



PALM

12V/120V LED

HIGHLIGHTS

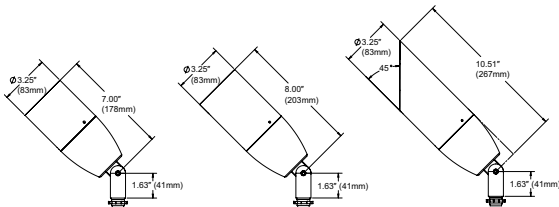
- The Palm Series accent lights are suitable for a variety of mounting applications including ground, wall, tree, sign and architectural accents
- Suitable for wet locations
- Integral driver for 120V
- Dimmable using standard TRIAC (forward-phase or leading-edge) and ELV (reverse phase or trailing-edge) dimmer for 120V and dimmable using standard MLV dimmer and magnetic transformer for 12V
- Tapered-sure lock
- Available in 80CRI and 90CRI
- 1,600lm



Specifications

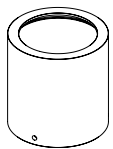
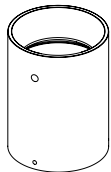
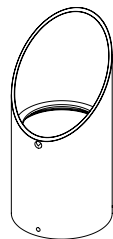
Weight:	3.0 lbs.
H:	7" (178mm) w/C1 8" (203mm) w/C2 10.51" (267mm) w/C3

DIMENSIONS

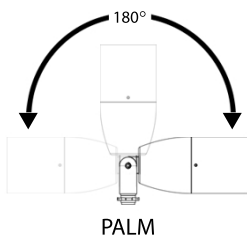

C1

 EPA = 0.191 ft²
C2

 EPA = 0.218 ft²
C3

 EPA = 0.243 ft²

C1
SHORT FLUSH

C2
LENS RECESSED

C3
45° CUTOFF

AIMING DETAILS

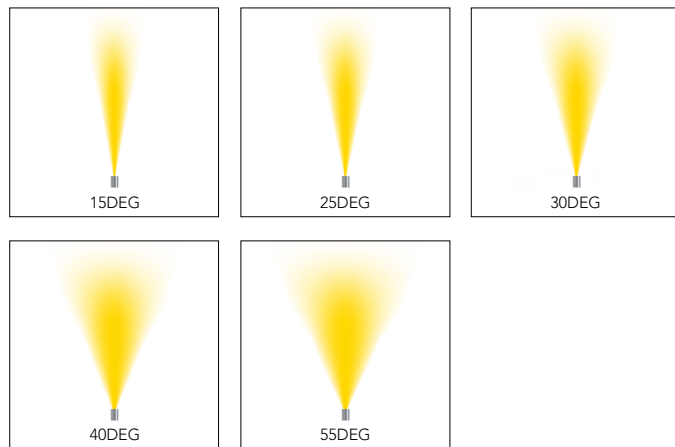

PALM

LUMEN PACKAGES

	15DEG	20DEG	25DEG	30DEG	35DEG	40DEG	45DEG	50DEG	55DEG
Delivered Lumens	1,514	1,433	1,466	1450	1515	1491	1440	1450	1465
Watts	18	18	18	18	18	18	18	18	18
LPW	84	80	81	81	84	83	80	81	81
Peak Candela	12,941	6,031	6,156	3986	3441	2761	2208	1681	1495

Note: Information based on 4000K @ P1, 80CRI, 120 Volt with C1 cap and FLC lens

STANDARD DISTRIBUTION



ORDERING INFORMATION

EXAMPLE: PALM A P1 80CRI 27K 12 20DEG FLC KM C2 BL

PALM																
Series*	Material*	Performance Packages*	CR*	Color Temperature*	Voltage*	Distribution*			Lens*		Mounting*					
PALM	A Aluminum BR Brass	P1 P2 <i>Note: P2 only available with 12volt</i>	80CRI 90CRI	27K 30K 35K 40K 50K <i>Note: 35k and 50K only available with 80CRI</i>	12 ¹ 120 ² <i>Note: 120V only available with P1</i>	15DEG 20DEG 25DEG 30DEG 35DEG	15° 20° 25° 30° 35°	40DEG 45DEG 50DEG 55DEG	40° 45° 50° 55°	FLC WSL	Flat Clear Watershed	KM 350R	Knuckle 350° rotational knuckle			
Mounting Accessories <i>Optional</i>				Options* <i>Optional</i>			External Caps*		Finish*							
Independent Mounting				Stems			Internal Louver		C1 Short Flush		All Material					
CN4	Rectangular canopy			S3 ³	3" Stem		IHL	Honeycomb Louver		C2	Recessed Lens		BL	Black Textured		
CN4BR	Rectangular canopy, Brass			S6 ³	6" Stem		Internal Accessory			C3	45° Angle Cut		BRS	Bronze Smooth		
CN5	5" Round canopy			S__ ³	12" - 24" stems, available in 6" increments		L1	Prismatic Lens		BRT				Bronze Textured		
CN5BR	5" Round canopy, Brass			S3BR ⁴	3" Stem Brass		L2	Linear Spread Lens		DBL				Black Smooth		
JBA	Aluminum J-Box			S6BR ⁴	6" Stem Brass		L3	Softening Lens		DDB				Designer Bronze		
JBB	Bronze J-Box Architectural			S__BR ⁴	12" - 24" stems, available in 6" increments		Internal Filters			DNA				Natural Aluminum		
PM60A ⁸	Adjustable Post Mount			Extension Arms⁵			FA	Amber		NBS ⁷				Natural Bronze Smooth		
PMBR60A ⁸	Adjustable Post Mount - Brass			EA_	12", 24"		FG	Green		STG				Steel Gray		
PM60C	Post Mount with Conduit			EA45_	45° - 12", 24"		FGD	Green Dichroic		VET				Verde Textured		
PMBR60C	Post Mount with Conduit - Brass			EA90_	90° - 12", 24"		FLB	Light Blue		WH				White Textured		
PM60D ⁹	Post Mount with Open Bottom						FM	Mercury Vapor		WHS				White Smooth		
PMBR60D ⁹	Post Mount with Open Bottom - Brass						FMB	Medium Blue		CF				Custom Finish		
WMC	Wall Mount Cover						FMBD	Medium Blue Dichroic		RALTBD				RAL Paint Finishes		
WMSA	Wall Mount with Splice Access						FR	Red		__Z ⁹				Zinc Undercoat (i.e.BLZ)		
TRA ⁸	Tree Mounted J-Box with Aluminum						FRD	Red Dichroic		Brass Only						
TRB ⁸	Tree Mounted J-Box with Aluminum mounting strap, available with 1-4 JBoxes per strap													BRZ	Satin Bronze w/ Satin Clear	
_TRAS ⁸	Tree Mounted J-Box with Bronze mounting strap, available with 1-4 JBoxes per strap													NAT	Natural Brass w/ Satin Clear	
_TRBS ⁸	Tree Mounted J-Box with Bronze mounting strap, available with 1-4 JBoxes per strap													POL	Polished Brass w/ Gloss Clear	
<i>Note: Aluminum or Bronze Stake Mounted J-Box (SBA_ or SBB_) is available in 12" or 18" and can be ordered separately, please see below and spec sheet for options.</i>				<i>Note: RALTBDD for pricing only, replace with applicable RAL call out when ready to order. See the RALBROCHURE for available options. It is recommended that Hydrel products only use textured paint. Note: Zinc Undercoat provides corrosion protection for Marine Environment and Natatorium Construction</i>												

*Required Fields

Notes:

- 1 Remote Transformer required - Options for remote transformers.
- 2 Integral Driver.
- 3 Aluminum stems only compatible with PM60A, PM60C and PM60D.
- 4 Brass stems only compatible with PMBR60A, PMBR60C and PMBR60D.
- 5 Extended arms compatible with WMC and WMSA.
- 6 Up to 2 options can be specified.
- 7 NBS paint uses specialty pigments to give a natural appearance that may vary by fixture.
- 8 Only available with 12 volt
- 9 Zinc undercoat for harsh environments

LUMEN OUTPUT

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Distribution Type	Field Angle		Beam Angle		27K (2700K, 80CRI)			30K (3000K, 80CRI)			35K (3500K, 80CRI)			40K (4000K, 80CRI)			50K (5000K, 80CRI)		
			°H	°V	°H	°V	Max CD	Lumens	LPW	Max CD	Lumens	LPW	Max CD	Lumens	LPW	Max CD	Lumens	LPW	Max CD	Lumens	LPW
P1 12 Volt	9	15DEG	31	31	16	16	6,553	767	85	6,798	795	88	6,921	810	90	7,165	838	93	7,410	867	96
		20DEG	46	46	22	22	3,054	726	81	3,168	753	84	3,226	766	85	3,340	793	88	3,454	821	91
		25DEG	45	45	24	24	3,117	742	82	3,234	770	86	3,292	784	87	3,409	812	90	3,525	840	93
		30DEG	57	57	30	30	2,019	735	82	2,094	762	85	2,132	776	86	2,207	803	89	2,283	831	92
		35DEG	57	57	37	36	1,743	767	85	1,808	796	88	1,840	810	90	1,906	839	93	1,971	868	96
		40DEG	65	65	41	41	1,398	755	84	1,450	783	87	1,477	797	89	1,529	826	92	1,581	854	95
		45DEG	74	74	44	44	1,118	729	81	1,160	756	84	1,181	770	86	1,223	797	89	1,265	825	92
		50DEG	87	87	52	52	851	734	82	883	762	85	899	775	86	931	803	89	963	830	92
P2 12 Volt	18	15DEG	31	31	16	16	11,069	1,295	72	11,482	1,343	75	11,689	1,367	76	12,103	1,416	79	12,517	1,464	81
		20DEG	46	46	22	22	5,159	1,226	68	5,352	1,271	71	5,448	1,294	72	5,641	1,340	74	5,834	1,386	77
		25DEG	45	45	24	24	5,266	1,254	70	5,463	1,301	72	5,561	1,324	74	5,758	1,371	76	5,955	1,418	79
		30DEG	57	57	30	30	3,409	1,241	69	3,537	1,287	72	3,601	1,310	73	3,728	1,357	75	3,856	1,403	78
		35DEG	57	57	37	36	2,944	1,296	72	3,054	1,345	75	3,109	1,369	76	3,219	1,417	79	3,329	1,466	81
		40DEG	65	65	41	41	2,362	1,275	71	2,450	1,323	74	2,494	1,347	75	2,582	1,395	78	2,671	1,442	80
		45DEG	74	74	44	44	1,889	1,232	68	1,960	1,278	71	1,995	1,301	72	2,065	1,348	75	2,136	1,393	77
		50DEG	87	87	52	52	1,438	1,240	69	1,492	1,287	72	1,518	1,310	73	1,572	1,356	75	1,626	1,402	78
		55DEG	95	95	56	55	1,279	1,253	70	1,327	1,300	72	1,351	1,323	74	1,399	1,370	76	1,446	1,417	79

Performance Package	System Watts	Distribution Type	Field Angle		Beam Angle		27K (2700K, 80CRI)			30K (3000K, 80CRI)			35K (3500K, 80CRI)			40K (4000K, 80CRI)			50K (5000K, 80CRI)		
			°H	°V	°H	°V	Max CD	Lumens	LPW	Max CD	Lumens	LPW	Max CD	Lumens	LPW	Max CD	Lumens	LPW	Max CD	Lumens	LPW
P1 120 Volt	18	15DEG	31	31	16	16	11,834	1,384	77	12,277	1,436	80	12,498	1,462	81	12,941	1,514	84	13,383	1,566	87
		20DEG	46	46	22	22	5,516	1,310	73	5,722	1,359	76	5,825	1,384	77	6,031	1,433	80	6,238	1,482	82
		25DEG	45	45	24	24	5,630	1,341	75	5,840	1,391	77	5,946	1,416	79	6,156	1,466	81	6,367	1,516	84
		30DEG	57	57	30	30	3,645	1,327	74	3,782	1,376	76	3,850	1,401	78	3,986	1,450	81	4,122	1,500	83
		35DEG	57	57	37	36	3,147	1,386	77	3,265	1,438	80	3,324	1,464	81	3,441	1,515	84	3,559	1,567	87
		40DEG	65	65	41	41	2,525	1,364	76	2,619	1,415	79	2,667	1,440	80	2,761	1,491	83	2,855	1,542	86
		45DEG	74	74	44	44	2,020	1,317	73	2,095	1,366	76	2,133	1,391	77	2,208	1,440	80	2,284	1,489	83
		50DEG	87	87	52	52	1,537	1,326	74	1,595	1,376	76	1,624	1,400	78	1,681	1,450	81	1,738	1,499	83
		55DEG	95	95	56	55	1,368	1,339	74	1,419	1,390	77	1,444	1,415	79	1,495	1,465	81	1,547	1,515	84

CRI SCALING	Multiplier
90CRI	0.83

EXTERNAL CAP	Multiplier
C2	0.70
C3	0.965

LED LIFE: L70@> 60,000 hours

OPERATING TEMPERATURE: -20°C through 35°C (12v Aluminum Material)
 -20°C through 40°C (12v Brass material)
 -30°C through 35°C (120v Aluminum Material)
 -30°C through 40°C (120v Brass material)

PHOTOMETRIC DIAGRAMS

To see complete photometric reports or download .ies files for this product, visit www.hydrrel.com

FEATURES & SPECIFICATIONS

MATERIAL: Body, caps and knuckle machined from 6061-T6 Aluminum. BR - machined from 360 brass.

LIGHT SOURCE: Proprietary high output LEDs. Units have near constant light output when supplied with 11VAC-14VAC to combat voltage drop. All within 3 MacAdam ellipses

VOLTAGE: 12 Volt AC. 120 Volt AC.

DISTRIBUTION: Available in 15DEG, 20DEG, 25DEG, 30DEG, 35DEG, 40DEG, 45DEG, 50DEG, 55DEG

LENS: FLC - Lens cut from heat strengthened borosilicate glass for superior clarity and strength. WSL - Molded heat strengthened borosilicate glass for superior clarity and strength, where the glass and the top of the door are flush to allow water to shed off the fixture.

MOUNTING: Knuckle is 1/2" NPSM, mounts to 7/8" thru hole. KM option allows to tilt the fixture up to 180°. 350R option allows to tilt the fixture up to 180° and rotate up to 350°.

POWER SUPPLY: Remote 12VAC transformer purchased separately. For 120VAC driver is integral. 12VAC dimmable using a remote magnetic transformer. 120VAC dimmable using a standard Triac dimming switch/systems.

FINISH: Super durable Polyester TGIC powder coat finish (standard). Optional Zinc undercoat for harsh environments.

FEATURES: Tapered "Sure Lock" knuckle seat for innite aiming and an unparalleled locking ability. Any combination of up to 2 lens accessories/color filter/shielding can be specied for cap style and are held securely by a removable stainless steel clip ring. 350° rotational knuckle also available.

LISTING: cCSAus, Wet Location. Laboratory tests conducted by CSA to UL Standards UL-1598, UL-8750 and UL-1838. IP66 Rated.

GOVERNMENT PROCUREMENT

BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to www.acuitybrands.com/resources/buy-american for additional information.

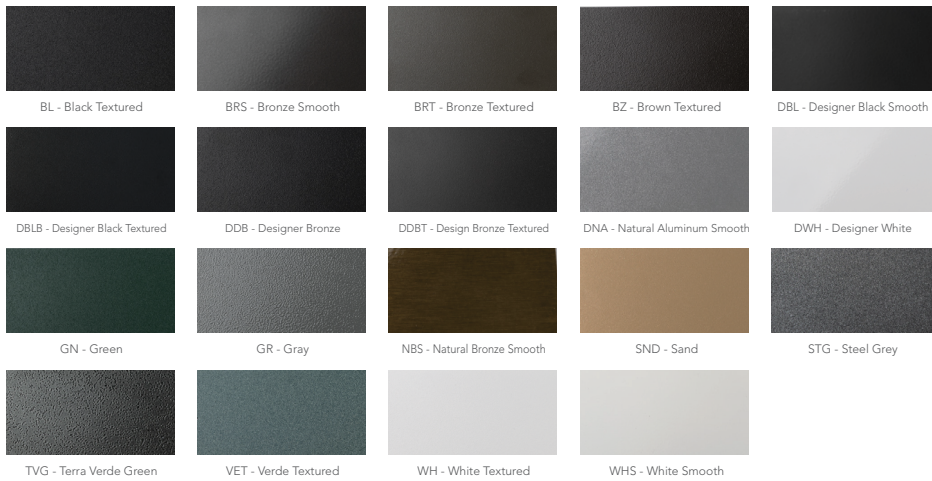
WARRANTY: 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Consult factory for details

NOTE: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

STANDARD ARCHITECTURAL COLORS

All Material Finishes



RAL Paint Finishes are also available. See the [RALBROCHURE](#) for available options. It is recommended that Hydrel products only use textured paint

Aluminum fixture surfaces are "four step pretreated" prior to being painted with a long lasting TGIC polyester powder coat.

Custom finishes are available. Textures of custom finishes are dependent on the finish material specified. Please consult factory.

Note: These colors were scanned from color chip samples. Some colors, however, may vary slightly from actual appearance due to printing variations and limitations. Please contact factory for color chip samples.

Brass Material Finishes



REMOTE TRANSFORMERS

Transformers may be loaded to 100% capacity, however the recommended load range for optimal efficiency is 40-80%.

Non-Isolated Transformers: Suitable for use with landscape type lighting

Isolated Transformers: Suitable for use with underwater and landscape type lighting




		Part #
	<ul style="list-style-type: none"> • 10 and 20 watts, 120V to 12VAC or 277V to 12VAC magnetic • Must be mounted in a listed weatherproof enclosure • Dimmable by using a magnetic low voltage dimmer switch • Non-Isolated • Suitable for LED 	Examples: TM10 120 TM10 277 TM20 120 TM20 277 See spec sheet for more options
	<ul style="list-style-type: none"> • 300 watts, 120V or 277V to 12VAC magnetic • Rated for outdoor surface mount, minimum of 12" above finished grade with the wire connection terminals facing down • Multi-tap secondary output allowing 12-15 Volt • Internal on/off switch-circuit breaker • Five "knock-outs" in the bottom cover plate (two 1/2", two 3/4" and one 1-1/2") • Dimmable by using a magnetic low voltage dimmer switch • Non-Isolated • Suitable for LED 	Example: TM300 120 See spec sheet for more options
	<ul style="list-style-type: none"> • 15 watts, 120V to 12VAC electronic • Maximum remote distance is 10' • Non-Isolated Suitable for LED 	Example: TE15 120 See spec sheet for more options
	<ul style="list-style-type: none"> • 60 and 75 watts, 120V to 12VAC electronic • Maximum remote distance is 10' • Non-Isolated Suitable for LED 	Examples: TE60 120 TE75 120 See spec sheet for more options
	<ul style="list-style-type: none"> • 150 watts, 120V or 277V primary to 12VAC secondary magnetic. • Rated for outdoor surface mount, minimum of 12" above finished grade with wire connection terminals facing down • Dimmable by using a magnetic low voltage dimmer switch • Non-Isolated • Suitable for LED 	Example: TM150 120 TM150 277 See spec sheet for more options

REMOTE TRANSFORMERS

Transformers may be loaded to 100% capacity, however the recommended load range for optimal efficiency is 40-80%.

Non-Isolated Transformers: Suitable for use with landscape type lighting

Isolated Transformers: Suitable for use with underwater and landscape type lighting

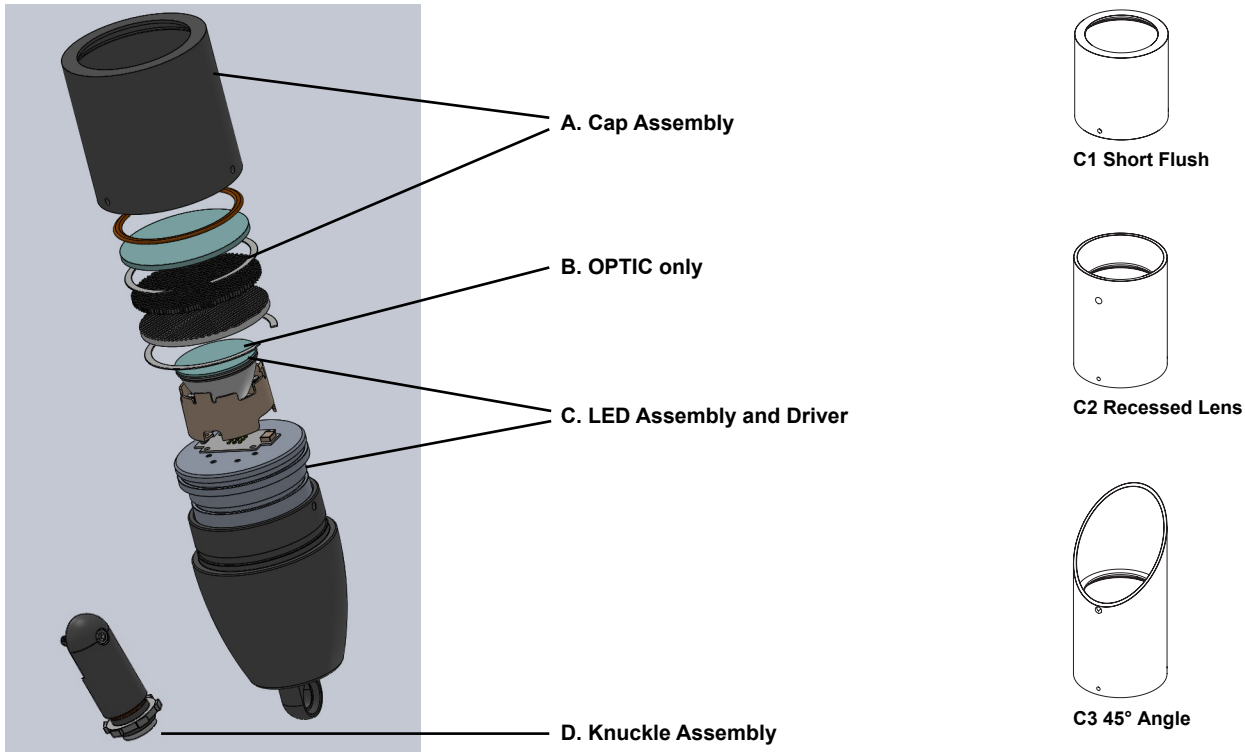
		Part #
	<ul style="list-style-type: none"> • Stepdown transformers are two winding isolated type • Two separate wiring compartments isolate primary and secondary leads • Housed in weatherproof enclosure • Meets requirements of article 680 N.E.C. Listed by U.L. • 100 watt 120/12,13,14 ac (T1901) • 300 watt 120/12,13,14 ac (T1903) • Dimmable by using magnetic low voltage dimmer switch • Isolated - can be used near underwater application • Suitable for LED 	<p>Examples: T1901 (100watts) T1903 (300watts) See spec sheet for more options</p>
	<ul style="list-style-type: none"> • Ground power post mount • 15 watts, 120V to 12V AC, electronic • Non-Isolated, suitable for LED • Non-Dimmable • Stem length available from 3" to 36" 	<p>Examples: PM60B ET15 120 S3 BL PMBR60B ET15 120 S6 POL See spec sheet for more options</p>
	<ul style="list-style-type: none"> • Wall mount power box • 15 watts, 120V to 12V AC, electronic • 20 watts, 120V to 12V AC, magnetic • ET15 - Electronic is non-dimmable • M20 - Magnetic is dimmable using low voltage magnetic dimmer switch • Non-isolated, suitable for LED 	<p>Examples: WP2J ET15 120 12C BL WP2S M50 120 34C BRS See spec sheet for more options</p>

ACCENT MOUNTING ACCESSORIES

		Part #
	<ul style="list-style-type: none"> • JBA/JBB Junction box for direct fixture mounting • Available in cast bronze or aluminum • Used where splicing is required for single or multiple fixtures Drilled and tapped to specified requirements • May be Ground or wall mounted 	Examples: JBA 34E 34F 78G BL JBB 12A 12C 78G See spec sheet for more options
	<ul style="list-style-type: none"> • CN4 wall plate canopy • Available in aluminum or brass • Shape rectangular to mount over a standard switch box • Thru hole sized for standard 1/2 pipe thread • Fixtures secured via locking nut (for thru hole) or threaded knuckle 	Example: CN4 78C BL See spec sheet for more options
	<ul style="list-style-type: none"> • CN5 wall mount canopy • Available in Aluminum, Brass or stainless steel • Shape round to mount over a standard 4" round or octagonal box. Thru hole sized for standard 1/2 pipe thread • Fixture secured via locking nut (for thru hole) or threaded knuckle 	Example: CN5 78C BL See spec sheet for more options
	<ul style="list-style-type: none"> • WMC wall mount cover • Available in cast aluminum • Wall mount cover or mounting fixture over wall box (by others) 	Examples: WMC 78C BL See spec sheet for more options
	<ul style="list-style-type: none"> • WMSA wall mount splice access • Available in cast aluminum • Wall mount with splice access plate for mounting a variety of fixtures • Integral splice access compartment for easy fixture connections • To be mounted over a recessed wall box 	Example: WMSA 78C BL See spec sheet for more options
	<ul style="list-style-type: none"> • TRA/TRB tree mount junction box • Available in cast aluminum or bronze Includes a splice box with a mounting plate • Placement of small accent fixtures around or on a structure, like a tree 	Examples: TRA 12B 78C BL TRB 12B 78C See spec sheet for more options

ACCENT MOUNTING ACCESSORIES




		Part #
	<ul style="list-style-type: none"> • TRAS/TRBS tree mount junction box with strap. • Available in cast aluminum or bronze • Includes one or more splice boxes with a polypropylene strap • Placement of small accent fixtures around the trunk or branch of a tree 	Examples: 2TRAS 12B 78C DDB 1TRBS 12B 78C See spec sheet for more options
	<ul style="list-style-type: none"> • Post Mounts PM60A, PM60C and PM60D Ground Mounting posts • Available in aluminum or brass • Suitable for fixtures with 1/2" knuckles • Fixtures are secured with a locking nut • PM60A and PM60D are used only with low volt fixtures • PM60C can be used with low or line voltage fixtures • Optional stems are offered in lengths from 3" to 36" 	Examples: PM60A S3 BL PMBR60C S12BR BRS PM60D BL See spec sheet for more options
	<ul style="list-style-type: none"> • EA-Extended Arms • Available in lengths 12", 24" • Available in angles 45° and 90° • Material available in aluminum • Extended arms are compatible with WMC and WMSA wall mounts 	Examples: WMC EA12 12C BL WMSA EA4512 12C BRS
	<ul style="list-style-type: none"> • Tree Ring TRAR 2FX, TRAR 3FX, TRAR 4XF, TRAR 5FX, TRAR 6FX • Stainless Steel Ring and Hardware • Can accommodate trees between 10" to 15" in diameter • Available in 2, 3, 4, 5 and 6 fixture configurations 	Examples: TRAR 5FX 12S 12C BL TRAR 3FX 12S 12C BRS Note: TRAR is sold separately. See spec sheets for options
	<ul style="list-style-type: none"> • SBA or SBB Stake mounted J-box • Available in aluminum or bronze material • Available in 12" and 18" • Used for a portable convenient placement of accent fixtures to accommodate 12v or 120v 1/2" knuckle fixture 	Examples: SBA12 78C CSL6P BL SBB18 78C CSL15P BZ See spec sheet for more options

PALM SPARE PARTS LIST


Part Number	Description	Part Number	Description
A. CAP ASSEMBLY CAPAPALM C1 xx1 xxx2 xxx3 CAPAPALM C2 xx1 xxx2 xxx3 CAPAPALM C3 xx1 xxx2 xxx3 1. available material finishes : A, BR 2. available lens: FLC, WSL 3. add paint finish	Cap Assembly will include the cap, lens and o-ring	C. LED Assembly + Driver module LEDAPALM xx1 xxx2 xxx3 xxx4 xxx5 1. available Performance Packages: P1,P2 2. available CRI: 80CRI, 90CRI 3. available colors: 27K, 30K, 35K,40K, 50K 4. available voltage: 12 ,120 5. available distributions: 15DEG, 20DEG, 25DEG, 30DEG, 35DEG, 40DEG, 45DEG, 50DEG, 55DEG	Includes LED array, optics, encapsulated driver
B. Optic only OPTPALM xx1 1. available distributions: 15DEG, 20DEG, 25DEG, 30DEG, 35DEG, 40DEG, 45DEG, 50DEG, 55DEG	One piece snap on optic only	D. Knuckle KAAPALM xx1 xx2 xx3 1. available material: A, BR 2. available knuckle: KM, 350R 3. add paint finish	Knuckle Assembly

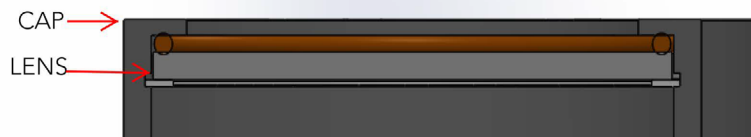
PALM INTERNAL ACCESSORIES

Internal Accessories can be ordered separate and are field replaceable

	<p>INTERNAL HONEYCOMB LOUVER</p> <ul style="list-style-type: none"> • Hexagonal cell louver with 45° cut-off • includes retaining ring 	<p>Example: IHPALM</p>
	<p>INTERNAL ACCESSORY LENSES</p> <ul style="list-style-type: none"> • L1 Prismatic Lens • L2 Linear Spread Lens • L3 Softening Lens • includes retaining ring 	<p>Examples: LAPALM L1 LAPALM L2 LAPALM L3</p>
	<p>INTERNAL COLORED FILTERS</p> <ul style="list-style-type: none"> • FA Amber • FG Green • FGD Green Dichroic • FLB Light Blue • FM Mercury Vapor • FMB Medium Blue • FMBD Medium Blue Dichroic • FR Red • FRD Red Dichroic • includes retaining ring 	<p>Examples: CFPALM FA CFPALM FG CFPALM FGD CFPALM FLB CFPALM FM CFPALM FMB CFPALM FMBD CFPALM FR CFPALM FRD</p>

The difference between the FLC and WSL lens

FLC lens is recessed below the cap



WSL lens is flush with cap to allow water to shed off the lens

