Light efficiency:

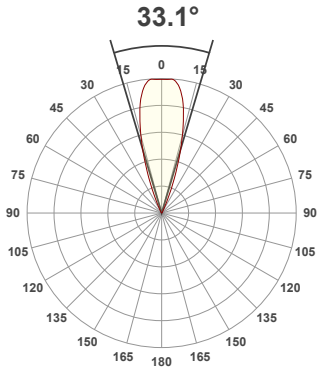
53 Lumen/Watt

Light quality:

CRI: 91.4

Color temperature:

3000 K



Product name:

90413-F_A-LED - LED51_3-30-FL-SL - 200mA

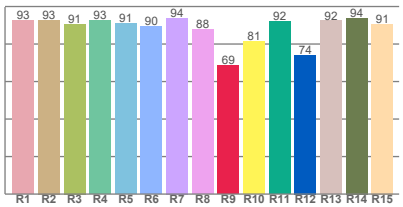
Item number:

Pinhole90 Fixed/Accent - LED51/3-30-FL-SL - 200mA

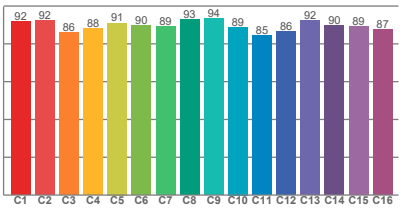
Delivered information for above fixture and LED combination.

Output: 454 Lumen Peak intensity: 1492 cd Power consumption: 8.5

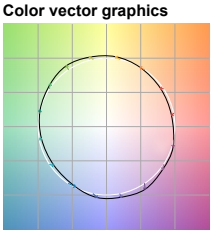
CRI R values



TM30 C Values

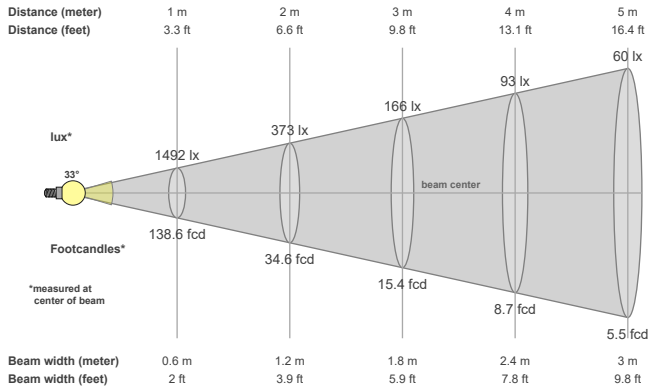


Color vector graphics



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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3000 K	91.4	68.6	89.7	102.5	89.0	0.437	0.404	0.251	0.348	0.0000

Beam details



Beam angels

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%
33.1°	48.3°	59.1°

Beam intensities

Peak intensity	Int. ratio in 120° cone	Int. ratio in 90° cone
1492 cd	99.8%	99.4%

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
1492lx	373lx	166lx	93lx	60lx	41lx	30lx	23lx	18lx	15lx	12lx	10lx	9lx	8lx	7lx	6lx	5lx	5lx	4lx	4lx
138.6fcd	34.6fcd	15.4fcd	8.7fcd	5.5fcd	3.8fcd	2.8fcd	2.2fcd	1.7fcd	1.4fcd	1.1fcd	1fcd	0.8fcd	0.7fcd	0.6fcd	0.5fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd

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	6.8	7.2	6.8	7.4	7.5	6.8	7.2	6.8	7.4	7.5
	3H	6.6	7.1	6.9	7.3	7.5	6.6	7.1	6.9	7.3	7.5
	4H	6.6	7.1	7.0	7.4	7.6	6.6	7.1	7.0	7.4	7.6
	6H	6.7	7.1	7.0	7.4	7.8	6.7	7.1	7.0	7.4	7.8
	8H	6.7	7.2	7.0	7.5	7.9	6.7	7.2	7.0	7.5	7.9
	12H	6.8	7.2	7.1	7.5	8.0	6.8	7.2	7.1	7.5	8.0
4H	2H	6.4	7.0	6.8	7.2	7.4	6.4	7.0	6.8	7.2	7.4
	3H	6.5	6.9	6.9	7.3	7.7	6.5	6.9	6.9	7.3	7.7
	4H	6.5	6.9	6.9	7.3	7.8	6.5	6.9	6.9	7.3	7.8
	6H	6.6	7.1	7.1	7.4	7.7	6.6	7.1	7.1	7.4	7.7
	8H	6.7	7.1	7.2	7.4	7.8	6.7	7.1	7.2	7.4	7.8
	12H	6.8	7.1	7.3	7.5	8.0	6.8	7.1	7.3	7.5	8.0
8H	4H	6.5	6.9	7.0	7.2	7.6	6.5	6.9	7.0	7.2	7.6
	6H	6.7	6.9	7.2	7.4	7.9	6.7	6.9	7.2	7.4	7.9
	8H	6.9	7.1	7.4	7.6	8.2	6.9	7.1	7.4	7.6	8.2
	12H	7.1	7.3	7.7	7.8	8.4	7.1	7.3	7.7	7.8	8.4
12H	4H	6.4	6.7	6.9	7.1	7.6	6.4	6.7	6.9	7.1	7.6
	6H	6.7	6.9	7.2	7.4	8.0	6.7	6.9	7.2	7.4	8.0
	8H	6.9	7.1	7.5	7.6	8.2	6.9	7.1	7.5	7.6	8.2
Variation of the observer position for the luminaire distance S											
S = 1.0H		3.8 / -2.8					3.8 / -2.8				
S = 1.5H		6.3 / -3.2					6.3 / -3.2				
S = 2.0H		8.2 / -3.5					8.2 / -3.5				
Corrected glare indices referring to 454 lm total luminous flux											