Photometric Report

MAC Viper XIP Spectral Enhancement Filter – 10 Degree

MARTIN PROFESSIONAL R&D OPTICAL LABORATORY

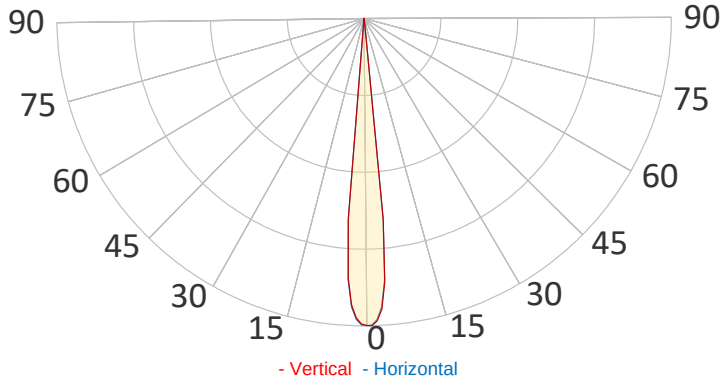
GENERAL SPECIFICATIONS

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)



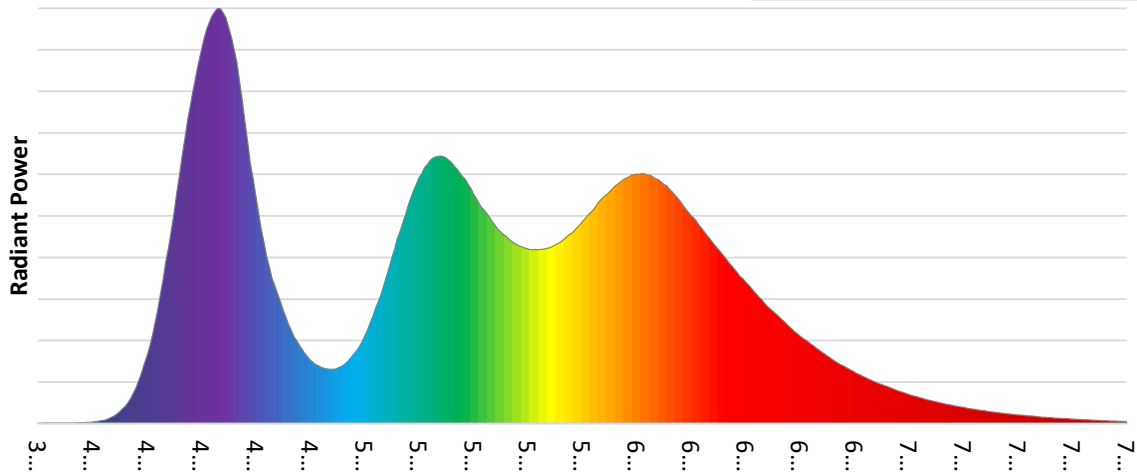
SAMPLE MEASUREMENT

POLAR PLOT



Catalog Number:	MAR-90250300HU
Measured Output:	16580 lm
Measured Peak:	675837 cd
Consumed Power:	900 W
Efficacy:	18,4 lm/W
Beam Angle (50%):	10,6°
Field Angle (10%):	11,7°
Cut-off Angle (3%):	11,9°
Measurement Condition:	
Ambient Temperature:	25° +/- 5° C
AC Supply:	230V/50Hz
Fan Mode:	Constant Fan Full
Fixture Warm-up Time:	30 minutes

SPECTRAL DISTRIBUTION



HARMAN PROFESSIONAL INC. • 8500 BALBOA BOULEVARD • NORTHRIDGE • CA 91329 • USA • +1 818 893 8411
©2019 HARMAN Professional. All rights reserved. Martin® is a registered trademark of HARMAN Professional Inc. registered in the United States and/or other countries.
Features, specifications, and appearance are subject to change without notice. Rev. 201904

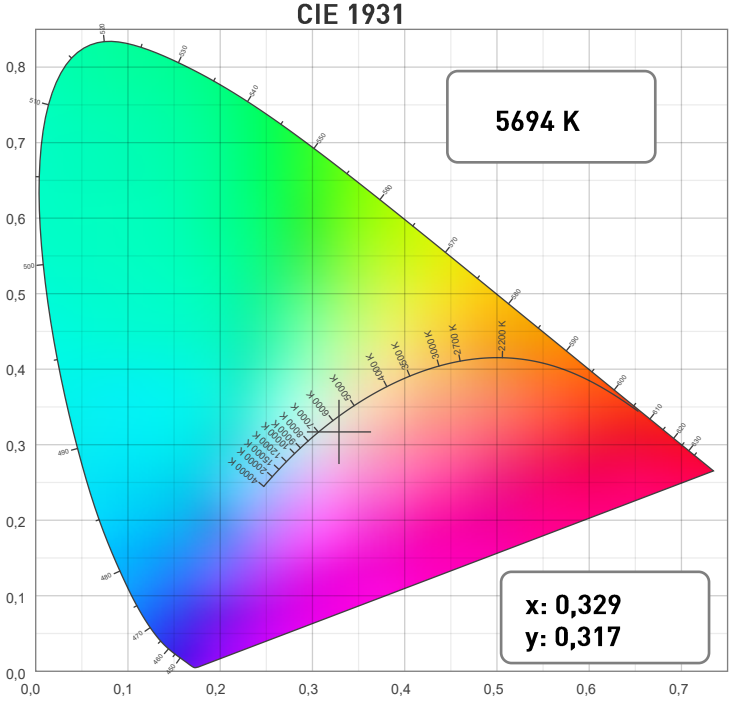
Martin

Photometric Report

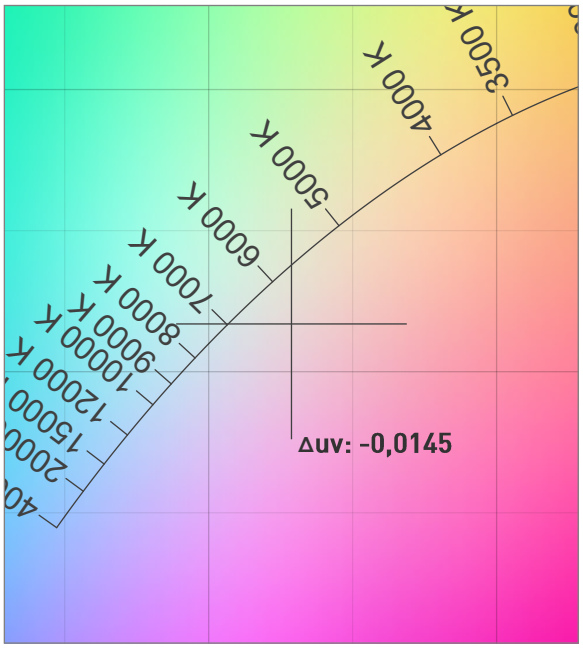
MAC Viper XIP Spectral Enhancement Filter – 10 Degree

CHROMATICITY

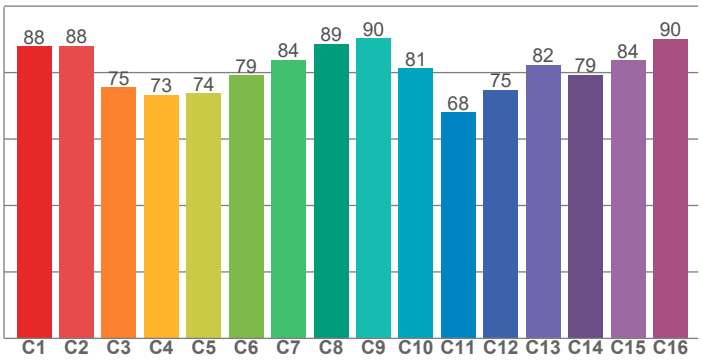
CIE 1931



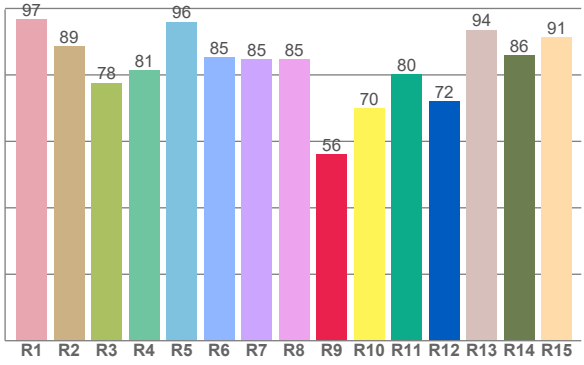
CIE 1931 ZOOM



TM30: 80,6



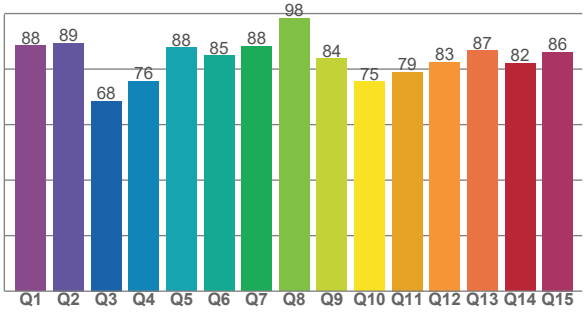
CRI: 86,9 (R1-R8)



COLOR PARAMETERS

Color Temperature	Color Rendering Index	Red Component	Color Fidelity	Color Gamut
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg
5694 K	86,9	56,1	80,6	107,2

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	0,317	0,214	0,309	-0,0145

HARMAN PROFESSIONAL INC. • 8500 BALBOA BOULEVARD • NORTHRIDGE • CA 91329 • USA • +1 818 893 8411
©2019 HARMAN Professional. All rights reserved. Martin® is a registered trademark of HARMAN Professional Inc. registered in the United States and/or other countries.
Features, specifications, and appearance are subject to change without notice. Rev. 201904

Martin

Photometric Report

MAC Viper XIP Spectral Enhancement Filter – 10 Degree

TM30

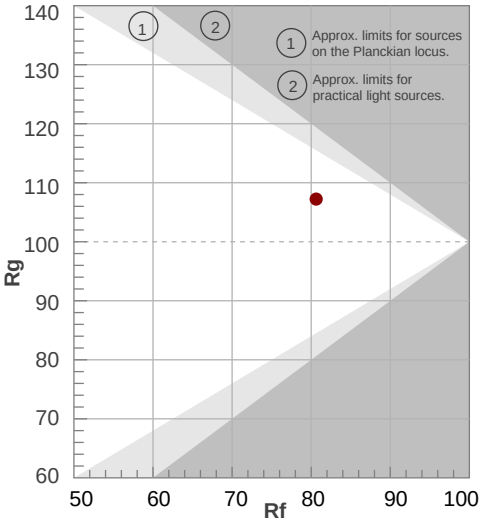
Rf 80,6

Fidelity index Rf

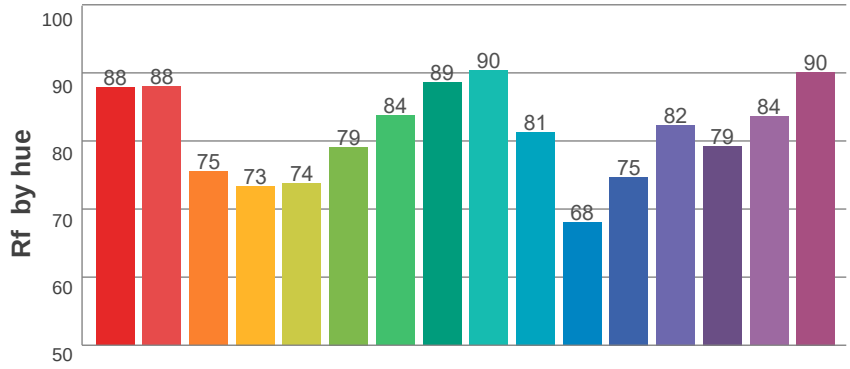
Rg 107,2

Gamut index Rg

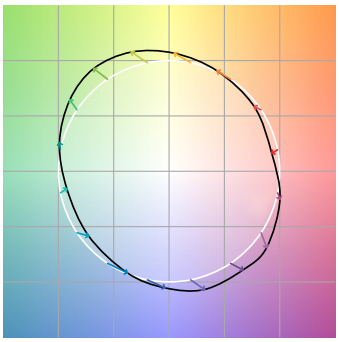
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	88	-6%	-2%
2	88	-4%	6%
3	75	0%	14%
4	73	5%	16%
5	74	12%	12%
6	79	15%	5%
7	84	10%	-4%
8	89	2%	-6%
9	90	-6%	-3%
10	81	-7%	8%
11	68	-3%	20%
12	75	4%	17%
13	82	11%	11%
14	79	11%	6%
15	84	12%	-8%
16	90	3%	-5%



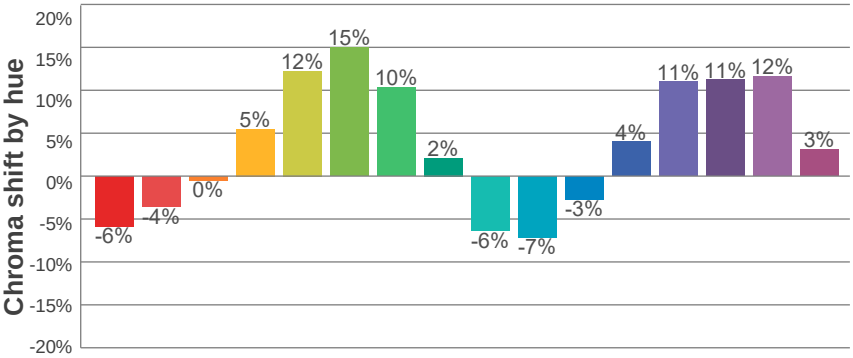
HUE BIN



COLOR VECTOR GRAPHICS



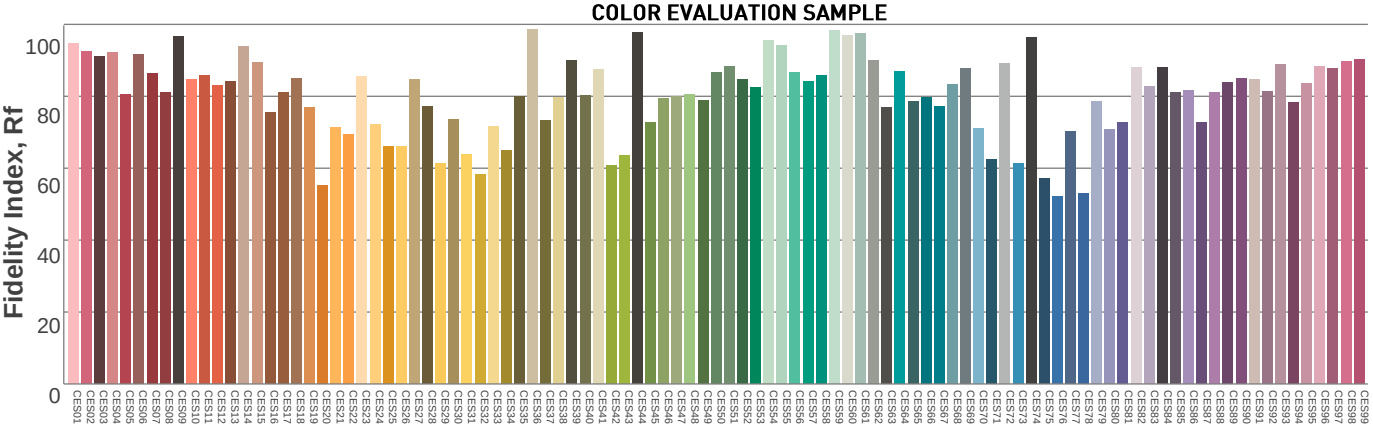
HUE BIN



COLOR DISTORTION GRAPHICS



COLOR EVALUATION SAMPLE



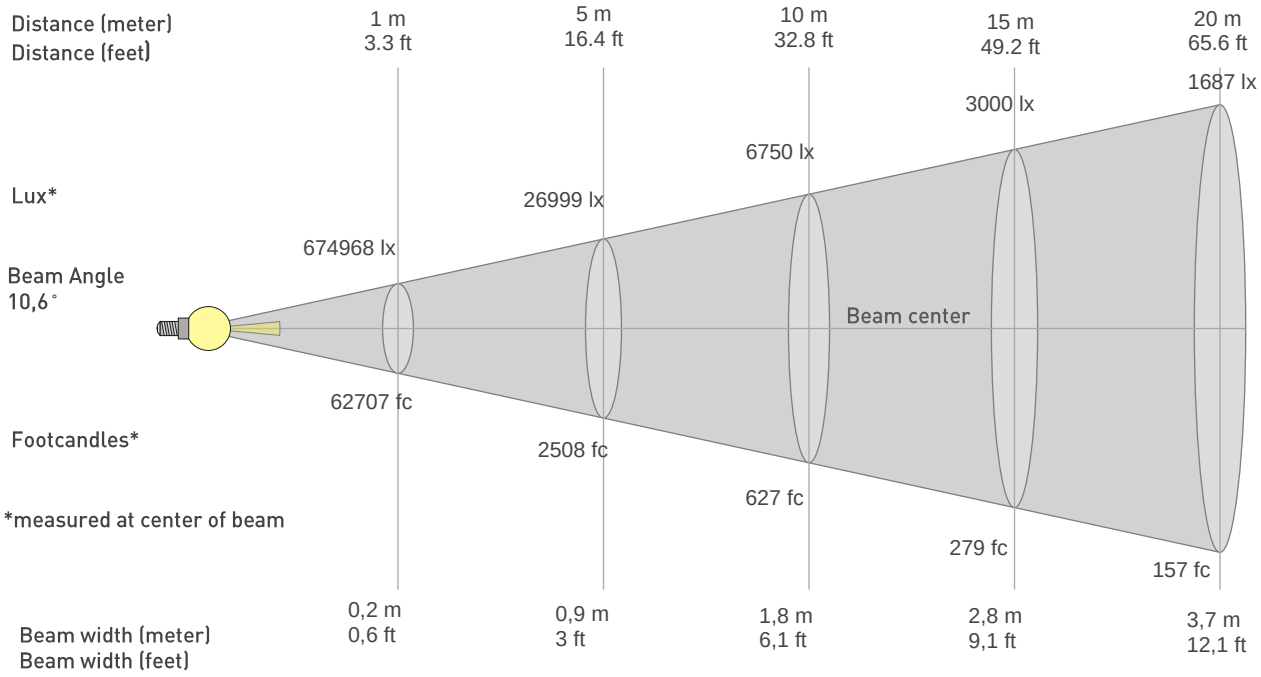
HARMAN PROFESSIONAL INC. • 8500 BALBOA BOULEVARD • NORTHRIDGE • CA 91329 • USA • +1 818 893 8411
©2019 HARMAN Professional. All rights reserved. Martin® is a registered trademark of HARMAN Professional Inc. registered in the United States and/or other countries.
Features, specifications, and appearance are subject to change without notice. Rev. 201904

Martin

Photometric Report

MAC Viper XIP Spectral Enhancement Filter – 10 Degree

BEAM DETAILS



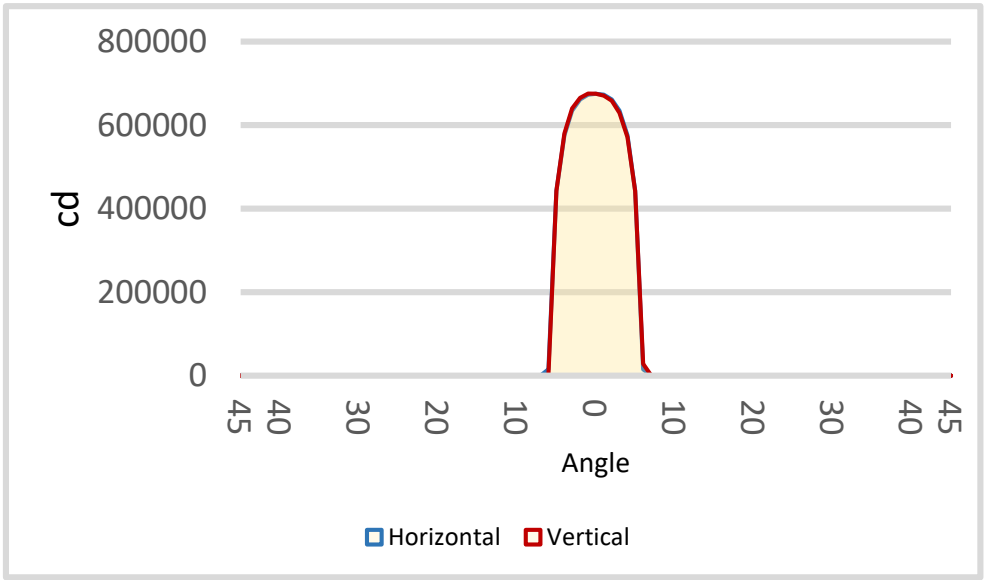
Beam width: = 0,2 * distance

Illuminance: = 674968 / (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
674968lx	168742lx	74996lx	42186lx	26999lx	18749lx	13775lx	10546lx	8333lx	6750lx	5578lx	4687lx	3994lx	3444lx	3000lx	2637lx	2336lx	2083lx	1870lx	1687lx
62706,6fc	15676,7fc	6967,4fc	3919,2fc	2508,3fc	1741,9fc	1279,7fc	979,8fc	774,2fc	627,1fc	518,2fc	435,5fc	371fc	319,9fc	278,7fc	244,9fc	217fc	193,5fc	173,7fc	156,8fc



BEAM ANGLE 50%	FIELD ANGLE 10%	CUTOFF ANGLE 3%
10,6°	11,7°	11,9°

HARMAN PROFESSIONAL INC. • 8500 BALBOA BOULEVARD • NORTHRIDGE • CA 91329 • USA • +1 818 893 8411
©2019 HARMAN Professional. All rights reserved. Martin® is a registered trademark of HARMAN Professional Inc. registered in the United States and/or other countries.
Features, specifications, and appearance are subject to change without notice. Rev. 201904

Martin