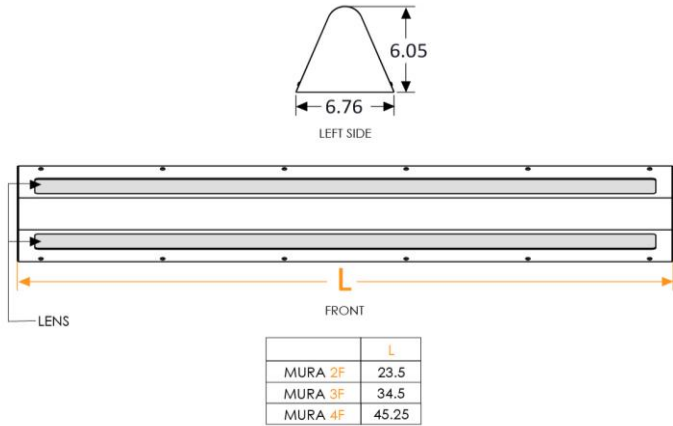


PROJECT:

NOTES:

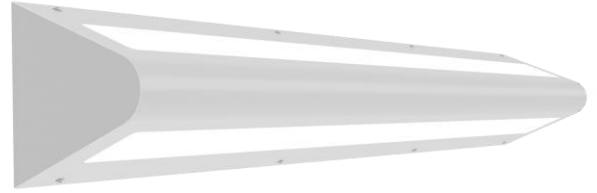
ORDERING INFORMATION:

SHOP DRAWINGS



ARMOR SERIES

SANTE SERIES



Optional

ORDERING INFORMATION

SERIES

MURA

HOUSING

X	12-Ga CRS (painted white)
H	14-Ga CRS (painted white)
M	16-Ga CRS (painted white)
L	18-Ga CRS (painted white)
HS	14-Ga SS (painted white)
MS	16-Ga SS (painted white)
LS	18-Ga SS (painted white)
HB	14-Ga SS (brushed)
MB	16-Ga SS (brushed)
LB	18-Ga SS (brushed)

DIMENSIONS

2F	23"
3F	34"
4F	45"

LUMENS UP*

00	No indirect light or lens
20	2,000
40	4,000

*Other lumen packages available.

LUMENS DOWN*

20	2,000
40	4,000

*Other lumen packages available.

CRI

8	80 CRI
9	90 CRI

KELVIN

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

DIFFUSERS

FA1	Prismatic Acrylic
H5	White Opal Underlay

SECURITY LENS (NOMINAL THICKNESS)

G1	Prismatic Polycarbonate (1/8")
*Not to be use with FA1 diffuser	
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")
T5	Clear Tempered Glass (3/8")
T6	Clear Tempered Glass (1/2")

VOLTAGE

MV	120-277V
347	347V

CIRCUITS

1C	1 Circuit
2C	2 Circuits

OPTIONS

EM	Emergency Power Pack
AM	Antimicrobial Finish
SH	Stainless Steel Housing
FU	Fuse and Fuse Holder
NLA	Amber LED night light (500 lumens)
NLR	Red LED night light (500 lumens)
NL	White LED night light (500 lumens)*
LV	Low Voltage Relay Ready (Patient Controlled)**
BAA	Buy American Act Compliant (consult factory) Optional

*Confirm lumen packages and TempK with manufacture

**Remote control not supplied by PA-CO and only 2 loads can be dimmable

DRIVERS

ND	Non-dimming applications
D	0-10V dimming
DA	DALI driver

FEATURES

- > Specification-grade direct/indirect wall mounted LED luminaire for anti-vandal and maximum security applications
- > Two apertures provide up and down light
- > Security lens (multiple thicknesses available) secured with internal frame
- > Continuous welded and ground seams for optimal structural strength
- > Tamper resistant fasteners
- > Minimum 80 CRI; color range 3000K - 5000K available
- > Multiple dimming protocols available
- > Optional 90 CRI
- > 1 or 2 circuits available
- > Anti-Ligature
- > Operating temperature (-40 to 45 Celsius / -22 to 113 Fahrenheit)

APPLICATIONS

- > Behavioral Facilities
- > Correctional facilities
- > Prison Cells
- > Patient Rooms

LED

FIXTURE PERFORMANCE DATA

SPECIFICATIONS

Housing – One-piece precision die-formed bull nose 14, 16, 18-gauge C.R.S. with continuously welded end plates

Internal Frame – One piece precision die formed internal frame fastened to housing with multiple screws

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

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

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 >72,000 hours reported / 129,200 hours calculated at maximum allowable output current. L85 >50,000 hours.

Mounting – Surface Wall Mount

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

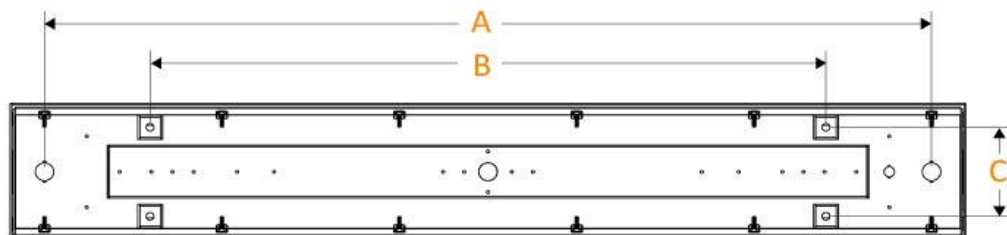
Warranty – 5-year limited warranty

LED PACKAGE	DELIVERED LUMENS	WATTAGE
4F		
20 UP / 20 DOWN	3,988	36
20 UP / 40 DOWN	6,161	61
40 UP / 20 DOWN	6,163	60
40 UP / 40 DOWN	8,092	74

*Results based on 4000K, 80 CRI, Security Lens (M4), Diffuser (H5)

Approximate CCT Multiplier	80 CRI	90 CRI
2700K	0.9	0.75
3000K	0.95	0.8
3500K	0.97	0.82
4000K	1	0.85
5000K	1.03	0.88

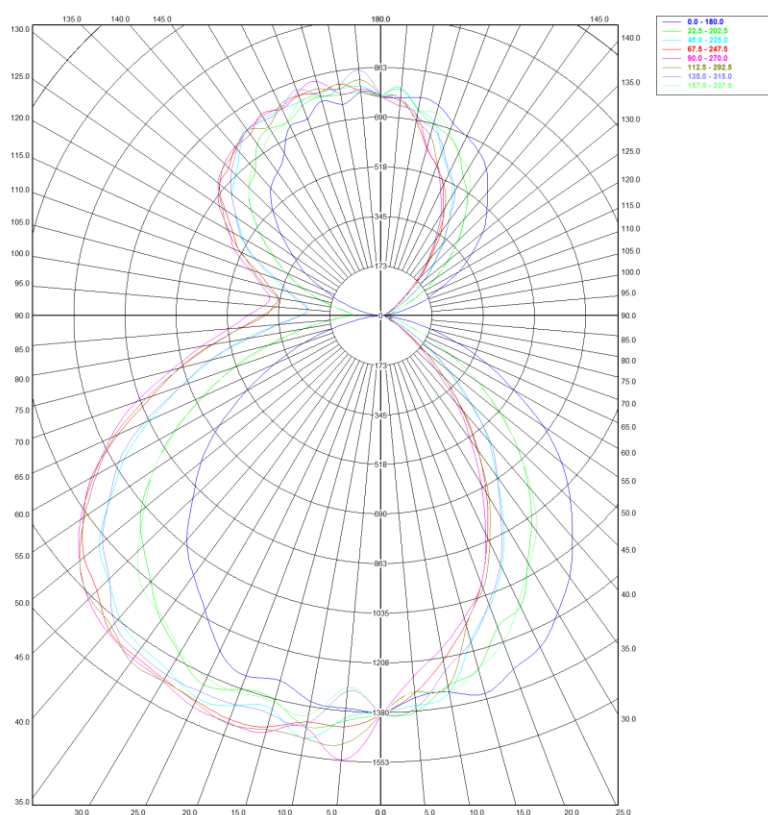
FIXTURE DETAILS



	A	B	C
MURA 2F	20	16	4.25
MURA 3F	30	28	4
MURA 4F	42	32	4.39

PHOTOMETRY

MURA-M-4F-20-40-40K-H5-M4-MV



Zonal Lumen Summary

Zone	Lumens	% Fixture
0.00° - 10.00°	138.61	2.25%
10.00° - 20.00°	369.80	6.00%
20.00° - 30.00°	555.32	9.01%
30.00° - 40.00°	656.15	10.65%
40.00° - 50.00°	667.94	10.84%
50.00° - 60.00°	594.91	9.65%
60.00° - 70.00°	459.84	7.46%
70.00° - 80.00°	309.01	5.01%
80.00° - 90.00°	190.83	3.10%
90.00° - 100.00°	142.60	2.31%
100.00° - 110.00°	174.90	2.84%
110.00° - 120.00°	249.40	4.05%
120.00° - 130.00°	324.90	5.27%
130.00° - 140.00°	369.15	5.99%
140.00° - 150.00°	365.63	5.93%
150.00° - 160.00°	308.20	5.00%
160.00° - 170.00°	206.99	3.36%
170.00° - 180.00°	77.78	1.26%
0.00° - 90.00°	3942.41	63.98%
90.00° - 180.00°	2219.54	36.02%
0.00° - 180.00°	6161.95	100.00%

Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°	112.50°	135.00°	157.50°	180.00°	202.50°	225.00°	247.50°	270.00°	292.50°	315.00°	337.50°	360.00°
0.00°	1387.93	1387.93	1387.93	1387.93	1387.93	1387.93	1387.93	1387.93	1387.93	1387.93	1387.93	1387.93	1387.93	1387.93	1387.93	1387.93	1387.93
5.00°	1333.71	1382.53	1360.28	1317.65	1261.19	1313.23	1370.64	1312.07	1369.72	1415.36	1405.00	1435.37	1552.60	1495.93	1311.02	1298.35	1333.71
10.00°	1328.65	1305.43	1332.40	1215.88	1177.05	1310.81	1253.94	1327.95	1362.87	1451.08	1492.69	1435.13	1453.53	1491.93	1441.63	1410.82	1328.65
15.00°	1360.46	1272.00	1172.62	1109.69	1087.67	1117.95	1175.66	1272.47	1313.54	1384.73	1416.92	1480.38	1499.33	1490.00	1434.08	1390.46	1360.46
20.00°	1308.08	1151.68	1074.32	992.41	992.12	1009.26	1065.73	1209.70	1333.47	1383.83	1443.11	1493.58	1505.88	1510.10	1438.67	1396.27	1308.08
25.00°	1272.31	1116.06	965.45	850.43	838.30	870.40	955.61	1100.71	1285.41	1416.32	1467.81	1476.85	1501.21	1482.42	1442.65	1389.25	1272.31
30.00°	1192.93	990.78	827.54	712.69	676.52	728.39	810.70	999.65	1184.79	1357.87	1428.01	1461.29	1468.52	1466.38	1443.84	1349.06	1192.93
35.00°	1110.07	887.10	680.15	570.06	528.35	565.75	686.25	916.14	1102.43	1293.51	1406.76	1444.53	1456.99	1469.64	1428.30	1282.47	1110.07
40.00°	1004.54	773.72	565.48	433.73	399.15	426.53	576.32	789.87	1018.00	1207.92	1370.83	1426.41	1434.35	1411.29	1396.85	1246.78	1004.54
45.00°	903.38	654.75	435.53	300.41	262.31	301.41	420.55	651.82	896.24	1133.29	1298.79	1352.52	1395.03	1389.40	1294.72	1159.27	903.38
50.00°	795.49	520.04	308.65	204.56	176.69	199.73	300.17	530.09	790.39	1056.00	1239.95	1306.81	1325.81	1325.10	1225.03	1039.83	795.49
55.00°	665.54	399.49	196.14	126.91	101.99	115.25	208.70	397.52	661.56	933.36	1112.47	1223.69	1235.42	1218.99	1118.05	934.83	665.54
60.00°	520.34	275.31	121.36	76.64	69.77	79.02	123.04	277.76	525.86	804.94	998.66	1126.82	1117.38	1105.63	1020.16	794.18	520.34
65.00°	397.65	174.88	66.55	44.31	34.64	41.70	69.81	174.18	394.24	656.81	857.24	975.64	1004.10	989.13	880.60	670.11	397.65
70.00°	274.50	96.03	31.70	19.26	26.76	18.58	31.19	96.30	278.96	531.34	716.35	823.36	879.95	843.60	716.69	517.98	274.50
75.00°	167.93	47.82	14.85	31.15	36.57	28.82	16.40	47.66	165.50	391.30	587.29	705.69	731.49	700.00	599.11	377.20	167.93
80.00°	77.41	23.30	19.17	34.00	38.14	30.92	19.57	21.94	78.65	263.56	468.19	580.67	614.29	575.81	448.47	270.55	77.41
85.00°	28.52	25.00	27.84	25.28	25.88	27.18	26.77	28.28	26.34	170.20	344.73	469.26	514.46	475.01	347.14	161.20	28.52
90.00°	8.60	33.64	23.02	22.12	23.39	25.08	24.27	34.59	8.69	106.36	273.30	391.22	449.59	401.98	270.25	108.62	8.60

Spacing Criterion:

Two luminaires, plane 0°	1.26
Two luminaires, plane 90°	0.85
Four luminaires	1.33