

Test specification:	Section 15.247(d), Radiated spurious emissions				
Test procedure:	ANCI C63.10 section 6.5 & 6.6				
Test mode:	Compliance	Vardiate	DASS		
Date(s):	06-Apr-21 - 30-Apr-21	verdict:	PASS		
Temperature: 23 °C	Relative Humidity: 47 %	Air Pressure: 1017 hPa	Power: 230 VAC, 50 Hz		
Remarks:					

Plot 9.2.18 Radiated emission measurements from 18 GHz to 25 GHz at the high carrier frequency



Test specification:	Section 15.247(d), Emissions at band edges			
Test procedure:	ANSI C63.10 section 6.10			
Test mode:	Compliance	Vardiate	DAGG	
Date(s):	07-Apr-21 - 30-Apr-21	verdict.	FA33	
Temperature: 24 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				

9.3 Band edge radiated emissions at BT protocol

9.3.1 General

This test was performed to measure emissions, radiated from the EUT at the assigned frequency band edges. Specification test limits are given in Table 7.3.1.

Table 9.3.1	Band	anha	emission	limits
1 abie 3.3.1	Danu	euge	61111221011	mmuə

Output power Assigne frequency,	Assigned	Attenuation below	Field strength at 3 m within restricted bands, dB(μV/m)		
	inequency, winz		Peak	Average	
Peak	902.0 - 928.0				
	2400.0 - 2483.5	20.0	74.0	54.0	
	5725.0 - 5850.0				

* - Band edge emission limit is provided in terms of attenuation below the peak of modulated carrier measured with the same resolution bandwidth.

9.3.2 Test procedure

- **9.3.2.1** The EUT was set up as shown in Figure 7.3.1, energized normally modulated at the maximum data rate and its proper operation was checked.
- 9.3.2.2 The EUT was adjusted to produce maximum available to end user RF output power at the lowest carrier frequency.
- **9.3.2.3** The spectrum analyzer span was set to capture the carrier frequency and associated modulation products. The resolution bandwidth was set wider than 1 % of the frequency span.
- **9.3.2.4** The spectrum analyzer was set in max hold mode and allowed trace to stabilize. The highest emission level within the authorized band was measured.
- **9.3.2.5** The maximum band edge emission and modulation product outside of the band were measured as provided in Table 7.3.2 and associated plots and referenced to the highest emission level measured within the authorized band.
- **9.3.2.6** The above procedure was repeated with the EUT adjusted to produce maximum RF output power at the highest carrier frequency.
- **9.3.2.7** The above procedure was repeated with the frequency hopping function enabled.

Figure 9.3.1 Band edge emission test setup





Test specification:	Section 15.247(d), Emissions at band edges			
Test procedure:	ANSI C63.10 section 6.10			
Test mode:	Compliance	Vardiate	DASS	
Date(s):	07-Apr-21 - 30-Apr-21	verdict.	FA33	
Temperature: 24 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				

Table 9.3.2 Band edge emission outside restricted bands test results

ASSIGNED FREQUENC	CY RANGE:	2400.0	0 – 2483.5 MHz			
DETECTOR USED:		Peak				
TRANSMITTER OUTPL	JT POWER SE	TTINGS: Maxim	านทา			
RESOLUTION BANDWI	IDTH:	100 kł	Ηz			
VIDEO BANDWIDTH:		≥ RBV	V			
MODULATION/BITRATI	E:	GFSK				
PROTOCOL:		BT				-
Frequency, Band ed	dge emission, dBm	Emission at carrier, dBm	Attenuation below carrier, dBc	Limit, dBc	Margin, dB*	Verdict
2400	44.27	88.98	44.71	20	24.71	Pass

*- Margin = Attenuation below carrier – specification limit.

Table 9.3.3 Band edge emission inside restricted bands test results

ASSIGNED FREQUENCY RANGE: DETECTOR USED: TRANSMITTER OUTPUT POWER SETTINGS: VIDEO BANDWIDTH: MODULATION/BITRATE: PROTOCOL:			0.0 – 2483.5 N k kimum BW FSK	lHz			
	Peak field	strength(VB	W=3 MHz)	Average field	d strength(VBW	/=1 kHz)	
Frequency, MHz	Measured, dB(μV/m)	Limit, dB(µV/m)	Margin, dB**	Measured, dB(μV/m)	Limit, dB(μV/m)	Margin, dB**	Verdict
2483.5	61.89	74	-12.11	53.1	54	-0.9	Pass

Reference numbers of test equipment used

HL 3818	HL 3903	HL 5902	HL 4933	HL 3442	HL 5606	



Test specification:	Section 15.247(d), Emissions at band edges			
Test procedure:	ANSI C63.10 section 6.10			
Test mode:	Compliance	Vordiot	DASS	
Date(s):	07-Apr-21 - 30-Apr-21	verdict.	FA33	
Temperature: 24 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				











Test specification:	Section 15.247(d), Emissions at band edges				
Test procedure:	ANSI C63.10 section 6.10				
Test mode:	Compliance	Vordiot	DASS		
Date(s):	07-Apr-21 - 30-Apr-21	verdict.	PA33		
Temperature: 24 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz		
Remarks:					







Test specification:	Section 15.203, Antenna re	quirements	
Test procedure:	Visual inspection		
Test mode:	Compliance	Vardiate	DASS
Date(s):	24-May-21	verdict.	FA33
Temperature: 24 °C	Relative Humidity: 48 %	Air Pressure: 1010 hPa	Power: 230 VAC, 50 Hz
Remarks:			

9.4 Antenna requirements

The EUT was verified for compliance with antenna requirements. A transmitter shall be designed to ensure that no antenna other than that furnished by the responsible party will be used with the device. It may be either permanently attached or employs a unique antenna connector for every antenna proposed for use with the EUT. This requirement does not apply to professionally installed transmitters.

The rationale for compliance with the above requirements was either visual inspection results or supplier declaration. The summary of results is provided in Table 9.4.1.

Table 9.4.1 Antenna requirements

Requirement	Rationale	Verdict
The transmitter antenna is permanently attached	NA	
The transmitter employs a unique antenna connector	Visual inspection	Comply
The transmitter requires professional installation	NA	

Photograph 9.4.1 Antenna assembly





Test specification:	Section 15.109, Radiated emission					
Test procedure:	ANSI C63.4, Sections 11.6 and 12.1.4					
Test mode:	Compliance	Verdiet: DACC				
Date(s):	07-Apr-21	verdict.	FA33			
Temperature: 24 °C	Relative Humidity: 48 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz			
Remarks:						

10 Emission tests according to 47CFR part 15 subpart B requirements

10.1 Radiated emission measurements

10.1.1 General

This test was performed to measure radiated emissions from the EUT enclosure. Specification test limits are given in Table 10.1.1.

Frequency,	Class B lim	it, dB(μV/m)	Class A limit, dB(μV/m)		
MHz	10 m distance	3 m distance	10 m distance	3 m distance	
30 - 88	29.5*	40.0	39.0	49.5*	
88 - 216	33.0*	43.5	43.5	54.0*	
216 - 960	35.5*	46.0	46.4	56.9*	
Above 960	43.5*	54.0	49.5	60.0*	

Table 10.1.1 Radiated emission test limits

* The limit for test distance other than specified was calculated using the inverse linear distance extrapolation factor as follows: $\lim_{s_2} = \lim_{s_1} + 20 \log (S_1/S_2)$,

where S_1 and S_2 – standard defined and test distance respectively in meters.

10.1.2 Test procedure for measurements in semi-anechoic chamber

- **10.1.2.1** The EUT was set up as shown in Figure 10.1.1 and associated photograph/s, energized and the performance check was conducted.
- **10.1.2.2** The specified frequency range was investigated with biconilog antenna connected to EMI receiver. To find maximum radiation the turntable was rotated 360⁰, the measuring antenna height was changed from 1 to 4 m, its polarization was switched from vertical to horizontal and the EUT cables position was varied.
- 10.1.2.3 The worst test results (the lowest margins) were recorded in Table 10.1.2 and shown in the associated plots.



Test specification:	Section 15.109, Radiated emission							
Test procedure:	ANSI C63.4, Sections 11.6 and 12.1.4							
Test mode:	Compliance	Vardiate	DAGG					
Date(s):	07-Apr-21	verdict.	FA33					
Temperature: 24 °C	Relative Humidity: 48 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz					
Remarks:								

Figure 10.1.1 Setup for radiated emission measurements in anechoic chamber, table-top equipment





Test specification:	Section 15.109, Radiated emission							
Test procedure:	ANSI C63.4, Sections 11.6 and 12.1.4							
Test mode:	Compliance	Vardiate	DAGG					
Date(s):	07-Apr-21	verdict.	FA33					
Temperature: 24 °C	Relative Humidity: 48 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz					
Remarks:								

Table 10.1.2 Radiated emission test results

EUT SET UP: LIMIT: EUT OPERATING MODE: TEST SITE: TEST DISTANCE: DETECTORS USED: FREQUENCY RANGE: **RESOLUTION BANDWIDTH:** TABLE-TOP Class B Receive SEMI ANECHOIC CHAMBER 3 m PEAK / QUASI-PEAK 30 MHz – 1000 MHz 120 kHz

EUT CONFIGURATION:

with box

	Book		Quasi-peak			Antonno	Turn tabla	
Frequency, MHz	emission, dB(μV/m)	Measured emission, dB(μV/m)	Limit, dB(µV/m)	Margin, dB*	Antenna polarization	height, m	position**, degrees	Verdict
32.529834	37.05	30.81	40.0	-9.19	Vertical	1.02	274	
36.009233	42.27	34.50	40.0	-5.50	Vertical	1.00	150	
60.000233	45.53	35.32	40.0	-4.68	Vertical	1.02	330	
62.515975	36.04	30.36	40.0	-9.64	Vertical	1.00	360	
120.011399	41.52	38.78	43.5	-4.72	Vertical	1.02	262	
240.016600	37.89	34.81	46.0	-11.19	Vertical	2.30	285	Pass
360.041934	46.41	44.41	46.0	-1.59	Horizontal	1.04	24	
480.041734	41.59	38.38	46.0	-7.62	Horizontal	1.00	180	
499.999000	41.91	40.28	46.0	-5.72	Horizontal	1.04	296	
599.990333	41.14	38.82	46.0	-7.18	Horizontal	1.02	183	
749.973833	39.62	36.94	46.0	-9.06	Horizontal	1.02	82	

TEST SITE: TEST DISTANCE: DETECTORS USED: FREQUENCY RANGE: **RESOLUTION BANDWIDTH:** SEMI ANECHOIC CHAMBER 3 m

PEAK / AVERAGE 1000 MHz - 18000 MHz 1000 kHz

EUT CONFIGURATION:

EUT CONFIGURATION: with box										
F	Peak		Average				Antonno	Turn table	_	
Frequency,	Measured	Limit,	Margin,	Measured	Limit,	Margin,	Antenna	Antenna	Turn-table	Vordiat
MU-7	emission,		emission, polarizat	polarization	neight,	dogroos	verdict			
MH2 dB(μV/m) dB(μV/m) dB* dB(μV/m) dB*							uegrees			
No emissions were found								Pass		



Test specification:	Section 15.109, Radiated emission							
Test procedure:	ANSI C63.4, Sections 11.6 and 12.1.4							
Test mode:	Compliance	Vardiate	DAGG					
Date(s):	07-Apr-21	verdict.	FA33					
Temperature: 24 °C	Relative Humidity: 48 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz					
Remarks:								

Table 10.1.3 Radiated emission test results

EUT SET UP: LIMIT: EUT OPERATING MODE: TEST SITE: TEST DISTANCE: DETECTORS USED: FREQUENCY RANGE: **RESOLUTION BANDWIDTH:** TABLE-TOP Class B Receive SEMI ANECHOIC CHAMBER 3 m PEAK / QUASI-PEAK 30 MHz – 1000 MHz 120 kHz

EUT CONFIGURATION:

without box

	Poak		Quasi-peak			Antonno	Turn-table	
Frequency, MHz	emission, dB(μV/m)	Measured emission, dB(μV/m)	Limit, dB(µV/m)	Margin, dB*	Antenna polarization	height, m	position**, degrees	Verdict
35.989676	42.96	34.54	40.0	-5.46	Vertical	1.04	114	
98.482126	33.23	26.99	43.5	-16.51	Vertical	1.02	284	
374.991667	40.34	37.70	46.0	-8.30	Horizontal	1.02	13	
449.983667	39.90	37.93	46.0	-8.07	Horizontal	1.02	80	
499.991500	47.49	45.85	46.0	-0.15	Horizontal	1.00	307	Pass
524.986625	40.32	38.10	46.0	-7.90	Vertical	1.02	150	
549.967915	41.26	39.40	46.0	-6.60	Vertical	1.02	173	
874.982081	40.73	37.42	46.0	-8.58	Horizontal	1.02	180	
999.980000	50.68	48.85	54.0	-5.15	Vertical	1.02	203	

*- Margin = Measured emission - specification limit.

**- EUT front panel refer to 0 degrees position of turntable.

TEST SITE: TEST DISTANCE: DETECTORS USED: FREQUENCY RANGE: **RESOLUTION BANDWIDTH:** SEMI ANECHOIC CHAMBER 3 m PEAK / AVERAGE 1000 MHz - 18000 MHz 1000 kHz

EUT CONFIGURATION:

EUT CONFIGURATION: without without a second					out box						
	Fraguanay	Peak		Average				Antonno	Turn toblo		
	Frequency,	Measured	Limit,	Margin,	Measured	Limit,	Margin,	Antenna Antenna		nosition**	Vordict
	MH7	emission,			emission,			polarization	m m	degrees	veruici
	$dB(\mu V/m) dB(\mu V/m) dB^* dB(\mu V/m) dB^* dB(\mu V/m) dB(\mu V/m) dB^*$							111	uegrees		
	No emissions were found								Pass		

*- Margin = Measured emission - specification limit.

**- EUT front panel refer to 0 degrees position of turntable.

Reference numbers of test equipment used

	HL 3903	HL 4360	HL 4933	HL 4956	HL 5288	HL 5085	HL 5112	HL 5902
F	ull description is	given in Appen	dix A.					



Test specification:	Section 15.109, Radiated emission							
Test procedure:	ANSI C63.4, Sections 11.6 and 12.1.4							
Test mode:	Compliance							
Date(s):	07-Apr-21	verdict.	FA33					
Temperature: 24 °C	Relative Humidity: 48 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz					
Remarks:								

Plot 10.1.1 Radiated emission measurements in 30 - 1000 MHz range, vertical and horizontal antenna polarization



Plot 10.1.2 Radiated emission measurements in 30 - 1000 MHz range, vertical and horizontal antenna polarization



Test specification:	Section 15.109, Radiated emission							
Test procedure:	ANSI C63.4, Sections 11.6 and 12.1.4							
Test mode:	Compliance	Vardiate	DAGG					
Date(s):	07-Apr-21	verdict.	FA33					
Temperature: 24 °C	Relative Humidity: 48 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz					
Remarks:								

Plot 10.1.3 Radiated emission measurements in 1000 - 18000 MHz range, vertical and horizontal antenna polarization

TEST SITE: LIMIT: TEST DISTANCE: EUT OPERATING MODE: EUT CONFIGURATION: Semi anechoic chamber Class B 3 m Receive with box







Semi anechoic chamber Class B 3 m Receive without box





Test specification:	FCC section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC section 15.407(a)(4); KDB 789033, ANSI C63.10, section 12.3.3			
Test mode:	Compliance			
Date(s):	07-Apr-21 - 20-May-21	verdict: PASS		
Temperature: 23 °C	Relative Humidity: 47 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				

11 Transmitter tests according to 47CFR part 15 subpart E requirements

11.1 Peak output power

11.1.1 General

This test was performed to measure the maximum peak output power at the transmitter RF antenna connector. Specification test limits are given in Table 11.1.1.

Table 11.1.1 Peak output power limits

Assigned frequency range, MHz	Maximum peak transmit power	Used limit*, dBm
5150 - 5250	The lesser of 250 mW (24 dBm) or 11 dBm +10 log B	24
5725 - 5825	The lesser of 1 W (30 dBm) or 17 dBm +10 log B	30

*The maximum 26-dB emission bandwidth is B MHz, the limit is equal to:

11 dBm + 10 log B = $\mathbf{A} \mathbf{dBm}$ (less than 250 mW = 24 dBm);

Note: If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power limit shall be reduced below the stated value by the amount in dB that the directional gain of antenna exceeds 6 dBi.

11.1.2 Test procedure

11.1.2.1 The EUT was set up as shown in Figure 11.1.1, energized and its proper operation was checked.

- 11.1.2.2 The EUT was adjusted to produce maximum available for end user RF output power.
- **11.1.2.3** The measurements were performed in continuous transmission mode of operation for carrier (channel) frequency at low, mid and high edges with a peak detector. The power was computed by integrating the spectrum across the 26 dB bandwidth of the signal as provided in the associated tables and plots.

Figure 11.1.1 Peak output power test setup





Test specification:	FCC section 15.407(a)(1-3), Peak output power				
Test procedure:	FCC section 15.407(a)(4); KDB 789033, ANSI C63.10, section 12.3.3				
Test mode:	Compliance	Vardiat: DASS			
Date(s):	07-Apr-21 - 20-May-21	verdict: PASS			
Temperature: 23 °C	Relative Humidity: 47 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz		
Remarks:					

Table 11.1.2 Peak output power test results

ASSIGNED FREQUENCY RANGE: DETECTOR USED: METHOD OF POWER MEASUREMENTS: RESOLUTION BANDWIDTH: VIDEO BANDWIDTH: 5150.0 – 5250.0 MHz / 5725.0 – 5850.0 MHz Peak 1 (channel power across the 26 dB EBW) 1 MHz

3 MHz

CHANNEL BANDWIDTH:		20 MHz		
Carrier frequency, MHz	Peak output power, dBm	Limit, dBm	Margin*, dB	Verdict
Modulation: 256QAM				
5180.0	6.29	24.0	-17.71	Pass
5200.0	6.93	24.0	-17.07	Pass
5220.0	6.26	24.0	-17.74	Pass
Modulation: 256QAM				
5745.0	6.80	30.0	-23.20	Pass
5785.0	5.74	30.0	-24.26	Pass
5825.0	4.42	30.0	-25.58	Pass

CHANNEL BANDWIDTH:	40 MHz						
Carrier frequency, MHz	Peak output power, dBm	Peak output power, dBm Limit, dBm Margin*, dB Verdict					
Modulation: 256QAM							
5190.0	2.42	24.0	-21.58	Pass			
5230.0	1.49	24.0	-22.51	Pass			
Modulation: 256QAM							
5755.0	2.48	30.0	-27.52	Pass			
5795.0	1.21	30.0	-28.79	Pass			

CHANNEL BANDWIDTH:		80 MHz		
Carrier frequency, MHz	Peak output power, dBm	Limit, dBm	Margin*, dB	Verdict
Modulation: 256QAM				
5210.0	1.60	24.0	-22.40	Pass
Modulation: 256QAM				
5775.0	1.61	30.0	-28.39	Pass
* Marsin Deals autout nou	ver limit			

* - Margin = Peak output power –limit.

Reference numbers of test equipment used

HL 4355	HL 3903	HL 5902	HL 4933	HL 3442		



Test specification:	FCC section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC section 15.407(a)(4); KDB 789033, ANSI C63.10, section 12.3.3			
Test mode:	Compliance	- Verdict: PASS		
Date(s):	07-Apr-21 - 20-May-21			
Temperature: 23 °C	Relative Humidity: 47 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				

Plot 11.1.1 Peak output power at low carrier frequency test results

Frequency: Channel BW: Modulation para	ameters:	51 20 25	80 MHz MHz 66 QAM		
Spectrum Spec Ref Level 120.00 dBuy	ctrum 2 X Si	oectrum 3 (Spectrum 4	X	
Att 20 TDF IPk Max	dB SWT 1 m	s 👄 VBW 3 MHz	Mode Sweep		
110 dBuV/m			M1[1]	102. 5.1	.57 dBµV/m 791610 GHz
100 dBµV/m		M1	www.extraconstructure		
90 dBµV/m			×	W.	
80 dBµV/m				- Andrews	
60 dBµV/m					and from the second
50 dBµV/m					
40 dBµV/m					
30 dBµV/m					
CF 5.18 GHz		1001 pts		Spar	n 40.0 MHz
Bandwidth 20.0	0 MHz	Power -66.7	2 dBm/Hz	Tx Total 6.29 d	lBm

Plot 11.1.2 Peak output power at mid frequency test results

Frequency: Channel BW: Modulation paramete Input voltage:	5200 MHz 20 MHz ters: 256 QAM		
Spectrum 2 Ref Level 120.00 dBµV/m Offs Att 20 dB SW TDF 10F	X Spectrum 3 X ret 20.00 dB • RBW 1 MHz Ims I ms • VBW 3 MHz Ims	Spectrum 4 🗙	
		M1[1]	102.75 dBµV/m
110 dBµV/m	M1		5.1985610 GHz
100 dBµV/m	TX1	- manual y	
90 dBµV/m			
80 dBµV/m			
17000000000000000000000000			Junite manor province be
60 dBµV/m			
50 dBµV/m			
40 dBµV/m			
30 dBµV/m			
CF 5.2 GHz	1001 pts		Span 40.0 MHz
Channel Power Bandwidth 20.00 MHz	Power -66.08 c	lBm/Hz Tx T	otal 6.93 dBm



Test specification:	FCC section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC section 15.407(a)(4); KDB 789033, ANSI C63.10, section 12.3.3			
Test mode:	Compliance			
Date(s):	07-Apr-21 - 20-May-21	Verdict: PASS		
Temperature: 23 °C	Relative Humidity: 47 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				

Plot 11.1.3 Peak output power at high frequency test results

Frequency: Channel BW: Modulation param Input voltage:	ieters:	5220 MHz 20 MHz 256 QAM	
Spectrum Spectru Ref Level 120.00 dBµV/m Att 20 dB TDF TDF	M 2 X Spectrum 3 Offset 20.00 dB RBW 1 SWT 1 ms VBW 3	MHz MHz Mode Sweep	X
TPK Max		M1[1]	102.47 dBµV/m
110 dBµV/m	M1		5.2183620 GHz
100 dBµV/m	Junton marine Starting	and an and a second	
90 dBµV/m	<u>/</u>	\	
80 dBµV/m			<u>\</u>
200 al Ball from and the part of the			Mark And the all and the second start of the second
60 dBµV/m-			
50 dBµV/m-			
40 dBµV/m			
30 dBµV/m			
CF 5.22 GHz	1001	pts	Span 40.0 MHz
Channel Power Bandwidth 20.00 M	Hz Power -	66.75 dBm/Hz	Tx Total 6.26 dBm



Test specification:	FCC section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC section 15.407(a)(4); KDB 789033, ANSI C63.10, section 12.3.3			
Test mode:	Compliance	- Verdict: PASS		
Date(s):	07-Apr-21 - 20-May-21			
Temperature: 23 °C	Relative Humidity: 47 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				

Plot 11.1.4 Peak output power at low carrier frequency test results

Frequency: Channel BW: Modulation parameters Input voltage:	5745 MHz 20 MHz : 256 QAM	
Spectrum Spectrum 2	Spectrum 3 Spectrum 4	× The second sec
Ref Level 120.00 dBµV/m Offset Att 20 dB SWT TDF 0 10k May	20.00 dB • RBW 1 MHz 1 ms • VBW 3 MHz Mode Sweep	
THK MAX	M1[1]	103.58 dBµV/m 5.7442410 GHz
110 dBµV/m	M1	
100 dBµV/m	were much the country of the second of the s	
90 dBµV/m		
80 dBµV/m		N.
the dependence have been and a second		Wartshalesbarthale evenden ware
60 dBµV/m		
50 dBµV/m		
40 dBµV/m		
30 dBµV/m-		
CF 5.745 GHz	1001 pts	Span 40.0 MHz
Channel Power Bandwidth 20.00 MHz	Power -66.21 dBm/Hz 1	x Total 6.80 dBm

Plot 11.1.5 Peak output power at mid frequency test results

Frequency: Channel BW: Modulation parameters: Input voltage:	57 20 25	85 MHz MHz 6 QAM	
Spectrum 2	Spectrum 3	Spectrum 4	X T
Ref Level 120.00 dBµV/m Offset 20 Att 20 dB SWT TDF	0.00 dB ● RBW 1 MHz 1 ms ● VBW 3 MHz	Mode Sweep	
e1Pk Max		M1[1]	101.95 dBuV/m
110 dBu//m			5.7842010 GHz
	M1		
100 dBµV/m	and the second states and the second	a control of the second states	
90 dBµV/m			
80 dBµV/m			
ovietuval uhuluguvitut			Martin attal warman and
60 dBµV/m			
50 dBµV/m			
40 dBµV/m-			
30 dBµV/m			
CF 5.785 GHz	1001 pts		Span 40.0 MHz
Channel Power			
Bandwidth 20.00 MHz	Power -67.2	7 dBm/Hz T	x Total 5.74 dBm



Test specification:	FCC section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC section 15.407(a)(4); KDB 789033, ANSI C63.10, section 12.3.3			
Test mode:	Compliance	Verdict: PASS		
Date(s):	07-Apr-21 - 20-May-21			
Temperature: 23 °C	Relative Humidity: 47 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				

Plot 11.1.6 Peak output power at high frequency test results

Frequency: Channel BW: Modulation parameters: Input voltage:	5825 MHz 20 MHz 256 QAM	
Spectrum Spectrum 2	× Spectrum 3 × Spectrum 4	X V
Ref Level 120.00 dBµ∀/m Offset 2 Att 20 dB SWT TDF 5 SWT SWT	0.00 dB ● RBW 1 MHz 1 ms ● VBW 3 MHz Mode Sweep	
●1Pk Max	M1[1]	101.00 dBµV/m
110 dBµV/m		5.8240810 GHz
100 dBµV/m	M1	
90 dBµV/m	~ ~ ~	
80 dBµV/m		2
.70.66.00000000000000000000000000000000		"Ulifertatuletudetudetatuationali
60 dBµV/m		
50 dBµV/m		
40 dBµV/m		
30 dBµV/m-		
CF 5.825 GHz	1001 pts	Span 40.0 MHz
Channel Power Bandwidth 20.00 MHz	Power -68.59 dBm/Hz 1	Tx Total 4.42 dBm



Test specification:	FCC section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC section 15.407(a)(4); KDB 789033, ANSI C63.10, section 12.3.3			
Test mode:	Compliance	- Verdict: PASS		
Date(s):	07-Apr-21 - 20-May-21			
Temperature: 23 °C	Relative Humidity: 47 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				

Plot 11.1.7 Peak output power at low carrier frequency test results

Frequency:	5190 MHz	
Channel BW:	40 MHz	
Modulation parameter	ers: 256 QAM	
Input voltage:		_
Spectrum Spectrum 2	Spectrum 3 Spectrum 4 X	[₩
Ref Level 120.00 dBµV/m Off → Att 20 dB SW TDF	set 20.00 dB ● RBW 1 MHz T 1 ms ● VBW 3 MHz Mode Sweep	
●1Pk Max		
	M1[1] 96.25 5.195	i dBµV/m 2750 GHz
110 dBµV/m		
100 dBµV/m		
۵0 dBµV/m	dementation of the second s	
80 dBµV/m		
70 dBu)//m		
C. H. H. B. L. H. L. L. H. L. L. H. L.	WARD - Jost Jack - Market Market	and second fills
60 dBµV/m		
50 dBµV/m		
40 dBµV/m		
30 dBµV/m		
CF 5.19 GHz	1001 pts Span 8	0.0 MHz
Bandwidth 40.00 MHz	Power -73.61 dBm/Hz Tx Total 2.42 dB	m

Plot 11.1.8 Peak output power at high frequency test results

Frequency: Channel BW: Modulation param	neters:	5230 40 MH 256 Q	MHz Hz IAM	
Grastrum Grastrum				
Spectrum Spectru	offert 88 88 dB		pectrum 4 (*	
Att 20 dB TDF	SWT 1 ms e	VBW 3 MHz Mod	le Sweep	
●1Pk Max				
		M1	[1]	95.28 dBµV/m
110 dBµV/m				5.2220070 GHz
100 dBµV/m	MI	T2 1		
90 dBµV/m	- Antipartine and the second s	warman phono mus	aternetwork	
80 dBµV/m				
.ZQ.dBUWMDortyAparto date to				Martinan Hunder and Martine and Ma
60 dBµV/m				
50 dBµV/m				
40 dBµV/m				
30 dBµV/m				
CF 5.23 GHz		1001 pts		Span 80.0 MHz
Channel Power		•		
Bandwidth 40.00 M	Hz P	ower -74.53 dBr	m/Hz Tx	Total 1.49 dBm



Test specification:	FCC section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC section 15.407(a)(4); KDB 789033, ANSI C63.10, section 12.3.3			
Test mode:	Compliance	- Verdict: PASS		
Date(s):	07-Apr-21 - 20-May-21			
Temperature: 23 °C	Relative Humidity: 47 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				

Plot 11.1.9 Peak output power at low carrier frequency test results

Frequency:	5755 MHz	
Modulation parameters:	256 QAM	
Input voltage:		
Spectrum Spectrum 2	x) Spectrum 3 (X) Spectrum 4 (∑ (₩
Ref Level 120.00 dBµV/m Offset 2 ■ Att 20 dB SWT TDF	0.00 dB • RBW 1 MHz 1 ms • VBW 3 MHz Mode Sweep	X X
●1Pk Max		
	M1[1]	95.81 dBµV/m 5.7602750 GHz
110 dBµV/m-		
100 dBµV/m	T 1 M1	
90 dBµV/m	and a second to a second the second second	
80 dBµV/m		
P76 1881 Wm Lander service and roter of		Law and a second s
60 dBµV/m		
50 dBµV/m		
40 dBµV/m		
30 dBµV/m		
CE 5 755 CHz	1001 pts	Span 80.0 MHz
Channel Power	1001 pcs	apan oo.0 MHz
Bandwidth 40.00 MHz	Power -73.55 dBm/Hz T	(Total 2.48 dBm

Plot 11.1.10 Peak output power at high frequency test results

Frequency: Channel BW:	579 40	95 MHz MHz	
Input voltage:	256	QAM	_
Spectrum Spectrum 2	Spectrum 3 🛛 🕅	Spectrum 4	×) (🖓
RefLevel 120.00 dBµV/m Offset 20 Att 20 dB SWT TDF	0.00 dB 👄 RBW 1 MHz 1 ms 👄 VBW 3 MHz	Mode Sweep	
●1Pk Max			04.05 d0.00 (m
		WILI	5.8002750 GHz
110 dBµV/m			
100 dBµV/m	T.1 M	1	
90 dBµV/m	manuful and manuful	and the liter and an and a star a	
80 dBµV/m			
maildefroyth when and hand ment			hand an internal and the second second second second
60 dBµV/m			
50 dBµV/m			
40 dBµV/m			
30 dBµV/m			
CF 5.795 GHz	1001 pts		Span 80.0 MHz
Channel Power			
Bandwidth 40.00 MHz	Power -74.81	dBm/Hz Tx	Total 1.21 dBm



Test specification:	FCC section 15.407(a)(1-3), Peak output power			
Test procedure:	FCC section 15.407(a)(4); KDB 789033, ANSI C63.10, section 12.3.3			
Test mode:	Compliance	- Verdict: PASS		
Date(s):	07-Apr-21 - 20-May-21			
Temperature: 23 °C	Relative Humidity: 47 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				

Plot 11.1.11 Peak output power at low carrier frequency test results

Frequency: Channel BW: Modulation para	meters:	5 8 2	210 MHz 0 MHz 56 QAM			
Input voltage:		_				
Spectrum Spect	rum 2 🛛 🗙 S	pectrum 3	Spectrum 4	×		
Ref Level 120.00 dBµV/r ■ Att 20 d TDF	n Offset 20.00 d B SWT 1 m	B 👄 RBW 1 MH s 👄 VBW 3 MH	z z Mode Sweep			
⊜1Pk Max						
			M1[1]		92.8	38 dBµV/m
110 dBµV/m					0.2	10170 0112
100 dBµV/m		Τ21	M1			
90 dBµV/m		an month of the second	with march and the particular	why		
80 dBµV/m						
and all the standard and the second	₩			booting	and a had the	itadorady proves
60 dBµV/m						
50 dBµV/m						
40 dBµV/m						
30 dBµV/m						
CF 5.21 GHz		1001 pts			Span 1	.60.0 MHz
Channel Power Bandwidth 80.00	MHz	Power -77	.43 dBm/Hz	Tx Tot	al 1.60 di	Bm

Plot 11.1.12 Peak output power at low carrier frequency test results

Frequency: Channel BW: Modulation para Input voltage:	meters:	57 80 25	75 MHz MHz 6 QAM	
Spectrum Spectr	um 2 🛛 🔊 Sp	ectrum 3	Spectrum 4	× The second sec
RefLevel 120.00 dBµV/m ■ Att 20 dB TDF	n Offset 20.00 dB 3 SWT 1 ms	 RBW 1 MHz VBW 3 MHz 	Mode Sweep	
⊖1Pk Max				
			M1[1]	92.86 dBµV/m
110 dBμV/m				3.740390 GHz
100 dBµV/m	M1	T2 1		
90 dBµV/m	ugwitherward	Wildren Lokay pro well	and the second burley	
80 dBµV/m			',	
v7@http://www.chias.com.uchias.co	v			Allow apprend to the second and the second s
60 dBµV/m				
50 dBµV/m				
40 dBµV/m				
30 dBµV/m				
CF 5.775 GHz		1001 pts		Span 160.0 MHz
Channel Power Bandwidth 80.00	MHz	Power -77.4	2 dBm/Hz	[x Total 1.61 dBm
		, , , , , , , , , , , , , , ,		



Test specification:	FCC section 15.407(b)1, Field strength of undesirable emissions			
Test procedure:	KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7			
Test mode:	Compliance	Vardiat: DACC		
Date(s):	07-Apr-21 - 20-May-21	verdict.	FA33	
Temperature: 25 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				

11.2 Field strength of undesirable emissions at 5150 – 5250 MHz range

11.2.1 General

This test was performed to measure field strength of spurious emissions from the EUT. Specification test limits are given in Table 11.2.2. Table 12.2.2

Table 11.2.1 Unwanted emissions limits below 1 GHz and within restricted bands above 1 GHz

	Field strength at 3 m, dB(µV/m)*				
Frequency, MHZ	Peak	Quasi Peak	Average		
0.009 - 0.090	148.5 – 128.5	NA	128.5 - 108.5**		
0.090 - 0.110	NA	108.5 - 106.8**	NA		
0.110 - 0.490	126.8 – 113.8	NA	106.8 - 93.8**		
0.490 – 1.705		73.8 - 63.0**			
1.705 - 30.0*		69.5			
30 – 88	NIA	40.0	NIA		
88 – 216	NA	43.5	NA NA		
216 – 960		46.0			
960 - 1000		54.0			
1000 - 40000	74.0	NA	54.0		

*- The limit for 3 m test distance was calculated using the inverse square distance extrapolation factor as follows: $Lim_{S2} = Lim_{S1} + 40 \log (S_1/S_2),$

where S_1 and S_2 – standard defined and test distance respectively in meters.

**- The limit decreases linearly with the logarithm of frequency.

Table 11.2.2 EIRP of undesirable emission limits outside restricted bands (above 1 GHz)

Operating frequency band, GHz	EIRP of spurious, dBm/MHz	Field strength at 3 m, dB(μV/m)
5150 - 5250	-27	68.23
5250 - 5350	-27	68.23
5.47 - 5.725	-27	68.23
5725 - 5825	-27 (below 5.715 GHz and above 5.835 GHz) -17 (in 5.715 - 5.725 GHz and 5.825 - 5.835 GHz)	68.23 78.23



Test specification:	FCC section 15.407(b)1, Field strength of undesirable emissions				
Test procedure:	KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7				
Test mode:	Compliance	Vardiate	DAGG		
Date(s):	07-Apr-21 - 20-May-21	verdict.	FA33		
Temperature: 25 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz		
Remarks:					

11.2.2 Test procedure for spurious emission field strength measurements in 9 kHz to 30 MHz band

11.2.2.1 The EUT was set up as shown in Figure 11.2.1 energized and the performance check was conducted.

- **11.2.2.2** The specified frequency range was investigated with antenna connected to spectrum analyzer/ EMI receiver. To find maximum radiation the turntable was rotated 360⁰ and the measuring antenna was rotated around its vertical axis.
- 11.2.2.3 The worst test results (the lowest margins) were recorded and shown in the associated plots.

11.2.3 Test procedure for spurious emission field strength measurements above 30 MHz

- **11.2.3.1** The EUT was set up as shown in Figure 11.2.2 and Figure 11.2.3, energized and the performance check was conducted.
- **11.2.3.2** The specified frequency range was investigated with antenna connected to spectrum analyzer/ EMI receiver. To find maximum radiation the turntable was rotated 360[°], the measuring antenna height was changed from 1 to 4 m, its polarization was switched from vertical to horizontal.
- 11.2.3.3 The worst test results (the lowest margins) were recorded and shown in the associated plots.

Figure 11.2.1 Setup for spurious emission field strength measurements below 30 MHz





Test specification:	FCC section 15.407(b)1, Field strength of undesirable emissions			
Test procedure:	KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7			
Test mode:	Compliance	Vardiate	DAGG	
Date(s):	07-Apr-21 - 20-May-21	verdict:	PA33	
Temperature: 25 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				

Figure 11.2.2 Setup for spurious emission field strength measurements from 30 to 1000 MHz



Figure 11.2.3 Setup for spurious emission field strength measurements above1000 MHz



Turn-table

position**,

Verdict



Test specification:	FCC section 15.407(b)1, Field strength of undesirable emissions				
Test procedure:	KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7				
Test mode:	Compliance	Vardiate	DAGG		
Date(s):	07-Apr-21 - 20-May-21	verdict.	FA33		
Temperature: 25 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz		
Remarks:					

Table 11.2.3 Field strength of spurious emissions below 1 GHz

ASSIGNED FREQUENCY BAND: INVESTIGATED FREQUENCY RANGE: TEST DISTANCE: MODULATION: TRANSMITTER OUTPUT POWER: RESOLUTION BANDWIDTH:

VIDEO BANDWIDTH:

5150 – 5250 MHz 0.009 – 1000 MHz 3 m 256QAM Maximum 1 kHz (9 kHz – 150 kHz) 9.0 kHz (150 kHz – 30 MHz) 120 kHz (30 MHz – 1000 MHz) > Resolution bandwidth Active loop (9 kHz – 30 MHz) Biconilog (30 MHz – 1000 MHz)

Antenna

polarization

Antenna

height, m

TEST ANTE	NNA TYPE:				
	Peak	Qua	isi-peak		
requency, MH	emission,	Measured emission,	Limit,		
	dB(µV/m)	dB(µV/m)	dB(µV/m)		
Low carrier frequency 5180 MHz					
120 015262	41.09	20.40	12 50		

	dB(µV/m)	dB(µV/m)	dB(µV/m)	Margin, ub	polarization	neight, m	degrees	
Low carrier frequency 5180 MHz								
120.015262	41.08	39.49	43.50	-4.01	V	1.00	-88	Page
960.092994	41.40	38.32	54.00	-15.68	Н	1.00	180	F 855
Mid carrier frequency 5205 MHz								
120.014839	41.08	39.15	43.50	-4.35	V	1.00	-79	Page
960.093712	41.40	38.21	54.00	-15.79	Н	1.00	186	F 855
High carrier frequency 5230 MHz								
120.013654	41.08	39.29	43.50	-4.21	V	1.00	-94	Boos
960.094563	41.40	38.41	54.00	-15.59	Н	1.00	175	F 855

Margin, dB*

*- Margin = Measured emission - specification limit.

**- EUT front panel refer to 0 degrees position of turntable.

Reference numbers of test equipment used

HL 4360	HL 3903	HL 446	HL 5288	HL 5085	HL 5902		



Test specification:	FCC section 15.407(b)1, Field strength of undesirable emissions			
Test procedure:	KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7			
Test mode:	Compliance			
Date(s):	07-Apr-21 - 20-May-21	verdict.	FA33	
Temperature: 25 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				

Table 11.2.4 Field strength of emissions outside restricted bands

ASSIGNED FREQUENCY BAND: INVESTIGATED FREQUENCY RANGE: TEST DISTANCE: MODULATION: TRANSMITTER OUTPUT POWER: DETECTOR: USED: RESOLUTION BANDWIDTH: TEST ANTENNA TYPE:			5150 – 5250 MHz 0.009 – 40 GHz 3 m 256QAM Maximum Peak 1000 kHz Biconilog (30 MHz – Double ridged guide	1000 MHz) (above 1000 M	Hz)		
Frequency, MHz	Antenna polarization	Antenna height, m	Azimuth, degrees*	Field strength of spurious, dB(μV/m)	Limit, dBµV/m	Margin, dB**	Verdict
Low carrier fr	equency 5180 M	lHz					
		All emissions	are more than 20	dB below the limit			Pass
Mid carrier fre	equency 5205 M	Hz					
All emissions are more than 20 dB below the limit							Pass
High carrier f	requency 5230 M	/Hz					
		All emissions a	are more than 20	dB below the limit			Pass

*- EUT front panel refers to 0 degrees position of turntable. **- Margin = Measured emission - specification limit.

Reference numbers of test equipment used

HL 4360	HL 3903	HL 4933	HL 446	HL 4956	HL 5288	HL 5085	HL 5112
HL 5902	HL 4378	HL 5286					



Test specification:	FCC section 15.407(b)1, Field strength of undesirable emissions				
Test procedure:	KDB 789033, ANSI C63.10, see	033, ANSI C63.10, section 12.7.6 & 12.7.7			
Test mode:	Compliance				
Date(s):	07-Apr-21 - 20-May-21	verdict.	FA33		
Temperature: 25 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa Power: 230 VAC, 50 H			
Remarks:					

Table 11.2.5 Field strength of spurious emissions above 1 GHz within restricted bands

ASSIGNE INVESTIO TEST DIS MODULA DUTY CY TRANSMI DETECTO RESOLUT TEST AN	D FREQUENCY: GATED FREQUEN TANCE: TION: CLE: TTER OUTPUT P OR USED: FION BANDWIDTH TENNA TYPE:	CY RANGE OWER: I :		5 1 3 2 1 M P 1 2	150 – 529 000 - 400 56QAM 00 % Maximum Peak 000 kHz Double ridg	50 MHz 000 MHz ged guide				
Frequency, MHz	Antenna Polarization Heigh	Azimuth, degrees*	Peak field s Measured, dB(μV/m)	trength(VB Limit, dB(μV/m)	W=3 MHz) Margin, dB**	Average Measured, dB(μV/m)	e field streng Calculated, dB(μV/m)	gth(VBW=1 Limit, dB(μV/m)	kHz) Margin, dB***	Verdict
Low carrie	r frequency 5180 M	Hz								
		All emi	ssions are m	ore than 20	dB below t	the limit				Pass
Mid carrier	frequency 5205 MH	lz								
All emissions are more than 20 dB below the limit P					Pass					
High carrie	r frequency 5230 M	Hz								
		All emi	ssions are m	ore than 20	dB below t	the limit				Pass

*- EUT front panel refers to 0 degrees position of turntable.

** - Margin, dB = Measured, dB(μ V/m) – Limit, dB(μ V/m)

*** - Margin, dB = Calculated, dB(μ V/m) – Limit, dB(μ V/m)

Reference numbers of test equipment used

HL 4360	HL 3903	HL 4933	HL 5286	HL 4956	HL 5288	HL 5085	HL 5112
HL 5902	HL 4378						



Test specification:	FCC section 15.407(b)1, Field strength of undesirable emissions				
Test procedure:	KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7				
Test mode:	Compliance	- Verdict: PASS			
Date(s):	07-Apr-21 - 20-May-21				
Temperature: 25 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz		
Remarks:					

Table 11.2.6 Restricted bands according to FCC section 15.205

MHz	MHz	MHz	MHz	MHz	GHz
0.09 - 0.11	8.37625 - 8.38675	73 - 74.6	399.9 - 410	2690 - 2900	10.6 - 12.7
0.495 - 0.505	8.41425 - 8.41475	74.8 - 75.2	608 - 614	3260 - 3267	13.25 - 13.4
2.1735 - 2.1905	12.29 - 12.293	108 - 121.94	960 - 1240	3332 - 3339	14.47 - 14.5
4.125 - 4.128	12.51975 - 12.52025	123 - 138	1300 - 1427	3345.8 - 3358	15.35 - 16.2
4.17725 - 4.17775	12.57675 - 12.57725	149.9 - 150.05	1435 - 1626.5	3600 - 4400	17.7 - 21.4
4.20725 - 4.20775	13.36 - 13.41	156.52475 - 156.52525	1645.5 - 1646.5	4500 - 5150	22.01 - 23.12
6.215 - 6.218	16.42 - 16.423	156.7 - 156.9	1660 - 1710	5350 - 5460	23.6 - 24
6.26775 - 6.26825	16.69475 - 16.69525	162.0125 - 167.17	1718.8 - 1722.2	7250 - 7750	31.2 - 31.8
6.31175 - 6.31225	16.80425 - 16.80475	167.72 - 173.2	2200 - 2300	8025 - 8500	36.43 - 36.5
8.291 - 8.294	25.5 - 25.67	240 - 285	2310 - 2390	9000 - 9200	Above 29.6
8.362 - 8.366	37.5 - 38.25	322 - 335.4	2483.5 - 2500	9300 - 9500	Above 38.6

Table 11.2.7 Restricted bands according to RSS-Gen

MHz	MHz	MHz	MHz	MHz	GHz
0.09 - 0.11	8.291 - 8.294	16.80425 - 16.80475	399.9 - 410	3260 - 3267	10.6 - 12.7
2.1735 - 2.1905	8.362 - 8.366	25.5 - 25.67	608 - 614	3332 - 3339	13.25 - 13.4
3.020 - 3.026	8.37625 - 8.38675	37.5 - 38.25	960 – 1427	3345.8 - 3358	14.47 – 14.5
4.125 - 4.128	8.41425 - 8.41475	73 - 74.6	1435 – 1626.5	3500 - 4400	15.35 – 16.2
4.17725 – 4.17775	12.29 – 12.293	74.8 - 75.2	1645.5 – 1646.5	4500 – 5150	17.7 – 21.4
4.20725 - 4.20775	12.51975 - 12.52025	108 – 138	1660 - 1710	5350 - 5460	22.01 – 23.12
5.677 - 5.683	12.57675 - 12.57725	156.52475 - 156.52525	1718.8 - 1722.2	7250 - 7750	23.6 - 24
6.215 - 6.218	13.36 – 13.41	156.7 - 156.9	2200 - 2300	8025 - 8500	31.2 - 31.8
6.26775 - 6.26825	16.42 - 16.423	240 - 285	2310 - 2390	9000 - 9200	36.43 - 36.5
6.31175 - 6.31225	16.69475 - 16.69525	322 - 335.4	2655 - 2900	9300 - 9500	Above 38.6



Test specification:	FCC section 15.407(b)1, Field strength of undesirable emissions					
Test procedure:	KDB 789033, ANSI C63.10, see	ection 12.7.6 & 12.7.7				
Test mode:	Compliance	- Verdict: PASS				
Date(s):	07-Apr-21 - 20-May-21					
Temperature: 25 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz			
Remarks:						











Test specification:	FCC section 15.407(b)1, Field strength of undesirable emissions					
Test procedure:	KDB 789033, ANSI C63.10, sec	789033, ANSI C63.10, section 12.7.6 & 12.7.7				
Test mode:	Compliance	Verdict: PASS				
Date(s):	07-Apr-21 - 20-May-21					
Temperature: 25 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz			
Remarks:						

Plot 11.2.3 Radiated emission measurements from 9 kHz to 30 MHz at the high carrier frequency





Test specification:	FCC section 15.407(b)1, Field strength of undesirable emissions					
Test procedure:	KDB 789033, ANSI C63.10, see	C63.10, section 12.7.6 & 12.7.7				
Test mode:	Compliance	Vardiate	DAGG			
Date(s):	07-Apr-21 - 20-May-21	verdict.	FA33			
Temperature: 25 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz			
Remarks:						

Plot 11.2.4 Radiated emission measurements from 30 MHz to 1000 MHz at the low carrier frequency







TEST SITE: Anechoic chamber 3 m



Test specification:	FCC section 15.407(b)1, Field strength of undesirable emissions					
Test procedure:	KDB 789033, ANSI C63.10, see	section 12.7.6 & 12.7.7				
Test mode:	Compliance	- Verdict: PASS				
Date(s):	07-Apr-21 - 20-May-21					
Temperature: 25 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz			
Remarks:						

Plot 11.2.6 Radiated emission measurements from 30 MHz to 1000 MHz at the high carrier frequency





Test specification:	FCC section 15.407(b)1, Field strength of undesirable emissions			
Test procedure:	KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7			
Test mode:	Compliance	Vardiate	DAGG	
Date(s):	07-Apr-21 - 20-May-21	verdict.	FA33	
Temperature: 25 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				

Plot 11.2.7 Radiated emission measurements from 1.0 to 18 GHz at the low carrier frequency





Test specification:	FCC section 15.407(b)1, Field strength of undesirable emissions			
Test procedure:	KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7			
Test mode:	Compliance	Vordiet: DASS		
Date(s):	07-Apr-21 - 20-May-21	verdict.	FA33	
Temperature: 25 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				





0↓

Frequency in MHz

Test specification:	FCC section 15.407(b)1, Field strength of undesirable emissions			
Test procedure:	KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7			
Test mode:	Compliance	Vardiate	DAGG	
Date(s):	07-Apr-21 - 20-May-21	verdict.	FA33	
Temperature: 25 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				

Plot 11.2.8 Radiated emission measurements from 1.0 to 18 GHz at the mid carrier frequency



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Test specification:	FCC section 15.407(b)1, Field strength of undesirable emissions			
Test procedure:	KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7			
Test mode:	Compliance	Vordiet: DASS		
Date(s):	07-Apr-21 - 20-May-21	verdict.	FA33	
Temperature: 25 °C	Relative Humidity: 49 %	Air Pressure: 1008 hPa	Power: 230 VAC, 50 Hz	
Remarks:				

