

BAA RECESSED LED PRISON GRADE



Ligature Resistant



The **BAA** is a specification grade maximum security recessed luminaire. Designed and engineered for maximum security prison applications, the BAA is available in 1x1, 1x2, 1x4, 2x2, and 2x4 sizes. Our custom designed fixture is also Ligature Resistant.

HOUSING: Die formed, seam welded, and ground smooth (specify material and gauge). Incorporates a removable reflector unitized with all electrical components for easy installation and maintenance. Die formed one-piece frame with tightly closed corners. (material and gauge to match housing).

DOORFRAME: Various doorframe materials available. Comes standard with a white TGIC polyester powder coat – 5-stage pre-treatment. Salt spray test: 1,000 hours; Reflectance: 92%. Doorframe secured to housing with stainless steel aircraft cables and tamper proof fasteners. Ligature Resistant is standard with inset doors, but not available on overlap doors.

TAMPER-PROOF FASTENERS: Tamper resistant T25 Torx head fasteners secure the doorframe to the housing. Optional allenhead screws with center pin reject.

ELECTRICAL SYSTEM: Electronic driver 0-10V, 1% dimming standard. Additional driver options available. Long-life LED system rated for >100K hours (L70 @ 45°C). Complies with federal energy efficiency standards.

OPTICAL SYSTEM: Inner lens for LED diffusion, and outer lens for impact resistance. Lenses ordered per specification (see options) and secured by retainers with weld studs for maximum strength.

LISTINGS: Optional IP65 with Wet Location Option. ETL listed.

MOUNTING: Recessed grid and recessed flanged applications. Easy installation with adjustable 90° swing arm system standard. Universal mounting allows for both recessed flanged and recessed grid mounting.

LED: 80 CRI or 90 CRI LEDs available in 2700K, 3000K, 3500K, 4000K and 5000K. Life is >100,000 hours at 70% lumen maintenance.

WARRANTY: 5-Year Limited Warranty. Complete warranty and terms located at: www.aelnow.com/warranty

Ordering Information on Next Page 

ORDERING INFORMATION:

Example: BAA-22-35-HL-B14-B14-375P-PA125-M

SERIES	SIZE	CCT	OUTPUT	MOUNTING	HOUSING MATERIAL	DOOR MATERIAL	DOOR TYPE
BAA	11 1x1	27 2700K	1L 1000 Lumens	F Flange	B20 20 Gauge Cold Roll Steel	B18 18 Gauge Cold Roll Steel	INS Inset Door*
	12 1x2	30 3000K	2L 2000 Lumens	G Grid	B18 18 Gauge Cold Roll Steel	SH18 18 Gauge Stainless Steel (Polished 304)	OVL Overlap Door
	14 1x4	35 3500K	4L 4000 Lumens		SH18 18 Gauge Stainless Steel (Polished 304)	SH186 18 Gauge Stainless Steel (Polished 316)	
	22 2x2	40 4000K	7L 7000 Lumens		SH186 18 Gauge Stainless Steel (Polished 316)	SHP18 18 Gauge Stainless Steel (Painted 304)	
	24 2x4	50 5000K	11L 11000 Lumens		SHP18 18 Gauge Stainless Steel (Painted 304)	SHP186 18 Gauge Stainless Steel (Painted 316)	
			12L 12000 Lumens		SHP186 18 Gauge Stainless Steel (Painted 316)	SHB18 18 Gauge Stainless Steel (Brushed 304)	
			13L 13000 Lumens		SHB18 18 Gauge Stainless Steel (Brushed 304)	SHB186 18 Gauge Stainless Steel (Brushed)	
			15L 15000 Lumens		SHB186 18 Gauge Stainless Steel (Brushed 316)	ALH .063" Aluminum (Painted)	
			17L 17000 Lumens		ALH .063" Aluminum (Painted)		
			20L 20000 Lumens				
			25L 25000 Lumens				
			XX Custom Lumens				

INNER LENS	OUTER LENS	VOLTAGE	DRIVER	OPTIONS
N No Lens	125P .125 Clear Polycarbonate	M 120/277V	BLANK 0-10V 1% Dimming Driver (included standard)	14EBL 14 Watt Emergency Ballast
PA125 .125 Prismatic Acrylic (inverted)	156P .156 Clear Polycarbonate	HV 347-480VAC	CD5 0-10V 5% to Off Dimming Driver	AH Allenhead Screws with center pin reject
PA156 .156 Prismatic Acrylic (inverted)	187P .187 Clear Polycarbonate		EDN Electronic Driver Non-Dimming	LN LED Night Light (Consult factory for available CCT)
PP125 .125 Prismatic Polycarbonate (inverted)	250P .250 Clear Polycarbonate		DALI 1% Dimming Driver	FZ Fuse Holder
PP187 .187 Prismatic Polycarbonate (inverted)	375P .375 Clear Polycarbonate		LDE1 Lutron Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology	WL Wet Location
CTG/PA Clear Tempered Glass with Prismatic Acrylic Overlay	CTG187 .187 Clear Tempered Glass			UV .005 UV Absorbing Overlay
FA Frosted Acrylic	CTG250 .250 Clear Tempered Glass			90 90 CRI
125P .125 Clear Polycarbonate	CTG375 .375 Clear Tempered Glass			AM Antimicrobial White Paint
156P .156 Clear Polycarbonate	CTG500 .500 Clear Tempered Glass			IS Internal Occupancy Sensor (Microwave)
187P .187 Clear Polycarbonate				IPH Full Length Internal Piano Hinge Door Frame
SY Symmetric Diffused DR Acrylic				

Other options and configurations are available. Consult factory for details.

Dimensions on Next Page 

ENERGY AND PERFORMANCE DATA

INPUT VOLTAGE:	120/277VAC
SYSTEM INPUT POWER:	27.8 - 173.4 WATTS*
DELIVERED LUMEN OUTPUT:	4000 - 25000 LUMENS
STANDARD DIMMING CONTROL:	0-10V
CCT:	2700, 3000, 3500, 4000, 5000 KELVIN
CRI:	82 (MINIMUM)
LIFE TIME RATING:	>100,000 HRS @ L70
INPUT FREQUENCY:	50/60 HZ
POWER FACTOR:	>0.9
OPERATING TEMP:	-30° TO 50° C

APPROXIMATE COLOR TEMPERATURE MULTIPLIER

5000K	X	1.03
4000K	X	1
3500K	X	.97
3000K	X	.94
2700K	X	.91

PART#	DELIVERED LUMENS	WATTS	L70 @20C (HRS)
4L	4000 LUMENS	27.8	>100K
7L	7000 LUMENS	48.5	>100K
11L	11000 LUMENS	79.3	>100K
12L	12000 LUMENS	83.2	>100K
13L	13000 LUMENS	90.1	>100K
15L	15000 LUMENS	104	>100K
16L	16000 LUMENS	110.1	>100K
20L	20000 LUMENS	138.7	>100K
25L	25000 LUMENS	173.4	>100K

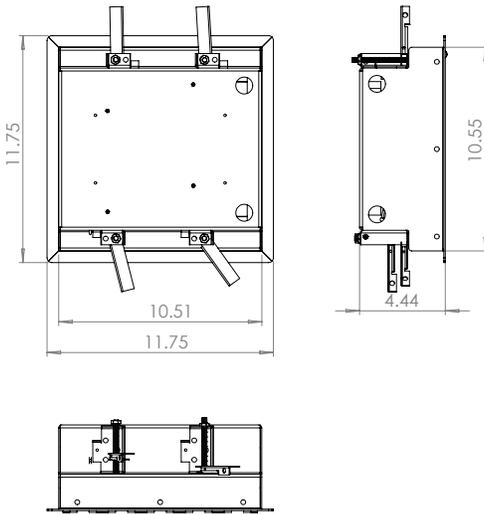
*ACTUAL WATTAGE MAY DIFFER BY ±5% WHILE OPERATING 120/277V ±10%



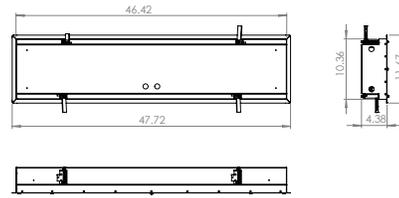
ROUGH IN SIZE LISTED BELOW.
Please pay careful attention to these dimensions.

DIMENSIONS

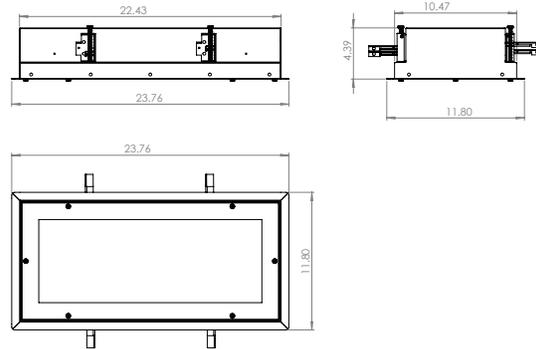
1x1
ROUGH IN SIZE TO BE 10 13/16" X 10 3/4"



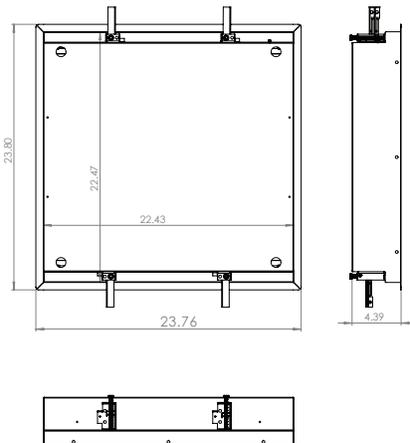
1x4
ROUGH IN SIZE TO BE 46 11/16" X 10 5/8"



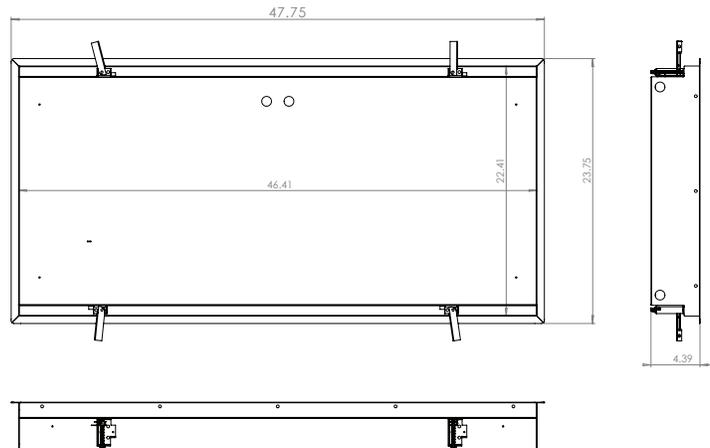
1x2
ROUGH IN SIZE TO BE 22 11/16" X 10 5/8"

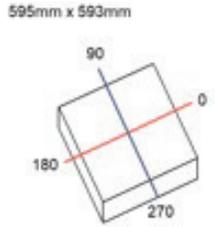


2x2
ROUGH IN SIZE TO BE 22 5/8" X 22 5/8"



2x4
ROUGH IN SIZE TO BE 46 5/8" X 22 11/16"



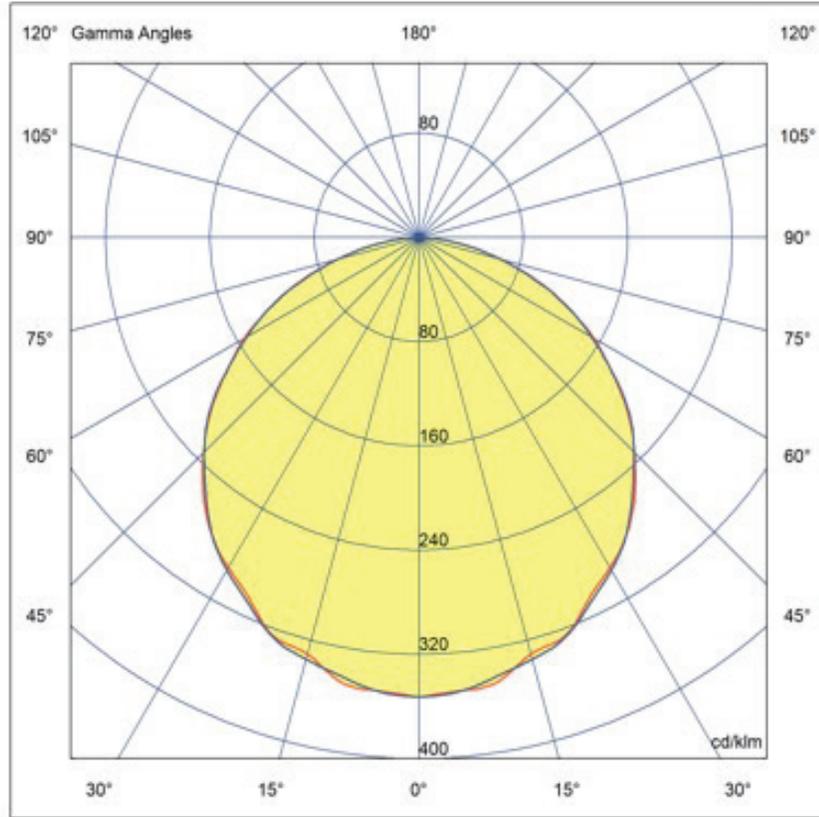


C Halfplanes

180.0 — 0.0

270.0 — 90.0

Flux 5700 lm
 Maximum 355.06 cd/klm
 Position C=22.50 G=5.00
 Efficiency: 100.00%
 Date: 02-05-2020
 Double Symmetrical



ZONAL FLUX DIAGRAM:

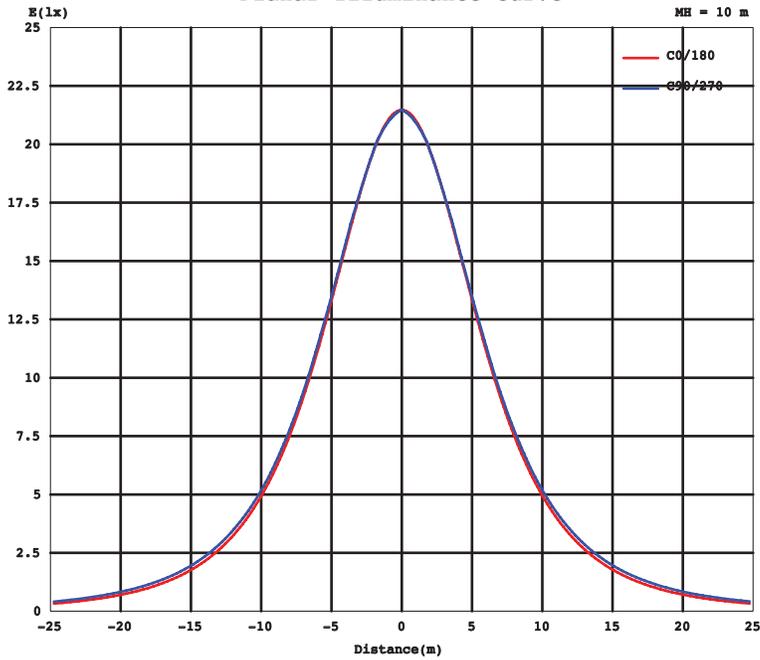
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φlum, lamp
10	2104	2098	2108	2100	2106	2099	2108	2097	0- 10	202.3	202.3	3.2,3.2
20	1980	1980	1999	1984	1984	1983	1998	1979	10- 20	578.8	781.1	12.4,12.4
30	1787	1801	1824	1804	1793	1804	1824	1799	20- 30	876.0	1657	26.2,26.2
40	1538	1564	1597	1570	1544	1571	1600	1564	30- 40	1057	2714	43,43
50	1243	1287	1331	1290	1251	1294	1337	1287	40- 50	1104	3818	60.4,60.4
60	912.1	977.1	1036	981.1	920.4	987.6	1046	979.6	50- 60	1015	4833	76.5,76.5
70	557.5	654.6	726.2	655.7	566.4	665.5	740.7	659.4	60- 70	807.9	5641	89.3,89.3
80	210.3	319.3	348.7	320.2	218.5	335.4	375.6	329.5	70- 80	507.2	6148	97.3,97.3
90	12.23	22.16	22.76	22.21	17.95	16.49	16.43	16.35	80- 90	168.9	6317	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT: lm		

CATALOG #:

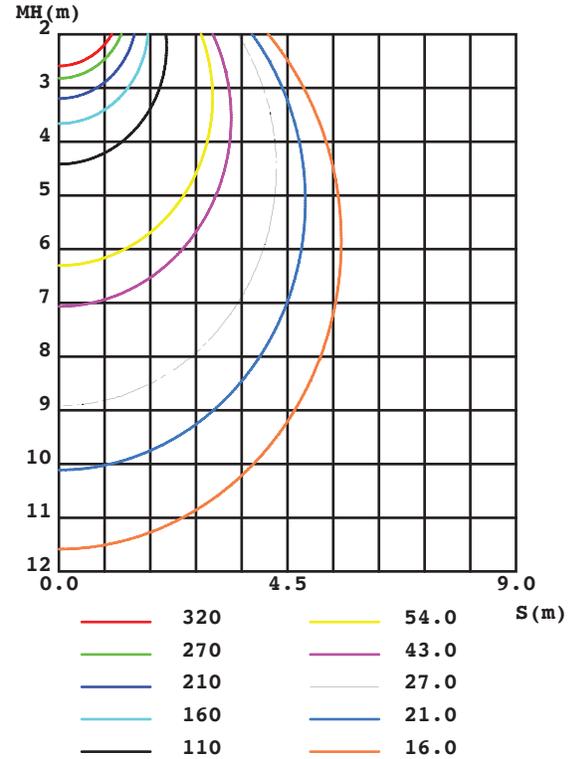
PROJECT:

TYPE:

Planar Illuminance Curve

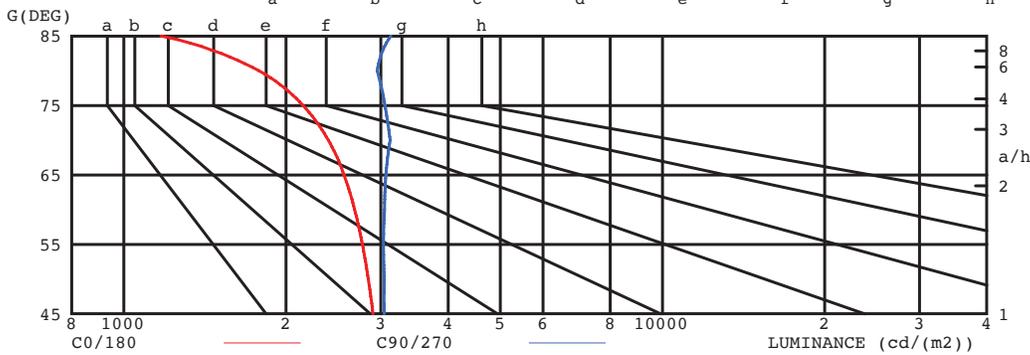


CO PLANE ISOLUX DIAGRAM (UNIT:lx)



LUMINANCE LIMITATION CURVES

GLARE	CLASS	ILLUMINANCE (lx)							
		a	b	c	d	e	f	g	h
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1172	3134
80	1781	2953
75	2151	3054
70	2397	3122
65	2563	3066
60	2683	3047
55	2773	3035
50	2844	3045
45	2901	3044