
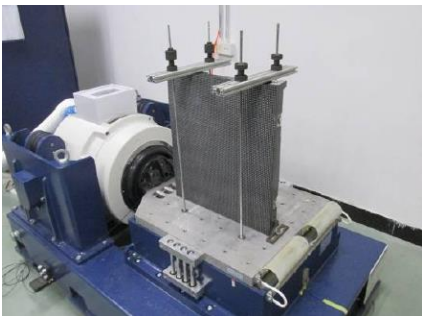


Product verification and reliability Report

Product: VDO Face 5

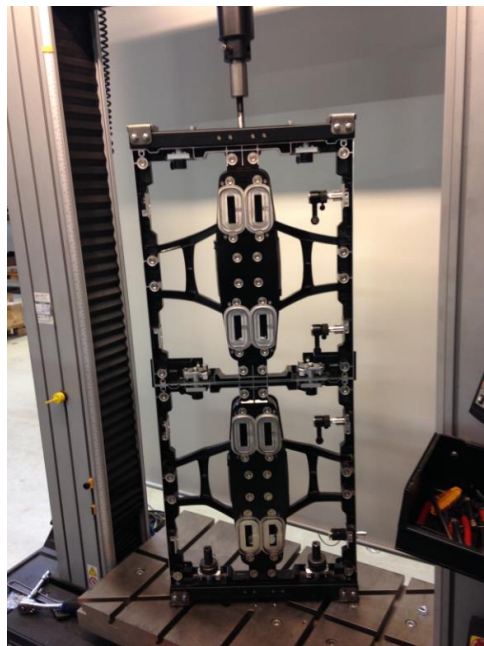
Date: 2017-03-05



Test performed	Condition	Duration	Test lab	Result
<p>Component Temperature test</p> <p>Measurements of component temperatures at worst case circumstances (Full load, and T(amb)max.)</p> 	<p>Full white</p> <p>35C</p> <p>110V</p>	4h	Martin Professional	Pass
<p>Application Vibration Test Verification – verification of mechanical robustness</p> 	<p>Sinusoidal vibration test IEC60068-2-6 (1g, 5-100Hz)</p> <p>Random Vibration test IEC60068-2-64 (3-100Hz, 0,7g(rms))</p>	30 mins. Per direction	EMTEK	Pass

	<p>Bump test 25g, 6ms, 500 bumps/direction</p> <p>All at 25.6C, 60%RH X, Y, Z directions</p>			
<p>Low temperature Thermal cycle</p> 	<p>-40C to +25C, +50C to -20C.</p> <p>Powered with 110V full white at 25C, 50C and -20C.</p>	<p>1 cycle @7h (4h, 1h, 1h, 1h)</p>	<p>Martin Professional</p>	<p>Pass</p>
<p>IP Class Test Verification - protection against intrusion of dust and water</p> 	<p>IP 65, EN60529</p> <p>Dust: 2kg/m3</p> <p>Water: 12,5 l/m 6.3mm nozzle Distance 3m</p>	<p>8h /3 min.</p>	<p>EMTEK</p>	<p>Pass</p>

		3 min			
<p>Wind Speed – Verification of mechanical robustness against high wind speed, gust and rain.</p> 		Wind speed and blowing rain, up to 32,7 m/s	11 min. per speed.	Velux	Pass
<p>Primary- and secondary suspension strength test: Header.</p> 		EN60598-2-17, clause 17.6.4, and 16.6.6 UL1573 (Bearing parts are capable of supporting at least 10x the intended weight, without deformation) (secondary suspension supports at least 6x the weight of the intended load)	N/A	EMTEK	Pass
<p>Primary- and secondary suspension strength test: Frame.</p>		EN60598-2-17, clause 17.6.4, and 16.6.6 UL1573 (Bearing parts are capable of supporting at least 10x the intended	N/A	Teknologisk institut	Pass



weight, without deformation)
 (secondary suspension supports at least 6x the weight of the intended load)

Secondary suspension fall test

45 falls @ 10cm.
 With simulated max allowed column height.

NA

Martin Professional

Pass



Surge / Transient Test Verification - surge immunity from power switches and lightning

EN61000-4-5 / Class 2;
1kV L-L, 2kV L-PE.

EN61000-4-4 / Level 2,
1kV mains, 0,5kV Signal.

NA

Martin Professional

Pass



Packing drop Test Verification – verification of robustness of product and packing

Nordtest method NT ELEC M601; Free fall: 1.2 m. 12 drops

12 falls on different sides, edges and corners.

EMTEK

Pass



Bo A. Poulsen

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Date: 2017-03-05
Revision: 00