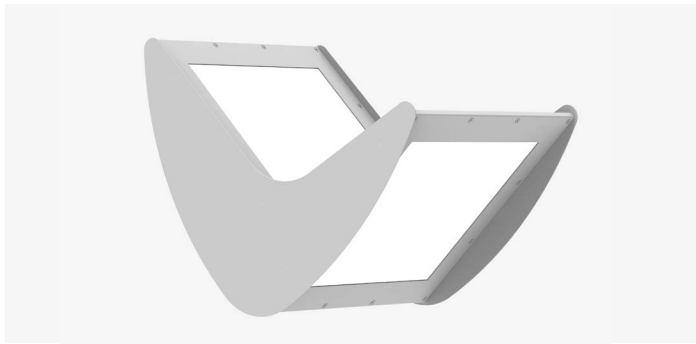


NATA NATADI

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) ¹	80+
L70 Estimate (h)	> 60,000 hrs

¹ 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

ORDERING STEPS:	1. Complete ORDERING LOGIC.	2. Complete MOUNTING KITS on page 2.
------------------------	------------------------------------	---

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							
DI Direct/Indirect	22L30K 3000K 22L35K 3500K 22L40K 4000K	NC Nata Clear Lens		M Meta Ice		NW Natatorium White NC Natatorium Custom Specify RAL:		L1 L2 See "Light Level Performance at 4000K" chart below							
	90 CRI is available under OPTIONS			Meta Ice: High output semi-diffuse lens											
7. CIRCUITRY	8. MOUNTING	9. VOLTAGE		10. CONTROLS		11. DRIVER LOCATION		12. OPTIONS							
1 1 Circuit UD Up / Down Switching	Select Mounting Kit in STEP 2.	1 120V 2 277V 3 347V 4 UNV (120 - 277V)		— None (leave space empty)		I Integral R Remote ¹		90 90 CRI, High R9 RK 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)
L1	15611	128	122
L2	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

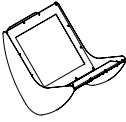
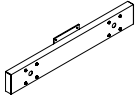
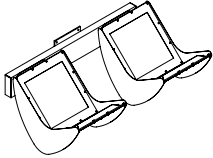
	NATASW-I	
QTY	Single Wall (Integral Driver)	FINISH*
	NATASW-R	
QTY	Single Wall (Remote Driver)	FINISH*
	NATADW-I	
QTY	Double Wall (Integral Driver)	FINISH*
	NATADW-R	
QTY	Double Wall (Remote Driver)	FINISH*

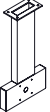
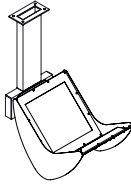
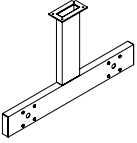
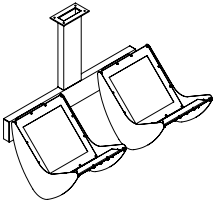
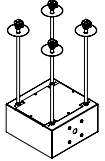
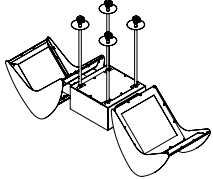
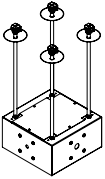
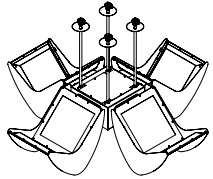
Pendant Mount

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

*** FINISH**

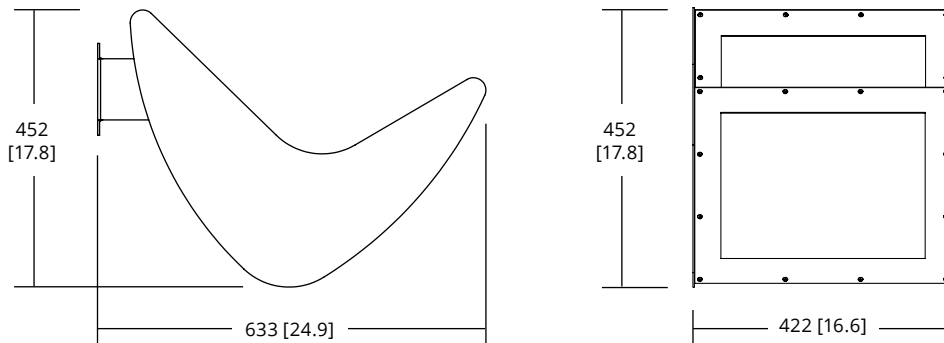
NW Natatorium White
NC Natatorium Custom Specify RAL# _____

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

SA Single Arm Pendant		
DA Double Arm Pendant		
DP Double Pendant		
QP 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: Reported L70 > 60,000 hrs at an ambient operating temperature of 35°C.

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

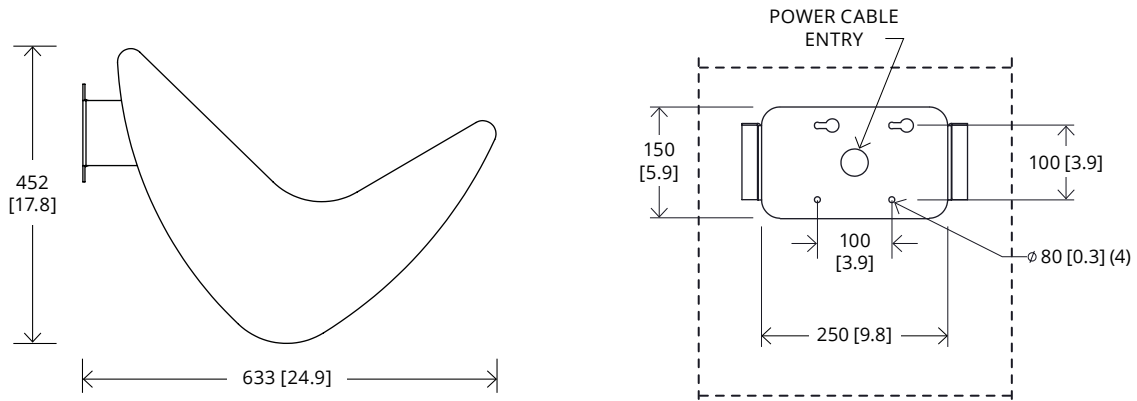
Fixture Type	Integral Fixture	Remote Fixture	Weight of brackets / hangers
Single Wall	10 kg [22.2lbs]	7.5 kg [16.5 lbs] (stand alone weight)	
Double Wall	24.8 kg [54.6 lbs]	19.8 kg [43.6 lbs]	4.8 kg [10.5 lbs]
Single Arm (max length 5 ft)	16.8 kg [36.9 lbs]	14.3 kg [31.4 lbs]	6.75 kg [14.9 lbs]
Double 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

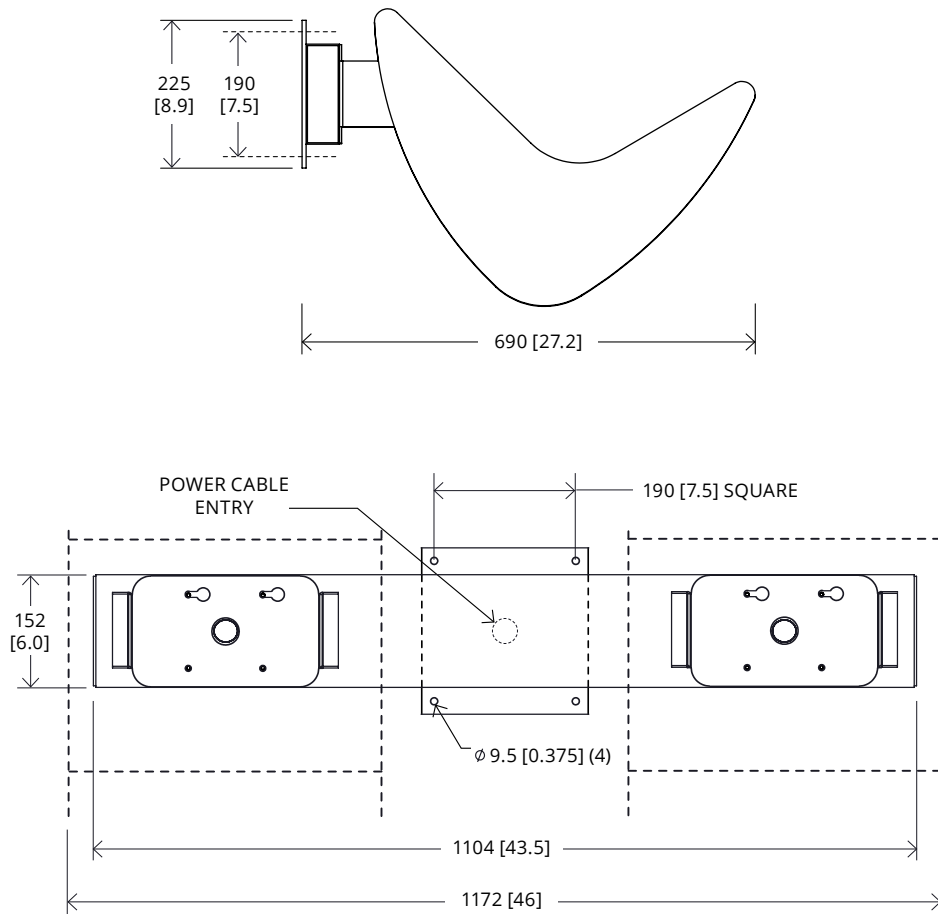
Metalumen will warrant defective luminaires for 5 years from date of purchase. Warranty is valid if luminaire is installed and used according to specification. If defective, Metalumen will send replacement boards or drivers at no cost along with detailed replacement instructions and instructions on how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

MOUNTING ARRANGEMENTS - WALL

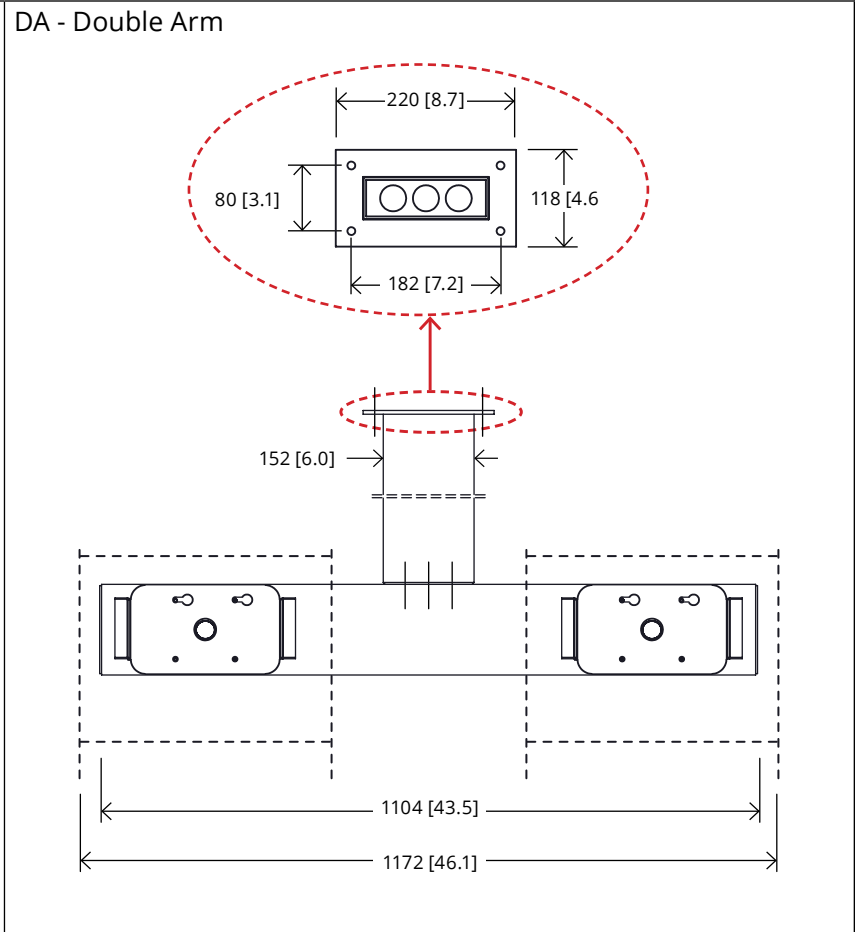
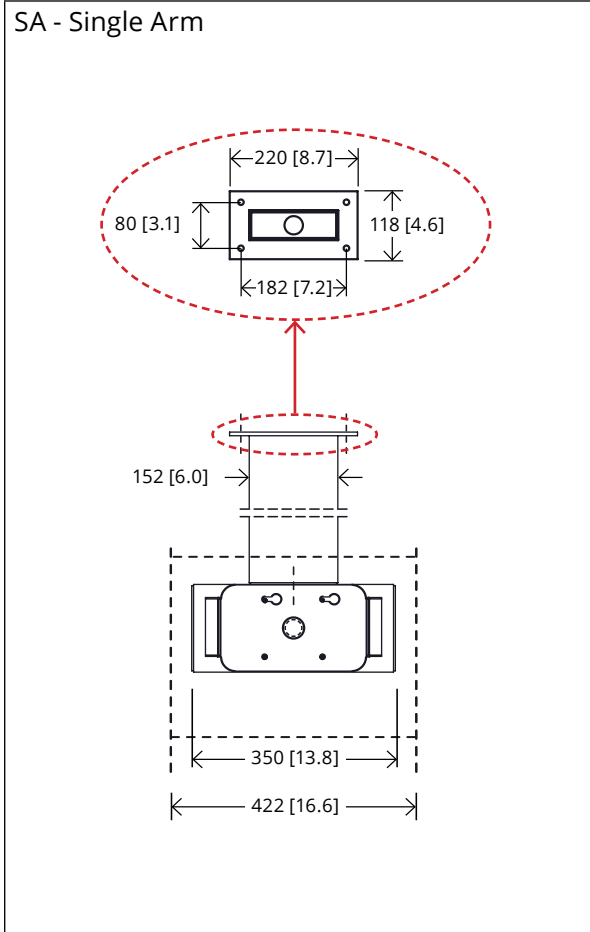
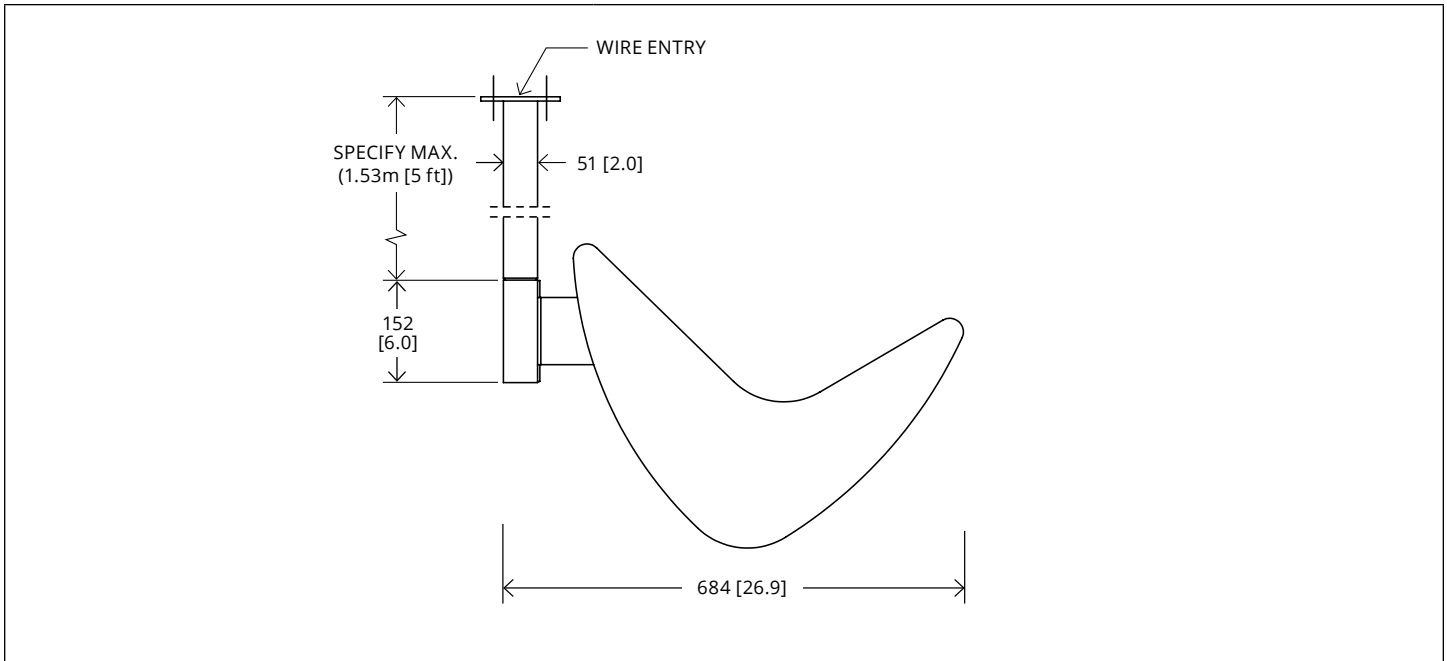
SW - Single Wall



DW - Double Wall

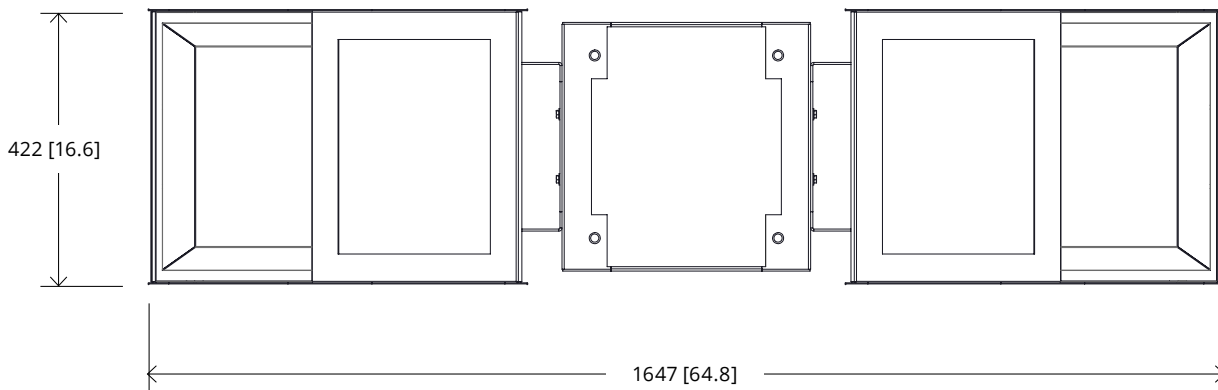
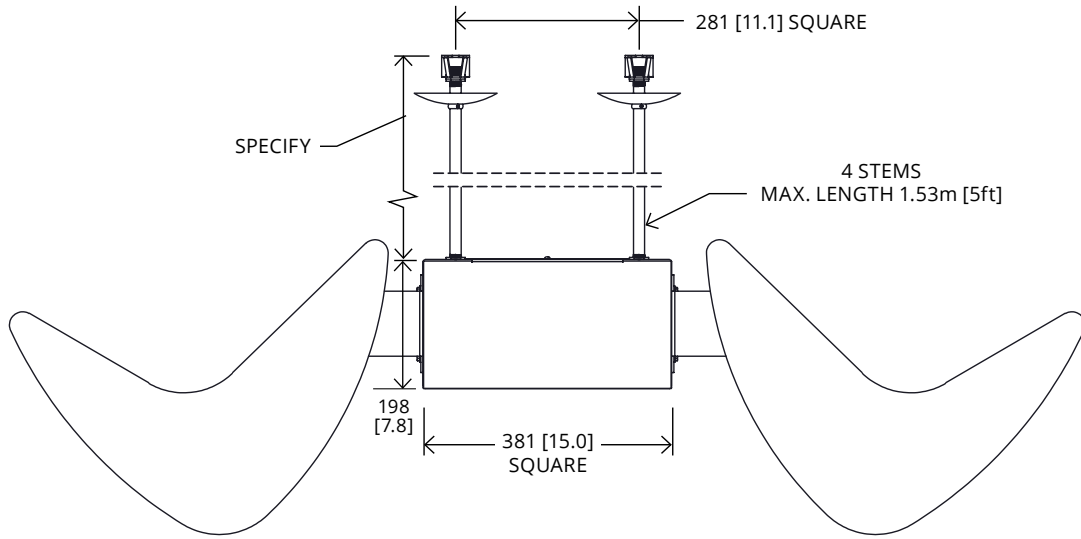


MOUNTING ARRANGEMENTS - PENDANT ARM



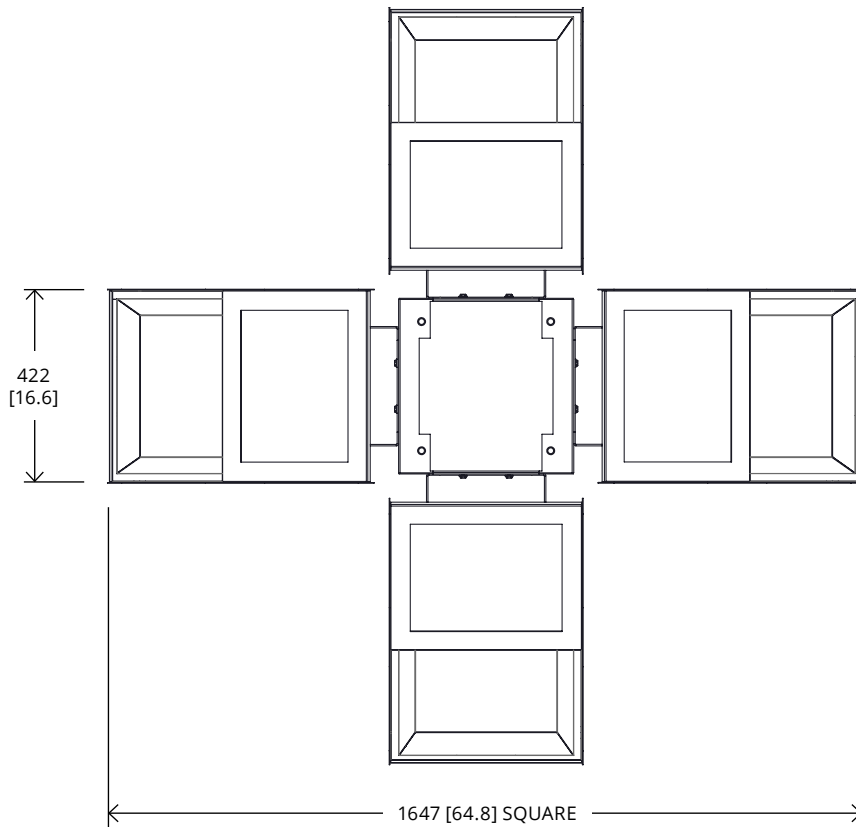
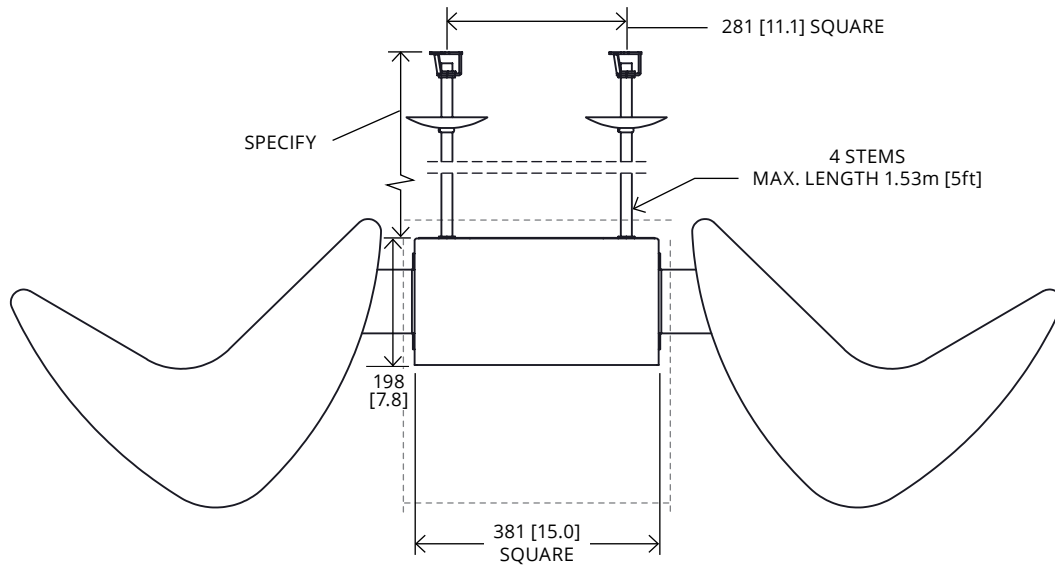
MOUNTING ARRANGEMENTS - PENDANT

DP - Double Pendant

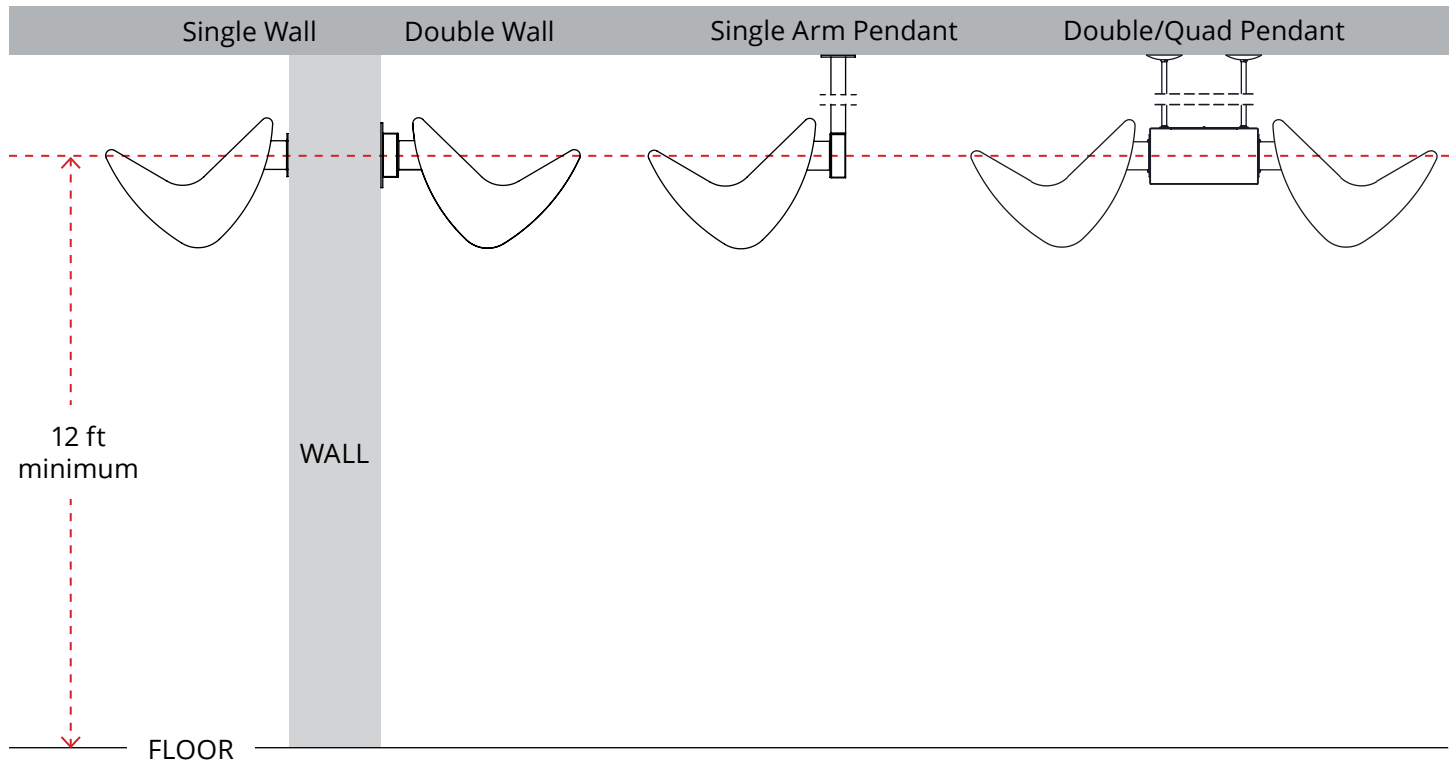


MOUNTING ARRANGEMENTS - PENDANT

QP - Quad Pendant



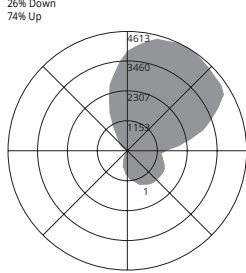
MOUNTING - MINIMUM DISTANCE FROM FLOOR



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

CANDELA DISTRIBUTION

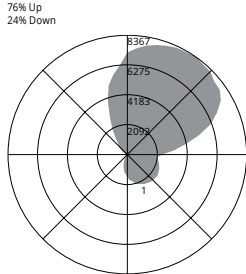
Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	978	978	978	978	978
10	1183	1231	1134	1058	1037
20	1409	1353	1232	1112	918
30	1512	1483	1320	1089	845
40	1607	1510	1351	1061	708
50	1611	1570	1304	970	521
60	1629	1527	1251	828	360
70	1535	1455	1159	645	204
80	1383	1432	1221	520	68
90	1521	1599	1483	665	32
100	2469	2428	1989	1084	211
110	3447	3314	2704	1716	650
120	4316	4048	3311	2302	1217
130	4430	4193	3693	2813	1820
140	4530	4425	4044	3312	2452
150	4613	4488	4197	3705	3004
160	4505	4466	4285	3912	3460
170	4275	4294	4173	3902	3746
180	3841	3841	3841	3841	3841

LUMINANCE DATA (CD/M²)

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

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	1550	1550	1550	1550	1550
10	1877	1889	1871	1688	1499
20	2194	2098	2012	1722	1455
30	2379	2274	2075	1726	1315
40	2513	2418	2104	1651	1113
50	2562	2395	2092	1510	838
60	2523	2393	1978	1275	567
70	2379	2295	1827	1018	330
80	2186	2270	1943	818	124
90	2455	2628	2465	1112	68
100	4152	4171	3409	1886	386
110	6199	5854	4775	3020	1144
120	7569	7247	5839	4041	2108
130	7960	7632	6572	4949	3152
140	8241	7848	7227	5836	4281
150	8272	8100	7441	6534	5243
160	8080	7961	7613	6927	6240
170	7730	7766	7365	7124	6814
180	7137	7137	7137	7137	7137

LUMINANCE DATA (CD/M²)

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