

Light efficiency:



Output: 896 lm

Light quality:

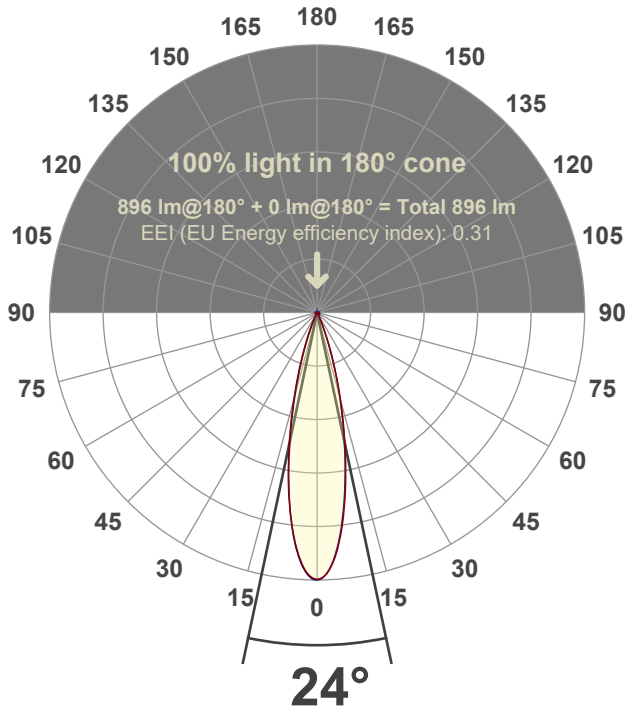


Peak: 4652 cd

Power: 21.2 W



Beam angle



Test number:

GR-F-F-A20-3019-NF-SQ-91A-Rev2

Luminaire Model:

Graffiti Flat Square Fixed Downlight-A20-3019 24° Optic-Solite

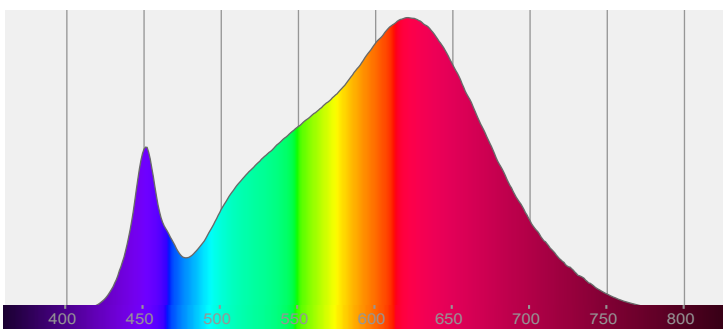
Date and time:

6/21/2022 8:37:54 PM

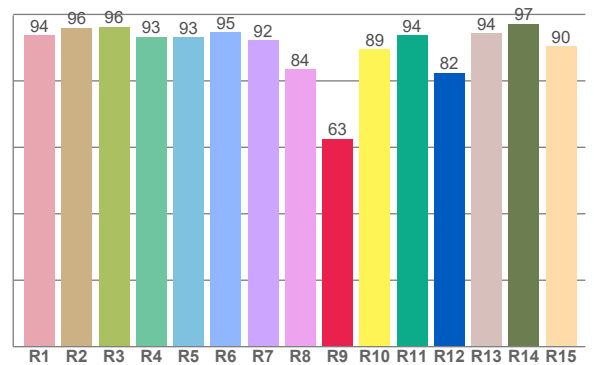
Delivered Lumens

896

Spectra



CRI: 92.8 (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
	92.8	62.6	91.1	101.5	89.8	0.435	0.398	0.252	0.346	-0.0023

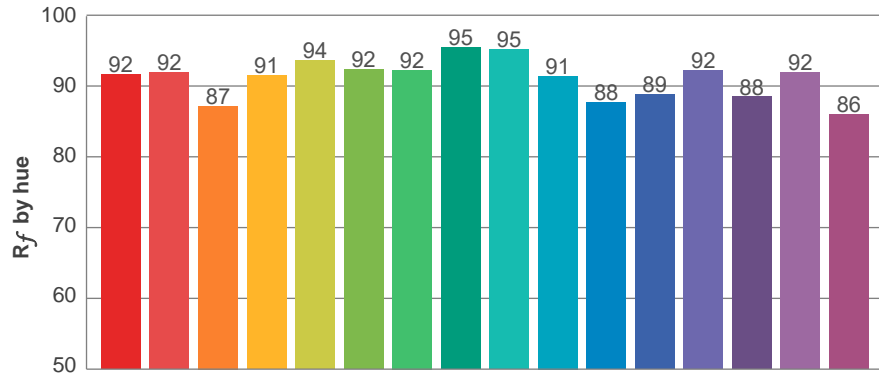
**$R_f$  91.1**  
Fidelity index  $R_f$

---

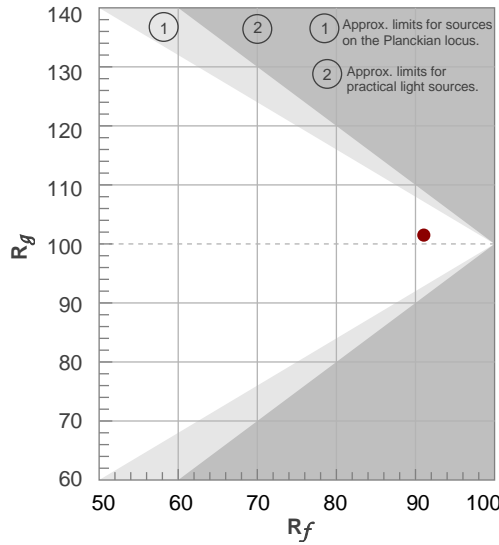
**$R_g$  101.5**  
Gammut index  $R_g$

TM30: 91.1

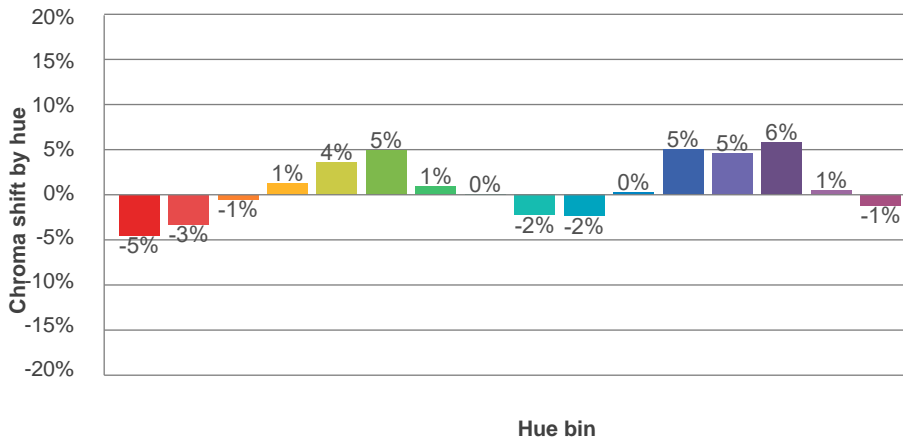
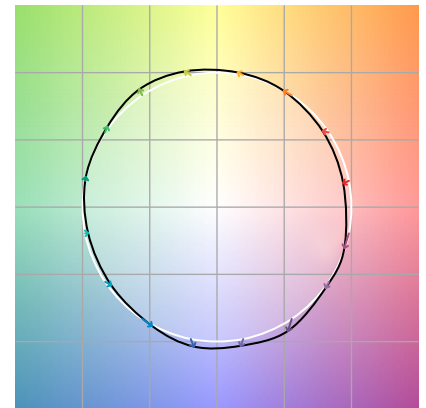
TM-30Color



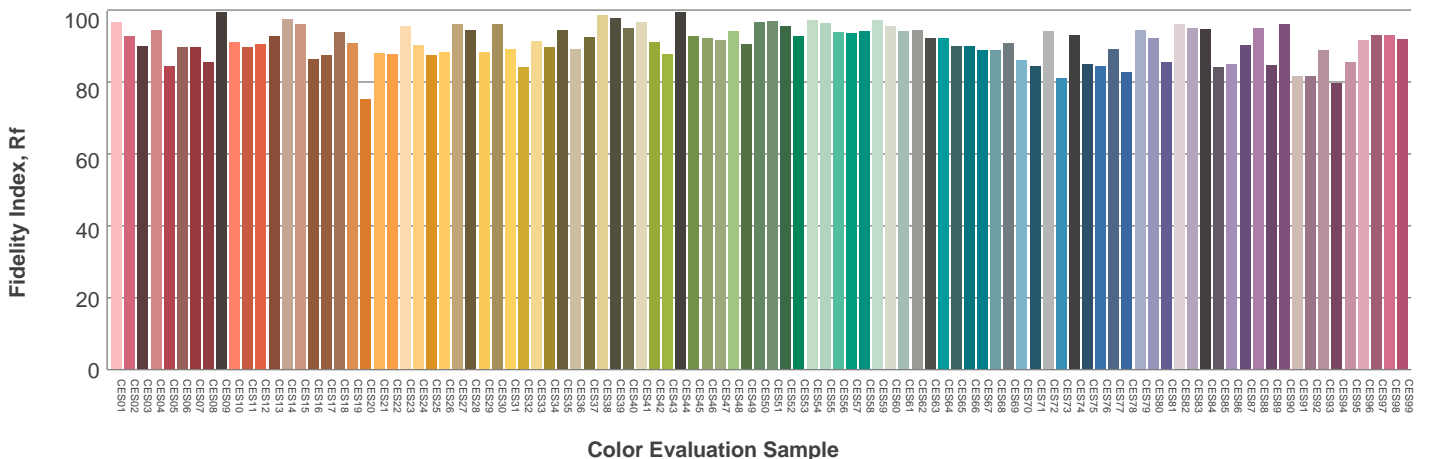
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	92	-5%	-1%
2	92	-3%	3%
3	87	-1%	7%
4	91	1%	4%
5	94	4%	4%
6	92	5%	-1%
7	92	1%	-4%
8	95	0%	-3%
9	95	-2%	0%
10	91	-2%	5%
11	88	0%	9%
12	89	5%	3%
13	92	5%	-3%
14	88	6%	-7%
15	92	1%	-5%
16	86	-1%	-11%



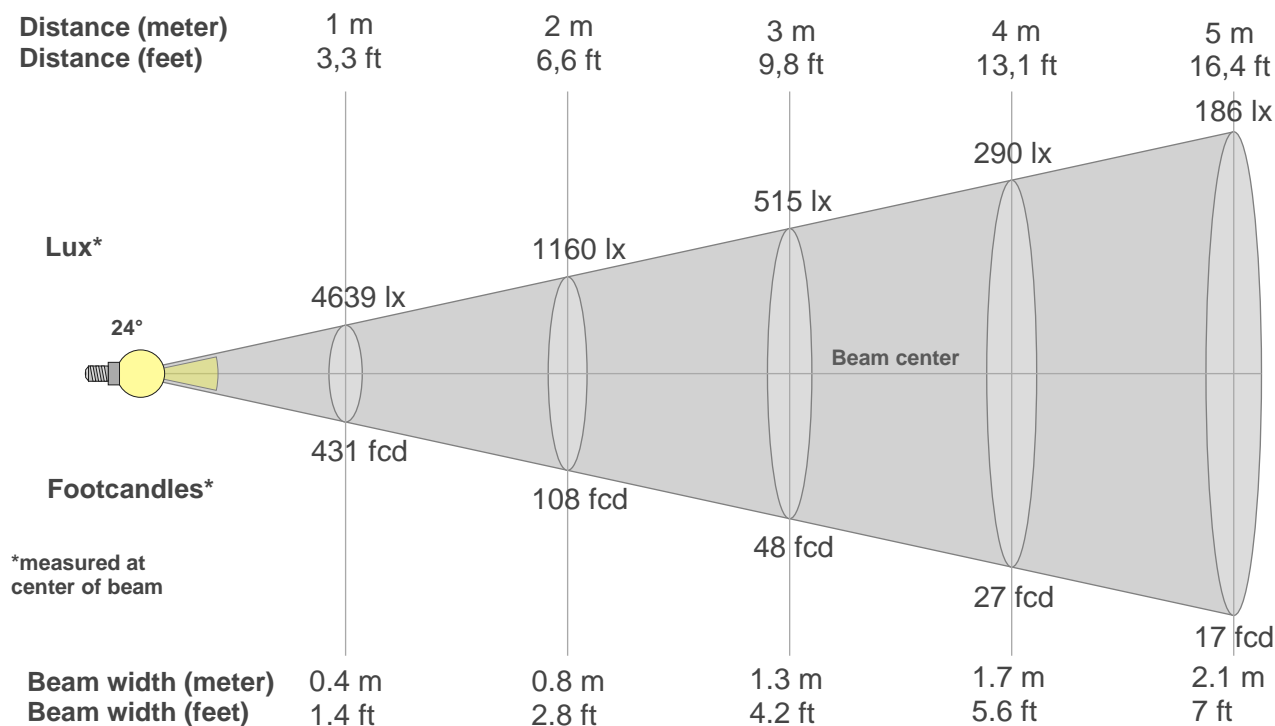
Color vector graphics



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
4639lx	1160lx	515lx	290lx	186lx	129lx	95lx	72lx	57lx	46lx	38lx	32lx	27lx	24lx	21lx	18lx	16lx	14lx	13lx	12lx
431fcd	107.8fcd	47.9fcd	26.9fcd	17.2fcd	12fcd	8.8fcd	6.7fcd	5.3fcd	4.3fcd	3.6fcd	3fcd	2.6fcd	2.2fcd	1.9fcd	1.7fcd	1.5fcd	1.3fcd	1.2fcd	1.1fcd

### 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°
4639	4568	4302	3902	3416	2883	2342	1827	1353	952	628	388	228	130	71	41	26	19	15	11
100%	98%	93%	84%	74%	62%	50%	39%	29%	21%	14%	8%	5%	3%	2%	1%	1%	0%	0%	0%

### 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°
4639	4540	4277	3874	3367	2824	2294	1791	1334	935	600	352	199	109	59	34	23	18	13	11
100%	98%	92%	84%	73%	61%	49%	39%	29%	20%	13%	8%	4%	2%	1%	1%	1%	0%	0%	0%

### 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°
4639	4545	4286	3901	3429	2900	2342	1822	1358	963	644	403	237	136	77	45	28	20	15	12
100%	98%	92%	84%	74%	63%	50%	39%	29%	21%	14%	9%	5%	3%	2%	1%	1%	0%	0%	0%

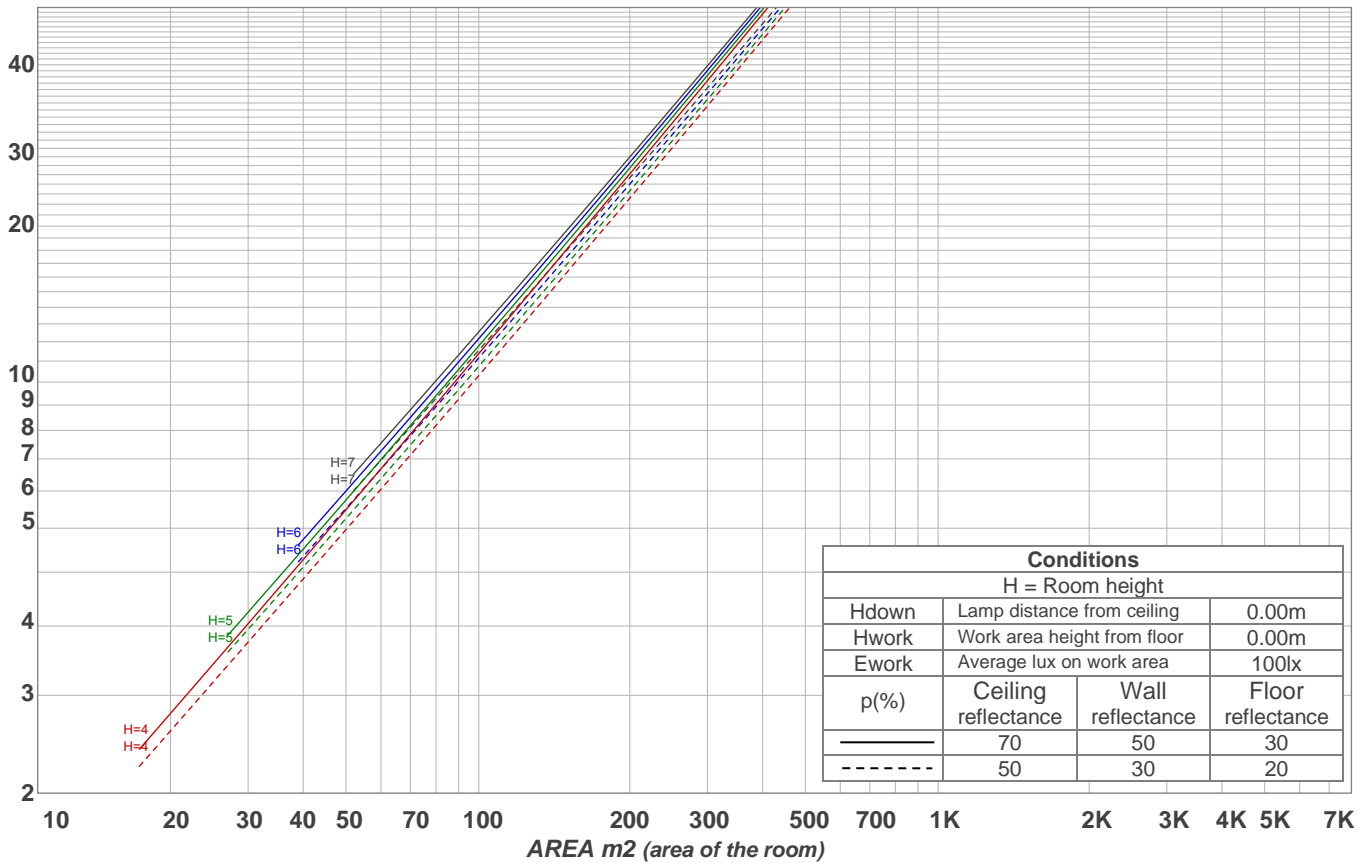
### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
4639	4557	4313	3925	3417	2859	2292	1757	1284	884	558	318	174	93	52	32	23	19	15	13
100%	98%	93%	85%	74%	62%	49%	38%	28%	19%	12%	7%	4%	2%	1%	1%	0%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
24°	42.2°	52.1°	98.5%	97.9%

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	107	107	105	104	103	102	101	100	99	98	98	96	96	
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	97	96	95	95	93	93	
3	108	103	100	97	106	102	99	96	100	97	95	97	95	93	95	93	92	92	90	90	
4	105	100	96	93	103	99	95	92	97	94	91	95	92	90	93	91	89	88	86	86	
5	102	96	92	89	101	95	92	89	94	91	88	92	90	88	91	89	87	86	84	84	
6	99	93	89	86	98	93	89	86	91	88	86	90	87	85	89	87	85	84	82	82	
7	97	91	87	84	96	90	86	84	89	86	83	88	85	83	87	85	83	82	80	80	
8	94	88	84	82	94	88	84	81	87	84	81	86	83	81	85	83	81	80	78	78	
9	92	86	82	80	91	86	82	79	85	81	79	84	81	79	83	81	79	78	76	76	
10	90	84	80	78	89	84	80	77	83	80	77	82	79	77	82	79	77	76	74	74	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
352 lm	423 lm	89.0 lm	11.2 lm	4.59 lm	3.16 lm	4.08 lm	4.74 lm	4.52 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