

## DESCRIPTION

Recessed shallow lens LED downlight luminaire with 4 inch square aperture utilizing a LED array. Modular platform can be reconfigured from below the ceiling to accept a broad range of lamp modules and optical elements. Platform is suitable for 2x6 residential or shallow plenum commercial applications. Insulation must be kept 3" from top and sides of housing. Platform + module + element combination produces square distribution with excellent light control and low aperture brightness.

<b>Catalog #</b>		<b>Type</b>
<b>Project</b>		
<b>Comments</b>		<b>Date</b>
<b>Prepared By</b>		

## SPECIFICATION FEATURES

### Frame

Galvanized steel plaster frame with integral bar hanger receivers. Setscrews provide positive horizontal locking.

### Collar

Matte black aluminum collar adjusts vertically for 1/2" - 1" thick ceilings and can be rotated ± 75° thru the aperture. Integral gun sights facilitate the use of guide strings or laser lines. Shipped with a paint overspray protector.

### Housing

Steel housing painted matte black for a visually dark interior. Removable hinged cover allow for top access. All fasteners are captive.

### Bar Hangers

Captive preinstalled bar hangers adjust from 8-1/2" to 24" wide; pass thru allows shortening without removal. Captive nail penetrates standard and engineered lumber. Mounting flange levels platform with ceiling. Integral clip attaches direction to tee grid.

### Universal Mounting Bracket

Accepts 1/2" EMT, C channel and bar hangers and adjusts 3" vertically from above the ceiling.

### Gaskets

Closed cell gaskets achieve restrictive airflow requirements without additional caulking.

### Lamp Module

Integral mounting clips facilitate installation from top access or thru the aperture. Locking screws (provided) lock lamp module to the housing. Electrical quick disconnect facilitates field service.

### LED Array

Field interchangeable and upgradable light engine provides a uniform source with high efficiency and no pixilation. Available in remote or proximity phosphors in various color temperatures. Select color rendering index (CRI) of 90, 95 or 97 minimum providing excellent color quality. Color accuracy within 2 SDCM.

### Primary Reflector

Segmented Miro® upper reflector yields a smooth square beam with uniform distribution. Diffuse glass mixing dome provides shielding to source and excellent color over angle uniformity over rated life.

### Lower Splay

Die cast aluminum splay with seamless corners provides cutoff to lens. Available in self-flanged or rimless versions.

### Shielding

Glass lens provides additional light control and source shielding. Spring loaded to allow removal when installed rimless.

### Trim Retention

Mousetrap type springs pull flange tight to ceiling. Light trap eliminates spill light at edge of flange and reflector.

### Junction Box

(7) 1/2" trade size pry outs, (3) non-metallic cable. Listed for (8) #12 AWG (four in, four out) 90°C conductors and feed thru branch wiring. Wago® quick connects for field wiring.

### Driver

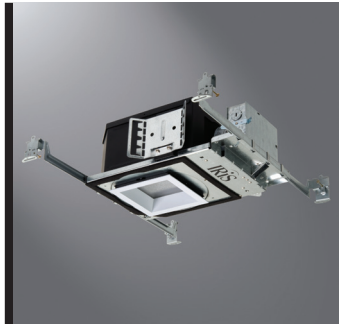
Integral 120 or 120-277V 50/60 Hz constant current driver provides noise free operation. Continuous, flicker-free leading or trailing edge phase cut dimming from 100 to 1% with select controls.

### Compliance

cULus listed for wet locations. UL1598 wet location labeled, covered ceiling mount only. Restrictive airflow per ASTM E283. EMI/RFI emissions per FCC 47CFR Part 15 class B limits and suitable for residential and commercial use. Contains no mercury or lead and RoHS compliant. Zhaga certified luminaire. Photometric testing in accordance with IES LM79. LED life testing in accordance with LM80.

### Warranty

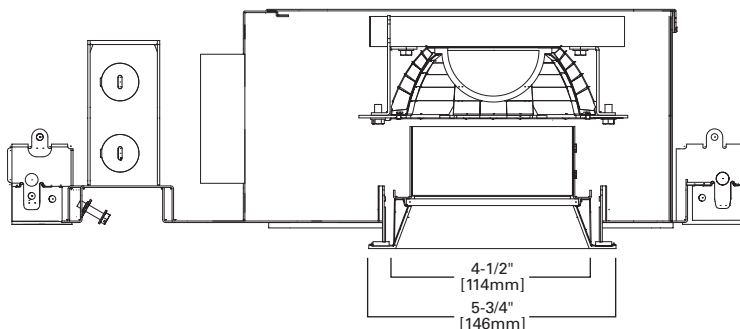
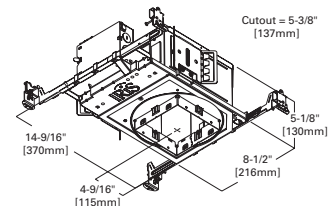
5 year warranty.



## P406TAT MH4LED E4SL

Shallow Lens  
LED Downlight

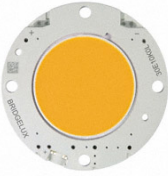

4-Inch Square Aperture



Refer to ENERGY STAR® Qualified Products List. Can be used to comply with California Title 24 High Efficacy requirements. Certified to California Title 20 Appliance Efficiency Database.



Cooper Lighting Solutions is a founding member of the Zhaga Consortium

Delivered Performance		V927	V930	V935	V940	D927	D930	A927	A930	
	CRI (Min)	90	90	90	90	97	97	95	95	
	R9 (Min)	50	50	50	50	95	95	90	90	
	CCT (K5)	2700	3000	3500	4000	2700	3000	2700	3000	
SDCM		2-Step								
Life (L70)		50,000 Hours						40,000 Hours*		
LPW**		46	48	53	60	36	40	36	38	
	Lumens	15W	664	691	759	863	517	570	518	552
		20W	901	937	1030	1170	701	773	703	749
		33W	1471	1501	1582	1874	1080	1190	1420	1515
Performance data based on goniometer measurements with 1ELTE driver option and E4SL2GMW lower shielding reflector. *Projected lumen maintenance. **LPW based on 15W and 'E' driver option.										

**ORDERING INFORMATION**

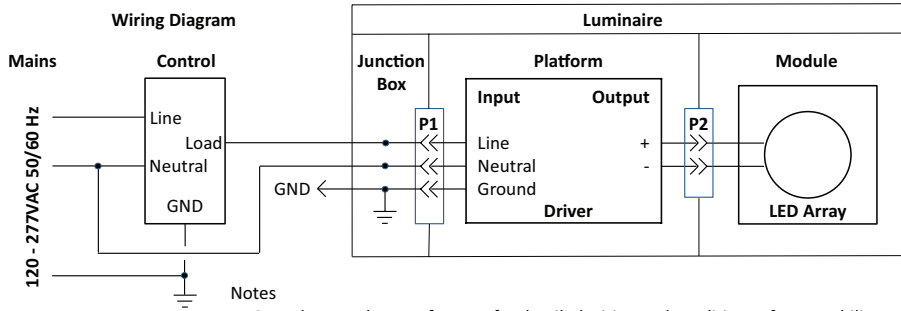
(Order housing platform, lamp module and optical element separately)

Housing Platform	Accessories
<input type="text"/>	<input type="text"/>
<p><b>P406TAT</b> = 4" square housing platform, non-IC, airtight</p> <p><b>P406TCP</b> = 4" square housing platform, non-IC, CCEA listed for City of Chicago plenum requirements</p>	<p><b>RA4X4</b> = Rimless adapter for 4" housing platforms</p> <p><b>EDC4X41</b> = Extended depth collar for 1" - 1-1/2" thick ceilings</p>

Lamp Module	Wattage	Light Engine	Driver
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<p><b>MH4LED</b> = 4" square LED module</p>	<p><b>15</b> = 15 Watts</p> <p><b>20</b> = 20 Watts</p> <p><b>33</b> = 33 Watts</p>	<p><b>V927</b> = Bridgelux Vero Series, Zhaga certified, 90 CRI min, 2700 K CCT</p> <p><b>V930</b> = Bridgelux Vero Series, Zhaga certified, 90 CRI min, 3000 K CCT</p> <p><b>V935</b> = Bridgelux Vero Series, Zhaga certified, 90 CRI min, 3500 K CCT</p> <p><b>V940</b> = Bridgelux Vero Series, Zhaga certified, 90 CRI min, 4000 K CCT</p> <p><b>D927</b> = Bridgelux Décor Series, Zhaga certified, 97 CRI min, 2700 K CCT</p> <p><b>D930</b> = Bridgelux Décor Series, Zhaga certified, 97 CRI min, 3000 K CCT</p> <p><b>A927</b> = Xicato XTM Artist Series, Zhaga compatible, 95 CRI min, 2700 K CCT</p> <p><b>A930</b> = Xicato XTM Artist Series, Zhaga compatible, 95 CRI min, 3000 K CCT</p>	<p><b>E</b> = 120 - 277V 50/60 Hz LE/TE phase cut dimming to 1% (dimming at 120V input only, available in 15 and 20 watt only)</p> <p><b>1ELTE</b> = 120V 60 Hz LE phase cut dimming to 1%, Lutron A-Series</p>

Element	Media	Texture	Finish	Flange Style	Accessories
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<p><b>E4SL</b> = 4" Shallow Lens Reflector</p>	<p><b>1G</b> = Prismatic Glass</p> <p><b>2G</b> = Diffuse Glass</p> <p><b>5G</b> = Opal White Glass</p>	<p><b>[Blank]</b> = Smooth</p>	<p><b>Painted Finishes</b></p> <p><b>MB</b> = Matte Black</p> <p><b>MW</b> = Matte White</p> <p><b>W</b> = Gloss White</p> <p><b>MMS</b> = Matte Metallic Silver</p>	<p><b>[Blank]</b> = Self-Flanged</p> <p><b>RL</b> = Rimless, Use with Rimless Adapter</p>	<p><b>L4X4HEX</b> = Matte Black Hex Cell Louver</p> <p><b>MTR4MW</b> = 4" Metal Trim Ring, Matte White</p> <p><b>MTR4MB</b> = 4" Metal Trim Ring, Matte Black</p> <p><b>MTR4SN</b> = 4" Metal Trim Ring, Satin Nickel</p> <p><b>MTR4TBZ</b> = 4" Metal Trim Ring, Tuscon Bronze</p>

WIRING DIAGRAM



Notes

- Consult controls manufacturer for detailed wiring and conditions of acceptability
- Input voltage contingent on control and driver options selected
- Field wiring to confirm to all national and local codes
- Phase cut dimming at 120V input only.

ENERGY

ENERGY DATA			
E = LE & TE Phase Cut			
Input Voltage		120V	277V
15W	Input Power (W)	14.4	15.4
	Input Current (A)	0.121	0.059
	Inrush (A)	0.16	0.288
20W	Input Power (W)	21.2	21.8
	Input Current (A)	0.178	0.082
	Inrush (A)	0.218	0.403
T Ambient -40 - +40°C			
Power Factor ≥ 0.90			
Sound Rating Class A			
THD ≤ 20%			

COMPATIBLE CONTROLS

Manufacturer	Series	Model	15W				LE Start Time	20W				LE Start Time
			Minimum Luminaires (per Circuit)	Maximum Luminaires (per Circuit)	Minimum Measured Light Output	Maximum Measured Light Output		Maximum Luminaires (per Circuit)	Minimum Measured Light Output (per Circuit)	Maximum Measured Light Output	Minimum Luminaires	
Lutron	Ariadni	AY-600P	1	37	9%	98%	<1s	1	27	11%	98%	<1s
Lutron	Contour	CT103P	1	62	1%	98%	>1s	1	45	4%	98%	<1s
Lutron	Contour	CT-600P	1	37	1%	98%	>1s	1	27	3%	98%	<1s
Lutron	Rotary	D-600P	1	37	1%	98%	>1s	1	27	3%	98%	>1s
Lutron	Diva	DV-600P	1	37	1%	98%	>1s	1	27	2%	98%	<1s
Lutron	Glyder	GL-600P	1	37	2%	99%	<1s	1	27	7%	98%	<1s
Lutron	Lumia	LG-600PH	1	37	1%	98%	>1s	1	27	1%	98%	>1s
Lutron	Nova	N-600	1	37	0%	99%	>1s	1	27	1%	99%	<1s
Lutron	Skylark	S-600P	1	37	1%	98%	>1s	1	27	1%	98%	>1s
Lutron	Centurion	C-600P	1	37	3%	99%	>1s	1	27	5%	99%	>1s
Lutron	Ariadni	AYLV-600P	1	28	4%	98%	<1s	1	20	9%	98%	<1s
Lutron	Glyder	GLV600	1	28	1%	99%	<1s	1	20	3%	99%	<1s
Lutron	Diva	DVLV-600P	1	28	2%	97%	<1s	1	20	6%	98%	<1s
Lutron	Lumina	LG-103P	1	62	5%	98%	<1s	1	45	10%	98%	<1s
Lutron	Skylark	SLV-600P	1	28	1%	98%	>1s	1	20	3%	98%	>1s
Lutron	Nova	NTLV600	1	28	9%	99%	<1s	1	20	12%	99%	<1s
Lutron	Nova	NT600	1	37	2%	99%	>1s	1	27	4%	99%	>1s

COMPATIBLE CONTROLS

Manufacturer	Series	Model	15W		Minimum Measured Light Output	Maximum Measured Light Output	LE Start Time	20W		Minimum Measured Light Output	Maximum Measured Light Output	LE Start Time
			Minimum Luminaires (per Output)	Maximum Luminaires (per Output)				Minimum Luminaires (per Output)	Maximum Luminaires (per Output)			
Lutron	Maestro	MACL-153M( )*	1	10	20%	98%	<1s	-	-	-	-	-
Lutron	Maestro Wireless	MRF2-6ND	1	10	20%	99%	>1s	1	7	19%	100%	>1s
Lutron	Maestro Wireless	MRF2-6ELV	-	-	-	-	-	1	7	19%	100%	>1s
Lutron	RadioRA2 1000 W	RRD-10ND	1	10	20%	99%	>1s	1	7	19%	100%	>1s
Lutron	RadioRA2 Adaptive Dimmer	RRD-6NA	-	-	-	-	-	1	7	19%	100%	>1s
Lutron	HomeWorks QS 600 W	HQRD-6ND	1	10	20%	99%	>1s	1	7	19%	100%	>1s
Lutron	HomeWorks QS 1000 W	HQRD-10ND	1	10	20%	99%	>1s	1	7	19%	100%	>1s
Lutron	HomeWorks QS Adaptive Dimmer	HQRD-6NA	-	-	-	-	-	1	7	19%	100%	>1s
Lutron	HomeWorks 600 W Dimmer	HxD-6ND	1	23	19%	99%	>1s	1	15	20%	99%	>1s
Lutron	"Grafik Eye 3000/ HomeWorks"	"Grafik Eye 3000 Family/ HWI-WPM-6D-120"	1	35	20%	98%	>1s	1	22	20%	100%	>1s
Lutron	"Grafik QS/ Wallbox Power Module"	"Grafik Eye QS Main Unit Family/ LQRJ-WPM-6P"	1	35	20%	98%	>1s	1	22	20%	100%	>1s
Lutron	RPM-4U Module (LCP, HomeWorks, GRAFIK Systems, Quantum)	HW-RPM-4U-120, LP-RPM-4U-120	1	86	20%	96%	>1s	1	55	18%	97%	>1s
Lutron	RPM-4A Module (LCP, HomeWorks, GRAFIK Systems, Quantum)	HW-RPM-4A-120, LP-RPM-4A-120	1	53	19%	99%	>1s	1	34	19%	98%	>1s
Lutron	Panel module	GP (Harrier) Card	-	-	-	-	-	1	50	19%	97%	>1s
Lutron	Stanza	SZ-6ND	1	23	19%	99%	>1s	1	15	20%	99%	>1s
Lutron		"PHPM-PA with Grafik Eye QS Main Unit"	1	71	19%	98%	>1s	1	55	20%	99%	>1s
Lutron		"PHPM-WBX with 3-wire fluorescent control"	1	71	19%	98%	>1s	1	55	20%	99%	>1s

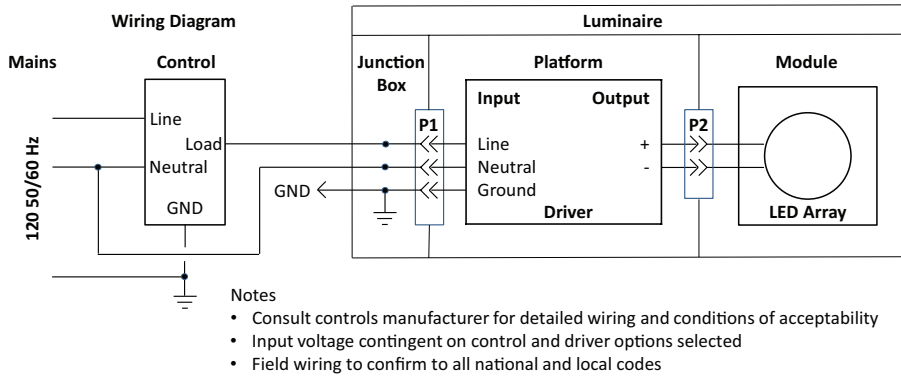
Discontinued 09-20-2021

COMPATIBLE CONTROLS

Manufacturer	Series	Model	15W		Maximum Measured	Minimum Measured	LE Start Time	20W		Maximum Measured	Minimum Measured	LE Start Time
			Minimum Luminaires (per circuit)	Maximum Luminaires (per circuit)				Minimum Luminaires	Maximum Luminaires			
Vantage	Enclosure Module	SDM12 EM	1	25	96.1%	1.7%	3.4s	1	17	95.9%	0.2%	5s
Vantage	Enclosure Module	EDIMMOD	1	37	98.8%	3.8%	2.4s	1	25	95.8%	4.9%	1.9s
Vantage	ScenePoint	DS / RD	1	8	96.1%	1.7%	3.4s	1	7	95.9%	0.2%	5s
Vantage	RFLC	DRD4	1	8	100%	6.3%	2.3s	1	7	100%	8.4%	1.9s
Crestron	Green Light	GLX-DIM6	--	--	100%	15%	--	--	--	100%	9%	--
Crestron	Green Light	GLXX-2DIM8	--	--	100%	15%	--	--	--	100%	9%	--
Crestron	Green Light	CLS-EXP-DIMU	--	--	100%	8%	--	--	--	100%	11%	--
Crestron	Green Light	DIN-1DIM4	--	--	100%	6%	--	--	--	100%	7%	--
Crestron	Green Light	DIN-1DIMU4	--	--	100%	14%	--	--	--	100%	9%	--
Savant		LMD-4120	--	--	100%	3.5%	<1s	--	--	100%	2.7%	<1s
Savant		LMD-8120	--	--	100%	10.1%	<1s	--	--	100%	10.4%	<1s
Savant		LMD-IN120	--	--	100%	3.5%	<1s	--	--	100%	3.1%	<1s

Manufacturer	Series	Model	15W		Maximum Measured	Minimum Measured	LE Start Time	20W		Maximum Measured	Minimum Measured	LE Start Time
			Minimum Luminaires (per circuit)	Maximum Luminaires (per circuit)				Minimum Luminaires	Maximum Luminaires			
CWD	Ilumen	SC277-06-UN	1	38	100%	13%	<1s	1	28	99.40%	16.58%	<1s
CWD	Aspire	9530AW	1	30	100%	5%	<1s	1	21	100.00%	13.07%	<1s
CWD	Skye	DE06P	1	30	98%	11%	<1s	1	21	96.78%	14.81%	<1s
CWD	Devine	RI061	1	30	99%	21%	>1s	1	21	98.81%	24.23%	>1s
CWD	Devine	TAL06P	1	37	100%	10%	<1s	1	27	99.22%	11.91%	<1s
CWD	Toggle	DAL06P	1	37	100%	4%	<1s	1	27	99.16%	5.66%	<1s
CWD	Skye	SAL06P	1	37	100%	9%	<1s	1	27	99.16%	13.00%	<1s
CWD	Skye	SLC06P	1	37	99%	2%	>1s	1	27	98.27%	1.76%	>1s
CWD	Devine	DLC06P	1	18	99%	2%	>1s	1	13	98.57%	3.09%	<1s
CWD	Toggle	TI061	1	30	97%	5%	<1s	1	21	96.36%	12.58%	<1s
CWD	Smart	AAL06	1	37	99%	10%	<1s	1	27	98.51%	13.33%	<1s

WIRING DIAGRAM



ENERGY

ENERGY DATA		
1ELTE = LE Phase Cut		
Input Voltage	120V	
15W	Input Power (W)	16.3
	Input Current (A)	0.14
	Inrush (A)	1.128
20W	Input Power (W)	23.2
	Input Current (A)	0.195
	Inrush (A)	1.112
33W	Input Power (W)	33.7
	Input Current (A)	0.283
	Inrush (A)	0.072
T Ambient -40 - +40°C		
Power Factor ≥ 0.90		
Sound Rating Class A		
THD ≤ 20%		

Discontinued  
09-20-2021

COMPATIBLE CONTROLS

Manufacturer	Series	Model	15W		Maximum Measured	Minimum Measured	LE Start Time	20W		Maximum Measured	Minimum Measured	LE Start Time	33W		Maximum Measured	Minimum Measured	LE Start Time
			Minimum Luminaires	Maximum Luminaires				Minimum Luminaires	Maximum Luminaires				Minimum Luminaires	Maximum Luminaires			
Lutron	Nova T	NTLV-600-CPN0199	1	8	100%	1%	<1s	1	8	100%	1%	<1s	1	8	100%	1%	<1s
Lutron	Maestro Wireless	MRF2-6ND-120	1	8	100%	1%	<1s	1	8	100%	1%	<1s	1	8	100%	1%	<1s
Lutron	RadioRA2 1000 W	RRD-10ND	1	13	100%	1%	<1s	1	13	100%	1%	<1s	1	13	100%	1%	<1s
Lutron	RadioRA2 Adaptive Dimmer	RRD-6NA	1	8	100%	1%	<1s	1	8	100%	1%	<1s	1	8	100%	1%	<1s
Lutron	RadioRA 600 W	RA-6ND	1	8	100%	1%	<1s	1	8	100%	1%	<1s	1	8	100%	1%	<1s
Lutron	RadioRA 1000 W	RA-10ND	1	13	100%	1%	<1s	1	13	100%	1%	<1s	1	13	100%	1%	<1s
Lutron	HomeWorks QS 600 W	HQRD-6ND	1	8	100%	1%	<1s	1	8	100%	1%	<1s	1	8	100%	1%	<1s
Lutron	HomeWorks QS 1000 W	HQRD-10ND	1	13	100%	1%	<1s	1	13	100%	1%	<1s	1	13	100%	1%	<1s
Lutron	HomeWorks QS Adaptive Dimmer	HQRD-6NA	1	8	100%	1%	<1s	1	8	100%	1%	<1s	1	8	100%	1%	<1s
Lutron	HomeWorks QS WPM	HQRJ-WPM-6D-120	1	10	100%	1%	<1s	1	10	100%	1%	<1s	1	10	100%	1%	<1s
Lutron	HomeWorks 600 W Dimmer	HRD-6ND	1	8	100%	1%	<1s	1	8	100%	1%	<1s	1	8	100%	1%	<1s
Lutron	HomeWorks 1000 W dimmer	HWD-10ND, HRD-10ND	1	8	100%	1%	<1s	1	8	100%	1%	<1s	1	8	100%	1%	<1s
	HomeWorks WPM	HWI-WPM-6D-120	1	10	100%	1%	<1s	1	10	100%	1%	<1s	1	10	100%	1%	<1s
Lutron	GRAFIK Eye QS	QSGR-, QSGRJ-	1	10	100%	1%	<1s	1	10	100%	1%	<1s	1	10	100%	1%	<1s
	GRAFIK Eye 3000	GRX-3100, GRX-3500	1	10	100%	1%	<1s	1	10	100%	1%	<1s	1	10	100%	1%	<1s
Lutron	RPM-4U Module (LCP, HomeWorks,	HW-RPM-4U-120,	1	26	100%	1%	<1s	1	26	100%	1%	<1s	1	26	100%	1%	<1s
	GRAFIK Systems, Quantum)	LP-RPM-4U-120															
Lutron	RPM-4A Module (LCP, HomeWorks,	HW-RPM-4A-120,	1	13	100%	1%	<1s	1	13	100%	1%	<1s	1	13	100%	1%	<1s
	GRAFIK Systems, Quantum)	LP-RPM-4A-120															
Lutron	GP Panels	Various	1	26	100%	1%	<1s	1	26	100%	1%	<1s	1	26	100%	1%	<1s
Lutron	Stanza	SZ-6ND	1	8	100%	1%	<1s	1	8	100%	1%	<1s	1	8	100%	1%	<1s
Lutron	"Ariadni® C•L® 250 W dimmer"	AYCL-253P-	1	8	100%	1%	<1s	1	8	100%	1%	<1s	1	8	100%	1%	<1s
Lutron	"Diva® C•L® 250 W dimmer"	DVCL-253P- S	1	8	100%	1%	<1s	1	8	100%	1%	<1s	1	8	100%	1%	<1s
		DVSCCL-253P	1	8	100%	1%	<1s	1	8	100%	1%	<1s	1	8	100%	1%	<1s

## COMPATIBLE CONTROLS

Manufacturer	Series	Model	15W		Maximum Measured	Minimum Measured	LE Start Time	20W		Maximum Measured	Minimum Measured	LE Start Time	33W		Maximum Measured	Minimum Measured	LE Start Time
			Minimum Luminaires	Maximum Luminaires				Minimum Luminaires	Maximum Luminaires				Minimum Luminaires	Maximum Luminaires			
Vantage	Enclosure Module	SDM12 EM	1	21	95.1%	1.0%	1.90s	1	17	95.3%	1.0%	1.70s	1	17	98.7%	1.1%	1.7s
Vantage	Enclosure Module	EDIMMOD	1	31	95.8%	0.9%	1.90s	1	25	96.2%	1.0%	1.80s	1	30	95.8%	1.1%	2.2s
Vantage	ScenePoint	DS / RD	1	7	95.1%	1.0%	1.90s	1	4	95.3%	1.0%	1.70s	1	7	98.7%	1.1%	1.7s
Crestron	Green Light	GLX-DIM6	--	--	100%	1%	--	--	--	100%	1%	--	--	--	100%	1%	--
Crestron	Green Light	CLX-2DIM8	--	--	100%	1%	--	--	--	100%	1%	--	--	--	100%	1%	--
Crestron	Green Light	GLXX-2DIM8	--	--	100%	1%	--	--	--	100%	1%	--	--	--	100%	1%	--
Crestron	Green Light	CLS-EXP-DIM	--	--	100%	1%	--	--	--	100%	1%	--	--	--	100%	1%	--
Crestron	Green Light	CLS-C6	--	--	100%	1%	--	--	--	100%	1%	--	--	--	100%	1%	--
Crestron	Green Light	CLW-DIMEX	--	--	100%	1%	--	--	--	100%	1%	--	--	--	100%	1%	--
Crestron	Green Light	CLX-1DELV4	--	--	100%	1%	--	--	--	100%	1%	--	--	--	100%	1%	--
Crestron	Green Light	DIN-1DIMU4	--	--	100%	1%	--	--	--	100%	1%	--	--	--	100%	1%	--
Cooper Lighting Solutions	ilumin	SC277-06-UN-1P	1	38	99%	0%	>1s	1	28	99%	0%	<1s	1	17	100	1%	<1s
Savant	--	LMD-8120	--	--	100%	3.0%	<1s	--	--	100%	3.0%	<1s	--	--	100%	2%	<1s
Savant	--	LMD-IN120	--	--	100%	4.0%	<1s	--	--	100%	4.0%	<1s	--	--	100%	2%	<1s
Savant	--	WCD-101xx	--	--	100%	3%	<1s	--	--	100%	0.03	<1s	--	--	1	2%	<1s

## FINISH MULTIPLIERS

	MB	MW	W	MMS
[Blank] = Smooth	0.73	1.00	1.00	0.87

## LIGHTING FACTS

**LED lighting facts®**  
A Program of the U.S. DOE

Light Output (Lumens) **691**  
Watts **14.5**  
Lumens per Watt (Efficacy) **47.66**

Color Accuracy  
Color Rendering Index (CRI) **90**

Light Color  
Correlated Color Temperature (CCT) **3000 (Bright White)**

2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit [www.lightingfacts.com](http://www.lightingfacts.com) for the Label Reference Guide.

Registration Number: F4QJ-IW5IFJ (9/25/2015)  
Model Number: P406TAT MH4LED15V930E E4SL2GMW [Upgrade : 9/25/2015]  
Type: Luminaire - Downlight

**LED lighting facts®**  
A Program of the U.S. DOE

Light Output (Lumens) **580**  
Watts **14.6**  
Lumens per Watt (Efficacy) **39.79**

Color Accuracy  
Color Rendering Index (CRI) **97**

Light Color  
Correlated Color Temperature (CCT) **2966 (Warm White)**

2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit [www.lightingfacts.com](http://www.lightingfacts.com) for the Label Reference Guide.

Registration Number: F4QJ-WL0NS3 (7/27/2015)  
Model Number: P406TAT MH4LED15D930E E4SL2GMW  
Type: Luminaire - Downlight

**LED lighting facts®**  
A Program of the U.S. DOE

Light Output (Lumens) **567**  
Watts **12.99**  
Lumens per Watt (Efficacy) **43.6**

Color Accuracy  
Color Rendering Index (CRI) **98**

Light Color  
Correlated Color Temperature (CCT) **2955 (Warm White)**

2700K 3000K 4500K 6500K

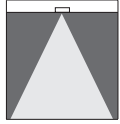
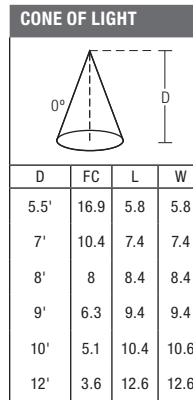
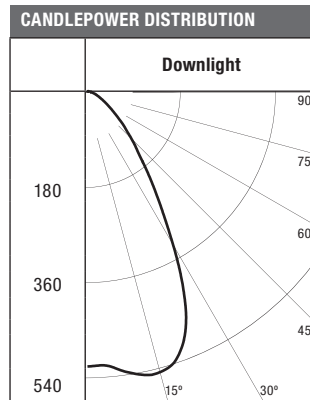
All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit [www.lightingfacts.com](http://www.lightingfacts.com) for the Label Reference Guide.

Registration Number: F4QJ-5S342Y (7/27/2015)  
Model Number: P406TAT MH4LED15A930E E4SL2GMW  
Type: Luminaire - Downlight

## PHOTOMETRICS

Test Number	P128209
Platform	P406TAT
Element	MH4LED15V930E E4SL2GMW
Lumens	691
Efficacy	48 Lm/W
SC	1.06

**CANDELA TABLE**

Degrees Vertical	Candela
0	512
5	514
15	540
25	439
35	220
45	107
55	50
65	23
75	8
85	2
90	0


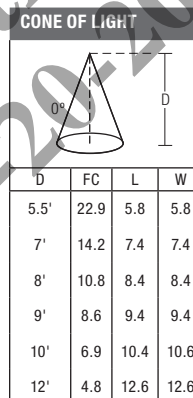
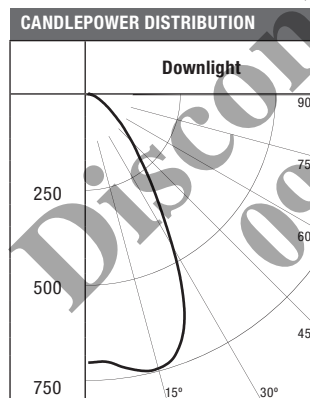
**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fixture
0-30	390	56.5
0-40	528	76.5
0-60	655	94.8
0-90	691	100.0
90-180	0	0
0-180	691	100.0

**COEFFICIENTS OF UTILIZATION**

Ceiling Wall % RCR	80%				70%				50%	
	70	50	30	10	50	30	10	50	10	
Zonal cavity method -- floor reflectance = 20%										
0	119	119	119	119	116	116	116	111	111	
1	112	109	106	103	107	104	102	103	98	
2	105	99	95	90	98	93	89	94	87	
3	99	91	85	80	90	84	80	87	78	
4	93	84	77	72	83	76	72	80	71	
5	87	77	70	65	76	70	65	74	64	
6	82	72	65	60	71	64	59	69	59	
7	77	67	60	55	66	59	55	64	54	
8	73	62	55	51	61	55	50	60	50	
9	69	58	51	47	58	51	47	57	47	
10	65	54	48	44	54	48	44	53	43	

Test Number	P128201
Platform	P406TAT
Element	MH4LED20V930E E4SL2GMW
Lumens	937
Efficacy	44 Lm/W
SC	1.06

**CANDELA TABLE**

Degrees Vertical	Candela
0	694
5	697
15	732
25	595
35	298
45	145
55	68
65	32
75	11
85	2
90	0

**ZONAL LUMEN SUMMARY**

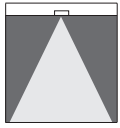
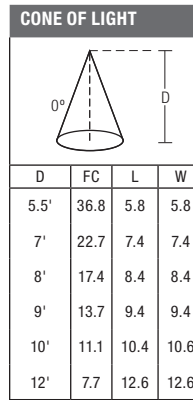
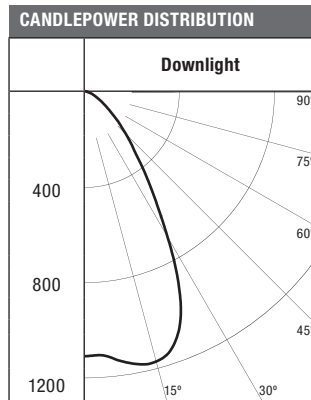
Zone	Lumens	%Fixture
0-30	529	56.5
0-40	717	76.5
0-60	888	94.8
0-90	937	100.0
90-180	0	0
0-180	937	100.0

**COEFFICIENTS OF UTILIZATION**

Ceiling Wall % RCR	80%				70%				50%	
	70	50	30	10	50	30	10	50	10	
Zonal cavity method -- floor reflectance = 20%										
0	119	119	119	119	116	116	116	111	111	
1	112	109	106	103	107	104	102	103	98	
2	105	99	95	90	98	93	89	94	87	
3	99	91	85	80	90	84	80	87	78	
4	93	84	77	72	83	76	72	80	71	
5	87	77	70	65	76	70	65	74	64	
6	82	72	65	60	71	64	59	69	59	
7	77	67	60	55	66	59	55	64	54	
8	73	62	55	51	61	55	50	60	50	
9	69	58	51	47	58	51	47	57	47	
10	65	54	48	44	54	48	44	53	43	

PHOTOMETRICS

Test Number	P167996
Platform	P406TAT
Element	MH4LED33V9301ELTE E4SL2GMW
Lumens	1500
Efficacy	40.9 Lm/W
SC	1.06

**CANDELA TABLE**

Degrees Vertical	Candela
0	1112
5	1116
15	1172
25	953
35	477
45	232
55	110
65	51
75	18
85	3
90	0

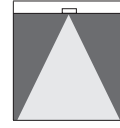
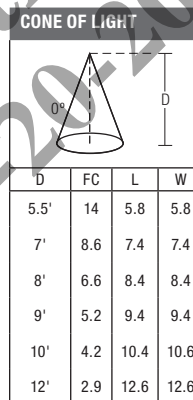
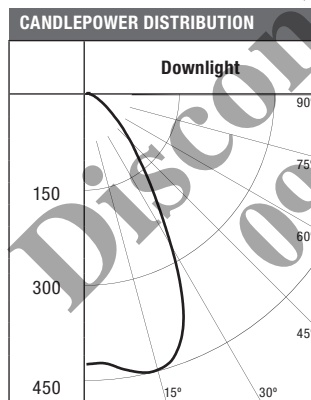
**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fixture
0-30	847	56.5
0-40	1148	76.5
0-60	1423	94.8
0-90	1500	100
90-180	0	0
0-180	1500	100

**COEFFICIENTS OF UTILIZATION**

Ceiling Wall % RCR	80%				70%				50%	
	70	50	30	10	50	30	10	50	10	
Zonal cavity method -- floor reflectance = 20%										
0	119	119	119	119	116	116	116	111	111	
1	112	109	106	103	107	104	102	103	98	
2	105	99	95	90	98	93	89	94	87	
3	99	91	85	80	90	84	80	87	78	
4	93	84	77	72	83	76	72	80	71	
5	87	77	70	65	76	70	65	74	64	
6	82	72	65	60	71	64	59	69	59	
7	77	67	60	55	66	59	55	64	54	
8	73	62	55	51	61	55	50	60	50	
9	69	58	51	47	58	51	47	57	47	
10	65	54	48	44	54	48	44	53	43	

Test Number	P128210
Platform	P406TAT
Element	MH4LED15D930E E4SL2GMW
Lumens	570
Efficacy	39.6 Lm/W
SC	1.06

**CANDELA TABLE**

Degrees Vertical	Candela
0	422
5	424
15	445
25	362
35	181
45	88
55	42
65	19
75	7
85	1
90	0

**ZONAL LUMEN SUMMARY**

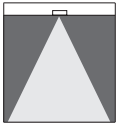
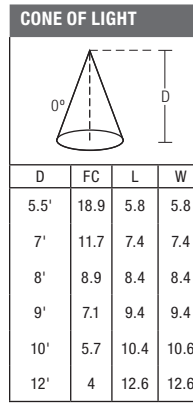
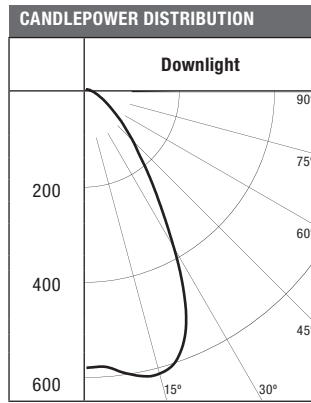
Zone	Lumens	%Fixture
0-30	322	56.5
0-40	436	76.5
0-60	540	94.8
0-90	570	100.0
90-180	0	0
0-180	570	100.0

**COEFFICIENTS OF UTILIZATION**

Ceiling Wall % RCR	80%				70%				50%	
	70	50	30	10	50	30	10	50	10	
Zonal cavity method -- floor reflectance = 20%										
0	119	119	119	119	116	116	116	111	111	
1	112	109	106	103	107	104	102	103	98	
2	105	99	95	90	98	93	89	94	87	
3	99	91	85	80	90	84	80	87	78	
4	93	84	77	72	83	76	72	80	71	
5	87	77	70	65	76	70	65	74	64	
6	82	72	65	60	71	64	59	69	59	
7	77	67	60	55	66	59	55	64	54	
8	73	62	55	51	61	55	50	60	50	
9	69	58	51	47	58	51	47	57	47	
10	65	54	48	44	54	48	44	53	43	

## PHOTOMETRICS

Test Number	P128202
Platform	P406TAT
Element	MH4LED20D930E E4SL2GMW
Lumens	773
Efficacy	36.3 Lm/W
SC	1.06

**CANDELA TABLE**

Degrees Vertical	Candela
0	572
5	575
15	604
25	490
35	246
45	120
55	56
65	26
75	9
85	2
90	0

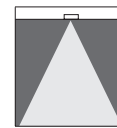
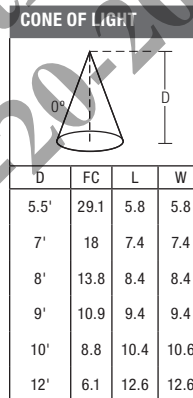
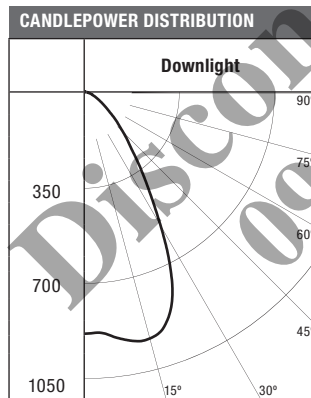
**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fixture
0-30	436	56.5
0-40	591	76.5
0-60	733	94.8
0-90	773	100.0
90-180	0	0
0-180	773	100.0

**COEFFICIENTS OF UTILIZATION**

Ceiling Wall % RCR	80%				70%				50%	
	70	50	30	10	50	30	10	50	10	
Zonal cavity method -- floor reflectance = 20%										
0	119	119	119	119	116	116	116	111	111	
1	112	109	106	103	107	104	102	103	98	
2	105	99	95	90	98	93	89	94	87	
3	99	91	85	80	90	84	80	87	78	
4	93	84	77	72	83	76	72	80	71	
5	87	77	70	65	76	70	65	74	64	
6	82	72	65	60	71	64	59	69	59	
7	77	67	60	55	66	59	55	64	54	
8	73	62	55	51	61	55	50	60	50	
9	69	58	51	47	58	51	47	57	47	
10	65	54	48	44	54	48	44	53	43	

Test Number	P168000
Platform	P406TAT
Element	MH4LED33D9301ELTE E4SL2GMW
Lumens	977
Efficacy	32.4 Lm/W
SC	1.06

**CANDELA TABLE**

Degrees Vertical	Candela
0	882
5	885
15	929
25	755
35	378
45	184
55	87
65	40
75	14
85	2
90	0

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fixture
0-30	672	56.5
0-40	910	76.5
0-60	1128	94.8
0-90	1190	100
90-180	0	0
0-180	1190	100

**COEFFICIENTS OF UTILIZATION**

Ceiling Wall % RCR	80%				70%				50%	
	70	50	30	10	50	30	10	50	10	
Zonal cavity method -- floor reflectance = 20%										
0	119	119	119	119	116	116	116	111	111	
1	112	109	106	103	107	104	102	103	98	
2	105	99	95	90	98	93	89	94	87	
3	99	91	85	80	90	84	80	87	78	
4	93	84	77	72	83	76	72	80	71	
5	87	77	70	65	76	70	65	74	64	
6	82	72	65	60	71	64	59	69	59	
7	77	67	60	55	66	59	55	64	54	
8	73	62	55	51	61	55	50	60	50	
9	69	58	51	47	58	51	47	57	47	
10	65	54	48	44	54	48	44	53	43	