

Light efficiency:



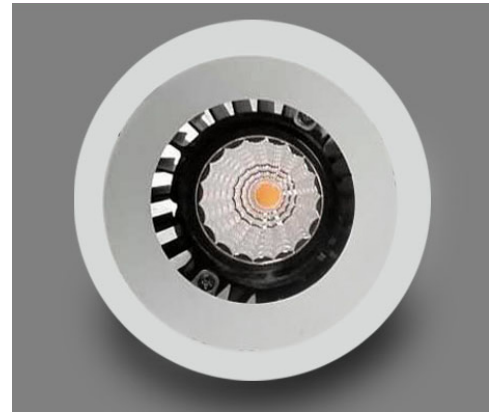
Output: 1452 lm

Light quality:

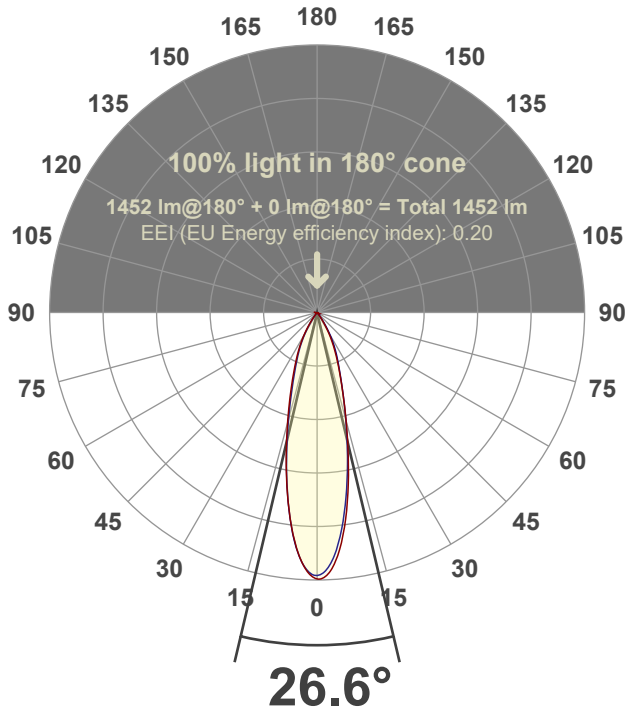


Peak: 4740 cd

Power: 21.3 W



Beam angle



Test number:

GR-O-F-A20-3019-NF-RD-91A-Rev2

Luminaire Model:

Graffiti Open Round Fixed Downlight-A20-3019 24° Optic-Solite

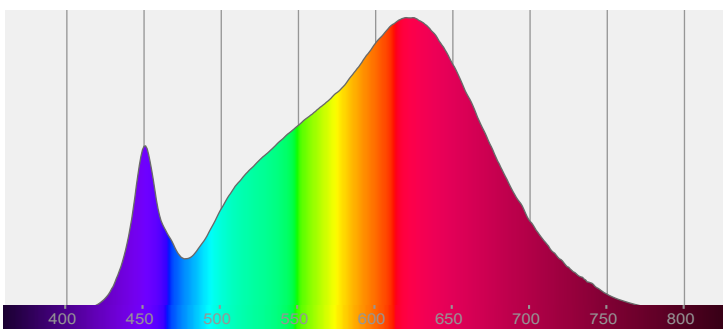
Date and time:

4/28/2022 7:52:22 PM

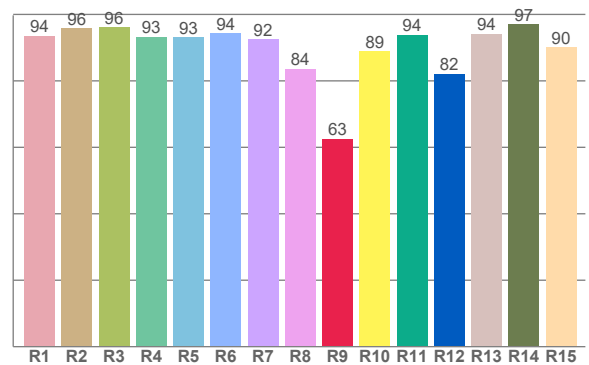
Delivered Lumens

1452

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	62.5	91.0	101.5	89.9	0.435	0.399	0.252	0.346	-0.0020

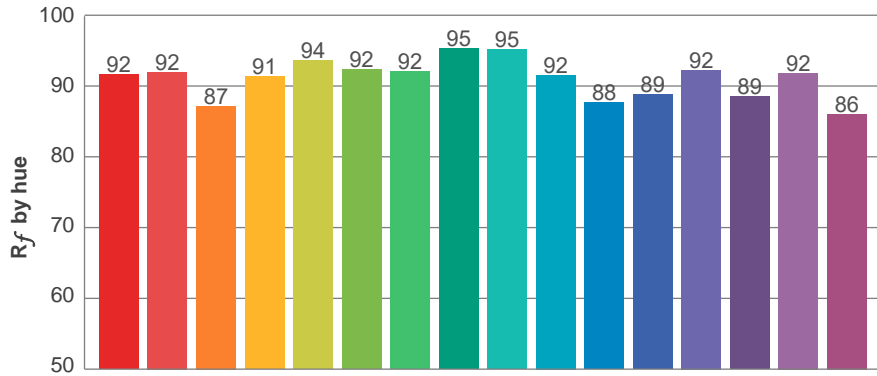
**$R_f$  91.0**  
Fidelity index  $R_f$

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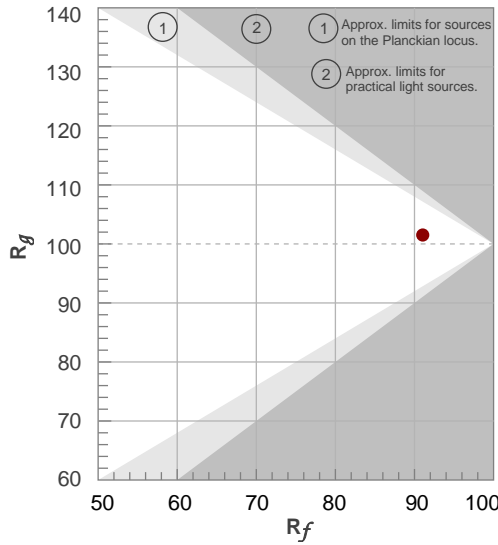
**$R_g$  101.5**  
Gammut index  $R_g$

TM30: 91.0

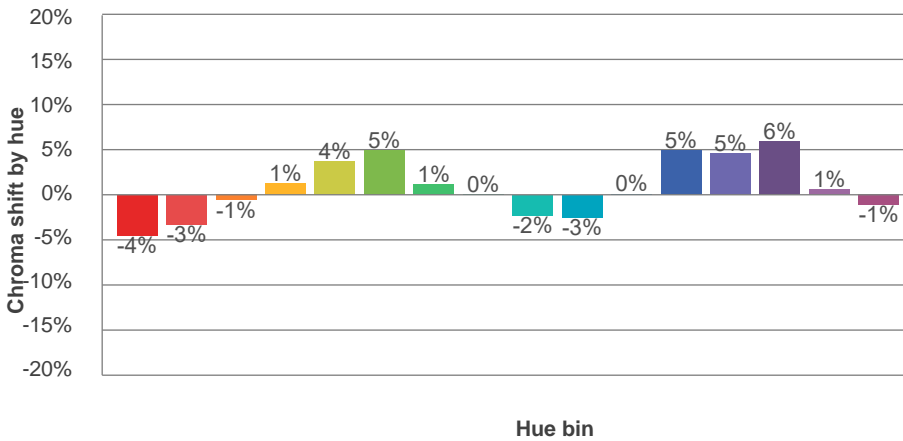
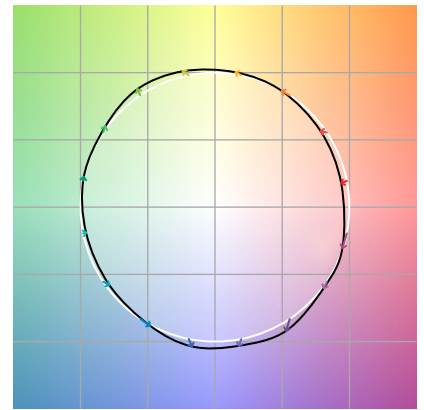
TM-30Color



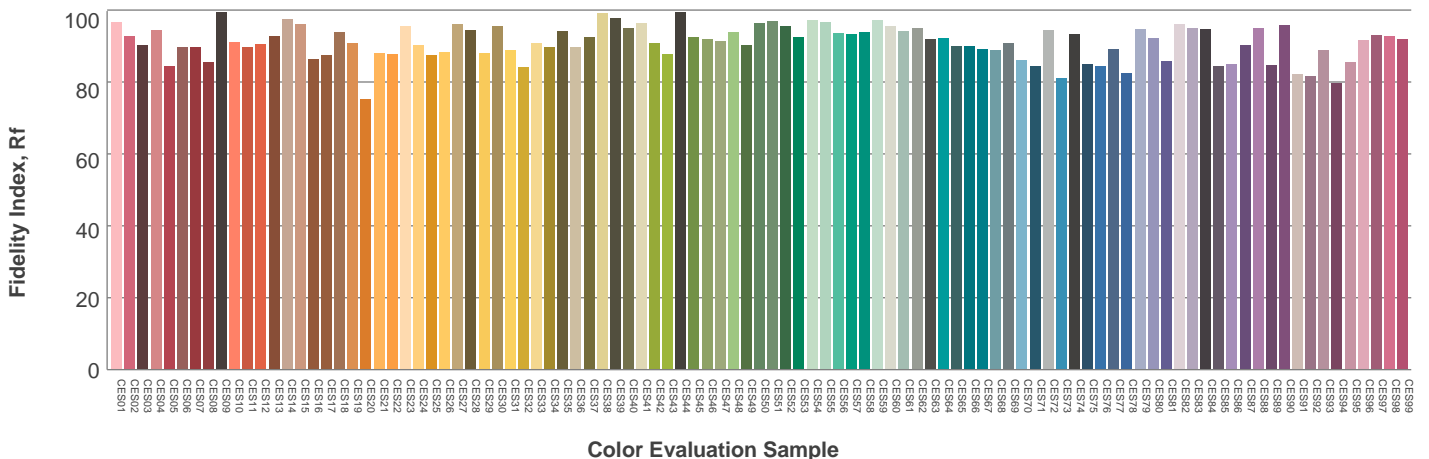
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-1%
2	92	-3%	3%
3	87	-1%	7%
4	91	1%	4%
5	94	4%	4%
6	92	5%	-1%
7	92	1%	-5%
8	95	0%	-3%
9	95	-2%	0%
10	92	-3%	4%
11	88	0%	9%
12	89	5%	4%
13	92	5%	-3%
14	89	6%	-7%
15	92	1%	-5%
16	86	-1%	-11%



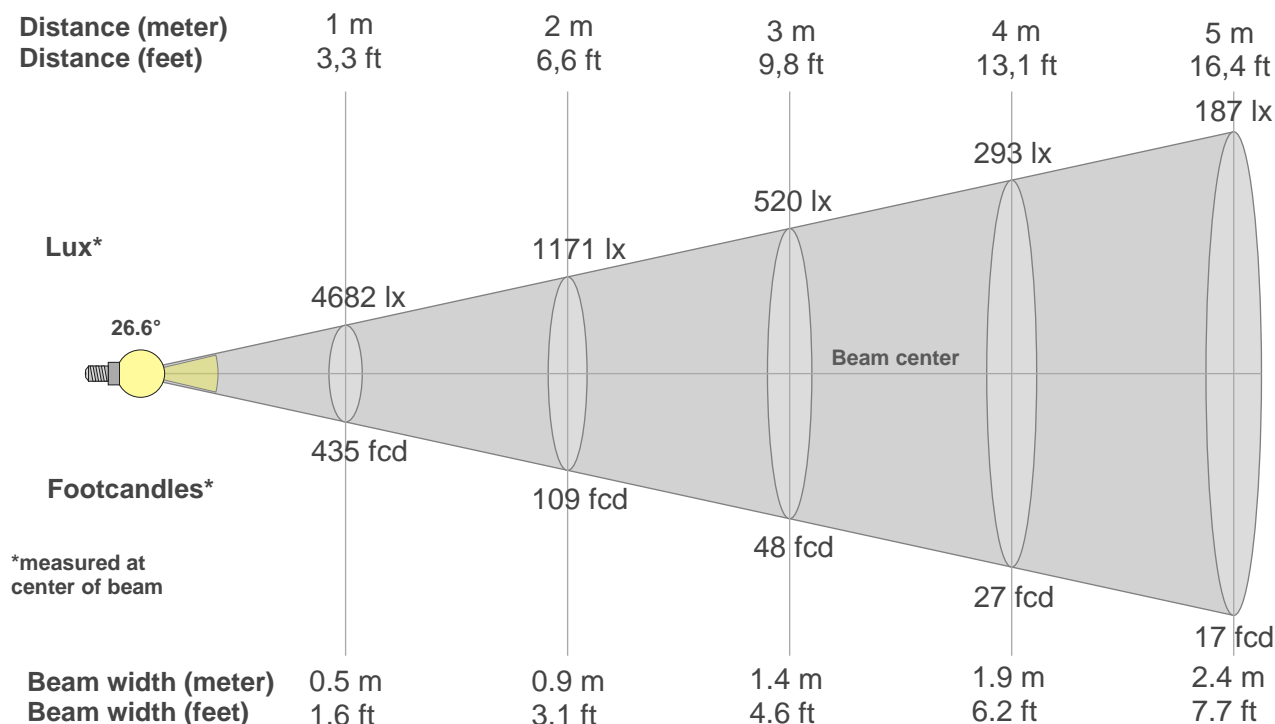
Color vector graphics



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
4682lx	1171lx	520lx	293lx	187lx	130lx	96lx	73lx	58lx	47lx	39lx	33lx	28lx	24lx	21lx	18lx	16lx	14lx	13lx	12lx
435fcd	108.8fcd	48.3fcd	27.2fcd	17.4fcd	12.1fcd	8.9fcd	6.8fcd	5.4fcd	4.4fcd	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°
4682	4656	4448	4113	3679	3181	2684	2226	1822	1481	1216	1012	837	683	544	419	305	213	144	95
100%	99%	95%	88%	79%	68%	57%	48%	39%	32%	26%	22%	18%	15%	12%	9%	7%	5%	3%	2%

#### 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°
4682	4569	4342	3967	3531	3069	2609	2173	1797	1490	1240	1041	883	745	611	481	359	248	158	100
100%	98%	93%	85%	75%	66%	56%	46%	38%	32%	26%	22%	19%	16%	13%	10%	8%	5%	3%	2%

#### 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°
4682	4622	4363	3997	3567	3110	2655	2228	1867	1560	1303	1090	915	766	627	496	373	263	178	120
100%	99%	93%	85%	76%	66%	57%	48%	40%	33%	28%	23%	20%	16%	13%	11%	8%	6%	4%	3%

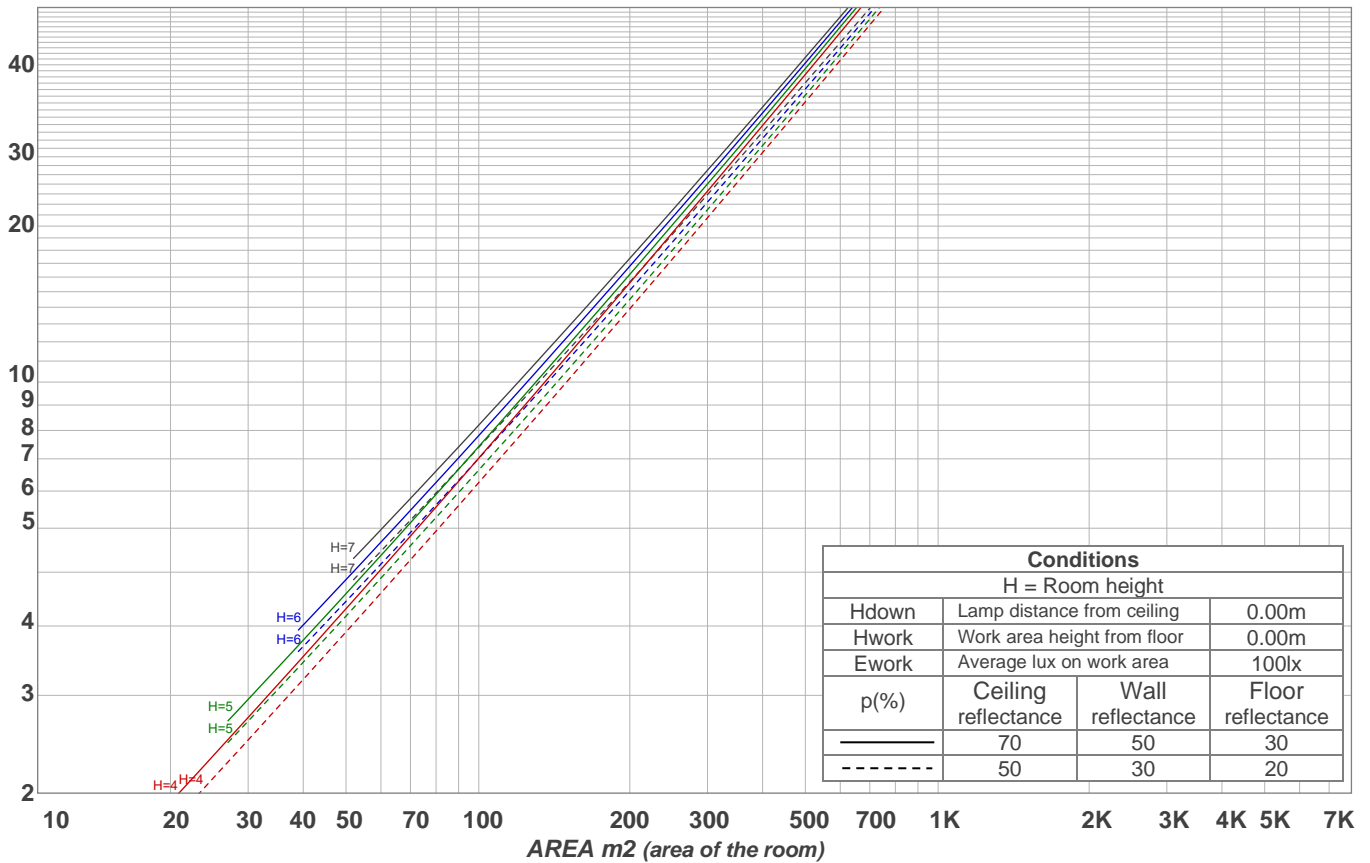
#### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
4682	4575	4357	4014	3570	3093	2621	2180	1790	1462	1216	1017	855	713	575	444	322	219	141	88
100%	98%	93%	86%	76%	66%	56%	47%	38%	31%	26%	22%	18%	15%	12%	9%	7%	5%	3%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26.6°	59.7°	74.6°	99.3%	98.6%

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	102	100	108	104	101	99	101	99	96	98	96	94	95	94	92	91	91	91	
3	106	100	96	93	104	99	95	92	97	93	91	94	92	89	92	90	88	87	87	87	
4	102	96	91	88	100	95	90	87	92	89	86	91	88	85	89	86	84	83	83	83	
5	98	91	87	83	97	90	86	83	89	85	82	87	84	81	86	83	81	79	79	79	
6	94	87	82	79	93	87	82	79	85	81	78	84	80	78	83	80	77	76	76	76	
7	91	84	79	75	90	83	79	75	82	78	75	81	77	75	80	77	74	73	73	73	
8	88	80	76	72	87	80	75	72	79	75	72	78	74	72	77	74	71	70	70	70	
9	85	77	73	69	84	77	72	69	76	72	69	75	72	69	75	71	69	68	68	68	
10	82	75	70	67	81	74	70	67	73	69	67	73	69	66	72	69	66	65	65	65	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
366 lm	555 lm	365 lm	130 lm	20.0 lm	4.83 lm	3.21 lm	3.39 lm	3.33 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