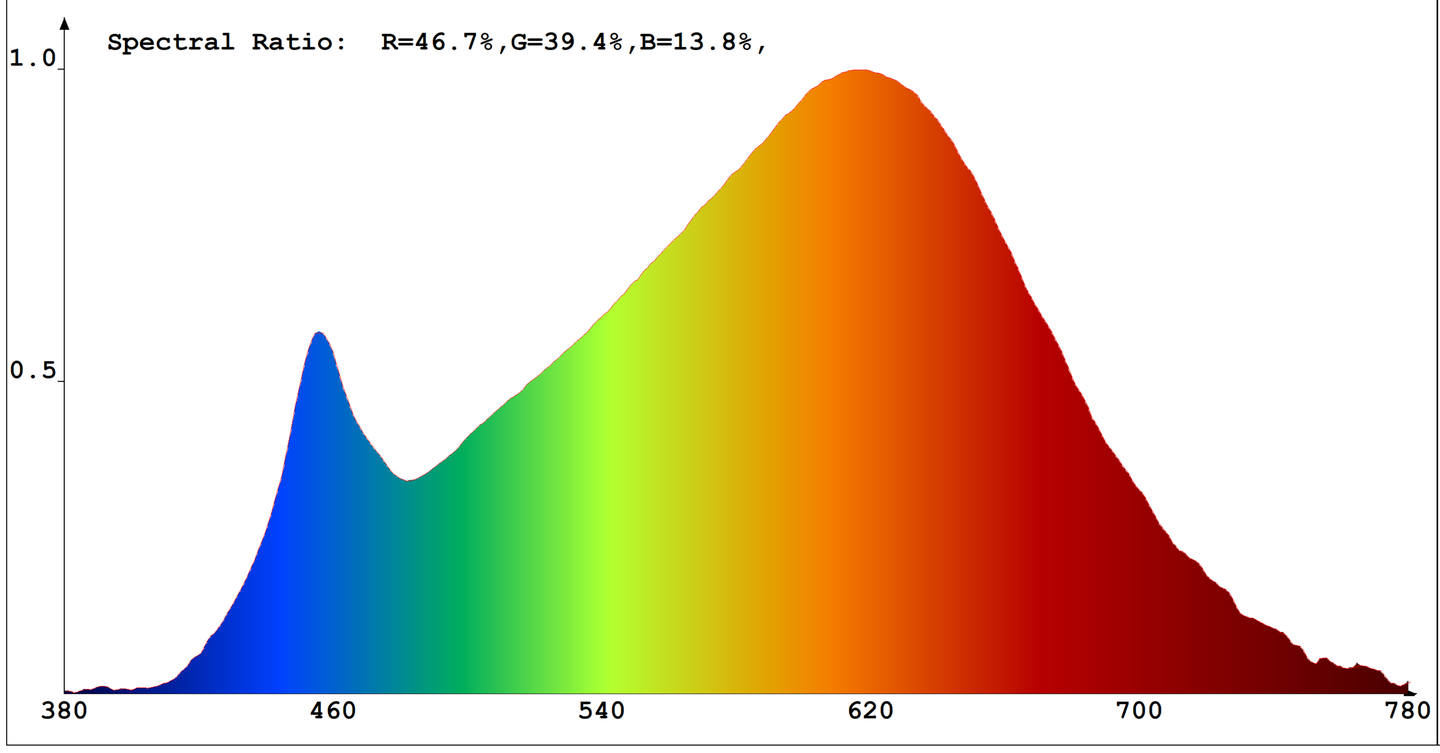
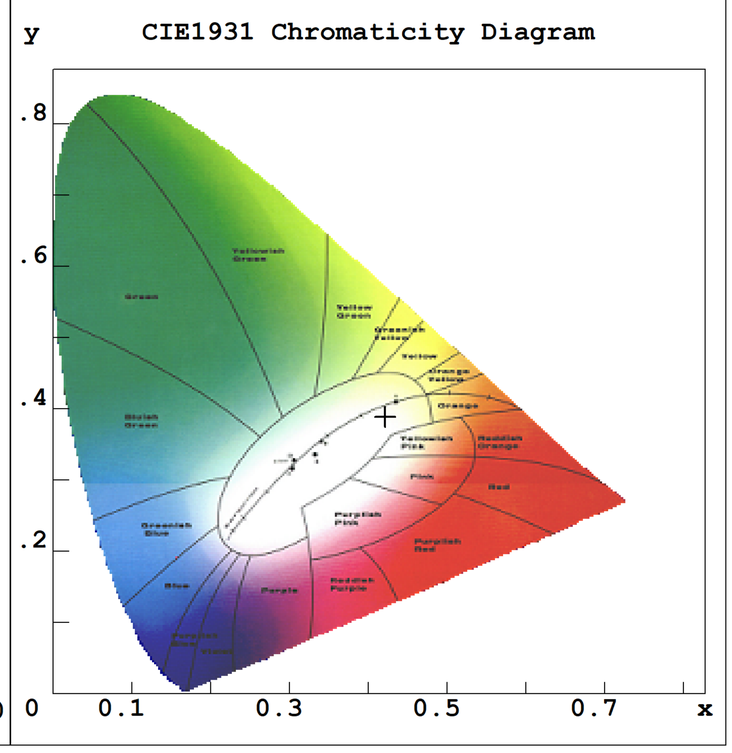
# Luminaire test report

## Product Mark

Product Type : LWAL-EL
Manufacturer : Lumen Warm Inc.
Temperature : 21'C
Humidity : 27%
Operator : NDR
Test Date : 2020-03-20 12:55:46
Remark: Tested with PWM9W - Elis with Small beam angle




## Chroma Parameters

Chro.Coor.:x=0.4217 y=0.3888 u=0.2472 v=0.3419 duv=-0.0040
CCT: 3145K Dominant Wave.:583.9nm Purity:43.3% Centre Wave:598.8nm
Flux RGB Ratio:R=22.7%,G=74.9%,B=2.4% Peak Wave:616.8nm Half Width:161.6nm

## Rendering Index:Ra= 91.5 CRI= 89.9

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| R1 =92 | R2 =97 | R3 =98 | R4 =92 | R5 =94 | R6 =94 | R7 =88 | R8 =78 |
| R9 =58 | R10=94 | R11=92 | R12=85 | R13=93 | R14=100 | R15=88 | |

Fidelity Index(Rf)=90.3 Gamut Index(Rg)=98.9

## Photo Parameters

Flux:141.69lm Effi.:14.5lm/W Radiant:461.1mW Iv:0.0mcd
Efficiency:0.56 Effi Level:B (EU 874-2012)

## Ele. Parameters

Voltage:U=24.00V Current:I=0.4070A
Power:P=9.768W Power Factor:PF=1.000

## Instrument state

Instrument:Hopoo HP8000 Integral Time: 1000.000ms VPeak: 12889
VDark: 1472 Scan Range: 380-780nm Product ID: 201901623

# IES TM-30-2015 Test Report

**Product Mark**

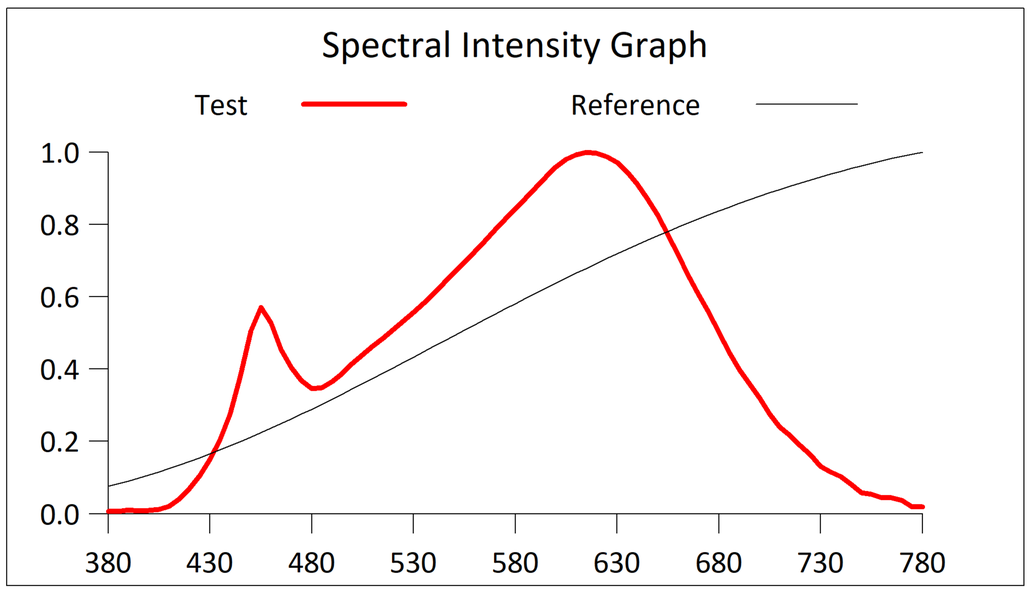
**Product Type : LWAL-EL** | **Manufacturer : Lumen Warm Inc.**

**Temperature : 21'C** | **Humidity : 27%**

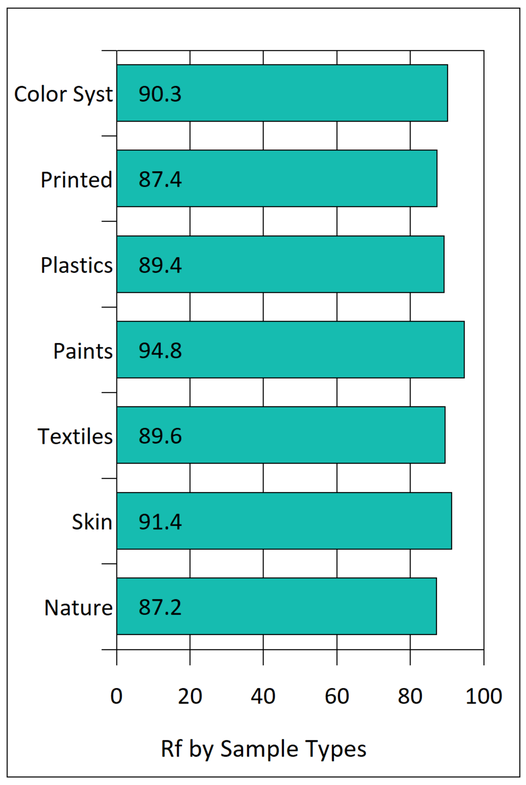
**Operator : NDR** | **Test Date : 2020-03-20 12:55:46**

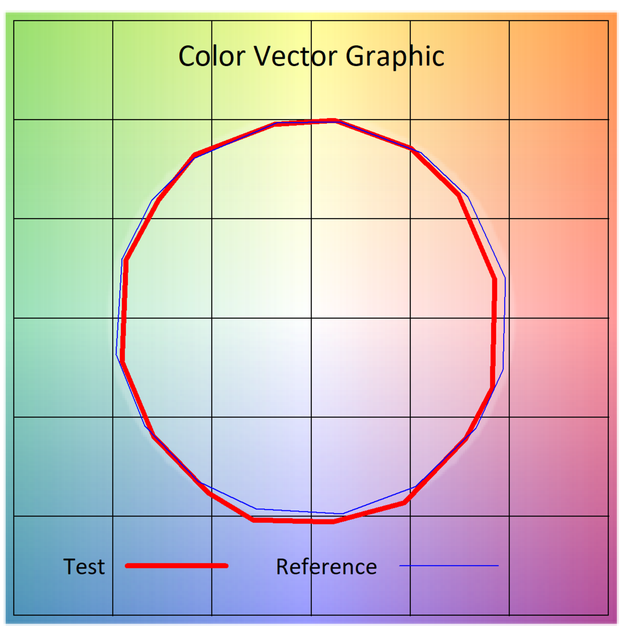
**Remark: Tested with PWM9W - Elis with Small beam angle**

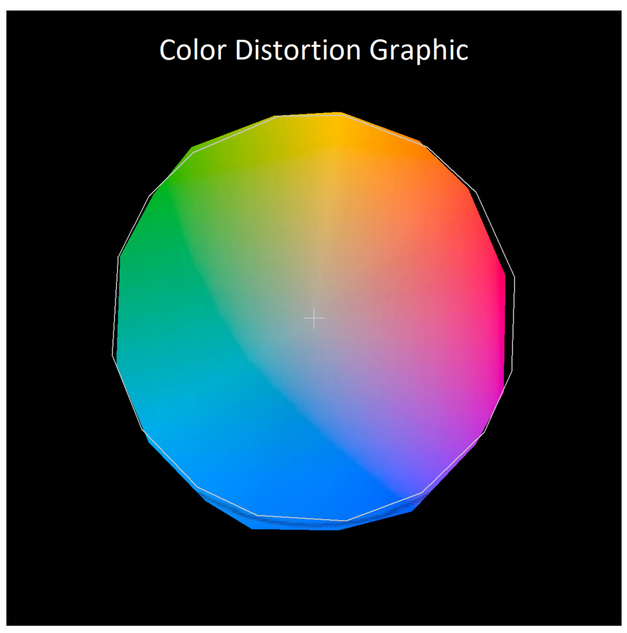
| | | | |
|---|---|---|---|
| Rf: 90.3 | | CCT(K): 3145 | u': 0.2472 |
| Rg: 98.9 | LER: 286.5 | Duv: -0.0040 | v': 0.3419 |

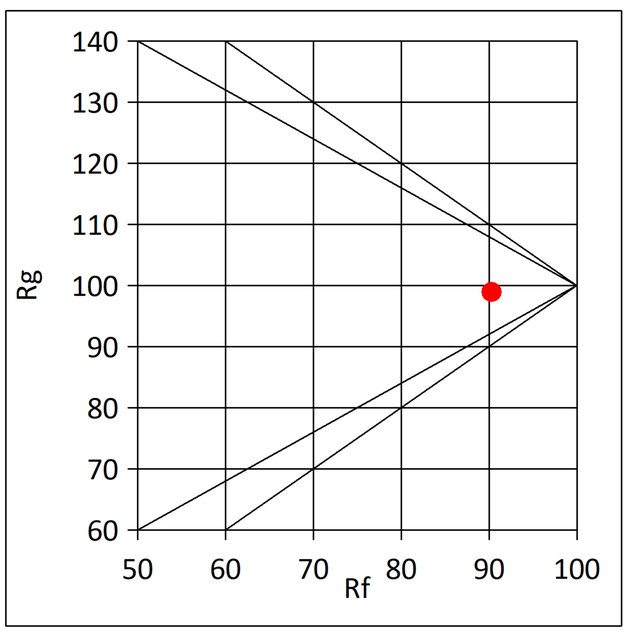


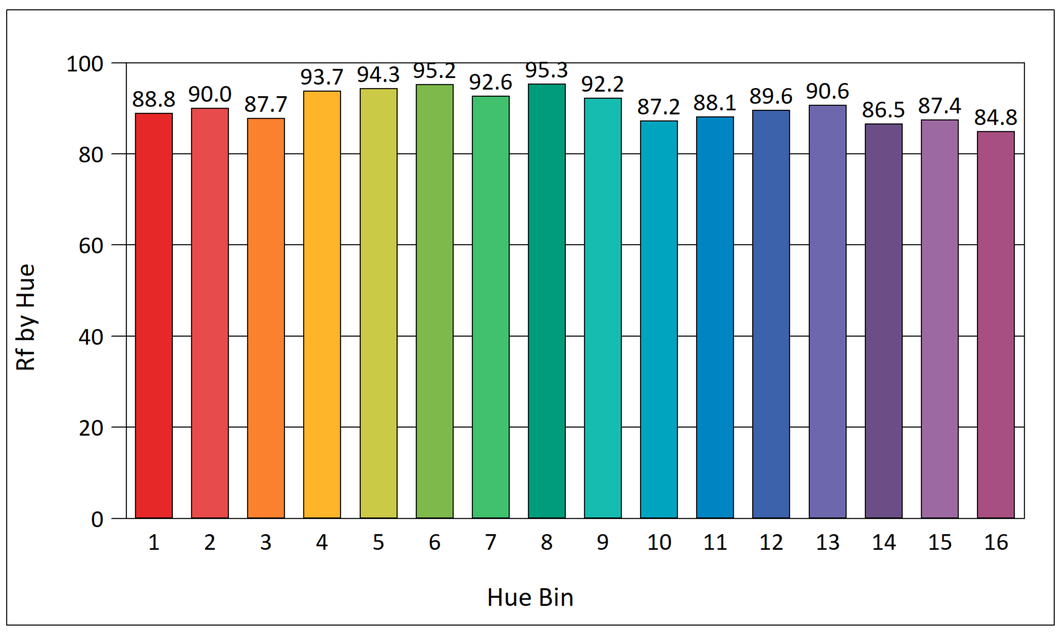

| | | Graphic Shifts (%) | |
|---|---|---|---|
| Hue Bin | Rf | Chroma | Hue |
| 1 | 88.8 | -5.4% | 0.6% |
| 2 | 90.0 | -3.4% | 3.6% |
| 3 | 87.7 | -0.9% | 5.6% |
| 4 | 93.7 | 0.2% | 2.5% |
| 5 | 94.3 | -0.6% | 1.3% |
| 6 | 95.2 | 1.3% | -1.3% |
| 7 | 92.6 | -2.8% | -1.8% |
| 8 | 95.3 | -2.1% | -0.0% |
| 9 | 92.2 | -2.2% | 4.1% |
| 10 | 87.2 | -0.7% | 6.5% |
| 11 | 88.1 | 2.2% | 7.1% |
| 12 | 89.6 | 5.9% | -0.5% |
| 13 | 90.6 | 2.8% | -5.5% |
| 14 | 86.5 | 3.6% | -9.2% |
| 15 | 87.4 | -1.5% | -7.0% |
| 16 | 84.8 | -3.2% | -10.0% |

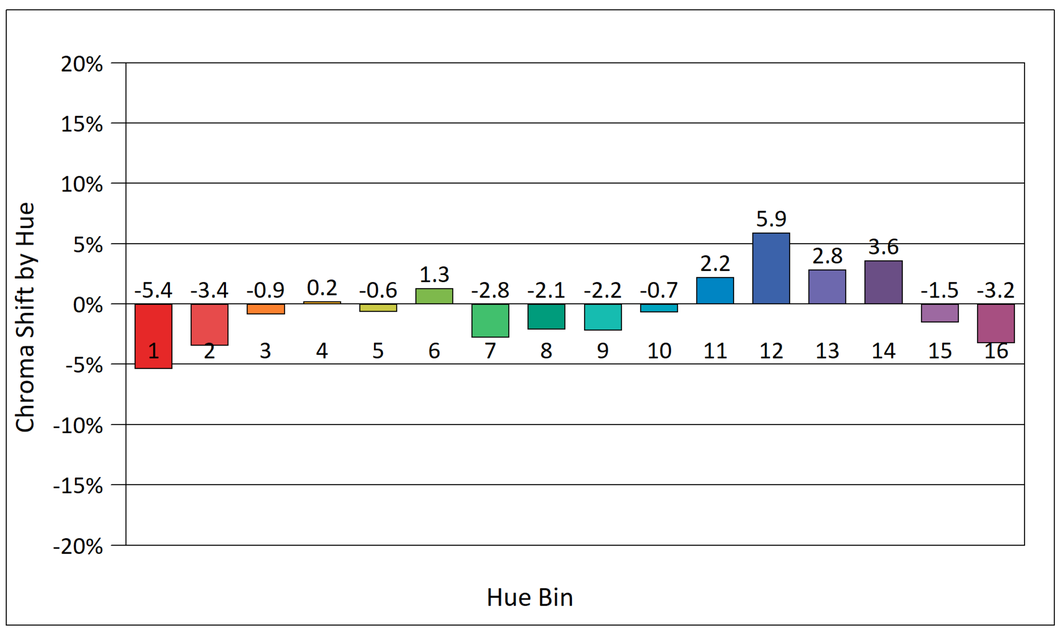


# IES TM-30-2015 Test Report

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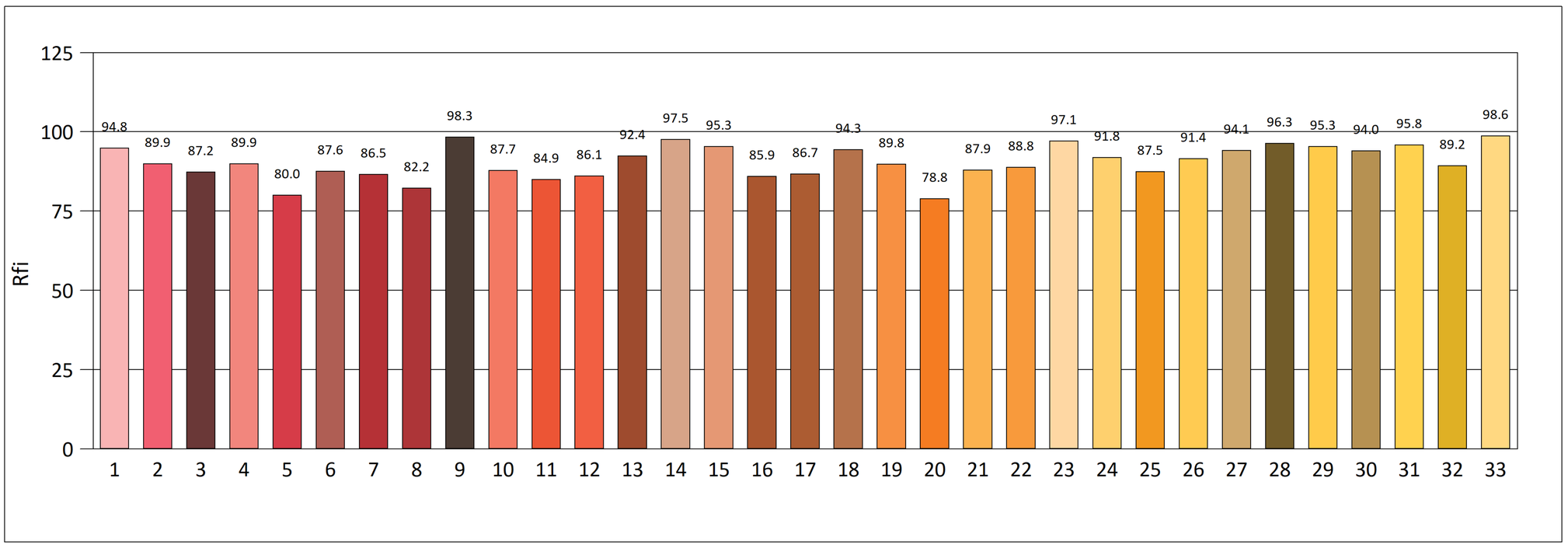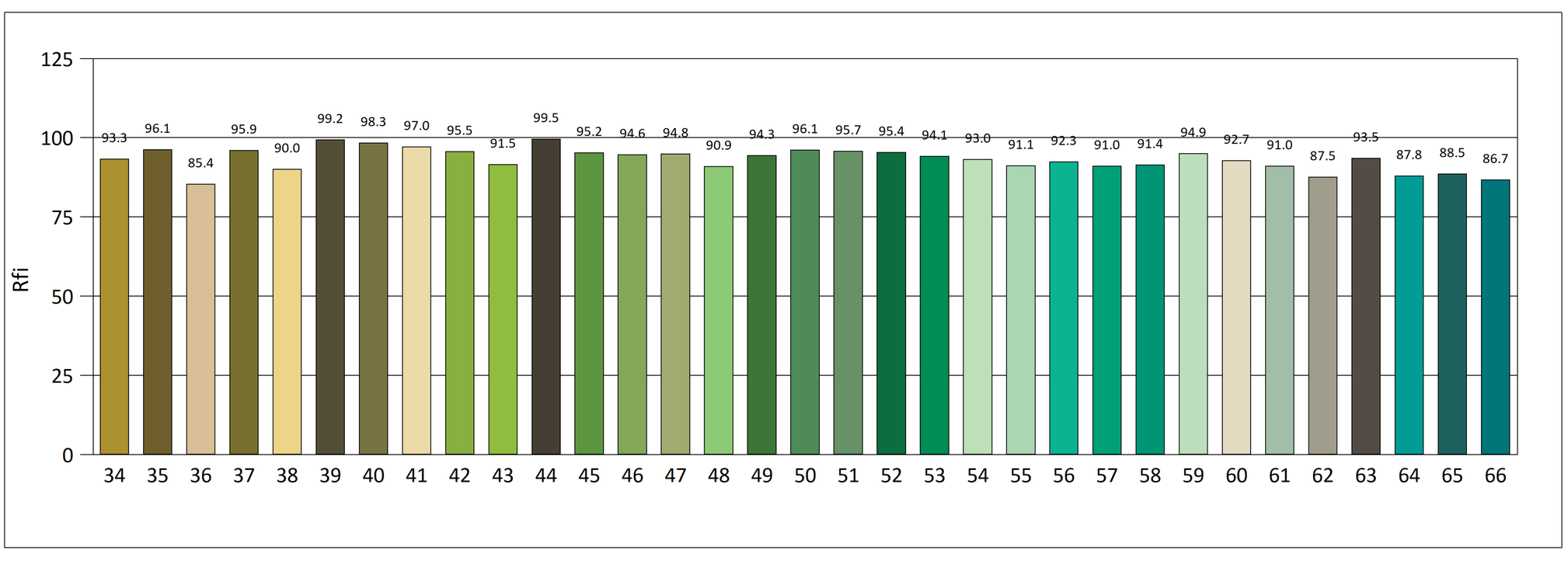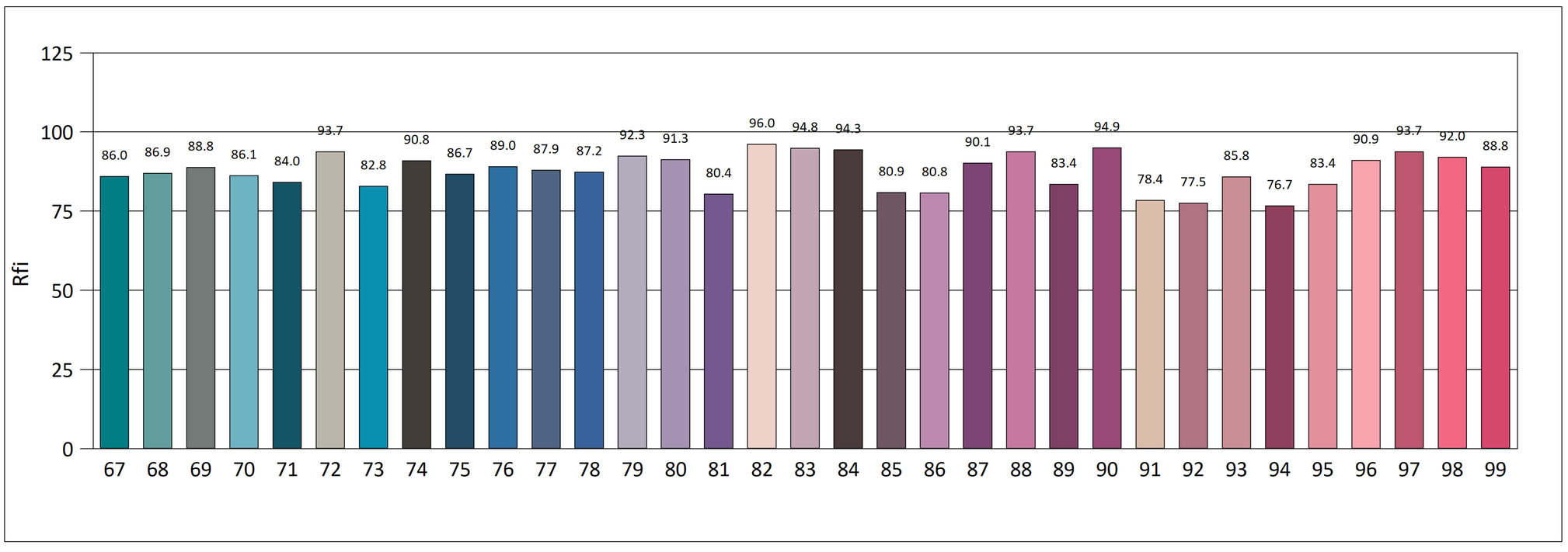
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