






Product verification and reliability report



Product: MAC Aura XIP




Date: 2022-11-30






Test performed	Condition	Duration	Test lab	Result
<p>Solar Radiation and Moist Test</p> <p>Verification method for exposing components to UV light in the presence of moisture to reproduce the weathering effects (temperature, humidity and/or wetting).</p> 	ISO 4892-2, cyclic no. 1, 102 mins. dry, 18 mins. water spray.	1500 hours	Martin	Pass
<p>Cold Climate</p> <p>Verification of performance in cold environments.</p> 	Martin Test Specification	12 hours	Martin	Pass

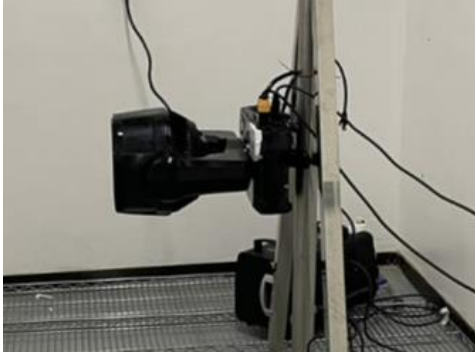
<p>Humidity</p> <p>Verification of performance in high humid and highly condensing environments.</p> 	<p>Martin Test Specification</p>	<p>144 hours</p>	<p>Martin</p>	<p>Pass</p>
<p>Mechanical Endurance</p> <p>Verification of product feature performance.</p> 	<p>Accelerated lifetime verification of mechanical features like Pan/Tilt and Zoom systems.</p>	<p>Approx 8 months</p>	<p>Martin</p>	<p>Pass</p>
<p>Application Vibration and Bump Test</p> <p>Verification of lifetime robustness in different product applications.</p> 	<p>Martin Test Specification</p> <p>Fixture powered during test.</p>	<p>8 hours</p>	<p>Martin</p>	<p>Pass</p>

<p>Thermal Test</p> <p>Verification of product temperature robustness.</p> 	<p>Designed and tested to ambient temperature Ta (min/max): 5°C to +40 °C</p>	<p>4 hours</p>	<p>Martin</p>	<p>Pass</p>
<p>IP Class Test</p> <p>Verification of protection against intrusion of dust and water.</p> 	<p>IP54 according to IEC/EN60529</p>	<p>IPX4:20 min IP5X:4 hours</p>	<p>Martin & ITS</p>	<p>Pass</p>

<p>Haze & Dust</p> <p>Verification of performance in hazy (smoke fluid) and dusty environments.</p> 	<p>Martin Test Specification</p>	<p>240 h</p>	<p>Martin</p>	<p>Pass</p>
<p>Rainstorm</p> <p>Verify performance in extreme rain situations.</p> 	<p>Martin Test Specification</p>	<p>4 hours</p>	<p>Martin</p>	<p>Pass</p>
<p>Surge / Transient Test</p> <p>Surge immunity from power switches and lightning.</p> 	<p>EN61000-4-5:2014+A1:2017</p>	<p>NA</p>	<p>Martin & SGS</p>	<p>Pass</p>

<p>Packing drop Test</p> <p>Verification of products and packing strength test of SIP and EPS packing solution.</p>  	<p>Nord-test method NT ELEC M601.</p> <p>EPS Free fall: 1.2 m. 12 drops</p> <p>SIP Free fall: 60 cm. 12 drops</p>	<p>NA</p>	<p>Martin</p>	<p>Pass</p>
<p>Product Lifetime testing</p> <p>Outdoor test (Started since Feb 2022)</p> 	<p>Indoor Ta 25°C and outdoor, LED on 24 hours per day.</p>	<p>24h/day</p>	<p>Martin</p>	<p>Ongoing</p>

Indoor test (Started since Aug 2022)



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Department:

Martin Professional, R&D Systems

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2022-12-08

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01