

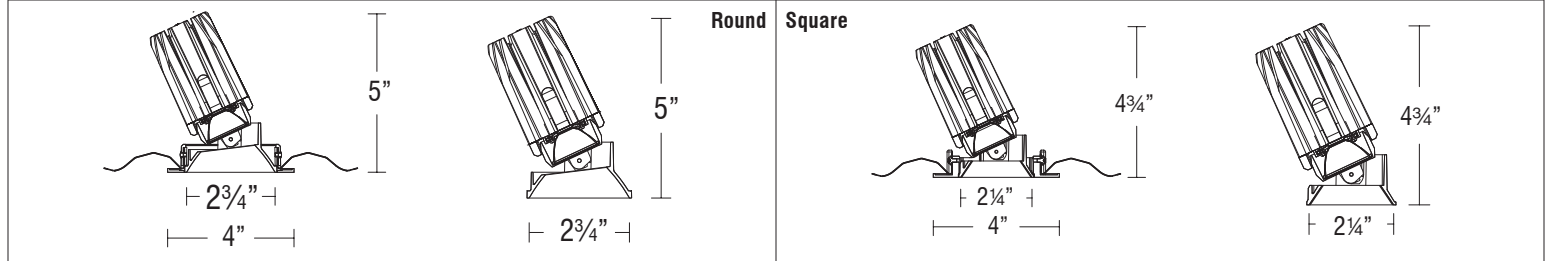
## FQ Tunable White 2" Adjustable

R2FRAT | R2FRAL | R2FSAT | R2FSAL

Fixture Type: \_\_\_\_\_  
 Project: \_\_\_\_\_  
 Catalog#: \_\_\_\_\_  
 Location: \_\_\_\_\_



### LINE DRAWING



### PRODUCT DESCRIPTION

FQ (Function + Quality) Experience simplicity and versatility with FQ 2" recessed luminaires. The fixtures merge modern design with world-class performance to achieve the ultimate in function and flexibility. Enjoy the benefits of two fixtures in one with Tunable White 1800-4000K and Dim-to-Warm 3000K-1800K features built into each luminaire, allowing you to customize the best light to illuminate dining areas, great rooms, primary bedrooms, kitchens, and baths on the fly. Deep regressed light sources deliver a glare-free, quiet ceiling aesthetic for a clean architectural look while providing a robust output from a diminutive source.

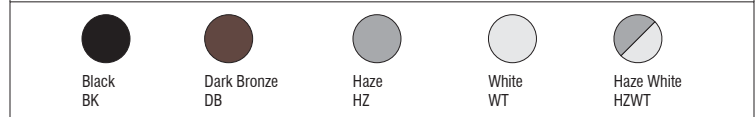
### SPECIFICATIONS

|                                     |  |
|-------------------------------------|--|
| <b>Construction:</b>                | Durable die-cast self flanged aluminum construction  |
| <b>Mounting:</b>                    | Heavy gauge retention clips support trim firmly<br>Ceiling cut out (Round): Trim $\varnothing$ 3 1/2"<br>Trimless $\varnothing$ 3 1/2"<br>Ceiling cut out (Square): Trim 3 1/2" x 3 1/2"<br>Trimless 3 1/2" x 3 1/2"<br>Accommodates 1/2" - 1" ceiling thickness |
| <b>Light Source:</b>                | High output 3-step Mac Adam Ellipse COB<br>Rated life of 50,000 hours at L70   |
| <b>Input:</b>                       | Universal 120-277V AC, 50/60 Hz  |
| <b>Dimming:</b>                     | 2CH 0-10V, DMX512-A: 100-0.1%  |
| <b>Maximum Delivered Intensity:</b> | Up to 2,393 cd (Square Narrow Flood 30°, 18W, 4000K, CRI 90)   |
| <b>Maximum Delivered Output:</b>    | Up to 1,084 lm (Square Narrow Flood 30°, 18W, 4000K, CRI 90)   |
| <b>Operating Temperature:</b>       | -4°F to 104°F (-20°C to 40°C)  |
| <b>Standards:</b>                   | ETL & cETL Damp location listed, Title 24 JA8 Compliant  |
| <b>Warranty:</b>                    | 5 year WAC Lighting guaranteed warranty  |

### BEAM ANGLES



### FINISHES



| Model                 | Beam   | Lumens Ref Output* | CBCP | Color Temp     | CRI |
|-----------------------|--------|--------------------|------|----------------|-----|
| R2FRAT Round Trim     | N 30°  | 980                | 2165 | TW 1800K-4000K | 90  |
|                       | Square | 985                | 2175 |                |     |
| R2FRAL Round Trimless | F 42°  | 915                | 1310 |                |     |
| Square                |        | 905                | 1310 |                |     |
| R2FSAT Square Trim    | W 55°  | 920                | 1025 |                |     |
| Square Trimless       |        | 935                | 1035 |                |     |

Lumens and CBCP are reference values for a trim fixture with 2 housing set to 3000K Color Temperature. Refer to Multiplier Table in Performance Data to determine other outputs.



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**ORDERING INFORMATION**

| CONFIGURATION TABLE |                   |                   |
|---------------------|-------------------|-------------------|
| Model               | Color Temperature | Reflector Finish  |
| R2FRAT              | TW - 1800K-4000K  | BK - BLACK        |
| R2FRAL              |                   | DB - DARK BRONZE  |
| R2FSAT              |                   | HZ - HAZE         |
| R2FSAL              |                   | HZWT - HAZE/WHITE |
|                     |                   | WT - WHITE        |

**R2FRAT-TW-**

Example: R2FRAT-TW-WT

**ORDERING NOTES**

1. The "Haze/White" finish is only available on trimmed fixtures (R2FRAT, R2FSAT).
2. The "Haze" finish is only available on trimless fixtures (R2FRAL, R2FSAL).
3. Flood beam (F - 42°) reflector comes pre-installed. All three reflector options (N-30°, F-42°, and W-55°) are included.

## FQ Tunable White 2" Adjustable

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Fixture Type: \_\_\_\_\_  
 Project: \_\_\_\_\_  
 Catalog#: \_\_\_\_\_  
 Location: \_\_\_\_\_

### ORDERING INFORMATION

| HOUSINGS   |                   |                 |                 |          |                   |
|--|-------------------|-----------------|-----------------|----------|-------------------|
|  | Model             | Control Options |                 | Power    |                   |
| New Construction<br>IC Airtight -<br>Round & Square Trim | <b>R2FBNT-TW</b>  | <b>X</b>        | <i>DMX512-A</i> | <b>1</b> | <i>14W IC</i>     |
|  |                   | <b>Z</b>        | <i>0-10V</i>    | <b>2</b> | <i>18W IC</i>     |
| New Construction<br>IC Airtight -<br>Round Trimless      | <b>R2FRNL-TW</b>  | <b>X</b>        | <i>DMX512-A</i> | <b>1</b> | <i>14W IC</i>     |
|  |                   | <b>Z</b>        | <i>0-10V</i>    | <b>2</b> | <i>18W IC</i>     |
| New Construction IC<br>Airtight -<br>Square Trimless     | <b>R2FSNL-TW</b>  | <b>X</b>        | <i>DMX512-A</i> | <b>1</b> | <i>14W IC</i>     |
|  |                   | <b>Z</b>        | <i>0-10V</i>    | <b>2</b> | <i>18W IC</i>     |
| Remodel Non-IC<br>Round Trimless                         | <b>R2FRRL-TW</b>  | <b>X</b>        | <i>DMX512-A</i> | <b>1</b> | <i>14W Non-IC</i> |
|  |                   | <b>Z</b>        | <i>0-10V</i>    | <b>2</b> | <i>18W Non-IC</i> |
| Remodel Non-IC<br>Square Trimless                        | <b>R2FSRL-TW</b>  | <b>X</b>        | <i>DMX512-A</i> | <b>1</b> | <i>14W Non-IC</i> |
|  |                   | <b>Z</b>        | <i>0-10V</i>    | <b>2</b> | <i>18W Non-IC</i> |
| Remodel IC<br>Round & Square Trim                        | <b>R2FBR2T-TW</b> | <b>X</b>        | <i>DMX512-A</i> | <b>1</b> | <i>14W IC</i>     |
|  |                   | <b>Z</b>        | <i>0-10V</i>    |          |                   |
| Remodel Non-IC<br>Round & Square Trim                    | <b>R2FBRT-TW</b>  | <b>X</b>        | <i>DMX512-A</i> | <b>1</b> | <i>14W Non-IC</i> |
|  |                   | <b>Z</b>        | <i>0-10V</i>    | <b>2</b> | <i>18W Non-IC</i> |

| ACCESSORIES     |                             |
|-----------------|-----------------------------|
| LENS-11-HCM     | <i>Honeycomb Louver</i>     |
| LENS-11P-CRL-BK | <i>Cross Louver</i>         |
| LENS-11AMB      | <i>Amber Lens</i>           |
| LENS-11RED      | <i>Red Lens</i>             |
| LENS-11BLU      | <i>Blue Lens</i>            |
| LENS-11GRN      | <i>Green Lens</i>           |
| LENS-11SPR      | <i>Spread Lens</i>          |
| LENS-11BEL      | <i>Beam Elongating Lens</i> |

**R2F\_\_-TW\_-**  
 Example: R2FBNT-TWX-2

| Millwork Housings                 | Size          | Control Options |                 | Power    |               |
|-----------------------------------|---------------|-----------------|-----------------|----------|---------------|
| New Construction<br><b>R2FRNM</b> | <b>A</b> 0.8" | <b>TWX</b>      | <i>DMX512-A</i> | <b>1</b> | <i>15W IC</i> |
|                                   | <b>B</b> 1.5" | <b>TWZ</b>      | <i>0-10V</i>    | <b>2</b> | <i>21W IC</i> |
|                                   |               | <b>3</b>        |                 |          | <b>3</b>      |
| New Construction<br><b>R2FSNM</b> | <b>A</b> 0.8" | <b>TWX</b>      | <i>DMX512-A</i> | <b>1</b> | <i>15W IC</i> |
|                                   | <b>B</b> 1.5" | <b>TWZ</b>      | <i>0-10V</i>    | <b>2</b> | <i>21W IC</i> |
|                                   |               | <b>3</b>        |                 |          | <b>3</b>      |

**R2F\_\_-TW\_-**  
 Example: R2FRNM-A-TWZ-3

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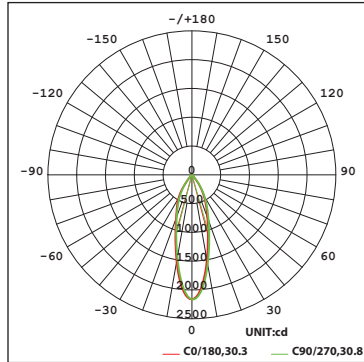
### PERFORMANCE DATA

#### Polar Candela Distribution Charts

Samples shown with a 18W fixture set to 3000K and 90 CRI.

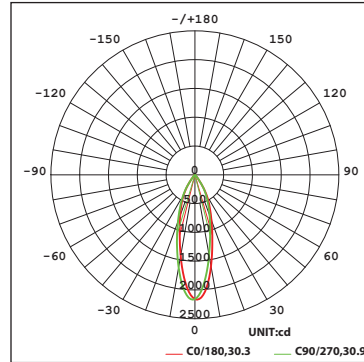
#### ROUND

Narrow Flood Beam: 30° Beam

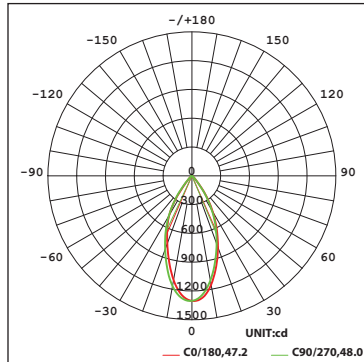


#### SQUARE

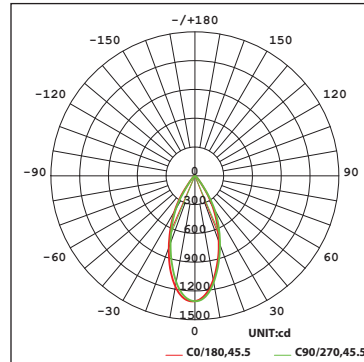
Narrow Flood Beam: 30° Beam



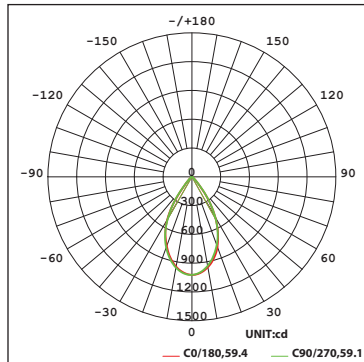
Flood Beam: 42° Beam



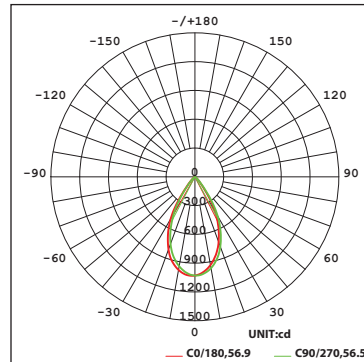
Flood Beam: 42° Beam



Wide Flood Beam: 55° Beam



Wide Flood Beam: 55° Beam



## FQ Tunable White 2" Adjustable

R2FRAT | R2FRAL | R2FSAT | R2FSAL

Fixture Type: \_\_\_\_\_  
Project: \_\_\_\_\_  
Catalog#: \_\_\_\_\_  
Location: \_\_\_\_\_

### PERFORMANCE DATA

#### Unified Glare Rating (UGR) Table

UGR values shown are calculated for a Round Trim fixture with a 18W Narrow Flood Beam (30°) optic at 3000K and 90 CRI. General performance of other beam angles shown below.

| ceiling/cavity  | 0.7              | 0.7  | 0.5  | 0.5  | 0.3  | 0.7            | 0.7  | 0.5  | 0.5  | 0.3  |      |
|-----------------|------------------|------|------|------|------|----------------|------|------|------|------|------|
| walls           | 0.5              | 0.3  | 0.5  | 0.3  | 0.3  | 0.5            | 0.3  | 0.5  | 0.3  | 0.3  |      |
| working plane   | 0.2              | 0.2  | 0.2  | 0.2  | 0.2  | 0.2            | 0.2  | 0.2  | 0.2  | 0.2  |      |
| Room dimensions | Viewed crosswise |      |      |      |      | Viewed endwise |      |      |      |      |      |
| x = 2H y = 2H   | 20.6             | 21.5 | 20.8 | 21.6 | 21.8 | 20.2           | 21.1 | 20.4 | 21.2 | 21.4 |      |
| 3H              | 20.5             | 21.3 | 20.7 | 21.5 | 21.7 | 20.1           | 20.9 | 20.3 | 21.1 | 21.3 |      |
| 4H              | 20.4             | 21.2 | 20.7 | 21.4 | 21.6 | 20.0           | 20.8 | 20.3 | 21.0 | 21.2 |      |
| 6H              | 20.4             | 21.1 | 20.7 | 21.3 | 21.6 | 20.0           | 20.7 | 20.3 | 20.9 | 21.2 |      |
| 8H              | 20.5             | 21.2 | 20.8 | 21.4 | 21.7 | 19.9           | 20.6 | 20.3 | 20.9 | 21.2 |      |
| 12H             | 20.5             | 21.2 | 20.8 | 21.4 | 21.7 | 19.9           | 20.6 | 20.2 | 20.8 | 21.1 |      |
| 4H              | 2H               | 20.4 | 21.1 | 20.7 | 21.4 | 21.6           | 20.0 | 20.7 | 20.3 | 21.0 | 21.2 |
| 3H              | 20.3             | 20.9 | 20.6 | 21.2 | 21.5 | 19.9           | 20.5 | 20.2 | 20.8 | 21.1 |      |
| 4H              | 20.2             | 20.8 | 20.6 | 21.1 | 21.4 | 19.8           | 20.4 | 20.2 | 20.7 | 21.0 |      |
| 6H              | 20.2             | 20.7 | 20.6 | 21.1 | 21.4 | 19.8           | 20.3 | 20.2 | 20.6 | 21.0 |      |
| 8H              | 20.4             | 20.9 | 20.8 | 21.2 | 21.6 | 19.8           | 20.2 | 20.2 | 20.6 | 21.0 |      |
| 12H             | 20.4             | 20.9 | 20.9 | 21.3 | 21.7 | 19.7           | 20.2 | 20.1 | 20.5 | 20.9 |      |
| 8H              | 4H               | 20.1 | 20.6 | 20.5 | 20.9 | 21.3           | 19.7 | 20.2 | 20.1 | 20.6 | 20.9 |
| 6H              | 20.1             | 20.5 | 20.5 | 20.9 | 21.3 | 19.7           | 20.1 | 20.1 | 20.5 | 20.9 |      |
| 8H              | 20.3             | 20.6 | 20.7 | 21.1 | 21.5 | 19.7           | 20.0 | 20.1 | 20.4 | 20.9 |      |
| 12H             | 20.4             | 20.7 | 20.9 | 21.1 | 21.6 | 19.6           | 19.9 | 20.1 | 20.4 | 20.9 |      |
| 12H             | 4H               | 20.0 | 20.5 | 20.5 | 20.9 | 21.3           | 19.7 | 20.1 | 20.1 | 20.5 | 20.9 |
| 6H              | 20.1             | 20.4 | 20.5 | 20.8 | 21.3 | 19.6           | 20.0 | 20.1 | 20.4 | 20.9 |      |
| 8H              | 20.3             | 20.6 | 20.7 | 21.0 | 21.5 | 19.6           | 19.9 | 20.1 | 20.4 | 20.9 |      |

| Round Fixture | Angle | UGR Range |
|---------------|-------|-----------|
| Narrow Flood  | 30°   | ≤22       |
| Flood         | 42°   | ≤23       |
| Wide Flood    | 55°   | ≤24       |

| Square Fixture | Angle | UGR Range |
|----------------|-------|-----------|
| Narrow Flood   | 30°   | ≤22       |
| Flood          | 42°   | ≤23       |
| Wide Flood     | 55°   | ≤24       |

#### Lumens and CBCP Multiplier Table

Use the below table to determine lumens and CBCP values for the combinations of power, color temperature, and CRI values.

| Lumens & CBCP Multiplier |                     | Color Temperature |       |       |       |       |       |
|--------------------------|---------------------|-------------------|-------|-------|-------|-------|-------|
| TWA (1800K - 4000K)      | Housing Power Level | 1800K             | 2200K | 2700K | 3000K | 3500K | 4000K |
|                          | 1 (14W)             | 0.59              | 0.69  | 0.76  | 0.80  | 0.85  | 0.88  |
|                          | 2 (18W)             | 0.74              | 0.86  | 0.95  | 1.00  | 1.06  | 1.10  |