

Light efficiency:



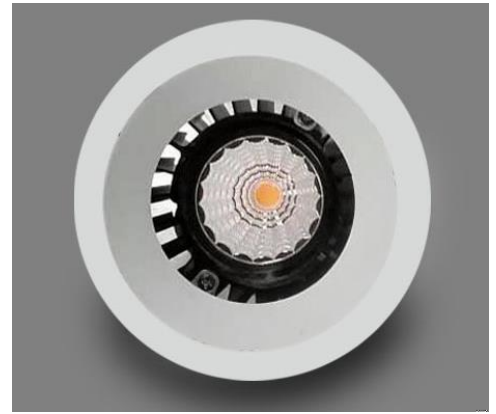
Output: 1636 lm

Light quality:

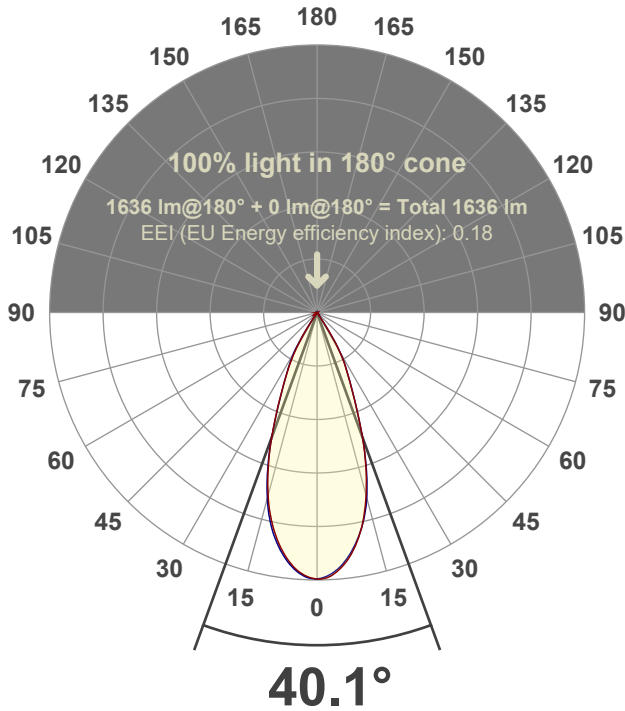


Peak: 3585 cd

Power: 21.3 W



Beam angle



Test number:

GR-O-F-A20-3019-FL-RD-Rev2

Luminaire Model:

Graffiti Open Round Fixed Downlight-A20-3019 38° Optic

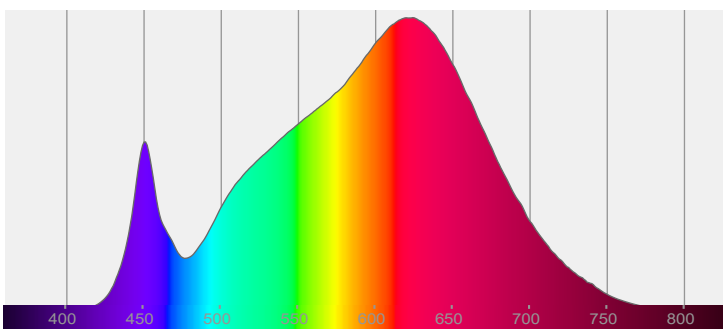
Date and time:

4/28/2022 8:16:08 PM

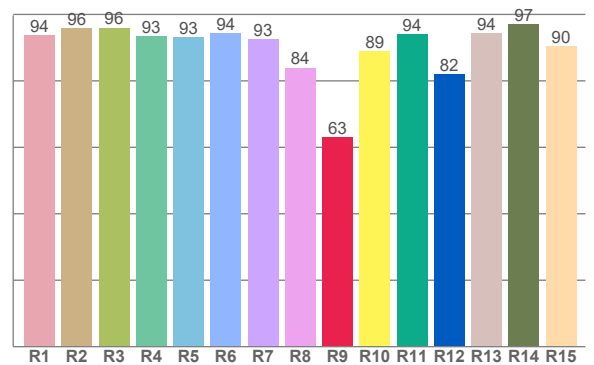
Delivered Lumens

1636

Spectra



CRI: 92.8 (R1-R8)



Color parameters

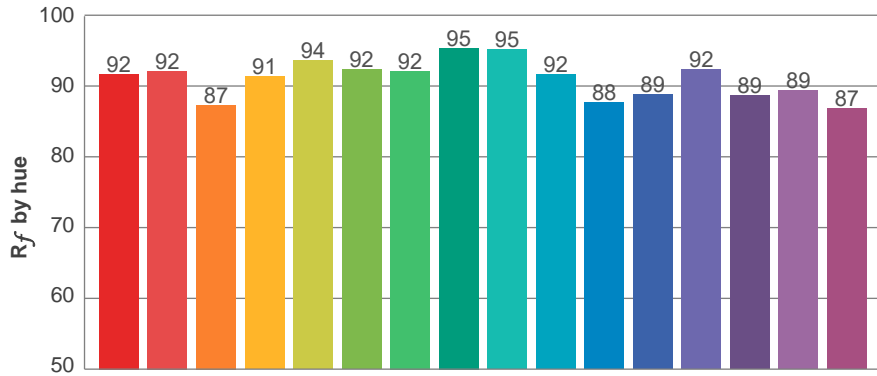
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	92.8	63.1	91.1	101.7	90.0	0.434	0.398	0.251	0.346	-0.0020

R_f 91.1
Fidelity index R_f

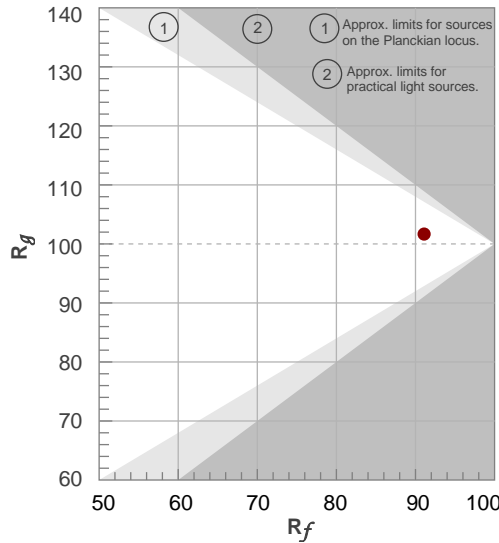
R_g 101.7
Gammut index R_g

TM30: 91.1

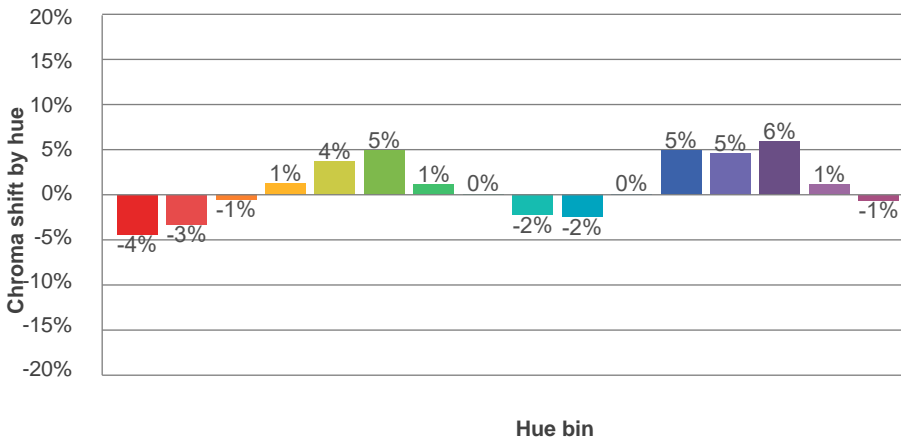
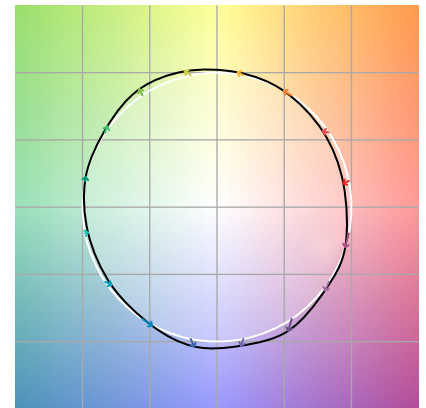
TM-30Color



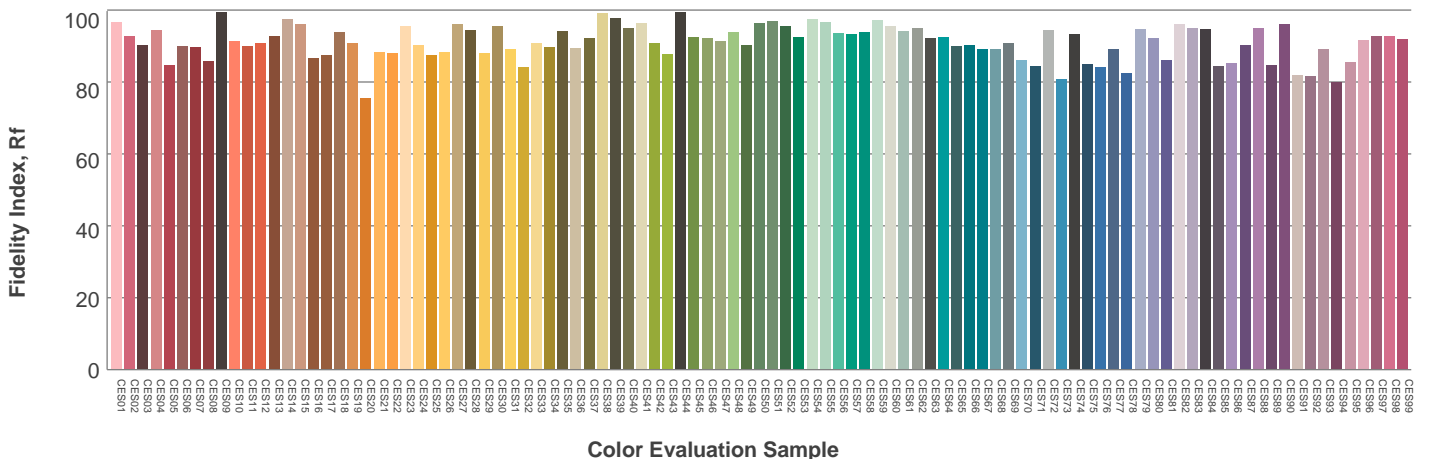
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-1%
2	92	-3%	3%
3	87	-1%	7%
4	91	1%	4%
5	94	4%	4%
6	92	5%	-1%
7	92	1%	-5%
8	95	0%	-3%
9	95	-2%	0%
10	92	-2%	4%
11	88	0%	9%
12	89	5%	4%
13	92	5%	-3%
14	89	6%	-7%
15	89	1%	-7%
16	87	-1%	-11%



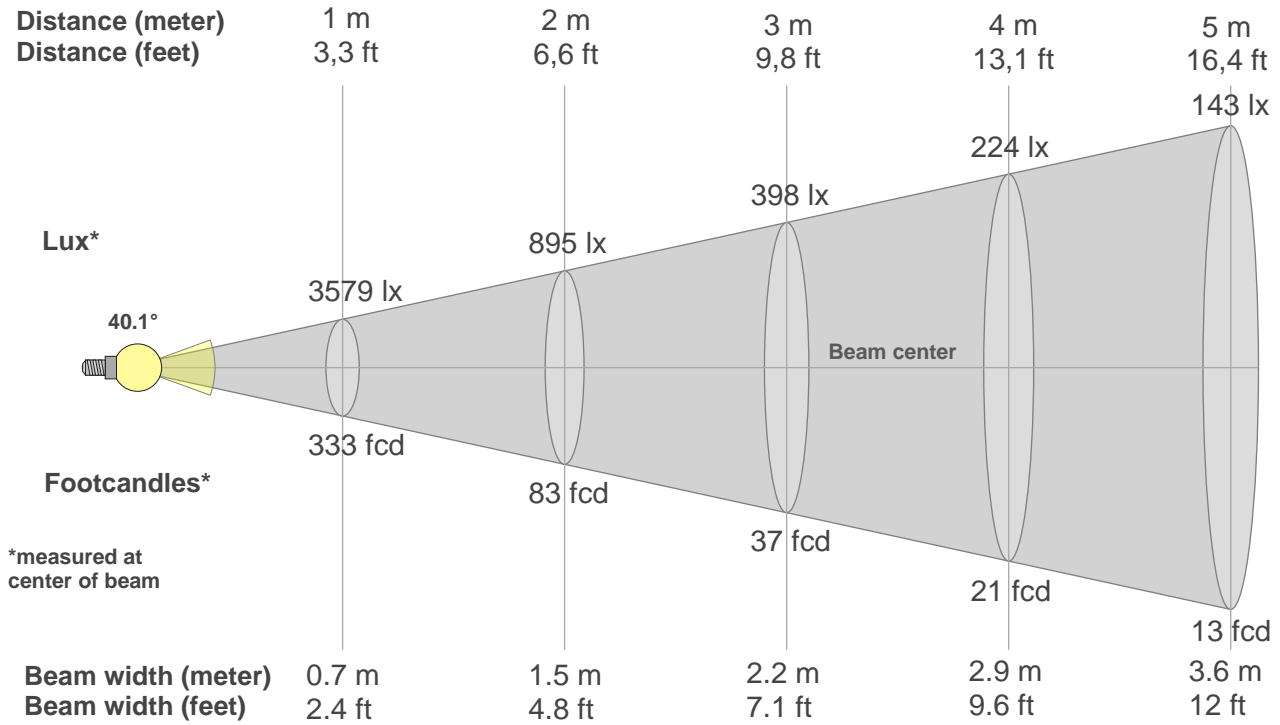
Color vector graphics



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
3579lx	895lx	398lx	224lx	143lx	99lx	73lx	56lx	44lx	36lx	30lx	25lx	21lx	18lx	16lx	14lx	12lx	11lx	10lx	9lx
332.5fcd	83.1fcd	36.9fcd	20.8fcd	13.3fcd	9.2fcd	6.8fcd	5.2fcd	4.1fcd	3.3fcd	2.7fcd	2.3fcd	2fcd	1.7fcd	1.5fcd	1.3fcd	1.2fcd	1fcd	0.9fcd	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°
3579	3565	3505	3409	3281	3119	2920	2678	2406	2111	1797	1467	1193	978	803	622	406	170	38	8
100%	100%	98%	95%	92%	87%	82%	75%	67%	59%	50%	41%	33%	27%	22%	17%	11%	5%	1%	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°
3579	3546	3481	3385	3258	3105	2923	2704	2435	2127	1795	1460	1197	985	811	633	410	134	34	7
100%	99%	97%	95%	91%	87%	82%	76%	68%	59%	50%	41%	33%	28%	23%	18%	11%	4%	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°
3579	3554	3489	3388	3256	3094	2903	2678	2408	2113	1797	1479	1194	971	779	586	379	173	20	10
100%	99%	97%	95%	91%	86%	81%	75%	67%	59%	50%	41%	33%	27%	22%	16%	11%	5%	1%	0%

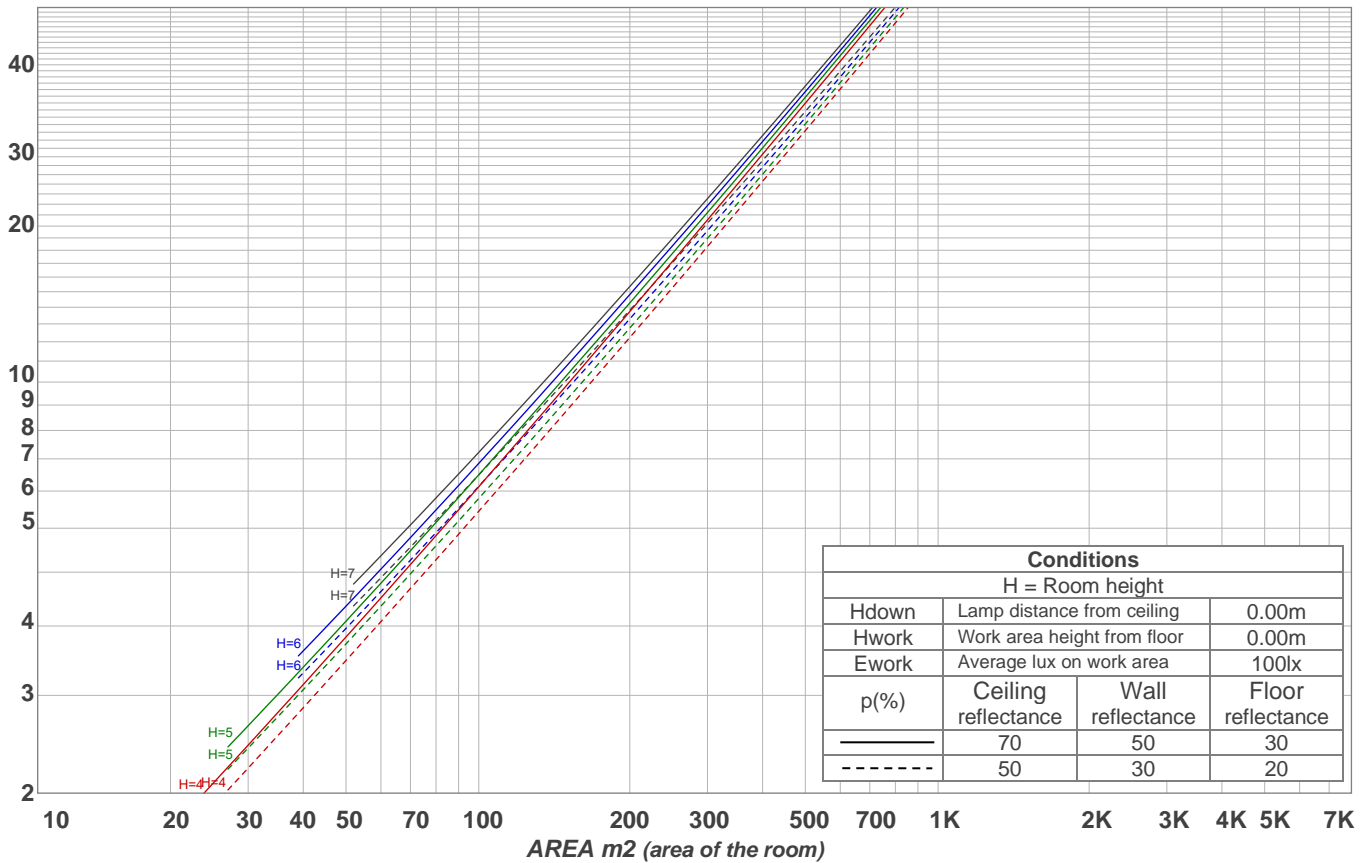
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3579	3567	3507	3412	3286	3132	2949	2724	2446	2133	1796	1464	1181	969	804	634	412	173	20	8
100%	100%	98%	95%	92%	88%	82%	76%	68%	60%	50%	41%	33%	27%	22%	18%	12%	5%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
40.1°	64.7°	70°	99.5%	99.3%

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	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	95	95	
2	110	106	102	100	108	104	101	98	101	98	96	98	96	94	95	94	92	91	91	91	
3	106	100	96	93	104	99	95	92	96	93	91	94	92	89	92	90	88	87	87	87	
4	102	95	91	87	100	94	90	87	92	89	86	90	87	85	89	86	84	83	83	83	
5	98	91	86	83	96	90	86	82	88	85	82	87	84	81	85	83	80	79	79	79	
6	94	87	82	79	93	86	82	78	85	81	78	84	80	77	82	79	77	76	76	76	
7	91	83	78	75	90	83	78	75	81	77	74	80	77	74	79	76	74	72	72	72	
8	87	80	75	72	86	79	75	71	78	74	71	77	74	71	76	73	71	69	69	69	
9	84	77	72	68	83	76	72	68	75	71	68	74	71	68	74	70	68	67	67	67	
10	81	74	69	66	81	73	69	66	72	68	65	72	68	65	71	68	65	64	64	64	

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
319 lm	697 lm	505 lm	103 lm	2.43 lm	1.74 lm	1.92 lm	3.25 lm	3.38 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