

Light efficiency:



Output: 1619 lm

Light quality:

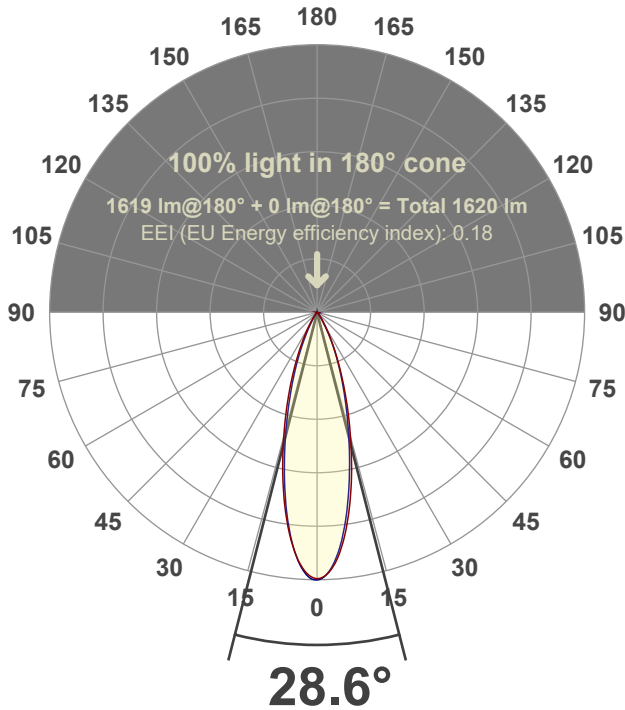


Peak: 5279 cd

Power: 20.7 W



Beam angle



Test number:

GR-F-CZ20-30k-NF-SQ-91A-Rev2

Luminaire Model:

Graffiti Regress Square Fixed Downlight-CZ20 30k 24° Optic-Solite

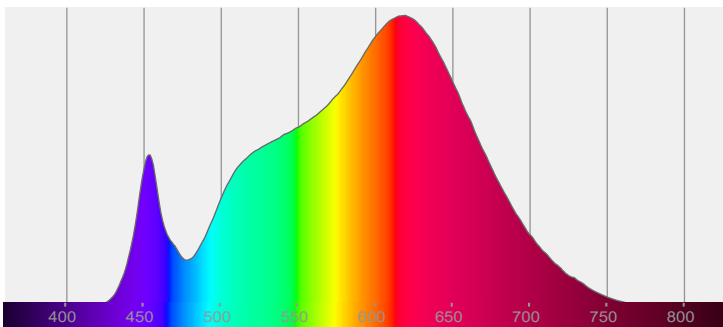
Date and time:

6/30/2022 9:02:58 PM

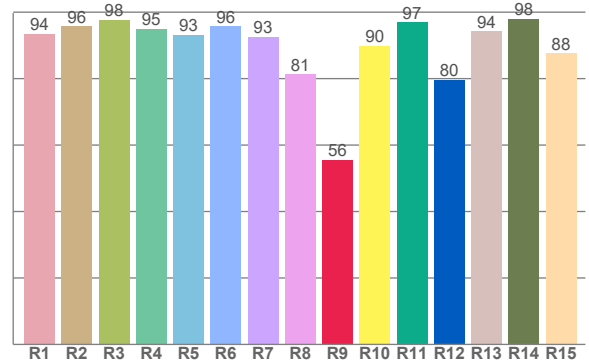
Delivered Lumens

1619

Spectra



CRI: 93.1 (R1-R8)



Color parameters

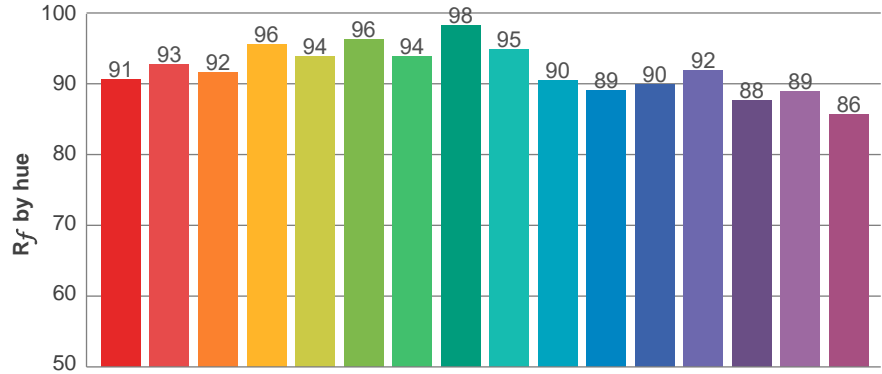
Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color divition from black body
CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
93.1	55.5	92.1	99.0	91.6	0.438	0.409	0.249	0.349	0.0016

R_f 92.1
Fidelity index R_f

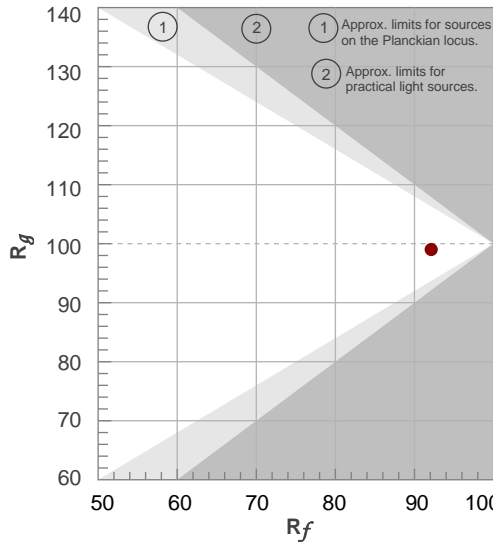
R_g 99.0
Gammut index R_g

TM30: 92.1

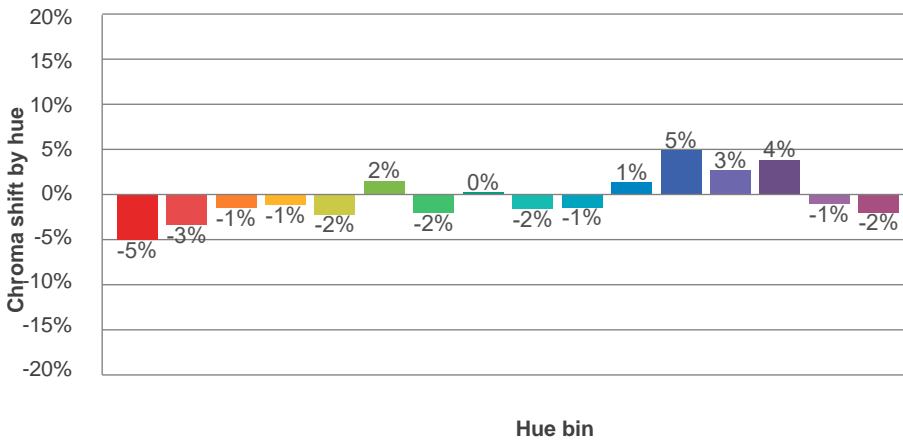
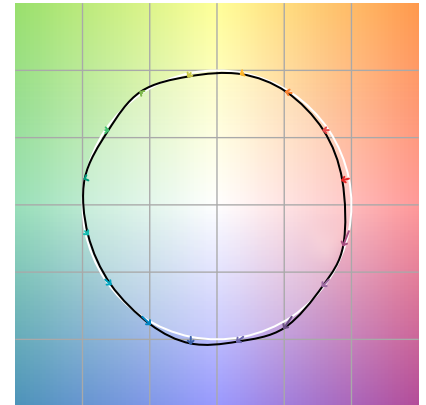
TM-30Color



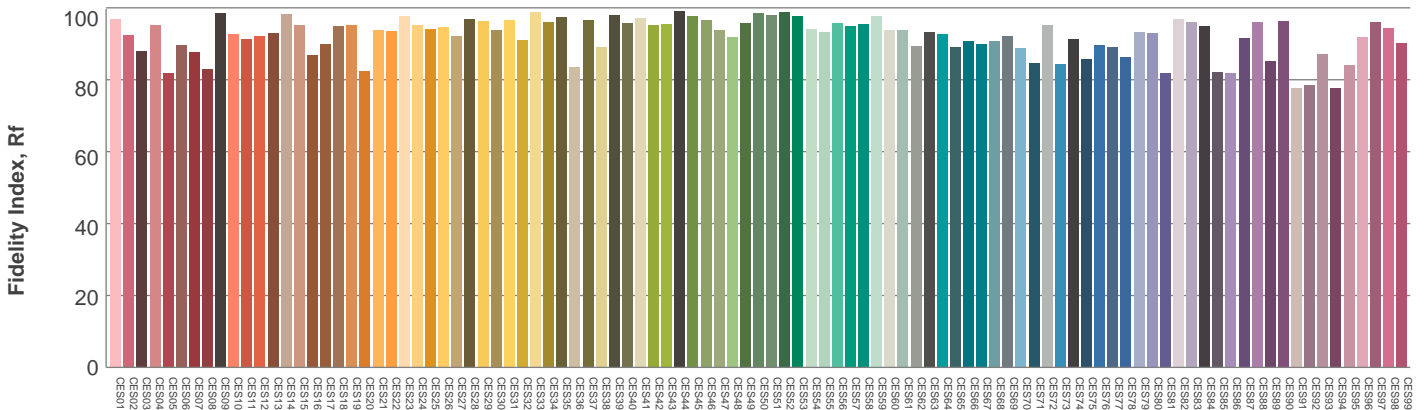
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	93	-3%	2%
3	92	-1%	4%
4	96	-1%	2%
5	94	-2%	2%
6	96	2%	1%
7	94	-2%	-1%
8	98	0%	0%
9	95	-2%	3%
10	90	-1%	5%
11	89	1%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-9%
15	89	-1%	-7%
16	86	-2%	-11%



Color vector graphics

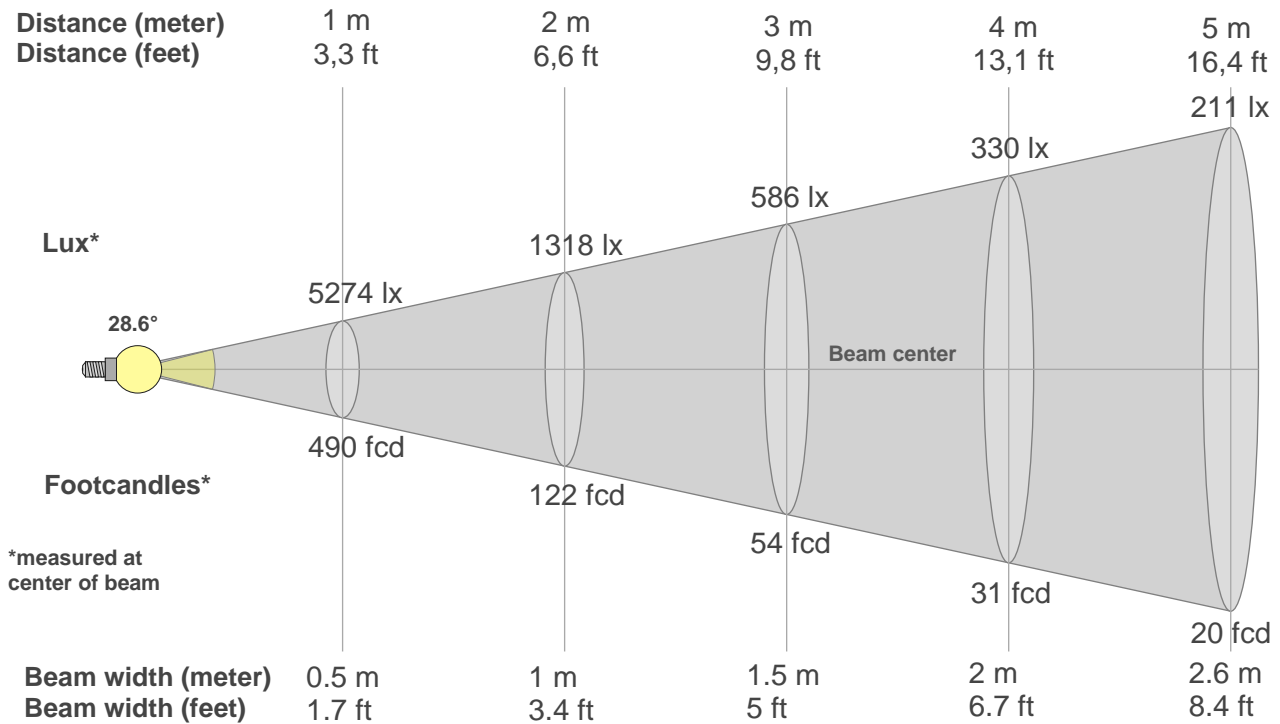


Color distortion



Color Evaluation Sample

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
5274lx	1318lx	586lx	330lx	211lx	146lx	108lx	82lx	65lx	53lx	44lx	37lx	31lx	27lx	23lx	21lx	18lx	16lx	15lx	13lx
489.9fcd	122.5fcd	54.4fcd	30.6fcd	19.6fcd	13.6fcd	10fcd	7.7fcd	6fcd	4.9fcd	4fcd	3.4fcd	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°
5274	5192	4979	4653	4242	3777	3290	2800	2346	1930	1557	1232	955	722	536	393	286	209	154	115
100%	98%	94%	88%	80%	72%	62%	53%	44%	37%	30%	23%	18%	14%	10%	7%	5%	4%	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°
5274	5176	4933	4570	4113	3606	3104	2624	2186	1800	1457	1164	912	690	499	346	233	156	109	77
100%	98%	94%	87%	78%	68%	59%	50%	41%	34%	28%	22%	17%	13%	9%	7%	4%	3%	2%	1%

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°
5274	5180	4960	4632	4223	3764	3279	2799	2348	1936	1568	1244	965	730	544	398	290	212	156	117
100%	98%	94%	88%	80%	71%	62%	53%	45%	37%	30%	24%	18%	14%	10%	8%	6%	4%	3%	2%

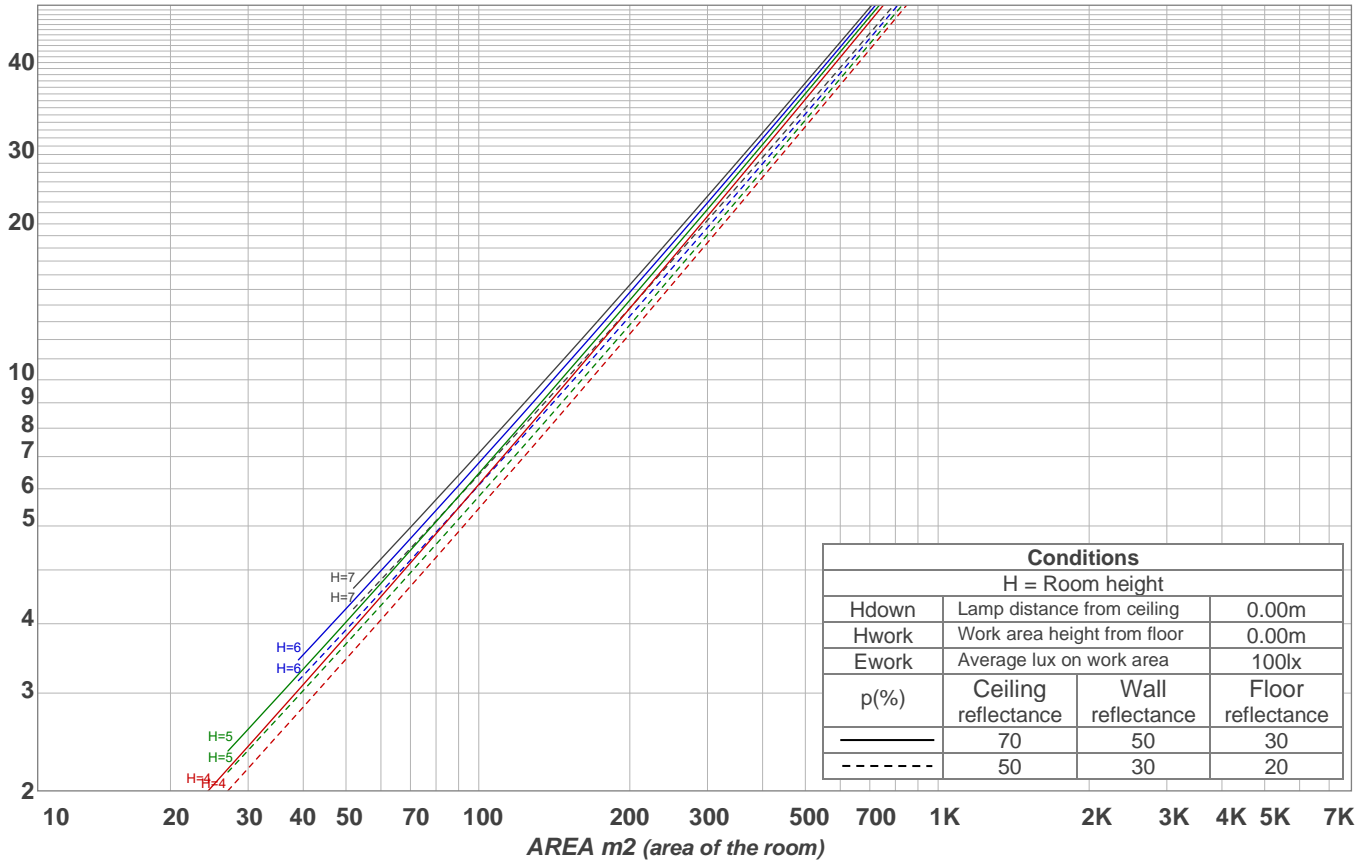
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
5274	5213	4990	4622	4164	3654	3131	2623	2149	1731	1377	1063	795	572	394	263	180	126	89	63
100%	99%	95%	88%	79%	69%	59%	50%	41%	33%	26%	20%	15%	11%	7%	5%	3%	2%	2%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
28.6°	55.2°	71.5°	99.2%	98.1%

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	0
Floor reflectance	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
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91
3	106	101	97	94	104	100	96	93	97	94	91	95	92	90	93	90	89	87
4	102	96	92	88	101	95	91	88	93	90	87	91	88	86	89	87	85	84
5	99	92	87	84	97	91	87	84	89	86	83	88	85	82	86	84	82	80
6	95	88	83	80	94	87	83	80	86	82	79	85	81	79	84	81	78	77
7	92	85	80	77	91	84	80	77	83	79	76	82	78	76	81	78	75	74
8	89	82	77	74	88	81	77	74	80	76	73	79	76	73	78	75	73	72
9	86	79	74	71	85	78	74	71	77	73	71	77	73	70	76	73	70	69
10	83	76	71	68	83	75	71	68	75	71	68	74	70	68	73	70	68	67

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
423 lm	680 lm	367 lm	102 lm	27.0 lm	8.89 lm	5.43 lm	3.45 lm	3.61 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