

Photometric Report

VDO Atomic Bold – Beam - Boost

MARTIN PROFESSIONAL R&D OPTICAL LABORATORY

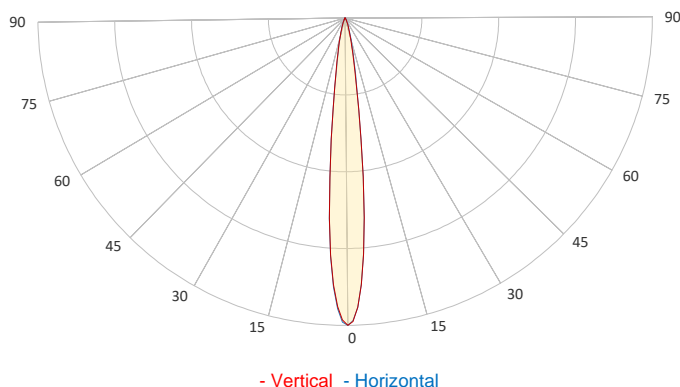
GENERAL SPECIFICATIONS

Total Fixture Output:	13000 lm
Light Engine Output:	14200 lm
Efficacy:	43 lm/W
Lens Option:	N/A
Beam Angle (50%):	12°
Field Angle (10%):	26°
Cut-off Angle (3%):	42°
CRI:	83
CQS:	87
TM-30 Rf:	83
TM-30 Rg:	106
TLCI:	85
Color Temperature:	2,000-11,000 K



SAMPLE MEASUREMENT

POLAR PLOT

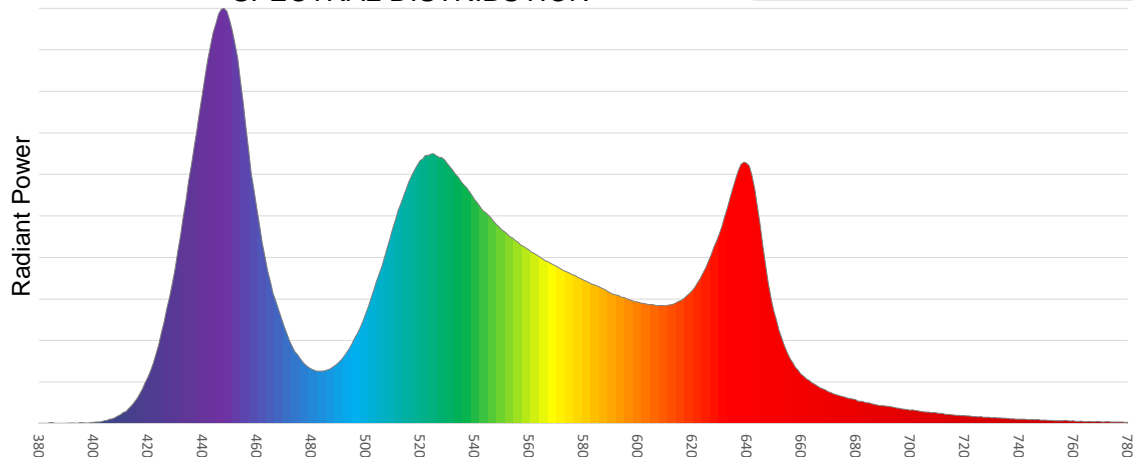


Catalog Number:	MAR-90357703
Measured Output:	12880 lm
Measured Peak:	170373 cd
Consumed Power:	300 W
Efficacy:	42.9 lm/W

Beam Angle (50%):	12.3°
Field Angle (10%):	25.6°
Cut-off Angle (3%):	41.8°

Measurement Condition:	
Ambient Temperature:	25° +/- 5° C
AC Supply:	230V/50Hz
Fan Mode:	Regulated Fan Speed
Fixture Warm-up Time:	30 minutes

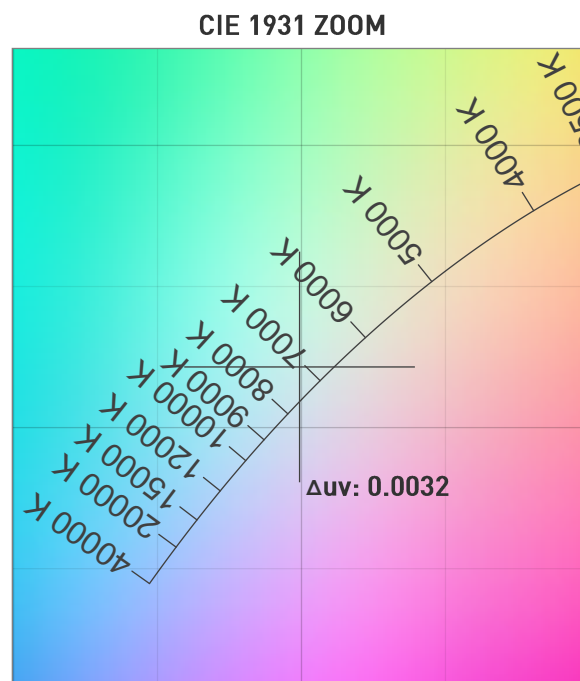
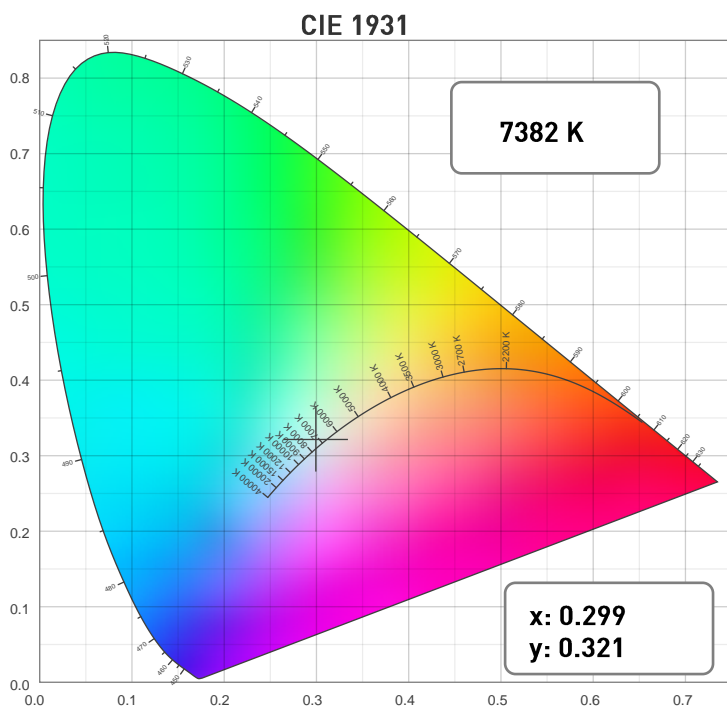
SPECTRAL DISTRIBUTION



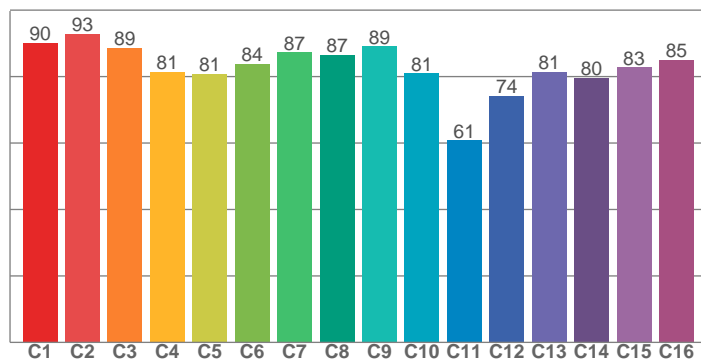
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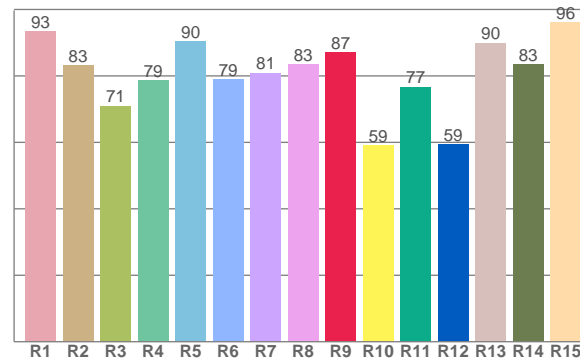
CHROMATICITY



TM30: 83.4



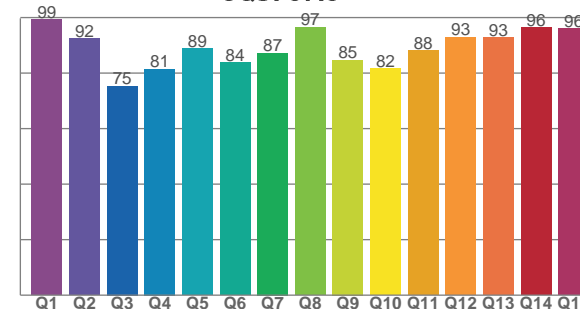
CRI: 82.5 (R1-R8)



COLOR PARAMETERS

Color Temperature	Color Rendering Index	Red Component	Color Fidelity	Color Gamut
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg
7382 K	82.5	87.2	83.4	105.9

CQS: 87.3



Television Lighting Consistency Index	Color Quality Scale	Color Coordinate CIE 1931	Color Coordinate CIE 1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964	Color Deviation from Black Body
TLCI	CQS	x	y	u	v	Δuv
85	87.3	0.299	0.321	0.191	0.308	0.0032

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TM30

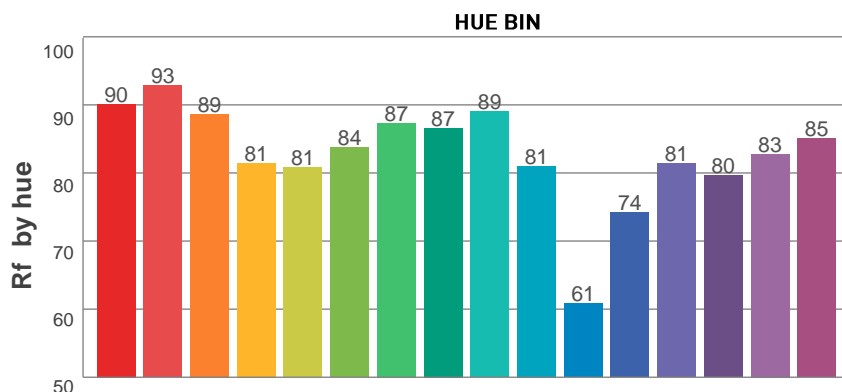
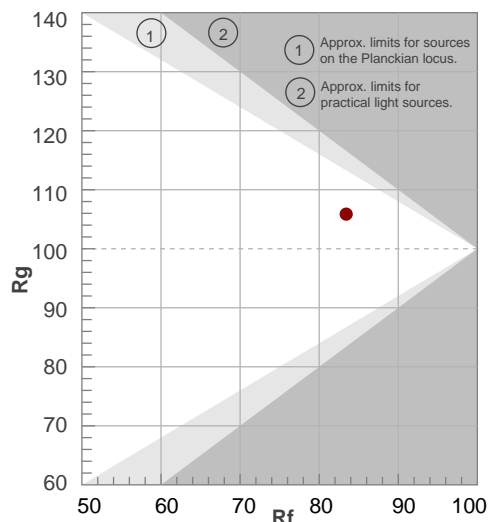
Rf 83.4

Fidelity index Rf

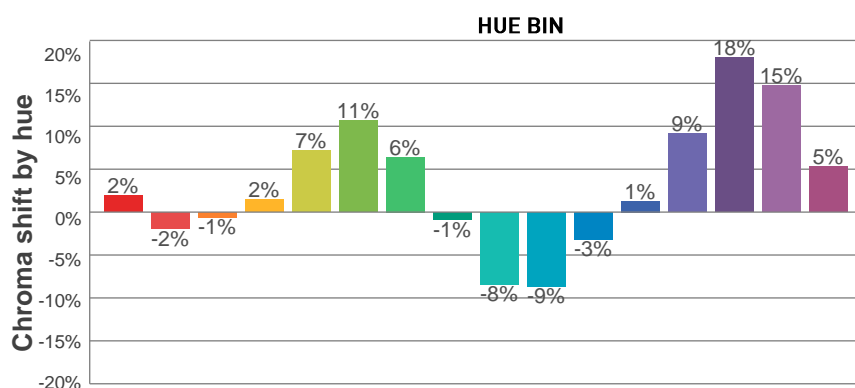
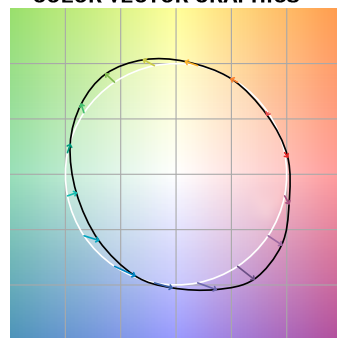
Rg 105.9

Gamut index Rg

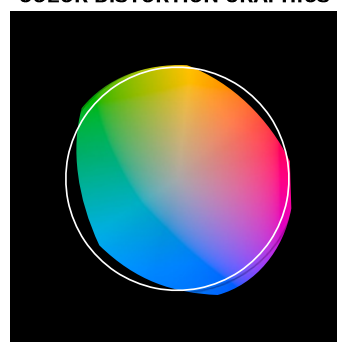
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	90	2%	-4%
2	93	-2%	-1%
3	89	-1%	7%
4	81	2%	11%
5	81	7%	9%
6	84	11%	2%
7	87	6%	-5%
8	87	-1%	-8%
9	89	-8%	-1%
10	81	-9%	11%
11	61	-3%	20%
12	74	1%	16%
13	81	9%	15%
14	80	18%	6%
15	83	15%	0%
16	85	5%	-6%



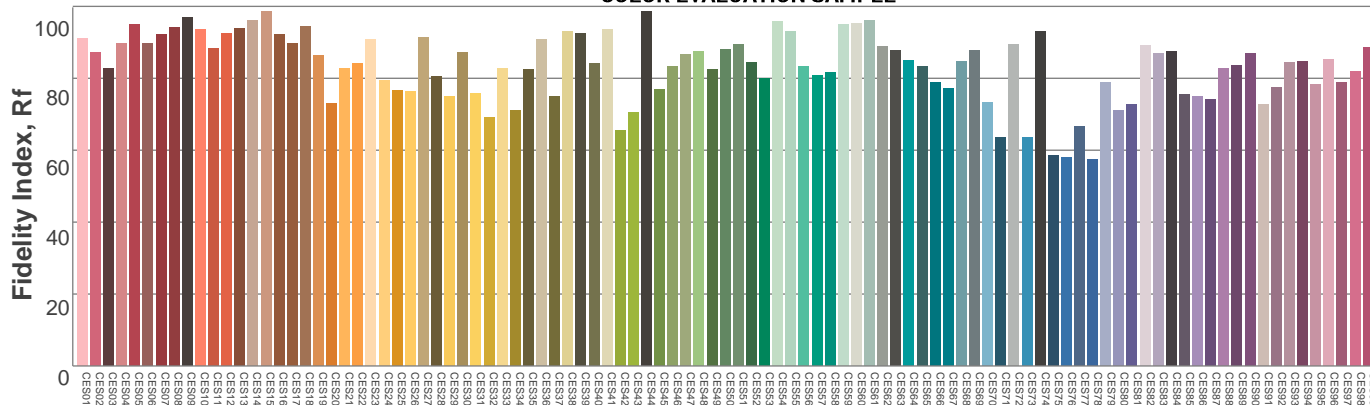
COLOR VECTOR GRAPHICS



COLOR DISTORTION GRAPHICS



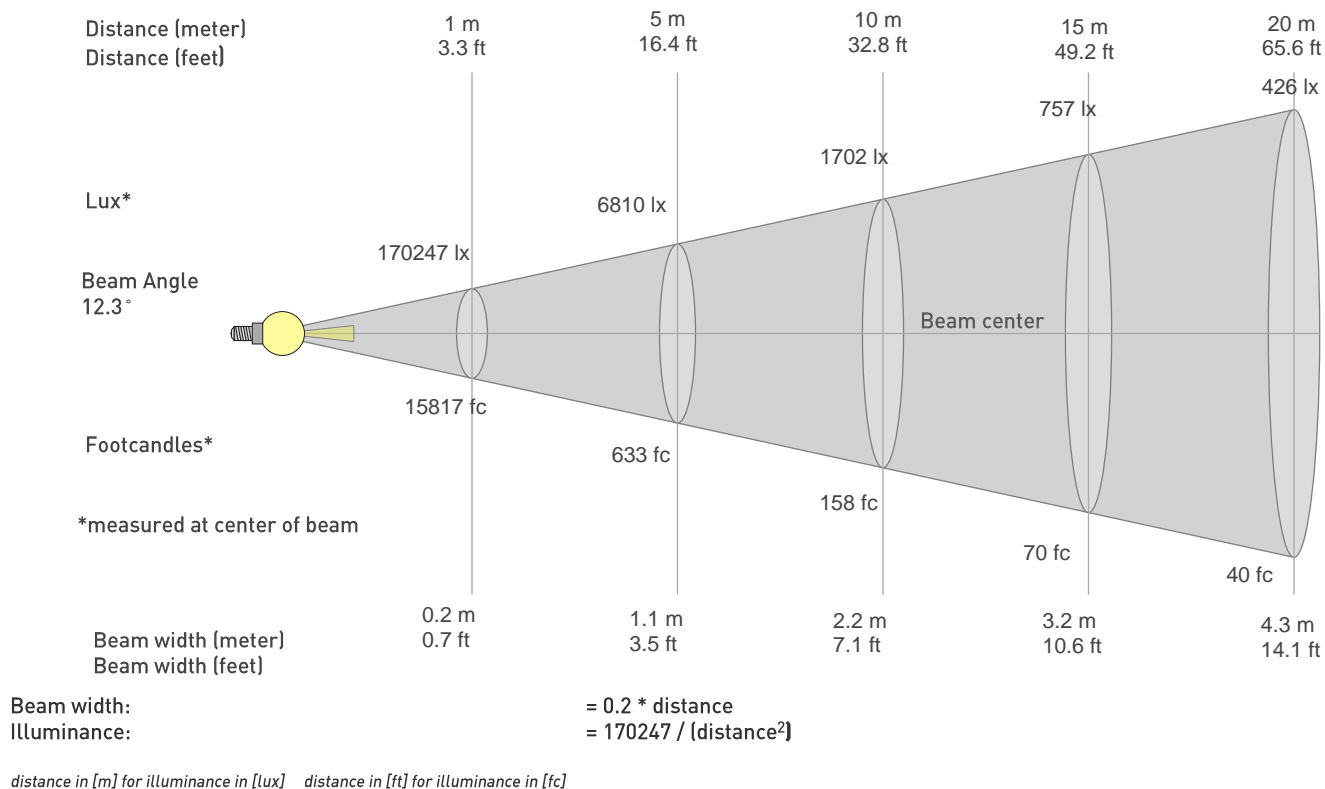
COLOR EVALUATION SAMPLE



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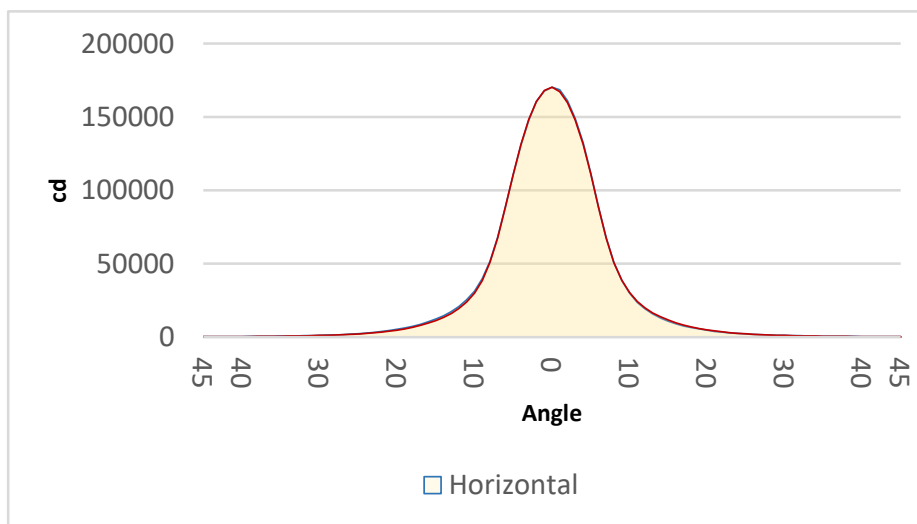
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BEAM DETAILS



BEAM ILLUMINANCE 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
170247lx	42562lx	18916lx	10640lx	6810lx	4729lx	3474lx	2660lx	2102lx	1702lx	1407lx	1182lx	1007lx	869lx	757lx	665lx	589lx	525lx	472lx	426lx
15816.5fc	3954.1fc	1757.4fc	988.5fc	632.7fc	439.3fc	322.8fc	247.1fc	195.3fc	158.2fc	130.7fc	109.8fc	93.6fc	80.7fc	70.3fc	61.8fc	54.7fc	48.8fc	43.8fc	39.5fc



BEAM ANGLE 50%	FIELD ANGLE 10%	CUTOFF ANGLE 3%
12.3°	25.6°	41.8°