

# Effective Projected Area (EPA) Ratings for Fixtures – Direct Mount

## 1-1/2" Close Pole Mount (0° tilt) – (Mounting Code 1)



Configuration Number	1	2	3	5	6
Square housing 12"	0.47	0.94	●	●	●
Square housing 16"	0.80	1.60	●	●	●
Square housing 22"	1.49	2.98	▲	▲	▲
Square housing 22" with Sag Lens (QV, VFT & VPR Series 250W & 400W MH)	1.58	3.16	▲	▲	▲
Square housing 22" with Sag Lens & back box (QV, VFT & VPR Series 1000W MH, 250W & 400W HPS)	1.64	3.28	▲	▲	▲
Wedge housing 16"	0.45	0.80	●	●	●
Wedge housing 22"	0.84	1.46	▲	▲	▲
Rectangular housing 9" x 16"	0.60	0.77	●	●	●
Square Dome Flat Lens (250-400W PSMH, 250W & 400W MH)	1.46	2.92	▲	▲	▲
Square Dome Sag Lens (250W & 400W HPS)	1.54	3.00	▲	▲	▲

● For Configurations 3, 5 & 6, a 6" Extended Pole Mount must be used.  
 ▲ For Configurations 3, 5 & 6 with 22" sq. housing, a special 12" Extended Pole Mount must be used.

## 6" Extended Pole Mount Arm (0° tilt) – (Mounting Code 2)



Configuration Number	1	2	3	5	6
Square housing 12"	0.55	1.10	0.92	1.40	1.84
Square housing 16"	0.95	1.90	1.50	2.25	3.00
Square housing 22"	1.64	3.28	▲	▲	▲
Square housing 22" with Sag Lens (QV, VFT & VPR Series 250W & 400W MH)	1.73	3.46	▲	▲	▲
Square housing 22" with Sag Lens & back box (QV, VFT & VPR Series 1000W MH, 250W & 400W HPS)	1.79	3.58	▲	▲	▲
Wedge housing 16"	0.53	0.96	0.93	1.41	1.86
Wedge housing 22"	0.99	1.76	▲	▲	▲
Rectangular housing 9" x 16"	0.60	1.06	0.93	1.27	1.86
Square Dome Flat Lens (250-400W PSMH, 250W & 400W MH)	1.61	3.22	▲	▲	▲
Square Dome Sag Lens (250W & 400W HPS)	1.69	3.29	▲	▲	▲

▲ For Configurations 3, 5 & 6 with 22" sq. housing, a special 12" Extended Pole Mount must be used.

## 12" Extended Pole Mount Arm (special order) – Fixtures at 90 configuration, order fixture without arm (Mounting Code 8)



Configuration Number	1	2	3	5	6
Square housing 22" with Flat Lens	1.79	3.58	3.03	4.61	6.06
Square housing 22" with Sag Lens (QV or VFT Series)	1.88	3.76	3.21	4.88	6.42
Square housing 22" with Sag Lens & back box (QV or VFT Series)	1.94	3.88	3.33	5.06	6.66
Square Dome Flat Lens (250-400W PSMH, 250W & 400W MH)	1.80	3.61	3.22	5.02	6.43
Square Dome Sag Lens (250W & 400W HPS)	1.88	3.69	3.29	5.10	6.51

## Fixed 20° Mount – (Mounting Code 5)



Configuration Number	21	22	23	25	26
Square housing 12"	0.70	1.12	1.18	1.66	2.36
Square housing 16"	1.26	2.08	2.17	3.08	4.30
Square housing 22"	2.36	3.44	n/a	n/a	n/a
Rectangular housing 9" x 16"	0.88	1.24	1.50	2.12	3.00

## Side Arm Mount (0° tilt) – (Mounting Code 0)



Configuration Number	1	2	3	5	6	7 *
Aerodome	2.59	5.18	3.87	6.46	7.74	5.52
Aerodome with Type 3 & 4 External Backlight Shield	2.65	5.30	4.37	7.02	8.74	6.44
Aerodome with Type 3 & 4 External Backlight Shield & Full Cutoff Shield	3.06	6.13	5.20	8.27	10.40	7.69
Aerodome with Frontline External Backlight Shield	2.85	5.69	5.75	8.60	11.50	8.90

\* Note: Only for use on Round Tapered Poles, must be used with AVR-P-3

## In-Line Bracket (PBD)



Configuration Number	2 fixtures	3 fixtures
Square housing 12"	1.39	2.33
Square housing 16"	1.88	3.00
Square housing 22"	3.02	4.62
Square housing 22" with Sag Lens (VFT Series)	3.11	4.71
Square housing 22" with Sag Lens & back box (VFT Series)	3.17	4.77
Rectangular housing 9" x 16"	1.49	2.38
Square Dome Flat Lens (250-400W PSMH, 250W & 400W MH)	3.37	5.26
Square Dome Sag Lens (250W & 400W HPS)	3.45	5.34

Poles

EPA

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# Effective Projected Area (EPA) Ratings for Fixtures – Direct Mounts

## Square Tube Post Top – (Mounting Code A, C, D or E)

Configuration Number	A	C	D	E
Square housing 16" (QH & QV Series)	2.23	2.23	n/a	n/a
Square housing 22" (QH Series)	3.41	3.41	3.41	3.41
Square housing 22" with Sag Lens (QV Series)	3.50	3.50	3.50	3.50
Square housing 22" with Sag Lens & back box (QV Series)	3.56	3.56	3.56	3.56

## Round Tube Post Top – (Mounting Code F, H, I, J, K or M)

Configuration Number	F	H	I	J	K	M
Square housing 16" (AC & PR Series)	n/a	n/a	n/a	n/a	1.21	1.21
Aerodome	2.69	2.55	2.55	2.55	n/a	n/a
Aerodome with Type 3 & 4 External Backlight Shield	3.13	2.99	2.99	2.99	n/a	n/a
Aerodome with Type 3 & 4 External Backlight Shield & Full Cutoff Shield	3.55	3.41	3.41	3.41	n/a	n/a
Aerodome with Frontline External Backlight Shield	4.31	4.18	4.18	4.18	n/a	n/a
Square Dome Flat Lens (250-400W PSMH, 250W & 400W MH)	2.11	2.11	n/a	n/a	n/a	n/a
Square Dome Sag Lens (250W & 400W HPS)	2.19	2.19	n/a	n/a	n/a	n/a

# Effective Projected Area (EPA) Ratings for Fixtures Mounted with Tenons and Brackets

### 2" Adjustable Fitter with 12" Square Housing

Catalog #	# Fixtures	0°	10°	20°	30°	45°	60°	70°	80°	90°
PA/PB-1	1	0.61	0.65	0.77	0.84	0.91	1.07	1.16	1.20	1.21
PA/PB-2	2 in-line	2.82	2.89	3.14	3.28	3.41	3.73	3.91	3.99	4.01
PB-3	3 in-line	4.68	4.91	5.28	5.50	5.68	6.17	6.44	6.56	6.59
PB-4(90)	4 @ 90°	4.19	4.37	4.55	4.65	4.76	5.00	5.12	5.14	5.20
PB-4	4 in-line	6.54	6.93	7.42	7.71	7.95	8.60	8.97	9.13	9.17
PT-1	1	0.82	0.86	0.98	1.05	1.11	1.28	1.37	1.41	1.42
PT/PD-2(90)	2 @ 90°	1.26	1.41	1.52	1.58	1.62	1.77	1.84	1.87	n/a
PT/PD-2(180)	2 @ 180°	1.43	1.43	1.43	1.43	1.49	1.75	1.90	1.95	1.96
PT/PD-3(90)	3 @ 90°	1.87	2.02	2.13	2.19	2.23	2.38	2.45	2.48	n/a
PT-3(120)	3 @ 120°	1.70	1.89	2.21	2.36	2.47	2.76	3.08	3.16	3.16
PT/PD-4(90)	4 @ 90°	2.31	2.60	2.82	2.94	3.04	3.32	3.49	3.54	3.53
PW-1A3	1	1.08*	1.12*	1.24*	1.31*	1.38*	1.54*	1.63*	1.67*	1.68*
PW-2A3	2	2.16*	2.24*	2.48*	2.62*	2.76*	3.08*	3.26*	3.32*	3.34*

### 2" Adjustable Fitter with 14" Square Micro Flood

Catalog #	# Fixtures	0°	10°	20°	30°	45°	60°	70°	80°	90°
PA/PB-1	1	0.78	0.88	1.02	1.09	1.14	1.34	1.45	1.53	1.61
PA/PB-2	2 in-line	3.54	3.75	4.04	4.18	4.28	4.67	4.90	5.05	5.21
PB-3	3 in-line	6.03	6.34	6.77	6.98	7.13	7.72	8.06	8.29	8.52
PB-4(90)	4 @ 90°	4.87	5.34	5.77	5.99	6.13	6.72	7.07	7.30	7.53
PB-4(180)	4 in-line	8.51	8.95	9.50	9.78	9.97	10.76	11.23	11.53	11.84
PT-1	1	0.99	1.09	1.23	1.30	1.35	1.55	1.66	1.74	1.82
PT/PD-2(90)	2 @ 90°	1.40	1.58	1.73	1.81	1.90	2.14	n/a	n/a	n/a
PT/PD-2(180)	2 @ 180°	1.76	1.76	1.76	1.76	1.76	2.04	2.20	2.33	2.44
PT/PD-3(90)	3 @ 90°	2.08	2.26	2.41	2.49	2.58	2.86	n/a	n/a	n/a
PT-3(120)	3 @ 120°	2.02	2.37	2.57	2.63	2.64	2.98	3.08	3.26	3.33
PT/PD-4(90)	4 @ 90°	2.74	3.09	3.37	3.52	3.66	4.11	n/a	n/a	n/a
PW-1A3	1	1.25*	1.35*	1.49*	1.56*	1.61*	1.81*	1.92*	2.00*	2.08*
PW-2A3	2	2.49*	2.70*	2.98*	3.13*	3.22*	3.62*	3.85*	4.00*	4.15*

### 2" Adjustable Fitter with 16" Square Housing

Catalog #	# Fixtures	0°	10°	20°	30°	45°	60°	70°	80°	90°
PA/PB-1	1	0.93	1.06	1.27	1.39	1.50	1.78	1.95	2.02	2.03
PA/PB-2	2 in-line	3.86	4.11	4.53	4.78	4.99	5.56	5.89	6.03	6.05
PB-3	3 in-line	6.35	6.87	7.51	7.88	8.19	9.04	9.55	9.76	9.79
PB-4(90)	4 @ 90°	5.84	6.17	6.49	6.67	6.83	7.25	7.50	7.60	7.62
PB-4	4 in-line	8.84	9.63	10.49	10.98	11.40	12.53	13.21	13.49	13.53
PT-1	1	1.14	1.26	1.48	1.60	1.71	1.99	2.16	2.23	2.24
PT/PD-2(90)	2 @ 90°	1.90	2.16	2.36	2.47	2.56	2.81	n/a	n/a	n/a
PT/PD-2(180)	2 @ 180°	2.09	2.09	2.10	2.34	2.40	2.84	3.08	3.18	3.19
PT/PD-3(90)	3 @ 90°	2.83	3.10	3.30	3.41	3.49	3.75	n/a	n/a	n/a
PT-3(120)	3 @ 120°	2.07	2.81	3.50	4.24	4.74	5.09	5.48	5.63	5.63
PT/PD-4(90)	4 @ 90°	3.57	4.13	4.53	4.72	4.90	5.42	n/a	n/a	n/a
PW-1A3	1	1.40*	1.53*	1.74*	1.86*	1.97*	2.25*	2.42*	2.49*	2.50*
PW-2A3	2	2.80*	3.06*	3.48*	3.72*	3.94*	4.50*	4.84*	4.98*	5.00*

### 2" Adjustable Fitter with Rectangular Housing

Catalog #	# Fixtures	0°	10°	20°	30°	45°	60°	70°	80°	90°
PA/PB-1	1	0.65	0.79	0.91	0.96	0.99	1.14	1.36	1.22	1.21
PA/PB-2	2 in-line	2.89	3.17	3.41	3.51	3.57	3.87	4.31	4.03	4.01
PB-3	3 in-line	4.91	5.33	5.69	5.84	5.93	6.38	7.04	6.62	6.59
PB-4(90)	4 @ 90°	4.11	4.53	4.89	5.04	5.13	5.58	6.24	5.82	5.79
PB-4	4 in-line	6.93	7.49	7.97	8.17	8.29	8.89	9.77	9.21	9.17
PT-1	1	0.86	1.00	1.12	1.17	1.20	1.35	1.57	1.43	1.42
PT/PD-2(90)	2 @ 90°	1.32	1.45	1.56	1.60	1.61	1.74	n/a	n/a	n/a
PT/PD-2(180)	2 @ 180°	1.24	1.35	1.52	1.59	1.64	1.85	2.17	1.97	1.95
PT/PD-3(90)	3 @ 90°	1.84	1.97	2.08	2.11	2.13	2.25	n/a	n/a	n/a
PT-3(120)	3 @ 120°	2.27	2.41	2.53	2.57	2.61	2.75	2.98	2.84	2.83
PT/PD-4(90)	4 @ 90°	2.44	2.70	2.91	2.98	3.02	3.26	n/a	n/a	n/a
PW-1A3	1	1.12*	1.26*	1.38*	1.43*	1.46*	1.61*	1.83*	1.69*	1.68*
PW-2A3	2	2.24*	2.52*	2.76*	2.86*	2.92*	3.22*	3.66*	3.38*	3.36*

\* These values must be multiplied by this ratio:  $\frac{\text{Fixture Mounting Height}}{\text{Total Pole Height}}$

### 2" Adjustable Fitter with 22" Square Housing

Catalog #	# Fixtures	0°	10°	20°	30°	45°	60°	70°	80°	90°
PA/PB-1	1	1.62	1.94	2.34	2.56	2.74	3.26	3.56	3.69	3.69
PA/PB-2	2 in-line	5.63	6.28	7.07	7.51	7.87	8.91	9.51	9.77	9.77
PB-3	3 in-line	9.12	10.27	11.45	12.12	12.66	14.22	15.12	15.51	15.51
PB-4(90)	4 @ 90°	8.74	9.40	9.99	10.32	10.59	11.37	11.83	12.03	12.03
PB-4	4 in-line	12.62	14.27	15.84	16.73	17.45	19.53	20.73	21.25	21.25
PT-1	1	1.83	2.15	2.55	2.77	2.95	3.47	3.77	3.90	3.90
PT/PD-2(180)	2 @ 180°	3.45	3.45	3.87	3.99	4.23	4.97	5.44	5.60	5.60
PT-3(120)	3 @ 120°	3.33	3.68	4.97	5.33	5.51	6.41	n/a	n/a	n/a
PW-1A3	1	2.09*	2.41*	2.81*	3.03*	3.21*	3.73*	4.03*	4.16*	4.16*
PW-2A3	2	4.18*	4.82*	5.62*	6.06*	6.42*	7.46*	8.06*	8.32*	8.32*



**NOTE:** Hanging signs, banners and flags on poles change the EPA rating and increase vibration. The EPA ratings data provided in this catalog does not allow for this added stress which could result in pole or fixture failure.

### Why is EPA Important?

Effective Projected Area—or EPA—is a rating assigned to a pole-mounted lighting fixture based on the fixture or pole's surface area and shape. The EPA is used to calculate wind loading to determine the proper pole size needed to support a fixture in outdoor applications. EPA maps (as seen on pages 163, 165 and 167) indicate approximate maximum wind zones throughout the United States. Base wind velocities are established using a 50-year recurring mean.

Note that the wind map has several shaded areas designated as Special Wind Regions. In these areas, the magnitudes of the local wind speeds are dramatically affected by local conditions. These special wind regions include mountainous terrain, gorges, and other geographic areas that produce exceptional wind velocities. Poles located in a special wind region may be subjected to wind speeds that are higher than those indicated in the surrounding area. Wind speeds in these special regions should be determined by consulting the authority with local jurisdiction in that particular area, or through the analysis of local meteorological conditions.