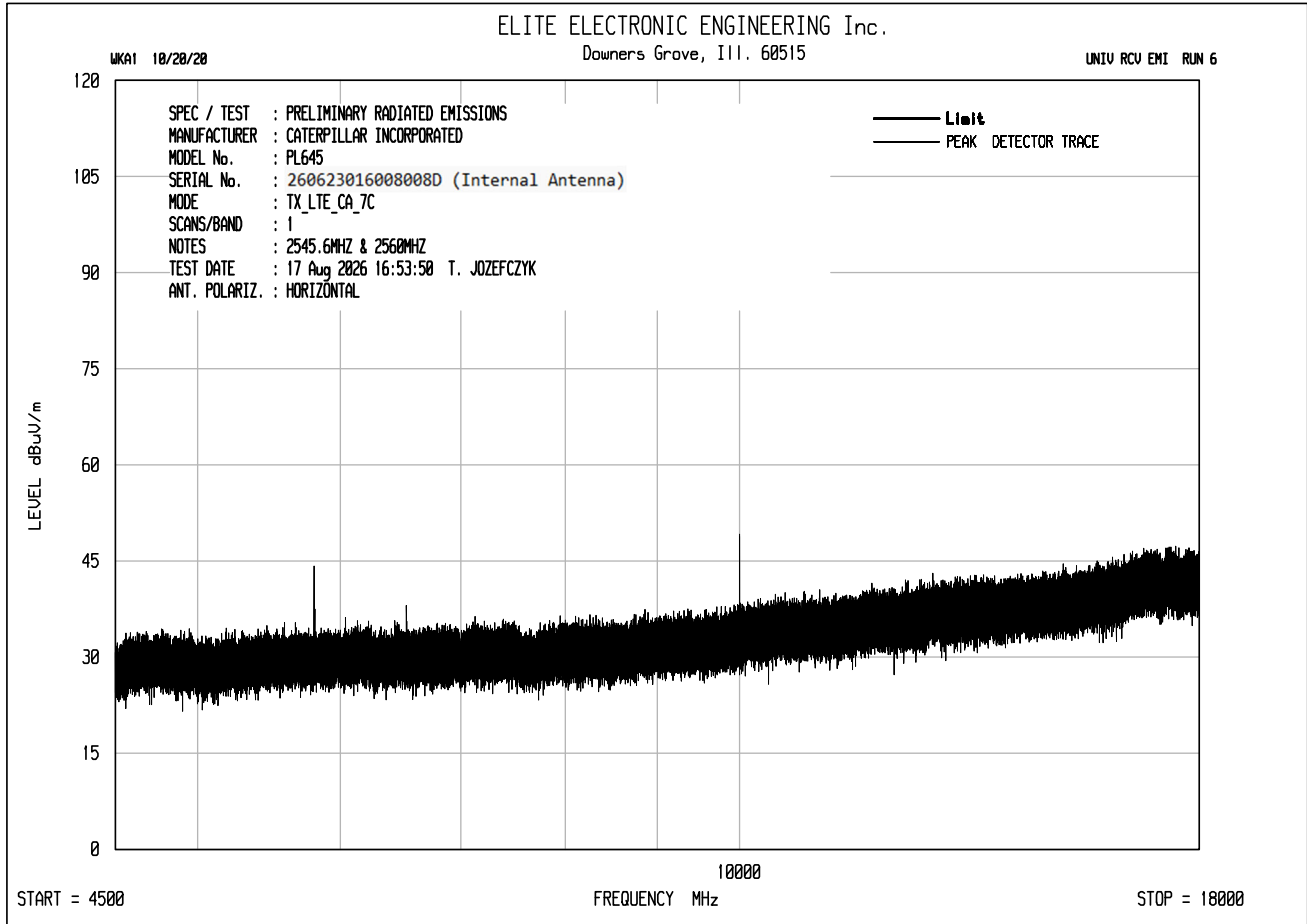
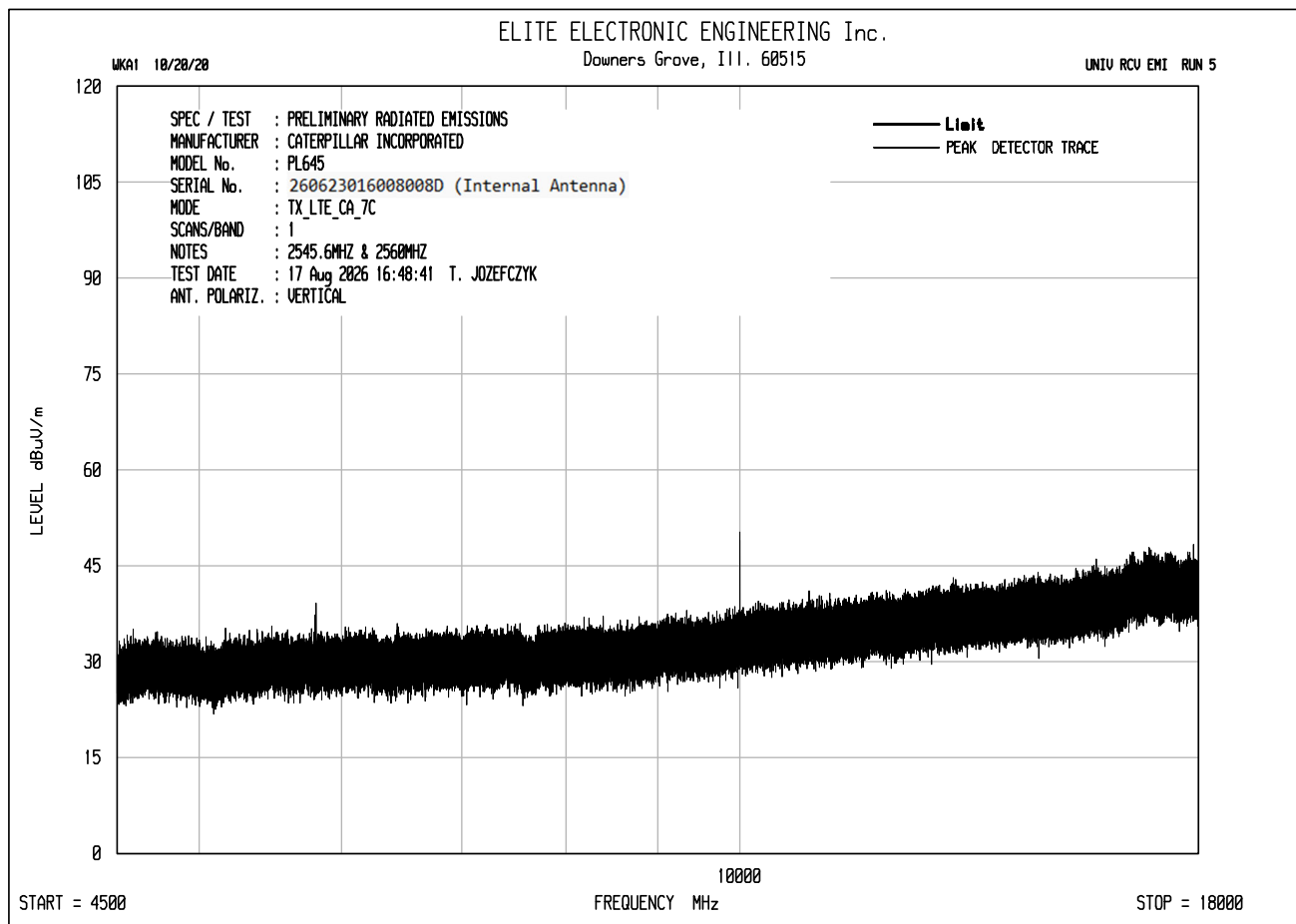
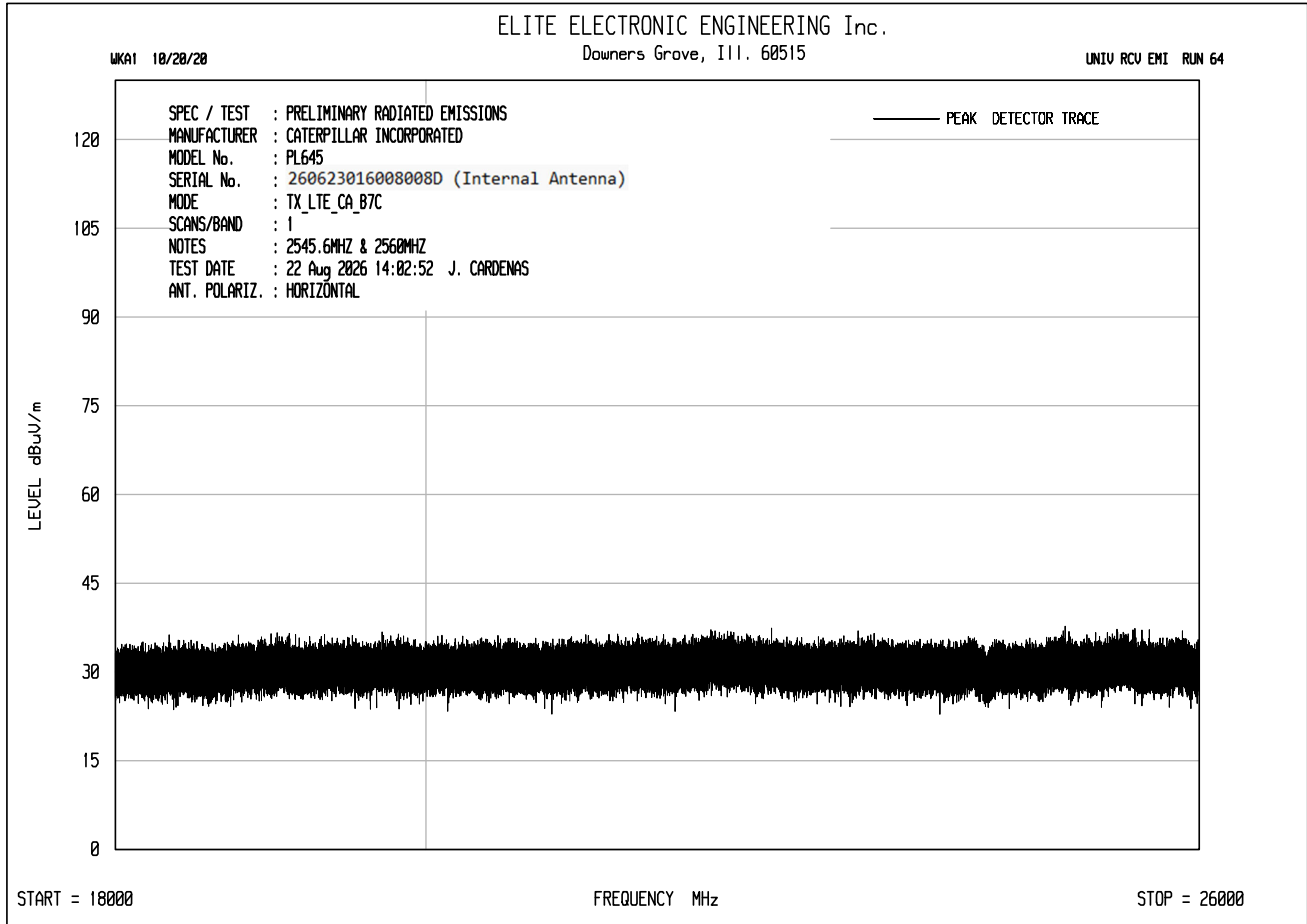
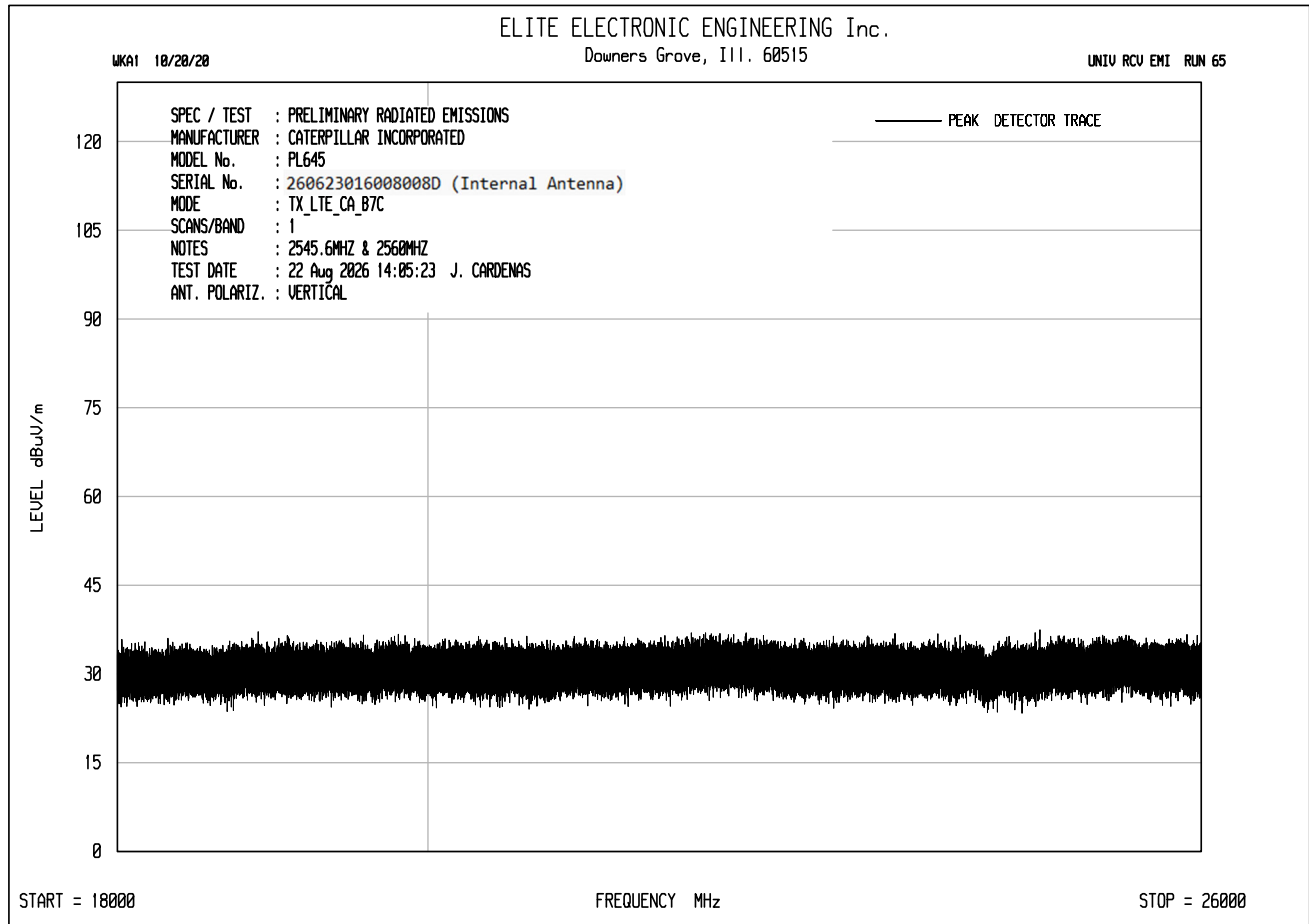




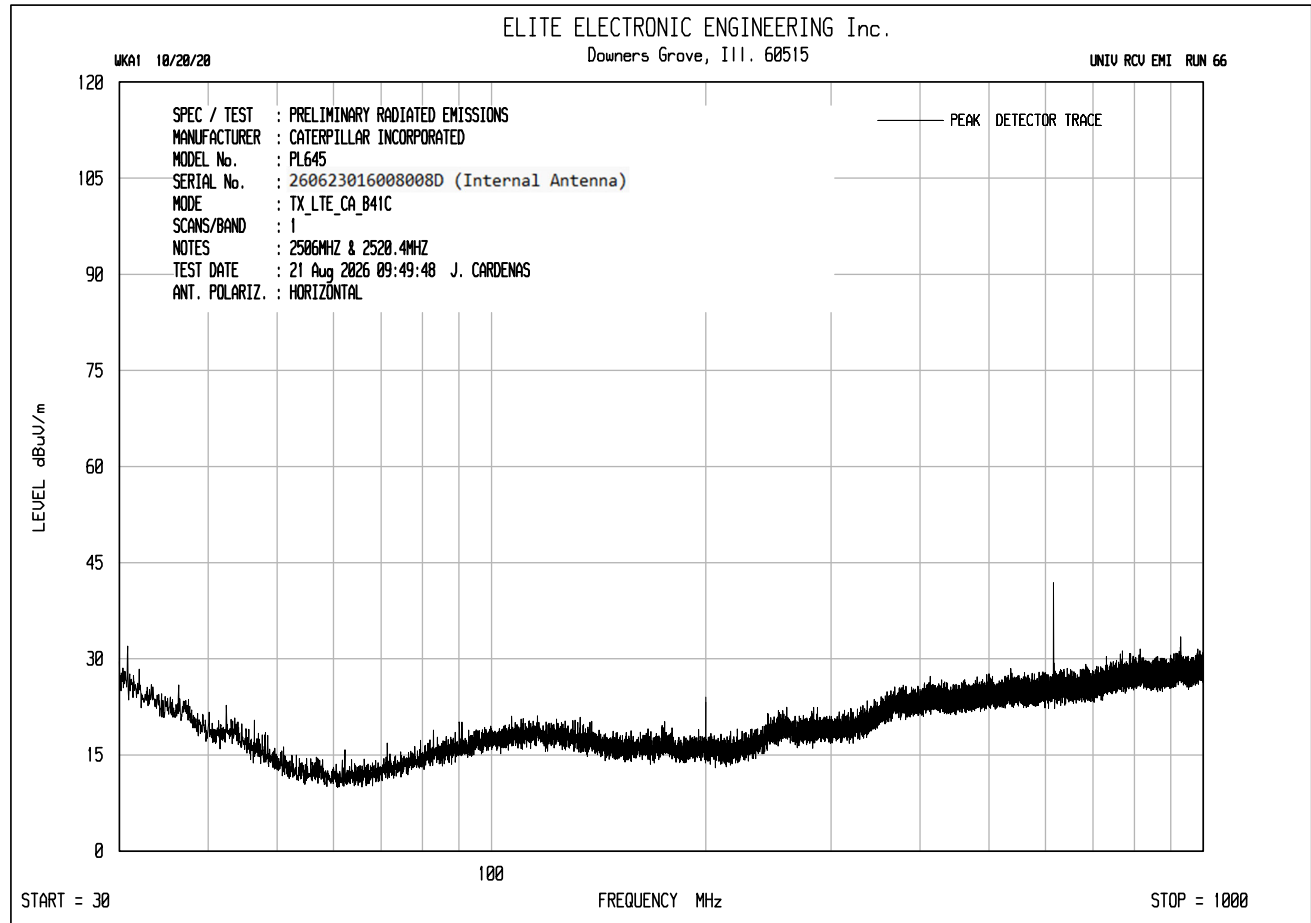


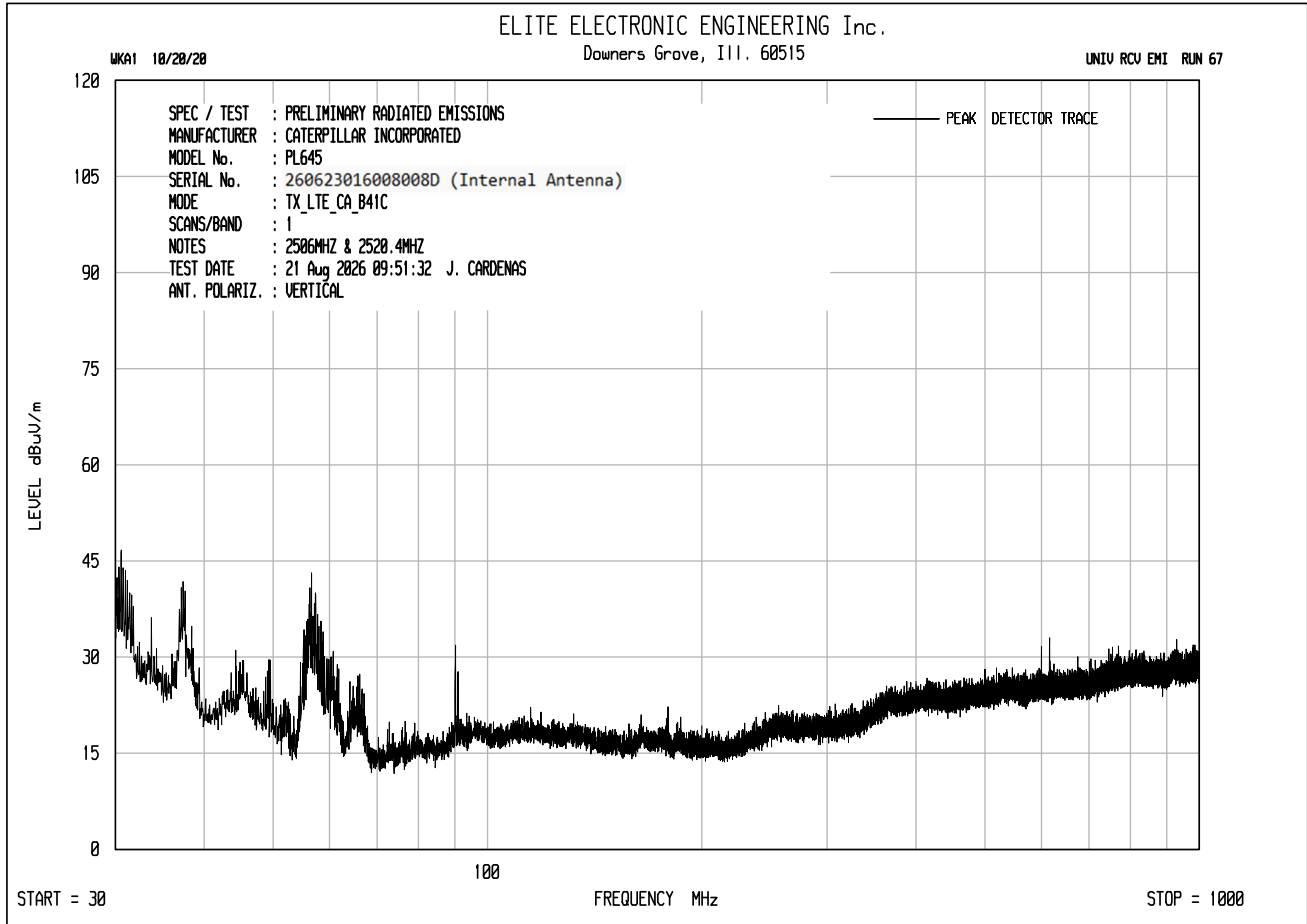


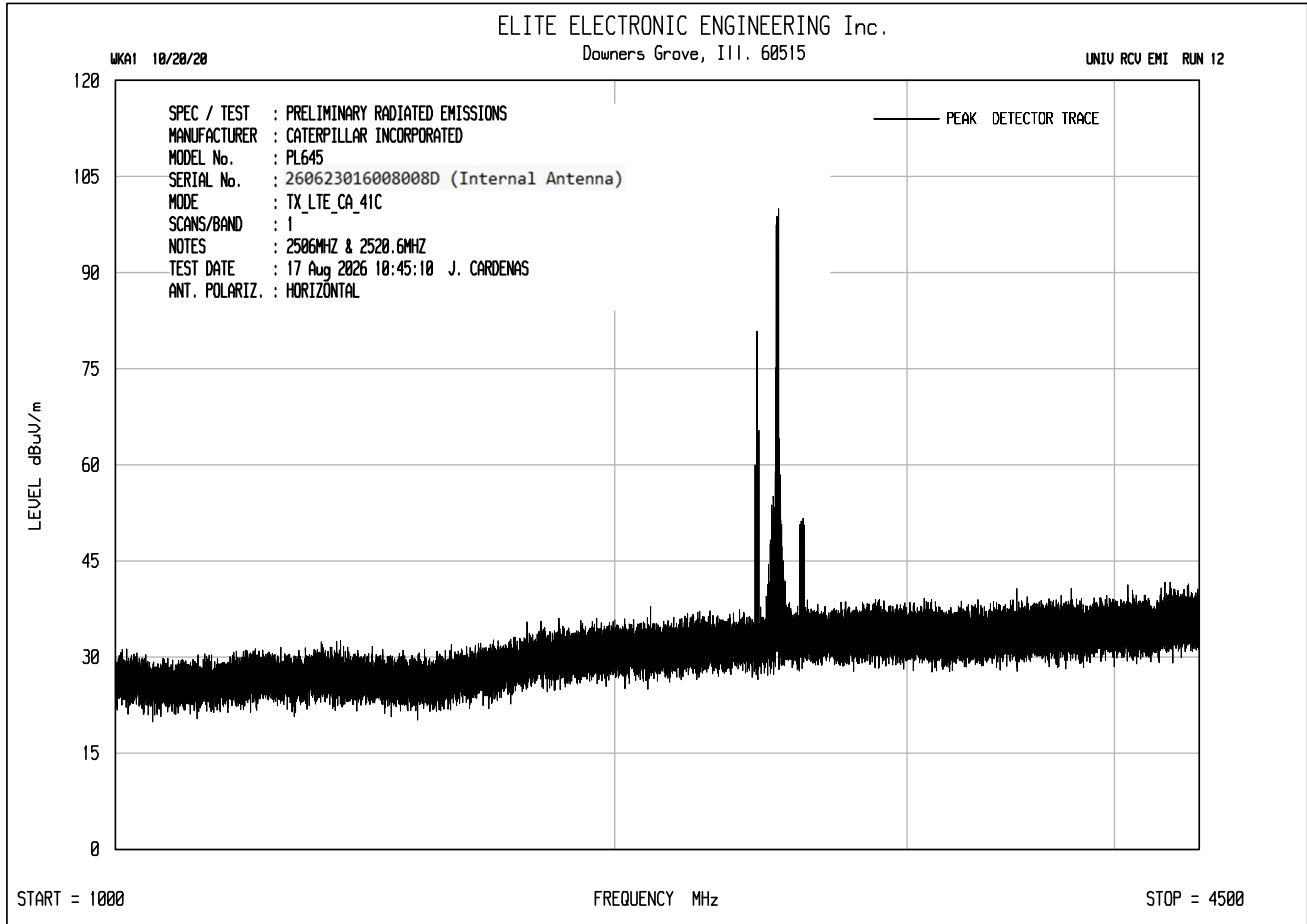


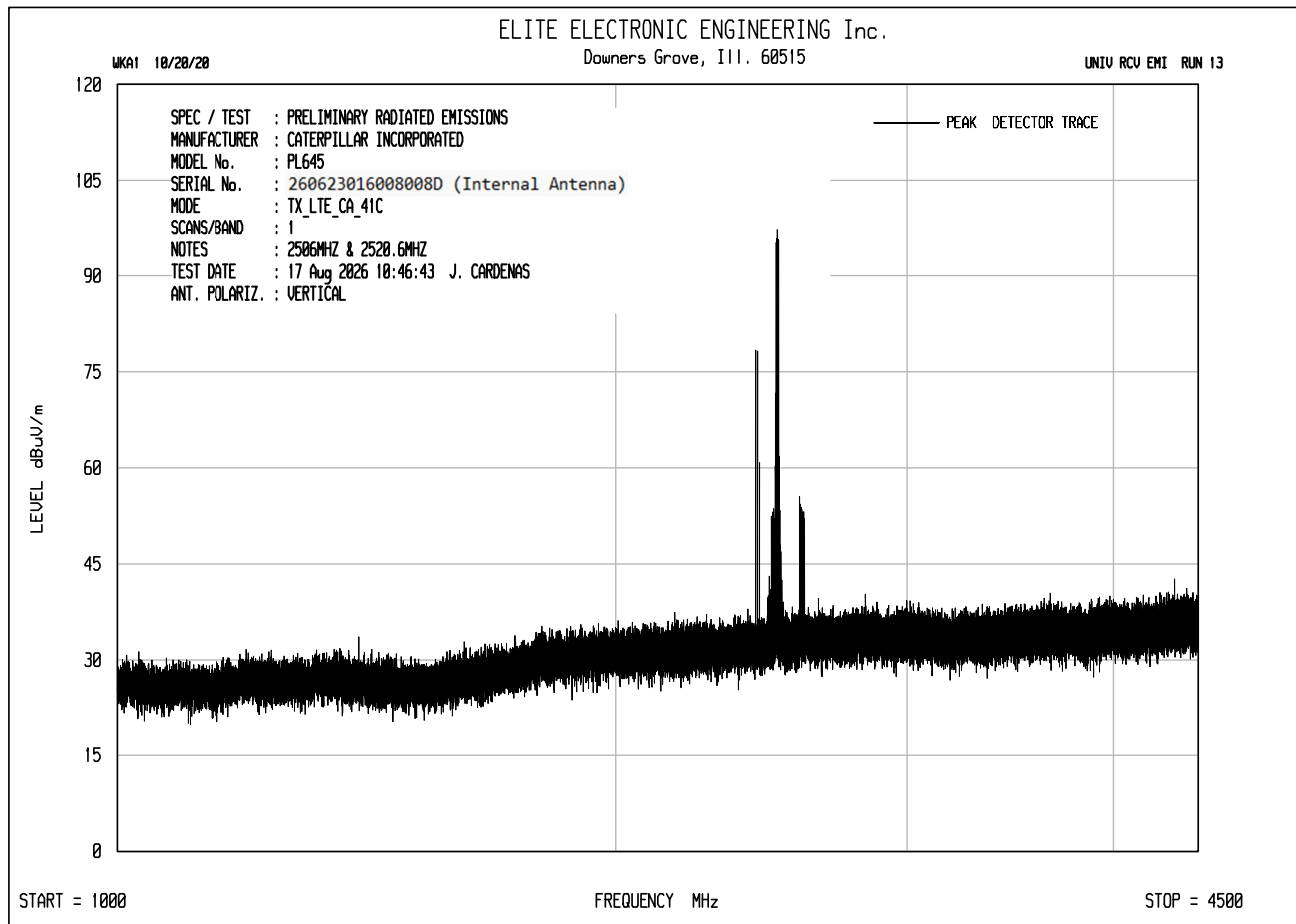
Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Calculated Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Attenuation Below Output Power (dB)	Minimum Attenuation (dB)
5091.20	H	49.5	Ambient	-49.8	5.2	5.0	-49.6	72.6	36.0
5091.20	V	49.2	Ambient	-49.4	5.2	5.0	-49.1	72.1	36.0

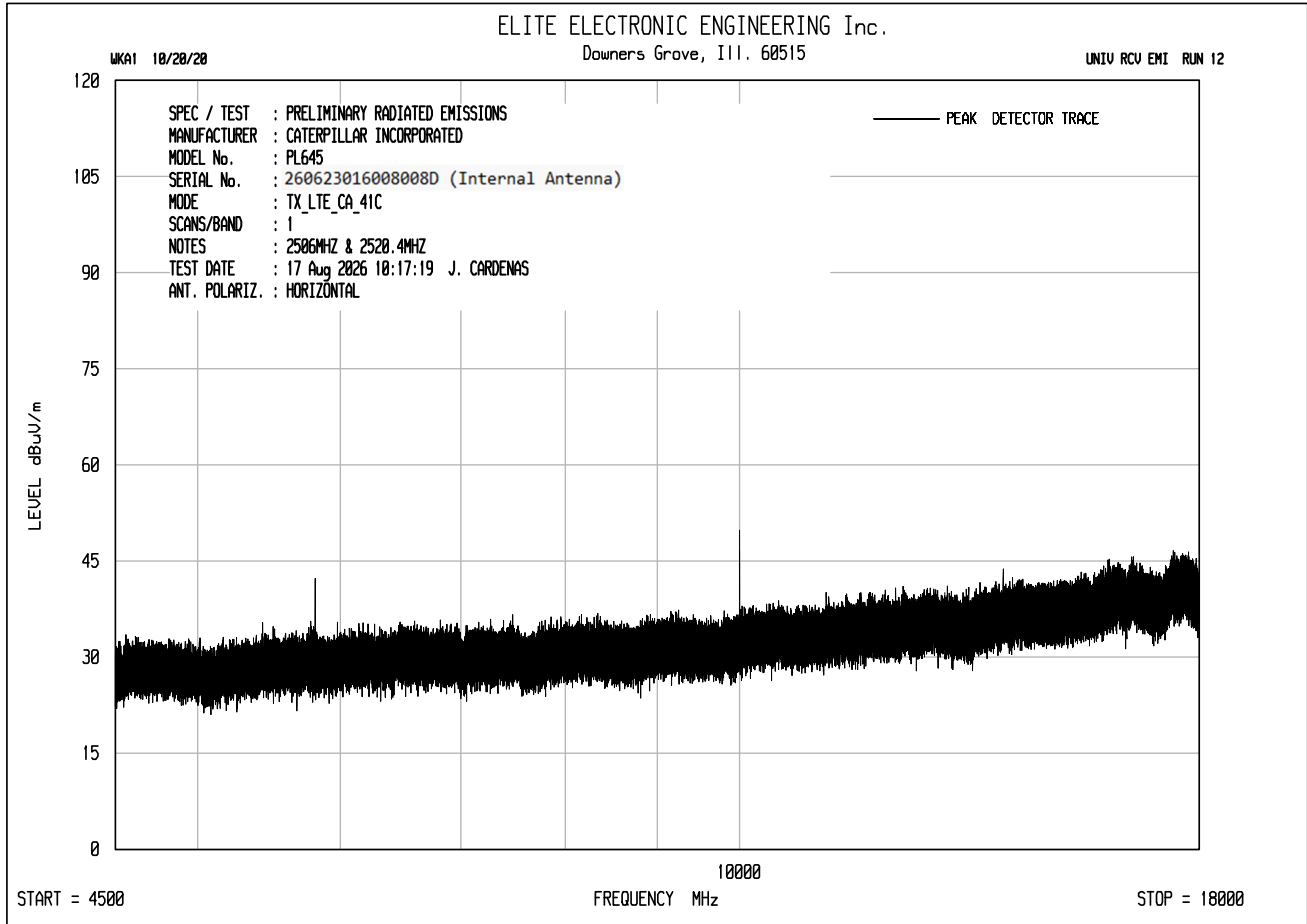
Test Details	
Manufacturer	Caterpillar Inc
Equipment Under Test	5G Telematics Radio
Model No.	PL645
Part No.	7620.002.904-13
Serial No.	260619016008008D (Internal Antenna)
Mode	LTE CA
Frequency Tested	Band 41 – 2506MHz
Notes	None

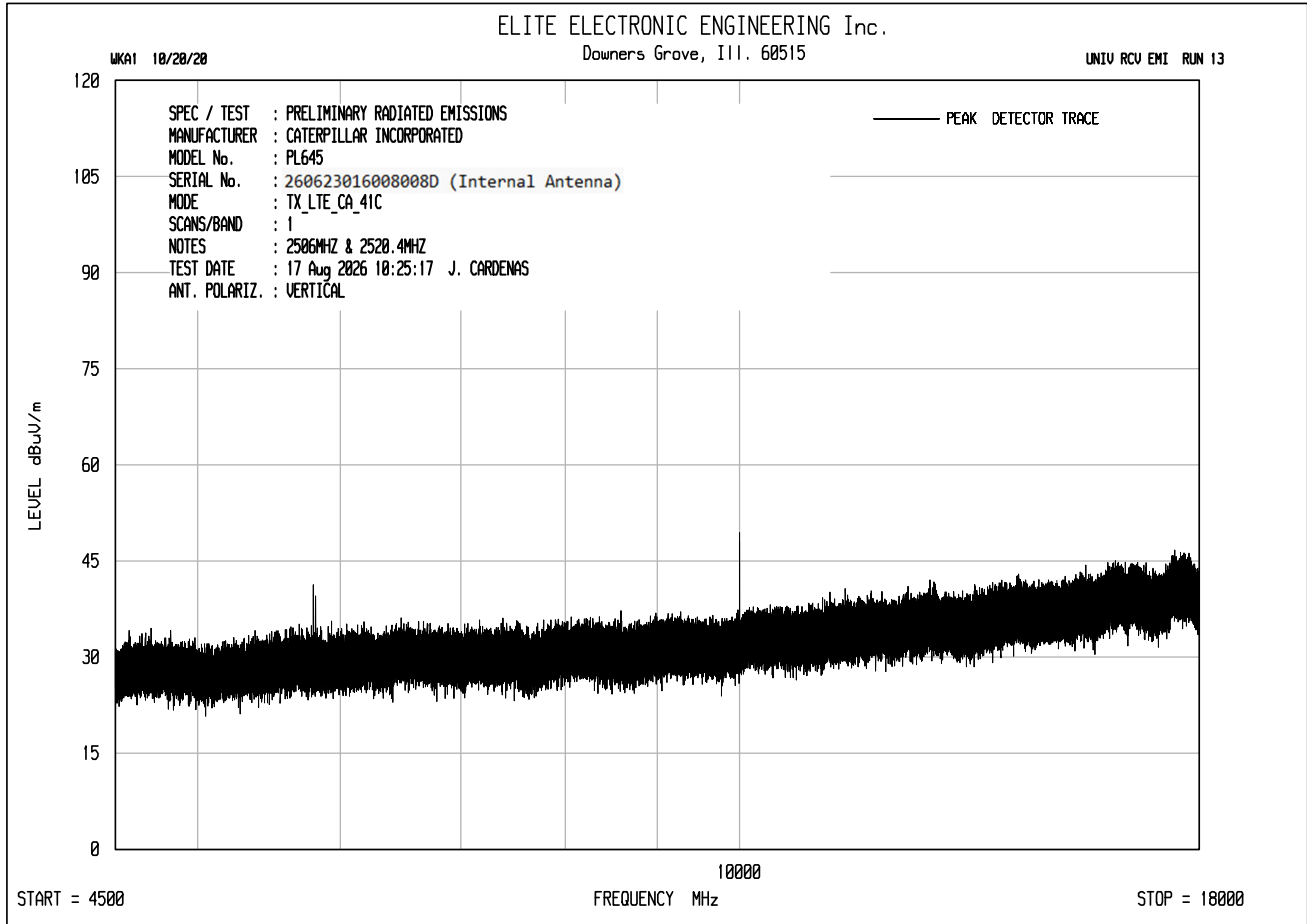


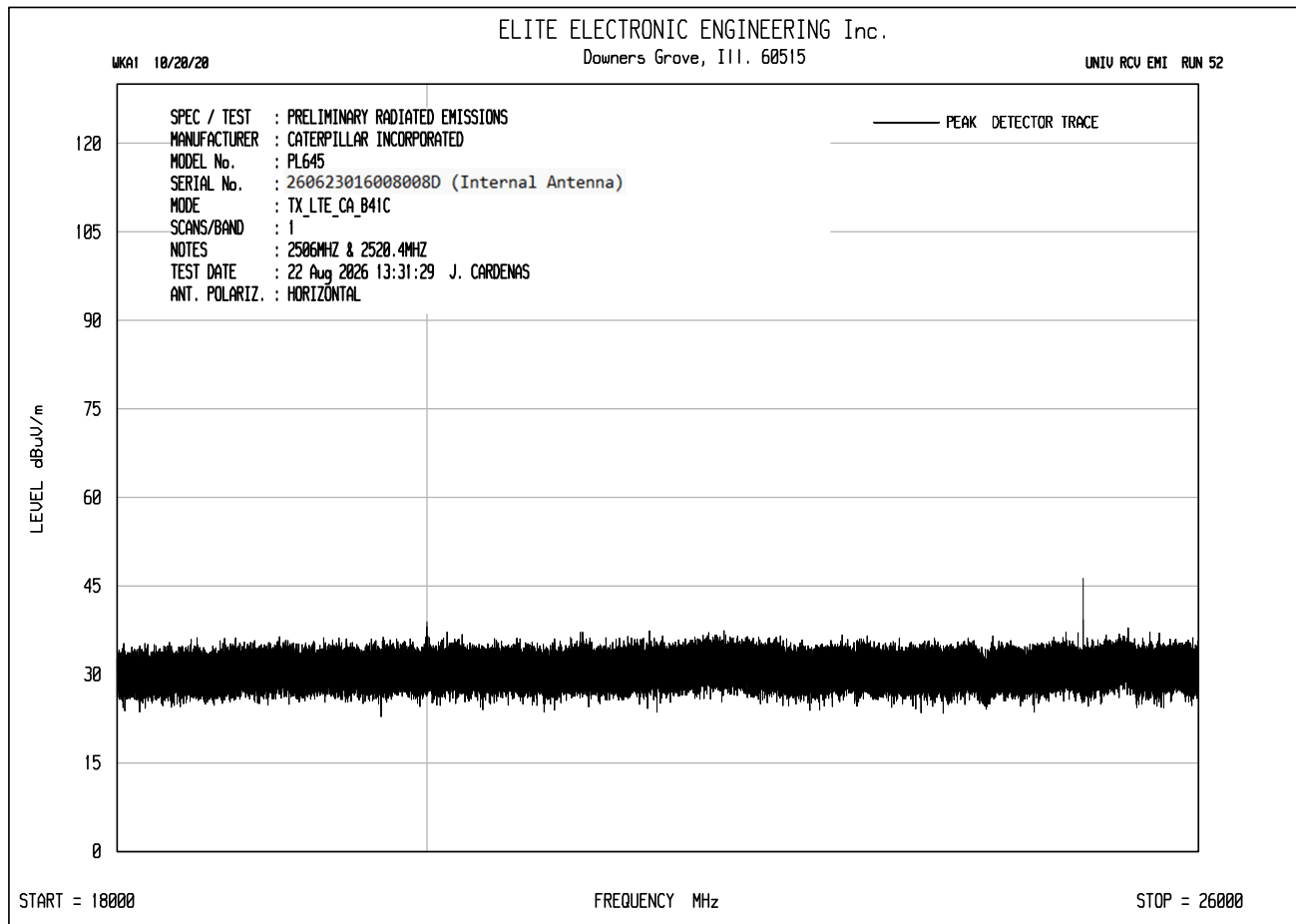


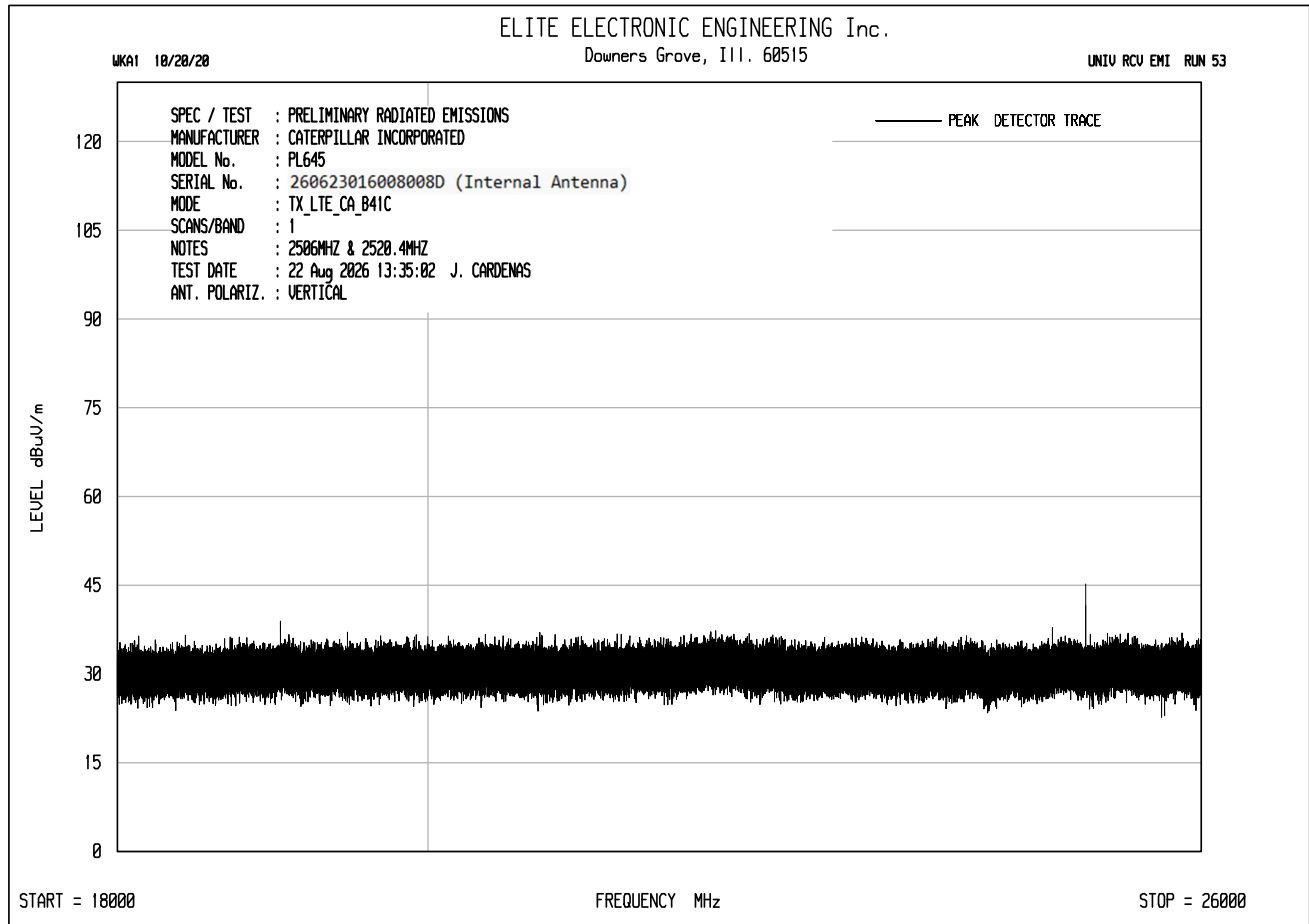






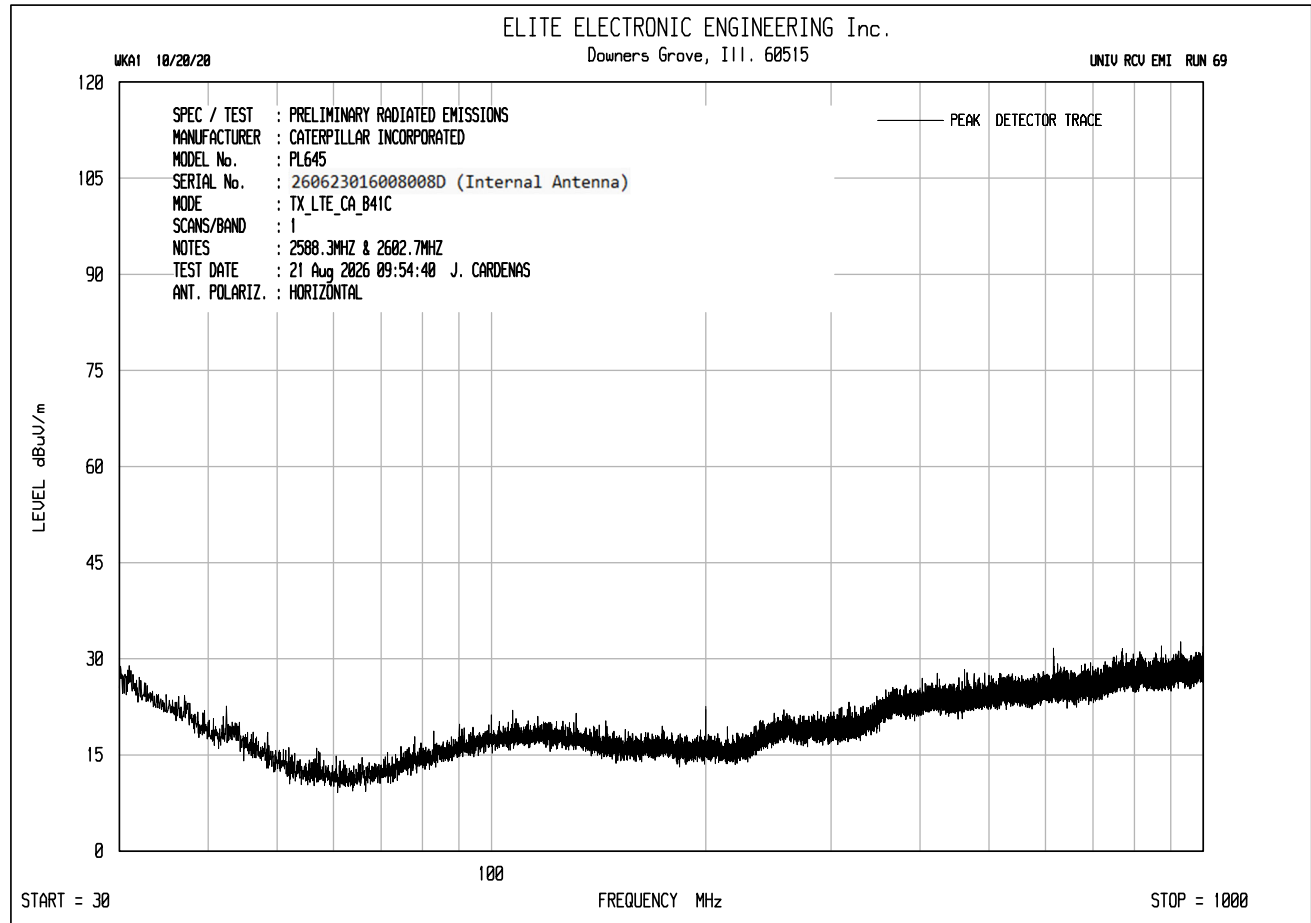


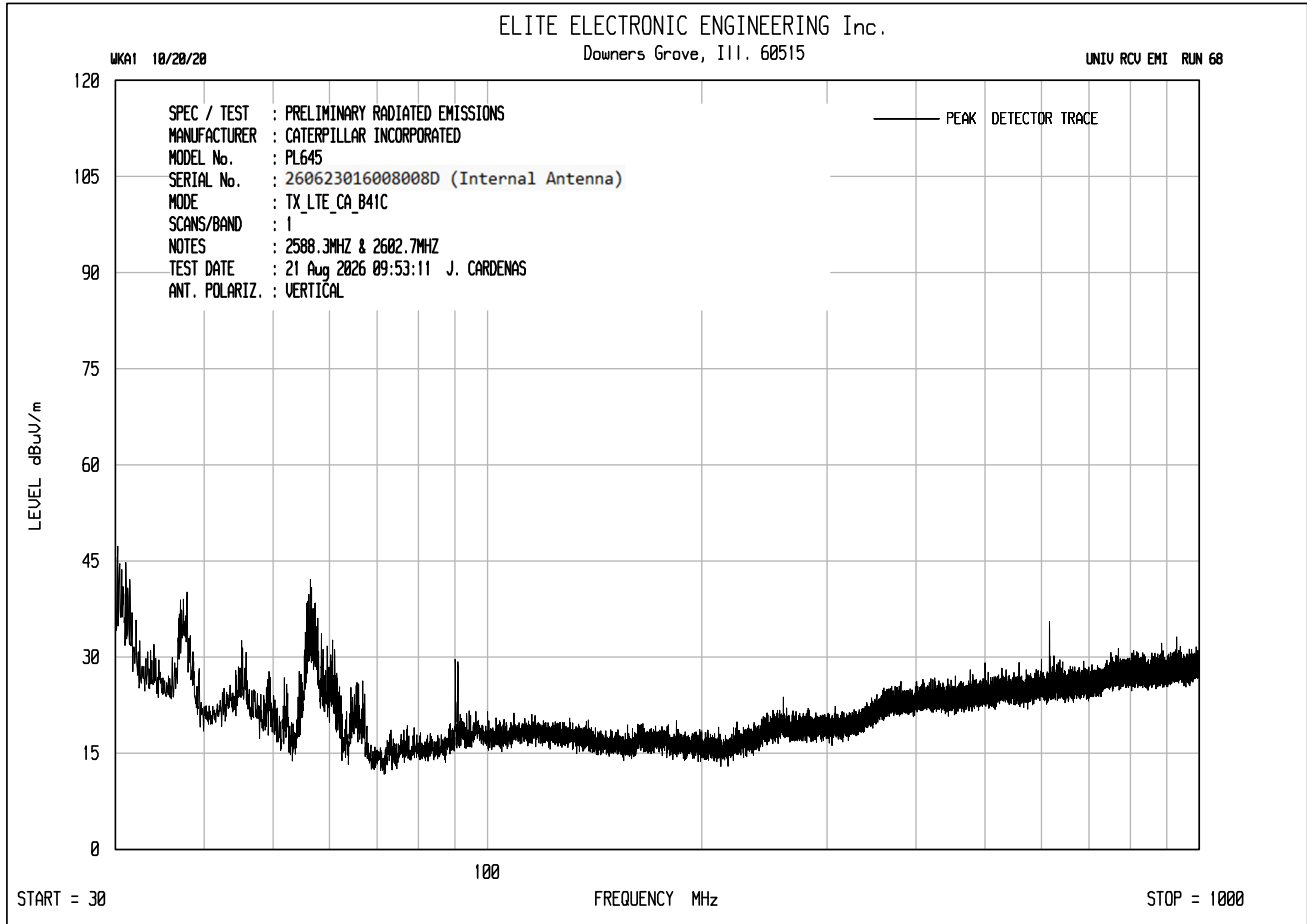


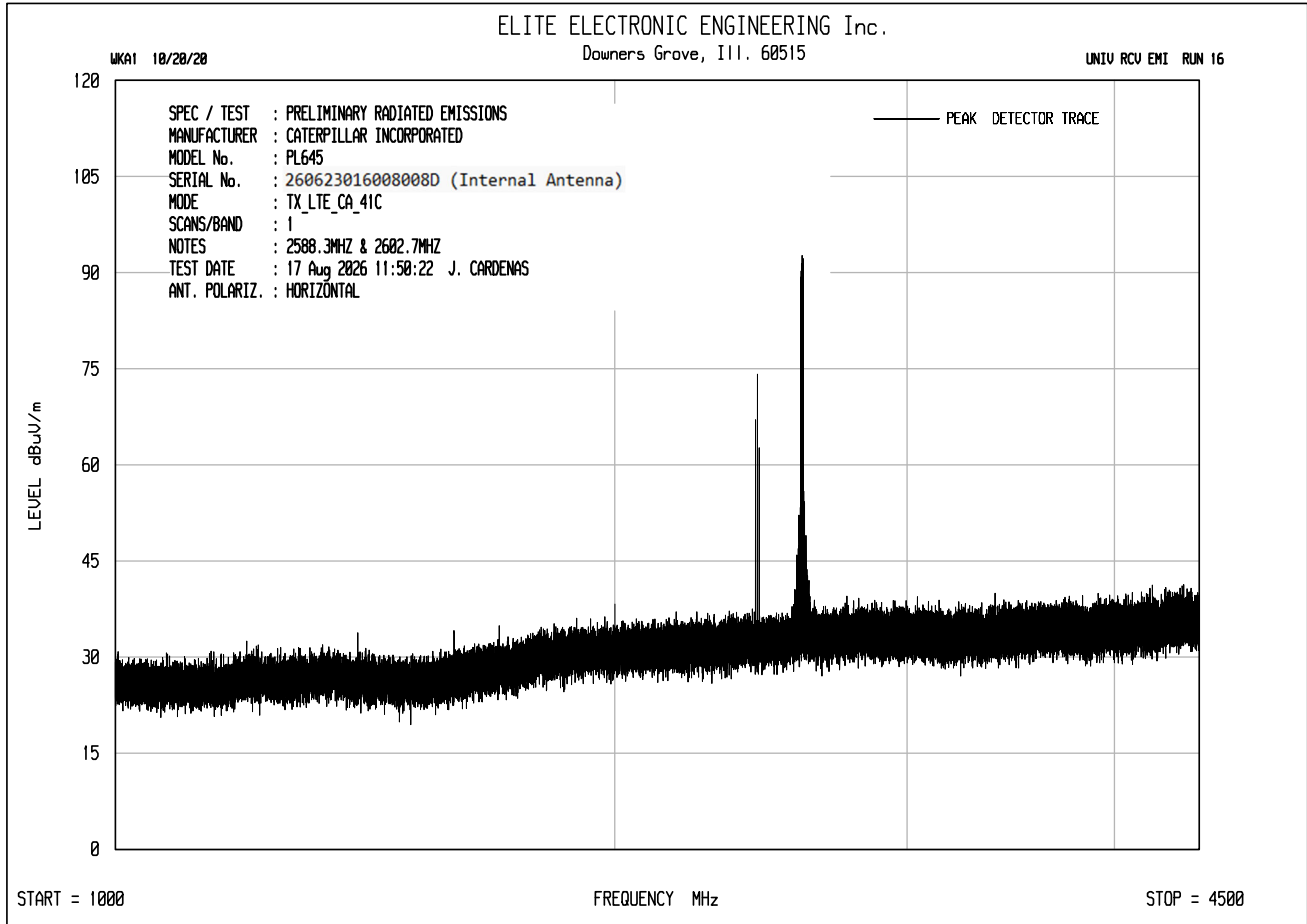


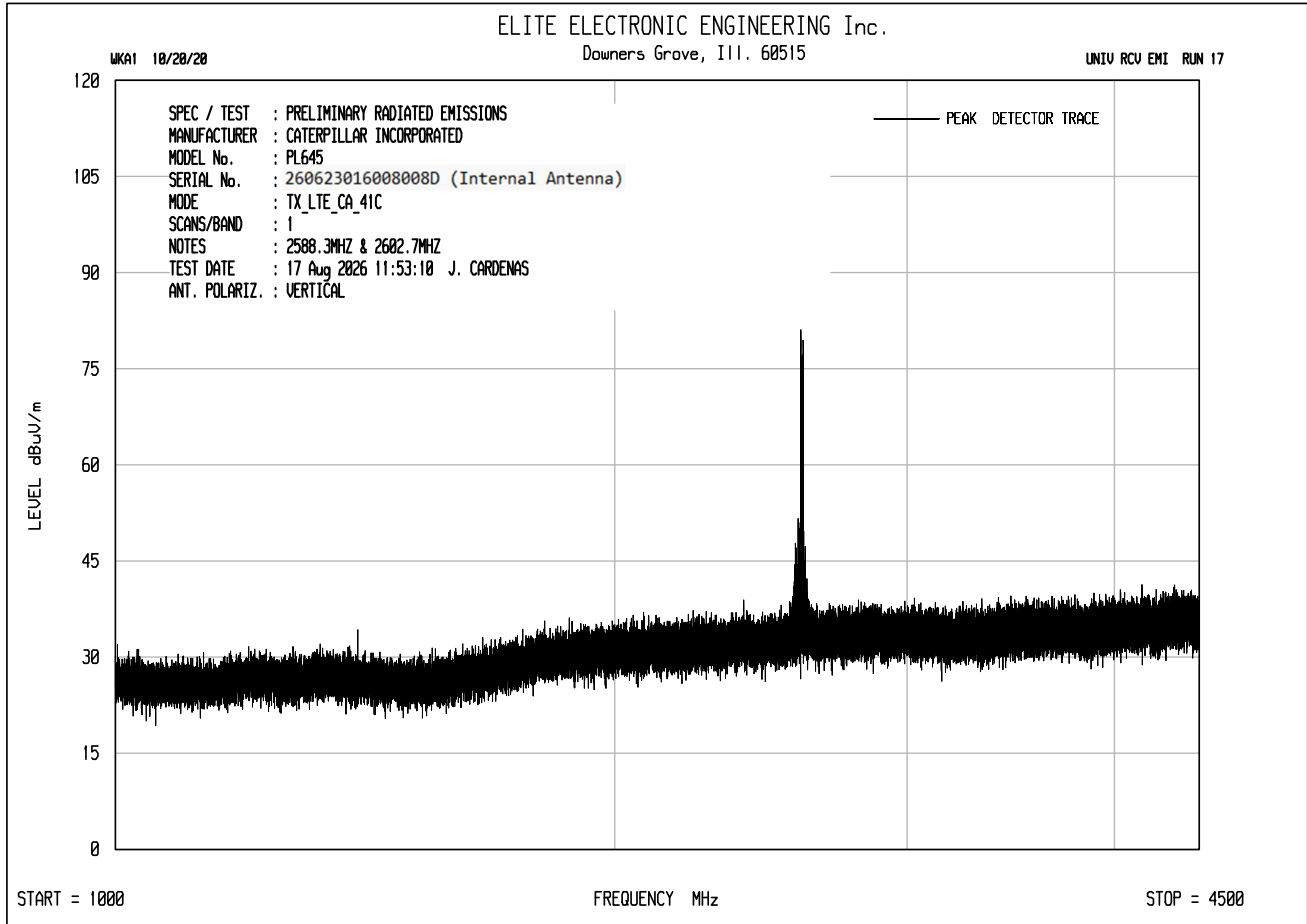
Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Calculated Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Attenuation Below Output Power (dB)	Minimum Attenuation (dB)
5012.00	H	24.5	Ambient	-35.5	5.5	4.9	-35.0	58.0	36.0
5012.00	V	25.0	Ambient	-33.5	5.5	4.9	-33.0	56.0	36.0

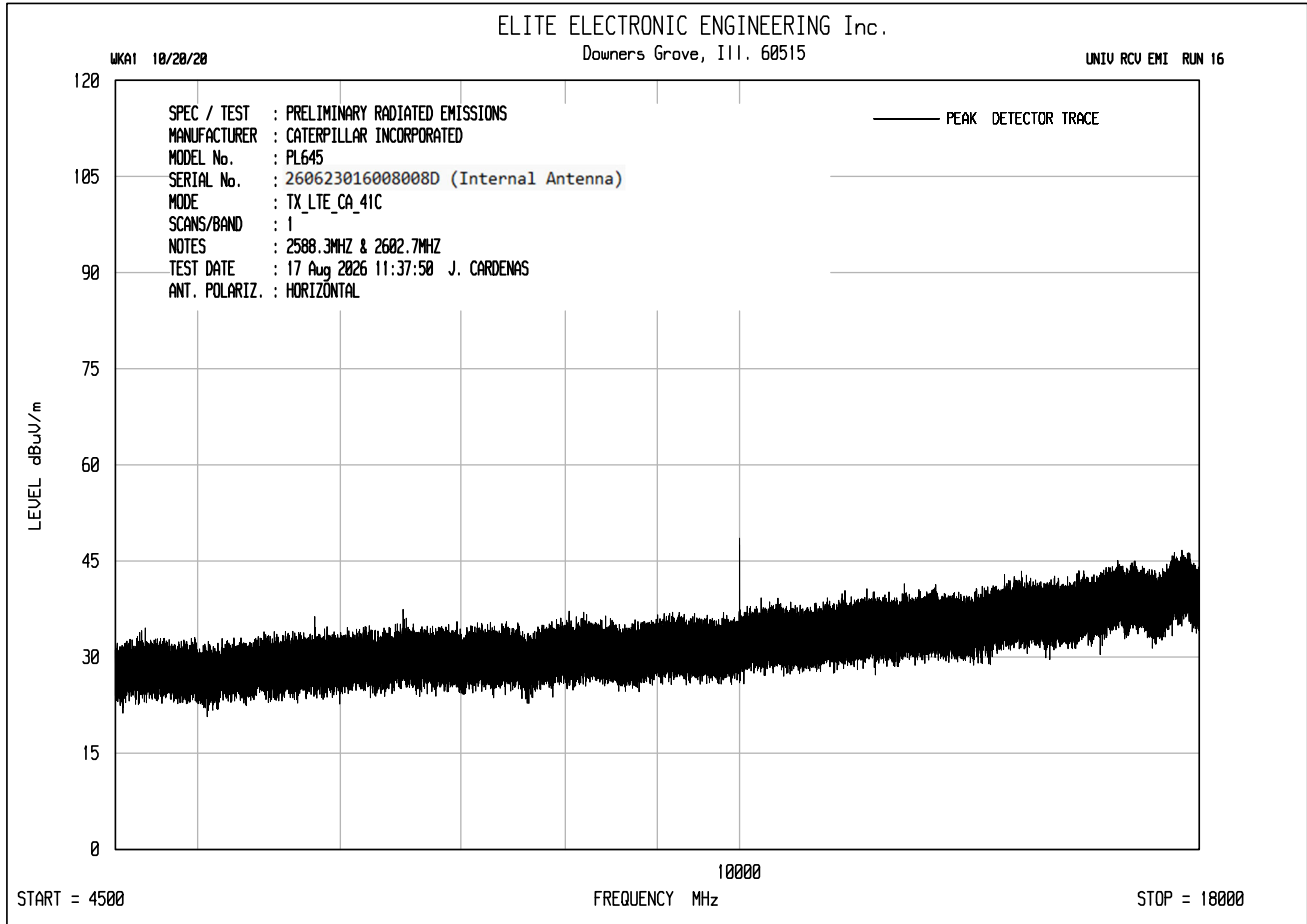
Test Details	
Manufacturer	Caterpillar Inc
Equipment Under Test	5G Telematics Radio
Model No.	PL645
Part No.	7620.002.904-13
Serial No.	260619016008008D (Internal Antenna)
Mode	LTE CA
Frequency Tested	Band 41 – 2588.3MHz
Notes	None

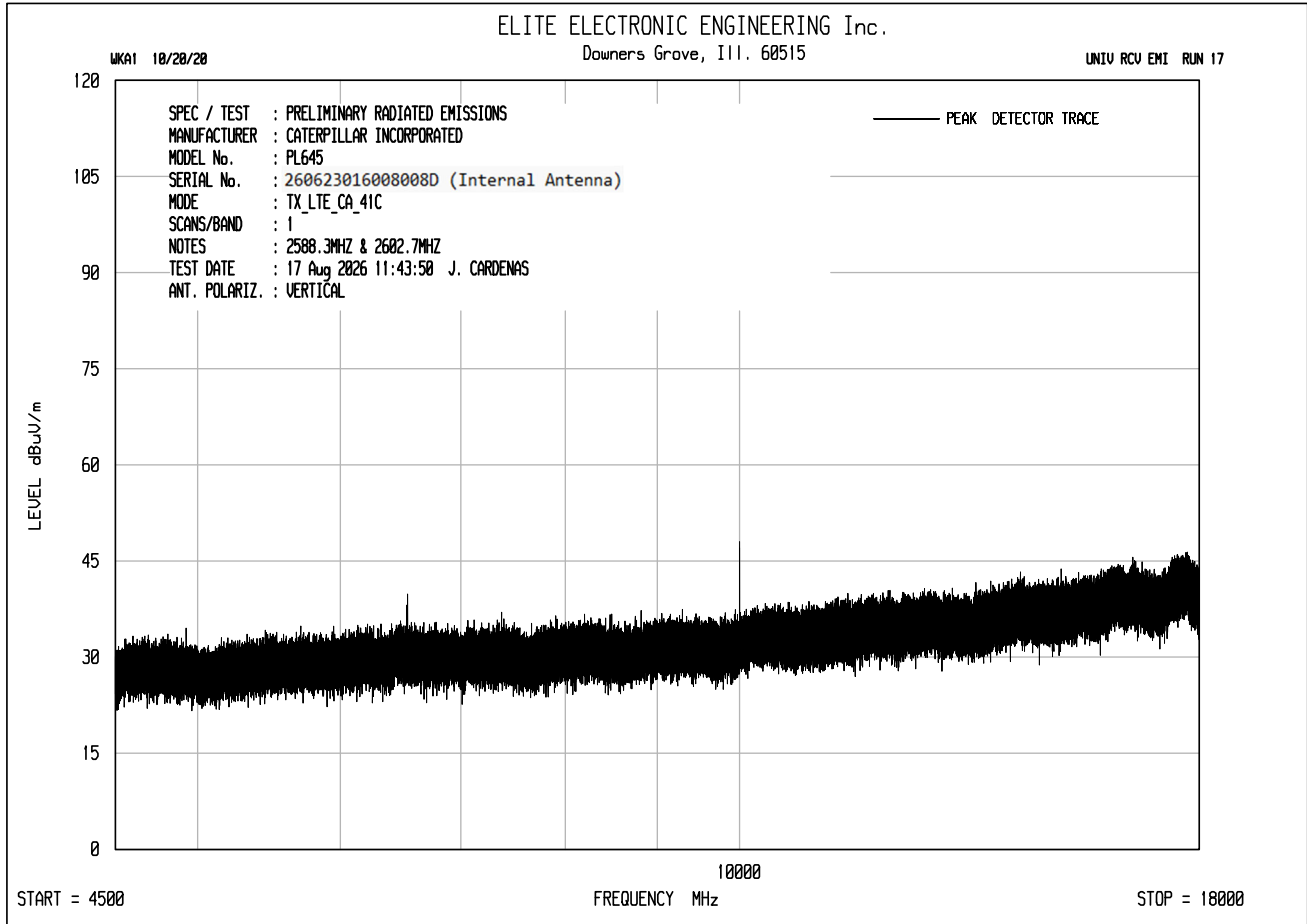


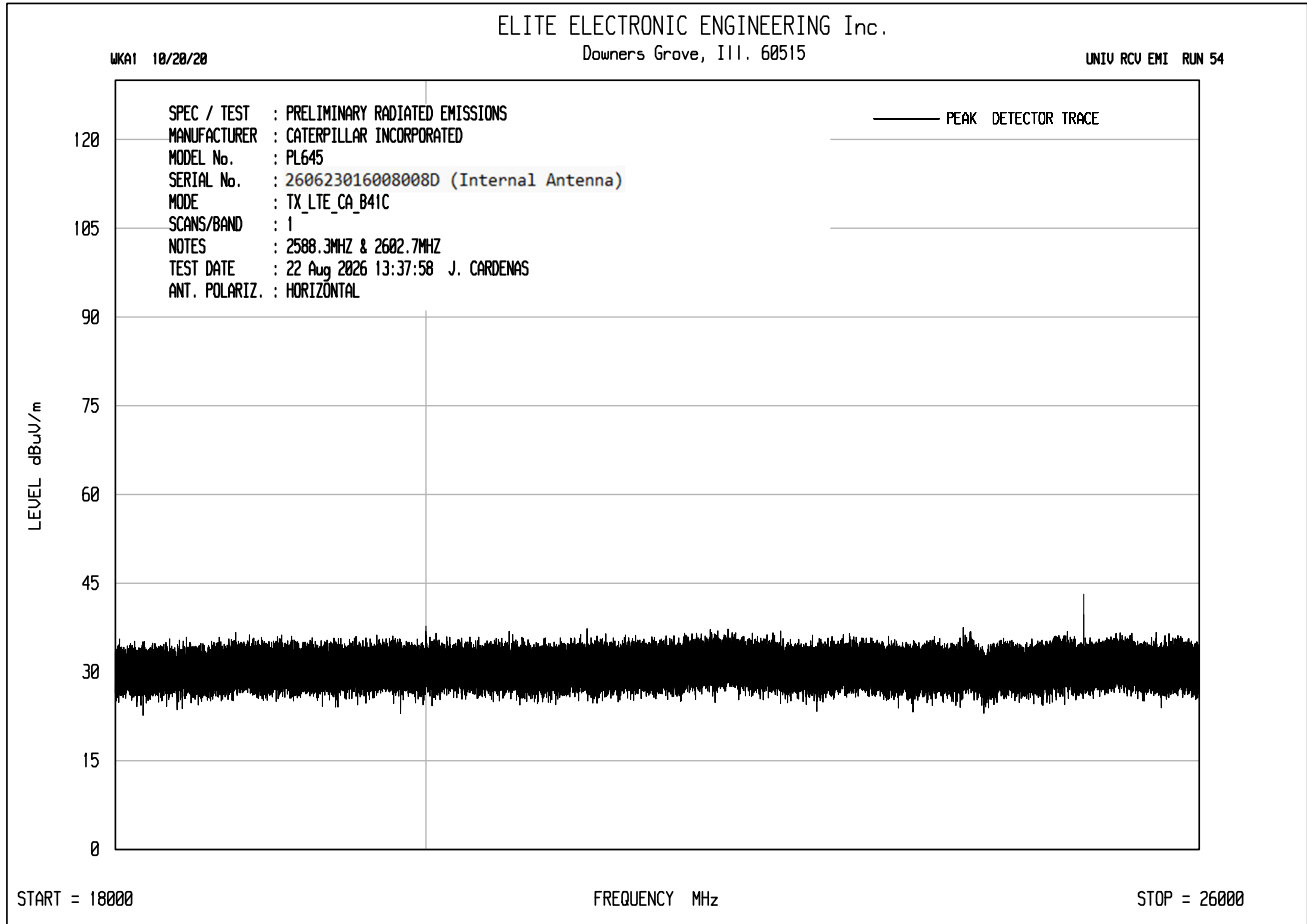


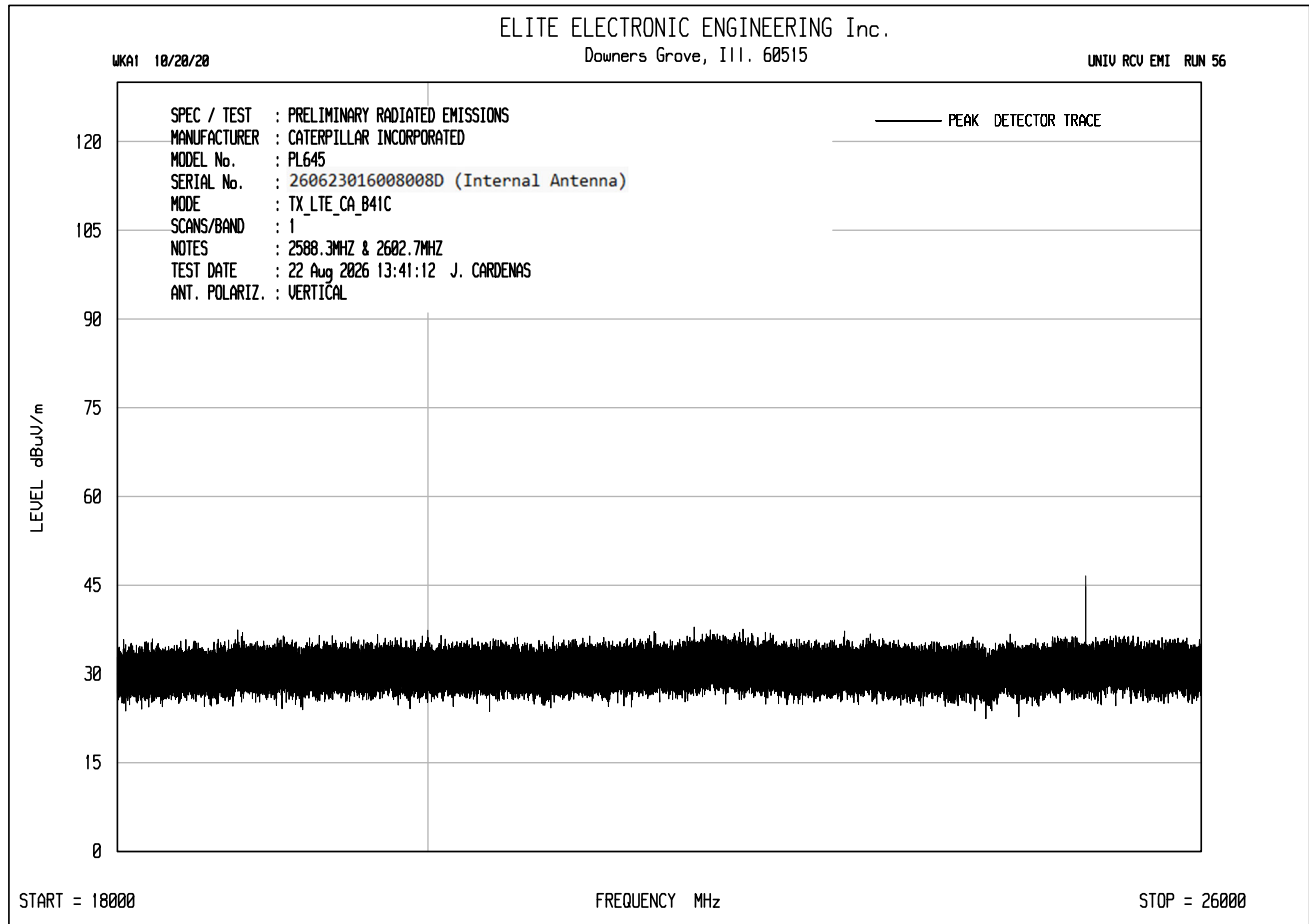






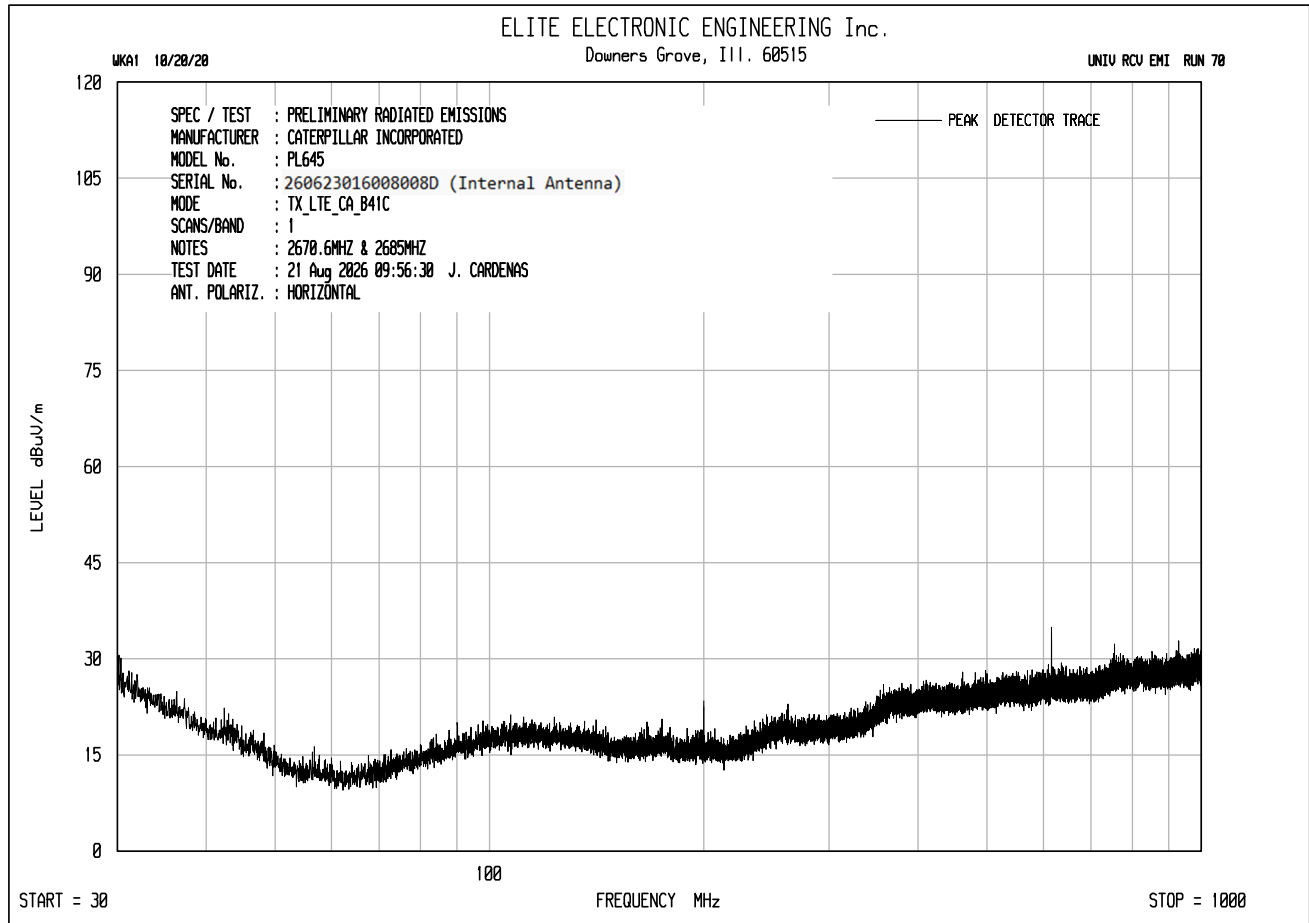


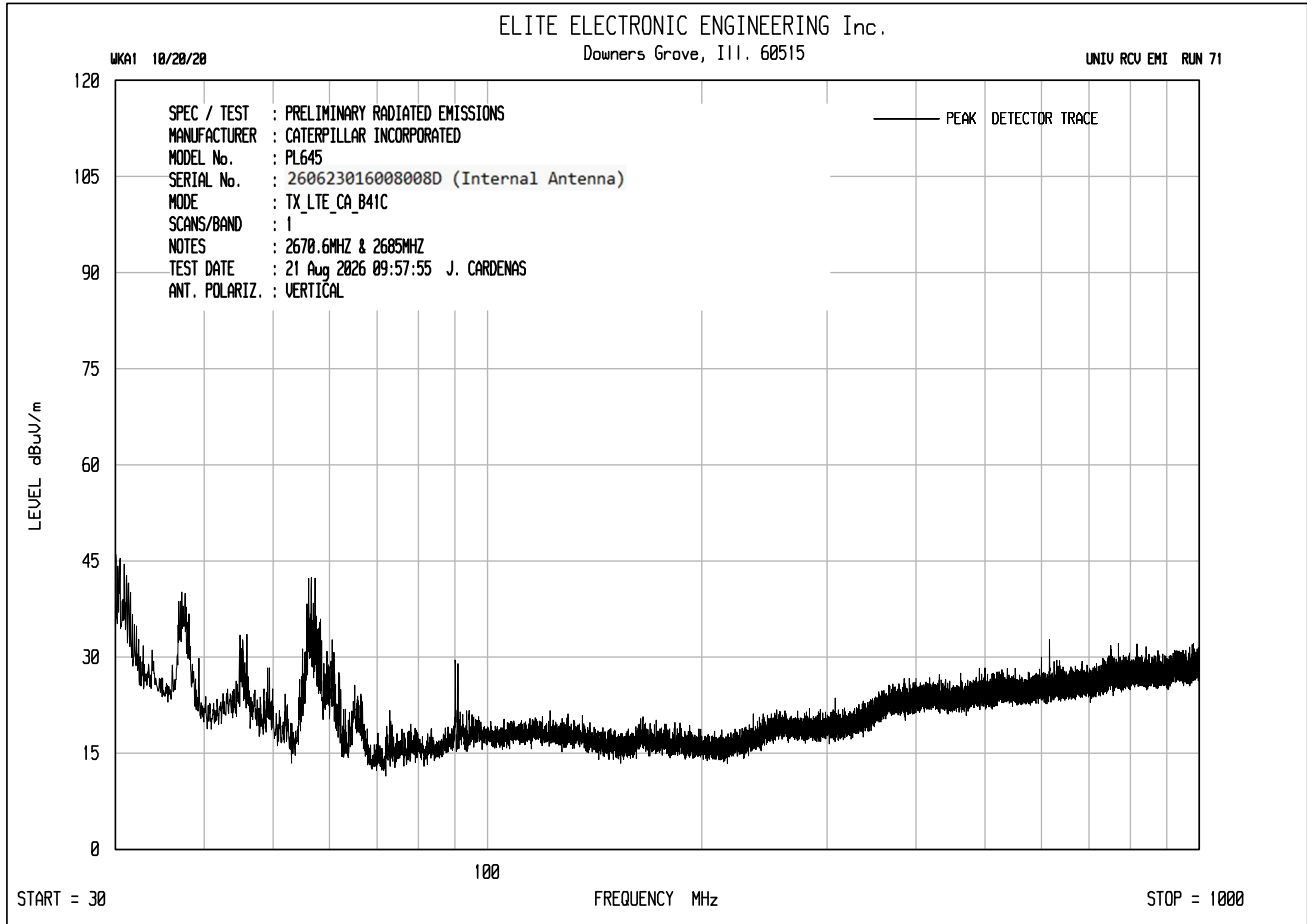


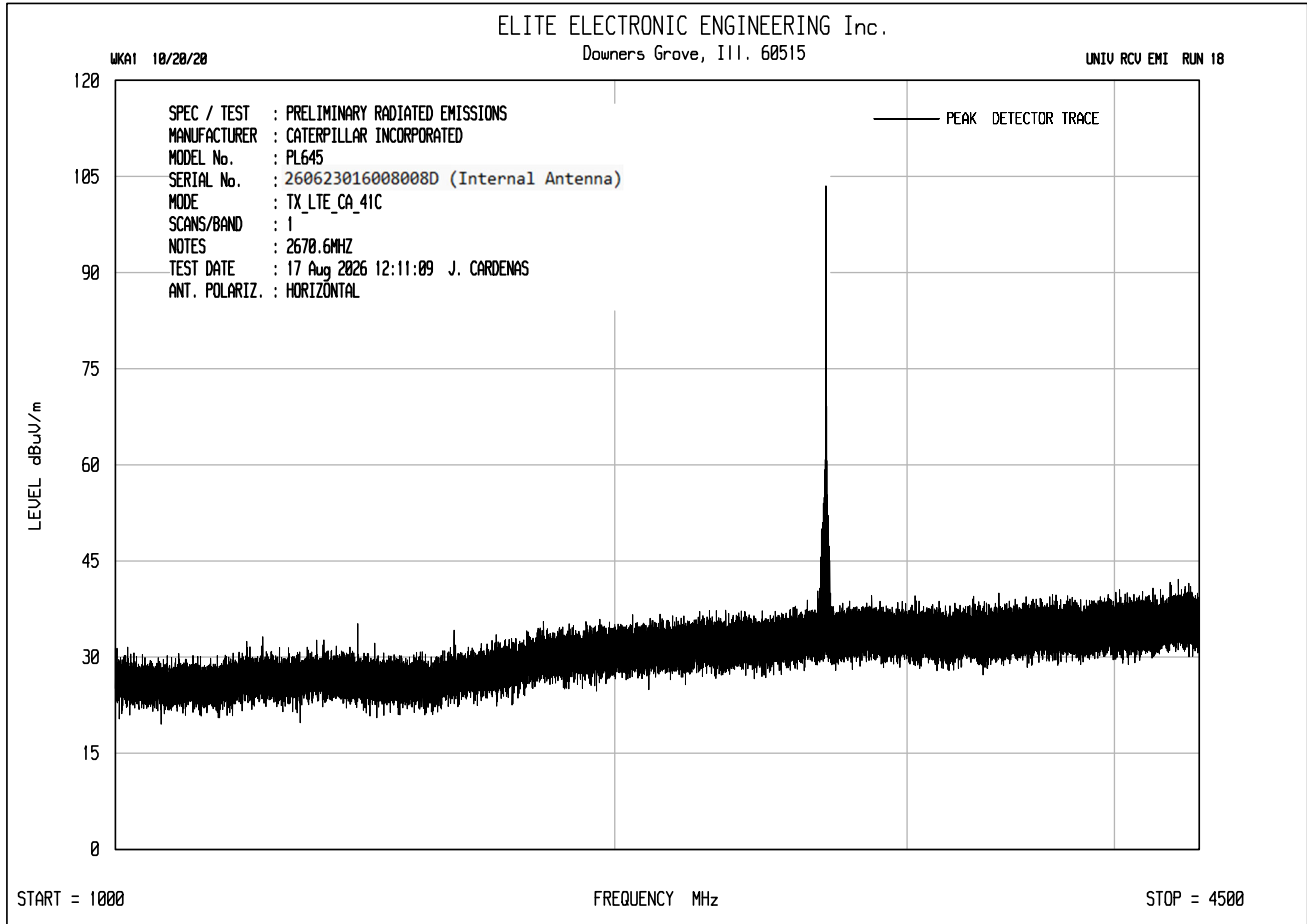


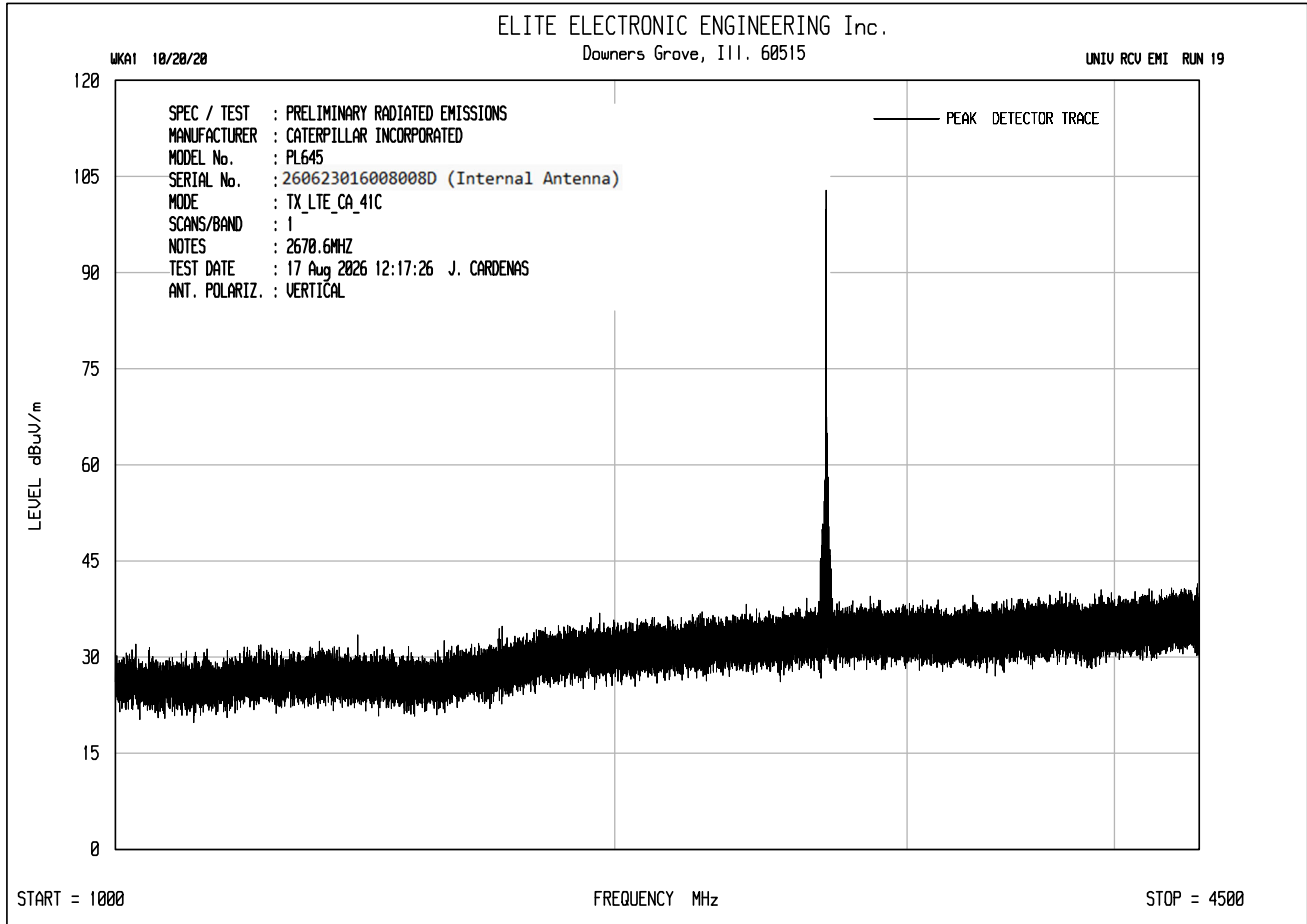
Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Calculated Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Attenuation Below Output Power (dB)	Minimum Attenuation (dB)
5176.60	H	26.4	Ambient	-32.3	5.0	5.0	-32.3	55.3	36.0
5176.60	V	26.1	Ambient	-32.5	5.0	5.0	-32.5	55.5	36.0

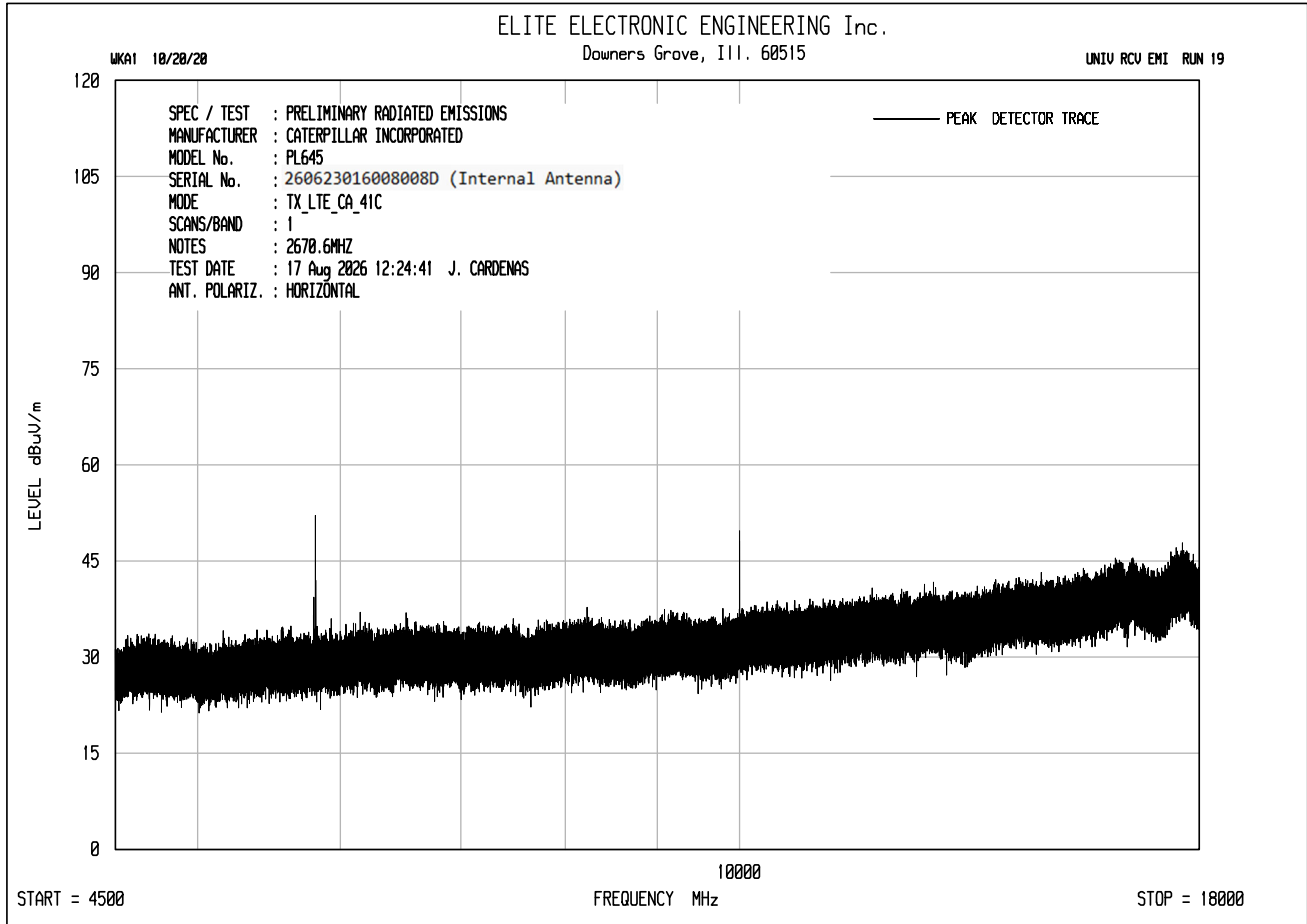
Test Details	
Manufacturer	Caterpillar Inc
Equipment Under Test	5G Telematics Radio
Model No.	PL645
Part No.	7620.002.904-13
Serial No.	260619016008008D (Internal Antenna)
Mode	LTE CA
Frequency Tested	Band 41 – 2670.6MHz
Notes	None

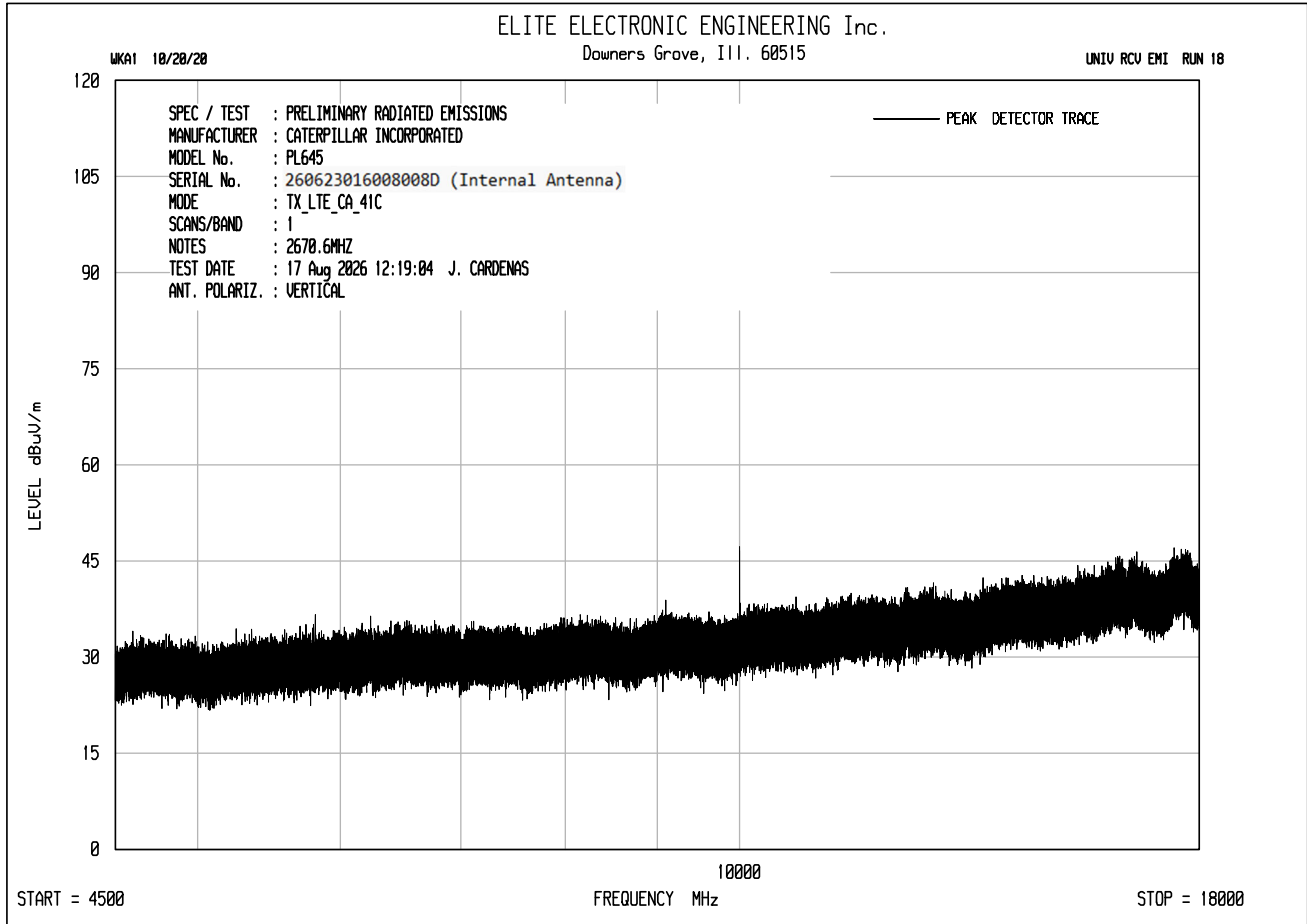


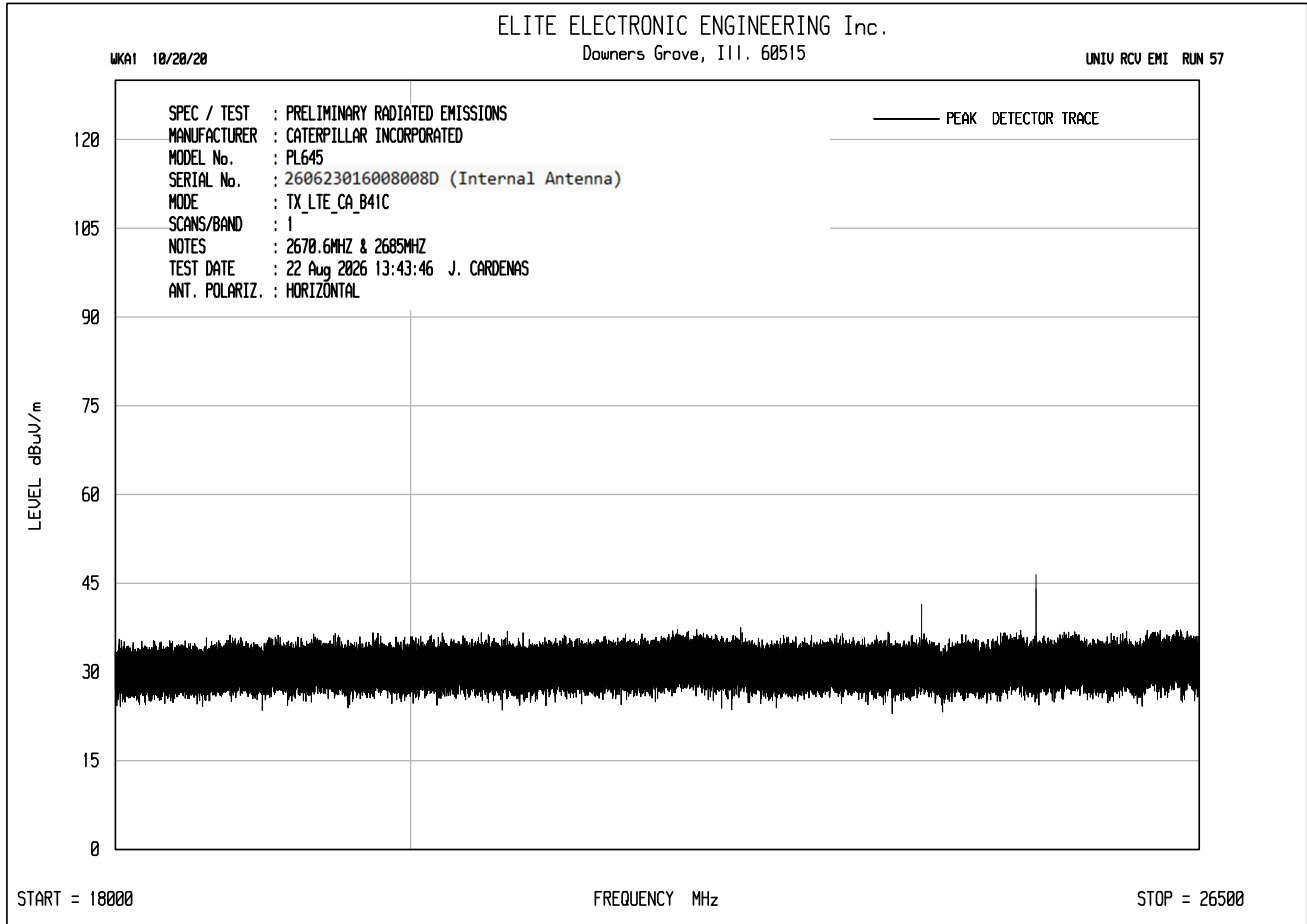


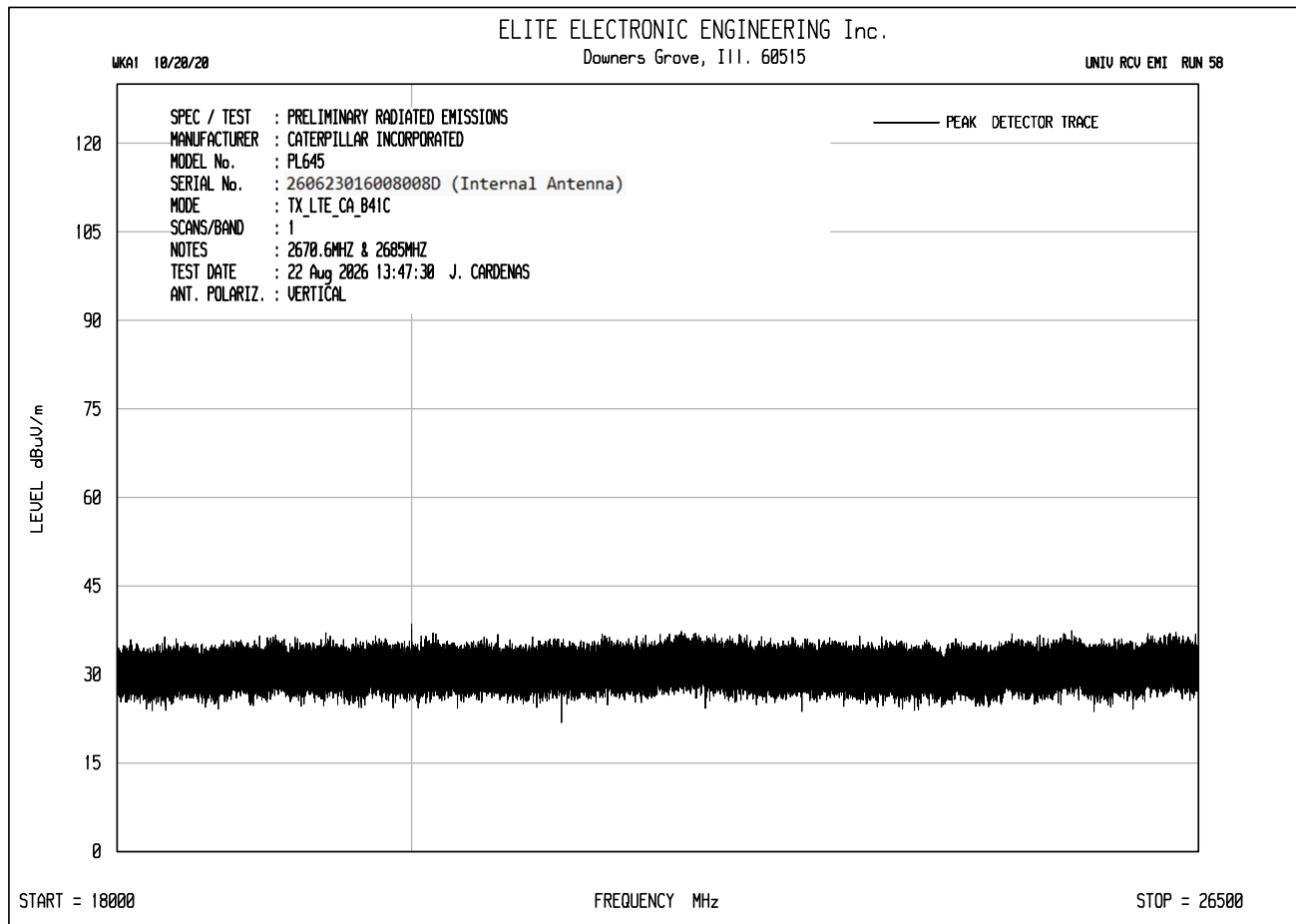


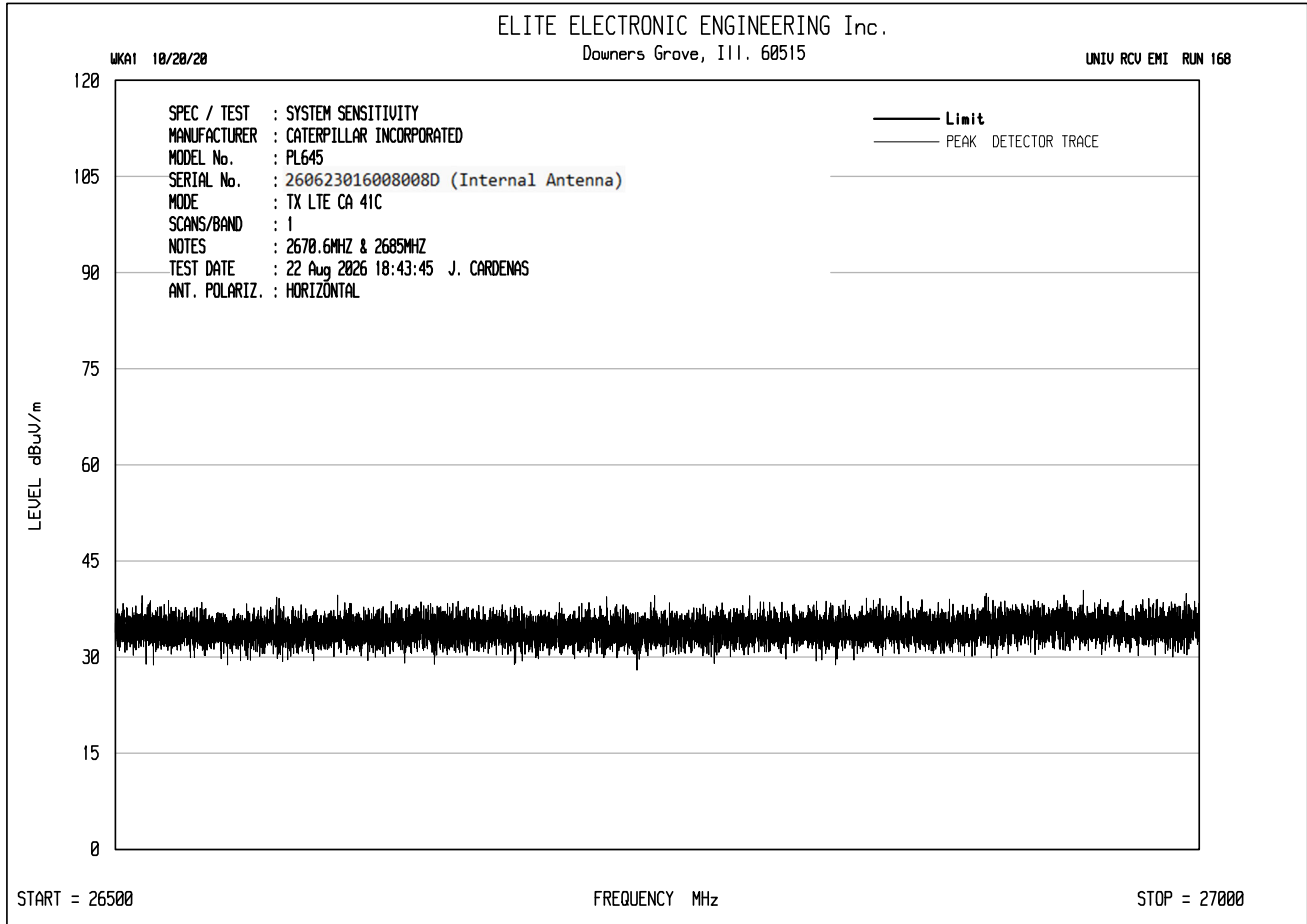


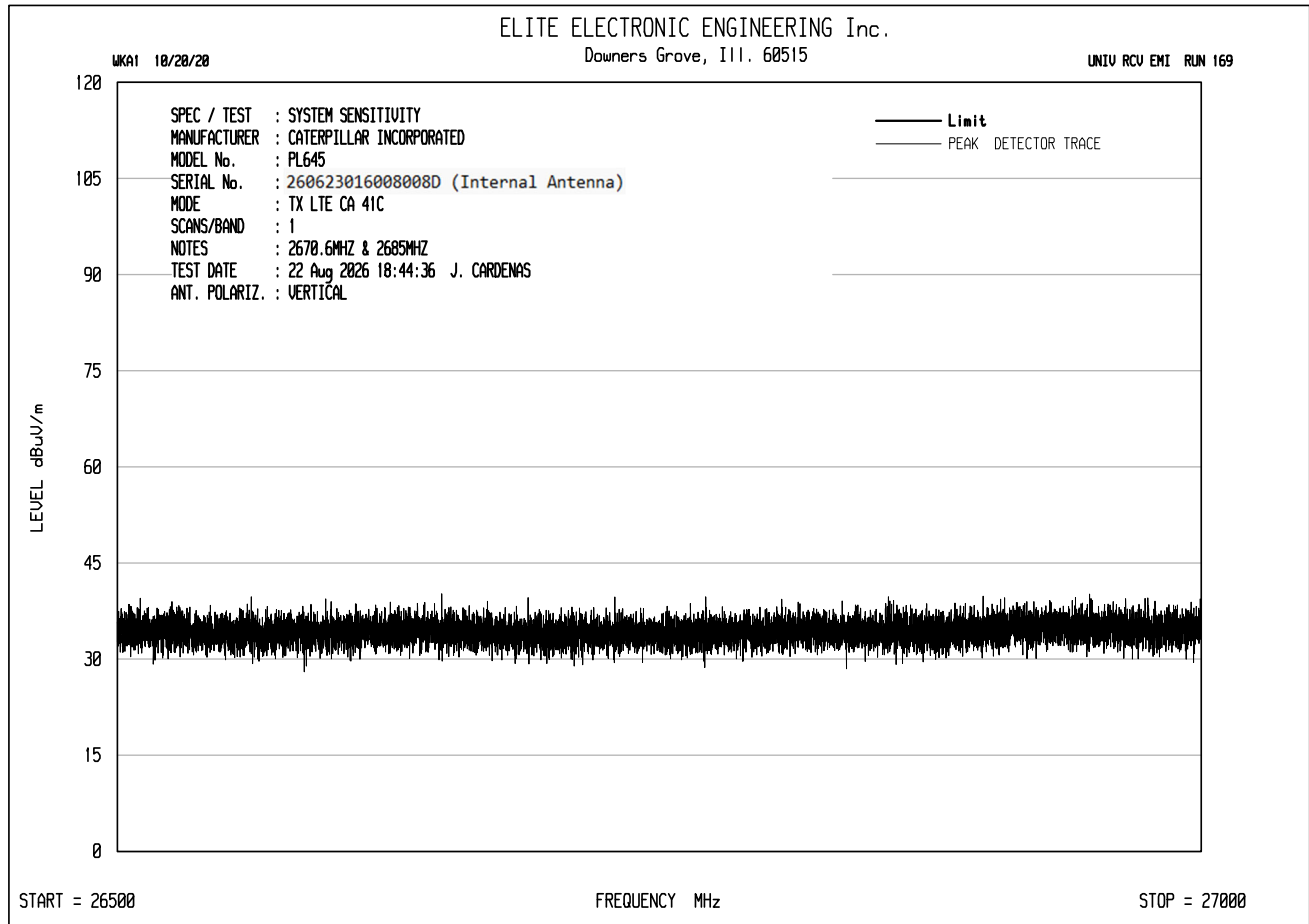






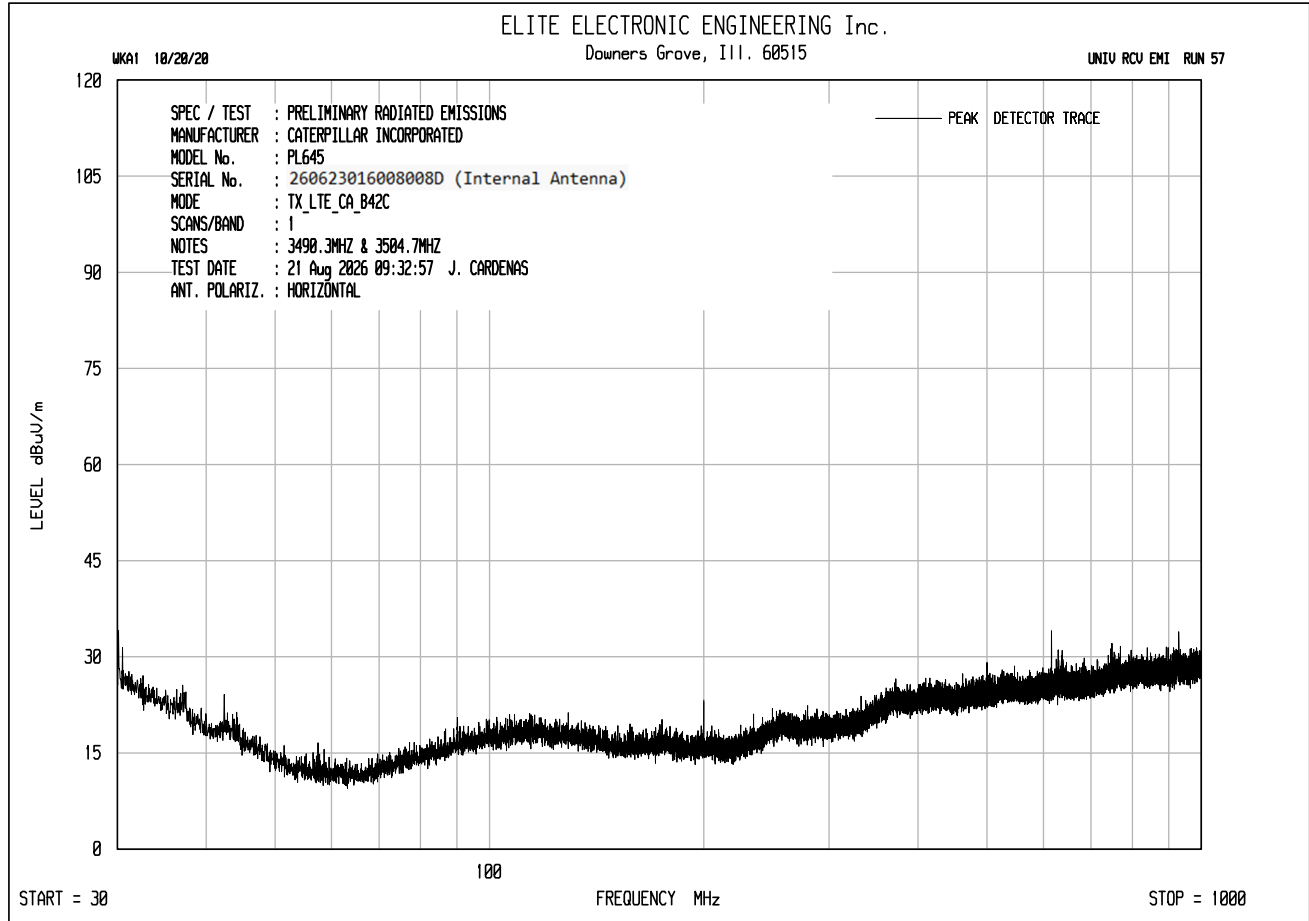


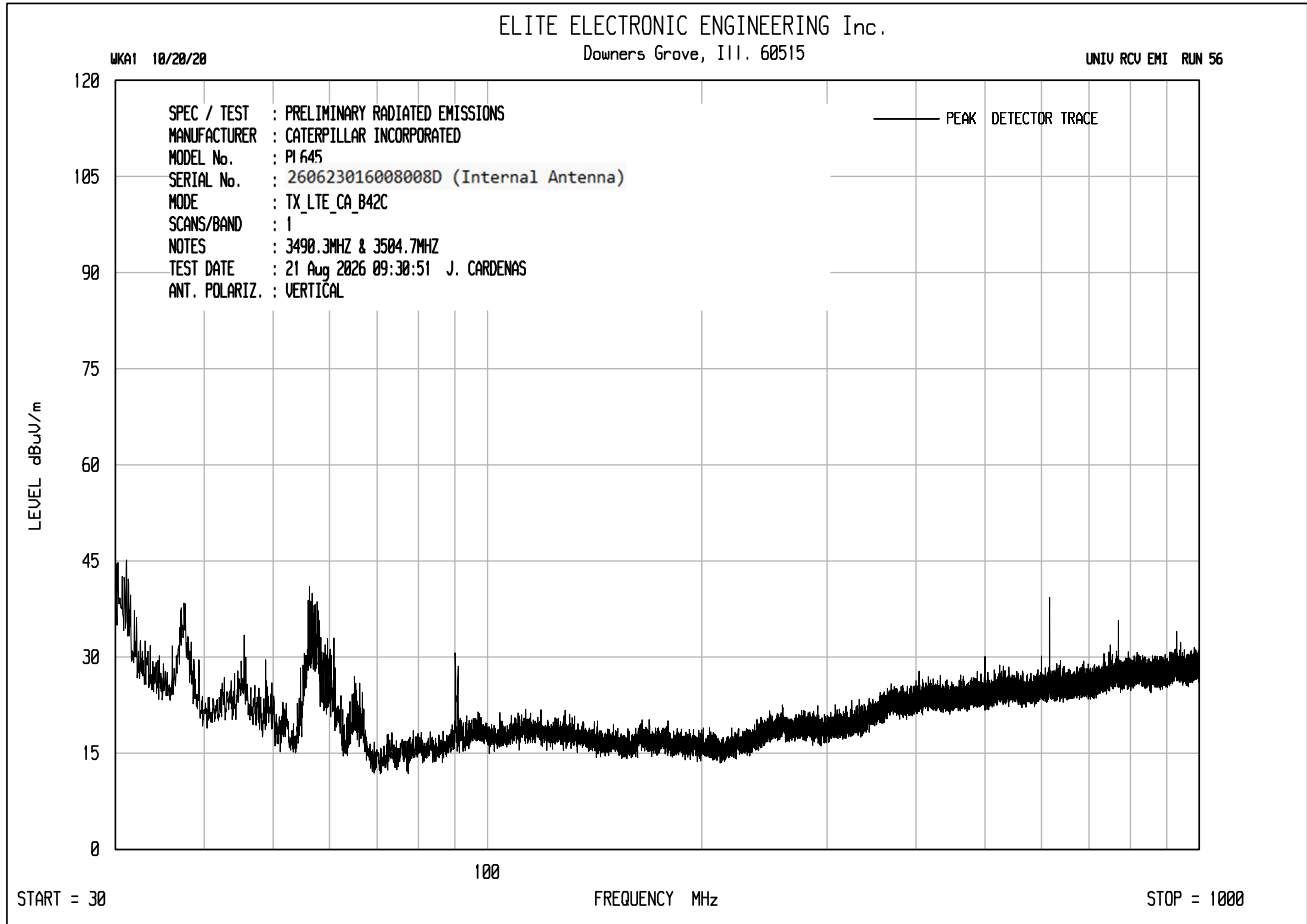


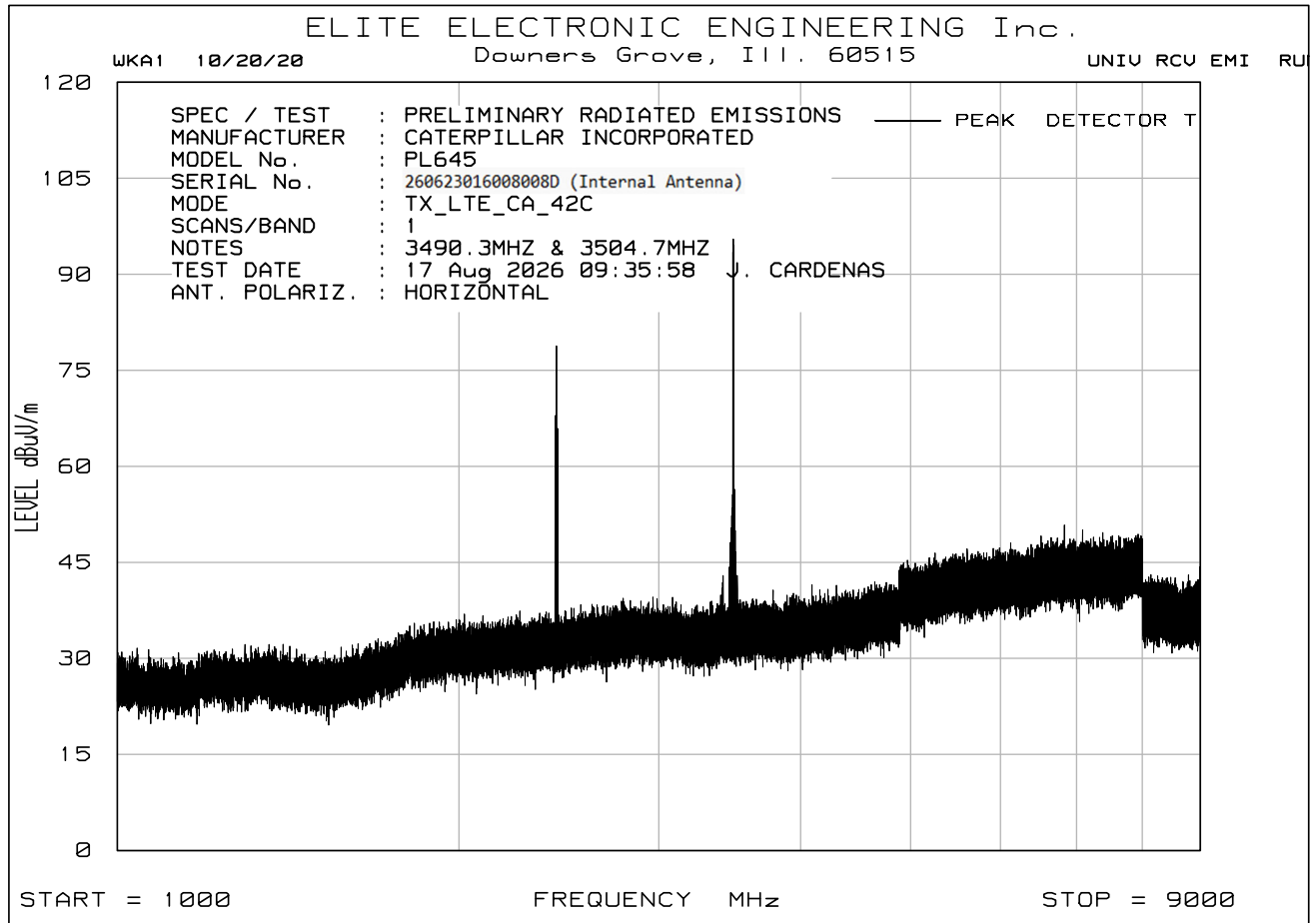


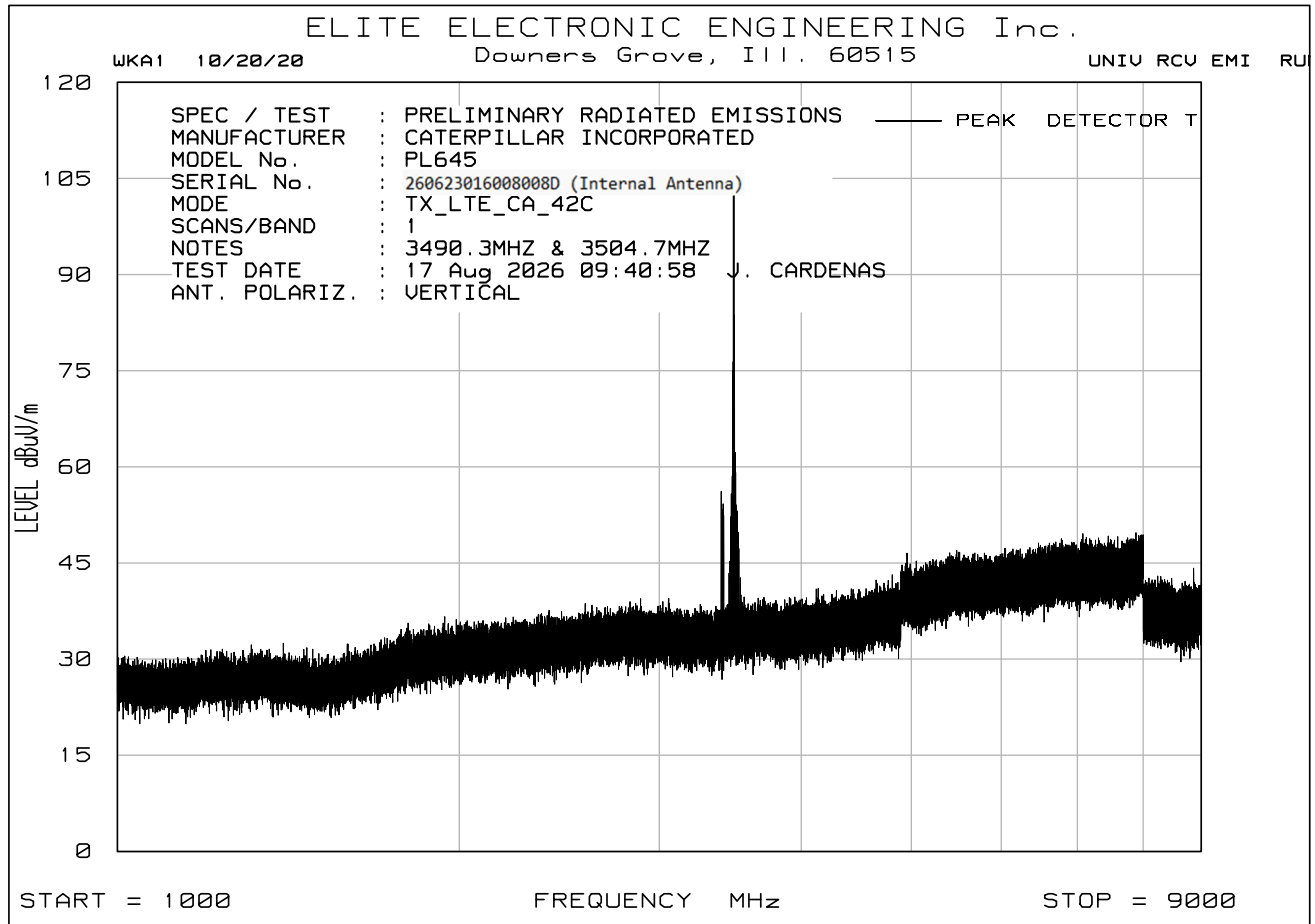
Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Calculated Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Attenuation Below Output Power (dB)	Minimum Attenuation (dB)
5341.20	H	49.6	Ambient	-49.2	5.3	5.1	-48.9	71.9	36.0
5341.20	V	49.9	Ambient	-49.3	5.3	5.1	-49.1	72.1	36.0

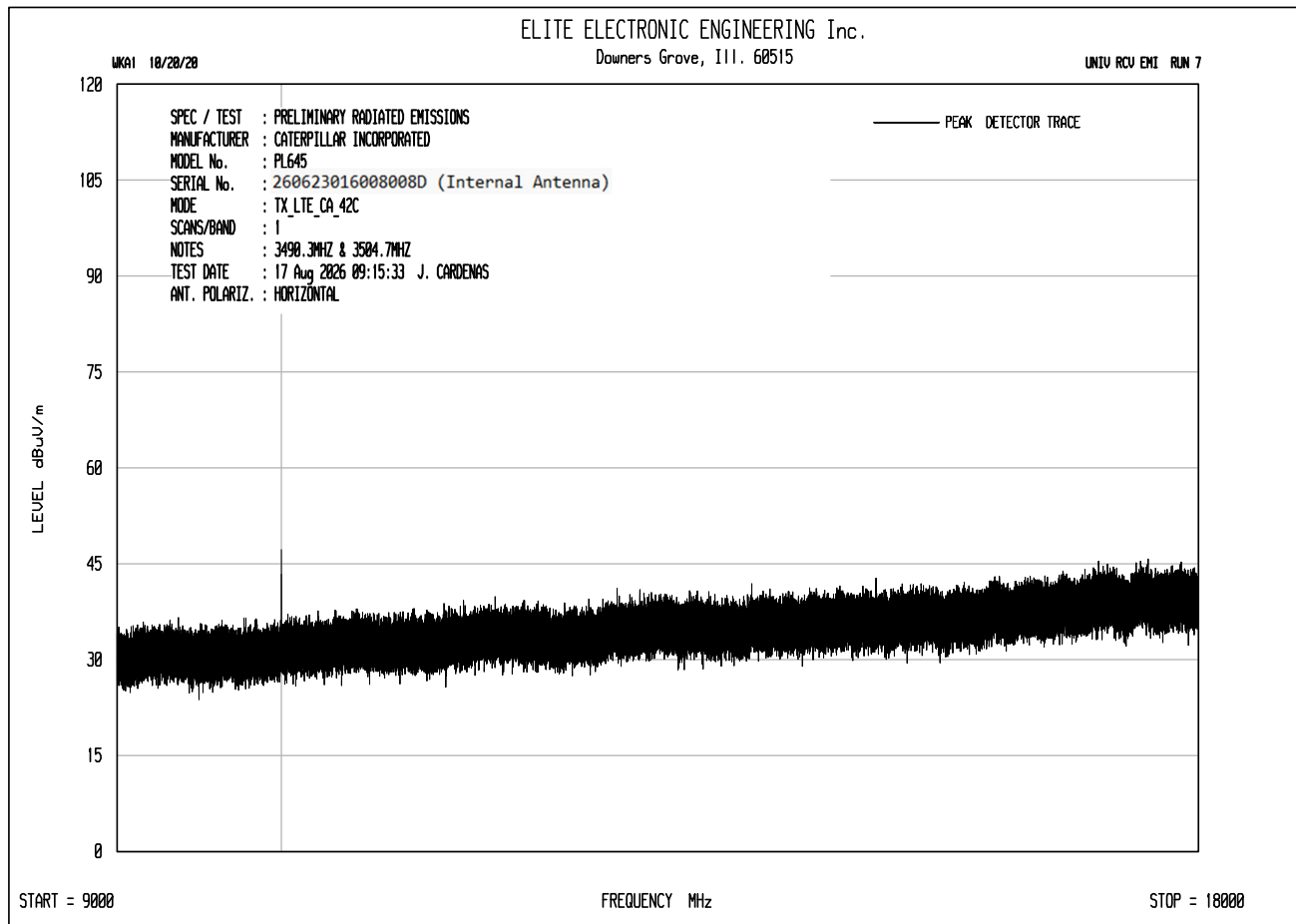
Test Details	
Manufacturer	Caterpillar Inc
Equipment Under Test	5G Telematics Radio
Model No.	PL645
Part No.	7620.002.904-13
Serial No.	260619016008008D (Internal Antenna)
Mode	LTE CA
Frequency Tested	Band 42 – 3490.3MHz
Notes	None

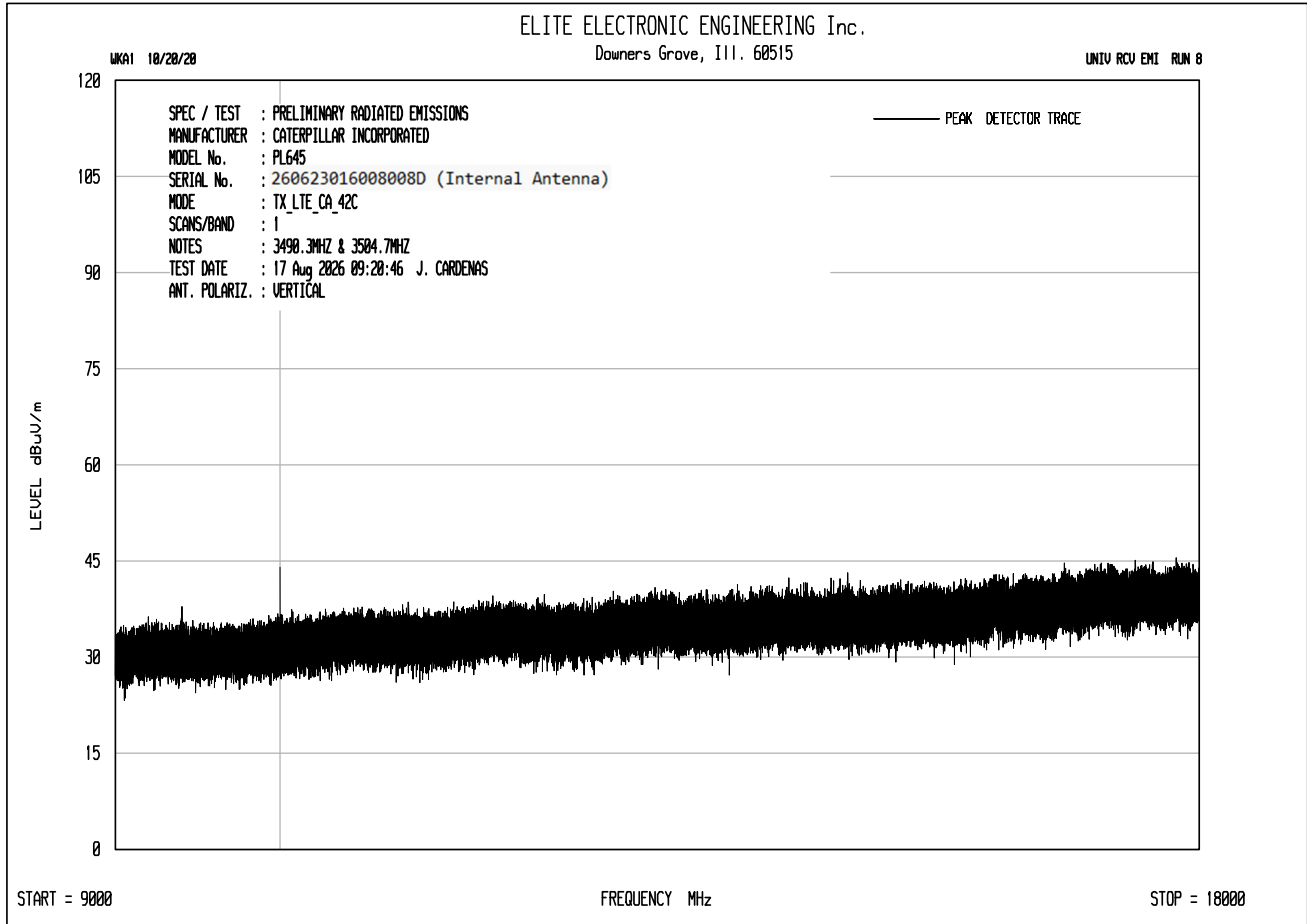


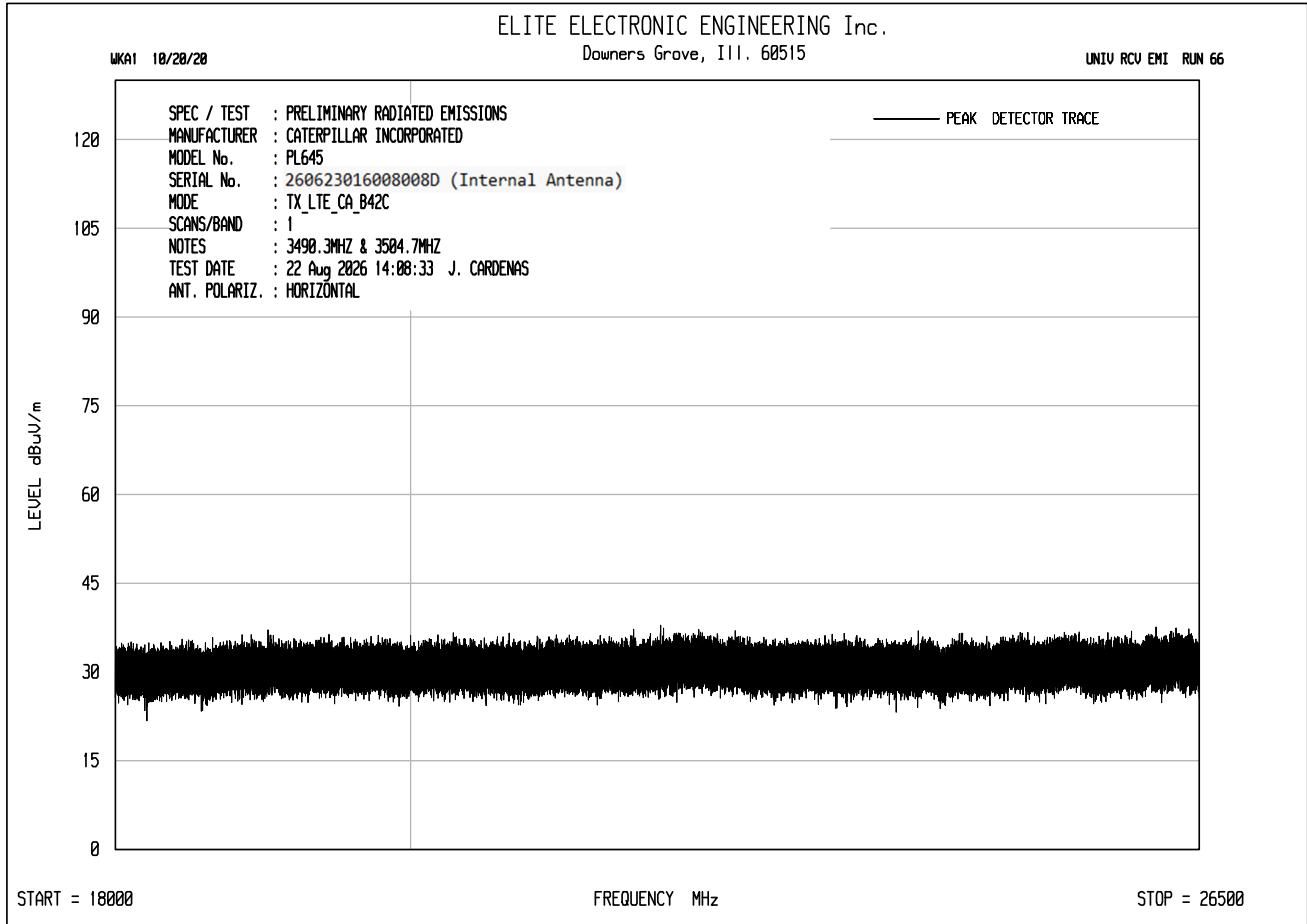


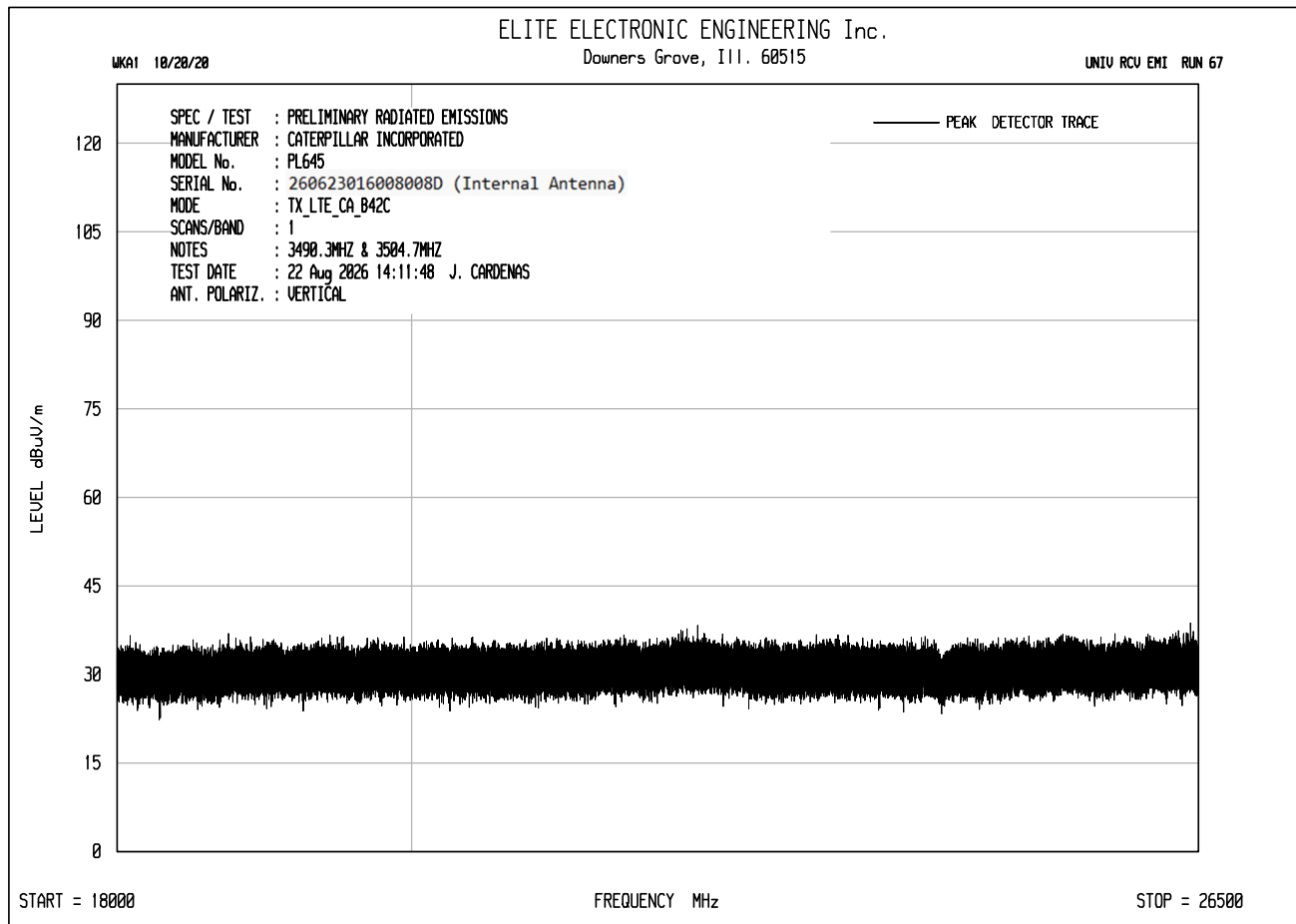


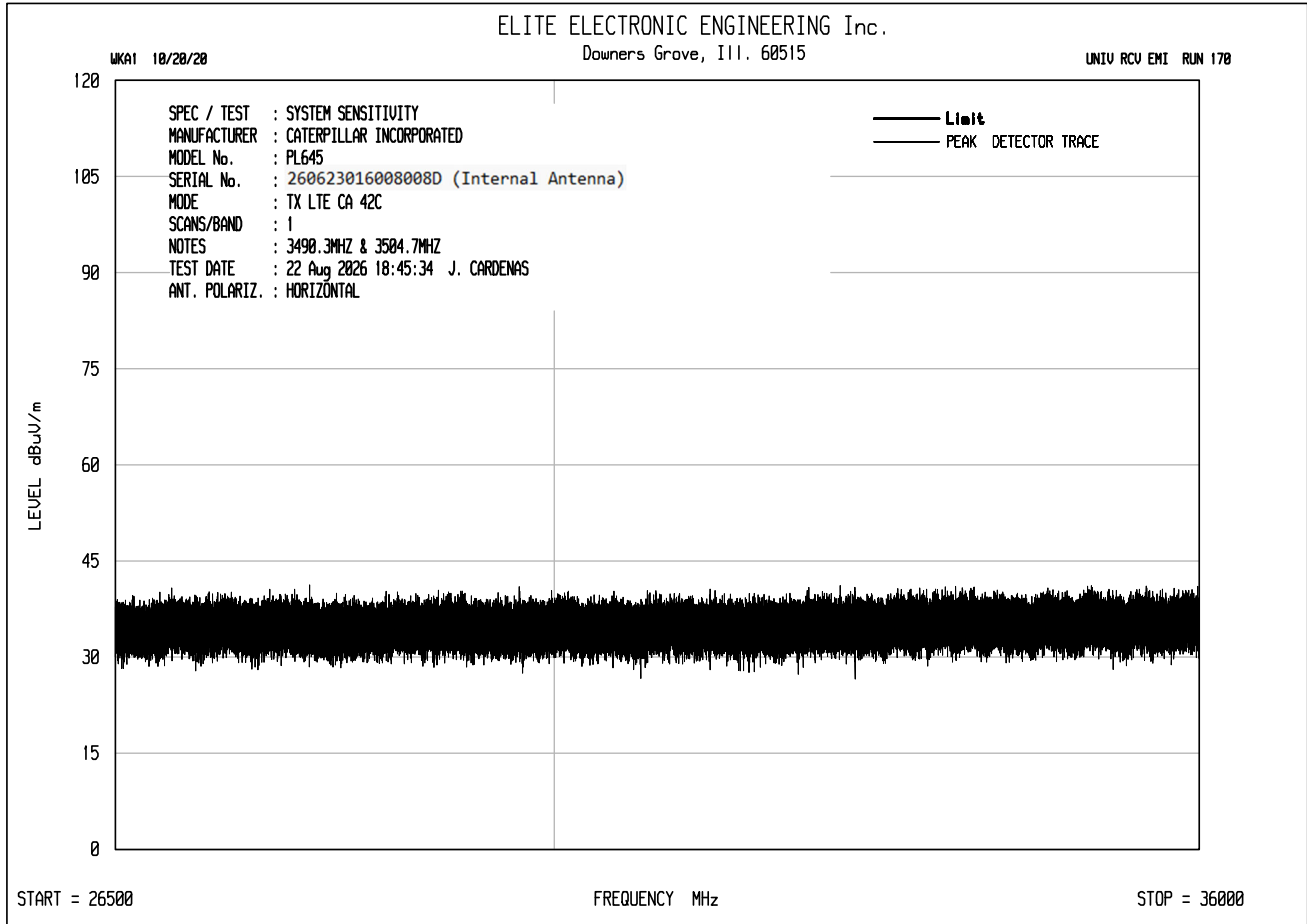


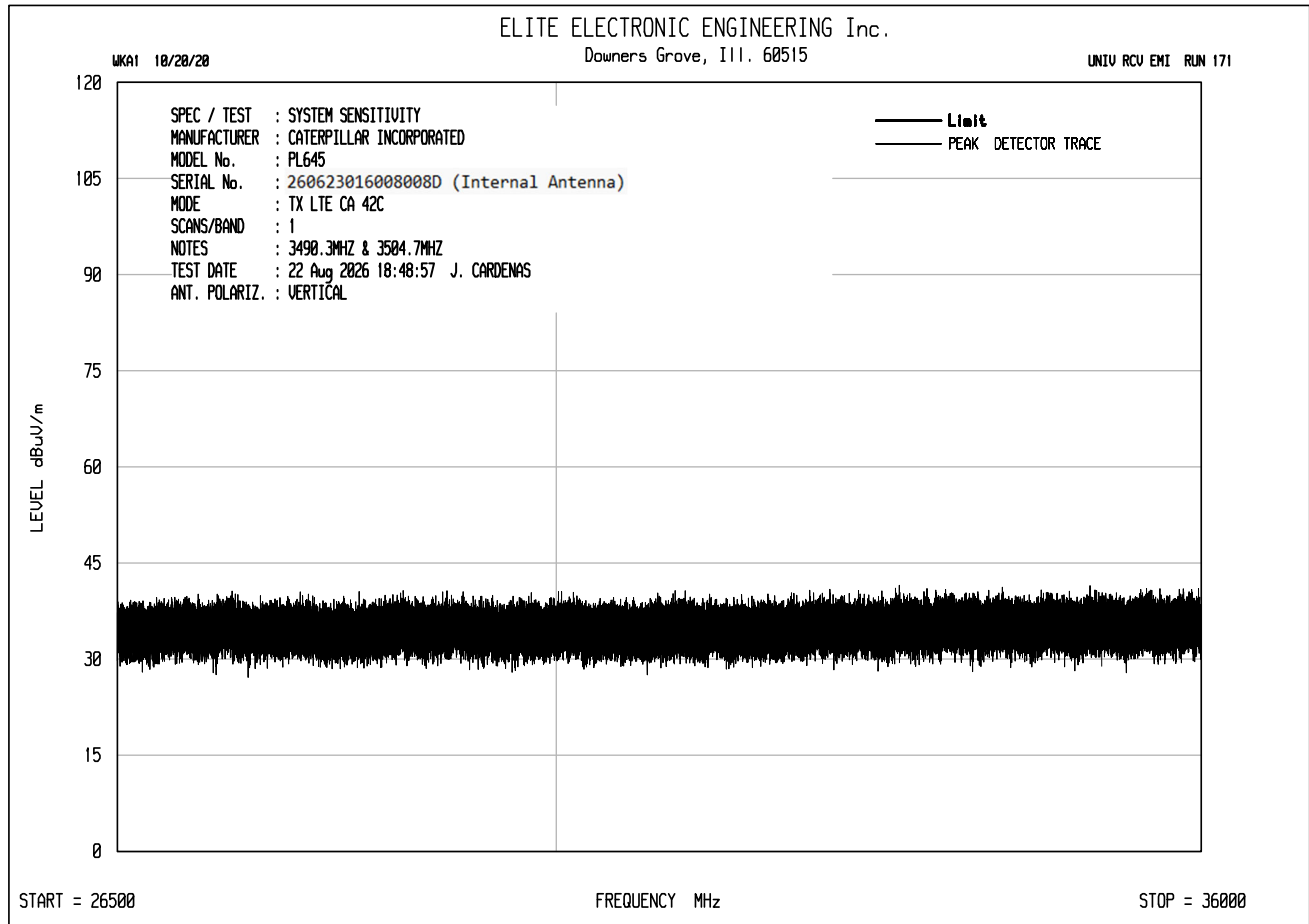






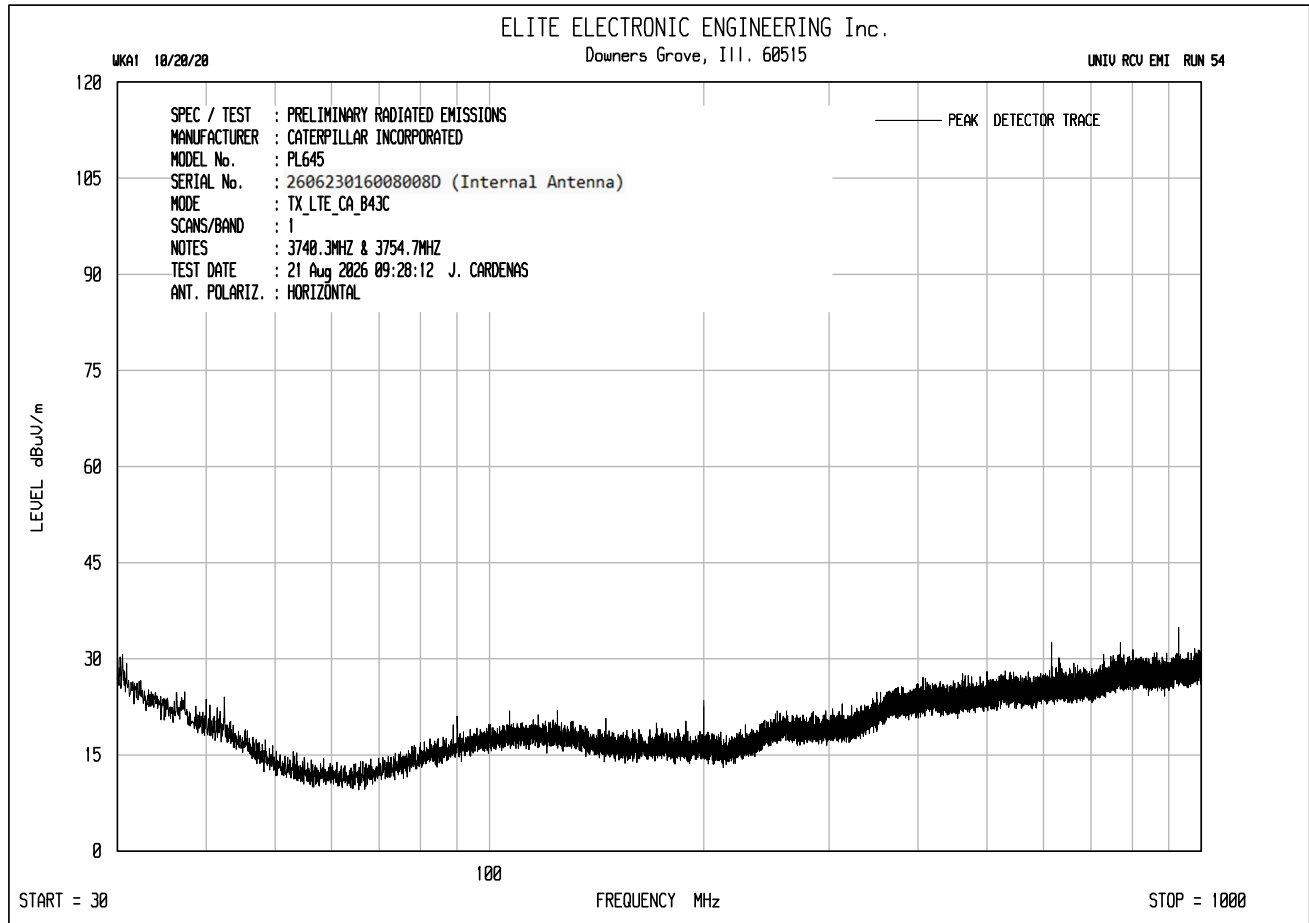


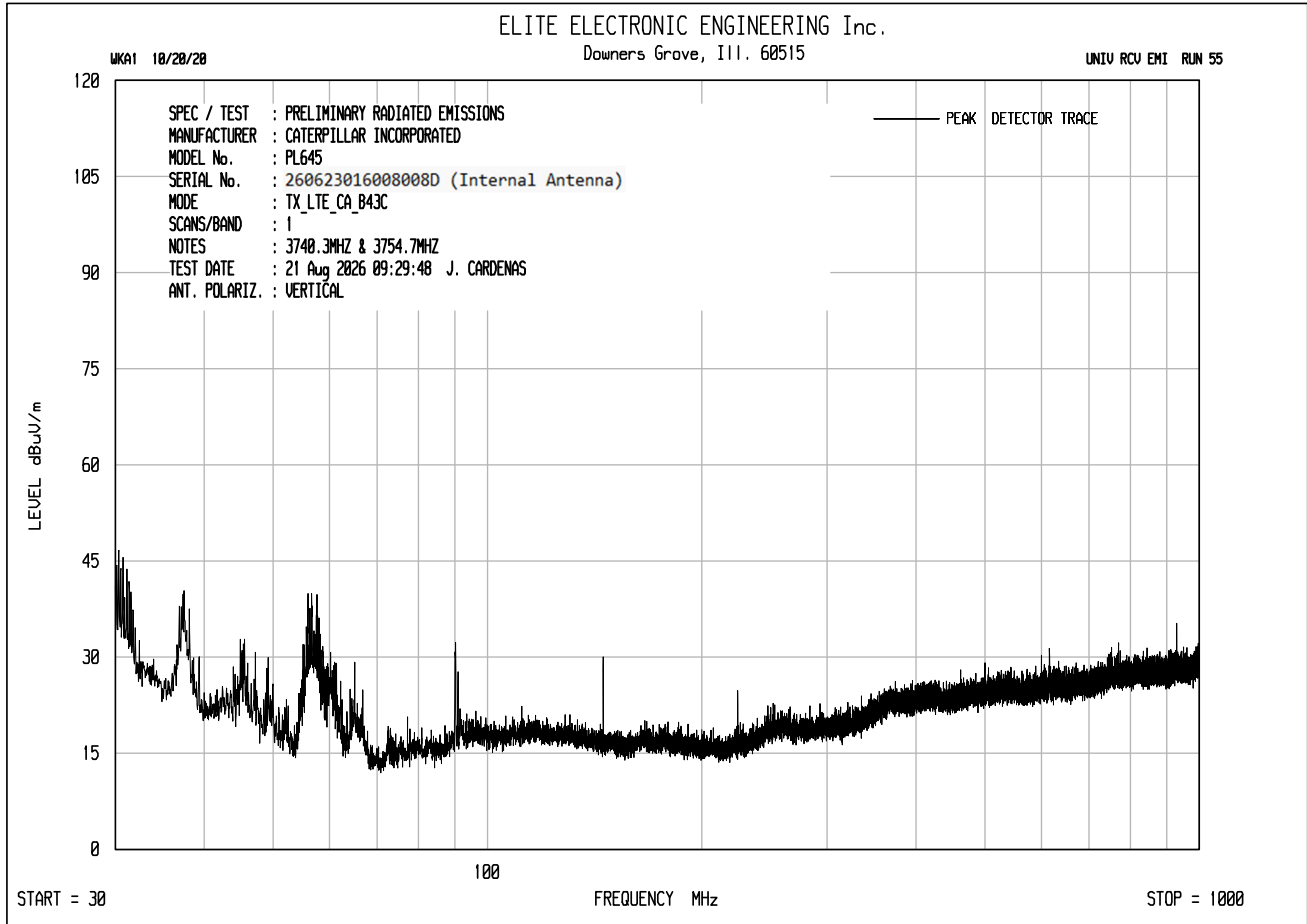


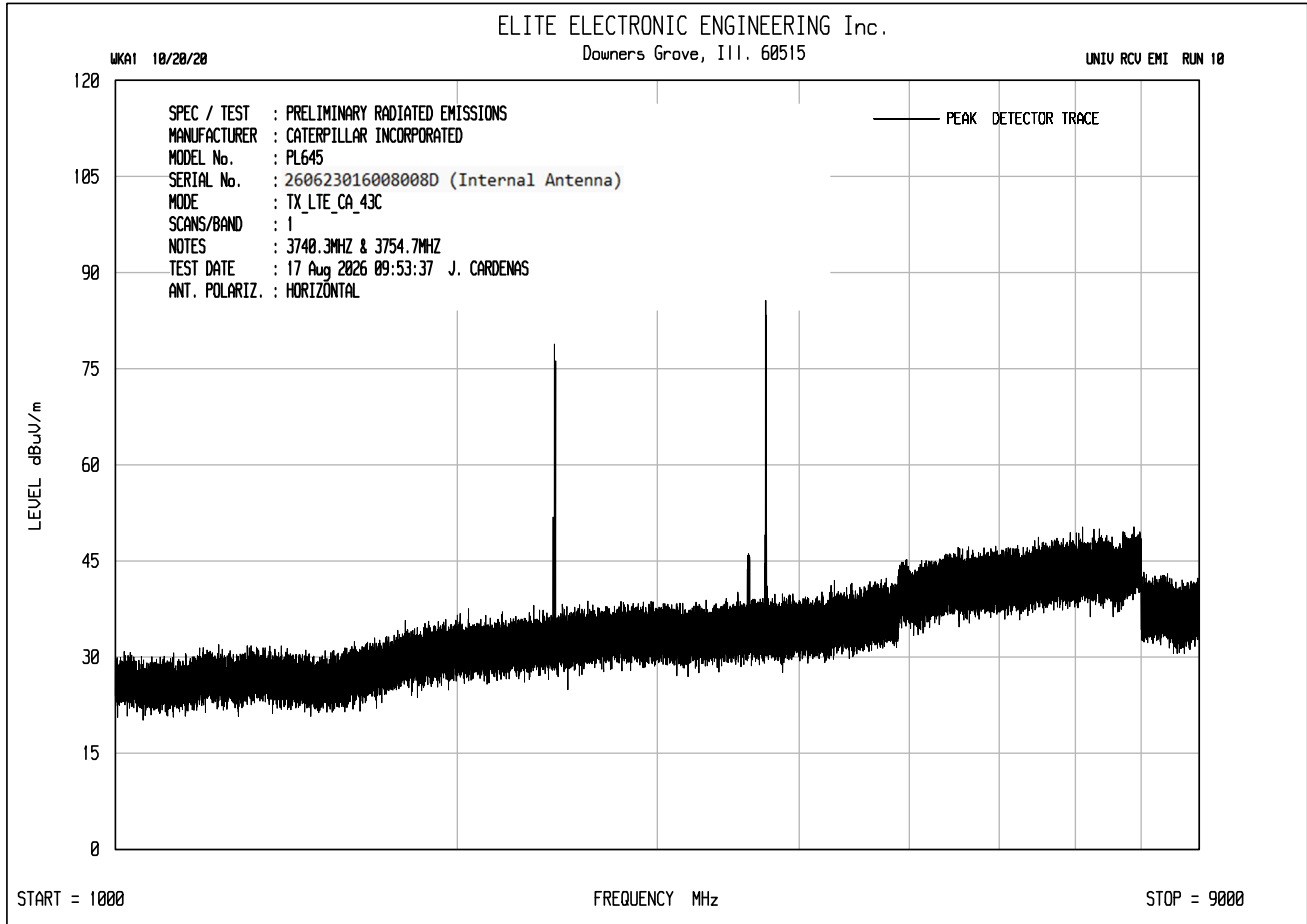


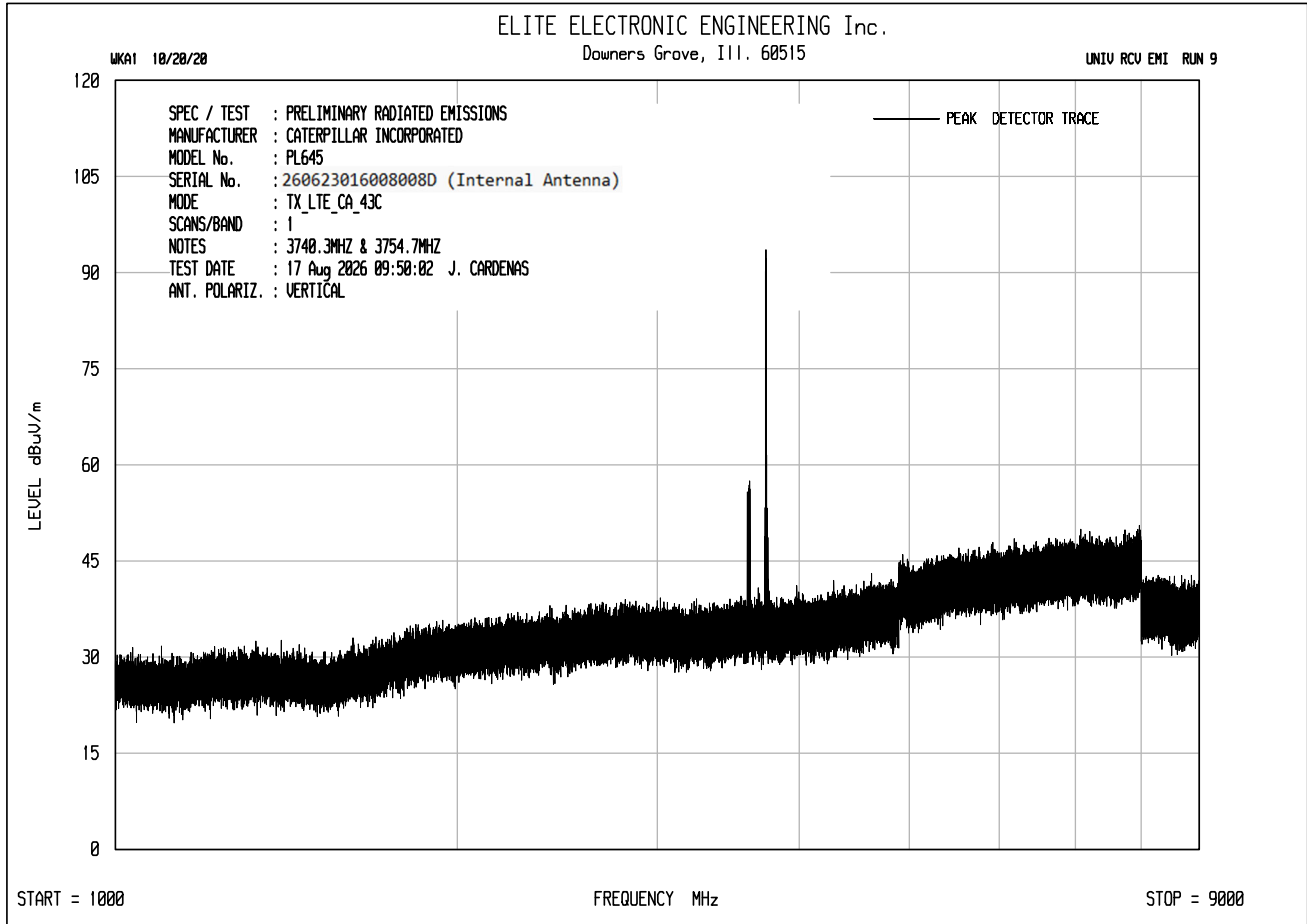
Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Calculated Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Attenuation Below Output Power (dB)	Minimum Attenuation (dB)
6980.60	H	24.5	Ambient	-31.7	7.1	6.0	-30.6	53.6	36.0
6980.60	V	24.7	Ambient	-32.4	7.1	6.0	-31.3	54.3	36.0

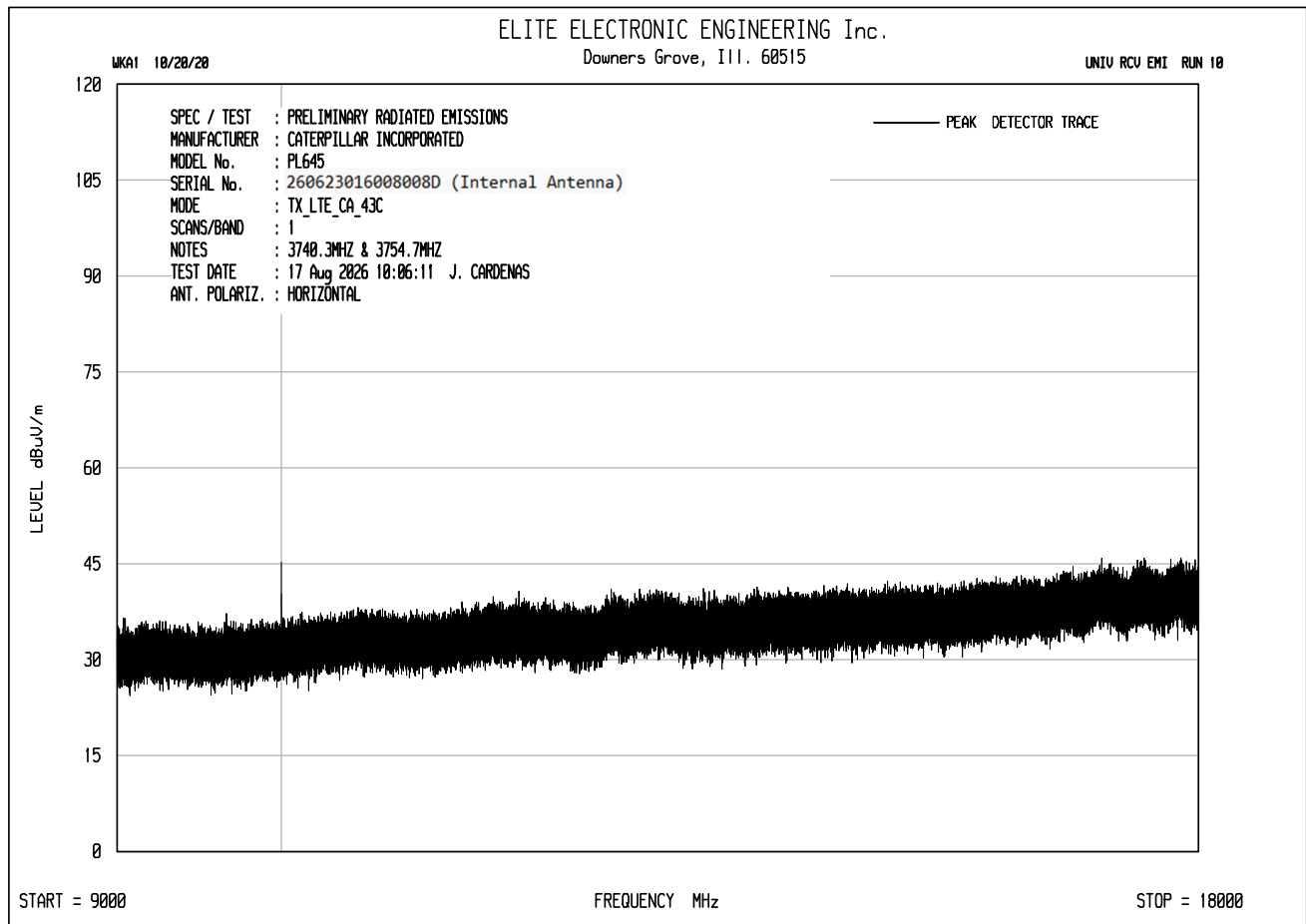
Test Details	
Manufacturer	Caterpillar Inc
Equipment Under Test	5G Telematics Radio
Model No.	PL645
Part No.	7620.002.904-13
Serial No.	260619016008008D (Internal Antenna)
Mode	LTE CA
Frequency Tested	Band 43 – 3740.3MHz
Notes	None

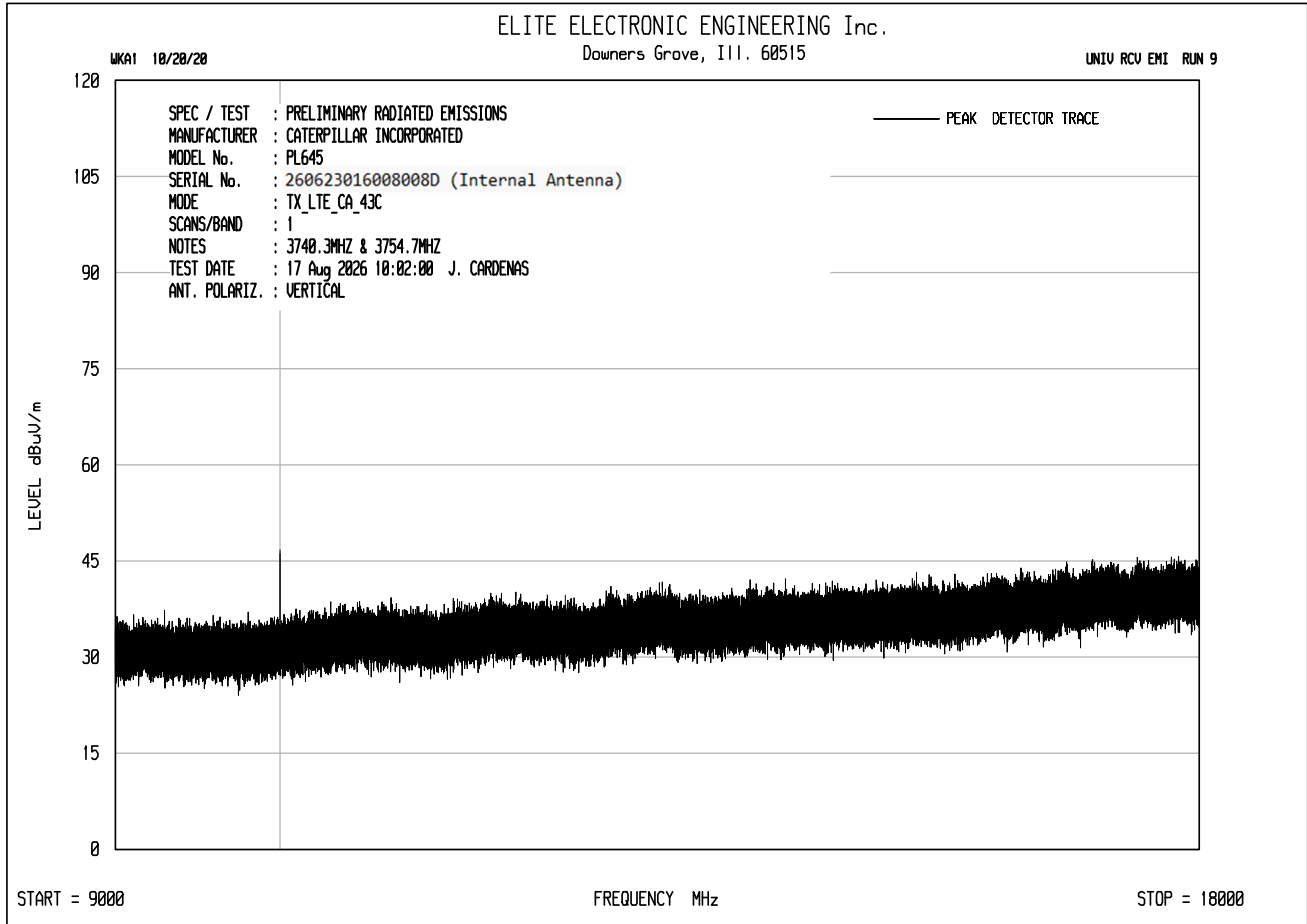


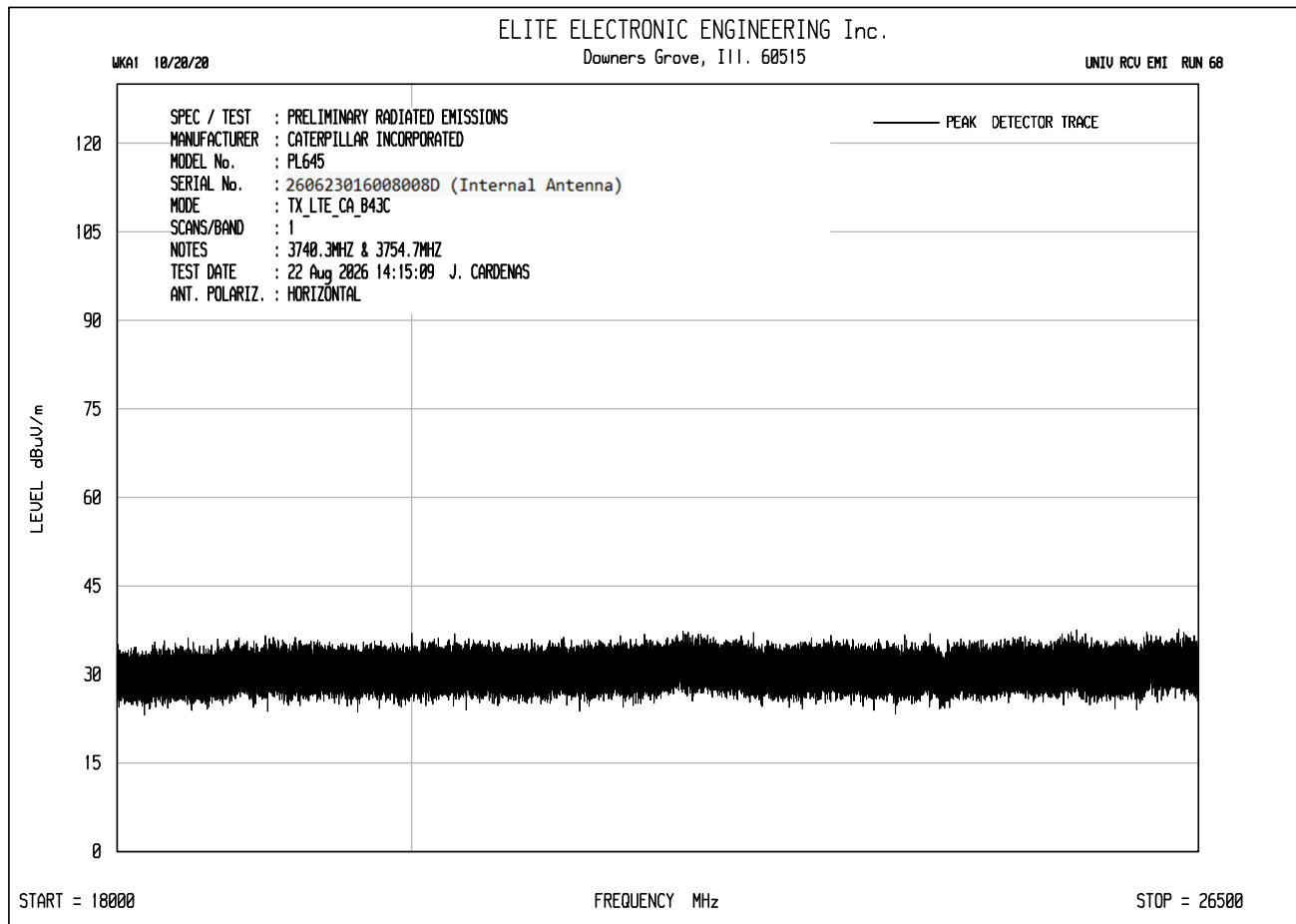


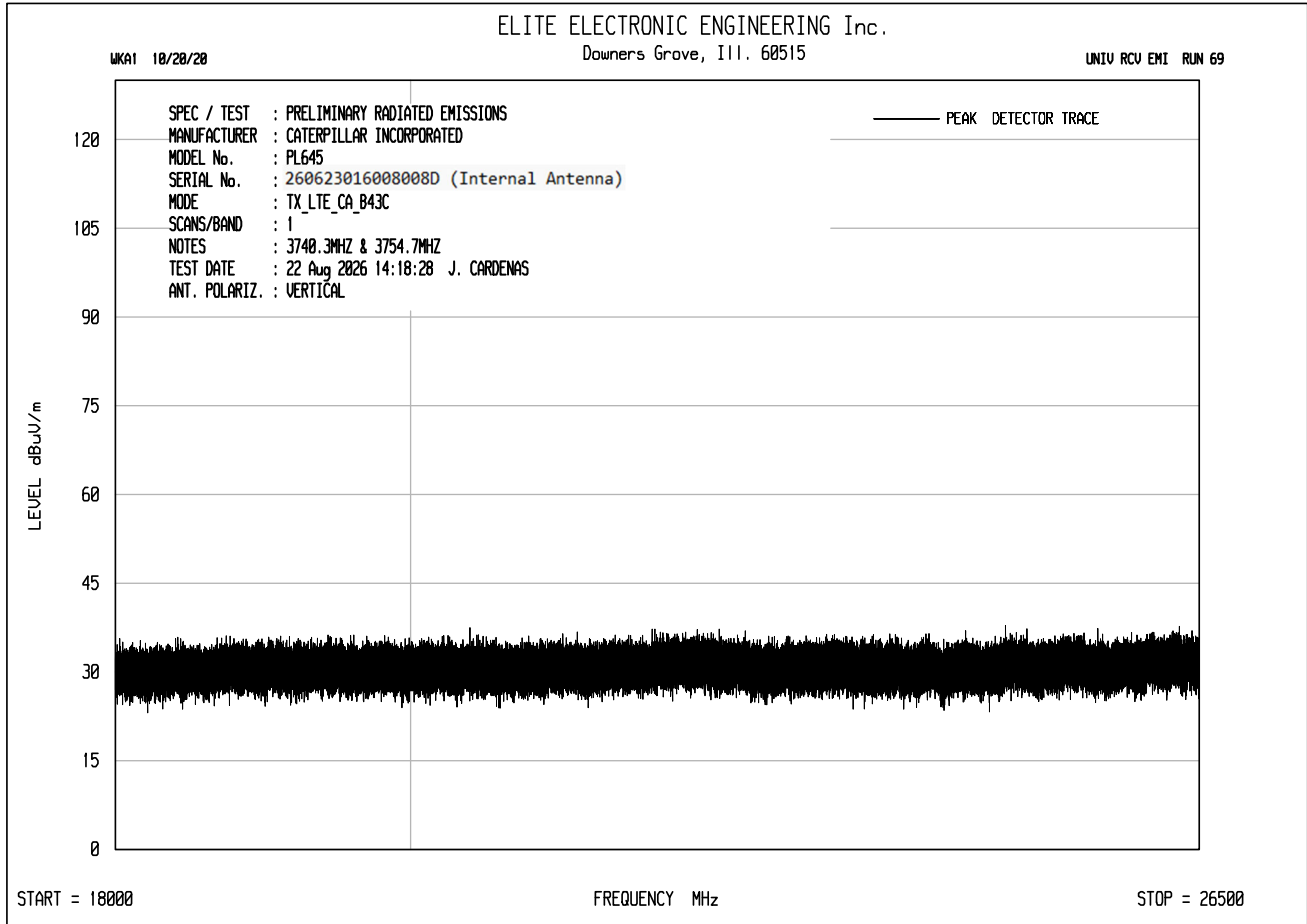


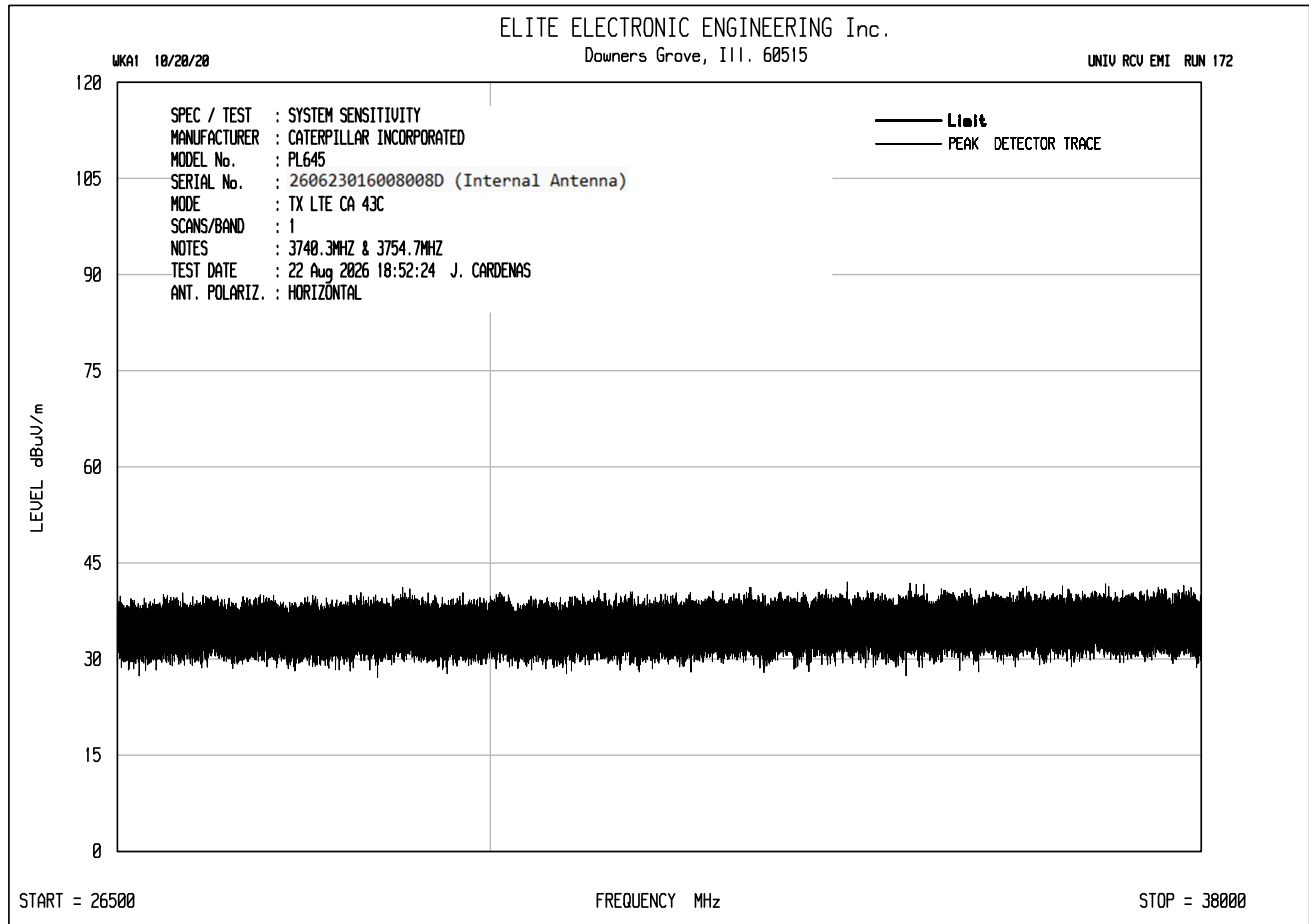


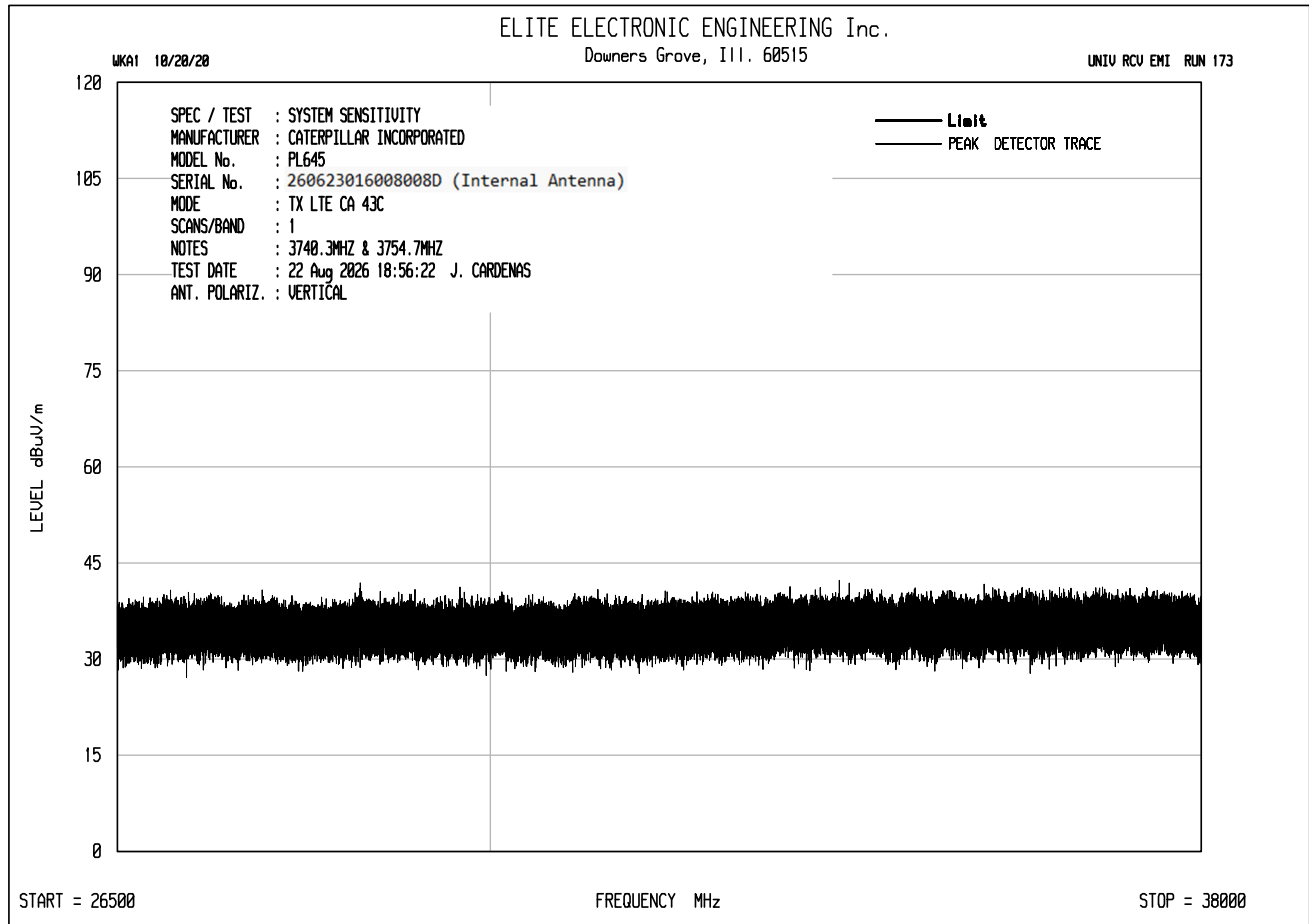






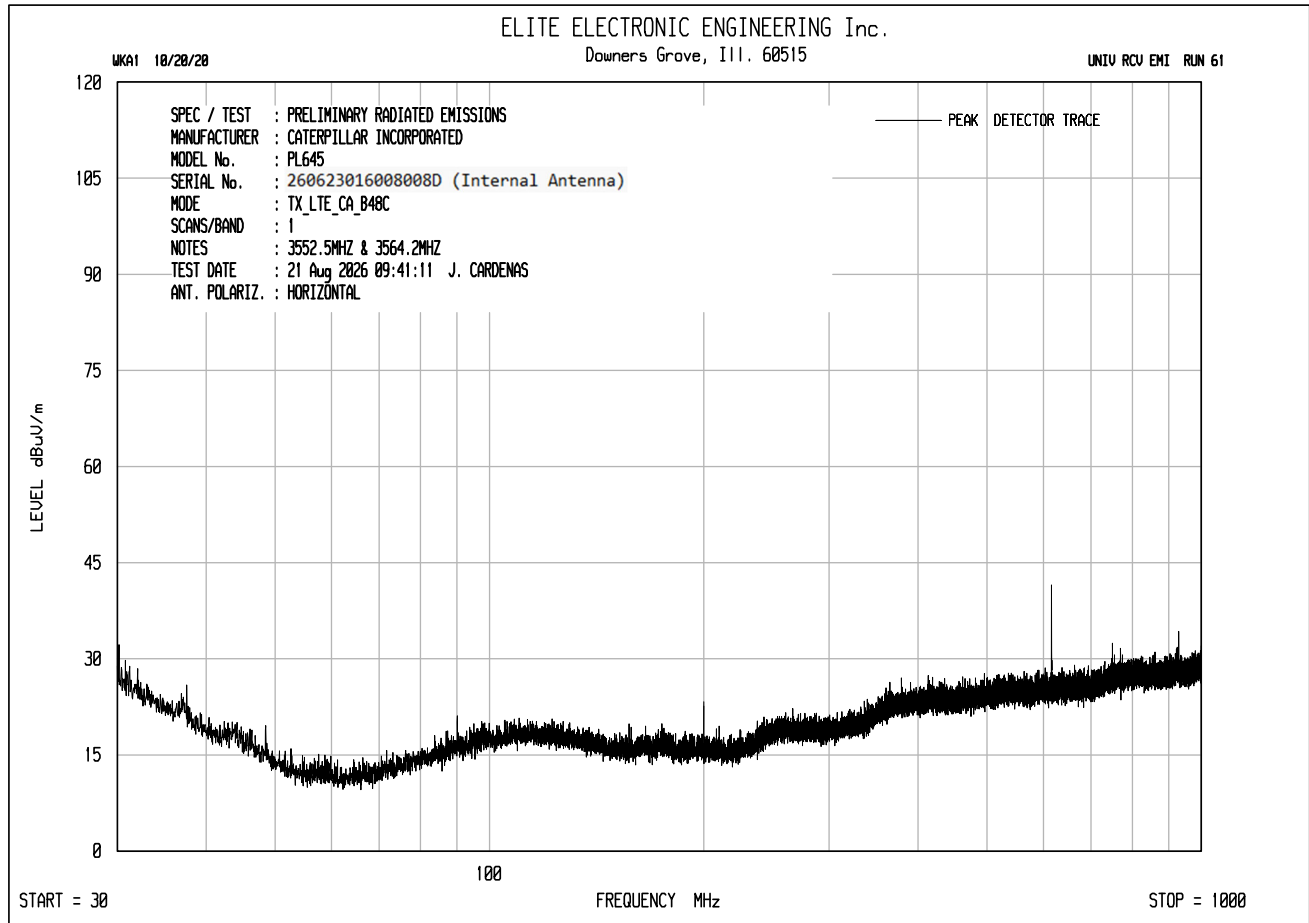


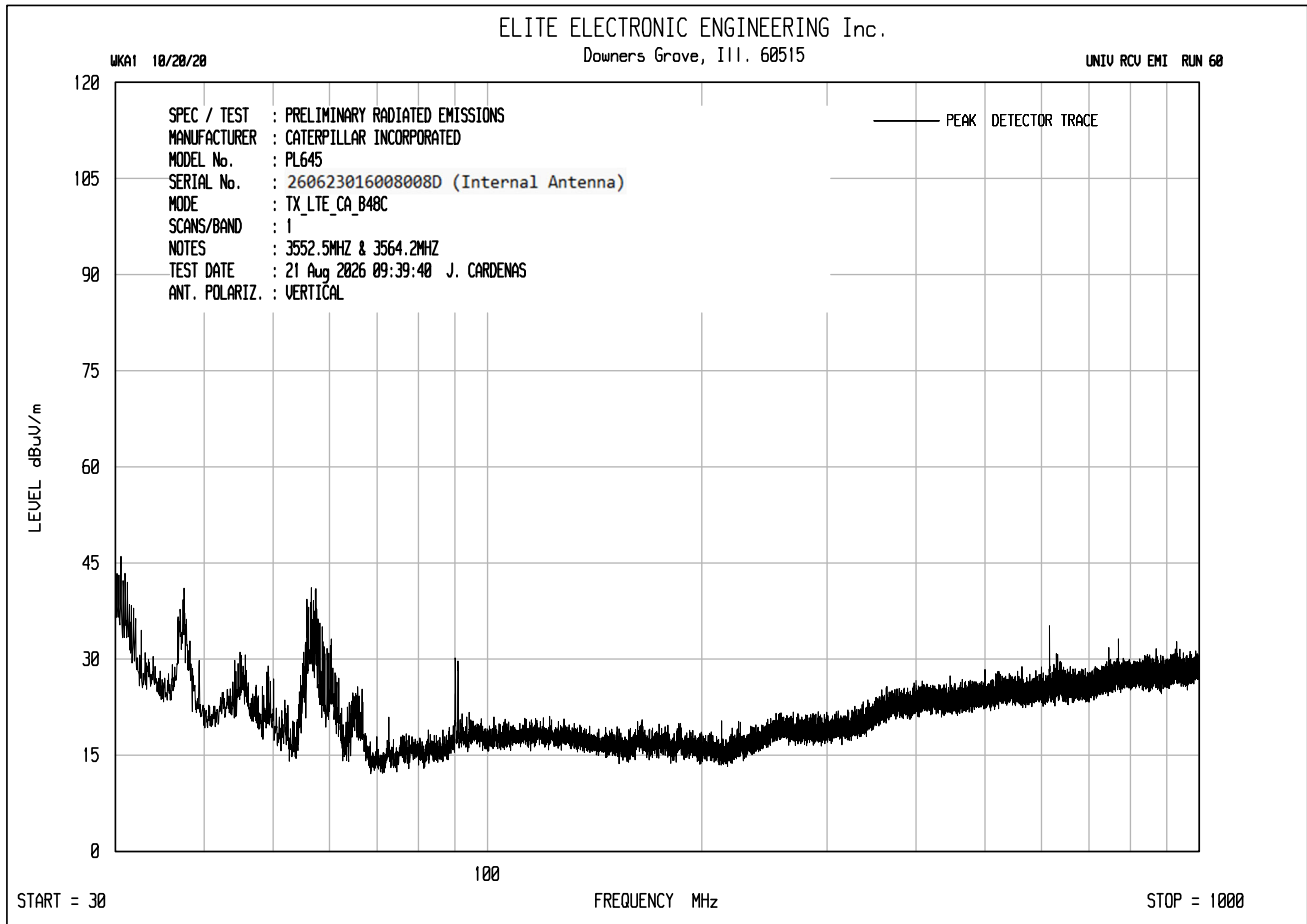


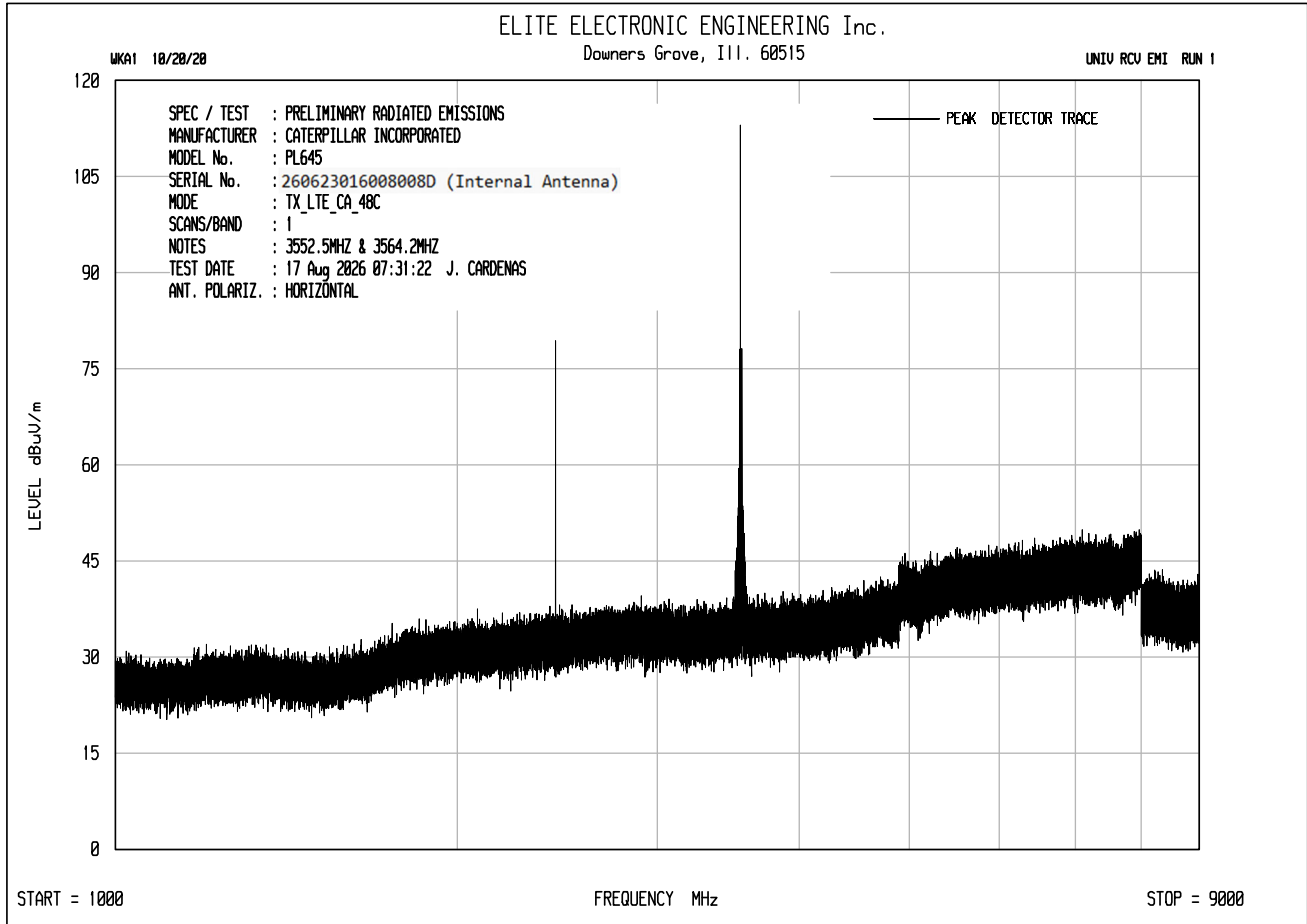


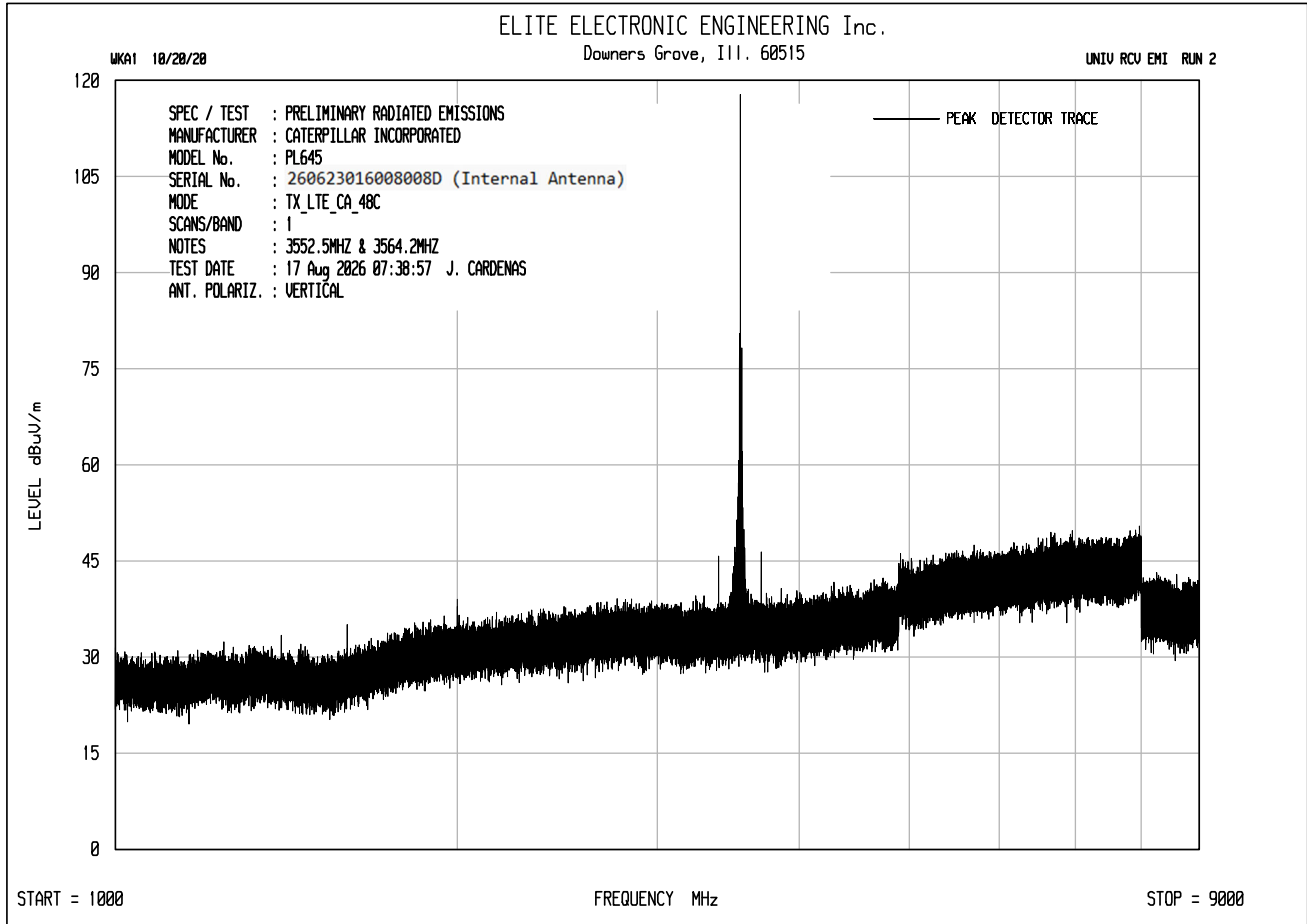
Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Calculated Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Attenuation Below Output Power (dB)	Minimum Attenuation (dB)
7480.60	H	26.7	Ambient	-30.1	7.7	6.2	-28.7	51.7	36.0
7480.60	V	27.1	Ambient	-30.1	7.7	6.2	-28.7	51.7	36.0

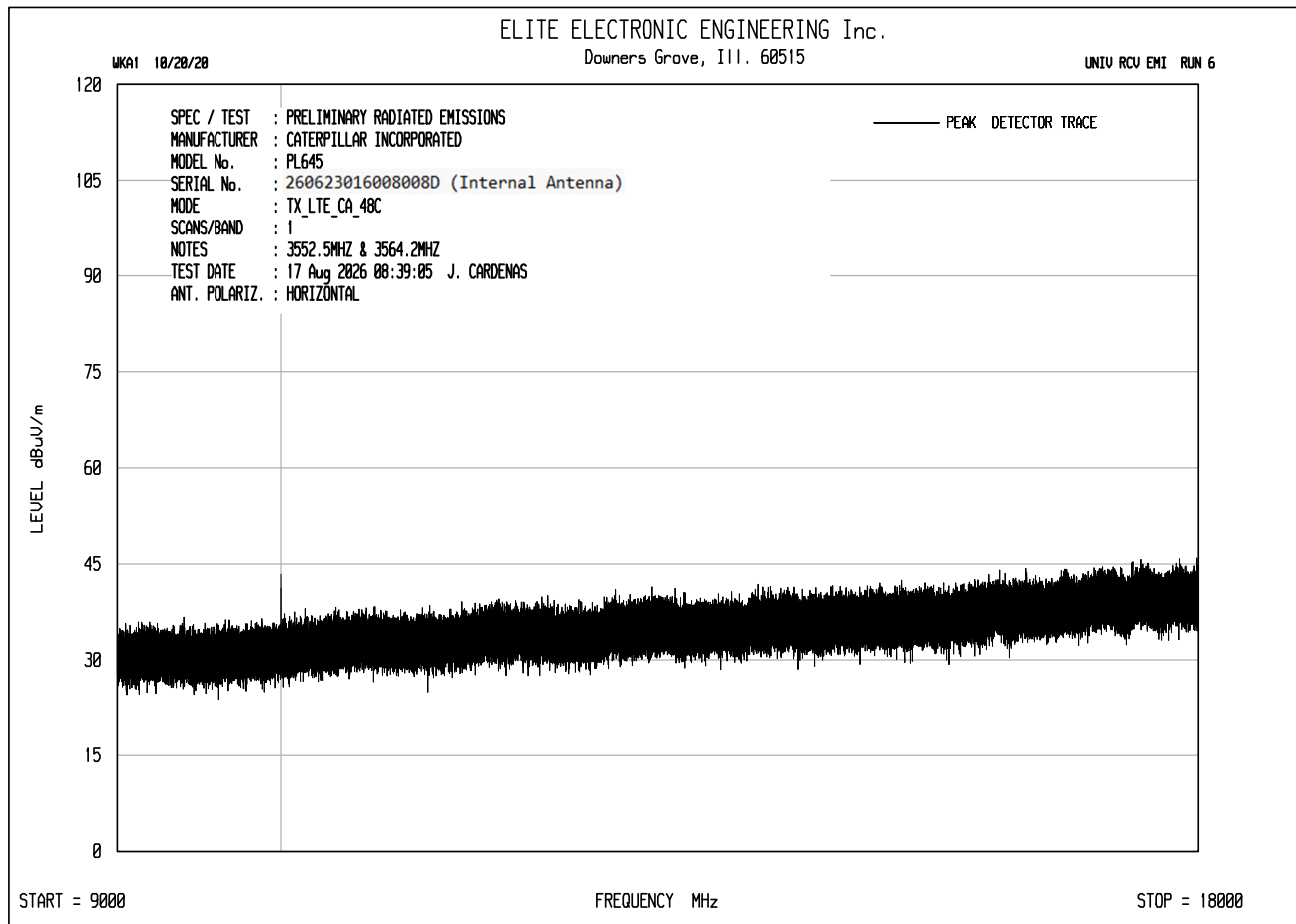
Test Details	
Manufacturer	Caterpillar Inc
Equipment Under Test	5G Telematics Radio
Model No.	PL645
Part No.	7620.002.904-13
Serial No.	260619016008008D (Internal Antenna)
Mode	LTE CA
Frequency Tested	Band 48 – 3552.5MHz
Notes	None

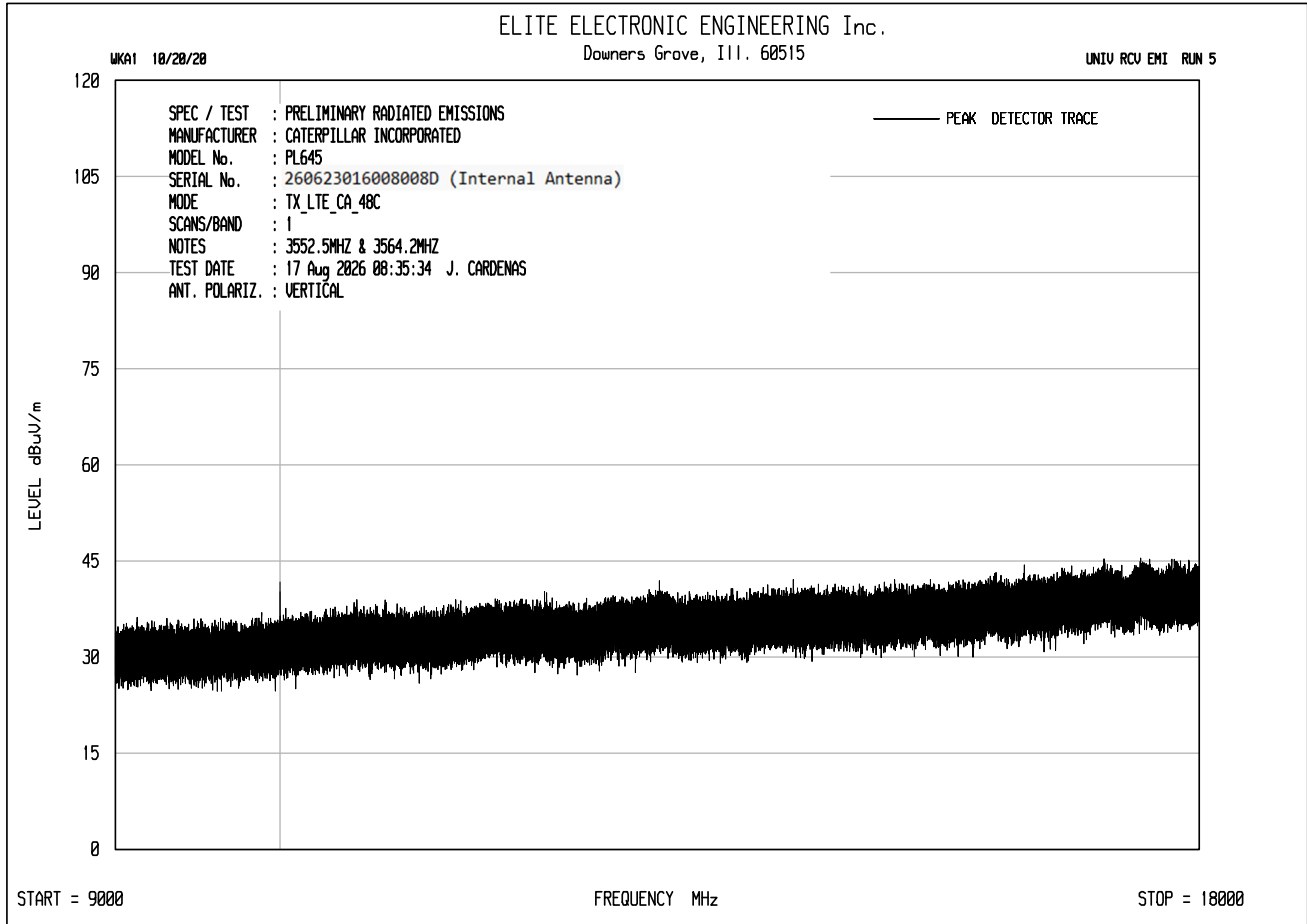


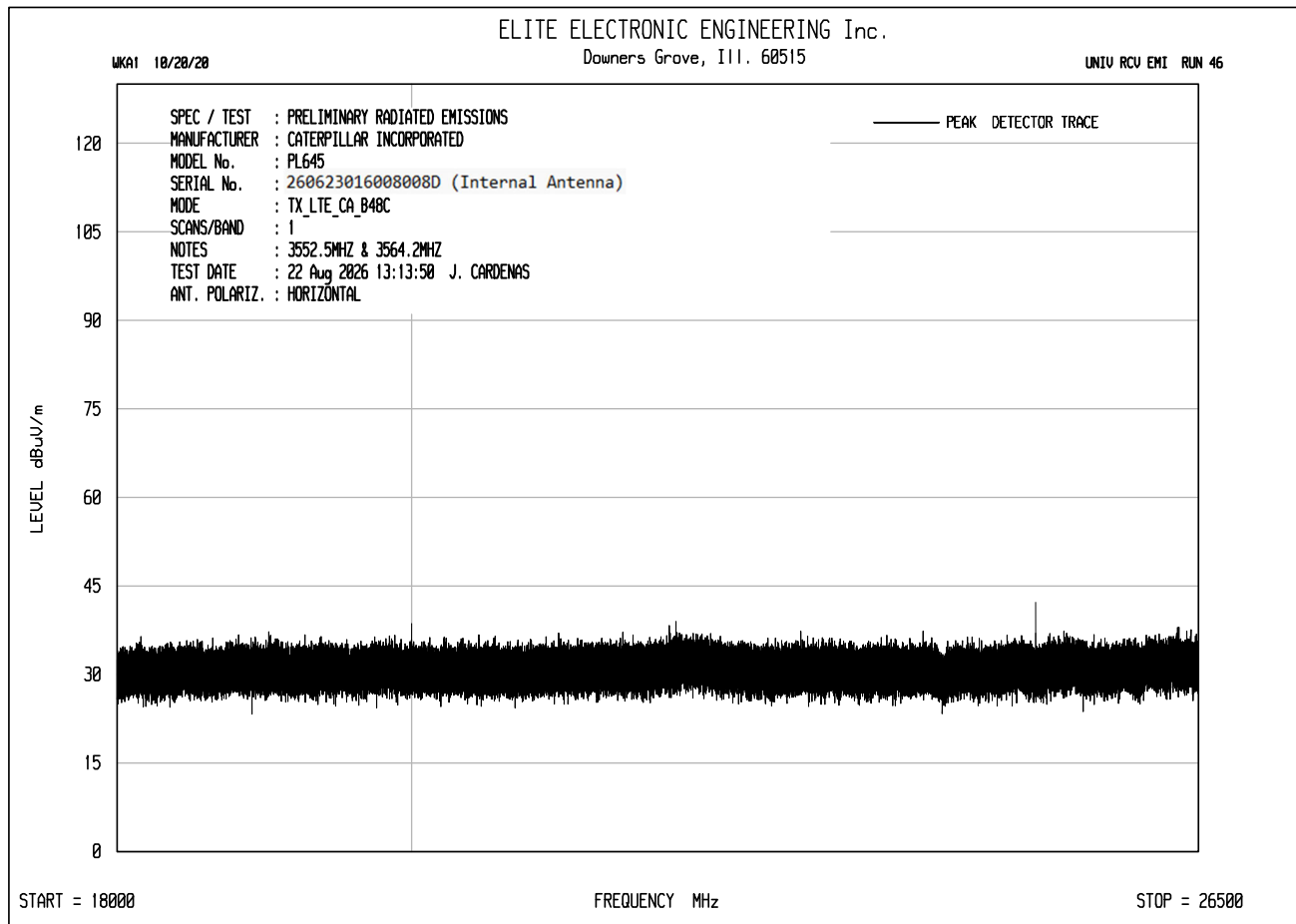


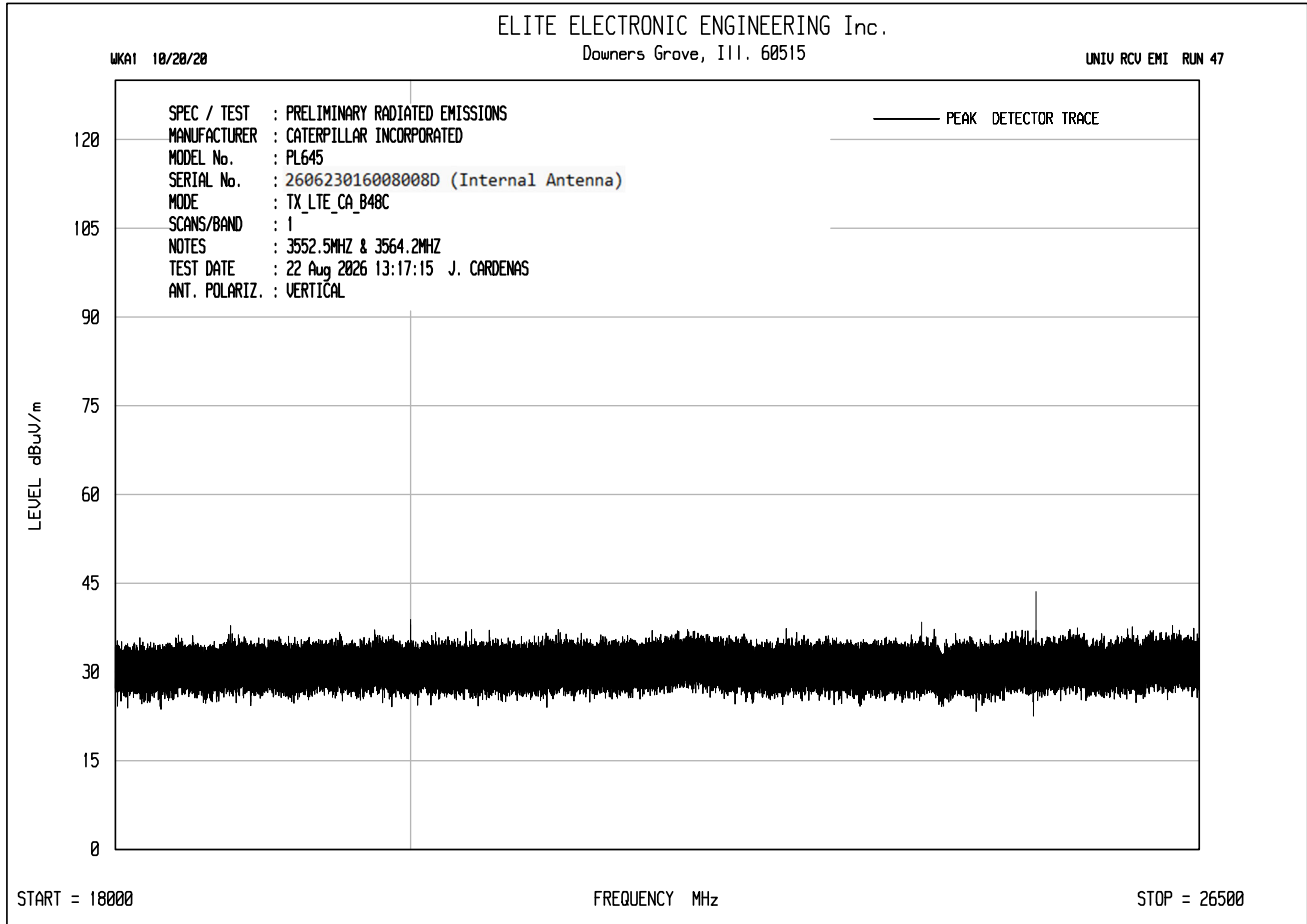


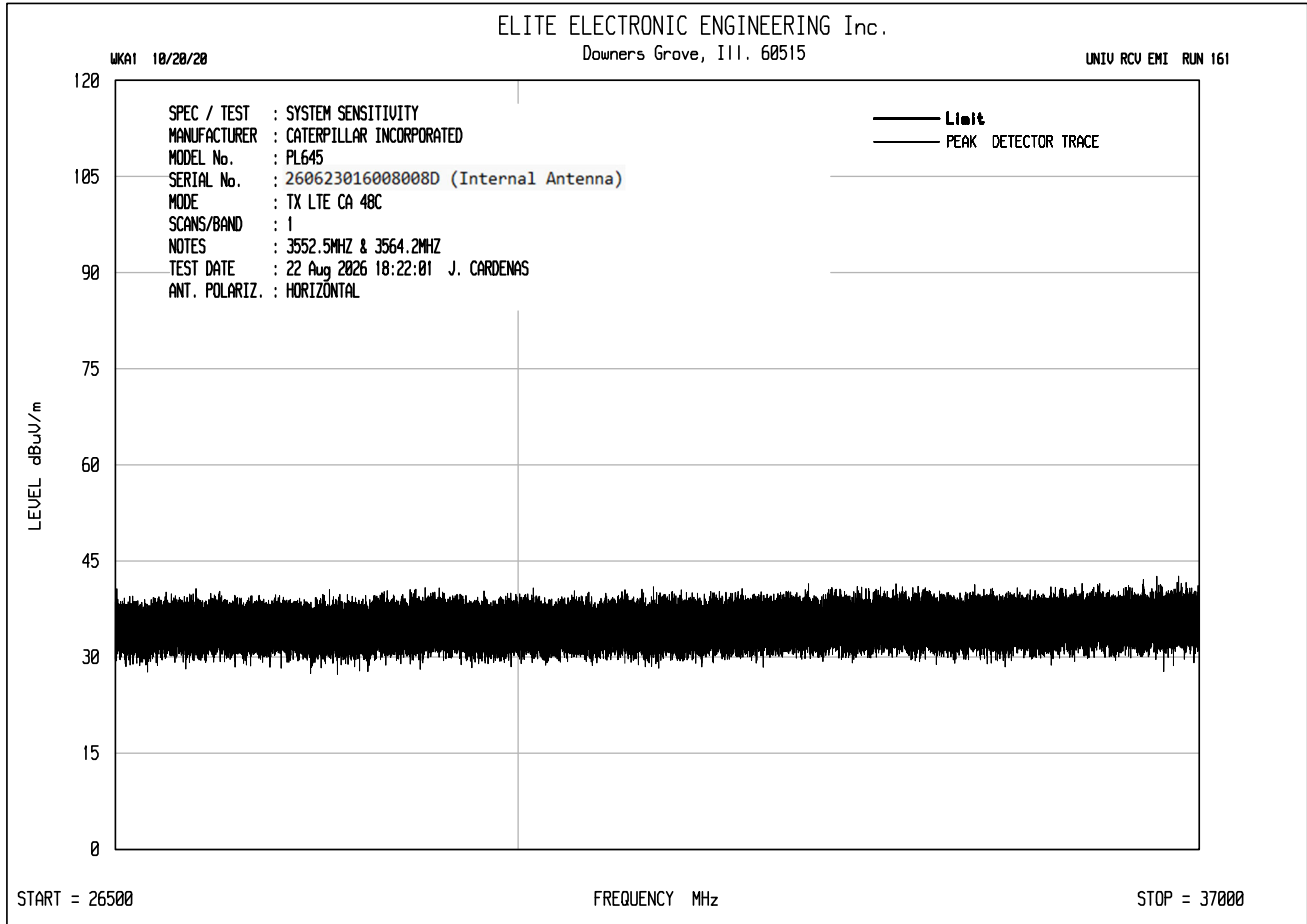


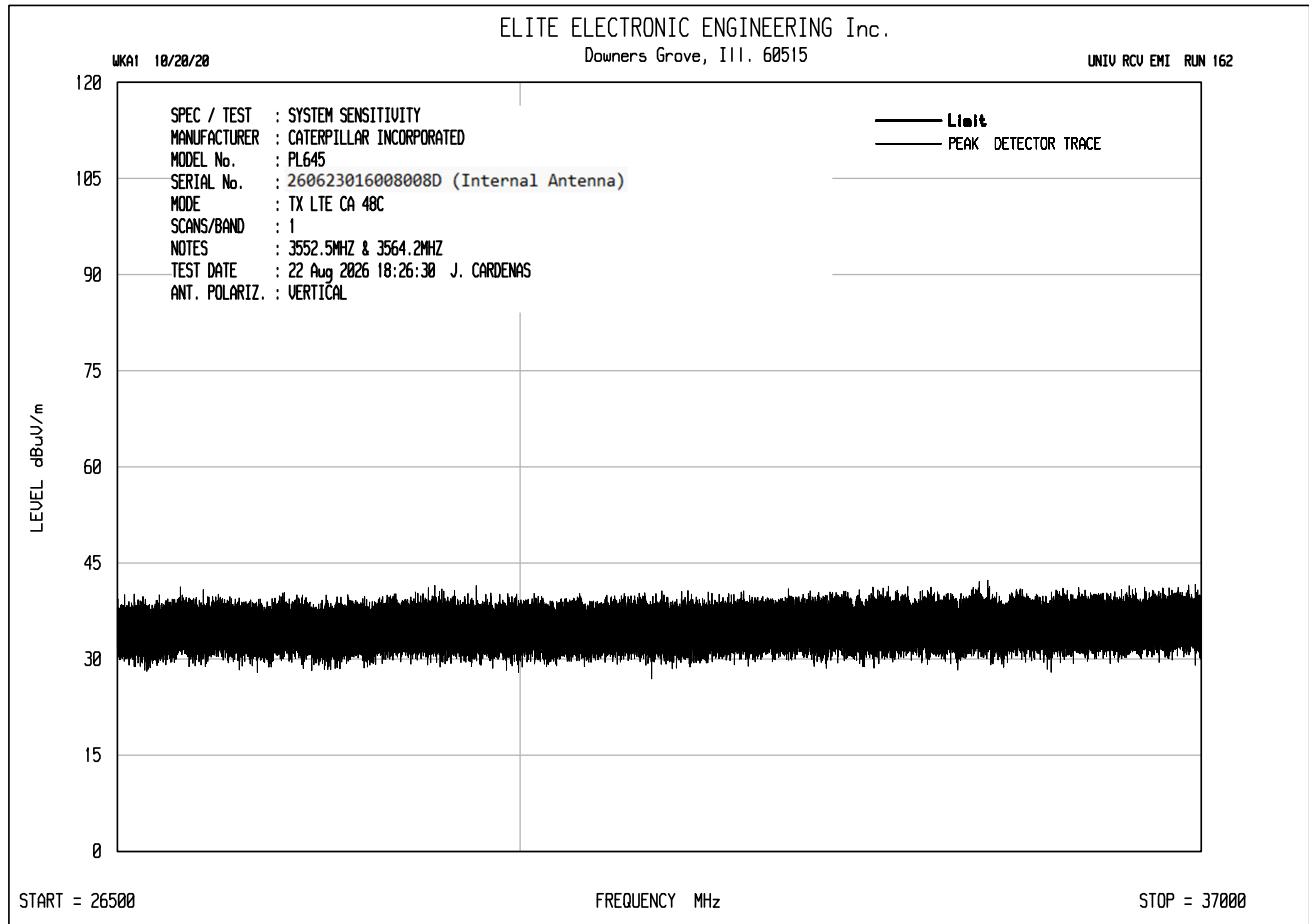






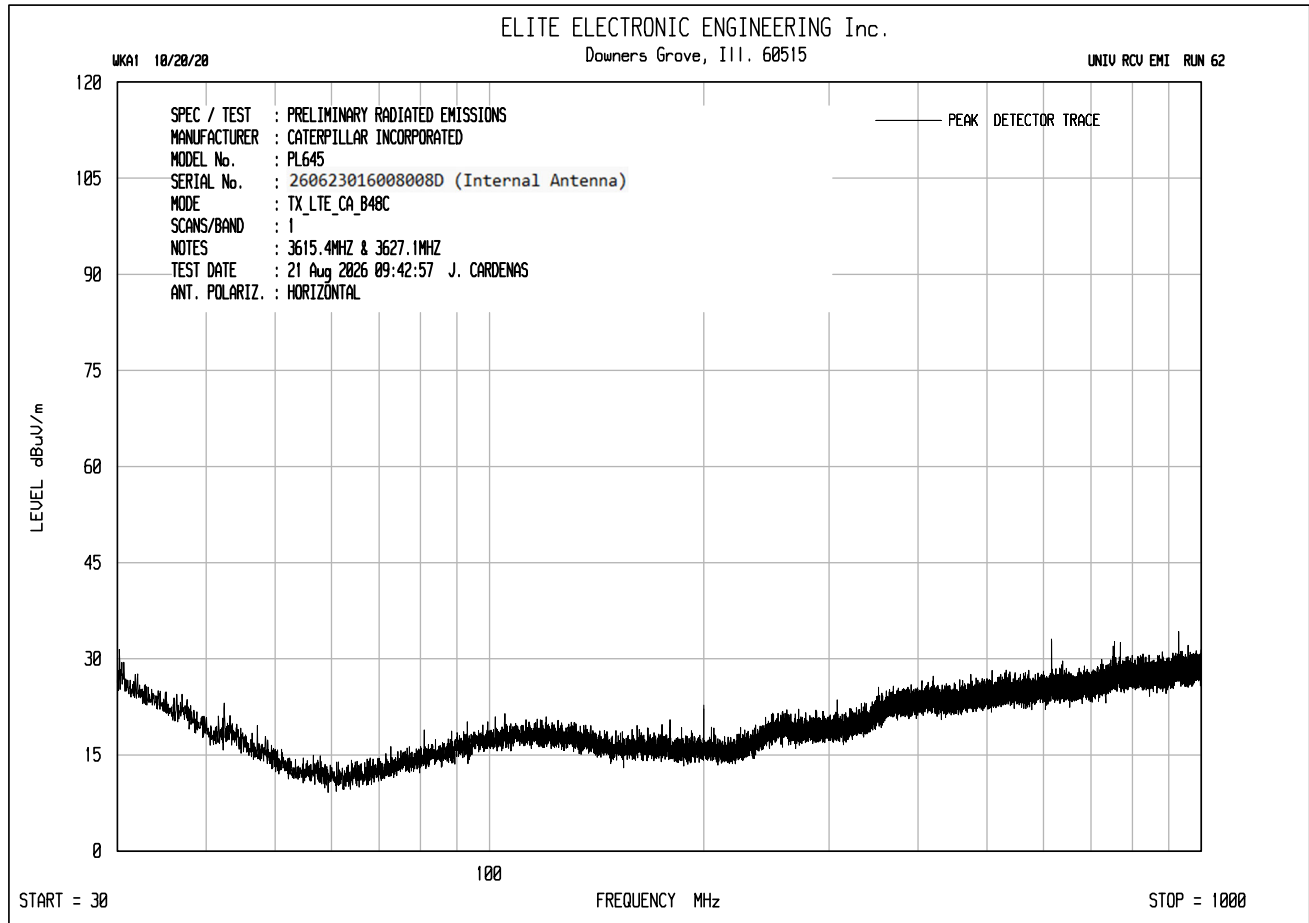


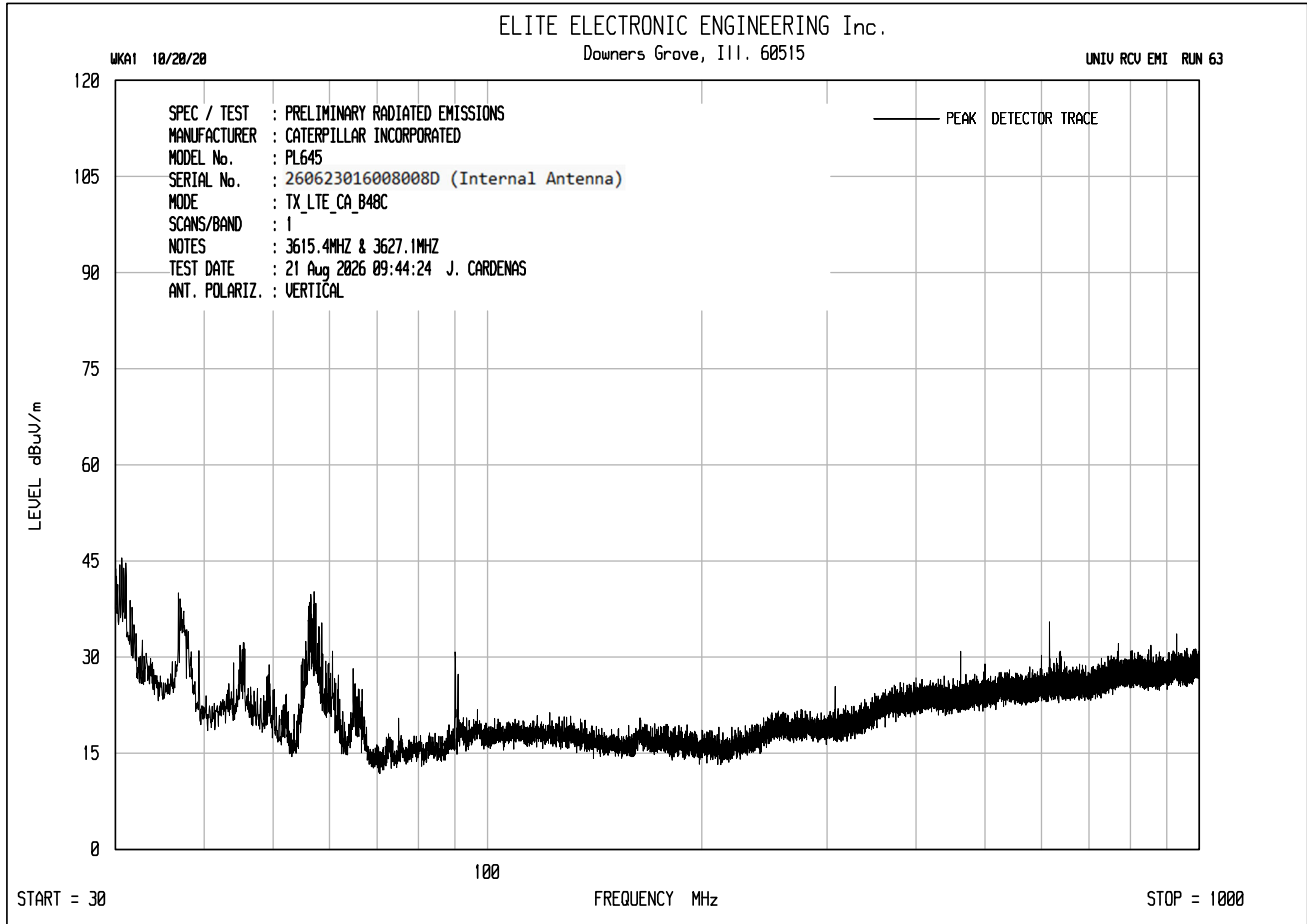


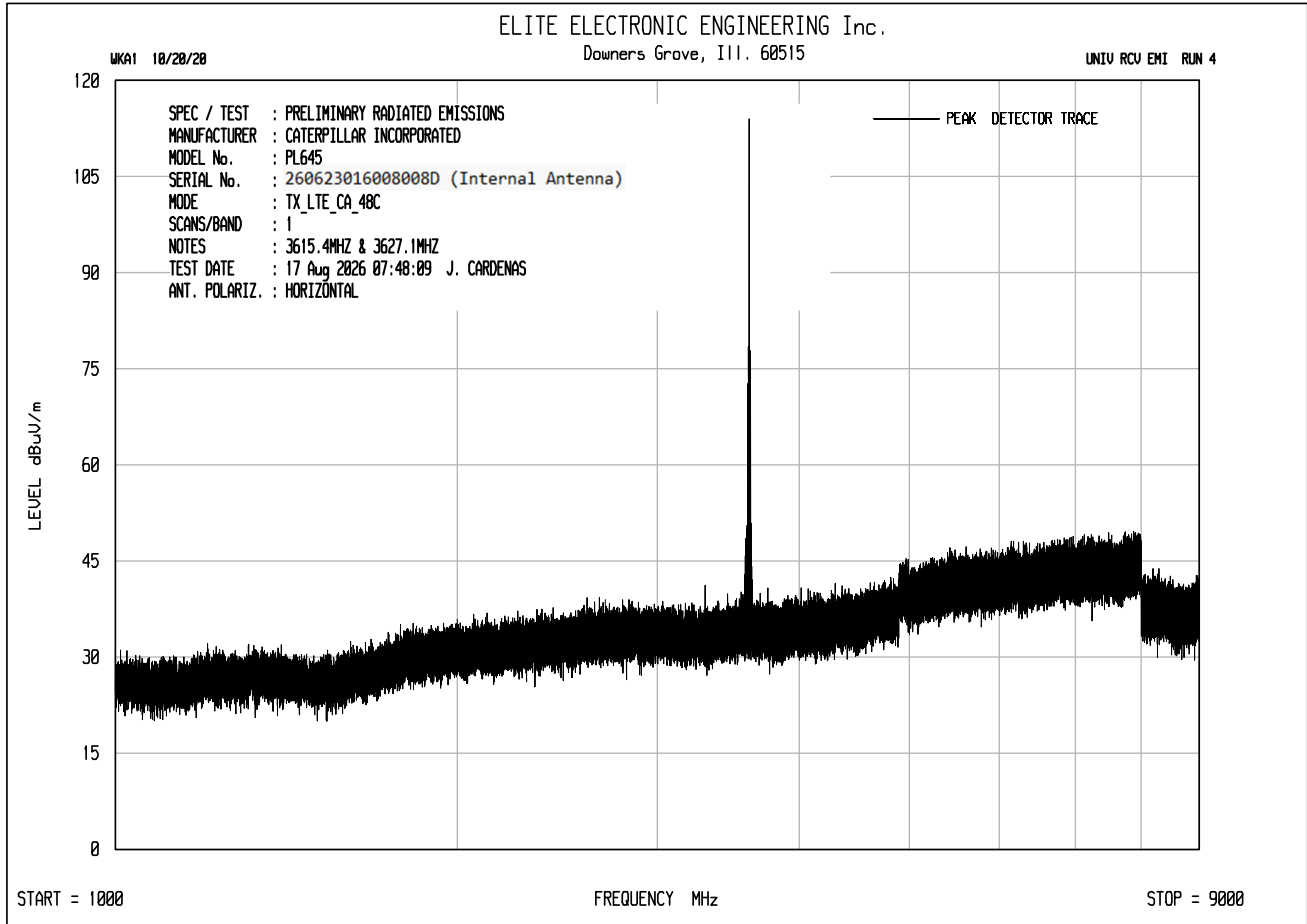


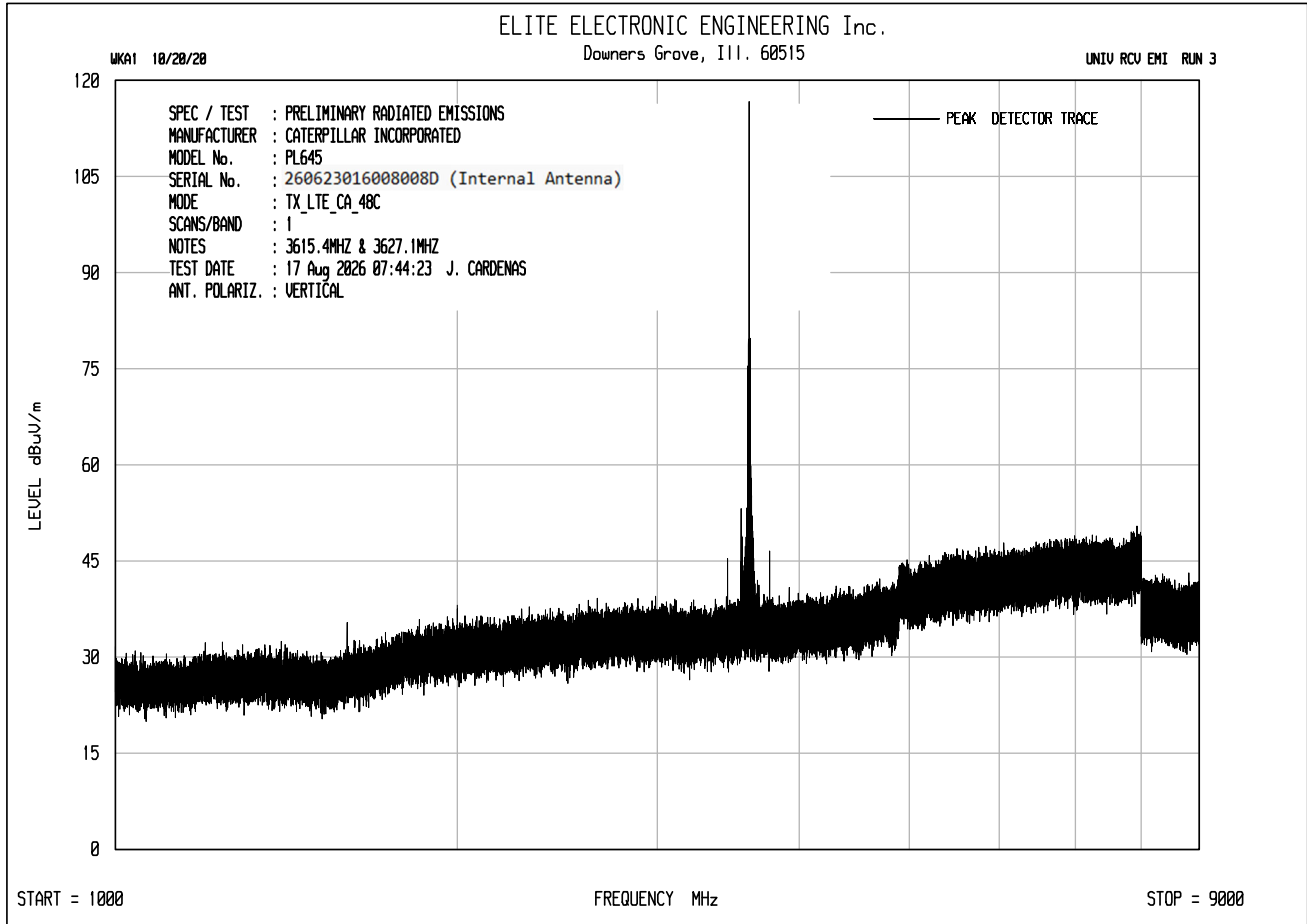
Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Calculated Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Attenuation Below Output Power (dB)	Minimum Attenuation (dB)
7105.00	H	24.8	Ambient	-31.6	7.4	6.1	-30.3	53.3	36.0
7105.00	V	25.0	Ambient	-32.2	7.4	6.1	-30.9	53.9	36.0

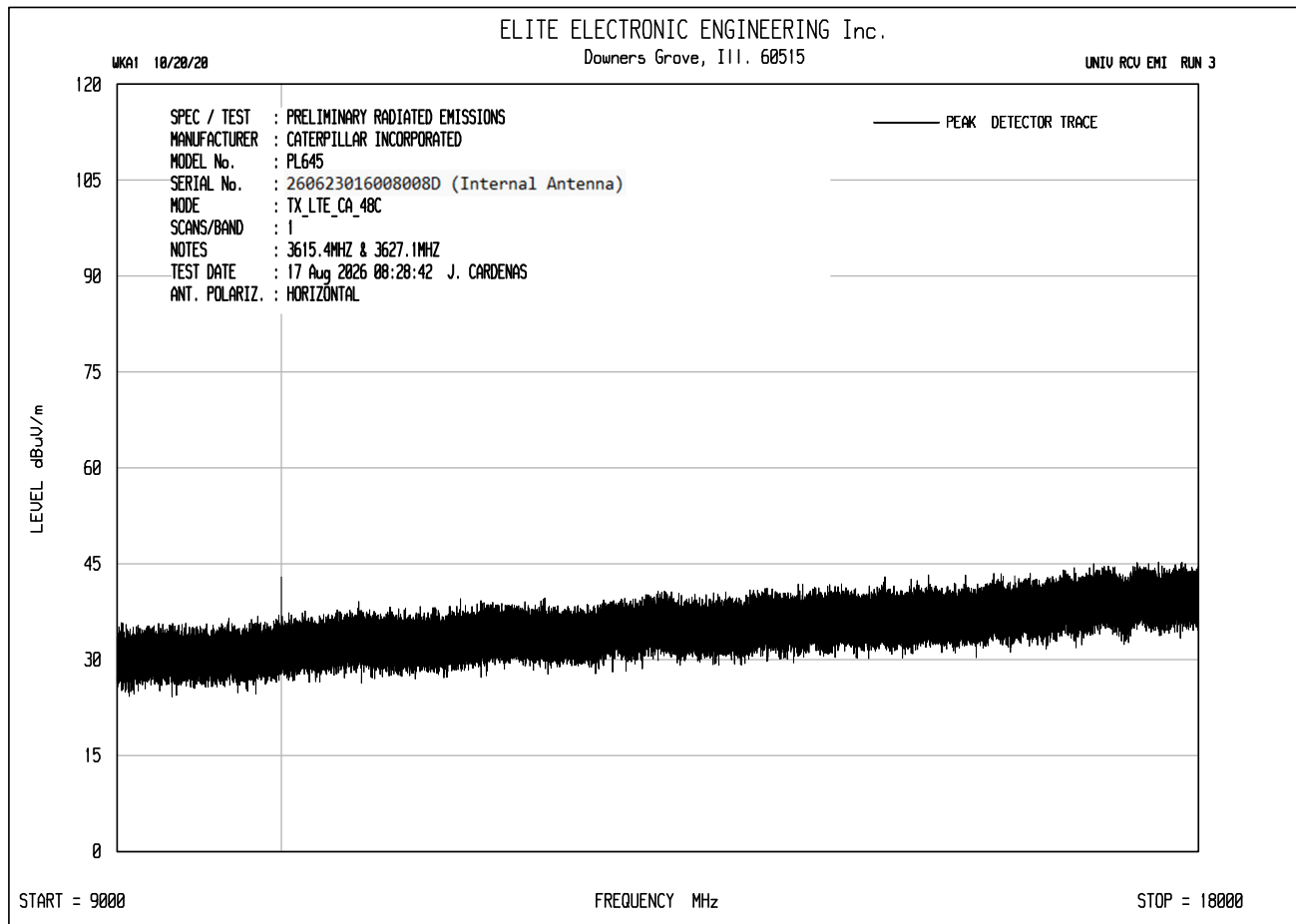
Test Details	
Manufacturer	Caterpillar Inc
Equipment Under Test	5G Telematics Radio
Model No.	PL645
Part No.	7620.002.904-13
Serial No.	260619016008008D (Internal Antenna)
Mode	LTE CA
Frequency Tested	Band 48 – 3615.4MHz
Notes	None

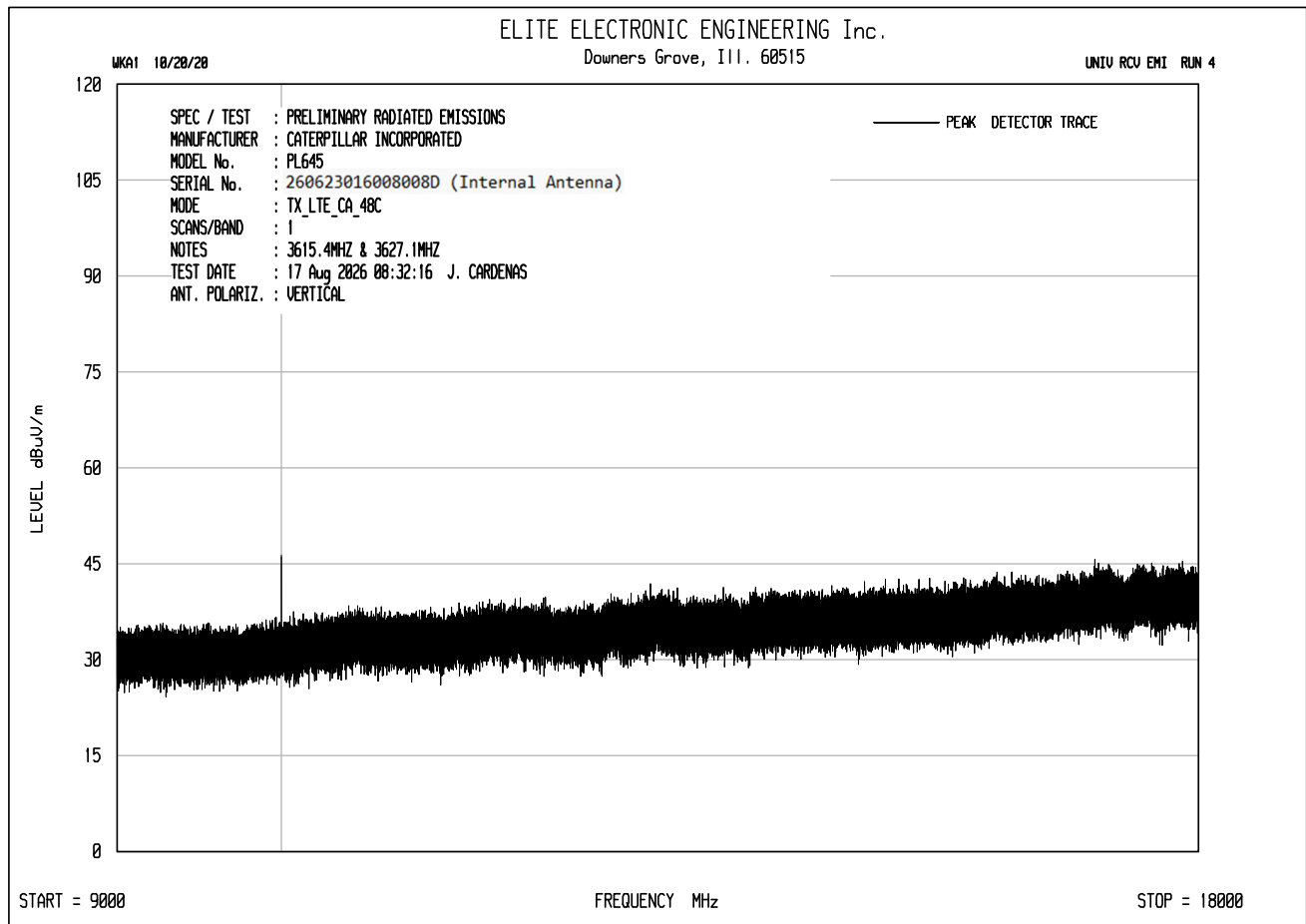


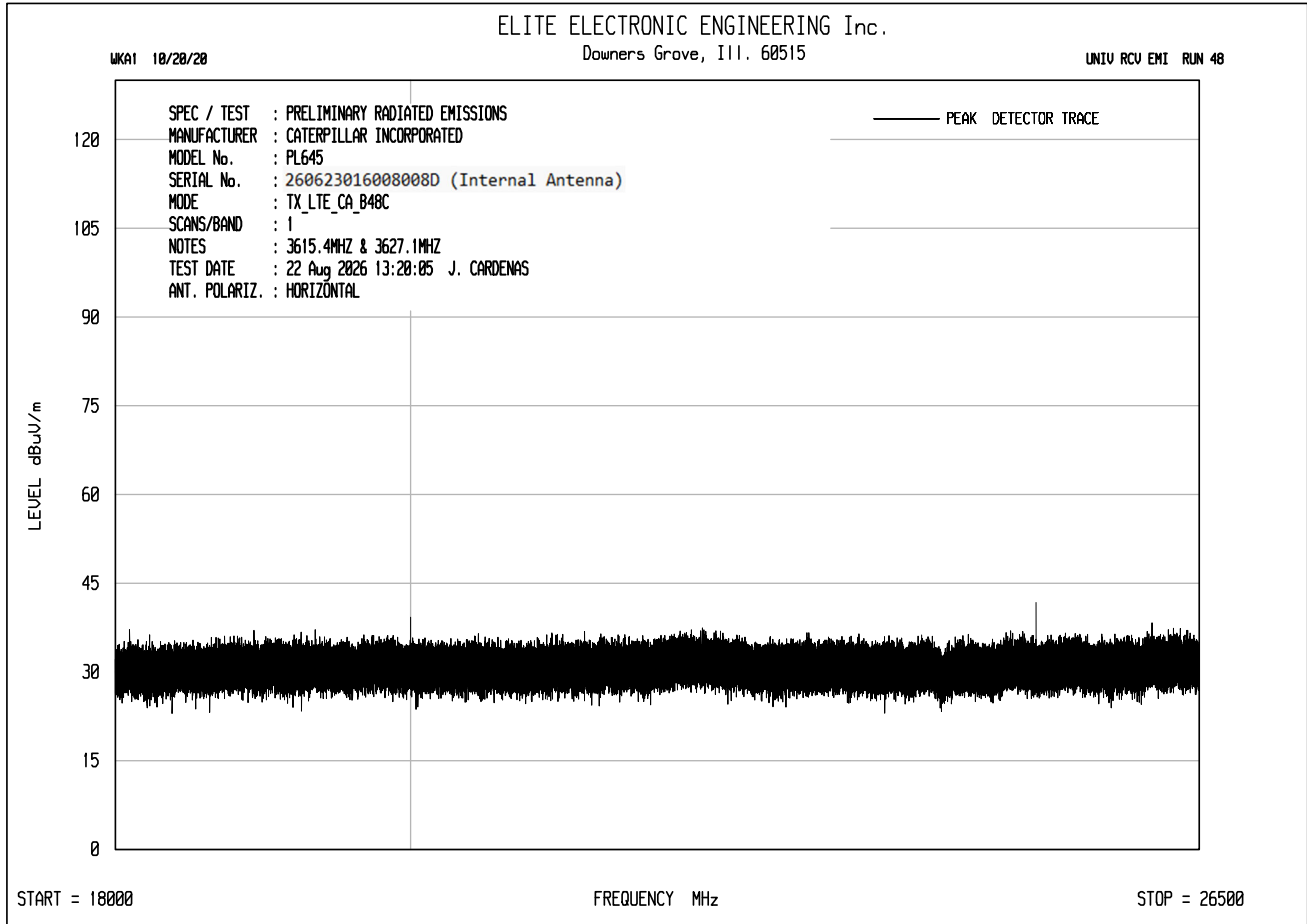


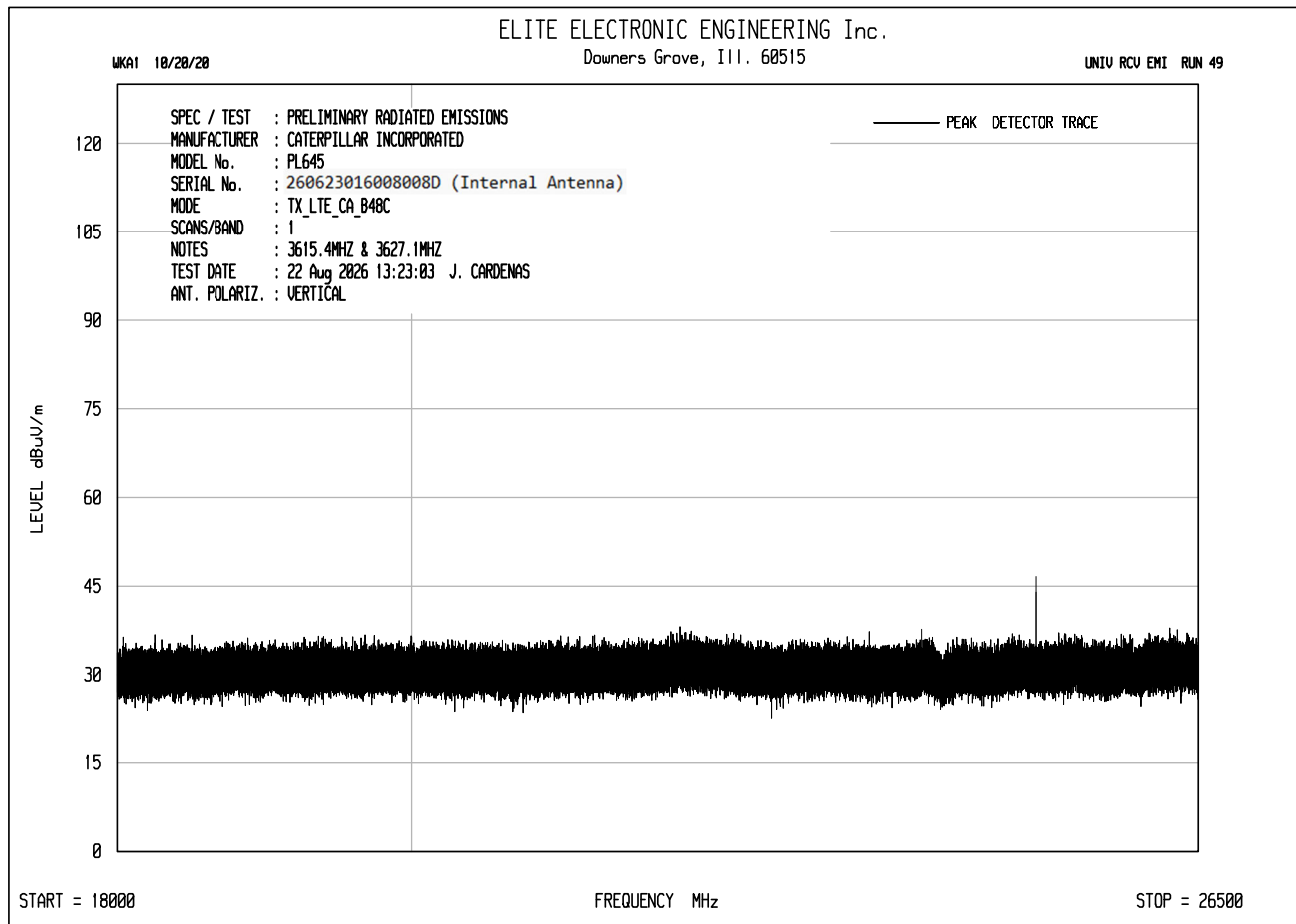


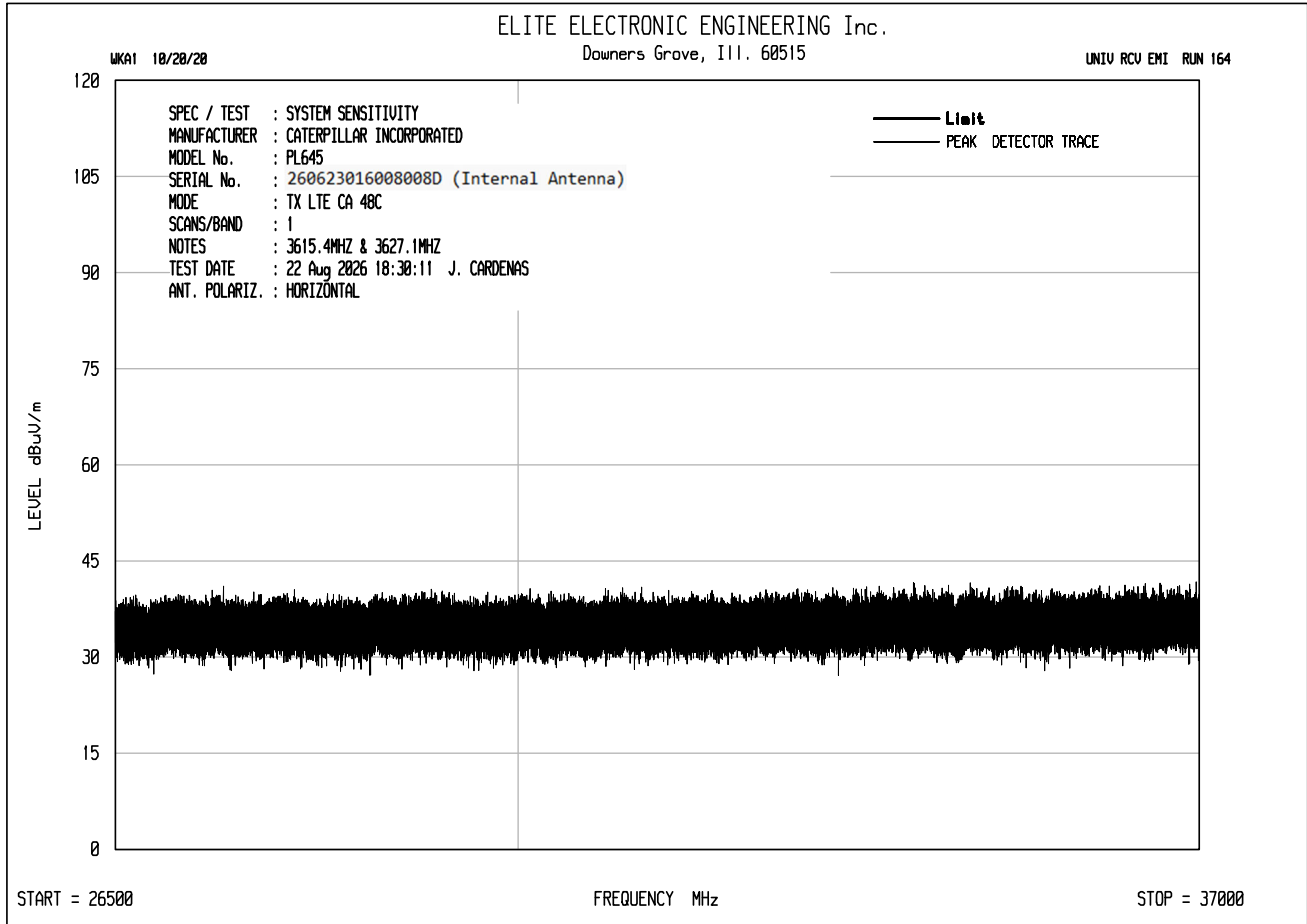


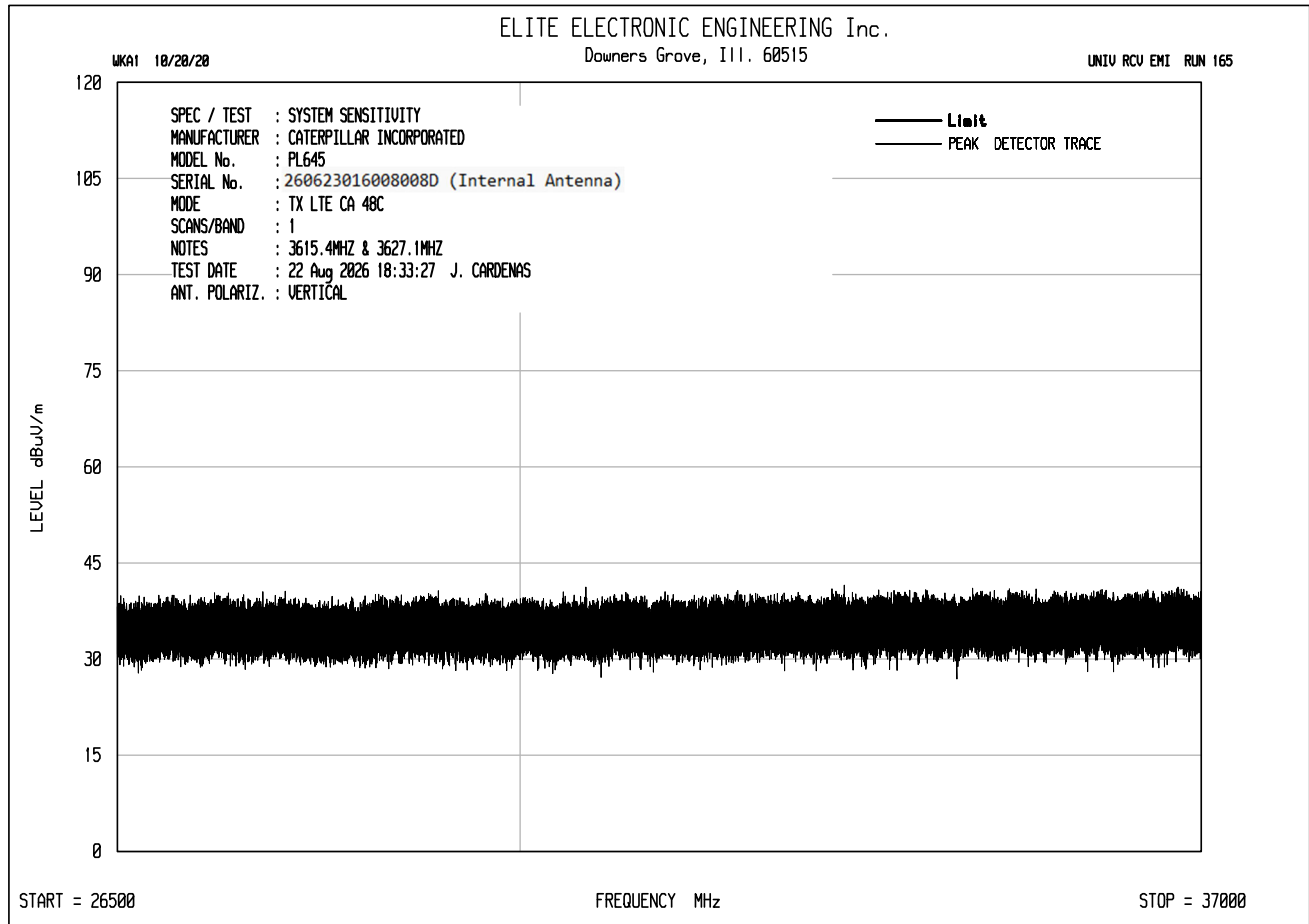






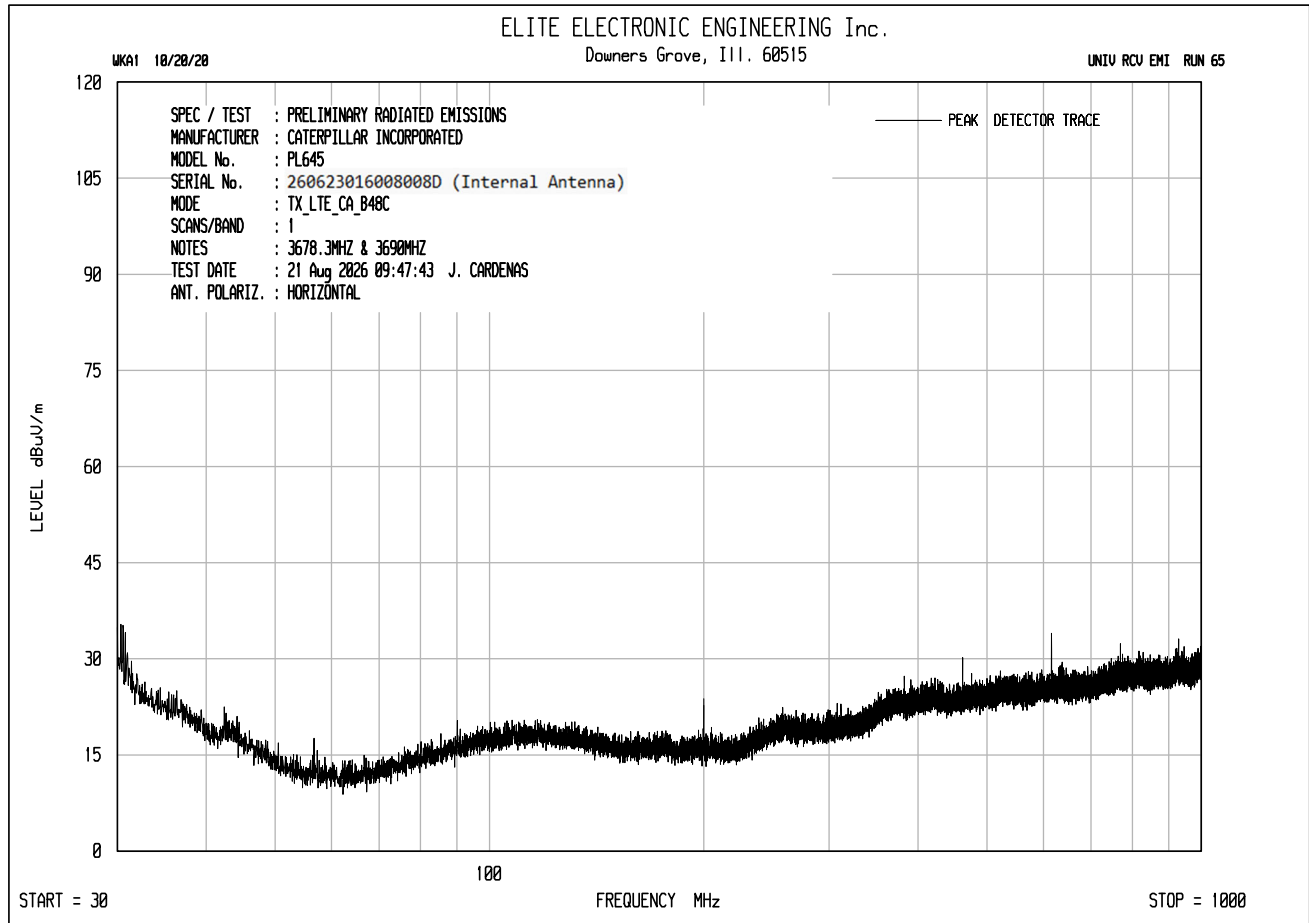


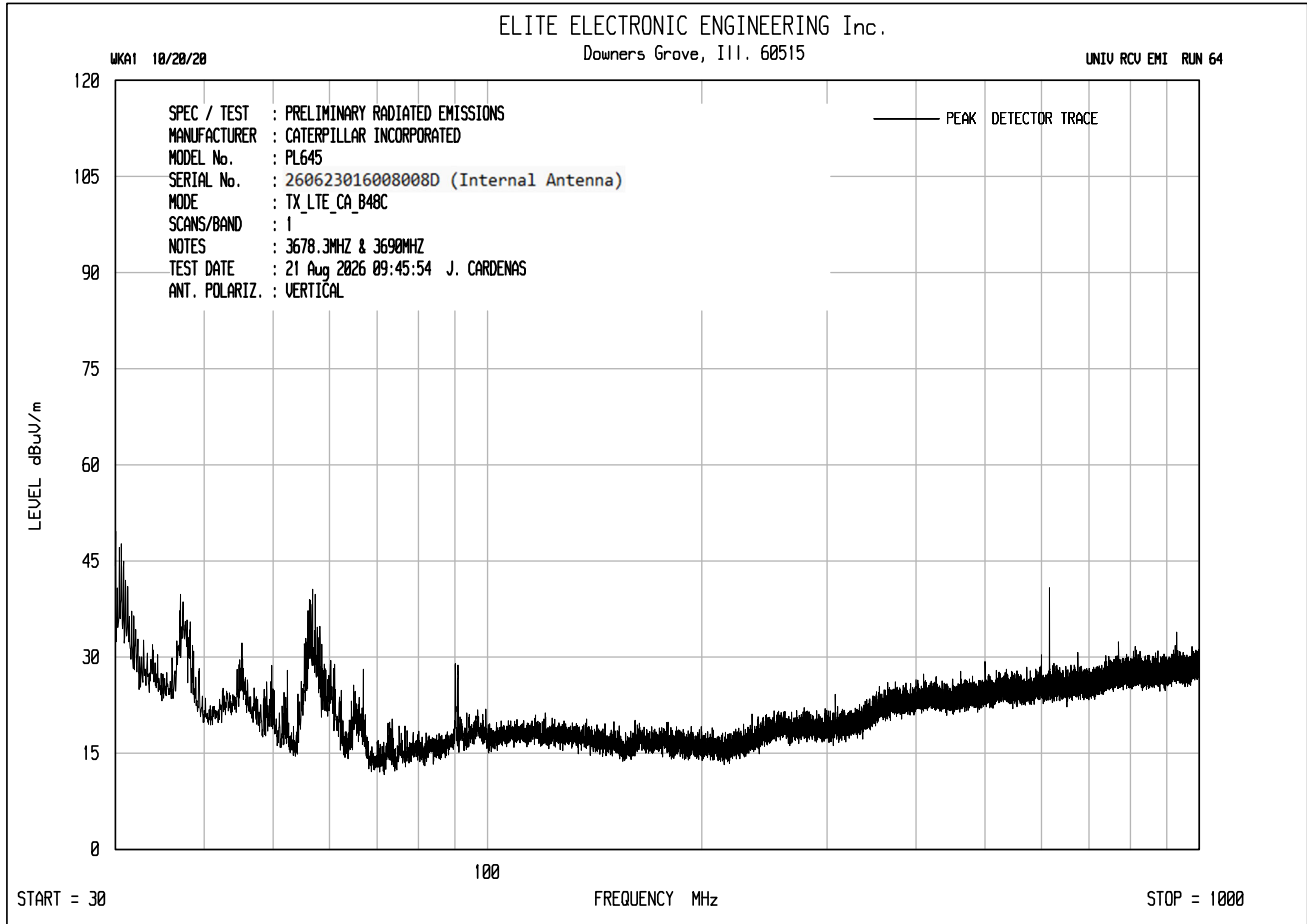


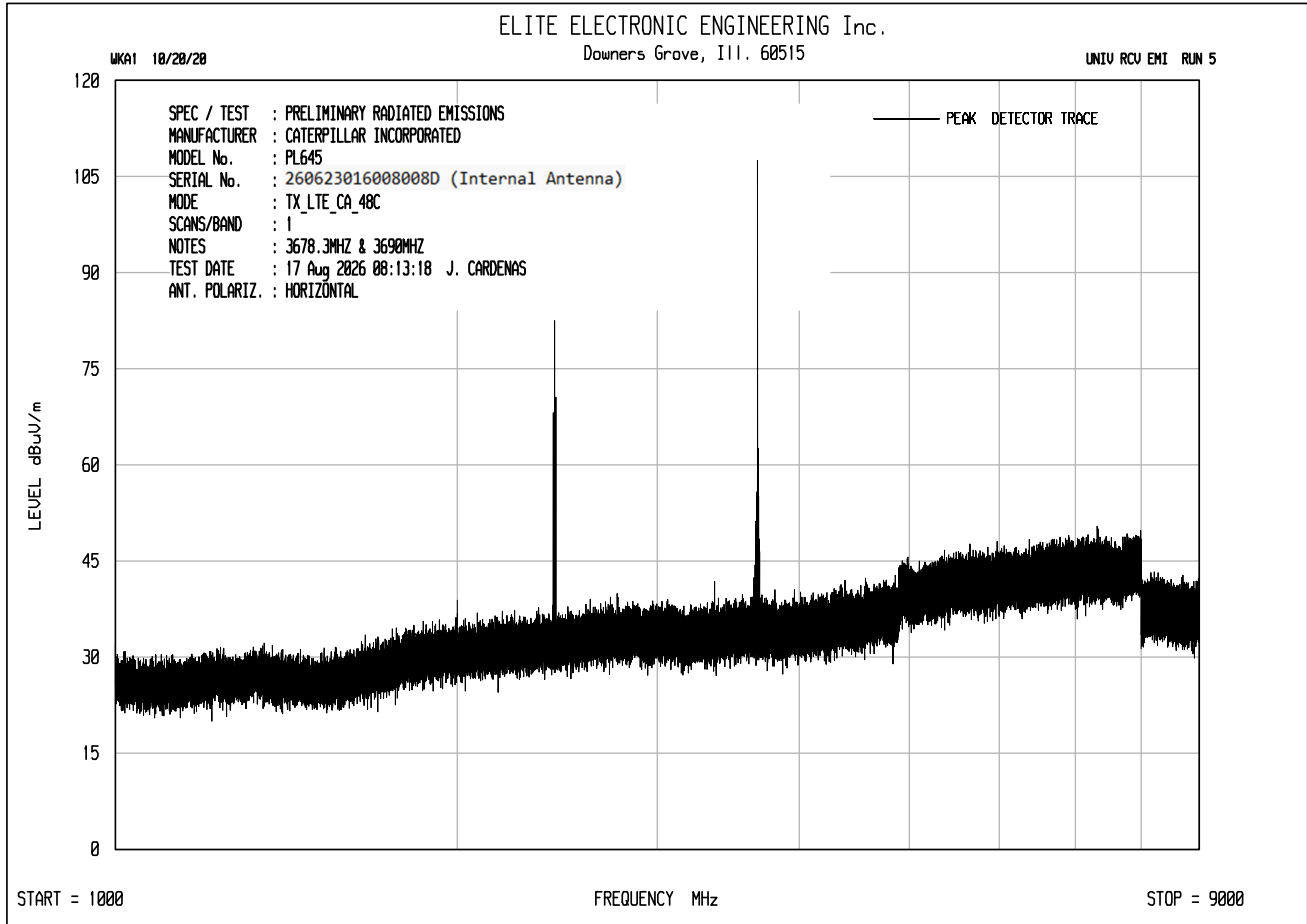


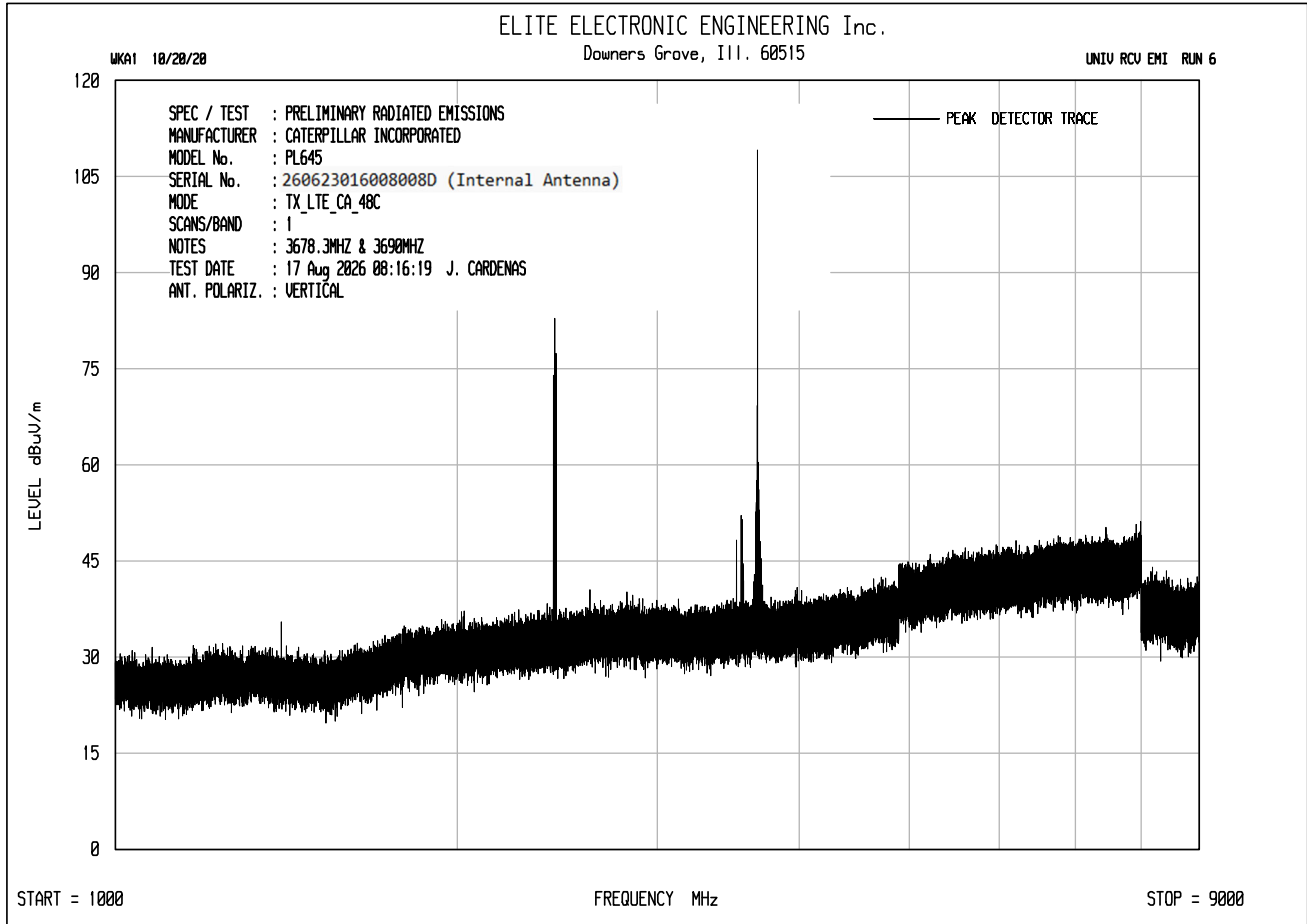
Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Calculated Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Attenuation Below Output Power (dB)	Minimum Attenuation (dB)
7230.80	H	24.5	Ambient	-32.0	7.5	6.1	-30.6	53.6	36.0
7230.80	V	24.9	Ambient	-32.5	7.5	6.1	-31.1	54.1	36.0

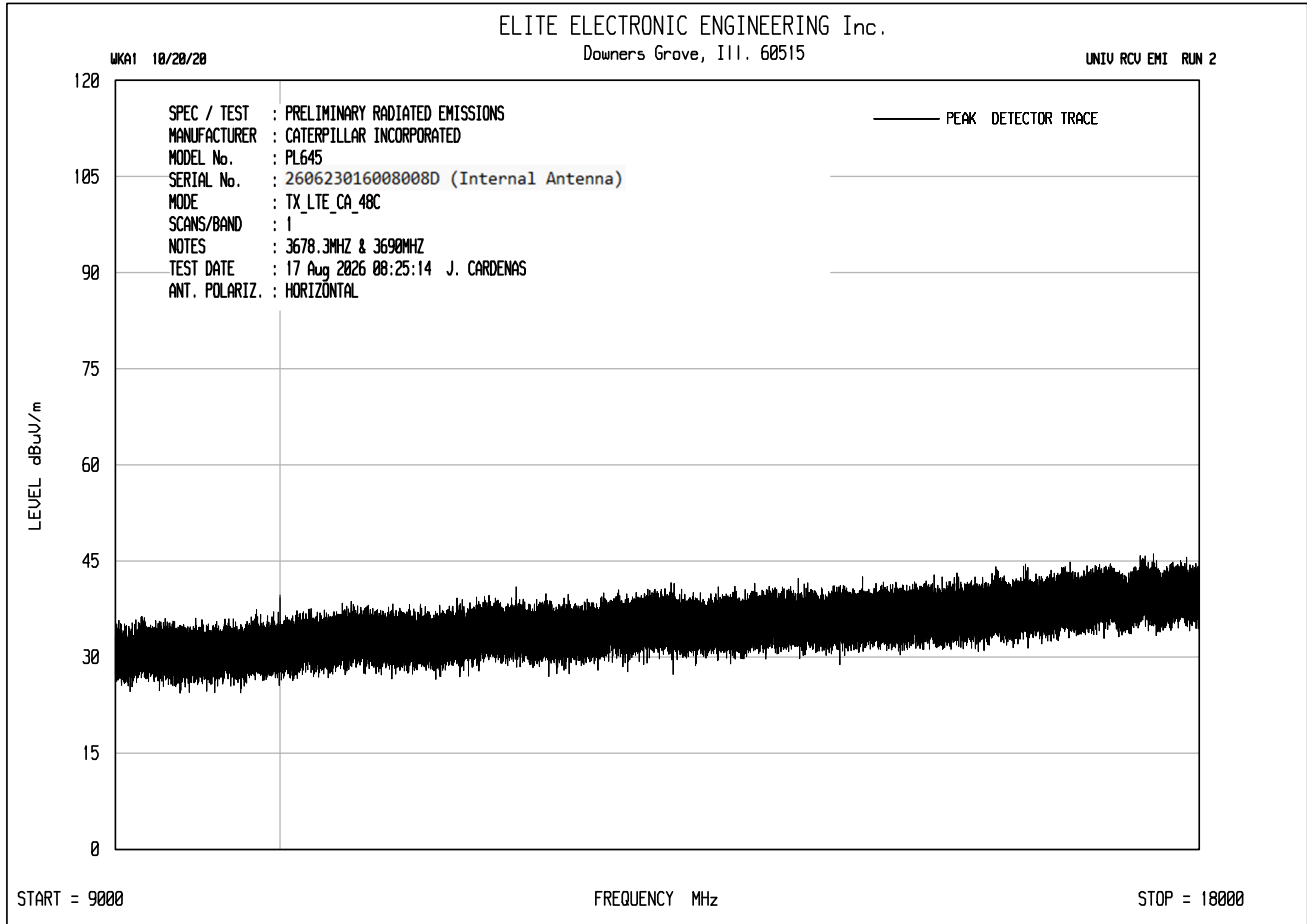
Test Details	
Manufacturer	Caterpillar Inc
Equipment Under Test	5G Telematics Radio
Model No.	PL645
Part No.	7620.002.904-13
Serial No.	260619016008008D (Internal Antenna)
Mode	LTE CA
Frequency Tested	Band 48 – 3678.3MHz
Notes	None

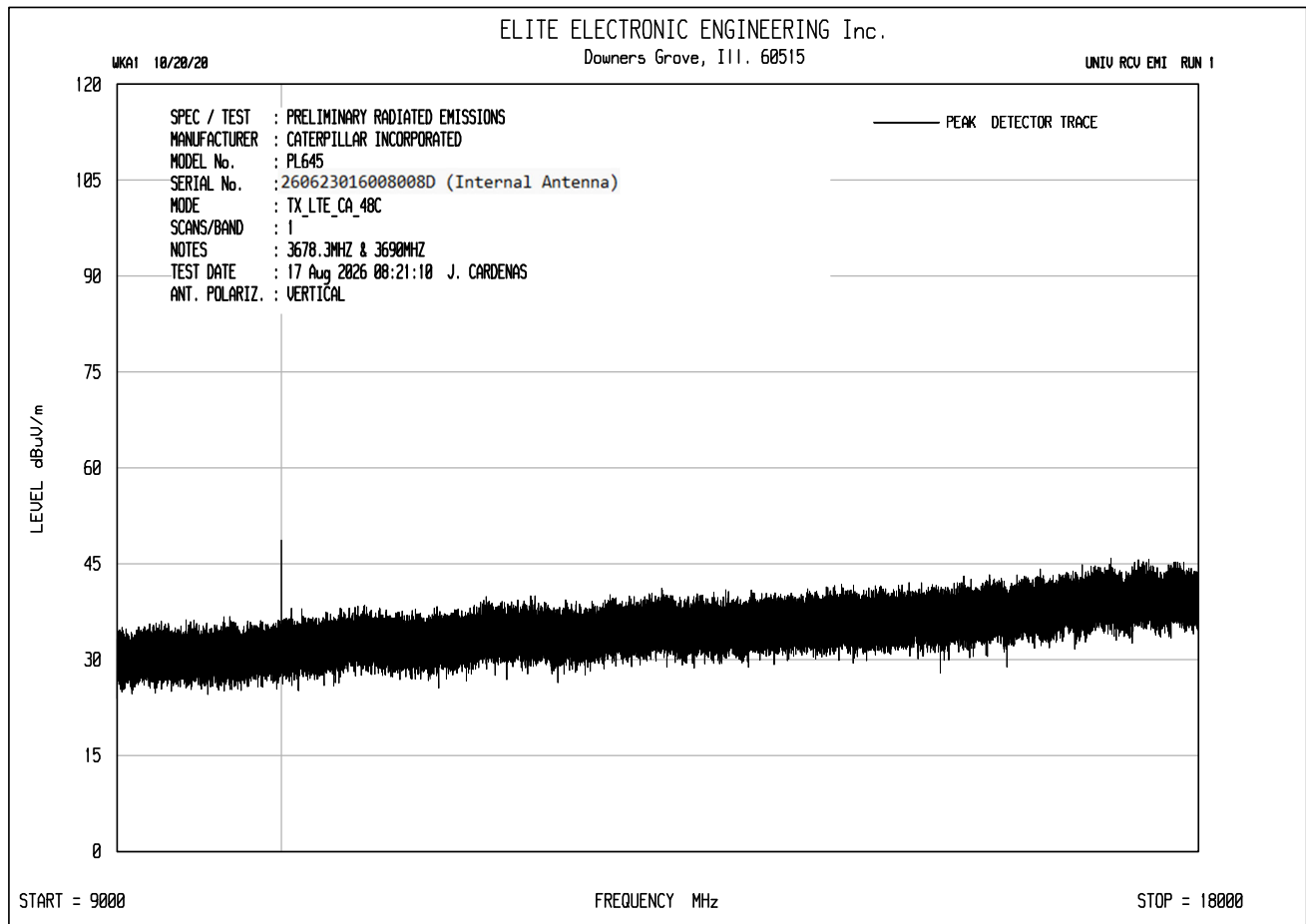


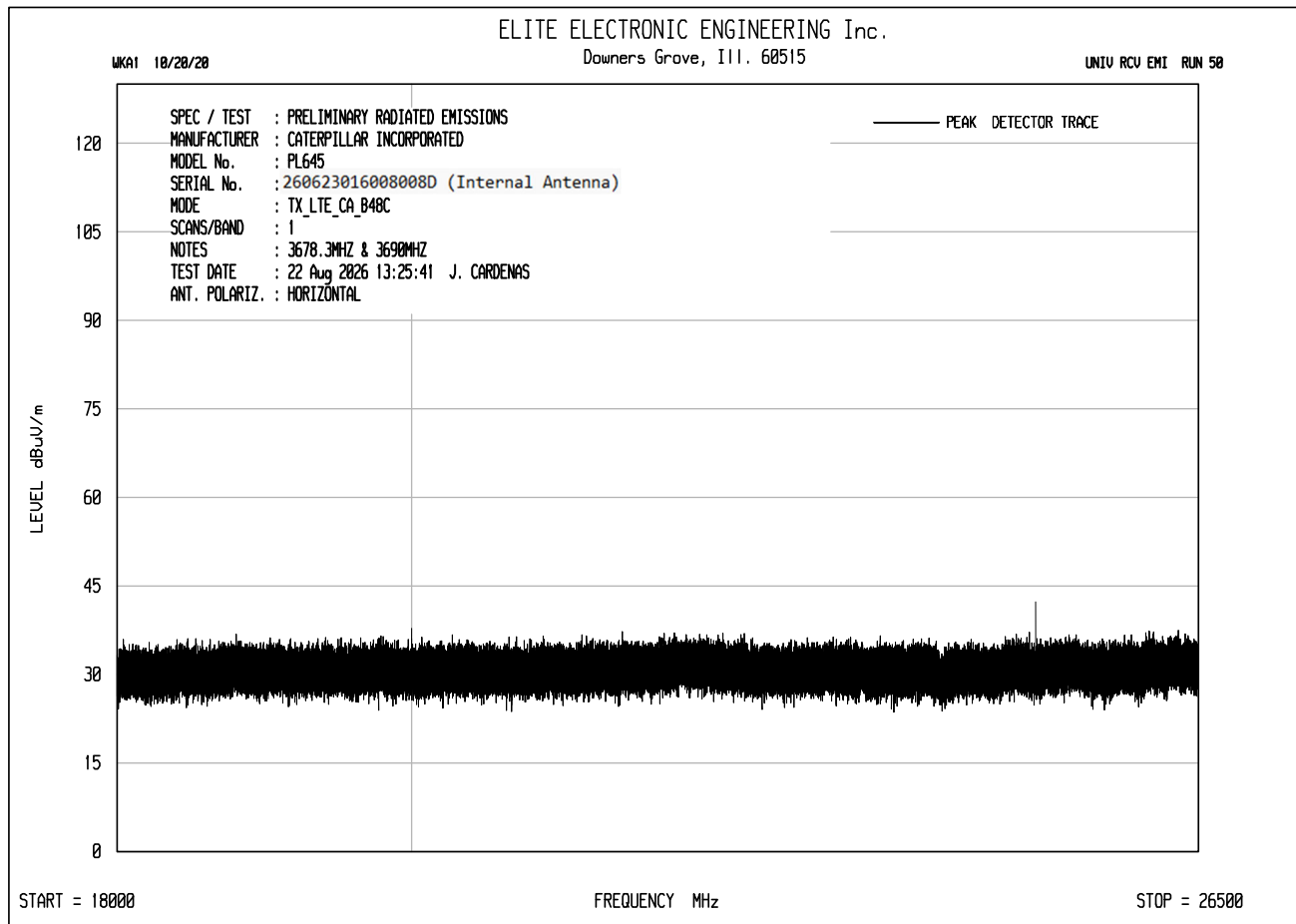


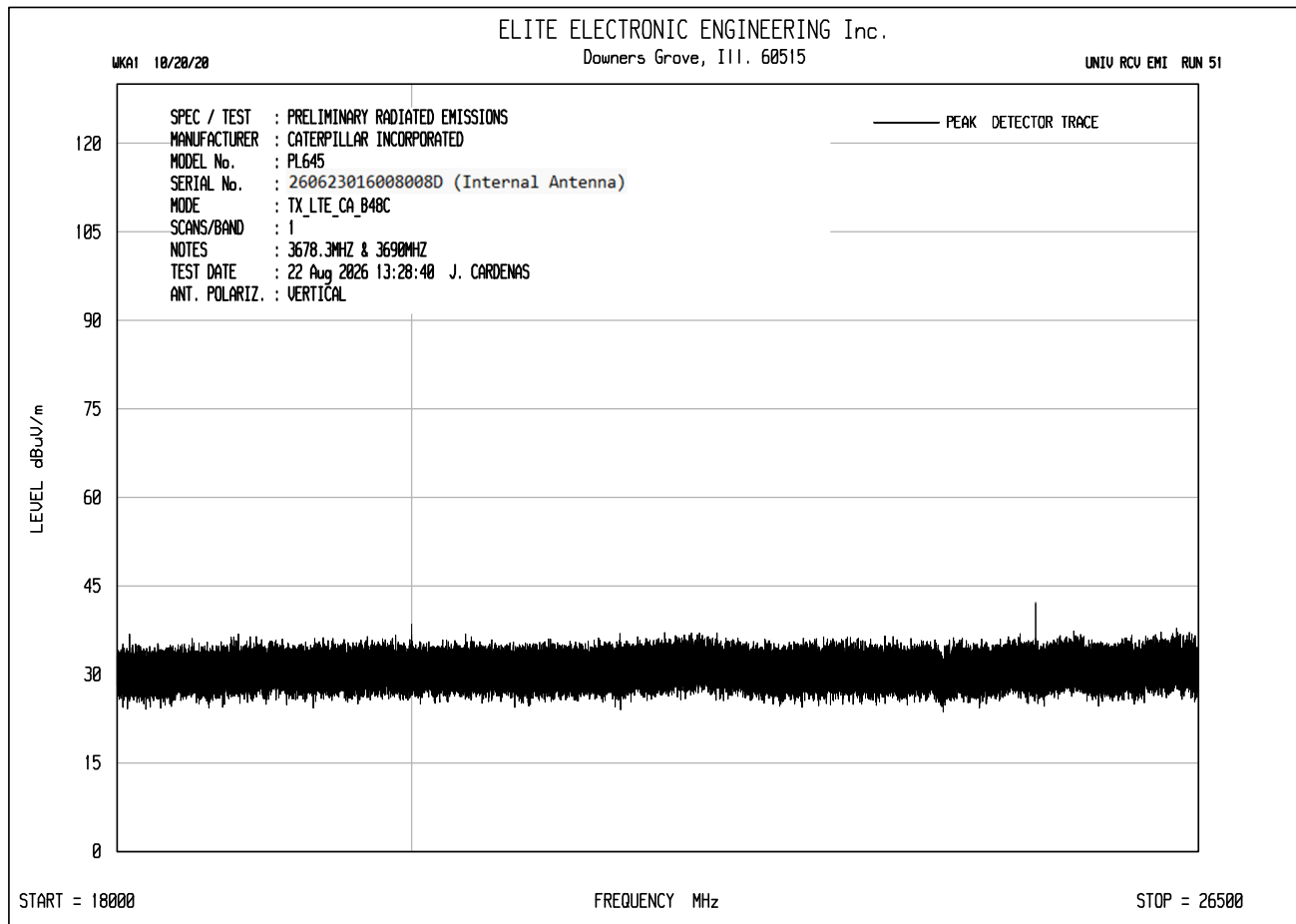


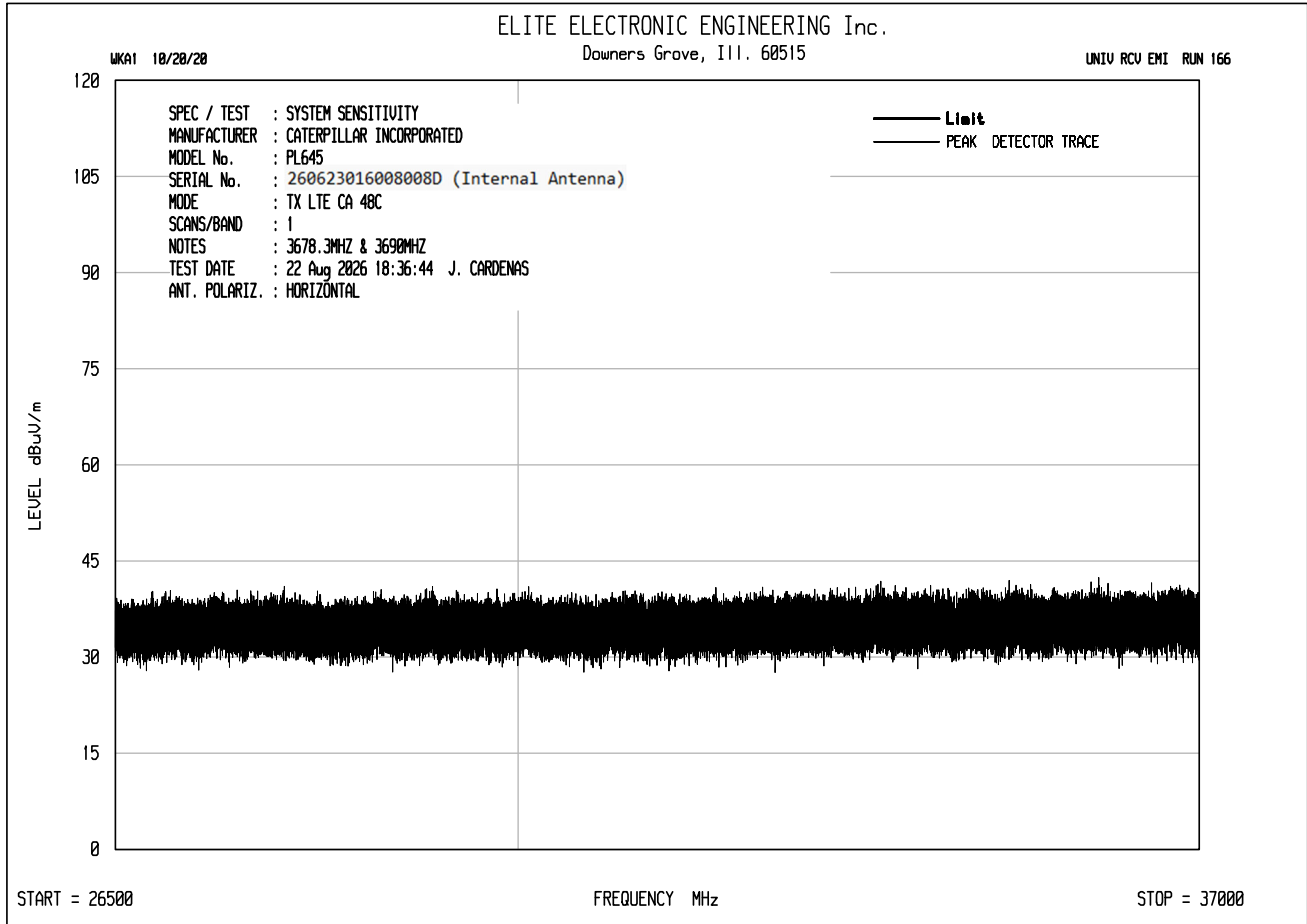


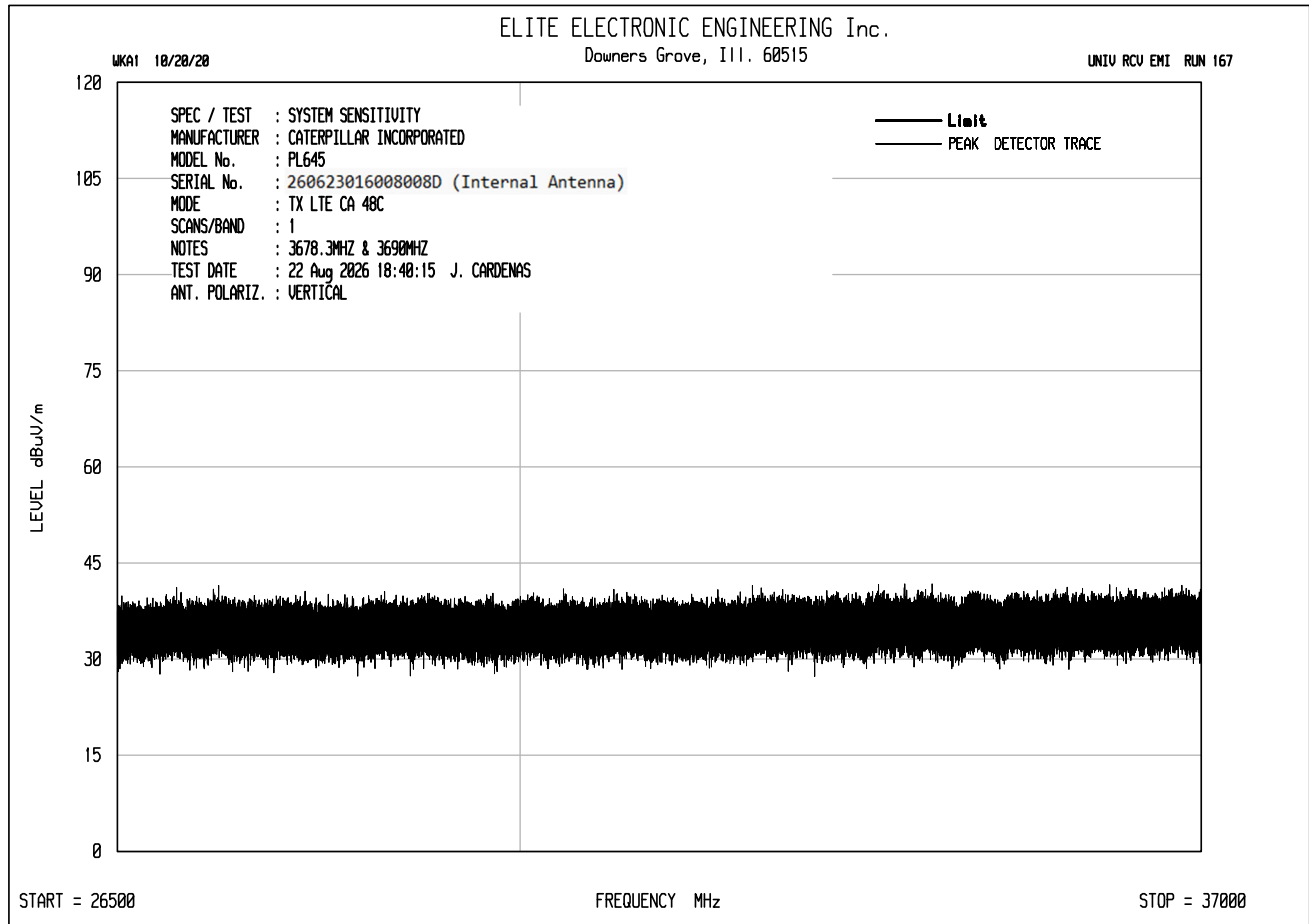






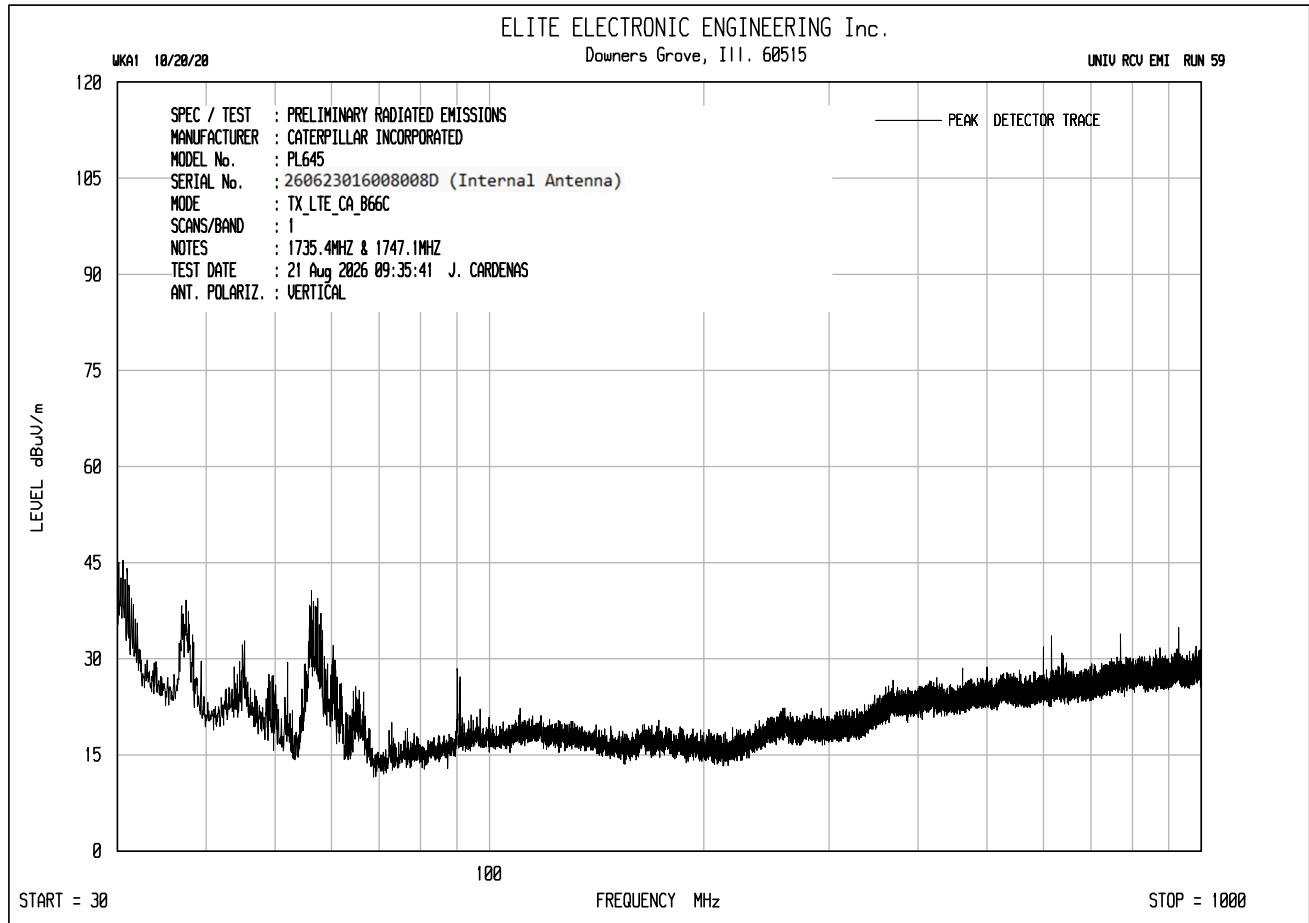


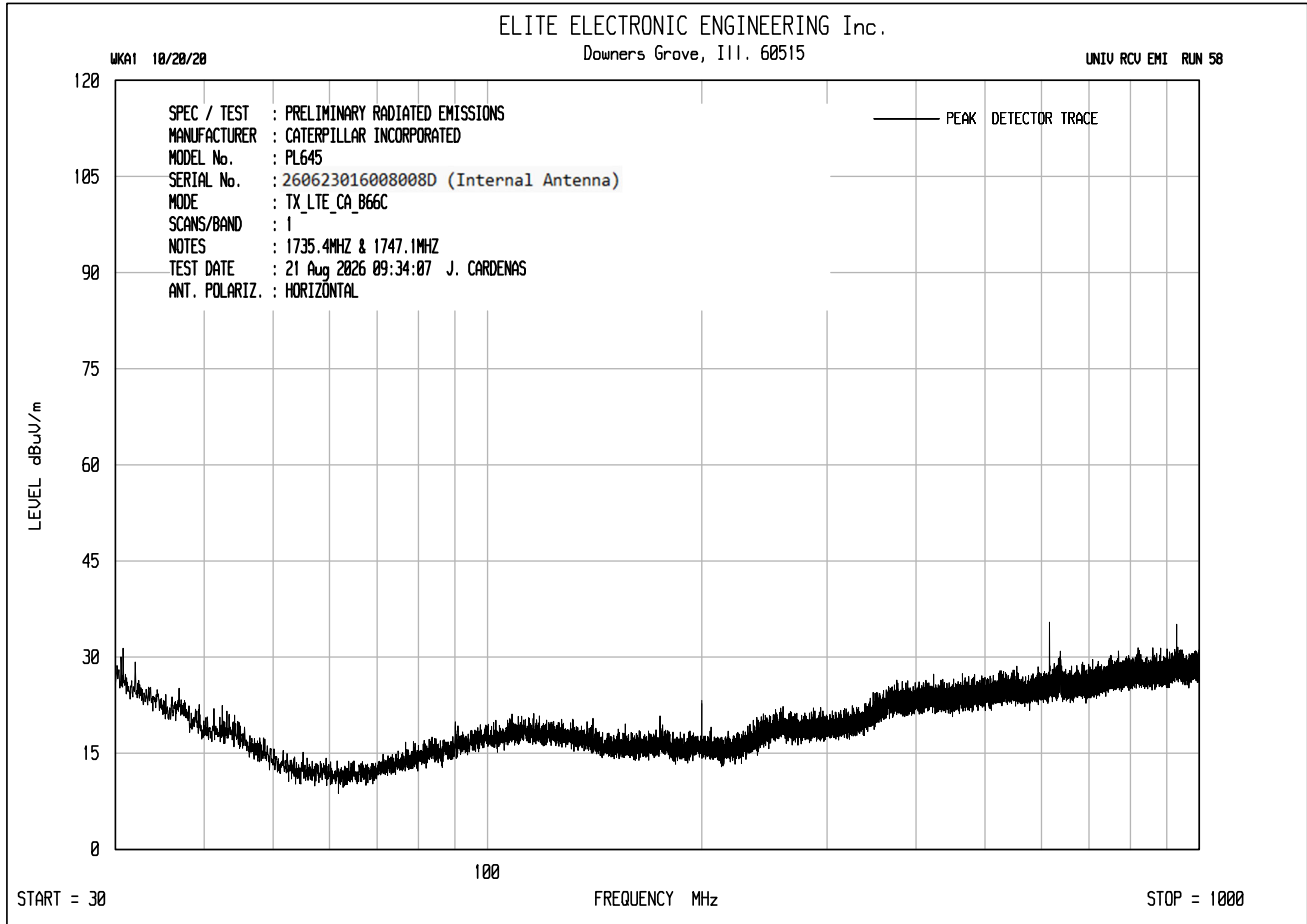


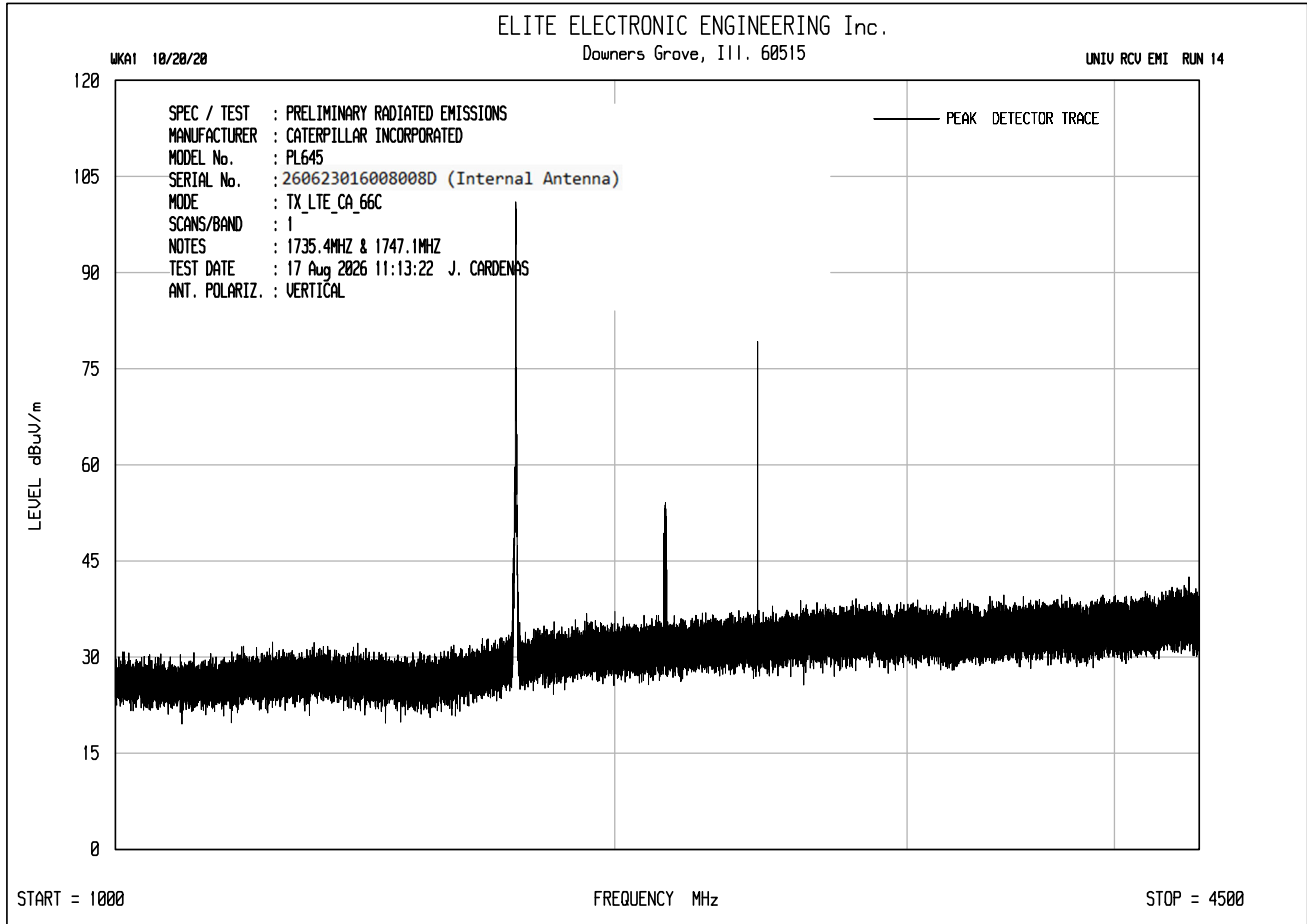


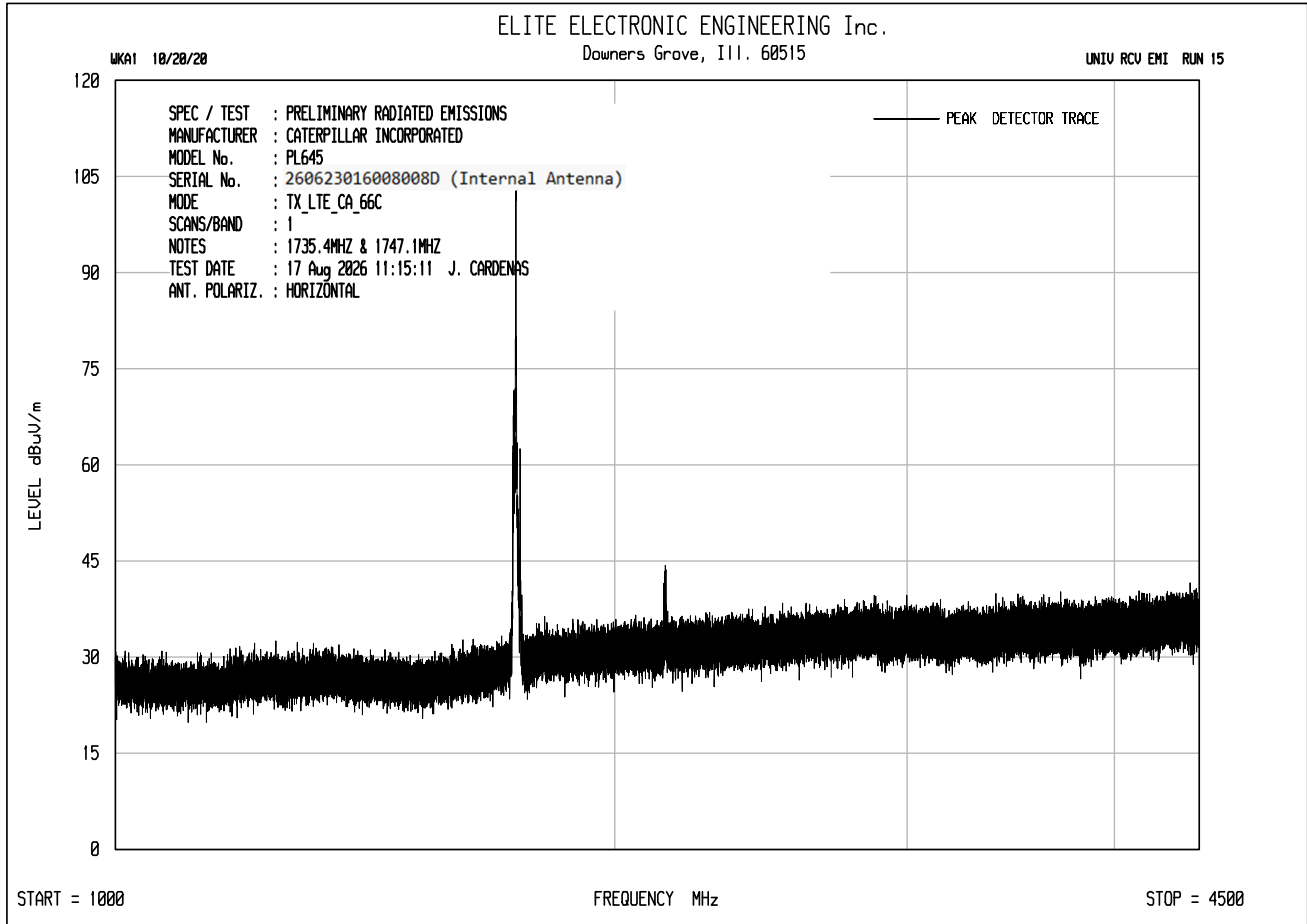
Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Calculated Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Attenuation Below Output Power (dB)	Minimum Attenuation (dB)
7356.60	H	24.5	Ambient	-32.1	7.6	6.2	-30.7	53.7	36.0
7356.60	V	24.4	Ambient	-32.9	7.6	6.2	-31.5	54.5	36.0

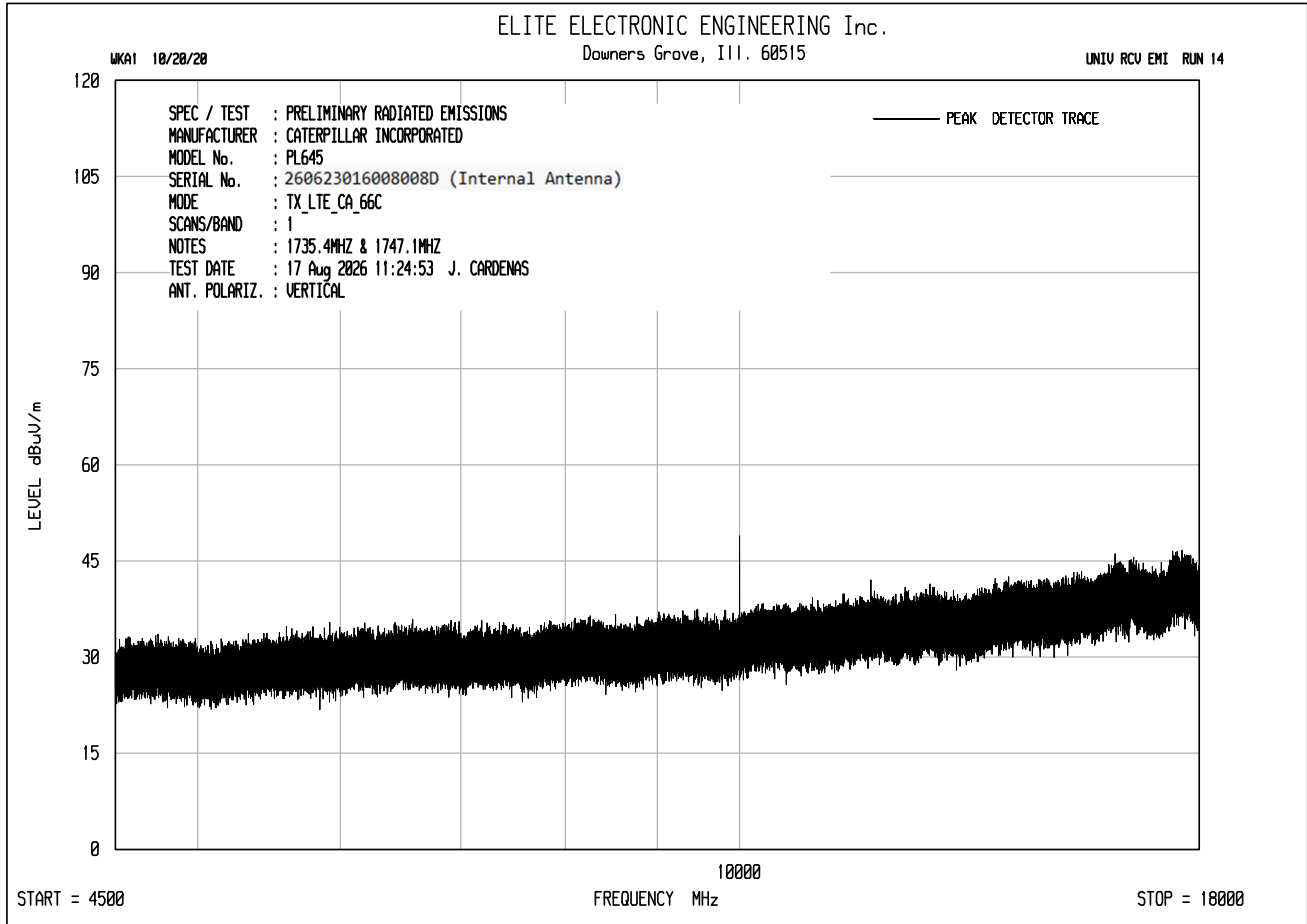
Test Details	
Manufacturer	Caterpillar Inc
Equipment Under Test	5G Telematics Radio
Model No.	PL645
Part No.	7620.002.904-13
Serial No.	260619016008008D (Internal Antenna)
Mode	LTE CA
Frequency Tested	Band 66 – 1735.4MHz
Notes	None

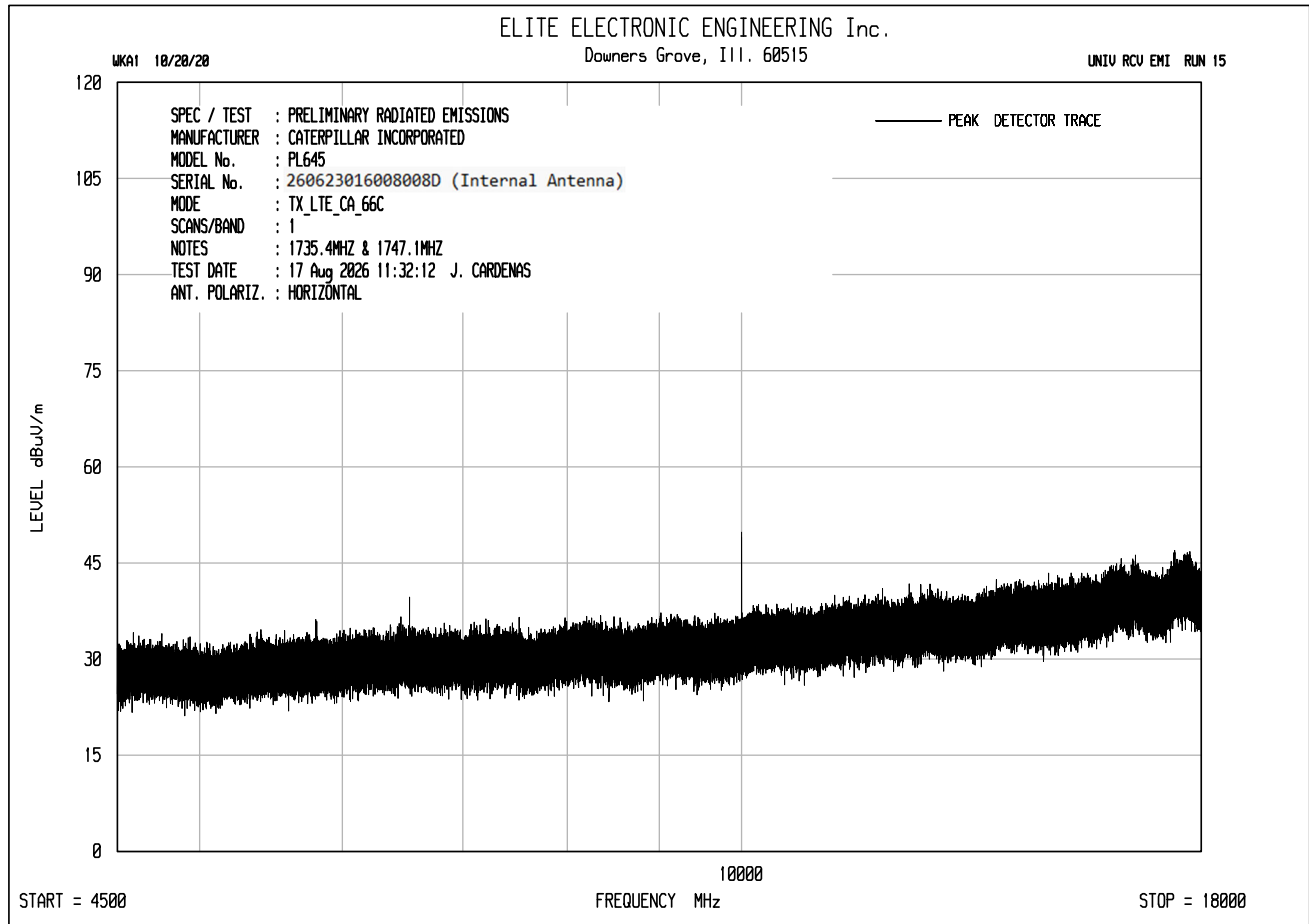












Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	Calculated Sig. Gen. Reading (dBm)	Equivalent Antenna Gain (dB)	Cable Loss (dB)	ERP (dBm)	Attenuation Below Output Power (dB)	Minimum Attenuation (dB)
3470.80	H	26.3	Ambient	-38.4	4.8	4.2	-37.8	60.8	36.0
3470.80	V	25.6	Ambient	-37.4	4.8	4.2	-36.8	59.8	36.0

23. Scope of Accreditation

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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Website: www.elitetest.com

ELECTRICAL

Valid To: June 30, 2027

Certificate Number: 1786.01

In recognition of the successful completion of the A2LA Accreditation Program evaluation process, accreditation is granted to this laboratory at the location listed above, as well as the satellite location listed below, to perform the following automotive electromagnetic compatibility and other electrical tests:

Test Technology:**Test Method(s)¹:**

Transient Immunity
(Max Voltage 1500 V/Max current 1000 A)

ISO 7637-2 (including emissions); ISO 7637-3; ISO 7637-4;
ISO 16750-2, Sections 4.6.3 and 4.6.4;
ISO 21498-1; ISO 21498-2;
CS.00054, Section 5.9; CS.00244 Section 5.2.15 through 5.2.21; CS.00245; CS.00246 Section 5.2.4;
EMC-CS-2009.1 (CI220); FMC1278 (CI220, CI221, CI222);
GMW 3097, Section 3.5; SAE J1113-11; SAE J1113-12;
ECE Regulation 10.06 Annex 10

Electrostatic Discharge (ESD)
(Up to +/-25 kV)

ISO 10605 (2001, 2008); ISO 10605;
CS.00054, Section 5.10; CS.00244 Section 5.5;
EMC-CS-2009.1 (CI 280); FMC1278 (CI280); SAE J1113-13;
GMW 3097 Section 3.6

Conducted Emissions

CISPR 25 (2002, 2008), Sections 6.2 and 6.3;
CISPR 25 (2016), Sections 6.3 and 6.4; CISPR 25;
CS.00054, Sections 5.6.1 and 5.6.2;
CS.00244 Sections 5.4.2 and 5.4.3; GMW 3097, Section 3.3.2;
EMC-CS-2009.1 (CE 420); FMC1278 (CE420, CE421, CE 430, CE440)

(A2LA Cert. No. 1786.01) 08/14/2025



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