



Report Number:

R14311589-E4

Issue Date:

2022-08-17

FCC ID:

PY7-17565F

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: 2022-08-17

FCC ID: PY7-17565F

Sample Serial Number: QV7700E8D8, QV77007JD8

Applicable Standards: FCC 47 CFR PART 15 SUBPART B:2022

Date Test Item Received: 2022-06-14

Testing Start Date: 2022-07-07

Date Testing Complete: 2022-08-08

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.

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REPORT REVISION HISTORY

Revision Date	Revision Version	Description	Revised By	Revision Reviewed By
2022-08-03	V1	Initial Issue	B. Kiewra	M. Antola
2022-08-09	V2	Added PC Peripheral data	B. Kiewra	M. Antola
2022-08-11	V3	Added clarification that downlink signal is from callbox	B. Kiewra	M. Antola
2022-08-17	V4	Updated note in section 3.7	B. Kiewra	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

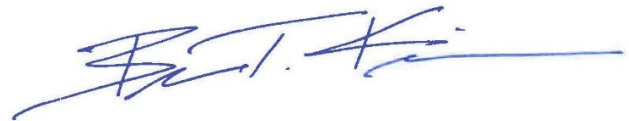
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2.0 DECISION RULES AND MEASUREMENT UNCERTAINTY

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}	U _{Cispr}
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.07 db	3.4 db
Worst Case Radiated Disturbance, All ranges	6.01 db	6.3 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 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	PY7-93060R	None
AE	Headphones	Sony	MDR-EX15AP	None
AE	Power Supply	Sony	XQZ-UC11-010-236-21	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	Dell	DA65NM191	Used for PC peripheral setup
AE	Power Supply	HP	TPN-CA14	Used for PC peripheral setup
AE	Monitor	ViewSonic	VS15453	Used for PC peripheral setup
AE	Monitor	ViewSonic	VS15562	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 0.49 for idle sample and 0.42 for WWAN Rx sample.

3.3 Block Diagram:

Refer to setup exhibit R14311589-EP4 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: LTE B12 covers LTE B17. Callbox was used to ensure that EUT was placed in Rx mode.
4	Operating as intended connected as PC Peripheral. Radio idle.

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

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 Z for both battery and power supply/PC peripheral modes. Therefore all final radiated testing performed with the EUT in the Z orientation.

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	86150/40882, 84740	
Test Date	2022-07-07, 2022-08-08	
Laboratory Parameters	Required prior to the test	During the test
Ambient Temperature	10 to 40 °C	23.8°C
Humidity	10 % to 90 %	47.0%
	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: None		

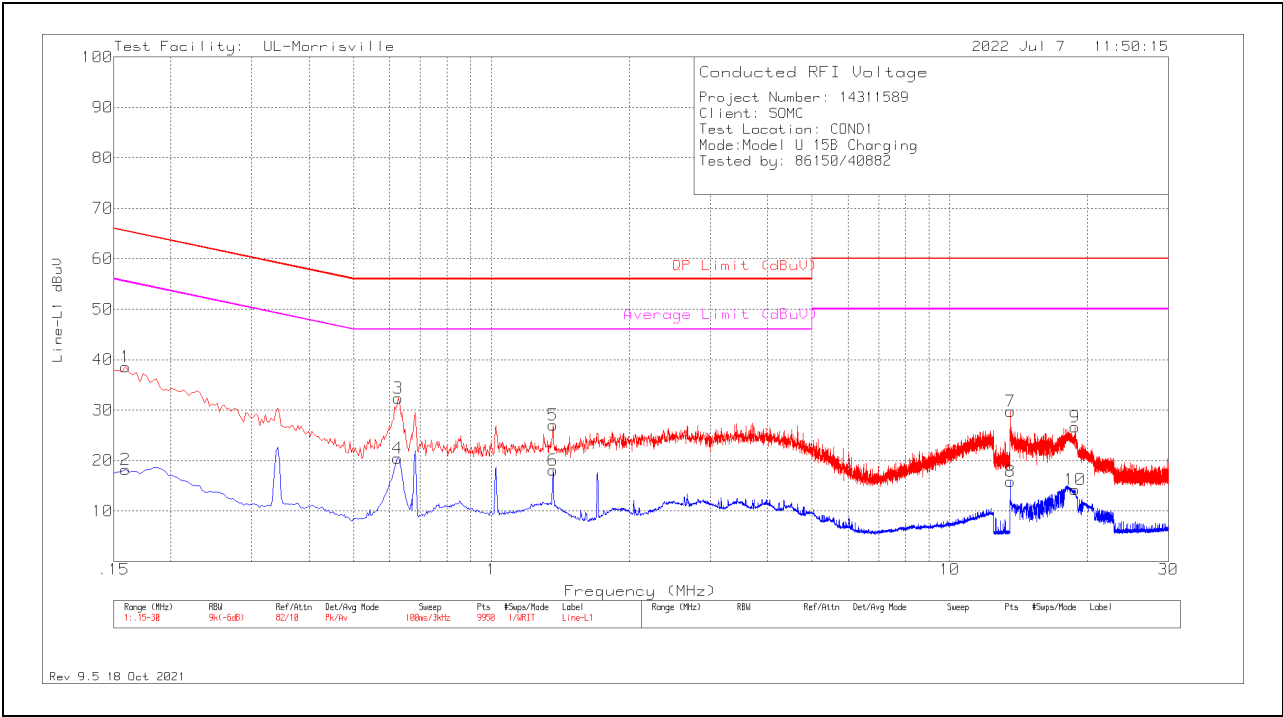
Refer to setup exhibit R14311589-EP4 for setup photos.

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
HI0096	Environmental Meter	Fisher Scientific	14-650-118	2021-09-21	2022-09-21
HI0091	Environmental Meter	Fisher Scientific	15-077-963	2022-07-20	2023-07-20
LISN003	LISN, 50-ohm/50-uH, 250uH 2-conductor, 25A	Fischer Custom Com.	FCC-LISN-50/250-25-2-01	2021-08-16	2022-08-16
75141	EMI Test Receiver 9kHz-7GHz	Rohde & Schwarz	ESCI 7	2021-08-17	2022-08-17
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
PS216	AC Power Source	Elgar	CW2501M-1 (s/n 1045A04231)	NA	NA
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
CDECABLE001	ANSI C63.4 1m extension cable.	UL	Per Annex B of ANSI C63.4	2021-09-13	2022-09-13
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 – Line 1

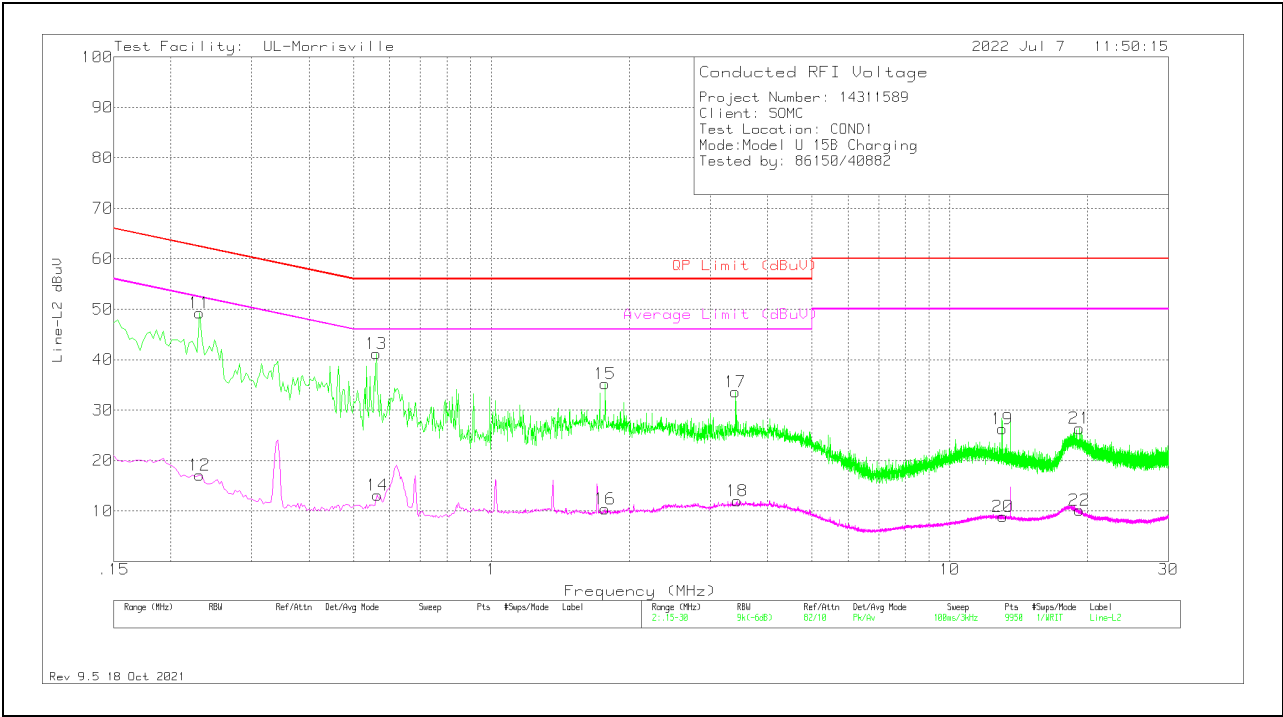


Conducted Emissions Data Points – Line 1

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	.159	28.55	Pk	.2	9.8	38.55	65.52	-26.97	-	-
2	.159	8.24	Av	.2	9.8	18.24	-	-	55.52	-37.28
4	.624	10.64	Av	0	9.8	20.44	-	-	46	-25.56
3	.627	22.59	Pk	0	9.8	32.39	56	-23.61	-	-
5	1.362	17.22	Pk	0	9.8	27.02	56	-28.98	-	-
6	1.362	8.24	Av	0	9.8	18.04	-	-	46	-27.96
8	13.56	5.76	Av	.1	10	15.86	-	-	50	-34.14
7	13.563	19.68	Pk	.1	10	29.78	60	-30.22	-	-
10	18.741	4	Av	.1	10.1	14.2	-	-	50	-35.8
9	18.768	16.43	Pk	.1	10.1	26.63	60	-33.37	-	-

Pk - Peak detector
Av - Average detection

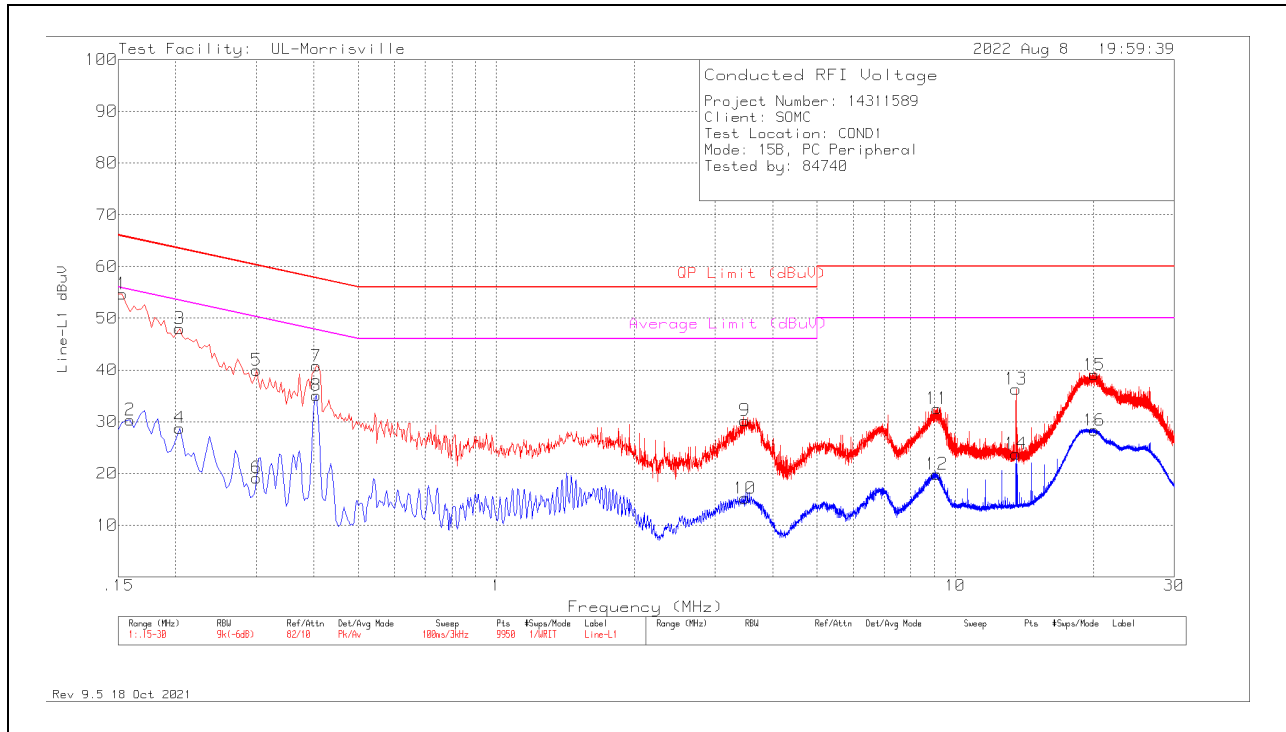
Conducted Emissions Graph – Line 2



Conducted Emissions Data Points – 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)
11	.231	39.37	Pk	.1	9.8	49.27	62.41	-13.14	-	-
12	.231	7.22	Av	.1	9.8	17.12	-	-	52.41	-35.29
13	.561	31.38	Pk	0	9.8	41.18	56	-14.82	-	-
14	.564	3.31	Av	0	9.8	13.11	-	-	46	-32.89
15	1.77	25.46	Pk	0	9.8	35.26	56	-20.74	-	-
16	1.77	.56	Av	0	9.8	10.36	-	-	46	-35.64
17	3.405	23.69	Pk	0	9.9	33.59	56	-22.41	-	-
18	3.438	2.13	Av	0	9.9	12.03	-	-	46	-33.97
19	13.035	16.16	Pk	.1	10	26.26	60	-33.74	-	-
20	13.047	-1.16	Av	.1	10	8.94	-	-	50	-41.06
21	19.17	16.05	Pk	.2	10.1	26.35	60	-33.65	-	-
22	19.17	-.12	Av	.2	10.1	10.18	-	-	50	-39.82

Pk - Peak detector
Av - Average detection

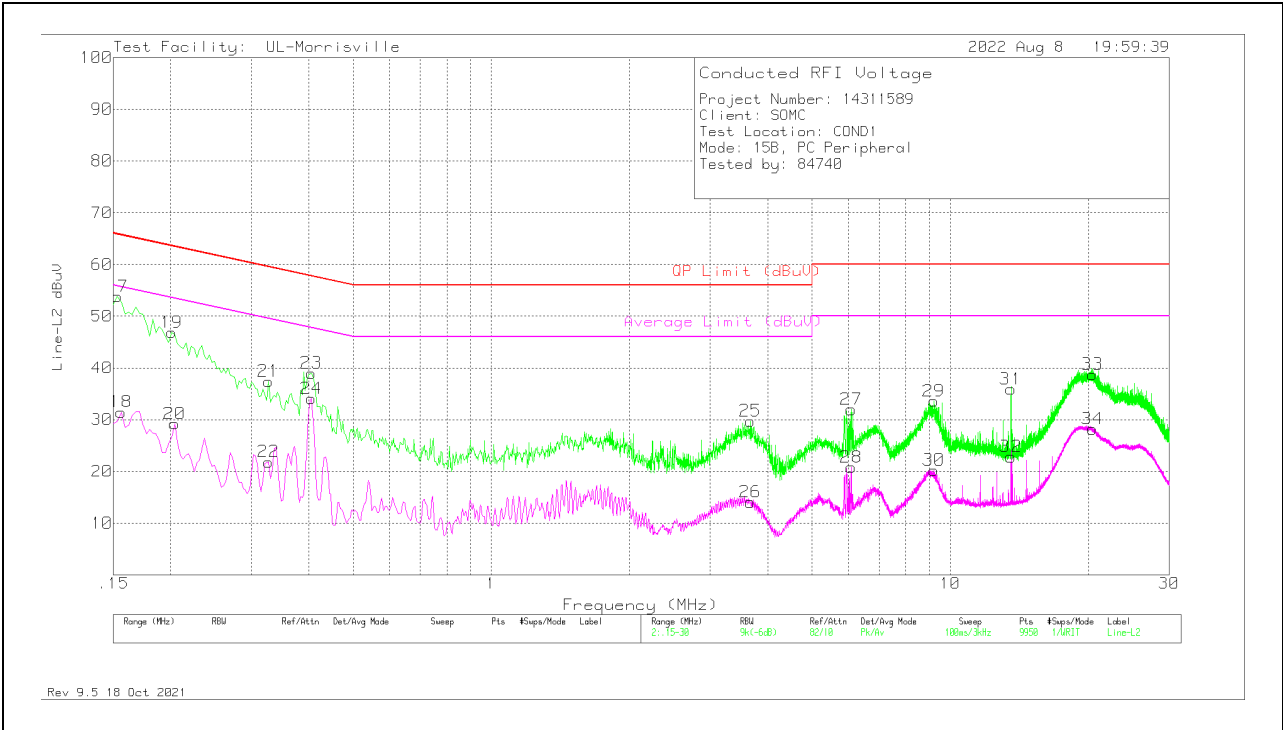
Conducted Emissions Graph – PC Peripheral Line 1**Conducted Emissions Data Points – PC Peripheral Line 1**

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	.153	44.7	Pk	.2	9.8	54.7	65.84	-11.14	-	-
2	.159	20.35	Av	.2	9.8	30.35	-	-	55.52	-25.17
3	.204	38.09	Pk	.1	9.8	47.99	63.45	-15.46	-	-
4	.204	18.89	Av	.1	9.8	28.79	-	-	53.45	-24.66
5	.3	30.06	Pk	.1	9.8	39.96	60.24	-20.28	-	-
6	.3	9.27	Av	.1	9.8	19.17	-	-	50.24	-31.07
7	.405	30.88	Pk	.1	9.8	40.78	57.75	-16.97	-	-
8	.405	25.18	Av	.1	9.8	35.08	-	-	47.75	-12.67
9	3.48	20.34	Pk	0	9.9	30.24	56	-25.76	-	-
10	3.48	5.31	Av	0	9.9	15.21	-	-	46	-30.79
12	9.111	9.75	Av	.1	10	19.85	-	-	50	-30.15
11	9.12	22.45	Pk	.1	10	32.55	60	-27.45	-	-
14	13.56	13.67	Av	.1	10	23.77	-	-	50	-26.23
13	13.563	26.22	Pk	.1	10	36.32	60	-23.68	-	-
15	20.085	28.77	Pk	.2	10.1	39.07	60	-20.93	-	-
16	20.091	18.05	Av	.2	10.1	28.35	-	-	50	-21.65

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)
17	.153	43.82	Pk	.2	9.8	53.82	65.84	-12.02	-	-
18	.156	21.47	Av	.2	9.8	31.47	-	-	55.67	-24.2
19	.201	36.97	Pk	.1	9.8	46.87	63.57	-16.7	-	-
20	.204	19.29	Av	.1	9.8	29.19	-	-	53.45	-24.26
21	.327	27.51	Pk	.1	9.8	37.41	59.53	-22.12	-	-
22	.327	11.95	Av	.1	9.8	21.85	-	-	49.53	-27.68
23	.405	29.11	Pk	.1	9.8	39.01	57.75	-18.74	-	-
24	.405	24.18	Av	.1	9.8	34.08	-	-	47.75	-13.67
25	3.666	19.84	Pk	0	9.9	29.74	56	-26.26	-	-
26	3.6675	4.16	Av	0	9.9	14.06	-	-	46	-31.94
27	6.084	21.98	Pk	.1	9.9	31.98	60	-28.02	-	-
28	6.084	10.8	Av	.1	9.9	20.8	-	-	50	-29.2
29	9.207	23.47	Pk	.1	10	33.57	60	-26.43	-	-
30	9.207	10.15	Av	.1	10	20.25	-	-	50	-29.75
31	13.563	25.79	Pk	.1	10	35.89	60	-24.11	-	-
32	13.563	12.75	Av	.1	10	22.85	-	-	50	-27.15
33	20.4	28.46	Pk	.2	10.1	38.76	60	-21.24	-	-
34	20.409	17.91	Av	.2	10.1	28.21	-	-	50	-21.79

Pk - Peak detector
Av - Average detection

4.2 Test Conditions and Results - RADIATED EMISSIONS

Test Engineer	85501/11993, 23567/11993, 86150/11993, 19289/11993	
Test Date	2022-07-20 to 2022-08-08	
Laboratory Parameters	Required prior to the test	During the test
Ambient Temperature	10 to 40 °C	24.1 – 24.6°C
Humidity	10 % to 90 %	48.8 – 50.0%
	Frequency range	Measurement Point
Fully configured sample scanned over the following frequency range	30-40000MHz	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: None		

Refer to setup exhibit R14311589-EP4 for setup photos.

Radiated Emissions Test Equipment

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 1)

Equipment ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
30-1000 MHz					
AT0066	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB1	2022-03-01	2023-03-01
1-18 GHz					
AT0072	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2022-05-11	2023-05-11
Gain-Loss Chains					
C1-SAC02	Gain-loss string: 25-1000MHz	Various	Various	2022-05-05	2023-05-05
C1-SAC03	Gain-loss string: 1-18GHz	Various	Various	2022-05-05	2023-05-05
Receiver & Software					
197954	Spectrum Analyzer	Rohde & Schwarz	ESW44	2022-04-14	2023-04-14
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
Additional Equipment used					
210922	Environmental Meter	Fisher Scientific	181474341	2021-09-27	2022-09-27

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

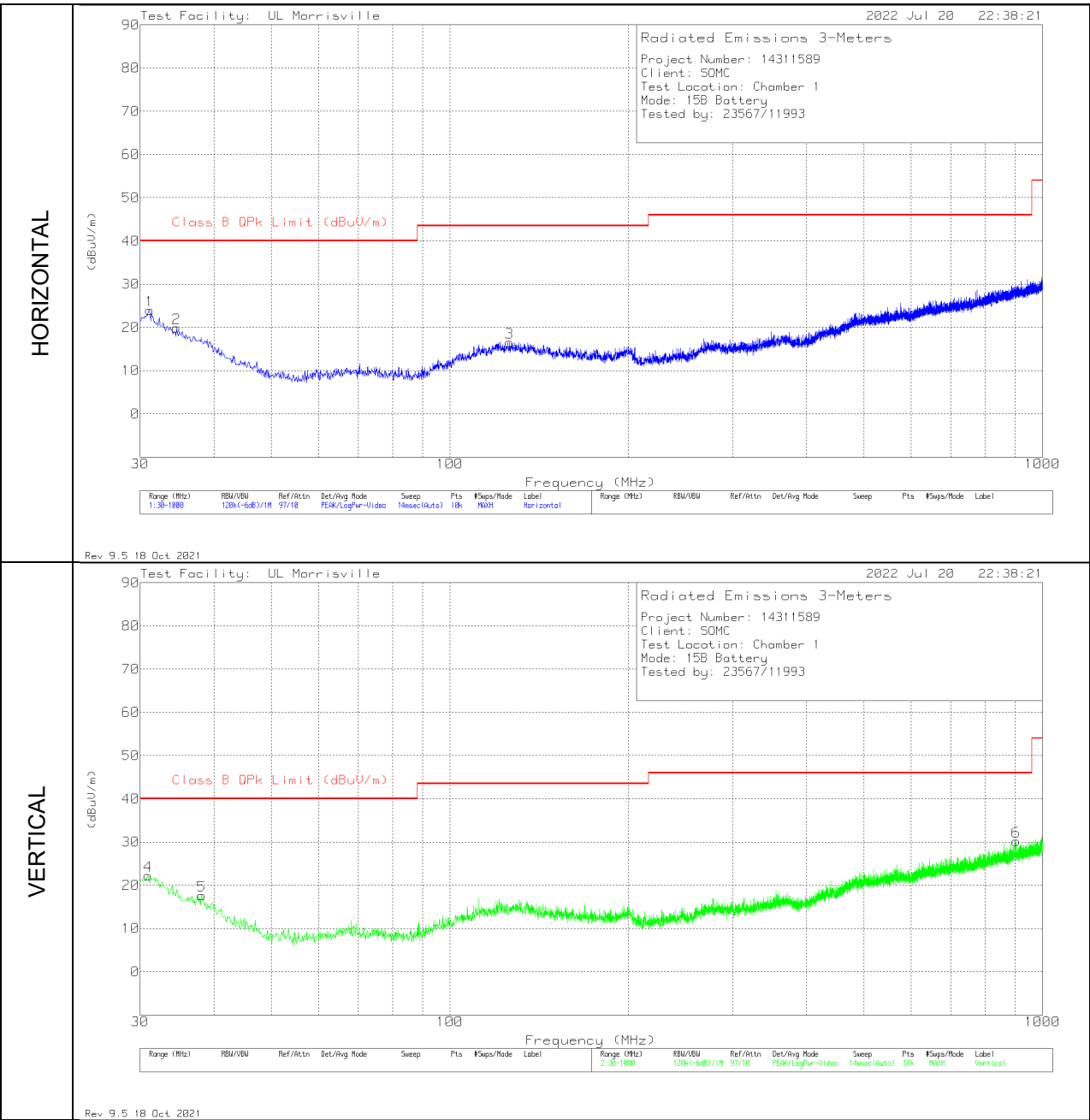
Equipment ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
18-40 GHz					
AT0063	Horn Antenna, 18-26.5GHz	ARA	MWH-1826/B	2021-11-04	2022-11-04
AT0061	Horn Antenna, 26-40GHz	ARA	MWH-2640/B	2021-11-04	2022-11-04
Gain-Loss Chains					
C2-SAC04	Gain-loss string: 18-40GHz	Various	Various	2022-05-10	2023-05-10
Receiver & Software					
SA0020	Spectrum Analyzer	Agilent	E4446A	2022-06-08	2023-06-08
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
Additional Equipment used					
200540	Environmental Meter	Fisher Scientific	15-077-963	2021-09-27	2022-09-27

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 4)

Equipment ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
30-1000 MHz					
AT0081	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB3	2021-12-08	2022-12-08
1-18 GHz					
AT0067	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2022-05-24	2023-05-24
Gain-Loss Chains					
C4-SAC02	Gain-loss string: 25-1000MHz	Various	Various	2022-05-20	2023-05-20
C4-SAC03	Gain-loss string: 1-18GHz	Various	Various	2022-05-20	2023-05-20
Receiver & Software					
206496	Spectrum Analyzer	Rohde & Schwarz	ESW44	2022-02-15	2023-02-15
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
Additional Equipment used					
210642	Environmental Meter	Fisher Scientific	15-077-963	2021-08-16	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



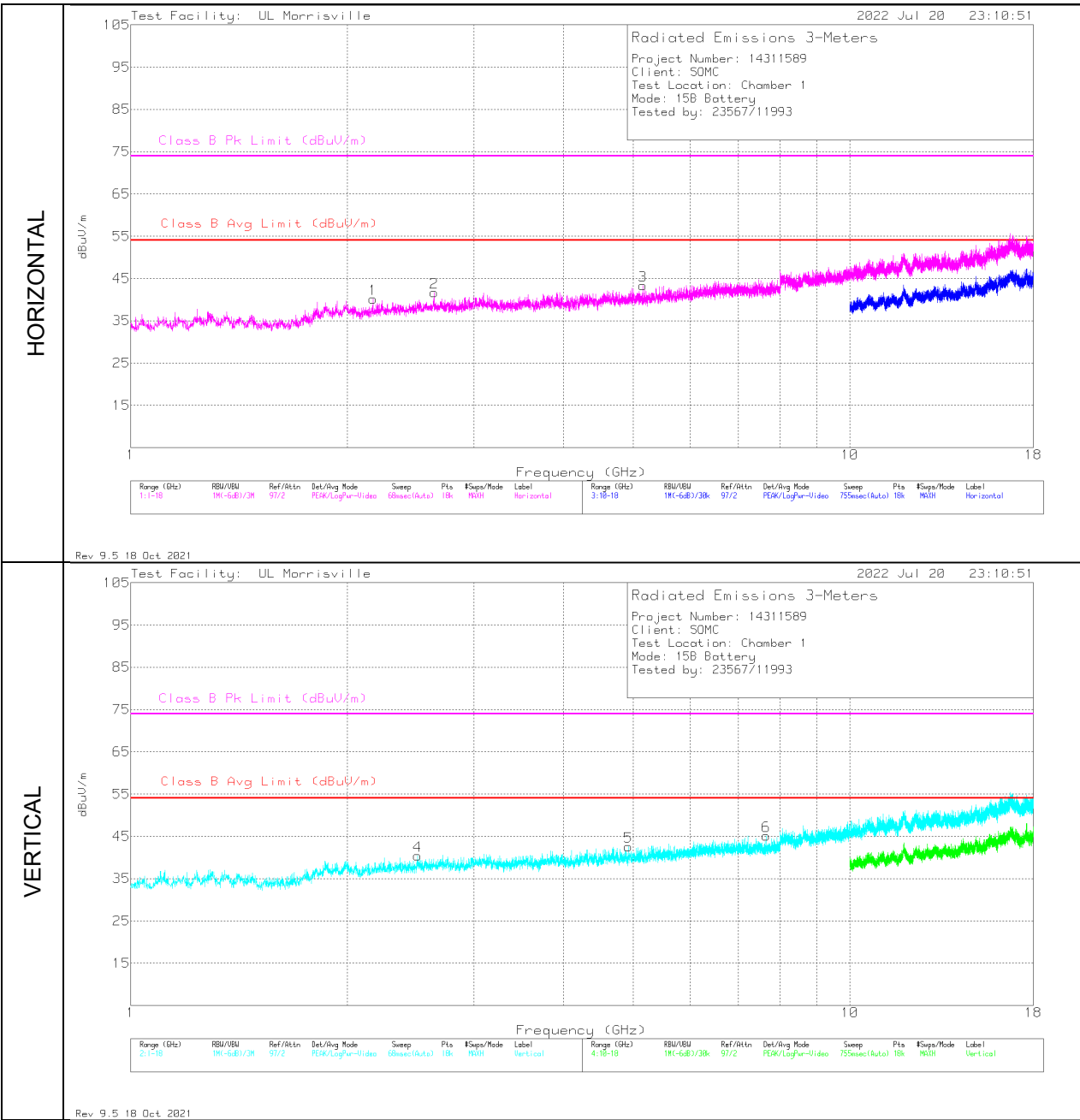
Radiated Emissions Data Points

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0066 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	30.97	26.89	Pk	26.6	-31.2	22.29	40	-17.71	0-360	100	V
1	31.164	28.73	Pk	26.5	-31.2	24.03	40	-15.97	0-360	299	H
2	34.559	27.54	Pk	23.9	-31.5	19.94	40	-20.06	0-360	100	H
5	38.148	27.55	Pk	21.4	-31.3	17.65	40	-22.35	0-360	100	V
3	126.03	27.14	Pk	19.6	-30.2	16.54	43.52	-26.98	0-360	400	H
6	903.291	26.57	Pk	28.4	-24.8	30.17	46.02	-15.85	0-360	100	V

Pk - Peak detector

RADIATED EMISSIONS 1000 TO 18,000 MHz – Battery

Radiated Emissions Graph



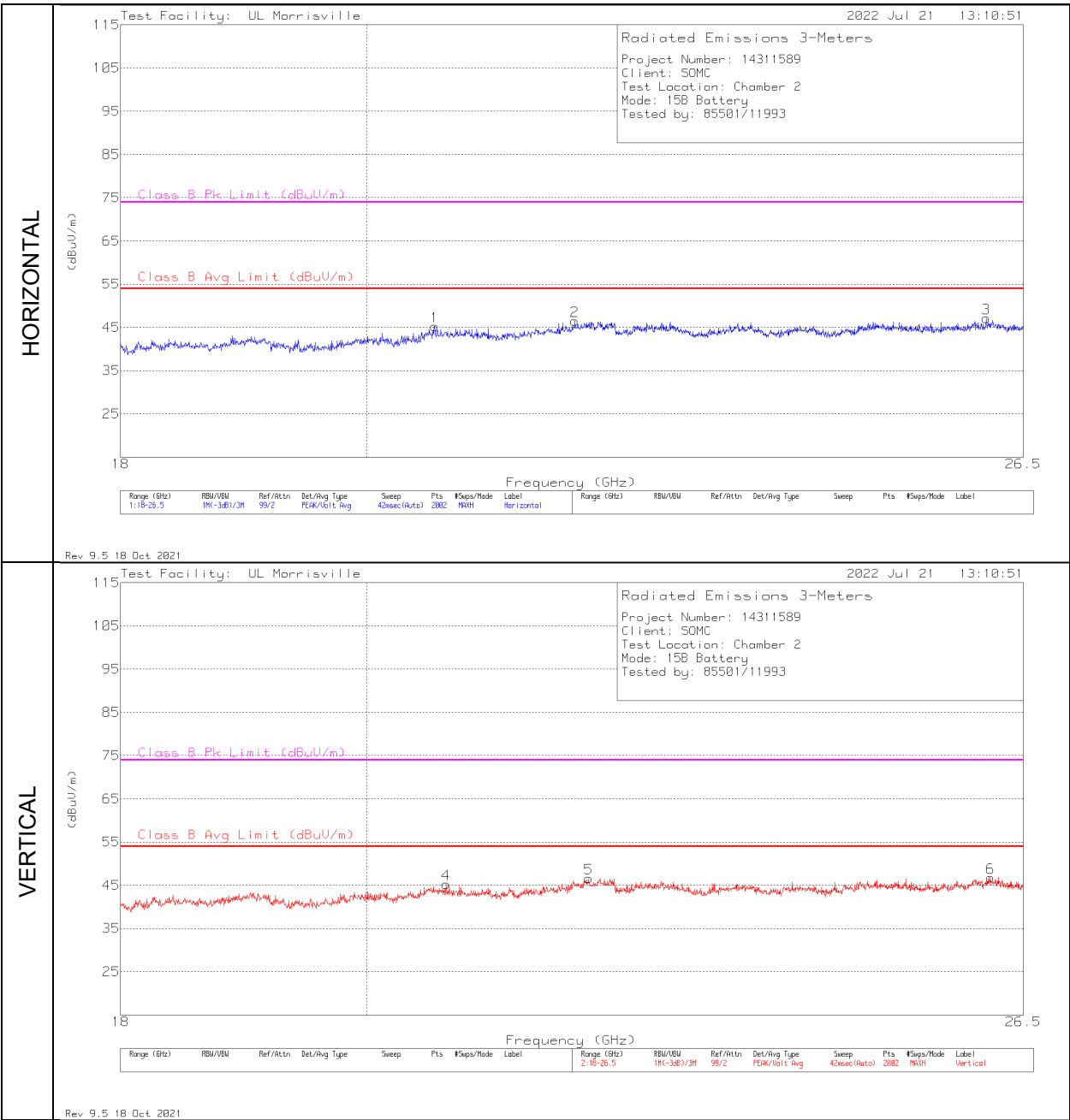
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	AT0072 (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	2.173	43.47	Pk	31.4	-34.7	40.17	54	-13.83	74	-33.83	0-360	200	H
4	2.50733	42.13	Pk	32.5	-34.2	40.43	54	-13.57	74	-33.57	0-360	200	V
2	2.64144	42.91	Pk	32.5	-33.7	41.71	54	-12.29	74	-32.29	0-360	200	H
5	4.92322	40.91	Pk	34	-32.3	42.61	54	-11.39	74	-31.39	0-360	200	V
3	5.15178	41.39	Pk	34.3	-32.3	43.39	54	-10.61	74	-30.61	0-360	200	H
6	7.64794	39.42	Pk	35.7	-30	45.12	54	-8.88	74	-28.88	0-360	200	V

Pk - Peak detector

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

Radiated Emissions Graph



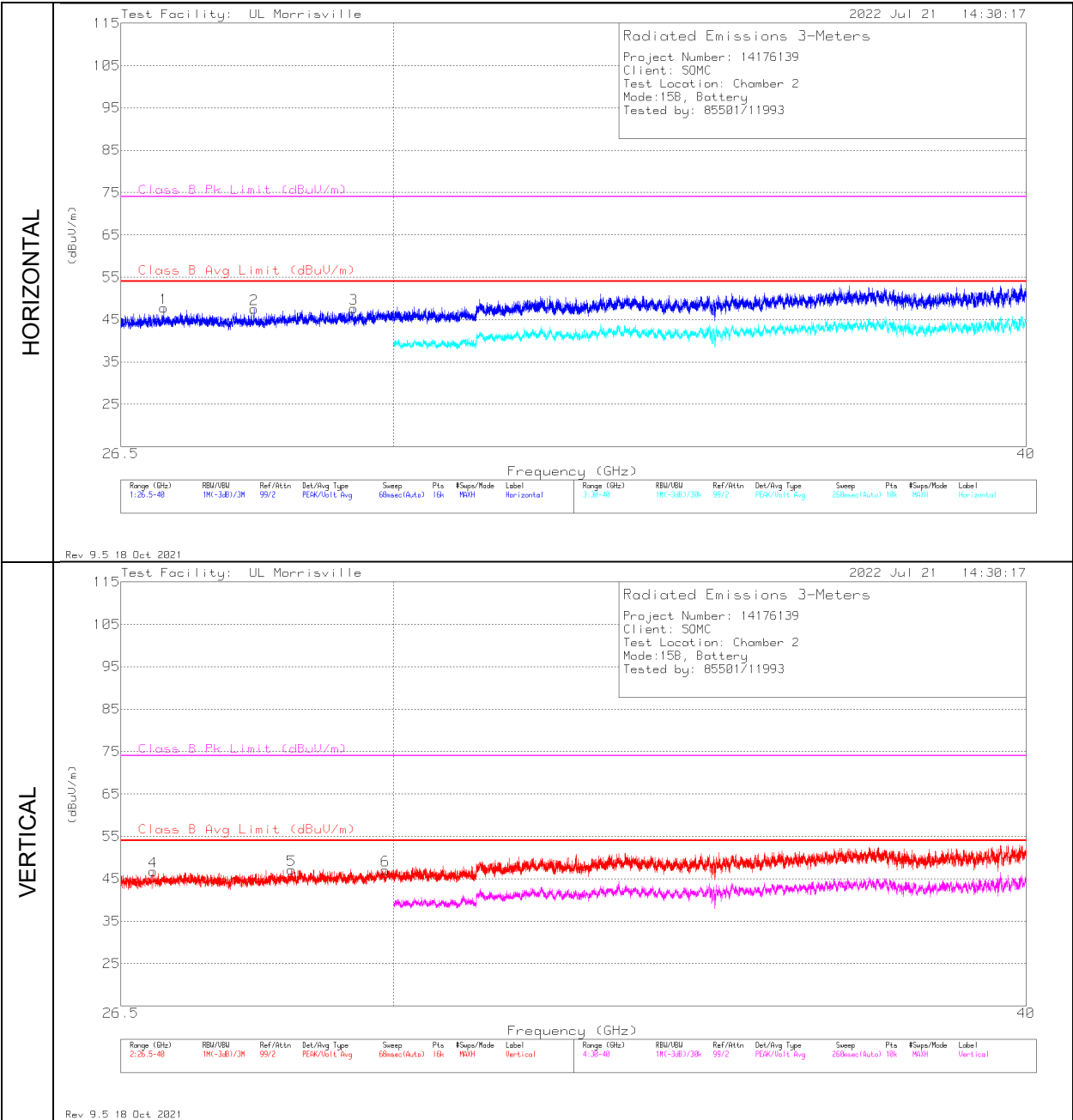
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0063 (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	20.59545	49.89	Pk	33.9	-38.5	45.29	54	-8.71	74	-28.71	0-360	101	H
4	20.69315	49.83	Pk	33.9	-38.5	45.23	54	-8.77	74	-28.77	0-360	101	V
2	21.86982	48.62	Pk	36.3	-38.4	46.52	54	-7.48	74	-27.48	0-360	101	H
5	21.99725	48	Pk	36.9	-38.3	46.6	54	-7.4	74	-27.4	0-360	101	V
3	26.08371	47.86	Pk	35.4	-36.1	47.16	54	-6.84	74	-26.84	0-360	150	H
6	26.13043	47.4	Pk	35.4	-36.1	46.7	54	-7.3	74	-27.3	0-360	249	V

Pk - Peak detector

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

Radiated Emissions Graph



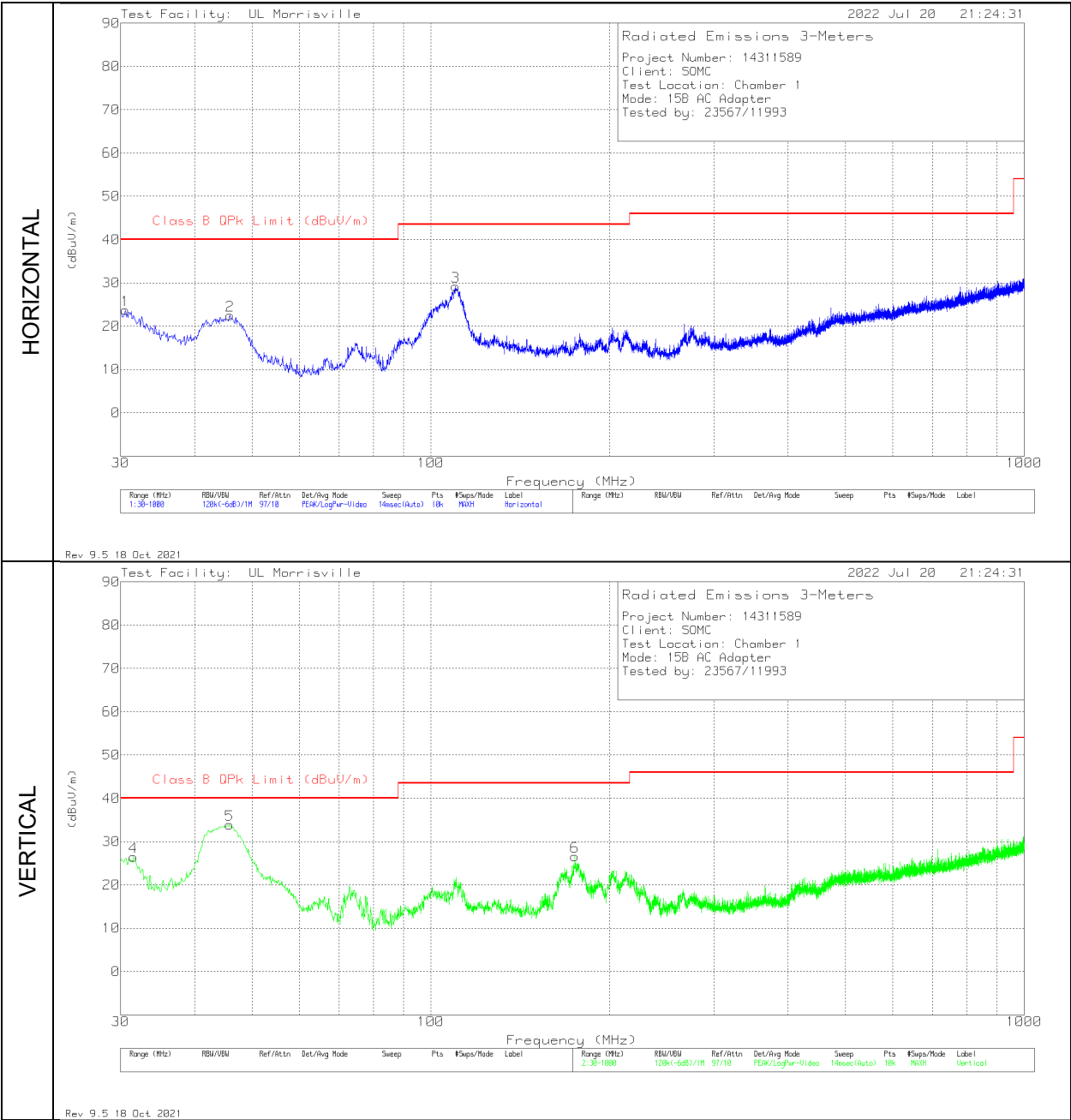
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0061 (dB/m)	Amp/Cbl (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	26.8881	45.92	Pk	36.1	-35.3	46.72	54	-7.28	74	-27.28	0-360	250	V
1	27.02478	47.12	Pk	36.1	-35.5	47.72	54	-6.28	74	-26.28	0-360	299	H
2	28.15365	46.67	Pk	36.2	-35.4	47.47	54	-6.53	74	-26.53	0-360	199	H
5	28.63962	45.67	Pk	36.3	-34.8	47.17	54	-6.83	74	-26.83	0-360	200	V
3	29.46306	46.3	Pk	36.2	-34.9	47.6	54	-6.4	74	-26.4	0-360	149	H
6	29.89082	44.95	Pk	36.6	-34.5	47.05	54	-6.95	74	-26.95	0-360	200	V

Pk - Peak detector

RADIATED EMISSIONS 30 TO 1000 MHz – Power Supply

Radiated Emissions Graph



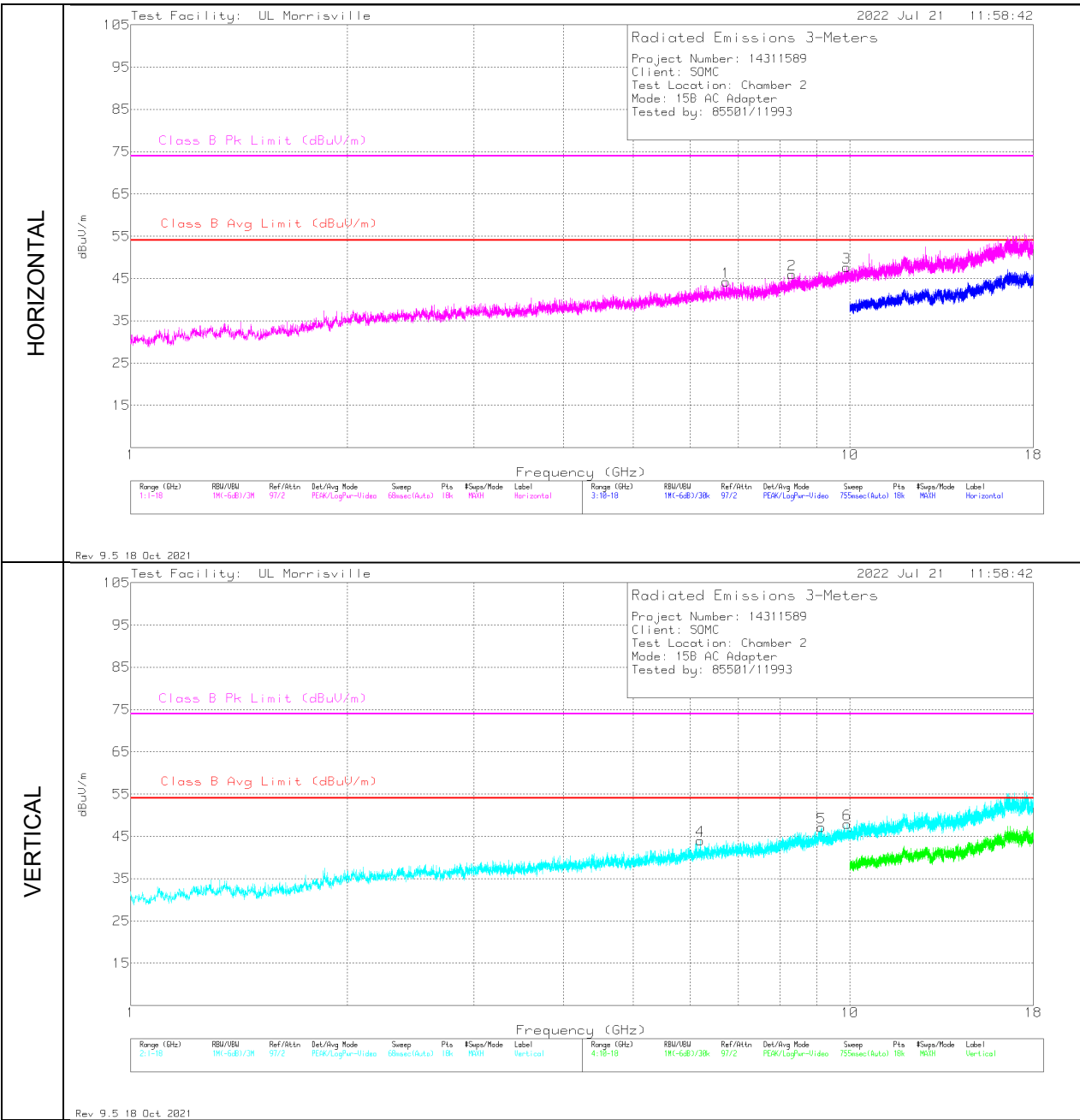
Radiated Emissions Data Points

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0066 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	30.582	28.49	Pk	26.6	-31.3	23.79	40	-16.21	0-360	99	H
4	31.552	31.62	Pk	26.1	-31.2	26.52	40	-13.48	0-360	100	V
5	45.811	49.59	Pk	15.7	-31.4	33.89	40	-6.11	0-360	100	V
2	45.908	38.16	Pk	15.7	-31.4	22.46	40	-17.54	0-360	399	H
3	110.025	41.38	Pk	18.2	-30.4	29.18	43.52	-14.34	0-360	300	H
6	174.724	38.73	Pk	17.4	-29.5	26.63	43.52	-16.89	0-360	100	V

Pk - Peak detector

RADIATED EMISSIONS 1000 TO 18,000 MHz – Power Supply

Radiated Emissions Graph



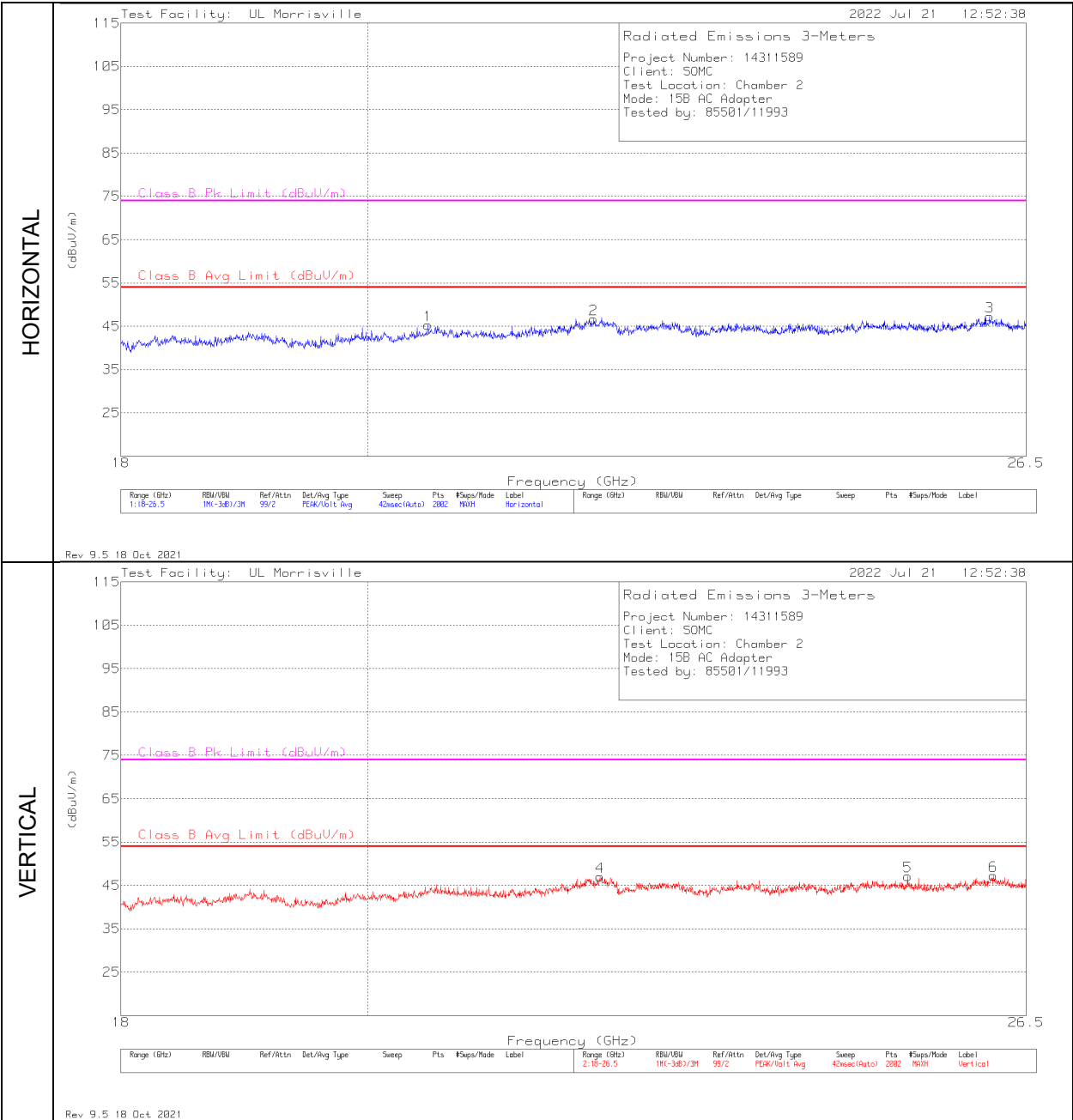
Radiated Emissions Data Points

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
4	6.19444	38.54	Pk	35.3	-29.8	44.04	54	-9.96	74	-29.96	0-360	101	V
1	6.72522	37.49	Pk	35.6	-28.9	44.19	54	-9.81	74	-29.81	0-360	101	H
2	8.31094	36.93	Pk	35.8	-26.7	46.03	54	-7.97	74	-27.97	0-360	200	H
5	9.13827	36.89	Pk	36.2	-25.9	47.19	54	-6.81	74	-26.81	0-360	101	V
3	9.8995	36.12	Pk	37	-25.5	47.62	54	-6.38	74	-26.38	0-360	200	H
6	9.91933	36.37	Pk	37	-25.5	47.87	54	-6.13	74	-26.13	0-360	101	V

Pk - Peak detector

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

Radiated Emissions Graph



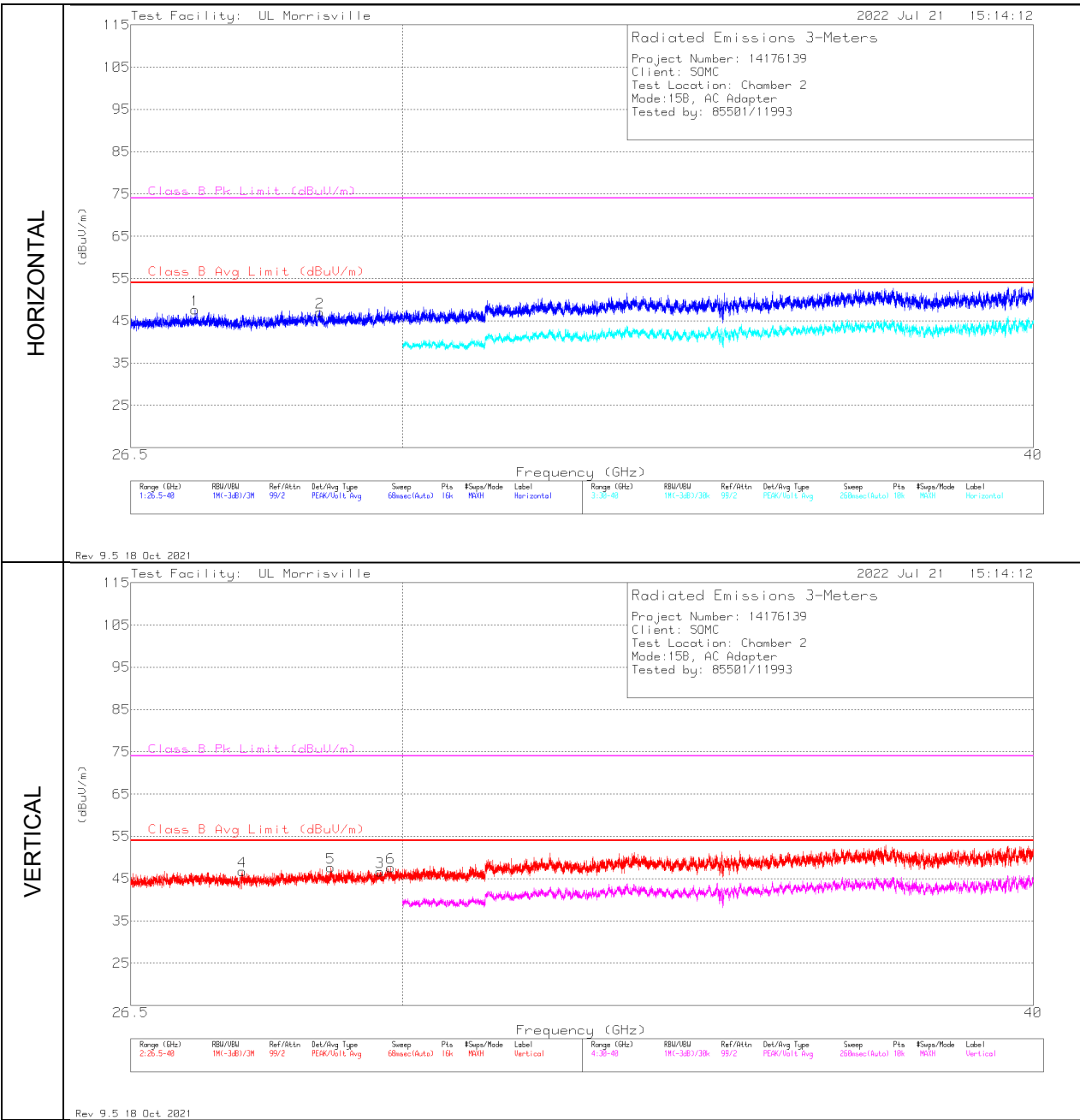
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0063 (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	20.52324	49.67	Pk	33.9	-38.3	45.27	54	-8.73	74	-28.73	0-360	200	H
2	22.03123	47.94	Pk	37	-38.3	46.64	54	-7.36	74	-27.36	0-360	300	H
4	22.0907	48.14	Pk	37.1	-38.2	47.04	54	-6.96	74	-26.96	0-360	249	V
5	25.19165	48.61	Pk	35.3	-36.8	47.11	54	-6.89	74	-26.89	0-360	200	V
3	26.08796	47.95	Pk	35.4	-36.1	47.25	54	-6.75	74	-26.75	0-360	300	H
6	26.13043	47.91	Pk	35.4	-36.1	47.21	54	-6.79	74	-26.79	0-360	300	V

Pk - Peak detector

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

Radiated Emissions Graph



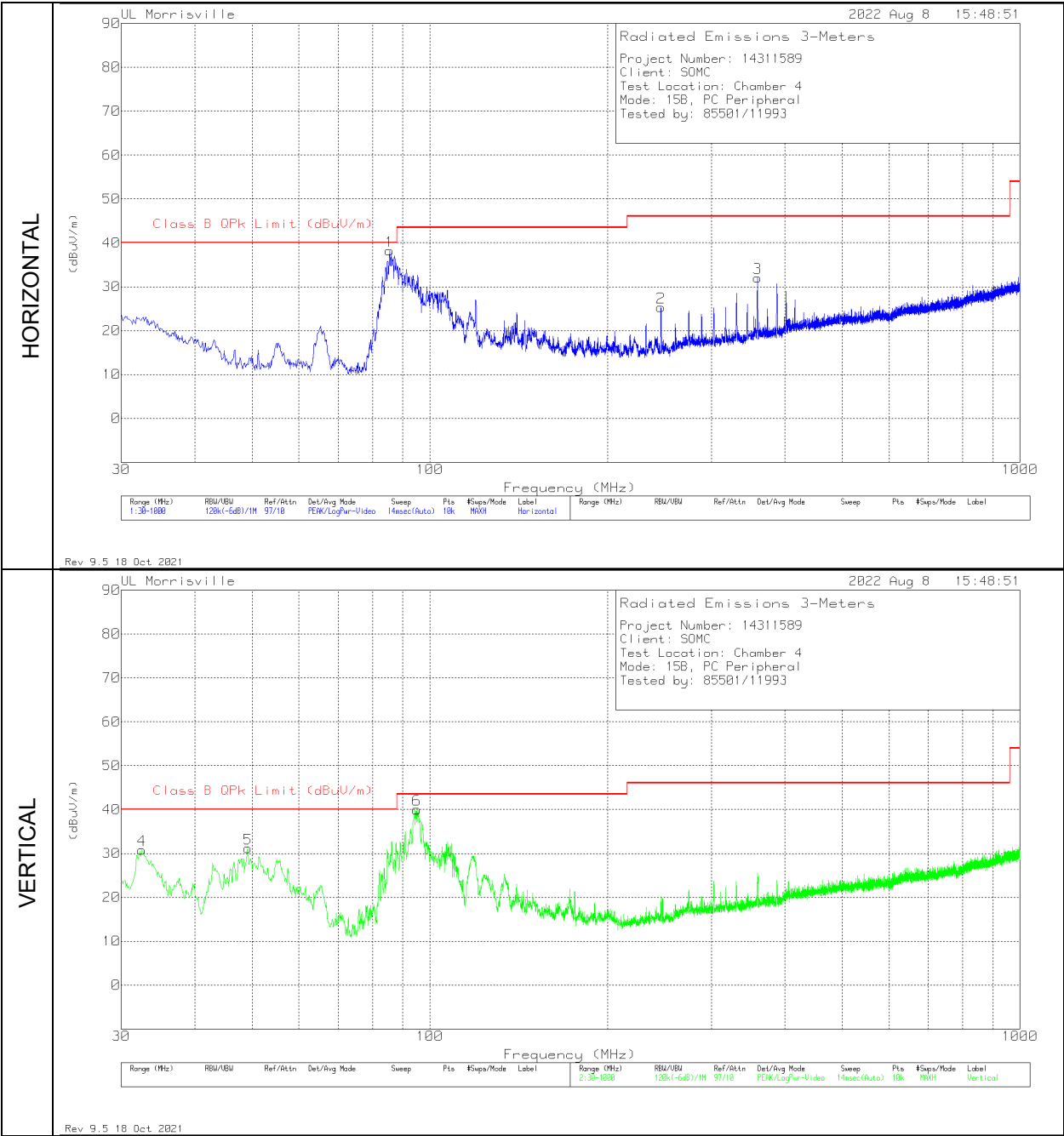
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0061 (dB/m)	Amp/Cbl (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	27.29139	46.49	Pk	36.2	-35.1	47.59	54	-6.41	74	-26.41	0-360	250	H
4	27.88198	45.53	Pk	36.1	-34.9	46.73	54	-7.27	74	-27.27	0-360	200	V
2	28.88682	45.09	Pk	36.3	-34.4	46.99	54	-7.01	74	-27.01	0-360	101	H
5	29.03025	45.78	Pk	36.2	-34.4	47.58	54	-6.42	74	-26.42	0-360	150	V
3	29.69002	44.04	Pk	36.4	-33.8	46.64	54	-7.36	74	-27.36	0-360	150	V
6	29.84104	44.89	Pk	36.6	-33.9	47.59	54	-6.41	74	-26.41	0-360	150	V

Pk - Peak detector

RADIATED EMISSIONS 30 TO 1000 MHz – PC Peripheral

Radiated Emissions Graph



Radiated Emissions Data Points

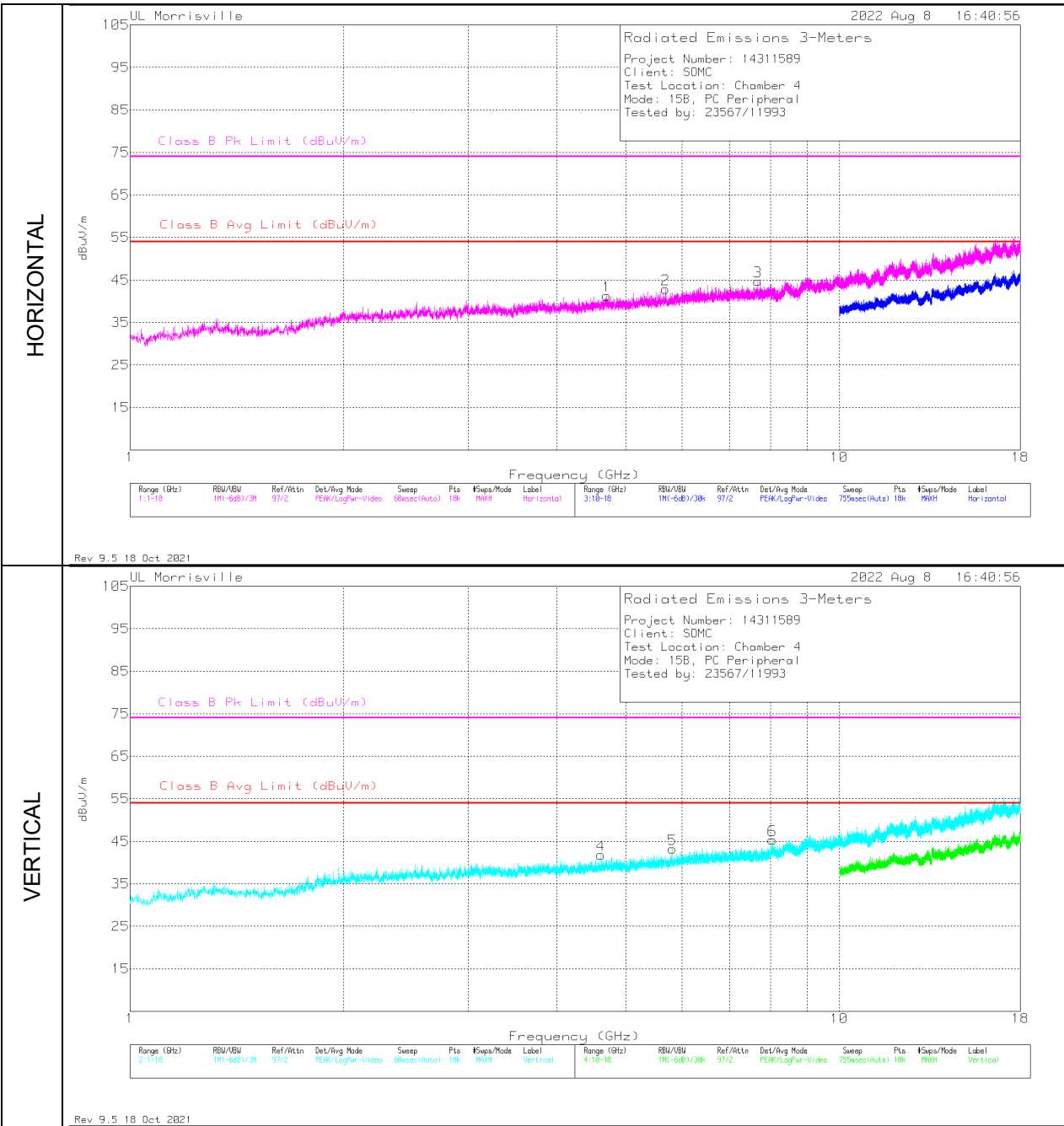
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0081 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	32.522	37.03	Pk	25.5	-31.7	30.83	40	-9.17	0-360	100	V
5	49.206	48.24	Pk	14.3	-31.4	31.14	40	-8.86	0-360	100	V
1	85.6461	46.44	Qp	13.5	-30.9	29.04	40	-10.96	357	243	H
6	95.2903	48.69	Qp	15.2	-30.8	33.09	43.52	-10.43	275	115	V
2	246.407	36.62	Pk	18.1	-29.4	25.32	46.02	-20.7	0-360	100	H
3	359.121	39.65	Pk	21.1	-28.7	32.05	46.02	-13.97	0-360	100	H

Pk - Peak detector

Qp - Quasi-Peak detector

RADIATED EMISSIONS 1000 TO 18,000 MHz – PC Peripheral

Radiated Emissions Graph



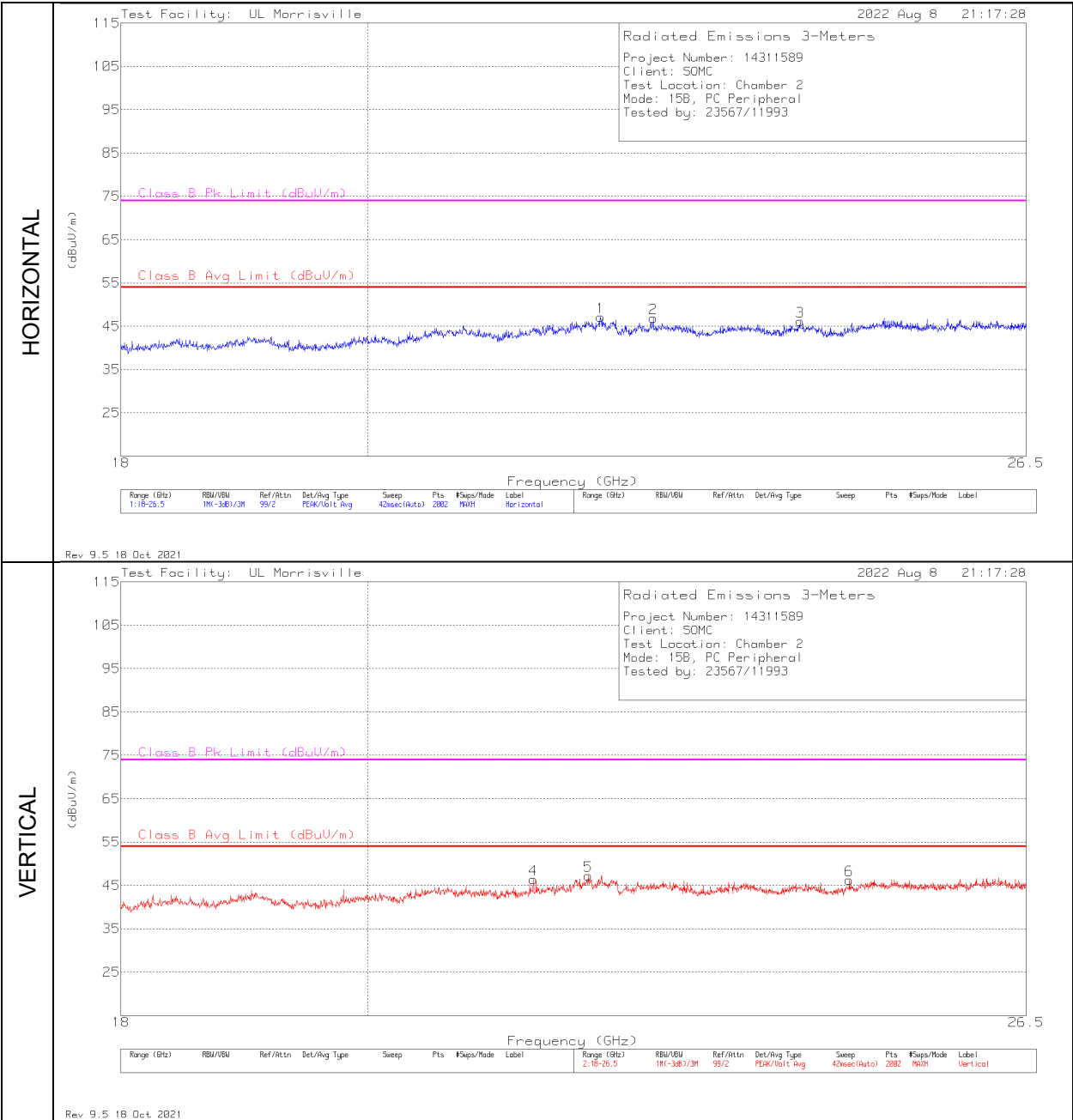
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (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	4.61344	39.91	Pk	34.1	-32.2	41.81	54	-12.19	74	-32.19	0-360	200	V
1	4.70033	39.61	Pk	34	-32.3	41.31	54	-12.69	74	-32.69	0-360	100	H
2	5.68728	39.37	Pk	34.8	-31.3	42.87	54	-11.13	74	-31.13	0-360	100	H
5	5.8195	39.1	Pk	35	-30.9	43.2	54	-10.8	74	-30.8	0-360	200	V
3	7.67344	37.72	Pk	35.7	-28.7	44.72	54	-9.28	74	-29.28	0-360	100	H
6	8.04744	37.65	Pk	35.8	-28.1	45.35	54	-8.65	74	-28.65	0-360	200	V

Pk - Peak detector

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

Radiated Emissions Graph



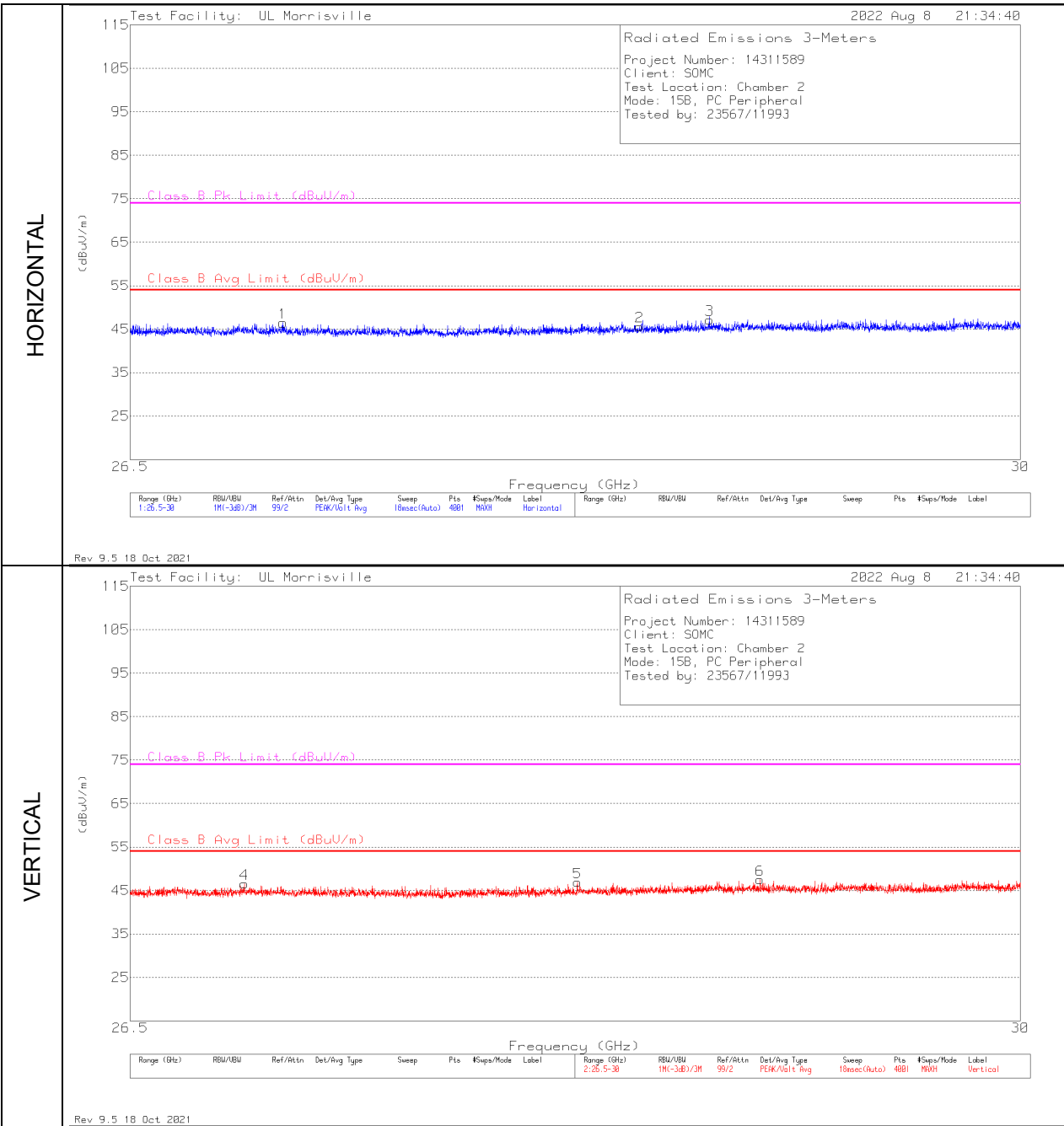
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0063 (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	21.47051	50.21	Pk	34.6	-38.4	46.41	54	-7.59	74	-27.59	0-360	150	V
5	21.98026	48.69	Pk	36.9	-38.3	47.29	54	-6.71	74	-26.71	0-360	200	V
1	22.09495	48.21	Pk	37.1	-38.2	47.11	54	-6.89	74	-26.89	0-360	200	H
2	22.5962	48.63	Pk	36.3	-38.1	46.83	54	-7.17	74	-27.17	0-360	250	H
3	24.06172	48.51	Pk	35	-37.4	46.11	54	-7.89	74	-27.89	0-360	200	H
6	24.57146	48.28	Pk	35.1	-37.1	46.28	54	-7.72	74	-27.72	0-360	150	V

Pk - Peak detector

RADIATED EMISSIONS 26,000 TO 30,000 MHz – PC Peripheral

Radiated Emissions Graph



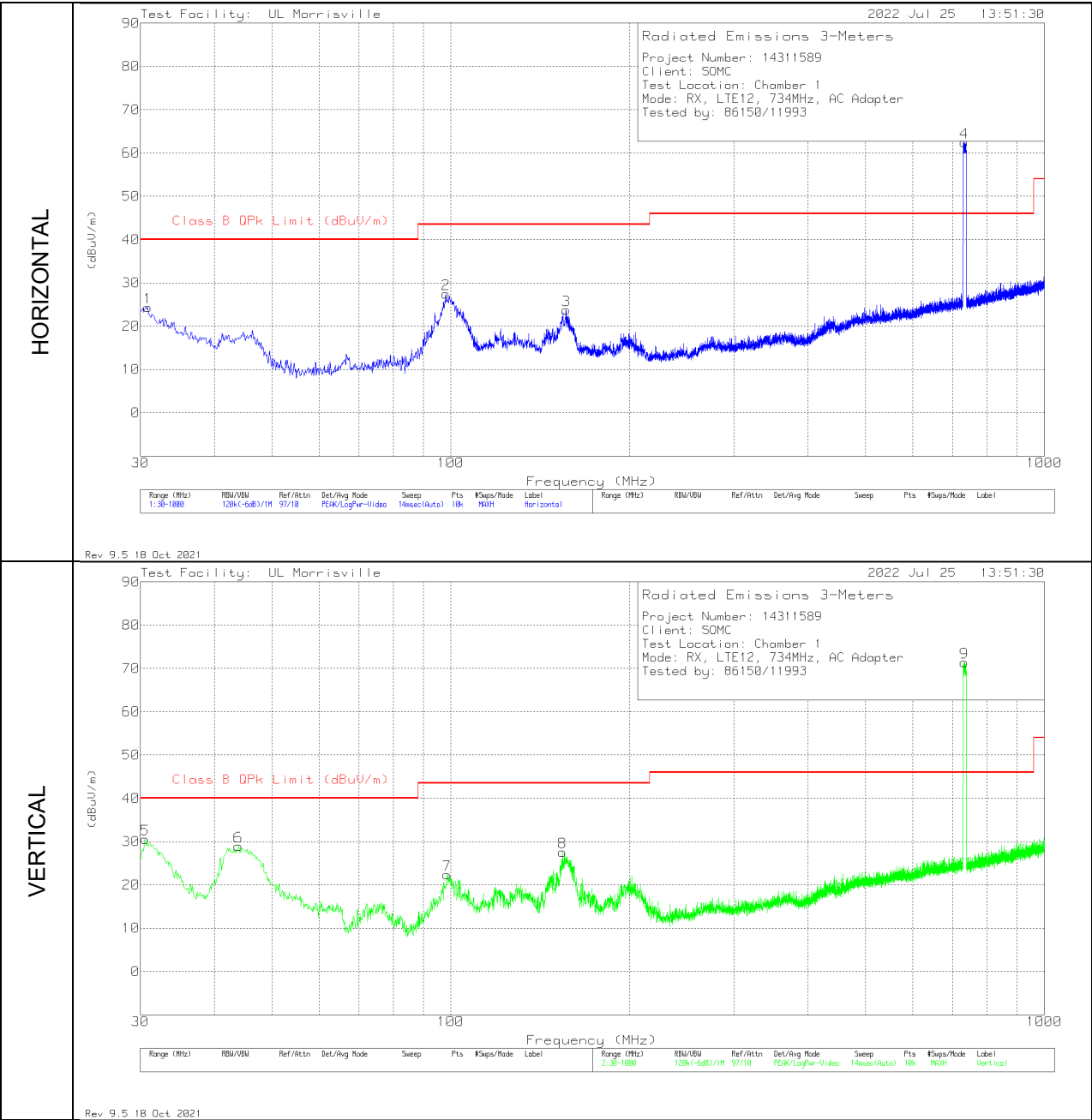
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0061 (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	26.92525	46.55	Pk	36.1	-36.1	46.55	54	-7.45	74	-27.45	0-360	250	V
1	27.0705	46.48	Pk	36.1	-36.1	46.48	54	-7.52	74	-27.52	0-360	199	H
5	28.2045	45.98	Pk	36.2	-35.3	46.88	54	-7.12	74	-27.12	0-360	101	V
2	28.45038	44.32	Pk	36.3	-35	45.62	54	-8.38	74	-28.38	0-360	199	H
3	28.72863	45.47	Pk	36.3	-34.6	47.17	54	-6.83	74	-26.83	0-360	149	H
6	28.93163	45.7	Pk	36.3	-34.5	47.5	54	-6.5	74	-26.5	0-360	250	V

Pk - Peak detector

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

Radiated Emissions Graph



Radiated Emissions Data Points

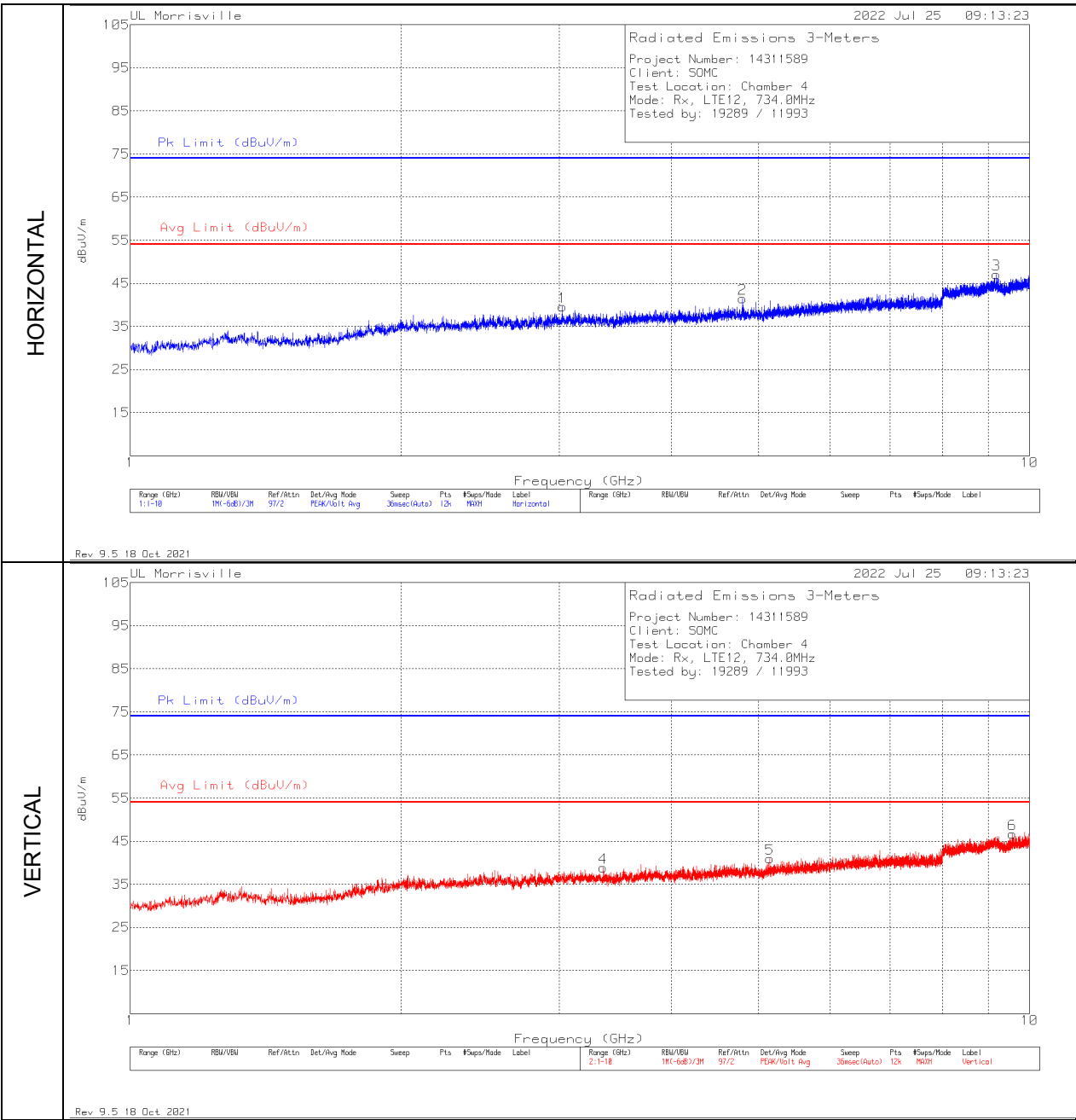
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0066 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	30.582	35.31	Pk	26.6	-31.3	30.61	40	-9.39	0-360	100	V
1	30.873	29.01	Pk	26.6	-31.2	24.41	40	-15.59	0-360	299	H
6	43.871	43.23	Pk	17	-31.3	28.93	40	-11.07	0-360	100	V
2	98.094	42.41	Pk	15.7	-30.7	27.41	43.52	-16.11	0-360	299	H
7	98.579	37.06	Pk	15.9	-30.6	22.36	43.52	-21.16	0-360	100	V
8	154.354	39.28	Pk	18.2	-29.9	27.58	43.52	-15.94	0-360	100	V
3	156.391	35.58	Pk	18.1	-30	23.68	43.52	-19.84	0-360	199	H
9 (DL)	732.765	71.55	Pk	26.2	-26.3	71.45	-	-	0-360	100	V
4 (DL)	733.541	62.48	Pk	26.2	-26.2	62.48	-	-	0-360	299	H

Pk - Peak detector

DL - Downlink from Callbox

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

Radiated Emissions Graph



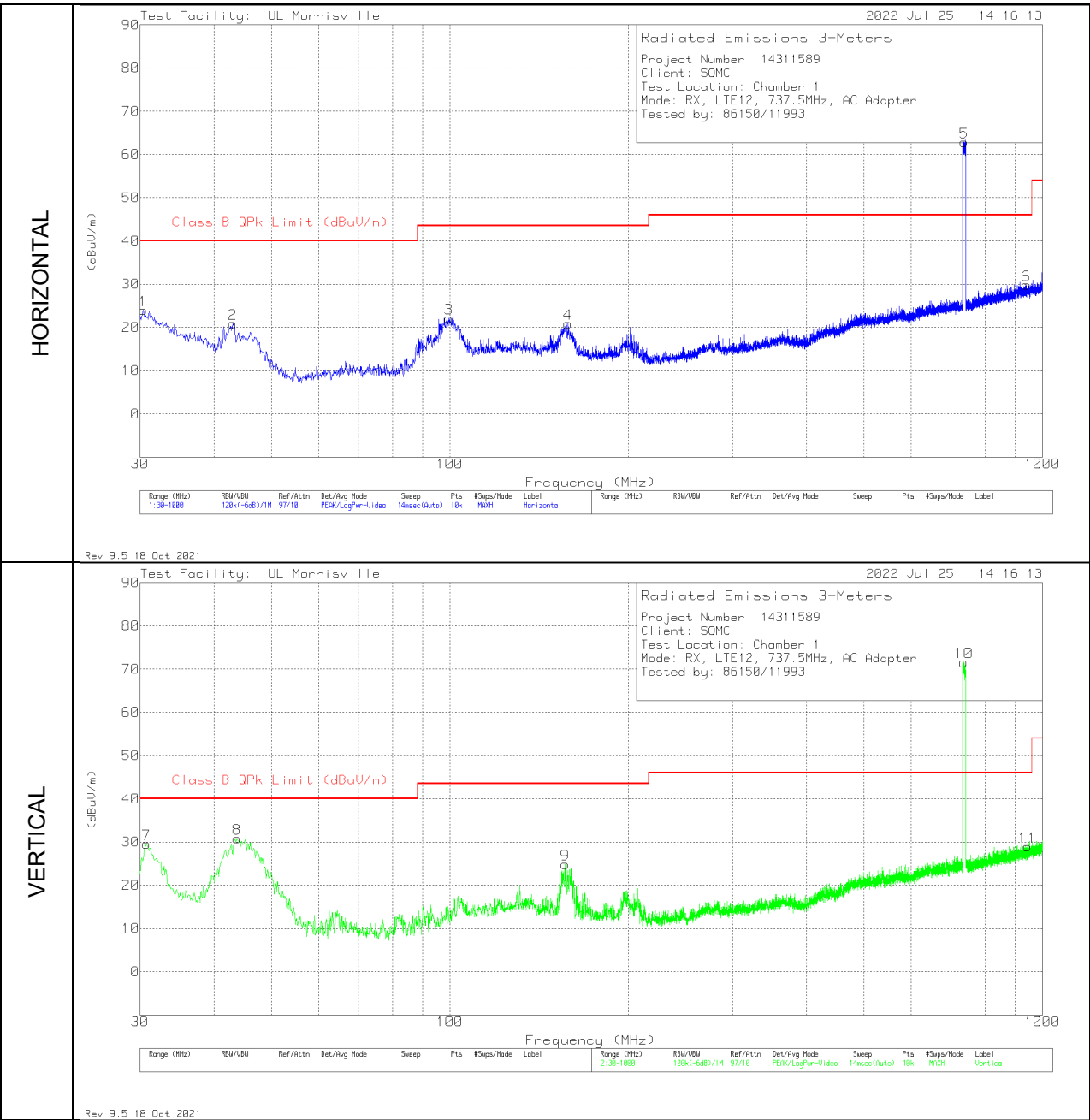
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Gain/Loss (dB)	Corrected Reading dBuV/m	Avg Limit (dBuV/m)	Margin (dB)	Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.02275	42.15	Pk	33.1	-35.7	39.55	54	-14.45	74	-34.45	0-360	100	H
4	3.355	40.88	Pk	33	-35	38.88	54	-15.12	74	-35.12	0-360	100	V
2	4.79725	39.62	Pk	34.1	-32.2	41.52	54	-12.48	74	-32.48	0-360	100	H
5	5.14	39.05	Pk	34.2	-32.3	40.95	54	-13.05	74	-33.05	0-360	100	V
3	9.18925	37.31	Pk	36.2	-26.4	47.11	54	-6.89	74	-26.89	0-360	100	H
6	9.57025	36.37	Pk	36.6	-26.3	46.67	54	-7.33	74	-27.33	0-360	100	V

Pk - Peak detector

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

Radiated Emissions Graph



Radiated Emissions Data Points

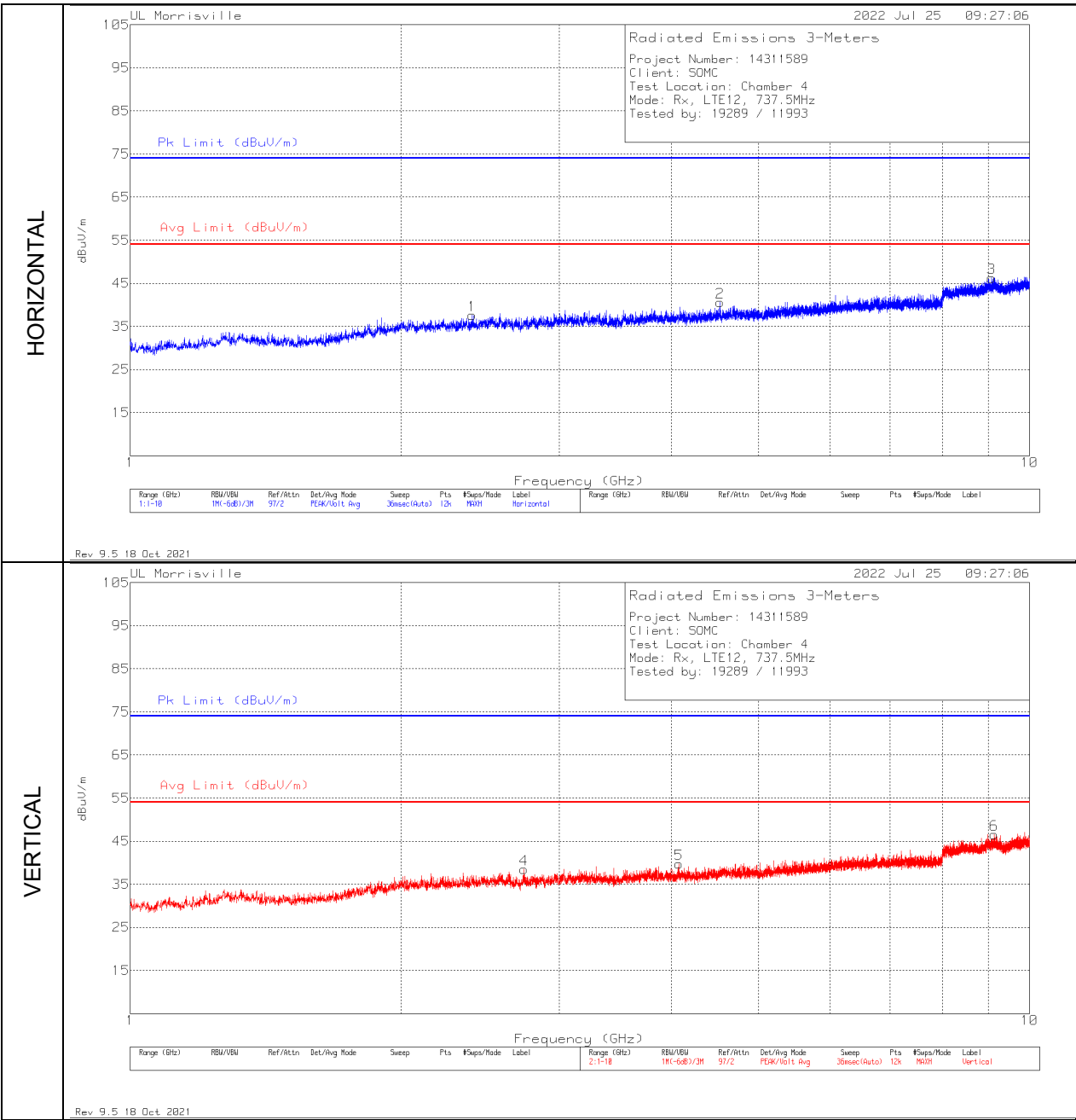
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1	30.388	28.57	Pk	26.7	-31.3	23.97	40	-16.03	0-360	99	H
7	30.776	34.13	Pk	26.6	-31.2	29.53	40	-10.47	0-360	100	V
2	42.998	34.52	Pk	17.7	-31.4	20.82	40	-19.18	0-360	200	H
8	43.774	45.05	Pk	17.1	-31.3	30.85	40	-9.15	0-360	100	V
3	99.549	36.55	Pk	16.1	-30.5	22.15	43.52	-21.37	0-360	99	H
9	156.391	36.75	Pk	18.1	-30	24.85	43.52	-18.67	0-360	100	V
4	158.234	32.72	Pk	18.1	-30	20.82	43.52	-22.7	0-360	200	H
10 (DL)	736.839	71.6	Pk	26.3	-26.3	71.6	-	-	0-360	100	V
5 (DL)	737.809	62.62	Pk	26.3	-26.1	62.82	-	-	0-360	300	H
6	940.151	25.62	Pk	28.6	-24.4	29.82	46.02	-16.2	0-360	200	H
11	943.837	24.85	Pk	28.5	-24.4	28.95	46.02	-17.07	0-360	100	V

Pk - Peak detector

DL - Downlink from Callbox

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

Radiated Emissions Graph



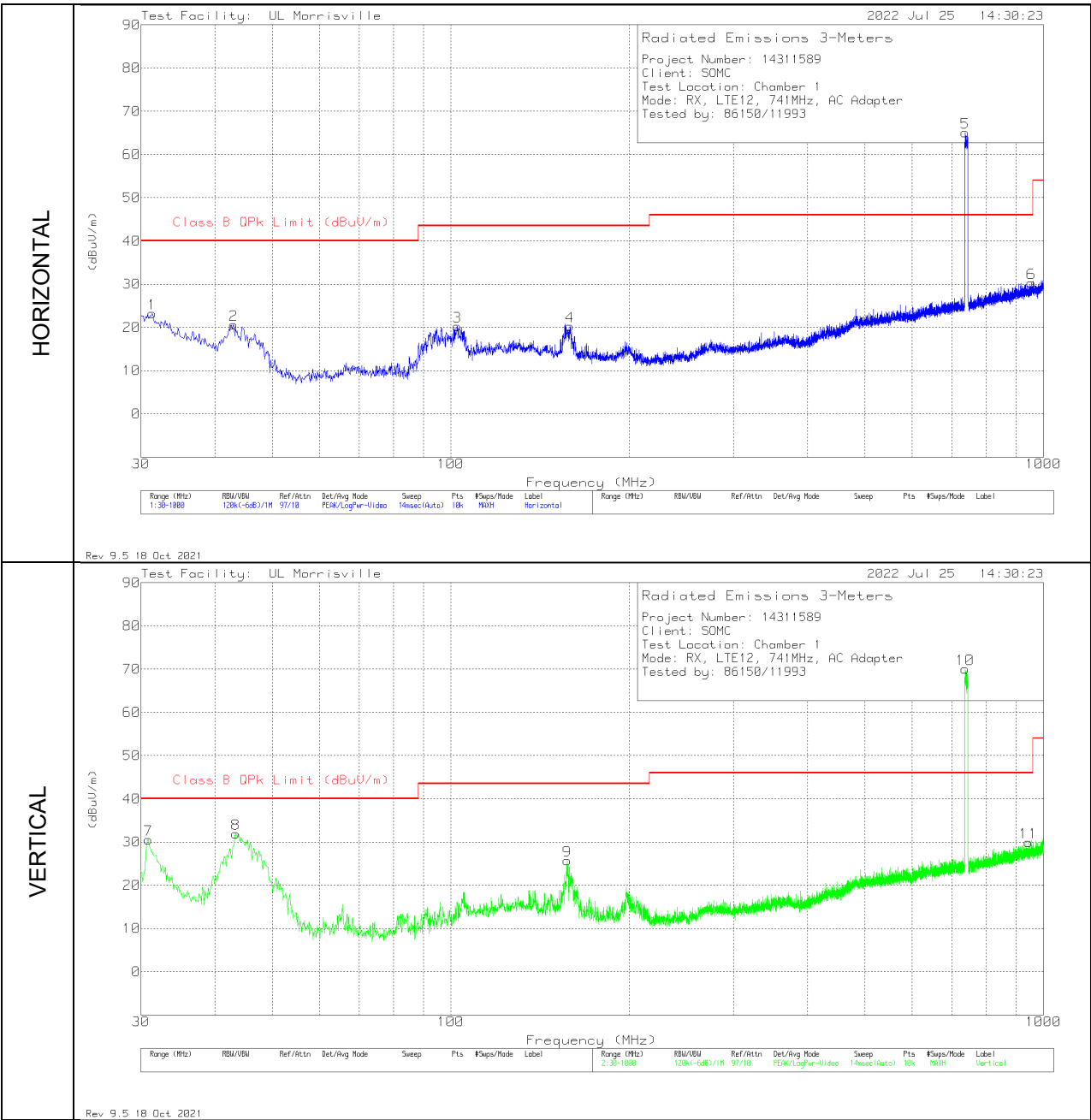
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Gain/Loss (dB)	Corrected Reading dBuV/m	Avg Limit (dBuV/m)	Margin (dB)	Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.401	41.51	Pk	32.2	-36.1	37.61	54	-16.39	74	-36.39	0-360	200	H
4	2.74225	41.97	Pk	32.4	-35.9	38.47	54	-15.53	74	-35.53	0-360	100	V
5	4.0765	39.52	Pk	33.4	-33.2	39.72	54	-14.28	74	-34.28	0-360	100	V
2	4.52575	38.84	Pk	33.9	-32.2	40.54	54	-13.46	74	-33.46	0-360	200	H
3	9.07225	36.75	Pk	36.1	-26.6	46.25	54	-7.75	74	-27.75	0-360	200	H
6	9.13525	36.9	Pk	36.2	-26.5	46.6	54	-7.4	74	-27.4	0-360	100	V

Pk - Peak detector

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

Radiated Emissions Graph



Radiated Emissions Data Points

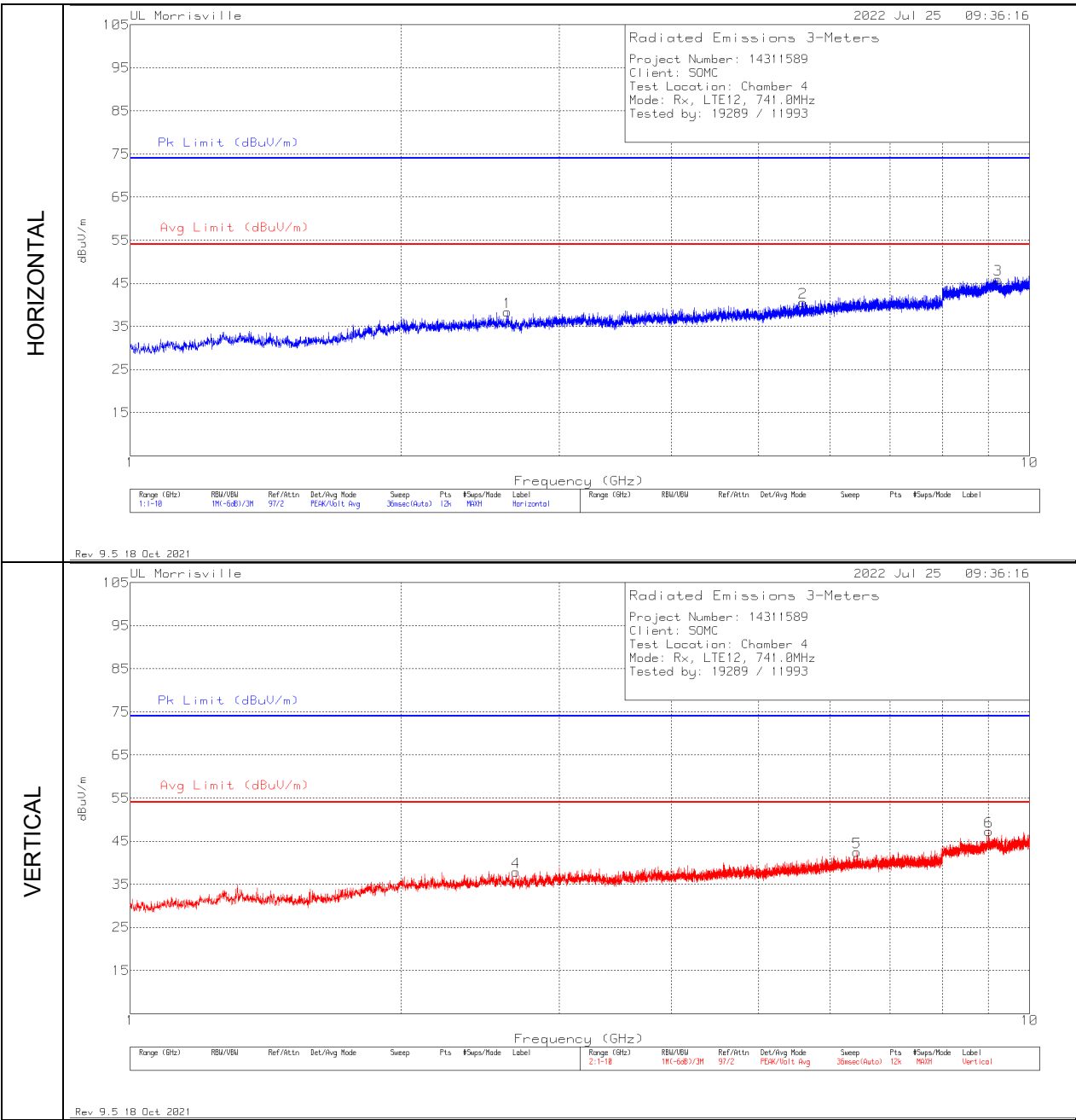
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0066 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7	30.873	35.17	Pk	26.6	-31.2	30.57	40	-9.43	0-360	100	V
1	31.358	28.16	Pk	26.3	-31.2	23.26	40	-16.74	0-360	99	H
2	42.998	34.36	Pk	17.7	-31.4	20.66	40	-19.34	0-360	300	H
8	43.386	45.88	Pk	17.4	-31.3	31.98	40	-8.02	0-360	100	V
3	102.459	34.01	Pk	16.8	-30.5	20.31	43.52	-23.21	0-360	300	H
9	157.264	37.57	Pk	18.1	-30	25.67	43.52	-17.85	0-360	100	V
4	158.719	32.21	Pk	18	-30	20.21	43.52	-23.31	0-360	200	H
5 (DL)	737.421	64.85	Pk	26.3	-26.1	65.05	-	-	0-360	300	H
10 (DL)	737.421	69.8	Pk	26.3	-26.1	70	-	-	0-360	100	V
11	942.382	25.73	Pk	28.5	-24.3	29.93	46.02	-16.09	0-360	100	V
6	954.119	25.65	Pk	28.7	-24	30.35	46.02	-15.67	0-360	399	H

Pk - Peak detector

DL - Downlink from Callbox

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

Radiated Emissions Graph



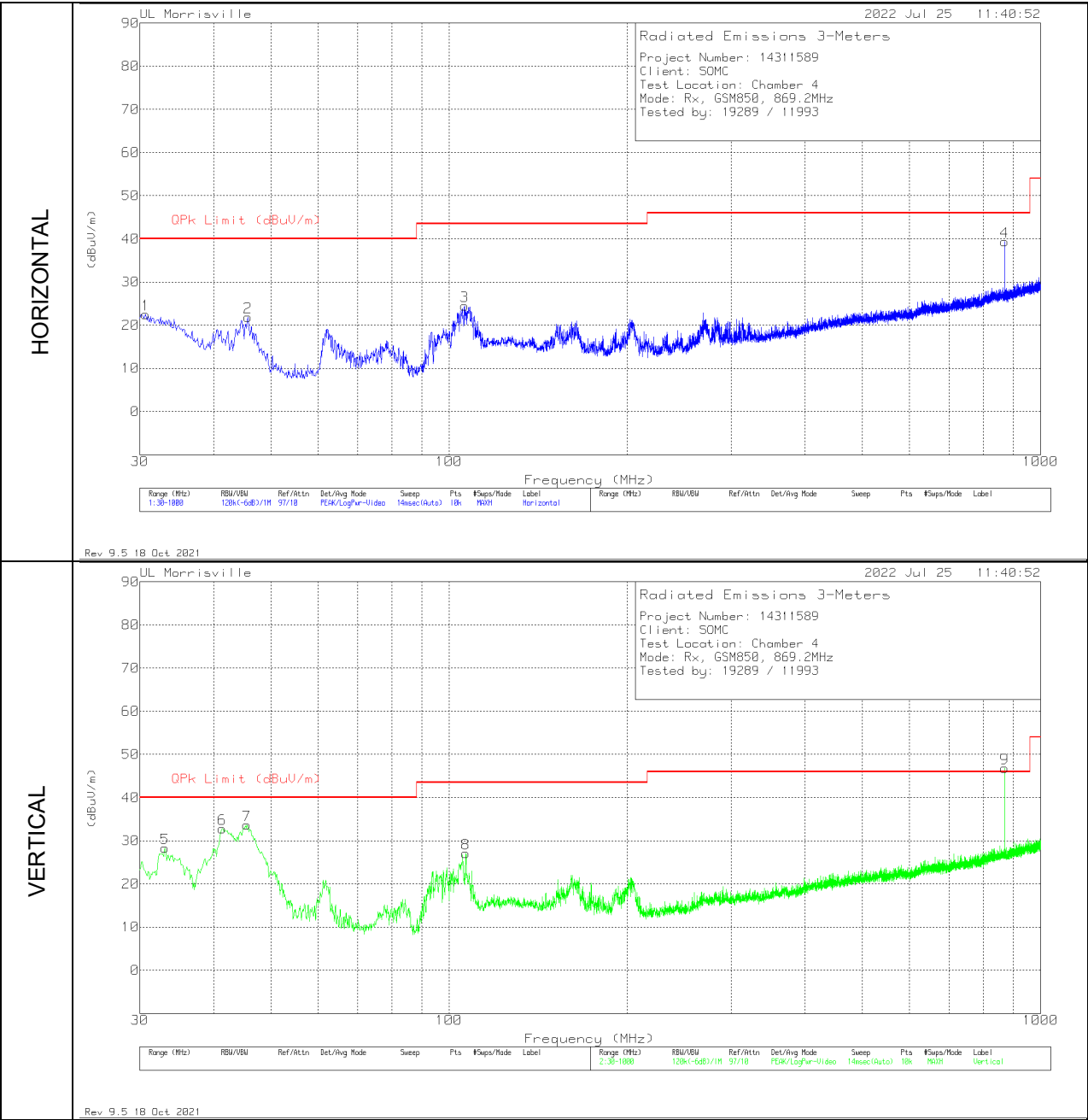
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Gain/Loss (dB)	Corrected Reading dBuV/m	Avg Limit (dBuV/m)	Margin (dB)	Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.626	41.93	Pk	32.5	-36.1	38.33	54	-15.67	74	-35.67	0-360	100	H
4	2.686	41.67	Pk	32.2	-36	37.87	54	-16.13	74	-36.13	0-360	200	V
2	5.59525	37.18	Pk	34.8	-31.4	40.58	54	-13.42	74	-33.42	0-360	100	H
5	6.42625	36.59	Pk	35.6	-29.7	42.49	54	-11.51	74	-31.51	0-360	200	V
6	9.013	37.3	Pk	36.1	-26.1	47.3	54	-6.7	74	-26.7	0-360	200	V
3	9.223	36.24	Pk	36.2	-26.5	45.94	54	-8.06	74	-28.06	0-360	100	H

Pk - Peak detector

RADIATED EMISSIONS 30 TO 1000 MHz – GSM 850 Rx 869.2MHz

Radiated Emissions Graph



Radiated Emissions Data Points

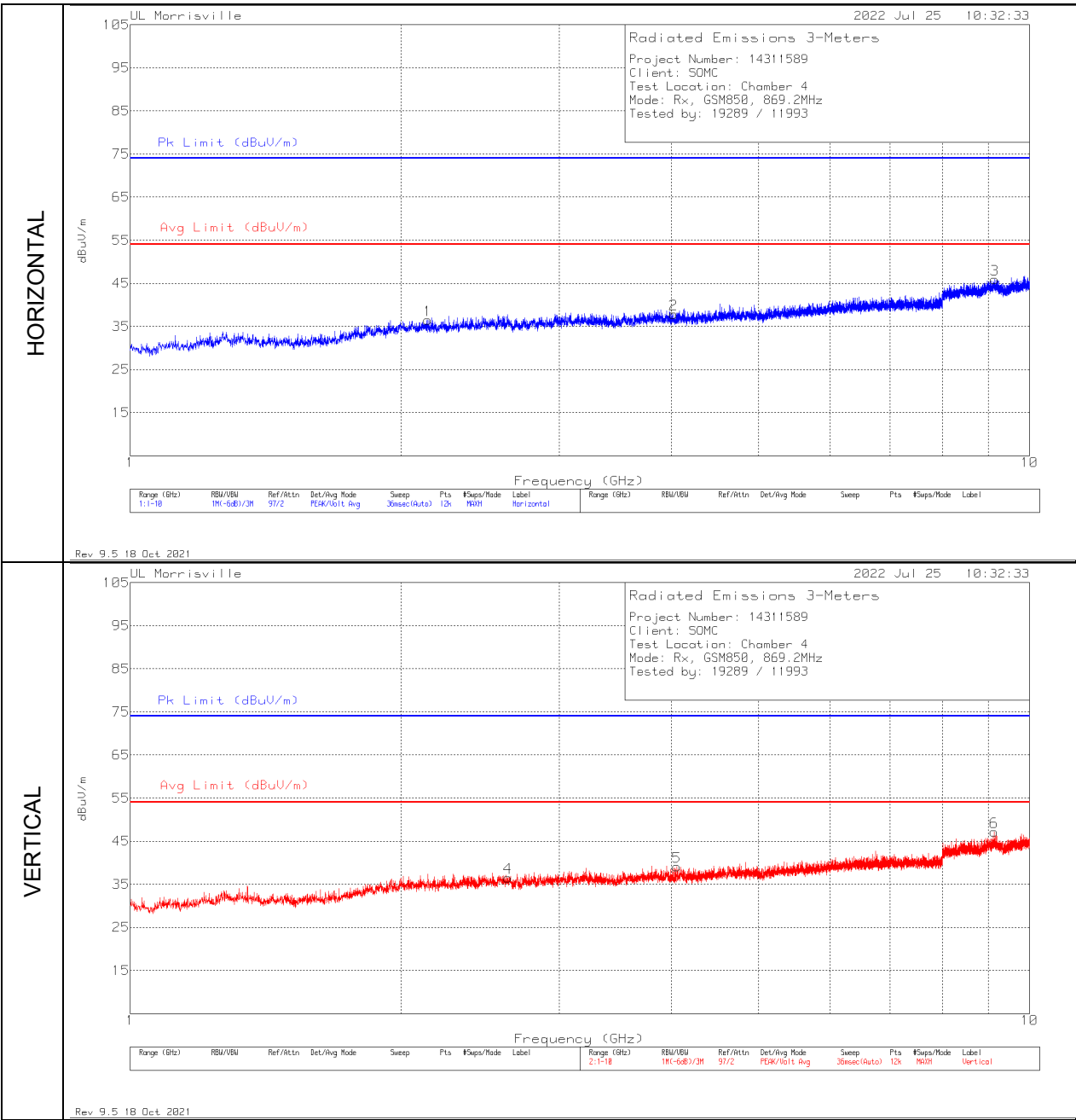
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0081 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	30.679	27.65	Pk	26.6	-31.7	22.55	40	-17.45	0-360	200	H
5	33.104	35.06	Pk	25	-31.7	28.36	40	-11.64	0-360	100	V
6	41.349	45.39	Pk	18.9	-31.5	32.79	40	-7.21	0-360	100	V
7	45.52	49.17	Pk	16.1	-31.6	33.67	40	-6.33	0-360	100	V
2	45.714	37.63	Pk	16	-31.7	21.93	40	-18.07	0-360	300	H
3	106.145	37.08	Pk	18	-30.6	24.48	43.52	-19.04	0-360	200	H
8	106.727	39.54	Pk	18.1	-30.5	27.14	43.52	-16.38	0-360	100	V
4 ^{DL}	869.244	36.75	Pk	28.5	-25.9	39.35	-	-	0-360	100	H
9 ^{DL}	869.341	44.19	Pk	28.5	-25.9	46.79	-	-	0-360	100	V

Pk - Peak detector

DL - Downlink from Callbox

RADIATED EMISSIONS 1000 TO 10,000 MHz – GSM 850 Rx 869.2MHz

Radiated Emissions Graph



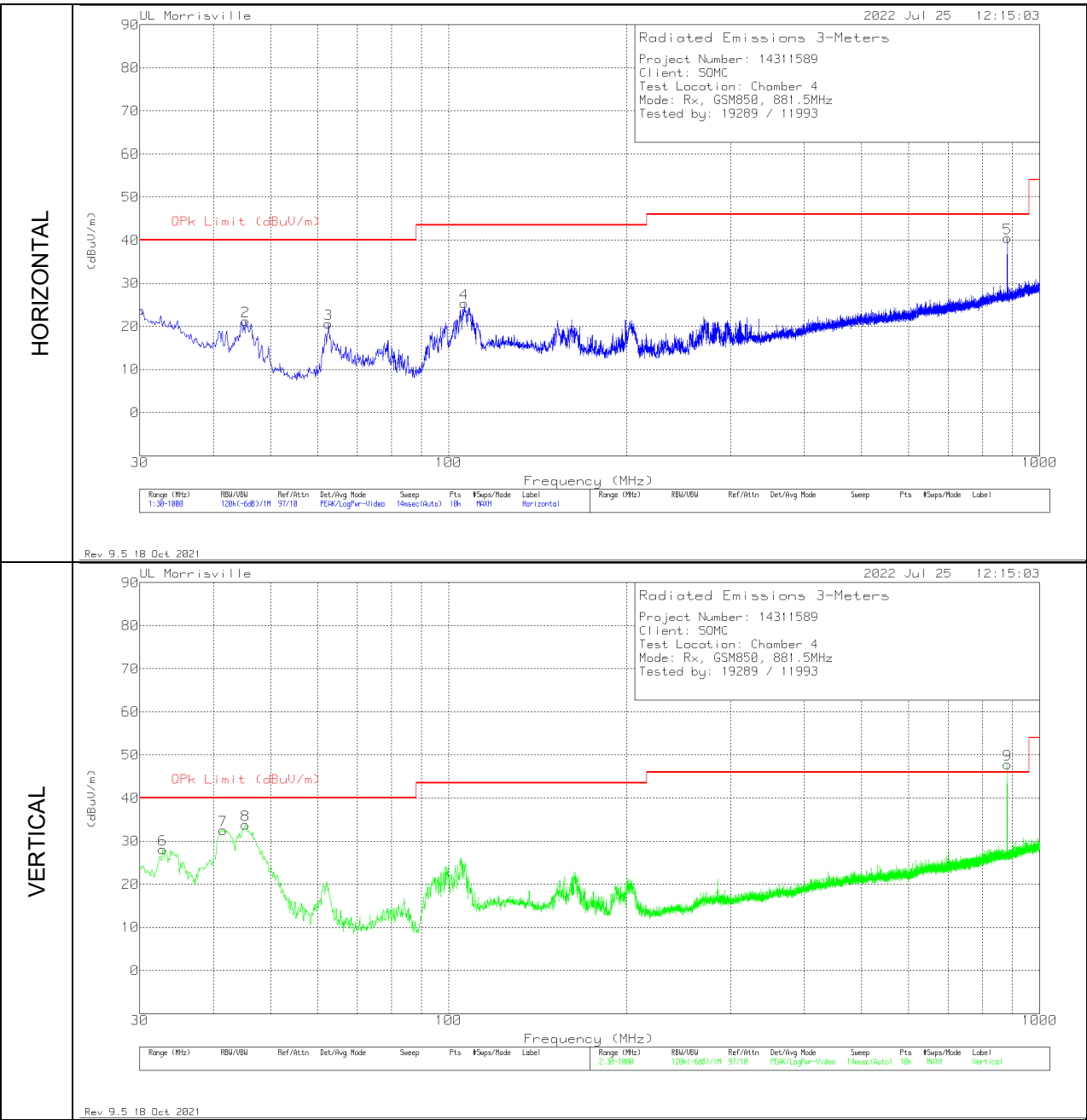
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Gain/Loss (dB)	Corrected Reading dBuV/m	Avg Limit (dBuV/m)	Margin (dB)	Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.1415	40.73	Pk	31.9	-36.1	36.53	54	-17.47	74	-37.47	0-360	100	H
4	2.632	40.06	Pk	32.5	-36	36.56	54	-17.44	74	-37.44	0-360	200	V
2	4.0225	37.79	Pk	33.4	-33.3	37.89	54	-16.11	74	-36.11	0-360	100	H
5	4.0555	39.04	Pk	33.4	-33.3	39.14	54	-14.86	74	-34.86	0-360	200	V
6	9.1405	37.35	Pk	36.2	-26.4	47.15	54	-6.85	74	-26.85	0-360	200	V
3	9.14875	36.28	Pk	36.2	-26.6	45.88	54	-8.12	74	-28.12	0-360	100	H

Pk - Peak detector

RADIATED EMISSIONS 30 TO 1000 MHz – GSM 850 Rx 881.5MHz

Radiated Emissions Graph



Radiated Emissions Data Points

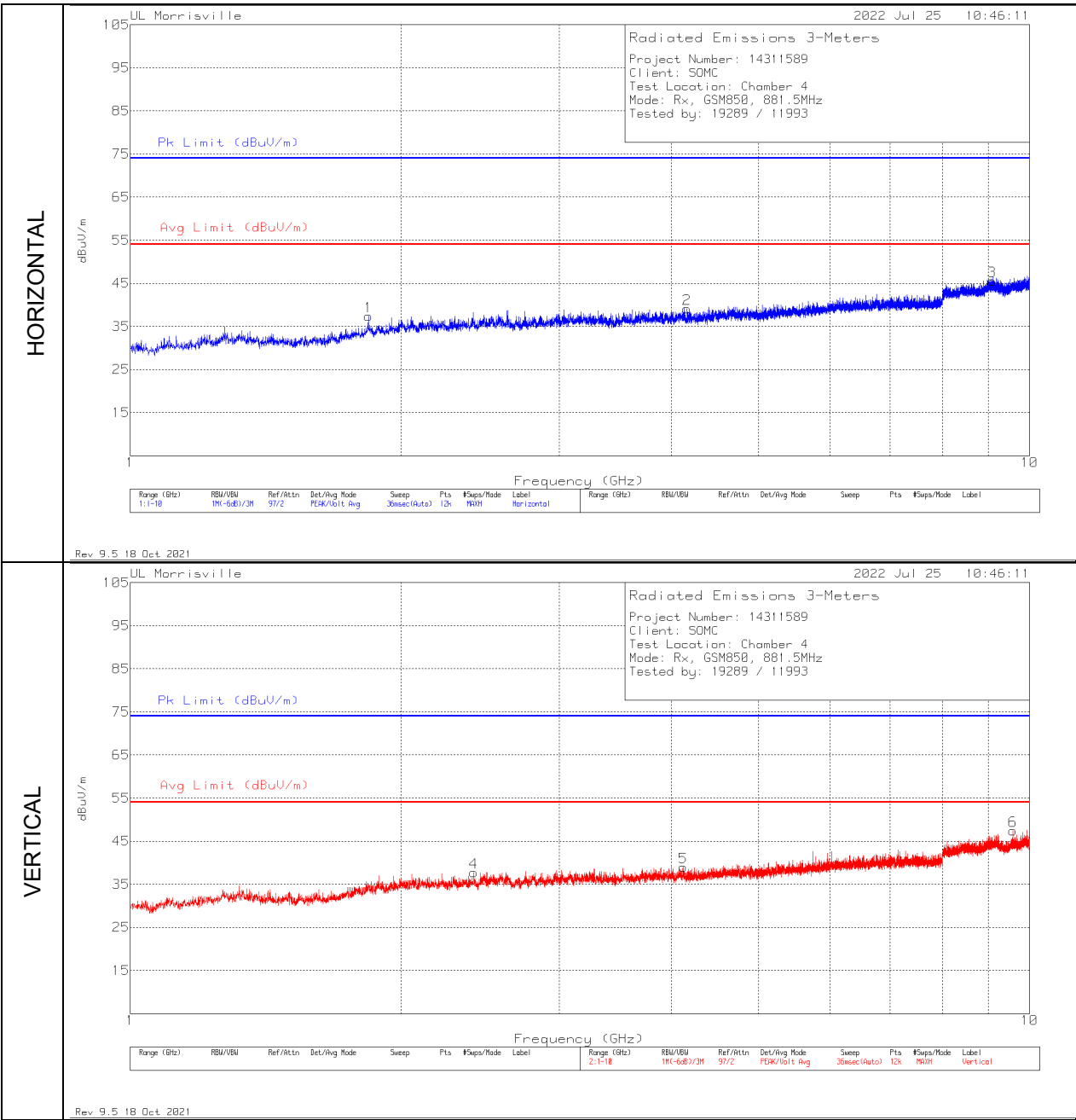
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0081 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	30.097	28.36	Pk	27.2	-31.8	23.76	40	-16.24	0-360	300	H
6	32.813	34.57	Pk	25.2	-31.7	28.07	40	-11.93	0-360	100	V
7	41.543	45.22	Pk	18.8	-31.5	32.52	40	-7.48	0-360	100	V
2	45.326	36.58	Pk	16.2	-31.5	21.28	40	-18.72	0-360	300	H
8	45.326	49.07	Pk	16.2	-31.5	33.77	40	-6.23	0-360	100	V
3	62.592	37.93	Pk	13.9	-31.2	20.63	40	-19.37	0-360	300	H
4	106.242	37.94	Pk	18	-30.6	25.34	43.52	-18.18	0-360	200	H
5 ^{DL}	881.563	37.48	Pk	28.6	-25.6	40.48	-	-	0-360	100	H
9 ^{DL}	881.66	44.95	Pk	28.6	-25.7	47.85	-	-	0-360	100	V

Pk - Peak detector

DL - Downlink from Callbox

RADIATED EMISSIONS 1000 TO 10,000 MHz – GSM 850 Rx 881.5MHz

Radiated Emissions Graph



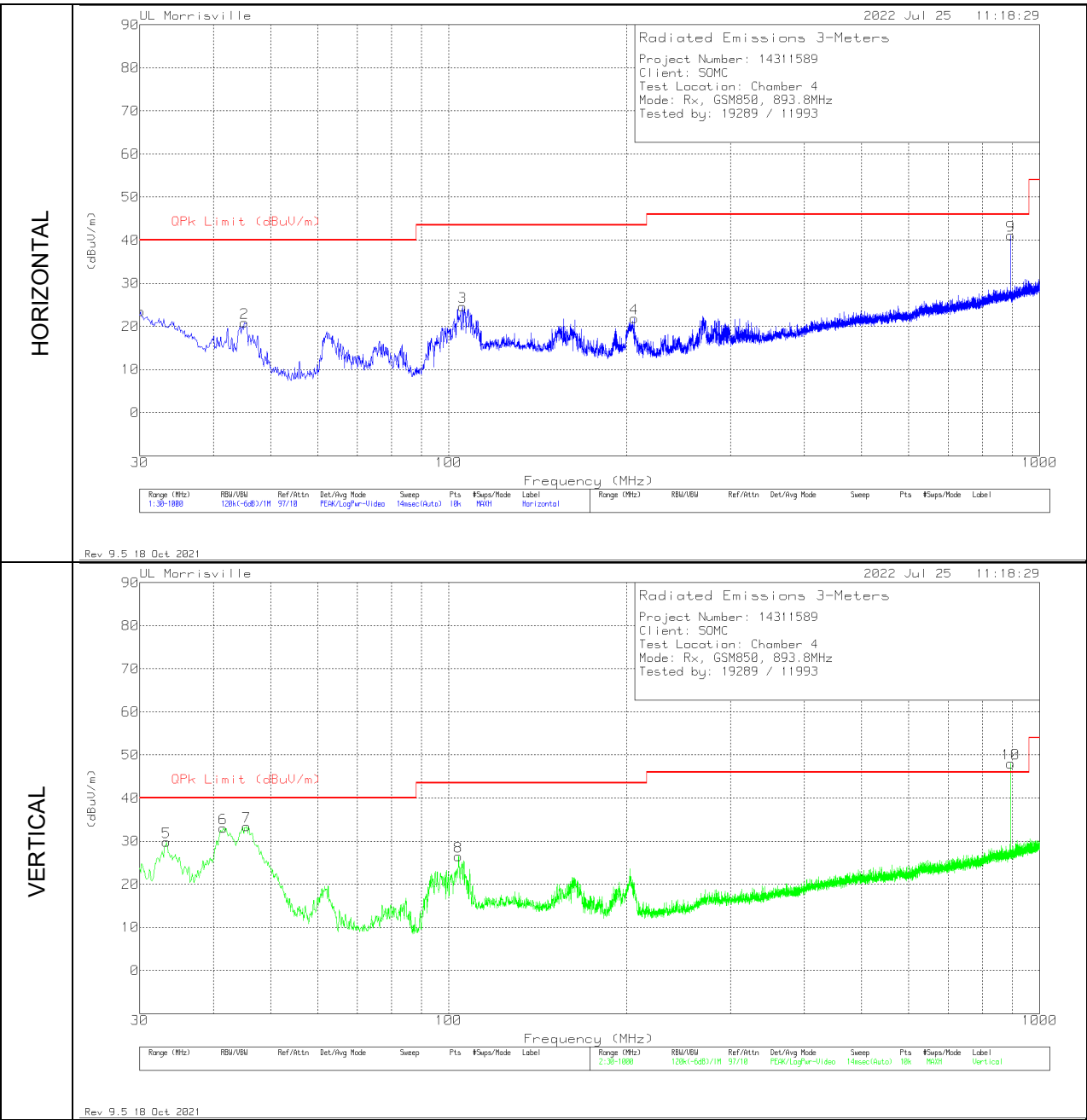
Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Gain/Loss (dB)	Corrected Reading dBuV/m	Avg Limit (dBuV/m)	Margin (dB)	Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.84075	42.42	Pk	31	-36.1	37.32	54	-16.68	74	-36.68	0-360	100	H
4	2.4115	41.75	Pk	32.2	-36.2	37.75	54	-16.25	74	-36.25	0-360	200	V
5	4.12075	38.52	Pk	33.4	-32.9	39.02	54	-14.98	74	-34.98	0-360	200	V
2	4.15825	38.52	Pk	33.4	-32.8	39.12	54	-14.88	74	-34.88	0-360	100	H
3	9.09175	35.92	Pk	36.2	-26.6	45.52	54	-8.48	74	-28.48	0-360	100	H
6	9.5875	37.03	Pk	36.7	-26.3	47.43	54	-6.57	74	-26.57	0-360	200	V

Pk - Peak detector

RADIATED EMISSIONS 30 TO 1000 MHz – GSM 850 Rx 893.8MHz

Radiated Emissions Graph



Radiated Emissions Data Points

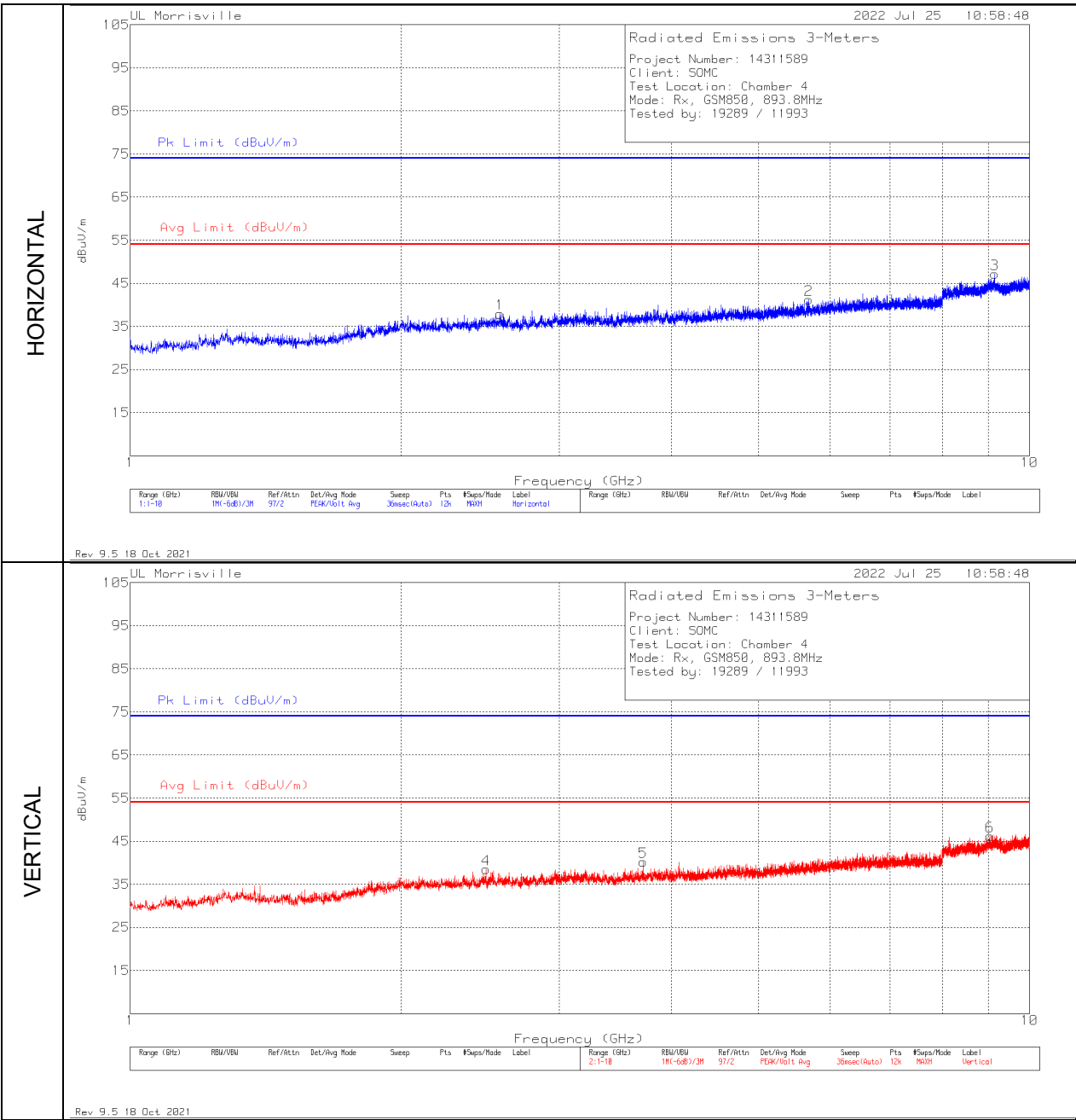
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0081 (dB/m)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	30.097	28.04	Pk	27.2	-31.8	23.44	40	-16.56	0-360	200	H
5	33.298	36.65	Pk	24.9	-31.7	29.85	40	-10.15	0-360	100	V
6	41.543	45.71	Pk	18.8	-31.5	33.01	40	-6.99	0-360	100	V
2	45.132	35.93	Pk	16.3	-31.4	20.83	40	-19.17	0-360	200	H
7	45.52	48.91	Pk	16.1	-31.6	33.41	40	-6.59	0-360	100	V
8	103.914	39.72	Pk	17.6	-30.8	26.52	43.52	-17	0-360	100	V
3	105.563	37.27	Pk	17.9	-30.6	24.57	43.52	-18.95	0-360	200	H
4	205.958	34.35	Pk	17.2	-29.7	21.85	43.52	-21.67	0-360	100	H
9 ^{DL}	893.882	37.78	Pk	28.8	-25.5	41.08	-	-	0-360	100	H
10 ^{DL}	893.882	44.71	Pk	28.8	-25.5	48.01	-	-	0-360	100	V

Pk - Peak detector

DL - Downlink from Callbox

RADIATED EMISSIONS 1000 TO 10,000 MHz – GSM 850 Rx 893.8MHz

Radiated Emissions Graph



Radiated Emissions Data Points

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Gain/Loss (dB)	Corrected Reading dBuV/m	Avg Limit (dBuV/m)	Margin (dB)	Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	2.48575	41.95	Pk	32.6	-36.1	38.45	54	-15.55	74	-35.55	0-360	100	V
1	2.578	41.33	Pk	32.7	-36.1	37.93	54	-16.07	74	-36.07	0-360	100	H
5	3.71875	41.17	Pk	33.3	-34.3	40.17	54	-13.83	74	-33.83	0-360	100	V
2	5.683	37.61	Pk	34.8	-31.2	41.21	54	-12.79	74	-32.79	0-360	100	H
6	9.03175	36.47	Pk	36.1	-26.4	46.17	54	-7.83	74	-27.83	0-360	100	V
3	9.14275	37.32	Pk	36.2	-26.4	47.12	54	-6.88	74	-26.88	0-360	100	H

Pk - Peak detector

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
☐	Building: 12 Laboratory Dr RTP, NC 27709, U.S.A	US0067	2180C	825374
☒	Building: 2800 Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A		27265	

END OF TEST REPORT