SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD. FCC ID: ZSHW50S Report No.: LCS181219033AEG

# Appendix D: Test Data for E-UTRA Band 2

# **Product Name: Smart Phone** Test Model: W55s

### **Environmental Conditions**

Temperature:	24.8
Relative Humidity:	53.2
ATM Pressure:	100.0 kPa
Test Engineer:	Mina Xu
Supervised by:	Jayden Zhuo

## **D.1 Conducted Output Power**

		Conducted	Output Pow	ver Test Result (Channel Band	width: 1.4 MHz)	
Modulation	Channel	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Vardiat
wodulation	Channel	Size	Offset	QPSK	16QAM	Verdict
	1	0	22.30	21.50	PASS	
		1	3	22.29	21.54	PASS
		1	5	22.45	21.36	PASS
	LCH	3	0	22.10	21.02	PASS
		3	2	22.50	21.57	PASS
		3	3	21.90	21.23	PASS
		6	0	22.45	21.74	PASS
		1	0	22.67	21.28	PASS
		1	3	22.75	21.36	PASS
QPSK /		1	5	21.95	21.10	PASS
16QAM	MCH	3	0	22.64	21.57	PASS
TOQAIM		3	2	22.45	21.64	PASS
		3	3	22.57	21.74	PASS
		6	0	21.97	21.34	PASS
		1	0	22.66	21.57	PASS
		1	3	22.03	21.22	PASS
		1	5	21.97	21.29	PASS
	НСН	3	0	22.44	21.52	PASS
		3	2	22.57	21.57	PASS
		3	3	22.61	21.70	PASS
		6	0	22.73	21.50	PASS

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		Conducte	d Output Pov	wer Test Result (Channel Ban	dwidth: 3 MHz)	
Modulation	Modulation Channel		figuration	Average Power [dBm]	Average Power [dBm]	Verdict
Modulation	Channel	Size	Offset	QPSK	16QAM	verdict
	1	0	21.99	21.27	PASS	
		1	7	22.44	21.49	PASS
		1	14	22.05	21.28	PASS
	LCH	8	0	22.63	21.58	PASS
		8	4	22.19	21.31	PASS
		8	7	22.08	21.34	PASS
		15	0	22.61	21.71	PASS
		1	0	22.17	21.37	PASS
		1	7	22.52	21.65	PASS
QPSK /		1	14	22.03	21.21	PASS
16QAM	MCH	8	0	21.95	21.13	PASS
TOQAIM		8	4	22.50	21.68	PASS
		8	7	22.62	21.84	PASS
		15	0	22.34	21.38	PASS
		1	0	22.01	21.29	PASS
		1	7	22.13	21.39	PASS
		1	14	22.56	21.82	PASS
	НСН	8	0	22.50	21.59	PASS
		8	4	22.27	21.55	PASS
		8	7	22.08	21.54	PASS
		15	0	22.68	21.78	PASS

	Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)								
Modulation	Channel	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict			
wouldtion	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	22.70	21.82	PASS			
		1	12	22.73	21.61	PASS			
		1	24	21.88	21.25	PASS			
	LCH	12	0	22.44	21.29	PASS			
		12	6	22.19	21.41	PASS			
		12	13	22.12	21.36	PASS			
		25	0	22.02	21.20	PASS			
		1	0	22.31	21.50	PASS			
		1	12	22.59	21.46	PASS			
QPSK /		1	24	22.37	21.84	PASS			
16QAM	MCH	12	0	22.46	21.60	PASS			
TOQAIM		12	6	22.05	21.31	PASS			
		12	13	22.54	21.81	PASS			
		25	0	22.51	21.81	PASS			
		1	0	22.64	21.52	PASS			
		1	12	22.53	21.42	PASS			
		1	24	22.65	21.81	PASS			
	НСН	12	0	22.38	21.74	PASS			
		12	6	22.00	21.55	PASS			
		12	13	22.46	21.69	PASS			
		25	0	21.94	21.33	PASS			

		Conducted	Output Pow	ver Test Result (Channel Band	lwidth: 10 MHz)	
Modulation	Channel	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict
wouldtion	Channel	Size	Offset	QPSK	16QAM	Verdict
		1	0	22.13	21.33	PASS
		1	24	22.42	21.91	PASS
		1	49	22.13	21.49	PASS
	LCH	25	0	22.12	21.45	PASS
		25	12	22.20	21.27	PASS
		25	25	22.00	21.62	PASS
		50	0	22.05	21.31	PASS
		1	0	22.65	21.80	PASS
		1	24	22.64	21.99	PASS
		1	49	22.21	21.65	PASS
QPSK / 16QAM	MCH	25	0	22.32	21.47	PASS
IOQAIN		25	12	22.65	21.81	PASS
		25	25	22.69	21.90	PASS
		50	0	22.38	21.72	PASS
		1	0	22.43	21.23	PASS
		1	24	22.54	21.76	PASS
		1	49	22.02	21.54	PASS
	HCH	25	0	21.96	21.43	PASS
		25	12	21.94	21.36	PASS
		25	25	22.56	21.41	PASS
		50	0	22.63	21.27	PASS

		Conducted	Output Pow	ver Test Result (Channel Band	lwidth: 15 MHz)	
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Vardiat
wooulation	Channel	Size	Offset	QPSK	16QAM	Verdict
		1	0	22.65	21.98	PASS
		1	37	22.34	21.82	PASS
		1	74	22.57	21.38	PASS
	LCH	37	0	22.31	21.19	PASS
		37	18	22.16	21.37	PASS
		37	38	22.36	21.28	PASS
		75	0	22.30	21.54	PASS
		1	0	22.58	21.89	PASS
		1	37	22.23	21.47	PASS
		1	74	22.68	21.90	PASS
QPSK / 16QAM	MCH	37	0	22.59	21.92	PASS
IOQAIN		37	18	22.32	21.58	PASS
		37	38	22.44	21.59	PASS
		75	0	22.59	21.71	PASS
		1	0	22.06	21.22	PASS
		1	37	22.40	21.69	PASS
		1	74	22.12	21.46	PASS
	НСН	37	0	22.02	21.32	PASS
		37	18	21.90	21.22	PASS
		37	38	22.07	21.37	PASS
		75	0	22.13	21.42	PASS

		Conducted	Output Pow	ver Test Result (Channel Band	width: 20 MHz)	
Modulation	Channel		figuration	Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
		1	0	22.33	21.76	PASS
		1	49	22.84	22.02	PASS
		1	99	22.70	21.98	PASS
	LCH	50	0	22.77	22.10	PASS
		50	25	22.35	21.91	PASS
		50	50	22.21	21.78	PASS
		100	0	22.46	21.88	PASS
		1	0	22.54	21.77	PASS
		1	49	22.62	21.88	PASS
QPSK /		1	99	22.48	21.83	PASS
16QAM	MCH	50	0	22.32	21.75	PASS
TOQAIN		50	25	22.75	21.87	PASS
		50	50	22.87	21.80	PASS
		100	0	22.88	21.87	PASS
		1	0	22.50	21.80	PASS
		1	49	22.45	21.68	PASS
		1	99	22.17	21.63	PASS
	НСН	50	0	22.78	21.76	PASS
		50	25	22.66	21.87	PASS
		50	50	22.48	21.86	PASS
		100	0	22.31	21.78	PASS

### D.2 Peak-to-Average Ratio

	Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict				
MODULATION	Channel	[dB]	[dB]	Verdict				
	LCH	6.01	<13	PASS				
QPSK	MCH	5.7	<13	PASS				
	HCH	5.64	<13	PASS				
	LCH	6.96	<13	PASS				
16QAM	MCH	6.63	<13	PASS				
	НСН	6.57	<13	PASS				

	Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict				
wouldton	Ghannei	[dB]	[dB]	Verdict				
	LCH	5.94	<13	PASS				
QPSK	MCH	5.72	<13	PASS				
	НСН	5.79	<13	PASS				
	LCH	6.95	<13	PASS				
16QAM	MCH	6.62	<13	PASS				
	НСН	6.55	<13	PASS				

	Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict				
MODULATION	Channel	[dB]	[dB]	Verdict				
	LCH	6.1	<13	PASS				
QPSK	MCH	5.75	<13	PASS				
	НСН	5.75	<13	PASS				
	LCH	6.88	<13	PASS				
16QAM	MCH	6.5	<13	PASS				
	HCH	6.51	<13	PASS				

	Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict				
Modulation	Channe	[dB]	[dB]	Verdict				
	LCH	6.03	<13	PASS				
QPSK	MCH	5.65	<13	PASS				
	НСН	5.7	<13	PASS				
	LCH	6.74	<13	PASS				
16QAM	MCH	6.42	<13	PASS				
	НСН	6.46	<13	PASS				

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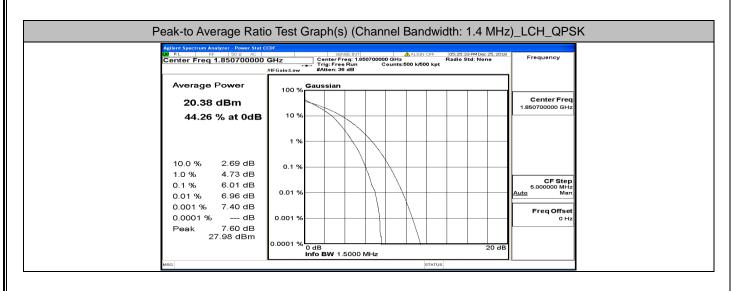
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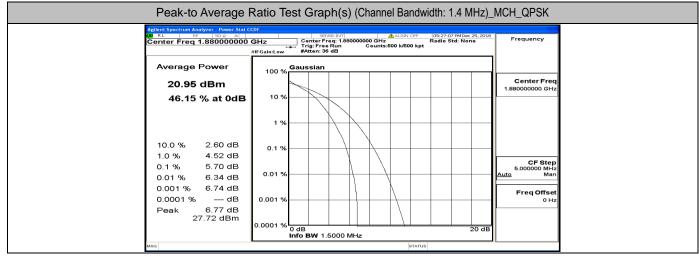
	Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict				
Wouldton	Channel	[dB]	[dB]	Verdici				
	LCH	5.12	<13	PASS				
QPSK	MCH	4.94	<13	PASS				
	НСН	4.91	<13	PASS				
	LCH	6.47	<13	PASS				
16QAM	MCH	6.27	<13	PASS				
	НСН	6.26	<13	PASS				

Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict
wouldtion		[dB]	[dB]	Verdict
	LCH	5.73	<13	PASS
QPSK	MCH	5.72	<13	PASS
	НСН	5.7	<13	PASS
	LCH	6.84	<13	PASS
16QAM	MCH	6.84	<13	PASS
	НСН	6.76	<13	PASS

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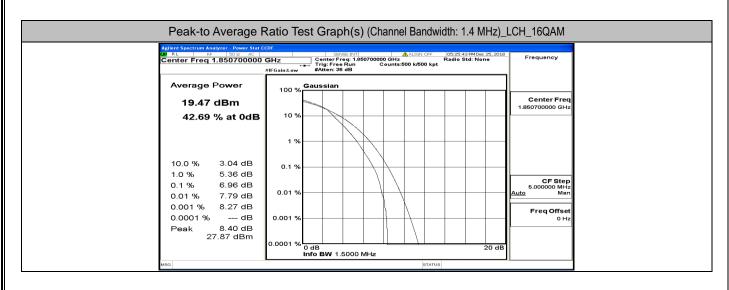


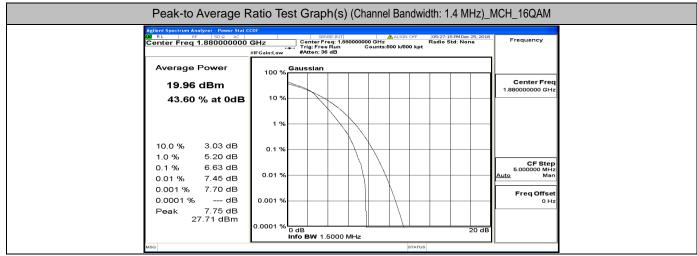


Peak-to Average	Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)	_HCH_QPSK
00 RL 6F 1500 AC Center Freq 1.909300000	#FGain:Low #Atten: 36 dB	Frequency
Average Power 21.55 dBm 46.14 % at 0dB	100 % Gaussian	Center Freq 1.909300000 GHz
	1 %	
10.0 % 2.61 dB 1.0 % 4.48 dB	0.1 %	
0.1 % 5.64 dB 0.01 % 6.26 dB	0.01 %	CF Step 5.00000 MHz <u>Auto</u> Man
0.001 % 6.50 dB 0.0001 % dB Peak 6.59 dB	0.001 %	Freq Offset 0 Hz
29.14 dBm	0.0001 % 0 dB 20 dE	
MSG	STATUS	

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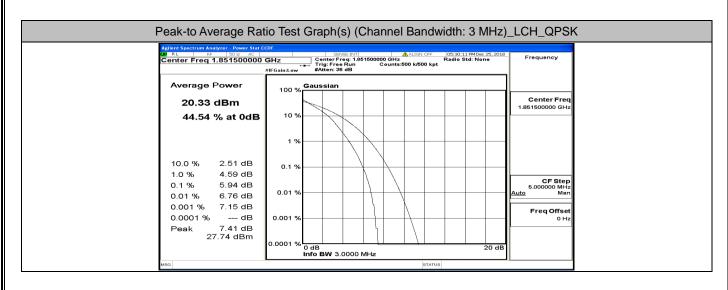


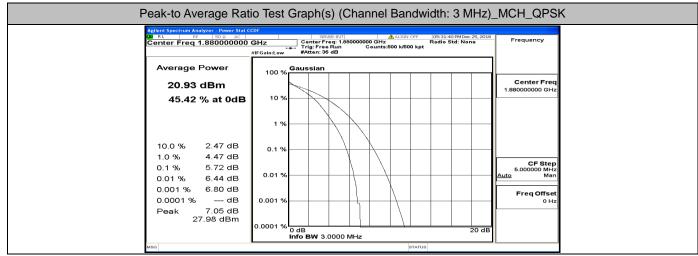


-	e Ratio Test Graph(s) (Channel Bandwidth: 1.4 MH	z)_HCH_16QAM
Aglent Spectrum Analyzer. Power 04 RL 0FF 1000 Center Freq 1.909300 Average Power	SENEEUNT ALALISE OFF 105289-48 PMORe 25     Off HZ     Center Freq: 1.0052000 GHz     Radio Std: None     #IFGen:Low     #Atten: 36 dB     Counts:500 k/500 kpt	2018 Frequency
20.61 dBm 43.38 % at 00		Center Freq 1.909300000 GHz
10.0 % 2.99 dl 1.0 % 5.19 dl	0.1 %	CF Step
0.1 % 6.57 dl 0.01 % 7.40 dl 0.001 % 7.70 dl 0.0001 % dl	0.01 %	S.000000 MHz Auto Man Freq Offset 0 Hz
Peak 7.80 dl 28.41 dBr		dB

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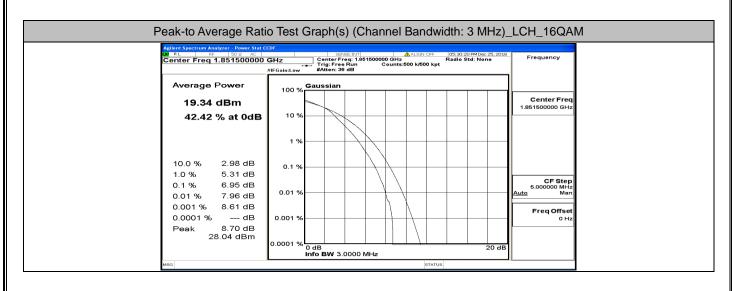


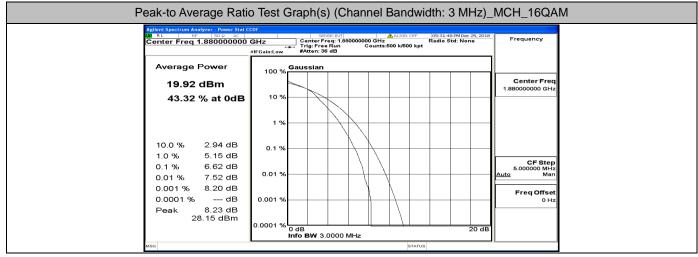


Peak-to Average Rat	io Test Graph(s) (Channel Bandwidth: 3 MHz)	HCH_QPSK
	#IFGain:Low #Atten: 36 dB	Frequency
Average Power 21.64 dBm 45.29 % at 0dB	100 % Gaussian	Center Freq 1.908500000 GHz
10.0 % 2.47 dB	1%	
1.0 % 4.49 dB 0.1 % 5.79 dB 0.01 % 6.50 dB	0.01 %	CF Step 5.000000 MHz <u>Auto</u> Man
0.001 % 6.90 dB 0.0001 % dB Peak 7.12 dB 28.76 dBm	0.001 %	Freq Offset 0 Hz
MBG	0.000 M 20 dB 20 dB 20 dB 10 0 0 MHz 20 dB	

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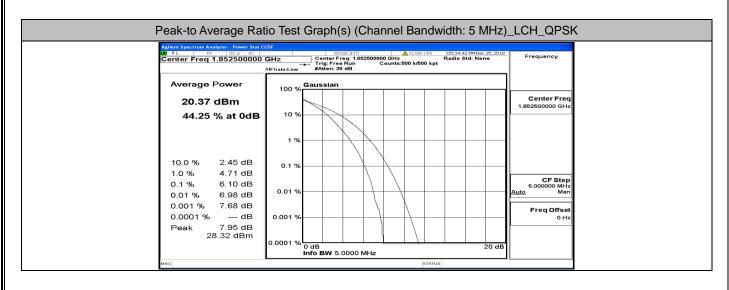


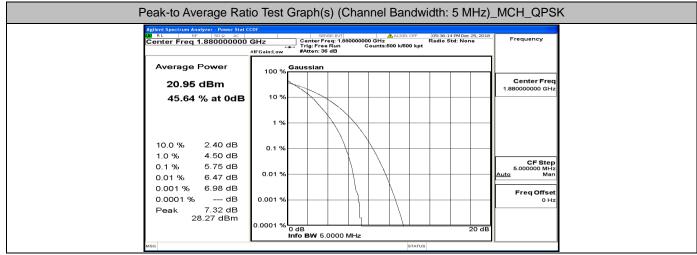


Agilent Spectrum Analyzer - Power Stat		
222 RL   8F   50 9, AC   Center Freq 1.908500000	#FGain:Low #Atten: 36 dB	Frequency
Average Power 20.63 dBm 43.14 % at 0dB	100 % Gaussian	Center Freq 1.908500000 GHz
	1 %	
10.0 % 2.95 dB 1.0 % 5.11 dB	0.1 %	
0.1 % 6.55 dB 0.01 % 7.50 dB	0.01 %	CF Step 5.000000 MHz <u>Auto</u> Man
0.001 % 8.14 dB 0.0001 % dB Peak 8.60 dB	0.001 %	Freq Offset 0 Hz
20.22 dBm	0.0001 %	
MSQ	STATUS	J

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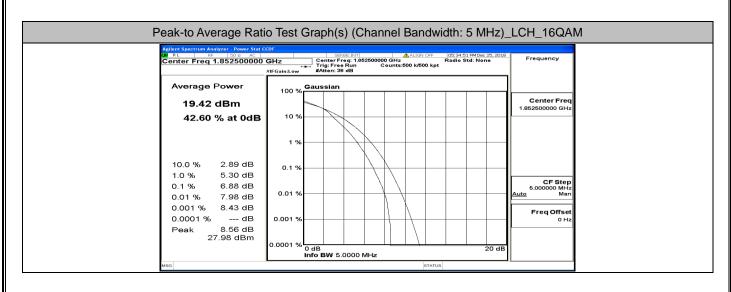


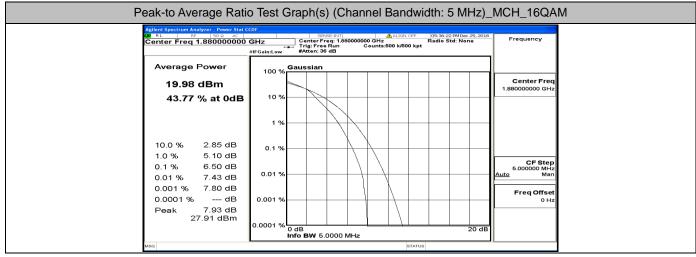


Peak-to Average Rat	io Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK	
Center Freq 1.907500000	SENSE:INT ALIGN OFF 05:37:46 PM Dec 25, 2018	
Average Power 21.67 dBm	100 % Gaussian Center Freq 1.907500000 GHz	
45.90 % at 0dB		
10.0 % 2.41 dB 1.0 % 4.50 dB	0.1 %	
0.1 % 5.75 dB 0.01 % 6.54 dB	0.01 %	
0.001 % 7.08 dB 0.0001 % dB Peak 7.32 dB	0.001 % Freq Offset	
28.99 dBm	0.0001 % 0 dB 0 0.0000 MHz 20 dB	

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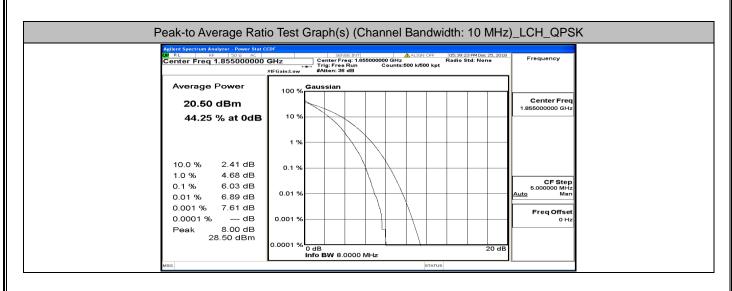


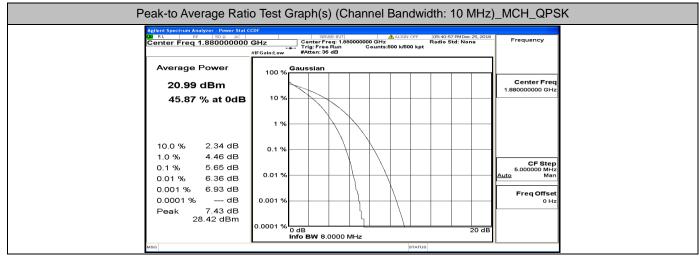


Agilent Spectrum Analyzer - Power Stat C		
Center Freq 1.907500000	SENSE:IVIT ▲ALGA CFF 05:37:55 MMDec 25,2018 GHZ Center Freq: 1:907500000 GHZ Radio Std: None #IFGain:Low #Atten: 36 dB	Frequency
Average Power	100 % Gaussian	
20.73 dBm		Center Freq 1.907500000 GHz
43.90 % at 0dB	10 %	
10.0 % 2.91 dB 1.0 % 5.14 dB	0.1 %	
0.1 % 6.51 dB 0.01 % 7.29 dB 0.001 % 7.91 dB	0.01 %	CF Step 5.000000 MHz <u>Auto</u> Man
0.0001 % dB Peak 8.40 dB	0.001 %	Freq Offset 0 Hz
29.13 dBm	0.0001 % 0 dB 20 dB 20 dB	

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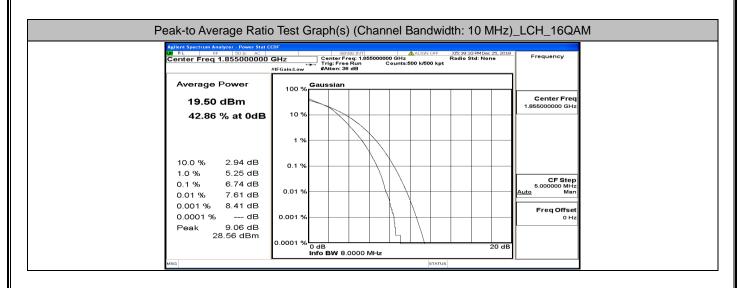


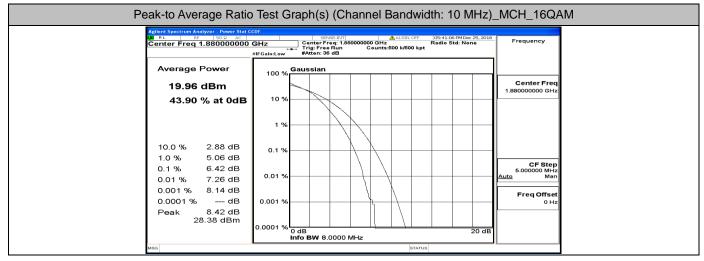


Peak-to Average R	atio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK
04 RL   RF   30 Q A Center Freq 1.9050000	SENSE:INT ALIGN OFF 05:42:31 PM Dec 25, 2018
Average Power	100 % Gaussian
21.55 dBm	Center Freq 1.905000000 GHz
45.69 % at 0d	3 10 %
	1 %
10.0 % 2.33 dB	
1.0 % 4.47 dB	0.1 %
0.1 % 5.70 dB 0.01 % 6.47 dB	0.01 %
0.001 % 6.77 dB	FreqOffset
0.0001 % dB Peak 7.26 dB	0.001 %
28.81 dBm	0.0001 % 0 dB 20 dB
MSG	Info BW 8.0000 MHz

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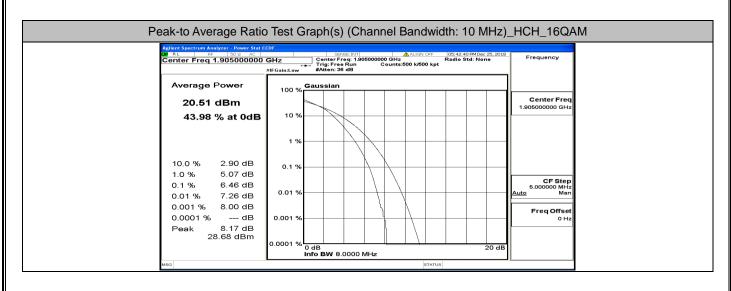
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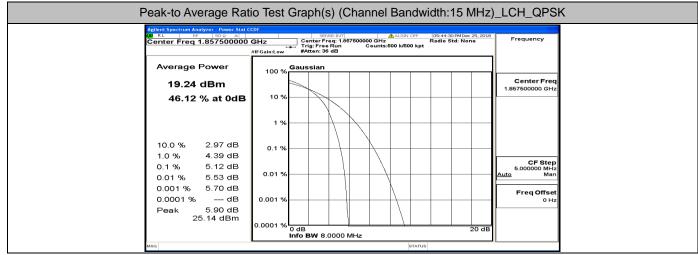




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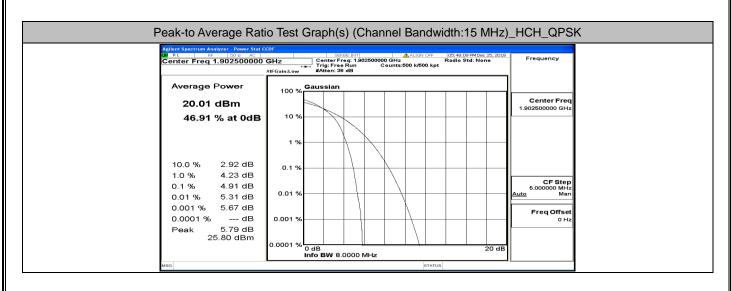


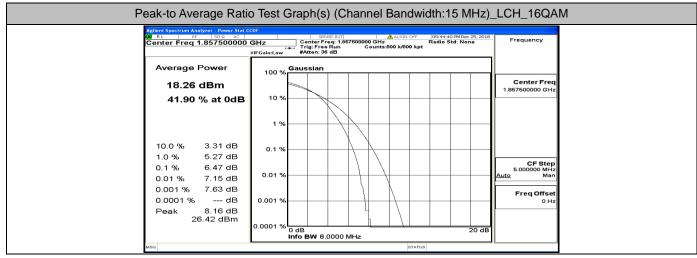


Peak-to Average Rati	o Test Graph(s) (Channel Bandwidth:15 MHz	_MCH_QPSI	K
	GHZ SERVERNTI A&LUON OFF 105406 20 FM One 29, 2011 Center Freq: 188000000 OH2 Trig: Free Run Counts:500 k/500 kpt #/FGain:Low #Atten: 36 dB	Frequency	
Average Power 19.81 dBm 46.58 % at 0dB	100 % Gaussian 10 %	Center Freq 1.880000000 GHz	
10.0 % 2.91 dB 1.0 % 4.23 dB	0.1 %		
0.1 % 4.94 dB 0.01 % 5.36 dB 0.001 % 5.60 dB	0.01 %	CF Step 5.000000 MHz Auto Man	
0.0001 % dB Peak 5.72 dB 25 53 dBm	0.001 % 0.0001 % 0 dB 20 dB	Freq Offset 0 Hz	
MBQ	0.0001 / 10 0 dB 20 dB 20 dB 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		

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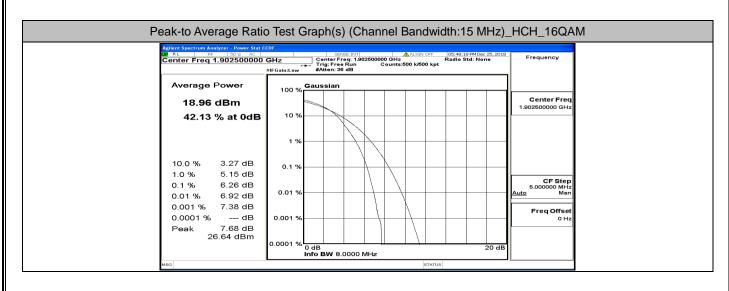


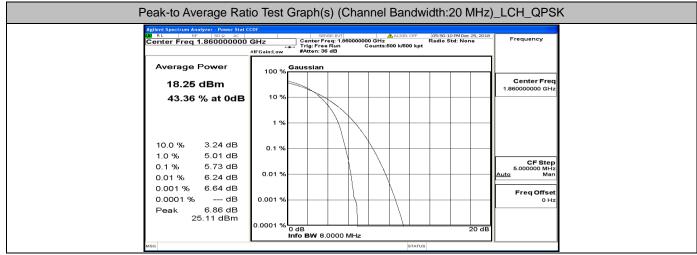


Agilent Spectrum Analyzer - Power Stat C		
0 RL HF 100 AC Center Freq 1.880000000 Average Power	#IFGain:Low #Atten: 8 dB	Frequency
18.81 dBm 42.20 % at 0dB	100 % 4035101 10 %	Center Freq 1.880000000 GHz
10.0 % 3.27 dB	0.1 %	
1.0 % 5.14 dB 0.1 % 6.27 dB 0.01 % 6.87 dB 0.001 % 7.23 dB	0.01 %	CF Step 5.00000 MHz Man Freq Offset
0.0001 % dB Peak 7.39 dB 26.20 dBm	0.001 % 0.0001 % 0 dB 20 dl Info BW 8.0000 MHz 20 dl	0 Hz
MSG	STATUS	

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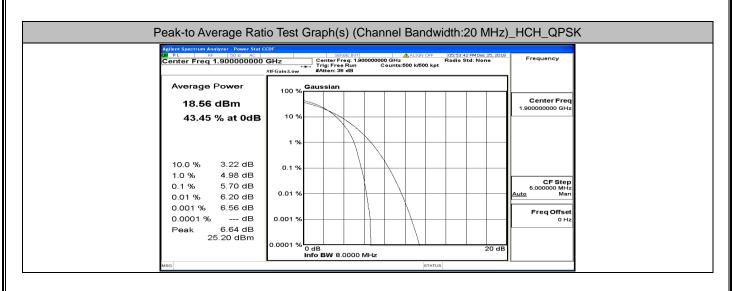


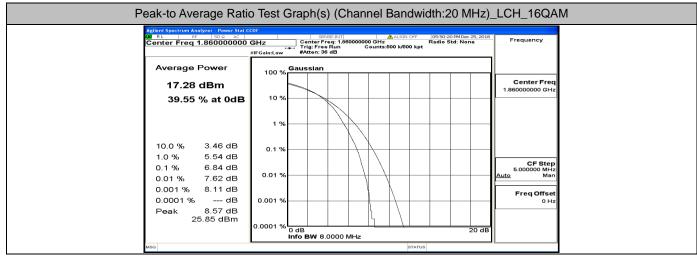


Aglent Spectrum Analyzer - Power St M R   R   RF   50 e Ac Center Freq 1.880000000	SENSE:INT ALIGN OFF 05:51:55 PM Dec 25, 2018	
	) GHZ Center Freq: 1:880000000 GHz Radio Std: None Frequency → Trig: Free Run Counts:500 k/500 kpt #/FGain:Low #Atten: 36 dB	
Average Power 18.55 dBm	100 % Gaussian Center Freq 1.88000000 GHz	
43.38 % at 0df	10 %	
10.0 % 3.27 dB 1.0 % 5.06 dB	0.1 %	
0.1 % 5.72 dB 0.01 % 6.17 dB	0.01 % CF Step 5.000000 MHz Auto Man	
0.001 % 6.50 dB 0.0001 % dB Peak 6.79 dB	0.001 % Freq Offset	
25.34 dBm	0.0001 % 0 dB 20 dB 20 dB 10 0 MHz	

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Report No.: LCS181219033AEG

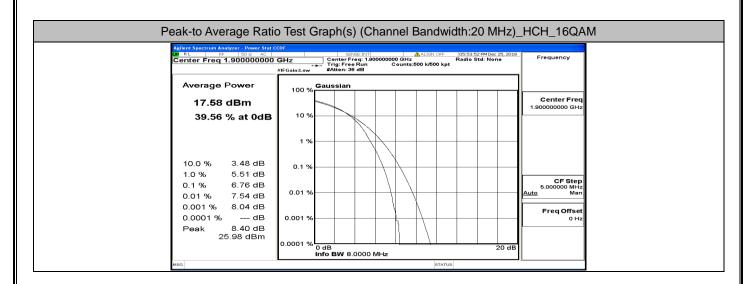




Agilent Spectrum Analyzer - Power Stat 0	o Test Graph(s) (Channel Bandwidth:20 MHz	)_MCH_16QAM
Center Freq 1.880000000 Average Power	#IFGain:Low #Atten: 36 dB	10 Frequency
17.56 dBm 39.54 % at 0dB		Center Freq 1.88000000 GHz
10.0 % 3.52 dB	1%	
1.0 % 5.55 dB 0.1 % 6.84 dB 0.01 % 7.60 dB	0.01%	CF Step 5.00000 MHz <u>Auto</u> Man
0.001 % 8.10 dB 0.0001 % dB Peak 8.85 dB 26.41 dBm	0.001 %	Freq Offset 0 Hz
мва	0.0001 % 0 dB 20 d Info BW 8.0000 MHz	В

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FCC ID: ZSHW50S



# D.3 26dB Bandwidth and Occupied Bandwidth

	EBW & OBW Te	est Result (Channel Band	width: 1.4 MHz)	
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation	Channel	(MHz)	(MHz)	Verdict
	LCH	1.0773	1.230	PASS
QPSK	MCH	1.0721	1.230	PASS
	НСН	1.0761	1.234	PASS
	LCH	1.0753	1.228	PASS
16QAM	MCH	1.0780	1.231	PASS
	НСН	1.0769	1.229	PASS

	EBW & OBW T	est Result (Channel Ban	dwidth: 3 MHz)	
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
wouldton	Ghannei	(MHz)	(MHz)	Verdict
	LCH	2.6853	2.830	PASS
QPSK	MCH	2.6750	2.833	PASS
	HCH	2.6778	2.835	PASS
	LCH	2.6751	2.827	PASS
16QAM	MCH	2.6805	2.841	PASS
	НСН	2.6778	2.833	PASS

	EBW & OBW T	est Result (Channel Ban	dwidth: 5 MHz)	
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
	LCH	4.4828	4.827	PASS
QPSK	MCH	4.4723	4.853	PASS
	HCH	4.4667	4.875	PASS
	LCH	4.4790	4.891	PASS
16QAM	MCH	4.4690	4.865	PASS
	НСН	4.4797	4.923	PASS

	EBW & OBW Te	est Result (Channel Band	dwidth: 10 MHz)	
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
MODUIATION	Channel	(MHz)	(MHz)	verdict
	LCH	8.9462	9.549	PASS
QPSK	MCH	8.9360	9.523	PASS
	HCH	8.9387	9.477	PASS
	LCH	8.9512	9.505	PASS
16QAM	MCH	8.9377	9.526	PASS
	HCH	8.9344	9.504	PASS

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Report No.: LCS181219033AEG

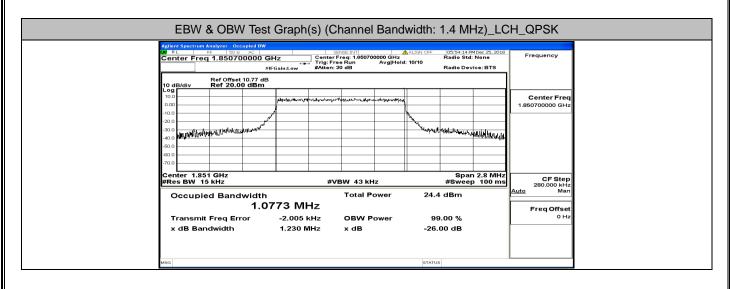
	EBW & OBW T	est Result (Channel Band	width: 15 MHz)	
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
	LCH	13.415	14.37	PASS
QPSK	MCH	13.377	14.05	PASS
	HCH	13.361	14.01	PASS
	LCH	13.410	14.07	PASS
16QAM	MCH	13.397	14.06	PASS
	HCH	13.355	14.02	PASS

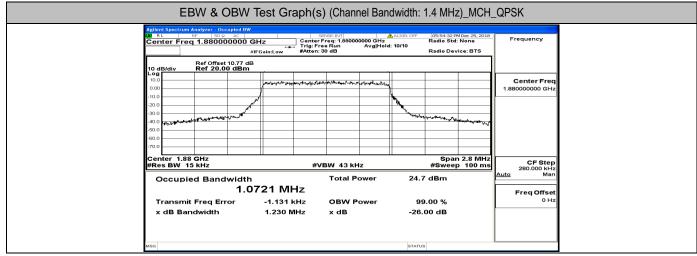
	EBW & OBW Te	est Result (Channel Band	lwidth: 20 MHz)	
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
	LCH	17.861	18.64	PASS
QPSK	MCH	17.825	18.55	PASS
	HCH	17.812	18.60	PASS
	LCH	17.858	18.59	PASS
16QAM	MCH	17.837	18.61	PASS
	НСН	17.806	18.57	PASS

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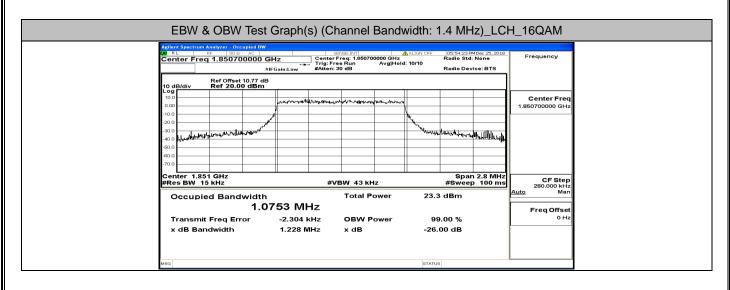


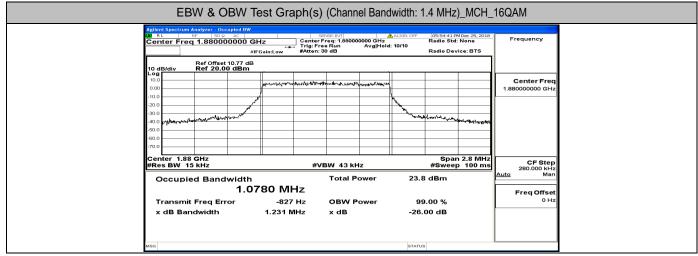


Center Freq 1.90930	0000 GH	z ain:Low	Center F Trig: Fre #Atten: 3	NSE:INT req: 1.90930 e Run 0 dB	0000 GHz Avg Hold	ALIGN OFF	05:54:52 P Radio Std Radio Dev		Frequency
Ref Offset 10 dB/div Ref 20.00	10.84 dB 0 dBm								
0.00		hali hakanatah	v~môĝit <sub>en</sub>		www.marahan				Center Freq 1.909300000 GHz
-10.0 -20.0 -30.0	A A A A A A A A A A A A A A A A A A A					No.			
-30.0 -40.0	<sup>س</sup> ليدمن.					And the second	1.00×1.94.94	the weat of the state of the st	
-60.0									
Center 1.909 GHz #Res BW 15 kHz	11		#VI	BW 43 кн	Iz		Spar #Swee	n 2.8 MHz p 100 ms	CF Step 280.000 kHz
Occupied Bandy		51 MH	z	Total Po	ower	26.0	) dBm		Auto Man Freq Offset
Transmit Freq Erro x dB Bandwidth		-2.517 kl 1.234 Mi		OBW P x dB	ower		0.00 % 00 dB		0 Hz

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FCC ID: ZSHW50S

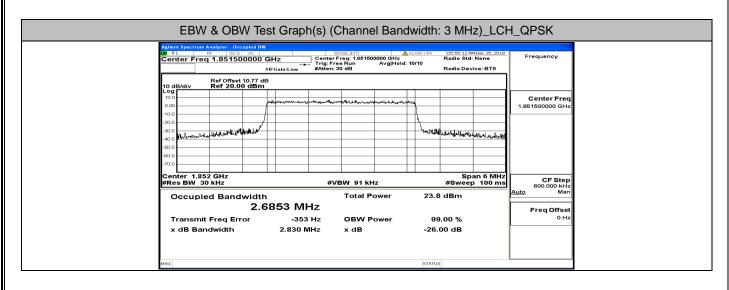


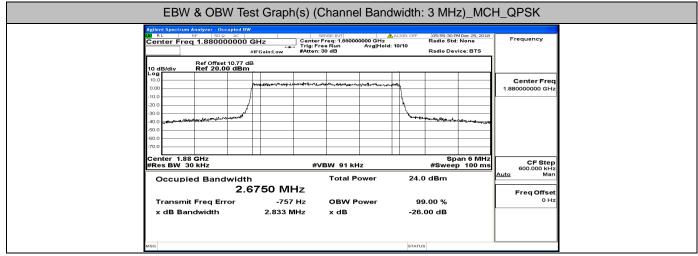


Agilent Spectrum Analyzer - Occupied           M         RL         RF         50 Ω         AC           Center Freq 1.90930000	I GHz	SENSE:INT Center Freq: 1.909300000 Trig: Free Run Av	GHz gjHold: 10/10	05:55:01 PMDec 25 Radio Std: None	
Ref Offset 10.84	#IFGain:Low	#Atten: 30 dB		Radio Device: B	rs
10 dB/div Ref 20.00 dB		راس الازم ورسهو کو آوار معادر مرد الام و روام و	~		Center Freq
-10.0	A				1.909300000 GHz
-20.0	present and a second		U. North March		
-30.0 -40.0 appropriate the start marine and start				on the states of the second se	Nisa, Weda
-60.0					
Center 1.909 GHz #Res BW 15 kHz		#VBW 43 kHz		Span 2.8 #Sweep 10	CF Step
Occupied Bandwid	th	Total Pow	ər 24.	6 dBm	280.000 kHz Auto Man
	.0769 MH	z			Freq Offset
Transmit Freq Error x dB Bandwidth	1.405 kH 1.229 MH			9.00 % .00 dB	0 Hz

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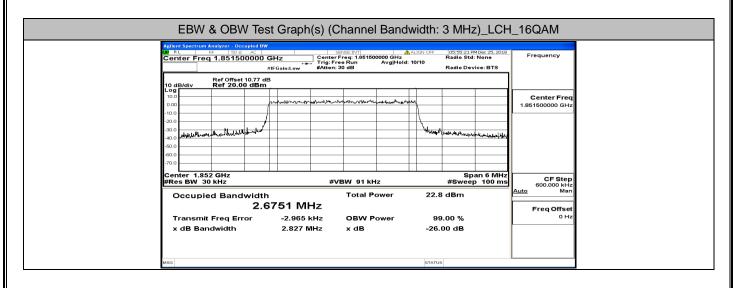


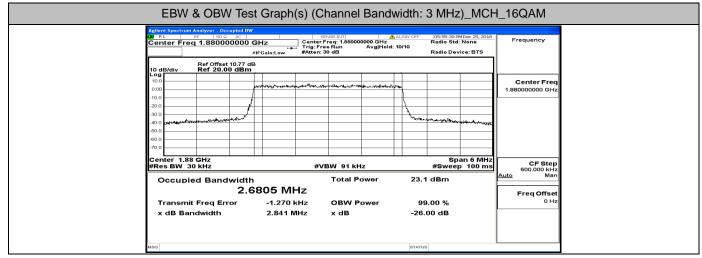
Center Freq 1.90850000		SENSE:INT Center Freq: 1.908 Trig: Free Run #Atten: 30 dB		IGN OFF	Radio Devi		Frequency
Ref Offset 10.8- 10 dB/div Ref 20.00 dE							
10.0	an analise analise	and an an inclusion of the second					Center Fre 1.908500000 G⊢
-10.0				l			1.908500000 GH
-20.0							
-40.0 may are the work of the rest of the	,			****	harmente		
-50.0							
-70.0							
Center 1.909 GHz #Res BW 30 kHz		#VBW 911	Hz			an 6 MHz 100 ms	CF Step 600.000 kHz
Occupied Bandwic	ith	Total	Power	25.3	3 dBm		Auto Man
-	.6778 MH	Iz					Freq Offset
2					9.00 %		0 Hz

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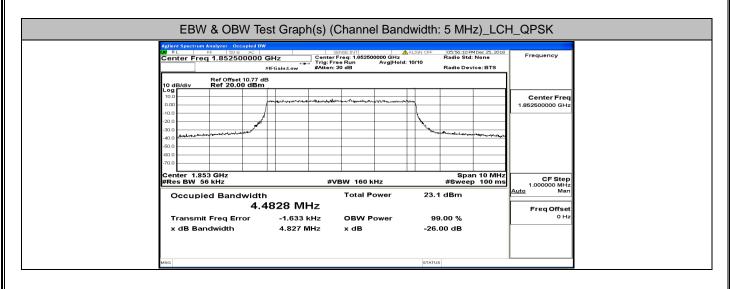


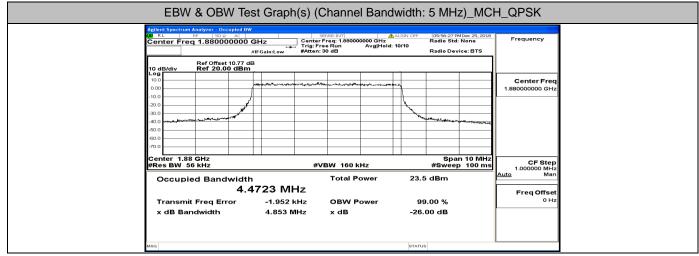


Center Freq 1.908500000	W GHz #IFGain:Low	Center F	*SE:INT eq: 1.90850 Run dB		LIGN OFF	Radio Std:		Frequency
Ref Offset 10.84 10 dB/div Ref 20.00 dBn	dB							
10.0 0.00		hiles where any of the	*****	1	4			Center Freq 1.908500000 GHz
-10.0	/				1			
-30.0 -40.0 meter montragener bertuker					her	n-abalington-100		
-60.0								
Center 1.909 GHz #Res BW 30 kHz		#VE	W 91 KH	z			an 6 MHz p 100 ms	CF Step 600.000 kHz
Occupied Bandwidt 2.	<sup>ь</sup> 6778 МІ	Ηz	Total P	ower	24.	1 dBm		Auto Man Freq Offset
Transmit Freq Error x dB Bandwidth	-2.618   2.833 M		OBW P x dB	ower		9.00 % .00 dB		0 Hz

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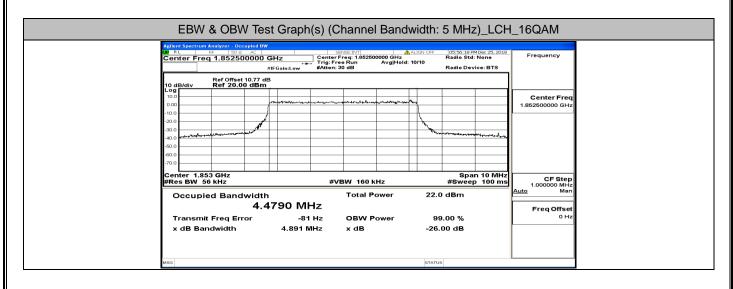


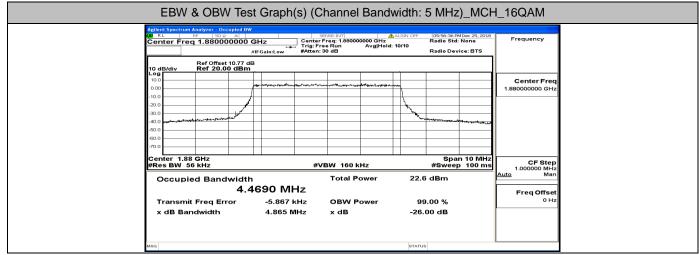
Center Freg 1.907500000		NSE:INT A	ALIGN OFF 05:56:46 PMDec 25 Radio Std: None	
	#IFGain:Low #Atten:	e Run Avg Hold:		
Ref Offset 10.84 d 10 dB/div Ref 20.00 dBm				
Log 10.0	new proton and the second			Center Freq
0.00		and the second		1.907500000 GHz
-10.0				
-30.0			Muran attac	
-40.0 Allow and a fair for a start of the second start of the seco			When when a second a second	
-60.0				
-70.0				
Center 1.908 GHz #Res BW 56 kHz	#V	BW 160 kHz	Span 10 #Sweep 100	
Occupied Bandwidth	1	Total Power	24.6 dBm	Auto Man
	4667 MHz			Freq Offset
Transmit Freq Error	-9.271 kHz	OBW Power	99.00 %	0 Hz
x dB Bandwidth	4.875 MHz	x dB	-26.00 dB	

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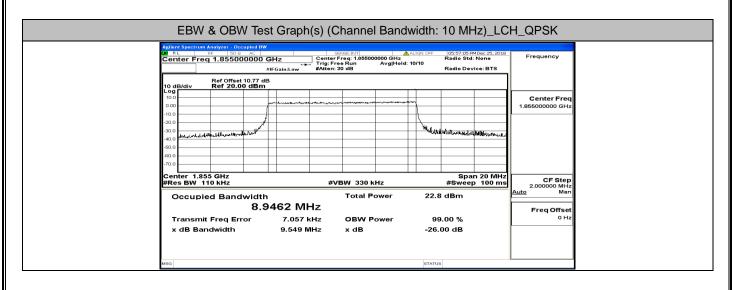


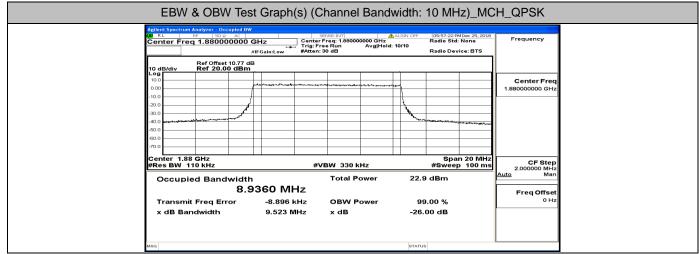
Center Freq 1.907500000 GHz Center Freq 1.907500000 GHz Ref 0.00 GHz Center Freq 1.907500000 GHz Ref 0.00 dBm Control Freq 0.00 dBm	Agilent Spectrum Analyzer - Occupied BW			ALIGN OFF 05:56:55 PM Dec 25, 201	e 1
10         10<	Center Freq 1.907500000 G #	Hz Center F Trig: Fre #Atten: 3	req: 1.907500000 GHz e Run Avg Hold: '	Radio Std: None 10/10	Frequency
20.0       30.0       40.0	10 dB/div Ref 20.00 dBm Log		0100-at-110-at-121-be-1	m	
80.0         Image: Constraint of the second se	-20.0			home and a second secon	
Center         1.908 GHz         Span 10 MHz         CF Step           #Res BW 56 kHz         #VBW 160 kHz         #Sweep 100 ms         1.00000 MHz           Occupied Bandwidth         Total Power         23.5 dBm         Auto         Man           4.4797 MHz         Freq Offset         0 Hz         0 Hz         0 Hz	-50.0				<b>-</b>
Occupied Bandwidth     Total Power     23.5 dBm       4.4797 MHz     Freq Offset       Transmit Freq Error     -9.040 kHz     OBW Power     99.00 %     0 Hz	Center 1.908 GHz	#V	BW 160 kHz	Span 10 MH #Sweep 100 m	s 1.000000 MHz
		797 MHz	Total Power	23.5 dBm	
	· ·				0 Hz

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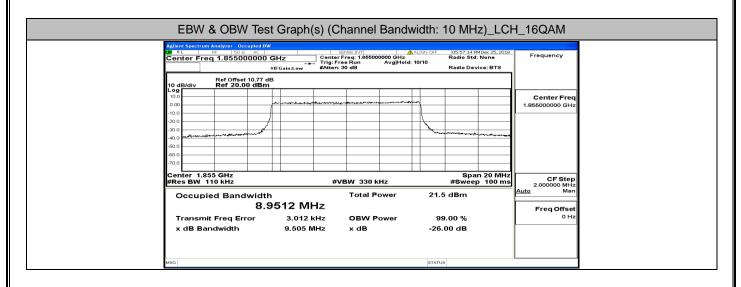


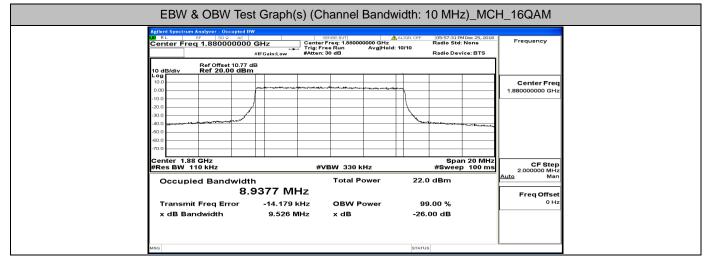
Center 1.905 GHz     AvgiHold: 10/10     Radio Device: BTS       10 dB/div     Ref Offset 10.84 dB     Center Free       10 dB/div     Ref 20.00 dBm     Center Free       10 dB/div     Ref 20.00 dBm     Center Free       10 dB/div     Ref 0ffset 10.84 dB     Center Free       200     Span 20 MHz     Span 20 MHz       Center 1.905 GHz     #VBW 330 kHz     Span 20 MHz       Cccupied Bandwidth     Total Power     23.8 dBm       8.9387 MHz     Freq offset	Center 1.90     Center 1.90     Center 1.90     Center 1.905       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000     000     000     000     000       000	Adlent Spectrum Analyzer - Occupied BW W RL RF S0.0 AC SENSENT ▲ALGN OFF (05:57:12 PMDec 25, 2018) Center Freq 1.9050000000 GHz Canter Freq: 1.905000000 GHz Radio Std: None F										
10 dB/div         Ref 20.00 dBm           Log         Center Free           100         Span 20 MHz           Center 1.905 GHz         Span 20 MHz           WBW 330 kHz         Span 20 MHz           Occupied Bandwidth         Total Power         23.8 dBm           B.9387 MHz         Freq Offse	Center 1.905 GHz         Ker 20.00 dBm         Center Freq           Conter 1.905 GHz         #VEW 330 kHz         #Span 20 MHz           Coccupied Bandwidth         Total Power         23.8 dBm           B.9387 MHz         Freq Offset           Transmit Freq Error         -2.941 kHz         OBW Power         99.00 %	Trig: Free Run Avg Hold: 10/10										
100         Center Free           100         C	Indiana         Center Freq           0.00         0	10 dB/div Ref 20.00 dBm										
200       300       4	300       3	10.0	por manuna m	*****	monorman				Center Freq 1.905000000 GHz			
400     400 <td>Image: style style</td> <td></td> <td></td> <td></td> <td></td> <td>۱</td> <td></td> <td></td> <td></td>	Image: style					۱						
Image: Second state of the second s	Image: Second state in the second state in	and a second second second second				N	manan					
Center 1.905 GHz #Res BW 110 kHz #VBW 330 kHz #Sweep 100 ms Occupied Bandwidth Total Power 23.8 dBm 8.9387 MHz Freq Offse	Center 1.905 GHz     Span 20 MHz       #Res BW 110 kHz     #VBW 330 kHz     #Sweep 100 ms       Occupied Bandwidth     Total Power     23.8 dBm       B:9387 MHz     Freq Offset       Transmit Freq Error     -2.941 kHz     OBW Power     99.00 %											
#Res BW         110 kHz         #VBW         330 kHz         #Sweep         100 ms         CCP Step           Occupied Bandwidth         Total Power         23.8 dBm         Auto         Mar           8.9387 MHz         Freq Offse         Freq offse         Freq offse	#Res BW         110 kHz         #VBW         330 kHz         #Sweep         100 ms         CCF Step Document           Occupied Bandwidth         Total Power         23.8 dBm         Auto         Man           B.9387 MHz         Freq Offset         Freq Offset         0 Hz						Sna	0 20 MHz				
Occupied Bandwidth Total Power 23.8 dBm	Occupied Bandwidth     Total Power     23.8 dBm       8.9387 MHz     Freq Offset       Transmit Freq Error     -2.941 kHz     OBW Power     99.00 %     0 Hz						#Sweep		2.000000 MHz			
	Transmit Freq Error -2.941 kHz OBW Power 99.00 %											
	x dB Bandwidth 9.477 MHz x dB -26.00 dB				ower							
		MSG				STATUS	5		1			

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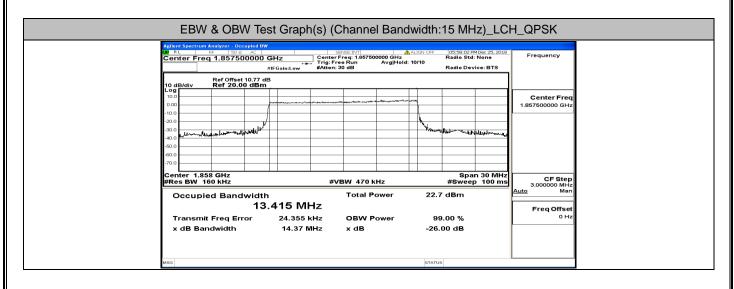


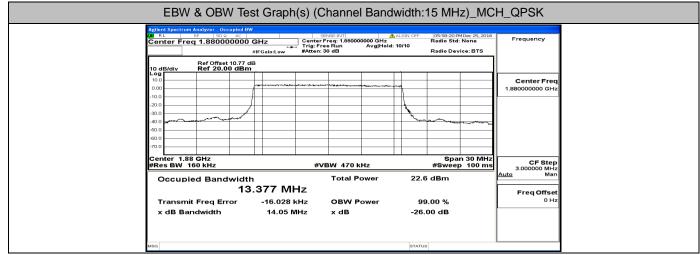
M         RL         RF         50 Ω         AC         SENSE:INT         ALIGN OFF         05:57:51 PM Dec 25, 2018           Center Freq         1.905000000 GHz         Center Freq: 1.005000000 GHz         Radio Std: None         Trig: Freq: 1.005000000 GHz         Radio Std: None									
Trig: Free Run Avg Hold: 10/10 #IFGain:Low #Atten: 30 dB Radio Device: BTS									
Ref Offset 10.84 10 dB/div Ref 20.00 dBr									
10.0	matheman			Center Freq					
-10.0	1			1.905000000 GHz					
-20.0 -30.0	/		\v.						
-40.0 comparison and a second a			Man on all and an and and	uphrese Line up					
-50.0									
-70.0									
Center 1.905 GHz #Res BW 110 kHz	#	VBW 330 kHz	Span 20 #Sweep 10						
Occupied Bandwidt	h	Total Power	22.8 dBm	Auto Man					
	9344 MHz			Freq Offset					
Transmit Freq Error	-6.950 kHz	OBW Power	99.00 %	0 Hz					
x dB Bandwidth	9.504 MHz	x dB	-26.00 dB						

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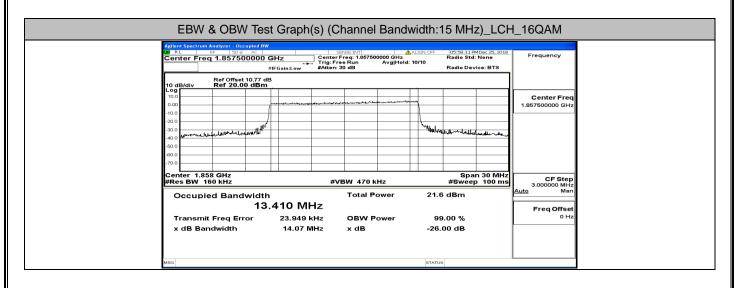


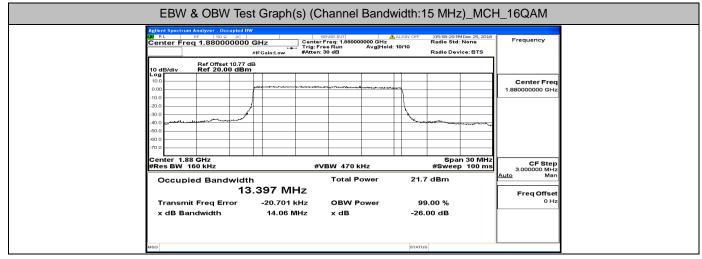
Aptient Spectrum Analyzer - Occupied DW R.L. & RP 500 AC SENSERNT ALION CFF 105:59:39 FMIDec 25, 2018 Center Freq 1.902500000 GHz Center Freq: 1.90250000 GHz Radio Std: None #IFGain:Low #Atten: 30 dB Radio Device: BTS										
Ref Offset 10.84 d           10 dB/div         Ref 20.00 dBm           Log				Center Fre						
-10.0				1.902500000 GH						
-30.0 -40.0 -50.0			- Annon anno anno	**						
-70.0										
Center 1.903 GHz #Res BW 160 kHz	#V	BW 470 kHz	Span 30 MH #Sweep 100 m	s 3.000000 MHz						
Occupied Bandwidth 13	361 MHz	Total Power	23.3 dBm	Auto Man Freq Offset						
Transmit Freq Error x dB Bandwidth	-254 Hz 14.01 MHz	OBW Power x dB	99.00 % -26.00 dB	0 Hz						

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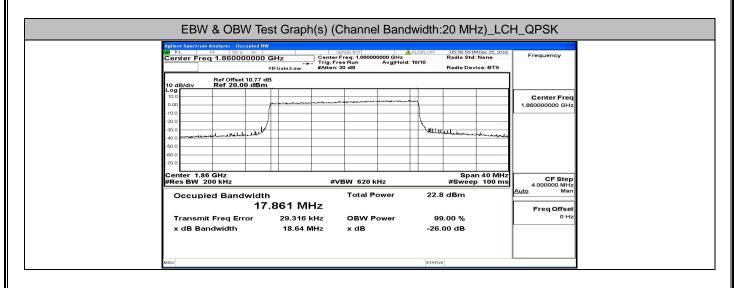


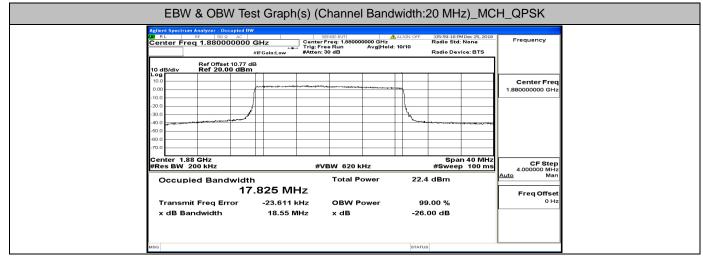
EBW & OBW Test			width:1		)_HCH	I_16QAM				
Center Freq 1.902500000 GHz #/FGain:Low #/FGain:Low #Atten: 30 dB Ref Offset 10.84 dB Ref Offset 10.84 dB										
Log 10.0 0.00 -10.0	and a start of the					Center Freq 1.902500000 GHz				
-20.0 -30.0 -40.0 -50.0			- And		an a balan analar					
60.0 -70.0 Center 1.903 GHz #Res BW 160 kHz	#\	/BW 470 kHz			1 30 MHz 100 ms	CF Step 3.000000 MHz				
Occupied Bandwidth 13.3	55 MHz	Total Power	22.2	dBm		Auto Man Freq Offset				
Transmit Freq Error x dB Bandwidth	2.876 kHz 14.02 MHz	OBW Power x dB		.00 % 00 dB		0 Hz				
MSG			STATUS			I				

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Report No.: LCS181219033AEG



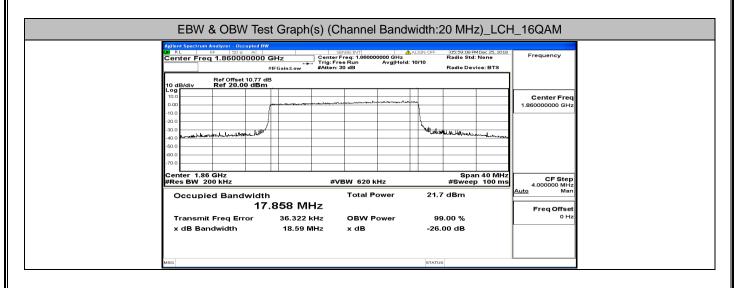


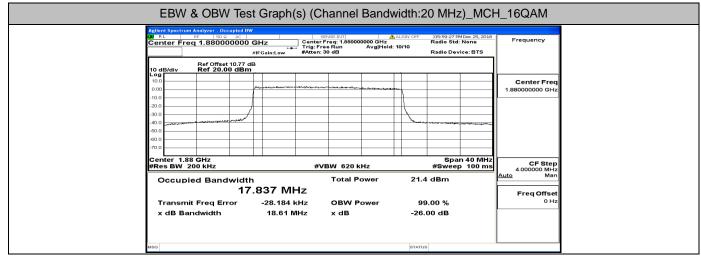
M         RL         RF         50.9         AC         SENSE:INT         ALIGN OFF         05:59:38 FMDec 25, 2018           Center Freq 1.90000000 GHz         Center Freq 1.90000000 GHz         Center Freq 1.90000000 GHz         Radio Std: None										
#IFGain:Low #Atten: 30 dB Radio Device: BTS										
Ref Offset 10.8 10 dB/div Ref 20.00 dE										
10.0 0.00		وسالله مر رو رو رو میشود.			~			Center Freq 1.90000000 GHz		
-10.0										
-30.0	/				N.					
-40.0					Malana	and an application of a	ana man			
-50.0							~~~			
-70.0										
Center 1.9 GHz #Res BW 200 kHz		#V	BW 620 k	Hz			n 40 MHz p 100 ms	CF Step 4.000000 MHz		
Occupied Bandwic	ith		Total P	ower	22.8	3 dBm		Auto Man		
1	7.812 N	ЛНz						Freq Offset		
Transmit Freq Error	7.60	7 kHz	OBW P	ower	99	9.00 %		0 Hz		
x dB Bandwidth	18.60	) MHz	x dB		-26.	00 dB				

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Report No.: LCS181219033AEG



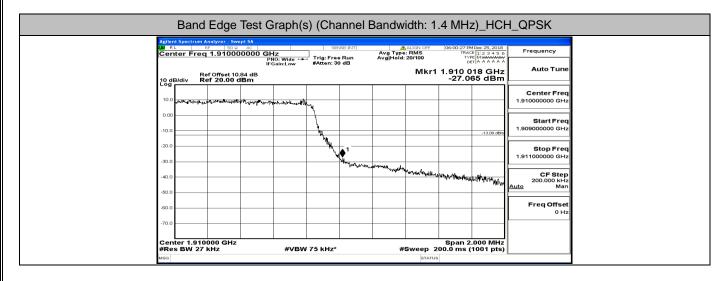


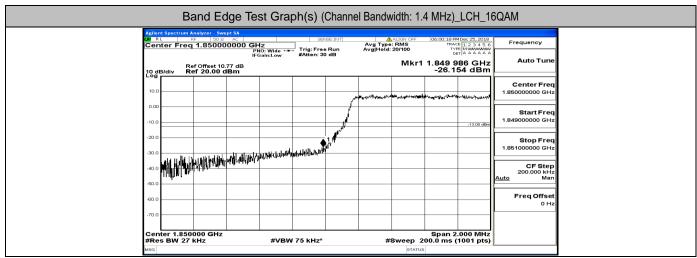
Agilent Spectrum Analyzer - Occupied IBW           M         RL         RF         SO Q         AC		ENSE:INT	width:2	05:59:47 PM De	ec 25, 2018	H_16QAM				
Center Freq 1.90000000 GHz WIFGain:Low WIFGain:Low WAtten: 30 dB AvgjHold: 10/10 Ref Offset 10.84 dB Ref Offset 20.00 dBm										
Log 10.0 .000		gargeneneringen angehalt er en en sameren.				Center Freq 1.90000000 GHz				
-20.0 -30.0 -40.0 -50.0			<u> </u>	an an state and a state of the state of	مر م					
60.0 -70.0 Center 1.9 GHz #Res BW 200 kHz		'BW 620 kHz		Span 4 #Sweep	40 MHz	CF Step				
Occupied Bandwidth	806 MHz	Total Power	21.7	dBm	100 1113	4.000000 MHz Auto Man Freq Offset				
Transmit Freq Error x dB Bandwidth	8.436 kHz 18.57 MHz	OBW Power x dB		.00 % 00 dB		0 Hz				
MSG			STATUS							

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### **D.4 Band Edge**

	Band E	dge Test G	iraph(s	) (Cha	annel E	Bandwi	idth: 1	.4 MHz	z)_LCH	I_QPSK	
		50 Q AC	Z O; Wide		SE:INT	Avg Type: Avg Hold:	ALIGN OFF RMS 20/100	06:00:08 PM TRACI TVP	Dec 25, 2018	Frequency	
	B/div Ref 2	ifő iffset 10.77 dB 20.00 dBm	ain:Low	#Atten: 30	dB	-		1.849 8	12 GHz 76 dBm	Auto Tune	
10.					بر	hayen files they are the	-shapelytheraperty	igest/1614-managelyla.co.1	Merroglerensp	Center Freq 1.85000000 GHz	
0.0										Start Freq 1.849000000 GHz	
				<sup>1</sup>	and a second				-13.00 dBm	Stop Freq	
-30.1	Uning and the second	Maladiment diapportations	www.grainwaladiwala	ANA Indryw <sup>yyyy</sup>						1.851000000 GHz	
-40.1		~								200.000 kHz Auto Man	
-60.0										Freq Offset 0 Hz	
-70.	nter 1.85000	0 GHz						Snan 2	000 MHz		
	es BW 27 kH		#VBW	75 kHz*		#5	Sweep 20	00.0 ms (			

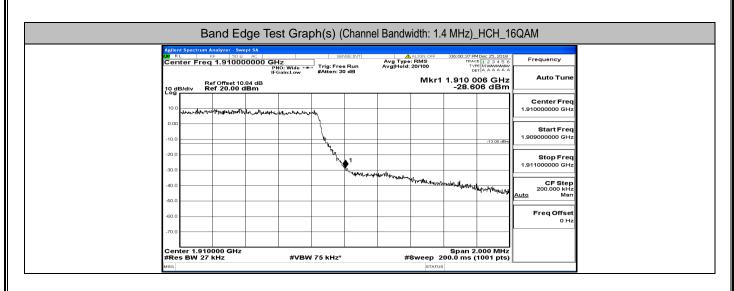


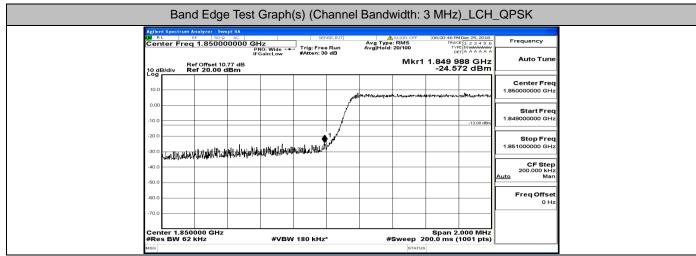


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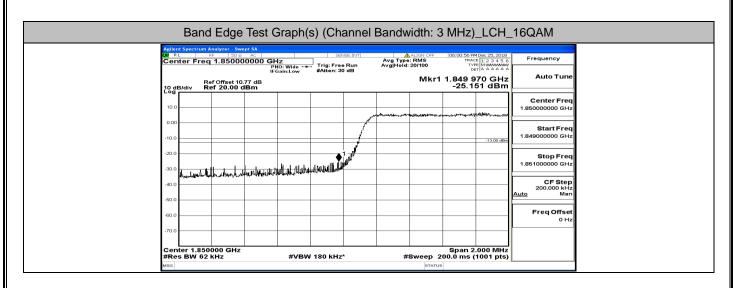


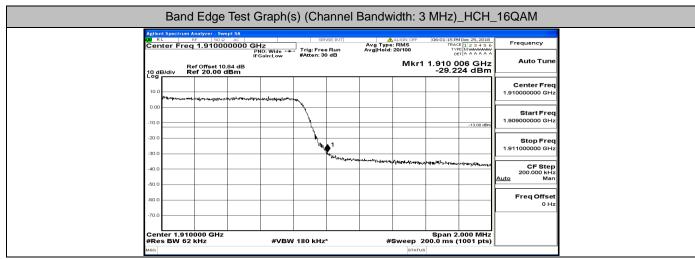
Agilent Spectrum Analyzer - Sw		SENSE:INT	ALIGN OFF 06:01:	:05 PMDec 25, 2018	
Center Freq 1.9100	PNO: Wide Trig:	Avg Free Run Avg	Type: RMS fold: 20/100	TRACE 1 2 3 4 5 6 TYPE MWWWWW DET A A A A A A	Frequency
Ref Offset 10 10 dB/div Ref 20.00 (	1.84 dB	n: 30 dB	Mkr1 1.91	0 002 GHz 7.352 dBm	Auto Tune
10.0					Center Freq
0.00	an income and a star province of the				
-10.0				-13.00 dBm	<b>Start Freq</b> 1.909000000 GHz
-20.0	1	\1			Stop Freq
-30.0		Manage Musicola	ikelaphannyayi yaki kanyan		1.911000000 GHz
-40.0					CF Step 200.000 kHz Auto Man
-50.0					
-60.0					Freq Offset 0 Hz
-70.0				I	

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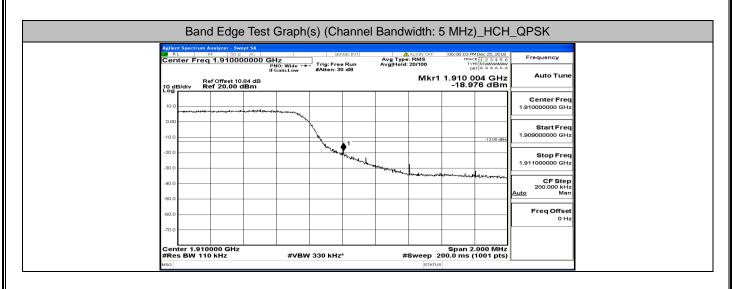


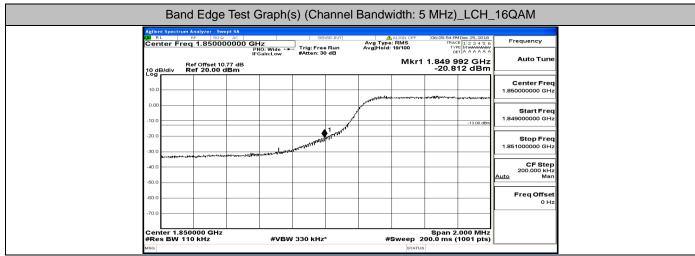
	Ba	nd Edg	e Test	t Graph	(s) (Cl	nannel	Band	width:	5 MHz	)_LCH	_QPSK
L <b>XI</b> F	RL	RF 50 RF 50	Ω AC   100000 C	SHz PNO: Wide ↔		e Run	Avg Type Avg Hold	ALIGN OFF RMS 20/100	06:05:44 PM TRAC TYF DE	MDec 25, 2018 E 1 2 3 4 5 6 E MWWWWW T A A A A A A	Frequency
10 g	B/div	Ref Offset 1 Ref 20.00	0.77 dB	IFGain:Low	written. e			Mkr1	1.850 0	00 GHz 65 dBm	Auto Tune
10.0		_					water	***			Center Freq 1.85000000 GHz
-10.0						الر	part and a second s			-13.00 dBm	<b>Start Freq</b> 1.849000000 GHz
-20.0					. In Maryally	A HAMPANY				110.00 000	Stop Freq 1.851000000 GHz
-30.0	home	and was haven	nine-and to prove a set	in your and the former and the							CF Step 200.000 kHz
-50.0											<u>Auto</u> Man
-60.0											Freq Offset 0 Hz
	nter 1.88	50000 GH2								.000 MHz	
#Re MSG	S DW 1	UU KHZ		#VBW	300 kHz		#	Sweep 2		1001 pts)	

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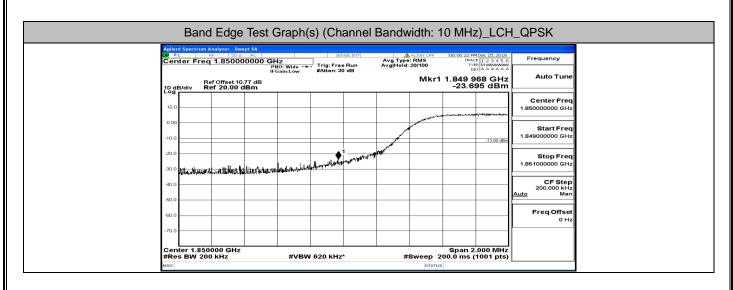


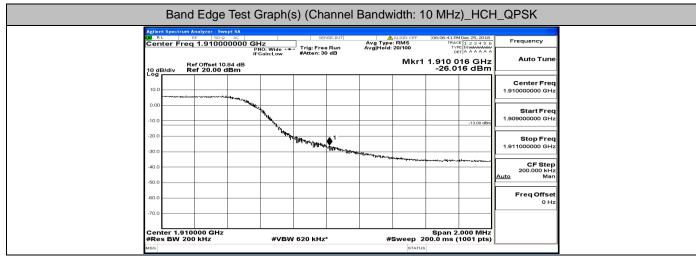
_				Graph(	s) (Ch	annel	Bandw	vidth: 5	MHz)_	HCH_	_16QAM
LXI R	L		2 AC   00000 GH	IZ IO: Wide ↔ Sain:Low		e Run	Avg Type Avg Hold:	ALIGN OFF RMS 19/100	06:06:13 PM TRACE TYPE DET	Dec 25, 2018	Frequency
10 d Log	B/div I	Ref Offset 10 Ref 20.00	0.84 dB	sain:Low	whiten: a	0 00		Mkr1	1.910 00		Auto Tune
10.0		an allower	๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛								Center Freq 1.91000000 GHz
-10.00					l V						Start Freq 1.909000000 GHz
-20.0					Alley Market	1 1				-13.00 dBm	
-30.0						NIN CONTRACTOR	An Mary ware	ana ayanga yadan ba	-sibraryin,stylegie	townsome	1.911000000 GHz
-40.0											200.000 kHz Auto Man
+60.0											Freq Offset 0 Hz
-70.0											
	nter 1.91 s BW 1	0000 GHz 10 kHz		#VBW	330 kHz	*	#	Sweep 2	Span 2.0 00.0 ms (1	000 MHz 001 pts)	

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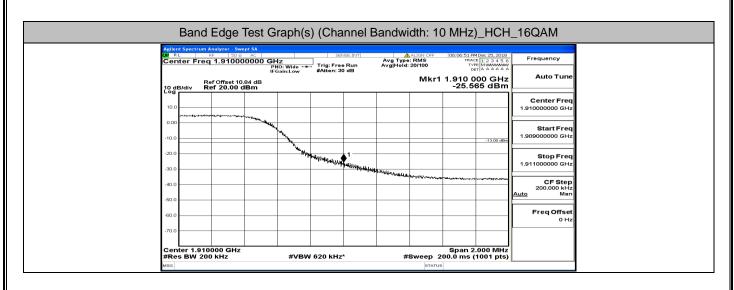


Agilent Spectrum Analyzer - Swept SA	SENSE:INT	ALIGN OFF 06:06:32 PMDac 25, 2018	
Center Freq 1.850000000		Avg Type: RMS Avg Hold: 20/100 Det A A A A A A	Frequency
Ref Offset 10.77 dB 10 dB/div Ref 20.00 dBm	irganicuw irrach. oo dB	Mkr1 1.849 980 GHz -25.672 dBm	Auto Tune
10.0			Center Freq 1.85000000 GHz
.10.0		-13.00 dPm	<b>Start Freq</b> 1.84900000 GHz
-20.0	1 • 1 • 1 • 1 • 1		Stop Freq 1.85100000 GHz
-30.0	have been been added and the address of the		1.851000000 GHz
-40.0			200.000 kHz Auto Man
-60.0			Freq Offset 0 Hz
-70.0			

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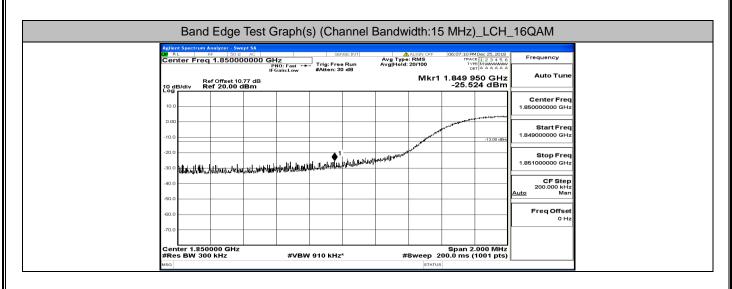
LXI RL		Analyzer - Sw RF 50 c 1.8500	00000 GH	Iz	SE	NSE:INT		ALIGN OFF	06:07:00 Pt	1Dec 25, 2018 E 1 2 3 4 5 6 E MWWWW A A A A A A	_QPSK
10 dB	R 3/div <b>R</b>	ef Offset 10 ef 20.00	IFC 0.77 dB	NO: Fast 🔸	#Atten: 3	Avginola.		1.849 9	64 GHz 97 dBm	Auto Tune	
10.0										gan follo Palace Concernance	Center Freq 1.85000000 GHz
-10.0								and the state of t	and a start for the	-13.00 dBm	Start Freq 1.849000000 GHz
-20.0 - -30.0	-	Millentlenter	tyrethander Aufina	here for the state of the state	Monaderaldia		J.A. Spice and the second strength and the second	~~~~			<b>Stop Freq</b> 1.851000000 GHz
-40.0											CF Step 200.000 kHz <u>Auto</u> Man
-60.0 -											Freq Offset 0 Hz
	ter 1.850 s BW 30	0000 GHz			910 kHz					.000 MHz 1001 pts)	

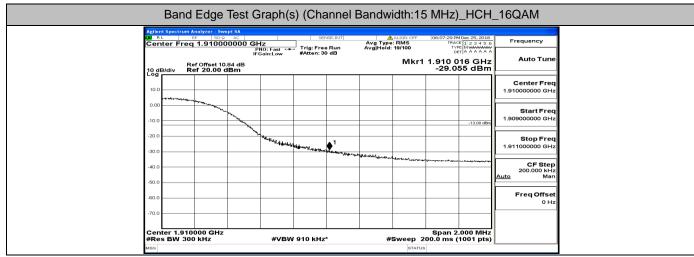
				Graph(	s) (Ch	annel	Bandw	vidth:1	5 MHz	)_HCH	I_QPSK
LXI R	L	RF 50	00000 GI	HZ NO: Fast ↔ Gain:Low		Run	Avg Type Avg Hold:	ALIGN OFF RMS 20/100	06:07:19 PM TRAC TYP	Dec 25, 2018 E 1 2 3 4 5 6 E MWWWWW T A A A A A A	Frequency
10 di Log	B/div	Ref Offset 1 Ref 20.00	0.84 dB	Gain:Low	#Millen: 3			Mkr1	1.910 0	10 GHz 50 dBm	A
10.0											Center Freq 1.91000000 GHz
-10.0			New Norman								Start Freq 1.90900000 GHz
-20.0			- <sup>-</sup>	- Berliefer Birthille		•1				-13.00 dBm	Stop Freq
-30.0					e anto matter	Panglijer pangenge	T Market Market Market	un and a state of the second sec	****	····· •	1.911000000 GHz
-60.0											200.000 kHz <u>Auto</u> Man
+60.0											Freq Offset 0 Hz
-70.0	tor 1.01	0000 GHz	-						Spap 3	000 MHz	
	s BW 3			#VBW	910 kHz	*	#\$	Sweep 2		1001 pts)	

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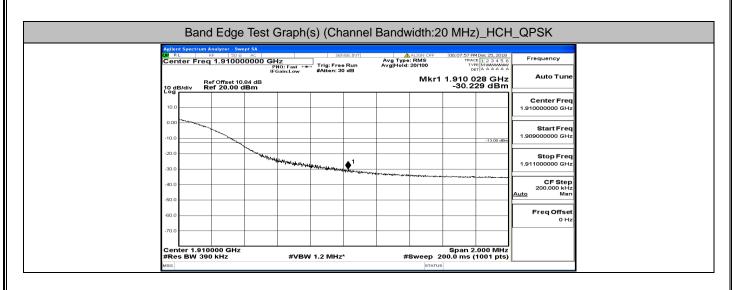


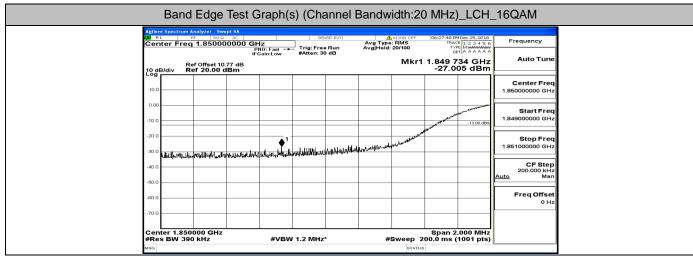
Agilent Spectrum Anal	50 Q AC		SENSE:INT	4	ALIGN OFF	06:07:38 PMDec 25, 201	3
Center Freq 1	.85000000 GH	D East Tr	ig: Free Run Atten: 30 dB	Avg Type Avg Hold:	: RMS 20/100	TRACE 1 2 3 4 5 TYPE MWWWW DET A A A A A	Frequency
	Dffset 10.77 dB 20.00 dBm	initow we			Mkr1	1.849 826 GH -25.525 dBr	z Auto Tune
10.0							Center Freq 1.85000000 GHz
0.00						. Surada and a surada and a surada and a surada	Start Freq
-10.0						-13.00 dE	<u>m</u>
-30.0			to a straight of the straighto	www.www.	A. Competer		Stop Freq 1.851000000 GHz
-40.0							CF Step 200.000 kHz
-50.0							<u>Auto</u> Man
-60.0							Freq Offset 0 Hz
-70.0							-

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			raph(s	s) (Cha	annel E	Bandwi	dth:20	MHz)	_HCH	_16QAM
LXI RL	m Analyzer - Sw RF 50 Ω req 1.91000	AC   00000 GH	NO: Fast ++		Run	Avg Type Avg Hold:	ALIGN OFF RMS 20/100	06:08:07 PM TRAC TYP	Dec 25, 2018 E 1 2 3 4 5 6 E MWWWWW T A A A A A A	Frequency
10 dB/div	Ref Offset 10 Ref 20.00 (	.84 dB	Sain:Low	#Atten: 3	) dB		Mkr1	1.910 0	24 GHz 94 dBm	Auto Tune
10.0										Center Freq 1.91000000 GHz
0.00	and a state of the									<b>Start Freq</b> 1.90900000 GHz
-20.0	**************************************	War John Made - Warran							-13.00 dBm	Stop Freq
-30.0			Statistic and and the		1 1 1 1 1 1 1 1 1 1	Sandy St. Same (				1.911000000 GHz
-40.0										200.000 kHz <u>Auto</u> Man
-60.0										Freq Offset 0 Hz
-70.0										
Center 1.9 #Res BW	910000 GHz 390 kHz		#VBW	1.2 MHz		#	Sweep 20		000 MHz 1001 pts)	

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## **D.5 Conducted Spurious Emission**

cu op						hann	el Rai	ndwidth	• 1 4 M	/Hz)	сн с	)PSK
Ag	ilent	Spectrum A	nalyzer - Sw	rept SA		Jhann	or Dai	awiuti				
LXI	RL	er Freq	RF 50.Ω	kHz P	NO: Wide 🔸	Trig: Free #Atten: 10	Run	Avg Type Avg Hold:	ALIGN OFF : RMS 10/100	06:08:27 PM TRACE TYPE	Dec 25, 2018 1 2 3 4 5 6 MMMMMM T A A A A A A	Frequency
10	dB	Re div <b>R</b> e	off offset 10		Gain:Low	Pricen. I			м	kr1 10.8		Auto Tune
0.5												Center Freq 79.500 kHz
-9.	42 -											Start Freq
-15	9.4											9.000 kHz
-25												Stop Freq 150.000 kHz
-32											-43.00 dBm	CF Step 14.100 kHz
-65	9.4 -											Auto Man
-65	9.4	7										Freq Offset 0 Hz
-75	9.4 <b>-</b>	· war waylyn	happy	Multurker	nymunt	WAR WARN	NUM	allen franseral	MMWMM	Maprown	ᢣᡗᡁ <i>ᢦ</i> ᠰᢩᡢᡟᡃᡃᡃ	
St #F	Res	9.00 kH BW 1.0	z KHz		#VBW	3.0 kHz*				74.0 ms (1		
Ag	9	Spectrum A	nalyzer - Sw	vept SA						DC Cou		
C	ent	er Freq	15.075	000 MHz	PNO: Fast	Trig: Free #Atten: 10	e Run 0 dB	Avg Type Avg Hold:	ALIGN OFF : RMS 9/100	TRACE TVPI DE	Dec 25, 2018	Frequency
10	dB	Re div <b>R</b> e	of Offset 10	0.68 dB dBm					-	Mkr1 5 -62.01	38 kHz 15 dBm	Auto Tune
0.6												Center Freq 15.075000 MHz
-9.	42 -											Start Freq
-15												150.000 kHz
-25											-33.00 dBm	Stop Freq 30.000000 MHz
-45												CF Step 2.985000 MHz
-65	9.4	∳ <sup>1</sup>										<u>Auto</u> Man
-65	ľ	# <b>1</b>										Freq Offset 0 Hz
-75				handynaatha	<b>16.</b> 1.000-04-1_12.64448.	ndywolfapyd	e	eller Worksenbergere	ng-P-b-liftp-selfeni			
#F	Res	150 kHz BW 10	kHz		#VBW	30 kHz*				68.3 ms (1		
1 \$1	R L	Spectrum A	RE 50.0	0 00	211-	SEP	NSE:INT	Au - 7.	ALIGN OFF	D6:08:36 PM TRACE	Dec 25, 2018	Frequency
C	ent				GHZ PNO: Fast ↔ Gain:Low	#Atten: 40	e Run 0 dB	Avg Hold:		kr2 25.8		Auto Tune
10	ЗВ	Re div <b>R</b> e	ef Offset 9. ef 30.00	98 dB dBm						-28.79	99 dBm	
20	0.0	1										Center Freq 13.015000000 GHz
	0.0 .00											Start Freq 30.000000 MHz
-10	D.O -										-13.00 dDm	Stop Freq
-20	D.O										2	26.00000000 GHz
-30			han .					- war and and	and a second	and the second second	or has not	CF Step 2.597000000 GHz <u>Auto</u> Man
-40	).0 ).0	or rates and			The second second							Freq Offset
-60												0 Hz
St	lart	30 MHz	MH~		#\/B\4	3.0 MIL-	*		Rween e	Stop 26	5.00 GHz	
#F		BW 1.0	WITZ		#VBW	3.0 MHz			Sweep 6 STATUS	4.93 ms (1	iouripts)	

Report No.: LCS181219033AEG

			CSE	Test	Graph(	s) (Cha	innel Ba	andwidth	n: 1.4 MI	Hz)_MC	H_QPS	К	
LXI	RL	RE	nalyzer - Swo 50 Ω 79.500	<u>∧</u> ⊳⊂ ∣ kHz		SEN	SE:INT	Avg Type Avg Hold:	ALIGN OFF	05:09:04 PM	Dec 25, 2018 1 2 3 4 5 6 MWWWWW A A A A A A	Frequency	
10		Ref	f Offset 10. f 10.58 c	IF	NO: Wide 🔸 Gain:Low	#Atten: 22	2 dB	Avg Hold:		/lkr1 9.0		Auto Tune	
L0 0.56			1 10.58 0	ыл						02.10		Center Freq 79.500 kHz	
-9.												Start Freq	
-19	9.4											9.000 kHz	
-29												Stop Freq 150.000 kHz	
-49											-43.00 dBm	CF Step 14.100 kHz	
-69	1- 1-	Y										Auto Man Freq Offset	
-69 -79	9.4	~~~~	mahankan Mha	w way	ulm <sub>op</sub> rireilory	en and	white have	MANAN	www.wm		at. At. At. A.	0 Hz	
St	art 9.0	00 kHz	2		`			· √. dA	γ <b>η η ΄</b> Υ	Stop 15	0.00 KHZ		
MSG	les B\	W 1.0	kHz		#VBW	3.0 kHz*			Sweep 17	74.0 ms (1	1001 pts)		
1 11	RL	RE	15.0750	<u>∧</u> ∝	NO: Fast + -		Run	Avg Type Avg Hold:	ALIGN OFF : RMS 9/100	06:09:10 PM TRACE TYP	Dec 25, 2018	Frequency	
10	dB/div	Ref	f Offset 10. f 10.58 c		NO: Fast ↔ Gain:Low	#Atten: 10	) dB			Mkr1 5	i38 kHz 39 dBm	Auto Tune	
Lõ 0.68												Center Freq 15.075000 MHz	
-9.4												Start Freq	
-19												150.000 kHz	
-29											-33.00 dBm	Stop Freq 30.000000 MHz	
-49	<u> </u>											CF Step 2.985000 MHz Auto Man	
-69	IT											Freq Offset	
-79		سيلابه	hansa kan dasta	nak de autoria bilan		aura (i taibu aka la)	late and also de	instrute second of	han Mutakkan	at a theather	lands we wait that	0 Hz	
St: #R	art 15	0 kHz W 10 k		a Storal A 188		30 kHz*	1940)- 994 (1901)-				0.00 MHz		
MSC	a lent Spe		nalyzer - Swe	ept SA					STATUS	🚹 DC Cou	pled		
L <b>X</b> /	RL	RF	= 50 Ω	AC 00000 0	SHz PNO: Fast ↔ Gain:Low	. Trig: Free #Atten: 40	Run dB	Avg Type Avg Hold:	ALIGN OFF : RMS 6/100	06:09:13 PM TRACE TVP DE	Dec 25, 2018 1 2 3 4 5 6 MMMMMM A A A A A A	Frequency	
18	dB/div	Ref Re	f Offset 9.9 f 30.00 c	8 dB					MI	(r2 25.6		Auto Tune	
20											]	Center Freq 13.015000000 GHz	
10		$\rightarrow$ <sup>1</sup>										Start Freq	
-10											-13.00 dB-	30.000000 MHz Stop Freq	
-20											2	26.00000000 GHz	
-30			سر پیمبر			1		and a second	an an an an an	-re- <sup>he</sup> l <sup>u</sup> le	and brown and	CF Step 2.597000000 GHz <u>Auto</u> Man	
-40		~~~	<b>™</b> ``,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									Freq Offset 0 Hz	
-60	0.0												
#R	tes Bl	0 MHz W 1.0 I	MHz	I	#VBW	3.0 MHz	•	 •		Stop 26 1.93 ms (1	5.00 GHz 1001 pts)		
MSG	a								STATUS				

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Report No.: LCS181219033AEG

	CSE Test Graph(s) (Chann	nel Bandwidth: 1.4 MHz)_HCH_QPS	K
Agilent Spectrum An XX RL RE Center Freq	50 Ω Δ DC SENSE:1	INT ALIGN OFF 06:09:39 PMDec 25, 2018 Avg Type: RMS TRACE 12.3 4 5 6 n Avg Jiploid: 9/100 Tvre (hwwww	Frequency
Bet	PNO: Wide - Trig: Free Ru IFGain:Low #Atten: 10 dE f 10.58 dB f 10.58 dBm	Avg Type: RMS m Avg Heid: 9/100 Berl/AAAAA Mkr1 14.076 kHz -72.340 dBm	Auto Tune
10 dB/div Re	f 10.58 dBm	-72.340 UBII	Center Freq
-9.42			79.500 kHz
-19,4			Start Freq 9.000 kHz
-29.4			Stop Freq 150.000 kHz
-39.4		-43.00 dBn	СF Step 14.100 кНz
-59.4			<u>Auto</u> Man
-69.4	same of a second part of a	A a a said war as may a may any my	Freq Offset 0 Hz
Start 9.00 kHz		What M AN WWW MAN MAN DE WALANT AND THE Stop 150.00 KHZ	
#Res BW 1.0	kHz #VBW 3.0 kHz*	Sweep 174.0 ms (1001 pts)	
Agilent Spectrum An UX RL RF Center Freq	50 R A DC SENSE:1	INT ALIGN OFF 06:09:45 PMDec 25, 2018 Avg Type: RMS TRACE 12 3 4 5 6 AvgHold: 9100 Type	Frequency
Bet	PNO: Fast Trig: Free Ru IFGain:Low #Atten: 10 dE	Avg Type: RMS m Avg Hold: 9/100 3 Mkr1 538 kHz -60.275 dBm	Auto Tune
10 dB/div Re	f 10.58 dBm	-60.275 dBm	Center Freq
-9.42			15.075000 MHz
-19.4			Start Freq 150.000 kHz
-29.4		-33.00 dDm	Stop Freq 30.000000 MHz
-39,4			CF Step 2.985000 MHz
-59.4			<u>Auto</u> Man
-69.4			Freq Offset 0 Hz
-79.4 Start 150 kHz		ฟางุจิลทายแหน่งหรือสิทธิสินทางการและแบบการเหล่าหลายการใหญ่หา Stop 30.00 MHz	
#Res BW 10 k	Hz #VBW 30 kHz*	Sweep 368.3 ms (1001 pts) status 1 DC Coupled	
Agilent Spectrum An UXI RL RF Center Freq	13.015000000 GHz	Avg Type: RMS TRACE 123456	Frequency
	PNO: Fast Trig: Free Ru IFGain:Low #Atten: 40 dE	Mkr2 25.688 GHz	Auto Tune
10 dB/div Re	f 30.00 dBm	-28.763 dBm	Center Freq
20.0 10.0			13.015000000 GHz
0.00			Start Freq 30.000000 MHz
-10.0		-13.00 dBn	Stop Freq 26.00000000 GHz
-20.0			CF Step
-40.0	weigen and an and and and and and and and and	ware an water ware and a start the start	2.597000000 GHz <u>Auto</u> Man
-50.0			Freq Offset 0 Hz
-60.0			
Start 30 MHz		Stop 26.00 GHz	

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Report No.: LCS181219033AEG

And the descent of descent of the d		CSE	Test Graph(s) (Chanr	nel Bandwidth: 1.4 MHz	z)_LCH_16QA	M
Image: Normal Strategy of the s	LX/ R	RL RF 50 ຊ 🥂	DC SENSE:	INT ALIGN OFF	06:08:43 PMDec 25, 2018	Frequency
Image: Set of the table all in the constraint of the table all in the constraint of table all in the constr	Cer	nter Freq 79.500 k	Hz PNO: Wide Trig: Free Ru IFGain:Low #Atten: 10 dE	Avg Type: RMS un Avg Hold: 9/100 3	DET A A A A A A	riequency
0.00     0.00	10,8	Ref Offset 10.5 B/div Ref 10.58 dl		Mk	r1 11.115 kHz	Auto Tune
1.1       1						
<pre>10 00 hHz 10 00</pre>						
30     30000144       30     300000144       30     30000144       30     30000144       30     30000144       30     30000144       30000144     30000144       300000044     30000144       300000044     30000144       30000044     30000144       300000044     300000144       300000044     300000144<	-19.4	4				
Creater Cre	-29.4	4				Stop Freq
Image: Section of the section of th	-39.4	4			-43.00 dBm	
and and another intervention of the second of the secon						CF Step 14.100 kHz <u>Auto</u> Man
0 Her     0 Her     0 Her     0 Her     0 Her     0 Her       Start 0.00 Hz     Stop 150.00 Hrz     Stop 150.00 Hrz     Stop 150.00 Hrz     0 Her       Start 0.00 Hz     Stop 150.00 Hz     Stop 150.00 Hz     Stop 150.00 Hz     Prequency       Center Freq 15.075000 Hrz     Freg Freq 8tm     Maghted and the stop 150.00 Hz     Prequency       0 genuin     Center Freq 15.075000 Hz     Freg Freq 308     Maghted and the stop 150.00 Hz     Auto Ture       0 genuin     Center Freq 15.075000 Hz     Freg Freq 308     Stop 150.00 Hz     Auto Ture       0 genuin     Center Freq 15.075000 Hz     Freg Freq 308     Stop 150.00 Hz     Auto Ture       0 genuin     Center Freq 15.075000 Hz     Freg Freq 308     Stop 150.00 Hz     Auto Ture       0 genuin     Center Freq 15.075000 Hz     Freg Freq 308     Stop 150.00 Hz     Stop 50.00 Hz       0 genuin     Center Freq 15.075000 Hz     Freq Offset 0 Hz     Stop 50.00 Hz     Stop 50.00 Hz       0 dent     Genuin     Genuin     Genuin     Genuin     Genuin     Genuin       0 dent     Genuin     Genuin     Genuin     Genuin     Genuin     Genuin       0 dent     Genuin     Genuin     Genuin     Genuin     Genuin     Genuin       0 dent     Genuin     Genuin		<b>A</b> 1				Freq Offset
Start 0.00 H/z #Res BW 1.0 H/z     #VBW 3.0 H/z*     Stop 150.00 H/z Bween 12.0 ms (1001 ps)       Auto Ture Free 0.5000 H/z Browne Do Coupled     Auto Ture Free 0.5000 H/z Browne Do Coupled     Free Users / Center Free 15.075000 H/z Browne Do Coupled     Free Users / Center Free 15.075000 H/z Browne Do Coupled     Free Users / Center Free 15.075000 H/z Browne Do Coupled     Free Users / Center Free 15.0000 H/z Browne Do Coupled     Free Users / Center Free 15.00000 H/z Browne Do Coupled     Free Users / Center Free 15.00000 H/z Browne Do Coupled     Free Offset 0.0000 H/z Browne Do Coupled     Auto Ture 2.000000 H/z Browne Do Coupled       Market Start Free 10.00000 H/z Do Coupled     Free Offset 0.0000 H/z Browne Do Coupled     Free Offset 0.00000 H/z Do Coupled     Free Offset 0.000000 H/z Do Coupled     Free Offset 0.000000 H/z Do Coupled     Free Offset 0.0000		Vannana	March March march	Ampanana maring	Munnan	0 Hz
PRes BW 10. kHz     #VBW 30. kHz*     Bweeg 174.0 ms (1001 pts)       Image: Decompted and update in the second an	Cta.		a induition of the second second			
Autom Systems and Autor Turner         State 1:0 480         Autor Turner         Autor Turner         Frequency           Center Freq 15.075000 MHz (0 gluidy Ref 05.05 6 Bbr 10 and 10 br 10 an	#Re	es BW 1.0 kHz	#VBW 3.0 kHz*	Sweep 174	1.0 ms (1001 pts)	
Center Freq 15.075000 Mtg       Freq Freq Ban       Avg Tree Red       Mkr1 508 Htg       Auto Tune         Ref Offset 10.68 dBm	Agiler	nt Spectrum Analyzer - Swep	t SA NDC SENSE-		05:08:49 PMDec 25, 2018	_
Ref Offset 10.88 dBm     Mikr1 508 kHz     Auto Tune       0.000     0.000 kHz     0.000 kHz     0.000 kHz     0.000 kHz       0.42     0.000 kHz     0.000 kHz     0.000 kHz     0.000 kHz       0.42     0.000 kHz     0.000 kHz     0.000 kHz     0.000 kHz       0.44     0.000 kHz     0.000 kHz     0.000 kHz     0.0000 kHz       0.44     0.000 kHz     0.000 kHz     0.0000 kHz     0.0000 kHz       0.44     0.000 kHz     0.0000 kHz     0.0000 kHz     0.00000 kHz       0.44     0.000 kHz     0.0000 kHz     0.0000 kHz     0.00000 kHz       0.45     0.0000 kHz     0.0000 kHz     0.00000 kHz     0.00000 kHz       0.45     0.1000 kHz     0.0000 kHz     0.00000 kHz     0.00000 kHz       0.45     0.1000 kHz     0.0000 kHz     0.00000 kHz     0.00000 kHz       0.45     0.10000 kHz     0.0000 kHz     0.0000 kHz     0.0000 kHz       0.45     0.10000 kHz     0.0000 kHz     0.00000 kHz     0.0000 kHz       0.45     0.0000 kHz     0.0000 kHz     0.0000 kHz     0.0000 kHz       0.45     0.0000 kHz     0.0000 kHz     0.0000 kHz     0.0000 kHz       0.45     0.0000 kHz     0.0000 kHz     0.0000 kHz     0.0000 kHz       0.			PNO: East Irig: Free Ru	Avg Type: RMS un Avg Hold: 9/100 3	TYPE A A A A A A	
0.00       0.00	10.4	Ref Offset 10.5 B/div Ref 10.58 dl	8 dB	I	Mkr1 508 kHz -64.489 dBm	Auto Tune
0.42       1						
19.4       19.4       19.4       19.000 kHz         39.4       19.4       19.000 kHz       19.000 kHz         39.4       19.4       19.4       19.000 kHz         39.4       19.4       19.4       19.000 kHz         49.4       19.4       19.4       19.000 kHz         49.4       19.4       19.4       19.4         49.4       19.4       19.4       19.4         49.4       19.4       19.4       19.4         49.4       19.4       19.4       19.4         49.4       19.4       19.4       19.4         49.4       19.4       19.4       19.4         49.4       19.4       19.4       19.4         5tart 150 kHz       #VBW 30 kHz*       Stoe 30.00 0MHz         5tart 150 kHz       #VBW 30 kHz*       Stoe 30.00 0MHz         40.4       19.4       19.4       19.4         10.6       10.6       10.4       19.4         10.6       10.6       10.4       19.4         10.6       10.6       19.4       19.4       19.4         10.6       10.6       10.4       19.4       19.4         10.6       10.4       19	-9.42	2				
304       3000000 MHz         3000000 MHz       3000000 MHz         304       404         404       404	-19.4	4				150.000 kHz
394	-29.4	4			-33.00 dBm	Stop Freq
Alter Second Mitz 484 4 494 4 495 4 495 4 495 4 495 4 495 4 595 4 595 4 505 10 KHz #Res BW 10 KHz #Res BW 10 KHz #Res BW 10 KHz #Res BW 10 KHz #VBW 30 KHz* Store 30.00 MHz Store 30.00 MHz Brau DC Coupled Frequency Alter 150 KHz #Res BW 10 KHz #VBW 30 KHz* Store 30.00 GHz Center Freq 13.01500000 GHz 10 BH/dt Store 30.00 GHz 10 Center Freq 10 BH/dt Store 30.00 GHz 10 Center Freq 10 Cent	-39.4	4				
.69.4     .69.4						2.985000 MHz
Start 150 kHz         Stop 30.00 MHz           #Res BW 10 kHz         #VBW 30 kHz*         Sweep 368.3 ms (1001 pts)           Mdd         Introduction Analyser - Sweet 36.         Sweep 368.3 ms (1001 pts)           Addition Spectrum Analyser - Sweet 36.         Sweep 368.3 ms (1001 pts)         Frequency           Center Freq 13.015000000 GHz         Avg Type: RMS         Trig: Free Run Br Gallelow         Avg Type: RMS         Trig: Tree Run Br Gallelow         Avg Type: RMS         Trig: Tree Run Br Gallelow         Frequency           10 dB/div         Ref Offset 9.98 dB         Mkr2 25.714 GHz         Auto Tune         -28.826 dBm         Center Freq 13.015000000 GHz         Auto Tune           0.00         1         - <td></td> <td>N</td> <td></td> <td></td> <td></td> <td>0 Hz</td>		N				0 Hz
#Res BW 10 kHz     #VBW 30 kHz*     Sweep 368.3 ms (1001 pts)       uso     intrue D C Coupled       All bit one     intrue D C Coupled       All bit one     intrue D C Coupled       All bit one     intrue D C Coupled       Center Freq 13.015000000 GHz     Trig: Free Run IFGainLow       D B/0/Fast     Trig: Free Run IFGainLow       0 dB/div     Ref Offeet 938 dB       10 dB/div     Ref 30.00 dBm       0 dD     1	Star	rt 150 kHz	นอการสีข้างหรือสู่สุดของสารสีรัฐสีรัฐสีรัฐสีรัฐสีรัฐสีรัฐสีรัฐสีรั	มีของ และสุข. ให้แกะผู้เป็นไม่เห็นสูงสารใจเสารประเทศเห็น (หรือเรืองสารท		
M         NL         NP         SO 0         AC         Issues         ALLON CP         December 2000000 CPH2         Frequency           Center Freq         13.015000000 GH2         PH0: East         To Effect 20.010         Avg Type: RMS         MRC [12.3.450         Frequency           Ref Offset 9.98 dB         Mkr2 25.714 GH2         Auto Tune           10 gB/div         Ref 30.00 dBm         -28.826 dBm         Center Freq           10 gB/div         1         - <td>#Re MSG</td> <td>es BW 10 kHz</td> <td>#VBW 30 kHz*</td> <td></td> <td>3.3 ms (1001 pts)</td> <td></td>	#Re MSG	es BW 10 kHz	#VBW 30 kHz*		3.3 ms (1001 pts)	
If Galm.Low         Partien: 40 dB         Mkr2 25.714 GHz         Auto Tune           10 gB/div         Ref 30.00 dBm         -28.826 dBm         Image: Center Freq 13.01600000 GHz         Image: Center Freq 13.01600000 GHz           0.00         1         Image: Center Freq 0.00	LXI R	RL RF 50.Ω	AC SENSE:	INT ALIGN OFF	06:08:52 PM Dec 25, 2018	Erequency
Ber Offeet 9 39 dB         Mkr2 25.714 GHz         Auto 1 une           10 gB/div         Ref 30.00 dBm         -28.826 dBm         -28.826 dBm         10.000 GHz           200         1         1         1         10.000 GHz         13.015000000 GHz         13.015000000 GHz           10.0         1         1         1         1         10.000000 GHz         13.015000000 GHz           10.0         1         1         1         1         10.000000 GHz         13.015000000 GHz           10.0         1         1         1         1         10.000000 GHz         13.015000000 GHz           10.0         1         1         1         1         10.000000 GHz         13.015000000 GHz           10.0         1         1         1         1         10.000000 GHz         13.00000 GHz           10.0         1         1         1         1         10.000000 GHz         13.00000 GHz           10.0         1         1         1         1         10.000000 GHz         13.00000 GHz           25.97000000 GHz         1         1         1         1         1         1           10.00         1         1         1         1         1         1 <td>Cer</td> <td>nter Freq 13.01500</td> <td>PNO: Fast +++ Trig: Free Ru IFGain:Low #Atten: 40 de</td> <td>3</td> <td></td> <td></td>	Cer	nter Freq 13.01500	PNO: Fast +++ Trig: Free Ru IFGain:Low #Atten: 40 de	3		
200       1       Center Freq       13.01500000 GHz         100       1       1       1       1       1       1         000       1       1       1       1       1       1       1         100       1 <td>10 di Log</td> <td>Ref Offset 9.98 B/div Ref 30.00 d</td> <td>dB 3m</td> <td>Mkr</td> <td>2 25.714 GHz -28.826 dBm</td> <td>Auto Tune</td>	10 di Log	Ref Offset 9.98 B/div Ref 30.00 d	dB 3m	Mkr	2 25.714 GHz -28.826 dBm	Auto Tune
100     Start Freq       100     1300 dm						
0.00	10.0	□				Start Freg
300     -1200 mm     Stop Frequencies       -000     -100 mm     -1200 mm	0.00	0				
200 -000 -					-13.00 dBm	Stop Freq
40.0					à	
			manufacture and a second secon	- martin and and and and and and and and and an	anarthan mar and the second	2.597000000 GHz Auto Man
						Freq Offset
	-60.0	,				U Hz
Start 30 MHz         Stop 26.00 GHz           #Res BW 1.0 MHz         #VBW 3.0 MHz*         Sweep 64.93 ms (1001 pts)	Star	rt 30 MHz			Stop 26.00 GHz	
#Res BW 1.0 MHz         #VBW 3.0 MHz*         Sweep 64.93 ms (1001 pts)           MBG         \$TATUB		es BW 1.0 MHz	#vBW 3.0 MHz*		មថ ms (1001 pts)	

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Report No.: LCS181219033AEG

			CSE	Test G	Graph(s	) (Char	nnel Bar	ndwidth:	1.4 MH	lz)_MCł	H_16QA	M
LX/	RL	RE	alyzer - Swe	N DC		SEN	ISE:INT	A	ALIGN OFF	06:09:21 PM	Dec 25, 2018	Frequency
		Ref	79.500   Offset 10. f 10.58 d	PI	IO: Wide ↔ Sain:Low	Trig: Free #Atten: 10	Run dB	Avg Type: Avg Hold:		trace Type bet kr1 29.5 -72.14	86 kHz	
18		v Rei	r 10.58 d	вm						-7 2.14		Center Freq 79.500 kHz
-9.4												Start Freq
-19 -29												9.000 kHz Stop Freq
-39	_										-43.00 dBm	150.000 kHz CF Step
-59												14.100 kHz <u>Auto</u> Man
-69	W	mm	phylame	A.A.A.Aymu	when the start	M.M.M	erran land	Munad	w. Ma	m hadaar	Www	Freq Offset 0 Hz
St	art 9.	00 kHz W 1.0 I			#VBM	3.0 kHz*		4 · · · · ·	ween 17	Stop 15	0.00 kHz	
MSG	a		KHZ alyzer - Swe	pt SA	#VBW	3.0 KHZ*		2		7 <b>4.0 ms (1</b>		
L)U	RL	RF	50 Q 15.0750		NO: Fast 🔸	SEN	Run	Avg Type: Avg Hold:	RMS 9/100	06:09:26 PM TRACE TYPE	Dec 25, 2018 1 2 3 4 5 6 MMMMMM A A A A A A	Frequency
18	dB/div	Ref v Ref	'Offset 10. f 10.58 d		Gain:Low	#Atten: 10	dB			Mkr1 5	38 kHz 8 dBm	Auto Tune
0.58												Center Freq 15.075000 MHz
-9												Start Freq 150.000 kHz
-29	_										-33.00 dBm	Stop Freq 30.000000 MHz
-39												CF Step 2.985000 MHz
-59	17											Auto Man Freq Offset
-69 -79	9.4	ا م الا	ndida en las	ية استياسين	Madante - *	la bille bi	autobie.	nollinita - mail I	na dan wa ha	un a hitu ili.	ال استحدید	0 Hz
#R	art 10 Res B	\//፡፡/፡፡ 50 kHz W 10 k		በት <sup>በ</sup> ጉም ግር በትር ው		ነት።ሳትዚቀብ 30 kHz*	andala ny fivitra	յոհմանուսեն Յ	weep 36	Stop 30 58.3 ms (1	).00 MHz 1001 pts)	
MSG		ectrum An	alyzer - Swe	pt SA						1 DC Cou		
()()	RL	RF	: 50 Ω	AC 00000 G		SEN	Run	Avg Type: Avg Hold:	RMS	06:09:30 PM TRACE TYPE	Dec 25, 2018	Frequency
10	dB/div	v Ref	′Offset 9.9 f 30.00 d		NO: Fast 🔸	#Atten: 40	dB			r2 25.7	IAAAAAA	Auto Tune
20												Center Freq 13.015000000 GHz
10												Start Freq 30.000000 MHz
-10	0.0										-13.00 dBm	Stop Freq 26.00000000 GHz
-20	0.0 0.0									Reference .	and and the	25.00000000 GHz CF Step 2.597000000 GHz
-40			www.angereen	حماسيةمعرة		Manhangang ang ang ang ang ang ang ang ang a	and the second	and the second	and the second s			Auto Man Freq Offset
-50	0.0											0 Hz
#R	Res B	0 MHz W 1.0 I	MHz		#VBW	3.0 MHz*		s		Stop 26 I.93 ms (1	5.00 GHz 1001 pts)	
MSC	a								STATUS			

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			CSE	Test G	Graph(s	s) (Char	nnel Bai	ndwidth	: 1.4 MF	lz)_HCł	H_16QA	M
LXI	RL	R	nalyzer - Swe F 50 ຊຸ	NDC		SEN	SE:INT	A	ALIGN OFF	06:09:56 PM	Dec 25, 2018	Frequency
Ce	ent		79.500	PN IFC	IO: Wide 🔸	Trig: Free #Atten: 10	Run dB	Avg Type Avg Hold:		kr1 13.0	Dec 25, 2018 1 2 3 4 5 6 MMMMM T A A A A A A 089 kHz	Auto Tune
10	ав/ <sup>9</sup> Г	/div Re	f Offset 10. ef 10.58 d	Bm						-69.58	35 dBm	
0.68	80 -											Center Freq 79.500 kHz
-9												Start Freq 9.000 kHz
-29												Stop Freq
-39	9.4										-43.00 dBm	150.000 kHz
-49												CF Step 14.100 kHz <u>Auto</u> Man
-69		∳ <sup>1</sup>	. A	n		<b>h</b>			ദ്പംഗം			Freq Offset 0 Hz
-79	9.4 H	« <sup>ስ ነ</sup> <sup>ነ</sup> ነለ አ		Warper	when him when	AMM	U <sup>m</sup> ~ap <sup>en</sup> W	hy wind	Mr Man	MYMA 4	lalanter prise	
#R	les	9.00 kH BW 1.0	z kHz		#VBW	3.0 kHz*		5		74.0 ms (1		
	lent		nalyzer - Swe	pt SA						🔥 DC Cou		
ixi ⊂e	RL ent	er Freq	15.0750	00 MHz PI	NO: Fast	1	Run dB	Avg Type Avg Hold:	ALIGN OFF RMS 9/100	05:10:01 PM TRACE TYPE DET	Dec 25, 2018	Frequency
10	dB/	Re div <b>R</b> e	f Offset 10. ef 10.58 d							Mkr1 5 -62.93	508 kHz 38 dBm	Auto Tune
0.66												Center Freq 15.075000 MHz
-9.4	42 -											Start Freq
-19												150.000 kHz
-39											-33.00 dBm	Stop Freq 30.000000 MHz
-49	9.4 -											CF Step 2.985000 MHz <u>Auto</u> Man
-69		•1										Freq Offset
-79										1		0 Hz
St	art	150 kHz		ฟสะสะ <sub>ใกล่</sub> เราะเมิด	ละ-หาะหาะ 		V-landara			Stop 30	0.00 MHz	
MSG	3	8W 10 I			#VBW	30 kHz*				68.3 ms (1		
(,)(/	RL	R	nalyzer - Swe F 50 Ω 13.0150	AC 00000 G	iHz	SEN	SE:INT	Avg Type Avg Hold:	ALIGN OFF	06:10:05 PM TRACE	Dec 25, 2018	Frequency
-		Re	f Offset 9.9 ef 30.00 d	PI	NO: Fast Sain:Low	Trig: Free #Atten: 40	dB	Avg Hold:		(r2 25.6	62 GHz 30 dBm	Auto Tune
		/div Re	er 30.00 d	BM						-28.43	,5 aBM	Center Freq
20		1										13.015000000 GHz
0.1												Start Freq 30.000000 MHz
-10											-13.00 dBm	Stop Freq 26.00000000 GHz
-20											Â.	CF Step 2.59700000 GHz
-40		and the second		and the second second		- Marcal Strate Barry	and a subserved	and the second second	مەر بەر مەس	1)	Virved"	2.597000000 GHz <u>Auto</u> Man
-50	0.0 -											Freq Offset 0 Hz
-60												
St: #R	les	30 MHz BW 1.0	MHz		#VBW	3.0 MHz*		ę	Sweep 6	4.93 ms (1	5.00 GHz 1001 pts)	
HIDO	1									I.		

Report No.: LCS181219033AEG

		С	SE Te	st Gra	ph(s) (	Chanr	nel Bai	ndwidt	h: 3 M	Hz)_L	CH_QI	PSK
L)XI	RL	RI	nalyzer - Swe F 50 Ω 2 79.500 I	A DC		SEN	SE:INT		ALIGN OFF	06:10:19 PM	Dec 25, 2018	Frequency
		Re	f Offset 10.	PN	IO: Wide 🔸 Sain:Low	Atten: 22	Run dB	Avg Type: Avg Hold:		kr1 15.2	04 kHz	Auto Tune
0.58			1 10.58 0	ыш						02.0		Center Freq 79.500 kHz
-9.4	12 -											
-19.	.4 —											Start Freq 9.000 kHz
-29.	.4 —											Stop Freq
-39.											-43.00 dBm	150.000 kHz
-49.		<b>A</b> 1										CF Step 14.100 kHz <u>Auto</u> Man
-69.		mar	a off the									Freq Offset
-79.	.4 —		w. Writh	MAN AND AND AND AND AND AND AND AND AND A	northethe	Winnaushi	whwhwh	ton Amarkan	the the second	Ψή ለኪህሐሌ	Wine thm	0 Hz
Sta												
#Re MSG		BW 1.0	кНz		#VBW	3.0 kHz*		S		74.0 ms (1 1 DC Cou		
	RL	R	nalyzer - Swe F 50 Ω 2 15.0750	<u>∿</u> ⊳⊂			SE:INT	Avg Type: Avg Hold:	ALIGN OFF RMS	06:10:25 PM	Dec 25, 2018	Frequency
				PI	NO: Fast 🔸	Atten: 10	Run dB	Avg Hold:		kr1 1.7	123456 AAAAAA 92 MHz	Auto Tune
10 0	dB/d	div Re	f Offset 10. f 10.58 d	Bm						-70.14	1 dBm	
0.68	- 08											Center Freq 15.075000 MHz
-9.4												Start Freq
-19												150.000 kHz
-29.											-33.00 dBm	Stop Freq 30.000000 MHz
-49.												CF Step 2.985000 MHz
-69.	.4 —											Auto Man
-69.	.4 	م المام المال										Freq Offset 0 Hz
-79.			milliologeneether	ninnerneter	h-h-sh-pa-fleula	igento-security for frequency	Medical color and gate in the	Maritanyakyetud	b~ppl./part/14/v	hlvupridh-yarta,hd	detraje-relations	
Sta #Re MBG	es I	150 kHz BW 10 k				30 kHz*		r	weep 3		0.00 MHz 1001 pts)	
(X)	RL	R	nalyzer - Swe F 50 Ω	AC		SEN	SE:INT	<u>A</u>	ALIGN OFF	06:10:28 PM	Dec 25, 2018	Fraguera
Ce	ente	er Freq	13.0150	00000 G	Hz NO: Fast Sain:Low	Trig: Free #Atten: 40	Run dB	Avg Type: Avg Hold:		TRACE TYPE DE		Frequency
10 0	dB/d	Re div Re	f Offset 9.9 f 30.00 d	8 dB Bm					MI	(r2 25.6 -28.55	62 GHz 59 dBm	Auto Tune
20.												Center Freq 13.015000000 GHz
10.1		^1										Start Freq
0.0												30.000000 MHz
-10.											-13.00 dDm	Stop Freq 26.00000000 GHz
-20.0											ê	
-30.		Anara and	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	and the state of t	an second	- martine and a start	angen gegennen	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	****	~~************************************	ment the set of the	<b>CF Step</b> 2.597000000 GHz <u>Auto</u> Man
-50.0	<b>1</b>											Freq Offset 0 Hz
-60.0	.0 -											UHZ
Sta	art 3	30 MHz BW 1.0			# /	3.0 MHz*				Stop 26 1.93 ms (1	5.00 GHz	
#R0 M8G		500 1.0	141172		#VBW	3.0 WHZ		2	SWEED 64		ioo i pis)	

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