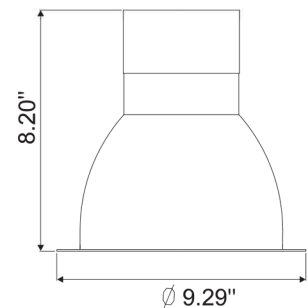


|                    |         |
|--------------------|---------|
| UL                 | E355621 |
| Energy Star Listed | YES     |
| LM79 Report        | YES     |
| Damp Rated         | YES     |



### GENERAL DESCRIPTION

The 8inch Commercial Downlight LED are suitable for 100~277 VAC Input with fired-rated Junction box, which delivers high lumens of exceptional 80+ CRI, Lifetime > 50000H with 3000K, 4000K, 5000K ES color temperatures options. They can replace for most manufacturers incandescent, CFL or H.I.D. fixtures with apertures of 7.72" min. to 8.26" max diameter, Easy conversion method and installation can be performed from below the ceiling without removing existing fixture.



### ORDER INFORMATION

AL-LED840-40E

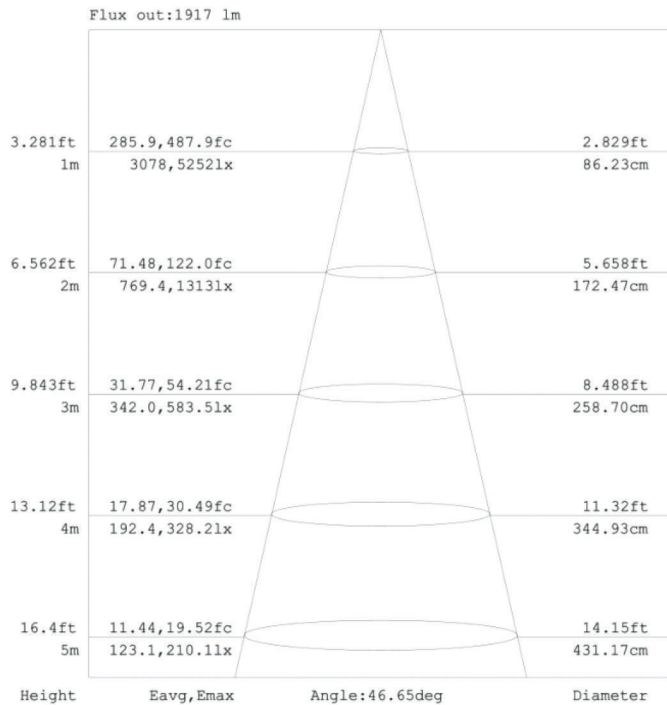
| Category      | Size    | Wattage                       | CCT(XX)                          | CRI(X)   |
|---------------|---------|-------------------------------|----------------------------------|----------|
| CE=Commercial | 8=8inch | 18W=18W<br>27W=27W<br>40W=40W | 30=3000K<br>40=4000K<br>50=5000K | E=80 CRI |

### ELECTRIC CHARACTERISTIC

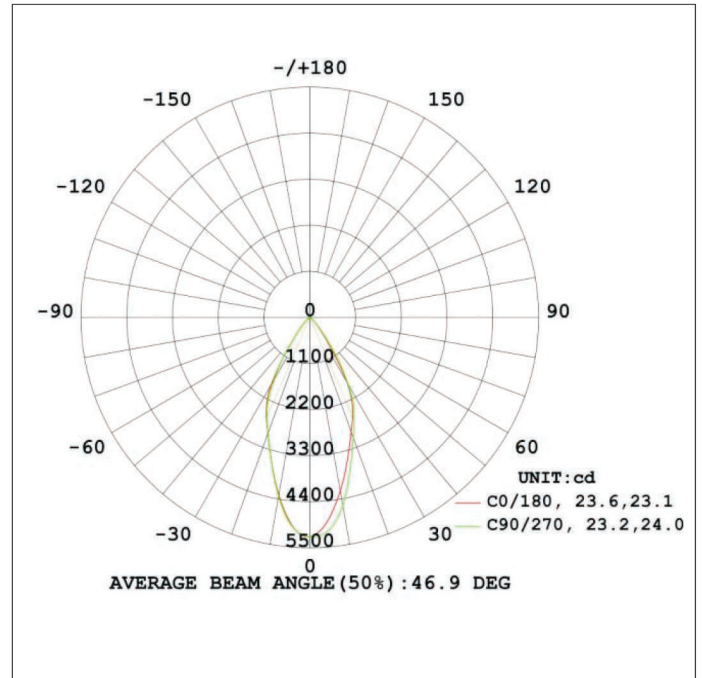
|  |   |
|--|---|
| Efficacy: >86LPW                       | Standard Warranty: 5 Years  |
| Rated Power: 40W                       | Standard Lifetime: Designed minimum 50,000 hours  |
| Delivered light output: 3454lm (3000K) | Mounting: Recessed  |
| CRI: Ra>80                             | Recommended Dimmers: DIVA-DVTV(LUTRON),NOVA T NTSTV-DV(LUTRON)                                    |
| CCT Options: 3000K, 4000K, 5000K       | Signal Current:0.96mA   |
| THD: <20%                              | Driver efficiency>87%.  |
| PF: >0.9                               | Temperature Rating: Designed to operate in temperatures 45°C and below room side and plenum side. |

LIGHTING UP THE WORLD  
WITH ONE BULB AT A TIME!

## 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.



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

## ZONAL FLUX DIAGRAM

| T   | C0                     | C45    | C90    | C135   | C180   | C225   | C270   | C315   |
|-----|------------------------|--------|--------|--------|--------|--------|--------|--------|
| 10  | 4207                   | 4415   | 4558   | 4486   | 4303   | 4317   | 4343   | 4361   |
| 20  | 2908                   | 2989   | 3048   | 3017   | 2951   | 2915   | 2939   | 2924   |
| 30  | 1783                   | 1845   | 1841   | 1886   | 1860   | 1768   | 1722   | 1715   |
| 40  | 404.4                  | 449.3  | 484.6  | 473.0  | 456.1  | 447.0  | 450.8  | 437.9  |
| 50  | 86.32                  | 93.34  | 102.6  | 97.79  | 98.80  | 98.58  | 100.2  | 88.29  |
| 60  | 28.65                  | 31.97  | 35.80  | 31.96  | 31.76  | 33.20  | 33.99  | 29.04  |
| 70  | 11.68                  | 13.27  | 14.63  | 12.86  | 12.69  | 13.51  | 13.68  | 11.78  |
| 80  | 4.325                  | 4.949  | 5.424  | 4.908  | 4.774  | 4.959  | 4.903  | 4.340  |
| 90  | 0.0042                 | 0.0048 | 0.0057 | 0.0085 | 0.0064 | 0.0028 | 0.0019 | 0.0025 |
| DEG | LUMINOUS INTENSITY: cd |        |        |        |        |        |        |        |

## ZONAL LUMEN SUMMARY

| T     | φ zone   | φ total | lum. lamp  |
|-------|----------|---------|------------|
| 0-10  | 456.9    | 456.9   | 13.2, 13.2 |
| 10-20 | 1007     | 1464    | 42.4, 42.4 |
| 20-30 | 1112     | 2576    | 74.6, 74.6 |
| 30-40 | 618.6    | 3195    | 92.5, 92.5 |
| 40-50 | 177.5    | 3372    | 97.6, 97.6 |
| 50-60 | 50.50    | 3423    | 99.1, 99.1 |
| 60-70 | 20.55    | 3443    | 99.7, 99.7 |
| 70-80 | 9.028    | 3452    | 99.9, 99.9 |
| 80-90 | 2.048    | 3454    | 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% | 50% | 30% | 10% | 0 |  |   |
| pw   | 20%                         |     |     |     | 20% |     |     |     | 20% |     |     |     | 20% |     |     |     | 20% |     |   |  | 0 |
|      | 50%                         | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |  |   |
| pfc  | 20%                         |     |     |     | 20% |     |     |     | 20% |     |     |     | 20% |     |     |     | 20% |     |   |  | 0 |
|      | 50%                         | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |  |   |
| RCR  | RCR: Room Cavity Ratio (CU) |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |   |  |   |
|      | 119                         | 119 | 119 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |     |     |   |  |   |
| 0.0  | 119                         | 119 | 119 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |     |     |   |  |   |
| 1.0  | 111                         | 108 | 106 | 109 | 107 | 105 | 105 | 103 | 101 | 101 | 101 | 00  | 98  | 98  | 96  | 95  |     |     |   |  |   |
| 2.0  | 103                         | 99  | 96  | 102 | 98  | 95  | 98  | 96  | 93  | 96  | 93  | 91  | 93  | 91  | 89  | 87  |     |     |   |  |   |
| 3.0  | 97                          | 92  | 88  | 95  | 91  | 87  | 93  | 89  | 86  | 90  | 87  | 85  | 88  | 85  | 83  | 82  |     |     |   |  |   |
| 4.0  | 91                          | 85  | 81  | 89  | 84  | 81  | 87  | 83  | 80  | 85  | 82  | 79  | 83  | 80  | 78  | 76  |     |     |   |  |   |
| 5.0  | 85                          | 80  | 75  | 84  | 79  | 75  | 82  | 78  | 74  | 81  | 77  | 74  | 79  | 76  | 73  | 71  |     |     |   |  |   |
| 6.0  | 80                          | 74  | 70  | 79  | 74  | 70  | 78  | 73  | 70  | 77  | 72  | 69  | 75  | 71  | 68  | 67  |     |     |   |  |   |
| 7.0  | 76                          | 70  | 66  | 75  | 69  | 65  | 74  | 69  | 65  | 73  | 68  | 65  | 71  | 67  | 64  | 63  |     |     |   |  |   |
| 8.0  | 72                          | 66  | 62  | 71  | 65  | 62  | 70  | 65  | 61  | 69  | 65  | 61  | 68  | 64  | 61  | 59  |     |     |   |  |   |
| 9.0  | 68                          | 62  | 58  | 67  | 62  | 58  | 66  | 62  | 58  | 66  | 61  | 58  | 65  | 60  | 57  | 56  |     |     |   |  |   |
| 10.0 | 64                          | 59  | 55  | 64  | 59  | 55  | 63  | 58  | 55  | 63  | 58  | 55  | 62  | 57  | 54  | 53  |     |     |   |  |   |

LIGHTING UP THE WORLD  
WITH ONE BULB AT A TIME!