



Annex E



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p.o.

Meheza Walla Lab Manager Radio Communications & EMC

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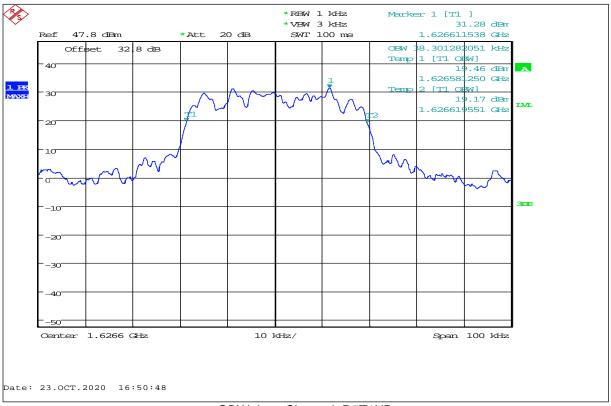
2 Measurement results, FCC Part 87 and FCC Part 25

This chapter consists of 121 pages including this page.

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Plot No. 1



OBW, Low Channel, R5T1XD

Plot No. 2

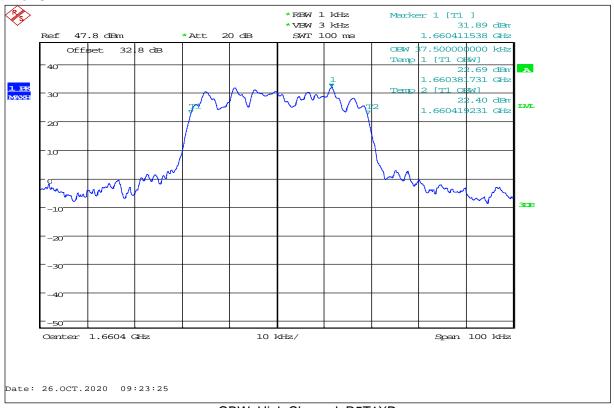


OBW, Middle Channel, R5T1XD

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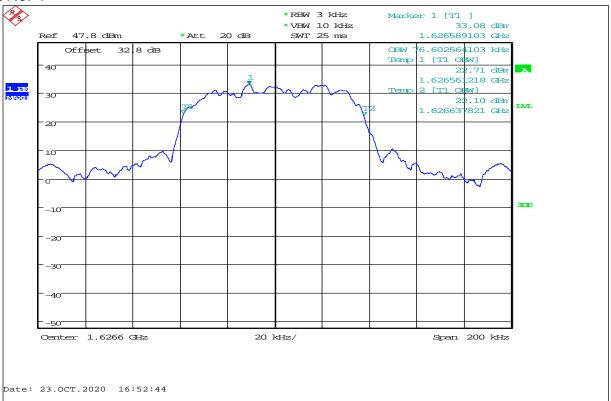


Plot No. 3



OBW, High Channel, R5T1XD

Plot No. 4

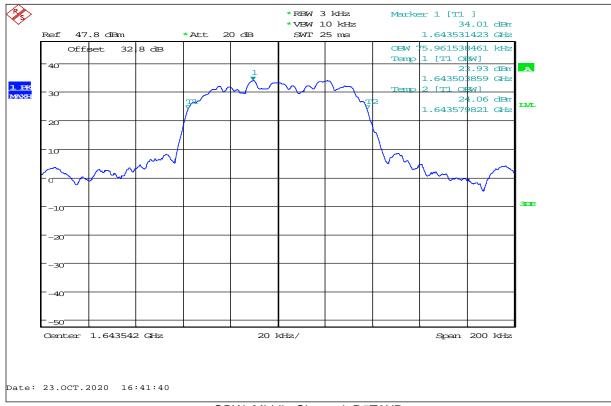


OBW, Low Channel, R5T2XD

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Plot No. 5



OBW, Middle Channel, R5T2XD

Plot No. 6

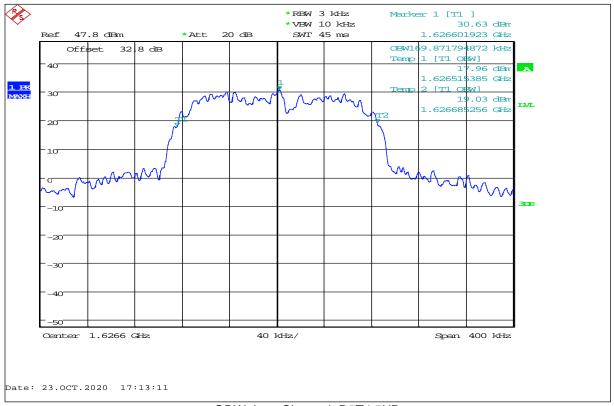


OBW, High Channel, R5T2XD

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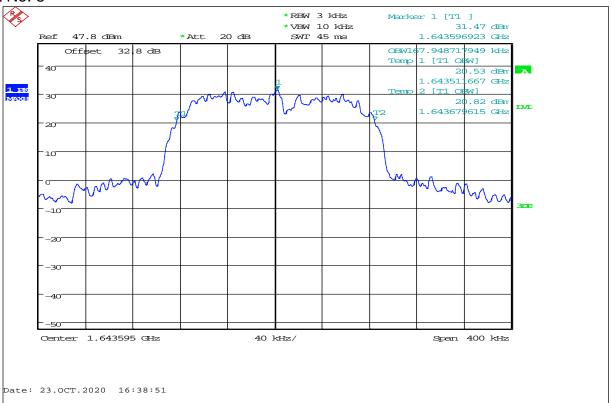


Plot No. 7



OBW, Low Channel, R5T4.5XD

Plot No. 8

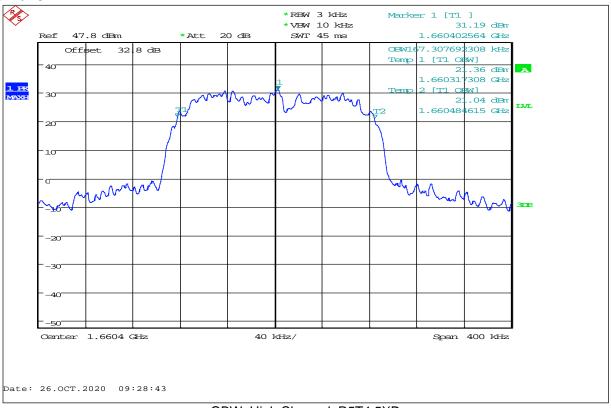


OBW, Middle Channel, R5T4.5XD

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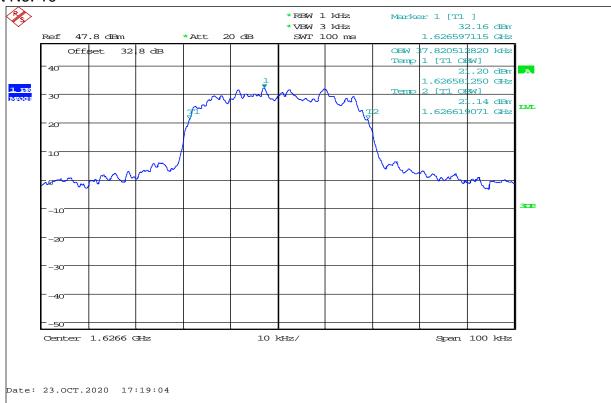


Plot No. 9



OBW, High Channel, R5T4.5XD

Plot No. 10

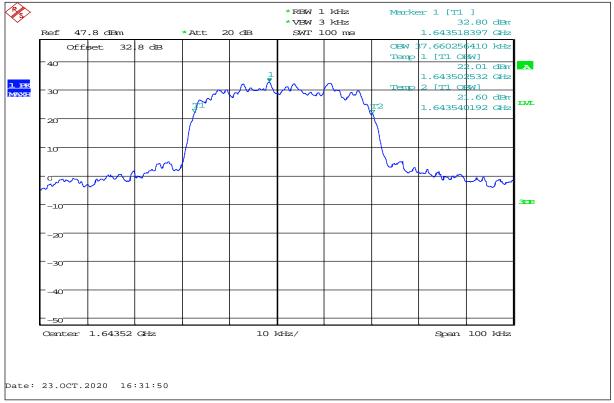


OBW, Low Channel, R20T1XD

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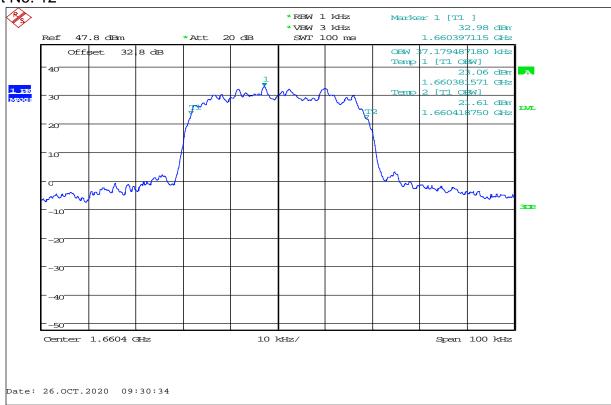


Plot No. 11



OBW, Middle Channel, R20T1XD

Plot No. 12

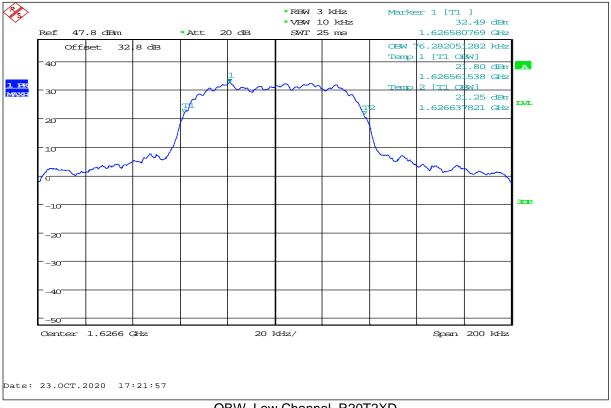


OBW, High Channel, R20T1XD

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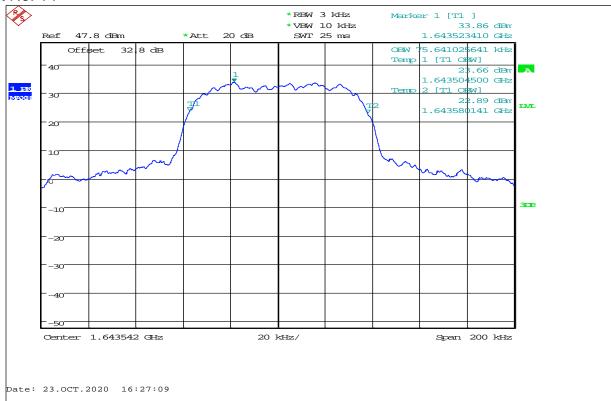


Plot No. 13



OBW, Low Channel, R20T2XD

Plot No. 14

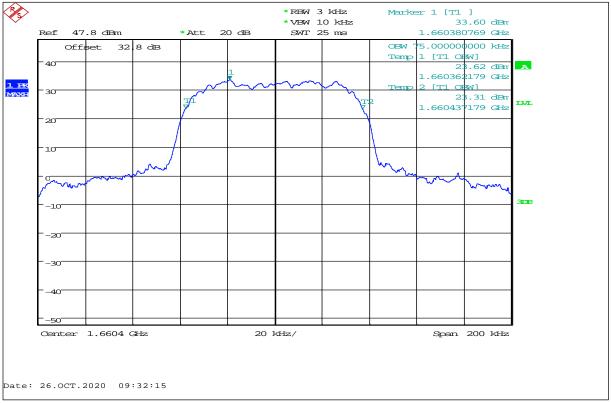


OBW, Middle Channel, R20T2XD

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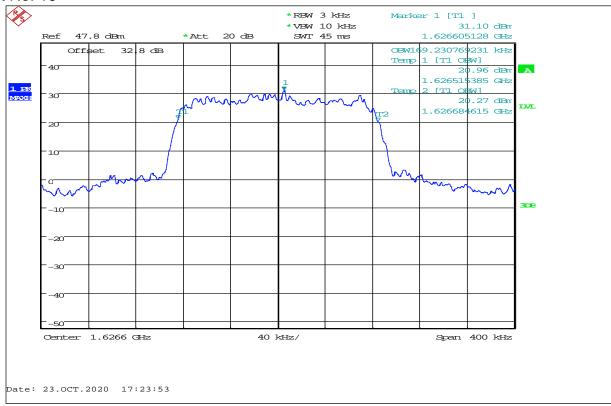


Plot No. 15



OBW, High Channel, R20T2XD

Plot No. 16

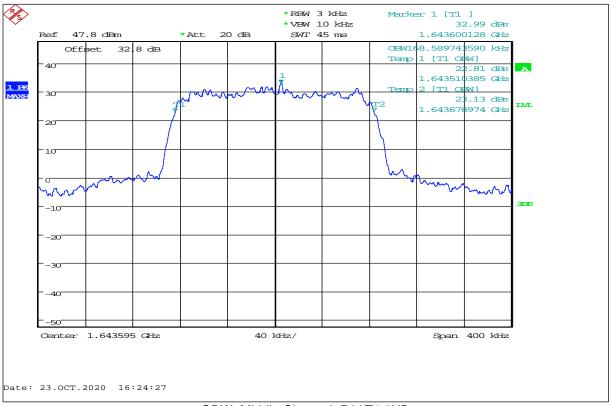


OBW, Low Channel, R20T4.5XD

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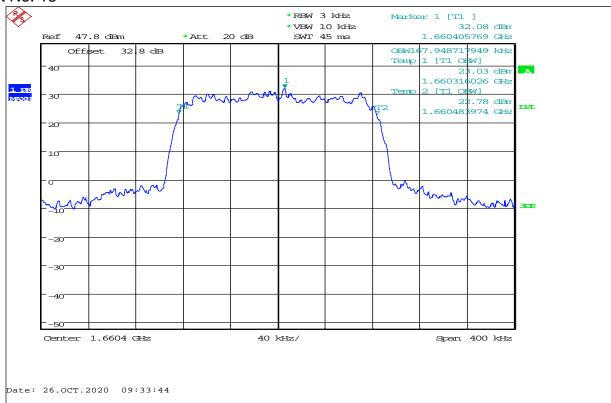


Plot No. 17



OBW, Middle Channel, R20T4.5XD

Plot No. 18

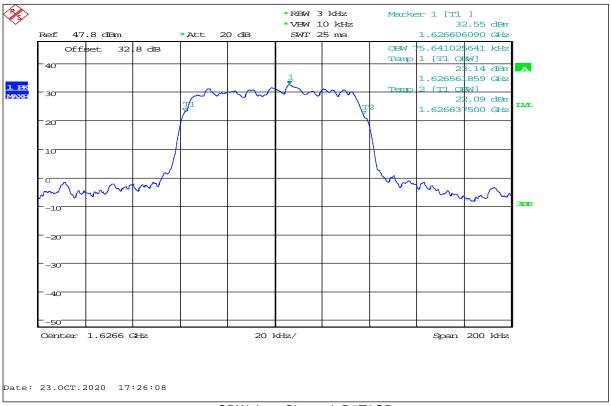


OBW, High Channel, R20T4.5XD

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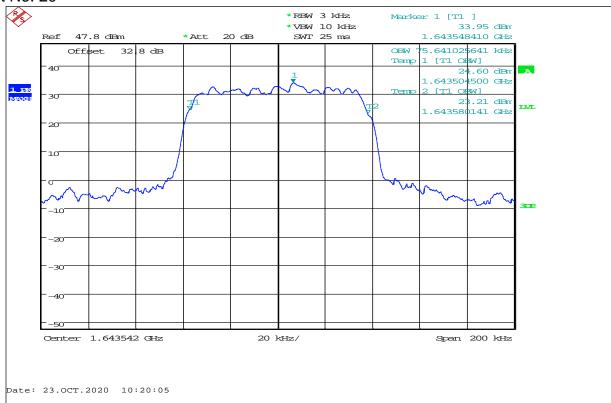


Plot No. 19



OBW, Low Channel, R5T2QD

Plot No. 20

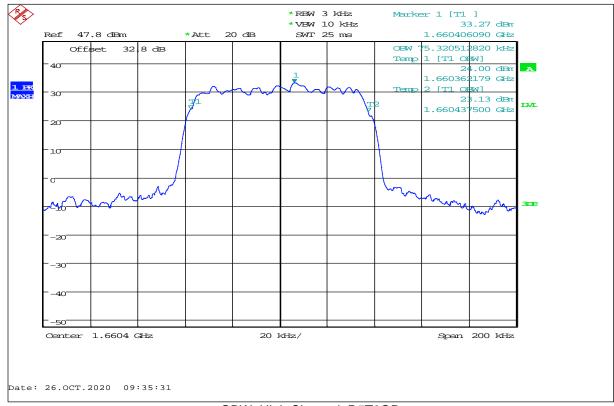


OBW, Middle Channel, R5T2QD

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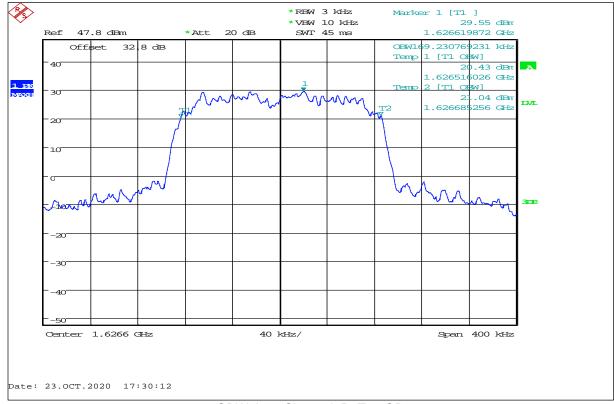


Plot No. 21



OBW, High Channel, R5T2QD

Plot No. 22

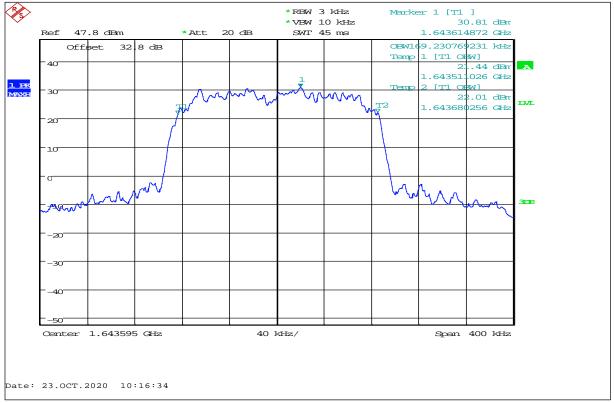


OBW, Low Channel, R5T4.5QD

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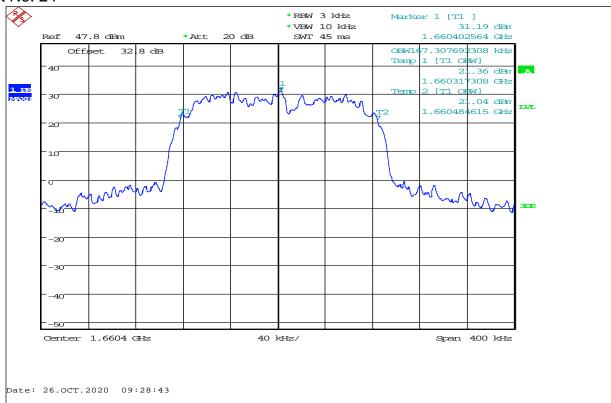


Plot No. 23



OBW, Middle Channel, R5T4.5QD

Plot No. 24

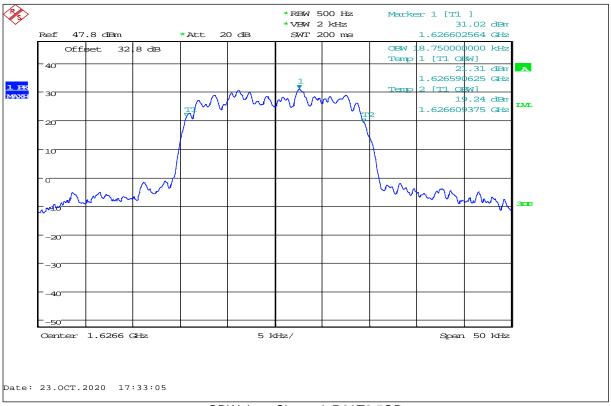


OBW, High Channel, R5T4.5QD

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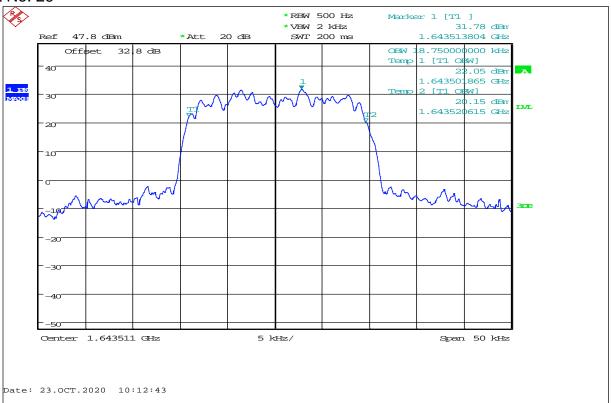


Plot No. 25



OBW, Low Channel, R20T0.5QD

Plot No. 26

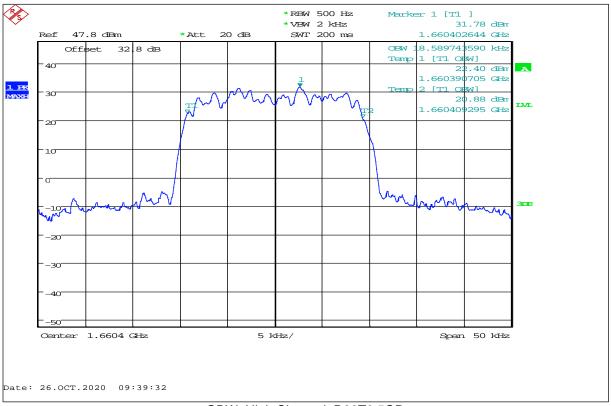


OBW, Middle Channel, R20T0.5QD

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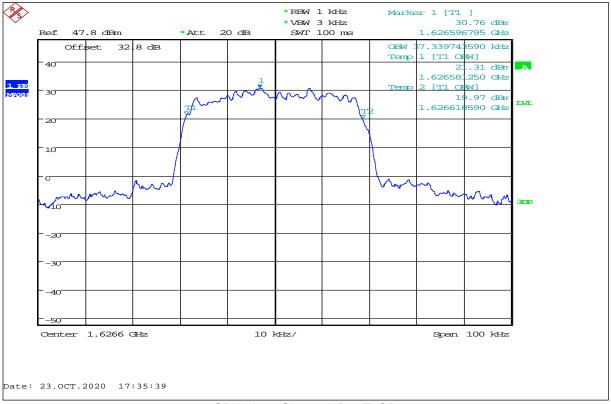


Plot No. 27



OBW, High Channel, R20T0.5QD

Plot No. 28

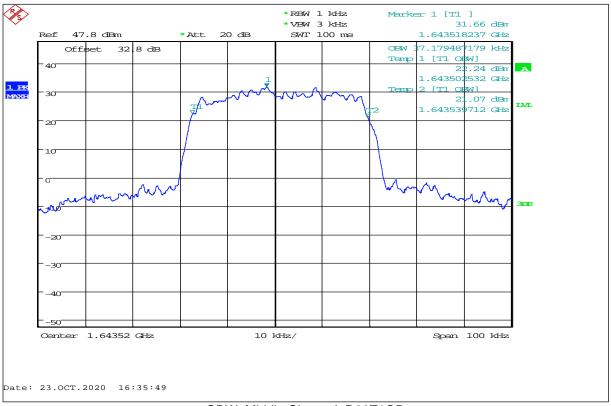


OBW, Low Channel, R20T1QD

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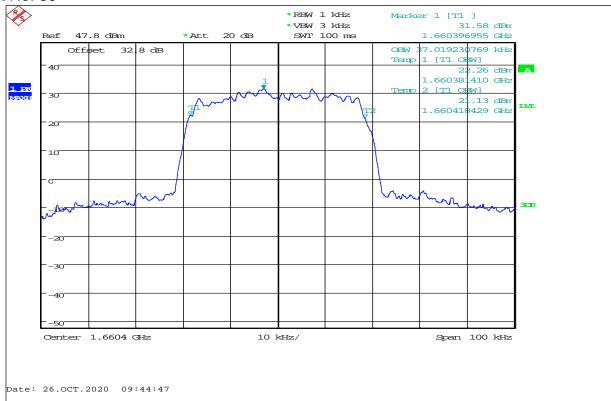


Plot No. 29



OBW, Middle Channel, R20T1QD

Plot No. 30

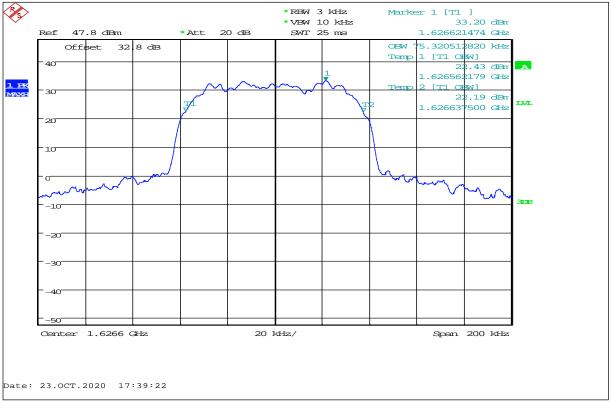


OBW, High Channel, R20T1QD

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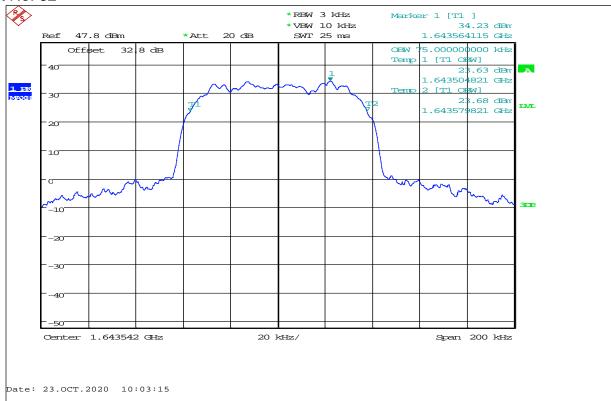


Plot No. 31



OBW, Low Channel, R20T2QD

Plot No. 32

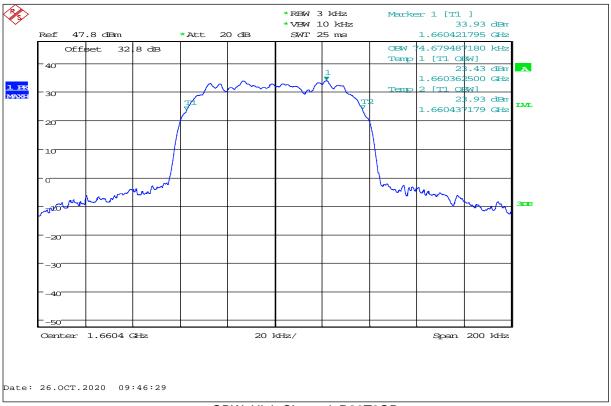


OBW, Middle Channel, R20T2QD

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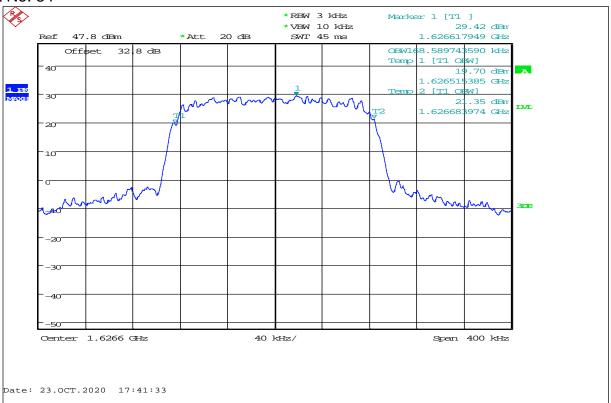


Plot No. 33



OBW, High Channel, R20T2QD

Plot No. 34

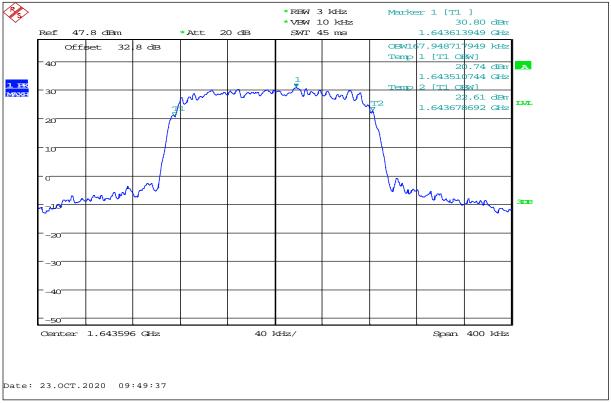


OBW, Low Channel, R20T4.5QD

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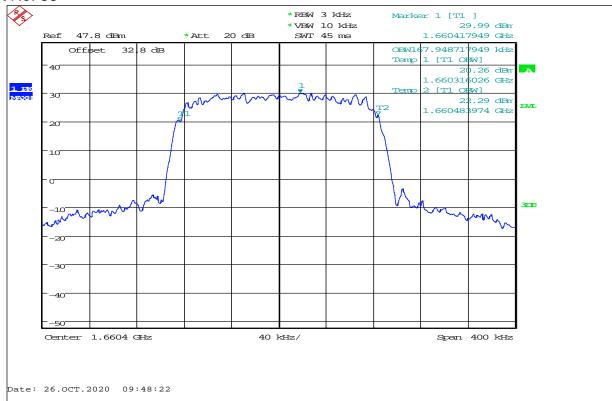


Plot No. 35



OBW, Middle Channel, R20T4.5QD

Plot No. 36

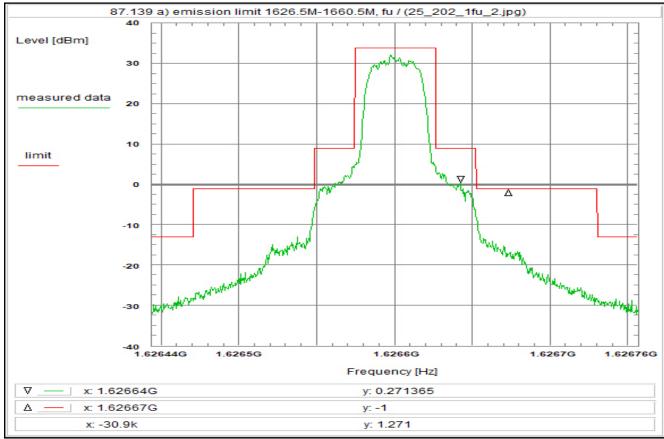


OBW, High Channel, R20T4.5QD

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Plot No. 37



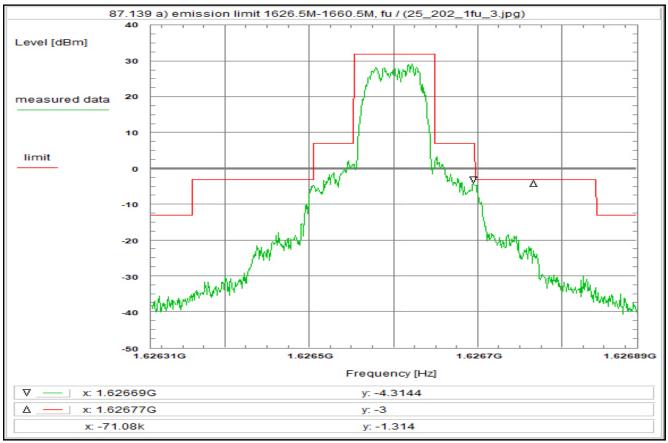
Emission limita	requency tolerance and emission limitations titions arrier at the lower edge of the band (fl)
Limit: Limit according to 87.139 a): 50-100% of assigned bw: -25dBc/4kHz 100-250% of assigned bw: -35dBc/4kH > 250% of assigned bw: -43+10log(Pm: The mean power of emissions shall be at below the mean output power of the trans in accordance with the above schedule.	ax)dBc/4kHz = -43 dBW tenuated
Test results: see plot (an explicit table was not genera	ted)
Operating condition of DUT: Operating condition 1, see test report chaft, R20T1XD	upter 6.4
Test setup: see test report chapter 8.2	
Test equipment: see test report chapter 8.1-8.2: C220, R0	01, U330
Remark:	
Test result: Test passed	

	22 55	SmbH, La °C	O aboratory RC-SYS	
Setup of measurement equ Start frequency: Stop frequency: Center frequency: Frequency span: Resolution-BW: Video-BW: Input attenuation: Trace-Mode: Detector-Mode:	1.626444 1.626756 1.6266 312	GHz GHz kHz kHz kHz		
Correction: Directional coupler Coaxial cable (C220) DUT-Antenna Test antenna BW correction factor (3k -> Atten. between HPA and fe (U330) TOTAL CORRECTION:	+ + + + + + + + + + + + + + + + + + +	0.9 dE 0.0 dE 0.0 dE 1.2 dE 0.0 dE 31.9 dE	B Bi B B B B	
Remarks: Carrier-on state / Carrier at	the lower edge	of the ban	nd (fl)	

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Plot No. 38



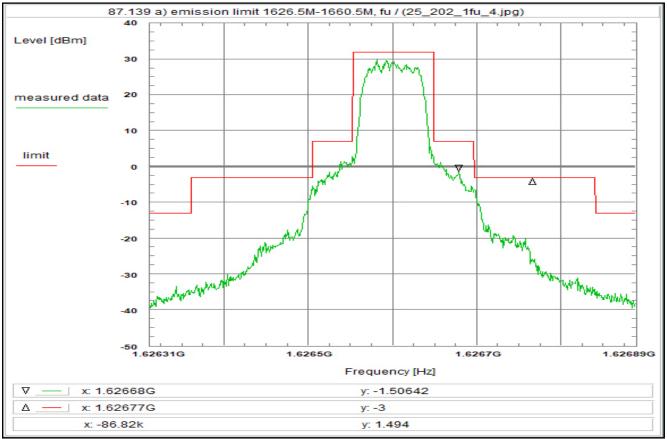
Subclause: 87.139 a)Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
Limit: Limit according to 87.139 a): 50-100% of assigned bw: -25dBc/4kHz 100-250% of assigned bw: -35dBc/4kHz > 250% of assigned bw: -43+10log(Pmax)dBc/4kHz = -43 dBW The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the above schedule.
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R5T2XD
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330
Remark:
Test result: Test passed

Environment condition:			
Date & Time:	Tue 27/Oct/2020		
Location:	CTC advanced (GmbH,	H, Laboratory RC-SYS
Temperature:	22	°C	-
Humidity:	55	%	
Voltage:	28	V DC	OC .
Setup of measurement e			
Start frequency:	1.626312	GHz	lz
Stop frequency:	1.626888	GHz	lz
Center frequency:	1.6266	GHz	łz
Frequency span:	576	kHz	Z
Resolution-BW:	3	kHz	Z
Video-BW:	10	kHz	Z
Input attenuation:	20	dB	
Trace-Mode:	Max-Hold		
Detector-Mode:	AVG		
Correction:			
Directional coupler	+		
Coaxial cable (C220)	+		
DUT-Antenna	+		
Test antenna	+		
BW correction factor (3k	-> 4K) +	1.2	
Atten. between HPA and			
(U330) TOTAL CORRECTION:	+		9 dB 0 dB
TOTAL CORRECTION:	+	34.0	0 08
Remarks:			
Carrier-on state / Carrier	at the lower edge	of the b	e band (fl)

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Plot No. 39



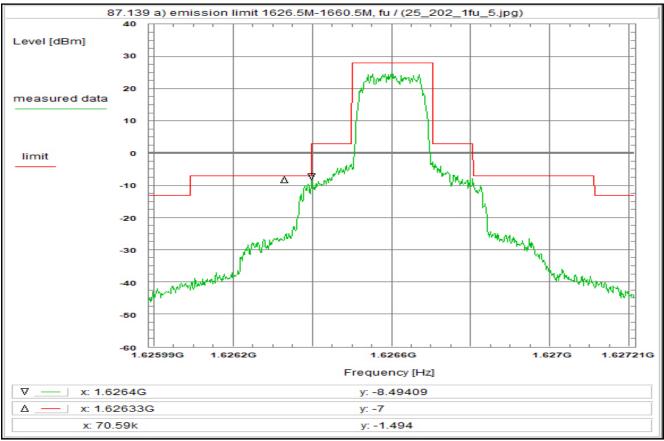
Subclause: 87.139 a)Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl) Limit: Limit according to 87.139 a): 50-100% of assigned bw: -25dBc/4kHz 100-250% of assigned bw: -35dBc/4kHz > 250% of assigned bw: -43+10log(Pmax)dBc/4kHz = -43 dBW The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the above schedule. Test results: see plot (an explicit table was not generated) Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R20T2XD Test setup: see test report chapter 8.2 Test equipment: see test report chapter 8.1-8.2: C220, R001, U330 Remark: Test result: Test passed	
Emission limitations Modulated rf-carrier at the lower edge of the band (fi) Limit: Limit according to 87.139 a): 50-100% of assigned bw: -25dBc/4kHz 100-250% of assigned bw: -35dBc/4kHz > 250% of assigned bw: -43+10log(Pmax)dBc/4kHz = -43 dBW The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the above schedule. Test results: see plot (an explicit table was not generated) Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fi, R20T2XD Test setup: see test report chapter 8.2 Test equipment: see test report chapter 8.1-8.2: C220, R001, U330 Remark:	
Limit according to 87.139 a): 50-100% of assigned bw: -25dBc/4kHz 100-250% of assigned bw: -43+10log(Pmax)dBc/4kHz = -43 dBW The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the above schedule. Test results: see plot (an explicit table was not generated) Operating condition of DUT: Operating condition 1, see test report chapter 6.4 ff, R20T2XD Test setup: see test report chapter 8.2 Test equipment: see test report chapter 8.1-8.2: C220, R001, U330 Remark:	Emission limitations
See plot (an explicit table was not generated) Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R20T2XD Test setup: see test report chapter 8.2 Test equipment: see test report chapter 8.1-8.2: C220, R001, U330 Remark:	Limit according to 87.139 a): 50-100% of assigned bw: -25dBc/4kHz 100-250% of assigned bw: -35dBc/4kHz > 250% of assigned bw: -43+10log(Pmax)dBc/4kHz = -43 dBW The mean power of emissions shall be attenuated below the mean output power of the transmitter
Operating condition 1, see fest report chapter 6.4 fl, R20T2XD Test setup: see test report chapter 8.2 Test equipment: see test report chapter 8.1-8.2: C220, R001, U330 Remark:	
see test report chapter 8.2 Test equipment: see test report chapter 8.1-8.2: C220, R001, U330 Remark:	Operating condition 1, see test report chapter 6.4
see test report chapter 8.1-8.2: C220, R001, U330 Remark:	
Test result: Test passed	Remark:
	Test result: Test passed

Environment condition:					
Date & Time: Tue 27/Oct/2020 14:40:33					
Location: CTC advanced GmbH, Laboratory RC-SYS					
Temperature:	22	°C			
Humidity:	55	%			
Voltage:	28	V DC	C		
Setup of measurement e	auinmont:				
Start frequency:	1.626312	GHz	7		
Stop frequency:	1.626888				
Center frequency:	1.6266				
Frequency span:	576				
Resolution-BW:	3				
Video-BW:	10				
Input attenuation:	20				
Trace-Mode:	Max-Hold				
Detector-Mode:	AVG				
Correction:		0.0	AD.		
Directional coupler	+				
Coaxial cable (C220) DUT-Antenna	+				
Test antenna	+				
BW correction factor (3k					
Atten. between HPA and					
(U330)	+				
TOTAL CORRECTION:	+				
Remarks: Carrier-on state / Carrier	at the lower edge	of tha h	hand (fl)		
Carrier-on state / Carrier	at the lower edge	oi tile L	band (ii)		

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Plot No. 40



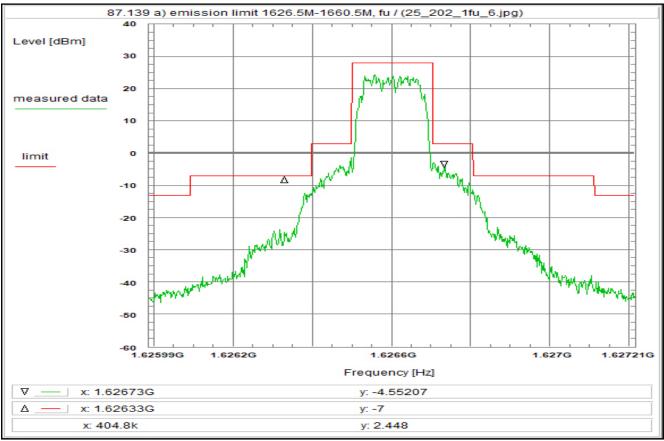
Subclause: 87.139 a)Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
Limit: Limit according to 87.139 a): 50-100% of assigned bw: -25dBc/4kHz 100-250% of assigned bw: -35dBc/4kHz > 250% of assigned bw: -43+10log(Pmax)dBc/4kHz = -43 dBW The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the above schedule.
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R20T45XD
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330
Remark:
Test result: Test passed

Temperature: 22 Humidity: 55	GmbH, Laboratory RC-SYS °C
Setup of measurement equipment: Start frequency: 1.625988 Stop frequency: 1.627912 Center frequency: 1.6266 Frequency span: 1.224 Resolution-BW: 3 Video-BW: 10 Input attenuation: 20 Trace-Mode: Max-Hold Detector-Mode: AVG	GHz GHz MHz kHz kHz dB
Correction: Directional coupler + Coaxial cable (C220) + DUT-Antenna + Test antenna + BW correction factor (3k -> 4k) + Atten. between HPA and feedhorn (U330) + TOTAL CORRECTION: + Remarks: Carrier-on state / Carrier at the lower edge	0.9 dB 0.0 dBi 0.0 dB 1.2 dB 0.0 dB 31.9 dB 34.0 dB

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Plot No. 41



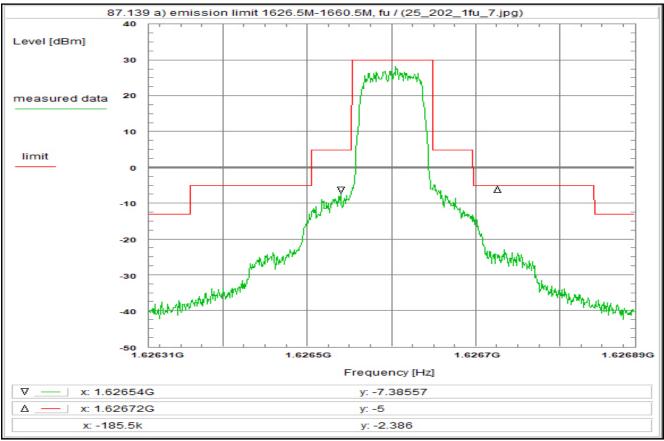
Subclause: 87.139 a)Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
Limit: Limit according to 87.139 a): 50-100% of assigned bw: -25dBc/4kHz 100-250% of assigned bw: -35dBc/4kHz > 250% of assigned bw: -43+10log(Pmax)dBc/4kHz = -43 dBW The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the above schedule.
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see lest report chapter 6.4 fl, R5T45XD
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330
Remark:
Test result: Test passed

Environment condition:					
Date & Time: Tue 27/Oct/2020 14:49:07					
Location: CTC advanced GmbH, Laboratory RC-SYS					
Temperature:	22	°C			
Humidity:	55				
Voltage:	28	V DC	C		
Setup of measurement equipme	ent:				
Start frequency:	1.625988	GHz	Z		
Stop frequency:	1.627212		Z		
Center frequency:	1.6266	GHz	Z		
Frequency span:	1.224	MHz	Z		
Resolution-BW:	3	kHz			
Video-BW:	10	kHz			
Input attenuation:	20	dB			
Trace-Mode:	Max-Hold				
Detector-Mode:	AVG				
Correction:					
Directional coupler	+	0.0	dB		
Coaxial cable (C220)	+				
DUT-Antenna	+		dBi		
Test antenna	+		dB		
BW correction factor (3k -> 4k)			dB		
Atten, between HPA and feedh	orn -	0.0	dB		
(U330)	+	31.9	9 dB		
TOTAL CORRECTION:	+	34.0	O dB		
Remarks:					
Carrier-on state / Carrier at the	lower edge	of the b	band (fl)		

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Plot No. 42



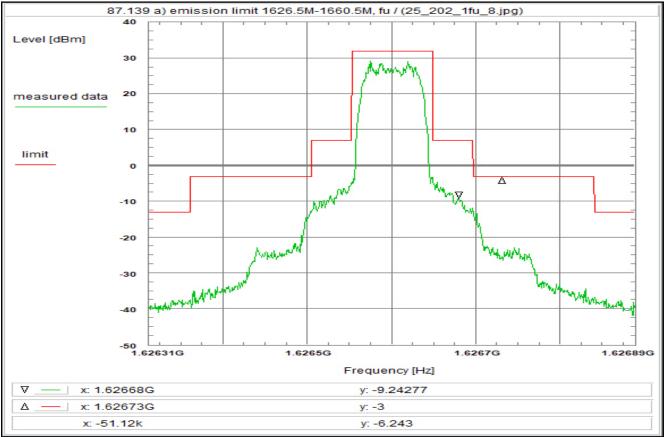
Subclause: 87.139 a)Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fi)
Limit: Limit according to 87.139 a): 50-100% of assigned bw: -25dBc/4kHz 100-250% of assigned bw: -35dBc/4kHz > 250% of assigned bw: -43+10log(Pmax)dBc/4kHz = -43 dBW The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the above schedule.
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R5T2QD
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330
Remark:
Test result: Test passed
1

	22 55	SmbH, L °C	H, Laboratory RC-SYS	
Setup of measurement equipolical Start frequency: Stop frequency: Center frequency: Frequency span: Resolution-BW: Video-BW: Input attenuation: Trace-Mode: Detector-Mode:	1.626312 1.626888 1.6266 576	GHz GHz kHz kHz kHz	2 2 2 2	
Correction: Directional coupler Coaxial cable (C220) DUT-Antenna Test antenna BW correction factor (3k -> 4 Atten. between HPA and fee (U330) TOTAL CORRECTION:		0.9 (0.0 (0.0 (0.0 (0.0 (0.0 (0.0 (0.0 (dB dBi dB dB dB dB	
Remarks: Carrier-on state / Carrier at t	he lower edge	of the ba	e band (ff)	

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Plot No. 43



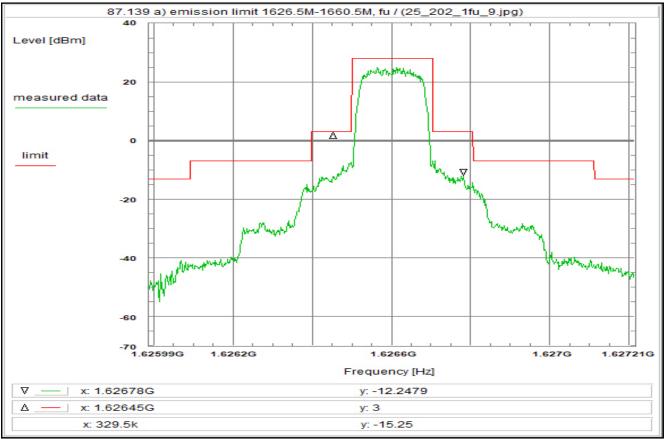
<u>Subclause:</u> 87	.139 a)Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
100-250% of assigned > 250% of assigned The mean power of below the mean out	7.139 a): 27.139 a): 28. d bw: -25dBc/4kHz 29. ded bw: -35dBc/4kHz 29. dbw: -43+10log(Pmax)dBc/4kHz = -43 dBW 29. emissions shall be attenuated 29. tput power of the transmitter 29. dbw 20.
Test results: see plot (an explicit	table was not generated)
Operating condition Operating condition fl, R20T2QD	of DUT: 1, see test report chapter 6.4
Test setup: see test report chap	oter 8.2
Test equipment: see test report chap	oter 8.1-8.2: R001
Remark:	
Test result: Te	est passed

Environment condition:			
Date & Time:	Tue 27/Oct/2020	14:56	6:14
Location:	CTC advanced (GmbH,	I, Laboratory RC-SYS
Temperature:	22		
Humidity:	55	%	
Voltage:	28	V DO	С
1			
Setup of measurement e	quipment:		
Start frequency:	1.626312	GHz	Z
Stop frequency:	1.626888	GHz	Z
Center frequency:	1.6266	GHz	Z
Frequency span:	576	kHz	
Resolution-BW:	3	kHz	
Video-BW:	10	kHz	
Input attenuation:	20	dB	
Trace-Mode:	Max-Hold		
Detector-Mode:	AVG		
Correction:			
Directional coupler	+	0.0	
Coaxial cable (C220)	+		
DUT-Antenna	+		
Test antenna	+		
BW correction factor (3k		1.2	
Atten. between HPA and	feedhorn -		
(U330)	+		9 dB
TOTAL CORRECTION:	+	34.0) dB
Domorko			
Remarks: Carrier-on state / Carrier	at the lower edge	of tha l	hand (fl)
Carrier-on state / Carrier	at the lower edge	oi the i	band (ii)

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Plot No. 44



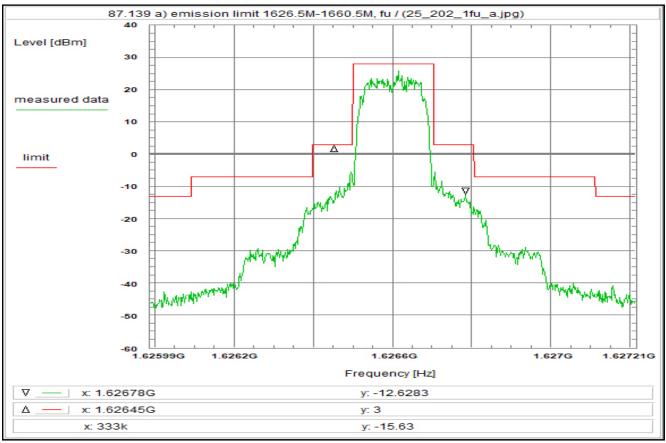
<u>Subclause:</u> 87	.139 a)Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
100-250% of assigned > 250% of assigned The mean power of below the mean ou	37.139 a): ed bw: -25dBc/4kHz ned bw: -35dBc/4kHz 1 bw: -43+10log(Pmax)dBc/4kHz = -43 dBW f emissions shall be attenuated tput power of the transmitter the above schedule.
Test results: see plot (an explicit	table was not generated)
Operating condition Operating condition fl, R20T45QD	n of DUT: 11, see test report chapter 6.4
Test setup: see test report chap	oter 8.2
Test equipment: see test report chap	oter 8.1-8.2: C220, R001, U330
Remark:	
Test result: To	est passed

Environment condition:			
Date & Time:	Tue 27/Oct/2020	14:59	59:53
Location:	CTC advanced (GmbH,	I, Laboratory RC-SYS
Temperature:	22	°C	
Humidity:	55	%	
Voltage:	28	V DC	OC .
· ·			
Setup of measurement e			
Start frequency:	1.625988	GHz	Z
Stop frequency:	1.627212		
Center frequency:	1.6266		Z
Frequency span:	1.224		
Resolution-BW:	3	kHz	
Video-BW:	10		<u>'</u>
Input attenuation:	20	dB	
Trace-Mode:	Max-Hold		
Detector-Mode:	AVG		
Correction:			-
Directional coupler	+		
Coaxial cable (C220)	+		
DUT-Antenna	+		
Test antenna	+		
BW correction factor (3k			
Atten. between HPA and			
(U330)	+		9 dB
TOTAL CORRECTION:	+	34.0	0 dB
Domarka			
Remarks: Carrier-on state / Carrier	at the lower edge	of tha l	hand (fl)
Carrier-on state / Carrier	at the lower edge	oi the i	ballu (II)
I			

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Plot No. 45



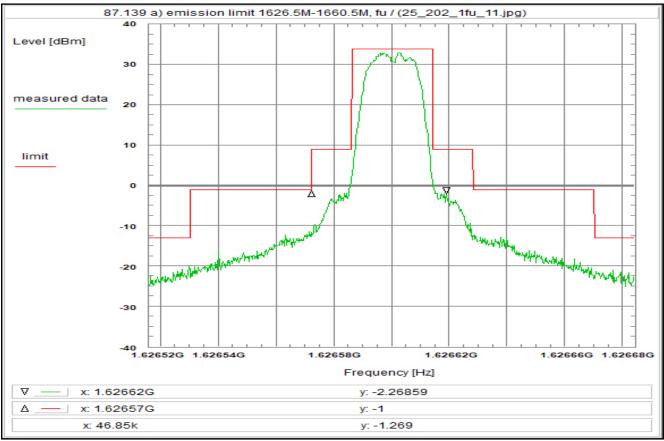
Subclause: 87.139 a)Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (ft)
Limit: Limit according to 87.139 a): 50-100% of assigned bw: -25dBc/4kHz 100-250% of assigned bw: -35dBc/4kHz > 250% of assigned bw: -43+10log(Pmax)dBc/4kHz = -43 dBW The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the above schedule.
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R5T45QD
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330
Remark:
Test result: Test passed

Environment condition: Date & Time:	Tue 27/Oct/2020		
Location:			, Laboratory RC-SYS
Temperature:	22		
Humidity:	55		
Voltage:	28	V DC	~
Setup of measurement e	quipment:		
Start frequency:	1.625988		:
Stop frequency:	1.627212	GHz	
Center frequency:	1.6266	GHz	
Frequency span:	1.224	MHz	!
Resolution-BW:	3	kHz	
Video-BW:	10	kHz	
Input attenuation:	20	dB	
Trace-Mode:	Max-Hold		
Detector-Mode:	AVG		
Correction			
Correction: Directional coupler	+	0.0	dB
Coaxial cable (C220)	+		T
DUT-Antenna			
Test antenna	+		T
BW correction factor (3k		1.2	
Atten. between HPA and	foodborn +		
(U330)	+		
TOTAL CORRECTION:	+		
TOTAL CONNECTION.	т	34.0	ub
Remarks: Carrier-on state / Carrier	at the lower edge of	of the h	hand (fl)
	at the letter eage t	00 2	24.14 (1.)

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Plot No. 46



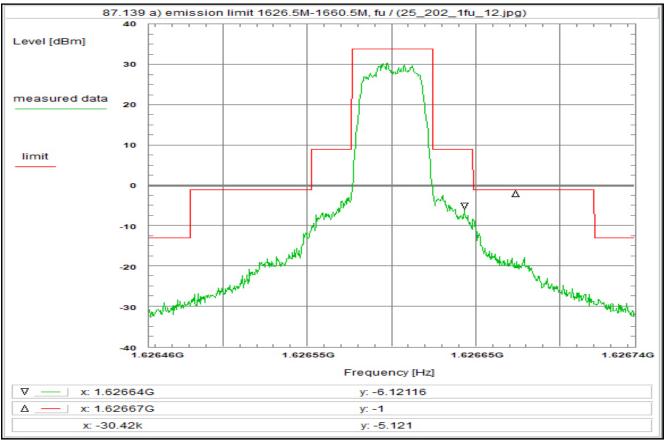
Subclause: 87.139 a)Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
Limit: Limit according to 87.139 a): 50-100% of assigned bw: -25dBc/4kHz 100-250% of assigned bw: -35dBc/4kHz > 250% of assigned bw: -43+10log(Pmax)dBc/4kHz = -43 dBW The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the above schedule.
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R20T0.5QD
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330
Remark:
Test result: Test passed

Temperature: 22 Humidity: 55	I GmbH, Laboratory RC-SYS °C
	GHz GHz KHz KHz KHz KHZ KHZ
Coaxial cable (C220) DUT-Antenna Test antenna BW correction factor (3k -> 4k) Atten. between HPA and feedhorn (U330)	0.0 dB 0.9 dB 0.0 dBi 0.0 dB 1.2 dB 0.0 dB 31.9 dB
Carrier-on state / Carrier at the lower edg	e of the band (f1)

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Plot No. 47



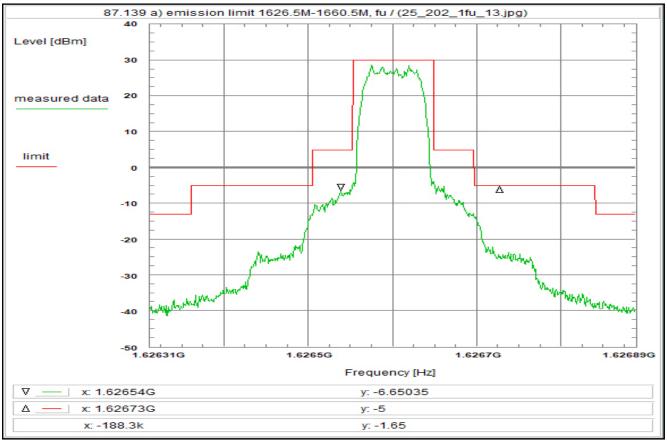
Subclause: 87.139 a)Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
Limit: Limit according to 87.139 a): 50-100% of assigned bw: -25dBc/4kHz 100-250% of assigned bw: -35dBc/4kHz > 250% of assigned bw: -43+10log(Pmax)dBc/4kHz = -43 dBW The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the above schedule.
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R20T1QD
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330
Remark:
Test result: Test passed

Environment condition:			
Date & Time:	Tue 27/Oct/2020	15:12	2:44
Location:	CTC advanced (SmbH,	I, Laboratory RC-SYS
Temperature:	22	°C	•
Humidity:	55	%	
Voltage:	28	V DO	C
Setup of measurement e	guipment:		
Start frequency:	1.626456	GHz	Z
Stop frequency:	1.626744	GHz	Z
Center frequency:	1.6266	GHz	Z
Frequency span:	288	kHz	
Resolution-BW:	3	kHz	
Video-BW:	10	kHz	
Input attenuation:	20	dB	
Trace-Mode:	Max-Hold		
Detector-Mode:	AVG		
Correction:			
Directional coupler	+	0.0	dB
Coaxial cable (C220)	+	0.9	dB
DUT-Antenna	+	0.0	dBi
Test antenna	+	0.0	dB
BW correction factor (3k			
Atten. between HPA and			
(U330)	+	31.9	
TOTAL CORRECTION:	+	34.0) dB
Remarks:			
Carrier-on state / Carrier	at the lower edge of	of the b	band (fl)
1			

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Plot No. 48



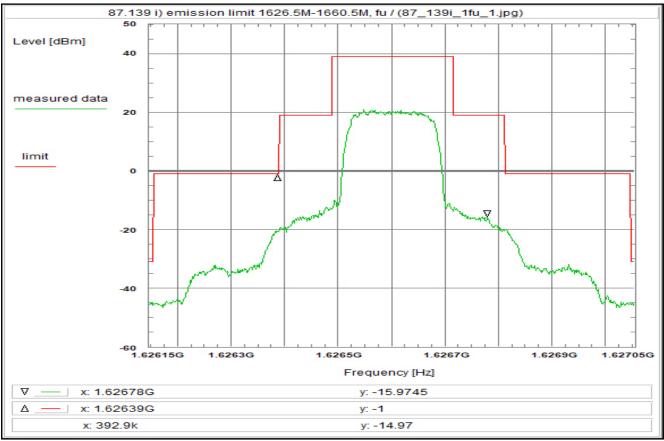
Subclause: 87.139 a)Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
Limit: Limit according to 87.139 a): 50-100% of assigned bw: -25dBc/4kHz 100-250% of assigned bw: -35dBc/4kHz > 250% of assigned bw: -43+10log(Pmax)dBc/4kHz = -43 dBW The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the above schedule.
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R20T2QD
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330
Remark:
Test result: Test passed

Environment condition:					
Date & Time:	Tue 27/Oct/2020	15:15	18		
Location:	CTC advanced (GmbH,	aboratory RC-S	SYS	
Temperature:	22		,		
Humidity:	55	%			
Voltage:	28	V DO			
1					
Setup of measurement e	quipment:				
Start frequency:	1.626312	GHz			
Stop frequency:	1.626888				
Center frequency:	1,6266				
Frequency span:	576	kHz			
Resolution-BW:	3				
Video-BW:	10				
Input attenuation:	20				
Trace-Mode:	Max-Hold				
Detector-Mode:	AVG				
Correction:					
Directional coupler	+	0.0	dB		
Coaxial cable (C220)	+		dB		
DUT-Antenna	+		dBi		
Test antenna	+		dB		
BW correction factor (3k	-> 4k) +	1.2	dB		
Atten. between HPA and	feedhorn -		dB		
(U330)	+				
TOTAL CORRECTION:	+				
Remarks:					
Carrier-on state / Carrier	at the lower edge	of the l	ind (fl)		
			. ()		
1					
1					
1					
I					

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Plot No. 49



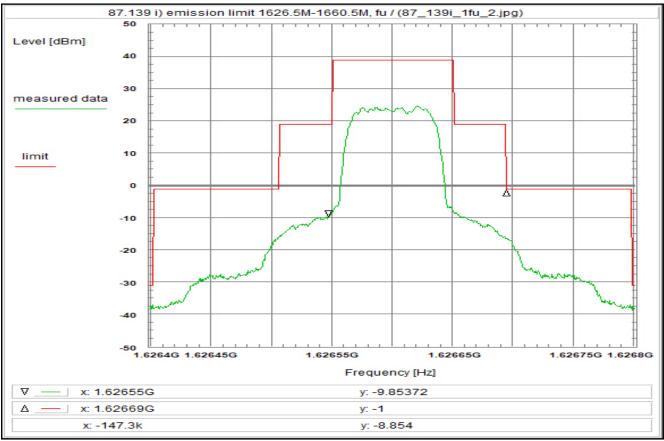
Subclause: 87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (ft)
Limit: Limit according to 87.139(i)(1) The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with 87.139(i)(1).
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R20T45QD
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330
Remark:
Test result: Test passed

Environment condition:	
Date & Time: Wed 28/Oct/2	2020 14:08:15
Location: CTC advance	ed GmbH, Laboratory RC-SYS
	22 °C
Humidity: 5	55 %
Voltage: 2	28 V DC
Setup of measurement equipment:	
Start frequency: 1.626146	
Stop frequency: 1.627053	
Center frequency: 1.626	
	7.2 kHz
	3 kHz
	10 kHz
input attoridation:	0 dB
Trace-Mode: Max-Hol	
Detector-Mode: AV	/G
0	
Correction:	0.0 - 10
	+ 0.0 dB
	+ 0.9 dB
	+ 0.0 dBi
	+ 0.0 dB + 1.2 dB
BW correction factor (3k -> 4k) Atten. between HPA and feedhorn	+ 1.2 dB
	- 0.0 dB + 31.9 dB
Freefield attenuation (U330) TOTAL CORRECTION:	+ 31.9 dB + 34.0 dB
TOTAL CORRECTION.	+ 34.0 UB
Remarks:	
Carrier-on state / Carrier at the lower edo	dge of the band (fl)
For EIRP calculation:	<u> </u>
'worst-case' = maximum antenna gain	
l	

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Plot No. 50



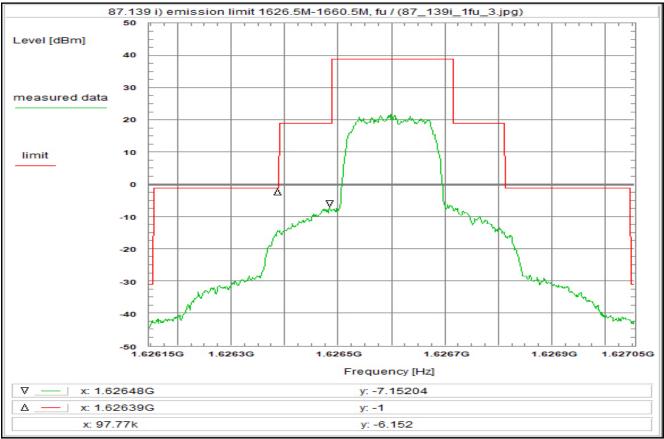
1
Subclause: 87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
Limit: Limit according to 87.139(i)(1) The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with 87.139(i)(1).
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R20T2QD
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330
Remark:
Test result: Test passed
1

Environment condition: Wed 28/Oct/2020 14:19:54 Location: CTC advanced GmbH, Laboratory RC-St Temperature: 22 °C Humidity: 55 % Voltage: 28 V DC	YS
Setup of measurement equipment: Start frequency: 1.6263984 GHz Stop frequency: 1.6268016 GHz Center frequency: 1.62666 GHz Frequency span: 403.2 kHz Resolution-BW: 3 kHz Video-BW: 10 kHz Input attenuation: 0 dB Trace-Mode: Max-Hold Detector-Mode: AVG	
Correction: + 0.0 dB Coaxial cable (C220) + 0.9 dB DUT-Antenna + 0.0 dBi Test antenna + 0.0 dB BW correction factor (3k -> 4k) + 1.2 dB Atten. between HPA and feedhorn - 0.0 dB Freefield attenuation (U330) + 31.9 dB TOTAL CORRECTION: + 34.0 dB	
Carrier-on state / Carrier at the lower edge of the band (fl) For EIRP calculation: 'worst-case' = maximum antenna gain	

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Plot No. 51



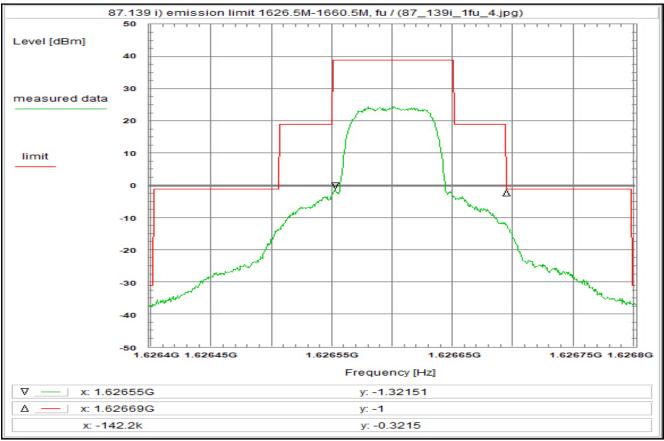
L'
Subclause: 87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
Limit: Limit according to 87.139(i)(1) The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with 87.139(i)(1).
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R20T45XD
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330
Remark:
Test result: Test passed

Environment condition:	
Date & Time: Wed 28/Oct/202	20 14:23:26
Location: CTC advanced	GmbH, Laboratory RC-SYS
Temperature: 22	°C
Humidity: 55	%
Voltage: 28	V DC
Setup of measurement equipment:	
Start frequency: 1.6261464	GHz
Stop frequency: 1.6270536	GHz
Center frequency: 1.6266	GHz
Frequency span: 907.2	kHz
Resolution-BW: 3	
Video-BW: 10	
Input attenuation: 0	dB
Trace-Mode: Max-Hold	
Detector-Mode: AVG	
Correction:	
Directional coupler +	0.0 dB
Coaxial cable (C220) +	0.9 dB
DUT-Antenna +	
Test antenna +	
	1.2 dB
	0.0 dB
Freefield attenuation (U330) + TOTAL CORRECTION: +	31.9 dB 34.0 dB
TOTAL CORRECTION: +	34.0 UB
Remarks:	
Carrier-on state / Carrier at the lower edge	of the band (fl)
For EIRP calculation:	
'worst-case' = maximum antenna gain	

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Plot No. 52



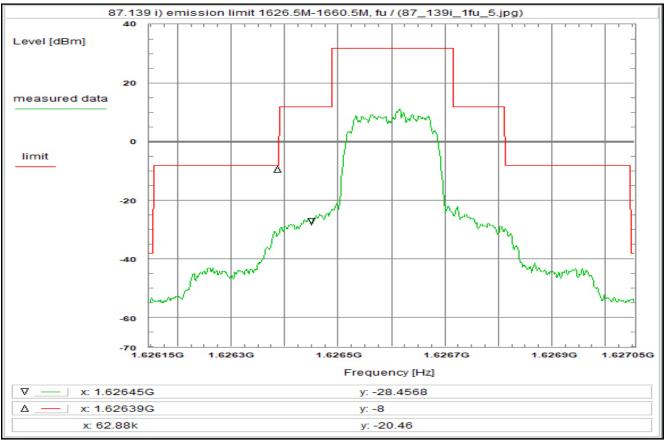
Subclause: 87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
Limit: Limit according to 87.139(i)(1) The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with 87.139(i)(1).
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R20T2XD
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330
Remark:
Test result: Test passed

Environment condition:			
Date & Time:	Wed 28/Oct/202	0 14:2	5:07
Location:	CTC advanced (GmbH,	Laboratory RC-SYS
Temperature:	22	°C	· ·
Humidity:	55	%	
Voltage:	28	V DO	
Setup of measurement ed			
Start frequency:	1.6263984	GHz	
Stop frequency:	1.6268016	GHz	
Center frequency:	1.6266		
Frequency span:	403.2		
Resolution-BW:	3	kHz	
Video-BW:	10	kHz	
Input attenuation:	0	dB	
Trace-Mode:	Max-Hold		
Detector-Mode:	AVG		
Correction:			
Directional coupler	+	0.0	
Coaxial cable (C220)	+	0.9	
DUT-Antenna	+	0.0	
Test antenna	+	0.0	
BW correction factor (3k -			
Atten. between HPA and		0.0	
Freefield attenuation (U3:	30) +	31.9	
TOTAL CORRECTION:	+	34.0	dB
Remarks:			
Carrier-on state / Carrier	at the lower edge	of the I	band (fl)
For EIRP calculation:			
'worst-case' = maximum	antenna gain		

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Plot No. 53



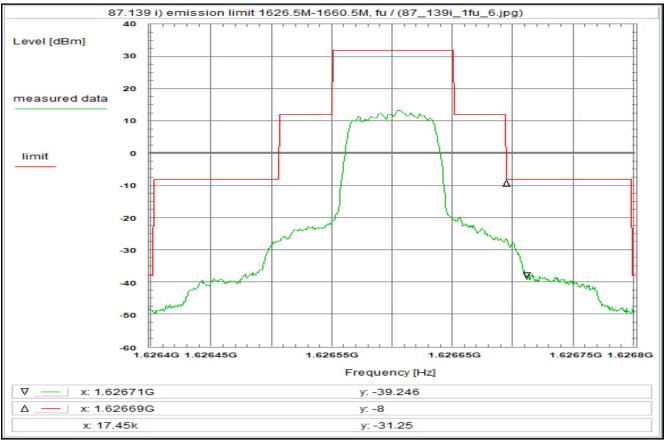
Subclause: 87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fi)
Limit: Limit according to 87.139(i)(1) The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with 87.139(i)(1).
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R5T45QD
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330
Remark:
Test result: Test passed

Environment condition: Date & Time: Wed 28/Oct/202 Location: CTC advanced of Temperature: 22 Humidity: 55 Voltage: 28	GmbH, Laboratory RC-SYS °C %
Setup of measurement equipment: Start frequency: 1.6261464 Stop frequency: 1.6270536 Center frequency: 1.6266 Frequency span: 907.2 Resolution-BW: 3 Video-BW: 10 Input attenuation: 0 Trace-Mode: Max-Hold Detector-Mode: AVG	GHz GHz kHz kHz kHz
Correction: Directional coupler + Coaxial cable (C220) + DUT-Antenna + Test antenna + BW correction factor (3k -> 4k) + Atten. between HPA and feedhorn - Freefield attenuation (U330) + TOTAL CORRECTION: + Remarks: Carrier-on state / Carrier at the lower edge For EIRP calculation: 'worst-case' = maximum antenna qain	0.9 dB 0.0 dBi 0.0 dB 1.2 dB 0.0 dB 31.9 dB 34.0 dB
Nost case - maximum anemia gain	

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Plot No. 54



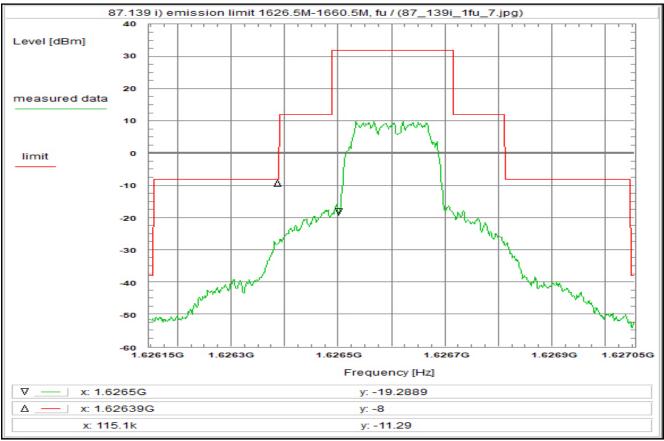
Subclause: 87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
Limit: Limit according to 87.139(i)(1) The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with 87.139(i)(1).
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R5T2QD
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330
Remark:
Test result: Test passed

Environment condition:	
Date & Time: Wed 28/Oct/202	0 14:33:53
Location: CTC advanced C	GmbH, Laboratory RC-SYS
Temperature: 22	°C
Humidity: 55	%
Voltage: 28	V DC
Tollage: 20	. 50
Setup of measurement equipment:	
Start frequency: 1.6263984	GHz
Stop frequency: 1.6268016	GHz
Center frequency: 1.6266	
Frequency span: 403.2	
	kHz
Video-BW: 10	kHz
Input attenuation: 0	dB
Trace-Mode: Max-Hold	45
Detector-Mode: AVG	
Detector mode.	
Correction:	
Directional coupler +	0.0 dB
Coaxial cable (C220) +	0.9 dB
DUT-Antenna +	
Test antenna +	
	1.2 dB
	0.0 dB
	31.9 dB
	34.0 dB
TOTAL CORRECTION.	34.0 db
Remarks:	
Carrier-on state / Carrier at the lower edge of	of the hand (fl)
For EIRP calculation:	or the band (ii)
'worst-case' = maximum antenna gain	
worst-case = maximum antenna gain	

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Plot No. 55



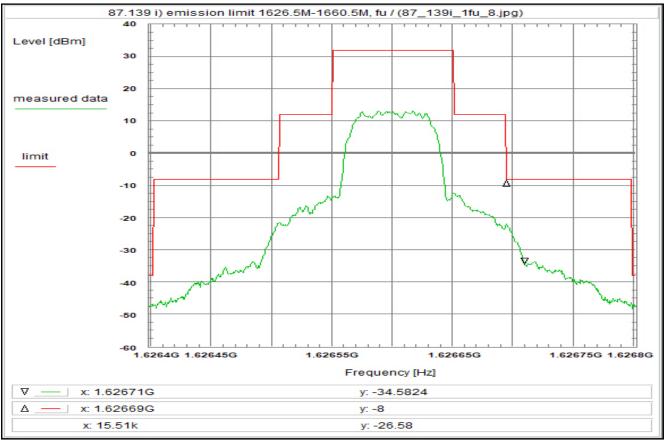
Subclause: 87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)	
Limit: Limit according to 87.139(i)(1) The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with 87.139(i)(1).	
Test results: see plot (an explicit table was not generated)	
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R5T45XD	
Test setup: see test report chapter 8.2	
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330	
Remark:	
Test result: Test passed	

Environment condition:				
Date & Time:	Date & Time: Wed 28/Oct/2020 14:37:30			
Location: CTC advanced GmbH, Laboratory RC-SYS				
Temperature:	22	°C		
Humidity:	55	%		
Voltage:	28	V DC	C	
Setup of measurement eq				
Start frequency:	1.6261464	GHz		
Stop frequency:	1.6270536			
Center frequency:	1.6266			
Frequency span:	907.2			
Resolution-BW:	-	kHz		
Video-BW:	10	kHz		
Input attenuation:	0	dB		
Trace-Mode:	Max-Hold			
Detector-Mode:	AVG			
Correction:				
Directional coupler	+	0.0		
Coaxial cable (C220)	+	0.9		
DUT-Antenna	+		dBi	
Test antenna	+			
BW correction factor (3k -:		1.2		
Atten. between HPA and f				
Freefield attenuation (U33	0) +	31.9		
TOTAL CORRECTION:	+	34.0) dB	
Remarks:				
Carrier-on state / Carrier a	it the lower edge	of the I	band (fl)	
For EIRP calculation:				
'worst-case' = maximum a	antenna gain			

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Plot No. 56



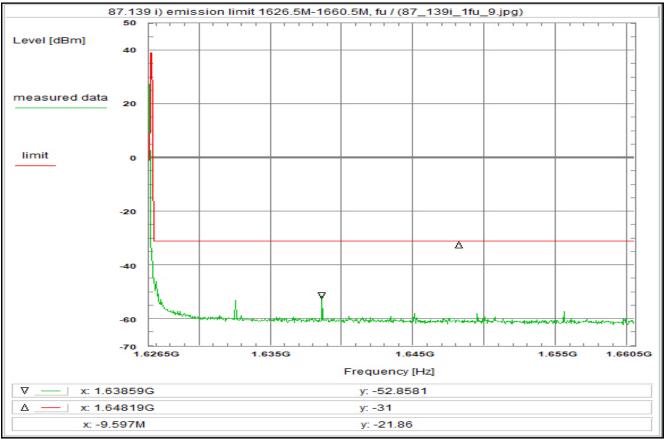
X. 10.01K
Subclause: 87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
Limit: Limit according to 87.139(i)(1) The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with 87.139(i)(1).
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R5T2XD
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330
Remark:
Test result: Test passed

Environment condition:	
Date & Time: Wed 28/Oct/202	0 14:41:01
	GmbH, Laboratory RC-SYS
Temperature: 22	°C
Humidity: 55	%
Voltage: 28	V DC
Colon of management and an in-	
Setup of measurement equipment: Start frequency: 1.6263984	GHz
Stop frequency: 1.6268016	GHz
Center frequency: 1.6266	
Frequency span: 403.2	
	kHz
Video-BW: 10	kHz
Input attenuation: 0	dB
Trace-Mode: Max-Hold	
Detector-Mode: AVG	
Correction:	0.0 40
Directional coupler +	0.0 dB 0.9 dB
Coaxial cable (C220) + DUT-Antenna +	
Test antenna +	
	1.2 dB
	0.0 dB
	31.9 dB
TOTAL CORRECTION: +	
Remarks:	611 1 1 100
Carrier-on state / Carrier at the lower edge	of the band (fl)
For EIRP calculation:	
'worst-case' = maximum antenna gain	

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Plot No. 57



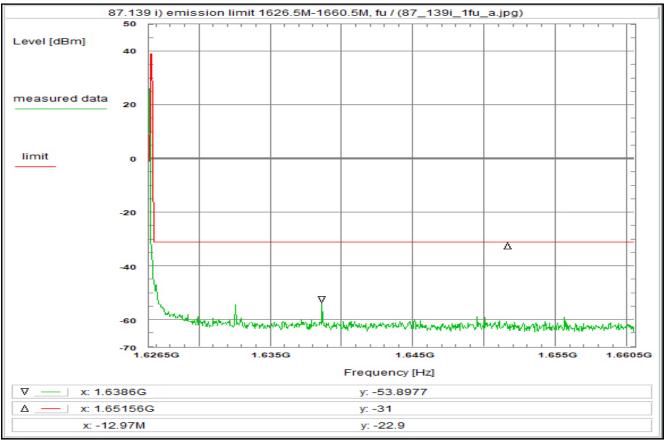
Subclause: 87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fi)
Limit: Limit according to 87.139(i)(1) The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with 87.139(i)(1).
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R5T1X
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330
Remark:
Test result: Test passed

Environment condition:				
	05/Nov/202	0 09:17	12	
			aboratory RC-SYS	
Temperature:	22	°C	,	
Humidity:	55	%		
Voltage:	28	V DC		
3				
Setup of measurement equipme	ent:			
Start frequency:	1.6265			
Stop frequency:	1.6605			
Center frequency:	1.6435			
Frequency span:	34			
Resolution-BW:	3			
Video-BW:	10			
Input attenuation:		dB		
Trace-Mode:	Max-Hold			
Detector-Mode:	RMS			
0				
Correction:		0.0	חר	
Directional coupler	+		dB	
Coaxial cable (C220) DUT-Antenna	+		dB dBi	
Test antenna	+		dB	
BW correction factor (3k -> 4k)			ив dB	
Atten. between HPA and feedh			dB	
(U330)	UIII - +			
TOTAL CORRECTION:	+			
TOTAL GOTTILE GOTTING		0 1.0	ub	
Remarks:				
Carrier-on state / Carrier at the	lower edge	of the b	and (fl)	
For EIRP calculation:				
'worst-case' = maximum anten	na gain			
1				
1				
1				
1				
1				
1				

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Plot No. 58



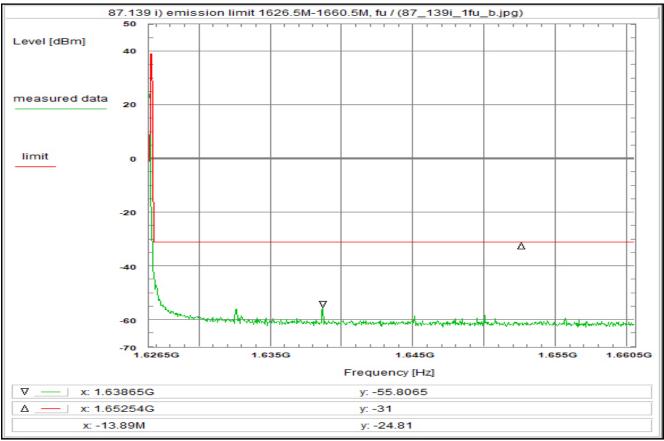
Subclause: 87.139 i) Frequencies, frequency tolerance and emiss Emission limitations Modulated rf-carrier at the lower edge of the	
Limit: Limit according to 87.139(i)(1) The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with 87.139(i)(1).	
Test results: see plot (an explicit table was not generated)	
Operating condition of DUT: Operating condition 1, see lest report chapter 6.4 fl, R20T1XD	
Test setup: see test report chapter 8.2	
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330	
Remark:	
Test result: Test passed	

Environment condition:					
	Thu 05/Nov/202	0 09:18	3:33		
Location:	CTC advanced (GmbH,	Labo	ratory RC-SYS	
Temperature:	22	°C		,	
Humidity:	55	%			
Voltage:	28	V DC)		
Setup of measurement equ		011			
Start frequency:	1.6265				
Stop frequency:	1.6605				
Center frequency:	1.6435				
Frequency span: Resolution-BW:	34 3				
Video-BW:	10				
Input attenuation:	0				
Trace-Mode:	Max-Hold	ub			
Detector-Mode:	RMS				
Detector-wode.	KIVIS				
Correction:					
Directional coupler	+	0.0	dB		
Coaxial cable (C220)	+		dB		
DUT-Antenna	+	0.0	dBi		
Test antenna	+	0.0	dB		
BW correction factor (3k ->	4k) +	1.2	dB		
Atten. between HPA and fe	edhorn -	0.0	dΒ		
(U330)	+				
TOTAL CORRECTION:	+	34.0	dΒ		
Remarks:	the levier edge.	af 11a 1	السسمة	/£I\	
Carrier-on state / Carrier at For EIRP calculation:	the lower eage	or the t	oana ((11)	
worst-case' = maximum a	ntonno goin				
WOISI-Case = IIIaxiiiiuiii ai	ntenna yani				
1					

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Plot No. 59



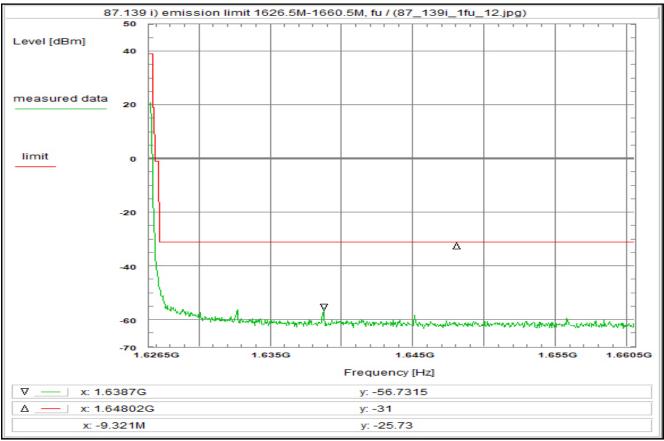
Subclause: 87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)				
Limit: Limit according to 87.139(i)(1) The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with 87.139(i)(1).				
Test results: see plot (an explicit table was not generated)				
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, R20T05QD				
Test setup: see test report chapter 8.2				
Test equipment: see test report chapter 8.1-8.2: C220, R001, U330				
Remark:				
Test result: Test passed				

	advanced (22 55	
Setup of measurement equipmer Start frequency: Stop frequency: Center frequency: Frequency span: Resolution-BW: Video-BW: Input attenuation: Trace-Mode: Detector-Mode:	1.6265 1.6605 1.6435 34 3	GHz GHz MHz kHz kHz dB
Correction: Directional coupler Coaxial cable (C220) DUT-Antenna Test antenna BW correction factor (3k -> 4k) Atten. between HPA and feedhor (U330) TOTAL CORRECTION: Remarks: Carrier-on state / Carrier at the lo	n - + +	0.9 dB 0.0 dBi 0.0 dB 1.2 dB 0.0 dB 31.9 dB 34.0 dB
worst-case' = maximum antenna	a gain	

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Plot No. 60



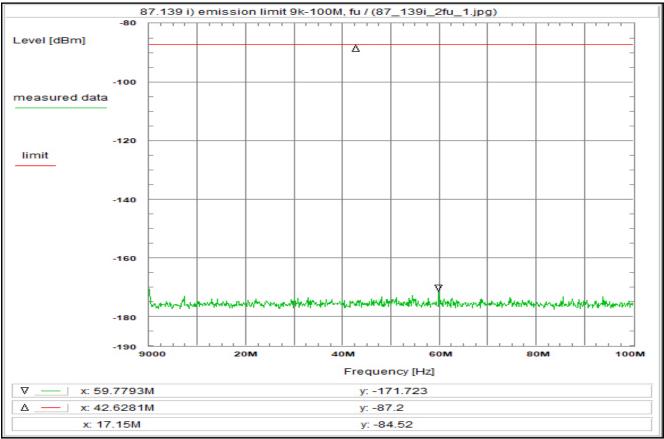
Subclause:	87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
	or of emissions shall be attenuated output power of the transmitter
Test results: see plot (an exp	licit table was not generated)
Operating condi Operating condi fl, R20T1QD	tion of <u>DUT:</u> tion 1, see lest report chapter 6.4
Test setup: see test report of	hapter 8.2
Test equipments	: hapter 8.1-8.2: R001
Remark:	
Test result:	Test passed

Environment condition: Date & Time: Thu 05/Nov/2020 09:23:57 Location: CTC advanced GmbH, Laboratory RC-SYS Temperature: 22 °C Humidity: 55 % Voltage: 28 V DC
Setup of measurement equipment: Start frequency: 1.6265 GHz Stop frequency: 1.6605 GHz Center frequency: 1.6435 GHz Frequency span: 34 MHz Resolution-BW: 3 kHz Video-BW: 30 kHz Input attenuation: 0 dB Trace-Mode: Max-Hold Detector-Mode: RMS
Correction: Directional coupler + 0.0 dB Coaxial cable (C220) + 0.9 dB DUT-Antenna + 0.0 dBi Test antenna + 0.0 dB BW correction factor (3k -> 4k) + 1.2 dB Atten. between HPA and feedhorn - 0.0 dB (U330) + 31.9 dB TOTAL CORRECTION: + 34.0 dB
Carrier-on state / Carrier at the lower edge of the band (ft) For EIRP calculation: worst-case = maximum antenna gain

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Plot No. 61



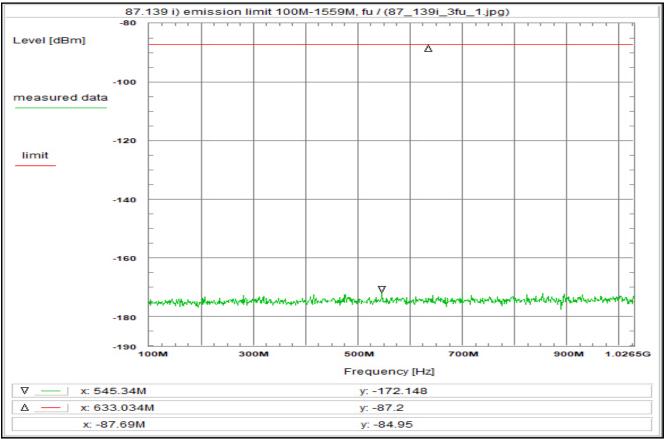
Subclause:	87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
	er of emissions shall be attenuated output power of the transmitter
Test results: see plot (an exp	licit table was not generated)
Operating condi Operating condi fl, valid for all me	tion 1, see test report chapter 6.4
Test setup: see test report of	hapter 8.2
Test equipments	: hapter 8.1-8.2: C220, R001, U331, W_RE
Remark:	
Test result:	Test passed

Environment condition:			
Date & Time: Thu 29/Oct/2020 13:32:55			
Location: CTC advanced GmbH, Laboratory RC-SYS			
22	2 °C		
55	5 %		
28	3 V DC		
28 quipment: 9 100 50.0045 99.991 3	3 V DC 3 kHz 3 MHz 4 MHz 5 MHz 6 MHz 6 MHz 6 MHz 7 MHz 8 kHz 9 kHz 9 kHz 10 dB		
+			
	- 0.0 dB		
	+ 1.2 dB		
	- 0.0 dB		
	+ 31.4 dB		
_	87.2 dB		
TOTAL CORRECTION: 87.2 dB Remarks: Carrier-on state / Carrier at the lower edge of the band (fi) For EIRP calculation: 'worst-case' = maximum antenna gain			
	quipment: quipment: 100 50.004t 99.991 11 Quipment: 120.0 Max-Holo Pos Peal 120.0 4 -> 4k) 16eedhorn		

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Plot No. 62



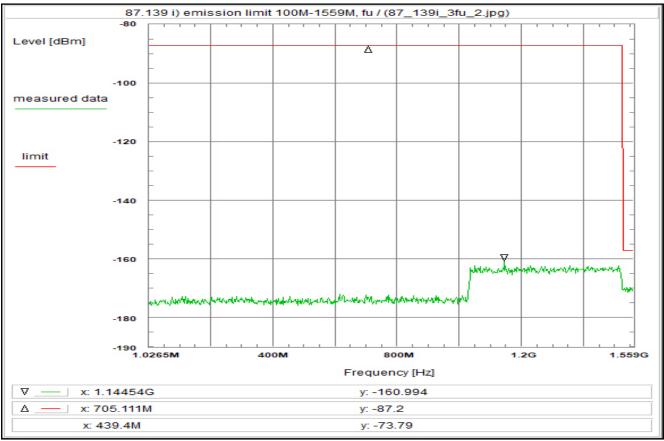
Subclause: 87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fi)			
Limit: Limit according to 87.139(i)(1) The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with 87.139(i)(1).			
Test results: see plot (an explicit table was not generated)			
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, valid for all modulations			
Test setup: see test report chapter 8.2			
Test equipment: see test report chapter 8.1-8.2: C220, R001, U331, W_RE			
Remark:			
Test result: Test passed			

Environment condition: Date & Time: Location: Temperature: Humidity: Voltage:	Thu 29/Oct/2020 CTC advanced 0 22 55 28	GmbH, Laboratory RC-SYS °C %
Setup of measurement eq Start frequency: Stop frequency: Center frequency: Frequency span: Resolution-BW: Video-BW: Input attenuation: Trace-Mode: Detector-Mode:	100 1.0265 563.25 926.5 3	GHz MHz MHz KHZ kHz
Correction: W_RE Coaxial cable (C220) DUT-Antenna Test antenna BW correction factor (3k - Atten. between HPA and f (U331) TOTAL CORRECTION: Remarks: Carrier-on state / Carrier a For EIRP calculation:	eedhorn - + -	0.5 dB 0.0 dBi 0.0 dB 1.2 dB 0.0 dB 31.7 dB -83.3 dB
worst-case' = maximum a	antenna gain	

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Plot No. 63



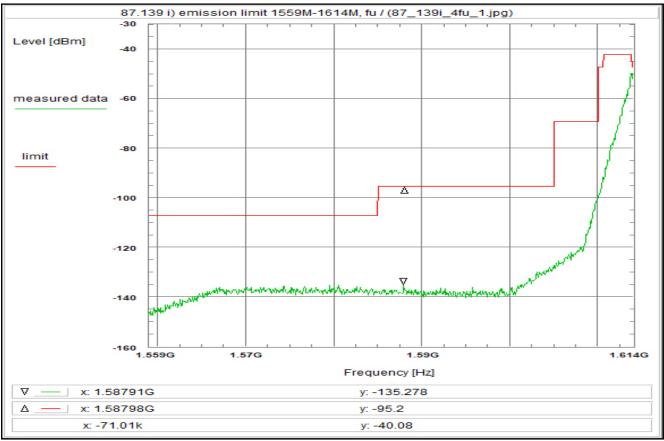
Subclause: 87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)				
Limit: Limit according to 87.139(i)(1) The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with 87.139(i)(1).				
Test results: see plot (an explicit table was not generated)				
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, valid for all modulations				
Test setup: see test report chapter 8.2				
Test equipment: see test report chapter 8.1-8.2: C220, R001, U331, W_RE				
Remark:				
Test result: Test passed				

Environment condition:		
	ct/2020	13:58:07
Location: CTC advanced GmbH, Laboratory RC-SYS		
Temperature:	22	°C
Humidity:	55	%
Voltage:	28	V DC
Sotup of massurament equipment.		
Setup of measurement equipment: Start frequency: 1	.0265	MHz
	1.559	
	01325	
	79735	
Resolution-BW:		kHz
Video-BW:	10	
Input attenuation:	0	
	-Hold	
	Peak	
Correction:		
	115.7	-
Coaxial cable (C220)	+	
DUT-Antenna	+	
Test antenna	+	
BW correction factor (3k -> 4k)	+	
Atten. between HPA and feedhorn		
(U331) TOTAL CORRECTION:	+	
TOTAL CORRECTION:	-	-82.1 dB
Remarks:		
Carrier-on state / Carrier at the lower	redge	of the band (fl)
For EIRP calculation:		
'worst-case' = maximum antenna ga	in	
i		

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Plot No. 64



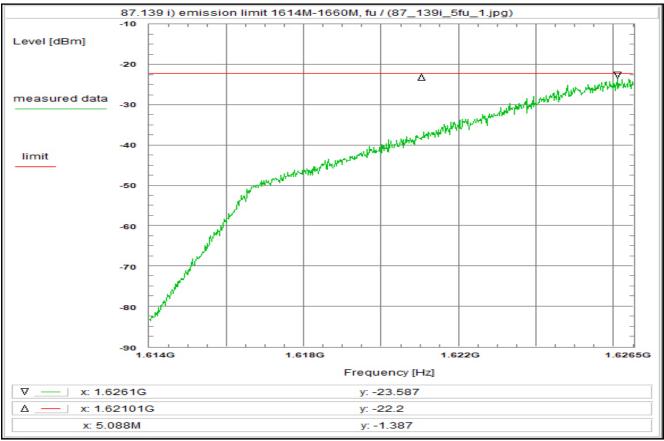
Subclause: 87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
Limit: Limit according to 87.139(i)(1) The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with 87.139(i)(1).
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, valid for all modulations
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U331, W_RE
Remark:
Test result: Test passed

Environment condition:			
Date & Time:	Thu 29/Oct/2020	13:59	1:51
Location:	CTC advanced (GmbH.	Laboratory RC-SYS
Temperature:	22	°C .	, ,
Humidity:	55	%	
Voltage:		V DO	
Setup of measurement ed	guipment:		
Start frequency:	1.559	GHz	
Stop frequency:	1.614	GHz	
Center frequency:	1.5865	GHz	
Frequency span:	55	MHz	
Resolution-BW:		kHz	
Video-BW:		kHz	
Input attenuation:	0		
Trace-Mode:	Max-Hold		
Detector-Mode:	Pos Peak		
Detector wode.	1 03 T Cak		
Correction:			
W RE	104.1	dB	
Coaxial cable (C220)		0.9	dB
DUT-Antenna		0.0	
Test antenna		0.0	
BW correction factor (3k -		25.2	
Atten, between HPA and		0.0	
(U331)		32.6	
TOTAL CORRECTION:			
TOTAL CONNECTION.		10.1	ub
Remarks:			
Carrier-on state / Carrier	at the lower edge	of the b	oand (fl)
For EIRP calculation:			(-)
'worst-case' = maximum	antenna gain		
	g		

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Plot No. 65



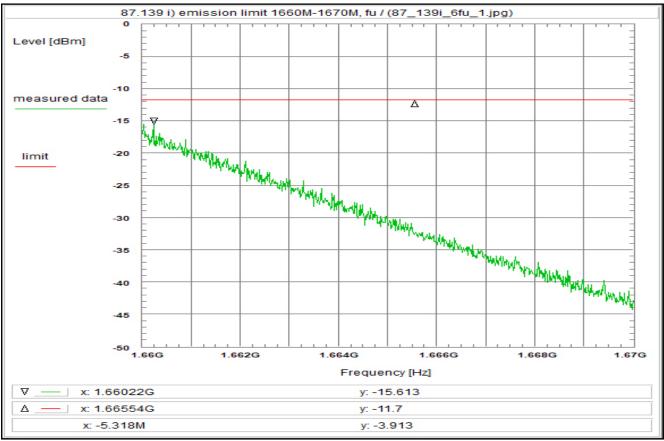
Subclause:	87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
The mean pow below the mea	to 87.139(i)(1) er of emissions shall be attenuated n output power of the transmitter with 87.139(i)(1).
Test results: see plot (an ex	plicit table was not generated)
Operating cond Operating cond fl, valid for all n	dition 1, see test report chapter 6.4
Test setup: see test report	chapter 8.2
Test equipmen see test report	<u>t:</u> chapter 8.1-8.2: C220, R001, U331, W_RE
Remark:	
Test result:	Test passed

Environment condition: Date & Time: Location: Temperature: Humidity: Voltage: Tenvironment condition: Thu 29/Oct/2020 CTC advanced 22 Humidity: 55 Voltage: 28	D 14:07:18 GmbH, Laboratory RC-SYS °C % V DC
	GHz MHz Hz
Atten. between HPA and feedhorn (U331) +	0.9 dB 0.0 dBi 0.0 dB 9.0 dB 0.0 dB 56.6 dB 18.7 dB
'worst-case' = maximum antenna gain	

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Plot No. 66



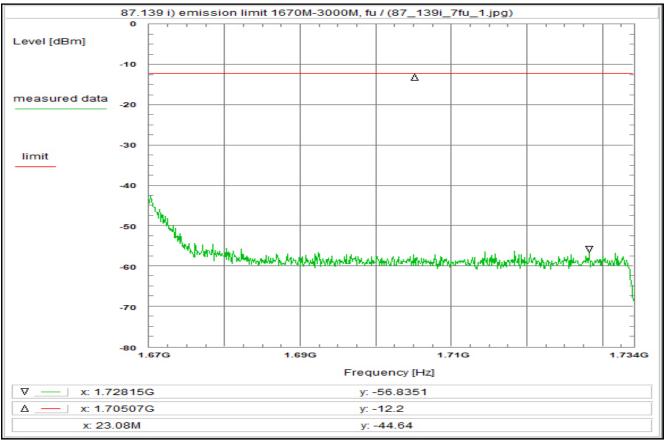
<u>Subclause:</u> 87	.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fi)
	emissions shall be attenuated tput power of the transmitter
Test results: see plot (an explicit	table was not generated)
Operating condition Operating condition fl, valid for all modu	1, see test report chapter 6.4
Test setup: see test report chap	oter 8.2
Test equipment: see test report chap	oter 8.1-8.2: C220, R001, U331, W_RE
Remark:	
Test result: Te	est passed

Environment condition: Date & Time: Thu 29/Oct/2020 14:08:40 Location: CTC advanced GmbH, Laboratory RC-SYS Temperature: 22 °C Humidity: 55 % Voltage: 28 V DC			
Setup of measurement equipment: 1.66 GHz Start frequency: 1.67 GHz Conter frequency: 1.655 GHz Frequency span: 10 MHz Resolution-BW: 3 kHz Video-BW: 10 kHz Input attenuation: 0 dB Trace-Mode: Max-Hold Detector-Mode: AVG			
Correction: W_RE 4.5 dB Coaxial cable (C220) + 0.9 dB DUT-Antenna + 0.0 dBi Test antenna + 0.0 dB BW correction factor (3k -> 20k) + 8.2 dB Atten. between HPA and feedhorn (U331) - 0.0 dB TOTAL CORRECTION: + 77.4 dB			
Remarks: Carrier-on state / Carrier at the lower edge of the band (fl) For EIRP calculation: 'worst-case' = maximum antenna gain			

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Plot No. 67



Subclause: 87.139 i) Frequencies, frequency tolerance and emission limitations Emission limitations Modulated rf-carrier at the lower edge of the band (fl)
Limit: Limit according to 87.139(i)(1) The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with 87.139(i)(1).
Test results: see plot (an explicit table was not generated)
Operating condition of DUT: Operating condition 1, see test report chapter 6.4 fl, valid for all modulations
Test setup: see test report chapter 8.2
Test equipment: see test report chapter 8.1-8.2: C220, R001, U331, W_RE
Remark:
Test result: Test passed

Environment condition:				
Date & Time:	Thu 29/Oct/2020	14:18	3:27	
Location:				
Temperature:	22	°C		
Humidity:	55	%		
Voltage:		V DC	2	
g				
Setup of measurement eq	juipment:			
Start frequency:	1.67	GHz		
Stop frequency:	1.734	GHz		
Center frequency:	1.702	GHz		
Frequency span:		MHz		
Resolution-BW:		kHz		
Video-BW:	10	kHz		
Input attenuation:	0	dB		
Trace-Mode:	Max-Hold	uD		
Detector-Mode:	Pos Peak			
Detector-wode.	1 03 1 Cak			
Correction:				
W RE	4.5	dB		
Coaxial cable (C220)	+		dB	
DUT-Antenna	+			
Test antenna	+			
BW correction factor (3k -		1.2		
Atten, between HPA and f		0.0		
(U331)	+			
TOTAL CORRECTION:	+			
TOTAL CORRECTION:	+	33.1	UB	
Remarks:				
Carrier-on state / Carrier a	at the lower edge	of the b	band (fl)	
For EIRP calculation:	J		` '	
'worst-case' = maximum a	antenna gain			
	. .			

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