

Title	Mechanical test of FLIR SC645
Report no.	276 243
Customer	Flir Systems AB
Contact person	Johan Murray
Address	Rinkebyvägen 19 SE-182 36 Danderyd
Assignment carried out by	Jan Nordström
Order no.	

Kista, 2010-06-10

INNVENTIA AB

Jan Nordström
Responsible for testing

Torben Jacobson
Project manager

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<i>Customer:</i> Flir Systems AB	<i>Contact person:</i> Johan Murray
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<i>Type of tested object:</i> FLIR SC645 P/N: 55001-0202 S/N: 55000016	<i>Accredited testing according to standard:</i> IEC 60068-2-6 2008 Sine IEC 60068-2-27 2008 Shock
<i>Testing level according to standard:</i> Custom specified.	<i>Testing date:</i> 2010-06-08
<i>Remarks:</i>	<i>Testing carried out by:</i> Jan Nordström

Control, place / type: Centre <input checked="" type="checkbox"/> Average <input checked="" type="checkbox"/> If other, see appendices listed below.

Testing carried out at the following levels of severity:

Sine Frequency 10-58-500 Hz Acceleration level 0.3 mm p-p /2g Sweep rate 1 oct/min 5 sweep cycles	Frequency 10-500 Hz Acceleration level 0.3 mm p-p /2g Sweep rate 1 oct/min 5 sweep cycles	Frequency 10-500 Hz Acceleration level 0.3 mm p-p / 2g Sweep rate 1 oct/min 5 sweep cycles
Shock 25 g, 6 ms Half sine ± 500 pulses	25 g, 6 ms Half sine ± 500 pulses	25 g, 6 ms Half sine ± 500 pulses

Person present

Mr: Johan Murray and Ove Gustavsson were present during the tests.

Results and remarks during testing

Fastening to vibration/shock tables, see photo 1 – 3 page 3 and 4.

Vibration curves sine, page 6.

Shocks curves, page 7.

Final functional testing and inspection is made by Flir Systems AB.

Photos

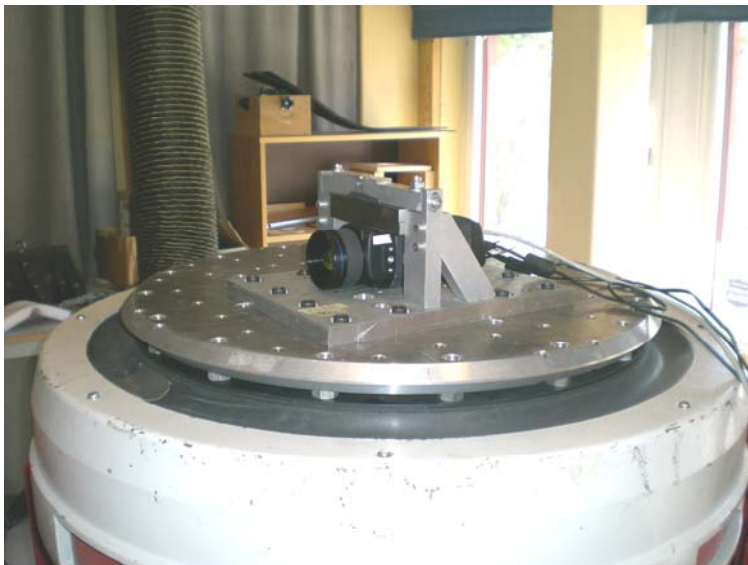


Photo 1. Z-direction

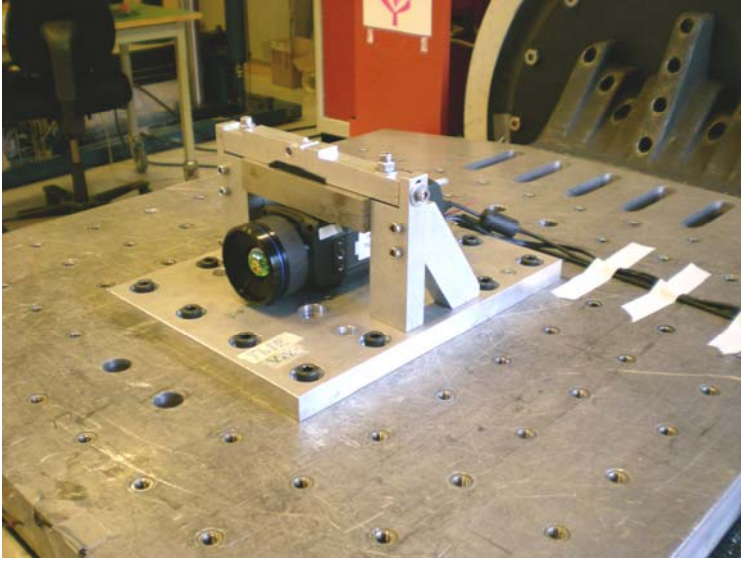


Photo 2. Y-direction

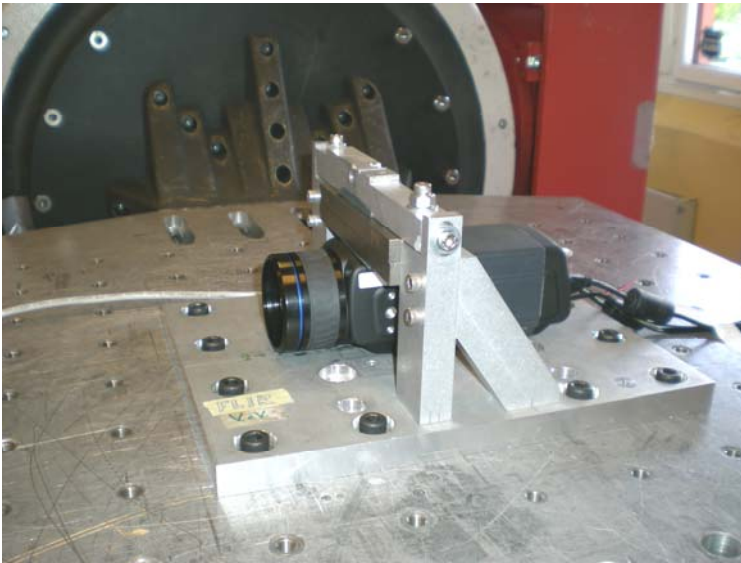


Photo 3. X-direction

Equipment used for testing

Vibrator and Control equipment

Ling LDS-V875LPT	<input checked="" type="checkbox"/>	Dactron Laser	<input checked="" type="checkbox"/>
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Amplifier and Accelerometer Type

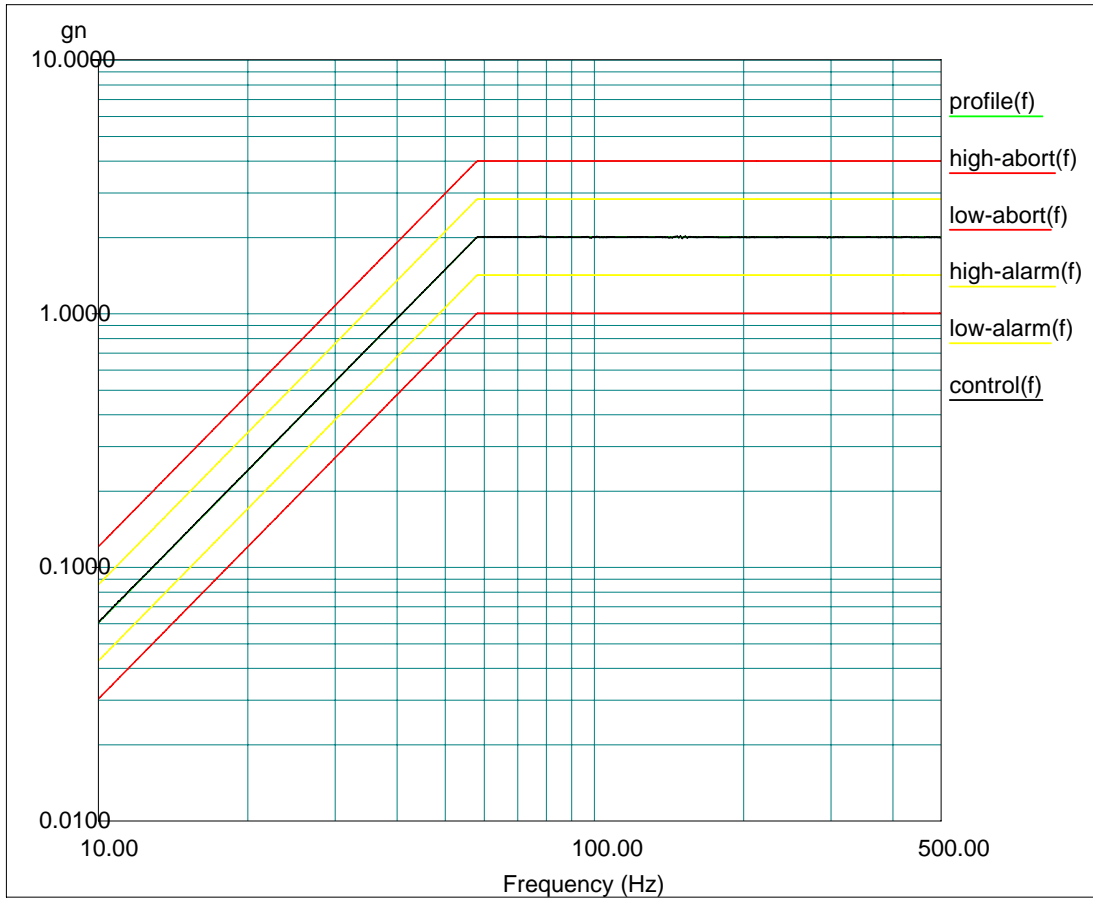
Dytran 3100B	Sn: 3867 (hor)	<input type="checkbox"/>	Sn: 3866 (ver)	<input checked="" type="checkbox"/>		
B&K 4507	Sn: 30334 (red)	<input type="checkbox"/>	Sn: 10054 (ora)	<input type="checkbox"/>	Sn: 2153815 (yel)	<input type="checkbox"/>
	Sn: 2153816 (gre)	<input type="checkbox"/>	Sn: 2153817 (blu)	<input type="checkbox"/>	Sn: 2153818 (pur)	<input type="checkbox"/>
	Sn: 224409 (gra)	<input type="checkbox"/>				

All equipment is traceably calibrated 2009-12, and the total inaccuracy for the acceleration level is better than $\pm 4\%$.

Diagrams

Sine level 0.3 mm p-p / 2 g

X, Y, and Z-direction



Shock 25 g 6 ms

X, Y, Z-direction

