## $SunPowerLED_{TM} \ FEATURE \ COMPARISON$

COMPANY & PRODUCT	SunPowerLED <sub>™</sub> SuperPalm 1050 <sub>™</sub>	Thor Large LED Cluster	Bales Photonics Home Model	UltraLux Red Pro
IMAGE			Contract of the contract of th	(Battery operated)
SIZE	7.6 cm (diameter)	7.6 cm (diameter)	Small (unknown)	15 cm x 10 cm
TREATMENT AREA	40 cm <sup>2</sup>	45.4 cm <sup>2</sup>	Small (unknown)	120 cm <sup>2</sup>
Number of LEDs	Red 12 (30 LEDs/ 100cm²) Near Infrared 10 (25 LEDs/ 100cm²)	Red 56 (123 LEDs/ 100cm²) Near Infrared 48 (106 LEDs/ 100cm²) (Old technology low-power LEDs)	Red 5 Blue 12 Near Infrared 850 nm 8 Near Infrared 940 nm 8	Total 12 (10 LEDs/ 100cm²) (Both wavelengths together)
LED WAVELENGTH	Red 660 nm Near Infrared 1050 nm	Red 660 nm Near Infrared 850 nm	Red Unknown Blue Unknown Near Infrared 850 nm Near Infrared 940 nm	Red 660 nm Near Infrared 850 nm
LIGHT POWER	Red 6500 mW (6.5W) Near Infrared 7500 mW (7.5 W)	Red 140 mW Near Infrared 360 mW	Red 7.5 W Blue 18.1 W Near Infrared 6.0 W Near Infrared 6.0 W	Total 2.0 W (Est) (Both wavelengths)
IRRADIANCE	Red 162 mW/cm <sup>2</sup> Near Infrared 187 mW/cm <sup>2</sup>	Red 3.1 mW/cm <sup>2</sup> Near Infrared 7.9 mW/cm <sup>2</sup>	Red Unknown Blue Unknown Near Infrared Unknown Near Infrared Unknown	Red (Est)  Near Infrared (Est)  8.3 mW/cm <sup>2</sup> 8.3 mW/cm <sup>2</sup>
PRICE	\$1900 USD	Unknown (Part of \$25,000 USD system)	\$8,000 USD approx.	\$550 USD

## SunPowerLED<sub>TM</sub> FEATURE COMPARISON

COMPANY & PRODUCT	SunPowerLED <sub>TM</sub> Mini Canopy	Platinum Biomax 450	Kala Red Light Pro Panel	UltraLux Red Mini
IMAGE		ETTE E PLAYINGHEETE		99999999999999999999999999999999999999
SIZE	30.5 cm x 22.9 cm	48.3 cm x 30.5 cm	35.6 cm x 22.9 cm	38.1 cm x 20.8 cm
TREATMENT AREA	620 cm <sup>2</sup>	1473.2 cm <sup>2</sup>	780 cm <sup>2</sup> (estimated)	750 cm <sup>2</sup> (estimated)
Number of LEDs	Red 160 (25.8 LEDs/ 100cm²)	Total 150 (25 for each wavelength)  (1.7 LEDs/ 100cm² for each wavelength)	Red 42 (5W) (5.1 LEDs/ 100cm <sup>2</sup> )	Total 132 (17.6 LEDs/ 100cm²) (All wavelengths together)
LED WAVELENGTH	Red 660 nm	480 nm, 630 nm, 660 nm, 810 nm, 830 nm, 850 nm	Near Infrared 43 (5W) (5.2 LEDs/ 100cm²)  Red 660 nm	660 W (Published)  Red 630nm, 660 nm
LIGHT POWER	Near Infrared810 nmRed63 WNear Infrared60 W	8.7 W (each wavelength (Est)) (Assuming 80% of max. allowable power at 110VAC and 25% efficiency)	Red 21W  (Assuming 80% of max. allowable power at 110VAC and 25% efficiency)  Near Infrared 21.5W	Near Infrared 830 nm, 850 nm  16.5 W (each wavelength (Est)) (Assuming 80% of max. allowable power at 110VAC and 25% efficiency)
IRRADIANCE	Red 102 mW/ cm <sup>2</sup> Near Infrared 97 mW/ cm <sup>2</sup>	5.9 mW/cm² (for each wavelength)	Total (published) Red (est) Near infrared 21.5W  170 mW/ cm <sup>2</sup> 26.9 mW/ cm <sup>2</sup> 27.6 mW/ cm <sup>2</sup>	Total (published) <160 mW/ cm <sup>2</sup> Red (est) 22 mW/ cm <sup>2</sup> Near Infrared (est) 22 mW/ cm <sup>2</sup>
PRICE	\$5,900 USD	\$1,089 USD	\$799.99 CDN	\$695 USD

## SunPowerLED<sub>TM</sub> FEATURE COMPARISON

COMPANY & PRODUCT	C Da.	and ED	News	THOR	V-I-		Hilliam
a mobbeen	Sull Fower LED <sub>TM</sub>			THOR	Kala	d Daniel	UltraLux
IMAGE	Canopy		NovoTHOR XL		Red Light Quad Panel		Red Mini
IWAGE			Part of the second of the seco				
SIZE	91.5 cm x 45.8 cm		238 cm x 96 cm  20,000 cm <sup>2</sup> (Estimated)		178 cm x 40.6 cm 7,200 cm <sup>2</sup> (Estimated)		91.4 cm x 27.9 cm
TREATMENT AREA	3720 cm <sup>2</sup>						2,400 cm <sup>2</sup> (Estimated)
Number of LEDs		(25.8 LEDs/ 100cm <sup>2</sup> )	Unknown		Red 504 (5W) (5.  Near Infrared 516 (5W) (	.25 LEDs/ 100cm <sup>2</sup> )	Total 464 (19.3 LEDs/ 100cm²)
LED	Red Red	00 (25.8 LEDs/ 100cm <sup>2</sup> ) 660 nm	Red	660 nm	Red	660 nm	610nm, 630nm, 660nm, 810nm,
WAVELENGTH	Reu	000 11111	Reu	000 11111	Reu	000 11111	830nm, 850nm
	Near infrared	810 nm	Near infrared	850 nm	Near Infrared	850 nm	
LIGHT POWER	Red	378 W	Total	<mark>675 W</mark>	Red (Assuming 80% of max. a	<mark>252 W</mark>	Total 120 W (Assuming 80% of max.
	Near Infrared	360 W	Each wavelength	337.5 W	at 110VAC and 25% efficiency)  Near Infrared  258 W		allowable power at 110VAC and 25% efficiency)
IRRADIANCE	Red	102 mW/ cm <sup>2</sup>	Total	33.8 mW/ cm <sup>2</sup>	Total (Published) Red (Estimated)	161 mW/cm <sup>2</sup> 25 mW/ cm <sup>2</sup>	Total (published) <170 mW/ cm <sup>2</sup> Each Wavelength 8.3 mW/ cm <sup>2</sup>
	Near Infrared	$97 \text{ mW/cm}^2$	Each wavelengtl	h <mark>16.9 mW/ cm²</mark>	Near Infrared (Estimated)	25 mW/ cm <sup>2</sup>	(Estimated)
PRICE	\$35,000 USD		\$150,000 USD		\$6,000 CDN		\$1,995 USD