

Test specification:	FCC section 15.407(b), Conducted out of band emissions						
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7						
Test mode:	Compliance	Vardiate	DV66				
Date(s):	11-Feb-19	verdict.	FA33				
Temperature: 26 °C	Relative Humidity: 45 %	Air Pressure: 1020 hPa Power: 48 VDC					
Remarks:							

Plot 7.8.23 Conducted spurious emission measurements in the range 4.5 – 5.46 GHz CARRIER FREQUENCY 5788 MHz





ate: 12.FEB.2019 18:20:07

ate: 12.FEB.2019 18:14:37

Plot 7.8.24 Conducted spurious emission measurements in the range 5.46 – 5.725 GHz CARRIER FREQUENCY 5788 MHz



Date: 12.FEB.2019 18:18:53



Test specification:	FCC section 15.407(b), Conducted out of band emissions						
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7						
Test mode:	Compliance						
Date(s):	11-Feb-19	verdict: PASS					
Temperature: 26 °C	Relative Humidity: 45 %	Air Pressure: 1020 hPa	Power: 48 VDC				
Remarks:							

Plot 7.8.25 Conducted spurious emission measurements in the range 5.85 – 6.4 GHz CARRIER FREQUENCY 5788 MHz



Date: 12.FEB.2019 18:17:57



Test specification:	cation: FCC section 15.407(b), Conducted out of band emissions						
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7						
Test mode:	Compliance	Vardiate	DV66				
Date(s):	11-Feb-19	verdict.	FA33				
Temperature: 26 °C	Relative Humidity: 45 %	Air Pressure: 1020 hPa Power: 48 VDC					
Remarks:							

Plot 7.8.26 Conducted spurious emission measurements in the range 4.5 – 5.46 GHz CARRIER FREQUENCY 5840 MHz





ate: 12.FEB.2019 18:22:39

ate: 12.FEB.2019 18:26:08

Plot 7.8.27 Conducted spurious emission measurements in the range 5.46 – 5.725 GHzCARRIER FREQUENCY5840 MHzCHANNEL BANDWIDTH20 MHz



Date: 12.FEB.2019 18:35:11



Test specification: FCC section 15.407(b), Conducted out of band emissions							
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7						
Test mode:	Compliance	Vardiet: DASS					
Date(s):	11-Feb-19	Verdict: PASS					
Temperature: 26 °C	Relative Humidity: 45 %	Air Pressure: 1020 hPa Power: 48 VDC					
Remarks:							

Plot 7.8.28 Conducted spurious emission measurements in the range 5.85 – 6.4 GHz CARRIER FREQUENCY 5840 MHz





Date: 12.FEB.2019 18:34:02

te: 12.FEB.2019 18:32:33



Test specification:	FCC section 15.407(b), Conducted out of band emissions					
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7					
Test mode:	Compliance					
Date(s):	10-Feb-19	verdict: PASS				
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC			
Remarks:						

7.9 Conducted out of band emissions at 5150 – 5250 MHz range

7.9.1 General

This test was performed to measure spurious emissions from the EUT near the band edges and within the pass band of the antenna. Specification test limits are given in Table 7.9.1 & EIRP of undesirable emission limits are given in Table 7.9.2

	Table 7.9.1 Unwanted	emissions	limit within	restricted	bands above	1 GHz
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Frequency MHz	Field strength at	t 3 m, dB(µV/m)*	Equivalent EIRP*, dBm			
Frequency, Minz	Peak Average		Peak	Average		
1000 – 40000	74.0	54.0	-21.2	-41.2		

* Equivalent EIRP was calculated as follow: Field strength – 95.2

Table 7.9.2 EIRP of undesirable emission limits outside restricted bands above 1 GHz

Frequency, MHz	EIRP of spurious, dBm/MHz	
Outside 5150-5350 band	-27	

7.9.2 Test procedure

- **7.9.2.1** The EUT was set up as shown in Figure 7.9.1, energized and the performance check was conducted.
- 7.9.2.2 The EUT was adjusted to produce maximum available to end user RF output power at the lowest carrier frequency.
- **7.9.2.3** The spectrum analyzer span was set to capture the carrier frequency and associated modulation products. The resolution bandwidth was set to 1 MHz.
- **7.9.2.4** The spectrum analyzer was set in max hold mode and allowed trace to stabilize. The highest emission level within the authorized band was measured.
- **7.9.2.5** The maximum band edge emission and modulation product outside of the band were measured as provided in the associated tables and plots.
- **7.9.2.6** The above procedure was repeated with the EUT adjusted to produce maximum RF output power at the mid and highest carrier frequencies.
- 7.9.2.7 Test results are shown in the Table 7.9.3, Table 7.9.4, Table 7.9.5 and the associated plots.

Figure 7.9.1 Setup for conducted spurious emissions





Test specification:	FCC section 15.407(b), Conducted out of band emissions						
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7						
Test mode:	Compliance	Vardiate DASS					
Date(s):	10-Feb-19	verdict: PASS					
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC				
Remarks:							

Table 7.9.3 Conducted spurious emission within restricted band test results

ASSIGNED FREQUENCY RANGE: INVESTIGATED FREQUENCY RANGE: MODULATION: DETECTOR USED: RESOLUTION BANDWIDTH EUT CONFIGURATION: 5.15 – 5.25 GHz 4500 - 6400 MHz QPSK Peak 1000 kHz 1 carrier, 1 sector (4 ports to 2 dual slant antennas), noncoherent signal 10 MHz

CHANNE	L BANWIE	DTH:			10	MHz					
Frequency	Antonna	Antenna		Peak				Average	e		
MHz	gain, dBi	gain arrav* dB	SA reading,	EIRP**, dBm/MHz	Limit, dBm	Margin***,	SA reading,	EIRP**, dBm/MHz	Limit, dBm	Margin***,	Verdict
Low carrie	r frequen	cy	dBiii		<u>ubiii</u>	uD	dBill		UDIII	ub.	
5149.840	17.0	3.0	-49.25	-29.25	-21.2	-8.05	-65.09	-42.62	-41.2	-1.42	Pass
5497.599	17.0	3.0	-59.01	-39.01	-21.2	-17.81	-70.65	-48.18	-41.2	-6.98	Pass
Mid carrier	frequenc	;y									
4915.300	17.0	3.0	-50.88	-30.88	-21.2	-9.68	-64.42	-41.95	-41.2	-0.75	Pass
5406.539	17.0	3.0	-56.11	-36.11	-21.2	-14.91	-72.71	-50.24	-41.2	-9.04	Pass
High carrier frequency											
4915.300	17.0	3.0	-50.39	-30.39	-21.2	-9.19	-64.07	-41.60	-41.2	-0.40	Pass
5369.103	17.0	3.0	-50.38	-30.38	-21.2	-9.18	-69.60	-47.13	-41.2	-5.93	Pass

CHANNEL	BANWID	TH:			15 Mł	Ηz					
Fraguanay	Antonno	Antenna		Peak				Average	e		
MU-7	Antenna gain dRi	gain	SA reading,	EIRP**,	Limit,	Margin***,	SA reading,	EIRP**,	Limit,	Margin***,	Verdict
MITZ	gain, ubi	array*, dB	dBm	dBm/MHz	dBm	dB	dBm	dBm/MHz	dBm	dB	
Low carrie	r frequen	су									
5149.840	17.0	3.0	-48.43	-28.43	-21.2	-7.23	-63.79	-41.32	-41.2	-0.12	Pass
5391.367	17.0	3.0	-54.51	-34.51	-21.2	-13.31	-69.68	-47.21	-41.2	-6.01	Pass
Mid carrier	r frequenc	;y									
5115.080	17.0	3.0	-51.45	-31.45	-21.2	-10.25	-65.00	-42.53	-41.2	-1.33	Pass
5378.668	17.0	3.0	-50.01	-30.01	-21.2	-8.81	-71.38	-48.91	-41.2	-7.71	Pass
High carrier frequency											
4871.130	17.0	3.0	-53.12	-33.12	-21.2	-11.92	-64.31	-41.84	-41.2	-0.64	Pass
5419.843	17.0	3.0	-54.02	-34.02	-21.2	-12.82	-72.08	-49.61	-41.2	-8.41	Pass



Test specification:	FCC section 15.407(b), Conducted out of band emissions						
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7						
Test mode:	Compliance	Vordiot	DV66				
Date(s):	10-Feb-19	verdict: PASS					
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC				
Remarks:							

Table 7.9.3 Conducted spurious emission within restricted band test results

ASSIGNED FREQUENCY RANGE: INVESTIGATED FREQUENCY RANGE: MODULATION: DETECTOR USED: RESOLUTION BANDWIDTH EUT CONFIGURATION: 5.15 – 5.25 GHz 4500 - 6400 MHz QPSK Peak 1000 kHz 1 carrier 1 sector

1 carrier, 1 sector (4 ports to 2 dual slant antennas), noncoherent signal

CHANNEL BANWIDTH:

20 MHz

		Antonna		Peak				Average	e		
Frequency, MHz	Antenna gain, dBi	gain array*, dB	SA reading, dBm	Peak EIRP**, dBm/MHz	Limit, dBm	Margin***, dB	SA reading, dBm	Average EIRP****, dBm/MHz	Limit, dBm	Margin***, dB	Verdict
Low carrie	r frequen	су									
5149.190	17.0	3.0	-46.18	-26.18	-21.2	-4.98	-63.72	-41.25	-41.2	-0.05	Pass
5406.869	17.0	3.0	-52.12	-32.12	-21.2	-10.92	-66.05	-43.58	-41.2	-2.38	Pass
Mid carrier	frequence	;y									
4915.300	17.0	3.0	-56.23	-36.23	-21.2	-15.03	-64.09	-41.62	-41.2	-0.42	Pass
5406.759	17.0	3.0	-57.64	-37.64	-21.2	-16.44	-72.06	-49.59	-41.2	-8.39	Pass
High carrie	er frequen	су									
4915.300	17.0	3.0	-54.79	-34.79	-21.2	-13.59	-63.87	-41.40	-41.2	-0.20	Pass
5406.869	17.0	3.0	-58.11	-38.11	-21.2	-16.91	-71.25	-48.78	-41.2	-7.58	Pass

* - Antenna gain array = 10log(Nant), where Nant = 2 (two cross-polarized antennas with non-coherent signals)

** - Peak EIRP = SA reading + Antenna gain + Antenna gain array

*** - Margin = EIRP - specified limit.

**** - Average EIRP = SA reading + Antenna gain + Antenna gain array + Duty cycle factor

Table 7.9.4 Duty cycle factor calculation

2.83 5.00 0.566 2.47	Burst dration, ms	Burst period, ms	Duty cycle*	Duty cycle factor**, dB
	2.83	5.00	0.566	2.47

*- Duty cycle = Burst duration / Burst period

** - Duty cycle factor = 10log(1/Duty cycle)



Test specification:	FCC section 15.407(b), Con	ducted out of band emission	ons
Test procedure:	KDB 662911; KDB 789033, ANS	I C63.10, section 12.7.6 & 12.7.	.7
Test mode:	Compliance	Vardiate	DASS
Date(s):	10-Feb-19	verdict.	FASS
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC
Remarks:			

Table 7.9.5 Conducted spurious emission outside restricted band test results

ASSIGNED FRE INVESTIGATED MODULATION: DETECTOR USI RESOLUTION B EUT CONFIGUE	QUENCY RA FREQUENC` ED: ANDWIDTH ATION: WIDTH:	NGE: Y RANGE:		5.15 – 5.25 GHz 4500 - 6400 MHz QPSK Peak 1000 kHz 1 carrier, 1 sector (coherent signal 10 MHz	4 ports to 2 du	al slant antenna	as), non-
Frequency, MHz	SA reading, dBm	Antenna gain, dBi	Antenna gain array*, dB	EIRP**, dBm/MHz	Limit, dBm/MHz	Margin***, dB	Verdict
Low carrier fre	quency						
5499.700	-58.97	17.0	3.0	-38.97	-27.0	-11.97	Pass
Mid carrier free	auencv						
5690.890	-50.52	17.0	3.0	-30.52	-27.0	-3.52	Pass
5690.890 High carrier fre	-50.52 equency	17.0	3.0	-30.52	-27.0	-3.52	Pass

CHANNEL BANWIDTH:

SA reading, dBm	Antenna gain, dBi	Antenna gain array*, dB	EIRP**, dBm/MHz	Limit, dBm/MHz	Margin***, dB	Verdict
quency						
-55.24	17.0	3.0	-35.24	-27.0	-8.24	Pass
quency						
-51.27	17.0	3.0	-31.27	-27.0	-4.27	Pass
equency						
-51.53	17.0	3.0	-31.53	-27.0	-4.53	Pass
	SA reading, dBm quency -55.24 quency -51.27 equency -51.53	SA reading, dBm Antenna gain, dBi quency -55.24 17.0 quency -51.27 17.0 equency -51.53 17.0	SA reading, dBmAntenna gain, dBiAntenna gain array*, dBquency-55.2417.03.0-51.2717.03.0equency-51.2717.03.0councy-51.5317.03.0	SA reading, dBm Antenna gain, dBi Antenna gain array*, dB EIRP**, dBm/MHz quency -55.24 17.0 3.0 -35.24 -51.27 17.0 3.0 -31.27 equency -51.53 17.0 3.0 -31.53	SA reading, dBm Antenna gain, dBi Antenna gain array*, dB EIRP**, dBm/MHz Limit, dBm/MHz quency -55.24 17.0 3.0 -35.24 -27.0 -51.27 17.0 3.0 -31.27 -27.0 equency -51.53 17.0 3.0 -31.53 -27.0	SA reading, dBm Antenna gain, dBi Antenna gain array*, dB EIRP**, dBm/MHz Limit, dBm/MHz Margin***, dB quency -55.24 17.0 3.0 -35.24 -27.0 -8.24 quency -51.27 17.0 3.0 -31.27 -27.0 -4.27 equency -51.53 17.0 3.0 -31.53 -27.0 -4.53

15 MU-

CHANNEL BANWIDTH: 20 MHz Antenna gain SA reading, Antenna Limit, Frequency, MHz EIRP**, dBm/MHz Margin***, dB dBm/MHz dBm gain, dBi array*, dB Low carrier frequency 17.0 3.0 -37.78 -27.0 -10.78 5576.740 -57.78 Mid carrier frequency -53.33 5697.000 17.0 -33.33 -27.0 3.0 -6.33

3.0

* - Antenna gain array = $10\log(N_{ant})$, where $N_{ant} = 2$ (two cross-polarized antennas)

17.0

** - EIRP = SA reading + Antenna gain + Antenna gain array

*** - Margin = EIRP - specified limit.

High carrier frequency

5730.350

Reference numbers of test equipment used

-52.53

	HL 3901	HL 4355						
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-32.53

-27.0

Full description is given in Appendix A.

Verdict

Pass

Pass

Pass

-5.53



Test specification:	FCC section 15.407(b), Con	ducted out of band emission	ons
Test procedure:	KDB 662911; KDB 789033, ANS	I C63.10, section 12.7.6 & 12.7.	7
Test mode:	Compliance	Vardiate	DV66
Date(s):	10-Feb-19	verdict.	FA33
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC
Remarks:			

Plot 7.9.1 Duty cycle





Test specification:	FCC section 15.407(b), Con	ducted out of band emission	ons
Test procedure:	KDB 662911; KDB 789033, ANS	GI C63.10, section 12.7.6 & 12.7.	.7
Test mode:	Compliance	Vardiate	DV66
Date(s):	10-Feb-19	verdict.	FA33
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC
Remarks:			

Plot 7.9.2 Conducted spurious emission measurements in the range 4.5 - 5.15 GHz CARRIER FREQUENCY 5160 MHz



12.FEB.2019 09:55:00

12.FEB.2019 09:58:15

*Applied Limit = Specification limit – Antenna Gain – Antenna Array gain

Plot 7.9.3 Conducted spurious emission measurements in the range 5.35 - 5.46 GHz CARRIER FREQUENCY 5160 MHz CHANNEL BANDWIDTH 10 MH-

	CHAININEL	. DANUV	חוטוי		INZ
Spectrum	Spectrum 2 🔍				
Ref Level -30.00 Att TDF	dBm Offset 10.00 d 0 dB SWT 2 m	B 🖶 RBW 1 MH2 s VBW 10 MH2	Mode Sweep		
●1Pk View					
			M1[1]		-58.32 dBm 5.4388080 GHz
-40 dBm01 -41.2	200 dBm				
-50 dBm					
				M1	
SQ.C.P.D.London Marine	เขาเขาไหรเห็นสีมีสุขังสูงเป็นเป็นหมาย เขาเขาเป็นเป็นเป็นสีมีสุขังสูงเป็นเป็นเป็นเป็นเป็นเป็นเป็นเป็นเป็นเป็น	the second states and the second states	riphiliphyberricheddiadayd	in gevening the state of the second	prophysical and the second second
-70 dBm					
-80 d8m					
-90 dBm					
-100 dBm					
110 d0m					
-110 UDIII					
-120 dBm					
start 5.35 GHz		2001 p	ts		stop 5.46 GHz

Spectrun	n Sp	ectrum 2	×						
Ref Leve Att	-30.00 dBi 0 d	m Offset B SWT	10.00 dB 👄 2 ms	RBW 1 M VBW 10 M	IHz IHz Mode	Sweep			
1Dm Aug	300/300	TDP							
and avgr					М	1[1]		5.43	70.65 dBm 75990 GHz
-40 dBm									
-50 dBm									
-60 dBm	D1 -61.200	dBm							
-70 dBm									
-80 dBm—				*****		/.#*:	, <u>, , , , , , , , , , , , , , , , , , </u>		
-90 dBm									
-100 dBm—									
-110 dBm—									
-120 dBm-	011-			0001				Oter	F. 46 OU-

Date: 12.FEB.2019 09:55:58

Date: 12.FEB.2019 09:56:49



Test specification:	FCC section 15.407(b), Con	ducted out of band emission	ons
Test procedure:	KDB 662911; KDB 789033, ANS	GI C63.10, section 12.7.6 & 12.7.	7
Test mode:	Compliance	Vardiate	DV66
Date(s):	10-Feb-19	verdict.	FA33
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC
Remarks:			

Plot 7.9.4 Conducted spurious emission measurements in the range 5.46 – 6.4 GHzCARRIER FREQUENCY5160 MHzCHANNEL BANDWIDTH10 MHz

Spectru	m Sp	ectrum 2	X						
Ref Leve	el -30.00 dB	m Offset	10.00 dB 🧉	RBW 1M	Hz				
Att	0 0	IB SWT	2 ms	VBW 10 M	Hz Mode	Sweep			
TDF									
1Pk View	1	1							50.0
					M	1[1]		5.4	-58.9 19970
-40 dBm-						L	L		
]							
-50 dBm-	D1 -47.000	dBm							
MI									
60 Jpm									
الم المالية المراكد	هر دينار بين م ارديا ا	ويهارك ومراوا والمحصول	Addustellast 1	الدفارية بعقابه	COMPLETE AND	. It		and set of	
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-70 dBm—	and and an entering	an constraint	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	Analise and	nenenen handelen	the the second second	Paratura, Alderi, Majdi	h.C.al.Unal.ogfrantisianan	untiv-thp
-70 dBm—	and and a set of the particular			2010 B-100 B-100	erskalten fondela	hille-Albertal, helder wit	tynten an	hLXall-Unit-gloverlapsech	44.j.4.j.
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-70 dBm—	and and an other second se		2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 -	a na ma na ma na ma	n de anter de la constant de la cons	ter in a second design of the	Pathon (Ministry)	h Linde linde in the second	44 47- 4 5-
-70 dBm— -80 dBm—					n sin in the second		n an	likikini kalina kali Internet kalina	
-70 dBm— -80 dBm— -90 dBm—					**********			s,∕sij,√intingtradisjason 	64,0490
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-70 dBm -80 dBm -90 dBm -100 dBm-					******				<u></u>
-70 dBm -80 dBm -90 dBm -100 dBm -110 dBm-									
-70 dBm -80 dBm -90 dBm -100 dBm- -110 dBm-									
-70 dBm -80 dBm -90 dBm -100 dBm- -110 dBm- -120 dBm-									
-70 dBm- -80 dBm- -90 dBm- -100 dBm- -110 dBm- -120 dBm-									

Date: 12.FEB.2019 09:53:34



Test specification:	FCC section 15.407(b), Conducted out of band emissions					
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7					
Test mode:	Compliance	Vardiate	DV66			
Date(s):	10-Feb-19	verdict: PASS				
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa Power: 48 VDC				
Remarks:						

Plot 7.9.5 Conducted spurious emission measurements in the range 4.5 - 5.15 GHz CARRIER FREQUENCY 5200 MHz





12.FEE 10:51:45 12.FEB.2019 10:46:30

Plot 7.9.6 Conducted spurious emission measurements in the range 5.35 - 5.46 GHz CARRIER FREQUENCY 5200 MHz

(HAN	NEL E	BAND		н	10	MHZ	
Spectrum Sp	ectrum 2	X						
Ref Level -25.00 dB	m Offset :	15.00 dB 👄	RBW 1 №	Hz				
Att Od	B SWT	2 ms	VBW 10 M	Hz Mode	Sweep			
TDF								
JPK VIEW				M	1[1]			56.11 dBm
-30 dBm					*[*]		5.40	69790 GHz
-40 dBm-01 -41 200	dBm							
01 -11200								
-50 dBm								
				M1				
ren aller and and an aller and	entropy of the second	hiteriate-charine	halikita. Augistara	and the last laws	nutud shinas	where the part of the	lanophilatic	Annal Part Char
-70 dBm								
-80 dBm								
-90 dBm								
-100 dBm								
-110 dBm								
110 000								
-120 dBm								
-120 000								
Start 5.35 GHz			2001	pts			Stop	5.46 GHz

Spectrum 2 🛞	
Ref Level -25.00 dBm Offset 15.00 dB - RBW 1 MHz	•
Att 5 dB SWT 2 ms VBW 10 MHz Mode Sweep	
SGL Count 300/300 PA TDF	
1Rm AvgPwr	
20 d0m	-72.71 dBm
-30 0811	5.4065390 GHz
-40 dBm	
-50 dBm	
60 d0m	
-50 dBill D1 -61.200 dBm	
-70 dBm	
-80 dBm	
-90 dBm	
-100 dBm	
-110 dBm	
-120 dBm	
Start 5.35 GHz 2001 pts	Stop 5.46 GHz

Date: 12.FEB.2019 10:49:43

Date: 12.FEB.2019 10:48:24



Test specification:	FCC section 15.407(b), Conducted out of band emissions				
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7				
Test mode:	Compliance	Vardiet: DASS			
Date(s):	10-Feb-19	verdict: PASS			
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa Power: 48 VDC			
Remarks:					

Plot 7.9.7 Conducted spurious emission measurements in the range 5.46 – 6.4 GHz CARRIER FREQUENCY 5200 MHz



Date: 12.FEB.2019 10:53:03



Test specification:	FCC section 15.407(b), Conducted out of band emissions					
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7					
Test mode:	Compliance	Vardiate	DV66			
Date(s):	10-Feb-19	verdict: PASS				
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa Power: 48 VDC				
Remarks:						

Plot 7.9.8 Conducted spurious emission measurements in the range 4.5 - 5.15 GHz CARRIER FREQUENCY 5245 MHz





e: 12.FEB.2019 11:23:57 12.FEB.2019 11:25:52

Plot 7.9.9 Conducted spurious emission measurements in the range 5.35 - 5.46 GHz CARRIER FREQUENCY 5245 MHz



Spectrum Sp	ectrum 2 🛛 🕅				
Ref Level -25.00 dB	m Offset 15.00 dB 🖷	RBW 1 MHz			
att 5 c	iB SWT 2 ms	VBW 10 MHz M	ode Sweep		
SGL Count 200/200	PA TDF				
1Rm AvgPwr					
			M1[1]		69.60 dBm
-30 dBm				5.36	91030 GHz
-40 dBm					
-50 dBm					
-60 dBm					
D1 -61.200	dBm				
M1					
-70 dBm					
and the second se		and the second sec			
-80 dBm					
-90 dBm					
100 d0m					
-100 0BIII					
-110 dBm					
-120 dBm					
		0001		01	E 46 0U-
Start 5.35 GHZ		2001 pts		stop	0 a.40 GHZ

Date: 12.FEB.2019 11:23:06

Date: 12.FEB.2019 11:24:33



Test specification:	FCC section 15.407(b), Conducted out of band emissions				
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7				
Test mode:	Compliance	Vardiat: DASS			
Date(s):	10-Feb-19	verdict: PASS			
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC		
Remarks:					

Plot 7.9.10 Conducted spurious emission measurements in the range 5.46 – 6.4 GHz CARRIER FREQUENCY 5245 MHz



Date: 12.FEB.2019 11:21:45



Test specification:	FCC section 15.407(b), Conducted out of band emissions					
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7					
Test mode:	Compliance	Vardiet: DASS				
Date(s):	10-Feb-19	verdict: PASS				
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa Power: 48 VDC				
Remarks:						

Plot 7.9.11 Conducted spurious emission measurements in the range 4.5 – 5.15 GHz CARRIER FREQUENCY 5165 MHz



X um Spectrum 2 -40.00 dBm Offset 15.00 dB • RBW 1 MHz 0 dB SWT 2 ms VBW 10 MHz Mode Sweep 000/300 TDF Ref Level Att SGL -63.79 M1[1] io de h ns an de 100 d 110 d 120 dB .30 (Start 4.5 GH 2001 pt Stop 5.15 GHz

e: 12.FEB.2019 11:52:36

ate: 12.FEB.2019 11:58:51

Plot 7.9.12 Conducted spurious emission measurements in the range 5.35 – 5.46 GHz CARRIER FREQUENCY 5165 MHz

CHANNE	L BANDWIDTH	15 MHZ
Spectrum 2 X	2	
Ref Level -20.00 dBm Offset 15.00	dB 👄 RBW 1 MHz	\$ }
Att 15 dB SWT 2	ms VBW 10 MHz Mode Swi	зер
PA TDF		
JPK VIEW	M1[1]	-54 51 dBm
		5.3915320 GHz
-30 dBm		
-40 dBm 01 -41 200 dBm		
-50 dBm	MI	
بيباب وماهر هيداني	Ť	
-60 dBm	in the second	editions with phylocone marked and with a significant strain and we
-70 dBm		
-80 dBm		
-90 dBm		
-100 dBm		
-110 dBm		
Start 5.35 GHz	2001 pts	Stop 5.46 GHz

Spectrum	Spe	ctrum 2	×							
Ref Level	-40.00 dBm	Offset	15.00 dB 👄	RBW	1 MHz					
Att	10 dB	SWT	2 ms	VBW	10 MHz	Mode	Sweep			
SGL Count 2	00/200	PA TDF								
1Rm AvgPwr	·									
						M	1[1]			69.68 dBm
									5.39	13670 GHz
-50 dBm										
-60 dBm-										
D	1 -61.200 d	Bm								
			M1							
-70.dBm		-	mound					a case - grade and and	and the party of t	
-80 dBm										
-90 dBm										
-100 dBm										
110 - 10										
-110 dBm										
-120 dBm										
-130 dBm										
100 0011										
Start 5.35 G	Hz				2001 pts			1	Stop	5.46 GHz

Date: 12.FEB.2019 11:51:16

Date: 12.FEB.2019 11:53:49



Test specification:	FCC section 15.407(b), Conducted out of band emissions				
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7				
Test mode:	Compliance	Vardiat: DASS			
Date(s):	10-Feb-19	verdict: PASS			
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC		
Remarks:					

Plot 7.9.13 Conducted spurious emission measurements in the range 5.46 – 6.4 GHzCARRIER FREQUENCY5165 MHzCHANNEL BANDWIDTH15 MHz

ANDWIDTH	15 MHz		
Spectrum Spec	trum 2 🛞		
Ref Level -20.00 dBm Att 15 dB PA TDF	Offset 15.00 dB ● RBW SWT 2 ms VBW	1 MHz 0 MHz Mode Sweep	X
●1Pk View			
		M1[1]	-55.24 dBn 5 932820 GH
-30 dBm			
-40 dBm			
D1 -47.000 dB	3m		
-50 dBm		M1	
واستبعادهم بعراره فالعريق والألاط	المرابعة والمراجع والمعدومة والمراجعة والمحاصر والمحا	- ill una de la sie man april and and	المراجع المحافظ المحافظ المحافظ المراجع المحافظ
-70 dBm			
-80 dBm			
-90 dBm			
-100 d8m			
-100 dbiii			
-110 dBm			
Start 5.46 GHz		001 nts	Ston 6.4 GHz

Date: 12.FEB.2019 11:49:54



Test specification:	FCC section 15.407(b), Conducted out of band emissions						
Test procedure:	KDB 662911; KDB 789033, ANS	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7					
Test mode:	Compliance	Variliet. DACC					
Date(s):	10-Feb-19	verdict.	FA33				
Temperature: 25 °C	Relative Humidity: 48 %Air Pressure: 1019 hPaPower: 48 VDC						
Remarks:							

Plot 7.9.14 Conducted spurious emission measurements in the range 4.5 – 5.15 GHz CARRIER FREQUENCY 5200 MHz



X m Spectrum 2 -40.00 dBm Offset 15.00 dB 0 dB SWT 2 ms 00/200 TDF Ref Level Att RBW 1 MHz
VBW 10 MHz
Mode Sweep SGL -65.00 5.115° M1[1] io de h ns an de 100 d 110 d 120 dB .30 (Start 4.5 GH 2001 pts Stop 5.15 GHz

e: 12.FEB.2019 12:04:14

ate: 12.FEB.2019 12:00:28

Plot 7.9.15 Conducted spurious emission measurements in the range 5.35 – 5.46 GHz CARRIER FREQUENCY 5200 MHz

CHANN	NEL BAND	WIDTH	15 MHz	Z
Spectrum 💥 Spectrum 2	X			
Ref Level -20.00 dBm Offset 1	15.00 dB 👄 RBW 1 M	Hz		
Att 20 dB SWT	2 ms VBW 10 M	Hz Mode Sweep		
PA TDF				
DIPK VIEW		A41[4]		40.00 40
		wifil	5.	-49.83 uBm 3887280 GHz
-30 dBm				
-40 dBm				
D1 -41.200 dBm				
50 d8m	MI			
particule descention and the second second second states and	Mahrindishaharip waran isthe wards	adalar in the stand of the month of the	- industry and a star	all have been and have
60 d0m				
-00 0811				
-70 dBm				
-80 dBm				
-90 dBm				
-100 dBm				
-110 dBm				
Start 5.35 GHz	2001	pts	St	op 5.46 GHz

Spectrum Spe	ectrum 2 🛛 🗶						
Ref Level -40.00 dBn	offset 15.00 d	8 👄 RBW 1	ИHz				
🖷 Att 5 di	3 SWT 2 m	5 VBW 10 1	Hz Mode	Sweep			
SGL Count 200/200	PA TDF						
1Rm AvgPwr							
			M	1[1]			71.38 dBm
						5.37	86680 GHz
-50 dBm							
-60 dBm - 01 61 000	10 m	_					
01 -61.200	JDIII						
70 d0m	M1						
-70 dBm	Town warmen we	~					
				Law and a second	and the second particular		
-80 dBm							
-90 dBm							
-100 dBm							
-110 dBm							
-120 dBm							
100 10-							
-130 dBm							
Start 5.35 GHz		200	1 pts	1	1	Stop	5.46 GHz

Date: 12.FEB.2019 12:05:12

Date: 12.FEB.2019 12:03:07



Test specification:	FCC section 15.407(b), Conducted out of band emissions					
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7					
Test mode:	Compliance	Verdiet: DASS				
Date(s):	10-Feb-19	verdict.	FA33			
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa Power: 48 VDC				
Remarks:						

Plot 7.9.16 Conducted spurious emission measurements in the range 5.46 – 6.4 GHzCARRIER FREQUENCY5200 MHzCHANNEL BANDWIDTH15 MHz

BANDWI	DTH	15	MHz						
Spectrun	n Sp	ectrum 2	×						
Ref Leve Att PA TDF	l -20.00 dB 15 d	m Offset B SWT	15.00 dB e 2 ms	RBW 1 M VBW 10 M	IHz IHz Mode	Sweep			
1Pk View									
					M	1[1]		5.7	51.27 dBr 53370 GH
-30 dBm									
-40 dBm									
	D1 -47.000	dBm							
-50 dBm			Ĩ.						
nethodala	Multimered	والمتحاد المستعد المتحاد	Recordence	Histomula	Hullmar	Moldonet-united	hormon and	ALEMAN AND AND A	alouant/heaven
1									
-70 dBm									
00 d0m									
-60 UBIII									
-90 dBm									
-100 dBm-									
-110 dBm-									
Start 5.46	GHz	1	1	2001	pts	1	1	Sto	p 6.4 GHz

Date: 12.FEB.2019 12:06:30



Test specification:	FCC section 15.407(b), Conducted out of band emissions						
Test procedure:	KDB 662911; KDB 789033, ANS	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7					
Test mode:	Compliance						
Date(s):	10-Feb-19	verdict.	FA33				
Temperature: 25 °C	Relative Humidity: 48 %Air Pressure: 1019 hPaPower: 48 VDC						
Remarks:							

Plot 7.9.17 Conducted spurious emission measurements in the range 4.5 – 5.15 GHz CARRIER FREQUENCY 5240 MHz





e: 12.FEB.2019 12:20:56

ate: 12.FEB.2019 12:25:43

Plot 7.9.18 Conducted spurious emission measurements in the range 5.35 – 5.46 GHz CARRIER FREQUENCY 5240 MHz

	CHAN	NEL E	SAND	WIDT	н	15	MHZ	
Spectrum	Spectrum 2	X						
Ref Level -20.00	dBm Offset 1	5.00 dB 👄	RBW 1 M	Hz				
■ Att 15	5 dB SWT	2 ms	VBW 10 M	Hz Mode	Sweep			
PA TDF								
●1Pk View								
				м	1[1]		- 5.37	54.18 dBm 06970 GHz
-30 dBm								
40 d0m								
-40 dBm D1 -41.2	00 dBm							
-50 dBm	m							
when the held conversion	historianitation	يغرط لامير سيايتك	stationan and a state	Holoman		and and and and	والاربعول وحميدات	ويدرد مدينا م
-60 dBm								
-70 dBm	_							
-80 dBm								
-90 dBm	_							
-100 dBm								
-110 dBm	_							
Start 5.35 GHz			2001	pts		1	Stop	5.46 GHz

Spectrum	n Sp	ectrum 2	×						
Ref Leve	-40.00 dBr	m Offset	15.00 dB 👄	RBW 1 M	Hz				
Att	5 d	B SWT	2 ms	VBW 10 M	Hz Mode	Sweep			
SGL Count	200/200	PA TDF							
1Rm AvgP	wr								
					м	1[1]		5.41	72.08 dBm 98430 GHz
-50 dBm									
-60 dBm	D1 -61.200	dBm							
-70 dBm						MI			
-	28-14-14/14/-14/14/14/14			man	-	potensia	-		
-80 dBm									
-90 dBm									
100 -00									
-100 dBm									
-110 dBm—									
-120 dBm—									
-130 dBm-									
Start 5.35	GHz			2001	pts			Stop	5.46 GHz

Date: 12.FEB.2019 12:19:48

Date: 12.FEB.2019 12:21:42



Test specification:	FCC section 15.407(b), Conducted out of band emissions					
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7					
Test mode:	Compliance	Verdiet: DASS				
Date(s):	10-Feb-19	verdict.	FA33			
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa Power: 48 VDC				
Remarks:						

Plot 7.9.19 Conducted spurious emission measurements in the range 5.46 – 6.4 GHz CARRIER FREQUENCY 5240 MHz



Date: 12.FEB.2019 12:18:21



Test specification:	FCC section 15.407(b), Conducted out of band emissions						
Test procedure:	KDB 662911; KDB 789033, ANS	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7					
Test mode:	Compliance						
Date(s):	10-Feb-19	verdict.	FA33				
Temperature: 25 °C	Relative Humidity: 48 %Air Pressure: 1019 hPaPower: 48 VDC						
Remarks:							

Plot 7.9.20 Conducted spurious emission measurements in the range 4.5 – 5.15 GHz CARRIER FREQUENCY 5165 MHz





e: 12.FEB.2019 12:30:29

ate: 12.FEB.2019 12:53:15

Plot 7.9.21 Conducted spurious emission measurements in the range 5.35 – 5.46 GHz CARRIER FREQUENCY 5165 MHz

	CHAN	INEL E	BAND	WIDT	Ή	20	MHz	
Spectrum	Spectrum 2	2 X						
Ref Level -20.0	0 dBm Offse	t 15.00 dB 👄	RBW 1 №	Hz				
e Att	5 dB SWT	2 ms	VBW 10 M	Hz Mode	Sweep			
TDF								
DIPK VIEW					1[1]			51.00 dDm
				M	1[1]		5.39	30160 GHz
-30 dBm								
-40 dBm								
D1 -4	1.200 dBm							
E0 d0m		M						
Uddul Lunade - Lake	ويديد المراجعات المراجع		March March	and a solution	1	بلي حدث ما ينا	والمعادية والمعاد	and a local se
and at some or a second of	PARTICULAR DESIGNATION OF THE OWNER	and the second sec	No on No. I North	and a sublitted of the	line in the second second	0*************************************	www.www.www.	Providence of Mary And
-60 dBm-								
-70 dBm		-						
-80 dBm		-						
-90 dBm								
-100 dBm								
-110 dBm								
Start 5.35 GHz			2001	pts			Stop	5.46 GHz

Spectrum Spectro	um 2 🛛 🗶		
Ref Level -40.00 dBm (offset 15.00 dB - RBW 1 M	Hz	x =.
■ Att 0 dB 8	SWT 2 ms VBW 10 M	Hz Mode Sweep	
SGL Count 200/200	TDF		
1Rm AvgPwr			
		M1[1]	-66.05 dBm 5.4068690 GHz
-50 dBm			
-60 dBm 01 -61.200 dBm		MI	
-70 dbor - file - market - 10 db		X	
-80 dBm-			
-90 dBm			
-100 dBm			
110 dBm			
-110 UBII			
-120 dBm			
-130 dBm			
		.	
start 5.35 GHz	2001	pts	Stop 5.46 GHz

Date: 12.FEB.2019 12:31:29

Date: 12.FEB.2019 12:54:45



Test specification:	FCC section 15.407(b), Conducted out of band emissions					
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7					
Test mode:	Compliance	Vardiate	DV66			
Date(s):	10-Feb-19	verdict.	FA33			
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC			
Remarks:						

Plot 7.9.22 Conducted spurious emission measurements in the range 5.46 – 6.4 GHzCARRIER FREQUENCY5165 MHzCHANNEL BANDWIDTH20 MHz

ANDWIDTH	20 MHz		
Spectrum Spe	ctrum 2 🛛 🗙		
Ref Level -20.00 dBm Att 0 dB TDF	Offset 15.00 dB 👄 R SWT 2 ms V	BW 1 MHz BW 10 MHz Mode Sweep	X.
• 1Pk View		M1[1]	-57.78 dB
-30 dBm			5.576740 G
-40 dBm			
-50 dBm	/Bm		
M1	anthonne and a charter of the state of the s	Analy March House and the second s	and the second state and a state of the second state of the
-70 dBm			
-80 dBm			
-90 dBm			
	1 1		
-100 dBm			
-100 dBm			

Date: 12.FEB.2019 12:33:07



Test specification:	FCC section 15.407(b), Conducted out of band emissions						
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7						
Test mode:	Compliance	Vardiate	DV66				
Date(s):	10-Feb-19	verdict.	FA33				
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa Power: 48 VDC					
Remarks:							

Plot 7.9.23 Conducted spurious emission measurements in the range 4.5 – 5.15 GHz CARRIER FREQUENCY 5200 MHz





e: 12.FEB.2019 15:15:28

Date: 12.FEB.2019 15:13:53

Plot 7.9.24 Conducted spurious emission measurements in the range 5.35 – 5.46 GHz CARRIER FREQUENCY 5200 MHz

	CHAN	INEL B	BAND	WIDT	Ή	20	MHz	
Spectrum	Spectrum 2	X						
Ref Level -20.0	0 dBm Offset	15.00 dB 👄	RBW 1 M	Hz				
Att	0 dB SWT	2 ms	VBW 10 M	Hz Mode	Sweep			
DF View								
				М	1[1]		5.45	-56.11 dBm
-30 dBm								
-40 dBm	L.200 dBm							
-50 dBm								M1
destation and the	a i ji izi i i i i i i i i i i i i i i i	entradius (nexistana)	hindendenden	<u>webernesses</u>	hainte taine	rshiteresterry	dilperninger	relindration
-70 dBm								
-80 dBm								
-90 dBm								
-100 dBm								
-110 dBm								
Start 5.35 GHz			2001	pts			Stop	5.46 GHz

Spectrur	n Sp	ectrum 2	\times						
Ref Leve	I -40.00 dB	m Offset	15.00 dB 👄	RBW 1M	Hz	_			
SGL Count	: 300/300	PA TDF	2 ms	VBW 10 M	HZ Mode	Sweep			
●1Rm AvgF	wr								
					M	1[1]		5.40	72.06 dBm 67590 GHz
-50 dBm									
-60 dBm-	01 -61.200	dBm							
-70 dBm					M1				
-80 dBm						an dike dike pang ng Lagan, dike	ajernakaistensen yette	an a	1.4
-90 dBm—									
-100 dBm—									
-110 dBm—									
-120 dBm—									
-130 dBm—									
01	011-			0001				01	F 46 011-
start 5.35	GHZ			2001	pts			stop	5.46 GHZ

Date: 12.FEB.2019 15:16:18

Date: 12.FEB.2019 13:37:06



Test specification:	FCC section 15.407(b), Conducted out of band emissions					
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7					
Test mode:	Compliance	Vardiate	DV66			
Date(s):	10-Feb-19	verdict.	FA33			
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC			
Remarks:						

Plot 7.9.25 Conducted spurious emission measurements in the range 5.46 – 6.4 GHz CARRIER FREQUENCY 5200 MHz



Date: 12.FEB.2019 15:17:34



Test specification:	FCC section 15.407(b), Conducted out of band emissions						
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7						
Test mode:	Compliance	Vardiate	DV66				
Date(s):	10-Feb-19	verdict.	FA33				
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa Power: 48 VDC					
Remarks:							

Plot 7.9.26 Conducted spurious emission measurements in the range 4.5 – 5.15 GHz CARRIER FREQUENCY 5240 MHz





e: 12.FEB.2019 14:07:55

ate: 12.FEB.2019 13:57:24

Plot 7.9.27 Conducted spurious emission measurements in the range 5.35 – 5.46 GHz CARRIER FREQUENCY 5240 MHz

	CHA	NNEL E	BAND	WIDT	Ή	20	MHz	
Spectrum	Spectrum	2 🗙						
Ref Level -20	0.00 dBm Offs	et 15.00 dB 👄	RBW 1 №	Hz				
Att	0 dB SW	f 2 ms	VBW 10 M	Hz Mode	Sweep			
1 DF								
				M	1[1]		- 5.36	57.48 dBm 81680 GHz
-30 dBm		-						
-40 dBm-01	-41.200 dBm	_						
-50 dBm								
Load Bound Land	WHAT IN A PRIME HOLE	tandaran ya di kumada ya kuma	endeliteten eta ante		with the second second		n a third out of the	hashabiiislas
-70 dBm		_						
-80 dBm		_						
-90 dBm								
-100 dBm								
-110 dBm								
Start 5.35 GHz			2001	pts			Stop	5.46 GHz

Spectrun	n Sp	ectrum 2	×					
Ref Leve	-40.00 dBr	m Offset	15.00 dB 👄	RBW 1 №	Hz			
Att SGL Count	5 d : 200/200	B SWT PA TDF	2 ms	VBW 10 M	Hz Mode	Sweep		
●1Rm AvgP	-wr							
					M	1[1]	5.40	71.25 dBm 68690 GHz
-50 dBm								
-60 dBm-	D1 -61.200	dBm						
-70 dBm	and the feature of the				M1			
-80 dBm				******	and the second	hallon an	 **********	~~~~
-90 d8m-								
-90 UDII								
-100 dBm—								
-110 dBm—								
-120 dBm—								
-130 dBm—								
Start 5.35	GHz			2001	pts		Stop	5.46 GHz

Date: 12.FEB.2019 14:08:41

Date: 12.FEB.2019 13:59:19



Test specification:	ication: FCC section 15.407(b), Conducted out of band emissions					
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7					
Test mode:	Compliance	Vardiate	DV66			
Date(s):	10-Feb-19	verdict.	FA33			
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC			
Remarks:						

Plot 7.9.28 Conducted spurious emission measurements in the range 5.46 – 6.4 GHzCARRIER FREQUENCY5240 MHzCHANNEL BANDWIDTH20 MHz

Ref Leve	el -20.00 dB	m Offset	15.00 dB 👄	RBW 1 M	Hz				[4
Att	5 c	B SWT	2 ms	VBW 10 M	Hz Mode	Sweep			
Count 300	/300	TDF							
●1Rm View	-								
					M	1[1]		57	52.53 dB 30350 CF
-30 dBm-								0.7	00000 0
-40 dBm									
io apin									
50 dBm	D1 -47.000	dBm M1							
-50 ubiii		J.							
hand had the weat	the hast a state of the state o	at the House	hallipping	hit which have been a state of the second	ere provident property is	hhyperitaritesines	blogensigned blocks	entrelited of the states	the heavy and
-60.gBm-									
-70 dBm—									
	1								
-80 dBm—									
-80 dBm—									
-80 dBm—									
-80 dBm—									
-80 dBm									
-80 dBm									
-80 dBm -90 dBm -100 dBm -110 dBm									

Date: 12.FEB.2019 14:09:54



Test specification:	FCC section 15.407(b), Conducted out of band emissions					
Test procedure:	KDB 662911; KDB 789033, ANSI C63.10, section 12.7.6 & 12.7.7					
Test mode:	Compliance	Vardiate	DV66			
Date(s):	10-Feb-19	veraici.	FA33			
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC			
Remarks:						

7.10 Conducted out of band emissions at 5150 – 5250 MHz range

7.10.1 General

This test was performed to measure spurious emissions from the EUT near the band edges and within the pass band of the antenna. Specification test limits are given in Table 7.10.1 & EIRP of undesirable emission limits are given in Table 7.10.2

	Fable 7.10.1	Unwanted	emissions	limit within	restricted	bands above	1 GH	Ηz
--	---------------------	----------	-----------	--------------	------------	-------------	------	----

Frequency MHz	Field strength at	t 3 m, dB(µV/m)*	Equivalent EIRP*, dBm		
Frequency, winz	Peak	Average	Peak	Average	
1000 – 40000	74.0	54.0	-21.2	-41.2	

Equivalent EIRP was calculated as follow: Field strength – 95.2

Table 7.10.2 EIRP of undesirable emission limits outside restricted bands above 1 GHz

Frequency, MHz	EIRP of spurious, dBm/MHz
Outside 5150-5350 band	-27

Test procedure

7.10.1.1 The EUT was set up as shown in Figure 7.10.1, energized and the performance check was conducted.

- 7.10.1.2 The EUT was adjusted to produce maximum available to end user RF output power at the lowest carrier frequency.
- 7.10.1.3 The spectrum analyzer span was set to capture the carrier frequency and associated modulation products. The resolution bandwidth was set to 1 MHz.
- **7.10.1.4** The spectrum analyzer was set in max hold mode and allowed trace to stabilize. The highest emission level within the authorized band was measured.
- **7.10.1.5** The maximum band edge emission and modulation product outside of the band were measured as provided in the associated tables and plots.
- **7.10.1.6** The above procedure was repeated with the EUT adjusted to produce maximum RF output power at the mid and highest carrier frequencies.
- 7.10.1.7 Test results are shown in the Table 7.10.3, Table 7.10.4, Table 7.10.5 and the associated plots.

Figure 7.10.1 Setup for conducted spurious emissions





Test specification:	Test specification: FCC section 15.407(b), Conducted out of band emissions								
Test procedure:	KDB 662911; KDB 789033, ANS	I C63.10, section 12.7.6 & 12.7.	.7						
Test mode:	Compliance	Vordiot	DV66						
Date(s):	10-Feb-19	veraici.	FASS						
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC						
Remarks:									

Table 7.10.3 Conducted spurious emission within restricted band test results

ASSIGNED FREQUENCY: INVESTIGATED FREQUENCY RANGE: MODULATION: DETECTOR USED: RESOLUTION BANDWIDTH: EUT CONFIGURATION: 5.15 – 5.25 GHz 4500 - 6400 MHz QPSK Peak/Average 1000 kHz 1 carrier, 1 sector (4 ports to 2 dual slant antennas), coherent signal 10 MHz

CHANNEL BANWIDTH:

Fraguanay	Antonna	Antenna		Peak				Average	e		
MU-	anin dRi	gain	SA reading,	EIRP**,	Limit,	Margin***,	SA reading,	EIRP**,	Limit,	Margin***,	Verdict
IVITIZ	gain, ubi	array*, dB	dBm	dBm/MHz	dBm	dB	dBm	dBm/MHz	dBm	dB	
Low carrie	r frequen	су									
5149.840	17.0	6.0	-50.10	-27.1	-21.2	-5.90	-67.53	-42.06	-41.2	-0.86	Pass
5406.814	17.0	6.0	-59.92	-36.92	-21.2	-15.72	-70.22	-44.75	-41.2	-3.55	Pass
Mid carrier	r frequenc	;y									
5099.490	17.0	6.0	-56.85	-33.85	-21.2	-12.65	-67.96	-42.49	-41.2	-1.29	Pass
5406.594	17.0	6.0	-56.56	-33.56	-21.2	-12.36	-69.84	-44.37	-41.2	-3.17	Pass
High carrier frequency											
5099.490	17.0	6.0	-57.82	-34.82	-21.2	-13.62	-67.28	-41.81	-41.2	-0.61	Pass
5368.443	17.0	6.0	-58.21	-35.21	-21.2	-14.01	-69.75	-44.28	-41.2	-3.08	Pass

CHANNEL		ЛН:			15 101	ΠZ					
Frequency Antenna Antenna			Peak			Average					
MU-	Antenna goin dBi	gain	SA reading,	EIRP**,	Limit,	Margin***,	SA reading,	EIRP**,	Limit,	Margin***,	Verdict
IVITIZ	gain, ubi	array*, dB	dBm	dBm/MHz	dBm	dB	dBm	dBm/MHz	dBm	dB	
Low carrier frequency											
5149.510	17.0	6.0	-46.69	-23.69	-21.2	-2.49	-67.41	-41.94	-41.2	-0.74	Pass
5391.312	17.0	6.0	-55.81	-32.81	-21.2	-11.61	-69.58	-44.11	-41.2	-2.91	Pass
Mid carrie	frequenc	ey 🛛									
5115.080	17.0	6.0	-55.42	-32.42	-21.2	-11.22	-67.53	-42.06	-41.2	-0.86	Pass
5391.422	17.0	6.0	-56.13	-33.13	-21.2	-11.93	-69.68	-44.21	-41.2	-3.01	Pass
High carrier frequency											
5115.080	17.0	6.0	-54.81	-31.81	-21.2	-10.61	-67.60	-42.13	-41.2	-0.93	Pass
5391.422	17.0	6.0	-55.32	-32.32	-21.2	-11.12	-69.70	-44.23	-41.2	-3.03	Pass

4 - 1411



Test specification:	Test specification: FCC section 15.407(b), Conducted out of band emissions								
Test procedure:	KDB 662911; KDB 789033, ANS	GI C63.10, section 12.7.6 & 12.7	.7						
Test mode:	Compliance	Vardiate	DV66						
Date(s):	10-Feb-19	verdict.	FA33						
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC						
Remarks:									

Table 7.10.3 Conducted spurious emission within restricted band test results

ASSIGNED FREQUENCY RANGE: INVESTIGATED FREQUENCY RANGE: MODULATION: DETECTOR USED: RESOLUTION BANDWIDTH EUT CONFIGURATION:

4500 - 6400 MHz QPSK Peak 1000 kHz 1 carrier 1 sector

5.15 – 5.25 GHz

coherent signal

1 carrier, 1 sector (4 ports to 2 dual slant antennas),

CHANNEL BANWIDTH:

20 MHz

Frequency, MHz Antenna gain, dBi Antenna gain, rray*, dB SA reading, dBm Peak EIRP**, dBm/MHz Limit, dBm Margin***, dB SA reading, dBm Average EIRP****, dBm/MHz Limit, dBm Margin***, dBm Verdict Low carrier frequency, mray*, dB SA reading, dBm Limit, dBm Margin***, dBm SA reading, dBm Average EIRP****, dBm/MHz Limit, dBm Margin***, dBm Verdict 5149.840 17.0 6.0 -46.87 -23.87 -21.2 -2.67 -66.71 -41.24 -41.2 -0.04 Pass 5391.312 17.0 6.0 -59.18 -36.18 -21.2 -14.98 -69.94 -44.47 -41.2 -0.04 Pass 5115.080 17.0 6.0 -56.13 -33.13 -21.2 -11.93 -66.76 -41.29 -41.2 -0.09 Pass 5391.037 17.0 6.0 -59.84 -36.84 -21.2 -15.64 -69.72 -44.25 -41.2 -3.05 Pass High carrier frequency 51.91			Antonna		Peak				Average	e		
Low carrier frequency 5149.840 17.0 6.0 -46.87 -23.87 -21.2 -2.67 -66.71 -41.24 -41.2 -0.04 Pass 5391.312 17.0 6.0 -59.18 -36.18 -21.2 -14.98 -69.94 -44.47 -41.2 -3.27 Pass Mid carrier frequency	Frequency, MHz	Antenna gain, dBi	gain array*, dB	SA reading, dBm	Peak EIRP**, dBm/MHz	Limit, dBm	Margin***, dB	SA reading, dBm	Average EIRP****, dBm/MHz	Limit, dBm	Margin***, dB	Verdict
5149.840 17.0 6.0 -46.87 -23.87 -21.2 -2.67 -66.71 -41.24 -41.2 -0.04 Pass 5391.312 17.0 6.0 -59.18 -36.18 -21.2 -14.98 -69.94 -44.47 -41.2 -0.04 Pass Mid carrier frequency	Low carrier frequency											
5391.312 17.0 6.0 -59.18 -36.18 -21.2 -14.98 -69.94 -44.47 -41.2 -3.27 Pass Mid carrier frequency - - - - - - - - - - - - - - - - - - - - - - - - - - - 3.27 Pass 5115.080 17.0 6.0 -56.13 -33.13 -21.2 -11.93 -66.76 -41.29 -41.2 -0.09 Pass 5391.037 17.0 6.0 -59.84 -36.84 -21.2 -15.64 -69.72 -44.25 -41.2 -3.05 Pass High carrier frequency - - - - - - - - - - - - - - - - - - - - - 3.05 Pass 5115.080<	5149.840	17.0	6.0	-46.87	-23.87	-21.2	-2.67	-66.71	-41.24	-41.2	-0.04	Pass
Mid carrier frequency 5115.080 17.0 6.0 -56.13 -33.13 -21.2 -11.93 -66.76 -41.29 -41.2 -0.09 Pass 5391.037 17.0 6.0 -59.84 -36.84 -21.2 -15.64 -69.72 -44.25 -41.2 -3.05 Pass High carrier frequency 5115.080 17.0 6.0 -54.91 -31.91 -21.2 -10.71 -66.91 -41.44 -41.2 -0.24 Pass	5391.312	17.0	6.0	-59.18	-36.18	-21.2	-14.98	-69.94	-44.47	-41.2	-3.27	Pass
5115.080 17.0 6.0 -56.13 -33.13 -21.2 -11.93 -66.76 -41.29 -41.2 -0.09 Pass 5391.037 17.0 6.0 -59.84 -36.84 -21.2 -15.64 -69.72 -44.25 -41.2 -3.05 Pass High carrier frequency 5115.080 17.0 6.0 -54.91 -31.91 -21.2 -10.71 -66.91 -41.44 -41.2 -0.24 Pass	Mid carrier	^r frequenc	ÿ									
5391.037 17.0 6.0 -59.84 -36.84 -21.2 -15.64 -69.72 -44.25 -41.2 -3.05 Pass High carrier frequency -54.91 -31.91 -21.2 -10.71 -66.91 -41.44 -41.2 -0.24 Pass	5115.080	17.0	6.0	-56.13	-33.13	-21.2	-11.93	-66.76	-41.29	-41.2	-0.09	Pass
High carrier frequency 5115.080 17.0 6.0 -54.91 -21.2 -10.71 -66.91 -41.44 -41.2 -0.24 Pass	5391.037	17.0	6.0	-59.84	-36.84	-21.2	-15.64	-69.72	-44.25	-41.2	-3.05	Pass
5115.080 17.0 6.0 -54.91 -31.91 -21.2 -10.71 -66.91 -41.44 -41.2 -0.24 Pass	High carrier frequency											
	5115.080	17.0	6.0	-54.91	-31.91	-21.2	-10.71	-66.91	-41.44	-41.2	-0.24	Pass
5391.422 17.0 6.0 -55.82 -32.82 -21.2 -11.62 -69.77 -44.30 -41.2 -3.10 Pass	5391.422	17.0	6.0	-55.82	-32.82	-21.2	-11.62	-69.77	-44.30	-41.2	-3.10	Pass

* - Antenna gain array = 10log(Nant), where Nant = 4 (two cross-polarized antennas with coherent signals)

** - Peak EIRP = SA reading + Antenna gain + Antenna gain array

*** - Margin = EIRP - specified limit.

**** - Average EIRP = SA reading + Antenna gain + Antenna gain array + Duty cycle factor

Table 7.10.4 Duty cycle factor calculation

2.83 5.00 0.566 2.47	Burst dration, ms	Burst period, ms	Duty cycle*	Duty cycle factor**, dB
	2.83	5.00	0.566	2.47

*- Duty cycle = Burst duration / Burst period

** - Duty cycle factor = 10log(1/Duty cycle)



Test specification:	Test specification: FCC section 15.407(b), Conducted out of band emissions								
Test procedure:	KDB 662911; KDB 789033, ANS	I C63.10, section 12.7.6 & 12.7.	7						
Test mode:	Compliance	Vardiate	DASS						
Date(s):	10-Feb-19	veraici.	FA33						
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC						
Remarks:									

Table 7.10.5 Conducted spurious emission outside restricted band test results

ASSIGNED FRE INVESTIGATED MODULATION: DETECTOR USI RESOLUTION B EUT CONFIGUR	QUENCY RA FREQUENC ED: ANDWIDTH ATION: WIDTH:	NGE: Y RANGE:		5.15 – 5.25 GHz 4500 - 6400 MHz QPSK Peak 1000 kHz 1 carrier, 1 sector (4 ports to 2 dual slant antennas), coherent signal 10 MHz						
Frequency, MHz	SA reading, dBm	Antenna gain, dBi	Antenna gain array*, dB	EIRP**, dBm/MHz	Limit, dBm/MHz	Margin***, dB	Verdict			
Low carrier fre	equency									
5600.220	-57.40	17.0	6.0	-34.40	-27.0	-7.40	Pass			
Mid carrier free	Mid carrier frequency									
5608.210	-56.23	17.0	6.0	-33.23	-27.0	-6.23	Pass			
High carrier fre	equency									
6287.490	-55.16	17.0	6.0	-32.16	-27.0	-5.16	Pass			

CHANNEL BANWIDTH:

CHANNEL BAN	NIDTH:			15 MHz						
Frequency, MHz	SA reading, dBm	Antenna gain, dBi	Antenna gain array*, dB	EIRP**, dBm/MHz	Limit, dBm/MHz	Margin***, dB	Verdict			
Low carrier frequency										
5885.370	-56.32	17.0	6.0	-33.32	-27.0	-6.32	Pass			
Mid carrier frequency										
5752.900	-56.61	17.0	6.0	-33.61	-27.0	-6.61	Pass			
High carrier frequency										
5792.360	-55.39	17.0	6.0	-32.39	-27.0	-5.39	Pass			

CHANNEL BANWIDTH: 20 MHz Antenna gain SA reading, Antenna Limit, Frequency, MHz EIRP**, dBm/MHz dBm/MHz dBm gain, dBi array*, dB Low carrier frequency -36 69 -27 0 5658.950 -59.69 1 17 0 60 T

0000.000	00.00	11.0	0.0	00.00	21.0	0.00	1 400								
Mid carrier free	quency														
6194.010	-55.86	17.0	6.0	-32.86	-27.0	-5.86	Pass								
High carrier fre	High carrier frequency														
5789.540	-55.97	17.0	6.0	-32.97	-27.0	-5.97	Pass								

* - Antenna gain array = $10\log(N_{ant})$, where $N_{ant} = 2$ (two cross-polarized antennas)

** - EIRP = SA reading + Antenna gain + Antenna gain array

*** - Margin = EIRP - specified limit.

Reference numbers of test equipment used

	HL 3901	HL 4355						
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Full description is given in Appendix A.

Margin***, dB

-9 69

Verdict

Pass



Test specification:	FCC section 15.407(b), Con	ducted out of band emission	ons
Test procedure:	KDB 662911; KDB 789033, ANS	GI C63.10, section 12.7.6 & 12.7.	.7
Test mode:	Compliance	Vardiate	DV66
Date(s):	10-Feb-19	verdict.	FA33
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC
Remarks:			

Plot 7.10.1 Duty cycle





Test specification:	FCC section 15.407(b), Cor	nducted out of band emissi	ons
Test procedure:	KDB 662911; KDB 789033, ANS	SI C63.10, section 12.7.6 & 12.7	.7
Test mode:	Compliance	Vordiot	DASS
Date(s):	10-Feb-19	verdict.	FA33
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC
Remarks:			

Plot 7.10.2 Conducted spurious emission measurements in the range 4.5 – 5.15 GHz CARRIER FREQUENCY 5160 MHz



^{*}Applied Limit = Specification limit – Antenna Gain – Antenna Array gain



Plot 7.10.3 Conducted spurious emission measurements in the range 5.35 - 5.46 GHz



Test specification:	FCC section 15.407(b), Con	ducted out of band emission	ons
Test procedure:	KDB 662911; KDB 789033, ANS	GI C63.10, section 12.7.6 & 12.7.	7
Test mode:	Compliance	Vardiate	DV66
Date(s):	10-Feb-19	verdict.	FA33
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC
Remarks:			

Plot 7.10.4 Conducted spurious emission measurements in the range 5.46 – 6.4 GHz CARRIER FREQUENCY 5160 MHz





Test specification:	FCC section 15.407(b), Con	ducted out of band emission	ons
Test procedure:	KDB 662911; KDB 789033, ANS	GI C63.10, section 12.7.6 & 12.7.	.7
Test mode:	Compliance	Vardiate	DV66
Date(s):	10-Feb-19	verdict.	FA33
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC
Remarks:			

Plot 7.10.5 Conducted spurious emission measurements in the range 4.5 – 5.15 GHz CARRIER FREQUENCY 5200 MHz

	Cr	IANN	IEL BA		/IDTH	1	10 N	/IHZ										
Spectrur	n Sp	ectrum 2	X							Spectrun	n Sp	ectrum 2	X					Ē
Ref Leve Att	el -20.00 de S	dia SWT	10.00 dB e 2 ms e	RBW 1N VBW 10 N	IHz IHz Mode	Sweep				Ref Leve Att SGL Count	-40.00 dB 0 d	m Offset IB = SWT TDF	10.00 dB (2 ms	RBW 1 VBW 10	MHz MHz Mod	e Sweep		
O 1Pk View										●1Rm AvgP	wr							
	30 dBm														м	1[1]	5.0	67.96 dBm 99490 GHz
-30 dBm										-50 dBm								
-40 dBm										-60 dBm								
	D1 -44.200) dBm									D1 -64.200	dBm						M1
-50 dBm								11		-70 dBm							 - demander	
J60JdBrazzi	and the second second	Water outline		المراضا والمعروب المراس	المنصوف والموانين	Automatical data	Marth Carlinson	and the subactive	hissister where	-80 dBm-		45-00-00-00-00-00-00-00-00-00-00-00-00-00						
and a state	and colleges																	
-70 dBm										-90 dBm								
-90 d8m-										-100 dBm-								
-00 0011										-100 0011								
-90 dBm										-110 dBm-								
100 40 m										100 d0m								
-100 gBm-										-150 gBm-								
-110 dBm-										-130 dBm-							 	
Start 4.5 (GHz			2001	pts			Stop	5.15 GHz	Start 4.5 (Hz			2001	pts		Stop	5.15 GHz

Plot 7.10.6 Conducted spurious emission measurements in the range 5.35 – 5.46 GHz CARRIER FREQUENCY 5200 MHz

	CH	IANN	IEL BA	ANDV		ł	10 N	ЛНz										
Spectrur	m Sp	ectrum 2	×							Spectrun	Sp	ectrum 2	X					Ē
Ref Leve Att TDF	el -20.00 dB 5 d	m Offset IB SWT	10.00 dB 🖷 2 ms 🖷	RBW 1N VBW 10 N	1Hz 1Hz Mode	Sweep				Ref Leve Att SGL Count	-40.00 dB 0 d 300/300	m Offse B = SWT TDF	t 10.00 dB (2 ms	RBW 1 VBW 10	MHz MHz Mod	e Sweep		
O 1PK VIEW					м	1[1]			55.01 dBm	● 1Km AVGP	wr				м	1[1]		69.84 dBm
-30 dBm								5.44	49100 GH2	-50 dBm							 5.40	65940 GHZ
-40 dBm										-60 dBm								
-50 d8m-	-D1 -44.200	dBm								-70 dBm-	D1 -64.200	dBm			M1			
-60 dBm	anananina ana kali	anter anti-	manushah	erweidelsen Masseichikk	والعليب المتصرره فأنبه	in makes the	isha fikanologi niganakika	MI Links	hysteriumani	-80 dBm-					-			
70 d0m										00 d0m								
-/0 0611										-90 UBIII								
-80 dBm										-100 dBm-								
-90 dBm										-110 dBm—								
-100 dBm-										-120 dBm-								
-110 dBm-										-130 dBm—								
Start 5.35	5 GHz			200	Ints			Stor	5.46 GHz	Start 5.35	GHz			2001	nts		Stor	5.46 GHz
	rt 5.35 GHz 2001 pts Stop 5.46 GHz										GITZ			2007	r pra		0.00	0.40 0112



Test specification:	FCC section 15.407(b), Con	ducted out of band emission	ons
Test procedure:	KDB 662911; KDB 789033, ANS	GI C63.10, section 12.7.6 & 12.7.	7
Test mode:	Compliance	Vardiate	DV66
Date(s):	10-Feb-19	verdict.	FA33
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC
Remarks:			

Plot 7.10.7 Conducted spurious emission measurements in the range 5.46 – 6.4 GHz CARRIER FREQUENCY 5200 MHz





Test specification:	FCC section 15.407(b), Con	ducted out of band emission	ons
Test procedure:	KDB 662911; KDB 789033, ANS	I C63.10, section 12.7.6 & 12.7.	7
Test mode:	Compliance	Vardiate	DV66
Date(s):	10-Feb-19	verdict.	FA33
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC
Remarks:			

Plot 7.10.8 Conducted spurious emission measurements in the range 4.5 – 5.15 GHz CARRIER FREQUENCY 5245 MHz

	CF	IANN	EL BA	ANDV	/IDTH	ł	10 N	/Hz											
Spectrun	n Sp	ectrum 2	X							Spectrun	n Sp	ectrum 2	X						Ē
Ref Leve	el -20.00 dBr	m Offset	10.00 dB 👄	RBW 1N	Hz					Ref Leve	-40.00 dB	m Offset	10.00 dB (RBW 1	MHz				
Att TDF	0 d	B SWT	2 ms 😑	VBW 10 M	Hz Mode	Sweep				Att SGL Count	0 c 300/300	IB . SWT TDF	2 ms	VBW 10	MHz Mod	e Sweep			
●1Pk View					_					●1Rm AvgP	wr								
					м	1[1]		5.0	-56.81 dBm 069280 GHz						м	1[1]		5.0	67.28 dBm 99490 GHz
-30 dBm										-50 dBm									
-40 dBm										-60 dBm									L
	D1 -44.200	dBm									D1 -64.200	dBm							M1 T
-50 dBm								M1		-70 dBm							and months	and some sources	-
-60 dBm						الماريد الماريد	www.www.	Maria Maria	بر مالا العالية الم	-80 dBm									
Automations	-	. Juny Willington State	hikohalamageoria	nan periodicial de la constanción de la	At we have been a served	And a start of the second s													
-70 dBm										-90 d8m									
-80 dBm										-100 dBm-									
-90 dBm										-110 dBm-									
-100 dBm-										-120 dBm-									
-110 dBm—										-130 dBm-									
Start 4.5 0	GHz			200	pts			Stop	5.15 GHz	Start 4.5 (Hz			200	1 pts			Stop	5.15 GHz

Plot 7.10.9 Conducted spurious emission measurements in the range 5.35 – 5.46 GHz CARRIER FREQUENCY 5245 MHz

	CH	IANN	EL BA	ANDV	VIDTH	ł	10 N	ЛНz										
Spectrun	n Sp	ectrum 2	×							Spectrun	n Sp	ectrum 2	X					Ē
Ref Leve Att TDF	l -20.00 dB 0 d	m Offset B SWT	10.00 dB e 2 ms e	RBW 1N VBW 10N	1Hz 1Hz Mode	Sweep				Ref Leve Att SGL Count	-40.00 dB 0 c 300/300	m Offse iB = SWT TDF	t 10.00 dB (2 ms	RBW 1 VBW 10	MHz MHz Mod	e Sweep		
1Pk View			1	[M	1[1]			58.18 dBm	●1Rm AvgP	wr		1	[м	1[1]		69.75 dBm
								5.37	10270 GHz								5.36	84430 GHz
-30 dBm										-50 dBm								
-40 d8m-										-60 d8m								
-io dom	D1 -44.200	dBm								-00 0011	D1 -64,200	dBm						
-50 d8m										-70 d8m	MI I	Same Providence			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		 	
	M																	
1.50,0149999999	the state of the s	withheled		hipungala	and we all a labor	aliternoveration	miller MARKALLING	ulaneters have	anning mula than	-80 dBm-								
-70 dBm-										-90 gBW								
-80 dBm										-100 dBm-								
-90 dBm										-110 dBm-								
-100 dBm—										-120 dBm-								
-110 dBm-										-130 dBm-								
Start 5.35	i GHz	1	1	2001	l pts	1	1	Stop	5.46 GHz	Start 5.35	GHz	1	1	2001	pts	1	Stop	5.46 GHz



Test specification:	tion: FCC section 15.407(b), Conducted out of band emissions											
Test procedure:	KDB 662911; KDB 789033, ANS	GI C63.10, section 12.7.6 & 12.7.	7									
Test mode:	Compliance	Vardiate	DV66									
Date(s):	10-Feb-19	verdict.	FA33									
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC									
Remarks:												

Plot 7.10.10 Conducted spurious emission measurements in the range 5.46 – 6.4 GHz CARRIER FREQUENCY 5245 MHz





Test specification:	FCC section 15.407(b), Con	ducted out of band emission	ons
Test procedure:	KDB 662911; KDB 789033, ANS	GI C63.10, section 12.7.6 & 12.7.	7
Test mode:	Compliance	Vordiot	DV66
Date(s):	10-Feb-19	verdict:	FA33
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC
Remarks:			

Plot 7.10.11 Conducted spurious emission measurements in the range 4.5 – 5.15 GHz CARRIER FREQUENCY 5165 MHz

	C⊢	IANN	EL B/	ANDV	VIDTH	1	15 N	ЛНz											
Spectrur	n Spe	ectrum 2	×						l □ □	Spectrun	n Sp	ectrum 2	X						Ē
Ref Leve	-20.00 dBr	n Offset	10.00 dB 🦷	RBW 1N	ИНZ					Ref Leve	-40.00 dB	m Offset	10.00 dB (RBW 1	MHz				
Att TDF	0 d	B SWT	2 ms 🧉	VBW 10 N	1Hz Mode	Sweep				Att SGL Count	0 c 300/300	IB . SWT TDF	2 ms	VBW 10	MHz Mod	e Sweep			
●1Pk View										1Rm AvgP	wr								
	M1[1] -46.70 dBm 5.149840 GHz					M1[1] -67. 5,1495							67.41 dBm 49510 GHz						
-30 dBm										-50 dBm									
-40 dBm										-60 dBm									
	D1 -44.200	dBm							<u> </u>		D1 -64.200	dBm							
-50 dBm										-70 dBm				l	- Company		-	farmer of the	mandread
-60 dBm-								موادر بارجو وروم	mileterned	-80 dBm-									
		station box	and the states	exercised bardes	and the second second	All a flood and a state													
-70 dBm										-90 dBm									
-80 d8m										-100 dBm-									
-90 dBm										-110 dBm—									
-100 dBm-										-120 dBm-									
-110 dBm—										-130 dBm-									
Start 4.5 (Start 4.5 GHz 2001 pts Stop 5.15 GHz Stop 5.2 GHz 2001 pts Stop 5.15 GHz										5.15 GHz								

Plot 7.10.12 Conducted spurious emission measurements in the range 5.35 – 5.46 GHz CARRIER FREQUENCY 5165 MHz

	CH		EL B/			4	15 N	/H7	_										
Spectrum		ectrum 2				1	131			Spectrur	n Sp	ectrum 2	X						
Ref Level Att TDF	-20.00 dB 5 (m Offset iB SWT	10.00 dB e 2 ms e	RBW 1N VBW 10 N	MHZ MHZ Mode	Sweep				Ref Leve Att SGL Count	-40.00 dB 0 d 300/300	m Offsel IB = SWT TDF	10.00 dB (2 ms	RBW 1 VBW 10	MHz MHz Mod	e Sweep			
-30 dBm-					м	1[1]		5.39	55.09 dBm 05420 GHz	-50 dBm-	wr				м	1[1]		- 5.39	69.58 dBm 13120 GHz
-40 dBm	D1 -44.200	dBm								-60 dBm	·D1 -64.200	dBm							
-50 dBm	Nondofiliand	lauren er en	MI	Juliisiya initaliji wa	alternal and	moderationalise	allogic feetings a feeting	****	ernantus, dainaises	-70 dBm			X			*****			-C +Au
-70 dBm								,		-90 dBm									
-80 d8m										-100 dBm—									
-90 dBm										-110 dBm-									
-110 dBm—										-130 dBm—									
Start 5.35	GHz			200	L pts			Stop	5.46 GHz	Start 5.35	GHz			2001	l pts			Stop	5.46 GHz



Test specification:	FCC section 15.407(b), Conducted out of band emissions										
Test procedure:	KDB 662911; KDB 789033, ANS	GI C63.10, section 12.7.6 & 12.7.	7								
Test mode:	Compliance	Vordiot	DV66								
Date(s):	10-Feb-19	verdict:	FA33								
Temperature: 25 °C	Relative Humidity: 48 %	Air Pressure: 1019 hPa	Power: 48 VDC								
Remarks:											

Plot 7.10.13 Conducted spurious emission measurements in the range 5.46 – 6.4 GHz CARRIER FREQUENCY 5165 MHz

