

*A Better Lamp for a Better Tan.*



WOLFF SYSTEM TECHNOLOGY 980 COBB PLACE BLVD NE #200  
KENNESAW, GA 30144-3680 USA WOLFFSYSTEM.COM

800.95.WOLFF





From German scientist to "the father of indoor tanning," Friedrich Wolff's research on ultraviolet light has launched a billion dollar industry and brought significant technological advancements to the lamps that produce  
*...the ultimate tan.*

Since bringing his European technology to the United States in 1978, Wolff's specialized lamps and unique reflector system have set the high standards that continue to push the limits of tanning in today's salons. Wolff System Technology Corporation operates in North America and Western Europe, and has patent licensees in Belgium, Canada, Germany, Sweden, Switzerland and the U.S.

*Pictured:*

*Jörg Wolff, Chairman (L) & Friedrich Wolff, Founder (R)*



EDUCATION 4 PROFITABILITY 8 WOLFF LAMPS 10 REFERENCE GUIDE 18



# DEEPER BRONZING

[WOLFFSYSTEM.COM](http://WOLFFSYSTEM.COM)

Authorized Wolff Licensees/Distributors  
New Product Announcements  
Compatibility Information  
UVB% & Lamp Life  
Lamp Disposal Instruction



40

FOUR  
DECADES OF  
RESEARCH



Different phosphor blends produce different results and UV wavelengths. (Nanometers)

**UVB - ranges 280-320 nm :**

Stimulates melanin production and can burn the skin if overexposed.

**UVA2 - ranges 320-340nm :**

Promotes melanin production and some pigment darkening; it is also associated with elastosis (photoaging, wrinkles).

**UVA1 - ranges 340-400nm :**

Penetrates deeper past the skin surface and is primarily responsible for pigment darkening.



Wolff lamps (such as Master Bronze, Bronzing Sun HPK90 or ETS Elite JK90) are engineered to provide enough UVB to stimulate the melanin, aid production of vitamin D, provide plenty of UVA1, and use less UVA2.

Every tanning lamp needs just enough UVB to stimulate the melanin, and copious UVA to oxidize it and turn it brown. Typically, higher UVB lamps have a shorter exposure schedule and cause more reddening unless sessions are severely shortened. Using an originally recommended lamp for equipment or a FDA-compatible replacement lamp results in little reddening when following the recommended exposure schedule. Replacing the original lamp with a higher UVB lamp or non-compatible lamp may cause erythema.

Educate customers that reddening is a burn - not a tan. For tanners that insist on being red after a tanning session, sell them a high tingle factor lotion. Wolff does not recommend turning off bed fans to give customers "heat flush" color... excess heat will shorten lamp life!

E D U C A T E

COLOR FACTORS



# BETTER UVB



There isn't an industry standard for determining UVB%, however, companies use it to market their lamps. UVB percentages are derived from dividing the measured UVB energy of a lamp by its UVA energy. This is a common method of "rating" sunlamps, but it is only a relative figure that tells very little about the tanning power, effectiveness or life of a given lamp. It is not an accurate measure of a lamp's true performance.

**UVB is a critical component** for the production of melanin, which is then darkened by exposure to UVA. Lamp performance is determined by the total UV energy and the UVA/UVB blend from the most effective spectral regions.

**Contraindication:**

This product is contraindicated for use on persons under the age of 18 years

**Contraindication:**

This product must not be used if skin lesions or open wounds are present

**Warning:**

This product should not be used on individuals who have had skin cancer or have a family history of skin cancer

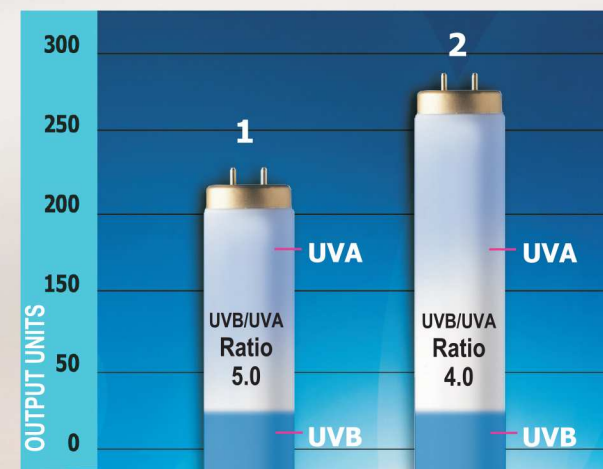
**Warning:**

Persons repeatedly exposed to UV radiation should be regularly evaluated for skin cancer

Two sunlamps are shown in the simple graph below. Both deliver the same amount of UVB, but deliver greatly differing amounts of UVA. Lamp 1 (left) has a 5% UVB ratio versus Lamp 2 (right) with only 4%.

If one only looks to the UVB% values, Lamp 1 with its higher UVB/UVA ratio could mistakenly be construed as a stronger or more effective lamp. **Not true;** Lamp 2 has a lower UVB ratio because it delivers so much more UVA.

Comparison of two different lamps with similar UVB output:



An effective sunlamp **must** produce a balance of both UVA and UVB. Adding more UVB typically creates more of a "reddening" lamp, not a better "tanning" lamp. By extensive research, Wolff System has engineered unique phosphor blends to produce high quality tanning lamps that deliver outstanding, reliable, and profitable results for the professional tanning salon.



# PROFIT

## COST

Less frequent lamp changes saves time and money! That savings gives you and your staff more time to spend on sales, customer service, and generating even more income.



### LAMP TECH

Pages 10-15 contain technical information about Wolff lamps including the TE and TM.

**TE:** Refers to the approximate time to 4 MEDs in a typical sunbed.

**TM:** Represents time for melanogenesis.

Remember, a compatible replacement lamp should not change the exposure schedule by more than +/- 10%. Therefore, a compatible replacement lamp for a 20 minute bed should have a TE in the 18-22 minute range (10% of 20 minutes is +/- 2 minutes). Also listed is the total UV flux, which is the measure of total output.

Price is only one component of the value decision. Many lamp brands cost less because they are made of economical phosphors that result in a shorter lamp life. Higher quality phosphors produce a lamp with a longer service life and better tanning performance. Over the life of a higher quality lamp, a salon will get more tanning sessions and better tanning results, which equals higher profits.

Wolff System		Brand "X"	
Lamp Cost	\$12	Lamp Cost	\$9
No. of Lamps	36	No. of Lamps	36
Total Cost	\$432	Total Cost	\$324
Life of Wolff Lamp	1000 hr	Life of Brand "X"	600 hr
20 min. Sessions per hour	3	20 min. Sessions per hour	3
Total Sessions over Lamp Life	3000	Total Sessions over Lamp Life	1800
20 min. Session Charge	\$8	20 min. Session Charge	\$8
<b>TOTAL REVENUE</b>	<b>\$24,000</b>	<b>TOTAL REVENUE</b>	<b>\$14,400</b>

Although Wolff lamps cost \$108 more than Brand "X", you've generated \$9,600 more in revenue. By changing lamps less, you save time, manpower and possible lamp breakage. You **do** get what you pay for.



## BELLARIUM S

- The choice for original equipment by most US bed manufacturers
- Excellent lamp for the novice to the experienced tanner
- Many boast of the beautiful, rich color of a Bellarium tan!

	Est. Minutes		UV Flux (W)			Rated Life
	T <sub>E</sub>	T <sub>M</sub>	UVB	UVA	Total	
Bellarium S 100W	20-24	65	1.0	22.4	23.4	1000
Bellarium SR 160W	13-15	38	1.1	33.1	34.2	800

## BRONZING SUN

- Full performance, long-lasting premium lamps
- Considerable UVB and UVA
- Non-reflector, strong enough to find application in 10-12 min. beds
- Compatible to many different lamp brands with longer service life
- **Bronzing Sun HPK90 has just enough UVB to stimulate melanin and boost vitamin D production, plenty of UVA1 for darkening, and less wrinkle-causing UVA2 - high pressure results in a low pressure lamp**
- Bronzing Sun Elite W/R is a power-packed, economical sunlamp, with a rated life of 600 hours

	Est. Minutes		UV Flux (W)			Rated Life
	T <sub>E</sub>	T <sub>M</sub>	UVB	UVA	Total	
Bronzing Sun FR59/80W	12-14	35	0.7	22.1	22.8	800
Bronzing Sun FR59/140W VS-R	9-11	28	1.0	31.1	32.1	800
Bronzing Sun Plus F71/100W	10-12	32	1.4	26.0	27.4	800
<b>Bronzing Sun HPK90 F71/100W</b>	<b>16-18</b>	<b>49</b>	<b>0.6</b>	<b>28.0</b>	<b>28.6</b>	<b>1500</b>
Bronzing Sun Ultra F71/120W	9-11	30	1.6	28.0	29.6	800
Bronzing Sun 160W F71/160W VHO	12-15	40	1.0	30.2	31.2	800
Bronzing Sun FR71/100W	12-14	35	1.0	28.3	29.3	800
<b>Bronzing Sun HPK90 FR71/100W</b>	<b>12-15</b>	<b>36</b>	<b>0.6</b>	<b>29.8</b>	<b>30.4</b>	<b>1000+</b>
Bronzing Sun Plus FR71/100W	11-13	34	1.1	28.2	29.3	800
Bronzing Sun MAG FR71/100W	10-12	32	1.2	28.2	29.4	800
Bronzing Sun Elite FR71/160W	9-12	29	1.3	36.1	37.4	600
Bronzing Sun FR71/160W VS-R	9-11	28	1.2	38.0	39.2	800
<b>Bronzing Sun HPK90 FR71/160W VS-R</b>	<b>9-11</b>	<b>28</b>	<b>0.5</b>	<b>40.3</b>	<b>40.8</b>	<b>1000+</b>
Bronzing Sun Plus FR71/160W VS-R	8-10	26	1.3	38.0	39.3	800
Bronzing Sun FR59/140W VS-R	9-11	28	1.0	31.1	32.1	800
<b>Bronz Sun HPK90 PlusFR71/160W VS-R</b>	<b>8-10</b>	<b>26</b>	<b>0.6</b>	<b>40.2</b>	<b>40.8</b>	<b>1000+</b>
<b>Bronzing Sun HPK90 FR71/180W VS-R</b>	<b>8-10</b>	<b>26</b>	<b>0.7</b>	<b>47.2</b>	<b>47.9</b>	<b>800</b>
<b>Bronzing Sun HPK90 FR71/200W VS-R</b>	<b>7-10</b>	<b>24</b>	<b>0.8</b>	<b>47.4</b>	<b>48.2</b>	<b>650</b>
Bronzing Sun FR79/180W VS-R 2M	9-11	28	1.3	43.1	44.4	800
Bronzing Sun Gold FR79/200W VS-R 2M	8-10	27	1.4	46.2	47.6	650

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## DARK TAN

- Power-packed, economical lamps
- Strong enough to find application in 12-14 minute sunbeds
- Enhanced UVB for shorter sessions and upgrades to existing line-up

	Est. Minutes		UV Flux (W)			Rated Life
	T <sub>E</sub>	T <sub>M</sub>	UVB	UVA	Total	
Dark Tan II 100W	12-14	35	1.3	25.9	27.2	800
Dark Tan II Plus 100W	11-13	34	1.4	25.6	27.0	800
Dark Tan II Plus R100W	12-14	35	1.0	28.0	29.0	800

## DIAMOND SUN S

- Was the choice for original equipment from ETS
- Economical, cost-effective phosphor blend resulting durable tans

	Est. Minutes		UV Flux (W)			Rated Life
	T <sub>E</sub>	T <sub>M</sub>	UVB	UVA	Total	
Diamond Sun S F71/100W	18-20	60	0.8	19.1	19.9	1000
Diamond Sun S F72/100W RDC	18-20	60	1.0	23.9	24.9	1000

## DOMINION

- Designed for quick results - excellent choice for 15 minute beds
- Ample volumes of very effective UVB
- Compatible to many different lamp brands

	Est. Minutes		UV Flux (W)			Rated Life
	T <sub>E</sub>	T <sub>M</sub>	UVB	UVA	Total	
Dominion 100W	14-16	40	1.2	25.9	27.1	1000
Dominion Plus 100W	13-15	40	1.3	25.9	27.2	1000

## ETERNAL SUN®

- The choice for original Montego Bay equipment from PC Marketing
- As an upgrade and replacement for other Wolff System lamps
- Assures tanners of quick, effective and durable tans

	Est. Minutes		UV Flux (W)			Rated Life
	T <sub>E</sub>	T <sub>M</sub>	UVB	UVA	Total	
Eternal Sun EX 100W BP&RDC	16-18	49	1.1	26.6	27.7	1000
Eternal Sun SX 100W BP&RDC	14-16	40	1.3	25.9	27.2	1000
Eternal Sun UXR 160W	9-11	29	1.3	38.1	39.4	800

## EUROSUN S3

- Considered a darkening or "bronzing" lamp and gentler to skin
- More UVA and localized UVB to promote effective melanogenesis

	Est. Minutes		UV Flux (W)			Rated Life
	T <sub>E</sub>	T <sub>M</sub>	UVB	UVA	Total	
EuroSun Plus S3 F71/100W	18-20	60	0.9	21.2	22.1	1500
EuroSun Plus S3 F73/100W	18-20	60	0.9	21.3	22.2	1500



## EVERGLO

- Replacement choice for the popular Bellarium S sunlamps
- Employs an improved combination of phosphors delivering more UVB and a huge increase of UVA vs. Bellarium S

	Est. Minutes		UV Flux (W)			Rated Life
	T <sub>E</sub>	T <sub>M</sub>	UVB	UVA	Total	
EverGlo F59/80W	18-20	60	0.9	21.2	22.1	1000
EverGlo F71/100W	18-20	60	1.1	26.5	27.6	1000
EverGlo Plus F73/100W	18-20	60	1.1	26.7	27.8	1000

## ETS ELITE

- Designed for JK-Light's ETS lamp division
- The choice for ETS equipment

	Est. Minutes		UV Flux (W)			Rated Life
	T <sub>E</sub>	T <sub>M</sub>	UVB	UVA	Total	
ETS Elite F59/80W	16-18	50	0.9	21.3	22.2	1000
ETS Elite Select F71/100W	14-16	45	1.2	26.7	27.9	1000
Ets Elite Cool Tone F71/100W	12-14	40	1.3	26.5	27.8	1000
ETS Elite Warm Tone F71/100W	12-14	40	1.3	25.9	27.2	800
ETS Elite Plus F71/100W	11-13	34	1.1	26.5	27.6	1000
ETS Elite Ultra F71/100W	10-12	35	1.4	26.0	27.4	800
ETS Elite Plus FR71/100W	11-13	34	1.1	28.2	29.3	800
ETS Elite VZR FR71/160W	9-11	28	1.2	38.0	39.2	800
ETS Elite Ultra FR71/160W	8-10	26	1.3	38.0	39.3	800
ETS Elite JK90 FR71/160W	8-10	26	0.6	40.2	40.8	1000
ETS Elite Ultra FR71/180-200W	8-10	26	1.3	43.1	44.4	800
ETS Elite Ultra FR79/200W 2M	8-10	26	1.4	46.2	47.6	600

## ELITE

- Designed for JK-Light's ETS lamp division
- The perfect upgrade for an Elite tanning experience

	Est. Minutes		UV Flux (W)			Rated Life
	T <sub>E</sub>	T <sub>M</sub>	UVB	UVA	Total	
Elite Select F73/120W	14-16	45	1.2	26.7	27.9	1000
Elite Plus F71/100W	12-14	40	1.3	25.9	27.2	1000
Elite Plus FR71/120W	11-13	34	1.1	28.2	29.3	800
Elite Select FR71/160W	9-11	28	1.3	38.0	39.3	800
Elite Ultra FR71/160W	8-10	26	1.2	38.0	39.2	800
Elite Ultra FR79/200W 2M	8-10	26	1.4	46.2	47.6	500

## GOLDEN BRONZE™

new

- Wide range of lamp types for replacement of original equipment
- Salon satisfaction had been excellent during introduction

	Est. Minutes		UV Flux (W)			Rated Life
	T <sub>E</sub>	T <sub>M</sub>	UVB	UVA	Total	
GoldenBronze F59/80W	16-18	50	0.9	21.4	22.3	1000
GoldenBronze F71/100-120W	14-16	45	1.2	26.8	28.0	1000
GoldenBronze F73/100-120W	14-16	45	1.2	26.8	28.0	1000
GoldenBronze Plus F71/100-120W	12-14	40	1.3	26.6	27.9	1000
GoldenBronze II F71/100-120W	11-13	34	1.4	25.7	27.1	1000
GoldenBronze II F73/100-120W	11-13	34	1.4	25.7	27.1	1000
GoldenBronze Mazimum F71/100-120W	10-12	32	1.4	26.1	27.5	1000
GoldenBronze Mazimum F73/100-120W	10-12	32	1.4	26.1	27.5	1000
GoldenBronze FR59/80W R	12-14	35	0.7	22.2	22.9	800
GoldenBronze FR71 100-120W	12-14	35	1.0	28.4	29.4	800
GoldenBronze FR73 100-120W	12-14	35	1.0	28.4	29.4	800
GoldenBronze Plus FR71/100-120W R	11-13	34	1.1	28.3	29.4	800
GoldenBronze VHO F71/160W	12-15	40	1.0	30.3	31.3	800
GoldenBronze FR59/140W R	9-11	28	1.0	31.2	32.2	800
GoldenBronze FR71/160W R	9-11	28	1.2	38.1	39.3	800
GoldenBronze Plus FR71/160W R	8-10	26	1.3	38.1	39.4	800
GoldenBronze FR71/200W R	8-10	27	1.4	46.3	47.7	600
GoldenBronze FR79/180-200W R 2M	8-10	28	1.3	43.2	44.5	800

## MASTER BRONZE™

new

- Deep and durable tans from greatly increased UVA
- Real tanning power - a high pressure session in a fluorescent bed
- 25-50% more service life - many more tanning sessions can be sold between lamp replacements

	Est. Minutes		UV Flux (W)			Rated Life
	T <sub>E</sub>	T <sub>M</sub>	UVB	UVA	Total	
Master Bronze F71/100-120W	14-16	49	0.6	28.1	28.7	1500
Master Bronze FR71/100-120W R	12-14	36	0.6	29.9	30.5	1000+
Master Bronze FR71/160W R	11-13	28	0.5	40.4	40.9	1000+
Master Bronze Plus FR71/160W R	9-11	26	0.6	40.3	40.9	1000+
Master Bronze FR71/180-200W R	8-10	26	0.7	47.3	48.0	1000





## SOLARIUM

- Long-lasting, very high output for VHO or VHO reflector application
- Compatible to many different high performance lamp brands

	Est. Minutes		UV Flux (W)			Rated Life
	T <sub>E</sub>	T <sub>M</sub>	UVB	UVA	Total	
Solarium VHO 160W	12-14	35	1.2	33.3	34.5	800
Solarium XLR R160W	10-12	30	1.2	37.3	38.5	800

## VELOCITY

- Among the most popular choices for original equipment from ETS
- Compatible replacement lamp for many other lamp brands
- Voted the industry's most popular 100W lamp year after year

	Est. Minutes		UV Flux (W)			Rated Life
	T <sub>E</sub>	T <sub>M</sub>	UVB	UVA	Total	
Velocity 80W	16-18	50	0.9	21.3	22.2	1000
Velocity 100W	16-18	50	1.1	26.7	27.8	1000
Velocity Plus 100W/120W	14-16	45	1.2	26.7	27.9	1000
Velocity Extreme 100W	12-14	40	1.3	26.5	27.8	1000
Velocity Hi Watt 120W	14-16	45	1.2	26.7	27.9	1000
Velocity 160W VS-R	10-12	30	1.1	38.0	39.1	800
Velocity Ultra VS-R R180W	8-10	28	1.3	43.1	44.4	800



## TURBO SUN FACE TANNER

High-speed, low-pressure tanning power! The Turbo Sun Face Tanner lamp blends advanced technology with enhanced facial tanning performance in select ETS tanning systems. These unique micro-lamps emit concentrated UVA energy and promote rich, golden facial tans.

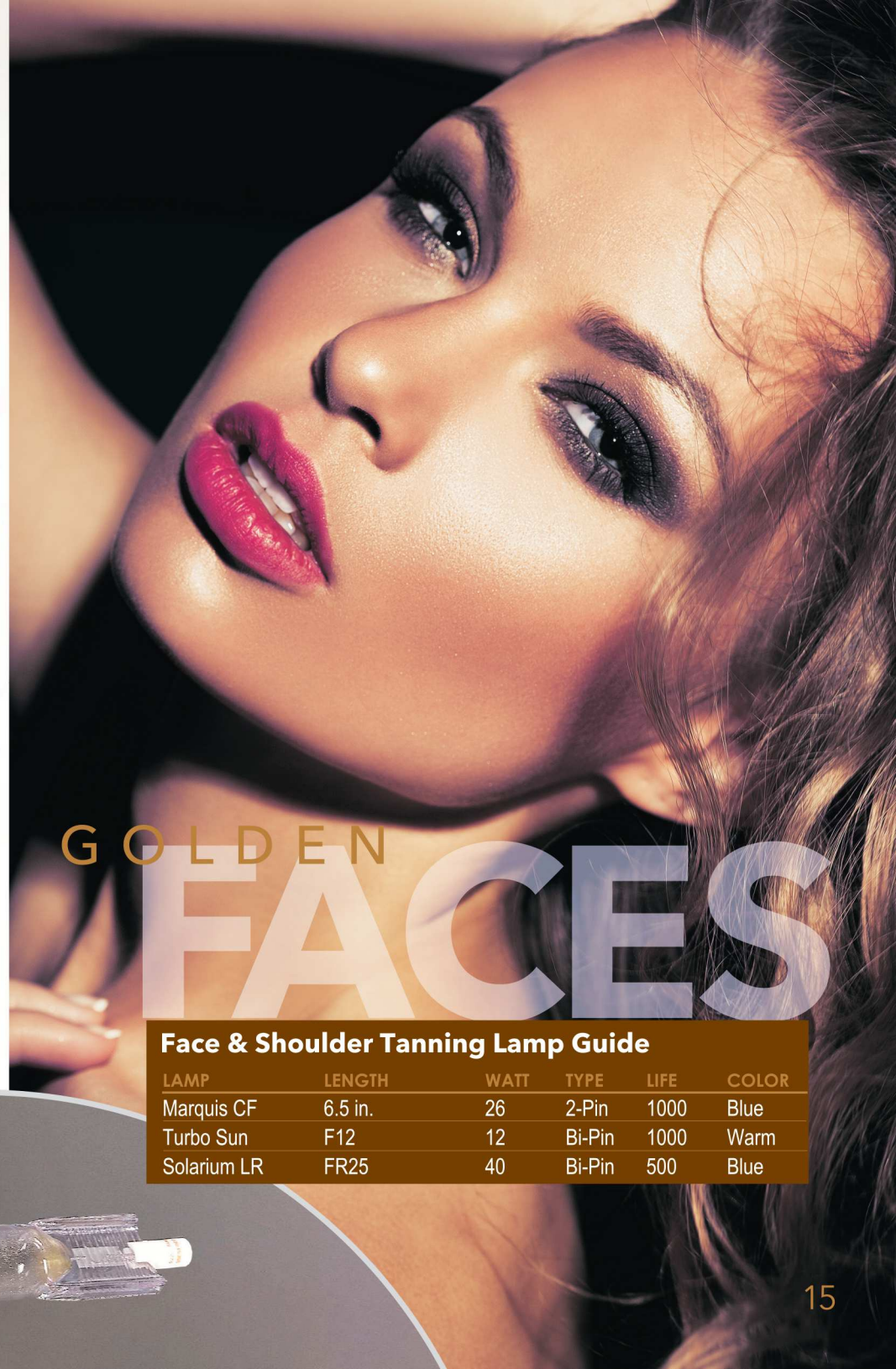
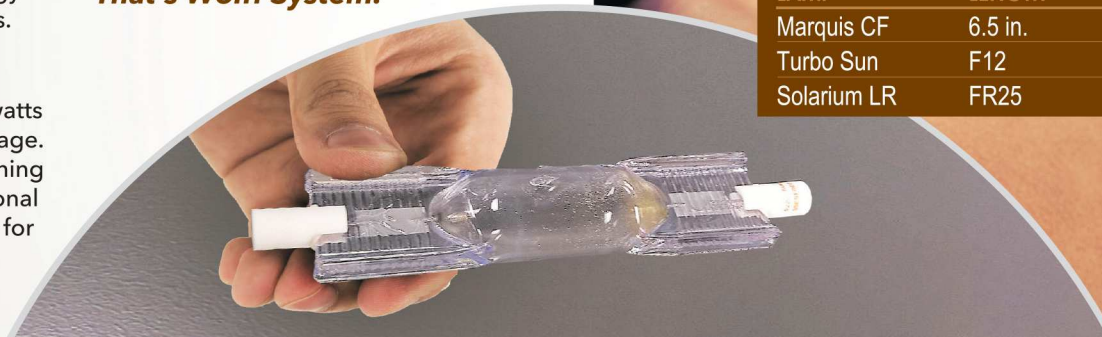
## MARQUIS

Wolff System's Marquis boosts 26 watts of tanning power in a compact package. Available in select Wolff System tanning units, this lamp concentrates additional energy to specific parts of the body for a complete and natural-looking tan.

## SOLARIUM LR

A 40 watt shoulder tanning reflector lamp employed as original equipment in selected ETS sunbeds.

**Compact. Powerful. Lasting.**  
**That's Wolff System.**



# GOLDEN FACES

## Face & Shoulder Tanning Lamp Guide

LAMP	LENGTH	WATT	TYPE	LIFE	COLOR
Marquis CF	6.5 in.	26	2-Pin	1000	Blue
Turbo Sun	F12	12	Bi-Pin	1000	Warm
Solarium LR	FR25	40	Bi-Pin	500	Blue