

ATTACHMENT G
INSTRUMENTATION EQUIPMENT SHEETS

WYLE LABORATORIES, INC.
Huntsville Facility



INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/31/2013 JOB NUMBER: T71013 TYPE OF TEST: VVSG 4.1.2.11 CRFI
 TECHNICIAN: R.CHAMBERS CUSTOMER: ES&S TEST AREA: EMI CHAMBER 3

No.	Description	Manufacturer	Model	Serial #	WYLE #	RANGE	ACCURACY	Cal Date	Cal Due
1	AMPLIFIER	AR	2500A225	0342861	03485	MFG	NCR	7/24/2013	7/24/2020
2	ATTEN	BIRD	25-T-MN	0129	03142	50 OHMS 25 W.	MFG	6/24/2013	6/24/2014
3	ATTENUATOR	NARDA	769-6	03180	04860	DC to 6GHz	MFG	3/25/2013	3/25/2014
4	DATALOGGER	EXTECH	42280	9051859	04926	-4°F to 144°F/0-±1°F / ±3%RH		5/14/2013	5/14/2014
5	DIR COUPLER	AMP RESEARCH	DC3010	304022	117208	.01-1000MHz	±0.8dB	5/15/2013	5/15/2014
6	DMM	FLUKE	87V	18290046	01474	4VDC	±0.1%+1	12/6/2012	12/6/2013
7	PASS IMP ADAPT	FISHER CC	FCC-801-150-50-CDT	9784	116854	150KHz-230MH	MFG	6/24/2013	6/24/2014
8	PASSIVE	FISHER CC	FCC-801-150-50-CDT	04049/04050	110405	150KHZ - 230M	MFG	7/20/2012	7/20/2014
9	SIG GEN	MARCONI	2023	112224/092	L12224	9kHz-1.2GHz	±0.8dB	2/11/2013	2/11/2014
10	SPEC ANAL	AGILENT	E4466A/H70	US44020335	03123	MFG	MFG	5/10/2013	5/10/2014
11	SPEC ANAL	HP	E4446a	US44020311	04447	44GHz	MFG	8/6/2012	8/6/2013
12	TAPE MEASURER	LUFKIN	HV1048CME	NSN	02708	8meters	+1mm	4/24/2012	4/24/2014

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: [Signature] CHECKED & RECEIVED BY: [Signature] 07/31/2013

WH-1029A, REV. APR 99 7/31/13 [Signature] 7/31/13 Page 1 of 1

WYLE LABORATORIES, INC.
 Huntsville Facility



INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/30/2013 JOB NUMBER: T71013 TYPE OF TEST: VVSG 4.1.2.8 ESD
 TECHNICIAN: J.GALEONE CUSTOMER: ES&S TEST AREA: ESD TEST LAB

No.	Description	Manufacturer	Model	Serial #	WYLE #	RANGE	ACCURACY	Cal Date	Cal Due
1	DISCHARGE	EMC-PARTNER	ESD0000DM1	049	03229	150pF	MFG	7/30/2013	7/30/2014
2	DMM	FLUKE	87V	18290046	01474	4VDC	±0.1%+1	12/6/2012	12/6/2013
3	ESD GUN	EMC-PARTNER	ESD0000	059	04446	16.5 KV	±10%	10/1/2012	10/1/2013
4	ESD TARGET	HAFFELY TRENCI	2520311	152461	110794	15KV	±5%	12/6/2011	12/6/2013
5	OSCILLOSCOPE	TEKTRONIX	DPO5104	C012091	01737		MFG	10/23/2012	10/23/2013
6	TAPE MEASURER	LUPKIN	11V1048CME	NSN	02708	8meters	±1mm	4/24/2012	4/24/2014
7	TEMP/HUM/BAR	EXTECH	SD700	Q590477	01539	MULTI	MFG	2/27/2013	2/27/2014

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: [Signature] CHECKED & RECEIVED BY: [Signature] 07/30/2013
 Q.A.: [Signature] 7/30/13

WH-1029A,REV,APR'99

WYLE LABORATORIES, INC.
 Huntsville Facility



INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/24/2013 JOB NUMBER: T71013 TYPE OF TEST: VVSG SECTION 4.1.2.6
 TECHNICIAN: R.CHAMBERS CUSTOMER: ES&S TEST AREA: EMI LAB - CHAMBER 3

No.	Description	Manufacturer	Model	Serial #	WYLE #	RANGE	ACCURACY	Cal Date	Cal Due
1	ATTEN	HAEFELY TRENCI	2520111/00	153823 153801	04590	MFG	MFG	3/14/2012	3/14/2014
2	DMM	FLUKE	87V	18290046	01474	4VDC	±0.1%+1	12/6/2012	12/6/2013
3	EFT JUNIOR TSTR	HAEFELY TRENCI	093204.1	83762-14	112575	5NS/50NS	30%	12/28/2012	12/28/2014
4	OSCILLOSCOPE	TEKTRONIX	DPO5104	C012091	01737	MFG	MFG	10/23/2012	10/23/2013
5	TAPE MEASURER	LUFKIN	HV1048CME	NSN	02708	8meters	±1mm	4/24/2012	4/24/2014

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: [Signature] CHECKED & RECEIVED BY: [Signature] 07/24/2013
 Q.A.: [Signature] 7/24/13

WH-1029A,REV,APR'99

Page 1 of 1

WYLE LABORATORIES, INC.
 Huntsville Facility

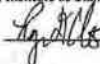
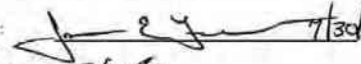


INSTRUMENTATION EQUIPMENT SHEET


DATE: 7/30/2013 JOB NUMBER: T71013 TYPE OF TEST: FCC PART 15
TECHNICIAN: J.SMITH CUSTOMER: ES&S TEST AREA: OATS 2

No.	Description	Manufacturer	Model	Serial #	WYLE #	RANGE	ACCURACY	Cal Date	Cal Due
1	ATTENUATOR	NARDA	766-20	740582	01444	DC-4 GHz	MFG	3/25/2012	3/25/2014
2	DMM	FLUKE	87	64440152	112518	MULTI	±0.1%+1	6/14/2013	6/14/2014
3	EMI TEST RCVR	ROHDE SCHWARZ	ESCI	100386	117803	MULTI	MFG	4/1/2013	4/1/2014
4	LISN	SOLAR	21107-50-TS-50-N	1125266	01686	MFG	MFG	8/7/2012	8/7/2014
5	LISN	SOLAR	21107-50-TS-50-N	1125267	01687	MFG	MFG	8/7/2012	8/7/2014
6	TAPE MEASURER	LUFKIN	EL1551	116893	116893	15meter	±1mm	7/12/2011	7/12/2014

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION:  7/30/2013 CHECKED & RECEIVED BY:  7/30/13

WH-1029A_REV_APR'99

Q.A.:  7/30/13

WYLE LABORATORIES, INC.
Huntsville Facility



INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/29/2013 JOB NUMBER: T71013 TYPE OF TEST: VVSG 4.1.2.12 MF1
TECHNICIAN: J.GALEONE CUSTOMER: BS&S TEST AREA: CHAMBER 3

No.	Description	Manufacturer	Model	Serial #	WYLE #	RANGE	ACCURACY	Cal Date	Cal Due
1	AMPLIFIER	TECHRON	7560	015075	04566	600W	NCR	7/8/2008	7/8/2020
2	DMM	FLUKE	87V	18290046	01474	4VDC	±0.1%+1	12/6/2012	12/6/2013
3	METER	HOLADAY	HOL-H13604	76285	117549	30-2KHz	MFG	2/24/2012	2/24/2014
4	STOP WATCH	HANHART	STRATOS1	110131	110131	10HR	5 sec/day	6/24/2013	6/24/2014
5	TAPE MEASUREE	LUFKIN	HV1048CME	NSN	02708	8meters	±1mm	4/24/2012	4/24/2014
6	WAVE GEN	AGILENT	33250A	5C40007026	014181	MULTI	CERT	12/18/2012	12/28/2013

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION:

[Signature]
7/29/13

CHECKED & RECEIVED BY:

[Signature] 07/29/2013
Burch Mousk 7/29/13

WH-1029A,REV,APR'99

Page 1 of 1

WYLE LABORATORIES, INC.
Huntsville Facility



INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/25/2013 JOB NUMBER: T71013 TYPE OF TEST: VVSG SEC.4.1.2.5 EPD
TECHNICIAN: R.CHAMBERS CUSTOMER: ES&S TEST AREA: EMI LAB - CHAMBER 3

No.	Description	Manufacturer	Model	Serial #	WYLE #	RANGE	ACCURACY	Cal Date	Cal Due
1	DATALOGGER	EXTECH	42280	9051859	04926	-4°F to 144°F/0-	±1°F / ±3%RH	5/14/2013	5/14/2014
2	DMM	FLUKE	87V	18290046	01474	4VDC	±0.1%±1	12/6/2012	12/6/2013
3	POWER SOURCE	CALIFORNIA INST	1251RP/IF	L06361	117347	0-270VAC RMS	1%	2/20/2013	2/20/2014
4	TAPE MEASURER	LUFKIN	HV1048CME	NSN	02708	8meters	±1mm	4/24/2012	4/24/2014

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: [Signature] CHECKED & RECEIVED BY: [Signature] 07/25/2013
7/25/13 Ronda Moore T71013

WH-1029A, REV. APR '99

Page 1 of 1

WYLE LABORATORIES, INC.
Huntsville Facility



INSTRUMENTATION EQUIPMENT SHEET

DATE: 8/19/2013 JOB NUMBER: T71013 TYPE OF TEST: VVSG4.1.2.10 EST WOP1
 TECHNICIAN: R.CHAMBERS CUSTOMER: ES&S TEST AREA: EMI CHAMBER#1

Nr.	Description	Manufacturer	Model	Serial #	WYLE#	RANGE	ACCURACY	Cal Date	Cal Due
1	AMPLIFIER	AMP RESEARCH	560W1000A	22561	03141	89MHz to 1GHz	NCE	8/23/2012	8/23/2013
2	DATALOGGER	EXTECH	42280	6051828	64926	-4°F to 144°F/0 to 61°F / ±0.5°F		5/14/2013	5/14/2014
3	DBI COUPLER	AMP RESEARCH	DC3010	304022	117798	01-1000MHz	±0.8dB	5/15/2013	5/15/2014
4	ISOTROPIC PROBE	AMP RESEARCH	PP2900	11687	113657	16 KHz - 1 GHz	±0.7 dB	11/8/2012	11/8/2013
5	SIG GEN	AEROFLEX	2023A	202306068	825330	9KHz-1.2GHz	M00	10/23/2012	10/23/2013
6	SPEC ANAL	AGILENT	E4446A	1042070108	110948	44 GHz	±3dB	7/9/2013	7/9/2014
7	TAPE MEASURER	LITKIN	HV1048CME	N56	07708	flexures	±0mm	4/24/2012	4/24/2014

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: [Signature] CHECKED & RECEIVED BY: [Signature] 08/19/2013
 WH-1029A, REV. APR'90 8/19/13 [Signature] 8/19/2013 Page 1 of 1

WYLE LABORATORIES, INC.
 Huntsville Facility



INSTRUMENTATION EQUIPMENT SHEET

DATE: 7/22/2013 JOB NUMBER: T71013 TYPE OF TEST: VVSG SECTION 4.1.2.7
TECHNICIAN: J.GALEONE CUSTOMER: ES&S TEST AREA: EMI LAB - CHAMBER 3

No.	Description	Manufacturer	Model	Serial #	WYLE #	RANGE	ACCURACY	Cal Date	Cal Due
1	COUPL NETWORK	HAEFELY TRENCI	PCD100	149869	R90540	MFG	MFG	7/10/2013	7/10/2015
2	DATALOGGER	EXTECH	42280	9051859	04926	-4°F to 144°F/0-	±1°F / ±3%RH	5/14/2013	5/14/2014
3	IMPULSE MODULE	HAEFELY TRENCI	PIM100	1103	R90538	6kV	MFG	7/10/2013	7/10/2015
4	OSCILLOSCOPE	TEKTRONIX	DPO5104	C012091	01737	MFG	MFG	10/23/2012	10/23/2013
5	STOP WATCH	HANHART	STRATOS1	110131	110131	10HR	5 sec/day	6/24/2013	6/24/2014
6	SURGE TSTR	HAEFELY TRENCI	PSURGE8000	150270	R90537	MULTI	MFG	7/10/2013	7/10/2015

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: [Signature] 7/22/13 CHECKED & RECEIVED BY: [Signature] 7/22/13
Q.A.: Bianca Mae 7/22/13

WH-1029A,REV,APR'99

Page 1 of 1

WYLE LABORATORIES, INC.
Huntsville Facility



INSTRUMENTATION EQUIPMENT SHEET

DATE: 8/23/2013 JOB NUMBER: T71013 TYPE OF TEST: VIBRATION
 TECHNICIAN: D. MEDLEY CUSTOMER: ES&S VOTING SYSTEMS TEST AREA: DYNAMICS

No.	Description	Manufacturer	Model	Serial #	WYLE #	RANGE	ACCURACY	Cal Date	Cal Due
1	ACCELEROMETER	ENDEVCO	7704A-50	13073	02600	50 pC/g / 20-5k1	±5%	8/14/2013	2/14/2014
2	ACCELEROMETER	ENDEVCO	7704A-50	12605	04867	50pC/g	±5%	8/14/2013	2/14/2014
3	CHARGE	ENDEVCO	2775A	EE24	112652	GAIN	1.5%	8/20/2013	2/16/2014
4	CHARGE	ENDEVCO	2775A	ED75	112653	GAIN	1.5%	8/20/2013	2/16/2014
5	DMM	FLUKE	45	5095170	114297	MULTI	CERT	6/25/2013	6/25/2014
6	DYN SIG	DATA PHYSICS CO.	70499	10004048	02760	MULTI	MFG	9/12/2012	9/12/2013

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: D. Medley CHECKED & RECEIVED BY: Michael D. Walker 8/23/13
 O.A.: Bondy Mace 8/23/13

WH-1029A,REV. APR'99

Page 1 of 1

WYLE LABORATORIES, INC.
 Huntsville Facility



INSTRUMENTATION EQUIPMENT SHEET

DATE: 8/19/2013 JOB NUMBER: T71013 TYPE OF TEST: TEMP
 TECHNICIAN: T TURNER CUSTOMER: ES&S TEST AREA: CHAMBER 16

No.	Description	Manufacturer	Model	Serial #	WYLE #	RANGE	ACCURACY	Cal Date	Cal Due
1	CHART RECORDER	HONEYWELL	DRT45AT-1111	0549Y5689061	110980	32 TO 131°F	0.5% FS	8/8/2013	8/8/2014
2	TEMP ALARM	THERMOTRON	THERM-ALARM	080	03379	TYPE T	±1°C	8/8/2013	8/8/2014
3	TEMP	THERMOTRON	4800	080	03378	-125-375°F	±2%	8/8/2013	8/8/2014

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: Travis Turner 8/19/13 CHECKED & RECEIVED BY: [Signature] 08/19/2013
 Q.A.: [Signature] 8/19/2013

WH-1029A, REV. APR'99 Page 1 of 1

WYLE LABORATORIES, INC.
 Huntsville Facility



INSTRUMENTATION EQUIPMENT SHEET

DATE: 8/21/2013 JOB NUMBER: T71013.01 TYPE OF TEST: COLD TEMP
TECHNICIAN: T.J. PARCUS CUSTOMER: ES&S TEST AREA: CHAMBER#16

No.	Description	Manufacturer	Model	Serial #	WYLE #	RANGE	ACCURACY	Cal Date	Cal Due
1	CHART RECORDER	HONEYWELL	DRT45AT-1111	0549Y568906	110980	32 TO 131°F	0.5% FS	8/8/2013	8/8/2014
2	TEMP ALARM	THERMOTRON	THERM-ALARM	jsn	03379	TYPE T	±1°C	8/8/2013	8/8/2014
3	TEMP	THERMOTRON	4800	msn	03378	-125-173°F	±2%	8/8/2013	8/8/2014

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: Jay Parcus 8/21/2013 CHECKED & RECEIVED BY: [Signature] 8/21/13

Q.A.I. [Signature] 8/21/2013

WH-1029A,REV.APR99

Page 1 of 1

WYLE LABORATORIES, INC.
Huntsville Facility



INSTRUMENTATION EQUIPMENT SHEET

DATE: 8/7/2013 JOB NUMBER: T71013 TYPE OF TEST: TEMP-HUM
TECHNICIAN: T.J.PARCUS CUSTOMER: ES&S TEST AREA: CHAMBER#2

No	Description	Manufacturer	Model	Serial #	WYLE #	RANGE	ACCURACY	Cal Date	Cal Due
1	HUMIDITY/TEMP	VAISALA	HM315	111410005	01610	MULTI	MFG	3/4/2013	9/4/2013
2	TEMP	THERMOTRON	SE12005	28417	114758	-70-180°C	0.3°C	3/13/2013	3/13/2014
3	TEMP RECORDER	HONEYWELL	DR4500A	9829V8369829	114837	-184-371°C	±0.1°C	3/13/2013	3/13/2014

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: Jay Dene 8/7/2013 CHECKED & RECEIVED BY: J. Clark 8/7/2013
Q.A.: J. Johnson 8/7/13

WH-1029A,REV,APR99

Page 1 of 1

WYLE LABORATORIES, INC.
Huntsville Facility



INSTRUMENTATION EQUIPMENT SHEET

DATE: 8/26/2013 JOB NUMBER: T71013 TYPE OF TEST: TEMP POWER
TECHNICIAN: LARRY IVEY CUSTOMER: ES&S TEST AREA: ENV CHAMBER 51A

No.	Description	Manufacturer	Model	Serial #	WYLE #	RANGE	ACCURACY	Cal Date	Cal Due
1	POWER SOURCE	CALIFORNIA INST	1251RP/IF	106361	117347	0-270VAC RMS	1%	2/20/2013	2/20/2014
2	TEMP	MICRISTAR	82B-B11	10033	108416	-400-700°F	1%FS	12/5/2012	12/5/2013
3	TEMP IND	NEWPORT	Q2001TC	N/A	116533	TYPE T	±1.5%	12/5/2012	12/5/2013
4	TEMP RECORDER	HONEYWELL	DR450T	924408505000	109830	-200-600°F	1°F	12/5/2012	12/5/2013

This is to certify that the above instruments were calibrated using state-of-the-art techniques with standards whose calibration is traceable to the National Institute of Standards and Technology.

INSTRUMENTATION: *Langberg 8/26/13* CHECKED & RECEIVED BY: *Michael S. Walker 8/26/13*

WH-1029A.REV.APR'99 Q.A.: *J. Hall 8/26/13*

WYLE LABORATORIES, INC.
Huntsville Facility