

## Light efficiency:

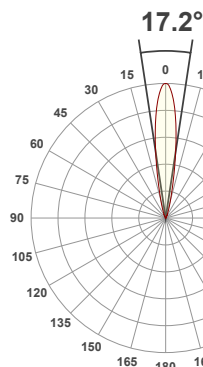
**139 Lumen/Watt**

## Light quality:

**CRI: 91.3**

## Color temperature:

**3000 K**



## Product name:

**TL603\_Q-HE-30-NF - 200mA**

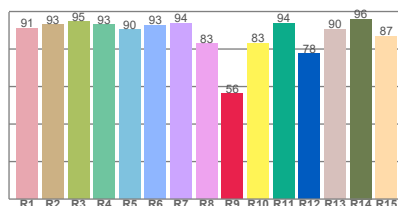
## Item number:

**TubeLED Mini Quantum HE  
Spotlight 3000K NF - 200mA**

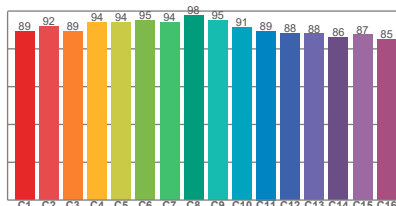
**Delivered information for above  
fixture and LED combination.**

**Output: 1111 Lumen    Peak intensity: 8766 cd    Power consumption: 8.0**

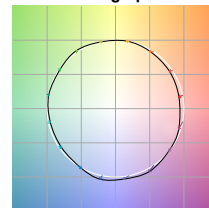
## CRI R values



## TM30 C Values

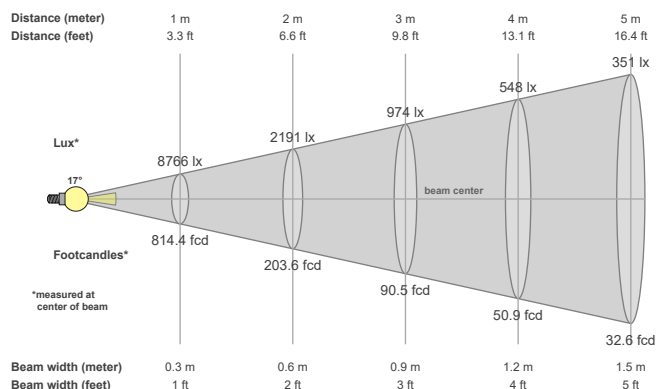


## Color vector graphics



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
3000 K	91.3	56.2	91.1	98.8	90.5	0.437	0.404	0.251	0.348	0.0040

## Beam details



## Beam angels

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%
17.2°	34°	50.1°

## Beam intensities

Peak intensity	Int. ratio in 120° cone	Int. ratio in 90° cone
8766 cd	98.4%	97.4%

## 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
8766lx	2191lx	974lx	548lx	351lx	243lx	179lx	137lx	108lx	88lx	72lx	61lx	52lx	45lx	39lx	34lx	30lx	27lx	24lx	22lx
814.4fcd	203.6fcd	90.5fcd	50.9fcd	32.6fcd	22.6fcd	16.6fcd	12.7fcd	10.1fcd	8.1fcd	6.7fcd	5.7fcd	4.8fcd	4.2fcd	3.6fcd	3.2fcd	2.8fcd	2.5fcd	2.3fcd	2fcd

The above information is for 3000K colour temperature, for specific module information please see LED spec located on our website.

For information regarding other colour temperatures please refer to ies/ldt files available on the website.

### Light planning Glare Evaluation According to UGR

p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X      Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	11.1	11.4	11.1	11.6	11.8	11.1	11.4	11.1	11.6	11.8
	3H	11.4	11.9	11.7	12.1	12.3	11.4	11.9	11.7	12.1	12.3
	4H	11.8	12.3	12.2	12.5	12.8	11.8	12.3	12.2	12.5	12.8
	6H	12.5	12.9	12.8	13.2	13.6	12.5	12.9	12.8	13.2	13.6
	8H	13.0	13.4	13.3	13.7	14.1	13.0	13.4	13.3	13.7	14.1
	12H	13.5	13.9	13.9	14.3	14.7	13.5	13.9	13.9	14.3	14.7
4H	2H	10.9	11.4	11.3	11.7	11.9	10.9	11.4	11.3	11.7	11.9
	3H	11.7	12.1	12.1	12.5	12.9	11.7	12.1	12.1	12.5	12.9
	4H	12.3	12.7	12.7	13.1	13.6	12.3	12.7	12.7	13.1	13.6
	6H	13.2	13.6	13.7	14.0	14.3	13.2	13.6	13.7	14.0	14.3
	8H	13.8	14.2	14.3	14.5	14.9	13.8	14.2	14.3	14.5	14.9
	12H	14.6	14.9	15.1	15.3	15.7	14.6	14.9	15.1	15.3	15.7
8H	4H	12.5	13.0	13.1	13.3	13.6	12.5	13.0	13.1	13.3	13.6
	6H	13.8	14.0	14.3	14.5	15.0	13.8	14.0	14.3	14.5	15.0
	8H	14.7	14.8	15.2	15.4	16.0	14.7	14.8	15.2	15.4	16.0
	12H	15.7	15.8	16.3	16.3	16.9	15.7	15.8	16.3	16.3	16.9
12H	4H	12.6	12.9	13.1	13.3	13.8	12.6	12.9	13.1	13.3	13.8
	6H	14.0	14.2	14.5	14.7	15.3	14.0	14.2	14.5	14.7	15.3
	8H	14.9	15.1	15.5	15.6	16.2	14.9	15.1	15.5	15.6	16.2
Variation of the observer position for the luminaire distance S											
S = 1.0H		0.9 / -0.4					0.9 / -0.4				
S = 1.5H		2.1 / -0.5					2.1 / -0.5				
S = 2.0H		3.2 / -0.7					3.2 / -0.7				
Corrected glare indices referring to 1111 lm total luminous flux											