

Light efficiency:



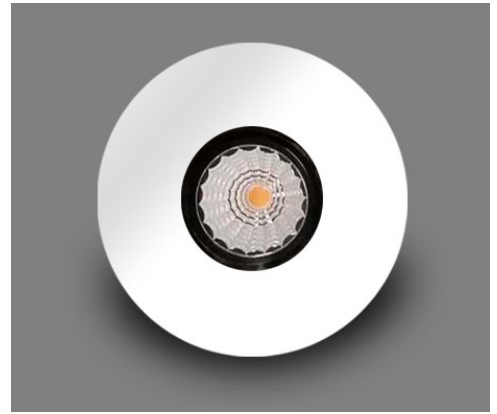
Output: 1109 lm

Light quality:

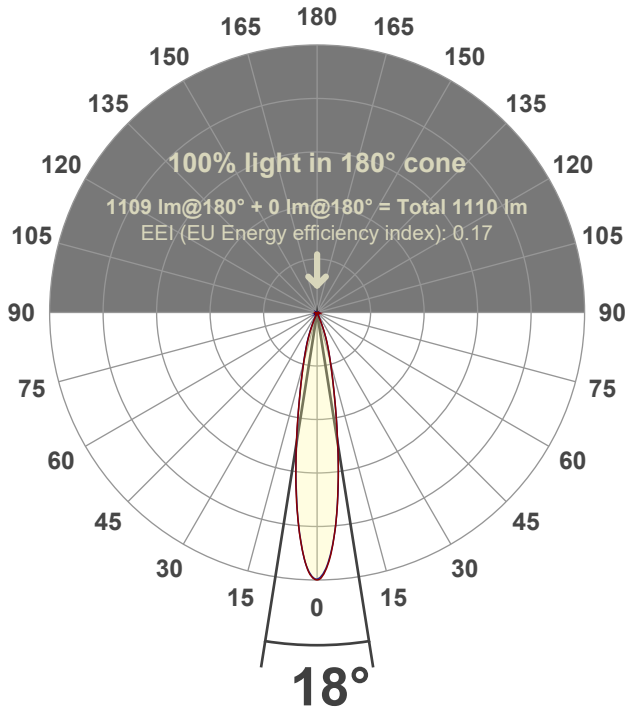


Peak: 8382 cd

Power: 14.2 W



Beam angle



Test number:

GR-F-F-CZ14-30k-SP-RD-Rev2

Luminaire Model:

Graffiti Flat Round Fixed Downlight-CZ14 30k 15° Optic

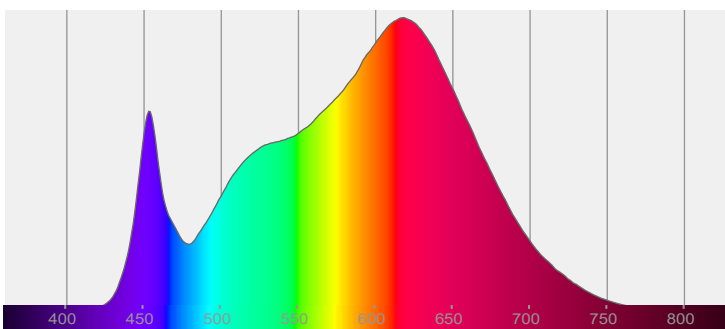
Date and time:

3/9/2022 2:18:20 PM

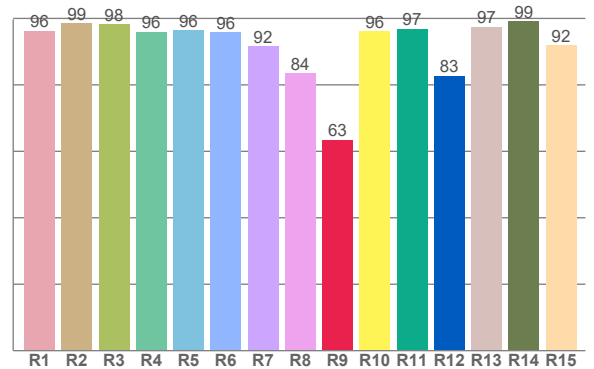
Delivered Lumens

1109

Spectra



CRI: 94.6 (R1-R8)



Color parameters

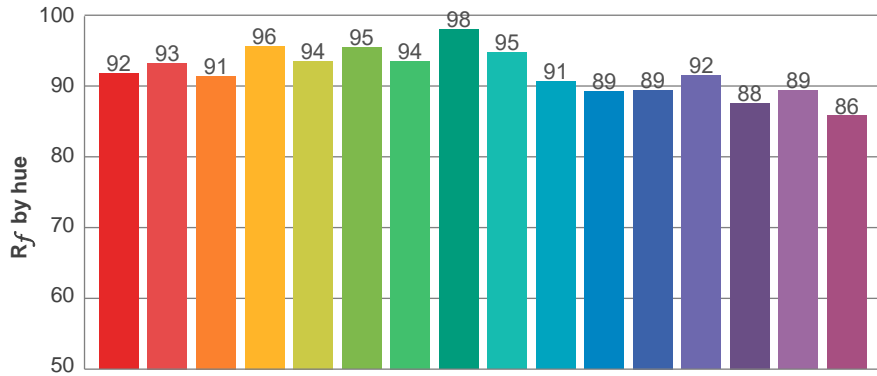
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	94.6	63.4	92.2	100.5	91.8	0.424	0.393	0.247	0.343	-0.0027

R_f 92.2
Fidelity index R_f

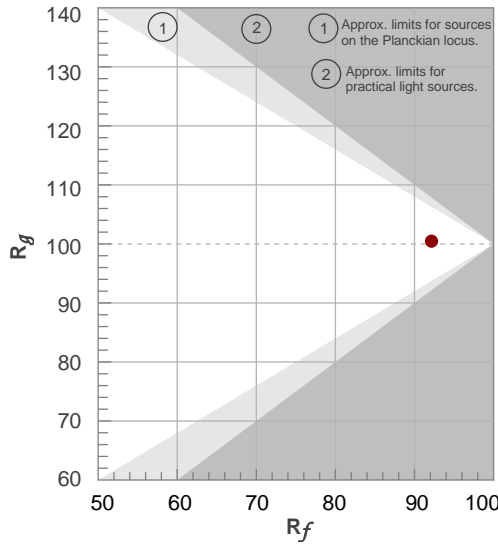
R_g 100.5
Gammut index R_g

TM30: 92.2

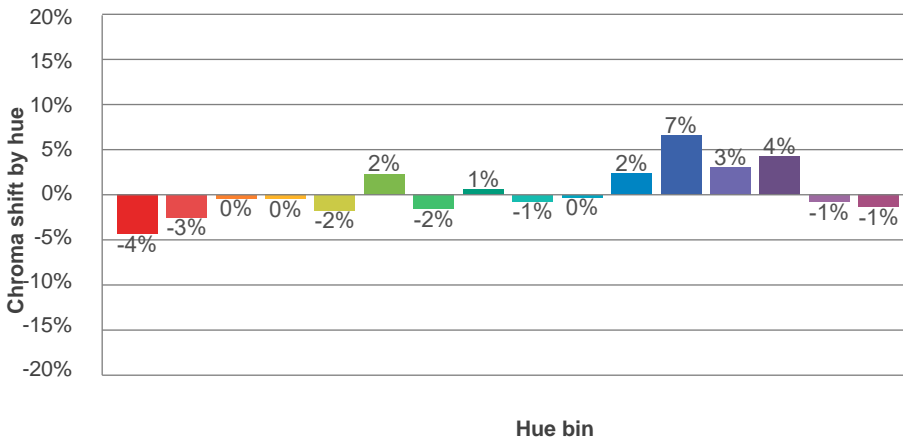
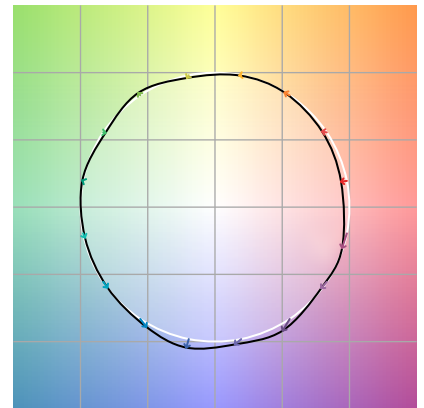
TM-30Color



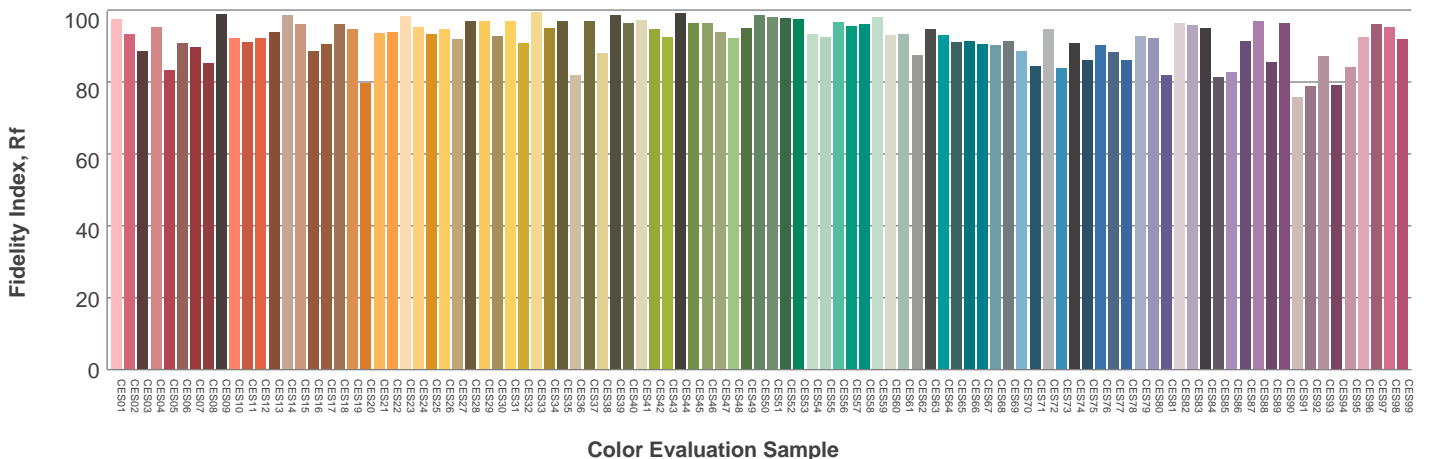
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	0%
2	93	-3%	2%
3	91	0%	4%
4	96	0%	1%
5	94	-2%	2%
6	95	2%	0%
7	94	-2%	-1%
8	98	1%	0%
9	95	-1%	3%
10	91	0%	5%
11	89	2%	7%
12	89	7%	-1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-6%
16	86	-1%	-11%



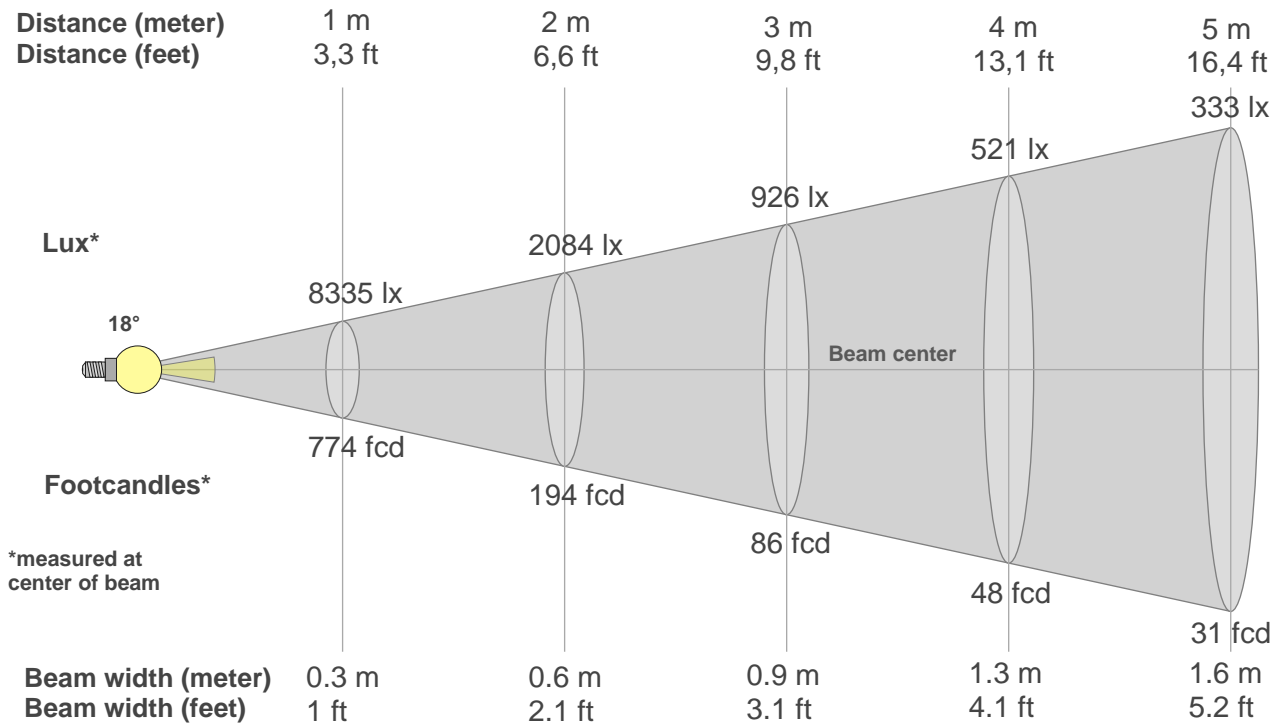
Color vector graphics



Color distortion



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
8335lx	2084lx	926lx	521lx	333lx	232lx	170lx	130lx	103lx	83lx	69lx	58lx	49lx	43lx	37lx	33lx	29lx	26lx	23lx	21lx
774.3fcd	193.6fcd	86fcd	48.4fcd	31fcd	21.5fcd	15.8fcd	12.1fcd	9.6fcd	7.7fcd	6.4fcd	5.4fcd	4.6fcd	4fcd	3.4fcd	3fcd	2.7fcd	2.4fcd	2.1fcd	1.9fcd

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°
8335	8267	7995	7722	7207	6680	6092	5445	4800	4193	3586	3082	2646	2231	1944	1658	1437	1247	1063	902
100%	99%	96%	93%	86%	80%	73%	65%	58%	50%	43%	37%	32%	27%	23%	20%	17%	15%	13%	11%

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°
8335	8177	8012	7626	7184	6683	6067	5451	4813	4171	3585	3075	2565	2231	1901	1631	1415	1203	1032	862
100%	98%	96%	91%	86%	80%	73%	65%	58%	50%	43%	37%	31%	27%	23%	20%	17%	14%	12%	10%

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°
8335	8240	8104	7672	7239	6693	6093	5483	4838	4193	3636	3105	2631	2278	1926	1672	1435	1225	1052	879
100%	99%	97%	92%	87%	80%	73%	66%	58%	50%	44%	37%	32%	27%	23%	20%	17%	15%	13%	11%

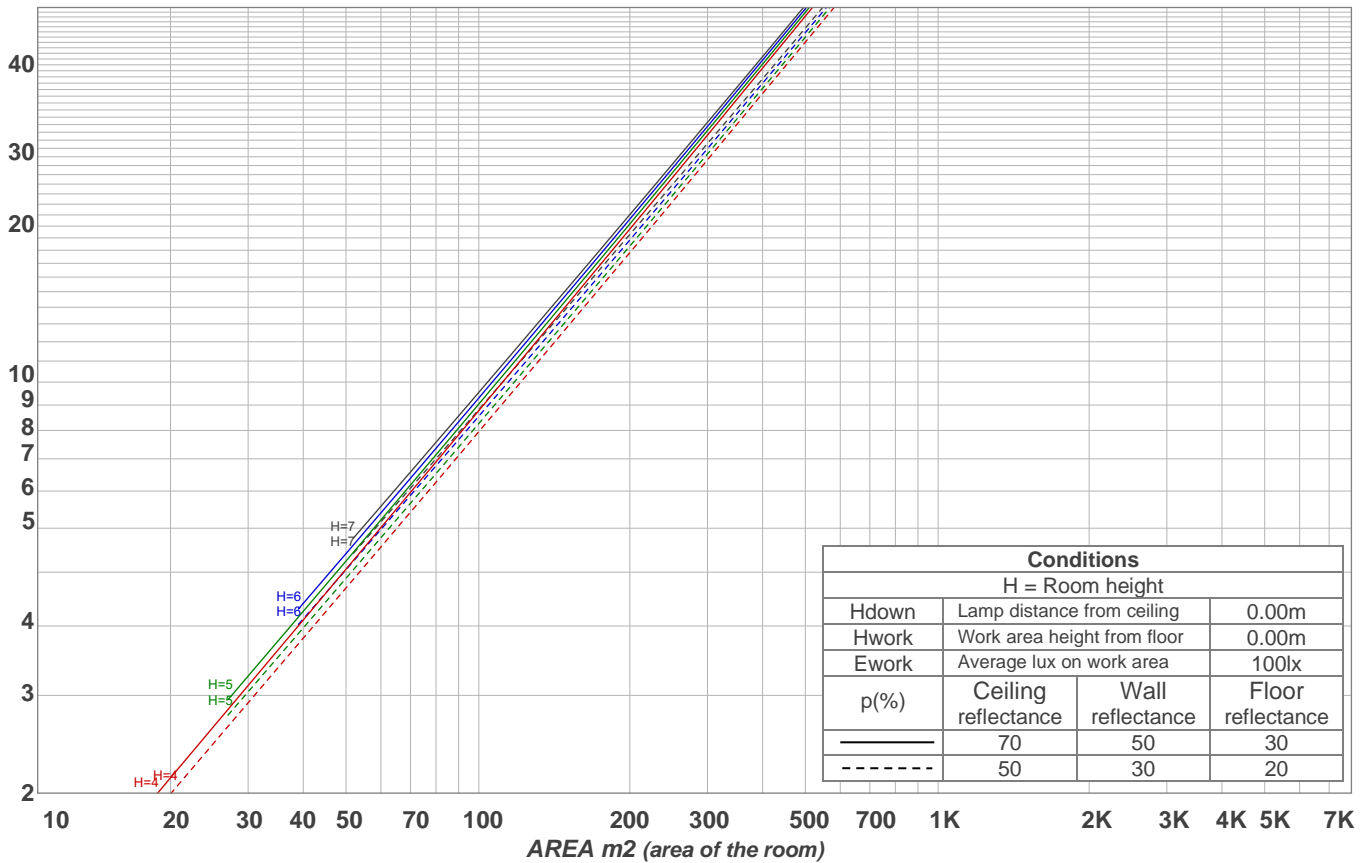
Intensities in 270° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
8335	8224	8016	7715	7198	6681	6064	5429	4798	4171	3545	3079	2625	2247	1951	1658	1460	1261	1086	927
100%	99%	96%	93%	86%	80%	73%	65%	58%	50%	43%	37%	31%	27%	23%	20%	18%	15%	13%	11%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
18°	38.7°	47.2°	98.8%	98.4%

LAMPS (number of lamps)
50

Light planning Luminaire budgetary diagram



Luminaire budgetary diagram AREA m2 (area of the room) Coefficients of Utilization

Ceiling reflectance	80				70				50			30			10			0			
Wall reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
Floor reflectance	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0
RCR	(RCR: Room Cavity Ratio)																				
	Room Values are expressed as percentage of Lumens delivered to the task surface																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	
1	115	113	111	110	113	111	109	108	107	106	105	103	102	102	100	99	99	97	97	97	
2	112	109	106	103	110	107	104	102	104	102	100	101	99	98	98	97	96	95	95	95	
3	109	105	101	99	107	103	100	98	101	98	96	99	97	95	97	95	94	92	92	92	
4	106	101	98	95	105	100	97	94	98	96	93	97	94	92	95	93	91	90	90	90	
5	104	98	95	92	102	98	94	92	96	93	91	95	92	90	93	91	89	88	88	88	
6	101	96	92	89	100	95	92	89	94	91	89	93	90	88	91	89	88	87	87	87	
7	99	93	90	87	98	93	89	87	92	89	87	91	88	86	90	88	86	85	85	85	
8	97	91	88	85	96	91	87	85	90	87	85	89	86	84	88	86	84	83	83	83	
9	95	89	86	83	94	89	86	83	88	85	83	87	85	83	87	84	83	82	82	82	
10	93	87	84	82	92	87	84	82	86	83	81	86	83	81	85	83	81	80	80	80	

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
532 lm	475 lm	79.2 lm	4.12 lm	3.10 lm	3.17 lm	3.38 lm	4.26 lm	5.17 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm