

Light efficiency:



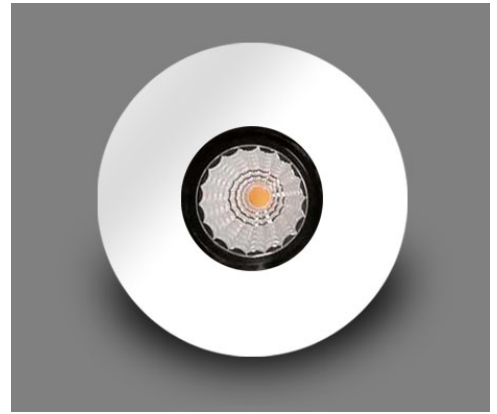
Output: 639 lm

Light quality:

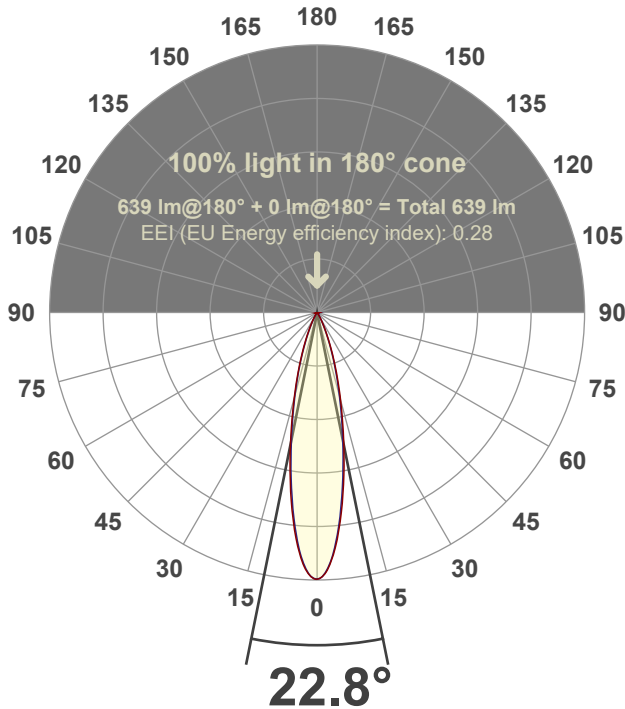


Peak: 2950 cd

Power: 14.6 W



Beam angle



Test number:

GR-F-F-A14-3019-SP-RD-91A-Rev2

Luminaire Model:

Graffiti Flat Round Fixed Downlight-A14-3019 15° Optic-Solite

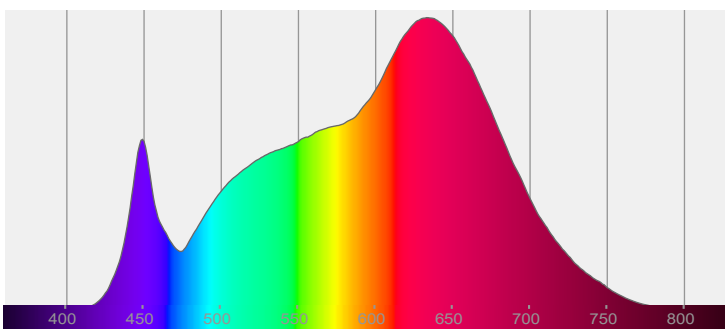
Date and time:

3/24/2022 8:03:24 PM

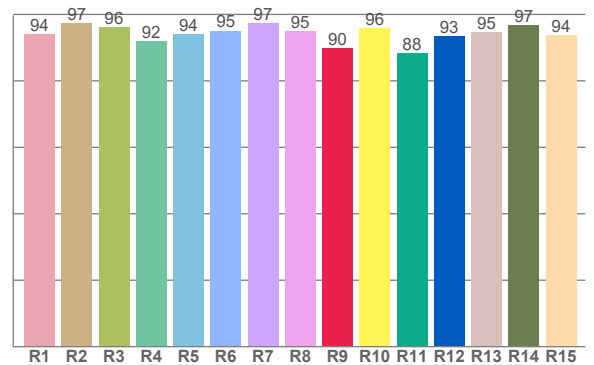
Delivered Lumens

639

Spectra



CRI: 95.0 (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
	95.0	89.8	94.9	105.4	95.1	0.423	0.388	0.249	0.342	-0.0045

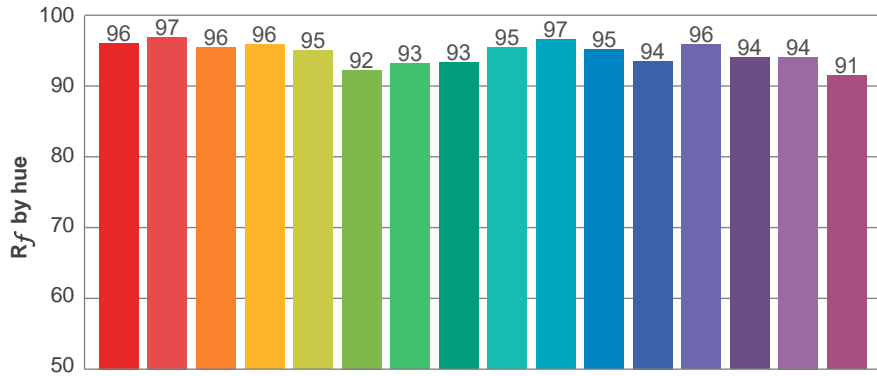
**$R_f$  94.9**  
Fidelity index  $R_f$

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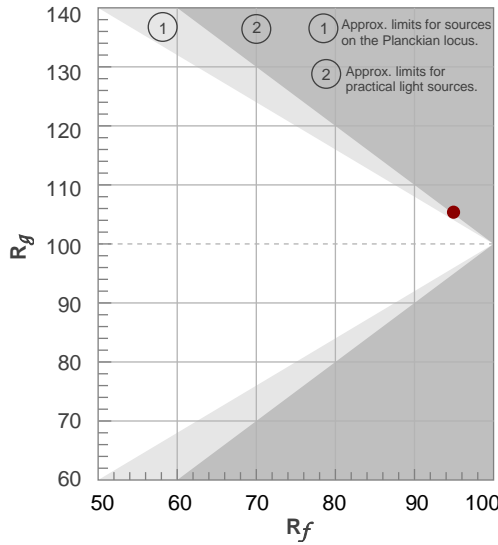
**$R_g$  105.4**  
Gammut index  $R_g$

TM30: 94.9

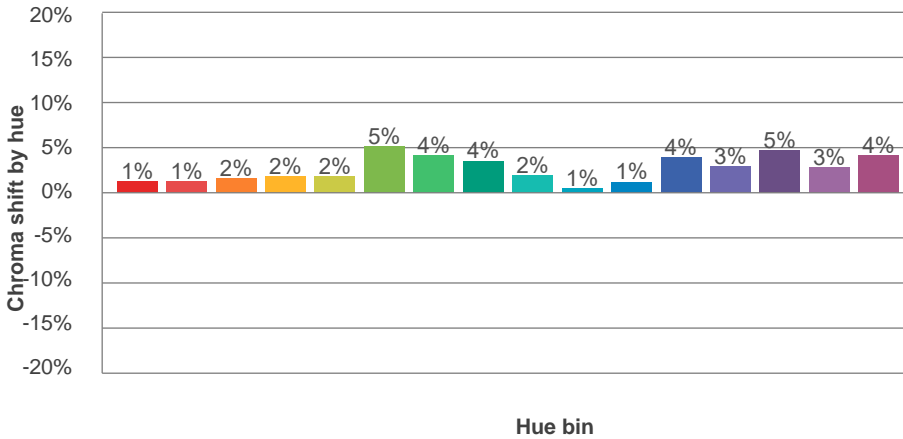
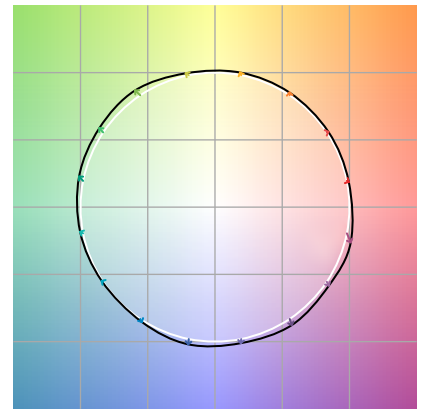
TM-30Color



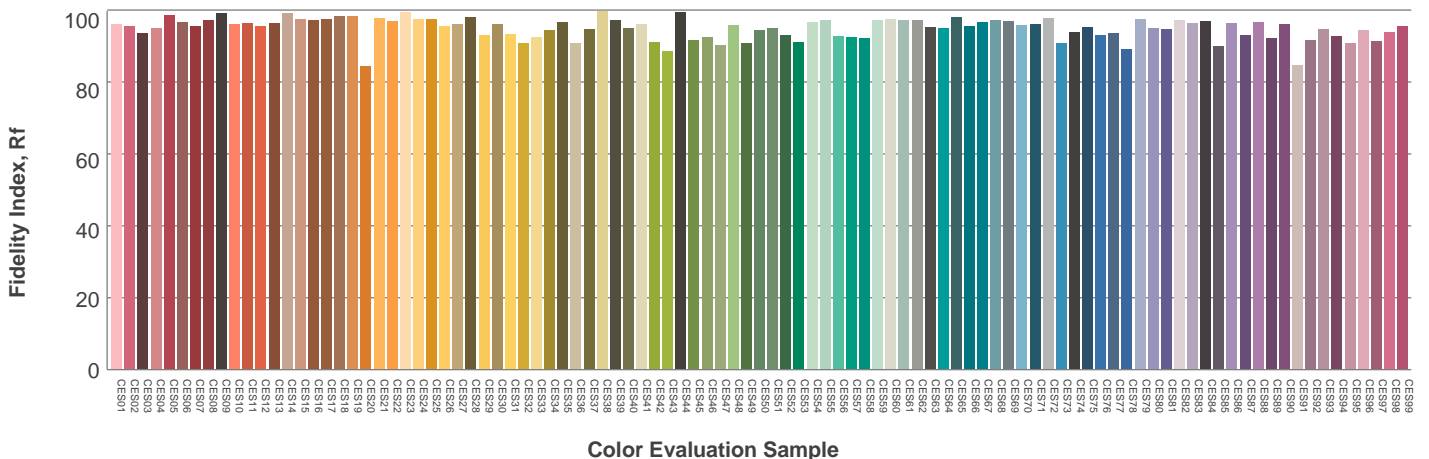
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	96	1%	-1%
2	97	1%	0%
3	96	2%	1%
4	96	2%	1%
5	95	2%	2%
6	92	5%	1%
7	93	4%	-1%
8	93	4%	-3%
9	95	2%	-2%
10	97	1%	-1%
11	95	1%	2%
12	94	4%	0%
13	96	3%	-1%
14	94	5%	-1%
15	94	3%	-1%
16	91	4%	-6%



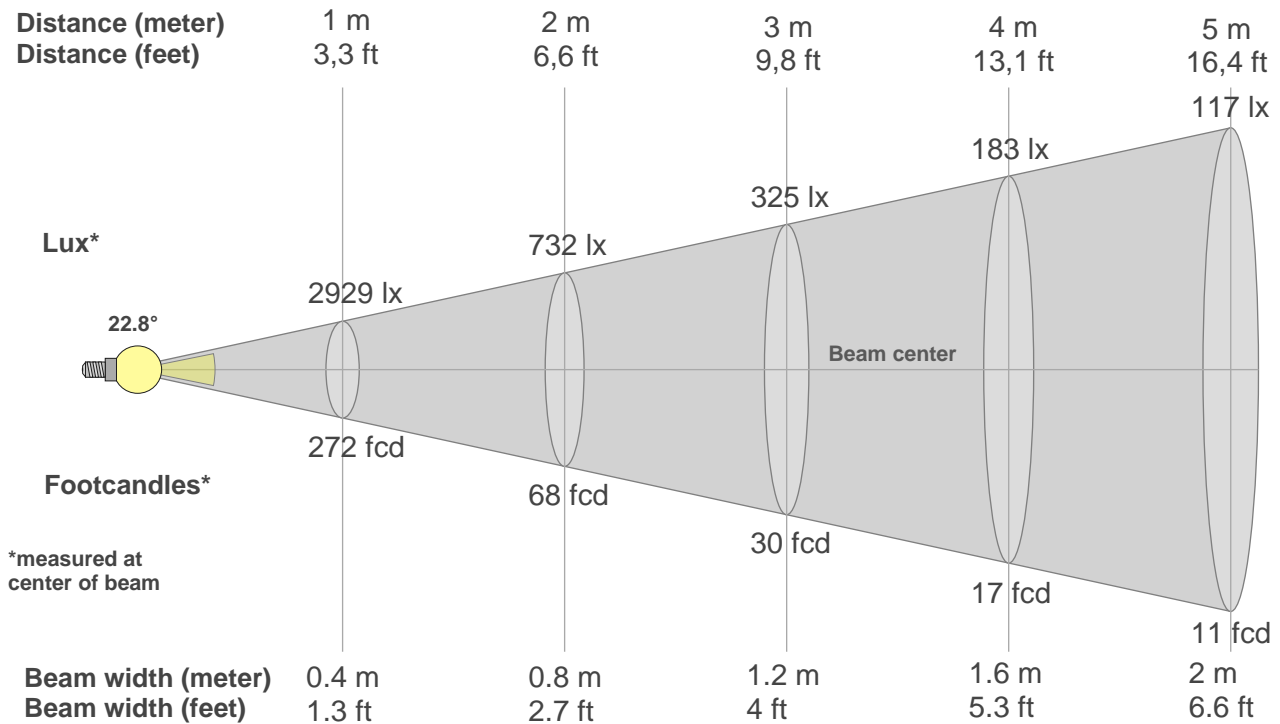
Color vector graphics



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
2929lx	732lx	325lx	183lx	117lx	81lx	60lx	46lx	36lx	29lx	24lx	20lx	17lx	15lx	13lx	11lx	10lx	9lx	8lx	7lx
272.1fcd	68fcd	30.2fcd	17fcd	10.9fcd	7.6fcd	5.6fcd	4.3fcd	3.4fcd	2.7fcd	2.2fcd	1.9fcd	1.6fcd	1.4fcd	1.2fcd	1.1fcd	0.9fcd	0.8fcd	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°
2929	2873	2656	2370	2050	1724	1412	1136	901	698	526	385	272	193	135	94	65	46	33	24
100%	98%	91%	81%	70%	59%	48%	39%	31%	24%	18%	13%	9%	7%	5%	3%	2%	2%	1%	1%

#### 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°
2929	2841	2636	2339	1996	1664	1358	1086	852	652	493	361	256	177	119	83	59	43	32	23
100%	97%	90%	80%	68%	57%	46%	37%	29%	22%	17%	12%	9%	6%	4%	3%	2%	1%	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°
2929	2865	2679	2403	2075	1730	1408	1121	875	670	501	371	269	190	131	90	64	48	36	25
100%	98%	91%	82%	71%	59%	48%	38%	30%	23%	17%	13%	9%	6%	4%	3%	2%	2%	1%	1%

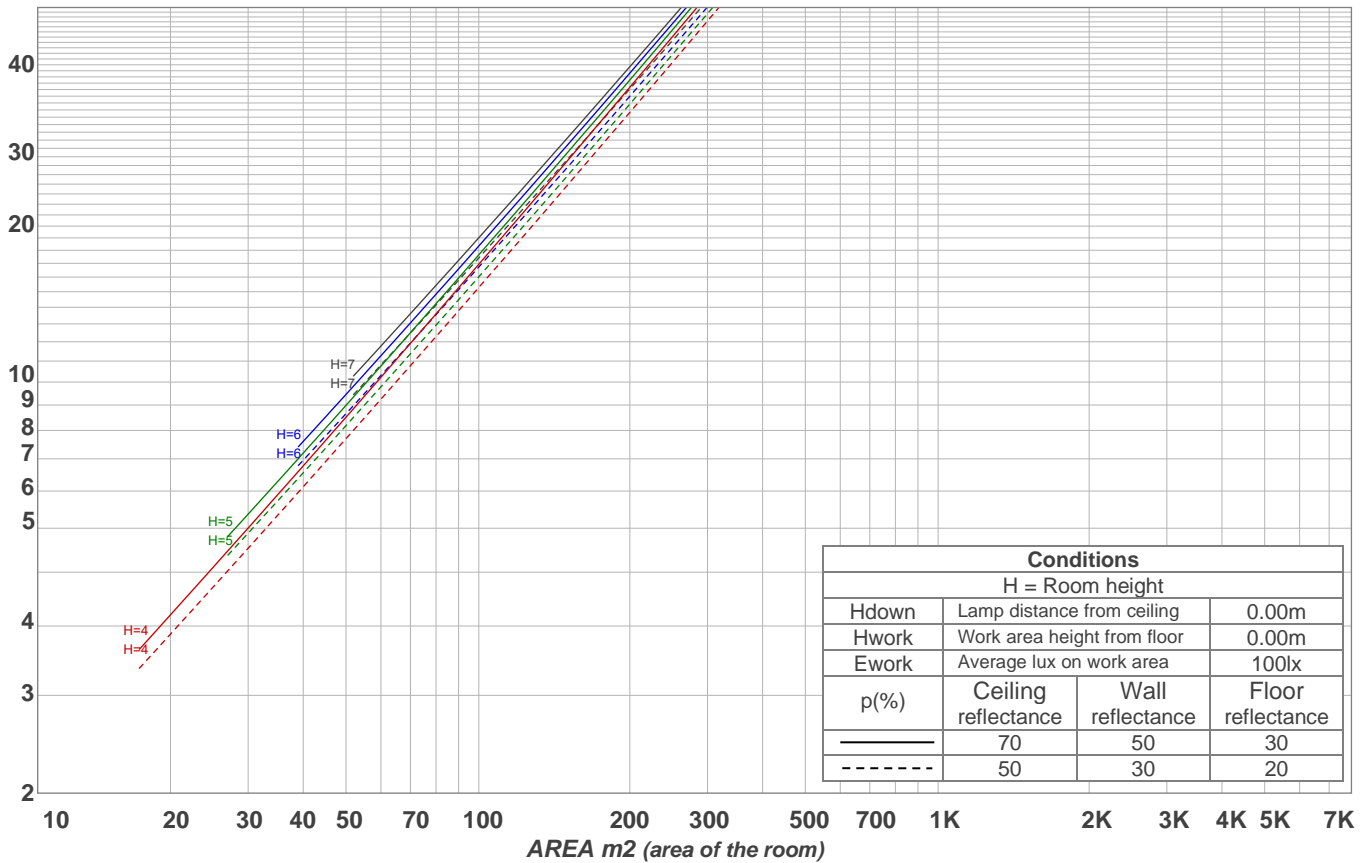
#### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2929	2865	2671	2359	2018	1676	1357	1073	838	642	476	341	235	157	107	73	52	37	27	20
100%	98%	91%	81%	69%	57%	46%	37%	29%	22%	16%	12%	8%	5%	4%	3%	2%	1%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
<b>22.8°</b>	<b>46.5°</b>	<b>61.6°</b>	<b>98.0%</b>	<b>96.8%</b>

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	106	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	107	102	98	95	105	100	97	94	98	95	92	95	93	91	93	91	90	88	88	88	
4	103	97	93	90	101	96	92	89	94	91	88	92	90	87	91	88	86	85	85	85	
5	100	94	89	86	98	93	89	86	91	88	85	90	87	84	88	86	83	82	82	82	
6	97	90	86	83	96	89	85	82	88	84	82	87	84	81	86	83	81	80	80	80	
7	94	87	83	80	93	86	82	79	85	82	79	84	81	79	83	80	78	77	77	77	
8	91	84	80	77	90	84	80	77	83	79	76	82	79	76	81	78	76	75	75	75	
9	89	82	77	75	88	81	77	74	80	77	74	80	76	74	79	76	74	73	73	73	
10	86	79	75	72	86	79	75	72	78	75	72	78	74	72	77	74	72	71	71	71	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
213 lm	270 lm	105 lm	25.0 lm	7.60 lm	4.83 lm	4.92 lm	4.51 lm	3.01 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