

Lichteffizienz:

129 Lumen/Watt

CRI:

CRI: 87,7

Farbtemperatur:

4142 K

Lichtstärke: 2210 lm

Leuchtdichte: 2571 cd

Leistung: 17,2 W

Powerfaktor: 0,87



Bestellnummer:

ES54104125\_18W-4000K

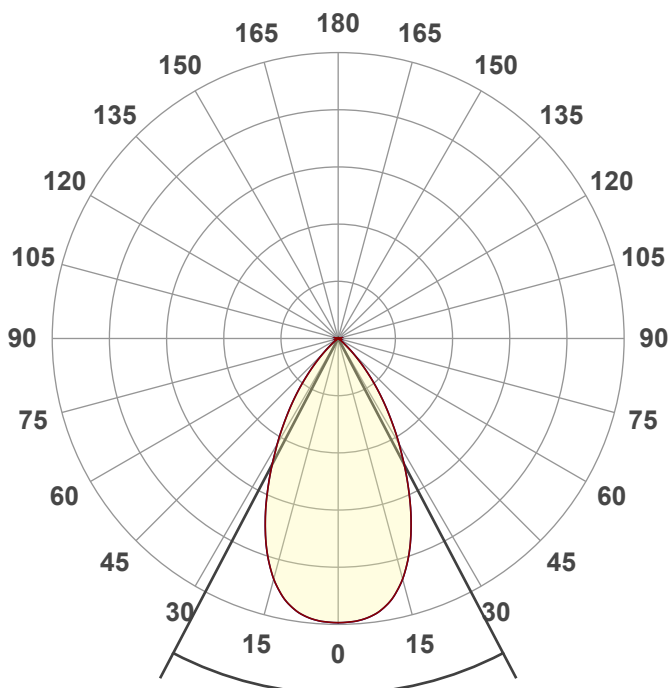
Messung erstellt:

28.04.2026 16:58:23

Beschreibung:

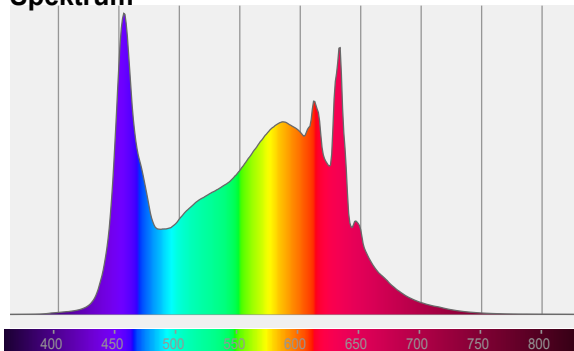
DECIDE

LED Deckeneinbau IP54 -  
schaltbar - 12-20W - 3000,  
4000, 5700K - 1428-2540lm -  
200-240V

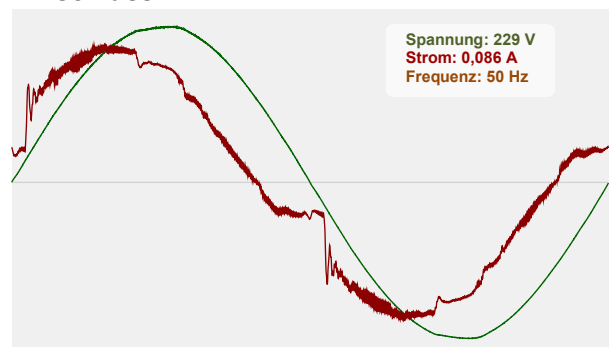


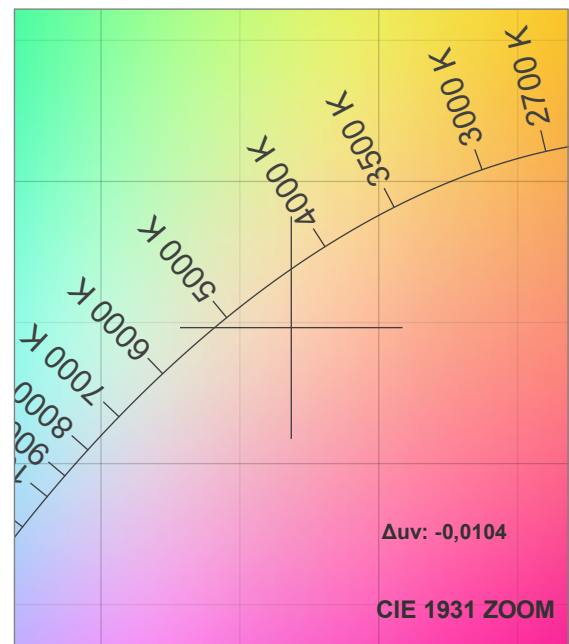
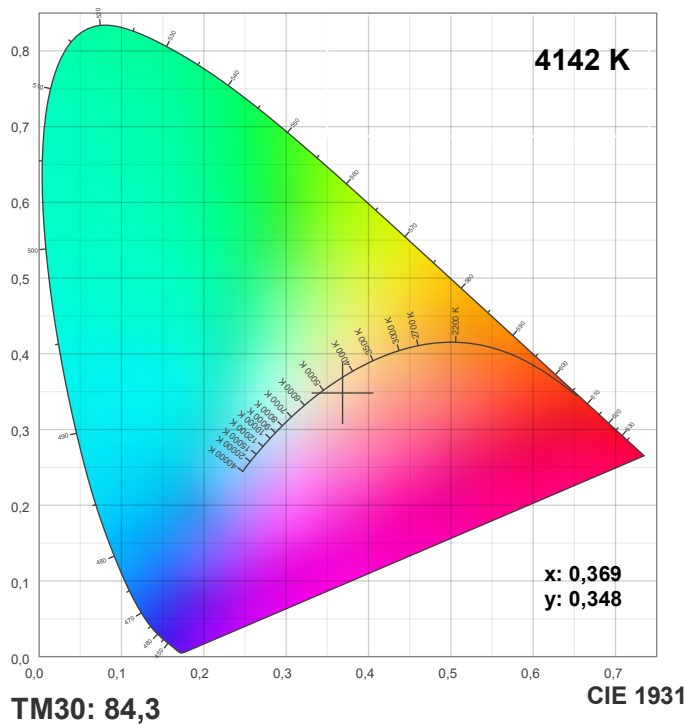
Abstrahlwinkel **55,3°**

Spektrum

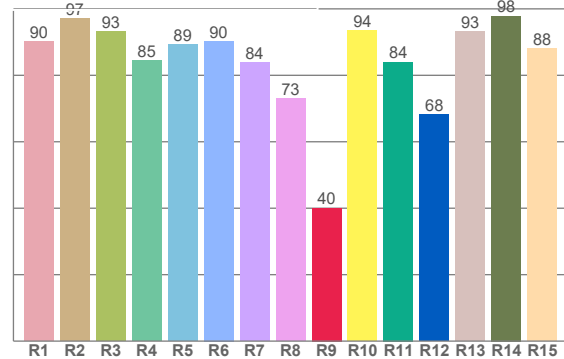
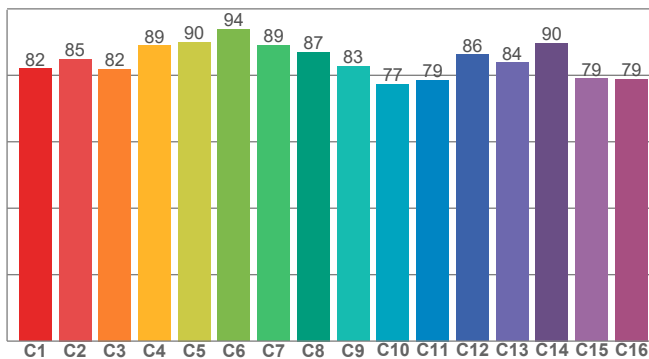


Anschluss





CRI: 87,7 (R1-R8)



CRI R-Werte, nur R1-R8 werden zur Berechnung des endgültigen CRI-Wertes verwendet

| R1   | R2   | R3   | R4   | R5   | R6   | R7   | R8   | R9   | R10  | R11  | R12  | R13  | R14  | R15  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 90,1 | 97,1 | 93,2 | 84,5 | 89,3 | 90,3 | 83,9 | 72,9 | 40,1 | 93,5 | 84,0 | 68,2 | 93,2 | 97,8 | 88,1 |

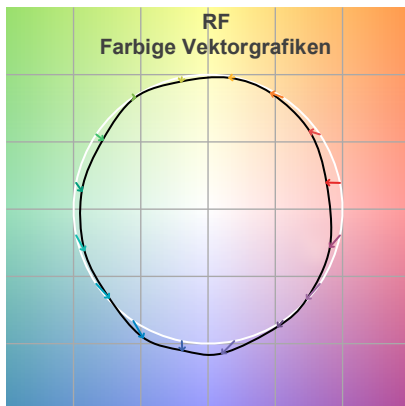
TM30 C-Werte, 16 eingelagerte Werte von insgesamt 99 C-Werten

| C1   | C2   | C3   | C4   | C5   | C6   | C7   | C8   | C9   | C10  | C11  | C12  | C13  | C14  | C15  | C16  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 82,0 | 84,9 | 81,9 | 88,9 | 90,0 | 93,8 | 89,1 | 87,0 | 82,7 | 77,4 | 78,6 | 86,2 | 83,9 | 89,8 | 78,9 | 78,9 |

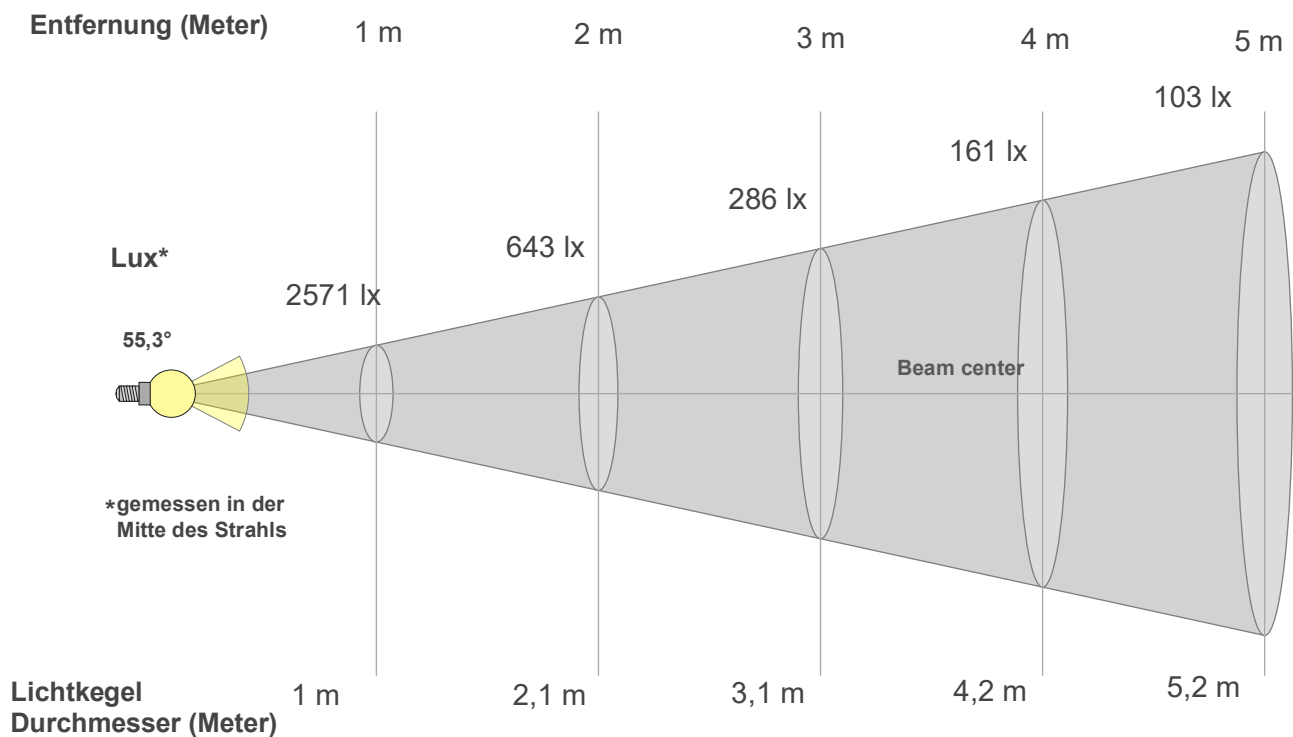
## Farbparameter

| Farbtemperatur<br>CCT | CRI-Wert rendering<br>CRI | Rotanteil R9<br>CRI R9 | Farbtreue<br>TM30 Rf | Farbbereich<br>TM30 Rg |
|-----------------------|---------------------------|------------------------|----------------------|------------------------|
| 4142 K                | 87,7                      | 40,1                   | 84,3                 | 96,0                   |

## TM30 Details



## Lichtstrahl Details



## Strahlintensitäten von 1-20m

| 1m     | 2m    | 3m    | 4m    | 5m    | 6m   | 7m   | 8m   | 9m   | 10m  | 3,3m    | 6,6m   | 9,8m   | 13,1m  | 16,4m | 19,7m | 23m   | 26,2m | 29,5m | 32,8m |
|--------|-------|-------|-------|-------|------|------|------|------|------|---------|--------|--------|--------|-------|-------|-------|-------|-------|-------|
| 2571lx | 643lx | 286lx | 161lx | 103lx | 71lx | 52lx | 40lx | 32lx | 26lx | 238,8lx | 59,7lx | 26,5lx | 14,9lx | 9,6lx | 6,6lx | 4,9lx | 3,7lx | 2,9lx | 2,4lx |

## Blendungsbewertung nach UGR

|                                                                   |     |                                               |     |     |     |     |                                           |     |     |     |     |
|-------------------------------------------------------------------|-----|-----------------------------------------------|-----|-----|-----|-----|-------------------------------------------|-----|-----|-----|-----|
| p Decke                                                           |     | 70                                            | 70  | 50  | 50  | 30  | 70                                        | 70  | 50  | 50  | 30  |
| p Wand                                                            |     | 50                                            | 30  | 50  | 30  | 30  | 50                                        | 30  | 50  | 30  | 30  |
| p Boden                                                           |     | 20                                            | 20  | 20  | 20  | 20  | 20                                        | 20  | 20  | 20  | 20  |
| Raumgrößen<br>X      Y                                            |     | Blickrichtung rechtwinklig zur<br>Lampenachse |     |     |     |     | Blickrichtung parallel zur<br>Lampenachse |     |     |     |     |
| 2H                                                                | 2H  | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
|                                                                   | 3H  | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
|                                                                   | 4H  | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
|                                                                   | 6H  | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
|                                                                   | 8H  | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
|                                                                   | 12H | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
| 4H                                                                | 2H  | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
|                                                                   | 3H  | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
|                                                                   | 4H  | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
|                                                                   | 6H  | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
|                                                                   | 8H  | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
|                                                                   | 12H | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
| 8H                                                                | 4H  | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
|                                                                   | 6H  | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
|                                                                   | 8H  | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
|                                                                   | 12H | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
| 12H                                                               | 4H  | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
|                                                                   | 6H  | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
|                                                                   | 8H  | -â°                                           | -â° | -â° | -â° | -â° | -â°                                       | -â° | -â° | -â° | -â° |
| Variation der Beobachterposition für den Leuchtenabstand S        |     |                                               |     |     |     |     |                                           |     |     |     |     |
| S = 1.0H                                                          |     | NaN / NaN                                     |     |     |     |     | NaN / NaN                                 |     |     |     |     |
| S = 1.5H                                                          |     | NaN / NaN                                     |     |     |     |     | NaN / NaN                                 |     |     |     |     |
| S = 2.0H                                                          |     | NaN / NaN                                     |     |     |     |     | NaN / NaN                                 |     |     |     |     |
| Standard-Tabelle                                                  |     | n/a                                           |     |     |     |     | n/a                                       |     |     |     |     |
| Korrektur<br>Zusammenfassung                                      |     | n/a                                           |     |     |     |     | n/a                                       |     |     |     |     |
| Korrigierte Blendungsindizes bezogen auf 2210 lm Gesamtlichtstrom |     |                                               |     |     |     |     |                                           |     |     |     |     |

| Measurement Details |                        |
|---------------------|------------------------|
| Messzeitpunkt       | 28.04.2026<br>16:58:23 |
| Betreiber           | EVN Lichttechnik       |

| Laboratory and Equipment      |                  |                         |
|-------------------------------|------------------|-------------------------|
| Laboreigentümer und Standort  | EVN Lichttechnik | Winkelhaid, Deutschland |
| Flickermeter Art              | Viso Systems     | LabFlicker              |
| Frequenz der Eingangsleistung | 50 Hz            |                         |

| Flicker Details                                                                                       |                     |                                             |
|-------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------------|
| Flicker-Abtastrate                                                                                    | 20000 Abtastungen/s |                                             |
| Flicker Kennwerte gemäß der Illuminating Engineering Society (IES)                                    | Flicker Frequenz    | 98,52 Hz                                    |
|                                                                                                       | Flickeranteil in %  | 0,09 %                                      |
|                                                                                                       | Flicker Index       | 0                                           |
| Flicker Kennwerte gemäß der Kalifornische Energiekommission, JA 8/10 Prozentsatz Amplitudenmodulation | Ungefiltert         | 0,09 %                                      |
|                                                                                                       | mit 40-Hz-Grenze    | 0,03 %                                      |
|                                                                                                       | mit 90-Hz-Grenze    | 0,04 %                                      |
|                                                                                                       | mit 200-Hz-Grenze   | 0,07 %                                      |
|                                                                                                       | mit 400-Hz-Grenze   | 0,07 %                                      |
|                                                                                                       | mit 1000-Hz-Grenze  | 0,08 %                                      |
| Flickerindex nach ASSIST                                                                              | Mp 0,01             | Konformität mit der EU-Ökodesign-Richtlinie |

| Flickerkurve (vollständig ausgewertetes Flickersignal)               |                                               |                                                  |
|----------------------------------------------------------------------|-----------------------------------------------|--------------------------------------------------|
| TLA-Kennwerte gemäß IEC TR 61547-1, IEC 61000-3-3 und IEC 61000-4-15 | Flicker PstLM Wert 0,02<br>Flicker SVM Wert 0 | No - PstLM not measured<br>No - SVM not measured |

| Flicker Frame (Bild einer Flickerperiode im Zeitbereich) | Flicker FFT (Flickerkurve im Frequenzbereich) |
|----------------------------------------------------------|-----------------------------------------------|
|----------------------------------------------------------|-----------------------------------------------|

