

TEST REPORT IP 67 / IP 67 TEST RAPORU IEC / EN 60529 & IEC / EN 60598-1 DEGREES OF PROTECTION PROVIDED BY ENCLOSURES (IP CODE) (FOR ELECTRICAL EQUIPMENTS) <i>ELEKTRİK DONANIMLARINDA MAHAZALARLA SAĞLANAN KORUMA DERECEŚİ (IP KODU)</i>	
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Standard (Standart).....	IEC 60529:1989 + A1:1999 + A2:2013 EN 60529:1991 + A1:2000 + A2:2013 IEC 60598-1:2014 + A1:2017 EN 60598-1:2015 + A1:2018
Test procedure (Deney prosedürü).....	IP67 Test procedure (IP67 Test Prosedürü)
Non-standard test method (Standart olmayan test metodu).....	N/A (YOK)
Test Report Form No (Deney Rapor Form No).....	N/A (YOK)
TRF Originator (TRF Sahibi).....	ESİM
Date (s) of performance of tests (Ürün testlerinin yapıłış tarihleri)	2020-01-30

Test item description (Deneye tabi tutulan cihaz).....	Exterior & Ground recessed luminaire / Dış cephe ve Zemine gömme aydınlatma armatürü
Trade Mark (Ticari Marka)	HERA
Manufacturer (Üretici)	Hera Eğlence ve Mimari Aydınlatma Sistemleri A. Ş.
Model/Type reference (Model)	Tested model / Test edilen model: P02021052; Leoline® S12 615mm DMX SC Surface Mounted Medium Beam 30° For approval models, see page 4 to 15. / <i>Onaylanan modeller için sayfa 4 ile 15 arasına bakınız.</i>
Ratings (Değerler)	48 Vdc

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Model description / Model tanımlaması

The tested product is P02021052; Leoline® S12 615mm DMX SC Surface Mounted Medium Beam 30° exterior luminaire. The product has electronic control circuit and remote control system. / Test edilen ürün Leoline® S12 1515mm DMX RGBW Linear Medium Beam 30° model dış cephe aydınlatma armatürüdür. Üründe elektronik kontrol devresi ve uzaktan kontrol sistemi bulunur.

The test results stated in this report of model Leoline® S12 1515mm DMX RGBW Linear Medium Beam 30° are also representative for models stated table-1 under approval models in page 4 to 15. / Bu raporda P02021052; Leoline® S12 615mm DMX SC Surface Mounted Medium Beam 30° modeli için verilen sonuçlar aynı zamanda sayfa 4 ile 15 arasındaki onaylanan modeller altındaki Tablo-1'de verilen modeller için de geçerlidir.

Leoline series products and Moleline series products are identical electrically and mechanically. The main difference between them;

- Leoline series products are designed to be used as exterior luminaire.
- Moleline series products are designed to be used as ground recessed luminaire.

/ Leoline serisi ürünler ile Moleline serisi ürünler elektriksel ve mekaniksel olarak birbirinin aynısıdır.

Aralarındaki temel fark;

- Leoline serisi ürünler dış cephe aydınlatma armatürü olarak kullanılması için tasarlanmıştır.
- Moleline serisi ürünler ise zemine gömme aydınlatma armatürü olarak kullanılması için tasarlanmıştır.

Approval models / Onaylanan modeller:

Table / Tablo - 1

Model / Model	Description / Açıklama
P02020011	Leoline® S12 315mm DMX SC Surface Mounted Narrow Beam 15°
P02020XX2	Leoline® S12 315mm DMX SC Surface Mounted Medium Beam 30°
P02020XX3	Leoline® S12 315mm DMX SC Surface Mounted Wide Beam 45°
P02020XX4	Leoline® S12 315mm DMX SC Surface Mounted Very Wide Beam 60°
P02020XX6	Leoline® S12 315mm DMX SC Surface Mounted Asymmetric Beam 35°+15°
P02021XX1	Leoline® S12 615mm DMX SC Surface Mounted Narrow Beam 15°
P02021XX2	Leoline® S12 615mm DMX SC Surface Mounted Medium Beam 30°
P02021XX3	Leoline® S12 615mm DMX SC Surface Mounted Wide Beam 45°
P02021XX4	Leoline® S12 615mm DMX SC Surface Mounted Very Wide Beam 60°
P02021XX6	Leoline® S12 615mm DMX SC Surface Mounted Asymmetric Beam 35°+15°
P02022XX1	Leoline® S12 915mm DMX SC Surface Mounted Narrow Beam 15°

P 1 2 3 4 XX 7

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01-Red
02-Green
03-Blue
04-Amber
05-Warm White
06-Natural White
07-Cool White

P02022XX2	Leoline® S12 915mm DMX SC Surface Mounted Medium Beam 30°	
P02022XX3	Leoline® S12 915mm DMX SC Surface Mounted Wide Beam 45°	
P02022XX4	Leoline® S12 915mm DMX SC Surface Mounted Very Wide Beam 60°	
P02022XX6	Leoline® S12 915mm DMX SC Surface Mounted Asymmetric Beam 35°+15°	
P02023XX1	Leoline® S12 1215mm DMX SC Surface Mounted Narrow Beam 15°	
P02023XX2	Leoline® S12 1215mm DMX SC Surface Mounted Medium Beam 30°	
P02023XX3	Leoline® S12 1215mm DMX SC Surface Mounted Wide Beam 45°	
P02023XX4	Leoline® S12 1215mm DMX SC Surface Mounted Very Wide Beam 60°	
P02023XX6	Leoline® S12 1215mm DMX SC Surface Mounted Asymmetric Beam 35°+15°	
P02024XX1	Leoline® S12 1515mm DMX SC Surface Mounted Narrow Beam 15°	
P02024XX2	Leoline® S12 1515mm DMX SC Surface Mounted Medium Beam 30°	
P02024XX3	Leoline® S12 1515mm DMX SC Surface Mounted Wide Beam 45°	
P02024XX4	Leoline® S12 1515mm DMX SC Surface Mounted Very Wide Beam 60°	
P02024XX6	Leoline® S12 1515mm DMX SC Surface Mounted Asymmetric Beam 35°+15°	
P02020081	Leoline® S12 315mm DMX RGB Surface Mounted Narrow Beam 15°	
P02020082	Leoline® S12 315mm DMX RGB Surface Mounted Medium Beam 30°	
P02020083	Leoline® S12 315mm DMX RGB Surface Mounted Wide Beam 45°	
P02020084	Leoline® S12 315mm DMX RGB Surface Mounted Very Wide Beam 60°	
P02020086	Leoline® S12 315mm DMX RGB Surface Mounted Asymmetric Beam 35°+15°	
P02021081	Leoline® S12 615mm DMX RGB Surface Mounted Narrow Beam 15°	
P02021082	Leoline® S12 615mm DMX RGB Surface Mounted Medium Beam 30°	
P02021083	Leoline® S12 615mm DMX RGB Surface Mounted Wide Beam 45°	
P02021084	Leoline® S12 615mm DMX RGB Surface Mounted Very Wide Beam 60°	
P02021086	Leoline® S12 615mm DMX RGB Surface Mounted Asymmetric Beam 35°+15°	
P02022081	Leoline® S12 915mm DMX RGB Surface Mounted Narrow Beam 15°	
P02022082	Leoline® S12 915mm DMX RGB Surface Mounted Medium Beam 30°	
P02022083	Leoline® S12 915mm DMX RGB Surface Mounted Wide Beam 45°	
P02022084	Leoline® S12 915mm DMX RGB Surface Mounted Very	

	Wide Beam 60°
P02022086	Leoline® S12 915mm DMX RGB Surface Mounted Asymmetric Beam 35°+15°
P02023081	Leoline® S12 1215mm DMX RGB Surface Mounted Narrow Beam 15°
P02023082	Leoline® S12 1215mm DMX RGB Surface Mounted Medium Beam 30°
P02023083	Leoline® S12 1215mm DMX RGB Surface Mounted Wide Beam 45°
P02023084	Leoline® S12 1215mm DMX RGB Surface Mounted Very Wide Beam 60°
P02023086	Leoline® S12 1215mm DMX RGB Surface Mounted Asymmetric Beam 35°+15°
P02024081	Leoline® S12 1515mm DMX RGB Surface Mounted Narrow Beam 15°
P02024082	Leoline® S12 1515mm DMX RGB Surface Mounted Medium Beam 30°
P02024083	Leoline® S12 1515mm DMX RGB Surface Mounted Wide Beam 45°
P02024084	Leoline® S12 1515mm DMX RGB Surface Mounted Very Wide Beam 60°
P02024086	Leoline® S12 1515mm DMX RGB Surface Mounted Asymmetric Beam 35°+15°
P02020101	Leoline® S12 315mm DMX RGBW Surface Mounted Narrow Beam 15°
P02020102	Leoline® S12 315mm DMX RGBW Surface Mounted Medium Beam 30°
P02020103	Leoline® S12 315mm DMX RGBW Surface Mounted Wide Beam 45°
P02020104	Leoline® S12 315mm DMX RGBW Surface Mounted Very Wide Beam 60°
P02020106	Leoline® S12 315mm DMX RGBW Surface Mounted Asymmetric Beam 35°+15°
P02021101	Leoline® S12 615mm DMX RGBW Surface Mounted Narrow Beam 15°
P02021102	Leoline® S12 615mm DMX RGBW Surface Mounted Medium Beam 30°
P02021103	Leoline® S12 615mm DMX RGBW Surface Mounted Wide Beam 45°
P02021104	Leoline® S12 615mm DMX RGBW Surface Mounted Very Wide Beam 60°
P02021106	Leoline® S12 615mm DMX RGBW Surface Mounted Asymmetric Beam 35°+15°
P02022101	Leoline® S12 915mm DMX RGBW Surface Mounted Narrow Beam 15°
P02022102	Leoline® S12 915mm DMX RGBW Surface Mounted Medium Beam 30°
P02022103	Leoline® S12 915mm DMX RGBW Surface Mounted Wide Beam 45°
P02022104	Leoline® S12 915mm DMX RGBW Surface Mounted Very Wide Beam 60°
P02022106	Leoline® S12 915mm DMX RGBW Surface Mounted Asymmetric Beam 35°+15°
P02023101	Leoline® S12 1215mm DMX RGBW Surface Mounted Narrow Beam 15°

P02023102	Leoline® S12 1215mm DMX RGBW Surface Mounted Medium Beam 30°
P02023103	Leoline® S12 1215mm DMX RGBW Surface Mounted Wide Beam 45°
P02023104	Leoline® S12 1215mm DMX RGBW Surface Mounted Very Wide Beam 60°
P02023106	Leoline® S12 1215mm DMX RGBW Surface Mounted Asymmetric Beam 35°+15°
P02024101	Leoline® S12 1515mm DMX RGBW Surface Mounted Narrow Beam 15°
P02024102	Leoline® S12 1515mm DMX RGBW Surface Mounted Medium Beam 30°
P02024103	Leoline® S12 1515mm DMX RGBW Surface Mounted Wide Beam 45°
P02024104	Leoline® S12 1515mm DMX RGBW Surface Mounted Very Wide Beam 60°
P02024106	Leoline® S12 1515mm DMX RGBW Surface Mounted Asymmetric Beam 35°+15°
P02020091	Leoline® S12 315mm DMX RGBA Surface Mounted Narrow Beam 15°
P02020092	Leoline® S12 315mm DMX RGBA Surface Mounted Medium Beam 30°
P02020093	Leoline® S12 315mm DMX RGBA Surface Mounted Wide Beam 45°
P02020094	Leoline® S12 315mm DMX RGBA Surface Mounted Very Wide Beam 60°
P02020096	Leoline® S12 315mm DMX RGBA Surface Mounted Asymmetric Beam 35°+15°
P02021091	Leoline® S12 615mm DMX RGBA Surface Mounted Narrow Beam 15°
P02021092	Leoline® S12 615mm DMX RGBA Surface Mounted Medium Beam 30°
P02021093	Leoline® S12 615mm DMX RGBA Surface Mounted Wide Beam 45°
P02021094	Leoline® S12 615mm DMX RGBA Surface Mounted Very Wide Beam 60°
P02021096	Leoline® S12 615mm DMX RGBA Surface Mounted Asymmetric Beam 35°+15°
P02022091	Leoline® S12 915mm DMX RGBA Surface Mounted Narrow Beam 15°
P02022092	Leoline® S12 915mm DMX RGBA Surface Mounted Medium Beam 30°
P02022093	Leoline® S12 915mm DMX RGBA Surface Mounted Wide Beam 45°
P02022094	Leoline® S12 915mm DMX RGBA Surface Mounted Very Wide Beam 60°
P02022096	Leoline® S12 915mm DMX RGBA Surface Mounted Asymmetric Beam 35°+15°
P02023091	Leoline® S12 1215mm DMX RGBA Surface Mounted Narrow Beam 15°
P02023092	Leoline® S12 1215mm DMX RGBA Surface Mounted Medium Beam 30°
P02023093	Leoline® S12 1215mm DMX RGBA Surface Mounted Wide Beam 45°
P02023094	Leoline® S12 1215mm DMX RGBA Surface Mounted Very

	Wide Beam 60°	
P02023096	Leoline® S12 1215mm DMX RGBA Surface Mounted Asymmetric Beam 35°+15°	
P02024091	Leoline® S12 1515mm DMX RGBA Surface Mounted Narrow Beam 15°	
P02024092	Leoline® S12 1515mm DMX RGBA Surface Mounted Medium Beam 30°	
P02024093	Leoline® S12 1515mm DMX RGBA Surface Mounted Wide Beam 45°	
P02024094	Leoline® S12 1515mm DMX RGBA Surface Mounted Very Wide Beam 60°	
P02024096	Leoline® S12 1515mm DMX RGBA Surface Mounted Asymmetric Beam 35°+15°	
P02020121	Leoline® S12 315mm DMX DW Surface Mounted Narrow Beam 15°	
P02020122	Leoline® S12 315mm DMX DW Surface Mounted Medium Beam 30°	
P02020123	Leoline® S12 315mm DMX DW Surface Mounted Wide Beam 45°	
P02020124	Leoline® S12 315mm DMX DW Surface Mounted Very Wide Beam 60°	
P02020126	Leoline® S12 315mm DMX DW Surface Mounted Asymmetric Beam 35°+15°	
P02021121	Leoline® S12 615mm DMX DW Surface Mounted Narrow Beam 15°	
P02021122	Leoline® S12 615mm DMX DW Surface Mounted Medium Beam 30°	
P02021123	Leoline® S12 615mm DMX DW Surface Mounted Wide Beam 45°	
P02021124	Leoline® S12 615mm DMX DW Surface Mounted Very Wide Beam 60°	
P02021126	Leoline® S12 615mm DMX DW Surface Mounted Asymmetric Beam 35°+15°	
P02022121	Leoline® S12 915mm DMX DW Surface Mounted Narrow Beam 15°	
P02022122	Leoline® S12 915mm DMX DW Surface Mounted Medium Beam 30°	
P02022123	Leoline® S12 915mm DMX DW Surface Mounted Wide Beam 45°	
P02022124	Leoline® S12 915mm DMX DW Surface Mounted Very Wide Beam 60°	
P02022126	Leoline® S12 915mm DMX DW Surface Mounted Asymmetric Beam 35°+15°	
P02023121	Leoline® S12 1215mm DMX DW Surface Mounted Narrow Beam 15°	
P02023122	Leoline® S12 1215mm DMX DW Surface Mounted Medium Beam 30°	
P02023123	Leoline® S12 1215mm DMX DW Surface Mounted Wide Beam 45°	
P02023124	Leoline® S12 1215mm DMX DW Surface Mounted Very Wide Beam 60°	
P02023126	Leoline® S12 1215mm DMX DW Surface Mounted Asymmetric Beam 35°+15°	
P02024121	Leoline® S12 1515mm DMX DW Surface Mounted Narrow Beam 15°	

P02024122	Leoline® S12 1515mm DMX DW Surface Mounted Medium Beam 30°
P02024123	Leoline® S12 1515mm DMX DW Surface Mounted Wide Beam 45°
P02024124	Leoline® S12 1515mm DMX DW Surface Mounted Very Wide Beam 60°
P02024126	Leoline® S12 1515mm DMX DW Surface Mounted Asymmetric Beam 35°+15°
P02025101	Leoline® M6 315mm DMX RGBW Surface Mounted Narrow Beam 10°
P02025102	Leoline® M6 315mm DMX RGBW Surface Mounted Medium Beam 25°
P02025103	Leoline® M6 315mm DMX RGBW Surface Mounted Wide Beam 35°
P02025104	Leoline® M6 315mm DMX RGBW Surface Mounted Asymmetric Beam 12+40°
P02025106	Leoline® M6 315mm DMX RGBW Surface Mounted Asymmetric Beam 40+12°
P02026101	Leoline® M6 615mm DMX RGBW Surface Mounted Narrow Beam 10°
P02026102	Leoline® M6 615mm DMX RGBW Surface Mounted Medium Beam 25°
P02026103	Leoline® M6 615mm DMX RGBW Surface Mounted Wide Beam 35°
P02026104	Leoline® M6 615mm DMX RGBW Surface Mounted Asymmetric Beam 12+40°
P02026106	Leoline® M6 615mm DMX RGBW Surface Mounted Asymmetric Beam 40+12°
P02027101	Leoline® M6 915mm DMX RGBW Surface Mounted Narrow Beam 10°
P02027102	Leoline® M6 915mm DMX RGBW Surface Mounted Medium Beam 25°
P02027103	Leoline® M6 915mm DMX RGBW Surface Mounted Wide Beam 35°
P02027104	Leoline® M6 915mm DMX RGBW Surface Mounted Asymmetric Beam 12+40°
P02027106	Leoline® M6 915mm DMX RGBW Surface Mounted Asymmetric Beam 40+12°
P02028101	Leoline® M6 1215mm DMX RGBW Surface Mounted Narrow Beam 10°
P02028102	Leoline® M6 1215mm DMX RGBW Surface Mounted Medium Beam 25°
P02028103	Leoline® M6 1215mm DMX RGBW Surface Mounted Wide Beam 35°
P02028104	Leoline® M6 1215mm DMX RGBW Surface Mounted Asymmetric Beam 12+40°
P02028106	Leoline® M6 1215mm DMX RGBW Surface Mounted Asymmetric Beam 40+12°
P02029101	Leoline® M6 1515mm DMX RGBW Surface Mounted Narrow Beam 10°
P02029102	Leoline® M6 1515mm DMX RGBW Surface Mounted Medium Beam 25°
P02029103	Leoline® M6 1515mm DMX RGBW Surface Mounted Wide Beam 35°
P02029104	Leoline® M6 1515mm DMX RGBW Surface Mounted

	Asymmetric Beam 12+40°	
P02029106	Leoline® M6 1515mm DMX RGBW Surface Mounted Asymmetric Beam 40+12°	
P02030XX1	Moleline® S12 315mm DMX SC Inground Narrow Beam 15°	
P02030XX2	Moleline® S12 315mm DMX SC Inground Medium Beam 30°	
P02030XX3	Moleline® S12 315mm DMX SC Inground Wide Beam 45°	
P02030XX4	Moleline® S12 315mm DMX SC Inground Wery Wide Beam 60°	
P02030XX6	Moleline® S12 315mm DMX SC Inground Asymmetric Beam 35°+15°	
P02031XX1	Moleline® S12 615mm DMX SC Inground Narrow Beam 15°	
P02031XX2	Moleline® S12 615mm DMX SC Inground Medium Beam 30°	
P02031XX3	Moleline® S12 615mm DMX SC Inground Wide Beam 45°	
P02031XX4	Moleline® S12 615mm DMX SC Inground Wery Wide Beam 60°	
P02031XX6	Moleline® S12 615mm DMX SC Inground Asymmetric Beam 35°+15°	
P02032XX1	Moleline® S12 915mm DMX SC Inground Narrow Beam 15°	
P02032XX2	Moleline® S12 915mm DMX SC Inground Medium Beam 30°	
P02032XX3	Moleline® S12 915mm DMX SC Inground Wide Beam 45°	
P02032XX4	Moleline® S12 915mm DMX SC Inground Wery Wide Beam 60°	
P02032XX6	Moleline® S12 915mm DMX SC Inground Asymmetric Beam 35°+15°	
P02033XX1	Moleline® S12 1215mm DMX SC Inground Narrow Beam 15°	
P02033XX2	Moleline® S12 1215mm DMX SC Inground Medium Beam 30°	
P02033XX3	Moleline® S12 1215mm DMX SC Inground Wide Beam 45°	
P02033XX4	Moleline® S12 1215mm DMX SC Inground Wery Wide Beam 60°	
P02033XX6	Moleline® S12 1215mm DMX SC Inground Asymmetric Beam 35°+15°	
P02034XX1	Moleline® S12 1515mm DMX SC Inground Narrow Beam 15°	
P02034XX2	Moleline® S12 1515mm DMX SC Inground Medium Beam 30°	
P02034XX3	Moleline® S12 1515mm DMX SC Inground Wide Beam 45°	
P02034XX4	Moleline® S12 1515mm DMX SC Inground Wery Wide Beam 60°	
P02034XX6	Moleline® S12 1515mm DMX SC Inground Asymmetric Beam 35°+15°	
P02030081	Moleline® S12 315mm DMX RGB Inground Narrow Beam 15°	
P02030082	Moleline® S12 315mm DMX RGB Inground Medium Beam 30°	
P02030083	Moleline® S12 315mm DMX RGB Inground Wide Beam 45°	

P02030084	Moleline® S12 315mm DMX RGB Inground Wery Wide Beam 60°
P02030086	Moleline® S12 315mm DMX RGB Inground Asymmetric Beam 35°+15°
P02031081	Moleline® S12 615mm DMX RGB Inground Narrow Beam 15°
P02031082	Moleline® S12 615mm DMX RGB Inground Medium Beam 30°
P02031083	Moleline® S12 615mm DMX RGB Inground Wide Beam 45°
P02031084	Moleline® S12 615mm DMX RGB Inground Wery Wide Beam 60°
P02031086	Moleline® S12 615mm DMX RGB Inground Asymmetric Beam 35°+15°
P02032081	Moleline® S12 915mm DMX RGB Inground Narrow Beam 15°
P02032082	Moleline® S12 915mm DMX RGB Inground Medium Beam 30°
P02032083	Moleline® S12 915mm DMX RGB Inground Wide Beam 45°
P02032084	Moleline® S12 915mm DMX RGB Inground Wery Wide Beam 60°
P02032086	Moleline® S12 915mm DMX RGB Inground Asymmetric Beam 35°+15°
P02033081	Moleline® S12 1215mm DMX RGB Inground Narrow Beam 15°
P02033082	Moleline® S12 1215mm DMX RGB Inground Medium Beam 30°
P02033083	Moleline® S12 1215mm DMX RGB Inground Wide Beam 45°
P02033084	Moleline® S12 1215mm DMX RGB Inground Wery Wide Beam 60°
P02033086	Moleline® S12 1215mm DMX RGB Inground Asymmetric Beam 35°+15°
P02034081	Moleline® S12 1515mm DMX RGB Inground Narrow Beam 15°
P02034082	Moleline® S12 1515mm DMX RGB Inground Medium Beam 30°
P02034083	Moleline® S12 1515mm DMX RGB Inground Wide Beam 45°
P02034084	Moleline® S12 1515mm DMX RGB Inground Wery Wide Beam 60°
P02034086	Moleline® S12 1515mm DMX RGB Inground Asymmetric Beam 35°+15°
P02030101	Moleline® S12 315mm DMX RGBW Inground Narrow Beam 15°
P02030102	Moleline® S12 315mm DMX RGBW Inground Medium Beam 30°
P02030103	Moleline® S12 315mm DMX RGBW Inground Wide Beam 45°
P02030104	Moleline® S12 315mm DMX RGBW Inground Wery Wide Beam 60°
P02030106	Moleline® S12 315mm DMX RGBW Inground Asymmetric Beam 35°+15°
P02031101	Moleline® S12 615mm DMX RGBW Inground Narrow Beam 15°

P02031102	Moleline® S12 615mm DMX RGBW Inground Medium Beam 30°
P02031103	Moleline® S12 615mm DMX RGBW Inground Wide Beam 45°
P02031104	Moleline® S12 615mm DMX RGBW Inground Wery Wide Beam 60°
P02031106	Moleline® S12 615mm DMX RGBW Inground Asymmetric Beam 35°+15°
P02032101	Moleline® S12 915mm DMX RGBW Inground Narrow Beam 15°
P02032102	Moleline® S12 915mm DMX RGBW Inground Medium Beam 30°
P02032103	Moleline® S12 915mm DMX RGBW Inground Wide Beam 45°
P02032104	Moleline® S12 915mm DMX RGBW Inground Wery Wide Beam 60°
P02032106	Moleline® S12 915mm DMX RGBW Inground Asymmetric Beam 35°+15°
P02033101	Moleline® S12 1215mm DMX RGBW Inground Narrow Beam 15°
P02033102	Moleline® S12 1215mm DMX RGBW Inground Medium Beam 30°
P02033103	Moleline® S12 1215mm DMX RGBW Inground Wide Beam 45°
P02033104	Moleline® S12 1215mm DMX RGBW Inground Wery Wide Beam 60°
P02033106	Moleline® S12 1215mm DMX RGBW Inground Asymmetric Beam 35°+15°
P02034101	Moleline® S12 1515mm DMX RGBW Inground Narrow Beam 15°
P02034102	Moleline® S12 1515mm DMX RGBW Inground Medium Beam 30°
P02034103	Moleline® S12 1515mm DMX RGBW Inground Wide Beam 45°
P02034104	Moleline® S12 1515mm DMX RGBW Inground Wery Wide Beam 60°
P02034106	Moleline® S12 1515mm DMX RGBW Inground Asymmetric Beam 35°+15°
P02030091	Moleline® S12 315mm DMX RGBA Inground Narrow Beam 15°
P02030092	Moleline® S12 315mm DMX RGBA Inground Medium Beam 30°
P02030093	Moleline® S12 315mm DMX RGBA Inground Wide Beam 45°
P02030094	Moleline® S12 315mm DMX RGBA Inground Wery Wide Beam 60°
P02030096	Moleline® S12 315mm DMX RGBA Inground Asymmetric Beam 35°+15°
P02031091	Moleline® S12 615mm DMX RGBA Inground Narrow Beam 15°
P02031092	Moleline® S12 615mm DMX RGBA Inground Medium Beam 30°
P02031093	Moleline® S12 615mm DMX RGBA Inground Wide Beam 45°
P02031094	Moleline® S12 615mm DMX RGBA Inground Wery Wide

	Beam 60°
P02031096	Moleline® S12 615mm DMX RGBA Inground Asymmetric Beam 35°+15°
P02032091	Moleline® S12 915mm DMX RGBA Inground Narrow Beam 15°
P02032092	Moleline® S12 915mm DMX RGBA Inground Medium Beam 30°
P02032093	Moleline® S12 915mm DMX RGBA Inground Wide Beam 45°
P02032094	Moleline® S12 915mm DMX RGBA Inground Wery Wide Beam 60°
P02032096	Moleline® S12 915mm DMX RGBA Inground Asymmetric Beam 35°+15°
P02033091	Moleline® S12 1215mm DMX RGBA Inground Narrow Beam 15°
P02033092	Moleline® S12 1215mm DMX RGBA Inground Medium Beam 30°
P02033093	Moleline® S12 1215mm DMX RGBA Inground Wide Beam 45°
P02033094	Moleline® S12 1215mm DMX RGBA Inground Wery Wide Beam 60°
P02033096	Moleline® S12 1215mm DMX RGBA Inground Asymmetric Beam 35°+15°
P02034091	Moleline® S12 1515mm DMX RGBA Inground Narrow Beam 15°
P02034092	Moleline® S12 1515mm DMX RGBA Inground Medium Beam 30°
P02034093	Moleline® S12 1515mm DMX RGBA Inground Wide Beam 45°
P02034094	Moleline® S12 1515mm DMX RGBA Inground Wery Wide Beam 60°
P02034096	Moleline® S12 1515mm DMX RGBA Inground Asymmetric Beam 35°+15°
P02030121	Moleline® S12 315mm DMX DW Inground Narrow Beam 15°
P02030122	Moleline® S12 315mm DMX DW Inground Medium Beam 30°
P02030123	Moleline® S12 315mm DMX DW Inground Wide Beam 45°
P02030124	Moleline® S12 315mm DMX DW Inground Wery Wide Beam 60°
P02030126	Moleline® S12 315mm DMX DW Inground Asymmetric Beam 35°+15°
P02031121	Moleline® S12 615mm DMX DW Inground Narrow Beam 15°
P02031122	Moleline® S12 615mm DMX DW Inground Medium Beam 30°
P02031123	Moleline® S12 615mm DMX DW Inground Wide Beam 45°
P02031124	Moleline® S12 615mm DMX DW Inground Wery Wide Beam 60°
P02031126	Moleline® S12 615mm DMX DW Inground Asymmetric Beam 35°+15°
P02032121	Moleline® S12 915mm DMX DW Inground Narrow Beam 15°
P02032122	Moleline® S12 915mm DMX DW Inground Medium Beam

	30°	
P02032123	Moleline® S12 915mm DMX DW Inground Wide Beam 45°	
P02032124	Moleline® S12 915mm DMX DW Inground Wery Wide Beam 60°	
P02032126	Moleline® S12 915mm DMX DW Inground Asymmetric Beam 35°+15°	
P02033121	Moleline® S12 1215mm DMX DW Inground Narrow Beam 15°	
P02033122	Moleline® S12 1215mm DMX DW Inground Medium Beam 30°	
P02033123	Moleline® S12 1215mm DMX DW Inground Wide Beam 45°	
P02033124	Moleline® S12 1215mm DMX DW Inground Wery Wide Beam 60°	
P02033126	Moleline® S12 1215mm DMX DW Inground Asymmetric Beam 35°+15°	
P02034121	Moleline® S12 1515mm DMX DW Inground Narrow Beam 15°	
P02034122	Moleline® S12 1515mm DMX DW Inground Medium Beam 30°	
P02034123	Moleline® S12 1515mm DMX DW Inground Wide Beam 45°	
P02034124	Moleline® S12 1515mm DMX DW Inground Wery Wide Beam 60°	
P02034126	Moleline® S12 1515mm DMX DW Inground Asymmetric Beam 35°+15°	
P02035101	Moleline® M6 315mm DMX RGBW Inground Narrow Beam 10°	
P02035102	Moleline® M6 315mm DMX RGBW Inground Medium Beam 25°	
P02035103	Moleline® M6 315mm DMX RGBW Inground Wide Beam 35°	
P02035106	Moleline® M6 315mm DMX RGBW Inground Asymmetric Beam 12+40°	
P02035107	Moleline® M6 315mm DMX RGBW Inground Asymmetric Beam 40+12°	
P02036101	Moleline® M6 615mm DMX RGBW Inground Narrow Beam 10°	
P02036102	Moleline® M6 615mm DMX RGBW Inground Medium Beam 25°	
P02036103	Moleline® M6 615mm DMX RGBW Inground Wide Beam 35°	
P02036106	Moleline® M6 615mm DMX RGBW Inground Asymmetric Beam 12+40°	
P02036107	Moleline® M6 615mm DMX RGBW Inground Asymmetric Beam 40+12°	
P02037101	Moleline® M6 915mm DMX RGBW Inground Narrow Beam 10°	
P02037102	Moleline® M6 915mm DMX RGBW Inground Medium Beam 25°	
P02037103	Moleline® M6 915mm DMX RGBW Inground Wide Beam 35°	
P02037106	Moleline® M6 915mm DMX RGBW Inground Asymmetric Beam 12+40°	
P02037107	Moleline® M6 915mm DMX RGBW Inground Asymmetric Beam 40+12°	

P02038101	Moleline® M6 1215mm DMX RGBW Inground Narrow Beam 10°
P02038102	Moleline® M6 1215mm DMX RGBW Inground Medium Beam 25°
P02038103	Moleline® M6 1215mm DMX RGBW Inground Wide Beam 35°
P02038106	Moleline® M6 1215mm DMX RGBW Inground Asymmetric Beam 12+40°
P02038107	Moleline® M6 1215mm DMX RGBW Inground Asymmetric Beam 40+12°
P02039101	Moleline® M6 1515mm DMX RGBW Inground Narrow Beam 10°
P02039102	Moleline® M6 1515mm DMX RGBW Inground Medium Beam 25°
P02039103	Moleline® M6 1515mm DMX RGBW Inground Wide Beam 35°
P02039106	Moleline® M6 1515mm DMX RGBW Inground Asymmetric Beam 17+39°
P02039107	Moleline® M6 1515mm DMX RGBW Inground Asymmetric Beam 40+12°

Decision Rule / Karar Kuralı

The test results was evaluated according to whether they are within the relevant limits or not, regardless of the proximity of the test results to the limits specified in the relevant specification or standard and irrespective of the level of confidence and uncertainty of measurement. The conformity assessment was carried out in favor of the product, if the test result is of equal level to the relevant limits. / Güven düzeyini ve ölçme belirsizliğini göz önünde bulundurmaksızın, elde edilen deney sonucunun, ilgili şartname veya standartta belirtilmiş sınırlara yakınlık oranı gözetilmeksizin, ilgili sınırlar içinde olup olmadığına dayanarak uygunluğun değerlendirilmesi yapılmıştır. Alınan ölçüm sonucunun sınır değere eş olduğu durumda uygunluk değerlendirilmesi ürün lehine yapılmıştır.

Test Specifications (Test Bilgisi):**TEST 1 IP6X:**

Degrees of protection against solid foreign objects indicated by the first characteristic numeral

Dust-proof luminaires shall be tested in a dust chamber similar to that shown in figure 1, in which talcum powder is maintained in suspension by an air current. The chamber shall contain 2 kg of powder for every cubic metre of its volume. The talcum powder used shall be able to pass through a square-meshed sieve whose nominal wire diameter is 50µm and whose nominal free distance between wires is 75µm. It shall not have been used for more than 20 tests.

The test shall proceed as follows:

- The luminaire is suspended outside the dust chamber and operated at rated supply voltage until operating temperature is achieved.
- The luminaire, whilst still operating, is placed with the minimum disturbance in the dust chamber.
- The door of the dust chamber is closed.
- The fan/blower causing the talcum powder to be in suspension is switched on.
- After 1 min, the luminaire is switched off and allowed to cool for 3h whilst the talcum powder remains in suspension.

The protection is satisfactory if no deposit of dust is observable inside the enclosure at the end of the test

TEST 1 IP6X:

Yabancı katı cisimlere karşı birinci karakteristik rakamla gösterilen koruma dereceleri;

Toz girişine karşı korumalı aydınlatma armatürleri, talk pudrasının hava akımıyla süspansiyon halinde muhafaza edildiği şekil 1'de gösterilene benzer bir toz hücresi içinde deneyden geçirilmelidir. Hücre hacminin her bir metreküpünde 2 kg pudra bulunmalıdır. Kullanılan talk pudrası, 50 µm ve teller arasındaki en serbest uzunluk 75 µm olan kare delikli bir ağ içinden geçirilmelidir. Bu pudra 20'den fazla deney için kullanılmamalıdır.

Deney aşağıdaki gibi yapılmalıdır:

- Aydınlatma armatürü toz hücresi dışındaki bir yere asılır ve çalışma sıcaklığına erişilinceye kadar beyan besleme geriliminde çalıştırılır.*
- Aydınlatma armatürü çalışmasını sürdürürken olumsuz yönde en az etkilenecek şekilde toz hücresine yerleştirilir.*
- Toz hücresinin kapısı kapatılır.*
- Talk pudrasını süspansiyon duruma getiren vantilatör/üfleme devreye alınır.*
- Aydınlatma armatürü devre dışı bırakıldıktan 1 dakika sonra, talk pudrası süspansiyon halde kalırken 3 saat süreyle soğumaya bırakılır.*

Deney sonunda mahfaza içinde hiçbir toz birikintisi gözlenmiyorsa koruma istenilen yeterlidir

Test Specifications (Test Bilgisi):**TEST 2 IPX7:**

Degrees of protection against water indicated by the second characteristic numeral.

Watertight luminaires (second characteristic IP numeral 7) are switched off and immediately immersed for 30 min in water, so that there is at least 150 mm of water above the top of the luminaire and the lowest portion is subjected to at least 1 m head of water. Luminaires shall be held in position by their normal fixing means.

After completion of the tests, electric strength test has been applied to the luminaire according to the EN 60598-1

TEST 2 IPX7:

Suya karşı ikinci karakteristik rakamla gösterilen koruma dereceleri

Su geçirmez aydınlatma armatürleri, devre dışı bırakılır bırakılmaz, su yüksekliği aydınlatma armatürünün en üst yüzeyinin yukarisından en az 150 mm ve en alt yüzeyinin yukarisından 1 m olacak biçimde, su içine 30 dakika süre ile daldırılır. Aydınlatma armatürleri, normal tespit düzenleriyle birlikte konumlarında tutulmalıdır.

Testlerden sonra EN 60598-1 standardına göre elektrik dayanım testi uygulanmalıdır..

Acceptance conditions (Kabul Şartları):

After testing with the appropriate requirements the enclosure shall be inspected for ingress of water. It is the responsibility of the relevant technical committee to specify the amount of water which may be allowed to enter the enclosure and the details of a dielectric strength test, if any.

In general, if any water is entered, it shall not:

- Be sufficient to interfere with the correct operation of the equipment or impair safety;
- Deposit on insulation parts where it could lead to tracking along the creepage distances;
- Reach live parts or windings not designed to operate when wet;
- Accumulate near the cable end or enter the cable if any;

If the enclosure is provided with drain-holes, it should be proved by inspection that any water which enters does not accumulate and that it drains away without doing any harm to the equipment.

For enclosures without drain-holes the relevant product standard shall specify the acceptance conditions if water can accumulate to reach live parts.

Mahfaza uygun olan deneylerden geçirildikten sonra su girişi olup olmadığı gözlenir.

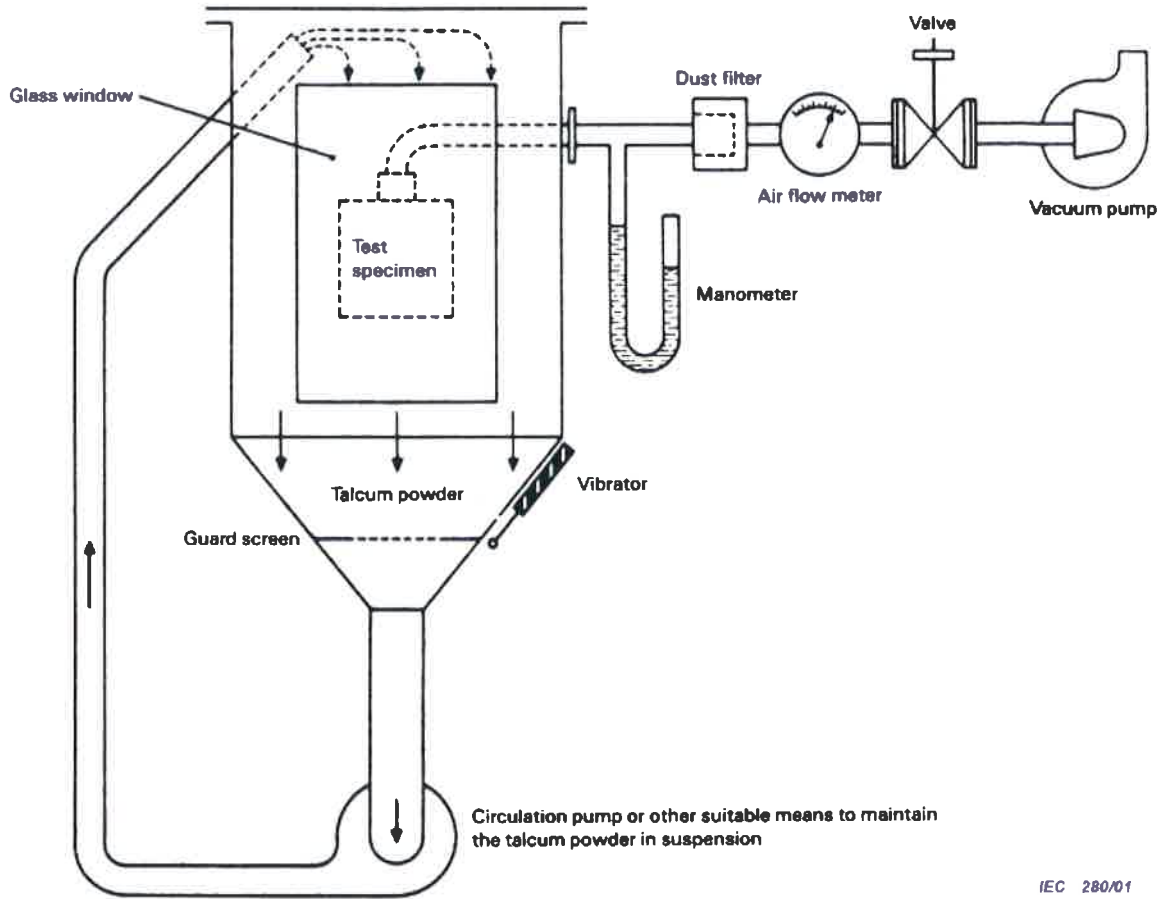
Mahfazaya girmesine izin verilen su miktarını ve varsa, dielektik dayanım deneyi ayrıntılarını belirlemek ilgili teknik komitenin sorumluluğundadır.

Genellikle herhangi bir su girmişse:

- *Donanımın hatasız çalışmasını olumsuz yönde etkilemeye veya güvenliğini bozmaya neden olmamalı;*
- *Yüzeyel kaçak yolu uzunlukları boyunca yalıtkan bölümler üzerinde yüzeyel kaçağa yol açabilecek birikme olmamalı;*
- *Islak şartlarda çalışmak için tasarılmayan gerilimli bölümlere veya sargılara erişmemeli;*
- *Kablo uçlarının yakınında toplanmamalı veya varsa kabloya girmemelidir.*

Mahfazada boşaltma delikleri bulunursa, giren suyun birikmediği ve donanıma herhangi bir zarar vermeden mahfazadan dışarı çıktığı gözle yapılan muayeneyle kanıtlanmalıdır.

Boşaltma delikleri bulunmayan mahfazalarda, ilgili ürün standardı suyun gerilimli bölümlere ulaşmak üzere toplanıp toplanmayacağına ait Kabul şartlarını belirtmelidir.



IEC 280/01

Figure 1 – Test device to verify protection against dust (dust chamber)

Şekil 1 - Toza Karşı Korumayı Doğrulamak İçin Deney Düzeni (toz hücresi)



Immersion Tank (Daldırma Tankı)

Results (Sonuçlar):
TEST 1: IP6X

First Characteristic Numeral (Birinci Karakteristik Rakam)	Information(Bilgi)	Result (Sonuç)
6	Dust Tight (Toza Karşı Tamamen Koruma)	PASS (BAŞARILI) (SEE PHOTOS / Resimlere Bakınız)

TEST 2: IPX7

Second Characteristic Numeral (ikinci Karakteristik Rakam)	Information(Bilgi)	Result (Sonuç)
7	<p>Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is temporarily immersed in water under standardized conditions of pressure and time.</p> <p>No flashover or breakdown has been observed during the test.</p> <p>(Mahfaza basıncın ve sürenin standart şartlarında suya geçici olarak daldırıldığında zararlı etkilere sebep olacak miktarlarda su girişi mümkün olmamalıdır.</p> <p>Elektrik dayanım testinde herhangi bir delinme gözlemlenmemiştir</p>	PASS (BAŞARILI) (SEE PHOTOS / Resimlere Bakınız)

Test Equipments (Test Cihazları)	Model - Serial no (Model-Seri no)	Specifications (Özellikler)	Last Calibration Date (Son Kalibrasyon Tarihi)	Calibration Due Date (Gelecek Kalibrasyon Tarihi)
Dust Test Equipment (Toz Kabini)	EL2-79	130X90X90cm	-	-
Immersion Tank (Daldırma Tankı)	-	150X150cm	-	-
Ce Test Multimeter	EL1-203	Electric strength / Elektriksel dayanım	2019/04	2020/04

Test photos (Test fotoğrafları) :



RA510-L00-00-T/E

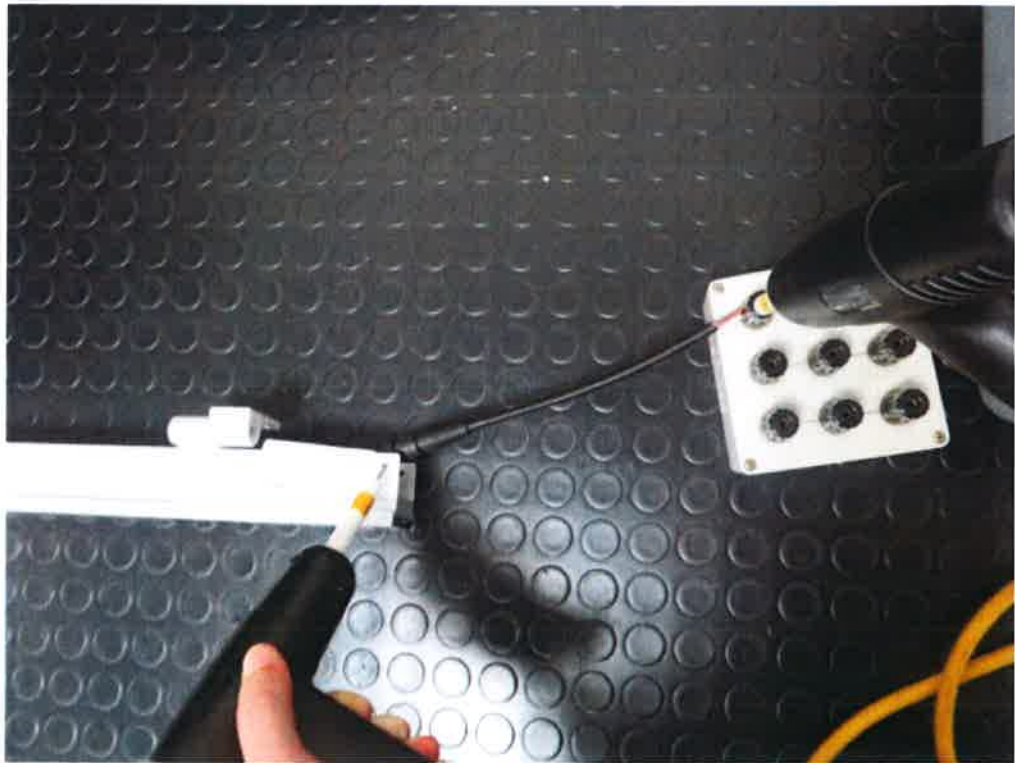


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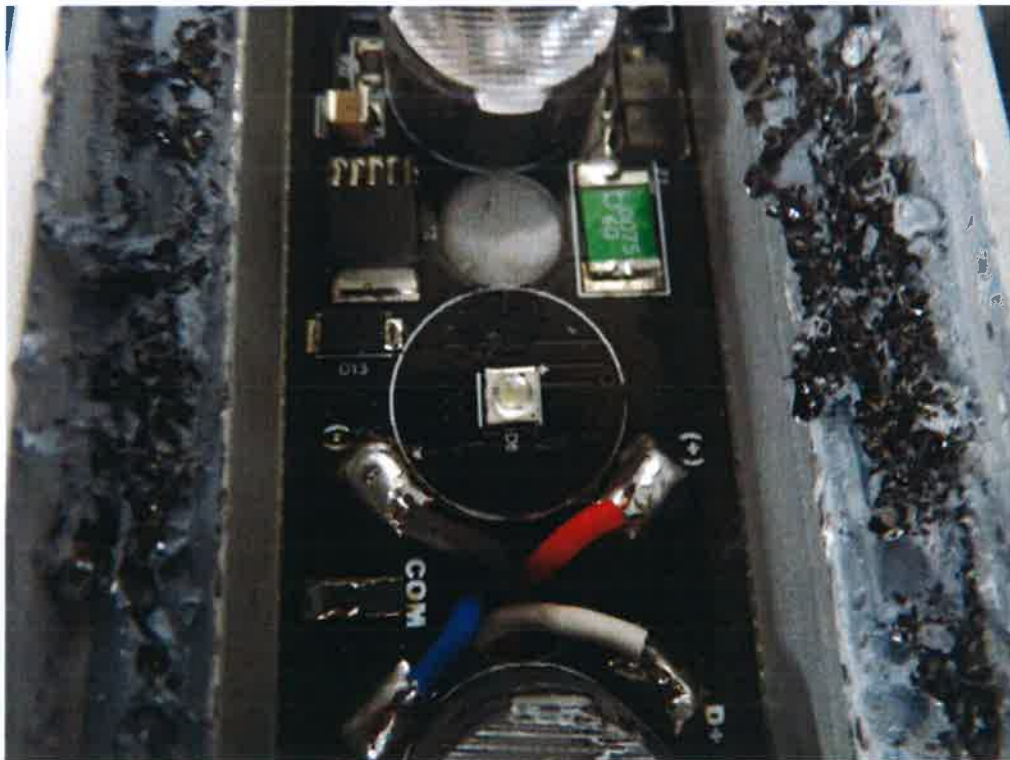




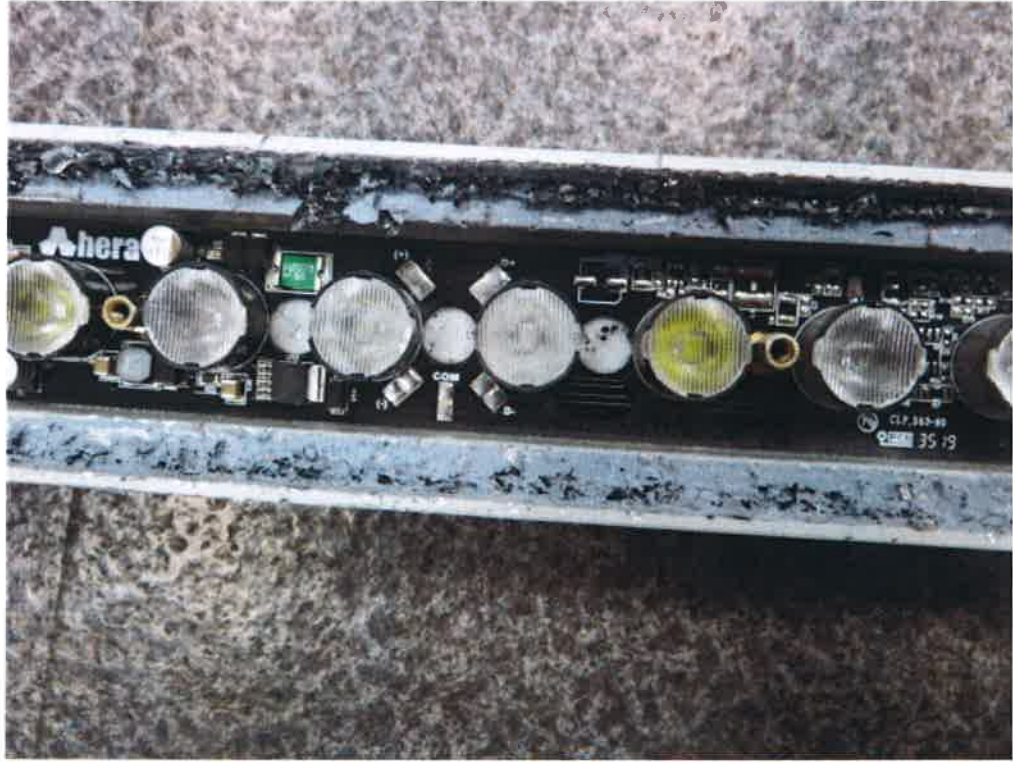
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