6DR tunable RGBW
6" Downlight – Round

Williams®

7-3/8"
ø6"
16-1/2"
1/2" min
2-1/4" max

CATALOG #: _____

TYPE: _____

PROJECT: _____

BAA & BABA COMPLIANT · IP65 Rated · WET/CC · Low UGR · TrimLock®

NEW CONSTRUCTION AND REMODEL

ORDERING EXAMPLE: 6DR - TL - L33/RGB940 - OPTIONS - DMX - UNV - FW - OF - CS - TRIM OPTIONS - N - F1

├──────────────── HOUSING ────────────────┤ ├──────── TRIM ────────┤ └ MOUNT. ┘

HOUSING

SERIES	LUMENS [1]	COLOR/CRI	CCT	OPTIONS		CONTROL [2]	VOLTAGE
6DR - TL TrimLock	L33 3,300lm	RGB9 90	27 2700K 30 3000K 35 3500K 40 4000K	EM/10W EM/10W/RTS EM/10W/IPRTS ATH	10-watt emergency battery [3] 10-watt emergency battery with regressed test switch [4] 10-watt emergency battery with IP65 rated regressed test switch [5] Airtight construction	DMX DMX512/RDM	UNV 120-277V

TRIM [6]

TRIM TYPE	DISTRIBUTION [7]	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS	
F Open reflector with frosted top diffuser [8] L Flush lens [9] R Regressed lens [10]	W Wide 70° Open 55° Flush 55° Regressed M Medium 35° Open N Narrow 20° Open	OF 1/2" standard flange SF 1/4" mud-in flange [11]	CS Clear semi-specular powder coat WH White texture powder coat [12] BL Black texture powder coat	MWT Smooth matte white trim flange [13] IP IP65 rated trim [14] AD Diffuse acrylic lens [15] PD Diffuse 1/8" polycarbonate lens [16] WET/CC Wet location, covered ceiling listed AM Anti-microbial [17]	

MOUNTING

MOUNTING TYPE [18]	MOUNTING HARDWARE [19]
N Open pan for new construction R Remodel kit [20]	F1 Integral 2-position fixed pan bracket, universal bar hanger included [21] BA1 Adjustable butterfly pan bracket, bar hanger not included [22] CA1 Adjustable caterpillar pan bracket, universal bar hanger included [23]

NOTES

1 Lumen output based on F Trim Type, W Distribution, CS Reflector Finish, 90 CRI/4000K CCT. Actual performance may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
2 See page 3 for CONTROL DETAILS.
3 Not available with IP Option. Specify CEC in the option code when California Energy Commission regulations are required. White output only in emergency mode.
4 Not available with IP or WET/CC Options. Specify CEC in the option code when California Energy Commission regulations are required. White output only in emergency mode.
5 Must specify IP Trim Option. Specify CEC in the option code when California Energy Commission regulations are required. White output only in emergency mode.

6 Trim ships separately.
7 Beam angle based on CS or WH Reflector Finish.
8 WET/CC standard unless ordered with EM/RTS.
9 W Distribution only.
10 W Distribution only.
11 For use with mud-in plaster construction only, supplied with mud flange installation kit. See page 3 for FLANGE TYPE DETAILS. Not available with ATH or IP Options.
12 W Distribution only.
13 Not available with WH Reflector Finish or L Trim Type.
14 L and R Trim Types only.
15 L and R Trim Types only. W Distribution only.
16 L and R Trim Types only. W Distribution only.

17 WH and BL Reflector Finishes only.
18 Mounting Hardware required for N Mounting Type, ordered separately, see MOUNTING HARDWARE ordering info. See page 4 for MOUNTING TYPE DETAILS.
19 Additional Mounting Hardware options available. See page 4 for MOUNTING HARDWARE DETAILS.
20 Also used in new construction sheetrock ceilings. Pan-less installation.
21 N Mounting Type only.
22 N Mounting Type only.
23 N Mounting Type only.

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Downlights
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# 6DR tunable RGBW
6" Downlight – Round

FEATURES

- Innovative TrimLock reflector retention system ensures trim remains flush with ceiling plane
- Create rich, vibrant designs with lasting visual impact using the full visible light spectrum
- Beam angles ranging from 20º narrow to 70º wide for tailored performance
- New construction mounting pan or pan-less remodel kit available
- Fully room-side accessible
- IP65-rated die-cast trim includes easy-to-clean flush lens
- Easily adjust mounting arms below ceiling to adapt to a range of ceiling thicknesses
- Low UGR meets LEED and WELL requirements
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING – Die-cast aluminum trim housing with forged aluminum heat sink. Galvanized steel splice compartment with driver mounting plate/enclosure. Swing-out mounting arms field adjust for ceiling thickness from 1/2″ – 2-1/4″.
- TRIMLOCK – Innovative TrimLock reflector retention system ensures the trim remains flush with the ceiling plane.
- OPEN REFLECTOR – Low-iridescent anodized aluminum with top diffuser. Clear semi-specular finish standard.
- LENSED TRIM – Die-cast aluminum frame with micro-prismatic, acrylic lens.
- ELECTRICAL – High-performance Class 2 CSP RGBW LED array. Modular quick-connect plug for easy field-connection of LED light assembly to driver. Reported L70>60,000 hours (all colors). Reported L90: Red: >23,000 hours, Green: >44,000 hours, Blue: >60,000 hours, White: >48,000 hours
- CONTROL – DMX enabled; controllers provided by others.

- MOUNTING – Recessed. 20 ga. galvanized steel mounting pan for new construction. Remodel kit option includes receiver bracket hardware. Minimum 24″ O.C. marked spacing required.
- LISTINGS –
  - cCSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0 for dry and damp locations. LED light assembly conforms to UL 2108 for remote installation.
  - Suitable for wet location under covered ceiling when specified with WET/CC Option or F trim type.
  - IP65 rated trim when specified with IP option.
  - Complies with ASTM-E283 when specified with ATH option.
  - RoHS compliant.
  - Complies with the Buy American Act and other federal regulations. Request certification at hew.com/buy-american
- WARRANTY – 5-year limited warranty, see hew.com/warranty

FIXTURE PERFORMANCE DATA

		F TRIM TYPE (CS REFLECTOR FINISH)									
		WHITE LED ONLY			RED ONLY		GREEN ONLY		BLUE ONLY		
	DISTRIBUTION	WATTAGE	DELIVERED LUMENS	EFFICACY (lm/W)	WATTAGE	MAX COLOR LUMENS	WATTAGE	MAX COLOR LUMENS	WATTAGE	MAX COLOR LUMENS	
L33	W	55.4	3262	59	17.8	176	14.4	772	18.3	332	
	M	55.4	3358	61	17.8	181	14.4	794	18.3	342	
	N	55.4	3377	61	17.8	188	14.4	822	18.3	354	
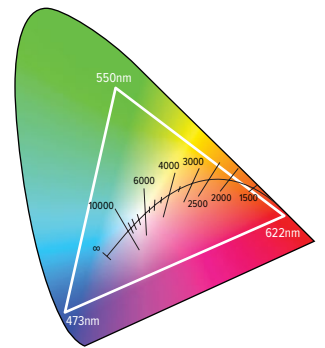
MULTIPLIER TABLES

COLOR TEMPERATURE

CCT	CONVERSION FACTOR
2700K	0.92
3000K	0.94
3500K	0.96
4000K	1.00

REFLECTOR FINISH

	CATALOG NUMBER	CONVERSION FACTOR
O TRIM	CS	1.00
	WH [1]	0.89
	BL [1]	0.47
R TRIM	WH	1.00
	CS	0.98
	BL	0.79

TRIM OPTIONS

CATALOG NUMBER	CONVERSION FACTOR
F	1.00
L	0.85
R	0.80
AD	0.99
PD	0.99

1 Distribution will also be affected, consult factory.
- Photometrics tested in accordance with IESNA LM-79. Results based on F Trim Type, W Distribution, CS Reflector Finish, 90 CRI/4000K CCT, wattage for 120V input, and 25ºC ambient temperature. Actual performance may vary +/-5%.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
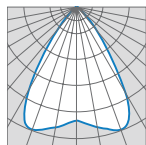- Use multiplier tables to calculate additional options.

PHOTOMETRY

6DR-TL-L33/RGB940-DMX-UNV-FW-OF-CS (White Only) Total Luminaire Output: 3262 lumens; 55.4 Watts | Efficacy: 59 lm/W | 90 CRI; 4000K CCT
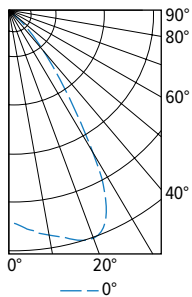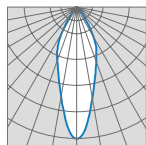
VERTICAL ANGLE	HORIZONTAL ANGLE 0°	ZONAL LUMENS
0	2402	
5	2490	241
15	2678	763
25	2617	1164
35	1148	742
45	350	280
55	46	60
65	8	9
75	2	2
85	0	0
90	0	

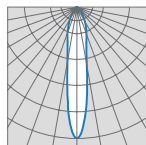| ZONE	LUMENS	% FIXTURE
0 - 40	2910	89
0 - 60	3250	100
0 - 90	3262	100
0-180	3262	100

OPEN
70° Wide   35° Medium   20° Narrow
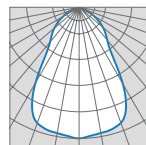
FLUSH
55° Wide

REGRESSED
55° Wide

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Downlights
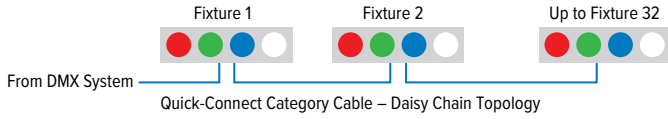Page 2 of 4

6DR
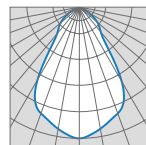
tunable **RGBW**
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CONTROL DETAILS

Fixture 1   Fixture 2   Up to Fixture 32

From DMX System

Quick-Connect Category Cable – Daisy Chain Topology
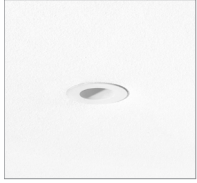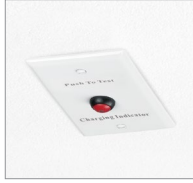
Note: Fixtures ship with DMX starting address of 1. (Red: 1, Green: 2, Blue: 3, White: 4). Terminator resistor (by others) is recommended at the end of each DMX run.

See DMX/RDM System Overview for details: hew.com/dmx-rdm
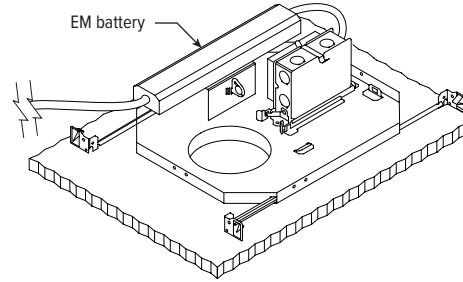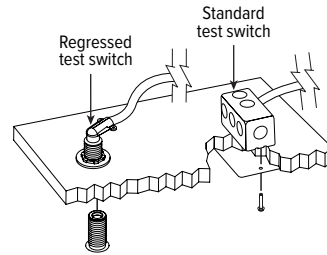
EMERGENCY BATTERY DETAILS

Regressed test switch
ø1-3/4"

Standard test switch
2-3/4" x 4-1/2"

Max remote distance is 50',
connection by others.

Regressed test switch

Standard test switch

EM battery

APERTURE ADAPTOR ORDERING INFO

ORDERING EXAMPLE: 4DR - GR - 0575 - WHT			
SERIES	CATALOG NUMBER	CEILING CUTOUT	FINISH
4AR 6AR 4DR 6DR 4DS 6DS 4PR 6PR 4PS 6PS 8DR	GR	Specify ceiling cutout in 1/8" increments. Example: 5.75" = **0575** See Kit Components for application limits.	**CS** Clear semi-specular powder coat **WH** White texture powder coat **BL** Black texture powder coat

Adaptor (goof ring) corrects ceiling cutout errors during remodel downlight installation.

Additional finishes available, consult factory.

For limitations and instructions, see hew.com/aperture-adaptor.pdf
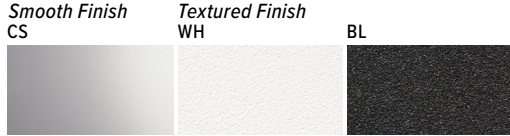
TRIM TYPE DETAILS

OPEN

ø6"

FLUSH

ø5-5/8"   1/8"

REGRESSED

ø5-13/16"   1/8"   1-1/2"

FLANGE TYPE DETAILS

1/2" STANDARD

ø7"

Ceiling Cutout: ø6-1/2"

1/4" MUD-IN

ø6-3/8"

Ceiling cutout: ø7"

MUD FLANGE MOUNTING KIT (SLIM FLANGE TYPE)

1/8"   ø6-9/16"   1/2"

ø9-1/2"
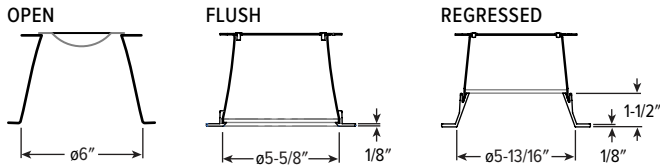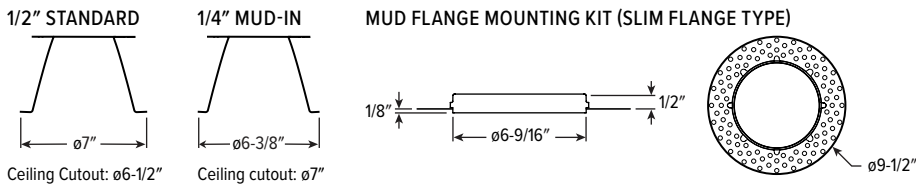
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TRIMLOCK DETAILS

TWIST

PULL

RELEASE

REFLECTOR FINISH DETAILS

Smooth Finish
CS

Textured Finish
WH

BL

MOUNTING TYPE DETAILS

NEW CONSTRUCTION

5″
ø6-1/2″
6-3/4″
13-1/2″
16-1/2″

REMODEL

Cross Section
7-3/8″
ø6″
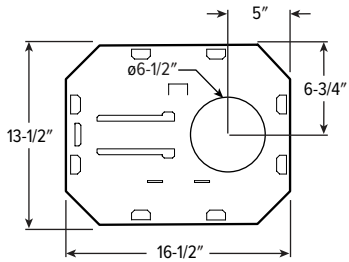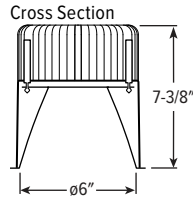
Receiver Bracket
2-3/4″
3-1/4″
6-5/8″
1-1/8″ min space
Ceiling cutout
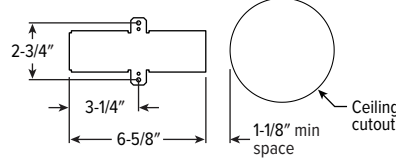
Driver and Junction Box
5-1/4″
4-1/8″
6-15/16″
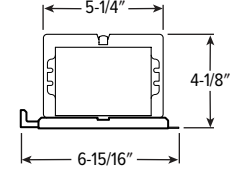
MOUNTING HARDWARE DETAILS

F1 Integral 2-position fixed pan bracket, universal bar hanger included

14″ minimum
24″ maximum

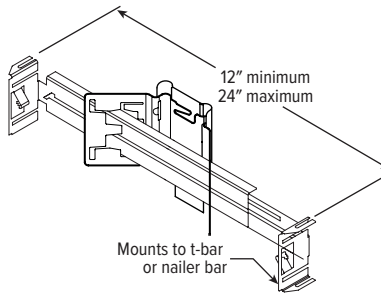Mounts to t-bar or nailer bar
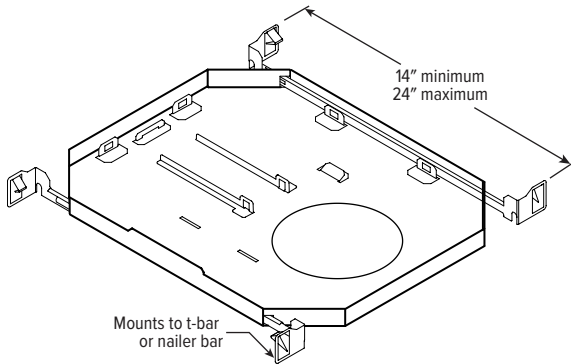
BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)
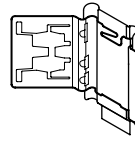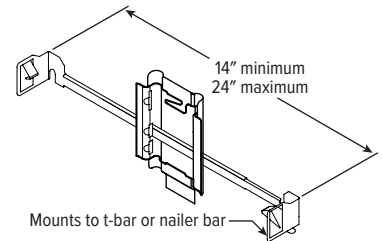
BA2 Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)

12″ minimum
24″ maximum

Mounts to t-bar or nailer bar

CA1 Adjustable caterpillar pan bracket, universal bar hanger included (N Mounting Type only)

14″ minimum
24″ maximum

Mounts to t-bar or nailer bar

CA2 Adjustable caterpillar pan bracket, t-bar hanger included (N Mounting Type only)

11″ minimum
26″ maximum

Mounts to t-bar

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Downlights
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