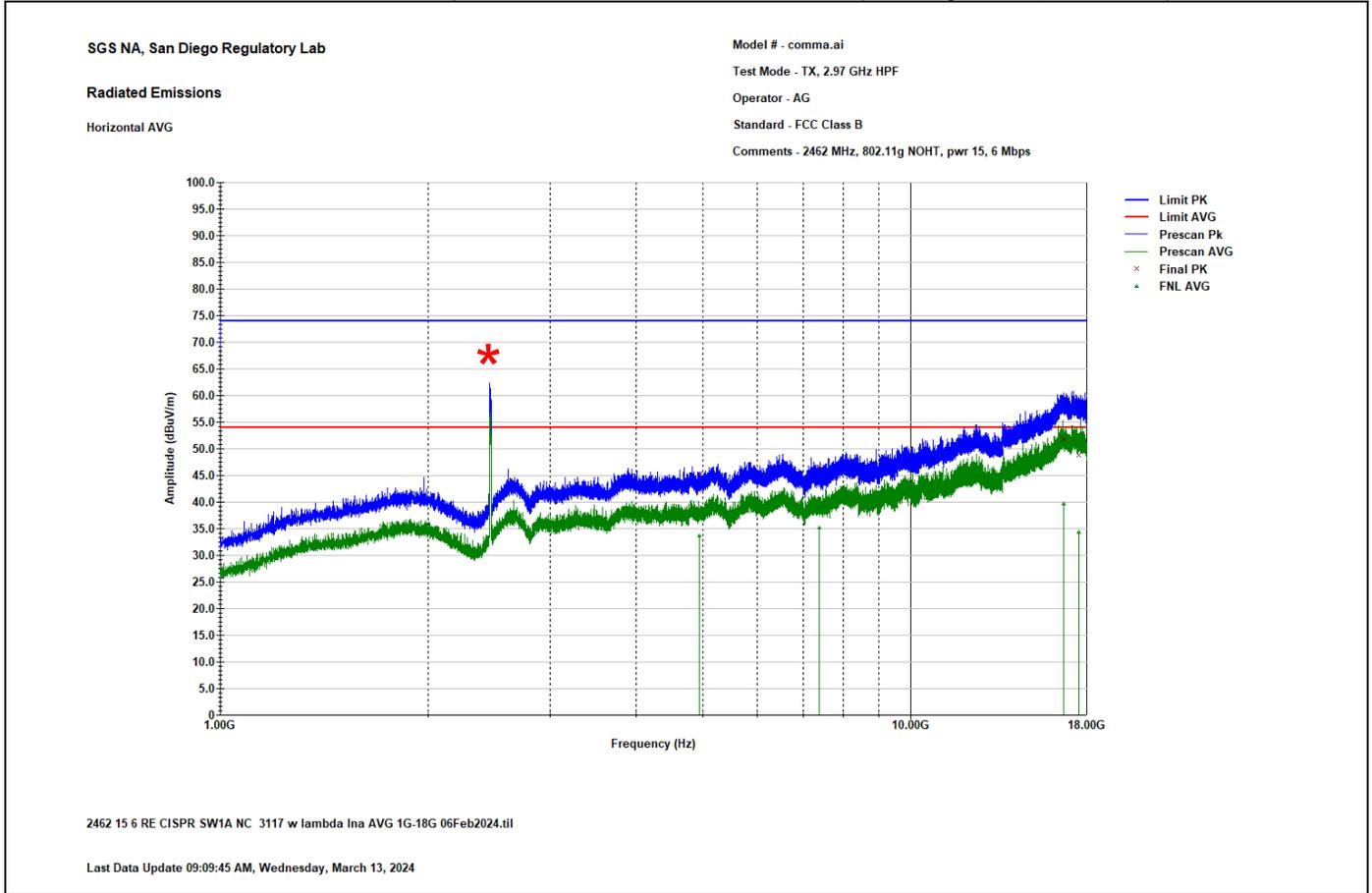
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
1567.5195	39.57	-5.99	-34.43	74	344	224
2036.7253	41.57	-1.77	-32.43	74	400	52
2167.488625	39.9	-1.48	-34.1	74	400	-20
6057.305625	46.67	10.04	-27.33	74	400	339
11632.55915	52.38	24.35	-21.62	74	400	298
16573.741	53.73	33.42	-20.27	74	400	246

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
1567.5195	28.08	0.15	-5.99	-25.92	54	344	224
2036.7253	29.55	0.15	-1.77	-24.45	54	400	52
2167.488625	27.82	0.15	-1.48	-26.18	54	400	-20
6057.305625	35.16	0.15	10.04	-18.84	54	400	339
11632.55915	39.75	0.15	24.35	-14.25	54	400	298
16573.741	41.97	0.15	33.42	-12.03	54	400	246

Horizontal Radiated Spurious Emissions Plot – 1-18GHz (802.11g NOHT, 2462MHz)



(*) marks TX signal from the EUT which are excluded from measurement

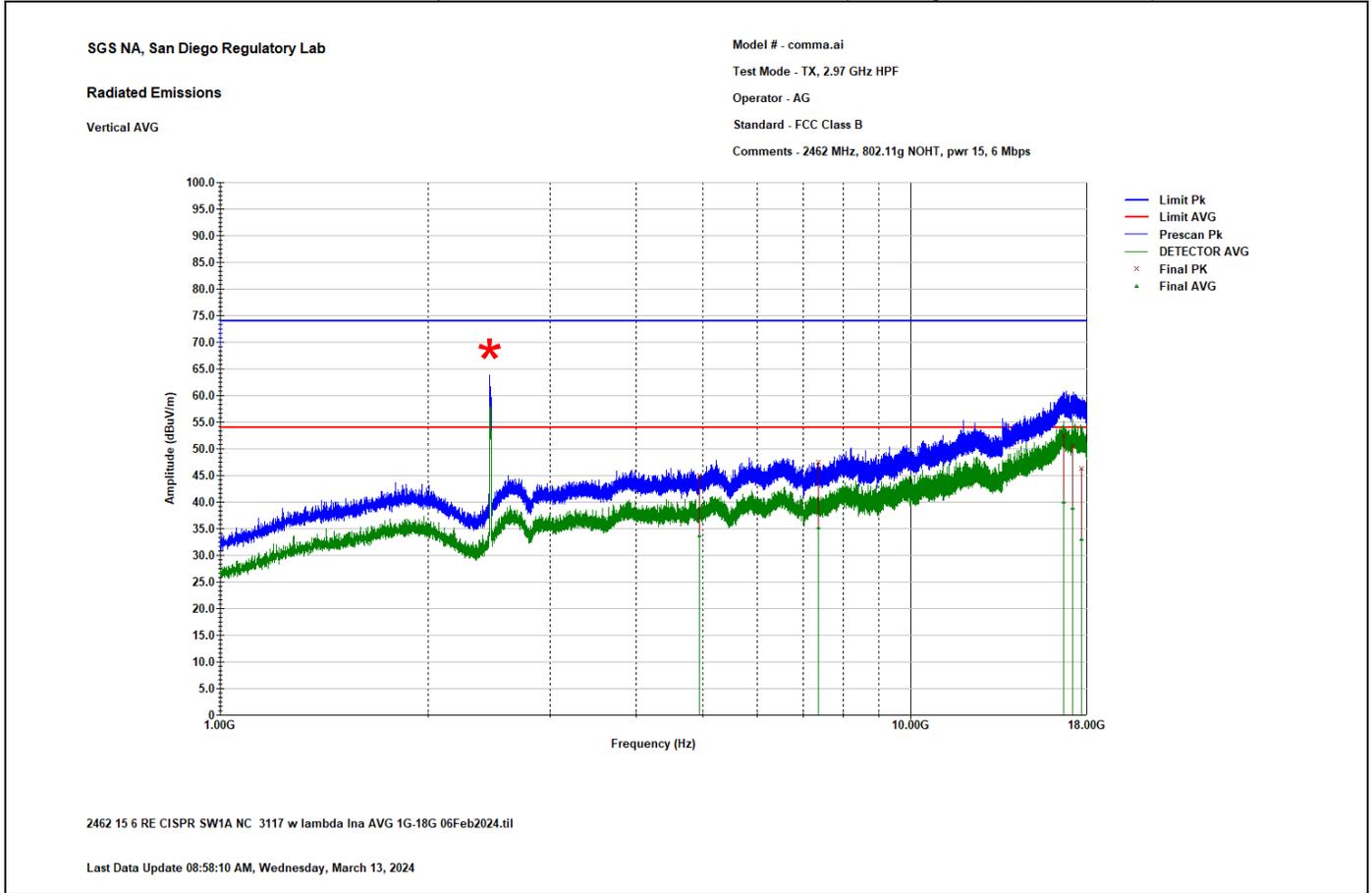
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4940.38	45.2	6.43	-28.8	74	150	145
7377.82	46.67	12.94	-27.33	74	370	307
16674.95245	51.74	33.62	-22.26	74	348	43
17549.35245	48.86	32.09	-25.14	74	331	274

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4940.38	33.73	0	6.43	-20.27	54	150	145
7377.82	35.15	0	12.94	-18.85	54	370	307
16674.95245	39.75	0	33.62	-14.25	54	348	43
17549.35245	34.28	0	32.09	-19.72	54	331	274

Vertical Radiated Spurious Emissions Plot – 1-18GHz (802.11g NOHT, 2462MHz)



(*) marks TX signal from the EUT which are excluded from measurement

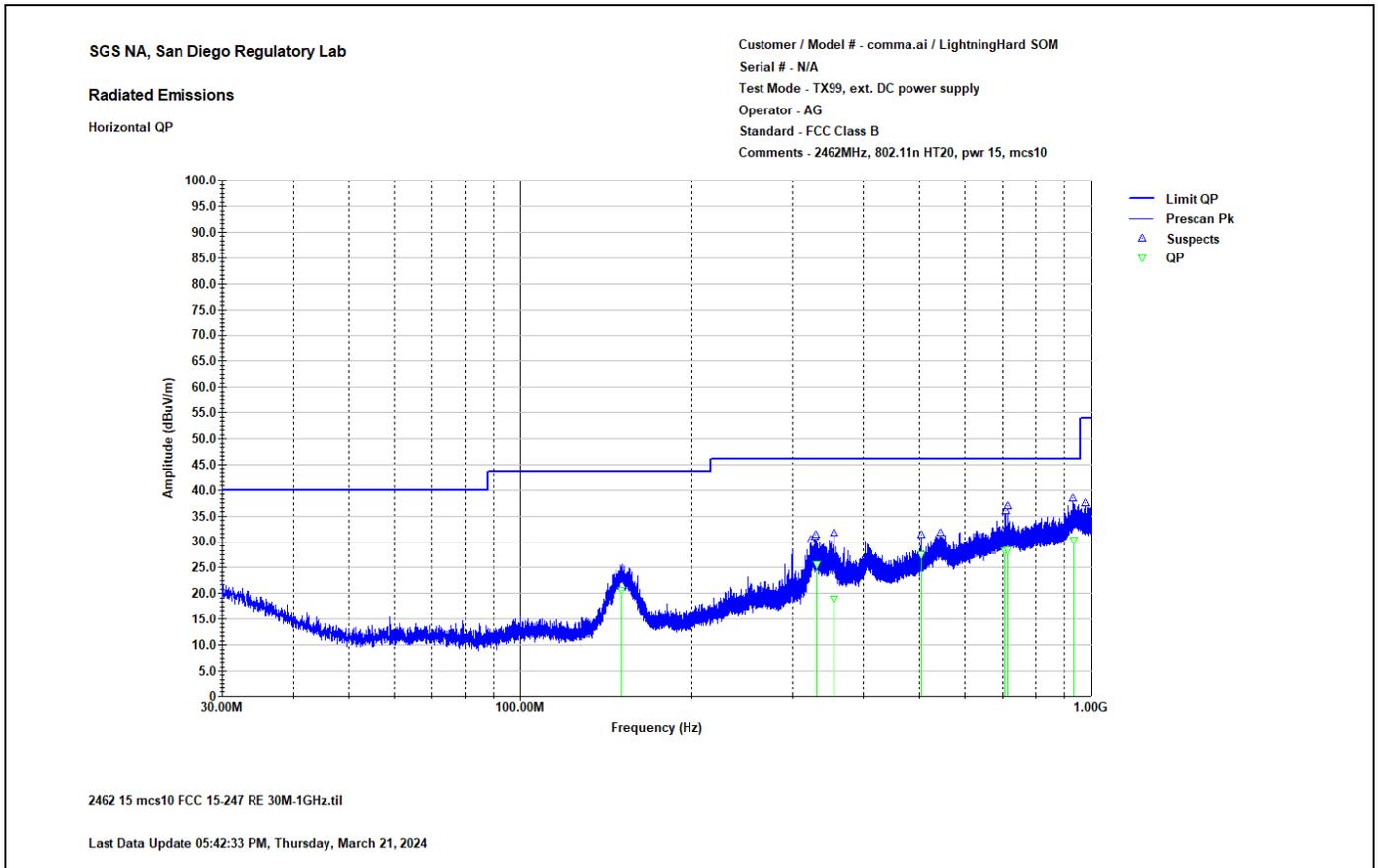
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4938.38	45.06	6.42	-28.94	74	150	85
7357.07	47.5	12.86	-26.5	74	150	220
16649.8084	52.54	33.63	-21.46	74	150	103
17185.95225	50.51	32.8	-23.49	74	150	2
17698.78735	46.36	31.94	-27.64	74	150	175

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4938.38	33.68	0	6.42	-20.32	54	150	85
7357.07	35.22	0	12.86	-18.78	54	150	220
16649.8084	40	0	33.63	-14	54	150	103
17185.95225	38.79	0	32.8	-15.21	54	150	2
17698.78735	32.97	0	31.94	-21.03	54	150	175

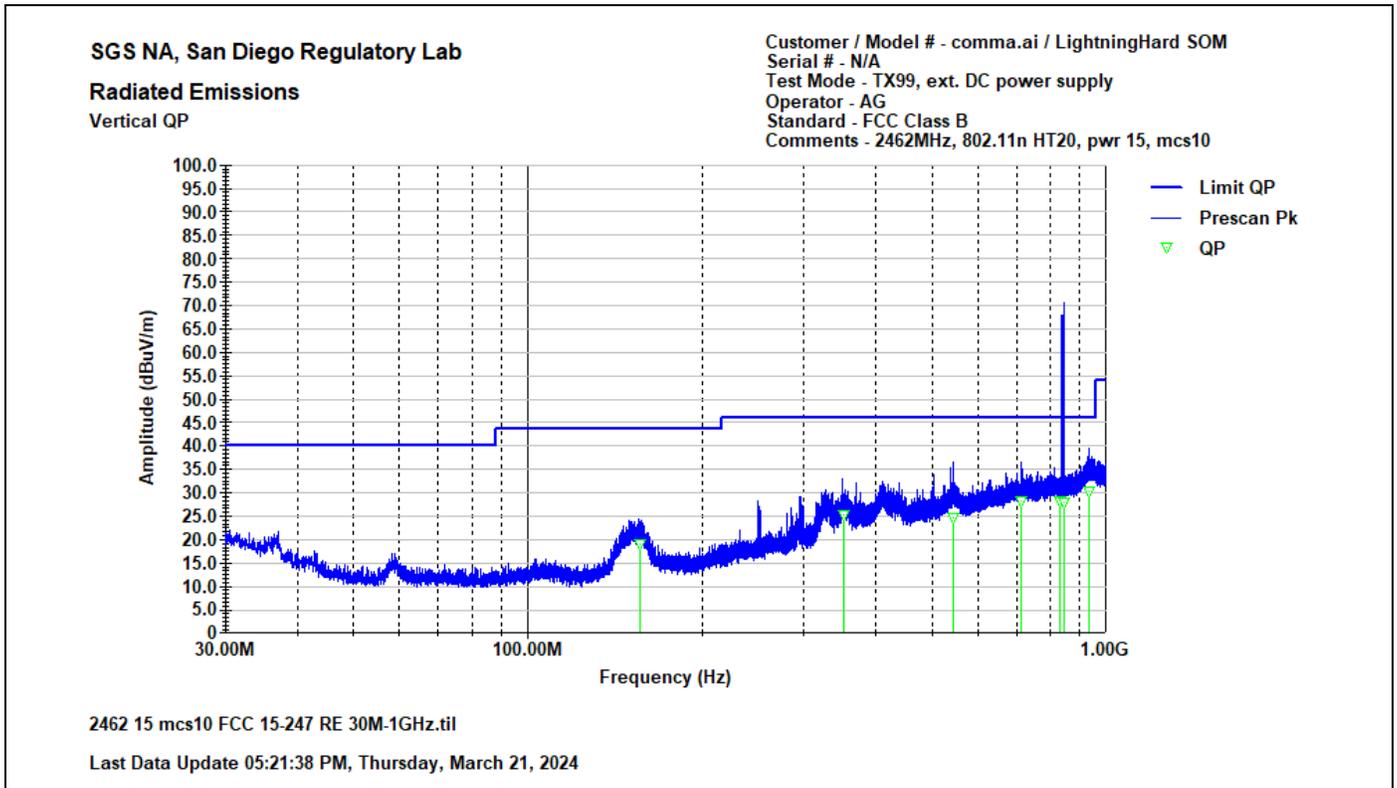
Horizontal Radiated Spurious Emissions Plot – 30 to 1000 MHz (802.11n20 HT20, 2462MHz)
Worst-Case presented



Quasi-Peak Data

Freq. (MHz)	Final QP (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
150.57072	20.62	-27.65	-22.9	43.52	208	316
330.47226	25.54	-22.62	-20.48	46.02	100	-20
354.283269	18.87	-20.75	-27.15	46.02	273	44
504.068211	27.44	-16.58	-18.58	46.02	185	45
705.937058	28.27	-11.84	-17.75	46.02	122	198
714.631266	28.41	-11.92	-17.61	46.02	306	-20
932.587912	30.31	-8.43	-15.71	46.02	352	295

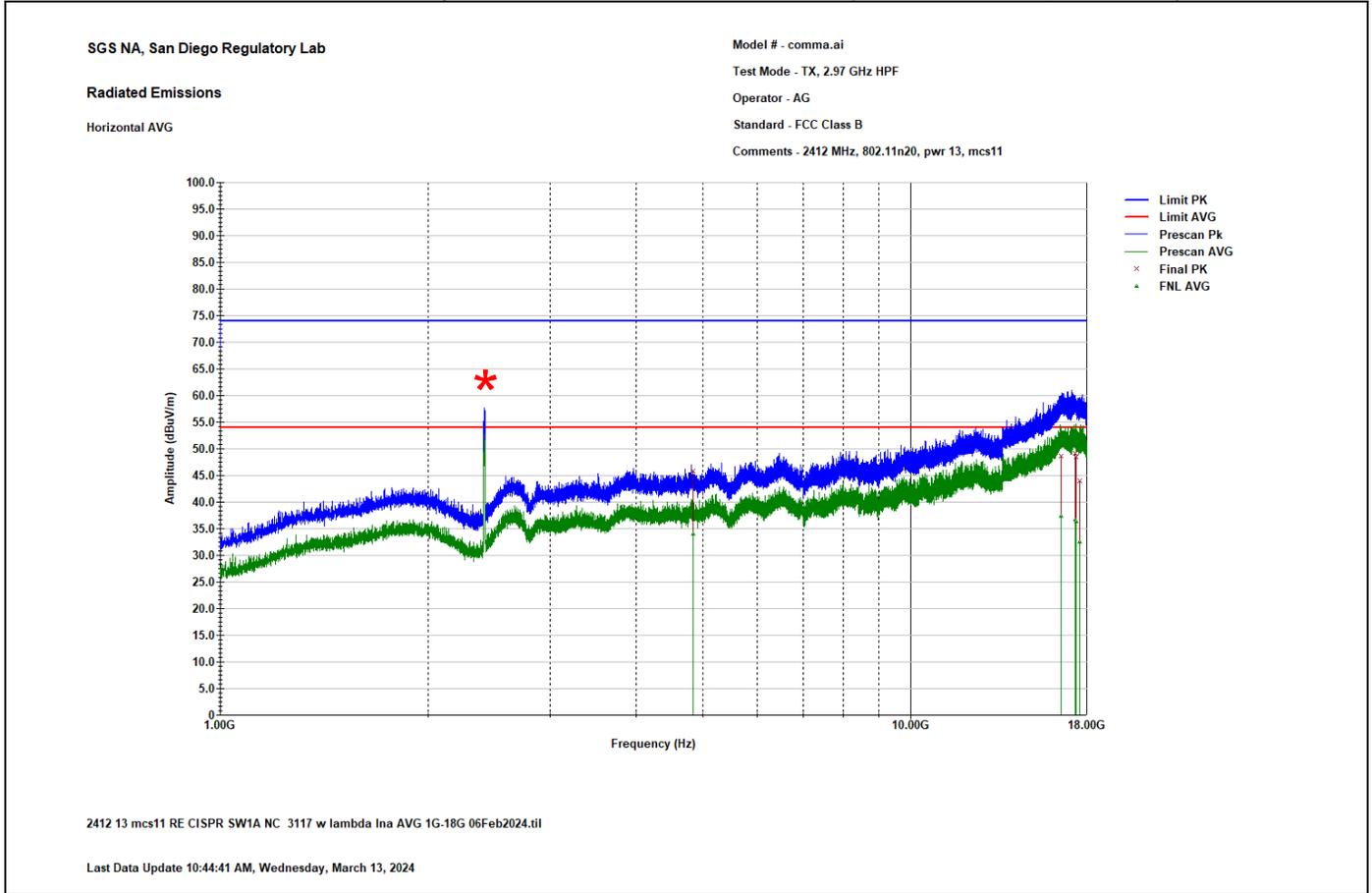
Vertical Radiated Spurious Emissions Plot – 30 to 1000 MHz (802.11n20 HT20, 2462MHz)
Worst-Case presented



Quasi-Peak Data

Freq. (MHz)	Final QP (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
156.205876	19	-26.23	-24.52	43.52	186	226
351.31	25.22	-20.94	-20.8	46.02	122	59
542.609422	24.69	-13.86	-21.33	46.02	287	306
711.793857	28.12	-11.88	-17.9	46.02	122	66
833.923651	28.18	-11.29	-17.84	46.02	380	231
846.812731	28.04	-11.1	-17.98	46.02	298	358
931.697618	30.28	-8.45	-15.74	46.02	339	230

Horizontal Radiated Spurious Emissions Plot – 1-18GHz (802.11n20 HT20, 2412MHz)



(*) marks TX signal from the EUT which are excluded from measurement

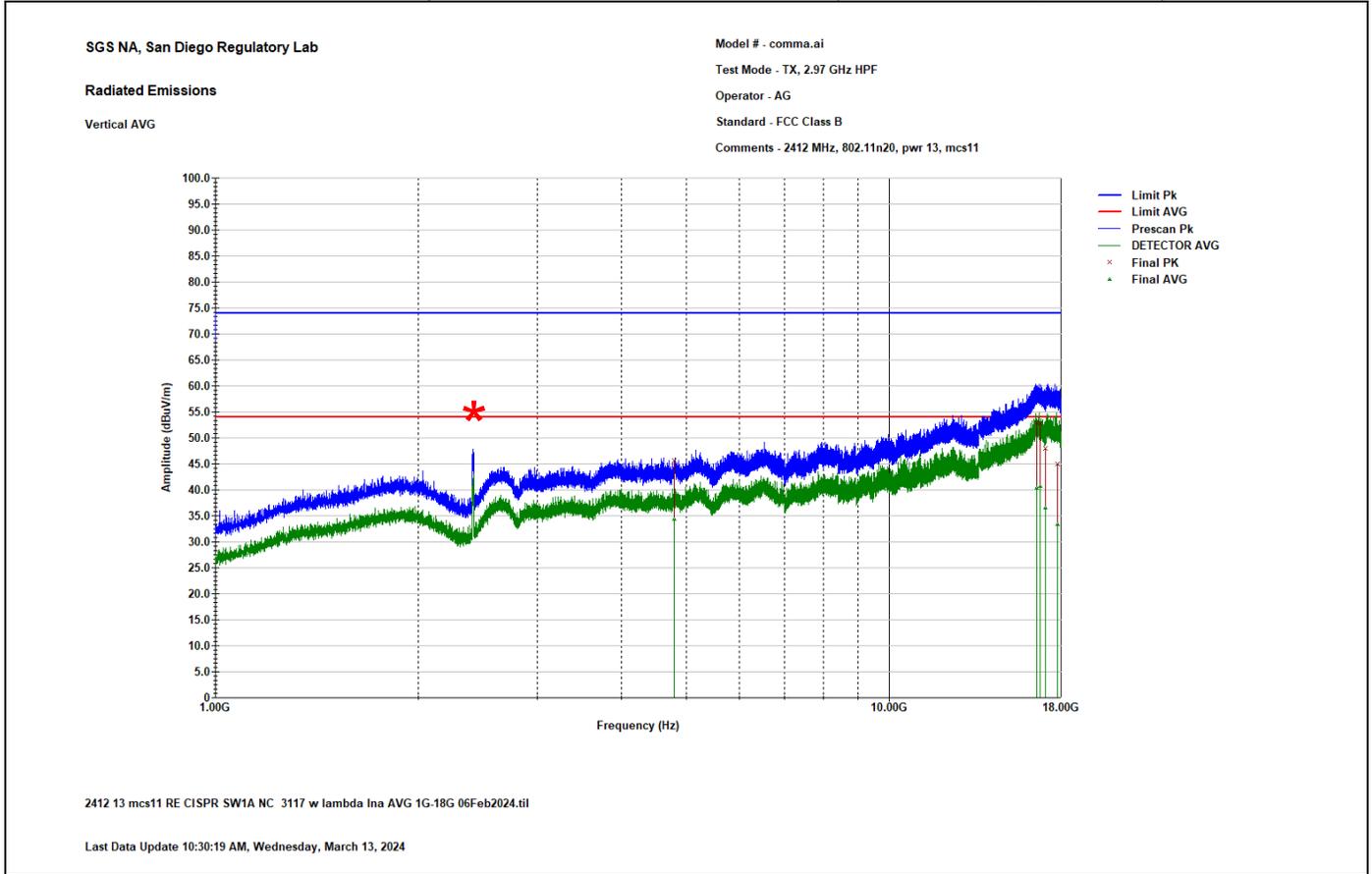
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4839.13	45.84	6.85	-28.16	74	348	91
16498.5671	48.6	33.1	-25.4	74	271	-20
17324.028	49.12	32.45	-24.88	74	150	1
17373.18515	48.51	32.33	-25.49	74	248	380
17574.7635	44.03	32.07	-29.97	74	202	175

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4839.13	34.52	0.53	6.85	-19.48	54	348	91
16498.5671	37.84	0.53	33.1	-16.16	54	271	-20
17324.028	37.13	0.53	32.45	-16.87	54	150	1
17373.18515	36.9	0.53	32.33	-17.1	54	248	380
17574.7635	32.96	0.53	32.07	-21.04	54	202	175

Vertical Radiated Spurious Emissions Plot – 1-18GHz (802.11n20 HT20, 2412MHz)



(*) marks TX signal from the EUT which are excluded from measurement

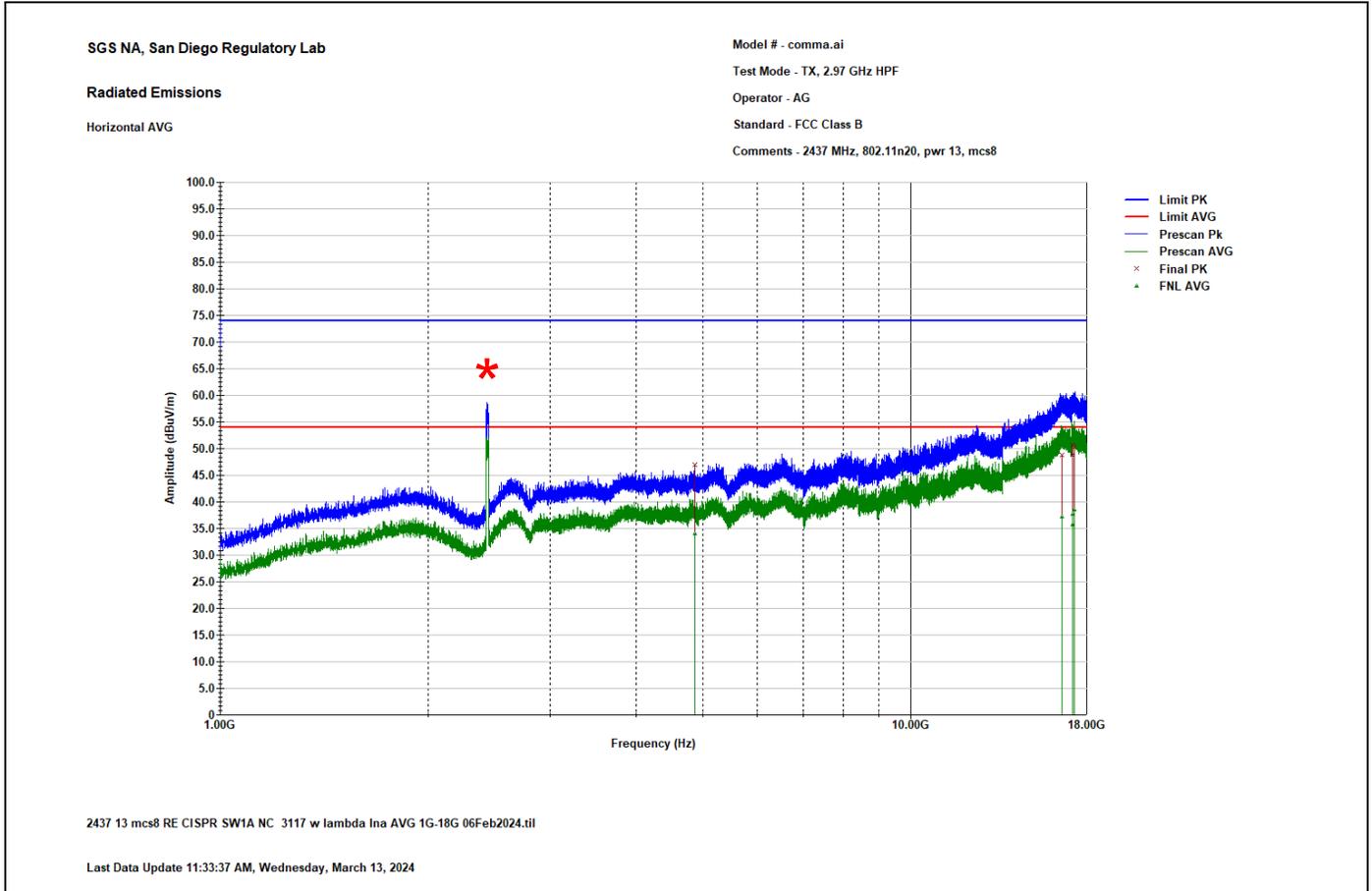
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4801.38	45.69	6.6	-28.31	74	357	322
16559.50675	52.93	33.36	-21.07	74	400	212
16761.3081	52.89	33.57	-21.11	74	150	193
17087.2896	47.97	32.81	-26.03	74	342	39
17798.3099	45	31.83	-29	74	364	328

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4801.38	34.81	0.53	6.6	-19.19	54	357	322
16559.50675	40.88	0.53	33.36	-13.12	54	400	212
16761.3081	41.18	0.53	33.57	-12.82	54	150	193
17087.2896	37.09	0.53	32.81	-16.91	54	342	39
17798.3099	33.89	0.53	31.83	-20.11	54	364	328

Horizontal Radiated Spurious Emissions Plot – 1-18GHz (802.11n20 HT20, 2437MHz)



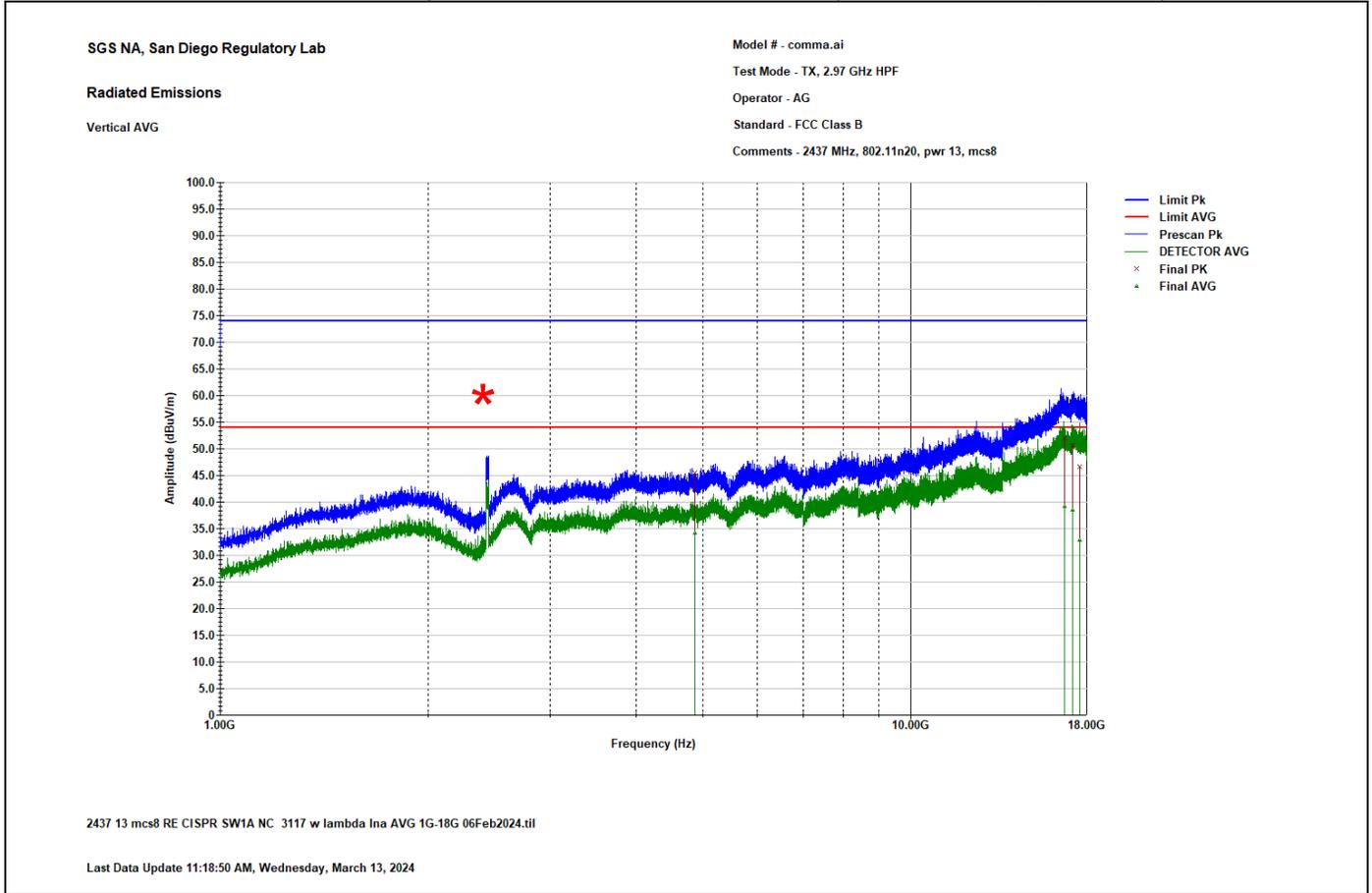
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4875.88	46.91	6.79	-27.09	74	333	351
16561.59175	48.76	33.37	-25.24	74	271	45
17149.41765	48.89	32.79	-25.11	74	331	-6
17174.8654	50.66	32.8	-23.34	74	287	169
17260.76675	50.3	32.63	-23.7	74	225	298

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4875.88	34.16	0.16	6.79	-19.84	54	333	351
16561.59175	37.24	0.16	33.37	-16.76	54	271	45
17149.41765	35.9	0.16	32.79	-18.1	54	331	-6
17174.8654	37.87	0.16	32.8	-16.13	54	287	169
17260.76675	38.7	0.16	32.63	-15.3	54	225	298

Vertical Radiated Spurious Emissions Plot – 1-18GHz (802.11n20 HT20, 2437MHz)



(*) marks TX signal from the EUT which are excluded from measurement

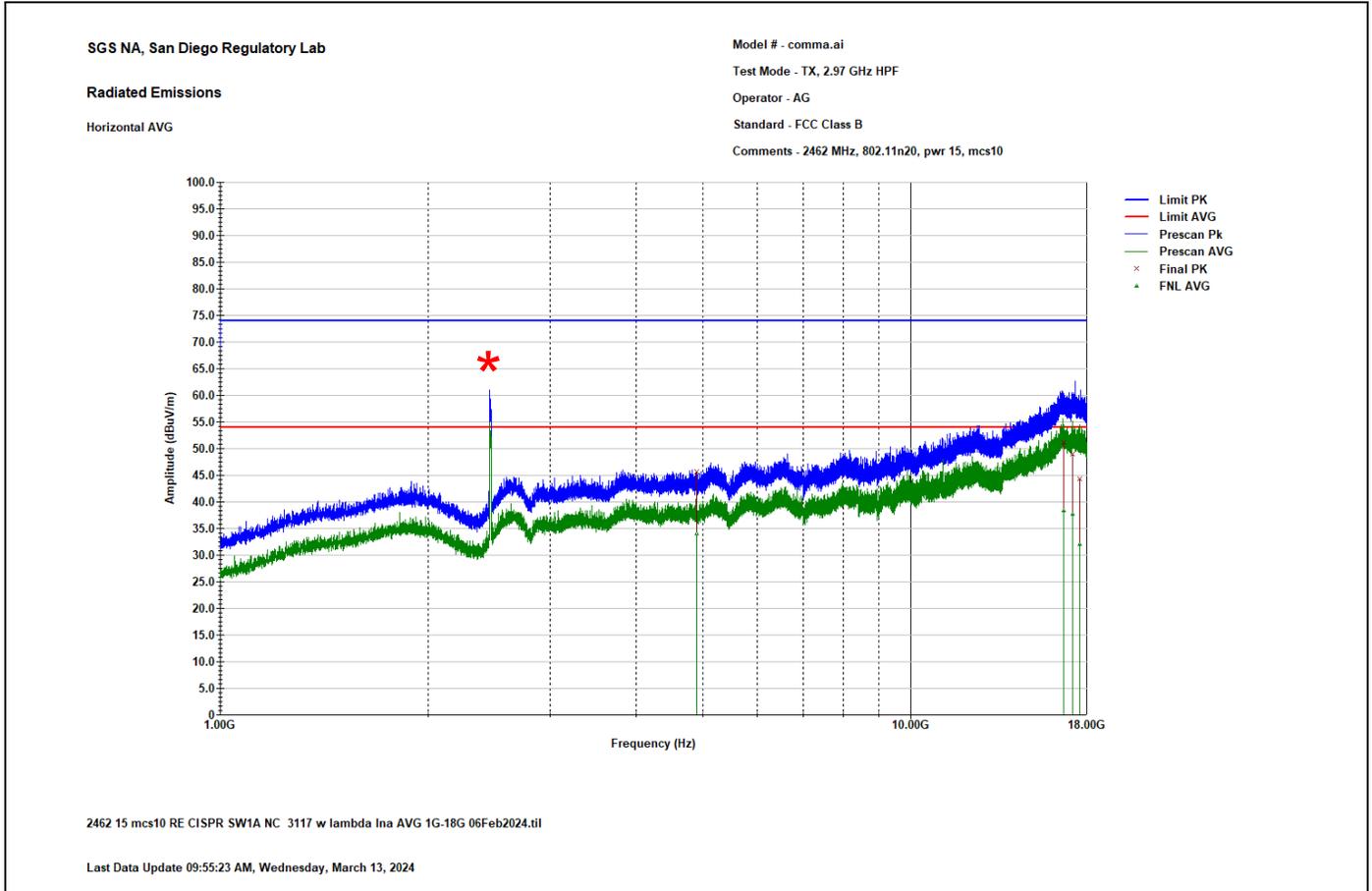
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4864.63	45.53	6.85	-28.47	74	187	110
16723.04185	51.96	33.59	-22.04	74	194	151
17161.72615	50.64	32.79	-23.36	74	400	156
17586.391	46.58	32.06	-27.42	74	242	347

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4864.63	34.26	0.16	6.85	-19.74	54	187	110
16723.04185	39.37	0.16	33.59	-14.63	54	194	151
17161.72615	38.57	0.16	32.79	-15.43	54	400	156
17586.391	32.97	0.16	32.06	-21.03	54	242	347

Horizontal Radiated Spurious Emissions Plot – 1-18GHz (802.11n20 HT20, 2462MHz)



(*) marks TX signal from the EUT which are excluded from measurement

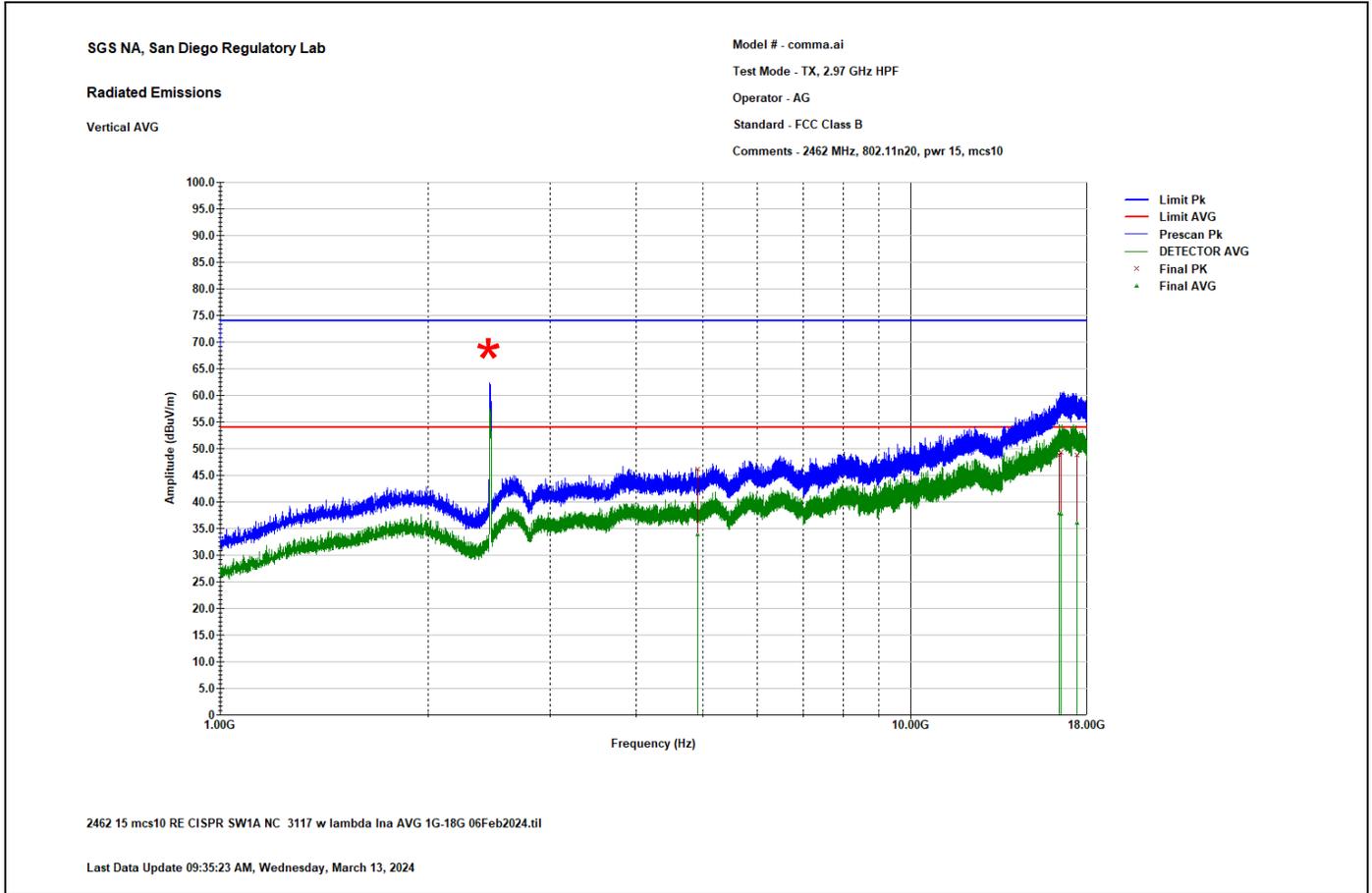
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4900.38	45.63	6.53	-28.37	74	194	97
16674.8795	51.18	33.62	-22.82	74	391	346
17174.7715	49.02	32.8	-24.98	74	209	336
17599.9495	44.39	32.06	-29.61	74	194	132

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4900.38	34.34	0.42	6.53	-19.66	54	194	97
16674.8795	38.76	0.42	33.62	-15.24	54	391	346
17174.7715	38.07	0.42	32.8	-15.93	54	209	336
17599.9495	32.36	0.42	32.06	-21.64	54	194	132

Vertical Radiated Spurious Emissions Plot – 1-18GHz (802.11n20 HT20, 2462MHz)



(*) marks TX signal from the EUT which are excluded from measurement

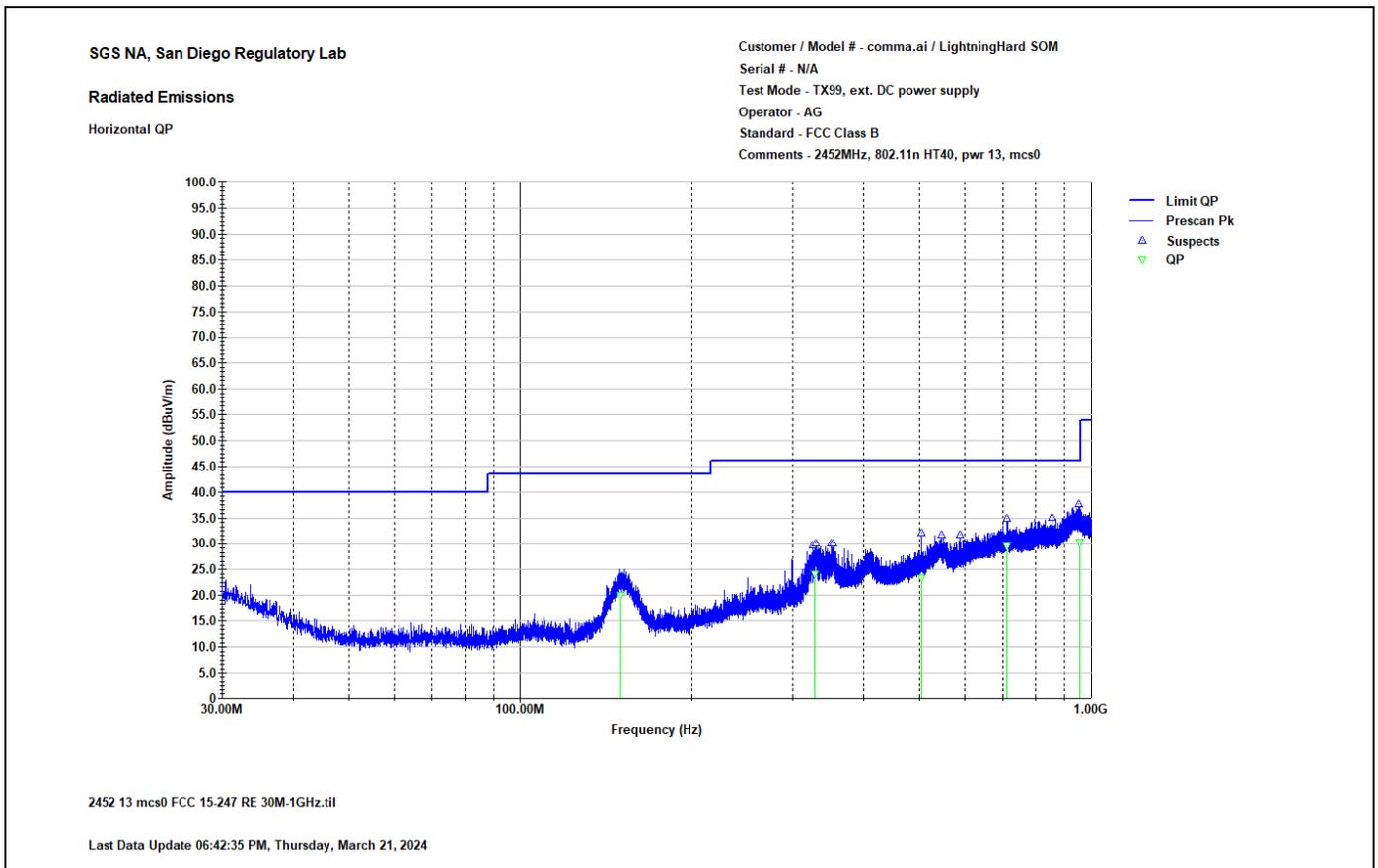
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4914.38	46.16	6.42	-27.84	74	155	231
16412.373	48.76	32.7	-25.24	74	319	268
16523.5815	49.37	33.2	-24.63	74	296	134
17411.66625	48.89	32.24	-25.11	74	210	-17

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4914.38	34.24	0.42	6.42	-19.76	54	155	231
16412.373	38.23	0.42	32.7	-15.77	54	319	268
16523.5815	38.16	0.42	33.2	-15.84	54	296	134
17411.66625	36.43	0.42	32.24	-17.57	54	210	-17

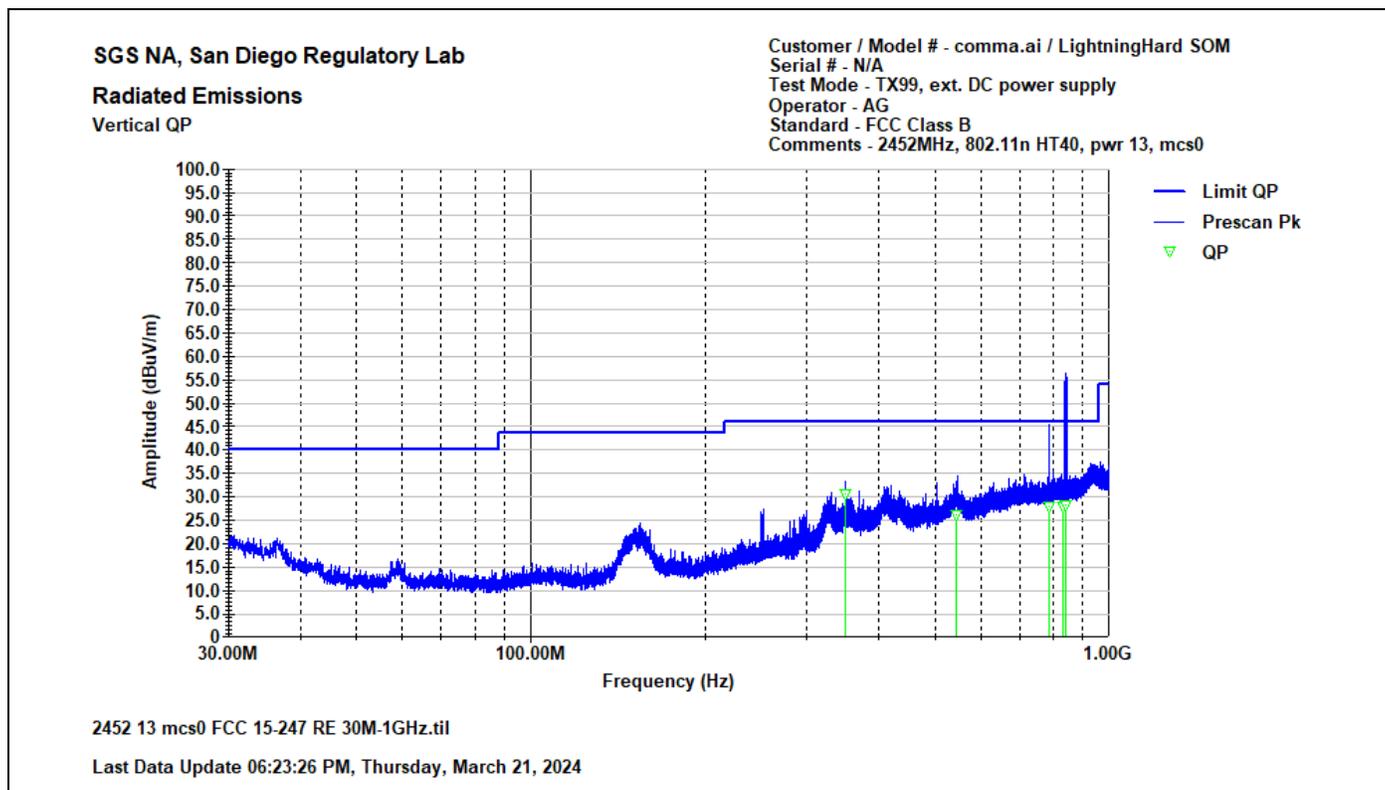
Horizontal Radiated Spurious Emissions Plot – 30 to 1000 MHz (802.11n40 HT40, 2452MHz)
Worst-Case presented



Quasi-Peak Data

Freq. (MHz)	Final QP (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
149.938222	20.01	-27.83	-23.51	43.52	216	335
328.214457	24.04	-22.7	-21.98	46.02	100	342
505.448211	23.3	-16.49	-22.72	46.02	186	246
713.408036	29.44	-11.9	-16.58	46.02	161	170
954.730974	30.25	-8.56	-15.77	46.02	376	52

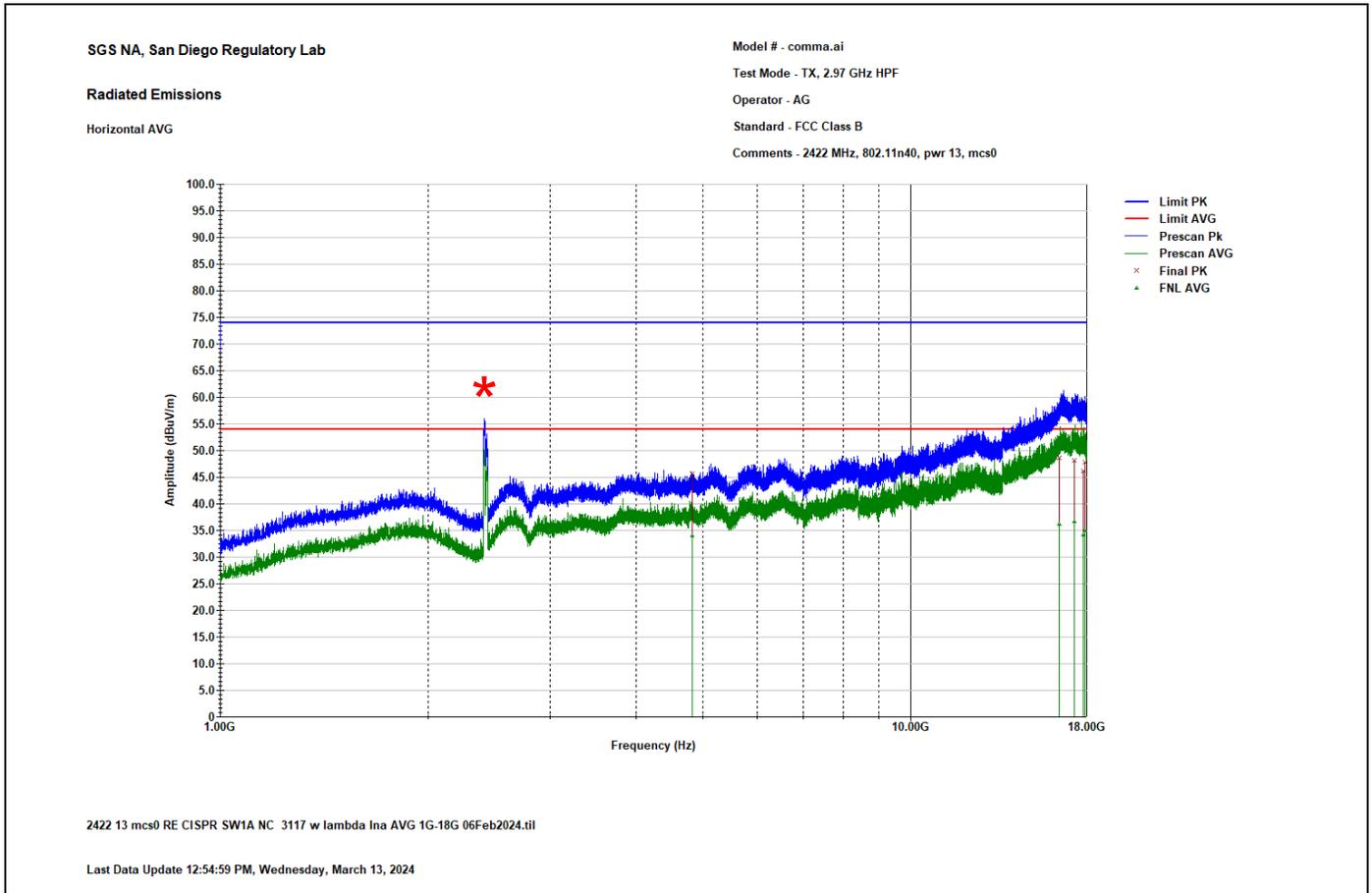
Vertical Radiated Spurious Emissions Plot – 30 to 1000 MHz (802.11n40 HT40, 2452MHz)
Worst-Case presented



Quasi-Peak Data

Freq. (MHz)	Final QP (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
349.987163	30.5	-21.02	-15.52	46.02	129	18
543.433146	26.22	-13.85	-19.8	46.02	218	340
787.645019	27.94	-11.7	-18.08	46.02	250	188
833.886026	28.07	-11.29	-17.95	46.02	106	31
839.989701	28.12	-11.2	-17.9	46.02	344	18
841.170333	28.22	-11.18	-17.8	46.02	234	37
842.469733	28.13	-11.16	-17.89	46.02	369	272

Horizontal Radiated Spurious Emissions Plot – 1-18GHz (802.11n40 HT40, 2422MHz)



(*) marks TX signal from the EUT which are excluded from measurement

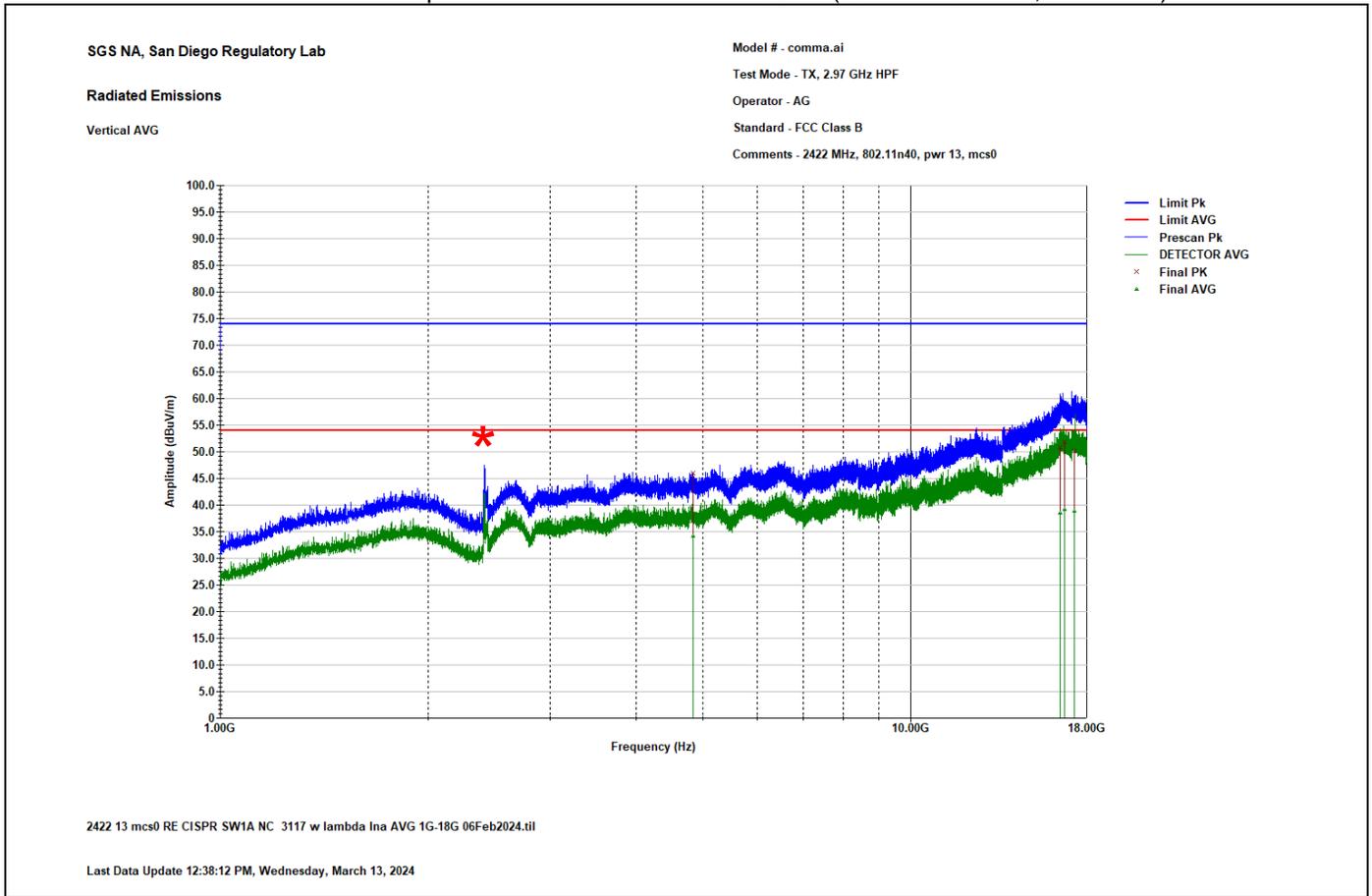
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4828.028	45.63	6.85	-28.37	74	247	173
16399.62875	48.65	32.64	-25.35	74	235	198
17262.4605	48.1	32.63	-25.9	74	302	207
17787.4912	46.09	31.84	-27.91	74	179	291
17887.25975	47.82	31.99	-26.18	74	150	138

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4828.028	34.22	0.23	6.85	-19.78	54	247	173
16399.62875	36.47	0.23	32.64	-17.53	54	235	198
17262.4605	36.9	0.23	32.63	-17.1	54	302	207
17787.4912	34.34	0.23	31.84	-19.66	54	179	291
17887.25975	35.22	0.23	31.99	-18.78	54	150	138

Vertical Radiated Spurious Emissions Plot – 1-18GHz (802.11n40 HT40, 2422MHz)



(*) marks TX signal from the EUT which are excluded from measurement

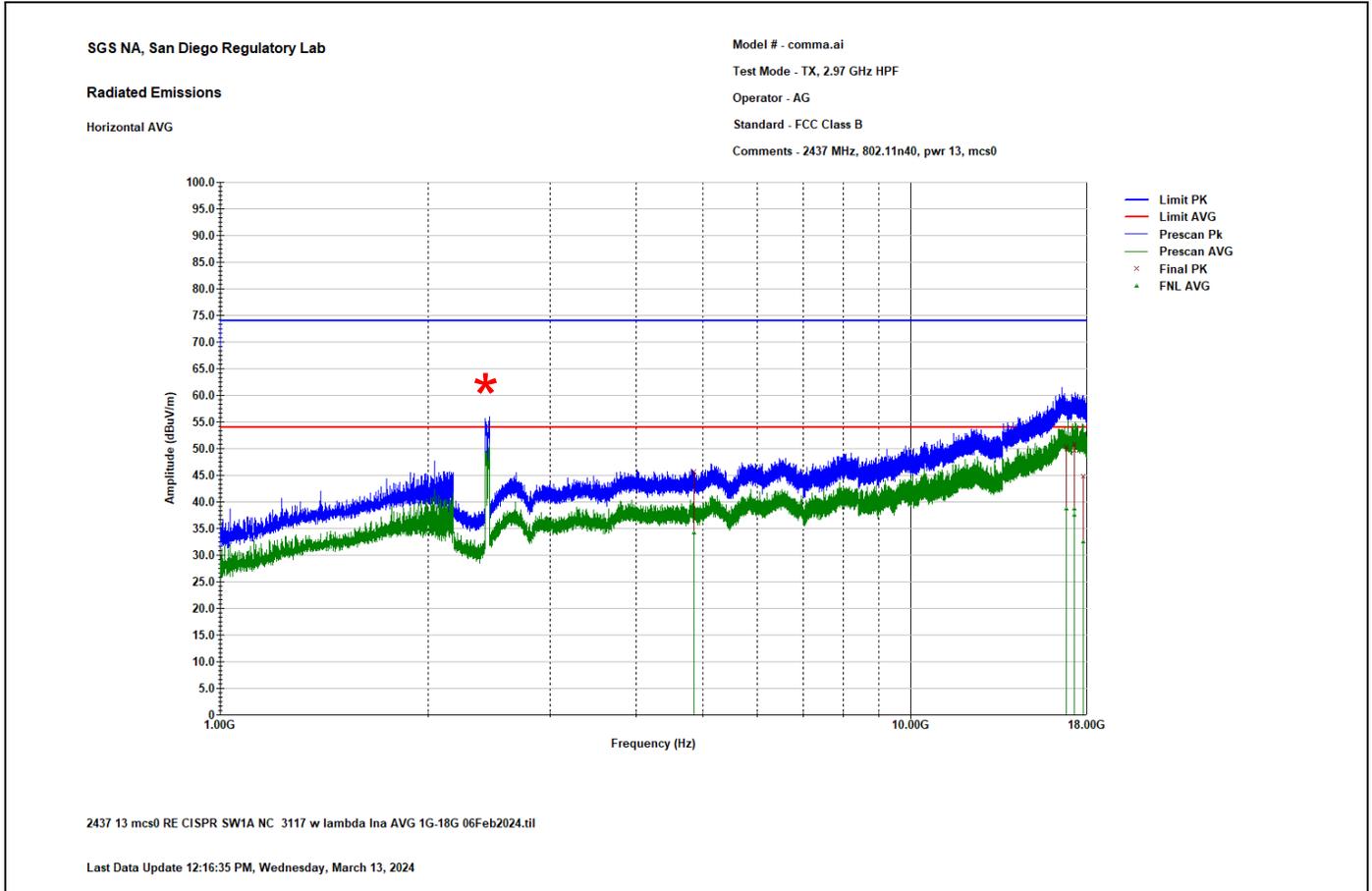
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4839.78	46.01	6.85	-27.99	74	349	332
16474.533	50.84	32.99	-23.16	74	233	219
16724.79185	51.78	33.59	-22.22	74	195	306
17261.53065	50.2	32.63	-23.8	74	187	-11

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4839.78	34.32	0.23	6.85	-19.68	54	349	332
16474.533	38.77	0.23	32.99	-15.23	54	233	219
16724.79185	39.4	0.23	33.59	-14.6	54	195	306
17261.53065	39.13	0.23	32.63	-14.87	54	187	-11

Horizontal Radiated Spurious Emissions Plot – 1-18GHz (802.11n40 HT40, 2437MHz)



(*) marks TX signal from the EUT which are excluded from measurement

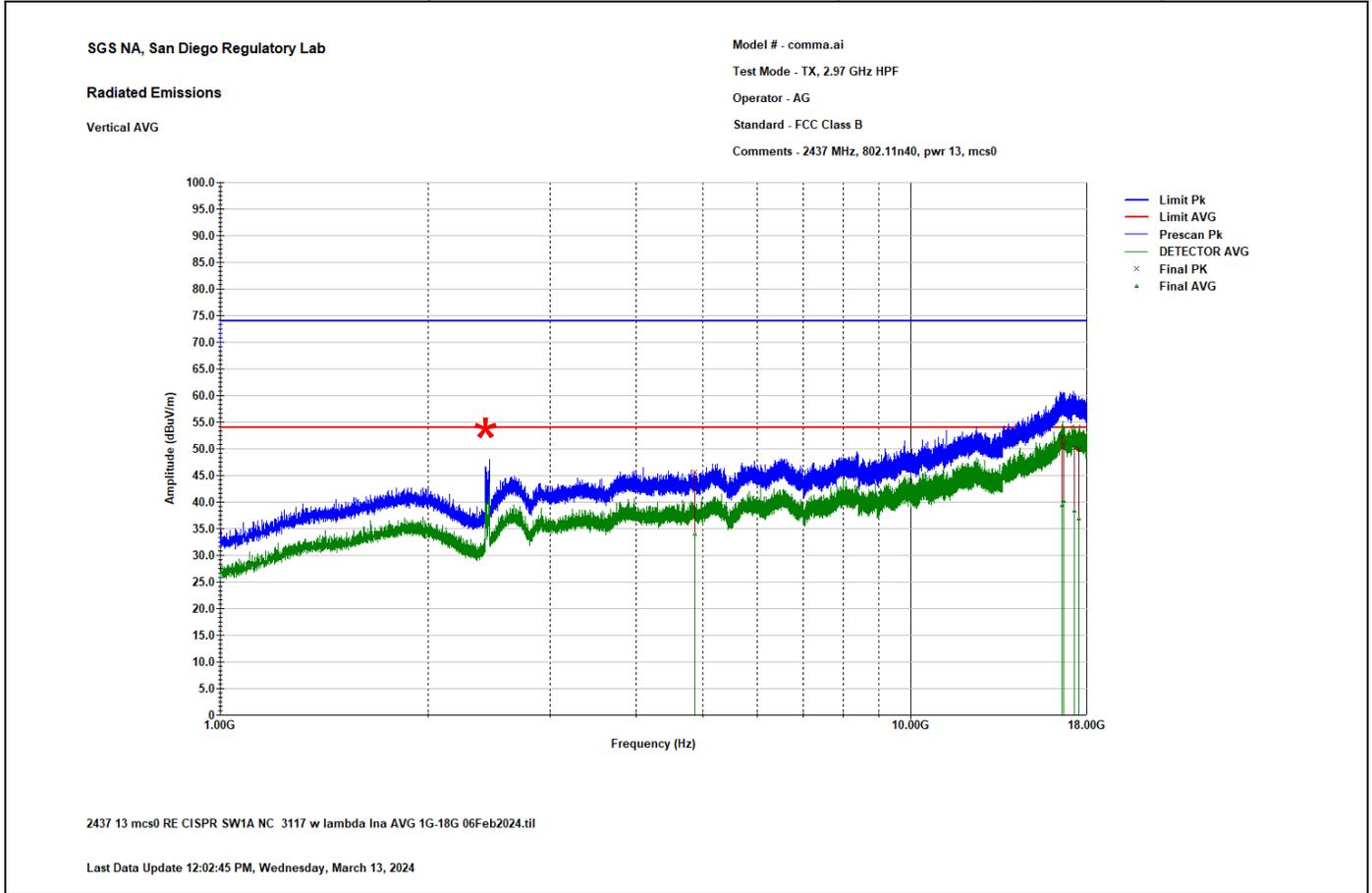
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4862.88	45.64	6.85	-28.36	74	279	20
16811.98775	50.31	33.53	-23.69	74	340	31
17260.30875	50.9	32.63	-23.1	74	383	-2
17274.9084	49.71	32.59	-24.29	74	155	16
17811.7666	44.89	31.85	-29.11	74	326	313

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4862.88	34.41	0.23	6.85	-19.59	54	279	20
16811.98775	38.94	0.23	33.53	-15.06	54	340	31
17260.30875	38.82	0.23	32.63	-15.18	54	383	-2
17274.9084	37.73	0.23	32.59	-16.27	54	155	16
17811.7666	32.78	0.23	31.85	-21.22	54	326	313

Vertical Radiated Spurious Emissions Plot – 1-18GHz (802.11n40 HT40, 2437MHz)



(*) marks TX signal from the EUT which are excluded from measurement

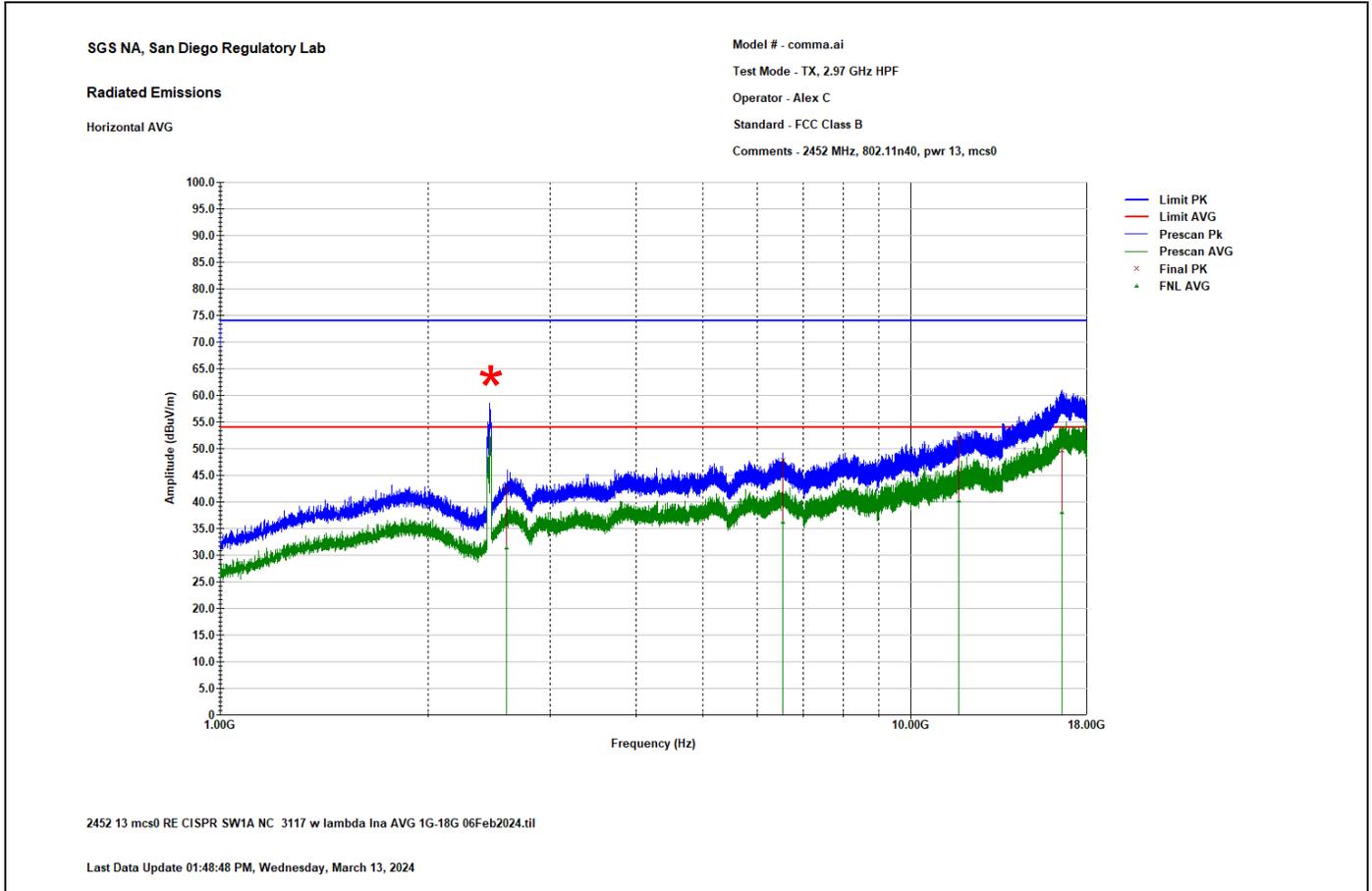
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4866.13	45.73	6.85	-28.27	74	296	220
16586.8024	52.32	33.48	-21.68	74	287	302
16672.67515	51.23	33.62	-22.77	74	210	13
17286.6684	50.17	32.55	-23.83	74	365	178
17523.86425	49.97	32.1	-24.03	74	303	253

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4866.13	34.15	0.23	6.85	-19.85	54	296	220
16586.8024	39.63	0.23	33.48	-14.37	54	287	302
16672.67515	40.34	0.23	33.62	-13.66	54	210	13
17286.6684	38.5	0.23	32.55	-15.5	54	365	178
17523.86425	37.07	0.23	32.1	-16.93	54	303	253

Horizontal Radiated Spurious Emissions Plot – 1-18GHz (802.11n40 HT40, 2452MHz)



(*) marks TX signal from the EUT which are excluded from measurement

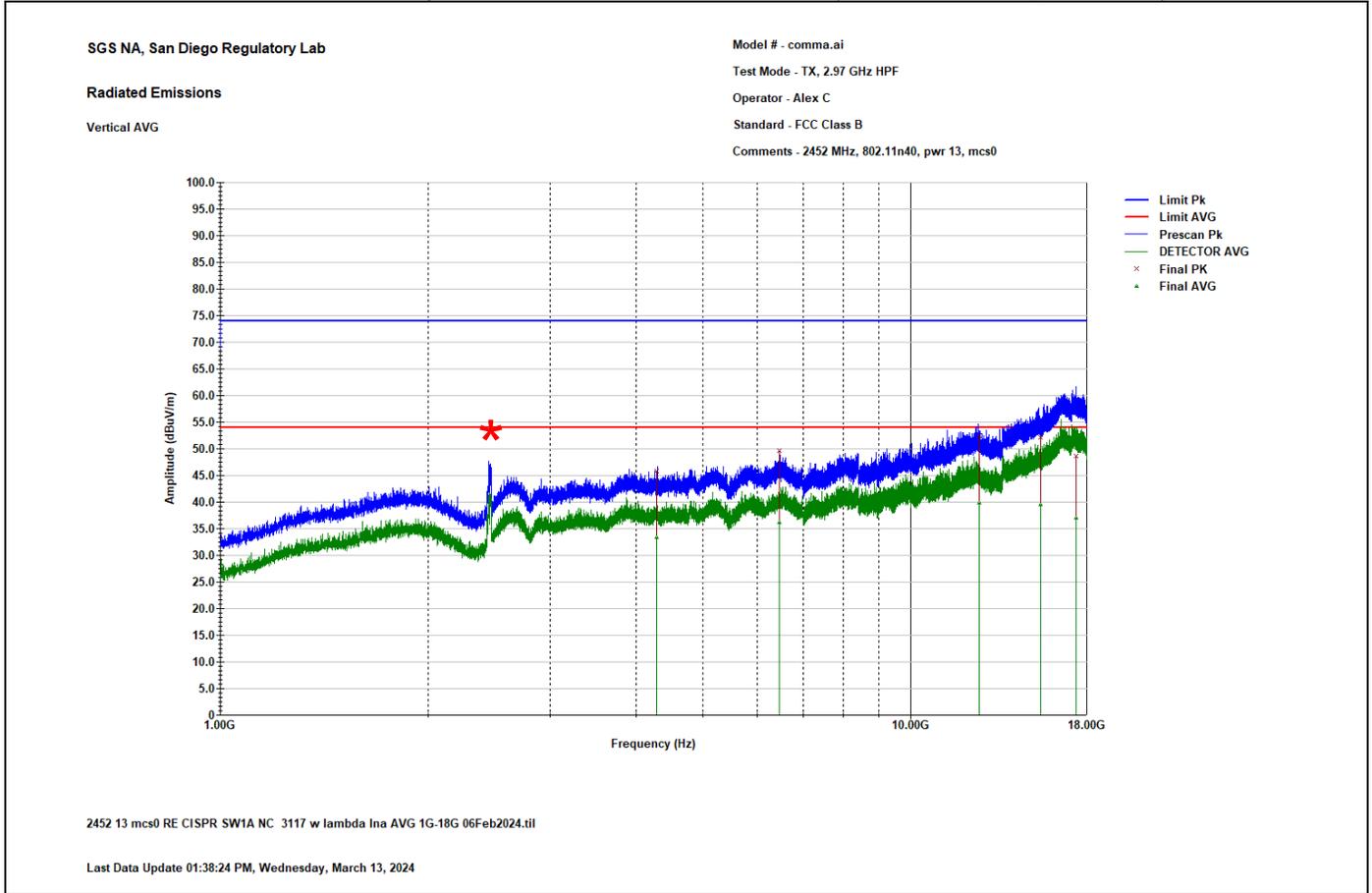
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2601.23875	42.79	0.63	-31.21	74	381	41
6540.005375	47.78	11.07	-26.22	74	150	169
11732.72885	51.78	24.69	-22.22	74	347	217
16574.90785	49.73	33.43	-24.27	74	163	184

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2601.23875	31.57	0.23	0.63	-22.43	54	381	41
6540.005375	36.38	0.23	11.07	-17.62	54	150	169
11732.72885	40.38	0.23	24.69	-13.62	54	347	217
16574.90785	38.26	0.23	33.43	-15.74	54	163	184

Vertical Radiated Spurious Emissions Plot – 1-18GHz (802.11n40 HT40, 2452MHz)



(*) marks TX signal from the EUT which are excluded from measurement

Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4291.01	45.77	5.36	-28.23	74	179	268
6462.84275	49.73	10.82	-24.27	74	287	193
12585.5615	52.51	26.08	-21.49	74	163	216
15424.68025	52.08	29.5	-21.92	74	279	175
17374.5781	48.6	32.32	-25.4	74	217	17

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
4291.01	33.6	0.23	5.36	-20.4	54	179	268
6462.84275	36.4	0.23	10.82	-17.6	54	287	193
12585.5615	40.05	0.23	26.08	-13.95	54	163	216
15424.68025	39.79	0.23	29.5	-14.21	54	279	175
17374.5781	37.2	0.23	32.32	-16.8	54	217	17

7 Radiated Band Edge Emissions in Restricted Frequency Bands

7.1 Test Result

Test Description	Test Specification		Test Result
Radiated Band Edge Emissions in Restricted Frequency Bands	15.205 / 15.209	RSS-GEN S8.9 / S8.10	Compliant

7.2 Test Method

Measurements were made using the radiated methods defined in ANSI C63.10, Section 11.12.2.

7.3 Test Site

3m Absorber Lined Shielded Enclosure (ALSE), San Diego, CA

Environmental Conditions

Temperature: 18.3 – 21.7 °C

Relative Humidity: 50 - 55 %

7.4 Test Equipment

Test Dates: March 25, 2024

Tester: Alex Chang

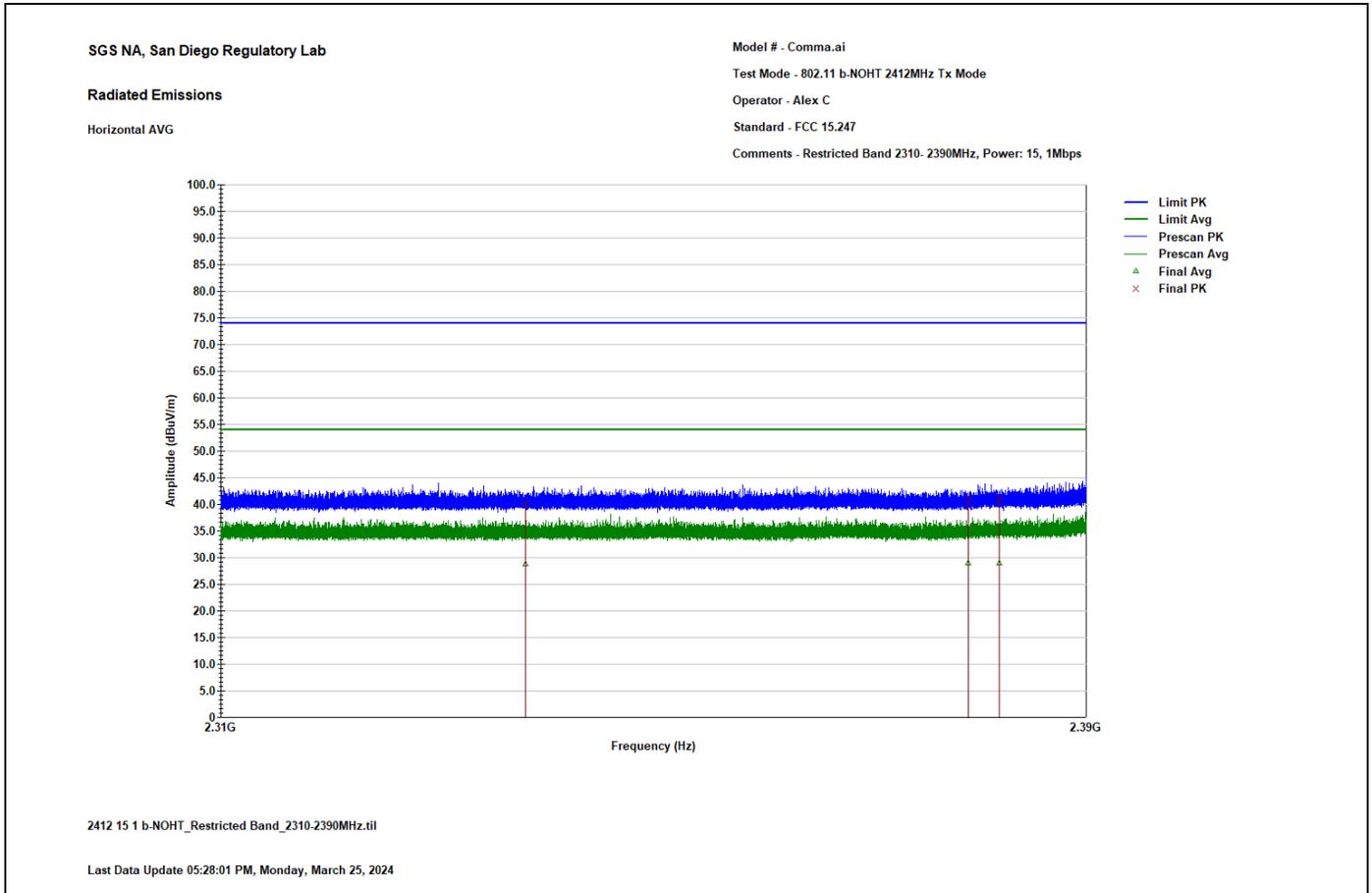
Asset No.	Type of Equipment	Model	Serial No.	Manufacturer	Cal Date	Cal Due Date
Radiated Emission < 1 GHz						
2017	EMI Receiver	N9038B	MY59050132	Keysight	10/24/2023	10/24/2024
2034	Biconilog Antenna 26M-6000MHz	3142E	00243882	ETS Lindgren	06/29/2023	06/29/2025
-	Test Software	TILE!	V7.8.1.7	ETS Lindgren	N/A	-
Radiated Emission > 1 GHz						
2017	EMI Receiver	N9038B	MY59050132	Keysight	10/24/2023	10/24/2024
2026	RF Microwave Systems Amplifier	RAMP00M45GA	00089204010	RF-Lambda	NCR	NCR
2033	DRG Horn Antenna 1G-18GHz	3117	00251986	ETS Lindgren	07/27/2022	07/27/2024
-	Test Software	TILE!	V7.8.1.7	ETS Lindgren	N/A	-
Miscellaneous						
2036	Temp/Humidity Data Logger	GSP-8	CMA231100002	Elitech	05/24/2023	

7.5 Test Setup Photographs

Test setup photographs are located in a separate exhibit.

7.6 Test Data – Restricted Band Edges

Horizontal 802.11b NOHT Low Channel (2412MHz)



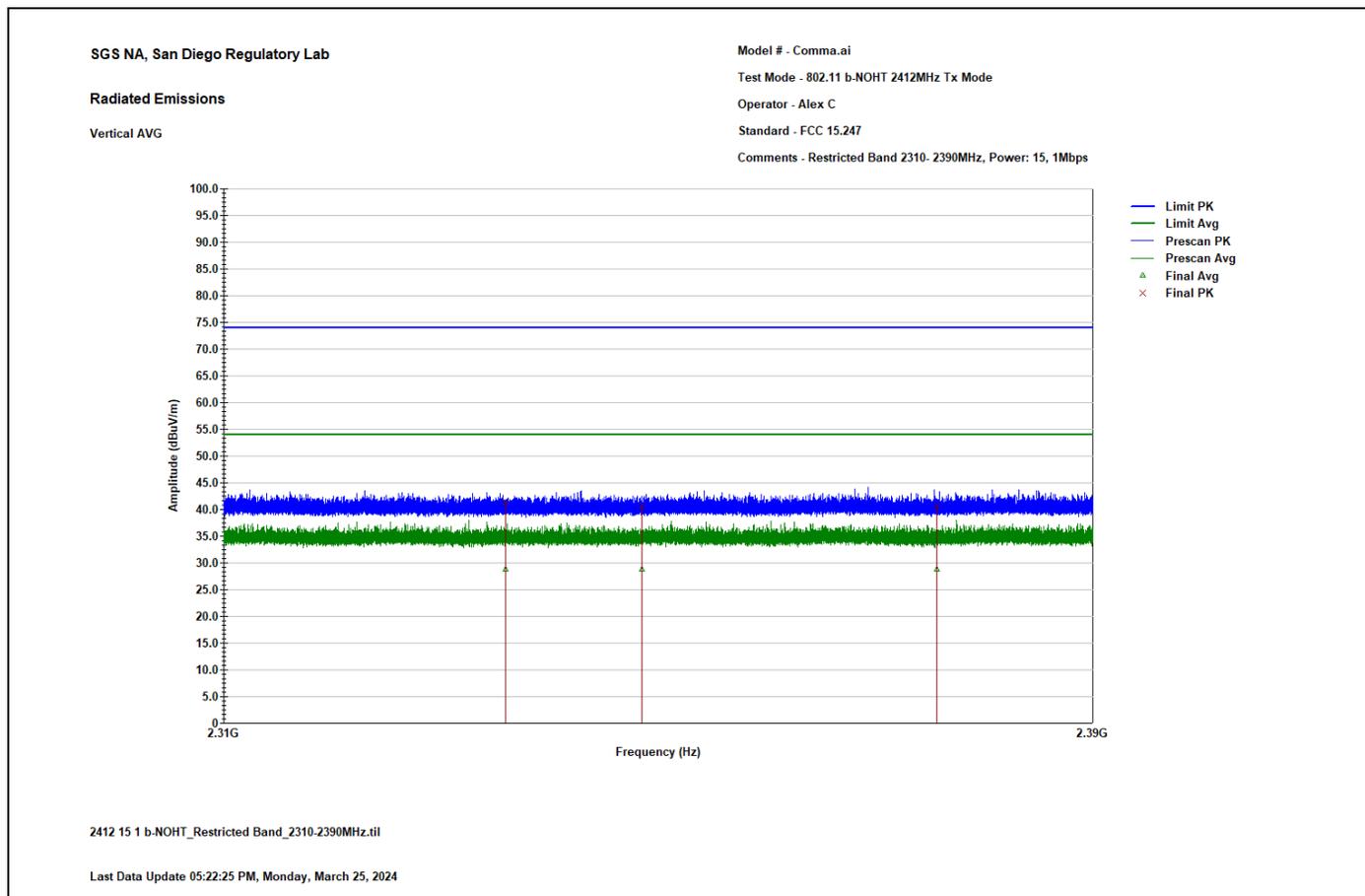
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2337.82867	40.31	-0.86	-33.69	74	241	187
2378.89636	40.96	-0.66	-33.04	74	250	366
2381.83954	41.12	-0.64	-32.88	74	230	94

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2337.82867	28.81	0	-0.86	-25.19	54	241	187
2378.89636	28.92	0	-0.66	-25.08	54	250	366
2381.83954	28.99	0	-0.64	-25.01	54	230	94

Vertical 802.11b NOHT Low Channel (2412MHz)



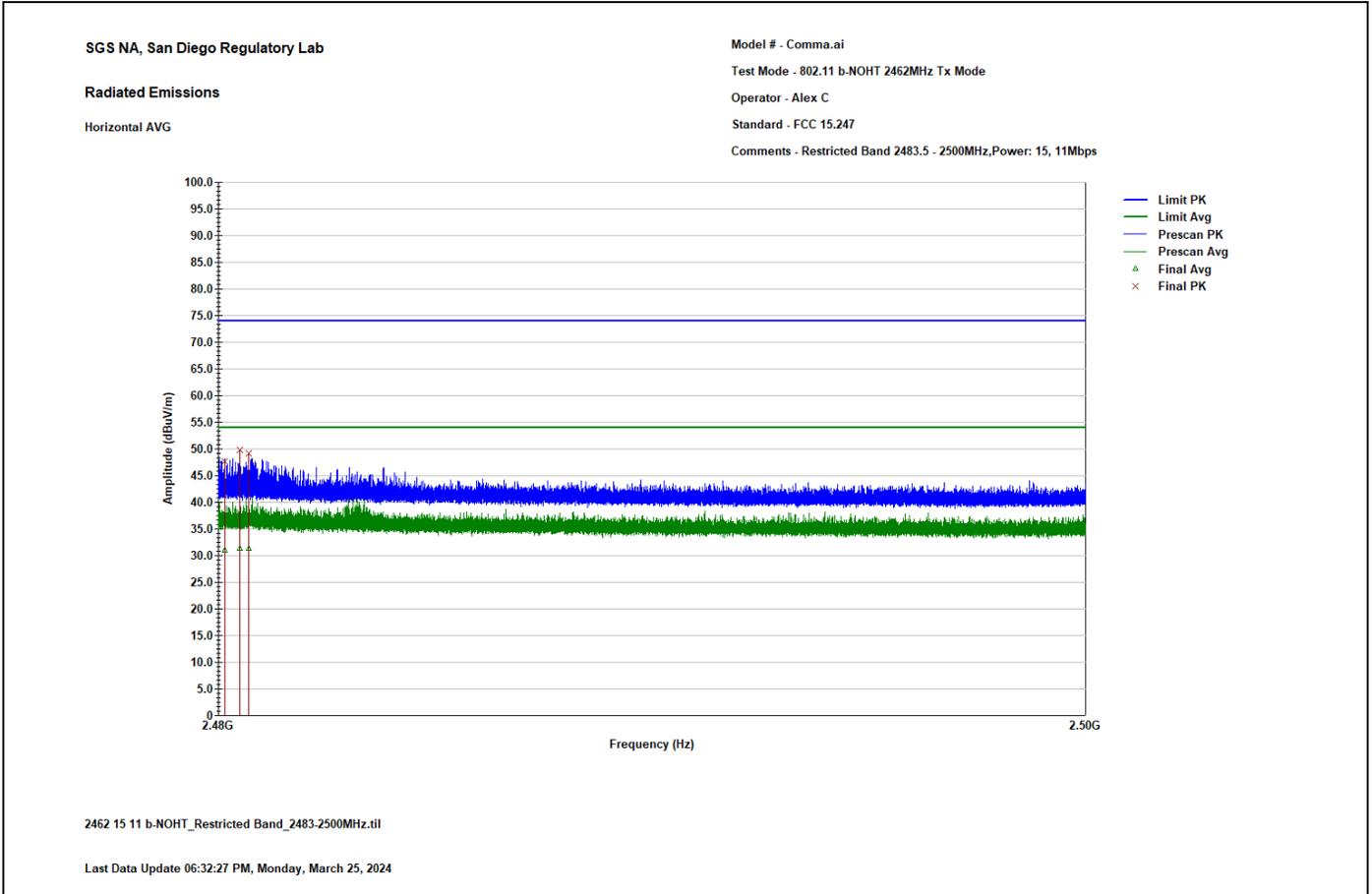
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2335.66884	41.28	-0.87	-32.72	74	211	91
2348.1504	40.7	-0.78	-33.3	74	202	151
2375.4271	40.71	-0.66	-33.29	74	200	254

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2335.66884	28.79	0	-0.87	-25.21	54	211	91
2348.1504	28.81	0	-0.78	-25.19	54	202	151
2375.4271	28.77	0	-0.66	-25.23	54	200	254

Horizontal 802.11b NOHT High Channel (2462MHz)



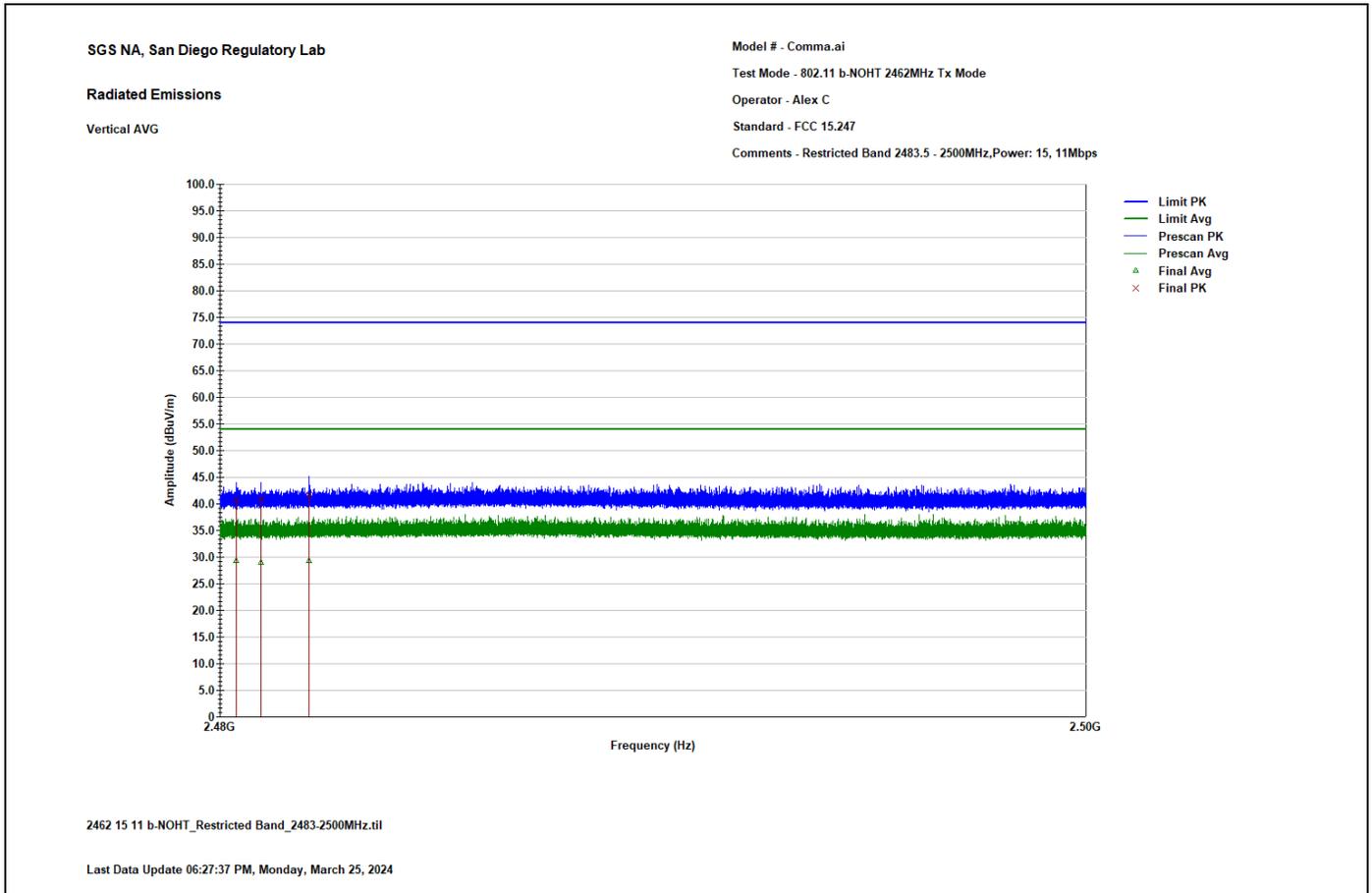
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.616	47.74	-0.11	-26.26	74	185	-6
2483.903	49.85	-0.11	-24.15	74	190	338
2484.073	49.08	-0.11	-24.92	74	194	-20

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.616	31.03	0.11	-0.11	-22.97	54	185	-6
2483.903	31.49	0.11	-0.11	-22.51	54	190	338
2484.073	31.42	0.11	-0.11	-22.58	54	194	-20

Vertical 802.11b NOHT High Channel (2462MHz)



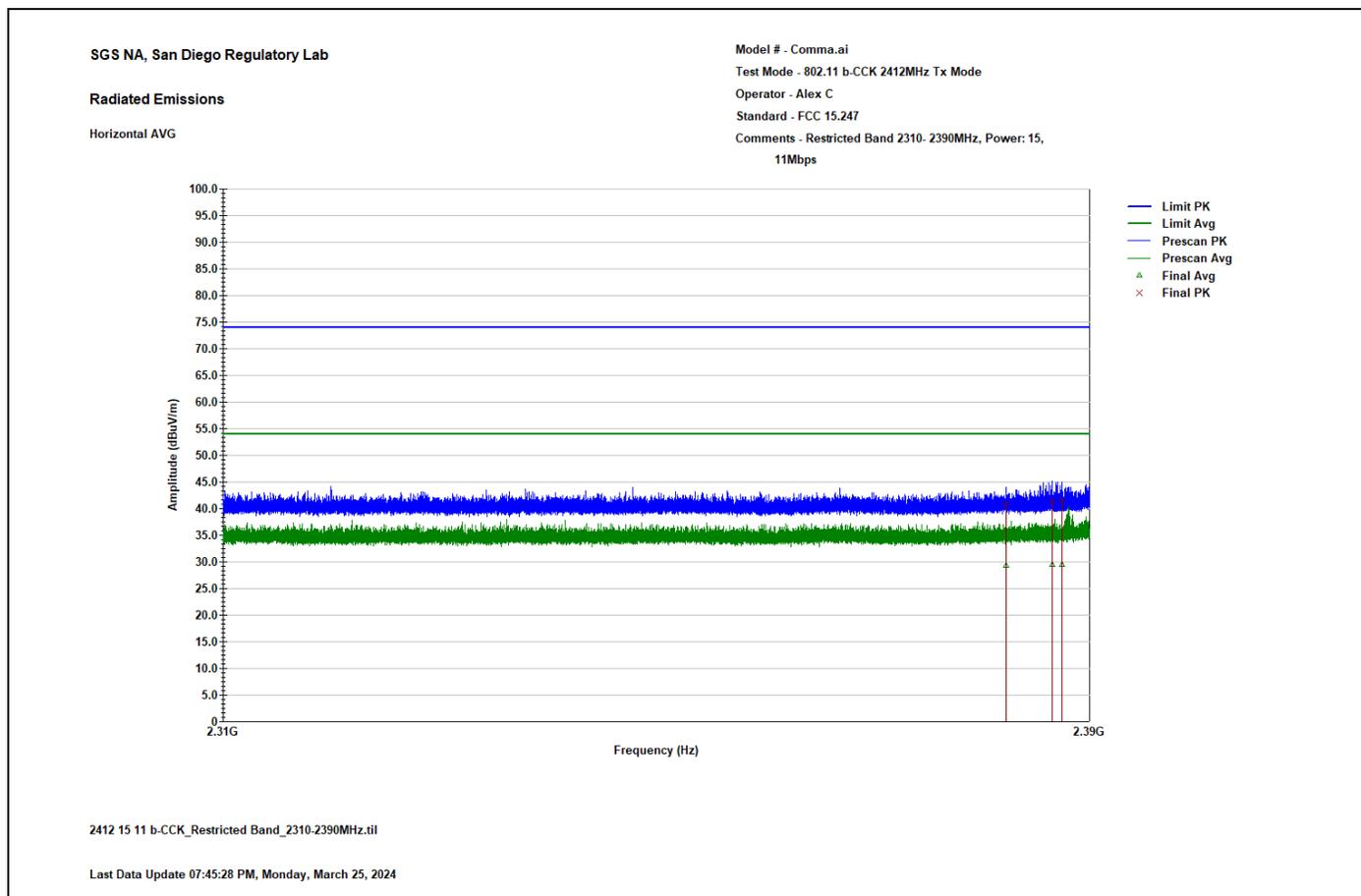
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.80001	40.8	-0.11	-33.2	74	185	287
2484.27001	40.99	-0.11	-33.01	74	190	16
2485.19401	41.61	-0.1	-32.39	74	194	261

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.80001	29.38	0.11	-0.11	-24.62	54	185	287
2484.27001	29.14	0.11	-0.11	-24.86	54	190	16
2485.19401	29.39	0.11	-0.1	-24.61	54	194	261

Horizontal 802.11b CCK Low Channel (2412MHz)



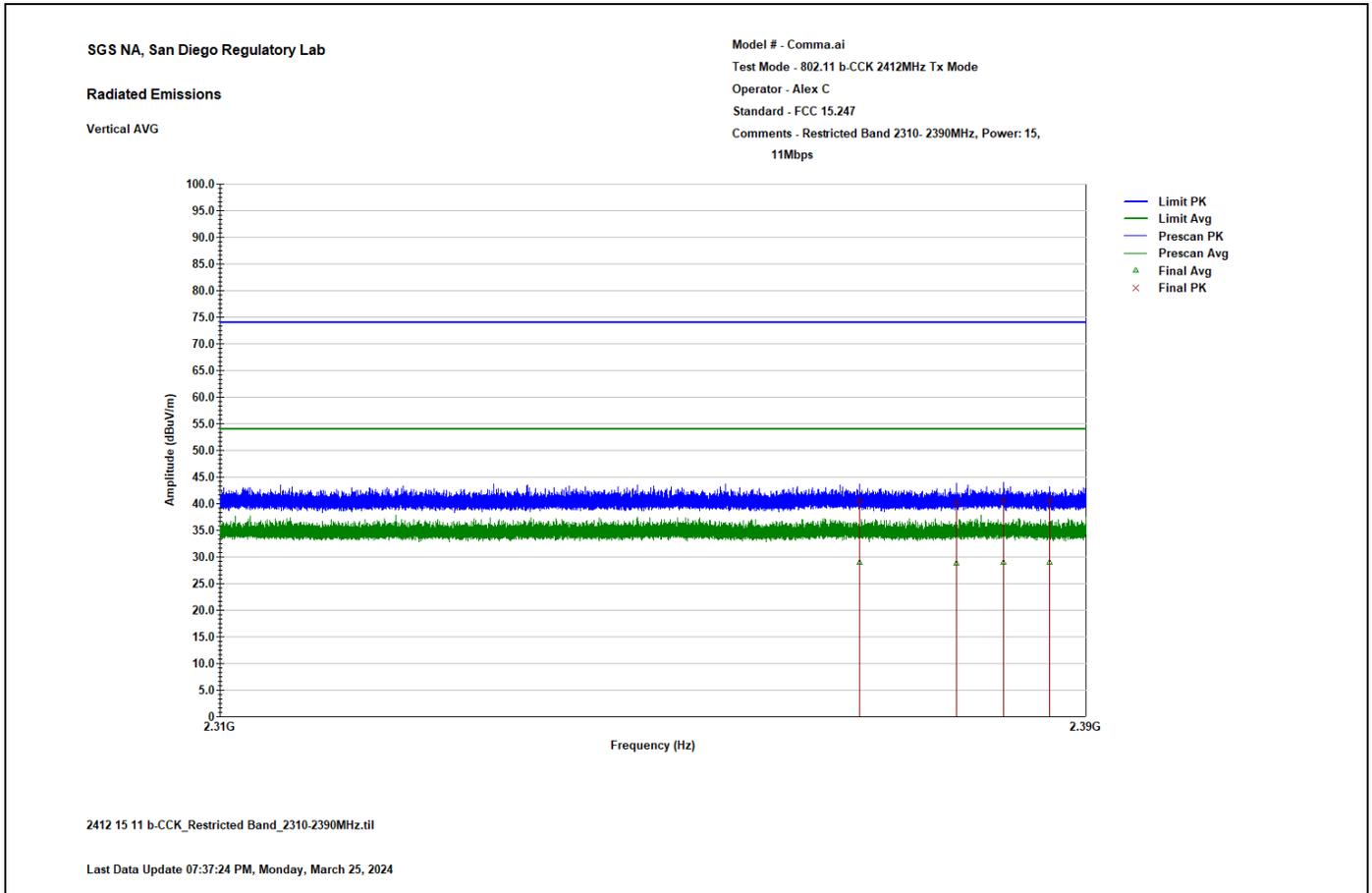
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2382.156	41	-0.64	-33	74	158	358
2386.534	41.5	-0.61	-32.5	74	175	373
2387.41801	41.62	-0.61	-32.38	74	164	33

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2382.156	29.38	0.11	-0.64	-24.62	54	158	358
2386.534	29.67	0.11	-0.61	-24.33	54	175	373
2387.41801	29.57	0.11	-0.61	-24.43	54	164	33

Vertical 802.11b CCK Low Channel (2412MHz)



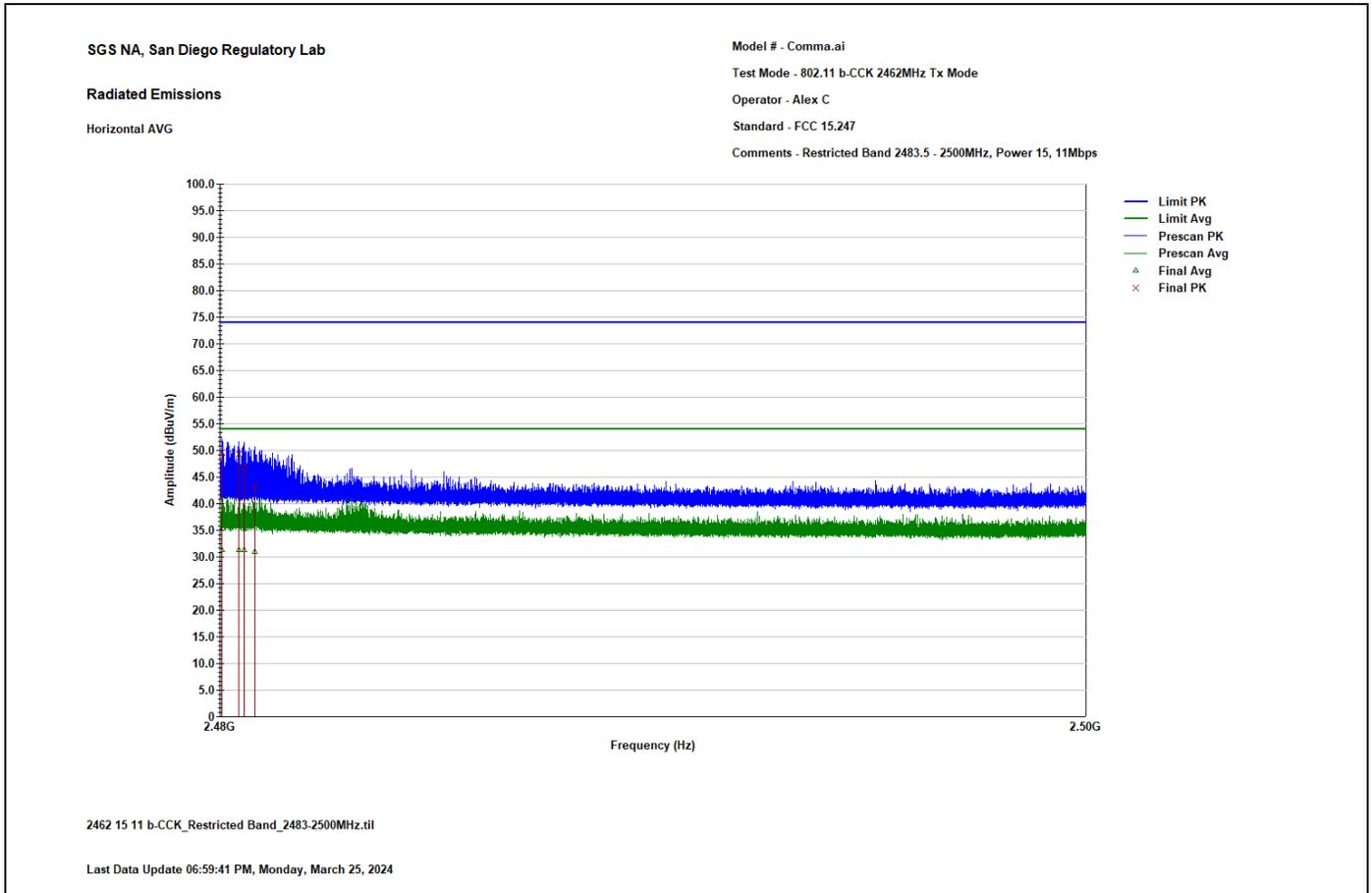
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2368.852	40.69	-0.67	-33.31	74	319	354
2377.826	40.32	-0.66	-33.68	74	320	358
2382.238	40.81	-0.64	-33.19	74	314	111
2386.54801	40.77	-0.61	-33.23	74	322	332

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2368.852	29.11	0.11	-0.67	-24.89	54	319	354
2377.826	29	0.11	-0.66	-25	54	320	358
2382.238	29.16	0.11	-0.64	-24.84	54	314	111
2386.54801	29.04	0.11	-0.61	-24.96	54	322	332

Horizontal 802.11b CCK High Channel (2462MHz)



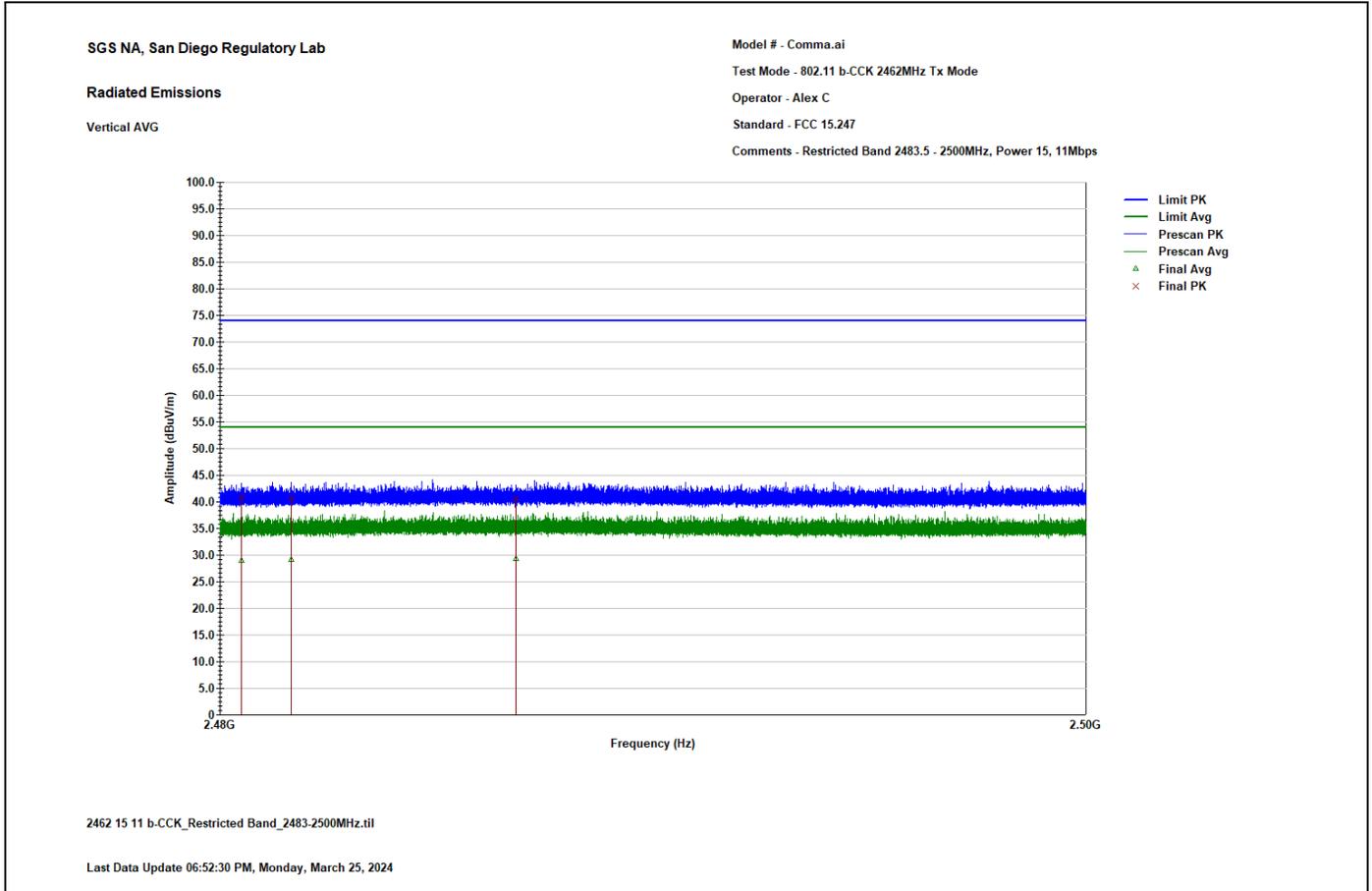
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.53801	49.75	-0.11	-24.25	74	333	-20
2483.852	49.39	-0.11	-24.61	74	321	-20
2483.959	46.76	-0.11	-27.24	74	315	-20
2484.159	43.34	-0.11	-30.66	74	311	18

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.53801	31.42	0.11	-0.11	-22.58	54	333	-20
2483.852	31.44	0.11	-0.11	-22.56	54	321	-20
2483.959	31.41	0.11	-0.11	-22.59	54	315	-20
2484.159	31.17	0.11	-0.11	-22.83	54	311	18

Vertical 802.11b CCK High Channel (2462MHz)



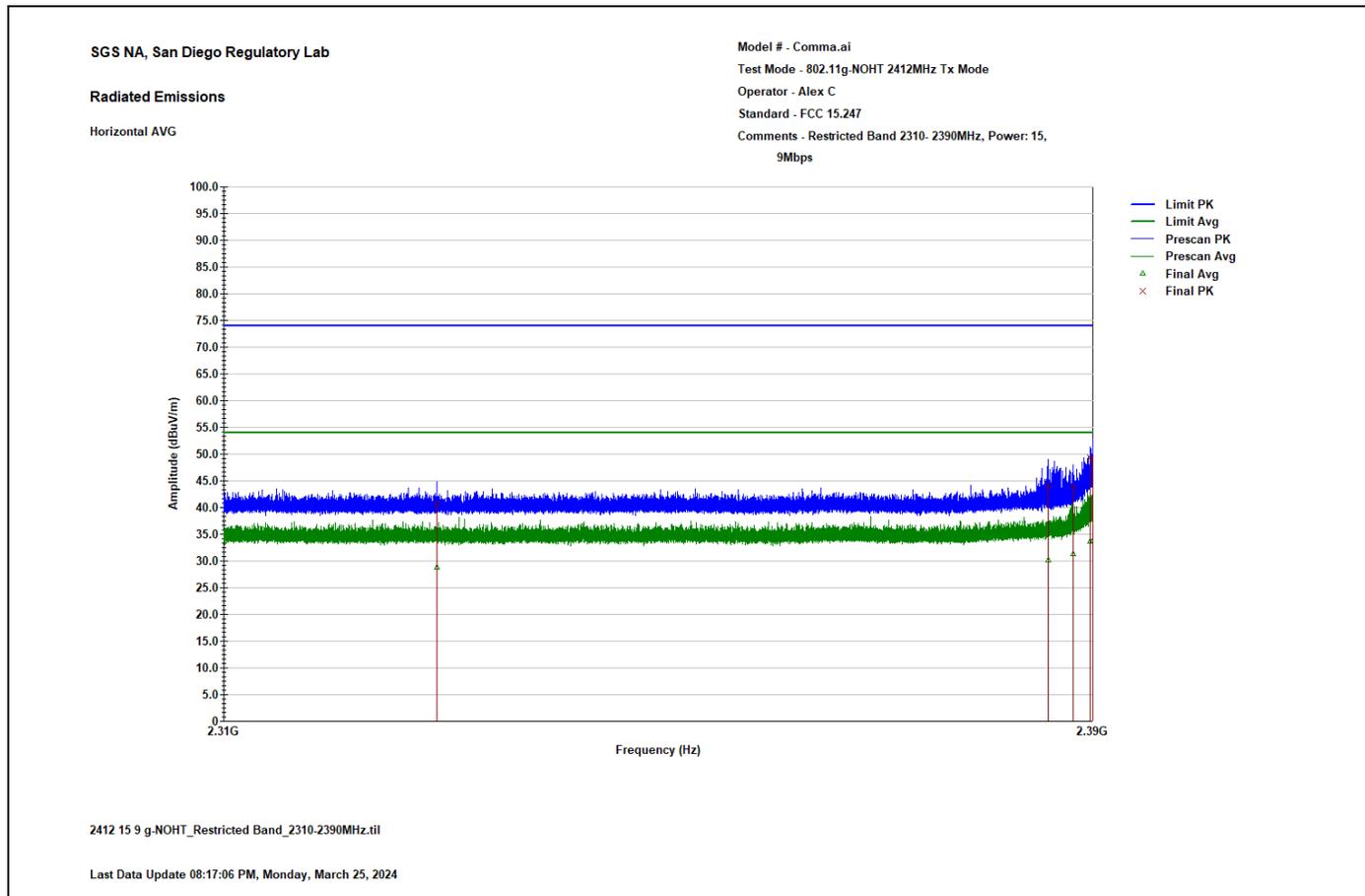
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.907	41.05	-0.11	-32.95	74	391	18
2484.848	40.85	-0.1	-33.15	74	384	300
2489.12801	40.61	-0.09	-33.39	74	377	365

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.907	29.14	0.11	-0.11	-24.86	54	391	18
2484.848	29.3	0.11	-0.1	-24.7	54	384	300
2489.12801	29.48	0.11	-0.09	-24.52	54	377	365

Horizontal 802.11g NOHT Low Channel (2412MHz)



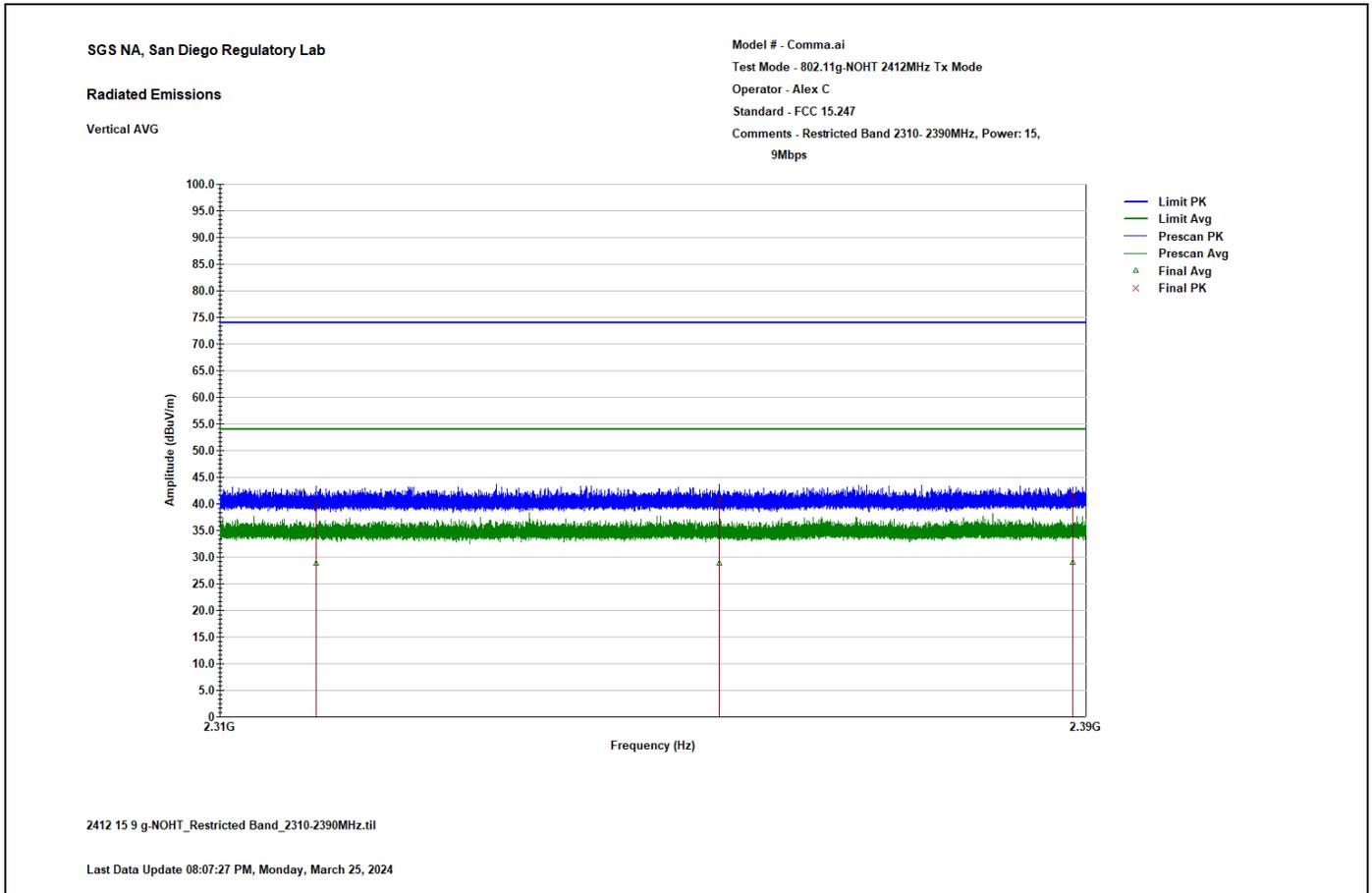
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2329.402	40.78	-0.92	-33.22	74	289	22
2385.84001	44.11	-0.62	-29.89	74	275	-9
2388.13401	44.03	-0.6	-29.97	74	290	335
2389.71601	49.31	-0.59	-24.69	74	268	-5
2389.97801	49.33	-0.59	-24.67	74	288	17

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2329.402	28.99	0.11	-0.92	-25.01	54	289	22
2385.84001	30.3	0.11	-0.62	-23.7	54	275	-9
2388.13401	31.39	0.11	-0.6	-22.61	54	290	335
2389.71601	33.81	0.11	-0.59	-20.19	54	268	-5
2389.97801	33.89	0.11	-0.59	-20.11	54	288	17

Vertical 802.11g NOHT Low Channel (2412MHz)



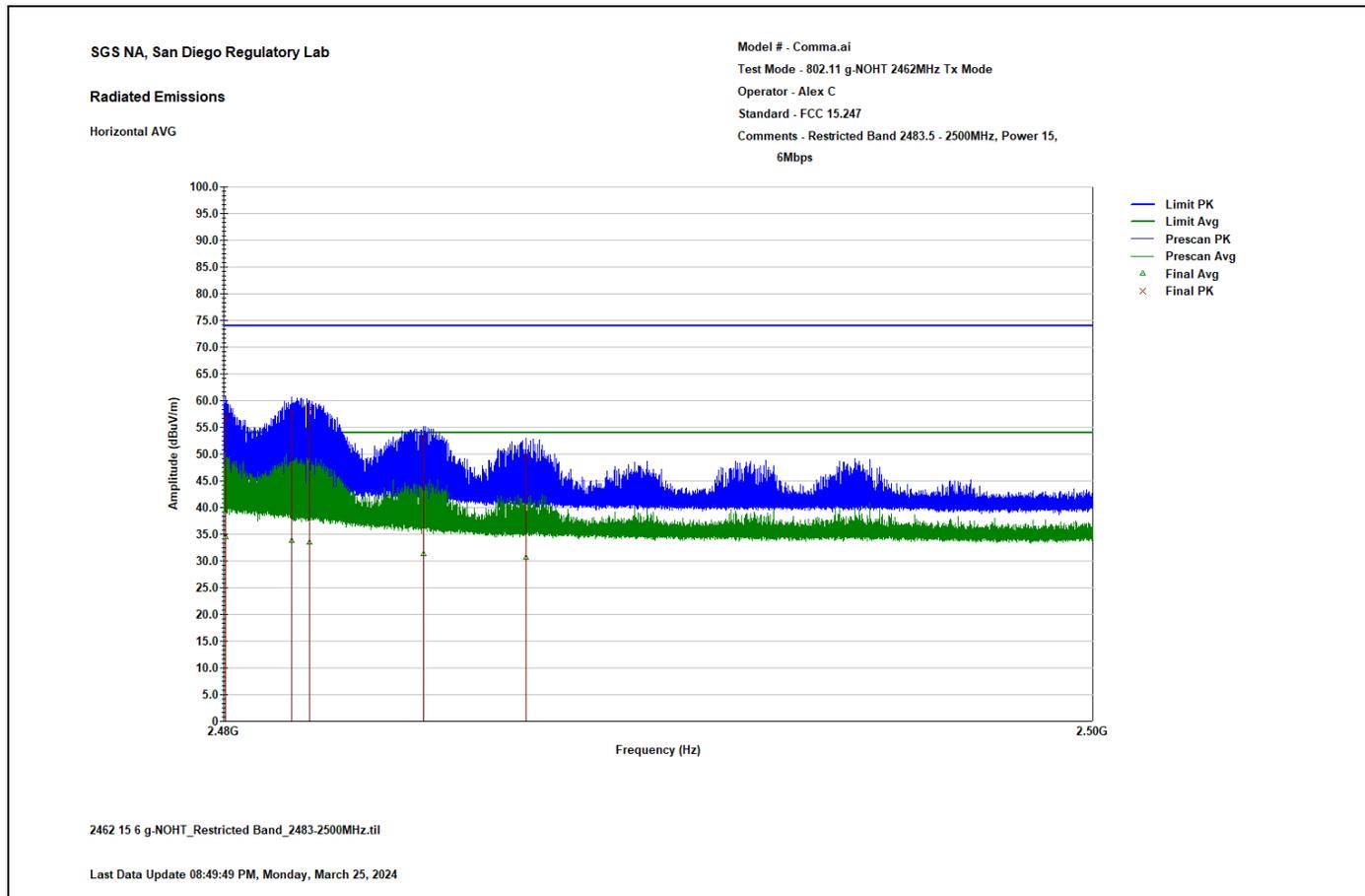
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2318.70401	40.09	-0.92	-33.91	74	309	194
2355.75601	40.98	-0.72	-33.02	74	300	6
2388.72001	41.59	-0.6	-32.41	74	298	131

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2318.70401	28.87	0.11	-0.92	-25.13	54	309	194
2355.75601	28.92	0.11	-0.72	-25.08	54	300	6
2388.72001	29.17	0.11	-0.6	-24.83	54	298	131

Horizontal 802.11g NOHT High Channel (2462MHz)



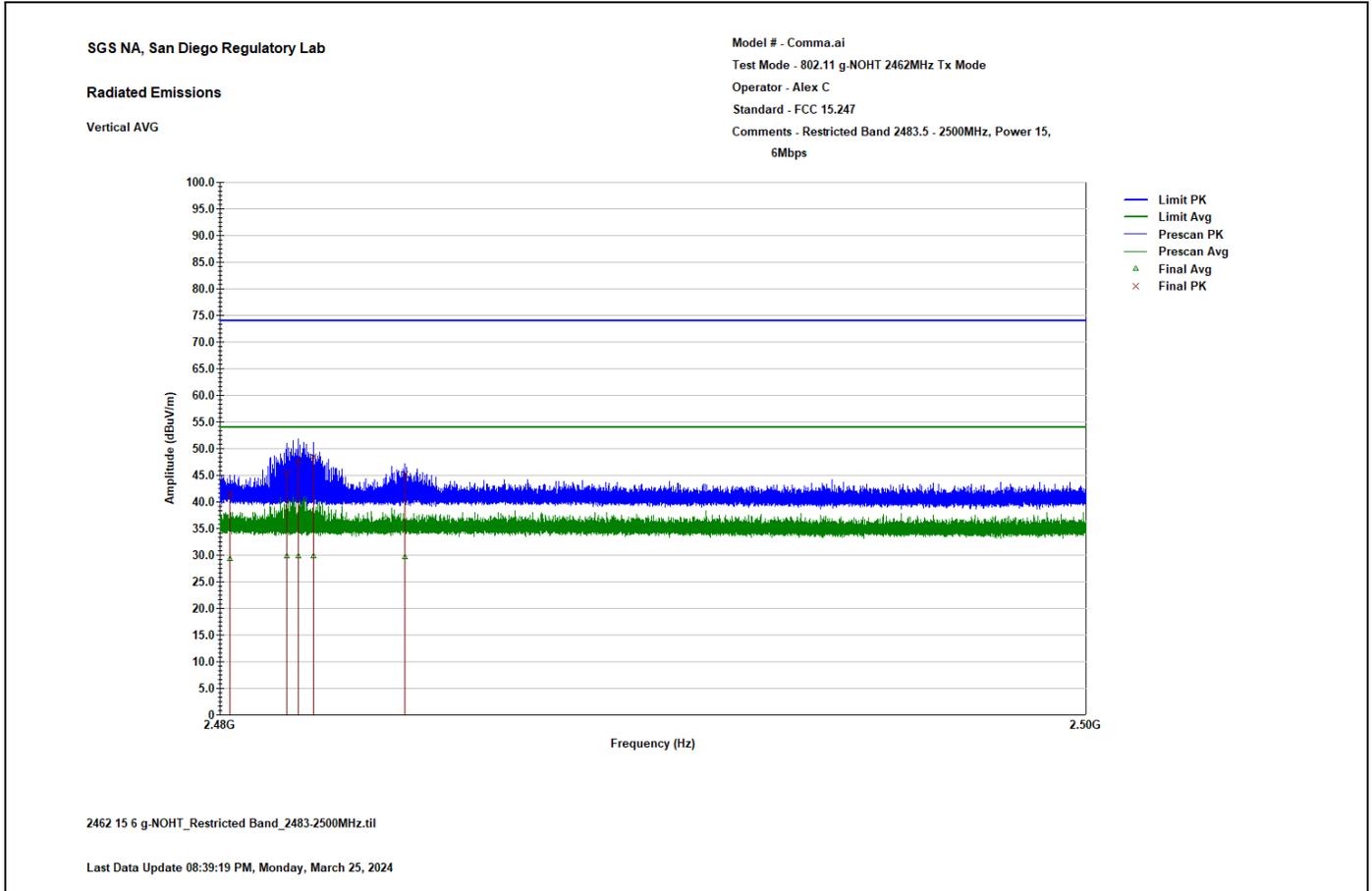
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.53401	56.96	-0.11	-17.04	74	289	346
2484.78	57.69	-0.1	-16.31	74	288	373
2485.12601	58.46	-0.1	-15.54	74	299	13
2487.279	52.91	-0.1	-21.09	74	302	321
2489.232	49.56	-0.09	-24.44	74	315	5

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.53401	34.42	0	-0.11	-19.58	54	289	346
2484.78	33.86	0	-0.1	-20.14	54	288	373
2485.12601	33.51	0	-0.1	-20.49	54	299	13
2487.279	31.31	0	-0.1	-22.69	54	302	321
2489.232	30.64	0	-0.09	-23.36	54	315	5

Vertical 802.11g NOHT High Channel (2462MHz)



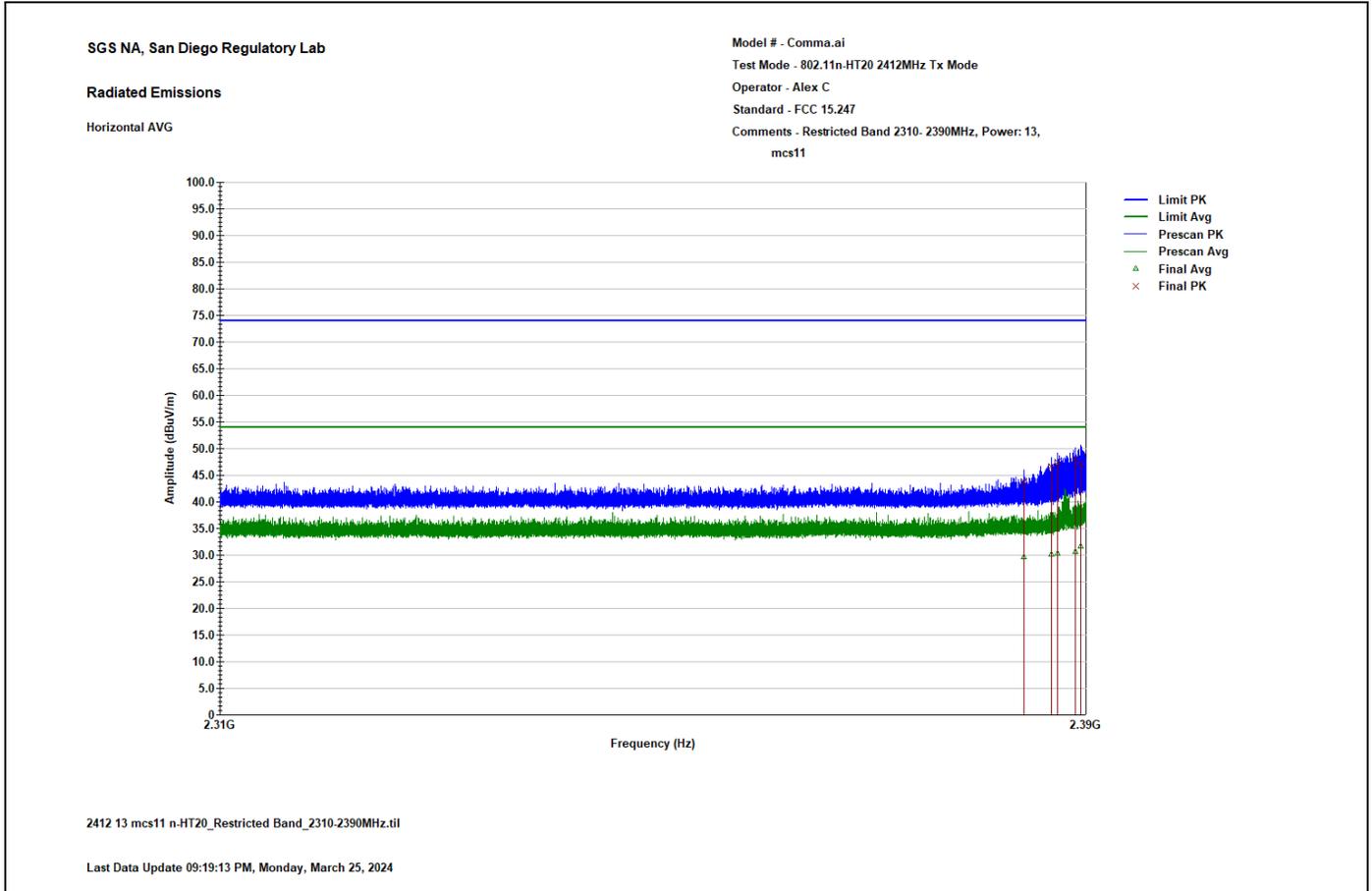
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.69001	41.55	-0.11	-32.45	74	206	50
2484.764	45.49	-0.1	-28.51	74	297	233
2484.97901	47.89	-0.1	-26.11	74	287	287
2485.264	48.47	-0.1	-25.53	74	284	280
2487.012	45.11	-0.1	-28.89	74	274	271

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.69001	29.31	0	-0.11	-24.69	54	206	50
2484.764	29.79	0	-0.1	-24.21	54	297	233
2484.97901	29.8	0	-0.1	-24.2	54	287	287
2485.264	29.77	0	-0.1	-24.23	54	284	280
2487.012	29.58	0	-0.1	-24.42	54	274	271

Horizontal 802.11n HT20 Low Channel (2412MHz)



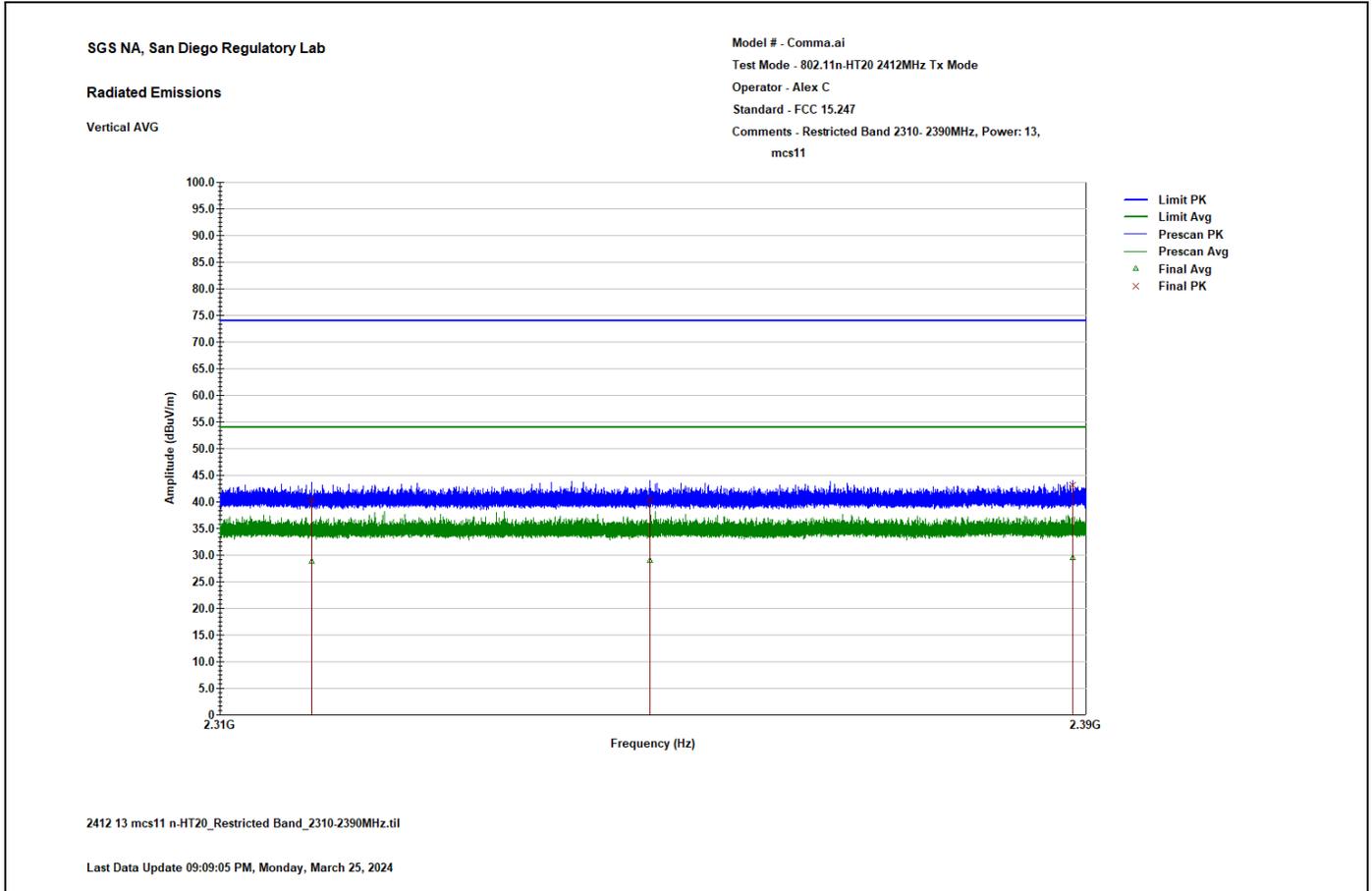
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2384.152	43.77	-0.63	-30.23	74	201	350
2386.72801	46.74	-0.61	-27.26	74	189	377
2387.30601	47.45	-0.61	-26.55	74	188	377
2389.006	48.11	-0.6	-25.89	74	151	35
2389.474	47.12	-0.59	-26.88	74	168	-20

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2384.152	30.17	0.53	-0.63	-23.83	54	201	350
2386.72801	30.61	0.53	-0.61	-23.39	54	189	377
2387.30601	30.81	0.53	-0.61	-23.19	54	188	377
2389.006	31.24	0.53	-0.6	-22.76	54	151	35
2389.474	32.27	0.53	-0.59	-21.73	54	168	-20

Vertical 802.11n HT20 Low Channel (2412MHz)



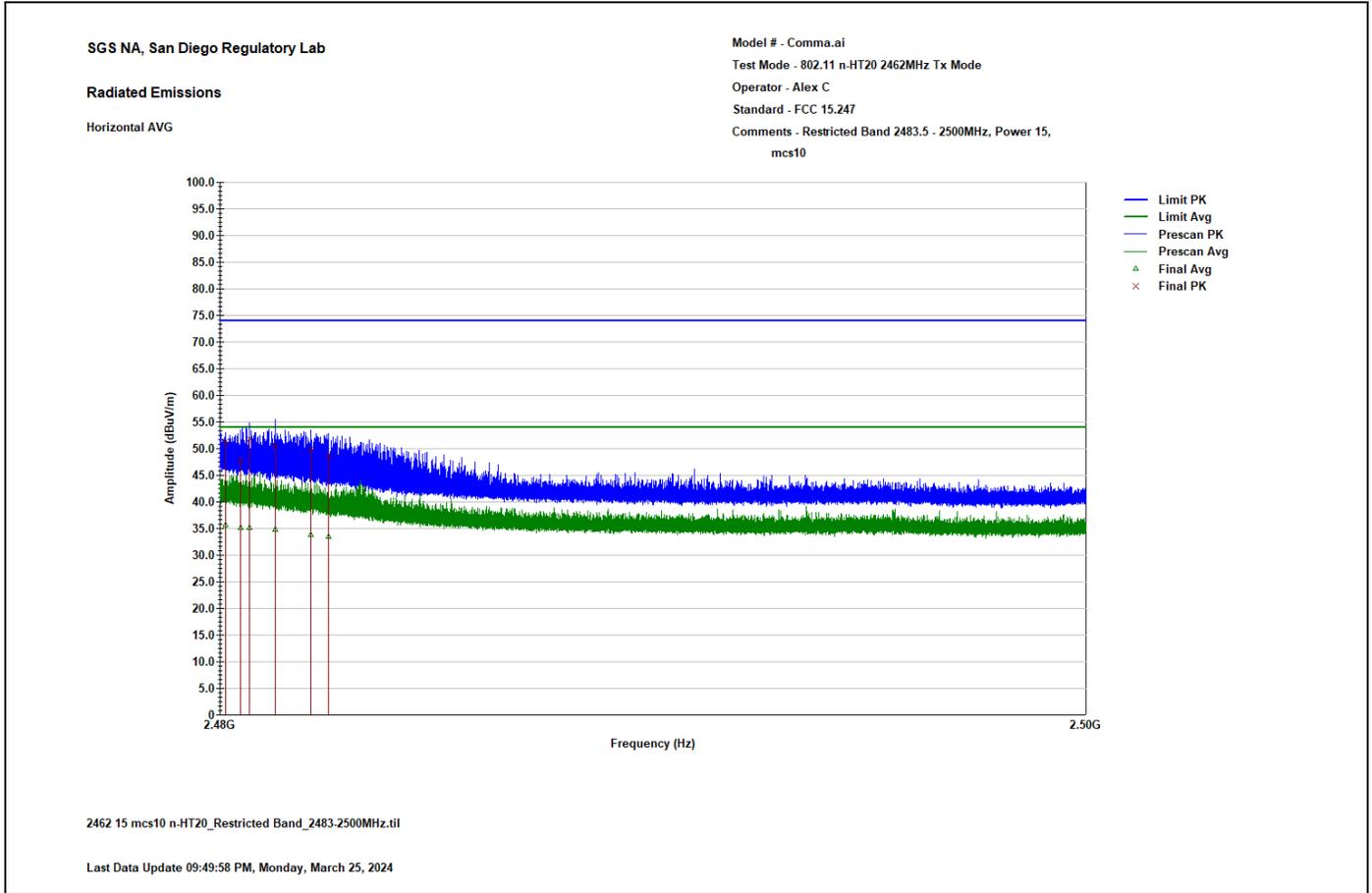
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2318.31001	40.56	-0.92	-33.44	74	254	295
2349.404	40.53	-0.77	-33.47	74	245	280
2388.748	43.22	-0.6	-30.78	74	231	280

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2318.31001	29.32	0.53	-0.92	-24.68	54	254	295
2349.404	29.51	0.53	-0.77	-24.49	54	245	280
2388.748	30.04	0.53	-0.6	-23.96	54	231	280

Horizontal 802.11n HT20 High Channel (2462MHz)



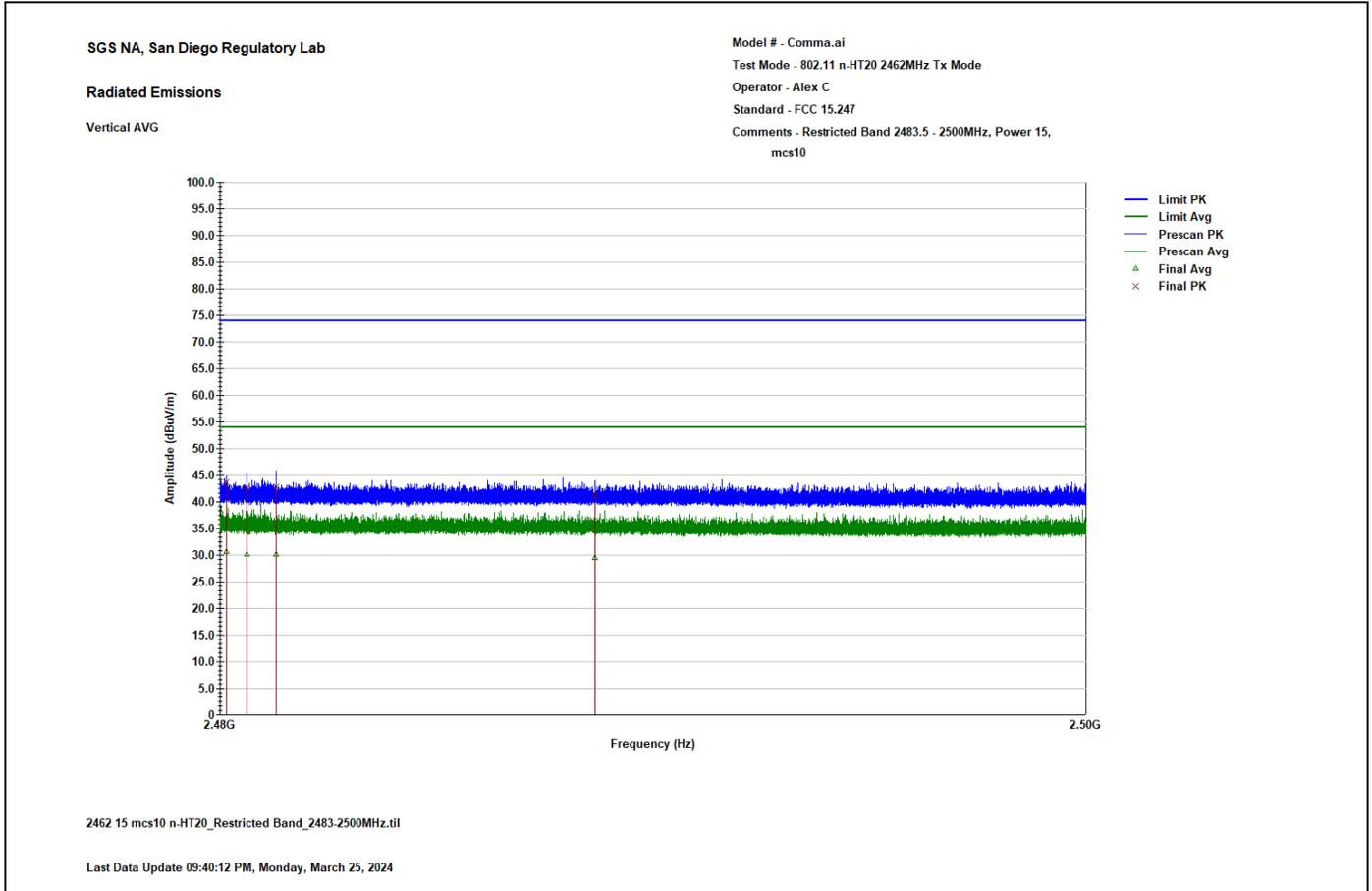
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.60501	35.65	-0.11	-18.35	54	187	338
2483.89101	35.11	-0.11	-18.89	54	188	380
2484.052	35.17	-0.11	-18.83	54	171	-20
2484.541	34.85	-0.11	-19.15	54	154	338
2485.222	33.82	-0.1	-20.18	54	190	-20
2485.564	33.47	-0.1	-20.53	54	201	336

Average

Freq. (MHz)	Final AVG (dBμV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBμV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.60501	33.79	0.42	5.36	-20.21	54	187	268
2483.89101	36.59	0.42	10.82	-17.41	54	188	193
2484.052	36.59	0.42	10.82	-17.41	54	171	193
2484.541	36.59	0.42	10.82	-17.41	54	154	193
2485.222	36.59	0.42	10.82	-17.41	54	190	193
2485.564	37.39	0.42	32.32	-16.61	54	201	17

Vertical 802.11n HT20 High Channel (2462MHz)



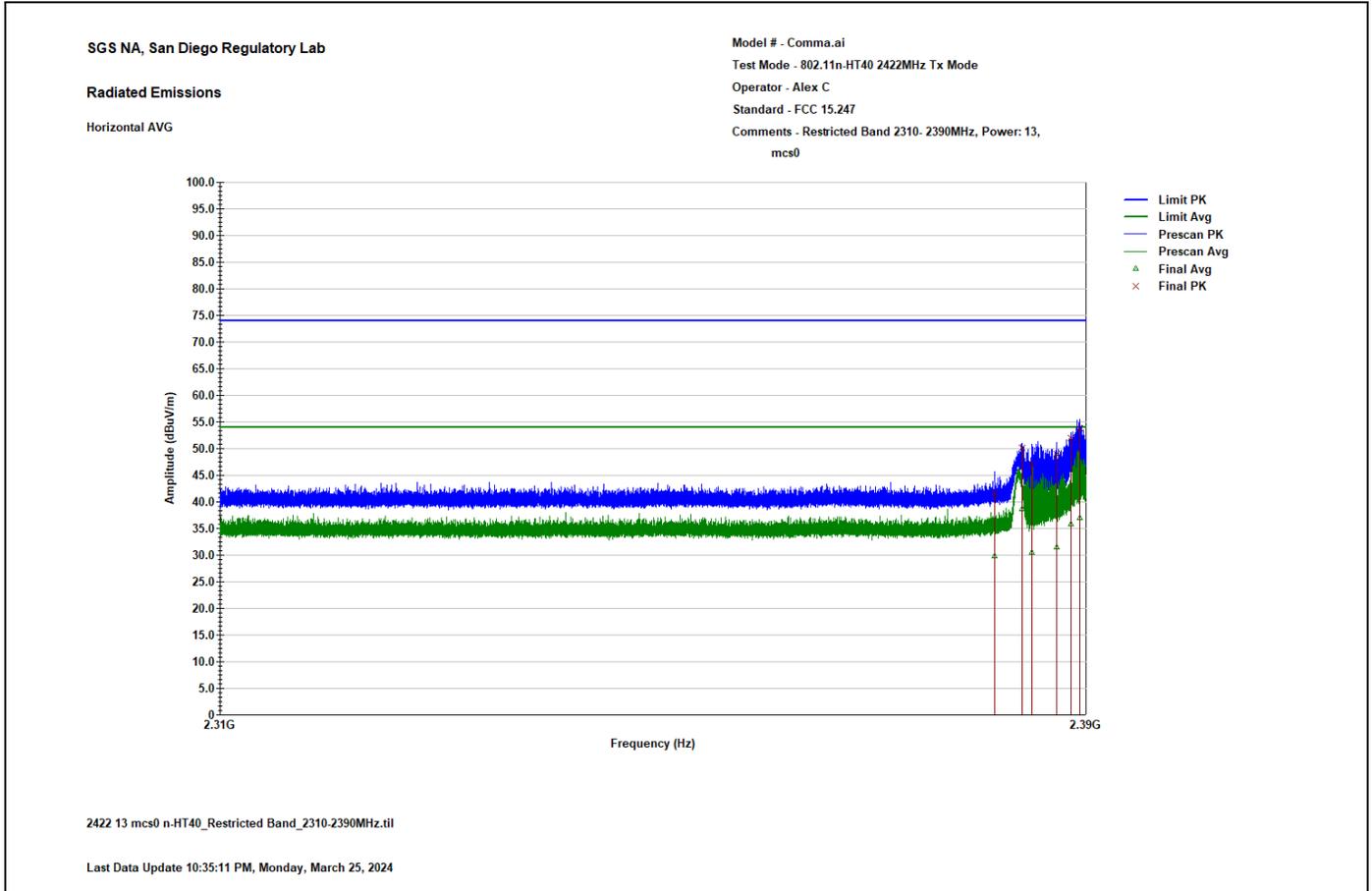
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.61801	43.63	-0.11	-30.37	74	375	225
2484.01401	42.7	-0.11	-31.3	74	265	232
2484.568	42.79	-0.11	-31.21	74	189	225
2490.634	41.41	-0.09	-32.59	74	315	229

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.61801	31.16	0.42	-0.11	-22.84	54	375	225
2484.01401	30.55	0.42	-0.11	-23.45	54	265	232
2484.568	30.52	0.42	-0.11	-23.48	54	189	225
2490.634	29.93	0.42	-0.09	-24.07	54	315	229

Horizontal 802.11n HT40 Low Channel (2422MHz)



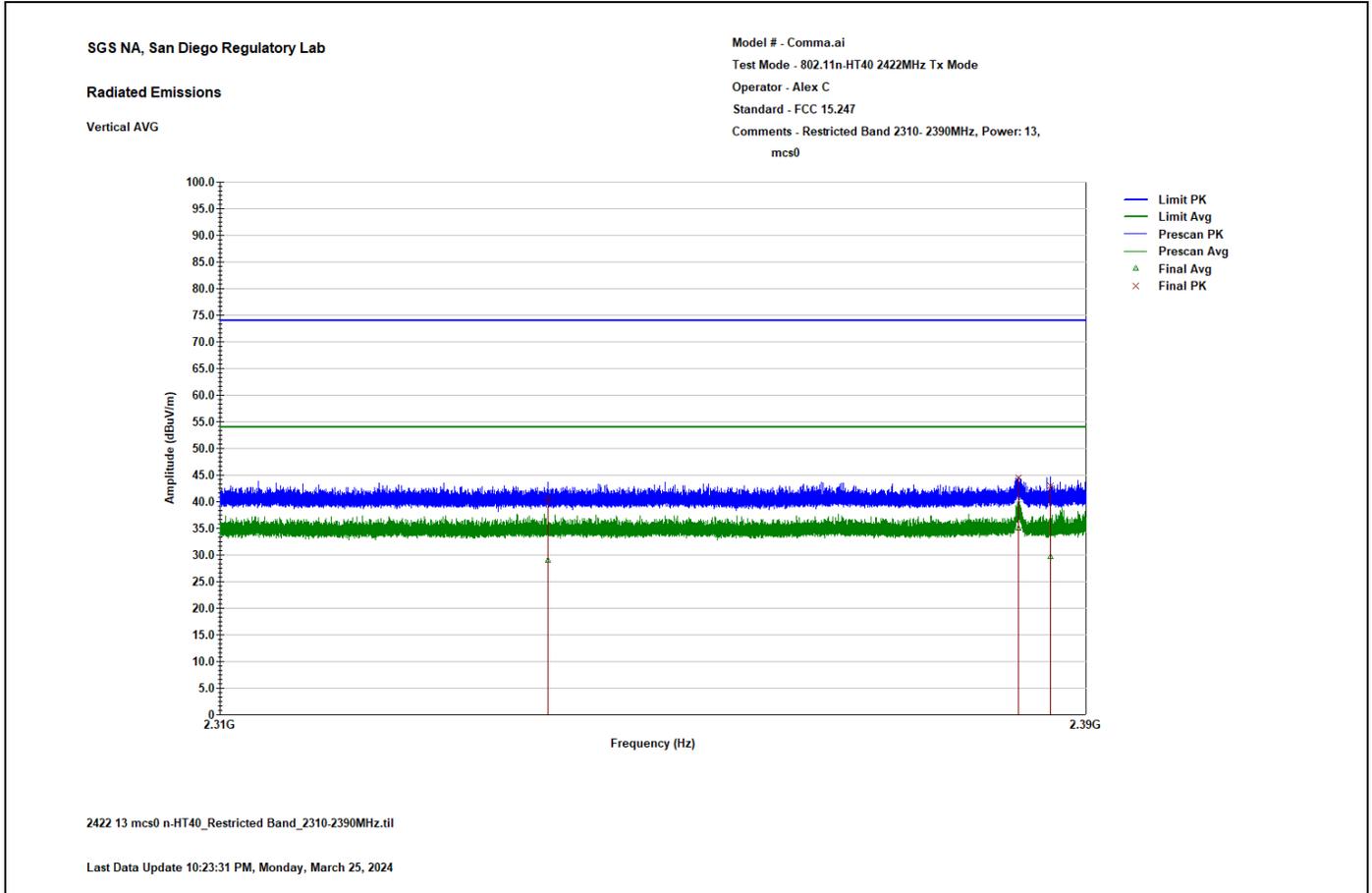
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2381.432	41.6	-0.65	-32.4	74	151	327
2384.008	50.1	-0.63	-23.9	74	160	346
2384.956	47.11	-0.62	-26.89	74	141	12
2387.236	48.92	-0.61	-25.08	74	179	25
2388.54801	51.98	-0.6	-22.02	74	205	342
2389.384	53.77	-0.59	-20.23	74	225	350

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2381.432	30.06	0.23	-0.65	-23.94	54	151	327
2384.008	38.97	0.23	-0.63	-15.03	54	160	346
2384.956	30.71	0.23	-0.62	-23.29	54	141	12
2387.236	31.74	0.23	-0.61	-22.26	54	179	25
2388.54801	36.02	0.23	-0.6	-17.98	54	205	342
2389.384	37.22	0.23	-0.59	-16.78	54	225	350

Vertical 802.11n HT40 Low Channel (2412MHz)



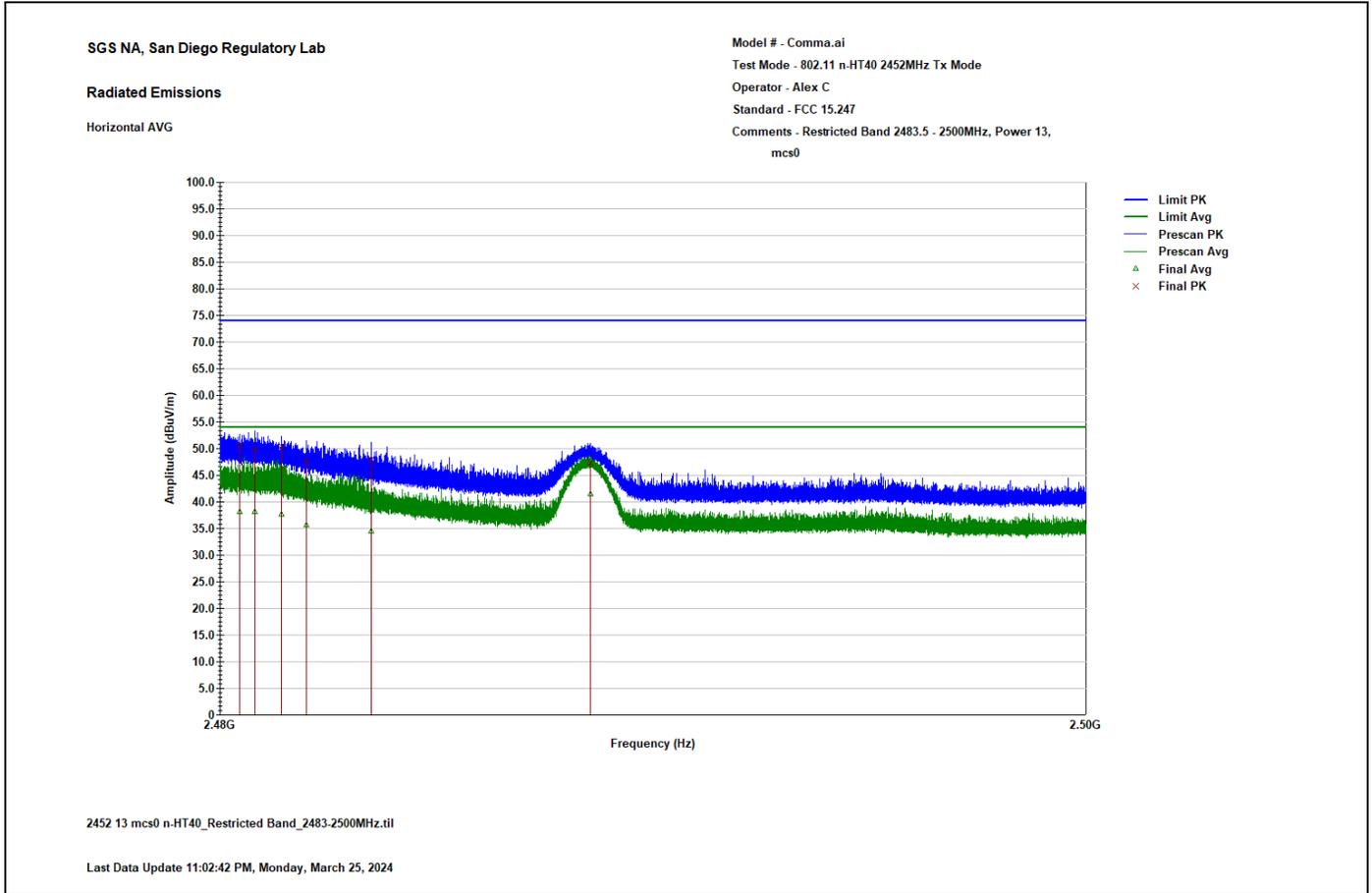
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2339.96201	40.65	-0.84	-33.35	74	214	166
2383.704	44.41	-0.63	-29.59	74	187	295
2386.636	42.94	-0.61	-31.06	74	201	307

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2339.96201	29.22	0.23	-0.84	-24.78	54	214	166
2383.704	35.18	0.23	-0.63	-18.82	54	187	295
2386.636	29.92	0.23	-0.61	-24.08	54	201	307

Horizontal 802.11n HT40 High Channel (2462MHz)



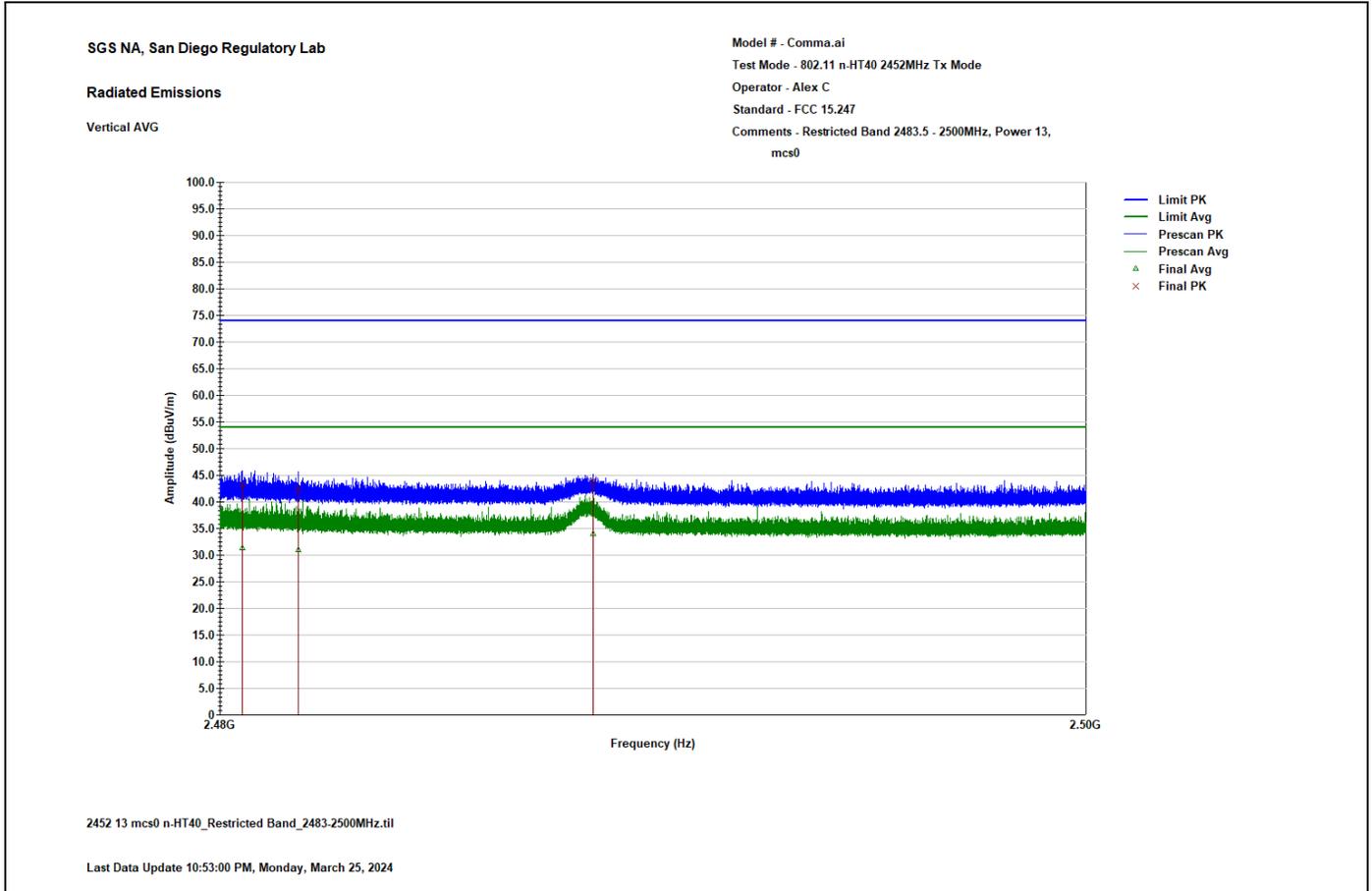
Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.876	50.59	-0.11	-23.41	74	285	12
2484.165	49.94	-0.11	-24.06	74	299	380
2484.659	50.42	-0.1	-23.58	74	305	22
2485.145	47.83	-0.1	-26.17	74	301	367
2486.376	47.94	-0.1	-26.06	74	342	377
2490.552	47.38	-0.09	-26.62	74	274	374

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.876	38.46	0.23	-0.11	-15.54	54	285	12
2484.165	38.31	0.23	-0.11	-15.69	54	299	380
2484.659	37.83	0.23	-0.1	-16.17	54	305	22
2485.145	35.95	0.23	-0.1	-18.05	54	301	367
2486.376	34.73	0.23	-0.1	-19.27	54	342	377
2490.552	41.68	0.23	-0.09	-12.32	54	274	374

Vertical 802.11n HT40 High Channel (2462MHz)



Peak Data

Freq. (MHz)	Final PK (dBµV/m)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.918	43.35	-0.11	-30.65	74	335	236
2484.98	42.63	-0.1	-31.37	74	350	276
2490.59601	44.06	-0.09	-29.94	74	341	221

Average

Freq. (MHz)	Final AVG (dBµV/m)	Duty Cycle Corr. (dB)	Total Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Ant. Height (cm)	Azimuth (deg.)
2483.918	31.57	0.23	-0.11	-22.43	54	335	236
2484.98	31.19	0.23	-0.1	-22.81	54	350	276
2490.59601	34.17	0.23	-0.09	-19.83	54	341	221

8 Antenna Requirement

8.1 Test Result

Test Description	Test Specification		Test Result
Antenna Requirement	15.203	RSS-GEN S6.8	Compliant

8.2 Applicable Requirement

Measurements were made using the radiated methods defined in ANSI C63.10, Section 11.12.2. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§ 15.211, 15.213, 15.217, 15.219, 15.221, or § 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

8.3 Antenna Connection/Construction

The applicant states in the Modular Approval request letter that this requirement is fulfilled. Please see that exhibit for details.

9 AC Powerline Conducted Emissions

9.1 Test Result

Test Description	Test Specification		Test Result
AC Powerline Conducted Emissions	15.207	RSS-GEN S8.8	N/A

9.2 Test Method

With the receiver's resolution bandwidth was set to 9 kHz, exploratory scans were performed over the measuring frequency range (0.15 MHz to 30 MHz) using a max hold mode incorporating a Peak detector and Average detector and using the TILE! software. The final test data was measured using a Quasi-Peak detector and Average detector and compared against the limits indicated in the table below.

Frequency Range	Limits (dBuV)
0.15 to 0.5 MHz	Avg 56 to 46 QP 66 to 56
0.5 to 5 MHz	Avg 46 Pk 56
5 to 30 MHz	Avg 50 Pk 60

9.3 Additional information

EUT is an DC powered device, AC conducted emission is not required. No test performed.

10 Measurement Uncertainty

The measurement uncertainty figures are be calculated in accordance with TR 100 028-1 [2] and correspond to an expansion factor (coverage factor) $k = 2$ (which provide confidence levels of 95,45 % in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian)).

Measurement uncertainty is not used to adjust the measurements to determine compliance.

Parameter	Expanded Uncertainty for Normal k factor equal to 2	
	Required	Laboratory Actual
Radio Frequency	$\pm 1 \times 10^{-5}$	$\pm 9.8 \times 10^{-8}$
total RF power, conducted	± 1.5 dB	± 1.2 dB
RF power density, conducted	± 3 dB	± 0.7 dB
spurious emissions, conducted	± 3 dB	± 2.1 dB
all emissions, radiated	± 6 dB	± 4.8 dB
temperature	$\pm 1^{\circ}\text{C}$	$\pm 0.5^{\circ}\text{C}$
humidity	± 5 %	$\pm 3.5\%$
DC and low frequency voltages	± 3 %	$\pm 0.4\%$

11 Revision History

Revision Level	Description of changes	Revision Date
0	Initial release	May 15, 2024
1	Added ch 6.4, ch 8, added ant gain and calc eirp on pages 34 to 37	June 26, 2024