## HORTICULTURE SOLUTIONS

The Luminus horticulture portfolio spans the spectrum from UV-A to Near Infrared Red. And because the illumination needs for crops vary, our SST family features two different beam angles: 90-degree and 120/130-degree so that the right solution can be implemented for each crop.

Luminus' 450nm deep-blue and 660nm deep-red LEDs are used to provide light for photosynthesis. The 730nm far-red is used for a plant's life-cycle from germination to vegetative growth and flowering. To make a more comfortable working environment for people, Luminus offers a horticulture white LED that can also be used to increase blue spectrum and broaden the engineering options.

Horticulture COBs are the most recent addition to Luminus' offering. These application specific COBs provide high PPF in a custom spectrum suited for indoor lighting of specific crops.

Luminus COB and mid-power LEDs offer extensive options that are the perfect solutions for supplemental lighting or for applications where PPF/W/\$ is the key metric.



SMD Series

			SST SERIES SELECTOR GUIDE					
Product Image	Product	Color	Package	Max Drive Current	Optical Output			
	SST-10-UV ()	365 nm 385 nm 395 nm 405 nm	SMT 3.45 mm x 2.45 mm	1.0 A	0.7 W - 0.9 W 0.9 W - 1.2 W 0.9 W - 1.2 W 0.9 W - 1.0 W			
9	\$\$T-10-B	Blue (450 nm)	SMT 3.45 mm x 3.45 mm	1.5 A	510 - 670 mW (0.85 A)			
9	\$\$T-20-B	Blue (450 nm)	SMT 3.45 mm x 3.45 mm	2.0 A	620 - 820 mW (0.35 A)			
<b>\$</b>	SST-10-SB	Sky Blue (470 nm)	SMT 3.45 mm x 3.45 mm	1.5 A	470 - 590 mW (0.35 A)			
	SST-10-G	Green (527 nm)	SMT 3.45 mm x 3.45 mm	1.5 A	190 - 350 mW (0.35 A)			
	SST-10-R	Red (621 nm)	SMT 3.45 mm × 3.45 mm	1.5 A	230 - 390 mW (0.35 A)			
	SST-10-DR	Deep Red (660 nm)	SMT 3.45 mm x 3.45 mm	1.5 A	270 - 480 mW (0.85 A)			
	SST-20-DR	Deep Red (660 nm)	SMT 3.45 mm x 3.45 mm	2.0 A	790 - 990 mW (0.70 A) 870 - 1070 mW (0.70 A)			
•	\$3T-20-DR Gen 2	Deep Red (660 nm)	SMT 3.45 mm x 3.45 mm	2.0 A				
	SST-10-FR	Far Red (730 nm)	SMT 3.45 mm x 3.45 mm	1.5 A	270 - 390 mW (0.35 A)			
<b>\limits</b>	SST-20-WxS U	5000 – 6500 K White, Standard CRI	SMT 3.45 mm x 3.45 mm	3 A	900 - 1100 lm (8 A)			
<b>*</b>	SST-20-WxH I	2700 - 4000 K White, 95 CRI	SMT 3.45 mm × 3.45 mm	2 A	155 - 320 Im (700 mA)			

	COB SERIES SELECTOR GUIDE						
Product Image	Product	Color	Package	Max Drive Current	Optical Output		
	CXM-14	Purple	COB package 19 mm * 19 mm (AC) 14.2 mm LES	1,440 mA	40 - 72 (µmol/s)		
	CXM-14	Plant White	COB package 19 mm * 19 mm (AC) 14.2 mm LES	1,440 mA	40 - 72 (µmol/s)		
	CLM-22	Purple	COB package 20 mm * 20 mm (AC) 22 mm LES	2,200 mA	60 - 115 (µmol/s)		
<u> </u>	CLM-22	Plant White	COB package 28 mm * 28 mm (AC) 22 mm LES	2,200 mA	60 – 115 (µmel/s)		
	CXM-22	Purple	COB package 28 mm * 28 mm (AC) 22 mm LES	2,200 mA	90 – 165 (µmol/s)		
	CXM-22	Plant White	COB package 28 mm * 28 mm (AC) 22 mm LES	2,200 mA	90 = 165 (µmol/s)		
	CXM-92	Plant White	COB package 38 mm * 38 mm (AC) 32 mm LES	4,400 mA	200 – 360 (µmal/s)		
			MIDPOWER SERIES SELECTOR GUIDE				
Product Image	Package Platform	Voltage (V) Cur	rent (mA) Input Power (W)	TYP FLUX (I 3000k, 800	lm), TYP lm/W, RI 3000k, 80CRI		
<b>•</b>	NEW MP-2020-110H	2.8	65 0.182	88	181		
•	NEW MP-9090-12ZH	2.67	65 0.178	33.5	192		
•	NEW MP-9090-210H	6.0	150 0.9	140	156		
<b>*</b> •	MP-5050-8100	24	200 4.8	630	131		
135 degree	NEW CUBE-1616-1103	\$.0	150 0.45	62	198		
135 degree	NEW CUBE-1616-2103	6.0	150 1.0	118	131		



## Mid Power Series

			SST SERIES SELECTOR GUII	DE		
Product Image	Product	Color	Package	Max Drive Current	Optical Output	
	\$\$7-10-UV <u>I</u>	365 nm 385 nm 395 nm 405 nm	SMT 3.45 mm x 3.45 mm	1.0 A	0.7 W - 0.9 W 0.9 W - 1.2 W 0.9 W - 1.2 W 0.8 W - 1.0 W	
	SST-10-B	Blue (450 nm)	SMT 3.45 mm x 3.45 mm	1.5 A	510 - 670 mW (0.35 A)	
	\$\$T-20-B	Blue (450 nm)	SMT 3.45 mm x 3.45 mm	3.0 A	620 - 920 mW (0.25 A)	
<b>\$</b>	SST-10-SB	Sky Blue (470 nm)	SMT 3,45 mm x 3,45 mm	1.5 A	470 - 590 mW (0.35 A)	
	SST-10-G	Green (527 nm)	SMT 3.45 mm x 3.45 mm	1.5 A	190 - 350 mW (0.35 A)	
	\$\$T-10-R	Red (621 nm)	SMT 3.45 mm x 3.45 mm	1.5 A	280 - 390 mW (0.35 A)	
	\$\$T-10-DR	Deep Red (660 nm)	SMT 3.45 mm x 3.45 mm	1.5 A	270 - 430 mW (0.35 A) 790 - 990 mW (0.70 A)	
<b>*</b>	SST-20-DR	Deep Red (660 nm)	SMT 3.45 mm x 3.45 mm	2.0 A		
	SST-20-DR Gen 2	Deep Red (660 nm)	SMT 3.45 mm x 3.45 mm	2.0 A	870 - 1070 mW (0.70 A)	
	\$\$T-10-FR	Far Red (730 nm)	9MT 3.45 mm x 3.45 mm	1.5 A	270 - 390 mW (0.35 A)	
<b>*</b>	SST-20-WxS I	5000 – 6500 K White, Standard CRI	3.45 mm x 3.45 mm	3 A	900 - 1100 Im (3 A)	
<b>*</b>	SST-20-WxH 1	2700 – 4000 K White, 95 CRI	3MT 3.45 mm x 3.45 mm	2 A	155 - 320 lm (700 mA)	

	COB SERIES SELECTOR GUIDE						
Product Image	Product	Color	Package	Max Drive Current	Optical Output		
	CXM-14	Purple	COB package 19 mm * 19 mm (AC) 14.3 mm LES	1,440 mA	40 – 72 (µmol/s)		
	CXM-14	Plant White	COB package 19 mm * 19 mm (AC) 14.3 mm LES	1,440 mA	40 – 72 (µmol/s)		
	CLM-22	Purple	COB package 28 mm * 28 mm (AC) 22 mm LES	2,200 mA	60 – 115 (µmol/s)		
	CLM-22	Plant White	COB package 28 mm * 28 mm (AC) 22 mm LES	2,200 mA	60 - 115 (µmol/s)		
	CXM-22	Purple	COB package 28 mm * 28 mm (AC) 22 mm LES	2,200 mA	90 – 165 (µmol/s)		
<u> </u>	CXM-22	Plant White	COB package 28 mm * 28 mm (AC) 22 mm LES	2,200 mA	90 – 165 (µmol/s)		
	CXM-82	Plant White	COB package 38 mm * 38 mm (AC) 32 mm LES	4,400 mA	200 – 360 (μmol/s)		
MIDPOWER SERIES SELECTOR GUIDE							
Product Image	Package Platform	Voltage (V) Cur	rent (mA) Input Power (W)	TYP FLUX 3000k, 8	C (lm), TYP lm/W, 3000k, 90CRI		
<b>•</b>	NEW MP-2020-110H	2.8	65 0.192	33	181		
<b>•</b>	NEW MP-3030-12ZH	2.67	65 0.173	93.5	5 193		
•	NEW MP-2000-210H	6.0	150 0.9	140	156		
<b>*</b>	MP-5050-8100	24	200 4.8	690	131		
135 degree	NEW CUBE-1616-1103	3.0	150 0.45	62	198		
135 degree	NEW CUBE-1616-2103	6.0	150 1.0	118	191		



## COB Series

Product Image	Product	Color	Package	Max Drive Current	Optical Output	
	\$\$7-10-UV <u>I</u>	365 nm 385 nm 395 nm 405 nm	SMT 2.45 mm x 2.45 mm	1.0 A	0.7 W - 0.9 W 0.9 W - 1.2 W 0.9 W - 1.2 W 0.8 W - 1.0 W	
	SST-10-B	Blue (450 nm)	SMT 3.45 mm x 3.45 mm	1.5 A	510 - 670 mW (0.35 A)	
	SST-20-8	Blue (450 nm)	SMT 2.45 mm x 3.45 mm	3.0 A	630 - 830 mW (0.35 A)	
\$	SST-10-SB	Sky Blue (470 nm)	3.45 mm x 3.45 mm	1.5 A	470 - 590 mW (0.35 A)	
<b>Q</b>	\$\$T-10-G	Green (S27 nm)	SMT 3.45 mm x 3.45 mm	1.5 A	190 - 350 mW (0.35 A)	
	SST-10-R	Red (621 nm)	3.45 mm x 3.45 mm	1.5 A	230 - 390 mW (0.35 A)	
1	SST-10-DR	Deep Red (660 nm)	3.45 mm x 3.45 mm	1.5 A	270 - 480 mW (0.85 A)	
	SST-20-DR	Deep Red (660 nm)	3MT 3.45 mm x 3.45 mm	2.0 A	790 - 990 mW (0.70 A)	
	SST-20-DR Gen 2	Deep Red (660 nm)	SMT 3.45 mm x 3.45 mm	2.0 A	870 - 1070 mW (0.70 A)	
1	SST-10-FR	Far Red (730 nm)	3MT 2.45 mm x 2.45 mm	1.5 A	270 - 390 mW (0.35 A)	
<b>**</b>	SST-20-WxS I	5000 - 6500 K White, Standard CRI	3MT 2,45 mm x 2,45 mm	3 A	900 - 1100 lm (3 A)	
<b>*</b>	SST-20-WxH	2700 - 4000 K White, 95 CRI	\$MT 2.45 mm x 2.45 mm	2 A	155 - 320 lm (700 mA)	

	COB SERIES SELECTOR GUIDE								
Product Image	Product	Color			Package		Max Drive Current		Optical Output
	CXM-14	Purple		19	COB package mm * 19 mm (AC) 14.2 mm LES		1,440 mA		40 - 72 (μmol/s)
	CXM-14	Plant White		19	008 package 19 mm * 19 mm (AC) 14.3 mm LES		1,440 mA		40 = 72 (μmol/s)
	CLM-22	Purple		COB package 28 mm * 28 mm (AC) 22 mm LES			2,200 mA		60 – 115 (µmol/s)
	CLM-22	Plant White		29	COB package mm * 28 mm (AC) 22 mm LES		2,200 mA		60 = 115 (μmel/s)
	CXM-22	Purple	Purple		COB package 28 mm * 28 mm (AC) 22 mm LES		2,200 mA		90 - 165 (μmol/s)
	CXM-22	Plant White		28	COS package mm × 28 mm (AC) 22 mm LES		2,200 mA		90 = 16S (μmol/s)
	CXM-32	Plant White		CO2 package 28 mm + 38 mm (AC) 22 mm LSS			4,400 mA		200 = 360 (µmol/s)
			М	IIDPOWER SERIES SELECTOR GUIDE					
Product Image	Package Platform	Voltage (V)	Curre	nt (mA) Input Power (W)			TYP FLUX (Im), 2000k, 80CRI		TYP im/W, 3000k, 80CRI
<b>•</b>	NEW MP-3030-110H	2.0		65	0.192		99		181
•	NEW MP-9030-12ZH	2.67		65	0.178		22.5		193
•	NEW MP-8080-210H	6.0	6.0 11		0.9	141			156
<b>\Q</b>	MP-5050-8100	24 20		200 4.9			630		121
135 degree	NEW CUBE-1616-1103	3.0	1	150	0.45		62		139
135 degree	NEW CUBE-1616-2103	6.0	1	150	1.0		119		191