

F213 Wide 50°
F215 Medium 34°
F217 Narrow 28°

3 1/2" Round Downlight with Lens, Install from Below

1100, 1500 and 2100 lumen
 Xicato®, MultiSource® Technology

OPTICS and APPLICATIONS

3" LED downlight optical systems are engineered to provide the aesthetic appeal of a small aperture while maintaining deep shielding and glare control. Primary reflectors can be substituted in the field to address application requirements. Ceiling materials must be rigid to support fixture frame. See ordering guide for tile ceiling mounting tray and flush mount options. Use for general downlighting applications where installation from below is required.

DESIGN FEATURES - MultiSource® Capable

An installation plate is provided separate, is the same for downlight and wall wash fixture functions, and installs directly into the ceiling. Tool-less adjustment tabs easily secure and accommodate all hard ceiling types and thickness from 3/8"-1 1/2". The plate allows for installation and serviceability from below the ceiling without jeopardizing the integrity of the ceiling. Products are designed with MultiSource® plug and play connectors allowing field conversion to other sources. Components are Zhaga compatible to accommodate future source options. Proprietary passive heatsinks ensure proper temperatures are maintained.

MODULES and DRIVERS

Xicato® modules provide excellent even, stable color and increased fixture efficiencies. The LED module holds color consistency within 1x2 MacAdam Ellipses. Standard 83 CRI. Dimming is standard 0-10V/10%. Rated life is 50,000 hours at 70% lumen output.

FINISH

Specular Alzak cones are standard. SoftSheen™ is a new finish designed to mitigate the color over angle "yellow streak" associated with remote phosphor sources. Softglow® and colors available, see options below. Steel parts are phosphate conditioned then painted matte black.

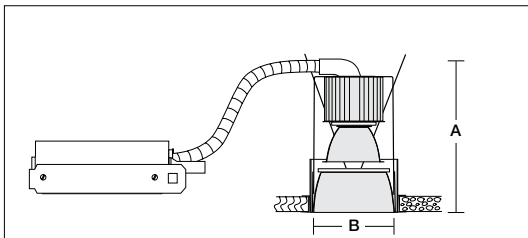
GENERAL

Fixture is pre-wired and thermal protected. UL and/or CSA certified to US and Canadian standards. Suitable for damp locations. Approved for eight wire 90°C branch circuit wiring. All products are union made. Designed and manufactured in the USA.

WARRANTY

5 Year Warranty. See www.kurtversen.com for details or select hyperlink.

DIMENSIONS and SOURCES



| Number | A Height* | B Aperture | LED Module |
|----------------------|-----------------|----------------|--|
| F213 F215 F217 | 6 5/8" 168mm | 3 1/2" 89mm | 1100 lm, 1500 lm or 2100 lm Xicato® |

*Plenum clearance required for installation: 8".

ENERGY INFORMATION

| Fixture | Module Lumens | Delivered Lumens | System Watts | lm/W |
|---------|---------------|------------------|--------------|------|
| F213 | 1100 | 792 | 14 | 57.0 |
| | 1500 | 1106 | 18 | 61.0 |
| | 2100 | 1496 | 24 | 62.0 |
| F215 | 1100 | 878 | 14 | 58.0 |
| | 1500 | 1251 | 18 | 70.0 |
| | 2100 | 1519 | 24 | 63.0 |
| F217 | 1100 | 851 | 14 | 65.0 |
| | 1500 | 1137 | 18 | 63.0 |
| | 2100 | 1586 | 24 | 66.0 |

ORDERING GUIDE

| Base Specification (required) Example: F215-153012D | | | | | Options (optional) | | | | | |
|--|--------------------|----------------------|--------------------|--|---|---|--|---|---|---|
| Model | Source Lumens | Kelvin | Volts | Dimming | CRI | Cone Finish | Cone Color | Cone Paint | Lens Options | Mounting |
| F213 Wide | 11 1100 15 1500 | 27 2700K 30 3000K | 12 120V 27 277V | D Standard 0-10V, to 10%. D1 Hi-lume 1% 3-wire LED driver DE Hi-lume 1% EcoSystem LED driver to 1%. DALI DM1 0-10V to 1%. DM01 0-10V to 0.1%. | Standard 83 CRI AS1 98 CRI. VS8 Vibrant 83 CRI. VS9 Vibrant 95 CRI. | Standard AS1 Specular clear SS SoftSheen™ S Softglow® | Standard clear B Black G Gold W Wheat Y Pewter | Standard clear WT White Flange. WHT White Cone, complete. | Standard solite clear LL Linear lens. LLFR Linear lens frosted. LS Clear lens. LSFR Clear lens frosted. SOFR Solite lens frosted. | Standard IFB with flange TC Tile ceiling mounting tray. FMR3 Flush mount drywall. |

OPTION NOTES

1. Artist Series® 98 +/-3 CRI modules. Contact factory for energy information.
2. Vibrant Series™, 83 CRI, 3000K only. Contact factory for energy information.
3. Vibrant Series™, 95 CRI, 3000K only. Contact factory for energy information.

Rev2 Date 6/14/2018

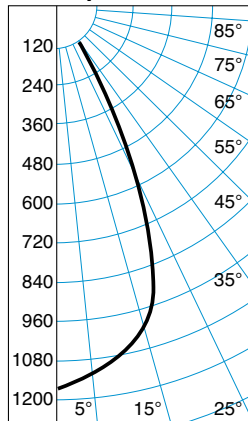


Performance Datachart

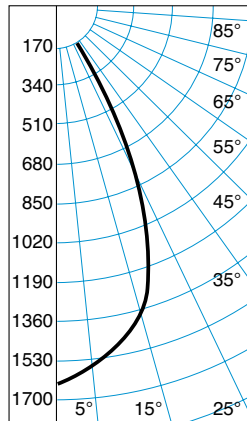
| Single Unit Initial Footcandles, 30" Work Plane | | | | | | Ceiling to Floor | | Multiple Units Initial Footcandles, 30" Work Plane | | | |
|---|-----|------|-----|------|-----|------------------|-----|--|-------|-------|-------|
| F213 Xicato® 1100 lm 3000K Read Top Data | | | | | | | | Ceiling 80% Walls 50% Floor 20% | | | |
| F213 Xicato® 1500 lm 3000K Read Bottom Data | | | | | | | | Spacing is Maximum Over Work Plane | | | |
| Nadir | 10° | | 20° | | 30° | | | Spacing | RCR 1 | RCR 3 | RCR 8 |
| FC | FC | Diam | FC | Diam | FC | Diam | | | | | |
| 39 | 34 | 2' | 24 | 4' | 6 | 6' | 8' | 5' | 43 | 38 | 29 |
| 54 | 46 | 2' | 34 | 4' | 8 | 6' | | 5' | 58 | 51 | 38 |
| 28 | 24 | 2' | 17 | 5' | 4 | 8' | 9' | 5' | 31 | 27 | 21 |
| 39 | 33 | 2' | 24 | 5' | 6 | 8' | | 5' | 41 | 36 | 27 |
| 21 | 18 | 3' | 13 | 5' | 3 | 9' | 10' | 6' | 23 | 21 | 15 |
| 29 | 25 | 3' | 18 | 5' | 5 | 9' | | 6' | 31 | 27 | 21 |
| 17 | 14 | 3' | 10 | 6' | 2 | 10' | 11' | 7' | 18 | 16 | 12 |
| 23 | 19 | 3' | 14 | 6' | 4 | 10' | | 7' | 24 | 21 | 16 |
| 13 | 11 | 3' | 8 | 7' | 2 | 11' | 12' | 8' | 14 | 13 | 10 |
| 18 | 16 | 3' | 11 | 7' | 3 | 11' | | 8' | 19 | 17 | 13 |

| Single Unit Initial Footcandles, 30" Work Plane | | | | | | Ceiling to Floor | | Multiple Units Initial Footcandles, 30" Work Plane | | | |
|---|-----|------|-----|------|-----|------------------|-----|--|-------|-------|-------|
| F213 Xicato® 2100 lm 3000K | | | | | | | | Ceiling 80% Walls 50% Floor 20% | | | |
| Nadir | | | | | | | | Spacing is Maximum Over Work Plane | | | |
| FC | 10° | | 20° | | 30° | | | Spacing | RCR 1 | RCR 3 | RCR 8 |
| FC | FC | Diam | FC | Diam | FC | Diam | | | | | |
| 71 | 63 | 2' | 46 | 4' | 11 | 6' | 8' | 5' | 78 | 69 | 52 |
| 51 | 45 | 2' | 33 | 5' | 8 | 8' | | 5' | 56 | 49 | 37 |
| 38 | 34 | 3' | 25 | 5' | 6 | 9' | 10' | 6' | 42 | 37 | 28 |
| 30 | 27 | 3' | 19 | 6' | 5 | 10' | | 7' | 33 | 29 | 22 |
| 24 | 21 | 3' | 16 | 7' | 4 | 11' | 12' | 8' | 26 | 23 | 17 |

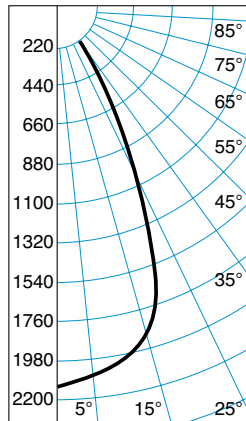
Candlepower Distribution



F213 Xicato® 1100lm
3000K S/M .82
Luminous efficacy 57.0



F213 Xicato® 1500lm
3000K S/M .84
Luminous efficacy 61.0



F213 Xicato® 2100lm
3000K S/M .84
Luminous efficacy 62.0

Candelas

| ° | 14W | 18W | 24W |
|----|------|-------|-------|
| | 792* | 1106* | 1496* |
| 0 | 1193 | 1631 | 2144 |
| 5 | 1130 | 1546 | 2072 |
| 10 | 1076 | 1470 | 2007 |
| 15 | 1036 | 1396 | 1924 |
| 20 | 887 | 1231 | 1692 |
| 25 | 575 | 814 | 1100 |
| 30 | 267 | 390 | 521 |
| 35 | 132 | 198 | 261 |
| 40 | 70 | 105 | 137 |
| 45 | 40 | 60 | 76 |
| 50 | 25 | 35 | 45 |
| 55 | 15 | 18 | 23 |
| 60 | 7 | 8 | 11 |
| 65 | 0 | 0 | 0 |
| 70 | 0 | 0 | 0 |
| 75 | 0 | 0 | 0 |
| 80 | 0 | 0 | 0 |
| 85 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 |

° Vertical Angles
* Luminaire Lumens

Notes

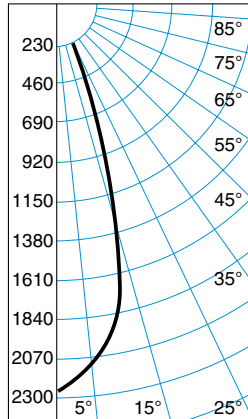
- Photometric Reports:
F213 1100 lm KV Report No. 33716, 1500 lm KV Report No. 23716, 2100 lm KV Report No. 13716.
- Datachart degree headings show one side of nadir. Diameter data includes both sides. Therefore the 10° column shows a 20° pattern diameter at the work plane. Footcandle values are at the diameter edge.
- The luminous efficacy (lm/W) refers to the total measured luminous flux (lumens) of the fixture divided by the total measured electrical input power (watts) of the complete fixture.

Performance Datachart

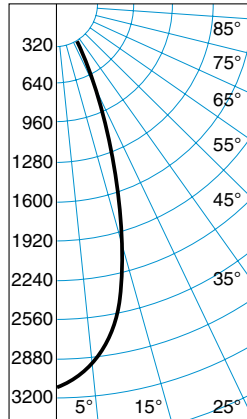
| Single Unit Initial Footcandles, 30" Work Plane | | | | | Ceiling to Floor | | Multiple Units Initial Footcandles, 30" Work Plane | | | |
|---|---------|---------|---------|-----|------------------|---------|--|-------|-------|--|
| F215 Xicato® 1100 lm 3000K Read Top Data | | | | | | | Ceiling 80% Walls 50% Floor 20% | | | |
| F215 Xicato® 1500 lm 3000K Read Bottom Data | | | | | | | Spacing is Maximum Over Work Plane | | | |
| Nadir | 10° | 20° | 30° | | | Spacing | RCR 1 | RCR 3 | RCR 8 | |
| FC | FC Diam | FC Diam | FC Diam | | | | | | | |
| 75 | 57 2' | 25 4' | 4 6' | 8' | | 3' | 97 | 87 | 69 | |
| 103 | 81 2' | 36 4' | 6 6' | 9' | | 3' | 129 | 116 | 92 | |
| 54 | 41 2' | 18 5' | 3 8' | 10' | | 4' | 69 | 62 | 49 | |
| 73 | 58 2' | 26 5' | 4 8' | 11' | | 4' | 92 | 83 | 66 | |
| 40 | 31 3' | 13 5' | 2 9' | 12' | | 5' | 52 | 47 | 37 | |
| 55 | 44 3' | 19 5' | 3 9' | | | 5' | 69 | 62 | 49 | |
| 31 | 24 3' | 10 6' | 2 10' | | | 5' | 40 | 36 | 29 | |
| 43 | 34 3' | 15 6' | 2 10' | | | 5' | 54 | 49 | 38 | |
| 25 | 19 3' | 8 7' | 1 11' | | | 6' | 32 | 29 | 23 | |
| 34 | 27 3' | 12 7' | 2 11' | | | 6' | 43 | 39 | 31 | |

| Single Unit Initial Footcandles, 30" Work Plane | | | | | Ceiling to Floor | | Multiple Units Initial Footcandles, 30" Work Plane | | | |
|---|---------|---------|---------|-----|------------------|---------|--|-------|-------|--|
| F215 Xicato® 2100 lm 3000K | | | | | | | Ceiling 80% Walls 50% Floor 20% | | | |
| F215 Xicato® 1500 lm 3000K | | | | | | | Spacing is Maximum Over Work Plane | | | |
| Nadir | 10° | 20° | 30° | | | Spacing | RCR 1 | RCR 3 | RCR 8 | |
| FC | FC Diam | FC Diam | FC Diam | | | | | | | |
| 142 | 105 2' | 42 4' | 6 6' | 8' | | 3' | 179 | 162 | 130 | |
| 102 | 75 2' | 30 5' | 4 8' | 9' | | 4' | 128 | 116 | 93 | |
| 76 | 56 3' | 23 5' | 3 9' | 10' | | 4' | 96 | 87 | 70 | |
| 59 | 44 3' | 18 6' | 2 10' | 11' | | 5' | 75 | 68 | 54 | |
| 48 | 35 3' | 14 7' | 2 11' | 12' | | 5' | 60 | 54 | 43 | |

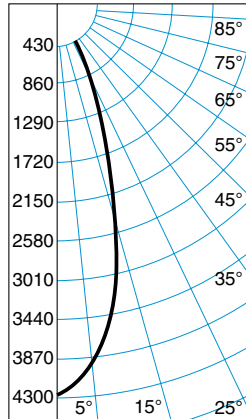
Candlepower Distribution



F215 Xicato® 1100lm
3000K S/M .63
Luminous efficacy 58.0



F215 Xicato® 1500lm
3000K S/M .60
Luminous efficacy 70.0



F215 Xicato® 2100lm
3000K S/M .56
Luminous efficacy 63.0

Candelas

| ° | 14W | 18W | 24W |
|----|------|-------|-------|
| | 878* | 1251* | 1519* |
| 0 | 2272 | 3102 | 4292 |
| 5 | 2110 | 2958 | 3946 |
| 10 | 1820 | 2570 | 3322 |
| 15 | 1374 | 1973 | 2427 |
| 20 | 907 | 1309 | 1536 |
| 25 | 491 | 705 | 798 |
| 30 | 177 | 260 | 264 |
| 35 | 64 | 94 | 91 |
| 40 | 28 | 41 | 42 |
| 45 | 17 | 24 | 26 |
| 50 | 13 | 17 | 20 |
| 55 | 10 | 12 | 16 |
| 60 | 9 | 10 | 12 |
| 65 | 0 | 0 | 0 |
| 70 | 0 | 0 | 0 |
| 75 | 0 | 0 | 0 |
| 80 | 0 | 0 | 0 |
| 85 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 |

° Vertical Angles
* Luminaire Lumens

Notes

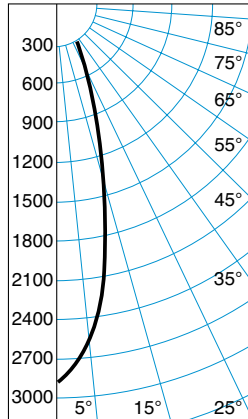
- Photometric Reports:
F215 1100 lm KV Report No. 33216, 1500 lm KV Report No. 23216, 2100 lm KV Report No. 13216.
- Datachart degree headings show one side of nadir. Diameter data includes both sides. Therefore the 10° column shows a 20° pattern diameter at the work plane. Footcandle values are at the diameter edge.
- The luminous efficacy (lm/W) refers to the total measured luminous flux (lumens) of the fixture divided by the total measured electrical input power (watts) of the complete fixture.

Performance Datachart

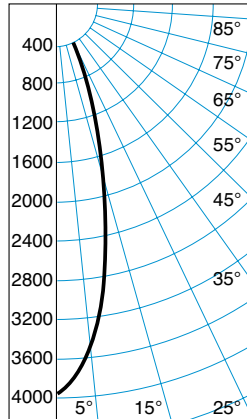
| Single Unit Initial Footcandles, 30" Work Plane | | | | | | Ceiling to Floor | Multiple Units Initial Footcandles, 30" Work Plane | | | |
|---|-----|------|-----|------|-----|------------------|--|-----------|-----------|------------------------------------|
| F217 Xicato® 1100 lm 3000K Read Top Data F217 Xicato® 1500 lm 3000K Read Bottom Data | | | | | | | Ceiling 80% | Walls 50% | Floor 20% | Spacing is Maximum Over Work Plane |
| Nadir | 10° | | 20° | | 30° | Spacing | RCR 1 | RCR 3 | RCR 8 | |
| FC | FC | Diam | FC | Diam | FC | | | | | Diam |
| 96 | 62 | 2' | 22 | 4' | 3 | 6' | 3' | 149 | 134 | 109 |
| 131 | 83 | 2' | 29 | 4' | 4 | 6' | 3' | 199 | 179 | 146 |
| 68 | 44 | 2' | 15 | 5' | 2 | 8' | 3' | 107 | 96 | 78 |
| 94 | 59 | 2' | 21 | 5' | 3 | 8' | 3' | 142 | 128 | 104 |
| 51 | 33 | 3' | 12 | 5' | 2 | 9' | 3' | 80 | 72 | 59 |
| 70 | 44 | 3' | 16 | 5' | 2 | 9' | 3' | 107 | 96 | 78 |
| 40 | 26 | 3' | 9 | 6' | 1 | 10' | 4' | 62 | 56 | 46 |
| 55 | 35 | 3' | 12 | 6' | 2 | 10' | 4' | 83 | 75 | 61 |
| 32 | 21 | 3' | 7 | 7' | 1 | 11' | 4' | 50 | 45 | 37 |
| 44 | 28 | 3' | 10 | 7' | 1 | 11' | 4' | 67 | 60 | 49 |

| Single Unit Initial Footcandles, 30" Work Plane | | | | | | Ceiling to Floor | Multiple Units Initial Footcandles, 30" Work Plane | | | |
|---|-----|------|-----|------|-----|------------------|--|-----------|-----------|------------------------------------|
| F217 Xicato® 2100 lm 3000K | | | | | | | Ceiling 80% | Walls 50% | Floor 20% | Spacing is Maximum Over Work Plane |
| Nadir | 10° | | 20° | | 30° | Spacing | RCR 1 | RCR 3 | RCR 8 | |
| FC | FC | Diam | FC | Diam | FC | | | | | Diam |
| 175 | 114 | 2' | 41 | 4' | 6 | 6' | 3' | 255 | 230 | 187 |
| 125 | 81 | 2' | 29 | 5' | 4 | 8' | 3' | 182 | 165 | 134 |
| 94 | 61 | 3' | 22 | 5' | 3 | 9' | 4' | 137 | 124 | 100 |
| 73 | 48 | 3' | 17 | 6' | 2 | 10' | 4' | 107 | 96 | 78 |
| 59 | 38 | 3' | 14 | 7' | 2 | 11' | 5' | 85 | 77 | 63 |

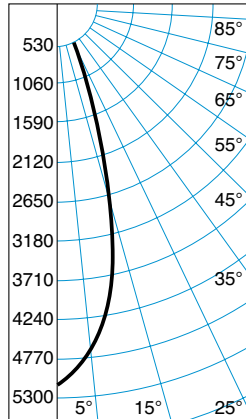
Candlepower Distribution



F217 Xicato® 1100 lm
3000K S/M.46
Luminous efficacy 65.0



F217 Xicato® 1500 lm
3000K S/M.46
Luminous efficacy 63.0



F217 Xicato® 2100 lm
3000K S/M.48
Luminous efficacy 66.0

Candelas

| ° | 14W | 18W | 24W |
|----|------|-------|-------|
| | 851* | 1137* | 1586* |
| 0 | 2889 | 3954 | 5281 |
| 5 | 2614 | 3540 | 4782 |
| 10 | 1954 | 2619 | 3605 |
| 15 | 1278 | 1704 | 2394 |
| 20 | 785 | 1052 | 1486 |
| 25 | 408 | 544 | 776 |
| 30 | 140 | 182 | 268 |
| 35 | 51 | 68 | 97 |
| 40 | 24 | 33 | 45 |
| 45 | 16 | 21 | 29 |
| 50 | 12 | 16 | 22 |
| 55 | 10 | 12 | 17 |
| 60 | 10 | 10 | 14 |
| 65 | 0 | 0 | 0 |
| 70 | 0 | 0 | 0 |
| 75 | 0 | 0 | 0 |
| 80 | 0 | 0 | 0 |
| 85 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 |

° Vertical Angles
* Luminaire Lumens

Notes

- Photometric Reports:
F217 1100 lm KV Report No. 63716, 1500 lm KV Report No. 53716, 2100 lm KV Report No. 43716.
- Datachart degree headings show one side of nadir. Diameter data includes both sides. Therefore the 10° column shows a 20° pattern diameter at the work plane. Footcandle values are at the diameter edge.
- The luminous efficacy (lm/W) refers to the total measured luminous flux (lumens) of the fixture divided by the total measured electrical input power (watts) of the complete fixture.