

Light efficiency:



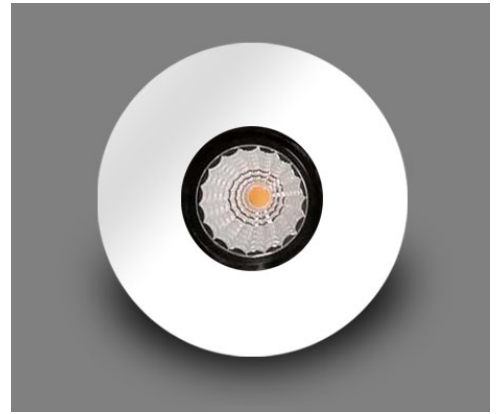
Output: 1170 lm

Light quality:

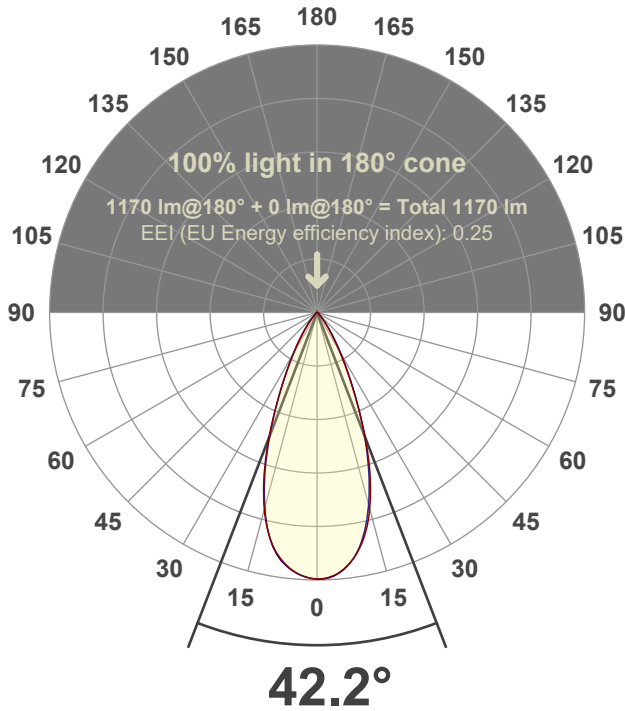


Peak: 2128 cd

Power: 20.8 W



Beam angle



Test number:

GR-F-F-CZ20-30k-WF-RD-91A-Rev2

Luminaire Model:

Graffiti Flat Round Fixed Downlight-CZ20 30k 60° Optic-Solite

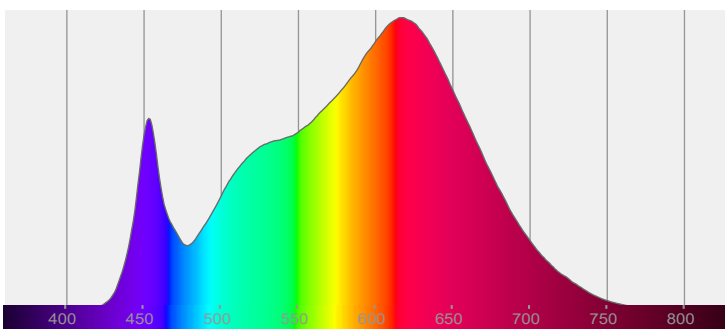
Date and time:

3/9/2022 3:42:53 PM

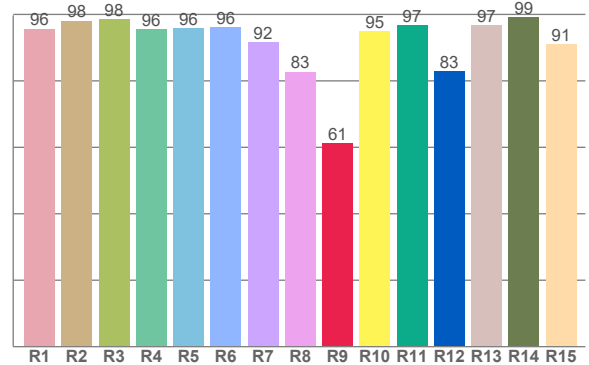
Delivered Lumens

1170

Spectra



CRI: 94.2 (R1-R8)



Color parameters

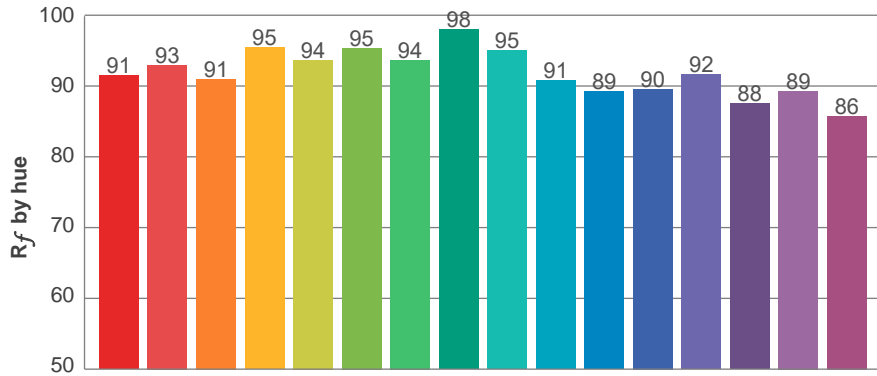
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	94.2	61.2	92.1	100.3	91.6	0.425	0.394	0.247	0.344	-0.0022

R_f 92.1
Fidelity index R_f

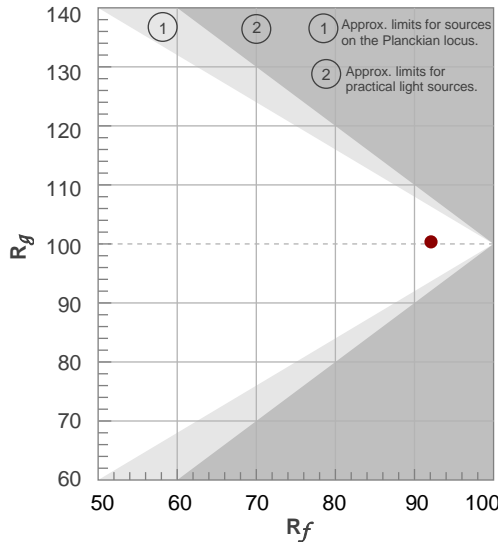
R_g 100.3
Gammut index R_g

TM30: 92.1

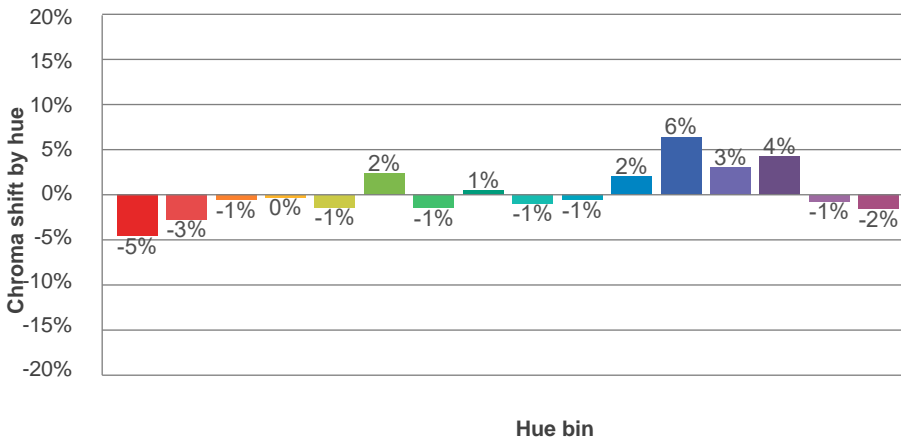
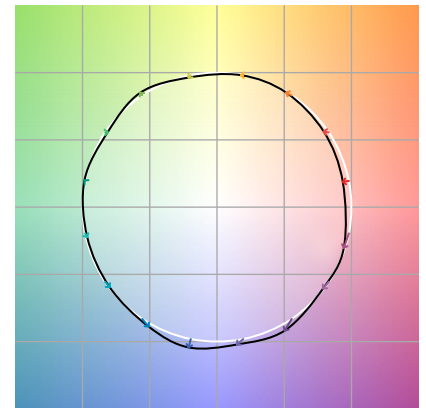
TM-30Color



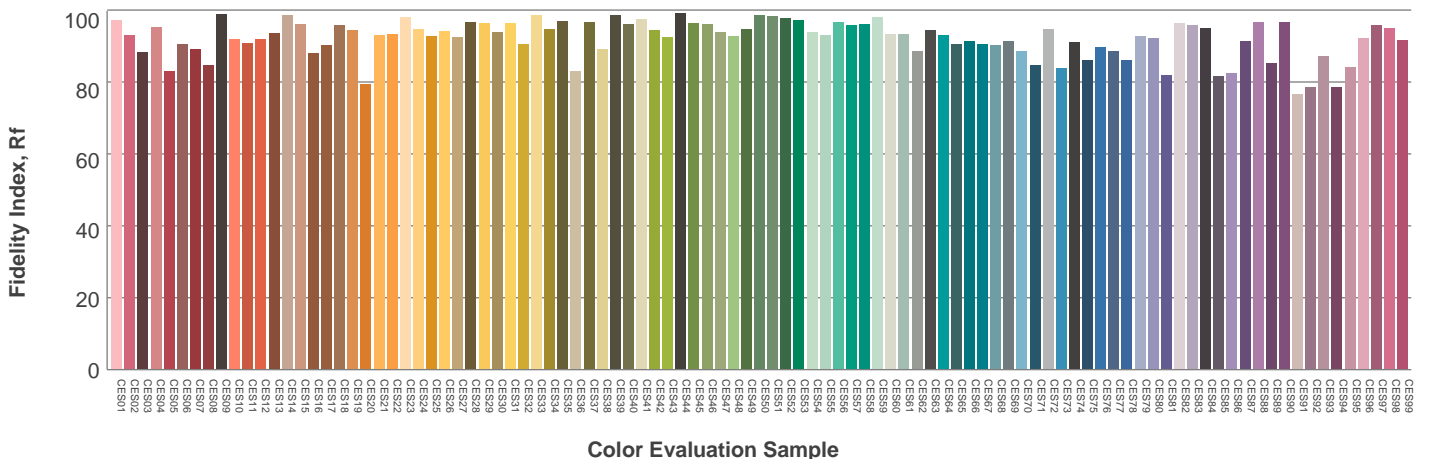
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	3%
3	91	-1%	4%
4	95	0%	2%
5	94	-1%	2%
6	95	2%	0%
7	94	-1%	-1%
8	98	1%	0%
9	95	-1%	3%
10	91	-1%	5%
11	89	2%	7%
12	90	6%	0%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-6%
16	86	-2%	-11%



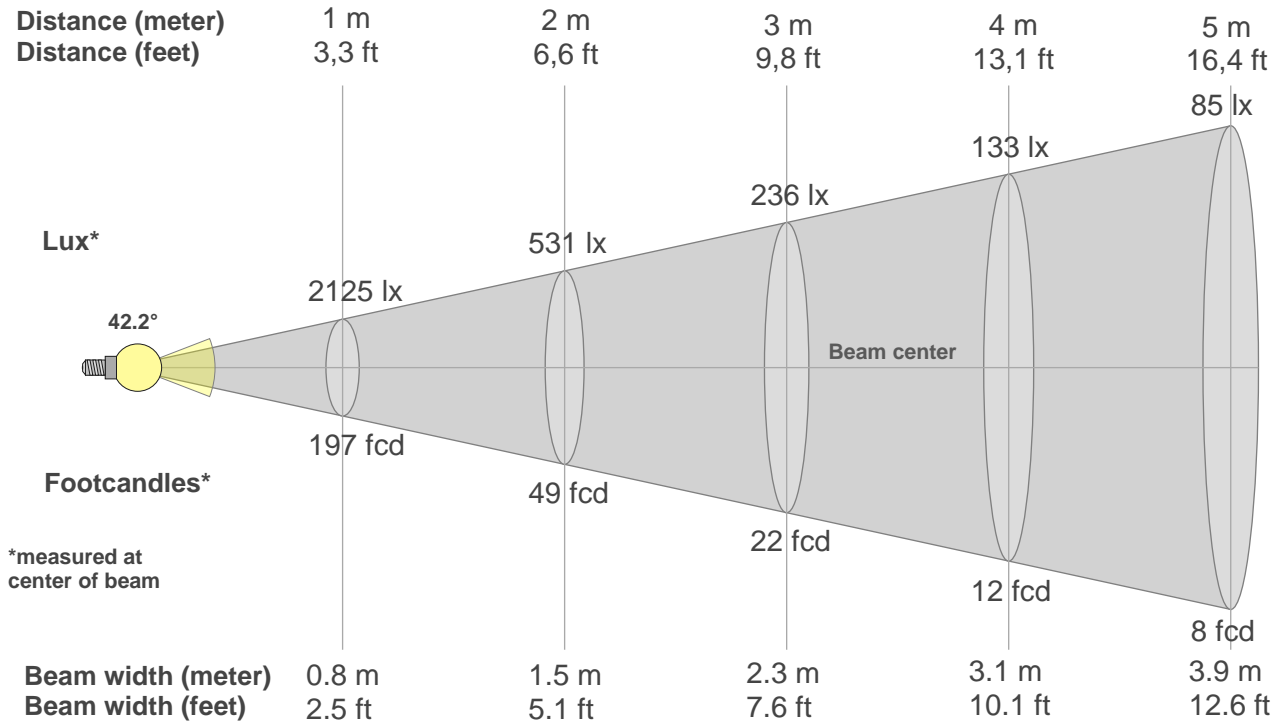
Color vector graphics



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
2125lx	531lx	236lx	133lx	85lx	59lx	43lx	33lx	26lx	21lx	18lx	15lx	13lx	11lx	9lx	8lx	7lx	7lx	6lx	5lx
197.4fcd	49.4fcd	21.9fcd	12.3fcd	7.9fcd	5.5fcd	4fcd	3.1fcd	2.4fcd	2fcd	1.6fcd	1.4fcd	1.2fcd	1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.5fcd	0.5fcd

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°
2125	2119	2097	2055	1996	1919	1820	1697	1544	1371	1181	983	789	617	484	376	289	220	166	122
100%	100%	99%	97%	94%	90%	86%	80%	73%	65%	56%	46%	37%	29%	23%	18%	14%	10%	8%	6%

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°
2125	2120	2099	2059	1999	1912	1799	1663	1508	1338	1155	969	792	635	500	387	299	228	172	128
100%	100%	99%	97%	94%	90%	85%	78%	71%	63%	54%	46%	37%	30%	24%	18%	14%	11%	8%	6%

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°
2125	2115	2091	2053	2000	1927	1826	1699	1548	1374	1183	982	794	630	495	386	298	230	174	131
100%	100%	98%	97%	94%	91%	86%	80%	73%	65%	56%	46%	37%	30%	23%	18%	14%	11%	8%	6%

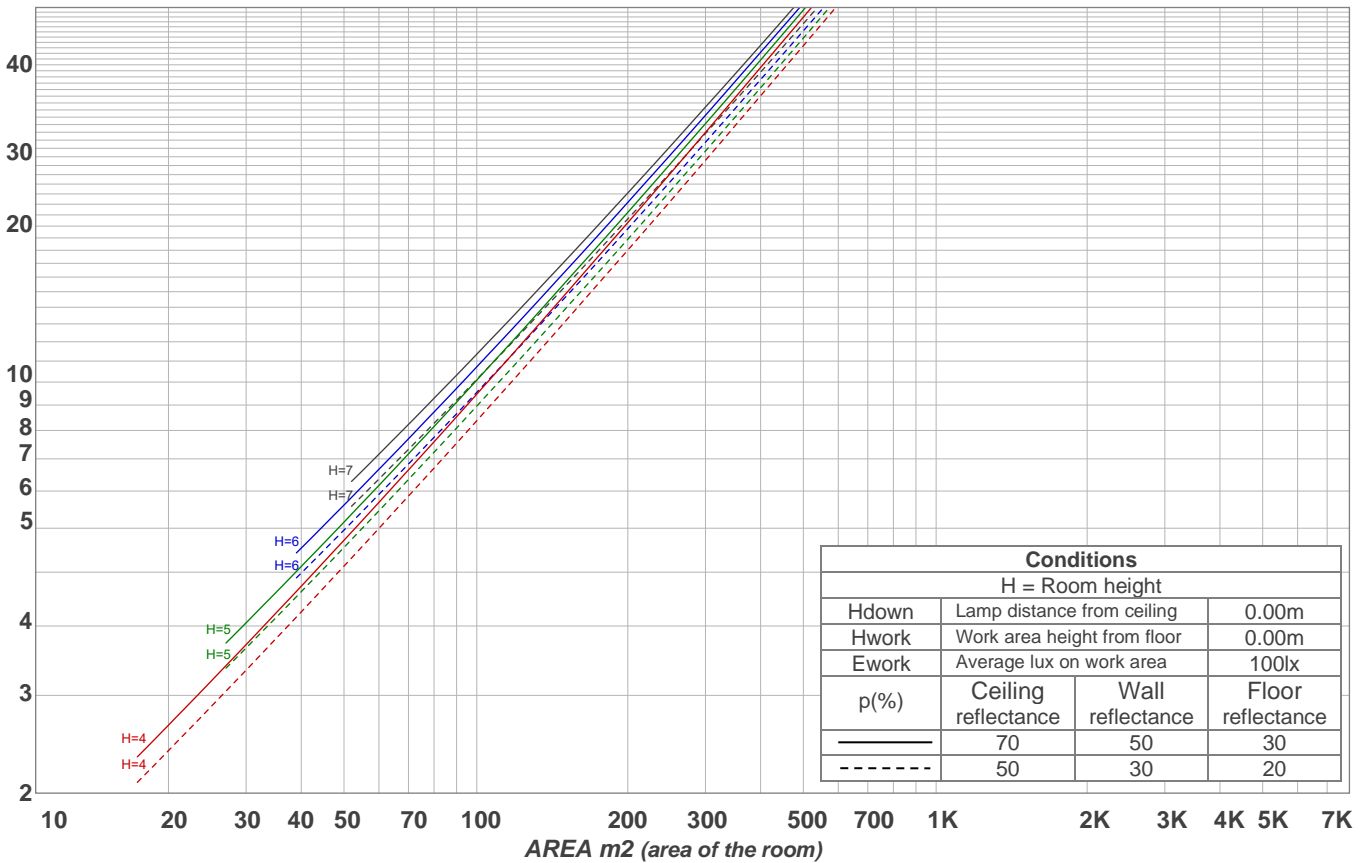
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2125	2116	2095	2058	2005	1930	1826	1691	1530	1351	1159	968	790	633	500	394	308	236	178	133
100%	100%	99%	97%	94%	91%	86%	80%	72%	64%	55%	46%	37%	30%	24%	19%	14%	11%	8%	6%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
42.2°	69°	88.3°	97.8%	95.2%

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	111	109	106	111	109	107	105	105	103	101	101	100	98	98	97	96	94	94	94	
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88	88	88	
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	85	83	83	83	
4	99	92	87	83	97	91	86	83	89	85	82	87	84	81	85	82	80	78	78	78	
5	95	87	82	78	93	86	81	78	85	80	77	83	79	76	82	78	76	74	74	74	
6	91	83	77	73	90	82	77	73	81	76	73	79	75	72	78	75	72	70	70	70	
7	87	79	73	70	86	78	73	69	77	72	69	76	72	69	75	71	68	67	67	67	
8	84	75	70	66	82	75	69	66	73	69	66	72	68	65	72	68	65	64	64	64	
9	80	72	66	63	79	71	66	63	70	66	62	69	65	62	69	65	62	61	61	61	
10	77	69	63	60	76	68	63	60	67	63	60	67	62	59	66	62	59	58	58	58	

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
194 lm	439 lm	326 lm	129 lm	39.2 lm	15.7 lm	11.4 lm	9.30 lm	5.24 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