

Light efficiency:



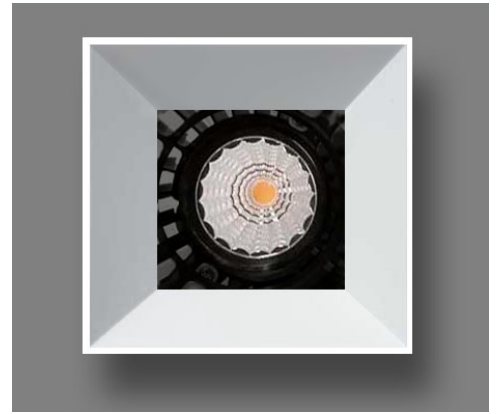
Output: 1446 lm

Light quality:

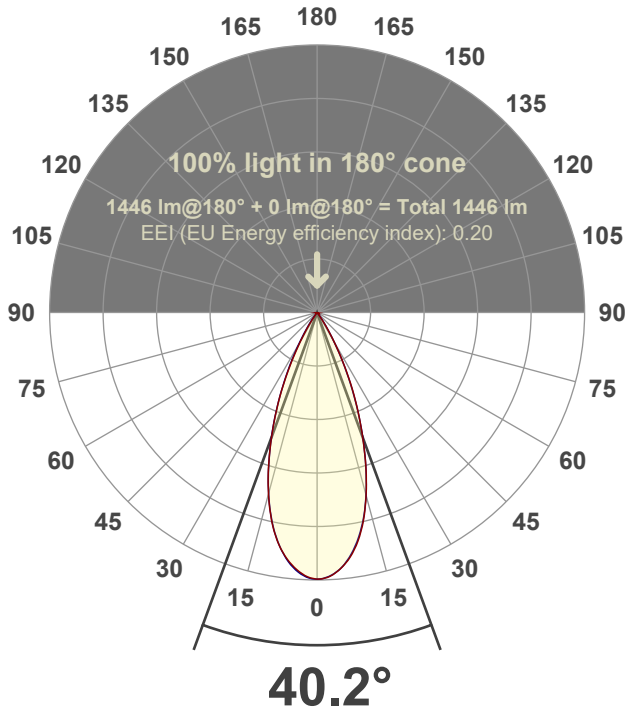


Peak: 3122 cd

Power: 21.3 W



Beam angle



Test number:

GR-O-F-A20-3019-FL-SQ-91A-Rev2

Luminaire Model:

Graffiti Open Square Fixed Downlight-A20-3019 38° Optic-Solite

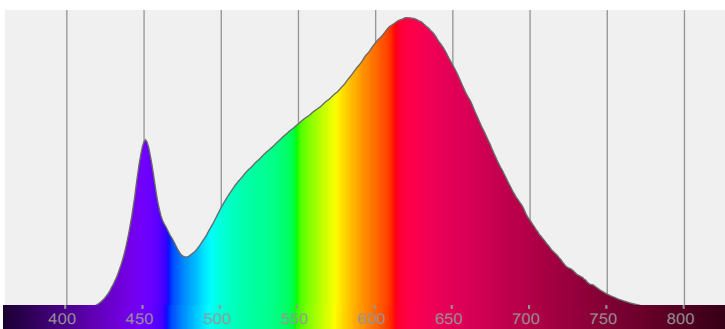
Date and time:

6/21/2022 8:25:05 PM

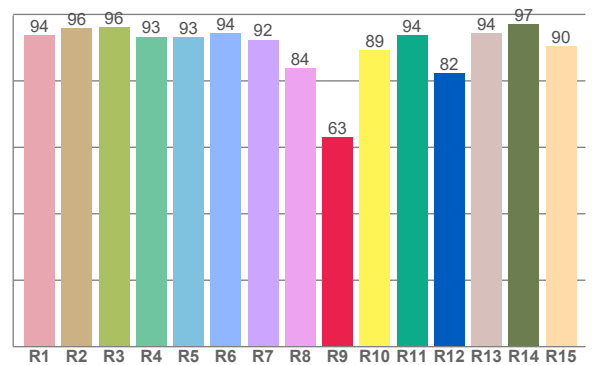
Delivered Lumens

1446

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	62.9	91.0	101.6	89.9	0.433	0.397	0.251	0.345	-0.0024

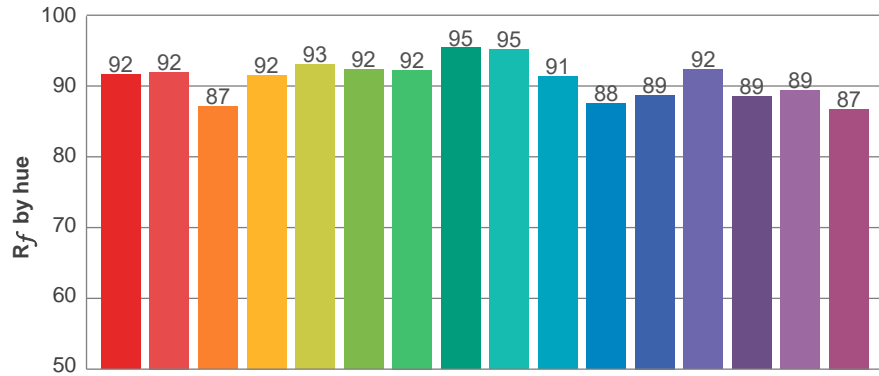
**$R_f$  91.0**  
Fidelity index  $R_f$

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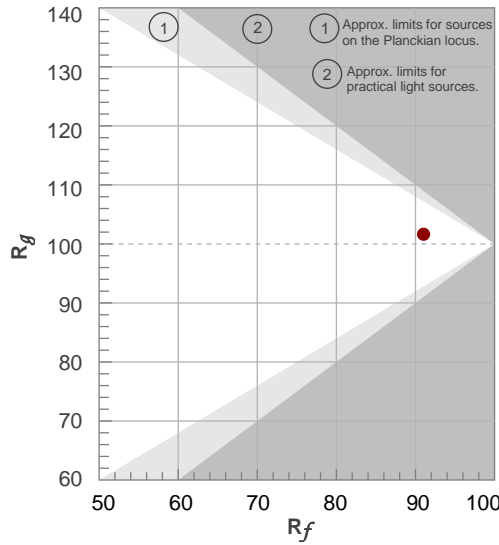
**$R_g$  101.6**  
Gammut index  $R_g$

TM30: 91.0

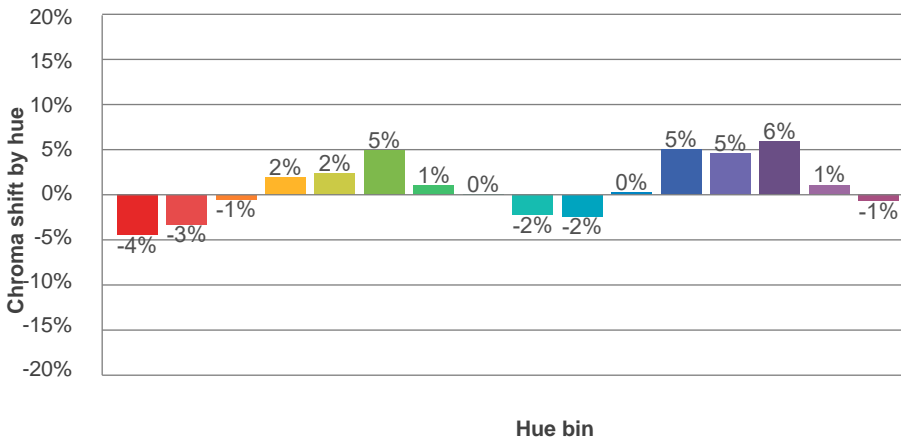
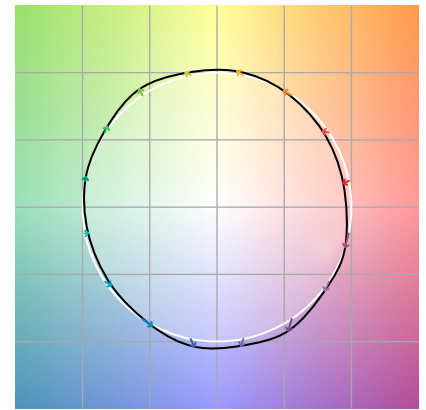
TM-30Color



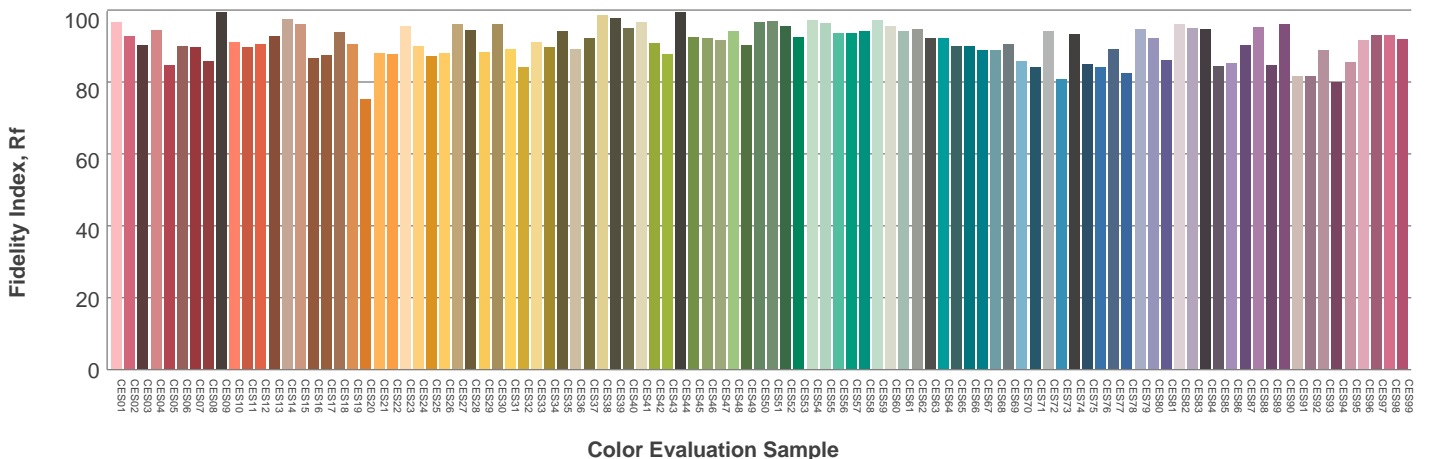
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-1%
2	92	-3%	3%
3	87	-1%	7%
4	92	2%	5%
5	93	2%	4%
6	92	5%	-1%
7	92	1%	-4%
8	95	0%	-3%
9	95	-2%	0%
10	91	-2%	5%
11	88	0%	9%
12	89	5%	4%
13	92	5%	-3%
14	89	6%	-7%
15	89	1%	-7%
16	87	-1%	-11%



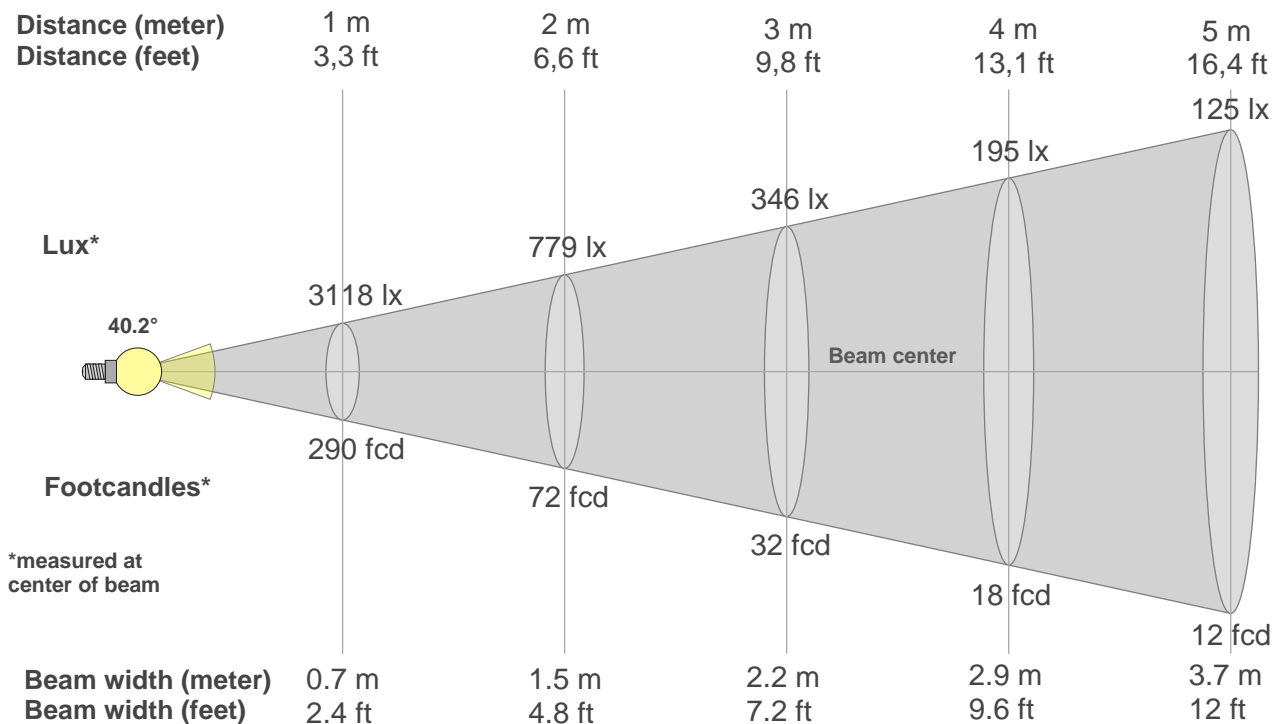
Color vector graphics



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
3118lx	779lx	346lx	195lx	125lx	87lx	64lx	49lx	38lx	31lx	26lx	22lx	18lx	16lx	14lx	12lx	11lx	10lx	9lx	8lx
289.7fcd	72.4fcd	32.2fcd	18.1fcd	11.6fcd	8fcd	5.9fcd	4.5fcd	3.6fcd	2.9fcd	2.4fcd	2fcd	1.7fcd	1.5fcd	1.3fcd	1.1fcd	1fcd	0.9fcd	0.8fcd	0.7fcd

#### 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°
3118	3103	3054	2975	2871	2730	2549	2335	2097	1841	1575	1322	1082	849	630	435	281	172	98	54
100%	100%	98%	95%	92%	88%	82%	75%	67%	59%	51%	42%	35%	27%	20%	14%	9%	6%	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°
3118	3099	3050	2972	2860	2712	2535	2328	2094	1838	1576	1319	1068	831	615	424	282	181	113	68
100%	99%	98%	95%	92%	87%	81%	75%	67%	59%	51%	42%	34%	27%	20%	14%	9%	6%	4%	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°
3118	3098	3037	2952	2842	2702	2529	2317	2083	1832	1575	1322	1077	834	612	422	271	160	91	52
100%	99%	97%	95%	91%	87%	81%	74%	67%	59%	51%	42%	35%	27%	20%	14%	9%	5%	3%	2%

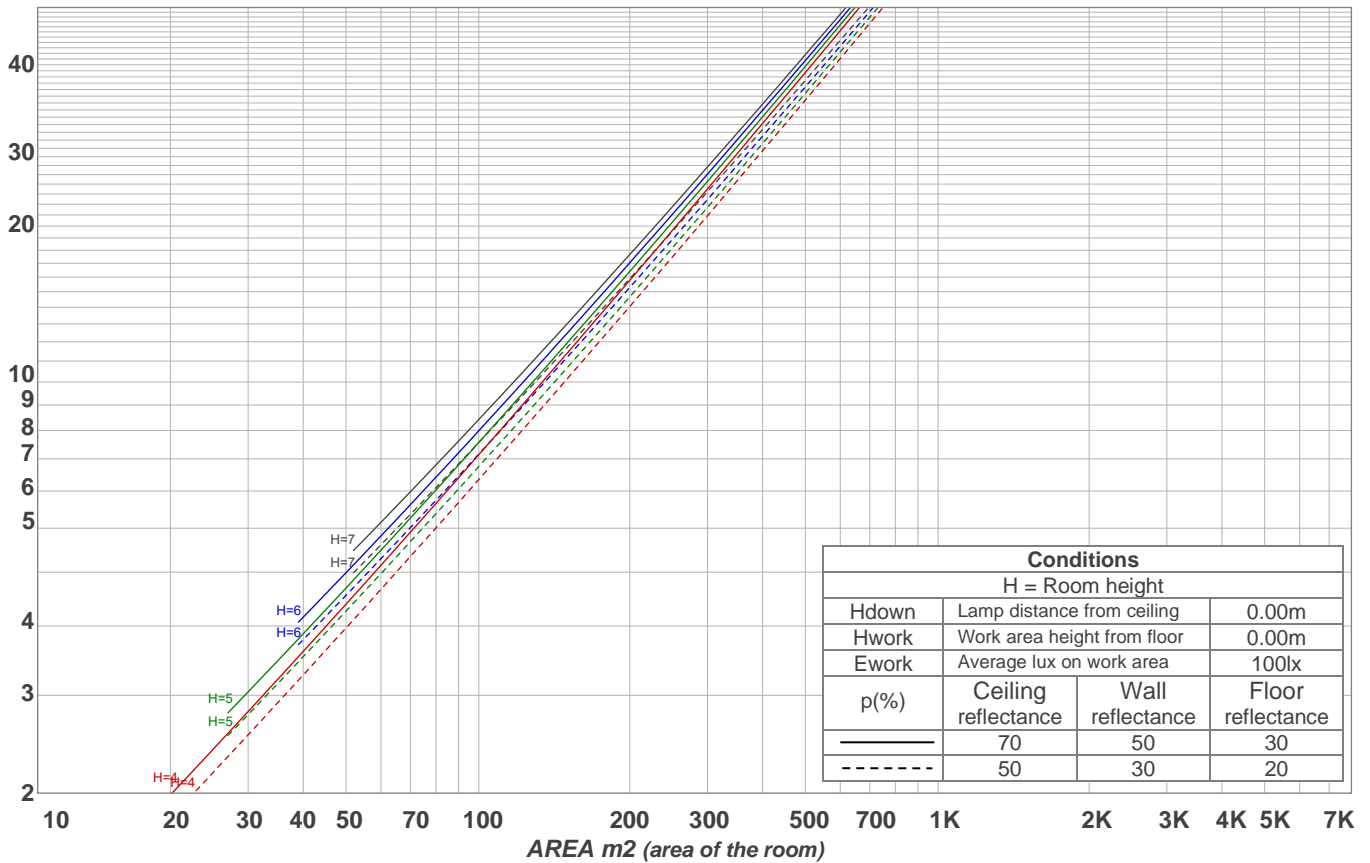
#### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3118	3104	3052	2965	2845	2697	2520	2313	2078	1827	1576	1326	1079	848	642	461	313	203	127	80
100%	100%	98%	95%	91%	86%	81%	74%	67%	59%	51%	43%	35%	27%	21%	15%	10%	6%	4%	3%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
40.2°	63.3°	74.3°	99.2%	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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	95	95	
2	110	105	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90	90	90	
3	105	100	96	92	103	99	95	92	96	93	90	94	91	89	91	89	87	86	86	86	
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	85	83	82	82	82	
5	97	90	85	82	96	89	85	82	88	84	81	86	83	80	85	82	79	78	78	78	
6	94	86	81	78	92	85	81	77	84	80	77	83	79	76	82	78	76	75	75	75	
7	90	82	77	74	89	82	77	74	81	76	73	80	76	73	79	75	73	71	71	71	
8	87	79	74	71	86	78	74	70	77	73	70	76	73	70	76	72	70	68	68	68	
9	84	76	71	68	83	75	71	67	74	70	67	74	70	67	73	69	67	66	66	66	
10	81	73	68	65	80	72	68	65	72	67	64	71	67	64	70	67	64	63	63	63	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
278 lm	602 lm	433 lm	102 lm	13.2 lm	5.56 lm	4.30 lm	4.39 lm	3.39 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