

VECO

SURFACE SERIES

An expansion to the Veco downlight series in surface mounted form that is suitable for installation in areas without false ceiling. Incorporating ELR's signature modular concept design, LED modules are fully interchangeable with various choices to provide optimal illumination for all kinds of spaces.



Future proof with
upgradeable module

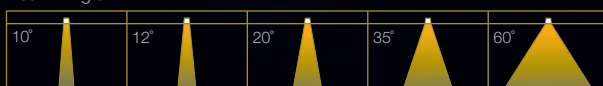


Accessory options

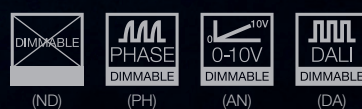
Module Colour Temperature Variation



Beam Angle



Driver Dimming Variation



VECO 3 SURFACE

SURFACE MOUNTED LUMINAIRE



#SURFACE

TECHNOLOGY AND FEATURES



Advanced Thermal
Protection System



Low Flicker,
No Risk
(IEEE 1789)



Converging Optical Lens
Maximising LOR

AVAILABLE OPTIONS

FITTURE COLOUR OPTIONS	Trim Colour Options	Reflector Colour Options		
		MATT WHITE RAL9003	MATT BLACK RAL9011	CHROME
	MATT WHITE RAL9003			
	MATT BLACK RAL9011			
ACCESSORIES	 Honeycomb Anti-Glare Louvre  Soft Lens  Linear Spread Lens  Comfort Pro  IP54  MR16 Holder GU10 Holder			
LED MODULE	 50N  35N  50N-HI  35N-HI  MR16/GU10			
	SINGLE CCT  2700K  3000K  3500K  4000K  5000K  ProART  ProART98	50N / 35N 50N-HI / 35N-HI	 10°  20°  35°  60°	 ✓  ✓  ✓  ✓
	WARM DIM 	50N / 35N	 ✓  ✓  ✓  ✓	
	tuneWHITE 	50N	 ✓  ✓  ✓  ✓	
	flexiK 			
DRIVER DIMMING	 (ND)  (PH)  (AN)  (DA)			

**tuneWHITE and flexiK are recommended to be paired with Soft Lens for better colour mixing effect.

*External drivers when paired with 50P, 50C, 35P or COIN LED module variants.

VECO 3
SURFACE

SPECIFICATIONS

FIXTURE	
Family Type	Veco series
Fixture Colours	Matt white, matt black
Reflector Colours	Matt white, matt black, chrome
Fixture Materials	Aluminium
Accessories	Honeycomb anti-glare louvre, soft lens, linear spread lens, Comfort Pro, IP54 seal
Ingress Protection	IP40, IP54
LED MODULE & DRIVER	
Compatible LED Modules	50, 35, COIN series LED modules or MR16/GU10
Lifetime	Up to 50,000 hours L80 lamp life with LM80 tested LED chip packages
Beam Angles	10°, 20°, 35°, 60°
Colour Temperatures	2700K, 3000K, 3500K, 4000K, 5000K, Warm Dim, tuneWHITE, flexiK
CRI	High Efficiency (CRI~85), ProART (CRI~95), ProART98 (CRI~98)
Driver (Dimming)	Non-dim, phase (leading & trailing edge), 0-10V, DALI

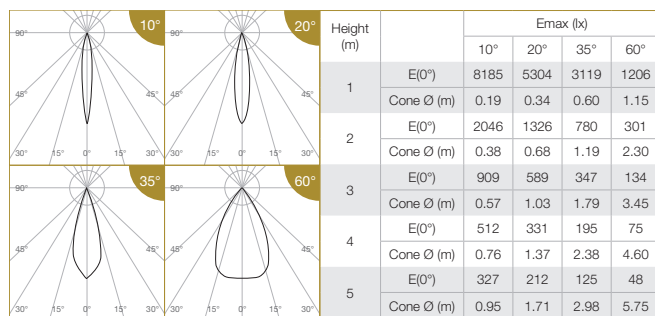
DIMENSIONS (MM)



VECO 3 SURFACE

PHOTOMETRICS

50 PRO



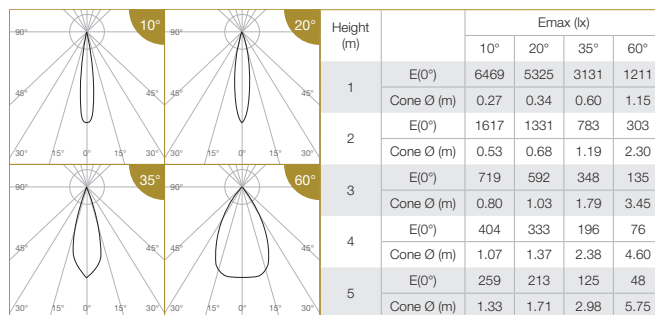
Correction Factor:
 50P (10°) - f = 1.00
 50C (10°) - f = 0.78
 35P (10°) - f = 0.62
 50N (10°) - f = 0.58
 35N (10°) - f = 0.42
 COIN (10°) - f = 0.35
 50P-24CV (10°) - f = 0.75
 50C-24CV (10°) - f = 0.62
 35P-24CV (10°) - f = 0.48
 COIN-24CV (10°) - f = 0.28
 50P (20°, 35°, 60°) - f = 1.00
 50C (20°, 35°, 60°) - f = 0.80
 35P (20°, 35°, 60°) - f = 0.71
 50N (20°, 35°, 60°) - f = 0.63
 35N (20°, 35°, 60°) - f = 0.47
 COIN (20°, 35°, 60°) - f = 0.38
 50P-24CV (20°, 35°, 60°) - f = 0.70
 50C-24CV (20°, 35°, 60°) - f = 0.57
 35P-24CV (20°, 35°, 60°) - f = 0.49
 COIN-24CV (20°, 35°, 60°) - f = 0.27

ELR LED Module				50P	50C	35P	50N	35N	COIN
LED Power				12W	10W	8W	7.5W	5.5W	4.5W
System Power				15.2W	12.8W	11W	10W	7.5W	6W
Luminous Flux (lm)	Type	Beam Angle	CRI						
	Single CCT (3000K)	10°	High Efficiency Ra-85	1079	847	672	623	457	374
			ProART Ra-95	917	720	572	530	388	318
			ProART98 Ra-98	755	593	471	436	320	261
		20°	High Efficiency Ra-85	1395	1116	995	884	651	530
			ProART Ra-95	1186	949	846	751	553	451
			ProART98 Ra-98	977	781	697	618	456	371
		35°	High Efficiency Ra-85	1410	1128	1006	893	658	536
			ProART Ra-95	1199	959	855	760	559	456
			ProART98 Ra-98	987	790	704	625	461	375
	60°	High Efficiency Ra-85	1440	1152	1027	912	672	547	
		ProART Ra-95	1224	979	874	776	571	466	
		ProART98 Ra-98	1008	806	719	638	470	383	
Input Power (24CV)				12W	10W	8W			4.5W
Luminous Flux (lm)	Type	Beam Angle	CRI						
	24CV Single CCT (3000K)	10°	High Efficiency Ra-85	805	664	523			307
			ProART Ra-95	685	564	445			261
			ProART98 Ra-98	564	465	366			215
		20°	High Efficiency Ra-85	977	800	688			381
			ProART Ra-95	830	680	585			325
			ProART98 Ra-98	684	560	482			267
		35°	High Efficiency Ra-85	987	808	696			385
			ProART Ra-95	839	687	591			328
			ProART98 Ra-98	691	566	487			270
		60°	High Efficiency Ra-85	1008	826	710			394
			ProART Ra-95	857	702	604			335
			ProART98 Ra-98	706	578	497			276

Data are based on 3000K (ProART CRI-95). Nominal data of 2700K and 3500K are shared with 3000K. Higher CCT of 4000K and 5000K will have a nominal data value of 5% higher than published. (f = 1.05) High Efficiency CRI-85 will have a nominal data value of 15% higher than published. (f = 1.17) ProART98 Ra-98 will have a nominal data value of 8% lower than published. (f = 0.82)

Nominal CRI-85, equals to Ra>80-87, R9>0
 Nominal CRI-95, equals to Ra>90-97, R9>50
 Nominal CRI-98, equals to Ra>97-99, R9>93

50 PRO WARM DIM



Correction Factor:
 50P WD - f = 1.00
 50N WD - f = 0.63
 35N WD - f = 0.46
 COIN WD - f = 0.38

ELR LED Module				50P	50N	35N	COIN
LED Power				12W	7.5W	5.5W	4.5W
System Power				15.2W	10W	7.5W	6W
Luminous Flux (lm)	Type	Beam Angle	CRI				
	Warm Dim (3100K)						
		10°	ProART Ra-95	1062	664	490	398
		20°		1190	744	549	446
		35°		1203	752	555	451
		60°		1229	768	566	461

Data are based on maximum output at 3100K.
 Nominal CRI-95, equals to Ra>90-97, R9>50

VECO 3 SURFACE

PHOTOMETRICS

50 PRO tuneWHITE/flexiK

20°

90°

55°

30°

15°

0°

15°

30°

35°

90°

55°

30°

15°

0°

15°

30°

60°

90°

45°

30°

15°

0°

15°

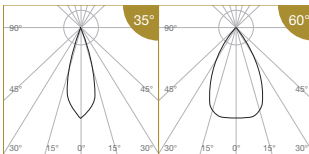
30°

Height (m)		Emax (lx)			ELR LED Module				50P	50N	COIN					
		20°	35°	60°	LED Power		System Power		Luminous Flux (lm)	Type	Beam Angle	CRI				
1	E(0°)	4160	2446	946	12W		15.2W						930	tuneWHITE / flexiK (4000K / 6500K)	20°	ProART Ra-95
	Cone Ø (m)	0.34	0.60	1.15	10W		6W									
2	E(0°)	1040	612	236	15.2W		10W									
	Cone Ø (m)	0.68	1.19	2.30	960		576									
3	E(0°)	462	272	105	960		576		576	60°	346					
	Cone Ø (m)	1.03	1.79	3.45	940		564									
4	E(0°)	260	153	59	940		564					338	60°	338		
	Cone Ø (m)	1.37	2.38	4.60	960		576									
5	E(0°)	166	98	38	960		576		346	60°	346					
	Cone Ø (m)	1.71	2.98	5.75	960		576									

Data are based on maximum output at highest CCT (4000K / 6500K).
2700K will have a nominal data value of 10% lower than published. (f = 0.90)
1800K will have a nominal data value of 30% lower than published. (f = 0.70)
Nominal CRI-95, equals to Ra>90-97, R9>50

Correction Factor: 50P TW / FK - f = 1.00
50N TW / FK - f = 0.90
COIN TW / FK - f = 0.36

50 PRO RGBW



Height (m)		Emax (lx)		ELR LED Module				50P							
		35°	60°	LED Power		System Power		Luminous Flux (lm)	Type	Beam Angle	CRI				
1	E(0°)	1480	572	12W		15.2W						569	RGBW	35°	N/A
	Cone Ø (m)	0.60	1.15	15.2W		10W									
2	E(0°)	370	143	15.2W		10W									
	Cone Ø (m)	1.19	2.30	960		576									
3	E(0°)	164	64	960		576		346	60°	346					
	Cone Ø (m)	1.79	3.45	940		564									
4	E(0°)	93	36	940		564					338	60°	338		
	Cone Ø (m)	2.38	4.60	960		576									
5	E(0°)	59	23	960		576		346	60°	346					
	Cone Ø (m)	2.98	5.75	960		576									

Data are based on maximum output of all 4 RGBW channels.

35 PRO HIGH INTENSITY

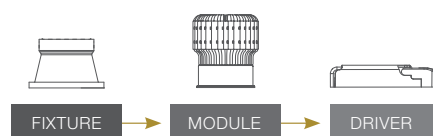
Height (m)		Emax (lx)		ELR LED Module				35P-HI	50N-HI	35N-HI	COIN-HI				
		10°	10°	LED Power		System Power		Luminous Flux (lm)	Type	Beam Angle	CRI				
1	E(0°)	10860	10860	8W		11W						587	Single CCT (3000K)	10°	High Efficiency Ra-85
	Cone Ø (m)	0.19	0.19	10W		7.5W									
2	E(0°)	2715	2715	10W		7.5W									
	Cone Ø (m)	0.37	0.37	949		469									
3	E(0°)	1207	1207	949		469		344	ProART98 Ra-98	284	231				
	Cone Ø (m)	0.56	0.56	411		386									
4	E(0°)	679	679	411		386						284	386	284	231
	Cone Ø (m)	0.74	0.74	411		386									
5	E(0°)	434	434	411		386		284	386	284	231				
	Cone Ø (m)	0.93	0.93	411		386									

Data are based on 3000K (ProART CRI-95). Nominal data of 2700K and 3500K are shared with 3000K.
Higher CCT of 4000K and 5000K will have a nominal data value of 5% higher than published. (f = 1.05)
High Efficiency CRI-85 will have a nominal data value of 15% higher than published. (f = 1.17)
ProART98 CRI-98 will have a nominal data value of 8% lower than published. (f = 0.92)
Nominal CRI-85, equals to Ra>80-87, R9>0
Nominal CRI-95, equals to Ra>90-97, R9>50
Nominal CRI-98, equals to Ra>97-99, R9>93

Correction Factor: 35P-HI - f = 1.00
50N-HI - f = 0.94
35N-HI - f = 0.69
COIN-HI - f = 0.56

VECO 3 SURFACE

MODULAR CONCEPT



ORDERING MATRIX CHART

Fixture										
Type	Shape		Angle		Colour		Reflector Colour		Accessories	
VECO-3SM	RD	Round	FX	Fix	WH	Matt White	WH	Matt White	N	None

Single CCT LED Module								Driver	
LED Power		Beam Angle		Colour Temp		CRI		Dimming	
ELR50P	12W	10	10°	27	2700K	HE	Ra-85	ND	Non-Dim
ELR50C	10W	20	20°	30	3000K	PA	ProART	PH	Phase
ELR35P	8W	35	35°	35	3500K	PP	ProART98	AN	0-10V
ELR50N	7.5W	60	60°	40	4000K			DA	DALI
ELR35N	5.5W			50	5000K				
ELR50P-24CV	12W	10	10°	27	2700K	HE	Ra-85	ND	Non-Dim
ELR50C-24CV	10W	20	20°	30	3000K	PA	ProART	PH	Phase
ELR35P-24CV	8W	35	35°	35	3500K	PP	ProART98	AN	0-10V
ELR50N-24CV	7.5W			40	4000K			DA	DALI
ELR35N-24CV	5.5W			50	5000K				

*Drivers for 24CV LED modules are sold separately.

example: VECO-3SM.RD.FX.WH.WH.AGL.ELR50P60.27.PA.DA

*Custom RAL colour options available.

Warm Dim LED Module								Driver	
LED Power		Beam Angle		Colour Temp		CRI		Dimming	
ELR50P	12W	10	10°	WD	Warm Dim	PA	ProART	PH	Phase
ELR50N	7.5W	20	20°					AN	0-10V
ELR35N	5.5W	35	35°					DA	DALI
ELR50N	7.5W	60	60°						

tuneWHITE LED Module								Driver	
LED Power		Beam Angle		Colour Temp		CRI		Dimming	
ELR50P	12W	20	20°	TW1831	tuneWHITE 1800K-3100K	PA	ProART	DA	DALI
ELR50N	7.5W	35	35°	TW1840	tuneWHITE 1800K-4000K				
ELR50N	7.5W	60	60°	TW2765	tuneWHITE 2700K-6500K				

flexiK LED Module								Driver	
LED Power		Beam Angle		Colour Temp		CRI		Dimming	
ELR50P	12W	20	20°	FK##	flexiK	PA	ProART	PH	Phase
ELR50N	7.5W	35	35°					AN	0-10V
ELR50N	7.5W	60	60°					DA	DALI

denotes the first two digits of preferred CCT ranging from 1800K to 6500K by increment of 100K.

RGBW LED Module								Driver	
LED Power		Beam Angle		Colour Temp		CRI		Dimming	
ELR50P	12W	35	35°	RGBW	Red, Green, Blue, White				
		60	60°						

*Drivers for RGBW LED modules are sold separately.