

Light efficiency:



Output: 957 lm

Light quality:

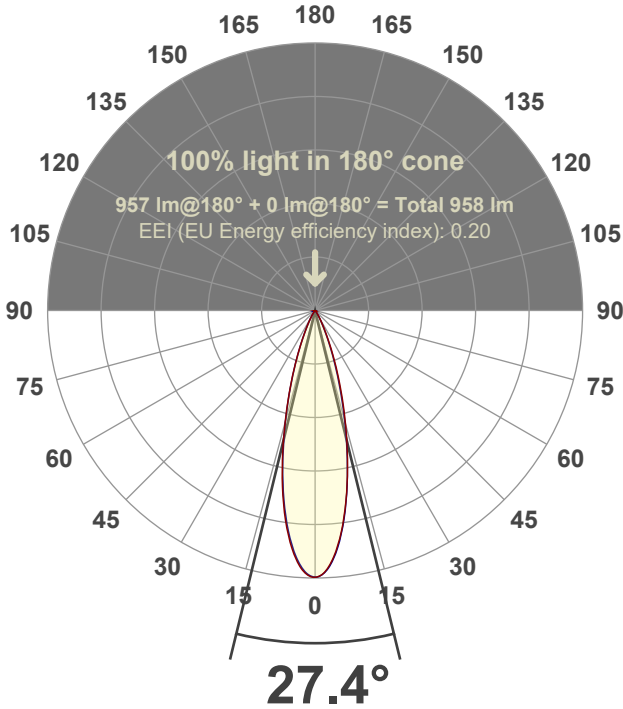


Peak: 3529 cd

Power: 14.2 W



Beam angle



Test number:

GR-F-F-CZ14-30k-NF-RD-91A-Rev2

Luminaire Model:

Graffiti Flat Round Fixed Downlight-CZ14 30k 24° Optic-Solite

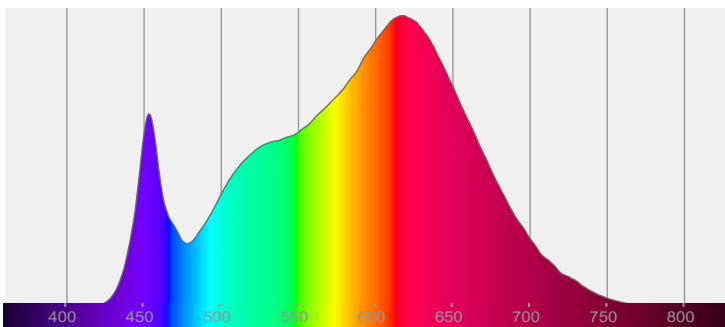
Date and time:

3/9/2022 2:33:39 PM

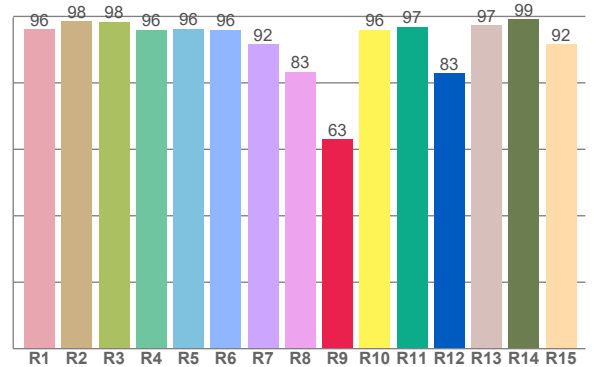
Delivered Lumens

957

Spectra



CRI: 94.5 (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
	94.5	63.0	92.2	100.4	91.8	0.425	0.394	0.248	0.344	-0.0025

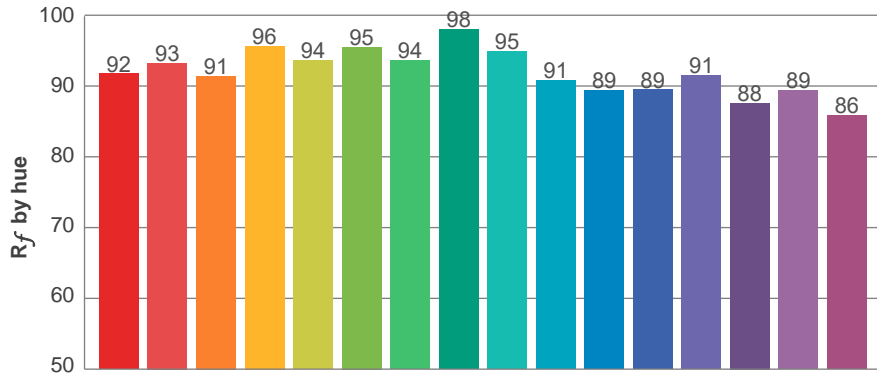
**$R_f$  92.2**  
Fidelity index  $R_f$

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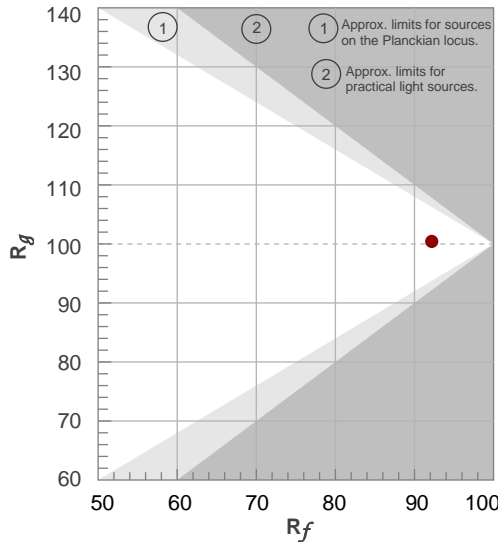
**$R_g$  100.4**  
Gammut index  $R_g$

TM30: 92.2

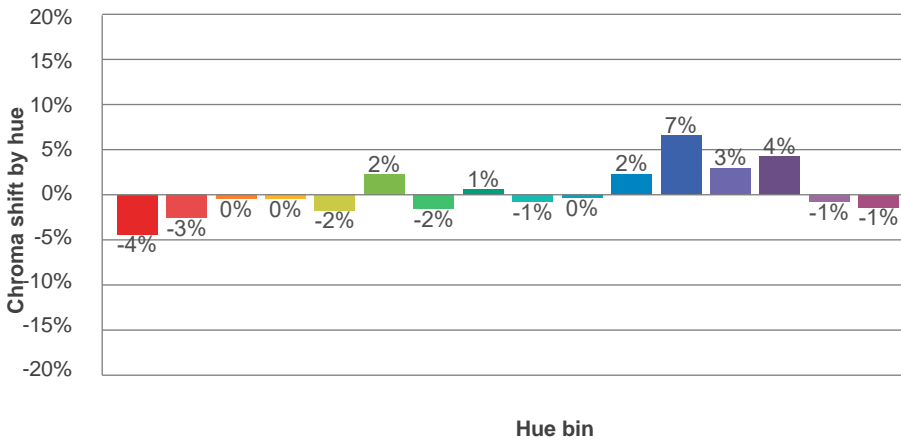
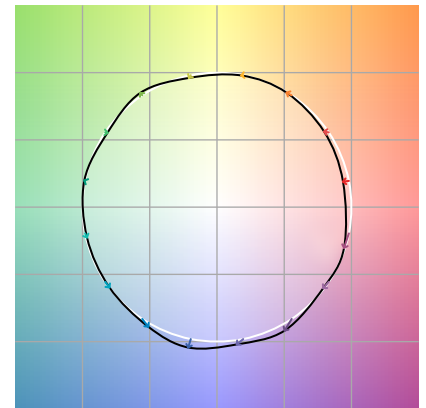
TM-30Color



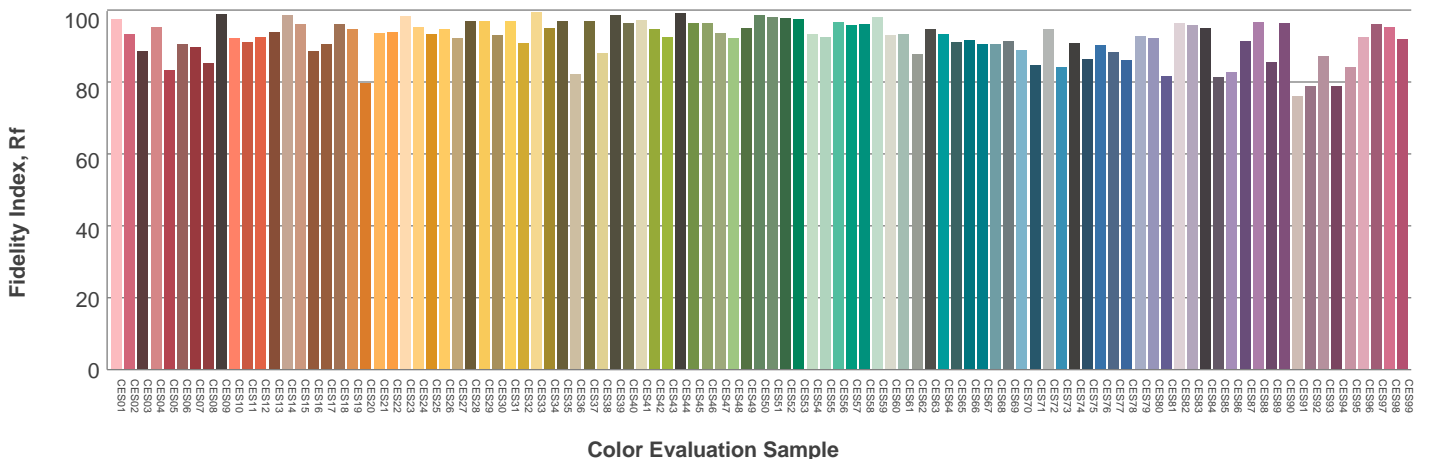
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	0%
2	93	-3%	2%
3	91	0%	4%
4	96	0%	1%
5	94	-2%	2%
6	95	2%	0%
7	94	-2%	-1%
8	98	1%	0%
9	95	-1%	3%
10	91	0%	5%
11	89	2%	7%
12	89	7%	-1%
13	91	3%	-5%
14	88	4%	-9%
15	89	-1%	-6%
16	86	-1%	-11%



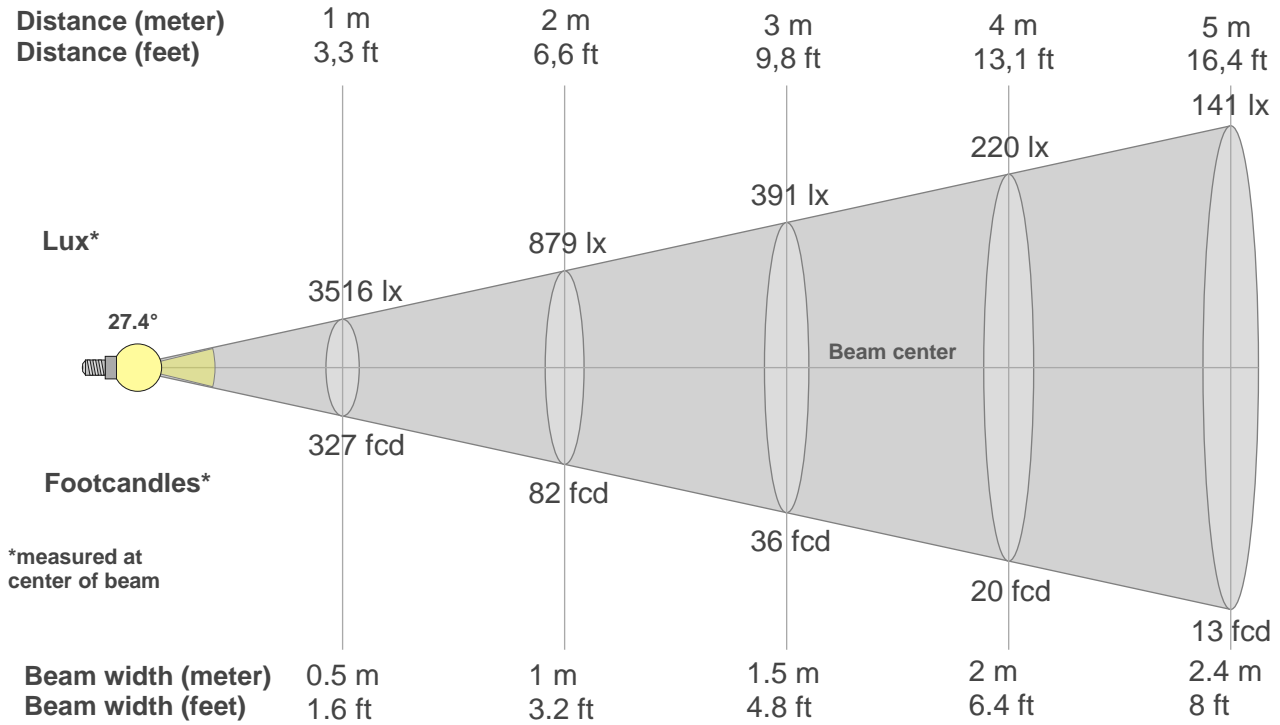
Color vector graphics



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
3516lx	879lx	391lx	220lx	141lx	98lx	72lx	55lx	43lx	35lx	29lx	24lx	21lx	18lx	16lx	14lx	12lx	11lx	10lx	9lx
326.6fcd	81.7fcd	36.3fcd	20.4fcd	13.1fcd	9.1fcd	6.7fcd	5.1fcd	4fcd	3.3fcd	2.7fcd	2.3fcd	1.9fcd	1.7fcd	1.5fcd	1.3fcd	1.1fcd	1fcd	0.9fcd	0.8fcd

#### Intensities in 0° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3516	3466	3298	3051	2751	2418	2071	1728	1408	1116	856	634	452	320	226	160	114	81	60	45
100%	99%	94%	87%	78%	69%	59%	49%	40%	32%	24%	18%	13%	9%	6%	5%	3%	2%	2%	1%

#### Intensities in 90° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3516	3457	3305	3070	2772	2422	2057	1700	1363	1056	799	590	421	291	199	137	97	69	49	35
100%	98%	94%	87%	79%	69%	59%	48%	39%	30%	23%	17%	12%	8%	6%	4%	3%	2%	1%	1%

#### Intensities in 180° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3516	3467	3325	3100	2810	2463	2095	1726	1377	1068	809	595	427	300	210	151	111	82	60	44
100%	99%	95%	88%	80%	70%	60%	49%	39%	30%	23%	17%	12%	9%	6%	4%	3%	2%	2%	1%

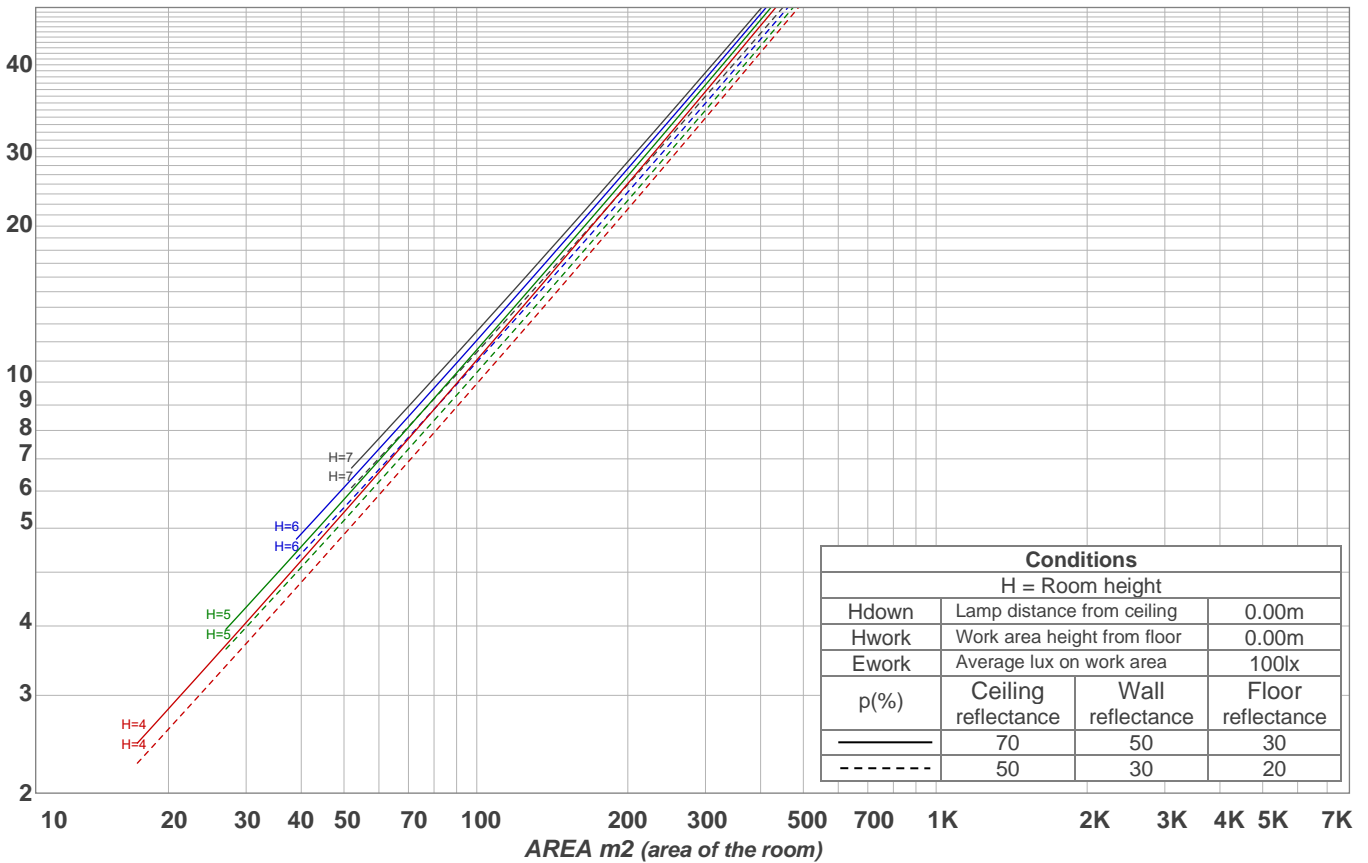
#### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3516	3471	3304	3062	2764	2426	2063	1697	1362	1061	800	583	413	292	204	142	99	71	51	36
100%	99%	94%	87%	79%	69%	59%	48%	39%	30%	23%	17%	12%	8%	6%	4%	3%	2%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
27.4°	50.2°	66.2°	98.1%	96.8%

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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	95	95	
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91	91	91	
3	106	101	97	94	104	100	96	93	97	94	92	95	92	90	93	91	89	88	88	88	
4	102	97	92	89	101	95	91	88	93	90	87	92	89	86	90	87	85	84	84	84	
5	99	93	88	85	98	92	87	84	90	86	84	89	85	83	87	84	82	81	81	81	
6	96	89	84	81	95	88	84	81	87	83	80	86	82	80	84	82	79	78	78	78	
7	93	86	81	78	92	85	81	78	84	80	77	83	80	77	82	79	77	76	76	76	
8	90	83	78	75	89	82	78	75	81	77	75	80	77	74	80	76	74	73	73	73	
9	87	80	76	73	86	80	75	72	79	75	72	78	75	72	77	74	72	71	71	71	
10	85	78	73	70	84	77	73	70	76	73	70	76	72	70	75	72	70	69	69	69	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
280 lm	419 lm	175 lm	43.6 lm	13.1 lm	7.93 lm	7.38 lm	6.46 lm	4.05 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