REPORT OF ANALYSIS No. 143825-1/25/GDA/GDY/PK

Client		Sample description *(according to declaration of the Client)*
Neryon Enterprises Kft., 1053 Budapest, Veres Pálné utca 9. fszt.6.		**LavyLips Lip Balm** **batch/lot: LLI-G48/1Q-M**
Sample reception date:	05.03.2025	
Start of analysis:	07.04.2025	
End of analysis:	06.05.2025	
Test report date:	08.05.2025	Sample status: no objections Sample received from the Client

IN VIVO DETERMINATION OF THE SUN PROTECTION FACTOR (SPF)

ACCORDING TO THE INTERNATIONAL NORM ISO 24444:2019/AMD 1:2022 - Cosmetics — Sun protection test methods — In vivo determination of the sun protection factor (SPF) — Amendment 1

Authorised by: Sandra Lewandowska, Project Manager (qualified electronic signature),
Berenika Olszewska, MD PhD Dermatologist-Venereologist, 2880077.

Laboratory: ul. Bajana 3D, 80-463 Gdańsk, Poland
The results relate to the analysed samples only.
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REPORT OF ANALYSIS No. 143825-1/25/GDA/GDY/PK

CONTENT OF THE REPORT:

1. The basis of the study.
2. Qualitative composition of the product.
3. Purpose of the test.
4. Samples and testing conditions.
5. Inclusion criteria.
6. Non-inclusion criteria.
7. Testing equipment.
8. Laboratory staff.
9. Description of the methodology.
10. SPF reference standard.
11. Product labeling method.
12. Date of performance of the study.
13. Test results.
14. Conclusion.
15. Signatures.

Authorised by: Sandra Lewandowska, Project Manager (qualified electronic signature),
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REPORT OF ANALYSIS No. 143825-1/25/GDA/GDY/PK

SCOPE OF TEST COMPLIES WITH:

- Regulation of the European Parliament and of the Council (EC) no. 1223/2009 of 30 November 2009 on cosmetic products.
- International Standard ISO 24444:2019/AMD 1:2022 - Cosmetics — Sun protection test methods — In vivo determination of the sun protection factor (SPF) — Amendment 1.
- Recommendation No. 2006/647/EC on the efficacy of sunscreen products and the claims made relating thereto.

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REPORT OF ANALYSIS No. 143825-1/25/GDA/GDY/PK

1. THE BASIS OF THE STUDY

- Test samples delivered by the Client.
- The qualitative composition of the product delivered by the Client.
- The results of microbiological purity of the product delivered by the Client.
- Negative results of the dermatological test of the product delivered by the Client.
- Declared a sun protection factor: 30.

2. QUALITATIVE COMPOSITION OF THE PRODUCT

Ricinus Communis Seed Oil, Prunus Amygdalus Dulcis Oil, C10-18 Triglycerides, Aqua, Cetearyl Alcohol, Hydrogenated Castor Oll Behenyl Esters, Hydrogenated Ollve Oll Stearyl Esters, Bis-Ethylhexyloxyphenol, Methoxyphenyl Triazine, Ethylhexyl Triazone, Butyl Methoxydibenzoylmethane, Diethylamino Hydroxybenzoyl Hexyl Benzoate, Butyrospermum Parkii Butter, Cocos Nucifera Oil, Caprylic/Capric Triglyceride, Tocopheryl Acetate, Persea Gratissima Oil, Aroma, Polyglyceryl-2 Sesquioleate, Glycyrrhiza Uralensis Root Extract, Helianthus Annuus Hybrid Oil, Chamomilla Recutita Flower Extract, Retinyl Palmitate, Bis Diglyceryl Polyacyladipate-2, Lavandula Officinalis Flower Oil, Citrus Medica Vulgaris Peel Oil, Peg-35 Castor Oil, Ascorbyl Palmitate, Lecithin, Citrus Aurantium Dulcis Peel Oil, Vitis Vinifera Seed Oil, Eucalyptus Globulus Leaf Oil, Litsea Cubeba Fruit Oil, Rosmarinus Officinalis Leaf Oil, Rose Oil, Melaleuca Alternifolia Leaf Oil, Cananga Odorata Leaf Oil, Melissa Officinalis Leaf Oil

The Client is responsible for compliance with the declared qualitative composition of the product and microbiological purity of sent samples for testing.

3. PURPOSE OF THE TEST

Confirmation / exclusion declared by the Manufacturer the Sun Protection Factor level.

4. SAMPLES AND TESTING CONDITIONS

Upon arrival, all products are registered on the HAMILTON LIMS System and kept at room temperature (unless otherwise requested). The test is performed in an air-conditioned room, with the room temperature maintained at 23 ± 3°C and the relative humidity 50 ± 10%.

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REPORT OF ANALYSIS No. 143825-1/25/GDA/GDY/PK

5. INCLUSION CRITERIA

Healthy subjects,
Subject having given her/his informed, written consent,
Subject that is willing to cooperate and aware of the necessity and duration of controls so that perfect adhesion to the protocol established by the clinical trial center could have been expected,
Age between 18 and 70,
Type: Caucasian,
Phototype: I to III,
Untanned skin on the test area.

6. NON-INCLUSION CRITERIA

Subjects below the age of consent or >70 years,
Pregnant or lactating women,
Subjects using medication with photo-sensitizing potential,
Subjects using anti-inflammatory medication,
Subjects with dermatological conditions,
Subjects with a history of abnormal response to the sun,
Subjects accustomed to using tanning beds,
Subjects having had sun exposure on the back area in the previous eight weeks prior to SPF testing,
Subjects having marks, blemishes or nevi or presenting existing sun damage in the test area,
Subjects having excessive hair in the area of the test,
Subjects having skeletal protrusions and extreme areas of curvature in the test area.

Authorised by: Sandra Lewandowska, Project Manager (qualified electronic signature),
Berenika Olszewska, MD PhD Dermatologist-Venereologist, 2880077.

Laboratory: ul. Bajana 3D, 80-463 Gdańsk, Poland
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REPORT OF ANALYSIS No. 143825-1/25/GDA/GDY/PK

7. TESTING EQUIPMENT

UV SOURCE:	Xenon lamp: Solar Light type Multiport 601
	Spectrum: 290 - 400 nm
	Power of the lamp: 300 W
	Elimination of IR and visible radiation: UG11 (1mm) and dichroic mirror.
	Radiated surface: Six holes (diameter 8 mm).
UV LIGHT RADIOMETER:	Solar Light Co. DCS 2.0.
DETECTOR:	Solar Light Co. Erythema detector PMA2108.LLG.

The documents for latest calibration and statement of compliance for solar simulators used in this study are attached below.

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TEST REPORT No. LE-L44/25

Scope:	Measurement of spectral irradiance of a solar simulator according to the "Guidelines for Monitoring UV Radiation Sources" (Cosmetics Europe, 2007) to evaluate the UV source compliance with various test methods and determination of correction factors for handheld UV radiometers
Customer:	Hamilton (Poland)
Ordered by:	SAM MONADERM 5, rue des violettes, 98000 Monaco, MONACO
Device under test:	Solar Light Multiport 601-300W V2.5 serial number 20427
Status of compliance:	The device under test and all investigated settings are compliant with the relevant international standards (see summary on page 2)

Authorised person: *Marko Weber, M.Eng.*
Test performed by: *DI Wolfgang Müllner*

Date: 10.03.2025
Number of pages: 16
Internal Order Number: L-2970_2

Comments:
This test report refers exclusively to the device under test and settings thereof at the date of test. Subsequent changes to the device under test are not covered by this report.
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Laser, LED and Lamp Safety
Test Report No. LE-L44/25

SEIBERSDORF LABORATORIES

Table 6 Integral irradiance in various wavelength ranges and the most relevant ratios

Irradiance [W·m^{-2}]	Port 1	Port 2	Port 3	Port 4	Port 5	Port 6
< 290 nm	<0.01	<0.01	<0.01	0.01	0.01	<0.01
UVB (290-320 nm)	100	98	126	130	153	102
UVA (320-400 nm)	838	795	1028	1094	1262	860
UVA-2 (320-340 nm)	251	242	313	325	383	257
UVA-1 (340-400 nm)	587	553	716	769	879	603
UV (290-400 nm)	**938**	**893**	**1154**	**1224**	**1414**	**962**
erythemal UV (250-400 nm)	7.2	7.1	9	9.3	11	7.3
Visible (400-780 nm)	10	9.7	11	14	15	11
Total (290-1600 nm)	949	904	1166	1238	1430	974
Ratio UVA / UVB	8.4	8.1	8.2	8.4	8.3	8.4
Ratio UVA-1 / UVA-2	2.3	2.3	2.3	2.4	2.3	2.4

s/n 20427 (Suntest CPS+ #4284)

Table 7 Compliance of the device under test with the specifications of various in-vivo SPF test methods (ISO 24444, FDA)

Parameter	Limits		Measurement results					
	Lower	Upper	Port 1	Port 2	Port 3	Port 4	Port 5	Port 6
RCEE% (< 290 nm)	-	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
RCEE% (290 - 300 nm)	1%	8%	6.0%	6.1%	6.0%	5.9%	5.7%	5.9%
RCEE% (290 - 310 nm)	49%	65%	58.5%	59.0%	58.8%	58.4%	57.9%	58.3%
RCEE% (290 - 320 nm)	**85%**	**90%**	**87.8%**	**88.1%**	**87.9%**	**87.7%**	**87.6%**	**87.7%**
RCEE% (290 - 330 nm)	91.5%	95.5%	93.4%	93.6%	93.5%	93.3%	93.3%	93.4%
RCEE% (290 - 340 nm)	94%	97%	95.6%	95.8%	95.7%	95.6%	95.6%	95.6%
RCEE% (290 – 400 nm)	99.9%	100%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Ratio UVA2 / UV	20%	-	26.7%	27.1%	27.1%	26.5%	27.1%	26.7%
Ratio UVA1 / UV	60%	-	62.6%	61.9%	62.0%	62.8%	62.1%	62.7%
Total irradiance ISO [W·m^{-2}]	-	1600	949	904	1 166	1 238	1 430	974
Total irradiance FDA [W·m^{-2}]	-	1500						
ISO 24444			Pass	Pass	Pass	Pass	Pass	Pass
FDA			Pass	Pass	Pass	Pass	Pass	Pass

s/n 20427 (Suntest CPS+ #4284)

Remark: SPF specifications include an irradiance limitation of 1600 W m^{-2} (1500 W m^{-2} for FDA). To meet this requirement, it might be necessary to reduce the intensity manually by closing individual ports partially. The values not to be exceeded are reported in section 5.3 of this Test Report.

Authorised by: Sandra Lewandowska, Project Manager (qualified electronic signature),
Berenika Olszewska, MD PhD Dermatologist-Venereologist, 2880077.

Laboratory: ul. Bajana 3D, 80-463 Gdańsk, Poland
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REPORT OF ANALYSIS No. 143825-1/25/GDA/GDY/PK

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TEST REPORT No. LE-L45/25

Scope: Measurement of spectral irradiance of a solar simulator according to the "Guidelines for Monitoring UV Radiation Sources" (Cosmetics Europe, 2007) to evaluate the UV source compliance with various test methods and determination of correction factors for handheld UV radiometers

Customer: Hamilton (Poland)

Ordered by: SAM MONADERM
5, rue des violettes, 98000 Monaco, MONACO

Device under test: Solar Light Multiport 601-300W V2.5
serial number 23338

Status of compliance: The device under test and all investigated settings are compliant with the relevant international standards (see summary on page 2)

Authorised person: *Marko Weber, M.Eng.*

Test performed by: *DI Wolfgang Müllner*

Date: 10.03.2025
Number of pages: 16
Internal Order Number: L-2970_3

Comments:
This test report refers exclusively to the device under test and settings thereof at the date of test. Subsequent changes to the device under test are not covered by this report.
The production or transmission of extracts of the present report is subject to authorisation by the testing laboratory.

SEIBERSDORF LABORATORIES

Table 6 Integral irradiance in various wavelength ranges and the most relevant ratios

Irradiance [W·m^{-2}]	Port 1	Port 2	Port 3	Port 4	Port 5	Port 6
< 290 nm	0.01	0.01	0.01	0.01	0.01	0.01
UVB (290-320 nm)	121	132	131	144	141	134
UVA (320-400 nm)	1071	1168	1162	1284	1266	1170
UVA-2 (320-340 nm)	330	360	356	394	386	363
UVA-1 (340-400 nm)	741	807	807	890	880	807
UV (290-400 nm)	**1192**	**1299**	**1294**	**1428**	**1407**	**1304**
erythemal UV (250-400 nm)	7.8	8.5	8.6	9.4	9.2	8.8
Visible (400-780 nm)	14	15	16	17	17	15
Total (290-1600 nm)	1207	1315	1310	1446	1425	1320
Ratio UVA / UVB	8.9	8.9	8.8	8.9	9	8.7
Ratio UVA-1 / UVA-2	2.2	2.2	2.3	2.3	2.3	2.2

s/n 23338 (Rafb s/n AH2069)

Table 7 Compliance of the device under test with the specifications of various in-vivo SPF test methods (ISO 24444, FDA)

Parameter	Limits		Measurement results					
	Lower	Upper	Port 1	Port 2	Port 3	Port 4	Port 5	Port 6
RCEE% (< 290 nm)	-	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
RCEE% (290 - 300 nm)	1%	8%	3.8%	3.7%	4.0%	3.9%	3.9%	3.9%
RCEE% (290 - 310 nm)	49%	65%	52.5%	52.3%	53.3%	52.8%	52.8%	53.1%
RCEE% (290 - 320 nm)	**85%**	**90%**	**85.4%**	**85.3%**	**85.7%**	**85.5%**	**85.4%**	**85.7%**
RCEE% (290 - 330 nm)	91.5%	95.5%	92.2%	92.1%	92.3%	92.2%	92.2%	92.4%
RCEE% (290 - 340 nm)	94%	97%	94.9%	94.8%	95.0%	94.9%	94.8%	95.0%
RCEE% (290 – 400 nm)	99.9%	100%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Ratio UVA2 / UV	20%	-	27.7%	27.7%	27.5%	27.6%	27.4%	27.8%
Ratio UVA1 / UV	60%	-	62.1%	62.1%	62.4%	62.3%	62.6%	61.9%
Total irradiance ISO [W·m^{-2}]	-	1600	1 207	1 315	1 310	1 446	1 425	1 320
Total irradiance FDA [W·m^{-2}]	-	1500						
ISO 24444			Pass	Pass	Pass	Pass	Pass	Pass
FDA			Pass	Pass	Pass	Pass	Pass	Pass

s/n 23338 (Rafb s/n AH2069)

Remark: SPF specifications include an irradiance limitation of 1600 W m^{-2} (1500 W m^{-2} for FDA). To meet this requirement, it might be necessary to reduce the intensity manually by closing individual ports partially. The values not to be exceeded are reported in section 5.3 of this Test Report.

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TEST REPORT No. LE-L46/25

Scope: Measurement of spectral irradiance of a solar simulator according to the "Guidelines for Monitoring UV Radiation Sources" (Cosmetics Europe, 2007) to evaluate the UV source compliance with various test methods and determination of correction factors for handheld UV radiometers

Customer: Hamilton (Poland)

Ordered by: SAM MONADERM
5, rue des violettes, 98000 Monaco, MONACO

Device under test: Solar Light Multiport 601-300W V2.5
serial number 25087

Status of compliance: The device under test and all investigated settings are compliant with the relevant international standards (see summary on page 2)

Authorised person: *Marko Weber, M.Eng.*

Test performed by: *DI Wolfgang Müllner*

Date: 11.03.2025
Number of pages: 16
Internal Order Number: L-2970_4

Comments:
This test report refers exclusively to the device under test and settings thereof at the date of test. Subsequent changes to the device under test are not covered by this report.
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SEIBERSDORF LABORATORIES

Table 6 Integral irradiance in various wavelength ranges and the most relevant ratios

Irradiance [W·m^{-2}]	Port 1	Port 2	Port 3	Port 4	Port 5	Port 6
< 290 nm	0.01	<0.01	0.01	0.01	0.01	0.02
UVB (290-320 nm)	141	126	144	193	187	192
UVA (320-400 nm)	1179	1163	1210	1691	1705	1683
UVA-2 (320-340 nm)	370	349	380	518	514	517
UVA-1 (340-400 nm)	809	814	829	1173	1192	1167
UV (290-400 nm)	**1320**	**1290**	**1354**	**1885**	**1893**	**1875**
erythemal UV (250-400 nm)	9.3	8.2	9.5	13	12	13
Visible (400-780 nm)	10	12	10	16	17	15
Total (290-1600 nm)	1331	1302	1365	1902	1911	1891
Ratio UVA / UVB	8.3	9.2	8.4	8.8	9.1	8.8
Ratio UVA-1 / UVA-2	2.2	2.3	2.2	2.3	2.3	2.3

s/n 25087 (Rafb s/n AH2068)

Table 7 Compliance of the device under test with the specifications of various in-vivo SPF test methods (ISO 24444, FDA)

Parameter	Limits		Measurement results					
	Lower	Upper	Port 1	Port 2	Port 3	Port 4	Port 5	Port 6
RCEE% (< 290 nm)	-	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
RCEE% (290 - 300 nm)	1%	8%	4.2%	3.8%	4.1%	4.0%	3.8%	4.0%
RCEE% (290 - 310 nm)	49%	65%	54.1%	52.3%	54.0%	53.2%	52.4%	53.1%
RCEE% (290 - 320 nm)	**85%**	**90%**	**86.3%**	**85.1%**	**86.2%**	**85.7%**	**85.3%**	**85.7%**
RCEE% (290 - 330 nm)	91.5%	95.5%	92.8%	91.9%	92.7%	92.4%	92.1%	92.4%
RCEE% (290 - 340 nm)	94%	97%	95.3%	94.7%	95.2%	95.0%	94.8%	95.0%
RCEE% (290 – 400 nm)	99.9%	100%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Ratio UVA2 / UV	20%	-	28.0%	27.1%	28.1%	27.5%	27.1%	27.6%
Ratio UVA1 / UV	60%	-	61.3%	63.1%	61.2%	62.2%	63.0%	62.2%
Total irradiance ISO [W·m^{-2}]	-	1600	1 331	1 302	1 365	1 902	1 911	1 891
Total irradiance FDA [W·m^{-2}]	-	1500						
ISO 24444			Pass	Pass	Pass	Pass	Pass	Pass
FDA			Pass	Pass	Pass	Pass	Pass	Pass

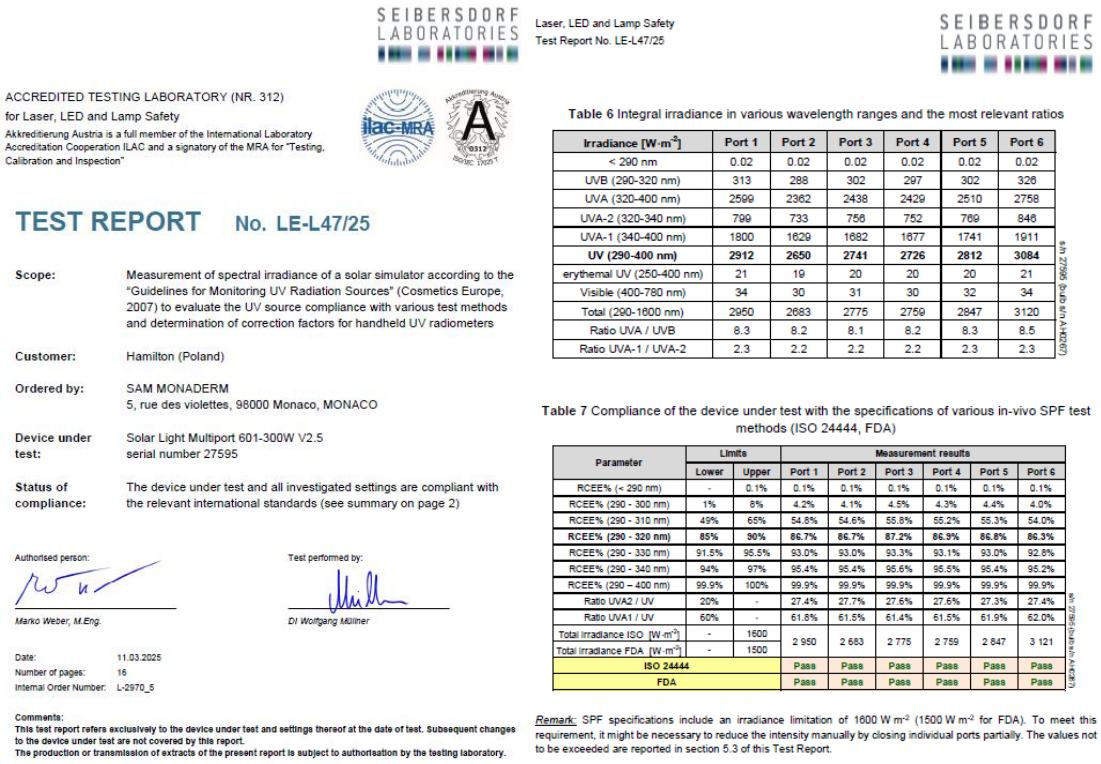
s/n 25087 (Rafb s/n AH2068)

Remark: SPF specifications include an irradiance limitation of 1600 W m^{-2} (1500 W m^{-2} for FDA). To meet this requirement, it might be necessary to reduce the intensity manually by closing individual ports partially. The values not to be exceeded are reported in section 5.3 of this Test Report.

Authorised by: Sandra Lewandowska, Project Manager (qualified electronic signature),
Berenika Olszewska, MD PhD Dermatologist-Venereologist, 2880077.

Laboratory: ul. Bajana 3D, 80-463 Gdańsk, Poland
The results relate to the analysed samples only.
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REPORT OF ANALYSIS No. 143825-1/25/GDA/GDY/PK



SEIBERSDORF LABORATORIES

Laser, LED and Lamp Safety
Test Report No. LE-L47/25

SEIBERSDORF LABORATORIES

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TEST REPORT No. LE-L47/25

Scope: Measurement of spectral irradiance of a solar simulator according to the "Guidelines for Monitoring UV Radiation Sources" (Cosmetics Europe, 2007) to evaluate the UV source compliance with various test methods and determination of correction factors for handheld UV radiometers

Customer: Hamilton (Poland)

Ordered by: SAM MONADERM
5, rue des violettes, 98000 Monaco, MONACO

Device under test: Solar Light Multiport 601-300W V2.5
serial number 27595

Status of compliance: The device under test and all investigated settings are compliant with the relevant international standards (see summary on page 2)

Authorised person: Marko Weber, M.Eng.

Test performed by: DI Wolfgang Müllner

Date: 11.03.2025
Number of pages: 16
Internal Order Number: L-2970_5

Comments:
This test report refers exclusively to the device under test and settings thereof at the date of test. Subsequent changes to the device under test are not covered by this report.
The production or transmission of extracts of the present report is subject to authorisation by the testing laboratory.

Table 6 Integral irradiance in various wavelength ranges and the most relevant ratios

Irradiance [W·m^{-2}]	Port 1	Port 2	Port 3	Port 4	Port 5	Port 6
< 290 nm	0.02	0.02	0.02	0.02	0.02	0.02
UVB (290-320 nm)	313	288	302	297	302	326
UVA (320-400 nm)	2599	2362	2438	2429	2510	2758
UVA-2 (320-340 nm)	799	733	756	752	769	846
UVA-1 (340-400 nm)	1800	1629	1682	1677	1741	1911
UV (290-400 nm)	**2912**	**2650**	**2741**	**2726**	**2812**	**3084**
erythemal UV (250-400 nm)	21	19	20	20	20	21
Visible (400-780 nm)	34	30	31	30	32	34
Total (290-1600 nm)	2950	2683	2775	2759	2847	3120
Ratio UVA / UVB	8.3	8.2	8.1	8.2	8.3	8.5
Ratio UVA-1 / UVA-2	2.3	2.2	2.2	2.2	2.3	2.3

s/n 27595 Solar Light A+(XD)

Table 7 Compliance of the device under test with the specifications of various in-vivo SPF test methods (ISO 24444, FDA)

Parameter	Limits		Measurement results					
	Lower	Upper	Port 1	Port 2	Port 3	Port 4	Port 5	Port 6
RCEE% (< 290 nm)	-	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
RCEE% (290 - 300 nm)	1%	8%	4.2%	4.1%	4.5%	4.3%	4.4%	4.0%
RCEE% (290 - 310 nm)	49%	65%	54.8%	54.6%	55.8%	55.2%	55.3%	54.0%
RCEE% (290 - 320 nm)	**85%**	**90%**	**86.7%**	**86.7%**	**87.2%**	**86.9%**	**86.8%**	**86.3%**
RCEE% (290 - 330 nm)	91.5%	95.5%	93.0%	93.0%	93.3%	93.1%	93.0%	92.8%
RCEE% (290 - 340 nm)	94%	97%	95.4%	95.4%	95.6%	95.5%	95.4%	95.2%
RCEE% (290 – 400 nm)	99.9%	100%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Ratio UVA2 / UV	20%	-	27.4%	27.7%	27.6%	27.6%	27.3%	27.4%
Ratio UVA1 / UV	60%	-	61.8%	61.5%	61.4%	61.5%	61.9%	62.0%
Total irradiance ISO [W·m^{-2}]	-	1600	2 950	2 683	2 775	2 759	2 847	3 121
Total irradiance FDA [W·m^{-2}]	-	1500						
ISO 24444			Pass	Pass	Pass	Pass	Pass	Pass
FDA			Pass	Pass	Pass	Pass	Pass	Pass

s/n 27595 Solar Light A+(XD)

Remark: SPF specifications include an irradiance limitation of 1600 W m^{-2} (1500 W m^{-2} for FDA). To meet this requirement, it might be necessary to reduce the intensity manually by closing individual ports partially. The values not to be exceeded are reported in section 5.3 of this Test Report.

8. LABORATORY STAFF

The application of the product and visual skin assessment of the responses are made by technically qualified and trained persons.

9. DESCRIPTION OF METHODOLOGY

The SPF test method is a laboratory method that utilizes a xenon arc lamp solar simulator of defined and known output to determine the protection provided by sunscreen products on human skin against erythema induced by solar ultraviolet rays. The test is restricted to the area of the back of selected human subjects. A section of each subject's skin is exposed to ultraviolet light without any protection and another section is exposed after application of the sunscreen product under test. One further section is exposed after application of an SPF reference sunscreen formulation which is used for validation of the procedure.

To determine the sun protection factor, incremental series of delayed erythemal responses are induced on a number of small sub-sites on the skin. These responses are visually assessed for the presence of redness 16 to 24 hours after UV radiation, by the judgment for a trained evaluator. The Minimal Erythema Dose (MED) for unprotected skin (MEDu) and the MED obtained after application of a sunscreen product (MED for product protected skin MEDp) shall be determined on the same subject on the same day. An individual sun protection factor (SPFi) for each subject tested is calculated as the ratio of individual MED on product protected skin divided by the individual MED on unprotected skin MEDp / MEDu. The sun protection factor for

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the product (SPF) is the arithmetic mean of all valid SPFi results from each subject in the test. The minimum area for a product application site shall be 30 cm^2 and the maximum shall be 60 cm^2. The position of the products must be random distributed on the back over the whole test group of subjects in order to reduce systematic error to anatomical differences in skin. The samples have been distributed in a quantity equal to 2.00 ± 0.05 mg/cm^2. After product is applied to the skin, exposure of the test site begins after a waiting period of 15-30 minutes. The application method is matched to the product type:

PRODUCT FORM	APPLICATION METHOD	DESCRIPTION
Non-flowing viscous liquids and semi-solids: stick, balm	B	Product is measured into a weigh boat and applied by finger in multiple areas of the test site, first with circular movements to gather the material and second in horizontal and vertical directions using light pressure. During the whole process, the application finger stays in contact with the skin.

Tested product was applied with finger cot. Drying time between application and UV exposure: exposure of the test site to the sequence of UV doses shall start 15 min to 30 min after the application of the products. Any extraneous exposure of the test sites to UV light (artificial or natural) shall be avoided during this period and for a period of 24 h after exposure. For the unprotected site, the center of the total UV dose range is established using the subject's provisional MEDu or estimated MEDu. 6 sub-sites centered on the provisional/estimated MEDu shall be exposed with incremental UV doses using a geometric progression of 1.15. For the product-protected site, the UV doses delivered are defined by the expected MEDp which is the multiple of the expected SPF of the test product and the provisional MEDu for the subject. 6 sub-sites centered on the provisional/estimated MEDu shall be exposed with incremental UV doses using a recommended geometric progression of 1.15.

10.SPF REFERENCE STANDARD

The method was controlled using reference sunscreen formulations to verify the test procedure. The mean SPF and the acceptance limits for the reference sunscreen formulations were:

REFERENCE SUNSCREEN FORMULATION	MEAN SPF	ACCEPTANCE LIMITS	
		LOWER LIMIT	UPPER LIMIT
P2	16.1	13.7	18.5
P5	30.6	23.7	37.4
P8	63.1	43.9	82.3

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11.PRODUCT LABELING METHOD

The following range of sun protection factors for each category and the respective labeling is recommended (in accordance with 2006/647/EC):

LABELLED CATEGORY	LABELLED SUN PROTECTION FACTOR	MEASURED SUN PROTECTION FACTOR
"Low protection"	"6"	6-9.9
	"10"	10-14.9
"Medium protection"	"15"	15-19.9
	"20"	20-24.9
	"25"	25-29.9
"High protection"	"30"	30-49.9
	"50"	50-59.9
"Very high protection"	"50+"	60≤

12.DATE OF PERFORMANCE OF THE STUDY

PRELIMINARY STEP: 07.04.2025 – 15.04.2025
VALIDATION STEP: 28.04.2025 – 06.05.2025

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13.TEST RESULTS

13.1 Characteristics of subjects

N° of subject	Identification of subject	Age	Sex	Phototype
(1)*	*(JUR_RA)**	*(43)**	*(M)**	*(II)**
(2)*	*(BIE_AG)**	*(48)**	*(F)**	*(II)**
3	BAB_WI	68	F	II
4	SIE_AR	46	M	II
5	KRÓ_AN	33	F	I
6	ZEM_KR	33	F	II
7	HNI_SV	57	F	I
8	CZE_DA	69	F	I
9	LUB_IR	55	F	II
10	ŁAB_KA	39	F	II
11	KRY_EM	46	F	II
12	BIE_MA	53	F	II

Min. age	No. F	phototype I
33	9	3
Max. age	**No. M**	**phototype II**
69	1	7
Av. age		**phototype III**
50		0

Legend: ***()****: value not included in data analysis*

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13.2 Test results for product and reference formulations P

ISO 24444 Test Method	Laboratory: J. S. Hamilton Poland Sp. z o.o.	Report Date: 08.05.2025	Dose Increments: 15%	Test Product Description: LavyLips Lip Balm batch/lot: LLI-G48/1Q-M

TEST SUBJECTS							SIM	TEST RESULTS													
Subject	Exposure	Appl.	Exp.	Read	Subject	Skin	SIM EE (highest)	MEDu		MEDp		SPFi	Rej.?	Reference Standard P8			Rej.?	Reference Standard P2			Rej.?
N°	date	by	by	by	code	ITA°	W/m² eff.	s	J/m² eff.	s	J/m² eff.		Y/N	s	J/m² eff.	SPF	Y/N	s	J/m² eff.	SPF	Y/N
1	07.04.2025	28	28	18;27	JUR_RA	45.6	11.1	31	229	630	illogical	*	Y	1986	14474	63.2	Y	-	-	-	-
2	08.04.2025	28	28	18;27	BIE_AG	52.5	11.1	26	221	660	illogical	*	Y	-	-	-	-	425	3564	16.1	Y
3	09.04.2025	28	28	18;27	BAB_WI	50.7	11.1	28	176	832	6060	34.4	N	1749	11084	63.0	N	-	-	-	-
4	10.04.2025	28	28	18;27	SIE_AR	48.0	11.1	30	216	979	7133	33.0	N	1871	11859	54.9	N	-	-	-	-
5	10.04.2025	18	18	01;02	KRÓ_AN	59.5	11.1	22	160	726	5289	33.1	N	1388	11630	72.7	N	-	-	-	-
6	10.04.2025	18	18	01;02	ZEM_KR	50.3	11.1	28	177	924	6735	38.1	N	1767	12878	72.8	N	-	-	-	-
7	14.04.2025	28	28	18;27	HNI_SV	55.1	8.6	32	207	1048	5947	28.7	N	2003	11372	54.9	N	-	-	-	-
8	28.04.2025	30	30	29;31	CZE_DA	55.7	10.6	26	204	843	5850	28.7	N	1611	11186	54.8	N	-	-	-	-
9	28.04.2025	30	30	29;31	LUB_IR	52.1	10.6	28	195	926	6431	33.0	N	1771	12297	63.1	N	-	-	-	-
10	29.04.2025	30	30	29;31	ŁAB_KA	52.8	10.6	28	220	910	7264	33.0	N	1740	12078	54.9	N	-	-	-	-
11	29.04.2025	31	31	29;30	KRY_EM	52.2	10.5	28	224	929	6417	28.6	N	1777	14111	63.0	N	-	-	-	-
12	05.05.2025	31	31	29;30	BIE_MA	44.9	10.5	34	234	1117	7710	32.9	N	-	-	-	-	545	3762	16.1	N

Number of Subjects (n)	10		9	1
Mean SPF (x)	**32.4**		**61.6**	**16.1**
Standard Deviation (s)	3.0		7.4	0.0
Confidence Interval (c)	2.1			
CI (%)	6.6	**CRITERIUM: CI ≤ 17%**	**COMPLIES**	
95% CI	[30.3;34.5]			

Legend:

c = t * s / √n with: t = t value from « two-sided » Student-t test

for the 95% Confidence Interval

MEDu - the Minimal Erythema Dose (MED) for unprotected skin

MEDp - the Minimal Erythema Dose (MED) for protected skin by tested sunscreen

SPFi = MEDp/MEDu

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14.CONCLUSION

Product « **LavyLips Lip Balm batch/lot: LLI-G48/1Q-M**» :

a. mean SPF value: 32.4
b. standard deviation: 3.0
c. 95%CI confidence interval: 30.3; 34.5
d. SPF value to be used in labelling (according to 2006/647/EC): 30 (Hight protection)

15.SIGNATURES

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THE END OF THE REPORT

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