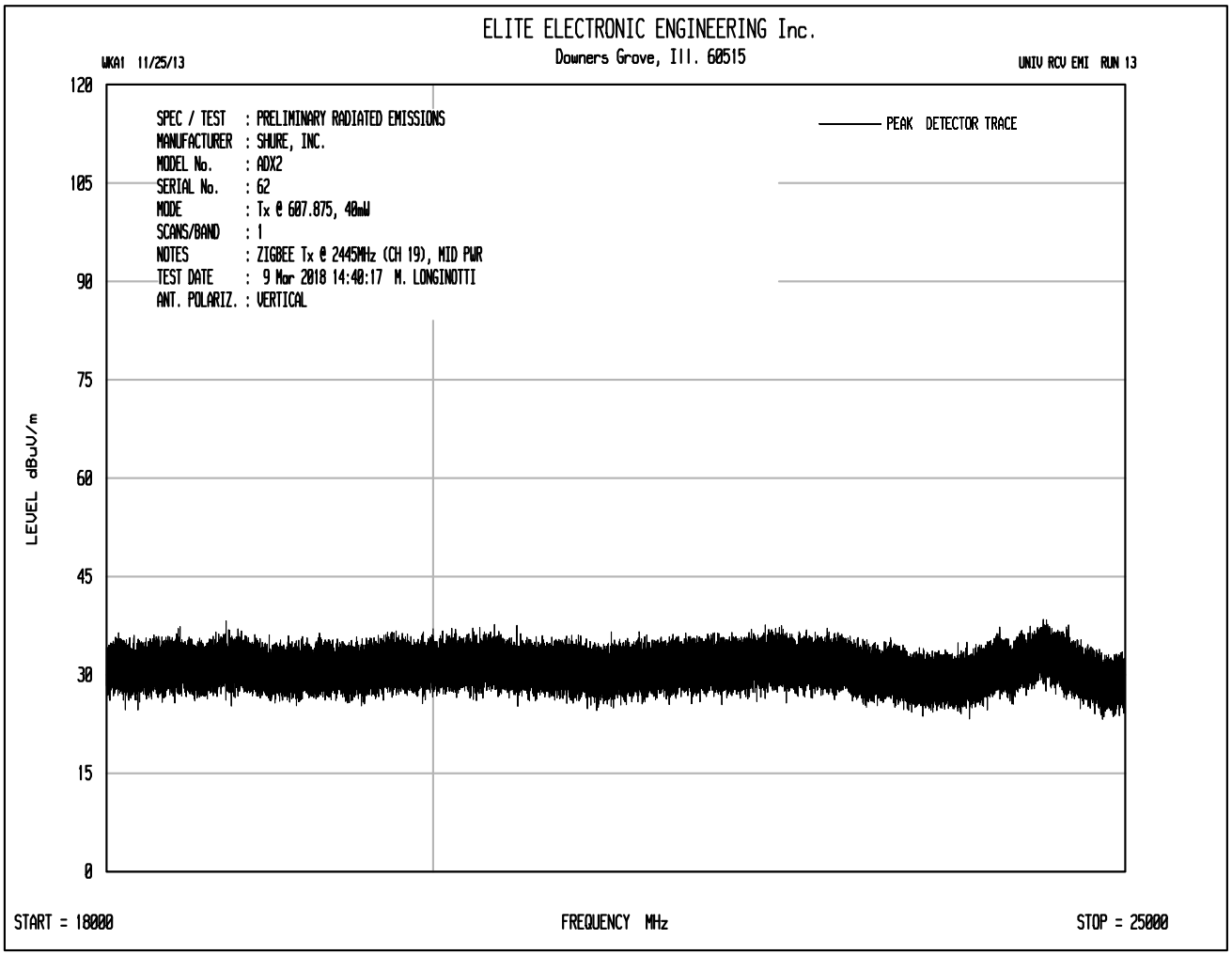
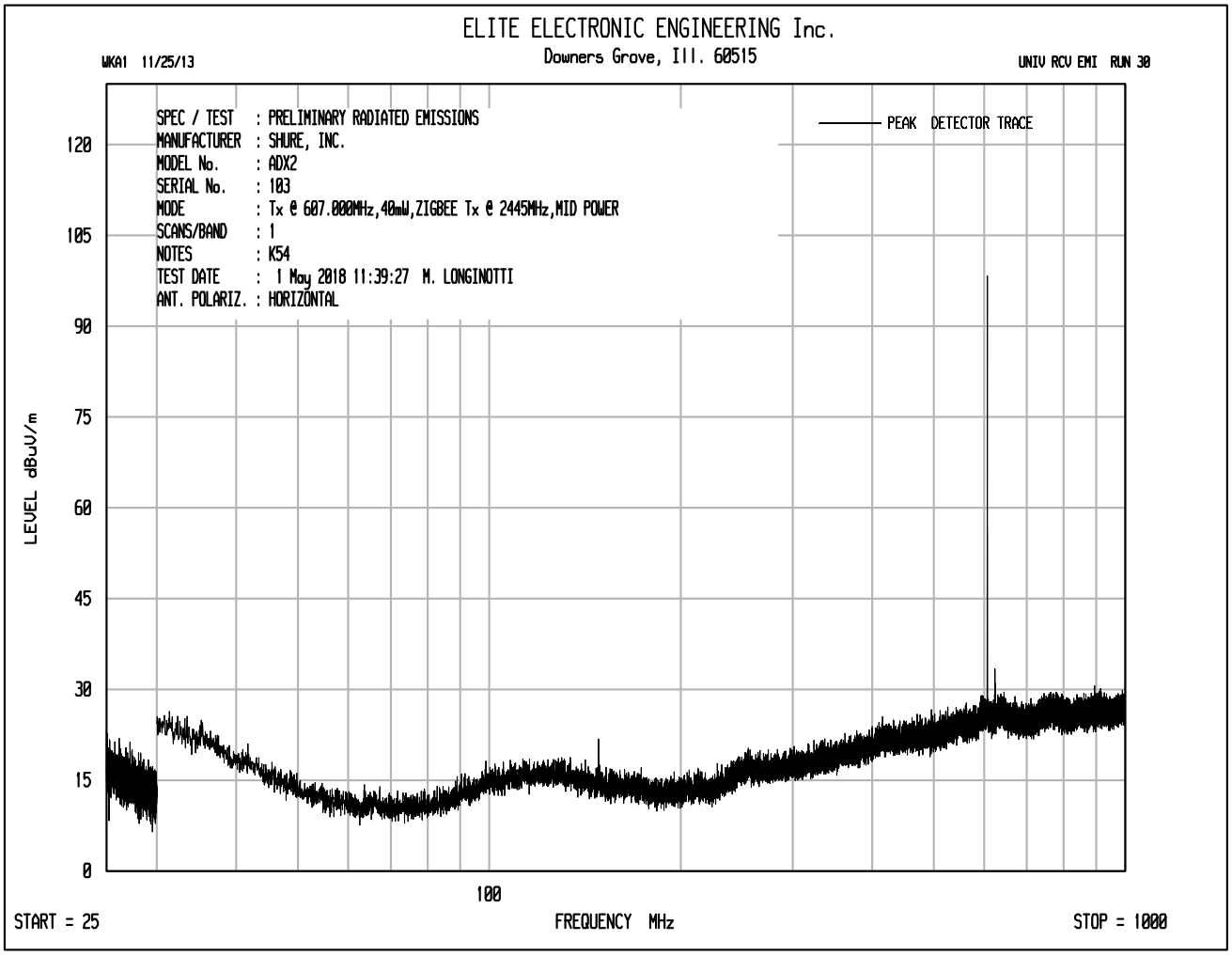
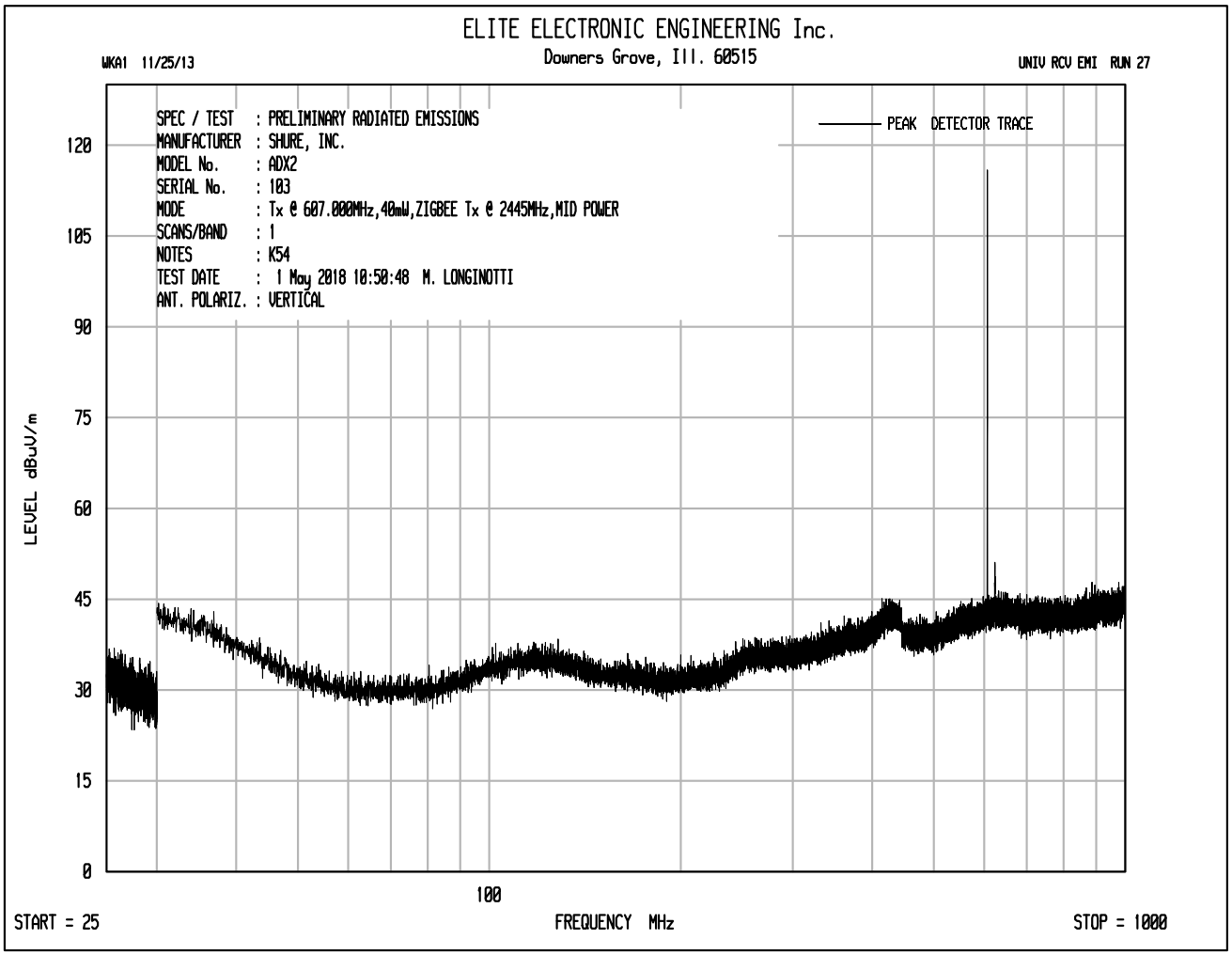
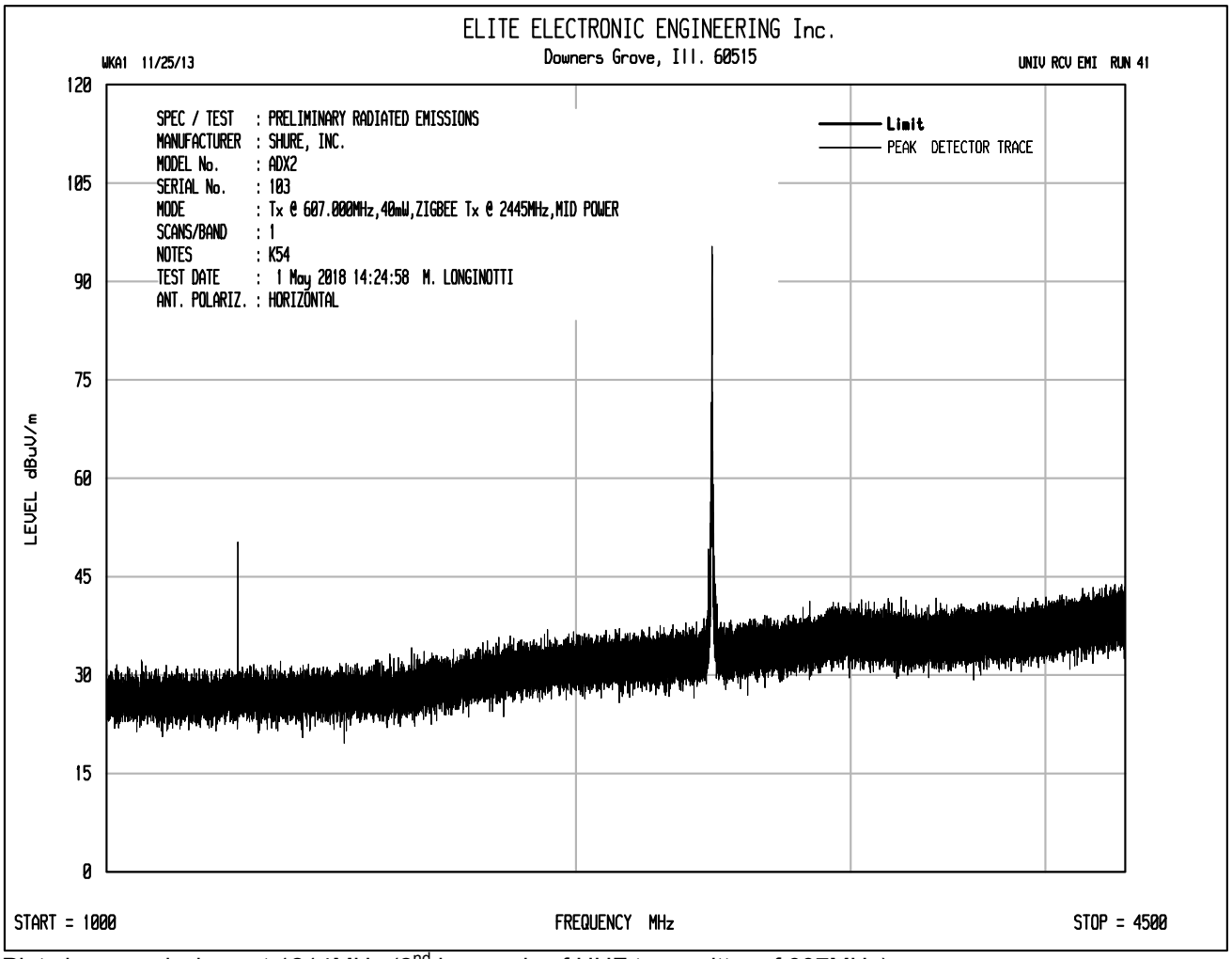

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 11/25/13
UNIV RCV EMI RUN 13
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : SHURE, INC.
MODEL No. : ADX2
SERIAL No. : 62
MODE : Tx @ 607.875, 40mW
SCANS/BAND : 1
NOTES : ZIGBEE Tx @ 2445MHz (CH 19), MID PWR
TEST DATE : 9 Mar 2018 14:40:17 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
120
105
90
75
60
45
30
15
0
LEVEL dBuV/m
START = 18000
FREQUENCY MHz
STOP = 25000



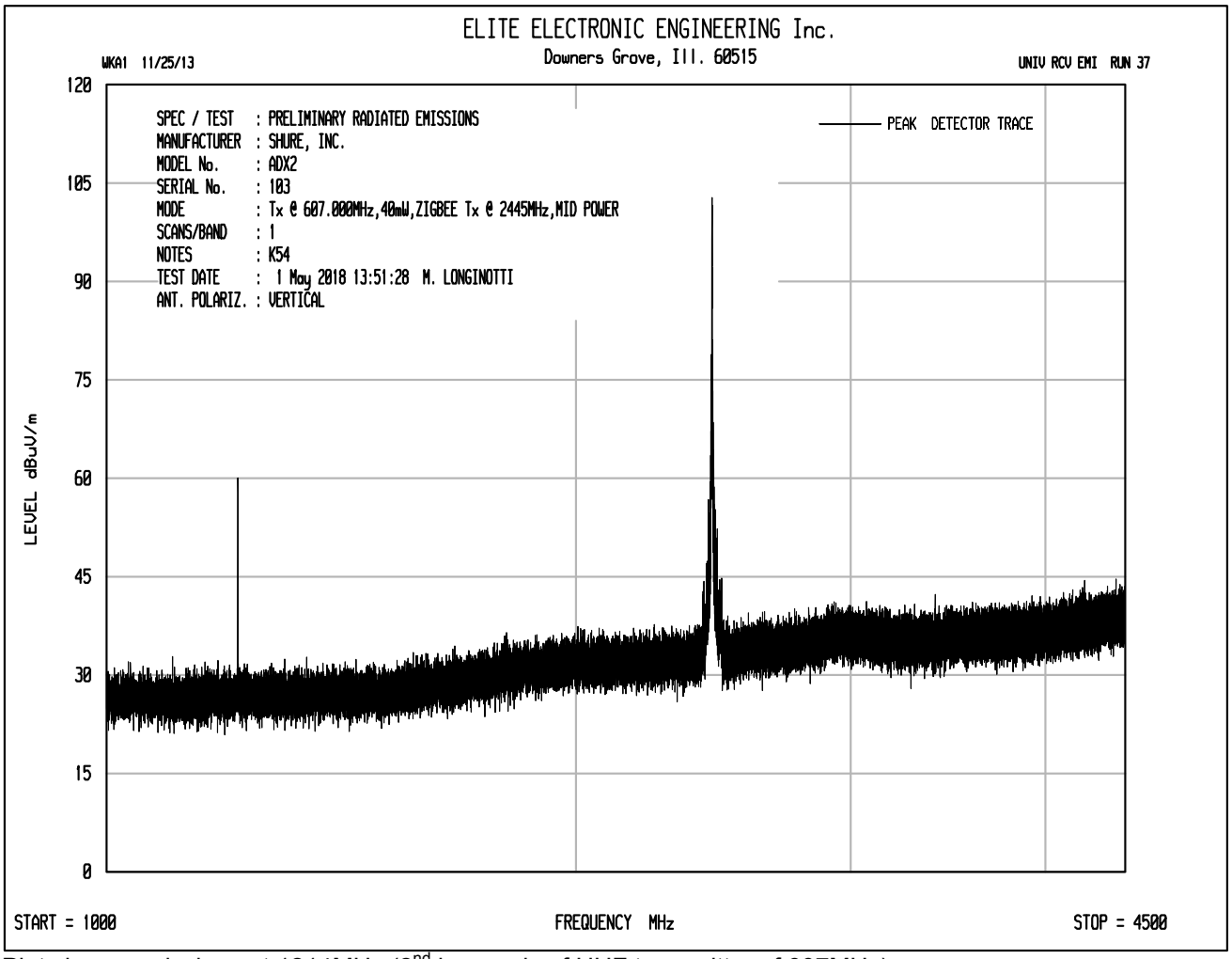

Plot shows emissions at 607.000MHz from UHF transmitter.
Plot shows emissions at 624MHz (Intermodulation product of 2445MHz – 3 x 606MHz)



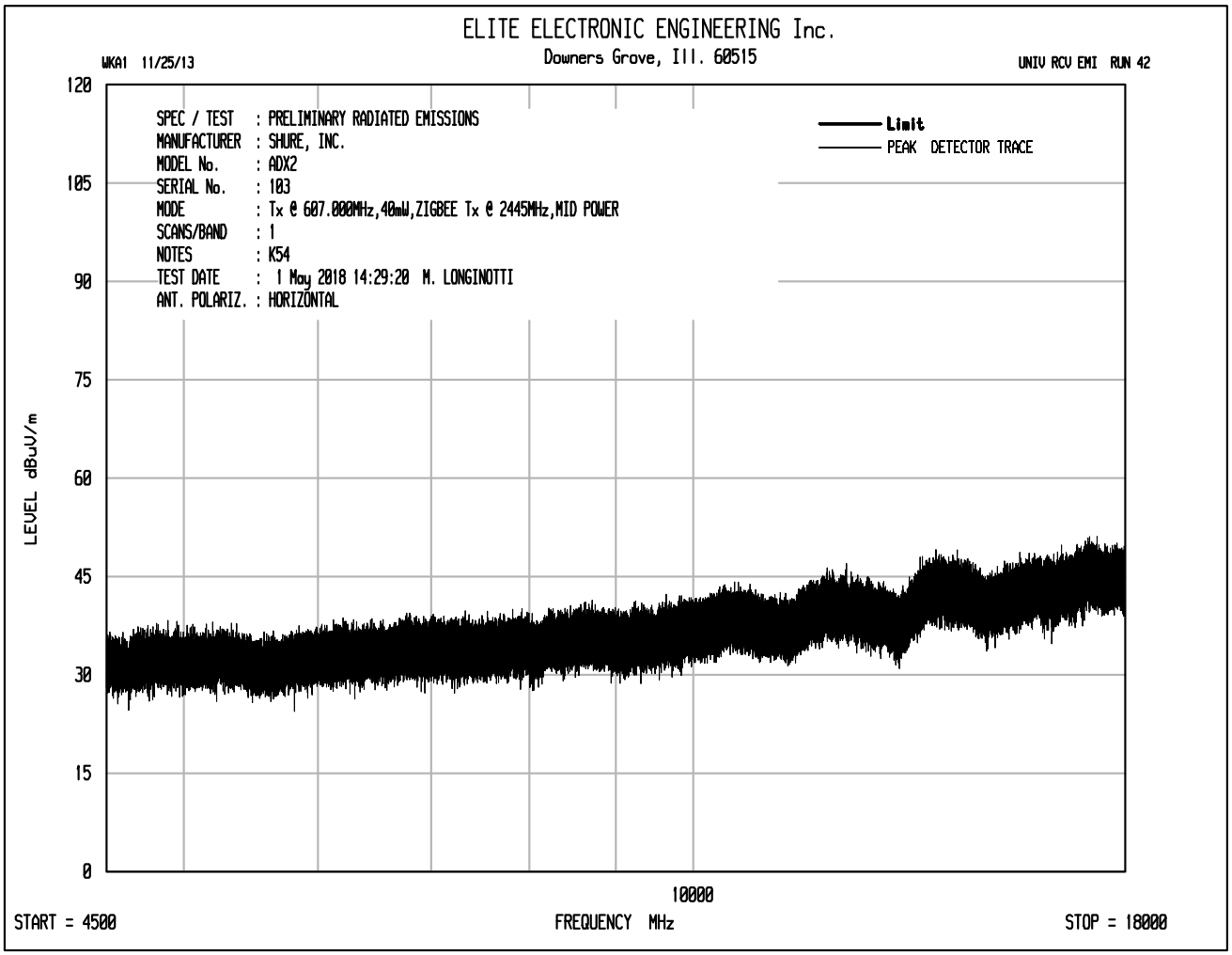

Plot shows emissions at 607.000MHz from UHF transmitter.
Plot shows emissions at 624MHz (Intermodulation product of 2445MHz – 3 x 606MHz)

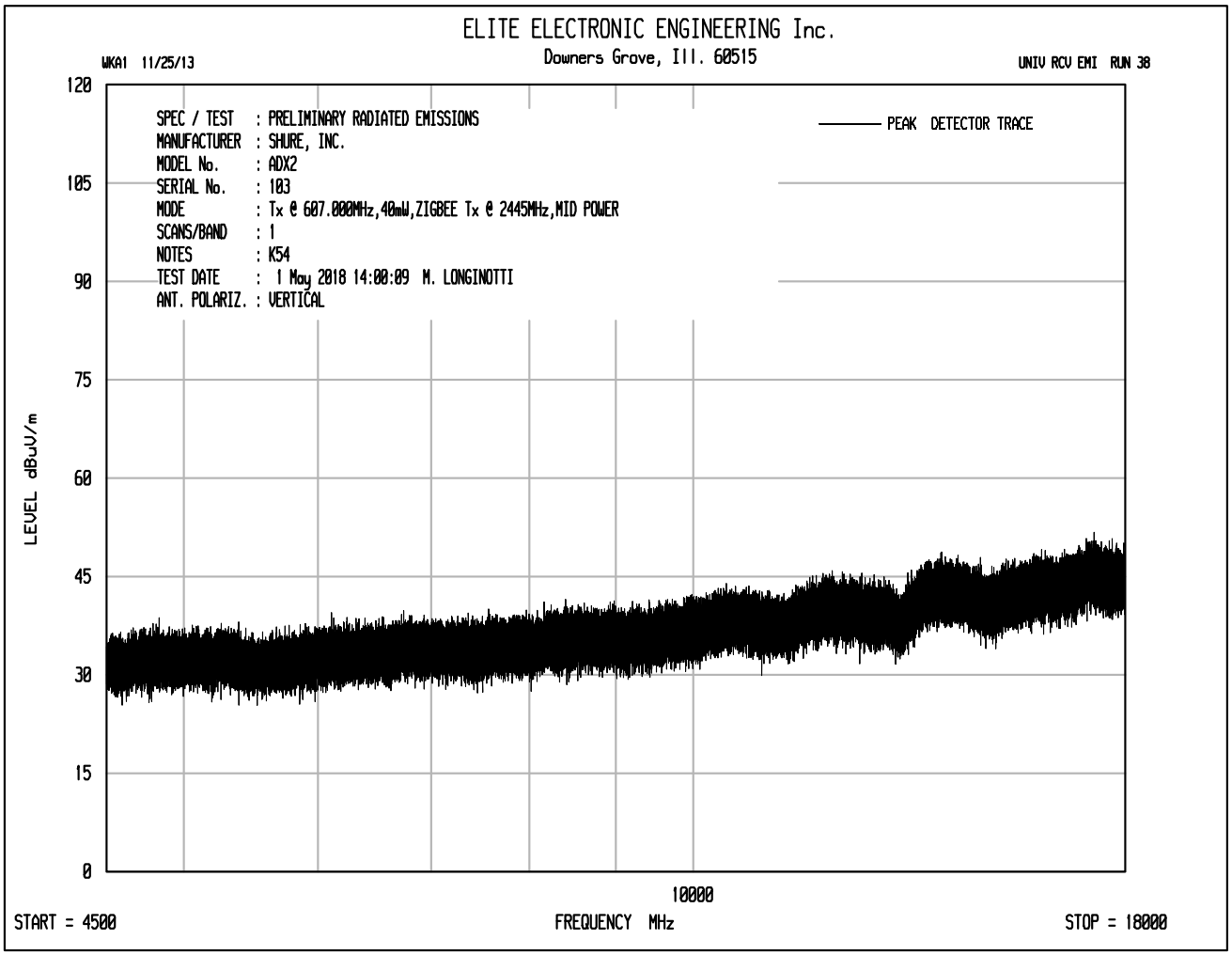


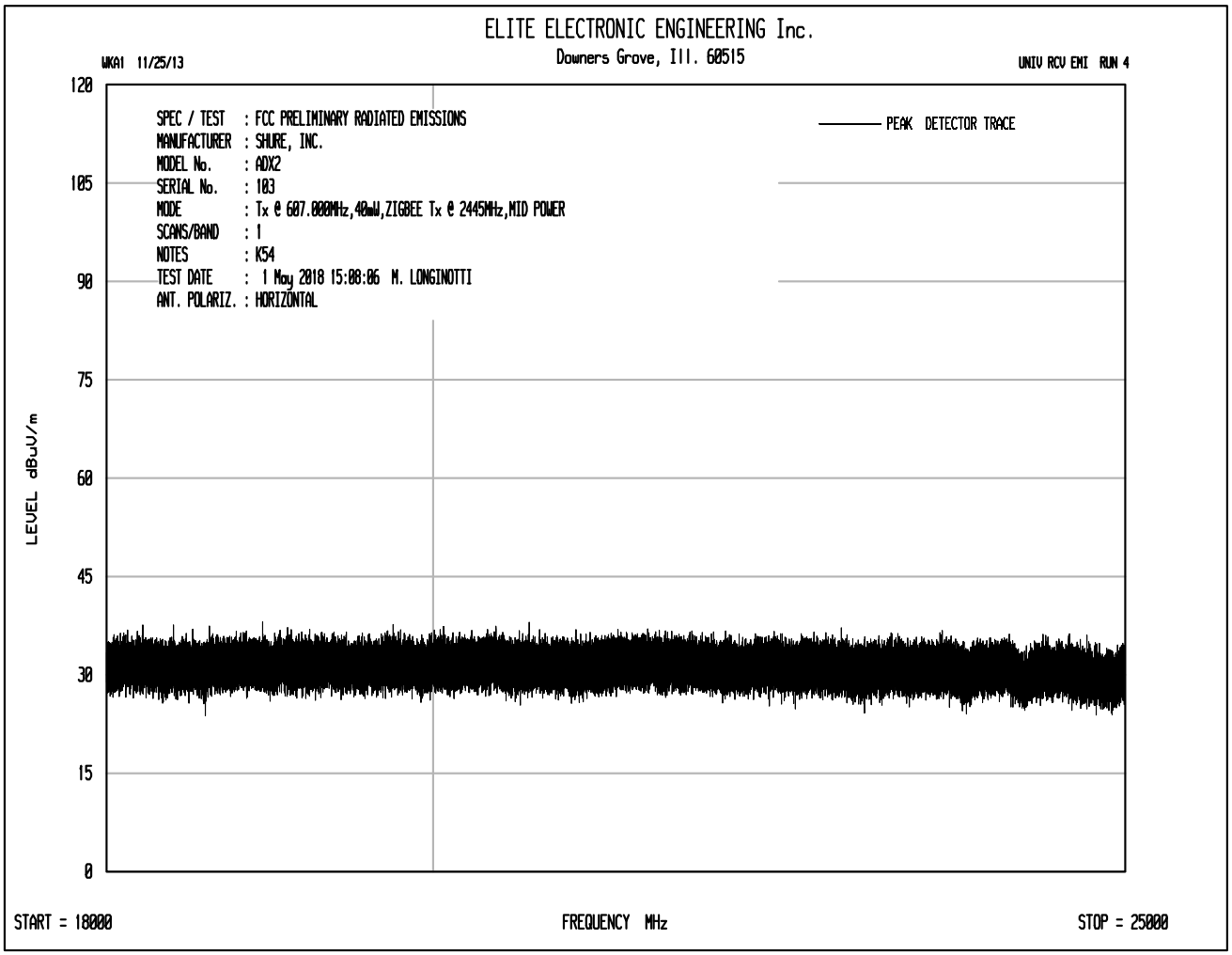

Plot shows emissions at 1214MHz (2nd harmonic of UHF transmitter of 607MHz).
Plot shows emissions at 2445MHz from Zigbee transmitter.

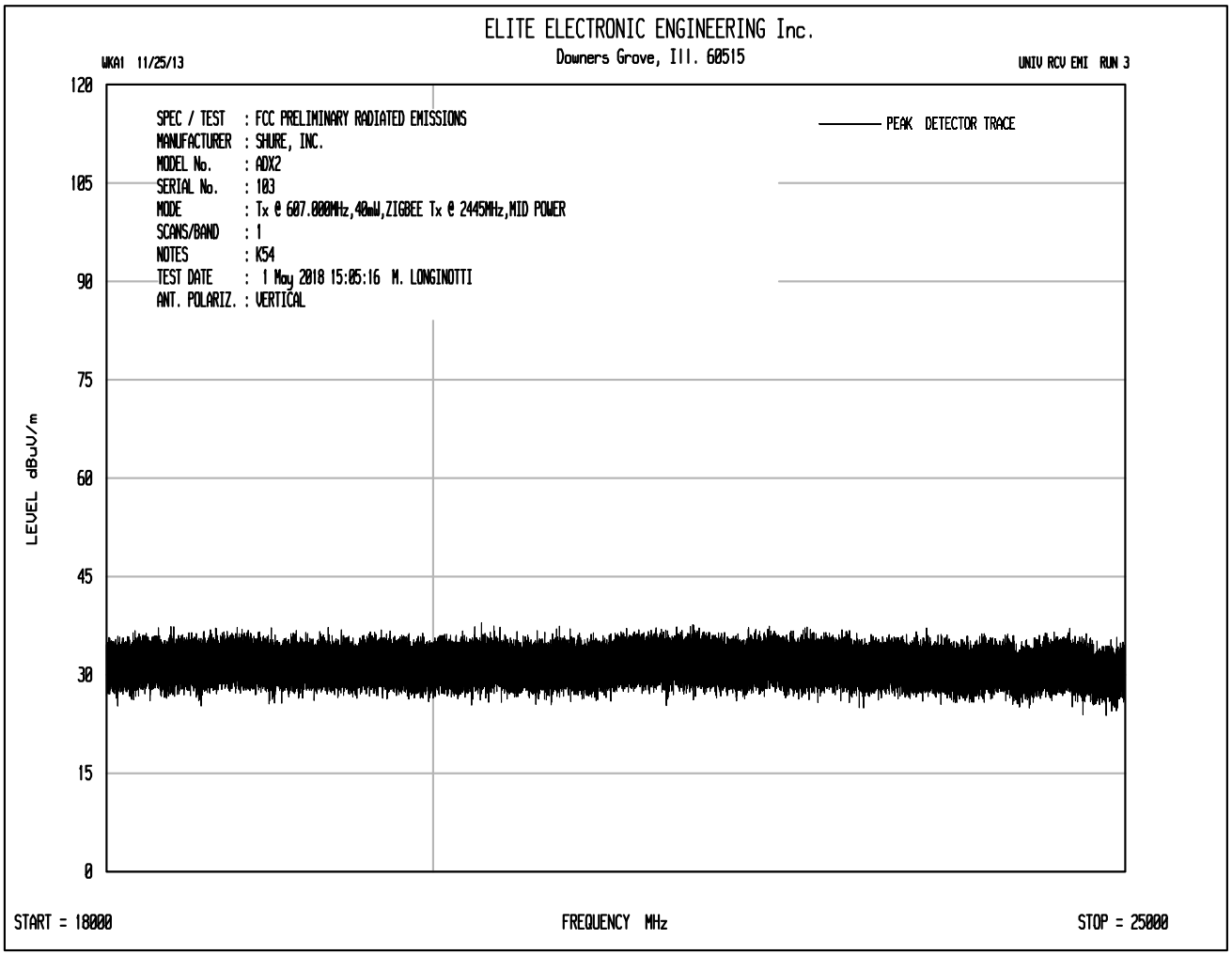



Plot shows emissions at 1214MHz (2nd harmonic of UHF transmitter of 607MHz).
Plot shows emissions at 2445MHz from Zigbee transmitter.


ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 11/25/13
UNIV RCV EMI RUN 42
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : SHURE, INC.
MODEL No. : ADX2
SERIAL No. : 103
MODE : Tx @ 607.000MHz,40mW,ZIGBEE Tx @ 2445MHz,MID POWER
SCANS/BAND : 1
NOTES : K54
TEST DATE : 1 May 2018 14:29:20 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
Limit
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
10000
START = 4500
FREQUENCY MHz
STOP = 18000


ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 11/25/13
UNIV RCV EMI RUN 38
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : SHURE, INC.
MODEL No. : ADX2
SERIAL No. : 103
MODE : Tx @ 607.000MHz,40mW,ZIGBEE Tx @ 2445MHz,MID POWER
SCANS/BAND : 1
NOTES : K54
TEST DATE : 1 May 2018 14:00:09 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
10000
START = 4500
FREQUENCY MHz
STOP = 18000


ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 11/25/13
UNIV RCV EMI RUN 4
SPEC / TEST : FCC PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : SHURE, INC.
MODEL No. : ADX2
SERIAL No. : 103
MODE : Tx @ 687.000MHz,40mW,ZIGBEE Tx @ 2445MHz,MID POWER
SCANS/BAND : 1
NOTES : K54
TEST DATE : 1 May 2018 15:08:06 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

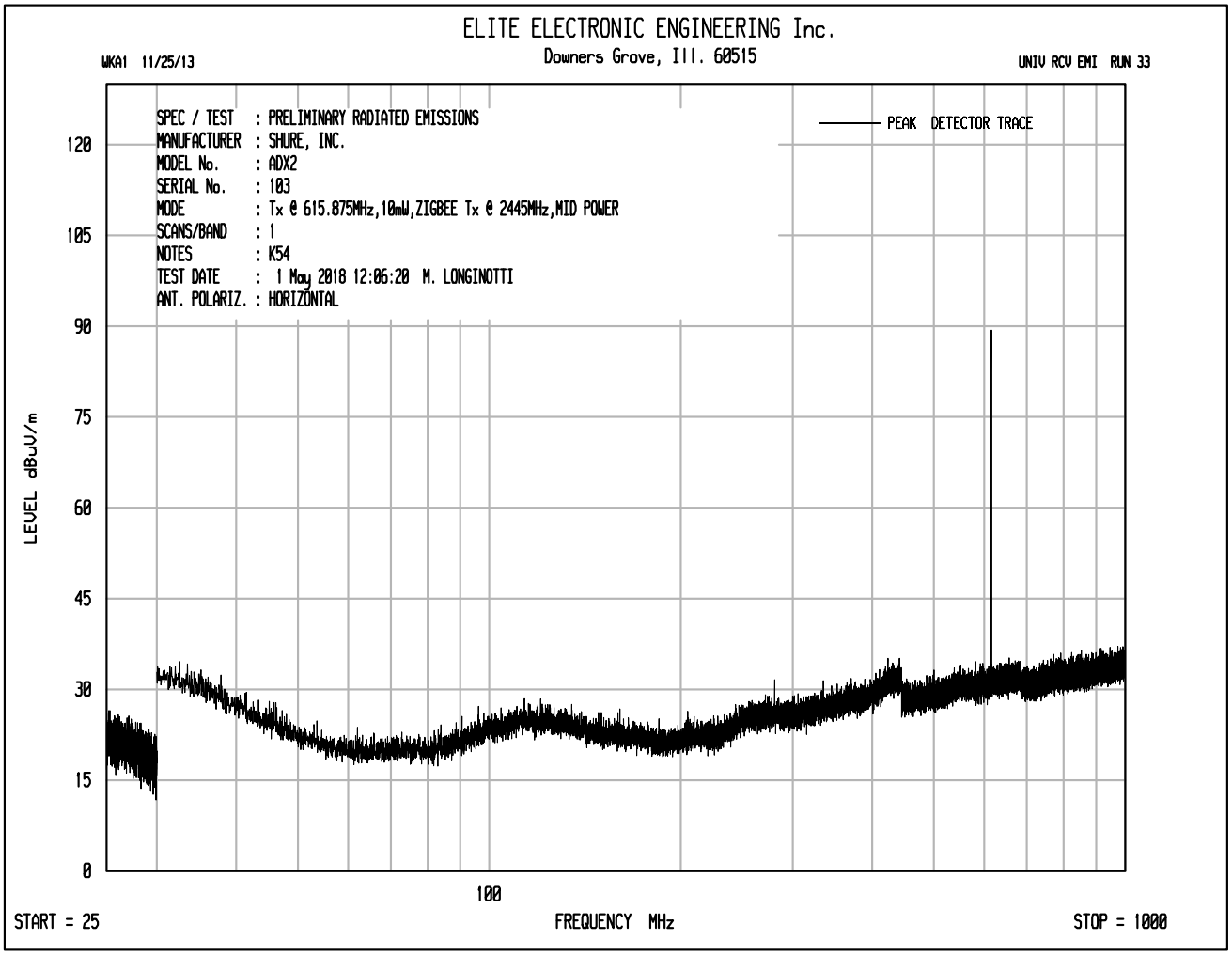

ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 11/25/13
UNIV RCV EMI RUN 3
SPEC / TEST : FCC PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : SHURE, INC.
MODEL No. : ADX2
SERIAL No. : 103
MODE : Tx @ 607.000MHz,40mW,ZIGBEE Tx @ 2445MHz,MID POWER
SCANS/BAND : 1
NOTES : K54
TEST DATE : 1 May 2018 15:05:16 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

MANUFACTURER : Shure Incorporated
MODEL NO. : ADX2
SERIAL NO. : 103
SPECIFICATION : FCC 74.861(e)(7) Intermodulation Spurious Radiated Emissions
DATE : May 1, 2018
MODE : UHF Tx @ 607.000MHz, 40mW, Zigbee Transmit at 2440MHz,
: mid power
UNIT : K54
EQUIPMENT USED : NTA2,RBG2,GRE2,GSE0,NWQ0,NWQ2
NOTES : Average Detector

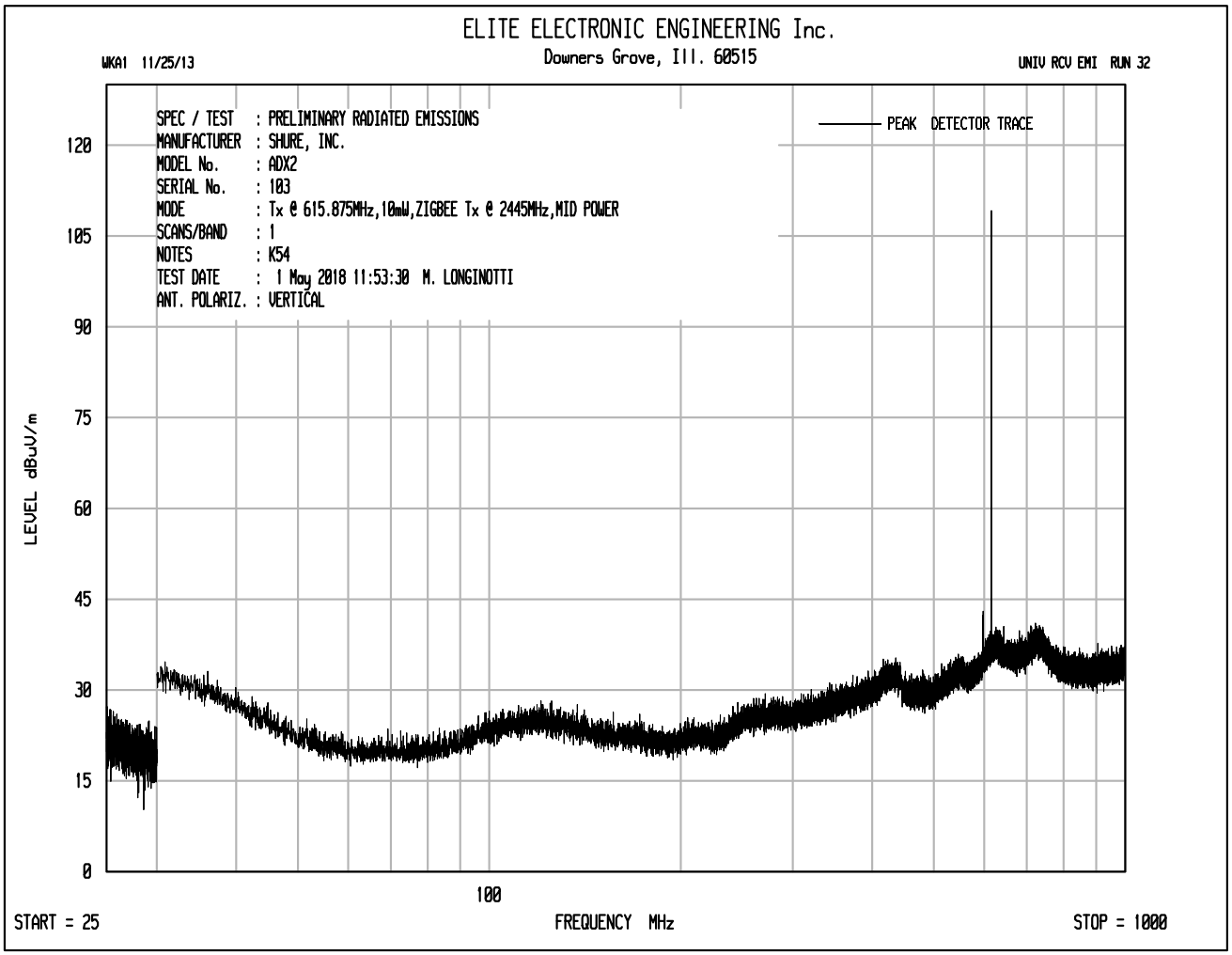
| Freq. MHz | Ant Pol | Meter Reading (dBuV) | Ambient | Matched Sig. Gen. Reading (dBm) | Equivalent Antenna Gain (dB) | Cable Loss (dB) | ERP (dBm) | Limit dBm | Margin dB |
|---|---|---|---|---|---|---|---|---|---|
| 624.00 | H | 0.2 | | -73.8 | 0.0 | 1.7 | -75.5 | -54.0 | -21.5 |
| 624.00 | V | 15.8 | | -59.1 | 0.0 | 1.7 | -60.8 | -54.0 | -6.8 |

ERP (dBm) = Matched Sig. (dBm) + Equivalent Antenna Gain (dB) – Cable Loss (dB)

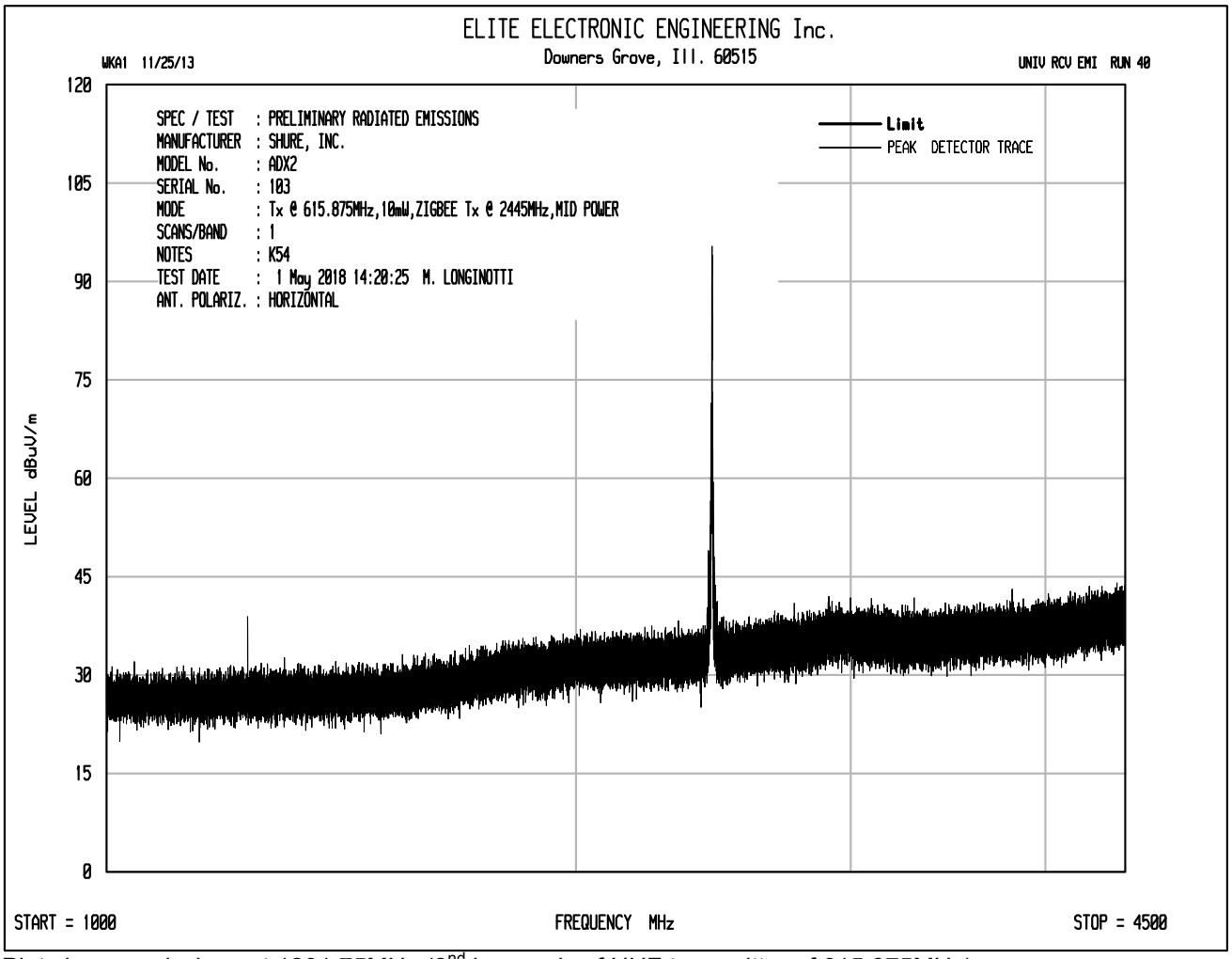
Checked By: MARK E. LONGINOTTI
Mark E. Longinotti



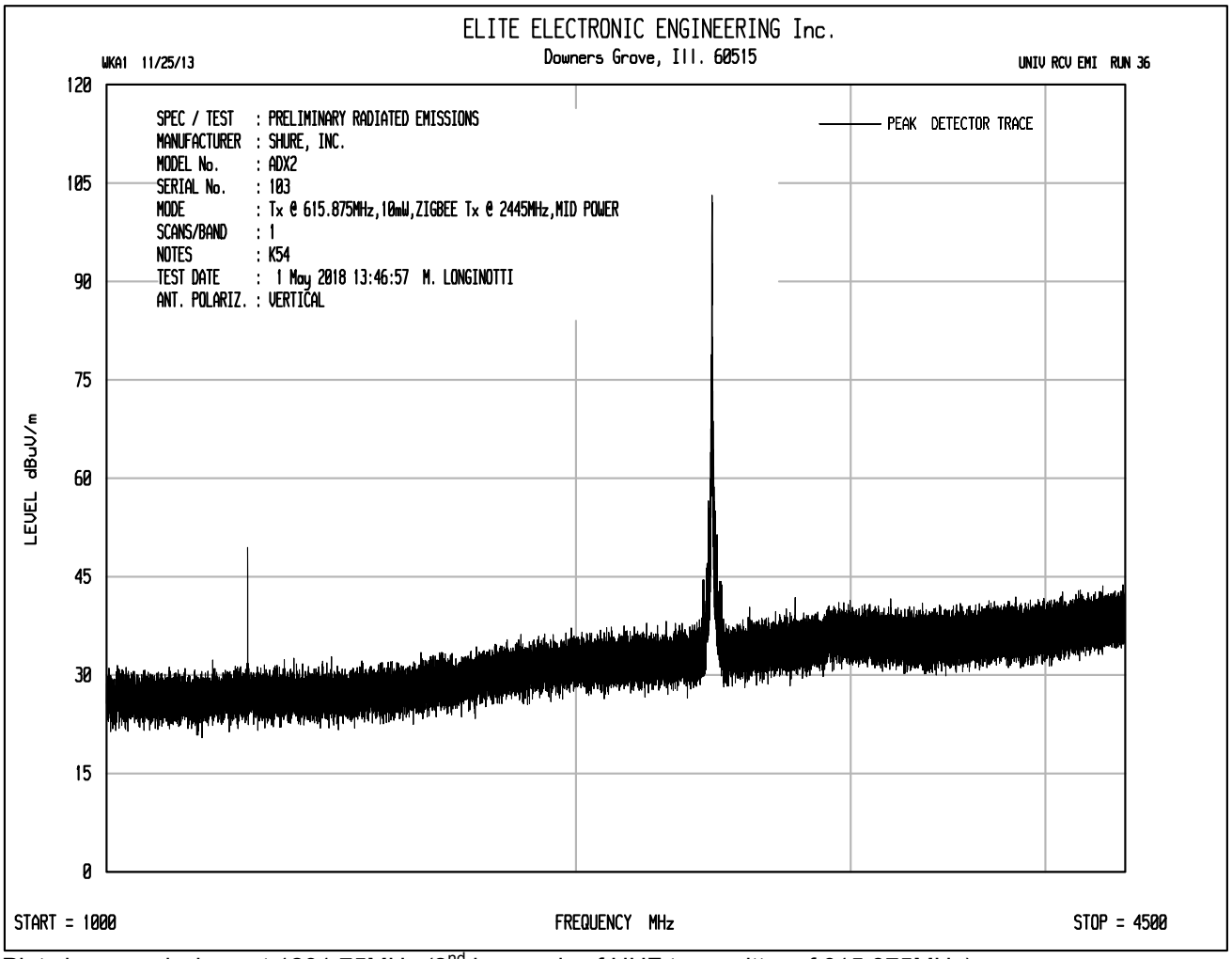

Plot shows emissions at 615.875MHz from UHF transmitter.



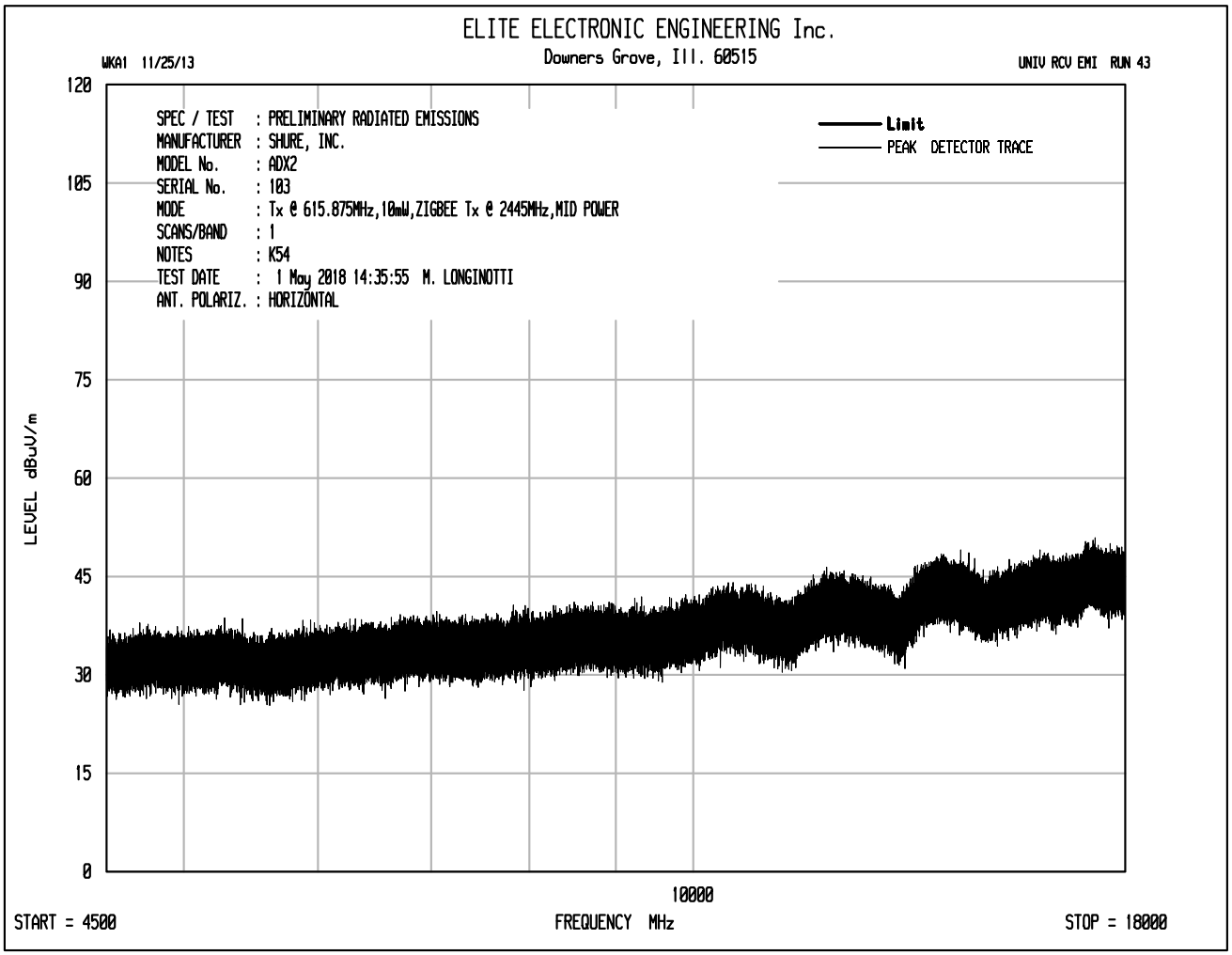

Plot shows emissions at 615.875MHz from UHF transmitter.
Plot shows emissions at 597.375MHz (Intermodulation product of 2445MHz – 3 x 615.875MHz)

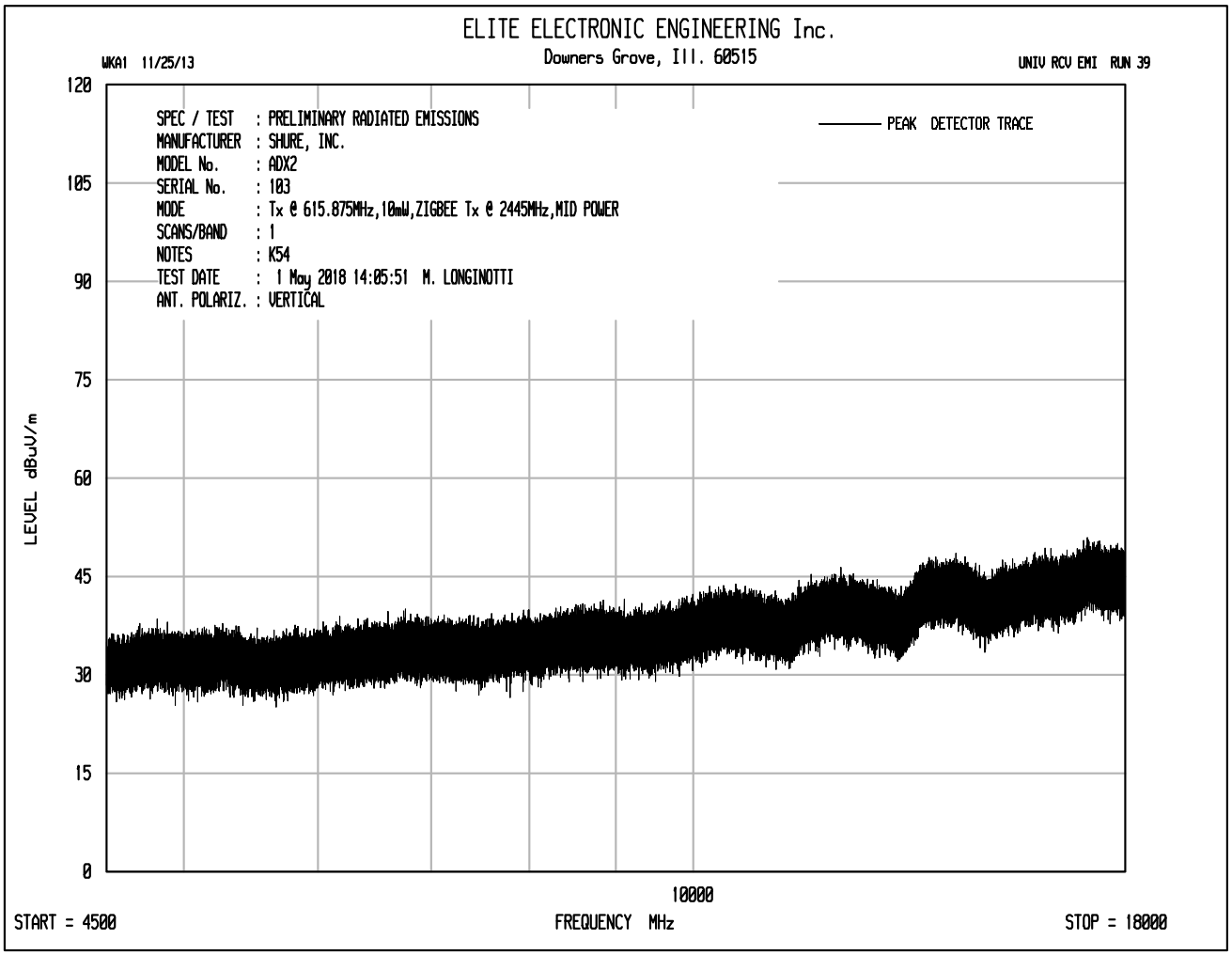


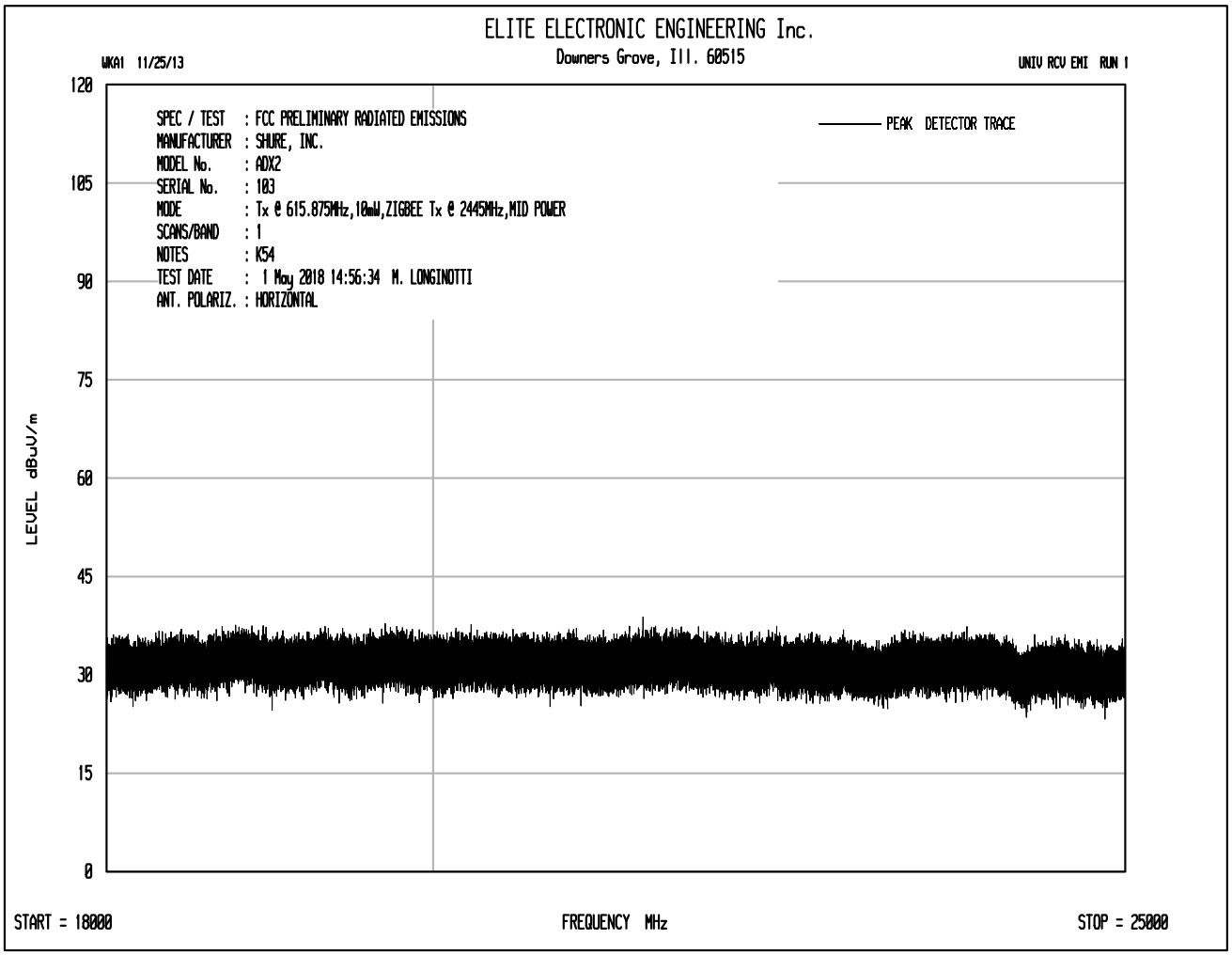

Plot shows emissions at 1231.75MHz (2nd harmonic of UHF transmitter of 615.875MHz).
Plot shows emissions at 2445MHz from Zigbee transmitter.

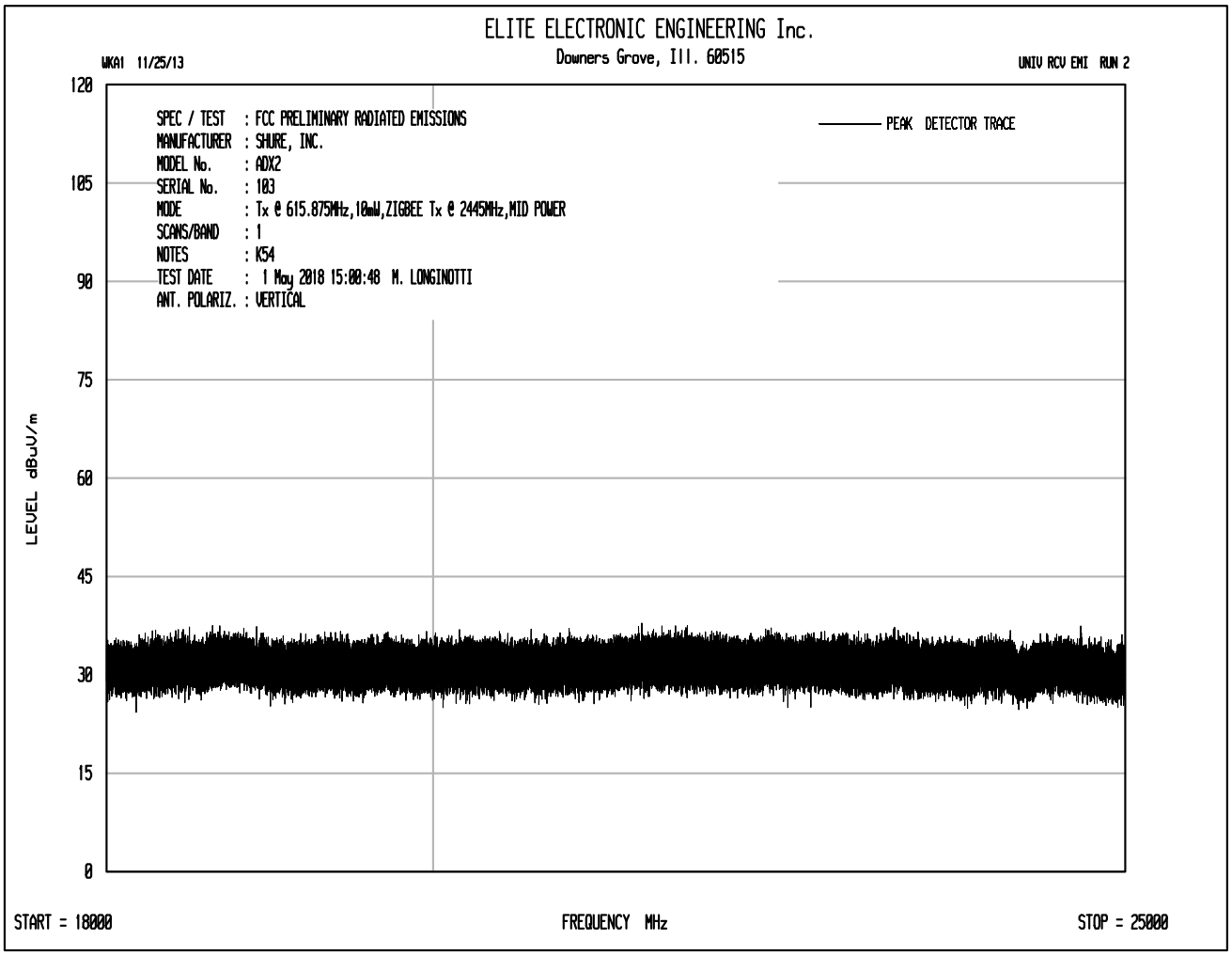



Plot shows emissions at 1231.75MHz (2nd harmonic of UHF transmitter of 615.875MHz).
Plot shows emissions at 2445MHz from Zigbee transmitter.


ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 11/25/13
UNIV RCV EMI RUN 43
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : SHURE, INC.
MODEL No. : ADX2
SERIAL No. : 103
MODE : Tx @ 615.875MHz,10mW,ZIGBEE Tx @ 2445MHz,MID POWER
SCANS/BAND : 1
NOTES : K54
TEST DATE : 1 May 2018 14:35:55 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
Limit
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
10000
START = 4500
FREQUENCY MHz
STOP = 18000


ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 11/25/13
UNIV RCV EMI RUN 39
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : SHURE, INC.
MODEL No. : ADX2
SERIAL No. : 103
MODE : Tx @ 615.875MHz,10mW,ZIGBEE Tx @ 2445MHz,MID POWER
SCANS/BAND : 1
NOTES : K54
TEST DATE : 1 May 2018 14:05:51 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
10000
START = 4500
FREQUENCY MHz
STOP = 18000


ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 11/25/13
UNIV RCV EMI RUN 1
SPEC / TEST : FCC PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : SHURE, INC.
MODEL No. : ADX2
SERIAL No. : 103
MODE : Tx @ 615.875MHz,10mW,ZIGBEE Tx @ 2445MHz,MID POWER
SCANS/BAND : 1
NOTES : K54
TEST DATE : 1 May 2018 14:56:34 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000


ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 11/25/13
UNIV RCV EMI RUN 2
SPEC / TEST : FCC PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : SHURE, INC.
MODEL No. : ADX2
SERIAL No. : 103
MODE : Tx @ 615.875MHz,10mW,ZIGBEE Tx @ 2445MHz,MID POWER
SCANS/BAND : 1
NOTES : K54
TEST DATE : 1 May 2018 15:08:48 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000

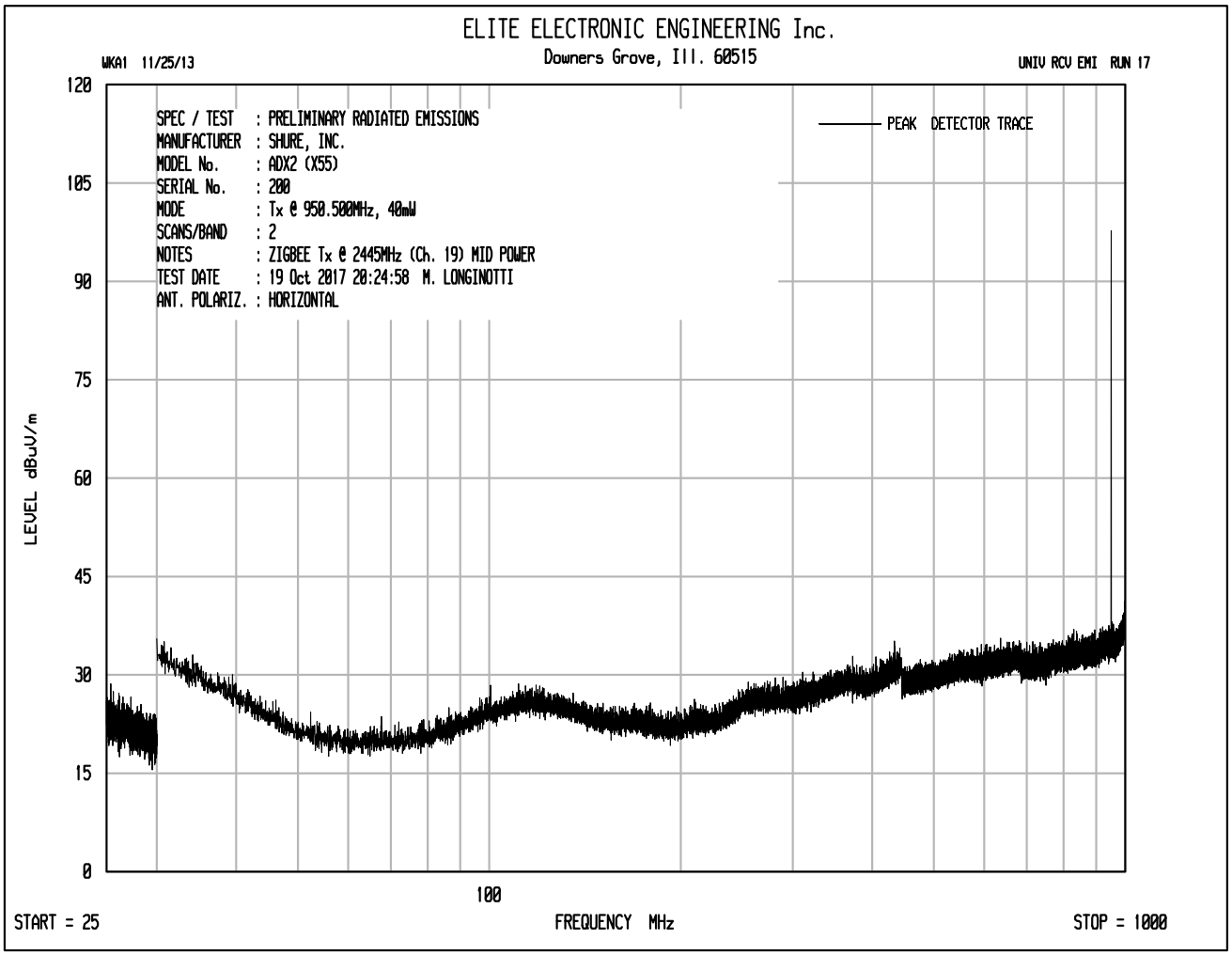
MANUFACTURER : Shure Incorporated
MODEL NO. : ADX2
SERIAL NO. : 103
SPECIFICATION : FCC 15.236(g) Intermodulation Spurious Radiated Emissions
DATE : May 1, 2018
MODE : UHF Tx @ 615.875MHz, 10mW, Zigbee Transmit at 2440MHz,
: mid power
UNIT : K54
EQUIPMENT USED : NTA2,RBG2,GRE2,GSE0,NWQ0,NWQ2
NOTES : Quasi-peak detector

| Freq. MHz | Ant Pol | Meter Reading (dBuV) | Ambient | Matched Sig. Gen. Reading (dBm) | Equivalent Antenna Gain (dB) | Cable Loss (dB) | ERP (dBm) | Limit dBm | Margin dB |
|---|---|---|---|---|---|---|---|---|---|
| 597.38 | H | -1.7 | | -85.6 | 0.0 | 1.7 | -87.3 | -54.0 | -33.3 |
| 597.38 | V | 14.2 | | -59.8 | 0.0 | 1.7 | -61.5 | -54.0 | -7.5 |

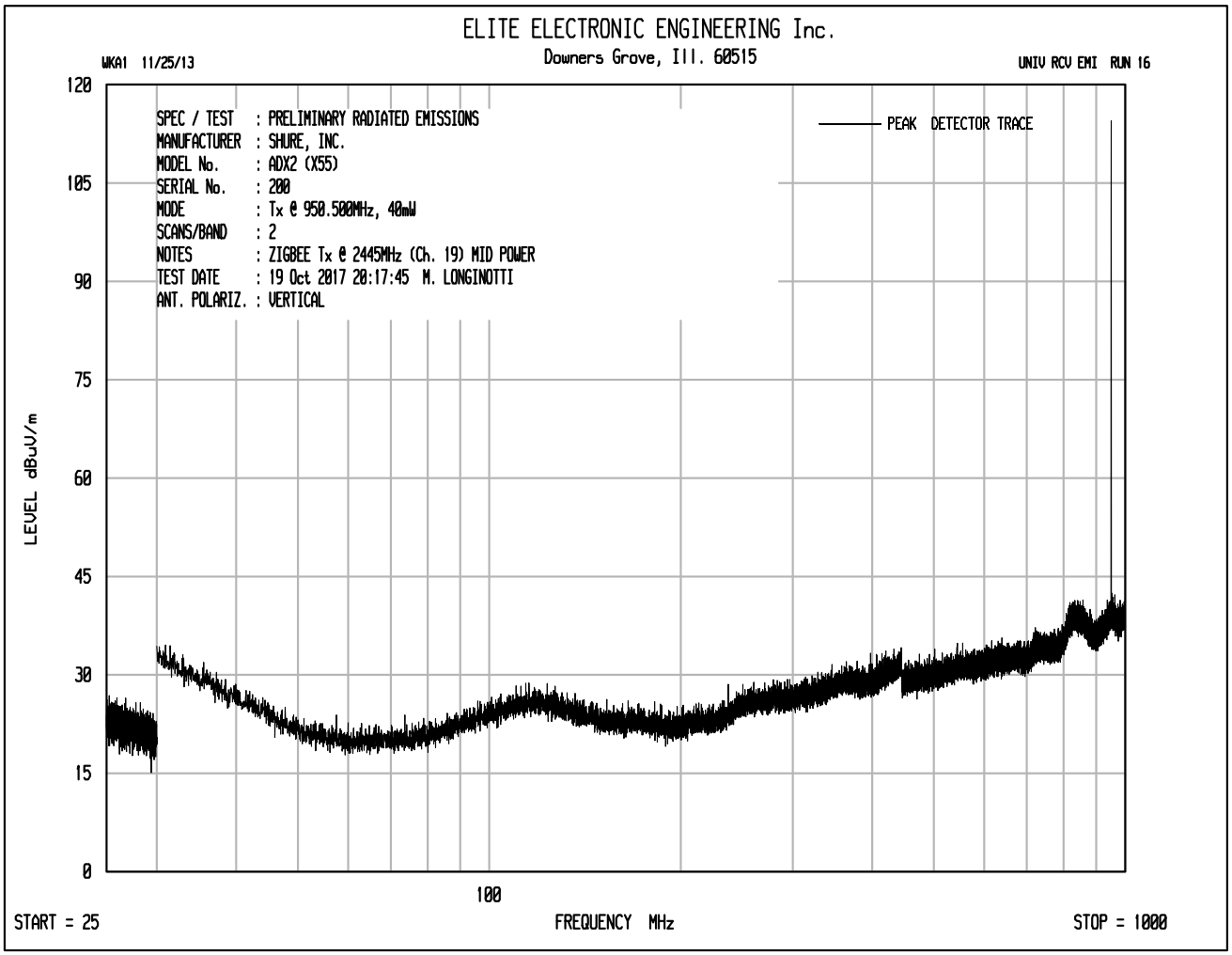
ERP (dBm) = Matched Sig. (dBm) + Equivalent Antenna Gain (dB) – Cable Loss (dB)

Checked By: MARK E. LONGINOTTI

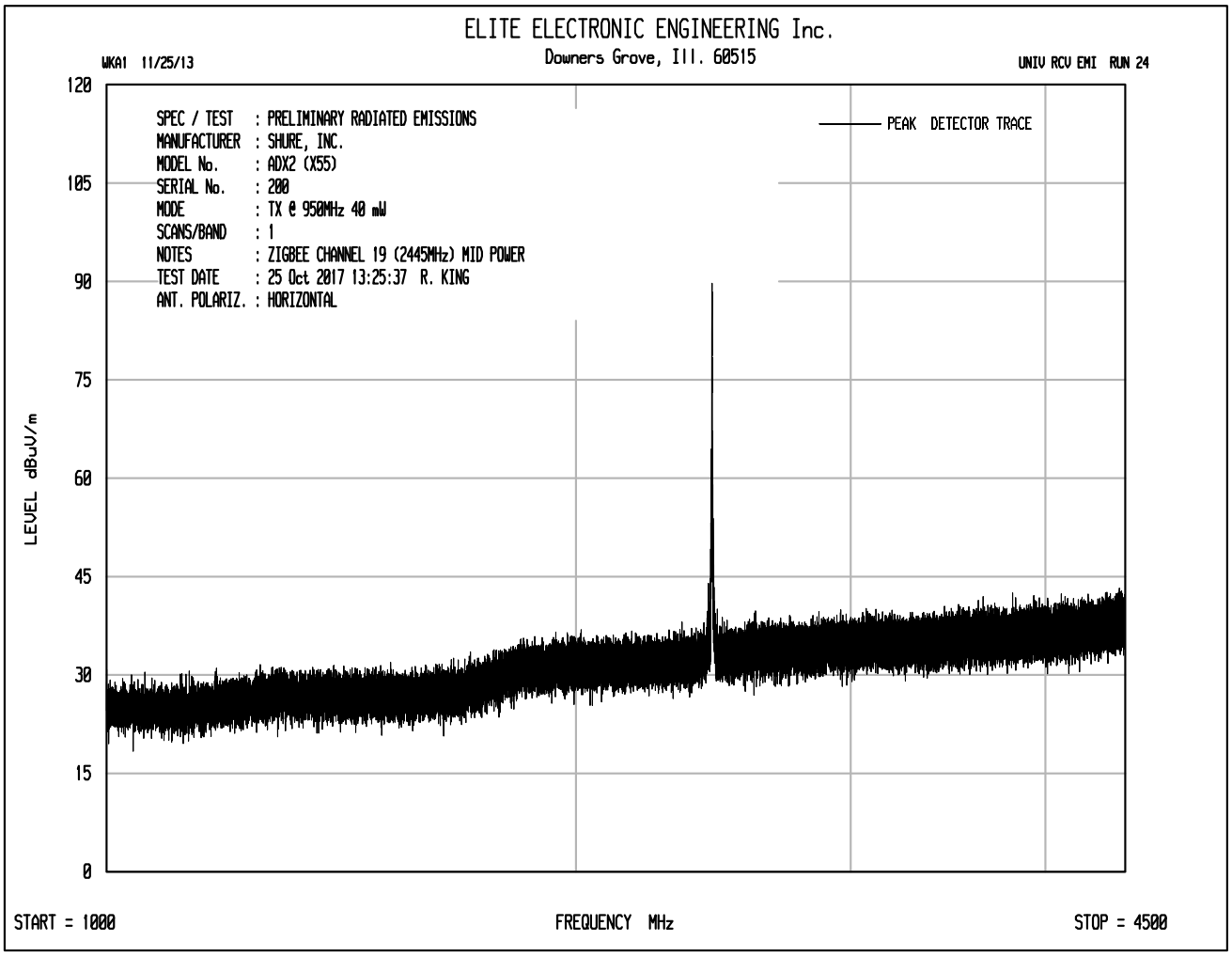
Mark E. Longinotti



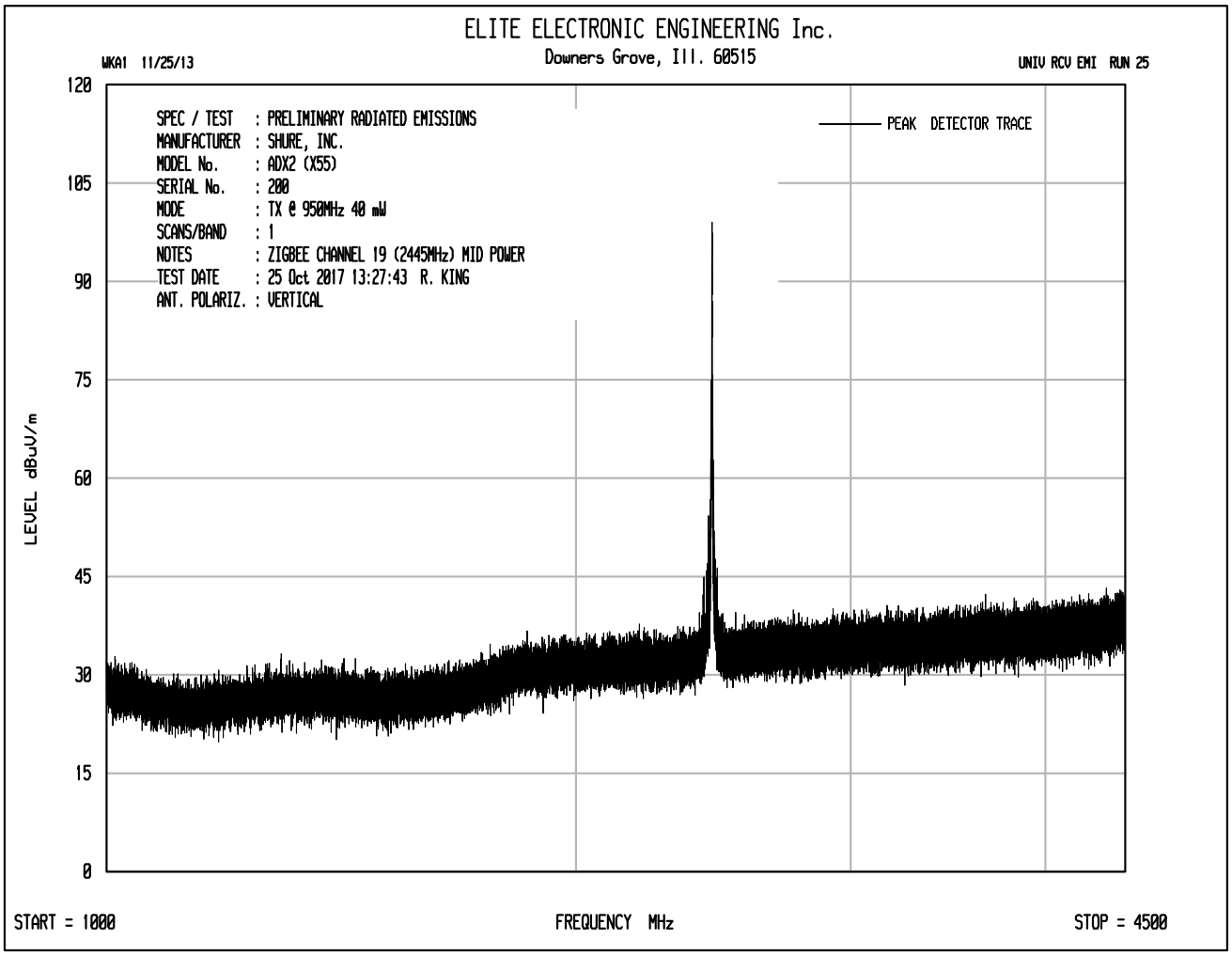

Plot shows emissions at 950.000MHz from UHF transmitter.



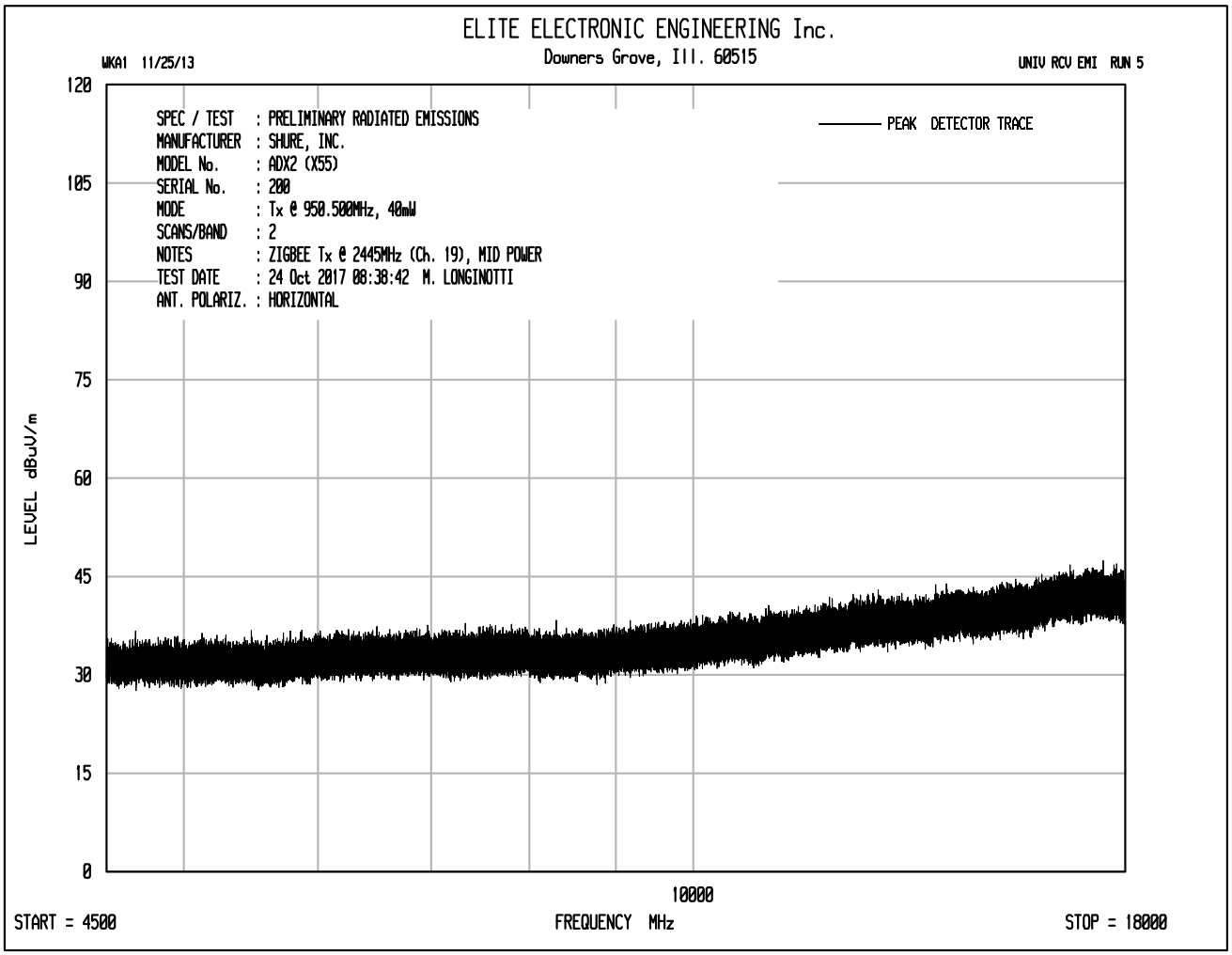

Plot shows emissions at 950.000MHz from UHF transmitter.

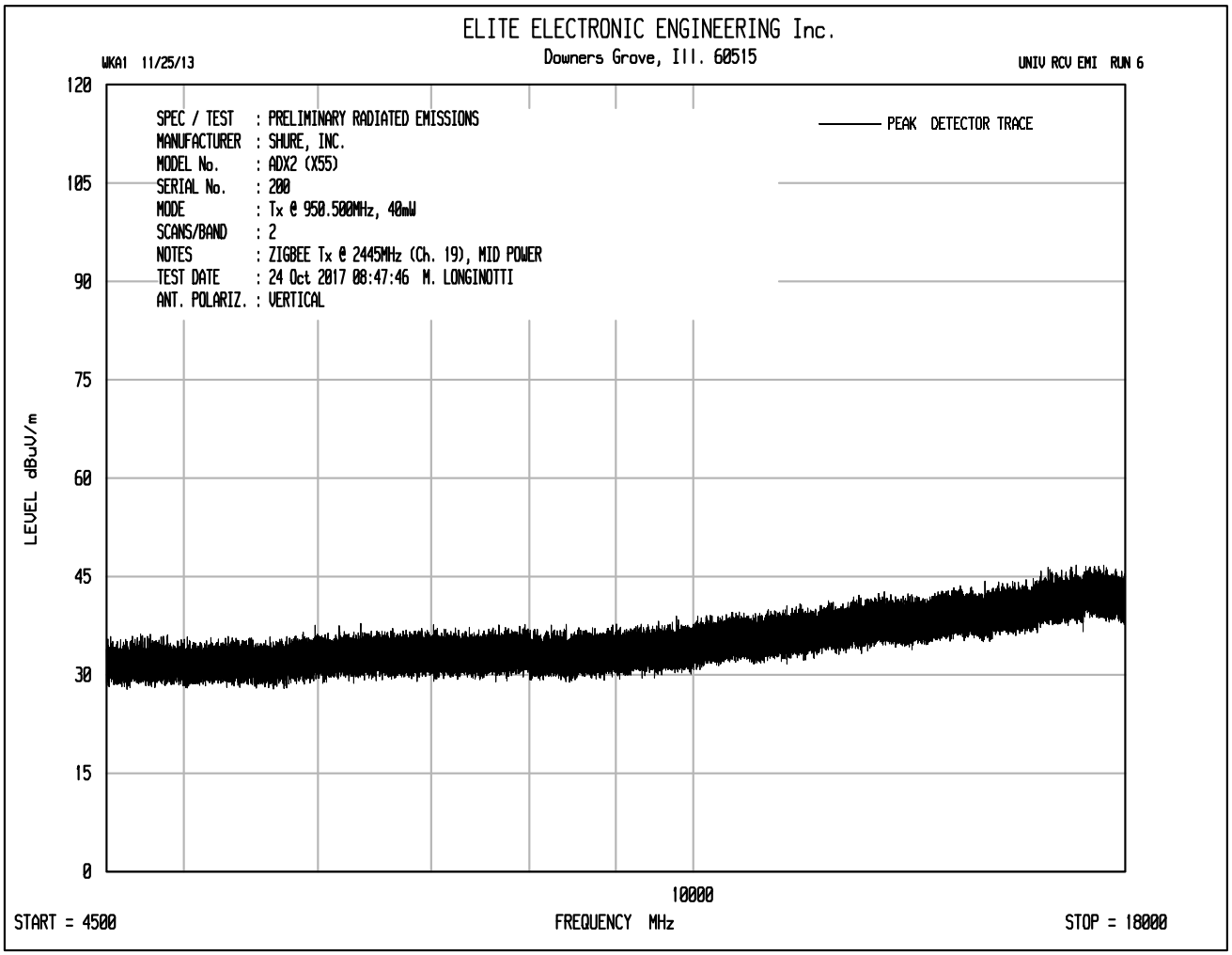


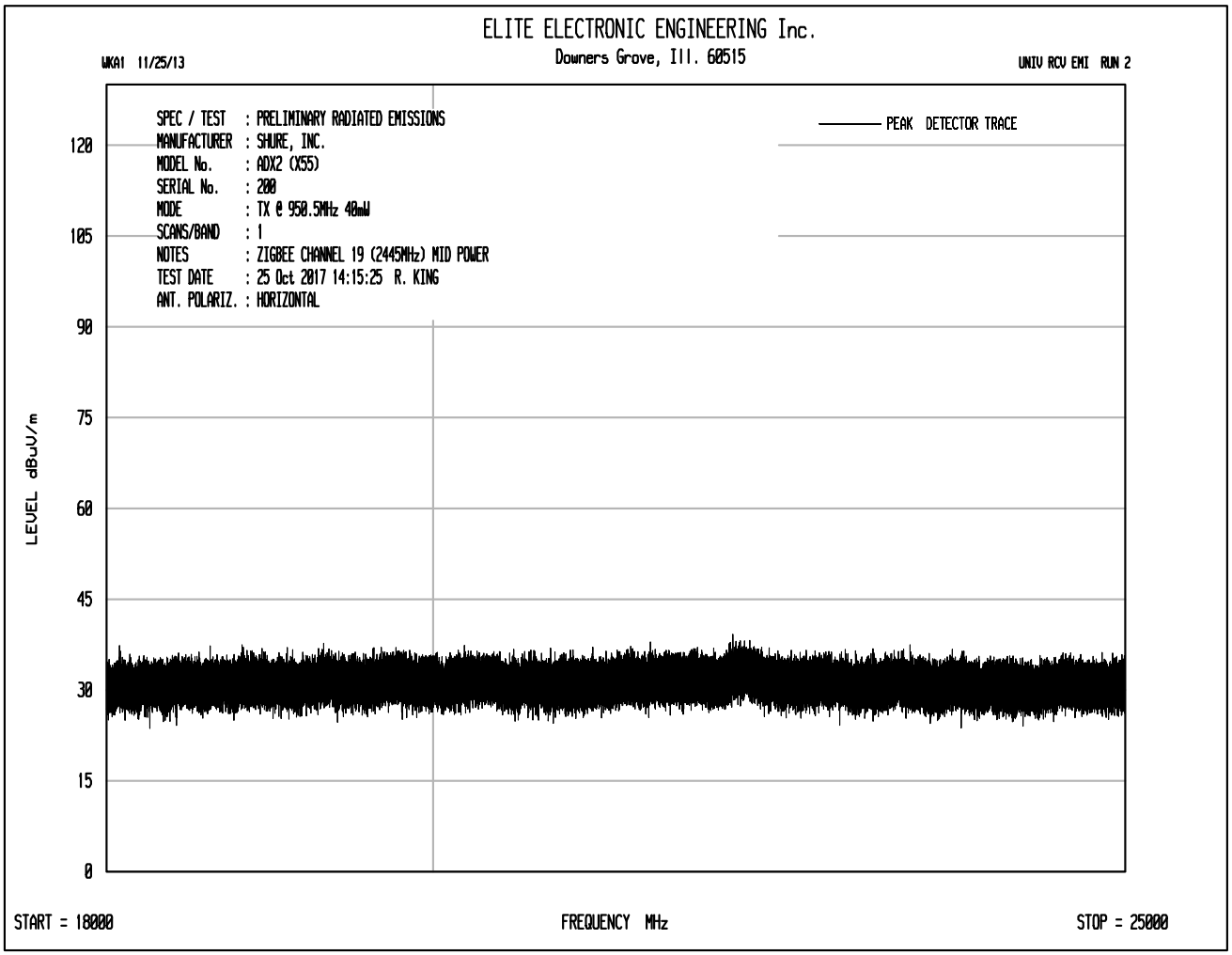

Plot shows emissions at 2445MHz from Zigbee transmitter.

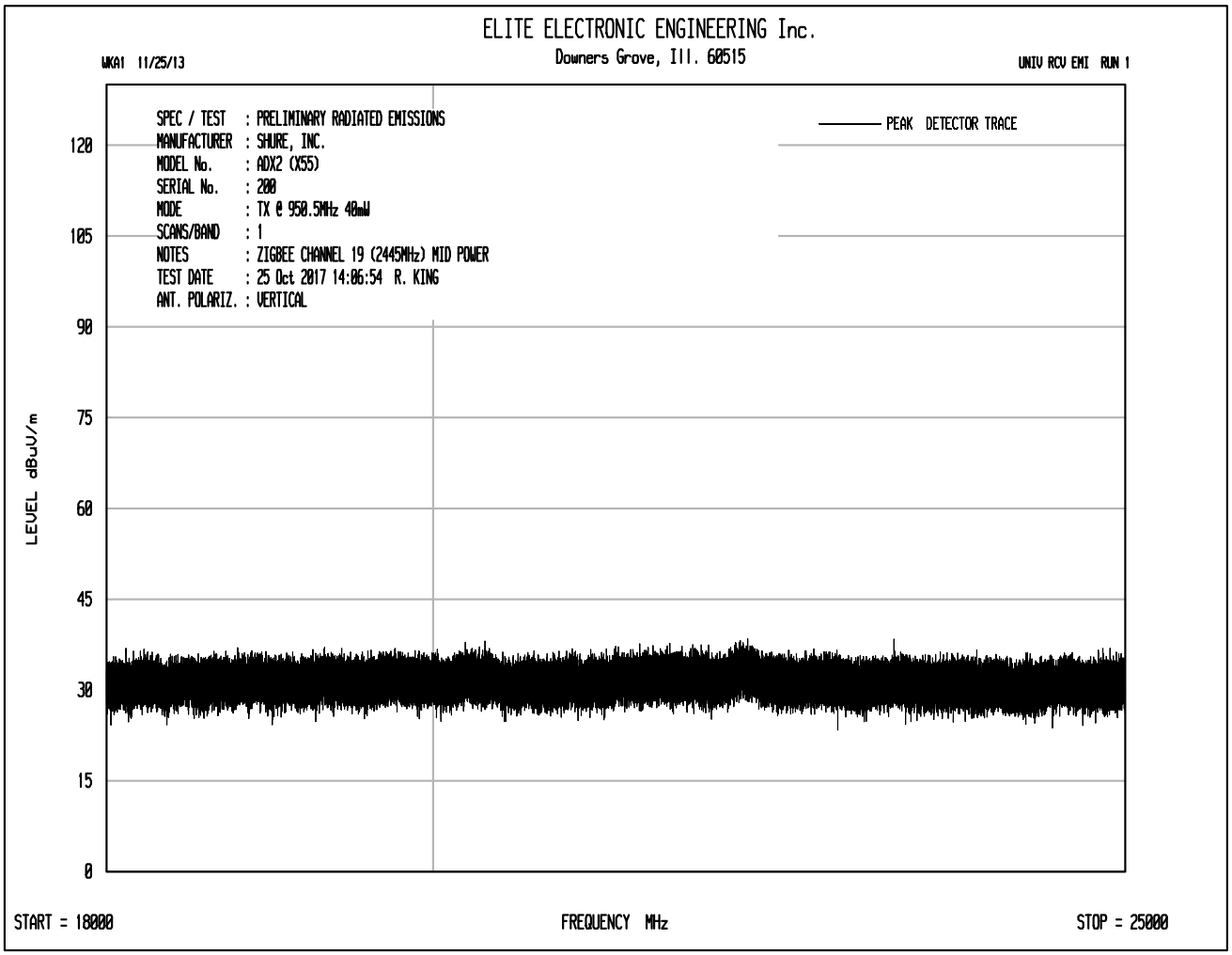



Plot shows emissions at 2445MHz from Zigbee transmitter.


ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 11/25/13
UNIV RCV EMI RUN 5
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : SHURE, INC.
MODEL No. : ADX2 (X55)
SERIAL No. : 200
MODE : Tx @ 950.500MHz, 40mW
SCANS/BAND : 2
NOTES : ZIGBEE Tx @ 2445MHz (Ch. 19), MID POWER
TEST DATE : 24 Oct 2017 08:38:42 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
10000
START = 4500
FREQUENCY MHz
STOP = 18000


ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 11/25/13
UNIV RCV EMI RUN 6
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : SHURE, INC.
MODEL No. : ADX2 (X55)
SERIAL No. : 200
MODE : Tx @ 950.500MHz, 40mW
SCANS/BAND : 2
NOTES : ZIGBEE Tx @ 2445MHz (Ch. 19), MID POWER
TEST DATE : 24 Oct 2017 08:47:46 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
10000
START = 4500
FREQUENCY MHz
STOP = 18000


ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 11/25/13
UNIV RCV EMI RUN 2
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : SHURE, INC.
MODEL No. : ADX2 (X55)
SERIAL No. : 200
MODE : TX @ 950.5MHz 40mW
SCANS/BAND : 1
NOTES : ZIGBEE CHANNEL 19 (2445MHz) MID POWER
TEST DATE : 25 Oct 2017 14:15:25 R. KING
ANT. POLARIZ. : HORIZONTAL
PEAK DETECTOR TRACE
120
105
90
75
60
45
30
15
0
LEVEL dBuV/m
START = 18000
FREQUENCY MHz
STOP = 25000


ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515
WKA1 11/25/13
UNIV RCV EMI RUN 1
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : SHURE, INC.
MODEL No. : ADX2 (X55)
SERIAL No. : 200
MODE : TX @ 950.5MHz 40mW
SCANS/BAND : 1
NOTES : ZIGBEE CHANNEL 19 (2445MHz) MID POWER
TEST DATE : 25 Oct 2017 14:06:54 R. KING
ANT. POLARIZ. : VERTICAL
PEAK DETECTOR TRACE
LEVEL dBuV/m
120
105
90
75
60
45
30
15
0
START = 18000
FREQUENCY MHz
STOP = 25000