

Light efficiency:



Output: 1342 lm

Light quality:

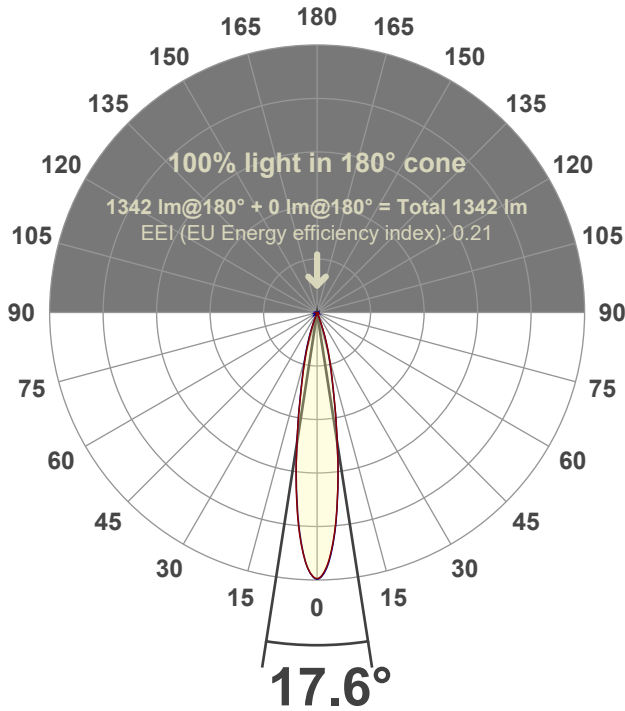


Peak: 11285 cd

Power: 20.7 W



Beam angle



Test number:

GR-F-F-CZ20-30k-SP-SQ-Rev2

Luminaire Model:

Graffiti Flat Square Fixed Downlight-CZ20 30k 15° Optic

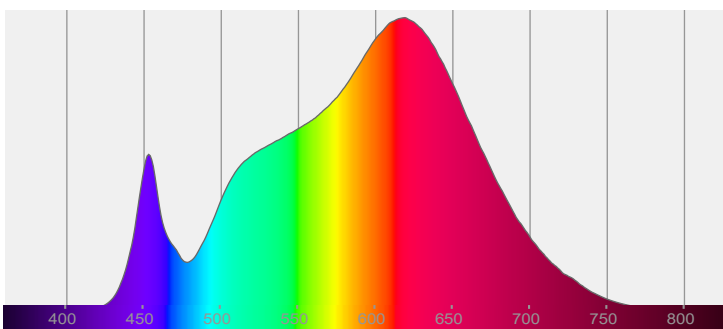
Date and time:

6/30/2022 9:23:43 PM

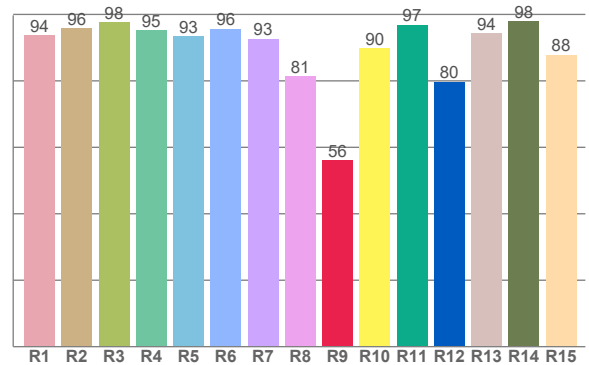
Delivered Lumens

1342

Spectra



CRI: 93.2 (R1-R8)



Color parameters

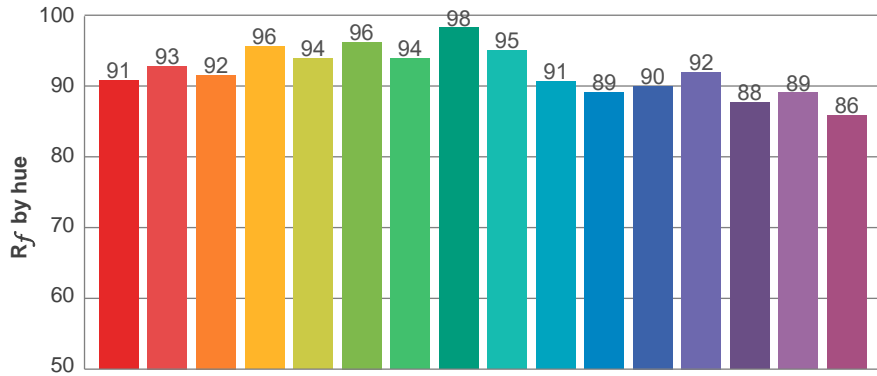
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	93.2	56.0	92.2	99.1	91.6	0.437	0.408	0.249	0.349	0.0016

R_f 92.2
Fidelity index R_f

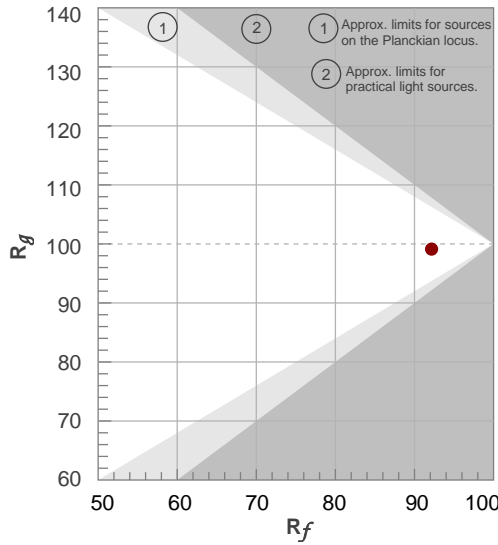
R_g 99.1
Gammut index R_g

TM30: 92.2

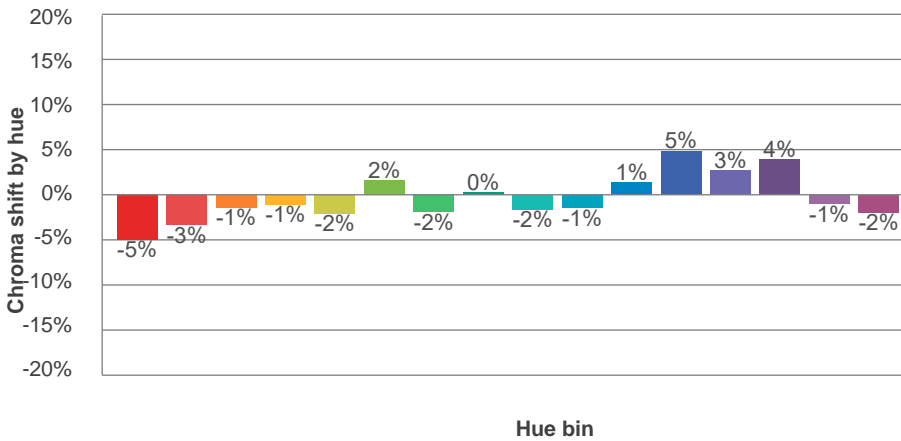
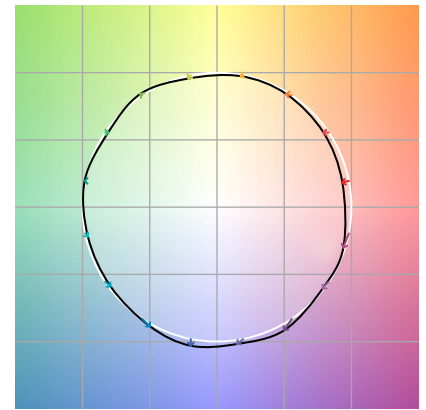
TM-30Color



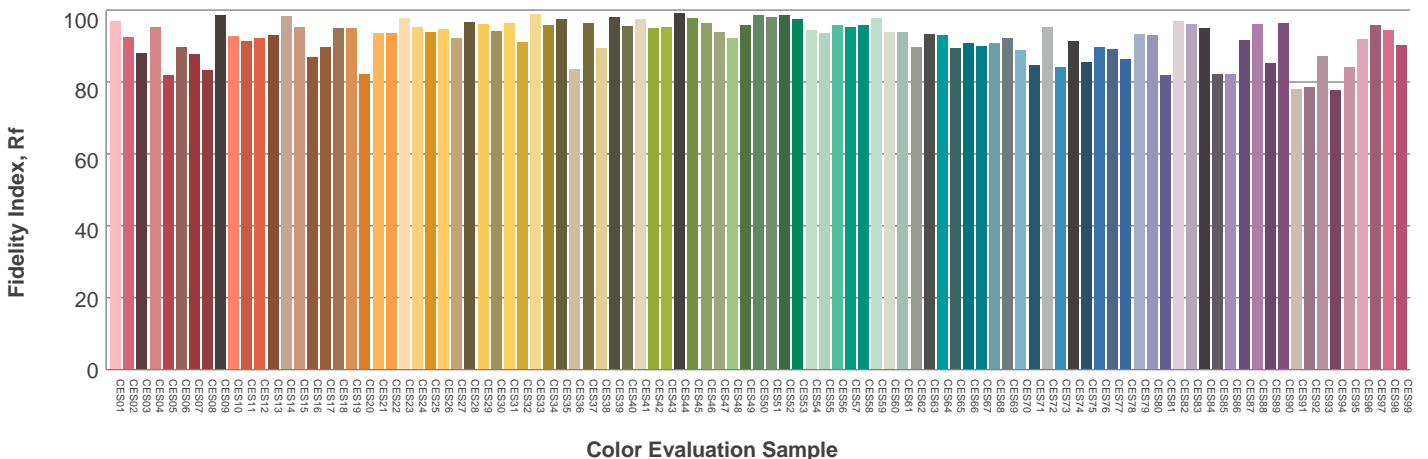
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	92	-1%	4%
4	96	-1%	2%
5	94	-2%	2%
6	96	2%	1%
7	94	-2%	-1%
8	98	0%	0%
9	95	-2%	3%
10	91	-1%	5%
11	89	1%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-7%
16	86	-2%	-11%



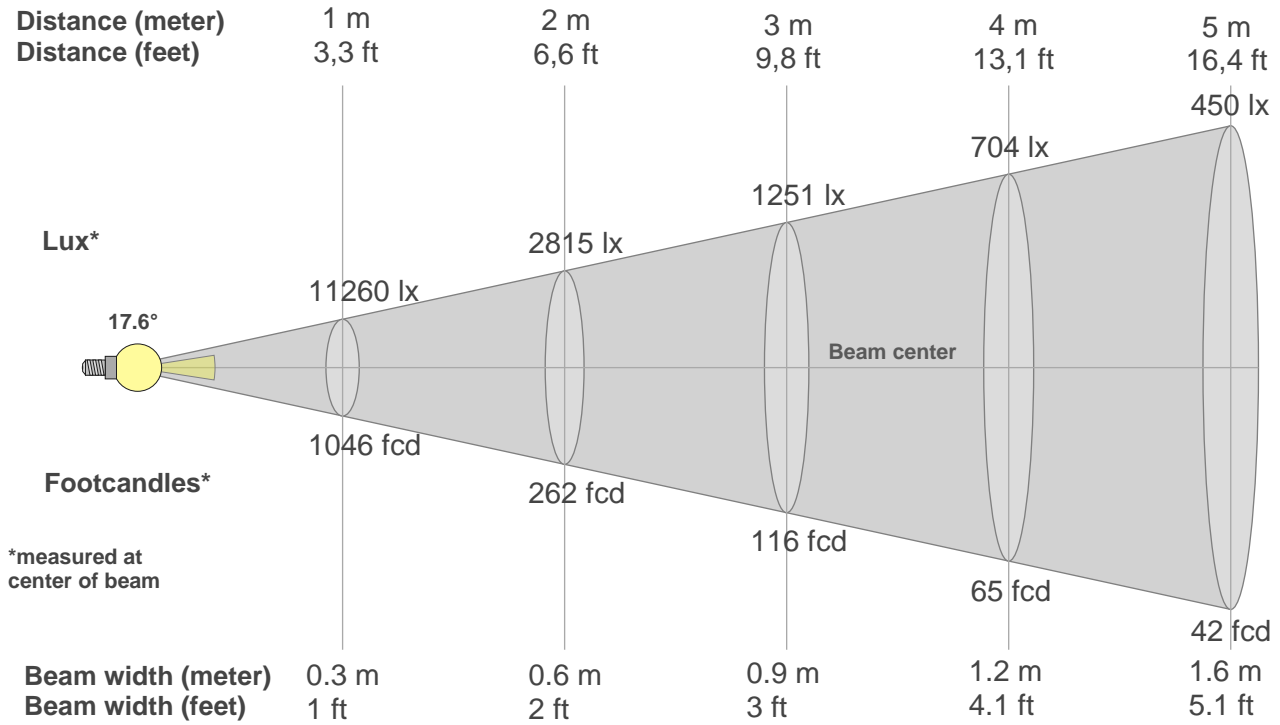
Color vector graphics



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
11260lx	2815lx	1251lx	704lx	450lx	313lx	230lx	176lx	139lx	113lx	93lx	78lx	67lx	57lx	50lx	44lx	39lx	35lx	31lx	28lx
1046.1fcd	261.5fcd	116.2fcd	65.4fcd	41.8fcd	29.1fcd	21.3fcd	16.3fcd	12.9fcd	10.5fcd	8.6fcd	7.3fcd	6.2fcd	5.3fcd	4.6fcd	4.1fcd	3.6fcd	3.2fcd	2.9fcd	2.6fcd

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°
11.3K	11.0K	10.7K	10.3K	9.6K	9.0K	8.1K	7.2K	6.4K	5.5K	4.6K	4.0K	3.3K	2.9K	2.4K	2.1K	1.7K	1.4K	1.2K	0.9K
100%	98%	95%	91%	86%	80%	72%	64%	56%	49%	41%	35%	30%	25%	22%	18%	15%	13%	10%	8%

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°
11.3K	11.0K	10.8K	10.3K	9.7K	9.0K	8.1K	7.3K	6.4K	5.5K	4.6K	3.9K	3.2K	2.8K	2.3K	1.9K	1.6K	1.3K	1.0K	0.7K
100%	98%	96%	92%	86%	80%	72%	64%	57%	48%	41%	35%	29%	25%	21%	17%	14%	12%	9%	6%

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°
11.3K	11.0K	10.8K	10.3K	9.7K	9.0K	8.2K	7.3K	6.4K	5.5K	4.6K	3.9K	3.2K	2.7K	2.3K	1.9K	1.6K	1.2K	1.0K	0.7K
100%	98%	96%	92%	86%	80%	73%	65%	57%	49%	41%	35%	28%	24%	20%	17%	14%	11%	9%	6%

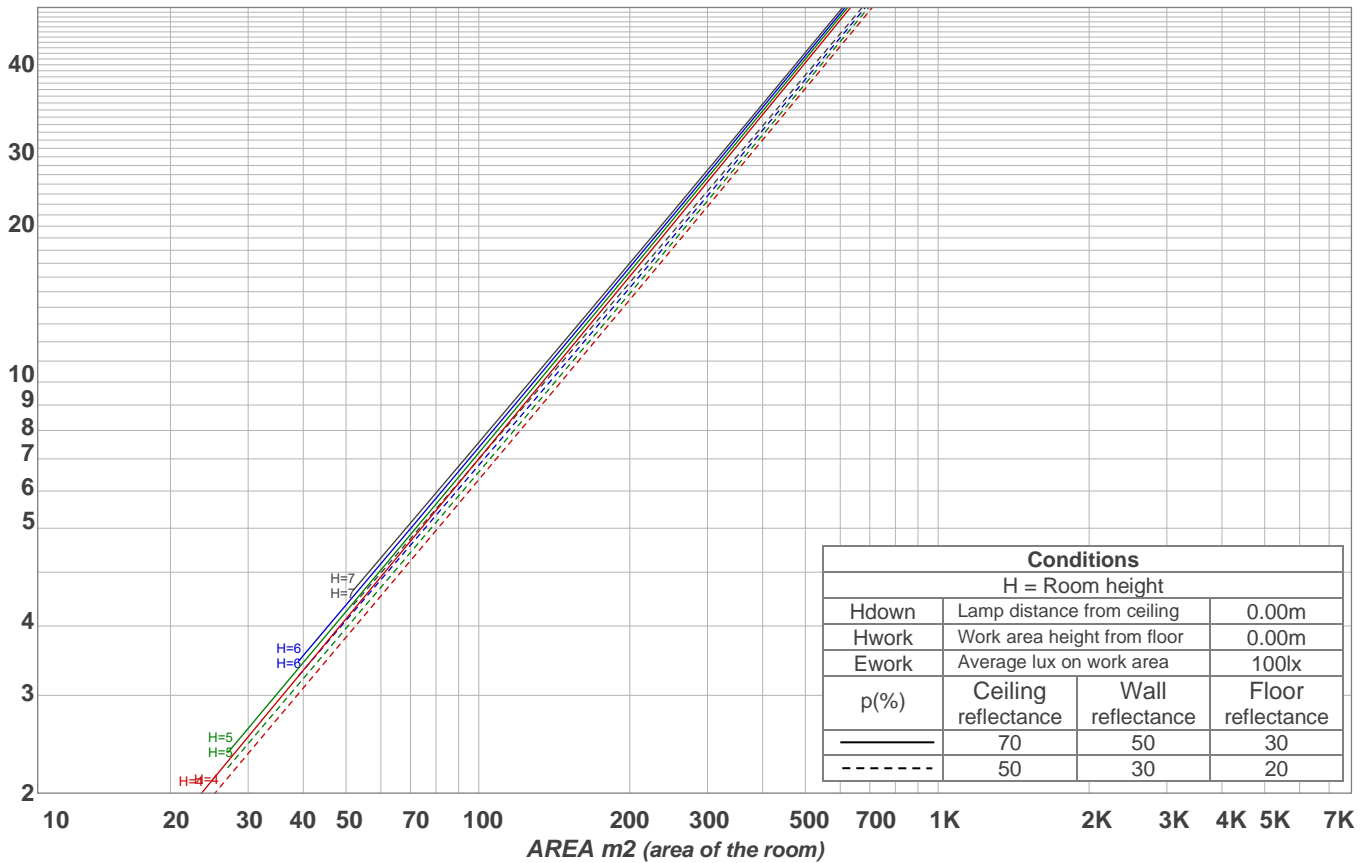
Intensities in 270° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
11.3K	11.0K	10.8K	10.3K	9.6K	9.0K	8.1K	7.2K	6.3K	5.5K	4.6K	4.0K	3.3K	2.8K	2.4K	2.0K	1.7K	1.4K	1.1K	0.8K
100%	98%	96%	92%	86%	80%	72%	64%	56%	49%	41%	35%	29%	25%	21%	18%	15%	12%	10%	7%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
17.6°	35.5°	42.7°	98.5%	98.1%

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	110	108	107	106	105	104	103	102	100	99	99	97	97	97	
2	112	109	106	104	110	107	105	103	104	102	100	101	100	98	99	97	96	97	96	95	
3	109	105	102	99	107	104	101	98	101	99	97	99	97	96	97	95	94	94	93	92	
4	107	102	98	96	105	101	98	95	99	96	94	97	95	93	95	94	92	92	91	90	
5	104	99	96	93	103	98	95	93	97	94	92	95	93	91	94	92	90	90	89	88	
6	102	97	93	91	101	96	93	90	95	92	90	94	91	89	93	90	89	88	87	86	
7	100	95	91	89	99	94	91	88	93	90	88	92	89	88	91	89	87	86	85	84	
8	98	93	89	87	97	92	89	87	91	88	86	90	88	86	90	87	86	85	84	83	
9	96	91	87	85	96	90	87	85	90	87	85	89	86	85	88	86	84	83	82	81	
10	95	89	86	84	94	89	86	84	88	85	83	88	85	83	87	85	83	82	81	80	

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
706 lm	555 lm	44.9 lm	8.03 lm	4.38 lm	4.50 lm	4.98 lm	6.53 lm	7.89 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