



PHOTOMETRIC TESTING & EVALUATION TO IES LM-79-19

Sample Tested

1054YM-X-MF-RGBW-FL-MV-DMX-With Filter-GREEN Output

Prepared for:

Vista Professional Outdoor Lighting

1625 Surveyor Ave
Simi Valley, CA 93063

Technical Report Number

80239581-54

March 28, 2025

Test Report Prepared and Released by:

K. A. Patel

Keyur Patel
Certifier-I

Test Report Reviewed by:

KC Fletcher

KC Fletcher
Manager

This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. **The results in this report relate only to the sample tested.**

This report shall not be reproduced, except in full, without the approval of CSA Group

Program Description

Photometric and electrical testing of a 1054YM-X-MF-RGBW-FL-MV-DMX-With Filter-GREEN Output Type C LED Luminaire to IES LM-79-19.

Executive Summary

Sample Tested = 1054YM-X-MF-RGBW-FL-MV-DMX-With Filter-GREEN Output

Sample Number = 44003367

Driver = ELDOLED PW50U-M4Z0X1

LED Module = LUMILEDS LUXEON 2835 Architectural

Test Condition = Total Lumens and electrical values are derived from CSA Report No. 80239581-30

R1(1052YM-X-MF-RGBW-FL-MV-DMX-With Filter-GREEN Output) using a scaling ratio of 2.16 for Total Lumens and 2.03 for electrical values. Spectral data in this report is from CSA Report No. 80239581-30 R1(1052YM-X-MF-RGBW-FL-MV-DMX-With Filter-Green Output).

| Luminous Efficacy (Lumens/Watt) | Luminous Flux (Lumens) | Input Power (Watts) | Power Factor | ATHD (%) |
|---------------------------------|------------------------|---------------------|--------------|----------|
| 59.10 | 2473.44 | 41.85 | 0.9705 | 14.39 |

| CCT(K) | CRI | R9 | Rcs,h1 | Rf / Rg |
|--------|------|------|--------|---------|
| N.A. | N.A. | N.A. | N.A. | N.A. |

* The above results are recorded / derived from measurements made using an Integrating Sphere

This report shall not be reproduced, except in full, without the approval of CSA Group

TABLE OF CONTENTS

| | |
|----------------------------------|---|
| Test Sample Pictures..... | 4 |
| Test Result..... | 5 |
| Spectral Power Distribution..... | 6 |
| Chromaticity Diagram..... | 7 |
| Photometric Test Results..... | 8 |
| Candela Tabulation..... | 9 |

This report shall not be reproduced, except in full, without the approval of CSA Group

Test Sample Pictures

The following sample was submitted for evaluation:



Vista Professional Outdoor Lighting : 1054YM-X-MF-RGBW-FL-MV-DMX-With Filter-GREEN Output

This report shall not be reproduced, except in full, without the approval of CSA Group

Test Result

The following results were measured after stabilization of the sample in the Integrating Sphere (unless otherwise stated). Stability shall be achieved when the variation (Maximum to minimum) of at least three readings of the light output and electrical power consumption, taken at a maximum of 10 minute intervals over a period of 20 minutes and divided by the last of these measurements chronologically, is less than 0.5%.

| Key Photometric Results | Sample Reference |
|--|---|
| | 1054YM-X-MF-RGBW-FL-MV-DMX-With Filter-GREEN Output |
| | Integrating Sphere |
| Luminous Efficacy (Lumens/Watt) | 59.10 |
| Total Luminous Flux (Lumens) | 2473.44 |
| Total Radiant Flux (Watts) | N.A. |
| Correlated Color Temperature (CCT) | N.A. |
| Color Rendering Index (CRI)(Ra) | N.A. |
| R9 Value | N.A. |
| IES Rf / IES Rg | N.A. |
| Local Chroma Shift Rcs,h1 | N.A. |
| Chromaticity (Chroma x/Chroma y) | 0.1484 / 0.7017 |
| Chromaticity (Chroma u/Chroma v) | 0.0534 / 0.3785 |
| Chromaticity (Chroma u'/Chroma v') | 0.0534 / 0.5677 |
| Duv Value | 0.1609 |
| Stabilization Time (Light and Power) | N.A. |
| Total Run Time (Integrating Sphere) | N.A. |
| Scotopic/Photopic ratio $\Phi(v')/\Phi(v)$ | 1.47 |

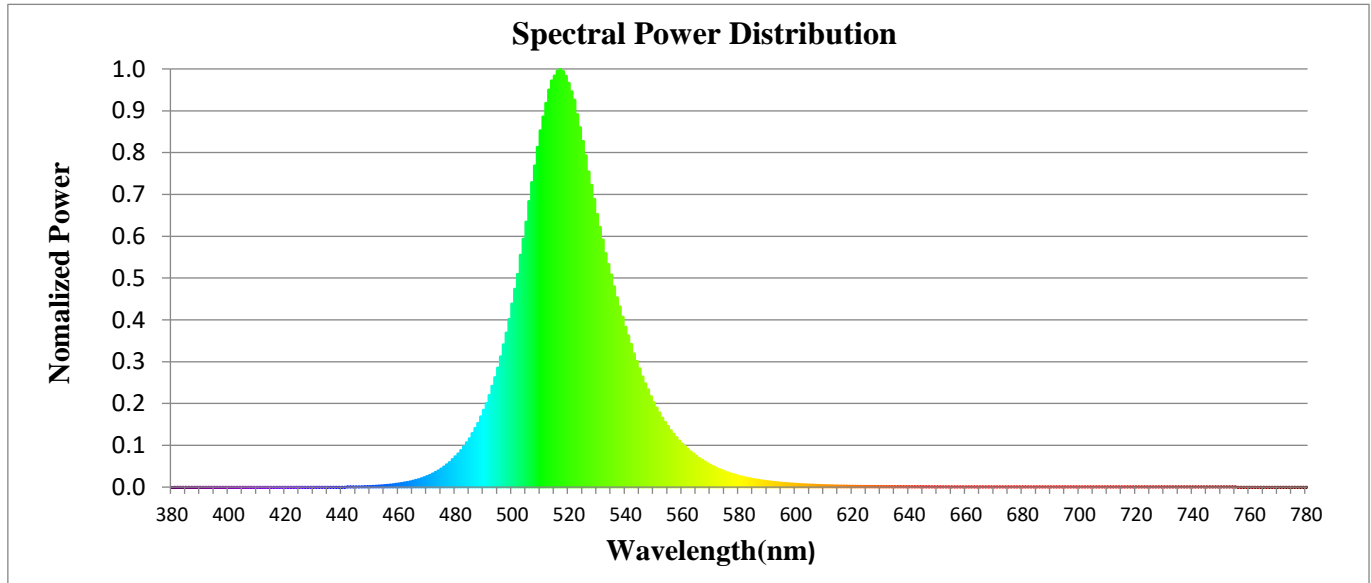
| Electrical Input Results: | Sample Reference |
|--------------------------------------|---|
| | 1054YM-X-MF-RGBW-FL-MV-DMX-With Filter-GREEN Output |
| Input Power (Watts) | 41.85 |
| Input Voltage (Volts AC) | 120.12 |
| Input Current (Amps) | 0.36 |
| Input Frequency (Hertz) | 60.0 |
| Power Factor | 0.9705 |
| Total Harmonic Distortion (THD V,A)% | 0.22, 14.39 |

| Additional Information | Sample Reference |
|-----------------------------|---|
| | 1054YM-X-MF-RGBW-FL-MV-DMX-With Filter-GREEN Output |
| Ambient Temperature | N.A. |
| Integrating Sphere Detector | CDS 2600 Spectroradiometer |
| Absortion Correction Used? | Yes |
| Date Tested | N.A. |

This report shall not be reproduced, except in full, without the approval of CSA Group

Spectral Flux

The following graph shows the spectral response curve of the radiant flux for the sample:

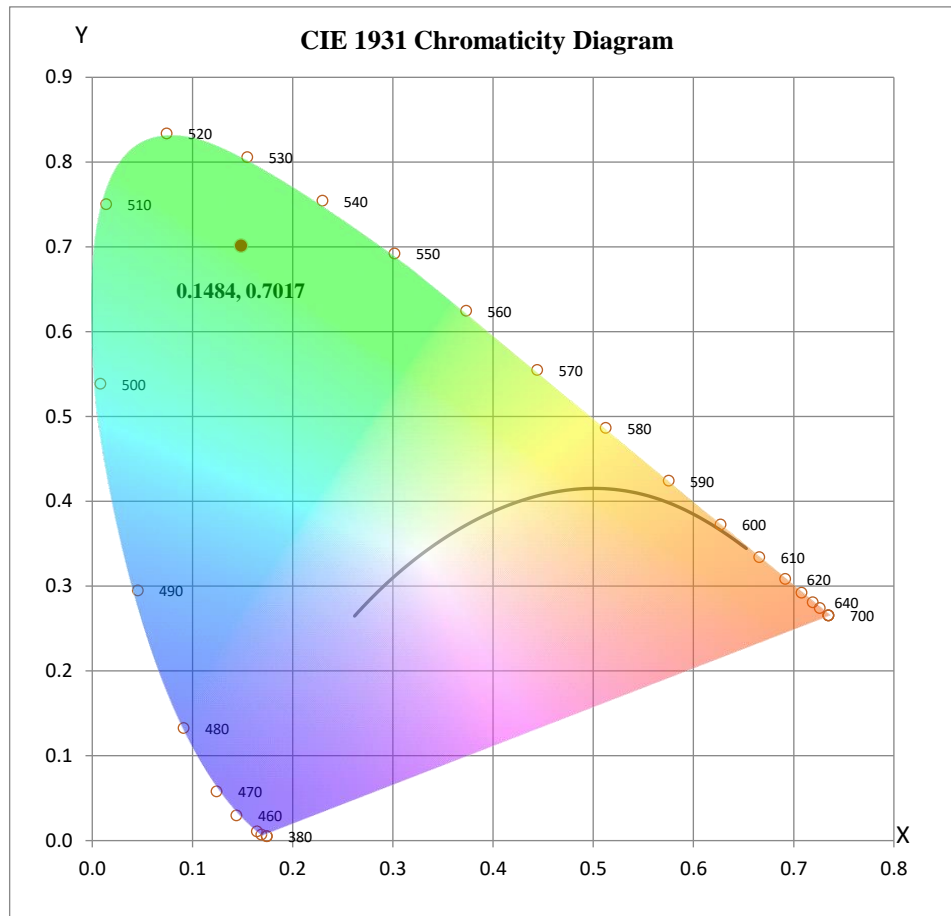


Spectral response of the Radiant Flux
 (380nm to 780nm - calibrated range of the Spectroradiometer)

This report shall not be reproduced, except in full, without the approval of CSA Group

Chromaticity Diagram

The following image shows the chromaticity diagram for the sample:

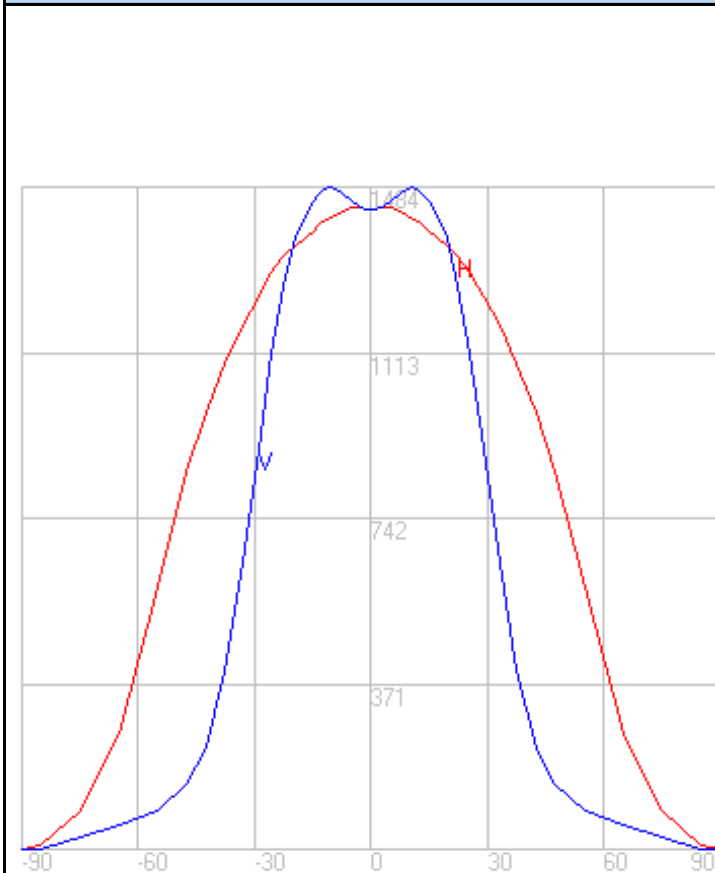
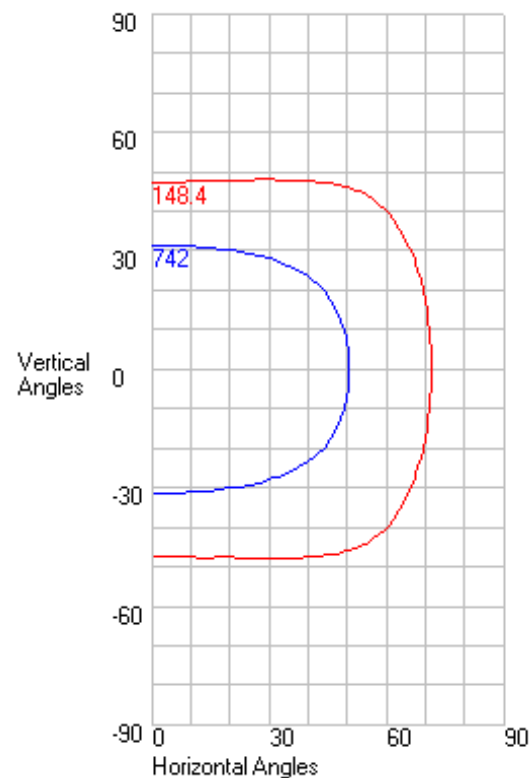


$x = 0.1484$ $y = 0.7017$

This report shall not be reproduced, except in full, without the approval of CSA Group

Photometric Test Results

| Characteristics | |
|------------------------------|-----------|
| NEMA Type | 7 H x 5 V |
| Maximum Candela | 1484.00 |
| Maximum Candela Angle | 0 H -11 V |
| Horizontal Beam Angle (50%) | 98.20 |
| Vertical Beam Angle (50%) | 62.90 |
| Horizontal Field Angle (10%) | 141.90 |
| Vertical Field Angle (10%) | 94.60 |
| Beam Lumens | 1737.00 |
| Field Lumens | 2317 |

Axial Candela Display

Isocandela Curves


This report shall not be reproduced, except in full, without the approval of CSA Group

Candela Tabulation

| | | Vertical Angle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| Horizontal Angle | | 0.0 | 2.5 | 5.0 | 7.5 | 10.0 | 12.5 | 15.0 | 17.5 | 20.0 | 22.5 | 25.0 | 27.5 | 30.0 | 32.5 | 35.0 | 37.5 | 40.0 | 42.5 | 45.0 | 47.5 | 50.0 | 52.5 | 55.0 | 57.5 | 60.0 | 62.5 | 65.0 | 67.5 | 70.0 | 72.5 | 75.0 | 77.5 | 80.0 | 82.5 | 85.0 | 87.5 | 90.0 | |
| | 0 | 1436 | 1438 | 1453 | 1472 | 1490 | 1475 | 1453 | 1416 | 1358 | 1263 | 1142 | 993 | 833 | 671 | 527 | 399 | 307 | 229 | 181 | 145 | 119 | 99 | 86 | 76 | 65 | 60 | 54 | 47 | 39 | 32 | 26 | 19 | 11 | 6 | 2 | 0 | 0 | |
| | 5 | 1436 | 1447 | 1459 | 1472 | 1483 | 1475 | 1451 | 1410 | 1354 | 1263 | 1142 | 997 | 836 | 678 | 529 | 406 | 311 | 237 | 184 | 147 | 119 | 99 | 86 | 76 | 67 | 60 | 54 | 47 | 39 | 32 | 26 | 19 | 11 | 6 | 2 | 0 | 0 | |
| | 10 | 1436 | 1438 | 1451 | 1470 | 1485 | 1477 | 1453 | 1408 | 1352 | 1267 | 1151 | 1010 | 853 | 689 | 542 | 415 | 320 | 246 | 192 | 151 | 123 | 104 | 89 | 78 | 67 | 60 | 54 | 50 | 41 | 35 | 28 | 19 | 13 | 6 | 2 | 0 | 0 | |
| | 15 | 1436 | 1440 | 1455 | 1470 | 1477 | 1481 | 1451 | 1410 | 1354 | 1282 | 1166 | 1030 | 872 | 719 | 564 | 440 | 335 | 259 | 201 | 160 | 132 | 108 | 93 | 80 | 73 | 63 | 56 | 50 | 41 | 35 | 28 | 22 | 13 | 6 | 2 | 0 | 0 | |
| | 20 | 1436 | 1444 | 1455 | 1462 | 1475 | 1475 | 1459 | 1416 | 1369 | 1291 | 1187 | 1058 | 907 | 749 | 602 | 469 | 365 | 279 | 218 | 173 | 140 | 117 | 97 | 84 | 76 | 65 | 58 | 52 | 45 | 37 | 28 | 22 | 13 | 6 | 2 | 0 | 0 | |
| | 25 | 1436 | 1438 | 1455 | 1466 | 1472 | 1483 | 1462 | 1431 | 1377 | 1308 | 1209 | 1088 | 948 | 797 | 643 | 512 | 395 | 309 | 240 | 190 | 151 | 125 | 106 | 91 | 80 | 69 | 63 | 54 | 47 | 39 | 30 | 24 | 13 | 6 | 2 | 0 | 0 | |
| | 30 | 1436 | 1444 | 1455 | 1464 | 1470 | 1475 | 1466 | 1440 | 1390 | 1323 | 1237 | 1125 | 993 | 844 | 695 | 561 | 440 | 345 | 268 | 212 | 171 | 138 | 117 | 99 | 86 | 78 | 67 | 58 | 50 | 41 | 32 | 24 | 17 | 9 | 2 | 0 | 0 | |
| | 35 | 1436 | 1436 | 1453 | 1466 | 1475 | 1481 | 1472 | 1447 | 1408 | 1345 | 1261 | 1164 | 1043 | 907 | 762 | 624 | 497 | 393 | 309 | 242 | 194 | 160 | 132 | 112 | 95 | 84 | 73 | 63 | 54 | 45 | 35 | 26 | 17 | 9 | 2 | 0 | 0 | |
| | 40 | 1436 | 1442 | 1451 | 1459 | 1468 | 1472 | 1472 | 1447 | 1412 | 1356 | 1291 | 1203 | 1092 | 972 | 831 | 693 | 568 | 453 | 361 | 285 | 225 | 181 | 149 | 125 | 108 | 93 | 80 | 67 | 58 | 47 | 37 | 28 | 19 | 9 | 4 | 0 | 0 | |
| | 45 | 1436 | 1442 | 1447 | 1455 | 1464 | 1468 | 1468 | 1453 | 1423 | 1373 | 1317 | 1241 | 1146 | 1036 | 909 | 775 | 641 | 522 | 419 | 337 | 266 | 214 | 175 | 145 | 121 | 106 | 89 | 78 | 65 | 52 | 41 | 30 | 22 | 11 | 4 | 2 | 0 | |
| | 50 | 1436 | 1440 | 1442 | 1447 | 1457 | 1462 | 1462 | 1455 | 1423 | 1384 | 1336 | 1270 | 1190 | 1095 | 982 | 859 | 734 | 607 | 494 | 399 | 322 | 259 | 209 | 171 | 142 | 119 | 99 | 86 | 73 | 58 | 45 | 32 | 22 | 11 | 4 | 0 | 0 | |
| | 55 | 1436 | 1444 | 1447 | 1451 | 1455 | 1459 | 1455 | 1442 | 1418 | 1384 | 1341 | 1291 | 1228 | 1146 | 1049 | 941 | 820 | 695 | 581 | 475 | 384 | 311 | 253 | 205 | 168 | 140 | 117 | 97 | 82 | 65 | 50 | 37 | 24 | 13 | 6 | 2 | 0 | |
| | 60 | 1436 | 1438 | 1447 | 1447 | 1447 | 1447 | 1442 | 1434 | 1410 | 1382 | 1347 | 1304 | 1259 | 1190 | 1110 | 1010 | 907 | 792 | 676 | 561 | 462 | 376 | 307 | 248 | 201 | 166 | 136 | 112 | 91 | 73 | 56 | 39 | 26 | 13 | 6 | 2 | 0 | |
| | 65 | 1436 | 1434 | 1442 | 1438 | 1438 | 1434 | 1427 | 1414 | 1399 | 1377 | 1349 | 1317 | 1274 | 1216 | 1146 | 1067 | 976 | 872 | 764 | 652 | 546 | 451 | 369 | 298 | 240 | 196 | 160 | 132 | 106 | 82 | 63 | 45 | 30 | 17 | 6 | 2 | 0 | |
| | 70 | 1436 | 1444 | 1442 | 1438 | 1431 | 1423 | 1412 | 1399 | 1384 | 1365 | 1341 | 1315 | 1278 | 1231 | 1170 | 1101 | 1026 | 937 | 838 | 734 | 628 | 527 | 434 | 354 | 287 | 231 | 188 | 149 | 119 | 91 | 69 | 50 | 32 | 19 | 9 | 2 | 0 | |
| | 75 | 1436 | 1444 | 1442 | 1436 | 1427 | 1414 | 1401 | 1386 | 1371 | 1349 | 1330 | 1308 | 1270 | 1226 | 1175 | 1116 | 1051 | 974 | 892 | 797 | 695 | 594 | 497 | 408 | 335 | 268 | 214 | 171 | 134 | 104 | 76 | 54 | 35 | 19 | 9 | 2 | 0 | |
| | 80 | 1436 | 1438 | 1438 | 1434 | 1423 | 1408 | 1395 | 1377 | 1358 | 1336 | 1315 | 1289 | 1252 | 1209 | 1159 | 1110 | 1051 | 985 | 913 | 831 | 743 | 648 | 548 | 458 | 374 | 298 | 237 | 184 | 145 | 110 | 82 | 56 | 37 | 22 | 9 | 2 | 0 | |
| | 85 | 1436 | 1431 | 1436 | 1431 | 1418 | 1406 | 1388 | 1369 | 1343 | 1321 | 1302 | 1270 | 1233 | 1190 | 1144 | 1095 | 1041 | 982 | 918 | 844 | 764 | 676 | 581 | 488 | 402 | 322 | 255 | 201 | 153 | 117 | 86 | 60 | 39 | 22 | 9 | 2 | 0 | |
| 90 | 1436 | 1438 | 1442 | 1431 | 1418 | 1406 | 1386 | 1369 | 1352 | 1330 | 1300 | 1265 | 1226 | 1183 | 1140 | 1090 | 1036 | 978 | 915 | 848 | 769 | 684 | 589 | 494 | 406 | 326 | 259 | 201 | 153 | 117 | 86 | 60 | 37 | 24 | 9 | 2 | 0 | | |

This report shall not be reproduced, except in full, without the approval of CSA Group

Accreditation

- This report, and use of the CSA logo, shall not be used by a client to claim certification, approval, or endorsement by CSA.

This report shall not be reproduced, except in full, without the approval of CSA Group