Photometric Report

MAC Viper XIP Spectral Enhancement Filter – Medium

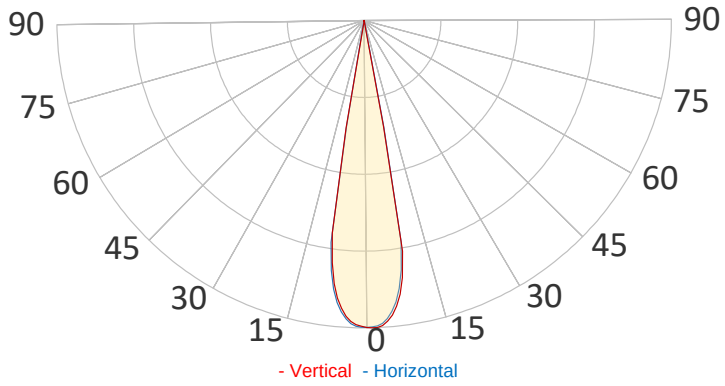
MARTIN PROFESSIONAL R&D OPTICAL LABORATORY

GENERAL SPECIFICATIONS

Total Fixture Output:	18700 lm
Light Engine Output:	56000 lm
Efficacy:	29,5 lm/W
Lens Option:	N/A
Beam Angle (50%):	5,1 - 49,3°
Field Angle (10%):	5,7 - 51,0°
Cut-off Angle (3%):	5,9 - 51,3°
CRI:	90 (+/- 3)
CQS:	83 (+/- 3)
TM-30 Rf:	78 (+/- 3)
TM-30 Rg:	107 (+/- 3)
TLCI:	68 (+/- 3)
Color Temperature:	5800 K (+/- 250 K)

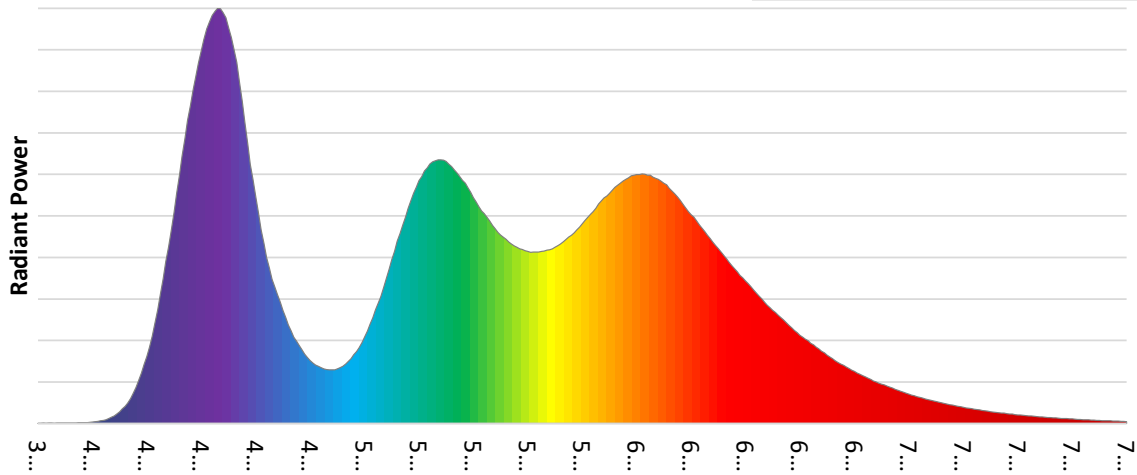
SAMPLE MEASUREMENT

POLAR PLOT



Catalog Number:	MAR-90250300HU
Measured Output:	18300 lm
Measured Peak:	222217 cd
Consumed Power:	900 W
Efficacy:	20,3 lm/W
Beam Angle (50%):	19,5°
Field Angle (10%):	20,8°
Cut-off Angle (3%):	21,6°
Measurement Condition:	
Ambient Temperature:	25° +/- 5° C
AC Supply:	230V/50Hz
Fan Mode:	Constant Fan Full
Fixture Warm-up Time:	30 minutes

SPECTRAL DISTRIBUTION



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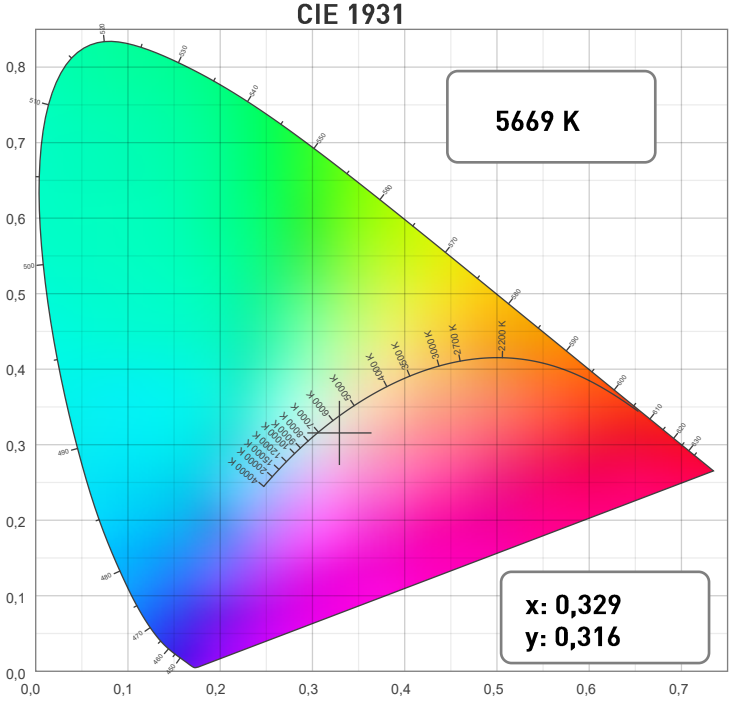
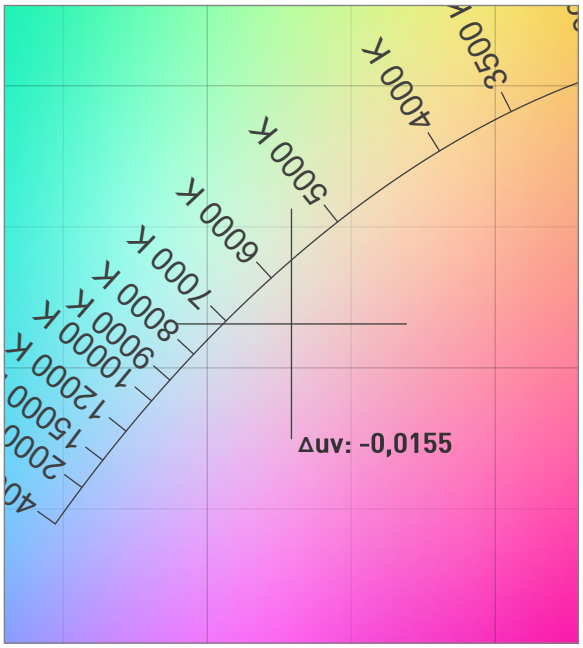
CHROMATICITY

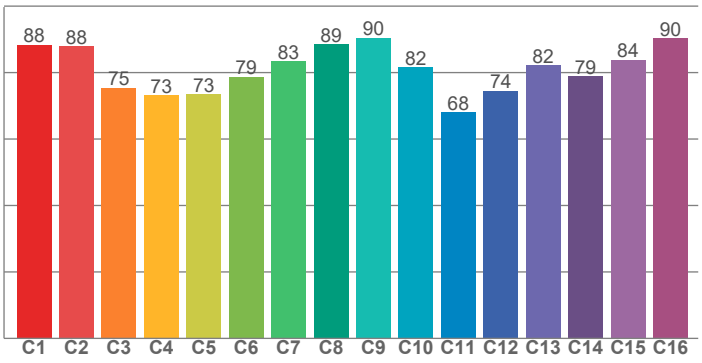
CIE 1931



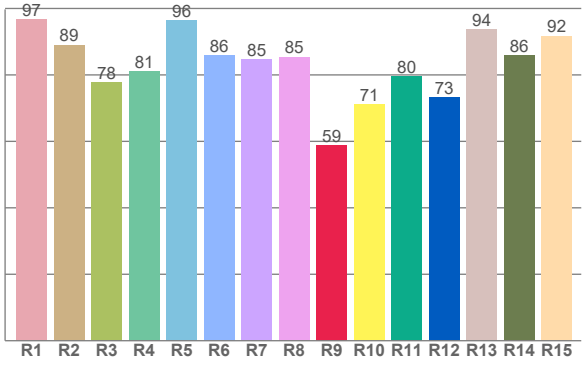
CIE 1931 ZOOM



TM30: 80,6



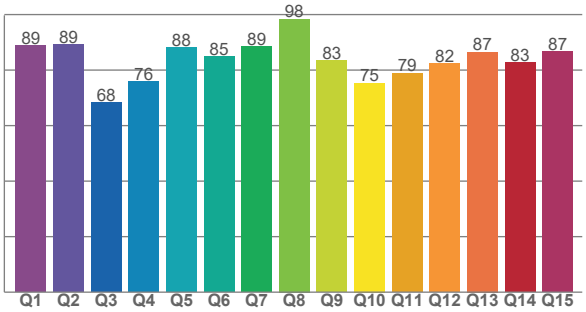
CRI: 87,1 (R1-R8)



COLOR PARAMETERS

Color Temperature	Color Rendering Index	Red Component	Color Fidelity	Color Gamut
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg
5669 K	87,1	58,9	80,6	107,7

CQS: 82,4



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
68	82,4	0,329	0,316	0,215	0,309	-0,0155

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TM30

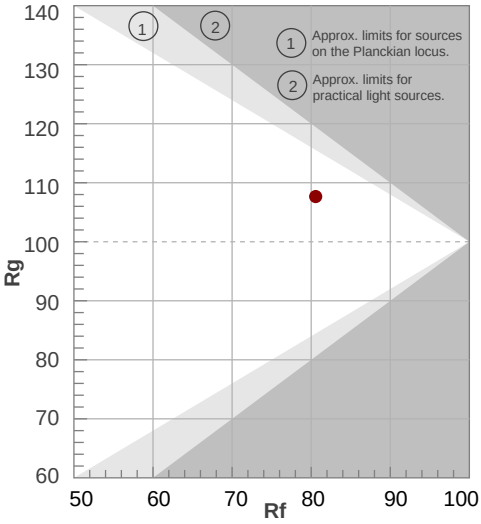
Rf 80,6

Fidelity index Rf

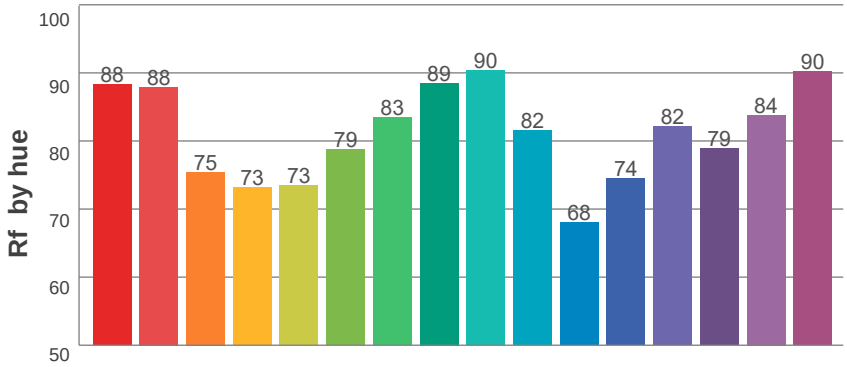
Rg 107,7

Gamut index Rg

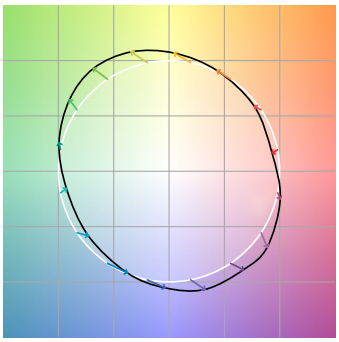
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	88	-6%	-2%
2	88	-3%	6%
3	75	0%	14%
4	73	6%	16%
5	73	12%	13%
6	79	15%	5%
7	83	11%	-4%
8	89	2%	-6%
9	90	-6%	-3%
10	82	-7%	8%
11	68	-3%	20%
12	74	4%	17%
13	82	11%	11%
14	79	11%	6%
15	84	12%	-8%
16	90	3%	-5%



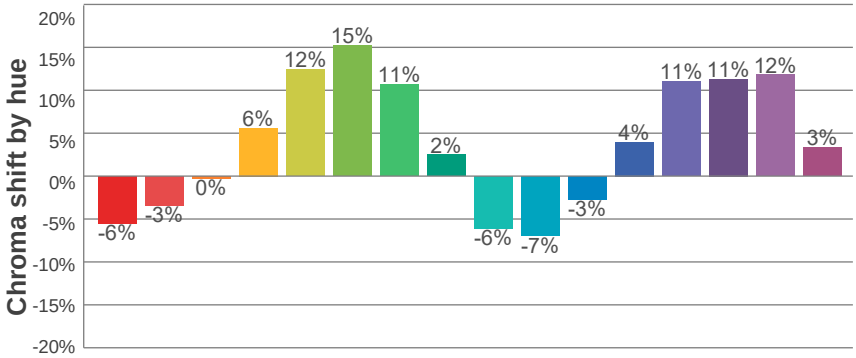
HUE BIN



COLOR VECTOR GRAPHICS

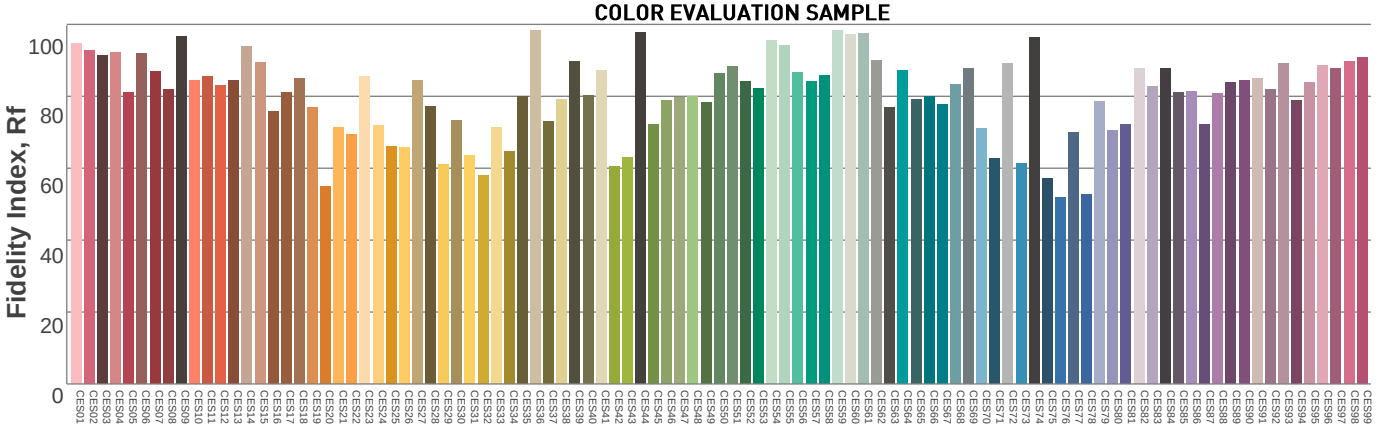


HUE BIN



COLOR DISTORTION GRAPHICS

COLOR EVALUATION SAMPLE



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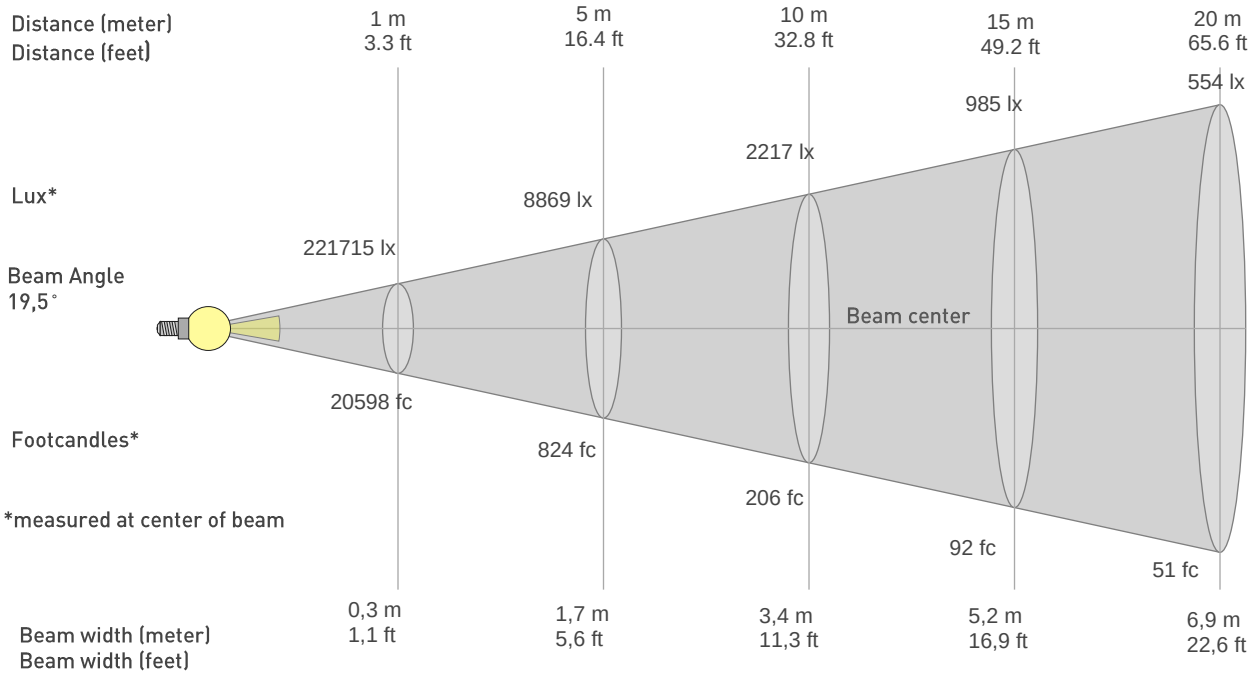
BEAM DETAILS



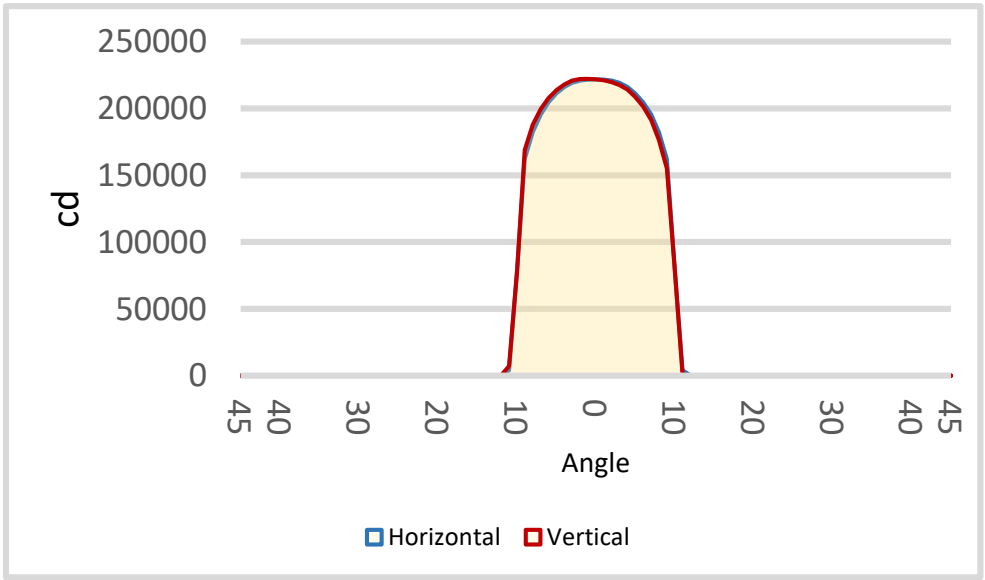
Beam width: = 0,3 * distance

Illuminance: = 221715 / (distance^2)

distance in [m] for illuminance in [lux] distance in [ft] for illuminance in [fc]

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
221715lx	55429lx	24635lx	13857lx	8869lx	6159lx	4525lx	3464lx	2737lx	2217lx	1832lx	1540lx	1312lx	1131lx	985lx	866lx	767lx	684lx	614lx	554lx
20598fc	5149,5fc	2288,7fc	1287,4fc	823,9fc	572,2fc	420,4fc	321,8fc	254,3fc	206fc	170,2fc	143fc	121,9fc	105,1fc	91,5fc	80,5fc	71,3fc	63,6fc	57,1fc	51,5fc



BEAM ANGLE 50%	FIELD ANGLE 10%	CUTOFF ANGLE 3%
19,5°	20,8°	21,6°

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