

Phoenix 840W

SKPHX-840-000-F1-XX-XXX-XXXX-XXXX

Spec Sheet Rev 1.0

Product Description

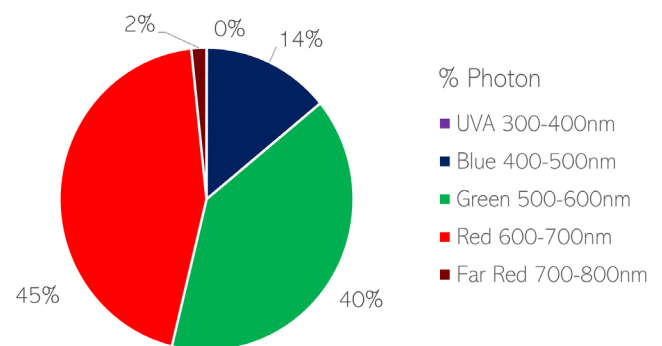
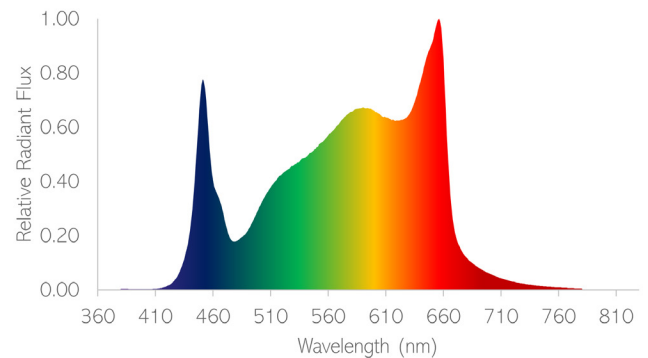
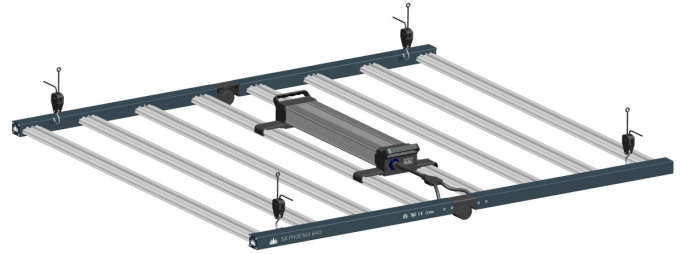
Spectrum King Phoenix 840W delivers 38% more photons and over 20% energy savings than a DE 1000W HPS system. It is unrivaled in performance and reliability in its class.

SK Cryo-Therm cooling technology enables an ultra slim form factor allowing for maximum airflow and minimizing microclimates. Optimized for high intensity cultivation in single or multi-tier cultivation in proximity to the canopy.

DLC 2.1 listed and qualified for additional local rebates.

Performance Summary

PPF (400-700nm) ¹	2350 umol/s
PPE (400-700nm)	2.80 umol/J
Input VAC (50/60 Hz)	120-277V 200-480V
Input Power @ 277VAC	840W
Cooling BTU @ 277VAC	2866
Operating Temp	-4 to 113°F (-20 to 45°C)
IP Rating	65, Wet Location
LED Lifetime	Q90 = 62,000hrs
Warranty ²	5 yrs
Weight (Frame + Driver)	21 lbs (9.5kg)
Min Height	6" (152mm)
Coverage Area	5x5'
Dimmable ³	Dim to Off, 10-100% Resistive
Beam Angle	120°
Fixture Dimensions	47x43x4.3" 1195x1095x109mm
Dual Surge Immunity	10kV Driver 1.5kW per Board
Certifications	DLC, ETL, CE



Depicted spectrum is a visual representation of the F1 spectrum. Results will vary.



¹ 7% Tolerance

² Limited Warranty can be found at: www.spectrumkingled.com/warranty

³ Requires compatible 0-10V Controller or Manual Dimmer Knob (sold separately)

Photometrics

Lumen ¹	143,000 lm
Efficacy	170 lm/W
CCT	3500K
CRI	90

1 7% Tolerance

AC Input Table (120-277VAC)

VAC	120	208	220	240	277
AC Current	7.4	4.1	3.9	3.6	3.1
AC Wattage	876	851	849	846	840
PF	0.99	0.99	0.99	0.99	0.98
Input Freq	50/60	50/60	50/60	50/60	50/60
BTU	2987	2902	2895	2885	2864

AC Input Table (200-480VAC)

AC	220	240	277	308	480
AC Current	4.00	3.56	3.08	2.76	1.76
AC Power	880	855	853	850	844
PF	0.999	0.988	0.987	0.987	0.983
Input Freq	50/60	50/60	50/60	50/60	50/60
BTU	3001	2916	2909	2899	2878

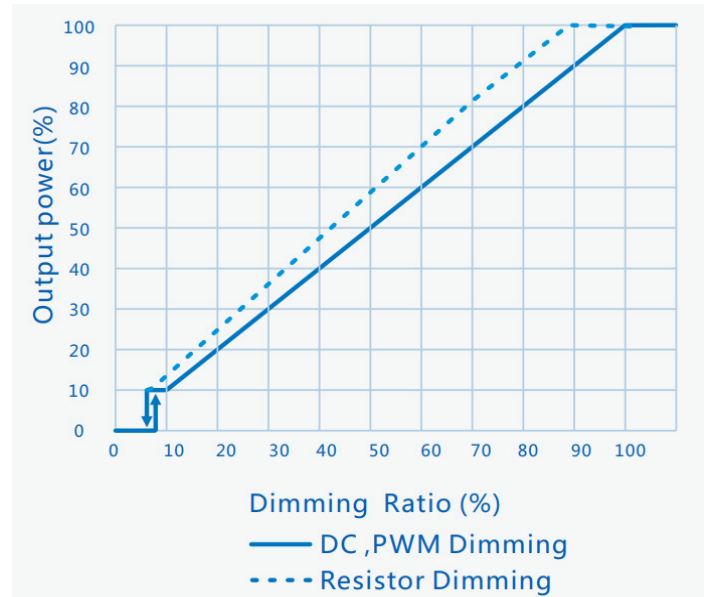
Fixture Dimensions

Description	Dimensions in (mm)	Weight lbs(kg)
Engine	47.2x43.1x2.0" 1199x1096x52 mm	15 lbs 6.8 kg
Fixture	47.2x43.1x4.3" 1199x1096x111 mm	21 lbs 9.5 kg
120-277V Driver	20.6x3.7x2.3" 522x93x59 mm	6.0 lbs 2.7 kg
200-480V Driver	TBD	TBD
Box	45.2x25.5x3.5" 1150x650x90 mm	25 lbs 11.3kg

Part Number

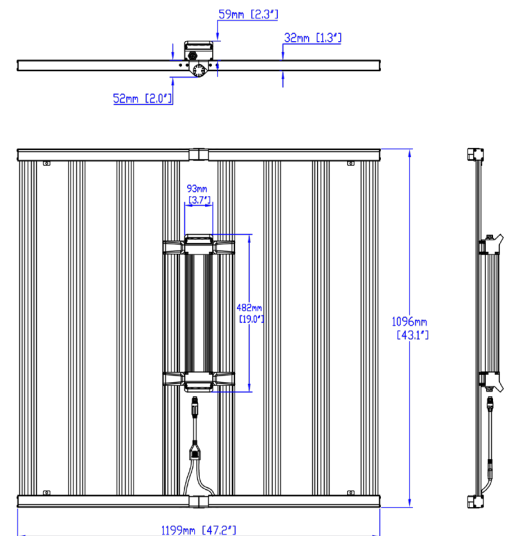
Family		Watts		Model		Spectrum		Input Voltage		AC Power Cord		AC Plug		DC Ext Cord		Mounting Hardware		Packaging		Internal		
Code	Name	Code	Name	Code	Name	Code	Name	Code	Name	Code	Name	Code	Name	Code	Name	Code	Name	Code	Name	Code	Name	
SKPHX	Phoenix	840	840	000	Standard	F1	SK Flower	01	120-277	0	10 ft	0	NEMA 5-15p	0	None	CT	Cable Ties/Pulley	00	Single Pack	0000		
												1	NEMA 6-15P	6	6ft	RM	Driver Hangers					
												2	NEMA L7-15P									
												3	NEMA L7-20P									

Dimming Curve



Dimming @ 277VAC, 60 Hz (120-277VAC)

Dimming	100%	90%	80%	40%	10%
Wattage	680	606	536	265	71
PF	0.97	0.97	0.96	0.91	0.53
PPF	1870	1700	1518	777	213
PPE	2.75	2.81	2.83	2.94	2.98
BTU	2319	2066	1826	903	243

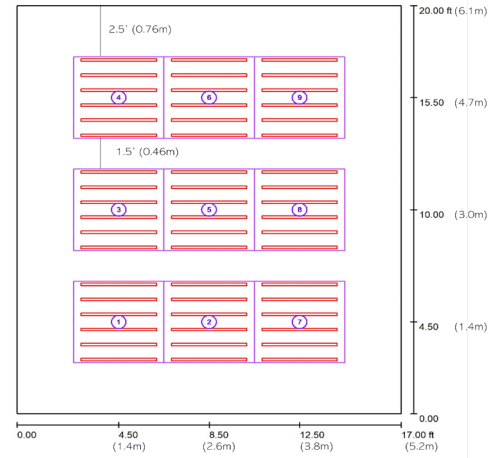


4x4' PPFD Maps

The Phoenix 840W is designed for cross-illumination for maximum uniformity. PPFD maps below show the center 4x4 canopy (#5) and edge 4x4 canopy (#1). To better represent a grow room, the center plot is simulated without wall reflectivity. The edge plot has wall reflectivity enabled (70%). Each plot was simulated using 81 measurement points.

Room Dimension

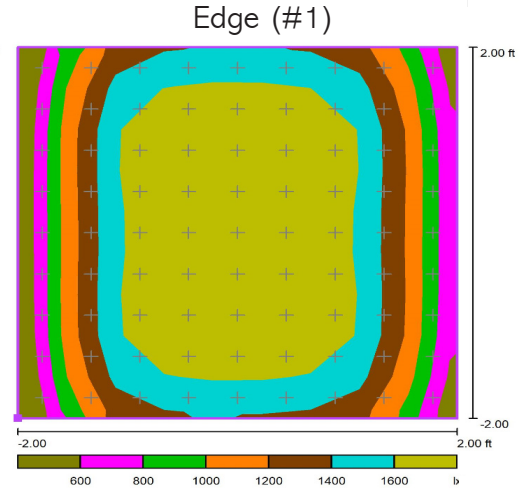
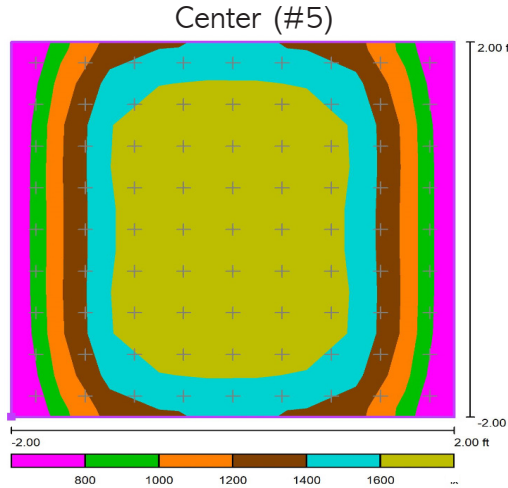
Room	20x17x12' (6.1x5.2x3.7m)
Wall to Canopy	2.5' (0.76m)
Aisle between Canopy	1.5' (0.46m)



6" (150mm) from Canopy

Center	
PPFD Avg	1428
Min/Avg	0.49
Min/Max	0.40

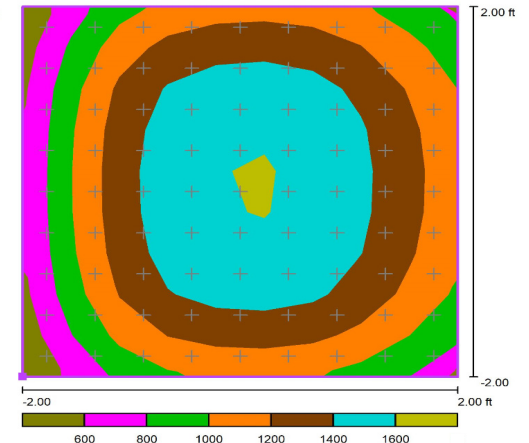
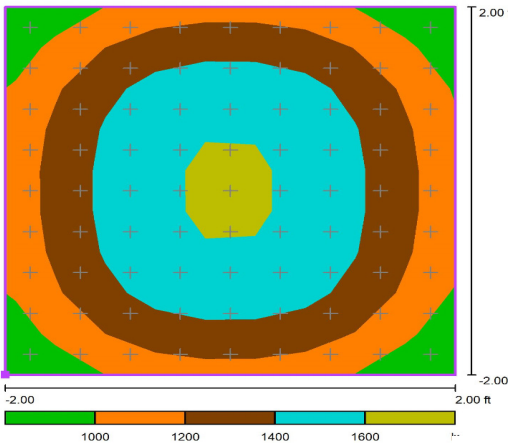
Edge	
Avg	1419
Min/Avg	0.42
Min/Max	0.33



12" (305mm) from Canopy

Center	
PPFD Avg	1316
Min/Avg	0.67
Min/Max	0.54

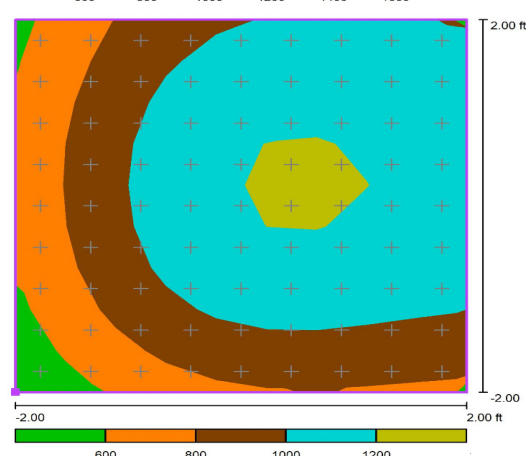
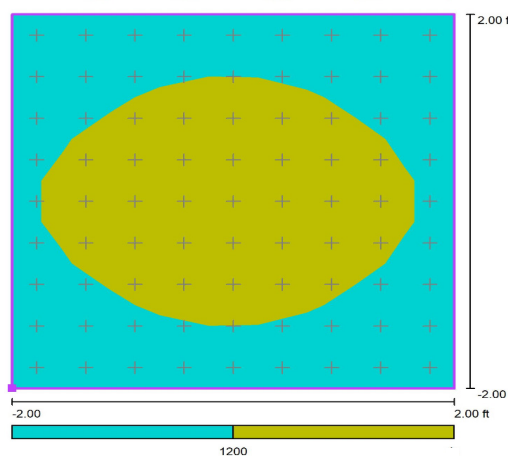
Edge	
PPFD Avg	1240
Min/Avg	0.46
Min/Max	0.35



24" (610mm) from Canopy

Center	
PPFD Avg	1184
Min/Avg	0.85
Min/Max	0.76

Edge	
PPFD Avg	993
Min/Avg	0.52
Min/Max	0.42

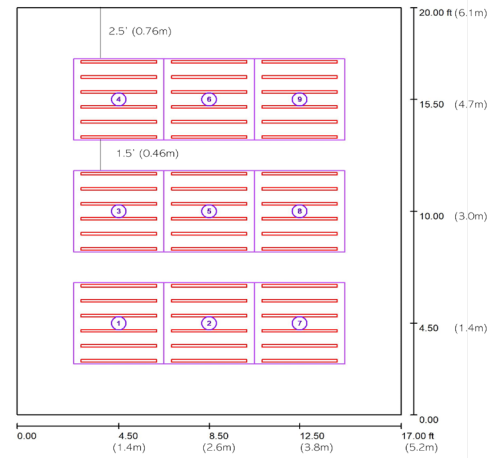


5x5' PPF Maps

The Phoenix 840W is designed for cross-illumination for maximum uniformity. PPF maps below show the center 5x5 canopy (#5) and edge 5x5 canopy (#1). To better represent a grow room, the center plot is simulated without wall reflectivity. The edge plot has wall reflectivity enabled (70%). Each plot was simulated using 81 measurement points.

Room Dimension

Room	20x17x12' (6.1x5.2x3.7m)
Wall to Canopy	2.5' (0.76m)
Aisle between Canopy	1.5' (0.46m)



12" (150mm) from Canopy

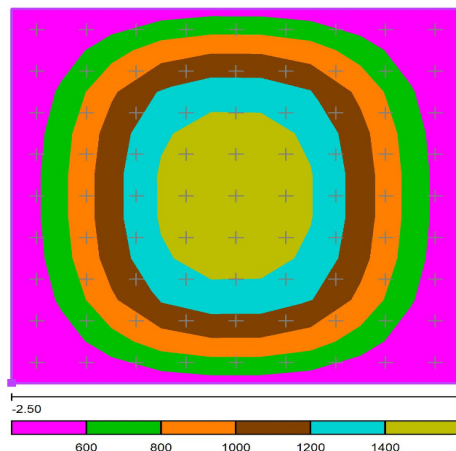
Center

PPFD Avg	933
Min/Avg	0.34
Min/Max	0.20

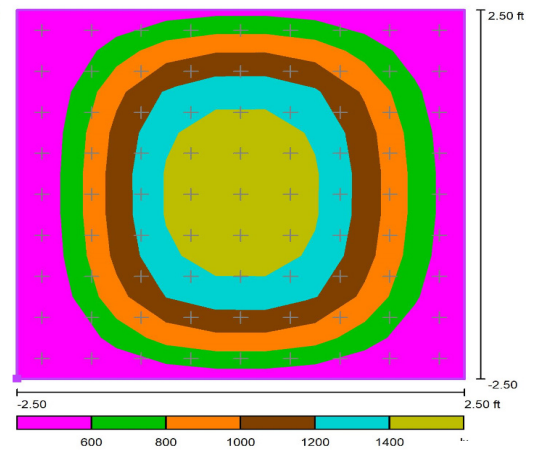
Edge

Avg	918
Min/Avg	0.25
Min/Max	0.14

Center (#5)



Edge (#1)



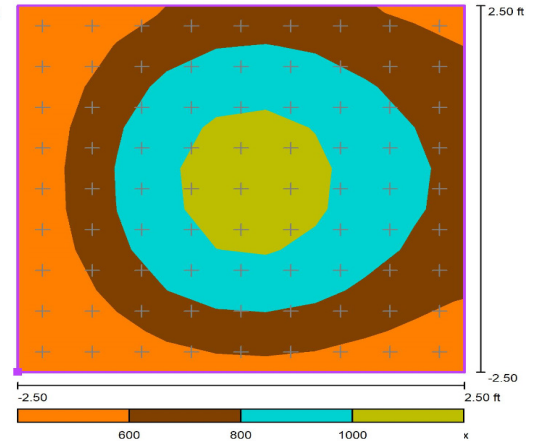
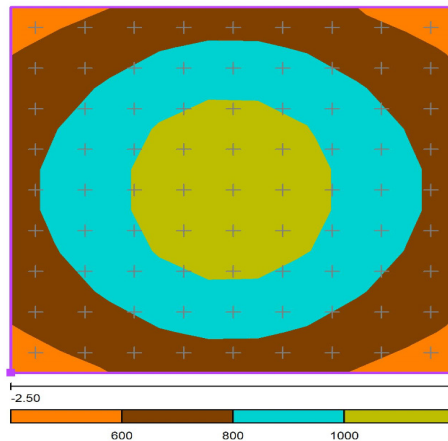
24" (305mm) from Canopy

Center

PPFD Avg	843
Min/Avg	0.67
Min/Max	0.49

Edge

PPFD Avg	755
Min/Avg	0.41
Min/Max	0.28



36" (610mm) from Canopy

Center

PPFD Avg	775
Min/Avg	0.84
Min/Max	0.72

Edge

PPFD Avg	643
Min/Avg	0.51
Min/Max	0.41

