## Cypher<sup>™</sup> – CY2 Pedestrian Scale

## FEATURES

- Integral Battery Backup Option
- 360° Light Distribution
- RGBW or Static White Luminous Front Option
- IES Type I, II, III & IV Distributions
- Wall Graze, Spot and Pencil Distributions
- Multiple Fascia Options and Finishes
- 0-10V dimming
- IP-66 Housing & Optical System

	using & Opti 347 and 48				rol Options	a wheress	Downlight and war	only, 3000K mer CCTs	ED			
ORDERING C	ODE											
1	2	3	4	5	6	7	8	9	10	11	12	
_	_	-	_			_			-		_	
Series-Output	CCT/CRI	Model	Main Distributio	Secondary n Distribution	Voltage	Housing Finish	Fascia Form	Luminous Front	Fascia Panel	Control Options	Options	
SERIES-OUT	PUT (Base)		1	SECONDAR	<b>OISTRIBUT</b>	ION (Up, Sid	des)	LUMINO	US FRONT			
CY2-25	25w, 2500	nominal lun	nens	2D	Type 2 Diffu	used		BLANK	Standard			
CY2-35		nominal lun		3D	Type 3 Diffu			RGBW		ninous Fron		
CY2-45	50w, 4500	nominal lun	nens	4D	Type 4 Diffu			LFSW		te Luminous		
CCT-CRI					n is available for s Not all combination				LFSW luminous from quare and perforat	,		
27K8	2700K, 80	CRI			on Matrix on page						-	
3K7	3000K, 70				1.2			FASCIA P				
3K8	3000K, 800			VOLTAGE				FPP	Full Panel			
4K7	4000K, 70	CRI		UNV	120-277V			FPS		Stainless Ste	eel	
4K8	4000K, 80			347	347V			FPC	Full Panel			
5K7	5000K, 70	CRI		480	480V			OPP OPS	Open Pan	el Stainless S	Stool	
MODEL (Lig	ht Engine)							OPC	Open Pan		Dieer	
1	DownLight	Only		BASE HOUS				4PP 4-Square Panel Painted				
2		n/Up, <b>Dowi</b>	n/Un	Standard Co				4PS 4-Square Panel Stainless Steel				
2		ons must m		AGN Bl	Antique Gre Black	een		4PC 4-Square Panel Copper				
3	90/10 Dow			BLT	Matte Black			PPP				
4		5 Split, <b>Dowr</b>	n/Up/	CRT	Corten			PPS	Perforated Panel Stainless Steel			
		outions mus		DB	Dark Bronze	5		PPC	Perforated Panel Copper			
5		0 Split, <b>Top</b>		DGN	Dark Green				dius Fascia forms o			
		ons must m	atch	GT	Graphite			panel finish	housing finish/colo	r. Consult facto	ory for custom	
Contact factory				LG	Light Grey			paner misn	es.			
See Distribution	warnx on page	2 Ior restriction	15.	MAL	Matte Alum			CONTRO	L OPTIONS			
MAIN DISTR		)own)		MDB MG	Metallic Bro Medium Gr			PCU	Universal E	utton Photo	cell	
1	IES Type I	, , , , , , , , , , , , , , , , , , , ,		TT	Titanium	еу			(120-277\	/)		
2	IES Type II			VBU	Verde Blue			SCP Programmable Occupancy Sens				
3	IES Type III			WDB	Weathered	Bronze		SWP SiteSync Wireless				
4	IES Type IV			WH	Arctic White	e		SWPM SiteSync Wireless w/Occupancy				
SP	15° Spot/C				_			WIR	Sensor wiSCAPE			
WG	60° Wall G			Premium Co				WIRSC		v/Occupanc	v Sensor	
1D	Type 1 Diff			SFM	Seafoam Shamrock				ensors not available		,	
2D 3D	Type 2 Diff Type 3 Diff			SHK SPP	Salt and Per	apor		Occupancy s	ensors not available	WILLI CD, 1, L UI		
3D 4D	Type 3 Diff			WCP	Weathered			OPTIONS	5			
40	турс 4 ВШ	useu		RAL		AL 4 digit col	or number	EM	Battery Ba	ickup Unit -:	20°C	
SECONDARY	Y DISTRIBU	TION (Up, S	ides)	CUSTOM		ide color chip		SF		e (120, 277		
1	IES Type I	-		COLOR	matching			DF		ise (208, 24		
2	IES Type II			FASCIA FOR	N.4				nckup not availab		gie and	
3	IES Type III			FASCIA FOR	Flat			Kounded I	Edge Fascia Form	IS.		
4	IES Type IV			r R	Radius/Curv	red						
SP	15° Spot/C			Т	Triangle/We							
WG	60° Wall G			Ē	Rounded Ec							
PB* 1D	Pencil Bear Type 1 Diff			C	Circle/Curve	5						
* PB distribution			10/10/10	СВ	Cylinder Bal	lanced						
r b นเรแามน์ไไป	i is available to	1 20/10 dila /0/	10/10/10	CT	Culinder Tal	1						

Custom Building Material Mount

Cylinder Tall

Ghost Fascia

• 3000K, 4000K & 5000K CCT

• Occupancy Sensor & Wireless

• IDA approved, downlight only, 3000K

• Fascia Forms F and E are ADA compliant for use in low mounting height applications

• 10kA Surge Protection

(80 inches or less)

and warmer CCTs

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CT

CBM



LISTED



FPP		Full Panel Painted
FPS		Full Panel Stainless Steel
FPC		Full Panel Copper
OPP		Open Panel Painted
OPS		Open Panel Stainless Steel
OPC		Open Panel Copper
4PP		4-Square Panel Painted
4PS		4-Square Panel Stainless Steel
4PC		4-Square Panel Copper
PPP		Perforated Panel Painted
PPS		Perforated Panel Stainless Steel
PPC		Perforated Panel Copper

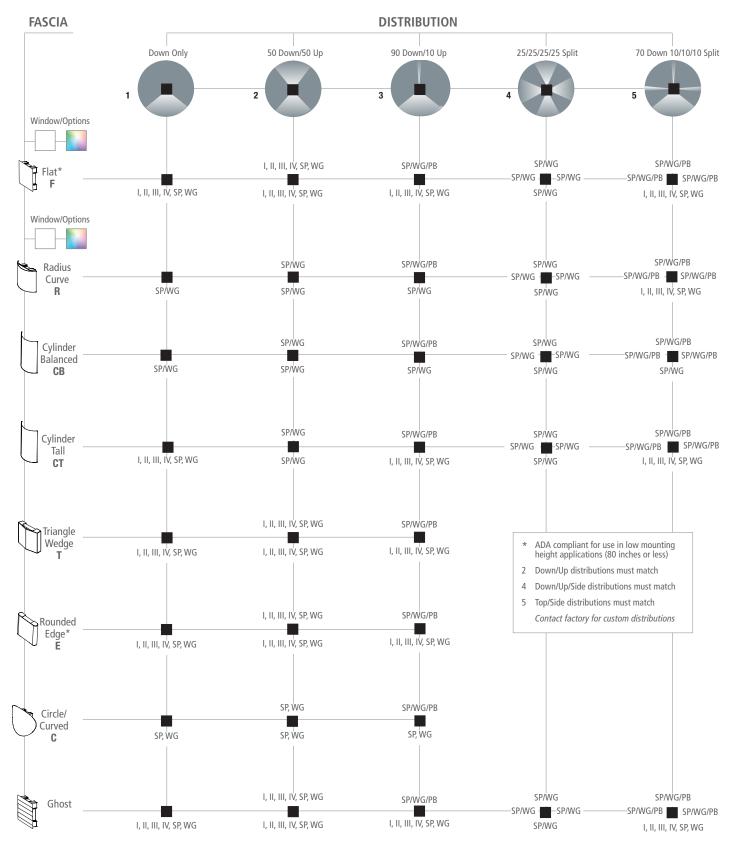
Universal Button Photocell								
(120-277V)								
Programmable Occupancy Sensor								
SiteSync Wireless								
SiteSync Wireless w/Occupancy								
Sensor								
WISCAPE								
wiSCAPE w/Occupancy Sensor								
Occupancy sensors not available with CB, T, E or C fascia forms								

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## Cypher<sup>™</sup> – CY2 Pedestrian Scale

ТҮРЕ

## **Distribution Matrix**

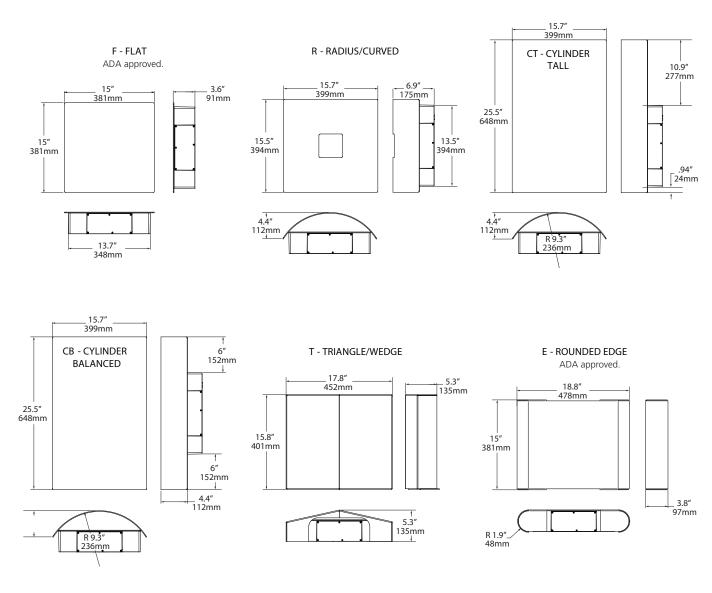




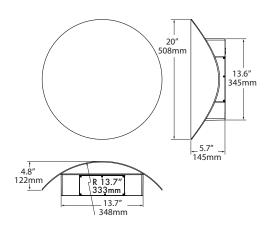
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Drawings



C - CIRCLE/CURVED





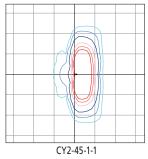
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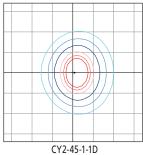
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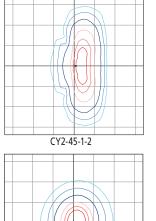
### LUMINAIRE PERFORMANCE

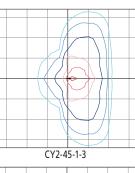
	Configuration																
	Bright White (5000K)					Neu	tral White	(4000	K)		Warm White (3000K)						
Nominal Output (Lm)	Average System	Distribution	Delivered	Efficacy	BU	G Rat	ing	Delivered	Efficacy	BUG	G Rat	ing	Delivered	Efficacy	BU	G Rati	ng
	Wattage		Lumens	(Lm/W)	В	U	G	Lumens	(Lm/W)	В	U	G	Lumens	(Lm/W)	В	U	G
				5000K 70 Q	RI				4000K 70 (	CRI				3000K 7	0 CRI		
		Type 1	2836	109	0	0	0	2596	100	0	0	0	2499	96	0	0	0
		Type 2	2570	99	1	0	1	2353	90	1	0	1	2265	87	1	0	1
		Type 3	2739	107	1	0	1	2507	96	1	0	1	2413	93	1	0	1
		Type 4	2512	97	0	0	1	2299	88	0	0	1	2213	85	0	0	0
2 500	26	Wall Graze	2795	107	2	0	0	2558	98	2	0	0	2462	95	2	0	0
2,500	26	Spot/Column	2371	91	2	0	0	2171	83	2	0	0	2089	80	2	0	0
		Type 1 Diffused	2488	96	1	0	1	2278	88	1	0	1	2193	84	1	0	1
		Type 2 Diffused	2274	87	1	0	1	2082	80	1	0	1	2004	77	1	0	1
		Type 3 Diffused	2163	83	1	0	1	1980	76	1	0	1	1906	73	1	0	1
		Type 4 Diffused	2197	84	1	0	1	2011	77	1	0	1	1936	74	1	0	1
				5000K 70 (	RI				4000K 70 (	CRI			3000K 70 CRI				
	40	Type 1	4011	100	1	0	0	3672	92	1	0	0	3534	88	1	0	0
		Type 2	3635	91	1	0	1	3328	83	1	0	1	3203	80	1	0	0
		Type 3	3874	97	1	0	1	3546	89	1	0	1	3413	85	1	0	1
		Type 4	3553	89	1	0	1	3252	81	1	0	1	3131	78	1	0	1
3,500		Wall Graze	3953	99	2	0	0	3618	90	2	0	0	3483	87	2	0	0
3,500		Spot/Column	3354	84	3	0	0	3070	77	3	0	0	2955	74	3	0	0
		Type 1 Diffused	3519	88	1	0	1	3222	81	1	0	1	3101	78	1	0	1
		Type 2 Diffused	3217	80	1	0	1	2945	74	1	0	1	2835	71	1	0	1
		Type 3 Diffused	3059	76	1	0	1	2800	70	1	0	1	2695	67	1	0	1
		Type 4 Diffused	3107	78	1	0	1	2844	71	1	0	1	2738	68	1	0	1
				5000K 70 (	CRI			4000K 70 CRI					3000K 70 CRI				
		Type 1	4982	97	1	0	1	4561	88	1	0	0	4390	84	1	0	0
		Type 2	4675	90	1	0	1	4280	82	1	0	1	4119	79	1	0	1
		Type 3	4812	95	1	0	1	4405	86	1	0	1	4240	82	1	0	1
		Type 4	4569	88	1	0	1	4183	80	1	0	1	4026	77	1	0	1
4,500	52	Wall Graze	5083	99	3	0	0	4653	89	3	0	0	4479	86	3	0	0
		Spot/Column	4313	84	3	0	0	3948	76	3	0	0	3800	73	3	0	0
		Type 1 Diffused	4526	88	2	0	1	4143	80		0	1	3988	77		0	
		Type 2 Diffused	4137	80	1	0		3787	73		0	1	3645	70		0	
		Type 3 Diffused	3934	76	1	0	1	3601	69		0	1	3466	67		0	1
		Type 4 Diffused	3996	77	1	0	1	3658	70	1	0	11	3521	68		0	1

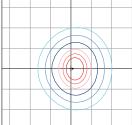
### ISOLINE TEMPLATES 15' Mounting Height, 15' Grid Spacing



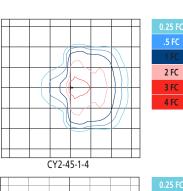


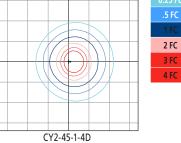






CY2-45-1-3D

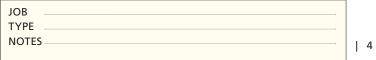






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CY2-45-1-2D



# Cypher<sup>™</sup> – CY2 Pedestrian Scale

TYPE

## ELECTRICAL CHARACTERISTICS

Lumen Pack-	-		oltage	ltage Input				Min. Power	Max THD	Dimming	Source/Sink C	Current (mA)	Abosolute voltage range on 0-10v (+) Purple		
age	Wattage (W)	VAC	Hz	120	277	347	480	Factor	(%)	Range	Min.	Max.	Min.	Max.	
2,500	26				0.2	0.1	0.1	0.1							
3,500	40	120	50/60	0.3	0.1	0.1	0.1	>0.9	20	10% to 100%	0 mA	1 mA	0V	10V	
4,500	52			0.4	0.2	0.2 0.1 0.1			10070						

## TM-21 LIFETIME CALCULATION (500mA)

Lumen Package	Ambient	Proj	ected Lu	umen M	aintenance (K	hrs)	Reported
Lumen Fackage	Environment °C	15	25	50	60 (TM-21)	100	L70
4,500	25	95%	94%	90%	89%	83%	>60Khrs.
4,500	40	93%	91%	84%	82%	73%	20UNIIIS.



JOB	
TYPE	
NOTES	1.1

#### HOUSING

- Main housing shroud shall be of fabricated 5052-H32 aluminum alloy
- Housing mounting interface shall have a stamped silicone gasket.
- Luminaire housing shall be free of any visible heat fins, hardware or fasteners.
- Bracketry and hardware shall be stainless steel.

#### OPTICAL ARRAY

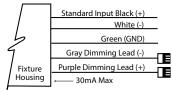
- LEDs shall be mounted to a metal printed circuit board assembly (MCPCB) with a uniform conformal coating over the panel surface and electrical features.
- Optical lenses shall be clear injection molded PMMA acrylic.
- Optical array shall be recessed in order to shield each LED optic across the length of the aperture.
- Optical array shall be sealed for IP66 rating.
- Secondary lens is impact resistant 5/32" tempered glass.

#### ELECTRICAL

- Drivers shall be in direct contact with the die-cast aluminum housing across the entire surface area of the widest face for maximum thermal transfer.
- "Thermal Shield", primary side, thermister provides protection for the sustainable life of LED module and electronic components.
- Drivers shall have greater than a 0.9 power factor, less than 20% harmonic distortion, and be suitable for operation in -40°C to 40°C ambient environments
- Luminaires shall have integral surge protection that shall be U.L. recognized and have a surge current rating of 10,000 Amps using the industry standard 8/20uSec wave and surge rating of 372J. Surge protection device shall be wired in series.
- Drivers shall be U.L recognized.
- Drivers shall not be compatible with current sourcing dimmers, consult factory for current list of known compatible dimming systems approved dimmers include Lutron Diva AVTV, Lutron Nova NFTV and NTFTV.
- Integral battery backup provides emergency path of egress lighting for the required 90 minutes for -20°C ambient environments.

#### SPECIFICATIONS

- Luminaire shall be capable of operating at 100% brightness in a 40°C environment. Both driver and optical array shall have integral thermal protection that will dim the luminaire upon detection of temperatures in excess of 85°C.
- Luminaires not configured with a control system shall be provided with 0-10 purple and gray dimming leads.



#### CONTROLS

- Optional universal voltage (120-277V) button photocontrol for dusk to dawn energy savings. Photocontrol is factory installed inside the housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others.
- Wireless enabled fixtures shall support bi-directional radio frequency (RF) communications utilizing IEEE 802.15.4 operating in the 2.4GHZ ISM band.
- Up to 1000' wireless range may be reduced by physical obstructions between lighting fixtures.
- Occupancy Sensor shall programmable and use passive infrared (PIR) sensing technology that reacts to changes in infrared energy (moving body heat) within the coverage area. Careful consideration must be given to obstructions that may block the sensor's line of sight.
- Factory default settings for SCP option shall be:
  High mode: 10V
  - Low mode: 1V
  - Ramp-up rate: disabled
  - Fade-down rate: disabled
- Photocell: Off
- Sensitivity: Full
- Time Delay: Fade to low: 5 minutes
- Time Delay: Fade to off: 1 hour
- The SCP enables any wall mounted luminaire, in excess of 30 watts, to meet California Title 24 requirements with integral 10KA surge protection for added reliability and serviceability.

For more detail: http://www.aal.net/ products/sensor\_control\_programmable

Hubbell Control Solution's wiSCAPE™ In-Fixture Module is a bi-directional wireless RF device that allows an individual fixture to be managed, monitored and metered. The wiSCAPE In-Fixture Module communicates wirelessly over a robust 2.4GHz ISM (Industrial, Scientific and Medical) certified meshed radio signal. The wiSCAPE Fixture Module drastically simplifies control and automation of projects, especially in retrofit environments, and challenges the legacy world of wired-systems. wiSCAPE wireless control technology easily adapts to complex automation situations for quick, simple and economical commissioning. The On-Fixture Module is compatible with A-25-7H option.  SiteSync<sup>™</sup> wireless control system for reduction in energy and maintenance cost while optimizing light quality 24/7. See ordering information or visit www. hubbelllighting.com/products/sitesync for more details.

#### **BLUETOOTH®**

- RGBW option includes integral Bluetooth module, built into driver, that permits the adjustment of luminous front color when paired with Hubbell Remote App via cellular/ tablet device.
- Bluetooth Low Energy (BLE) or Bluetooth Smart compatible for both iOS (iOS8 and forward) and Android (Gingerbread and forward) handheld software applications. Compatible with phones and tablets.
- Free Bluetooth Apps are available for Apple iOS and Google Android mobile devices and are downloadable via the internet at Apple App Store or Google Play.

#### MOUNTING AND INSTALLATION

- JUNCTION BOX: Standard with zinc-plated, quick-mount junction box plate that mounts directly to 4" J-Box
- Mounting plate features a one-piece EPDM gasket on back side of plate to firmly seal fixture to wall surface, forbidding entry of moisture and particulates.
- Fixture attaches by two Allen-head hidden fasteners for tamper resistance.
- Optional mounting arrangements utilize a die-cast mounting adaptor to allow for surface conduit and through branch wiring.

#### SERVICING

- Housing shall be able to hang freely in an open service position for inspection of internal wire connections. Once in service position, the housing shall be able to be removed for service by lifting the assembly up off the rear mounting plate and disconnecting the wiring plugs.
- Driver assembly shall be mounted to a prewired internal tray with quick disconnects for removal.

#### FUSING

**SF** for 120, 277, and 347 Line volts **DF** for 208, 240, and 480 Line volts

High temperature fuse holders factory installed inside the fixture housing. Fuse is included.



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#### FINISH

- Luminaire finish shall consist of a five stage pretreatment regimen with a polymer primer sealer, oven dry off, and top coated with a thermoset super TGIC polyester powder coat finish.
- Luminaire finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance.

#### CERTIFICATION

- Luminaire shall be listed with UL for outdoor, wet location use, UL1598, UL 8750 and Canadian CSA Std. C22.2 no.250.
- IP66 rated assembly
- IDA approved, 3000K and warmer CCTs only.
- DesignLights Consortium® (DLC) qualified.
  Please refer to the DLC website for specific product qualifications at www.designlights.org.
- ANSI C136.31-2010 4G Vibration tested and compliant.
- Complies with "Americans with Disabilities Act" or "ADA" on select versions for low mounting height applications (fixtures extend maximum of 4 inches from wall for mounting heights of 80 inches or less).

# WARRANTY / TERMS AND CONDITIONS OF SALE

Download:

<u>Five year limited warranty (for more information</u> <u>visit: http:// www.hubbelllighting.com/resources/</u> <u>warranty/</u>

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