

Light efficiency:



Output: 1396 lm

Light quality:

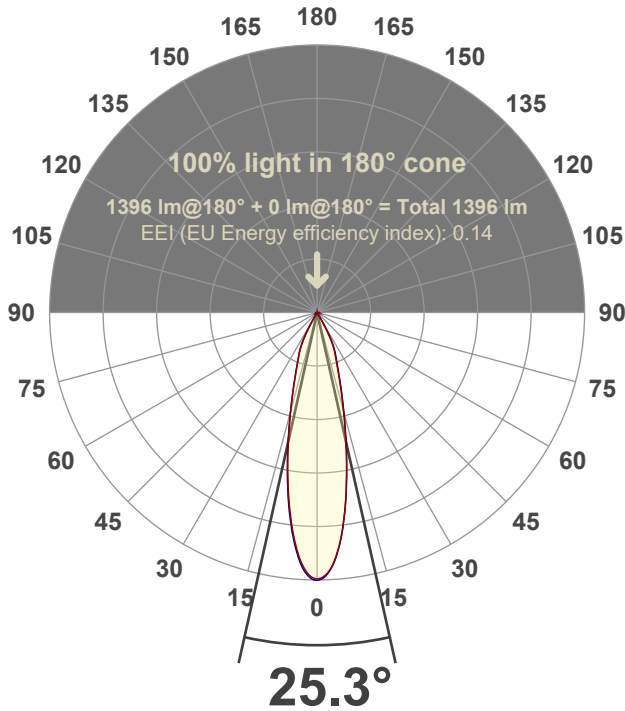


Peak: 5384 cd

Power: 14.2 W



Beam angle



Test number:

GR-O-F-CZ14-30k-NF-SQ-Rev2

Luminaire Model:

Graffiti Open Square Fixed Downlight-CZ14 30k 24° Optic

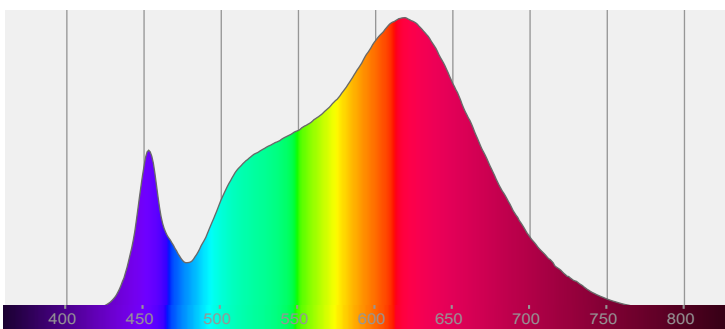
Date and time:

6/30/2022 8:37:25 PM

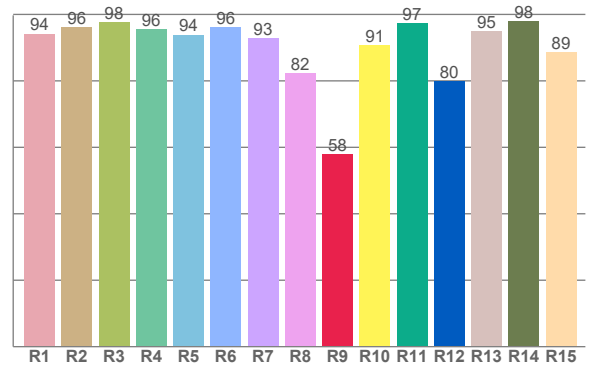
Delivered Lumens

1396

Spectra



CRI: 93.6 (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
	93.6	57.8	92.3	99.3	91.9	0.437	0.408	0.249	0.349	0.0014

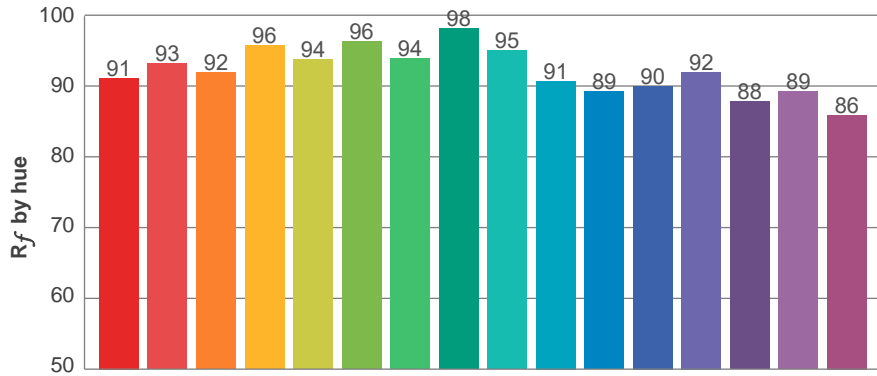
**$R_f$  92.3**  
Fidelity index  $R_f$

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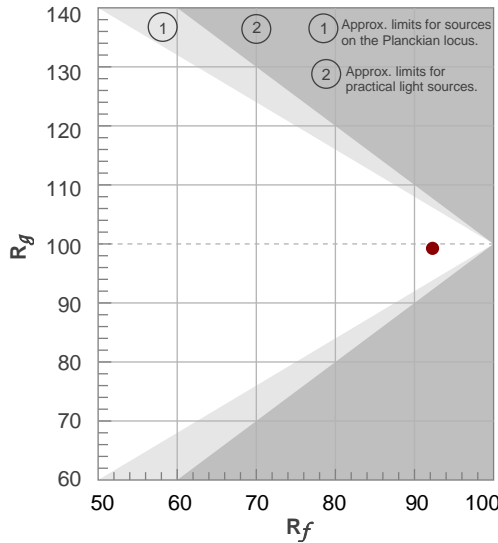
**$R_g$  99.3**  
Gammut index  $R_g$

TM30: 92.3

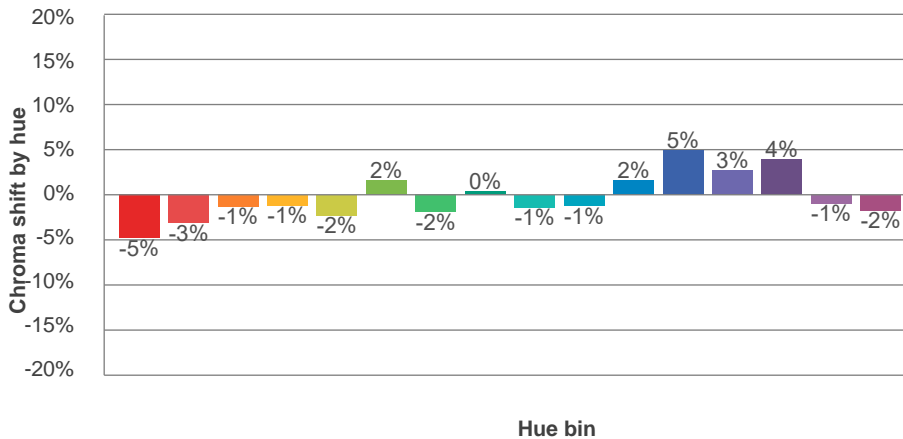
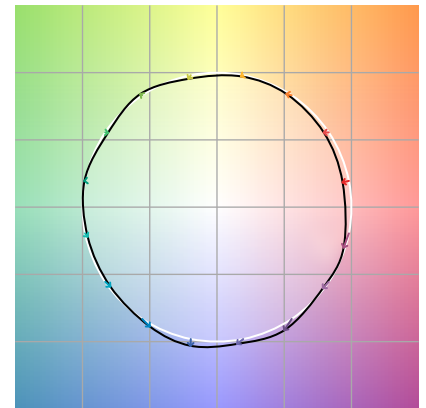
TM-30Color



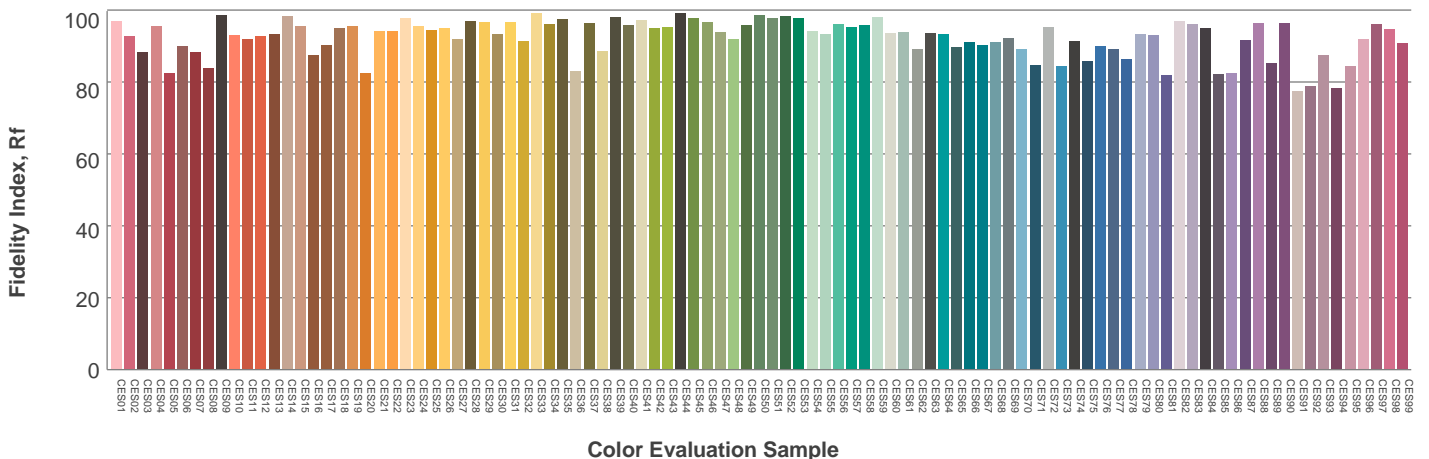
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	92	-1%	4%
4	96	-1%	1%
5	94	-2%	2%
6	96	2%	1%
7	94	-2%	-1%
8	98	0%	0%
9	95	-1%	3%
10	91	-1%	5%
11	89	2%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-6%
16	86	-2%	-11%



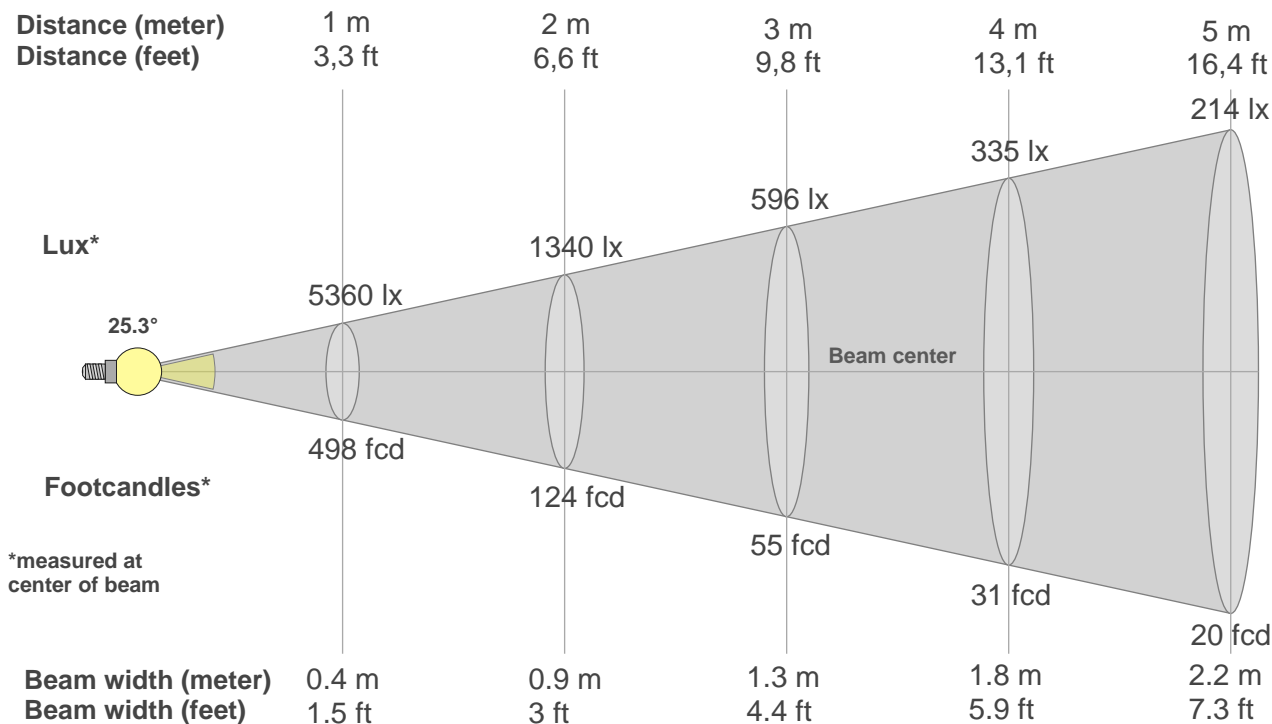
Color vector graphics



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
5360lx	1340lx	596lx	335lx	214lx	149lx	109lx	84lx	66lx	54lx	44lx	37lx	32lx	27lx	24lx	21lx	19lx	17lx	15lx	13lx
497.9fcd	124.5fcd	55.3fcd	31.1fcd	19.9fcd	13.8fcd	10.2fcd	7.8fcd	6.1fcd	5fcd	4.1fcd	3.5fcd	2.9fcd	2.5fcd	2.2fcd	1.9fcd	1.7fcd	1.5fcd	1.4fcd	1.2fcd

#### 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°
5360	5260	5005	4587	4032	3437	2854	2322	1868	1509	1238	1036	874	710	496	259	95	24	12	10
100%	98%	93%	86%	75%	64%	53%	43%	35%	28%	23%	19%	16%	13%	9%	5%	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°
5360	5287	5031	4593	4034	3440	2865	2344	1894	1550	1277	1071	911	763	556	325	139	35	14	10
100%	99%	94%	86%	75%	64%	53%	44%	35%	29%	24%	20%	17%	14%	10%	6%	3%	1%	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°
5360	5255	4985	4528	3985	3411	2845	2322	1877	1530	1257	1052	895	749	535	300	121	28	14	11
100%	98%	93%	84%	74%	64%	53%	43%	35%	29%	23%	20%	17%	14%	10%	6%	2%	1%	0%	0%

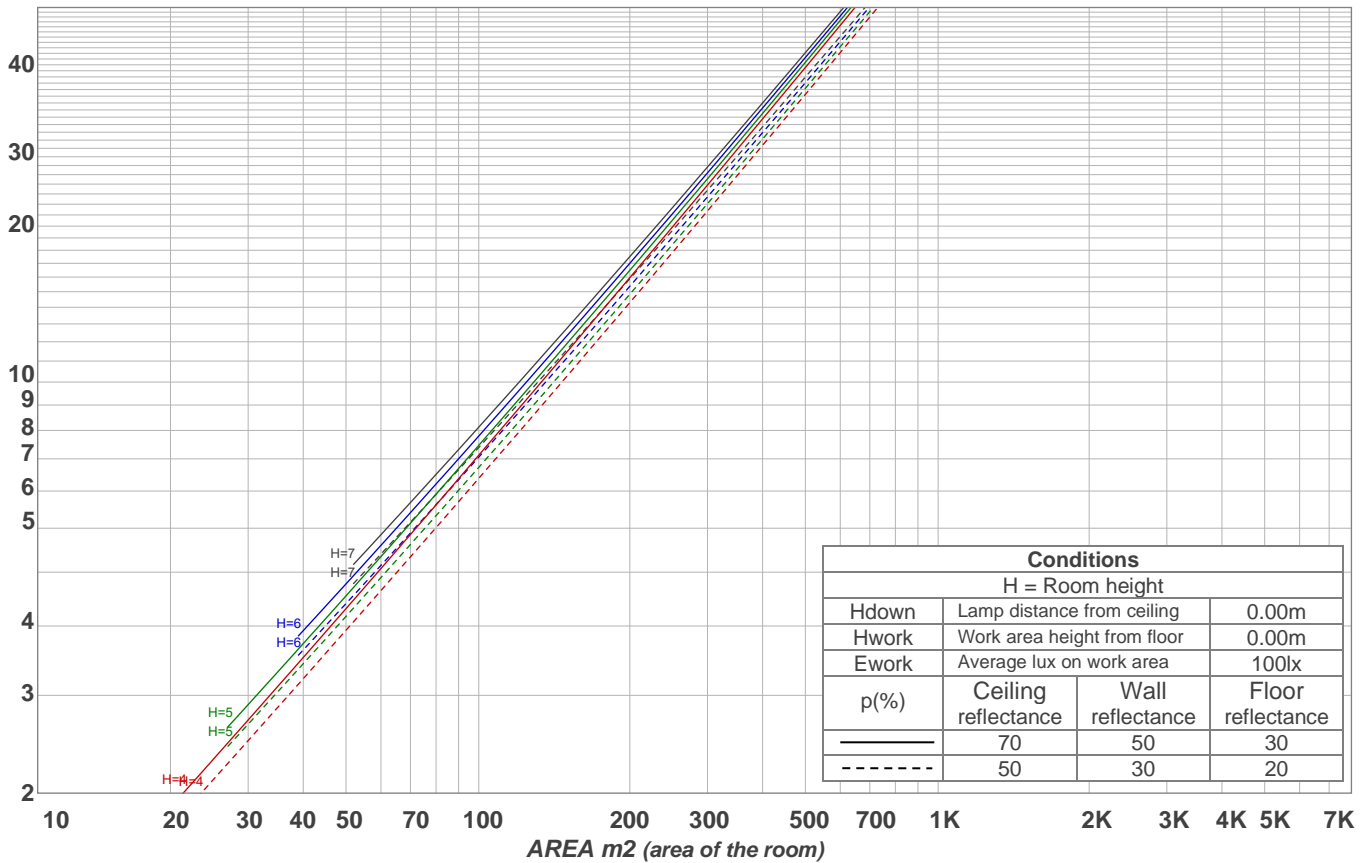
#### Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
5360	5288	5023	4589	4043	3456	2874	2335	1869	1511	1240	1034	866	695	473	242	88	22	13	10
100%	99%	94%	86%	75%	64%	54%	44%	35%	28%	23%	19%	16%	13%	9%	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
25.3°	55.6°	63.3°	99.3%	98.9%

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	109	112	110	108	107	106	105	104	103	102	101	99	98	98	96	96	96	
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	96	95	94	92	92	92	
3	107	102	98	95	105	101	97	94	98	95	93	96	93	91	94	92	90	89	89	89	
4	103	98	93	90	102	97	93	90	95	91	89	93	90	88	91	89	87	86	86	86	
5	100	94	89	86	99	93	89	86	91	88	85	90	87	84	88	86	84	83	83	83	
6	97	90	86	83	96	89	85	82	88	85	82	87	84	81	86	83	81	80	80	80	
7	94	87	83	79	93	86	82	79	85	82	79	84	81	78	83	80	78	77	77	77	
8	91	84	80	77	90	83	79	76	83	79	76	82	78	76	81	78	76	75	75	75	
9	88	81	77	74	87	81	77	74	80	76	74	79	76	73	79	75	73	72	72	72	
10	86	79	74	72	85	78	74	71	78	74	71	77	74	71	76	73	71	70	70	70	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
415 lm	582 lm	351 lm	31.4 lm	3.89 lm	2.83 lm	2.82 lm	3.68 lm	3.62 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