

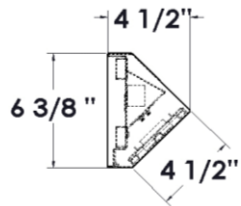
PROJECT:

NOTES:

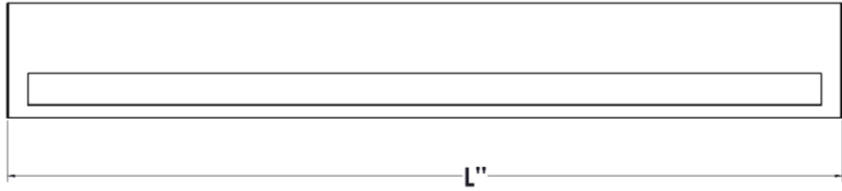
ORDERING INFORMATION:

EXAMPLE PUMA - H - 45 - L - 40 - 9 - 40 - H5 - M5 - MV - EM - DIM
 SERIES SECURITY LEVEL NOM. LENGT SOURCE LUMENS CRI KELVINS DIFFUSERS LENS VOLTAGE OPTIONS DRIVER

SHOP DRAWINGS



	L
PUMA - 23	23"
PUMA - 34	34"
PUMA - 45	45"



ORDERING INFORMATION

SERIES
PUMA

SECURITY LEVEL
 X Extra Heay (12 gauge)
 H Heavy (14 gauge)
 M Medium (16 gauge)
 L Light (18 gauge)

NOMINAL LENGTH
 23 23"
 34 34"
 45 45"

SOURCE
L LED

Lumen Package*	Nom. Lumens	Wattage
45"		
30	3,000	28
40	4,000	37
50	5,000	47

*Other lumen packages available.

CRI
 BLANK 80 CRI
 9 90 CRI

KELVIN
 30 3000K
 35 3500K
 40 4000K
 50 5000K
 TW Tunable White

DIFFUSERS
 A1 Acrylic K12 (1/8")
 H5 White Opal Underlay
 L1 Frosted Acrylic (1/8")

SECURITY LENS (NOMINAL THICKNESS)
 M1 Clear Polycarbonate (1/8")
 M3 Clear Polycarbonate (3/16")
 M4 Clear Polycarbonate (1/4")
 M5 Clear Polycarbonate (3/8")
 M6 Clear Polycarbonate (1/2")

VOLTAGE
 MV 120-277V
 347 347V

OPTIONS
 EM Emergency Power Pack
 AM Antimicrobial Finish
 SH Stainless Steel Housing
 NLA Amber LED night light (500 lumens)
 NLR Red LED night light (500 lumens)
 NL White LED night light (500 lumens)*
**Confirm lumen packages and TempK with manufacture*

DRIVER
 BLANK Non-dimming applications
 DM 0-10V dimming
 DA DALI driver

FEATURES

- > Specification-grade LED wall mount luminaire for anti-vandal and security applications
- > Robust design with concealed hinges, tamper-resistant fasteners and contraband trapping backplate
- > Security lens (multiple thicknesses available)
- > Double frame secured internally with multiple screws
- > Concealed piano hinge welded to door frame and fastened to backplate welded housing for additional strength
- > Welded housing for additional strength
- > Minimum 80 CRI; color range 3000K - 5000K available
- > Multiple dimming protocols available
- > Energy-saving occupancy sensor option available
- > 100% made in Canada

APPLICATIONS

- > Prison cells
- > Correctional facilities
- > Corridors
- > Locker rooms
- > Public areas
- > Schools
- > Stairwells

LED

FIXTURE PERFORMANCE DATA

SPECIFICATIONS

Housing – Precision die-formed 12,14,16,18-gauge C.R.S. with continuously welded end caps of matching gauge

Door Frame – Single piece precision die formed frame with seam welded corners and tamper-resistant fasteners secure door frame to housing

Internal Frame –

For maximum security applications:

One piece internal frame fastened to door with 12 screws for maximum security applications.

For minimum security applications:

Zintec angle frame riveted to door

Security Lens – Variety of robust polycarbonate lenses available (outer lens).

Diffuser – Variety of diffusers available for smooth and uniform illumination (inner lens).

Hinge – Full length piano style hinge with .500" knuckle and .125" pin welded to doorframe

Finish – Baked white enamel powder finish applied post production on all surfaces for smooth edges and safe handling

Electrical – High quality mid-power LED boards. L70 >50,000 hours.

Mounting – Wall mount

Listings –

■ cUL certified as luminaire suitable for dry or damp locations.

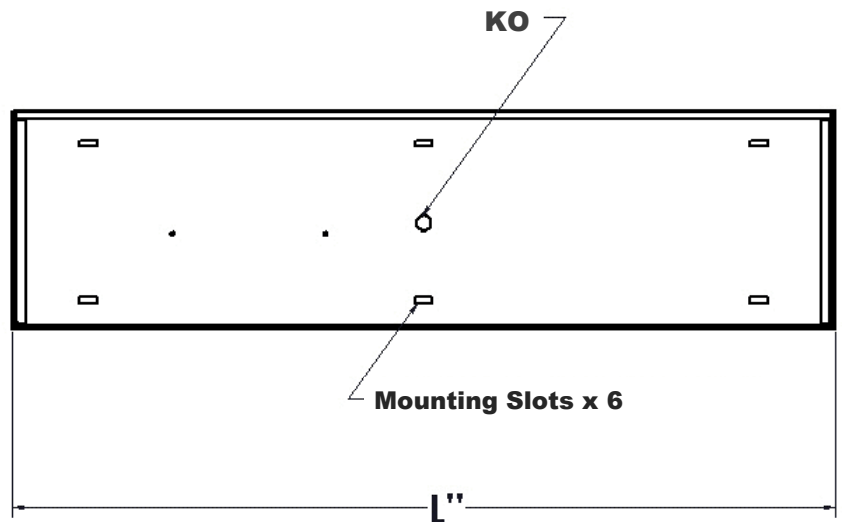
Warranty – 5-year limited warranty

LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
45"			
30	3,005	28	107
40	4,119	37	111
50	5,001	47	106

*Results based on 4000K, 80 CRI, Lens M4, Diffuser A1

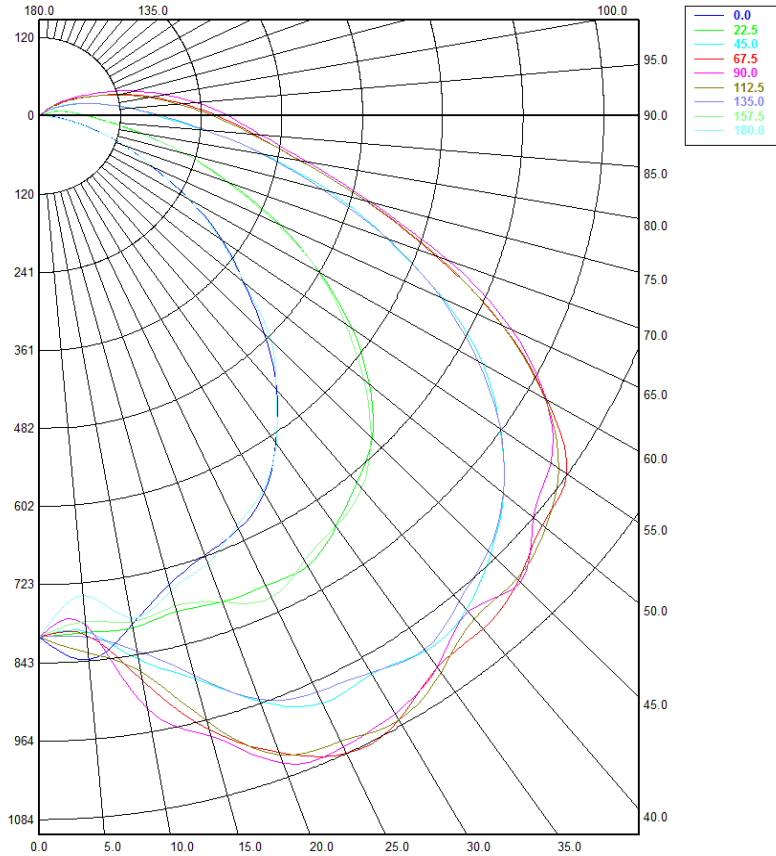
MULTIPLIER TABLE	
COLOR TEMPERATURE	
CCT/CRI	CONVERSION FACTOR
3000K / 80 CRI	0.95
3500K / 80 CRI	0.97
4000K / 80 CRI	1
5000K / 80 CRI	1.03

FIXTURE DETAILS



PHOTOMETRY

PUMA-45-LED-40-40-A1-M4-MVOLT Total Luminaire Output: 4.119 lumens: 47 Watts



Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°	112.50°	135.00°	157.50°	180.00°
0.00°	803.03	803.03	803.03	803.03	803.03	803.03	803.03	803.03	803.03
5.00°	841.49	799.21	798.15	802.83	788.41	831.14	806.70	781.98	741.30
10.00°	796.02	801.23	850.52	883.86	927.92	869.41	837.38	791.90	786.24
15.00°	747.90	790.52	898.70	980.02	989.35	966.33	892.53	781.92	757.13
20.00°	720.76	797.05	959.79	1,043.82	1,061.63	1,048.07	957.33	797.86	733.42
25.00°	702.67	798.52	998.97	1,083.96	1,072.78	1,063.01	979.16	819.42	696.98
30.00°	670.77	800.43	992.63	1,074.99	1,062.52	1,074.91	990.13	790.40	666.53
35.00°	614.52	771.81	1,006.29	1,036.98	1,036.87	1,046.22	1,003.98	771.38	615.68
40.00°	550.31	736.69	992.93	1,031.81	996.99	1,011.66	976.48	748.45	548.77
45.00°	473.82	702.48	953.81	1,012.24	1,016.27	1,009.34	948.56	698.92	488.50
50.00°	396.55	641.70	905.12	980.82	963.50	987.61	905.28	630.76	397.18
55.00°	332.85	569.22	840.27	961.95	932.64	947.04	840.46	555.44	326.32
60.00°	257.12	482.62	765.81	876.23	874.25	872.31	758.02	480.96	254.36
65.00°	187.26	394.23	665.87	764.02	779.64	764.00	662.08	388.71	187.97
70.00°	135.32	301.36	552.25	631.99	649.79	635.00	553.27	296.46	132.11
75.00°	86.99	223.80	446.67	502.05	510.92	502.56	435.05	224.02	84.13
80.00°	49.11	154.39	338.26	393.41	405.44	392.63	336.39	151.96	47.83
85.00°	24.26	102.37	246.51	319.89	330.85	317.28	247.46	98.56	20.80
90.00°	10.18	71.30	175.01	265.14	281.96	257.73	181.57	68.99	9.57
95.00°	5.42	52.29	138.20	213.01	234.52	208.78	134.73	53.35	6.21
100.00°	2.45	38.72	99.79	168.71	188.41	163.34	101.48	39.89	2.29
105.00°	1.56	28.36	74.88	128.44	147.01	125.16	72.97	26.35	1.52
110.00°	0.74	11.56	53.49	89.33	109.70	89.96	52.11	12.61	0.83
115.00°	0.25	3.05	35.64	66.31	77.03	64.29	33.74	3.24	0.20
120.00°	0.27	0.82	21.17	42.53	52.05	44.25	19.60	0.79	0.20
125.00°	0.09	0.62	6.04	27.20	35.63	29.45	6.32	0.98	0.09
130.00°	0.09	0.62	1.49	13.05	20.80	12.84	1.39	0.47	0.24
135.00°	0.01	0.62	1.12	1.83	3.78	1.65	0.93	0.74	0.16
140.00°	0.21	0.75	1.71	1.35	1.08	1.54	1.02	0.43	0.05
145.00°	0.04	0.76	0.97	1.44	1.59	0.95	0.82	0.59	0.00
150.00°	0.00	0.50	1.06	1.16	1.38	1.58	1.39	0.38	0.02
155.00°	0.00	0.06	1.30	1.18	0.93	1.03	0.84	0.28	0.09
160.00°	0.00	0.00	0.93	0.70	0.93	0.57	0.82	0.26	0.00
165.00°	0.00	0.14	0.40	0.40	1.53	0.17	0.12	0.20	0.00
170.00°	0.00	0.09	0.51	0.26	0.27	0.18	0.33	0.00	0.00
175.00°	0.00	0.07	0.00	0.07	0.00	0.00	0.00	0.00	0.00
180.00°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Spacing Criterion:

Two luminaires, plane 0°	1.23
Two luminaires, plane 90°	1.83
Four luminaires	1.83

Zonal Lumen Summary

Zone	Lumens	% Fixture
0.00° - 10.00°	83.20	2.02%
10.00° - 20.00°	251.85	6.11%
20.00° - 30.00°	431.94	10.48%
30.00° - 40.00°	569.26	13.82%
40.00° - 50.00°	653.95	15.87%
50.00° - 60.00°	662.91	16.09%
60.00° - 70.00°	566.08	13.74%
70.00° - 80.00°	389.74	9.46%
80.00° - 90.00°	234.91	5.70%
90.00° - 100.00°	143.05	3.47%
100.00° - 110.00°	80.61	1.96%
110.00° - 120.00°	36.50	0.89%
120.00° - 130.00°	12.69	0.31%
130.00° - 140.00°	2.03	0.05%
140.00° - 150.00°	0.58	0.01%
150.00° - 160.00°	0.34	0.01%
160.00° - 170.00°	0.11	0.00%
170.00° - 180.00°	0.01	0.00%
0.00° - 90.00°	3,843.82	93.30%
90.00° - 180.00°	275.92	6.70%
0.00° - 180.00°	4,119.74	100.00%

