

Test Details					
Manufacturer	Astronics				
Model No.	Focus Pro				
Serial No.	1378290				
Mode	802.11n – MCS6				
Carrier Frequency	2462MHz				
Parameters	6dB BW				
Notes	6dB BW = 17.20MHz				

MultiView 88 Received	r 🕅 S	pectrum 🔆 🔀	Spectrum 2 🛛 🔆	Spectrum 3	Spectrum 4	4 🔆 🔀 Spec	trum 5 🛛 🔆 🔀		
Ref Level 18.00 Att Input	0 dBm Offse 10 dB ● SWT 1 AC PS	et 40.60 dB ● R 2 ms ● V On N	BW 100 kHz BW 300 kHz otch Off	Mode Auto Swee	ep		Fre	equency 2.4	4620000 GHz
1 Frequency Sw	eep								o1Pk Max
	000							D1[1]	-0.24 dB
10 dBm								M1[1]	-9.19 dBm
									2.4534890 GHz
0 dBm									
		man	mm	n Am	mm	mm	man	MAA	
-10 dBm	11 9.100 you	<u> </u>		Ĺ	)				
-20 dBm									h
-40 dBm									
-50 dBm									
-60 dBm									
-70 dBm									
-80 dBm									
CE 2.462 GHz			1001 pt	s	2	0 MHz/			Span 20.0 MHz
	)[		1001 pt		Measuring	J (11111)	02.06.2 02:54	021 Ref Lev 1:57	el RBW

02:54:57 02.06.2021



Test Details					
Manufacturer	Astronics				
Model No.	Focus Pro				
Serial No.	1378290				
Mode	802.11n – MCS7				
Carrier Frequency	2462MHz				
Parameters	6dB BW				
Notes	6dB BW = 17.54MHz				

MultiView 88 Receiver	r 🕅 s	pectrum 🔆 🔀	Spectrum 2 🛛 🔆	Spectrum 3	Spectrum 4	1 🔆 🔀 Spec	trum 5 🛛 🔆 🔀		
Ref Level 18.00 Att Input	) dBm Offse 10 dB ● SWT 1 AC PS	et 40.60 dB ● R 2 ms ● V On N	BW 100 kHz BW 300 kHz otch Off	Mode Auto Swee	ер		Fre	equency 2	.4620000 GHz
1 Frequency Sw	еер								⊙1Pk Max
	1-							D1[1]	-1.12 dB
									17.5420 MHz
10 dBm								M1[1]	-9.07 dBm
								wit[1]	2 4522600 CU-
									2.4532690 GHZ
0 dBm									
	Δ Δ	Λ	Λ Λ	٥	Δ	Δ Δ	۸	0 /	X III
MI	American	MAAA	Imana	mhn	$h \sim \alpha M$	Mum	hm	Jun	ha la A RI
-10 dBm			ψ			v v			
					)				
				1					
-20 dBm									
									N <sub>2</sub>
N.									۳Ņ.
/-30 dBm									v
-40 dBm									
-50 dBm									
-60 dBm									
-70 dBm									
-80 dBm			1001						0
UF 2,462 GHZ			1001 pt	s	2	.u MHZ/			Span 20.0 MHz
	П				Measuring		02.06.2	021 Ref Lo	evel RBW

02:59:22 02.06.2021



## 24. Occupied Bandwidth (99%)

EUT Information				
Manufacturer	Astronics			
Product	Resideo Thermostat			
Model No.	Focus Pro			
Serial No.	1378290			
Mode	802.11b, 802.11g, 802.11n			

Test Setup Details				
Setup Format	Tabletop			
Measurement Method	Antenna Conducted			
Notes	N/A			

## Procedures

The antenna port of the EUT was connected to the spectrum analyzer through 40dB of attenuation.

The EUT was allowed to transmit continuously. The transmit channel was set separately to low, middle, and high channels. The resolution bandwidth (RBW) was set to 1% to 5% of the actual occupied bandwidth, the video bandwidth (VBW) was set 3 times greater than the RBW, and the span was set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency.

The 'Max-Hold' function was engaged. The analyzer was allowed to scan until the envelope of the transmitter bandwidth was defined. The analyzer's display was plotted using a 'screen dump' utility.



Test Details					
Manufacturer	Astronics				
EUT	Resideo Thermostat				
Model No.	Focus Pro				
Serial No.	1378290				
Mode	802.11b				
Notes	N/A				

Protocol	Freq. (MHz)	Data Rate (Mbps)	99% BW (MHz)
	2412		14.99
	2437	1	14.87
	2462		14.86
	2412		14.78
	2437	2	14.74
802 11b	2462		14.72
002.110	2412		14.53
	2437	5.5	14.59
	2462		14.51
	2412		14.58
	2437	11	14.57
	2462		14.59



Test Details					
Manufacturer	Astronics				
Model No.	Focus Pro				
Serial No.	1378290				
Mode	802.11b – 1Mbps				
Carrier Frequency	2412MHz				
Parameters	99% BW				
Notes	99% BW = 14.99MHz				

Multi¥iew 88 Recei	ver 🛛	Spectrum	Spectrum 2	Spectrum 3	Spectrum 4	X			
Ref Level 40.1 Att Input	60 dBm Offse 10 dB SWT 1 AC PS	t 40.60 dB ● RI 1.01 ms VI On N	BW 1 MHz BW 1 MHz otch Off	Mode Auto Sweep			Freq	uency 2.41	.20000 GHz
1 Occupied Bar	ndwidth								●1Pk View
								M1[1] 2	14.11 dBm 2.4133490 GHz
30 dBm									
20 dBm					M1				
10 dBm		T1					T2		
0 dBm									
-10 dBm	1 malling								
								W. I.W.	million 1 Aug
-40 dBm									ω ψW
-50 dBm									
05 0, 410, CU			1001						00.0141
CF Z.41Z GHZ	<u></u>		1001	pts	3.			5	pan 50.0 MHz
		X-Value		V-Value		Function	1	Eunction Re	sult
M1 T1	1	2.413349 G	H <b>z</b> GHz	14.11 dBm 0.40 dBm	Occ Bw Occ Bw Cer	ntroid	14.	.99360541 2.411994	9 MHz 426 GHz
T2	1	2.4194912 0	GHz	0.41 dBm	Occ Bw Fre	q Offset		-5.574360	)224 kHz
					Measuring		01.06.202 20:27:5	1 Ref Level	RBW

20:27:51 01.06.2021



Test Details					
Manufacturer	Astronics				
Model No.	Focus Pro				
Serial No.	1378290				
Mode	802.11b – 2Mbps				
Carrier Frequency	2412MHz				
Parameters	99% BW				
Notes	99% BW = 14.78MHz				

MultiView 88 Receiv	ver 🕅 🤋	Spectrum	Spectrum 2	Spectrum 3	Spectrum 4	s 🕅 Spe	ctrum 5 🛛 🔆 🔀	l	
Ref Level 40.6 Att	50 dBm Offse 10 dB SWT	t 40.60 dB • RI 1.08 ms • VE	3W 100 kHz 3W 300 kHz 1	Mode Auto Swee	р		Fr	equency 2.4	L20000 GHz
1 Occupied Ban	dwidth		oten on						o 1 Pk View
r occupied bui								M1[1]	9 90 dBm
								, mili	2,50 dbm
30 dBm								-	14123990 GHZ
oo abiii									
20 dBm									
					M1				
10 dBm					<b>X</b>				
				mound	1 marine				
				$\sim$ (					
U dBm			11	1					
			2 V			V Z			
-10 dBm						· ·			
						M N			
-20 dBm-			1			$\langle \rangle$			
-20 dbm			V			(			
		/	1				N.		
-30 dBm									
		workey (					1 Amo		
-40 dBm		A NY L					Winny		
mature	month	1						manne	www. Anora and A
								η <b>τ</b> ους	naw right a row wabb
-50 dBm									
CE 2 412 GHz			1001 pt	<u> </u>	5				Spap 50.0 MHz
2 Markor Tabla			1001 pt	3		10 10112/			
	Tro	V-Value		V-Value		Eunction		Eupction D	eult
M1	1	2.412599 G	Hz	9.90 dBm	Occ Bw	runcuon		4.7843060	75 MHz
T1	1	2.404617	Hz	-4.79 dBm	Occ Bw Cei	ntroid	-	2.412000	9185 GHz
T2	î	2.4194013 0	SHz	-3.82 dBm	Occ Bw Fre	g Offset		9.18514	0553 kHz
·	)(				Mansuring		<b>4 ya</b> 01.06.2	2021 Ref Level	RBW
l	Л				Measuring		20:5	4:45	

20:54:45 01.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11b – 5.5Mbps					
Carrier Frequency	2412MHz					
Parameters	99% BW					
Notes	99% BW = 14.53MHz					

Multi¥iew 88 Receiv	ver 🕅 S	pectrum	Spectrum 2	Spectrum 3	Spectrum	4 🛛 🕅 Spe	ctrum 5 🛛 🔆 🔀		
Ref Level 40.6 Att	50 dBm Offse 10 dB SWT	t 40.60 dB • RE 1.08 ms • VE	3W 100 kHz 300 kHz	Mode Auto Swee	ep		Fn	equency 2.4:	L20000 GHz
Input 1 Occupied Bar	1 AC PS	On No	otch Off						• 1 Dk View
r occupieu bai								M1[1]	10.06 dBm
								(WILL)	10.00 dBm
30 dBm								-	14123990 GHZ
00 0.5.11									
20 dBm									
					M1				
10 dBm				and March	man an				
				whom who we have	1 march				
0 dBm			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			M			
o ubiii			\ ∀			12 ₩			
			مسمر			المرور			
-10 dBm			7						
						$\lambda$			
-20 dBm			<i>∫</i>						
-30 dBm		Mal					N.A.		
00 0011		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					MMM.		
		New March					m.	l all	
-40 dBm	wanter Martin All						Prof Prof	hlaman	
were and a construction of	And Autor in the c							A. L. MARY	man manage
-50 dBm									
			1001						50.01.01
CF 2.412 GHz			1001 pt	t <b>s</b>	5	.0 MHz/		2	span 50.0 MHz
2 Marker Table									
Type   Ref		X-Value	u.,	Y-Value	Ora Bui	Function		Function Re	esult
	1	2.412333 U		-4.46 dBm	Occ BW Co	ntroid		2 /1202	20 mnz 8825 GHz
T2	1	2.4192911 G	iHz	-4.48 dBm	Occ Bw Fre	a Offset		23.8248	1357 kHz
	Y		· · · -				<b>110</b> 01 06 2	20.021 Reflevel	RBW
l	Д				Measuring	J	21:1	4:39	•

21:14:40 01.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11b – 11Mbps					
Carrier Frequency	2412MHz					
Parameters	99% BW					
Notes	99% BW = 14.58MHz					

Multi¥iew 88 Receiv	ver 🛛	Spectrum	Spectrum 2	Spectrum 3	Spectrum 4	4 🕅 Spe	ctrum 5 🛛 🔆 🔀	l	
Ref Level 40.6 Att Input	50 dBm Offs 10 dB SWT	et 40.60 dB • RE 1.08 ms • VE	3W 100 kHz 3W 300 kHz	Mode Auto Sweep	)		Fr	requency 2.4	L20000 GHz
1 Occupied Bar	ndwidth								●1Pk View
								M1[1]	10.52 dBm
									.4111510 GHz
30 dBm									
20 dBm-									
				M1					
10 dBm					mm				
				minner	May mar .				
0 dBm			T1	al		my ro			
o ubiii			V.			12 V			
			- M			M.			
-10 dBm			N			7			
						X X			
-20 dBm			7			<u>ــــــــــــــــــــــــــــــــــــ</u>			
			Y				4		
20. dB		n/					N.		
-30 ubm		AN MW					MAR A		
		A MARTIN A					mm.		
-40 dBm	- and the	al by A w						MAN	.0.0
manna	war h.h.							1 V non	mon months
-50 dBm									
CF 2.412 GHz		•	1001 p	ts	5	.0 MHz/			pan 50.0 MHz
2 Marker Table									]
Type Ref	Trc	X-Value		Y-Value		Function		Function R	esult
M1	1	2.411151 G	Hz	10.52 dBm	Occ Bw			14.5830357	71 MHz
T1	1	2.4047171 0	iHz	-4.17 dBm	Occ Bw Cel	ntroid		2.412008	3645 GHz
T2	1	2.4193002 G	Hz	-4.04 dBm	Occ Bw Fre	q Offset		8.6448	4574 kHz
					Measuring		<b>101.06</b>	2021 Ref Level	RBW

21:35:41 01.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11b – 1Mbps					
Carrier Frequency	2437MHz					
Parameters	99% BW					
Notes	99% BW = 14.87MHz					

Multi¥iew 88 Reco	ziver 🔀	Spectrum	Spectrum 2	Spectrum 3	Spectrum	4 🛛 🕅 Sp	ectrum 5 🛛 🔆 🔀	l	
Ref Level 40 Att	.60 dBm Offs 10 dB SW	et 40.60 dB 🖷 RI 1.08 ms 🖷 VI	BW 100 kHz BW 300 kHz	Mode Auto Swee	p		Fr	equency 2.4	370000 GHz
Input	1 AC PS	On N	otch Off						• 1 Dk View
T Occupied Ba								M1[1]	10.40 dBm
								WILLI	2 4364510 GHz
30 dBm									214004010 0112
20. d8m									
20 UBIII									
				M1					
10 dBm				MMARIA	MMALL.				
				MWWWW \	1 . mouth				
0 dBm			HI M	ι <u>΄΄</u>	<u></u>	MIT2			
			I MAN			V WA			
-10 dBm			the r			<u> </u>			
			N			M N			
-20 dBm			M			<u> </u>			
			V				M.		
20. d0m		/	/				- N		
-30 uBm-		. Mr. d							
		Marine and					month		
-40 dBm	A a second of	7 <sup>0</sup> "					MUA	Ma america	a
man	by Above a station of							- Charles and	manna
-50 dBm									
CE 2 437 GHz			1001 pt	 S	5	0 MHz/			Spap 50.0 MHz
2 Marker Tabl	e		1001 pt			10 01127			opan oolo minz
Type Ref		X-Value		Y-Value		Function		Function F	Result
M1	1	2.436451 G	Hz :	LO.40 dBm	Occ Bw			14.8728827	783 MHz
Τ1	1	2.4295283 (	GHz	-3.48 dBm	Occ Bw Cer	ntroid		2,4369	64717 GHz
T2	1	2.4444012 0	GHz	-6.12 dBm	Occ Bw Fre	q Offset		-35.2828	312625 kHz
	T T				Measuring		<b>1.06</b> .20:4	2021 Ref Lev	el RBW

20:42:26 01.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11b – 2Mbps					
Carrier Frequency	2437MHz					
Parameters	99% BW					
Notes	99% BW = 14.74MHz					

Multi¥iew 88	Receiver	🗙 Spectrum 🛛 🔆 🔀	Spectrum 2 💡	Spectrum 3	Spectrum -	4 🕱 9	Spectrum 5 🛛 🔆	$\propto$	
Ref Level Att Input	40.60 dBm ( 10 dB ( 1 AC (	Offset 40.60 dB ● RI SWT 1.08 ms ● VI PS On No	BW 100 kHz BW 300 kHz otch Off	Mode Auto Sweep	p	_		Frequency 2.4	4370000 GHz
1 Occupied	Bandwidth								⊙1Pk View
								M1[1]	1 9.95 dBm
									2.4362010 GHz
30 dBm									211002010 0112
20 dBm									
				M1					
10 dBm				X					
				a marine 1	1 mm				
o dour				$\int_{-\infty}^{\infty}$					
U aBm-			11	(		12			
						IV N			
-10 dBm			<u>⊢ /</u> `			· \			
			J.						
00 d0			17						
-20 aBm			7						
			d in the second s				- N		
-30 dBm									
		anna					M.M.		
10 10		and the second s					IVV m		
-40 dBm-	a straw	a mul						June Area	
www.	and and the second							al all when a fair a fair	marker war war
-50 dBm									
CF 2.437 G	lz		1001 p	ts	5	.0 MHz/			Span 50.0 MHz
2 Marker Ta	able								1
Type F	Ref Trc	X-Value		Y-Value		Function		Function I	Result
M1	1	2.436201 G	Hz	9.95 dBm	Occ Bw			14.748282	081 MHz
T1	1	2.4296019 0	GHz	-4.60 dBm	Occ Bw Ce	ntroid		2,4369	76052 GHz
T2	1	2.4443502 0	GHz	-4.33 dBm	Occ Bw Fre	q Offset		-23.9479	995283 kHz
					Measuring	j 🗰	<b>1 1 1</b>	06.2021 Ref Lev	el RBW

21:03:24 01.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11b – 5.5Mbps					
Carrier Frequency	2437MHz					
Parameters	99% BW					
Notes	99% BW = 14.59MHz					

MultiView 🔠 Recei	ver 🕅	Spectrum	Spectrum 2	Spectrum 3	Spectrum -	4 🛛 🕅 Sp	ectrum 5 🛛 🔆 🖾		
Ref Level 40. Att Input	60 dBm Offs 10 dB SWT	et 40.60 dB • RE 1.08 ms • VE	3W 100 kHz 3W 300 kHz	Mode Auto Sweep	þ		Fr	equency 2.43	370000 GHz
1 Occupied Bar	ndwidth		on on						●1Pk View
								M1[1]	10.71 dBm
									2.4366000 GHz
30 dBm									
20 dBm-									
				M1					
10 dBm				- man	monten				
				wall	June Marine				
0 dBm			TI MM			12 T2			
			7						
			and the second sec			1 m			
-10 dBm-						1			
			1			\ \			
-20 dBm			<u> </u>				<u>}</u>		
							h		
-30 dBm		(VV V					WA.		
		a server of					Why		
	. mortin	all					۳h~	10 0.0A.	
-40 dBm	VALAN MARTIN	V.0 -						YYY WOMAN	A Mone as
www.www.www.									Man allowers
-50 dBm									
CF 2.437 GHz			1001 p	ts	5	.0 MHz/			Span 50.0 MHz
2 Marker Table	<u>,</u>								]
Type Ref	Trc	X-Value		Y-Value		Function		Function R	esult
M1	1	2.4366 G	MZ		Occ Bw	a kana tal	1	4.5961633	
	1	2.4297062 0	ndz 107	-4.18 aBM	Occ Bw Cel	ntrolă va Offect		2.437004	4308 GHZ
12	1	2.4443024 0	21 12	-3.13 UDIII		eq onset	01.01	4.30010	
l	Л				Measuring		21:2	3:44	RBW

21:23:45 01.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11b – 11Mbps					
Carrier Frequency	2437MHz					
Parameters	99% BW					
Notes	99% BW = 14.57MHz					

Multi¥iew 88 Receiv	ver 🕅	Spectrum 🔀	Spectrum 2	Spectrum 3	Spectrum -	4 🕅 Spe	ctrum 5 🛛 🔆 🔀		
Ref Level 40.6 Att	50 dBm Offse 10 dB SWT	et 40.60 dB • RE 1.08 ms • VE	3W 100 kHz 3W 300 kHz	Mode Auto Sweep	þ		Fn	equency 2.4	370000 GHz
Input	1 AC PS	On No	otch Off						o t Dk Mierry
T Occupied Bar	nawlath							141543	OIPK VIEW
								MILII	10.37 dBm
20. d9m-									2.4371000 GHz
So ubiii									
20 dBm									
				N	1				
10 dBm				- And	munice.				
				Warman	a Maria				
0 dBm			TI			WWW TO			
			A CONTRACT			. V.			
			م م			<u> </u>			
-10 dBm-			<i></i>			<u> </u>			
			5						
-20 dBm			/			1	N N		
			{				X		
-30 dBm		H AV					1 1 1 1		
		1 M. M.					NAMA .		
-40 d8m-	MAG	North Market					"Mym	mm	
Ann - Wanter	my						1	V VMV LAN	- Adda at alea
• NAJAM - 11104									moning w. Arthr
-50 dBm									
CE 2 437 GHz			1001 pt	 c	5			l	Snan 50 0 MHz
2 Marker Table	•		1001 pt	.a		10 10112/			span oolo Minz
		X-Value		V-Value		Eunction		Eunction P	esult
M1	1	2.4371 G	Hz :	LO.37 dBm	Occ Bw	ancon	1	4.5703779	96 MHz
T1	1	2.4296932	Hz	-4.09 dBm	Occ Bw Ce	ntroid	_	2.43697	8365 GHz
T2	1	2.4442636 0	iHz	-3.98 dBm	Occ Bw Fre	eq Offset		-21.6350	3155 kHz
					Measuring		<b>4/0</b> 01.06.2 21:4	2021 Ref Level	RBW

21:43:02 01.06.2021



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11b – 1Mbps						
Carrier Frequency	2462MHz						
Parameters	99% BW						
Notes	99% BW = 14.85MHz						

Multi¥iew 🔠 Rece	iver 🛛	Spectrum	Spectrum 2	Spectrum 3	Spectrum 4	4 🛛 🕅 Spe	ectrum 5 🛛 🔆 🔀	l	
Ref Level 40 Att	.60 dBm Off 10 dB SW	set 40.60 dB 🖷 RI T 1.08 ms 🖷 VI	BW 100 kHz BW 300 kHz I	Mode Auto Swee	p		Fr	requency 2.4	520000 GHz
Input 1 Occupied Ba	ndwidth	Un Ni	otch Uff						0 1 Pk View
r occupica Da								M1[1]	10.54 dBm
								(MILI)	2 4629490 GHz
30 dBm									214025450 0112
20 dBm									
					M1				
10 dBm					WILL				
				MUWWWW	1 MANNAN I				
0 dBm			T1 1	100	- m				
			$ \chi \mathcal{N}' \rangle /$			\ / *U[]			
			Nº W			V V			
-10 dBm						N.			
			N			N N			
-20 dBm			5			1			
			ľ				Y		
-30 dBm		/					<u> </u>		
		A NAMAN					A.		
40 dBm							W www.		
-40 uBm	- Mr. Mar	J. M.					L. of	march	a allow in allow a
William 100									Anna and the constant
-50 dBm									
CE 2 462 CHz			1001 pt	6	5				Spap 50.0 MHz
2 Markor Tabl	0		1001 pt	3		10 MI12/			
		X-Value	1	V-Value		Eunction		Eunction P	ecult
M1	1	2.462949 G	Hz 1	LO.54 dBm	Occ Bw	runcdom		14.8578725	64 MHz
T1	ī	2.4545265 0	GHz	-3.55 dBm	Occ Bw Cei	ntroid		2.46195	5478 GHz
T2	1	2.4693844 0	GHz	-6.02 dBm	Occ Bw Fre	q Offset		-44.52180	19434 kHz
	)[				Measuring	j <b>()</b>	<b>1.06.</b> 20:4	2021 Ref Level	RBW

20:47:25 01.06.2021



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11b – 2Mbps						
Carrier Frequency	2462MHz						
Parameters	99% BW						
Notes	99% BW = 14.72MHz						

MultiView 🔠 Recei	ver 🛛	Spectrum	Spectrum 2	Spectrum 3	Spectrum	4 🕅 SI	oectrum 5 🛛 🔆 🔀	l	
Ref Level 40.1 Att Input	50 dBm Offse 10 dB SWT 1 AC PS	et 40.60 dB ● RI 1.08 ms ● VE	3W 100 kHz 3W 300 kHz	Mode Auto Swee	р		Fr	equency 2.46	520000 GHz
1 Occupied Bar	ndwidth								○1Pk View
								M1[1]	10.27 dBm
									2.4612510 GHz
30 dBm									
00 d0m									
20 UBM									
				M1					
10 dBm				mont	1 million a				
				word 1	( intro				
0 dBm			T1 ~						
			<u>▼</u> ~ \{	1		V ~~			
10 48			V N			V W			
-10 uBm									
						۲			
-20 dBm			/						
			{						
-30 dBm		- pl							
		Mm ~					Mann		
-40 dBm	0.0 M B C	M					W.	an been	
www.www	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~							and such to a marine	mannon
-50 dBm									
CF 2.462 GHz			1001 pt	S		.u MHz/			span 50.0 MHz
2 Marker Table	<u>}</u>								
Type   Ref	Irc	X-Value	U7 .	Y-Value	One Duri	Function		Function Re	
	1	2.401231 U		-3 65 dBm	Occ BW Co	otroid	-	2 46107	7515 CH2
	1	2.4693413	iHz	-4.19 dBm	Occ Bw Fre	a Offset		-22.4854	7684 kHz
	1	2000 110 0	21 18aa				<b>110</b> 01 06 1	2021 Ref Level	RBW
l	Д				Measurin		21:0	7:36	•

21:07:36 01.06.2021



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11b – 5.5Mbps						
Carrier Frequency	2462MHz						
Parameters	99% BW						
Notes	99% BW = 14.51MHz						

Multi¥iew 🔠 Recei	ver 🕅 S	spectrum	Spectrum 2	Spectrum 3	X	Spectrum 4	Spe	ctrum 5 🛛 🔆 🔀	)	
Ref Level 40.4 Att	60 dBm Offse 10 dB SWT	t 40.60 dB • RE 1.08 ms • VE	3W 100 kHz 3W 300 kHz	Mode Auto Swee	*p			F	requency 2.	4620000 GHz
Input 1 Occupied Bar	1 AC PS	On No	otch Off							o t Dk View
T Occupied Bar	iawiath								MIE	
									MIL.	1 10.67 dBm
30. dBm										2,4623500 GHZ
oo ubiii										
20 dBm										
					М1					
10 dBm				- man we'r	- march	<u>.</u>				
				p marine		my.				
0 dBm			TIM	-		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<u></u> T2		_	
			×				N.			
-10 dBm							- h			
10 dbm							\ \			
			1							
-20 dBm-			/				) J			
								La		
-30 dBm		- wow						MA WAL		
		~~~~						1 V Nn w		
-40 dBm	- AAAM	N						0.00	WARM .	
Man Mar Mar	Mr								" I''' Wh	war month mor
-50 dBm										
CF 2.462 GHz			1001 pt	ts		5.0 M	1Hz/			Span 50.0 MHz
2 Marker Table	;									
Type Ref	Trc	X-Value		Y-Value		Fu	Inction		Function	Result
	1	2.46235 G	HZ :	10.61 apm	Occ E	3W Duu Control	i d		14.514618	6451 MHZ
	1	2.45471796	nnz SHz	-3.88 aBM -3.34 dBm	Occ E	ow Centrol Bw Fred Of	iu Ffset		∠.461 -24 757	973243 GHZ
14	T	2,40920200		5.54 abm			noet	tur, 01.04	24.7J7	
l	Д				Me	asuring		21:	29:11	

21:29:12 01.06.2021



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11b – 11Mbps						
Carrier Frequency	2462MHz						
Parameters	99% BW						
Notes	99% BW = 14.58MHz						

Multi¥iew 🔠 Receiv	er 🕅 S	pectrum 🔆 🔀	Spectrum 2 🛛 🕌	Spectrum 3	Spectrum 4	sper	ctrum 5 🛛 🔆 🔀		
Ref Level 40.6 Att	50 dBm Offse 10 dB SWT	t 40.60 dB • RE 1.08 ms • VE	3W 100 kHz 3W 300 kHz	Mode Auto Sweep	1		Fr	equency 2.40	518000 GHz
Input	1 AC PS	On No	otch Off						
1 Occupied Ban	dwidth							114543	● 1PK View
								M1[1]	10.99 dBm
20. d0m									2.4614000 GHz
30 ubiii									
20 dBm									
				M1					
10 dBm									
				adam Martin	mount	4			
0 dBm			T1			12 T2			
o abiii			<b>7</b>			N. N			
			۳ <i>م</i> -			La construction of the second s			
-10 dBm			1			6			
-20 dBm			/			\			
			/				N		
-30 dBm							N.		
So abiii		MAN					whym		
	. M	M <sup>2</sup>					Ma A	JANA .	
-40 dBm	SOM MONT	~					,Ų	1 4 man	MAD A A
my www.	1.444.0								A MA MACAMINA
-50 dBm									
CF 2.4618 GHz			1001 p	ts	5	.0 MHZ/			span 50.0 MHz
2 Marker Table	1 - 1								
Type Ref	Irc	X-Value	<b>U</b> 7		O and Dury	Function		Function R	
	1	2.4546704 G	<b>nz</b> :H7	-3.71 dBm	Occ BW Cor	otroid	•	2 461 06	4451 GHz
T <sub>2</sub>	1	2.4692585 G	iHz	-2.40 dBm	Occ Bw Fre	a Offset		164.45136	51004 kHz
(	<u> </u>	2		2 60.00			<b>1 WA</b> 01.06.2	2021 Ref Level	RBW
l					Measuring		22:0	1:13	•

22:01:13 01.06.2021



Test Details								
Manufacturer	Astronics							
EUT	Resideo Thermostat							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11g							
Notes								

Dratagal	Freq.	Data Rate	99% BW			
Protocol	(MHz)	(Mbps)	(MHz)			
	2412		16.48			
	2437	6	16.51			
	2462		16.5			
	2412		16.4			
	2437	9	16.4			
	2462		16.4			
	2412		16.44			
	2437	12	16.44			
	2462		16.44			
	2412		16.44			
	2437	18	16.45			
802 11a	2462		16.45			
602.11g	2412		16.43			
	2437	24	16.43			
	2462		16.44			
	2412		16.41			
	2437	36	16.45			
	2462		16.43			
	2412		16.43			
	2437	48	16.42			
	2462		16.4			
	2412		16.44			
	2437	54	16.39			
	2462		16.39			



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11g – 6Mbps						
Carrier Frequency	2412MHz						
Parameters	99% BW						
Notes	99% BW = 16.47MHz						

MultiView 88	Receiver	Sp Sp	ectrum	Spectru	im 2	Spectrum 3	Sp Sp	ectrum 4	Spe	:trum 5 🛛 🔆 🚺	Σ		
Ref Level Att	40.60 dBm 10 dB	Offset SWT	: 40.60 dB • 1.08 ms •	RBW 10 VBW 30 Notch	DO kHz DO kHz	Mode Sweep					Frequency	2.41	20000 GHz
1 Occupied	Bandwidth	10	011	Noteri	on								●1Pk View
1 0 000 000											MI	[1]	7.87 dBm
												2	4144980 GHz
30 dBm				_									11111500 0112
20 dBm													
10 dBm							M1						
					6 . A	1 A. Marsher	I a heard a	A	Λ. Λ				
0 dBm					Monthe	alore out a road and	Jan war war	~ www. gland-~	41000 Jun 2				
U UBIII							V						
							1		- L				
-10 dBm							-				-		
				N					η.				
-20 dBm				Mar					Ý	M			
20 0011			anaramm	× .						Man	0.0		
	0.000	ahaalaa	BAAAAA .							1.1	and my all	104	
-30 dBm	Mundit											. t. how	Van
ANN	/V [												"WWW
~40'dBm							_						'mw~h
· ·													
-50 dBm													
CE 2 412 G	47				1001 m	te		5.0.1	147/			C,	ap 50.0 MHz
O Morkor T	1 <u>4</u>				1001 p	13		5.0 1	·III 14/				
Z Marker I			V Value			V Value		г.	motion		Euro et	ion Do	
M1			A-value	GHZ		7.87 dBm		FU	unction		16.4793	.001 Ke	9 MHz
	1	-	2 4037748	GHz		-0.70 dBm	Occ B	w Centro	ud		2017/30	412014	541 GHz
T2	1		2.4202542	GHz		-0.25 dBm	Occ B	w Frea O	)ffset		14.	541193	937 kHz
	<u> </u>								4	07 (	16.2021 Re	flevel	RBW
l	Л						Mea	suring		2	1:51:49	•	

21:51:49 07.06.2021



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11g – 9Mbps						
Carrier Frequency	2412MHz						
Parameters	99% BW						
Notes	99% BW = 16.40MHz						

MultiView 88	Receiver X	Spectrum 🛛	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spe	ectrum 5 🛛 🔆 🔀		
Ref Level Att	40.60 dBm Off 10 dB SW 1 AC PS	set 40.60 dB ● RI /T 1.08 ms ● VE On N(	3W 100 kHz 3W 300 kHz	Mode Sweep			Fre	equency 2.4	120000 GHz
1 Occupied	Bandwidth								●1Pk View
								M1[1]	3.77 dBm 2.4144980 GHz
30 dBm									
20 dBm									
10 dBm					M1				
0 dBm			T1 Andrew	<mark>alandrahaalaa</mark>		how have the			
-10 dBm					V				
-20 dBm			NWWW I				<b>W</b>		
-30 dBm		M	· · · · · · · · · · · · · · · · · · ·				Mun		
-40 dBm	A	mm					Www.	m	
hen halw	WWWW V V							A. A. MARCAN	Margaren Margare
-50 dBm									
CF 2.412 G	Hz		1001 p	ts	5	.0 MHz/		:	Span 50.0 MHz
2 Marker T	able								
<b>Type   F</b> M1	Ref   Trc   1	X-Value 2.414498 G	Hz	Y-Value 3.77 dBm	Occ Bw	Function	1	Function R 6.4005236	esult 61 MHz
T1 T2	1	2.4038029 C 2.4202035 C	GHz GHz	-3.64 dBm -3.71 dBm	Occ Bw Ce Occ Bw Fre	ntroid a Offset		2.41200 3.19412	3194 GHz 9212 kHz
					Measuring	<b>(</b>	<b>67.06.2</b> 21:42	2021 Ref Level	RBW

21:42:21 07.06.2021



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11g – 12Mbps						
Carrier Frequency	2412MHz						
Parameters	99% BW						
Notes	99% BW = 16.44MHz						

Multi¥iew 88	Receiver		pectrum	X	Spectrum 2	Spectrum 3	X	Spectrum 4	X	Spectrum	5 🔆 🕱			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB ( 1.08 ms ( On	<ul> <li>RBV</li> <li>VBV</li> <li>Not</li> </ul>	₩ 100 kHz ₩ 300 kHz ch Off	Mode Sweep					Fr	equency	2.41	20000 GHz
1 Occupied	l Bandwidt	h												●1Pk View
												M1	[1]	8.01 dBm
													2	.4144980 GHz
30 dBm														
20 dBm														
10 dBm							M	1						
					ті б.	A Acres Acres	<u>.</u>	walk at	. Л. Л. те					
0.40.00					Thomas	an prover to	Jonwood	IN AN IONI	windly .					
0 uBm							1							
							i							
-10 dBm														
					1					m				
-20 dBm-				N	es.					- VAS				
-20 ubiii			Mr. M.	www.							Massa			
		6.0. Ma	NANNA AND A									Marine		
-30 dBm	M. When	No. A Contra											avy m	٨٨٨
A.N	Man.													Mar Maria
A40 dBm	•													"What
, ,														×
-50 dBm														
CE 0 410 C					1001									
UF 2,412 C	HZ				1001 p	ts		<u> </u>	U MHZ/				5	pan 50.0 MHZ
2 Marker T	able	-										_		
Type	Ref   Trc		X-Valu	e e cu	-	Y-Value		B	Function			Funct	ion Re	Sult
	1		2.414498				000	BW C	traid		1	0.4401	0102	
	1		2.40379	UZ GF NB GF	12 17	1.31 dBm	Occ	Bw Eroc	n Offeet			2.4	+1∠UIU 285426	200 GHZ 3484 VH7
12	1		2.42023	UD OF	12	0.91 UDIII		Dwined	4 Onset	_	07.00	10	200420	
	Л						M	easuring.			21:5	7:28	•	RBW •

21:57:29 07.06.2021



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11g – 18Mbps						
Carrier Frequency	2412MHz						
Parameters	99% BW						
Notes	99% BW = 16.44MHz						

MultiView 88 Rece	iver 🕅 🕅	spectrum	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spe	ctrum 5 🛛 🔆 🔀		
RefLevel 40. Att	.60 dBm Offse 10 dB SWT	t 40.60 dB • RE 1.08 ms • VE	3W 100 kHz 3W 300 kHz I	Mode Sweep			Fre	equency 2.4	120000 GHz
Input	1 AC PS	On No	otch Off						
1 Occupied Bai	ndwidth			1				114543	●1Pk View
								MILI	7.83 dBm
30. dBm									2.4144980 GHz
So dbill									
20 dBm									
					M1				
10 dBm									
			1ª Anna	hardwholm	mounder	Whyhr2			
0 dBm									
					1				
-10 dBm						<u> </u>			
			N			bay			
-20 dBm			P			7	1000 million		
		. ADRONNOV					MMMMMM.		
-30 dBm	Anaphro	MMV					11.11/44	mman	
0.44	MM M								Mr. Marea
NAD ARMWWWW									MANNA MAN
V Moo april									
co dour									
-50 aBm									
CF 2.412 GHz			1001 pt	s	5	.0 MHz/	1		Span 50.0 MHz
2 Marker Table	e								
Type Ref	Trc	X-Value		Y-Value		Function		Function R	esult
M1	1	2.414498 G	MZ	1.83 aBm	Occ Bw	atraid	1	0.4438521	
	1	2.40377586	ndz NHz	-0.25 dBm	Occ Bw Cel	nurora a Offset		-2.31914	501 4 kHz
- 12	Ŷ	2. 1202100 0		5.25 GD/II			07.06.2	021 Ref Level	RBW
l	П				Measuring		22:01	1:07	•

22:01:08 07.06.2021



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11g – 24Mbps						
Carrier Frequency	2412MHz						
Parameters	99% BW						
Notes	99% BW = 16.43MHz						

MultiView 88 Rece	iver 🕅 S	spectrum	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spec	trum 5 🛛 🔆 🔀		
Ref Level 40. Att	.60 dBm Offse 10 dB SWT	t 40.60 dB • RE 1.08 ms • VE	3W 100 kHz 3W 300 kHz 1	Mode Sweep			Fre	equency 2.4	120000 GHz
Input	1 AC PS	On No	otch Off						o t Div Mierry
T Occupied Ba	nawiatn							M1[1]	-40.04 dBm
								, witting	2.4370000 GHz
30 dBm									
20 dBm									
10 dBm									
			т1 А., в о	A. Rosalling	andread produced	A AT2			
0 dBm			- Andrew	esteral and a feed	10000 A 100 A 1. A 1. 200	a sa a averado			
-10 dBm						<u> </u>			
			N			۲. No. 1997			
-20 dBm		,	J <sup>er</sup>			٣.	η <u>Λ</u>		
20 0011		. And Mr					monthe		
-30 dBm	Marshall	mapar						Mympan	
SU GBII	WWW WWW								Muna.
- and Mark									VAN M1
W40 MBIII									
-F0 dBm									
-50 UDIII									
CF 2.412 GHz			1001 pt	s	5	.0 MHz/			Span 50.0 MHz
2 Marker Table	e								
I ype   Ref	Irc	2.437 G	H7	Y-Value 40.04 dBm	Occ Bw	Function		Function R	esuit 44 MH7
T1	1	2.4037653 G	Hz -	0.89 dBm	Occ Bw Cel	ntroid		2.41198	1281 GHz
T2	1	2.4201972 C	iHz	1.87 dBm	Occ Bw Fre	q Offset		-18.71910	6984 kHz
					Measuring		07.06.2 22:0	021 Ref Level	RBW

22:05:12 07.06.2021



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11g – 36Mbps						
Carrier Frequency	2412MHz						
Parameters	99% BW						
Notes	99% BW = 16.41MHz						

MultiView 88 Rec	eiver 🛛	Spectrum 🛛	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spe	ctrum 5 🛛 🔆 🔀		
Ref Level 40 Att	0.60 dBm Offse 10 dB SWT	et 40.60 dB • RI 1.08 ms • VE	3W 100 kHz 3W 300 kHz 1	Mode Sweep			Fre	equency 2.4	120000 GHz
Input 1 Occupied B:	1 AC PS	On No	otch Off						O I Dk View
I Occupied Da								M1[1]	7 69 dBm
								mili	2 4144980 GHz
30 dBm									2,4144900 012
00 d0									
20 dBm-									
10 dBm					ML				
			Valas has	an Ass John	mante	mal al T2			
0 dBm			NAAM MAA.						
-10 dBm									
10 0.011			A land			L K			
			السمور			\\~\ <sub>\</sub> \_			
-20 dBm		. Mar	<u>)</u>				MAL AA		
	A	In MARY .					M WWW	AAA	
-30 dBm	AN ADOM MANA	Y Y						MAR WAR	Å
DA WA	Marke .							· · · · ·	TWY MAN
-40 d8m									www.
4.4									· · · · · ·
-50 dBm									
CF 2.412 GHz			1001 pt	s	5	.0 MHz/		:	Span 50.0 MHz
2 Marker Tab	le								
Type Re	f   Trc	X-Value		Y-Value		Function		Function R	esult
M1	1	2.414498 G	HZ	7.69 dBm	Occ Bw	atraid	1	6.4145080	
	1	2.4037901 0	DHZ CH7	∠.78 dBm 1.78 dBm	Occ BW Cel	ntroia a Offset		-2 63653	/303 GHZ
	T	2.4202040 0	JI IL	1.70 UDIT				2.05000	
l	П				Measuring		22:19		

22:19:23 07.06.2021



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11g – 48Mbps						
Carrier Frequency	2412MHz						
Parameters	99% BW						
Notes	99% BW = 16.43MHz						

Multi¥iew 88	Receiver	Spectru	m X	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spe	ctrum 5 🛛 🎽 🕱		
Ref Level Att	40.60 dBm 10 dB 1 AC	Offset 40 SWT 1 PS	0.60 dB ● RE .08 ms ● VE .0n No	3W 100 kHz 3W 300 kHz   otch Off	Mode Sweep			Fre	equency 2.4	120000 GHz
1 Occupied	Bandwidth									⊙1Pk View
									M1[1]	7.85 dBm 2.4144980 GHz
30 dBm										
20 dBm										
10 dBm				τι ή . Α.	hello el calero	M1				
0 dBm				Whyter	Marrier	han man and many	WWWWWWWW			
-10 dBm							h.			
-20 dBm				pr.			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	www.		
-30 dBm		month	Mary					""WWW	morning	
in how w	www.ww	NOV .								mmmmm
<del>, "д</del> у-арт——										
-50 dBm										
CF 2.412 G	iHz			1001 pt	S	5	.0 MHz/	1	1	Span 50.0 MHz
2 Marker T	able									
Type         M1           T1         T2	Ref   Trc   1 1 1	2.4	<b>X-Value</b> • <b>14498 G</b> 2.4037648 G 2.4201994 G	H <b>z</b> Hz iHz	Y-Value 7.85 dBm 1.55 dBm 1.58 dBm	Occ Bw Occ Bw Cer Occ Bw Fre	Function ntroid q Offset	1	Function F L <b>6.434659</b> 2.4119 -17.9177	Result 528 MHz 82082 GHz 48034 kHz
[	)[					Measuring		<b>## 07.06.2</b> 22:23	2021 Ref Leve	el RBW

22:22:42 07.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 54Mbps					
Carrier Frequency	2412MHz					
Parameters	99% BW					
Notes	99% BW = 16.44MHz					

Multi¥iew 88 Rec	eiver 🛛	Spectrum	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spe	ctrum 5 🛛 🎽 🔀		
Ref Level 40 Att	.60 dBm Offs 10 dB SWT	et 40.60 dB ● RB 1.08 ms ● VB	3W 100 kHz 3W 300 kHz I	Mode Sweep			Fre	equency 2.4	120000 GHz
Input	1 AC PS	On No	otch Off						o t Dk Mierry
T Occupied Ba	andwidth							M1[1]	● IPK View
								WILII	7.80 UBIT
30 dBm									2.4144980 012
20 dBm									
20 0011									
10 ID					M1				
10 dBm									
			l 🗄 🖓 MM	www.	whythyla	mmm			
0 dBm			- ( <sup>0</sup> · · · · ·		,				
-10 dBm									
			Ń			٦ ٦			
-20 dBm			~			- Va			
		L. MM					month	R	
-30 dBm	- Arran	MANYW'' '					*******	Margan A.	
Δ.	M MYVIII							1 v.M.	haman
- and have	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )								MMM
M40 abin-									4.44
-50 dBm									
CF 2.412 GHz		1	1001 pt	S	5	.0 MHz/			Span 50.0 MHz
2 Marker Tab	е								
Type Re	f   Trc	X-Value		Y-Value		Function		Function R	esult
M1	1	2.414498 G	Hz	7.80 dBm	Occ Bw		1	6.4433434	49 MHz
	1	2.4037633 0	iHz Hz	1.54 dBm 1.72 dBm	Occ Bw Cel	ntroid a Offect		2.41198	4942 GHz
14	T	2.4202000 G	11 12	1.72 UDIII				-13.0360.	
	11				Measuring		22:2	5:43	KBW •

22:25:43 07.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 6Mbps					
Carrier Frequency	2437MHz					
Parameters	99% BW					
Notes	99% BW = 16.50MHz					

Multi¥iew 🔠 Re	eceiver 🔀	Spectrum	Spectrum 2	Spectrum 3	Spectrum	4 🛛 🕅 Spe	ctrum 5 🛛 🔆 🔀		
Ref Level 4 Att	0.60 dBm Off 10 dB SW	set 40.60 dB • RI T 1.08 ms • VI	3W 100 kHz 3W 300 kHz	Mode Sweep			Fre	equency 2.43	370000 GHz
1 Occupied B	andwidth	OII N							01Pk View
								M1[1]	8.18 dBm 2.4394980 GHz
30 dBm									
20 dBm									
10 dBm			- h when	In when which here	MI	mentared to			
0 dBm			- Warren			and a contraction of the			
-10 dBm			w			hy			
-20 dBm	. Mark	Manhamman	<u>,</u>				MANNI	MMMM.	
-30 dBm	M							<u>, , M</u> UU	montanda
µ+40/dBm									
-50 dBm									
CF 2.437 GH	Z	·	1001 pt	S	5	.0 MHz/	·		pan 50.0 MHz
2 Marker Tal	ole								]
<b>Type   Re</b> M1 T1 T2	ef   Trc   1 1 1	X-Value 2.439498 G 2.4287459 C 2.4452541 C	Hz GHz GHz	Y-Value 8.18 dBm -0.68 dBm -0.02 dBm	Occ Bw Occ Bw Cer Occ Bw Fre	Function ntroid	1	Function Re 6.50823859 2.437000 11.10139	esult 95 MHz 0011 GHz 95607 Hz
					Measuring		<b>67.06.2</b> 21:52	021 Ref Level	RBW

21:52:52 07.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 9Mbps					
Carrier Frequency	2437MHz					
Parameters	99% BW					
Notes	99% BW = 16.39MHz					

Multi¥iew 🔠 Rece	iver 🔀	Spectrum	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spe	ctrum 5 🛛 🔆 🔀		
Ref Level 40. Att	.60 dBm Offs 10 dB SW	set 40.60 dB • RI T 1.08 ms • VE	3W 100 kHz 3W 300 kHz 1	Mode Sweep			Fn	equency 2.4	370000 GHz
1 Occupied Ba	ndwidth	on N							o 1 Pk View
T occupied bu								M1[1]	3.62 dBm 2.4394980 GHz
30 dBm									
20 dBm									
10 dBm					M1				
0 dBm			T1 Ann Ann	hardrowlowed	pp for the second	work roll 72			
-10 dBm									
-20 dBm		40	manda				Чи.		
-30 dBm		Marcinonet					Mr. Mr.		
-40 dBm-	mannen	₩ <del>₩₩</del>						Anno mar	hamman
-50 dBm									
CF 2.437 GHz	1	1	1001 pt	s	5	.0 MHz/	I		Span 50.0 MHz
2 Marker Table	e					•			
Type   Ref	Trc   1 1	X-Value 2.439498 G 2.4288085 G	Hz Hz	Y-Value 3.62 dBm -3.34 dBm	Occ Bw Occ Bw Cer	Function	1	Function R 6.3954924 2.437 6 10070	esult D3 MHz D062 GHz
		2.4402009 0	21 12	4.45 UDIII	Measuring	j	<b>#</b> 07.06.2 21:4	2021 Ref Level	RBW

21:46:50 07.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 12Mbps					
Carrier Frequency	2437MHz					
Parameters	99% BW					
Notes	99% BW = 16.43MHz					

Multi¥iew 🔠 Rece	iver 🛛	Spectrum 🔀	Spectrum 2	Spectrum 3	Spectrum 4	4 🛛 🕅 Spe	ectrum 5 🛛 🔆 🔀		
Ref Level 40. Att	60 dBm Offse 10 dB SWT	t 40.60 dB ● RE 1.08 ms ● VE	3W 100 kHz 3W 300 kHz 1	Mode Sweep			Fre	equency 2.4	370000 GHz
1 Occupied Ba	ndwidth	UN NO	oten on						o 1 Pk View
r occupied bu								M1[1]	7.94 dBm
								(MILI)	2 420 4090 CH-
30. dBm									2,4394980 GHZ
oo abiii									
20 dBm									
10 dBm					M1				
			- 6 8 1	N. A., A A	. A to A .				
			What	many	mannen	www.			
U dBm									
						l l			
-10 dBm						И			
			N			L M			
-20 d8m		- North	V.			<u>۲</u>	Vinha .		
-20 ubm		Nor					MMM		
	0.000M	MAMM					- made al	Marshare .	
-30 dBm	ADD WVVVVVV VII							- · · · · · · · · · · · · · · · · · · ·	Mar
M	AAAA .								. marine
-40/d8m									MARAN
vad 7									
-50 dBm									
CE 2 437 GHz			1001 pt	<u> </u>	5				Spap 50.0 MHz
2 Markor Tabl	<b>_</b>		1001 pt	3		10 10 12/			
		V-Value		V-Value		Eupction	1	Euroction E	Pocult
M1	1	2.439498 G	Hz	7.94 dBm	Occ Bw	runcuon	1	6.4351328	25 MHz
Ti	1	2.4287768 0	iHz	0.22 dBm	Occ Bw Cei	ntroid	-	2.43699	94323 GHz
T2	ī	2.4452119	βHz	1.52 dBm	Occ Bw Fre	q Offset		-5.6771	43832 kHz
r	) (				Measuring		<b>07.06.2</b>	021 Ref Leve	el RBW
l					J		21:58	3:40	•

21:58:41 07.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 18Mbps					
Carrier Frequency	2437MHz					
Parameters	99% BW					
Notes	99% BW = 16.44MHz					

Multi¥iew 🔠 Rece	eiver 🛛	Spectrum	Spectrum 2	Spectrum 3	Spectrum 4	4 🛛 🕅 Sp	ectrum 5 🛛 🔆 🔀		
Ref Level 40. Att	.60 dBm Offse 10 dB SWT	et 40.60 dB ● RI 1.08 ms ● VE	3W 100 kHz 3W 300 kHz	Mode Sweep			Fr	equency 2.4	370000 GHz
Input 1 Occupied Ba	1 AC PS	On No	otch Off						o 1 Pk View
r occupied ba								M1[1]	-36.14 dBm
								(int[1]	2.4144970 GHz
30 dBm									
20 dBm									
10 dBm									
10 000			6 8	0 0.8	A A A				
			- how how	hwwww	whollowm	monthy			
U dBm									
-10 dBm									
			N			J 7			
-20 dBm		A MA	<i>r</i> -				Month A.		
	A MAN	In Marine					. www.why	Mandra.	
-30 dBm	wwwwwwwww							****	M
Mann	<sup>Y</sup> <sup>Q</sup>								Windwar
, <b>,⊂,4Q</b> /dBm									
-50 dBm									
CE 2.437 GHz			1001 pt	'S	5	.0 MHz/		I	Span 50.0 MHz
2 Marker Tabl	e								1
Type Ref	Trc	X-Value		Y-Value		Function		Function R	esult
M1	1	2.414497 G	Hz -	36.14 dBm	Occ Bw		1	6.4485467	93 MHz
T1	1	2.4287653 0	)Hz	0.79 dBm	Occ Bw Cer	ntroid		2,43698	9615 GHz
12	1	2.4452139 0	)HZ	2.07 aBm	Occ BW Fre	eq Uffset		-10.3854	0341 KHZ
	П				Measuring	J <b>(</b> )	07.06.2 22:0	021 Ref Leve 2:25 ●	RBW

22:02:26 07.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 24Mbps					
Carrier Frequency	2437MHz					
Parameters	99% BW					
Notes	99% BW = 16.44MHz					

MultiView 🔠 Rece	iver 🕅	Spectrum	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spe	ctrum 5 🛛 🔆 🔀		
Ref Level 40. Att	.60 dBm Offse 10 dB SWT	t 40.60 dB • RE 1.08 ms • VE	3W 100 kHz 3W 300 kHz 1	Mode Sweep			Fn	equency 2.4	370000 GHz
Input	1 AC PS	On No	otch Off					,	
1 Occupied Ba	ndwidth								●1Pk View
								M1[1]	7.73 dBm
20. dBm-									2.4394980 GHz
30 ubiii									
20 dBm									
10 dBm					ML				
			The And	mounder	MMMM	mhmh			
0 dBm						4.10.1444			
				1					
-10 dBm						<u> </u>			
			SI I						
-20 dBm			N. A.			"h	14. A		
20 0011		AN ANY					moner		
	a marala.	MANNE					Why Why	mm.	
-30 dBm	MMM MAN							M MAN	MAR .
	ψ×Υ .								1 Mun
-40\dBm-									1.0 1000
r									
-50 dBm									
CE 2 437 GHz			1001 pt	e	5				Spap 50.0 MHz
2 Marker Table	<u>م</u>		1001 pt	3		10 101127			
		X-Value		Y-Value		Function		Function R	esult
M1	1	2.439498 G	Hz	7.73 dBm	Occ Bw		1	6.4285148	82 MHz
Τ1	1	2.4287841 0	GHz	2.47 dBm	Occ Bw Cer	ntroid		2.43699	8393 GHz
T2	1	2.4452127 0	iHz	2.29 dBm	Occ Bw Fre	q Offset		-1.60705	50077 kHz
[	Π				Measuring		07.06.2 22:1	2021 Ref Leve	RBW

22:17:21 07.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 36Mbps					
Carrier Frequency	2437MHz					
Parameters	99% BW					
Notes	99% BW = 16.44MHz					

Multi¥iew 88 Re	ceiver 🔀	Spectrum	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spe	ctrum 5 🛛 🎽 🔀		
Ref Level 4 Att	0.60 dBm Offs 10 dB SWT	et 40.60 dB • RI 1.08 ms • VI	3W 100 kHz 3W 300 kHz 1	Mode Sweep			Fre	equency 2.4	370000 GHz
1 Occupied B	andwidth	Un Ni	oten on						o 1 Pk View
1 Occupied B								M1[1]	7.80 dBm
								(inter)	2.4394980 GHz
30 dBm									
00.40.0									
20 dBm-									
					841				
10 dBm					MI				
			T1 An Mark	a Ann Anna	mar Amber	WAL AT 2			
0 dBm			AN. Ann Am	MA. 0. 0. 1114-		a contraction			
				}					
10.10.0						6			
-10 dBm-			N			h			
			N			W.			
-20 dBm		Maha	N			V)	WWW.		
		a all cherry					mand	a .	
-30 dBm	- MANANA ANA	VANAAA					)	hadan	
-	MANN							WV C	m.
and an Mark									Mulana
M4U/aBm-									h
-50 dBm									
CE 0 407 CU-	-		1001 pt		 F				Chan EO O MUIT
	<u> </u>		1001 pt	5	5				span 50.0 MHZ
		V Volu-		V Value		Function		Function D	
M1		2.439498 G	Hz	7-Value 7-80 dBm	Occ Bw	Function		6.4482830	25 MHz
T1	1	2.4287551 (	Hz	1.11 dBm	Occ Bw Cei	ntroid	-	2,43697	9269 GHz
T2	î	2.4452034 0	Hz	1.37 dBm	Occ Bw Fre	q Offset		-20.73142	6618 kHz
r	Υ				Measuring		<b>07.06.2</b>	021 Ref Level	RBW
l	П				measanng		22:20	0:26	•

22:20:27 07.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 48Mbps					
Carrier Frequency	2437MHz					
Parameters	99% BW					
Notes	99% BW = 16.42MHz					

Multi¥iew 88	Receiver	Sp Sp	oectrum	Spe	ctrum 2	Spectrum 3	Spectrum	4 🕅 Spe	ctrum 5 🛛 🎽 🔀		
Ref Leve Att	40.60 dBm 10 dB	Offset SWT	t 40.60 dB = 1.08 ms =	RBW VBW	100 kHz 300 kHz	Mode Sweep			Fre	equency 2.4	370000 GHz
1 Occupied	Bandwidth	P3	UI	Noten	Uli						01Pk View
roccupiet										M1[1]	7.87 dBm
30 dBm											2.4394980 GHZ
20 dBm											
10 dBm							M1				
0 dBm					How	hanna	Muhuha	mmm			
o abiii							V				
-10 dBm				ليرك	/			h.			
-20 dBm			MMMM	N N					1 Multim		
-30 dBm	month	Ver MAN	V( ) · ) ·							MANAN	Mana a
-40/8pm	1										- mining and
-50 dBm											
05.0.107.0					1001						
CF 2.437 C	iHZ				1001 pt	IS	L L	o.u MHz/			Span 50.0 MHz
2 Marker 1	able	1	V Valua			V Valua		Eurotion		Eupotion	Docult
M1			2.439498	GHZ		<b>7.87 dBm</b>	Occ Bw	Function	1	6.4236236	559 MHz
T1	1	-	2.428771	8 GHz		1.14 dBm	Occ Bw Ce	ntroid	-	2.4369	83579 GHz
T2	1		2.445195	4 GHz		1.09 dBm	Occ Bw Fre	eq Offset		-16.4212	64537 kHz
							Measurin	g <b>(1</b> 1111)	<b>67.06.2</b> 22:23	1021 Ref Levi	el RBW

22:23:34 07.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 54Mbps					
Carrier Frequency	2437MHz					
Parameters	99% BW					
Notes	99% BW = 16.38MHz					

MultiView 88 Rece	iver 🕅 🕅	spectrum	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spe	ctrum 5 🛛 🔆 🔀		
RefLevel 40. Att	.60 dBm Offse 10 dB SWT	t 40.60 dB • RE 1.08 ms • VE	3W 100 kHz 3W 300 kHz I	Mode Sweep			Fn	equency 2.4	370000 GHz
Input	1 AC PS	On No	otch Off						
1 Occupied Ba	ndwidth							-	⊙1Pk View
								M1[1]	7.86 dBm
									2.4394980 GHz
30 dBm									
20 dBm									
10 dBm					M1				
			т1 б 💧	1. And all a	allow of when	А. Атг			
0 dBm			Ammy	MILMIMUM	mer an an all	mmhhy			
0 ubiii			[ ] [						
-10 dBm			1			<u> </u>			
			J.			ا <i>ل</i> ړ			
-20 dBm			$\sim$			~	N		
							month		
-30 dBm	MARCAN	My MV						WWWWWW	
	www.howler to the							1 Mart	A.
MM									w har as
~40,q8m-									Ander
-50 dBm									
			1001 pt		 F				Chap EQ Q MUS
			1001 pt	5	ວ				span 50.0 MIHZ
Z Marker Lable		V Value		V Voluo		Eurotion		Eupotion D	ocult
M1	1	2.439498 G	HZ	<b>7.86 dBm</b>	Occ Bw	Function	1	6.3852467	97 MHz
T1	1	2.428804 @	Hz	1.11 dBm	Occ Bw Cel	ntroid	-	2,43699	6657 GHz
T2	1	2.4451893 0	iHz	1.16 dBm	Occ Bw Fre	q Offset		-3.34318	9481 kHz
	)[				Measuring		<b>#</b> 07.06.2 22:2	2021 Ref Leve	RBW

22:26:30 07.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 6Mbps					
Carrier Frequency	2462MHz					
Parameters	99% BW					
Notes	99% BW = 16.50MHz					

Multi¥iew 88 Re	eceiver 🛛	Spectrum	Spectrum 2	Spectrum 3	Spectrum 4	Spe	ctrum 5 🛛 🔆 🔀		
Ref Level 4 Att	0.60 dBm Off 10 dB SW	fset 40.60 dB ● RI /T 1.08 ms ● VI On N	3W 100 kHz 3W 300 kHz	Mode Sweep			Fre	equency 2.46	520000 GHz
1 Occupied B	andwidth	on n							• 1Pk View
								M1[1]	8.03 dBm 4669950 GHz
30 dBm									
20 dBm									
10 dBm			T. B. where	Jacobrochanter.	anhanhunhan	1 mml 1.72			
0 dBm						Contraction Mitz			
-10 dBm			and the second s			- they			
-20 dBm	www	MMMMMMM	· ·				- March Ma	hyphanally	
-30 dBm	W qual V							^Y \	Mr. Marian
√~+0) UBM									
-50 dBm									
CF 2.462 GH	Z	·	1001 pt	S	5	.0 MHz/	-		pan 50.0 MHz
2 Marker Tal	ole								]
<b>Type</b>   <b>R</b> M1 T1 T2	ef   Trc   1 1	X-Value 2.466995 G 2.4537494 ( 2.4702531 (	Hz GHz GHz	Y-Value 8.03 dBm -0.39 dBm -0.11 dBm	Occ Bw Occ Bw Cer Occ Bw Fre	Function ntroid a Offset	1	Function Re 6.50368747 2.462001 1.28883	esult 74 MHz .289 GHz 3225 kHz
	)[				Measuring		<b>67.06.2</b> 21:53	021 Ref Level	RB₩

21:53:42 07.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 9Mbps					
Carrier Frequency	2462MHz					
Parameters	99% BW					
Notes	99% BW = 16.40MHz					

Multi¥iew 🔠 Re	eiver 🗵	Spectrum	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spe	ctrum 5 🛛 🔆 🔀		
Ref Level 40 Att	0.60 dBm 0 10 dB 5	Hffset 40.60 dB ● R WT 1.08 ms ● VI S On N	BW 100 kHz BW 300 kHz	Mode Sweep			Fre	equency 2.40	520000 GHz
1 Occupied B	andwidth								●1Pk View
20 40								M1[1]	3.89 dBm 2.4644980 GHz
30 UBIII-									
20 dBm									
10 dBm					M1				
0 dBm			- The Area	frankran born hver	franklander frank	hardbord to			
-10 dBm				· · · · · · · · · · · · · · · · · · ·					
-20 dBm			, en				h.		
-30 dBm		- almand War					Marine Marine		
-40 dBm	www.wh	<b>~~</b> ≁ <sup>≁</sup>					~~~~	masser	homenu
-50 dBm									
CF 2.462 GHz	1	1	1001 pt	t <b>s</b>	5	.0 MHz/	1		Span 50.0 MHz
2 Marker Tab	le		•						
<b>Type</b>   <b>Re</b> M1 T1 T2	f   Trc   1 1	X-Value 2.464498 G 2.4537828 ( 2.4701884 (	Hz GHz GHz	Y-Value 3.89 dBm -4.30 dBm -3.76 dBm	Occ Bw Occ Bw Ce Occ Bw Fre	Function ntroid q Offset		Function R <b>16.405585</b> 2.46198 -14.39541	esult 59 MHz 5605 GHz 2907 kHz
					Measuring		07.06.2 07.06.2	021 Ref Level	RBW

21:47:48 07.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 12Mbps					
Carrier Frequency	2462MHz					
Parameters	99% BW					
Notes	99% BW = 16.44MHz					

Ref Level 40.60 dbm         Offset 40.60 db         RBW         100 kHz         Mode Sweep         Frequency         2.4620000 GHz           10 dbm         0         Notch         Off         0         18/ View         0         18/ View           10 dbm         0         0         Notch         Off         0         18/ View         0         18/ View           10 dbm         0         0         Notch         Off         0         18/ View         0         18/ View           20 dbm         0         0         Notch         0         18/ View         0         10/ View         0         0         10/ View         0         0         10/ View         0         0         0         10/ View         0         0         10/ View         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <t< th=""><th>MultiView 88 Recei</th><th>ver 🕅 S</th><th>Spectrum</th><th>Spectrum 2</th><th>Spectrum 3</th><th>Spectrum</th><th>4 🛛 🕅 Spi</th><th>ectrum 5 🛛 🔆 🔀</th><th></th><th></th></t<>	MultiView 88 Recei	ver 🕅 S	Spectrum	Spectrum 2	Spectrum 3	Spectrum	4 🛛 🕅 Spi	ectrum 5 🛛 🔆 🔀		
Input         1AC         PS         On         Notch         OH           1 Occupied Bandwidth              128 View           30 dbm         2.4644980 GHz          2.4644980 GHz         2.4644980 GHz         2.4644980 GHz           20 dbm               2.4644980 GHz           20 dbm <td< th=""><th>RefLevel 40. Att</th><th>60 dBm Offse 10 dB SWT</th><th>t 40.60 dB • RI 1.08 ms • VE</th><th>3W 100 kHz 3W 300 kHz</th><th>Mode Sweep</th><th></th><th></th><th>Fr</th><th>equency 2.4</th><th>620000 GHz</th></td<>	RefLevel 40. Att	60 dBm Offse 10 dB SWT	t 40.60 dB • RI 1.08 ms • VE	3W 100 kHz 3W 300 kHz	Mode Sweep			Fr	equency 2.4	620000 GHz
Coccupied calculation         M1[1]         B.06 dBm           30 dBm         2.4644980 GHz         2.4644980 GHz           20 dBm         10 dBm         10 dBm         10 dBm           10 dBm         11 dBm         10 dBm         10 dBm           -10 dBm         11 dBm         10 dBm         10 dBm           -20 dBm         10 dBm         10 dBm         10 dBm           -30 dBm         10 dBm         10 dBm         10 dBm           -30 dBm         10 dBm         10 dBm         10 dBm           -20 dBm         10 dBm         10 dBm         10 dBm           -30 dBm         10 dBm         10 dBm         10 dBm           -20 dBm         10 dBm         10 dBm	Input 1 Occupied Bar	1 AC PS	On No	otch Off						• 1 Dk Viow
30 dBm     2.4644980 GHz       20 dBm     30 dBm       10 dBm     M1       10 dBm     M1       10 dBm     M1       -10 dBm     M1       -20 dBm     M1       -30 dBm     M1       -30 dBm     M1       -50 dBm     M1       -50 dBm     M1       -21 dBm     M1       -22 dBm     M1       -30 dBm     M1       -30 dBm     M1       -30 dBm     M1       -30 dBm     M1       -20 dBm     M1       -30 dBm     M1	r Occupied Ba	Tawiaun							M1[1]	8.06 dBm
30 dBm       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10										2.4644980 GHz
20 dBm	30 dBm									
20 dBm										
10 dBm     10 dBm <td>20 dBm</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	20 dBm									
10 dBm						MI				
0 dBm         T1         Multiplication         T2         Image: CF 2.462 GHz         1001 pts         5.0 MHz/         Span 50.0 MHz	10 dBm									
0 dBm -10 dBm -20 dBm -20 dBm -30 dBm -30 dBm -30 dBm -50 d				Tiphone	howhowhy	mhalhala	WWWhT2			
-10 dBm	0 dBm			- Y			Y Y			
-10 dBm -20 dBm -30 dBm -30 dBm -30 dBm -50				<u> </u>		]	<u>\</u>			
-20 dBm	-10 dBm						4			
-20 dBm				N			N (V	m		
-30 dBm	-20 dBm-		1. A ARA ANNO					Munnar		
-50 dBm     -50 dBm     -50 dBm       -50 dBm     -50 dBm     -50 dBm       -50 dBm     -50 dBm     -50 dBm       2 Marker Table     -50 dBm	-20 dBm	mm	Man have						MWWWWWWWW	
-40. dBm         -50 dBm         -50 dBm         -50 dBm         -50 dBm           -50 dBm         -50 dBm         -50 dBm         -50 dBm         -50 dBm           CF 2.462 GHz         1001 pts         5.0 MHz/         Span 50.0 MHz           2 Marker Table         -50 dBm         -50 dBm         -50 dBm	-30 dBm	MIN								mm
-50 dBm         -50 dBm         -50 dBm           CF 2.462 GHz         1001 pts         5.0 MHz/         Span 50.0 MHz           2 Marker Table	-40 dBm									1000 Malan
-50 dBm         Image: CF 2.462 GHz         1001 pts         5.0 MHz/         Span 50.0 MHz           2 Marker Table         Image: CF 2.462 GHz         Image: CF 2.462 GHz/         Span 50.0 MHz/         Span 50.0 MHz/	, including									1.00
CF 2.462 GHz         1001 pts         5.0 MHz/         Span 50.0 MHz           2 Marker Table         1001 pts         5.0 MHz/         Span 50.0 MHz	-50 dBm									
CF 2.462 GHz         1001 pts         5.0 MHz/         Span 50.0 MHz           2 Marker Table										
2 Marker Table				1001 m						Coop EQ Q MUIT
	2 Markor Table	<b>`</b>		1001 pt	.3	J				
Type   Ref   Trc   X-Value   Y-Value   Function   Function Result	Type Ref	Trc	X-Value		Y-Value		Function		Function R	esult
M1 1 2.464498 GHz 8.06 dBm Occ Bw 16.442063931 MHz	M1	1	2.464498 G	Hz	8.06 dBm	Occ Bw		1	6.4420639	31 MHz
T1         1         2.4537827 GHz         0.41 dBm         Occ Bw Centroid         2.462003721 GHz           T2         1         2.4702248 GHz         -0.10 dBm         Occ Bw Freq Offset         3.720904029 VHz	T1 T2	1	2.4537827 0	iHz Hz	0.41 dBm -0.10 dBm	Occ Bw Ce	ntroid a Offeet		2.46200	3721 GHz
Mascuing 07.06.2021 Ref Level RBW		1 1	2.47022400		0.10 0011	Maasuring		07.06.2	2021 Ref Leve	RBW

22:00:01 07.06.2021


Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 18Mbps					
Carrier Frequency	2462MHz					
Parameters	99% BW					
Notes	99% BW = 16.45MHz					

MultiView 88 Receiv	ver 🕅 S	pectrum	Spectrum 2	Spectrum 3	Spectrum	Spec	ctrum 5 🛛 🔆 🔀		
Ref Level 40.6 Att	60 dBm Offse 10 dB SWT	t 40.60 dB • RE 1.08 ms • VE	3W 100 kHz 3W 300 kHz I	Mode Sweep			Fre	equency 2.46	520000 GHz
Input	1 AC PS	On No	otch Off						
1 Occupied Bar	ndwidth								●1Pk View
								M1[1]	8.03 dBm 2.4644980 GHz
30 dBm									
20 dBm									
10 dBm					M1				
0.40.0			72 Annahar	halushally	putulation	When htp			
U dBm									
-10 dBm			~			h.			
-20 dBm		Book Ash Mart	www.			- Mu	Mar Maria		
-30 dBm	- Angel	Willighton					. MANAAMA	Mrymanna.	
www	WY MARKEN I							.14040	man
√ <sup>40<sup>v</sup>dBm</sup>									- 0494a
-50 dBm									
CF 2.462 GHz			1001 pt	s	5	.0 MHz/		2	pan 50.0 MHz
2 Marker Table	2					· · · · ·			
Type   Ref	Trc	X-Value 2.464498 GI	Hz	Y-Value 8.03 dBm	Occ Bw	Function	1	Function Re	esult L7 MHz
T1 T2	- 1 1	2.4537683 G 2.4702196 G	iHz iHz	0.08 dBm 0.27 dBm	Occ Bw Cer Occ Bw Fre	ntroid q Offset		2.461993 -6.04786	3952 GHz 5064 kHz
[					Measuring		<b>## 07.06.2</b> 22:03	Ref Level	RBW

22:03:59 07.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 24Mbps					
Carrier Frequency	2462MHz					
Parameters	99% BW					
Notes	99% BW = 16.43MHz					

Multi¥iew 88	Receiver	S S	pectrum	Spe	ectrum 2	Spectrum 3	X	Spectrum 4	X Sp	ectrum 5 🛛 🔆	X		
Ref Leve Att	40.60 dBn 10 dE	D Offse	t 40.60 dB • 1.08 ms •	<ul> <li>RBW</li> <li>VBW</li> <li>Notch</li> </ul>	100 kHz 300 kHz	Mode Sweep					Frequency	2.46	20000 GHz
1 Occupied	Bandwid	th	011	Hoten									• 1Pk View
											М	1[1] 2	7.96 dBm .4644980 GHz
30 dBm——													
20 dBm													
10 dBm					I. A. Ma	handrada	MI	when	and and T2				
0 dBm					And he M and	,							
-10 dBm					/					<b>A</b>			
-20 dBm		mman	Month	M						mann	mmmm	100	
-30 dBm	N-MNOWA	* ; .,										<u>0 A A A A A</u>	MMMm
													. 1163
-50 uBm													
CF 2.462 C	Hz				1001 pt	ts		5.0	) MHz/		•	Ś	pan 50.0 MHz
2 Marker 1	Fable												
Type           M1           T1           T2	Ref   Tro	:	X-Valu 2.464498 2.45376 2.470208	e <b>3 GHz</b> 59 GHz 35 GHz		Y-Value 7.96 dBm 2.64 dBm 2.79 dBm	Occ Occ Occ	Bw Bw Centi Bw Freq	Function roid Offset		Func <b>16.439</b> 2. -11	tion Re 50191 461988 214782	sult .8 MHz .785 GHz 2289 kHz
							Me	asuring		<b>W</b> 0	7.06.2021 Ro	ef Level	RBW

22:18:16 07.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 36Mbps					
Carrier Frequency	2462MHz					
Parameters	99% BW					
Notes	99% BW = 16.42MHz					

Multi¥iew 🔠 F	Receiver	Spectrum	Spectrum 2	Spectrum 3	Spectrum 4	4 🕅 Spe	ctrum 5 🛛 🎽 🔀		
Ref Level 4 Att	40.60 dBm ( 10 dB (	Dffset 40.60 dB ● F SWT 1.08 ms ● N	RBW 100 kHz /BW 300 kHz	Mode Sweep			Fre	equency 2.46	520000 GHz
1 Occupied I	Bandwidth	-3 OII I							01Pk View
								M1[1]	7.98 dBm 2.4644980 GHz
30 dBm									
20 dBm									
10 dBm			T1. A. And	hallestrahn	MI	ml ml 72			
0 dBm			An Ind. A			- aproxy			
-10 dBm			werd			h h			
-20 dBm		www.Mmwww	^~				more when the way	MMan	
-30 dBm	~ Margaret							White	mann
~~+9/µBm~									
-5U dBm									
CF 2.462 GH	z	•	1001 p	ts	5	.0 MHz/	·		Span 50.0 MHz
2 Marker Ta	ble								
Type         R           M1         T1           T2         T2	ef   Trc   1 1 1	X-Value 2.464498 ( 2.4537813 2.4702079	GHz GHz GHz	Y-Value 7.98 dBm 1.25 dBm 2.20 dBm	Occ Bw Occ Bw Cer Occ Bw Fre	Function ntroid q Offset		Function Re 16.4266005 2.461994 -5.415070	esult 53 MHz 585 GHz 0814 kHz
					Measuring	(IIIIII)	<b>##</b> 07.06.2 22:21	021 Ref Level	RBW

22:21:32 07.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 48Mbps					
Carrier Frequency	2462MHz					
Parameters	99% BW					
Notes	99% BW = 16.40MHz					

MultiView 88	Receiver	Spectrum	X	Spectrum 2	Spectrum 3	Spectrum	4 🛛 Spe	ectrum 5 🛛 🔆 🔀		
Ref Level Att	40.60 dBm 10 dB 1 AC	Offset 40. SWT 1.0	60 dB • RE 08 ms • VE	3W 100 kHz 3W 300 kHz	Mode Sweep			Fn	equency 2.4	620000 GHz
1 Occupied	Bandwidth	10	on no	on on						●1Pk View
									M1[1]	7.98 dBm 2.4644980 GHz
30 dBm										
20 dBm										
10 dBm				T1.8 A 100	harmal when	M1	M. A			
0 dBm				- privare	- WWW - GWW - H		ton wheels			
-10 dBm				al and a second			1 Min	N		
-20 dBm		· ~ Mw	www	ſ"			,	www.	Martin	
-30 dBm	M MM	A							THE WAY	many
-40,upm										- War
-50 aBm——										
CF 2.462 G	Hz			1001 pt	S	5	.0 MHz/			Span 50.0 MHz
2 Marker T	able									
<b>Type   F</b> M1 T1 T2	Ref   Trc   1 1	2.46 2. 2. 2.	K-Value 64498 GI 4537789 GI 4701816 GI	H <b>z</b> Hz Hz	Y-Value 7.98 dBm -0.14 dBm 1.27 dBm	Occ Bw Occ Bw Ce Occ Bw Fre	Function ntroid og Offset	1	Function R L6.4026500 2.46198 -19.7371	esult <b>37 MHz</b> 80263 GHz 82467 kHz
	)[					Measuring	j (IIIIIII)	<b>67.06.2</b> 22:2	2021 Ref Leve	RBW

22:24:37 07.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11g – 54Mbps					
Carrier Frequency	2462MHz					
Parameters	99% BW					
Notes	99% BW = 16.39MHz					

MultiView 88	Receiver	Spe Spe	ctrum	Spe	ctrum 2	Spectrum 3	X	Spectrum 4	X	Spectrum 5	×X			
Ref Level Att	40.60 dBm 10 dB	Offset SWT	40.60 dB • 1.08 ms •	RBW VBW	100 kHz 300 kHz	Mode Sweep					Fre	equency	2.46	20000 GHz
1 Occupied	Bandwidth	P3	UII	Noten	Uli									01Pk View
roccupica	Baramat											M1	[1] 2	8.04 dBm .4644980 GHz
30 dBm														
20 dBm														
10 dBm					T1. A.A. A AN	A. S. Bandle onlyne	M	1 haallikad						
0 dBm					Ann Man	abbear no reasonal 18.	100-000	******	munip					
-10 dBm					}				\ \					
-20 dBm			· · · · · · · · · · · · · · · · · · ·	MAA						Mon				
-30 dBm	- AND	MAN	Man								MANN	mmy	and the	h.
-40 ABM	WALWALA													myhmm
Martin														. VV.
-50 dBm														
CF 2.462 G	Hz				1001 pt	 S	1	5.	0 MHz/				S	pan 50.0 MHz
2 Marker T	able													
Type         M1           T1         T2	Ref   Trc 1 1 1	2	X-Value .464498 2.453810 2.470201	<b>GHz</b> 1 GHz 7 GHz		Y-Value 8.04 dBm 1.28 dBm 1.76 dBm	000 000 000	Bw Bw Cer Bw Free	Function htroid q Offset		1	Funct 6.3915 2.4 5.9	<b>ion Re</b> <b>7870</b> 462005 931248	sult 95 MHz 931 GHz 3365 kHz
	][						М	easuring.			07.06.2	021 Re 7:33	f Level	RBW

22:27:34 07.06.2021



Test Details							
Manufacturer	Astronics						
EUT	Resideo Thermostat						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11n						
Notes							

Drata cal	Freq.	Data Rate	99% BW
Protocol	(MHz)	(Mbps)	(MHz)
	2412		17.6
	2437	MCS0	17.59
	2462		17.62
	2412		17.59
	2437	MCS1	17.58
	2462		17.57
	2412		17.57
	2437	MCS2	17.56
	2462		17.58
	2412		17.56
	2437	MCS3	17.54
802 11p	2462		17.6
002.1111	2412		17.55
	2437	MCS4	17.56
	2462		17.54
	2412		17.58
	2437	MCS5	17.57
	2462		17.61
	2412		17.57
	2437	MCS6	17.55
	2462		17.58
	2412		17.59
	2437	MCS7	17.56
	2462		17.55



Test Details								
Manufacturer	Astronics							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11n – MCS0							
Carrier Frequency	2412MHz							
Parameters	99% BW							
Notes	99% BW = 17.59MHz							

Multi¥iew 🛞 Rece	iver 🛛	Spectrum	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spe	ctrum 5 🛛 🎽 🕱		
Ref Level 40. Att	.60 dBm Offs 10 dB SWI	et 40.60 dB ● RI 1.08 ms ● VI	BW 100 kHz BW 300 kHz I	Mode Sweep			Fre	equency 2.4	120000 GHz
1 Occupied Ba	ndwidth	ON N	ottan on						o 1 Dk View
r occupied bu								M1[1]	6.82 dBm
								(MILI)	2 4144990 GHz
30 dBm									2.4144900 012
20 dBm									
10 dBm					M1				
				1 0 0 B	0 Å 0				
0.40.0			1 Janhar have	within handburg	mananamana	hordburlden T2			
U dBm-			1 Pri						
-10 dBm									
						۱ کر			
-20 dBm		A	Ń			, 	Xa.		
-20 0811		1					hand		
		man					"Www.Maha	30	
-30 dBm	A MARANY	full when the second					- Weit	A. Anallar	6
	MMM8.							- v *	MWWWWWWWW
-40-dBm									MMM
0 <b>1</b> 1 .									l i
-50 dBm									
CE 2 412 GHz			1001 pt	c	5	0 MHz/			Spap 50.0 MHz
2 Markor Tabl	0		1001 pt	<u>.</u>		10 10 127			span ooro minz
		V-Value		V-Value		Euroction		Euroction P	ecult
M1	1	2.414498 G	Hz	6.82 dBm	Occ Bw	rancion	1	7.5957804	52 MHz
T1	1	2,4031995 (	 GHz	-0.12 dBm	Occ Bw Cei	ntroid	-	2.41199	7355 GHz
T2	ī	2.4207952 0	GHz	-0.74 dBm	Occ Bw Fre	q Offset		-2.64515	5336 kHz
r	1				Measuring		07.06.2	2021 Ref Level	RBW
l	- 11				measaring		23:13	2:22	•

23:12:23 07.06.2021



Test Details								
Manufacturer	Astronics							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11n – MCS1							
Carrier Frequency	2412MHz							
Parameters	99% BW							
Notes	99% BW = 17.59MHz							

Multi¥iew 🔠 Reco	aiver 🔀	Spectrum 🛛	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spe	ctrum 5 🛛 🔆 🔀		
Ref Level 40 Att	.60 dBm Off 10 dB SW	set 40.60 dB ● RI T 1.08 ms ● VI	BW 100 kHz BW 300 kHz	Mode Sweep			Fn	equency 2.4	120000 GHz
1 Occupied Ba	ndwidth	ON N	otan on						o i Pk View
								M1[1]	3.16 dBm 2.4144980 GHz
30 dBm									
20 dBm									
10 dBm					M1				
0 dBm			TI John Mar	hundruhundry	whentur	hulm the			
-10 dBm				,					
-20 dBm			, w				Mungha		
-30 dBm		And March and					apall ward		
-40 dBm	mennen	www.wbd						Murhum	hornow
-50 dBm									
CF 2.412 GHz		·	1001 pt	s	5	.0 MHz/		· .	Span 50.0 MHz
2 Marker Tabl	e								
<b>Type   Ref</b> M1 T1 T2	Trc	X-Value 2.414498 G 2.4032026 C 2.4207933 C	Hz 6Hz	Y-Value 3.16 dBm -3.22 dBm -3.45 dBm	Occ Bw Occ Bw Cer	Function	1	Function R 7.5907487 2.41199 -2.04892	esult 78 MHz 7951 GHz 7174 kHz
		2.4207900 0	21 12	5.45 dDm	Measuring	<b></b>	<b>#</b> 07.06.2 23:1	2.04092 2021 Ref Level	RBW

23:16:06 07.06.2021



Test Details								
Manufacturer	Astronics							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11n – MCS2							
Carrier Frequency	2412MHz							
Parameters	99% BW							
Notes	99% BW = 17.56MHz							

MultiView 88	Receiver	Spect	rum	Spectrum 2	Spectrum 3	Spectrum	4 🛛 🕅 Spe	ctrum 5 🛛 🎽 🕱		
Ref Level Att	40.60 dBm 10 dB	Offset 4 SWT	1.03 ms = V	BW 100 kHz BW 300 kHz	Mode Sweep			Fre	equency 2.41	20000 GHz
Input 1 Occupied	1 AC Bandwidth	PS	On N	lotch Off						o 1 Pk View
1 Occupied	Dandwidun								M1[1]	3 19 dBm
									, milii)	4144940 GHz
30 dBm										
00 dB										
20 dBm-										
10 dBm						54.1				
						VIII VIII				
0 dBm				T1 A. A.	mlla a braderada	Lashar Andrew				
				ANN WWW.	40 T 2		AWY THE ALL ALL ALL ALL ALL ALL ALL ALL ALL AL			
-10 dBm										
10 dbm							լ է			
				5			1	h		
-20 dBm				J <sup>I</sup>				η.		
			کمہ					2		
-30 dBm			and the second second					- W		
			and and					and the second		
-40 dBm		MAN	, and i					- muly		
mont	Mannon	Margar							www.	Munnharme
-50 dBm										
30 dbm										
CF 2.412 G	Hz			1001	pts	4	.8 MHz/	•	5	pan 48.0 MHz
2 Marker T	able									
Type I	Ref Trc		X-Value		Y-Value		Function		Function Re	sult
M1	1	2.4	414494 G	iHz	3.19 dBm	Occ Bw		1	7.56873122	29 MHZ
	1		2.4032111	GHZ GHz	-4.05 aBm -3 54 dBm	Occ Bw Ce	ntrola nd Offect		2.411995	9442 GHZ 3524 VHz
12	1		2.4207790		-5.54 UDIII				-4.55705.	
l	Л					Measuring		23:1	B:56	KBW

23:18:56 07.06.2021



Test Details								
Manufacturer	Astronics							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11n – MCS3							
Carrier Frequency	2412MHz							
Parameters	99% BW							
Notes	99% BW = 17.55MHz							

Multi¥iew 88	Receiver	Spec	trum	X Sp	oectrum 2	Spectru	m 3	X	ipectrum 4	x s	pectrum 5	×			
Ref Level Att	40.60 dBm 10 dB	Offset - SWT	40.60 dB = 1.03 ms = On	RBW VBW Notch	100 kHz 300 kHz	Mode Swe	ep					Fn	equency	2.41	.20000 GHz
1 Occupied	Bandwidth	F.0	OII	Notei											01Pk View
30 dBm													MI	.[1] 2	3.18 dBm .4144940 GHz
20 dBm															
10 dBm								M1							
0 dBm				T:	mun	hAwala	when	<del>whyth</del>	www	hounding	2				
-10 dBm															
-20 dBm				, W							The second				
-30 dBm			al marked when									hymne			
-40 dBm	mwAmm	MMM	<u>µ</u> ∽~									- www	MMW	WWW	mmm
-50 dBm															
CF 2.412 GF	lz			-	1001 pt	S			4	.8 MHz/			1	S	pan 48.0 MHz
2 Marker Ta	ble														
<b>Type</b>   <b>F</b> M1 T1 T2	tef   Trc   1 1	2.	X-Value 414494 2.403216 2.420772	<b>GHz</b> 5 GHz 5 GHz		Y-Value 3.18 dB -3.73 df -2.92 df	e S <b>m</b> Bm Bm	Occ E Occ E Occ E	3w 3w Cer 3w Fre	Function htroid q Offset		1	Funct 7.5560 2.4 -5	ion Re 9 <b>5667</b> 411994 5.51490	<b>sult</b> <b>7 MHz</b> 485 GHz 0713 kHz
								Mea	asuring			07.06.2	2021 Re	f Level	RBW

23:21:46 07.06.2021



Test Details								
Manufacturer	Astronics							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11n – MCS4							
Carrier Frequency	2412MHz							
Parameters	99% BW							
Notes	99% BW = 17.54MHz							

MultiView 88	Receiver	Spectrum	X	Spectrum 2	Spectrum 3	Spectrum 4	Spe	ectrum 5 🛛 🔆 🔀		
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offset 40.6 SWT 1.03 PS	0 dB ● RB\ 3 ms ● VB\ On Not	W 100 kHz W 300 kHz tch Off	Mode Sweep			Fre	equency 2.4	120000 GHz
1 Occupied	Bandwidth	10								●1Pk View
i									M1[1]	3.15 dBm 2.4144940 GHz
30 dBm										
20 dBm										
10 dBm						M1				
0 dBm				71 mm	Androhodby	moberhoodow	MAN T2			
-10 dBm				/						
-20 dBm										
-30 dBm		. DA DAW	W					- Mun Mill		
-40 dBm	mmm	Wanna.							M. M. M. M. M.	mmm
-50 dBm										
CF 2.412 G	Hz	I		1001 pt	ts	4	.8 MHz/	1	1	Span 48.0 MHz
2 Marker T	able			•						
Type         M1           T1         T2	Ref   Trc   1 1	X- 2.414 2.4 2.4	- <b>Value 4494 GH</b> 032175 GH 207664 GH	<b>Iz</b> Hz Hz	Y-Value 3.15 dBm -3.32 dBm -2.75 dBm	Occ Bw Occ Bw Cer Occ Bw Fre	Function ntroid q Offset	1	Function R 7.5488931 2.4119 -8.05981	esult 42 MHz 9194 GHz 1676 kHz
[						Measuring		<b>07.06.2</b>	021 Ref Leve	RBW

23:24:38 07.06.2021



Test Details								
Manufacturer	Astronics							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11n – MCS5							
Carrier Frequency	2412MHz							
Parameters	99% BW							
Notes	99% BW = 17.57MHz							

MultiView 88	Receiver	Sp	ectrum	X Sp	pectrum 2	Spectrum 3	X	Spectrum 4	Sp.	ectrum 5 🛛 🔆	X		
Ref Level Att	40.60 dBm 10 dB	Offset SWT	40.60 dB • 1.03 ms •	RBW VBW	100 kHz 300 kHz	Mode Sweep					Frequenc	y <b>2.41</b>	20000 GHz
1 Occupied	Bandwidth	F3	OII	Notei	n Oli								01Pk View
roccupiec											٩	И1[1] 2	3.21 dBm 2.4144940 GHz
30 dBm													
20 dBm													
10 dBm							M	1					
0 dBm				X	introduced	hallowhold	MM	who	And Any				
-10 dBm										λ			
-20 dBm			j	w						Mr. Way			
-30 dBm			www.							Surger M	<u>~</u>		
-+0 UBM	hannen	run	10°0.								www.	Mr	Monton
-50 dBm													
CF 2.412 G	Hz				1001 pt	s		4	.8 MHz/			S	pan 48.0 MHz
2 Marker T	able												
Type         M1           T1         T2	Ref   Trc 1 1 1	2	X-Value 414494 2.403212 2.420787	<b>GHz</b> 4 GHz 6 GHz		Y-Value 3.21 dBm -3.57 dBm -2.12 dBm	0cc 0cc 0cc	Bw Bw Cer Bw Fre	Function htroid q Offset		Fun 17.575 2	<b>ction Re</b> 26473 2.411999 11.14414	<b>87 MHz</b> 9989 GHz 44058 Hz
							M	easuring	(	<b>###</b> 07	.06.2021	Ref Level	RBW

23:27:32 07.06.2021



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11n – MCS6						
Carrier Frequency	2412MHz						
Parameters	99% BW						
Notes	99% BW = 17.57MHz						

MultiView 88 Rec	eiver 🛛	Spectrum 🛛	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spec	ctrum 5 🛛 🔆 🕱	l	
Ref Level 40 Att	1.60 dBm Off 10 dB SW	set 40.60 dB ● RI /T 1.03 ms ● VI On N	BW 100 kHz BW 300 kHz	Mode Sweep			Fr	equency 2.4	120000 GHz
1 Occupied Ba	ndwidth								●1Pk View
20 db.m								M1[1]	3.36 dBm 2.4144940 GHz
30 ubiii									
20 dBm									
10 dBm					M1				
0 dBm			Further	humanan	phonologic	And the state			
-10 dBm			1						
-20 dBm							hh		
-30 dBm		- manana					MMMA		
-40 dBm	mound	war					·	monton	mmmm
-50 dBm									
CF 2.412 GHz	1	1	1001 pt	S	4	.8 MHz/	1		Span 48.0 MHz
2 Marker Tab	e								
Type         Re           M1         T1           T2         T2	f   Trc   1 1 1	X-Value 2.414494 G 2.4032208 C 2.4207915 C	Hz SHz SHz	Y-Value 3.36 dBm -4.02 dBm -3.20 dBm	Occ Bw Occ Bw Ce Occ Bw Fre	Function ntroid q Offset	t	Function R L7.5706703 2.41200 6.15827	esult 06 MHz 6158 GHz 1775 kHz
	)[				Measuring	<b></b>	<b>##</b> 07.06.2 23:3	2021 Ref Level	RBW

23:30:13 07.06.2021



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11n – MCS7						
Carrier Frequency	2412MHz						
Parameters	99% BW						
Notes	99% BW = 17.59MHz						

MultiView 88	Receiver	Spect	rum 🛛 🕅	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spe	ctrum 5 🛛 🎽 🔀		
Ref Level Att	40.60 dBm 10 dB 1 AC	Offset 4 SWT PS	10.60 dB ● F 1.03 ms ● V On N	ABW 100 kHz ABW 300 kHz	Mode Sweep			Fre	equency 2.4	120000 GHz
1 Occupied	Bandwidth	10	011 11	ocon on						●1Pk View
									M1[1]	3.23 dBm 2.4144940 GHz
30 dBm										
20 dBm										
10 dBm						M1				
0 dBm				- The And	Montophingha	mound	And Miny			
-10 dBm										
-20 dBm				1				4		
-30 dBm			كم م	<i>y</i>				My		
-40 dBm			AN MANANA					Munhow		
mmm	mont	martin						- · · ·	Monowant	myama
-50 dBm——										
CF 2.412 G	Hz	1		1001	ots	4	.8 MHz/			Span 48.0 MHz
2 Marker T	able									
Type                     M1         T1           T2         T2	Ref   Trc 1 1 1	2.4	X-Value 414494 ( 2.4031977 2.4207905	GHz GHz GHz	Y-Value <b>3.23 dBm</b> -3.28 dBm -3.00 dBm	Occ Bw Occ Bw Ce Occ Bw Fre	Function ntroid oq Offset	1	Function R 7.5928283 2.41199 -5.86537	esult D2 MHz 4135 GHz 2551 kHz
	)[					Measuring	<b></b>	<b>## 07.06.2</b> 23:33	1021 Ref Level	RBW ●

23:33:04 07.06.2021



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11n – MCS0						
Carrier Frequency	2437MHz						
Parameters	99% BW						
Notes	99% BW = 17.58MHz						

Multi¥iew 🔠 I	Receiver	Spectrum	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spe	ctrum 5 🛛 🔆 🕱	l	
Ref Level - Att	40.60 dBm Offs 10 dB SW	set 40.60 dB 🖷 RI T 1.08 ms 🖷 VI	BW 100 kHz BW 300 kHz 1	Mode Sweep			Fr	equency 2.4	370000 GHz
Input	1 AC PS	On N	otch Off						
1 Occupied	Bandwidth							141513	• 1PK View
								MILI	6.86 dBm
20. d0m-									2.4394980 GHz
S0 ubiii									
20 dBm									
10 dBm					<u>M1</u>				
			T1 6 Å	1 0 0 8	A A A				
0 dBm			Zurhandhun	and we will have a start of the	pullindurdhin	WWWWWWWT2			
o ubili			l pr						
-10 dBm			l J'			6			
			N°			۲, ۲			
-20 dBm			, · · · · · · · · · · · · · · · · · · ·				₩		
		- Win					WWWWWWWW		
-30 dBm		IA ABAMAN VILL					AMB AND A	margare 1	
30 dbm	, many many	u w x · x						I M WWW	1 mars
mm	What is								WWWWWWWWWW
-40 dBm									Amon A
-50 dBm									
CF 2.437 GF	lz		1001 pt	S	5	.0 MHz/			Span 50.0 MHz
2 Marker Ta	ble								
Type   R	tef   Trc	X-Value	U-	Y-Value		Function		Function R	esult
	1	2.437478 G	Π <b>1</b> 2μ <sub>7</sub>	0.00 (IDIII 0.10 dBm	Occ BW Col	ntroid	-	2 13600 CL. 30	
	1	2.4457822 (	3Hz	-0.55 dBm	Occ Bw Ere	na Offset		-11.52447	1915 kHz
	Υ.	2111070220		0.00 40/11		in onoc	<b>110</b> 07 06 1	2021 Ref Level	RBW
l	Д				Measuring		23:1	3:35	•

23:13:36 07.06.2021



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11n – MCS1						
Carrier Frequency	2437MHz						
Parameters	99% BW						
Notes	99% BW = 17.57MHz						

Multi¥iew 🔠 I	Receiver	Spectrum	Sp Sp	pectrum 2	Spectrum 3	Spectrum 4	4 🕅 Spe	ctrum 5 🛛 🔆 🔀		
Ref Level - Att	40.60 dBm 10 dB 1 AC	Offset 40.60 c SWT 1.08 m	IB • RBW	100 kHz 300 kHz 1	Mode Sweep			Fre	equency 2.4	370000 GHz
1 Occupied	Bandwidth	F <b>3</b> C	In Nota							●1Pk View
									M1[1]	3.35 dBm 2.4394980 GHz
30 dBm										
20 dBm										
10 dBm						M1				
0 dBm				The production	www.howling	phaladari	Vanhardhurg			
-10 dBm			/	}	)					
-20 dBm			- AND				<u> </u>			
-30 dBm		MANN	N.M.					mym		
-40 aBm	mon	month							maham	mmmm
-50 dBm										
CF 2.437 GF	lz	1	1	1001 pt	S	5	.0 MHz/	L		Span 50.0 MHz
2 Marker Ta	ble									
Type         R           M1         T1           T2         T2	ef   Trc   1 1	X-Va 2.4394 2.428 2.445	alue 98 GHz 2178 GHz 7928 GHz		Y-Value 3.35 dBm -3.96 dBm -3.27 dBm	Occ Bw Occ Bw Cel Occ Bw Fre	Function ntroid q Offset	1	Function R 7.5750216 2.43700 5.33734	esult 57 MHz 5337 GHz 5872 kHz
						Measuring	(	07.06.2 23:16	021 Ref Level	RBW

23:16:56 07.06.2021



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11n – MCS2						
Carrier Frequency	2437MHz						
Parameters	99% BW						
Notes	99% BW = 17.55MHz						

MultiView 88	Receiver	Spectrum		Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spec	ctrum 5 🛛 🎽 🔀		
Ref Level Att	40.60 dBm 10 dB	Offset 40. SWT 1.0	.60 dB ● RE 03 ms ● VB On No	3W 100 kHz 3W 300 kHz	Mode Sweep			Fre	equency 2.43	370000 GHz
1 Occupied	Bandwidth	13		din on						• 1Pk View
									M1[1]	3.37 dBm 2.4394940 GHz
30 dBm										
20 dBm										
10 dBm						M1				
0 dBm				Junhahn	Andreader	poholow	Intwhy?			
-10 dBm				1		<u>r</u>				
-20 dBm			مم مع	f			v	hun		
-30 dBm		- all mark	and the second					Monte		
mm	MMMM	NMINA							""WWWWWW	Mann
-50 dBm——										
CF 2.437 G	Hz			1001 p	ts	4	.8 MHz/	I	<u></u>	pan 48.0 MHz
2 Marker T	able									
Type         M1           T1         T2	Ref   Trc   1 1	2.43 2. 2.	<b>X-Value 39494 GI</b> .4281986 G .4457555 G	Hz Hz Hz	Y-Value 3.37 dBm -3.52 dBm -3.39 dBm	Occ Bw Occ Bw Ce Occ Bw Fre	Function ntroid q Offset	1	Function Re <b>7.5568852</b> 2.43697 -22.99124	esult 92 MHz 7009 GHz 2822 kHz
[	)[					Measuring	j (	07.06.2 07.06.2 07:06	021 Ref Level	RBW ●

23:19:54 07.06.2021



Test Details							
Manufacturer	Astronics						
Model No.	Focus Pro						
Serial No.	1378290						
Mode	802.11n – MCS3						
Carrier Frequency	2437MHz						
Parameters	99% BW						
Notes	99% BW = 17.54MHz						

Multi¥iew 🔠 Rece	iver 🕅	Spectrum	Spectrum 2	Spectrum 3	Spectrum 4	4 🕅 Spe	ctrum 5 🛛 🔆 🔀	l	
Ref Level 40. Att	.60 dBm Offs 10 dB SW 1 AC PS	et 40.60 dB   RI  1.03 ms  VI  On N	3W 100 kHz 3W 300 kHz	Mode Sweep			Fn	equency 2.4	370000 GHz
1 Occupied Ba	ndwidth								o1Pk View
								M1[1]	3.43 dBm 2.4394940 GHz
30 dBm									
20 dBm									
10 dBm					M1				
0 dBm			The Andrew	hardenstand	portrationsbyo	hounding			
-10 dBm			1	, ,	<u> </u>				
-20 dBm			/				<u>.</u>		-
-30 dBm							M		
-40 dBm		annon					"hon when	-A.	
manne	www.www							mmm	howman
-50 dBm									
CF 2.437 GHz	I		1001 pt	S	4	.8 MHz/	I	1	Span 48.0 MHz
2 Marker Tabl	e								
<b>Type</b>   Ref M1 T1 T2	1 1 1	X-Value 2.439494 G 2.4282186 G	 <b>Hz</b>  Hz	Y-Value 3.43 dBm -2.38 dBm	Occ Bw Occ Bw Cel	Function	1	Function R 17.5439334 2.43699 -9.47816	esult 92 MHz 0522 GHz
	<u>`</u>	2.44070200	2 12	5.40 dbm	Measuring	j	<b>#</b> 07.06.2 23:2	2021 Ref Leve	

23:22:31 07.06.2021



	Test Details									
Manufacturer	Astronics									
Model No.	Focus Pro									
Serial No.	1378290									
Mode	802.11n – MCS4									
Carrier Frequency	2437MHz									
Parameters	99% BW									
Notes	99% BW = 17.56MHz									

Multi¥iew 88	Receiver	Spectrum	Spectrum	2	Spectrum 3	Spectrum 4	Spe	ctrum 5 🛛 🔆 🔀		
Ref Level Att	40.60 dBm 10 dB	Offset 40.60 dB SWT 1.03 ms	<ul> <li>RBW 100</li> <li>VBW 300</li> <li>Notch</li> </ul>	0 kHz 0 kHz <b>Mode</b> 0ff	Sweep			Fre	equency 2.43	370000 GHz
1 Occupied	Bandwidth	<b>F3</b> 01	Noteri	011						●1Pk View
									M1[1]	3.47 dBm 2.4394940 GHz
30 dBm										
20 dBm										
10 dBm						M1				
0 dBm			T1 TM	nAndrad	roboohoo	pvAveAveAve	Andredenz			
-10 dBm										
-20 dBm								u.		
-30 dBm			<u></u>					W W		
-40 dBm-		Achim						Manny	<b>N</b>	
mon	mount	Aman							- www.	www.home
-50 dBm										
CF 2.437 G	-lz	I	I	1001 pts		4	.8 MHz/	I	۱	pan 48.0 MHz
2 Marker Ta	able			•			•			
<b>Type   F</b> M1 T1 T2	Ref   Trc   1 1 1	X-Val 2.43949 2.4281 2.4457	ue 94 GHz 969 GHz 592 GHz	Y-' 3.4 -2 -3	Value 7 <b>dBm</b> .58 dBm .20 dBm	Occ Bw Occ Bw Cer Occ Bw Fre	Function htroid q Offset	1	Function Re <b>7.5622277</b> 2.436978 -21.96058	esult 46 MHz 8039 GHz 2654 kHz
	)[					Measuring	(111111)	07.06.2	021 Ref Level	RBW

23:25:33 07.06.2021



	Test Details									
Manufacturer	Astronics									
Model No.	Focus Pro									
Serial No.	1378290									
Mode	802.11n – MCS5									
Carrier Frequency	2437MHz									
Parameters	99% BW									
Notes	99% BW = 17.57MHz									

Multi¥iew 88	Receiver	Sp.	ectrum	Sp Sp	oectrum 2	Spectrum 3	X	Spectrum 4	Spe	ctrum 5 🛛 🔆	X		
Ref Level Att	40.60 dBm 10 dB	Offset SWT	40.60 dB = 1.03 ms =	RBW VBW	100 kHz 300 kHz I	Mode Sweep					Frequency	2.43	70000 GHz
1 Occupied	Bandwidth	10	011	HOLEI									●1Pk View
											М	1[1] 2	3.45 dBm .4394940 GHz
30 dBm													
20 dBm													
10 dBm							M	1					
0 dBm				X	www.hr	to aport and my	mMw	hortow	hand My				
-10 dBm													
-20 dBm				<i>N</i>						Mr.			
-30 dBm			month	~						"Noting	h.a.a		
-40 dBm	mm	www	U								- WWWWWW	www	Manna
-50 dBm													
CF 2.437 C	Hz				100 <u>1</u> pt	s	·	4.	.8 MHz/			S	pan 48.0 MHz
2 Marker T	able												
Type         M1           T1         T2	Ref   Trc 1 1	2	X-Value 2.439494 2.428203 2.445775	<b>GHz</b> 2 GHz 5 GHz		Y-Value 3.45 dBm -2.42 dBm -2.45 dBm	000 000 000	Bw Bw Cer Bw Free	Function htroid q Offset		Fund <b>17.572</b> 2 -10	tion Re 33063 436989	<b>Sult</b> <b>35 MHz</b> 9351 GHz 5687 kHz
							M	easuring		<b>4/1</b> 07	.06.2021 R	ef Level	RBW

23:28:21 07.06.2021



	Test Details									
Manufacturer	Astronics									
Model No.	Focus Pro									
Serial No.	1378290									
Mode	802.11n – MCS6									
Carrier Frequency	2437MHz									
Parameters	99% BW									
Notes	99% BW = 17.55MHz									

MultiView 88	Receiver	Spe	ectrum (	Spec	trum 2	Spe	ctrum 3	X	Spectrum 4		Spectrum 5	× X	l		
Ref Level Att	40.60 dBm 10 dB 1 AC	Offset SWT PS	40.60 dB ● 1.03 ms ● On	RBW VBW Notch	100 kHz 300 kHz	Mode Sv	veep					Fr	equency	2.43	70000 GHz
1 Occupied	Bandwidth		011	Hoton	011										●1Pk View
													M	l[1] 2	3.48 dBm :.4394940 GHz
30 dBm															
20 dBm															
10 dBm								N	1						
0 dBm					whichard	harder	hardron	ppland	he hand have a stand of the second se	howhow	7				
-10 dBm				+											
-20 dBm				_/							<u> </u>				
-30 dBm				مر							- Why				
-40 dBm			amondant									Winny	AA		
MANN W	monum	Name											www	www	man
-50 dBm															
CF 2.437 G	Hz			1	1001 pt	S		1	4	.8 MHz/			1	S	pan 48.0 MHz
2 Marker T	able														1
Type         M1           T1         T2	Ref   Trc 1 1	2	X-Value .439494 2.4282073 2.4457603	GHz 3 GHz 3 GHz		Y-Val 3.48 ( -1.96 -2.45	ue 1 <b>Bm</b> dBm dBm	000 000 000	Bw Bw Cer Bw Fre	Function htroid q Offset		1	Func 17.5530 2. -16	tion Re 0652 436983 5.16366	sult 25 MHz 836 GHz 5243 kHz
								м	easuring			<b>07.06</b> . 23:3	2021 Re	ef Level	RBW

23:31:07 07.06.2021



	Test Details									
Manufacturer	Astronics									
Model No.	Focus Pro									
Serial No.	1378290									
Mode	802.11n – MCS7									
Carrier Frequency	2437MHz									
Parameters	99% BW									
Notes	99% BW = 17.56MHz									

MultiView 88	Receiver	Spectrum	X	Spectrum 2	Spectrum 3	Spectrum	4 🛛 Spe	ectrum 5 🛛 🔆 🔀		
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offset 40.6 SWT 1.0 PS	50 dB • RB 3 ms • VB On No	W 100 kHz W 300 kHz	Mode Sweep			Fr	equency 2.4	370000 GHz
1 Occupied	Bandwidth									●1Pk View
<u>`</u>									M1[1]	3.50 dBm 2.4394940 GHz
30 dBm										
20 dBm										
10 dBm						M1				
0 dBm				TI MAN	Avanavan	whent	MANNA T2			
-10 dBm										
-20 dBm				ŕ				Ą		
-30 dBm			and a second					M.W.		
40 d0m		March	Marine					Manny		
month and	mmm	1000							and row www.	monnom
-50 dBm										
CF 2.437 G	Hz	I		1001 p	ts	4	.8 MHz/	1	1	Span 48.0 MHz
2 Marker T	able			•						
<b>Type</b>   1 M1 T1 T2	Ref   Trc   1 1	<b>2.43</b> 2.43	- <b>Value 9494 GI</b> 4282091 G 4457722 G	<b>Hz</b> Hz	Y-Value 3.50 dBm -2.18 dBm -2.43 dBm	Occ Bw Occ Bw Cer Occ Bw Fre	Function ntroid q Offset	1	Function R 17.5631080 2.43699 -9.33469	esult 61 MHz 0665 GHz 15992 kHz
						Measuring		<b>##</b> 07.06.2 23:3	2021 Ref Leve	RBW

23:33:50 07.06.2021



	Test Details									
Manufacturer	Astronics									
Model No.	Focus Pro									
Serial No.	1378290									
Mode	802.11n – MCS0									
Carrier Frequency	2462MHz									
Parameters	99% BW									
Notes	99% BW = 17.61MHz									

Multi¥iew 88	Receiver		ipectrum	Spec	trum 2	Spectrum 3	X	Spectrum 4	S S	pectrum 5	×X			
Ref Leve Att	40.60 dBn 10 dE	D Offse	t 40.60 dB • 1.08 ms •	RBW VBW	100 kHz 300 kHz	Mode Sweep					Fre	equency	2.46	20000 GHz
1 Occupier	d Bandwidt	b F3	on	Noturi	Oli									01Pk View
roccupiet												M1	[1] 2	7.12 dBm .4644980 GHz
30 dBm——														
20 dBm														
10 dBm					Λ. Λ.	AAAA								
0 dBm				17	MAN WANTER	a provinsi na fan a fan fan fan fan fan fan fan fa		hour	WWWWWWW					
-10 dBm										<b>V</b>				
-20 dBm		Δn	month							WW	MWW			
-30 dBm	MANN	ᡐᠣᡐᡟᢩᡰᡟᡐ										th wheeling	v~~u	mmule.
-40/dBm														اليلمم ي
-50 dBm														
CF 2.462 C	GHz		1		1001 pt	Ś		5.	.0 MHz/				S	pan 50.0 MHz
2 Marker 1	Table													
Type         M1           T1         T2	Ref   Tro 1 1 1	:	X-Value 2.464498 2.4531898 2.4708066	<b>GHz</b> B GHz 5 GHz		Y-Value 7.12 dBm -0.09 dBm -0.61 dBm	00 00 00	: Bw : Bw Cer : Bw Fre	Function htroid q Offset		1	Funct 7.6168 2.4 -1.8	ion Re <b>8077</b> 161998 306219	sult '5 MHz 194 GHz 9856 kHz
							N	leasuring			07.06.2	021 Re	f Level	RBW

23:14:30 07.06.2021



Test Details									
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11n – MCS1								
Carrier Frequency	2462MHz								
Parameters	99% BW								
Notes	99% BW = 17.57MHz								

Multi¥iew 🔠 Reco	ziver 🕅	Spectrum	Spectrum 2	Spectrum 3	Spectrum	4 🛛 Spec	:trum 5 🛛 🔆 🖾		
Ref Level 40 Att Input	.60 dBm Offe 10 dB SW 1 AC PS	et 40.60 dB • RI	BW 100 kHz BW 300 kHz 1 atch Off	Mode Sweep			Fre	equency 2.40	520000 GHz
1 Occupied Ba	ndwidth								o1Pk View
								M1[1]	3.57 dBm 2.4644940 GHz
30 dBm									
20 dBm									
10 dBm					M1				
0 dBm			TI Andred	hadredredred	pahvahada	twhite			
-10 dBm			/						
-20 dBm		كمكرم					hu here		
-30 dBm		a and when the					"MMM	land .	
-40 dBm	www.							and the second	MMmmm
-50 dBm									
CF 2.462 GHz	1	1	1001 pt	S	4	.8 MHz/	1		Span 48.0 MHz
2 Marker Tabl	e								1
<b>Type   Ref</b> M1 T1 T2	Trc   1 1 1	X-Value 2.464494 G 2.4532064 C 2.4707775 C	 Hz GHz GHz	Y-Value 3.57 dBm -2.86 dBm -3.14 dBm	Occ Bw Occ Bw Cer Occ Bw Fre	Function ntroid a Offset		Function R <b>17.571127</b> 2.46199 -8.050418	esult <b>'8 MHz</b> 195 GHz 3443 kHz
					Measuring		07.06.2 23:17	021 Ref Level	RBW

23:17:48 07.06.2021



	Test Details								
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11n – MCS2								
Carrier Frequency	2462MHz								
Parameters	99% BW								
Notes	99% BW = 17.57MHz								

MultiView 88	Receiver	Spe Spe	ctrum 🛛	Spectrum	2	Spectrum 3	X	Spectrum 4	Sp Sp	ectrum 5 🛛 🦂	×		
Ref Level Att	40.60 dBm 10 dB 1 AC	Offset SWT PS	40.60 dB ● I 1.03 ms ● ' On I	RBW 100 VBW 300 Notch	)kHz )kHz № Off	<b>lode</b> Sweep					Frequ	ency 2.4	620000 GHz
1 Occupied	Bandwidth		011 1	TOCOL	011								○1Pk View
												M1[1]	3.62 dBm 2.4644940 GHz
30 dBm													
20 dBm													
10 dBm								41 <b>Y</b>					
0 dBm				T1 PANA	white	whenthe	W Arrow	horder	And the				
-10 dBm										2			
-20 dBm			J.	J <sup>V</sup>						MM			
-30 dBm		mar	mm							1 M	W. Way		
Annormalia	mm	warm										a rand Month	mmm
-50 dBm——													
CF 2.462 G	Hz			1	1001 pts		1	4	.8 MHz/				Span 48.0 MHz
2 Marker T	able												
Type         M1           T1         T2	Ref   Trc 1 1 1	2	X-Value .464494 ( 2.4531987 2.470775	<b>GHz</b> GHz GHz	:	Y-Value 3.62 dBm -3.40 dBm -3.45 dBm		: Bw : Bw Cer : Bw Fre	Function ntroid q Offset		17	Function F 7.576260 2.46198 -13.1513	Result 044 MHz 36849 GHz 98412 kHz
							N	leasuring		<b>490</b>	07.06.2021 23:20:57	Ref Leve	RBW

23:20:57 07.06.2021



Test Details								
Manufacturer	Astronics							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11n – MCS3							
Carrier Frequency	2462MHz							
Parameters	99% BW							
Notes	99% BW = 17.59MHz							

Multi¥iew 🔠 F	eceiver 🛛	Spectrum	Spectrum 2	Spectrum 3	Spectrum	4 🛛 Spec	:trum 5 🛛 🎽 🕱		
Ref Level 4 Att Input	10.60 dBm <b>C</b> 10 dB <b>S</b> 1 AC F	Offset 40.60 dB ● R SWT 1.03 ms ● V S On N	BW 100 kHz BW 300 kHz lotch Off	Mode Sweep			Fre	equency 2.4	520000 GHz
1 Occupied E	Bandwidth		on on						●1Pk View
								M1[1]	3.66 dBm 2.4644940 GHz
30 dBm									
20 dBm									
10 dBm					M1				
0 dBm			T1 Juntowhere	Andrahoon	for the plant of the second	Wohn T2			
-10 dBm					<u> </u>				
-20 dBm			/			j	h		
-30 dBm							M		
-40 dBm	An Anna	MMM					www	Marthonia	and Ann
-50 dBm	<u> </u>								an annahar
CF 2.462 GH	z		1001 p	ts	4	.8 MHz/			Span 48.0 MHz
2 Marker Ta	ble								
Type   R	et   Trc	X-Value	2 <b>1</b> 17	Y-Value	Ora Buy	Function		Function R	esult
	1	2.404494 0	GHz	-1.78 dBm	Occ BW Col	ntroid		2 /6108	
T2	1	2.4707835	GHz	-2.44 dBm	Occ Bw Fre	eq Offset		-15.79260	5729 kHz
	T				Measuring	<b></b>	<b>67.06.2</b> 23:23	2021 Ref Level	RBW

23:23:41 07.06.2021



	Test Details								
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11n – MCS4								
Carrier Frequency	2462MHz								
Parameters	99% BW								
Notes	99% BW = 17.54MHz								

MultiView 88	Receiver	Spectru	n 🕱	Spectrum 2	Spectrum 3	Spectrum	4 🛛 🕅 Spe	ctrum 5 🛛 🎽 🕱		
Ref Level Att	40.60 dBm 10 dB 1 AC	Offset 40 SWT 1.	.60 dB ● RE 03 ms ● VE On No	3W 100 kHz 3W 300 kHz	Mode Sweep			Fre	equency 2.4	520000 GHz
1 Occupied	Bandwidth	10	011 140	Jean on						●1Pk View
									M1[1]	3.67 dBm 2.4644940 GHz
30 dBm										
20 dBm										
10 dBm						M1				
0 dBm				Internation	portwoopendoor		hat the			
-10 dBm				/						
-20 dBm			and have					Why .		
-40 dBm-		. In M	M					Mar Mar		
MMMmmm	mahm	MV ~V							many	Mannaputation
-5U dBm										
CF 2.462 G	Hz			1001 pt	Ś	4	.8 MHz/	1		pan 48.0 MHz
2 Marker T	able									
Type         M1           T1         T2	Ref   Trc 1 1 1	<b>2.4</b> 2 2	X-Value 64494 Gl 4532018 G 4707467 G	Hz Hz Hz	Y-Value 3.67 dBm -2.53 dBm -2.76 dBm	Occ Bw Occ Bw Ce Occ Bw Fre	Function ntroid q Offset	1	Function R L7.5448941 2.46197 -25.71170	esult 77 MHz 4288 GHz 14149 kHz
						Measuring	j <b></b>	07.06.2 23:20	2021 Ref Level	RBW

23:26:26 07.06.2021



	Test Details								
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11n – MCS5								
Carrier Frequency	2462MHz								
Parameters	99% BW								
Notes	99% BW = 17.61MHz								

MultiView 88	Receiver	Sp Sp	ectrum		Spectrum 2	Spectrum 3	X	Spectrum 4	Spr	ectrum 5 🛛 🔆 🛛	K		
Ref Level Att	40.60 dBm 10 dB	Offset SWT	: 40.60 dB • 1.03 ms • On	<ul> <li>RBW</li> <li>VBW</li> <li>Note</li> </ul>	✔ 100 kHz ✔ 300 kHz	Mode Sweep					Frequency	2.46	20000 GHz
1 Occupied	Bandwidth	10	011	1000									• 1Pk View
											M	l[1] 2	3.70 dBm .4644940 GHz
30 dBm													
20 dBm													
10 dBm							1	41					
0 dBm					monted	forder hours	Wood and	Annon	Andrew				
-10 dBm				1						٨.			
-20 dBm			,	por l						Mu			
-40 dBm			wwwww							Par way	Man .		
Maynam Maria	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	MM	o .								" WWW	mm	Murmun
-50 dBm——													
CF 2.462 G	Hz				1001 pt	s	·	4	.8 MHz/	1		S	pan 48.0 MHz
2 Marker T	able												
Type                     M1	Ref   Trc 1 1 1	2	X-Value 2.464494 2.45319 2.470813	e <b>I GH</b> 2 99 GH2 33 GH2	<b>Z</b> Z Z	Y-Value 3.70 dBm -1.81 dBm -2.14 dBm	000 000 000	: Bw : Bw Cer : Bw Fre	Function ntroid q Offset		Func <b>17.6142</b> 2. 6.	tion Re 2 <b>1978</b> 462006 141875	sult <b>8 MHz</b> 142 GHz 5278 kHz
							N	leasuring	(	<b># 07.0</b> 23	6.2021 Re	f Level	RBW

23:29:06 07.06.2021



	Test Details								
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11n – MCS6								
Carrier Frequency	2462MHz								
Parameters	99% BW								
Notes	99% BW = 17.57MHz								

Multi¥iew 88	Receiver	Sp Sp	ectrum	X Sp	ectrum 2	Spectrum 3	X	Spectrum 4	s 🖾 sı	ectrum 5 🛛 🔆	X		
Ref Level Att	40.60 dBm 10 dB	Offset SWT	: 40.60 dB • 1.03 ms • On	RBW VBW Notch	100 kHz 300 kHz	Mode Sweep					Frequency	2.46	20000 GHz
1 Occupied	Bandwidth	10	011	Hoter									●1Pk View
											М	1[1] 2	3.70 dBm :.4644940 GHz
30 dBm——													
20 dBm													
10 dBm							P	41					
0 dBm					1 horalm	fortworker	WWW	Annthe	AMAMAN				
-10 dBm				+			<u>v</u>						
-20 dBm				/						<u>v</u>			
-30 dBm			M	~~						Long Long Long Long Long Long Long Long			
40 dBm		AM	mm							WWW	manna		
-+0 UBM	W VIsalac	W									a allow	Mrw	Mummu
-50 dBm													
CF 2.462 C	Hz				1001 pt	S	1	4	.8 MHz/	1	I	S	pan 48.0 MHz
2 Marker T	able												1
Type         M1           T1         T2	Ref   Trc 1 1 1		X-Value 2.464494 2.453201 2.470781	<b>GHz</b> 8 GHz 2 GHz		Y-Value 3.70 dBm -1.74 dBm -2.97 dBm	000 000 000	: Bw : Bw Cer : Bw Fre	Function ntroid q Offset		Fund 17.579 2 -8	tion Re 46030 .461991	sult <b>7 MHz</b> 487 GHz 3728 kHz
							M	leasuring		<b>444</b> 07	.06.2021 R	ef Level	RBW

23:32:00 07.06.2021



	Test Details								
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11n – MCS7								
Carrier Frequency	2462MHz								
Parameters	99% BW								
Notes	99% BW = 17.54MHz								

Multi¥iew 🔠	Receiver	Spects	rum 🛛 🕅	Spectrum 2	Spectrum 3	Spectrum	4 🕅 Spe	ctrum 5 🛛 🔆 🔀		
Ref Level	40.60 dBm 10 dB	Offset 4	0.60 dB 🖷 F 1 03 ms 🖷 V	<b>RW</b> 100 kHz	: Mode Sween			Fra		520000 GHz
Input	1 AC	PS	On N	Jotch Of	f				equency 2.4	520000 0112
1 Occupied	Bandwidth									○1Pk View
									M1[1]	3.72 dBm 2.4644940 GHz
30 dBm——										
20 dBm										
10 dBm						M1				
0 dBm				- Entrand	onthe way when the second s	worker the second	howhite			
-10 dBm						V				
-20 dBm				-1			\ \			
-30 dBm			Å	^^				Mr. Market		
40 db			www.					MMM	٨٨	
-40 dBm	man	-							M. M. M.	monto
-50 dBm										
CF 2.462 G	Hz	I		1001	pts	4	.8 MHz/	1	5	Span 48.0 MHz
2 Marker T	able									
<b>Type</b> M1 T1 T2	Ref   Trc   1 1 1	2.4	X-Value 164494 0 2.4532254 2.4707751	GHz GHz GHz	Y-Value <b>3.72 dBm</b> -3.50 dBm -2.85 dBm	Occ Bw Occ Bw Ce Occ Bw Fre	Function ntroid a Offset	1	Function R 7.5497005 2.46200 288.9083	esult 78 MHz 0289 GHz 05168 Hz
	)[					Measuring	j	07.06.2 23:34	021 Ref Level	RBW

23:34:39 07.06.2021



## 25. Maximum Peak Conducted Output Power

EUT Information					
Manufacturer	Astronics				
Product	Resideo Thermostat				
Model No.	Focus Pro				
Serial No.	1378290				
Mode	802.11b, 802.11g, 802.11n				

Test Setup Details						
Setup Format	Tabletop					
Measurement Method	Antenna Conducted					
Notes	N/A					

R	Requirements
The output power shall not exceed 1W (30dBm)	

Procedures

The antenna port of the EUT was connected to the spectrum analyzer through 40dB of attenuation. The EUT was set to transmit separately at the low, middle, and high channels. The resolution bandwidth (RBW) was set to greater than the 6dB bandwidth. The span was set to greater than 3 times the RBW. The 'Max-Hold' function was engaged. The maximum meter reading was recorded. The peak power output was calculated for the low, middle, and high channels.



Test Details					
Manufacturer	Astronics				
Model No.	Focus Pro				
Serial No.	1378290				
Mode	802.11b				
Notes	N/A				

Drotocol	Freq.	Data Rate	Power	Power
FIOLOCOI	(MHz)	(Mbps)	(dBm)	(W)
	2412		21.7	0.1479
	2437	1	22.06	0.1606
	2462		22.07	0.1610
	2412		21.66	0.1465
	2437	2	21.79	0.1510
802 11b	2462		21.84	0.1527
002.110	2412		21.67	0.1468
	2437	5.5	22.01	0.1588
	2462		22.09	0.1618
	2412		21.97	0.1573
	2437	11	22.42	0.1745
	2462		22.47	0.1766



Test Details					
Manufacturer	Astronics				
Model No.	Focus Pro				
Serial No.	1378290				
Mode	802.11b – 1Mbps				
Carrier Frequency	2412MHz				
Parameters	Output Power = 0.1479W (21.69dBm)				
Notes	N/A				

MultiView 😁	Receiver	X	Spectrum	X					
Ref Level 40.60 Att Input	0 dBm Offse 10 dB SWT 1 AC PS	t 40.60 dB 1.01 ms On	<ul> <li>RBW 30 MHz</li> <li>VBW 30 MHz</li> <li>Notch Off</li> </ul>	Mode Auto Sweep			Fred	quency 2.41	20000 GHz
1 Frequency Swe	еер								o1Pk Max
								M1[1]	21.69 dBm .4104000 GHz
30 dBm									
				M1					
20 dBm									
10 dBm									
0 dBm									and the second s
-10 dBm									N. A.
Ψ									
-20 dBm									
20. d0m									
-30 uBm									
-40 dBm									
-50 dBm									
CF 2.412 GHz			1001	pts	11	0.0 MHz/		Sn	an 100.0 MHz
		Inst	rument warming up.		Measuring		<b>1.06.20</b>	21 Ref Level	RBW

20:16:41 01.06.2021



Test Details					
Manufacturer	Astronics				
Model No.	Focus Pro				
Serial No.	1378290				
Mode	802.11b – 2Mbps				
Carrier Frequency	2412MHz				
Parameters	Output Power = 0.1465W (21.47dBm)				
Notes	N/A				

MultiView 88	Receiver	X :	Spectrum	X	Spectrum 2	¥X	Spectrum 3	×x	Spectrum 4	××	Spectrum 5	×X			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dE: 1.01 ms Or	B  RE S VE No	W 30 MHz W 50 MHz otch Off	Mode	: Sweep					Fre	equency 2	2.41	20000 GHz
1 Frequence	cy Sweep														●1Pk View
	<u> </u>												M1	[1]	21.47 dBm
															4105000 GHz
														1	4100000012
30 dBm								-							
							MI								
20 dBm															
				_							-				
10 dBm															
0 dBm														my	~
o ubili															
and the second sec															· · · ·
We is															M.A
FIU dBm-															.a. (
-20 dBm															
-30 dBm															
-40 dBm								-							
-50 dBm															
CE 2 412 C					1001	nto			10					- Cr -	ND 100 0 MU-
CF 2.412 G					1001	pts			10	.u MHZ/		01.0		ъра	an 100.0 MHZ
l	Л							N	leasuring			22:11	1:31 Ref l	evel	RBW

22:11:31 01.06.2021



Test Details					
Manufacturer	Astronics				
Model No.	Focus Pro				
Serial No.	1378290				
Mode	802.11b – 5.5Mbps				
Carrier Frequency	2412MHz				
Parameters	Output Power = 0.1468W (21.67dBm)				
Notes	N/A				

Multi¥iew 🔠 Receiver	X	Spectrum	X :	Spectrum 2	×X	Spectrum 3	X	Spectrum 4	• ¥X(•	Spectrum 5 🛛 🧳			
Ref Level 40.60 Att Input	dBm Offse 10 dB SWT 1 AC PS	et 40.60 dB • 1.01 ms • On	RBW VBW Note	✔ 30 MHz ✔ 50 MHz ch Off	Mode	Sweep					Frequer	icy <b>2.4</b> 1	120000 GHz
1 Frequency Swe	еер												⊙1Pk View
	-											M1[1]	21.67 dBm
													4139000 GHz
												4	14109000 0112
30 dBm													
							M1						
20 dBm													
											_		
10 dBm													
0 dBm													
η 10 dbm													" <mark>N</mark>
-20 dBm													
-30 dBm													
-40 dBm					_		-						
-50 dBm					_								
CF 2.412 GHz		1		1001	pts			10	).0 MHz/			Sc	an 100.0 MHz
							м	easuring			D1.06.2021 21:10:01	Ref Level	RBW

21:10:01 01.06.2021



Test Details					
Manufacturer	Astronics				
Model No.	Focus Pro				
Serial No.	1378290				
Mode	802.11b – 11Mbps				
Carrier Frequency	2412MHz				
Parameters	Output Power = 0.1573W (21.97dBm)				
Notes	N/A				

Multi¥iew 🔠 Receive	er 🛛 🕅	Spectrum	X	Spectrum 2	¥X	Spectrum 3	×x	Spectrum 4	· X	Spectrum 5	×x		
Ref Level 40.6 Att Input	0 dBm Off 10 dB SW 1 AC PS	set 40.60 dB T 1.01 ms Or	e RB	W 30 MHz W 50 MHz	Mode	Sweep					Freq	uency 2.41	20000 GHz
1 Frequency Sw	eep												●1Pk View
												M1[1]	21.97 dBm 2.4137000 GHz
30 dBm							M1						
20 dBm										~			
10 dBm													
Delan a human													
HUM ABM													- Charles
-20 dBm													
-30 dBm													
-40 dBm													
-50 dBm													
CF 2.412 GHz				1001	pts			10	).0 MHz/			Sp	an 100.0 MHz
	Ţ						N	leasuring		•	01.06.202 21:31:1	21 Ref Level	RBW

21:31:18 01.06.2021


	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11b – 1Mbps										
Carrier Frequency	2437MHz										
Parameters	Output Power = 0.1606W (22.06dBm)										
Notes	N/A										

MultiView 88	Receiver	x s	pectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4	× 🗶	Spectrum 5	×x			<ul> <li>▼</li> </ul>
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms On	s = RB s = VB n No	W 30 MHz W 50 MHz tch Off	Mode	e Sweep					Fre	equency 2	2.43	70000 GHz
1 Frequence	y Sweep														●1Pk View
													M1[	1] 2.	22.06 dBm 4368000 GHz
30 dBm														_	
								м <u>г</u>							
20 dBm															
10 dBm															
0 dBm														$\geq$	
-10 dBm															No. Contraction of the second
/															Ì
-20 dBm——															
-30 dBm															
-40 dBm															
-50 dBm															
CF 2.437 G	Hz				1001	pts			10	0.0 MHz/				Spa	n 100.0 MHz
								N	leasuring		0 4	01.06.20 20:34	021 Ref L	.evel	RBW

20:34:08 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11b – 2Mbps										
Carrier Frequency	2437MHz										
Parameters	Output Power = 0.1510W (21.79dBm)										
Notes	N/A										

Multi¥iew 88	Receiver	S s	pectrum	X	Spectrum 2	¥X	Spectrum 3	×.	Spectrum 4	• 🔆 🖾	Spectrum 5	× 🕅	l		
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms On	<ul> <li>RE</li> <li>VE</li> <li>No</li> </ul>	W 30 MHz W 50 MHz tch Off	Mode	e Sweep					Fr	equency	2.43	370000 GHz
1 Frequence	sy Sweep														●1Pk View
													N	11[1]	21.79 dBm
														2	.4383000 GHz
30 dBm															
								M1							
20 dBm															
10 dBm								+							
0 dBm	-														
10, 10, 11															and the second second
710 dBm															- m
an dam															
-20 uBm															
-30 dBm															
So abiii															
-40 dBm								_							
-50 dBm								_							
CF 2,437 G	iHz				1001	pts			10	).0 MHz/			1	Sp	an 100.0 MHz
	)(								Aoacurino			<b>1</b> 01.06.	2021 🛛 Re	f Level	RBW
L	Л								reasuring			20:5	i8:30	•	

20:58:30 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11b – 5.5Mbps										
Carrier Frequency	2437MHz										
Parameters	Output Power = 0.1588W (22.01dBm)										
Notes	N/A										

MultiView 88	Receiver	x s	pectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4	• 🔆 🖾	Spectrum 5	×x			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms On	<ul> <li>RE</li> <li>VE</li> <li>No</li> </ul>	W 30 MHz W 50 MHz tch Off	Mode	e Sweep					Fr	equency	2.43	70000 GHz
1 Frequence	sy Sweep														●1Pk View
													M	1[1]	22.01 dBm
															4384000 GHz
														1	14004000 0112
30 dBm															
								M1							
20 dBm															
10 dBm													<u> </u>		
	June														~
-20 dBm								_							
-30 dBm								-							
-40 dBm															
-50 dBm								-							
CF 2.437 G	Hz		1		1001	pts			10	.0 MHz/	I			Sp	an 100.0 MHz
(	)(							M	1easuring		10	<b>1.06.2</b> 21:1	2021 Ret 8:59	Level	RBW

21:18:59 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11b – 11Mbps										
Carrier Frequency	2437MHz										
Parameters	Output Power = 0.1745W (22.42dBm)										
Notes	N/A										

MultiView 88	Receiver	X	ipectrum	X	Spectrum 2	¥X	Spectrum 3	×x	Spectrum 4	× ***	Spectrum 5	×x		
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms On	<ul> <li>RE</li> <li>VB</li> <li>No</li> </ul>	W 30 MHz W 50 MHz otch Off	Mode	: Sweep					Fre	quency 2	.4370000 GHz
1 Frequence	cy Sweep													⊙1Pk View
· · · · ·													M1[1	1 22.42 dBm
														2 4261000 GHz
														214001000 0112
30 dBm														
							M1 ▼							
20 dBm														
10 dBm			F											
	warmen and												and the second	my in
														- WWWW
<u> </u>														4
-20 dBm														
-30 dBm														
-40 dBm														
-50 dBm														
CF 2.437 G	iHz				1001	pts			10	.0 MHz/				Span 100.0 MHz
						·		M	leasuring	(111111		01.06.20 21:39	021 Ref L :16	evel RBW

21:39:16 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11b – 1Mbps										
Carrier Frequency	2462MHz										
Parameters	Output Power = 0.1610W (22.07dBm)										
Notes	N/A										

Multi¥iew 🔠 Recei	ver 🛛 🕅	Spectrum	X	Spectrum 2	🔆 🔀 Spec	trum 3 🛛 🔆	Spectrum ·	4 🔆 🖾 🕅	pectrum 5 🛛 🔆 🔀		
Ref Level 40.1 Att Input	50 dBm 0 10 dB 51 1 AC PS	ffset 40.60 WT 1.01 S	)dB ● RE ms ● VE On No	3W 30 MHz SW 50 MHz	Mode Swe	еер			I	Frequency 2.4	620000 GHz
1 Frequency Sy	weep	5	on ne								o1Pk Max
										M1[1]	22.07 dBm 2.4622000 GHz
30 dBm						MI					
20 dBm											
10 dBm		_									
0 dBm											
510 dBm											
-20 dBm											
20 d0m											
-50 ubm											
-40 dBm											
-50 dBm											
CE 2,462 GHz				1001	nts		11	 0.0 MHz/			nan 100.0 MHz
	Ĭ			1001	p.0	)	Measuring	<b>(</b>	01.0	5.2021 Ref Leve	

20:44:02 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11b – 2Mbps										
Carrier Frequency	2462MHz										
Parameters	Output Power = 0.1527W (21.84dBm)										
Notes	N/A										

MultiView 88	Receiver	X s	pectrum	X	Spectrum 2	×x	Spectrum 3		Spectrum 4	× ***	Spectrum 5	×x		
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dE 1.01 ms Or	3 • RE 5 • VE 1 No	3W 30 MHz 3W 50 MHz 50 ch Off	Mode	e Sweep					Free	quency 2.40	520000 GHz
1 Frequence	v Sweep													●1Pk View
· · ·													M1[1]	21.84 dBm
														4637000 GHz
30 dBm														
								M1						
20 dBm								_						
10 dBm													~	
0 dBm	·													
du dem														
Web abin														.ufl
-20 dBm														
-20 uBm														
-30 dBm														
oo abiii														
-40 dBm								_						
-50 dBm														
CE 2,462 G	 Hz				1001	nts			10	. 0 MHz /				an 100.0 MHz
01 21102 0	Υ Γ				1001	pta		) -		/10/11/12/		M 01.06 20	21 Reflevel	
L								N	leasuring			21:04:	37	

21:04:38 01.06.2021



Test Details									
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11b – 5.5Mbps								
Carrier Frequency	2462MHz								
Parameters	Output Power = 0.1618W (22.09dBm)								
Notes	N/A								

MultiView 88	Receiver	X	ipectrum	X	Spectrum 2	×x	Spectrum 3	×.	Spectrum 4	• 🔆 🖾	Spectrum 5	××			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dE 1.01 ms Or	B • RE s • VE n No	W 30 MHz W 50 MHz otch Off	Mode	e Sweep					Fre	equency	2.46	20000 GHz
1 Frequence	cy Sweep														●1Pk View
													М	1[1]	22.09 dBm
														2	4627000 GHz
														Ĩ	1027000 0112
30 dBm															
								M1 ▼							
20 dBm								_			_				
10 dBm															
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~														MALLI.
0,dBm															WWW
<mark>H</mark> 1O dBm──															
-20 dBm								_							
-30 dBm															
10.10															
-40 dBm															
-E0 dBm-															
So abiii															
CE 2 462 C					1001				10					- Cro	ap 100 0 MU-
UF 2,402 G					1001	pts		)	I(	J.U MHZ/			001 (2-4	spa	
l	Л							M	leasuring/			21:25	5:00 Ref	•	RBW

21:25:01 01.06.2021



Test Details									
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11b – 11Mbps								
Carrier Frequency	2462MHz								
Parameters	Output Power = 0.1766W (22.47dBm)								
Notes	N/A								

Multi¥iew 🔠 Recei	iver 🔀	Spectrum	X	Spectrum 2	×x	Spectrum 3	🔆 🖾 Spectra	um 4		pectrum 5 🛛 🔆	X		
Ref Level 40. Att	60 dBm Off 10 dB SW	set 40.60 dB T 1.01 ms	<ul> <li>RBV</li> <li>VBV</li> </ul>	♥ 30 MHz ♥ 50 MHz	Mode	: Sweep					Frequen	cy <b>2.46</b>	520000 GHz
1 Erequency Sy	TAC PS	Un	NOL	on Un									o 1 Pk View
I Hequency b	псер											M1[1]	22.47 dBm
													2.4618000 GHz
30 dBm													
						M	1						
20 dBm					_			_		~			
10 dBm								_					
													×.
0 dBm													- when he had
AN AND AND AND AND AND AND AND AND AND A													" MANANA
-10 dBm													H 14
-20 dBm													
-30 dBm													
-40 dBm													
ie abiii													
-50 dBm		-								-			
CF 2.462 GHz				1001	pts			10.0	) MHz/			Sr	) an 100.0 MHz
	Υ			1001			Moacur	ina		10 <b>avi</b> 01	1.06.2021 🕻	Ref Level	RBW
							measur	mg		4,44	21:56:17	•	

21:56:17 01.06.2021



Test Details									
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11g								
Notes	N/A								

Dratagel	Freq.	Data Rate	Power
Protocol	(MHz)	(Mbps)	(dBm)
	2412		21.8
	2437	6	21.97
	2462		22
	2412		21.64
	2437	9	22.37
	2462		22.24
	2412		21.69
	2437	12	21.98
	2462		21.75
	2412		21.9
	2437	18	21.57
902 11a	2462		22.14
002.11g	2412		21.59
	2437	24	22.11
	2462		22.15
	2412		21.38
	2437	36	21.87
	2462		21.7
	2412		22.34
	2437	48	22
	2462		21.88
	2412		17.8
	2437	54	18.13
	2462		19.26



Test Details									
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11g – 6Mbps								
Carrier Frequency	2412MHz								
Parameters	Output Power = 0.1513W (21.81dBm)								
Notes	N/A								

MultiView 🔠 Receive	er 🔀	Spectrum	X	Spectrum 2	X	Spectrum 3	×X	Spectrum 4	× 🔆 🕅	Spectrum 5	×x			
Ref Level 40.6 Att Input	0 dBm Off: 10 dB SW 1 AC PS	set 40.60 dB T 1.01 ms On	<ul> <li>RB\</li> <li>VB\</li> <li>Not</li> </ul>	₩ 30 MHz ₩ 50 MHz	Mode	: Sweep					Fn	equency	2.41	20000 GHz
1 Frequency Sw	/eep		110									01	Pk Vie	w 💿 2Pk Max
												MI	[1]	21.81 dBm
													2	.4117000 GHz
20. db.u.													1	
30 dBm														
	HI 26.400 C	16m				м	L							
20 dBm									Status and a status and					
			The second s						A REAL FOR THE PARTY OF THE PAR	ALAN DI CARA				
		A RANGE AND A RANGE									A ROLD BOLD AND			
10 dBm	and the second second	<u> </u>			_							1 Martin		
	-APS T APP .											under	The second	
A CONTRACT OF													- <b>1</b>	WIRC
U dBm														Mr ay
And the second s														Thomas
10 dBm					_									N
-20 dBm					_									
-30 dBm-														
-40 dBm														
-50 dBm														
CF 2.412 GHz				1001	ots			10	).0 MHz/				Sp	an 100.0 MHz
							M	leasuring			01.06.2 23:1	2021 Ref	Level ●	RBW

23:11:48 01.06.2021



Test Details									
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11g – 9Mbps								
Carrier Frequency	2412MHz								
Parameters	Output Power = 0.1458W (21.64dBm)								
Notes	N/A								

MultiView 88	Receiver	X	ipectrum	X	Spectrum 2	*	Spectrum 3	×x	Spectrum 4	× ***	Spectrum 5	X		
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dE: 1.01 ms Or	B • RE B • VE	3W 30 MHz 3W 50 MHz otch Off	Mod	<b>e</b> Sweep					Fre	equency 2.4	120000 GHz
1 Frequence	cy Sweep													●1Pk View
													M1[1]	21.64 dBm
														2.4102000 GHz
30 dBm														
							M1 V							
20 dBm											~			
10 dBm														
0 dBm														
Color and														Mary and
-10 dBm														No.
-20 dBm														
20 40														
-30 dBm-														
-40 dBm														
to dom														
-50 dBm														
CF 2.412 G	iHz		1		1001	pts			10	).0 MHz/			S	pan 100.0 MHz
ſ								N	leasurina			01.06.2	021 Ref Leve	RBW
												23:14	:56	

23:14:57 01.06.2021



Test Details									
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11g – 12Mbps								
Carrier Frequency	2412MHz								
Parameters	Output Power = 0.1475W (21.69dBm)								
Notes	N/A								

Multi¥iew 88 Receiv	ver 🛛 🕅	Spectrum	X	Spectrum 2	×x	Spectrum 3	X	Spectrum 4	🔆 🕅 🖌	pectrum 5 🛛 🔆	X		
Ref Level 40.6 Att	50 dBm 01 10 dB 51	fset 40.60 d VT 1.01 m	B • RE is • VB	W 30 MHz W 50 MHz	Mode	: Sweep					Frequency	2.41	20000 GHz
1 Frequency Sy	veep	, 3	11 140	on on									• 1Pk View
111040010,0	1995											M1[1]	21.69 dBm
													4136000 GHz
												4	14100000 0112
30 dBm													
							M1						
20 dBm									and address of the set				
										- and and a	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
10 dBm													
	warman and the second sec												
0 dBm													- mark
Aurolan													No have been a second and a second a se
~10 dBm													4
00 dBm													
-20 uBm													
-30 dBm													
So ubiii													
-40 dBm													
io delli													
-50 dBm													
CE 2.412 GHz		1		1001	pts		1	10	.0 MHz/			Sc	an 100.0 MHz
	)(			1001				a a currier -		110 01	.06.2021	ef Level	RBW
l	Л						J M	easuring.		<b>1</b> /1	23:17:40	•	

23:17:41 01.06.2021



	Test Details
Manufacturer	Astronics
Model No.	Focus Pro
Serial No.	1378290
Mode	802.11g – 18Mbps
Carrier Frequency	2412MHz
Parameters	Output Power = 0.1548W (21.90dBm)
Notes	N/A

MultiView 88	Receiver	X	ipectrum	X	Spectrum 2	¥X	Spectrum 3		Spectrum 4	• 🔆 🗶	Spectrum 5	×x			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms On	■ RE ■ VB	W 30 MHz W 50 MHz tch Off	Mode	e Sweep					Fr	equency	2.41	.20000 GHz
1 Frequence	cy Sweep														●1Pk View
													M	1[1]	21.90 dBm
															4129000 GHz
														-	
30 dBm															
								M1							
20 dBm															
				-h							and the second s	Mar and			
10 dBm													- m		
														~~~	
0 dBm	·														and the second s
															mark and
√-10 dBm															10 AV
-20 dBm															
20. d0m															
-30 ubm-															
-40 dBm															
50.15															
-50 dBm-															
CE 2.412 G	 iHz				1001	nts			10	).0 MHz/				Sn	an 100.0 MHz
	) )				1001	1. 00		).	10 2 curi	<b>.</b>		<b>1 W1</b> 01.06.2	2021 Re	fLevel	RBW
l	Л								reasuring			23:2	0:05	•	

23:20:06 01.06.2021



	Test Details
Manufacturer	Astronics
Model No.	Focus Pro
Serial No.	1378290
Mode	802.11g – 24Mbps
Carrier Frequency	2412MHz
Parameters	Output Power = 0.1442W (21.59dBm)
Notes	N/A

Multi¥iew 88	Receiver	X s	ipectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4	***	Spectrum 5	×x		▽
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 df: 1.01 m: Or	B = RE s = VE n No	3W 30 MHz 3W 50 MHz otch Off	Mode	e Sweep					Fre	quency 2.4	120000 GHz
1 Frequence	cy Sweep													●1Pk View
													M1[1]	21.59 dBm
														2,4113000 GHz
30 dBm														
							м	1						
20 dBm														
10 dBm														
													and the second sec	
0 dBm														
and a show the second														- The second
/~10 dBm-														ć
an dam														
-20 uBm														
-30 dBm														
So abiii														
-40 dBm														
-50 dBm														
CF 2,412 G	iHz		1		1001	pts			10	.0 MHz/			S	 pan 100.0 MHz
	)(				1001				loscuring			01.06.20	021 Ref Leve	RBW
L	Л								ieasuring.			23:22	:46	

23:22:46 01.06.2021



	Test Details									
Manufacturer	Astronics									
Model No.	Focus Pro									
Serial No.	1378290									
Mode	802.11g – 36Mbps									
Carrier Frequency	2412MHz									
Parameters	Output Power = 0.1374W (21.38dBm)									
Notes	N/A									

Multi¥iew 88	Receiver	S S	pectrum	X	Spectrum 2	¥X	Spectrum 3	×x	Spectrum 4	××	Spectrum 5	×X			
Ref Level Att Input	l 40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms Or	s = RE s = VB n No	3W 30 MHz 3W 50 MHz 50 ch Off	Mode	e Sweep					Fre	equency 2	2.41	10000 GHz
1 Frequen	cy Sweep														●1Pk View
													M1	[1]	21.38 dBm
														2	4089000 GHz
														Ĩ	1005000 0112
30 dBm															
							M 1								
							The second se								
20 dBm						_				_					
10 dBm															
	- Andrew													$\sim 1$	
	- Marine -														~
0 dBm															the second secon
a marine															A.
-Martin															~
~10 dBm															كر
-20 dBm															
-30 dBm															
-40 dBm															
-50 dBm															
CF 2.411 C	Hz				1001	pts			10	.0 MHz/				Spa	an 100.0 MHz
	Y								loasuring			01.06.2	021 🛛 Ref L	.evel	RBW
L	Л								reasoning.			23:25	5:09		

23:25:09 01.06.2021



	Test Details
Manufacturer	Astronics
Model No.	Focus Pro
Serial No.	1378290
Mode	802.11g – 48Mbps
Carrier Frequency	2412MHz
Parameters	Output Power = 0.1713W (22.34dBm)
Notes	N/A

MultiView 88	Receiver	S s	pectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4	× ×	Spectrum 5	××		
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms On	<ul> <li>RE</li> <li>VE</li> <li>NC</li> </ul>	3W 30 MHz 3W 50 MHz otch Off	Mode	• Sweep					Free	quency 2.4:	20000 GHz
1 Frequence	v Sweep		-											●1Pk View
													M1[1]	22.34 dBm
														4114000 GHz
30 dBm														
							M	1						
20 dBm														
10 dBm		- And a start of the start of t												
0 dBm	and the second s													- Marine
and the second se														man here
/-10 dBm														<sup>1</sup> ~
-20 dBm														
-30 dBm														
-40 dBm								-						
-50 dBm														
CE 2 412 C	 				1001	nte			10				Cr	ap 100 0 MHz
GF 2.412 G					1001	pts			10			01.06.20	21 (Bofford	
L	Л							N	leasuring.			23:27:	21 Kei Level	KBW

23:27:22 01.06.2021



	Test Details
Manufacturer	Astronics
Model No.	Focus Pro
Serial No.	1378290
Mode	802.11g – 54Mbps
Carrier Frequency	2412MHz
Parameters	Output Power = 0.060W (17.63dBm)
Notes	N/A

Multi¥iew 88	Receiver	S s	pectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4	•	Spectrum 5	×x			
Ref Leve Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 ( 1.01 n	dB = RE ns = VE On No	3W 30 MHz 3W 50 MHz otch Of	: Mode	e Sweep					Fre	equency	2.41	20000 GHz
1 Frequen	cy Sweep														●1Pk View
													M1[1]		17.63 dBm
														2	4093000 GHz
														Ĩ	
30 dBm															
20 dBm							M1	+							
									Lawrence and the second						
				www.	And the state of t										
10 dBm			- Martin									My and the second second			
		- The second	W									and a second	- and the second s		
	- W	1000												.	
0 dBm	- Wer													- Allowed	
	ward													Î	
own															me mar
-10 <sup>4</sup> dBm															and the second
and abili															New V
oo dom															
-20 uBm-															
-30 dBm															
-40 dBm															
-50 dBm															
CE 2.412 0	GHz		I		100	1 nts			10	).0 MHz/			I	Spa	an 100.0 MHz
	)(				100	- 00						M 02 06 2	021 Pof	Level	
l								P.	leasuring			00:02	5:08	•	

00:05:09 02.06.2021



	Test Details
Manufacturer	Astronics
Model No.	Focus Pro
Serial No.	1378290
Mode	802.11g – 6Mbps
Carrier Frequency	2437MHz
Parameters	Output Power = 0.1573W (21.97dBm)
Notes	N/A

MultiView 88	Receiver	S s	pectrum	X	Spectrum 2	¥X	Spectrum 3		Spectrum 4	• 🔌 🖾	Spectrum 5	×x			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms On	<ul> <li>RB</li> <li>VB</li> <li>No</li> </ul>	W 30 MHz W 50 MHz tch Off	Mode	e Sweep					Fre	equency	2.43	70000 GHz
1 Frequence	cy Sweep														⊙1Pk View
													м	1[1] 2	21.97 dBm .4384000 GHz
30 dBm	H1 26	400 dBn													
20. dBm								M1 V							
20 ubii											m	www.www.			
10 dBm													horas and	man	
0 dBm														- Contraction of the contraction	MUNINA MAL
And and a second second															and the second sec
(-10 aBm															
-20 dBm															
-30 dBm															
-40 d8m-															
40 GBII															
-50 dBm															
CF 2.437 G	Hz				1001	pts			10	).0 MHz/				Sp	an 100.0 MHz
								N	leasuring			01.06.2 M	021 Rei 2:47	f Level	RBW

23:12:48 01.06.2021



Test Details								
Manufacturer	Astronics							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11g – 9Mbps							
Carrier Frequency	2437MHz							
Parameters	Output Power = 0.1725W (22.37dBm)							
Notes	N/A							

MultiView 88	Receiver	S S	ipectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4	• <b>≯</b> ⊠	Spectrum 5	×x		
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 df 1.01 m Or	B  RE S VE NO	3W 30 MHz 3W 50 MHz otch Off	Mode	e Sweep					Fre	quency 2.4	370000 GHz
1 Frequence	v Sweep													●1Pk View
· ·													M1[1]	22.37 dBm
														2 4374000 GHz
30 dBm														
								M1						
20 dBm								-						
											~	man and the second seco		
10 dBm	_					_								
													and the second s	
0 dBm	· · · · · · · · · · · · · · · · · · ·													
and dealer and the														and the second sec
-10 dBm														
-20 dBm														
ID														
-30 dBm														
-40 dBm														
-40 ubiii-														
-50 d8m								_						
CE 2,437 G	Hz				1001	nts			10	. 0 MHz /			<	han 100.0 MHz
01 21407 0					1001	pta				7.0 mi 127		.um 01 06 20	121 Refleve	
L								N	leasuring			23:15	:54	

23:15:55 01.06.2021



Test Details								
Manufacturer	Astronics							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11g – 12Mbps							
Carrier Frequency	2437MHz							
Parameters	Output Power = 0.1577W (21.98dBm)							
Notes	N/A							

MultiView 88	Receiver	S s	pectrum	X	Spectrum 2	¥X	Spectrum 3	×x	Spectrum 4	• 🔆 🖾	Spectrum	5 🎽 🐹			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms On	<ul> <li>RE</li> <li>VE</li> <li>No</li> </ul>	W 30 MHz W 50 MHz tch Off	Mode	e Sweep						Frequency	2.43	370000 GHz
1 Frequence	y Sweep														●1Pk View
														M1[1]	21.98 dBm
															4382000 GHz
														4	14002000 0112
30 dBm															
								M1							
20 dBm									v,						
												- man w	~		
10 dBm		- Aller	-										- march		
	and a survey and the												· · · · · · · · · · · · · · · · · · ·	Martin and	- Maria
0 dBm															and the second second
and the second															May
∕-10 dBm──															- V
-20 dBm															
-30 dBm															
-40 dBm															
-50 dBm								-							
CF 2.437 G	Hz		1		1001	pts		1	10	).0 MHz/			- 1	Sc	an 100.0 MHz
ſ	)(								40 a curin a			<b>1</b> 01.0	6.2021 🕞	ef Level	
L									reasuring			23	:18:21	•	

23:18:22 01.06.2021



Test Details								
Manufacturer	Astronics							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11g – 18Mbps							
Carrier Frequency	2437MHz							
Parameters	Output Power = 0.1435W (21.57dBm)							
Notes	N/A							

MultiView 88	Receiver	S S	pectrum	X	Spectrum 2	×x	Spectrum 3	××	Spectrum 4	• 🔌 🖾	Spectrum 5	X		
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms On	<ul> <li>RE</li> <li>VE</li> <li>No</li> </ul>	W 30 MHz W 50 MHz otch Off	Mode	e Sweep					Fre	equency 2.4	370000 GHz
1 Frequence	y Sweep													●1Pk View
													M1[1]	21.57 dBm
														2 4387000 GHz
30 dBm														
								M1						
20 dBm									- March	- Antonio - Antonio				
												~		
10 dBm														
0 dBm	~							_						
Marine														and the second sec
∕-10 dBm								_						
-20 dBm						_								
-30 dBm														
-40 dBm								-						
-50 dBm														
CF 2.437 G	Hz		1		1001	pts		-	10	).0 MHz/	I		5	pan 100.0 MHz
(	)(					•		) N	leasuring			01.06.20 23:20	021 Ref Leve	RBW

23:20:48 01.06.2021



Test Details								
Manufacturer	Astronics							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11g – 24Mbps							
Carrier Frequency	2437MHz							
Parameters	Output Power = 0.1625W (22.11dBm)							
Notes	N/A							

Multi¥iew 88	Receiver	S S	ipectrum	X	Spectrum 2	¥X	Spectrum 3		Spectrum 4	× **	Spectrum 5	¥ 🛛			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dE 1.01 ms Or	B  RE S VE NO	3W 30 MHz 3W 50 MHz 50 ch Off	Mode	e Sweep					Fre	equency :	2.43	70000 GHz
1 Frequence	cy Sweep														• 1Pk View
													M1	[1]	22.11 dBm
														2	4398000 GHz
														Ĩ	1000000012
30 dBm															
								M1							
20 dBm															
													h		
10 dBm															
	- I and the														
	Andrea													T	and a start of the
0 dBm	~														- North Contraction
Martin															M
10.10															<u> </u>
-10 dBm-															, s
00 dB															
-20 dBm															
20 db															
-30 dBm-															
10 10															
-40 uBm-															
E0 d0m															
-50 ubm-															
															100.015
CF 2.437 G	iHz				1001	pts			10	).0 MHz/				Spa	an 100.0 MHz
[	][							N	leasuring			(M) 01.06.2 23:23	021 Ref   3:25	Level	RBW

23:23:26 01.06.2021



Test Details									
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11g – 36Mbps								
Carrier Frequency	2437MHz								
Parameters	Output Power = 0.1538W (21.87dBm)								
Notes	N/A								

MultiView 88	Receiver	X :	Spectrum	X	Spectrum 2	¥X	Spectrum 3	××	Spectrum 4	× ×	Spectrum 5	×		
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB: 1.01 ms On	<ul> <li>RE</li> <li>VB</li> <li>No</li> </ul>	W 30 MHz W 50 MHz otch Off	Mode	• Sweep					Free	quency 2.4	370000 GHz
1 Frequence	cy Sweep													●1Pk View
													M1[1]	21.87 dBm
														2,4394000 GHz
20. db.u														
30 dBm-														
								M1						
20 dBm														
20 0011														
				_										
10 dBm														
													and the second sec	
														market and the second s
0 dBm														
and the second sec														Nr.
and the second s														N N
/-10 dBm														
00 dBm														
-20 dBm														
-30 dBm														
-40 dBm														
-50 dBm														
CF 2.437 G	Hz		·		1001	pts			10	.0 MHz/			5	pan 100.0 MHz
								۸ (	leasuring.		10 4	01.06.20 23:25:	21 Ref Leve	RBW

23:25:48 01.06.2021



Test Details								
Manufacturer	Astronics							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11g – 48Mbps							
Carrier Frequency	2437MHz							
Parameters	Output Power = 0.1584W (22.00dBm)							
Notes	N/A							

MultiView 88	Receiver	X	ipectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4		Spectrum 5	×x			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms Or	s = RE s = VB n No	3W 30 MHz 3W 50 MHz 50 ch Off	Mode	e Sweep					Fre	equency 2	2.4370	0000 GHz
1 Frequence	cy Sweep													(	o1Pk View
													M1	[1]	22.00 dBm
														2.43	364000 GHz
														1 1	001000 0112
30 dBm															
							M	11							
20 dBm								,							
10 dBm			1					-							
													and the second s		
0 dBm															mar and a second
and the second															where a
⊬10 dBm——															<u> </u>
00.40.0															
-20 dBm															
-30 dBm															
oo abiii															
-40 dBm								-							
-50 dBm								-							
CF 2.437 G	iHz				1001	pts			10	).0 MHz/	I			Span	100.0 MHz
									1easurina			01.06.2	021 Ref L	evel	RBW
L												23:28	:00		•

23:28:00 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11g – 54Mbps										
Carrier Frequency	2437MHz										
Parameters	Output Power = 0.065W (18.08dBm)										
Notes	N/A										

Multi¥iew 88	Receiver	S s	pectrum	X	Spectrum 2	×x	Spectrum 3	× 🛛	Spectrum 4	• 🔆 🗶	Spectrum 5	× 🕅			▽ )
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms Or	s = RE s = VE n No	3W 30 MHz 3W 50 MHz 5tch Off	Mode	e Sweep					Fre	equency	2.43	70000 GHz
1 Frequence	sy Sweep														●1Pk View
													M1[1]		18.08 dBm
														2	.4387000 GHz
30 dBm															
50 abiii															
20 dBm								M1							
10 dBm				-								and the second s			
	Vernand													man	
0 dBm	www.														March 1
and the second															Margare 10
-10 dBm															Ne y
and a contraction															Mr.
-20 dBm															
-30 dBm															
10. dBm															
-40 uBm															
-50 dBm															
CF 2.437 G	Hz		1		1001	pts			10	).0 MHz/	1		1	Spa	an 100.0 MHz
									1easuring			02.06.2	2021 Re	Level	RBW
L									logsaring			00:0	5:55	•	

00:05:55 02.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11g – 6Mbps										
Carrier Frequency	2462MHz										
Parameters	Output Power = 0.1584W (22.00dBm)										
Notes	N/A										

MultiView 88	Receiver		Spectrum	X	Spectrum 2	¥X	Spectrum 3	×x	Spectrum 4	• 🔆 🖾	Spectrum 5	×x			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dE: 1.01 ms Or	S  RE S VE No	W 30 MHz W 50 MHz otch Off	Mode	e Sweep					Fr	equency	2.46	20000 GHz
1 Frequence	y Sweep														○1Pk View
													M	1[1]	22.00 dBm
														2	.4621000 GHz
20. d0m															
30 dBm-															
							1	11							
20 dBm															
												and the second s			
10 dBm		- A Contraction											man		
	and the second													m	
	Auron														When the second second
0 dBm	·														- Jaco
Amerik															and the second sec
10 dbm															Jon Mark
-10 dBm-															, ,
-20 dBm															
-30 dBm															
-40 dBm															
50.10															
-so a8m															
CE 2 462 C					1001	nto			10					C	ap 100 0 ML
CF 2,402 G					1001	pts				J.U MIEIZ/			0021	5p f Louch	
								N	1easuring			23:1	3:44	•	RBW

23:13:45 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11g – 9Mbps										
Carrier Frequency	2462MHz										
Parameters	Output Power = 0.1674W (22.24dBm)										
Notes	N/A										

Multi¥iew 88 Receiver		Spectrum	Spectrum 2	Spectrum 3	Spectrum 4	4 🔆 🕅 Spect	trum 5 🛛 🔆 🖾		
Ref Level 40.60 Att Input	) dBm Offse 10 dB SWT 1 AC PS	t 40.60 dB ● 1.01 ms ● On	RBW 30 MHz VBW 50 MHz Notch Off	Mode Sweep			Freq	uency 2.46	20000 GHz
1 Frequency Swo	еер								●1Pk View
								M1[1]	22.24 dBm
									4625000 GHz
								1	14020000 0112
30 dBm									
					м1 ▼				
20 dBm									
		-					Mary Mary		
10 dBm	and the second se							mapon	
	and the work							Mar and Mar	W.
0 dBm									My
Mart Martin Walk									Jan Maria
/-10 dBm									2
-20 dBm									
-30 dBm									
-40 dBm			-						
-50 dBm									
CF 2.462 GHz		1	1001	pts	10	0.0 MHz/		Sp	an 100.0 MHz
	1		1001	- 1			<b>11</b> 01.06.202	21 Ref Level	RBW
	Л				Measuring		23:16:3	5	

23:16:36 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11g – 12Mbps										
Carrier Frequency	2462MHz										
Parameters	Output Power = 0.1496W (21.75dBm)										
Notes	N/A										

MultiView 88	Receiver	X	ipectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4	××	Spectrum 5	×x			<ul> <li>▼</li> </ul>
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dE: 1.01 ms Or	B = RE s = VE n No	3W 30 MHz 3W 50 MHz 50 MHz 50 MHz	Mode	e Sweep					Fre	quency 2	2.462	20000 GHz
1 Frequence	cy Sweep														●1Pk View
													M1	[1]	21.75 dBm
														- 2	4615000 GHz
														1.	1010000 0112
30 dBm								<u> </u>							
							М	1							
20 dBm															
												~~~~			
10 dBm		al liter and											- A		
	- warden and													~	And a second sec
0 dBm															James
North Contraction															and the second
/-10 dBm															
-20 dBm								<u> </u>							
-30 dBm															
10.10															
-40 dBm															
50.10															
-50 dBm-															
CF 2.462 G	Hz				1001	pts		_	10	.0 MHz/				Spa	n 100.0 MHz
[	][							) N	leasuring			01.06.20 23:19	021 Ref L	evel	RBW

23:19:09 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11g – 18Mbps										
Carrier Frequency	2462MHz										
Parameters	Output Power = 0.1636W (22.14dBm)										
Notes	N/A										

MultiView 88	Receiver	S s	pectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4	• 🔆 🖾	Spectrum 5	×x			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dE 1.01 ms Or	B • RE s • VE n No	W 30 MHz W 50 MHz tch Off	Mode	e Sweep					Fr	equency	2.46	20000 GHz
1 Frequence	cy Sweep														●1Pk View
													M	1[1]	22.14 dBm
															4627000 GHz
														1	14027000 0112
30 dBm															
								M1							
20 dBm															
10 dBm													$\sim$		
	www														~
0 dBm	*														- North Contraction of the Contr
Mar and a start															Marken a
/-10 dBm															7
00 dbu															
-20 dBm															
-30 dBm															
-40 dBm															
-50 dBm															
CF 2.462 G	iHz				1001	pts			10	0.0 MHz/				Sp	an 100.0 MHz
[	)[							ז (	leasuring		0	01.06.2 23:2	2021 Re 1:44 Re	f Level	RBW

23:21:44 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11g – 24Mbps										
Carrier Frequency	2462MHz										
Parameters	Output Power = 0.1640W (22.15dBm)										
Notes	N/A										

MultiView 88	Receiver	X	ipectrum	X	Spectrum 2	×x	Spectrum 3	_ ¥⊠	Spectrum 4	• 🔌 🖾	Spectrum 5	××			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 df: 1.01 m: Or	B  RE S VE NO	3W 30 MHz 3W 50 MHz 50 ch Off	Mode	e Sweep					Fre	equency	2.46	20000 GHz
1 Frequence	cy Sweep														●1Pk View
													M	1[1]	22.15 dBm
														2	4637000 GHz
														Ĩ	
30 dBm															
								M1							
20 dBm										- the sub-					
			m								ma	thank			
10 dBm		- All and a second											my -		
		4.1.												- mar	
مربر 0 dBm															The second second
and the second second															North Mary
∽10 dBm															- A
-20 dBm								-							
-30 dBm															
oo abiii															
-40 dBm															
-50 dBm															
CE 2.462 G	 iHz				1001	nts			10	).0 MHz/				Sp/	an 100.0 MHz
01 21 102 0					1001	pt3				10 11127		<b>110</b> 01.06 2	2021 Re	flevel	
								M	leasuring			23:2	4:10	•	

23:24:11 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11g – 36Mbps										
Carrier Frequency	2462MHz										
Parameters	Output Power = 0.1479W (21.70dBm)										
Notes	N/A										

Multi¥iew 88	Receiver	S s	pectrum	X	Spectrum 2	¥X	Spectrum 3	_ ¥∑	Spectrum 4	× 🗶	Spectrum 5	××		
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms On	● RE ● VE	3W 30 MHz 3W 50 MHz 50 ch Off	Mode	e Sweep					Free	quency 2.4	4620000 GHz
1 Frequence	cy Sweep													⊙1Pk View
													M1[1	1 21.70 dBm
														2 4649000 GHz
														214049000 0112
30 dBm														
								M1						
20 dBm														
10 dBm			<u> </u>											
0 dBm														- market
and March														and the second sec
∕-10 dBm														
-20 dBm														
-30 dBm														
-40 dBm														
-50 dBm								_						
CF 2.462 G	iHz		I		1001	pts			10	0.0 MHz/				Span 100.0 MHz
					_ 301							<b>va</b> 01.06.20	21 Ref Lev	el RBW
L	Л								leasuring			23:26:	33	

23:26:33 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11g – 48Mbps										
Carrier Frequency	2462MHz										
Parameters	Output Power = 0.1541W (21.88dBm)										
Notes	N/A										

MultiView 88	Receiver	S S	pectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4	4 🔆 🖾	Spectrum 5	××			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms Or	s • RE s • VE n No	W 30 MHz W 50 MHz otch Off	Mode	e Sweep					Fre	equency	2.46	20000 GHz
1 Frequence	cy Sweep														●1Pk View
													M	1[1]	21.88 dBm
															4625000 GHz
														1	14020000 0112
30 dBm															
								41 V							
20 dBm															
			_								- mark				
			- and a marked												
10 dBm			<b></b>												
														M	n.
0 dBm	when a														- Marcine
and a second second															
-10 dBm——															
-20 dBm															
-30 dBm															
-40 dBm															
-50 dBm															
CE 2,462 G	Hz				1001	nts			10				1	- Sn	an 100.0 MHz
GF 21102 C					1001	P03				510 1112/	-	<b></b> 01 06 2	021 Ref	Level	
L									deasuring			23:28	3:35	e	

23:28:36 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11g – 54Mbps										
Carrier Frequency	2462MHz										
Parameters	Output Power = 0.084W (19.26dBm)										
Notes	N/A										

MultiView 88	Receiver	S S	pectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4	• 🔆 🖾	Spectrum 5	×X			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 d 1.01 m C	B = RE is = VE in No	3W 30 MHz 3W 50 MHz 5tch Off	Mode	e Sweep					Fre	quency	2.46	20000 GHz
1 Frequence	sy Sweep														●1Pk View
													M1[1]		19.26 dBm
														2	.4622000 GHz
30 dBm															
20 dBm									26/28						
					- mart	NLUL WUM	ALAN MININ I		4	A CALINE AND					
10 dBm				more							A CAN WANT	Jon			
10 0.011		مر میں										van	and a second second		
	. Malane .													m	
0 dBm	NWW COM														marke
. All and a start of the start															and and a second and
-10 dBm															) and the second se
•															
-20 dBm															
-30 dBm															
10 10															
-40 dBm															
-50 dBm															
CF 2.462 G	iHz				1001	pts		I	1(	).0 MHz/				Spa	an 100.0 MHz
[	)[							) N	1easuring	<b>.</b>	•	02.06.2	021 Ref :47	f Level	RBW

00:06:48 02.06.2021



	Test Details
Manufacturer	Astronics
Model No.	Focus Pro
Serial No.	1378290
Mode	802.11n
Notes	N/A

Drata asl	Freq.	Data Rate	Power	Power
Protocol	(MHz)	(Mbps)	(dBm)	(W)
	2412		20.15	0.1035
	2437	MCS0	20.56	0.1137
	2462		20.45	0.1109
	2412		20.07	0.1016
	2437	MCS1	20.35	0.1083
	2462		20.90	0.1230
	2412		20.66	0.1164
	2437	MCS2	20.33	0.1078
	2462		20.30	0.1071
	2412		19.44	0.0879
	2437	MCS3	19.95	0.0988
802 11p	2462		20.44	0.1106
002.1111	2412		19.80	0.0954
	2437	MCS4	19.02	0.0797
	2462		19.61	0.0914
	2412		19.90	0.0977
	2437	MCS5	20.00	0.1000
	2462		20.17	0.1039
	2412		17.41	0.0550
	2437	MCS6	17.33	0.0540
	2462		17.65	0.0582
	2412		16.87	0.0486
	2437	MCS7	18.14	0.0651
	2462	]	17.89	0.0615



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11n – MCS0										
Carrier Frequency	2412MHz										
Parameters	Output Power = 0.1035W (20.15dBm)										
Notes	N/A										

MultiView 88	Receiver	X	Spectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4	××	Spectrum 5	×x		
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offs SWT PS	et 40.60 1.01	dB • R ms • VI On N	BW 30 MHz BW 50 MHz otch Of	: Mode	e Sweep					Fre	equency 2.	4120000 GHz
1 Frequence	cy Sweep													○1Pk View
													M1[1	1 20.15 dBm
														2 4102000 GHz
														2,4102000 0112
30 dBm								<u> </u>						
							M1							
20 dBm														
				and the second							- market			
10 dBm			- and a start									man	~	
		Var and a second											and a second	
	wwww	·											- Andrew	
0 dBm	Allan													
o doni														and the second sec
Martin														and the second second
An down														No and
0≈10 dBm—														رم
-20 dBm														
-30 dBm								<u> </u>						
-40 dBm								-						
-50 dBm														
CE 2 412 C					100	1 == 1==								Cran 100 0 Mila
LF 2.412 G					100	1 pts			10	.u MHZ/				span 100.0 MHz
								N	leasuring			01.06.2 M	021 Ref Lev 7:02	RBW

23:37:03 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11n – MCS1										
Carrier Frequency	2412MHz										
Parameters	Output Power = 0.1016W (20.07dBm)										
Notes	N/A										

MultiView 88	Receiver	X	Spectrum	X	Spectrum 2	¥X	Spectrum 3	×x	Spectrum 4	• 🔌 🖾	Spectrum 5	×X		
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	et 40.60 df 1.01 m O	3 • RE s • VE n No	3W 30 MHz 3W 50 MHz 50 ch Off	Mode	e Sweep					Fre	equency 2	.4110000 GHz
1 Frequence	y Sweep													⊙1Pk View
	-												M1[	11 20.07 dBm
														2.4110000 GHz
														1
30 dBm														
								1.						
								M1						
20 dBm						~~~~								
											- marken			
10. d0m												man and		
10 UBM													mark and a second	
													and the second s	
0 dBm	- A A A A A A A A A A A A A A A A A A A													Mm
dum														- And
and the second														The second se
10 dBm														
-20 dBm														
-30 dBm														
-40 dBm								-						
-50 dBm														
CF 2.411 G	Hz				1001	pts			10	0.0 MHz/				Span 100.0 MHz
ſ	Ĩ					-			leasuring			01.06.2	021 Ref Le	evel RBW
									reasuring			23:40	:13 🛛 🔍	

23:40:14 01.06.2021


	Test Details									
Manufacturer	Astronics									
Model No.	Focus Pro									
Serial No.	1378290									
Mode	802.11n – MCS2									
Carrier Frequency	2412MHz									
Parameters	Output Power = 0.1164W (20.66dBm)									
Notes	N/A									

MultiView 88	Receiver	X	Spectrum	X	Spectrum 2	*	Spectrum 3	××	Spectrum 4	• <b>≯</b> ⊠	Spectrum 5	××			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	et 40.60 1.01	dB = RI ms = VE On No	3W 30 MHz 3W 50 MHz otch Off	Mode	e Sweep					Fre	equency :	2.41	20000 GHz
1 Frequence	cy Sweep														●1Pk View
													M1	[1]	20.66 dBm
														2	4140000 GHz
														Ĩ	
30 dBm															
								MI							
20 dBm															
					Mar Walt						mon				
			-m									man man			
10 dBm		w	1										and the second		
	~~~~	Mar.											- man		
	and and and													$\sim$	
0 dBm	and a second														Mary Mary
N															Margare 1
- Marken Mark															where
/~10 dBm															J.
-20 dBm															
-30 dBm															
-40 dBm															
-50 dBm															
CF 2.412 G	Hz				1001	pts			10	).0 MHz/				Spa	an 100.0 MHz
	][							M (	leasuring			01.06.2 23:42	021 Ref	evel	

23:42:43 01.06.2021



	Test Details								
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11n – MCS3								
Carrier Frequency	2412MHz								
Parameters	Output Power = 0.0879W (19.44dBm)								
Notes	N/A								

MultiView 88	Receiver	X s	ipectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4		Spectrum 5	×X			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB: 1.01 ms On	<ul> <li>RB</li> <li>VB</li> <li>No</li> </ul>	W 30 MHz W 50 MHz tch Off	Mode	• Sweep					Fre	equency	2.41	.20000 GHz
1 Frequence	y Sweep														●1Pk View
													M	1[1]	19.44 dBm
															4091000 GHz
														Ĩ	
30 dBm								-							
							M1								
20 dBm															
10 dBm													- market		
														~	
	al and a second s													~	and the second se
U dBm															and the second s
and the second second															The second se
Man dam															Maria
-10 dBm-															2
-20 dBm															
-20 ubiii-															
-20 dBm-															
So abiii															
-40 dBm															
io abiii															
-50 dBm															
oo abiii															
CE 2 412 C					1001	nto								<u> </u>	ap. 100, 0 Mili-
UF 2,412 G					1001	pts		<u> </u>	10	NU MIHZ/		01.06.2	0001 <b>( D</b> -6	sp	
l								M	leasuring			23:4	5:19 Ref	•	RBW

23:45:20 01.06.2021



	Test Details									
Manufacturer	Astronics									
Model No.	Focus Pro									
Serial No.	1378290									
Mode	802.11n – MCS4									
Carrier Frequency	2412MHz									
Parameters	Output Power = 0.0954W (19.80dBm)									
Notes	N/A									

Multi¥iew 88	Receiver	S s	pectrum	X	Spectrum 2	¥X	Spectrum 3	×x	Spectrum 4	***	Spectrum 5	×x			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms On	<ul> <li>RB</li> <li>VB</li> <li>No</li> </ul>	W 30 MHz W 50 MHz tch Off	Mode	• Sweep					Fre	equency	2.41	.20000 GHz
1 Frequence	y Sweep														●1Pk View
													M1[1]	2	19.80 dBm 2.4088000 GHz
30 dBm															
20 dBm							M1								
10 dBm		4													
0 dBm	and a second							_							Same and the second sec
-10 dBm															and the second second
i io abiii															4
-20 dBm															
-30 dBm															
-40 dBm															
-50 dBm															
CF 2.412 G	Hz				1001	pts			10	1.0 MHz/				Sp	an 100.0 MHz
								N	leasuring		. 4	01.06.2 23:48	021 Re 3:06	f Level	RBW

23:48:06 01.06.2021



	Test Details									
Manufacturer	Astronics									
Model No.	Focus Pro									
Serial No.	1378290									
Mode	802.11n – MCS5									
Carrier Frequency	2412MHz									
Parameters	Output Power = 0.0977W (19.90dBm)									
Notes	N/A									

Multi¥iew 🔠 Re	eiver	SI SI	pectrum	X	Spectrum 2	¥X	Spectrum 3	¥ 🕱	Spectrum 4	• ¥ 🛛 •	ipectrum 5 🛛 🔌			
Ref Level 40 Att Input	0.60 dBm 10 dB 1 AC	Offset SWT PS	t 40.60 dB 1.01 ms On	<ul> <li>RB</li> <li>VB</li> <li>No</li> </ul>	W 30 MHz W 50 MHz tch Off	Mode	Sweep					Frequency	2.412	0000 GHz
1 Frequency	Sweep													⊙1Pk View
												M1[1]	2.4	19.90 dBm 127000 GHz
30 dBm														
20 dBm								M1 V						
10 dBm														
0 dBm														Nu.
-10 dBm														and a second and a second and a second as
-20 dBm														
-30 dBm														
-40 dBm														
-50 dBm														
05.0.440.011					1001									100.0141
CF 2.412 GHz					1001	pts			10	J.U MHZ/			Span	100.0 MHz
l	Л							N	1easuring		l ()()	1.06.2021 Re 23:50:40	• Level	RBW

23:50:40 01.06.2021



Test Details								
Manufacturer	Astronics							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11n – MCS6							
Carrier Frequency	2412MHz							
Parameters	Output Power = 0.055W (17.41dBm)							
Notes	N/A							

Multi¥iew 88	Receiver	X	ipectrum	X	Spectrum 2	¥X	Spectrum 3	***	Spectrum 4	• 🔆 🗶	Spectrum 5	×X			
Ref Leve Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dl 1.01 m 0	B  PRE S PRE NO	W 30 MHz W 50 MHz otch Off	Mode	e Sweep					Fre	equency	2.41	20000 GHz
1 Frequen	cy Sweep														●1Pk View
													M1[1]		17.41 dBm
														2	4124000 GHz
														Ĩ	
30 dBm															
20 dBm								<b>T</b>							
					and the second	Mar Mar									
					Mall and and										
10 dBm			WWW.												
		Name													
	and the second	w/w												~	
0 dBm	Arrival and Contract														~
and the	<i></i>														have
20 dbas															Maria
ALO OBW-															Jan Ja
00 d0m															
-20 uBm															
20. d0m															
-30 ubiii															
-40 dBm															
-40 0811															
-E0 dBm-															
-50 ubiii															
05.0.410.0					1001				10						- 100 0 MU-
CF 2,412 0					1001	pts		)	IU	J.U MHZ/		01.0		Spa	an 100.0 MHZ
								M	leasuring			23:57	7:27 Ref	•	RBW

23:57:28 01.06.2021



	Test Details									
Manufacturer	Astronics									
Model No.	Focus Pro									
Serial No.	1378290									
Mode	802.11n – MCS7									
Carrier Frequency	2412MHz									
Parameters	Output Power = 0.0486W (16.87dBm)									
Notes	N/A									

MultiView 88	Receiver	X	Spectrum	X	Spectrum 2	×x	Spectrum 3	× 🛛	Spectrum 4	× ×	Spectrum 5	×x			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 d: 1.01 m 0	B 🖷 RE s 🖷 VE n No	W 30 MHz W 50 MHz otch Off	Mode	e Sweep					Fre	equency	2.41	20000 GHz
1 Frequence	cy Sweep		-												●1Pk View
													M1[1]		16.87 dBm
														2.	4138000 GHz
20. db															
30 abm															
20. dBm								0.0.1							
20 0011								- V							
10 dBm								_							
													h		
		and the second se													
0 dBm	- Anno and														
. Same	www.													ľ	all markers
Manualter															The second second
-10 dBm															and the second second
															1
-20 dBm															
-30 dBm															
50 dbiii															
-40 dBm															
-50 dBm								_							
CF 2.412 G	Hz				1001	pts			10	0.0 MHz/			·	Spa	an 100.0 MHz
(									leasuring			02.06.2	2021 Re	fLevel	RBW

00:01:35 02.06.2021



Test Details									
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11n – MCS0								
Carrier Frequency	2437MHz								
Parameters	Output Power = 0.1137W (20.56dBm)								
Notes	N/A								

MultiView 88	Receiver	S S	pectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4	• 🔌 🖾	Spectrum 5	- 🔆 🖾			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dE 1.01 ms Or	8 • RB s • VB n No	W 30 MHz W 50 MHz tch Off	Mode	e Sweep					Fre	quency 2	2.437	0000 GHz
1 Frequence	cy Sweep														●1Pk View
													M1	[1] 2.4	20.56 dBm 393000 GHz
30 dBm															
20 dBm					~~~~~										
10 dBm		arman way and										are and a construction of the second s	Carlo Connormation		
0 dBm	- Andrew Martin												~~*	mum	hun .
10 dBm															and the second s
10 0.011															Ì
-20 dBm															
-30 dBm															
-40 dBm															
-50 dBm															
CF 2.437 G	Hz				1001	pts			10	).0 MHz/				Spar	100.0 MHz
								N	leasuring			01.06.20 23:38	021 Ref L	evel	RBW

23:38:12 01.06.2021



Test Details								
Manufacturer	Astronics							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11n – MCS1							
Carrier Frequency	2437MHz							
Parameters	Output Power = 0.1083W (20.35dBm)							
Notes	N/A							

MultiView 88	Receiver	S S	pectrum	X	Spectrum 2	¥X	Spectrum 3	×x	Spectrum 4	• 🔌 🖾	Spectrum 5				
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms On	<ul> <li>RB</li> <li>VB</li> <li>No</li> </ul>	W 30 MHz W 50 MHz tch Off	Mode	e Sweep					Fre	equency	2.43	70000 GHz
1 Frequence	y Sweep														●1Pk View
													м	1[1] 2	20.35 dBm .4382000 GHz
30 dBm															
20 dBm									·						
10 dBm															
0 dBm	- All marked and a second													~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	where a second s
and the store	´														and the second second
γ-10 αBm——															<i></i>
-20 dBm															
-30 dBm															
-40 dBm															
-50 dBm															
CF 2.437 G	Hz				1001	pts			10	).0 MHz/				Sp	an 100.0 MHz
	J							M	1easuring			23:40 01.06.2	2021 Ref	Level	RBW

23:40:55 01.06.2021



Test Details								
Manufacturer	Astronics							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11n – MCS2							
Carrier Frequency	2437MHz							
Parameters	Output Power = 0.1078W (20.33dBm)							
Notes	N/A							

MultiView 88	Receiver	S S	ipectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4	•	Spectrum 5	×x			<
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB. 1.01 ms On	● RE ● VB	W 30 MHz W 50 MHz tch Off	Mode	sweep					Fre	equency 2	.4370	000 GHz
1 Frequence	sy Sweep													0	1Pk View
													M1	[1] 2.43	20.33 dBm 50000 GHz
30 dBm															
20 dBm							M1								
				man	white we					and me and a second		~~			
10 dBm		- Mar										مىرىر مەرىر	- Alexandre a		
0 dBm	ter al la constante													- The second second	1
410 dBm															J. W. W.
00 dBm															
-20 uBm															
-30 dBm															
-40 dBm															
-50 dBm															
CF 2,437 G	iHz				1001	pts			10	).0 MHz/				Span 1	.00.0 MHz
	)[							M	leasuring			01.06.2 23:43	021 Ref L 8:46	evel	RBW

23:43:47 01.06.2021



Test Details									
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11n – MCS3								
Carrier Frequency	2437MHz								
Parameters	Output Power = 0.0988W (19.95dBm)								
Notes	N/A								

MultiView 88	Receiver	X s	spectrum	X	Spectrum 2	¥X	Spectrum 3	_ ¥⊠	Spectrum 4	× ***	Spectrum 5	_¥∞			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB: 1.01 ms On	<ul> <li>RE</li> <li>VE</li> <li>No</li> </ul>	W 30 MHz W 50 MHz otch Off	Mode	e Sweep					Fre	equency	2.43	70000 GHz
1 Frequence	cy Sweep														●1Pk View
· · ·													M	1[1]	19.95 dBm
															.4403000 GHz
														~	
30 dBm															
								M1							
20 dBm						-									
				mund							M				
10.40.0			au	_											
IU dBm		March											m		
	and the state												~~~~~	~	
0. d0 m	Same and the														m
U UBM															
Sand Sand Sand Sand Sand Sand Sand Sand															March 1
/10 dBm															and the
10 0.011															Ň
-20 dBm															
20 0011															
-30 dBm															
-40 dBm															
-50 dBm															
CF 2.437 G	iHz		1		1001	pts			10	).0 MHz/			L	Sn	an 100.0 MHz
	γ				1001	1. 00					-	01.06.2	2021 Rei	fLevel	RBW
								M	leasuring			23:4	5:55	•	

23:45:55 01.06.2021



Test Details									
Manufacturer	Astronics								
Model No.	Focus Pro								
Serial No.	1378290								
Mode	802.11n – MCS4								
Carrier Frequency	2437MHz								
Parameters	Output Power = 0.0797W (19.02dBm)								
Notes	N/A								

MultiView 88	Receiver	X	ipectrum	X	Spectrum 2	¥X	Spectrum 3	×x	Spectrum 4	× X	Spectrum 5	×X			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dE: 1.01 ms Or	3 • RE 5 • VE 1 No	W 30 MHz W 50 MHz tch Off	Mode	• Sweep					Fre	quency	2.43	70000 GHz
1 Frequence	cy Sweep														●1Pk View
													M1[1]		19.02 dBm
														2.	4319100 GHz
														Ĩ	10101000
30 dBm															
							M1								
20 dBm						mant	M. T. Marine		mm	- der					
10.40.0			no de												
IU dBm													~~~		
	- server													~	
0. d0 m	and when														~
U UBM															Mr. Kana
and walker															and the second sec
V 10 dBm															n.
10 0.011															۲. ۲
-20 dBm															
20 0011															
-30 dBm								_							
-40 dBm								_							
-50 dBm								_							
CF 2.437 G	iHz		1		1001	pts			10	.0 MHz/				Spa	an 100.0 MHz
	Υ.				1001	0.0		) .	10			<b>va</b> 01.06.20	021 Ref	Level	
								N	leasuring.			23:48	:56	•	

23:48:57 01.06.2021



Test Details								
Manufacturer	Astronics							
Model No.	Focus Pro							
Serial No.	1378290							
Mode	802.11n – MCS5							
Carrier Frequency	2437MHz							
Parameters	Output Power = 0.1W (20.00dBm)							
Notes	N/A							

Multi¥iew 88	Receiver	X	Spectrum	X	Spectrum 2	*	Spectrum 3	×x	Spectrum 4	× *	Spectrum 5				
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	et 40.60 d 1.01 m C	IB • RE ns • VE 2n • No	W 30 MHz W 50 MHz otch Off	Mode	e Sweep					Fre	equency	2.43	70000 GHz
1 Frequence	cy Sweep														●1Pk View
	· ·												M1[1]		20.00 dBm
														2	4352000 GHz
														1	14002000 0112
30 dBm															
							M1								
20 dBm															
10 dBm			F												
														~	
	and a second													~	
0 dBm															~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Martin															Maria
and the second second															and the second
-10 dBm															
-20 dBm															
-30 dBm															
-40 dBm															
-50 dBm															
CF 2,437 G	iHz		1		1001	pts		1	10	0.0 MHz/	1		1	Sp	an 100.0 MHz
	) (				1001						-	<b>4 ya</b> 01.06.2	021 Re	fLevel	RBW
L								N	ieasuring			23:5	1:31	•	

23:51:32 01.06.2021



	Test Details									
Manufacturer	Astronics									
Model No.	Focus Pro									
Serial No.	1378290									
Mode	802.11n – MCS6									
Carrier Frequency	2437MHz									
Parameters	Output Power = 0.054W (17.33dBm)									
Notes	N/A									

Multi¥iew 88	Receiver	X	ipectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4	× ×	Spectrum 5	×x			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dl: 1.01 m 0	B 🖷 RE s 🖷 VE n No	W 30 MHz W 50 MHz otch Off	Mode	sweep					Fre	equency	2.43	70000 GHz
1 Frequenc	y Sweep														●1Pk View
													M1[1]		17.33 dBm
														2	4373000 GHz
30 dBm															
00 00.															
20 dBm								M1							
10 dBm			-					-							
			Ĩ												
0.40.0														the second	
U dBm															and the second s
1 martin															and a second second
-10 dBm															W. Water
r -															n.
-20 dBm															
-30 dBm															
-40 dBm															
io abiii															
-50 dBm								_							
CF 2.437 G	Hz				1001	pts			10	.0 MHz/				Spa	an 100.0 MHz
								1	leasuring.			01.06.2	2021 Re	f Level	RBW

23:58:22 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11n – MCS7										
Carrier Frequency	2437MHz										
Parameters	Output Power = 0.0651W (18.14dBm)										
Notes	N/A										

Multi¥iew 88	Receiver	S s	pectrum	X	Spectrum 2	¥X	Spectrum 3	×x	Spectrum 4	• 🔌 🖾	Spectrum 5	×x		
Ref Level Att Input	l 40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dE 1.01 m: Or	B = RE s = VE n No	W 30 MHz W 50 MHz tch Off	Mode	e Sweep					Freq	uency 2	.4370000 GHz
1 Frequence	cy Sweep													⊙1Pk View
													M1[1]	18.14 dBm
														2.4376000 GHz
30 dBm														
								М1						
20 dBm														
10.40.0											n n n n			
IU dBm			and and a second second									- mark		
		er and the second											and the second s	
0. d0 m	Munand												and the second se	M
U UBM	Wardson Street													and the
N.W.V.														and a start of the
-10 dBm-														when the
AD abili														The second se
-20 dBm														
20 0011														
-30 dBm														
-40 dBm														
-50 dBm														
CE 2.437 G	Hz		I		1001	nts			10	).0 MHz/				Span 100.0 MHz
	Υ.				1001	0.0		].				a 02.06.202	21 Refle	
l								۲ (	leasuring			00:02:1	9	

00:02:20 02.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11n – MCS0										
Carrier Frequency	2462MHz										
Parameters	Output Power = 0.1109W (20.45dBm)										
Notes	N/A										

MultiView 88	Receiver	X	Spectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4	• <b>≯</b> ⊠	Spectrum 5	×x			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 d: 1.01 m 0	B  P RE s P VE n No	W 30 MHz W 50 MHz tch Off	Mode	e Sweep					Fre	equency	2.46	20000 GHz
1 Frequence	y Sweep														●1Pk View
	· · ·												M	1[1]	20.45 dBm
														-1-1	4654000 GHz
														1	14004000 0112
30 dBm															
								M1							
20 dBm									• • • • • • • • • • • • • • • • • • • •						
					- manufacture and a second										
			1 million									and the second s			
10 dBm													www		
	and a second	wer											~~~	~.	
	- North Contraction													A. No.	m
0 dBm	And and a second se							-							- Andrew
www															"New
Mar In															M.
/-10 dBm															
-20 dBm															
20. db.u.															
-30 dBm-															
40 dBm															
-40 uBm-															
E0.d0m															
-50 UBIII-															
															100.011
CF 2.462 G	Hz				1001	pts			10	).0 MHz/			_	Sp	an 100.0 MHz
	J							N N	leasuring			01.06.2 M	021 Rei 3:56	Level	RBW

23:38:57 01.06.2021



	Test Details									
Manufacturer	Astronics									
Model No.	Focus Pro									
Serial No.	1378290									
Mode	802.11n – MCS1									
Carrier Frequency	2462MHz									
Parameters	Output Power = 0.1230 (20.90dBm)									
Notes	N/A									

MultiView 88	Receiver	X s	ipectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4		Spectrum 5				<ul> <li>▼</li> </ul>
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dE: 1.01 ms Or	B  RE S VE NO	W 30 MHz W 50 MHz otch Off	Mode	e Sweep					Fre	equency 2	4620	0000 GHz
1 Frequence	cy Sweep													(	●1Pk View
	-												M1[	1]	20.90 dBm
													-	2.40	510000 GHz
00 ID														T	
30 dBm															
							M	L							
20 dBm						a from				M					
												No. of Street, or other			
10 dBm			,										~		
0 dBm														~	m de
and a second second															may a share
2-10 dBm															X
-20 dBm-															
20 000															
20. d0m															
-30 aBm															
-40 dBm															
-50 d9m-															
-30 dbm															
CE 2 462 C	 				1001	nte			10					Snan	100.0 MH-
GI 2,402 G					1001	μιδ			10	12/		the 01.06.2	021 Refle	Span	
L								N	1easuring			23:43			

23:41:51 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11n – MCS2										
Carrier Frequency	2462MHz										
Parameters	Output Power = 0.1071W (20.30dBm)										
Notes	N/A										

Multi¥iew 🔠 Rece	iver 🛛 🕅	Spectrum	X	Spectrum 2	🔆 🔀 Spectrum 3	Spectrum -	4 🔆 🕅 Spe	ctrum 5 🛛 🔆 🔀		
Ref Level 40. Att Input	.60 dBm 0 10 dB <b>S</b> 1 AC <b>P</b>	ffset 40.60 WT 1.01 S	dB • RB ms • VB On No	W 30 MHz W 50 MHz tch Off	Mode Sweep			Fre	equency 2.46	520000 GHz
1 Frequency S	weep									●1Pk View
									M1[1]	20.30 dBm
20 dBm-									2	2.4632000 GHz
50 UBIII										
20 dBm					······································	M1 ▼				
			mone	vv mm						
10 dBm			r/** '							
	and the second second								and the second second	
0 dBm										and the second s
10 dBm										and the second second
-20 dBm										
-30 dBm										
-40 dBm										
-SU dBm-										
25 0 460 F										
CF 2.462 GHz				1001	pts	1	0.0 MHz/		Sp	an 100.0 MHz
l	J					Measuring		01.06.2 23:44	021 Ref Level	RBW

23:44:28 01.06.2021



	Test Details										
Manufacturer	Astronics										
Model No.	Focus Pro										
Serial No.	1378290										
Mode	802.11n – MCS3										
Carrier Frequency	2462MHz										
Parameters	Output Power = 0.1106W (20.44dBm)										
Notes	N/A										

MultiView 88	Receiver	X	ipectrum	X	Spectrum 2	×x	Spectrum 3	×.	Spectrum 4	×x	Spectrum 5	×x			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms Or	■ RE ■ VB	W 30 MHz W 50 MHz	Mode	e Sweep					Fn	equency	2.46	20000 GHz
1 Frequence	v Sweep														●1Pk View
· · ·	<u>, ,</u>												M1[1]		20.44 dBm
														-	4617000 GHz
														-	000 012
30 dBm															
								MIL S							
20 dBm										manne					
											mund	ц.			
10. d0m												maline			
10 UBM		~~~~											and the second second		
														man	
0 dBm	a contraction of the second													- Maria	~
o ubiii															March 1
Mandala															man and a second
-10 dBm															and the second s
, 10 0.0															
-20 dBm															
-30 dBm								_							
-40 dBm															
-50 dBm								-							
CF 2.462 G	Hz				1001	pts		-1	10	.0 MHz/	I		1	Sp	an 100.0 MHz
	Ĩ								leasuring			01.06.2	021 Re	f Level	RBW
L	Л								reasuring			23:4	7:14	•	

23:47:15 01.06.2021



Test Details					
Manufacturer	Astronics				
Model No.	Focus Pro				
Serial No.	1378290				
Mode	802.11n – MCS4				
Carrier Frequency	2462MHz				
Parameters	Output Power = 0.0914W (19.61dBm)				
Notes	N/A				

Multi¥iew 88	Receiver	x s	ipectrum	X	Spectrum 2	¥X	Spectrum 3	× 🛛	Spectrum 4	• 🔆 🗶	Spectrum 5	¥ 🖾			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dB 1.01 ms On	<ul> <li>RE</li> <li>VB</li> <li>No</li> </ul>	W 30 MHz W 50 MHz tch Off	Mode	e Sweep					Fr	equency	2.46	20000 GHz
1 Frequence	cy Sweep														●1Pk View
													M1[1]		19.61 dBm
														2	4629000 GHz
														Ĩ	
30 dBm															
								M1							
20 dBm								-		·					
10. d0m				_											
10 UBM		سر													
														~	
0 dBm	and we have the second													_	
o ubm	h-un														and the second s
al and a second															and the second sec
10 dBm															w.
-20 dBm															
-30 dBm								_							
-40 dBm			-					_							
-50 dBm								_							
CF 2.462 G	iHz				1001	pts		-	10	.0 MHz/				Sp	an 100.0 MHz
	)(								leasuring			01.06.2	2021 Re	f Level	RBW
L									casaring			23:4	9:41	•	

23:49:41 01.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11n – MCS5					
Carrier Frequency	2462MHz					
Parameters	Output Power = 0.1039W (20.17dBm)					
Notes	N/A					

Multi¥iew 🔠 Rece	iver	Spect	rum	X	Spectrum 2	¥X	Spectrum 3	×x	Spectrum 4	***	Spectrum 5	X			▽
Ref Level 40. Att Input	60 dBm ( 10 dB ( 1 AC F	Offset 4 SWT PS	0.60 dB 1.01 ms On	<ul> <li>RB'</li> <li>VB'</li> <li>Not</li> </ul>	W 30 MHz W 50 MHz tch Off	Mode	: Sweep					Freq	uency 2	.4620000 (	GHz
1 Frequency S	weep													⊙1Pk Vi€	ew
													M1[1]	20.17 c 2.4628000	dBm GHz
30 dBm															
20 dBm								M1 X.,		n					
10 dBm			~~~~			_									
0 dBm						_									
20 dBm															مرمر
-20 dBm															
-20 ubm															
-30 dBm															
-40 dBm															
-50 dBm															
CE 2,462 CU-					1001	nto									411-1
UF 2,462 GHZ					1001	pts		<u> </u>	10	U MHZ/		01.06.005	01 <b>( D-61</b> -	Span IUU.UN	/iHZ
l								M	leasuring.			23:53:3			v

23:53:39 01.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11n – MCS6					
Carrier Frequency	2462MHz					
Parameters	Output Power = 0.0582W (17.65dBm)					
Notes	N/A					

MultiView 88	Receiver	S S	pectrum	X	Spectrum 2	×x	Spectrum 3	×x	Spectrum 4	× ***	Spectrum 5	×x			
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 c 1.01 m C	dB = RE ns = VE On No	3W 30 MHz SW 50 MHz Stch Off	Mode	e Sweep					Fre	quency	2.46	20000 GHz
1 Frequence	cy Sweep														●1Pk View
													M1[1]		17.65 dBm
														2	4568100 GHz
														Ĩ	
30 dBm															
20 dBm															
						man	milkin								
				and and	multimeter					v	m m				
10 dBm			and the	And the second s								man and a second			
		in	ww										and the second sec		
	an almonton	Martin											~	me	
0 dBm	1 and a start													M	<u>∽.</u>
www															marker .
and Make															and they
10 dBm															and the second second
															- 1
-20 dBm															
-30 dBm															
-40 dBm															
-50 dBm															
CF 2.462 G	iHz				1001	pts		1	10	0.0 MHz/				Spa	an 100.0 MHz
	) (				1001			).				M 02.06.20	121 Ref	Level	RBW
l	Л							, r	leasuring			00:00	:39	•	

00:00:40 02.06.2021



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378290					
Mode	802.11n – MCS7					
Carrier Frequency	2462MHz					
Parameters	Output Power = 0.0615W (17.89dBm)					
Notes	N/A					

MultiView 88	Receiver	S S	pectrum	X	Spectrum 2	¥X	Spectrum 3	×.	Spectrum 4	• 🔆 🖾	Spectrum 5	×x			▽ )
Ref Level Att Input	40.60 dBm 10 dB 1 AC	Offse SWT PS	t 40.60 dE 1.01 ms Or	B • RE s • VE n No	W 30 MHz W 50 MHz tch Off	Mode	• Sweep					Fre	equency	2.46	20000 GHz
1 Frequence	cy Sweep														●1Pk View
													M1[1]		17.89 dBm
														2	4625000 GHz
														Ĩ	1020000 0112
30 dBm															
								41							
20 dBm								V							
										mune					
											men				
10 dBm															
			1												
														man 1	
0 dBm	and and the second														~
- And															No.
- Andrew Contraction															and the second
-10 dBm															North Contraction
-20 dBm															
-30 dBm															
-40 dBm															
-50 dBm															
CF 2.462 G	Hz				1001	pts			10	).0 MHz/			-	Spa	an 100.0 MHz
								1	1easuring	(		02.06.2 M	021 Rei 3:03	f Level	RBW

00:03:03 02.06.2021



# 26. Effective Isotropic Radiated Power (EIRP)

EUT Information						
Manufacturer	Astronics					
Product	Resideo Thermostat					
Model No.	Focus Pro					
Serial No.	1378317					
Mode	802.11b, 802.11g, 802.11n					

Test Setup Details						
Setup Format	Tabletop					
Measurement Method	Radiated					
Type of Test Site	Semi-Anechoic Chamber					
Test Site Used	Room 29					
Type of Antenna Used	Double-ridged waveguide (or equivalent)					
Notes	N/A					

Measurement Uncertainty	
Measurement Type	Expanded Measurement Uncertainty
Radiated disturbance (electric field strength on an open area test site or alternative test site) (30 MHz – 1000 MHz)	4.3
Radiated disturbance (electric field strength on an open area test site or alternative test site) (1 GHz – 6 GHz)	3.1
Radiated disturbance (electric field strength on an open area test site or alternative test site) (6 GHz – 18 GHz)	3.2
Radiated disturbance (electric field strength on an open area test site or alternative test site) (18 GHz – 26.5 GHz)	3.3
Radiated disturbance (electric field strength on an open area test site or alternative test site) (26.5 GHz – 40 GHz)	3.4

### Requirements

The output power shall not exceed 4W (36dBm).

### Procedures

The EUT was placed on the non-conductive stand and set to transmit. A double ridged waveguide antenna was placed at a test distance of 3 meters from the EUT. The resolution bandwidth (RBW) of the spectrum analyzer was set to greater than the 6dB bandwidth. The EUT was maximized for worst case emissions (or maximum output power) at the measuring antenna. The maximum meter reading was recorded. The peak power output was measured for the low, middle, and high channels.

The equivalent power was determined from the field intensity levels measured at 3 meters using the substitution method. To determine the emission power, a dipole antenna (double ridged waveguide antenna for all measurements above 1GHz) was then set in place of the EUT and connected to a calibrated signal generator. The output of the signal generator was adjusted to match the received level at the spectrum analyzer. The signal level was recorded. The reading was then corrected to compensate for cable loss (and antenna gain for all measurements above 1GHz), as required. The peak power output was calculated for low, middle, and high hopping frequencies.



Test Details						
Manufacturer	Astronics					
Model No.	Focus Pro					
Serial No.	1378317					
Mode	802.11b – 11Mbps					
Notes	N/A					

Freq. (MHz)	Ant Pol	Wide BW Meter Reading (dBuV)	Matched Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2412.00	Н	76.0	10.7	5.0	3.4	12.3	36.0	-23.7
2412.00	V	84.0	19.6	5.0	3.4	21.2	36.0	-14.8
2437.00	Н	77.6	12.4	5.0	3.5	13.9	36.0	-22.1
2437.00	V	84.8	20.4	5.0	3.5	22.0	36.0	-14.0
2462.00	Н	75.8	10.6	4.9	3.5	12.0	36.0	-24.0
2462.00	V	83.9	19.6	4.9	3.5	21.0	36.0	-15.0



Test Details					
Manufacturer	Astronics				
Model No.	Focus Pro				
Serial No.	1378317				
Mode	802.11g – 9Mbps				
Notes	N/A				

Freq. (MHz)	Ant Pol	Wide BW Meter Reading (dBuV)	Matched Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2412.00	Н	79.1	13.8	5.0	3.4	15.4	36.0	-20.6
2412.00	V	86.5	22.1	5.0	3.4	23.7	36.0	-12.3
2437.00	Н	79.4	14.2	5.0	3.5	15.7	36.0	-20.3
2437.00	V	87.8	23.4	5.0	3.5	25.0	36.0	-11.0
2462.00	Н	77.0	11.8	4.9	3.5	13.2	36.0	-22.8
2462.00	V	83.4	19.1	4.9	3.5	20.5	36.0	-15.5



Test Details					
Manufacturer	Astronics				
Model No.	Focus Pro				
Serial No.	1378317				
Mode	802.11n – MCS1				
Notes	N/A				

Freq. (MHz)	Ant Pol	Wide BW Meter Reading (dBuV)	Matched Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)
2412.00	Н	80.0	14.7	5.0	3.4	16.3	36.0	-19.7
2412.00	V	87.5	23.1	5.0	3.4	24.7	36.0	-11.3
2437.00	Н	80.2	15.0	5.0	3.5	16.5	36.0	-19.5
2437.00	V	86.6	22.2	5.0	3.5	23.8	36.0	-12.2
2462.00	Н	77.0	11.8	4.9	3.5	13.2	36.0	-22.8
2462.00	V	85.5	21.2	4.9	3.5	22.6	36.0	-13.4



## 27. Duty Cycle Factor Measurements

EUT Information				
Manufacturer	Astronics			
Product	Resideo Thermostat			
Model No.	Focus Pro			
Serial No.	1378290			
Mode	802.11b, 802.11g, 802.11n			

Test Setup Details						
Setup Format	Tabletop					
Measurement Method	Antenna Conducted					
Notes	N/A					

#### Procedures

The duty cycle factor is used to convert peak detected readings to average readings when pulsed modulation is employed. This factor is computed from the time domain trace of the pulse modulation signal.

With the transmitter set up to transmit for maximum pulse density, the time domain trace is displayed on the spectrum analyzer. This trace is obtained by tuning center frequency to the transmitter frequency and then setting a zero span width with 2msec/div. The amplitude settings are adjusted so that the on/off transitions clear the 4th division from the bottom of the display. The markers are set at the beginning and end of the "on-time". The trace is recorded.

Next the spectrum analyzer center frequency is set to the transmitter frequency with a zero span width and 10msec/div. This shows if the word is longer than 100msec or shorter than 100msec. If the word period is less than 100msec, the display is set to show at least one word. The on-time and off-time are then measured. The on-time is total time signal level exceeds the 4th division. Off-time is time under for the word period. The duty cycle is then computed as the (On-time/ word period) where the word period = (On-time + Off-time).



Test Details				
Manufacturer	Astronics			
Model	Focus Pro			
S/N	1378290			
Mode	802.11b			
Carrier Frequency	2462MHz			
Parameters	Duty cycle repeats every 4.02msec. In each 4.02msec period, there are 2 short off-time periods of 13usec and 2 long off-time period of 125usec. The total on-time = $4.02msec - ((2 \times 13 \text{ usec off-time})+ (2 \times 125usec \text{ off-time})) = 3.74msec$			
Notes	None			



20:45:50 02.06.2021



Test Details				
Manufacturer	Astronics			
Model	Focus Pro			
S/N	1378290			
Mode	802.11b			
Carrier Frequency	2462MHz			
Parameters	Long Off time is 125usec			
Notes	None			

MultiView	Receiver	Sp	ectrum (	X							
Ref Level 10: Att Input TRG:VID	2.00 dBµV 0 dB ● SW 1 AC PS	T 5 ms VBW On Note	VIMHz VIMHz ch Off	SGL				Fre	equency	<b>2.4</b> 6	18000 GHz
1 Zero Span											●1AP Clrw
100 dBµ∨										D1[1	]2.33 dB-
											125.00 μ <del>s</del>
90. dBuV										M1[1	] 71.00 dBµV
SO GBPT											4.19000 ms
80 dBµV											
Alles - margarett		The second second	all and a second se	والمتعاد وأسريا وتشاري والمتار الأ			<b>Webplated</b> and	A distance of the second second	M 1 1	D1	ali albud gabi gabi gabi
70 dBµV									<u> </u>	1	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
									1.4		a a da
	atalah din dalah	մ տեներին ներ		li lina bibbati	a la de la la dale		A DECEMBER 1. 1	lada di kita di katel	li di al		hadd to date to be
60 dBµ∨		with the state of the state				┉╼┼┍╜					
1 <mark>1</mark> 11	14. I Alia II. I A	1.11.11.11.12	ויין ווין	nd the design of the	1.1.1		լիդեր երկ	ղեն երերել է	' ' H -		n ka ana ka ka
50 dBµV		BμV									
4U авµv											
30 dBµV										+ +	
an delute											
20 UBDV									11.1	4	
									1.40		
10 d <mark>BµV</mark>			++		<b>├</b> ─── <mark>├</mark>						
line in the									1		
CF 2.4618 GHz	2	1		100	l pts				<b>- 1</b> 1.		500.0 µs/
	Υ				Rear	dv.		02.06.2	021 Re	ef Level	RBW
L						.,		20:42	2:18 🗨	•	

20:42:18 02.06.2021



Test Details				
Manufacturer	Astronics			
Model	Focus Pro			
S/N	1378290			
Mode	802.11b			
Carrier Frequency	2462MHz			
Parameters	Short Off time is 13usec			
Notes	None			

MultiView 🕄 Receiv	er 🛛 🛛 Spectrum 🔆	X					▽
Ref Level         102.00 dBµV           ● Att         0 dB ●           Input         1 AC           TRG:VID         1 AC	BBW 1 MHz SWT 4 ms VBW 1 MHz PS On Notch Off	SGL			Fre	equency 2.46	520000 GHz
1 Zero Span							●1AP Clrw
100 dBµV						D1[1]	0.40 dB
							13.00 us
						M1[1]	73.89 dBuV
90 dBµV							2 96700 ms
							2150700 ma
80 dBµV					1 141		a ba
ألعوا فارق ألقوه بسبب سيبين فأقر المرافل المزور	si a bia di dia manjaki si kanta di di makala di kana na bia di sa kata di s	And the Rest of State		مقاولا والقار فالقار متطاويل والمأتك		al la chianairte bi chu	a da a da da ka Marida a
70 dBuV							
ro appv							in the
n devel da de la Laberta de	aliter des les les de la data de la la company de la c			يل المان والألار الت		l luch del tol a	المتعادية والمتعاد
60 dвµV··	A TANK DE TATALE I LE LE LE LE CALLENDER DE LE CALLE	<u>1                                    </u>				, a <u>da an an Alda</u> si bab <u>an si an</u> an	ATT I AN SLID, I MANAL
	nde al standard e l'acterización del terrente		NATE AND A DESCRIPTION	l Mini let d'Entra A		1 ( 1 ° 1 ° 1 ° 1 ° 1 ° 1 ° 1 ° 1	
TRG 52 C		Marial			1 101. 10.		
50 dBµV		C 1000		1			
40 dBµV							
30 dBuV							
30 dbp v							
20 dBµV							
10 dBµV		-					
CE 2 462 GHz		100	l nts		1		400.0.0.57
		100	1 pta		110 02 06 2	021 Reflevel	
			Ready		20:44	1:41	

20:44:41 02.06.2021



	Test Details							
Manufacturer	Astronics							
Model	Focus Pro							
S/N	1378290							
Mode	802.11b							
Carrier Frequency	2462MHz							
Parameters	100msec time period							
Notes	None							

MultiView 🗄 Receiver	Spectrum	×					
Ref Level 102.00 dBµV           Att         0 dB ● SWT 100 m           Input         1 AC         PS         C	• RBW 1 MHz ns VBW 1 MHz n Notch Off	SGL			Fre	quency 2.46	20000 GHz
1 Zero Spap							O LAD Clow
							VIAF CIIW
90 dBµV							
80 dBµV					4		and the state of
							a shall a la shall a shall a sh
70 dBµV							
60 dBµV							
	يريقا بالالالالالية الالدارية المريبة	uluu i, lib, iilind ad i	ل اه اير اير اير الا ال	un statute, kon e	ha ha <mark>ba</mark> hari king d	l Market Market Al	dildi ku ah
50 dBµY							
40 dBµV							
30 dBµV							
20 dBµV		┠┼┽╋╏┿╀╋	╟┼┼╏┼┼╏┼╴	╏┨┼┼┦┼┼┥			
10 двµу		┝┼┽╂╏┿┽╂	╟┼┼┼┼┦┼		┝┼┼┛┼┼┼		
CF 2.462 GHz		1001	l pts				10.0 ms/
			Ready	*******	02.06.20 20:39:	C21 Ref Level	RBW

20:39:51 02.06.2021

Duty Cycle= DC = 3.74msec on-time/4.02msec total word time) = 0.93

Duty Cycle Correction Factor = 20 log (1/DC) = 20 log (1/0.93) = 0.62dB

The Duty Cycle was the same for the low, middle, and high channels.



Test Details							
Manufacturer	Astronics						
Model	Focus Pro						
S/N	1378290						
Mode	802.11g						
Carrier Frequency	2462MHz						
Parameters	Duty cycle repeats every 4.3msec. In each 4.3msec period, there is one 150usec off period. The total on-time = 4.3msec – 150usec off-time = 4.15msec						
Notes	None						

MultiView 8	Receiver	🕱 Spe	ctrum [	X					
Ref Level 85.1 Att Input TRG:VID	00 dBµV 0 dB ● SWT 1 AC PS	● RBW 20 ms ● VBW On Note	1 MHz 5 3 MHz h Off	GL			Free	quency 2.46	520000 GHz
1 Zero Span									• 1Pk Max
80 dBuV								D1[	1] 0.00 dB
00 000								M1[	4.3000 ms
A ANA MANAMANAN	Marmonartyn	Whit was by North	man marker mark	ALMAN WWW.MALM	A MARINA MARINA	amann mala	Manage March March	WALMAR NORTH	1/1/4/4000 ms
10.000h.	TRG 66.000 d		r · · · · · · · · · · · · · · · · · · ·		. h h.				
		T U							
60 dBhA									1
50 dBµ∨									
40 dBµ∨									
30 dBµV									
2 <mark>0 dBµ∨</mark>									
U		ļ ↓		γ		_			
10 dBµV									
0 dBµV									
·									
-10 dBuV									
10 dbpv									
CF 2.462 GHz				100	1 pts				2.0 ms/
					Ready		23:28:	51 Ker Level	RBW

23:28:51 02.06.2021



Test Details						
Manufacturer	Astronics					
Model	Focus Pro					
S/N	1378290					
Mode	802.11g					
Carrier Frequency	2462MHz					
Parameters	Long Off time is 150usec					
Notes	None					

MultiView 88	Receiver	🕱 Spe	ctrum	X							<ul><li>▼</li></ul>
Ref Level 85.00 Att Input TRG:VID	OdBµV OdB ● SWT 5 1 AC PS	● RBW 5 ms ● VBW On Notch	1 MHz 3 MHz Off	SGL				Fre	equency	2.46200	)00 GHz
1 Zero Span										•	1Pk Max
oo doutu										D1[1]	-2.71 dB
80 dBμv											150.00 µs
		do i cita		June Law	and the second	M1				MI[1] 6	9.89 dBµV
AolashA	<del>^\}\hijk#upro+r^w1k/#{</del> ;	<del>୷</del> ᠺᠰᢔ <mark>ᡀᢛᡃ</mark> ᡟ᠊ᠬᢍᢛ᠋ᡟᡟᢔᠰᡟᡟ	hater and the second second	ᡔᠲ᠋ᡶᢣᡎᠰᢦᢝᠬᢦᡊᡎ᠆ᠰᡃᢔᡌᡟᠮᡫᠵ	┶ <del>╏╢╢┉</del> ┝╌╱╼╬ <del>╢╠┙</del> ╿┨┲╵	MM D	atter the top	<del>Ს\q^</del> ৢ₩ <sub>₽₩</sub> ₽₽₽	<del>᠔ᢂᡁᢦ᠆ᡇᡁᢂ</del> ᠥ	Marth Mar	Ma March
	— TRG 66.000 dBµ'	v <u> </u>									
60 dBµV											
50 dBuV											
40 dBμV											
30 dBµV —											
20 dBµV						1.					
						Mu					
10 dBuV						4.44					
10 0804											
0 dBµV											
-10 dBµ∨											
CE 2 462 CH2				100	1 pto						-00 0 us (
	1			100	I produ			02.06.2	021 Ref	Level	RBW
ι	Л				Ready			23:25	:04	•	•

23:25:04 02.06.2021



Test Details						
Manufacturer	Astronics					
Model	Focus Pro					
S/N	1378290					
Mode	802.11g					
Carrier Frequency	2462MHz					
Parameters	100msec time period					
Notes	None					

MultiView 8	Receiver	X	Spectrum	Σ	Z									<
Ref Level 85. Att Input TRG:VID	00 dBµV 0 dB ● SWT 1 AC PS	100 ms • On	RBW 1 MHz VBW 3 MHz Notch Off		SGL					F	requency	2.46	2000	0 GHz
1 Zero Span													•1P	k Max
80 dBµV												M1[1	1 71.5	51 dBµV
M1													1.0	100 ms
Condenter and	you and a short of the	manna	monomon	mm	www.mm	npro-pr	and with the	nor man	and a share a s	manun	month	mmmy	mmm	monor
		 3µ∨								· · ·		<u>(</u> (		
en dauv														
оо авру-						1								
50 ID 11														
50 авµ∨———														
40 dBµ∨							-							
30 dBµV														
20 dBµ∨							_							
10 dBµ∨														
0 dBµV														
-10 dBµ∨														
CE 2 462 GHz						1001	nts						10	0 ms/
	Y					100.	. pt3	Ready		02.06	.2021 Re	ef Level		RBW
L								Reduy		23:	23:18	•		•

23:23:19 02.06.2021

Duty Cycle= DC = 4.15msec on-time/4.3msec total word time) = 0.965

Duty Cycle Correction Factor = 20 log (1/DC) = 20 log (1/0.965) = 0.31dB

The Duty Cycle was the same for the low, middle, and high channels.



Test Details							
Manufacturer	Astronics						
Model	Focus Pro						
S/N	1378290						
Mode	802.11n						
Carrier Frequency	2462MHz						
Parameters	Short off period of 25usec						
Notes	None						

MultiView 🗄 Receiver 🛛 🛛	Spectrum 📰			
Ref Level         97.00 dBµV           Att         0 dB         SWT 5 ms           Input         1 AC         PS         On           TRG:/VID         TRG:/VID         SWT 5 ms         SWT 5 ms	RBW 1 MHz SGL VBW 300 kHz Notch Off		Frequency 2	.4620000 GHz
1 Zero Span				●1AP Clrw
				0.05 dB
90 dBuV				25.00 µs
So dept			1	M1[1] 63.54 dBµV
				3.01000 ms
80 dBµV				
70 dBμV				
والمتعادية والمتعالية والمعادية والمتعادية	والمراجع والمنافع المراجع المراجع المراجع المراجع والمراجع والمراجع	المراجع والأفلاح المراجع الأربار	والمعارية والمتعارية والمتعارية والمتعارية	المراقب المجرب
	al alas a sur a			and a state of state of the
60 dBµV	and the data dollar that the state of the	a daa ah dhadaa ah ah	a Historia i	data ang diaka
d i sail a bai in é ta la da las, i sais taini i bhí dda bhaite a bai	má na hI dia kita Juli kutina a link dia kutina kita kita kita kita kita kita kita kit	the such such as in the same find the substrates of the	ah 🛯 ya . Anal iso lang, kinal 🛛 da 🖬 binan ya Kati senga	a a da lina dadi sa dina dilak daha
	ייאן נעניי על ערע הן און אוויינער אין אין איי דייי		a na sa san ta ta ta sa sa sa	the field and the fill
40 dBuV				
30 dBµV				
20 dBµV				
	<u>1</u>			
10 aBhA				
		1		
0 dbuV		17		
UF 2,462 GHZ	1001	pts		500.0 µs/
1 1		Ready	44 02.06.2021 Ref Le	RBW

21:52:13 02.06.2021



Test Details							
Manufacturer	Astronics						
Model	Focus Pro						
S/N	1378290						
Mode	802.11n						
Carrier Frequency	2462MHz						
Parameters	Long off time of 140usec. Duty cycle repeats every 4.12msec. In each 4.12msec period, there are 3 short off-time periods of 25usec and 1 long off-time period of 140usec. The total on-time = $4.12msec - ((3 \times 25 \text{ usec off-time}) + (1 \times 140\text{ usec off-time})) = 3.91msec$						
Notes	None						

MultiView 8	Receiver	🖾 Spe	ctrum [	X					
Ref Level 97. Att Input TBG/VID	00 dBµV 0 dB ● SWI 1 AC PS	● RBW 10 ms ● VBW On Notch	1 MHz 300 kHz 1 Off	SGL			Fre	equency 2.4	620000 GHz
1 Zero Span									●1AP Clrw
								D1[	1] 2.19 dB 140.00 us
90 авµ∨———								M1[	1] 63.15 dBμV
80. dBuV									8.01000 ms
00 000									
70 dBµ∨									
Sectional will be as	and had all the	الداليالي المعاريات	المتر المحالية بالشعية والاعدال	and had all to	المرالية أحجر أحجره التعالان	والمعالم والمحمد والاعراق	لاياساله بالديدا رايد الا		1 al Black land willast
60 dBµ∨ -				-		-		-	
a de de la baix a de la de	a de Jehlelle in alt. A la	line states and the	likur kiristeri	A de stateler a atalent	the Arabian Index All	a di Jahan a di Ka	al de verheit de de die	let a branch that have	a di kasi na di kasi di ka
50 авµ∨	TPC 47 000 d							<u> </u>	
· '	ING 11:000 d								
40 dBµ∨									
an dhulu									
30 dBh4									
20 dBµ∨									
								L.	
10 dBµ∨								<u> </u>	
									1
0 dBµV				·			l	<u> </u>	
CF 2.462 GHz	Y			1001	pts		110 02 06 2	021 Ref Louis	1.0 ms/
L					Ready		21:53		KBW

21:53:57 02.06.2021


Test Details		
Manufacturer	Astronics	
Model	Focus Pro	
S/N	1378290	
Mode	802.11n	
Carrier Frequency	2462MHz	
Parameters	100msec time period	
Notes	None	



21:49:47 02.06.2021

Duty Cycle= DC = 3.91msec on-time/4.125msec total word time) = 0.948

Duty Cycle Correction Factor = 20 log (1/DC) = 20 log (1/0.948) = 0.46dB

The Duty Cycle was the same for the low, middle, and high channels.



## 28. Case Spurious Radiated Emissions

EUT Information			
Manufacturer	Astronics		
Product	Resideo Thermostat		
Model No.	Focus Pro		
Serial No.	1378317		
Mode	802.11b, 802.11g, 802.11n		

Test Setup Details			
Setup Format	Tabletop		
Measurement Method	Radiated		
Type of Test Site	Semi-Anechoic Chamber		
Test Site Used	Room 29		
Type of Antennas Used	Double-ridged waveguide (or equivalent)		
Notes	The cables were manually maximized during the preliminary emissions sweeps. The cable arrangement which resulted in the worst-case emissions was utilized.		

Measurement Uncertainty		
Measurement Type	Expanded Measurement Uncertainty	
Radiated disturbance (electric field strength on an open area test site or alternative test site) (30 MHz – 1000 MHz)	4.3	
Radiated disturbance (electric field strength on an open area test site or alternative test site) (1 GHz – 6 GHz)	3.1	
Radiated disturbance (electric field strength on an open area test site or alternative test site) (6 GHz – 18 GHz)	3.2	
Radiated disturbance (electric field strength on an open area test site or alternative test site) (18 GHz – 26.5 GHz)	3.3	
Radiated disturbance (electric field strength on an open area test site or alternative test site) (26.5 GHz – 40 GHz)	3.4	



## Procedures

Radiated measurements were performed in a 32ft. x 20ft. x 14ft. high shielded enclosure. The shielded enclosure prevents emissions from other sources, such as radio and TV stations from interfering with the measurements. All powerlines and signal lines entering the enclosure pass through filters on the enclosure wall. The powerline filters prevent extraneous signals from entering the enclosure on these leads.

Preliminary radiated emissions tests were performed to determine the emission characteristics of the EUT. For the preliminary test, a broadband measuring antenna was positioned at a 3 meter distance from the EUT. The entire frequency range from 30MHz to 25GHz was investigated using a peak detector function.

The final open field emission tests were then manually performed over the frequency range of 30MHz to 25GHz.

- 1) For all harmonics not in the restricted bands, the following procedure was used:
  - a) The field strength of the fundamental was measured using a double ridged waveguide antenna. The waveguide antenna was positioned at a 3 meter distance from the EUT. The EUT was placed on a non-conductive stand. A peak detector with a resolution bandwidth of 100kHz was used on the spectrum analyzer.
  - b) The field strengths of all of the harmonics not in the restricted band were then measured using a double-ridged waveguide antenna. The waveguide antenna was positioned at a 3 meter distance from the EUT. The EUT was placed on a non-conductive stand. A peak detector with a resolution bandwidth of 100kHz was used on the spectrum analyzer.
  - c) To ensure that maximum or worst case emission levels at the fundamental and harmonics were measured, the following steps were taken when measuring the fundamental emissions and the spurious emissions:
    - i) The EUT was rotated so that all of its sides were exposed to the receiving antenna.
    - ii) Since the measuring antenna is linearly polarized, both horizontal and vertical field components were measured.
    - iii) The measuring antenna was raised and lowered for each antenna polarization to maximize the readings.
    - iv) In instances where it was necessary to use a shortened cable between the measuring antenna and the spectrum analyzer. The measuring antenna was not raised or lowered to ensure maximized readings, instead the EUT was rotated through all axis to ensure the maximum readings were recorded for the EUT.
  - d) All harmonics not in the restricted bands must be at least 20dB below levels measured at the fundamental. However, attenuation below the general limits specified in §15.209(a) is not required.
- 2) For all emissions in the restricted bands, the following procedure was used:
  - a) The field strengths of all emissions above 1GHz were measured using a double-ridged waveguide antenna. The waveguide antenna was positioned at a 3 meter distance from the EUT. The EUT was placed on a non-conductive stand. A peak detector with a resolution bandwidth of 1 MHz was used on the spectrum analyzer.
  - b) To ensure that maximum or worst case emission levels were measured, the following steps were taken when taking all measurements:
    - i) The EUT was rotated so that all of its sides were exposed to the receiving antenna.
    - ii) Since the measuring antenna is linearly polarized, both horizontal and vertical field components were measured.
    - iii) The measuring antenna was raised and lowered for each antenna polarization to maximize the readings.
    - iv) In instances where it was necessary to use a shortened cable between the measuring antenna



and the spectrum analyzer. The measuring antenna was not raised or lowered to ensure maximized readings, instead the EUT was rotated through all axis to ensure the maximum readings were recorded for the EUT.

- c) For all radiated emissions measurements above 1GHz, the peak readings must comply with the 15.35(b) limits. 15.35(b) states that when average radiated emissions measurements are specified, there also is a limit on the peak level of the radiated emissions. The limit on the peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. Therefore, all peak readings above 1GHz must be no greater than 20dB above the limits specified in 15.209(a).
- d) Next, for all radiated emissions measurements above 1GHz, the resolution bandwidth was set to 1MHz. The analyzer was set to linear mode with a 10Hz video bandwidth in order to simulate an average detector. An average reading was taken.