

## PRODUCT DESCRIPTION

The clean and elegant design of FS series 2X2FT led flat panel light provides a modern alternative to traditional 2x2ft fluorescent troffer, reaching up to 110lm/w. The unique internal driver and only 1.09" thickness allow you the ability to install the LED light just about anywhere, especially for the small and confined space, including recessed, suspended, surface mounted installations methods. It is available for 0-10v dimming and step dimming with maximum 2 years warranty.

## PERFORMANCE SUMMARY

Efficacy: 110LPW

Delivered Light Output: 4399 Lumens (3500K)

Input Power: 40Watts

CRI: Ra > 80

DLC CCT Options: 3500k, 4000k, 5000k

Input Voltage: 100-277 VAC

Input current: 0.40-0.14A

THD: < 20% (at 277V)

Standard Warranty: Maximum 2 Years

Standard Lifetime: Designed to L70 minimum 50,000 hours

Installation Options: Recessed, Suspending, Surface mounted

0-10V dimming and step dimming available

Recommended Dimmers: DIVA-DVTV, NOVA T NTSTV-DV, IP710-DL

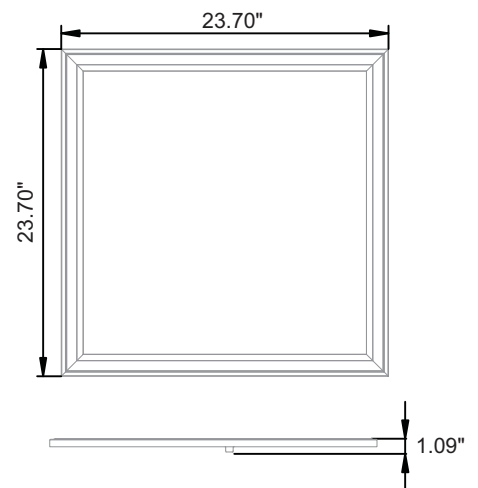
Dimensions: L 23.7" x W 23.7" x H 1.09"

Fixture measurement and weight are round up, pls contact your representative for exact data.

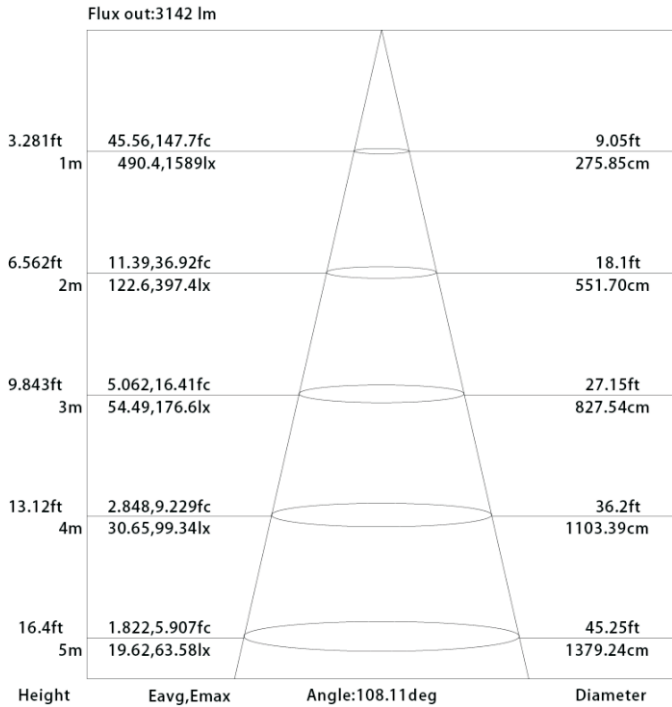
## REGULATORY & VOLUNTARY QUALIFICATIONS

|                    |     |
|--------------------|-----|
| ETL Listed         | Yes |
| DLC Qualifications | Yes |
| LM79 Report        | Yes |
| Damp rated         | Yes |

## Thinnest Surface Mounted Panels



## AVERAGE ILLUMINANCE CURVE



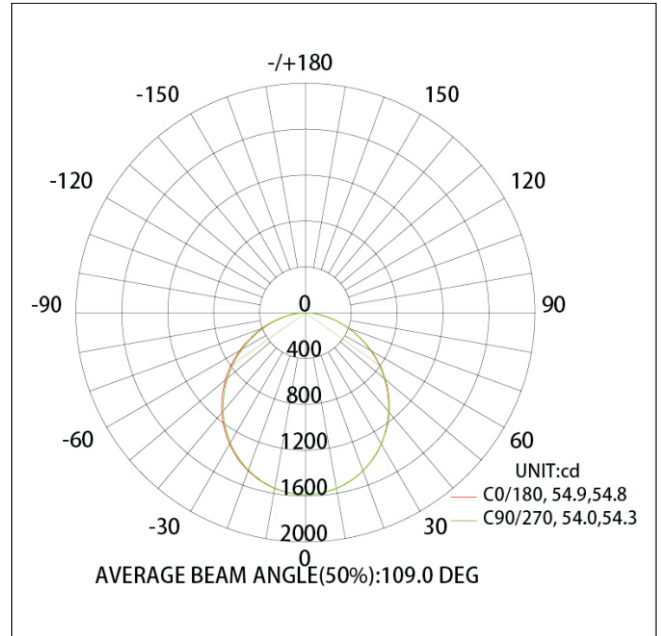
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

## PHOTOMETRY

Fixture photometry has been conducted accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%. Result may vary per actual order.

## LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

NAME: FS22-DM-35E



## ZONAL FLUX DIAGRAM

| T  | C0    | C45    | C90    | C135   | C180  | C225  | C270  | C315  |
|----|-------|--------|--------|--------|-------|-------|-------|-------|
| 10 | 1556  | 1556   | 1555   | 1556   | 1556  | 1554  | 1553  | 1554  |
| 20 | 1467  | 1465   | 1465   | 1466   | 1467  | 1463  | 1459  | 1462  |
| 30 | 1323  | 1322   | 1319   | 1323   | 1324  | 1318  | 1312  | 1316  |
| 40 | 1133  | 1133   | 1125   | 1134   | 1135  | 1128  | 1117  | 1126  |
| 50 | 908.9 | 906.4  | 897.4  | 907.8  | 911.0 | 901.9 | 888.9 | 899.3 |
| 60 | 660.8 | 657.5  | 650.8  | 659.9  | 665.1 | 653.4 | 641.5 | 650.1 |
| 70 | 403.3 | 402.0  | 399.8  | 405.6  | 409.1 | 398.5 | 388.6 | 394.5 |
| 80 | 159.9 | 163.7  | 165.1  | 168.0  | 166.5 | 159.5 | 154.2 | 155.3 |
| 90 | 0     | 0.0065 | 0.0202 | 0.0245 | 0     | 0     | 0     | 0     |

DEG LUMINOUS INTENSITY: cd

## ZONAL LUMEN SUMMARY

| T     | φ zone | φ total | % lum, lamp |
|-------|--------|---------|-------------|
| 0-10  | 149.9  | 149.9   | 3.44, 3.44  |
| 10-20 | 427.9  | 577.8   | 13.2, 13.2  |
| 20-30 | 644.2  | 1222    | 28, 28      |
| 30-40 | 768.7  | 1991    | 45.6, 45.6  |
| 40-50 | 785.8  | 2776    | 63.6, 63.6  |
| 50-60 | 697.9  | 3474    | 79.6, 79.6  |
| 60-70 | 522.0  | 3996    | 91.6, 91.6  |
| 70-80 | 293.1  | 4289    | 98.3, 98.3  |
| 80-90 | 70.77  | 4360    | 100, 100    |

UNIT: lm

## COEFFICIENTS OF UTILIZATION

| ppc  | 80%                         |     |     | 70% |     |     | 50% |     |     | 30% |     |     | 10% |     |     | 0   |
|------|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|      | 50%                         | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0   |
| pw   | 20%                         |     |     | 20% |     |     | 20% |     |     | 20% |     |     | 20% |     |     | 0   |
|      | 20%                         | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 20% | 0   |
| pfc  | RCR: Room Cavity Ratio (CU) |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|      | RCR                         | 119 | 119 | 119 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 |
| 0.0  | 119                         | 119 | 119 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 00  |
| 1.0  | 104                         | 00  | 96  | 102 | 98  | 95  | 98  | 94  | 92  | 94  | 91  | 89  | 90  | 88  | 86  | 84  |
| 2.0  | 91                          | 84  | 78  | 89  | 83  | 77  | 85  | 80  | 76  | 82  | 78  | 74  | 79  | 75  | 72  | 70  |
| 3.0  | 80                          | 72  | 65  | 78  | 71  | 65  | 75  | 69  | 63  | 73  | 67  | 62  | 70  | 65  | 61  | 59  |
| 4.0  | 71                          | 62  | 55  | 69  | 61  | 55  | 67  | 60  | 54  | 65  | 58  | 53  | 62  | 57  | 53  | 51  |
| 5.0  | 63                          | 54  | 48  | 62  | 54  | 47  | 60  | 53  | 47  | 58  | 51  | 46  | 56  | 50  | 46  | 44  |
| 6.0  | 57                          | 48  | 42  | 56  | 48  | 41  | 54  | 47  | 41  | 53  | 46  | 41  | 51  | 45  | 40  | 38  |
| 7.0  | 52                          | 43  | 37  | 51  | 43  | 37  | 49  | 42  | 36  | 48  | 41  | 36  | 47  | 40  | 36  | 34  |
| 8.0  | 47                          | 39  | 33  | 46  | 38  | 33  | 45  | 38  | 33  | 44  | 37  | 32  | 43  | 37  | 32  | 30  |
| 9.0  | 43                          | 35  | 30  | 43  | 35  | 29  | 42  | 34  | 29  | 40  | 34  | 29  | 39  | 33  | 29  | 27  |
| 10.0 | 40                          | 32  | 27  | 39  | 32  | 27  | 38  | 31  | 27  | 38  | 31  | 27  | 37  | 31  | 26  | 25  |

## PRODUCT DESCRIPTION

The clean and elegant design of VS series 1X4FT led flat panel light , reaching up to 95 lm/w.The unique internal driver and only 1.09" thickness allow you the ability to install the LED light just about anywhere,especially for the small and confined space. It is available for 0-10v dimming and step dimming with maximum 2 years warranty.

## PERFORMANCE SUMMARY

Efficacy:95LPW

Delivered Light Output: 3820Lumens (4000K)

Input Power: **40Watts**

CRI: Ra>80

CCT Options: 3000k,4000k,5000k

Input Voltage: 100-277 VAC

Input current:0.14-0.4A

THD:<20%(at 277V)

Standard Warranty: **Maximum 2 Years**

Standard Lifetime: Designed to L70 minimum 50,000 hours

Installation Options: Recessed,Suspending,Surface mounted

0-10V dimming and step dimming available

Recommended Dimmers:DIVA-DVTV , IP710-DL

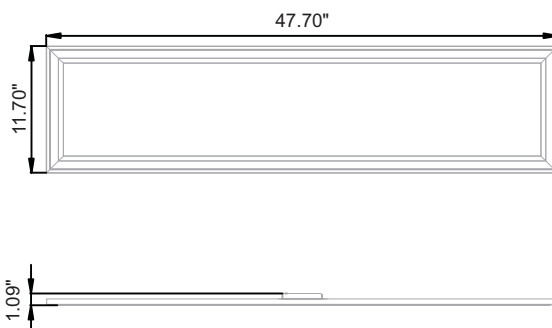
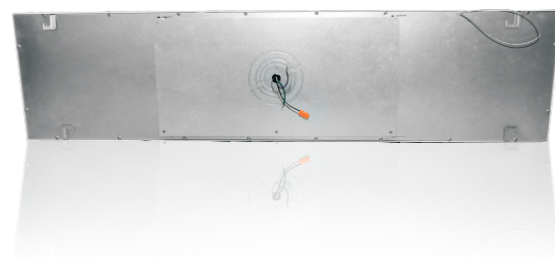
Dimensions: L 47.7" x W 11.7" x H 1.09"

Fixture measurement and weight are round up, pls contact your representative for exact data.

## REGULATORY & VOLUNTARY QUALIFICATIONS

|            |     |
|------------|-----|
| ETL Listed | Yes |
| Damp rated | Yes |

## Thinnest Surface Mounted Panels



## PRODUCT DESCRIPTION

The clean and elegant design of FS series 2X4FT led flat panel light provides a modern alternative to traditional 2x4ft fluorescent troffer, reaching up to 110lm/w. The unique internal driver and only 1.09" thickness allow you the ability to install the LED light just about anywhere, especially for the small and confined space, including recessed, suspended surface mounted installations methods. It is available for 0-10v dimming and step dimming with maximum 2 years warranty.

## PERFORMANCE SUMMARY

Efficacy: 110LPW

Delivered Light Output: 5619 Lumens (3500K)

Input Power: 50Watts

CRI: Ra > 80

DLC CCT Options: 3500k, 4000k, 5000k

Input Voltage: 100-277 VAC

Input current: 0.42-0.18A

THD: < 20% (at 277V)

Standard Warranty: Maximum 2 Years

Standard Lifetime: Designed to L70 minimum 50,000 hours

Installation Options: Recessed, Suspending, Surface mounted

0-10V dimming and step dimming available

Recommended Dimmers: DIVA-DVTV, NOVA T NTSTV-DV, IP710-DL

Dimensions: L 47.7" x W 23.7" x H 1.09"

Fixture measurement and weight are round up, pls contact your representative for exact data.

## REGULATORY & VOLUNTARY QUALIFICATIONS

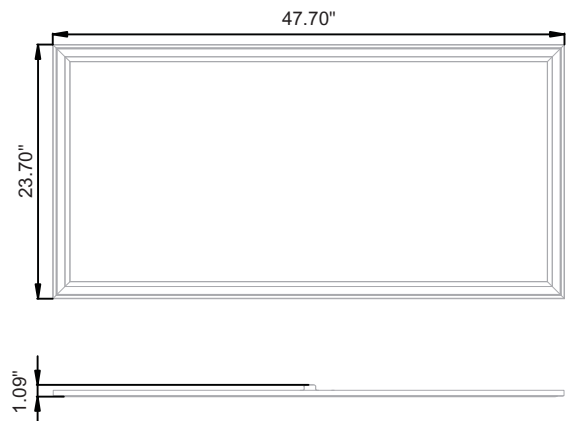
ETL Listed Yes

DLC Qualifications Yes

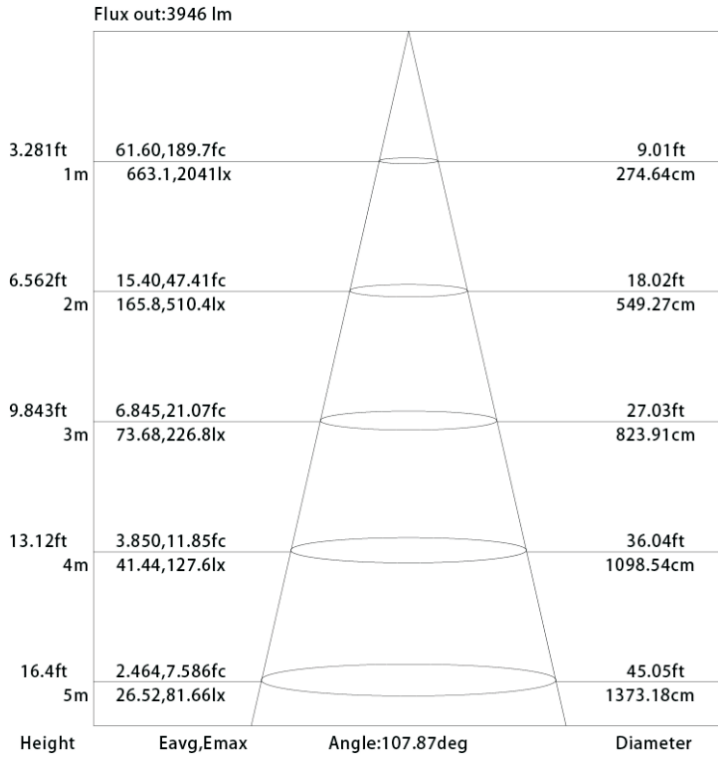
LM79 Report Yes

Damp rated Yes

## Thinnest Surface Mounted Panels



## AVERAGE ILLUMINANCE CURVE



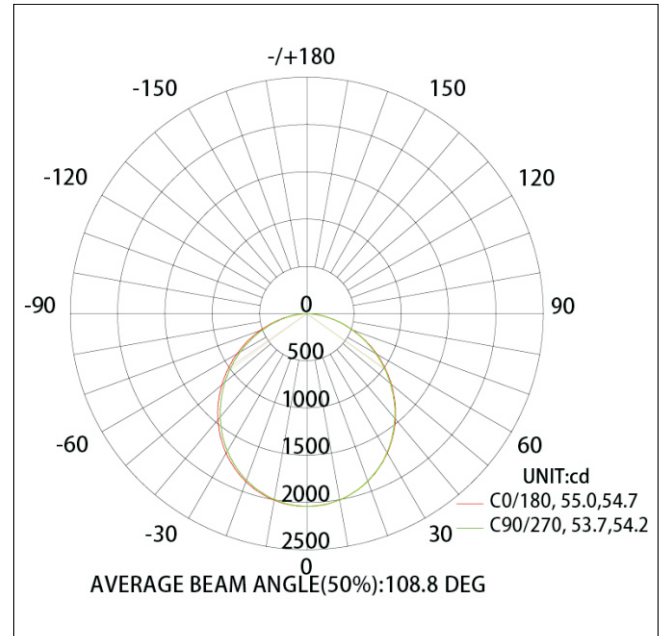
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

## PHOTOMETRY

Fixture photometry has been conducted accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%. Result may vary per actual order.

## LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

NAME: FS24-DH-35E



## ZONAL FLUX DIAGRAM

| T  | C0     | C45    | C90    | C135   | C180  | C225  | C270   | C315  |
|----|--------|--------|--------|--------|-------|-------|--------|-------|
| 10 | 2000   | 2001   | 2001   | 2003   | 2003  | 1999  | 1996   | 1997  |
| 20 | 1887   | 1886   | 1884   | 1889   | 1892  | 1880  | 1875   | 1879  |
| 30 | 1702   | 1700   | 1696   | 1704   | 1709  | 1692  | 1682   | 1690  |
| 40 | 1457   | 1453   | 1446   | 1460   | 1465  | 1444  | 1429   | 1443  |
| 50 | 1168   | 1161   | 1153   | 1169   | 1176  | 1150  | 1134   | 1150  |
| 60 | 849.5  | 843.3  | 836.6  | 850.2  | 857.2 | 832.1 | 816.4  | 832.2 |
| 70 | 520.4  | 517.6  | 514.1  | 524.5  | 528.5 | 507.7 | 494.9  | 507.0 |
| 80 | 209.7  | 214.7  | 216.5  | 220.9  | 221.1 | 208.3 | 201.8  | 204.7 |
| 90 | 0.0276 | 0.1180 | 0.4739 | 0.2054 | 0     | 0     | 0.2077 | 0     |

DEG LUMINOUS INTENSITY: cd

## ZONAL LUMEN SUMMARY

| T     | φ zone | φ total | % lum. lamp |
|-------|--------|---------|-------------|
| 0-10  | 192.8  | 192.8   | 3.44, 3.44  |
| 10-20 | 550.5  | 743.3   | 13.3, 13.3  |
| 20-30 | 828.5  | 1572    | 28, 28      |
| 30-40 | 987.7  | 2560    | 45.6, 45.6  |
| 40-50 | 1008   | 3568    | 63.6, 63.6  |
| 50-60 | 894.5  | 4463    | 79.5, 79.5  |
| 60-70 | 669.5  | 5132    | 91.5, 91.5  |
| 70-80 | 379.1  | 5511    | 98.2, 98.2  |
| 80-90 | 98.50  | 5610    | 100, 100    |

UNIT: lm

## COEFFICIENTS OF UTILIZATION

| ppc  | 80%                    |     |     | 70% |     |     | 50%  |     |     | 30% |     |     | 10% |     |     | 0   |  |  |
|------|------------------------|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| pw   | 50%                    | 30% | 10% | 50% | 30% | 10% | 50%  | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0   |  |  |
| pfc  | 20%                    |     |     | 20% |     |     | 20%  |     |     | 20% |     |     | 20% |     |     | 0   |  |  |
| RCR  | RCR: Room Cavity Ratio |     |     |     |     |     | (CU) |     |     |     |     |     |     |     |     |     |  |  |
| 0.0  | 119                    | 119 | 119 | 116 | 116 | 116 | 111  | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |  |  |
| 1.0  | 104                    | 00  | 96  | 102 | 98  | 94  | 98   | 94  | 91  | 94  | 94  | 89  | 90  | 88  | 86  | 84  |  |  |
| 2.0  | 91                     | 84  | 78  | 89  | 83  | 77  | 85   | 80  | 76  | 82  | 82  | 74  | 79  | 75  | 72  | 70  |  |  |
| 3.0  | 80                     | 72  | 65  | 78  | 71  | 65  | 75   | 69  | 63  | 72  | 72  | 62  | 70  | 65  | 61  | 59  |  |  |
| 4.0  | 71                     | 62  | 55  | 69  | 61  | 55  | 67   | 60  | 54  | 65  | 65  | 53  | 62  | 57  | 53  | 50  |  |  |
| 5.0  | 63                     | 54  | 48  | 62  | 54  | 47  | 60   | 53  | 47  | 58  | 58  | 46  | 56  | 50  | 46  | 44  |  |  |
| 6.0  | 57                     | 48  | 42  | 56  | 48  | 41  | 54   | 47  | 41  | 52  | 52  | 41  | 51  | 45  | 40  | 38  |  |  |
| 7.0  | 52                     | 43  | 37  | 51  | 43  | 37  | 49   | 42  | 36  | 48  | 48  | 36  | 46  | 40  | 36  | 34  |  |  |
| 8.0  | 47                     | 39  | 33  | 46  | 38  | 33  | 45   | 38  | 33  | 44  | 44  | 32  | 43  | 37  | 32  | 30  |  |  |
| 9.0  | 43                     | 35  | 30  | 43  | 35  | 29  | 42   | 34  | 29  | 40  | 40  | 29  | 39  | 33  | 29  | 27  |  |  |
| 10.0 | 40                     | 32  | 27  | 39  | 32  | 27  | 38   | 31  | 27  | 38  | 38  | 26  | 37  | 31  | 26  | 25  |  |  |