



PLANAR MONOLITHICS INDUSTRIES, INC.
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 EMAIL: SALES@PLANARMONOLITHICS.COM
 ISO 9001:2000 CERTIFIED

**SUMMARY TEST DATA
 ON
 SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER**

CUSTOMER: _____
 MODEL NO: SDLVA-0120-70
 OPTION NO: 500M105, 5DBM, MH
 SERIAL NO: PM421615

JOB NO: P410043
 TESTED BY: Loc Chau
 TEMPERATURE: ROOM
 DATE: 01/12/2005

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	INPUT VSWR	1.8:1 MAXIMUM; (1.5:1 TYPICAL)	1.22:1	
2	TYPICAL OUTPUT VOLTAGE @ -60 TO +5 dBm	PLOT ATTACHED	0.095 VDC TO 1.793 VDC	
3	TSS (0.5 -1.5 GHz)	-65 dBm (-70 dBm TYPICAL)	-67 dBm	
4	LOG SLOPE	25 mV/dB NOMINAL	22.2 mV/dB TO 26.9 mV/dB	
6	LOG LINEARITY @ -60 TO 0 dBm	± 1.2 dB MAXIMUM	± 0.72 dB	
7	LOG LINEARITY @ -65 TO +5 dBm	± 1.5 dB MAXIMUM	± 0.50 dB	
8	VIDEO LOAD	100Ω ± 10%	100Ω	
9	RISE TIME	25 nSec MAXIMUM	10 nSec	
10	FALL TIME	30 nSec MAXIMUM	11 nSec	
11	SETTLING TIME	40 nSec MAXIMUM	35 nSec	
12	DC Power +V	12 to 15V @ 100mA Maximum	74 mA	
13	DC Power -V	-12 to -15V @ 200mA Maximum	145 mA	

QA/QC APPROVAL: _____

DATED: _____

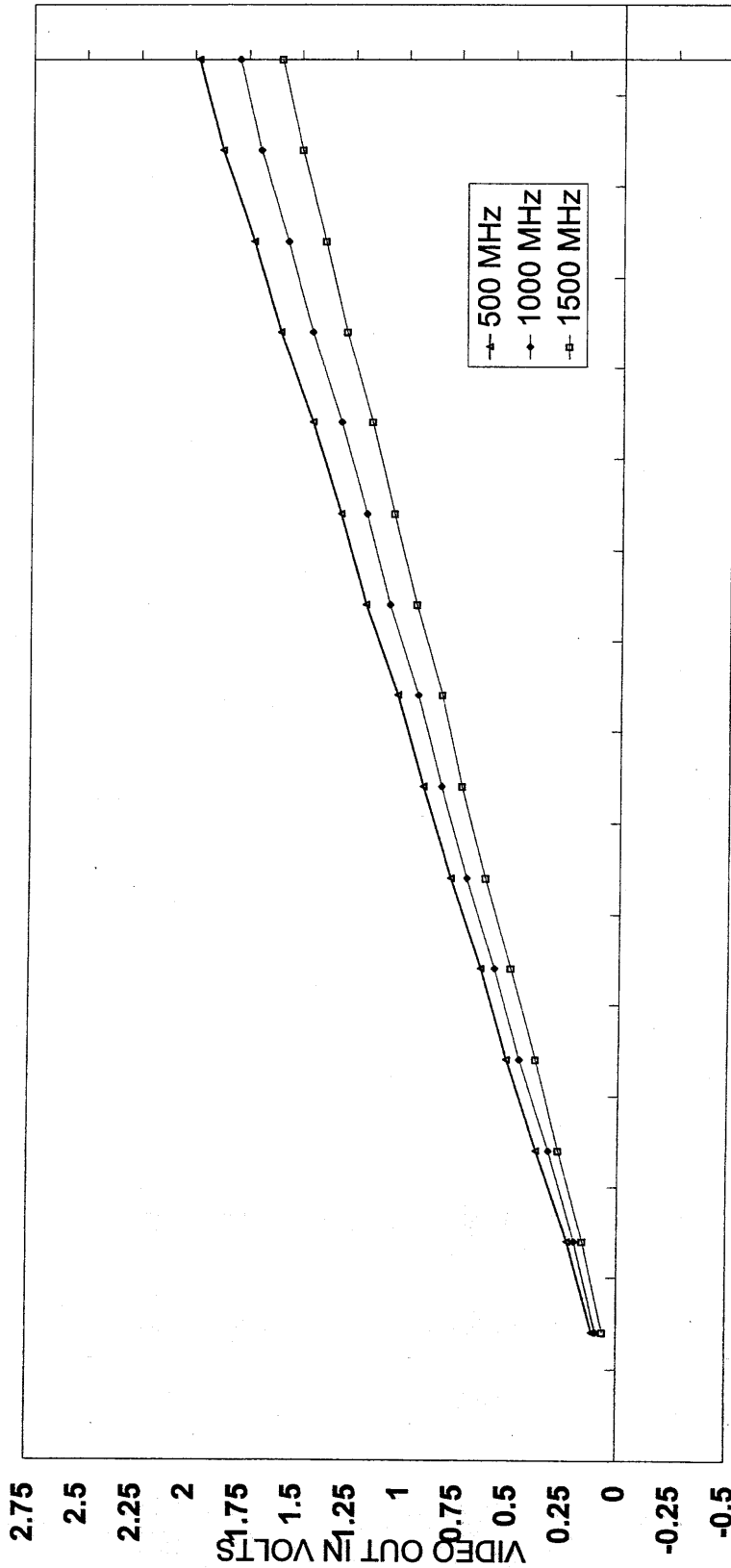


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TABULATED TEST DATA @ 500 MHz, 1000 MHz AND 1500MHz @ +25 DEGREES C

TECHNICIAN: Loc Chau MODEL NUMBER: SDLVA-0120-70
 DATE: 01/11/2005 SERIAL NUMBER: PM412615

PLOT OF LOG SLOPE OVER FREQUENCY



RF POWER IN dBm



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CUSTOMER: _____
MODEL NO: SDLVA-0120-70
OPTION NO: 500M105, 5DBM, MH
SERIAL NO: PM421616

JOB NO: P410043
TESTED BY: Loc Chau
TEMPERATURE: ROOM
DATE: 01/12/2005

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	INPUT VSWR	1.8:1 MAXIMUM; (1.5:1 TYPICAL)	1.25:1	
2	TYPICAL OUTPUT VOLTAGE @ -60 TO +5 dBm	PLOT ATTACHED	0.068 VDC TO 1.773 VDC	
3	TSS (0.5 -1.5 GHz)	-65 dBm (-70 dBm TYPICAL)	-67 dBm	
4	LOG SLOPE	25 mV/dB NOMINAL	22.4 mV/dB TO 27.2 mV/dB	
6	LOG LINEARITY @ -60 TO 0 dBm	± 1.2 dB MAXIMUM	± 0.69 dB	
7	LOG LINEARITY @ -65 TO +5 dBm	± 1.5 dB MAXIMUM	± 1.35 dB	
8	VIDEO LOAD	100Ω ± 10%	100Ω	
9	RISE TIME	25 nSec MAXIMUM	10 nSec	
10	FALL TIME	30 nSec MAXIMUM	11 nSec	
11	SETTLING TIME	40 nSec MAXIMUM	35 nSec	
12	DC Power +V	12 to 15V @ 100mA Maximum	75 mA	
13	DC Power -V	-12 to -15V @ 200mA Maximum	148 mA	

QA / QC APPROVAL:

DATED:



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TABULATED TEST DATA @ 500 MHZ, 1000 MHZ AND 1500MHZ @ +25 DEGREES C

TECHNICIAN: Loc Chau MODEL NUMBER: SDLVA-0120-70
 DATE: 01/11/2005 SERIAL NUMBER: PM412616

RF POWER IN (dBm)	500 MHz		1000 MHz		1500 MHz	
	VIDEO OUT (VOLTS)	LIMITED IF OUT (dBm)	VIDEO OUT (VOLTS)	LIMITED IF OUT (dBm)	VIDEO OUT (VOLTS)	LIMITED IF OUT (dBm)
5	1.935	5.86	1.773	5.78	1.584	3.49
0	1.791	5.86	1.659	5.78	1.485	3.43
-5	1.657	5.85	1.531	5.78	1.376	3.39
-10	1.518	5.85	1.409	5.78	1.269	3.37
-15	1.364	5.84	1.269	5.77	1.143	3.35
-20	1.242	5.84	1.153	5.77	1.038	3.33
-25	1.095	5.83	1.028	5.75	0.92	3.32
-30	0.957	5.83	0.897	5.74	0.803	3.32
-35	0.835	5.82	0.787	5.73	0.703	3.31
-40	0.682	5.8	0.65	5.72	0.577	3.29
-45	0.556	5.78	0.526	5.72	0.466	3.25
-50	0.423	5.75	0.4	5.75	0.358	3.3
-55	0.278	5.6	0.267	5.77	0.241	3.4
-60	0.156	5.46	0.159	5.64	0.129	3.53
-65	0.055	4.99	0.068	5.11	0.043	3.46
DC POWER @ + 15 VOLTS	+75 mA					
DC POWER @ - 15 VOLTS	-148 mA					
LOG SLOPE						
BEST FIT STRAIGHT LINE	27.1779	mV/dB	24.8336	mV/dB	22.4371	mV/dB
LOG ERROR IN dB	1.35		1.29		0.86	
LOG ERROR IN dB	-0.58		-0.69		-0.46	
FREQUENCY FLATNESS						
LOG VIDEO FROM THE VALUE @ 350 MHz IN dB						

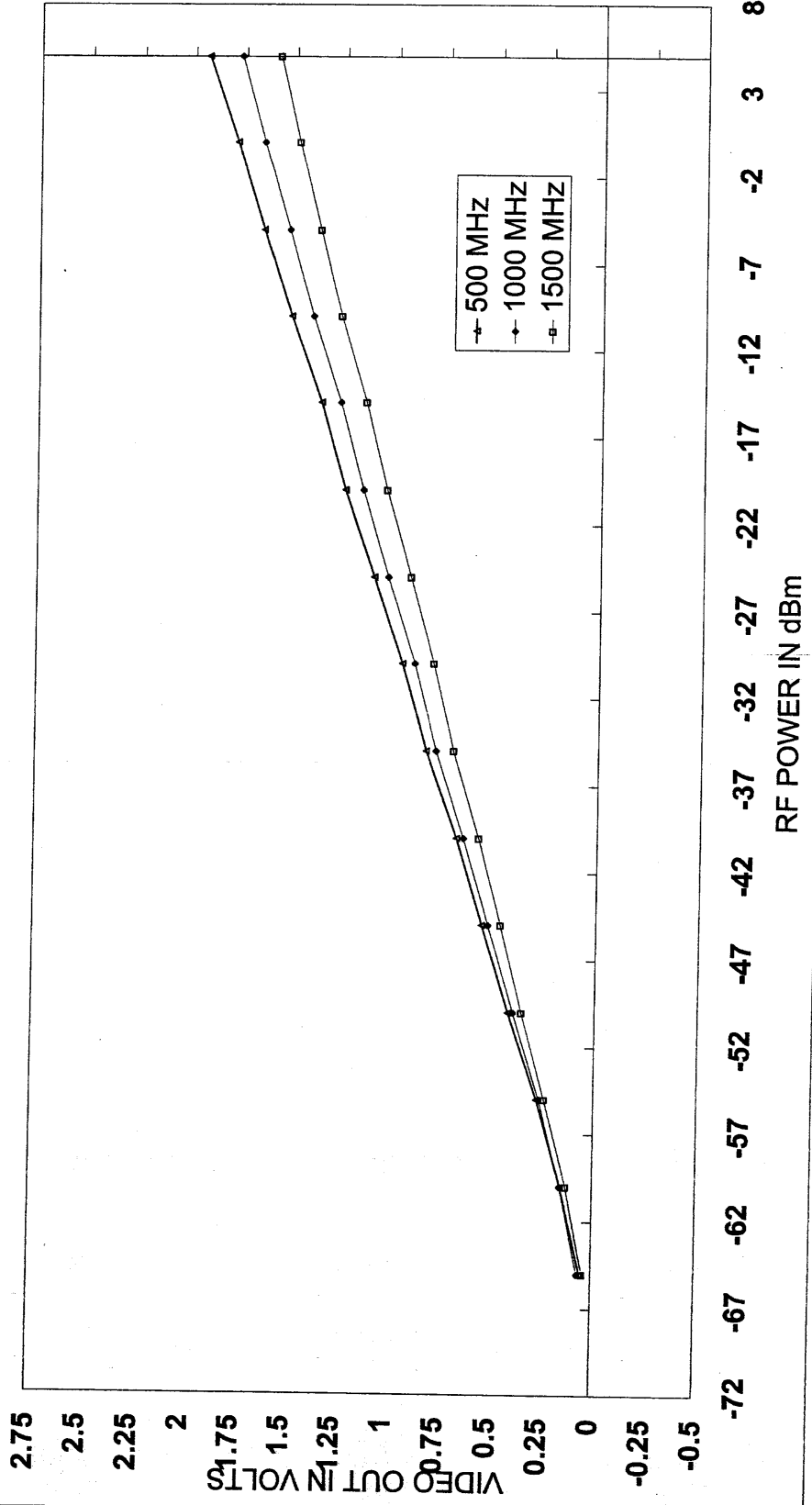


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TABULATED TEST DATA @ 500 MHz, 1000 MHz AND 1500MHz @ +25 DEGREES C

TECHNICIAN: Loc Chau MODEL NUMBER: SDLVA-0120-70
 DATE: 01/11/2005 SERIAL NUMBER: PM412616

PLOT OF LOG SLOPE OVER FREQUENCY





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**SUMMARY TEST DATA
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CUSTOMER: _____
MODEL NO: SDLVA-0120-70
OPTION NO: 500M105, 5DBM, MH
SERIAL NO: PM421617

JOB NO: P410043
TESTED BY: Ed Elder
TEMPERATURE: ROOM
DATE: 01/19/2005

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	INPUT VSWR	1.8:1 MAXIMUM; (1.5:1 TYPICAL)	1.26:1	
2	TYPICAL OUTPUT VOLTAGE @ -60 TO +5 dBm	PLOT ATTACHED	0.046V TO 2.05V	
3	TSS (0.5 -1.5 GHz)	-65 dBm (-70 dBm TYPICAL)	-67 dBm	
4	LOG SLOPE	25 mV/dB NOMINAL	23.25 mV/dB TO 27.2 mV/dB	
6	LOG LINEARITY @ -60 TO 0 dBm	±1.2 dB MAXIMUM	±0.96	
7	LOG LINEARITY @ -65 TO +5 dBm	±1.5 dB MAXIMUM	±1.09	
8	VIDEO LOAD	100Ω ± 10%	100 Ω	
9	RISE TIME	25 nSec MAXIMUM	15 nS	
10	FALL TIME	30 nSec MAXIMUM	24 nS	
11	SETTLING TIME	40 nSec MAXIMUM	30 nS	
12	DC Power +V	12 to 15V @ 100mA Maximum	90 mA	
13	DC Power -V	-12 to -15V @ 200mA Maximum	150 mA	

QA/QC APPROVAL: _____

DATED: _____

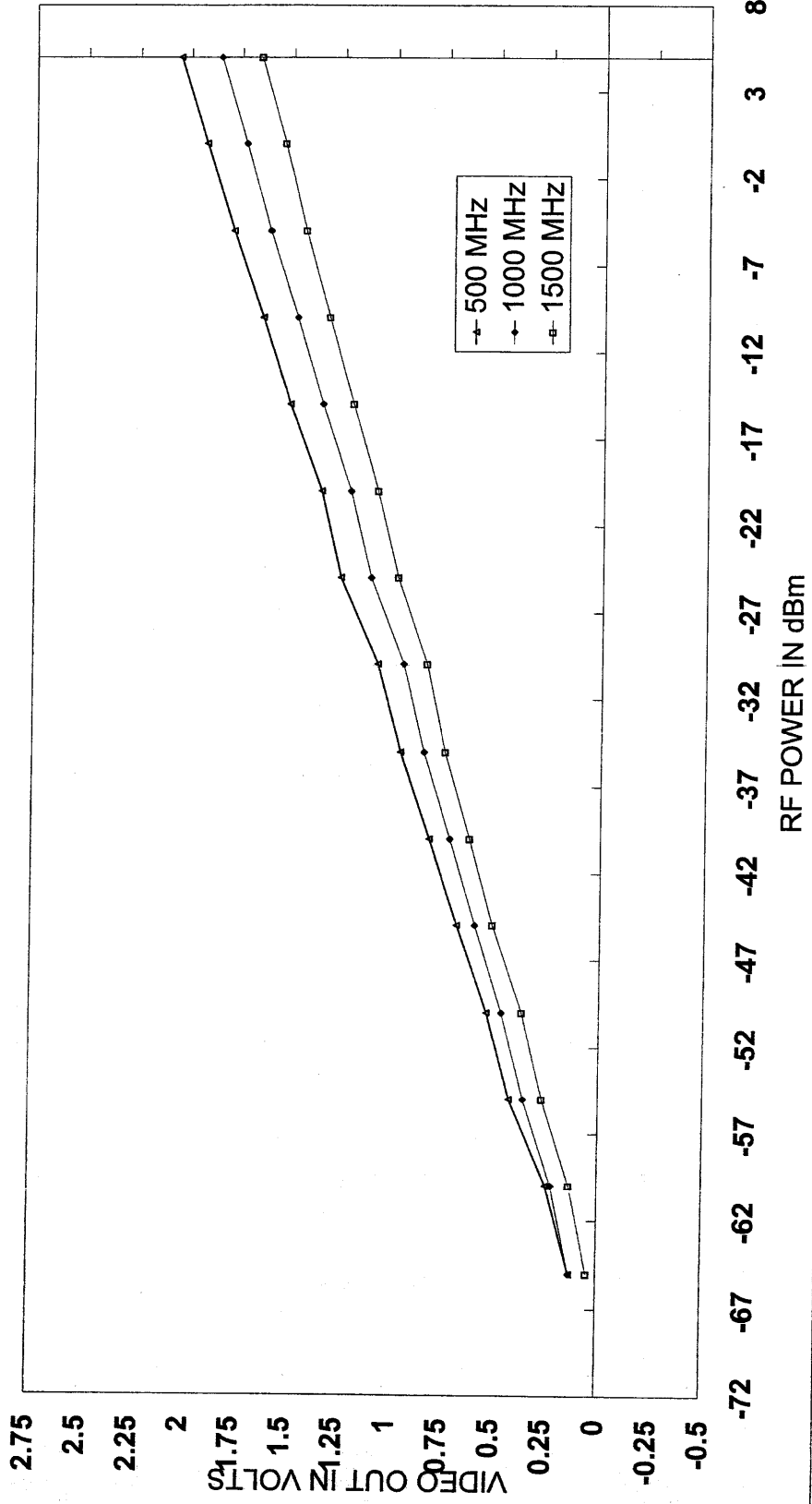


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TABULATED TEST DATA @ 500 MHz, 1000 MHz AND 1500MHz @ +25 DEGREES C

TECHNICIAN: Ed Eider MODEL NUMBER: SDLVA-0120-70
 DATE: 01/18/2005 SERIAL NUMBER: PM412617

LOT OF LOG SLOPE OVER FREQUENCY





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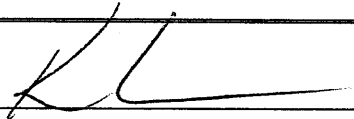
**SUMMARY TEST DATA
 ON
 SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER**

CUSTOMER: _____
MODEL NO: SDLVA-0120-70
OPTION NO: 500M105, 5DBM, MH
SERIAL NO: PM421618

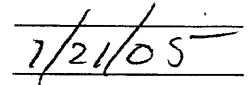
JOB NO: P410043
TESTED BY: Ed Elder
TEMPERATURE: ROOM
DATE: 01/19/2005

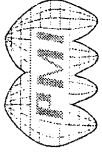
TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	INPUT VSWR	1.8:1 MAXIMUM; (1.5:1 TYPICAL)	1.18:1	
2	TYPICAL OUTPUT VOLTAGE @ -60 TO +5 dBm	PLOT ATTACHED	0.046V TO 1.93V	
3	TSS (0.5 -1.5 GHz)	-65 dBm (-70 dBm TYPICAL)	-66 dBm	
4	LOG SLOPE	25 mV/dB NOMINAL	21.66 mV/dB TO 26.41 mV/dB	
6	LOG LINEARITY @ -60 TO 0 dBm	± 1.2 dB MAXIMUM	±0.68	
7	LOG LINEARITY @ -65 TO +5 dBm	± 1.5 dB MAXIMUM	±0.86	
8	VIDEO LOAD	100Ω ± 10%	100 Ω	
9	RISE TIME	25 nSec MAXIMUM	15 nS	
10	FALL TIME	30 nSec MAXIMUM	24 nS	
11	SETTLING TIME	40 nSec MAXIMUM	31 nS	
12	DC Power +V	12 to 15V @ 100mA Maximum	90 mA	
13	DC Power -V	-12 to -15V @ 200mA Maximum	140 mA	

QA / QC APPROVAL:



DATED:



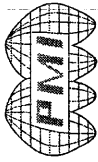


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TABULATED TEST DATA @ 500 MHz, 1000 MHz AND 1500MHz @ +25 DEGREES C

TECHNICIAN: Ed Elder MODEL NUMBER: SDLVA-0120-70
 DATE: 01/18/2005 SERIAL NUMBER: PM412618

RF POWER IN (dBm)	500 MHz		1000 MHz		1500 MHz	
	VIDEO OUT (VOLTS)	LIMITED IF OUT (dBm)	VIDEO OUT (VOLTS)	LIMITED IF OUT (dBm)	VIDEO OUT (VOLTS)	LIMITED IF OUT (dBm)
5	1.933	5.06	1.75	5.74	1.546	3.16
0	1.777	5.06	1.626	5.73	1.435	3.08
-5	1.662	5.06	1.516	5.73	1.339	3.04
-10	1.52	5.04	1.381	5.74	1.228	3
-15	1.39	5.04	1.263	5.74	1.12	2.99
-20	1.253	5.03	1.137	5.73	1.006	2.96
-25	1.142	5.03	1.038	5.72	0.91	2.95
-30	0.976	5.02	0.888	5.71	0.777	2.95
-35	0.877	5.03	0.794	5.7	0.692	2.95
-40	0.724	5.03	0.662	5.68	0.573	2.94
-45	0.606	5.04	0.548	5.67	0.467	2.88
-50	0.47	5.03	0.416	5.69	0.345	2.92
-55	0.345	5	0.3	5.72	0.251	3.03
-60	0.181	4.89	0.167	5.62	0.132	3.25
-65	0.085	4.48	0.077	5.12	0.046	3.26
DC POWER @ + 15 VOLTS	+90 mA					
DC POWER @ - 15 VOLTS	-140 mA					
LOG SLOPE						
BEST FIT STRAIGHT LINE	26.4086	mV/dB	24.1029	mV/dB	21.6664	mV/dB
LOG ERROR IN dB	0.53		0.68		0.61	
LOG ERROR IN dB	-0.86		-0.67		-0.65	
FREQUENCY FLATNESS						
LOG VIDEO FROM THE VALUE @ 350 MHz IN dB						

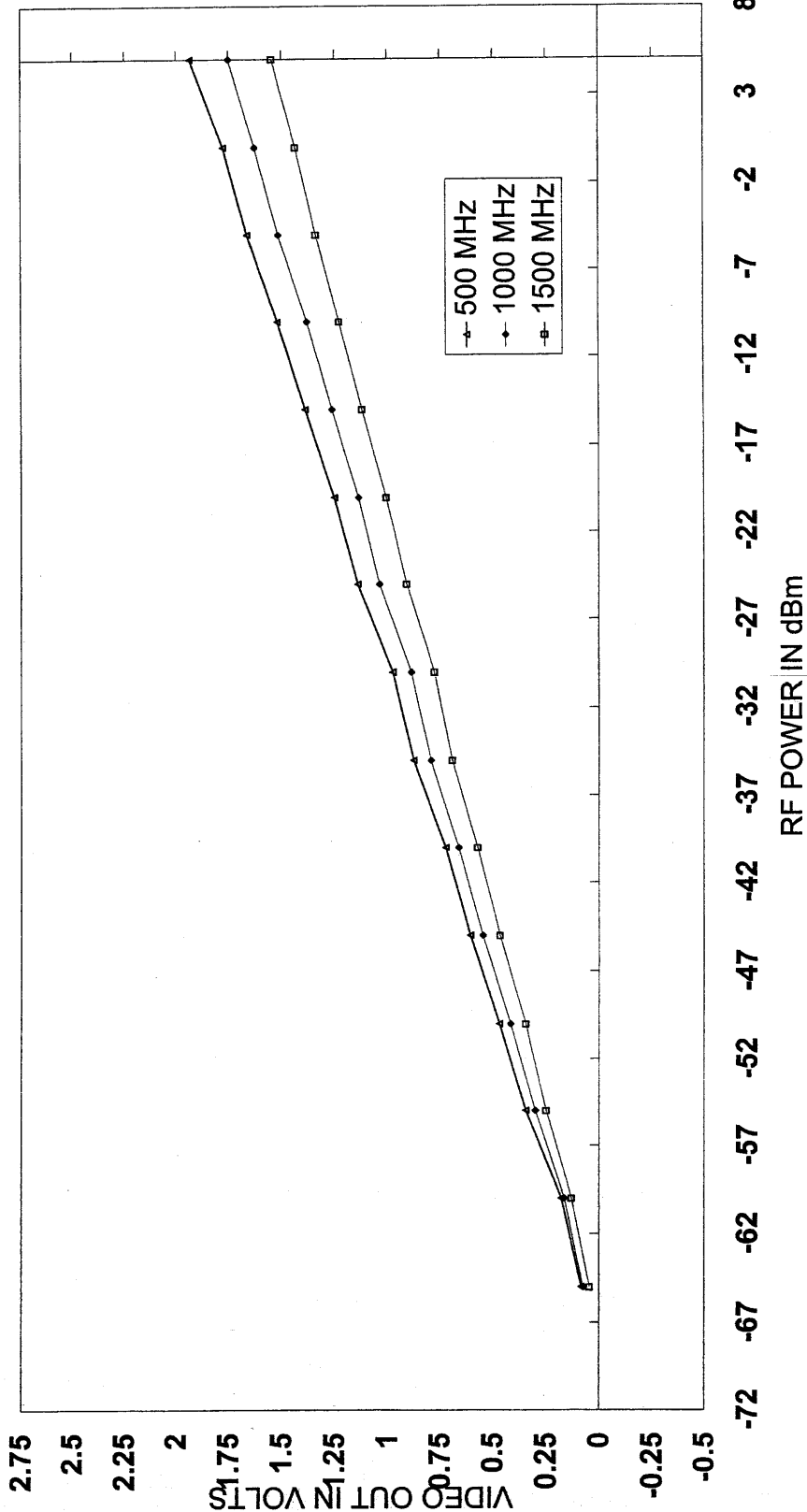


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TABULATED TEST DATA @ 500 MHz, 1000 MHz AND 1500MHz @ +25 DEGREES C

TECHNICIAN: Ed Elder MODEL NUMBER: SDLVA-0120-70
 DATE: 01/18/2005 SERIAL NUMBER: PM412618

PLOT OF LOG SLOPE OVER FREQUENCY





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**SUMMARY TEST DATA
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CUSTOMER: _____
MODEL NO: SDLVA-0120-70
OPTION NO: 500M105, 5DBM, MH
SERIAL NO: PM421619

JOB NO: P410043
TESTED BY: Ed Elder
TEMPERATURE: ROOM
DATE: 01/19/2005

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	INPUT VSWR	1.8:1 MAXIMUM; (1.5:1 TYPICAL)	1.29:1	
2	TYPICAL OUTPUT VOLTAGE @ -60 TO +5 dBm	PLOT ATTACHED	0.640 V TO 2.606 V	
3	TSS (0.5 -1.5 GHz)	-65 dBm (-70 dBm TYPICAL)	-69 dBm	
4	LOG SLOPE	25 mV/dB NOMINAL	22.51 mV/dB TO 27.57 mV/dB	
6	LOG LINEARITY @ -60 TO 0 dBm	± 1.2 dB MAXIMUM	±0.88	
7	LOG LINEARITY @ -65 TO +5 dBm	± 1.5 dB MAXIMUM	±0.88	
8	VIDEO LOAD	100Ω ± 10%	100 Ω	
9	RISE TIME	25 nSec MAXIMUM	15 nS	
10	FALL TIME	30 nSec MAXIMUM	23 nS	
11	SETTLING TIME	40 nSec MAXIMUM	29 nS	
12	DC Power +V	12 to 15V @ 100mA Maximum	100 mA	
13	DC Power -V	-12 to -15V @ 200mA Maximum	140 mA	

QA/QC APPROVAL: _____

DATED: _____



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