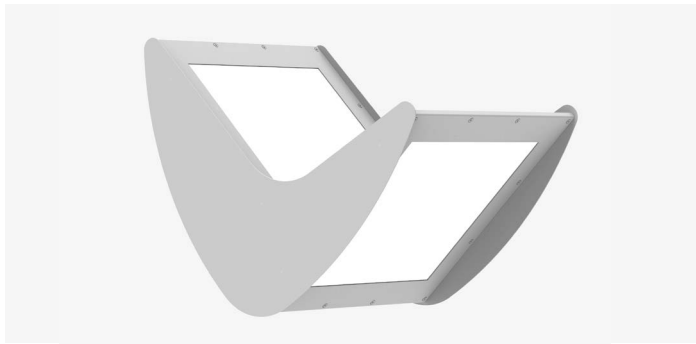


# NATA NATADI

LED . INDIRECT/DIRECT



PART #:	
PREP BY:	DATE:
PROJECT:	
NOTES:	
APPROVAL SIGNATURE:	DATE (DD/MM/YYYY):

PERFORMANCE SUMMARY at 4000K	LIGHT LEVEL L1
Lumens	15611
Wattage	128
Efficacy	122
Color Rendering (CRI) <sup>1</sup>	80+
L70 Estimate (h)	≥ 54,000 hrs

<sup>1</sup> For CRI 90, please refer to Lumen Adjustment Factor chart below.

## FEATURES

- Efficacy up to 122 LPW
- 80+ CRI is standard with option of 90 CRI
- Direct / Indirect distribution

<b>ORDERING STEPS:</b>	<b>1. Complete ORDERING LOGIC.</b>	<b>2. Complete MOUNTING KITS on page 2.</b>
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## 1. ORDERING LOGIC

Example Part Number: NATADI-22L40K-NCM-NW-L2UD-1-R-90

QTY	NATA DI Series	1	2	NC	M	3	4	5	6	7	8	9	10	11	12
1. MODEL /SIZE		2. COLOR TEMP		3. OPTICS UP		4. OPTICS DOWN		5. FINISH		6. LIGHT LEVEL					
<b>DI</b> Direct/Indirect		<b>22L30K</b> 3000K <b>22L35K</b> 3500K <b>22L40K</b> 4000K		<b>NC</b> Nata Clear Lens		<b>M</b> Meta Ice		<b>NW</b> Natatorium White <b>NC</b> Natatorium Custom Specify RAL:		<b>L1</b> <b>L2</b> <div style="border: 1px solid black; padding: 2px; width: fit-content;">See "Light Level Performance at 4000K" chart below</div>					
		90 CRI is available under OPTIONS				<b>Meta Ice:</b> High output semi-diffuse lens									
7. CIRCUITRY		8. MOUNTING		9. VOLTAGE		10. CONTROLS		11. DRIVER LOCATION		12. OPTIONS					
<b>1</b> 1 Circuit <b>UD</b> Up / Down Switching		<b>Select Mounting Kit in STEP 2.</b>		<b>1</b> 120V <b>2</b> 277V <b>3</b> 347V <b>4</b> UNV (120 - 277V)		— None (leave space empty)		<b>I</b> Integral <b>R</b> Remote <sup>1</sup>		<b>90</b> 90 CRI, High R9 <b>RK</b> Retrofit Kit* — None (leave space empty)					
								1. Not available with Quad Pendant Mounting		* Fixture includes mounting bracket to adapt NATADI to existing AW7 arms. See pages 4-7 for more info.					

## Light Level Performance at 4000K

Light Level	NATADI		
	Lumens	Wattage	Efficacy (LPW)
<b>L1</b>	15611	128	122
<b>L2</b>	26843	236	114

## Lumen Adjustment Factor

Color Temp	80 CRI	90 CRI
3000K	0.953	0.846
3500K	0.969	0.848
4000K	1.000	0.852

## 2. MOUNTING KITS

### Wall Mount

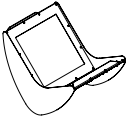
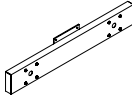
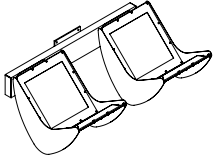
	<b>NATASW-I</b>	
QTY	Single Wall (Integral Driver)	FINISH*
	<b>NATASW-R</b>	
QTY	Single Wall (Remote Driver)	FINISH*
	<b>NATADW-I</b>	
QTY	Double Wall (Integral Driver)	FINISH*
	<b>NATADW-R</b>	
QTY	Double Wall (Remote Driver)	FINISH*


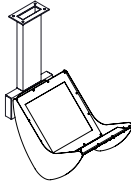
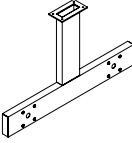
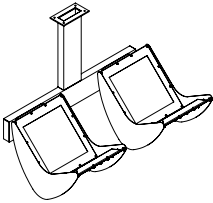
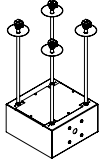
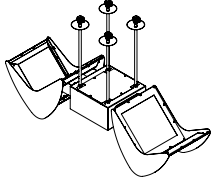
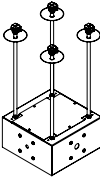
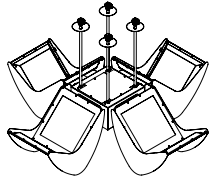
### Pendant Mount

	<b>NATASA-I</b>		
QTY	Single Arm (Integral Driver)	Indicate arm length (max 5ft**)	FINISH*
	<b>NATASA-R</b>		
QTY	Single Arm (Remote Driver)	Indicate arm length (max 5ft**)	FINISH*
	<b>NATADA-I</b>		
QTY	Double Arm (Integral Driver)	Indicate arm length (max 5ft**)	FINISH*
	<b>NATADA-R</b>		
QTY	Double Arm (Remote Driver)	Indicate arm length (max 5ft**)	FINISH*
	<b>NATADP-I</b>		
QTY	Double Pendant (Integral Driver)	Indicate hanger length (max 5ft**)	FINISH*
	<b>NATADP-R</b>		
QTY	Double Pendant (Remote Driver)	Indicate hanger length (max 5ft**)	FINISH*
	<b>NATAQP-I</b>		
QTY	Quad Pendant (Integral Driver)	Indicate hanger length (max 5ft**)	FINISH*
	<b>NATAQP-R</b>		
QTY	Quad Pendant (Remote Driver)	Indicate hanger length (max 5ft**)	FINISH*

**\* FINISH**

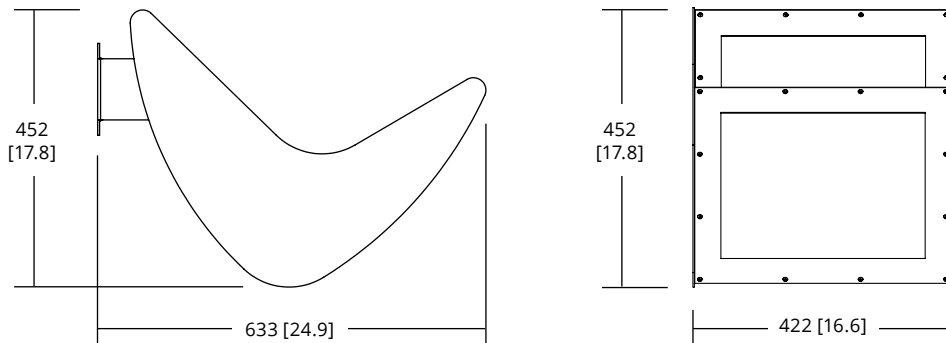
- NW** Natatorium White
- NC** Natatorium Custom Specify RAL# \_\_\_\_\_

Code	Mounting Kit	NATADI
<b>SW</b> Single Wall	Single wall mount included.  Specify appropriate mounting kit for all other applications  (Driver location is selected in Ordering Logic on page 1)	
<b>DW</b> Double Wall		

<b>SA</b> Single Arm Pendant		
<b>DA</b> Double Arm Pendant		
<b>DP</b> Double Pendant		
<b>QP</b> Quad Pendant		 <small>Remote driver option not available with Quad Pendant NATADI.</small>

\*\* Maximum length from ceiling surface to top of fixture. Custom lengths available upon request.

## CROSS SECTIONS



## SPECIFICATIONS

Due to the Continuous Improvement Policy at Metalumen, we reserve the right to change our specifications without notice.

**Housing:** Fixture body is constructed using aluminum sheet, with 1.63mm (14 gauge aluminum sheet metal) nominal wall thickness.

**Optical System:** High flux, high efficacy, LED technology in conjunction with high efficiency reflectors and high transmittance lenses create controlled asymmetric distribution with comfortable low-glare illumination.

**CRI:** 80 minimum for all CCTs in standard configurations.

**Lumen Maintenance:** At an ambient operating temperature of 25°C the LED lifetime expectancy  $\geq$  54,000 hrs for L70.

**Finish:** White paint with a coating suitable for natatoriums is standard. Custom natatorium finish also available.

**Weight:** See chart below.

**Mounting:** Standard hanger lengths are 2, 3, 4 and 5 ft. Consult factory for custom lengths. Pendant mounting is

available with hangers in four options:

- single arm pendant
  - double arm pendant
  - double pendant mount
  - quad pendant mount
- Wall mounting is available in two options:
- single wall mount
  - double wall mount

**Electrical:** 120 V or 277 V/347 V prewired. Standard drivers feature electronic universal voltage (120-277V,

347 V/50-60 Hz), greater than 0.9 power factor, less than 20% harmonic distortion, and ambient temperature range of 35°C (95°F) to minimum starting temp of -40°C (-40°F). Max amp draw @120V is 2.03Amps, @277V is 0.88Amps, @347V is 0.7Amps.

**Approvals:** This product is cULus listed.

**Environment:** Suitable for wet locations. IP65 rated.

## NATADI WEIGHTS

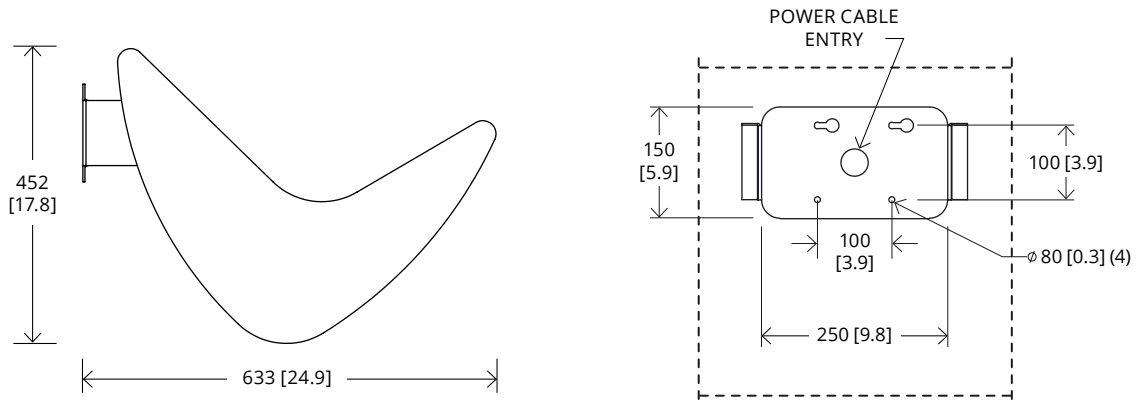
Fixture Type	Integral Fixture	Remote Fixture	Weight of brackets / hangers
Single Wall	10 kg [22.2lbs]	<b>7.5 kg [16.5 lbs]</b> (stand alone weight)	
Double Wall	24.8 kg [54.6 lbs]	19.8 kg [43.6 lbs]	4.8 kg [10.5 lbs]
Single Arm (max length 5 ft)	16.8 kg [36.9 lbs]	14.3 kg [31.4 lbs]	6.75 kg [14.9 lbs]
Double Arm (max length 5 ft)	29.3 kg [64.7 lbs]	24.3 kg [53.7 lbs]	9.3 kg [20.6 lbs]
Double Pendant (max length 5 ft)	30.2 kg [66.5 lbs]	25.2 kg [55.4 lbs]	10.2 kg [22.4 lbs]
Quad Pendant (max length 5 ft)	50.5 kg [111.3 lbs]	40.5 kg [89.2 lbs]	10.5 kg [23.1 lbs]

## WARRANTY

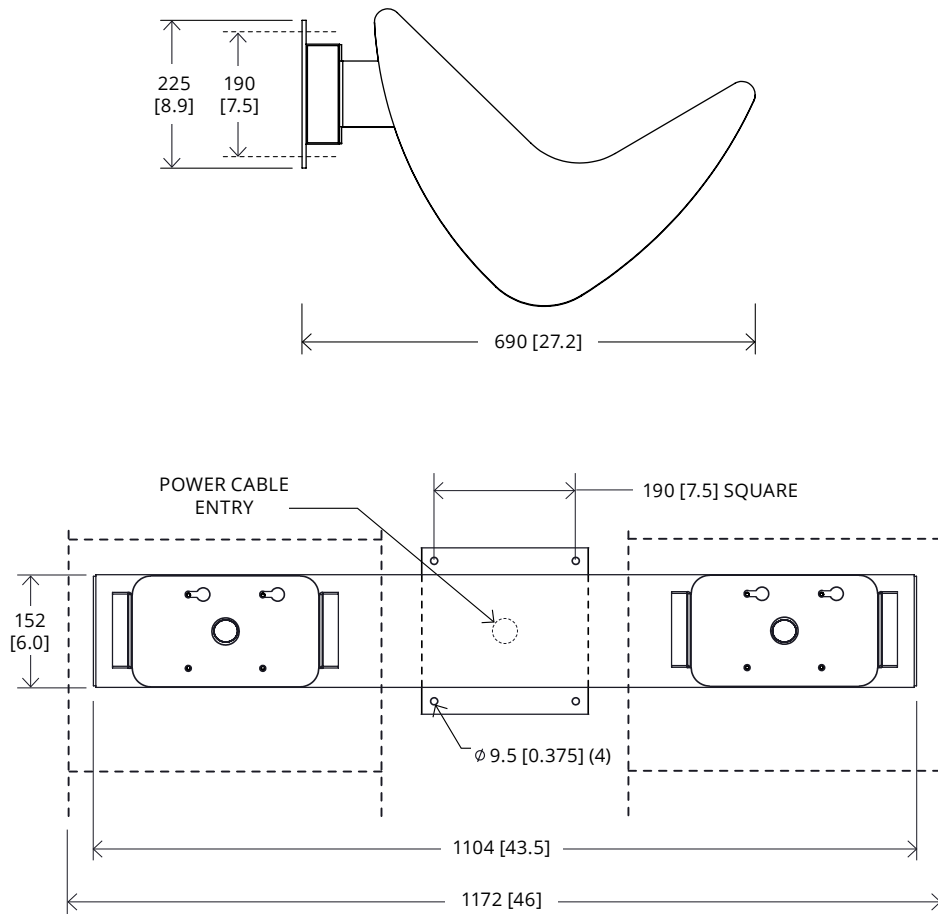
Metalumen will warrant defective luminaires for 5 years from date of purchase. Warranty is valid if luminaire is installed and used according to specification. If defective, Metalumen will send replacement boards or drivers at no cost along with detailed replacement instructions and instructions on how to return defective components to Metalumen.

MOUNTING ARRANGEMENTS - WALL

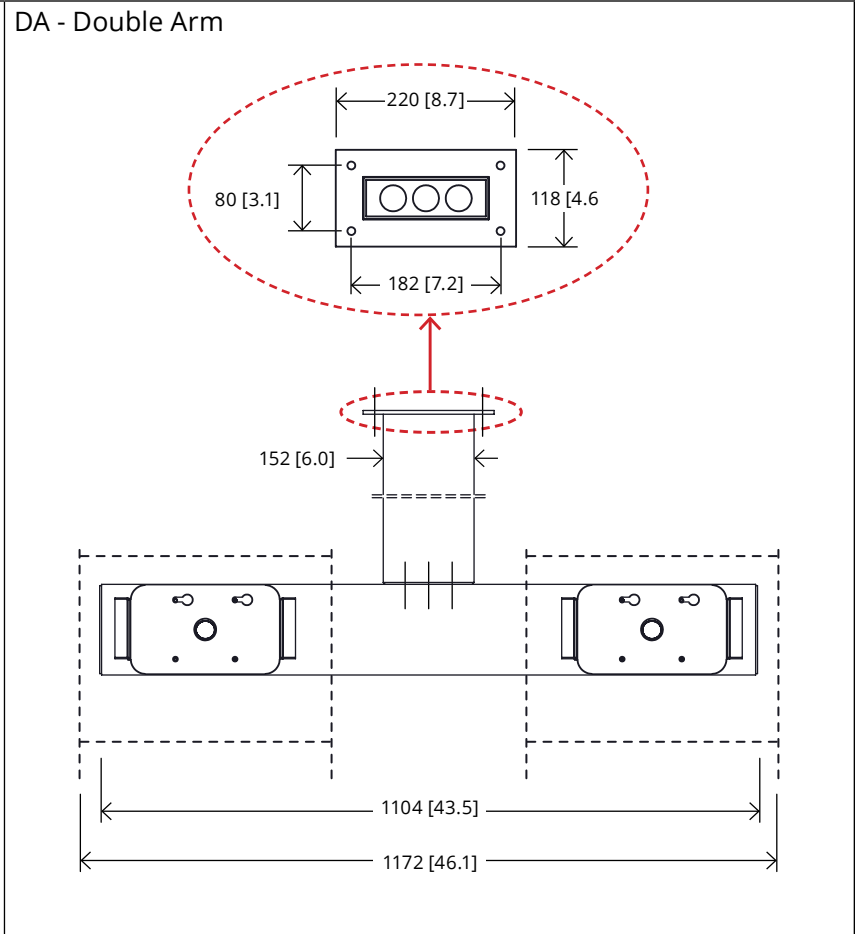
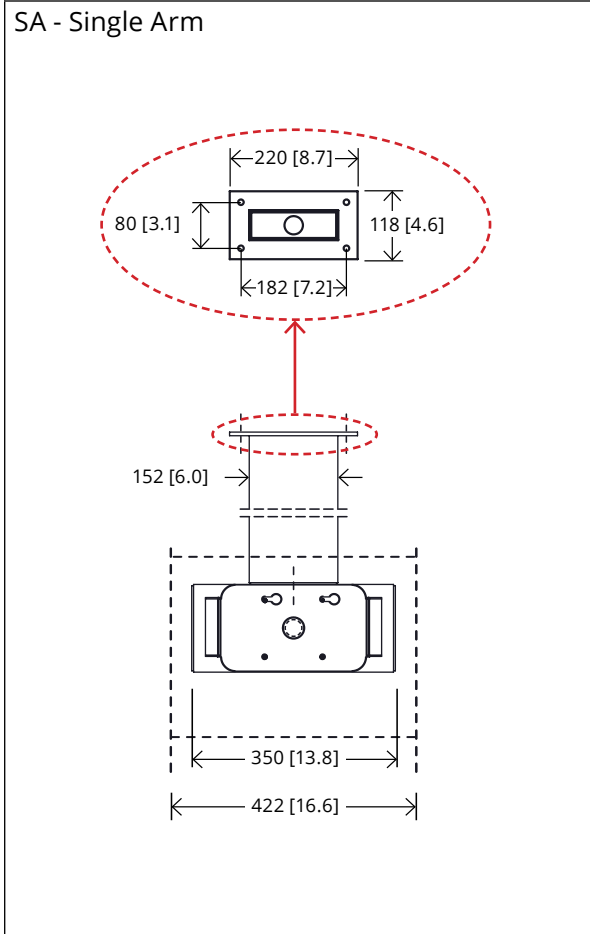
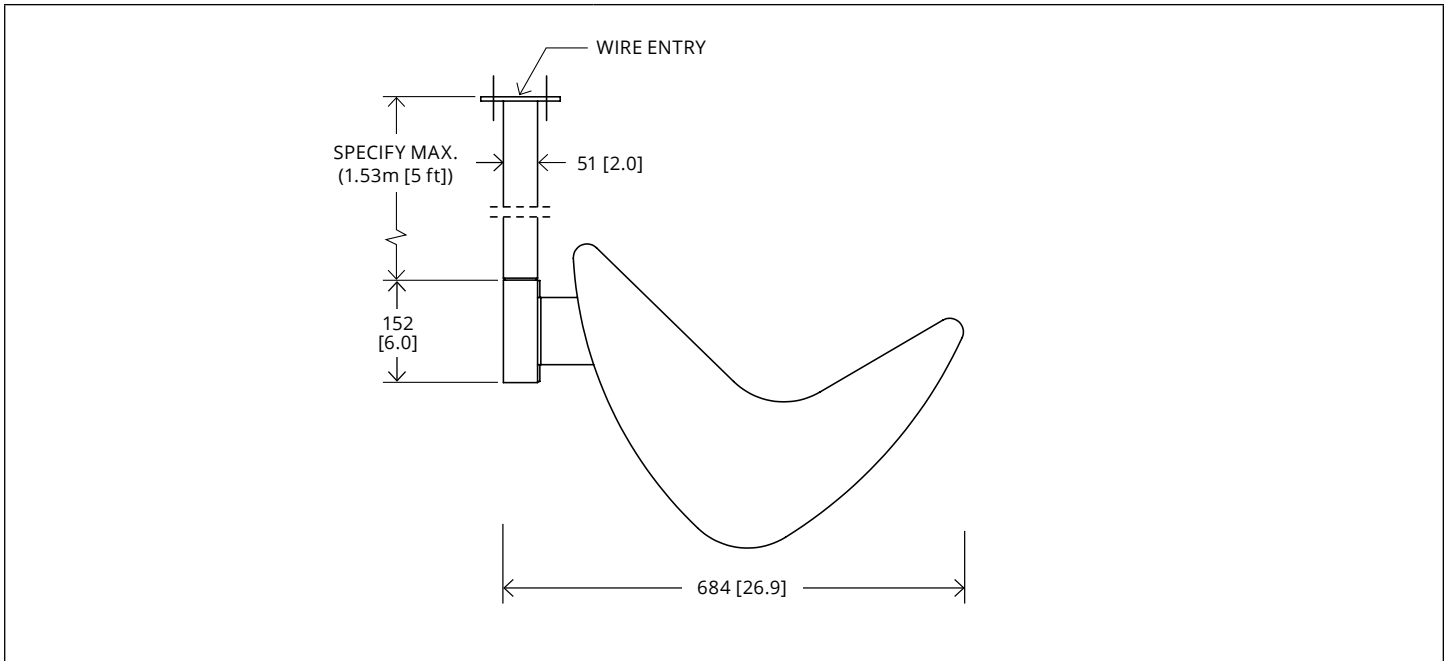
SW - Single Wall



DW - Double Wall

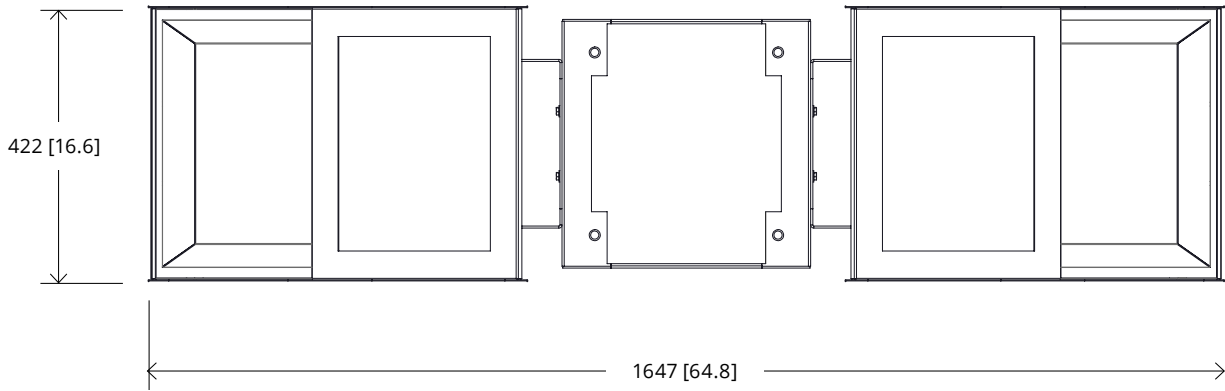
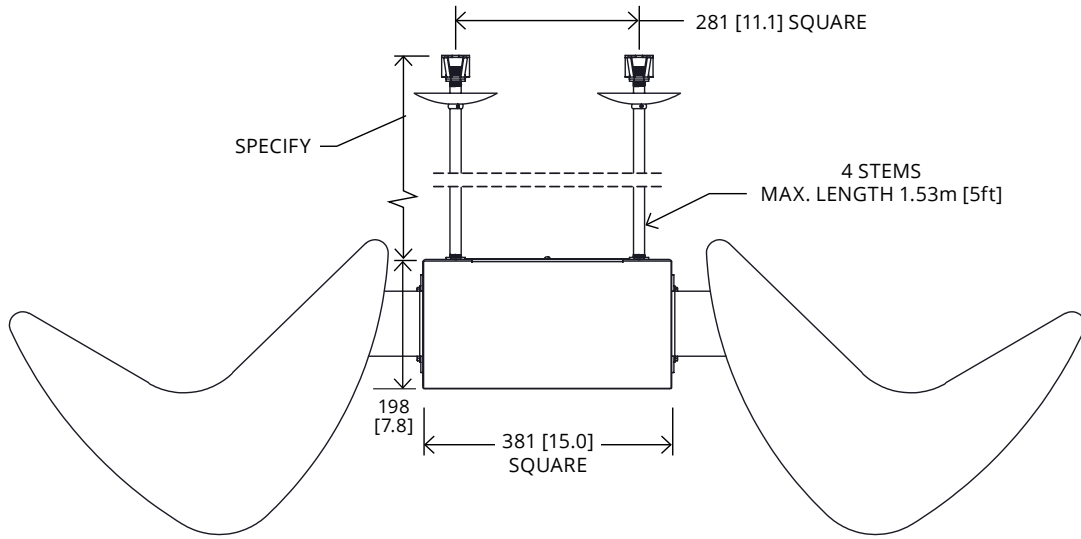


MOUNTING ARRANGEMENTS - PENDANT ARM



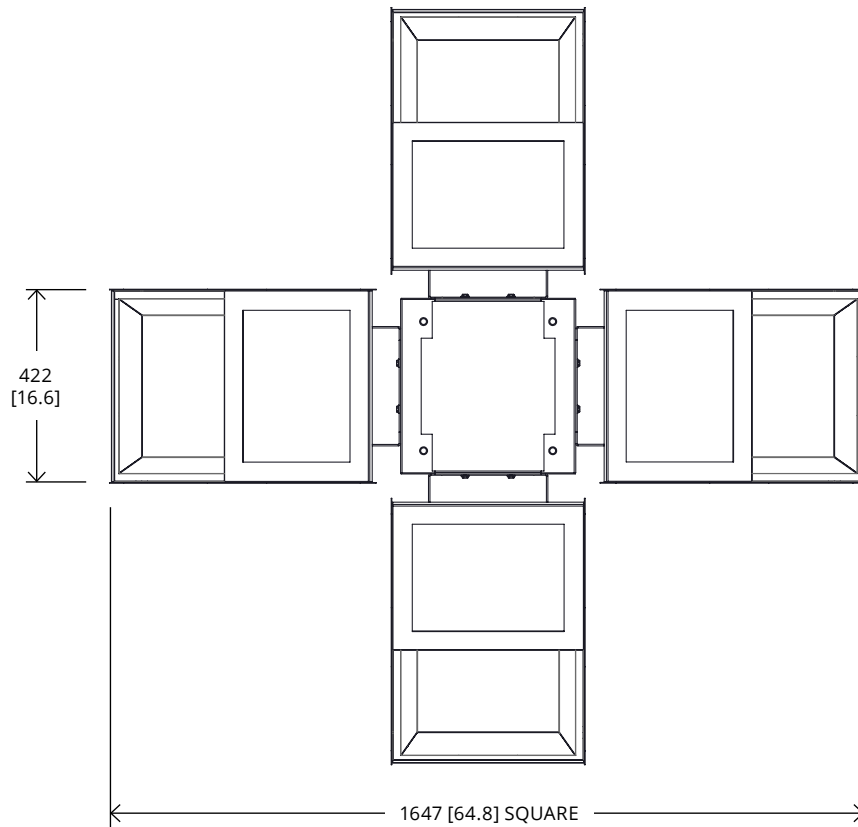
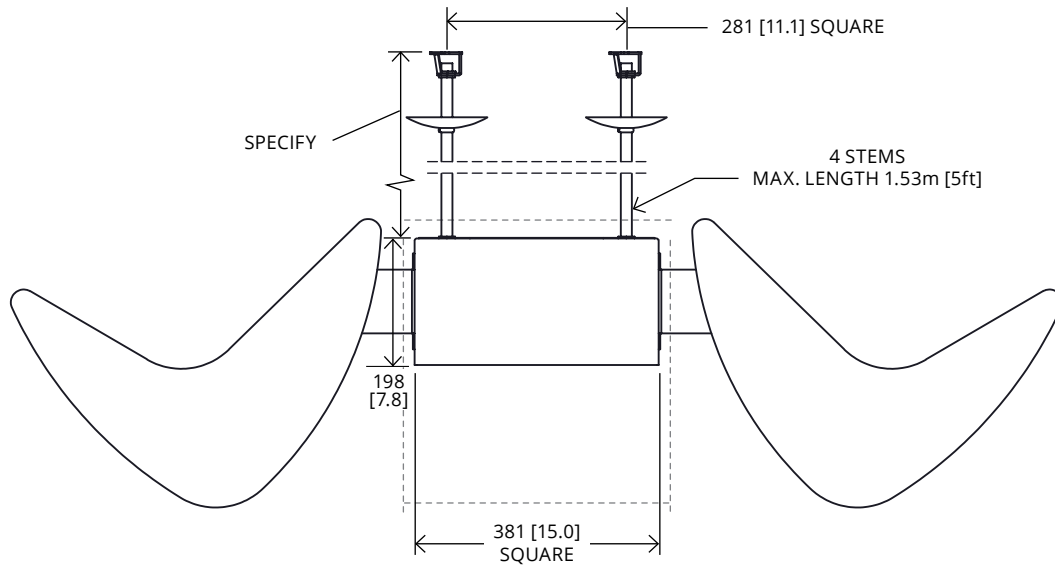
# MOUNTING ARRANGEMENTS - PENDANT

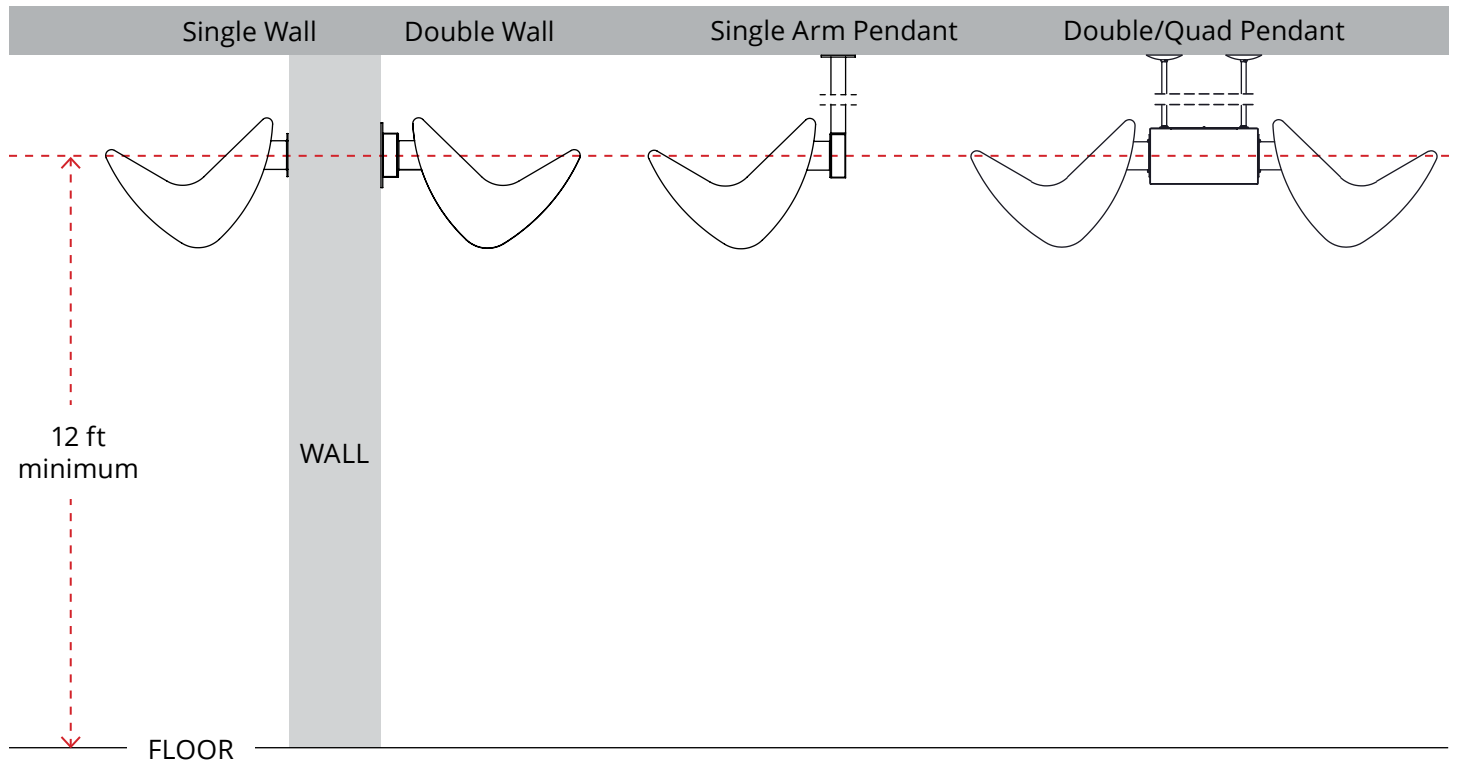
## DP - Double Pendant



# MOUNTING ARRANGEMENTS - PENDANT

QP - Quad Pendant



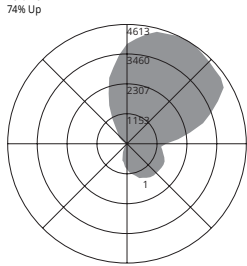




PHOTOMETRIC DATA - 4000K, CRI 80

Optics Up: **Nata Clear Lens**  
 Optics Down: **Meta Ice**  
 IES File: **NATADI-22L40K-NCM-L1**  
 Lumens: **15611** Wattage: **128**  
 Efficacy: **122 lm/W**

PHOTOMETRIC CURVE



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	366	2.3
0-30	783	5
0-40	1293	8.3
0-60	2425	15.5
0-80	3527	22.6
0-90	4101	26.2
10-90	4006	25.6
20-40	926	5.9
20-50	1483	9.5
40-70	1698	10.9
60-80	1102	7.1
70-80	536	3.4
80-90	573	3.7
90-110	1982	12.7
90-120	3521	22.5
90-130	5252	33.6
90-150	8701	55.7
90-180	11524	73.8
110-180	9542	61.1
0-180	15625	100

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

RC	80				70				50			
	RW	70	50	30	10	70	50	30	10	50	30	10
RCR												
0	101	101	101	101	91	91	91	91	70	70	70	70
1	91	86	82	78	81	77	73	70	59	56	54	54
2	82	74	68	62	73	66	61	56	51	47	44	44
3	75	65	57	51	66	58	51	46	44	40	36	36
4	68	57	49	43	60	51	44	39	39	34	30	30
5	62	50	42	36	55	45	38	33	35	30	26	26
6	57	45	37	31	50	40	33	28	31	26	22	22
7	53	40	33	27	47	36	29	24	28	23	19	19
8	49	36	29	24	43	33	26	21	25	20	17	17
9	45	33	26	21	40	30	23	19	23	18	15	15
10	42	30	23	18	37	27	21	17	21	17	13	13

CANDELA DISTRIBUTION

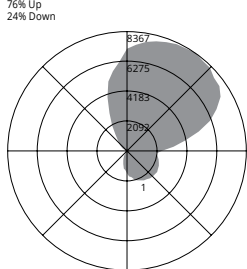
Vertical Angle	Horizontal Angle			
	0	22.5	45	67.5 90
0	978	978	978	978 978
5	1112	1034	1114	1068 999
10	1183	1231	1134	1058 1037
15	1281	1270	1239	1072 976
20	1409	1353	1232	1112 918
25	1445	1432	1298	1105 906
30	1512	1483	1320	1089 845
35	1574	1507	1347	1082 777
40	1607	1510	1351	1061 708
45	1606	1564	1345	1017 613
50	1611	1570	1304	970 521
55	1622	1535	1296	901 437
60	1629	1527	1251	828 360
65	1608	1497	1210	730 278
70	1535	1455	1159	645 204
75	1450	1428	1154	553 122
80	1383	1432	1221	520 68
85	1324	1449	1322	546 33
90	1521	1599	1483	665 32
95	1984	2010	1725	842 87
100	2469	2428	1989	1084 211
105	3041	2881	2324	1415 395
110	3447	3314	2704	1716 650
115	3878	3733	3053	2024 948
120	4316	4048	3311	2302 1217
125	4419	4186	3439	2569 1550
130	4430	4193	3693	2813 1820
135	4486	4322	3858	3055 2175
140	4530	4425	4044	3312 2452
145	4601	4434	4104	3550 2715
150	4613	4488	4197	3705 3004
155	4590	4547	4299	3815 3292
160	4505	4466	4285	3912 3460
165	4464	4371	4304	3988 3576
170	4275	4294	4173	3902 3746
175	4058	4105	4127	3961 3791
180	3841	3841	3841	3841 3841

LUMINANCE DATA (CD/M<sup>2</sup>)

Vertical Angle	Horizontal Angle		
	0	45	90
45	5001	3172	1578
55	5287	3043	1136
65	5682	2918	753
75	5785	2953	355
85	6285	3747	109

Optics Up: **Nata Clear Lens**  
 Optics Down: **Meta Ice**  
 IES File: **NATADI-22L40K-NCM-L2**  
 Lumens: **26843** Wattage: **236**  
 Efficacy: **114 lm/W**

PHOTOMETRIC CURVE



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	573	2.1
0-30	1223	4.6
0-40	2020	7.5
0-60	3798	14.1
0-80	5534	20.6
0-90	6462	24
10-90	6314	23.5
20-40	1447	5.4
20-50	2321	8.6
40-70	2666	9.9
60-80	1737	6.5
70-80	849	3.2
80-90	928	3.5
90-110	3412	12.7
90-120	6124	22.8
90-130	9175	34.1
90-150	15311	57
90-180	20407	76
110-180	16996	63.3
0-180	26869	100

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

RC	80				70				50			
	RW	70	50	30	10	70	50	30	10	50	30	10
RCR												
0	101	101	101	101	90	90	90	90	69	69	69	69
1	90	86	81	77	80	76	72	69	58	55	53	53
2	82	74	68	62	72	66	60	56	50	46	43	43
3	74	65	57	51	65	57	51	46	44	39	36	36
4	68	57	49	43	60	50	44	38	39	34	30	30
5	62	50	42	36	55	45	38	33	34	29	25	25
6	57	45	37	31	50	40	33	28	31	26	22	22
7	52	40	32	27	46	36	29	24	28	23	19	19
8	48	36	29	24	43	32	26	21	25	20	17	17
9	45	33	26	21	40	29	23	19	23	18	15	15
10	42	30	23	18	37	27	21	17	21	16	13	13

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle			
	0	22.5	45	67.5 90
0	1550	1550	1550	1550 1550
5	1796	1850	1702	1598 1511
10	1877	1889	1871	1688 1499
15	2083	2005	1893	1704 1501
20	2194	2098	2012	1722 1455
25	2275	2174	2041	1724 1419
30	2379	2274	2075	1726 1315
35	2422	2364	2089	1694 1247
40	2513	2418	2104	1651 1113
45	2545	2432	2105	1595 983
50	2562	2395	2092	1510 838
55	2571	2436	2030	1397 690
60	2523	2393	1978	1275 567
65	2473	2343	1884	1169 449
70	2379	2295	1827	1018 330
75	2295	2235	1825	900 207
80	2186	2270	1943	818 124
85	2083	2319	2140	928 67
90	2455	2628	2465	1112 68
95	3280	3406	2943	1440 169
100	4152	4171	3409	1886 386
105	5206	5017	4105	2466 712
110	6199	5854	4775	3020 1144
115	6913	6684	5464	3485 1620
120	7569	7247	5839	4041 2108
125	7897	7420	6224	4498 2676
130	7960	7632	6572	4949 3152
135	8229	7765	6891	5449 3715
140	8241	7848	7227	5836 4281
145	8367	7925	7484	6206 4743
150	8272	8100	7441	6534 5243
155	8234	8121	7603	6795 5819
160	8080	7961	7613	6927 6240
165	7936	7911	7519	7006 6490
170	7730	7766	7365	7124 6814
175	7443	7317	7498	7404 7111
180	7137	7137	7137	7137 7137

LUMINANCE DATA (CD/M<sup>2</sup>)

Vertical Angle	Horizontal Angle		
	0	45	90
45	7926	4964	2531
55	8384	4768	1793
65	8739	4544	1215
75	9160	4667	604
85	9891	6021	219