

Light efficiency:



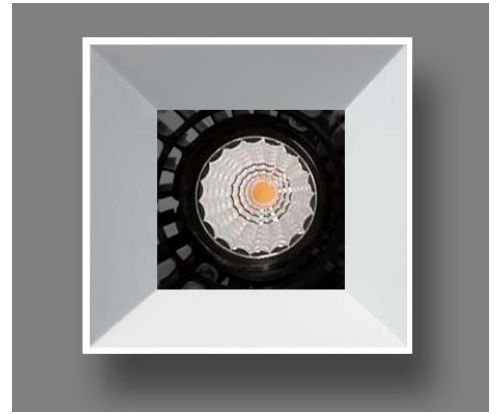
Output: 1892 lm

Light quality:

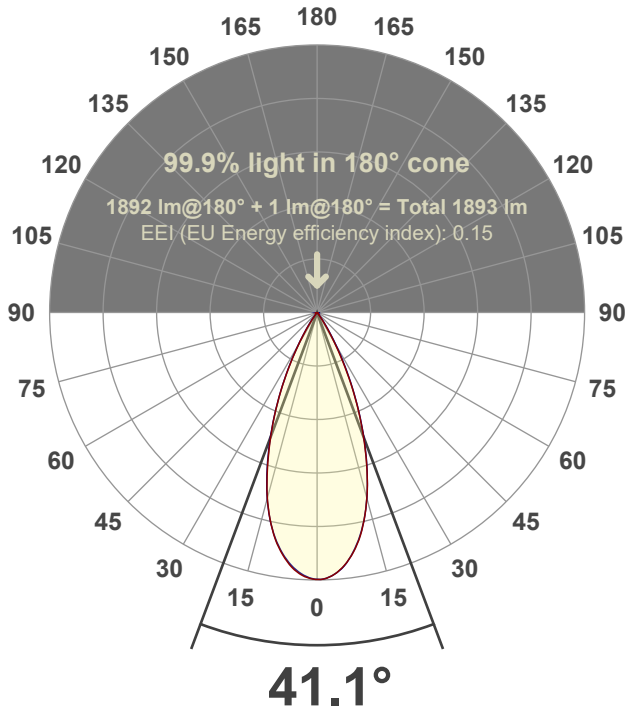


Peak: 3954 cd

Power: 20.7 W



Beam angle



Test number:

GR-O-F-CZ20-30k-FL-SQ-91A-Rev2

Luminaire Model:

Graffiti Open Square Fixed Downlight-CZ20 30k 38° Optic-Solite

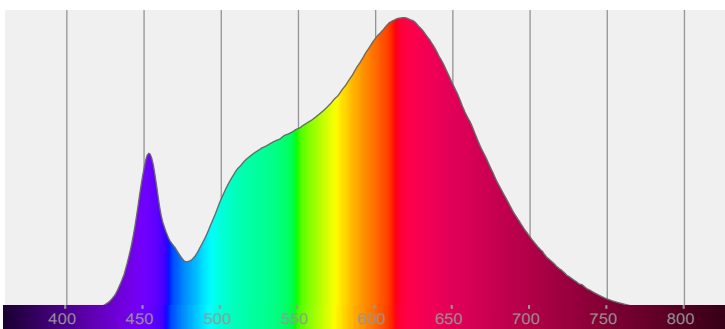
Date and time:

6/30/2022 8:05:33 PM

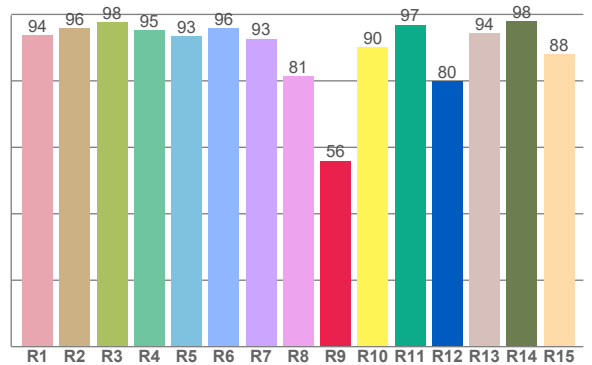
Delivered Lumens

1892

Spectra



CRI: 93.2 (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
93.2	55.9	92.2	99.1	91.6	0.437	0.408	0.249	0.349	0.0015

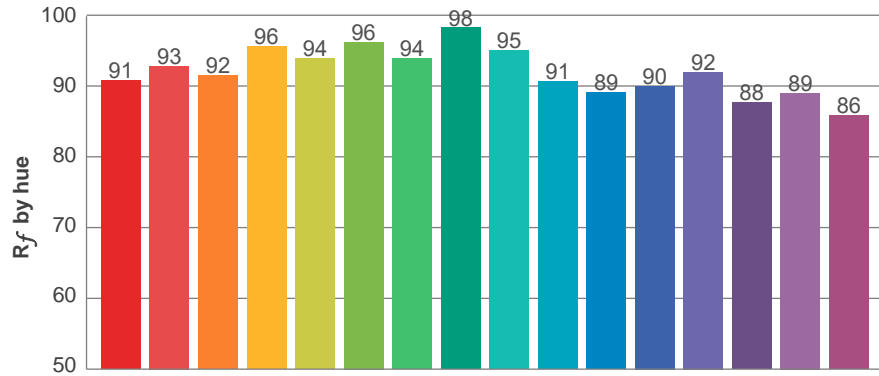
**$R_f$  92.2**  
Fidelity index  $R_f$

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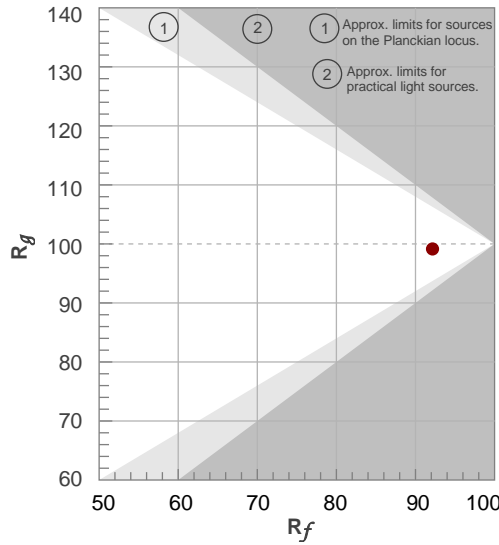
**$R_g$  99.1**  
Gammut index  $R_g$

TM30: 92.2

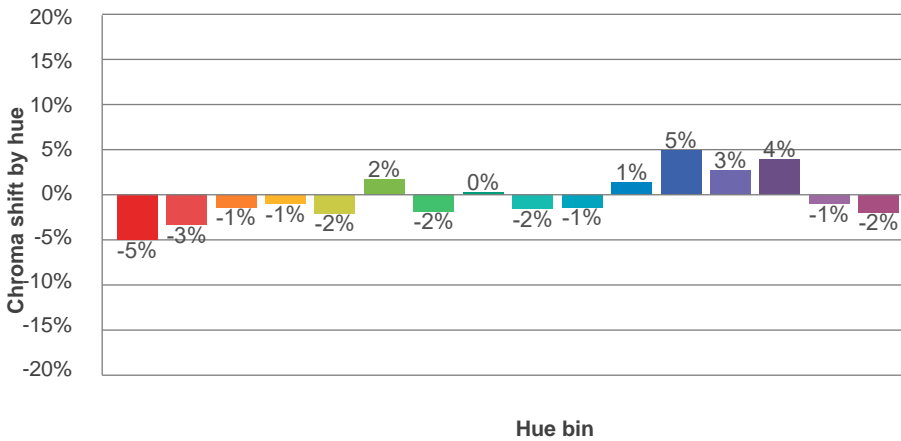
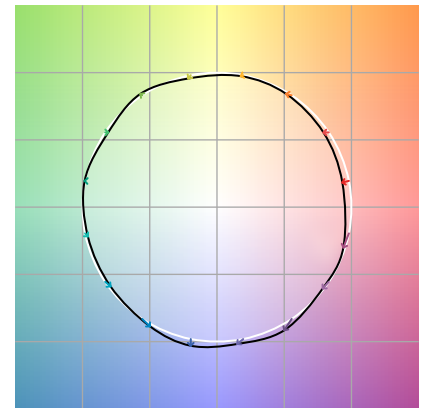
TM-30Color



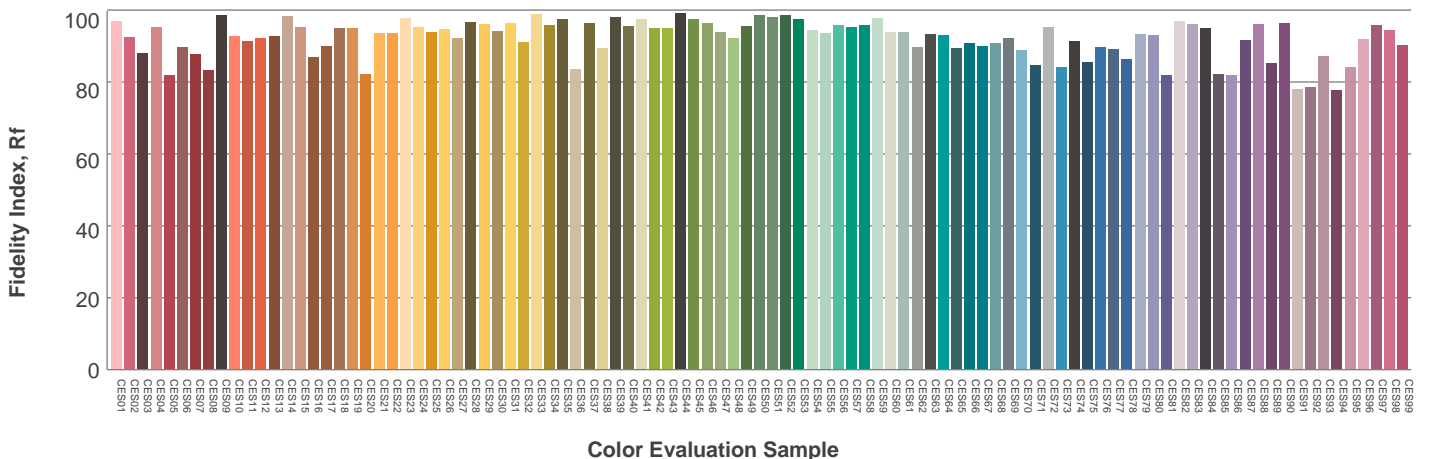
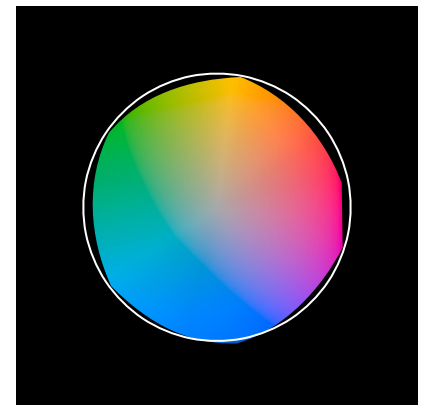
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	92	-1%	4%
4	96	-1%	2%
5	94	-2%	2%
6	96	2%	1%
7	94	-2%	-1%
8	98	0%	0%
9	95	-2%	3%
10	91	-1%	5%
11	89	1%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-7%
16	86	-2%	-11%



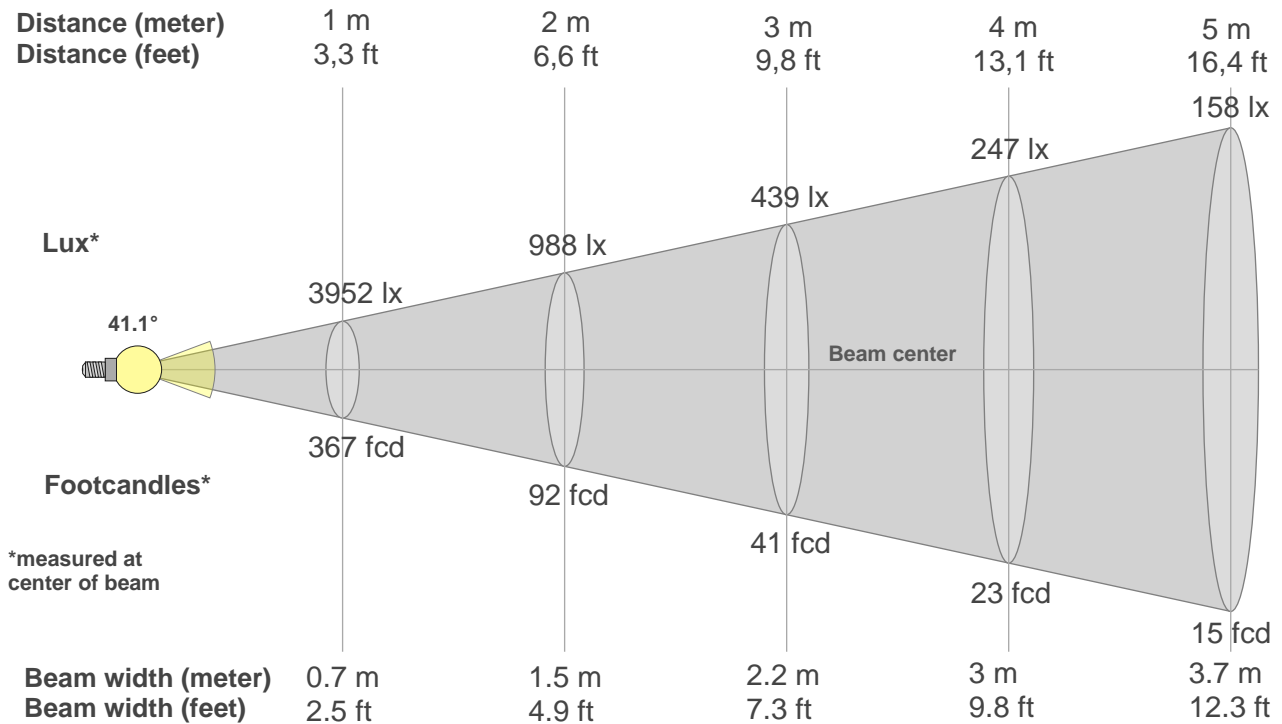
Color vector graphics



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
3952lx	988lx	439lx	247lx	158lx	110lx	81lx	62lx	49lx	40lx	33lx	27lx	23lx	20lx	18lx	15lx	14lx	12lx	11lx	10lx
367.1fcd	91.8fcd	40.8fcd	22.9fcd	14.7fcd	10.2fcd	7.5fcd	5.7fcd	4.5fcd	3.7fcd	3fcd	2.5fcd	2.2fcd	1.9fcd	1.6fcd	1.4fcd	1.3fcd	1.1fcd	1fcd	0.9fcd

#### 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°
3952	3939	3882	3779	3640	3465	3248	2993	2709	2388	2059	1733	1410	1095	798	547	360	226	136	81
100%	100%	98%	96%	92%	88%	82%	76%	69%	60%	52%	44%	36%	28%	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°
3952	3936	3879	3786	3636	3455	3240	2989	2705	2395	2071	1745	1424	1120	842	596	405	265	169	105
100%	100%	98%	96%	92%	87%	82%	76%	68%	61%	52%	44%	36%	28%	21%	15%	10%	7%	4%	3%

#### 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°
3952	3931	3872	3775	3636	3461	3243	2990	2701	2381	2056	1739	1426	1122	839	589	382	237	141	84
100%	99%	98%	96%	92%	88%	82%	76%	68%	60%	52%	44%	36%	28%	21%	15%	10%	6%	4%	2%

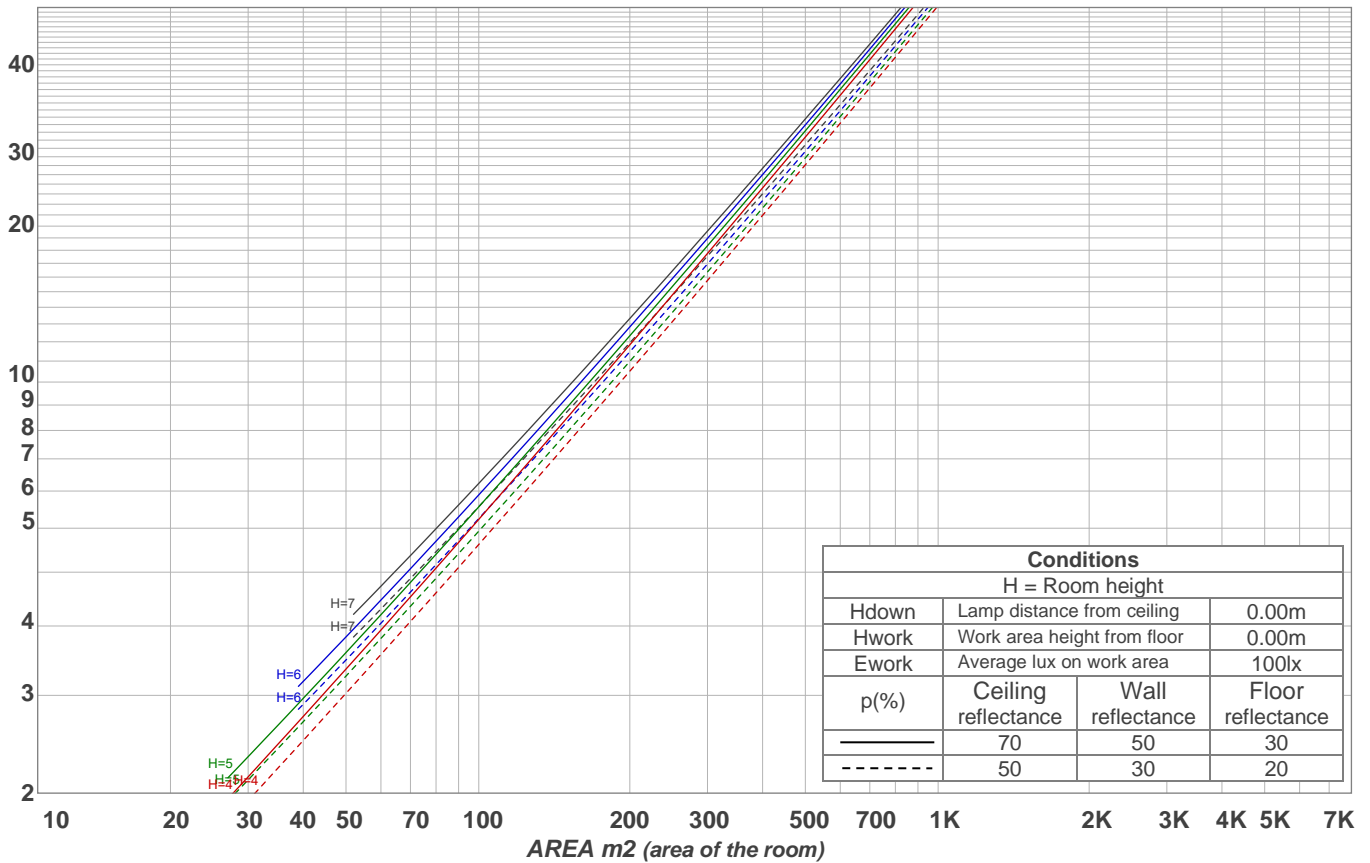
#### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3952	3921	3856	3758	3620	3448	3240	2994	2712	2398	2071	1746	1428	1125	846	599	404	263	169	108
100%	99%	98%	95%	92%	87%	82%	76%	69%	61%	52%	44%	36%	28%	21%	15%	10%	7%	4%	3%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
41.1°	63.8°	75.6°	99.0%	98.2%

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	109	108	112	110	108	106	106	104	103	102	101	100	98	98	97	95	95	95	
2	110	105	102	99	107	104	100	98	100	98	96	98	95	94	95	93	92	90	90	90	
3	105	100	95	92	103	98	94	91	96	93	90	93	91	88	91	89	87	86	86	86	
4	101	95	90	86	99	94	89	86	91	88	85	90	86	84	88	85	83	82	82	82	
5	97	90	85	81	96	89	85	81	87	83	80	86	82	80	84	81	79	78	78	78	
6	93	86	81	77	92	85	80	77	84	80	76	82	79	76	81	78	75	74	74	74	
7	90	82	77	73	89	81	77	73	80	76	73	79	75	73	78	75	72	71	71	71	
8	86	78	73	70	85	78	73	70	77	73	70	76	72	69	75	72	69	68	68	68	
9	83	75	70	67	82	75	70	67	74	70	67	73	69	66	72	69	66	65	65	65	
10	80	72	67	64	79	72	67	64	71	67	64	70	66	64	70	66	64	62	62	62	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
354 lm	777 lm	572 lm	142 lm	20.9 lm	8.40 lm	6.17 lm	5.97 lm	4.82 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