

Light efficiency:



Output: 1036 lm

Light quality:

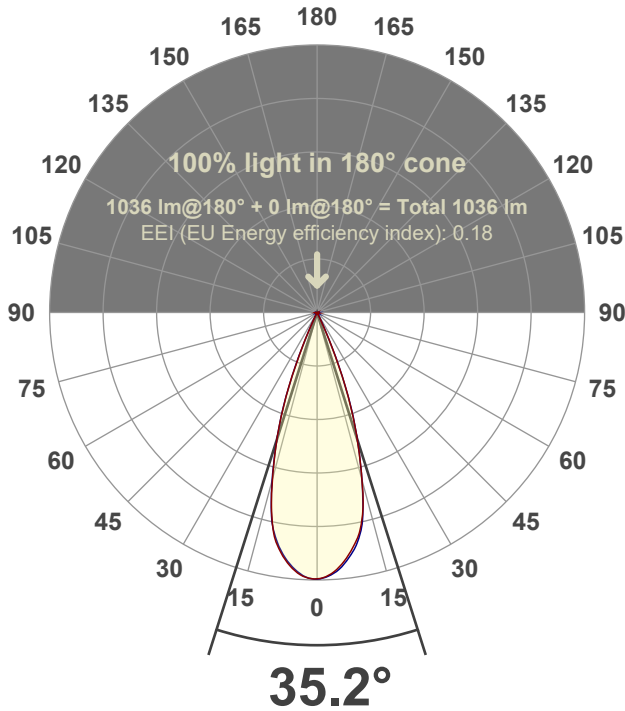


Peak: 3287 cd

Power: 14.2 W



Beam angle



Test number:

GR-F-F-CZ14-30k-FL-RD-Rev2

Luminaire Model:

Graffiti Flat Round Fixed Downlight-CZ14 30k 38° Optic

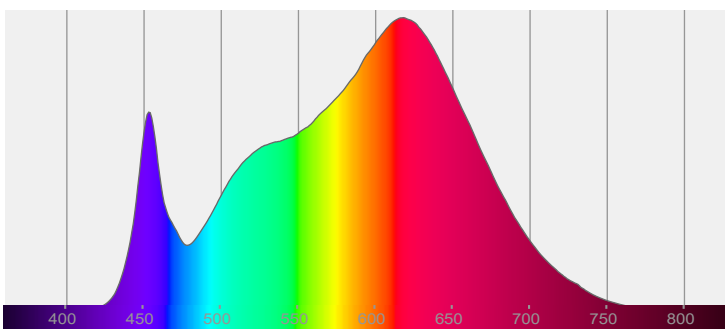
Date and time:

3/9/2022 3:31:24 PM

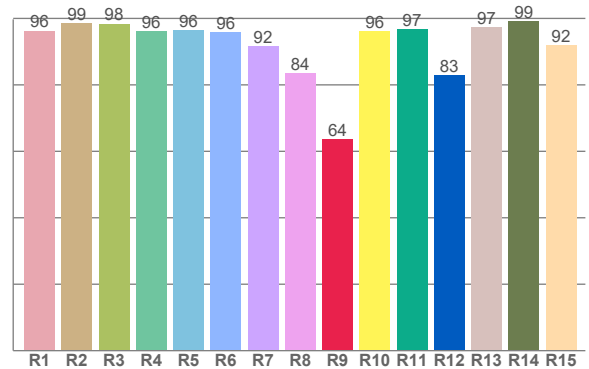
Delivered Lumens

1036

Spectra



CRI: 94.6 (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
94.6	63.5	92.2	100.5	91.9	0.424	0.393	0.247	0.343	-0.0026

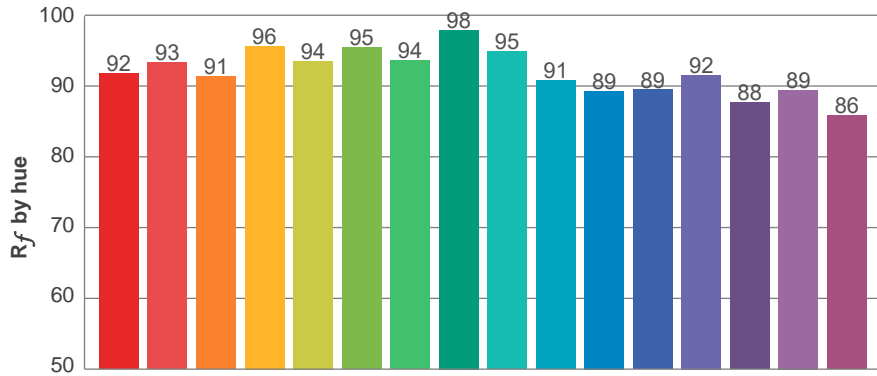
**$R_f$  92.2**  
Fidelity index  $R_f$

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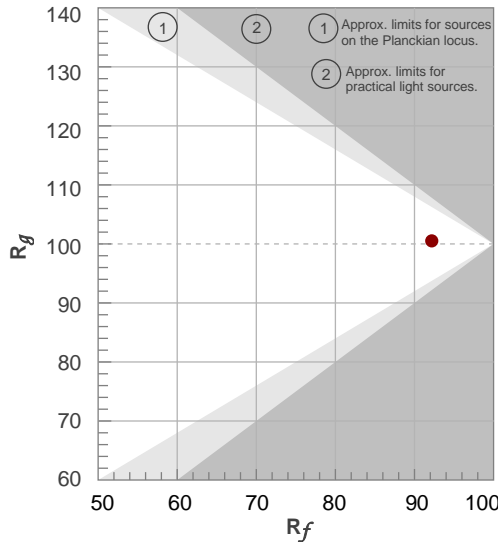
**$R_g$  100.5**  
Gammut index  $R_g$

TM30: 92.2

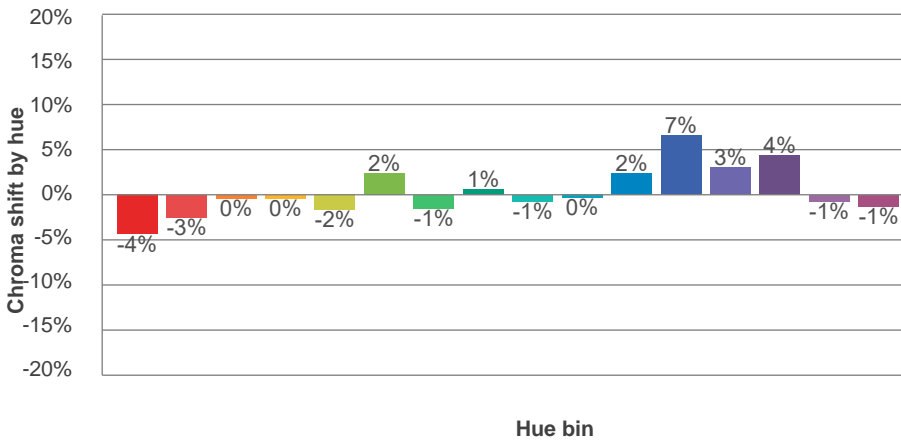
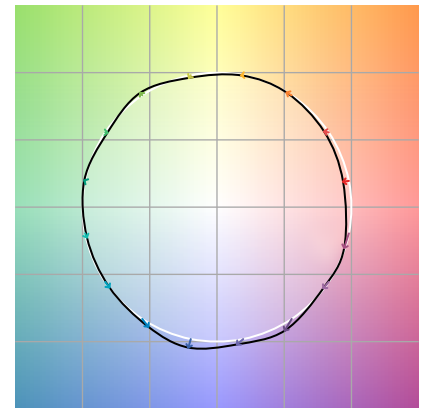
TM-30Color



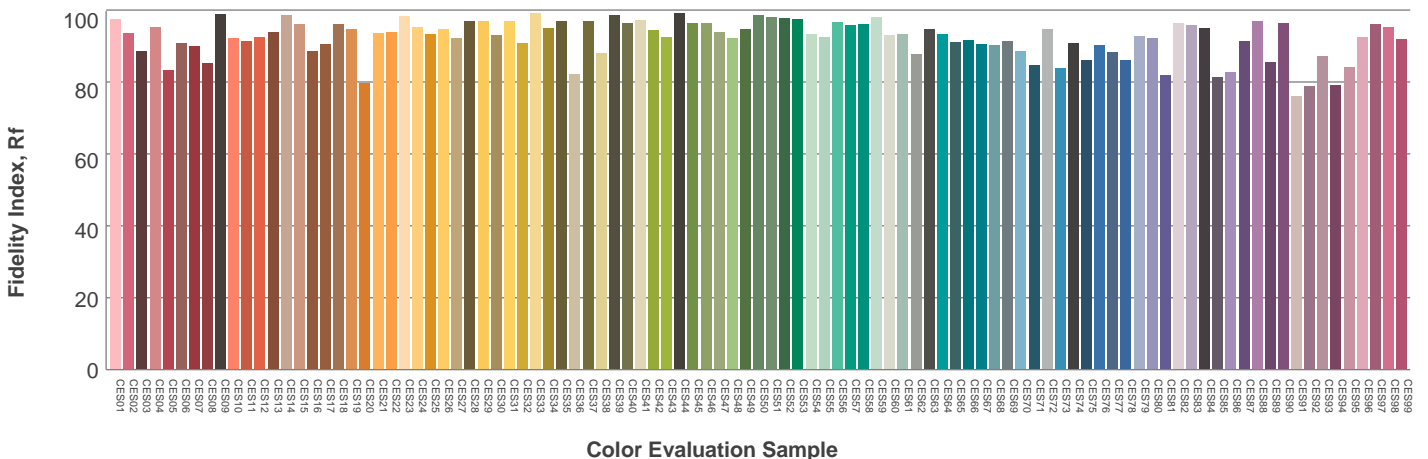
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	0%
2	93	-3%	2%
3	91	0%	4%
4	96	0%	1%
5	94	-2%	2%
6	95	2%	0%
7	94	-1%	-1%
8	98	1%	0%
9	95	-1%	3%
10	91	0%	5%
11	89	2%	7%
12	89	7%	0%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-6%
16	86	-1%	-11%



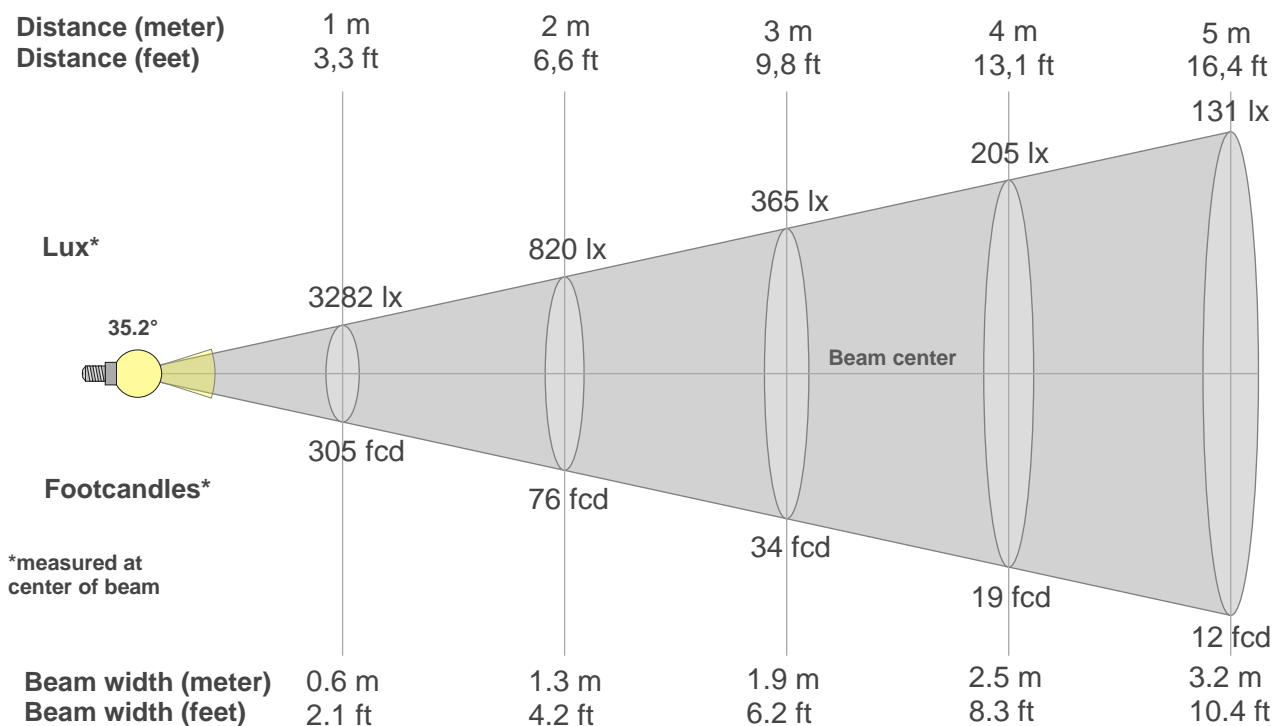
Color vector graphics



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
3282lx	820lx	365lx	205lx	131lx	91lx	67lx	51lx	41lx	33lx	27lx	23lx	19lx	17lx	15lx	13lx	11lx	10lx	9lx	8lx
304.9fcd	76.2fcd	33.9fcd	19.1fcd	12.2fcd	8.5fcd	6.2fcd	4.8fcd	3.8fcd	3fcd	2.5fcd	2.1fcd	1.8fcd	1.6fcd	1.4fcd	1.2fcd	1.1fcd	0.9fcd	0.8fcd	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°
3282	3251	3191	3095	2972	2827	2627	2342	1950	1570	1179	775	395	121	48	17	7	5	4	3
100%	99%	97%	94%	91%	86%	80%	71%	59%	48%	36%	24%	12%	4%	1%	1%	0%	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°
3282	3260	3206	3121	3008	2871	2661	2325	1951	1572	1191	766	397	171	62	22	9	6	4	3
100%	99%	98%	95%	92%	87%	81%	71%	59%	48%	36%	23%	12%	5%	2%	1%	0%	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°
3282	3269	3227	3146	3029	2874	2644	2324	1942	1572	1176	765	389	132	53	20	8	5	4	3
100%	100%	98%	96%	92%	88%	81%	71%	59%	48%	36%	23%	12%	4%	2%	1%	0%	0%	0%	0%

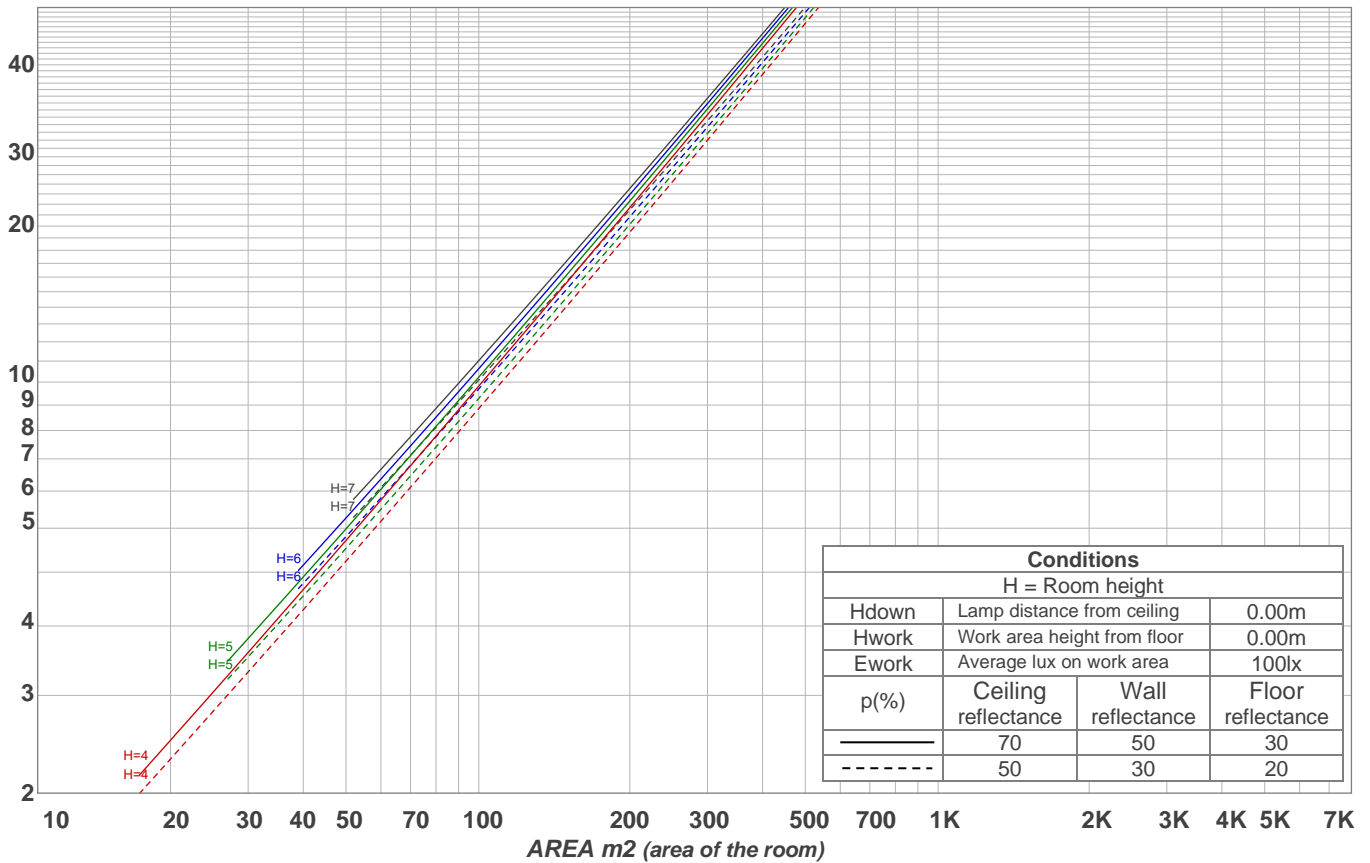
#### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3282	3268	3211	3124	3008	2860	2653	2329	1956	1570	1185	756	380	146	40	13	7	6	5	4
100%	100%	98%	95%	92%	87%	81%	71%	60%	48%	36%	23%	12%	4%	1%	0%	0%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
35.2°	48.8°	54.2°	99.3%	99.0%

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	113	111	109	112	111	109	107	107	105	104	103	102	101	99	99	98	96	96	96	
2	111	107	104	102	109	106	103	101	103	100	98	100	98	96	97	96	94	93	93	93	
3	107	103	99	96	106	101	98	95	99	96	94	97	94	93	95	93	91	90	90	90	
4	104	99	95	92	103	98	94	91	96	93	90	94	91	89	92	90	88	87	87	87	
5	101	95	91	88	100	94	90	87	93	89	87	91	88	86	90	87	85	84	84	84	
6	98	92	88	85	97	91	87	84	90	86	84	88	85	83	87	85	83	82	82	82	
7	95	89	85	82	94	88	84	81	87	84	81	86	83	81	85	82	80	79	79	79	
8	93	86	82	79	92	85	81	79	84	81	78	84	80	78	83	80	78	77	77	77	
9	90	83	79	76	89	83	79	76	82	79	76	81	78	76	81	78	76	75	75	75	
10	88	81	77	74	87	80	77	74	80	76	74	79	76	74	79	76	74	73	73	73	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
293 lm	571 lm	158 lm	3.52 lm	1.60 lm	1.50 lm	1.83 lm	2.44 lm	3.30 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