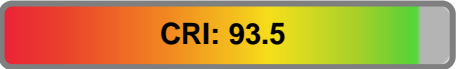


Light efficiency:



Output: 904 lm

Light quality:

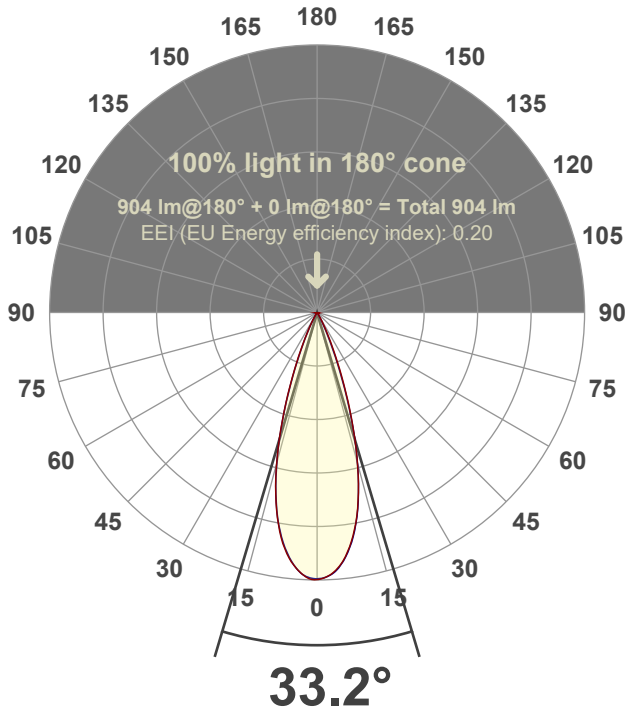


Peak: 2867 cd

Power: 14.2 W



Beam angle



Test number:

GR-F-F-CZ14-30k-FL-SQ-91A-Rev2

Luminaire Model:

Graffiti Flat Square Fixed Downlight-CZ14 30k 38° Optic-Solite

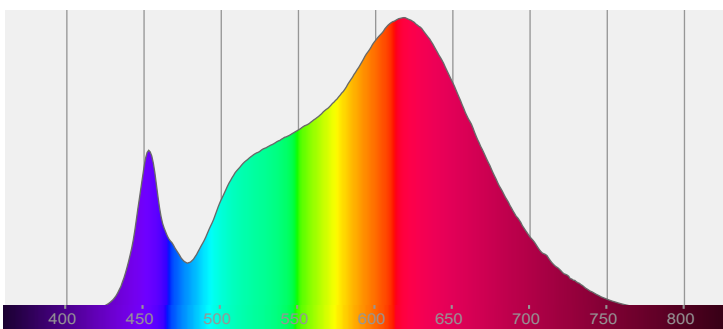
Date and time:

6/30/2022 8:18:18 PM

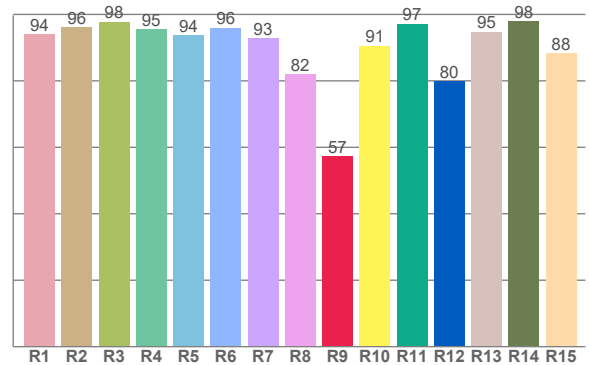
Delivered Lumens

904

Spectra



CRI: 93.5 (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
	93.5	57.3	92.2	99.2	91.8	0.438	0.408	0.249	0.349	0.0014

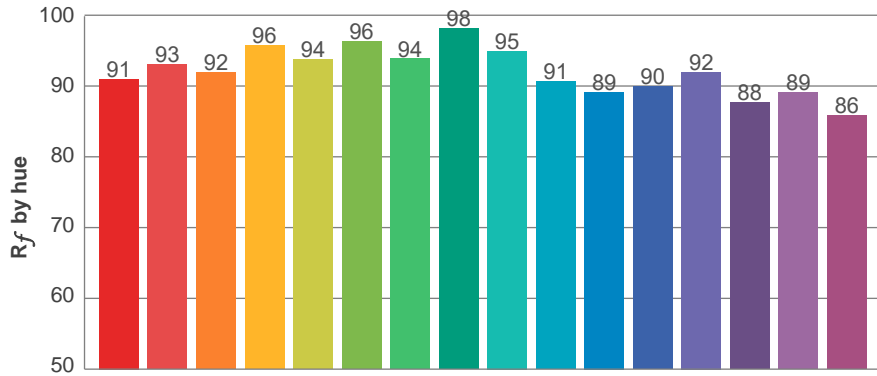
**$R_f$  92.2**  
Fidelity index  $R_f$

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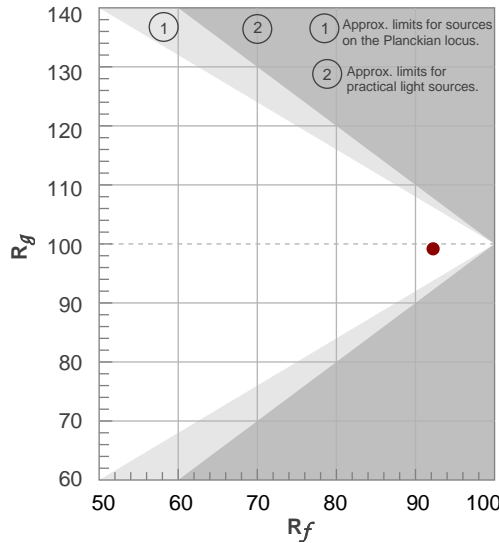
**$R_g$  99.2**  
Gammut index  $R_g$

TM30: 92.2

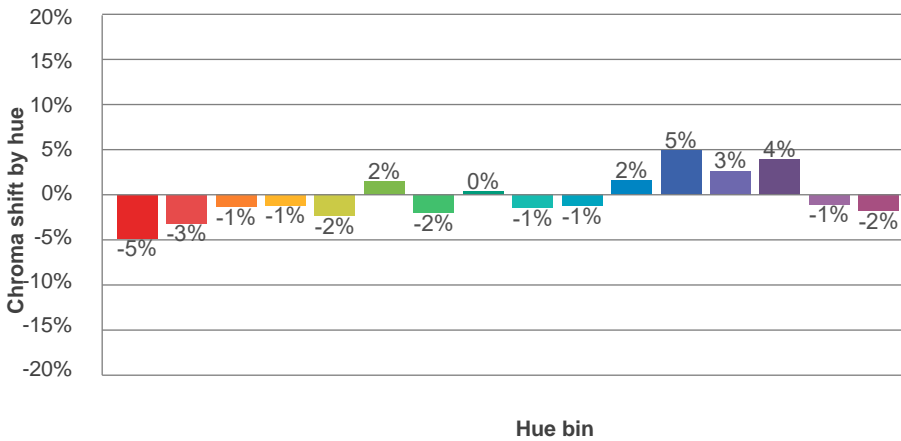
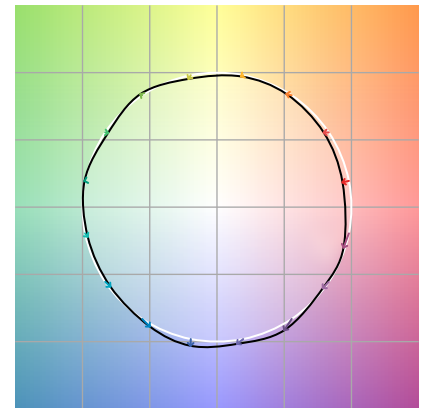
TM-30Color



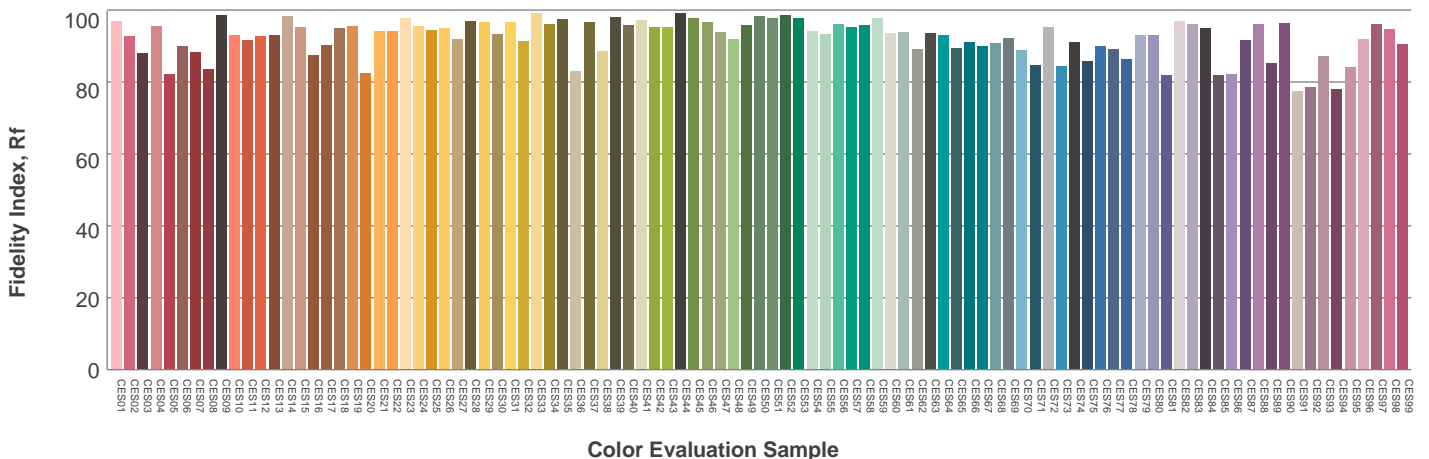
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	92	-1%	4%
4	96	-1%	1%
5	94	-2%	2%
6	96	2%	1%
7	94	-2%	-1%
8	98	0%	0%
9	95	-1%	3%
10	91	-1%	5%
11	89	2%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-6%
16	86	-2%	-11%



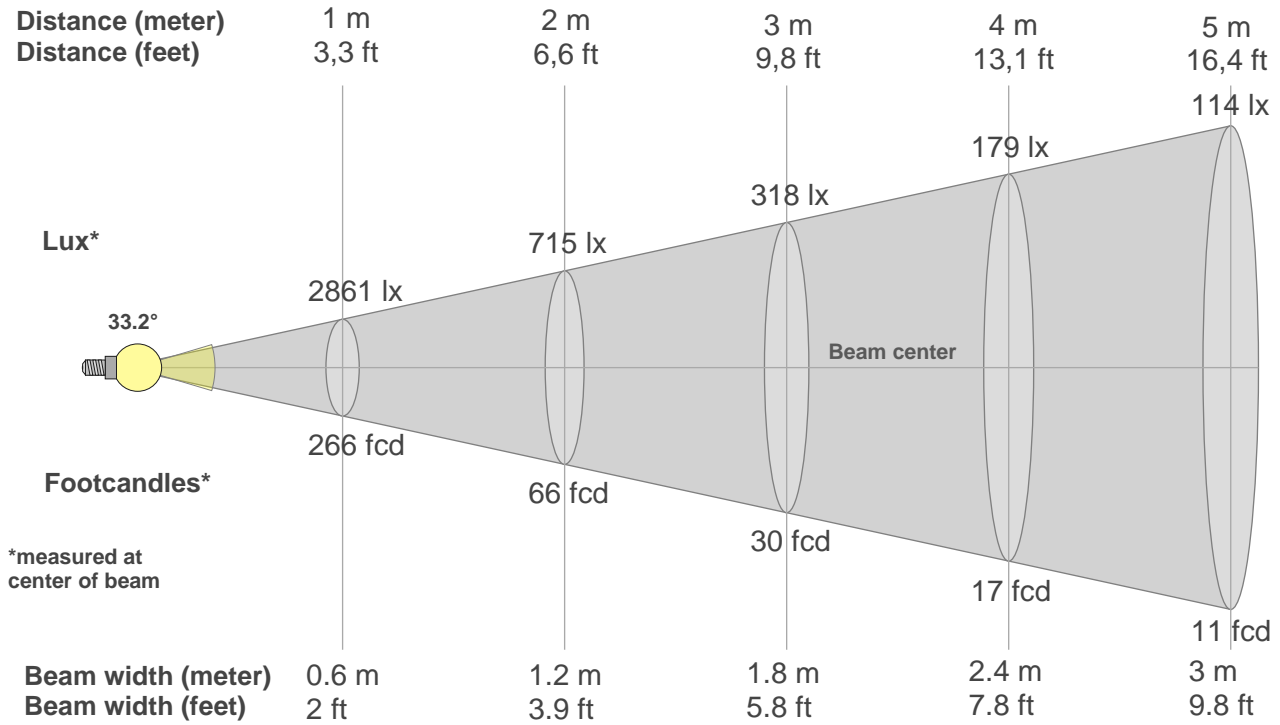
Color vector graphics



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
2861lx	715lx	318lx	179lx	114lx	79lx	58lx	45lx	35lx	29lx	24lx	20lx	17lx	15lx	13lx	11lx	10lx	9lx	8lx	7lx
265.8fcd	66.4fcd	29.5fcd	16.6fcd	10.6fcd	7.4fcd	5.4fcd	4.2fcd	3.3fcd	2.7fcd	2.2fcd	1.8fcd	1.6fcd	1.4fcd	1.2fcd	1fcd	0.9fcd	0.8fcd	0.7fcd	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°
2861	2839	2780	2684	2530	2340	2108	1834	1528	1209	906	640	423	269	170	104	63	39	27	19
100%	99%	97%	94%	88%	82%	74%	64%	53%	42%	32%	22%	15%	9%	6%	4%	2%	1%	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°
2861	2842	2790	2683	2537	2349	2117	1834	1519	1191	869	579	360	215	122	68	40	27	19	14
100%	99%	98%	94%	89%	82%	74%	64%	53%	42%	30%	20%	13%	8%	4%	2%	1%	1%	1%	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°
2861	2851	2788	2684	2539	2349	2115	1842	1528	1208	902	630	417	272	170	102	61	39	27	19
100%	100%	97%	94%	89%	82%	74%	64%	53%	42%	32%	22%	15%	9%	6%	4%	2%	1%	1%	1%

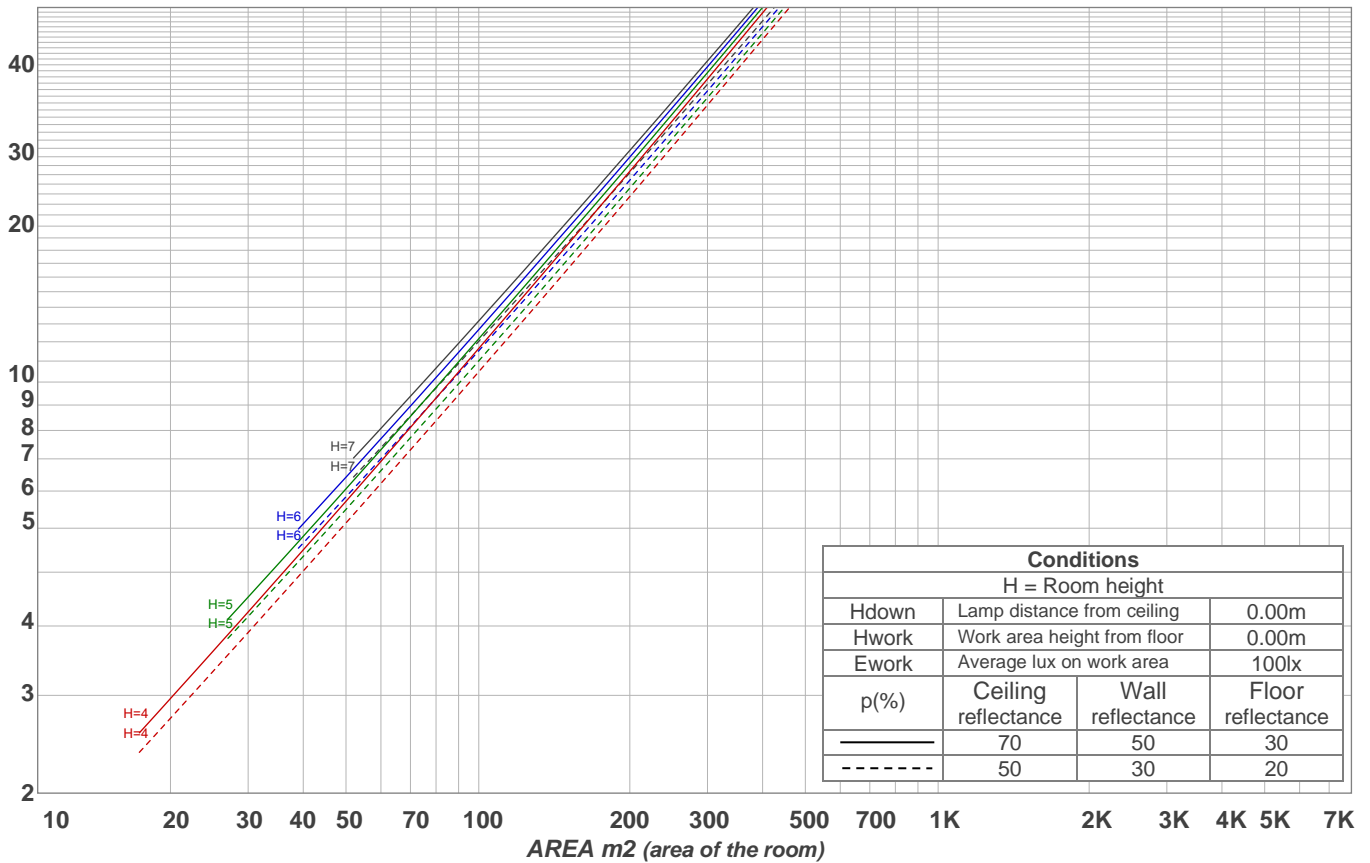
**Intensities in 270° c-plane**

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2861	2839	2783	2680	2530	2338	2104	1829	1522	1194	882	609	392	236	147	90	55	35	24	17
100%	99%	97%	94%	88%	82%	74%	64%	53%	42%	31%	21%	14%	8%	5%	3%	2%	1%	1%	1%

<b>Beam angle 50%</b>	<b>Field angle 10%</b>	<b>Cutoff angle 2,5%</b>	<b>Intensity ratio in 120° cone</b>	<b>Intensity ratio in 90° cone</b>
<b>33.2°</b>	<b>50.9°</b>	<b>61.6°</b>	<b>98.4%</b>	<b>97.6%</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	93	89	86	98	93	88	85	91	87	85	89	86	84	88	85	83	82	82	82	
6	97	90	85	82	95	89	85	82	88	84	81	87	83	81	85	83	80	79	79	79	
7	94	87	82	79	93	86	82	79	85	81	79	84	81	78	83	80	78	77	77	77	
8	91	84	79	76	90	83	79	76	82	79	76	81	78	76	81	78	75	74	74	74	
9	88	81	77	74	87	81	77	74	80	76	73	79	76	73	78	75	73	72	72	72	
10	86	79	74	71	85	78	74	71	78	74	71	77	73	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°
250 lm	448 lm	161 lm	21.1 lm	6.18 lm	4.17 lm	4.78 lm	5.29 lm	4.58 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