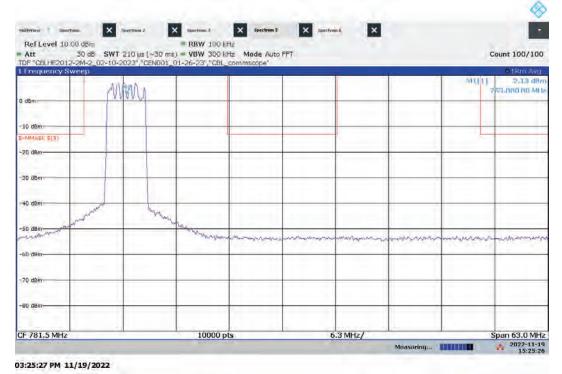
Lo-PIM – ANTO Mid Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 16QAM

Intertek

Ref Level 10.00 Att	30 dB 5	WT 210 µs	(~30 ms)	 RBW 100 kF VBW 300 kF 	tz Mode Auto	FFT				Count 100/10
DF "CBLHF2012-2 Frequency Swe	2M-2_02-	10-2023","0	EN001_0	1-26-23","CBL_	commiscope"					O 1 Rm Avg
_	1	Antenh .	_						MI	753.000 00 M
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			-							
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STERN STERNES				marsharm	holochuispeelage	mannen	norman in the man	and many marine	manginger	mannin
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F 781,5 MHz				10000 pt	s	54	5.3 MHz/		1	Span 63.0 MH

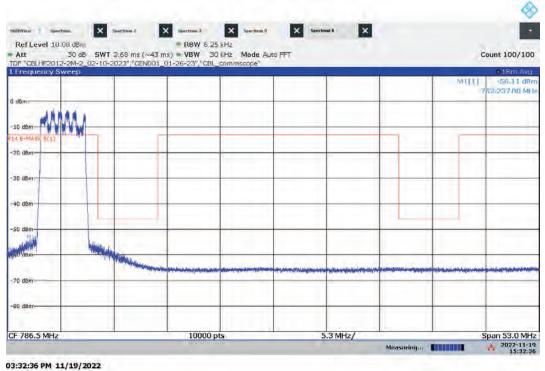
03:22:51 PM 11/19/2022

Lo-PIM – ANT1 Mid Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 16QAM

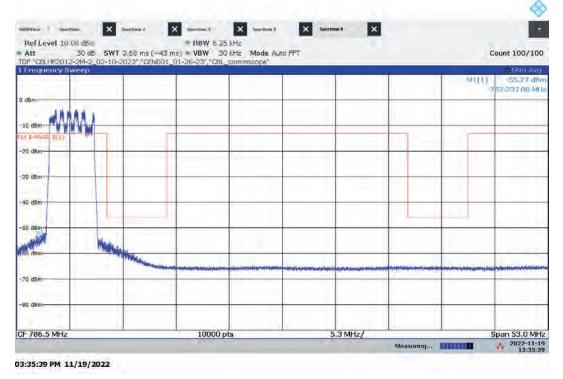


Lo-PIM – ANTO High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 16QAM

Intertek





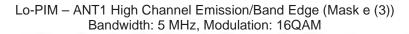


Lo-PIM – ANTO High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 16QAM

Intertek

Ait 30 dE SWT 210 µs (~30 ms) = VBW 300 kHz Mode Auto FFT TDP "CBLHF2012-2M-2_02-10-2002","CEN001_01-26-23","CBL_commscope" MIIITI 0 dBm	0 1 Rm Avg -28.01 dB/ 751.000 00 Mi									TDF "CBLHF2012-3
0 dbm MMM MITT 10 dbm 10 dbm 10 dbm 20 dbm 10 dbm 10 dbm 50 dbm 10 dbm 10 dbm 10 dbm 10 dbm 10 dbm 50 dbm 10 dbm 10 dbm 40 dbm 10 dbm 10 dbm	-28.01 dB					commscope"	1-26-23","CBL_	023","CENDO1_0		
10 d6m. 10 d6m. 10 d6m. 20 d8m. 30 d8m. 40 d6m. 50 d8m. 40 d6m. 50 d8m. 50										Frequency Swi
10 dbm 		7						MAAAAA		
10 dbm MMASK E(3) 20 dbm 50 dbm 60								NVNVQA		dBm
AMASK E(3) 20 d&m 30 d&m 40 d&m 50 d&m 60 d&m										
20 d&m- 30 d&m- 40 d&m- 50									-	10 dBm
30 dbm 31 32 33 34 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>_</td><td>-MMASK E(3)</td></td<>									_	-MMASK E(3)
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40 dbm										
40 dbm						11.000				30 dBm
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									and	+0 dBm
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	A Contraction of Second		and the second se	the second s	1. 1	and the second second				
70 dbm										60 dBm
70 dBm						11 11 11				
										70 dBm
80.48m										BD dBm-
F 781.5 MHz 10000 pts 6.3 MHz/	Span 63.0 MH									

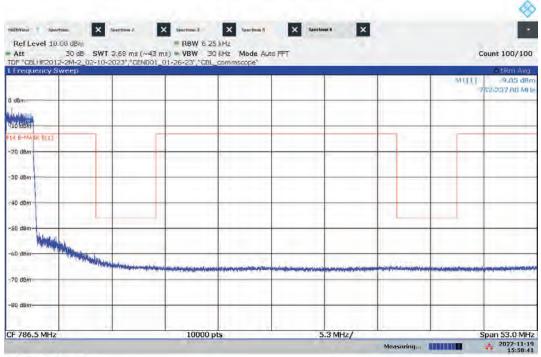
03:32:07 PM 11/19/2022



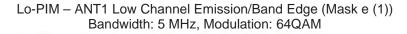
Att 30 dB DF "CBLHF2012-2M-2_0	SWT 210 µs (~30 ms 12-10-2023", "CENDO1			FFT				Count 100/100
Frequency Sweep							1	O 1 Rm Avg
	MMMA						MUL	755.000 ND MI
dbm	LAANAU							-
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-MMASK E(3)			-		ł		1	
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and should be								
		10000		-	0.000			
F 781.5 MHz		10000 p	ts		5.3 MHz/	Measuring	-	Span 63.0 MH 2022-11-1 15:35:1

Lo-PIM – ANTO Low Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 64QAM

Intertek



03:58:41 PM 11/19/2022



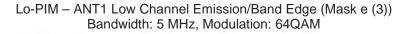
Erequency Sv	-2M-2_02-10-2	023","CEN001_	01-26-23","CBL_	commscope"					01Rm Avg
	accip.							MILLI	-9.81 dB/ 52/237.00 MI
dBm 10 dBm	_								
4 9-MASK E(1) 20 dBm						-			
30 dBm									
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90 dBm	_								
-80 dBm CF 786.5 MHz			10000 p	s	5	5.3 MHz/			Span 53.0

Lo-PIM – ANTO Low Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 64QAM

Intertek

Ref Level 10.00 Att 3		210 4= 1-20 m	RBW 100 ki b) = VBW 300 ki		EET.				Count 100/100
DF "CBLHF2012-2	M-2_02-10-2	023","CEND01_	01-26-23","CBL	commscope"	ni				a state of the state of the
Frequency Swe	ep		-		-		-	MI	01Rm Avg 11 -30.20 dBr
	norm								755.000 00 MI
dBm									
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-MMASK E(3)				1					
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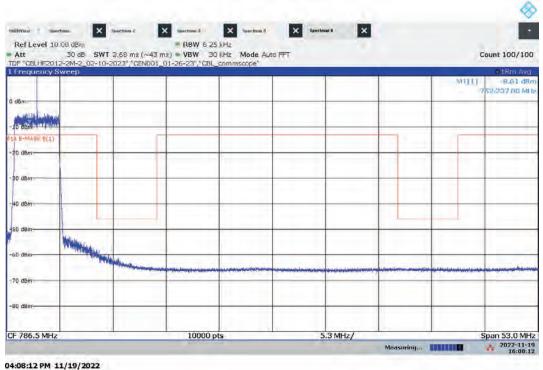
03:58:13 PM 11/19/2022



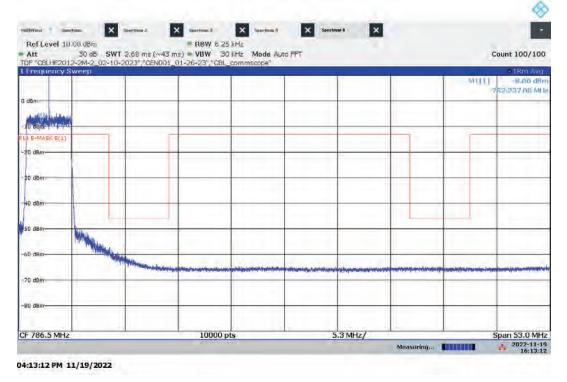
Att 30 de		ms) - VBW 300 kHz						Count 100/100
Frequency Sweep	02-10-2023 / CENOC	11_01-26-23 , CBL_C	mmscope					O1Rm Ave
~	nummin						WILL	-29.82 dB
dBm								
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MMASK E(3)		4						-
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	1							
00 dBm	14							
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- Martin		Muconorthouse	numeron	and a subscription of the	minuman	amen more	however	monimpionen
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						-		
70 dBm								
BQ dBm								
-								
F 781.5 MHz	- 1	10000 pts		6.3 M	AH2/			Span 63.0 MF
Alle Plane		a o o o o p ta		0.0		asuring		2022-11-1

Lo-PIM – ANT0 Mid Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 64QAM

Intertek



Lo-PIM – ANT1 Mid Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 64QAM

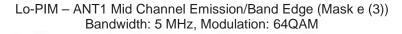


Lo-PIM – ANT0 Mid Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 64QAM

Intertek

Ref Level 10.	00 dBm			. RBW 100 K	12		má ×			1
Att				- VBW 300 ki 1-26-23","CBL_	tz Mode Auto	FFT				Count 100/100
Frequency S		-10-2025	CENDOI_0	1+20+20 GOL_	commiscope					O 1 Rm Avg
		malin	m						MU	13.98 dBn 755.000 00 MH
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								1		
10 dBm	-		-							
E-MMASK E(3)	1									
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30 dBm	-									
40 dBm	1									
40 dom	and the second		human					1		
-S0 dBm	par.		in	Yen						
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-60 dBm-	-								-	
-			11			1.11		1		
70 dBm	-		_						-	
			-						-	
-B0 dBm										-
				-		_				_
CF 781,5 MHz				10000 p	ls	6	.3 MHz/	_		Span 63.0 MH

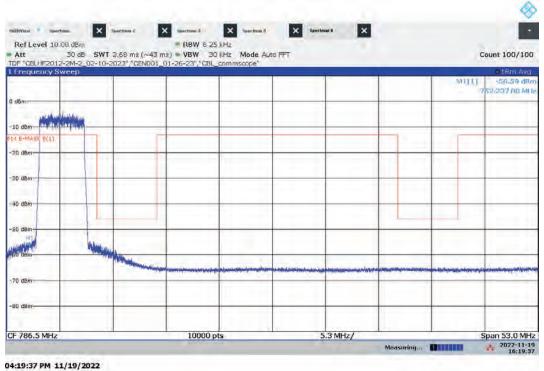
04:07:11 PM 11/19/2022

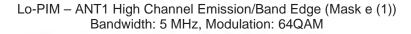


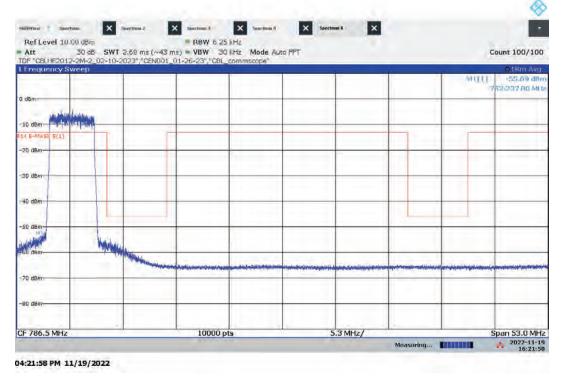
Att 3 DF "CBLHF2012-2	0 dB SW	T 210 µs	(~30 ms) - VBW 300 k	Hz Mode Auto	FFT				Cour	nt 100/100
Frequency Swe	ep	PEDEDIX	41400120	11-20-20 1 600	commissiope					_	O1Rm Avg
		alle							MIT I		14.27 dB
dBm	ſ									(paul	and for we
1.3											
10 dBm										-	_
-MMASK E(3)									-	-	
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of Galant		1 1			-		-	-		-	
00 dBm											_
ou dom									-		
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SO dBm	en.		and	line							
SO dBm				Howard .	mound	making mount	minimumm	in man -	millionan	man	mon
							A POST OF THE POST		1	1	
60 dBm											
70 dBm											
		1								1	
BD dBm		-									
F 781.5 MHz				10000 p	te	6	.3 MHz/			Sna	n 63.0 MH

Lo-PIM – ANTO High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 64QAM

Intertek





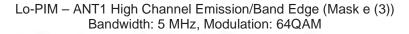


Lo-PIM – ANTO High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 64QAM

Intertek

Ref Level 10.00			. RBW 100 k						A market for
Att	30 dB SWT :	210 µs (~30 m	s) = VBW 300 k 01-26-23"."CBI	Hz Mode Auto	FFT				Count 100/100
Frequency Swe			I SO ES GOL			1	1		O1Rm Avg
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	1.000								
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-MMASK E(3)	-								
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-DD dBm			-		1.4.1.1.1.1				-
	- 1						1		
70 dBm									
-B0 dBm-			-		-				
F 781.5 MHz	- 1		10000 p	ter.	-	5.3 MHz/			Span 63.0 MH

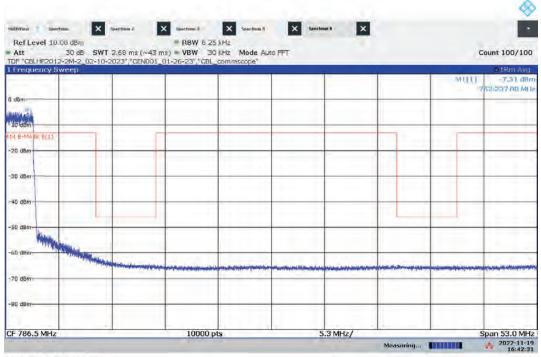
04:19:02 PM 11/19/2022



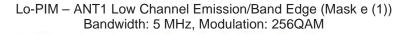
Att 30 dB	SWT 210 µs (~30 m	RBW 100 ki B) = VBW 300 ki	tz Mode Auto	FFT				Count 100/100
DF "CBLHF2012-2M-2_03 Frequency Sweep	-10-2023","CEND01_	01-26-23","CBL_	commscope"	940.				O1Rm Ave
	1.000					1	MUL	1 -31.42 dB
	hornor							751.000 00 MI
i dBm								
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			1					
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			and the for		The second second	N. I. S.	AND ALL AND	A REAL PROPERTY AND
60 dBm			1			1		
70 dBm			1.1			1		
and the second second								4 1 1 1 1 1
BD dBm			1					
F 781.5 MHz		10000 p	s	6	.3 MHz/	1.		Span 63.0 MH

Lo-PIM – ANTO Low Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 256QAM

Intertek



04:42:31 PM 11/19/2022



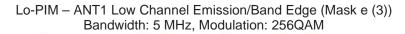
TDF "CBLHF2012-2M-2_02-10-2023","CEN0 L Frequency Sweep	01_01+26+23","GBL_commscope"			O1Rm Avo
				MULT -7.56 dB 752/237 AD MI
i dBm				
10 deprint				
H E+MASK E(s)				
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40 dBm				
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60 dBm	Manual International Contraction of the Contraction		and a stand of the	and state on the second se
70 dBm				
80 d8m			-	
	10000 pts	5.3 MH2/		Span 53.0 MH

Lo-PIM – ANTO Low Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 256QAM

Intertek

Ref Level 10.00		ipertrum 2	RBW 100 k	× Spectrum I	× Spectra	m6 ×			
Att	SO dB SWT		ns) = VBW 300 ki	tz Mode Auto	FFT				Count 100/100
DF "CBLHF2012-2 Frequency Swe		023","CEN001	01-26-23","CBL	commscope"					O1Rm Avg
	portunition April							NIT M	1] -32.81 dBn 755.000 00 MH
dBm						-			ris-tal tal mail
	-							1	
10 dBm	-								
-MMASK E(3)									
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				11.000	-				-
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SQ dBmad		martingy.	~						
denoted to			Mundan	and a superior	monorm	mannumber	- Morrison	winning	minimum
60 dBm									-
									10.00
70 dBm									
BQ dBm									
					_				
F 781.5 MHz			10000 p	s	6	.3 MHz/			Span 63.0 MH2 2022-11-19 16:42:04

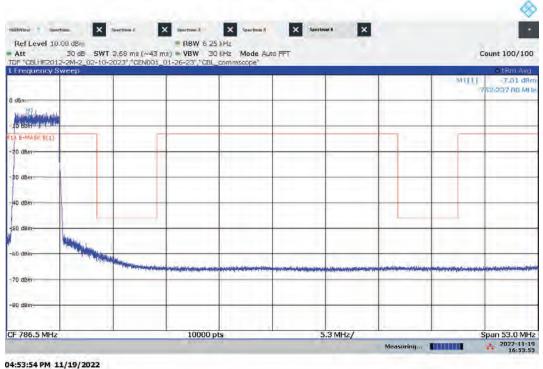
04:42:05 PM 11/19/2022



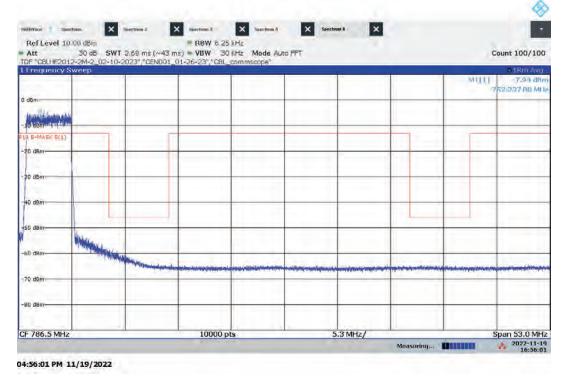
) = VBW 300 k		FFT				Count 100/10
DF "CBLHF2012-2M Frequency Swee		23 / CENUU1_	01-26-23", "GBL	commscope"				ب الم	01Rm Avg
	mound							MUL	755.000 ND MI
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and the area				1					
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ru uom									
and another								1	
B0 dBm-									
					-		_		_
F 781.5 MHz			10000 p	ts	5	6.3 MHz/			Span 63.0 MH

Lo-PIM – ANTO Mid Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 256QAM

Intertek



Lo-PIM – ANT1 Mid Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 256QAM

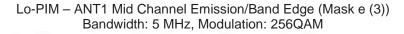


Lo-PIM – ANTO Mid Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 256QAM

Intertek

Ref Level 10	00 dBm			. RBW 100 K	14		má X			2 - 10 - 10
Att				- VBW 300 kH		FFT				Count 100/100
Frequency S		10-2020 1	C4190091_0	1-20-20 1 600	Commandpe	-				O1Rm Avg
		mystism	1						MI.	753.000 00 MI
dBm										
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-MMASK E(3)							1			
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	-				11.000				1	14 1
BO dBm-										
						-				
F 781.5 MHz	1.1			10000 p	S	6	.3 MHz/			Span 63.0 MH 2022-11-1 16:53:0

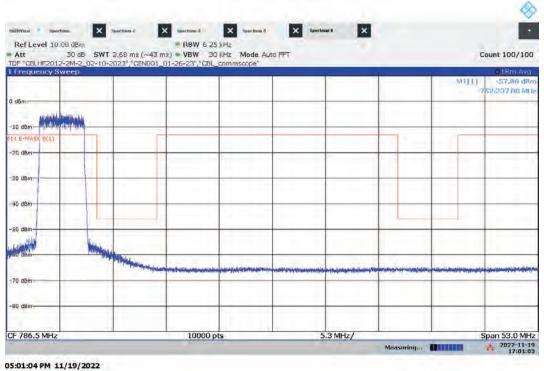
04:53:09 PM 11/19/2022



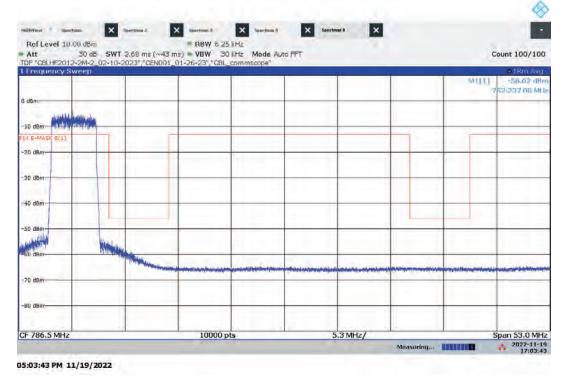
Ref Level 10. Att	30 dB	SWT a	210 µs	(~30 ms	WBW	100 ki 300 ki	tz Mo	de Auto	FFT							C	unt 100/10
DF "CBLHE201: Frequency S		-10-20	023","C	EN001_0	11-26-23	","CBL	comms	cope"	-		-						O1Rm Avc
			9										-		MI		ज.वंश dB
dBm	1	my	Lough													7	STRUCTURE MI
(DBM)				1													
1000																	
10 dBm											J	_					
-MMASK E(3)			-				1										
20 dBm	-		1											-			
			1.1						1.1.1								
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-									12.2		1						
40 dBm	ph		-						-			-		-		-	
	when			marine	1.1						1.000						
SO dBm		-	-		Same	1100 1					10.1.1	-				-	
APR Marine						and shares	an work	in Marine	maria	- AND AND	-NV22-born	min	manner	man	manus	wart	and survey and the
-60 dBm-		-	-				-	_			-	-		-		-	
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70 dBm	_		-			_	-		-	_		_		_		_	
-BO dBm-	-	_	_			_			-			_		-		_	-
							1										
F 781.5 MHz				_		0000 p			-	6	3 MHz/			-	_	C	ban 63.0 MH
1 701.5 MITZ	-					0000 p				0	o wnz/	-	Measurin				2022-11-1 16:55:3

Lo-PIM – ANTO High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 256QAM

Intertek



Lo-PIM – ANT1 High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 256QAM

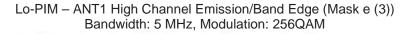


Lo-PIM – ANTO High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 256QAM

Intertek

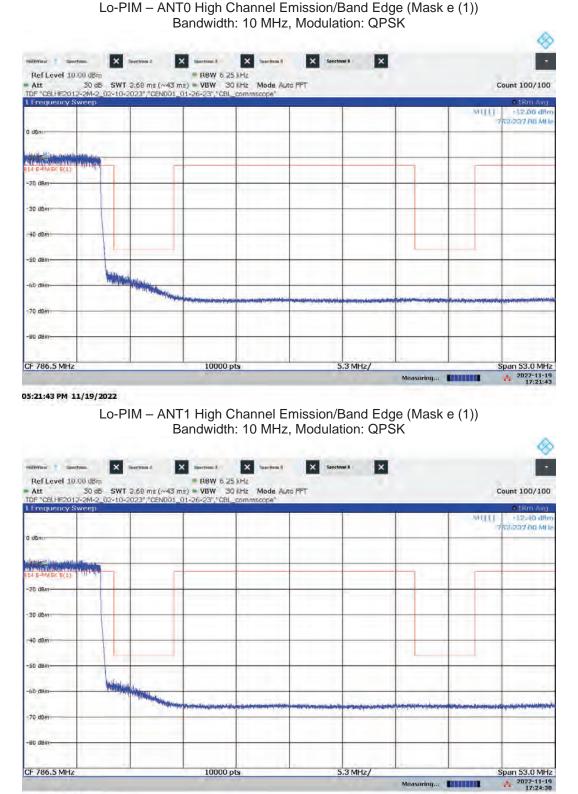
Ref Level 10.00 dBm		. RBW 100 k	Hz		má 🗙			1
Att 30 dB	SWT 210 µs (~30 ms			FFT				Count 100/100
Frequency Sweep	-10-2023 (CENUCI_	11-20-23 , CBL	commscope					O1Rm Avg
	month						MI	753.000 00 MI
0 dBm								()-talkastas na
10 dBm								10
-MMASK E(3)					f		1	
-20 dBm					-		-	
			11					
30 dBm	44							
40 dBm								
	ment h	n.						
S0 dBm		man						
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-60 dBm-								_
			11.000.00	1.1.1				
70 dBm								
					_			
BD dBm		-		-	-		-	
CF 781.5 MHz		10000 p	te.	6	.3 MHz/		-	Span 63.0 MH

05:00:30 PM 11/19/2022



Att 30 dB	SWT 210 µs (~30 ms	 RBW 100 kH VBW 300 kH 	z Mode Auto	FFT				Count 100/100
DF "CBLHF2012-2M-2_0 Frequency Sweep	2-10-2023","CEN001_	01-26-23","CBL_c	ommscope"					O1Rm Avg
	mannan						MI 11	-28,33 dB) 753,000 00 MI
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10 dBm					-			
-MMASK E(3)		4						-
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	MI							
30 dBm	1							
40 dBm								
	where h	m				1 — T		
S0 dBm		Martin			-		-	-
manantan		meni	super-second	inmanne	man	anison have made	newspaper	and a second sec
0D dBm			_				_	-
	1.101							
70 dBm							_	_
BO dBm			_		-			
F 781.5 MHz		10000 pts		6	.3 MHz/	-		Span 63.0 MH

Intertek



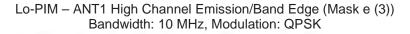
05:24:38 PM 11/19/2022

Lo-PIM – ANTO High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 10 MHz, Modulation: QPSK

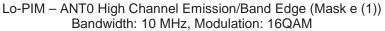
Intertek

Ref Level 10.00	a X Treettum 2	. RBW 100 K	X Spectrum I	× Specta	in 6 ×			1
	30 dB SWT 210 µs (~30 r M-2_02-10-2023","CENDO			FFT				Count 100/100
Frequency Swe		-01-20-20 , GOL	commiscope		-	-		O 1 Rm Avg
-	manuthan						MI	1.73 dBr 759.000 00 MH
l dBm	1							
10 dBm								
-MMASK E(3)								
20 dBm	+ +		1		-	-		
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40 dBm		ha						
SD dBm Malerona		Journal	MARAN				and the second second	marin
60 dBm		-	a set we have	W.P.M. Priderer	CAMP- SP. O. S.	Manufactor A second	- Novin de de	Processies and a second
70 dBm								
80 dBm							· · · · · ·	
F 781.5 MHz		10000 p	te.	-	5.3 MHz/			Span 63.0 MH

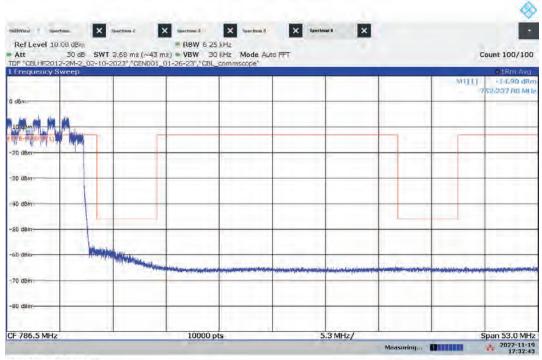
05:21:16 PM 11/19/2022



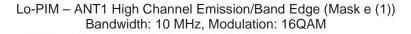
	210 µs (~30 ms) = VBW 3		FT			Count 100/100
DF "CBLHF2012-2M-2_02-10- Frequency Sweep	2023","CEN001_01-26-23","	'CBL_commscope'				01Rm Avg
	100				MUU	1.13 dB) 753.000 00 MI
dBm	montaine -				-	
					1	
10 dBm -MMASK E(3)						
-20 dBm-					1	
					1	
30 dBm					-	
40 dBm					-	
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20-april		monorman	monorman and	and and the second second second	-manumus	man
-60 dBm-						
A						
70 dBm					-	
					1	
B0 dBm						
F 781,5 MHz		00 pts	6.3 MH.			Span 63.0 MH

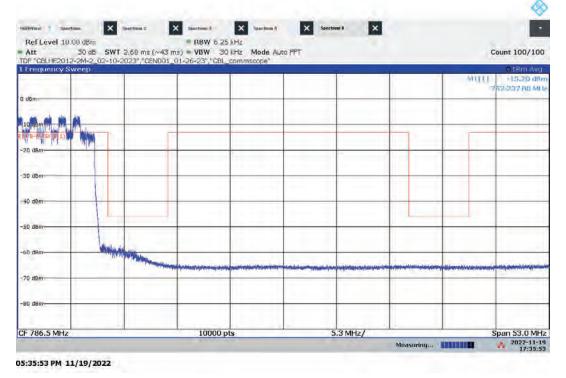


Intertek



05:32:43 PM 11/19/2022



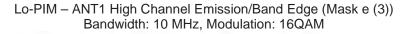


Lo-PIM – ANTO High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 10 MHz, Modulation: 16QAM

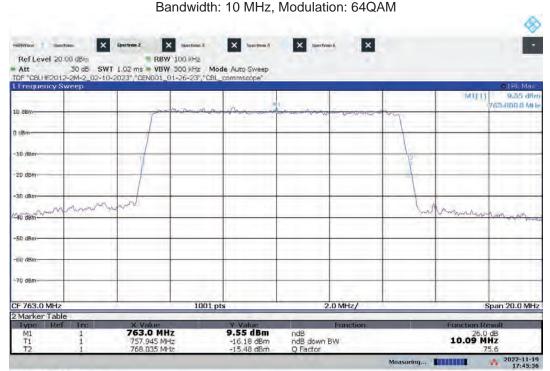
Intertek

F "CBLHE2012-2M-2			Hz Mode Auto	FFT				Count 100/100
requency Sweep	02-10-2023","CEND01,	01-26-23","CBL	commscope"					01Rm Avg
	MAMAA						MI	755.000 00 MI
iBm fly	WUUUng							
0 dBm					-			
MMASK E(3)							1	
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D dBm								
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			1					

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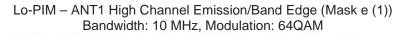


	018m Ave 310 dB 755.000 (t0 M)
ungunar ana santan ja paga bahan	non markey markey markey
	1



Lo-PIM – ANTO High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 10 MHz, Modulation: 64QAM

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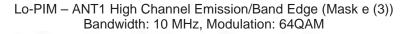
DF "CBLHF2012-2M-2_0 Frequency Sweep	SWT 1.02 ms = VBW (2-10-2023","CEND01_0				_			O1Pk Max
Frequency sweep						1	MILII	9.22 dB
U dBm-		And the starter	mount	- or the co	Martin Martin			763-000-0 M
111.0	ſ				C. D. W. S. S. S.	ay		-
dBm-					-			
0 dBm			1					1
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				1 march 1				
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n mann						have	a rimmon while	MM
			11	12.1		1		a growing
0 dBm-	_							-
0 dBm						1		
0 dBm								
	-							-
763.0 MHz		1001 pt	s	2	.0 MHz/		5	Span 20.0 M
Marker Table				-				
Type Ref Irc M1 1	X-Value 763.0 MHz		V-Value 9.22 dBm	ndB	Function		Function Re 26.0 10.07 M	
T1 1 T2 1	757.965 MH; 768.035 MH;		-16.69 dBm -17.15 dBm	ndB down E Q Factor	BW			Hz 5.8

Lo-PIM – ANTO High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 10 MHz, Modulation: 64QAM

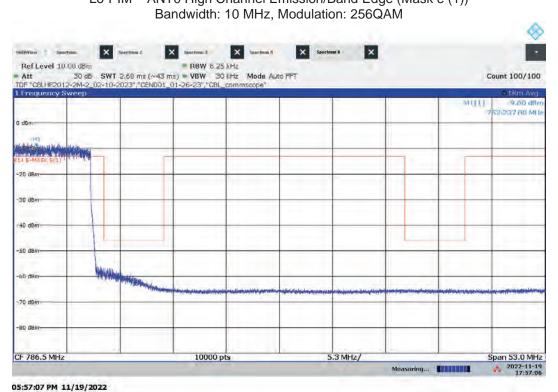
Intertek

Ref Level 10.00		RBW 100 k	X Spectrum I	× spectra	má 🗙			
Att 3	0 dB SWT 210 µs (~30 r M-2_02-10-2023","CEN001	ns) = VBW 300 k	Hz Mode Auto	FFT				Count 100/100
Frequency Swe		01-20-23 , GOL	commiscope					O 1 Rm Avg
	Analistan ang manang						MU	1 1.33 dB/ 753.000 00 MI
dBm	hanner a point of country							
10 dBm								
-MMASK E(3)							-	
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			1.1					
00 dBm								
			1					
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D dBmennum	1					T		
SO dBm		Windowner			-			_
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D dBm								
						11		
70 dBm						11		
			1.					
BO dBm						1.		
			1					
F 781.5 MHz		10000 p	ts	6	.3 MHz/			Span 63.0 MH

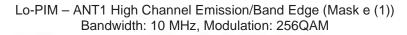
05:46:44 PM 11/19/2022



			RBW 100 k (s) = VBW 300 k	Hz Mode Aut	FFT				Count 100/100
IDF "CBLHF2012-2 L Frequency Swe	M-2_02-10-	2023","CENU01	U1-26-23", CBL	commscope"	1				01Rm Avg
D dBm	morena	Mamminga						MUT	1.53 dBr 755.000 00 MI
- ppm									
10 dBm	-					-			-
-MMASK E(3)	-								
-20 dBm-	1	1							-
30 dbm	-								
40 dBm	-								
50.dem	_	-	wannyan						
00.			www	Konstantinant	Machanan	and the second	Magnimeran	monterior	new mandmanni
-60 dBm-							1		
70 dBm								-	
BQ dBm	-		-	-			-		-
CF 781.5 MHz	-		10000 p			6.3 MHz/			Span 63.0 MH



Lo-PIM – ANTO High Channel Emission/Band Edge (Mask e (1))



TDF "CBLHF2012	-2M-2_02-	10-2023"/	CEND01_01	-26-23","CBL	KHz 'Mode A					Count 100/100
L Frequency Sv	weep		-				1	1	MILL	018m Avg (-9.31 dB/ 752/237 Att MI
dBm	_	_							_	(BARATE FOLDA)
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to tabihit an Materia	Lathanta									
	other iter	1.11			-	-		1		-
20 dBm-										
ad dam					1		-	1		-
30 dBm					11.000					
30 dbm										
40 dBm										
-	1		-							
S0 dBm			-							
	1.0				11					
-60 dBm-	10	A PARTY AND A	Minute .							
			Contraction of the local division of the loc		Martin ger betra president	a she was to get the second of	i transmitter and the second	alle grand and a start of the		AND WANTER MANAGEMENT
70 dBm			_						-	
BO dBm	-								-	
CF 786.5 MHz				10000 p		-	5.3 MHz/	+++++++++++++++++++++++++++++++++++++++	_	Span 53.0 MH

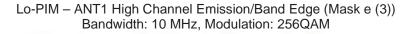
A

Lo-PIM – ANTO High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 10 MHz, Modulation: 256QAM

Intertek

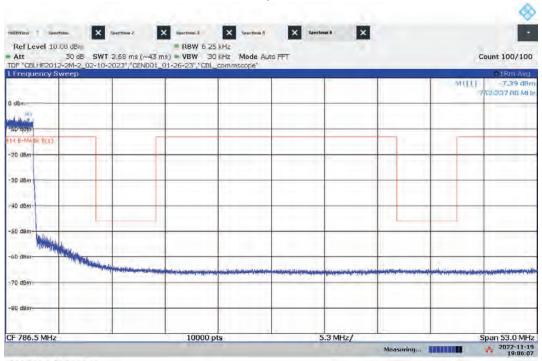
Att	1 dBm 30 dB SWT 210 µs (~30	RBW 100 ms) = VBW 300	kHz Mode Auto	FFT				Count 100/100
F "CBLHF2012-2 requency Swe	M-2_02-10-2023","CENDO	1_01-26-23","CBI	_commscope"					O1Rm Avg
	prover and					1	MUT	0.75 dB 753.000 00 MI
dBm -	1	1						
0 dBm								-
MMASK E(3)			4		·		-	
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0 dBm								
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Q dBm			-					
0 dBm								-

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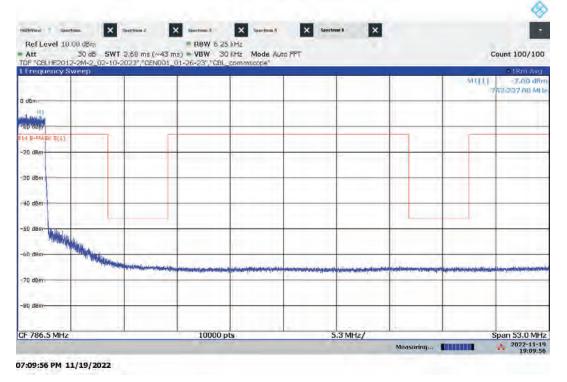
Ref Level 10.00 Att	30 dB SWT	210 µs (~30 m	 RBW 100 ki VBW 300 ki 	tz Mode Aut	O FFT				Count 100/100
IDF "CBLHF2012- LErequency Sw		2023","CENU01,	01-26-23","GBL	commscope"	1				01Rm Avg
	manint	mininte						MUT	751,000 00 MI
dBm									
10 dBm	-				_	-			-
-MMASK E(3)	-							-	
20 dBm-				1					-
30 dBm	-								
40 dBm -50,dBm	N		water.						
SD dBm	_		WWW WWW WWW	monorman	mariansam	minimum	municon and	auguran - m	an man man
60 dBm	-								
70 dBm	_								
BQ dBm-	-			-					
F 781.5 MHz	-		10000 p	ts		6.3 MHz/			Span 63.0 MH

Hi-PIM – ANTO Low Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: QPSK



07:06:07 PM 11/19/2022

Hi-PIM – ANT1 Low Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: QPSK



Hi-PIM – ANTO Low Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: QPSK

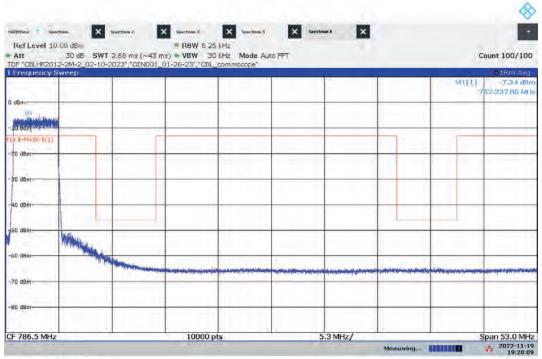
Ref Level 10.0			. RBW 100 ki						A market of
Att DF "CBLHE2012-	30 dB SWT :	210 µs (~30 m 023"."CEND01	(1-26-23","CBL_	Hz Mode Auto	FFT				Count 100/100
Frequency Sw								-	O 1 Rm Avg
	monin							MULT	32.01 dB
dBm	12000								-
0 dBm	-								
MMASK E(3)				1				-	
0 dBm			-			-			_
	1 1			11.000					
00 dBm		41	-			-			
		-							
0 dBm	11	4	-						-
1ª		"Hartin in		1.1					
0 dBm		The	and the second			Contraction of the	H.C. Confine	10000	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
The second s				man manager	Any manufacture and a second	-inversion	where we we	- and an and an and an a	and a stand of the
0 dBm									-
	100								
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				and the second second					a 1 m a
0 dBm									
				1					
F 781.5 MHz			10000 p	e	F	5.3 MHz/		1:	Span 63.0 MH

07:05:48 PM 11/19/2022

Hi-PIM – ANT1 Low Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: QPSK

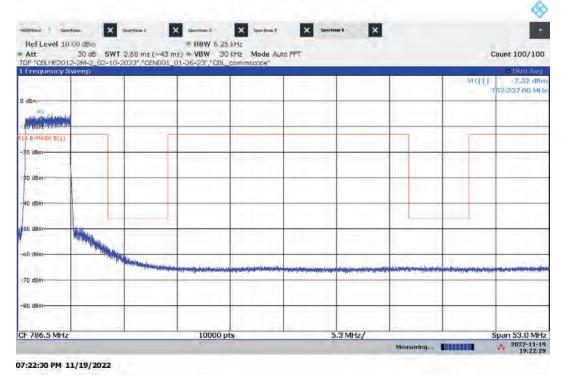
Att 3 DF "CBLHF2012-2	0 dB SWT :	210 µs (~30 m	(1-26-23", "CBI 01-26-23", "CBI	Hz Mode Auto	FFT				Count 100/100
Frequency Swe		02.0 1 00.0 10.001	of the to the	Communication pro-	-	-		MILL	01Rm Avg
	mound							Contra 1	751.000 00 MI
dBm					-				
				1.1.1.1.1			1 1		
10 dBm			-						
-MMASK E(3)						1			
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		1. A			1.1				
40 dBm	/	time			-				
all		march							
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whenen				a nannonnen hen	Milandon Maria	Low manufaction	Mr. alman and Maria	man producto	and Voren to a more a
60 dBm				1			1		-
70 dBm					-				
				1			· · · · · · · · · · · · · · · · · · ·		
BD dBm									
					-				

Hi-PIM – ANT0 Mid Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: QPSK



07:20:09 PM 11/19/2022

Hi-PIM – ANT1 Mid Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: QPSK



Hi-PIM – ANTO Mid Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: QPSK

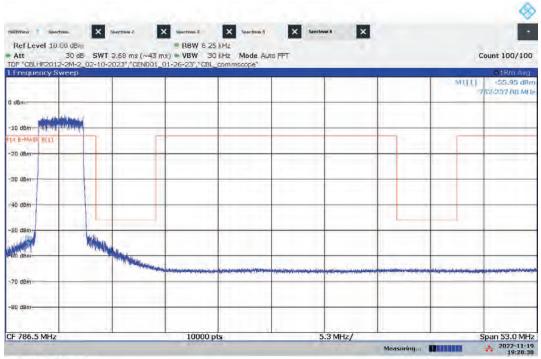
Ref Level 10.			-	RBW 100 kF						A of a local
Att TDF "CBLHF201;					tz Mode Auto	FFT				Count 100/100
Frequency S	weep	-		20 20 1 000	ann na clas					01Rm Avg
		million							NAX .	1] 4.79 dBn 753.000 00 MH
a dBm			_							
1.0	1.0							1		
10 dBm	-									
E-MMASK E(3)							·			
-20 dBm	-		-				-		-	_
and the second second										
30 dBm	-									
40 dBm	a part		and the							
	william		my			_				
-SO dBm				how when man	we had a present of the	AND DOLLARD	and interesting to		ana sinatan	as warman and the second
					and a second second second	Aller and a strange day	and the second second	AAA. Autority and	1	and there is a state which and
-60 dBm-								1		
70 dBm										
DO diam										
-B0 dBm										
						_		-		
CF 781.5 MHz				10000 pt	S	e	3 MHz/	-	-	Span 63.0 MHz 2022-11-19 19:19:41

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Hi-PIM – ANT1 Mid Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: QPSK

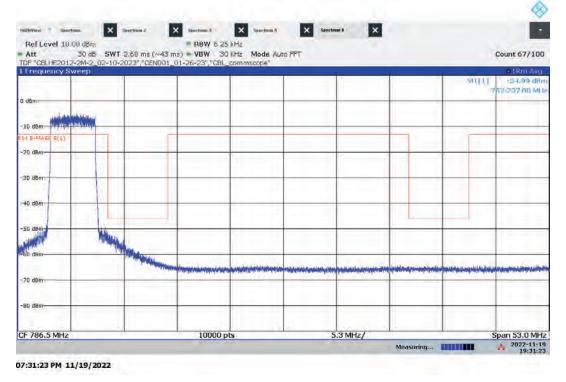
Att	dBm 30 dB	SWT	210 85	~30 ms		W 100 k W 300 k		ode Auto	FFT							C	ount 100/10
DF "CBLHF2012- Frequency Sw	2M-2_02	-10-2	023","C	EN001_0	1-26-2	3","CBL	comm	scope"	Sort.				_			12	O 1 Rm Ave
Frequency Sw	eep	-	111			-			1	_	-			1	MU	11	4.17 dB
		man	Summy.													7	STLAND PUT MI
dBm	-		-						-	_				-		-	
														- 11			
10 dBm	-					_				-				_		-	
-MMASK E(3)							-		-					111		-	
							12										
20 dBm	-																
30 dBm		-	-						-	_						-	
40 dBm	-	10.1		he	-		_			_				_		_	
2.24	- F	11		W	100		11				-						
SO dBm	hard		-	7	1												
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			-					and her de							a b and		
-60 dBm-		- 11										-					
70 dBm			-	_	-		-		-	_		_		-		-	
		- 11					1.1										
B0 dBm	_					_		_						-			
and addition							1			-			-				
									_								
F 781.5 MHz		-			1 - T	10000 p	ts			6	3 MHz/	1				S	pan 63.0 MF

Hi-PIM – ANTO High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: QPSK



07:28:38 PM 11/19/2022

Hi-PIM – ANT1 High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: QPSK



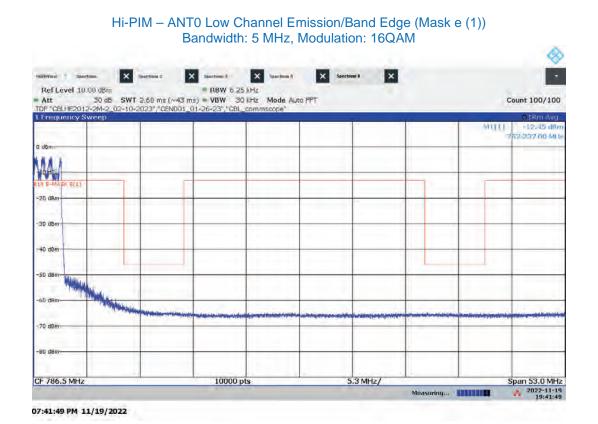
Hi-PIM – ANTO High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: QPSK

Ref Level 10.0 Att		210 ня (~30 ms	 RBW 100 ki VBW 300 ki 		FFT				Count 100/100
TDF "CBLHF2012-	2M-2_02-10-2	023","CEN001	01-26-23","CBL	commscope"					O1Rm Avg
L Frequency Sw	reep	punchung						MU	1 -29.87 dBn
0 dBm		manning							755.000 ND MI
10 dBm									
-MMASK E(3)	_						1		
20 dBm									
1									
30 dBm		*							
40 d8m									
	when		marking	1.000	1000				
	and mark		will will	1000					-
manne					and a second as the	ana ya camata wa waa	Marine Marine	-montering	man
-60 dBm-			-						-
70 dBm									-
BO dBm							1		
CF 781.5 MHz	_		10000 p	s	6	.3 MHz/			Span 63.0 MHz

07:28:07 PM 11/19/2022

Hi-PIM – ANT1 High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: QPSK

Att 30 dB TDF "CBLHF2012-2M-2_0	SWT 210 µs (~30 ms 2-10-2023","CEND01_			FFT				Count 100/100
Frequency Sweep		-				1	1 state	01Rm Avg
	10-141 Mary						MIT I	751,000 00 MI
l dBm								
10 dBm								-
-MMASK E(3)						1		-
-20 dBm-								
			-			1		
30 dBm	14							
So dom							1	
40 dBm	-							
40 dom	1	Call .				-		
-S0 dBm	-N*	hum						
SU dam		all	manyannan	mannon	- mar mar mar	a prover allower	mannes	mannen
					Contraction of the	1.	Che see	
-60 dBm-			1					
70 dBm								
							· · · · · · · · ·	
BO dBm		-						
				_				_
CF 781.5 MHz		10000 p	ts	6	5.3 MHz/			Span 63.0 MH



Hi-PIM – ANT1 Low Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 16QAM

TDF "CBLHF2012-2M-2_02-10-2023","CI	(~43 ms) = VBW 30 kHz Mode AL END01_01-26-23","CBL_commscope"			Count 100/
Frequency Sweep		1	1 1	•1Rm Mi[1] +12.45
				752,237.00
dBm			-	
84.5				
Orfeine				
H E-MASK E(4)				
20. dBm				
00 dBm				
40 dBm				
SO dBm			-	
The second se				
D dBm				
and the second se	we have the property of the second second second second second second			
70 dBm				
80 dBm			-	
F 786.5 MHz	10000 pts	5.3 MHz/	- I	Span 53.0
	Profession and		Measuring	

A

Hi-PIM – ANTO Low Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 16QAM

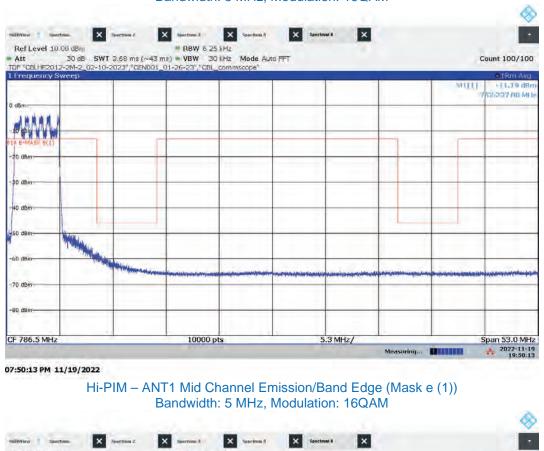
Ref Level 10.0 Att	30 dB SWT		 RBW 100 ki VBW 300 ki 	Hz Mode Auto	FFT				Count 100/100
DF "CBLHF2012 Frequency Sv		023","CENDO1	_01-26-23","CBL_	commscope"					O 1 Rm Avg
	MAN						1	MILL	31.01 dB 753.000 RD MI
dBm									
10 dBm									
MMASK E(3)						-			
20 dBm-	-	-				-			-
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ið dBm									-
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dBm									

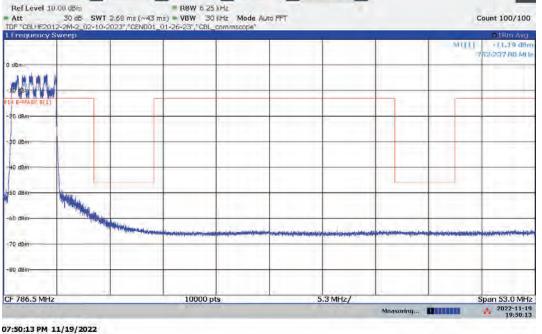
07:38:48 PM 11/19/2022

Hi-PIM – ANT1 Low Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 16QAM

TDF "CBLHF2012-2	M-2_02-10-2		vBW 300 ki 01-26-23","CBL		TTI				Count 100/100
Frequency Swe	ep			1	-	-	1	MULT	01Rm Avg
	MARAN	-							751.000 00 MI
dBm	VUVUL					-			
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-MMASK E(3)						-		-	
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00 dBm									_
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70 dBm									_
BO dBm						-			
				1.0					
F 781.5 MHz			10000 p		-	5.3 MHz/			Span 63.0 MH
F 701.5 MILZ			10000 p	LS		5.5 MH2/	Measuring		2022-11- 19:41:







EMC Report Shell Rev. October 2022 Client: CommScope Technologies LLC – Model: RPM-A5A11-B14

Hi-PIM – ANTO Mid Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 16QAM

DF "CBLHF201	2-2M-2 02-	-10-2023"."((~30 ms) EN001_01	-26-23","CBL	Hz Mode Auto commscope"	FFT				Count 100/10
Frequency S	weep	-	-			-	-	P	MI	01Rm Av
		ANNA							INT A	751.000 PD M
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								100		
10 dBm										
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70 dBm			-						-	
					11				-	
BO dBm	-				-	-	-			

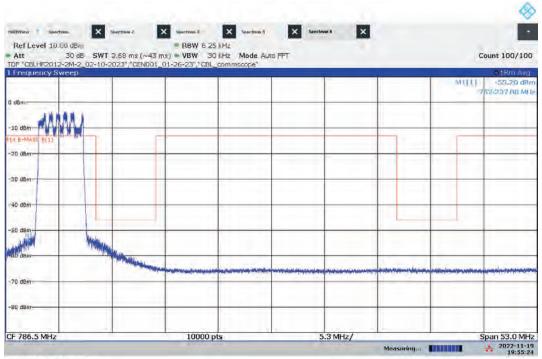
07:49:51 PM 11/19/2022

Hi-PIM – ANT1 Mid Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 16QAM

	30 dB	SWT	210 µs	~30 ms)	- VBW :	100 kHz 300 kHz	Mode Au	to FFT					C	punt 100/100
DF "CBLHF2012- Frequency Sw	-2M-2_02 /eep	-10-2	023°,"C	ENDO1_0	1-26-23",	CBL_CO	mmscope"							01Rm Avg
		Ah	A A A									MI		1.81 dB 53.000 00 MI
dBm		fuu	WLA									_	1	ATT TO THE MO
	-			_										
10 dBm							_	-						_
-MMASK E(3)	-							-				1	_	
20 dBm-				_		_		_					_	
		1.1												
30 dBm	_					_		_					_	
40 dBm													_	
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70 dBm		_				_	_	_					_	
Server 1		- 11												
BO dBm		-				_						_	_	
				-										
F 781.5 MHz	-				100	00 pts			6	3 MHz/				pan 63.0 MF
A TWAND MILIZ	-				100	ou pla			0.	S IM IF/	Measuring	Transmit		2022-11-1

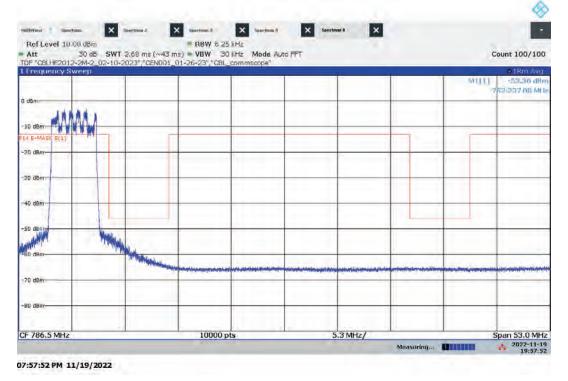
Hi-PIM – ANTO High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 16QAM

Intertek



07:55:24 PM 11/19/2022

Hi-PIM – ANT1 High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 16QAM



Hi-PIM – ANTO High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 16QAM

				kHz Mode Auto	FFT				Count 100/100
TDF "CBLHF2012-2M- L Frequency Sweet		023"/"GEN001_	U1-26-23", "Gb	L_commscope		_			O1Rm Avg
		AAAAA.						MUII	1 -28.96 dBr 755.000 00 MI
dBm		MMM		_	_				(Baland) fail Mi
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10 dBm									
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oD dBm			-	-		-		-	_
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	_								
BO dBm				-	-				

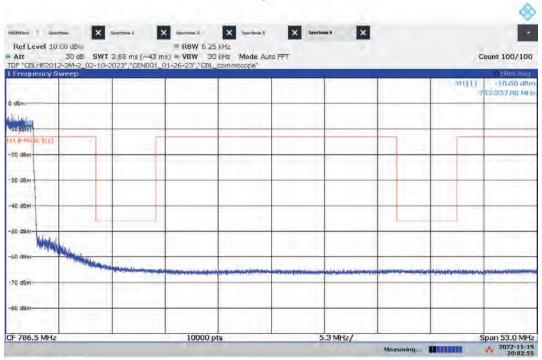
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Hi-PIM – ANT1 High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 16QAM

Att 30 dB TDF "CBLHF2012-2M-2_0	SWT 210 µs (~30 ms 2-10-2023"."CEN001	e) = VBW 300 k 01-26-23"."CBL	Hz Mode Auto commscope"	FFT				Count 100/100
Frequency Sweep								O1Rm Avg
	MMMA						M111	-30.30 dB
dBm	1.00017							-
10 dBm								
-MMASK E(3)					-		-	-
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			1					
30 dBm	1							
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-S0 dBm-		Vienow						-
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-60 dBm-			-		-			-
	1000							
70 dBm								
			1.1					
BD dBm	-			-	-			-
F 781.5 MHz	- 1	10000 p	te	6	.3 MHz/			Span 63.0 MH

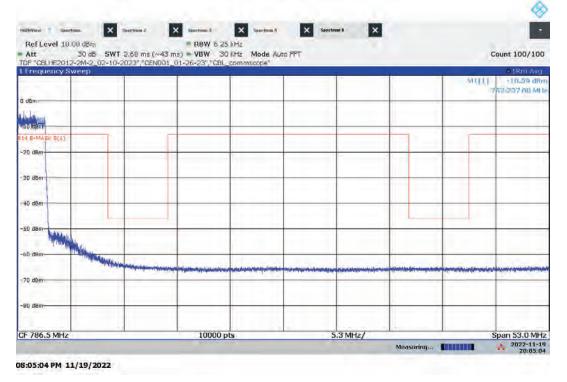
Hi-PIM – ANTO Low Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 64QAM

Intertek



08:02:56 PM 11/19/2022

Hi-PIM – ANT1 Low Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 64QAM



Hi-PIM – ANTO Low Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 64QAM

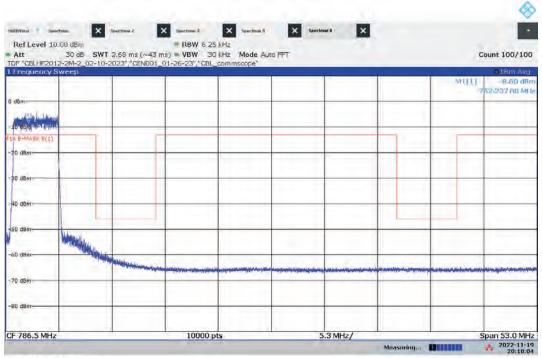
Ref Level 10.00 Att	30 dB SWT	210 µs (~30 m	RBW 100 k (s) = VBW 300 k	Hz Mode Auto	FFT				Count 100/100
DF "CBLHF2012-: Frequency Swi		023","CEN001	01-26-23","CBL	commscope"					O1Rm Avg
	rynna						-	MI.	
dBm			-						
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MMASK E(3)									
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d dBm			-	-					_
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BO dBm-				-				-	
				1.					
			10000 p		-	.3 MHz/			Span 63.0 MH

08:02:30 PM 11/19/2022

Hi-PIM – ANT1 Low Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 64QAM

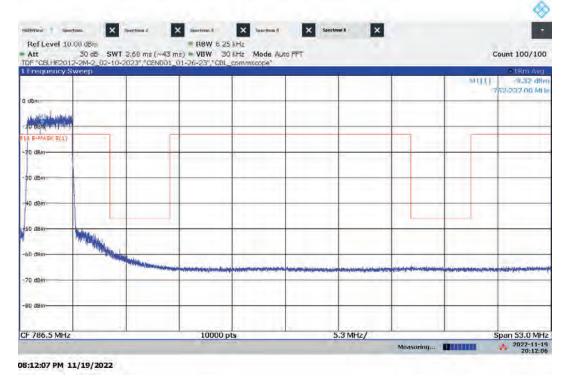
Att 3 TDF "CBLHE2012-2	0 dB SWT	210 µs (~30 ms) - VBW 300 ki	Hz Mode Auto	FFT				Count 100/10
Frequency Swe		CES / CLEVENT	I TO ES TRUE	communication of the	1	-	-		O1Rm Ave
	minon							MUL	755.000 00 MI
dBm									-
				1.1.1.1					
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-MMASK E(3)								-	
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	1000			11.000	1.1.1				
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-				Add Territoria		_			
BD dBm					-				-
F 781.5 MHz		-	10000 p	10-	-	6.3 MHz/	1	1	Span 63.0 MH

Hi-PIM – ANTO Mid Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 64QAM



08:10:04 PM 11/19/2022

Hi-PIM – ANT1 Mid Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 64QAM



Hi-PIM – ANTO Mid Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 64QAM

Ref Level 10.00	dBm			. RBW 100 ki	Hz					3
Att 3 DF "CBLHE2012-2	O dB SW	T 210 Hs (~30 ms)	- VBW 300 ki	Hz Mode Auto	FFT				Count 100/100
Frequency Swe	ep	3+2025 / G		1+20+20 1 GOL	commiscope	1				O1Rm Avg
		a line							MI I	1 4.32 dBr 753.000 00 MI
dBm					-					-
								1.00		
10 dBm										
-MMASK E(3)					11				1	
20 dBm	1						-			
30 dbm		-								_
40 dBm	www.www		wall Were	_						
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60 dBm			_							
							-			
70 dBm		-							-	_
									· · · · · · · · · · · · · · · · · · ·	-
BD dBm					-					
						-				

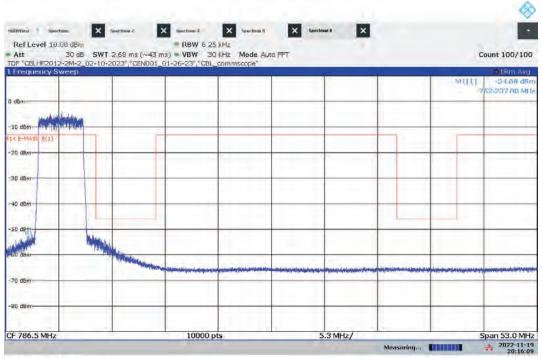
08:09:38 PM 11/19/2022

Hi-PIM – ANT1 Mid Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 64QAM

Ref Level 10.00 dBm			RBW 100 kF						
Att 30 dB DF "CBLHF2012-2M-2_0				tz Mode Auto	FFT				Count 100/100
Frequency Sweep	12-10-2020 / 0	404001_01-2	0-20 1 600	commiscope					O1Rm Avg
	111					1		MILI	
	printing								7551.000 00 MI
i dBm									
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-MMASK E(3)		_							
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-80 dBm-					-			-	
				1.					
		-			-				
F 781.5 MHz			10000 pt	LS		6.3 MHz/	Measuring	-	Span 63.0 MH 2022-11-1 20:11:4

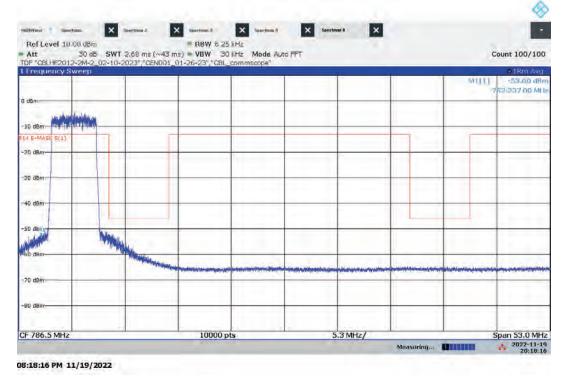
Hi-PIM – ANTO High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 64QAM

Intertek



08:16:09 PM 11/19/2022

Hi-PIM – ANT1 High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 64QAM



Hi-PIM – ANTO High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 64QAM

	0 dBm	210 us / ~ 30 ms	 RBW 100 ki VBW 300 ki 		FFT				Count 100/100
TDF "CBLHF2012-	2M-2_02-10-20				rr (The second second
Frequency Sw	eep		-	-		T	(Mil	018m Avg 51.01 dBn
	1.1.1.1	participany							755.000 PD MI
dBm									
				1.0.0					
10 dBm	-								10 1 1 1 1 1
E-MMASK E(3)	-								
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		-							
DO dBm		11							_
				1					
40 dBm			-						
2.20	www.	N N	No.	1			1		
S0 dBm	pant		Nelan						_
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-60 dBm									
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				1			1		
B0 dBm									
og som				-			1		
_									
F 781.5 MHz			10000 p	ts		5.3 MHz/			Span 63.0 MH2 2022-11-19 20:15:45

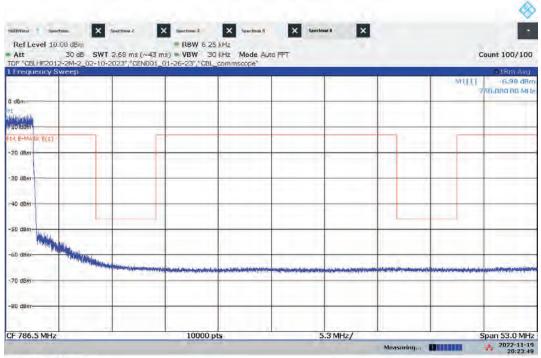
08:15:45 PM 11/19/2022

Hi-PIM – ANT1 High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 64QAM

		 RBW 100 kHz VBW 300 kHz 				c	ount 100/100
DF "CBLHF2012-2M-2_0; Frequency Sweep	2-10-2023","CEN001_	01-26-23","CBL_comn	nscope"				01Rm Avg
	mourie					MULT	-29,77 dB/ 51,000 00 MI
D dBm	hand						Paratitio fut MI
10 dBm							
-MMASK E(3)				_			
20 dBm							
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and making			1.1				
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remarkton		Winn	and a contraction of the contrac	In more particular	mannintworks	minimum	and any production
-60 dBm-							
70 dBm						_	
-90 d8m-					-		
CF 781.5 MHz		10000 pts		6.3 MHz/	+11,+		Span 63.0 MH

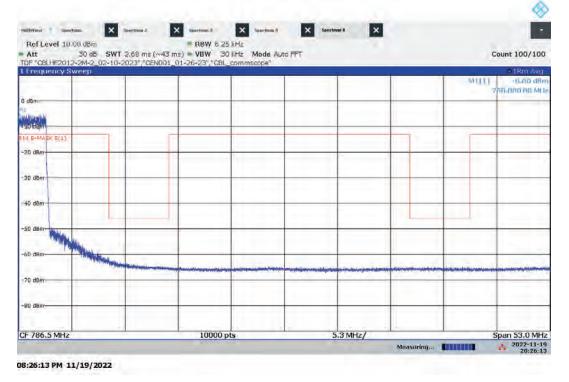
Hi-PIM – ANTO Low Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 256QAM

Intertek



08:23:49 PM 11/19/2022

Hi-PIM – ANT1 Low Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 256QAM



Hi-PIM – ANTO Low Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 256QAM

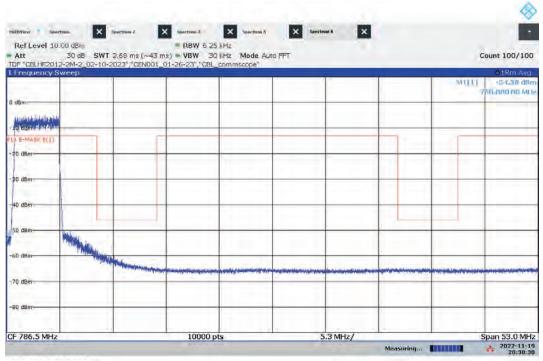
niitr¥iew Spectrum		pertrum 2	X Spertrum 3	_	× Specta				
Att 10.00	SO dB SWT	210 µs (~30 r	RBW 100 kF ns) = VBW 300 kF	z Mode Auto	FFT				Count 100/100
DF "CBLHF2012-2 Frequency Swe		023","CENDO:	_01-26-23","CBL_	commscope"					01Rm Avg
	manufacture							MU	755.000 00 MH
dBm						-			
									_
10 dBm -MMASK E(3)								· · · · · · · · · · · · · · · · · · ·	
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30 dBm	-	de la				_		_	_
40 dBm	N	have						-	
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			1						
70 dBm									
BO dBm			-					-	
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F 781.5 MHz			10000 pt	S		5.3 MHz/			Span 63.0 MHz

08:23:25 PM 11/19/2022

Hi-PIM – ANT1 Low Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 256QAM

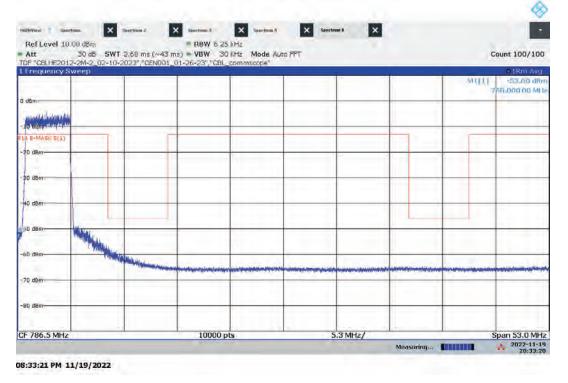
Ref Level 10.00			• RBW 100 k						
Att 3 DF "CBLHF2012-2	0 dB SWT :	210 µs (~30 m 023","CEND01	(1) VBW 300 k 01-26-23", "CBL	Hz Mode Auto commscope"	FFT				Count 100/100
Frequency Swe	ер					-	1	1	O1Rm Avg
	malling	1						MI	753.000 00 MI
dBm	(and a						-		
			-			-			
10 dBm									
-MMASK E(3)						1		1	_
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30 dBm		-							
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80 dBm									
_			-		-				
F 781.5 MHz			10000 p	ts	(5.3 MHz/	Measuring		Span 63.0 MH 2022-11-1 20:25:4

Hi-PIM – ANT0 Mid Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 256QAM



08:30:39 PM 11/19/2022

Hi-PIM – ANT1 Mid Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 256QAM



Hi-PIM – ANTO Mid Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 256QAM

	Bm		RBW 100 kF						
Att 30 DF "CBLHE2012-2M	dB SWT 210 µ				FFT				Count 100/100
Frequency Swee		CONTRACT_01	ED ED DUE	communication of the				1	O1Rm Avg
	montern	4						-MI 1	3.85 dBr 755.000 00 MI
l dbm									
10 d8m									
-MMASK E(3)			4						
20 dBm-	-	-				-			-
30 dBm									
40 dBm	www	hunge	_						
SD dBm	and a	Vinte	m.	-					
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6D dBm				1					-
70 dBm	_								-
BQ dBm				11					-
20 d8m 30 d8m 40 d8m 50 d8m 60 d8m 60 d8m	wert	whether the second	an market	in the second	-tront/selenstre	and the state of t	a da a su a contra gone a far	mahanana	nouron
									-
-BO dBm-				1			1		

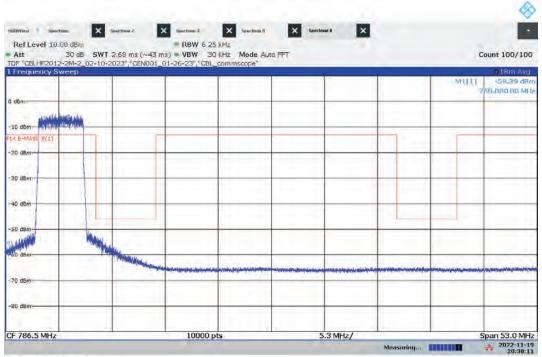
08:30:16 PM 11/19/2022

Hi-PIM – ANT1 Mid Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 256QAM

Ref Level 10:00 Att		WT 210	HE (~30 mE)	RBW 100 k	Hz Mode Aut	o FFT				Count 100/100
TDF "CBLHE2012-2	M-2_02-	10-2023	","CENDO1_0	1-26-23","CBL	commscope"	and a				
L Frequency Swe	ep				1	-	1	1	MIL	01Rm Avg 1.12 dBr
	1	properties	C.W.							751.000 00 MI
0 dBm	-					_	-	-		-
	1									
10 dBm	-	_								
-MMASK E(3)	1					-	-			
20 dBm-										
a dann					-		-	1		
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40 dBm	Int		they							
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-SO dBm	-			"this would					1. Contractor	
Norman and					Managalana	and the second and and and and and and and and and a	a series and a series of the		alana the same	- where a stranger was
-60 dBm-		-		-	-	-	-	-	-	_
70 dBm									_	
-BQ dBm		-			-	-	_	-		
					1					
				10000		-	COLUMN 1			
CF 781.5 MHz				10000 p	ts	_	6.3 MHz/	Measuring		Span 63.0 MH 2022-11-1 20:32:5

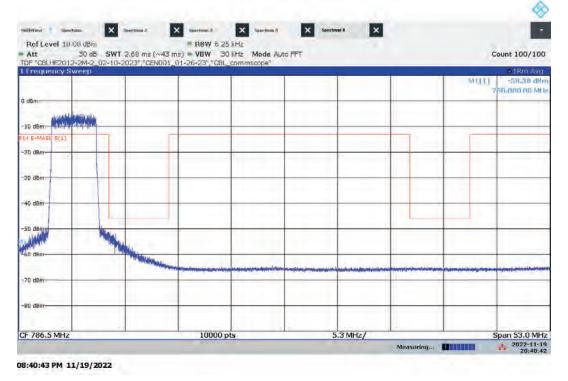
Hi-PIM – ANTO High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 256QAM

Intertek



08:38:12 PM 11/19/2022

Hi-PIM – ANT1 High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 5 MHz, Modulation: 256QAM



Hi-PIM – ANTO High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 256QAM

Ref Level 10.00 dB			RBW 100						
Att 30 s	B SWT 210 2 02-10-202	0 µs (~30 ms 3","CEND01_) = VBW 3001 01-26-23","CBL	Hz Mode Auto	FFT				Count 100/100
Frequency Sweep				1		-		-	O 1 Rm Avg
	2	1-manifer						MUI	1 -32.20 dBr 755.000 00 MI
l dBm									-
10 dBm									10 1 10 10 10
-MMASK E(3)				4		1			
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				11					
30 dBm	1			-					
40 dBm				-					_
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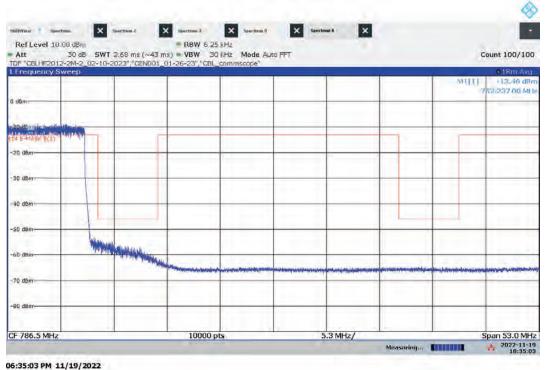
08:37:46 PM 11/19/2022

Hi-PIM – ANT1 High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 5 MHz, Modulation: 256QAM

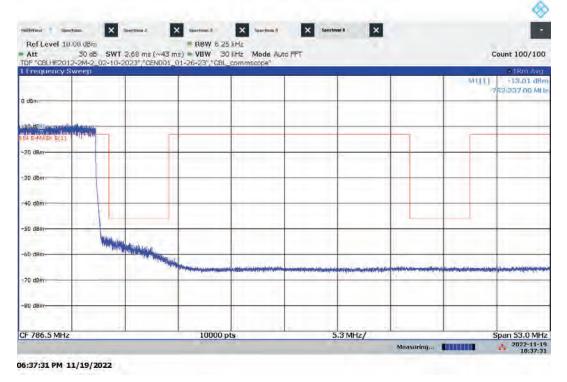
Att 30 dB	SWT 210 µs (~30 m	 RBW 100 ki VBW 300 ki 	Hz Mode Auto	FFT				Count 100/100
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F 701.3 MINZ		10000 p	LS .		5.5 WH2/	Measuring		2022-11-1 20:40:1

Hi-PIM – ANTO High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 10 MHz, Modulation: QPSK

Intertek



Hi-PIM – ANT1 High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 10 MHz, Modulation: QPSK



Hi-PIM – ANTO High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 10 MHz, Modulation: QPSK

Intertek

Ref Level 10.00			. RBW 100 k			nă 🗶			American
Att 3 DF "CBLHF2012-2	0 dB SWT	210 µs (~30 m 023"."CEND01	s) VBW 300 ki 01-26-23", "CBL	Hz Mode Auto commscope"	FFT				Count 100/10
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F 781.5 MHz	-		10000 p		-	.3 MHz/	-		Span 63.0 M

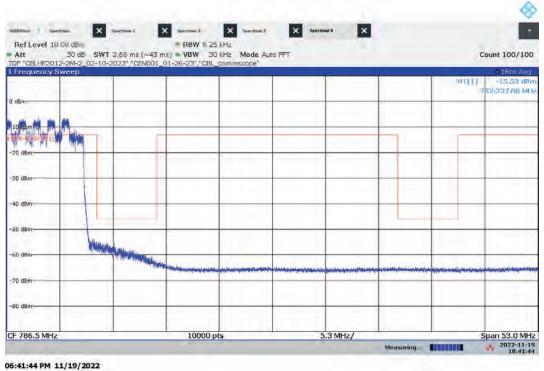
06:34:33 PM 11/19/2022

Hi-PIM – ANT1 High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 10 MHz, Modulation: QPSK

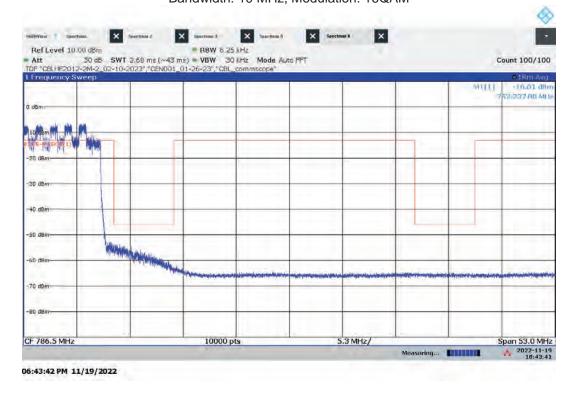
Att			ms) = VBW 300 k 1_01-26-23","CBL		to FFT				Count 100/10
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									10.000
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		1.							
BO dBm	_		-			-		-	
F 781.5 MHz		-	10000 p	te.		6.3 MHz/	-	1	Span 63.0 MH

Hi-PIM – ANTO High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 10 MHz, Modulation: 16QAM

Intertek



Hi-PIM – ANT1 High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 10 MHz, Modulation: 16QAM



Hi-PIM – ANTO High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 10 MHz, Modulation: 16QAM

Intertek

Att :	dBm 30 dB SWT	210 µs (~30	RBW 100 ms) = VBW 300	Hz Mode Aut	FFT				Count 100/10
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0 dBm									
0 dBm	_		-						-
								1	

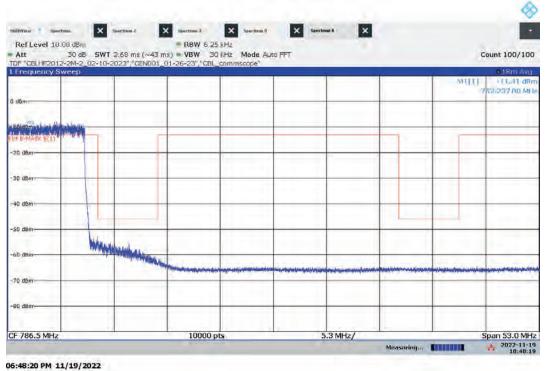
06:41:17 PM 11/19/2022

Hi-PIM – ANT1 High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 10 MHz, Modulation: 16QAM

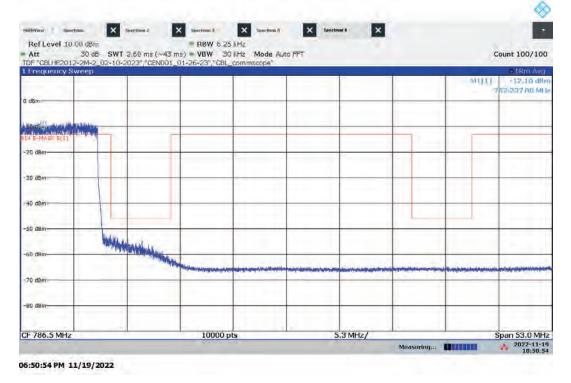
DF "CBLHF2012-2M	2_02-10-2		(1) VBW 300 01-26-23","CBL		FFT				Count 100/100
Energian Street	ANA	Mann							018m Ave 2.97 dB 751.000 80 Mi
40 dBm			wenne war		al source of the second s	here management	manatana	man	in an
F 781.5 MHz			10000 ;	ots	6	5.3 MHz/	Measuring		Span 63.0 Mł 2022-11- 10:43:

Hi-PIM – ANTO High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 10 MHz, Modulation: 64QAM

Intertek



Hi-PIM – ANT1 High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 10 MHz, Modulation: 64QAM

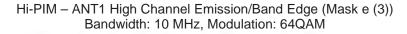


Hi-PIM – ANTO High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 10 MHz, Modulation: 64QAM

Intertek

Ref Level 10.00			- RBW 100 k						A of a factor
Att 2 DF "CBLHF2012-2	0 dB SWT	210 µs (~30 n	ns) = VBW 300 k	Hz Mode Auto	FFT				Count 100/100
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				1					
30 dBm	1								
40 dBm	1								
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70 dBm			-	-				-	
-								· · · · · ·	-
BQ dBm	_		-	-			1		
F 781.5 MHz		1	10000 p	tio.	6	.3 MHz/	-	1	Span 63.0 MH

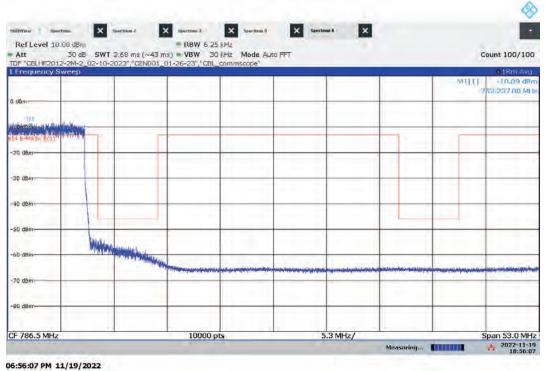
06:47:53 PM 11/19/2022



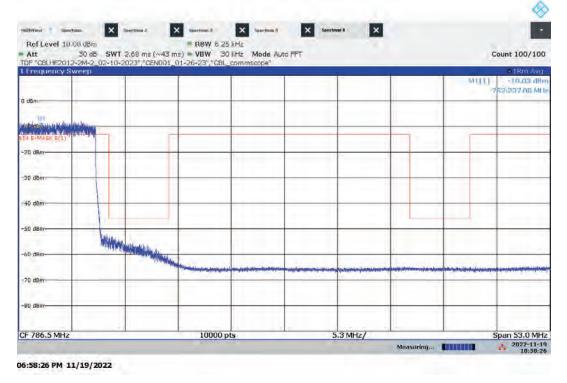
2023 / CENU01_0	1-26-23","CBL_	commscope"					
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Hi-PIM – ANTO High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 10 MHz, Modulation: 256QAM

Intertek



Hi-PIM – ANT1 High Channel Emission/Band Edge (Mask e (1)) Bandwidth: 10 MHz, Modulation: 256QAM



Hi-PIM – ANTO High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 10 MHz, Modulation: 256QAM

Intertek

Att 3 DF "CBLHF2012-2			s) - VBW 300 k		FFT				Count 100/10
Frequency Swe		025 / GENUGI,	01-20-20 GOL	usininscope	1				O 1 Rm Avg
	a hi hataa	MII MANANA MANANA						MI	753.000 00 M
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Hi-PIM – ANT1 High Channel Emission/Band Edge (Mask e (3)) Bandwidth: 10 MHz, Modulation: 256QAM

Ref Level 10:00 dBm Att 30 dB S	WT 210 µs (~30 ms)	RBW 100 kH BW 300 kH		FFT				Count 100/10
DF "CBLHF2012-2M-2_02-1 Frequency Sweep				CAN'S CONTRACTOR		_		O1Rm Ave
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and manut carry	i i i i i i i i i i i i i i i i i i i	M. Marine Marine Marine	1.000	1000				1.1
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bD dBm-								-
70 dBm								
BQ dBm								

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	Product Standard:	CFR47 FCC Part 90		Limit applied: See Report Section 6.3 Pretest Verification w/BB source: N/A				
Test Date	Test Personnel/ Initials	Supervising Engineer/ Initials	Input Voltage	Mode	Temp C°	Atmospheric Relative Humidity %	Data Atmospheric Pressure mbar	
11/19/2022	Kouma Sinn 143	Vathana F. Ven	POE	Transmit	24	14	1009	

Deviations, Additions, or Exclusions: None

EMC Report Shell Rev. October 2022 Client: CommScope Technologies LLC – Model: RPM-A5A11-B14

9 Antenna Conducted and Radiated Emissions

9.1 Method

Tests are performed in accordance with ANSI C63.26 and CFR47 FCC Parts 2.1051, 2.1057 and 90.

TEST SITE: EMC Lab and 10m ALSE

The EMC Lab has one Semi-anechoic Chamber and one Shielded Chamber. AC Mains Power is available at 120, 230, and 277 Single Phase; 208, 400, and 480 3-Phase. Large reference ground-planes are installed in the general lab area to facilitate EMC work not requiring a shielded environment.

The 10m ALSE is 13m (Length) x 21m (Depth) x 10m (Height) with the effective size in terms of space from the tips of the absorber is 12m (Length) x 20m (Depth) x 8.5m (Height). This chamber achieves broadband performance using a unique arrangement of hybrid and ferrite tile absorber. This chamber has a built in 3m diameter turntable (Embedded type). The metal structure of the table makes electrical connection around the entire circumference of the turntable to the ground plane with a metal brush type connection. The turntable is located on one end of the chamber and the antennas are mounted 3 and 10 meters away at the other end of the chamber on the adjustable an Antenna Mast. The antenna mast is a non-conductive bore sighted type with remote control of antenna height and polarization. The Antenna Mast and the turntable can be remotely controlled through the controller located in the adjacent Control room. A Styrofoam table 80 cm high is used for table-top equipment.

Measurement	Frequency Range	Expanded Uncertainty (k=2)	Ucispr
Radiated Emissions, 10m	30-1000 MHz	4.9 dB	6.3 dB
Radiated Emissions, 3m	30-1000 MHz	4.5 dB	6.3 dB
Radiated Emissions, 3m	1-6 GHz	4.4 dB	5.2 dB
Radiated Emissions, 3m	6-15 GHz	5.2 dB	5.5 dB
Radiated Emissions, 3m	15-18 GHz	4.8 dB	5.5 dB
Radiated Emissions, 3m	18-40 GHz	4.8 dB	N/A

Measurement Uncertainty

As shown in the table above our radiated emissions $U_{\it lab}$ is less than the corresponding $U_{\it CISPR}$

reference value in CISPR 16-4-2 Table 1, hence the compliance of the product is only based on the measured value, and no measurement uncertainty correction is required, based on CISPR 22 and CISPR 11 (for 2006 and later revisions) Clause 11.

Sample Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF +	CF - AG
Where	$FS = Field Strength in dB\mu V/m$
	RA = Receiver Amplitude (including preamplifier) in $dB\mu V$
	CF = Cable Attenuation Factor in dB
	AF = Antenna Factor in dB/m
	AG = Amplifier Gain in dB
Where	$\label{eq:RA} \begin{array}{l} RA = Receiver \; Amplitude \; (including \; preamplifier) \; in \; dB_{\mu}V \\ CF = Cable \; Attenuation \; Factor \; in \; dB \\ AF = Antenna \; Factor \; in \; dB/m \end{array}$

In the following table(s), the reading shown on the data table reflects the preamplifier gain. An example for the calculations in the following table is as follows.

Assume a receiver reading of 52.0 dB μ V is obtained. The antenna factor of 7.4 dB/m and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted, giving a field strength of 32 dB μ V/m. This value in dB μ V/m was converted to its corresponding level in μ V/m.

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 $RA = 52.0 \text{ dB}\mu\text{V} \\ AF = 7.4 \text{ dB}/\text{m} \\ CF = 1.6 \text{ dB} \\ AG = 29.0 \text{ dB} \\ FS = 32 \text{ dB}\mu\text{V/m} \\ \label{eq:result}$

To convert from $dB\mu V$ to μV or mV the following was used:

 $UF = 10^{(NF/20)} \text{ where } UF = \text{Net Reading in } \mu\text{V}$ $NF = \text{Net Reading in } dB\mu\text{V}$

Example:

$$\label{eq:FS} \begin{split} FS &= RA + AF + CF - AG = 52.0 + 7.4 + 1.6 - 29.0 = 32.0 \\ UF &= 10^{(32 \ dB\mu V \ / \ 20)} = 39.8 \ \mu V/m \end{split}$$

Alternately, when BAT-EMC Emission Software is used, the "Level" includes all losses and gains and is compared directly in the "Margin" column to the "Limit". The "Correction" includes Antenna Factor, Preamp, and Cable Loss. These are already accounted for in the "Level" column.

9.2 Test Equipment Used:

Test equipment used for antenna port conducted emissions

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
DAV005'	Weather Station	Davis	6250	MS191218083	02/11/2022	02/11/2023
ROS005-1'	Signal and Spectrum Analyzer	Rohde and Shwartz	FSW43	100646	11/02/2021	11/02/2022
CEN001'	DC-40GHz attenuator 20dB	Centric RF	C411-20	CEN001	01/26/2022	01/26/2023
	2m 9kHz-40GHz Coaxial Cable -					
CBLHF2012-2M-2'	SET2	Huber & Suhner	SF102	252675002	02/10/2022	02/10/2023
CEN001'	DC-40GHz attenuator 20dB	Centric RF	C411-20	CEN001	01/26/2022	01/26/2023
None	Mini SMA cable	Provided by CommScope	None	None	VBU	Verified

Software Utilized:

Name	Manufacturer	Version
None	N/A	N/A

Test equipment used for radiated emissions from 9 kHz-30 MHz

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
DAV007'	Weather Station Vantage Vue	Davis	6250	MS191212003	03/08/2022	03/08/2023
145108'	EMI Test Receiver (20Hz - 40GHz)	Rohde & Schwarz	ESIB40	100209	06/23/2022	06/23/2023
145-420'	Receiver to floor cable	Utiflex	UFB311A-2-0591-70070	145-420	02/21/2022	02/21/2023
145-414'	Cable 145-414	Huber + Suhner	3m Track A cable	145-414	01/14/2022	01/14/2023
145-423'	Pre-amp to under floor	Huber and Suhner	SF106A/11N/11N/1.5m	145-423	02/15/2022	02/15/2023
IW006;	DC-18GHz cable 8.4m long	Insulated Wire	2800-NPS	IW006	07/14/2022	07/14/2023
ETS003'	9kHz-30MHz Active Loop Antenna	ETS Lindgren	6502	00143396	09/06/2022	09/06/2023

Test equipment used for radiated emissions from 30-1000 MHz

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
DAV007'	Weather Station Vantage Vue	Davis	6250	MS191212003	03/08/2022	03/08/2023
PRE10'	30-1000MHz pre-amp	ITS	PRE10	PRE10	02/15/2022	02/15/2023
145-424'	9kHz to 40GHz Cable	Huber and Suhner	Sucoflex	145-424	02/15/2022	02/15/2023
145-422'	10Amp Pre-amp to under floor	Utiflex	UFB311A-0-2756-70070	145-422	02/21/2022	02/21/2023
HS003'	10m under floor cable	Huber-Schuner	10m-1	HS003	02/15/2022	02/15/2023
145-420'	Receiver to floor cable	Utiflex	UFB311A-2-0591-70070	145-420	02/21/2022	02/21/2023
145145'	Broadband Hybrid Antenna 30 MHz - 3 GHz	Sunol Sciences Corp.	JB3	A122313	06/16/2022	06/16/2023
145108'	EMI Test Receiver (20Hz - 40GHz)	Rohde & Schwarz	ESIB40	100209	06/23/2022	06/23/2023

Test equipment used for radiated emissions from 1-8 GHz

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
DAV007'	Weather Station Vantage Vue	Davis	6250	MS191212003	03/08/2022	03/08/2023
PRE12'	Pre-amplifier	Com Power	PAM-118A	18040117	12/06/2021	12/06/2022
145108'	EMI Test Receiver (20Hz - 40GHz)	Rohde & Schwarz	ESIB40	100209	06/23/2022	06/23/2023
ETS002'	1-18GHz DRG Horn Antenna	ETS Lindgren	3117	00143260	09/27/2022	09/27/2023
145-420'	Receiver to floor cable	Utiflex	UFB311A-2-0591-70070	145-420	02/21/2022	02/21/2023
145-414'	Cable 145-414	Huber + Suhner	3m Track A cable	145-414	01/14/2022	01/14/2023
145-423'	Pre-amp to under floor	Huber and Suhner	SF106A/11N/11N/1.5m	145-423	02/15/2022	02/15/2023
IW006;	DC-18GHz cable 8.4m long	Insulated Wire	2800-NPS	IW006	07/14/2022	07/14/2023
REA003	1GHz High Pass Filter	Reactel, Inc	7HS-1G/10G-S11	06-1	02/09/2022	02/09/2023

Software Utilized:

Name	Manufacturer	Version
BAT-EMC	Nexio	3.18.0.16

9.3 Results:

The sample tested was found to Comply.

Limits:

CFR47 FCC Part 90.543 (e)(1) and (e)(3) – For operations in the 758-768 MHz, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(e)(1): On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.

(e)(3): On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

9.4 **Setup Photographs:**

Confidential – Photos not included in this report

9.5 Plots/Data:

Lo-PIM Antenna Port Conducted Emissions, 9 kHz-8 GHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 256QAM, ANT0, Low Channel

	RBW 100 kHz		2.000.000.000
Att 30 dB SWT 80 ms TOF "CBLHE2012-2M-2_02-10-2023"," CE	VBW 300 kHz: Mode Auto Sweep N001_01-26-23","CBL_commscope"		Count 100/100
I Frequency Sweep		T T T	018m Avg Mi[1] -52,87 dBn
10 dBm			559,609 MI
Q dBm			
-10 dBm H1 -13,000 dbm			
-20 dBm-			
-30 dBm			
-40 dBm			
-50 dBm			
-50 (Bm			
-70 dBm			
CF 4.000 004 5 GHz	10000 pts	800.0 MHz/	Span 7.999 991 GH

Lo-PIM Antenna Port Conducted Emissions, 9 kHz-8 GHz

Worst-case output power: Bandwidth: 5 MHz, Modulation: 256QAM, ANT1, Low Channel

Att 30 dB SWT 80 ms . 1 DF "CBLHF2012-2M-2_02-10-2023", "CEN	/BW 300 kHz Mode Auto Sweep 001_01-26-23","CBL_commscope"		Count 100/10
Frequency Sweep		1 1	01Rm Avg Mi[1] -53.00 dB
			M1[1] +53.00 dB 559.609 MI
0 dBm			
1 dBm			
10 dBm			
H1 -13,000 dbin			
20 dBm			
30 dBm			
			- 1
40 dBm-			
50 dBm			
50 dBm-			
70 dBm			
F 4.000 004 5 GHz	10000 pts	800.0 MHz/	Span 7.999 991 GF

Lo-PIM Antenna Port Conducted Emissions, 9 kHz-8 GHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 64QAM, ANTO, Mid Channel

Ref Level 20.00 dBm 🛛 🖷 F	BW 100 kHz	X seechem 6	2 1 2 2 2
Att 30 dB SWT 90 ms • V F "CBLHF2012-2M-2_02-10-2023","CEN	BW 300 kHz Mode Auto Sweep		Count 100/100
Frequency Sweep		1 1	01Rm Avg
			M1[1] -52:70 dBm 559:609 MH
dBm			
dBm	_		
0 dBm			
0 dBm-			
0 dBm			
0 dBm	_		_
0 dBm			
0 dBm-			
0 dBm			

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Lo-PIM Antenna Port Conducted Emissions, 9 kHz-8 GHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 64QAM, ANT1, Mid Channel

Att 30 dB SWT 80 r	ns • VBW 300 kHz Mode /				Count 100/10
I Frequency Sweep				1. 1.	01Rm Avg M1[1] -52.68 dB
					559.609 MI
10 dBm				-	
0 dBm					
-10 dBm-					
H1 13,000 dBm					
20 dBm					
		1		1	
30 dBm					
40 dBm					
-50 dBm			-		
Su usin					
60 dBm					
-70 dBm-					
9.0 kHz	10000 pts		800.0 MHz/	- L-	8.0 GH

Lo-PIM Antenna Port Conducted Emissions, 9 kHz-8 GHz Worst-case output power: Bandwidth: 5 MHz. Modulation: 64QAM, ANTO, High Channel

ruilhrview Spectrum X Spectrum 2	X spertrum.1 X Spertrum.1	× suectrum 6 ×	
	RBW 100 kHz		2
Att 30 dB SWT 80 ms TDF "CBLHF2012-2M-2_02-10-2023","CF	VBW 300 kHz Mode Auto Sweep ND01_01-26-23", "CBL_commscope"		Count 100/100
L Frequency Sweep			O1Rm Avg
			M1[1] -52.74 dBm 559.609 MH
10 dBm			-03200370018
0 dBm			
-10 dBm			
H1 -13,000,db/n			
-20 dBm			
-30 dBm			
			- 1
-40 d8m-			
-50 dBm			
-50 dBm			
-70 dBm-			

10:39:39 PM 11/19/2022

Lo-PIM Antenna Port Conducted Emissions, 9 kHz-8 GHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 64QAM, ANT1, High Channel

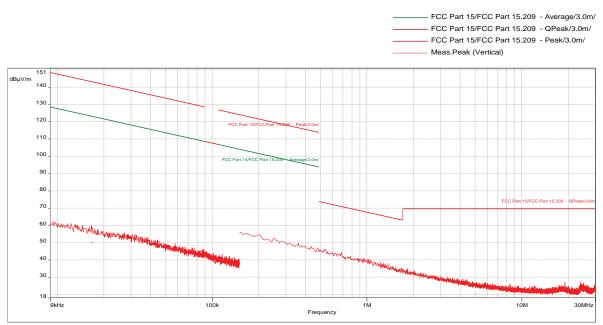
Att 30 dB SWT 80 m	s VBW 300 kHz Mode Auto Sweep "CEND01_01-26-23","CBL_commscope"		Co	ount 100/100
L Frequency Sweep				O1Rm Avg
			Milil	-52.51 dBn 559.609 MH
10 dBm				
0 dBm				
-10 dBm-				
H1 (13,000 dbm				
20 dBm				
-30 dBm				
-40 dBm				
-50 dBm				
60 dBm				
-70 dBm				
9.0 kHz	10000 pts	800.0 MHz/		8.0 GHz

Lo-PIM Radiated Emissions, 9 kHz-30 MHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 64QAM, Mid Channel (Only mid channel was selected for testing in this frequency range)

Test Information:

Date and Time	11/21/2022 5:54:24 PM
Client and Project Number	CommScope_G105250625
Engineer	Vathana Ven
Temperature	26 C
Humidity	12 %
Atmospheric Pressure	1013 mbar
Comments	RE 9kHz-30MHz Loop antenna, Electric Field, 3M Location (FCC 15.209)_(Lo-PIM)
	Tx Mid CH_5MHz BW_64QAM

Graph:



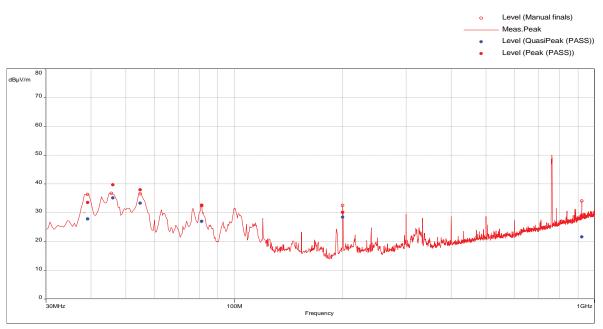
<u>Results</u>: No emissions were detected above the measuring equipment noise floor.

Lo-PIM Radiated Emissions, 30-1000 MHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 256QAM, Low Channel

Test Information:

Date and Time	11/20/2022 8:34:32 AM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	24 C
Humidity	17 %
Atmospheric Pressure	1003 mbar
Comments	Scan 1: Low Ch (Lo-PIM), 5 MHz 256QAM, RE 30-1000MHz SA mode

Graph:



Results:

EIRP Level (PASS) (6)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
39.32631579	33.57	-51.23	-13	-38.23	96.00	3.13	Vertical	120000.00	-18.90
46.13684211	39.73	-45.07	-13	-32.07	39.00	1.44	Vertical	120000.00	-23.41
54.73684211	37.99	-46.81	-13	-33.81	335.00	2.01	Vertical	120000.00	-25.68
81.16842105	32.66	-52.14	-13	-39.14	170.00	2.84	Vertical	120000.00	-25.08
200	30.12	-54.68	-13	-41.68	155.00	1.53	Vertical	120000.00	-19.11
922.1052632	28.50	-56.3	-13	-43.3	234.00	2.17	Vertical	120000.00	-5.01

Notes:

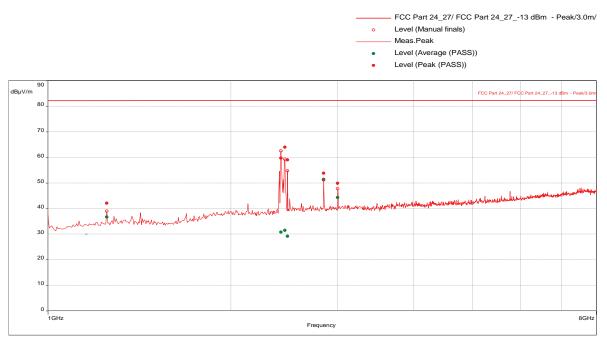
The level in EIRP (dBm) is calculated from peak readings as:

Lo-PIM Radiated Emissions, 1-8 GHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 256QAM, Low Channel

Test Information:

Date and Time	11/21/2022 8:23:52 PM
Client and Project Number	CommScope_G105250625
Engineer	Vathana Ven
Temperature	26 C
Humidity	12 %
Atmospheric Pressure	1013 mbar
Comments	Low Ch (Lo-PIM), 5 MHz 256QAM, RE 1-8 GHz

Graph:



Results:

EIRP Level (PASS) (6)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBµV/m)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
1250	42.10	-53.16	-13	-40.07	293.00	1.80	Horizontal	100000.00	-7.62
2422.368421	59.69	-35.57	-13	-22.50	170.00	3.69	Vertical	1000000.00	-3.29
2453.157895	63.98	-31.28	-13	-18.21	344.00	1.90	Vertical	1000000.00	-2.99
2480	59.00	-36.26	-13	-23.20	97.00	1.05	Vertical	1000000.00	-2.78
2844.473684	53.80	-41.46	-13	-28.40	147.00	1.70	Vertical	100000.00	-2.40
3000	49.87	-45.39	-13	-32.33	133.00	1.30	Vertical	1000000.00	-2.02

Notes:

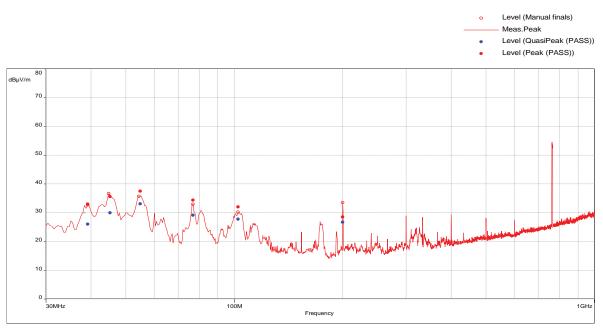
The level in EIRP (dBm) is calculated from peak readings as:

Lo-PIM Radiated Emissions, 30-1000 MHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 64QAM, Mid Channel

Test Information:

Date and Time	11/20/2022 9:25:58 AM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	24 C
Humidity	17 %
Atmospheric Pressure	1003 mbar
Comments	Scan 2: Mid Ch (Lo-PIM), 5 MHz 64QAM, RE 30-1000MHz SA mode

Graph:



Results:

EIRP Level (PASS) (6)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
39.26315789	33.04	-51.76	-13	-38.76	118.00	2.51	Vertical	120000.00	-18.85
45.08421053	35.60	-49.2	-13	-36.2	323.00	1.45	Vertical	120000.00	-22.82
54.77894737	37.52	-47.28	-13	-34.28	315.00	1.79	Vertical	120000.00	-25.68
76.98947368	34.36	-50.44	-13	-37.44	301.00	2.85	Vertical	120000.00	-24.83
102.4947368	32.00	-52.8	-13	-39.8	0.00	1.41	Vertical	120000.00	-21.27
200	28.50	-56.3	-13	-43.3	148.00	2.56	Vertical	120000.00	-19.11

Notes:

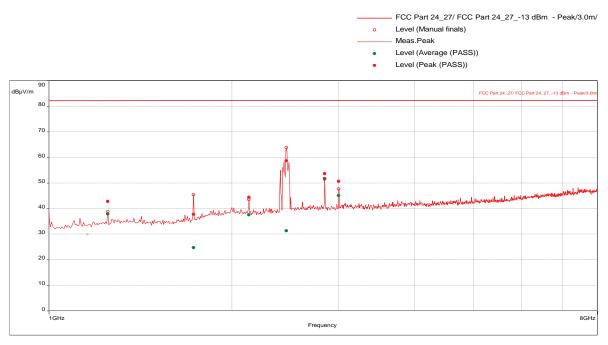
The level in EIRP (dBm) is calculated from peak readings as:

Lo-PIM Radiated Emissions, 1-8 GHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 64QAM, Mid Channel

Test Information:

Date and Time	11/21/2022 7:25:53 PM
Client and Project Number	CommScope_G105250625
Engineer	Vathana Ven
Temperature	26 C
Humidity	12 %
Atmospheric Pressure	1013 mbar
Comments	Mid Ch (Lo-PIM), 5 MHz 64QAM, RE 1-8 GHz SA mode

Graph:



Results:

EIRP Level (PASS) (6)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
1250	42.77	-52.49	-13	-39.40	299.00	1.80	Horizontal	1000000.00	-7.62
1730.526316	37.70	-57.56	-13	-44.48	51.00	2.60	Horizontal	1000000.00	-6.19
2133.421053	44.41	-50.85	-13	-37.78	109.00	1.00	Vertical	1000000.00	-3.86
2458.947368	58.67	-36.59	-13	-23.52	210.00	2.50	Vertical	1000000.00	-2.96
2844.473684	53.67	-41.59	-13	-28.53	153.00	1.70	Vertical	1000000.00	-2.40
3000	50.61	-44.65	-13	-31.59	125.00	1.01	Vertical	1000000.00	-2.02

Notes:

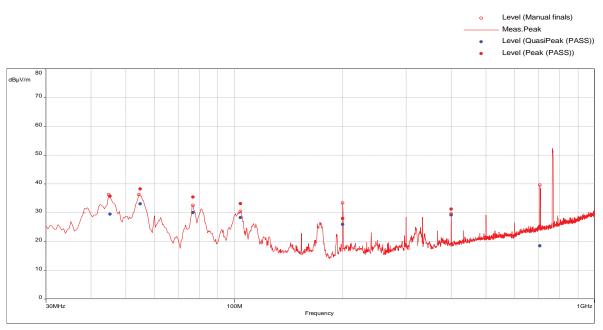
The level in EIRP (dBm) is calculated from peak readings as:

Lo-PIM Radiated Emissions, 30-1000 MHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 64QAM, High Channel

Test Information:

Date and Time	11/20/2022 10:16:22 AM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	24 C
Humidity	17 %
Atmospheric Pressure	1003 mbar
Comments	Scan 3: High Ch (Lo-PIM), 5 MHz 64QAM, RE 30-1000MHz SA mode

Graph:



Results:

EIRP Level (PASS) (7)

Frequency	Peak	EIRP	Limit	Margin	Azimuth	Height	Pol.	RBW (Hz)	Correction
(MHz)	Level	Level	(dBm)	(dB)	(°)	(m)			(dB)
	(dBµV/m)	(dBm)							
45.24210526	35.78	-49.02	-13	-36.02	258.00	2.46	Vertical	120000.00	-22.90
54.87368421	38.26	-46.54	-13	-33.54	257.00	1.81	Vertical	120000.00	-25.69
76.8	35.44	-49.36	-13	-36.36	316.00	2.85	Vertical	120000.00	-24.81
104.0947368	33.13	-51.67	-13	-38.67	0.00	1.29	Vertical	120000.00	-20.79
200	27.97	-56.83	-13	-43.83	163.00	2.61	Vertical	120000.00	-19.11
400	31.23	-53.57	-13	-40.57	279.00	2.25	Horizontal	120000.00	-15.19
704.7052632	25.22	-59.58	-13	-46.58	353.00	2.45	Vertical	120000.00	-8.78

Notes:

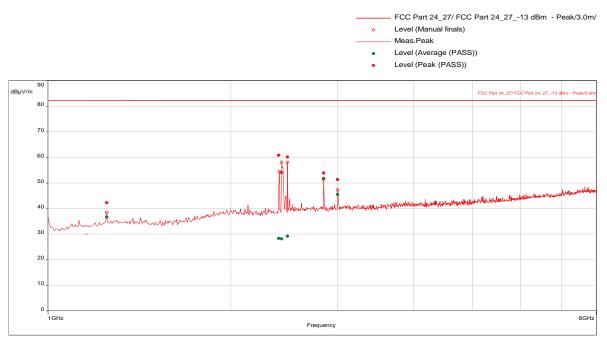
The level in EIRP (dBm) is calculated from peak readings as:

Lo-PIM Radiated Emissions, 1-8 GHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 64QAM, High Channel

Test Information:

Date and Time	11/21/2022 7:52:50 PM
Client and Project Number	CommScope_G105250625
Engineer	Vathana Ven
Temperature	26 C
Humidity	12 %
Atmospheric Pressure	1013 mbar
Comments	High Ch (Lo-PIM), 5 MHz 64QAM, RE 1-8 Ghz SA mode

Graph:



Results:

EIRP Level (PASS) (6)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
1250	42.29	-52.97	-13	-39.88	290.00	1.75	Horizontal	1000000.00	-7.62
2402.105263	60.82	-34.44	-13	-21.37	169.00	2.35	Vertical	1000000.00	-3.40
2426.578947	54.08	-41.18	-13	-28.11	232.00	1.55	Vertical	1000000.00	-3.29
2479.736842	60.19	-35.07	-13	-22.00	309.00	1.00	Vertical	1000000.00	-2.78
2844.473684	53.93	-41.33	-13	-28.27	147.00	1.70	Vertical	1000000.00	-2.40
3000	51.33	-43.93	-13	-30.86	125.00	1.05	Vertical	1000000.00	-2.02

Notes:

The level in EIRP (dBm) is calculated from peak readings as:

Hi-PIM Antenna Port Conducted Emissions, 9 kHz-8 GHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 16QAM, ANT0, Low Channel

Ref Level 20.00 dBm	thum 2 Seathand Seathand	a X Spectrum A X	A second
	ms • VBW 300 kHz Mode Auto Sweep 3","CEND01_01-26-23","CBL_commscope"		Count 100/100
1 Frequency Sweep			O 1 Rm Avg
			M1[1] -52.37 dBm 986.129 Mile
10 dBm			
0 d6m			
-10 dBm			
- 20 dBm			
-30 dbm			
-40 d8m			
-50 dBm			
60 dBm			
-70 dBm-			

09:18:23 PM 11/19/2022

Hi-PIM Antenna Port Conducted Emissions, 9 kHz-8 GHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 16QAM, ANT1, Low Channel

TDF "CBLHF2012-2M-2_02-10-2023","(VBW 300 kHz Mode Auto Sweep- END01_01-26-23","CBL_commscope"		Count 100/100
L Frequency Sweep			01Rm Avg M1[1] -52,61 dBn 986,129 MI
0 dBm			
dßm			
10 dBm			
20 dBm			
30 dBm			
40 dBm-	_		_
50 /JBm			
50 aBm-			
70 dBm	_		
F 4.000 004 5 GHz	10000 pts	800.0 MHz/	Span 7.999 991 GH

Hi-PIM Antenna Port Conducted Emissions, 9 kHz-8 GHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 64QAM, ANT0, Mid Channel

Ref Level 20.00 dBm # Att 30 dB SWT 90 ms	RBW 100 kHz VBW 300 kHz Mode Auto Sweep	Curren 100 (100
TDF "CBLHF2012-2M-2_02-10-2023","CEN		Count 100/100
L Frequency Sweep		01Rm Avg M1[1] -52.75 dBn 559.609 Mth
10 dBm		
0 d6m		
-10 dBm		
-20 dBm-	_	
-30 dBm		_
-40 dBm-	-	
-S0 dBm		
-60 @Bm		

09:22:36 PM 11/19/2022

Hi-PIM Antenna Port Conducted Emissions, 9 kHz-8 GHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 64QAM, ANT1, Mid Channel

TDF "CBLHE2012-2M-2_02-10-2023","CEN	BW 300 kHz Mode Auto Sweep 001_01-26-23","CBL_commscope"		Count 100/100
L Frequency Sweep			01Rm Avg M1[1] -52.64 dBr 559.609 MI
0 dBm			203/00/4 MB
dBm	_		
10 dBm			
20 dBm			
30 dBm			
40 dBm-			
50 dBm			
60 dBm-			
70 dbm	_		
:F 4.000 004 5 GHz	10000 pts	800.0 MHz/	Span 7.999 991 GF

Hi-PIM Antenna Port Conducted Emissions, 9 kHz-8 GHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 16QAM, ANTO, High Channel

	RBW 100 kHz VBW 300 kHz Mode Auto Sweep		Count 100/100
TDF "CBLHF2012-2M-2_02-10-2023","C			
I Frequency Sweep	1 1		01Rm Avg M1[1] -52.53 dBm
10 dBm			559,609 MHz
U dBm-			
-10 dBm			
H1 -13,000 dBm			
-20 dBm-			
30 dBm			
-40 dBm-			
-50 d8m-141			
-BU dBin			
-70 d8m			
CF 4.000 004 5 GHz	10000 pts	800.0 MHz/	Span 7.999 991 GHz

09:24:30 PM 11/19/2022

Hi-PIM Antenna Port Conducted Emissions, 9 kHz-8 GHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 16QAM, ANT1, High Channel

TDF "CBLHF2012-2M-2_02-10-2023","CEN	VBW 300 kHz Mode Auto Sweep ID01_01-26-23","CBL_commscope"			Count 100/100
Frequency Sweep			Mili	01Rm Avg +52,73 dB/
			and a second sec	559.609 MI
0 dBm				-
dBm				-
10 dBm				
H1 13,000,dbm				
20 dBm				
30 dBm				
40 d8m				
50 dBm		a for the second		
- the man				
50 (Bm-				
70 dBm				
:F 4.000 004 5 GHz	10000 pts	800.0 MHz/	Measuring	7.9999991 GH

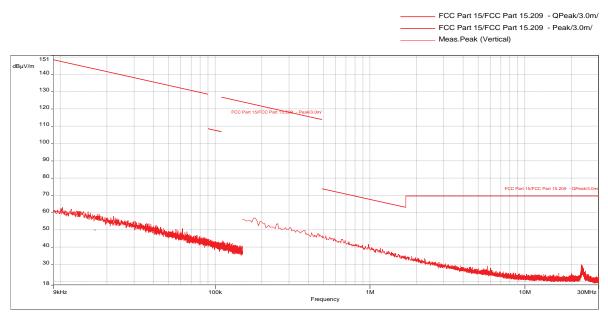
A

Hi-PIM Radiated Emissions, 9 kHz-30 MHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 16QAM, Low Channel (Only low channel was selected for testing in this frequency range)

Test Information:

Date and Time	11/21/2022 4:32:06 PM
Client and Project Number	CommScope_G105250625
Engineer	Vathana Ven
Temperature	26 C
Humidity	12 %
Atmospheric Pressure	1013 mbar
Comments	CRE 9kHz-30MHz Loop antenna, Electric Field, 3M Location (FCC 15.209)_Tx High
	CH_5MHz BW_16QAM

Graph:



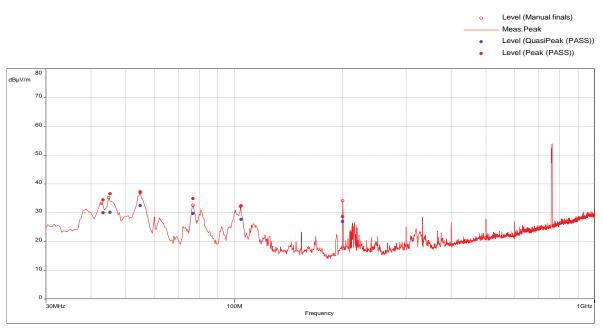
 $\underline{\textbf{Results:}} \text{ No emissions were detected above the measuring equipment noise floor.}$

Hi-PIM Radiated Emissions, 30-1000 MHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 16QAM, Low Channel

Test Information:

Date and Time	11/20/2022 11:14:17 AM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	24 C
Humidity	17 %
Atmospheric Pressure	1003 mbar
Comments	Scan 4: Low Ch (Hi-PIM), 5 MHz 16QAM, RE 30-1000MHz SA mode

Graph:



Results:

EIRP Level (PASS) (6)

Frequency (MHz)	Peak Level	EIRP Level	Limit (dBm)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
	(dBµV/m)	(dBm)							
43.11578947	34.46	-50.34	-13	-37.34	0.00	2.45	Vertical	120000.00	-21.59
45.11578947	36.55	-48.25	-13	-35.25	273.00	1.45	Vertical	120000.00	-22.83
54.95789474	37.26	-47.54	-13	-34.54	82.00	1.00	Vertical	120000.00	-25.70
76.83157895	34.91	-49.89	-13	-36.89	302.00	2.68	Vertical	120000.00	-24.81
104.2842105	32.44	-52.36	-13	-39.36	1.00	2.51	Vertical	120000.00	-20.75
200	28.68	-56.12	-13	-43.12	150.00	2.18	Vertical	120000.00	-19.11

Notes:

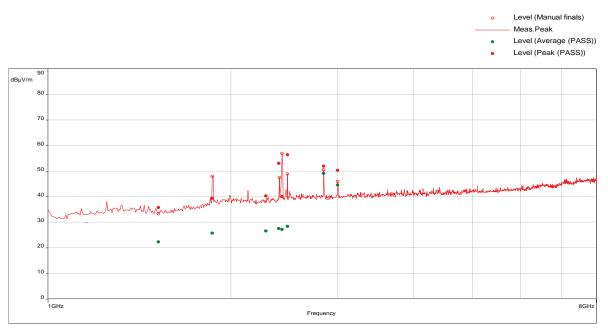
The level in EIRP (dBm) is calculated from peak readings as:

Hi-PIM Radiated Emissions, 1-8 GHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 16QAM, Low Channel

Test Information:

Date and Time	11/20/2022 3:24:39 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	24 C
Humidity	17 %
Atmospheric Pressure	1003 mbar
Comments	Scan 9: Lo Ch (Hi-PIM), 5 MHz 16QAM, RE 1-8 Ghz SA mode

Graph:



Results:

EIRP Level (PASS) (8)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
1519.736842	35.78	-59.48	-13	-46.48	286.00	1.35	Vertical	1000000.00	-7.97
1863.421053	39.39	-55.87	-13	-42.87	31.00	3.25	Vertical	100000.00	-4.37
2282.631579	40.31	-54.95	-13	-41.95	199.00	3.05	Horizontal	100000.00	-3.85
2402.105263	53.05	-42.21	-13	-29.21	17.00	2.05	Vertical	100000.00	-3.40
2427.631579	40.08	-55.18	-13	-42.18	75.00	2.05	Vertical	1000000.00	-3.29
2480.263158	56.36	-38.9	-13	-25.9	234.00	1.45	Vertical	1000000.00	-2.78
2844.473684	51.97	-43.29	-13	-30.29	112.00	1.35	Vertical	1000000.00	-2.40
3000	50.32	-44.94	-13	-31.94	126.00	1.15	Vertical	1000000.00	-2.02

Notes:

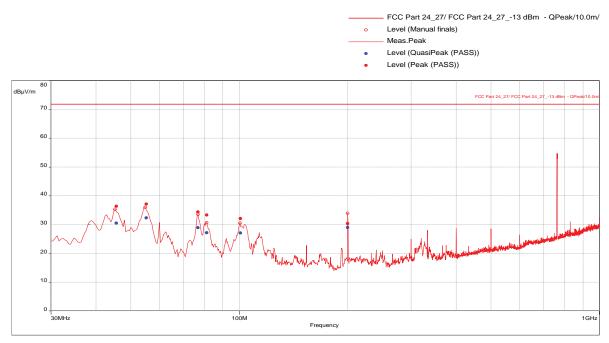
The level in EIRP (dBm) is calculated from peak readings as:

Hi-PIM Radiated Emissions, 30-1000 MHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 64QAM, Mid Channel

Test Information:

Date and Time	11/20/2022 12:03:39 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	24 C
Humidity	17 %
Atmospheric Pressure	1003 mbar
Comments	Scan 5: Mid Ch (Hi-PIM), 5 MHz 64QAM, RE 30-1000MHz SA mode

Graph:



Results:

EIRP Level (PASS) (6)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
45.42105263	36.39	-48.41	-13	-35.41	310.00	1.47	Vertical	120000.00	-23.00
55.08421053	37.15	-47.65	-13	-34.65	97.00	1.84	Vertical	120000.00	-25.70
76.95789474	34.40	-50.4	-13	-37.4	251.00	3.02	Vertical	120000.00	-24.82
81.2	33.34	-51.46	-13	-38.46	112.00	2.67	Vertical	120000.00	-25.09
100.7473684	32.07	-52.73	-13	-39.73	258.00	1.39	Vertical	120000.00	-21.71
200	30.35	-54.45	-13	-41.45	156.00	1.46	Vertical	120000.00	-19.11

Notes:

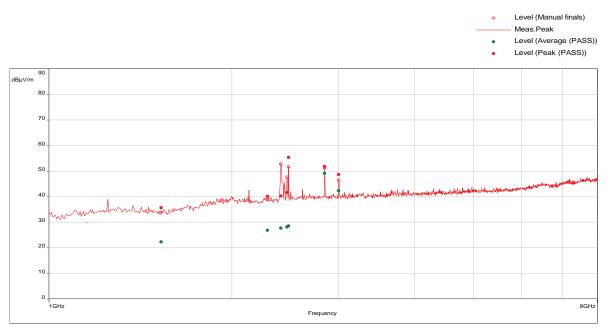
The level in EIRP (dBm) is calculated from peak readings as:

Hi-PIM Radiated Emissions, 1-8 GHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 64QAM, Mid Channel

Test Information:

Date and Time	11/20/2022 3:19:20 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	24 C
Humidity	17 %
Atmospheric Pressure	1003 mbar
Comments	Scan 8: Mid Ch (Hi-PIM), 5 MHz 64QAM, RE 1-8 Ghz SA mode

Graph:



Results:

EIRP Level (PASS) (7)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
1528.421053	35.65	-59.61	-13	-46.61	242.00	1.65	Horizontal	1000000.00	-7.97
2292.368421	40.13	-55.13	-13	-42.13	4.00	1.70	Horizontal	1000000.00	-3.76
2411.578947	40.31	-54.95	-13	-41.95	252.00	2.10	Vertical	1000000.00	-3.31
2463.947368	41.65	-53.61	-13	-40.61	53.00	2.45	Horizontal	1000000.00	-2.92
2480	55.38	-39.88	-13	-26.88	45.00	1.00	Vertical	1000000.00	-2.78
2844.473684	51.82	-43.44	-13	-30.44	112.00	1.30	Vertical	1000000.00	-2.40
3000	48.66	-46.6	-13	-33.6	119.00	1.35	Vertical	1000000.00	-2.02

Notes:

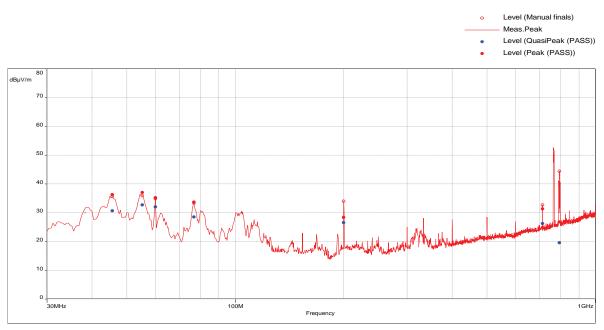
The level in EIRP (dBm) is calculated from peak readings as:

Hi-PIM Radiated Emissions, 30-1000 MHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 16QAM, High Channel

Test Information:

Date and Time	11/20/2022 12:57:51 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	24 C
Humidity	17 %
Atmospheric Pressure	1003 mbar
Comments	Scan 6: High Ch (Hi-PIM), 5 MHz 16QAM, RE 30-1000MHz SA mode

Graph:



Results:

EIRP Level (PASS) (7)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
45.50526316	36.26	-48.54	-13	-35.54	257.00	2.10	Vertical	120000.00	-23.05
55.04210526	37.04	-47.76	-13	-34.76	46.00	2.52	Vertical	120000.00	-25.70
60	35.18	-49.62	-13	-36.62	82.00	1.57	Vertical	120000.00	-25.34
76.98947368	33.69	-51.11	-13	-38.11	257.00	2.90	Vertical	120000.00	-24.83
200	28.38	-56.42	-13	-43.42	149.00	2.09	Vertical	120000.00	-19.11
713.1684211	31.37	-53.43	-13	-40.43	112.00	2.12	Horizontal	120000.00	-8.62
793.8736842	26.74	-58.06	-13	-45.06	10.00	3.99	Horizontal	120000.00	-7.41

Notes:

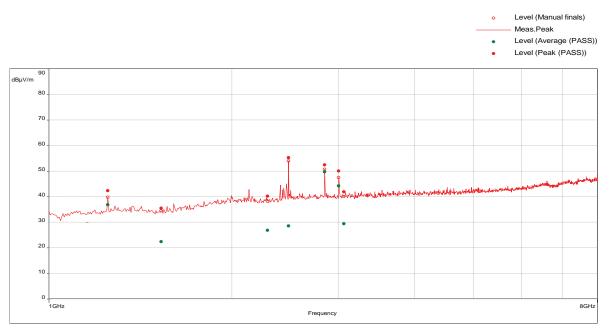
The level in EIRP (dBm) is calculated from peak readings as:

Hi-PIM Radiated Emissions, 1-8 GHz Worst-case output power: Bandwidth: 5 MHz, Modulation: 16QAM, High Channel

Test Information:

Date and Time	11/20/2022 2:10:23 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	24 C
Humidity	17 %
Atmospheric Pressure	1003 mbar
Comments	Scan 7: High Ch (Hi-PIM), 5 MHz 16QAM, RE 1-8 Ghz SA mode

Graph:



Results:

EIRP Level (PASS) (7)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
1250	42.38	-52.88	-13	-39.88	46.00	1.80	Horizontal	1000000.00	-7.62
1529.736842	35.53	-59.73	-13	-46.73	103.00	1.50	Vertical	1000000.00	-7.97
2292.368421	40.26	-55	-13	-42	323.00	3.39	Horizontal	1000000.00	-3.76
2480	55.26	-40	-13	-27	45.00	1.00	Vertical	1000000.00	-2.78
2844.473684	52.41	-42.85	-13	-29.85	111.00	1.35	Vertical	1000000.00	-2.40
3000	50.02	-45.24	-13	-32.24	154.00	1.45	Vertical	1000000.00	-2.02
3059.736842	41.93	-53.33	-13	-40.33	293.00	1.75	Vertical	1000000.00	-1.57

Notes:

The level in EIRP (dBm) is calculated from peak readings as:

	Product Standard: CFR	Limit applied: See Report Section 9.3 Pretest Verification w/BB source: N/A					
Test Date	Test Personnel/ Initials	Supervising Engineer/ Initials	Input Voltage	Mode	Temp C°	Atmospheric Relative Humidity %	Data Atmospheric Pressure mbar
11/19/2022	Kouma Sinn 443	N/A	POE	Transmit	24	14	1009
11/21/2022	Vathana F. Ven	N/A	POE	Transmit	28	12	1013

Deviations, Additions, or Exclusions: None

10 Revision History

Revision Level	Date	Report Number	Prepared By	Reviewed By	Notes
0	11/30/2022	105250625BOX-001	KPS 43	VEV	Original Issue
1	12/20/2022	105250625BOX-001.1	KPS 43	VFV	Included combined power in power tables in Section 6.3
2	01/11/2023	105250625BOX-001.2	KPS ¹⁴³	VFV	Re-measured output power for Lo-PIM- TM3.1-64QAM-5MHz BW