

C2PC FCC IC Test Report (BT-LE)

Report No.: FCC_IC_RF_SL21020901-SLX-160A1_BLE Rev_2.0

FCC ID: U4G-RHINO

IC ID: 3862E-RHINO

Test Model: QCNFA324

Received Date: 01/04/2021

Test Date: 06/02/2021 - 01/12/2022

Issued Date: 01/14/2022

Applicant: Datalogic S.r.l.

Address: Via san Vitalino 13, 40012 Lippo di Calderara di Reno (BO), Italy

Manufacturer: Silex Technology America, Inc.

Address: 201 East Sandpointe, Suite 245, Santa Ana, CA 92707

Issued By: Bureau Veritas Consumer Products Services, Inc.

Lab Address: 775 Montague Expressway, Milpitas, CA 95035

Test Location (1): 775 Montague Expressway, Milpitas, CA 95035

**FCC Registration /
Designation Number:** 540430

ISED# / CAB identifier: 4842D



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Table of Contents

Release Control Record	3
1 Certificate of Conformity	4
2 Summary of Test Results	5
2.1 Measurement Uncertainty	5
2.2 Modification Record	5
3 General Information	6
3.1 General Description of EUT	6
3.2 Description of Test Modes	7
3.2.1 Test Mode Applicability and Tested Channel Detail	8
3.3 Description of Support Units	9
3.3.1 Configuration of System under Test	9
3.4 General Description of Applied Standards	9
4 Test Types and Results	10
4.1 Radiated Emission and Bandedge Measurement	10
4.1.1 Limits of Radiated Emission and Bandedge Measurement	10
4.1.2 Test Instruments	11
4.1.3 Test Procedures	12
4.1.4 Deviation from Test Standard	12
4.1.5 Test Setup	13
4.1.6 EUT Operating Conditions	14
4.1.7 Test Results	15
5 Pictures of Test Arrangements	24
Appendix – Information on the Testing Laboratories	25

Release Control Record

Issue No.	Description	Date Issued
FCC_IC_RF_SL21020901-SLX-160A1_BLE	Original Report	06/09/2020
FCC_IC_RF_SL21020901-SLX-160A1_BLE Rev_1.0	Updated Title page, Section 2 - Summary of Test Results, Secotion 3 – General Information, Section 4 – Test Types and Results	01/03/2022
FCC_IC_RF_SL21020901-SLX-160A1_BLE Rev_2.0	Updated Antenna type, calibration list, and 18-25 GHz test results	01/14/2022

2 Summary of Test Results

47 CFR FCC Part 15, Subpart C (SECTION 15.247) / ISED RSS-247				
RSS 247 Issue2, RSS Gen Issue5				
FCC Clause	RSS Section (s)	Test Item	Result	Remarks
15.205 & 15.209 & 15.247(d)	RSS-247 7.3	Radiated Emissions and Band Edge Measurement	PASS	Meet the requirement of limit.
15.203	RSS Gen [6.8]	Antenna Requirement	PASS	PCB antenna with IPEX connector

Note:

1. Refer the test report. FCC ID: PPD-QCNFA324, Report Number: RF140808E04B-2 for all other tests.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) (\pm)
Conducted Emissions at mains ports	150kHz ~ 30MHz	3.51dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	3.73dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	4.64dB
	6GHz ~ 18GHz	4.82dB
	18GHz ~ 40GHz	4.91dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	PCIe 2x2 AC Wireless Module
Brand	Datalogic S.r.l
Test Model	QCNFA324
Status of EUT	Engineering sample
Power Supply Rating	3.3Vdc from the host equipment
Modulation Type	GFSK
Modulation Technology	DTS
Transfer Rate	Up to 1Mbps
Operating Frequency	2.402 ~ 2.480GHz
Number of Channel	40
Output Power	1.95 mW
Antenna Brand	Huber+Suhner
Antenna Type	Dual band WiFi embedded patch antenna pair
Antenna Model	1399.99.0151
Antenna Gain	1 dBi
Antenna Connector	I-PEX MHF-4

Note:

1. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.
2. Output power was verified and transmitting at full max output power. Measurements were taken prior to starting RSE testing.
3. The purpose of this report is to address the C2PC changes due to the addition of the dual patch antenna.

3.2 Description of Test Modes

40 channels are provided to this EUT:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE \geq 1G	RE $<$ 1G	PLC	APCM	
-	√	√	-	-	

Where RE \geq 1G: Radiated Emission above 1GHz & Bandedge Measurement
 RE $<$ 1G: Radiated Emission below 1GHz
 PLC: Power Line Conducted Emission
 APCM: Antenna Port Conducted Measurement

NOTE: The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Y-plane**.
NOTE: "-" means no effect.

Radiated Emission Test (Above 1GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TYPE	DATA RATE (Mbps)
0 to 39	0,19,39	GFSK	1

Radiated Emission Test (Below 1GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TYPE	DATA RATE (Mbps)
0 to 39	0,19,39	GFSK	1

3.3 Description of Support Units

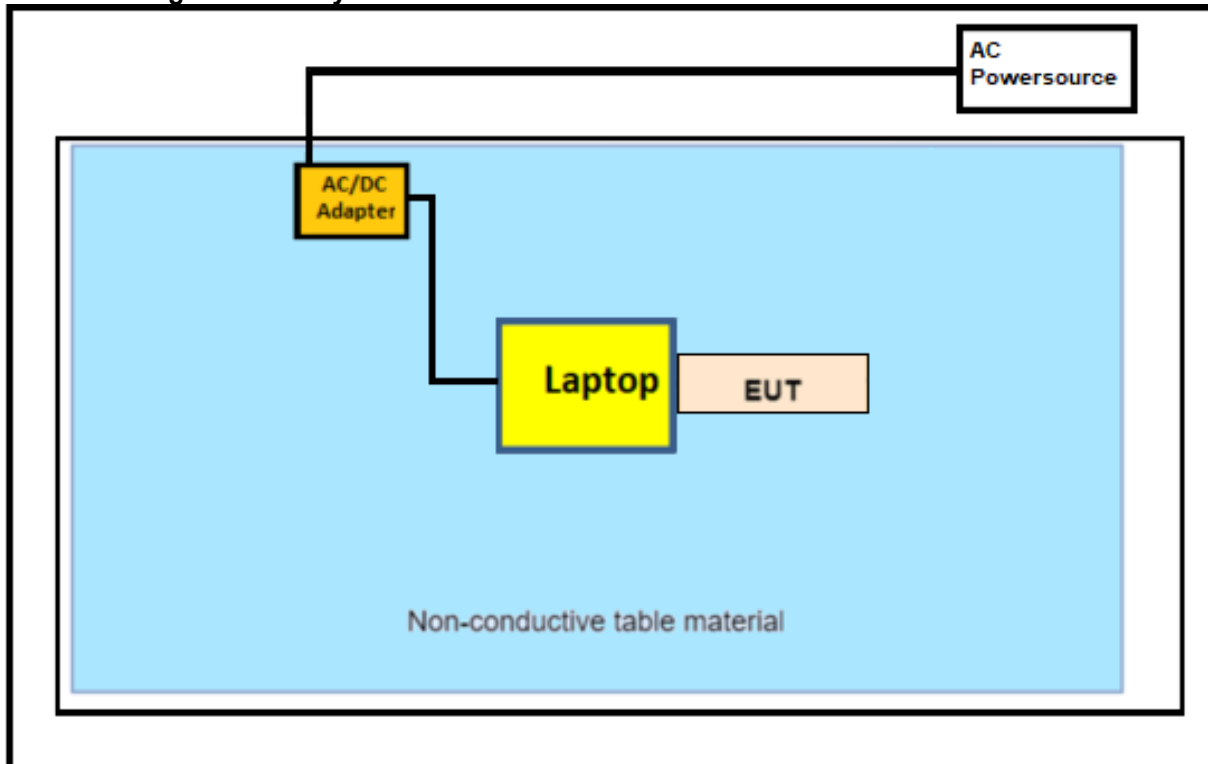
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Laptop	Dell	Latitude E6420	56CK3R1	N/A	N/A
B.	Power Supply (Laptop)	Dell	DA130PEI-00	JU012	N/A	N/A

Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. EUT is connected via an express card adapter.

3.3.1 Configuration of System under Test



3.4 General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

47 CFR FCC Part 15, Subpart C (Section 15.247)
RSS 247 Issue2, February 2017
ANSI C63.10: 2013
RSS Gen Issue5, March 2019
558074 D01 15.247 Meas Guidance v05r02

All test items have been performed and recorded as per the above standards.

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.1.2 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
PXA Signal Analyzer KEYSIGHT	N9030B	MY57140374	07/07/2020	07/07/2021
Horn Antenna ETS-Lindgren	3117	218554	07/24/2020	07/24/2021
Biconilog Antenna Sunol	JB6	A111717	03/04/2021	03/04/2022
Pre-Amplifier RF-Lambda	RAMP00M50GA	18040300055	10/1/2020	10/1/2021

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
EMI Receiver Rohde and Schwarz	ESW44	1328.4100K- 101662-MH	09/22/2021	09/22/2022
Biconilog Antenna Sunol	JB1	A111717	09/04/2020	9/4/2022
Horn Antenna ETS-Lindgren	3117	218553	02/20/2020	2/20/2022
DRG Horn Antenna	SAS-117	579	08/05/2020	08/05/2022
Pre-Amplifier RF-Lambda	RAMP00M50GA	18040300055	08/05/2020	08/05/2022
Microwavetown (0.80 m)	FSB360PK-KMKM	201906110002	12/09/2021	12/09/2022
Microwavetown (6.0 m)	FSB360PK-KMKM	202103270001	12/09/2021	12/09/2022

4.1.3 Test Procedures

For Radiated emission below 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz at frequency below 30MHz.

For Radiated emission above 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

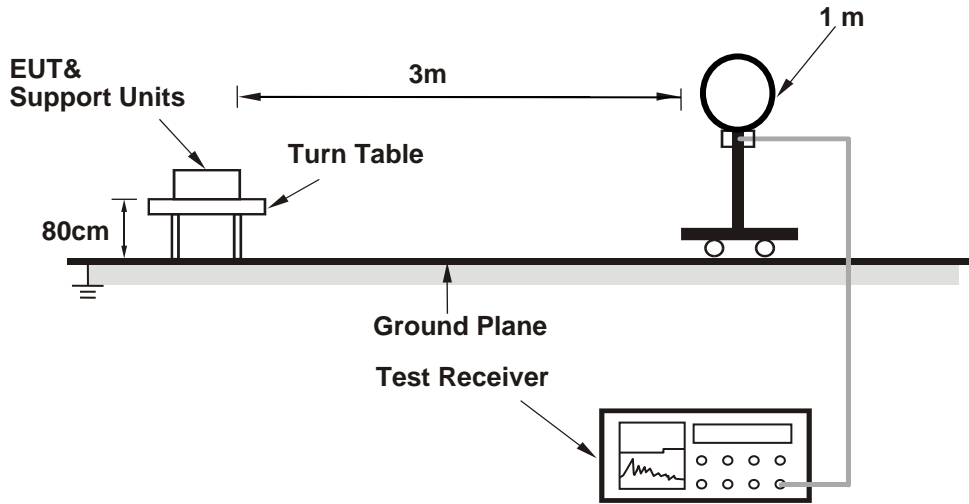
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

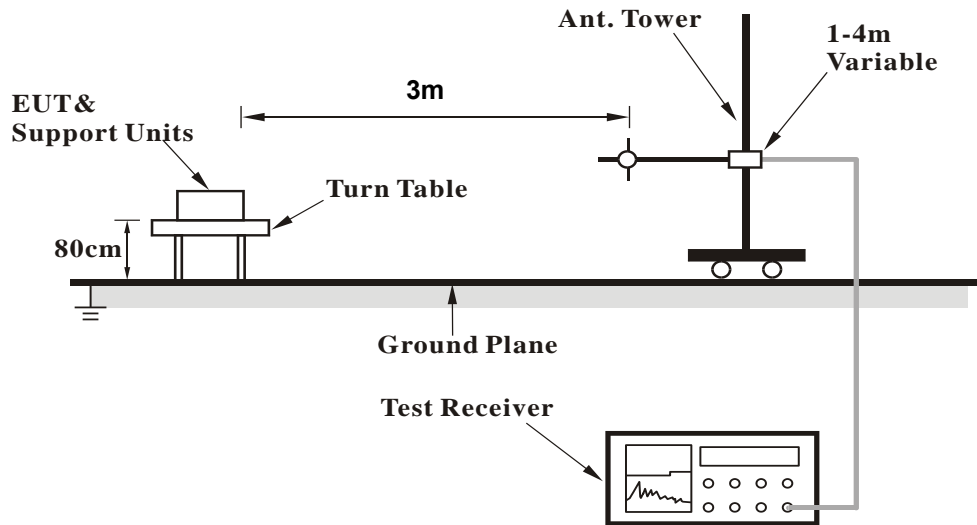
No deviation.

4.1.5 Test Setup

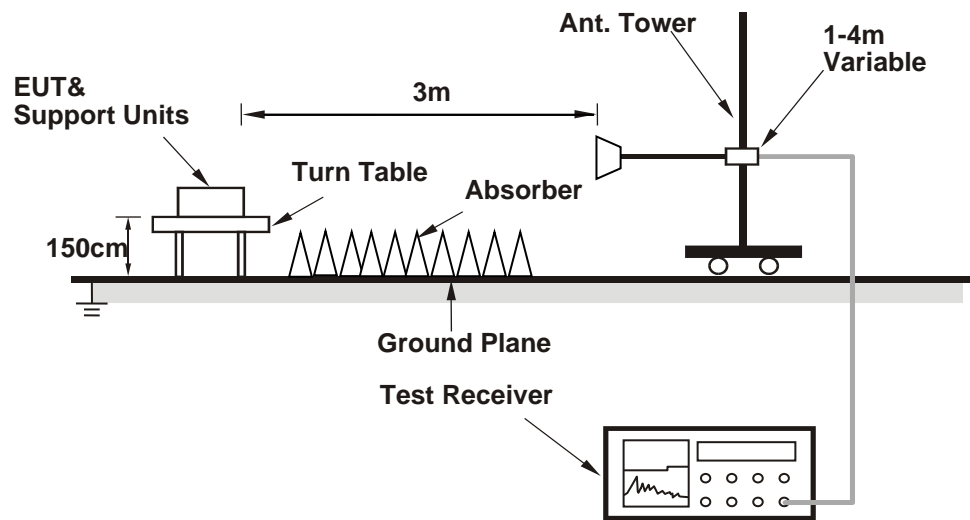
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT Operating Conditions

- a. Connected the EUT with the Notebook Computer which is placed on the table with the EUT.
- b. Controlling software has been activated to set the EUT on specific status.

4.1.7 Test Results

BELOW 1GHz WORST-CASE DATA:

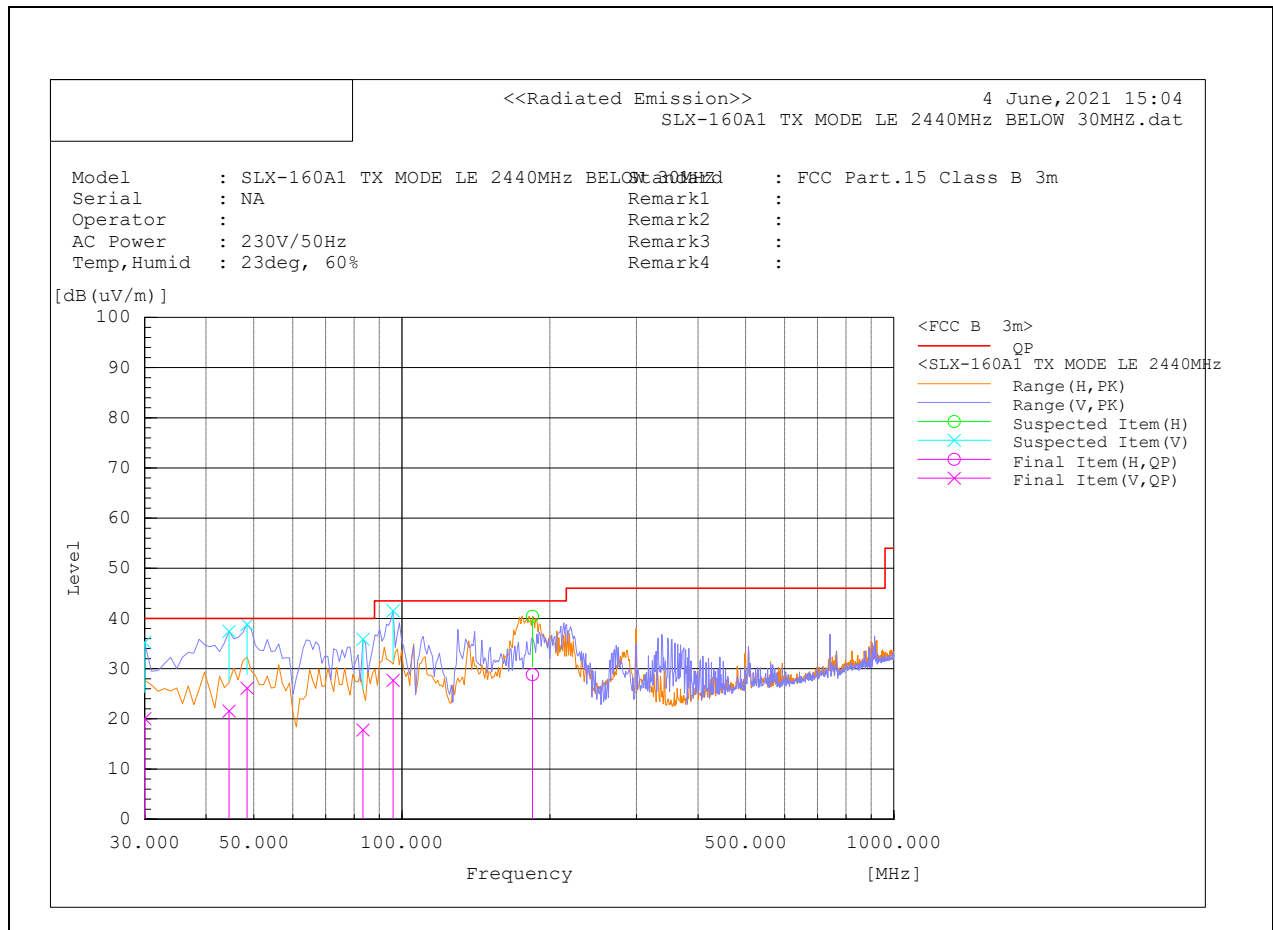
BT-LE (GFSK)

CHANNEL	TX Channel 19	DETECTOR FUNCTION	Quasi Peak
FREQUENCY RANGE	30MHz – 1GHz		

Antenna Polarity & Test Distance: Vertical and Horizontal at 3m										
No.	Frequency (MHz)	Polarization (H/V)	Reading QP [dB(uV)]	Factor [dB(1/m)]	Level QP [dB(uV/m)]	Limit\QP [dB(uV/m)]	Margin QP [dB]	Height (cm)	Angle (Deg)	Pass/Fail
1	30*	V	-5.4	25.5	20.1	40	-19.9	104.8	130.5	Pass
2	44.55*	V	6	15.6	21.6	40	-18.4	153	313	Pass
3	48.43*	V	12.5	13.6	26.1	40	-13.9	120.3	357.6	Pass
4	83.35*	V	4.6	13.2	17.8	40	-22.2	115.8	279.6	Pass
5	95.96*	V	12	15.7	27.7	43.5	-15.8	100	194.6	Pass
6	184.23*	H	11.2	17.6	28.8	43.5	-14.7	130.3	221	Pass

REMARKS:

1. Level (dBuV) = Reading (dBuV) + Factor (dB (1/m)).
2. Factor (dB (1/m)) = Antenna Factor (AF) (dB (1/m)) + Cable Loss (dB)
3. Margin = Level (dBuV/m) - Limit value (dBuV/m)
4. * Worst case points outside of the restricted band were measured.



ABOVE 1GHz TEST DATA:

BT-LE (GFSK)

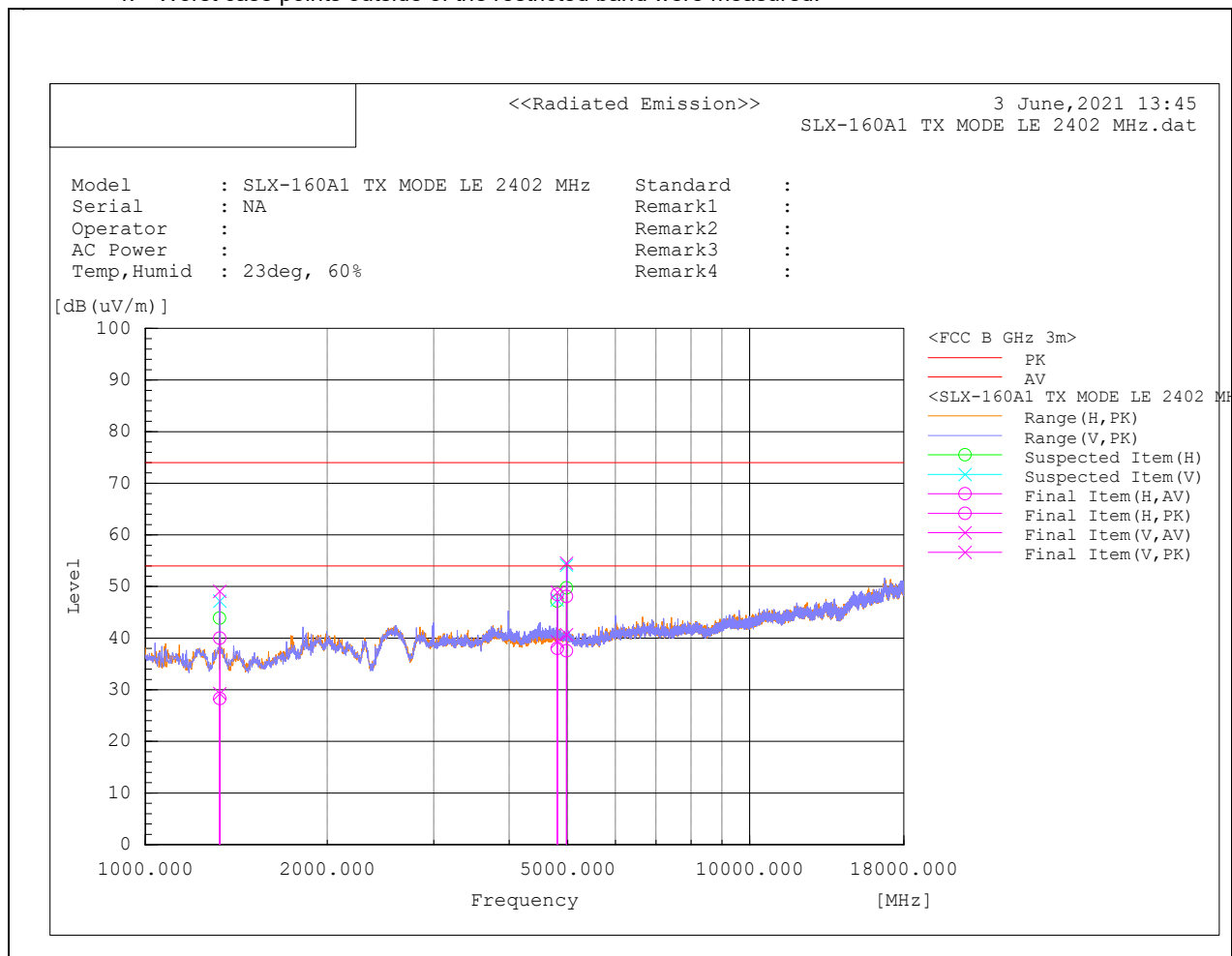
CHANNEL	TX Channel 0	DETECTOR FUNCTION	Peak Average
FREQUENCY RANGE	1GHz ~ 18GHz		

Antenna Polarity & Test Distance: Vertical and Horizontal at 3m

No.	Frequency (MHz)	Polarization (H/V)	Reading AV [dB(uV)]	Reading PK [dB(uV)]	Factor [dB(1/m)]	Level AV [dB(uV/m)]	Level PK [dB(uV/m)]	LimitAV [dB(uV/m)]	LimitPK [dB(uV/m)]	Margin AV [dB]	Margin PK [dB]	Height (cm)	Angle (Deg)	Pass/Fail
1	1327.934	H	44.6	56.3	-16.3	28.3	40	54	74	-25.7	-34	218.1	98.5	Pass
2	1328.051	V	45.5	65.4	-16.3	29.2	49.1	54	74	-24.8	-24.9	184.4	254.1	Pass
3	4803.909	V	45.3	54.9	-6	39.3	48.9	54	74	-14.7	-25.1	218.6	9.2	Pass
4	4803.722	H	44	54.5	-6	38	48.5	54	74	-16	-25.5	128.7	96.3	Pass
5	4978.928	V	46.6	60.4	-5.9	40.7	54.5	54	74	-13.3	-19.5	127.9	112.4	Pass
6	4978.973	H	43.5	54	-5.9	37.6	48.1	54	74	-16.4	-25.9	153.4	153.9	Pass

REMARKS:

1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) –Preamplifier Gain (dB)
3. Margin = Level (dBuV/m) - Limit value (dBuV/m)
4. * Worst case points outside of the restricted band were measured.

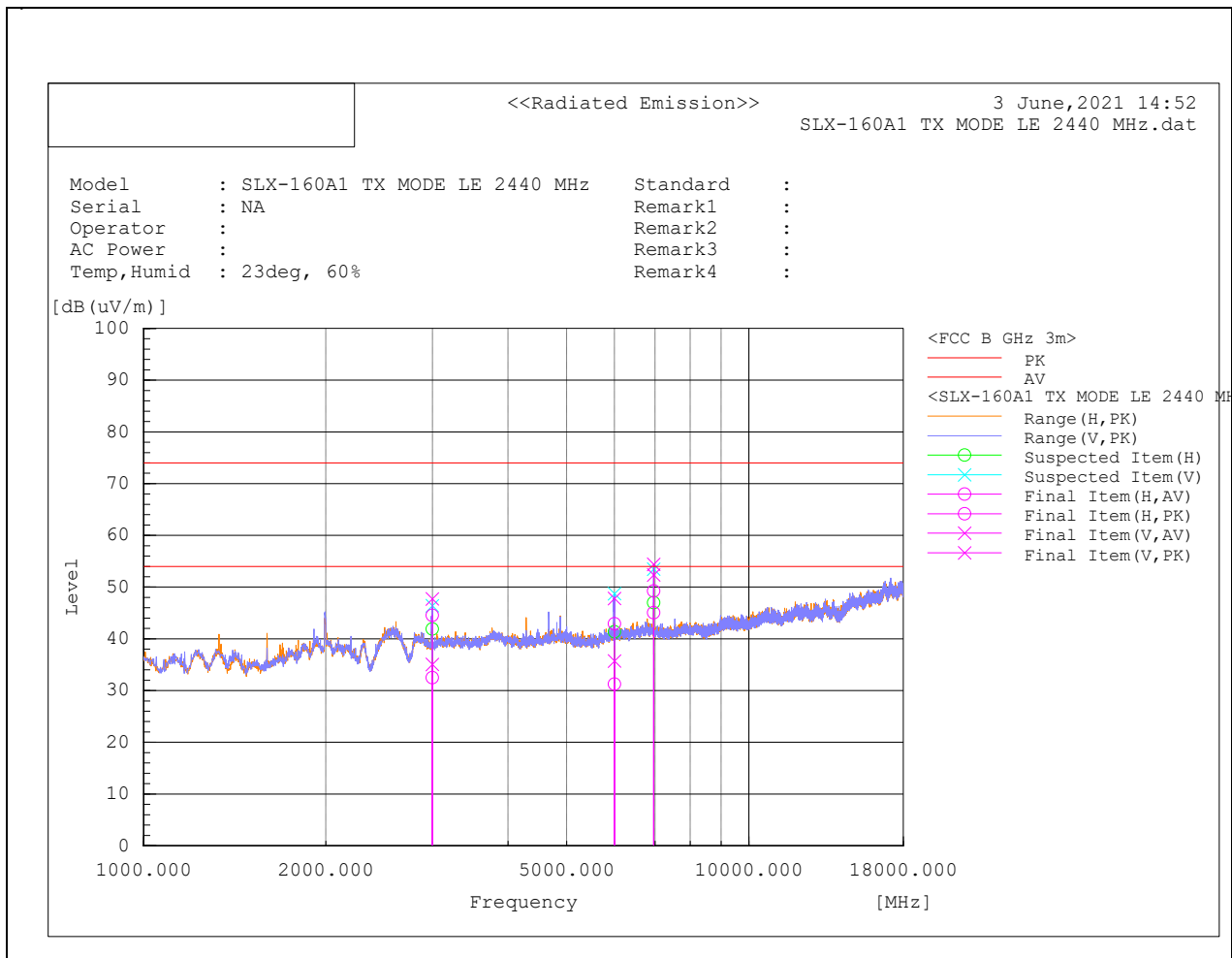


CHANNEL	TX Channel 19	DETECTOR FUNCTION	Peak Average
FREQUENCY RANGE	1GHz ~ 18GHz		

Antenna Polarity & Test Distance: Vertical and Horizontal at 3m														
No.	Frequency (MHz)	Polarization (H/V)	Reading AV [dB(uV)]	Reading PK [dB(uV)]	Factor [dB(1/m)]	Level AV [dB(uV/m)]	Level PK [dB(uV/m)]	LimitAV [dB(uV/m)]	LimitPK [dB(uV/m)]	Margin AV [dB]	Margin PK [dB]	Height (cm)	Angle (Deg)	Pass/Fail
1	2999.907*	V	45.4	58	-10.3	35.1	47.7	54	74	-18.9	-26.3	314.7	279.2	Pass
2	2999.905*	H	42.8	54.9	-10.3	32.5	44.6	54	74	-21.5	-29.4	371.4	154.7	Pass
3	5999.871*	V	39.1	51.2	-3.4	35.7	47.8	54	74	-18.3	-26.2	123	231.8	Pass
4	5999.093*	H	34.6	46.3	-3.4	31.2	42.9	54	74	-22.8	-31.1	378.1	0	Pass
5	6959.986*	V	53.6	55.7	-1.3	52.3	54.4	54	74	-1.7	-19.6	153.7	185.9	Pass
6	6960.018*	H	46.3	50.5	-1.3	45	49.2	54	74	-9	-24.8	116.3	325.3	Pass

REMARKS:

1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) –Preamplifier Gain (dB)
3. Margin = Level (dBuV/m) - Limit value (dBuV/m)
4. * Worst case points outside of the restricted band were measured.

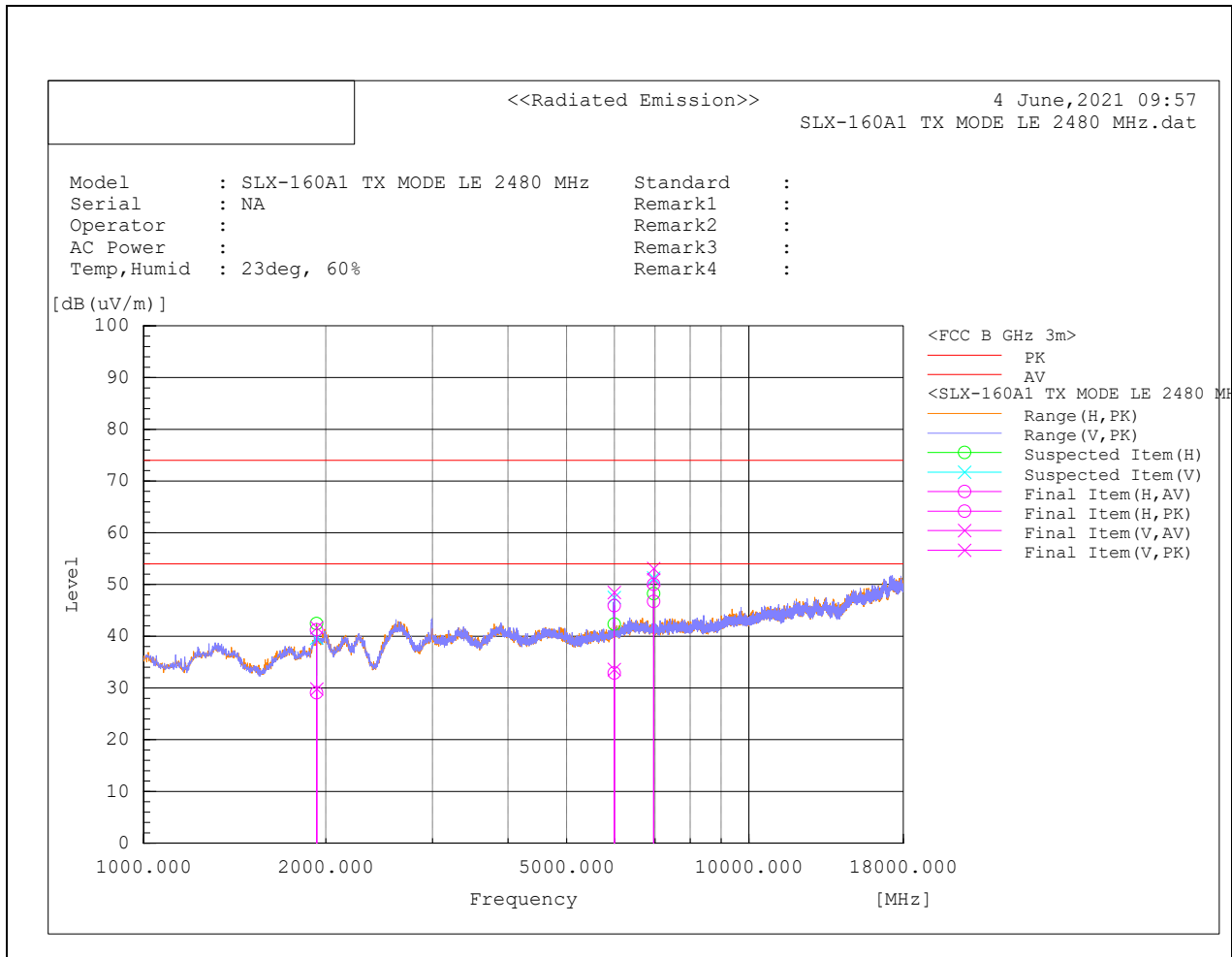


CHANNEL	TX Channel 39	DETECTOR FUNCTION	Peak Average
FREQUENCY RANGE	1GHz ~ 18GHz		

Antenna Polarity & Test Distance: Vertical and Horizontal at 3m														
No.	Frequency (MHz)	Polarization (H/V)	Reading AV [dB(uV)]	Reading PK [dB(uV)]	Factor [dB(1/m)]	Level AV [dB(uV/m)]	Level PK [dB(uV/m)]	Limit\AV [dB(uV/m)]	Limit\PK [dB(uV/m)]	Margin AV [dB]	Margin PK [dB]	Height (cm)	Angle (Deg)	Pass/Fail
1	1932.534*	V	42.3	54.2	-12.5	29.8	41.7	54	74	-24.2	-32.3	349.4	119.2	Pass
2	1931.599*	H	41.6	53.7	-12.5	29.1	41.2	54	74	-24.9	-32.8	348.2	244	Pass
3	5994.257*	V	37	51.9	-3.4	33.6	48.5	54	74	-20.4	-25.5	107.7	141.5	Pass
4	5995.223*	H	36.3	49.3	-3.4	32.9	45.9	54	74	-21.1	-28.1	162.8	104.8	Pass
5	6959.989*	V	52.2	54.4	-1.3	50.9	53.1	54	74	-3.1	-20.9	144.4	202.5	Pass
6	6960.019*	H	48	51.3	-1.3	46.7	50	54	74	-7.3	-24	153.4	263.2	Pass

REMARKS:

1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) –Preamplifier Gain (dB)
3. Margin = Level (dBuV/m) - Limit value (dBuV/m)
4. * Worst case points outside of the restricted band were measured.



ABOVE 18GHz TEST DATA:

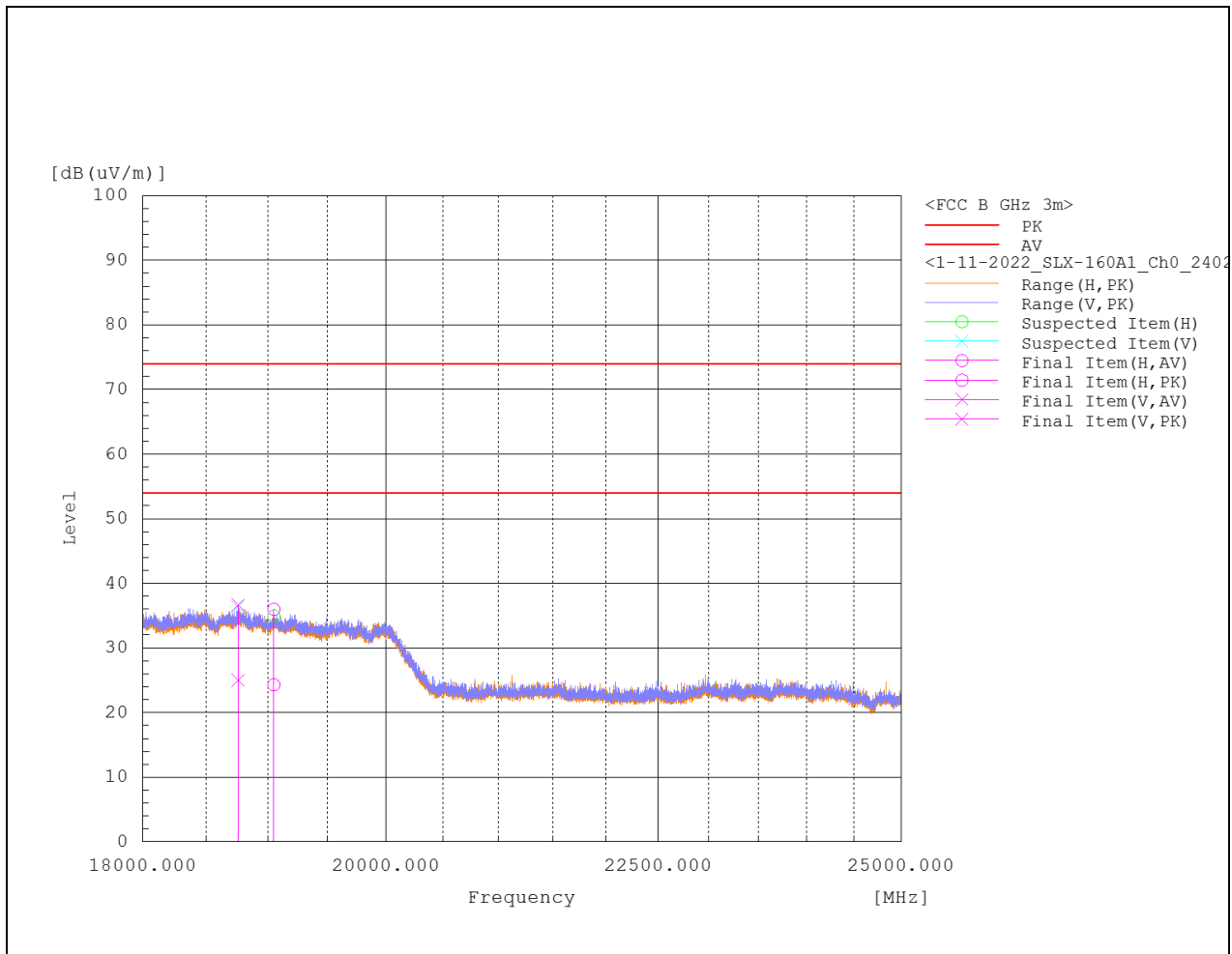
BT-LE (GFSK)

CHANNEL	TX Channel 0	DETECTOR FUNCTION	Peak Average
FREQUENCY RANGE	18GHz ~ 25GHz		

Antenna Polarity & Test Distance: Vertical and Horizontal at 3m														
No.	Frequency (MHz)	Polarization (H/V)	Reading AV [dB(uV)]	Reading PK [dB(uV)]	Factor [dB(1/m)]	Level AV [dB(uV/m)]	Level PK [dB(uV/m)]	LimitAV [dB(uV/m)]	LimitPK [dB(uV/m)]	Margin AV [dB]	Margin PK [dB]	Height (cm)	Angle (Deg)	Pass/Fail
1	18756.644	V	20.5	32.2	4.5	25	36.7	54	74	29	37.3	223	184.6	Pass
2	19050.456	H	20.4	32.1	3.9	24.3	36	54	74	29.7	38	382	240.9	Pass

REMARKS:

1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) –Preamplifier Gain (dB)
3. Margin = Level (dBuV/m) - Limit value (dBuV/m)

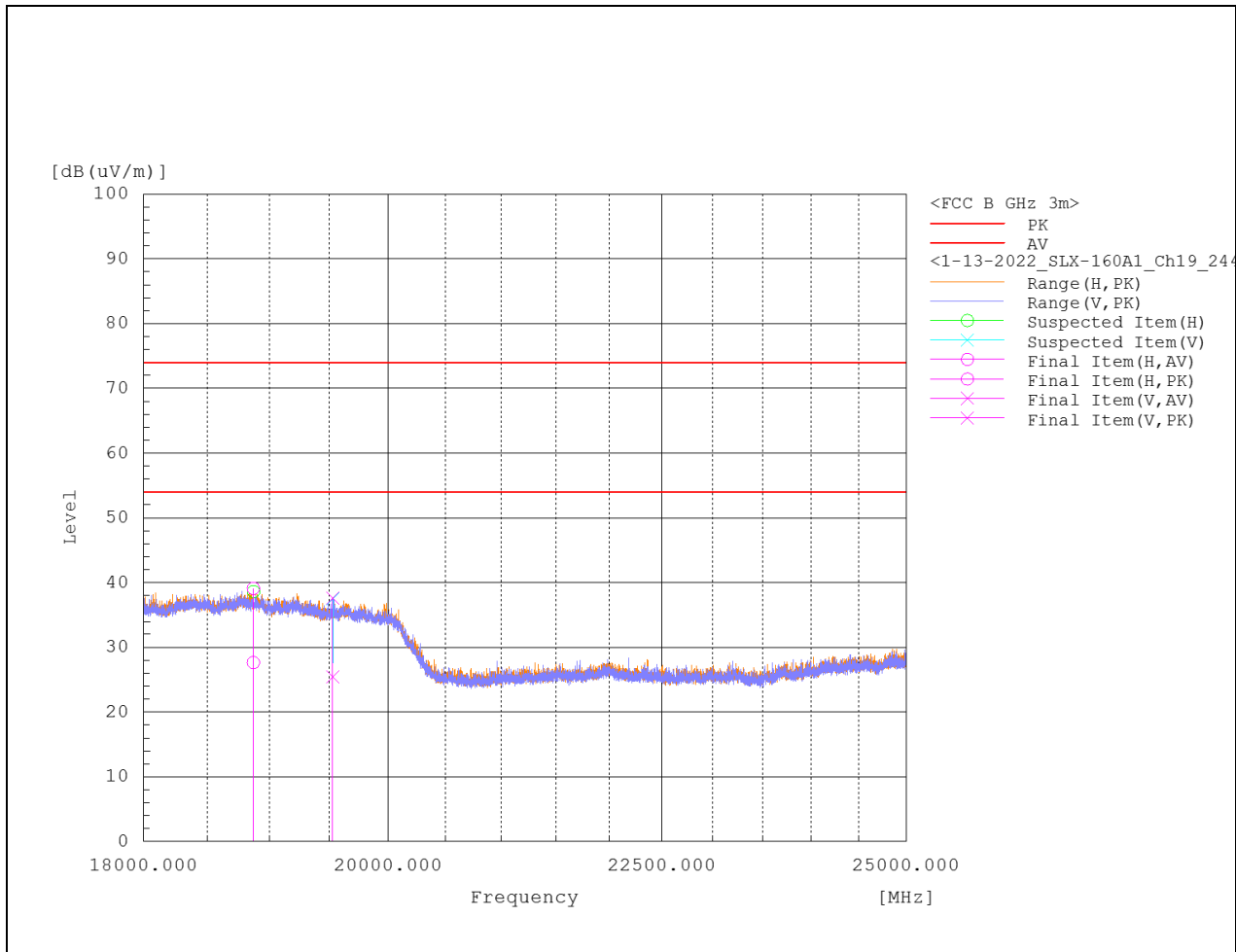


CHANNEL	TX Channel 19	DETECTOR FUNCTION	Peak Average
FREQUENCY RANGE	18GHz ~ 25GHz		

Antenna Polarity & Test Distance: Vertical and Horizontal at 3m														
No.	Frequency (MHz)	Polarization (H/V)	Reading AV [dB(uV)]	Reading PK [dB(uV)]	Factor [dB(1/m)]	Level AV [dB(uV/m)]	Level PK [dB(uV/m)]	LimitAV [dB(uV/m)]	LimitPK [dB(uV/m)]	Margin AV [dB]	Margin PK [dB]	Height (cm)	Angle (Deg)	Pass/Fail
1	18871.484	H	23.4	34.9	4.2	27.6	39.1	54	74	26.4	34.9	307	120.2	Pass
2	19527.076	V	21.9	34.1	3.5	25.4	37.6	54	74	28.6	36.4	389	0	Pass

REMARKS:

1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) -Preamplifier Gain (dB)
3. Margin = Level (dBuV/m) - Limit value (dBuV/m)



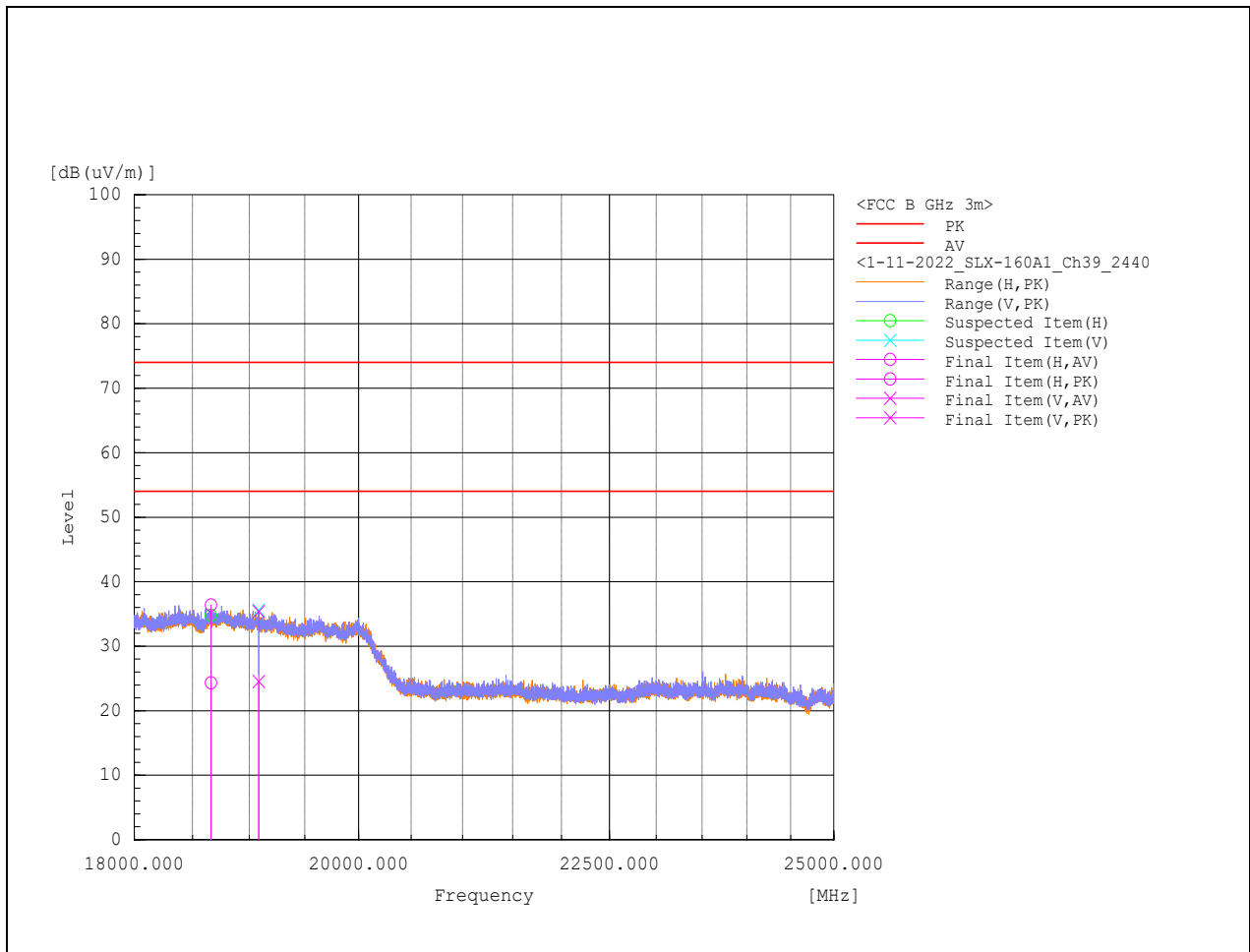
CHANNEL	TX Channel 39	DETECTOR FUNCTION	Peak Average
FREQUENCY RANGE	18GHz ~ 25GHz		

Antenna Polarity & Test Distance: Vertical and Horizontal at 3m

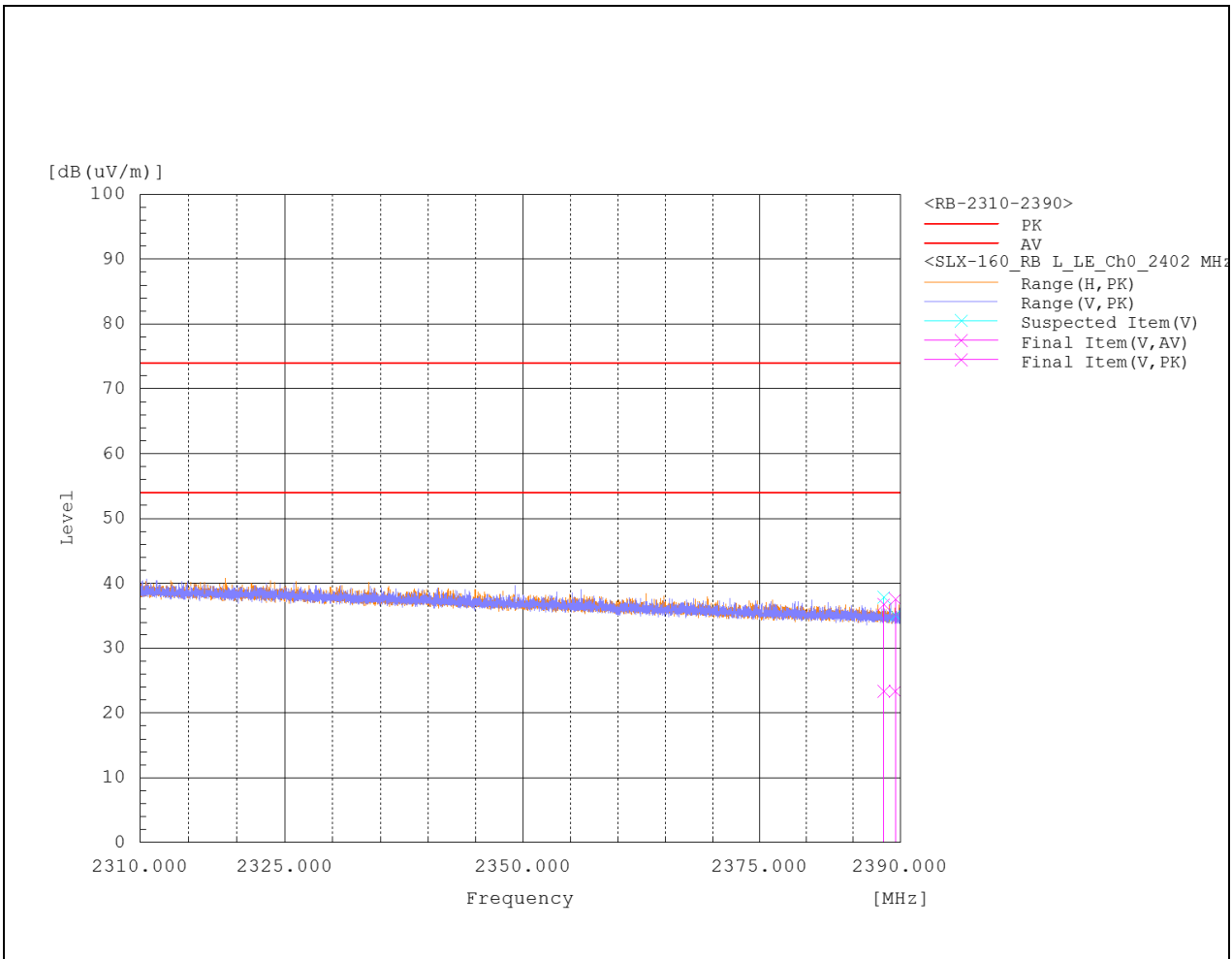
No.	Frequency (MHz)	Polarization (H/V)	Reading AV [dB(uV)]	Reading PK [dB(uV)]	Factor [dB(1/m)]	Level AV [dB(uV/m)]	Level PK [dB(uV/m)]	LimitAV [dB(uV/m)]	LimitPK [dB(uV/m)]	Margin AV [dB]	Margin PK [dB]	Height (cm)	Angle (Deg)	Pass/Fail
1	18660.062	H	19.8	31.9	4.5	24.3	36.4	54	74	29.7	37.6	359	252.9	Pass
2	19083.302	V	20.8	31.7	3.7	24.5	35.4	54	74	29.5	38.6	223	335	Pass

REMARKS:

1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) -Preamplifier Gain (dB)
3. Margin = Level (dBuV/m) - Limit value (dBuV/m)



RESTRICTED BAND (LOW CHANNEL)



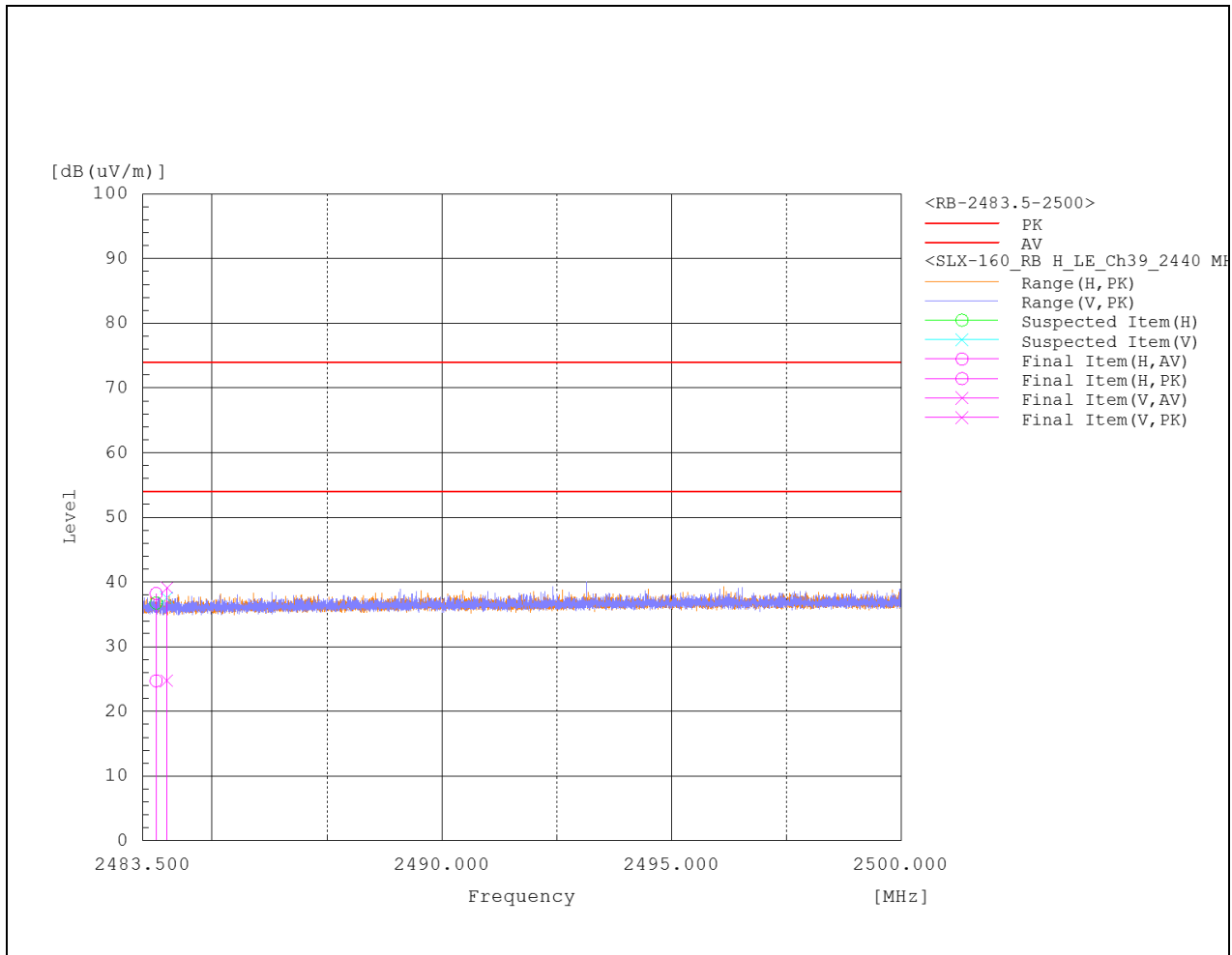
Antenna Polarity & Test Distance: Vertical and Horizontal at 3m

No.	Frequency (MHz)	Polarization (H/V)	Reading AV [dB(uV)]	Reading PK [dB(uV)]	Factor [dB(1/m)]	Level AV [dB(uV/m)]	Level PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Limit PK [dB(uV/m)]	Margin AV [dB]	Margin PK [dB]	Height (cm)	Angle (Deg)	Pass/Fail
1	2388.248	V	35.1	48.4	-11.7	23.4	36.7	54	74	30.6	37.3	162	148.2	Pass
2	2389.496	V	35	49.2	-11.7	23.3	37.5	54	74	30.7	36.5	369	223.5	Pass

REMARKS:

1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) –Preamplifier Gain (dB)
3. Margin = Level (dBuV/m) - Limit value (dBuV/m)

RESTRICTED BAND (HIGH CHANNEL)



Antenna Polarity & Test Distance: Vertical and Horizontal at 3m														
No.	Frequency (MHz)	Polarization (H/V)	Reading AV [dB(uV)]	Reading PK [dB(uV)]	Factor [dB(1/m)]	Level AV [dB(uV/m)]	Level PK dB(uV/m)	LimitAV dB(uV/m)	LimitPK [dB(uV/m)]	Margin AV [dB]	Margin PK [dB]	Height (cm)	Angle (Deg)	Pass/Fail
1	2483.786	H	35.9	49.4	-11.2	24.7	38.2	54	74	29.3	35.8	256	310.7	Pass
2	2484.017	V	35.9	50.3	-11.2	24.7	39.1	54	74	29.3	34.9	205	338.7	Pass

REMARKS:

1. Level (dBuV) = Reading (dBuV) + Factor (dB(1/m)).
2. Factor (dB(1/m)) = Antenna Factor(AF) (dB(1/m)) + Cable Loss (dB) –Preamplifier Gain (dB)
3. Margin = Level (dBuV/m) - Limit value (dBuV/m)

5 Pictures of Test Arrangements

Please see setup photo file.

Appendix – Information on the Testing Laboratories

Bureau Veritas is a global leader in testing, inspection and certification (TIC) services. We help businesses improve safety, sustainability and productivity; and our clients include the majority of leading brands in retail, manufacturing and other industries. With a presence in every major country around the world, our quality assurance and compliance solutions are vital in helping our customers enhance product quality and concept-to-consumer journeys. We also assist with increasing speed to market, profitability and brand equity throughout the supply chain. Bureau Veritas is a leading wireless/IoT testing, inspection, audit and certification provider, with a global network of test laboratories to support the IoT industry in areas of connectivity, security, interoperability as well as quality, health & safety, and environmental/chemical requirements.

If you have any comments, please feel free to contact us at the following:

Milpitas EMC/RF/Safety/Telecom Lab

775 Montague Expressway, Milpitas, CA 95035

Tel: +1 408 526 1188

Sunnyvale OTA/Bluetooth Lab

1293 Anvilwood Avenue, Sunnyvale, CA

94089

Tel: +1 669 600 5293

Littleton EMC/RF/Safety/Environmental Lab

1 Distribution Center Cir #1, Littleton, MA 01460

Tel: +1 978 486 8880

Email: sales.eaw@us.bureauveritas.com

Web Site: www.cpsusa-bureauveritas.com

The address and road map of all our labs can be found in our web site also.

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