

Light efficiency:



Output: 1304 lm

Light quality:

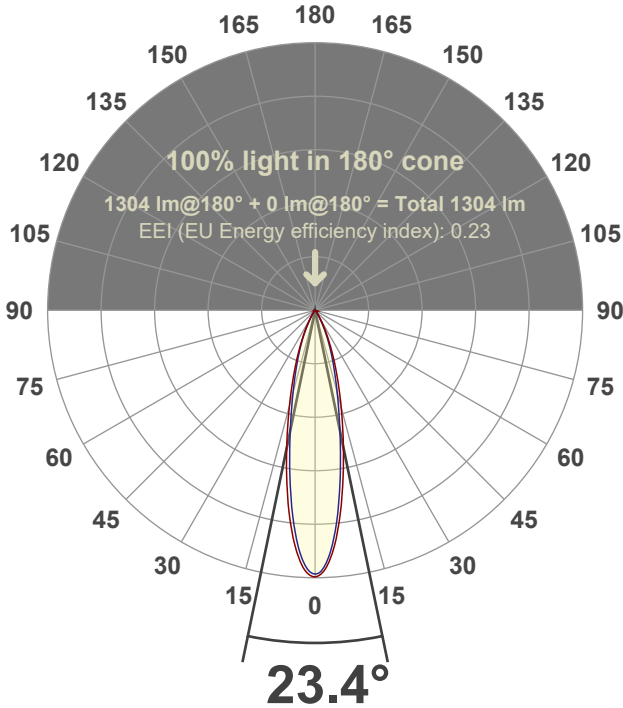


Peak: 5427 cd

Power: 21.2 W



Beam angle



Test number:

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

Luminaire Model:

Graffiti Regress Square Fixed Downlight-A20-3019 15° Optic-Solite

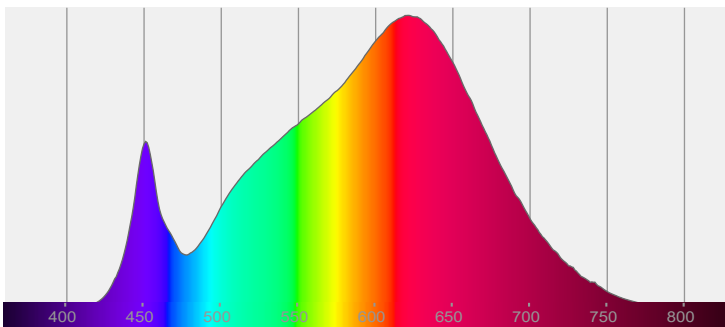
Date and time:

6/21/2022 8:53:33 PM

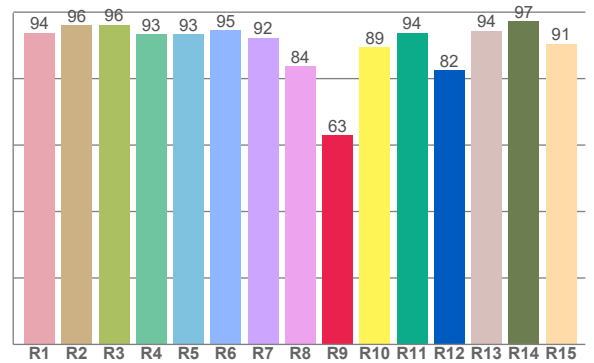
Delivered Lumens

1304

Spectra



CRI: 92.9 (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 divition from black body
CRI	CRI R9	TM30 R <sub>f</sub>	TM30 R <sub>g</sub>	CQS	x	y	u	v	Δuv
92.9	62.9	91.0	101.5	89.8	0.434	0.397	0.252	0.345	-0.0024

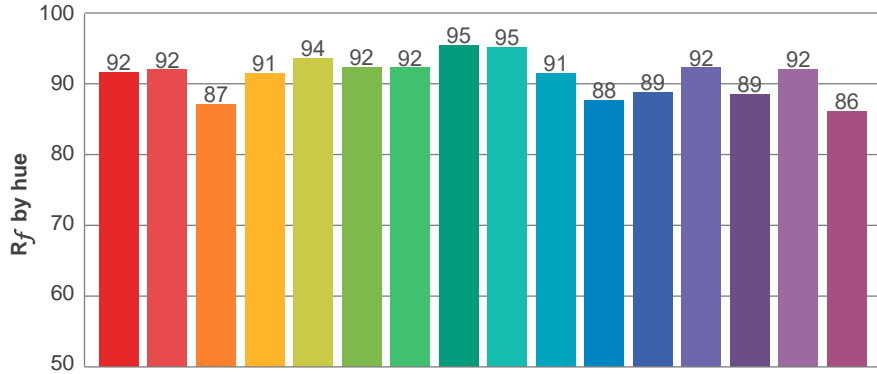
**$R_f$  91.0**  
Fidelity index  $R_f$

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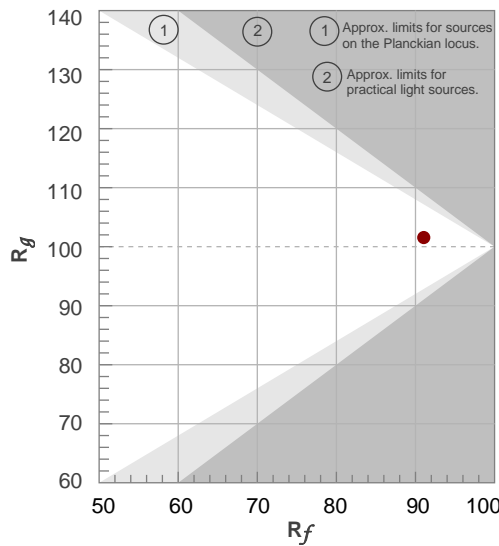
**$R_g$  101.5**  
Gammut index  $R_g$

TM30: 91.0

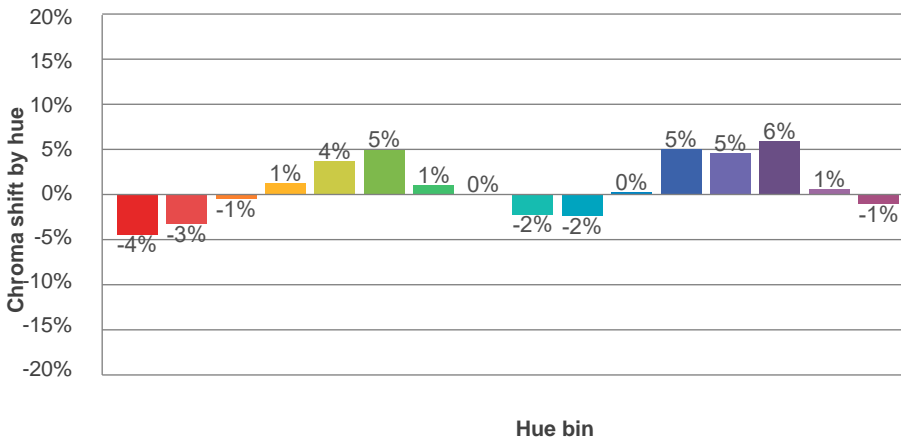
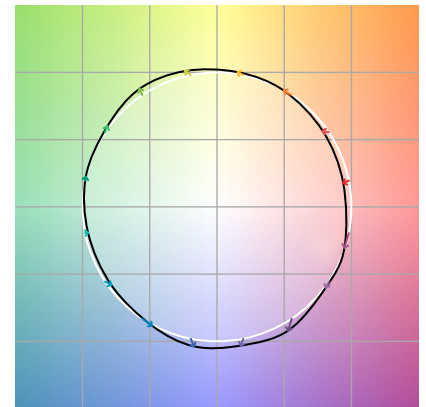
TM-30Color



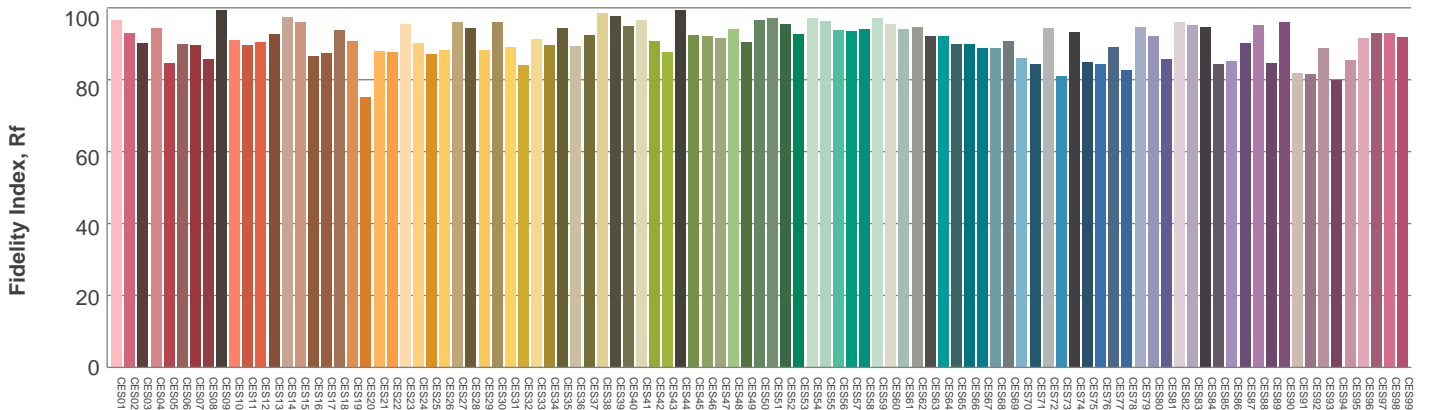
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-1%
2	92	-3%	3%
3	87	-1%	7%
4	91	1%	4%
5	94	4%	4%
6	92	5%	-1%
7	92	1%	-4%
8	95	0%	-3%
9	95	-2%	0%
10	91	-2%	5%
11	88	0%	9%
12	89	5%	3%
13	92	5%	-3%
14	89	6%	-7%
15	92	1%	-5%
16	86	-1%	-11%



Color vector graphics



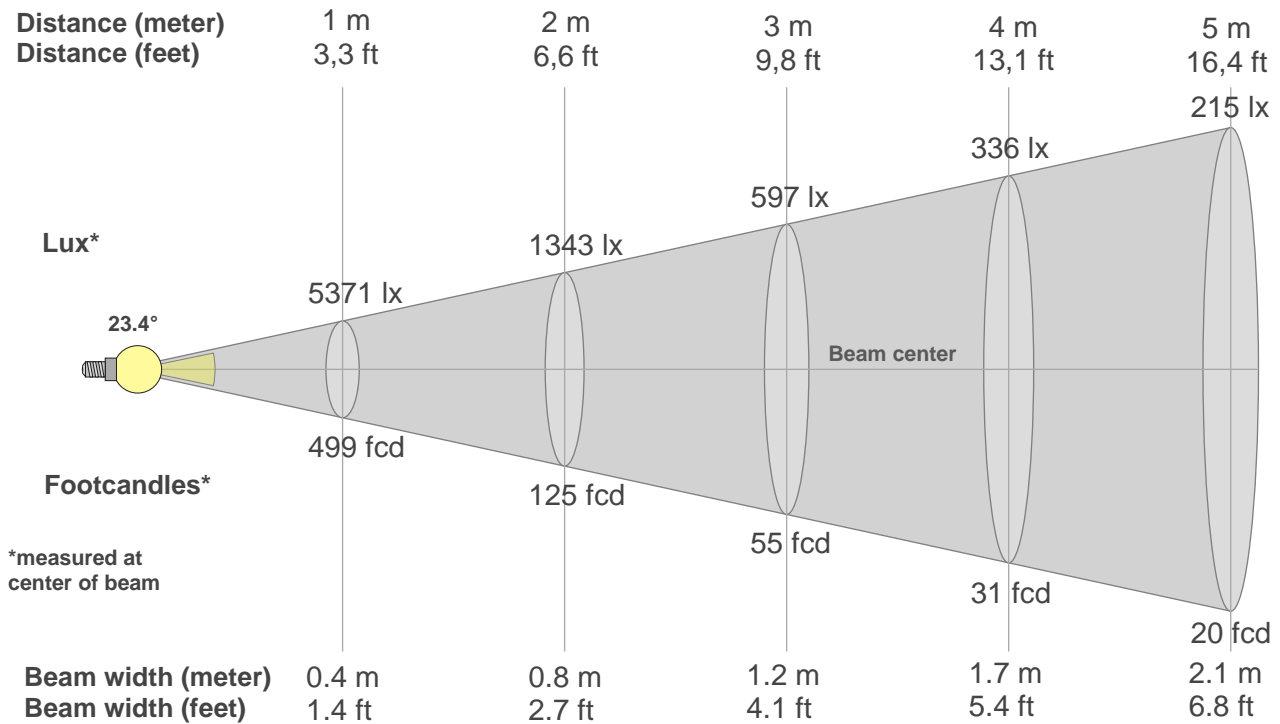
Color distortion



Color Evaluation Sample

[www.graffitilighting.com](http://www.graffitilighting.com) As a result of our continuous improvement, values are subject to change without notice. These are delivered results and can vary +/- 10% from published source data range.

### 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
5371lx	1343lx	597lx	336lx	215lx	149lx	110lx	84lx	66lx	54lx	44lx	37lx	32lx	27lx	24lx	21lx	19lx	17lx	15lx	13lx
499fcd	124.7fcd	55.4fcd	31.2fcd	20fcd	13.9fcd	10.2fcd	7.8fcd	6.2fcd	5fcd	4.1fcd	3.5fcd	3fcd	2.5fcd	2.2fcd	1.9fcd	1.7fcd	1.5fcd	1.4fcd	1.2fcd

#### 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°
5371	5288	4945	4462	3900	3320	2772	2291	1872	1511	1204	942	722	548	406	296	214	156	115	87
100%	98%	92%	83%	73%	62%	52%	43%	35%	28%	22%	18%	13%	10%	8%	6%	4%	3%	2%	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°
5371	5189	4821	4277	3624	2994	2437	1965	1576	1260	1015	801	616	457	324	219	150	104	72	50
100%	97%	90%	80%	67%	56%	45%	37%	29%	23%	19%	15%	11%	9%	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°
5371	5298	4979	4514	3957	3355	2781	2273	1834	1460	1146	885	675	506	369	266	193	142	107	81
100%	99%	93%	84%	74%	62%	52%	42%	34%	27%	21%	16%	13%	9%	7%	5%	4%	3%	2%	2%

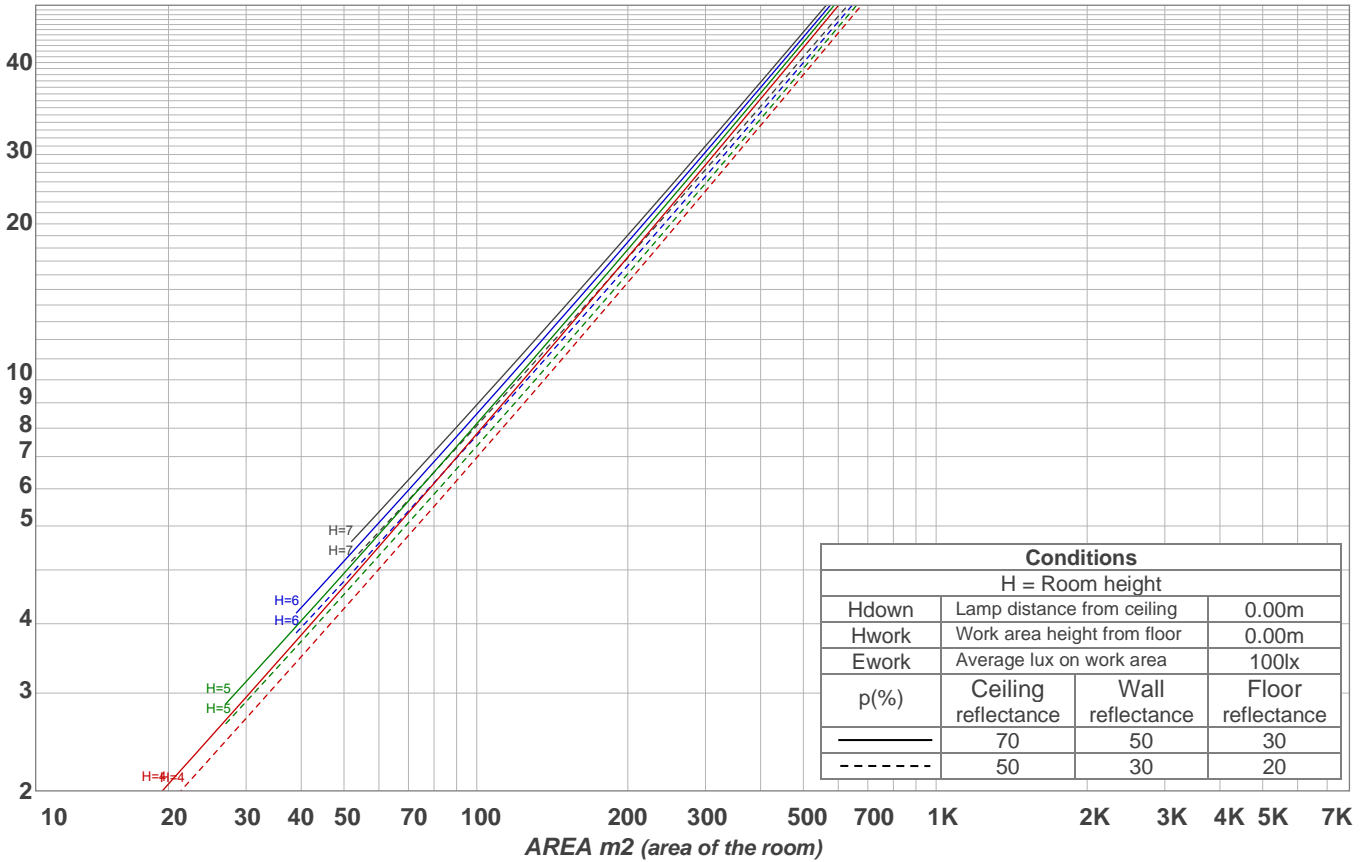
#### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
5371	5201	4839	4274	3632	3006	2441	1960	1568	1263	1013	799	614	454	319	218	151	105	74	54
100%	97%	90%	80%	68%	56%	45%	36%	29%	24%	19%	15%	11%	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
23.4°	50.8°	67.2°	99.0%	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	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96	96	96	
2	110	106	103	100	108	105	102	99	102	99	97	99	97	95	96	95	93	92	92	92	
3	106	101	97	94	105	100	96	94	98	95	92	95	93	91	93	91	89	88	88	88	
4	103	97	93	89	101	96	92	89	94	90	88	92	89	87	90	88	86	85	85	85	
5	99	93	88	85	98	92	88	85	90	87	84	89	86	83	87	85	83	81	81	81	
6	96	89	85	81	95	89	84	81	87	83	81	86	83	80	85	82	80	79	79	79	
7	93	86	81	78	92	85	81	78	84	80	78	83	80	77	82	79	77	76	76	76	
8	90	83	78	75	89	82	78	75	81	78	75	81	77	75	80	77	74	73	73	73	
9	87	80	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71	71	71	
10	85	78	73	70	84	77	73	70	77	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°
395 lm	529 lm	267 lm	73.2 lm	20.1 lm	7.64 lm	5.11 lm	3.66 lm	3.41 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