

# Par Z120 RGBW



Light Efficiency:

35 Lumen/Watt

Light Quality:

CRI: 70.7

Color Temperature:

6375 K

Output: 1219 lm

Peak: 6629 cd

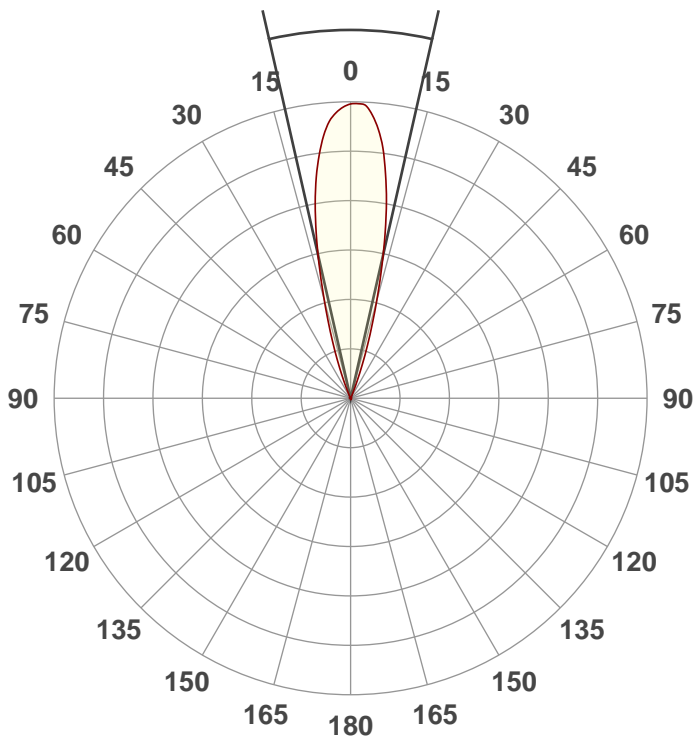
Power: 34.8 W

PF: 0.6



Beam Angle

25.6°



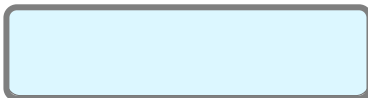
Test:

25deg White

Date:

8/17/2018

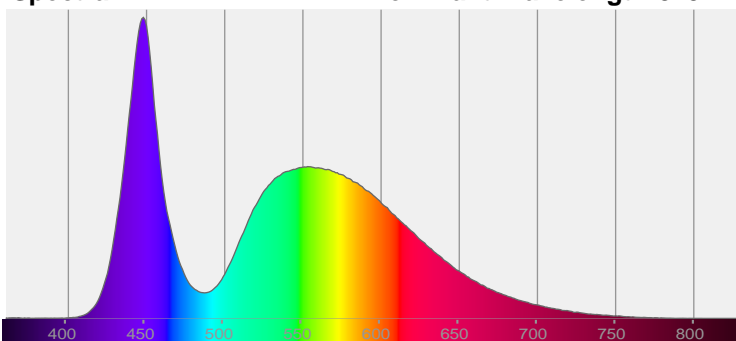
Note:



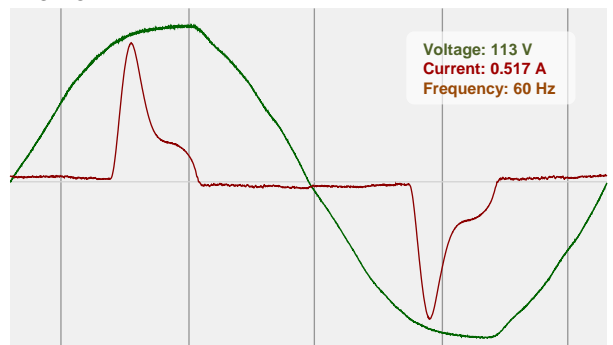
CIE 1931  
x: 0.316  
y: 0.324

Spectra

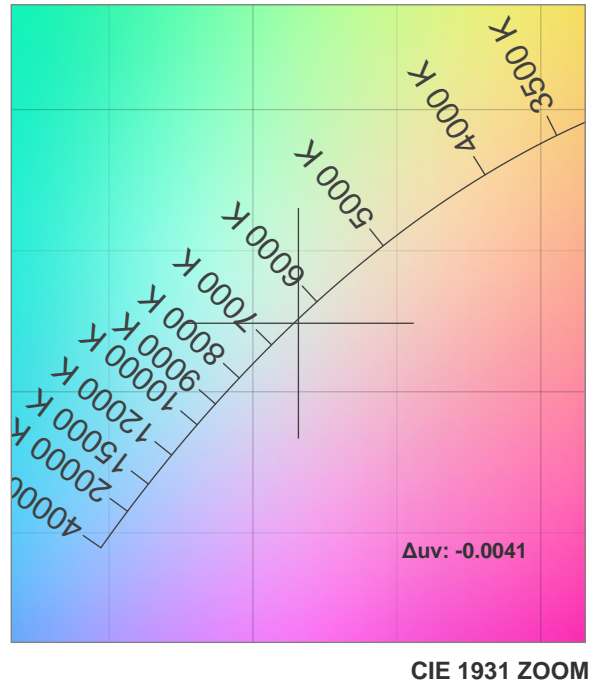
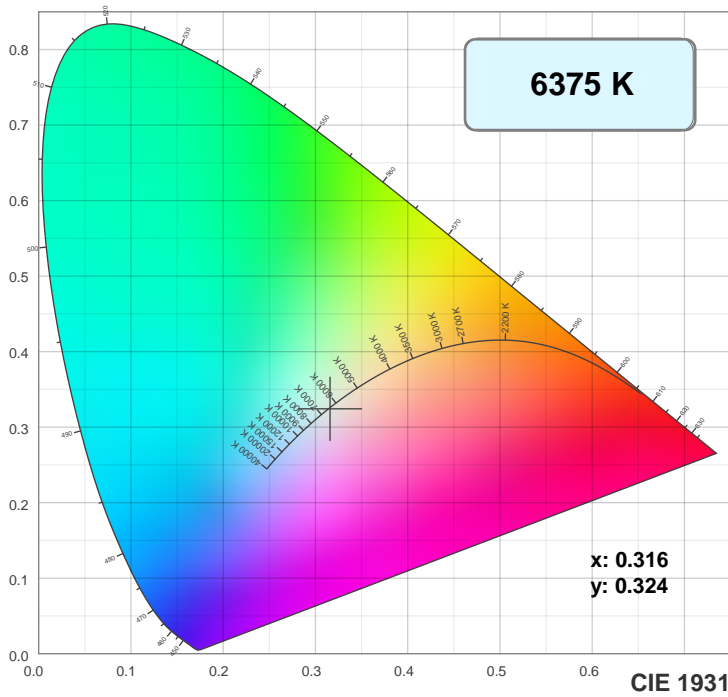
Dominant Wavelength: 829nm



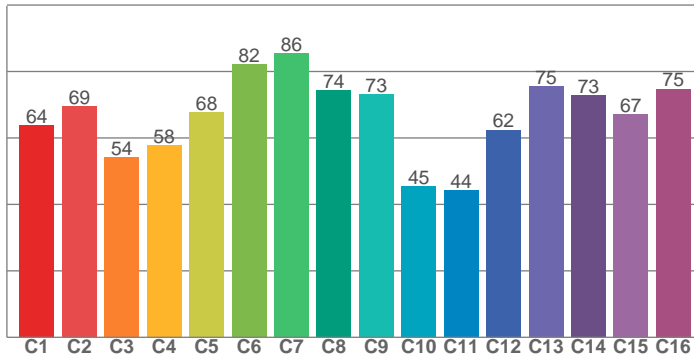
Power



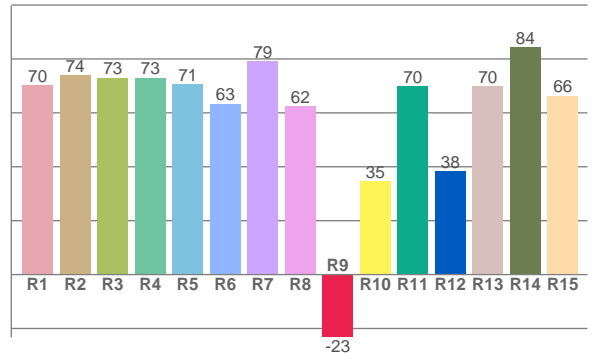
## Color Details



TM30: 66.2



CRI: 70.7 (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  |
|------|------|------|------|------|------|------|------|-------|------|------|------|------|------|------|
| 70.2 | 73.8 | 73.0 | 73.0 | 70.6 | 63.3 | 79.2 | 62.4 | -23.3 | 34.7 | 69.8 | 38.5 | 70.0 | 84.5 | 66.3 |

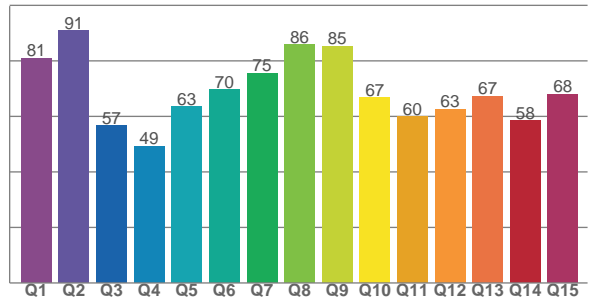
TM30 C values, 16 binned values out of total of 99 C values

| C1   | C2   | C3   | C4   | C5   | C6   | C7   | C8   | C9   | C10  | C11  | C12  | C13  | C14  | C15  | C16  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 63.7 | 69.4 | 54.1 | 57.8 | 67.7 | 82.1 | 85.5 | 74.3 | 73.1 | 45.4 | 44.2 | 62.4 | 75.4 | 72.8 | 67.0 | 74.8 |

CQS Q values

| Q1   | Q2   | Q3   | Q4   | Q5   | Q6   | Q7   | Q8   | Q9   | Q10  | Q11  | Q12  | Q13  | Q14  | Q15  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 81.0 | 90.8 | 56.7 | 49.3 | 63.4 | 69.5 | 75.5 | 85.9 | 85.3 | 66.7 | 59.9 | 62.7 | 67.3 | 58.4 | 68.0 |

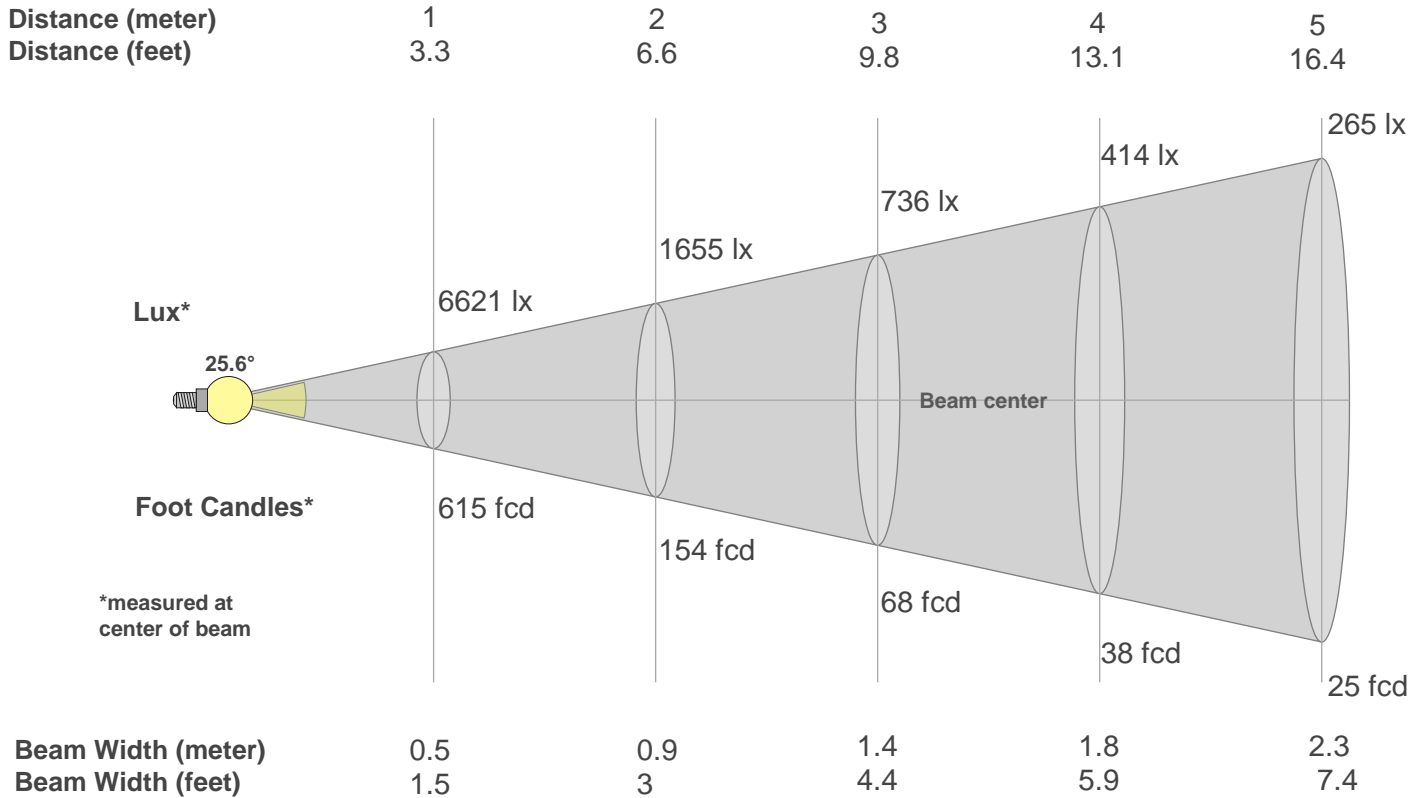
CQS: 67.2



## 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                | $\Delta uv$                     |
| 6375 K            | 70.7                  | -23.3         | 66.2           | 94.4        | 67.2                | 0.316                     | 0.324                     | 0.202            | 0.311            | -0.0041                         |

## Beam Details



**Beam Intensities from 1-20m**

| m   | 1     | 2     | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   |
|-----|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| ft  | 3.3   | 6.6   | 9.8  | 13.1 | 16.4 | 19.7 | 23   | 26.2 | 29.5 | 32.8 | 36.1 | 39.4 | 42.7 | 45.9 | 49.2 | 52.5 | 55.8 | 59.1 | 62.3 | 65.6 |
| lx  | 6621  | 1655  | 736  | 414  | 265  | 184  | 135  | 103  | 82   | 66   | 55   | 46   | 39   | 34   | 29   | 26   | 23   | 20   | 18   | 17   |
| fcd | 615.1 | 153.8 | 68.3 | 38.4 | 24.6 | 17.1 | 12.6 | 9.6  | 7.6  | 6.2  | 5.1  | 4.3  | 3.6  | 3.1  | 2.7  | 2.4  | 2.1  | 1.9  | 1.7  | 1.5  |

**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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| 6621 | 6574 | 6508 | 6422 | 6297 | 6121 | 5901 | 5618 | 5305 | 4965 | 4571 | 4138 | 3685 | 3216 | 2747 | 2299 | 1903 | 1552 | 1231 | 946 |
| 100% | 99%  | 98%  | 97%  | 95%  | 92%  | 89%  | 85%  | 80%  | 75%  | 69%  | 63%  | 56%  | 49%  | 41%  | 35%  | 29%  | 23%  | 19%  | 14% |

**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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| 6621 | 6574 | 6508 | 6422 | 6297 | 6121 | 5901 | 5618 | 5305 | 4965 | 4571 | 4138 | 3685 | 3216 | 2747 | 2299 | 1903 | 1552 | 1231 | 946 |
| 100% | 99%  | 98%  | 97%  | 95%  | 92%  | 89%  | 85%  | 80%  | 75%  | 69%  | 63%  | 56%  | 49%  | 41%  | 35%  | 29%  | 23%  | 19%  | 14% |

**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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| 6621 | 6626 | 6617 | 6589 | 6445 | 6265 | 6051 | 5775 | 5432 | 5045 | 4633 | 4179 | 3701 | 3211 | 2735 | 2277 | 1853 | 1489 | 1153 | 845 |
| 100% | 100% | 100% | 100% | 97%  | 95%  | 91%  | 87%  | 82%  | 76%  | 70%  | 63%  | 56%  | 49%  | 41%  | 34%  | 28%  | 22%  | 17%  | 13% |

**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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| 6621 | 6626 | 6617 | 6589 | 6445 | 6265 | 6051 | 5775 | 5432 | 5045 | 4633 | 4179 | 3701 | 3211 | 2735 | 2277 | 1853 | 1489 | 1153 | 845 |
| 100% | 100% | 100% | 100% | 97%  | 95%  | 91%  | 87%  | 82%  | 76%  | 70%  | 63%  | 56%  | 49%  | 41%  | 34%  | 28%  | 22%  | 17%  | 13% |

| Beam Angle 50% | Field Angle 10% | Cutoff Angle 2,5% | Intensity Ratio in 120° Cone | Intensity Ratio in 90° Cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 25.6°          | 39.9°           | 46°               | 100.0%                       | 100.0%                      |