SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

PL19643/1629

Customer:		**Tested By:**	R. Combs
SO No:		**Temperature:**	+25°C
Model No:	PTRAN-100M18G-SFB-3UVPX-10HP-MAH	**Date:**	10/04/16
Serial No:	PL19643/1629	**Drawing No:**	27624282 **Rev:** A1

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
J1 RF Receive Input				
1	Frequency	100MHz-18GHz	**100MHz-18GHz**	PMI QA 2
2	Input Power Level	-80 dBm to -10 dBm	**-80dBm to -10dBm**	
J4A IF1 Input				
3	Frequency	100MHz-4GHz	**100MHz-4GHz**	
4	Input Power Level	0 dBm Typical	**0dBm**	
J4B IF2 Input				
5	Frequency	100MHz-4GHz	**100MHz-4GHz**	
6	Input Power Level	0 dBm Typical	**0dBm**	
J9 LO1 Input				
7	Frequency	4GHz-20GHz	**4GHz-20GHz**	
8	Input Power Level	+10 dBm Typ.	**+10dBm**	
J10 LO2 Input				
9	Input Frequency	4GHz-20GHz	**4GHz-20GHz**	
10	Input Power Level	+10 dBm Typ.	**+10dBm**	PMI QA 2

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SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

PL19643/1629

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
		J3A IF1 Output		
11	Output Frequency	100MHz - 4GHz	**100MHz - 4GHz**	PMI QA 2
12	Output Power Level	0dBm Typical for Limited SDLVA channels	**-2.6dBm to +5.5dBm See Plots**	
		J3B IF2 Output		
13	Output Frequency	100MHz - 4GHz	**100MHz - 4GHz**	
14	Output Power Level	0dBm Typical for Limited SDLVA channels	**-2.5dBm to +5.4dBm See Plots**	
		J6 RF Transmit Output		
15	Output Frequency	100MHz-18GHz	**100MHz-18GHz**	
16	Output Power Level	0dBm to +10dBm Typical with use of variable attenuator in Down-Converted Channel	**-0.8dBm to +4.4dBm See Plots**	
		Control Logic – TTL		
17	**TTL 1** Transmit Path Output Select / Receive Filter Bank Input Select	0 – Output to TX Filter bank, RX-Backplane/Input (J1) 1 – Output to RX Filter bank, RX-Transceiver Input	**0 – Output to TX Filter bank, RX Backplane/Input (J1)** **1 – Output to RX Filter bank, RX-Transceiver Input**	PMI QA 2

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SUMMARY TEST DATA
ON
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PL19643/1629

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
18	**TTL 2** RF Receive Filter Select	000 – Thru Channel 001 – Channel 1 010 – Channel 2 011 – Channel 3 100 – Channel 4 101 – Channel 5 110 Not Defined 111 – Not Defined	**000 – Thru Channel** **001 – Channel 1** **010 – Channel 2** **011 – Channel 3** **100 – Channel 4** **101 – Channel 5** **110 Not Defined** **111 – Not Defined**	PMI QA 2
19	**TTL 3** Linear or Limited SDLVA RF Output Channel	0 - Limited RF Output Channel 1 - Linear RF Output Channel	**0 – Limited RF Output Channel** **1 – Linear RF Output Channel**	
20	**TTL 4** RF Receive Thru Channel Or Down-Converted Channel.	0 - .Thru Channel 1 - Down-Converted Channel	**0 - Thru Channel** **1 – Down-Converted Channel**	
21	**TTL 5** IF1 or IF2 Output Select	0 – IF1 Output Channel 1 – IF2 Output Channel	**0 – IF1 Output Channel** **1 – IF2 Output Channel**	
22	**TTL 6** IF1 or IF2 Input Select	0 – IF1 Input Chan. 1 – High Freq. Chan.	**0 – IF1 Input Channel** **1 – IF2 Input Channel**	
23	**TTL 7** RF Transmit Thru Channel or Down-Converted Channel	0 – Thru Channel 1 – Down-Converted Channel	**0 – Thru Channel** **1 – Down-Converted Channel**	PMI QA 2

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SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

PL19643/1629

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
24	**TTL 8** RF Transmit Filter Select 3 BIT Control	000 – Thru Channel 001 – Channel 1 010 – Channel 2 011 – Channel 3 100 – Channel 4 101 – Channel 5 110 Not Defined 111 – Not Defined	**000 – Thru Channel** **001 – Channel 1** **010 – Channel 2** **011 – Channel 3** **100 – Channel 4** **101 – Channel 5** **110 Not Defined** **111 – Not Defined**	PMI QA 2
25	**TTL9** RF Transmit Down-Converted Channel 5 BIT Attenuation Control	00000 – 0 dB Attenuation 11111 – 31 dB Attenuation	**00000 – 0 dB Attenuation** **11111 – 31 dB Attenuation**	
26	**TTL10** LO1 LO2 Select 2 BIT Control	00 M1–LO1 M2-LO1 01 M1–LO1 M2-LO2 10 M1–LO2 M2-LO1 11 M1–LO2 M2-LO2	**00 M1–LO1 M2-LO1** **01 M1–LO1 M2-LO2** **10 M1–LO2 M2-LO1** **11 M1–LO2 M2-LO2**	
27	**TTL11** SDLVA Threshold Adjust 6 BIT Control	000000 – Lowest Threshold Level 111111 – Highest Threshold Level	**000000 – Lowest Threshold Level** **111111 – Highest Threshold Level**	
28	**TTL12** SDLVA CTL A (ENABLE)	0 – Internal Comparator Triggered SPST 1 – External Trigger Enable (SW CTL B)	**0 – Internal Comparator Triggered SPST** **1 – External Trigger Enable (SW CTL B)**	
29	**TT13** SDLVA CTL B (TRIGGER)	0 - Limited RF Channel SPST Switch ON (Insertion Loss) 1 - Limited RF Channel SPST Switch OFF (Isolation)	**0 - Limited RF Channel SPST Switch ON (Insertion Loss)** **1 - Limited RF Channel SPST Switch OFF (Isolation)**	PMI QA 2

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SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

PL19643/1629

30	Power Supply	+12V -12V +5V +3.3V	**+12V @ 1.2 A** **-12V @ 835 mA** **+5V @ 575 mA** **+3.3V @ 7 mA**	PMI QA 2
Receive and Transmit Switched Filter Bank (PL19619, See Appendix A)				
Transceiver Module (PL19633, See Appendix B)				
SDLVA (PL19628, See Appendix C)				

QA/QC Approval: _____ PMI QA 2 **Date:** 10/6/16

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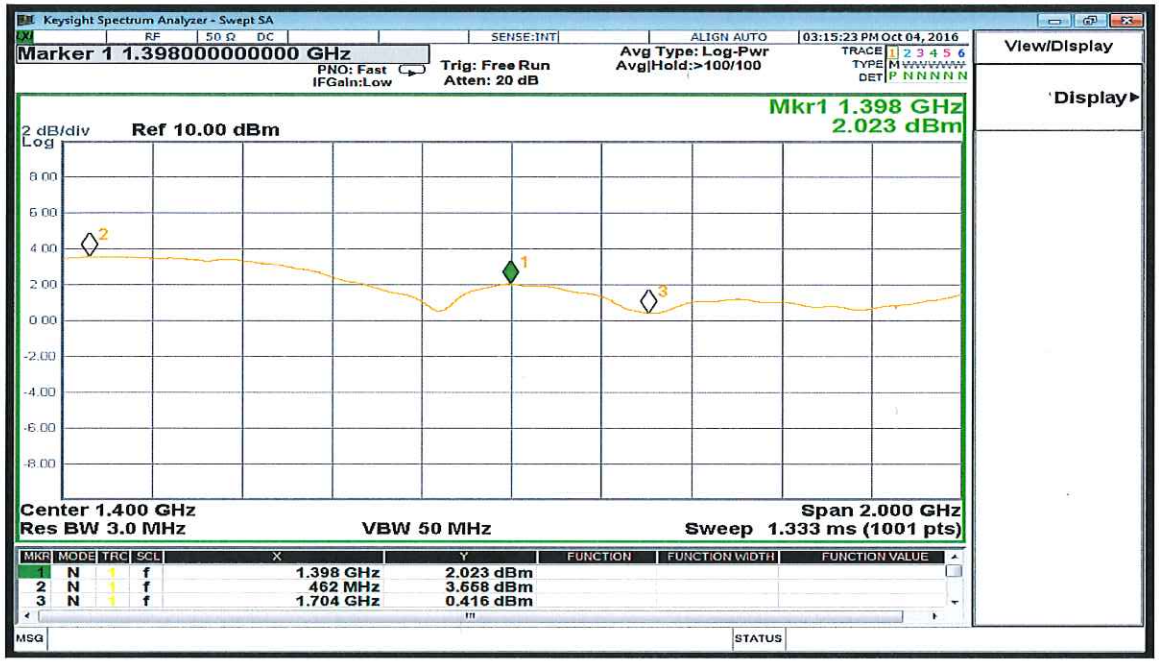
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

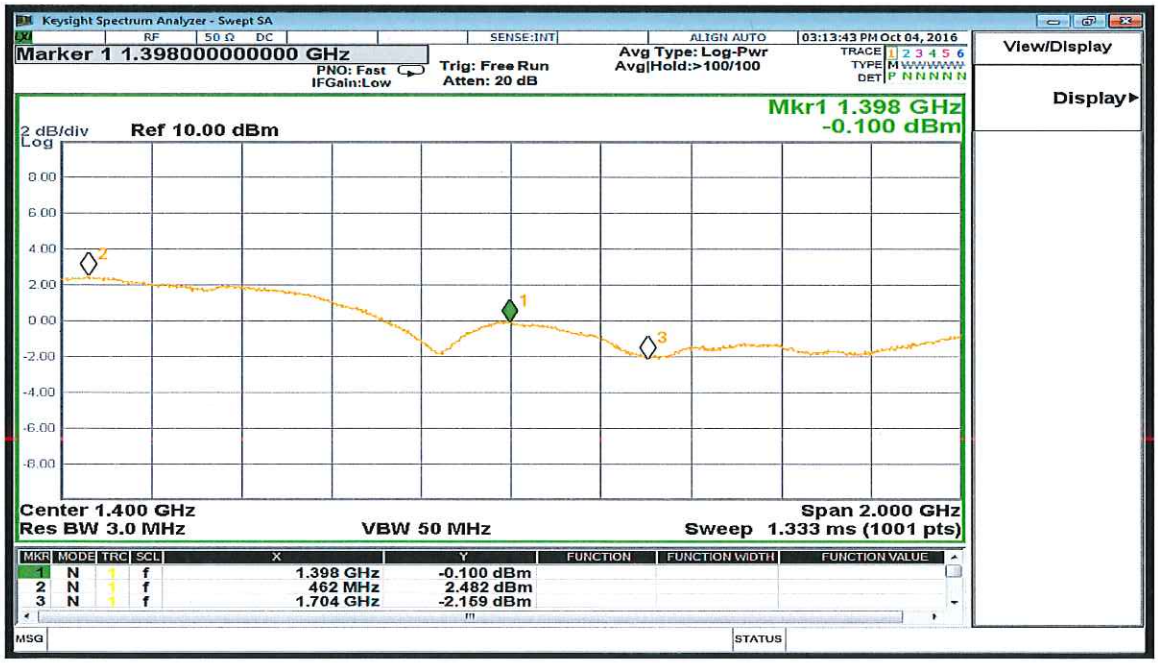
PL19643/1629

RECEIVE INPUT to IF OUTPUT PLOTS - Limited RF Channel

RF Receive Input (J1) To IF1 Output (J3A) Thru Channel (-10dBm Input)



RF Receive Input (J1) To IF1 Output (J3A) Thru Channel (-70dBm Input)



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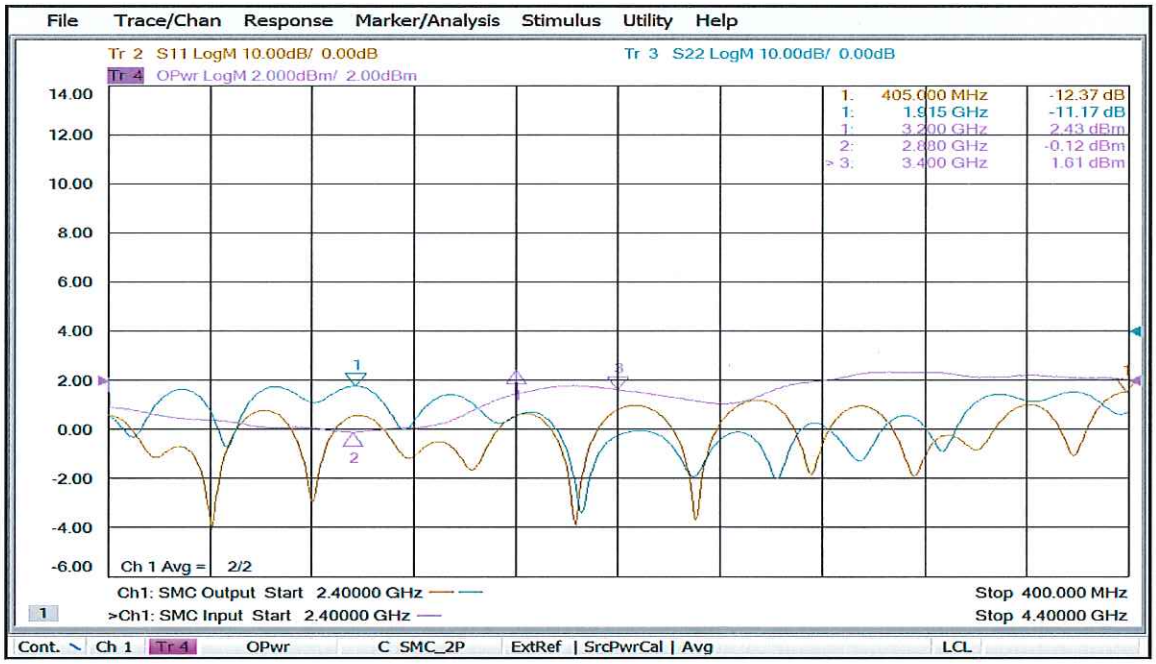
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

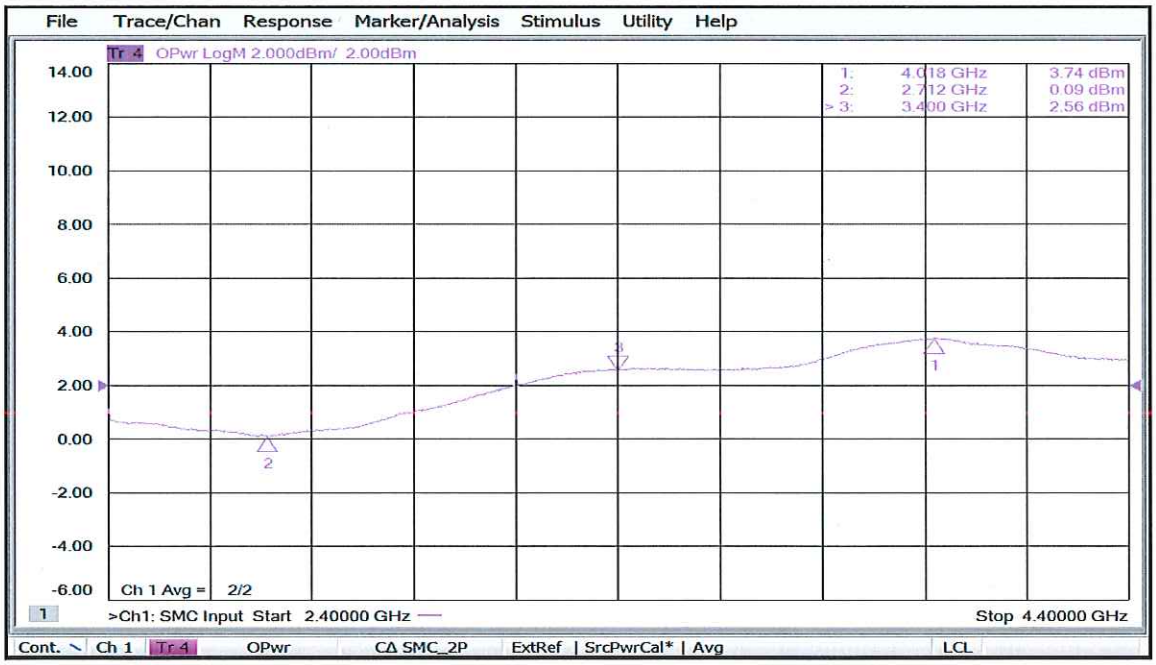
PL19643/1629

RECEIVE INPUT to IF OUTPUT PLOTS - Limited RF Channel

RF Receive Input (J1) To IF1 Output (J3A) Channel 1 (-10dBm Input)



RF Receive Input (J1) To IF1 Output (J3A) Channel 1 (-70dBm Input)



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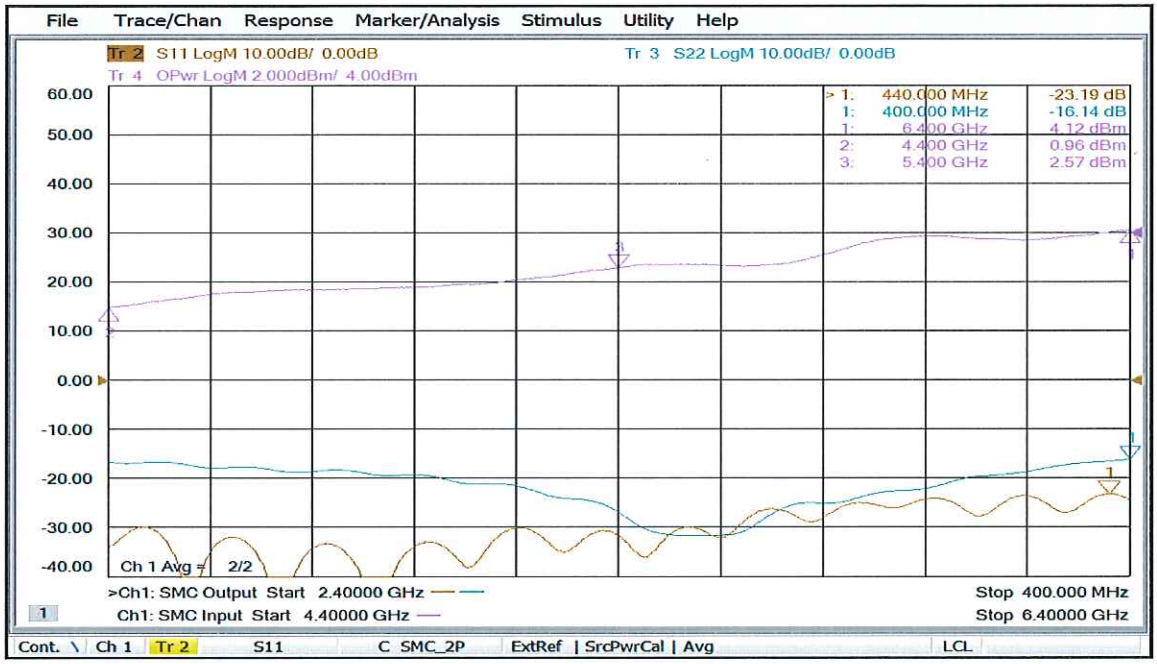
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

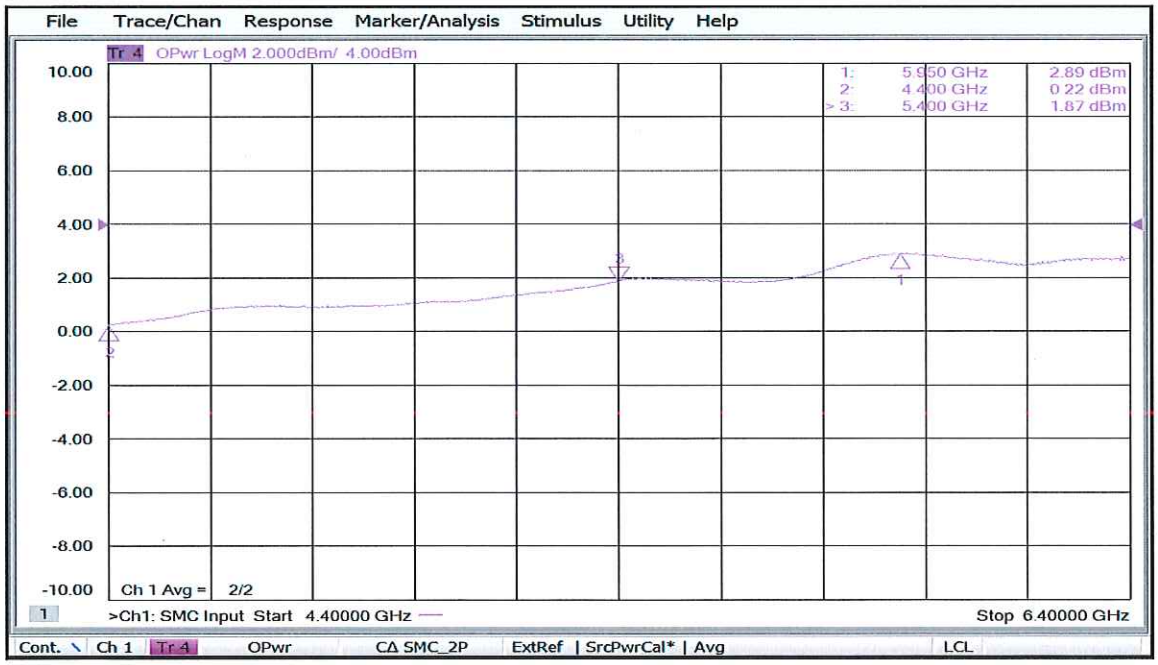
PL19643/1629

RECEIVE INPUT to IF OUTPUT PLOTS - Limited RF Channel

RF Receive Input (J1) To IF1 Output (J3A) Channel 2 (-10dBm Input)



RF Receive Input (J1) To IF1 Output (J3A) Channel 2 (-70dBm Input)



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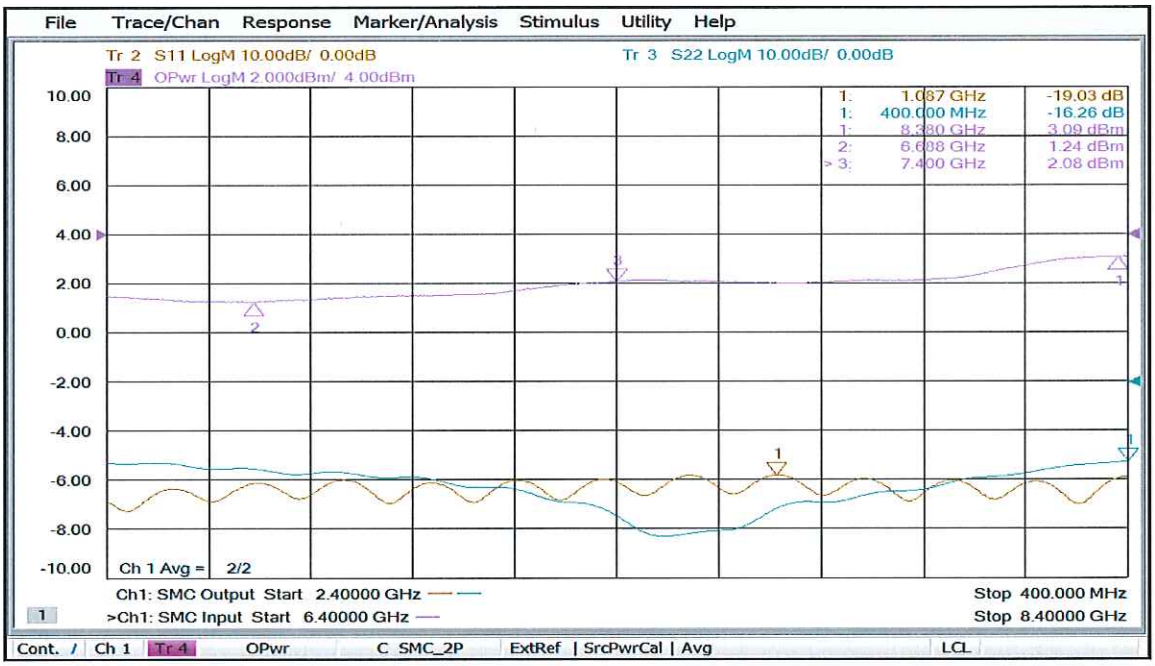
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

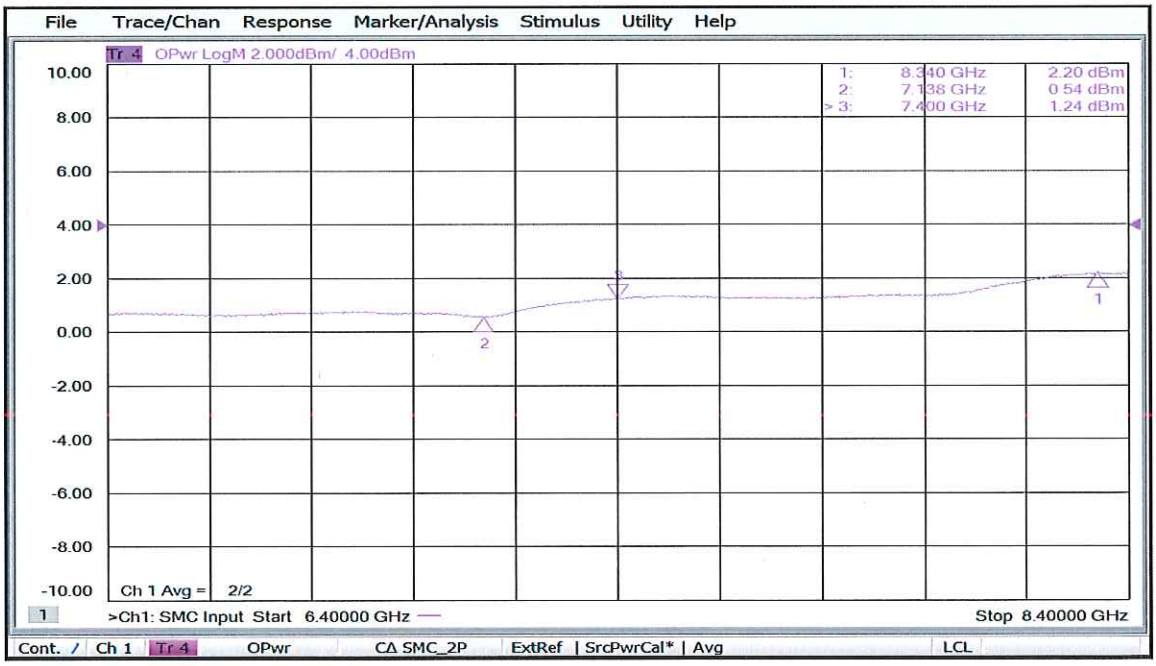
PL19643/1629

RECEIVE INPUT to IF OUTPUT PLOTS - Limited RF Channel

RF Receive Input (J1) To IF1 Output (J3A) Channel 3 (-10dBm Input)



RF Receive Input (J1) To IF1 Output (J3A) Channel 3 (-70dBm Input)



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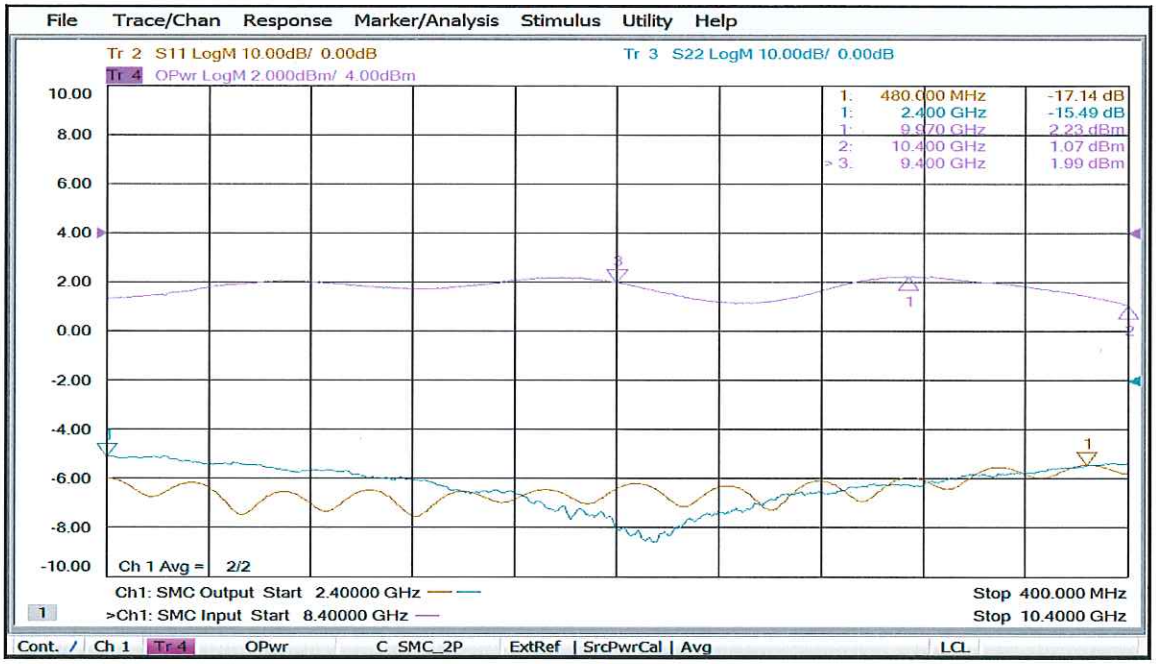
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

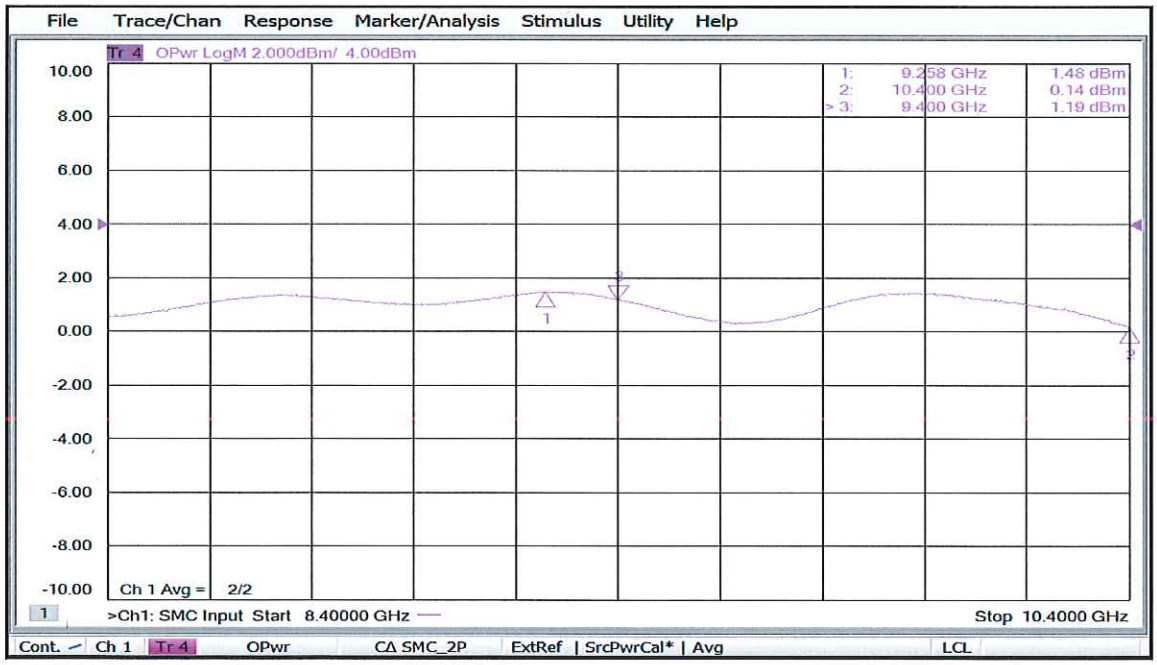
PL19643/1629

RECEIVE INPUT to IF OUTPUT PLOTS - Limited RF Channel

RF Receive Input (J1) To IF1 Output (J3A) Channel 4 (-10dBm Input)



RF Receive Input (J1) To IF1 Output (J3A) Channel 4 (-70dBm Input)



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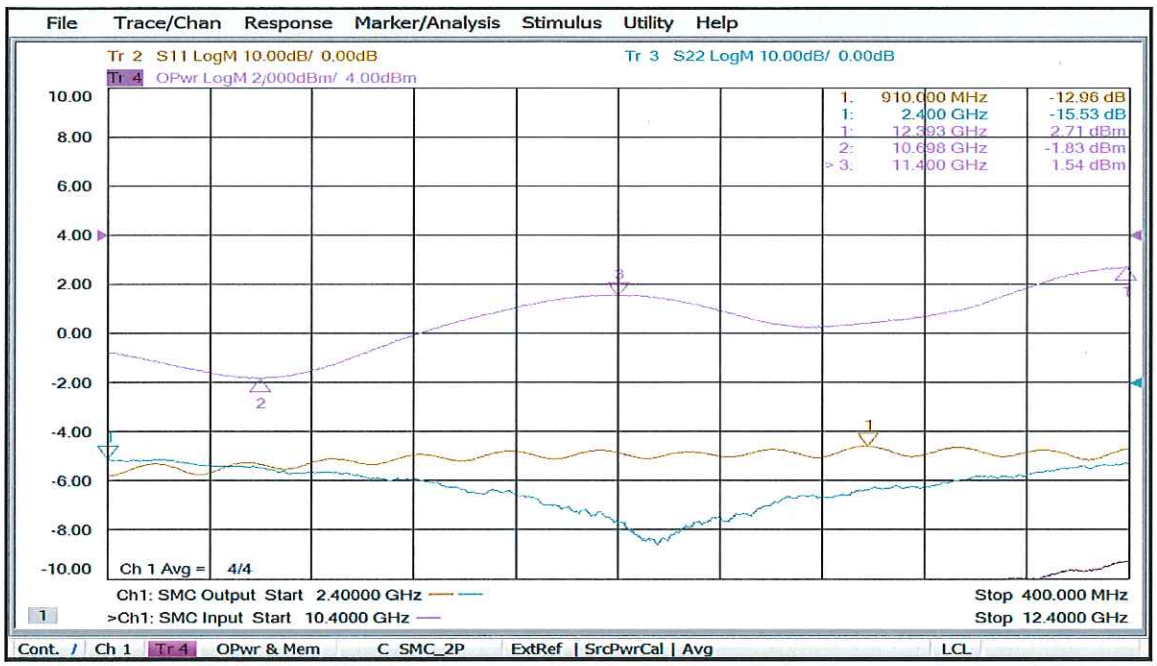
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

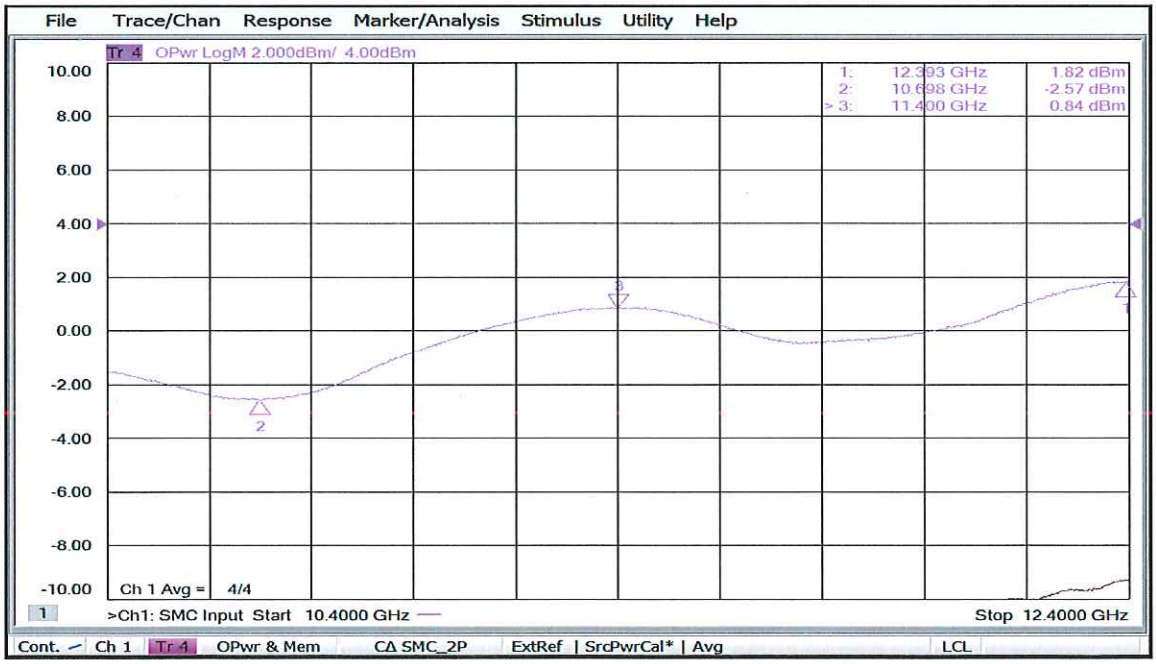
PL19643/1629

RECEIVE INPUT to IF OUTPUT PLOTS - Limited RF Channel

RF Receive Input (J1) To IF1 Output (J3A) Channel 5 (-10dBm Input)



RF Receive Input (J1) To IF1 Output (J3A) Channel 5 (-70dBm Input)



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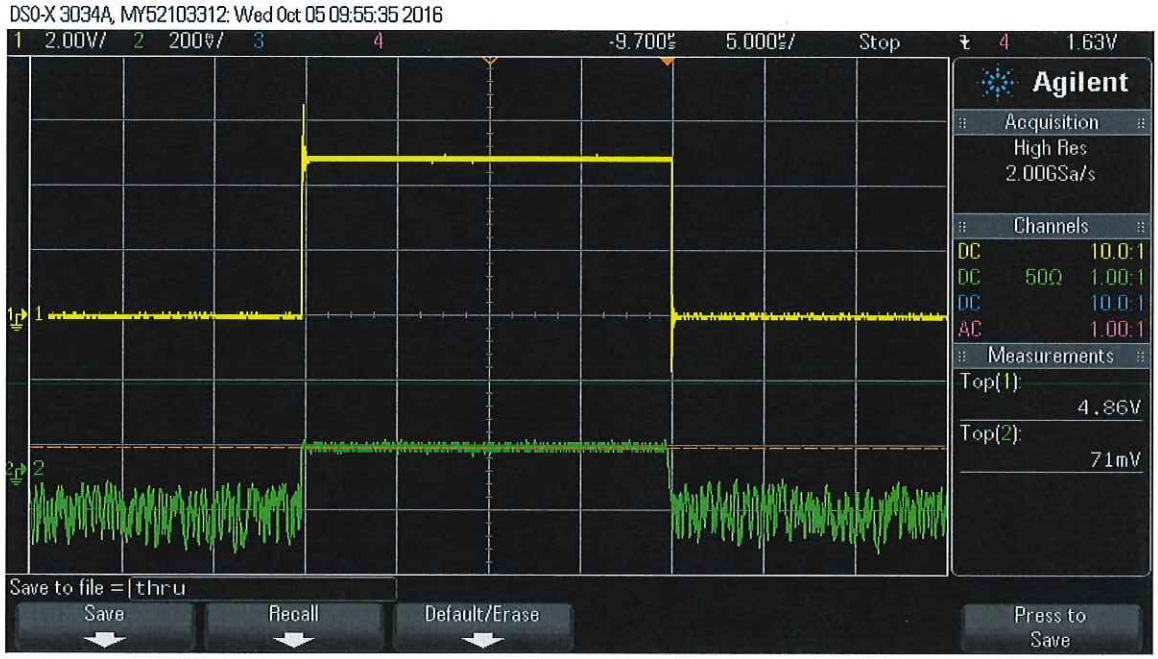
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

PL19643/1629

RECEIVE INPUT to IF OUTPUT PLOTS - Limited RF Channel

Log Proportional Detected Video Output (V1) and Threshold Detected Video Output (V0)

Thru Channel - 1.4GHz @ -70dBm Threshold Set to 6



Green Trace: J11 - Log Proportional Detected Video Output (V1)

Yellow Trace: J12 - Threshold Detected Video Output (V0)

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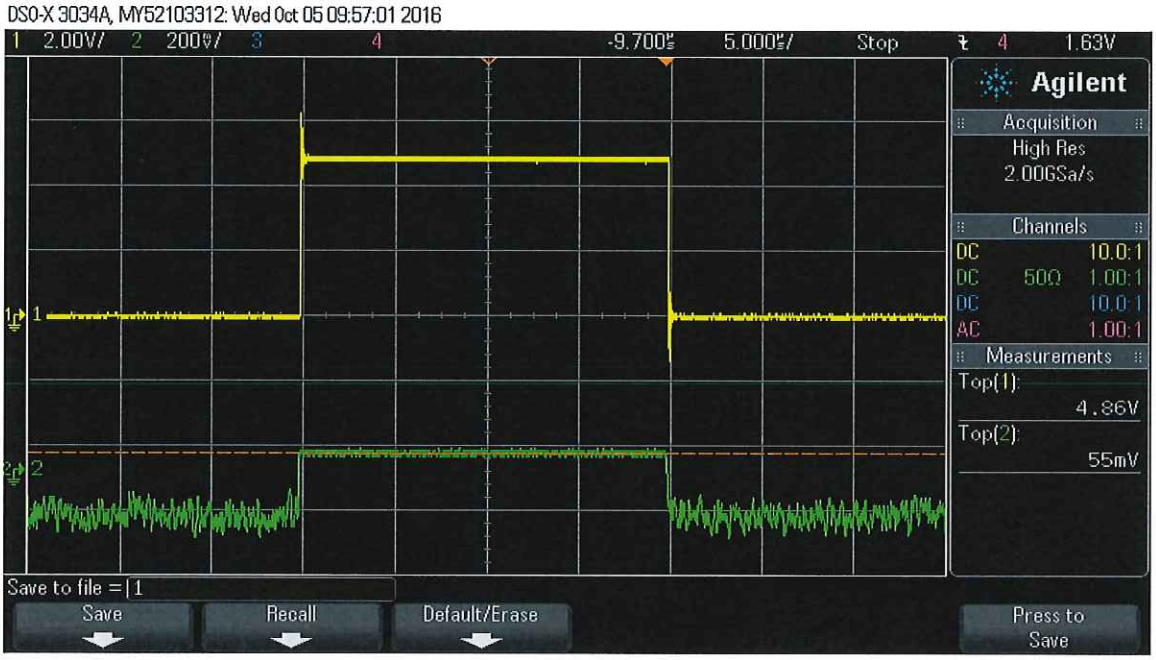
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

PL19643/1629

RECEIVE INPUT to IF OUTPUT PLOTS - Limited RF Channel

Log Proportional Detected Video Output (V1) And Threshold Detected Video Output (V0)

Channel 1 - 3.4GHz @ -65dBm Threshold Set to 4



Green Trace: J11 - Log Proportional Detected Video Output (V1)

Yellow Trace: J12 - Threshold Detected Video Output (V0)

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SUMMARY TEST DATA
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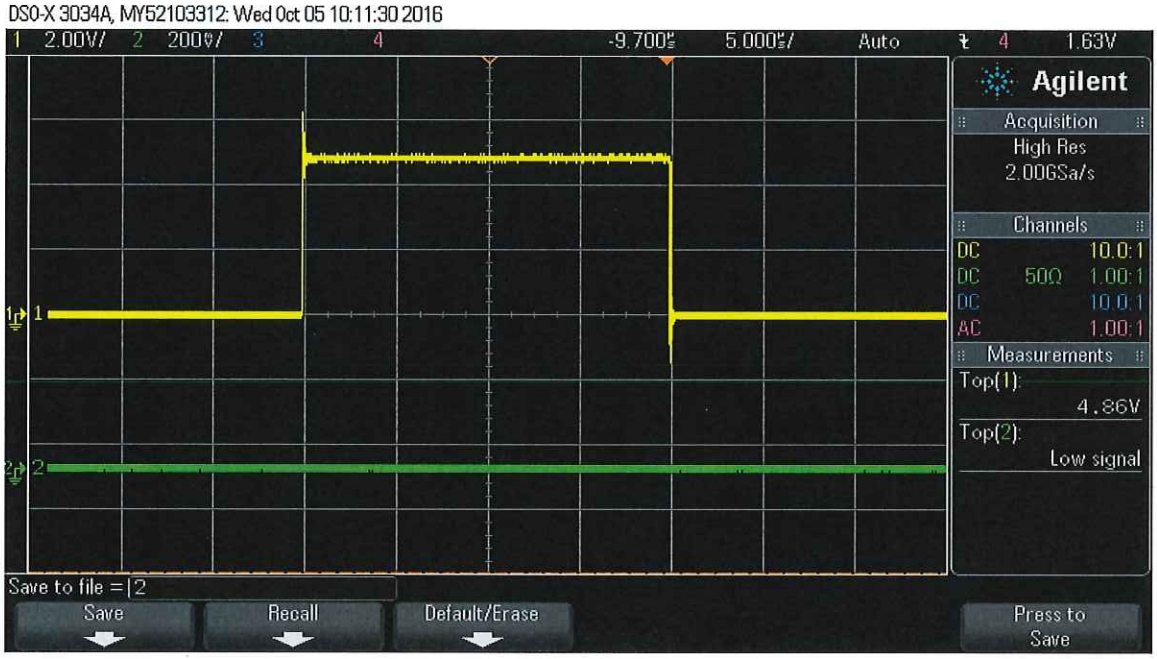
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

PL19643/1629

RECEIVE INPUT to IF OUTPUT PLOTS - Limited RF Channel

Log Proportional Detected Video Output (V1) And Threshold Detected Video Output (V0)

Channel 2 - 5.4GHz @ -65dBm Threshold Set to 5



Green Trace: J11 - Log Proportional Detected Video Output (V1)

Yellow Trace: J12 - Threshold Detected Video Output (V0)

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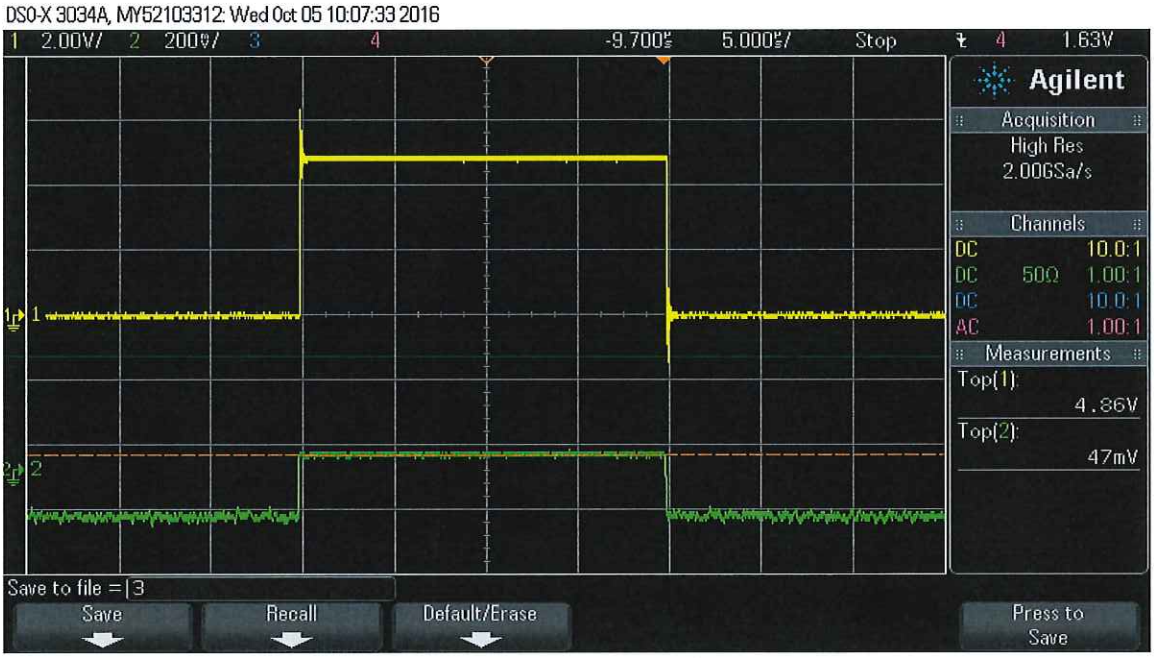
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

PL19643/1629

RECEIVE INPUT to IF OUTPUT PLOTS - Limited RF Channel

Log Proportional Detected Video Output (V1) And Threshold Detected Video Output (V0)

Channel 3 - 7.4GHz @ -65dBm Threshold Set to 5



Green Trace: J11 - Log Proportional Detected Video Output (V1)

Yellow Trace: J12 - Threshold Detected Video Output (V0)

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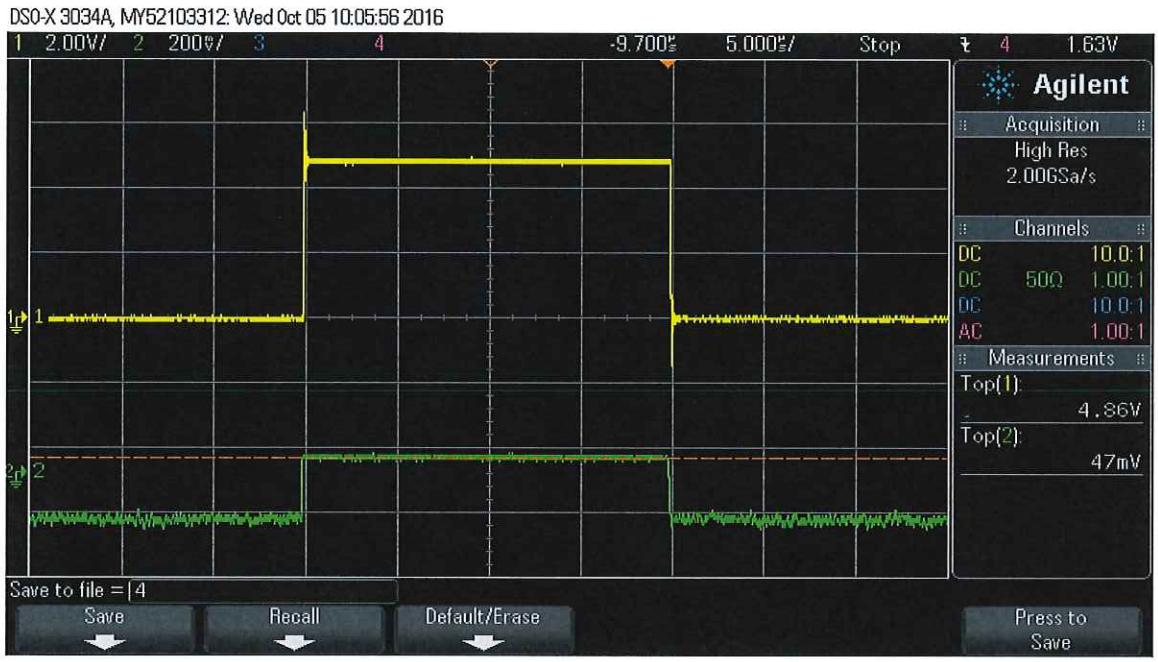
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

PL19643/1629

RECEIVE INPUT to IF OUTPUT PLOTS - Limited RF Channel

Log Proportional Detected Video Output (V1) And Threshold Detected Video Output (V0)

Channel 4 - 9.4GHz @ -64dBm Threshold Set to 5



Green Trace: J11 - Log Proportional Detected Video Output (V1)

Yellow Trace: J12 - Threshold Detected Video Output (V0)

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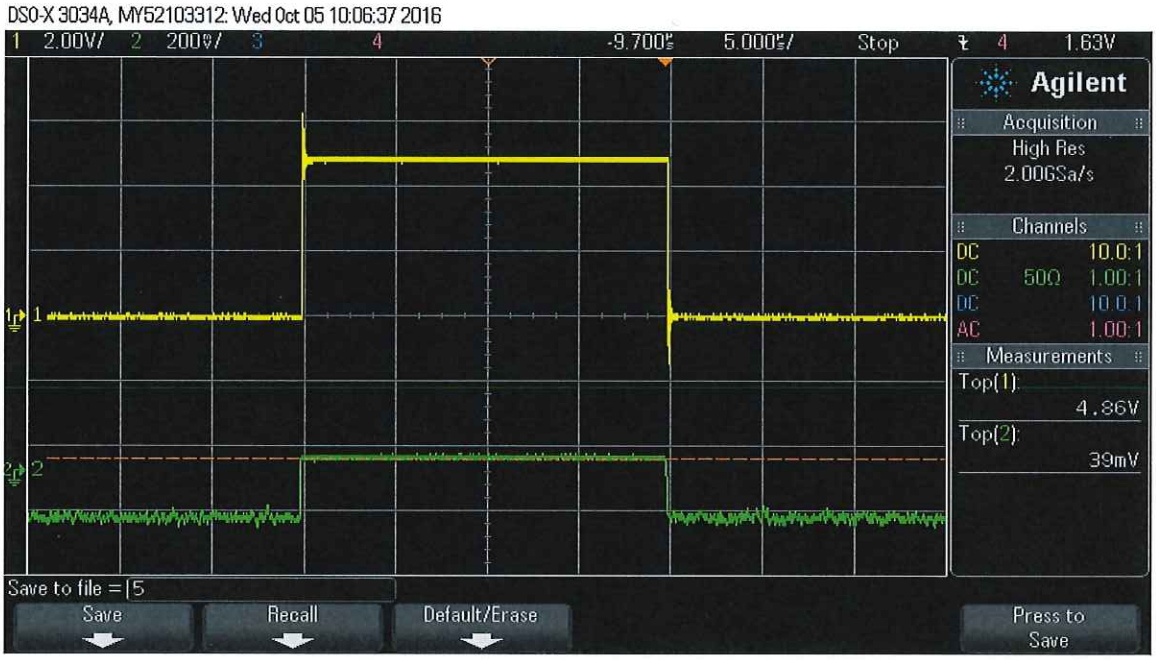
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

PL19643/1629

RECEIVE INPUT to IF OUTPUT PLOTS - Limited RF Channel

Log Proportional Detected Video Output (V1) And Threshold Detected Video Output (V0)

Channel 5 - 11.4GHz @ -65dBm Threshold Set to 5



Green Trace: J11 - Log Proportional Detected Video Output (V1)

Yellow Trace: J12 - Threshold Detected Video Output (V0)

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SUMMARY TEST DATA
ON
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PL19643/1629

TABLE 1

Typical Minimum Threshold Values for Band Centers and Band Edges

Channel	Frequency	dBm	Threshold setting	Frequency	dBm	Threshold setting	Frequency	dBm	Threshold setting
1	2.4 GHz	-69	6	3.4 GHz	-70	6	4.4 GHz	-70	6
2	4.4 GHz	-67	5	5.4 GHz	-68	5	6.4 GHz	-64	5
3	6.4 GHz	-66	5	7.4 GHz	-67	5	8.4 GHz	-65	5
4	8.4 GHz	-67	5	9.4 GHz	-68	5	10.4 GHz	-66	5
5	10.4 GHz	-68	5	11.4 GHz	-68	5	12.4 GHz	-66	5
THRU	400 MHz	-69	8	1.4 GHz	-70	8	2.4 GHz	-69	8

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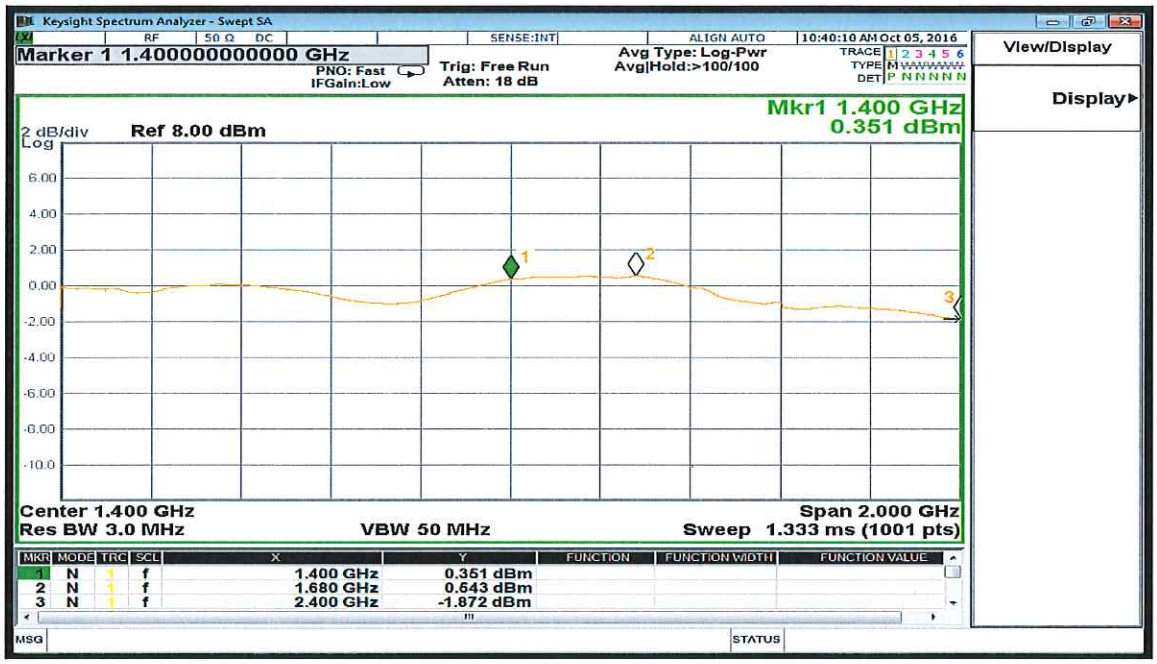
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

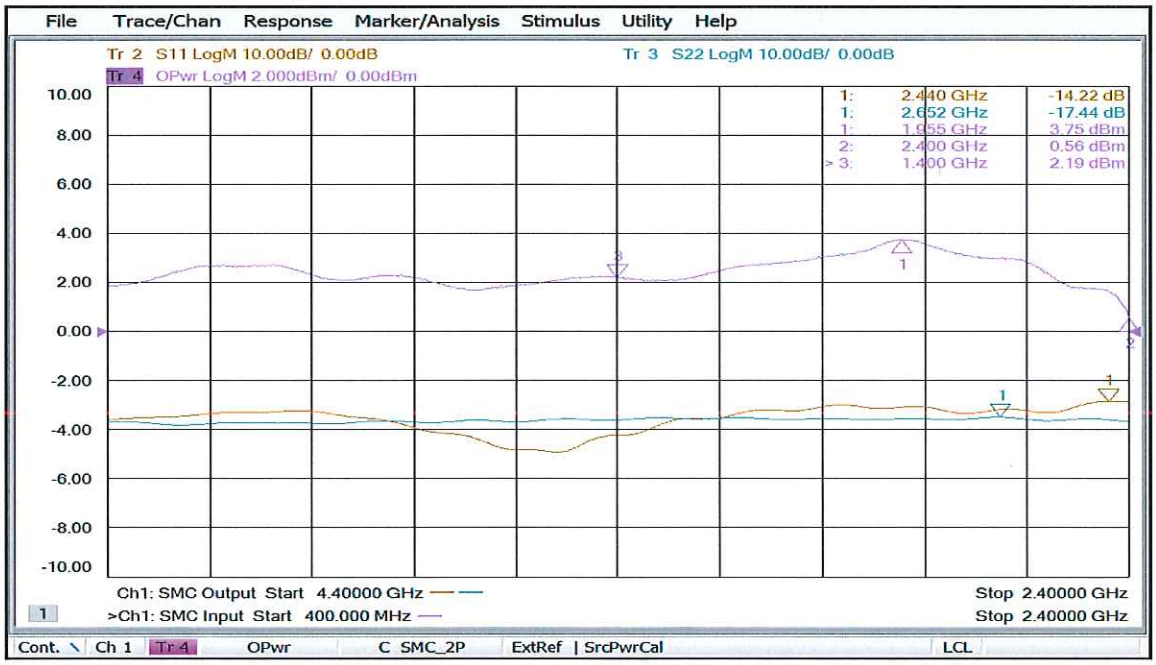
PL19643/1629

IF INPUT to TRANSMIT OUTPUT PLOTS

IF1 Input (J4A) To RF Transmit Output (J6) Thru Channel (0dBm Input)



IF1 Input (J4A) To RF Transmit Output (J6) Channel 1 (0dBm Input)



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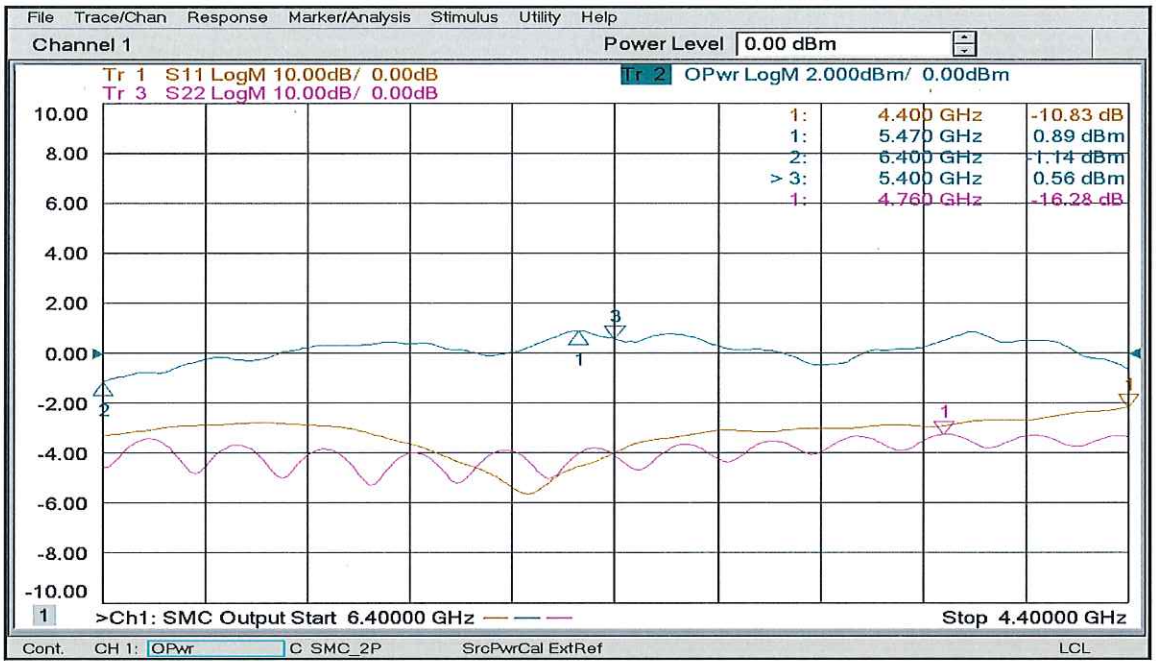
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

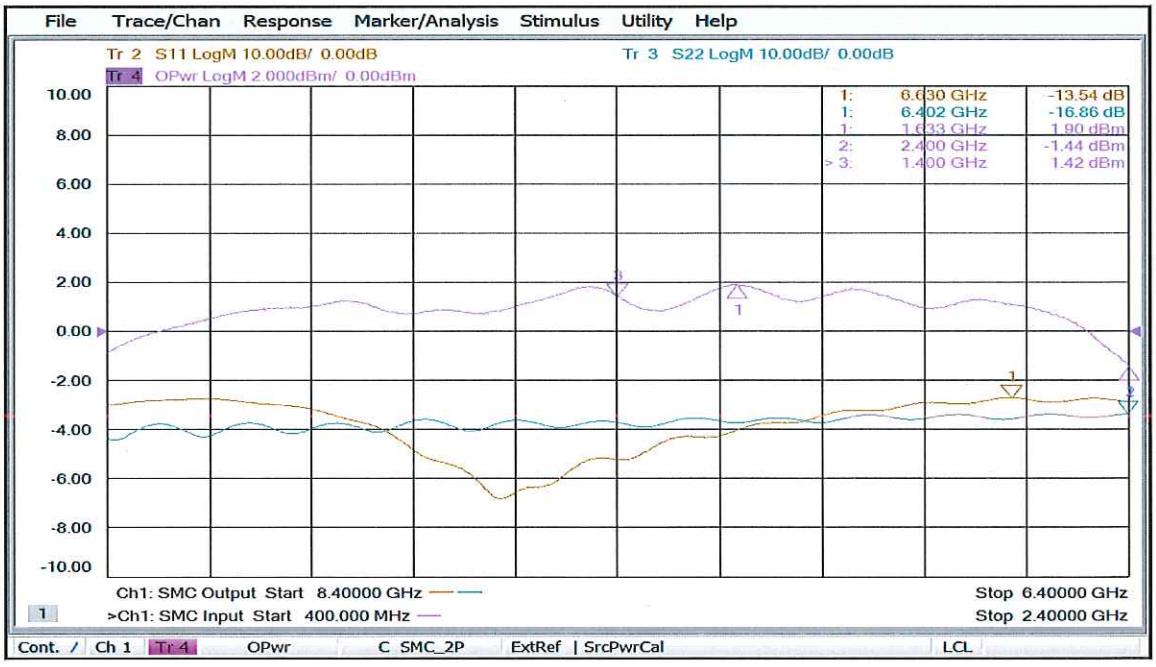
PL19643/1629

IF INPUT to TRANSMIT OUTPUT PLOTS

IF1 Input (J4A) To RF Transmit Output (J6) Channel 2 (0dBm Input)



IF1 Input (J4A) To RF Transmit Output (J6) Channel 3 (0dBm Input)



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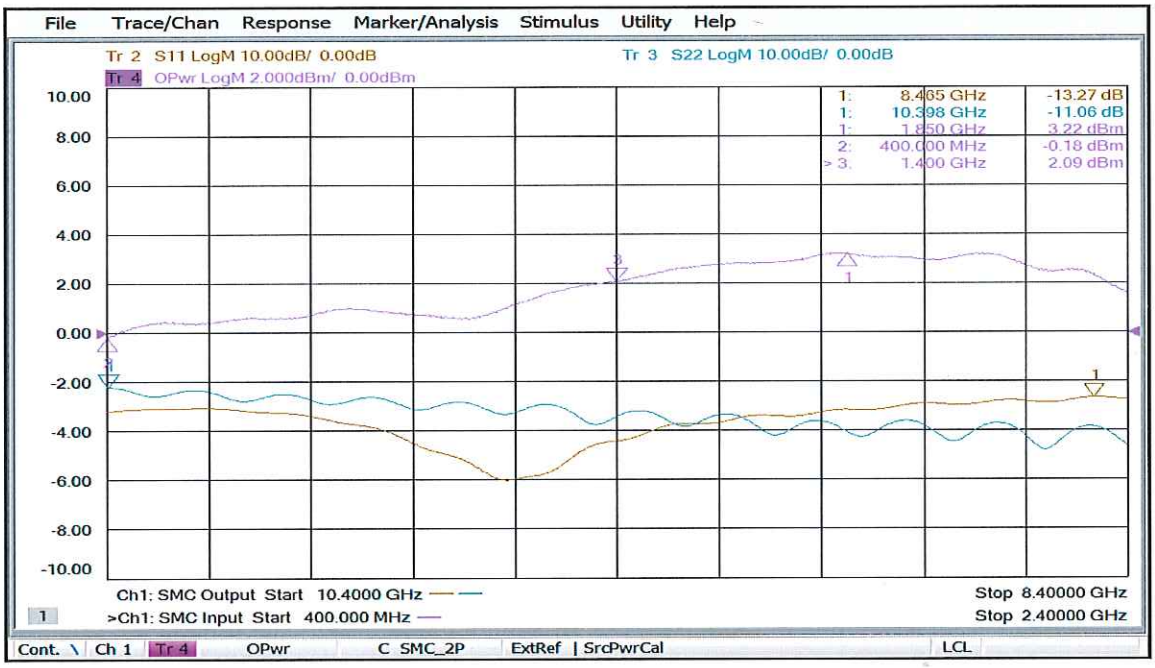
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

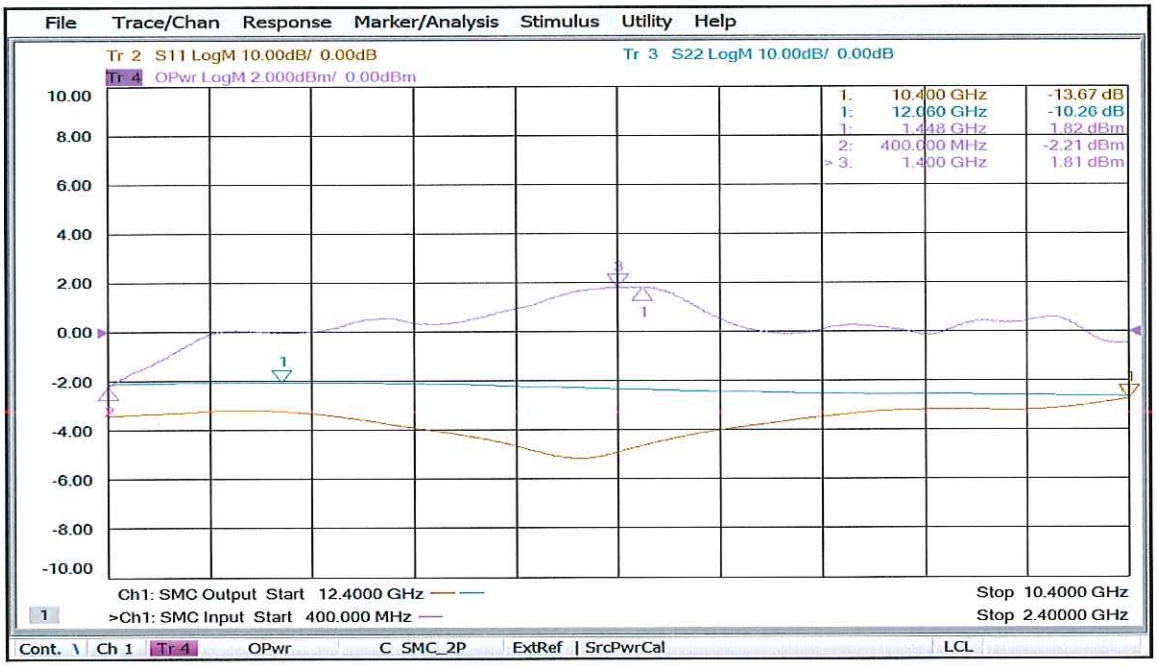
PL19643/1629

IF INPUT to TRANSMIT OUTPUT PLOTS

IF1 Input (J4A) To RF Transmit Output (J6) Channel 4 (0dBm Input)



IF1 Input (J4A) To RF Transmit Output (J6) Channel 5 (0dBm Input)



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SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

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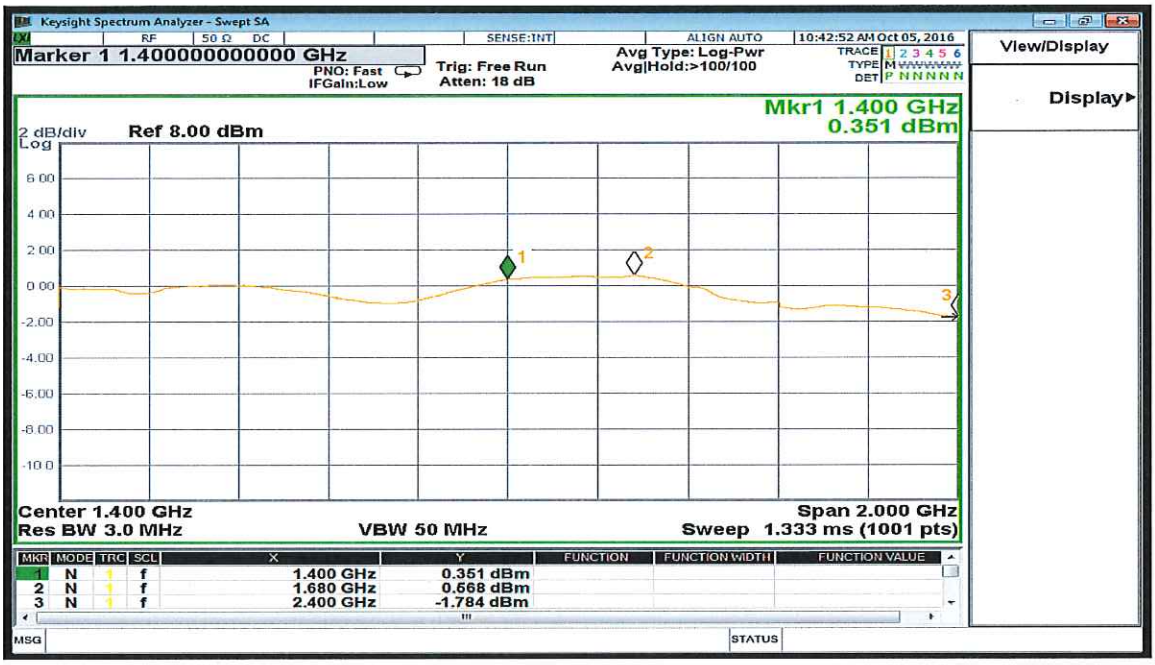
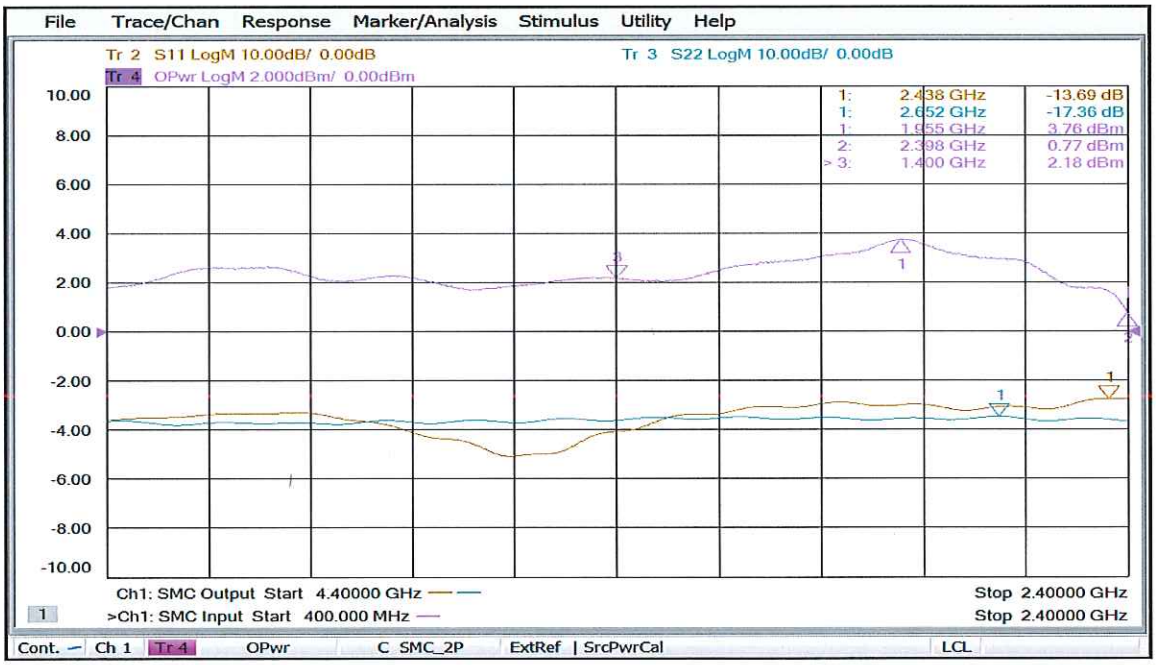
IF INPUT to TRANSMIT OUTPUT PLOTS

IF2 Input (J4A) To RF Transmit Output (J6) Thru Channel (0dBm Input)



IF2 Input (J4A) To RF Transmit Output (J6) Channel 1 (0dBm Input)



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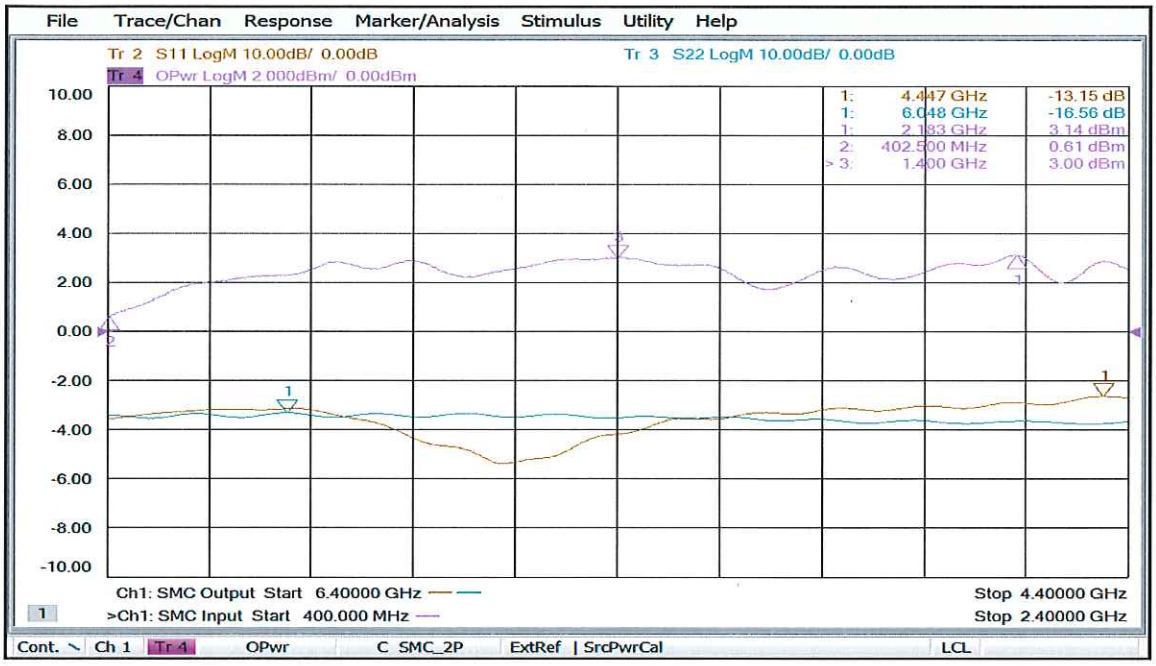
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

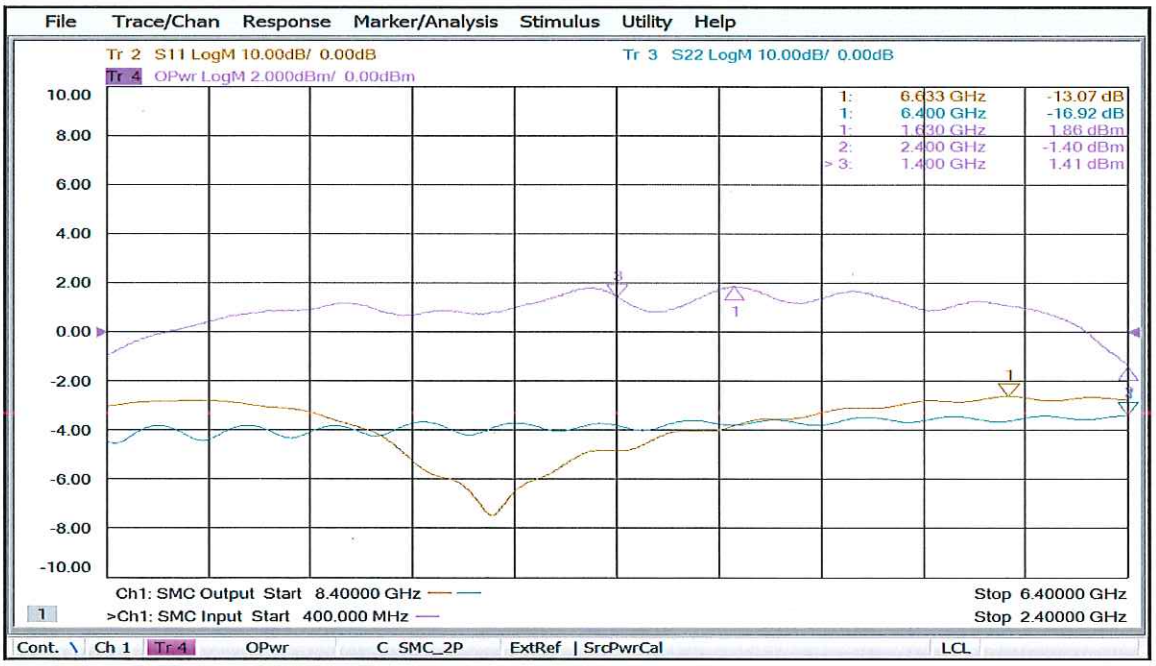
PL19643/1629

IF INPUT to TRANSMIT OUTPUT PLOTS

IF2 Input (J4A) To RF Transmit Output (J6) Channel 2 (0dBm Input)



IF2 Input (J4A) To RF Transmit Output (J6) Channel 3 (0dBm Input)



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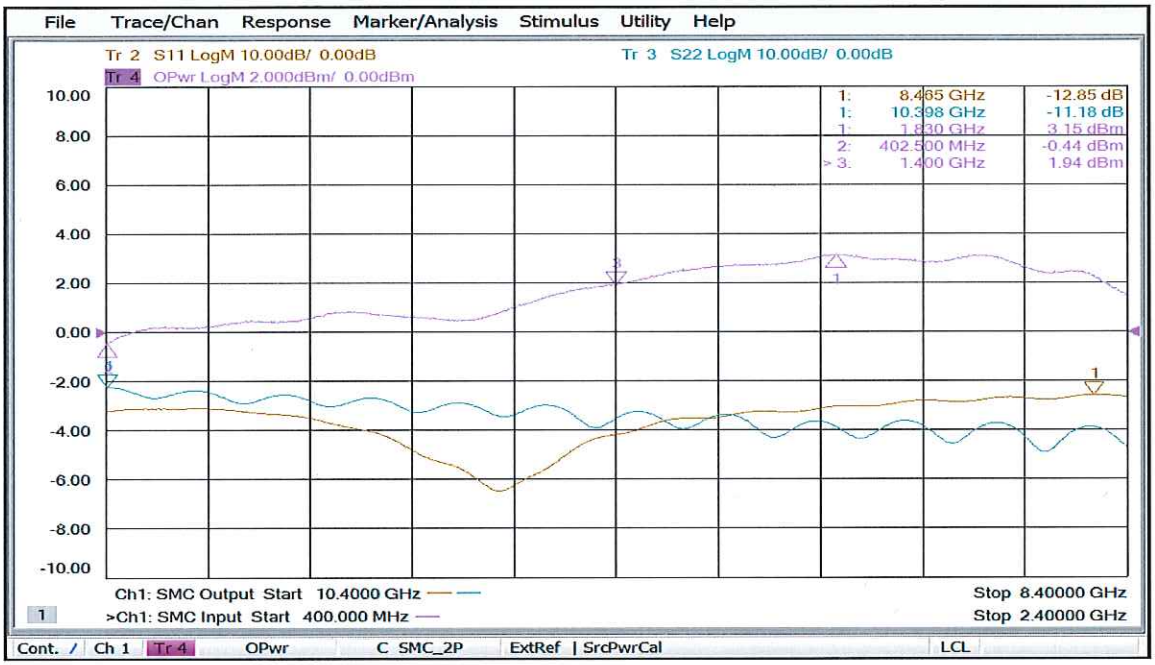
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

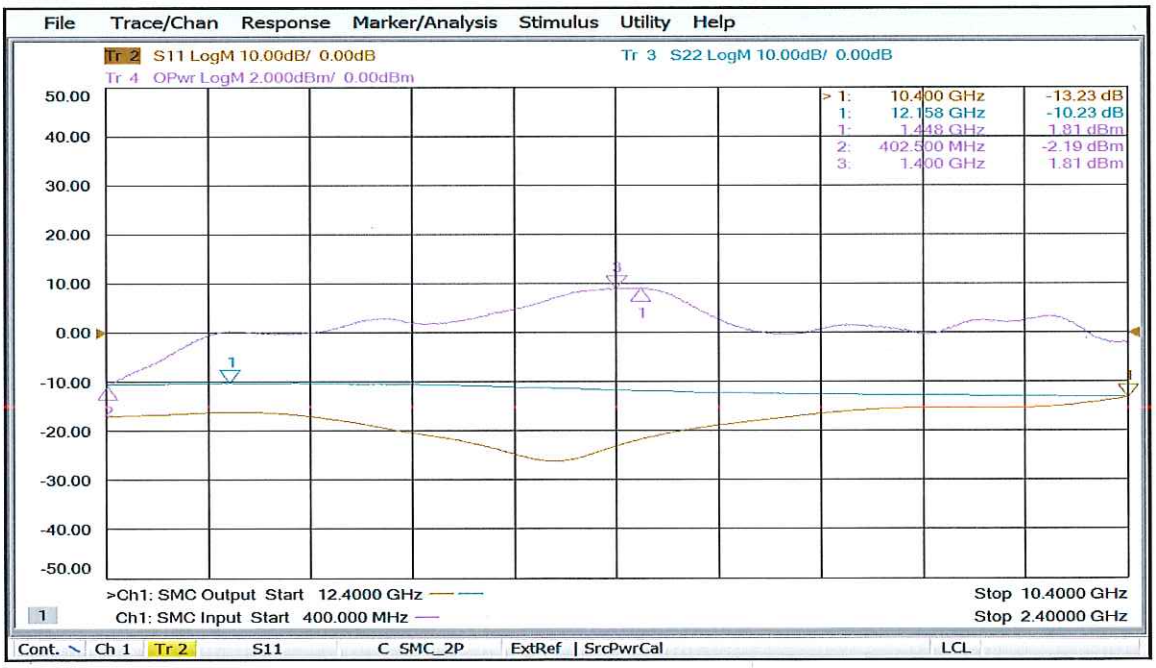
PL19643/1629

IF INPUT to TRANSMIT OUTPUT PLOTS

IF2 Input (J4A) To RF Transmit Output (J6) Channel 4 (0dBm Input)



IF2 Input (J4A) To RF Transmit Output (J6) Channel 5 (0dBm Input)



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SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

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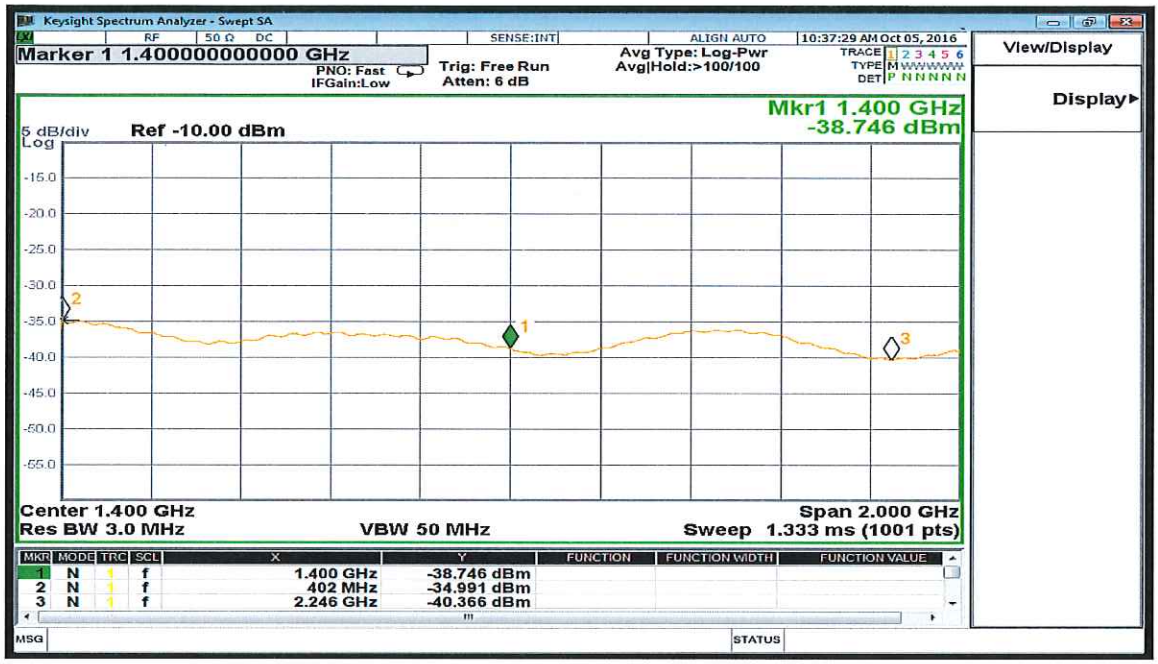
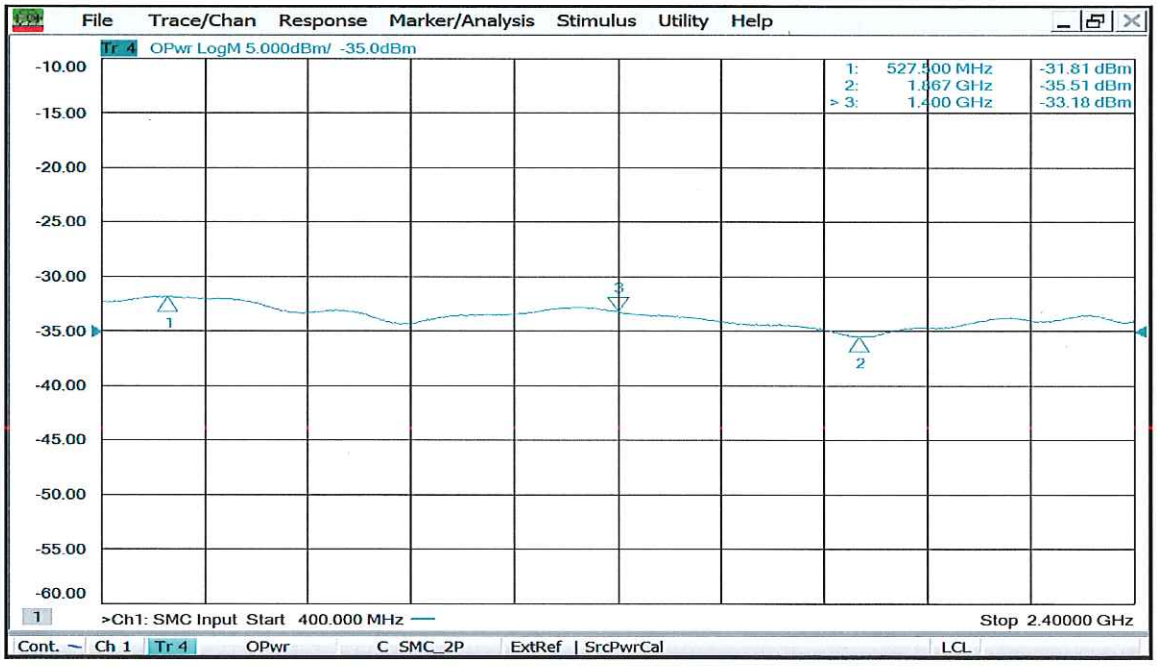
IF INPUT to RF TRANSMIT SAMPLE OUTPUT PLOTS

IF1 Input (J4A) To RF Transmit Sample Output (J8) Thru Channel (0dBm Input)



IF1 Input (J4A) To RF Transmit Sample Output (J8) Channel 1 (0dBm Input)



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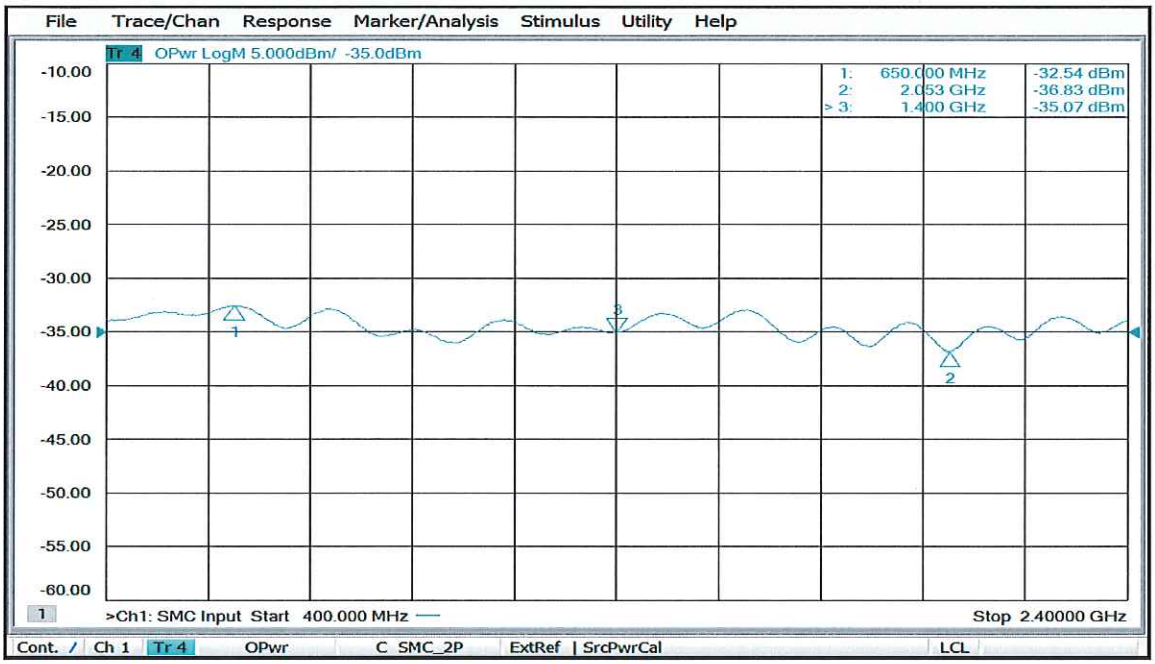
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

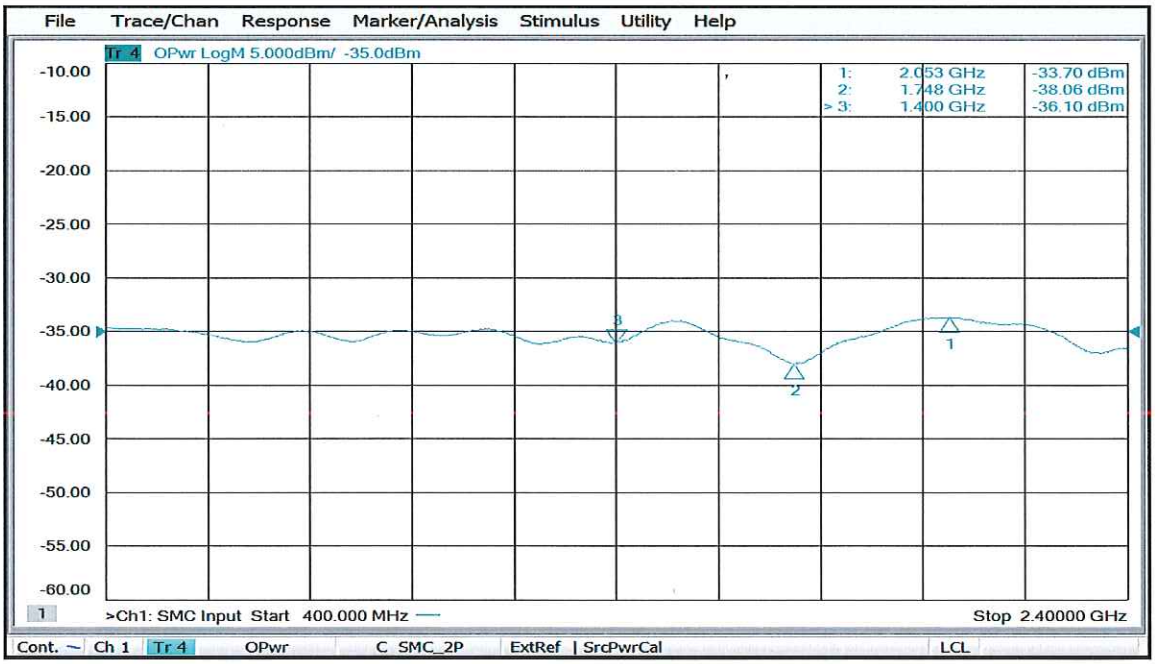
PL19643/1629

IF INPUT to RF TRANSMIT SAMPLE OUTPUT PLOTS

IF1 Input (J4A) To RF Transmit Sample Output (J8) Channel 2 (0dBm Input)



IF1 Input (J4A) To RF Transmit Sample Output (J8) Channel 3 (0dBm Input)



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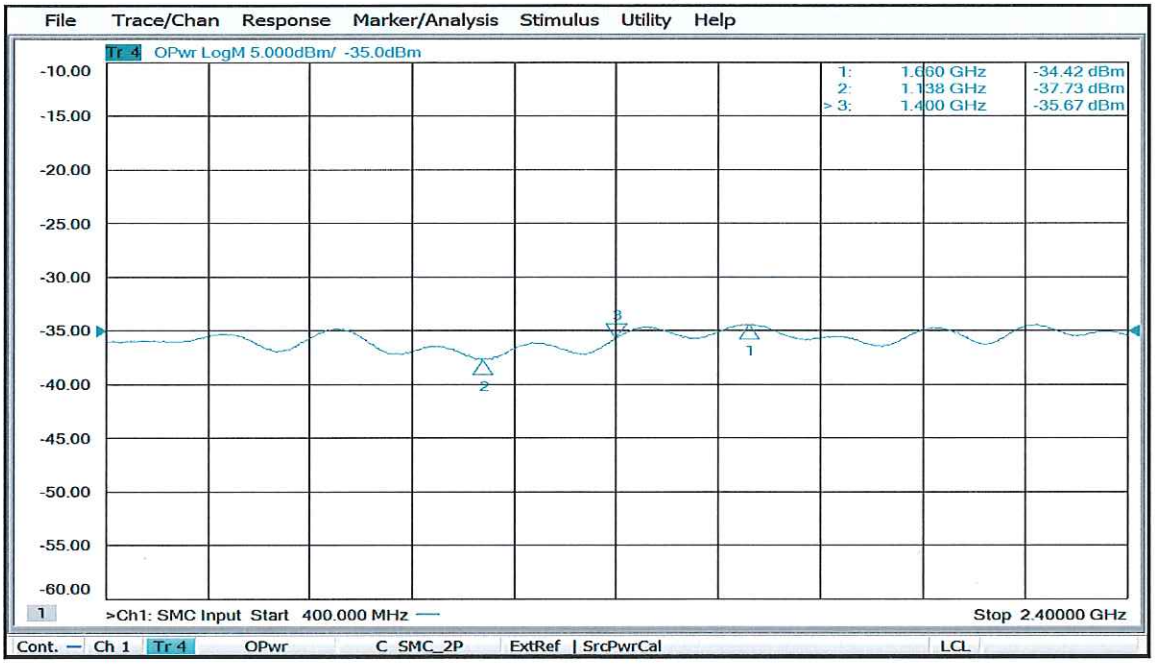
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

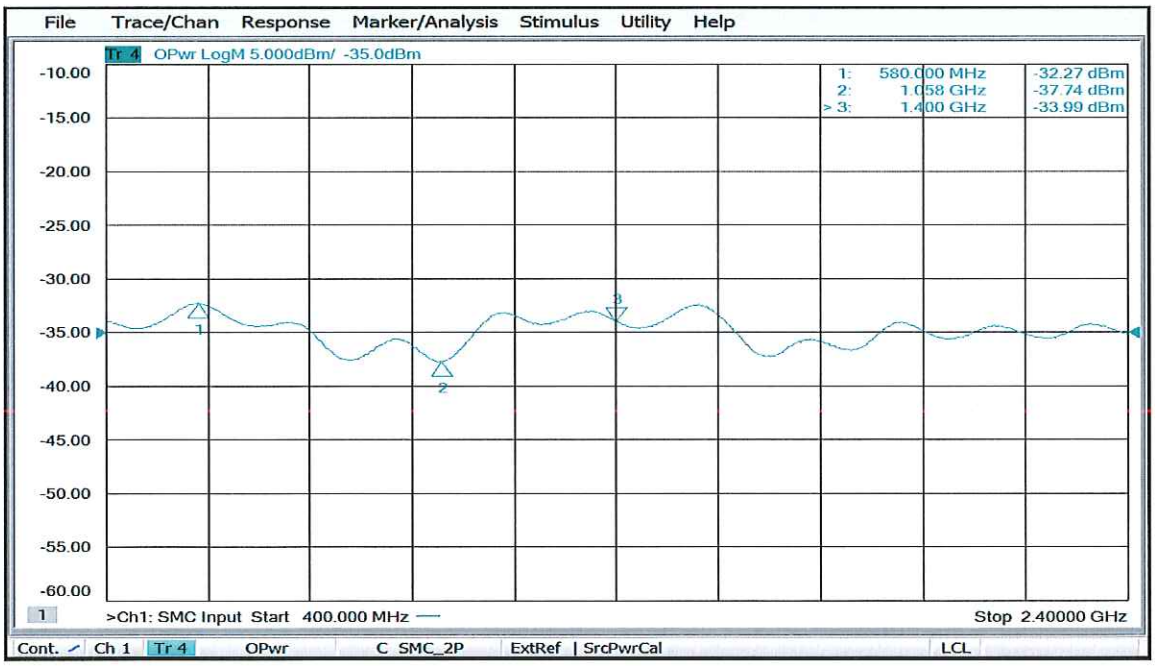
PL19643/1629

IF INPUT to RF TRANSMIT SAMPLE OUTPUT PLOTS

IF1 Input (J4A) To RF Transmit Sample Output (J8) Channel 4 (0dBm Input)



IF1 Input (J4A) To RF Transmit Sample Output (J8) Channel 5 (0dBm Input)



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SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

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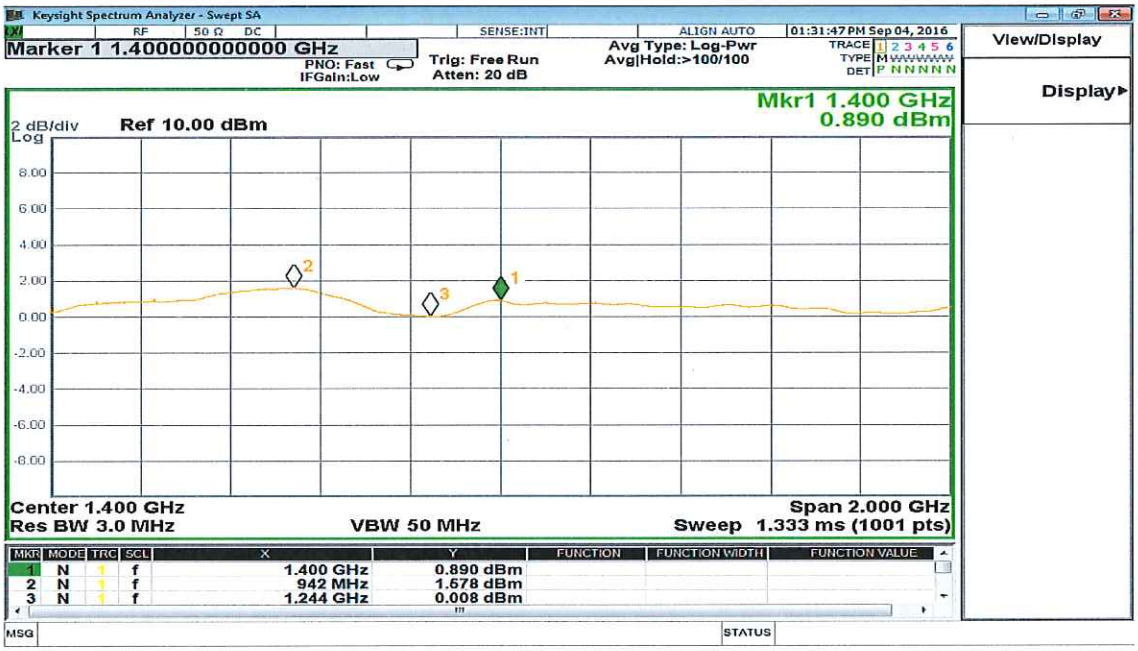
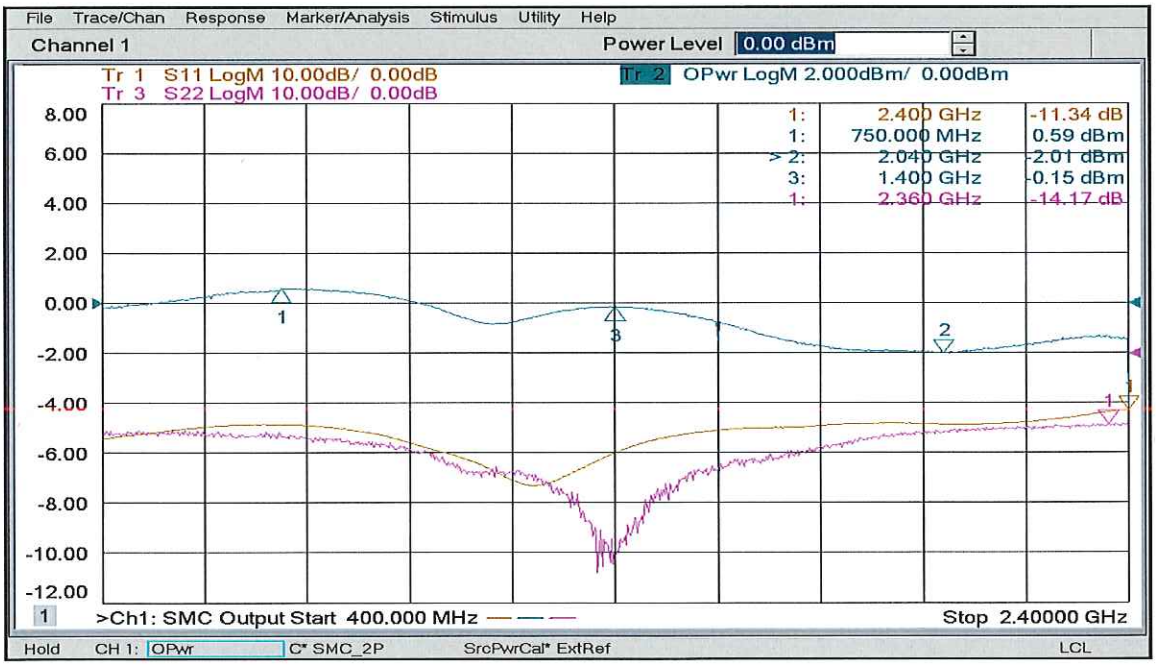
IF INPUT to RF TRANSMIT BUILT-IN-TEST OUTPUT PLOTS

IF1 Input (J4A) To IF1 Output (J3A) Thru Channel (0dBm Input)



IF1 Input (J4A) To IF1 Output (J3A) Channel 1 (0dBm Input)



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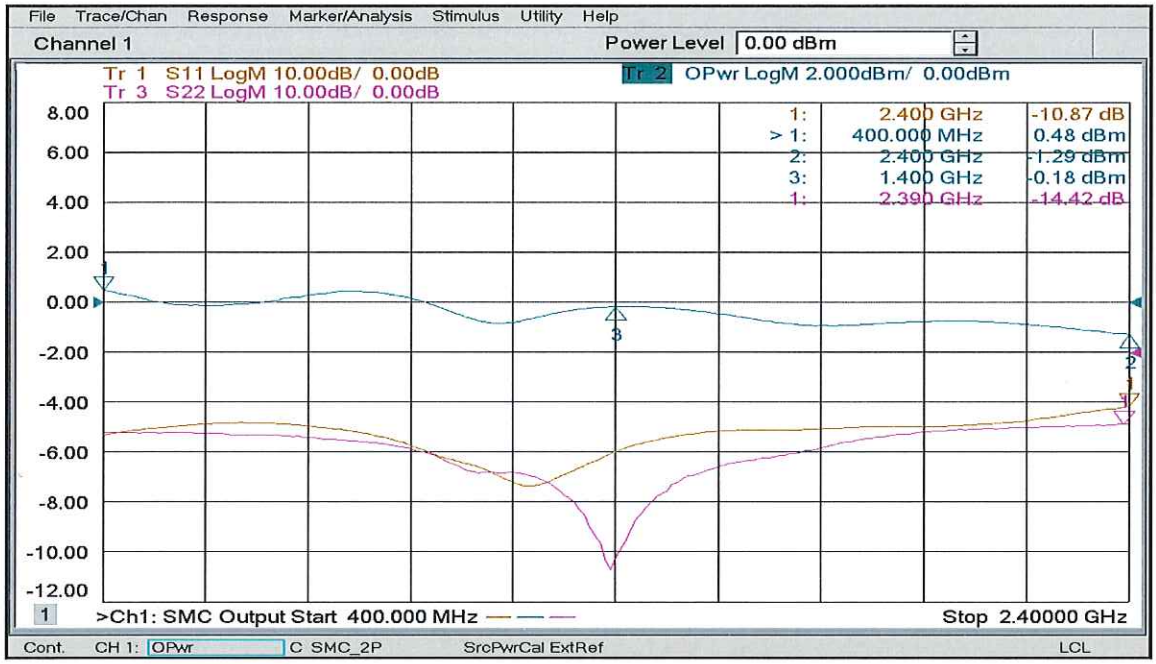
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

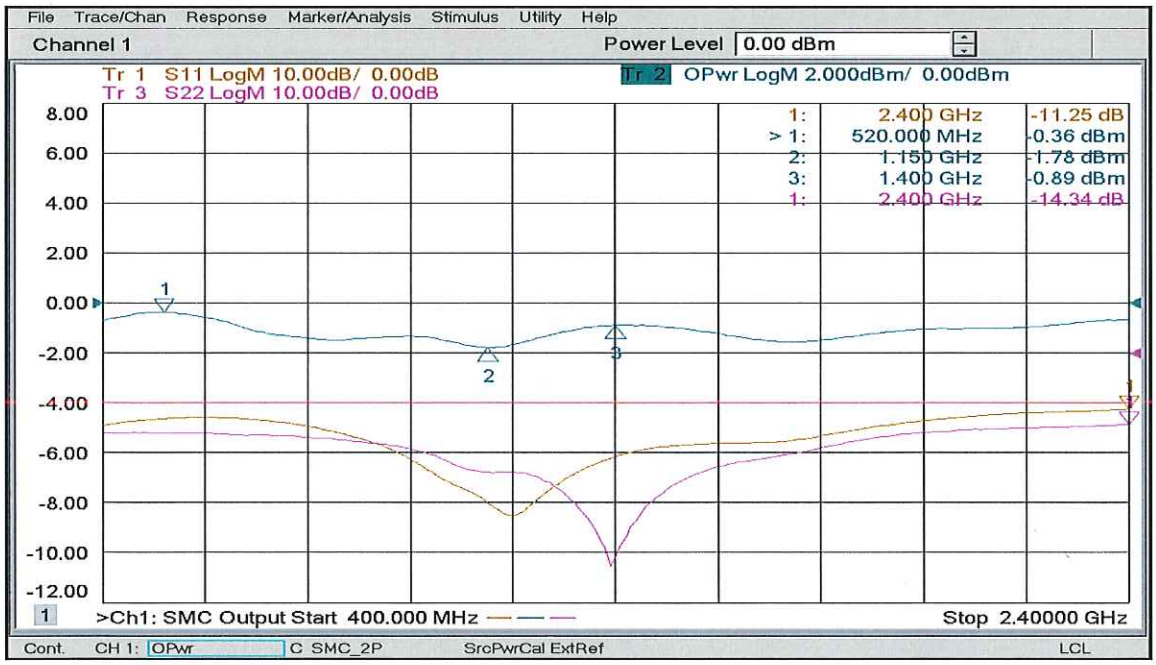
PL19643/1629

IF INPUT to RF TRANSMIT BUILT-IN-TEST OUTPUT PLOTS

IF1 Input (J4A) To IF1 Output (J3A) Channel 2 (0dBm Input)



IF1 Input (J4A) To IF1 Output (J3A) Channel 3 (0dBm Input)



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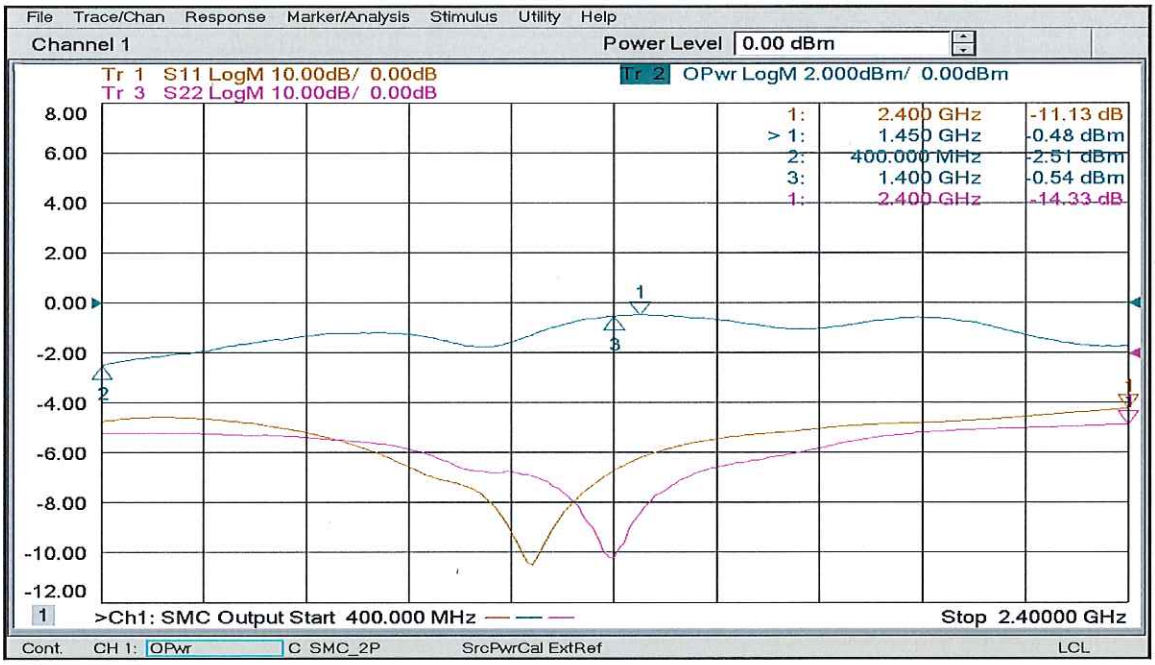
SUMMARY TEST DATA
ON
PTRAN-100M18G-SFB-3UVPX-10HP-MAH

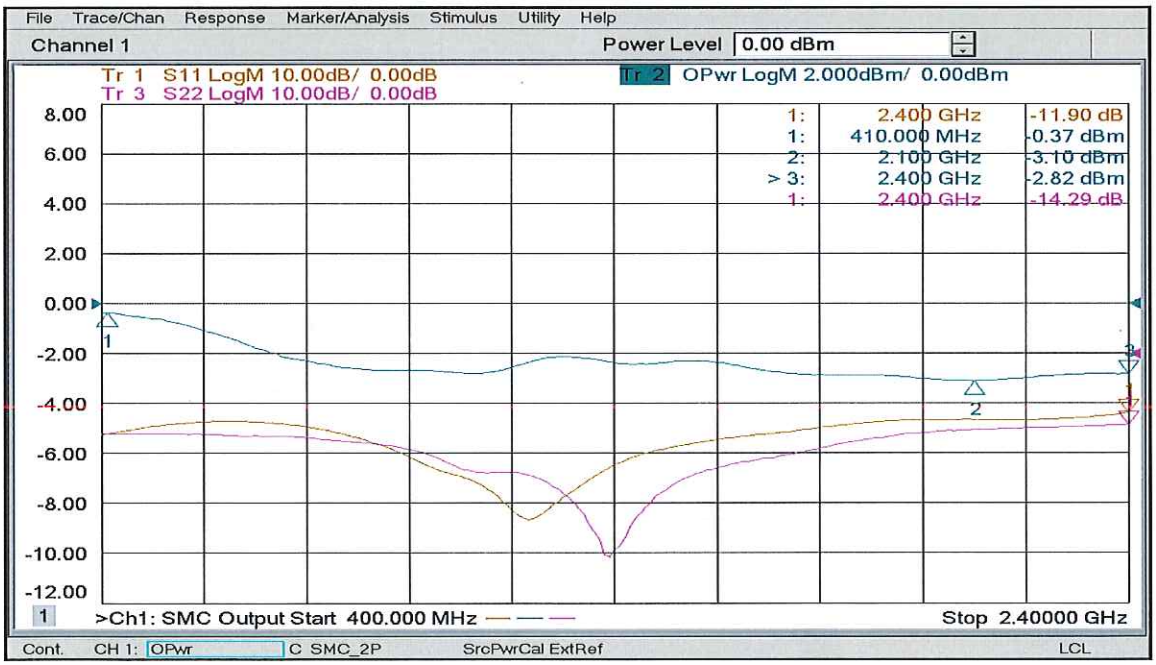
PL19643/1629

IF INPUT to RF TRANSMIT BUILT-IN-TEST OUTPUT PLOTS

IF1 Input (J4A) To IF1 Output (J3A) Channel 4 (0dBm Input)



IF1 Input (J4A) To IF1 Output (J3A) Channel 5 (0dBm Input)



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SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

Customer:		**Tested By:**	Jian Xu
SO No:		**Temperature:**	+25°C
Model No:	6SFB-CC-100M18G-MAH-RX-TX	**Date:**	6/24/16
Serial No:	PL19619/1629	**Drawing No:**	27624332 **Rev:** A1

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	J1 Input Frequency (RF RX Input)	100MHz–18.0GHz	**100MHz-18.0GHz See Plot**	PMI QA 2
2	J1 Input Power Level	-80dBm to -10dBm Typical	**-80dBm to -10dBm**	
3	J5 Input Frequency (RF TX Input)	100MHz-18.0GHz	**100MHz-18.0GHz See Plot**	
4	J5 Input Power Level	-20dBm to -15dBm Typical	**-20dBm to -15dBm**	
5	J7 Input Frequency (RF BIT RX Input)	100MHz-18.0GHz	**100MHz-18.0GHz See Plot**	
6	J7 Input Power Level	-20dBm to -15dBm Typical	**-20dBm to -15dBm**	
7	J2 Output Frequency (RF RX Output)	100MHz-18.0GHz	**100MHz-18.0GHz See Plot**	
8	J2 Output Power Level	-62dBm to +8dBm Typical	**-60dBm to +15dBm**	
9	J6 Output Frequency (RF TX Output)	100MHz-18.0GHz	**100MHz-18.0GHz See Plot**	
10	J6 Output Power Level	0dBm to +10dBm Typical	**+7dBm to +14dBm**	
11	J1 RX Path Gain	18dB Typical	**20dB to 29dB**	
12	J7 RX BIT Path Insertion Loss	10dB Typical	**-3dB to -8dB**	
13	(J1 to J2) to (J7 to J2) RX Isolation	100dB Typical	**116.51dB See Plot**	
14	J5 TX Path Gain	32dB Typical	**37dB to 44dB**	
15	VSWR Over 90% Passband	2 : 1 Maximum	**2.0:1 See Plots**	PMI QA 2

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SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

16	Switching Speed	100ns Typical	**75.0ns See Plots**	PMI QA 2
17	Thru Channel Passband	100MHz-18.0GHz	**100MHz- 18.0GHz See Plots**	
18	Channel 1 Center Frequency	3400MHz	**3400MHz**	
19	Channel 1 3dB Bandwidth	2000MHz	**2000MHz**	
20	Channel 1 RX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-2.0GHz, -40dBc Typical, -30dBc Minimum 4.8GHz-18.0GHz	**-46dBc See Plot -42dBc See Plot**	
21	Channel 1 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-2.0GHz, -40dBc Typical, -30dBc Minimum 4.8GHz-18.0GHz	**-39dBc See Plot -38dBc See Plot**	
22	Channel 2 Center Frequency	5400MHz	**5400MHz**	
23	Channel 2 3dB Bandwidth	2000MHz	**2000MHz**	
24	Channel 2 RX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-4.0GHz, -40dBc Typical, -30dBc Minimum 6.8GHz-18.0GHz	**-57dBc See Plot -36dBc See Plot**	
25	Channel 2 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-4.0GHz, -40dBc Typical, -30dBc Minimum 6.8GHz-18.0GHz	**-75dBc See Plot -33dBc See Plot**	
26	Channel 3 Center Frequency	7400MHz	**7400MHz**	
27	Channel 3 3dB Bandwidth	2000MHz	**2000MHz**	
28	Channel 3 RX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-6.0GHz, -40dBc Typical, -30dBc Minimum 8.8GHz-18.0GHz	**-62dBc See Plot -33dBc See Plot**	PMI QA 2

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SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

29	Channel 3 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-6.0GHz, -40dBc Typical, -30dBc Minimum 8.8GHz-18.0GHz	**-63dBc** **See Plot** **-32dBc** **See Plot**	PMI QA 2
30	Channel 4 Center Frequency	9400MHz	**9400MHz**	
31	Channel 4 3dB Bandwidth	2000MHz	**2000MHz**	
32	Channel 4 RX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-8.0GHz, -40dBc Typical, -30dBc Minimum 10.8GHz-18.0GHz	**-47dBc** **See Plot** **-37dBc** **See Plot**	
33	Channel 4 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-8.0GHz, -40dBc Typical, -30dBc Minimum 10.8GHz-18.0GHz	**-47dBc** **See Plot** **-34dBc** **See Plot**	
34	Channel 5 Center Frequency	11400MHz	**11400MHz**	
35	Channel 5 3dB Bandwidth	2000MHz	**2000MHz**	
36	Channel 5 RX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-10.0GHz, -40dBc Typical, -30dBc Minimum 12.8GHz-18.0GHz	**-71dBc** **See Plot** **-47dBc** **See Plot**	
37	Channel 5 TX Rejection	-40dBc Typical, -30dBc Minimum 100MHz-10.0GHz, -40dBc Typical, -30dBc Minimum 12.8GHz-18.0GHz	**-65dBc** **See Plot** **-48dBc** **See Plot**	
38	Control Logic	TTL '0': 0V to 0.8V TTL '1': 2V to 5V	**Pass**	
39	Power Supplies	+12V @ 600mA Max +5V @ 550mA Max -12V @ 300mA Max	**+12V @ 408mA** **+5V @ 92mA** **-12V @ 149mA**	PMI QA 2

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SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

QA/QC Approval: PMI QA 2 **Date:** 10/6/16

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SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

RX High Gain Thru Path (J1 RX IN)

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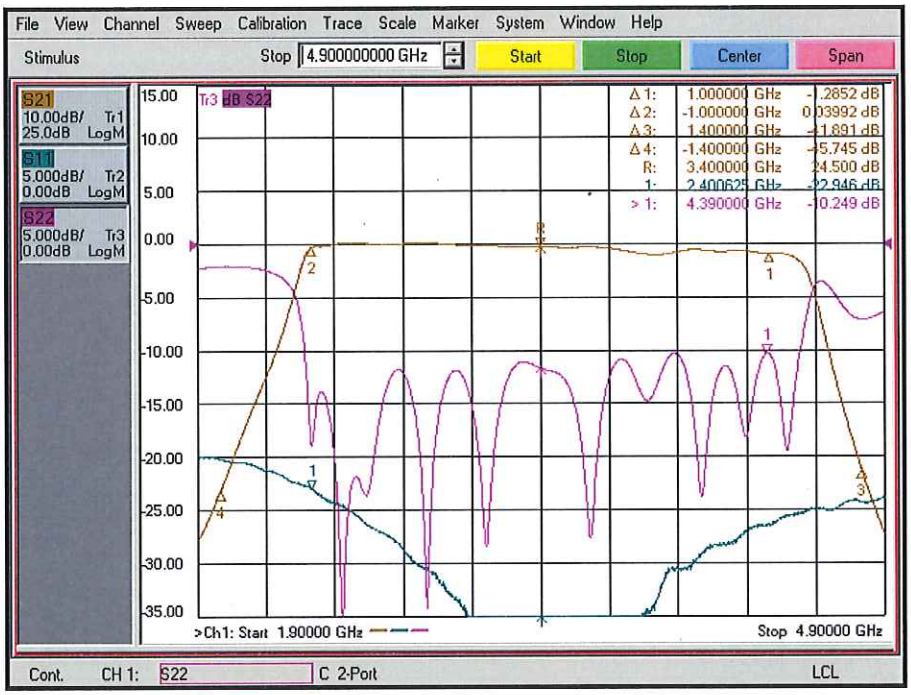
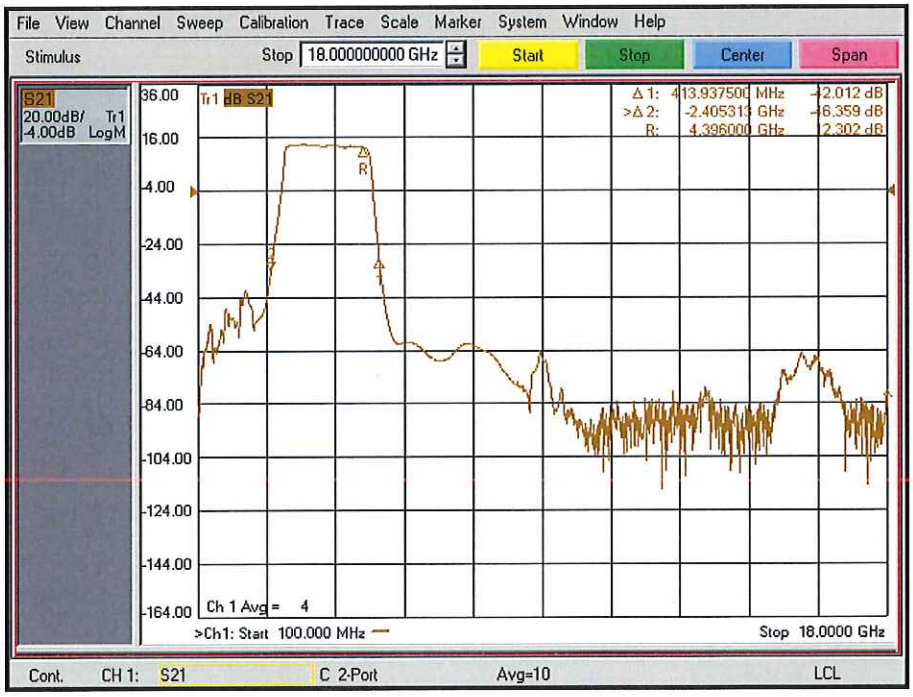
SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

RX Ch1 High Gain Path Narrow Band (J1 RX IN)



RX Ch1 High Gain Path Broadband (J1 RX IN)



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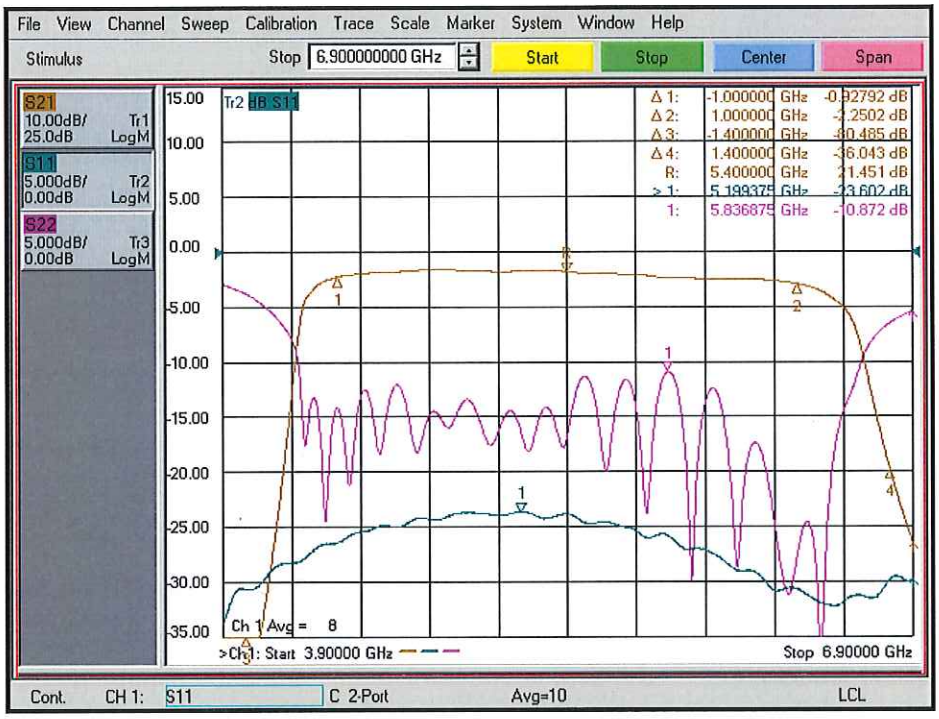
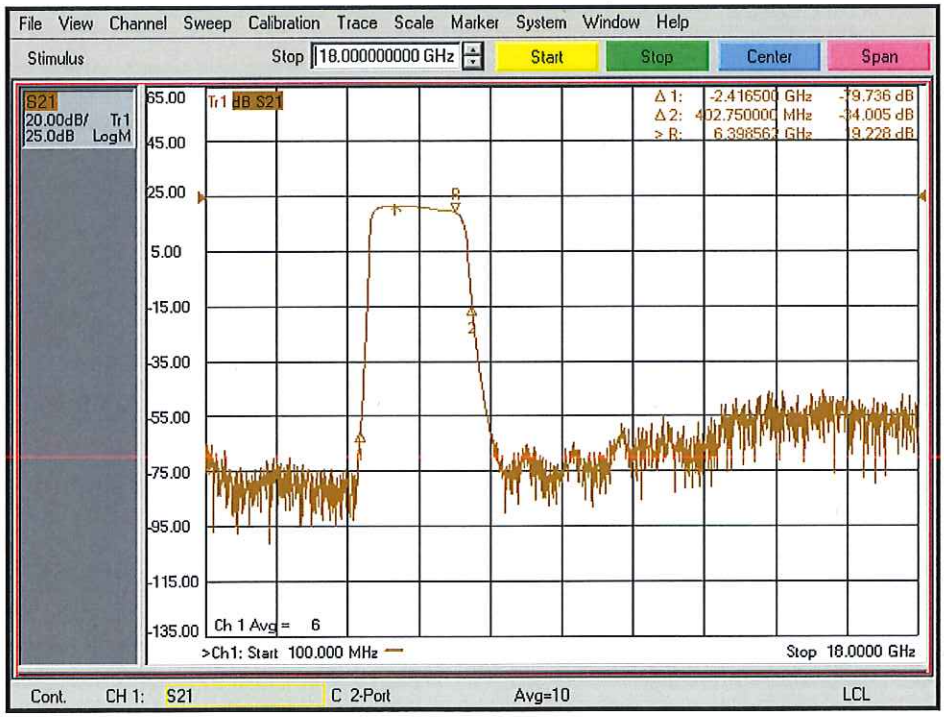
SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

RX Ch2 High Gain Path Narrow Band (J1 RX IN)



RX Ch2 High Gain Path Broadband (J1 RX IN)



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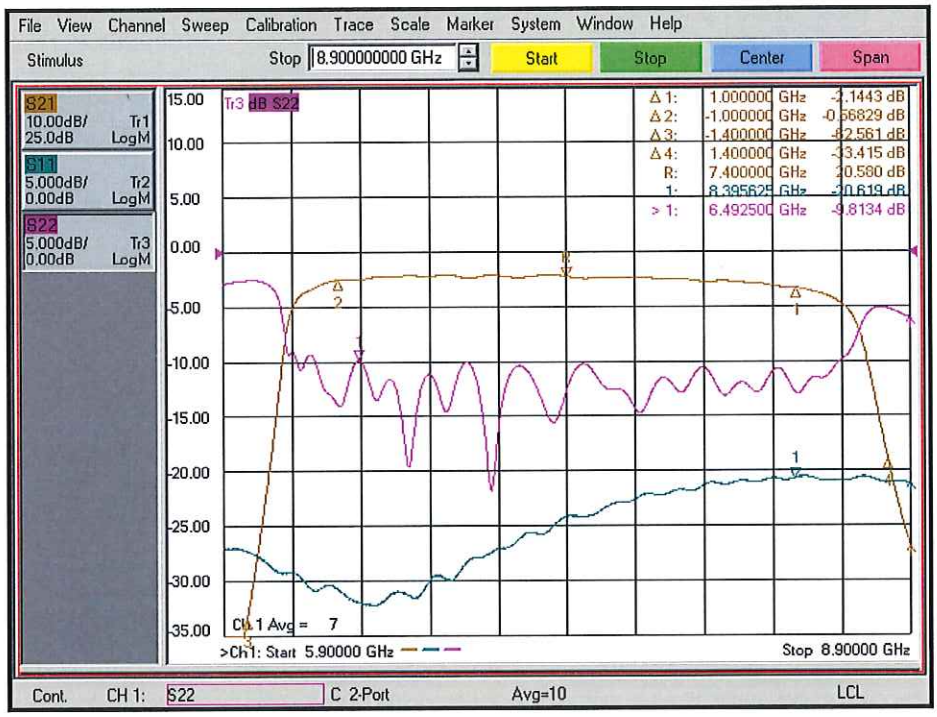
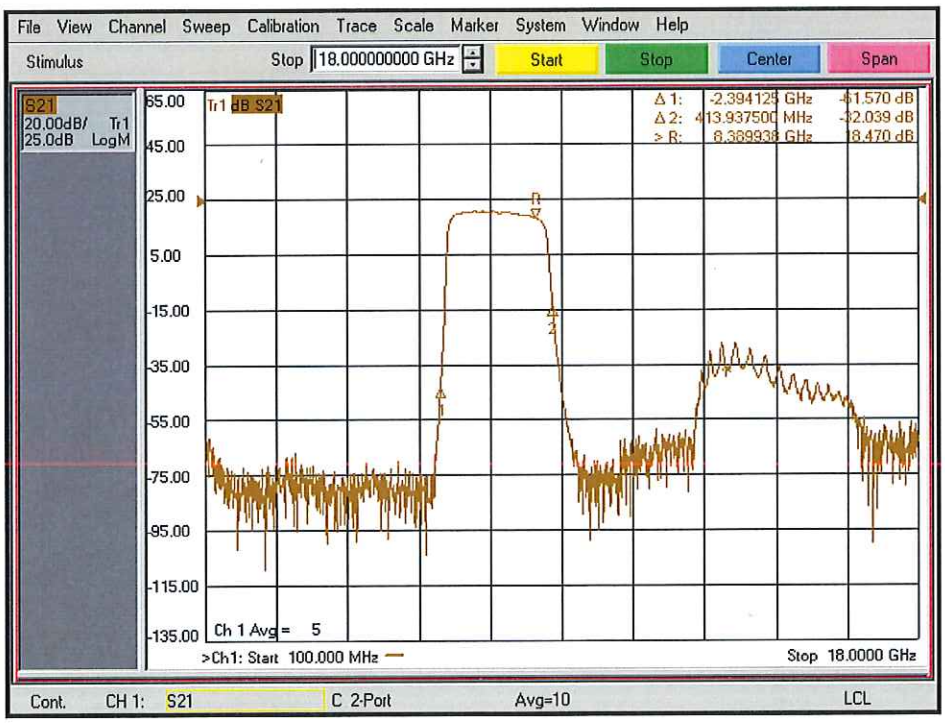
SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

RX Ch3 High Gain Path Narrow Band (J1 RX IN)



RX Ch3 High Gain Path Broadband (J1 RX IN)



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SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

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RX Ch4 High Gain Path Narrow Band (J1 RX IN)

RX Ch4 High Gain Path Broadband (J1 RX IN)

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SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

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RX Ch5 High Gain Path Narrow Band (J1 RX IN)

RX Ch5 High Gain Path Broadband (J1 RX IN)

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SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

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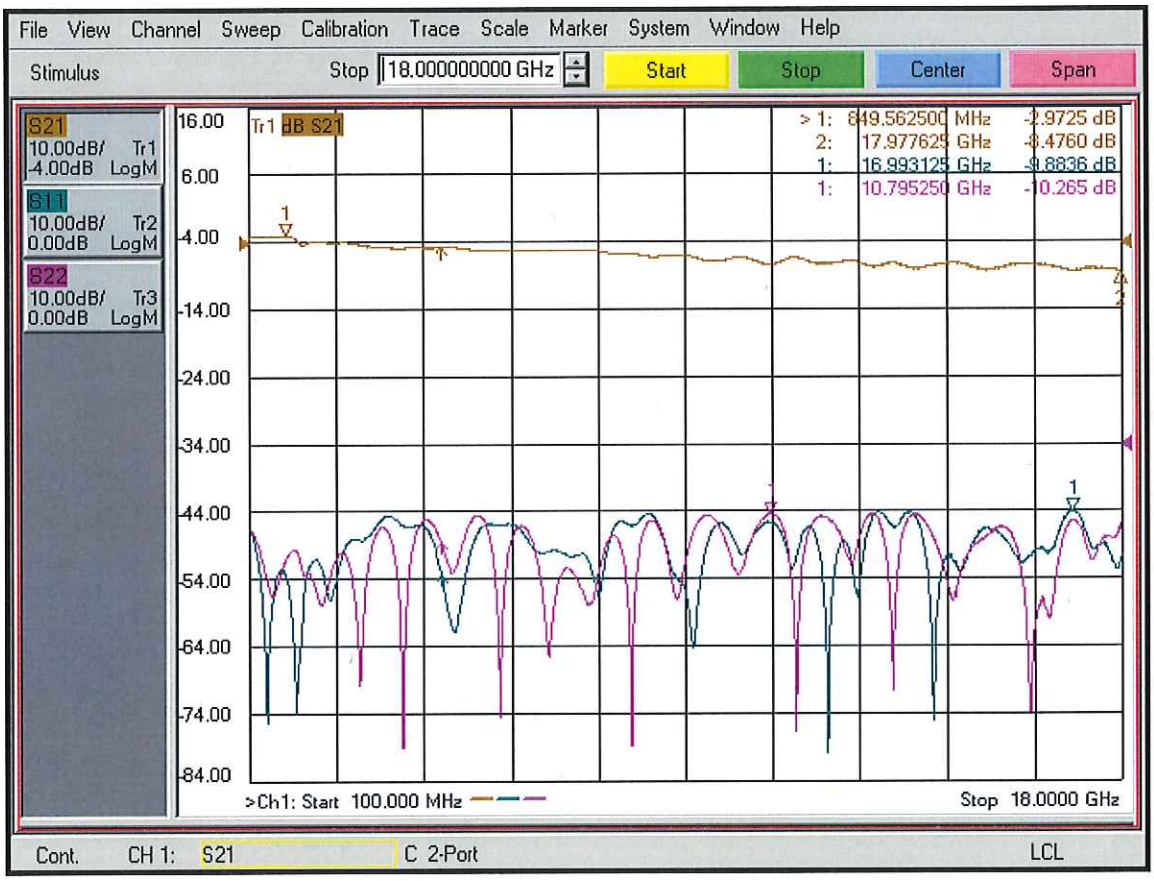
RX Low Gain Thru Path (J7 RX BIT IN)



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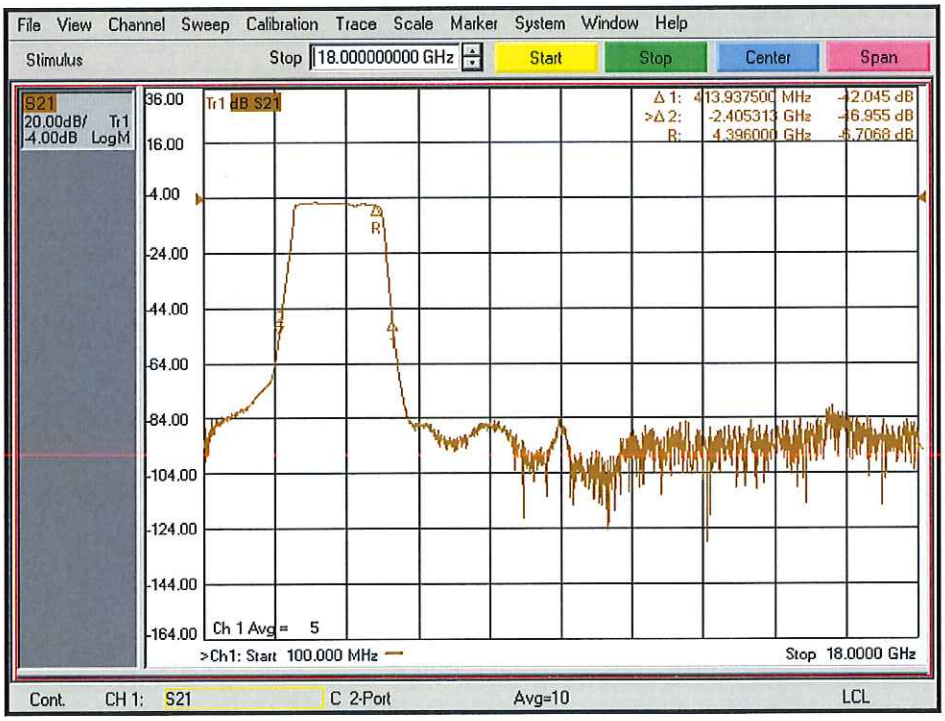
SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

RX Ch1 Low Gain Path Narrow Band (J7 RX BIT IN)

RX Ch1 Low Gain Path Broadband (J7 RX BIT IN)



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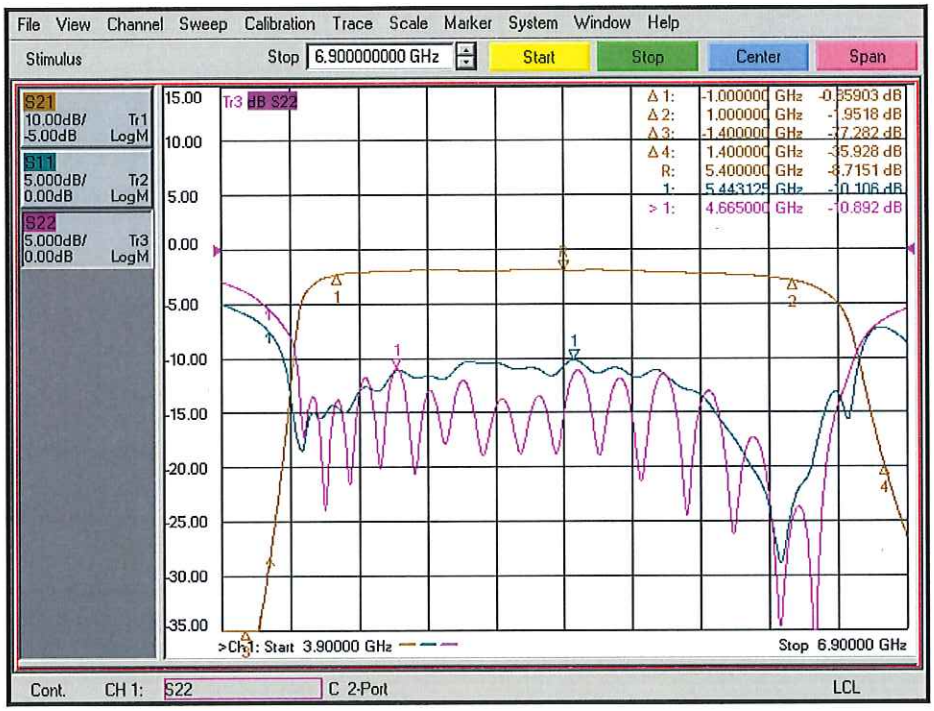
Email: sales@pmi-rf.com

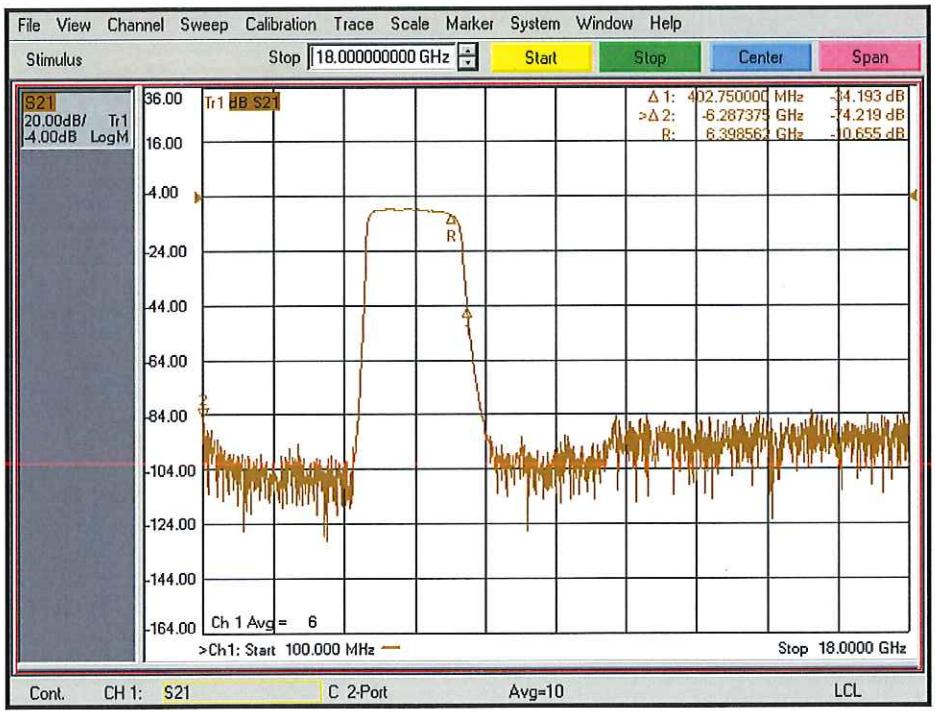
SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

RX Ch2 Low Gain Path Narrow Band (J7 RX BIT IN)



RX Ch2 Low Gain Path Broadband (J7 RX BIT IN)



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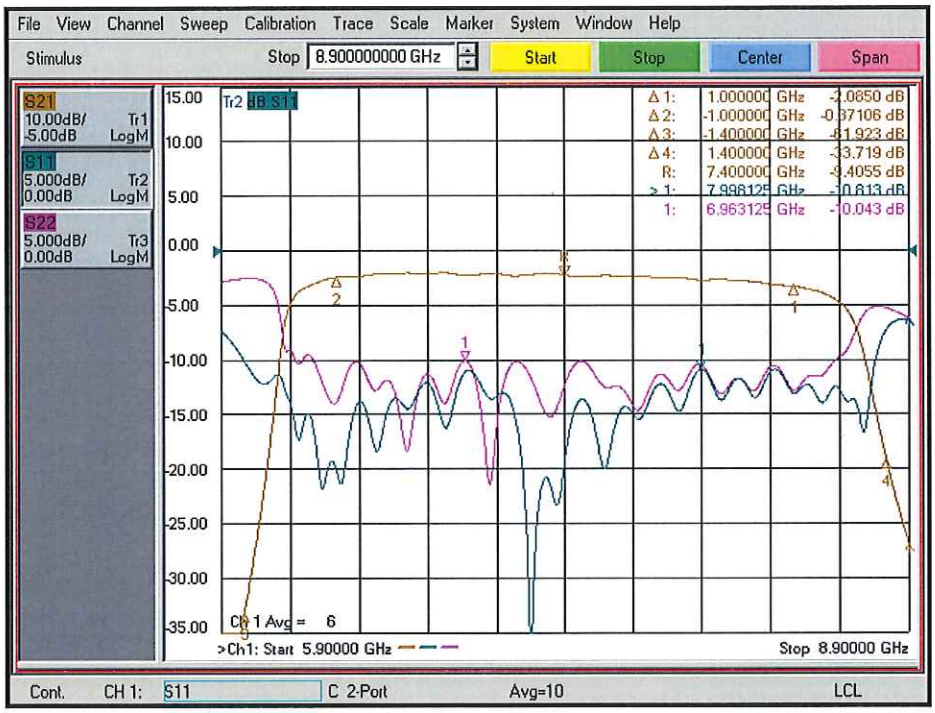
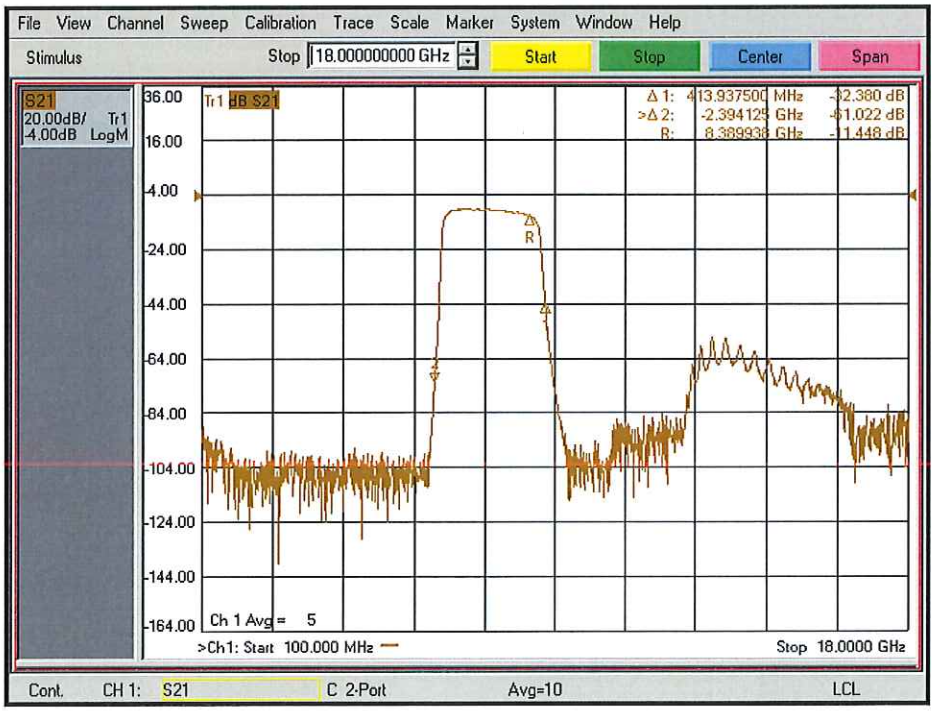
SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

RX Ch3 Low Gain Path Narrow Band (J7 RX BIT IN)



RX Ch3 Low Gain Path Broadband (J7 RX BIT IN)



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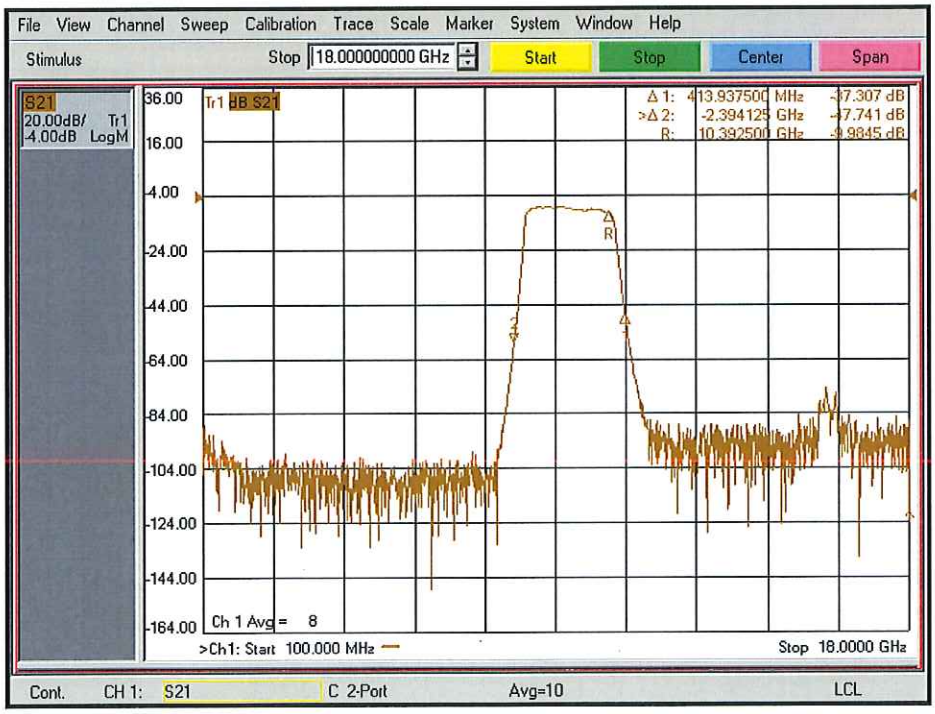
SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

RX Ch4 Low Gain Path Narrow Band (J7 RX BIT IN)

RX Ch4 Low Gain Path Broadband (J7 RX BIT IN)



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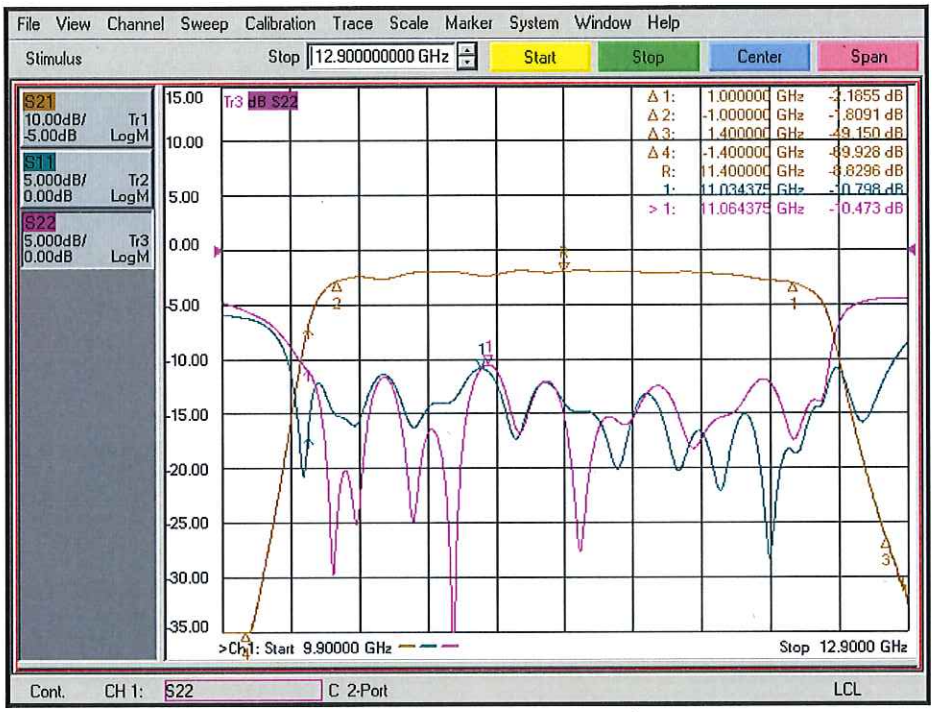
Email: sales@pmi-rf.com

SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

RX Ch5 Low Gain Path Narrow Band (J7 RX BIT IN)



RX Ch5 Low Gain Path Broadband (J7 RX BIT IN)

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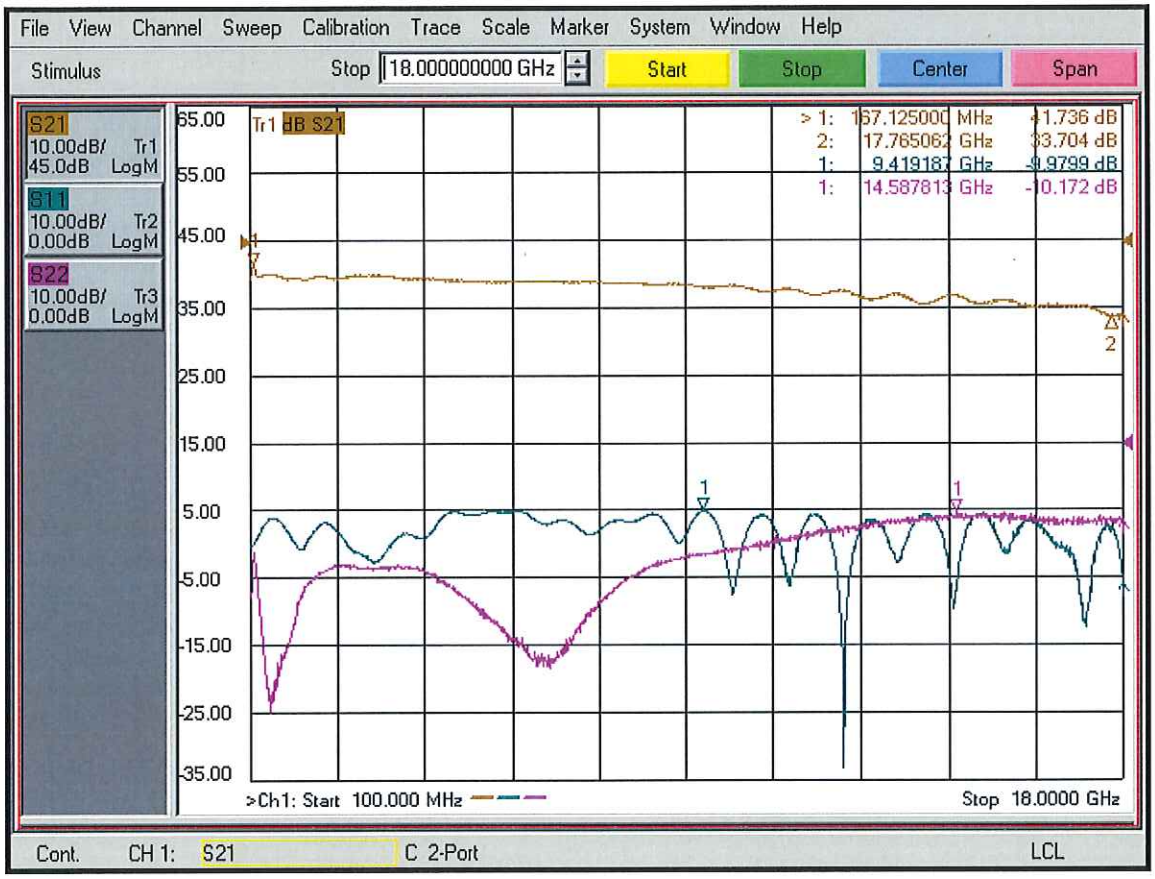
Email: sales@pmi-rf.com

SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

TX Thru Path



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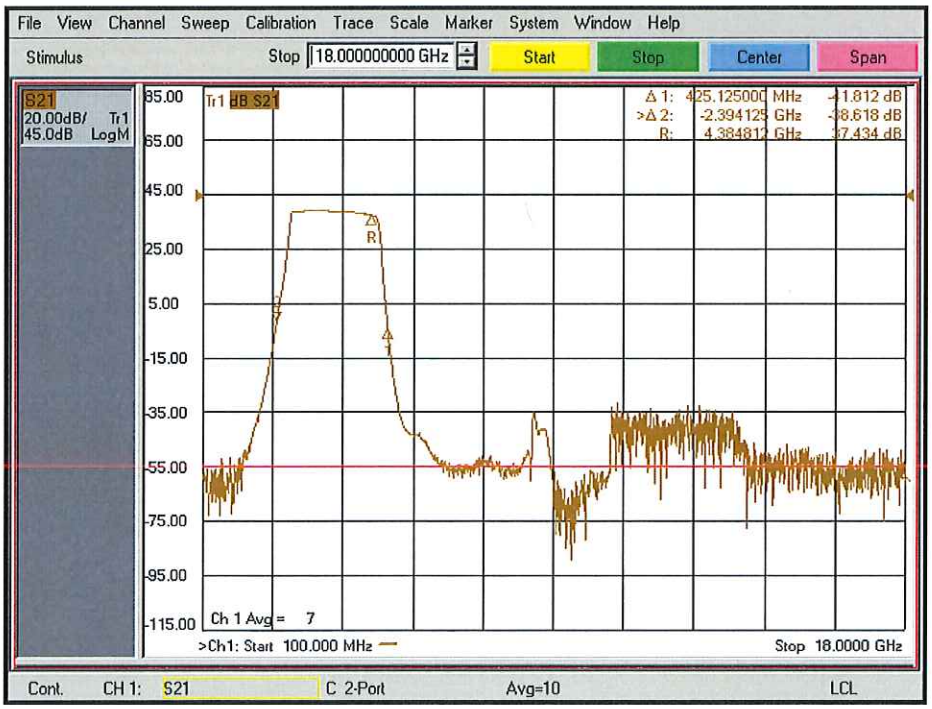
SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

TX Ch1 Path Narrow Band

TX Ch1 Path Broadband



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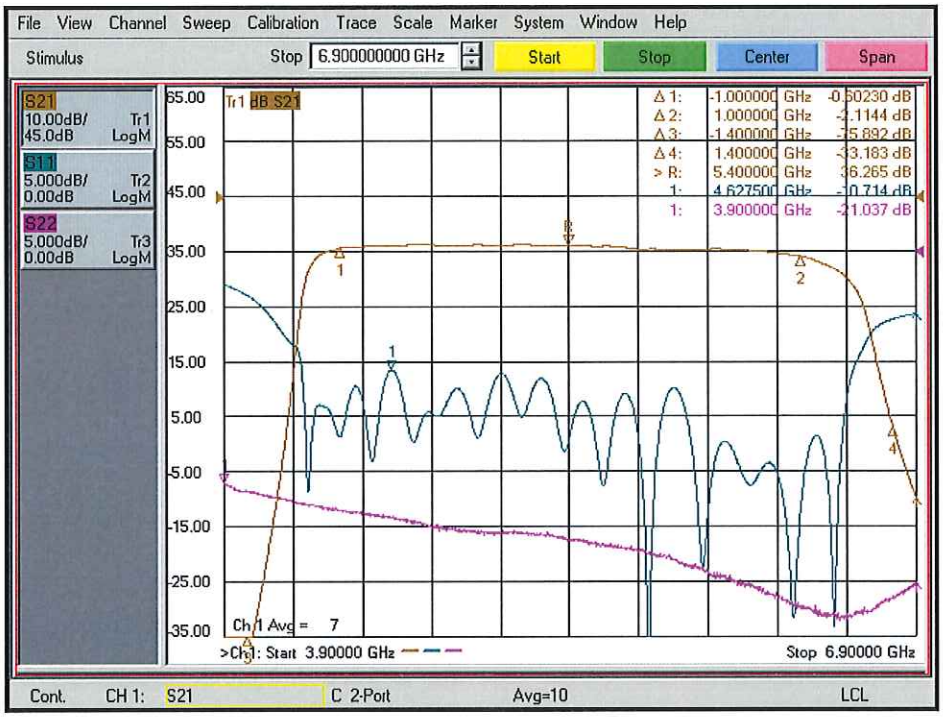
SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

TX Ch2 Path Narrow Band



TX Ch2 Path Broadband

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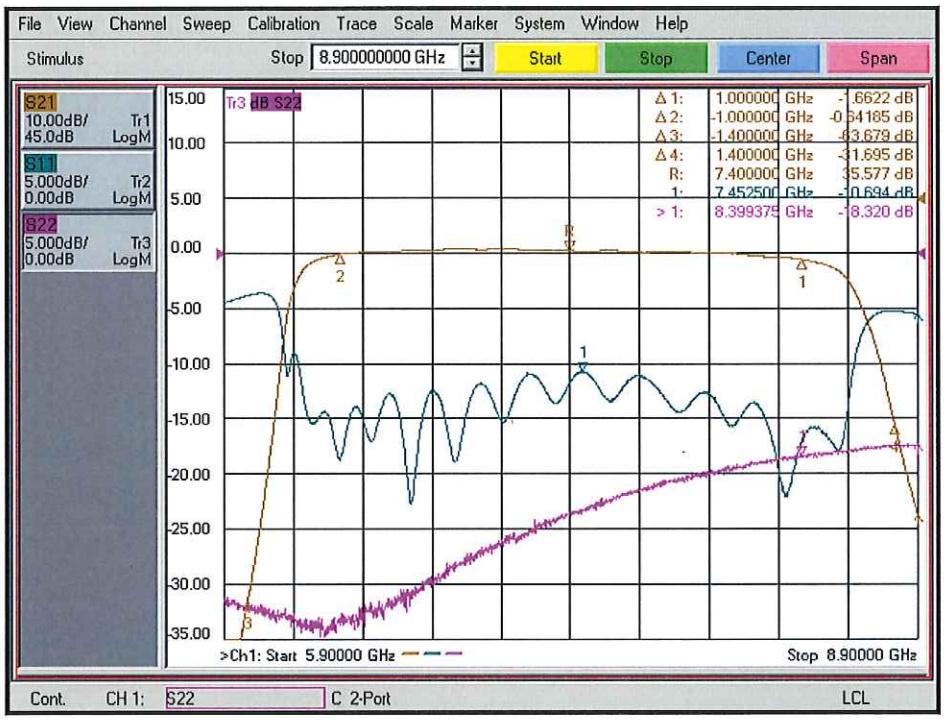
Email: sales@pmi-rf.com

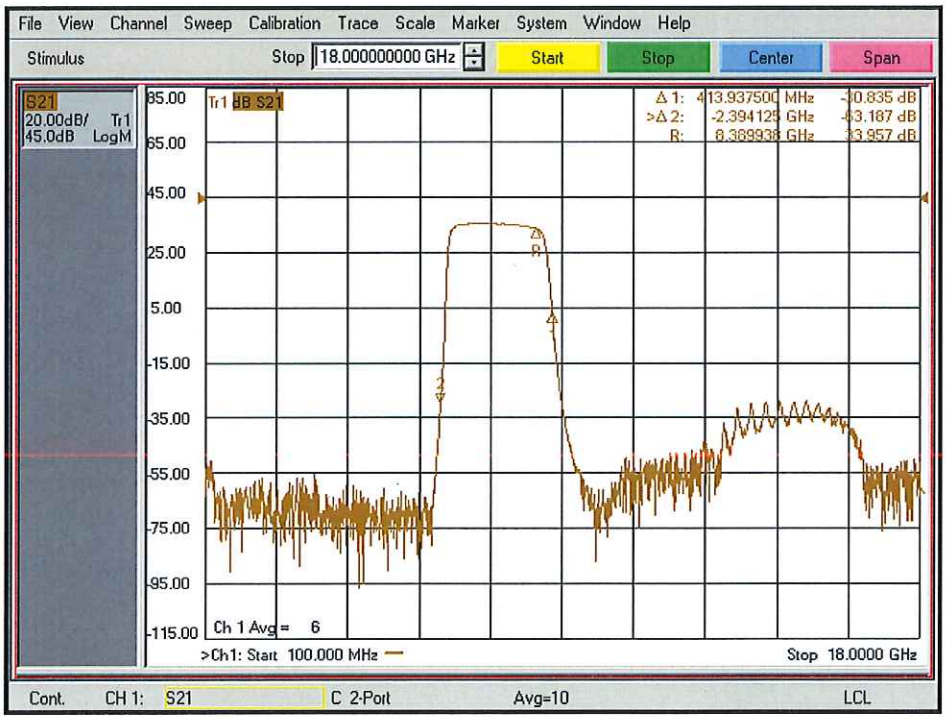
SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

TX Ch3 Path Narrow Band



TX Ch3 Path Broadband



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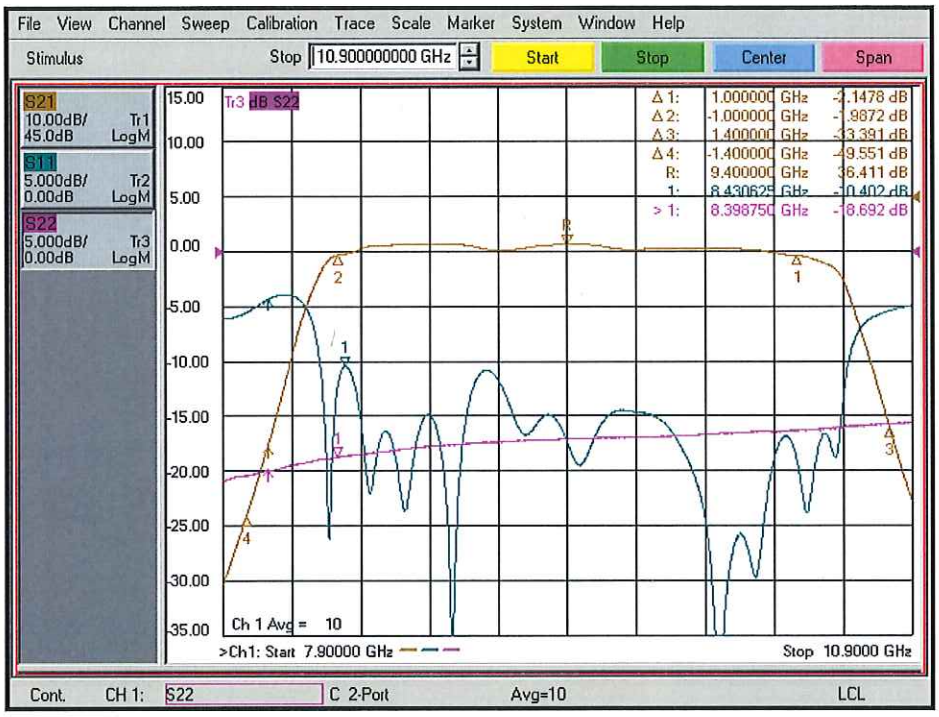
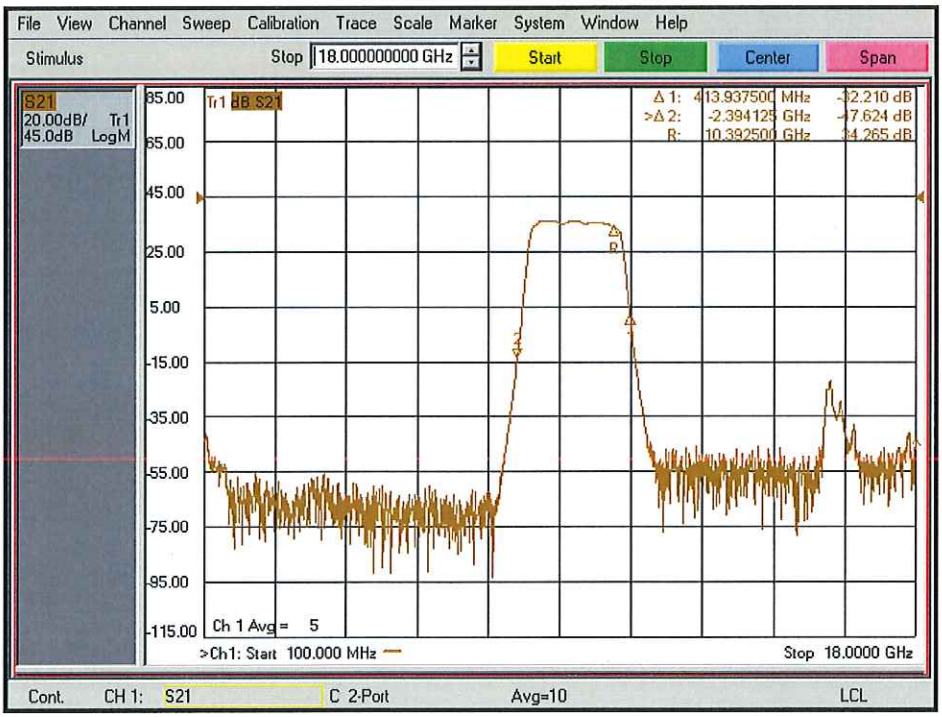
SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

TX Ch4 Path Narrow Band



TX Ch4 Path Broadband



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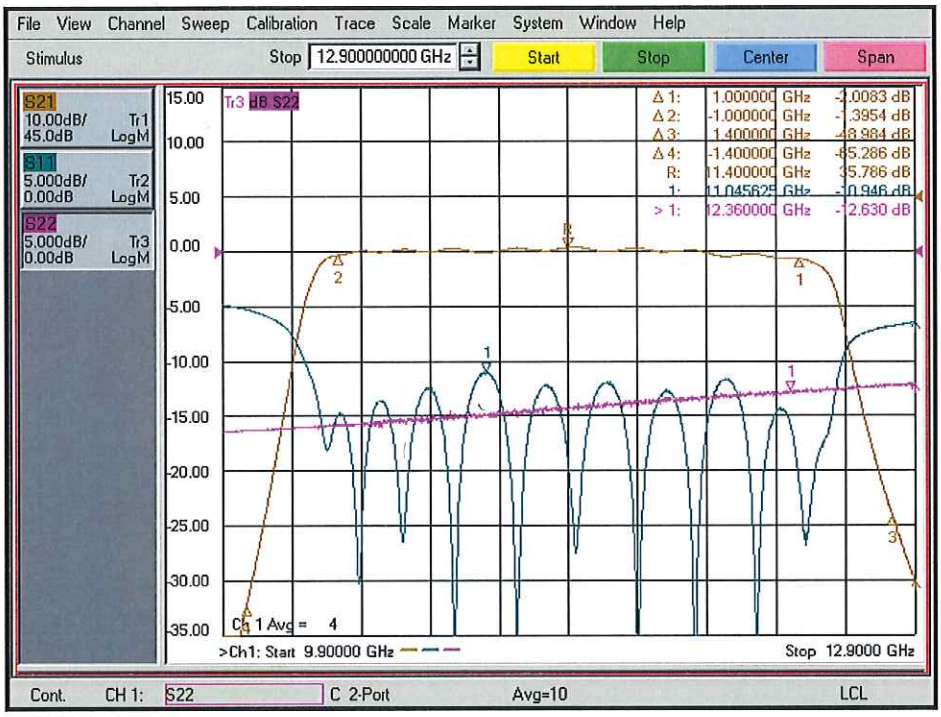
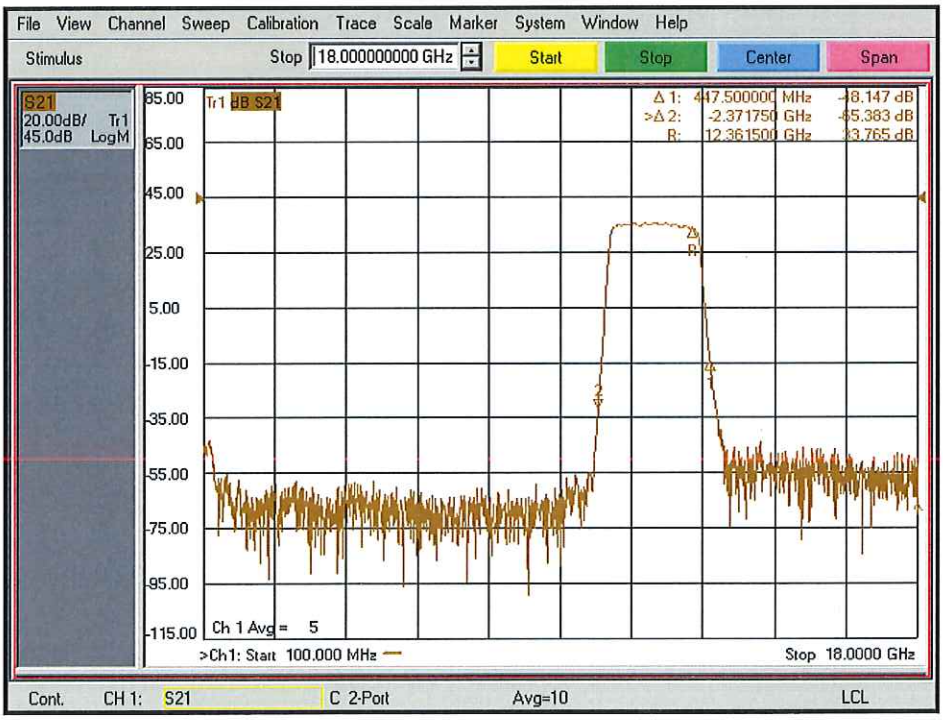
SUMMARY TEST DATA
ON
6SFB-CC-100M18G-MAH-RX-TX

PL19619/1629

TX Ch5 Path Narrow Band



TX Ch5 Path Broadband



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Email: sales@pmi-rf.com

SUMMARY TEST DATA
ON
PTRAN-CC-100M18G-70-MAH

PL19633/1629

Customer:		**Tested By:**	RLCombs		
SO No:		**Temperature:**	+25°C		
Model No:	PTRAN-CC-100M18G-70-MAH	**Date:**	8/18/2016		
Serial No:	PL19633/1629	**Drawing No:**	27624305	**Rev:**	A1

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	J2 Input Frequency (RF RX Input)	100MHz–18.0GHz	**100MHz-18.0GHz**	PMI QA 2
2	J2 Input Power Level	-62dBm to +8dBm Typical	**-62dBm to +8dBm**	
3	J4A Input Frequency (IF1 Input)	100MHz-4GHz	**100MHz-4GHz**	
4	J4A Input Power Level	0dBm Typ.	**0dBm**	
5	J4B Input Frequency (IF2 Input)	100MHz-4GHz	**100MHz-4GHz**	
6	J4B Input Power Level	0dBm Typ.	**0dBm**	
7	J9 Input Frequency (LO1 Input)	4GHz-20GHz	**4GHz-20GHz**	
8	J9 Input Power Level	+10dBm Typ.	**+10dBm**	
9	J10 Input Frequency (LO2 Input)	4GHz-20GHz	**4GHz-20GHz**	
10	J10 Input Power Level	+10dBm Typ.	**+10dBm**	
11	J3A Output Frequency (IF1 Output)	100MHz-4GHz	**100MHz-4GHz**	
12	J3A Output Power Level	0dBm Typ. for Limited SDLVA Ch	**+3.1dBm**	
13	J3B Output Frequency (IF2 Output)	100MHz-4GHz	**100MHz-4GHz**	
14	J3B Output Power Level	0dBm Typ. for Limited SDLVA Ch	**+1.8dBm**	
15	J5 Output Frequency (RF Transmit Output)	100MHz-18GHz	**100MHz-18GHz**	
16	J5 Output Power Level	-20dBm to -15dBm Typ. for 0 dB Attenuation	**-29.0dBm**	PMI QA 2

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Email: sales@pmi-rf.com

SUMMARY TEST DATA
ON
PTRAN-CC-100M18G-70-MAH

PL19633/1629

17	J7 Output Frequency (RF Transmit BIT Output)	100MHz-18GHz	**100MHz-18GHz**	PMI QA 2
18	J7 Output Power Level	-20dBm to -15dBm Typ. for 0 dB Attenuation	**-265.5dBm**	
19	Attenuation Range	0 to 31 dB Attenuation in 1 dB Typ. steps	**30.2dB**	
20	J8 Output Frequency (TX Sample Output)	100MHz-18GHz	**100MHz-18GHz**	
21	J8 Output Power Level	-40dBm to -30dBm Typ.	**-33 to -36.5dBm**	
22	Power Supply	+12V @ 2A Typ. +5V @ 1.5A Typ. +3.3V @ 0.5A Typ. -12V @ 1A Typ.	**+12V @ 0.65A** **+5V @ 0.6A** **+3.3V @ 0.01A** **-12V @ 0.71A**	PMI QA 2
23	SDLVA Data Attached	**SDLVA-100M18G-CW-70-MAH Serial Number 19628**		

QA/QC Approval: _____ **Date:** 10/6/16

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Email: sales@pmi-rf.com

SUMMARY TEST DATA
ON
SDLVA-100M18G-CW-70-MAH

PL19628/1629

Customer:		**Tested By:**	RCombs
SO No:		**Temperature:**	+25°C
Model No:	SDLVA-100M18G-CW-70-MAH	**Date:**	8/18/16
Serial No:	PL19628/1629	**Drawing No:**	27623180 **Rev:** A1

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	Frequency Range	100 MHz-18GHz	**100 MHz-18GHz**	PMI QA 2
2	Frequency Flatness	±2.0 dB Max.	**±1.9dB**	
3	TSS	-68 dBm Min., -70 dBm Typ.	**-68 dBm**	
4	Limited Output Power (Input Power ≥ -65dBm)	+8 dBm ±3.0dBm Max.	**+5.5 to +10.5 dBm**	
5	VSWR	2.0:1 Max.	**1.8:1**	
6	Linear Output Gain	43dB ±3.0dB Max.	**42.9 to 45.5 dB**	
7	Linear Output Psat	+3 dBm ±3.0dB Max.	**1.80 to 4.2 dBm**	
8	V0 (Video Comparator Signal Amplitude)	3.3V Typ.	**2.25V**	
9	Video Comparator External Threshold Level	Adjustable with Analog Voltage (2 Times V1)	Adjustable withAnalog Voltage(2 Times V1)	
10	Video Comparator Delay	50 ns Typ.	**40 ns**	
11	V1 (Log Video Signal Amplitude)	1 Volt Max.	**0.820 Volts**	
12	Log Slope	10mV/dB into a 50Ω load (±1mV) Max.	**9.85mV/dB**	
13	Log Range	-65 to +5 dBm Min.	**-65 to +5 dBm**	PMI QA 2

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SUMMARY TEST DATA
ON
SDLVA-100M18G-CW-70-MAH

PL19628/1629

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
14	Log Linearity	±1.75dB (-40°C to +85°C) Max.	**±1.62dB**	PMI QA 2
15	Pulse Range	100ns to 250µs	**100ns to 250µs**	
16	Rise Time	35ns Max.	**24ns**	
17	Settling time to ±1dB	50ns Typ.	**40ns**	
18	Recovery Time	350ns Max.	**280ns**	
19	CW Immunity Range	TSS to -45 dBm (1dB degradation)	**0.8dB**	
20	Pulse Considered CW	1ms Typ.	**0.7ms**	
21	Rejection Time	1ms Typ.	**0.5ms**	
22	Droop	1dB Max.	**0dB**	
23	SPST Isolation	70dB Typ.	**≥ 70dB**	
24	SPST Switch Speed	20ns Typ.	**20ns Typ.**	
25	Power Supply	±12VDC to ±15VDC	**±12VDC to ±15VDC**	PMI QA 2

QA/QC Approval: PMI QA 2 **Date:** 10/6/16

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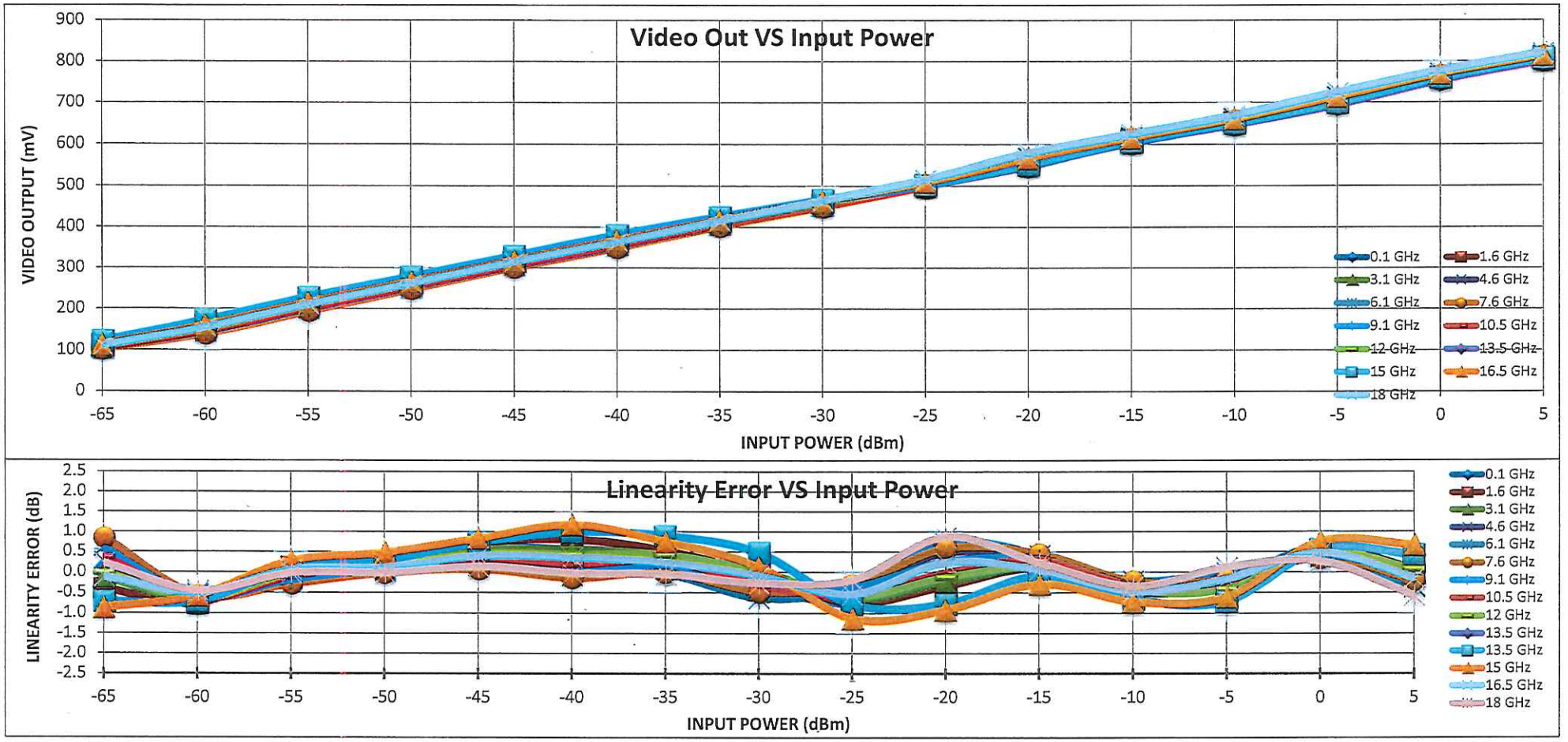
Email: sales@pmi-rf.com

LOG TRANSFER VS FREQUENCY
MODEL: SDLVA-100M18G-CW-70-MAH
TESTED BY: rrllcc
DATE: 18 AUG 16
SERIAL NO: PL19628

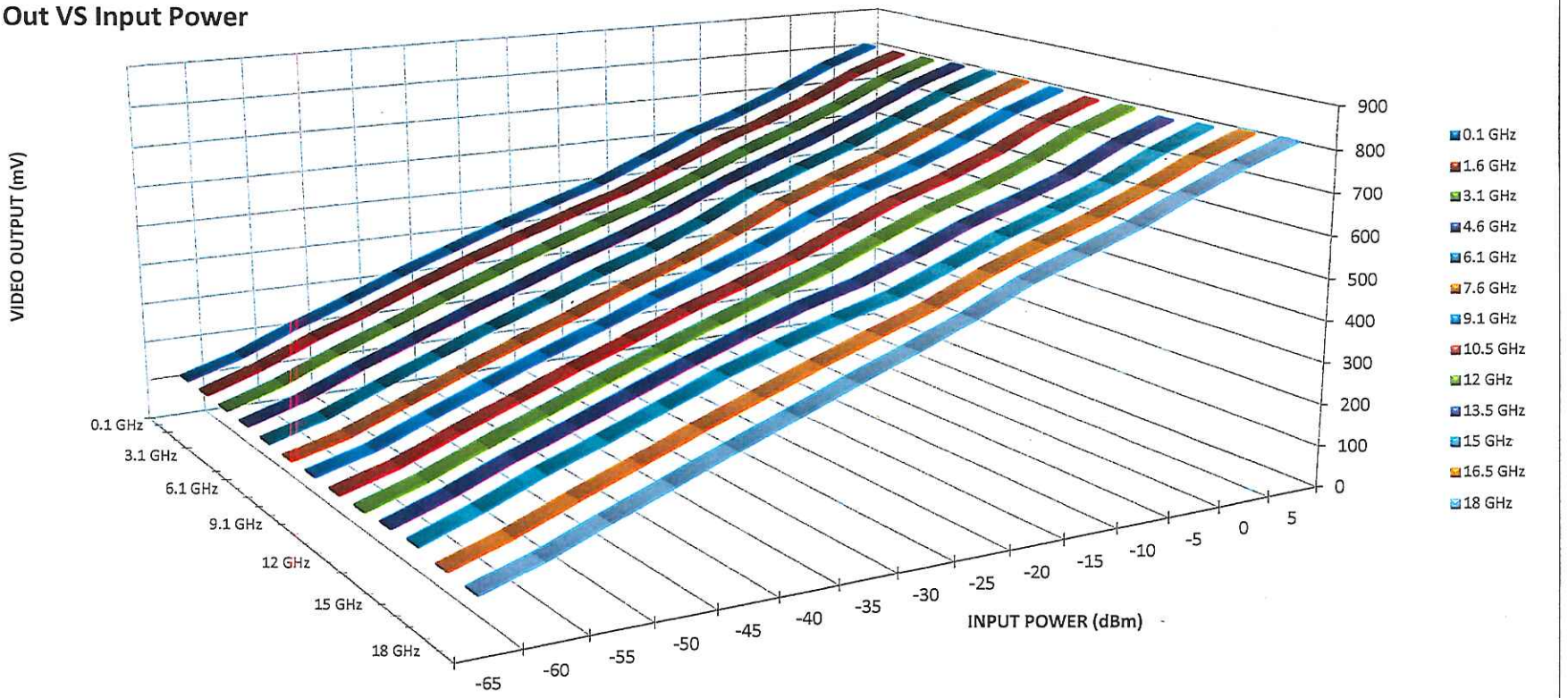
Test Temp: +25C
Graph 2A

PLANAR MONOLITHICS INDUSTRIES
7311-F GROVE ROAD, FREDERICK, MD 21704 USA
TEL: 301-662-5019 FAX: 301-662-1731
URL: WWW.PMI-RF.COM
EMAIL: SALES@PMI-RF.COM

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
0.1 GHz	INTERCEPT (mV)	757	112	154	211	262	316	365	413	456	501	556	610	654	706	764	808	Measured Value (mV)
	SLOPE (mV/dB)	9.95	1	-7	1	2	6	5	3	-3	-8	-3	2	-4	-2	6	1	Error (mV)
			0.10	-0.67	0.06	0.15	0.59	0.54	0.35	-0.33	-0.77	-0.28	0.19	-0.41	-0.21	0.62	0.07	LINEARITY ERROR (dB)
1.6 GHz	INTERCEPT (mV)	757	113	159	217	267	321	371	417	461	503	557	610	658	704	762	805	Measured Value (mV)
	SLOPE (mV/dB)	9.85	-4	-7	1	2	7	8	5	0	-7	-3	1	-5	-3	5	0	Error (mV)
			-0.41	-0.75	0.14	0.24	0.72	0.81	0.52	-0.03	-0.75	-0.33	0.11	-0.48	-0.35	0.54	0.01	LINEARITY ERROR (dB)
3.1 GHz	INTERCEPT (mV)	760	110	154	211	263	316	366	416	461	504	556	611	656	708	765	810	Measured Value (mV)
	SLOPE (mV/dB)	9.98	-1	-7	1	2	6	5	4	0	-7	-2	1	-4	-3	5	0	Error (mV)
			-0.12	-0.70	0.05	0.19	0.55	0.55	0.43	0.01	-0.65	-0.21	0.11	-0.45	-0.25	0.52	-0.02	LINEARITY ERROR (dB)
4.6 GHz	INTERCEPT (mV)	766	109	151	207	259	312	361	412	458	508	558	613	661	714	770	813	Measured Value (mV)
	SLOPE (mV/dB)	10.1	2	-6	0	1	3	1	1	-4	-4	5	3	-3	-1	4	-3	Error (mV)
			0.24	-0.56	-0.03	0.08	0.32	0.15	0.10	-0.35	-0.38	0.49	0.27	-0.32	-0.07	0.39	-0.33	LINEARITY ERROR (dB)
6.1 GHz	INTERCEPT (mV)	767	108	145	201	254	306	355	407	452	506	560	617	662	716	770	814	Measured Value (mV)
	SLOPE (mV/dB)	10.3	7	-5	-1	0	2	-1	0	-6	-4	7	4	-2	0	4	-4	Error (mV)
			0.64	-0.53	-0.13	0.03	0.16	-0.07	-0.04	-0.63	-0.38	0.73	0.43	-0.21	0.00	0.36	-0.36	LINEARITY ERROR (dB)
7.6 GHz	INTERCEPT (mV)	763	103	140	195	246	301	350	403	450	503	553	613	658	710	767	812	Measured Value (mV)
	SLOPE (mV/dB)	10.3	9	-6	-3	0	1	-1	0	-5	-3	6	5	-2	-2	4	-2	Error (mV)
			0.85	-0.57	-0.27	0.00	0.09	-0.13	0.01	-0.47	-0.30	0.59	0.45	-0.22	-0.17	0.35	-0.20	LINEARITY ERROR (dB)
9.1 GHz	INTERCEPT (mV)	761	106	145	200	254	306	355	407	454	503	560	612	656	707	765	811	Measured Value (mV)
	SLOPE (mV/dB)	10.2	6	-6	-2	1	2	0	2	-3	-4	3	3	-3	-3	4	-1	Error (mV)
			0.56	-0.60	-0.18	0.07	0.21	0.03	0.18	-0.25	-0.36	0.26	0.32	-0.31	-0.27	0.42	-0.07	LINEARITY ERROR (dB)
10.5 GHz	INTERCEPT (mV)	757	107	147	203	256	308	357	408	452	500	555	609	653	703	762	808	Measured Value (mV)
	SLOPE (mV/dB)	10	4	-6	-1	2	4	2	3	-3	-6	0	3	-3	-4	5	1	Error (mV)
			0.38	-0.63	-0.08	0.15	0.35	0.21	0.30	-0.30	-0.56	-0.01	0.30	-0.33	-0.37	0.52	0.08	LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	758	111	165	211	262	316	364	414	460	503	553	610	654	704	763	808	Measured Value (mV)
	SLOPE (mV/dB)	9.95	0	-6	0	1	5	4	4	0	-6	-1	1	-4	-4	5	1	Error (mV)
			0.00	-0.64	-0.01	0.14	0.46	0.43	0.43	0.03	-0.58	-0.12	0.13	-0.44	-0.41	0.50	0.08	LINEARITY ERROR (dB)
13.5 GHz	INTERCEPT (mV)	749	117	165	221	271	323	374	421	465	501	555	604	647	694	755	801	Measured Value (mV)
	SLOPE (mV/dB)	9.62	-7	-7	1	3	7	10	9	5	-8	-8	-1	-6	-7	5	4	Error (mV)
			-0.72	-0.71	0.09	0.29	0.74	0.99	0.89	0.47	-0.78	-0.78	-0.10	-0.67	-0.71	0.56	0.43	LINEARITY ERROR (dB)
15 GHz	INTERCEPT (mV)	753	122	173	229	279	330	381	426	467	502	552	605	650	699	760	807	Measured Value (mV)
	SLOPE (mV/dB)	9.57	-8	-5	3	5	8	11	7	1	-11	-9	-3	-7	-6	7	6	Error (mV)
			-0.86	-0.57	0.28	0.48	0.83	1.17	0.75	0.13	-1.13	-0.92	-0.29	-0.72	-0.60	0.75	0.67	LINEARITY ERROR (dB)
16.5 GHz	INTERCEPT (mV)	766	114	160	216	266	319	369	418	464	510	566	616	661	714	770	814	Measured Value (mV)
	SLOPE (mV/dB)	10	-1	-5	1	1	4	4	2	-1	-5	2	1	-5	-2	5	-1	Error (mV)
			-0.10	-0.49	0.07	0.12	0.41	0.37	0.25	-0.08	-0.54	0.24	0.06	-0.47	-0.16	0.48	-0.14	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	774	111	156	211	262	315	366	416	465	517	578	623	668	724	777	820	Measured Value (mV)
	SLOPE (mV/dB)	10.2	2	5	0	0	1	0	0	-3	2	9	2	-3	1	3	-6	Error (mV)
			0.23	-0.45	-0.01	-0.01	0.15	-0.02	-0.04	-0.26	-0.18	0.87	0.24	-0.34	0.13	0.28	-0.57	LINEARITY ERROR (dB)
	Average Slope (mV)	10.0																
	Flatness		0.9	1.6	1.7	1.5	1.4	1.5	1.1	0.8	0.8	1.4	0.9	1.1	1.5	1.1	0.9	
			103	140	195	249	301	350	403	450	500	549	604	647	694	755	801	
			122	173	229	279	330	381	425	467	517	578	623	668	724	777	820	
			100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	


Video Out VS Input Power
VIDEO OUTPUT (mV)
900
800
700
600
500
400
300
200
100
0
-65
-60
-55
-50
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
5
INPUT POWER (dBm)
0.1 GHz
1.6 GHz
3.1 GHz
4.6 GHz
6.1 GHz
7.6 GHz
9.1 GHz
10.5 GHz
12 GHz
13.5 GHz
15 GHz
16.5 GHz
18 GHz
Linearity Error VS Input Power
LINEARITY ERROR (dB)
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
-65
-60
-55
-50
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
5
INPUT POWER (dBm)
0.1 GHz
1.6 GHz
3.1 GHz
4.6 GHz
6.1 GHz
7.6 GHz
9.1 GHz
10.5 GHz
12 GHz
13.5 GHz
13.5 GHz
15 GHz
16.5 GHz
18 GHz

Video Out VS Input Power

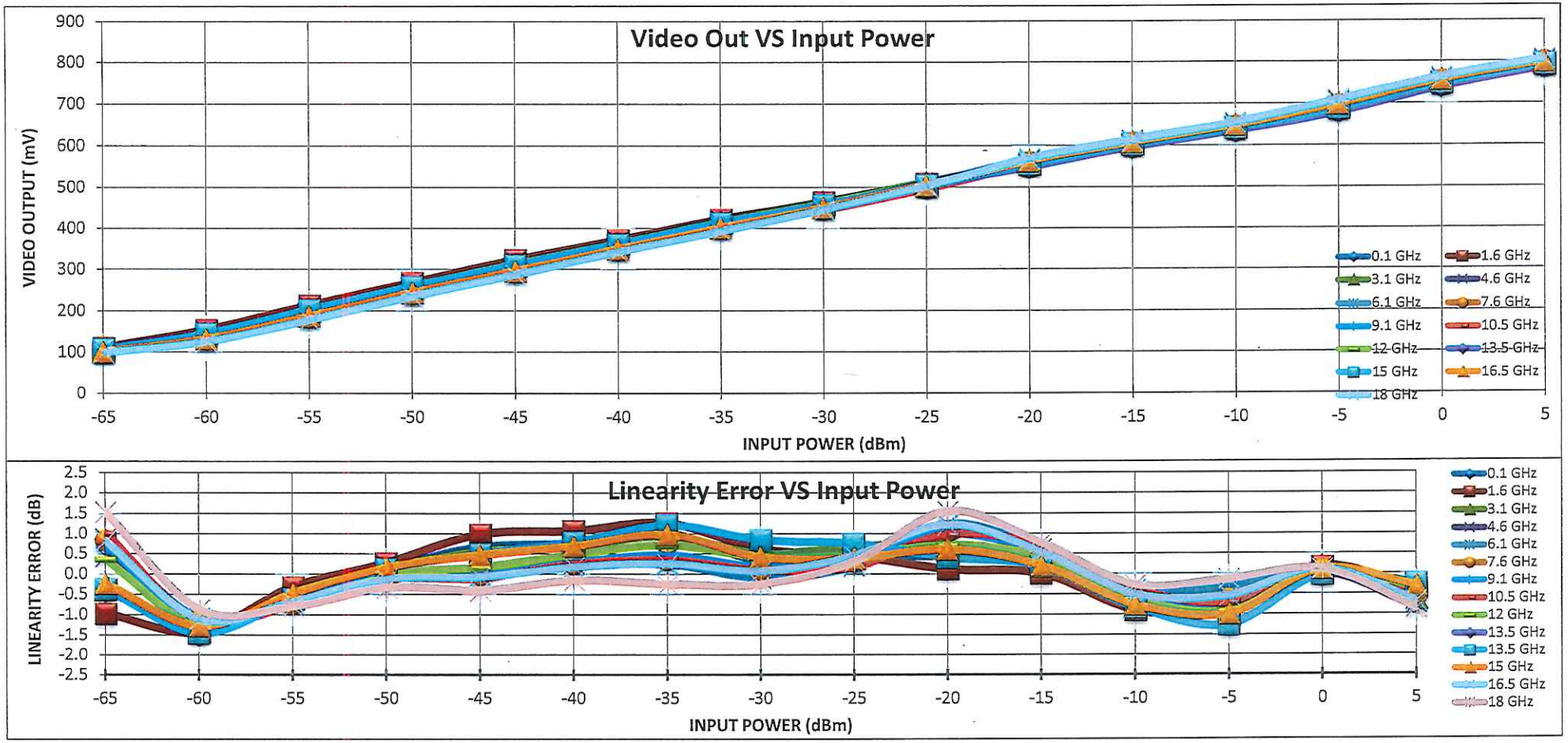


LOG TRANSFER VS FREQUENCY
MODEL: SDLVA-100M18G-CW-70-MAH
TESTED BY: rrilcc
DATE: 18AUG16
SERIAL NO: PL19628

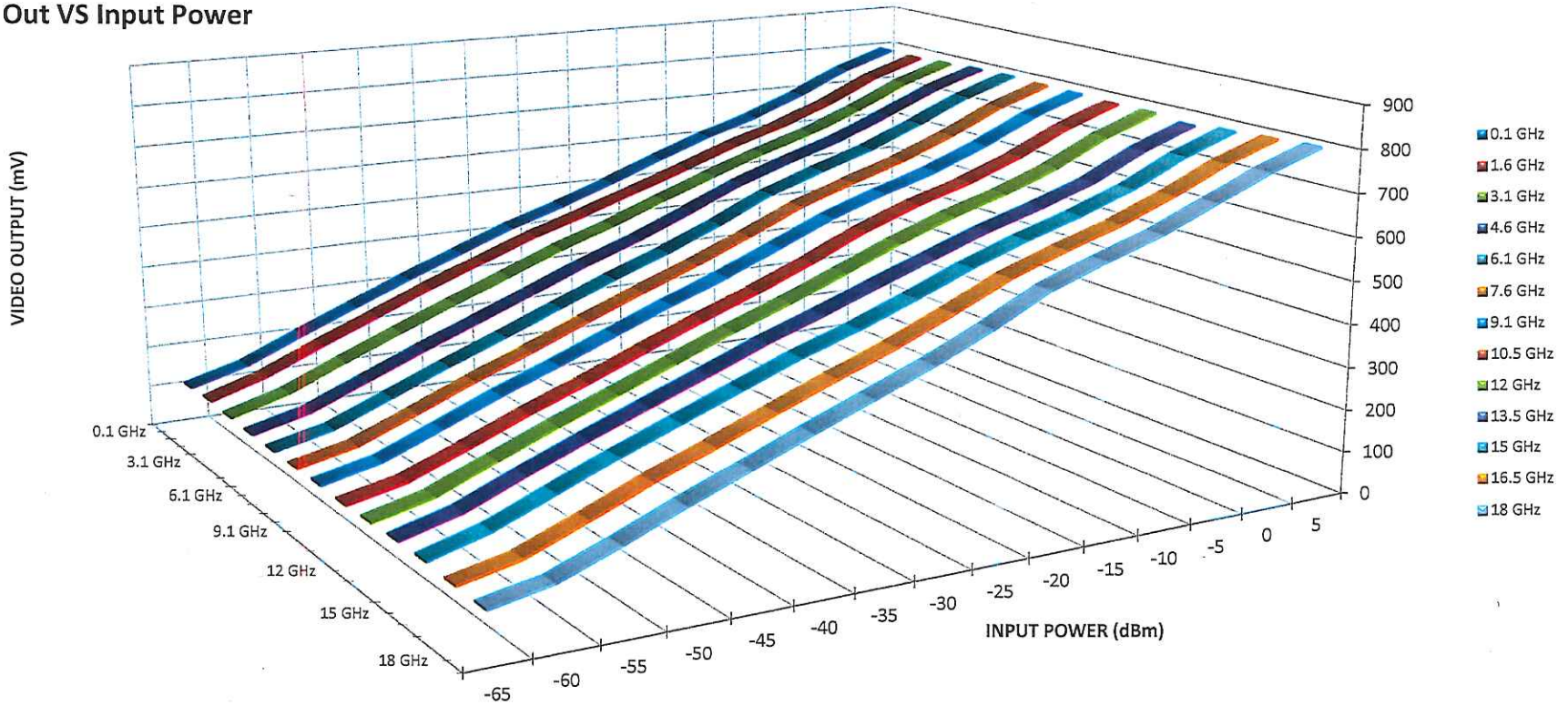
Test Temp: +85C
Graph 2C

PLANAR MONOLITHICS INDUSTRIES
7311-F GROVE ROAD, FREDERICK, MD 21704 USA
TEL: 301-662-5019 FAX: 301-662-1731
URL: WWW.PMI-RF.COM
EMAIL: SALES@PMI-RF.COM

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
0.1 GHz	INTERCEPT (mV)	749	108	147	205	260	316	364	416	458	507	557	603	643	693	751	793	Measured Value (mV)
	SLOPE (mV/dB)	9.81	-3	-13	-4	2	7	8	10	3	3	4	2	-8	-7	2	-5	Error (mV)
			-0.29	-1.36	-0.42	0.16	0.67	0.77	1.01	0.32	0.35	0.44	0.18	-0.80	-0.73	0.19	-0.47	LINEARITY ERROR (dB)
1.6 GHz	INTERCEPT (mV)	747	111	155	214	268	323	372	422	464	511	568	613	642	680	746	792	Measured Value (mV)
	SLOPE (mV/dB)	9.65	-9	-14	-3	3	10	10	12	6	4	1	0	-9	-9	2	-4	Error (mV)
			-0.97	-1.42	-0.31	0.28	0.99	1.07	1.26	0.62	0.44	0.12	0.00	-0.90	-0.96	0.16	-0.38	LINEARITY ERROR (dB)
3.1 GHz	INTERCEPT (mV)	752	106	146	204	260	313	364	416	461	512	562	607	646	695	753	795	Measured Value (mV)
	SLOPE (mV/dB)	9.88	-4	-14	-5	1	5	7	9	5	7	7	2	-8	-8	0	-6	Error (mV)
			-0.39	-1.39	-0.46	0.15	0.56	0.68	0.94	0.51	0.68	0.72	0.25	-0.77	-0.83	0.02	-0.65	LINEARITY ERROR (dB)
4.6 GHz	INTERCEPT (mV)	758	103	137	194	250	302	356	407	454	508	557	611	651	702	758	808	Measured Value (mV)
	SLOPE (mV/dB)	10.1	5	-12	-6	0	1	3	4	1	5	12	5	-5	-4	0	-9	Error (mV)
			0.45	-1.17	-0.57	-0.01	0.11	0.27	0.42	0.06	0.45	1.21	0.53	-0.49	-0.44	0.03	-0.85	LINEARITY ERROR (dB)
6.1 GHz	INTERCEPT (mV)	757	101	132	188	244	296	350	402	449	503	565	615	651	702	758	801	Measured Value (mV)
	SLOPE (mV/dB)	10.2	9	-11	-7	-1	0	2	3	-1	2	13	6	-4	-4	1	-8	Error (mV)
			0.88	-1.07	-0.64	-0.11	-0.05	0.18	0.25	-0.10	0.20	1.24	0.63	-0.40	-0.35	0.09	-0.74	LINEARITY ERROR (dB)
7.6 GHz	INTERCEPT (mV)	753	101	131	186	243	295	348	401	448	502	560	606	646	696	754	799	Measured Value (mV)
	SLOPE (mV/dB)	10.2	8	-11	-7	-1	0	3	4	1	4	11	5	-5	-6	1	-5	Error (mV)
			0.83	-1.13	-0.71	-0.12	-0.01	0.27	0.37	0.10	0.36	1.06	0.53	-0.52	-0.62	0.09	-0.50	LINEARITY ERROR (dB)
9.1 GHz	INTERCEPT (mV)	752	101	133	188	246	297	350	402	450	503	560	605	645	694	752	797	Measured Value (mV)
	SLOPE (mV/dB)	10.1	7	-12	-7	-1	0	3	5	2	5	10	5	-5	-7	1	-5	Error (mV)
			0.71	-1.17	-0.69	-0.09	0.00	0.29	0.47	0.18	0.47	1.01	0.51	-0.54	-0.71	0.07	-0.51	LINEARITY ERROR (dB)
10.5 GHz	INTERCEPT (mV)	748	100	129	183	240	291	345	397	445	498	555	603	643	690	749	794	Measured Value (mV)
	SLOPE (mV/dB)	10.1	10	-12	-8	-1	-1	3	4	1	2	10	7	-4	-7	1	-5	Error (mV)
			1.01	-1.14	-0.75	-0.13	-0.10	0.25	0.35	0.10	0.19	0.97	0.69	-0.39	-0.70	0.12	-0.48	LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	747	103	136	192	248	300	353	405	452	502	554	601	641	687	747	793	Measured Value (mV)
	SLOPE (mV/dB)	9.97	4	-13	-6	0	2	5	7	4	5	7	4	-6	-9	1	-4	Error (mV)
			0.37	-1.29	-0.64	0.01	0.17	0.49	0.72	0.42	0.47	0.71	0.41	-0.63	-0.93	0.10	-0.37	LINEARITY ERROR (dB)
13.5 GHz	INTERCEPT (mV)	739	106	144	200	256	308	359	412	457	504	550	596	634	679	739	785	Measured Value (mV)
	SLOPE (mV/dB)	9.69	-3	-14	-6	1	5	8	12	8	7	4	2	-8	-12	0	-2	Error (mV)
			-0.36	-1.45	-0.62	0.14	0.50	0.79	1.21	0.84	0.74	0.40	0.18	-0.83	-1.26	-0.03	-0.25	LINEARITY ERROR (dB)
15 GHz	INTERCEPT (mV)	747	107	146	203	258	310	361	413	457	505	557	602	642	689	748	794	Measured Value (mV)
	SLOPE (mV/dB)	9.82	-2	-13	-5	2	5	7	10	4	4	6	2	-8	-10	1	-3	Error (mV)
			-0.24	-1.28	-0.48	0.17	0.48	0.69	0.98	0.42	0.40	0.60	0.21	-0.77	-0.99	0.11	-0.31	LINEARITY ERROR (dB)
16.5 GHz	INTERCEPT (mV)	755	101	133	188	245	295	350	401	450	505	564	608	648	699	756	799	Measured Value (mV)
	SLOPE (mV/dB)	10.2	8	-11	-7	-1	-1	2	3	1	5	12	6	-5	-6	1	-7	Error (mV)
			0.83	-1.10	-0.68	-0.12	-0.07	0.19	0.27	0.08	0.46	1.22	0.54	-0.51	-0.54	0.12	-0.68	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	761	99	126	179	236	287	342	393	445	503	550	613	654	708	762	804	Measured Value (mV)
	SLOPE (mV/dB)	10.4	16	-9	-8	-3	-4	-2	-3	-3	3	16	8	-3	-1	1	-9	Error (mV)
			1.54	-0.86	-0.79	-0.33	-0.41	-0.15	-0.24	-0.25	0.31	1.55	0.77	-0.27	-0.13	0.11	-0.86	LINEARITY ERROR (dB)
	Average Slope (mV)	10.0																
	Flatness		0.6	1.4	1.7	1.6	1.8	1.5	1.4	0.9	0.8	0.9	0.8	1	1.4	1.1	0.9	
			99	126	179	236	287	342	393	445	496	550	596	634	679	739	786	
			111	155	214	268	323	372	422	464	512	568	613	654	708	762	804	
			100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	


Video Out VS Input Power
VIDEO OUTPUT (mV)
900
800
700
600
500
400
300
200
100
0
-65
-60
-55
-50
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
5
INPUT POWER (dBm)
0.1 GHz
1.6 GHz
3.1 GHz
4.6 GHz
6.1 GHz
7.6 GHz
9.1 GHz
10.5 GHz
12 GHz
13.5 GHz
15 GHz
16.5 GHz
18 GHz
Linearity Error VS Input Power
LINEARITY ERROR (dB)
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
INPUT POWER (dBm)
0.1 GHz
1.6 GHz
3.1 GHz
4.6 GHz
6.1 GHz
7.6 GHz
9.1 GHz
10.5 GHz
12 GHz
13.5 GHz
13.5 GHz
15 GHz
16.5 GHz
18 GHz

Video Out VS Input Power

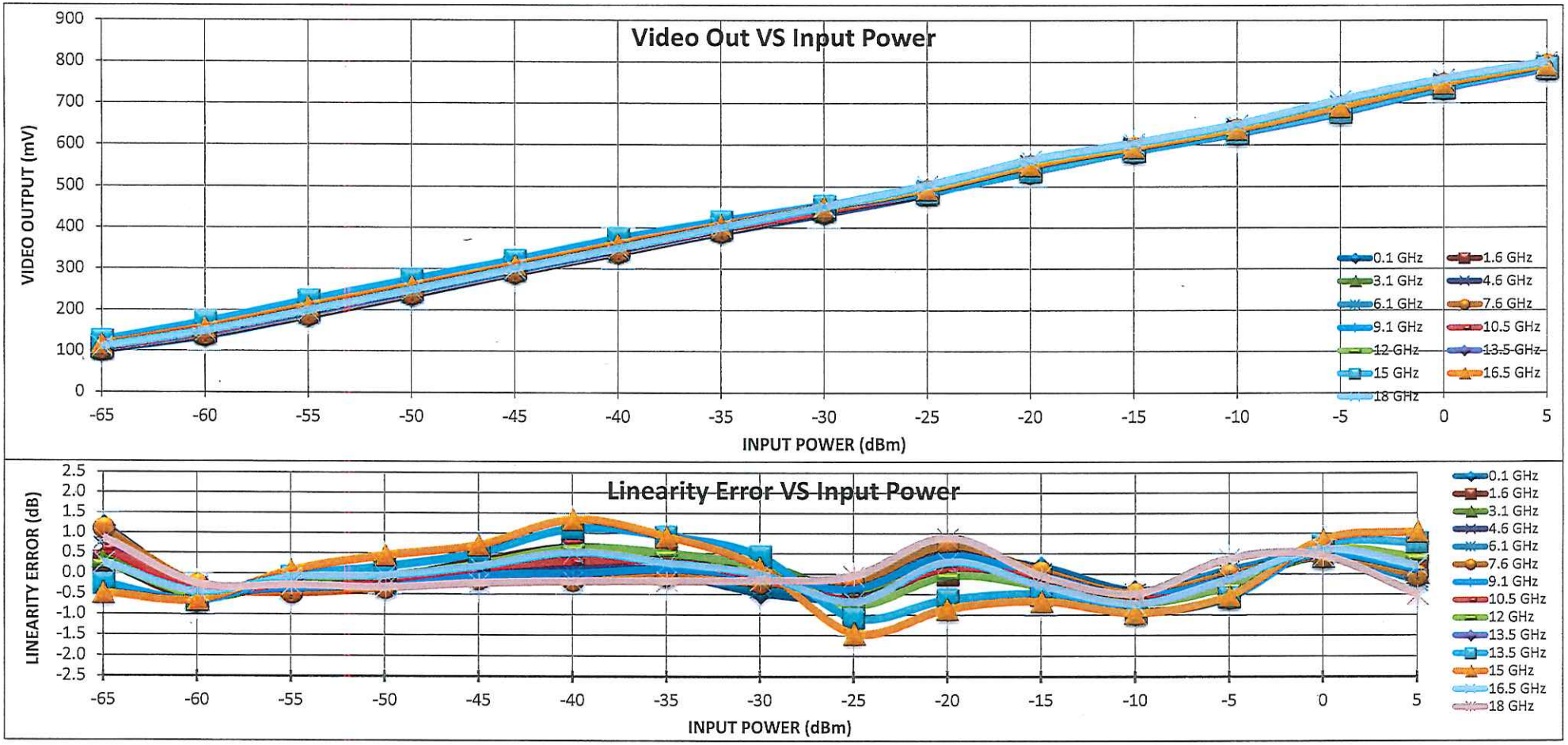


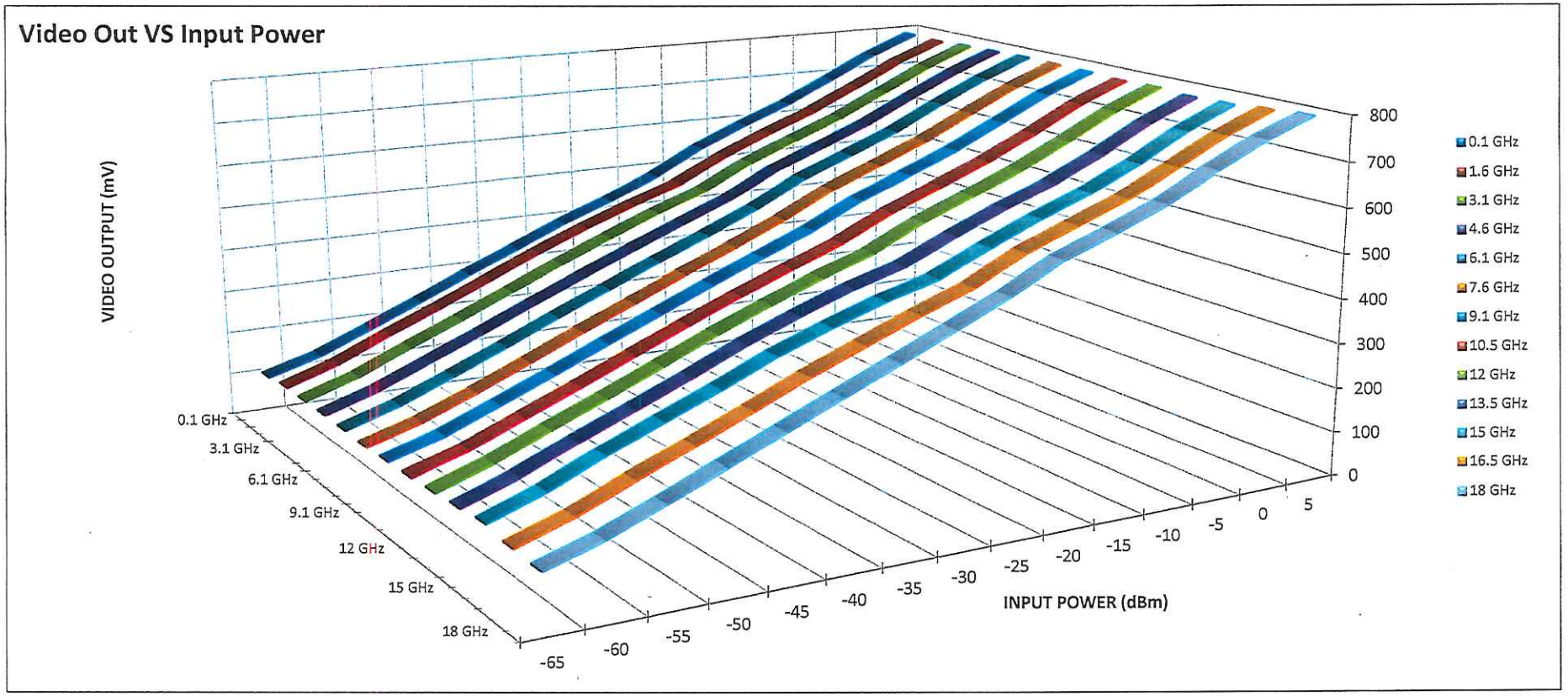
LOG TRANSFER VS FREQUENCY
MODEL: SDLVA-100M18G-CW-70-MAH
TESTED BY: rrllcc
DATE: 18 AUG 16
SERIAL NO: PL19628

Test Temp: -40C
Graph 2B

PLANAR MONOLITHICS INDUSTRIES
7311-F GROVE ROAD, FREDERICK, MD 21704 USA
TEL: 301-662-5019 FAX: 301-662-1731
URL: WWW.PMI-RF.COM
EMAIL: SALES@PMI-RF.COM

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
0.1 GHz	INTERCEPT (mV)	738	102	137	186	237	290	339	389	434	483	542	590	636	685	744	785	Measured Value (mV)
	SLOPE (mV/dB)	9.96	12	-3	-4	-3	0	0	0	-5	-6	3	2	-4	0	6	1	Error (mV)
			1.17	-0.31	-0.36	-0.28	0.01	-0.03	0.02	-0.46	-0.56	0.32	0.17	-0.41	0.03	0.61	0.09	LINEARITY ERROR (dB)
1.6 GHz	INTERCEPT (mV)	737	105	140	201	250	303	355	402	446	497	543	595	633	686	742	787	Measured Value (mV)
	SLOPE (mV/dB)	9.7	3	-6	-1	-1	3	6	5	1	-7	0	-1	-6	-2	6	2	Error (mV)
			0.29	-0.59	-0.15	-0.10	0.31	0.65	0.47	0.06	-0.71	0.00	-0.12	-0.64	-0.18	0.57	0.16	LINEARITY ERROR (dB)
3.1 GHz	INTERCEPT (mV)	740	109	148	200	250	302	353	402	448	492	586	592	635	690	745	790	Measured Value (mV)
	SLOPE (mV/dB)	9.78	4	-6	-2	-2	1	4	4	2	-4	3	-1	-7	-2	4	0	Error (mV)
			0.39	-0.56	-0.24	-0.18	0.13	0.42	0.38	0.24	-0.39	0.34	-0.13	-0.67	-0.20	0.43	0.03	LINEARITY ERROR (dB)
4.6 GHz	INTERCEPT (mV)	743	109	148	199	248	300	351	399	448	493	591	595	639	694	746	791	Measured Value (mV)
	SLOPE (mV/dB)	9.85	6	-4	-2	-2	0	2	1	-1	-3	6	-1	-5	0	5	-1	Error (mV)
			0.65	-0.38	-0.25	-0.21	0.04	0.16	0.10	-0.12	-0.34	0.56	-0.05	-0.54	0.01	0.47	-0.08	LINEARITY ERROR (dB)
6.1 GHz	INTERCEPT (mV)	744	108	146	195	246	298	348	397	444	493	593	595	641	696	748	793	Measured Value (mV)
	SLOPE (mV/dB)	9.93	9	-3	-3	-3	0	0	0	-3	-3	7	0	-5	1	4	-2	Error (mV)
			0.86	-0.31	-0.32	-0.27	-0.03	0.01	-0.01	-0.31	-0.29	0.72	0.03	-0.47	0.10	0.45	-0.15	LINEARITY ERROR (dB)
7.6 GHz	INTERCEPT (mV)	742	105	141	189	240	292	342	393	441	491	550	593	638	692	747	792	Measured Value (mV)
	SLOPE (mV/dB)	9.97	11	-3	-5	-3	-1	-2	0	-2	-2	7	1	-5	0	4	0	Error (mV)
			1.11	-0.26	-0.46	-0.33	-0.12	-0.16	-0.03	-0.22	-0.20	0.69	0.06	-0.47	-0.01	0.43	-0.03	LINEARITY ERROR (dB)
9.1 GHz	INTERCEPT (mV)	740	108	145	194	245	296	346	398	444	490	587	592	636	690	745	791	Measured Value (mV)
	SLOPE (mV/dB)	9.86	9	-3	-3	-2	0	0	1	-1	-4	4	0	-5	-1	5	1	Error (mV)
			0.88	-0.32	-0.35	-0.25	-0.04	0.01	0.12	-0.05	-0.36	0.43	-0.03	-0.54	-0.11	0.49	0.12	LINEARITY ERROR (dB)
10.5 GHz	INTERCEPT (mV)	734	110	146	199	248	299	350	398	445	495	591	595	632	693	740	787	Measured Value (mV)
	SLOPE (mV/dB)	9.7	6	-4	-2	-1	1	3	3	-1	-6	1	-1	-6	-3	6	4	Error (mV)
			0.62	-0.40	-0.23	-0.12	0.14	0.31	0.31	-0.07	-0.62	0.07	-0.10	-0.61	-0.30	0.61	0.39	LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	736	115	166	207	256	307	359	406	450	499	544	590	633	685	742	788	Measured Value (mV)
	SLOPE (mV/dB)	9.6	2	-5	-1	0	2	6	5	2	-7	0	-3	-7	-3	6	4	Error (mV)
			0.26	-0.51	-0.14	-0.05	0.25	0.64	0.50	0.16	-0.77	-0.05	-0.30	-0.72	-0.29	0.61	0.40	LINEARITY ERROR (dB)
13.5 GHz	INTERCEPT (mV)	729	121	163	215	265	314	366	411	463	486	537	584	627	677	736	783	Measured Value (mV)
	SLOPE (mV/dB)	9.32	-2	-6	-1	2	5	10	9	4	-10	-6	-5	-9	-5	7	7	Error (mV)
			-0.24	-0.66	-0.06	0.18	0.51	1.11	0.93	0.43	-1.07	-0.63	-0.51	-0.92	-0.57	0.73	0.78	LINEARITY ERROR (dB)
15 GHz	INTERCEPT (mV)	729	127	171	224	273	322	373	416	468	486	537	583	628	678	737	785	Measured Value (mV)
	SLOPE (mV/dB)	9.2	-4	-6	1	4	6	12	8	2	-13	-8	-6	-9	-5	8	10	Error (mV)
			-0.47	-0.64	0.08	0.45	0.71	1.34	0.92	0.16	-1.45	-0.85	-0.66	-0.95	-0.53	0.85	1.04	LINEARITY ERROR (dB)
16.5 GHz	INTERCEPT (mV)	742	117	159	210	259	309	361	407	452	498	552	594	638	692	748	792	Measured Value (mV)
	SLOPE (mV/dB)	9.65	3	-4	-1	0	2	5	3	0	-7	3	-3	-7	-1	6	2	Error (mV)
			0.27	-0.44	-0.08	-0.04	0.19	0.53	0.28	-0.01	-0.68	0.30	-0.28	-0.73	-0.12	0.60	0.21	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	753	112	161	201	250	301	352	402	452	503	552	603	649	707	758	799	Measured Value (mV)
	SLOPE (mV/dB)	10	9	-2	-3	-3	-2	-2	-2	-2	0	9	0	-5	4	4	-5	Error (mV)
			0.87	-0.24	-0.27	-0.33	-0.22	-0.17	-0.17	-0.15	-0.04	0.89	-0.04	-0.48	0.38	0.45	-0.49	LINEARITY ERROR (dB)
	Average Slope (mV)	9.7																
	Flatness		1.3	1.7	1.9	1.8	1.6	1.7	1.3	1	1	1.3	0.9	1.1	1.5	1.1	0.8	
			102	137	186	237	290	339	389	434	483	537	584	627	677	736	783	
			127	171	224	273	322	373	416	455	503	562	603	649	707	758	799	
			100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	


Video Out VS Input Power
VIDEO OUTPUT (mV)
900
800
700
600
500
400
300
200
100
0
-65
-60
-55
-50
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
5
INPUT POWER (dBm)
0.1 GHz
1.6 GHz
3.1 GHz
4.6 GHz
6.1 GHz
7.6 GHz
9.1 GHz
10.5 GHz
12 GHz
13.5 GHz
15 GHz
16.5 GHz
18 GHz
Linearity Error VS Input Power
LINEARITY ERROR (dB)
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
-65
-60
-55
-50
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
5
INPUT POWER (dBm)
0.1 GHz
1.6 GHz
3.1 GHz
4.6 GHz
6.1 GHz
7.6 GHz
9.1 GHz
10.5 GHz
12 GHz
13.5 GHz
13.5 GHz
15 GHz
16.5 GHz
18 GHz


Video Out VS Input Power
VIDEO OUTPUT (mV)
800
700
600
500
400
300
200
100
0
0.1 GHz
3.1 GHz
6.1 GHz
9.1 GHz
12 GHz
15 GHz
18 GHz
-65
-60
-55
-50
-45
-40
-35
-30
-25
-20
-15
-10
-5
0
5
INPUT POWER (dBm)
0.1 GHz
1.6 GHz
3.1 GHz
4.6 GHz
6.1 GHz
7.6 GHz
9.1 GHz
10.5 GHz
12 GHz
13.5 GHz
15 GHz
16.5 GHz
18 GHz