HYDREL

CATALOG NUMBER

NOTES

TYPE

SAF7F RGBW SPECIALTY ARCHITECTURAL FLOOD FLAME

MVOLT LED

HIGHLIGHTS

- Lighting effects using two beams
- Available Flame distributions: Narrow (30DEG with 10DEG), Wide (70DEG with 30DEG), Lotus (70DEG with 10DEG)
- Suitable for a variety of mounting applications including ground, wall, pole, stanchion
- 3G vibration rating per ANSI C136.31
- DMX/RDM
- Taper-Lock technology provides full aiming integrity utilizing both a rugged knuckle and yoke design
- IK10 option available
- Minimalist design that provides clean and intentional lines and transitions
- Slightly convex watershed lens that evades water build up and staining
- Industry leading flow-thru design achieved with separately sealed optical chamber and driver
- Quad chip technology, enabling optimal color mixing under each individual optic. Avoid striations and color separation when wall grazing/ washing

LED

5 YEAR warranty

IP68

BAA

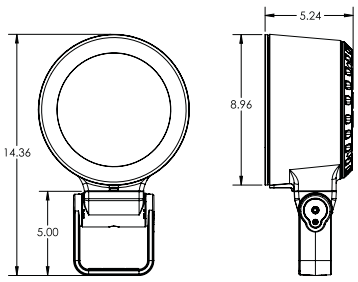
BABA

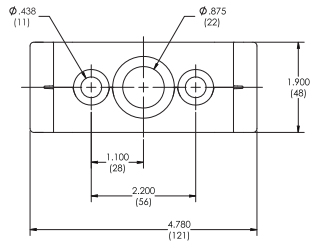
Specifications

Weight:	15lbs

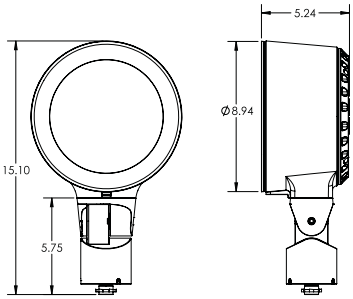
EPA:	KM: .73
	YM: .71

DIMENSIONS





YOKE

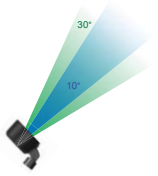


KNUCKLE

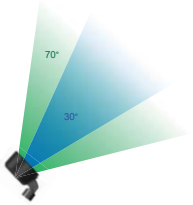
LUMEN PACKAGES

	N30DEG		W70DEG		L70DEG	
	Outer	Center	Outer	Center	Outer	Center
Delivered Lumens	823	730	705	710	705	730
Total Watts (all on)	46		46		46	
Max Candela	2077	18,394	481	1791	481	18,394

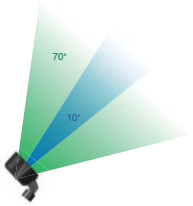
STANDARD DISTRIBUTION



"NARROW"
N30DEG 30° Outer Beam & 10° Central Beam

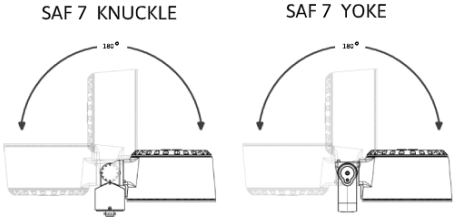


"WIDE"
W70DEG 70° Outer Beam & 30° Central Beam



"LOTUS"
L70DEG 70°Outer Beam & 10° Central Beam

AIMING DETAIL



© 2021-2024 Acuity Brands Lighting, Inc. • One Lithonia Way, Conyers GA 30012
Phone: 800-705-SERV (7378) • www.hydrel.com

ORDERING INFORMATION

EXAMPLE: SAF7F LED P1 RGBW4 MVOLT N30DEG CWL KM CJB DMX BL

SAF7F

Series*	Source*	Performance Packages*	LED Dynamic Range*	Voltage*	Distribution*	Lens*	Mounting*
SAF7F Specialty Architectural Flood Flame	**LED**	**P1**	**RGBW4** 40K white (80CRI)	**MVOLT**	**N30DEG** Narrow Flame 30° Outer Beam & 10° Central Beam **W70DEG** Wide Flame 70° Outer Beam & 30° Central Beam **L70DEG** Lotus Flame 70° Outer Beam & 10° Central Beam	**CWL** Clear Watershed Lens *Note: CWL lens IK07. For IK10 use external WRG option*	**KM** Knuckle **YM** Yoke

Mounting Accessories	Options Accessory	Options	Control Input*	External	Finish*
ADPMR Architectural Decorative Pole Mount Round **ADPMS** Architectural Decorative Pole Mount Square **AMPC_/_** Architectural Mid Pole Clamp available to fit on a 4" or 6" pole with 1 or 2 fixtures **APAR** Round 18" Pole Mount **APAS** Square 18" Pole Mount **AWSC** Architectutal Wall Splice Cover **CAJB** Cylindrical Architectural Junction box **CJB** Cylindrical Junction Box **CPM** Cylindrical Pedestal Mount **CPMSA** Cylindrical Pole Mount Splice Access **CSM_** Cylindrical Stancion Mount 12"-48" available in 6" increments **CWMA_E** Cylindrical Wall Mount Arm. End 12"-48" (available in 6" increments) **CWMA_T** Cylindrical Wall Mount Arm Top 12"-48" (available in 6" increments)	Hardware **TPH** Tamper proof hardware **LASC** Safety Cable	**CSL_** 10' – 50' of cord available in 5' increments *Note: Cord length required for Yoke Mounting only*	**DMX**	**GS** Glare shield **FGS** Full Glare Shield **WRG** Wire Rock Guard	**BL** Black Textured **BRS** Bronze Smooth **BRT** Bronze Textured **CF** Custom Finish **DBL** Black Smooth **DDB** Designer Bronze **DNA** Natural Aluminum **NBS** Natural Bronze Smooth **VET** Verde Textured **WH** White Textured **WHS** White Smooth **__Z** Zinc Undercoat (i.e.BLZ) Note: Zinc Undercoat provides corrosion protection for Marine Environment and Natatorium Construction **CF** Custom Finish **RALTBD** RAL Paint Finishes *Note: RALTBD 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.*

*Required Fields

© 2021-2024 Acuity Brands Lighting, Inc. • One Lithonia Way, Conyers GA 30012
Phone: 800-705-SERV (7378) • www.hydrel.com

PERFORMANCE DATA

LUMEN OUTPUT — SAF7F_RGBW

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		RGBW4	
				H	V	H	V	Max CD	Lumens
P1	46	N30DEG	Outer	61	61	33	33	2077	823
			Center	18	18	9	9	18,394	730
		W70DEG	Outer	111	111	77	77	481	705
			Center	61	61	33	33	1791	710
		L70DEG	Outer	111	111	77	77	481	705
			Center	18	18	9	9	18,394	730

CSA LISTING TEMPERATURE: -20°C though 40°C

ELECTRICAL LOAD

		Current (A)			
Light Engines	System Watts	120	208	240	277
RGBW P1	46	0.39	0.23	0.20	0.17

LUMEN AMBIENT TEMPERATURE (LAT) MULTIPLIERS

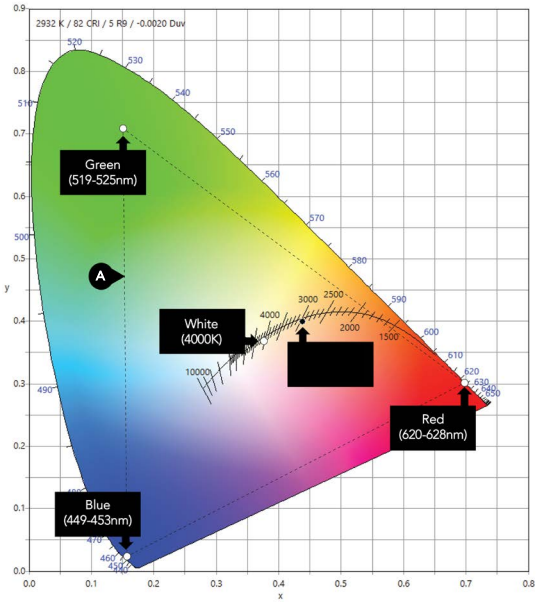
Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F)

Ambient		RGBW Lumen Multiplier
0°C	32°F	1.27
10°C	50°F	1.16
20°C	68°F	1.05
25°C	77°F	1.00
30°C	86°F	0.94
40°C	104°F	0.83

Optical Scaling Charts*	
GS	0.96
FGS	0.95

Note: This table can be used to approximate the lumen values with different accessories. Please see IES files for exact lumen outputs.

RGBW GAMUT AND RANGE



- The Gamut of a luminaire determines the potential color range, specifically the dominant wavelength of each primary color.
- The Path determines the range of colors the user can select for the luminaire.

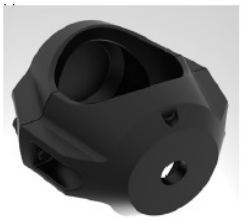
ARCHITAINMENT COLOR GPHD

- **Gamut** Triangular
- **Path** Full RGB gamut
- **Handle** Four Handles: Red, Green, Blue, White
- **Data** DMX512/RDM

The RGBW Range reaches the full range of saturated colors and subtle pastels to create bold transformational effects.

A RGBW Range within triangle formed by RGB

SAF MOUNTING ACCESSORIES

		Part #
	ADPMR/ADPMS Architectural Decorative Pole Mount Round or Square • Architectural opulent design for seamless pole integration and fixture aiming • Intended for 4" round and tapered poles or minimum 4" square poles • Mounting location on the top of each arm accepts one lighting fixture • Designed for SAF7 & SAF14 fixtures	Examples: ADPMR 78C BL See spec sheet for more options
	• AMPC Architectural Mid Pole Clamp • Clamp pole mount design for quick install and fixture aiming • Intended for 4" or 6" round straight pole • Mount one or two fixtures • Mounting location mid pole • Designed for SAF7 and SAF14 series with safety cable option	Example: AMPC4/1 78C BL See spec sheet for more options
	APAR/APAS Architectural Pole Arm Round or Square • Intended for 4" round and tapered poles or minimum 4" square poles • Mounting location on the top of each arm accepts one lighting fixture • Designed for SAF7 & SAF14 fixtures	Example: APAS XLSC BRS See spec sheet for more options
	AWSC Architectural Wall Splice Cover • Designed to be mounted over a recessed wall box or can be surface mounted for direct conduit entrance • Supplied with an integral splice access compartment for easy fixture connections • Designed for SAF7 & SAF14 fixtures	Example: AWSC 78C DNA See spec sheet for more options
	CAJB Cylindrical Architectural Junction Box • Designed for architectural and landscape applications • Recommended for mounting on a rigid metallic conduit • For direct mounting of the SAF7 & SAF14 series light fixtures	Example: CAJB 34B XLSC DBL See spec sheet for more options
	CJB Cylindrical Junction Box • Drilled and tapped to ¾" NPT specifications • For larger hole sizes , consult factory • Recommended to seal conduit to maintain dry components • Compatible with SAF7 & SAF14 Flood luminaries	Example: CJB 34S XLSC VET See spec sheet for more options

© 2021-2024 Acuity Brands Lighting, Inc. • One Lithonia Way, Conyers GA 30012
Phone: 800-705-SERV (7378) • www.hydrel.com

SAF MOUNTING ACCESSORIES

		Part #
	CPM Cylindrical Pedestal Mount • Suitable for architectural and landscape applications • Provided with front access cover for easy wiring and installation. • Compatible with SAF7 & SAF14 Flood luminaries	Example: CPM 78C BL See spec sheet for more options
	CPMSA Cylindrical Pole Mount Splice Access • Designed to mount atop of 4" round poles • Provided with splice compartment • Compatible with SAF7 & SAF14 Flood luminaries	Example: CPMSA 78C DBL See spec sheet for more options
	CSM Cylindrical Stanchion Mount • Available in heights from 12" to 48" in 6" increments • Provided with front access cover for easy wiring and installation. • Compatible with SAF7 & SAF14 Flood luminaries	Example: CSM12 XLSC BRT See spec sheet for more options
	CWMA E/CWMA T Cylindrical Wall Mount Arm End or Top • Available in lengths from 12" to 48" in 6" increments • Supplied with splice cover for easy wiring and installation • End mounting only available with SAF7 • Compatible with SAF7 & SAF14 Flood luminaries	Example: CWMA30E 78C BL CWMA12T XLSC BRS See spec sheet for more options

© 2021-2024 Acuity Brands Lighting, Inc. • One Lithonia Way, Conyers GA 30012
Phone: 800-705-SERV (7378) • www.hydrel.com

EXTERNAL ACCESSORIES

		Part #
	• WRG- Wire Rock Guard	Example: WRGSAF7 BL
	• FGS- Full Glare Shield	Example: FGSSAF7 DDB
	• GS- Glare Shield	Example: GSSAF7 BL

© 2021-2024 Acuity Brands Lighting, Inc. • One Lithonia Way, Conyers GA 30012
Phone: 800-705-SERV (7378) • www.hydrel.com

ACCESSORY OPTIONS

TAKE CONTROL

Hydrel lighting solutions bring ease of use, innovation, and next-generation control features to commercial, underwater, and architectural outdoor applications. We offer a dedicated team of specification engineers to take you through lighting design, the specification process, to the installation of our fixtures. We simplify the complex and help you create the right layer of light for any outdoor lighting environment. Find the right architectural outdoor fixture, controls, and network connectivity with Hydrel Lighting Solutions.

FRESCO CONTROL SYSTEM

Series		Model		Options		Finish	
FCS	Fresco Control System	**7TSN**	7" touchscreen with nLight port	**X**	DMX/RDM control	**DBL**	Black
						DWH	White
						DNA	Natural Aluminum

Refer to FRESCO spec sheet for additional details and options.

EASYL - LED SHOW CONTROLLER WITH LCD TOUCHSCREEN

Series		Voltage		Finish	
EZSOLO	Easyl Solo	**MVOLT**	120V-277V VAC, 50/60Hz	**BK**	Black
EZTOUCH	Easyl Touch			**Wh**	White
EZPRO	Easyl Pro				

Refer to EASYL spec sheet for additional details and options.

PATHWAY Connectivity Solutions- DMX networking and advanced control

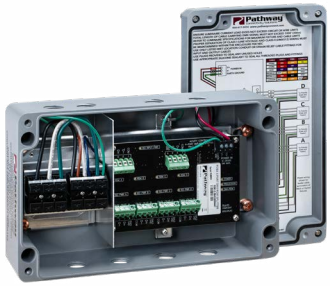
DMX512 networks create dynamic lighting. Dynamic lighting often brings a lot of color and movement to spaces. The DMX512 lighting protocol was created to serve the needs of performance lighting, such as in theaters or music venues. A DMX network is designed to support large amounts of data continually moving between controllers and luminaires, and at very high speeds. Many non-performance lighting applications also rely on DMX networks, to support RGB LED luminaires featured in applications such as building façades, hotel lobbies and corporate reception areas.

A DMX network always includes a controller and luminaires that are compatible with the DMX protocol. As well, DMX lighting systems must include network devices that route the DMX data to different locations between the controllers and luminaires.

Pathway Connectivity provides these network devices, creating robust and secure network backbones. Pathway devices create bridges between Ethernet and DMX, and DMX and other kinds of lighting control protocols, such as RDM, nLight® or 0-10v.

DMX-RDM Repeater with Power in IP65 Enclosure

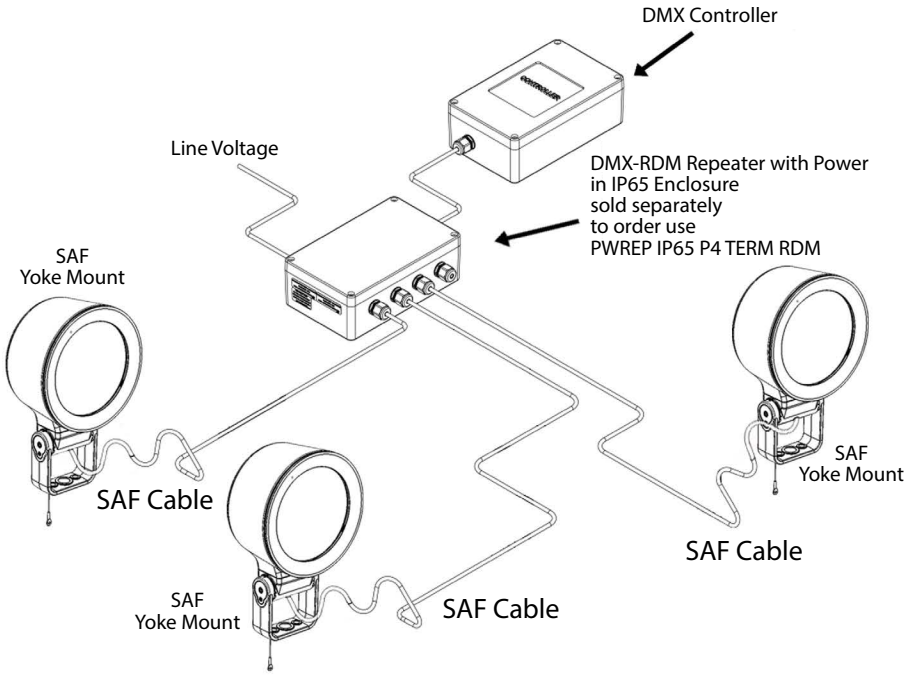
Model	
PWREP IP65 P4 TERM RDM	DMX-RDM Repeater with Power in IP65 Enclosure



Refer to PWREP IP65 spec sheet for additional details.

© 2021-2024 Acuity Brands Lighting, Inc. • One Lithonia Way, Conyers GA 30012
Phone: 800-705-SERV (7378) • www.hydrel.com

WIRING AND LAYOUT DESIGN



Wiring Detail - DMX RGBW Fixture

FEATURES & SPECIFICATIONS

MATERIAL: Die cast copper-free aluminum (A360) housing & doors with separate optical and driver compartments to ensure thermal isolation of the electronic drivers and LED's.

VOLTAGE: MVOLT 120V-277V, 50/60Hz.

DISTRIBUTION: Available in N30DEG, W70DEG and L70DEG.

LENS: Molded from heat strengthened borosilicate glass for superior clarity and strength.

MOUNTING: Adjustable knuckle is 1/2" NPT. Yoke mount is a 7/8" thru hole center and (2) 7/16" thru holes 2.2" on center. Aluminum knuckle, yoke, & stainless steel locking hardware with infinite aiming adjustment capabilities and a wide array of mounting accessories. The SAF series can withstand up to a 3G vibration load rating per ANSI/IEEE C136.31. Yoke mount luminaires are provided with 10'-50' at 5ft increments of 18 gauge/6 conductor ST cord for power supply and control. Knuckle mount luminaires are provided with 18" leads (18 gauge for power supply and 22 gauge for control).

GLARE CONTROL: External glare control options include full glare shields and half glare shields.

FINISH: Exterior parts are protected by a zinc-infused durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climates without cracking or peeling.

ELECTRICAL: MVOLT (120-277) LED class 2 power supply. 46 watts max, L83 lifetime ≥ 100,000 hours at 25°C. Power factor > 90%, THD < 20%. 6KV surge protection meets a minimum Category C low operation per ANSI/IEEE C62.41.2.

CONTROL: 8 channel system. Channels 1-4 will control the outer beam and channels 5-8 control the center beam.

FEATURES: Taper lock knuckle and yoke for infinite aiming and an unparalleled locking ability.

EXTERNAL ACCESSORY: Impact resistant rock guard.

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.

LISTING: cCSAus, suitable for outdoor & wet location, IP68 rated.

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.

© 2021-2024 Acuity Brands Lighting, Inc. • One Lithonia Way, Conyers GA 30012
Phone: 800-705-SERV (7378) • www.hydrel.com