

LIGHTSPEED PRO

Powered by LUMLUX



Your clear **solution** for **optimal light coverage** and **uniformity** across the plant canopy

Distributed by

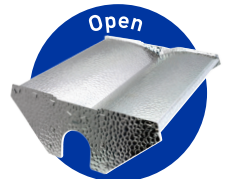
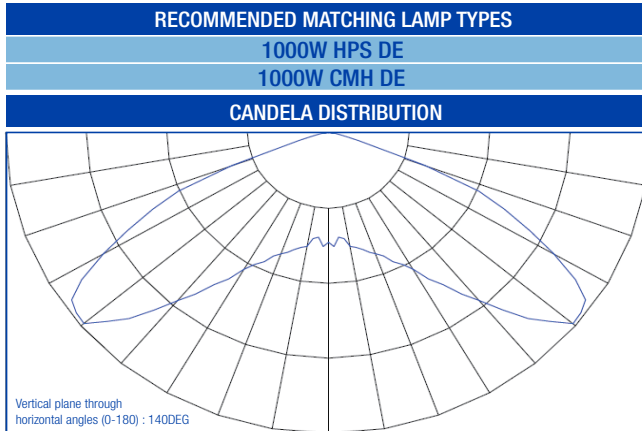


www.HydrotekHydroponics.com

Lightspeed PRO 1000W 347V

Dimmable DE Lighting System

Code 101345



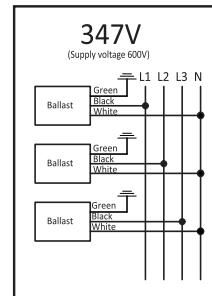
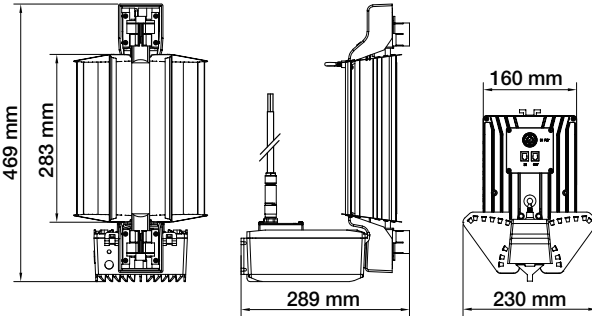
Highly Reflective Aluminum Casing



Die-Cast Aluminum Housing



Ballast with Communication Interface



SPECIFICATIONS

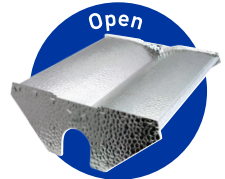
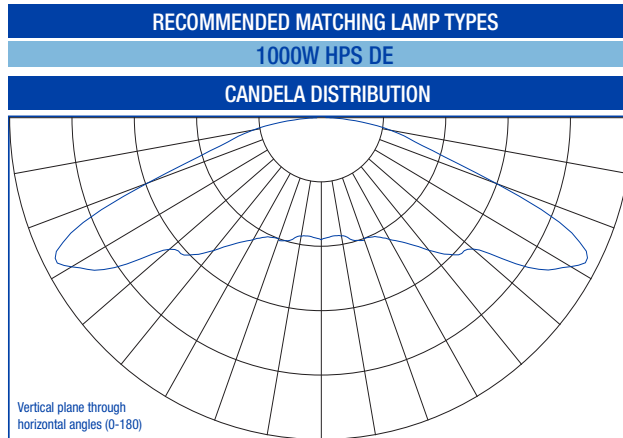
INPUT CHARACTERISTICS					
Parameters	Conditions	Min	Type	Max	Units
Mains Voltage	Operational Voltage	312	347	382	V
	Safe Voltage	295	347	399	
Mains Frequency f_{mains}	Operational Frequency	48	50/60	63	Hz
	Safe Frequency	45	50/60	66	
Mains Power P_{mains}	P=100%	979	1030	1082	W
	P=90%	881	927	974	
	P=80%	783	824	866	
	P=70%	685	721	758	
	P=60%	588	618	649	
Mains Current I_{mains}	$V_{mains} = 347V$	2.9	3.1	3.2	A
	$V_{mains} = 310V$	3.3	3.4	3.6	
Power Factor	P=1000W	0.97	0.98	--	--
THD	P=1000W	--	--	10%	--
Inrush Current	$V_{mains} = 347V$	--	--	30	A
Pulse Duration	$T_a = 25^{\circ}C$ cold start	--	--	0.8	ms

OUTPUT CHARACTERISTICS					
Parameters	Conditions	Min	Type	Max	Units
Lamp Frequency f_{lamp}	P=1000W	110	125	135	KHz
Efficiency(%)	P=1000W	95	96	--	--
Lamp Power P_{lamp}	P=100%	949	1000	1052	W
	P=90%	854	900	947	
	P=80%	759	800	842	
	P=70%	664	700	737	
Lamp Voltage	1000W DE	200	250	300	V
Ignition Voltage	$C_{load} < 100pF$	3000	4000	5000	V
Ignition Interval	--	--	1-5-5-5-5	--	Min

Lightspeed PRO 1000W 208-277V

Dimmable DE Lighting System

Code 101335



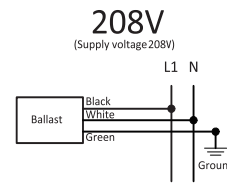
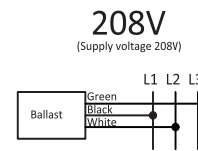
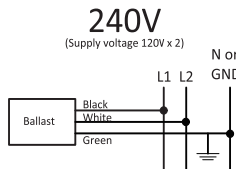
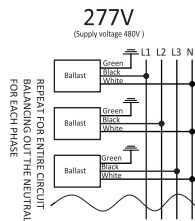
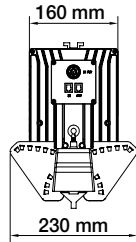
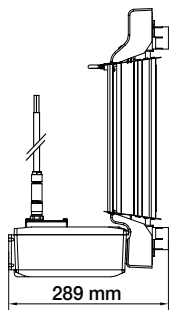
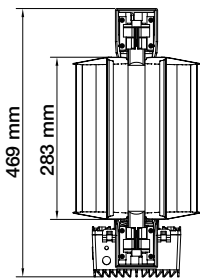
Highly Reflective Aluminum Casing



Die-Cast Aluminum Housing



Ballast with Communication Interface



SPECIFICATIONS

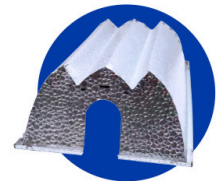
INPUT CHARACTERISTICS					
Parameters	Conditions	Min	Type	Max	Units
Mains Voltage	Operational Voltage	187	208-277	305	V
	Safe Voltage	177	208-277	319	
Mains Frequency f_{mains}	Operational Frequency	48	50/60	63	Hz
	Safe Frequency	45	50/60	66	
Mains Power P_{mains}	P=100%	979	1030	1082	W
	P=90%	881	927	974	
	P=80%	784	825	867	
	P=70%	685	721	758	
	P=60%	588	618	649	
Mains Current I_{mains}	$V_{mains} = 277V$	3.6	3.8	4.1	A
	$V_{mains} = 208V$	4.8	5.1	5.4	
	$V_{mains} = 185V$	5.4	5.7	6.1	
Power Factor	P=1000W	0.97	0.98	--	--
THD	P=1000W	--	--	10%	--
Inrush Current	$V_{mains} = 277V$	--	--	30	A
Pulse Duration	$T_a = 25^{\circ}C$ cold start	--	--	0.8	ms

Note: The certified current of this product is : 6.5A(208V)/4.8A(277V).

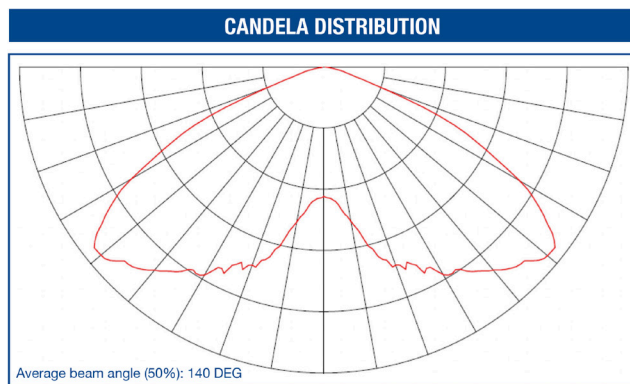
OUTPUT CHARACTERISTICS					
Parameters	Conditions	Min	Type	Max	Units
Lamp Frequency f_{lamp}	P=1000W	110	125	135	KHz
Efficiency(%)	P=1000W	95	96	--	
Lamp Power P_{lamp}	P=100%	949	1000	1052	W
	P=90%	854	900	947	
	P=80%	759	800	842	
	P=70%	664	700	737	
Lamp Voltage	1000W DE	200	250	300	V
Ignition Voltage	$C_{load} < 100pF$	3000	4000	5000	V
Ignition Interval	--	--	1-5-5-5-5	--	Min

Lightspeed PRO 630W 120-240V CMH Dimmable DE Lighting System

Code 101363



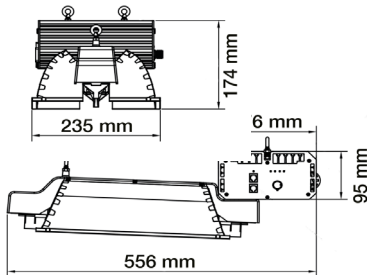
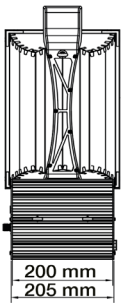
Highly Reflective Aluminum Casing



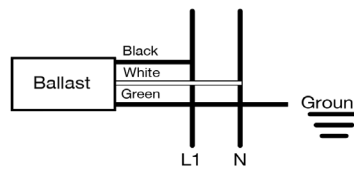
Die-Cast Aluminum Housing



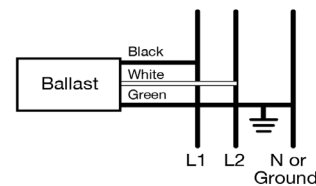
Ballast with Communication Interface



120V
(Supply voltage 120V)



240V
(Supply voltage 120 x 2)



SPECIFICATIONS

INPUT CHARACTERISTICS

Parameters	Conditions	Min	Type	Max	Units	
Mains Performance	Operational Performance	110	120-240	265	V	
	Operational Safety	100	120-240	275		
Mains Frequency f_{mains}	Operational Performance	48	50/60	63	Hz	
	Operational Safety	45	50/60	66		
Mains Power P_{mains}	P=100%	$V_{mains}=120V$	655	675	695	W
		$V_{mains}=240V$	640	660	680	
	P=90%	$V_{mains}=120V$	589	607	625	
		$V_{mains}=240V$	576	594	612	
	P=80%	$V_{mains}=120V$	523	540	557	
		$V_{mains}=240V$	511	528	545	
	P=70%	$V_{mains}=120V$	457	472	487	
		$V_{mains}=240V$	447	462	477	
	P=60%	$V_{mains}=120V$	393	405	417	
		$V_{mains}=240V$	384	396	408	
P=50%	$V_{mains}=120V$	326	337	348		
	$V_{mains}=240V$	319	330	341		
Mains Current I_{mains}	$V_{mains} = 240V$	2.6	2.7	2.8	A	
	$V_{mains} = 120V$	5.4	5.6	5.8		
	$V_{mains} = 110V$	5.9	6.1	6.3		
Power Factor	P=100%	0.97	0.98	--	--	
THD	P=100%	--	--	10%	--	
Inrush Current	$V_{mains} = 240V$	--	--	30	A	
Pulse Duration	$T_a=25^{\circ}C$, cold start	--	--	0.8	ms	

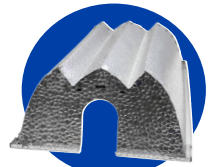
OUTPUT CHARACTERISTICS

Parameters	Conditions	Min	Type	Max	Units	
Lamp Frequency f_{lamp}	P=100%	195	205	215	Hz	
Efficiency(%)	P=100%	$V_{mains}=120V$	92	93	--	--
		$V_{mains}=240V$	94	95	--	--
Lamp Power P_{lamp}	P=100%	610	630	650	W	
	P=90%	549	567	585		
	P=80%	488	504	520		
	P=70%	427	441	455		
	P=60%	366	378	390		
P=50%	305	315	325			
Lamp Voltage	315 CMH	180	200	220	V	
Ignition Voltage	$C_{load}<100pF$	3000	4000	5000	V	
Ignition Interval	--	0.5-0.5-0.5-5-5-5-5-10			Min	

Lightspeed PRO 315W 277-347V

Dual CMH Dimmable Lighting System

Code 101321



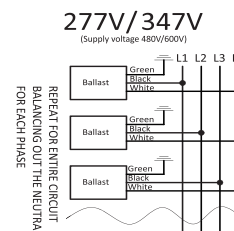
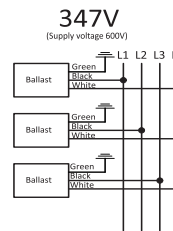
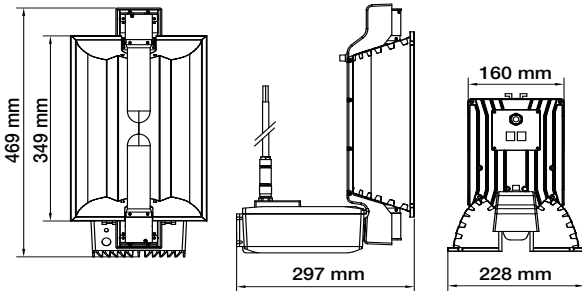
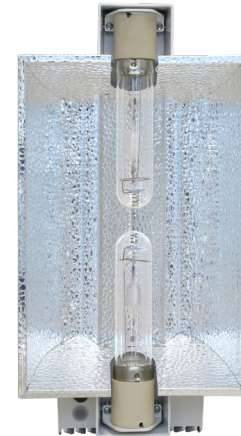
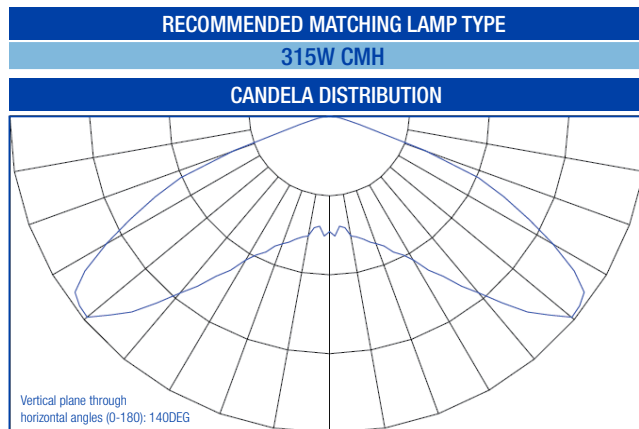
Highly Reflective Aluminum Casing



Die-Cast Aluminum Housing



Ballast with Communication Interface



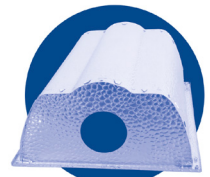
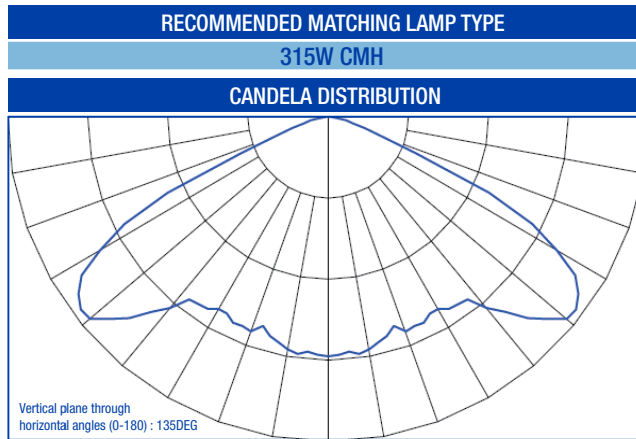
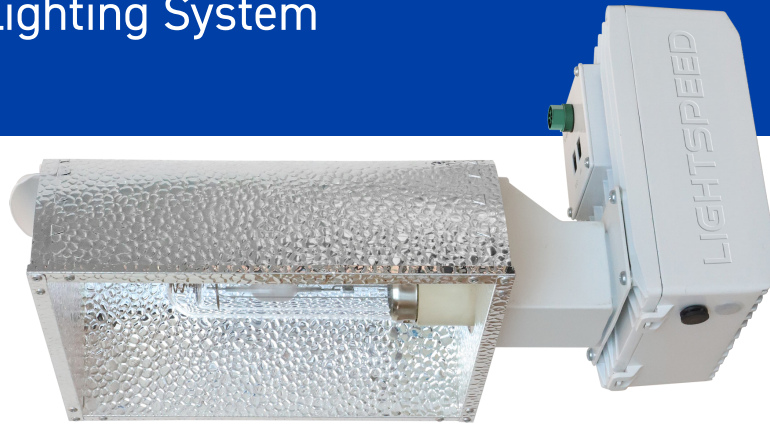
SPECIFICATIONS

INPUT CHARACTERISTICS					
Parameters	Conditions	Min	Type	Max	Units
Mains Voltage	Operational Voltage	249	277-347	382	V
	Safe Voltage	295	277-347	399	
Mains Frequency f_{mains}	Operational Frequency	48	50/60	63	Hz
	Safe Frequency	45	50/60	66	
Mains Power P_{mains}	P=100%	330*2	340*2	351*2	W
	P=90%	297*2	306*2	316*2	
	P=80%	264*2	272*2	281*2	
	P=70%	231*2	238*2	246*2	
	P=60%	198*2	204*2	211*2	
	P=50%	165*2	170*2	176*2	
Mains Current I_{mains}	$V_{mains}=347V$	1.8	2.0	2.1	A
	$V_{mains}=277V$	2.3	2.5	2.7	
	$V_{mains}=250V$	2.6	2.8	2.9	
Power Factor	P=100%	0.96	0.97	--	--
THD	P=100%	--	--	15%	--
Inrush Current	$V_{mains}=347V$	--	--	30	A
Pulse Duration	$T_a=25^{\circ}C$ cold start	--	--	0.8	ms

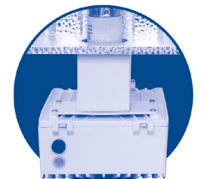
OUTPUT CHARACTERISTICS					
Parameters	Conditions	Min	Type	Max	Units
Lamp Frequency f_{lamp}	P=1000W	196	206	216	KHz
Efficiency (%)	P=1000W	91	92	--	--
Lamp Power P_{lamp}	P=100%	296*2	315*2	328*2	W
	P=90%	267*2	284*2	300*2	
	P=80%	235*2	252*2	269*2	
	P=70%	204*2	221*2	237*2	
	P=60%	173*2	189*2	206*2	
	P=50%	141*2	158*2	175*2	
Lamp Voltage	315W CMH	90	100	115	V
Ignition Voltage	$C_{load}<100pF$	3000	4000	5000	V
Ignition Interval	--	0.5-0.5-0.5-5-5-5-5-10			Min

Lightspeed PRO 315W 208-277V CMH Dimmable Lighting System

Code 101329



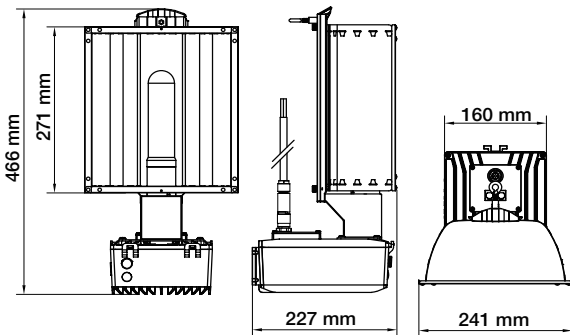
Highly Reflective Aluminum Casing



Die-Cast Aluminum Housing

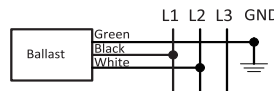


Ballast with Communication Interface



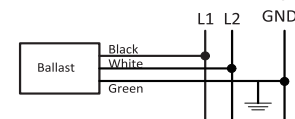
208V

(Supply voltage 208V)



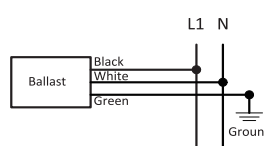
240V

(Supply voltage 120V x 2)



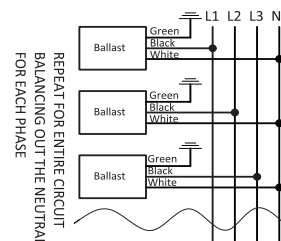
208V

(Supply voltage 208V)



277V

(Supply voltage 480V)



SPECIFICATIONS

INPUT CHARACTERISTICS

Parameters	Conditions	Min	Type	Max	Units
Mains Voltage	Operational Voltage	187	208-277	305	V
	Safe Voltage	177	208-277	319	
Mains Frequency f_{mains}	Operational Frequency	48	50/60	63	Hz
	Safe Frequency	45	50/60	66	
Mains Power P_{mains}	P=100%	331	342	353	W
	P=90%	297	308	319	
	P=80%	263	274	285	
	P=70%	230	241	252	
	P=60%	196	208	219	
	P=50%	163	174	185	
Mains Current I_{mains}	$V_{mains} = 277V$	1.2	1.3	1.4	A
	$V_{mains} = 208V$	1.6	1.7	1.8	
Power Factor	P=100%	0.96	0.97	--	--
THD	P=100%	--	--	15%	--
Inrush Current	$V_{mains} = 277V$	--	--	30	A
Pulse Duration	$T_a = 25^{\circ}C$, cold start	--	--	0.8	ms

Note: The certified current of this product is: 1.2A

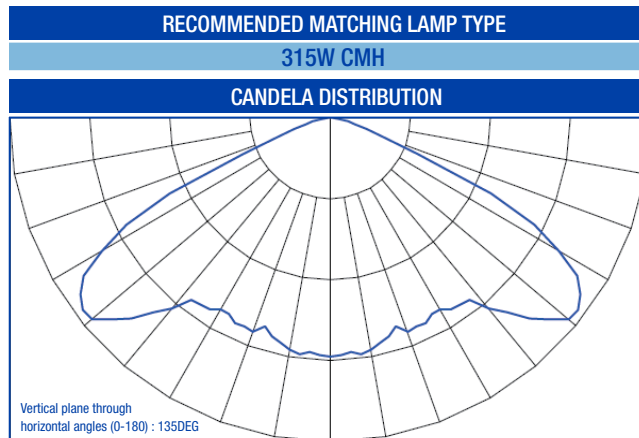
OUTPUT CHARACTERISTICS

Parameters	Conditions	Min	Type	Max	Units
Lamp Frequency f_{lamp}	P=100%	110	120	130	Hz
Efficiency(%)	P=100%	91	92	--	--
Lamp Power P_{lamp}	P=100%	306	315	324	W
	P=90%	274	284	293	
	P=80%	243	252	261	
	P=70%	211	221	230	
	P=60%	180	189	198	
Lamp Voltage	315 CMH	90	100	115	V
Ignition Voltage	$C_{load} < 100pF$	3000	4000	5000	V
Ignition Interval	--	0.5-0.5-0.5-5-5-5-5-10			Min

Lightspeed PRO 315W 347V

CMH Dimmable Lighting System

Code 101331



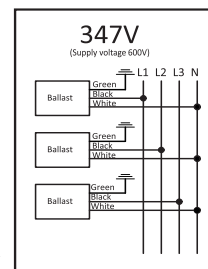
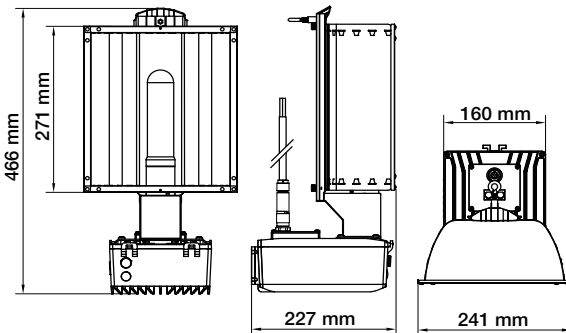
Highly Reflective Aluminum Casing



Die-Cast Aluminum Housing



Ballast with Communication Interface



SPECIFICATIONS

INPUT CHARACTERISTICS

Parameters	Conditions	Min	Type	Max	Units
Mains Voltage	Operational Voltage	312	347	382	V
	Safe Voltage	295	347	399	
Mains Frequency f_{mains}	Operational Frequency	48	50/60	63	Hz
	Safe Frequency	45	50/60	66	
Mains Power P_{mains}	P=100%	315	334	347	W
	P=90%	284	301	317	
	P=80%	256	267	278	
	P=70%	217	234	250	
	P=60%	184	200	217	
	P=50%	150	167	184	
	Mains Current I_{mains}	$V_{mains} = 347V$	0.94	1.0	
$V_{mains} = 295V$		1.1	1.2	1.3	
Power Factor	P=100%	0.96	0.97	--	--
THD	P=100%	--	--	15%	--
Inrush Current	$V_{mains} = 347V$	--	--	30	A
Pulse Duration	$T_a = 25^{\circ}C$, cold start	--	--	0.8	ms

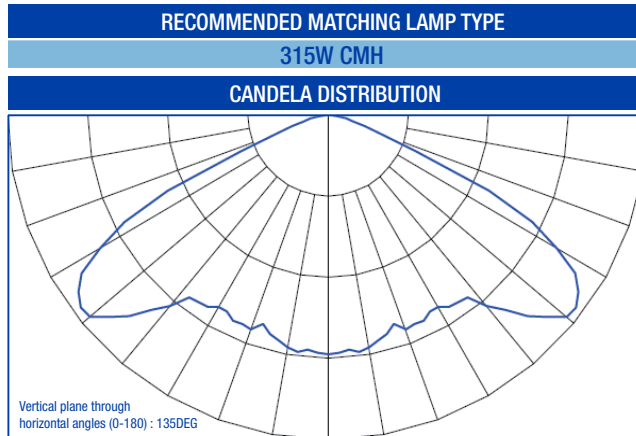
Note: The certified current of this product is: 1.2A

OUTPUT CHARACTERISTICS

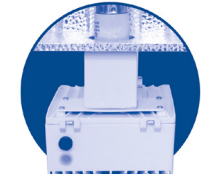
Parameters	Conditions	Min	Type	Max	Units
Lamp Frequency f_{lamp}	P=100%	196	206	216	Hz
Efficiency(%)	P=100%	91	92	--	--
Lamp Power P_{lamp}	P=100%	296	315	328	W
	P=90%	267	284	300	
	P=80%	235	252	269	
	P=70%	205	221	238	
	P=60%	173	189	206	
	P=50%	141	158	175	
Lamp Voltage	315 CMH	90	100	115	V
Ignition Voltage	$C_{load} < 100pF$	3000	4000	5000	V
Ignition Interval	--	0.5-0.5-0.5-5-5-5-5-10			Min

Lightspeed PRO 315W 120-240V CMH Dimmable Lighting System

Code 101319



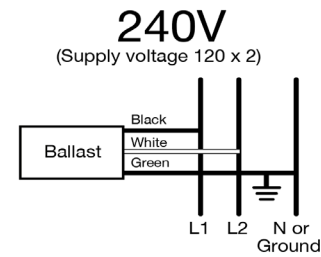
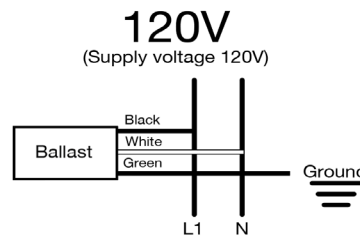
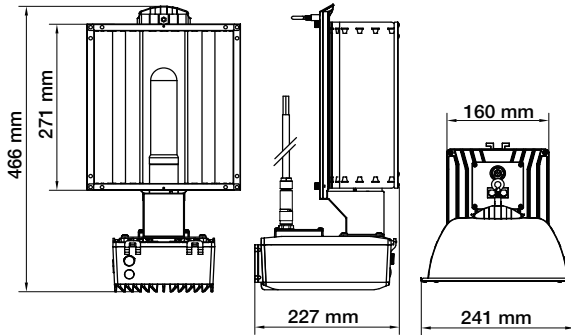
Highly Reflective Aluminum Casing



Die-Cast Aluminum Housing



Ballast with Communication Interface



SPECIFICATIONS

INPUT CHARACTERISTICS

Parameters	Conditions	Min	Type	Max	Units
Mains Voltage	Operational Voltage	108	120-240	264	V
	Safe Voltage	102	120-240	276	
Mains Frequency f_{mains}	Operational Frequency	48	50/60	63	Hz
	Safe Frequency	45	50/60	66	
Mains Power P_{mains}	P=100%	331	342	353	W
	P=90%	297	308	319	
	P=80%	263	274	285	
	P=70%	230	241	252	
	P=60%	196	208	219	
	P=50%	163	174	185	
	Mains Current I_{mains}	$V_{mains} = 347V$	1.4	1.5	
	$V_{mains} = 295V$	2.8	2.9	3.1	
Power Factor	P=100%	0.97	0.98	--	--
THD	P=100%	--	--	10%	--
Inrush Current	$V_{mains} = 347V$	--	--	30	A
Pulse Duration	$T_a = 25^{\circ}C$, cold start	--	--	0.8	ms

OUTPUT CHARACTERISTICS

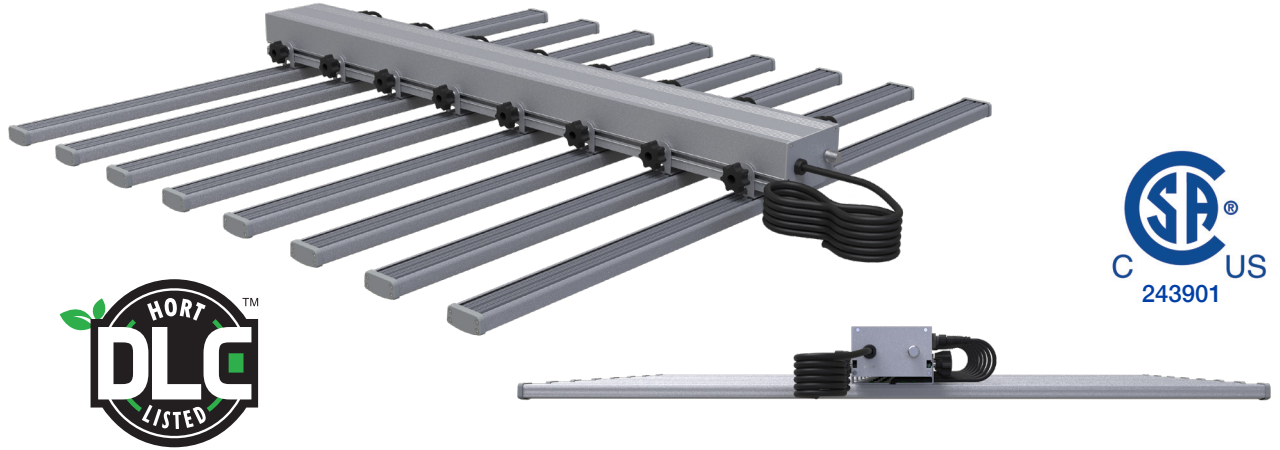
Parameters	Conditions	Min	Type	Max	Units
Lamp Frequency f_{lamp}	P=100%	110	120	130	Hz
Efficiency(%)	P=315W	90	92	--	--
Lamp Power P_{lamp}	P=100%	306	315	324	W
	P=90%	274	284	293	
	P=80%	243	252	261	
	P=70%	211	221	230	
	P=60%	180	189	198	
	P=50%	148	158	167	
Lamp Voltage	315 CMH	90	100	115	V
Ignition Voltage	$C_{load} < 100pF$	3000	4000	5000	V
Ignition Interval	--	0.5-0.5-0.5-5-5-5-5-10			Min

Note: The certified current of this product is :1.7A(240V)3.4A(120V).

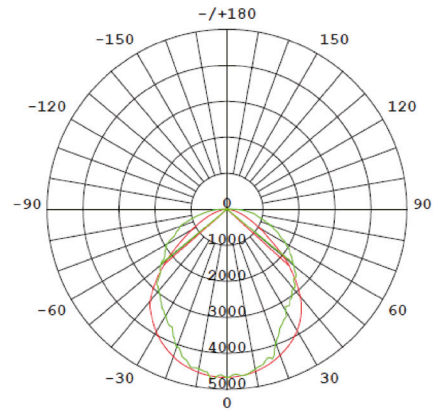
Lightspeed PRO 600W 100-277V - Code 107656

Lightspeed PRO 600W 347V - Code 107676

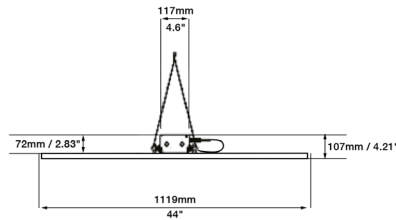
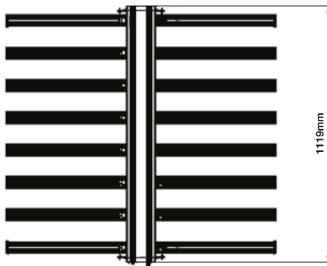
LED Dimmable Cosmic Plus Lighting Systems



CANDELA DISTRIBUTION



DIMENSIONS



SPECIFICATIONS

Parameter	Typical Value	Input Voltage	100-277 VAC, 50-60Hz (code 107656) 347 VAC, 50-60Hz (code 107676)
Power	600W	Light Efficiency	2.6 μmol/J
Power Factor	>0.95	Dimming	0-25%-50%-75%-100%
PPF	1482 μmol/s	Light Angle	110°
Spectrum	R/W	Connect Way	Wire Input
IP Grade	IP54	Life Span	>50,000H
Net Weight	17.5kg	Work Temperature	-20°C - +40°C
Mounting Height	>30cm Above Canopy	Certifications	CSA/IC

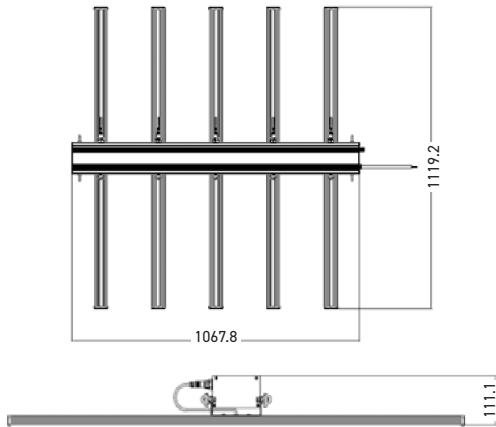
Lightspeed PRO 400W 100-277V

LED Dimmable Cosmic Plus Lighting Systems

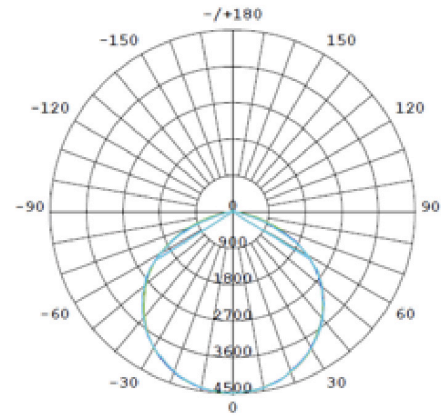
Code 107655



DIMENSIONS



CANDELA DISTRIBUTION



SPECIFICATIONS

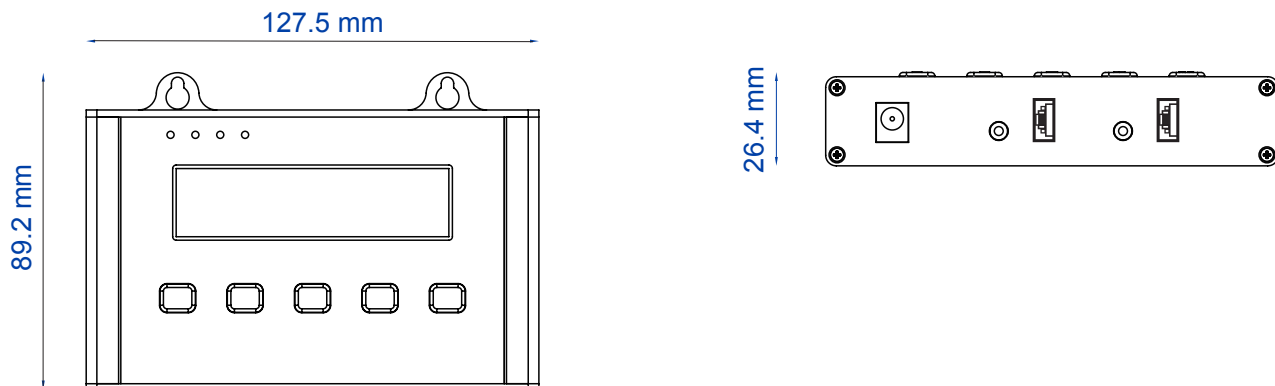
Parameter	Typical Value	Input Voltage	100-277 VAC, 50-60Hz
Power	400W	Light Efficiency	2.6 $\mu\text{mol}/\text{J}$
Power Factor	>0.95	Dimming	0-25%-50%-75%-100%
PPF	920 $\mu\text{mol}/\text{s}$	Light Angle	120°
Spectrum	R/W	Connect Way	Cable
IP Grade	IP54	Life Span	>50,000H
Net Weight	15kg	Work Temperature	-20°C - +40°C
Mounting Height	>30cm Above Canopy	Certifications	CSA/IC

Lightspeed PRO HID & LED Universal Digital Lighting Controller

Code 101600



DIMENSIONS



SPECIFICATIONS

Parameter	Conditions	Min	Type	Max	Units
Mains Performance	Operational Performance	110	120-240	265	V
	Operational Safety	100	120-240	275	
Mains Frequency f_{mains}	Operational Performance	47.5	50/60	63	Hz
	Operational Safety	45	50/60	66	
Mains Power	$V_{cc}=5V$	--	--	200	mA
V_{cc}	--	4.5	5	5.5	V
Control quantity	ZONE A / ZONE B	0	--	200/50	PCS
Temperature	Dimming	0	--	40	°C
	OFF	10	--	50	°C

Environment	Conditions	Operating	Storage
	Temperature		0°C -- +40 °C
Humidity (25 °C)		20% -- 90 %, non-condensing	10% -- 95 %, non-condensing
Waterproof and dustproof		IP20	
Dielectric withstand Voltage (HI -POT)		Communication line to GND: 500Vac/60S 5.5m Amax	

LIGHTSPEED PRO

Powered by LUMLUX



Manufactured by LUMLUX

Distributed by Hydrotek Hydroponics
Mirabel, QC, Canada J7J 2K4
www.HydrotekHydroponics.com