

ADJUSTABLE CONSTANT CURRENT LED DRIVER XLC50 PROGRAMMABLE SPECIFICATIONS SHEET

ELECTRICAL SPECIFICATIONS

Input		
Input Voltage (VAC)	120-277V (+/-10%)	
Frequency Range (Hz)	50-60Hz	
	120V	277V
Input Current (A)	0.50	0.21
THD @ Full Load	<10%	<15%
Power Factor @ Full Load	>0.95	>0.90
Efficiency @ Full Load	>85%	>85%
Inrush Current (Apk)	5.52	3.20
Output		
Output Current (mA)	392 - 1400mA	
Output Voltage (VDC)	10 - 55V	
Output Ripple Current (mA)	300mA	
Maximum Output Power (W)	50W	
LED Power Up Time	<1sec	
Load Regulation	<3%	
Line Regulation (Max Load)	<3%	
Over Voltage Protection	Yes, Auto Recovery	
Over Load Protection	Yes, Auto Recovery	
Output Short-Circuit Protection	Yes	
Over Temperature Protection	Yes	
Auxiliary Output	12V, 100mA ¹	

¹ Class P units Only



GENERAL INFORMATION

Order Numbers	Type TL: XLC50-1400Z-UNV-I Class P: XLC50-1400Z-UNV-I-P
Type	Constant Current, Class 2
Output Power	50W (Maximum)
Programming Method	I-LOC Keys

DIMMING

Dimming Control	0-10V Dimming
Dimming Range	Dims to 1%
Dimming Input Isolation	2.5kV
Source Current (Max)	1.2mA

ENVIRONMENTAL SPECIFICATIONS

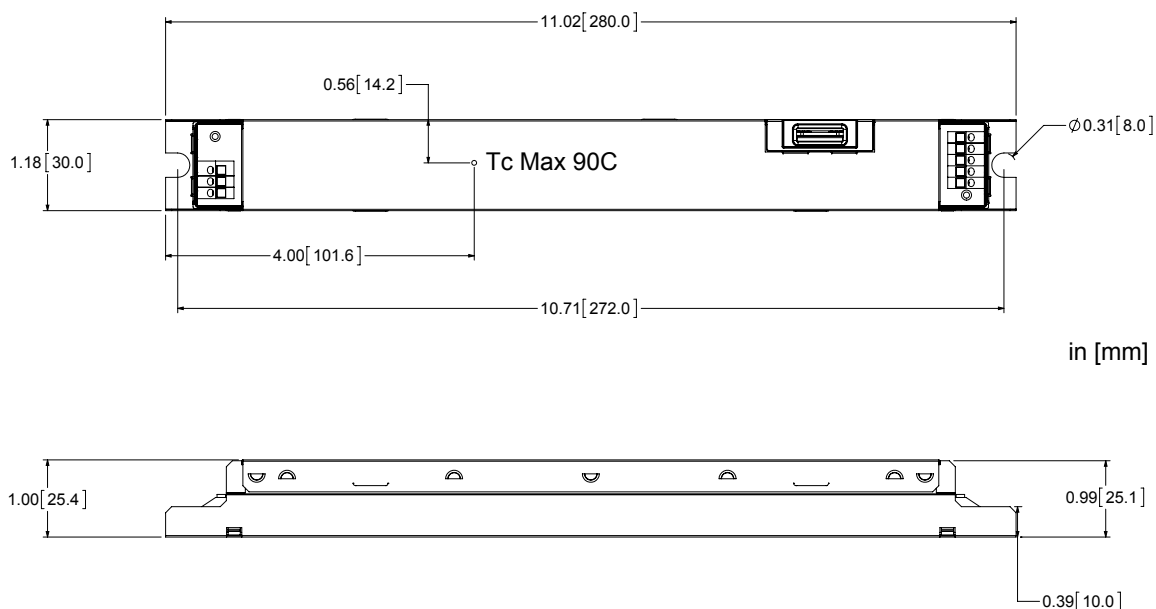
Minimum Operating Temperature	-30°C
Maximum Case Temperature (Tc)	90°C*
Maximum Storage Temperature	70°C
Maximum Relative Humidity (%)	85%, non-condensing
Transient Protection	NEMA SSL1-2010 Non-Roadway 2.5kV
UL Environment Rating	Dry & Damp
UL File Number	E341915
EMI Compliance	FCC Part 15 Class A
Sound Rating	Class A

*80°C Maximum Case Temperature for Warranty Purposes

WIRING

Input:	Terminals Black (L), White (N), Green (G)
Output:	Terminals Red (+), Black (-)
Dimming:	Terminals Purple (+), Grey (-)
Auxiliary ¹ :	Terminal Yellow (12V, 100mA)
Notes: Use solid copper wire only (16-24 AWG) Strip length 3/8" ¹ Class P units Only	

DIMENSIONS



Always confirm fit with a physical sample.
Specifications subject to change.

PACKAGING INFORMATION

Weight: 0.70 lbs

Quantity: 50pc/carton

PROGRAMMABILITY

Hatch I-LOC Technology enables quick and easy setting of driver output current with the simple click of a key. Select the appropriate I-LOC key for the desired output current and click it into the driver.

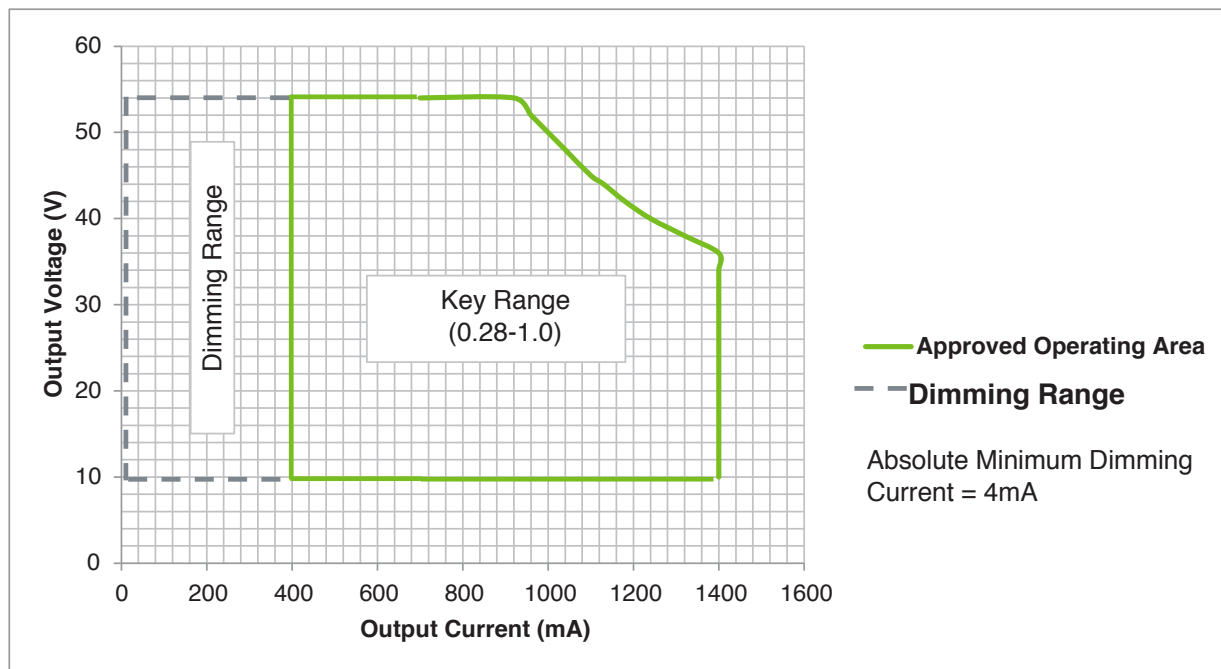
The keys are **Interchangeable** across the Hatch I-LOC LED Driver product family and have a 28% to maximum output range. The 0.28 to 0.48 keys are designed exclusively for the Linear I-LOC family.

Drive Factor	Part Number	Max Output mA	Voltage Range V	Max Output W
1.00	XA100	1400	10-35	50
0.98	XB098	1372	10-36	50
0.95	XC095	1330	10-37	50
0.93	XD093	1302	10-38	50
0.90	XE090	1260	10-39	50
0.88	XF088	1232	10-40	50
0.85	XG085	1190	10-42	50
0.83	XH083	1162	10-43	50
0.80	XI080	1120	10-44	50
0.78	XJ078	1092	10-45	50
0.75	XK075	1050	10-47	50
0.73	XL073	1022	10-48	50
0.70	XM070	980	10-51	50
0.68	XN068	952	10-52	50
0.65	XO065	910	10-54	50

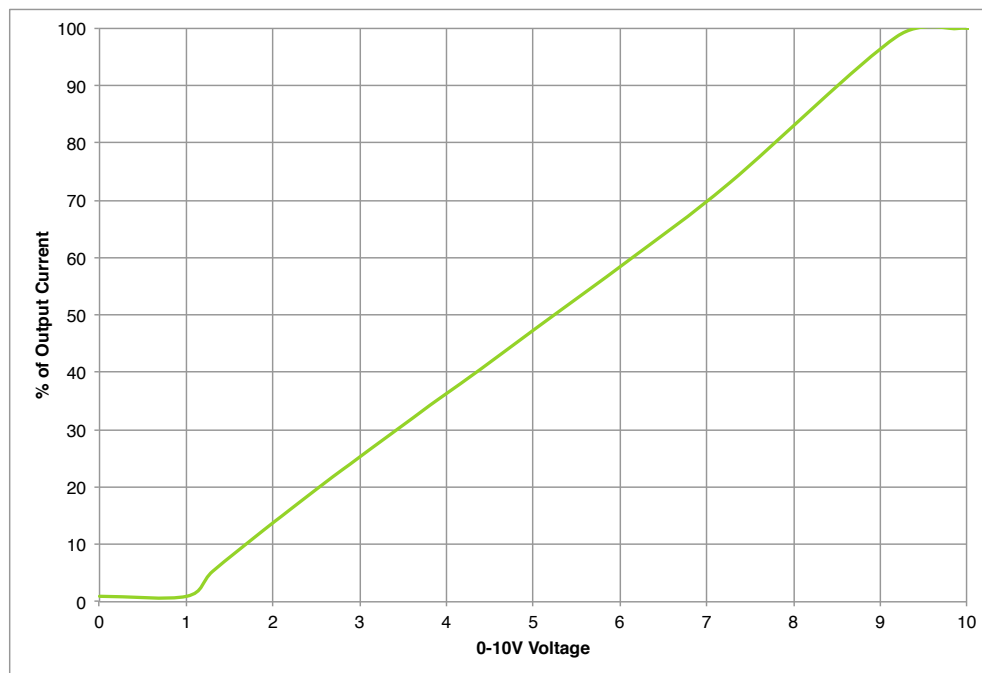
Drive Factor	Part Number	Max Output mA	Voltage Range V	Max Output W
0.63	XP063	882	10-55	49
0.60	XQ060	840	10-55	47
0.58	XR058	812	10-55	45
0.55	XS055	770	10-55	43
0.53	XT053	742	10-55	41
0.50	XU050	700	10-55	39
0.48	XLA048	672	10-55	37
0.45	XLB045	630	10-55	35
0.43	XLC043	602	10-55	34
0.40	XLD040	560	10-55	31
0.38	XLE038	532	10-55	30
0.35	XLF035	490	10-55	27
0.33	XLG033	462	10-55	26
0.30	XLH030	420	10-55	24
0.28	XLI028	392	10-55	22

Adjusted Output Current
Tolerance +/- 3%

OPERATING RANGE

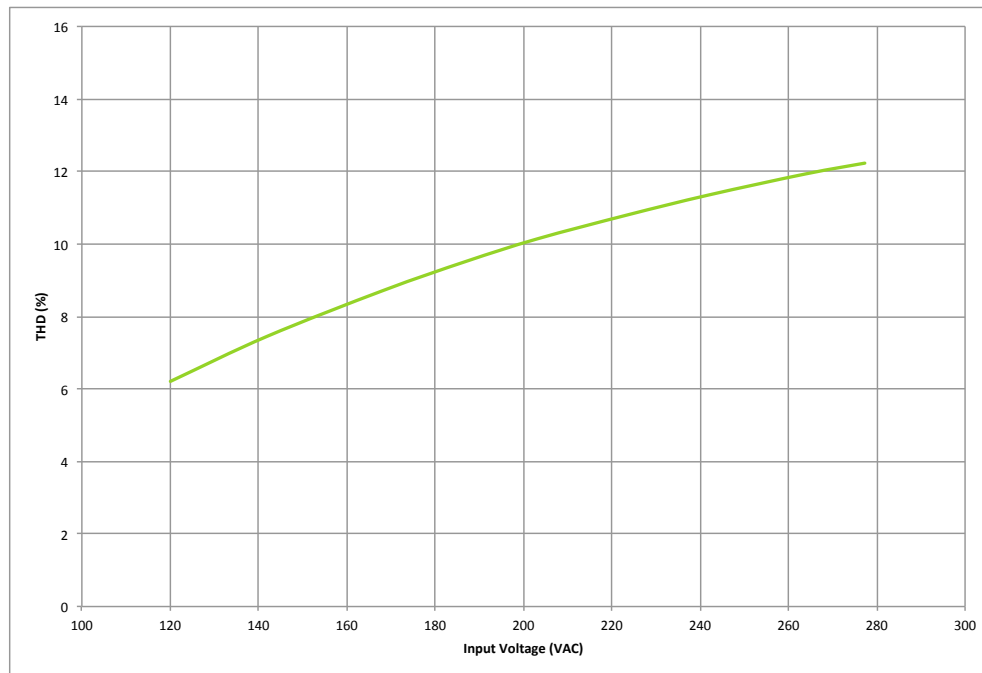


DIMMING

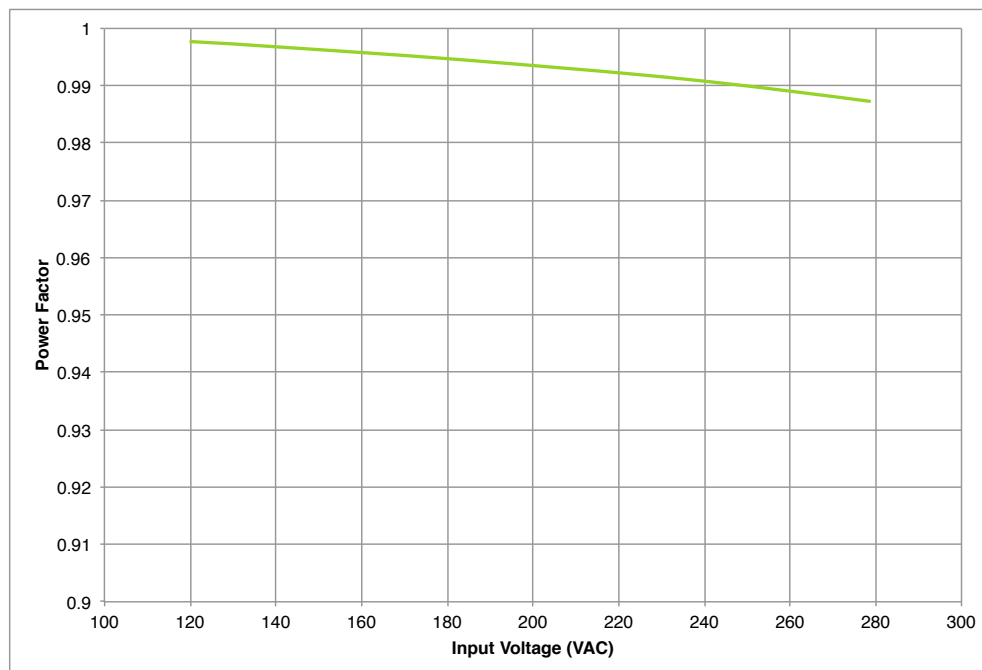


I-LOC Linear drivers dim to 1% of the adjusted output current.

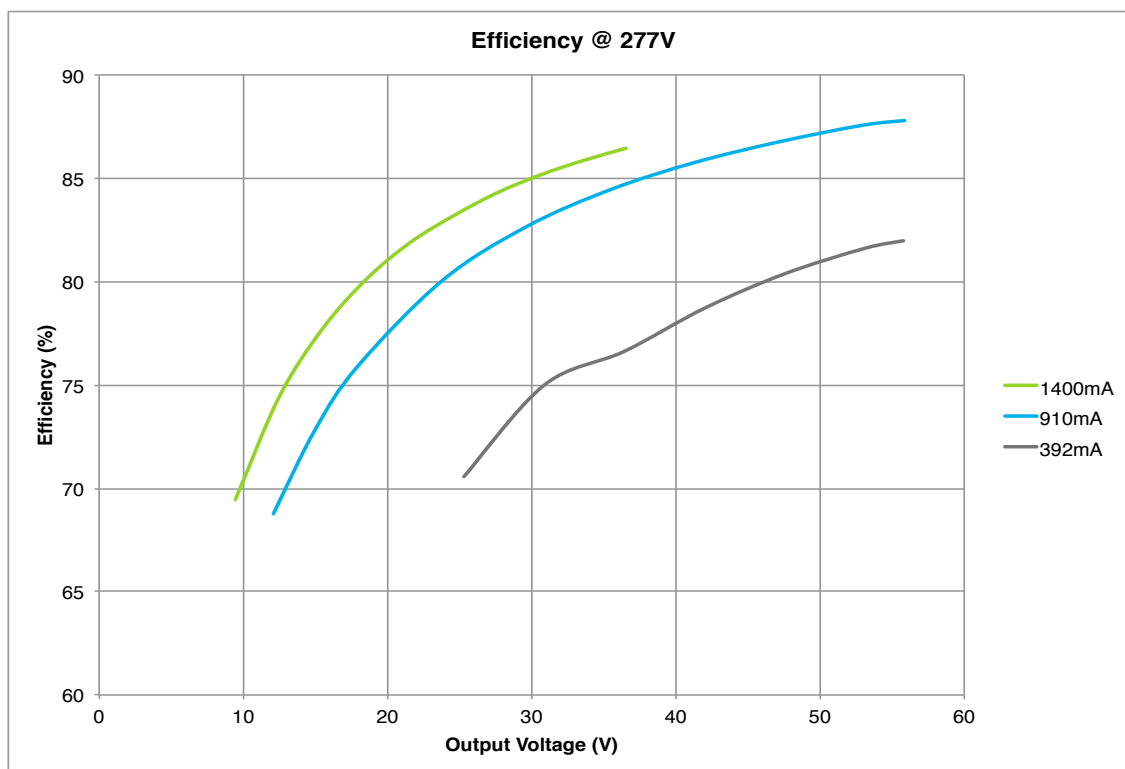
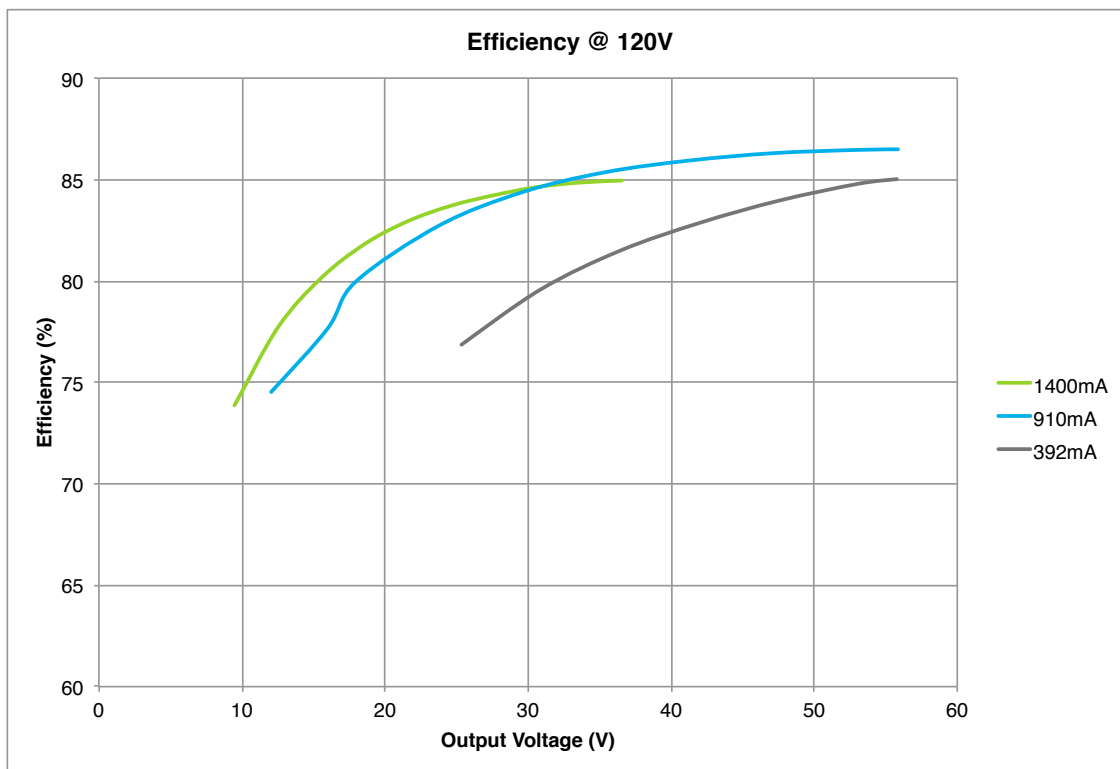
THD VS. INPUT VOLTAGE (FULL LOAD)



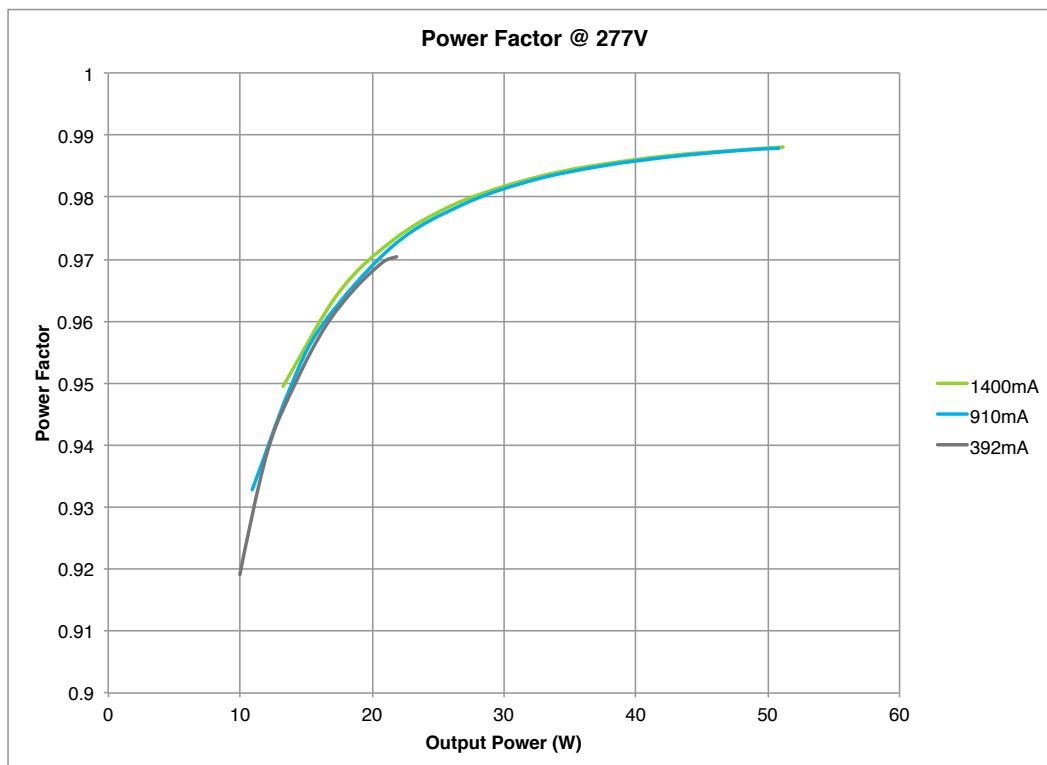
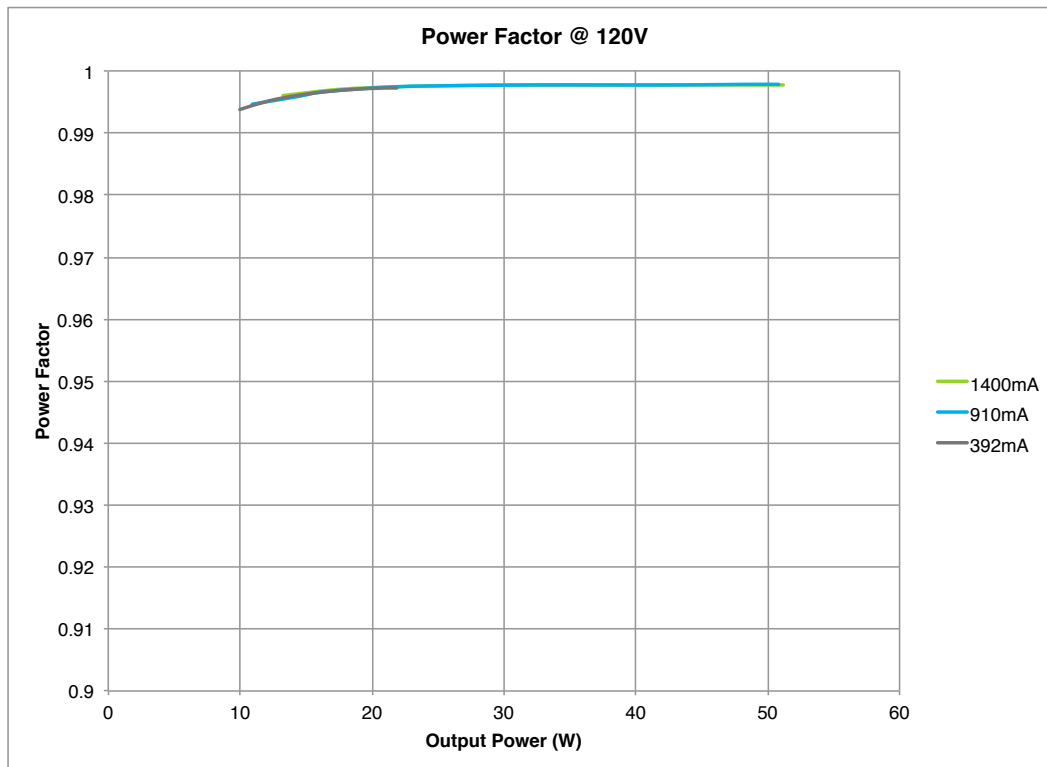
POWER FACTOR VS. INPUT VOLTAGE (FULL LOAD)



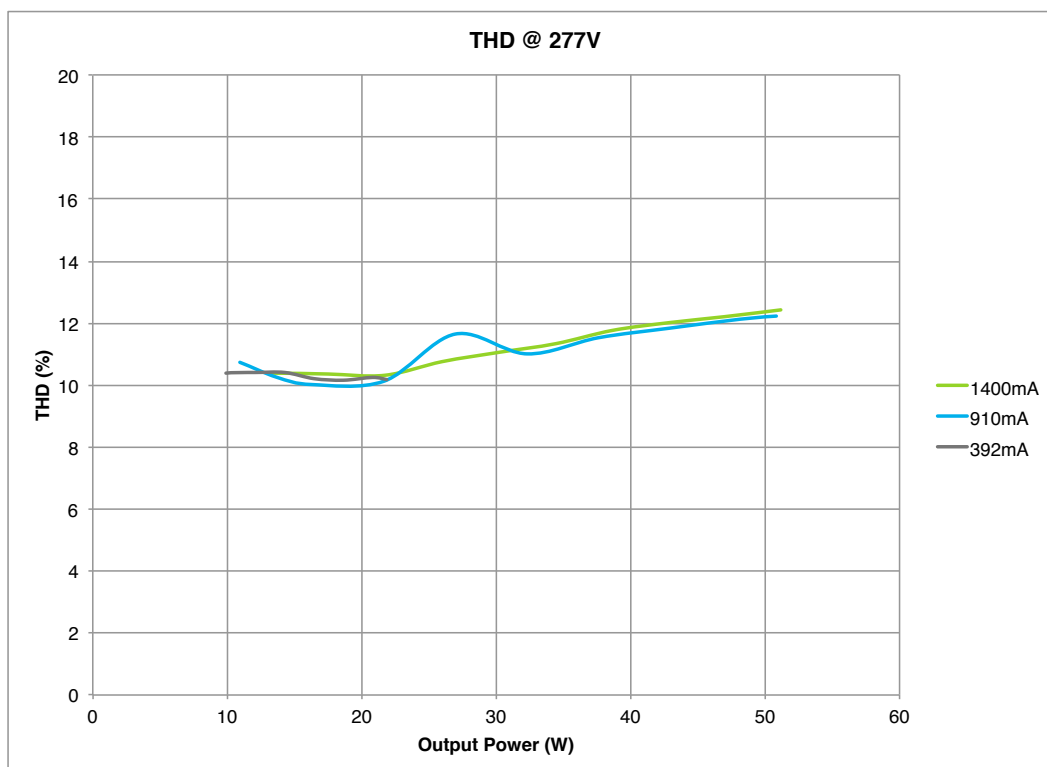
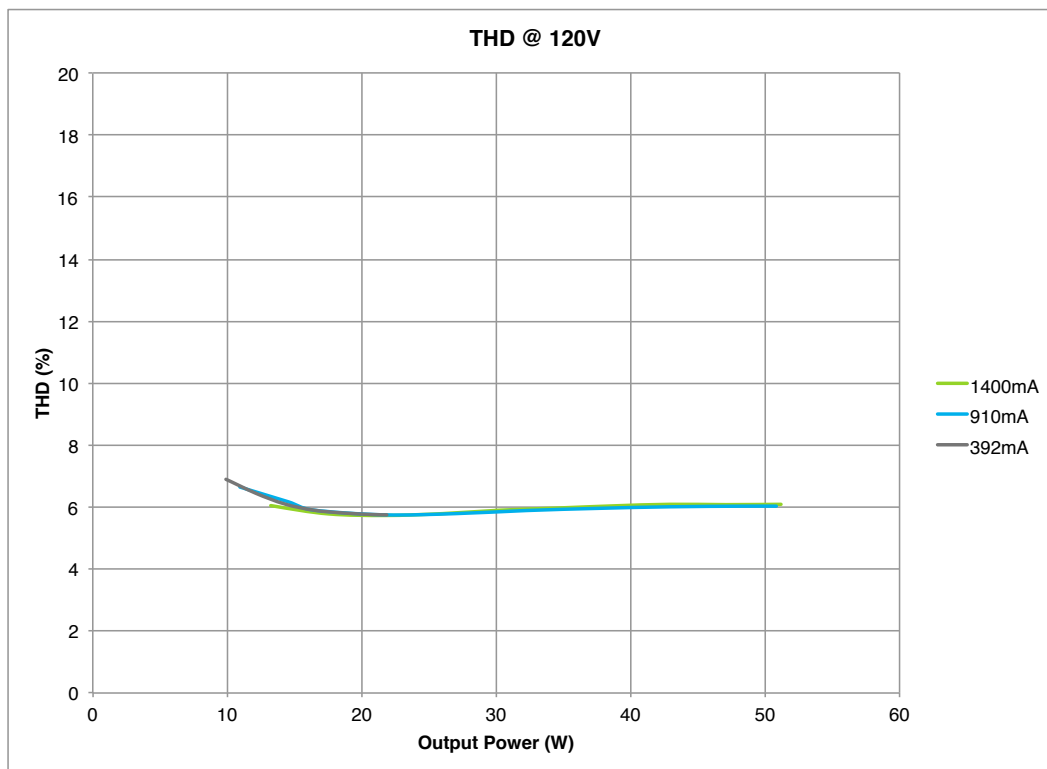
EFFICIENCY VS. OUTPUT VOLTAGE



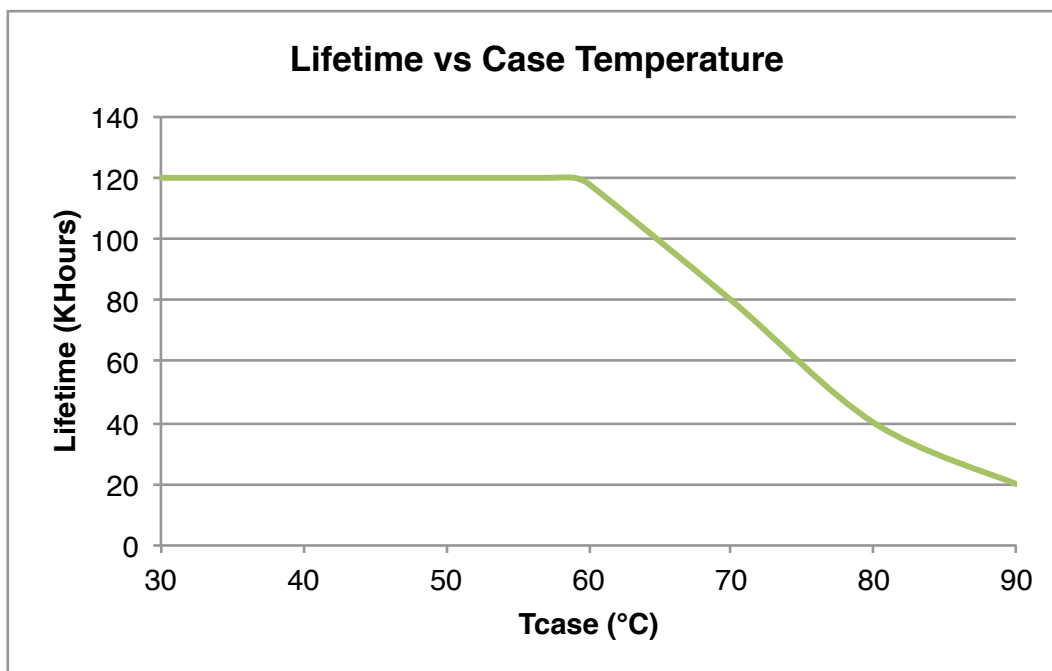
POWER FACTOR VS. LOAD



THD VS. LOAD



LIFETIME (FULL LOAD)



TL INFORMATION

Model Number	Tref Max	Measured Tref @ 40°C Ambient Temperature
XLC50-1400Z-UNV-I	90°C	51°C

INRUSH CHARACTERISTICS

Input Voltage Vin (Vrms)	I _{pk} (A)	T 50%pk (μS)
120	5.52	16
277	3.20	48