

Light efficiency:



Output: 1396 lm

Light quality:

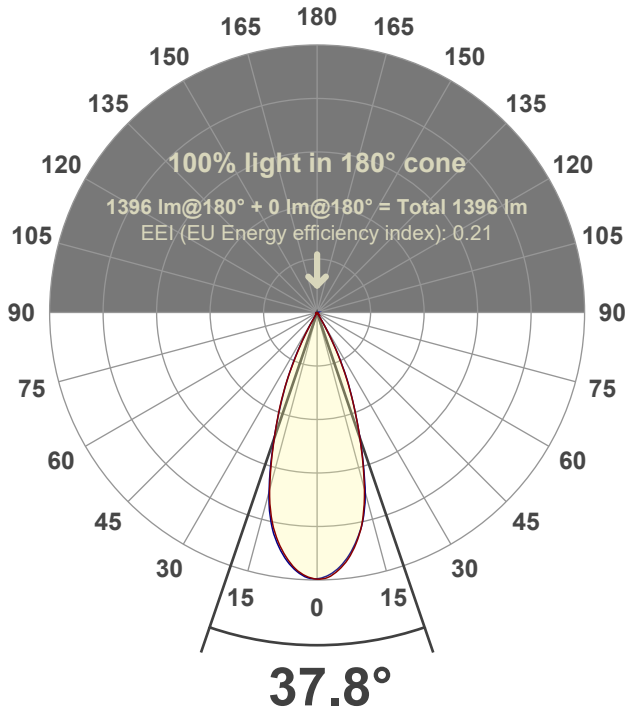


Peak: 3578 cd

Power: 21.3 W



Beam angle



Test number:

GR-F-A20-3019-FL-RD-Rev2

Luminaire Model:

Graffiti Regress Round Fixed Downlight-A20-3019 38° Optic

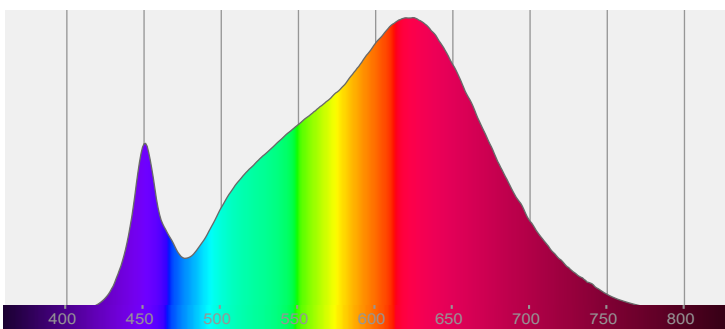
Date and time:

4/28/2022 8:05:55 PM

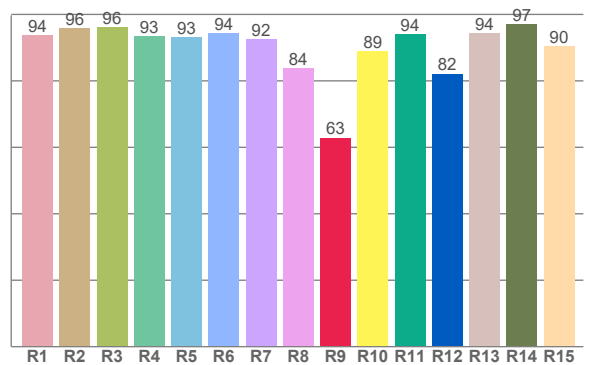
Delivered Lumens

1396

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	91.1	101.6	90.0	0.434	0.398	0.252	0.346	-0.0020

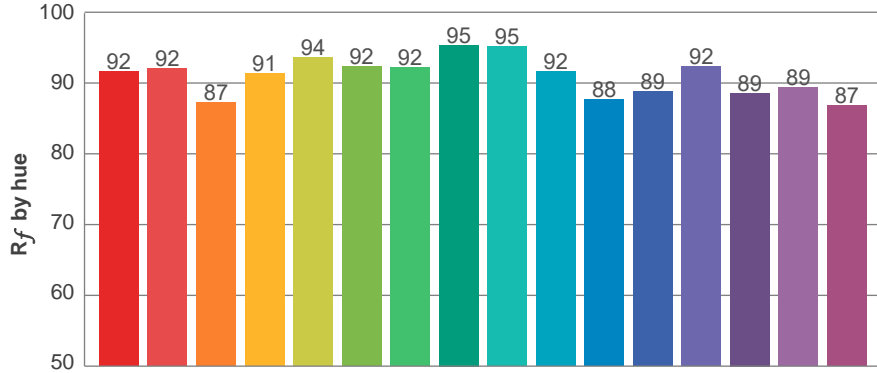
**$R_f$  91.1**  
Fidelity index  $R_f$

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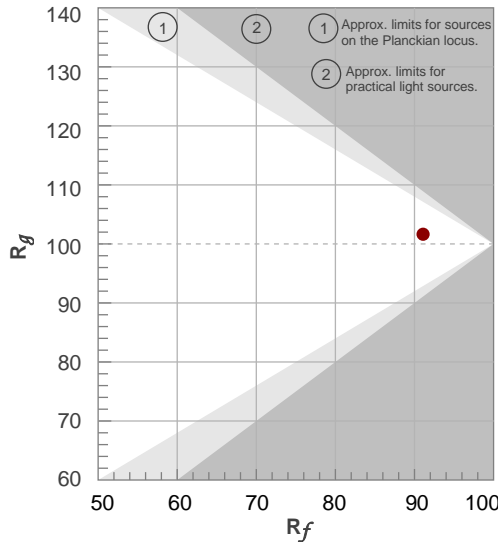
**$R_g$  101.6**  
Gammut index  $R_g$

TM30: 91.1

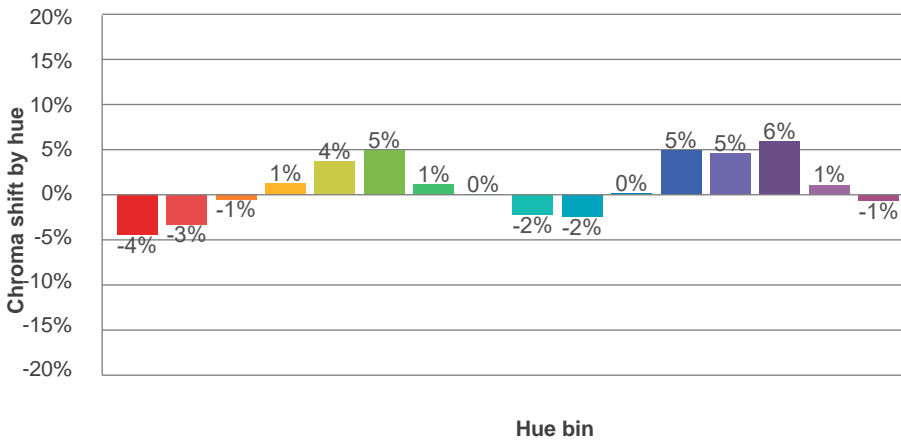
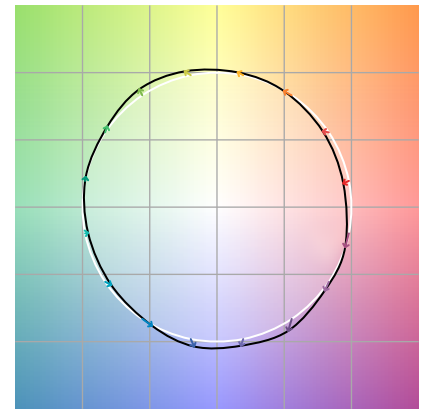
TM-30Color



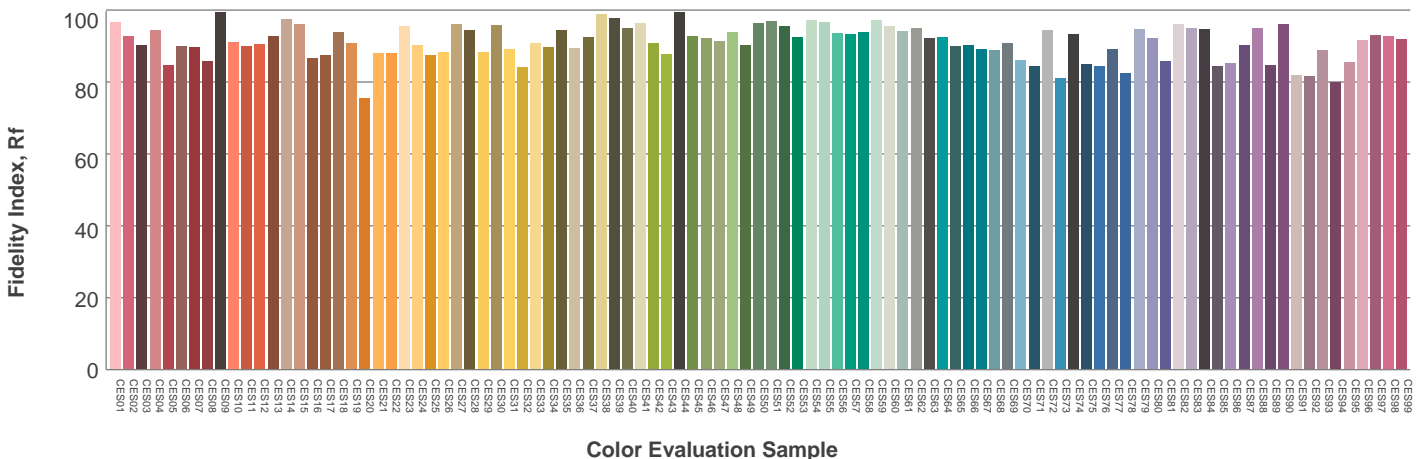
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-1%
2	92	-3%	3%
3	87	-1%	7%
4	91	1%	4%
5	94	4%	4%
6	92	5%	-1%
7	92	1%	-5%
8	95	0%	-3%
9	95	-2%	0%
10	92	-2%	4%
11	88	0%	9%
12	89	5%	4%
13	92	5%	-3%
14	89	6%	-7%
15	89	1%	-7%
16	87	-1%	-11%



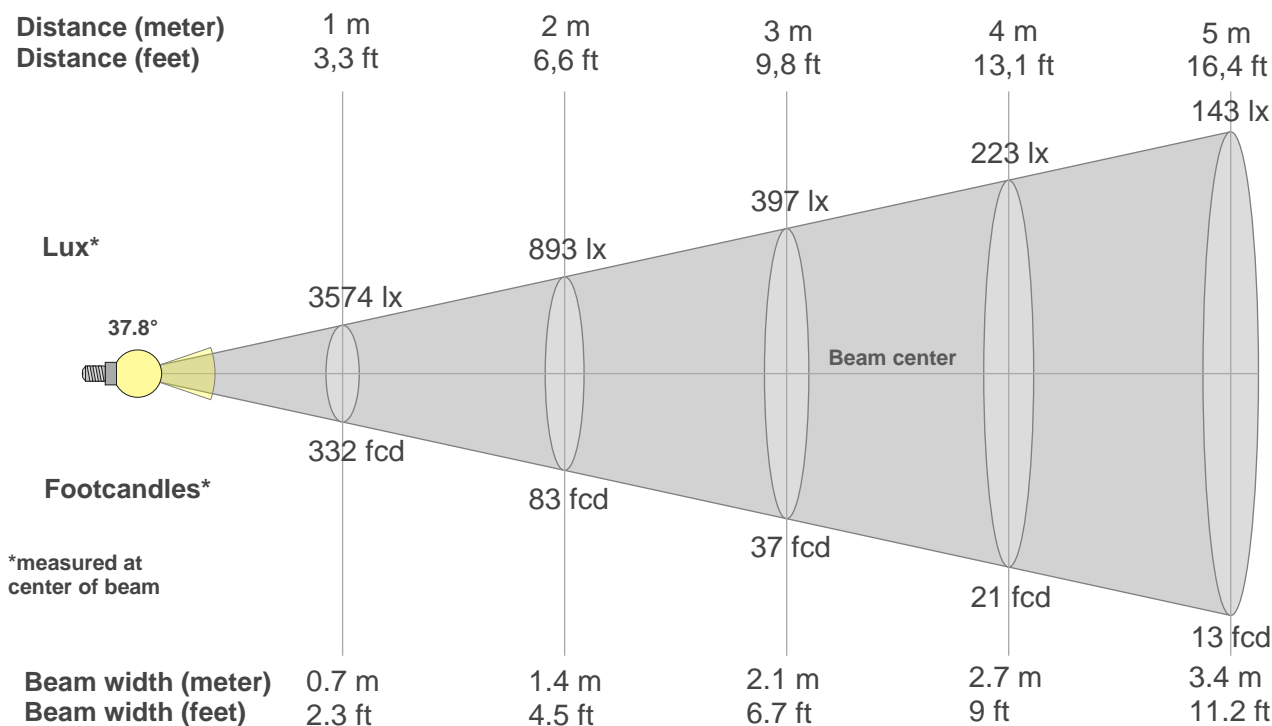
Color vector graphics



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
3574lx	893lx	397lx	223lx	143lx	99lx	73lx	56lx	44lx	36lx	30lx	25lx	21lx	18lx	16lx	14lx	12lx	11lx	10lx	9lx
332fcd	83fcd	36.9fcd	20.8fcd	13.3fcd	9.2fcd	6.8fcd	5.2fcd	4.1fcd	3.3fcd	2.7fcd	2.3fcd	2fcd	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°
3574	3561	3498	3401	3270	3104	2901	2618	2282	1936	1600	1284	994	708	451	232	78	14	9	8
100%	100%	98%	95%	92%	87%	81%	73%	64%	54%	45%	36%	28%	20%	13%	6%	2%	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°
3574	3537	3472	3375	3248	3090	2901	2645	2314	1948	1596	1282	1011	730	450	211	52	14	8	6
100%	99%	97%	94%	91%	86%	81%	74%	65%	55%	45%	36%	28%	20%	13%	6%	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°
3574	3547	3483	3382	3249	3087	2888	2620	2287	1937	1605	1301	999	680	421	209	62	17	12	9
100%	99%	97%	95%	91%	86%	81%	73%	64%	54%	45%	36%	28%	19%	12%	6%	2%	0%	0%	0%

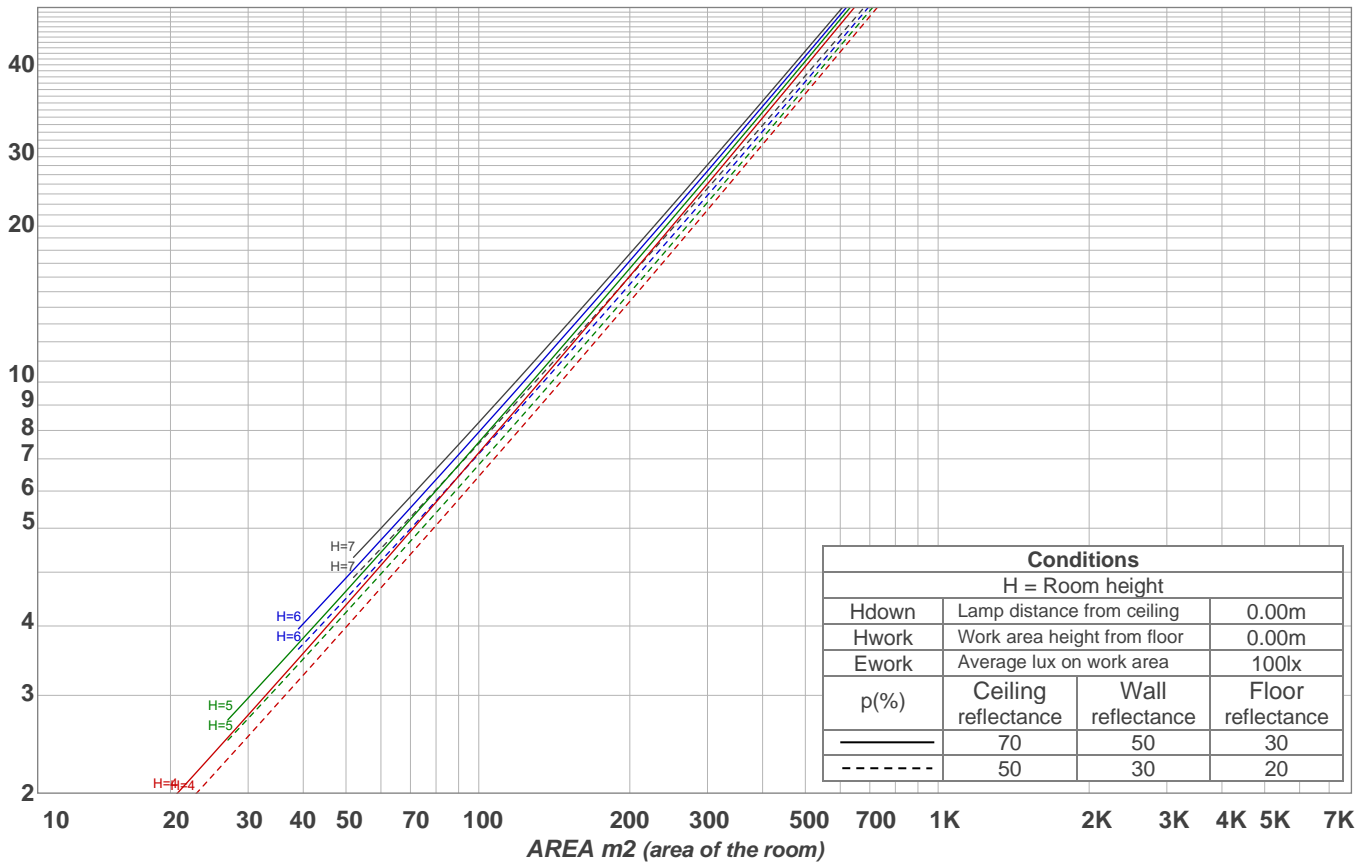
#### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3574	3562	3501	3407	3280	3122	2927	2665	2318	1952	1601	1278	985	704	416	188	58	17	11	9
100%	100%	98%	95%	92%	87%	82%	75%	65%	55%	45%	36%	28%	20%	12%	5%	2%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
37.8°	57.2°	62.7°	99.4%	99.1%

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		
1	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96	96		
2	110	106	103	101	108	105	102	99	102	99	97	99	97	95	96	95	93	92	92		
3	106	101	98	94	105	100	97	94	98	95	92	95	93	91	93	91	89	88	88		
4	103	97	93	89	101	96	92	89	94	90	88	92	89	87	90	88	86	85	85		
5	99	93	88	85	98	92	88	85	90	87	84	89	86	83	87	85	83	81	81		
6	96	89	85	81	95	88	84	81	87	83	80	86	82	80	85	82	79	78	78		
7	93	86	81	78	92	85	81	78	84	80	77	83	79	77	82	79	77	75	75		
8	90	82	78	75	89	82	78	75	81	77	74	80	77	74	79	76	74	73	73		
9	87	80	75	72	86	79	75	72	78	74	72	77	74	71	77	74	71	70	70		
10	84	77	72	69	83	76	72	69	76	72	69	75	71	69	74	71	69	68	68		

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
318 lm	665 lm	379 lm	19.2 lm	3.48 lm	2.55 lm	2.32 lm	2.75 lm	3.13 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