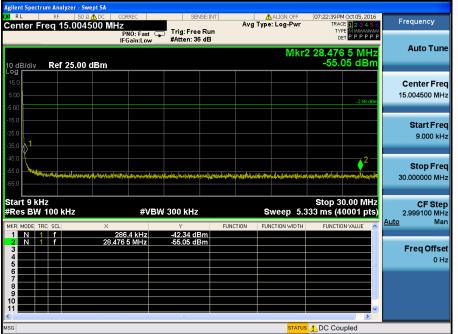


Reference for limit



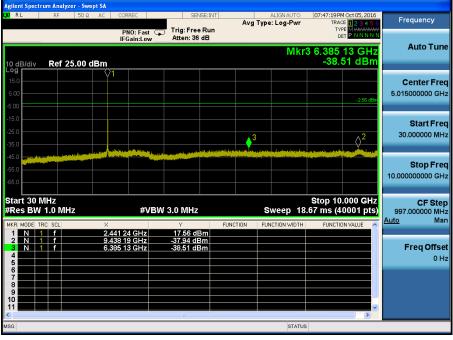


Conducted Spurious Emissions Middle Channel & Modulation : GFSK









RL	RF 5	50 Ω AC CORREC	SENSE:	INT	ALIGN OFF	07:23:06 PM Oct 05, 20	16 _
Center F	req 17.50	00000000 GHz	t 👝 Trig: Free Ru		Type: Log-Pwr	TRACE 1234	Frequency
		PNO: Fas IFGain:Lo				DET P P P	
					Mkr3 2	21.881 500 GF	Auto Tune
10 dB/div	Ref 25.0	0 dBm				-29.75 dB	
Log							
15.0							Center Free
5.00						-2.56 0	17.50000000 GH
-5.00							
-15.0						3 \^2 /	1 Start Free
-25.0							10.00000000 GH:
-35.0		STATE OF STREET, STREE		محيالة معالم معالم معالم المحيسين . المحيولة المعالم المحيولة المحيولة المحيولة المحيولة المحيولة المحيولة المح		A REAL PROPERTY AND ADDRESS OF TAXABLE PARTY.	
-45.0		and the second s					
-55.0							Stop Free
-65.0							25.00000000 GH
Start 10.0 #Res BW		-24	/BW 3.0 MHz		0	Stop 25.000 GH 0.00 ms (40001 pt	Z CF Step
							Auto Mai
MKR MODE TH	RC SCL	× 24.691 750 GHz	-27.54 dBm	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	
2 N 1	f	23.785 750 GHz					
3 N 1	f	21.881 500 GHz	-29.75 dBm				Freq Offse
4 5							0 H
6							
(+						
8							
8							
9						>	



High Band-edge

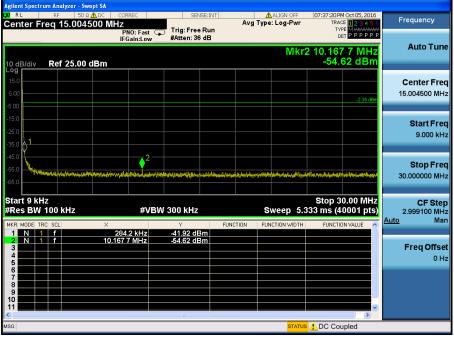
Highest Channel & Modulation : GFSK



High Band-edge <u>Hopping mode & Modulation : GFSK</u>



Highest Channel & Modulation : GFSK



Agilent Spectrum Analyzer - Sv XI RL RF 50 S	2 AC CORREC	SENSE:INT	ALIGNAUTO	07:48:19 PM Oct 05, 2016	Frequency
	PNO: Fast	Trig: Free Run	Avg Type: Log-Pwr	TRACE 1 2 3 4 5 6 TYPE MWWWW DET P N N N N N	Frequency
	IFGain:Low	Atten: 36 dB		DET PNNNN	
			Mkr	3 7.515 48 GHz	Auto Tune
10 dB/div Ref 25.00				-38.42 dBm	
15.0	Q1				Center Free
5.00					5.015000000 GH
5.00				-2.35 dBm	
15.0					
25.0					Start Free
35.0			3		30.000000 MH:
		and the second se	and the state of the second state of the secon		
45.0					Stop Fred
-55.0					10.00000000 GH
65.0					
Start 30 MHz				Stop 10.000 GHz	CF Step
Res BW 1.0 MHz	#VB	W 3.0 MHz	Sweep 18	.67 ms (40001 pts)	997.000000 MHz
MKR MODE TRC SCL	x		FUNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Mar
1 N 1 f	2.480 13 GHz 9.559 82 GHz	17.79 dBm -38.15 dBm			
3 N 1 f	7.515 48 GHz	-38.42 dBm			Freq Offse
5				=	0 H:
6					
8					
9					
				×	
ISG		110	STATUS		
			01ATO		

Highest Channel & Modulation : GFSK





Low Band-edge

Lowest Channel & Modulation : π/4DQPSK

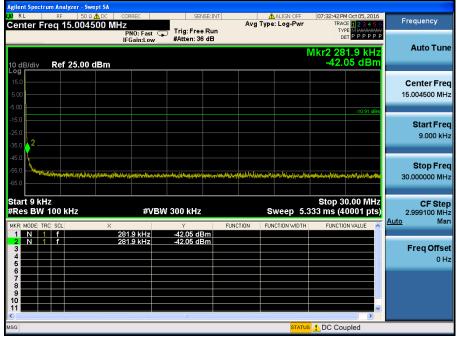


Low Band-edge

Hopping mode & Modulation : π/4DQPSK



Lowest Channel & Modulation : π/4DQPSK



RL RF 50 Ω	AC CORREC	SENSE:INT	ALIGN AUTO	08:11:40 PM Oct 05, 2016	Enternance
	PNO: Fast ◯ IFGain:Low	Trig: Free Run Atten: 36 dB	Avg Type: Log-Pwr	TRACE 123456 TYPE MWWWWW DET PNNNNN	Frequency
) dB/div Ref 25.00 d			Mkr	3 9.511 97 GHz -38.50 dBm	Auto Tun
5.0 .00 .00				-10.91 dēm	Center Fre 5.015000000 G⊦
5.0			altyl Broad diagon of the factor of and		Start Fre 30.000000 MH
5.0					Stop Fre 10.000000000 GH
tart 30 MHz Res BW 1.0 MHz	#VBI	№ 3.0 MHz	-	Stop 10.000 GHz .67 ms (40001 pts)	CF Ste 997.000000 Mi Auto Mi
KR MODE TRC SCL	× 2.401 86 GHz	Y FL 11.41 dBm	JNCTION FUNCTION WIDTH	FUNCTION VALUE	
2 N 1 f 3 N 1 f 4 5	3.248 57 GHz 9.511 97 GHz	-38.21 dBm -38.50 dBm			Freq Offs 0 F
6 7					
0				×	
		110		>	



Lowest Channel & Modulation : π/4DQPSK



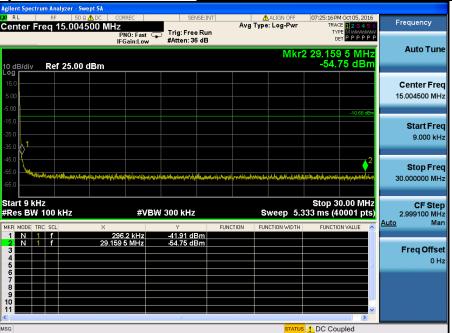


Reference for limit

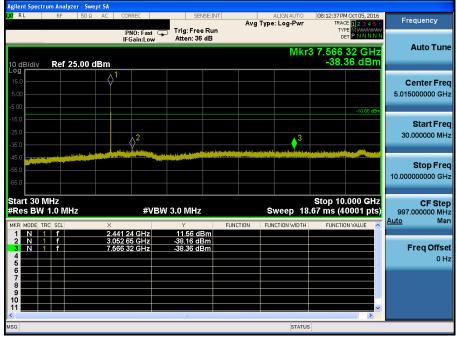
Middle Channel & Modulation : π/4DQPSK



Conducted Spurious Emissions <u>Middle Channel & Modulation : $\pi/4DQPSK$ </u>



Middle Channel & Modulation : π/4DQPSK



	um Analyzer - S								
	RF 50			SENS	E:INT	ALIGN OFF		M Oct 05, 2016	Frequency
Genter P	reg 17.500	Р	NO: Fast ⊂ Gain:Low	Trig: Free # #Atten: 36		 	TY D		
10 dB/div	Ref 25.00) dBm				Mkr3 2	1.942 6 -29.	25 GHz 96 dBm	Auto Tune
15.00								-10.65 dBm	Center Fred 17.500000000 GH:
-15.0 -25.0 -35.0	Labiania				e tri f i storma herrorij e a Militari u sveno sa Bili s		3	2^{2}	Start Fred 10.000000000 GHz
-45.0									Stop Free 25.000000000 GH
Start 10.0 #Res BW	1.0 MHz	X	#VB\	N 3.0 MHz	500	weep 40	.00 ms (4	.000 GHz 0001 pts)	CF Stej 1.50000000 GH <u>Auto</u> Ma
1 N 1 2 N 1 3 N 1 4 5	f	24.736 37 23.833 00 21.942 62	0 GHz	-28.04 dBr -28.90 dBr -29.96 dBr	n n		FONCTIO		Freq Offse
6 7 8 9 10									
11 <u> </u>				110				>	
MSG						STATUS			



High Band-edge

Highest Channel & Modulation : π/4DQPSK

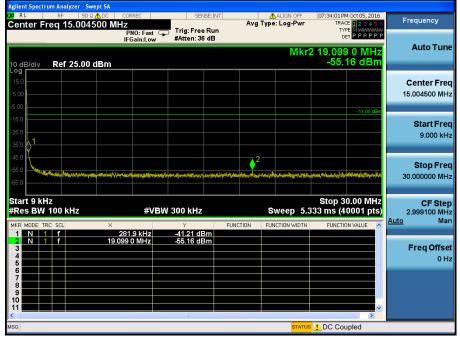


High Band-edge

<u>Hopping mode & Modulation : π/4DQPSK</u>



Highest Channel & Modulation : π/4DQPSK



ilent Spectrum Analyzer - S RL RF 50		SENSE:INT	ALIGN AUTO	08:13:40 PM Oct 05, 2016	
NC 11 30	PNO: Fast	Trig: Free Run	Avg Type: Log-Pwr	TRACE 123456	Frequency
	IFGain:Low	Atten: 36 dB		DET P NNNN	Auto Tun
0 dB/div Ref 25.00	l dBm		Mkr	3 3.303 40 GHz -38.44 dBm	AutoTur
og 5.0					O
5.00	Y				Center Fre 5.015000000 Gi
					5.015000000 Gi
5.0				-11.05 dBm	
					Start Fr
5.0	3			2	30.000000 M
5.0	A REAL PROPERTY AND A REAL PROPERTY.	The second second second second second	ومعمدة وتصاحب والتقام وسادر وما فيقتدونا		
5.0 Here is the state of the s					Stop Fr
5.0					10.00000000 G
5.0					
tart 30 MHz				Stop 10.000 GHz	CF St
Res BW 1.0 MHz	#VB	W 3.0 MHz	Sweep 18	.67 ms (40001 pts)	997.000000 M
KR MODE TRC SCL	X	Y	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> N
1 N 1 f	2.479 88 GHz 9.469 60 GHz	11.90 dBm -38.04 dBm			
3 N 1 f	3.303 40 GHz	-38.44 dBm			Freq Offs
5				в	0
6					
8					
0					
1				~	



<u>Highest Channel & Modulation : π/4DQPSK</u>

Agilent Spectrum	n Analyzer - Swept S RE 50 Q AG		051105					
	q 17.500000	000 GHz	SENSE:	Avg Ty	ALIGN OFF	07:34:28 PM Oct 05, TRACE 1 2 3 TYPE WWW	456	Frequency
10 dB/div	Ref 25.00 dBr	PNO: Fast IFGain:Low	Trig: Free Ru #Atten: 36 dB		Mkr3 2	3.865 250 G -28.13 d	PPP Hz	Auto Tune
	Rei 25.00 dBi							Center Freq 17.500000000 GHz
-15.0 -25.0 -35.0		and the second	a Million spyl de richtsteren fil beder			-11.	5 dBm 21 21 1	Start Freq 10.000000000 GHz
-45.0 -55.0 -65.0								Stop Freq 25.000000000 GHz
Start 10.00 #Res BW 1	.0 MHz		3W 3.0 MHz		-	Stop 25.000 .00 ms (40001	pts)	CF Step 1.500000000 GHz Auto Man
2 N 1 3 N 1 4 5	f 24 f 24	× .956 125 GHz .416 875 GHz .865 250 GHz	Y -27.52 dBm -27.55 dBm -28.13 dBm		FUNCTION WIDTH	FUNCTION VALUE		Freq Offset 0 Hz
6 7 8 9 10 11								
MSG			Ш		STATUS		>	
					STATUS			



Low Band-edge

Lowest Channel & Modulation : 8DPSK

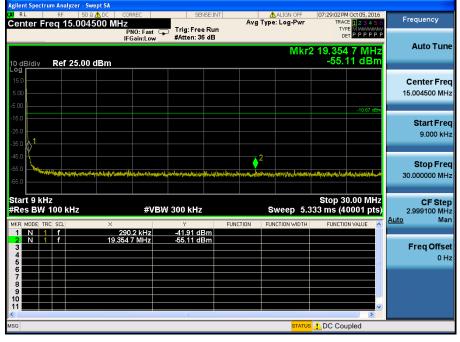


Low Band-edge <u>Hopping mode & Modulation : 8DPSK</u>





Lowest Channel & Modulation : 8DPSK



Agilent Spectrum Analyzer - Sw					
<mark>XI</mark> RL RF 50Ω	AC CORREC	SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr	08:16:12 PM Oct 05, 2016 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast IFGain:Low	Trig: Free Run Atten: 36 dB	Avg Type. Log- wi	TYPE MWAWAWA DET P N N N N N	
10 dB/div Ref 25.00			Mkr	3 9.528 17 GHz -38.56 dBm	Auto Tune
15.00 -5.00	↓ ↓ ↓			-10.67 dBm	Center Free 5.015000000 GH
-15.0			Since some and the second		Start Free 30.000000 MH
-45.0 -65.0 -65.0			antimus di adale con d'anale con la con esta con esta de la contra de la contra de la contra de la contra de la		Stop Free 10.000000000 GH
Start 30 MHz #Res BW 1.0 MHz		W 3.0 MHz		Stop 10.000 GHz .67 ms (40001 pts)	CF Step 997.000000 MH Auto Mar
MKR MODE TRC SCL 1 N 1 f 2 N 1 f 3 N 1 f 4	× 2.402 11 GHz 3.146 37 GHz 9.528 17 GHz	11.67 dBm -38.00 dBm -38.56 dBm	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	Freq Offse
6 7 8 9 10 11					
< NSG		Ш	STATUS		



Lowest Channel & Modulation : 8DPSK

Agilent Spectrum Analyzer - S						
Center Freq 17.50		SENSE:INT	ALIGN OFF e: Log-Pwr	TRA	M Oct 05, 2016	Frequency
10 dB/div Ref 25.0	PNO: Fast IFGain:Low		 Mkr3 2	۲۷ ۵ 2 1.134 8	PE PPPPP T PPPPP 75 GHz 45 dBm	Auto Tune
15.0 5.00					-10.67 dBm	Center Freq 17.500000000 GHz
-15.0 -25.0 -35.0			3	2^2		Start Freq 10.000000000 GHz
-45.0 -55.0 -65.0						Stop Freq 25.00000000 GHz
Start 10.000 GHz #Res BW 1.0 MHz	#V ×	BW 3.0 MHz	weep 40	.00 ms (4	.000 GHz 0001 pts)	CF Step 1.500000000 GH: <u>Auto</u> Mar
1 N 1 f 2 N 1 f 3 N 1 f 4 - - - 5 - - -	23.877 625 GHz 22.633 750 GHz 21.134 875 GHz	-27.83 dBm -30.28 dBm -30.45 dBm		ISICI		Freq Offset 0 Hz
6 7 8 9 10						
MSG		Ш	STATUS			

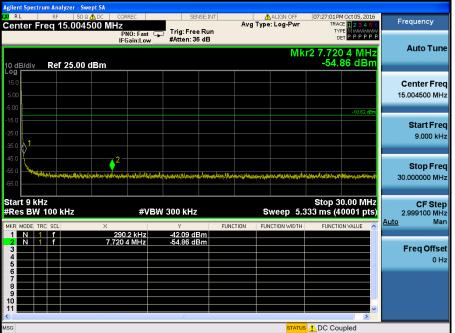


Reference for limit



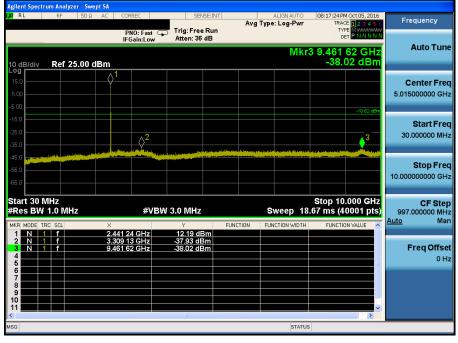


Conducted Spurious Emissions <u>Middle Channel & Modulation : 8DPSK</u>





Middle Channel & Modulation : 8DPSK



	um Analyzer - S							
(XIRL			SENSE:		ALIGN OFF	07:27:29 PM Oc TRACE	t 05, 2016	Frequency
Center F	req 17.500	0000000 GHz PNO: Fast	🖵 Trig: Free Ru	in -	Type. Log-Fwi	TYPE	PPPPP	
		IFGain:Low	#Atten: 36 dE	3				Auto Tune
					Mkr3 2	21.217 375	5 GHz	Autorune
10 dB/div Log	Ref 25.00	0 dBm				-30.56	dBm	
15.0								Center Freq
5.00								17.500000000 GHz
-5.00								11.0000000000000
							-10.62 dBm	
-15.0					▲ 3 ∧	2	1	Start Freq
-25.0					Ŷ*�		Name of Street, or	10.00000000 GHz
-35.0	And the second division in the second se	The state of the second st		na an an Alain an Al				
-45.0								Otan Fran
-55.0								Stop Freq 25.00000000 GHz
-65.0								25.00000000 GHZ
Start 10.0 #Res BW		#VI	BW 3.0 MHz		Sweep 40	Stop 25.00 .00 ms (400	00 GHZ 01 pts)	CF Step 1.50000000 GHz
MKR MODE TH	RC SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION V	ALUE 🔼	<u>Auto</u> Man
1 N 1 2 N 1	f	24.872 500 GHz 21.814 000 GHz	-27.95 dBm -30.47 dBm					
2 N 3 N 1	f	21.217 375 GHz	-30.47 dBm -30.56 dBm					Freq Offset
4							_	0 Hz
6							=	
7								
9								
10								
<							>	
MSG					STATUS	3		



High Band-edge

Highest Channel & Modulation : 8DPSK

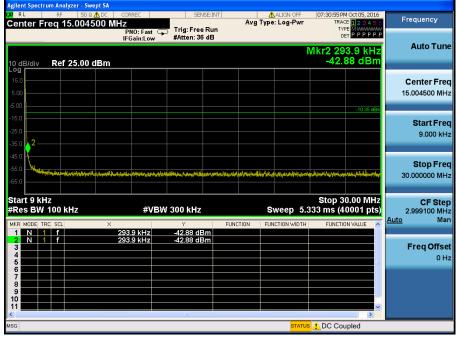


High Band-edge Hopping mode & Modulation : 8DPSK





Highest Channel & Modulation : 8DPSK



Agilent Spectrum Analyzer - Swe	pt SA				
LX/RL RF 50Ω	AC CORREC	SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr	08:18:22 PM Oct 05, 2016 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast 🕞 IFGain:Low	Trig: Free Run Atten: 36 dB	Avg Type. Log-Fwi	TYPE MWAWAAAAA DET P N N N N N	
10 dB/div Ref 25.00 d	IBm		Mkr	3 3.199 96 GHz -38.02 dBm	Auto Tune
15.00	1			-10.35 dBm	Center Freq 5.015000000 GHz
-15.0 -25.0 -35.0	3	ىنىدۇرىيى بىرى بىرى بىرى بىرى بىرى بىرى بىرى	in the last of process patients prices processing	2 	Start Freq 30.000000 MHz
-45.0 -55.0 -65.0					Stop Freq 10.000000000 GHz
Start 30 MHz #Res BW 1.0 MHz		/ 3.0 MHz		Stop 10.000 GHz .67 ms (40001 pts)	CF Step 997.000000 MHz Auto Man
MKR MODE TRC SCL 1 N 1 f 2 N 1 f 3 N 1 f 4 5 5 5	× 2.480 13 GHz 9.408 03 GHz 3.199 96 GHz	Y FUN 12.35 dBm -37.68 dBm -38.02 dBm	CTION FUNCTION WIDTH	FUNCTION VALUE	Freq Offset 0 Hz
6 7 8 9 10 11					
MSG		ilu Ilu	STATUS		



Highest Channel & Modulation : 8DPSK

enter Freq 17.5		SENSE:INT	ALIGN OFF Avg Type: Log-Pwr	07:31:22 PM Oct 05, 2016 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast IFGain:Low	Trig: Free Run #Atten: 36 dB	Mkr2 (TYPE MWWWW DET P P P P P P	Auto Tun
dB/div Ref 25.	00 dBm			-29.24 dBm	
5.00					Center Fre 17.500000000 G⊦
5.0				-10.35 dBm	Start Fre 10.000000000 GF
5.0					Stop Fre 25.00000000 G⊦
tart 10.000 GHz Res BW 1.0 MHz		BW 3.0 MHz		Stop 25.000 GHz .00 ms (40001 pts)	CF Ste 1.50000000 GH Auto Ma
KR MODE TRC SCL 1 N 1 f 2 N 1 f 3 N 1 f 4	× 24.781 375 GHz 23.964 625 GHz 23.148 625 GHz	27.82 dBm -28.67 dBm -29.24 dBm	UNCTION FUNCTION WIDTH	FUNCTION VALUE	Freq Offs
6 7					
0				~	



8. Transmitter AC Power Line Conducted Emission

8.1 Test Setup

Refer to test setup photo.

8.2 Limit

According to §15.207(a) for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 uH/50 ohm line impedance stabilization network (LISN).

Compliance with the provision of this paragraph shall on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower applies at the boundary between the frequency ranges.

Frequency Range (MHz)	Conducted Limit (dBuV)				
Frequency hange (Minz)	Quasi-Peak	Average			
0.15 ~ 0.5	66 to 56 *	56 to 46 *			
0.5 ~ 5	56	46			
5 ~ 30	60	50			

* Decreases with the logarithm of the frequency

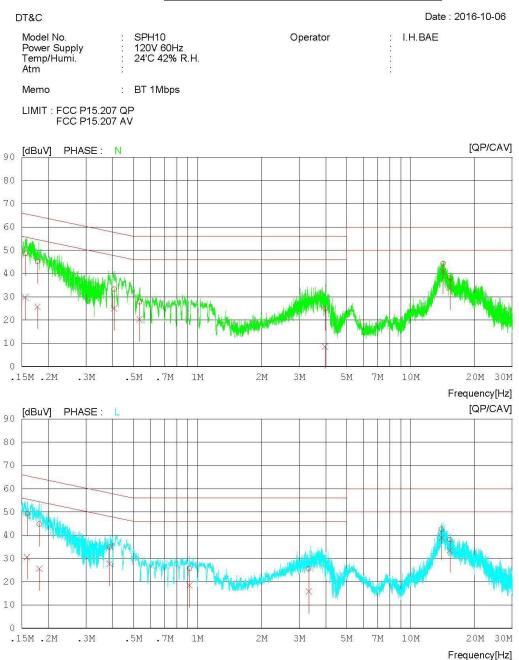
8.3 Test Procedures

Conducted emissions from the EUT were measured according to the ANSI C63.10.

- 1. The test procedure is performed in a 6.5 m × 3.5 m × 3.5 m (L × W × H) shielded room. The EUT along with its peripherals were placed on a 1.0 m (W) × 1.5 m (L) and 0.8 m in height wooden table and the EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane.
- 2. The EUT was connected to power mains through a line impedance stabilization network (LISN) which provides 50 ohm coupling impedance for measuring instrument and the chassis ground was bounded to the horizontal ground plane of shielded room.
- 3. All peripherals were connected to the second LISN and the chassis ground also bounded to the horizontal ground plane of shielded room.
- 4. The excess power cable between the EUT and the LISN was bundled. The power cables of peripherals were unbundled. All connecting cables of EUT and peripherals were moved to find the maximum emission.

8.4. Test Results

AC Line Conducted Emissions (Graph) = Modulation : <u>GFSK</u>



Results of Conducted Emission

AC Line Conducted Emissions (List) = Modulation : <u>GFSK</u>

Results of Conducted Emission

DT&C			Date	2016-10-06
Model No. Power Supply Temp/Humi. Atm	: SPH10 120V 60Hz 24'C 42% R.H.	Operator	I.H.BAE	
Memo	: BT 1Mbps			
LIMIT : FCC P15 FCC P15				
NO FREQ	READING C.FACTOR OP CAV	RESULT LIMIT OP CAV OP CAV	MARGIN OP CAV	PHASE
[MHz]	[dBuV] [dBuV] [dB]	[dBuV][dBuV] [dBuV][dBu	~	7]
	45.4026.54 3.17	48.5729.71 65.70 55.70		Ν
	42.6423.182.51 32.4524.250.86	45.1525.69 64.60 54.60 33.3125.11 57.72 47.72		N N
	27.2619.66 0.65	27.9120.31 56.00 46.00		N
	24.69 8.33 0.33	25.02 8.66 56.00 46.00		N
	43.9040.38 0.47	44.3740.85 60.00 50.00		Ν
7 15.28003	37.7233.44 0.49	38.2133.93 60.00 50.00	21.79 16.07	Ν
	46.1027.42 3.10	49.2030.52 65.54 55.54		L
	42.2223.20 2.47	44.6925.67 64.43 54.43		L
	33.90.26.77 0.94	34.8427.71 58.14 48.14		Ļ
	25.2117.97 0.44 25.2015.45 0.36	25.6518.41 56.00 46.00 25.5615.81 56.00 46.00		L L
	25.2015.45 0.36 42.1338.44 0.46	42.5938.90 60.00 50.00		L
	37.64 33.11 0.47	38.11 33.58 60.00 50.00	L. SAME A. SHARE STRATE STRATE	L

9. Antenna Requirement

Describe how the EUT complies with the requirement that either its antenna is permanently attached, or that it employs a unique antenna connector, for every antenna proposed for use with the EUT.

Conclusion: Comply

The antenna is permanently attached on PCB. (Refer to Internal photo file.)

- Minimum Standard :

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions.

10. Occupied Bandwidth (99 %)

10.1 Test Setup

Refer to the APPENDIX I.

10.2 Limit

Limit : Not Applicable

10.3 Test Procedure

The 99 % power bandwidth was measured with a calibrated spectrum analyzer.

The resolution bandwidth (RBW) shall be in the range of 1 % to 5 % of the occupied bandwidth (OBW) and video bandwidth (VBW) shall be approximately $3 \times RBW$.

Spectrum analyzer plots are included on the following pages.

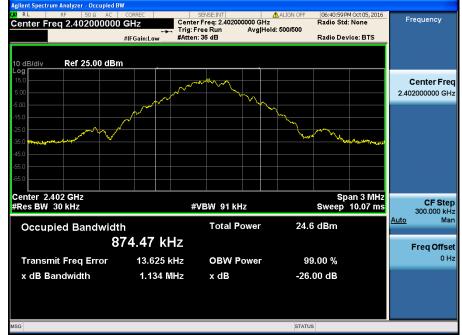
10.4 Test Results

Test Mode	Tested Channel	Test Results (MHz)
	Lowest	0.87
<u>GFSK</u>	Middle	0.87
	Highest	0.88
	Lowest	1.39
<u>π/4DQPSK</u>	Middle	1.46
	Highest	1.47
	Lowest	1.36
<u>8DPSK</u>	Middle	1.44
	Highest	1.44

Dt&C

Occupied Bandwidth (99 %)

Lowest Frequency & GFSK



Occupied Bandwidth (99 %)

Middle Frequency & GFSK

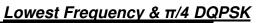


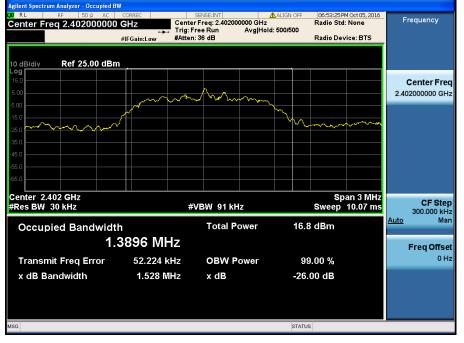
Highest Frequency & GFSK

Occupied Bandwidth (99 %)

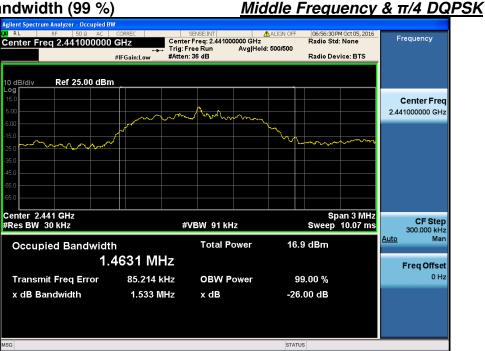


Occupied Bandwidth (99 %)



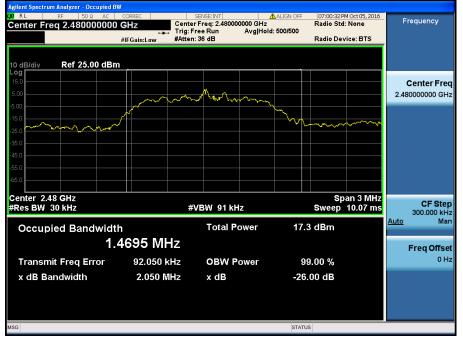


Occupied Bandwidth (99 %)

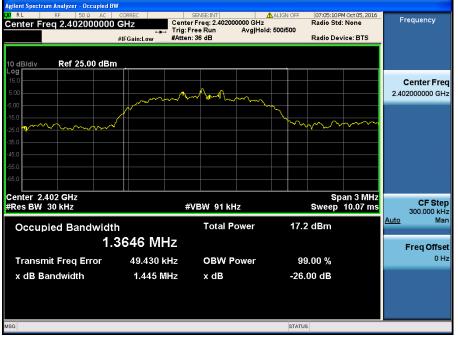


Occupied Bandwidth (99 %)

Highest Frequency & π/4 DQPSK



Occupied Bandwidth (99 %)



Occupied Bandwidth (99 %)

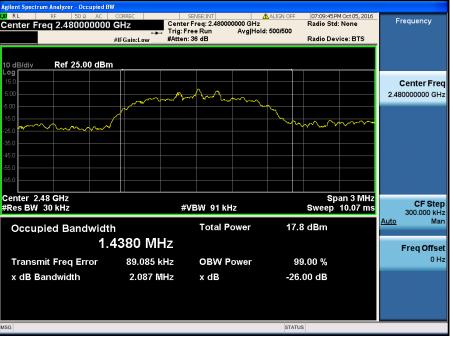


Middle Frequency & 8DPSK

Lowest Frequency & 8DPSK

Highest Frequency & 8DPSK

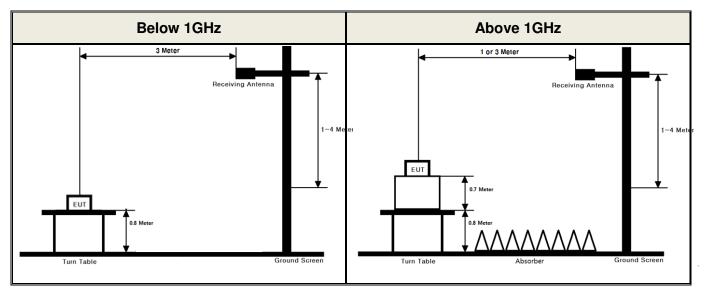
Occupied Bandwidth (99 %)



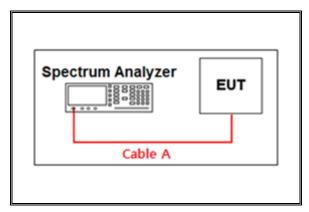
APPENDIX I

Test set up diagrams

Radiated Measurement



Conducted Measurement



Path loss information

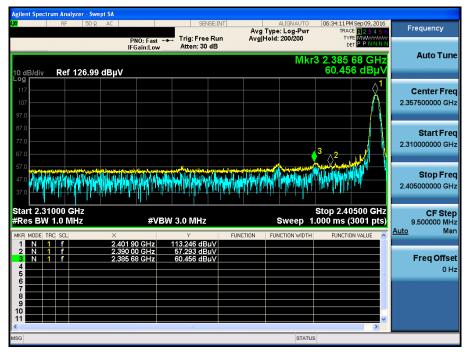
Frequency (GHz)	Path Loss (dB)	Frequency (GHz)	Path Loss (dB)
0.03	0.22	15	4.85
1	1.15	20	5.18
2402 & 2440 & 2480	1.93	25	6.54
5	2.59	-	-
10	3.93	-	-

Note 1 : The path loss from EUT to Spectrum analyzer were measured and used for test. Path loss (S/A's Correction factor) = Cable A

APPENDIX II

Unwanted Emissions (Radiated) Test Plot

GFSK & Lowest & X & Hor

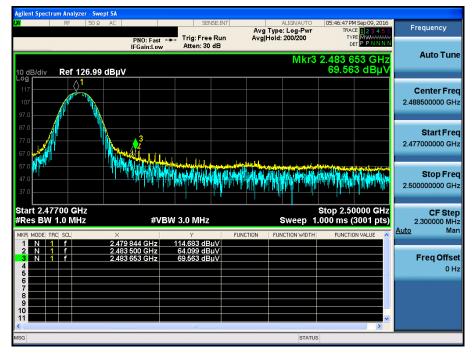


GFSK & Lowest & X & Hor





GFSK & Highest & X & Hor



Detector Mode : AV

GFSK & Highest & X & Hor





$\pi/4DQPSK$ & Lowest & X & Hor

Agilent Spectrum Analyzer - Swept SA					
LXI RF 50 Ω AC		SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr	06:31:22 PM Sep 09, 2016 TRACE 1 2 3 4 5 6	Frequency
		Trig: Free Run Atten: 30 dB	Avg Hold: 200/200		
10 dB/div Ref 126.99 dBµV			Mkr	3 2.386 41 GHz 58.913 dBµV	Auto Tune
117 107 97.0				Á.	Center Freq 2.357500000 GHz
87.0 77.0 67.0					Start Freq 2.310000000 GHz
57.0 47.0 37.0 37.0	winnantan	hand	ndivitin ile printe di	my my my	Stop Freq 2.405000000 GHz
Start 2.31000 GHz #Res BW 1.0 MHz	#VBW 3	.0 MHz	Sweep 1	Stop 2.40500 GHz .000 ms (3001 pts)	CF Step 9.500000 MHz
MKR MODE TRC SCL X			CTION FUNCTION WIDTH	FUNCTION VALUE	<u>Auto</u> Man
2 N 1 f 2.39	0 00 GHz 5	6.634 dBµ∨ 2.961 dBµ∨ 8.913 dBµV		=	Freq Offset 0 Hz
7 8 8 9 9 10 11					
MSG			STATU	s	

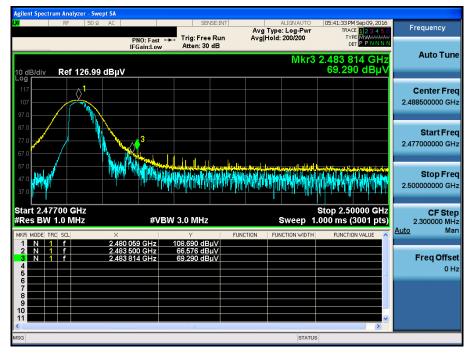
Detector Mode : AV

π /4DQPSK & Lowest & X & Hor

	RF 50 Ω	AC		SEN	ISE:INT		ALIGNAUTO		M Sep 09, 2016	Frequ	ancy
			PNO: Fast + Gain:Low	►. Trig: Free Atten: 30			Type: Voltage Hold: 200/200	TY	CE 123456 PE MW WWWWW ET P P N N N N		
dB/div	tef 126.99	dBµV					Mkr	3 2.386 50.74	00 GHz 2 dBµV	Au	to Tur
79 1117 107 7.0									\wedge ¹	Cent 2.357500	t er Fre 1000 GH
7.0 7.0 7.0										Sta 2.310000	art Fre
7.0 7.0 7.0								³ 2 ²		St (2.405000	op Fr 1000 GI
tart 2.3100 Res BW 1.			#VB	W 1.0 kHz			Sweep 7	Stop 2.4 4.20 ms (0500 GHz 3001 pts)	9.500	CF St 000 M
KR MODE TRC	SCL	× 2.402 2.390	06 GHz 00 GHz	Y 103.918 dB 47.043 dB	μV	NCTION	FUNCTION WIDTH	FUNCTI	DN VALUE	<u>Auto</u>	М
	f		DO GHZ	50.742 dB	μV				=	Free	q Offs 0
7											
									~		



$\pi/4DQPSK$ & Highest & X & Hor



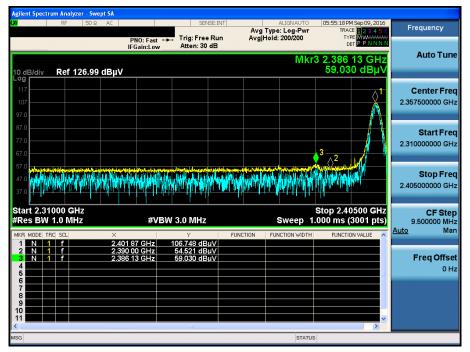
Detector Mode : AV

π /4DQPSK & Highest & X & Hor





8DPSK & Lowest & X & Hor



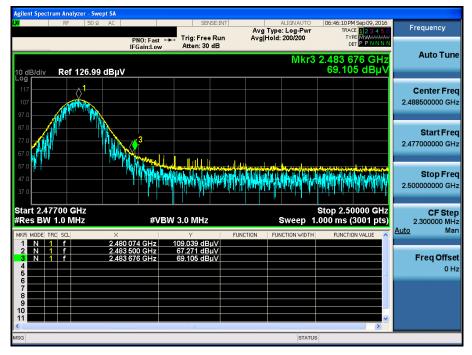
Detector Mode : AV

8DPSK & Lowest & X & Hor

0	RF 50 \$		NO:Fast ←	SENSE	#Av tun Avg	ALIGNAUTO g Type: Voltage [Hold: 200/200	05:53:55 PM TRACE TYPE	5ep 09, 2016 1 2 3 4 5 6 MW P P N N N N	Frequency
0 dB/div	Ref 126.9		Gain:Low _	Atten: 30 d	8	Mkr	3 2.385 s 51.064	7 GHz	Auto Tune
- og 117 107 97.0									Center Fre 2.357500000 GH
87.0 77.0 67.0									Start Fre 2.310000000 GH
57.0 47.0 37.0	Jana and a state of the state o			antimat Plantamatana			³ 2		Stop Fre 2.405000000 GH
Start 2.310 Res BW 1	0 MHz	×	#VB	W 1.0 kHz	FUNCTION		Stop 2.40: 4.20 ms (3	001 pts)	CF Ste 9.500000 MH Auto Ma
MODE THC 1 N 1 2 N 1 3 N 1 4	f f f	2.402 0 2.390 0 2.385 9	0 GHz	103.599 dBμ' 47.041 dBμ' 51.064 dBμ'	/	FUNCTION WIDTH	FUNCTION	VALUE	Freq Offse 0 H
6 7 8 9 10									
						STATUS	1	<u>></u>	



8DPSK & Highest & X & Hor



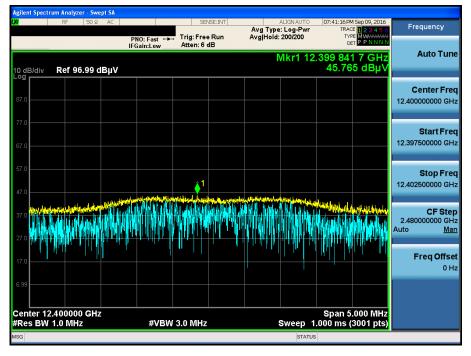
Detector Mode : AV

8DPSK & Highest & X & Hor



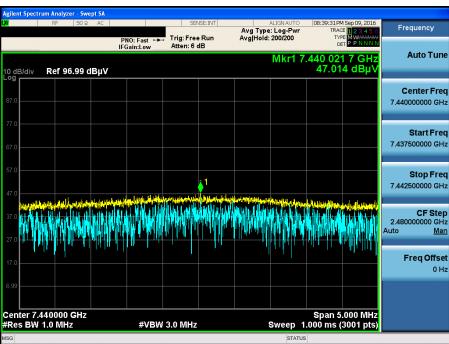


GFSK & Highest & X & Hor



π/4DQPSK & Highest & Y & Hor

Detector Mode : PK





8DPSK & Highest & Y & Hor





GFSK & Hopping mode & X & Hor

Agilent Spectrum Analyzer - Swept SA				
ΙΧΙ RF 50 Ω AC	SENSE:I	Avg Type: Log-Pwr	06:38:41PM Sep 09, 2016 TRACE 2 3 4 5 6	Frequency
10 dB/div Ref 126.99 dBµV	PNO: Fast Trig: Free Ru IFGain:Low Atten: 30 dB	<u>.</u>	туре Милини Det P P N N N N 3 2.386 06 GHz 59.576 dBµV	Auto Tune
117 107 97.0				Center Freq 2.357500000 GHz
87.0 77.0 67.0				Start Freq 2.310000000 GHz
	na kati pangalan na mpati mpanina kati na kati		Minternet Minternet	Stop Freq 2.405000000 GHz
Start 2.31000 GHz #Res BW 1.0 MHz	#VBW 3.0 MHz		Stop 2.40500 GHz .000 ms (3001 pts)	CF Step 9.500000 MHz Auto Man
MKR MODE TRC SCL X)1 90 GHz 113.006 dBuV	FUNCTION FUNCTION WIDTH	FUNCTION VALUE	
2 N 1 f 2.39	7 30 GHz 0 00 GHz 57.080 dBμV 36 06 GHz 59.576 dBμV			Freq Offset 0 Hz
7 8 9 10				
MSG		STATU	s	

Detector Mode : AV

GFSK & Hopping mode & X & Hor

RF 50 Ω	AC PNO: Fa	SENS	#Avg	ALIGNAUTO Type: Voltage Hold: 500/500	06:37:18 PM Sep 09, 2016 TRACE 123456 TYPE MWWWWW	Frequency
) dB/div Ref 126.99	IFGain:L		IB T	Mkr	3 2.385 94 GHz 54.801 dBµV	Auto Tur
29 1177 107 7.0						Center Fre 2.357500000 GF
7.0					3 . 2	Start Fr 2.310000000 Gi
7.0 7.0 7.0					····	Stop Fr 2.405000000 G
tart 2.31000 GHz Res BW 1.0 MHz	#	VBW 1.0 kHz	FUNCTION	Sweep 7	Stop 2.40500 GHz 4.20 ms (3001 pts)	CF St 9.500000 M Auto M
Hole HC SLL 1 N 1 f 2 N 1 f 3 N 1 f 4	2.402 06 GH 2.390 00 GH 2.385 94 GH	z 112.917 dBµ z 53.903 dBµ	V V	FORCHON WIDTH	FONCTION VALUE	Freq Offs 0
6 7 8 8 9						
					~	



GFSK & Hopping mode & X & Hor

Agilent Spectrum Analyzer - Swept SA							
LX U RF 50Ω AC		SENSE:INT		ALIGNAUTO	TRACI	Sep 09, 2016 E 1 2 3 4 5 6 E MW	Frequency
	PNO: Fast 🔸	Trig: Free Run Atten: 30 dB	Avg Hold:		DE	TPPNNNN	Auto Tune
10 dB/div Ref 126.99 dBµV				Mkr3	2.483 5 69.61	84 GHz 2 dBµV	Auto Tulle
Log 1 117 107 97.0							Center Freq 2.488500000 GHz
87.0 77.0 67.0	3						Start Freq 2.477000000 GHz
57.0 47.0 37.0	1444 proved partil	ininini majanin	T MARKEN THAT I HAVE A	White Hit	Maliliant	M M M	Stop Freq 2.500000000 GHz
Start 2.47700 GHz #Res BW 1.0 MHz	#VBW	3.0 MHz		Sweep 1	Stop 2.50 .000 ms (3	000 GHz 3001 pts)	CF Step 2.300000 MHz
MKR MODE TRC SCL X	844 GHz	Y 14.673 dBuV	FUNCTION FUN	ICTION WIDTH	FUNCTIO	N VALUE	<u>Auto</u> Man
2 N 1 f 2.483	3 500 GHz 3 584 GHz	58.974 dBµV 69.612 dBµV				=	Freq Offset 0 Hz
7 8 9 10 11							
MSG				STATUS			

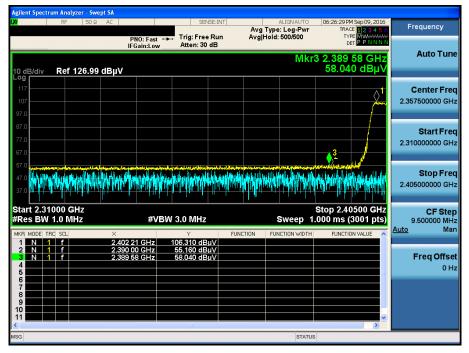
Detector Mode : AV

GFSK & Hopping mode & X & Hor

RF 50	Ω AC PNO: IFGain	Fast 🛶 Trig:Fr	ee Run A	ALIGNAUTO Avg Type: Voltage vg Hold: 500/500	05:49:09 PM Sep 09, 2010 TRACE 2 3 4 5 TYPE MWWWW DET P P N N N	6 Frequency
) dB/div Ref 126.9				Mkr3	2.483 508 GH: 56.400 dBµ\	
pg 1117 107 77.0						Center Fre 2.488500000 Gi
7.0	3					Start Fr 2.477000000 G
7.0						Stop Fr 2.500000000 G
tart 2.47700 GHz Res BW 1.0 MHz	×	#VBW 1.0 kHz	Z		Stop 2.50000 GH: 8.00 ms (3001 pts	2.300000 M
1 N 1 f 2 N 1 f 3 N 1 f 4 5 6	2.480 044 G 2.483 500 G 2.483 508 G	Hz 114.543 d Hz 56.460 d	IBμV IBμV			Freq Offs 0
8 8 9 0 1						
					>	



$\pi/4DQPSK$ & Hopping mode & X & Hor

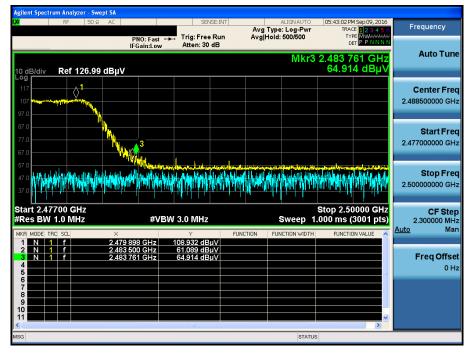


π /4DQPSK & Hopping mode & X & Hor

Frequency #Avg Type: Voltage Avg|Hold: 500/500 TYPE MWWWW DET P P N N Trig: Free Run Atten: 30 dB PNO: Fast 🔸 Auto Tune Mkr3 2.389 20 GH: 50.795 dBµ\ Ref 126.99 dBµV **Center Freq** 2.357500000 GHz Start Freq 2.310000000 GHz 3! Stop Freq 2.405000000 GHz Stop 2.40500 GHz 74.20 ms (3001 pts) Start 2.31000 GHz #Res BW 1.0 MHz CF Step 9.500000 MHz Man #VBW 1.0 kHz Sweep Auto FUNCTION FUNCTION 50.017 dBµ\ 50.795 dBµ\ Freq Offset 0 Hz



$\pi/4DQPSK$ & Hopping mode & X & Hor



$\pi/4DQPSK$ & Hopping mode & X & Hor

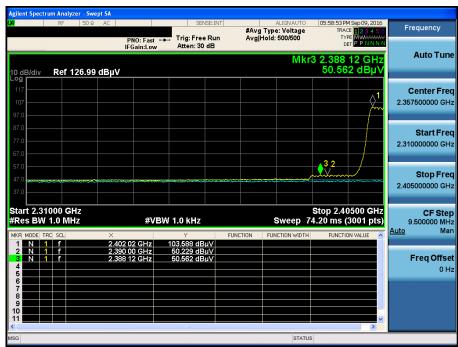




8DPSK & Hopping mode & X & Hor

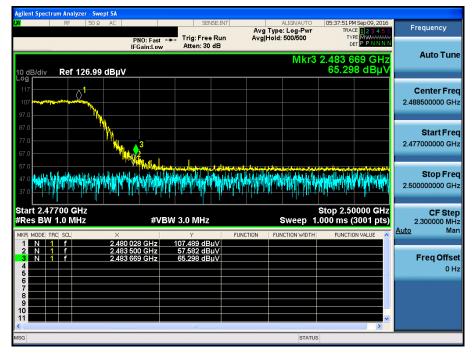
Agilent Spectrum Analyzer - Swept SA					
LXI RF 50Ω AC		Avg Type	:Log-Pwr T	5PM Sep 09, 2016 RACE 123456 TYPE MW	Frequency
	IFGain:Low Atten: 30		Mkr3 2.38	DET PPNNNN	Auto Tune
10 dB/div Ref 126.99 dBµV					Center Freq 2.357500000 GHz
87.0 77.0 67.0			³ ⊘ ²		Start Freq 2.310000000 GHz
57.0 47.0 37.0	kalan da ana ana ana ana ana ana ana ana an	and a state the will	h the second	Horning the	Stop Freq 2.405000000 GHz
Start 2.31000 GHz #Res BW 1.0 MHz	#VBW 3.0 MHz		Sweep 1.000 ms		CF Step 9.500000 MHz Auto Man
2 N 1 f 2.39	22 31 GHz 106.340 dE 90 00 GHz 54.317 dE 96 96 GHz 57.458 dE	μV μV	CCTION WIDTH FUNI		Freq Offset 0 Hz
MSG			STATUS		

8DPSK & Hopping mode & X & Hor





8DPSK & Hopping mode & X & Hor



8DPSK & Hopping mode & X & Hor

