MARK ARCHITECTURAL LIGHTING

SPECIFICATIONS

TYPE:

PROJECT:

MARKLINE

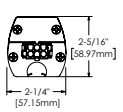
SURFACE
TUNABLE WHITE & WARM DIMMING

HIGHLIGHTS

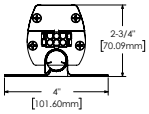
- Small, versatile and impactful
- Extruded aluminum construction
- 9 x 9, 15 x 30, 10 x 60, 30 x 60, 40 x 60, 60 x 60 or wall wash distributions
- Tunable White available in Rhythm Range (2700-6500K) or Layers Range (2200-5000K) incorporate warm-neutral-cool LEDs
- Warm Dimming Golden Range from (3000-2200K)
- Wide and Powerful Range 300, 450, 600, 750 or 1000 lumens per foot
- DMX with Remote Device Management
- Efficient with up to 119 lumens per watt
- Full compliment of mounting and shielding accessories
- Manufactured in USA

DIMENSIONS

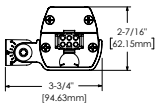
Reference Drawing Detail section for additional information



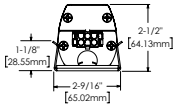
NO MOUNT
(SHOWN FOR SIZE REFERENCE ONLY)



M500ADJC1 MOUNT

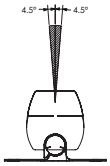


M500ADJH2 MOUNT

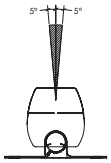


M500FMC MOUNT

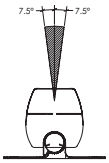
STANDARD DISTRIBUTION



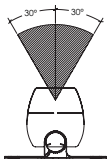
9'x9'



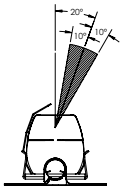
10'x60'



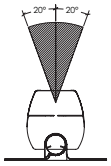
15'x30'



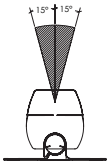
60'x60'



WW Wall Wash (Asymmetric)
***Shown with supplied snap-on visor**



40'x60'



30'x60'

FIXTURE PERFORMANCE

MKS501							
Distribution	**WW**	**9x9**	**10x60**	**15x30**	**30x60**	**40x60**	**60x60**
Delivered Lumens/Foot	612	957	959	764	783	726	777
Input Watts/Foot	8.06	8.94	8.94	8.06	8.06	8.06	8.06
Lumens/Watt	76	107	107	95	97	90	96

*Based on a 4ft, 80CRI, TUWH, RHYR, 1000LMF fixture.

TUNABLE WHITE

WARMDIM®

Buy American

AcuityBrands.

MAINSTREAM DYNAMIC BY ACUITY BRANDS

MARK ARCHITECTURAL LIGHTING

MARKLINE
Surface
Tunable White & Warm Dimming

ORDERING

Example: MKS501 LLP 14FT MSL4 M500ADJH2 80CRI TUWH LAYR 600LMF 15X30DEG DARK MVOLT SIT DMX MFCLW25TL
Example: MKS501 LLP 12FT MSL4 M500FMC 80CRI WDIM GOLR 1000LMF WW DARK MVOLT WTP ZT NOFCL

Series

MKS501	MARKline 500 Series Surface

Linear Plan

LLP	Linear Longest Possible
LCB	Linear Center Balanced
LSL	Linear Same Length

Total Run Length

_FT	Specify continuous linear feet in 1' increments, with a minimum of 2'. (Example: 24FT)

Max Section Length

MSL2	2'
MSL3	3'
MSL4	4'

Mounting

M500ADJC1	Adjustable Mount Center Axis
M500ADJH2	Adjustable Mount Side Hinge
M500FMC	Fixed Mount

Mounting Option

(blank)	No Cantilever Brackets
MCBT12	Cantilever Bracket 12" Projection
MCBT18	Cantilever Bracket 18" Projection
MCBT6	Cantilever Bracket 6" Projection
MCBTL12	Cantilever Bracket Large 12" projection
MCBTL18	Cantilever Bracket Large 18" projection
MCBTL6	Cantilever Bracket Large 6" projection

Must select 500SDJH2 mounting option.

Direct Light Source Color Rendering

80CRI	80CRI
90CRI*	90CRI

*Not available in LAYR.

Dynamic Feature

TUWH	Tunable White
WDIM	Warm Dimming

Dynamic Range

GOLR*	Golden Range (2200K-3000K)
LAYR	Layers Range (2200K-5000K)
RHYR	Rhythm Range (2700K-6500K)

*Only available with WDIM

Direct LED Light Output

300LMF	300 Nominal Lumens per Foot
450LMF	450 Nominal Lumens per Foot
600LMF	600 Nominal Lumens per Foot
750LMF	750 Nominal Lumens per Foot
1000LMF	1000 Nominal Lumens per Foot

Distribution

10X60DEG	10 x 60 Degrees
15X30DEG	15 x 30 Degrees
30X60DEG	30 x 60 Degrees
40X60DEG	40 x 60 Degrees
60X60DEG	60 x 60 Degrees
6X6DEG	6 x 6 Degrees
9X9DEG	9 x 9 Degrees
WW*	Wall Wash (Asymmetric)

*Supplied with a snap on visor.

Minimum Dimming Level

DARK	Constant Current, Dimming to <1%

Optional Shielding

(blank)	No Optional Sheilding
MBFL	Baffle Linear Surface
MGVL	Glare Visor Linear Surface

Voltage

MVOLT	120-277 Volt

Shielding

(blank)	Standard Clear Acrylic
FCA	Frosted Clear Acrylic

Finish

WTP	White Textured Paint
SIT	Silver Textured Paint
BKT	Black Textured Paint
RALTBD*	RAL Color TBD
CPF	Custom Paint Finish

*RALTBD for pricing only. Replace with applicable RAL number when placing order.

Control Input

DMX*	DMX
ZT**	0-10V

*Available with TUWH only
**Available with WDIM only

Power Feed

M500WBXL	Wire Splice Box, Left Feed, Interior Location, for Conduit Termination
M500WBXR	Wire Splice Box, Right Feed, Interior Location, for Conduit Termination
MFCL100TL	100FT Feed Cable Interior Location Left Feed
MFCL100TR	100FT Feed Cable Interior Location Right Feed
MFCL10TL	10FT Feed Cable Interior Location Left Feed
MFCL10TR	10FT Feed Cable Interior Location Right Feed
MFCL25TL	25FT Feed Cable Interior Location Left Feed
MFCL25TR	25FT Feed Cable Interior Location Right Feed
MFCL50TL	50FT Feed Cable Interior Location Left Feed
MFCL50TR	50FT Feed Cable Interior Location Right Feed
NOFCL	No Power Feed Cable

Model	Length	Weight
MKS501	24-1/4" (616 mm)	3.5 lbs (1.59 kg)
	36-1/8" (918 mm)	4.0 lbs (1.81 kg)
	48" (1219 mm)	5.0 lbs (2.27 kg)

MAINSTREAM DYNAMIC BY ACUITY BRANDS

PERFORMANCE DATA

Tunable White RHYR Range

Lumens Per Foot	Fixture Length	Distribution	CCT/CRI 2700K/80	Input Watts 2700K/80	Delivered Lumens Per Foot	Input Watts Per Foot	CCT/CRI 4000K/80	Input Watts 4000K/80	Delivered Lumens Per Foot	Input Watts Per Foot	CCT/CRI 6500K/80	Input Watts 6500K/80	Delivered Lumens Per Foot	Input Watts Per Foot
300	4FT	9x9	1207	17.94	302	4.49	1229	14.07	307	3.52	1281	14.03	320	3.51
	4FT	10x60	1209	17.94	302	4.49	1231	14.07	308	3.52	1284	14.03	321	3.51
	4FT	15x30	1371	17.39	343	4.35	1583	15.91	396	3.98	1714	15.09	429	3.77
	4FT	30x60	1401	17.39	350	4.35	1618	15.91	405	3.98	1752	15.09	438	3.77
	4FT	40x60	1298	17.39	325	4.35	1499	15.91	375	3.98	1623	15.09	406	3.77
	4FT	60x60	1389	17.39	347	4.35	1604	15.91	401	3.98	1737	15.09	434	3.77
	4FT	WWD	1094	17.39	274	4.35	1263	15.91	316	3.98	1368	15.09	342	3.77
450	4FT	9x9	1693	22.26	423	5.57	1724	17.45	431	4.36	1797	17.41	449	4.35
	4FT	10x60	1696	22.26	424	5.57	1727	17.45	432	4.36	1800	17.41	450	4.35
	4FT	15x30	1651	31.84	413	7.96	1906	29.13	477	7.28	2064	27.63	516	6.91
	4FT	30x60	1688	31.84	422	7.96	1949	29.13	487	7.28	2111	27.63	528	6.91
	4FT	40x60	1564	31.84	391	7.96	1806	29.13	452	7.28	1956	27.63	489	6.91
	4FT	60x60	1673	31.84	418	7.96	1932	29.13	483	7.28	2092	27.63	523	6.91
	4FT	WWD	1318	31.84	330	7.96	1522	29.13	381	7.28	1648	27.63	412	6.91
600	4FT	9x9	2193	27.97	548	6.99	2233	21.93	558	5.48	2328	21.88	582	5.47
	4FT	10x60	2197	27.97	549	6.99	2237	21.93	559	5.48	2332	21.88	583	5.47
	4FT	15x30	2007	25.2	502	6.30	2317	23.06	579	5.77	2509	21.87	627	5.47
	4FT	30x60	2052	25.2	513	6.30	2369	23.06	592	5.77	2566	21.87	642	5.47
	4FT	40x60	1901	25.2	475	6.30	2195	23.06	549	5.77	2377	21.87	594	5.47
	4FT	60x60	2034	25.2	509	6.30	2349	23.06	587	5.77	2543	21.87	636	5.47
	4FT	WWD	1602	25.2	401	6.30	1850	23.06	463	5.77	2003	21.87	501	5.47
750	4FT	9x9	2693	34.3	673	8.58	2742	26.89	686	6.72	2859	26.83	715	6.71
	4FT	10x60	2697	34.3	674	8.58	2747	26.89	687	6.72	2864	26.83	716	6.71
	4FT	15x30	2389	32.19	597	8.05	2759	29.45	690	7.36	2988	27.94	747	6.99
	4FT	30x60	2443	32.19	611	8.05	2822	29.45	706	7.36	3055	27.94	764	6.99
	4FT	40x60	2264	32.19	566	8.05	2614	29.45	654	7.36	2830	27.94	708	6.99
	4FT	60x60	2422	32.19	606	8.05	2797	29.45	699	7.36	3029	27.94	757	6.99
	4FT	WWD	1907	32.19	477	8.05	2203	29.45	551	7.36	2385	27.94	596	6.99
1000	4FT	9x9	3402	47.85	851	11.96	3464	37.51	866	9.38	3612	37.42	903	9.36
	4FT	10x60	3407	47.85	852	11.96	3470	37.51	868	9.38	3618	37.42	905	9.36
	4FT	15x30	2795	40.36	699	10.09	3228	36.94	807	9.24	2495	35.03	624	8.76
	4FT	30x60	2858	40.36	715	10.09	3301	36.94	825	9.24	3574	35.03	894	8.76
	4FT	40x60	2648	40.36	662	10.09	3058	36.94	765	9.24	3311	35.03	828	8.76
	4FT	60x60	2834	40.36	709	10.09	3272	36.94	818	9.24	3543	35.03	886	8.76
	4FT	WWD	2231	40.36	558	10.09	2577	36.94	644	9.24	2790	35.03	698	8.76

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

IES data is available at www.winonalighting.com. Refer to website for the latest IES file updates.

PERFORMANCE DATA

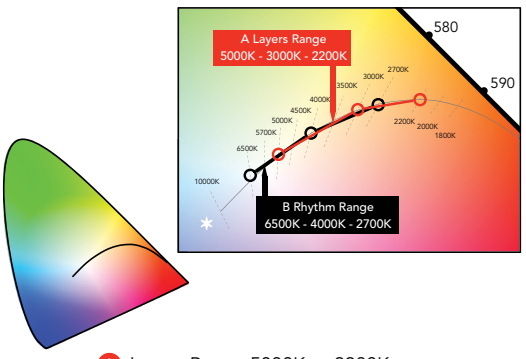
Tunable White LAYR Range

Lumens Per Foot	Fixture Length	Distribution	CCT/CRI 2200K/80	Input Watts 2200K/80	Delivered Lumens Per Foot	Input Watts Per Foot	CCT/CRI 3500K/80	Input Watts 3500K/80	Delivered Lumens Per Foot	Input Watts Per Foot	CCT/CRI 5000K/80	Input Watts 5000K/80	Delivered Lumens Per Foot	Input Watts Per Foot
300	4FT	9x9	816	12.74	204	3.19	934	9.94	234	2.49	929	9.42	232	2.36
	4FT	10x60	818	12.74	205	3.19	935	9.94	234	2.49	930	9.42	233	2.36
	4FT	15x30	703	12.74	176	3.19	804	9.94	201	2.49	799	9.42	200	2.36
	4FT	30x60	718	12.74	180	3.19	822	9.94	206	2.49	817	9.42	204	2.36
	4FT	40x60	666	12.74	167	3.19	761	9.94	190	2.49	757	9.42	189	2.36
	4FT	60x60	712	12.74	178	3.19	815	9.94	204	2.49	810	9.42	203	2.36
	4FT	WWD	550	12.74	138	3.19	629	9.94	157	2.49	626	9.42	157	2.36
450	4FT	9x9	1358	19.32	340	4.83	1554	15.08	389	3.77	1545	14.28	386	3.57
	4FT	10x60	1361	19.32	340	4.83	1556	15.08	389	3.77	1547	14.28	387	3.57
	4FT	15x30	1169	19.32	292	4.83	1337	15.08	334	3.77	1329	14.28	332	3.57
	4FT	30x60	1195	19.32	299	4.83	1367	15.08	342	3.77	1359	14.28	340	3.57
	4FT	40x60	1107	19.32	277	4.83	1266	15.08	317	3.77	1259	14.28	315	3.57
	4FT	60x60	1185	19.32	296	4.83	1355	15.08	339	3.77	1347	14.28	337	3.57
	4FT	WWD	916	19.32	229	4.83	1047	15.08	262	3.77	1041	14.28	260	3.57
600	4FT	9x9	1768	25.34	442	6.34	2023	19.77	506	4.94	2011	18.73	503	4.68
	4FT	10x60	1772	25.34	443	6.34	2026	19.77	507	4.94	2015	18.73	504	4.68
	4FT	15x30	1522	25.34	381	6.34	1740	19.77	435	4.94	1731	18.73	433	4.68
	4FT	30x60	1556	25.34	389	6.34	1780	19.77	445	4.94	1770	18.73	443	4.68
	4FT	40x60	1442	25.34	361	6.34	1649	19.77	412	4.94	1639	18.73	410	4.68
	4FT	60x60	1543	25.34	386	6.34	1764	19.77	441	4.94	1754	18.73	439	4.68
	4FT	WWD	1192	25.34	298	6.34	1363	19.77	341	4.94	1356	18.73	339	4.68
750	4FT	9x9	2175	32.38	544	8.10	2487	25.26	622	6.32	2473	23.93	618	5.98
	4FT	10x60	2179	32.38	545	8.10	2492	25.26	623	6.32	2478	23.93	620	5.98
	4FT	15x30	1871	32.38	468	8.10	2140	25.26	535	6.32	2128	23.93	532	5.98
	4FT	30x60	1914	32.38	479	8.10	2189	25.26	547	6.32	2176	23.93	544	5.98
	4FT	40x60	1773	32.38	443	8.10	2028	25.26	507	6.32	2016	23.93	504	5.98
	4FT	60x60	1897	32.38	474	8.10	2170	25.26	543	6.32	2157	23.93	539	5.98
	4FT	WWD	1466	32.38	367	8.10	1677	25.26	419	6.32	1667	23.93	417	5.98
1000	4FT	9x9	2696	45.37	674	11.34	3084	35.4	771	8.85	3066	33.53	767	8.38
	4FT	10x60	2701	45.37	675	11.34	3089	35.4	772	8.85	3072	33.53	768	8.38
	4FT	15x30	2320	45.37	580	11.34	2654	35.4	664	8.85	2639	33.53	660	8.38
	4FT	30x60	2373	45.37	593	11.34	2713	35.4	678	8.85	2698	33.53	675	8.38
	4FT	40x60	2198	45.37	550	11.34	2514	35.4	629	8.85	2500	33.53	625	8.38
	4FT	60x60	2352	45.37	588	11.34	2690	35.4	673	8.85	2675	33.53	669	8.38
	4FT	WWD	1817	45.37	454	11.34	2078	35.4	520	8.85	2067	33.53	517	8.38

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

IES data is available at www.winonalighting.com. Refer to website for the latest IES file updates.

TUNABLE WHITE WARM DIMMING GAMUT AND RANGE



A Layers Range 5000K to 2200K

B Rhythm Range 6500K to 2700K

- The Gamut of a luminaire determines the potential color range, as well as light quality through measurements such as CRI and R9.
- The Path determines the range of colors temperatures available for the luminaire and how it tracks the Black Body Curve.

TUNABLE WHITE GPHD

- **Gamut:** One dimensional Warm-Neutral-Cool (WiNC)
- **Path:** Multi-segment (6500K to 2700K) (Rhythm Range) or (5000K to 2200K) (Layers Range)
- **Handle:** Three handles: Warm, Neutral and Cool
- **Data:** DMX512/RDM

Rhythm Range is for designers who want to mimic the natural rhythms of daylight, with a broad palette of color temperatures. Layers Range offers the flexibility of tunable white control with the aesthetics of warm dimming, reaching to 2200K.

PERFORMANCE DATA

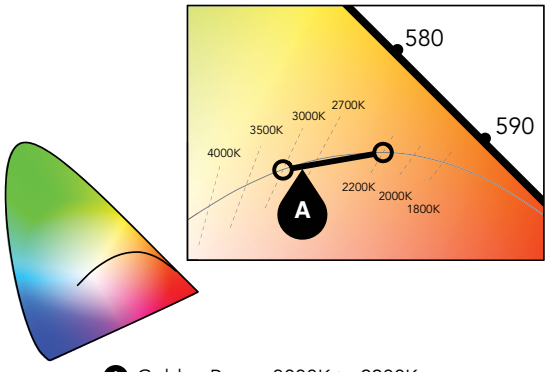
Warm Dimming GOLR Range

Lumens Per Foot	Fixture Length	Distribution	CRI	Delivered Lumens	Input Watts	Lumen/Watt	Delivered Lumens Per Foot	Input Watts Per Foot
300	4FT	9x9	80	1107	8.67	128	277	2.17
	4FT	10x60	80	1108	8.67	128	277	2.17
	4FT	15x30	80	1052	8.67	121	263	2.17
	4FT	30x60	80	1076	8.67	124	269	2.17
	4FT	40x60	80	997	8.67	115	249	2.17
	4FT	60x60	80	1066	8.67	123	267	2.17
	4FT	WWD	80	955	8.67	110	239	2.17
450	4FT	9x9	80	1723	11.86	145	431	2.97
	4FT	10x60	80	1726	11.86	146	432	2.97
	4FT	15x30	80	1638	11.86	138	410	2.97
	4FT	30x60	80	1675	11.86	141	419	2.97
	4FT	40x60	80	1552	11.86	131	388	2.97
	4FT	60x60	80	1660	11.86	140	415	2.97
	4FT	WWD	80	1488	11.86	125	372	2.97
600	4FT	9x9	80	2315	16.37	141	579	4.09
	4FT	10x60	80	2319	16.37	142	580	4.09
	4FT	15x30	80	2201	16.37	134	550	4.09
	4FT	30x60	80	2250	16.37	137	563	4.09
	4FT	40x60	80	2085	16.37	127	521	4.09
	4FT	60x60	80	2231	16.37	136	558	4.09
	4FT	WWD	80	1999	16.37	122	500	4.09
750	4FT	9x9	80	2866	21.48	133	717	5.37
	4FT	10x60	80	2871	21.48	134	718	5.37
	4FT	15x30	80	2725	21.48	127	681	5.37
	4FT	30x60	80	2786	21.48	130	697	5.37
	4FT	40x60	80	2581	21.48	120	645	5.37
	4FT	60x60	80	2762	21.48	129	691	5.37
	4FT	WWD	80	2475	21.48	115	619	5.37
1000	4FT	9x9	80	3771	30.42	124	943	7.61
	4FT	10x60	80	3778	30.42	124	945	7.61
	4FT	15x30	80	3585	30.42	118	896	7.61
	4FT	30x60	80	3666	30.42	121	917	7.61
	4FT	40x60	80	3396	30.42	112	849	7.61
	4FT	60x60	80	3634	30.42	119	909	7.61
	4FT	WWD	80	3256	30.42	107	814	7.61

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

IES data is available at www.winonalighting.com. Refer to website for the latest IES file updates.

WARM DIMMING GAMUT AND RANGE



A Golden Range 3000K to 2200K

- The Gamut of a luminaire determines the potential color range, as well as light quality through measurements such as CRI and R9.
- The Path determines the range of colors temperatures available for the luminaire.

WARM DIMMING GPHD
- **Gamut:** One dimensional Warm-Cool (WiC)
- **Path:** Straight Line 3000K to 2200K (Golden Range)
- **Handle:** One Handle: Intensity (with implicit CCT)
- **Data:** 0-10V

Replicate the comfortable, familiar feeling of traditional light sources warming in color as they are dimmed.

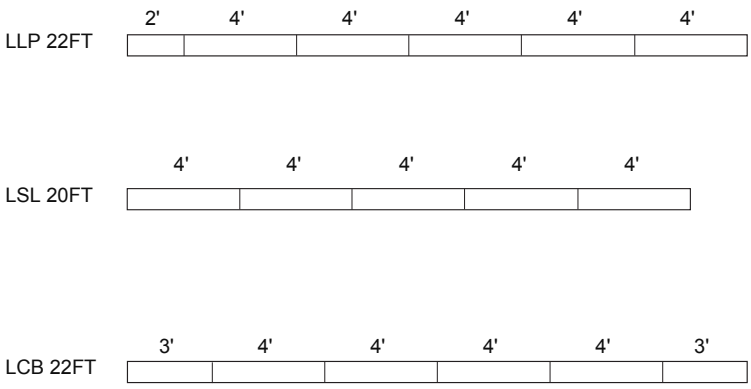
LINEAR PLAN

Mark offers the ability to provide a continuous run plan to suit your requirements by optionally offering three methods of configuration.

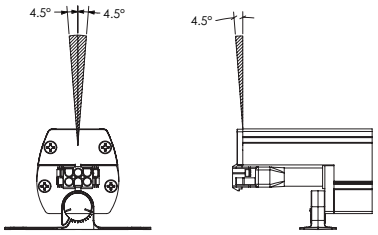
LLP Longest Length Possible:
In this plan the longest length available is optimized resulting in the fewest segments and mounting locations. Caution should be used where balanced appearance is a concern. Example: 22FT row would have (5) 4FT segments and (1) 2FT segment located at one end.

LSL Longest Same Length:
In this configuration each segment is the same length is standardized based on the longest length available and is the only option provided. Because it is dependent on one segment length there are mathematical limitations on what overall row lengths can be achieved. Example: 20FT row would be achieved with (5) 4FT long segments equaling 20FT (nominal).

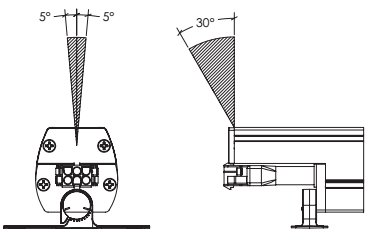
LCB Longest Center Balanced:
This configuration incorporates the longest center segment(s) along with any additional lengths required to fill located at each end. Example: 22FT row would have (2) 3FT segments (one at each end) and (4) 4FT intermediate segments located in between.



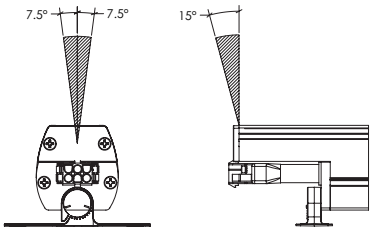
DISTRIBUTION



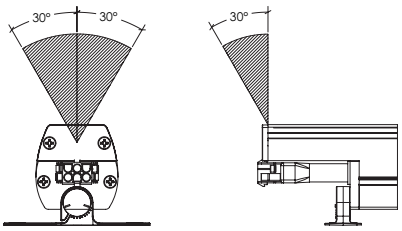
9x9 Degree



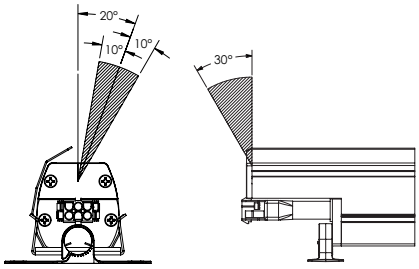
10x60 Degree



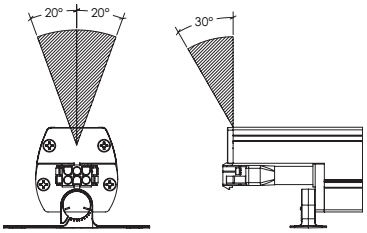
15x30 Degree



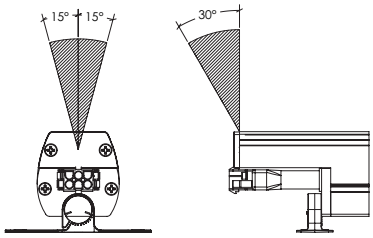
60x60 Degree



WW Wall Wash
(Asymmetric)
***Shown with supplied snap-on visor**



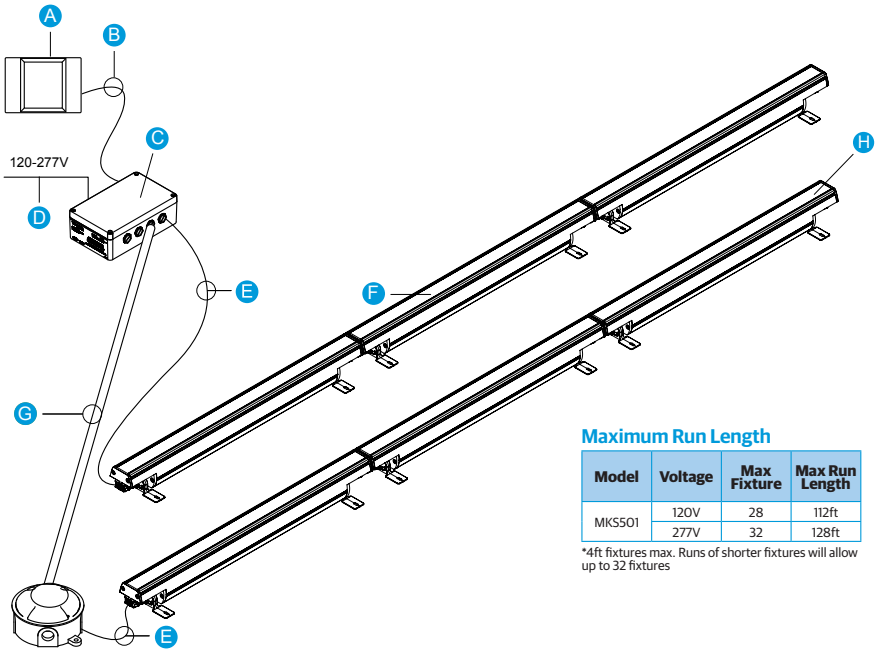
40x60 Degree



30x60 Degree

BASIC SYSTEM WIRING INFORMATION

This very basic system wiring diagram provides an overview of components and materials required for a simple installation of MKS501 luminaires controlled by a DMX controller. These diagrams should not be used in place of actual installation instructions or submittal drawings prepared for a specific project.

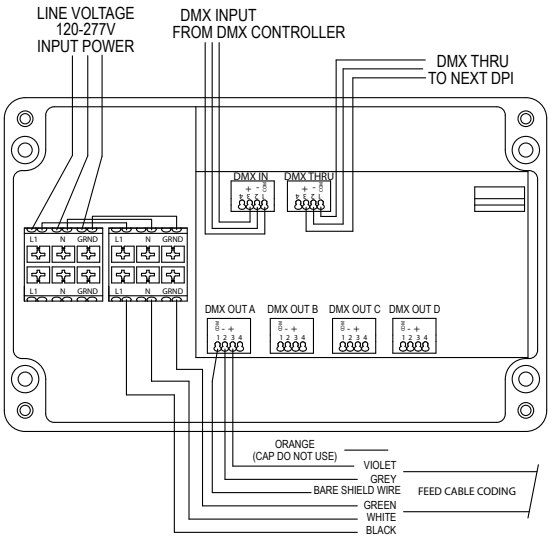


Maximum Run Length

Model	Voltage	Max Fixture	Max Run Length
MKS501	120V	28	112ft
	277V	32	128ft

*4ft fixtures max. Runs of shorter fixtures will allow up to 32 fixtures

Power & DMX Connection in DPI Box



A tunable white luminaire installation can be as simple as a single luminaire and one control to many different luminaires in multiple locations being triggered and manipulated in real time. Consulting with the factory at the beginning stages of the project will ensure the required equipment be specified and properly installed.

Note: For multiple runs and multiple DPI boxes, consult factory.

Note: No more than four DPI Boxes, in series, can be utilized between the DMX Controller and any luminaire.

A DMX controller providing one universe of DMX-512 control.

To supply a complete system RDM set-up and playback control solution, use:

Fresco
- Manage multiple light sources in multiple lighting zones, all from one controller
- On screen lighting design and set-up, no computer required or Ethernet connection for remote configuration and advanced control
- All device settings are stored on-board in non-volatile memory

B Belden 9829 cable is the preferred communication/ data cable used to carry the DMX signal to and from the DPI Box. The total length of this cable must not exceed 1000 feet from the DMX controller to the DPI Box. No luminaires should be installed between DMX Controller and any DPI Box.

C DPI box (Data Power Integration) is used to bundle DMX to line voltage and deliver them to the luminaire. This box provides necessary isolation between the DMX control and line voltage and is required for all MKS501 installations. The DPI box also serves as a 4-channel splitter enabling up to 128 fixtures to be controlled from a single DPI box. Refer to DPI Installation Sheet for dimensions and mounting details.

D 120V-277V input to DPI box. Metallic conduit and standard fittings are compatible as are multi-conductor cords provided they are appropriate to the mounting location.

E Feed cable connects junction box with first fixture in a run. 14 ga. conductors carry power, shielded 18 ga. conductors carry data. Input end is stripped for connection to the Junction or DPI box, output end includes a male or female plug for fixture connection. Also included with each feed cable is a termination/ sealing cap for the end of each run. Contact factory for availability of custom feed cable lengths.

F A maximum of 32 luminaires can be connected to a single output channel of the DPI box. The maximum length of cord and luminaire run combined is 1000 feet per DMX/ RDM specification.

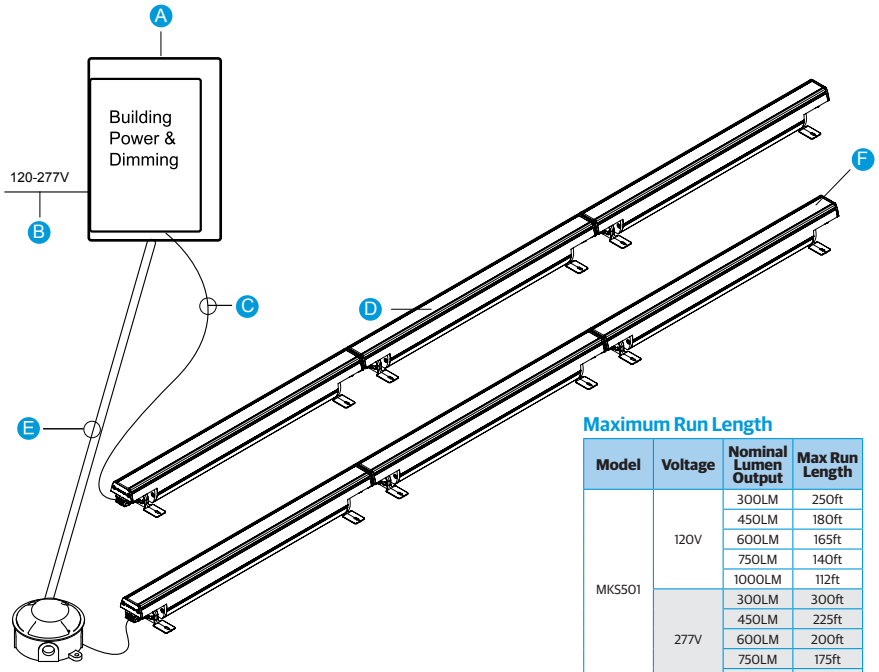
G Power and Data can be run to junction box locations in rigid conduit. Use Belden 9829 for data and copper wire per local code for power. Use appropriate fitting for combination cord.

H To ensure data integrity, a termination/sealing cap with 120 Ohm resistor is required at the last luminaire in each run. See installation instructions.

Fresco Control System

BASIC SYSTEM WIRING INFORMATION WITHOUT DMX

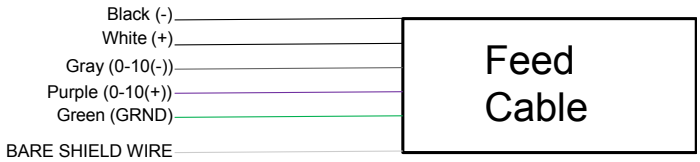
This very basic system wiring diagram provides an overview of components and materials required for a simple installation of MKS501 luminaires controlled by building system power (By Others). These diagrams should not be used in place of actual installation instructions or submittal drawings prepared for a specific project.



Maximum Run Length

Model	Voltage	Nominal Lumen Output	Max Run Length
MKS501	120V	300LM	250ft
		450LM	180ft
		600LM	165ft
		750LM	140ft
		1000LM	112ft
	277V	300LM	300ft
		450LM	225ft
		600LM	200ft
		750LM	175ft
		1000LM	128ft

Feed Cable Wiring



*Notes

1) Cap BARE SHIELD WIRE in Junction box. (By Others)
2) When not using 0-10V dimming, cap Gray and Purple separately in the junction box. (By Others)

Luminaire installation can be as simple as a single luminaire and one control to many different luminaires in multiple locations being triggered and manipulated in real time. Consulting with the factory at the beginning stages of the project will ensure the required equipment be specified and properly installed.

A Building power and dimming control input via 0-10V system provided by others.

B 120V-277V input. Metallic conduit and standard fittings are compatible as are multi-conductor cords provided they are appropriate to the mounting location.

C Feed cable connects junction box or control input with first fixture in a run. 14 ga. conductors carry power, shielded 18 ga. conductors carry data. Input end is stripped for connection to the junction box, output end includes a female or male plug for fixture connection. Also included with each feed cable is a sealing cap for the end of each run.

D A maximum of 32 luminaires can be connected to a single feed cable.

E Power can be run to junction box locations in rigid conduit. Use Belden 9829 for data and copper wire per local code for power. Use appropriate fitting for combination cord.

F Included with each feed cable is a sealing cap for the last luminaire in each run. See installation instructions.

ACCESSORY OPTIONS

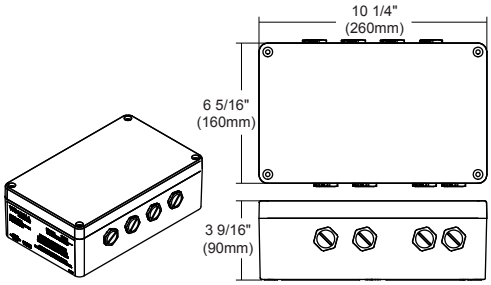
Fresco Control System

Series		Model		Options		Finish	
FCS	Fresco Control System	**7TSN**	7" touchscreen with nLight port	**(blank)**	nlight only	**DBL**	Black
				X	DMX/RDM control	**DWH**	White
						DNA	Natural Aluminum

Refer to FRESCO spec sheet for additional details and options

DMX / Power Integrator

Model	
MDPI4W	DPI4W- DMX/POWER INTEGRATOR BOX



Integrates DMX signal & 120-277 line voltage onto a single cable. Exterior rated, up to 4 output feeds, Silver Textured Finish.

Environmental Information

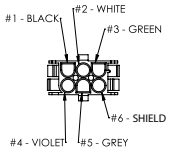
Storage Temperature	40˚F - 185˚F
Start-up Temperature	13˚F - 122˚F
Operating Temperature	13˚F - 122˚F
Ingress Protection Rating	IP65
Environment	Suitable for indoor and outdoor applications

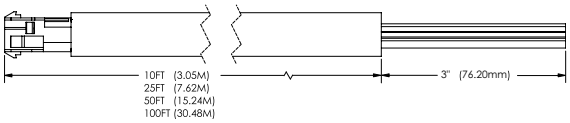
Feed Cable, Right Feed (Female Plug)

***Minimum of one feed cable, left or right, required per installation**

Model	
MFCL10TR BCRD DXP	10FT Feed Cable w/ Sealing Cap, Right Feed, Interior Location (Black)
MFCL25TR BCRD DXP	25FT Feed Cable w/ Sealing Cap, Right Feed, Interior Location (Black)
MFCL50TR BCRD DXP	50FT Feed Cable w/ Sealing Cap, Right Feed, Interior Location (Black)
MFCL100TR BCRD DXP	100FT Feed Cable w/ Sealing Cap, Right Feed, Interior Location (Black)
MFCL10TR WCRD DXP	10FT Feed Cable w/ Sealing Cap, Right Feed, Interior Location (White)
MFCL25TR WCRD DXP	25FT Feed Cable w/ Sealing Cap, Right Feed, Interior Location (White)
MFCL50TR WCRD DXP	50FT Feed Cable w/ Sealing Cap, Right Feed, Interior Location (White)
MFCL100TR WCRD DXP	100FT Feed Cable w/ Sealing Cap, Right Feed, Interior Location (White)

Carries DMX signal and 120-277 line voltage power to right end of first fixture in run. Supplied with termination/sealing cap. *Use one feed cable per run only.*





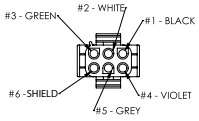
ACCESSORY OPTIONS (CONTINUED)

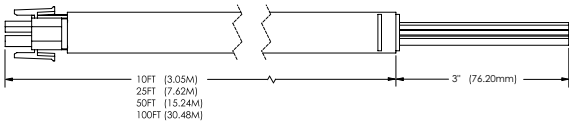
Feed Cable, Left Feed (Male Plug)

***Minimum of one feed cable, left or right, required per installation**

Carries DMX signal and 120-277 line voltage power to left end of first fixture in run.
Supplied with termination/sealing cap.
Use one feed cable per run only.

Model	
MFCL10TL BCRD DXP	10FT Feed Cable w/ Sealing Cap, Left Feed, Interior Location (Black)
MFCL25TL BCRD DXP	25FT Feed Cable w/ Sealing Cap, Left Feed, Interior Location (Black)
MFCL50TL BCRD DXP	50FT Feed Cable w/ Sealing Cap, Left Feed, Interior Location (Black)
MFCL100TL BCRD DXP	100FT Feed Cable w/ Sealing Cap, Left Feed, Interior Location (Black)
MFCL10TL WCRD DXP	10FT Feed Cable w/ Sealing Cap, Left Feed, Interior Location (White)
MFCL25TL WCRD DXP	25FT Feed Cable w/ Sealing Cap, Left Feed, Interior Location (White)
MFCL50TL WCRD DXP	50FT Feed Cable w/ Sealing Cap, Left Feed, Interior Location (White)
MFCL100TL WCRD DXP	100FT Feed Cable w/ Sealing Cap, Left Feed, Interior Location (White)



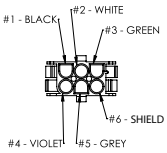


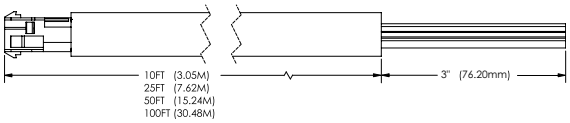
Feed Cable, Right Feed (Female Plug)

***Minimum of one feed cable, left or right, required per installation**

Carries NON-DMX signal and 120-277 line voltage power to right end of first fixture in run.
Supplied with termination/sealing cap.
Use one feed cable per run only.

Model	
MFCL10TR BCRD NDXP	10FT Feed Cable w/ Sealing Cap, Right Feed, Interior Location (Black)
MFCL25TR BCRD NDXP	25FT Feed Cable w/ Sealing Cap, Right Feed, Interior Location (Black)
MFCL50TR BCRD NDXP	50FT Feed Cable w/ Sealing Cap, Right Feed, Interior Location (Black)
MFCL100TR BCRD NDXP	100FT Feed Cable w/ Sealing Cap, Right Feed, Interior Location (Black)
MFCL10TR WCRD NDXP	10FT Feed Cable w/ Sealing Cap, Right Feed, Interior Location (White)
MFCL25TR WCRD NDXP	25FT Feed Cable w/ Sealing Cap, Right Feed, Interior Location (White)
MFCL50TR WCRD NDXP	50FT Feed Cable w/ Sealing Cap, Right Feed, Interior Location (White)
MFCL100TR WCRD NDXP	100FT Feed Cable w/ Sealing Cap, Right Feed, Interior Location (White)



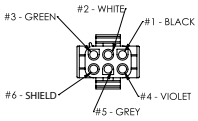


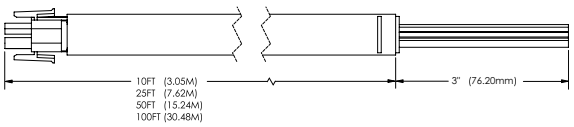
ACCESSORY OPTIONS (CONTINUED)

Feed Cable, Left Feed (Male Plug)
***Minimum of one feed cable, left or right, required per installation**

Model	
MFCL10TL BCRD NDXP	10FT Feed Cable w/ Sealing Cap, Left Feed, Interior Location (Black)
MFCL25TL BCRD NDXP	25FT Feed Cable w/ Sealing Cap, Left Feed, Interior Location (Black)
MFCL50TL BCRD NDXP	50FT Feed Cable w/ Sealing Cap, Left Feed, Interior Location (Black)
MFCL100TL BCRD NDXP	100FT Feed Cable w/ Sealing Cap, Left Feed, Interior Location (Black)
MFCL10TL WCRD NDXP	10FT Feed Cable w/ Sealing Cap, Left Feed, Interior Location (White)
MFCL25TL WCRD NDXP	25FT Feed Cable w/ Sealing Cap, Left Feed, Interior Location (White)
MFCL50TL WCRD NDXP	50FT Feed Cable w/ Sealing Cap, Left Feed, Interior Location (White)
MFCL100TL WCRD NDXP	100FT Feed Cable w/ Sealing Cap, Left Feed, Interior Location (White)

Carries NON-DMX signal and 120-277 line voltage power to left end of first fixture in run.
Supplied with termination/sealing cap.
Use one feed cable per run only.

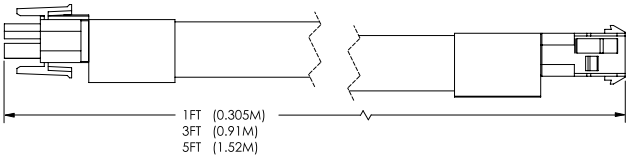




Jumper Cable *Optional*

Model	
MJCLW1T BCRD	1FT Jumper Cable Interior Location (Black)
MJCLW3T BCRD	3FT Jumper Cable Interior Location (Black)
MJCLW5T BCRD	5FT Jumper Cable Interior Location (Black)
MJCLW1T WCRD	1FT Jumper Cable Interior Location (White)
MJCLW3T WCRD	3FT Jumper Cable Interior Location (White)
MJCLW5T WCRD	5FT Jumper Cable Interior Location (White)

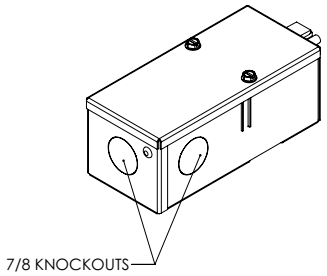
Carries DMX or NON-DMX signal and 120-277 line voltage power between two units in a run when larger spacing between units is required.



ACCESSORY OPTIONS (CONTINUED)

Wire Splice Box, Right Feed (Female Plug), *Optional*
*Minimum of one wire splice box, left or right, required for installation

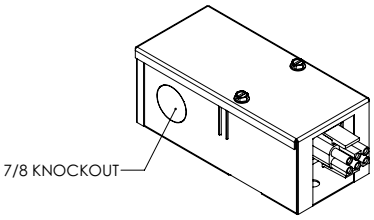
Model	
M500WBXR DXP	Wire Splice Box w/ Sealing Cap, Right Feed, Interior Location (Galvanized Steel)
M500WBXR WTPP DXP	Wire Splice Box,w/ Sealing Cap, Right Feed, Interior Location (White)



Replaces feed cable for areas where flexible cord cannot be used to bring input DMX signal and 120-277 line voltage power to right end of beginning of run. Box allows 1/2" NPT conduit fitting connection and area for building wire splice connections. Supplied with termination/sealing cap.
Use one wire splice box per run only.

Wire Splice Box, Left Feed (Male Plug), *Optional*
*Minimum of one wire splice box, left or right, required for installation

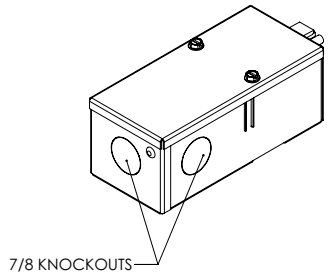
Model	
M500WBXL DXP	Wire Splice Box,w/ Sealing Cap, Left Feed, Interior Location (Galvanized Steel)
M500WBXL WTPP DXP	Wire Splice Box,w/ Sealing Cap, Left Feed, Interior Location (White)



Replaces feed cable for areas where flexible cord cannot be used to bring input DMX signal and 120-277 line voltage power to right end of beginning of run. Box allows 1/2" NPT conduit fitting connection and area for building wire splice connections. Supplied with termination/sealing cap.
Use one wire splice box per run only.

Wire Splice Box, Right Feed (Female Plug), *Optional*
*Minimum of one wire splice box, left or right, required for installation

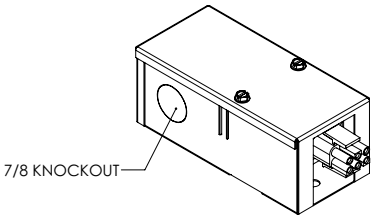
Model	
M500WBXR NDXP	Wire Splice Box w/ Sealing Cap, Right Feed, Interior Location (Galvanized Steel)
M500WBXR WTPP NDXP	Wire Splice Box,w/ Sealing Cap, Right Feed, Interior Location (White)



Replaces feed cable for areas where flexible cord cannot be used to bring input NON-DMX signal and 120-277 line voltage power to right end of beginning of run. Box allows 1/2" NPT conduit fitting connection and area for building wire splice connections. Supplied with termination/sealing cap.
Use one wire splice box per run only.

Wire Splice Box, Left Feed (Male Plug), *Optional*
*Minimum of one wire splice box, left or right, required for installation

Model	
M500WBXL NDXP	Wire Splice Box,w/ Sealing Cap, Left Feed, Interior Location (Galvanized Steel)
M500WBXL WTPP NDXP	Wire Splice Box,w/ Sealing Cap, Left Feed, Interior Location (White)

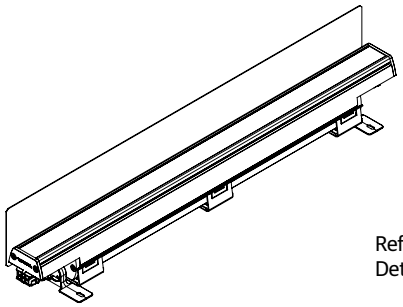


Replaces feed cable for areas where flexible cord cannot be used to bring input NON-DMX signal and 120-277 line voltage power to right end of beginning of run. Box allows 1/2" NPT conduit fitting connection and area for building wire splice connections. Supplied with termination/sealing cap.
Use one wire splice box per run only.

ACCESSORY OPTIONS (CONTINUED)

Glare Visor (Linear) *Optional*

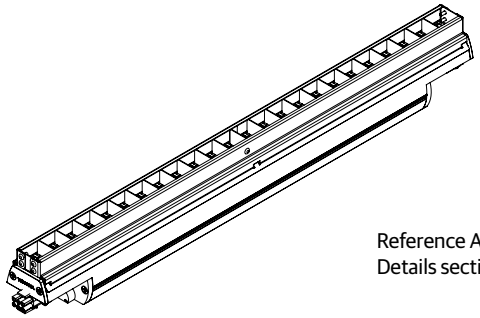
Model		Fixture Section		Finish	
MGVL5	Glare Visor Linear Surface	**U2**	2FT Length Unit	**BKT**	Black Textured Paint
		U3	3FT Length Unit	**SIT**	Silver Textured Paint
		U4	4FT Length Unit	**WTP**	White Textured Paint
				RALTBD	RAL Paint Finish
				CPF	Custom Painted Finish



Reference Additional Accessory Details section for dimensions

Baffle (Linear) *Optional*

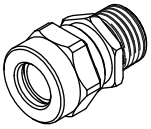
Model		Fixture Section	
MBFL5	Baffle Linear Surface (Available in matte black finish only)	**U2**	2FT Length Unit
		U3	3FT Length Unit
		U4	4FT Length Unit

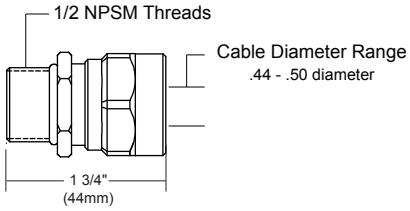


Reference Additional Accessory Details section for dimensions

Liquid-Tight Cord Grip

Model	
MCORDGP2	Liquid-Tight Cord Grip (Use to secure and seal feed cord to DPI Box)

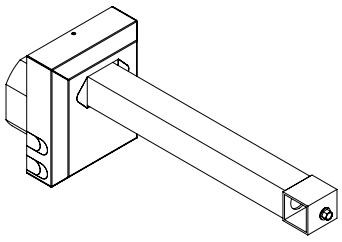




Connector to secures and seal feed cord.

Brackets *Optional*

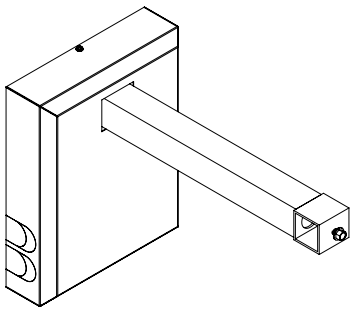
Series		Finish	
MCBT6	Cantilever Bracket 6" Projection	**BKT**	Black Textured Paint
MCBT12	Cantilever Bracket 12" Projection	**SIT**	Silver Textured Paint
MCBT18	Cantilever Bracket 18" Projection	**WTP**	White Textured Paint
		RALTBD	RAL Paint Finish
		CPF	Custom Painted Finish



Reference Additional Accessory Details section for dimensions

Brackets *Optional*

Series		Finish	
MCBTL6	Cantilever Bracket Large 6" Projection	**BKT**	Black Textured Paint
MCBTL12	Cantilever Bracket Large 12" Projection	**SIT**	Silver Textured Paint
MCBTL18	Cantilever Bracket Large 18" Projection	**WTP**	White Textured Paint
		RALTBD	RAL Paint Finish
		CPF	Custom Painted Finish

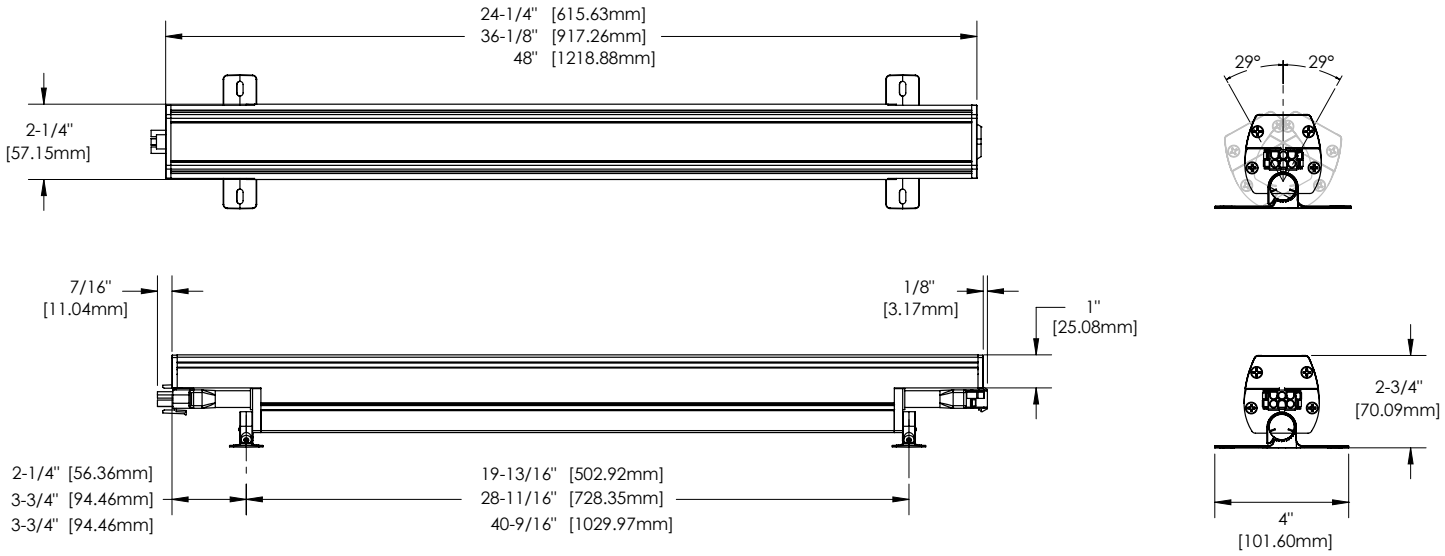


For use with surface mount junction box (by others) and surface mounted conduit (by others).

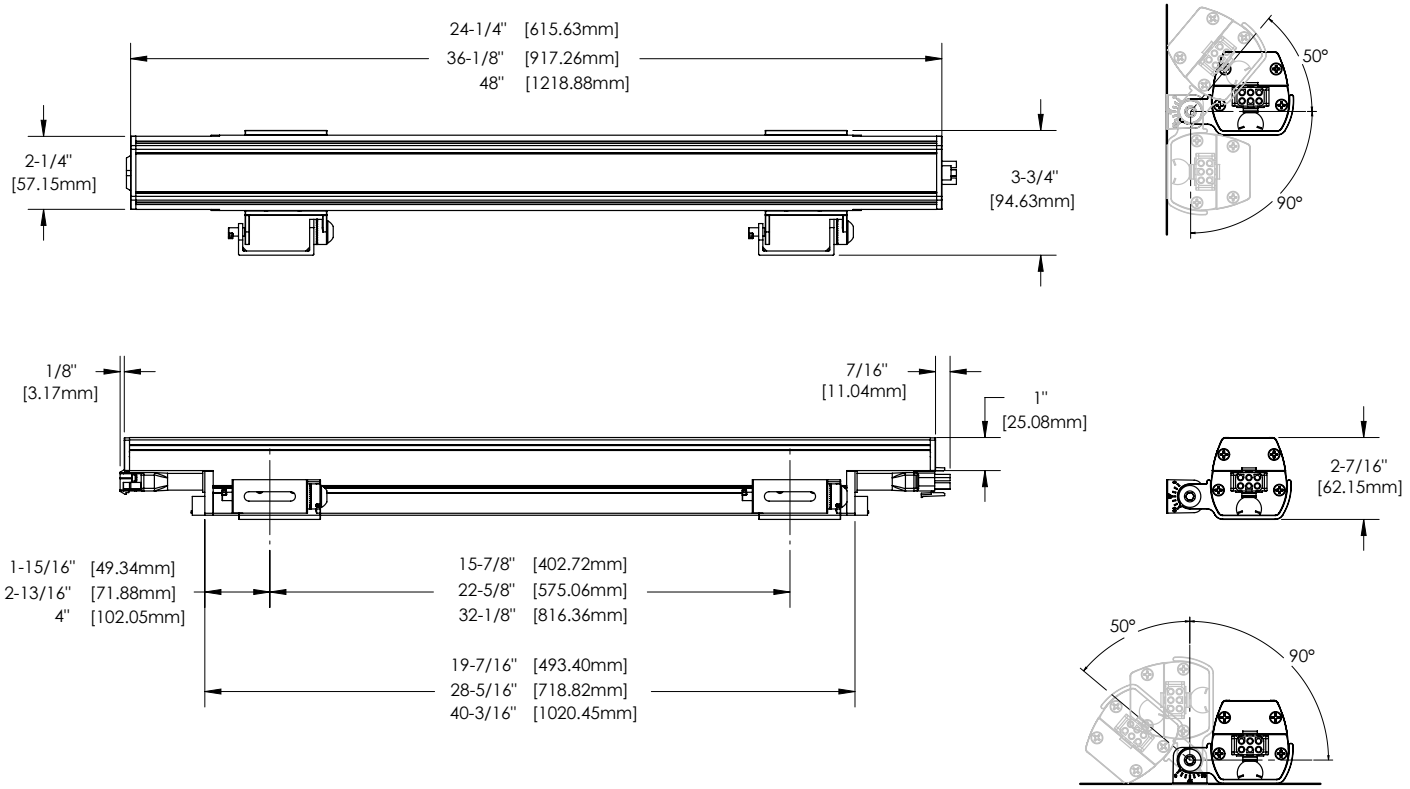
Reference Additional Accessory Details section for dimensions

DRAWING DETAILS

M500ADJC1 - Adjustable Mount Center Axis

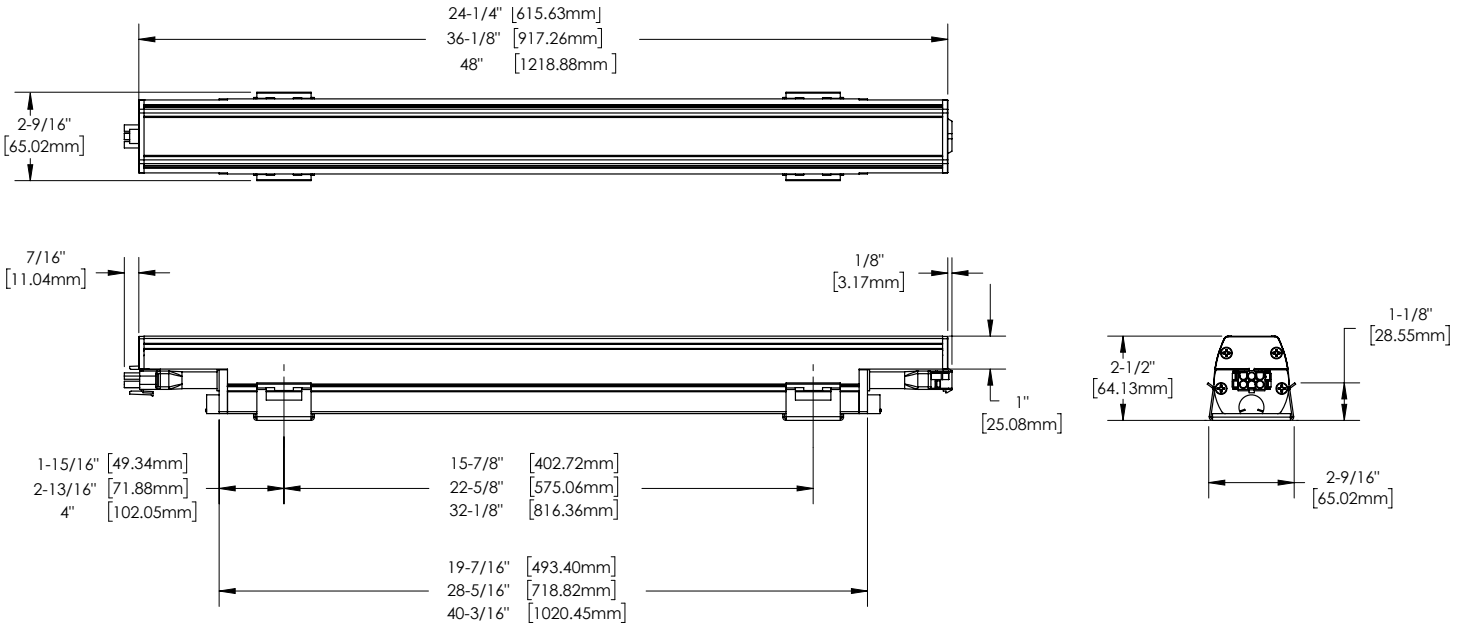


M500ADJH2 - Adjustable Mount Side Hinge



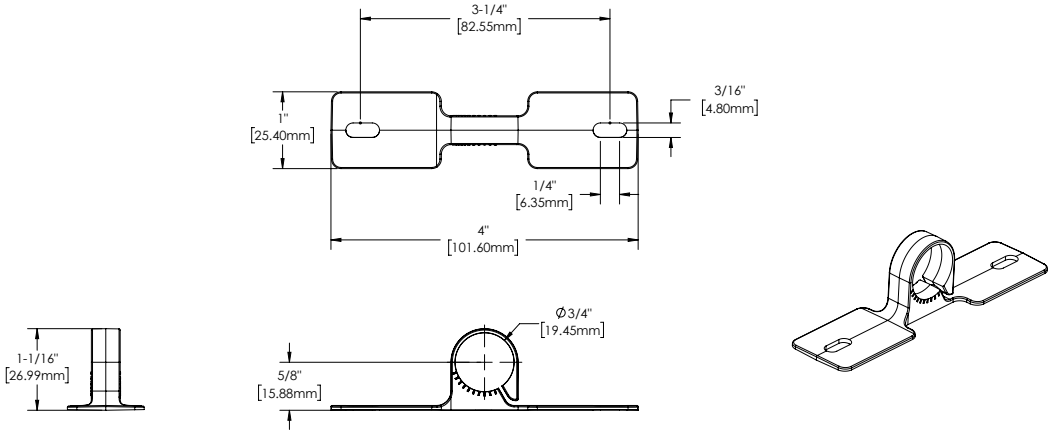
DRAWING DETAILS (CONTINUED)

M500FMC - Fixed Mount

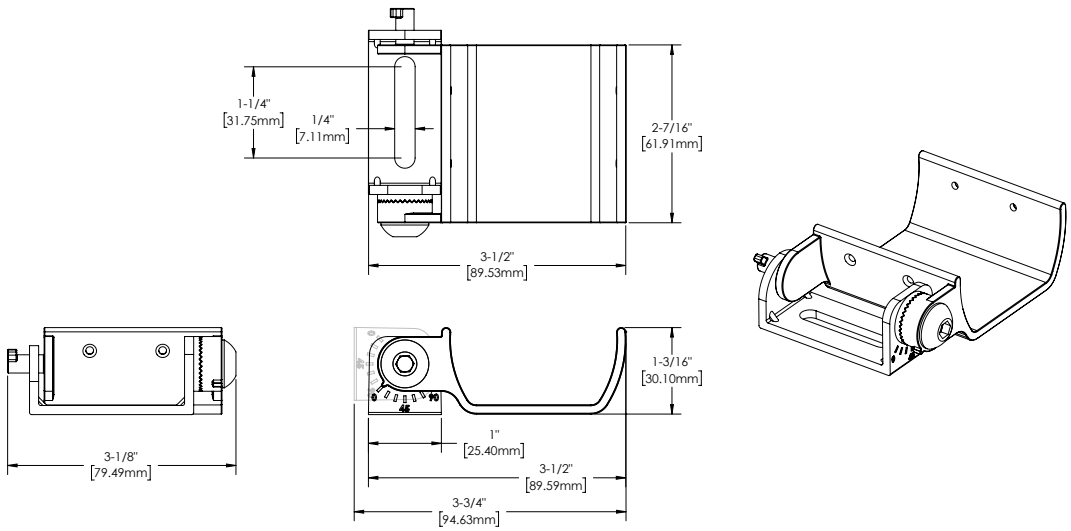


DRAWING DETAILS (CONTINUED)

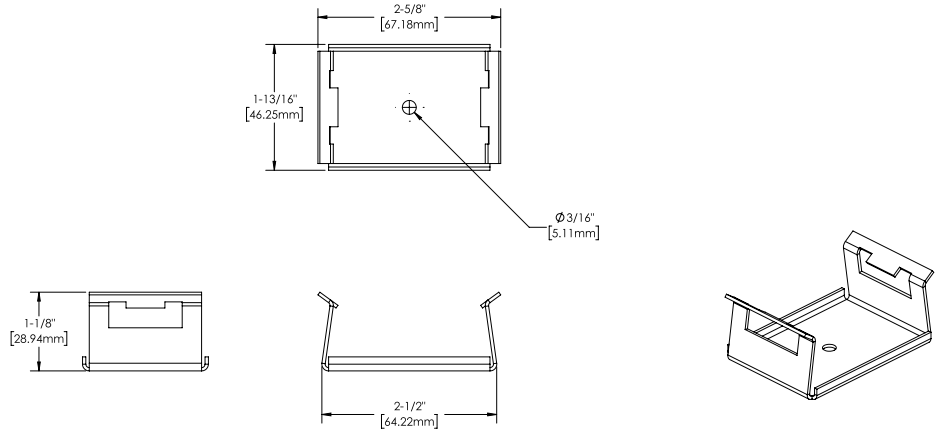
M500ADJC1 - Adjustable Mount Center Axis Detail



M500ADJH2 - Adjustable Mount Side Hinge Detail

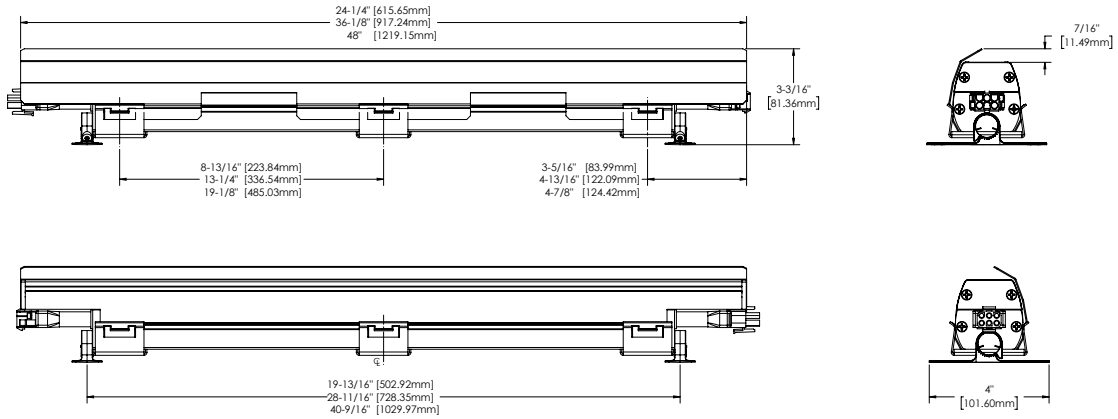


M500FMC - Fixed Mount Detail

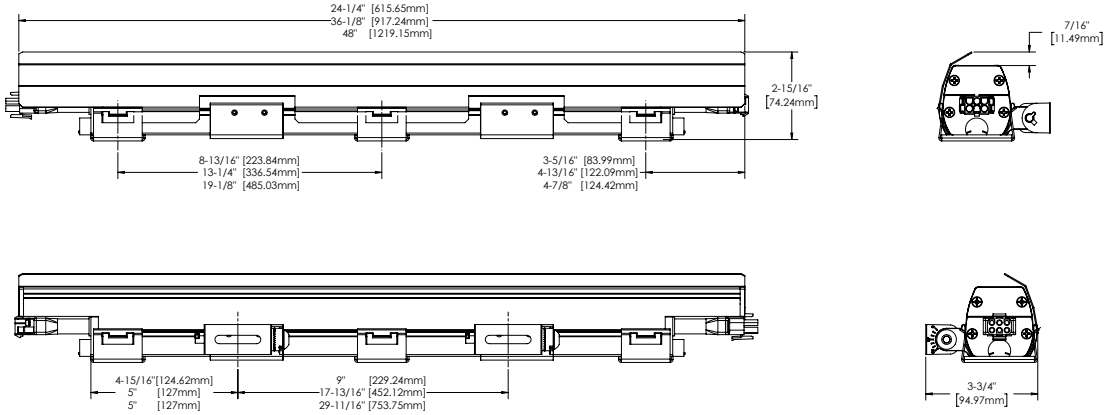


DRAWING DETAILS (CONTINUED)

WW Asymmetric Glare Visor with M500ADJC1 Mount
Automatically included when WW distribution is ordered.

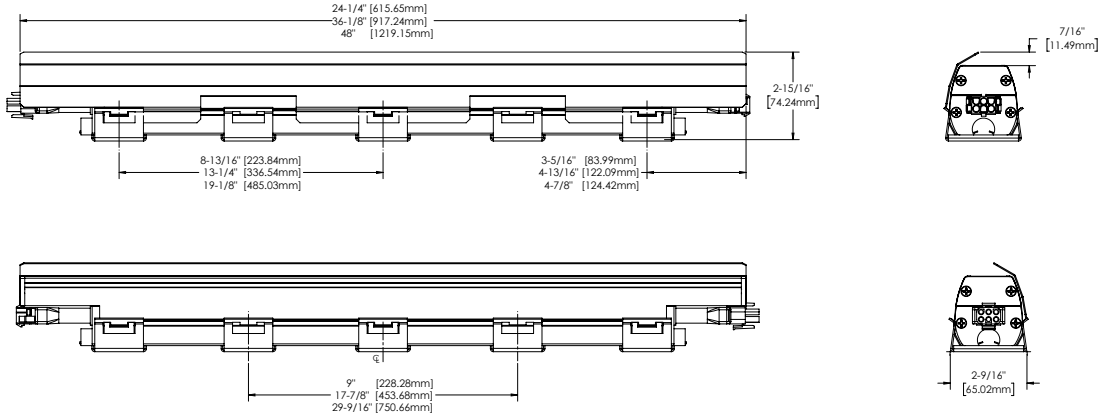


WW Asymmetric Glare Visor with M500ADJH2 Mount
Automatically included when WW distribution is ordered.



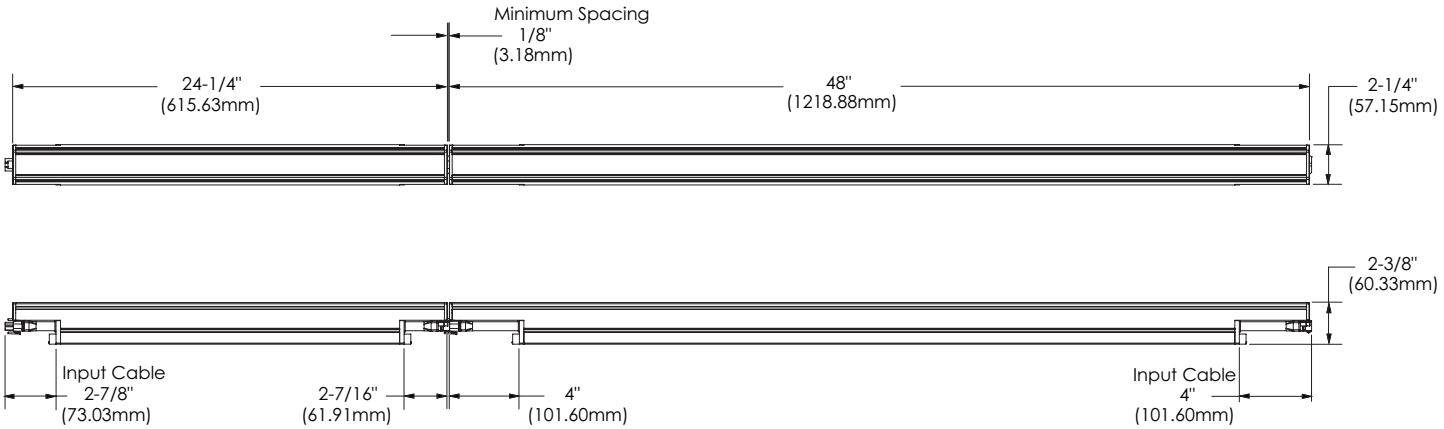
VIEW- A

WW Asymmetric Glare Visor with M500FMC Mount
Automatically included when WW distribution is ordered.



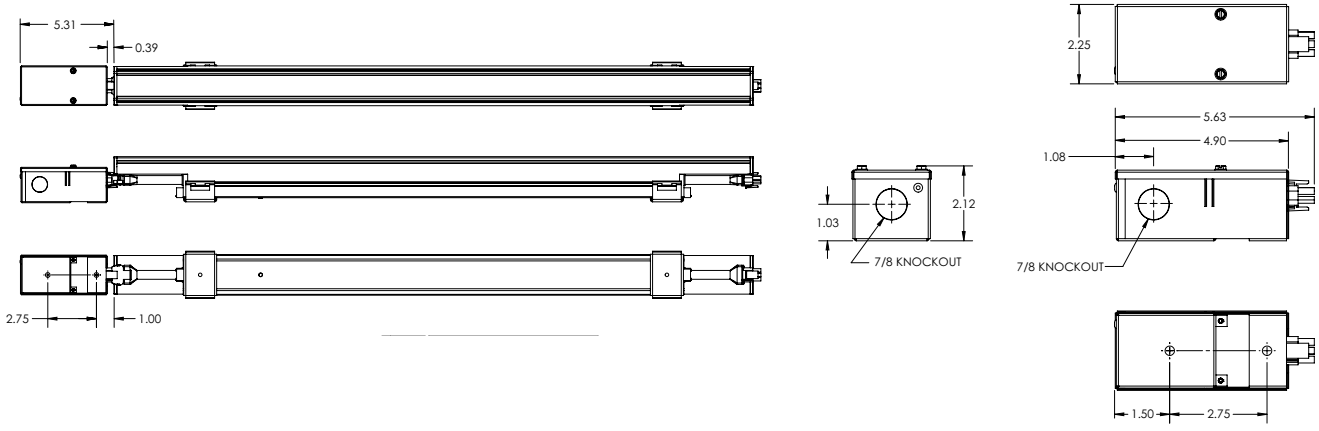
DRAWING DETAILS (CONTINUED)

MKS501 Series Typical End-To-End Run Configuration

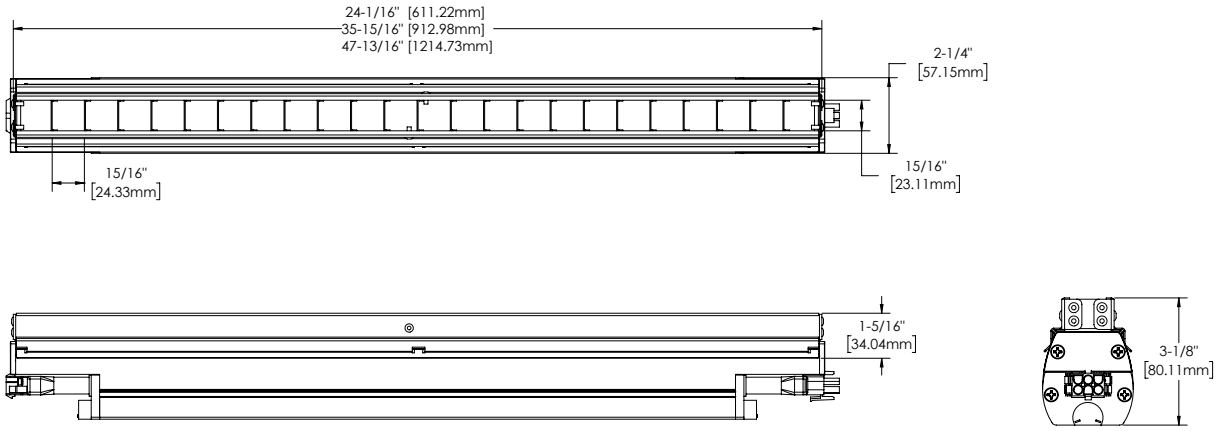


ADDITIONAL ACCESSORY DETAILS

M500WBX Details
(Same dimensions apply for Left or Right Feed)

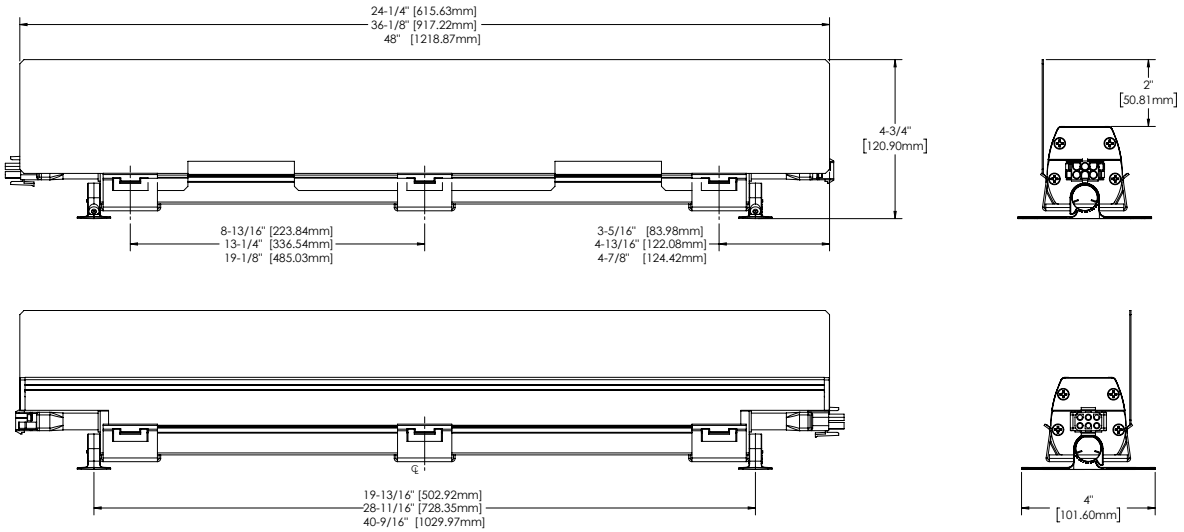


Baffle Linear Surface

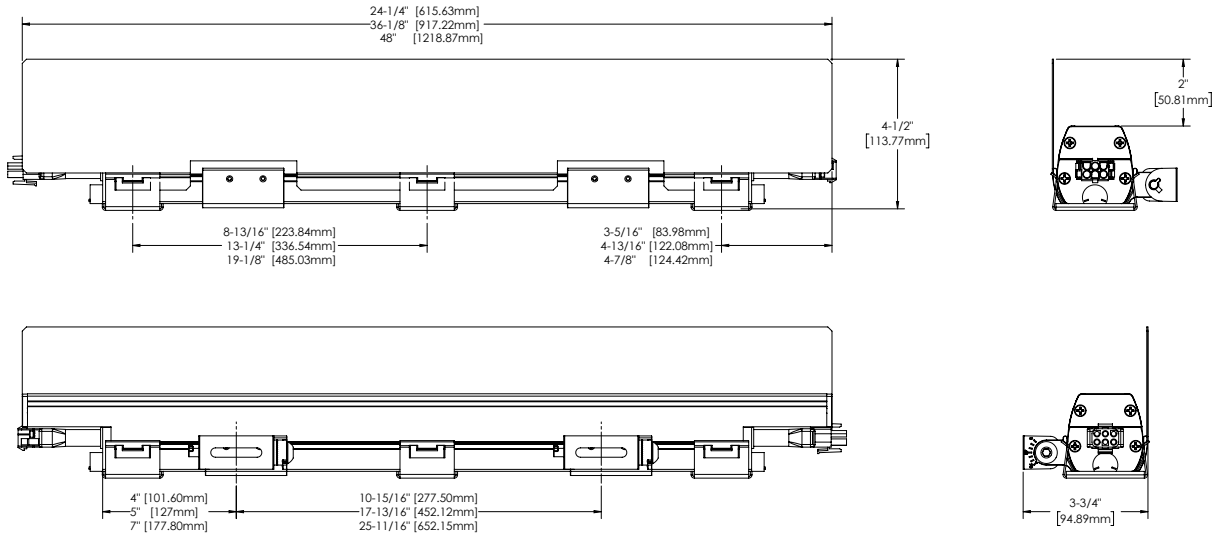


ADDITIONAL ACCESSORY DETAILS (CONTINUED)

Glare Visor with M500ADJC1 Mount



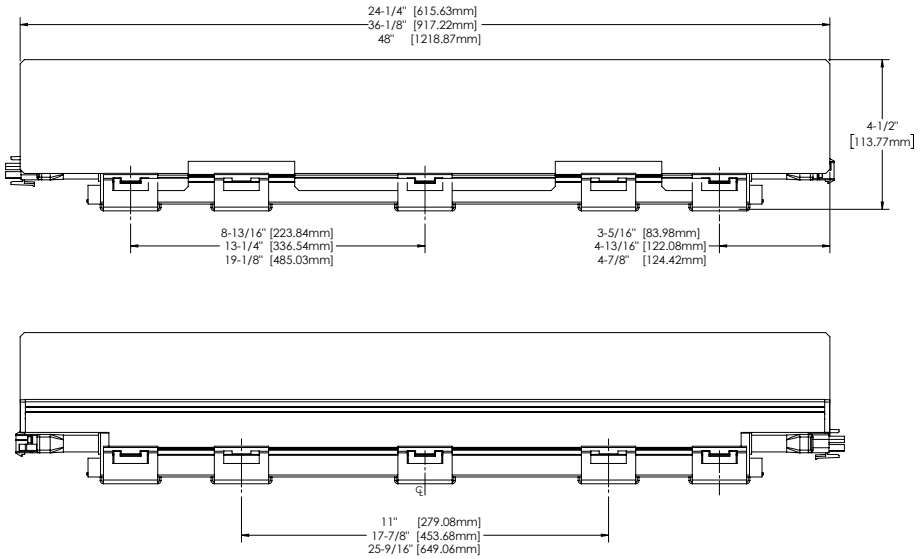
Glare Visor with M500ADJH2 Mount

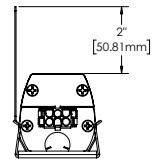


ADDITIONAL ACCESSORY DETAILS (CONTINUED)

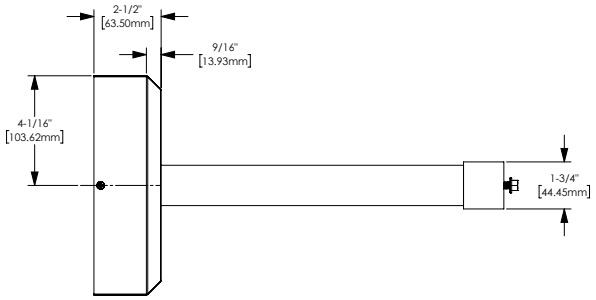
Glare Visor with M500FMC Mount

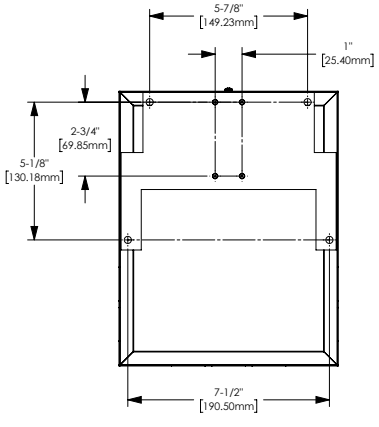
*The (3) visor clips can also be used for mounting fixture to surface.

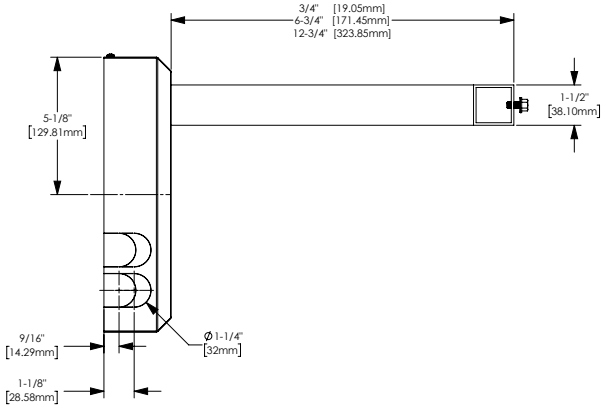


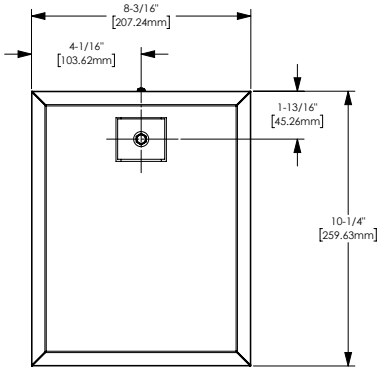


Cantilever Bracket Large Detail



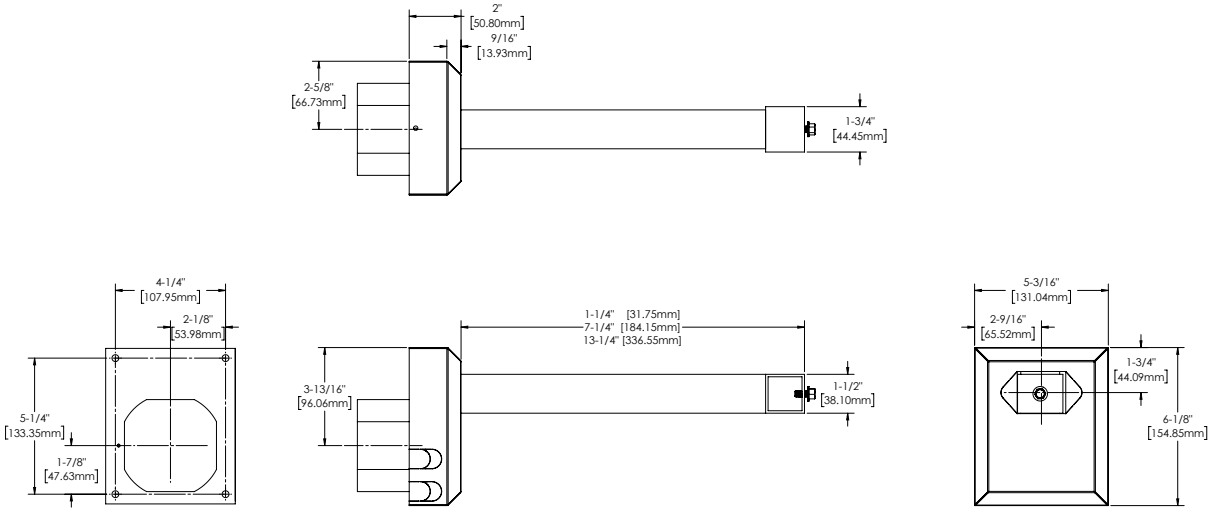




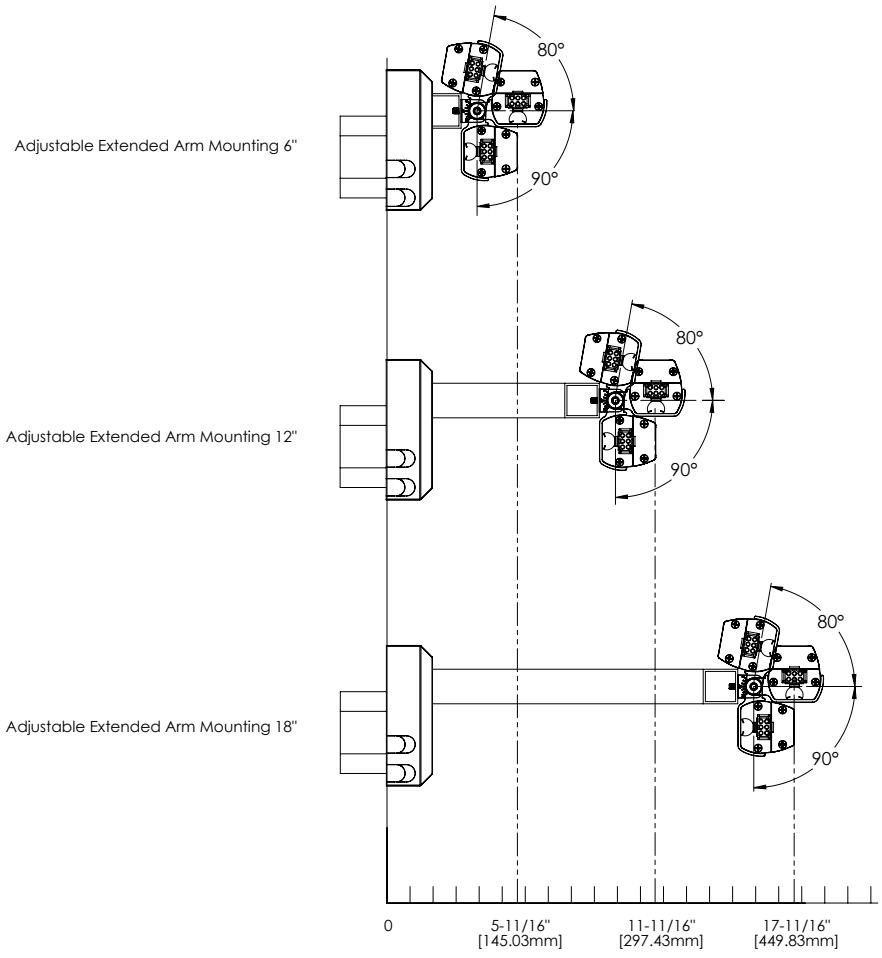


ADDITIONAL ACCESSORY DETAILS (CONTINUED)

Cantilever Bracket Detail

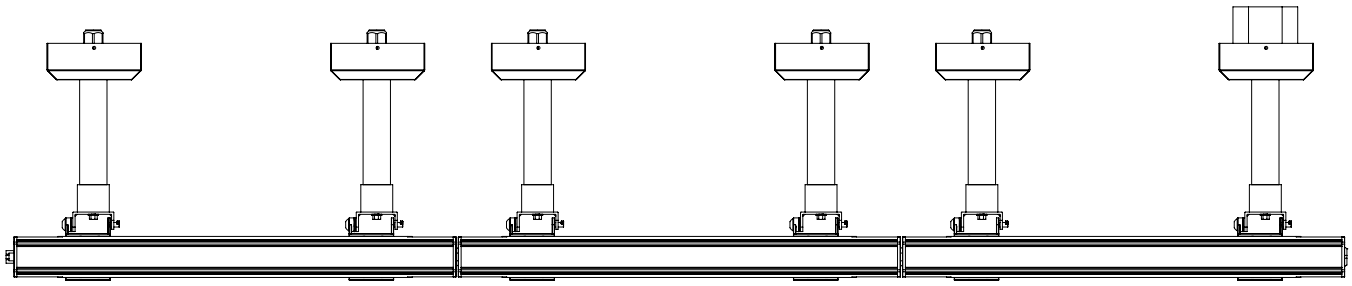


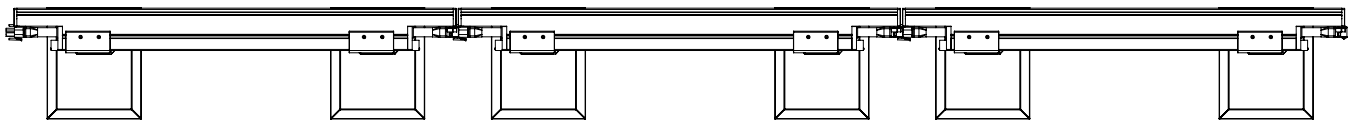
Cantilever Bracket Detail with M500ADJH2 and Fixture

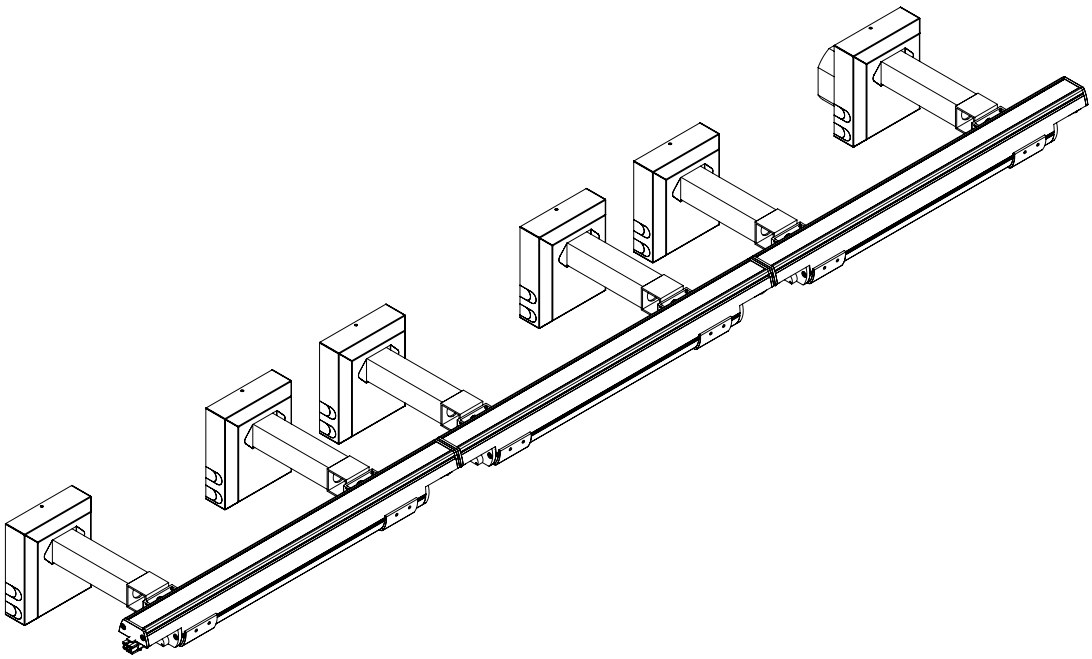


ADDITIONAL ACCESSORY DETAILS (CONTINUED)

MKS501 Series Typical End-To-End Run Configuration with Cantilever Brackets (Showing 6-foot run of (3) 2-foot units with MCBT12 bracket accessory







SPECIFICATIONS

Voltage: 120 through 277v/60Hz

Distribution: 9° x 9°, 10° x 60°, 15° x 30°, 30° x 60°, 40° x 60°, 60° x 60°, Asymmetric Wall Wash

Size: 2.25 W x 2.31 H

Housing: Extruded aluminum snap together construction

Finish: Polyester powder coat painted finish. Black oxide fastener color with BKT finish and natural stainless steel fastener color with WPT & SIT finishes

Lens Material: Extruded acrylic

Lumen Maintenance: RHYR (9° x 9°, 10° x 60°): 60,000 hours L70 @ +120deg C. LAYR (9° x 9°, 10° x 60°): 120,000 hours L70@ +55deg C RHYR & LAYR (15° x 30°, 30° x 60°, 40° x 60°, 60° x 60°, WWD): 120,000 hours L70@ +55deg C. (9° x 9°, 10° x 60°, 15° x 30°, 30° x 60°, 40° x 60°, 60° x 60°, WWD): 60,000 hours L70 @ +120deg C.

LED Color Mix: RHYR: 12 LEDs per 12 inches in a 1:1 ratio (1x2700k, 1x4000k, 1x6500k). LAYR: 12 LEDs per 12 inches in a 1:1 ratio (1x2200k, 1x3000k, 1x5000k). GOLR: 12 LEDs per 12 inches in a 2:1 ratio (2x3000k, 1x2200k)

Control System: TUWH: Fresco DMX512 controller. WDIM: 0-10V dimmer control

Ambient Temperature Ranges: -40° to +45°C

Mounting: Suitable for mounting within the space between ground and 4FT (1.2M) of the ground. Suitable for damp location applications.

Certification/Compliance: CSA Certified to meet U.S. and Canadian standards conforming to UL 1598 and CAN/CSA C22.2 No. 250.0

Weight: 24" - 3.5 lbs (1.59 kg) / 36" - 4.0 lbs (1.81 kg) / 48" - 5.0 lbs (2.27 kg)

Buy American: This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FARS, DFARS and DOT. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

Warranty: 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25°C. Specifications subject to change without notice.

Assembled in America: Buy American Act Compliant

