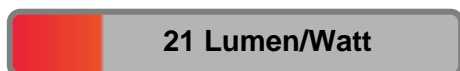


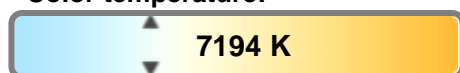
# Light efficiency:



# Light quality:



# Color temperature:

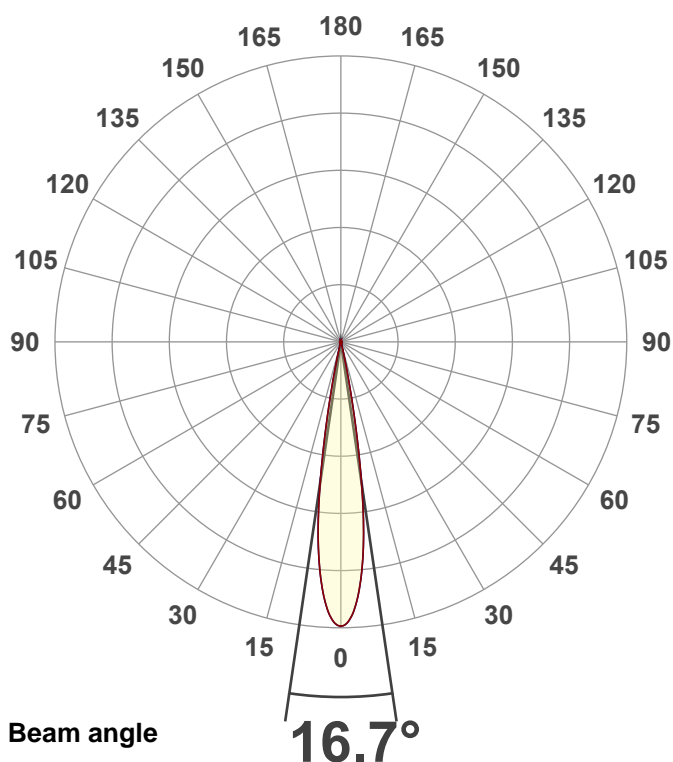


**Output:** 16210 lm  
**Peak:** 127529 cd  
**Power:** 771 W  
**PF:** 1.0



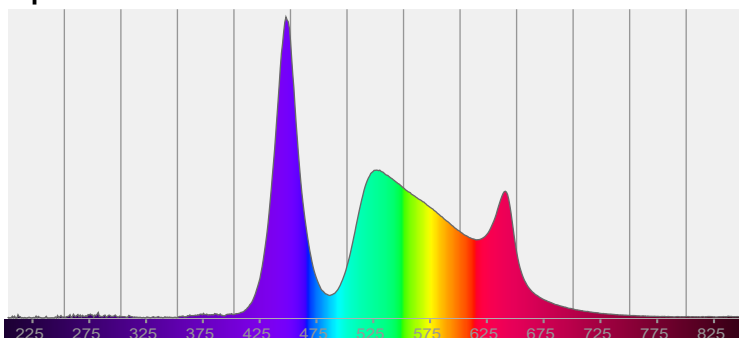
**Product name:**  
**Hydro Flex L19 (Zoom 50% 8000K)**  
**Item number:**

**Date and time:**  
**9/8/2025 9:25:38 AM**

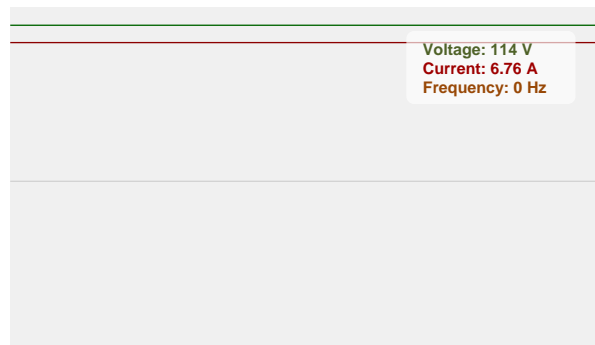


CIE 1931  
x: 0.304  
y: 0.316

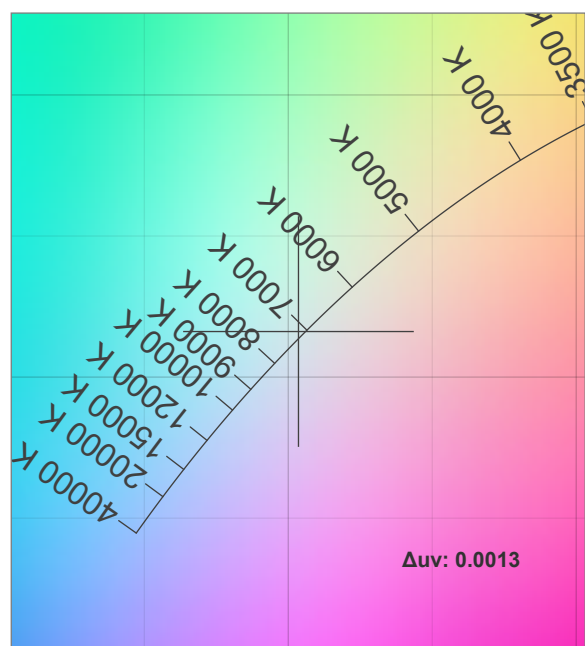
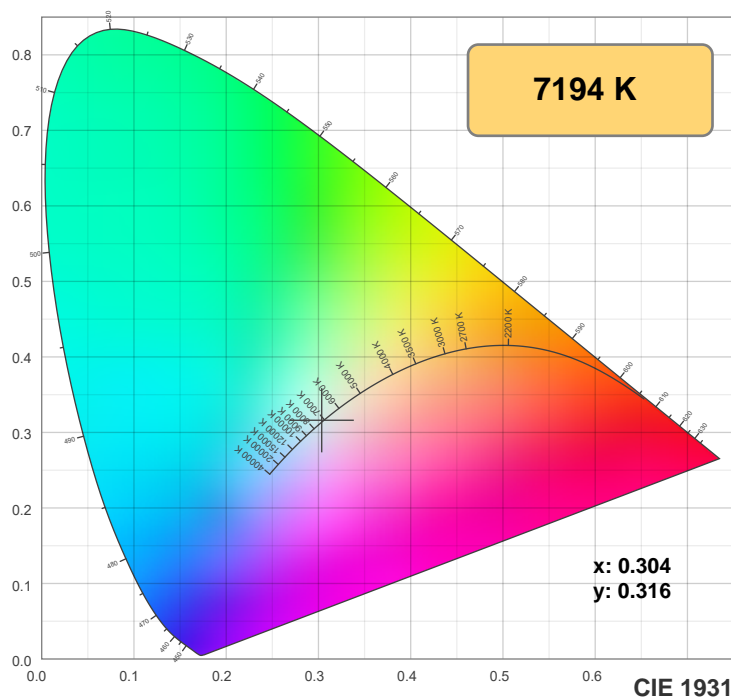
# Spectra



# Power

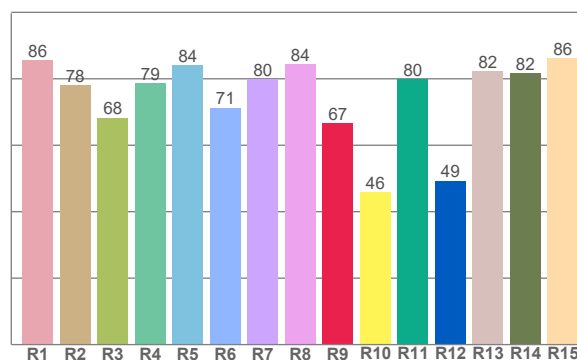
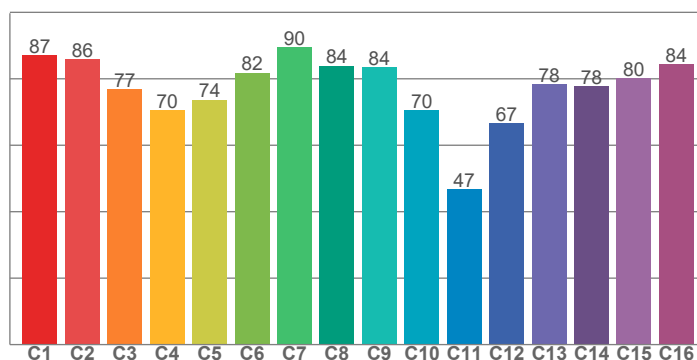


## Color details



**TM-30: 77.4**

**CRI: 78.8 (R1-R8)**



CRI R values, only R1-R8 are used to calculate final CRI value

| R1   | R2   | R3   | R4   | R5   | R6   | R7   | R8   | R9   | R10  | R11  | R12  | R13  | R14  | R15  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 85.7 | 78.2 | 68.3 | 78.7 | 84.2 | 71.3 | 79.8 | 84.4 | 66.7 | 45.9 | 79.8 | 49.3 | 82.4 | 81.8 | 86.3 |

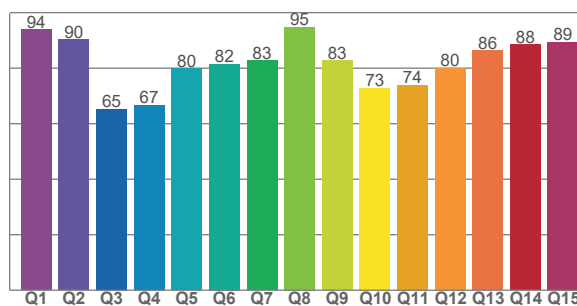
TM30 C values, 16 binned values out of total of 99 C values

| C1   | C2   | C3   | C4   | C5   | C6   | C7   | C8   | C9   | C10  | C11  | C12  | C13  | C14  | C15  | C16  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 87.1 | 85.9 | 76.9 | 70.4 | 73.6 | 81.8 | 89.5 | 83.9 | 83.5 | 70.4 | 46.7 | 66.7 | 78.3 | 77.8 | 80.2 | 84.3 |

CQS Q values

| Q1   | Q2   | Q3   | Q4   | Q5   | Q6   | Q7   | Q8   | Q9   | Q10  | Q11  | Q12  | Q13  | Q14  | Q15  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93.9 | 90.2 | 65.3 | 66.8 | 79.9 | 81.6 | 82.8 | 94.9 | 82.8 | 72.8 | 74.0 | 80.1 | 86.4 | 88.5 | 89.4 |

**CQS: 79.9**



### Color parameters

| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Color coordinate cie 1931 | Color coordinate cie 1931 | Color coordinate | Color coordinate | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|------------------|------------------|---------------------------------|
| CCT               | CRI                   | CRI R9        | TM30 Rf        | TM30 Rg     | CQS                 | x                         | y                         | u                | v                | Δuv                             |
| 7194 K            | 78.8                  | 66.7          | 77.4           | 103.0       | 79.9                | 0.304                     | 0.316                     | 0.196            | 0.307            | 0.0013                          |

# TM-30 details

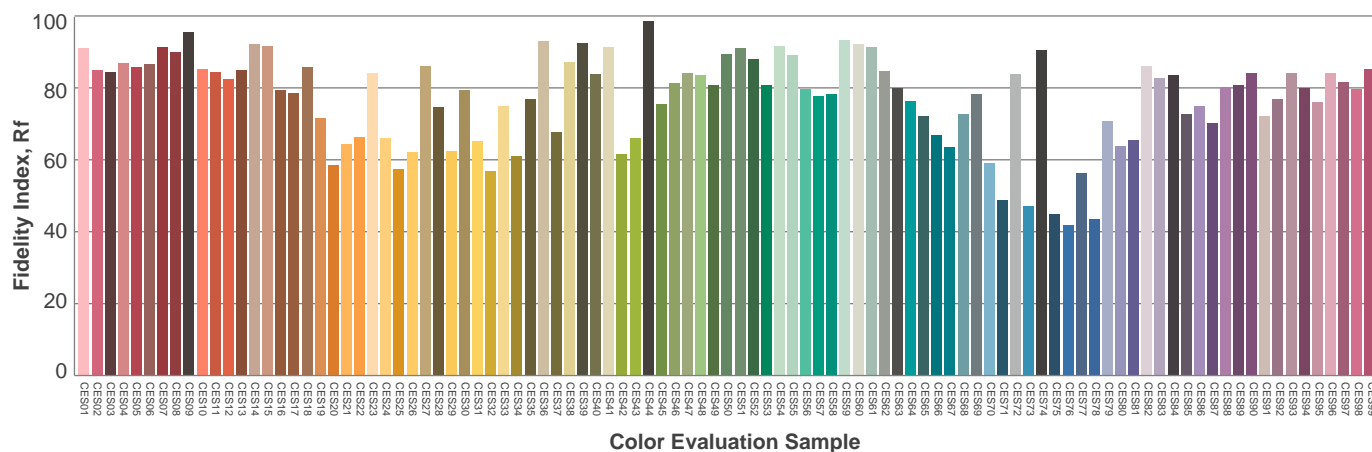
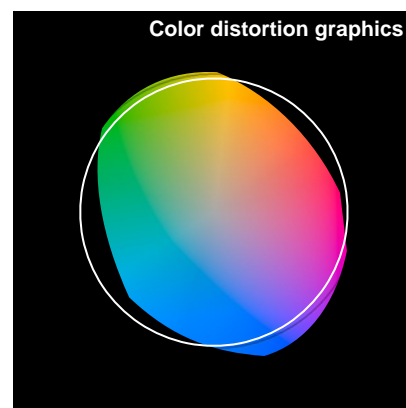
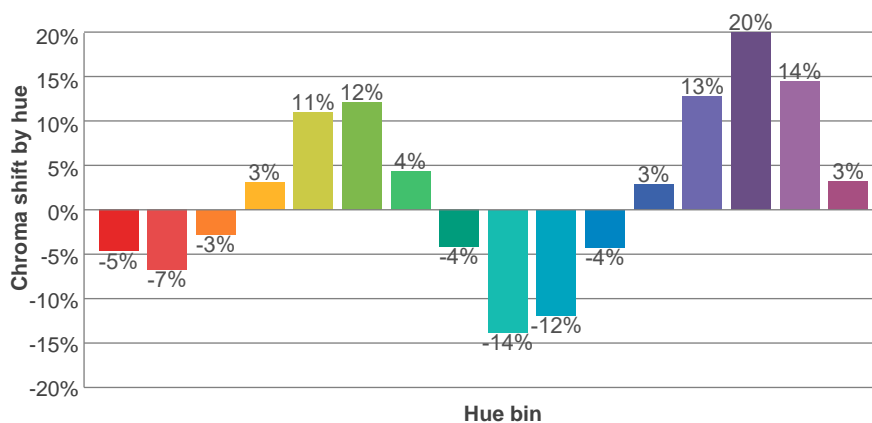
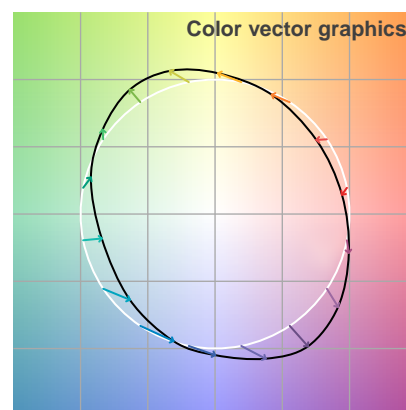
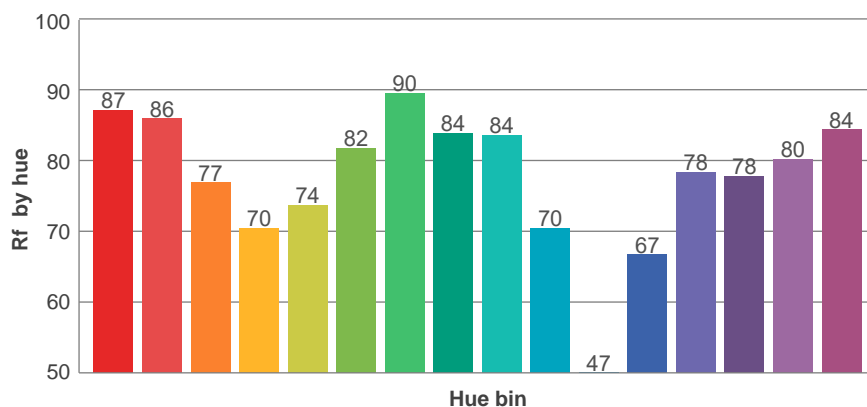
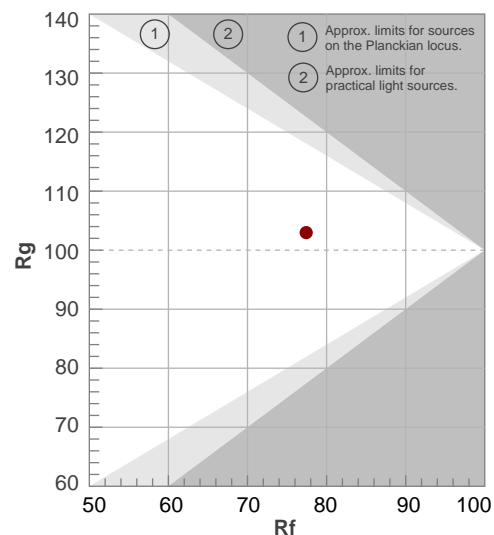
**Rf 77.4**

Fidelity index Rf

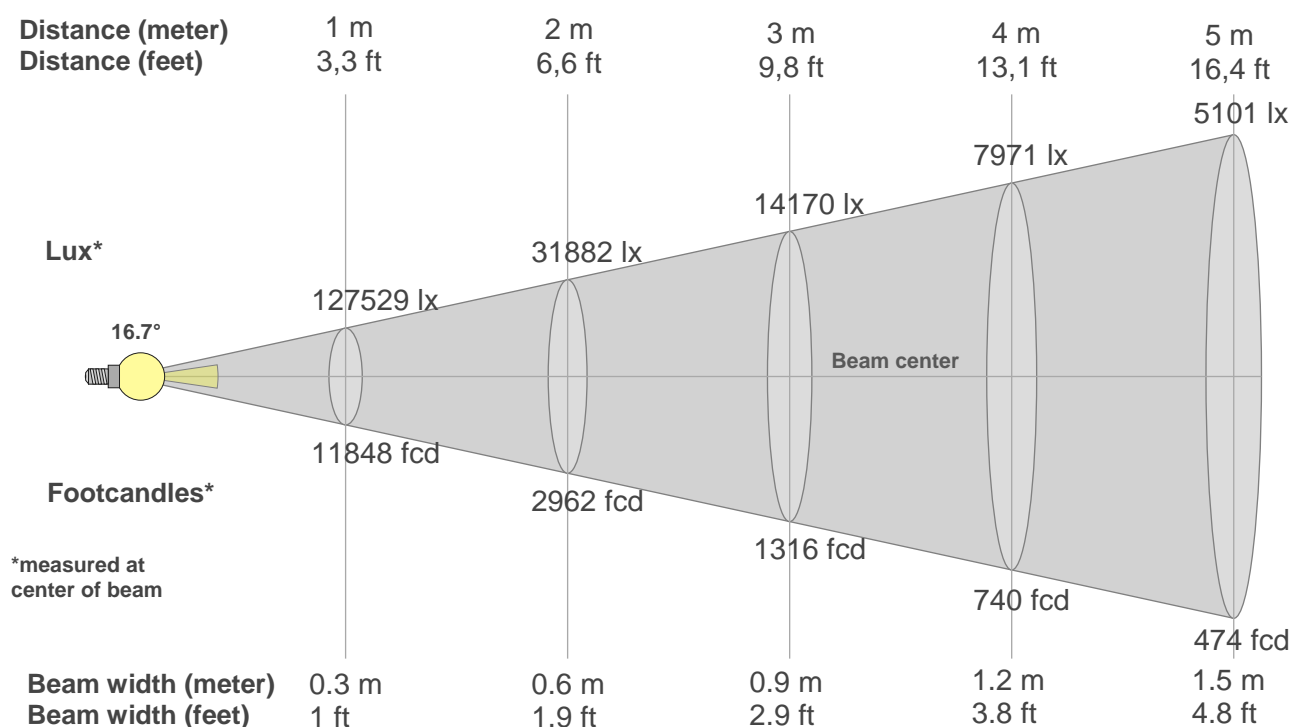
**Rg 103.0**

Gamut index Rg

| Hue Bin | Ri | Shifts (%) |     |
|---------|----|------------|-----|
|         |    | Chroma     | Hue |
| 1       | 87 | -5%        | -4% |
| 2       | 86 | -7%        | 4%  |
| 3       | 77 | -3%        | 14% |
| 4       | 70 | 3%         | 18% |
| 5       | 74 | 11%        | 12% |
| 6       | 82 | 12%        | 1%  |
| 7       | 90 | 4%         | -6% |
| 8       | 84 | -4%        | -9% |
| 9       | 84 | -14%       | 1%  |
| 10      | 70 | -12%       | 18% |
| 11      | 47 | -4%        | 27% |
| 12      | 67 | 3%         | 21% |
| 13      | 78 | 13%        | 16% |
| 14      | 78 | 20%        | 3%  |
| 15      | 80 | 14%        | -7% |
| 16      | 84 | 3%         | -9% |



## Beam details



### Beam intensities from 1-20m

| 1m          | 2m         | 3m         | 4m        | 5m        | 6m        | 7m        | 8m        | 9m        | 10m       | 11m      | 12m      | 13m      | 14m      | 15m      | 16m      | 17m    | 18m      | 19m      | 20m      |
|-------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|----------|----------|----------|--------|----------|----------|----------|
| 3.3ft       | 6.6ft      | 9.8ft      | 13.1ft    | 16.4ft    | 19.7ft    | 23ft      | 26.2ft    | 29.5ft    | 32.8ft    | 36.1ft   | 39.4ft   | 42.7ft   | 45.9ft   | 49.2ft   | 52.5ft   | 55.8ft | 59.1ft   | 62.3ft   | 65.6ft   |
| 127529lx    | 31882lx    | 14170lx    | 7971lx    | 5101lx    | 3542lx    | 2603lx    | 1993lx    | 1574lx    | 1275lx    | 1054lx   | 886lx    | 755lx    | 651lx    | 567lx    | 498lx    | 441lx  | 394lx    | 353lx    | 319lx    |
| 11847.8 fcd | 2961.9 fcd | 1316.4 fcd | 740.5 fcd | 473.9 fcd | 329.1 fcd | 241.8 fcd | 185.1 fcd | 146.3 fcd | 118.5 fcd | 97.9 fcd | 82.3 fcd | 70.1 fcd | 60.4 fcd | 52.7 fcd | 46.3 fcd | 41 fcd | 36.6 fcd | 32.8 fcd | 29.6 fcd |

### Intensities in 0° c-plane

| 0°   | 1°   | 2°   | 3°   | 4°   | 5°   | 6°  | 7°  | 8°  | 9°  | 10° | 11° | 12° | 13° | 14° | 15° | 16° | 17° | 18° | 19° |
|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 128k | 127k | 124k | 120k | 113k | 105k | 95k | 83k | 69k | 53k | 37k | 23k | 13k | 6k  | 3k  | 1k  | 1k  | 1k  | 1k  | 1k  |
| 100% | 99%  | 97%  | 94%  | 89%  | 83%  | 75% | 65% | 54% | 42% | 29% | 18% | 10% | 5%  | 2%  | 1%  | 1%  | 1%  | 1%  | 1%  |

### Intensities in 90° c-plane

| 0°   | 1°   | 2°   | 3°   | 4°   | 5°   | 6°  | 7°  | 8°  | 9°  | 10° | 11° | 12° | 13° | 14° | 15° | 16° | 17° | 18° | 19° |
|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 128k | 127k | 124k | 120k | 113k | 105k | 95k | 83k | 69k | 53k | 37k | 23k | 13k | 6k  | 3k  | 1k  | 1k  | 1k  | 1k  | 1k  |
| 100% | 99%  | 97%  | 94%  | 89%  | 83%  | 75% | 65% | 54% | 42% | 29% | 18% | 10% | 5%  | 2%  | 1%  | 1%  | 1%  | 1%  | 1%  |

### Intensities in 180° c-plane

| 0°   | 1°   | 2°   | 3°   | 4°   | 5°   | 6°  | 7°  | 8°  | 9°  | 10° | 11° | 12° | 13° | 14° | 15° | 16° | 17° | 18° | 19° |
|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 128k | 127k | 124k | 120k | 113k | 105k | 95k | 83k | 69k | 53k | 37k | 23k | 13k | 6k  | 3k  | 1k  | 1k  | 1k  | 1k  | 1k  |
| 100% | 99%  | 97%  | 94%  | 89%  | 83%  | 75% | 65% | 54% | 42% | 29% | 18% | 10% | 5%  | 2%  | 1%  | 1%  | 1%  | 1%  | 1%  |

### Intensities in 270° c-plane

| 0°   | 1°   | 2°   | 3°   | 4°   | 5°   | 6°  | 7°  | 8°  | 9°  | 10° | 11° | 12° | 13° | 14° | 15° | 16° | 17° | 18° | 19° |
|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 128k | 127k | 124k | 120k | 113k | 105k | 95k | 83k | 69k | 53k | 37k | 23k | 13k | 6k  | 3k  | 1k  | 1k  | 1k  | 1k  | 1k  |
| 100% | 99%  | 97%  | 94%  | 89%  | 83%  | 75% | 65% | 54% | 42% | 29% | 18% | 10% | 5%  | 2%  | 1%  | 1%  | 1%  | 1%  | 1%  |

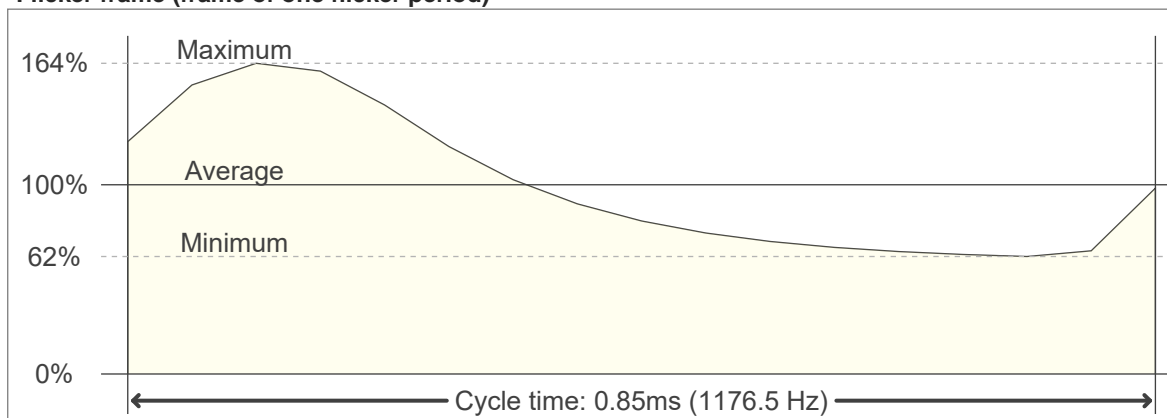
| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 16.7°          | 24°             | 27.5°             | 68.4%                        | 63.4%                       |

# Flicker

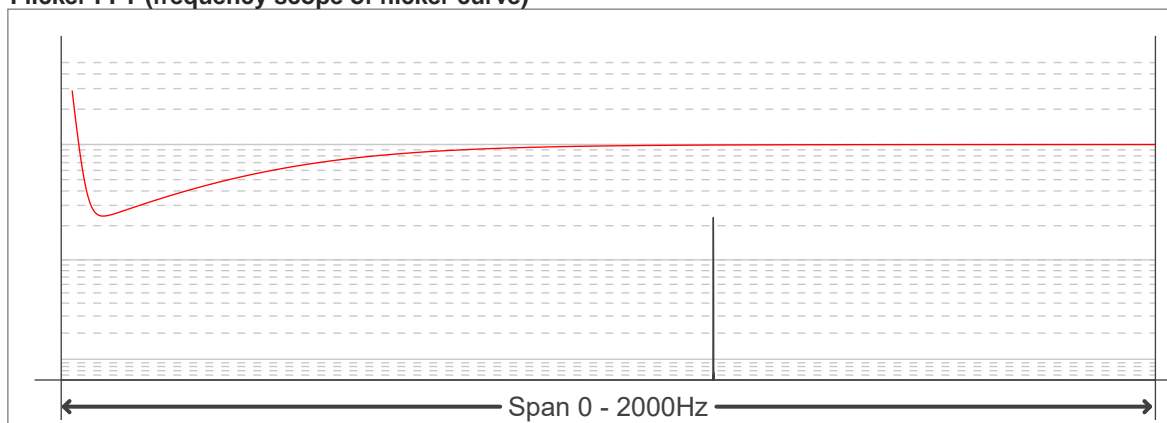
**Flicker curve (complete sampled flicker signal)**



**Flicker frame (frame of one flicker period)**



**Flicker FFT (frequency scope of flicker curve)**



**Flicker results:**

| Flicker frequency:    |         | 1176.47 Hz    |        |
|-----------------------|---------|---------------|--------|
| Flicker index:        | 0.16    | JA8/10 40Hz   | 0.16 % |
| Flicker percentage:   | 46.78 % | JA8/10 90Hz   | 0.3 %  |
| SVM: (Visual flicker) | 0.48    | JA8/10 200Hz  | 0.69 % |
| PstLM                 | 0       | JA8/10 400Hz  | 1.32 % |
| Mp                    | 0.07    | JA8/10 1000Hz | 4.62 % |

**Flicker conditions:**

|              |                      |
|--------------|----------------------|
| Sample rate: | 20000 samples/second |
|--------------|----------------------|