

Light efficiency:



Output: 1336 lm

Light quality:

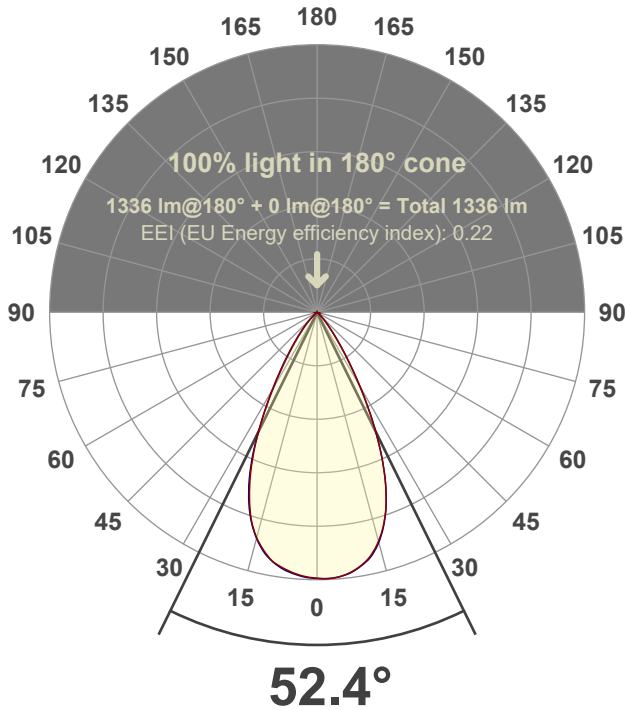


Peak: 1791 cd

Power: 21.3 W



Beam angle



Test number:

GR-F-A20-3019-WF-RD-91A-Rev2

Luminaire Model:

Graffiti Regress Round Fixed Downlight-A20-3019 60° Optic-Solite

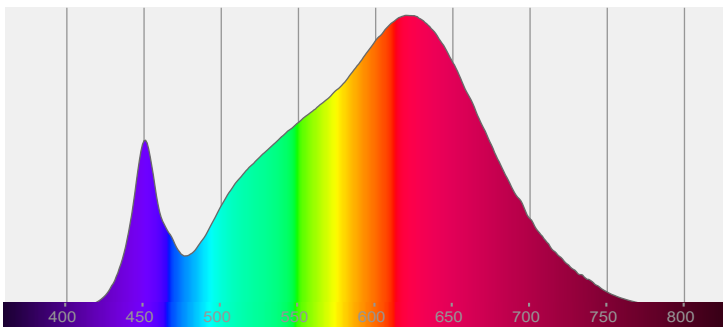
Date and time:

4/28/2022 8:33:07 PM

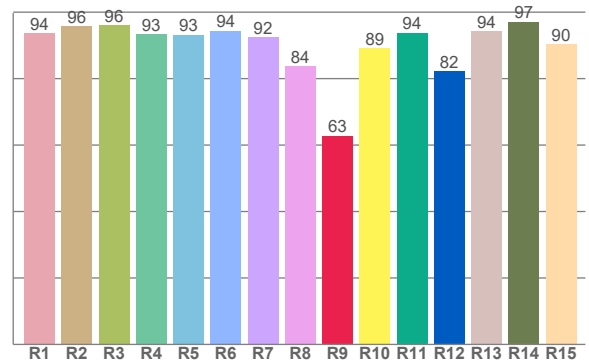
Delivered Lumens

1336

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 divition from black body
CRI	CRI R9	TM30 R <sub>f</sub>	TM30 R <sub>g</sub>	CQS	x	y	u	v	Δuv
92.8	62.8	91.0	101.7	89.9	0.434	0.398	0.252	0.346	-0.0022

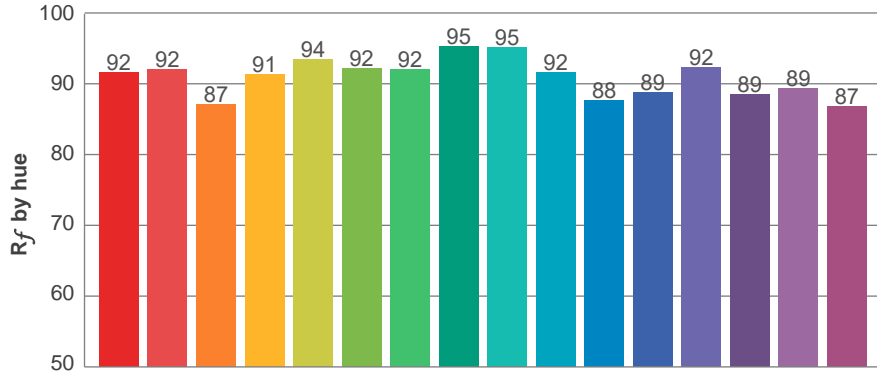
**$R_f$  91.0**  
Fidelity index  $R_f$

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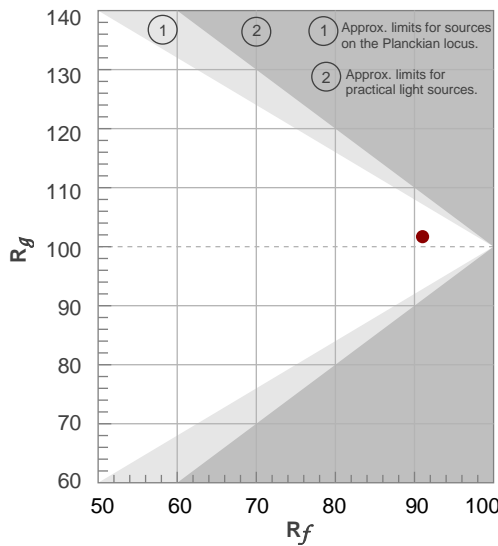
**$R_g$  101.7**  
Gammut index  $R_g$

TM30: 91.0

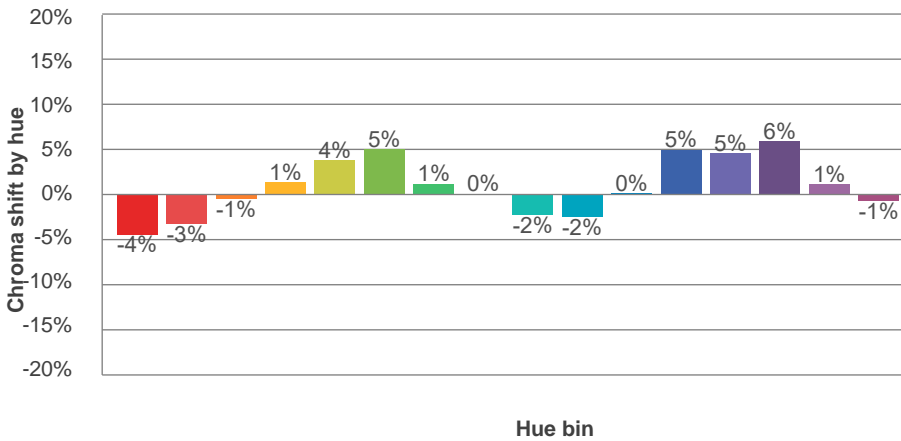
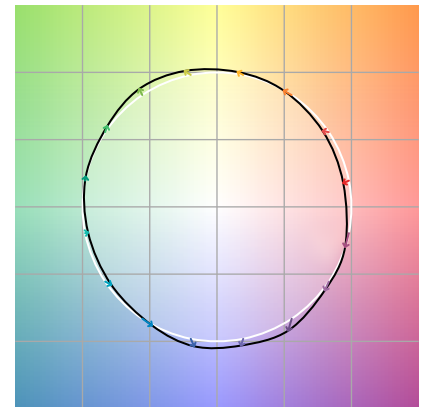
TM-30Color



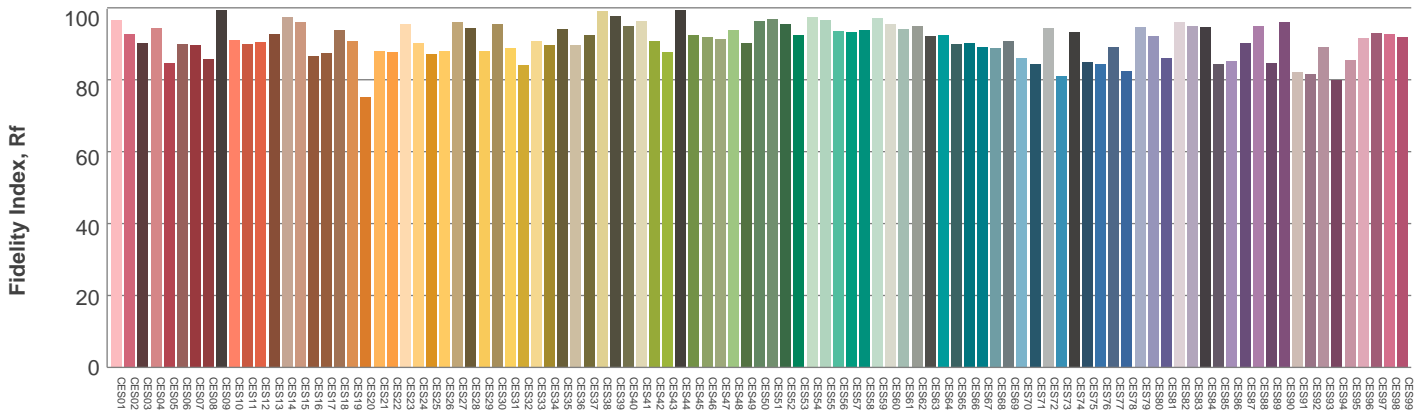
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-1%
2	92	-3%	3%
3	87	-1%	7%
4	91	1%	5%
5	94	4%	4%
6	92	5%	-1%
7	92	1%	-5%
8	95	0%	-3%
9	95	-2%	0%
10	92	-2%	4%
11	88	0%	9%
12	89	5%	4%
13	92	5%	-3%
14	89	6%	-7%
15	89	1%	-7%
16	87	-1%	-11%



Color vector graphics



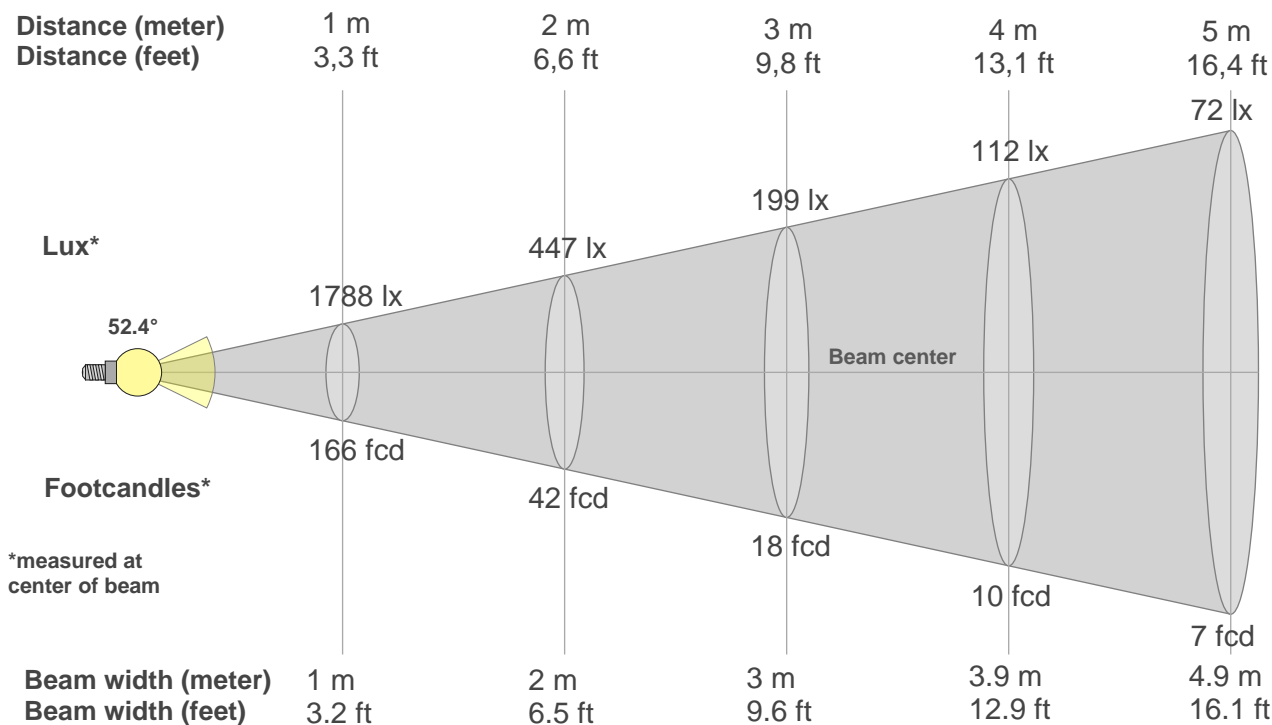
Color distortion



Color Evaluation Sample

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**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
1788lx	447lx	199lx	112lx	72lx	50lx	36lx	28lx	22lx	18lx	15lx	12lx	11lx	9lx	8lx	7lx	6lx	6lx	5lx	4lx
166.1fcd	41.5fcd	18.5fcd	10.4fcd	6.6fcd	4.6fcd	3.4fcd	2.6fcd	2.1fcd	1.7fcd	1.4fcd	1.2fcd	1fcd	0.8fcd	0.7fcd	0.6fcd	0.6fcd	0.5fcd	0.5fcd	0.4fcd

**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°
1788	1791	1787	1774	1753	1724	1685	1627	1554	1465	1356	1227	1078	913	749	595	456	340	254	188
100%	100%	100%	99%	98%	96%	94%	91%	87%	82%	76%	69%	60%	51%	42%	33%	26%	19%	14%	11%

**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°
1788	1790	1786	1775	1756	1728	1691	1634	1560	1469	1360	1228	1075	913	747	585	438	327	239	172
100%	100%	100%	99%	98%	97%	95%	91%	87%	82%	76%	69%	60%	51%	42%	33%	25%	18%	13%	10%

**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°
1788	1780	1767	1750	1728	1702	1656	1599	1530	1443	1332	1203	1062	912	759	614	490	387	302	232
100%	100%	99%	98%	97%	95%	93%	89%	86%	81%	74%	67%	59%	51%	42%	34%	27%	22%	17%	13%

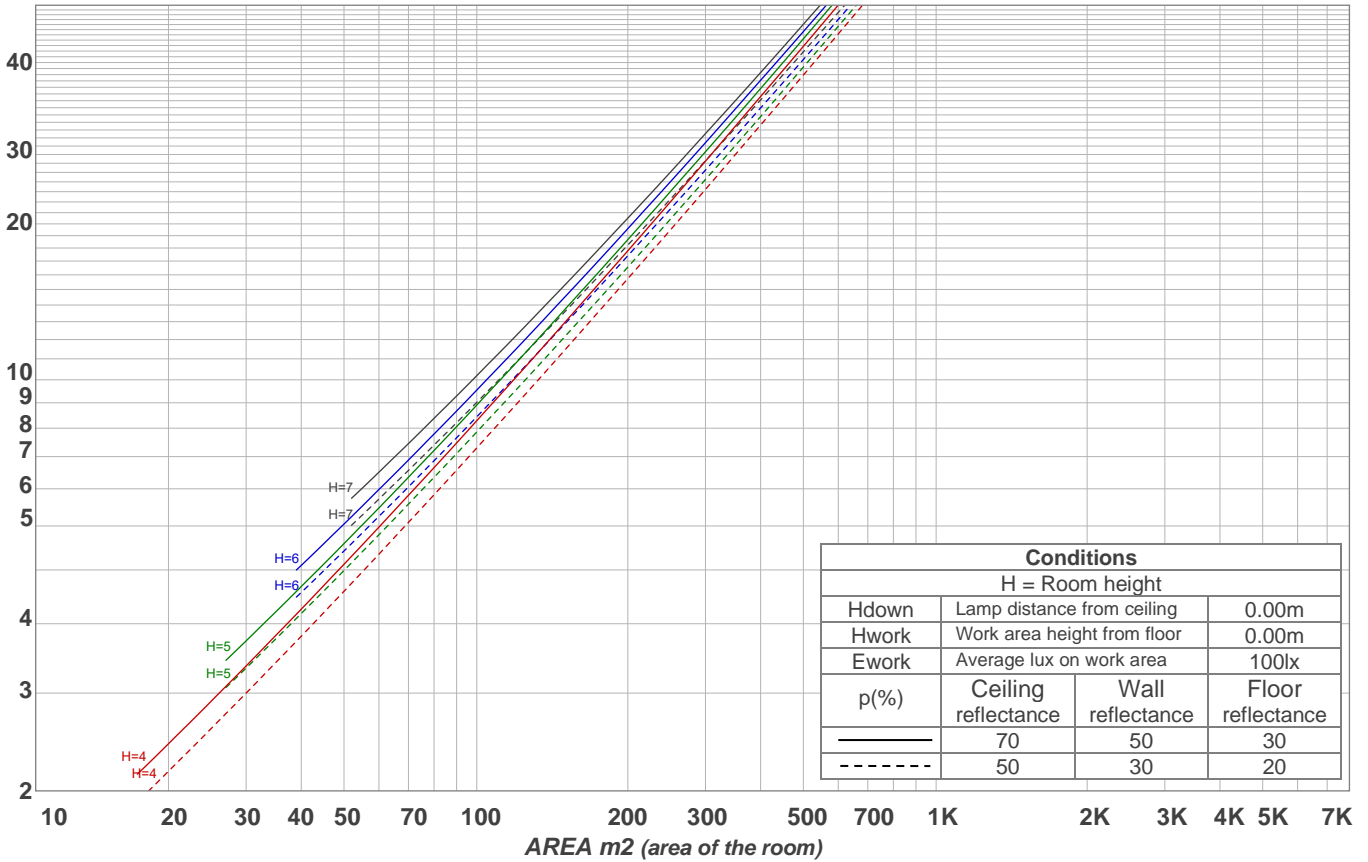
**Intensities in 270° c-plane**

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1788	1784	1772	1756	1735	1705	1663	1605	1534	1448	1345	1222	1076	913	750	600	465	360	278	212
100%	100%	99%	98%	97%	95%	93%	90%	86%	81%	75%	68%	60%	51%	42%	34%	26%	20%	16%	12%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
<b>52.4°</b>	<b>77.5°</b>	<b>94.9°</b>	<b>99.1%</b>	<b>96.6%</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	114	111	109	106	111	109	107	105	105	103	101	101	100	98	98	97	96	94	94	94	
2	108	104	100	97	106	102	98	95	99	96	93	96	93	91	93	91	89	88	88	88	
3	103	97	92	89	101	96	91	88	93	89	86	91	88	85	89	86	84	82	82	82	
4	98	91	86	82	97	90	85	81	88	84	81	86	82	80	84	81	79	77	77	77	
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73	73	73	
6	89	81	75	71	88	80	75	71	79	74	71	77	73	70	76	72	70	68	68	68	
7	85	77	71	67	84	76	71	67	75	70	66	74	69	66	72	69	66	64	64	64	
8	82	73	67	63	80	72	67	63	71	66	63	70	66	62	69	65	62	61	61	61	
9	78	69	63	60	77	68	63	59	67	63	59	67	62	59	66	62	59	58	58	58	
10	75	65	60	56	74	65	60	56	64	59	56	64	59	56	63	59	56	55	55	55	

### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
167 lm	438 lm	445 lm	201 lm	57.2 lm	13.9 lm	6.29 lm	3.24 lm	2.94 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

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