

## G.SKILL International Enterprise

# TEST REPORT

**SCOPE OF WORK:**

FCC Part 15B – EMC report

**Model:**

F4-5333C22D-16GTEG

(Serial models please refer to section 1.2)

**REPORT NUMBER**

211100067THC-001

**ISSUE DATE**

Nov. 30, 2021

**PAGES**

53

**DOCUMENT CONTROL NUMBER**

GFT-OP-10h (28-Nov-2018)

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# FCC Part 15B TEST REPORT

<b>Applicant:</b>	G.SKILL International Enterprise 6F., No.69, Dongsing Rd., Sinyi Dist., Taipei City 11070, Taiwan
<b>Product:</b>	Memory Module
<b>Model No.:</b>	F4-5333C22D-16GTEG; F4-5333C22D-16GTRG; F4-4266C17D-32GTZNB; F4-5066C20D-16GTZR (Serial models please refer to section 1.2)
<b>Brand Name:</b>	NIL
<b>Test Standard:</b>	47 CFR FCC Part 15 Subpart B
<b>Test Method:</b>	FCC Procedure ANSI C63.4 (2014)
<b>Test By:</b>	Intertek Testing Services Taiwan Ltd. Hsinchu Laboratory No. 11, Lane 275, Ko-Nan 1 Street, Chia-Tung Li Shiang-Shan District, Hsinchu City, Taiwan



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**Revision History**

<b>Report No.</b>	<b>Issue Date</b>	<b>Revision Summary</b>
211100069THC-001	Nov. 30, 2021	Original report

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## 1. General Information

### 1.1 Identification of the EUT


<b>Product:</b>	Memory Module
<b>Model No.:</b>	F4-5333C22D-16GTEG; F4-5333C22D-16GTRG; F4-4266C17D-32GTZNB; F4-5066C20D-16GTZR
<b>Rated Power:</b>	1.2Vdc
<b>Power Cord:</b>	N/A
<b>Sample receiving date:</b>	2021/11/08
<b>Sample condition:</b>	Workable
<b>Testing date:</b>	2021/11/17 ~ 2021/11/23

### 1.2 Additional information about the EUT


The customer confirmed the series models are identical in IC and different in appearance, color, capacity and speed.

Trident Z RGB			
			
F4-2133C15S-4GTZR	F4-2400C15Q-64GTZR	F4-2666C18Q-32GTZR	F4-2933C14Q-32GTZR
F4-2400C15D-16GTZR	F4-2400C15Q-64GTZR	F4-2666C18Q-64GTZR	F4-2933C14Q-64GTZR
F4-2400C15D-16GTZR	F4-2400C15S-16GTZR	F4-2666C18Q-64GTZR	F4-2933C14Q-64GTZR
F4-2400C15D-32GTZR	F4-2400C15S-4GTZR	F4-2666C18S-16GTZR	F4-2933C16D-16GTZR
F4-2400C15D-32GTZR	F4-2400C15S-8GTZR	F4-2666C18S-16GTZR	F4-2933C16D-32GTZR
F4-2400C15Q-16GTZR	F4-2666C18D-16GTZR	F4-2666C18S-8GTZR	F4-2933C16Q2-128GTZR
F4-2400C15Q2-128GTZR	F4-2666C18D-16GTZR	F4-2666C18S-8GTZR	F4-2933C16Q2-64GTZR
F4-2400C15Q2-128GTZR	F4-2666C18D-32GTZR	F4-2933C14D-16GTZR	F4-2933C16Q-32GTZR
F4-2400C15Q2-64GTZR	F4-2666C18D-32GTZR	F4-2933C14D-32GTZR	F4-2933C16Q-64GTZR
F4-2400C15Q2-64GTZR	F4-2666C18Q2-64GTZR	F4-2933C14Q2-128GTZR	F4-3000C14D-16GTZR
F4-2400C15Q-32GTZR	F4-2666C18Q2-64GTZR	F4-2933C14Q2-128GTZR	F4-3000C14D-32GTZR
F4-2400C15Q-32GTZR	F4-2666C18Q-32GTZR	F4-2933C14Q2-64GTZR	F4-3000C14Q2-128GTZR


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Trident Z RGB			
			
F4-3000C14Q2-64GTZR	F4-3200C15Q-32GTZR	F4-4000C14D-16GTZR	F4-3466C16Q-64GTZR
F4-3000C14Q-32GTZR	F4-3200C15Q-64GTZR	F4-4000C14D-32GTZR	F4-3466C18D-16GTZRXB
F4-3000C14Q-64GTZR	F4-3200C15S-16GTZR	F4-4266C18D-32GTZRA	F4-3466C18Q-32GTZRXB
F4-3000C14S-16GTZR	F4-3200C16D-16GTZRN	F4-4266C19D-16GTZRC	F4-3600C14D-16GTZR
F4-3000C15D-16GTZR	F4-3200C16D-32GTZRN	F4-4266C19D-32GTZR	F4-3600C14Q2-64GTZRB
F4-3000C15Q-32GTZR	F4-3200C16D-16GTZLG	F4-4266C19D-64GTZR	F4-3600C14Q-32GTZR
F4-3000C15S-16GTZR	F4-3200C16D-16GTZR	F4-4400C17D-32GTZR	F4-3600C15D-16GTZRB
F4-3000C15S-8GTZR	F4-3200C16D-16GTZRX	F4-4400C19D-64GTZR	F4-3600C15D-32GTZRB
F4-3000C16D-16GTZLG	F4-3200C16D-32GTZR	F4-4600C19D-32GTZR	F4-3600C15Q2-128GTZRB
F4-3000C16D-16GTZR	F4-3200C16D-32GTZRX	F4-4600C20D-64GTZR	F4-3600C15Q2-64GTZRB
F4-3000C16D-32GTZR	F4-3200C16Q2-128GTZR	F4-4800C19D-16GTZRC	F4-3600C15Q-32GTZRB
F4-3000C16Q-32GTZR	F4-3200C16Q2-64GTZR	F4-4800C20D-16GTZR	F4-3600C15Q-64GTZRB
F4-3000C16Q-64GTZR	F4-3200C16Q-32GTZR	F4-4800C20D-32GTZR	F4-3600C16D-16GTZR
F4-3000C16S-16GTZR	F4-3200C16Q-32GTZRX	<b>F4-5066C20D-16GTZR</b>	F4-3600C16D-16GTZRC
F4-3000C16S-8GTZLG	F4-3200C16Q-64GTZR	F4-3466C16D-16GTZR	F4-3600C16D-16GTZRXB
F4-3000C16S-8GTZR	F4-3200C16S-16GTZR	F4-2666C18D-64GTZR	F4-3600C16D-32GTZR
F4-3200C14D-16GTZR	F4-3200C16S-8GTZLG	F4-2666C18Q-128GTZR	F4-3600C16D-32GTZRC
F4-3200C14D-16GTZRX	F4-3200C16S-8GTZR	F4-2666C18Q2-256GTZR	F4-3600C16Q2-64GTZR
F4-3200C14D-32GTZR	F4-3333C16D-32GTZR	F4-2666C18S-32GTZR	F4-3600C16Q-32GTZR
F4-3200C14Q2-128GTZR	F4-3333C16Q2-128GTZR	F4-3200C16D-64GTZR	F4-3600C16Q-32GTZRC
F4-3200C14Q2-64GTZR	F4-3333C16Q2-64GTZR	F4-3200C16Q-128GTZR	F4-3600C16Q-64GTZR
F4-3200C14Q-32GTZR	F4-3333C16Q-64GTZR	F4-3200C16Q2-256GTZR	F4-3600C16Q-64GTZRC
F4-3200C14Q-32GTZRX	F4-3600C14D-16GTZRA	F4-3200C16S-32GTZR	F4-3600C17D-16GTZR
F4-3200C14Q-64GTZR	F4-3600C14D-32GTZRA	F4-3466C16D-32GTZR	F4-3600C17D-32GTZR
F4-3200C14S-8GTZR	F4-3600C14Q2-128GTZRA	F4-3466C16Q2-128GTZR	F4-3600C17Q2-128GTZR
F4-3200C15D-32GTZR	F4-3600C14Q2-64GTZRA	F4-3466C16Q2-64GTZR	F4-3600C17Q-32GTZR
F4-3200C15Q2-128GTZR	F4-3600C14Q-32GTZRA	F4-3466C16Q-32GTZR	F4-3600C17Q-64GTZR
F4-3200C15Q2-64GTZR	F4-3600C14Q-64GTZRA	F4-3466C16Q-64GTZR	F4-3600C18D-16GTZR

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Trident Z RGB			
			
F4-3600C18D-16GTZR	F4-3800C18Q-32GTZR	F4-4000C17Q-32GTZR	F4-4200C19Q-32GTZRB
F4-3600C18D-32GTZR	F4-3800C19D-32GTZR	F4-4000C17Q-32GTZRB	F4-4266C16D-16GTZR
F4-3600C18D-64GTZR	F4-3800C19Q2-128GTZR	F4-4000C17Q-64GTZRB	F4-4266C16D-32GTZR
F4-3600C18Q-128GTZR	F4-3800C19Q-64GTZR	F4-4000C18D-16GTZR	F4-4266C17D-16GTZRB
F4-3600C18Q2-128GTZR	F4-3866C18D-16GTZR	F4-4000C18D-16GTZRB	F4-4266C17D-32GTZRB
F4-3600C18Q2-256GTZR	F4-3866C18Q2-128GTZR	F4-4000C18D-32GTZR	F4-4266C17Q-32GTZR
F4-3600C18Q2-64GTZR	F4-3866C18Q-32GTZR	F4-4000C18D-64GTZR	F4-4266C19D-16GTZR
F4-3600C18Q-32GTZR	F4-4000C15D-16GTZR	F4-4000C18Q-128GTZR	F4-4266C19Q-32GTZR
F4-3600C18Q-64GTZR	F4-4000C15Q2-64GTZR	F4-4000C18Q2-64GTZR	F4-4266C19Q-32GTZRB
F4-3600C18S-16GTZR	F4-4000C15Q-32GTZR	F4-4000C18Q-32GTZR	F4-4333C19D-16GTZR
F4-3733C17D-32GTZR	F4-4000C16D-16GTZR	F4-4000C18Q-32GTZRB	F4-4400C16D-16GTZR
F4-3733C17Q2-64GTZR	F4-4000C16D-16GTZRA	F4-4000C19D-32GTZR	F4-4400C17D-16GTZR
F4-3733C17Q-32GTZR	F4-4000C16D-32GTZR	F4-4133C17D-16GTZR	F4-4400C18D-16GTZR
F4-3733C17Q-64GTZR	F4-4000C16D-32GTZRA	F4-4133C17Q-32GTZR	F4-4400C18D-32GTZRC
F4-3733C18D-32GTZR	F4-4000C17D-16GTZR	F4-4133C18D-32GTZR	F4-4400C19D-16GTZR
F4-3733C18Q2-128GTZR	F4-4000C17D-16GTZRB	F4-4133C19D-16GTZR	F4-4600C18D-16GTZR
F4-3733C18Q-64GTZR	F4-4000C17D-32GTZR	F4-4133C19Q-32GTZRF	F4-4600C20D-32GTZR
F4-3800C18Q2-64GTZR	F4-4000C17D-32GTZRB	F4-4200C19D-16GTZR	

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Trident Z NEO			
			
F4-2400C15D-8GTZN	F4-3200C16D-32GTZN	F4-3600C16D-16GTZN	F4-3600C18Q-32GTZNA
F4-2400C15S-4GTZN	F4-3200C16D-64GTZN	F4-3600C16D-16GTZNC	F4-3600C18Q-64GTZN
F4-2666C18D-16GTZN	F4-3200C16Q-128GTZN	F4-3600C16D-32GTZN	F4-3800C14D-16GTZN
F4-2666C18D-32GTZN	F4-3200C16Q2-256GTZN	F4-3600C16D-32GTZNC	F4-3800C14Q-32GTZN
F4-2666C18D-64GTZN	F4-3200C16Q-32GTZN	F4-3600C16D-64GTZN	F4-3800C18D-64GTZN
F4-2666C18Q-128GTZN	F4-3200C16Q-64GTZN	F4-3600C16Q-128GTZN	F4-4000C14D-16GTZN
F4-2666C18Q2-256GTZN	F4-3200C16S-32GTZN	F4-3600C16Q2-128GTZN	F4-4000C14D-32GTZN
F4-2666C18Q-32GTZN	F4-3600C14D-16GTZN	F4-3600C16Q2-128GTZNC	F4-4000C16D-16GTZNA
F4-2666C18Q-64GTZN	F4-3600C14D-16GTZNA	F4-3600C16Q2-256GTZN	F4-4000C16D-32GTZNA
F4-2666C18S-32GTZN	F4-3600C14D-16GTZNB	F4-3600C16Q2-64GTZN	F4-4000C17D-16GTZNB
F4-2666C19D-64GTZN	F4-3600C14D-32GTZNA	F4-3600C16Q2-64GTZNC	F4-4000C17D-32GTZNB
F4-2666C19Q-128GTZN	F4-3600C14Q2-128GTZNA	F4-3600C16Q-32GTZN	F4-4000C17Q-32GTZNB
F4-2666C19Q2-256GTZN	F4-3600C14Q2-64GTZNA	F4-3600C16Q-32GTZNC	F4-4000C17Q-64GTZNB
F4-2666C19S-32GTZN	F4-3600C14Q2-64GTZNB	F4-3600C16Q-64GTZN	F4-4000C18D-16GTZN
F4-3000C16D-16GTZN	F4-3600C14Q-32GTZN	F4-3600C16Q-64GTZNC	F4-4000C18D-32GTZN
F4-3000C16D-32GTZN	F4-3600C14Q-32GTZNA	F4-3600C16S-8GTZNC	F4-4000C18Q-128GTZN
F4-3000C16Q-32GTZN	F4-3600C14Q-32GTZNB	F4-3600C18D-16GTZN	F4-4000C18Q-32GTZN
F4-3000C16Q-64GTZN	F4-3600C14Q-64GTZNA	F4-3600C18D-16GTZNA	F4-4133C18D-32GTZN
F4-3000C16S-8GTZN	F4-3600C15D-16GTZNB	F4-3600C18D-32GTZN	F4-4266C17D-16GTZNB
F4-3200C14D-16GTZN	F4-3600C15D-32GTZNB	F4-3600C18D-64GTZN	F4-4266C17D-32GTZNB
F4-3200C14D-32GTZN	F4-3600C15Q2-128GTZNB	F4-3600C18Q-128GTZN	
F4-3200C14Q-32GTZN	F4-3600C15Q2-64GTZNB	F4-3600C18Q2-128GTZN	
F4-3200C14Q-64GTZN	F4-3600C15Q-32GTZNB	F4-3600C18Q2-256GTZN	
F4-3200C16D-16GTZN	F4-3600C15Q-64GTZNB	F4-3600C18Q-32GTZN	



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TridentZ Royal			
			
F4-2133C15S-4GTRS	F4-3200C14Q2-64GTRS	F4-3600C14Q-64GTRSA	F4-3600C17Q2-128GTRS
F4-2400C15D-8GTRS	F4-3200C14Q-32GTRS	F4-3600C15D-16GTRSB	F4-3600C17Q-32GTRS
F4-2400C15Q-16GTRS	F4-3200C14Q-32GTRSU	F4-3600C15D-32GTRSB	F4-3600C17Q-32GTRSU
F4-2666C18D-16GTRS	F4-3200C14Q-64GTRS	F4-3600C15Q2-128GTRSB	F4-3600C17Q-64GTRS
F4-2666C18D-32GTRS	F4-3200C16D-16GTRS	F4-3600C15Q2-64GTRSB	F4-3600C18D-16GTRS
F4-2666C18D-64GTRS	F4-3200C16D-32GTRS	F4-3600C15Q-32GTRSB	F4-3600C18D-32GTRS
F4-2666C18Q-128GTRS	F4-3200C16D-64GTRS	F4-3600C15Q-64GTRSB	F4-3600C18D-64GTRS
F4-2666C18Q2-256GTRS	F4-3200C16H2-384GTRS	F4-3600C16D-16GTRS	F4-3600C18Q-128GTRS
F4-2666C18Q2-64GTRS	F4-3200C16H2-96GTRS	F4-3600C16D-16GTRSB	F4-3600C18Q2-128GTRS
F4-2666C18Q-32GTRS	F4-3200C16H-48GTRS	F4-3600C16D-16GTRSC	F4-3600C18Q2-256GTRS
F4-2666C18Q-64GTRS	F4-3200C16Q-128GTRS	F4-3600C16D-16GTRSS	F4-3600C18Q-32GTRS
F4-2666C18S-32GTRS	F4-3200C16Q2-128GTRS	F4-3600C16D-32GTRS	F4-3600C18Q-64GTRS
F4-2666C19D-64GTRS	F4-3200C16Q2-256GTRS	F4-3600C16D-32GTRSC	F4-3600C19D-16GTRS
F4-2666C19Q-128GTRS	F4-3200C16Q2-64GTRS	F4-3600C16D-64GTRS	F4-3600C19D-32GTRS
F4-2666C19Q2-256GTRS	F4-3200C16Q-32GTRS	F4-3600C16D-64GTRSA	F4-3600C19Q-32GTRS
F4-2666C19S-32GTRS	F4-3200C16Q-32GTRSU	F4-3600C16Q-128GTRS	F4-3600C19Q-64GTRS
F4-3000C16D-16GTRS	F4-3200C16Q-64GTRS	F4-3600C16Q2-128GTRSC	F4-3800C18D-64GTRS
F4-3000C16D-32GTRS	F4-3200C16S-32GTRS	F4-3600C16Q2-256GTRS	F4-4000C14D-16GTRS
F4-3000C16Q2-128GTRS	F4-3600C14D-16GTRS	F4-3600C16Q2-64GTRS	F4-4000C14D-32GTRS
F4-3000C16Q2-64GTRS	F4-3600C14D-16GTRSA	F4-3600C16Q2-64GTRSC	F4-4000C15D-16GTRS
F4-3000C16Q-32GTRS	F4-3600C14D-16GTRSB	F4-3600C16Q-32GTRS	F4-4000C15Q2-64GTRS
F4-3000C16Q-32GTRSU	F4-3600C14D-32GTRSA	F4-3600C16Q-32GTRSC	F4-4000C15Q-32GTRS
F4-3000C16Q-64GTRS	F4-3600C14Q2-128GTRSA	F4-3600C16Q-32GTRSU	F4-4000C16D-16GTRS
F4-3200C14D-16GTRS	F4-3600C14Q2-64GTRSA	F4-3600C16Q-64GTRS	F4-4000C16D-16GTRSA
F4-3200C14D-32GTRS	F4-3600C14Q2-64GTRSB	F4-3600C16Q-64GTRSC	F4-4000C16D-32GTRS
F4-3200C14H2-192GTRS	F4-3600C14Q-32GTRS	F4-3600C17D-16GTRS	F4-4000C16D-32GTRSA
F4-3200C14Q-128GTRSB	F4-3600C14Q-32GTRSA	F4-3600C17D-32GTRS	F4-4000C17D-16GTRS
F4-3200C14Q2-128GTRS	F4-3600C14Q-32GTRSB	F4-3600C17H-48GTRS	F4-4000C17D-16GTRSB

**TridentZ Royal**



F4-4000C17D-32GTRSB	F4-4000C19D-32GTRS	F4-4400C16D-16GTRS	F4-4600C20D-64GTRS
F4-4000C17Q-32GTRS	F4-4133C18D-32GTRS	F4-4400C17D-16GTRS	F4-4600C20D-32GTRS
F4-4000C17Q-32GTRSB	F4-4266C16D-16GTRS	F4-4400C17D-32GTRS	F4-4700C19D-16GTRSA
F4-4000C17Q-32GTRSU	F4-4266C16D-32GTRS	F4-4400C18D-16GTRS	F4-4800C17D-16GTRS
F4-4000C17Q-64GTRSB	F4-4266C17D-16GTRSB	F4-4400C18D-32GTRSC	F4-4800C18D-16GTRS
F4-4000C18D-16GTRS	F4-4266C17D-32GTRSB	F4-4400C18Q-32GTRSB	F4-4800C19D-16GTRSB
F4-4000C18D-16GTRSS	F4-4266C17Q-32GTRS	F4-4400C19D-64GTRS	F4-4800C19D-16GTRSC
F4-4000C18D-32GTRS	F4-4266C18D-32GTRSA	F4-4600C17D-16GTRS	F4-4800C20D-16GTRS
F4-4000C18D-32GTRSS	F4-4266C19D-16GTRS	F4-4600C18D-16GTRS	F4-4800C20D-32GTRS
F4-4000C18D-64GTRS	F4-4266C19D-16GTRSC	F4-4600C18D-16GTRSA	F4-5000C19D-16GTRS
F4-4000C18Q-128GTRS	F4-4266C19D-32GTRS	F4-4600C18D-16GTRSB	F4-5066C20D-16GTRS
F4-4000C18Q-32GTRS	F4-4266C19D-64GTRS	F4-4600C19D-32GTRS	F4-5333C22D-16GTRS

**TridentZ Royal**



F4-2133C15S-4GTRG	F4-2666C18Q-32GTRG	F4-3000C16Q2-128GTRG	F4-3200C14Q-64GTRG
F4-2400C15D-8GTRG	F4-2666C18Q-64GTRG	F4-3000C16Q2-64GTRG	F4-3200C16D-16GTRG
F4-2400C15Q-16GTRG	F4-2666C18S-32GTRG	F4-3000C16Q-32GTRG	F4-3200C16D-32GTRG
F4-2666C18D-16GTRG	F4-2666C19D-64GTRG	F4-3000C16Q-64GTRG	F4-3200C16D-64GTRG
F4-2666C18D-32GTRG	F4-2666C19Q-128GTRG	F4-3200C14D-16GTRG	F4-3200C16Q-128GTRG
F4-2666C18D-64GTRG	F4-2666C19Q2-256GTRG	F4-3200C14D-32GTRG	F4-3200C16Q2-128GTRG
F4-2666C18Q-128GTRG	F4-2666C19S-32GTRG	F4-3200C14Q2-128GTRG	F4-3200C16Q2-256GTRG
F4-2666C18Q2-256GTRG	F4-3000C16D-16GTRG	F4-3200C14Q2-64GTRG	F4-3200C16Q2-64GTRG
F4-2666C18Q2-64GTRG	F4-3000C16D-32GTRG	F4-3200C14Q-32GTRG	F4-3200C16Q-32GTRG

## TEST REPORT

### TridentZ Royal



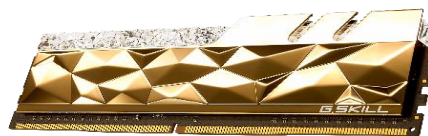
F4-3200C16Q-64GTRG	F4-3600C16Q2-64GTRG	F4-4000C15Q-32GTRG	F4-4266C19D-32GTRG
F4-3200C16S-32GTRG	F4-3600C16Q2-64GTRGC	F4-4000C16D-16GTRG	F4-4266C19D-64GTRG
F4-3600C14D-16GTRG	F4-3600C16Q-32GTRG	F4-4000C16D-16GTRGA	F4-4400C16D-16GTRG
F4-3600C14D-16GTRGA	F4-3600C16Q-32GTRGC	F4-4000C16D-32GTRG	F4-4400C17D-16GTRG
F4-3600C14D-16GTRGB	F4-3600C16Q-64GTRG	F4-4000C16D-32GTRGA	F4-4400C17D-32GTRG
F4-3600C14D-32GTRGA	F4-3600C16Q-64GTRGC	F4-4000C17D-16GTRG	F4-4400C18D-16GTRG
F4-3600C14Q2-128GTRGA	F4-3600C17D-16GTRG	F4-4000C17D-16GTRGB	F4-4400C18D-32GTRGC
F4-3600C14Q2-64GTRGA	F4-3600C17D-32GTRG	F4-4000C17D-32GTRGB	F4-4400C18Q-32GTRGB
F4-3600C14Q2-64GTRGB	F4-3600C17Q2-128GTRG	F4-4000C17H2-96GTRGB	F4-4400C19D-64GTRG
F4-3600C14Q-32GTRG	F4-3600C17Q-32GTRG	F4-4000C17Q-32GTRG	F4-4600C18D-16GTRG
F4-3600C14Q-32GTRGA	F4-3600C17Q-64GTRG	F4-4000C17Q-32GTRGB	F4-4600C18D-16GTRGA
F4-3600C14Q-32GTRGB	F4-3600C18D-16GTRG	F4-4000C17Q-64GTRGB	F4-4600C18D-16GTRGB
F4-3600C14Q-64GTRGA	F4-3600C18D-32GTRG	F4-4000C18D-16GTRG	F4-4600C19D-32GTRG
F4-3600C15D-16GTRGB	F4-3600C18D-64GTRG	F4-4000C18D-32GTRG	F4-4600C20D-64GTRG
F4-3600C15D-32GTRGB	F4-3600C18Q-128GTRG	F4-4000C18D-64GTRG	F4-4600C20D-32GTRG
F4-3600C15Q2-128GTRGB	F4-3600C18Q2-128GTRG	F4-4000C18Q-128GTRG	F4-4700C19D-16GTRG
F4-3600C15Q2-64GTRGB	F4-3600C18Q2-256GTRG	F4-4000C18Q-32GTRG	F4-4700C19D-16GTRGA
F4-3600C15Q-32GTRGB	F4-3600C18Q-32GTRG	F4-4000C19D-32GTRG	F4-4800C17D-16GTRG
F4-3600C15Q-64GTRGB	F4-3600C18Q-64GTRG	F4-4133C17Q-32GTRG	F4-4800C18D-16GTRG
F4-3600C16D-16GTRG	F4-3600C19D-16GTRG	F4-4133C18D-32GTRG	F4-4800C19D-16GTRG
F4-3600C16D-16GTRGB	F4-3600C19D-32GTRG	F4-4266C16D-16GTRG	F4-4800C19D-16GTRGB
F4-3600C16D-16GTRGC	F4-3600C19Q-32GTRG	F4-4266C16D-32GTRG	F4-4800C19D-16GTRGC
F4-3600C16D-32GTRG	F4-3600C19Q-64GTRG	F4-4266C17D-16GTRGB	F4-4800C20D-16GTRG
F4-3600C16D-32GTRGC	F4-3800C18D-64GTRG	F4-4266C17D-32GTRGB	F4-4800C20D-32GTRG
F4-3600C16D-64GTRG	F4-4000C14D-16GTRG	F4-4266C17Q-32GTRG	F4-5066C20D-16GTRG
F4-3600C16Q-128GTRG	F4-4000C14D-32GTRG	F4-4266C18D-32GTRGA	F4-5333C22D-16GTRG
F4-3600C16Q2-128GTRGC	F4-4000C15D-16GTRG	F4-4266C19D-16GTRG	
F4-3600C16Q2-256GTRG	F4-4000C15Q2-64GTRG	F4-4266C19D-16GTRGC	

**TridentZ Royal**



F4-3600C14D-16GTESA	F4-3600C16D-16GTESC	F4-4000C14D-32GTES	F4-4600C20D-32GTES
F4-3600C14D-32GTESA	F4-3600C16D-32GTESC	F4-4000C16D-32GTES	F4-4800C20D-32GTES
F4-3600C14Q2-128GTESA	F4-3600C16Q-32GTESC	F4-4000C18D-64GTES	F4-4800C19D-16GTESC
F4-3600C14Q2-64GTESA	F4-3600C16Q-64GTESC	F4-4266C16D-32GTES	F4-5066C20D-16GTES
F4-3600C14Q-32GTESA	F4-3600C16Q-32GTES	F4-4266C19D-64GTES	F4-5333C22D-32GTES
F4-3600C14Q-64GTESA	F4-4000C14D-16GTES	F4-4266C19Q-64GTES	F4-5333C22D-16GTES

**TridentZ Royal**



F4-3600C14D-16GTEGA	F4-3600C16D-32GTEGC	F4-4000C16D-32GTEG	F4-4800C20D-32GTEG
F4-3600C14D-32GTEGA	F4-3600C16Q-64GTEGC	F4-4000C18D-64GTEG	F4-5066C20D-16GTEG
F4-3600C14Q2-128GTEGA	F4-3600C16Q-64GTEGC	F4-4266C16D-32GTEG	F4-5333C22D-32GTEG
F4-3600C14Q2-64GTEGA	F4-3600C16Q-32GTEGC	F4-4266C19D-64GTEG	F4-5333C22D-16GTEG
F4-3600C14Q-32GTEGA	F4-4000C14Q-32GTEG	F4-4266C19Q-64GTEG	
F4-3600C14Q-64GTEGA	F4-4000C14D-16GTEG	F4-4600C20D-32GTEG	
F4-3600C16D-16GTEGC	F4-4000C14D-32GTEG	F4-4800C19D-16GTEGC	

**TEST REPORT****2. Test Summary**

<b>Emission</b>			
<b>Standard</b>	<b>Test Type</b>	<b>Result</b>	<b>Remarks</b>
<b>FCC Subpart B Section 15.107</b>	Conducted Emission Test	PASS	Meet Class B Limit
<b>FCC Subpart B Section 15.109</b>	Radiated Emission Test	PASS	Meet Class B Limit

Note: Please note that the test results with statement of conformity, the decision rules which are based on: Safety Testing: the specification, standard or IEC Guide 115.

Other Testing: the specification, standard and not taking into account the measurement uncertainty.

## TEST REPORT

### 3. Test Specifications

#### 3.1 Standards

The following standards were applied for testing:

**FCC standard: 47 CFR Part 15, Subpart B.**

This part sets out the regulations under which an unintentional, or incidental Telecommunication, RADIO FREQUENCY DEVICES may be operated without an individual license.

**ANSI C63.4-2014:** American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

#### 3.2 Classification of ITE

Class A digital device. A digital device that is marketed for use in a commercial, industrial or business environment, exclusive of a device which is marketed for use by the general public or is intended to be used in the home.

Class B digital device. A digital device that is marketed for use in a residential environment notwithstanding use in commercial, business and industrial environments. Examples of such devices include, but are not limited to, personal computers, calculators, and similar electronic devices that are marketed for use by the general public.

#### 3.3 Mode of operation during the test

1. Install the EUT to the PC
2. operator executes "Burn In "software on the PC
3. Check EUT status in the all tests.

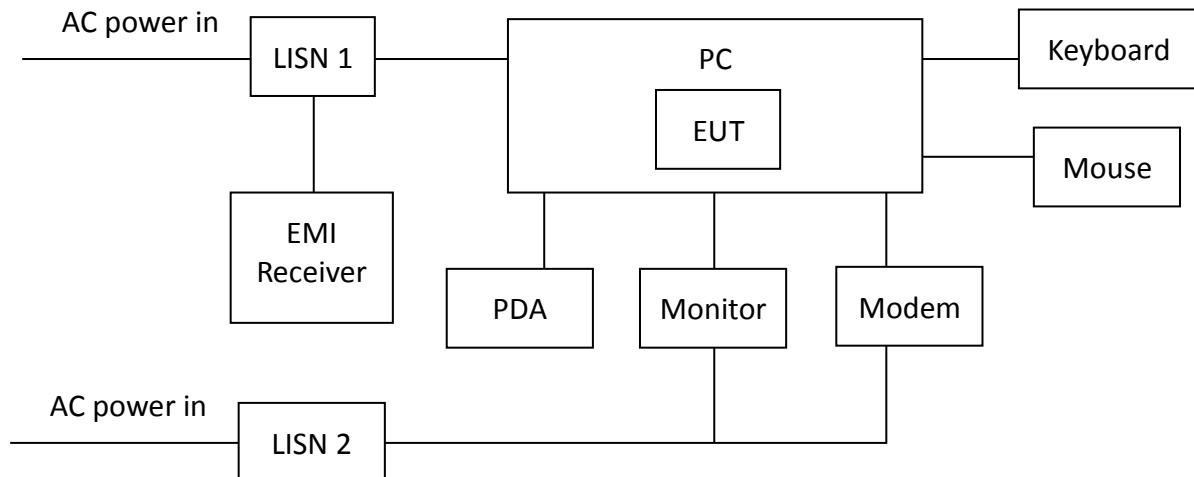
**TEST REPORT****3.4 Peripherals equipment**

Peripherals	Brand	Model No.	Serial No.	Description of Data Cable
PC	ASUS	Z170-PRO	N/A	N/A
Monitor	PHILIPS	223V5L	N/A	N/A
Modem	LEMEL	MD-56KVR LUS-V9	N/A	N/A
PDA	HP	IPAQ 112	N/A	N/A
Mouse	HP	MOHQQUO	N/A	N/A
Keyboard	DELL	SK-8115	N/A	N/A

## TEST REPORT

### 4. Conducted Emission Test

#### 4.1 Test Procedure



The EUT along with its peripherals were placed on a 1.0 meter(W)×1.5meter(L) and 0.8 meter in height wooden table and the EUT was adjusted to maintain a 0.4meter space from a vertical reference plane. The EUT was connected to power mains through a Artificial Mains Network (LISN), which provided 50 ohm coupling impedance for measuring instrument and the chassis ground was bounded to the horizontal ground plane of shielded room.

The excess power cable between the EUT and the AMN was bundled. All connecting cables of EUT and peripherals were moved to find the maximum emission

#### 4.2 Test Equipment

Test Equipment	Brand	Model No.	Serial No.	Calibration Date	Next Calibration Date
EMI Test Receiver	R&S	ESCI	100059	2021/11/08	2022/11/07
LISN	R&S	ENV216	101160	2021/07/14	2022/07/13
LISN	R&S	ESH3-Z5	835239/023	2021/09/22	2022/09/21
CON-2 Cable	SUHNER	EMCCFD300-B M-NM-6000	170502	2021/04/29	2022/04/28
Test software	Audix	e3	V4.20040112L	NCR	NCR





Total Quality. Assured.

**TEST REPORT**

Note: No Calibration Required (NCR).

Report No.: 211100067THC-001

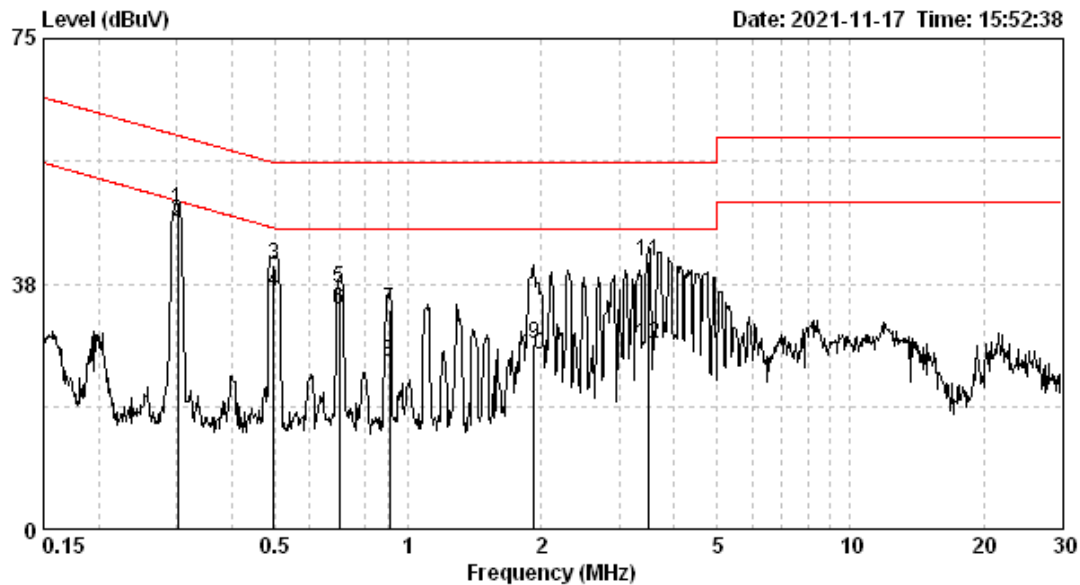
**TEST REPORT****4.3 Conducted Emission Limit**

Frequency (MHz)	Maximum RF Line Voltage	
	Class B Equipment (dB $\mu$ V)	
	Q.P.	Avg.
0.15~0.50	66~56	56~46
0.50~5.00	56	46
5.00~30.0	60	50

## TEST REPORT

### 4.4 Conducted Emission Data

Model No.:	F4-5333C22D-16GTEG
Remark:	N/A



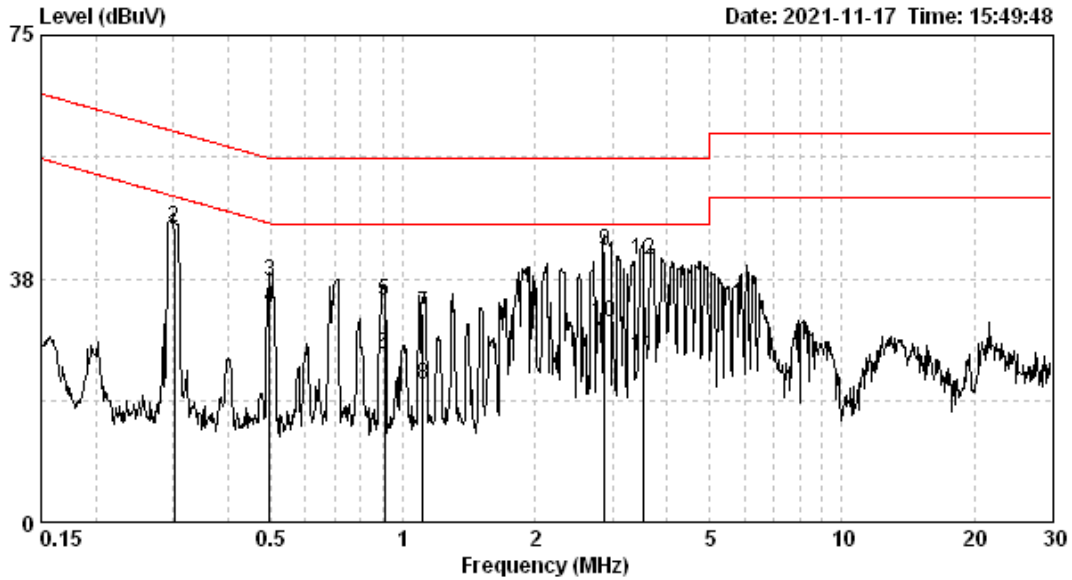
Test voltage :AC 120V 60Hz  
 Temp. / R.H. :24°C / 56%RH  
 Atmospheric pressure :1003 hPa

Phase	Frequency (MHz)	Corr. Factor (dB)	Reading QP (dBuV)	Level QP (dBuV)	Limit QP (dBuV)	Reading AV (dBuV)	Level AV (dBuV)	Limit AV (dBuV)	Margin (dB)	
									QP	AV
LINE	0.302	9.72	39.17	48.90	60.19	37.33	47.06	50.19	-11.29	-3.13
LINE	0.497	9.83	30.54	40.37	56.05	26.43	36.26	46.05	-15.69	-9.79
LINE	0.701	9.82	26.88	36.69	56.00	23.74	33.56	46.00	-19.31	-12.44
LINE	0.909	9.80	23.84	33.65	56.00	15.63	25.43	46.00	-22.35	-20.57
LINE	1.928	9.85	18.35	28.20	56.00	16.76	26.61	46.00	-27.80	-19.39
LINE	3.491	9.83	30.99	40.82	56.00	18.52	28.35	46.00	-15.18	-17.65

Remark:

1. Corr. Factor (dB) = AMN Factor (dB) + Cable Loss (dB)
2. Level (dBuV) = Corr. Factor (dB) + Reading (dBuV)
3. Margin (dB) = Level (dBuV) – Limit (dBuV)

## TEST REPORT



Test voltage :AC 120V 60Hz  
 Temp. / R.H. :24°C / 56%RH  
 Atmospheric pressure :1003 hPa

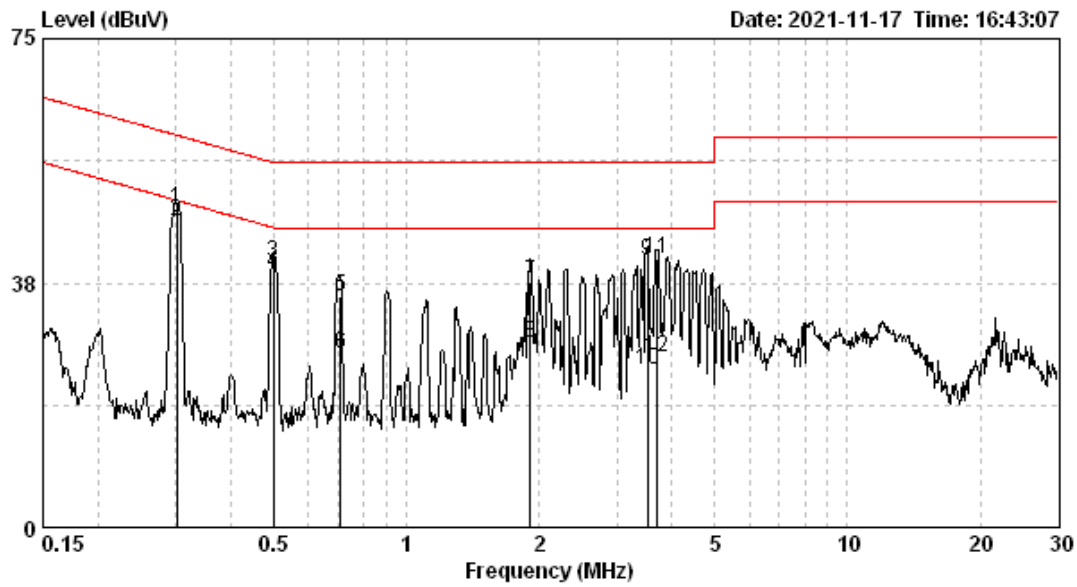
Phase	Frequency (MHz)	Corr. Factor (dB)	Reading QP (dBUV)	Level QP (dBUV)	Limit QP (dBUV)	Reading AV (dBUV)	Level AV (dBUV)	Limit AV (dBUV)	Margin (dB)	
									QP	AV
NEUTRAL	0.302	9.72	35.60	45.33	60.19	34.49	44.21	50.19	-14.86	-5.98
NEUTRAL	0.497	9.83	27.15	36.98	56.05	23.21	33.04	46.05	-19.08	-13.02
NEUTRAL	0.909	9.80	24.39	34.20	56.00	16.09	25.90	46.00	-21.80	-20.10
NEUTRAL	1.111	9.81	22.44	32.25	56.00	11.47	21.28	46.00	-23.75	-24.72
NEUTRAL	2.884	9.84	32.01	41.85	56.00	20.84	30.68	46.00	-14.15	-15.32
NEUTRAL	3.528	9.83	30.51	40.34	56.00	15.74	25.56	46.00	-15.66	-20.44

Remark:

1. Corr. Factor (dB) = AMN Factor (dB) + Cable Loss (dB)
2. Level (dBUV) = Corr. Factor (dB) + Reading (dBUV)
3. Margin (dB) = Level (dBUV) – Limit (dBUV)

## TEST REPORT

Model No.:	F4-5333C22D-16GTRG
Remark:	N/A



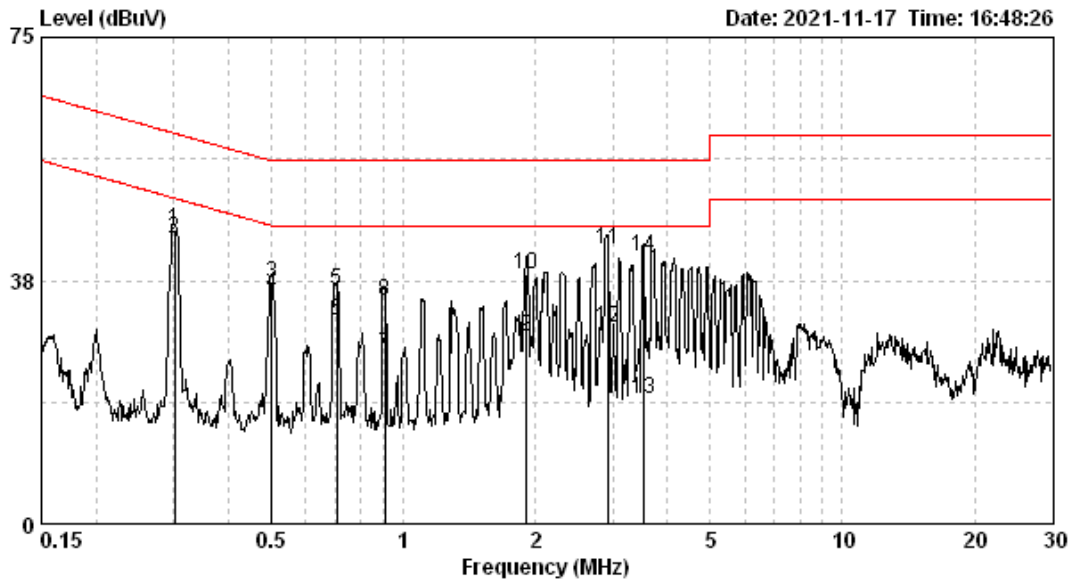
Test voltage :AC 120V 60Hz  
 Temp. / R.H. :24°C / 56%RH  
 Atmospheric pressure :1003 hPa

Phase	Frequency (MHz)	Corr. Factor (dB)	Reading QP (dBuV)	Level QP (dBuV)	Limit QP (dBuV)	Reading AV (dBuV)	Level AV (dBuV)	Limit AV (dBuV)	Margin (dB)	
									QP	AV
LINE	0.302	9.72	39.21	48.94	60.19	37.32	47.05	50.19	-11.25	-3.15
LINE	0.499	9.83	30.75	40.58	56.01	29.05	38.88	46.01	-15.43	-7.13
LINE	0.708	9.82	25.72	35.54	56.00	16.74	26.56	46.00	-20.46	-19.44
LINE	1.908	9.85	27.71	37.56	56.00	18.51	28.36	46.00	-18.44	-17.64
LINE	3.528	9.83	31.22	41.05	56.00	14.38	24.21	46.00	-14.95	-21.79
LINE	3.700	9.83	31.25	41.08	56.00	16.30	26.12	46.00	-14.92	-19.88

Remark:

1. Corr. Factor (dB) = AMN Factor (dB) + Cable Loss (dB)
2. Level (dBuV) = Corr. Factor (dB) + Reading (dBuV)
3. Margin (dB) = Level (dBuV) – Limit (dBuV)

## TEST REPORT



Test voltage : AC 120V 60Hz  
 Temp. / R.H. : 24°C / 56%RH  
 Atmospheric pressure : 1003 hPa

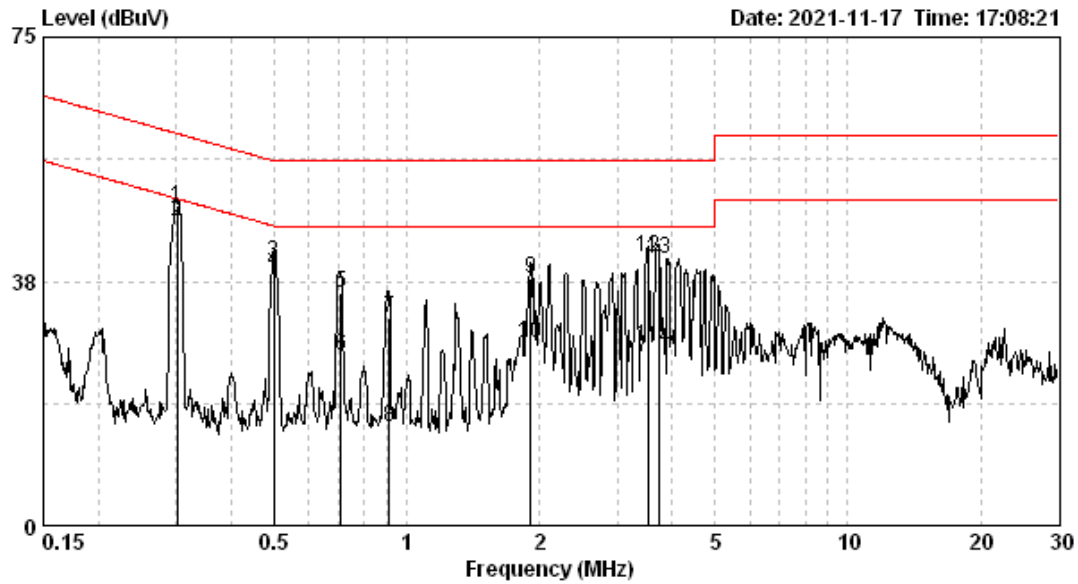
Phase	Frequency (MHz)	Corr. Factor (dB)	Reading QP (dBuV)	Level QP (dBuV)	Limit QP (dBuV)	Reading AV (dBuV)	Level AV (dBuV)	Limit AV (dBuV)	Margin (dB)	
									QP	AV
NEUTRAL	0.302	9.72	35.57	45.30	60.19	34.10	43.83	50.19	-14.89	-6.37
NEUTRAL	0.502	9.83	27.33	37.16	56.00	25.70	35.53	46.00	-18.84	-10.47
NEUTRAL	0.705	9.82	26.11	35.92	56.00	21.37	31.19	46.00	-20.08	-14.81
NEUTRAL	0.909	9.80	24.54	34.34	56.00	16.36	26.17	46.00	-21.66	-19.83
NEUTRAL	1.908	9.85	28.58	38.43	56.00	19.10	28.94	46.00	-17.57	-17.06
NEUTRAL	2.915	9.84	32.46	42.30	56.00	20.51	30.35	46.00	-13.70	-15.65
NEUTRAL	3.528	9.83	31.48	41.31	56.00	9.39	19.22	46.00	-14.69	-26.78

Remark:

1. Corr. Factor (dB) = AMN Factor (dB) + Cable Loss (dB)
2. Level (dBuV) = Corr. Factor (dB) + Reading (dBuV)
3. Margin (dB) = Level (dBuV) – Limit (dBuV)

## TEST REPORT

Model No.:	F4-4266C17D-32GTZNB
Remark:	N/A



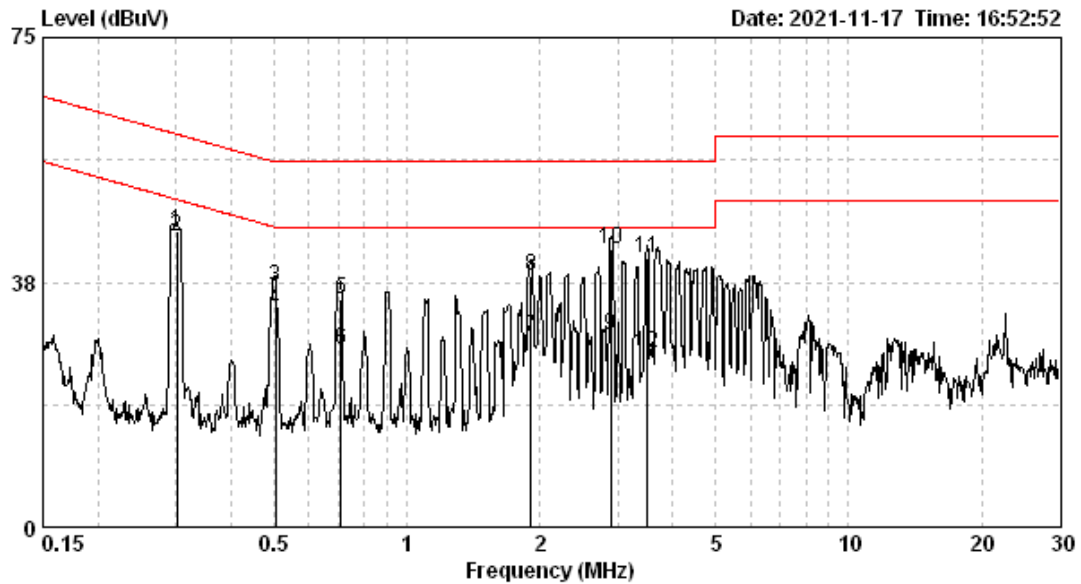
Test voltage :AC 120V 60Hz  
 Temp. / R.H. :24°C / 56%RH  
 Atmospheric pressure :1003 hPa

Phase	Frequency (MHz)	Corr. Factor (dB)	Reading QP (dBuV)	Level QP (dBuV)	Limit QP (dBuV)	Reading AV (dBuV)	Level AV (dBuV)	Limit AV (dBuV)	Margin (dB)	
									QP	AV
LINE	0.302	9.72	39.16	48.89	60.19	37.10	46.82	50.19	-11.30	-3.37
LINE	0.499	9.83	30.68	40.51	56.01	29.20	39.03	46.01	-15.50	-6.98
LINE	0.708	9.82	25.88	35.70	56.00	16.22	26.03	46.00	-20.30	-19.97
LINE	0.914	9.80	22.13	31.93	56.00	5.20	15.00	46.00	-24.07	-31.00
LINE	1.908	9.85	28.07	37.91	56.00	18.04	27.89	46.00	-18.09	-18.11
LINE	3.528	9.83	31.32	41.15	56.00	17.53	27.35	46.00	-14.85	-18.65
LINE	3.720	9.82	30.99	40.82	56.00	17.28	27.11	46.00	-15.18	-18.89

Remark:

1. Corr. Factor (dB) = AMN Factor (dB) + Cable Loss (dB)
2. Level (dBuV) = Corr. Factor (dB) + Reading (dBuV)
3. Margin (dB) = Level (dBuV) – Limit (dBuV)

## TEST REPORT



Test voltage :AC 120V 60Hz  
 Temp. / R.H. :24°C / 56%RH  
 Atmospheric pressure :1003 hPa

Phase	Frequency (MHz)	Corr. Factor (dB)	Reading QP (dBUV)	Level QP (dBUV)	Limit QP (dBUV)	Reading AV (dBUV)	Level AV (dBUV)	Limit AV (dBUV)	Margin (dB)	
									QP	AV
NEUTRAL	0.302	9.72	35.58	45.31	60.19	34.83	44.55	50.19	-14.88	-5.64
NEUTRAL	0.505	9.83	27.05	36.88	56.00	23.50	33.33	46.00	-19.12	-12.67
NEUTRAL	0.708	9.82	25.07	34.88	56.00	17.36	27.18	46.00	-21.12	-18.82
NEUTRAL	1.908	9.85	28.68	38.53	56.00	19.40	29.25	46.00	-17.47	-16.75
NEUTRAL	2.900	9.84	32.87	42.71	56.00	19.48	29.32	46.00	-13.29	-16.68
NEUTRAL	3.509	9.83	31.35	41.18	56.00	16.83	26.66	46.00	-14.82	-19.34

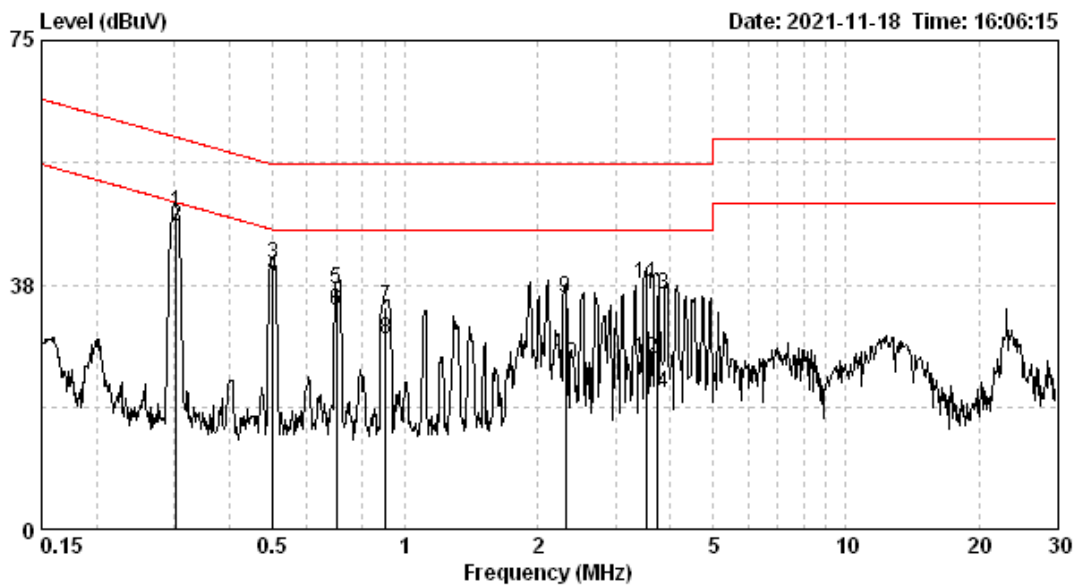
Remark:

1. Corr. Factor (dB) = AMN Factor (dB) + Cable Loss (dB)
2. Level (dBUV) = Corr. Factor (dB) + Reading (dBUV)
3. Margin (dB) = Level (dBUV) – Limit (dBUV)



## TEST REPORT

Model No.:	F4-5066C20D-16GTZR
Remark:	N/A



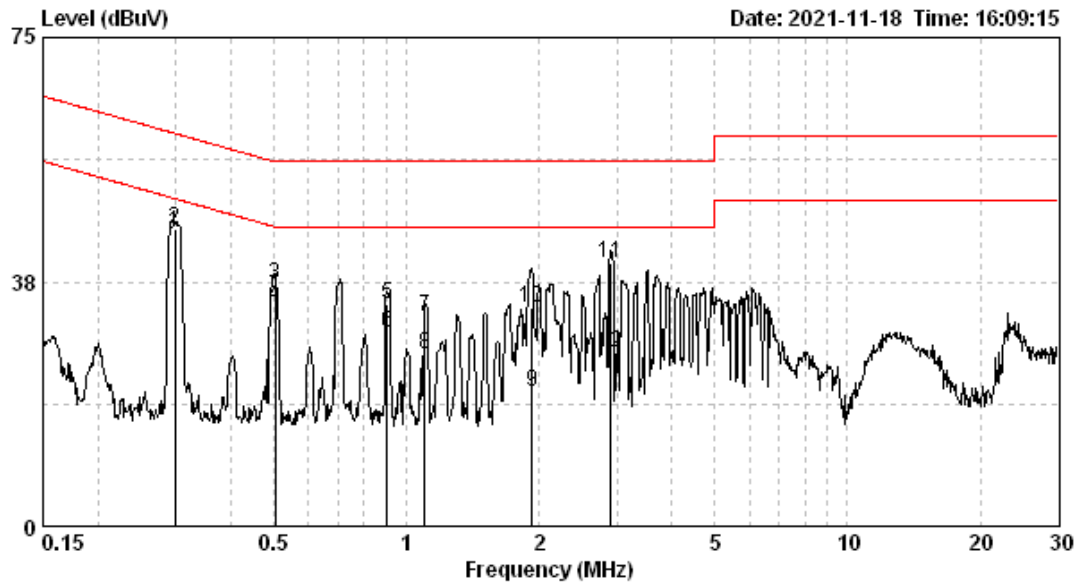
Test voltage :AC 120V 60Hz  
 Temp. / R.H. :24°C / 56%RH  
 Atmospheric pressure :1003 hPa

Phase	Frequency (MHz)	Corr. Factor (dB)	Reading	Level	Limit	Reading	Level	Limit	Margin	
			QP (dBuV)	QP (dBuV)		AV (dBuV)	AV (dBuV)		QP	AV
LINE	0.303	9.73	38.88	48.60	60.15	36.75	46.48	50.15	-11.54	-3.67
LINE	0.502	9.83	30.71	40.54	56.00	28.96	38.79	46.00	-15.46	-7.21
LINE	0.701	9.82	26.96	36.78	56.00	23.70	33.51	46.00	-19.22	-12.49
LINE	0.904	9.80	24.15	33.95	56.00	19.39	29.19	46.00	-22.05	-16.81
LINE	2.309	9.84	25.64	35.48	56.00	15.46	25.30	46.00	-20.52	-20.70
LINE	3.528	9.83	27.94	37.76	56.00	16.27	26.10	46.00	-18.24	-19.90
LINE	3.740	9.82	26.21	36.04	56.00	11.01	20.83	46.00	-19.96	-25.17

Remark:

1. Corr. Factor (dB) = AMN Factor (dB) + Cable Loss (dB)
2. Level (dBuV) = Corr. Factor (dB) + Reading (dBuV)
3. Margin (dB) = Level (dBuV) – Limit (dBuV)

## TEST REPORT



Test voltage :AC 120V 60Hz  
 Temp. / R.H. :24°C / 56%RH  
 Atmospheric pressure :1003 hPa

Phase	Frequency (MHz)	Corr. Factor (dB)	Reading QP (dBuV)	Level QP (dBuV)	Limit QP (dBuV)	Reading AV (dBuV)	Level AV (dBuV)	Limit AV (dBuV)	Margin (dB)	
									QP	AV
NEUTRAL	0.299	9.72	35.98	45.70	60.28	35.27	45.00	50.28	-14.57	-5.28
NEUTRAL	0.505	9.83	27.36	37.19	56.00	24.04	33.87	46.00	-18.81	-12.13
NEUTRAL	0.904	9.80	24.40	34.20	56.00	19.77	29.57	46.00	-21.80	-16.43
NEUTRAL	1.100	9.81	22.35	32.15	56.00	16.49	26.29	46.00	-23.85	-19.71
NEUTRAL	1.928	9.85	23.65	33.50	56.00	10.70	20.55	46.00	-22.50	-25.45
NEUTRAL	2.900	9.84	30.52	40.36	56.00	16.89	26.73	46.00	-15.64	-19.27

Remark:

1. Corr. Factor (dB) = AMN Factor (dB) + Cable Loss (dB)
2. Level (dBuV) = Corr. Factor (dB) + Reading (dBuV)
3. Margin (dB) = Level (dBuV) – Limit (dBuV)

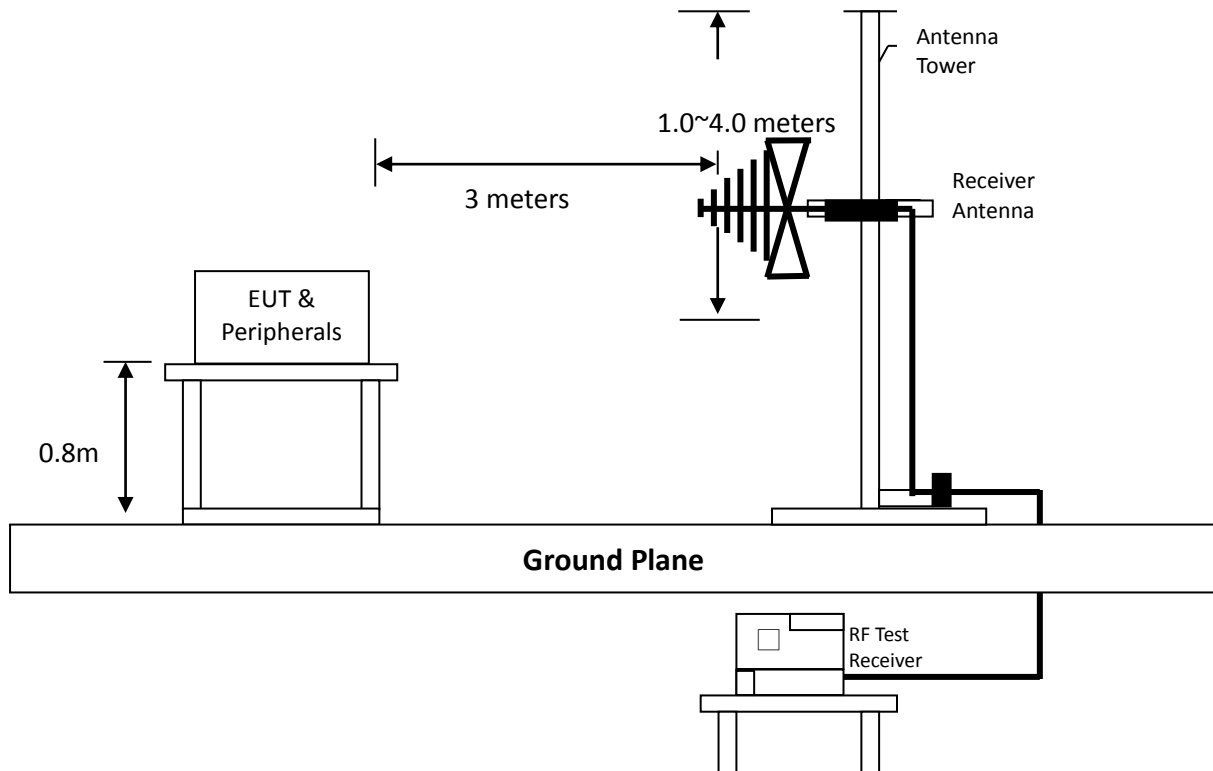
**TEST REPORT**

**5. Radiated Emission Test**

**5.1.1 Test Procedure from 30 MHz to 1000 MHz**

The figure below shows the test setup, which is utilized to make these measurements.

Side View



Radiated testing was performed at 3 meters semi-anechoic chamber. The equipment under test were placed on a turntable top 0.8 meter above ground. The table was 360 degrees to determine the position of the highest radiation. EUT is set 3 meters from the EMI receiving antenna, which is mounted on a variable height mast. The antenna height is varied between one meter and four meters above ground to find the maximum value of the field strength. Both horizontal polarization and vertical polarization of the antenna was set to conduct the measurement.

The bandwidth was set on the EMI meter 120 kHz.

The levels are quasi peak value readings. The frequency spectrum from 30 MHz to 1000 MHz was investigated.

**TEST REPORT**

**5.1.2 Test Equipment**

Test Equipment	Brand	Model No.	Serial No.	Calibration Date	Next Calibration Date
EMI Test Receiver	R&S	ESU40	100381	2021/10/15	2022/10/14
Bi-log Hybrid Antenna	ETC	MCTD2786	BL13S03017	2021/01/29	2022/01/28
966-1(A) Cable	SUHNER	SMA / SUCOFLEX 104	29510614	2021/04/09	2022/04/08
966-1(B) Cable	JUNFLON	SMA / J12J100880-00	AUG-26-08-001	2021/04/09	2022/04/08
966-1_3m Semi-Anechoic Chamber	966_1	CEM-966_1	N/A	2021/01/08	2022/01/07
Test software	Audix	e3	V4.20040112L	NCR	NCR

Note: No Calibration Required (NCR).

**5.1.3 Radiated Emission Limit**

According to FCC 15.109, except for Class A digital device, the field strength of radiated emission from unintentional radiators at a distance of 3 meters shall not exceed the following values:

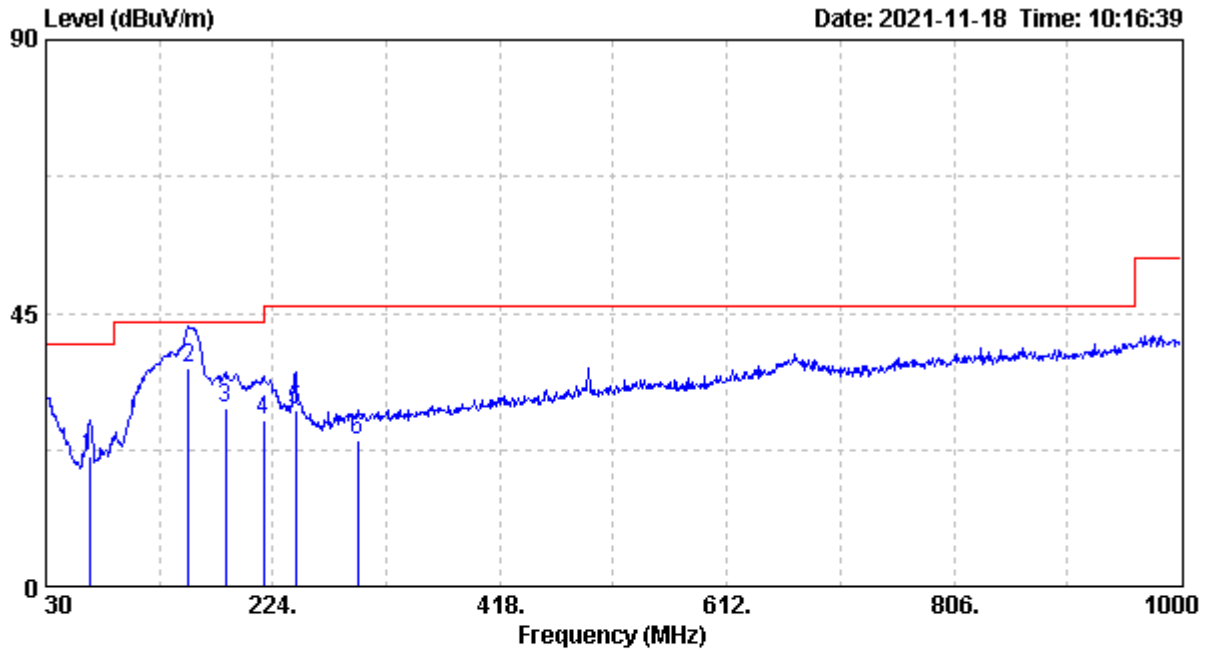
Class B Radiated Emission Limits:

Frequency MHz	Field Strength dB $\mu$ V/m
30-88	40.0
88-216	43.5
216-960	46.0
Above 960	54.0

## TEST REPORT

### 5.1.4 Radiated Emission Test Data from 30 MHz to 1000 MHz

Model No.:	F4-5333C22D-16GTEG
Remark:	N/A



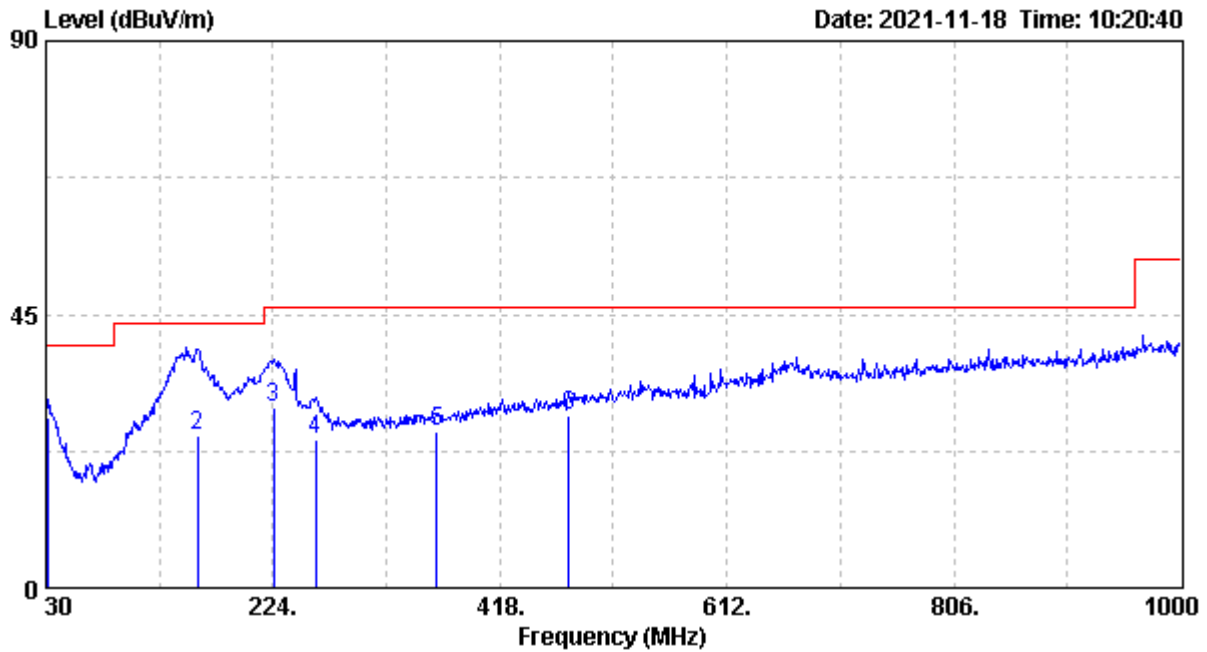
Testing Voltage : AC 120V 60Hz  
 Temp. : 30°C  
 Relative Humidity : 55%RH  
 Atmospheric pressure: 1006 hPa

Freq	Pol/Phase	Factor	Read Level	Level	Limit	Over	Remark
MHz		dB	dBuV	dBuV/m	dBuV/m	dB	
66.860	VERTICAL	12.95	8.34	21.29	40.00	-18.71	QP
152.220	VERTICAL	18.71	17.30	36.01	43.50	-7.49	QP
183.260	VERTICAL	16.68	12.65	29.32	43.50	-14.18	QP
216.240	VERTICAL	18.37	9.13	27.50	46.00	-18.50	QP
243.400	VERTICAL	18.78	10.39	29.17	46.00	-16.83	QP
296.750	VERTICAL	22.50	1.63	24.13	46.00	-21.87	QP

Remark:

- Factor = Antenna Factor (dB/m) + Cable Loss (dB)
- Level (dBμV/m) = Factor (dB) + Read Level (dBμV)
- Over Limit (dB) = Level (dBμV/m) – Limit Line (dBμV/m)

## TEST REPORT



Testing Voltage : AC 120V 60Hz  
 Temp. : 30°C  
 Relative Humidity : 55%RH  
 Atmospheric pressure: 1006 hPa

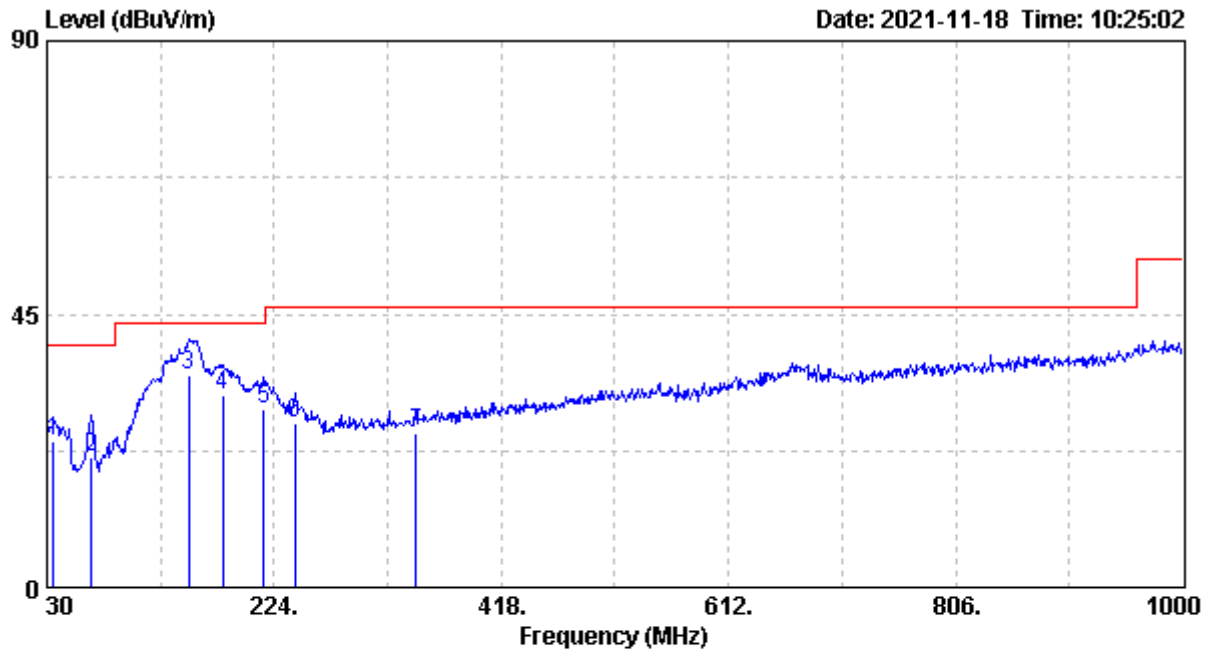
Freq	Pol/Phase	Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB	dBuV	dBuV/m	dBuV/m	dB	
30.970	HORIZONTAL	25.41	2.57	27.98	40.00	-12.02	QP
159.980	HORIZONTAL	18.52	6.50	25.02	43.50	-18.48	QP
224.970	HORIZONTAL	18.18	11.48	29.66	46.00	-16.34	QP
260.860	HORIZONTAL	20.55	3.82	24.37	46.00	-21.63	QP
363.680	HORIZONTAL	23.76	2.03	25.79	46.00	-20.21	QP
477.170	HORIZONTAL	26.06	2.28	28.35	46.00	-17.65	QP

Remark:

- Factor = Antenna Factor (dB/m) + Cable Loss (dB)
- Level (dBμV/m) = Factor (dB) + Read Level (dBμV)
- Over Limit (dB) = Level (dBμV/m) – Limit Line (dBμV/m)

## TEST REPORT

Model No.:	F4-5333C22D-16GTRG
Remark:	N/A



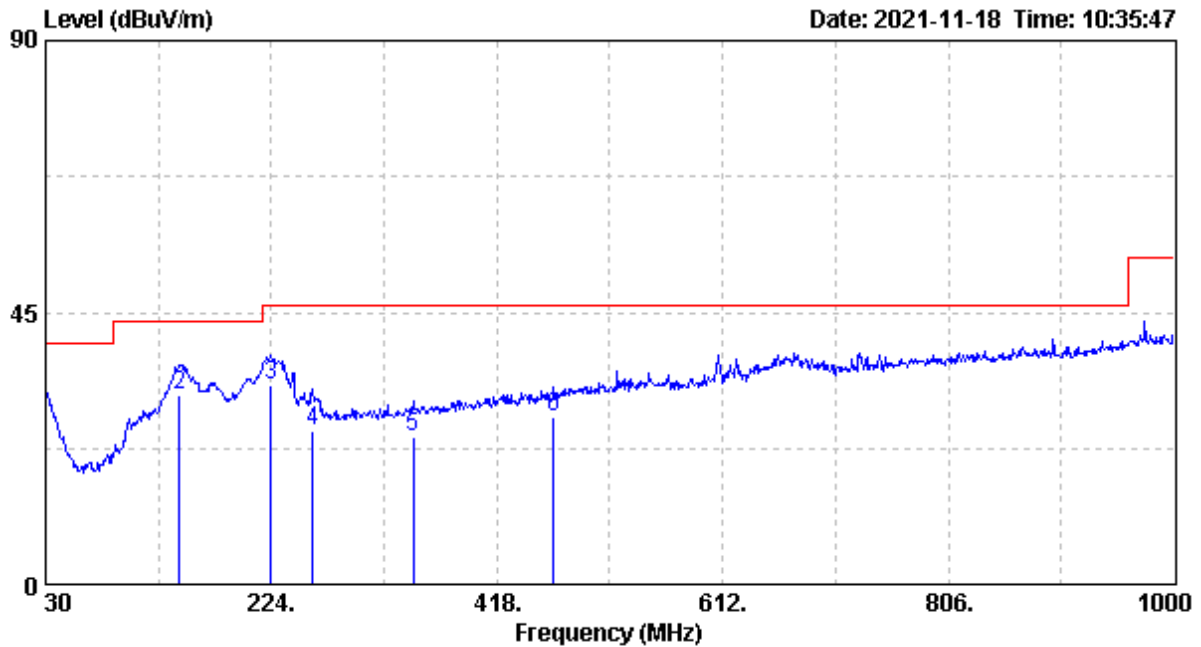
Testing Voltage : AC 120V 60Hz  
 Temp. : 30°C  
 Relative Humidity : 55%RH  
 Atmospheric pressure: 1006 hPa

Freq	Pol/Phase	Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB	dBuV	dBuV/m	dBuV/m	dB	
35.820	VERTICAL	23.03	1.05	24.09	40.00	-15.92	QP
67.830	VERTICAL	13.02	8.44	21.47	40.00	-18.53	QP
151.250	VERTICAL	18.70	16.30	35.00	43.50	-8.50	QP
180.350	VERTICAL	16.97	14.60	31.57	43.50	-11.93	QP
215.270	VERTICAL	18.40	11.10	29.50	43.50	-14.00	QP
241.460	VERTICAL	18.48	8.51	26.98	46.00	-19.02	QP
345.250	VERTICAL	23.28	2.05	25.33	46.00	-20.67	QP

Remark:

- Factor = Antenna Factor (dB/m) + Cable Loss (dB)
- Level (dBμV/m) = Factor (dB) + Read Level (dBμV)
- Over Limit (dB) = Level (dBμV/m) – Limit Line (dBμV/m)

## TEST REPORT



Testing Voltage : AC 120V 60Hz  
 Temp. : 30°C  
 Relative Humidity : 55%RH  
 Atmospheric pressure: 1006 hPa

Freq	Pol/Phase	Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB	dBuV	dBuV/m	dBuV/m	dB	
30.000	HORIZONTAL	25.88	2.07	27.95	40.00	-12.05	QP
145.430	HORIZONTAL	18.89	12.48	31.37	43.50	-12.13	QP
224.000	HORIZONTAL	18.21	14.64	32.85	46.00	-13.15	QP
259.890	HORIZONTAL	20.50	4.80	25.30	46.00	-20.70	QP
346.220	HORIZONTAL	23.29	1.10	24.40	46.00	-21.60	QP
466.500	HORIZONTAL	25.65	1.94	27.59	46.00	-18.41	QP

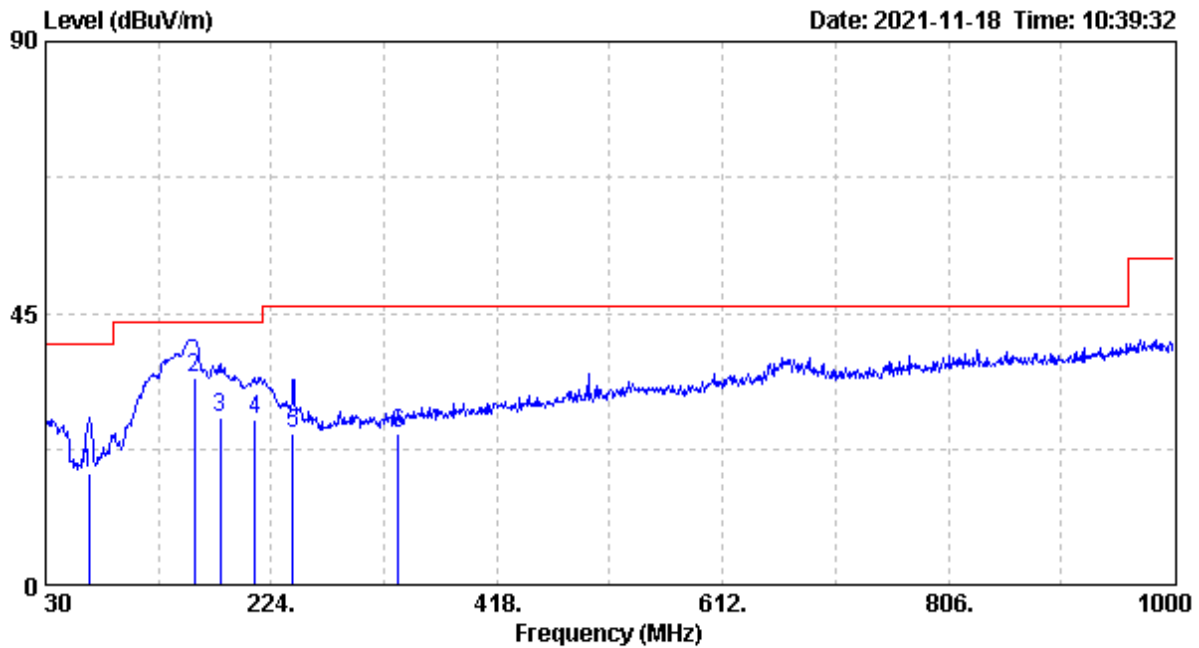
Remark:

- Factor = Antenna Factor (dB/m) + Cable Loss (dB)
- Level (dBμV/m) = Factor (dB) + Read Level (dBμV)
- Over Limit (dB) = Level (dBμV/m) – Limit Line (dBμV/m)



## TEST REPORT

Model No.:	F4-4266C17D-32GTZNB
Remark:	N/A



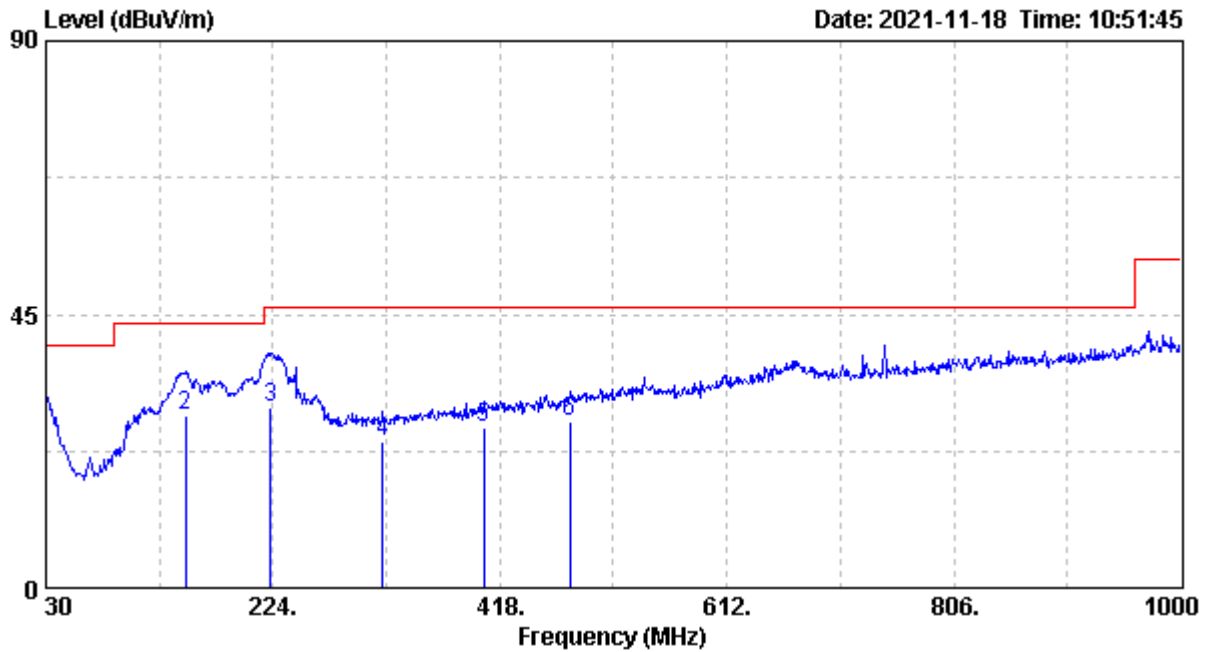
Testing Voltage : AC 120V 60Hz  
 Temp. : 30°C  
 Relative Humidity : 55%RH  
 Atmospheric pressure: 1006 hPa

Freq	Pol/Phase	Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB	dBuV	dBuV/m	dBuV/m	dB	
66.860	VERTICAL	12.95	5.62	18.57	40.00	-21.43	QP
158.040	VERTICAL	18.60	15.60	34.20	43.50	-9.30	QP
180.350	VERTICAL	16.97	10.63	27.60	43.50	-15.90	QP
210.420	VERTICAL	18.49	8.83	27.32	43.50	-16.18	QP
242.430	VERTICAL	18.63	6.40	25.03	46.00	-20.97	QP
333.610	VERTICAL	23.02	2.14	25.16	46.00	-20.84	QP

Remark:

- Factor = Antenna Factor (dB/m) + Cable Loss (dB)
- Level (dBμV/m) = Factor (dB) + Read Level (dBμV)
- Over Limit (dB) = Level (dBμV/m) – Limit Line (dBμV/m)

## TEST REPORT



Testing Voltage :AC 120V 60Hz  
 Temp. :30°C  
 Relative Humidity :55%RH  
 Atmospheric pressure:1006 hPa

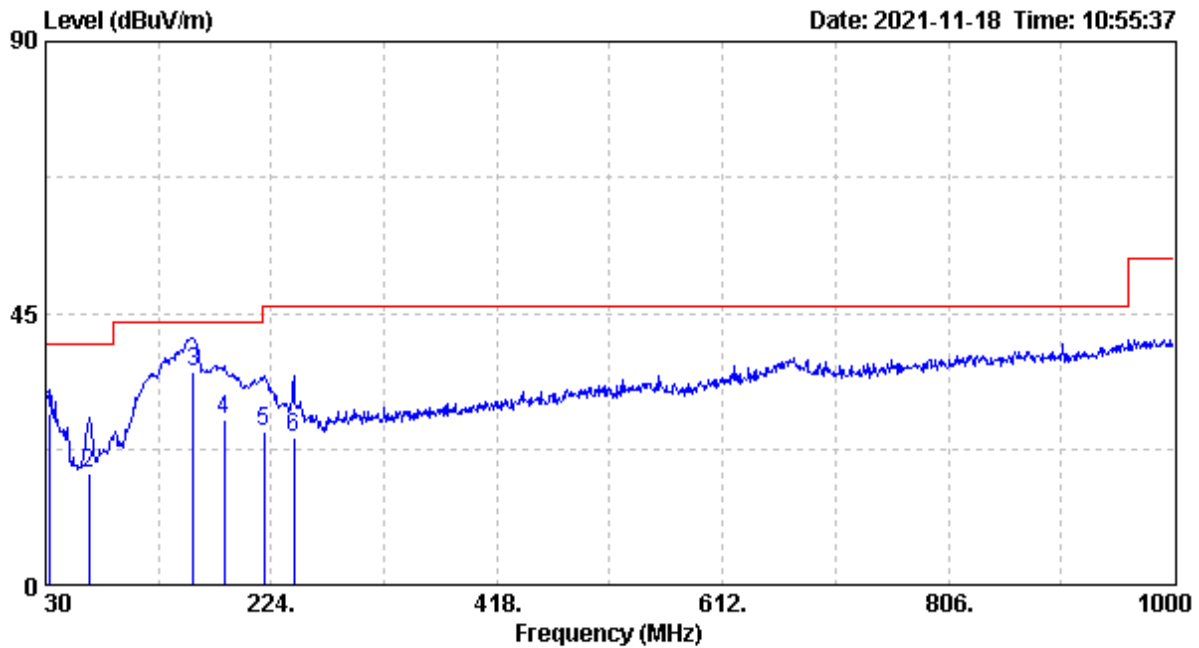
Freq	Pol/Phase	Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB	dBuV	dBuV/m	dBuV/m	dB	
30.000	HORIZONTAL	25.88	1.96	27.84	40.00	-12.16	QP
149.310	HORIZONTAL	18.74	9.77	28.51	43.50	-14.99	QP
222.060	HORIZONTAL	18.24	11.37	29.62	46.00	-16.38	QP
318.090	HORIZONTAL	22.86	1.25	24.12	46.00	-21.88	QP
404.420	HORIZONTAL	24.72	1.81	26.54	46.00	-19.46	QP
478.140	HORIZONTAL	26.10	1.13	27.24	46.00	-18.76	QP

Remark:

- Factor = Antenna Factor (dB/m) + Cable Loss (dB)
- Level (dBμV/m) = Factor (dB) + Read Level (dBμV)
- Over Limit (dB) = Level (dBμV/m) – Limit Line (dBμV/m)

## TEST REPORT

Model No.:	F4-5066C20D-16GTZR
Remark:	N/A



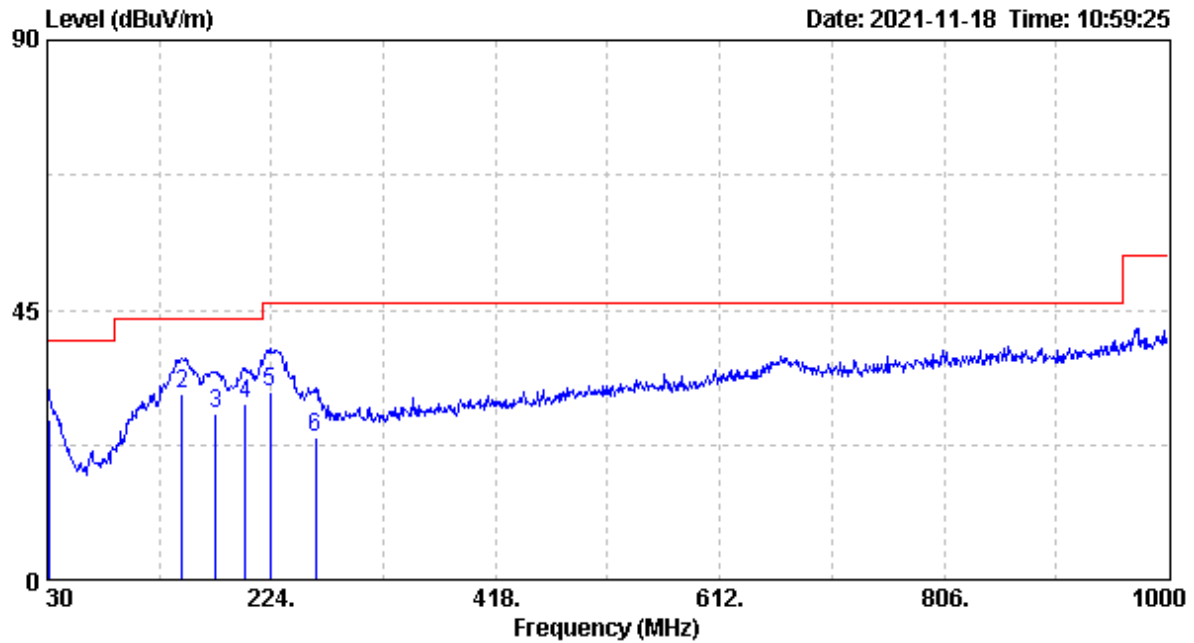
Testing Voltage : AC 120V 60Hz  
 Temp. : 30°C  
 Relative Humidity : 55%RH  
 Atmospheric pressure: 1006 hPa

Freq	Pol/Phase	Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB	dBuV	dBuV/m	dBuV/m	dB	
33.880	VERTICAL	24.01	4.24	28.25	40.00	-11.75	QP
66.860	VERTICAL	12.95	5.63	18.58	40.00	-21.42	QP
157.070	VERTICAL	18.64	16.50	35.14	43.50	-8.36	QP
183.260	VERTICAL	16.68	10.70	27.37	43.50	-16.13	QP
218.180	VERTICAL	18.33	7.13	25.46	46.00	-20.54	QP
243.400	VERTICAL	18.78	5.73	24.52	46.00	-21.48	QP

Remark:

- Factor = Antenna Factor (dB/m) + Cable Loss (dB)
- Level (dBμV/m) = Factor (dB) + Read Level (dBμV)
- Over Limit (dB) = Level (dBμV/m) – Limit Line (dBμV/m)

## TEST REPORT



Testing Voltage : AC 120V 60Hz  
 Temp. : 30°C  
 Relative Humidity : 55%RH  
 Atmospheric pressure: 1006 hPa

Freq	Pol/Phase	Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB	dBuV	dBuV/m	dBuV/m	dB	
30.970	HORIZONTAL	25.41	1.32	26.73	40.00	-13.27	QP
146.400	HORIZONTAL	18.85	12.21	31.06	43.50	-12.44	QP
175.500	HORIZONTAL	17.46	10.32	27.78	43.50	-15.72	QP
201.690	HORIZONTAL	16.84	12.53	29.37	43.50	-14.13	QP
223.030	HORIZONTAL	18.21	13.22	31.43	46.00	-14.57	QP
261.830	HORIZONTAL	20.60	3.24	23.84	46.00	-22.16	QP

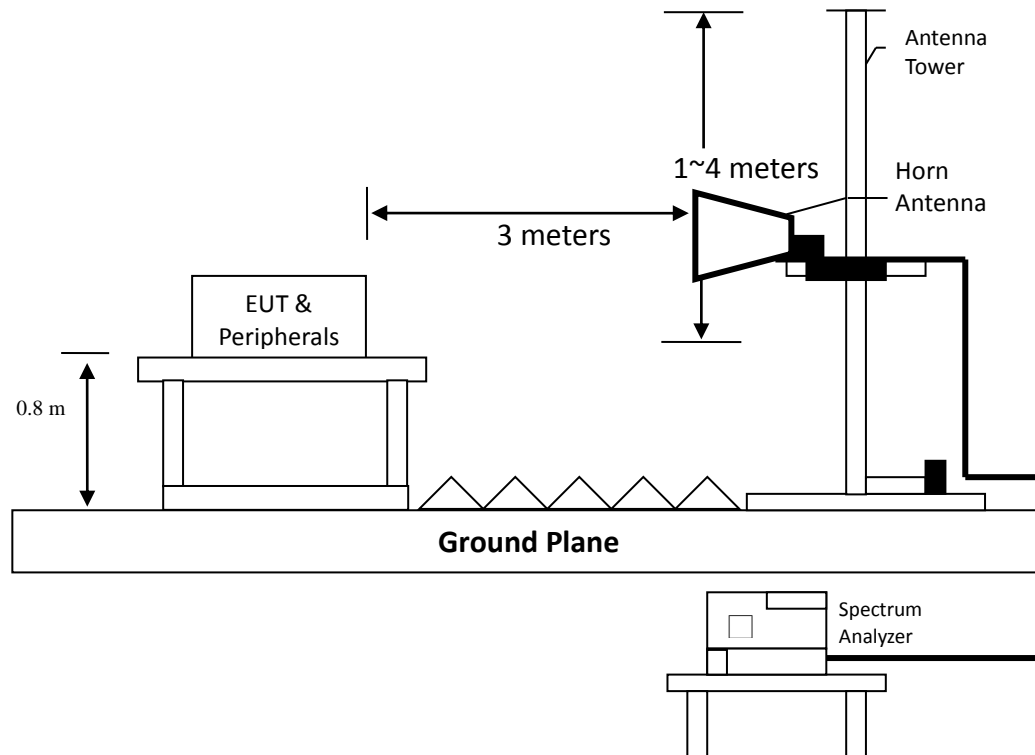
Remark:

- Factor = Antenna Factor (dB/m) + Cable Loss (dB)
- Level (dBμV/m) = Factor (dB) + Read Level (dBμV)
- Over Limit (dB) = Level (dBμV/m) – Limit Line (dBμV/m)

**TEST REPORT**

**5.2.1 Test Procedure above 1 GHz**

The figure below shows the test setup, which is utilized to make these measurements.



Radiated testing was performed at 3 meters semi-anechoic chamber. The equipment under test were placed on a turntable top 0.8 meter above ground. The table was 360 degrees to determine the position of the highest radiation. EUT is set 3 meters from the EMI receiving antenna, which is mounted on a variable height mast. The antenna height is varied between one meter and four meters above ground to find the maximum value of the field strength. Both horizontal polarization and vertical polarization of the antenna was set to conduct the measurement.

The bandwidth was set on the EMI meter 1 MHz.

The levels are peak and average value readings. The frequency spectrum above 1 GHz was investigated.

**TEST REPORT**

**5.2.2 Test Equipment**

Test Equipment	Brand	Model No.	Serial No.	Calibration Date	Next Calibration Date
EMI Test Receiver	R&S	ESR7	101822	2021/08/16	2022/08/15
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-456	2021/01/11	2022/01/10
Pre-Amplifier	AML	AML0120L3401	0419-114	2020/12/16	2021/12/15
966-2(A) Cable	SUHNER	SUCOLEX 104	295105/4	2021/03/08	2022/03/07
966-2(B) Cable	SUHNER	SUCOFLEX 104P	CB0005	2021/03/08	2022/03/07
966-2_3m Semi-Anechoic Chamber	N/A	CEM-966_2	N/A	2021/01/15	2022/01/14
Test software	Audix	e3	V9	NCR	NCR

Note: No Calibration Required (NCR).

**5.2.3 Radiated Emission Limit**

According to FCC 15.109, except for Class A digital device, the field strength of radiated emission from unintentional radiators at a distance of 3 meters shall not exceed the following values:

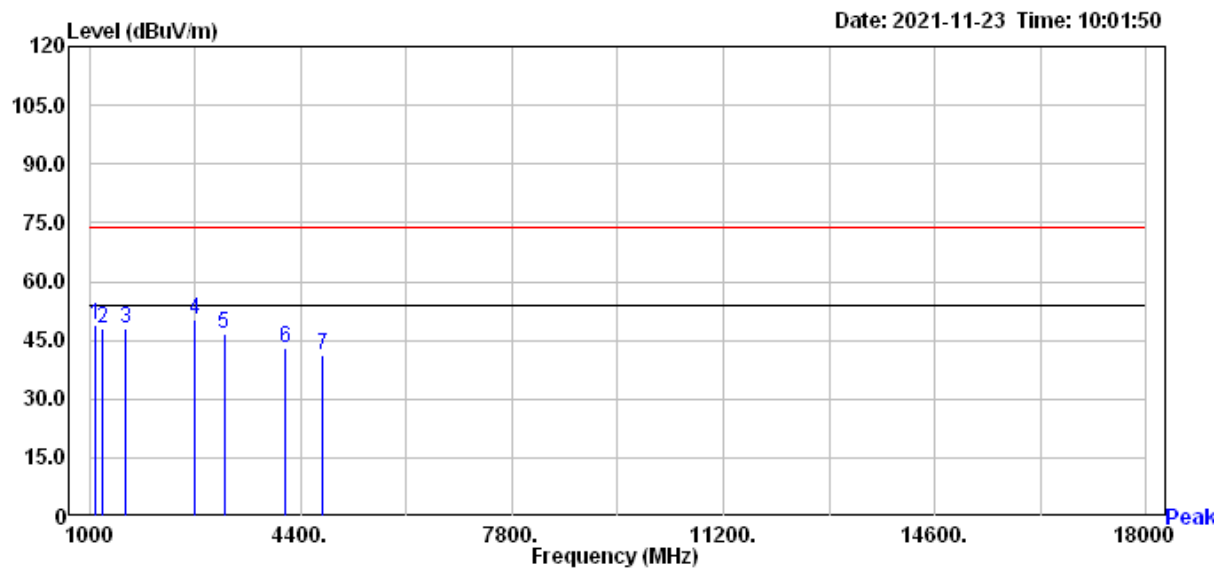
Class B Radiated Emission Limits:

Frequency MHz	Field Strength dB $\mu$ V/m (Average)	Field Strength dB $\mu$ V/m (Peak)
Above 1000	54.0	74.0

## TEST REPORT

### 5.2.4 Radiated Emission Test Data above 1 GHz

Model No.:	F4-5333C22D-16GTEG
Remark:	N/A



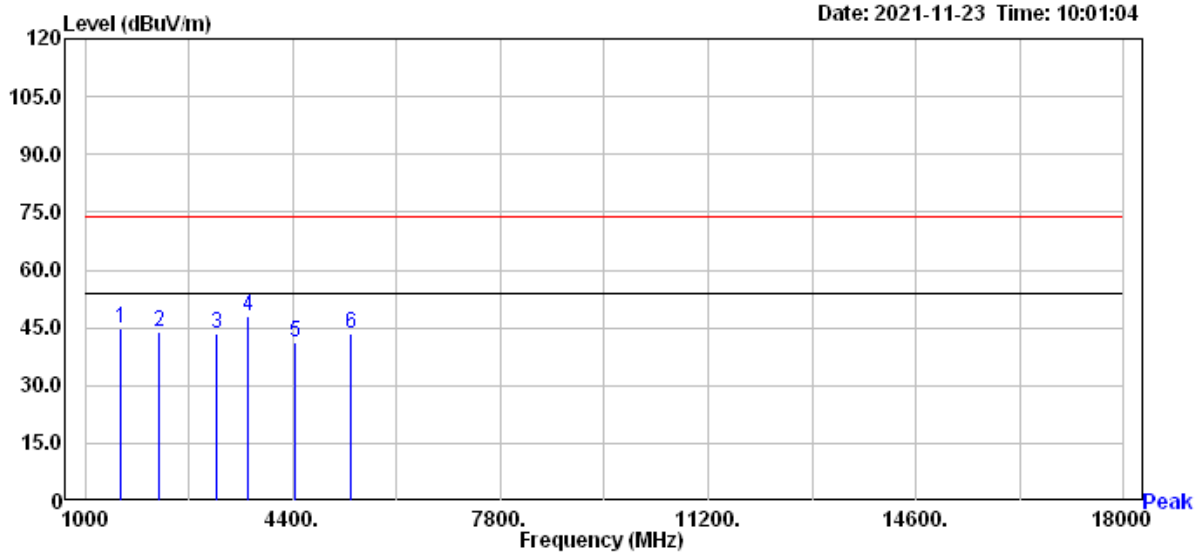
Test Voltage : AC 120V 60Hz  
 Temp. : 27°C  
 Relative Humidity : 55%RH  
 Atmospheric pressure: 1005hPa

Freq	Pol/Phase	Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1090.000	Vertical	3.35	45.54	48.89	74.00	-25.11	Peak
1215.000	Vertical	4.67	43.26	47.93	74.00	-26.07	Peak
1580.000	Vertical	5.40	42.49	47.89	74.00	-26.11	Peak
2680.000	Vertical	11.02	39.18	50.20	74.00	-23.80	Peak
3160.000	Vertical	12.38	34.33	46.71	74.00	-27.29	Peak
4135.000	Vertical	14.09	28.98	43.07	74.00	-30.93	Peak
4750.000	Vertical	15.93	25.49	41.42	74.00	-32.58	Peak

Remark:

- Level (dBμV/m) = Factor (dB) + Read Level (dBμV)
- Factor = Antenna Factor (dB/m) + Cable Loss (dB) – Amplifier Gain (dB)  
 (\*The Amplifier Gain depended on measure equipment, see test equipment list.)
- Over Limit (dB) = Level (dBμV/m) – Limit Line (dBμV/m)

## TEST REPORT



Test Voltage : AC 120V 60Hz  
 Temp. : 27°C  
 Relative Humidity : 55%RH  
 Atmospheric pressure: 1005hPa

Freq MHz	Pol/Phase	Factor dB/m	Read		Limit	Over	Remark
			Level dBuV	Level dBuV/m	Line dBuV/m	Limit dB	
1575.000	Horizontal	5.41	39.25	44.66	74.00	-29.34	Peak
2190.000	Horizontal	10.11	33.87	43.98	74.00	-30.02	Peak
3155.000	Horizontal	12.38	31.19	43.57	74.00	-30.43	Peak
3650.000	Horizontal	13.42	34.72	48.14	74.00	-25.86	Peak
4425.000	Horizontal	14.82	26.47	41.29	74.00	-32.71	Peak
5355.000	Horizontal	16.47	27.13	43.60	74.00	-30.40	Peak

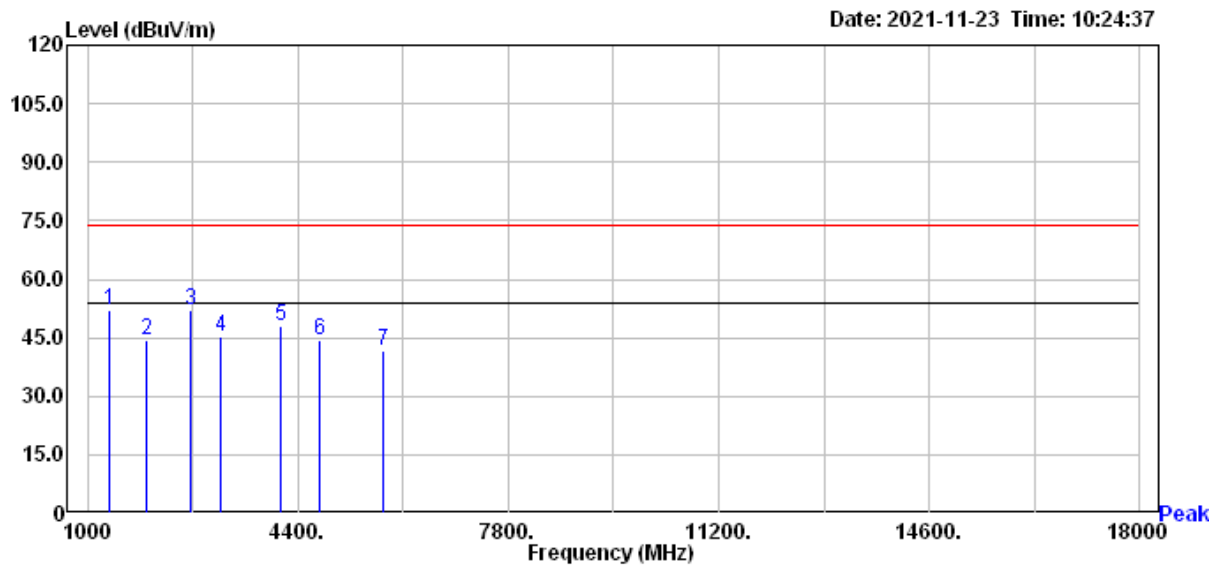
Remark:

1. Level (dBμV/m) = Factor (dB) + Read Level (dBμV)
2. Factor = Antenna Factor (dB/m) + Cable Loss (dB) – Amplifier Gain (dB)  
 (\*The Amplifier Gain depended on measure equipment, see test equipment list.)
3. Over Limit (dB) = Level (dBμV/m) – Limit Line (dBμV/m)



## TEST REPORT

Model No.:	F4-5333C22D-16GTRG
Remark:	N/A



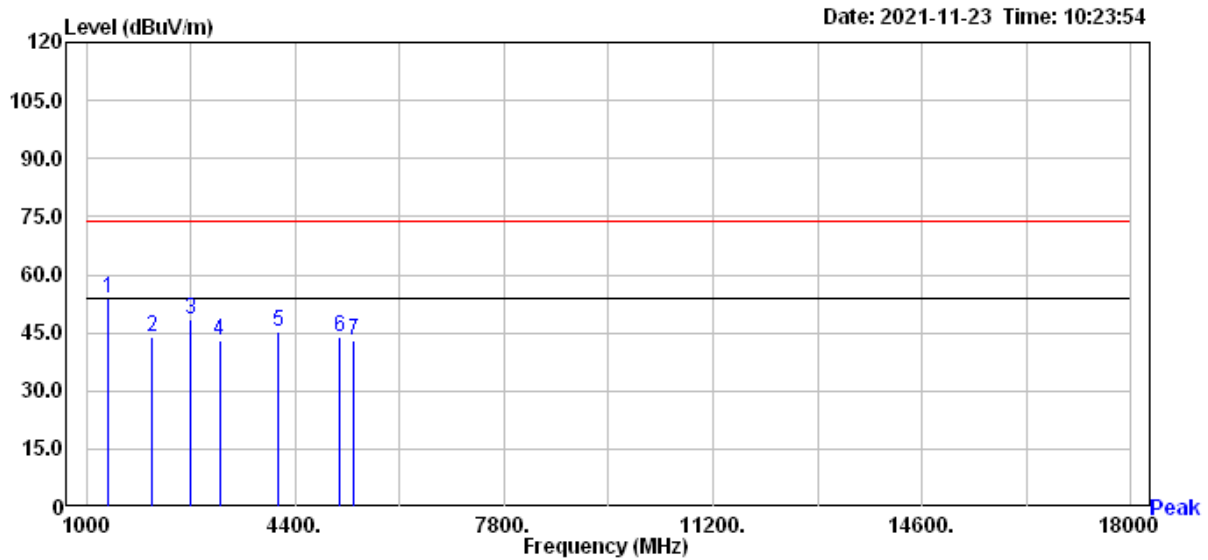
Test Voltage : AC 120V 60Hz  
 Temp. : 27°C  
 Relative Humidity : 55%RH  
 Atmospheric pressure: 1005hPa

Freq	Pol/Phase	Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1335.000	Vertical	5.46	46.56	52.02	74.00	-21.98	Peak
1940.000	Vertical	7.13	37.33	44.46	74.00	-29.54	Peak
2670.000	Vertical	10.96	41.29	52.25	74.00	-21.75	Peak
3155.000	Vertical	12.38	32.92	45.30	74.00	-28.70	Peak
4130.000	Vertical	14.08	34.13	48.21	74.00	-25.79	Peak
4750.000	Vertical	15.93	28.53	44.46	74.00	-29.54	Peak
5785.000	Vertical	18.08	23.63	41.71	74.00	-32.29	Peak

Remark:

- Level (dB $\mu$ V/m) = Factor (dB) + Read Level (dB $\mu$ V)
- Factor = Antenna Factor (dB/m) + Cable Loss (dB) – Amplifier Gain (dB)  
 (\*The Amplifier Gain depended on measure equipment, see test equipment list.)
- Over Limit (dB) = Level (dB $\mu$ V/m) – Limit Line (dB $\mu$ V/m)

## TEST REPORT



Test Voltage : AC 120V 60Hz  
 Temp. : 27°C  
 Relative Humidity : 55%RH  
 Atmospheric pressure: 1005hPa

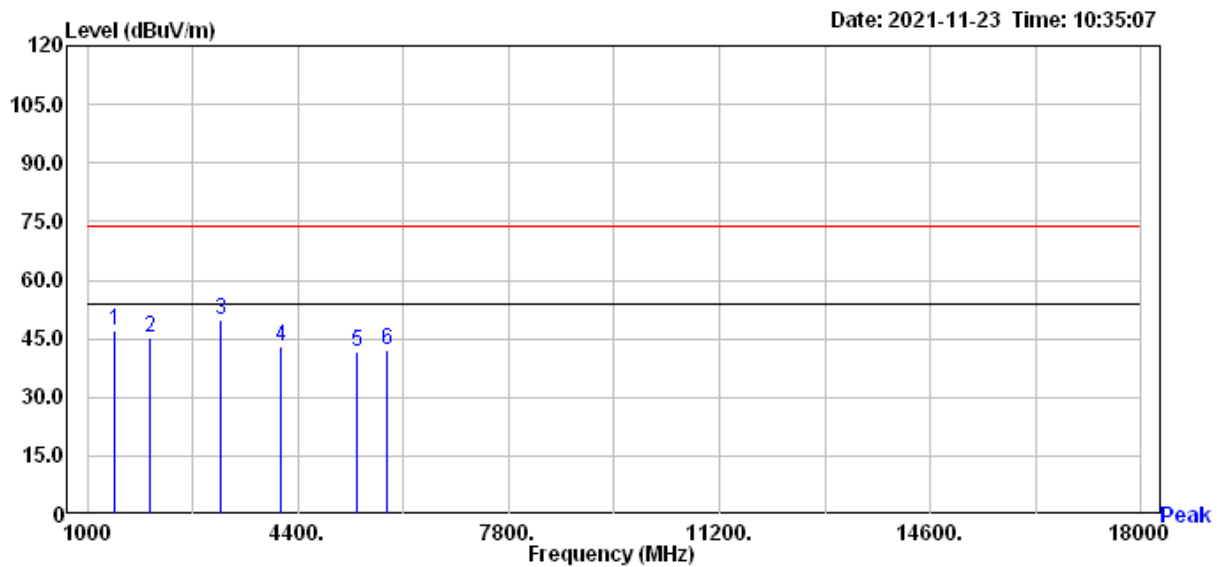
Freq	Pol/Phase	Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1335.000	Horizontal	5.46	48.42	53.88	74.00	-20.12	Peak
2065.000	Horizontal	8.29	35.51	43.80	74.00	-30.20	Peak
2675.000	Horizontal	10.99	37.52	48.51	74.00	-25.49	Peak
3160.000	Horizontal	12.38	30.79	43.17	74.00	-30.83	Peak
4125.000	Horizontal	14.06	31.37	45.43	74.00	-28.57	Peak
5115.000	Horizontal	16.85	27.14	43.99	74.00	-30.01	Peak
5345.000	Horizontal	16.43	26.66	43.09	74.00	-30.91	Peak

Remark:

- Level (dBμV/m) = Factor (dB) + Read Level (dBμV)
- Factor = Antenna Factor (dB/m) + Cable Loss (dB) – Amplifier Gain (dB)  
 (\*The Amplifier Gain depended on measure equipment, see test equipment list.)
- Over Limit (dB) = Level (dBμV/m) – Limit Line (dBμV/m)

## TEST REPORT

Model No.:	F4-4266C17D-32GTZNB
Remark:	N/A



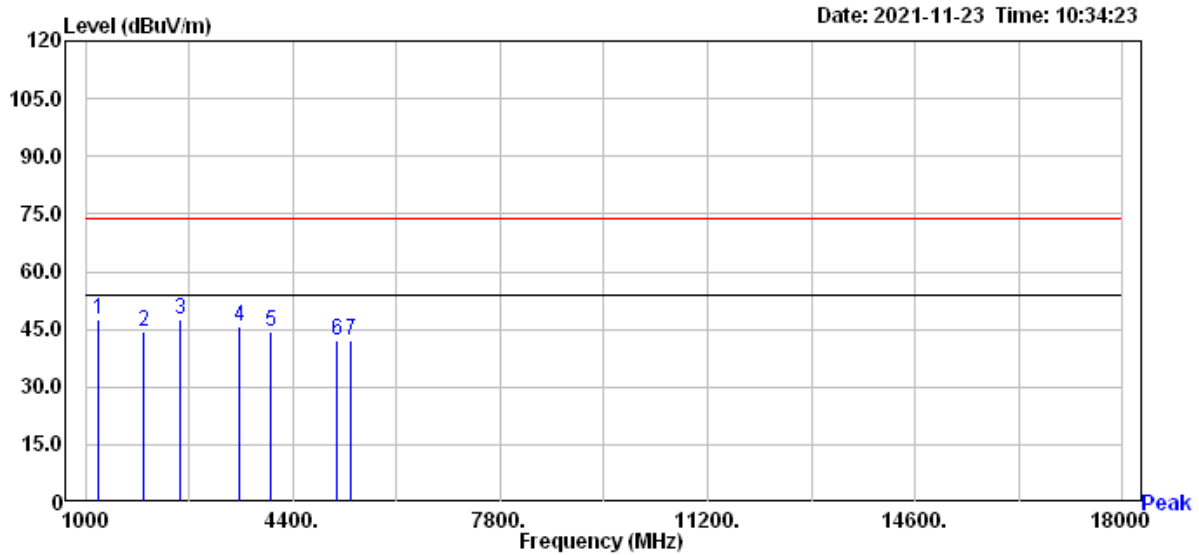
Test Voltage : AC 120V 60Hz  
 Temp. : 27°C  
 Relative Humidity : 55%RH  
 Atmospheric pressure: 1005hPa

Freq	Pol/Phase	Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1435.000	Vertical	5.76	41.40	47.16	74.00	-26.84	Peak
2005.000	Vertical	7.57	37.91	45.48	74.00	-28.52	Peak
3155.000	Vertical	12.38	37.47	49.85	74.00	-24.15	Peak
4130.000	Vertical	14.08	29.04	43.12	74.00	-30.88	Peak
5345.000	Vertical	16.43	25.28	41.71	74.00	-32.29	Peak
5835.000	Vertical	18.27	23.75	42.02	74.00	-31.98	Peak

Remark:

- Level (dBμV/m) = Factor (dB) + Read Level (dBμV)
- Factor = Antenna Factor (dB/m) + Cable Loss (dB) – Amplifier Gain (dB)  
 (\*The Amplifier Gain depended on measure equipment, see test equipment list.)
- Over Limit (dB) = Level (dBμV/m) – Limit Line (dBμV/m)

## TEST REPORT



Test Voltage : AC 120V 60Hz  
 Temp. : 27°C  
 Relative Humidity : 55%RH  
 Atmospheric pressure: 1005hPa

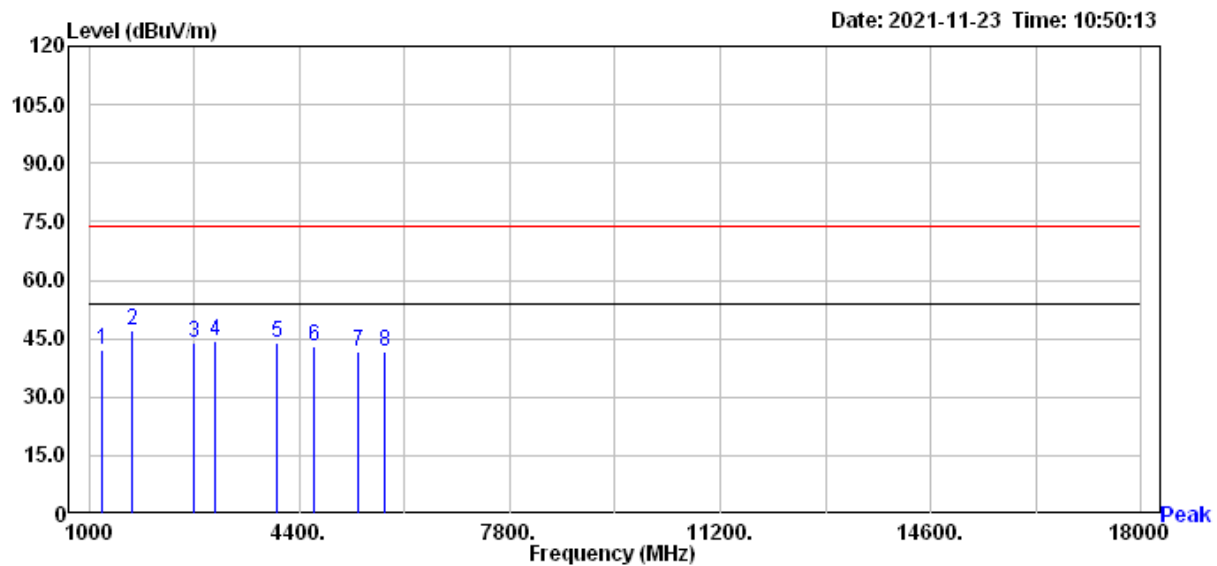
Freq	Pol/Phase	Factor	Read Level	Level	Limit	Over	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1210.000	Horizontal	4.64	42.91	47.55	74.00	-26.45	Peak
1940.000	Horizontal	7.13	37.43	44.56	74.00	-29.44	Peak
2555.000	Horizontal	10.11	37.31	47.42	74.00	-26.58	Peak
3525.000	Horizontal	13.25	32.51	45.76	74.00	-28.24	Peak
4020.000	Horizontal	13.77	30.57	44.34	74.00	-29.66	Peak
5115.000	Horizontal	16.85	25.12	41.97	74.00	-32.03	Peak
5355.000	Horizontal	16.47	25.68	42.15	74.00	-31.85	Peak

Remark:

- Level (dB $\mu$ V/m) = Factor (dB) + Read Level (dB $\mu$ V)
- Factor = Antenna Factor (dB/m) + Cable Loss (dB) – Amplifier Gain (dB)  
 (\*The Amplifier Gain depended on measure equipment, see test equipment list.)
- Over Limit (dB) = Level (dB $\mu$ V/m) – Limit Line (dB $\mu$ V/m)

## TEST REPORT

Model No.:	F4-5066C20D-16GTZR
Remark:	N/A



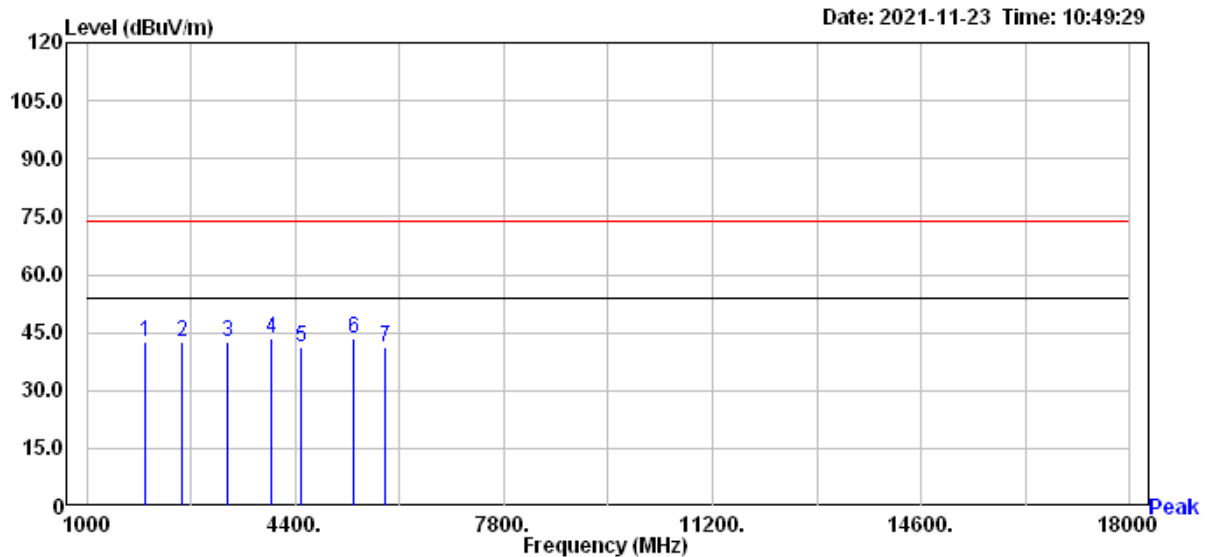
Test Voltage : AC 120V 60Hz  
 Temp. : 27°C  
 Relative Humidity : 55%RH  
 Atmospheric pressure: 1005hPa

Freq	Pol/Phase	Factor	Read Level	Level	Limit	Over Limit	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1215.000	Vertical	4.67	37.44	42.11	74.00	-31.89	Peak
1700.000	Vertical	5.71	41.22	46.93	74.00	-27.07	Peak
2680.000	Vertical	11.02	33.01	44.03	74.00	-29.97	Peak
3040.000	Vertical	11.98	32.38	44.36	74.00	-29.64	Peak
4020.000	Vertical	13.77	29.96	43.73	74.00	-30.27	Peak
4625.000	Vertical	15.46	27.68	43.14	74.00	-30.86	Peak
5345.000	Vertical	16.43	25.38	41.81	74.00	-32.19	Peak
5785.000	Vertical	18.08	23.57	41.65	74.00	-32.35	Peak

Remark:

- Level (dBμV/m) = Factor (dB) + Read Level (dBμV)
- Factor = Antenna Factor (dB/m) + Cable Loss (dB) – Amplifier Gain (dB)  
 (\*The Amplifier Gain depended on measure equipment, see test equipment list.)
- Over Limit (dB) = Level (dBμV/m) – Limit Line (dBμV/m)

## TEST REPORT



Test Voltage : AC 120V 60Hz  
 Temp. : 27°C  
 Relative Humidity : 55%RH  
 Atmospheric pressure: 1005hPa

Freq	Pol/Phase	Factor	Read Level	Level	Limit Line	Over Limit	Remark
MHz		dB/m	dBuV	dBuV/m	dBuV/m	dB	
1945.000	Horizontal	7.16	35.23	42.39	74.00	-31.61	Peak
2555.000	Horizontal	10.11	32.41	42.52	74.00	-31.48	Peak
3285.000	Horizontal	12.16	30.61	42.77	74.00	-31.23	Peak
4005.000	Horizontal	13.72	29.96	43.68	74.00	-30.32	Peak
4495.000	Horizontal	14.98	26.09	41.07	74.00	-32.93	Peak
5355.000	Horizontal	16.47	26.81	43.28	74.00	-30.72	Peak
5850.000	Horizontal	18.32	22.74	41.06	74.00	-32.94	Peak

Remark:

1. Level (dBuV/m) = Factor (dB) + Read Level (dBuV)
2. Factor = Antenna Factor (dB/m) + Cable Loss (dB) – Amplifier Gain (dB)  
 (\*The Amplifier Gain depended on measure equipment, see test equipment list.)
3. Over Limit (dB) = Level (dBuV/m) – Limit Line (dBuV/m)

**TEST REPORT**

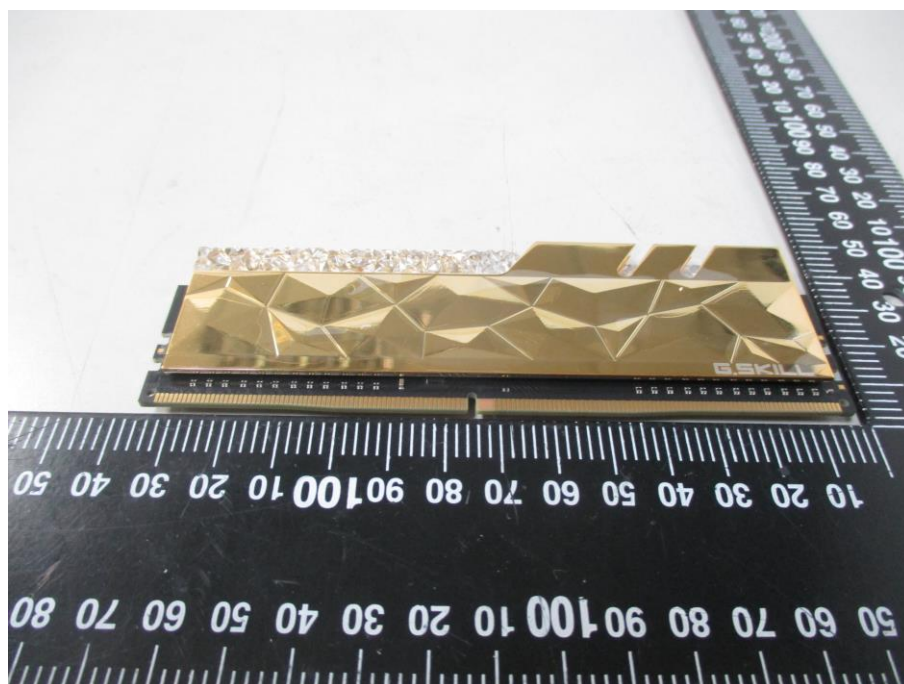
**Appendix A: Uncertainty**

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Item	Uncertainty
Conducted disturbance measurements at a mains port from 9 kHz to 30 MHz using a 50 Ω/50 μH +5Ω artificial mains network (AMN)	3.08 dB
Radiated disturbances from 9kHz~30MHz in a semi-anechoic chamber at a distance of 3m	3.70 dB
Vertically polarized radiated disturbances from 30MHz~1GHz in a open area test site at a distance of 10m	5.18 dB
Horizontally polarized radiated disturbances from 30MHz~1GHz in a open area test site at a distance of 10m	5.05 dB
Vertically polarized radiated disturbances from 30MHz~1GHz in a semi-anechoic chamber at a distance of 3m	5.16 dB
Horizontally polarized radiated disturbances from 30MHz~1GHz in a semi-anechoic chamber at a distance of 3m	5.02 dB
Radiated disturbances from 1GHz~18GHz in a semi-anechoic chamber at a distance of 3m	5.17 dB

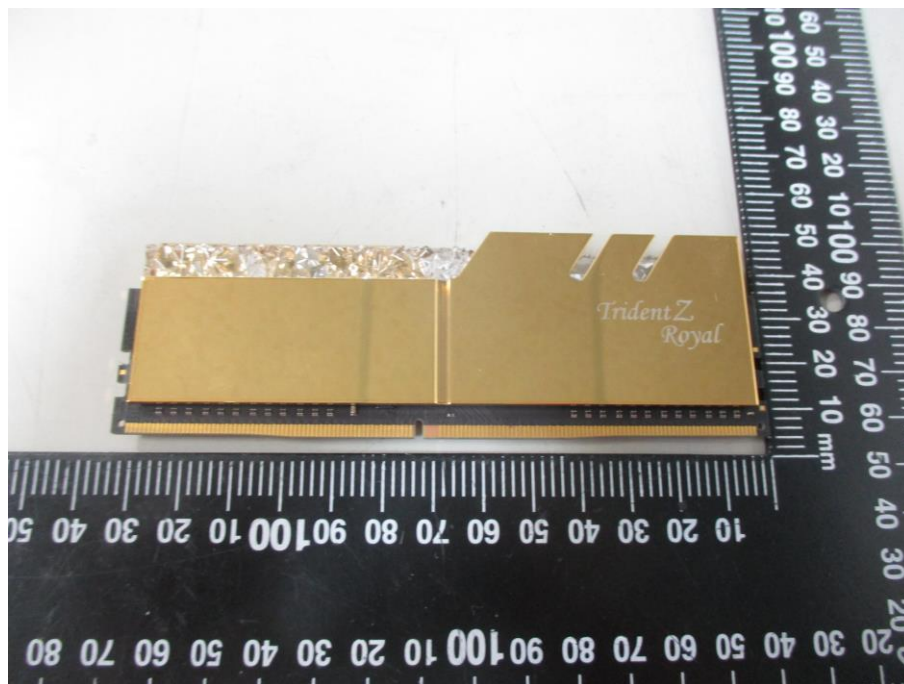
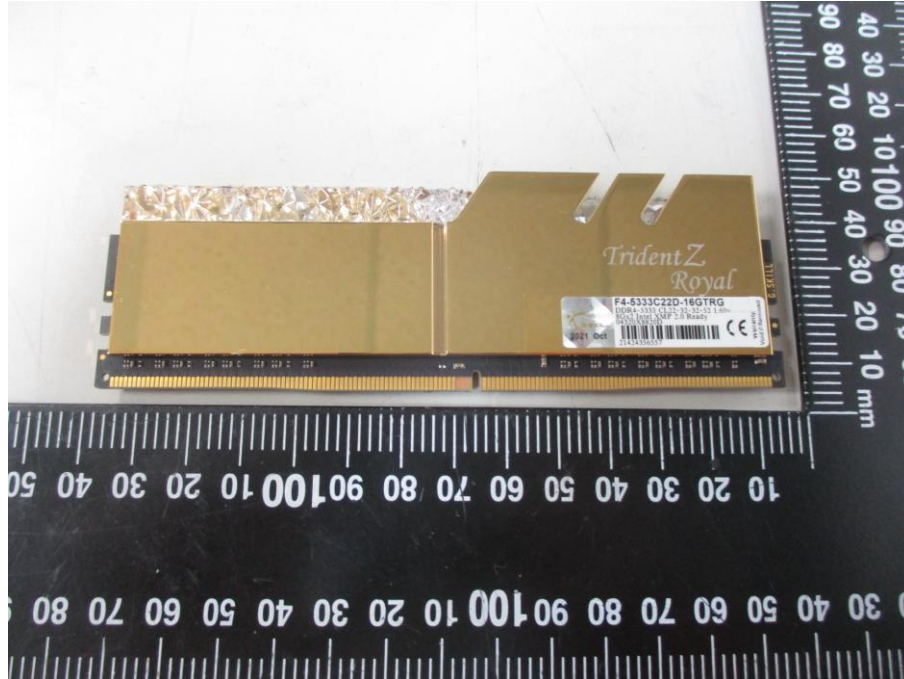
## Appendix B: Photo of EUT

Model: F4-5333C22D-16GTEG





Model: F4-5333C22D-16GTRG



Model: F4-4266C17D-32GTZNB



Model: F4-5066C20D-16GTZR



**Appendix C1: Conducted Emission Test Set-up**



**Appendix C2: Radiated Emission Test Set-up (Below 1GHz)**



**Appendix C3: Radiated Emission Test Set-up (Above 1GHz)**

