
	Test report n.	151-QL16-R03 ver. 0
	Applicant	LARES di Claudio Leric Regione Viazzi, 6 15010 Castelletto d'Erro (AL)
	EUT/Type	Reflecting sheets O03, R03, W03

TEST REPORT Nr. 151-QL16-R03 ver. 0

GENERAL INFORMATION INFORMAZIONI GENERALI	
Addresses Indirizzi	
Applicant Richiedente	LARES di Claudio Leric Regione Viazzi, 6 15010 Castelletto d'Erro (AL)
Manufacturer Produttore	LARES di Claudio Leric Regione Viazzi, 6 15010 Castelletto d'Erro (AL)
Test laboratory Laboratorio di prova	Qualilab s.r.l. Via Trento, 87 25020 – Capriano del Colle (BS)
Dates Date	
Report Date Data preparazione rapporto di prova	01/02/2016
Equipment under test Dispositivo sottoposto a prova	
Equipment under test Dispositivo sottoposto a prova	Reflecting sheets
Type: Modello:	LARES O03 – amber LARES W03 – white LARES R03 - red
Light source: Sorgente luminosa:	n.a.
Multimeter: Multimetro :	n.a.
Date and method of sampling: Data e metodo di campionamento:	Sampling performed by the applicant
Applicable norms Norme applicabili	
	Test performed according to: ECE R 3 and FMVSS108

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TEST AND RESULTS

Test Name	Test Procedure	Test measurement	Result
LARES O03	CIL measurement in accordance to ECE R3 and FMVSS108	See Annex	N/A
LARES W03	CIL measurement in accordance to ECE R3 and FMVSS108	See Annex	N/A
LARES R03	CIL measurement in accordance to ECE R3 and FMVSS108	See Annex	N/A

STATEMENT

The measured value (y) and the associated expanded uncertainty (U) represent the interval ($y \pm U$) which contains the value of the measured quantity with a probability of approximately 95 % and a coverage factor $k = 2$.


Il valore misurato (y) e l'incertezza estesa associata (U) rappresentano l'intervallo ($y \pm U$) che contiene il valore della quantità misurata con una probabilità di circa il 95% e un fattore di copertura $k=2$.

Measured value in $\text{mcd} \cdot \text{lx}^{-1}$ $U = \pm 0.037 \cdot y$


Capriano del Colle, 01/02/2016





Ing. Carsten Seyring
Testing engineer

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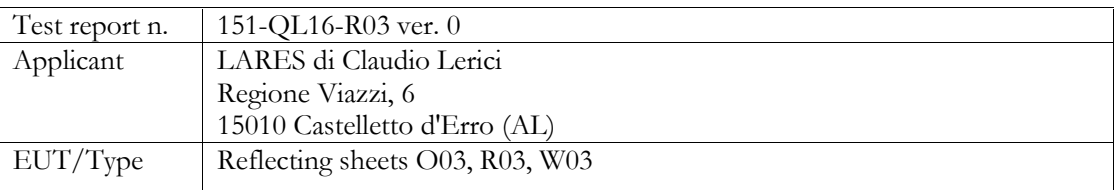
APPENDIX I				LARES O03 - amber			
Standard	ECE R 3 and FMVSS08						
Sample N°	151-QL16-S03						
Place of test	QUALILAB s.r.l. - Via Trento, 87 25020 – Capriano del Colle (BS)						
Date of test	27/01/2016						
Environmental conditions	temperature 25°C						
Testing instruments							
	Instrument	number	manufacturer	type	S/N	calibration dates	
	Goniometro	QL-IN-002	LMT	GOH1200		09/14	09/16
	Retro Unit	QL-IN-008	LMT	RETRO2000		09/14	09/16
Test procedure	The sample was prepared, stabilized and measured like defined in ECE R 3 and FMVSS08						
Test requirements	n.a.						
Test measurements	The sample was mounted onto the test stand, provided by the manufacturer. The sample was illuminated with standard illuminant A. The sample was installed perpendicular to the light source. Afterwards the grid, given in the ECE R3 and FMVSS108, was measured.						
TEST RESULT	ECE R03			FMVSS108			
	Functions	R [mcd/lx]	Unit	Functions	R [mcd/lx]	Unit	
	0.333 at H - V	1638	mcd/lx	0.200 at H - V	2320	mcd/lx	
	0.333 at H - 10U	1635	mcd/lx	0.200 at H - 10U	2320	mcd/lx	
	0.333 at H - 10D	1615	mcd/lx	0.200 at H - 10D	2300	mcd/lx	
	0.333 at 20R - 5U	1583	mcd/lx	0.200 at 20L - V	2260	mcd/lx	
	0.333 at 20R - 5D	1577	mcd/lx	0.200 at 20R - V	2250	mcd/lx	
	0.333 at 20L - 5U	1592	mcd/lx	1.500 at H - V	138,5	mcd/lx	
	0.333 at 20L - 5D	1590	mcd/lx	1.500 at H - 10U	131,3	mcd/lx	
	1.500 at H - V	138,2	mcd/lx	1.500 at H - 10D	131,9	mcd/lx	
	1.500 at H - 10U	131,4	mcd/lx	1.500 at 20L - V	135,6	mcd/lx	
	1.500 at H - 10D	132,2	mcd/lx	1.500 at 20R - V	135,6	mcd/lx	
	1.500 at 20R - 5U	133,4	mcd/lx				
	1.500 at 20R - 5D	134,5	mcd/lx				
	1.500 at 20L - 5U	133,0	mcd/lx				
	1.500 at 20L - 5D	134,6	mcd/lx				

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APPENDIX II				LARES W03 - white			
Standard	ECE R 3 and FMVSS08						
Sample N°	151-QL16-S04						
Place of test	QUALILAB s.r.l. - Via Trento, 87 25020 – Capriano del Colle (BS)						
Date of test	27/01/2016						
Environmental conditions	temperature 25°C						
Testing instruments							
	Instrument	number	manufacturer	type	S/N	calibration dates	
	Goniometro	QL-IN-002	LMT	GOH1200		09/14	09/16
	Retro Unit	QL-IN-008	LMT	RETRO2000		09/14	09/16
Test procedure	The sample was prepared, stabilized and measured like defined in ECE R 3 and FMVSS08						
Test requirements	n.a.						
Test measurements	The sample was mounted onto the test stand, provided by the manufacturer. The sample was illuminated with standard illuminant A. The sample was installed perpendicular to the light source. Afterwards the grid, given in the ECE R3 and FMVSS108, was measured.						
TEST RESULT	<u>ECE R03</u>			<u>FMVSS108</u>			
	Functions	R [mcd/lx]	Unit	Functions	R [mcd/lx]	Unit	
	0.333 at H - V	2220	mcd/lx	0.200 at H - V	3030	mcd/lx	
	0.333 at H - 10U	2170	mcd/lx	0.200 at H - 10U	2960	mcd/lx	
	0.333 at H - 10D	2190	mcd/lx	0.200 at H - 10D	2990	mcd/lx	
	0.333 at 20R - 5U	2070	mcd/lx	0.200 at 20L - V	2880	mcd/lx	
	0.333 at 20R - 5D	2090	mcd/lx	0.200 at 20R - V	2870	mcd/lx	
	0.333 at 20L - 5U	2090	mcd/lx	1.500 at H - V	147,2	mcd/lx	
	0.333 at 20L - 5D	2100	mcd/lx	1.500 at H - 10U	135,8	mcd/lx	
	1.500 at H - V	147,2	mcd/lx	1.500 at H - 10D	135,6	mcd/lx	
	1.500 at H - 10U	135,7	mcd/lx	1.500 at 20L - V	140,5	mcd/lx	
	1.500 at H - 10D	135,3	mcd/lx	1.500 at 20R - V	140,6	mcd/lx	
	1.500 at 20R - 5U	137,4	mcd/lx				
	1.500 at 20R - 5D	139,1	mcd/lx				
	1.500 at 20L - 5U	137,2	mcd/lx				
	1.500 at 20L - 5D	139,7	mcd/lx				

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APPENDIX III				LARES R03 - red			
Standard	ECE R 3 and FMVSS08						
Sample N°	151-QL16-S05						
Place of test	QUALILAB s.r.l. - Via Trento, 87 25020 – Capriano del Colle (BS)						
Date of test	27/01/2016						
Environmental conditions	temperature 25°C						
Testing instruments							
	Instrument	number	manufacturer	type	S/N	calibration dates	
	Goniometro	QL-IN-002	LMT	GOH1200		09/14	09/16
	Retro Unit	QL-IN-008	LMT	RETRO2000		09/14	09/16
Test procedure	The sample was prepared, stabilized and measured like defined in ECE R 3 and FMVSS08						
Test requirements	n.a.						
Test measurements	The sample was mounted onto the test stand, provided by the manufacturer. The sample was illuminated with standard illuminant A. The sample was installed perpendicular to the light source. Afterwards the grid, given in the ECE R3 and FMVSS108, was measured.						
TEST RESULT	ECE R03			FMVSS108			
	Functions	R [mcd/lx]	Unit	Functions	R [mcd/lx]	Unit	
	0.333 at H - V	500	mcd/lx	0.200 at H - V	649	mcd/lx	
	0.333 at H - 10U	477	mcd/lx	0.200 at H - 10U	621	mcd/lx	
	0.333 at H - 10D	478	mcd/lx	0.200 at H - 10D	625	mcd/lx	
	0.333 at 20R - 5U	450	mcd/lx	0.200 at 20L - V	597	mcd/lx	
	0.333 at 20R - 5D	452	mcd/lx	0.200 at 20R - V	592	mcd/lx	
	0.333 at 20L - 5U	454	mcd/lx	1.500 at H - V	47,5	mcd/lx	
	0.333 at 20L - 5D	455	mcd/lx	1.500 at H - 10U	35,7	mcd/lx	
	1.500 at H - V	47,3	mcd/lx	1.500 at H - 10D	36,6	mcd/lx	
	1.500 at H - 10U	35,7	mcd/lx	1.500 at 20L - V	35,6	mcd/lx	
	1.500 at H - 10D	36,6	mcd/lx	1.500 at 20R - V	35,3	mcd/lx	
	1.500 at 20R - 5U	34,7	mcd/lx				
	1.500 at 20R - 5D	35,2	mcd/lx				
	1.500 at 20L - 5U	35,0	mcd/lx				
	1.500 at 20L - 5D	35,7	mcd/lx				



Photos

