



Report Number: R14639470-E1
Issue Date: 2023-03-27
FCC ID: PY7-03571V

Electromagnetic Compatibility Test Report

For

Sony Corporation
1-7-1 Konan Minato-ku
Tokyo, 108-0075, Japan



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TEST REPORT DETAILS

Tests Performed By: UL LLC
 12 LABORATORY DR.
 RESEARCH TRIANGLE PARK, NC 27709, U.S.A.

Tests Performed For: Sony Corporation
 1-7-1 Konan Minato-ku
 Tokyo, 108-0075, Japan

Issue Date: 2023-03-27

FCC ID: PY7-03571V

Sample Serial Number: QV77003JFR, QV7700DUFR

Applicable Standards: FCC 47 CFR PART 15 SUBPART B:2023

Date Test Item Received: 2023-02-27

Testing Start Date: 2023-02-27

Date Testing Complete: 2023-03-02

Overall Results: **Compliant**

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by a2La, NIST, or any agency of the U.S. government.

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REPORT REVISION HISTORY

Revision Date	Revision Version	Description	Revised By	Revision Reviewed By
2023-03-23	V1	Initial Issue	N. Bennett	M. Antola
2023-03-27	V2	TCB Feedback: Round 1	N. Bennett	M. Antola

1.0 TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4:2014.

1.1 Deviations from standard test methods

None

1.2 Device Modifications Necessary for Compliance

None

1.3 TEST RESULTS SUMMARY

This product is considered Class B

Requirement – Test	Result (Compliant / Non-Compliant)
CONDUCTED EMISSIONS	Compliant
RADIATED EMISSIONS	Compliant

Approved & Released For

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2.0 DECISION RULES AND MEASUREMENT UNCERTAINTY

2.1 Metrological Traceability

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers’ recommendation, whichever is less, and where applicable is traceable to recognized national standards

2.2 Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement).

2.3 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	U _{lab}
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.40 db
Worst Case Radiated Disturbance, All ranges	6.01 db

Uncertainty figures are valid to a confidence level of 95%.

2.4 Sample Calculation

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

$$36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$$

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.

$$36.5 \text{ dBuV} + 0 \text{ dB} + 10.1 \text{ dB} + 0 \text{ dB} = 46.6 \text{ dBuV}$$

3.0 GENERAL - Product Description

3.1 Equipment Description

GSM/WCDMA/LTE/5G Phone with BT, DTS/UNII a/b/g/n/ac/ax, GPS, WPT & NFC

3.2 Device Configuration During Test

3.2.1 Equipment Used During Test:

Use	Product Type	Manufacturer	Model	Comments
EUT	Cell phone	Sony	PY7-03571V	None
AE	Headphones	Sony	MDR-EX15AP	None
AE	Power Supply	Sony	XQZ-UC1	None
AE	Laptop	Dell	Inspiron 15 3511	Used for PC peripheral setup
AE	Laptop	HP	11-ah112dx	Used for PC peripheral setup
AE	Power Supply	Lite-on	ADLX45DLC2A PA-1450-17	Used for PC peripheral setup
AE	AC Adaptor	Dell	DA65NM191	Used for PC peripheral setup
AE	Monitor	ViewSonic	VS15562	Used for PC peripheral setup
AE	Mouse	Logitech	B100	Used for PC peripheral setup

Note: **EUT** - Equipment Under Test, **AE** - Auxiliary/Associated Equipment, or **SIM** - Simulator (Not Subjected to Test)

3.2.2 Input/Output Ports:

Port #	Name	Type*	Cable Max. >3m (Y/N)	Cable Shielded (Y/N)	Comments
0	Enclosure	N/E	—	—	None
1	USB	DC	N	N	Connected to power supply/laptop
2	Audio	I/O	N	N	Connected to headphones
3	HDMI	I/O	N	N	Connected to monitor for support laptop population
4	Audio	I/O	N	N	Connected to monitor for support laptop population
5	Mains	I/O	N	N	Connected to support laptop power supply

*Note: AC = AC Power Port DC = DC Power Port N/E = Non-Electrical I/O = Signal Input or Output Port (Not Involved in Process Control) TP = Telecommunication Ports

3.2.3 EUT Highest Frequencies:

Frequency (MHz)	Description
5825	Highest Tx Frequency

3.2.4 Power Interface:

Mode # /Rated	Voltage (V)	Current (A)	Power (W)	Frequency (DC/AC-Hz)	Phases (#)	Comments
Rated	100-240	-	-	50/60	Single	None
1	120Vac	-	-	60Hz	Single	Power Supply
2	4.28Vdc	-	-	DC	Single	Battery

3.2.5 Subassemblies

Description	Manufacturer	Model
None		

3.2.6 Manufacturer’s Description of Model Differences

None

3.2.7 Software and Firmware

The software installed during testing was 0.140 for idle sample and 0.88 for WWAN Rx sample.

3.3 Block Diagram

Refer to setup exhibit R14639470-EP2 for block diagram.

3.4 EUT Configurations

Configuration #	Description
1	Configured as table top equipment

3.5 EUT Operation Modes

Mode of Operation#	Description
1	Operating as intended on battery. Radio idle.
2	Operating as intended connected to power supply. Radio idle.
3	Operating as intended connected to power supply. Radio in Rx mode on supported LTE bands that transmit <960MHz. Note: Callbox was used to ensure that EUT was placed in Rx mode. LTE17 is covered by LTE12. WCDMA5 and GSM850 is covered by LTE5.
4	Operating as intended connected as PC Peripheral. Radio idle.

Supported Band(s)	Down Link Frequency Range (MHz)
GSM850, WCDMA5, LTE5	869-894
LTE B12, B17	729-746
LTE 13	746-756

3.6 Rationale for EUT Configurations

Configuration #	Description
1	EUT was investigated in three orientations, X, Y, and Z. It was determined that worst-case orientation for radiated testing was X for AC Adaptor Mode and PC Peripheral Mode, and Y for battery mode.

3.7 Rationale for EUT Mode of Operation

Mode of Operation #	Description
1,2,3,4	EUT capable of operating on battery, connected to power supply, or connected as PC peripheral.

4.0 APPLICABLE EMISSIONS LIMITS AND TEST RESULTS

4.1 Test Conditions and Results - MAINS TERMINAL - CONDUCTED EMISSIONS

Test Engineer	27467/46722	
Test Date	2023-02-27	
Laboratory Parameters	Required prior to the test	During the test
Ambient Temperature	10 to 40 °C	20.6 C
Humidity	10 % to 90 %	41.6 %
	Frequency range on each side of line	Measurement Point
Fully configured sample scanned over the following frequency range	150kHz to 30MHz	Mains
Limits - Class B		
Frequency (MHz)	Limit (dBµV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50
Supplementary information: None		

Conducted Emissions EUT Configuration Settings

Power Interface #	EUT Configurations #	EUT Mode of Operation#
1	1	2,4
Supplementary information: EUT S/N: QV7700DUFR was used.		

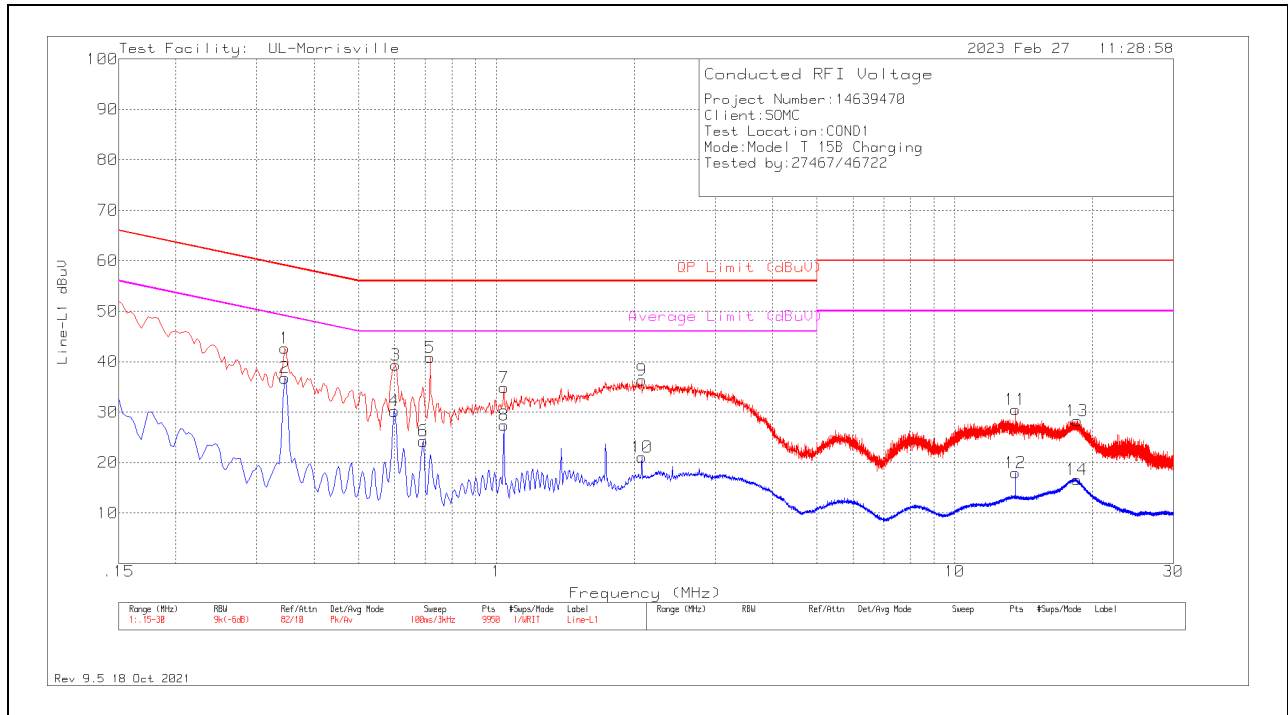
Refer to R14639470-EP2 for setup photos.

Conducted Emissions Test Equipment

Test Equipment Used - Line-Conducted Emissions – Voltage (Morrisville – Conducted 1)

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
CBL087	Coax cable, RG223, N-male to BNC-male, 20-ft.	Pasternack	PE3W06143-240	2022-04-05	2023-04-05
HI0091	Environmental Meter	Fisher Scientific	15-077-963	2022-07-20	2023-07-20
LISN001	LISN, 50-ohm/50-uH, 2-conductor, 25A	Fischer Custom Com.	FCC-LISN-50-25-2-01-550V	2022-08-01	2023-08-01
75141	EMI Test Receiver 9kHz-7GHz	Rohde & Schwarz	ESCI 7	2022-08-03	2023-08-03
ATA222	Transient Limiter, 0.009-100MHz	Electro-Metrics	EM-7600	2022-04-05	2023-04-05
PS214	AC Power Source	Elgar	CW2501M (s/n 1523A02396)	NA	NA
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
	Miscellaneous (if needed)				
LISN008	LISN, 50-ohm/50-uH, 2-conductor, 25A (For support gear only.)	Solar Electronics	8012-50-R-24-BNC	NA	NA

Conducted Emissions Graph – Power Supply Line 1



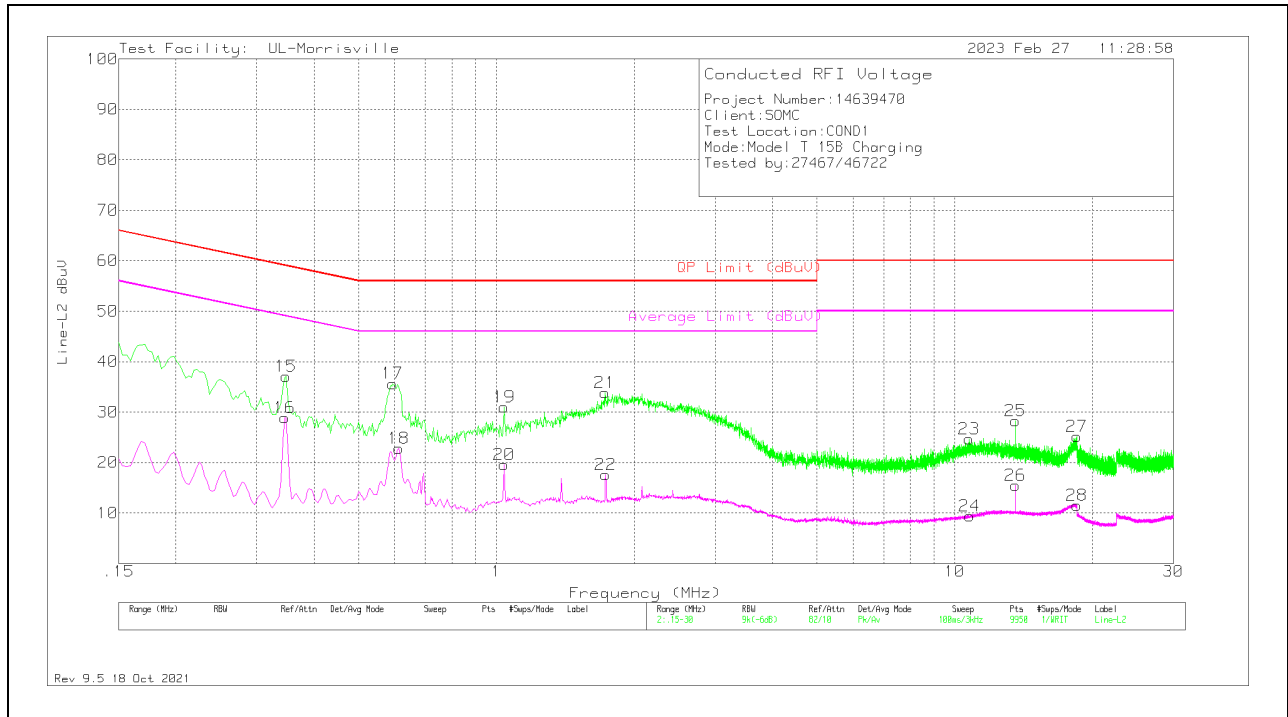
Conducted Emissions Data Points – Power Supply Line 1

Range 1: Line-L1 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
1	.345	32.72	Pk	.1	9.8	42.62	59.08	-16.46	-	-
2	.345	26.88	Av	.1	9.8	36.78	-	-	49.08	-12.3
3	.603	29.56	Pk	0	9.8	39.36	56	-16.64	-	-
4	.6	20.4	Av	0	9.8	30.2	-	-	46	-15.8
5	.717	31	Pk	0	9.8	40.8	56	-15.2	-	-
6	.693	14.44	Av	0	9.8	24.24	-	-	46	-21.76
7	1.038	25.03	Pk	0	9.8	34.83	56	-21.17	-	-
8	1.038	17.65	Av	0	9.8	27.45	-	-	46	-18.55
9	2.076	26.55	Pk	0	9.8	36.35	56	-19.65	-	-
10	2.076	11.27	Av	0	9.8	21.07	-	-	46	-24.93
11	13.56	20.36	Pk	.1	10	30.46	60	-29.54	-	-
12	13.56	7.87	Av	.1	10	17.97	-	-	50	-32.03
13	18.501	18.1	Pk	.1	10.1	28.3	60	-31.7	-	-
14	18.483	6.37	Av	.1	10.1	16.57	-	-	50	-33.43

Pk - Peak detector

Av - Average detection

Conducted Emissions Graph – Power Supply Line 2

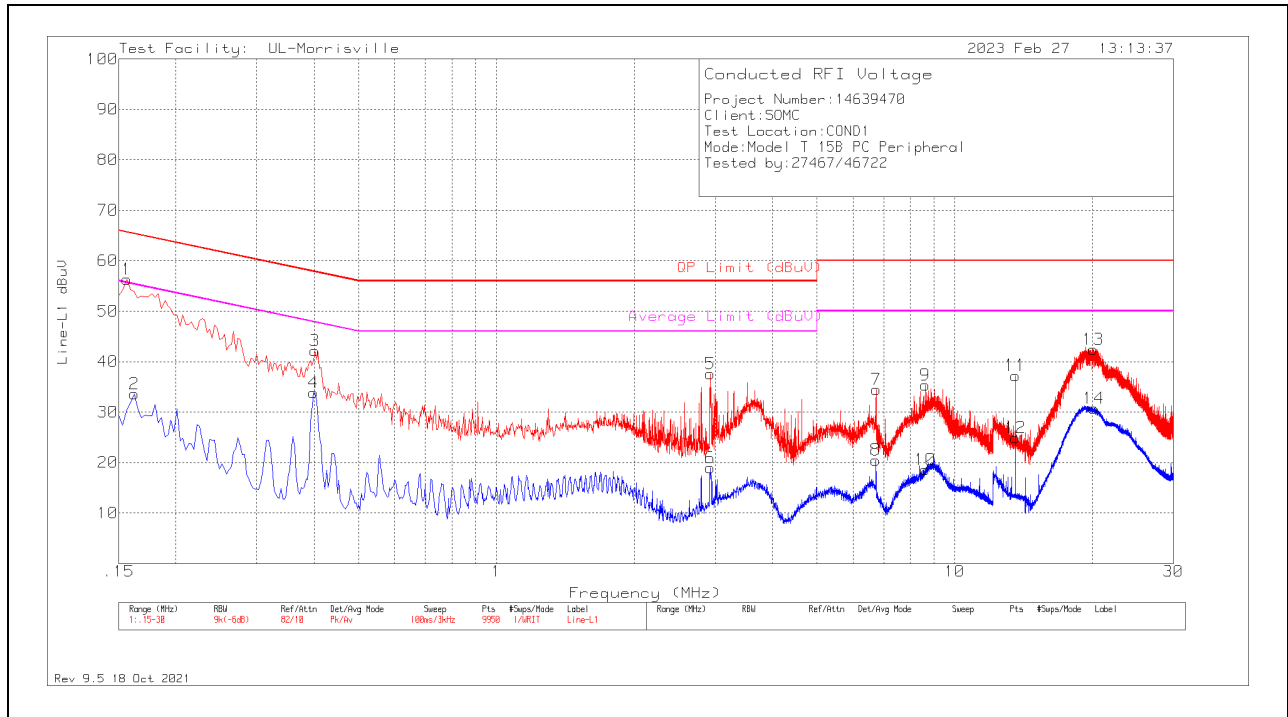


Conducted Emissions Data Points – Power Supply Line 2

Range 2: Line-L2 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
15	.348	27.21	Pk	.1	9.8	37.11	59.01	-21.9	-	-
16	.345	18.95	Av	.1	9.8	28.85	-	-	49.08	-20.23
17	.594	25.86	Pk	0	9.8	35.66	56	-20.34	-	-
18	.612	13.01	Av	0	9.8	22.81	-	-	46	-23.19
19	1.041	21.15	Pk	0	9.8	30.95	56	-25.05	-	-
20	1.038	9.81	Av	0	9.8	19.61	-	-	46	-26.39
21	1.728	24.08	Pk	0	9.8	33.88	56	-22.12	-	-
22	1.731	7.81	Av	0	9.8	17.61	-	-	46	-28.39
23	10.752	14.6	Pk	.1	10	24.7	60	-35.3	-	-
24	10.785	-66	Av	.1	10	9.44	-	-	50	-40.56
25	13.56	18.21	Pk	.1	10	28.31	60	-31.69	-	-
26	13.56	5.39	Av	.1	10	15.49	-	-	50	-34.51
27	18.492	15	Pk	.1	10.1	25.2	60	-34.8	-	-
28	18.489	1.33	Av	.1	10.1	11.53	-	-	50	-38.47

Pk - Peak detector
Av - Average detection

Conducted Emissions Graph – PC Peripheral Line 1

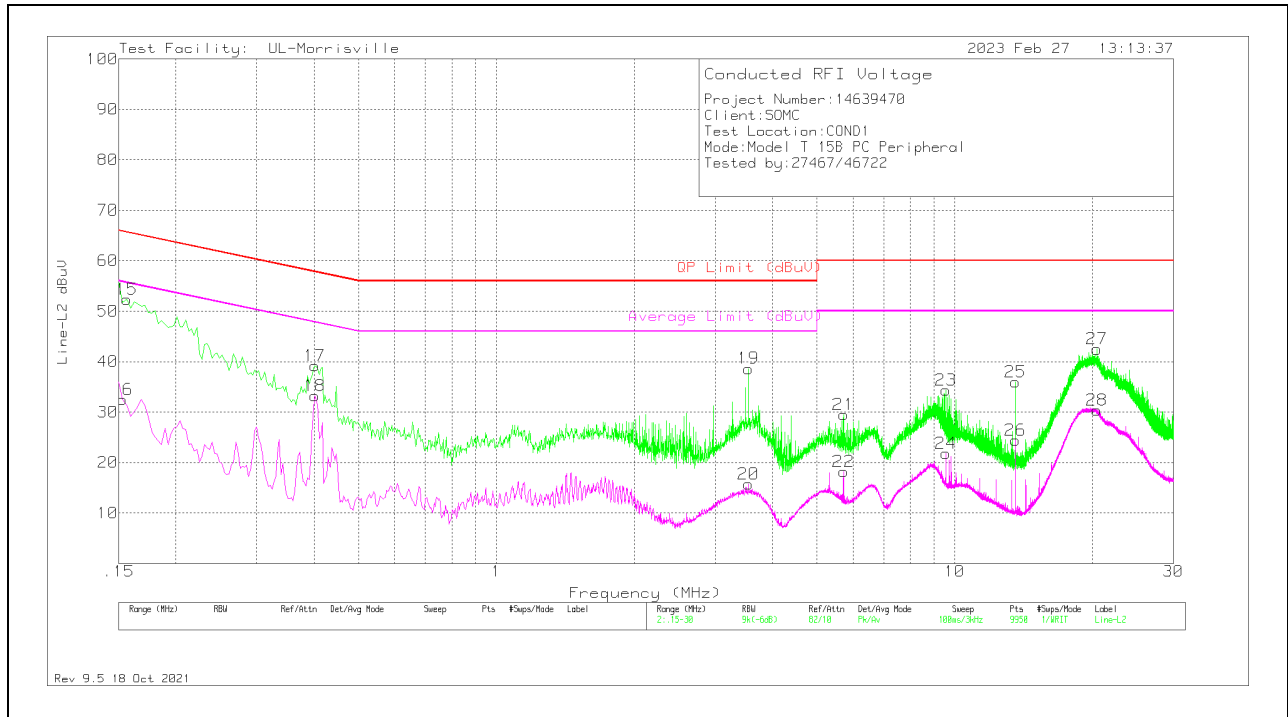


Conducted Emissions Data Points – PC Peripheral Line 1

Range 1: Line-L1 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
1	.156	46.37	Pk	.2	9.8	56.37	65.67	-9.3	-	-
2	.162	23.6	Av	.2	9.8	33.6	-	-	55.36	-21.76
3	.402	32.41	Pk	0	9.8	42.21	57.81	-15.6	-	-
4	.399	23.94	Av	.1	9.8	33.84	-	-	47.87	-14.03
5	2.925	27.74	Pk	0	9.8	37.54	56	-18.46	-	-
6	2.925	9.16	Av	0	9.8	18.96	-	-	46	-27.04
7	6.738	24.51	Pk	.1	9.9	34.51	60	-25.49	-	-
8	6.732	10.51	Av	.1	9.9	20.51	-	-	50	-29.49
9	8.613	25.27	Pk	.1	10	35.37	60	-24.63	-	-
10	8.631	8.49	Av	.1	10	18.59	-	-	50	-31.41
11	13.56	27.17	Pk	.1	10	37.27	60	-22.73	-	-
12	13.56	14.83	Av	.1	10	24.93	-	-	50	-25.07
13	20.07	32.11	Pk	.2	10.1	42.41	60	-17.59	-	-
14	20.097	20.44	Av	.2	10.1	30.74	-	-	50	-19.26

Pk - Peak detector
Av - Average detection

Conducted Emissions Graph – PC Peripheral Line 2



Conducted Emissions Data Points – PC Peripheral Line 2

Range 2: Line-L2 .15 - 30MHz										
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit (dBuV)	Margin (dB)	Average Limit (dBuV)	Margin (dB)
15	.156	42.31	Pk	.2	9.8	52.31	65.67	-13.36	-	-
16	.153	22.5	Av	.2	9.8	32.5	-	-	55.84	-23.34
17	.402	29.4	Pk	0	9.8	39.2	57.81	-18.61	-	-
18	.402	23.4	Av	0	9.8	33.2	-	-	47.81	-14.61
19	3.546	28.74	Pk	0	9.9	38.64	56	-17.36	-	-
20	3.546	5.84	Av	0	9.9	15.74	-	-	46	-30.26
21	5.718	19.6	Pk	0	9.9	29.5	60	-30.5	-	-
22	5.718	8.34	Av	0	9.9	18.24	-	-	50	-31.76
23	9.561	24.2	Pk	.1	10	34.3	60	-25.7	-	-
24	9.561	11.66	Av	.1	10	21.76	-	-	50	-28.24
25	13.563	25.82	Pk	.1	10	35.92	60	-24.08	-	-
26	13.56	14.33	Av	.1	10	24.43	-	-	50	-25.57
27	20.454	32.19	Pk	.2	10.1	42.49	60	-17.51	-	-
28	20.43	20.13	Av	.2	10.1	30.43	-	-	50	-19.57

Pk - Peak detector
 Av - Average detection

4.2 Test Conditions and Results - RADIATED EMISSIONS

Test Engineer	28100/11993; 27669/11993; 11993	
Test Date	2023-03-01 to 2023-03-02	
Laboratory Parameters	Required prior to the test	During the test
Ambient Temperature	10 to 40 °C	23.8 – 24.5 C
Humidity	10 % to 90 %	31.7 – 39.6 %
	Frequency range	Measurement Point
Fully configured sample scanned over the following frequency range	Config 1,2,4: 30-40000MHz Config 3: 30-10000MHz	3m
Limits - Class B		
Frequency (MHz)	Limit (dBµV/m)	
30-88	40	NA
88-216	43.5	NA
216-960	46	NA
Above 960	54	NA
	Peak	Average
Above 1 GHz	74	54
Supplementary information: none.		

Radiated Emissions EUT Configuration Settings

Power Interface #	EUT Configurations #	EUT Mode of Operation#
1,2	1	1,2,3,4
Supplementary information: EUT Mode of Operation 1,2 and 4 tested with: QV7700DUFR EUT Mode of Operation 3 tested with: QV77003JFR LTE Band 13 was tested at Middle Channel at 10MHz BW, which satisfies the entire frequency range of the Band as specified in section 3.5. Since LTE Band 13’s authorized frequency range is 10MHz wide, and the test frequency was set to 10MHz BW, the reported test data in this report shall satisfy FCC requirement 15.31(m).		

Refer to R14639470-EP2 for setup photos.

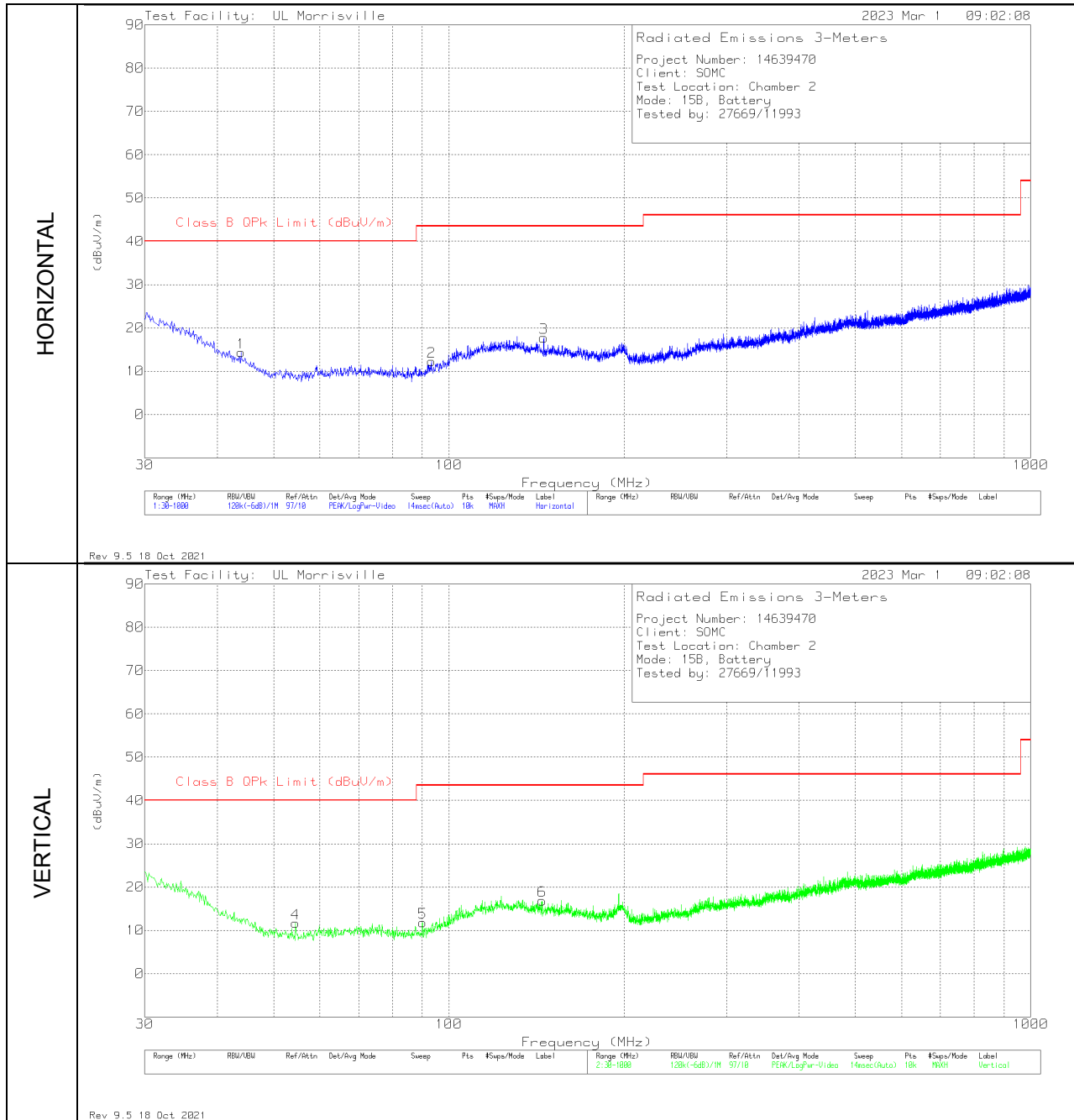
Radiated Emissions Test Equipment

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 2)

Equip. ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
	30-1000 MHz				
AT0074	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB3	2022-09-07	2023-09-07
	1-18 GHz				
206211	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2022-03-21	2023-03-21
	18-40 GHz				
204704	Horn Antenna, 18-26.5GHz	Com-Power	AH-626	2022-07-11	2023-07-11
204705	Horn Antenna, 26-40GHz	Com-Power	AH-640	2022-07-11	2023-07-11
	Gain-Loss Chains				
91978	Gain-loss string: 25-1000MHz	Various	Various	2022-05-10	2023-05-10
91977	Gain-loss string: 1-18GHz	Various	Various	2022-05-10	2023-05-10
136042	Gain-loss string: 18-40GHz	Various	Various	2022-05-10	2023-05-10
	Receiver & Software				
197955	Spectrum Analyzer	Rohde & Schwarz	ESW44	2022-03-08	2023-03-08
72823	Spectrum Analyzer	Agilent	E4446A	2022-06-08	2023-06-08
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
	Additional Equipment used				
210642	Environmental Meter	Fisher Scientific	15-077-963 s/n 210701942	2022-08-16	2023-08-16
207620	Wideband Radio Communications Tester	Anritsu	MT8821C	2022-07-08	2023-07-08

RADIATED EMISSIONS 30 TO 1000 MHz - Battery

Radiated Emissions Graph



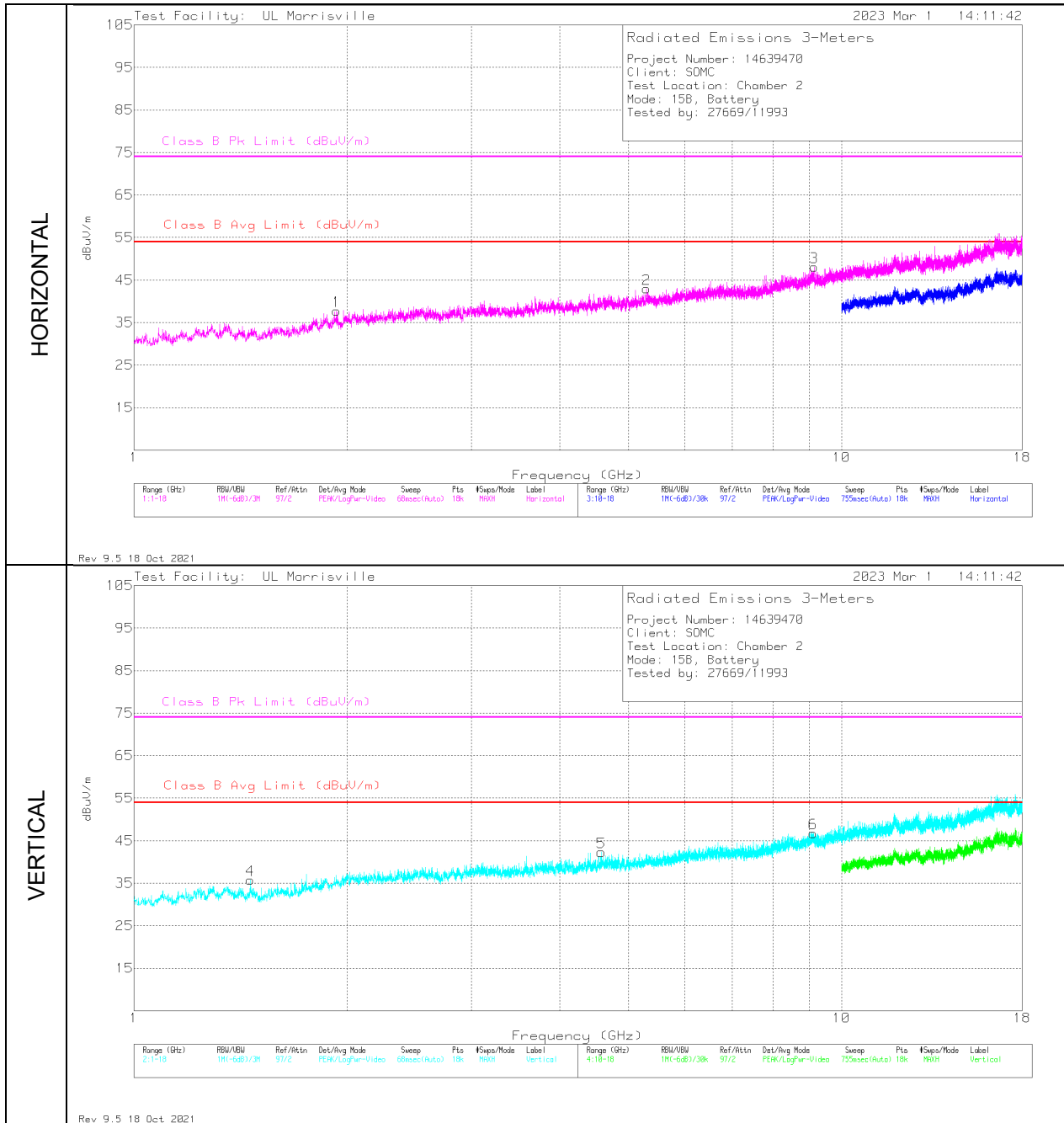
Radiated Emissions Data Points

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0074 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	43.968	28.63	Pk	17	-31.3	14.33	40	-25.67	0-360	299	H
4	54.541	29.26	Pk	13.4	-31	11.66	40	-28.34	0-360	101	V
5	90.14	28.5	Pk	14	-30.7	11.8	43.52	-31.72	0-360	101	V
2	93.341	28.46	Pk	14.7	-30.9	12.26	43.52	-31.26	0-360	99	H
6	144.654	28.05	Pk	18.9	-30.1	16.85	43.52	-26.67	0-360	299	V
3	145.624	28.91	Pk	18.8	-30	17.71	43.52	-25.81	0-360	99	H

Pk - Peak detector

RADIATED EMISSIONS 1000 TO 18,000 MHz – Battery

Radiated Emissions Graph



Radiated Emissions Data Points

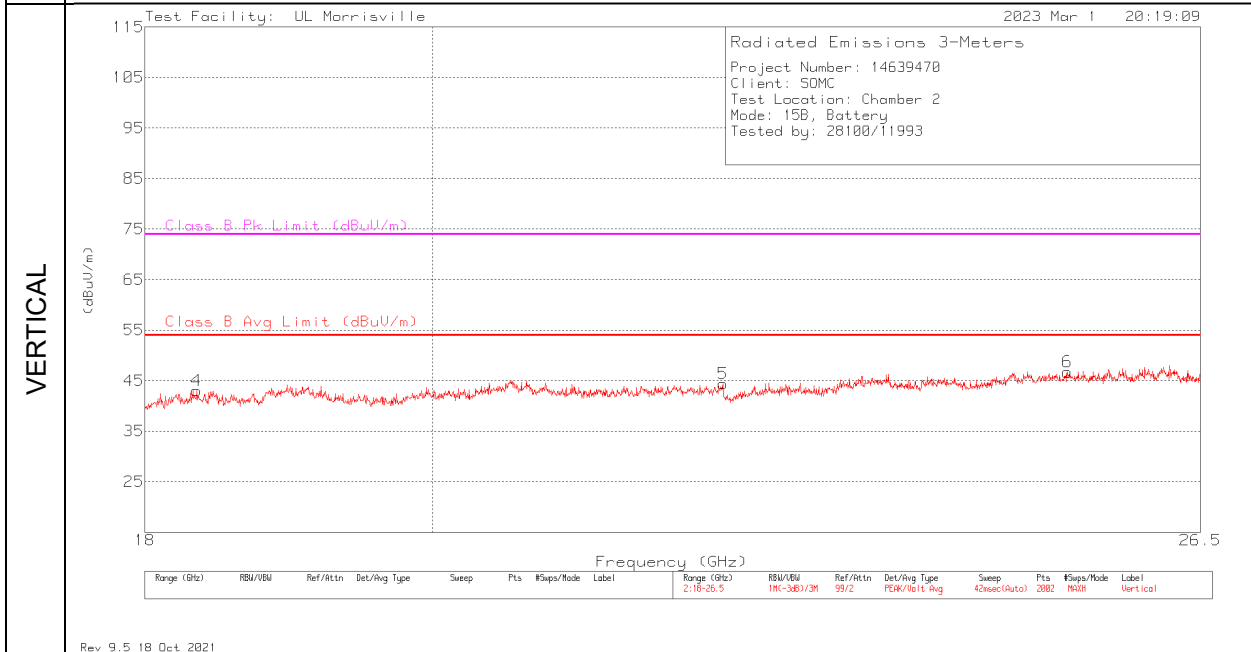
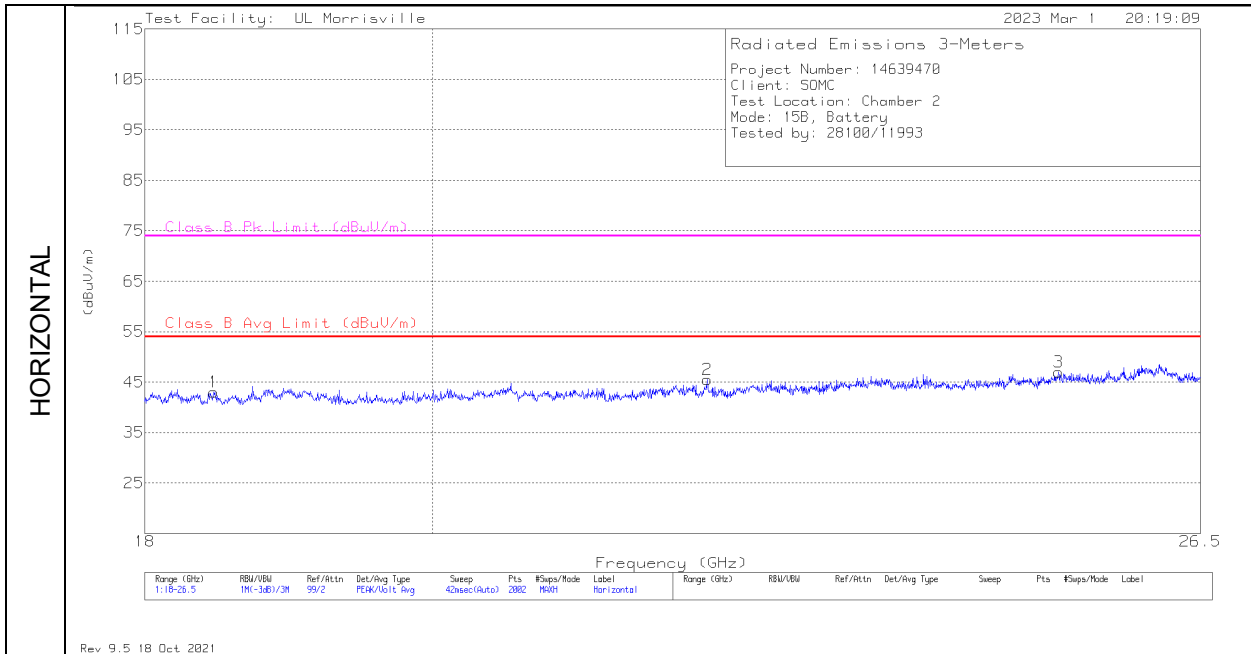
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	1.46089	41.99	Pk	28.2	-34.4	35.79	54	-18.21	74	-38.21	0-360	199	V
1	1.93406	41.38	Pk	30.6	-34.2	37.78	54	-16.22	74	-36.22	0-360	101	H
5	4.57567	40	Pk	34.2	-31.9	42.3	54	-11.7	74	-31.7	0-360	101	V
2	5.29911	38.87	Pk	34.5	-30.4	42.97	54	-11.03	74	-31.03	0-360	101	H
6	9.12033	36.76	Pk	36.2	-26.2	46.76	54	-7.24	74	-27.24	0-360	199	V
3	9.14551	38.89	Pk	36.2	-26.2	48.89	-	-	74	-25.11	144	222	H
	9.14551	25.05	Av	36.2	-26.2	35.05	54	-18.95	-	-	144	222	H

Pk - Peak detector

Av - Average detection

RADIATED EMISSIONS 18,000 TO 26,000 MHz – Battery

Radiated Emissions Graph



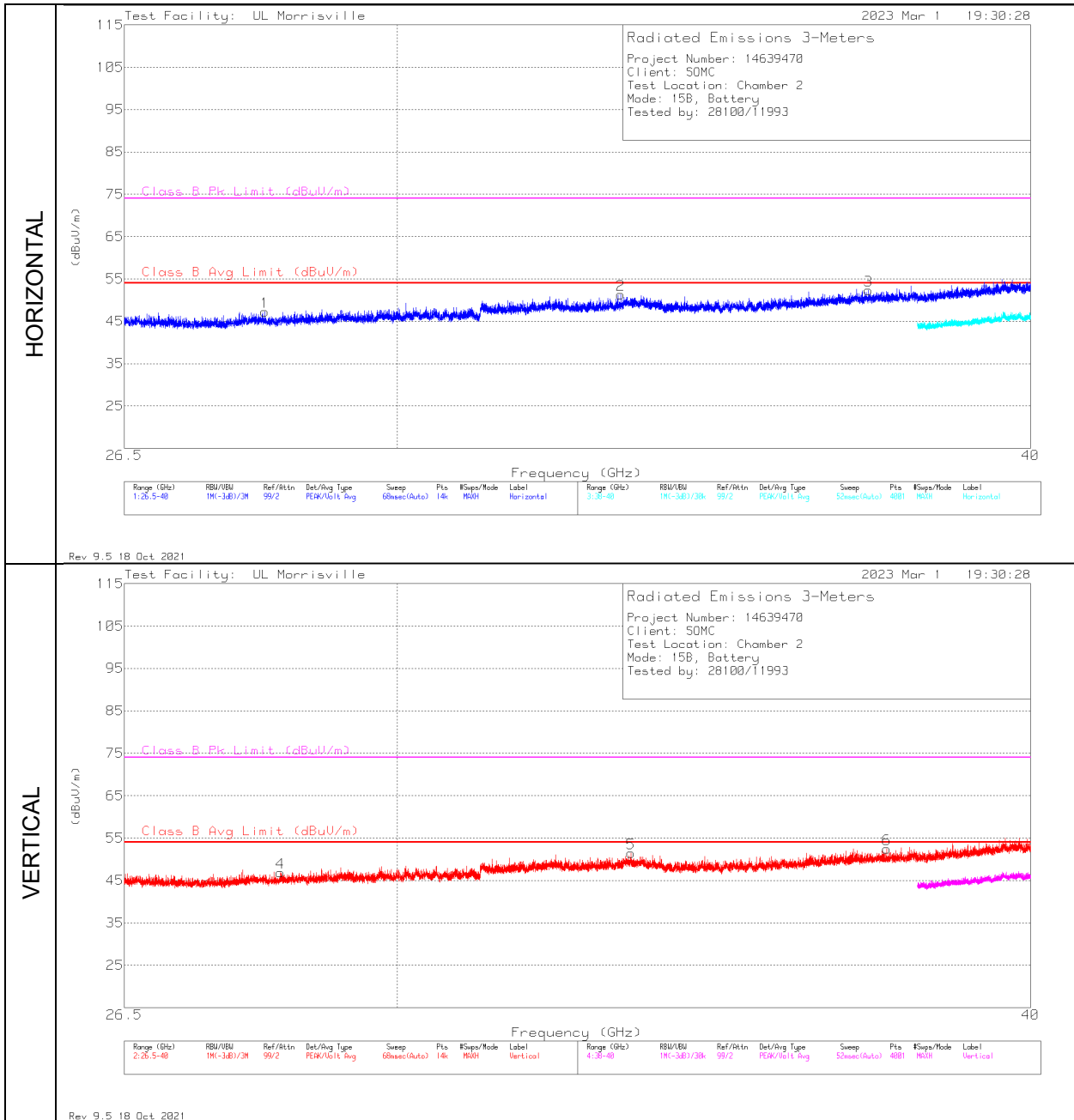
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	204704 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	18.34408	48.69	Pk	33.1	-38.8	42.99	54	-11.01	74	-31.01	0-360	300	V
1	18.45877	48.49	Pk	33.1	-38.6	42.99	54	-11.01	74	-31.01	0-360	149	H
2	22.12044	49.31	Pk	34.5	-38.3	45.51	54	-8.49	74	-28.49	0-360	200	H
5	22.24788	48.24	Pk	34.5	-38.3	44.44	54	-9.56	74	-29.56	0-360	200	V
3	25.15767	47.94	Pk	35.9	-36.9	46.94	54	-7.06	74	-27.06	0-360	149	H
6	25.23838	47.49	Pk	36.1	-36.9	46.69	54	-7.31	74	-27.31	0-360	101	V

Pk - Peak detector

RADIATED EMISSIONS 26,000 TO 40,000 MHz – Battery

Radiated Emissions Graph



Radiated Emissions Data Points

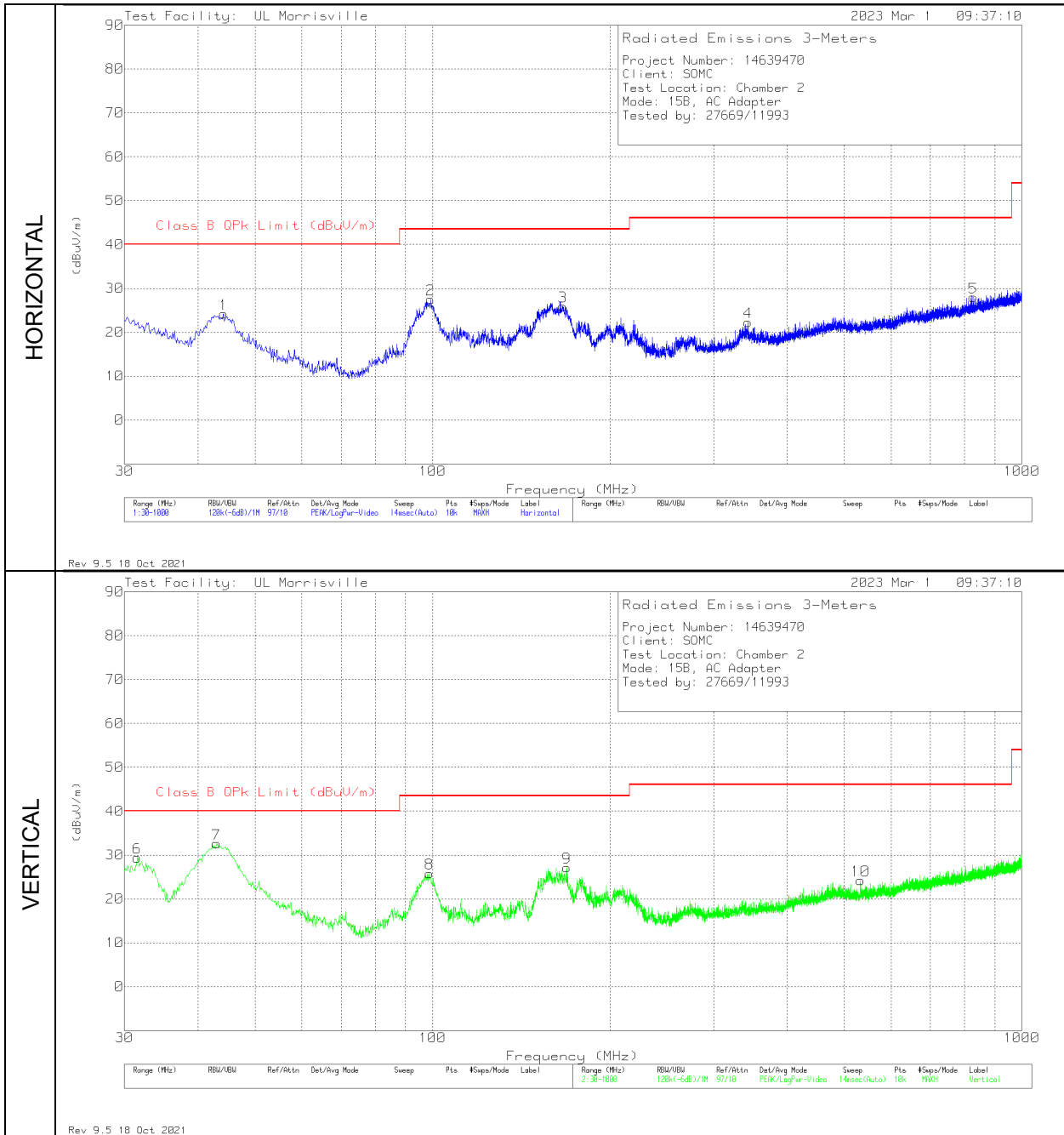
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	204705 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	28.24523	45.94	Pk	36.5	-35.2	47.24	54	-6.76	74	-26.76	0-360	299	H
4	28.44483	45.38	Pk	36.5	-35	46.88	54	-7.12	74	-27.12	0-360	101	V
2	33.20473	48.22	Pk	37.3	-34.7	50.82	-	-	74	-23.18	132	126	H
	33.20483	40.32	Av	37.3	-34.7	42.92	54	-11.08	-	-	132	126	H
5	33.35832	48.31	Pk	37.3	-34.7	50.91	-	-	74	-23.09	348	394	V
	33.35632	40.77	Av	37.3	-34.7	43.37	54	-10.63	-	-	348	394	V
3	37.16204	51.13	Pk	38.3	-36.7	52.73	-	-	74	-21.27	105	312	H
	37.1638	42.94	Av	38.3	-36.7	44.54	54	-9.46	-	-	105	312	H
6	37.47213	51.47	Pk	38.3	-36.7	53.07	-	-	74	-20.93	168	239	V
	37.47217	42.58	Av	38.3	-36.7	44.18	54	-9.82	-	-	168	239	V

Pk - Peak detector

Av - Average detection

RADIATED EMISSIONS 30 TO 1000 MHz – Power Supply

Radiated Emissions Graph



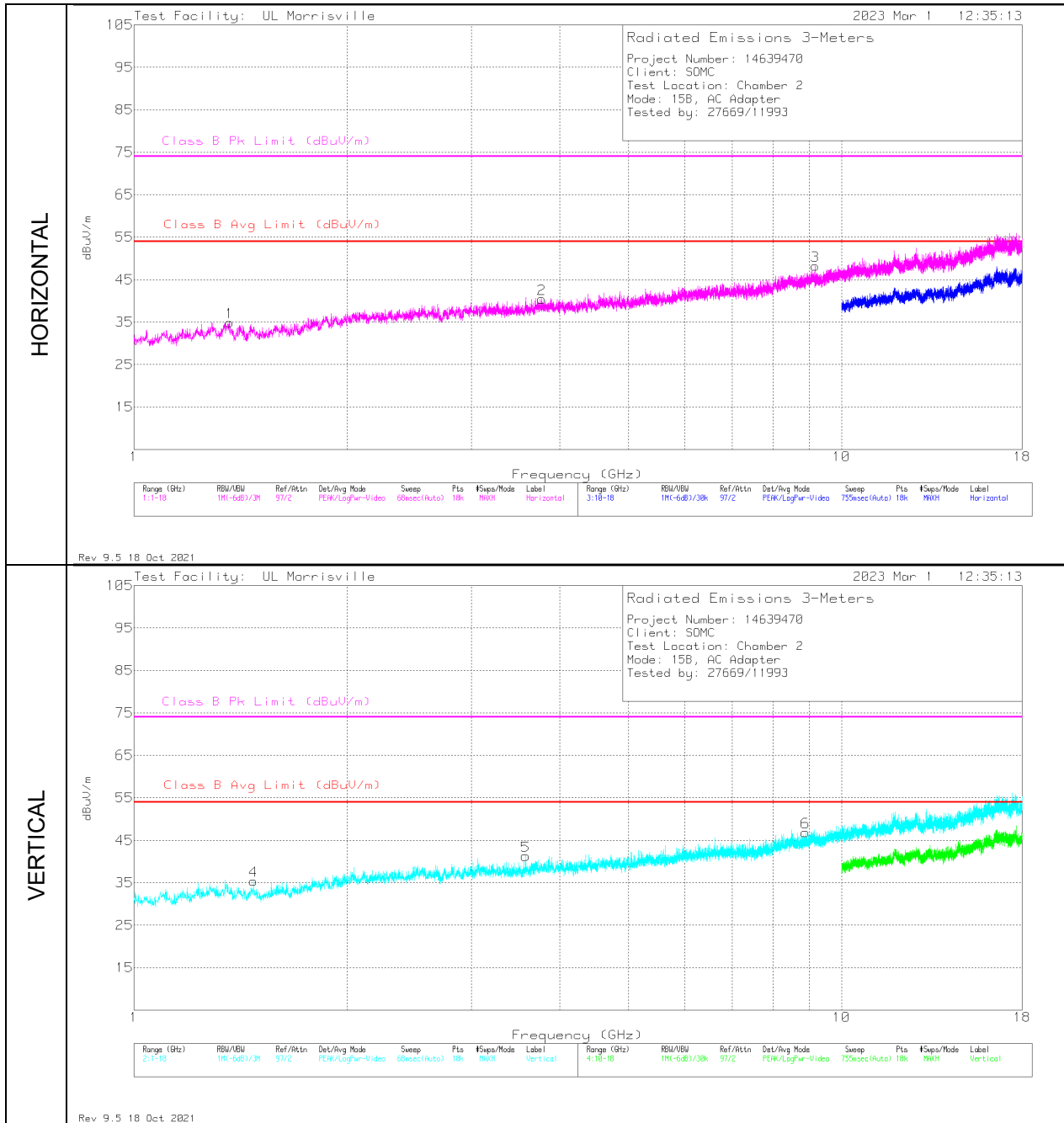
Radiated Emissions Data Points

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0074 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	31.552	34.7	Pk	26.2	-31.5	29.4	40	-10.6	0-360	101	V
7	42.998	46.19	Pk	17.7	-31.3	32.59	40	-7.41	0-360	101	V
1	44.259	38.62	Pk	16.8	-31.2	24.22	40	-15.78	0-360	399	H
8	98.773	40.24	Pk	16.1	-30.5	25.84	43.52	-17.68	0-360	101	V
2	99.258	42.04	Pk	16.2	-30.7	27.54	43.52	-15.98	0-360	299	H
3	166.382	37.52	Pk	18.2	-29.8	25.92	43.52	-17.6	0-360	199	H
9	169.001	38.96	Pk	18.1	-29.9	27.16	43.52	-16.36	0-360	101	V
4	343.213	30.92	Pk	20.1	-28.7	22.32	46.02	-23.7	0-360	101	H
10	532.557	28.16	Pk	23.8	-27.7	24.26	46.02	-21.76	0-360	299	V
5	827.437	26.79	Pk	27.3	-26.1	27.99	46.02	-18.03	0-360	199	H

Pk - Peak detector

RADIATED EMISSIONS 1000 TO 18,000 MHz – Power Supply

Radiated Emissions Graph



Radiated Emissions Data Points

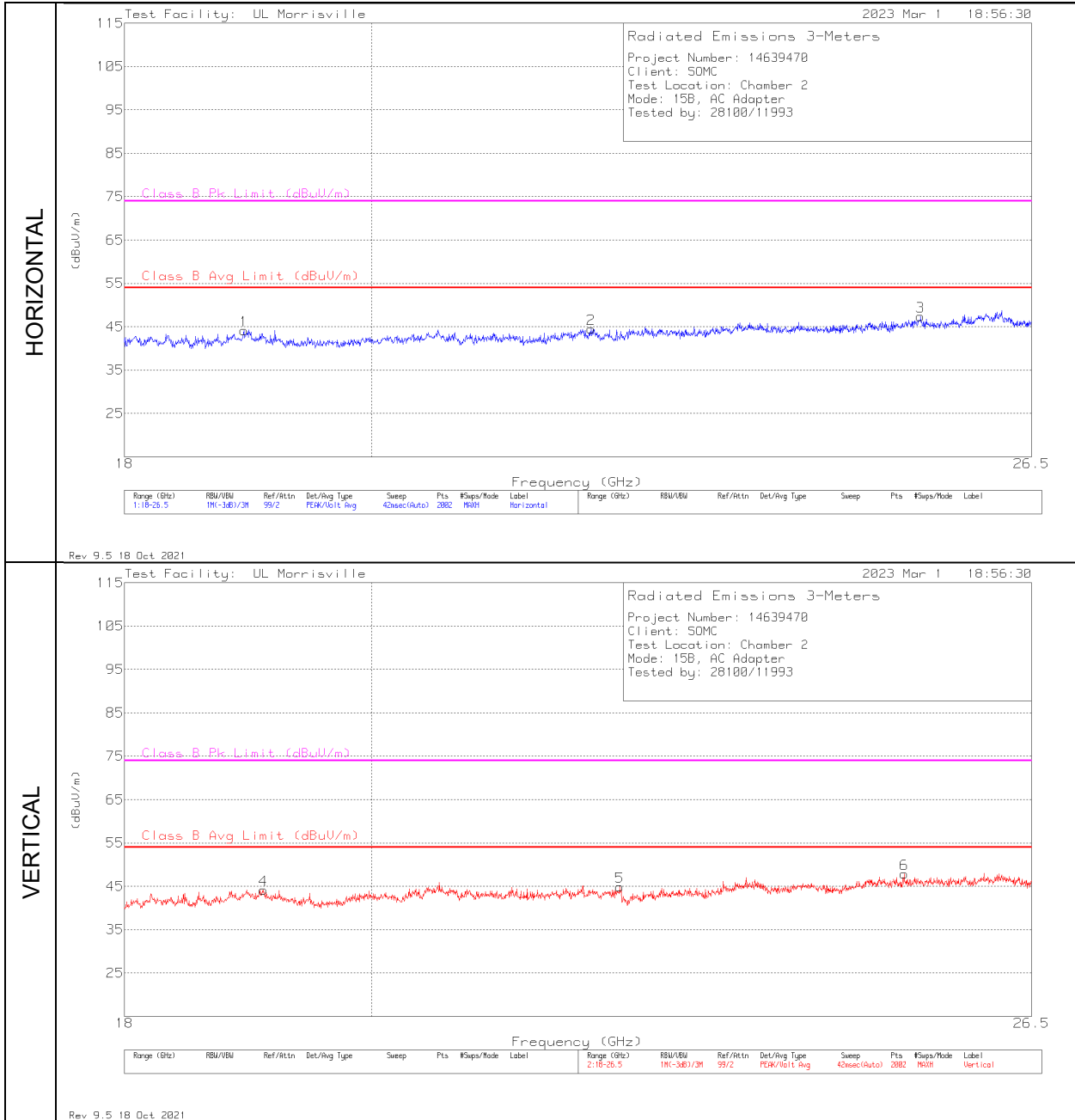
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.3655	40.83	Pk	29	-34.9	34.93	54	-19.07	74	-39.07	0-360	200	H
4	1.47506	42.04	Pk	28.2	-34.8	35.44	54	-18.56	74	-38.56	0-360	200	V
5	3.57644	41.31	Pk	32.9	-32.9	41.31	54	-12.69	74	-32.69	0-360	200	V
2	3.76911	39.54	Pk	33.4	-32.5	40.44	54	-13.56	74	-33.56	0-360	200	H
6	8.89272	37.69	Pk	36.1	-26.9	46.89	54	-7.11	74	-27.11	0-360	200	V
3	9.18374	38.61	Pk	36.3	-26.4	48.51	-	-	74	-25.49	133	387	H
3	9.18374	24.98	Av	36.3	-26.4	34.88	54	-19.12	-	-	133	387	H

Pk - Peak detector

Av - Average detection

RADIATED EMISSIONS 18,000 TO 26,000 MHz – Power Supply

Radiated Emissions Graph



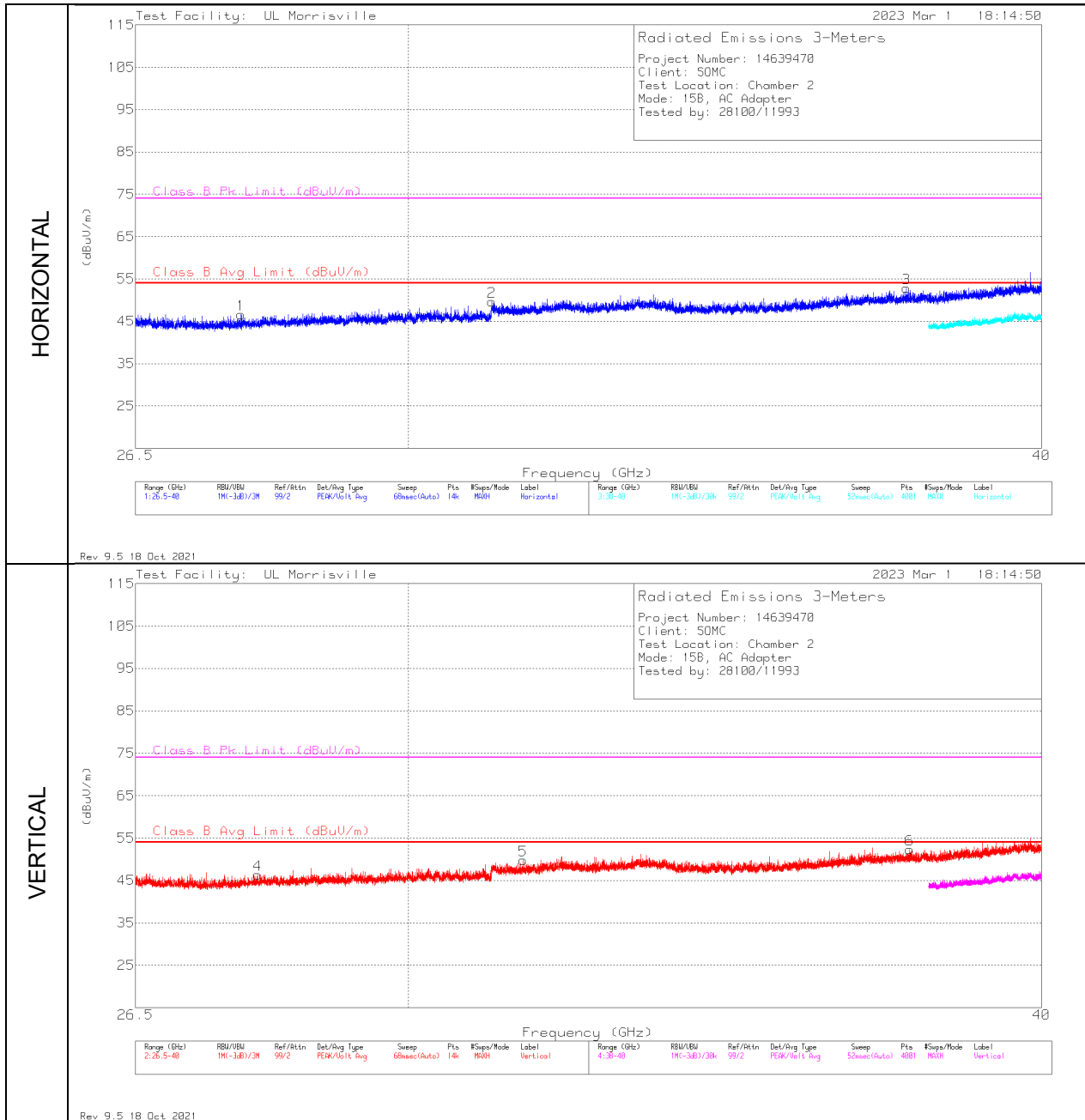
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	204704 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	18.94303	48.62	Pk	33.8	-38.3	44.12	54	-9.88	74	-29.88	0-360	249	H
4	19.1002	48.73	Pk	33.8	-38.4	44.13	54	-9.87	74	-29.87	0-360	200	V
2	21.96327	48.27	Pk	34.5	-38.3	44.47	54	-9.53	74	-29.53	0-360	300	H
5	22.23088	48.66	Pk	34.5	-38.3	44.86	54	-9.14	74	-29.14	0-360	251	V
6	25.0982	48.96	Pk	35.7	-36.8	47.86	54	-6.14	74	-26.14	0-360	300	V
3	25.27661	48.19	Pk	36.1	-36.9	47.39	54	-6.61	74	-26.61	0-360	100	H

Pk - Peak detector

RADIATED EMISSIONS 26,000 TO 40,000 MHz – Power Supply

Radiated Emissions Graph



Radiated Emissions Data Points

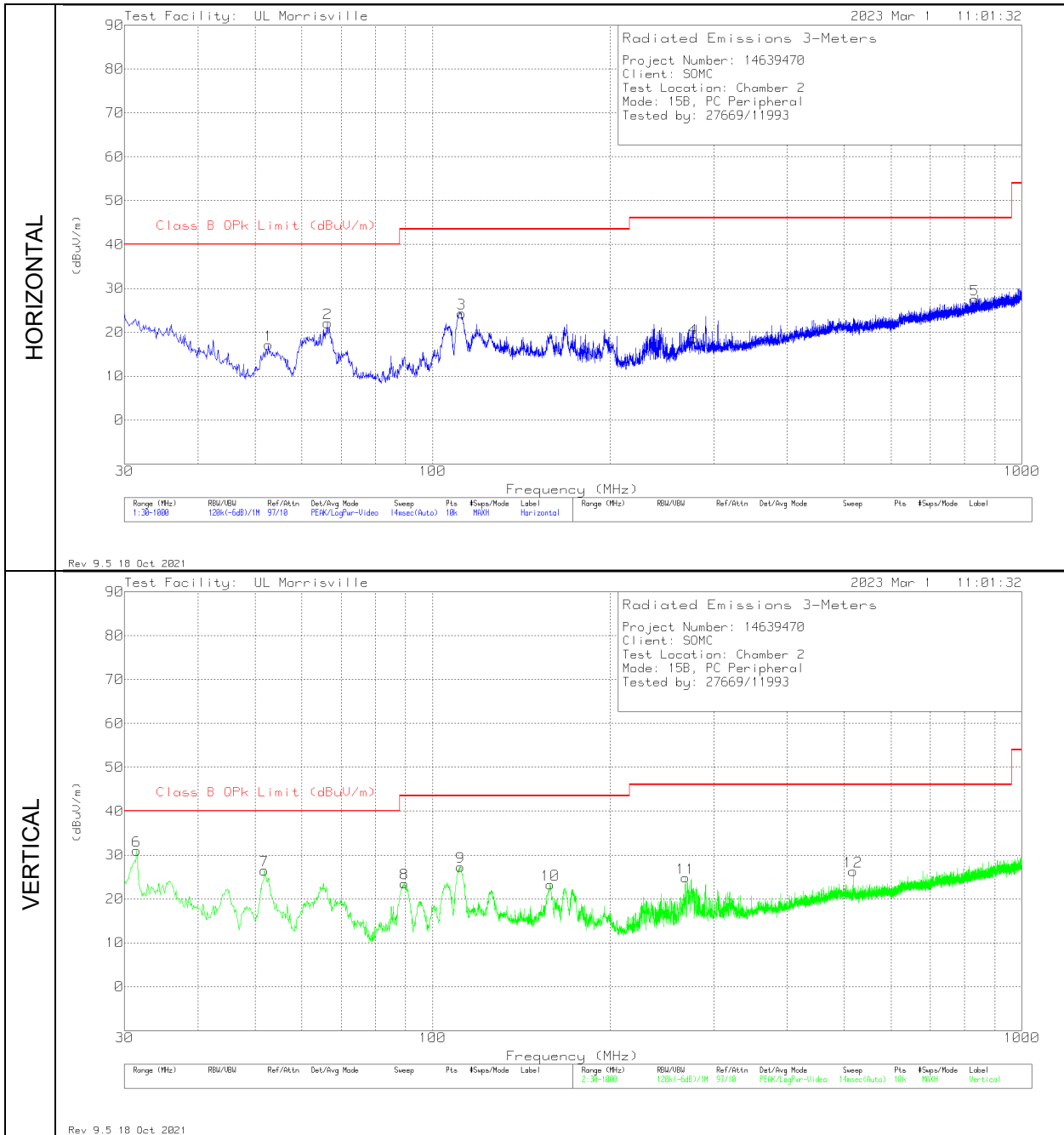
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	204705 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	27.80073	45.98	Pk	36.3	-35.7	46.58	54	-7.42	74	-27.42	0-360	300	H
4	28.01093	45.3	Pk	36.5	-35.4	46.4	54	-7.6	74	-27.6	0-360	150	V
2	31.15969	47.75	Pk	37	-34.1	50.65	-	-	74	-23.35	57	390	H
	31.1612	39.31	Av	37	-34.1	42.21	54	-11.79	-	-	57	390	H
5	31.59887	47.17	Pk	37.1	-34	50.27	-	-	74	-23.73	114	375	V
	31.60108	39.58	Av	37.1	-34	42.68	54	-11.32	-	-	114	375	V
3	37.61845	51.2	Pk	38.4	-36.8	52.8	-	-	74	-21.2	65	164	H
	37.61928	42.91	Av	38.4	-36.8	44.51	54	-9.49	-	-	65	164	H
6	37.67724	50.72	Pk	38.4	-36.7	52.42	-	-	74	-21.58	66	249	V
	37.67459	42.56	Av	38.4	-36.7	44.26	54	-9.74	-	-	66	249	V

Pk - Peak detector

Av - Average detection

RADIATED EMISSIONS 30 TO 1000 MHz – PC Peripheral

Radiated Emissions Graph



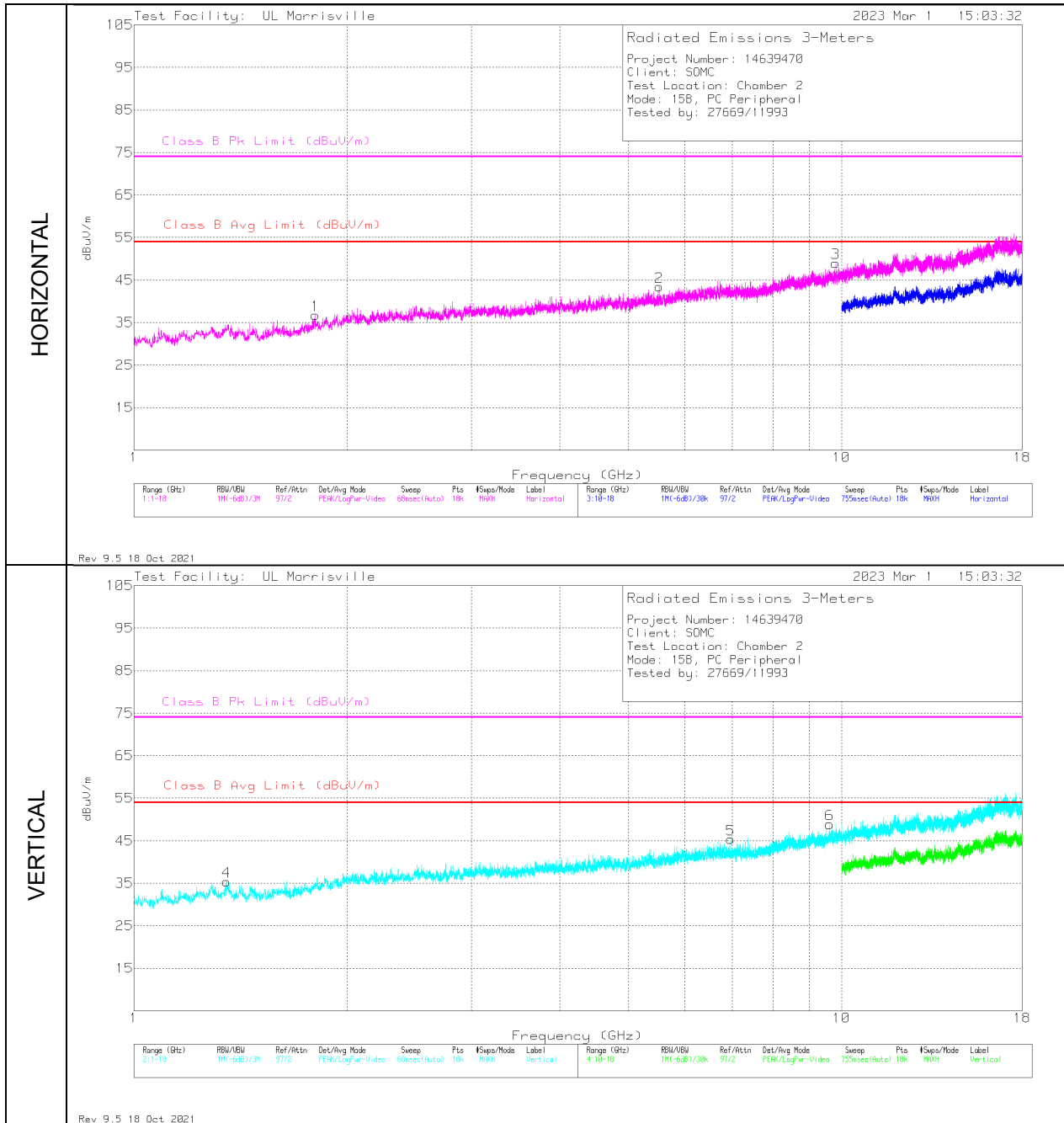
Radiated Emissions Data Points

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0074 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	31.455	36.1	Pk	26.3	-31.4	31	40	-9	0-360	101	V
7	51.825	44.07	Pk	13.6	-31.2	26.47	40	-13.53	0-360	101	V
1	52.698	34.71	Pk	13.5	-31.1	17.11	40	-22.89	0-360	399	H
2	66.375	38.7	Pk	14.4	-31	22.1	40	-17.9	0-360	199	H
8	89.558	40.03	Pk	13.9	-30.4	23.53	43.52	-19.99	0-360	101	V
9	111.48	38.82	Pk	18.9	-30.4	27.32	43.52	-16.2	0-360	101	V
3	111.965	35.69	Pk	19	-30.4	24.29	43.52	-19.23	0-360	299	H
10	158.428	34.55	Pk	18.4	-29.7	23.25	43.52	-20.27	0-360	101	V
11	268.62	34.91	Pk	19	-29.1	24.81	46.02	-21.21	0-360	101	V
4	277.544	28.21	Pk	19.3	-28.9	18.61	46.02	-27.41	0-360	199	H
12	517.425	30.29	Pk	23.5	-27.5	26.29	46.02	-19.73	0-360	101	V
5	832.287	26.27	Pk	27.4	-26.2	27.47	46.02	-18.55	0-360	199	H

Pk - Peak detector

RADIATED EMISSIONS 1000 TO 18,000 MHz – PC Peripheral

Radiated Emissions Graph



Radiated Emissions Data Points

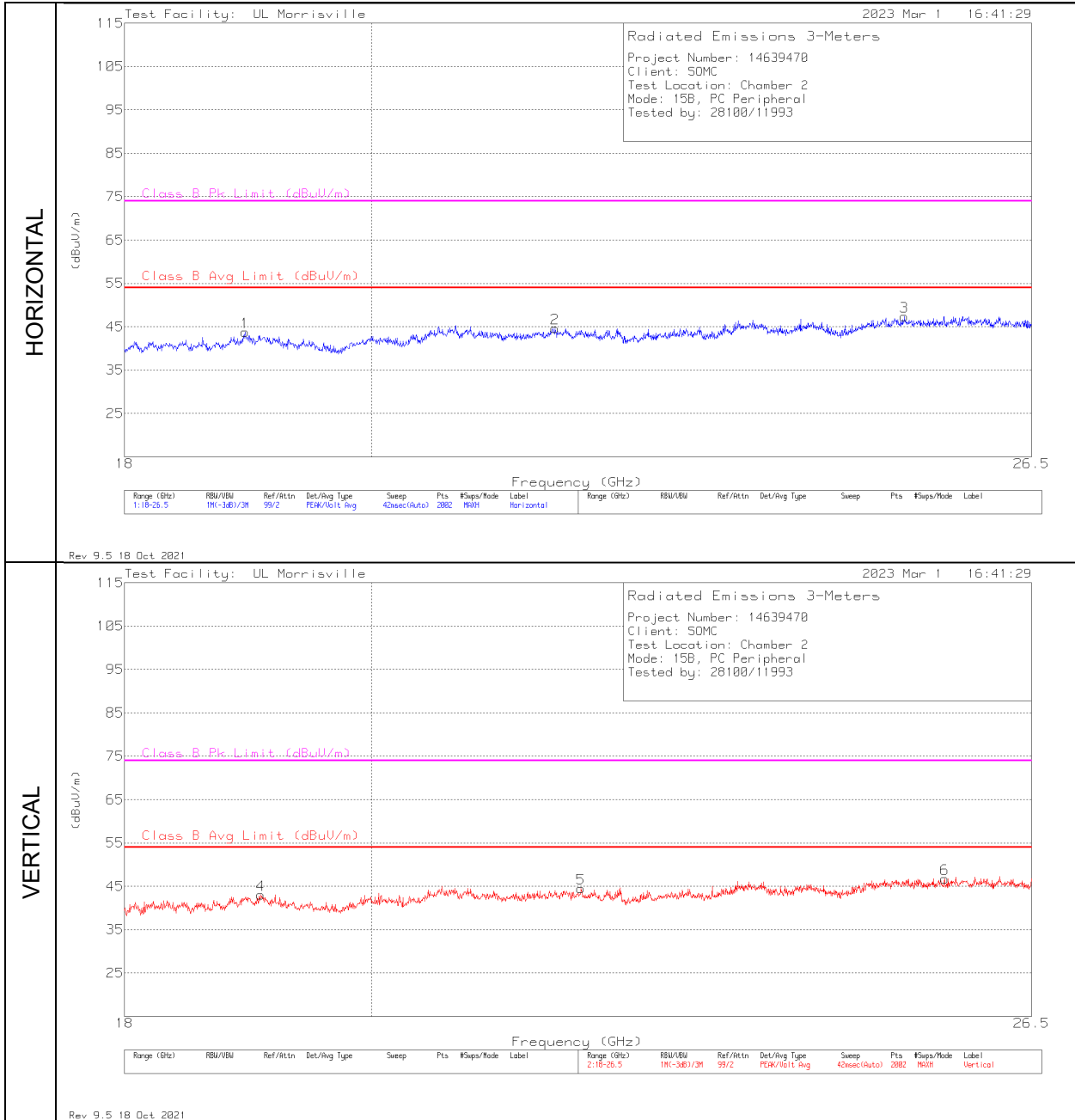
Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading dBUV/m	Class B Avg Limit (dBUV/m)	Margin (dB)	Class B Pk Limit (dBUV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	1.35133	41.01	Pk	29.3	-34.9	35.41	54	-18.59	74	-38.59	0-360	200	V
1	1.80372	41.26	Pk	30	-34.5	36.76	54	-17.24	74	-37.24	0-360	100	H
2	5.52672	39.37	Pk	34.4	-30.3	43.47	54	-10.53	74	-30.53	0-360	100	H
5	6.96889	38.23	Pk	35.6	-28.5	45.33	54	-8.67	74	-28.67	0-360	101	V
6	9.62496	38.65	Pk	36.7	-25.8	49.55	-	-	74	-24.45	236	182	V
	9.62496	24.4	Av	36.7	-25.8	35.3	54	-18.7	-	-	236	182	V
3	9.8097	37.79	Pk	36.8	-25.1	49.49	-	-	74	-24.51	65	131	H
	9.8097	23.99	Av	36.8	-25.1	35.69	54	-18.31	-	-	65	131	H

Pk - Peak detector

Av - Average detection

RADIATED EMISSIONS 18,000 TO 26,000 MHz – PC Peripheral

Radiated Emissions Graph



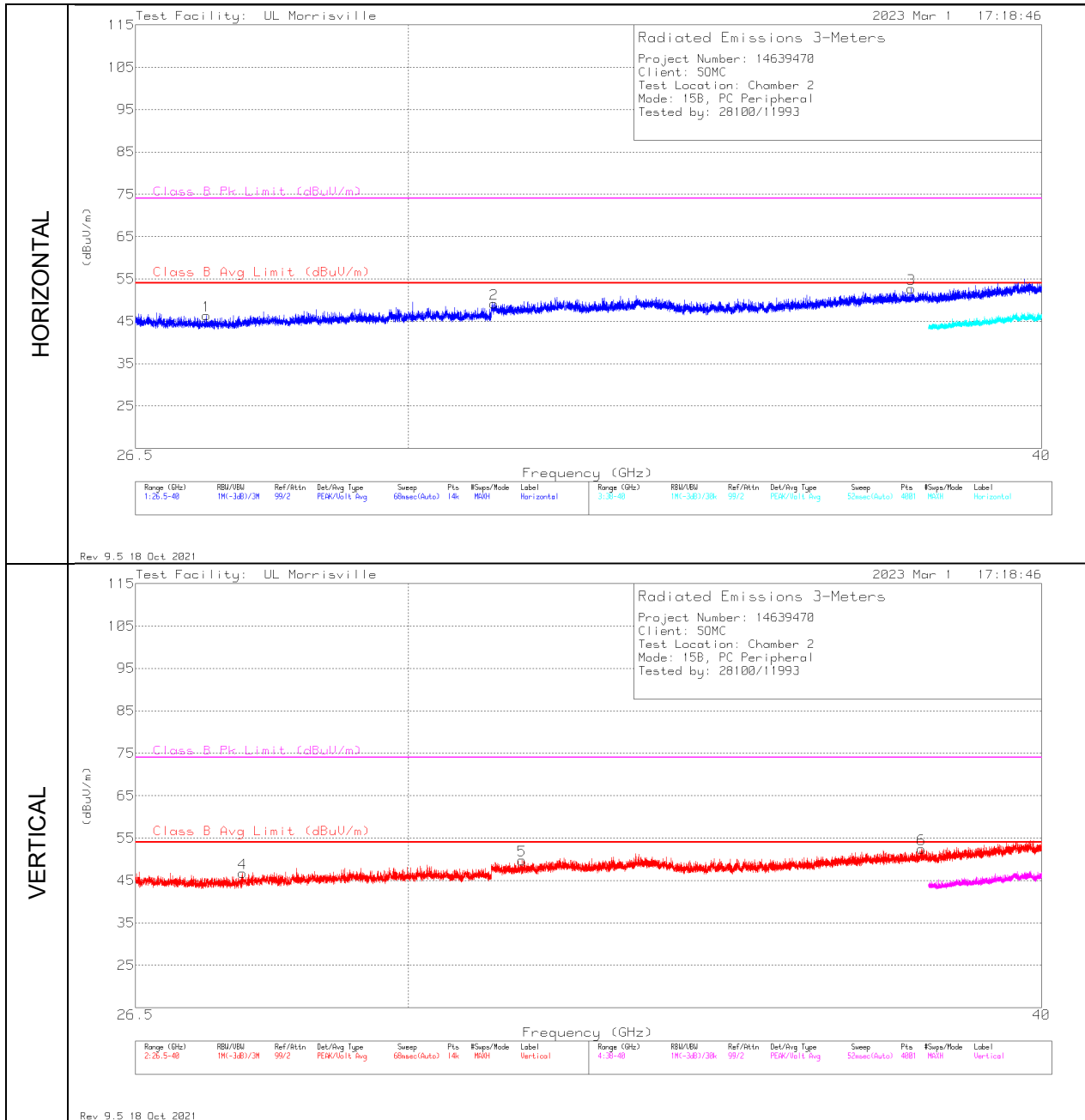
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	204704 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	18.95152	48.29	Pk	33.8	-38.3	43.79	54	-10.21	74	-30.21	0-360	200	H
4	19.07896	47.6	Pk	33.8	-38.4	43	54	-11	74	-31	0-360	101	V
2	21.62769	48.95	Pk	34.2	-38.5	44.65	54	-9.35	74	-29.35	0-360	299	H
5	21.86982	48.32	Pk	34.6	-38.4	44.52	54	-9.48	74	-29.48	0-360	101	V
3	25.10245	48.49	Pk	35.7	-36.8	47.39	54	-6.61	74	-26.61	0-360	101	H
6	25.53573	47.28	Pk	36	-36.5	46.78	54	-7.22	74	-27.22	0-360	249	V

Pk - Peak detector

RADIATED EMISSIONS 26,000 TO 40,000 MHz – PC Peripheral

Radiated Emissions Graph



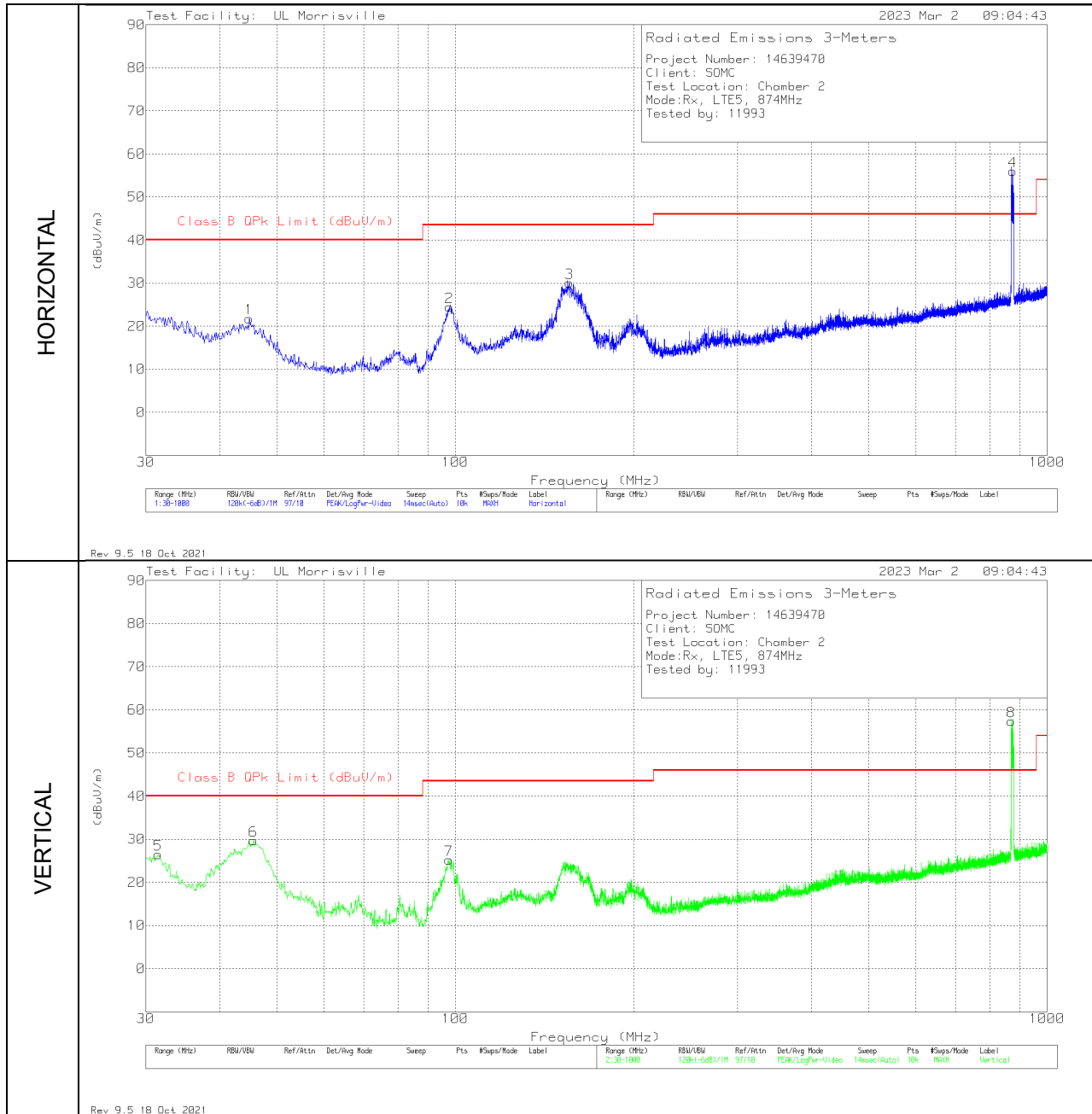
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	204705 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	27.3678	46.23	Pk	36.1	-36	46.33	54	-7.67	74	-27.67	0-360	299	H
4	27.82001	46.04	Pk	36.3	-35.6	46.74	54	-7.26	74	-27.26	0-360	299	V
2	31.18811	48.15	Pk	37	-34.1	51.05	-	-	74	-22.95	355	341	H
	31.18646	39.37	Av	37	-34.1	42.27	54	-11.73	-	-	355	341	H
5	31.58824	47.39	Pk	37.1	-34	50.49	-	-	74	-23.51	245	139	V
	31.58518	39.09	Av	37.1	-34	42.19	54	-11.81	-	-	245	139	V
3	37.70355	51.01	Pk	38.4	-36.6	52.81	-	-	74	-21.19	109	113	H
	37.70335	43.52	Av	38.4	-36.6	45.32	54	-8.68	-	-	109	113	H
6	37.87102	50.57	Pk	38.4	-36.6	52.37	-	-	74	-21.63	290	224	V
	37.87225	41.84	Av	38.4	-36.6	43.64	54	-10.36	-	-	290	224	V

Pk - Peak detector
 Av - Average detection

RADIATED EMISSIONS 30 TO 1000 MHz – LTE5 Rx 874MHz

Radiated Emissions Graph



Radiated Emissions Data Points

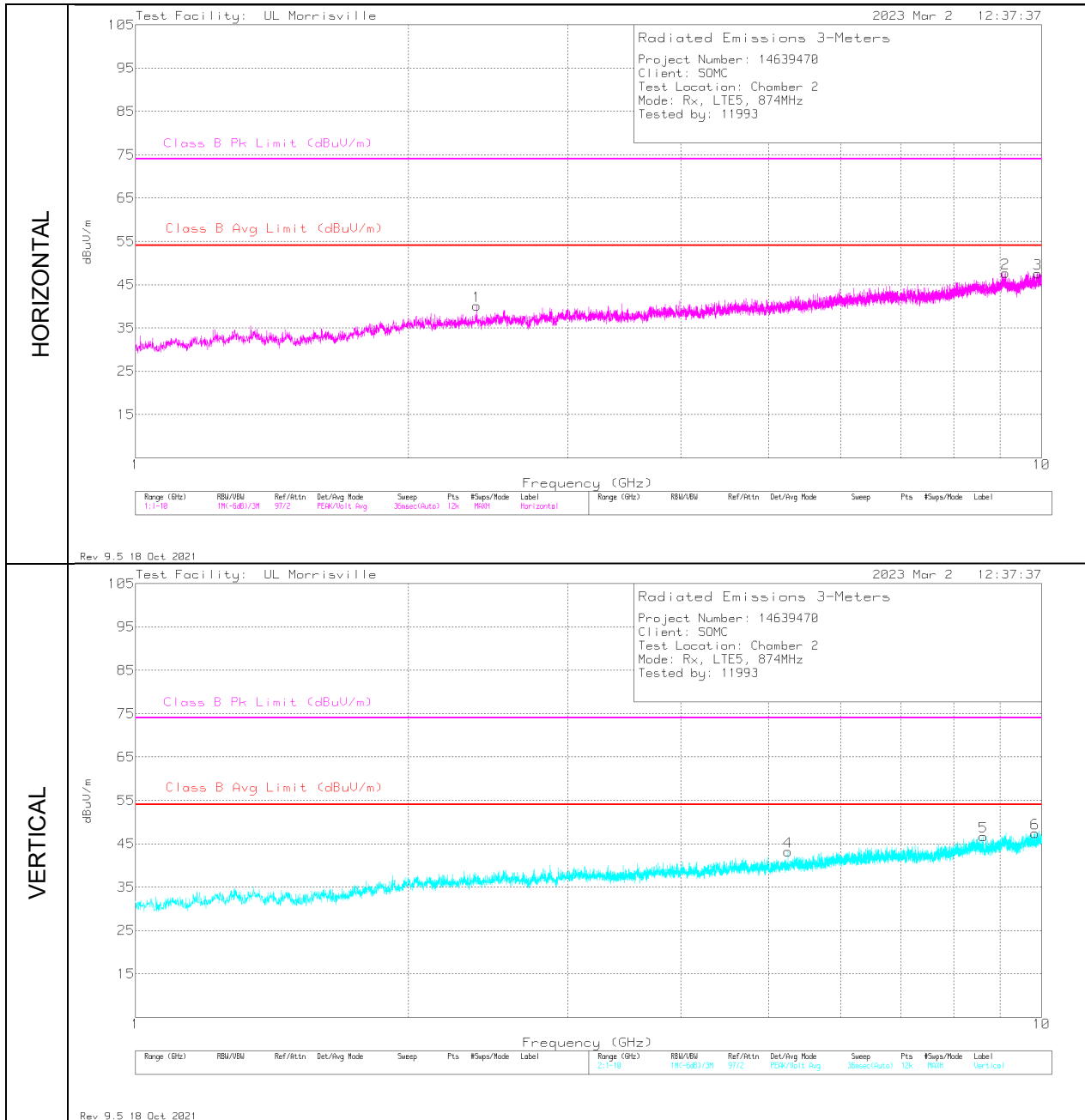
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0074 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	31.455	31.6	Pk	26.3	-31.4	26.5	40	-13.5	0-360	101	V
1	44.841	36.41	Pk	16.5	-31.1	21.81	40	-18.19	0-360	399	H
6	45.617	44.86	Pk	16	-31.2	29.66	40	-10.34	0-360	101	V
7	97.609	39.79	Pk	15.8	-30.4	25.19	43.52	-18.33	0-360	101	V
2	97.706	39.07	Pk	15.8	-30.4	24.47	43.52	-19.05	0-360	299	H
3	155.809	41.62	Pk	18.4	-29.9	30.12	43.52	-13.4	0-360	199	H
8	869.826 (DL)	55.35	Pk	27.8	-25.8	57.35	-	-	0-360	101	V
4	874.385 (DL)	54.06	Pk	27.8	-25.9	55.96	-	-	0-360	299	H

Pk - Peak detector

DL – Downlink from Callbox

RADIATED EMISSIONS 1000 TO 10,000 MHz – LTE5 Rx 874MHz

Radiated Emissions Graph



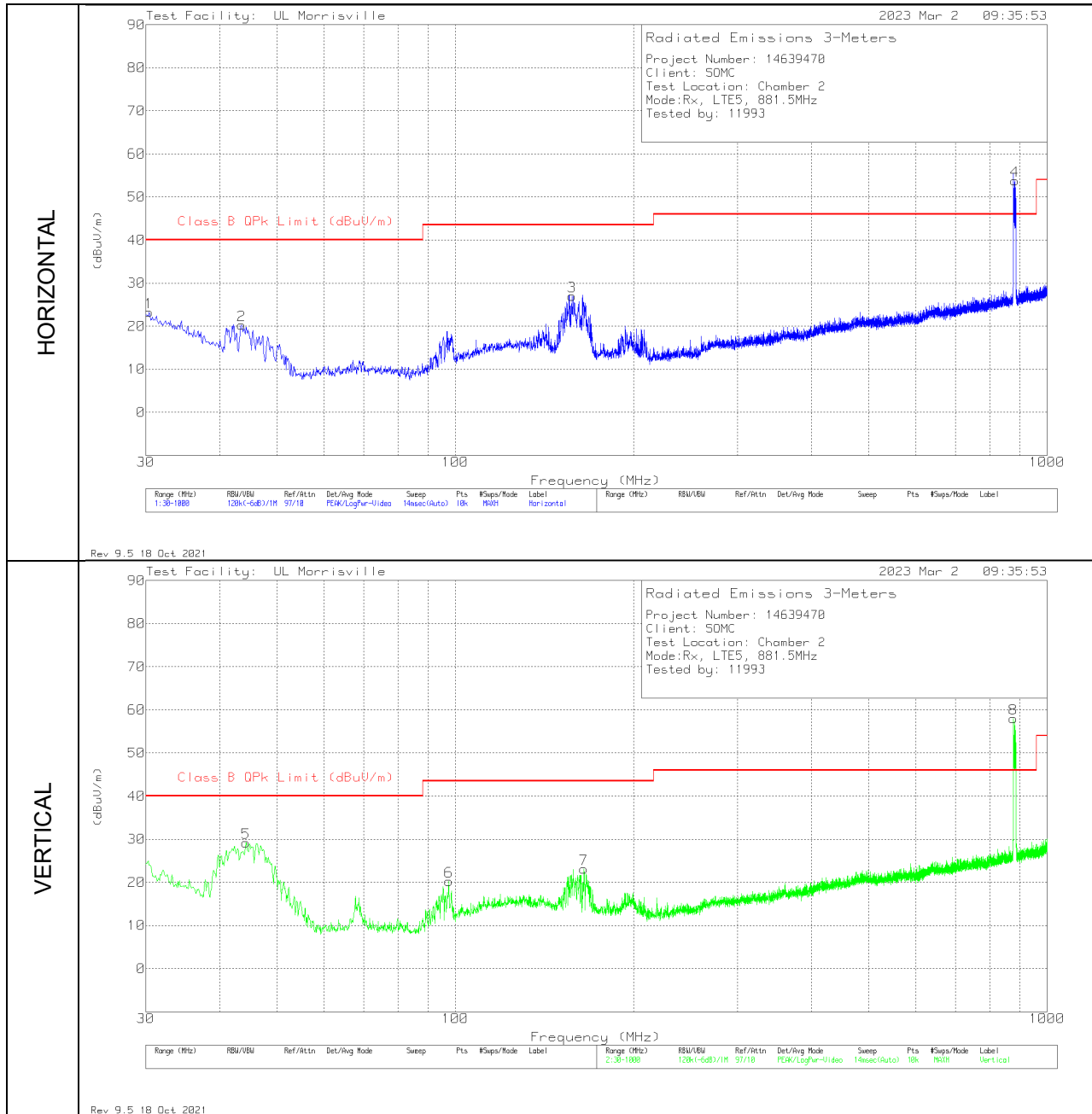
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.38075	41.96	Pk	32.1	-34	40.06	54	-13.94	74	-33.94	0-360	200	H
4	5.24875	39.84	Pk	34.4	-31	43.24	54	-10.76	74	-30.76	0-360	200	V
5	8.626	37.51	Pk	35.9	-26.7	46.71	54	-7.29	74	-27.29	0-360	200	V
2	9.127	37.63	Pk	36.2	-26.2	47.63	54	-6.37	74	-26.37	0-360	101	H
6	9.8335	35.78	Pk	36.9	-25.3	47.38	54	-6.62	74	-26.62	0-360	101	V
3	9.9025	36.23	Pk	37	-25.7	47.53	54	-6.47	74	-26.47	0-360	200	H

Pk - Peak detector

RADIATED EMISSIONS 30 TO 1000 MHz – LTE5 Rx 881.5MHz

Radiated Emissions Graph



Radiated Emissions Data Points

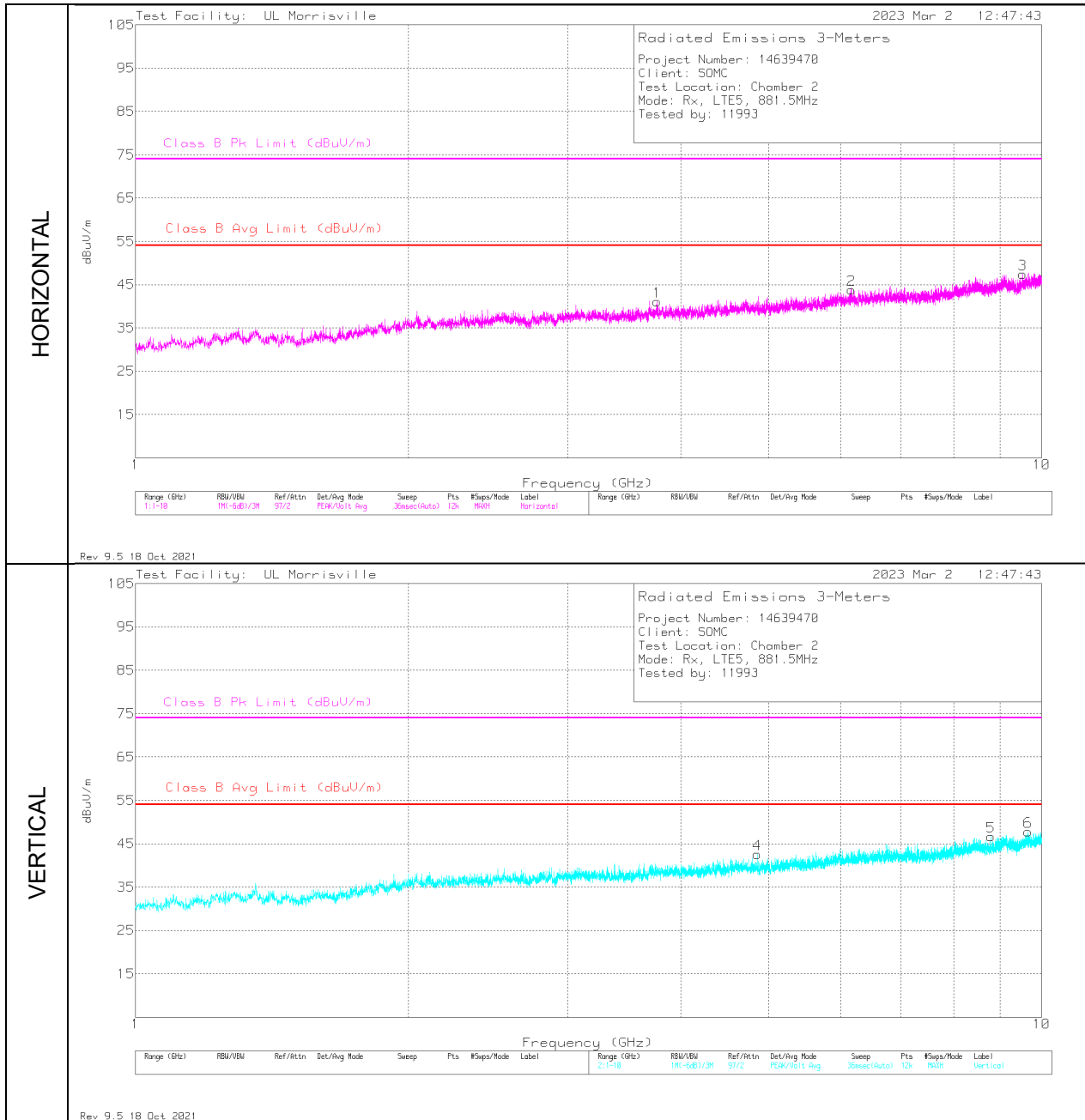
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0074 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	30.388	27.72	Pk	27	-31.5	23.22	40	-16.78	0-360	399	H
2	43.58	34.26	Pk	17.3	-31.3	20.26	40	-19.74	0-360	399	H
5	44.259	43.65	Pk	16.8	-31.2	29.25	40	-10.75	0-360	101	V
6	97.512	34.87	Pk	15.8	-30.4	20.27	43.52	-23.25	0-360	101	V
3	157.458	38.5	Pk	18.4	-29.9	27	43.52	-16.52	0-360	199	H
7	164.927	34.47	Pk	18.3	-29.7	23.07	43.52	-20.45	0-360	101	V
8(DL)	877.295	56.01	Pk	27.8	-25.8	58.01	-	-	0-360	101	V
4(DL)	881.66	51.83	Pk	27.9	-25.9	53.83	-	-	0-360	101	H

Pk - Peak detector

DL – Downlink from Callbox

RADIATED EMISSIONS 1000 TO 10,000 MHz – LTE5 Rx 881.5MHz

Radiated Emissions Graph



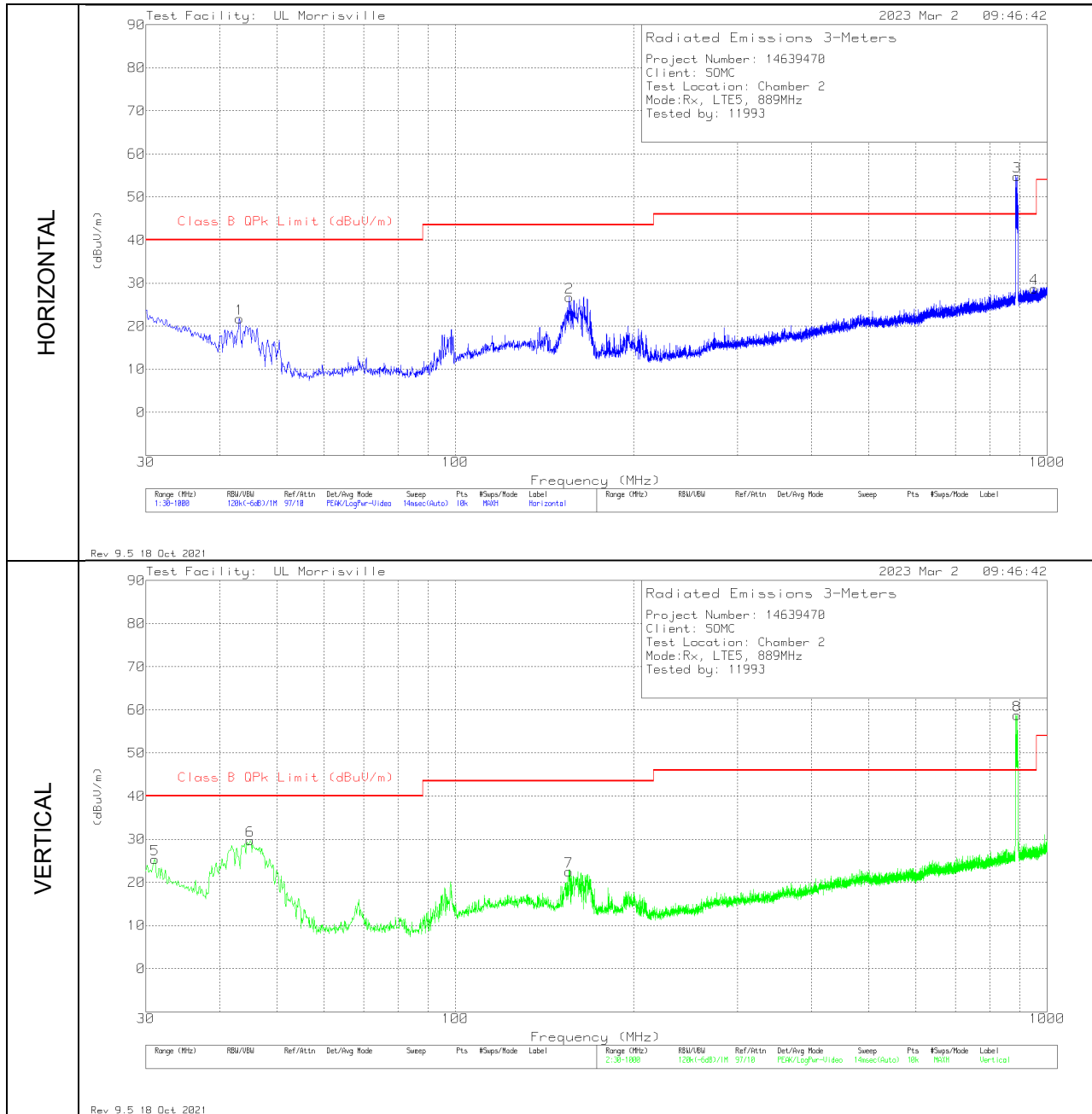
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.766	40.14	Pk	33.4	-32.5	41.04	54	-12.96	74	-32.96	0-360	101	H
4	4.8535	39.66	Pk	34	-31.1	42.56	54	-11.44	74	-31.44	0-360	199	V
2	6.17275	38.41	Pk	35.3	-29.9	43.81	54	-10.19	74	-30.19	0-360	199	H
5	8.78875	36.83	Pk	36	-26.2	46.63	54	-7.37	74	-27.37	0-360	199	V
3	9.52788	36.24	Pk	36.6	-25.4	47.44	54	-6.56	74	-26.56	0-360	199	H
6	9.66925	36.71	Pk	36.7	-25.6	47.81	54	-6.19	74	-26.19	0-360	101	V

Pk - Peak detector

RADIATED EMISSIONS 30 TO 1000 MHz – LTE5 Rx 889MHz

Radiated Emissions Graph



Radiated Emissions Data Points

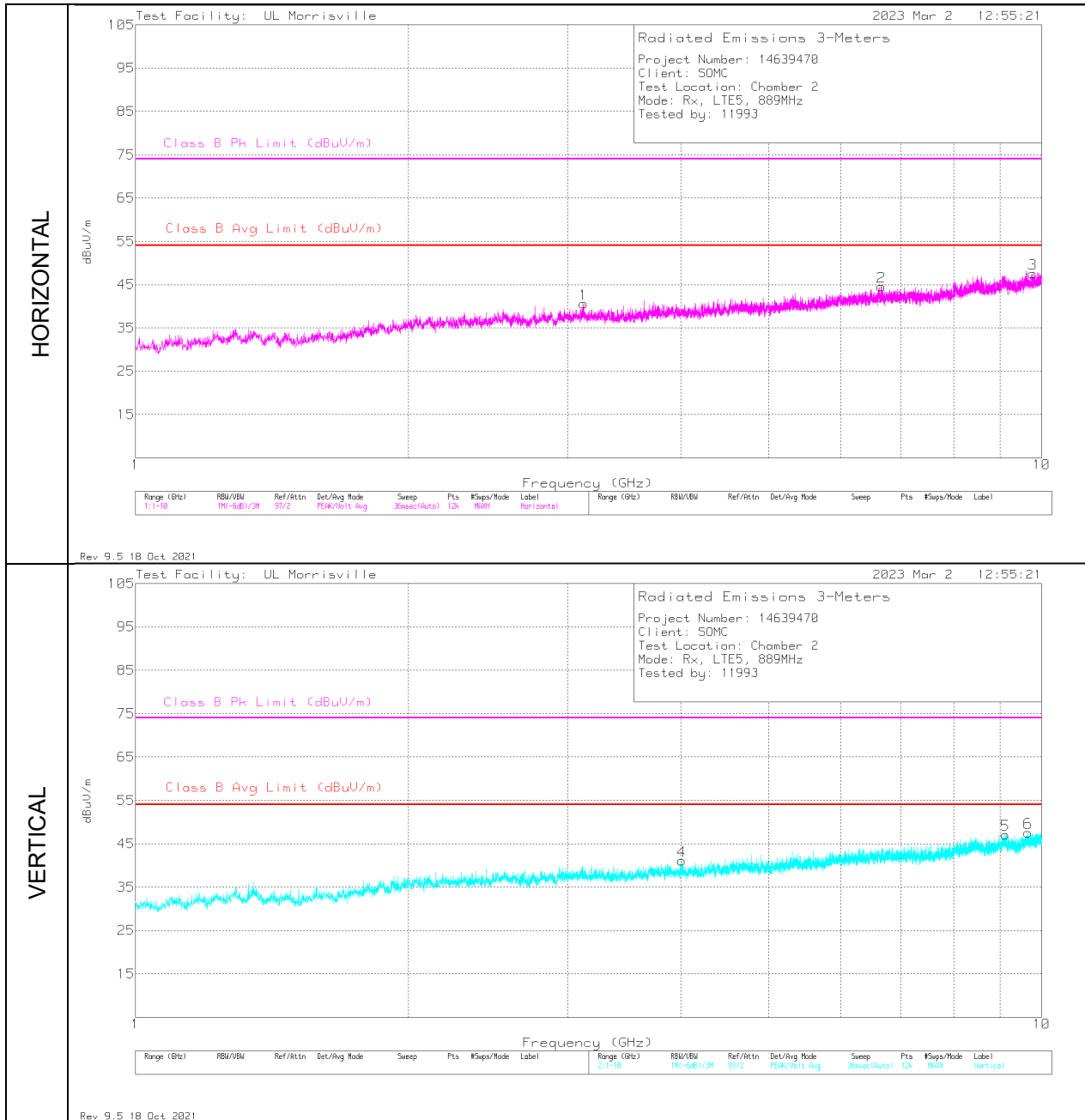
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0074 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	31.067	30.18	Pk	26.5	-31.3	25.38	40	-14.62	0-360	100	V
1	43.192	35.46	Pk	17.6	-31.3	21.76	40	-18.24	0-360	299	H
6	45.035	44.52	Pk	16.3	-31.1	29.72	40	-10.28	0-360	100	V
7	155.712	33.95	Pk	18.4	-29.9	22.45	43.52	-21.07	0-360	199	V
2	155.809	38.27	Pk	18.4	-29.9	26.77	43.52	-16.75	0-360	299	H
3	888.935 (DL)	52.45	Pk	27.9	-25.6	54.75	-	-	0-360	101	H
8	889.129 (DL)	56.55	Pk	27.9	-25.7	58.75	-	-	0-360	100	V
4	950.433	25.26	Pk	28.4	-24.9	28.76	46.02	-17.26	0-360	199	H

Pk - Peak detector

DL – Downlink from Callbox

RADIATED EMISSIONS 1000 TO 10,000 MHz – LTE5 Rx 889MHz

Radiated Emissions Graph



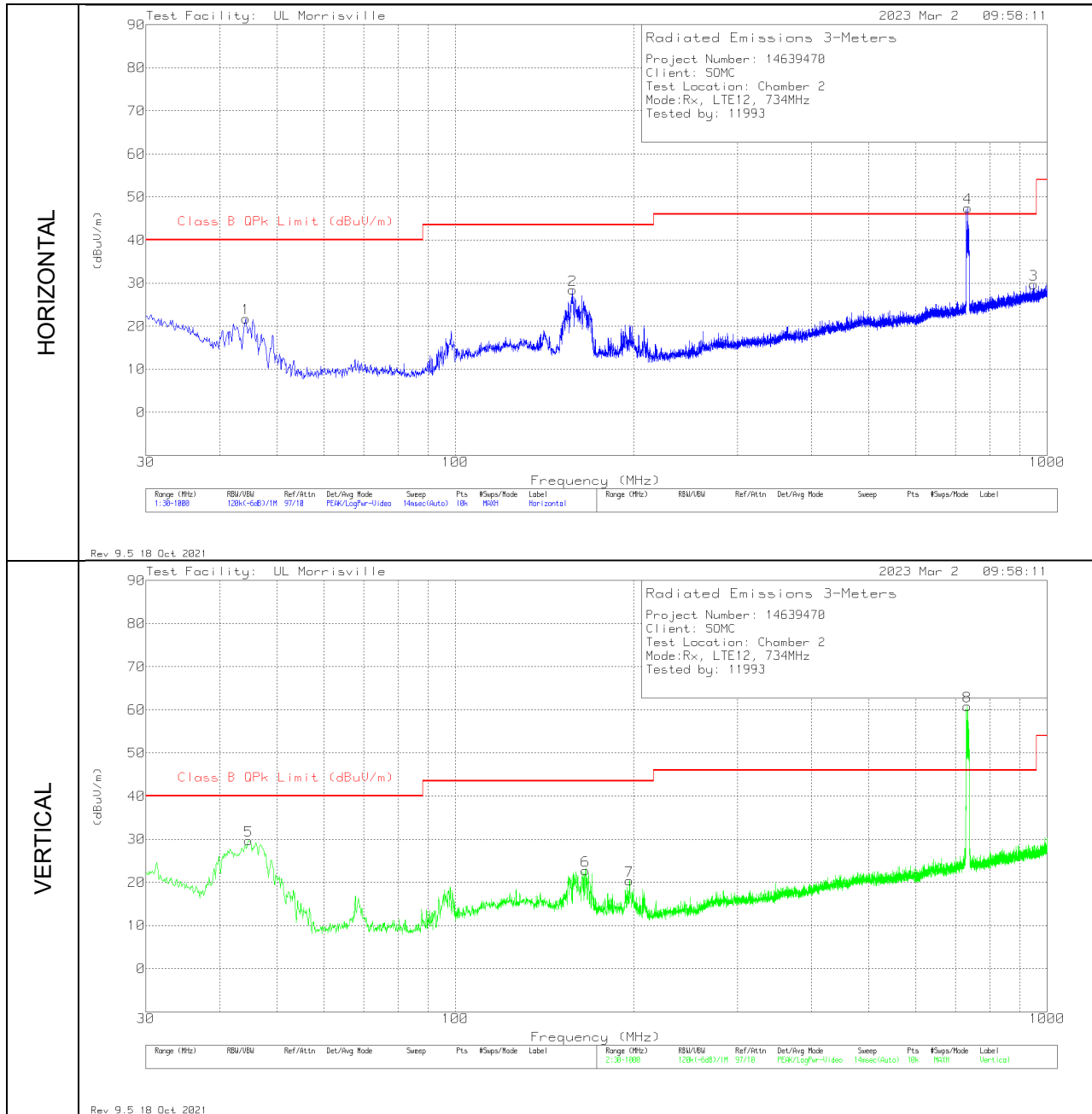
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.12325	41.06	Pk	32.9	-33.4	40.56	54	-13.44	74	-33.44	0-360	101	H
4	4.009	39.74	Pk	33.4	-32.1	41.04	54	-12.96	74	-32.96	0-360	200	V
2	6.65575	37.6	Pk	35.6	-28.6	44.6	54	-9.4	74	-29.4	0-360	101	H
5	9.12925	37.11	Pk	36.2	-26.2	47.11	54	-6.89	74	-26.89	0-360	101	V
6	9.664	36.71	Pk	36.7	-25.8	47.61	54	-6.39	74	-26.39	0-360	101	V
3	9.7765	36.4	Pk	36.8	-25.6	47.6	54	-6.4	74	-26.4	0-360	101	H

Pk - Peak detector

RADIATED EMISSIONS 30 TO 1000 MHz – LTE B12 Rx 734.0MHz

Radiated Emissions Graph



Radiated Emissions Data Points

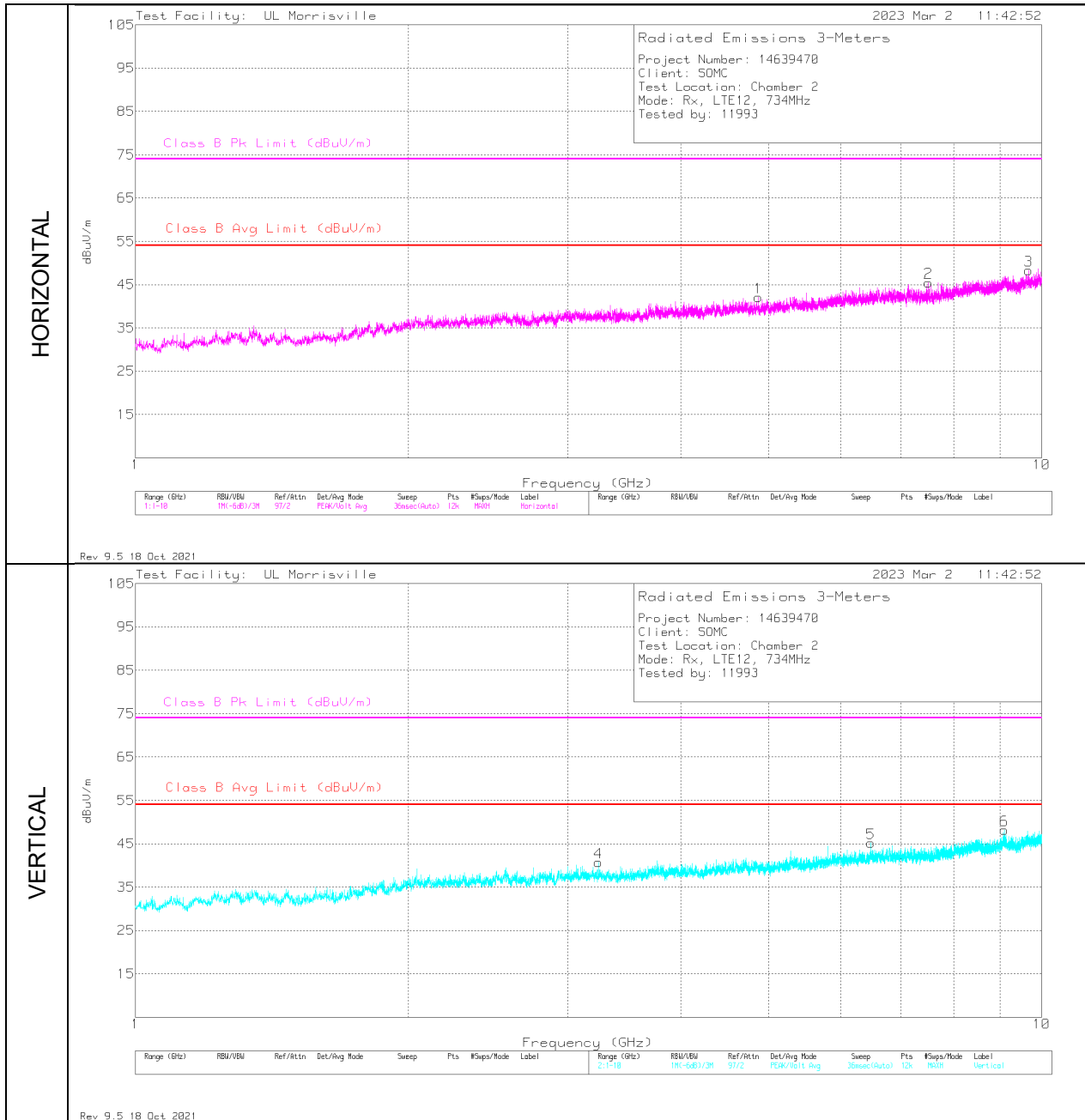
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0074 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	44.259	36.21	Pk	16.8	-31.2	21.81	40	-18.19	0-360	399	H
5	44.744	44.26	Pk	16.5	-31.1	29.66	40	-10.34	0-360	101	V
2	157.846	39.92	Pk	18.4	-29.9	28.42	43.52	-15.1	0-360	199	H
6	166.091	34.32	Pk	18.2	-29.8	22.72	43.52	-20.8	0-360	199	V
7	197.034	31.12	Pk	18.9	-29.6	20.42	43.52	-23.1	0-360	101	V
8	733.638 (DL)	60.99	Pk	26.6	-26.7	60.89	-	-	0-360	101	V
4	734.22 (DL)	47.51	Pk	26.6	-26.6	47.51	-	-	0-360	199	H
3	949.269	26.14	Pk	28.4	-24.9	29.64	46.02	-16.38	0-360	399	H

Pk - Peak detector

DL – Downlink from Callbox

RADIATED EMISSIONS 1000 TO 10,000 MHz – LTE B12 Rx 734.0MHz

Radiated Emissions Graph



Radiated Emissions Data Points

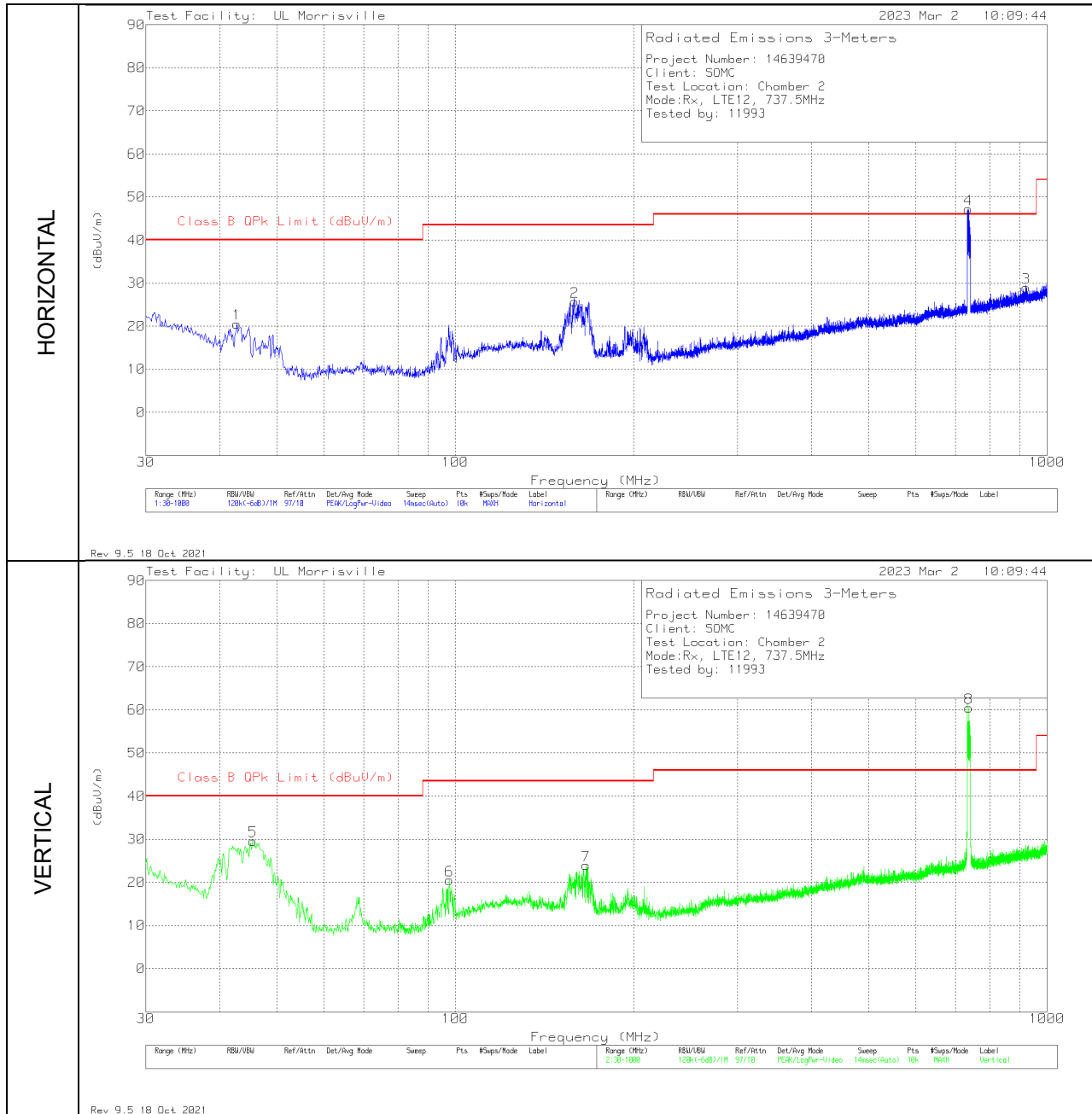
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	3.241	41.18	Pk	32.9	-33.4	40.68	54	-13.32	74	-33.32	0-360	101	V
1	4.86775	39.56	Pk	33.9	-31.4	42.06	54	-11.94	74	-31.94	0-360	101	H
5	6.47725	38.13	Pk	35.6	-28.5	45.23	54	-8.77	74	-28.77	0-360	101	V
2	7.49875	37.2	Pk	35.7	-27.4	45.5	54	-8.5	74	-28.5	0-360	200	H
6	9.10377	38.68	Pk	36.2	-26.2	48.68	-	-	74	-25.32	328	354	V
	9.10377	25.07	Av	36.2	-26.2	35.07	54	-18.93	-	-	328	354	V
3	9.67071	37.32	Pk	36.7	-25.5	48.52	-	-	74	-25.48	310	241	H
	9.67071	24.23	Av	36.7	-25.5	35.43	54	-18.57	-	-	310	241	H

Pk - Peak detector

Av - Average detection

RADIATED EMISSIONS 30 TO 1000 MHz – LTE B12 Rx 737.5MHz

Radiated Emissions Graph



Radiated Emissions Data Points

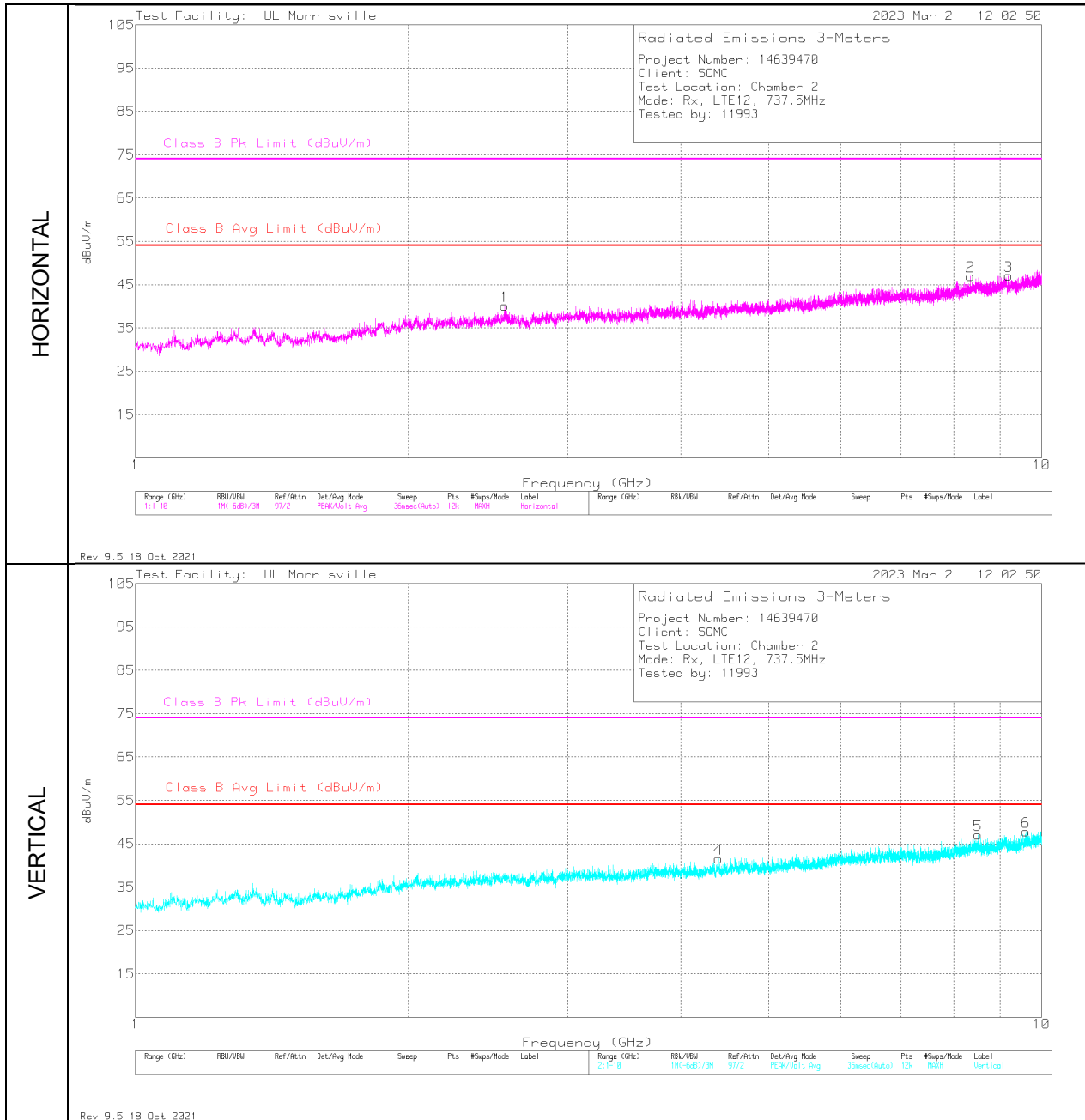
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0074 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	42.707	34.07	Pk	17.9	-31.4	20.57	40	-19.43	0-360	299	H
5	45.52	44.73	Pk	16.1	-31.2	29.63	40	-10.37	0-360	101	V
6	97.706	35.1	Pk	15.8	-30.4	20.5	43.52	-23.02	0-360	101	V
2	159.01	37.17	Pk	18.4	-29.8	25.77	43.52	-17.75	0-360	199	H
7	166.382	35.55	Pk	18.2	-29.8	23.95	43.52	-19.57	0-360	199	V
4(DL)	735.384	47.55	Pk	26.6	-26.9	47.25	-	-	0-360	199	H
8(DL)	737.13	61	Pk	26.6	-27.1	60.5	-	-	0-360	101	V
3	922.303	25.85	Pk	28.2	-25.1	28.95	46.02	-17.07	0-360	101	H

Pk - Peak detector

DL – Downlink from Callbox

RADIATED EMISSIONS 1000 TO 10,000 MHz – LTE B12 Rx 737.5MHz

Radiated Emissions Graph



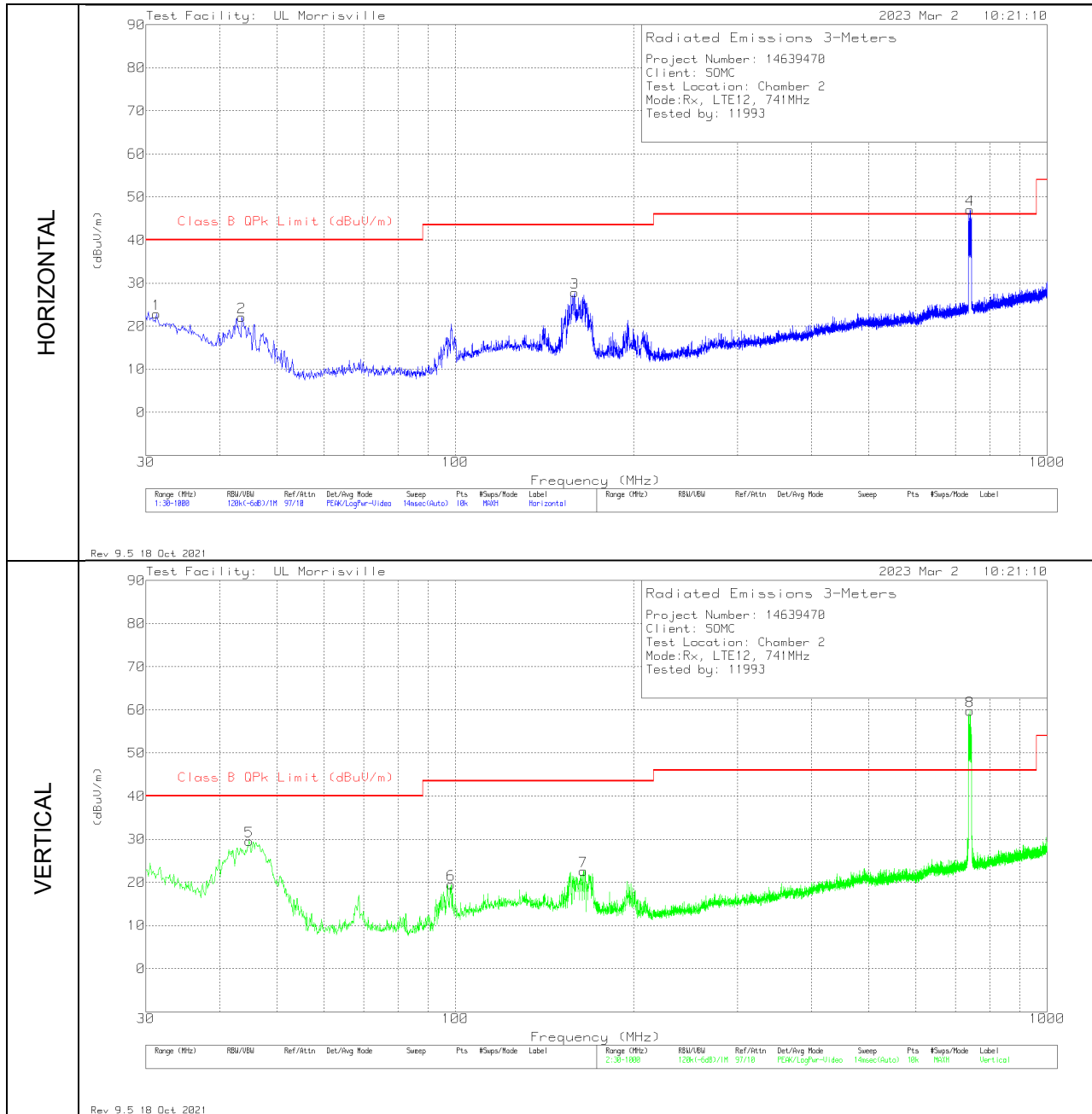
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.55475	41.24	Pk	32.5	-33.6	40.14	54	-13.86	74	-33.86	0-360	399	H
4	4.40125	39.11	Pk	33.7	-31.2	41.61	54	-12.39	74	-32.39	0-360	300	V
2	8.3455	38.09	Pk	35.8	-26.9	46.99	54	-7.01	74	-27.01	0-360	399	H
5	8.50675	38.06	Pk	35.9	-26.9	47.06	54	-6.94	74	-26.94	0-360	200	V
3	9.20275	37.38	Pk	36.3	-26.6	47.08	54	-6.92	74	-26.92	0-360	399	H
6	9.60475	36.74	Pk	36.7	-25.6	47.84	54	-6.16	74	-26.16	0-360	200	V

Pk - Peak detector

RADIATED EMISSIONS 30 TO 1000 MHz – LTE B12 Rx 741.0MHz

Radiated Emissions Graph



Radiated Emissions Data Points

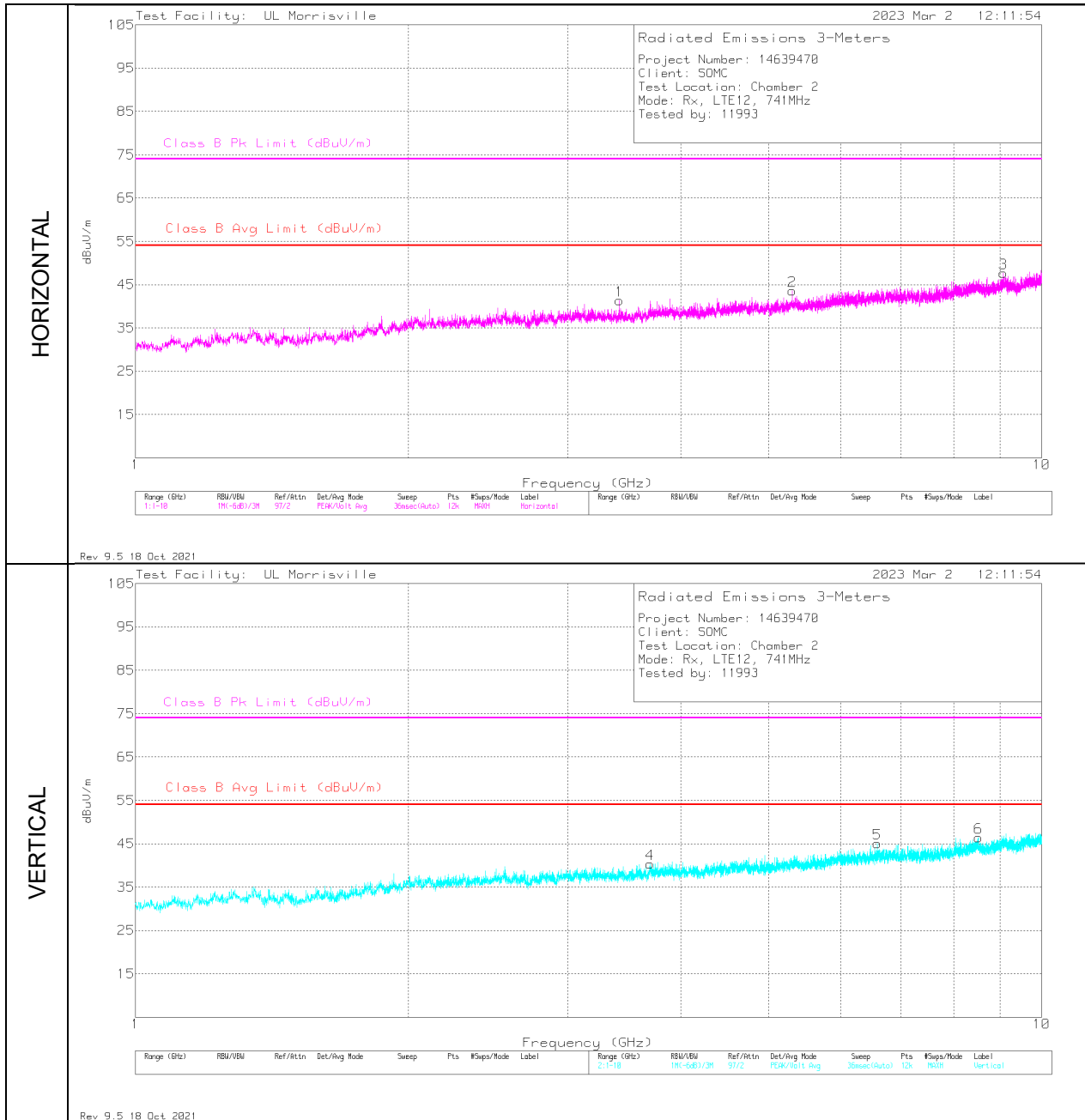
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0074 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	31.261	27.81	Pk	26.4	-31.4	22.81	40	-17.19	0-360	399	H
2	43.58	36.07	Pk	17.3	-31.3	22.07	40	-17.93	0-360	399	H
5	44.841	44.15	Pk	16.5	-31.1	29.55	40	-10.45	0-360	101	V
6	98.385	34.14	Pk	16	-30.6	19.54	43.52	-23.98	0-360	101	V
3	159.01	39.21	Pk	18.4	-29.8	27.81	43.52	-15.71	0-360	199	H
7	164.636	33.98	Pk	18.3	-29.7	22.58	43.52	-20.94	0-360	199	V
8(DL)	741.301	59.74	Pk	26.7	-26.7	59.74	-	-	0-360	101	V
4(DL)	741.398	47.07	Pk	26.7	-26.7	47.07	-	-	0-360	199	H

Pk - Peak detector

DL – Downlink from Callbox

RADIATED EMISSIONS 1000 TO 10,000 MHz – LTE B12 Rx 741.0MHz

Radiated Emissions Graph



Radiated Emissions Data Points

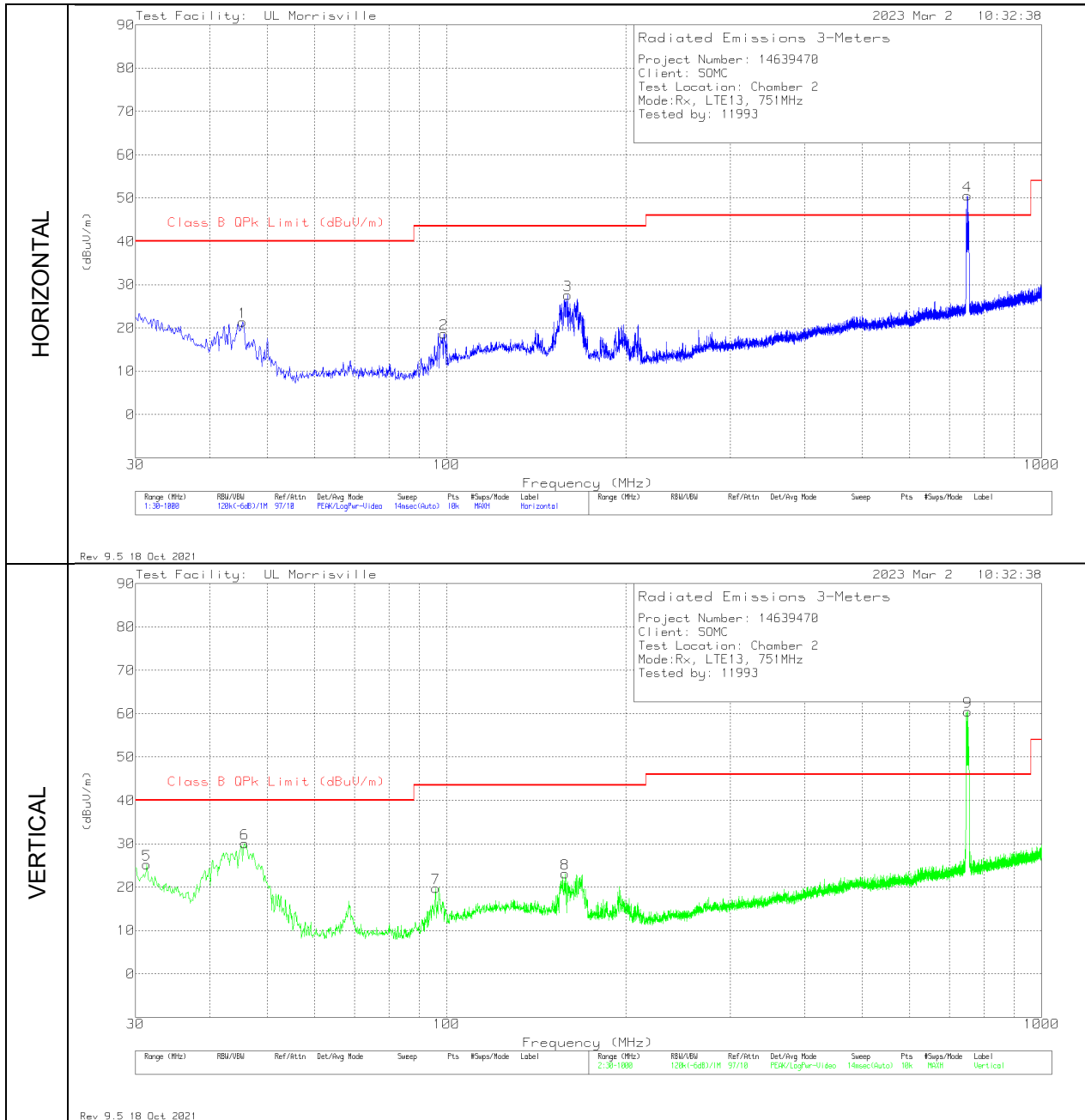
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.41875	41.66	Pk	32.5	-32.8	41.36	54	-12.64	74	-32.64	0-360	100	H
4	3.69925	39.38	Pk	33.1	-32.1	40.38	54	-13.62	74	-33.62	0-360	101	V
2	5.3095	39.33	Pk	34.6	-30.4	43.53	54	-10.47	74	-30.47	0-360	100	H
5	6.58375	38.67	Pk	35.5	-29.1	45.07	54	-8.93	74	-28.93	0-360	101	V
6	8.52025	37.28	Pk	35.9	-26.8	46.38	54	-7.62	74	-27.62	0-360	199	V
3	9.0685	37.47	Pk	36.1	-25.9	47.67	54	-6.33	74	-26.33	0-360	100	H

Pk - Peak detector

Av - Average detection

RADIATED EMISSIONS 30 TO 1000 MHz – LTE B13 Rx 751.0MHz

Radiated Emissions Graph



Radiated Emissions Data Points

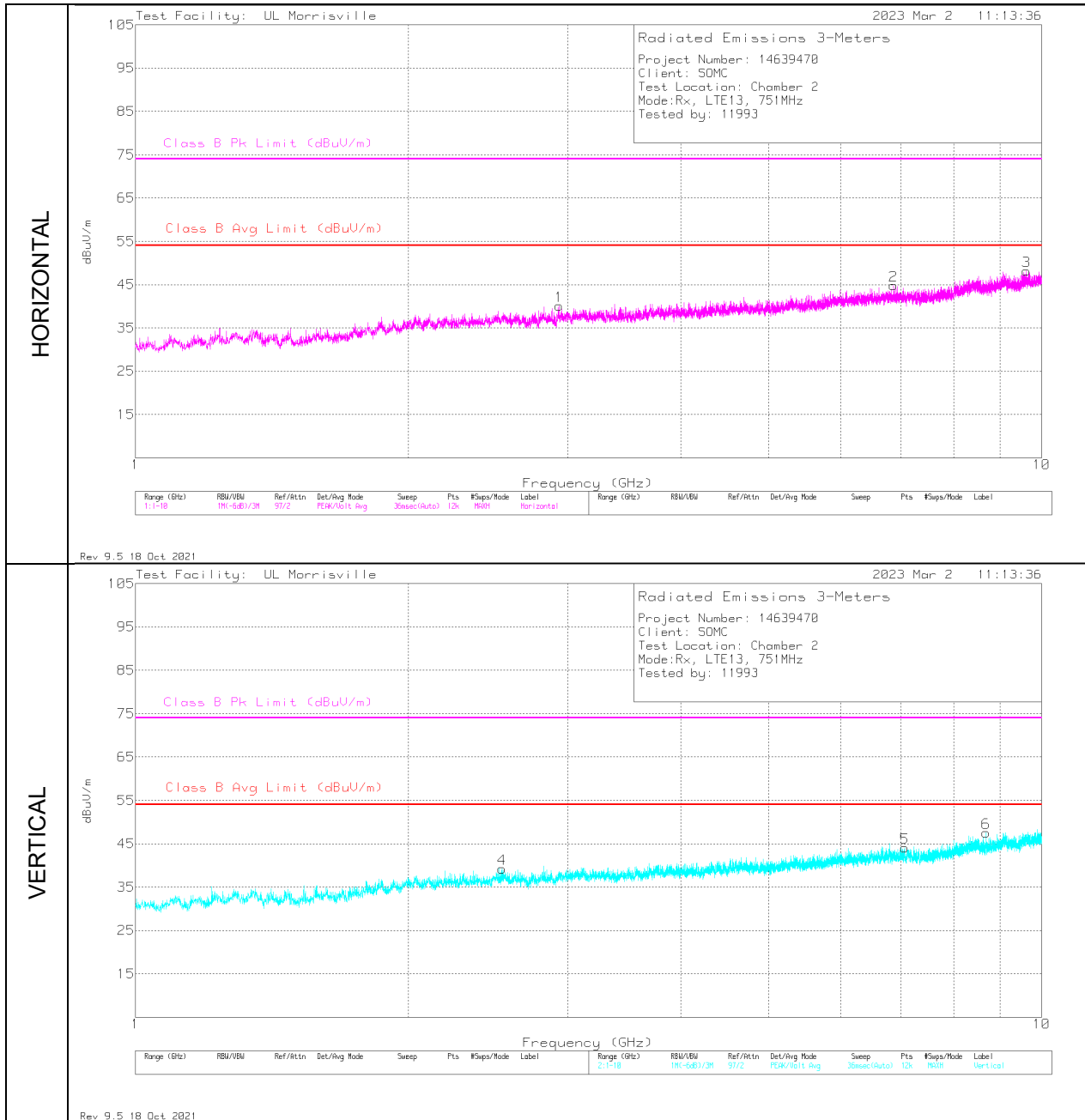
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0074 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	31.358	30.32	Pk	26.3	-31.4	25.22	40	-14.78	0-360	101	V
1	45.423	36.48	Pk	16.1	-31.2	21.38	40	-18.62	0-360	399	H
6	45.811	45.43	Pk	15.9	-31.3	30.03	40	-9.97	0-360	101	V
7	95.863	34.98	Pk	15.4	-30.6	19.78	43.52	-23.74	0-360	101	V
2	99.064	33.09	Pk	16.2	-30.6	18.69	43.52	-24.83	0-360	299	H
8	158.137	34.49	Pk	18.4	-29.8	23.09	43.52	-20.43	0-360	101	V
3	159.689	38.94	Pk	18.4	-29.8	27.54	43.52	-15.98	0-360	199	H
4	750.807 (DL)	50.36	Pk	26.7	-26.5	50.56	-	-	0-360	299	H
9	750.904 (DL)	60.24	Pk	26.7	-26.5	60.44	-	-	0-360	101	V

Pk - Peak detector

DL – Downlink from Callbox

RADIATED EMISSIONS 1000 TO 10,000 MHz – LTE B13 Rx 751.0MHz

Radiated Emissions Graph



Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	206211 (dB/m)	Gain/Loss (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	2.539	40.42	Pk	32.6	-33.8	39.22	54	-14.78	74	-34.78	0-360	200	V
1	2.935	40.87	Pk	32.4	-33.2	40.07	54	-13.93	74	-33.93	0-360	200	H
2	6.868	37.57	Pk	35.5	-28.2	44.87	54	-9.13	74	-29.13	0-360	100	H
5	7.06375	36.63	Pk	35.6	-28.2	44.03	54	-9.97	74	-29.97	0-360	101	V
6	8.68225	37.97	Pk	36	-26.4	47.57	54	-6.43	74	-26.43	0-360	101	V
3	9.6163	38.21	Pk	36.7	-25.6	49.31	-	-	74	-24.69	96	249	H
	9.6163	24.34	Av	36.7	-25.6	35.44	54	-18.56	-	-	96	249	H

Pk - Peak detector

Av - Average detection

Appendix A

Facilities, Accreditations and Authorizations

UL LLC is accredited by A2LA, certification # 0751.06, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
<input type="checkbox"/>	Building: 12 Laboratory Dr RTP, NC 27709, U.S.A	US0067	2180C	825374
<input checked="" type="checkbox"/>	Building: 2800 Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A		27265	

END OF TEST REPORT