HYDREL®

SAF14 RGB SPECIALTY ARCHITECTURAL FLOOD
MVOLT LED

LED · 5 YEAR warranty · IP68 · BAA · BABA

HIGHLIGHTS

- Suitable for a variety of mounting applications including ground, wall, pole, stanchion
- DMX/RDM
- Taper-Lock technology provides full aiming integrity utilizing both a rugged knuckle and yoke design
- 2,294lm
- 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
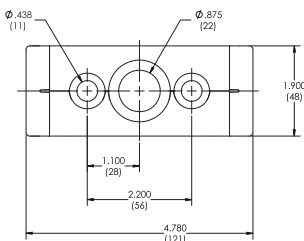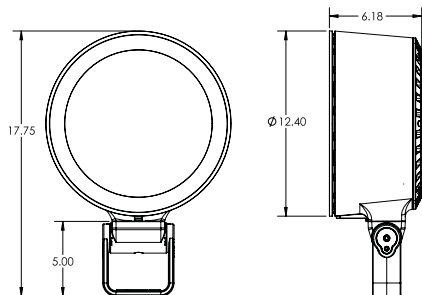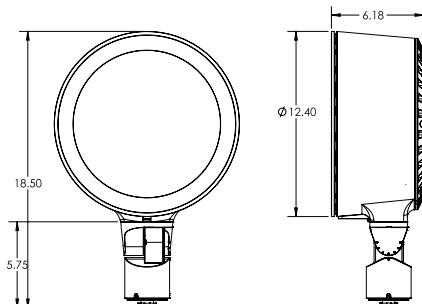- NOM Listed

Specifications

Weight:	34lbs.

EPA:	KM: 1.24
	YM: 1.21

DIMENSIONS

YOKE

KNUCKLE

LUMEN PACKAGES

	10DEG	15DEG	20DEG	30DEG	40DEG	50DEG	70DEG
Deliverd Lumens	2,294	2,189	2,175	2,145	2,110	2,095	2,031
Watts	85	85	85	85	85	85	85
LPW	27	26	26	25	25	25	24
Max Candela	57,738	19,484	13,349	5,410	3,145	2,278	1,386

	100DEG	15Vx60H	30Vx60H	60Vx15H	60Vx30H
Deliverd Lumens	1766	2,238	2,161	2,095	2,064
Watts	85	85	85	85	85
LPW	21	26	25	25	24
Max Candela	776	5,601	3,088	5,807	2,937

Note: Information based on RGB

Individual Channel Lumens	R	G	B
Scaling factor	0.61	0.82	0.20

Note: Information based on RGB @ maximum output per channel

STANDARD DISTRIBUTION

10DEG · 15DEG · 20DEG · 30DEG · 40DEG · 50DEG

70DEG · 100DEG · 15Vx60H · 30Vx60H · 60Vx15H · 60Vx30H

AIMING DETAIL

SAF 14 KNUCKLE · SAF 14 YOKE
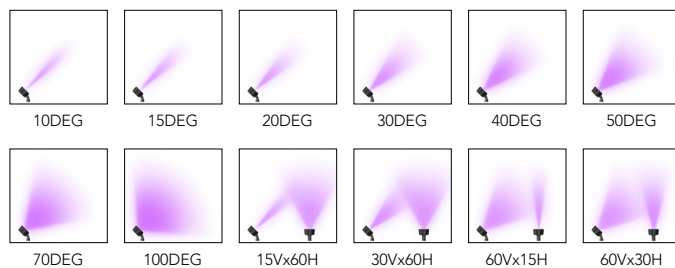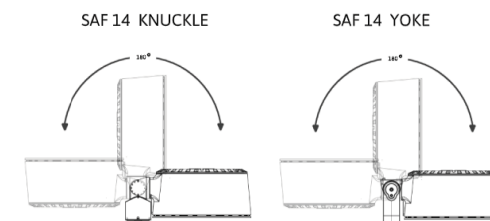
ORDERING INFORMATION

EXAMPLE: SAF14 LED P1 RGB MVOLT 10DEG CWL KM CJB L1 DMX BL

SAF14								

Series*		Source*	Performance Packages*	LED Dynamic Range*	Voltage*	Distribution*		Lens*		Mounting*	
SAF14	Specialty Architectural Flood	LED	P1	RGB	MVOLT	10DEG	10°	CWL	Clear Watershed Lens	KM	Knuckle
						15DEG	15°			YM	Yoke
						20DEG	20°	*Note: CWL lens IK07. For IK10 use external WRG option.*			
						30DEG	30°				
						40DEG	40°				
						50DEG	50°				
						70DEG	70°				
						100DEG	100°				
						15VX60H	15° x 60°				
						30VX60H	30° x 60°				
						60VX15H	60° x 15°				
						60VX30H	60° x 30°				

Mounting Accessories		Options Internal Accessory		Options		Control Input*	External		Finish*	
ADPMR	Architectural Decorative Pole Mount Round	L1	Prismatic Lens	CSL_	10' – 50' of cord available in 5' increments	DMX	GS	Glare shield	BL	Black Textured
ADPMS	Architectural Decorative Pole Mount Square	L2	Linear Spread Lens				FGS	Full Glare Shield	BRS	Bronze Smooth
AMPC_/_	Architectural Mid Pole Clamp available to fit on a 4" or 6" pole with 1 or 2 fixtures	L3	Softening Lens		*Note: Cord length required for Yoke Mounting only*		WRG	Wire Rock Guard	BRT	Bronze Textured
		IHL	Honeycomb Louver						CF	Custom Finish
APAR	Round 18" Pole Mount	*Note: Only one Internal accessory can be choosen*							DBL	Black Smooth
APAS	Square 18" Pole Mount								DDB	Designer Bronze
AWSC	Architectutal Wall Splice Cover	**Hardware**							DNA	Natural Aluminum
CAJB	Cylindrical Architectural Junction box	TPH	Tamper proof hardware						NBS	Natural Bronze Smooth
CJB	Cylindrical Junction Box								VET	Verde Textured
CPM	Cylindrical Pedestal Mount	LASC	Safety Cable						WH	White Textured
CPMSA	Cylindrical Pole Mount Splice Access								WHS	White Smooth
CSM_	Cylindrical Stancion Mount 12"-48" available in 6" increments								__Z	Zinc Undercoat (i.e.BLZ)
CWMA_T	Cylindrical Wall Mount Arm Top 12"-48" (available in 6" increments)									*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

PERFORMANCE DATA

LUMEN OUTPUT — SAF14_RGB

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		RGB		
			°H	°V	°H	°V	Max CD	Lumens	LPW
P1	85	10DEG	18	18	9	9	57,738	2,294	27
		15DEG	32	32	16	16	19,484	2,189	26
		20DEG	39	39	20	20	13,349	2,175	26
		30DEG	61	61	33	33	5,410	2,145	25
		40DEG	78	78	47	47	3,145	2,110	25
		50DEG	90	90	56	56	2,278	2,095	25
		70DEG	111	111	77	77	1,386	2,031	24
		100DEG	131	131	100	100	776	1766	21
		15Vx60H	95	34	66	16	5,601	2,238	26
		30Vx60H	98	61	66	33	3,088	2,161	25
		60Vx15H	33	93	16	65	5,807	2,095	25
		60Vx30H	62	100	34	68	2,937	2,064	24

CSA LISTING TEMPERATURE: -20°C through 35°C

ELECTRICAL LOAD

Light Engines	Drive Current (mA)	System Watts	Current (A)			
			120	208	240	277
RGB P1 10+deg	830	85	0.71	0.41	0.35	0.31

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		RGB Lumen Multiplier
0°C	32°F	1.28
10°C	50°F	1.18
20°C	68°F	1.06
25°C	77°F	1.00
30°C	86°F	0.95
40°C	104°F	0.83

RGB GAMUT AND RANGE
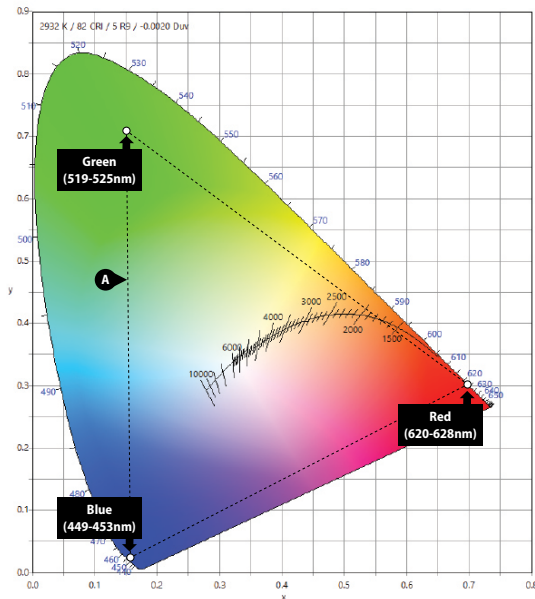
Ⓐ RGB Range within triangle formed by RGB

- 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** Three Handles: Red, Green, Blue
- **Data** DMX512/RDM

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

Optical Scaling Charts*	
Symmetric Distributions (10DEG - 70DEG)	
GS	0.96
FGS	0.95
IHL	0.76
L1	0.95
L2	0.95
L3	0.97
WRG	0.81

*Wider distributions will have a lower scaling factor - see individual IES files for full details

Asymmetric Distributions (xxVXxxH)	
GS	0.93*
FGS	0.85*
IHL	0.35
L1	0.88
L2	0.86
L3	0.95
WRG	0.71

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

PHOTOMETRIC DIAGRAMS

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

SAF MOUNTING ACCESSORIES
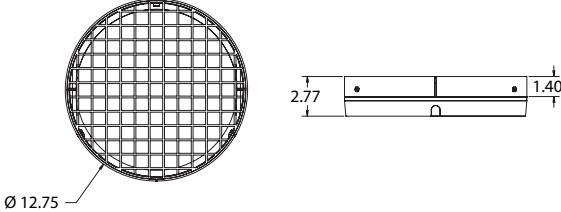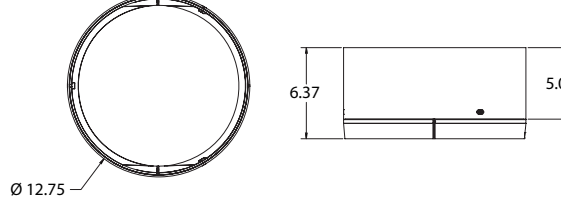
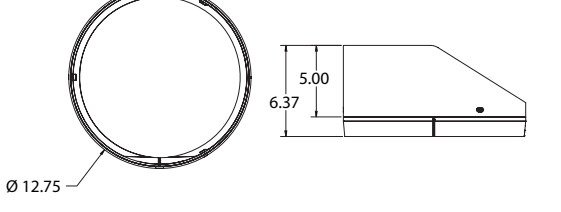|		Part #
	ADPMR/ADPMS Architectural Decorative Pole Mount Round or Square • Architectural opulent design for seamless pole integration and fixture aiming • Intended for 4" round and tapered poles or minimum 4" square poles • Mounting location on the top of each arm accepts one lighting fixture • Designed 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

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: CWMA30T 78C BL CWMA12T XLSC BRS See spec sheet for more options

EXTERNAL ACCESSORIES

		Part #
	• WRG- Wire Rock Guard 2.77 1.40 Ø 12.75	Example: WRGSAF14 BL
	• FGS- Full Glare Shield 6.37 5.00 Ø 12.75	Example: FGSSAF14 DDB
	• GS- Glare Shield 5.00 6.37 Ø 12.75	Example: GSSAF14 BL

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.
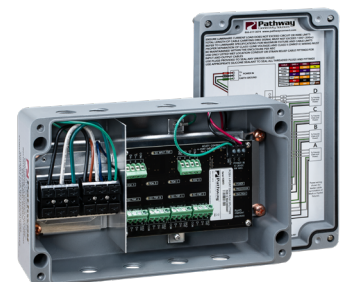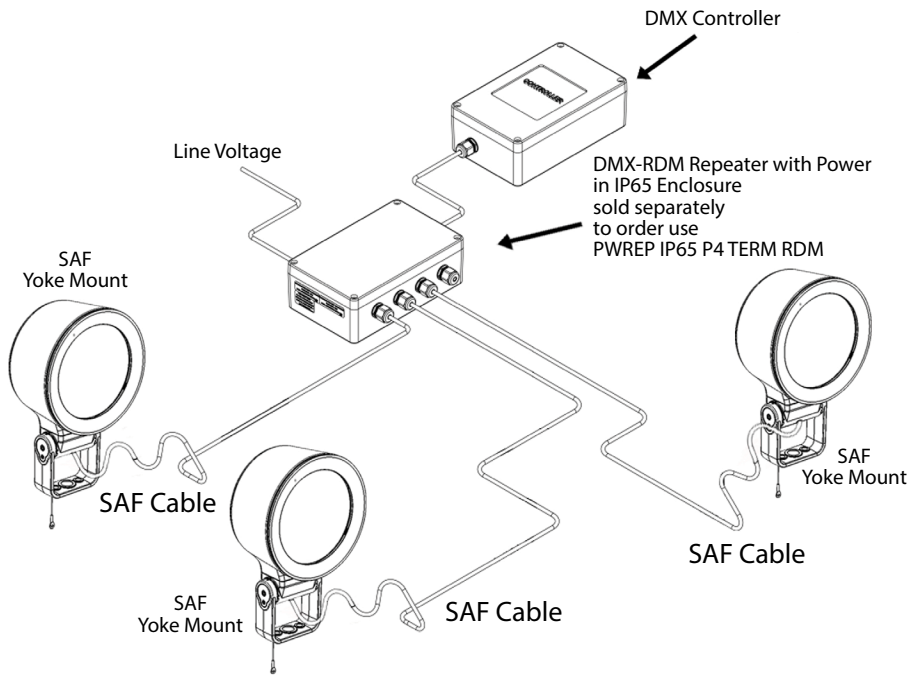
DMX-RDM Repeater with Power in IP65 Enclosure

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

Refer to PWREP IP65 spec sheet for additional details.

WIRING AND LAYOUT DESIGN

DMX Controller

Line Voltage

DMX-RDM Repeater with Power in IP65 Enclosure sold separately to order use PWREP IP65 P4 TERM RDM

SAF Yoke Mount

SAF Cable

SAF Yoke Mount

SAF Cable

SAF Yoke Mount

SAF Cable

Wiring Detail - DMX RGB Fixture

Black	Line
White	Neutral
Green	Power Ground
Yellow/Gray or **PINK**	DMX Common
Orange/Violet	DMX -
Red	DMX +
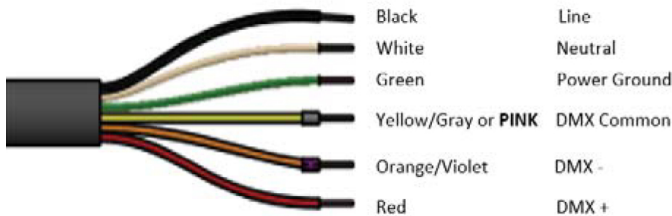
FEATURES & SPECIFICATIONS

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

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

DISTRIBUTION: Available in 10DEG, 15DEG, 20DEG, 30DEG, 40DEG, 50DEG, 70DEG, 100DEG, 15Vx60H, 30Vx60H, 60Vx15H and 60Vx30H.

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. 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. 96 watts, 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.

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.