

### FEATURES

- 3 different sharp beam angles
- Wide variety of TM30 optimized LEDs
- ENEC approved drivers
- IEEE P1789 Flickerfree driver to 1%

### COLOURS

Available colours:



Matt white RAL 9016 (XX=MW)  
Matt grey RAL 9006 (XX=GR)  
Matt black RAL 9005 (XX=BL)

LV 45° / 65°

LV 80° (on request)

### SPRINGS

Standard with CS springs (concrete/gyproc).  
On request also available as above with  
WS springs (gypro/metal).

## Linea DS-F 150 LV

Fixed

### SPECIFICATIONS

|                            |                                                                                                                               |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Beam angle (FWHM)          | 45° / 65° (80° on request)                                                                                                    |
| Fixture material           | Die cast aluminium                                                                                                            |
| Environment                | Indoor                                                                                                                        |
| IP rate                    | IP20 / IP44                                                                                                                   |
| IK rate                    | IK03                                                                                                                          |
| Operating temperature (Ta) | -20°C / +45°C <sup>1</sup>                                                                                                    |
| Safety marks               | EN60598 / EN62031 / EN62471                                                                                                   |
| EMC compliance             | EN55015                                                                                                                       |
| Colour consistency (SDCM)  | MacAdam step 3                                                                                                                |
| Warranty                   | 7 years * (within the European Union and the countries of the Free Trade Association for products delivered after 1 May 2015) |
| Energy class               | A+                                                                                                                            |

This luminaire contains built-in LED lamps. The lamps cannot be changed in the luminaire. EU 874/2012

<sup>1</sup> In applications with a flat roof (fi. car showrooms) the temperatures may exceed 45°C. Please ask our sales office for a special driver.



Ask our sales department  
about the possibilities for:  
- Tunable white 2700-6500K.  
- Extra LED options from the  
LUXEON Stylist Series

Only when the product is  
installed in a closed ceiling  
it may be exposed to water  
splashes, and only on its  
front side.

IP20

IP44

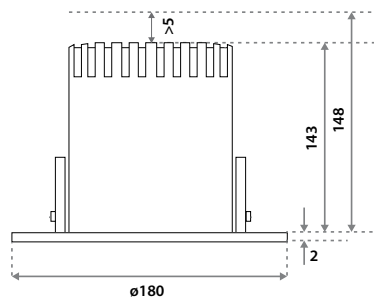
## LINEA DS-F 150 VARIATIONS

|                |       |            |             |                    |        |
|----------------|-------|------------|-------------|--------------------|--------|
| Linea DS-F 150 | CRI80 | 3000/4000K | 3000/3400Lm | incl. power supply | page 3 |
| Linea DS-F 150 | CRI80 | 3000/4000K | 5000/5700Lm | incl. power supply | page 4 |
| Linea DS-F 150 | CRI97 | 3000K      | 2500Lm      | incl. power supply | page 5 |
| Linea DS-F 150 | CRI97 | 3000K      | 3750Lm      | incl. power supply | page 6 |

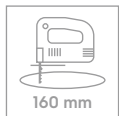
## CRI80/97 CHOOSE YOUR LV LUMEN OUTPUT

|                 | mA   | W    | Lumen Output |       |       | Lumen / Watt |       |       | Driver types |            |            |        |            |
|-----------------|------|------|--------------|-------|-------|--------------|-------|-------|--------------|------------|------------|--------|------------|
|                 |      |      | CRI80        | CRI80 | CRI97 | CRI80        | CRI80 | CRI97 | No dim       | Triac      | 1-10V&Push | Dali   | Casambi    |
|                 |      |      | 3000K        | 4000K | 3000K | 3000K        | 4000K | 3000K |              |            |            |        |            |
| Special request | 250  | 9,4  | 1200         | 1400  | 800   | 127          | 149   | 85    | 127570       | x          | 126421     | 127576 | x          |
| Special request | 350  | 13,2 | 1650         | 1900  | 1100  | 125          | 144   | 83    | 127570       | x          | 127021     | 127576 | 127630     |
| Special request | 500  | 17,9 | 2250         | 2500  | 1450  | 125          | 139   | 81    | 127570       | 127032     | 127021     | 127576 | 127630     |
| Standard        | 700  | 27,0 | 3000         | 3400  | 2150  | 111          | 126   | 80    | 127484N      | 122260     | 127021     | 127576 | 127630     |
| Special request | 800  | 32,1 | 3400         | 3750  | 2500  | 106          | 117   | 78    | 127484N      | on request | 127021     | 127490 | 127630     |
| Special request | 900  | 35,5 | 3700         | 4100  | 2700  | 104          | 115   | 76    | 127484N      | on request | 127021     | 127490 | 127630     |
| Special request | 1050 | 41,7 | 4200         | 4700  | 3000  | 101          | 113   | 72    | 127484N      | on request | 127021     | 127490 | 127630     |
| Standard        | 1200 | 50,5 | 5000         | 5700  | 3250  | 99           | 113   | 64    | 127690       | on request | 123170     | 123170 | On request |
| Special request | 1400 | 57,2 | 5600         | 6300  | 3750  | 98           | 110   | 66    | 127310       | on request | 123170     | 123170 | On request |

## DIMENSIONS



## HOLE SIZE



### Using CS (concrete) springs (concrete/gyproc)

For 5-148 mm ceiling thickness and recess depth 148 mm (incl. 5mm space for air ventilation).  
For plasterboard ceilings or similar harder materials.



### Using WS (wire) springs (gyproc/metal)

For 1-35 mm ceiling thickness and recess depth 148 mm (incl. 5mm space for air ventilation).  
For soft ceiling tiles. We recommend using a wooden plate or a ceiling ring on the reverse side of the tile.

LINEA DS-F 150 LV

CRI80 3000/3400LM

ITEM SPECIFICATIONS (PART A)

| Description                                    | 45°          |      | 65°          |      | Type      | mA  | Vf   |
|------------------------------------------------|--------------|------|--------------|------|-----------|-----|------|
|                                                | Item code    | UGR  | Item code    | UGR  |           |     |      |
| Linea DS-F LV 3000 Lm 3000K CRI80 No dim       | 180503XXJA02 | 15.6 | 180503XXJB02 | 18.5 | Incl. PSU | 700 | 35,3 |
| Linea DS-F LV 3000 Lm 3000K CRI80 1-10V & Push | 180503XXN202 | 15.6 | 180503XXN302 | 18.5 | Incl. PSU | 700 | 35,3 |
| Linea DS-F LV 3000 Lm 3000K CRI80 Dali         | 180503XXP202 | 15.6 | 180503XXP302 | 18.5 | Incl. PSU | 700 | 35,3 |
| Linea DS-F LV 3400 Lm 4000K CRI80 No dim       | 180503XXJC02 | 16.0 | 180503XXJD02 | 18.9 | Incl. PSU | 700 | 35,3 |
| Linea DS-F LV 3400 Lm 4000K CRI80 1-10V & Push | 180503XXN402 | 16.0 | 180503XXN502 | 18.9 | Incl. PSU | 700 | 35,3 |
| Linea DS-F LV 3400 Lm 4000K CRI80 Dali         | 180503XXP402 | 16.0 | 180503XXP502 | 18.9 | Incl. PSU | 700 | 35,3 |

ITEM SPECIFICATIONS (PART B)

| Description                                    | W    | Lm   | Lm/W | CRI (typ.) | Pf   | Ripple | Inrush current | B-16A Fuse | Safety class | Energy class |
|------------------------------------------------|------|------|------|------------|------|--------|----------------|------------|--------------|--------------|
| Linea DS-F LV 3000 Lm 3000K CRI80 No dim       | 27,0 | 3000 | 111  | 82         | 0.95 | <3%    | 5A 50µS        | 50 pcs     | I            | A+           |
| Linea DS-F LV 3000 Lm 3000K CRI80 1-10V & Push | 27,0 | 3000 | 111  | 82         | 0.95 | <3%    | 5A 50µS        | 50 pcs     | II           | A+           |
| Linea DS-F LV 3000 Lm 3000K CRI80 Dali         | 27,0 | 3000 | 111  | 82         | 0.95 | <3%    | 5A 50µS        | 50 pcs     | II           | A+           |
| Linea DS-F LV 3400 Lm 4000K CRI80 No dim       | 27,0 | 3400 | 126  | 82         | 0.95 | <3%    | 5A 50µS        | 50 pcs     | I            | A+           |
| Linea DS-F LV 3400 Lm 4000K CRI80 1-10V & Push | 27,0 | 3400 | 126  | 82         | 0.95 | <3%    | 5A 50µS        | 50 pcs     | II           | A+           |
| Linea DS-F LV 3400 Lm 4000K CRI80 Dali         | 27,0 | 3400 | 126  | 82         | 0.95 | <3%    | 5A 50µS        | 50 pcs     | II           | A+           |

ITEM SPECIFICATIONS (PART C)

| Description         | Weight  | Dimensions single carton | Quantity per carton | Expected lifespan B10 reported (25°C) |             |             |
|---------------------|---------|--------------------------|---------------------|---------------------------------------|-------------|-------------|
|                     |         |                          |                     | L70B10                                | L80B10      | L90B10      |
| Linea DS-F LV CRI80 | 1690 gr | 185x185x160 mm           | 12 pcs              | >60.500 hrs                           | >60.500 hrs | >60.500 hrs |

All values are measured at 230V (+/- 7%)

LINEA DS-F 150 LV

CRI80 5000/5700LM

ITEM SPECIFICATIONS (PART A)

| Description                                    | 45°          |      | 65°          |      | Type      | mA   | Vf   |
|------------------------------------------------|--------------|------|--------------|------|-----------|------|------|
|                                                | Item code    | UGR  | Item code    | UGR  |           |      |      |
| Linea DS-F LV 5000 Lm 3000K CRI80 No dim       | 180503XXCK02 | 17.4 | 180503XXCL02 | 20.3 | Incl. PSU | 1200 | 37,5 |
| Linea DS-F LV 5000 Lm 3000K CRI80 1-10V & Push | 180503XXNU02 | 17.4 | 180503XXNV02 | 20.3 | Incl. PSU | 1200 | 37,5 |
| Linea DS-F LV 5000 Lm 3000K CRI80 Dali         | 180503XXPU02 | 17.4 | 180503XXPV02 | 20.3 | Incl. PSU | 1200 | 37,5 |
| Linea DS-F LV 5700 Lm 4000K CRI80 No dim       | 180503XXCM02 | 17.8 | 180503XXCN02 | 20.7 | Incl. PSU | 1200 | 37,5 |
| Linea DS-F LV 5700 Lm 4000K CRI80 1-10V & Push | 180503XXNW02 | 17.8 | 180503XXNX02 | 20.7 | Incl. PSU | 1200 | 37,5 |
| Linea DS-F LV 5700 Lm 4000K CRI80 Dali         | 180503XXPW02 | 17.8 | 180503XXPX02 | 20.7 | Incl. PSU | 1200 | 37,5 |

ITEM SPECIFICATIONS (PART B)

| Description                                    | W    | Lm   | Lm/W | CRI (typ.) | Pf   | Ripple | Inrush current | B-16A Fuse | Safety class | Energy class |
|------------------------------------------------|------|------|------|------------|------|--------|----------------|------------|--------------|--------------|
| Linea DS-F LV 5000 Lm 3000K CRI80 No dim       | 50,5 | 5000 | 99   | 82         | 0.95 | <3%    | 10A 200µS      | 30 pcs     | II           | A+           |
| Linea DS-F LV 5000 Lm 3000K CRI80 1-10V & Push | 50,5 | 5000 | 99   | 82         | 0.95 | <3%    | 10A 200µS      | 30 pcs     | I            | A+           |
| Linea DS-F LV 5000 Lm 3000K CRI80 Dali         | 50,5 | 5000 | 99   | 82         | 0.95 | <3%    | 10A 200µS      | 30 pcs     | I            | A+           |
| Linea DS-F LV 5700 Lm 4000K CRI80 No dim       | 50,5 | 5700 | 113  | 82         | 0.95 | <3%    | 10A 200µS      | 30 pcs     | II           | A+           |
| Linea DS-F LV 5700 Lm 4000K CRI80 1-10V & Push | 50,5 | 5700 | 113  | 82         | 0.95 | <3%    | 10A 200µS      | 30 pcs     | I            | A+           |
| Linea DS-F LV 5700 Lm 4000K CRI80 Dali         | 50,5 | 5700 | 113  | 82         | 0.95 | <3%    | 10A 200µS      | 30 pcs     | I            | A+           |

ITEM SPECIFICATIONS (PART C)

| Description         | Weight  | Dimensions single carton | Quantity per carton | Expected lifespan B10 reported (25°C) |             |             |
|---------------------|---------|--------------------------|---------------------|---------------------------------------|-------------|-------------|
|                     |         |                          |                     | L70B10                                | L80B10      | L90B10      |
| Linea DS-F LV CRI80 | 1690 gr | 185x185x160 mm           | 12 pcs              | >60.500 hrs                           | >60.500 hrs | >60.500 hrs |

All values are measured at 230V (+/- 7%)

## LINEA DS-F 150 LV

CRI97 2500LM

## ITEM SPECIFICATIONS (PART A)

| Description                                    | 45°          |      | 65°          |      | Type      | mA  | Vf   |
|------------------------------------------------|--------------|------|--------------|------|-----------|-----|------|
|                                                | Item code    | UGR  | Item code    | UGR  |           |     |      |
| Linea DS-F LV 2500 Lm 3000K CRI97 No dim       | 180503XXCX02 | 15.0 | 180503XXCY02 | 17.9 | Incl. PSU | 800 | 35,3 |
| Linea DS-F LV 2500 Lm 3000K CRI97 1-10V & Push | 180503XXN002 | 15.0 | 180503XXNI02 | 17.9 | Incl. PSU | 800 | 35,3 |
| Linea DS-F LV 2500 Lm 3000K CRI97 Dali         | 180503XXP002 | 15.0 | 180503XXPI02 | 17.9 | Incl. PSU | 800 | 35,3 |

## ITEM SPECIFICATIONS (PART B)

| Description                                    | W    | Lm   | Lm/W | CRI (typ.) | Pf   | Ripple | Inrush current | B-16A Fuse | Safety class | Energy class |
|------------------------------------------------|------|------|------|------------|------|--------|----------------|------------|--------------|--------------|
| Linea DS-F LV 2500 Lm 3000K CRI97 No dim       | 32,1 | 2500 | 78   | 97         | 0.95 | <3%    | 5A 50µS        | 50 pcs     | I            | A+           |
| Linea DS-F LV 2500 Lm 3000K CRI97 1-10V & Push | 32,1 | 2500 | 78   | 97         | 0.95 | <3%    | 5A 50µS        | 50 pcs     | II           | A+           |
| Linea DS-F LV 2500 Lm 3000K CRI97 Dali         | 32,1 | 2500 | 78   | 97         | 0.95 | <3%    | 5A 50µS        | 50 pcs     | II           | A+           |

## ITEM SPECIFICATIONS (PART C)

| Description                       | Weight  | Dimensions single carton | Quantity per carton | Expected lifespan B10 reported (25°C) |             |             |
|-----------------------------------|---------|--------------------------|---------------------|---------------------------------------|-------------|-------------|
|                                   |         |                          |                     | L70B10                                | L80B10      | L90B10      |
| Linea DS-F LV 2500 Lm 3000K CRI97 | 1690 gr | 185x185x160 mm           | 12 pcs              | >60.500 hrs                           | >60.500 hrs | >60.500 hrs |

All values are measured at 230V (+/- 7%)

## LINEA DS-F 150 LV

CRI97 3750LM

## ITEM SPECIFICATIONS (PART A)

| Description                                    | 45°          |      | 65°          |      | Type      | mA   | Vf   |
|------------------------------------------------|--------------|------|--------------|------|-----------|------|------|
|                                                | Item code    | UGR  | Item code    | UGR  |           |      |      |
| Linea DS-F LV 3750 Lm 3000K CRI97 No dim       | 180503XXCP02 | 16.4 | 180503XXCQ02 | 19.3 | Incl. PSU | 1400 | 37,5 |
| Linea DS-F LV 3750 Lm 3000K CRI97 1-10V & Push | 180503XXNY02 | 16.4 | 180503XXNZ02 | 19.3 | Incl. PSU | 1400 | 37,5 |
| Linea DS-F LV 3750 Lm 3000K CRI97 Dali         | 180503XXPY02 | 16.4 | 180503XXPZ02 | 19.3 | Incl. PSU | 1400 | 37,5 |

## ITEM SPECIFICATIONS (PART B)

| Description                                    | W    | Lm   | Lm/W | CRI (typ.) | Pf   | Ripple | Inrush current | B-16A Fuse | Safety class | Energy class |
|------------------------------------------------|------|------|------|------------|------|--------|----------------|------------|--------------|--------------|
| Linea DS-F LV 3750 Lm 3000K CRI97 No dim       | 57,2 | 3750 | 66   | 97         | 0.95 | <3%    | 10A 200µS      | 30 pcs     | II           | A+           |
| Linea DS-F LV 3750 Lm 3000K CRI97 1-10V & Push | 57,2 | 3750 | 66   | 97         | 0.95 | <3%    | 10A 200µS      | 30 pcs     | I            | A+           |
| Linea DS-F LV 3750 Lm 3000K CRI97 Dali         | 57,2 | 3750 | 66   | 97         | 0.95 | <3%    | 10A 200µS      | 30 pcs     | I            | A+           |

## ITEM SPECIFICATIONS (PART C)

| Description                       | Weight  | Dimensions single carton | Quantity per carton | Expected lifespan B10 reported (25°C) |             |             |
|-----------------------------------|---------|--------------------------|---------------------|---------------------------------------|-------------|-------------|
|                                   |         |                          |                     | L70B10                                | L80B10      | L90B10      |
| Linea DS-F LV 3750 Lm 3000K CRI97 | 1690 gr | 185x185x160 mm           | 12 pcs              | >60.500 hrs                           | >60.500 hrs | >60.500 hrs |

All values are measured at 230V (+/- 7%)

## NEW STANDARDS REQUIRE NEW LEDS

TM-30 (new color norm): The Illuminating Engineering Society (IES) has published a new Technical Memorandum – TM-30-15 entitled “IES Method for Evaluating Light Source Color Rendition” – that promises to supplant CRI as a color metric. TM-30 relies on separate fidelity and gamut metrics, as well as a set of color samples that is more representative of real-world objects, as opposed to the pastel samples that were primarily used for the baseline CRI metric that was sometimes called Ra. The new color metric is intended to fairly and accurately characterize both LED-based solid-state lighting (SSL) and legacy sources.



### Desaturated

CRI = 80 / R<sub>g</sub> = 92



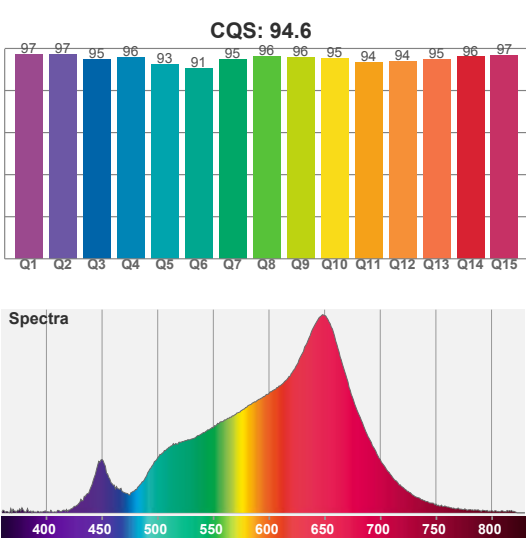
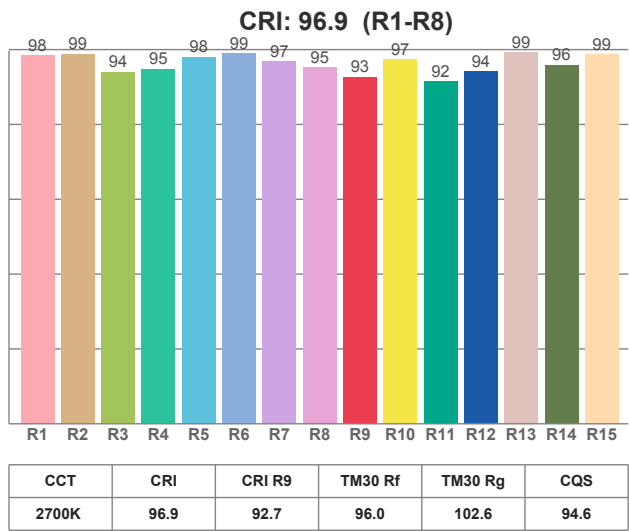
### Red-Enhanced

CRI = 98 / R<sub>g</sub> = 103

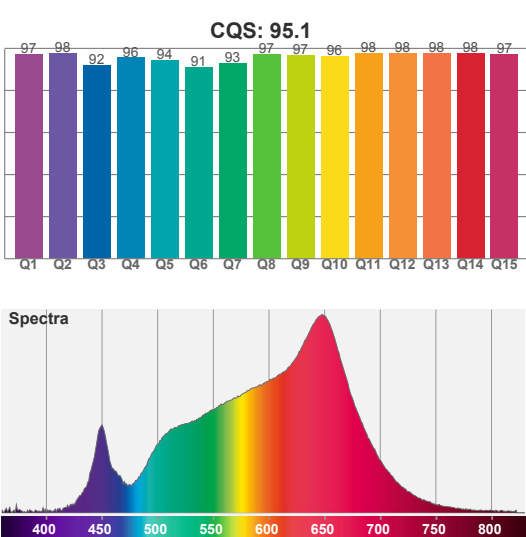
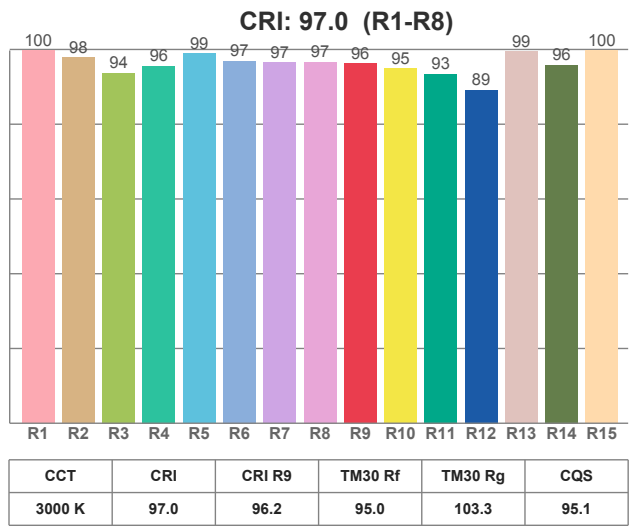
## SPECIAL LEDS AVAILABLE

|                             | CCT   | CRI | R9 | RF | RG  | R15 | TLCI | DOWNLIGHTS SMALL |      | DOWNLIGHTS LARGE |      | DOWNLIGHTS LARGE |      | ITEM CODE    |
|-----------------------------|-------|-----|----|----|-----|-----|------|------------------|------|------------------|------|------------------|------|--------------|
|                             |       |     |    |    |     |     |      | MA               | LM   | MA               | LM   | MA               | LM   |              |
| <b>CRI80</b>                | 2700K | 82  | 5  | 82 | 92  | 75  | 69   | 350 mA           | 1550 | 700 mA           | 2900 | 1200 mA          | 4800 | 51-4028-27-1 |
| <b>CRI80</b>                | 3000K | 82  | 5  | 81 | 93  | 75  | 66   | 350 mA           | 1625 | 700 mA           | 3000 | 1200 mA          | 5000 | 51-4028-30-1 |
| <b>CRI80</b>                | 4000K | 82  | 5  | 81 | 93  | 74  | 66   | 350 mA           | 1700 | 700 mA           | 3400 | 1200 mA          | 5700 | 51-4028-40-1 |
| <b>CRI97</b>                | 2700K | 97  | 93 | 96 | 103 | 99  | 97   | 350 mA           | 1150 | 800 mA           | x    | 1400 mA          | x    | 50-3031-27   |
| <b>CRI97</b>                | 3000K | 97  | 96 | 95 | 103 | 100 | 97   | 350 mA           | 1250 | 800 mA           | 2500 | 1400 mA          | 3750 | 50-3031-30   |
| <b>CRI97</b>                | 4000K | 97  | 96 | 95 | 103 | 100 | 97   | 350 mA           | 1350 | 800 mA           | x    | 1400 mA          | x    | 50-3031-40   |
| <b>CrispWhite</b>           | 3000K | 90  | 61 | 87 | 102 | 89  | 83   | 350 mA           | 780  | 900 mA           | 2300 | 1400 mA          | 3550 | 51-4029-30   |
| <b>CrispColor</b>           | 4000K | 95  | 96 | 90 | 101 | 95  | 96   | 350 mA           | 1050 | 900 mA           | 2700 | 1400 mA          | 4700 | 51-4051-40   |
| <b>Red Meat</b>             | 1800K | 82  | 81 | 77 | 119 | 95  | 60   | 350 mA           | 515  | 900 mA           | 1750 | 1400 mA          | 2350 | 51-4042-00   |
| <b>Fish</b>                 | 6500K | 96  | 96 | 89 | 98  | 94  | 96   | 350 mA           | 825  | 900 mA           | 2800 | 1400 mA          | 3750 | 51-4044-00   |
| <b>Bread &amp; Pastries</b> | 2700K | 92  | 54 | 89 | 96  | 86  | 91   | 350 mA           | 770  | 900 mA           | 2600 | 1400 mA          | 3500 | 51-4045-00   |

2700K



3000K



4000K

