



UL Verification Services Inc.  
7036 Snowdrift Road  
Allentown, PA 18106  
610-774-1300

## Integrating Sphere Test Report

Relevant Standards  
IES LM-79-2008  
ANSI C78.377-2011, ANSI C82.77-2002  
CIE 13.3-1995, CIE 15-2004

Prepared For  
Elemental LED Inc, DBA Diode LED  
Wes Buck  
Suite 211, 1195 Park Ave.  
Emeryville, CA 94608  
United States

Catalog Number  
FLUID VIEW™ 12v LED Tape Light DI-12V-FV50-80XX

Order Number  
10460077  
Test Number  
758911

Test Date  
2014-09-23

Prepared By

*Javier Caban*

Javier Caban, Technician

Approved By

*Eric M. Gaudreau*

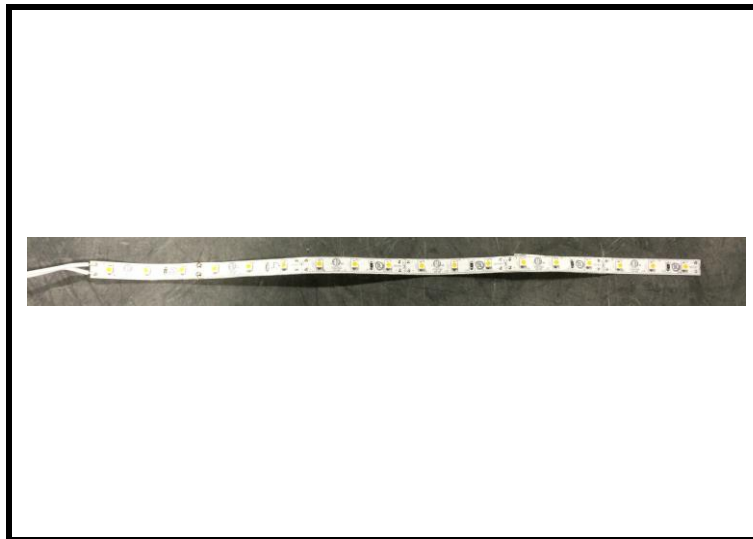
Eric Gaudreau, Engineering Project Handler

The results contained in this report pertain only to the tested sample.  
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.



Luminaire Description: LED strip  
Catalog Number: FLUID VIEW™ 12v LED Tape Light DI-12V-FV50-80XX  
Lamp: 18 white LEDs  
Mounting: Surface  
Ballast/Driver: One Meanwell LPV-60-12

Luminaire



#### Summary of Results

|                     |                  |
|---------------------|------------------|
| Radiant Flux:       | 445.9 mW         |
| Luminous Flux:      | 141.9 Lumens     |
| Luminaire Efficacy: | 64.2 Lumens/Watt |
| CCT:                | 5192 K           |
| CRI (Ra):           | 82.6             |
| Chromaticity (x):   | 0.3401           |
| Chromaticity (y):   | 0.3517           |
| Chromaticity (u):   | 0.2080           |
| Chromaticity (v):   | 0.3227           |
| Duv:                | 0.0016           |

#### Test Conditions

|                   |           |
|-------------------|-----------|
| Test Temperature: | 24.9 °C   |
| Voltage:          | 120.0 VAC |
| Current:          | 0.05150 A |
| Power:            | 2.210 W   |
| Power Factor:     | 0.357     |
| Frequency:        | 60 Hz     |
| Current THD:      | 166 %     |

Testing was performed in a 1-meter integrating sphere using the 4 $\pi$  geometry method.

Absorption correction was employed for this measurement.

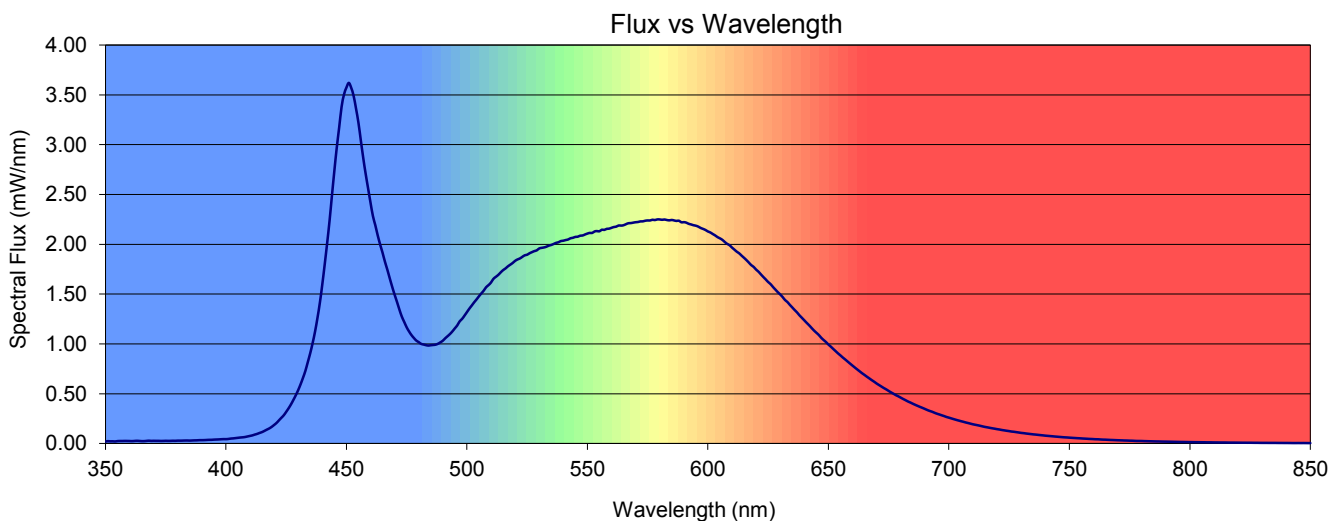
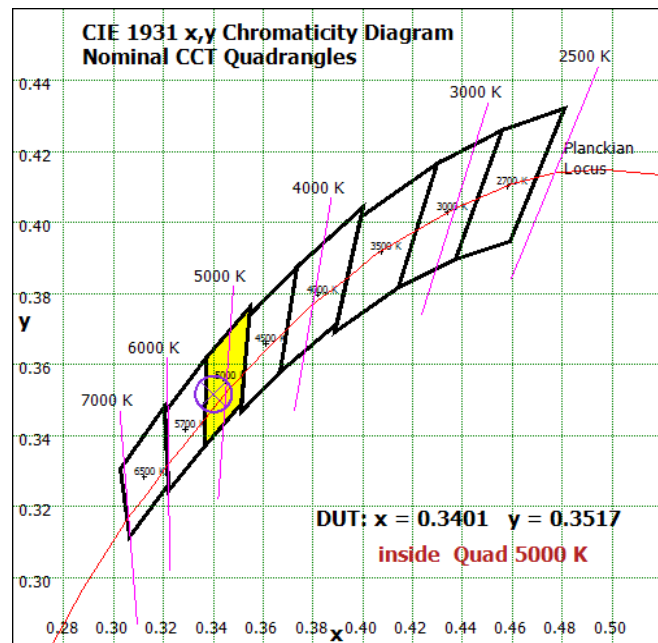
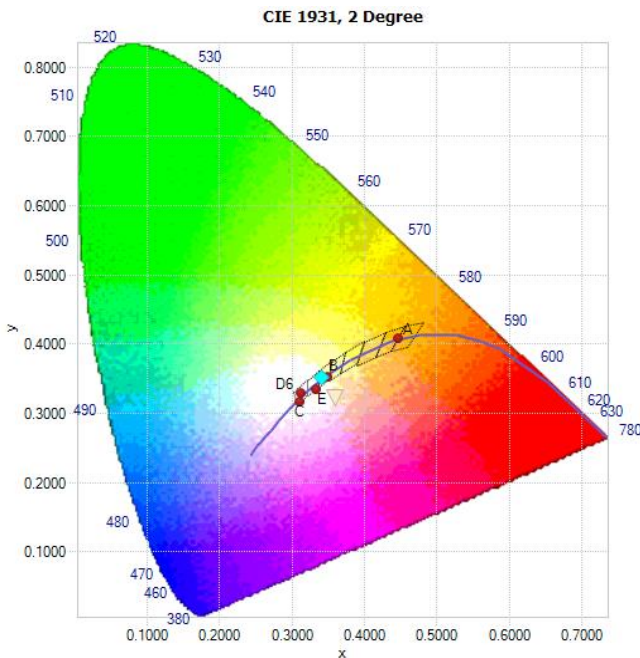


Chromaticity Coordinates

| x      | y      | u      | v      | u'     | v'     | Duv    |
|--------|--------|--------|--------|--------|--------|--------|
| 0.3401 | 0.3517 | 0.2080 | 0.3227 | 0.2080 | 0.4840 | 0.0016 |

Color Rendering Index Detail

| Ra (CRI) | R1   | R2   | R3   | R4   | R5   | R6   | R7   | R8   | R9  | R10  | R11  | R12  | R13  | R14  |
|----------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|
| 82.6     | 80.8 | 88.2 | 92.5 | 81.8 | 81.4 | 83.0 | 86.6 | 66.5 | 4.9 | 71.2 | 80.5 | 61.2 | 82.8 | 96.1 |





Spectral Power Distribution

| $\lambda$ (nm) | mW/nm  | $\lambda$ (nm) | mW/nm | $\lambda$ (nm) | mW/nm | $\lambda$ (nm) | mW/nm | $\lambda$ (nm) | mW/nm | $\lambda$ (nm) | mW/nm  | $\lambda$ (nm) | mW/nm   |
|----------------|--------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|--------|----------------|---------|
| 350            | 0.0196 | 422            | 0.232 | 494            | 1.13  | 566            | 2.20  | 638            | 1.29  | 710            | 0.193  | 782            | 0.0235  |
| 351            | 0.0235 | 423            | 0.258 | 495            | 1.16  | 567            | 2.21  | 639            | 1.26  | 711            | 0.188  | 783            | 0.0228  |
| 352            | 0.0218 | 424            | 0.283 | 496            | 1.19  | 568            | 2.21  | 640            | 1.24  | 712            | 0.183  | 784            | 0.0223  |
| 353            | 0.0223 | 425            | 0.317 | 497            | 1.23  | 569            | 2.22  | 641            | 1.21  | 713            | 0.178  | 785            | 0.0215  |
| 354            | 0.0206 | 426            | 0.353 | 498            | 1.25  | 570            | 2.22  | 642            | 1.19  | 714            | 0.172  | 786            | 0.0208  |
| 355            | 0.0242 | 427            | 0.393 | 499            | 1.28  | 571            | 2.22  | 643            | 1.16  | 715            | 0.167  | 787            | 0.0205  |
| 356            | 0.0252 | 428            | 0.437 | 500            | 1.32  | 572            | 2.23  | 644            | 1.13  | 716            | 0.162  | 788            | 0.0198  |
| 357            | 0.0252 | 429            | 0.485 | 501            | 1.35  | 573            | 2.23  | 645            | 1.11  | 717            | 0.157  | 789            | 0.0191  |
| 358            | 0.0261 | 430            | 0.536 | 502            | 1.38  | 574            | 2.24  | 646            | 1.09  | 718            | 0.153  | 790            | 0.0189  |
| 359            | 0.0257 | 431            | 0.595 | 503            | 1.42  | 575            | 2.24  | 647            | 1.06  | 719            | 0.149  | 791            | 0.0185  |
| 360            | 0.0252 | 432            | 0.660 | 504            | 1.45  | 576            | 2.24  | 648            | 1.04  | 720            | 0.144  | 792            | 0.0180  |
| 361            | 0.0240 | 433            | 0.730 | 505            | 1.48  | 577            | 2.25  | 649            | 1.02  | 721            | 0.141  | 793            | 0.0173  |
| 362            | 0.0257 | 434            | 0.818 | 506            | 1.51  | 578            | 2.24  | 650            | 0.994 | 722            | 0.136  | 794            | 0.0168  |
| 363            | 0.0274 | 435            | 0.907 | 507            | 1.54  | 579            | 2.25  | 651            | 0.973 | 723            | 0.132  | 795            | 0.0164  |
| 364            | 0.0259 | 436            | 1.01  | 508            | 1.57  | 580            | 2.25  | 652            | 0.950 | 724            | 0.128  | 796            | 0.0157  |
| 365            | 0.0242 | 437            | 1.12  | 509            | 1.59  | 581            | 2.25  | 653            | 0.928 | 725            | 0.125  | 797            | 0.0155  |
| 366            | 0.0241 | 438            | 1.26  | 510            | 1.62  | 582            | 2.25  | 654            | 0.905 | 726            | 0.120  | 798            | 0.0151  |
| 367            | 0.0262 | 439            | 1.41  | 511            | 1.65  | 583            | 2.24  | 655            | 0.885 | 727            | 0.118  | 799            | 0.0146  |
| 368            | 0.0284 | 440            | 1.60  | 512            | 1.67  | 584            | 2.24  | 656            | 0.863 | 728            | 0.114  | 800            | 0.0142  |
| 369            | 0.0264 | 441            | 1.80  | 513            | 1.69  | 585            | 2.24  | 657            | 0.844 | 729            | 0.111  | 801            | 0.0140  |
| 370            | 0.0272 | 442            | 2.01  | 514            | 1.72  | 586            | 2.24  | 658            | 0.823 | 730            | 0.107  | 802            | 0.0135  |
| 371            | 0.0267 | 443            | 2.23  | 515            | 1.74  | 587            | 2.23  | 659            | 0.802 | 731            | 0.104  | 803            | 0.0133  |
| 372            | 0.0268 | 444            | 2.49  | 516            | 1.76  | 588            | 2.24  | 660            | 0.782 | 732            | 0.101  | 804            | 0.0131  |
| 373            | 0.0258 | 445            | 2.74  | 517            | 1.78  | 589            | 2.22  | 661            | 0.763 | 733            | 0.0977 | 805            | 0.0125  |
| 374            | 0.0261 | 446            | 2.97  | 518            | 1.80  | 590            | 2.22  | 662            | 0.743 | 734            | 0.0948 | 806            | 0.0124  |
| 375            | 0.0272 | 447            | 3.17  | 519            | 1.81  | 591            | 2.22  | 663            | 0.724 | 735            | 0.0919 | 807            | 0.0117  |
| 376            | 0.0265 | 448            | 3.38  | 520            | 1.83  | 592            | 2.21  | 664            | 0.705 | 736            | 0.0897 | 808            | 0.0118  |
| 377            | 0.0268 | 449            | 3.50  | 521            | 1.85  | 593            | 2.20  | 665            | 0.688 | 737            | 0.0870 | 809            | 0.0115  |
| 378            | 0.0278 | 450            | 3.57  | 522            | 1.86  | 594            | 2.19  | 666            | 0.670 | 738            | 0.0842 | 810            | 0.0109  |
| 379            | 0.0274 | 451            | 3.62  | 523            | 1.87  | 595            | 2.19  | 667            | 0.654 | 739            | 0.0818 | 811            | 0.0108  |
| 380            | 0.0288 | 452            | 3.57  | 524            | 1.89  | 596            | 2.18  | 668            | 0.636 | 740            | 0.0789 | 812            | 0.0105  |
| 381            | 0.0286 | 453            | 3.49  | 525            | 1.90  | 597            | 2.16  | 669            | 0.620 | 741            | 0.0769 | 813            | 0.0101  |
| 382            | 0.0292 | 454            | 3.36  | 526            | 1.91  | 598            | 2.15  | 670            | 0.603 | 742            | 0.0746 | 814            | 0.0102  |
| 383            | 0.0300 | 455            | 3.22  | 527            | 1.92  | 599            | 2.14  | 671            | 0.587 | 743            | 0.0726 | 815            | 0.00986 |
| 384            | 0.0301 | 456            | 3.04  | 528            | 1.93  | 600            | 2.13  | 672            | 0.572 | 744            | 0.0702 | 816            | 0.00948 |
| 385            | 0.0294 | 457            | 2.87  | 529            | 1.94  | 601            | 2.12  | 673            | 0.557 | 745            | 0.0682 | 817            | 0.00915 |
| 386            | 0.0304 | 458            | 2.71  | 530            | 1.96  | 602            | 2.10  | 674            | 0.543 | 746            | 0.0660 | 818            | 0.00915 |
| 387            | 0.0316 | 459            | 2.56  | 531            | 1.96  | 603            | 2.09  | 675            | 0.528 | 747            | 0.0640 | 819            | 0.00889 |
| 388            | 0.0321 | 460            | 2.42  | 532            | 1.97  | 604            | 2.07  | 676            | 0.513 | 748            | 0.0622 | 820            | 0.00866 |
| 389            | 0.0338 | 461            | 2.28  | 533            | 1.98  | 605            | 2.06  | 677            | 0.500 | 749            | 0.0608 | 821            | 0.00840 |
| 390            | 0.0336 | 462            | 2.19  | 534            | 1.99  | 606            | 2.04  | 678            | 0.486 | 750            | 0.0589 | 822            | 0.00808 |
| 391            | 0.0343 | 463            | 2.09  | 535            | 1.99  | 607            | 2.02  | 679            | 0.474 | 751            | 0.0572 | 823            | 0.00797 |
| 392            | 0.0356 | 464            | 2.00  | 536            | 2.00  | 608            | 2.00  | 680            | 0.461 | 752            | 0.0556 | 824            | 0.00787 |
| 393            | 0.0369 | 465            | 1.92  | 537            | 2.01  | 609            | 1.99  | 681            | 0.448 | 753            | 0.0541 | 825            | 0.00788 |
| 394            | 0.0372 | 466            | 1.82  | 538            | 2.02  | 610            | 1.97  | 682            | 0.435 | 754            | 0.0526 | 826            | 0.00754 |
| 395            | 0.0390 | 467            | 1.74  | 539            | 2.03  | 611            | 1.95  | 683            | 0.422 | 755            | 0.0510 | 827            | 0.00724 |
| 396            | 0.0401 | 468            | 1.66  | 540            | 2.04  | 612            | 1.93  | 684            | 0.412 | 756            | 0.0495 | 828            | 0.00713 |
| 397            | 0.0411 | 469            | 1.57  | 541            | 2.04  | 613            | 1.91  | 685            | 0.400 | 757            | 0.0483 | 829            | 0.00672 |
| 398            | 0.0427 | 470            | 1.49  | 542            | 2.05  | 614            | 1.89  | 686            | 0.389 | 758            | 0.0465 | 830            | 0.00647 |
| 399            | 0.0441 | 471            | 1.42  | 543            | 2.06  | 615            | 1.86  | 687            | 0.378 | 759            | 0.0456 | 831            | 0.00643 |
| 400            | 0.0440 | 472            | 1.34  | 544            | 2.07  | 616            | 1.84  | 688            | 0.368 | 760            | 0.0442 | 832            | 0.00633 |
| 401            | 0.0457 | 473            | 1.27  | 545            | 2.07  | 617            | 1.82  | 689            | 0.358 | 761            | 0.0429 | 833            | 0.00614 |
| 402            | 0.0496 | 474            | 1.22  | 546            | 2.08  | 618            | 1.79  | 690            | 0.348 | 762            | 0.0422 | 834            | 0.00618 |
| 403            | 0.0514 | 475            | 1.17  | 547            | 2.09  | 619            | 1.77  | 691            | 0.337 | 763            | 0.0404 | 835            | 0.00610 |
| 404            | 0.0544 | 476            | 1.13  | 548            | 2.09  | 620            | 1.75  | 692            | 0.327 | 764            | 0.0391 | 836            | 0.00594 |
| 405            | 0.0572 | 477            | 1.09  | 549            | 2.10  | 621            | 1.72  | 693            | 0.319 | 765            | 0.0384 | 837            | 0.00566 |
| 406            | 0.0602 | 478            | 1.06  | 550            | 2.11  | 622            | 1.70  | 694            | 0.309 | 766            | 0.0371 | 838            | 0.00554 |
| 407            | 0.0623 | 479            | 1.03  | 551            | 2.11  | 623            | 1.67  | 695            | 0.300 | 767            | 0.0360 | 839            | 0.00544 |
| 408            | 0.0657 | 480            | 1.02  | 552            | 2.11  | 624            | 1.65  | 696            | 0.292 | 768            | 0.0351 | 840            | 0.00537 |
| 409            | 0.0710 | 481            | 1.00  | 553            | 2.13  | 625            | 1.62  | 697            | 0.284 | 769            | 0.0340 | 841            | 0.00515 |
| 410            | 0.0762 | 482            | 0.994 | 554            | 2.13  | 626            | 1.60  | 698            | 0.276 | 770            | 0.0329 | 842            | 0.00485 |
| 411            | 0.0817 | 483            | 0.988 | 555            | 2.13  | 627            | 1.57  | 699            | 0.267 | 771            | 0.0320 | 843            | 0.00454 |
| 412            | 0.0897 | 484            | 0.983 | 556            | 2.15  | 628            | 1.55  | 700            | 0.260 | 772            | 0.0312 | 844            | 0.00451 |
| 413            | 0.0968 | 485            | 0.987 | 557            | 2.14  | 629            | 1.52  | 701            | 0.252 | 773            | 0.0303 | 845            | 0.00474 |
| 414            | 0.106  | 486            | 0.989 | 558            | 2.15  | 630            | 1.50  | 702            | 0.245 | 774            | 0.0298 | 846            | 0.00445 |
| 415            | 0.115  | 487            | 0.992 | 559            | 2.16  | 631            | 1.47  | 703            | 0.238 | 775            | 0.0287 | 847            | 0.00468 |
| 416            | 0.127  | 488            | 1.00  | 560            | 2.17  | 632            | 1.44  | 704            | 0.231 | 776            | 0.0282 | 848            | 0.00458 |
| 417            | 0.140  | 489            | 1.02  | 561            | 2.17  | 633            | 1.42  | 705            | 0.224 | 777            | 0.0268 | 849            | 0.00418 |
| 418            | 0.152  | 490            | 1.03  | 562            | 2.18  | 634            | 1.39  | 706            | 0.218 | 778            | 0.0258 | 850            | 0.00414 |
| 419            | 0.167  | 491            | 1.06  | 563            | 2.19  | 635            | 1.37  | 707            | 0.211 | 779            | 0.0254 |                |         |
| 420            | 0.186  | 492            | 1.08  | 564            | 2.19  | 636            | 1.34  | 708            | 0.206 | 780            | 0.0252 |                |         |
| 421            | 0.206  | 493            | 1.10  | 565            | 2.19  | 637            | 1.32  | 709            | 0.199 | 781            | 0.0241 |                |         |



UL Verification Services Inc.  
7036 Snowdrift Road  
Allentown, PA 18106  
610-774-1300

## Photometric Indoor Test Report

Relevant Standards  
IES LM-79-2008  
ANSI C82.77-2002

Prepared For  
Elemental LED Inc, DBA Diode LED  
Wes Buck  
Suite 211, 1195 Park Ave.  
Emeryville, CA 94608  
United States

Catalog Number  
FLUID VIEW™ 12v LED Tape Light DI-12V-FV50-80XX  
Project Number  
10460077  
Test Number  
758910

Test Date

2014-09-23

Prepared By

Handwritten signature of Javier Caban in black ink.

Javier Caban, Technician

Approved By

Handwritten signature of Eric M. Gaudreau in black ink.

Eric Gaudreau, Engineering Project Handler

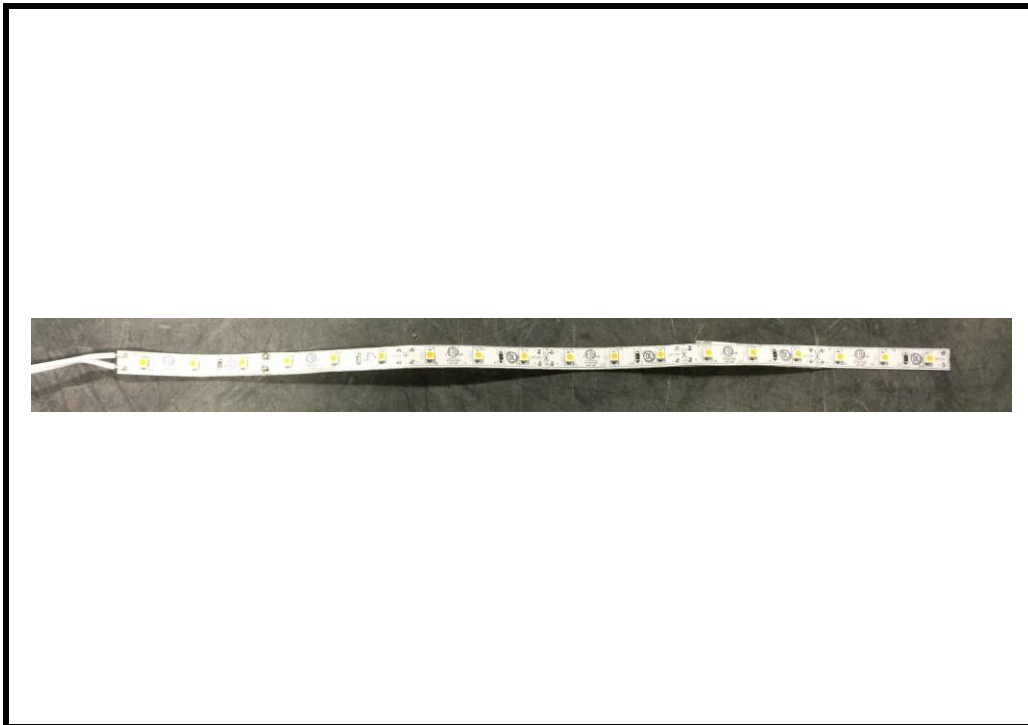
The results contained in this report pertain only to the tested sample.  
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.



UL Verification Services Inc.  
7036 Snowdrift Road  
Allentown, PA 18106  
610-774-1300

Luminaire Description: LED strip  
Catalog Number: FLUID VIEW™ 12v LED Tape Light DI-12V-FV50-80XX  
Lamp: 18 white LEDs  
Mounting: Surface  
Ballast/Driver: One Meanwell LPV-60-12

Luminaire

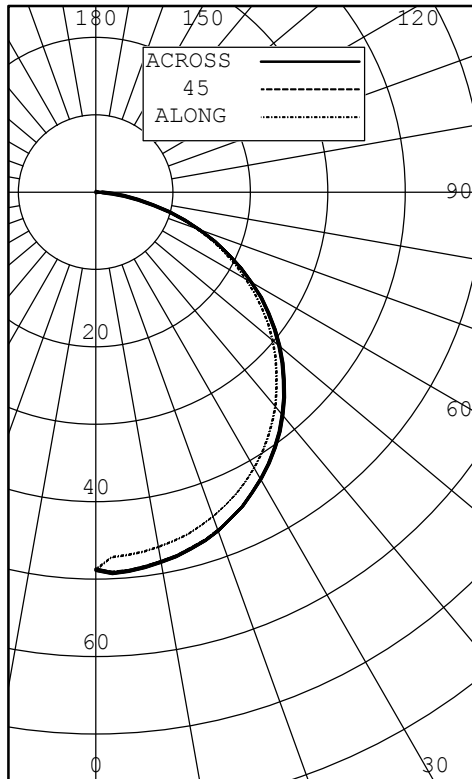


Test Conditions

|                   |           |
|-------------------|-----------|
| Test Temperature: | 24.8 °C   |
| Voltage:          | 120.0 VAC |
| Current:          | 0.05010 A |
| Power:            | 2.318 W   |
| Power Factor:     | 0.385     |
| Frequency:        | 60 Hz     |
| Current THD:      | 163 %     |



INTENSITY (CANDLEPOWER) SUMMARY OUTPUT LUMENS



| ANGLE | ALONG | 22.5 | 45 | 67.5 | ACROSS | OUTPUT LUMENS |
|-------|-------|------|----|------|--------|---------------|
| 0     | 49    | 49   | 49 | 49   | 49     |               |
| 5     | 47    | 49   | 49 | 49   | 49     | 5             |
| 10    | 47    | 48   | 48 | 48   | 49     |               |
| 15    | 46    | 47   | 48 | 48   | 48     | 13            |
| 20    | 45    | 46   | 46 | 46   | 47     |               |
| 25    | 43    | 45   | 45 | 45   | 45     | 20            |
| 30    | 41    | 43   | 43 | 42   | 43     |               |
| 35    | 39    | 40   | 40 | 40   | 40     | 25            |
| 40    | 36    | 37   | 38 | 37   | 38     |               |
| 45    | 33    | 34   | 34 | 34   | 34     | 26            |
| 50    | 30    | 31   | 31 | 31   | 31     |               |
| 55    | 26    | 27   | 27 | 27   | 27     | 24            |
| 60    | 22    | 23   | 23 | 23   | 23     |               |
| 65    | 18    | 19   | 19 | 19   | 19     | 19            |
| 70    | 14    | 14   | 14 | 14   | 14     |               |
| 75    | 10    | 10   | 10 | 10   | 10     | 10            |
| 80    | 6     | 6    | 6  | 6    | 6      |               |
| 85    | 2     | 2    | 2  | 2    | 2      | 3             |
| 90    | 0     | 0    | 0  | 0    | 0      |               |

ZONAL LUMENS AND PERCENTAGES

| ZONE   | LUMENS | % LUMINAIRE |
|--------|--------|-------------|
| 0-30   | 38     | 26.43       |
| 0-40   | 64     | 43.60       |
| 0-60   | 114    | 78.25       |
| 0-90   | 146    | 100.00      |
| 40-90  | 82     | 56.40       |
| 60-90  | 32     | 21.75       |
| 90-180 | 0      | 0.00        |
| 0-180  | 146    | 100.00      |

EFFICACY (LUMENS PER WATT): 63.3

\*\*\* THIS IS AN ABSOLUTE TEST \*\*\*

LUMINOUS LENGTH: 12.000 INS  
 WIDTH: 0.375 INS

LUMINANCE SUMMARY CD./SQ.M.

S/MH: 1.3  
 SC: 1.3

| ANGLE | ALONG | 45    | ACROSS |
|-------|-------|-------|--------|
| 45    | 16074 | 16796 | 16796  |
| 55    | 15733 | 16426 | 16426  |
| 65    | 14874 | 15499 | 15462  |
| 75    | 12776 | 13191 | 13225  |
| 85    | 8694  | 9113  | 8728   |

TESTED IN ACCORDANCE WITH IES PROCEDURES.



INTENSITY (CANDLEPOWER) DATA  
IN 2.5 DEGREE STEPS

| ANGLE | PLANE |      |    |      |        |         | OUTPUT<br>LUMENS |
|-------|-------|------|----|------|--------|---------|------------------|
|       | ALONG | 22.5 | 45 | 67.5 | ACROSS | AVERAGE |                  |
| 0.0   | 49    | 49   | 49 | 49   | 49     | 49      |                  |
| 2.5   | 47    | 49   | 49 | 49   | 49     | 49      |                  |
| 5.0   | 47    | 49   | 49 | 49   | 49     | 49      | 5                |
| 7.5   | 47    | 49   | 49 | 49   | 49     | 48      |                  |
| 10.0  | 47    | 48   | 48 | 48   | 49     | 48      |                  |
| 12.5  | 46    | 48   | 48 | 48   | 48     | 48      |                  |
| 15.0  | 46    | 47   | 48 | 48   | 48     | 47      | 13               |
| 17.5  | 45    | 47   | 47 | 47   | 47     | 47      |                  |
| 20.0  | 45    | 46   | 46 | 46   | 47     | 46      |                  |
| 22.5  | 44    | 46   | 46 | 45   | 46     | 45      |                  |
| 25.0  | 43    | 45   | 45 | 45   | 45     | 44      | 20               |
| 27.5  | 42    | 44   | 44 | 44   | 44     | 43      |                  |
| 30.0  | 41    | 43   | 43 | 42   | 43     | 42      |                  |
| 32.5  | 40    | 42   | 42 | 41   | 42     | 41      |                  |
| 35.0  | 39    | 40   | 40 | 40   | 40     | 40      | 25               |
| 37.5  | 37    | 39   | 39 | 39   | 39     | 39      |                  |
| 40.0  | 36    | 37   | 38 | 37   | 38     | 37      |                  |
| 42.5  | 35    | 36   | 36 | 36   | 36     | 36      |                  |
| 45.0  | 33    | 34   | 34 | 34   | 34     | 34      | 26               |
| 47.5  | 31    | 33   | 33 | 33   | 33     | 33      |                  |
| 50.0  | 30    | 31   | 31 | 31   | 31     | 31      |                  |
| 52.5  | 28    | 29   | 29 | 29   | 29     | 29      |                  |
| 55.0  | 26    | 27   | 27 | 27   | 27     | 27      | 24               |
| 57.5  | 24    | 25   | 25 | 25   | 25     | 25      |                  |
| 60.0  | 22    | 23   | 23 | 23   | 23     | 23      |                  |
| 62.5  | 20    | 21   | 21 | 21   | 21     | 21      |                  |
| 65.0  | 18    | 19   | 19 | 19   | 19     | 19      | 19               |
| 67.5  | 16    | 17   | 17 | 17   | 17     | 17      |                  |
| 70.0  | 14    | 14   | 14 | 14   | 14     | 14      |                  |
| 72.5  | 12    | 12   | 12 | 12   | 12     | 12      |                  |
| 75.0  | 10    | 10   | 10 | 10   | 10     | 10      | 10               |
| 77.5  | 8     | 8    | 8  | 8    | 8      | 8       |                  |
| 80.0  | 6     | 6    | 6  | 6    | 6      | 6       |                  |
| 82.5  | 4     | 4    | 4  | 4    | 4      | 4       |                  |
| 85.0  | 2     | 2    | 2  | 2    | 2      | 2       | 3                |
| 87.5  | 1     | 1    | 1  | 1    | 1      | 1       |                  |
| 90.0  | 0     | 0    | 0  | 0    | 0      | 0       |                  |





COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

| CC<br>WALL | 90 |       |      |      | 80  |       |      |      | 70  |       |      |      | 50  |       |      |      | 30    |       |      |       | 10   |       |      |      | 0   |      |
|------------|----|-------|------|------|-----|-------|------|------|-----|-------|------|------|-----|-------|------|------|-------|-------|------|-------|------|-------|------|------|-----|------|
|            | 70 | 50    | 30   | 10   | 70  | 50    | 30   | 10   | 70  | 50    | 30   | 10   | 50  | 30    | 10   | 50   | 30    | 10    | 50   | 30    | 10   | 50    | 30   | 10   | 0   |      |
| RCR        | 0  | 1.221 | .221 | .221 | .22 | 1.191 | .191 | .191 | .19 | 1.161 | .161 | .161 | .16 | 1.111 | .111 | .111 | .11   | 1.061 | .061 | .061  | .06  | 1.021 | .021 | .021 | .02 | 1.00 |
|            | 1  | 1.121 | .071 | .020 | .98 | 1.091 | .051 | .000 | .97 | 1.061 | .020 | .990 | .95 | 0.980 | .950 | .92  | 0.940 | .920  | .89  | 0.910 | .880 | .87   | 0.85 |      |     |      |
|            | 2  | 1.020 | .940 | .870 | .81 | 1.000 | .920 | .860 | .80 | 0.980 | .900 | .840 | .79 | 0.870 | .820 | .77  | 0.840 | .790  | .76  | 0.810 | .770 | .74   | 0.72 |      |     |      |
|            | 3  | 0.940 | .830 | .740 | .68 | 0.910 | .810 | .730 | .67 | 0.890 | .800 | .720 | .67 | 0.770 | .710 | .65  | 0.740 | .690  | .64  | 0.720 | .670 | .63   | 0.61 |      |     |      |
|            | 4  | 0.860 | .740 | .650 | .58 | 0.840 | .730 | .640 | .58 | 0.820 | .710 | .640 | .57 | 0.690 | .620 | .57  | 0.670 | .610  | .56  | 0.640 | .590 | .55   | 0.53 |      |     |      |
|            | 5  | 0.800 | .660 | .570 | .50 | 0.770 | .650 | .560 | .49 | 0.750 | .640 | .550 | .49 | 0.610 | .540 | .49  | 0.590 | .530  | .48  | 0.580 | .520 | .48   | 0.46 |      |     |      |
|            | 6  | 0.730 | .590 | .500 | .43 | 0.710 | .580 | .490 | .43 | 0.690 | .570 | .490 | .43 | 0.550 | .480 | .42  | 0.530 | .470  | .42  | 0.520 | .460 | .41   | 0.39 |      |     |      |
|            | 7  | 0.670 | .530 | .430 | .38 | 0.650 | .520 | .430 | .37 | 0.640 | .510 | .430 | .37 | 0.490 | .420 | .37  | 0.480 | .410  | .36  | 0.470 | .410 | .36   | 0.34 |      |     |      |
|            | 8  | 0.620 | .480 | .390 | .33 | 0.600 | .470 | .380 | .33 | 0.590 | .460 | .380 | .32 | 0.450 | .370 | .32  | 0.440 | .370  | .32  | 0.420 | .360 | .32   | 0.30 |      |     |      |
|            | 9  | 0.570 | .430 | .340 | .29 | 0.560 | .430 | .340 | .29 | 0.550 | .420 | .340 | .29 | 0.410 | .330 | .28  | 0.400 | .330  | .28  | 0.390 | .320 | .28   | 0.26 |      |     |      |
|            | 10 | 0.530 | .390 | .310 | .25 | 0.520 | .390 | .310 | .25 | 0.510 | .380 | .310 | .25 | 0.370 | .300 | .25  | 0.360 | .290  | .25  | 0.350 | .290 | .25   | 0.23 |      |     |      |

THE ABOVE COEFFICIENTS HAVE BEEN CALCULATED BASED ON LUMINAIRE LUMENS  
 BECAUSE IN AN ABSOLUTE TEST THE BARE LAMP LUMENS ARE UNKNOWN.  
 LIGHTING DESIGN CALCULATIONS MADE USING THESE COEFFICIENTS SHOULD  
 THEREFORE USE THE LUMINAIRE LUMENS IN THE CALCULATION FORMULA

LABORATORY RESULTS MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.  
 BALLAST AND FIELD FACTORS HAVE NOT BEEN APPLIED.

TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST  
 LUMINOUS OPENING OF LUMINAIRE.



## Cone of Light

**Cone Of Light Tabulation**

| Mounting Height (Feet) | Footcandles at Nadir | Diameter (Feet) |
|------------------------|----------------------|-----------------|
| 4.00                   | 3.07                 | 5.15            |
| 6.00                   | 1.36                 | 7.72            |
| 8.00                   | 0.766                | 10.3            |
| 10.0                   | 0.490                | 12.9            |
| 12.0                   | 0.341                | 15.4            |
| 14.0                   | 0.250                | 18.0            |
| 16.0                   | 0.192                | 20.6            |

**Cone of Light Plot**

