

20 dB bandwidth



<u>192159</u> 20dB 0.wmf: 20 dB bandwidth at the lower end of the assigned frequency band:

192159_20dB_24.wmf: 20 dB bandwidth at the middle of the assigned frequency band:







192159_20dB_49.wmf: 20 dB bandwidth at the upper end of the assigned frequency band:

99 % bandwidth

192159_99_0.wmf: 99 % at the lower end of the assigned frequency band:







192159_99_24.wmf: 99 % bandwidth at the middle of the assigned frequency band:

192159_99_49.wmf: 99 % bandwidth at the upper end of the assigned frequency band:





Carrier frequency separation



192159 CFS 0.wmf: Channel separation at the lower end of the assigned frequency band:

<u>192159_CFS_24.wmf</u>: Channel separation at the middle of the assigned frequency band:







192159_CFS_49.wmf: Channel separation at the upper end of the assigned frequency band:

Number of hopping channels

192159_hop.wmf: Number of hopping channels:





Dwell time

MultiView 🔭 Spectrum 00 dBm • RBW 50 kHz 40 dB • SWT 500 ms • VBW 50 kHz Ref Level 30.00 dBm SGL Att TRG:VID I Zero Span TRG 48.000 dBm D2[1] 391.0973 ms M1[1] 18.30 dBr -1.7000 ms 40 dBm 30-dBn 20 dBr 10 dBr 0 dBn 10 dBr -20 dBr -30 dBm 40 dBr CF 914.75 MHz 50.0 ms/ 5001 pts

<u>192159 Dwell1 24.wmf: Dwell time at the middle of the assigned frequency band (single hop):</u>

192159_Dwell2_24.wmf: Dwell time at the middle of the assigned frequency band (21 s sweep):

Mult	tiView	Spectrum	e 50W 57	NUL.					•
 Att TRG: 		65 dB 👄 SWT	21 s VBW 50) kHz					SUL
1 Zer	o Span								O1Pk Max
		TRG 28.000 dl	Bm						
20 dBn	n								
to an	0								
0 d0m							 		
U UBIII									
-10 dp	100-				-	-	 		
10 00									
-20 dB	m								
20 00									
	1.7		The second se		a traches	100 Mar 10	 		
-30 de	Min and a start		I olida da balanta di di turan	and a pluministration to at the	A A ALLANDA AND AND	And a subilities of weathing	da ashuo, ida sidhaha	and the second second	distriction of the day
				1				1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
-40 dB	im			1	-				
-50 dB	im						 		
-60 dB	im			1					
TRG									
CF 91	4.75 MH	Z			5001	l pts			2.1 s/



Maximum peak output power of TN-UHF-Q300-NA-CDS

192159 PWR 0.wmf: Maximum peak output power at the lower end of the assigned frequency band:

MultiView 🐂	Spectrum							-
Ref Level 30.00 dE	3m	• BBW	100 kHz					
Att 40	dB SWT 1.0	1 ms VBW	100 kHz Mod	le Sweep				
1 Frequency Swee	:p							O1Pk Max
					vī1		 M1[1] 90	29.23 dBm 2.751250 MHz
20 dBm								/
10 dBm								
0 dBm								
-10 dBm								
-20 dBm								
-30 dBm								
-40 dBm								
-50 dBm								
-60 dBm								
CE 902 75 MHz			1001 p	rs	2	5 0 kHz/		an 250 0 kHz

<u>192159_PWR_24.wmf: Maximum peak output power at the middle of the assigned frequency band:</u>

	_	-									
MultiView	Spe	ectrum									-
Ref Level 30.	00 dBm			RBW	100 kHz						
Att	40 dB	SWT 1	1.01 ms	VBW	100 kHz	Mode	: Sweep				
1 Frequency S	weep								Ľ.		o1Pk Max
								P11		 M1[1]	29.20 dBm
										91	4.751000 MHz
20 dBm									-		
10.40.0									-		
10 dBm-											
0 dBm-									-		
-10 dBm					-			-			
00 40-1								8			
-20 UBm											
-30 dBm									2	 	
-40 dBm-											
-50 dBm-									12		
So dom											
-60 dBm									2	 	
CF 914.75 MH	z		Ļ.		10	01 pts	;	2	5.0 kHz/	S	pan 250.0 kHz



							_
MultiView Sp	ectrum						
Ref Level 30.00 dBm	RBV	/ 100 kHz					
Att 40 dB	SWT 1.01 ms VBV	100 kHz Mode	e Sweep				
I Frequency Sweep	1		M			MILTI	O 1PK Max
						 MILI	29.63 UDI
							7.249000 14
20 dBm							-
10 dBm		-	5			 -	
10500							
D dBm		1			1		
-10 dBm							
Laste, Vestervi							
-20 dBm							
-30 dBm							
-40 dBm					-		
-50 d8m							
17 18 10 10 10 10 10 10 10 10 10 10 10 10 10							
-60 dBm		+					
F 927.25 MHz	.40	1001 pt	S	2.	5.0 kHz/	S	oan 250.0 kH

192159_PWR_49.wmf: Maximum peak output power at the upper end of the assigned frequency band:

Maximum peak output power of TN-UHF-Q180L300-NA-CDS

192159_PWR_0_2.png: Maximum peak output power at the lower end of the assigned frequency band:

MultiView	Spec	trum									
Ref Level 30. Att Input	00 dBm 25 dB 1 AC	Offset SWT PS	20.00 dB 1.01 ms On	RBW VBW Notch	100 kHz 100 kHz Off	Mode Sweep			Freque	ency 902.75	00000 MHz
1 Frequency S	Sween										10k May
I nequency o	, neep						1			M1[1] 90	29.43 dBm 2.747750 MHz
20 dBm											
											1
10 dBm-											
0 dBm											
and a second second											
-10 dBm							-				
10.0 AUTO											
-20 dBm											
-30 dBm											
-40 dBm							<i>.</i>				
-50 dBm-											
55 dbm											
-60 dBm						-					
CF 902.75 MH	z				1001	pts	2	5.0 kHz/		S	oan 250.0 kHz



Input 1.42 PS On Noteh Off	Att 25 dF	3 SWT 1.01 ms	VBW 100 kHz Mode	Sweep	Frequency 914.	7500000 MH
In requeries, sweep MI[1] 22 20 dbm MI[1] 25 10 dbm MI[1] 10 10 dbm MI[1] 10 <	nput 1 AC	PS On	Notch Off		 	I Dk May
20 dbm 914.748 10 dbm 914.748 10 dbm 10 dbm 10 dbm 10 dbm 20 dbm 10 dbm 10 dbm 10 dbm	requency sweep			m.	M1[1]	29 44 dB
0 dem 1 1 1 1 1 0 dem 1 1 1 1 1 1 dem 1 1 1 1 1 2 dem 1 1 1 1 1 2 dem 1 1 1 1 1 3 dem 1 1 1 1 1 3 dem 1 1 1 1 1 3 dem 1 1 1 1 1 5 dem 1 1 1 1 1						914,748500 MH
	l dBm					
	ubiii-					
$\begin{array}{c c c c c c c c c c c c c c c c c c c $						
dBm	dBm				 	
JBm Image: Sector of the sec						
Jam	19					
0 dam Image: state	.Bm-					
dBm						
dBm Image: Sector of the sec	dBm				 	_
d8m Image: Constraint of the constra						
dBm dBm <td>dBm</td> <td></td> <td></td> <td></td> <td></td> <td></td>	dBm					
dBm Image: Constraint of the second						
	J dBm-				 	
	r dBm-					
dBm						
	J dBm-		_		 	
3.40m						
J dBm) dBm				 	

192159_PWR_24_2.wmf: Maximum peak output power at the middle of the assigned frequency band:

192159_PWR_49_2.wmf: Maximum peak output power at the upper end of the assigned frequency band:

MultiView	Spectrum								▼
Ref Level 30. Att Input	00 dBm Offse 25 dB SWT 1 AC PS	20.00 dB = RB 1.01 ms VB On No	W 100 kHz W 100 kHz M tch Off	lode Sweep			Freque	ency 927.25	500000 MHz
1 Erequency S	ween	011 140	can on						1Pk Max
r moqueney e	and dip							MILLI	20.10 dBm
								WILII	29.19 dBm
								92	7.249250 MHz
20 dBm									
10 d0m									
TO OPIN-									
0 dBm-									
-10 dBm-									
-20 dBm-									
22.42.0									
-30 dBm-									
-40 dBm				<i>.</i>					
-50 dBm				2		0			
-60 d8m-									
CF 927.25 MH	Z		1001 pt	S	2.	5.0 kHz/		S	ban 250.0 kHz



Radiated emission measurement of TN-UHF-Q300-NA-CDS

Preliminary radiated emission measurement with internal antenna

Transmitter operates at the lower end of the assigned frequency band (operation mode 1)

192159_0_30M_1G_2i: Spurious emissions from 30 MHz to 1 GHz (operation mode 1, carrier notched):



Preview Result 2-AVG [Preview Result 2.Result:4]

Preview Result 1PK+ [Preview Result 1.Result:2]









Transmitter operates at the middele of the assigned frequency band (operation mode 2) 192159_150k_30M_24_2i: Spurious emissions from 150 kHz to 30 MHz (operation mode 2):



192159_24_30M_1G_2i: Spurious emissions from 30 MHz to 1 GHz (operation mode 2, carrier notched):



Preview Result 2-AVG Preview Result 1-PK+





192159_24_1G_10G_2i: Spurious emissions from 1 GHz to 10 GHz (operation mode 2):

Transmitter operates on the upper end of the assigned frequency (operation mode 3)

192159_49_30M_1G_2i: Spurious emissions from 30 MHz to 1 GHz (operation mode 3, carrier notched):



Preview Result 1-PK+

Preview Result 2-AVG





<u>192159_49_1G_10G_2i:</u> Spurious emissions from 1 GHz to 10 GHz (operation mode 3):

PK+_MAXH

Final radiated emission measurement (30 MHz to 1 GHz) with internal antenna

Transmitter operates on the lower end of the assigned frequency (operation mode 1)



Final_Result QPK

Data record name: 192159_0_30M_1G_2i





Transmitter operates on the middle of the assigned frequency (operation mode 2)

Data record name: 192159_24_30M_1G_2i

Transmitter operates on the upper end of the assigned frequency (operation mode 3)







<u>Preliminary radiated emission measurement with external antenna port terminated</u> <u>Transmitter operates at the lower end of the assigned frequency band (operation mode 1)</u> <u>192159_0_30M_1G_2t: Spurious emissions from 30 MHz to 1 GHz (operation mode 1):</u>



<u>192159_0_1G_10G_2t</u>: Spurious emissions from 1 GHz to 10 GHz (operation mode 1):



PK+_MAXH



<u>Transmitter operates on the middle of the assigned frequency band (operation mode 2)</u> 192159_24_150k_30M_2t: Spurious emissions from 150 kHz to 30MHz (operation mode 2):



192159_24_30M_1G_2t: Spurious emissions from 30 MHz to 1 GHz (operation mode 2):



Preview Result 2-AVG

Preview Result 1-PK+





192159_24_1G_10G_2t.wmf: Spurious emissions from 1 GHz to 10 GHz (operation mode 2):

PK+_MAXH

Transmitter operates on the upper end of the assigned frequency (operation mode 3)

192159_49_30M_1G_2t: Spurious emissions from 30 MHz to 1 GHz (operation mode 3):



Preview Result 2-AVG Preview Result 1-PK+





<u>192159_49_1G_10G_2t</u>: Spurious emissions from 1 GHz to 10 GHz (operation mode 3):

PK+_MAXH

<u>Final radiated emission measurement (30 MHz to 1 GHz) with external antenna port</u> terminated

Transmitter operates on the lower end of the assigned frequency (operation mode 1)



Data record name: 192159_0_30M_1G_2t





Transmitter operates on the middle of the assigned frequency (operation mode 2)

Transmitter operates on the upper end of the assigned frequency (operation mode 3)



Data record name: 192159_49_30M_1G_2t



Radiated emission measurement of TN-UHF-Q180L300-NA-CDS

Preliminary radiated emission measurement with external antenna port terminated

Transmitter operates on the upper end of the assigned frequency (operation mode 3)

192159_150k_30M_49_2: Spurious emissions from 150 kHz to 30 MHz (operation mode 3):



192159_49_30M_1G_2: Spurious emissions from 30 MHz to 1 GHz (operation mode 3):







<u>192159_49_1G_10G_2: Spurious emissions from 1 GHz to 10 GHz (operation mode 3):</u>

Preview Result 1-PK+

Final radiated emission measurement (30 MHz to 1 GHz) with external antenna port terminated

Transmitter operates on the upper end of the assigned frequency (operation mode 3)





Conducted emissions on antenna port 1

Transmitter operates at the lower end of the assigned frequency band (operation mode 1)

192159_150k_30M_0_con: Conducted spurious emissions from 150 kHz to 30 MHz (operation mode 1):

MultiView	Spectrum								-
Ref Level 0.0	00 dBm Offset	20.00 dB • RB	N 10 kHz						
 Att 	0 dB S₩T	29.9 ms VBV	🕅 30 kHz 🛛 Mod	le Sweep					
1 Erequency S	ween								o 1Pk Max
									C I I I I I I
-10 dBm									
-20 dBm-									
20. d9m									
-30 UBIII									
-40 dBm									
-50 dBm									
-60 dBm									
70. d0m									
70 dbm									
l									
-80 dBm									
Man Manalina Laporation	المطاب المخاسطة والمحاصة والمجام	متهور ومراجع ومرجع ومرجعا	المناوية ومحمد المناجع والمقاومة	Some Manual Annahar	منوار محط فالمين المتيمن مناقلهم	A Horis / all and the line	No. And All the	hall wanter al anter	Handers Harbert And Andered
-90 dBm									
150.01/15			F000 - 1						20.0 MU
130.0 KHZ			3980 pt	5	Ζ.	99 MINZ/			SOLU MHZ

<u>192159_30M_1G_0_con.wmf</u>: Conducted spurious emissions from 30 MHz to 1 GHz (operation mode 1):

MultiView	Spe	ctrum									-
Rof Loval 30	00 dBm	Offcot	20.00 dB	DDU	V 100 kHz						
Att	20 dB	SWT	19.5 ms	VRV	V 300 kHz	Mode Auto Swe	en				
1 Frequency S	weep	0111	1910 1110	101	0001012	niodo / laco orre	92				• 1Pk Max
20. dBm											
20 0011											
10 dBm											
0 dBm											
-10 d8m											
-10 usm											
-20 dBm-											
-30 dBm											
-40 dBm-											
											a Jala
-50 dBm-							un market and				
and the ball contra	manger	يلقر يساويلك	استهاره المراهم	المستال	and a state of the		where approach the state of the state of the		11-11-11-11-11-11-11-11-11-11-11-11-11-	and the second second second second	
	and the second second		And the state of the second								
-60 dBm											
30.0 MHz					1940	1 pts	9	7.0 MHz/			1.0 GHz



190760_1G_10G_0_con.wmf: Conducted spurious emissions from 1 GHz to 10 GHz (operation mode 1):



Transmitter operates at the middle of the assigned frequency band (operation mode 2)

192159_30M_1G_24_con.wmf: Conducted spurious emissions from 30 MHz to 1 GHz (operation mode 2):





190760_1G_10G_24_con.wmf: Conducted spurious emissions from 1 GHz to 10 GHz (operation mode 2):



Transmitter operates at the upper end of the assigned frequency band (operation mode 3)

<u>192159_30M_1G_49_con.wmf</u>: Conducted spurious emissions from 30 MHz to 1 GHz (operation mode 3):









Conducted emissions on power supply lines

EUT supplied via PoE





EUT supplied with DC

