

# XTRASUN<sup>®</sup> DE

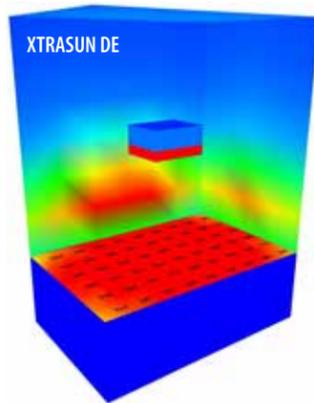
## DOUBLE-ENDED LIGHTING SYSTEM

The Xtrasun DE Lighting System delivers more plant-usable light per square meter than any other system in its class.

For more information, visit [Xtrasun.com](http://Xtrasun.com).

### TEST PARAMETERS – Single DE Fixture

- 4' x 6' measurement area
- 54 measurement points
- 3.5' between measurement area and bottom of reflector
- 40% reflectance on walls and ceiling
- 20% reflectance on floors
- All lamps seasoned 100 hours per internationally recognized testing procedures



## XTRASUN DE

Double-Ended Lighting System (XTDEKT1)

<b>440</b> AVERAGE μmol/s/m <sup>2</sup>	MIN	<b>326</b>	'326 '396 '440 '444 '435 '442 '439 '402 '351
	MAX	<b>515</b>	'374 '429 '468 '472 '463 '471 '468 '425 '373
	AVG/MIN	<b>1.35</b>	'403 '464 '512 '515 '505 '515 '512 '462 '403
	MAX/MIN	<b>1.58</b>	'402 '461 '511 '514 '504 '514 '510 '462 '401
			'375 '424 '471 '474 '465 '473 '471 '430 '371
			'344 '387 '427 '429 '421 '428 '427 '391 '341

**ILUMINAR**

<b>292</b> AVERAGE μmol/s/m <sup>2</sup>	MIN	<b>251</b>	'251 '269 '271 '274 '277 '274 '272 '270 '265
	MAX	<b>334</b>	'283 '290 '291 '295 '300 '294 '291 '287 '282
	AVG/MIN	<b>1.16</b>	'306 '315 '321 '327 '334 '326 '320 '313 '306
	MAX/MIN	<b>1.33</b>	'305 '312 '320 '326 '333 '326 '319 '312 '304
			'284 '287 '293 '297 '302 '297 '293 '289 '281
			'260 '260 '263 '265 '269 '265 '263 '261 '257

**NANOLUX**

<b>278</b> AVERAGE μmol/s/m <sup>2</sup>	MIN	<b>229</b>	'229 '245 '259 '280 '295 '281 '261 '248 '242
	MAX	<b>353</b>	'253 '261 '276 '302 '318 '302 '276 '259 '253
	AVG/MIN	<b>1.22</b>	'266 '277 '300 '334 '353 '333 '299 '275 '266
	MAX/MIN	<b>1.54</b>	'265 '275 '300 '333 '352 '333 '299 '275 '265
			'253 '258 '276 '304 '320 '304 '279 '261 '252
			'238 '239 '252 '271 '284 '271 '252 '241 '236

**Generic Import DE**

<b>258</b> AVERAGE μmol/s/m <sup>2</sup>	MIN	<b>154</b>	'154 '196 '245 '299 '333 '299 '247 '201 '169
	MAX	<b>396</b>	'180 '215 '264 '322 '357 '321 '263 '212 '180
	AVG/MIN	<b>1.68</b>	'195 '233 '291 '357 '396 '356 '289 '231 '195
	MAX/MIN	<b>2.57</b>	'195 '231 '290 '355 '395 '355 '290 '232 '195
			'181 '212 '264 '323 '360 '324 '268 '216 '179
			'164 '191 '237 '289 '322 '289 '239 '194 '163

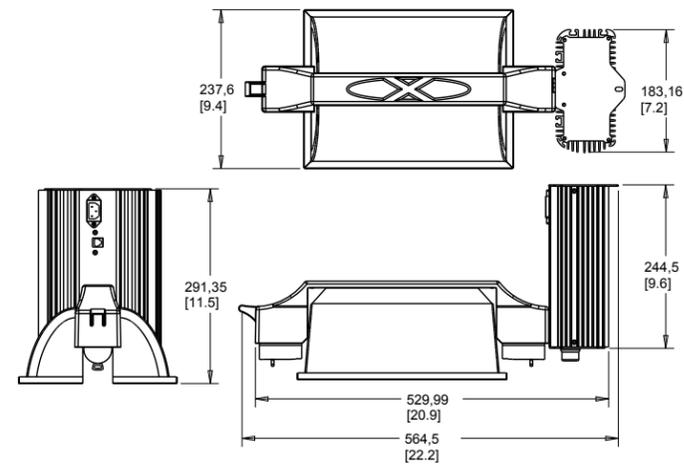


## XTRASUN DE 1000W ENCLOSED LIGHTING SYSTEM (XTDEKT1)

The ballast model included in this system features rugged build quality, multi-aspect protection circuitry, and variable wattage output that offers several choices on a range from 600W to 1150W using 1000W DE lamps.

Rounding out this kit are our Xtrasun enclosed double-ended reflector and a high-PAR Xtrasun DE high-pressure sodium lamp.

- High μmol/s output DE lamp
- Revised reflector design constructed out of 95% reflective European aluminum (*coming soon*)
- 600W, 750W, 825W, 1000W, 1150W, EXT Setting
- Integrates with Xtrasun Lighting Controller (*coming soon, sold separately*)



### SPECIFICATIONS

Rated Wattage:	1000W
Main Voltage:	240V 50/60 Hz
Input Amperage:	5.06A @ Imax 5.06A @ 1150W 4.6A @ 1000W 3.91A @ 825W 3.48A @ 750W 2.86A @ 600W
Lamp:	High μmol/s output 1000W DE HID
Socket Type:	K12 x 30s
Lamp Position:	Horizontal
Reflector:	Xtrasun v2.0 reflector
Ballast Type:	Xtrasun 1000W DE
Dimensions:	24"L x 13.6"W x 11.4"H

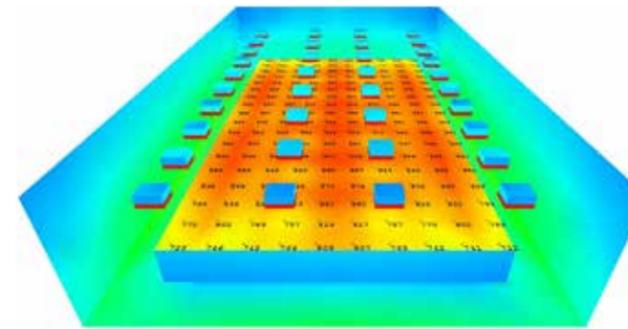


### TEST PARAMETERS – 36 DE Fixtures

- 19.5' x 35' measurement area
- 180 measurement points
- 3.6' between measurement area and bottom of reflector
- 80% reflectance on walls & ceiling
- 20% reflectance on floors
- All lamps seasoned 100 hours per internationally recognized testing procedures

## XTRASUN DE

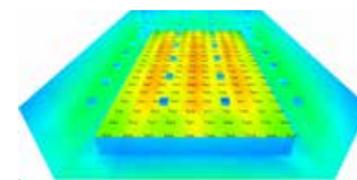
Double-Ended Lighting System (XTDEKT1)



<b>838</b> AVERAGE μmol/s/m <sup>2</sup>	MIN	<b>722</b>
	MAX	<b>913</b>
	AVG/MIN	<b>1.16</b>
	MAX/MIN	<b>1.26</b>

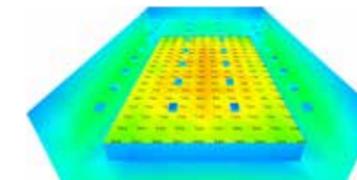
**ILUMINAR**

<b>777</b> AVERAGE μmol/s/m <sup>2</sup>	MIN	<b>624</b>
	MAX	<b>870</b>
	AVG/MIN	<b>1.25</b>
	MAX/MIN	<b>1.39</b>



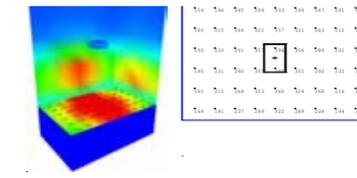
**NANOLUX**

<b>749</b> AVERAGE μmol/s/m <sup>2</sup>	MIN	<b>620</b>
	MAX	<b>828</b>
	AVG/MIN	<b>1.21</b>
	MAX/MIN	<b>1.34</b>



**Generic Import DE**

<b>629</b> AVERAGE μmol/s/m <sup>2</sup>	MIN	<b>489</b>
	MAX	<b>738</b>
	AVG/MIN	<b>1.29</b>
	MAX/MIN	<b>1.51</b>



Hydrofarm  
DE Lighting Systems  
consistently  
**outperform**  
the competition  
on every level!

## PHANTOM DE

### DOUBLE-ENDED LIGHTING SYSTEM



## XTRASUN<sup>®</sup> DE

### DOUBLE-ENDED LIGHTING SYSTEM



# PHANTOM DE

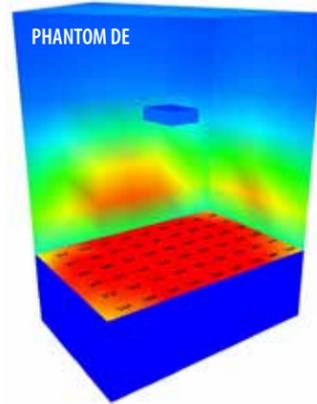
## DOUBLE-ENDED LIGHTING SYSTEM

Independent testing has proven that Phantom DE systems deliver more plant-usable light per square meter than any other systems in their class.

For more information, visit [PhantomBallast.com](http://PhantomBallast.com).

### TEST PARAMETERS – Single DE Fixture

- 4' x 6' measurement area
- 54 measurement points
- 3.5' between measurement area and bottom of reflector
- All data based on accredited independent photometric lab testing
- 40% reflectance on walls and ceiling
- 20% reflectance on floors
- All lamps seasoned 100 hours per internationally recognized testing procedures

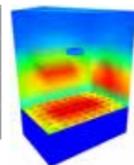


### PHANTOM DE Double-Ended Lighting Systems

<b>449</b> AVERAGE $\mu\text{mol/s/m}^2$	MIN	<b>329</b>
	MAX	<b>556</b>
	AVG/MIN	<b>1.36</b>
	MAX/MIN	<b>1.69</b>

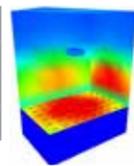
'329	'394	'439	'455	'460	'455	'441	'401	'355
'377	'428	'470	'491	'497	'490	'469	'424	'377
'406	'463	'517	'545	'556	'544	'515	'460	'408
'405	'459	'514	'542	'554	'542	'514	'459	'405
'378	'422	'471	'493	'501	'494	'473	'427	'375
'349	'386	'426	'441	'445	'442	'426	'388	'344

<b>301</b> AVERAGE $\mu\text{mol/s/m}^2$	MIN	<b>226</b>
	MAX	<b>360</b>
	AVG/MIN	<b>1.33</b>
	MAX/MIN	<b>1.59</b>



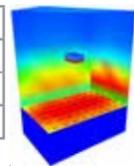
'226	'266	'294	'301	'297	'301	'296	'271	'243
'258	'290	'317	'324	'319	'324	'317	'287	'258
'279	'316	'351	'360	'354	'360	'350	'314	'280
'278	'313	'349	'359	'353	'359	'349	'313	'278
'259	'286	'319	'327	'322	'327	'319	'291	'257
'238	'260	'286	'292	'288	'292	'285	'262	'235

<b>339</b> AVERAGE $\mu\text{mol/s/m}^2$	MIN	<b>251</b>
	MAX	<b>441</b>
	AVG/MIN	<b>1.35</b>
	MAX/MIN	<b>1.76</b>



'251	'292	'325	'351	'367	'352	'327	'296	'268
'284	'315	'347	'377	'396	'376	'347	'312	'284
'305	'341	'381	'417	'441	'416	'379	'339	'306
'304	'337	'379	'415	'439	'415	'379	'338	'304
'284	'311	'348	'379	'399	'380	'350	'315	'282
'263	'286	'316	'341	'356	'342	'317	'287	'260

<b>355</b> AVERAGE $\mu\text{mol/s/m}^2$	MIN	<b>290</b>
	MAX	<b>402</b>
	AVG/MIN	<b>1.22</b>
	MAX/MIN	<b>1.39</b>

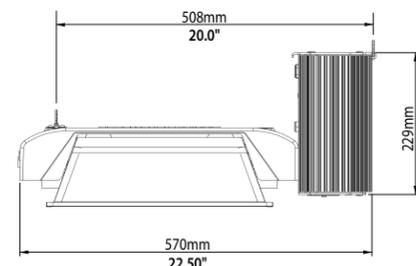
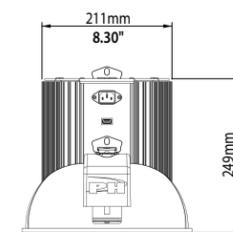
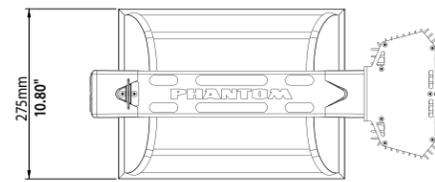
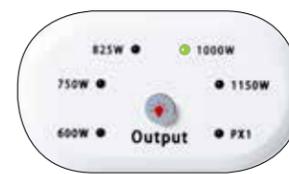


'290	'327	'343	'340	'333	'339	'343	'330	'311
'332	'354	'366	'364	'358	'363	'364	'350	'330
'359	'382	'400	'402	'398	'400	'398	'380	'358
'358	'379	'398	'400	'397	'400	'398	'379	'356
'333	'349	'366	'366	'362	'366	'367	'351	'329
'304	'318	'333	'329	'324	'329	'332	'320	'300



### PHANTOM DE 50 SERIES 1000W ENCLOSED LIGHTING SYSTEMS

- Independent laboratory tested to deliver more  $\mu\text{mol/s/m}^2$
- 2100  $\mu\text{mol/s}$  European-made DE lamp
- Patented PHRS1 reflector constructed from 95% reflective European aluminum
- Microprocessor controlled Smart Ballast
- 600W, 750W, 825W, 1000W, 1150W, PX1 settings
- USB interface controls up to 512 Phantoms with the Autopilot PX1 Digital Lighting Controller (*sold separately*)
- Proven reputation of reliability
- Internal RF shielding
- End of lamp life signal
- Auto-restrike feature protects valuable lamps from damaging power interruptions
- Includes all necessary cables for PX1 use



### SPECIFICATIONS



Item Code	Voltage	INPUT AMPERAGE						Ballast Type	Dimensions
		I <sub>max</sub>	1150W	1000W	825W	750W	600W		
PHDESK11	208V/240V	6.0/5.3A	5.8/5.1A	5.1/4.4A	4.2/3.7A	3.9/3.3A	3.1/2.7A	Phantom DE Smart Ballast (PHB5015)	22.5" L x 10.8" W x 9.8" H
PHDESK12	120V/240V	10.5/5.3A	10.2/5.1A	8.9/4.5A	7.4/3.7A	6.7/3.3A	5.4/2.7A	Phantom DE Smart Ballast (PHB5015)	22.5" L x 10.8" W x 9.8" H
PHDESK13	277V	4.6A	4.4A	3.8A	3.2A	2.9A	2.3	Phantom DE Smart Ballast (PHB5020)	22.5" L x 10.8" W x 9.8" H
PHDESK15	480V	2.6A	2.5A	2.2A	1.8A	1.6A	1.3A	Phantom DE Smart Ballast (PHB5030)	22.5" L x 10.8" W x 9.8" H

### Autopilot PX1 Digital Lighting Controller (APDPX1 – sold separately)

- Control up to 512 Phantom ballasts
- 2 independent zones—256 ballasts per zone
- 2 temperature sensors
- Wattage output control
- Automated temperature-based dimming
- Emergency shutdown when temperature exceeds user defined set points
- Sunrise/sunset



For more information, visit [AutopilotControllers.com](http://AutopilotControllers.com).

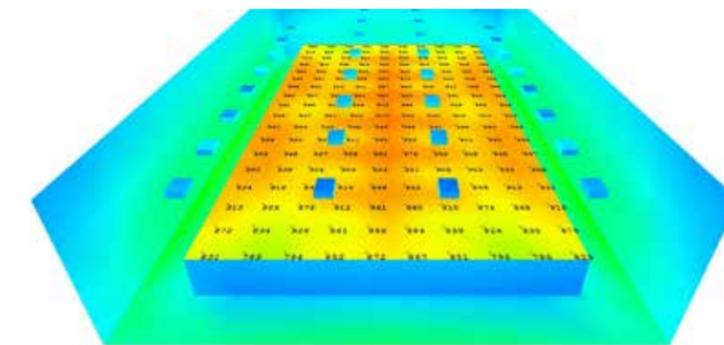
**Phantom 50 Series Truss Hangers (PHDETH1 – sold separately)**  
Designed to easily mount your Phantom fixture from Unistrut® or greenhouse C-channel strut for secure, level suspension.



### TEST PARAMETERS – 36 DE Fixtures

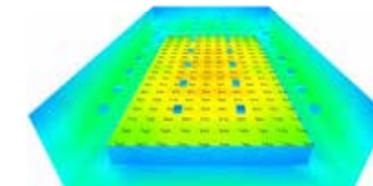
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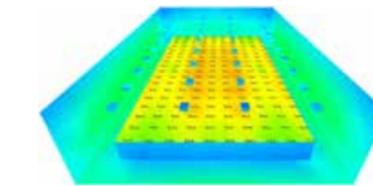


<b>912</b> AVERAGE $\mu\text{mol/s/m}^2$	MIN	<b>785</b>
	MAX	<b>988</b>
	AVG/MIN	<b>1.16</b>
	MAX/MIN	<b>1.26</b>

<b>842</b> AVERAGE $\mu\text{mol/s/m}^2$	MIN	<b>695</b>
	MAX	<b>935</b>
	AVG/MIN	<b>1.21</b>
	MAX/MIN	<b>1.35</b>



<b>881</b> AVERAGE $\mu\text{mol/s/m}^2$	MIN	<b>730</b>
	MAX	<b>976</b>
	AVG/MIN	<b>1.21</b>
	MAX/MIN	<b>1.34</b>



<b>881</b> AVERAGE $\mu\text{mol/s/m}^2$	MIN	<b>708</b>
	MAX	<b>967</b>
	AVG/MIN	<b>1.24</b>
	MAX/MIN	<b>1.37</b>

