

Light efficiency:



Output: 948 lm

Light quality:

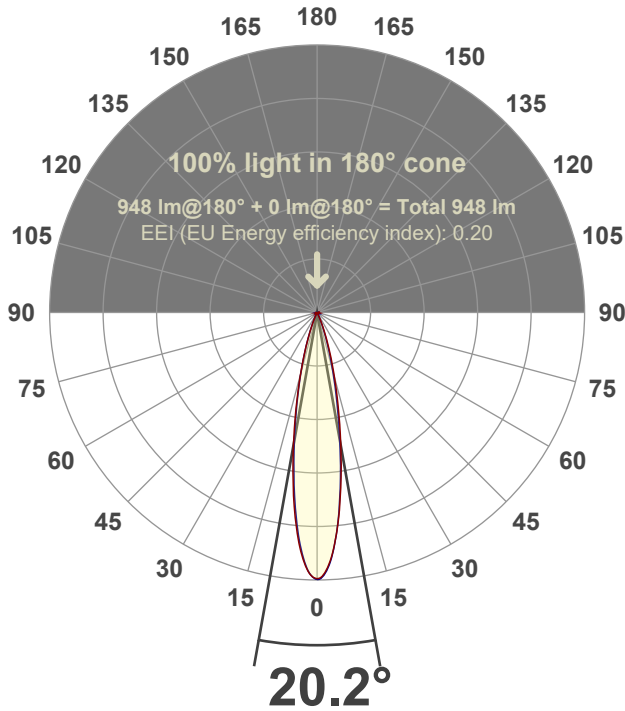


Peak: 6129 cd

Power: 14.2 W



Beam angle



Test number:

GR-F-F-CZ14-30k-SP-SQ-91A-Rev2

Luminaire Model:

Graffiti Flat Square Fixed Downlight-CZ14 30k 15° Optic-Solite

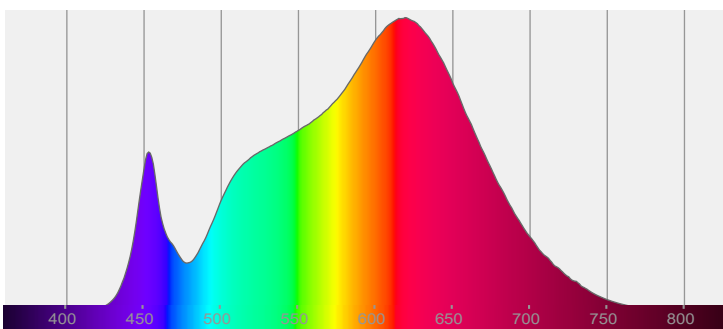
Date and time:

6/30/2022 9:28:35 PM

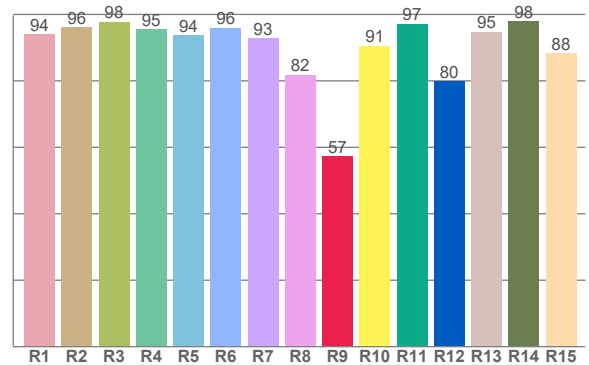
Delivered Lumens

948

Spectra



CRI: 93.5 (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 <sub>f</sub>	TM30 R <sub>g</sub>	CQS	x	y	u	v	Δuv
	93.5	57.2	92.2	99.2	91.8	0.438	0.408	0.250	0.349	0.0014

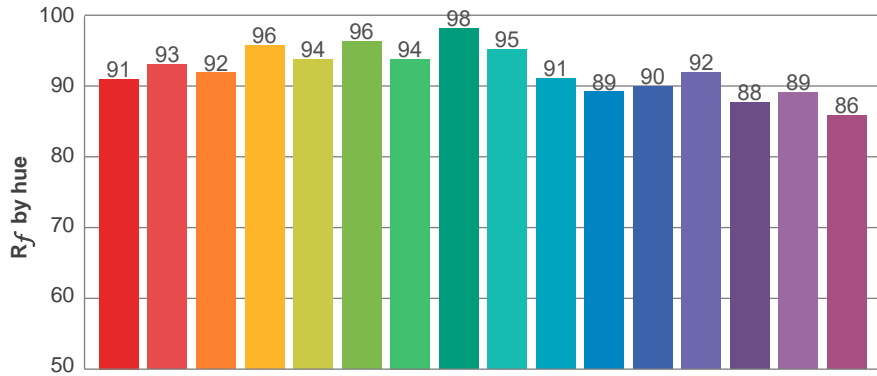
**$R_f$  92.2**  
Fidelity index  $R_f$

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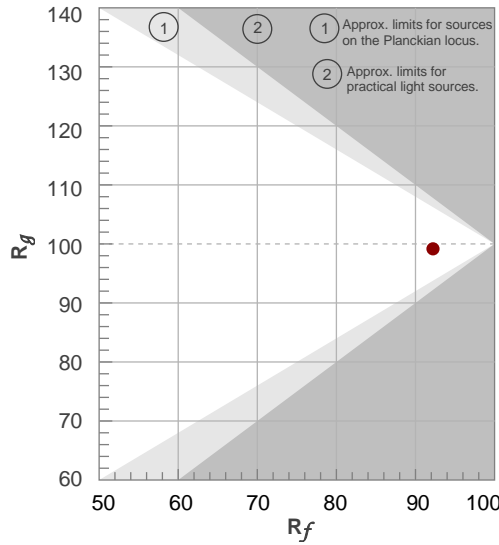
**$R_g$  99.2**  
Gammut index  $R_g$

TM30: 92.2

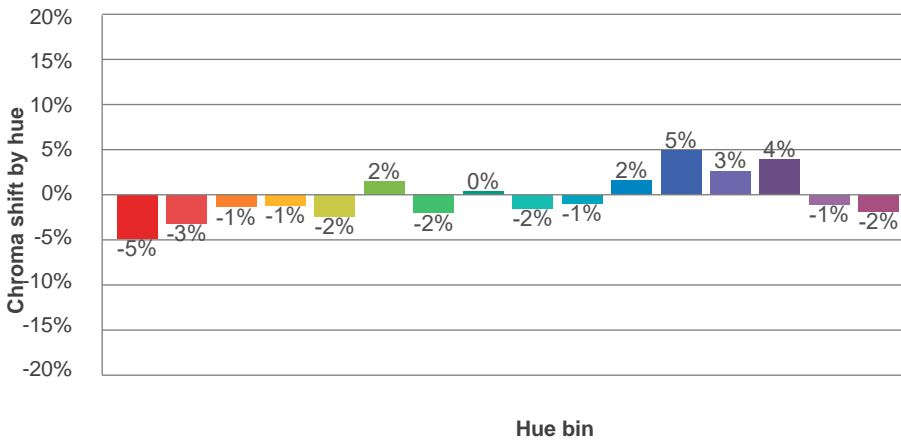
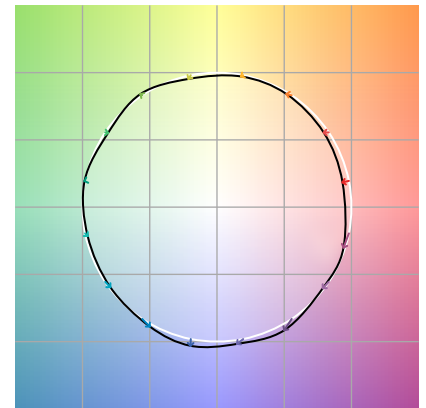
TM-30Color



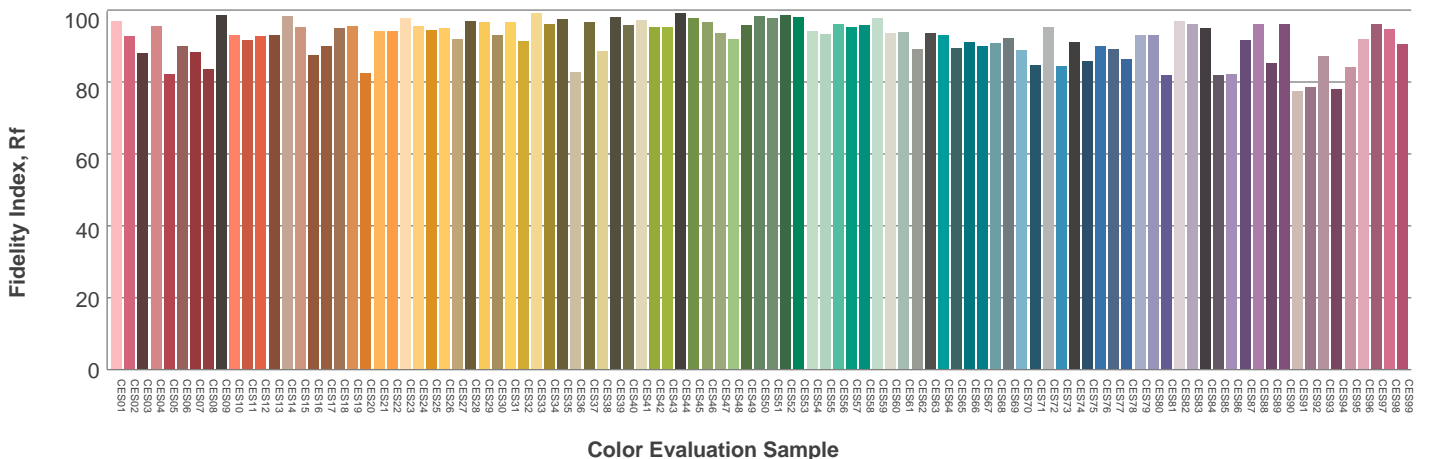
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	92	-1%	4%
4	96	-1%	1%
5	94	-2%	2%
6	96	2%	1%
7	94	-2%	-1%
8	98	0%	0%
9	95	-2%	2%
10	91	-1%	5%
11	89	2%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-6%
16	86	-2%	-11%



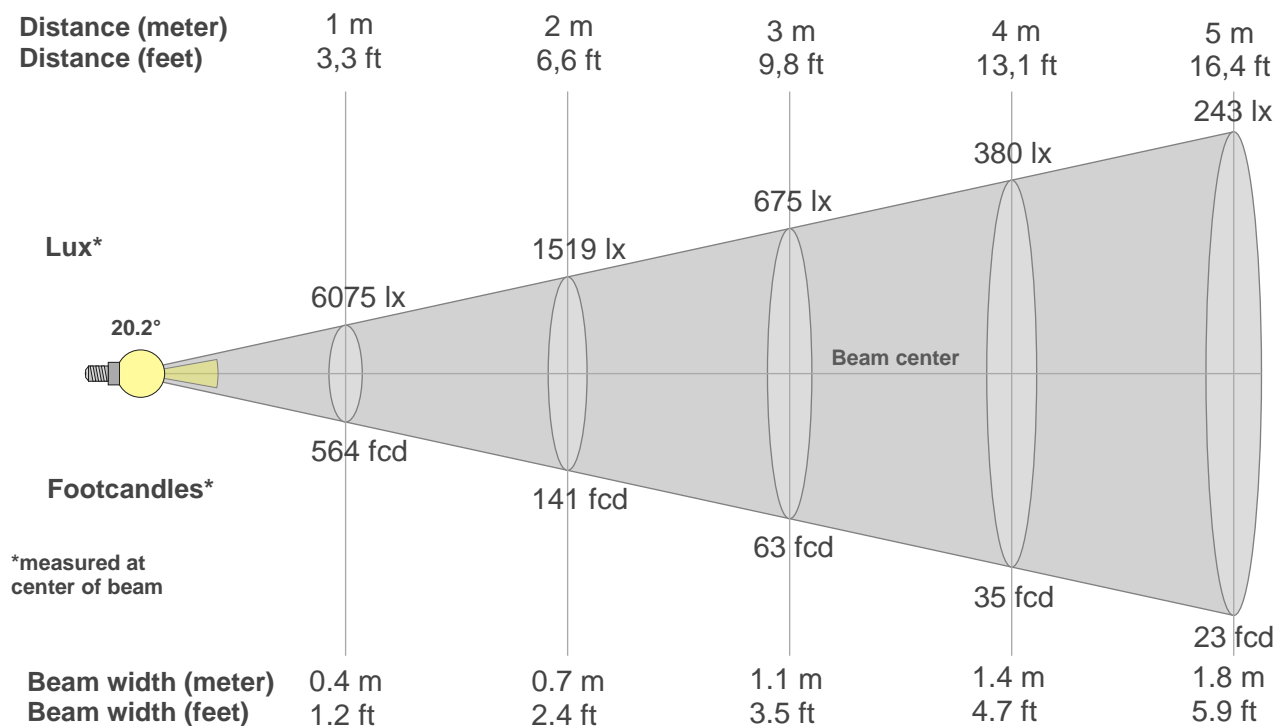
Color vector graphics



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
6075lx	1519lx	675lx	380lx	243lx	169lx	124lx	95lx	75lx	61lx	50lx	42lx	36lx	31lx	27lx	24lx	21lx	19lx	17lx	15lx
564.4fcd	141.1fcd	62.7fcd	35.3fcd	22.6fcd	15.7fcd	11.5fcd	8.8fcd	7fcd	5.6fcd	4.7fcd	3.9fcd	3.3fcd	2.9fcd	2.5fcd	2.2fcd	2fcd	1.7fcd	1.6fcd	1.4fcd

### 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°
6075	6057	5878	5700	5417	5086	4743	4345	3946	3555	3168	2789	2458	2128	1842	1581	1329	1132	935	771
100%	100%	97%	94%	89%	84%	78%	72%	65%	59%	52%	46%	40%	35%	30%	26%	22%	19%	15%	13%

### 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°
6075	6058	5901	5744	5419	5081	4708	4286	3864	3448	3032	2646	2302	1957	1685	1422	1184	989	795	650
100%	100%	97%	95%	89%	84%	77%	71%	64%	57%	50%	44%	38%	32%	28%	23%	19%	16%	13%	11%

### 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°
6075	6025	5931	5697	5463	5127	4762	4384	3971	3559	3167	2782	2414	2097	1780	1516	1271	1041	866	690
100%	99%	98%	94%	90%	84%	78%	72%	65%	59%	52%	46%	40%	35%	29%	25%	21%	17%	14%	11%

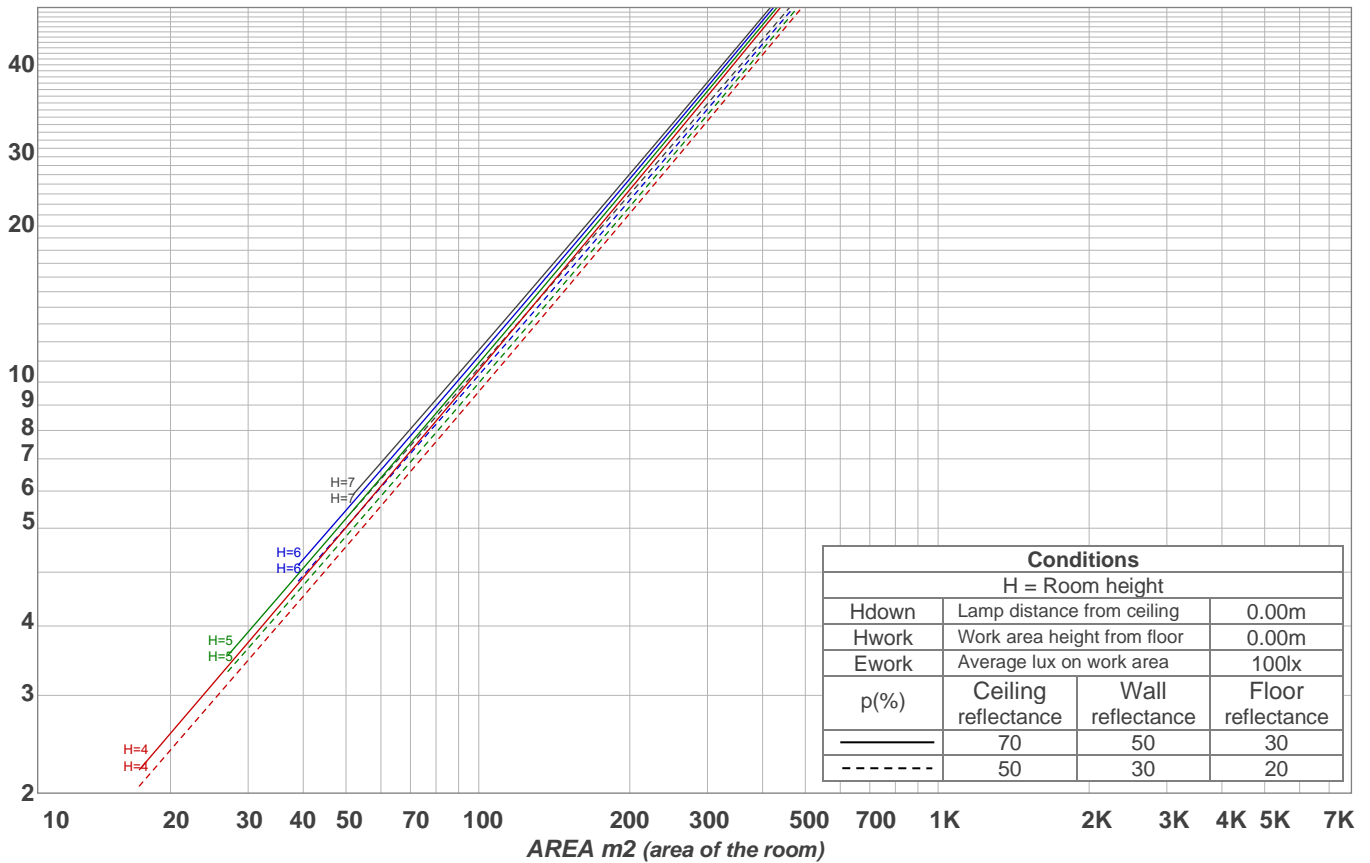
### Intensities in 270° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
6075	6017	5936	5660	5384	5046	4652	4258	3842	3427	3036	2670	2305	2016	1729	1474	1253	1032	864	698
100%	99%	98%	93%	89%	83%	77%	70%	63%	56%	50%	44%	38%	33%	28%	24%	21%	17%	14%	11%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
20.2°	39.2°	50°	98.9%	98.5%

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	109	113	111	109	108	107	106	104	103	102	101	100	99	98	98	97	96	
2	112	108	105	103	110	107	104	102	103	101	100	101	99	98	98	97	96	96	94	93	
3	108	104	101	98	107	103	100	97	100	98	96	98	96	94	96	94	93	92	90	89	
4	106	101	97	94	104	100	96	94	98	95	92	96	93	91	94	92	90	89	87	86	
5	103	97	94	91	102	97	93	90	95	92	90	94	91	89	92	90	88	87	85	84	
6	100	95	91	88	99	94	90	88	93	90	87	91	89	87	90	88	86	85	83	82	
7	98	92	88	86	97	92	88	85	91	87	85	90	87	85	89	86	84	83	81	80	
8	96	90	86	84	95	89	86	83	88	85	83	88	85	83	87	84	82	81	79	78	
9	94	88	84	82	93	87	84	81	87	83	81	86	83	81	85	83	81	80	78	77	
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	84	81	79	78	76	75	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
419 lm	415 lm	85.2 lm	11.3 lm	3.95 lm	2.73 lm	2.91 lm	3.58 lm	3.69 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