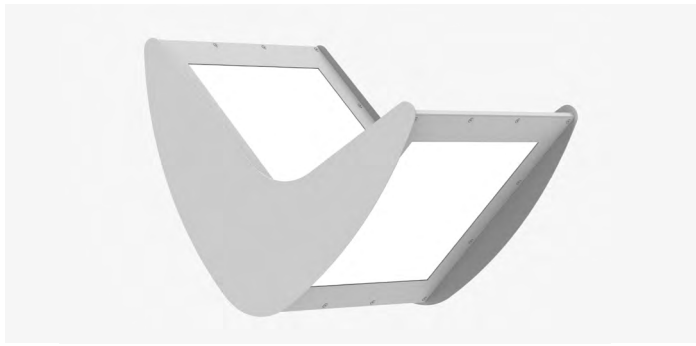


NATA NATADI

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

- Standard natatorium finish and IP65 rated
- Suitable for highly humid and corrosive environments
- Direct / Indirect distribution
- Efficacy up to 122 lm/W

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-RKI

QTY	NATA DI Series	1	2	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.		1 120 V 2 277 V 3 347 V 4 UNV (120 - 277V)		— None (leave space empty)		I Integral R Remote ¹		90 90 CRI, High R9 RK Retrofit Kit* (Not UL approved) RKI Retrofit Kit Inverse Mount (75D / 25U) (Not UL approved) — 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 (lm/W)
L1	15611	128	122
L2	26843	236	114
L3	47000	470	100

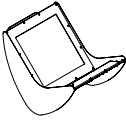
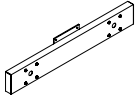
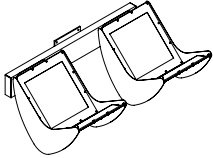
Lumen Adjustment Factor

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

2. MOUNTING KITS

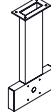
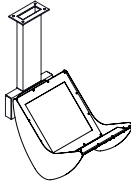
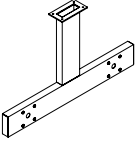
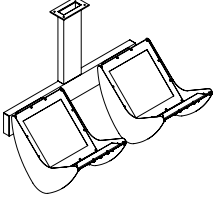
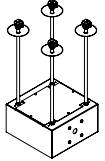
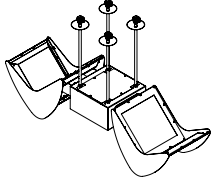
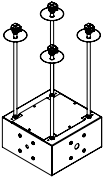
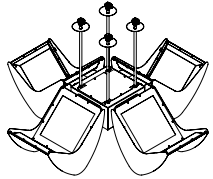
Wall Mount

	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*

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		

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*

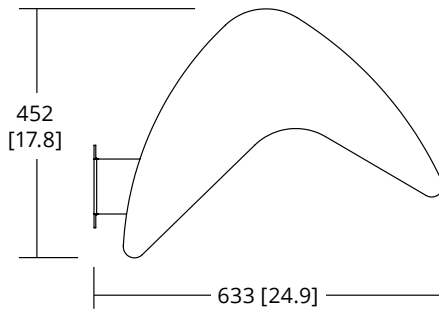
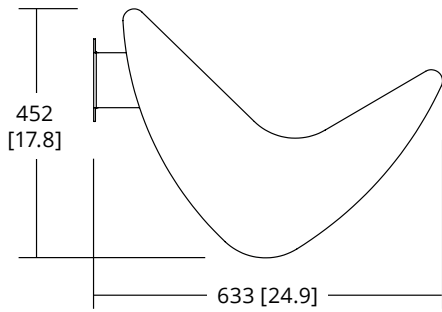
SA Single Arm Pendant		
DA Double Arm Pendant		
DP Double Pendant		
QP Quad Pendant		 <small>Remote driver option not available with Quad Pendant NATADI.</small>

*** FINISH**

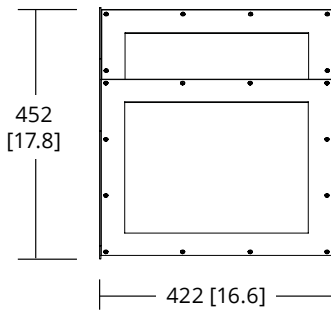
NW Natatorium White
NC Natatorium Custom Specify RAL# _____

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

CROSS SECTIONS



Inverse Mount



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. This product is not cULus listed when retrofitted.

Environment: Suitable for wet locations. IP65 rated.

NATADI WEIGHTS

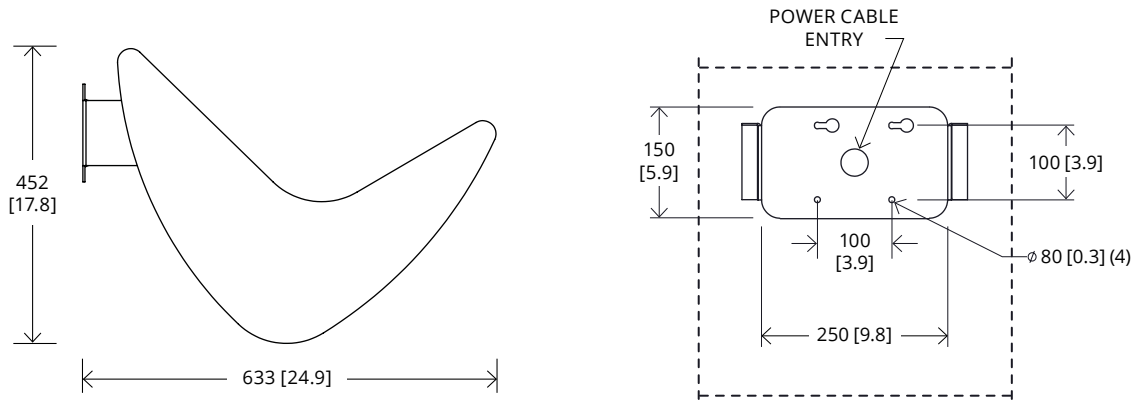
Fixture Type	Integral Fixture	Remote Fixture	Weight of brackets / hangers
Single Wall	10 kg [22.2lbs]	7.5 kg [16.5 lbs] (stand alone weight)	
Double Wall	24.8 kg [54.6 lbs]	19.8 kg [43.6 lbs]	4.8 kg [10.5 lbs]
Single Arm (max length 5 ft)	16.8 kg [36.9 lbs]	14.3 kg [31.4 lbs]	6.75 kg [14.9 lbs]
Double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

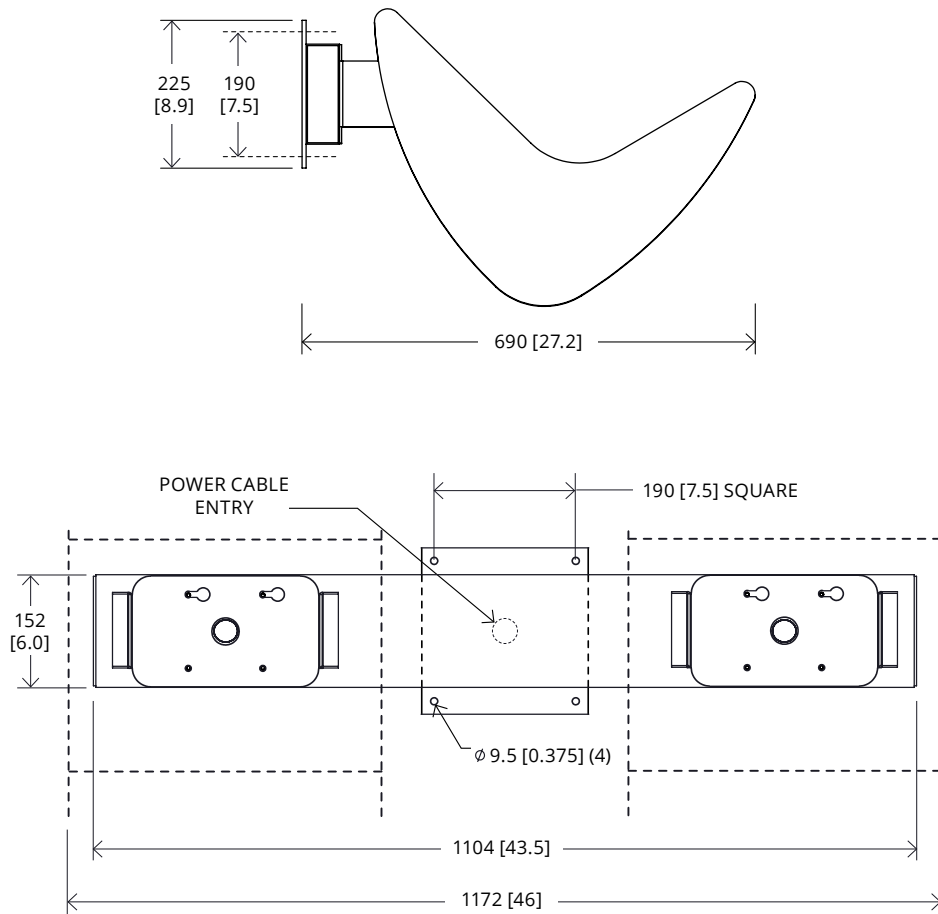
Metalumen will warrant defective luminaires for 5 years from date of purchase. Warranty is valid if luminaire is installed and used according to specification. If defective, Metalumen will send replacement boards or drivers at no cost along with detailed replacement instructions and instructions on how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

MOUNTING ARRANGEMENTS - WALL 

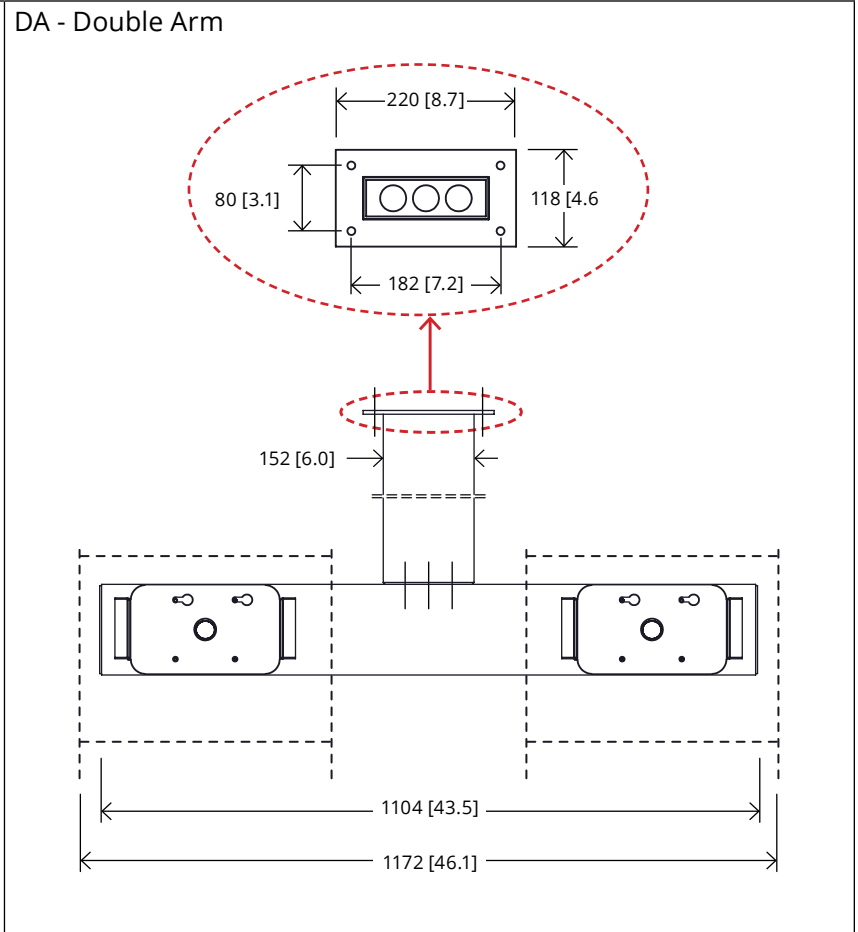
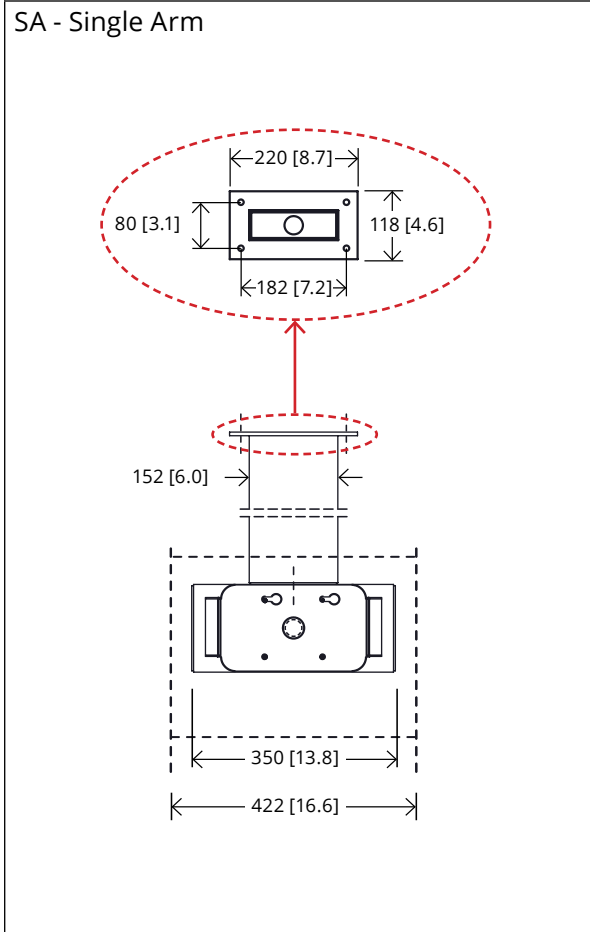
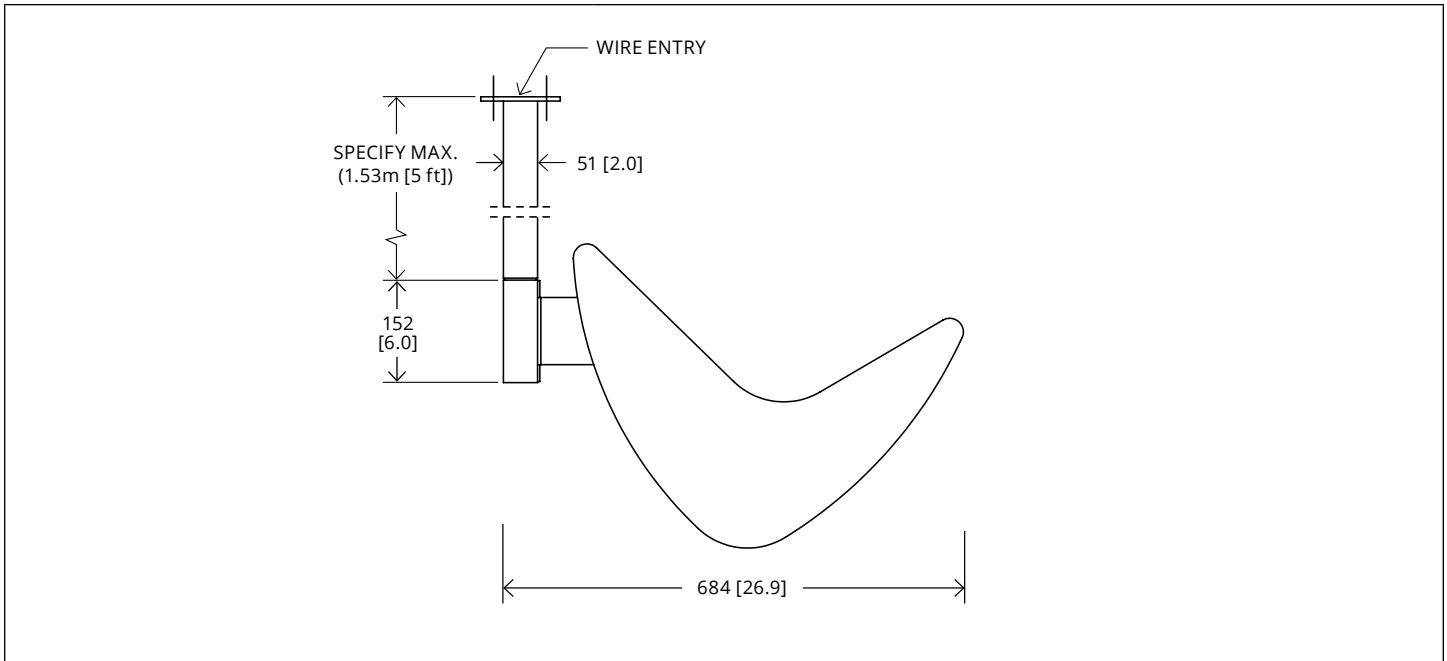
SW - Single Wall



DW - Double Wall

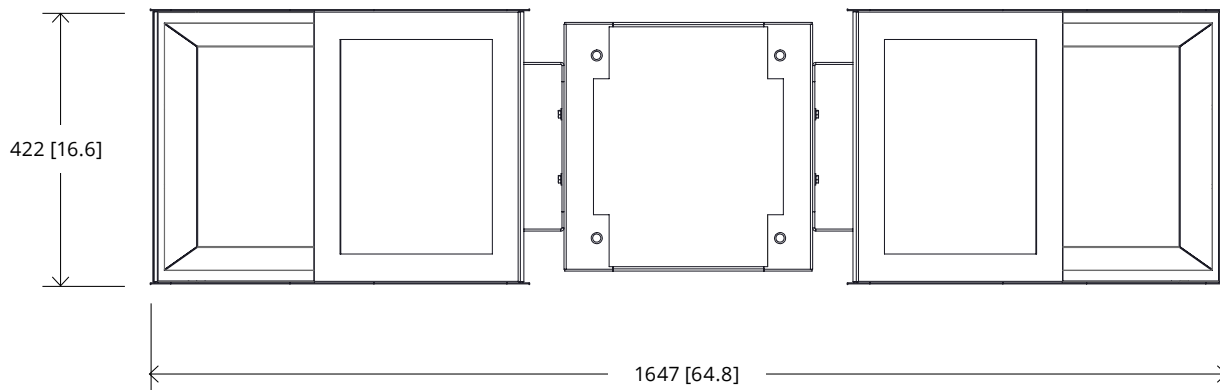
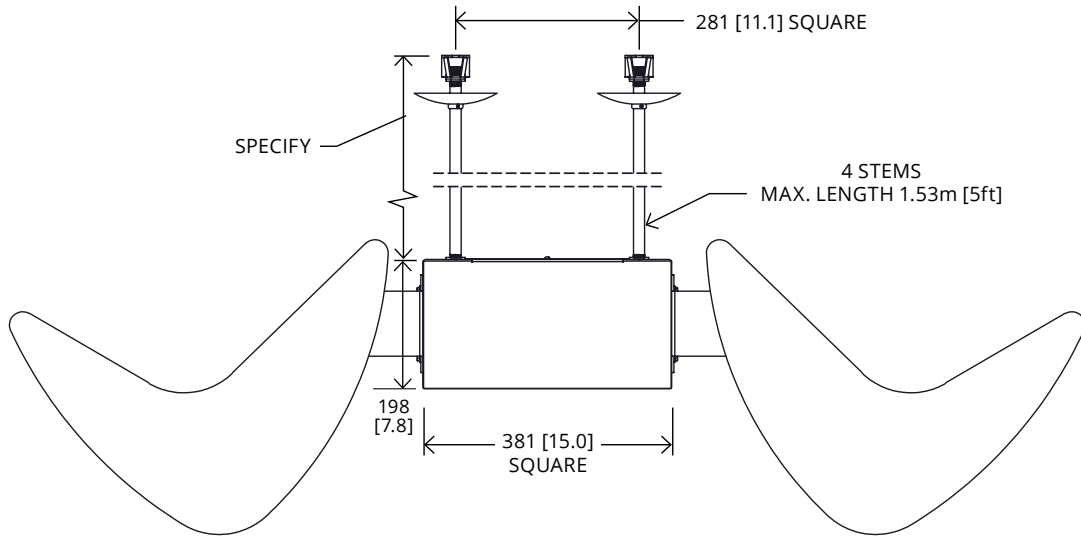


MOUNTING ARRANGEMENTS - PENDANT ARM



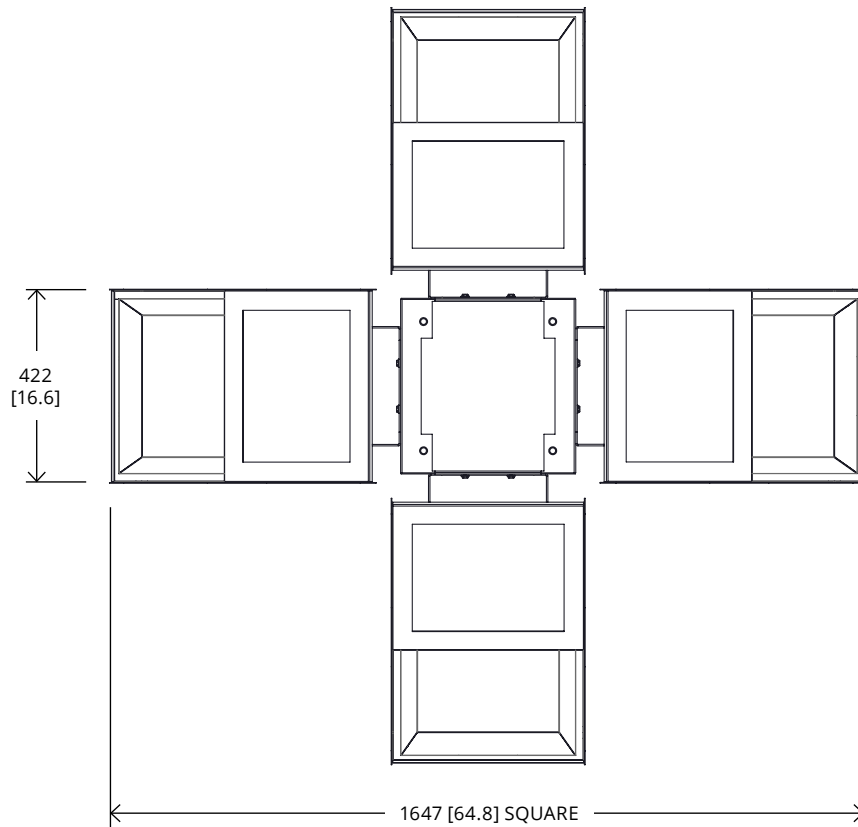
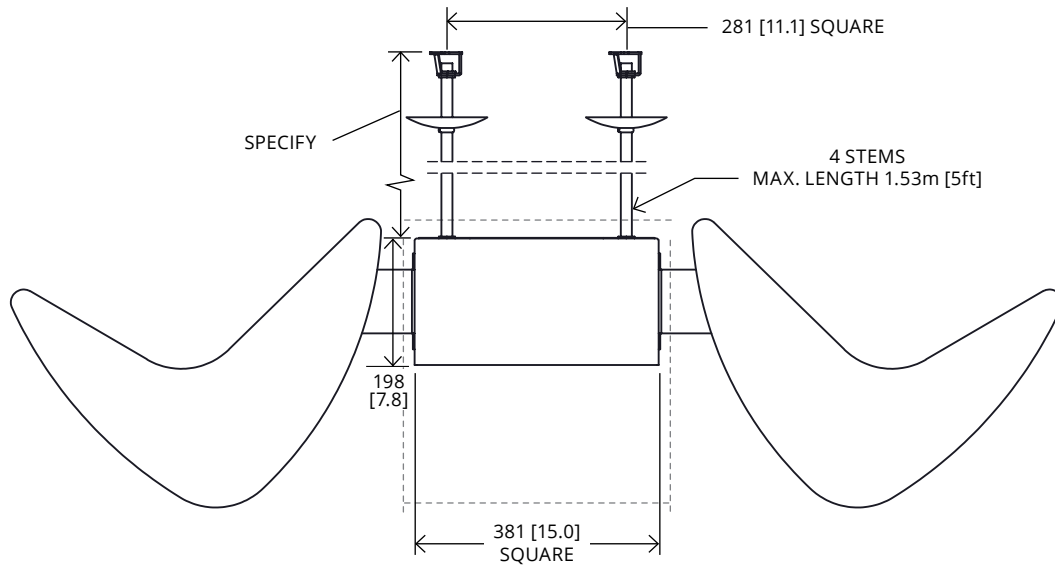
MOUNTING ARRANGEMENTS - PENDANT

DP - Double Pendant

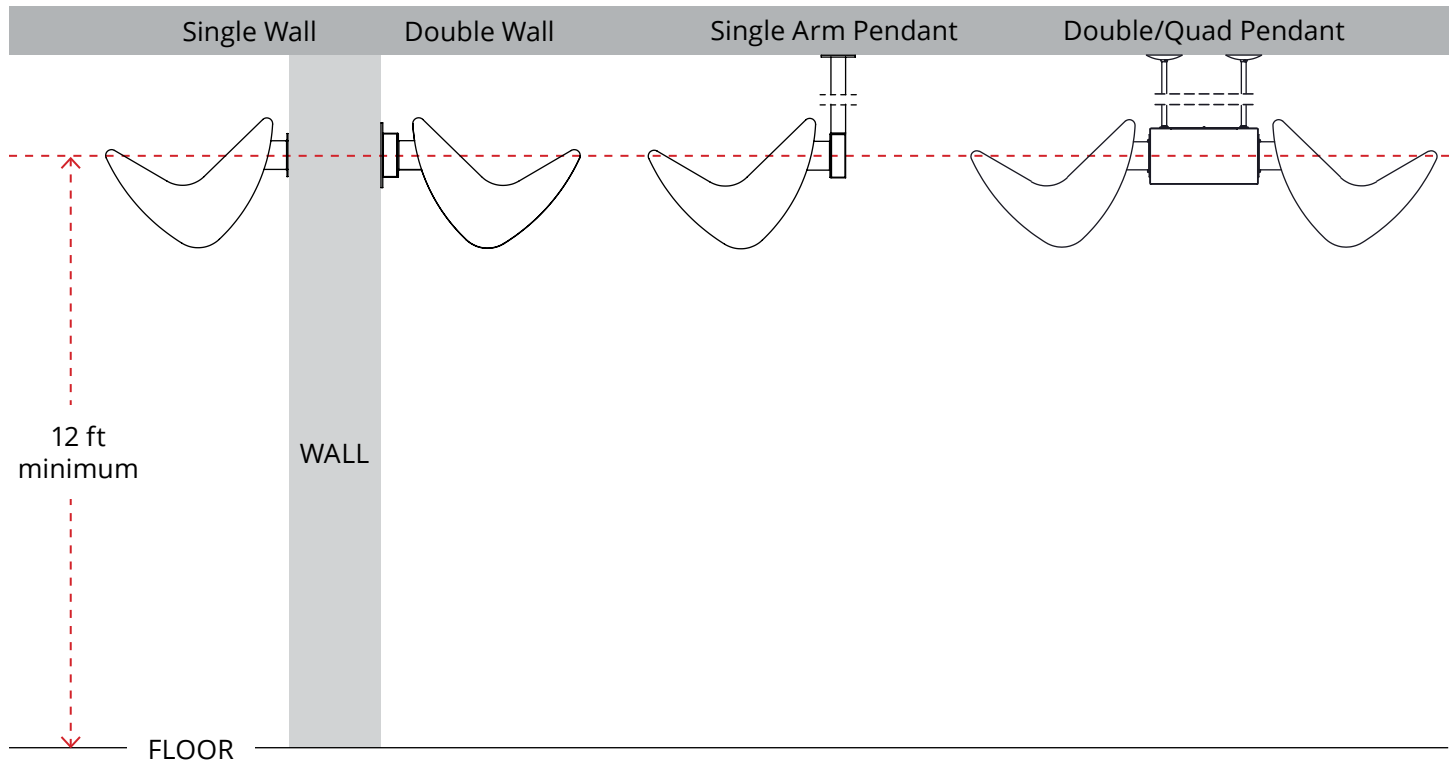


MOUNTING ARRANGEMENTS - PENDANT

QP - Quad Pendant



MOUNTING - MINIMUM DISTANCE FROM FLOOR

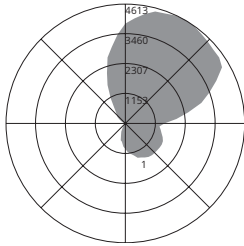


PHOTOMETRIC DATA - 4000K, CRI 80

Optics Up: **Nata Clear Lens**
 Optics Down: **Meta Ice**
 IES File: **NATADI-22L40K-NCM-L1**
 Lumens: **15593** Wattage: **128**
 Efficacy: **122 lm/W**

PHOTOMETRIC CURVE

26% Down
74% Up



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
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

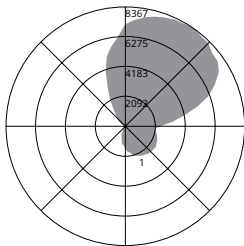
LUMINANCE DATA (CD/M²)

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: **26831** Wattage: **236**
 Efficacy: **114 lm/W**

PHOTOMETRIC CURVE

76% Up
24% Down



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
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)

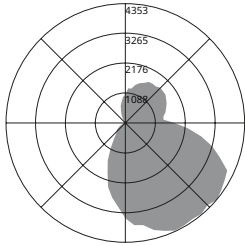
Vertical Angle	Horizontal Angle		
	0	45	90
45	7926	4964	2531
55	8384	4768	1793
65	8739	4544	1215
75	9160	4667	604
85	9891	6021	219

PHOTOMETRIC DATA - 4000K, CRI 80, INVERSE MOUNT

Optics Up: **Nata Clear Lens**
 Optics Down: **Meta Ice**
 IES File: **NATADI-22L40K-NCM-L1-RKI**
 Lumens: **15605** Wattage: **127.8**
 Efficacy: **122 lm/W**

PHOTOMETRIC CURVE

73% Up
27% Down



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	1226	7.9
0-30	2567	16.5
0-40	4149	26.6
0-60	7545	48.4
0-80	10421	66.8
0-90	11326	72.6
10-90	11005	70.5
20-40	2923	18.7
20-50	4614	29.6
40-70	4990	32
60-80	2875	18.4
70-80	1282	8.2
80-90	905	5.8
90-110	1170	7.5
90-120	1742	11.2
90-130	2335	15
90-150	3448	22.1
90-180	4279	27.4
110-180	3109	19.9
0-180	15605	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	113	113	113	113	107	107	107	107	96	96	96	
1	100	95	90	85	95	90	85	81	80	77	74	
2	90	81	74	68	85	77	70	65	69	64	59	
3	82	71	62	55	77	67	59	53	60	54	49	
4	75	62	53	46	70	59	51	44	53	46	41	
5	68	55	46	39	64	52	44	38	47	40	35	
6	63	49	40	34	59	47	39	33	42	36	30	
7	58	45	36	30	55	43	34	29	39	32	27	
8	54	41	32	26	51	39	31	25	35	28	24	
9	50	37	29	23	48	35	28	23	32	26	21	
10	47	34	26	21	45	33	25	20	30	23	19	

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	3470	3470	3470	3470	3470
10	3777	3875	3761	3578	3325
20	4180	4191	3889	3582	3090
30	4297	4202	3889	3476	2746
40	4316	4098	3774	3087	2363
50	4353	4128	3545	2777	1809
60	4173	4041	3281	2297	1258
70	3662	3541	2838	1771	728
80	2800	2730	2169	1221	286
90	1780	1876	1613	705	50
100	1412	1481	1292	515	42
110	1581	1529	1222	603	149
120	1712	1640	1310	811	311
130	1786	1682	1405	991	495
140	1736	1693	1451	1117	702
150	1717	1615	1458	1164	877
160	1533	1508	1351	1187	971
170	1270	1309	1200	1133	1089
180	1027	1027	1027	1027	1027

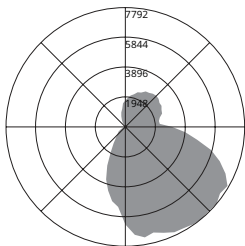
LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0	45	90
45	13177	8810	5234
55	13915	8025	3956
65	14474	7541	2707
75	13076	6404	1422
85	10854	5221	469

Optics Up: **Nata Clear Lens**
 Optics Down: **Meta Ice**
 IES File: **NATADI-22L40K-NCM-L2-RKI**
 Lumens: **26854** Wattage: **235.9**
 Efficacy: **114 lm/W**

PHOTOMETRIC CURVE

75% Down
25% Up



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	2218	8.3
0-30	4636	17.3
0-40	7466	27.8
0-60	13463	50.1
0-80	18518	69
0-90	20069	74.7
10-90	19489	72.6
20-40	5248	19.5
20-50	8245	30.7
40-70	8801	32.8
60-80	5055	18.8
70-80	2251	8.4
80-90	1551	5.8
90-110	1893	7.1
90-120	2797	10.4
90-130	3729	13.9
90-150	5479	20.4
90-180	6784	25.3
110-180	4891	18.2
0-180	26854	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	113	113	113	113	107	107	107	107	97	97	97	
1	101	95	90	86	95	90	86	82	81	78	75	
2	91	82	74	68	86	78	71	65	70	65	60	
3	82	71	62	56	78	68	60	53	61	55	49	
4	75	63	53	47	71	60	51	45	54	47	41	
5	69	56	46	40	65	53	45	38	48	41	36	
6	63	50	41	34	60	48	39	33	43	36	31	
7	59	45	36	30	55	43	35	29	39	32	27	
8	54	41	32	27	51	39	31	26	36	29	24	
9	51	37	29	24	48	36	28	23	33	26	22	
10	48	34	27	21	45	33	26	21	30	24	20	

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	6357	6357	6357	6357	6357
10	7308	6853	6645	6231	6139
20	7336	7242	6939	6469	5508
30	7620	7539	6842	6215	4932
40	7792	7566	6746	5464	4053
50	7781	7389	6306	4782	3094
60	7687	7200	5801	3996	2192
70	6556	6271	5057	3163	1289
80	4763	4649	3794	2161	500
90	3029	3151	2728	1249	94
100	2232	2342	2096	831	73
110	2546	2404	1899	945	253
120	2729	2572	2019	1244	506
130	2834	2656	2220	1520	772
140	2809	2645	2284	1768	1122
150	2659	2561	2253	1850	1364
160	2393	2365	2145	1863	1572
170	2077	2051	2027	1851	1682
180	1707	1707	1707	1707	1707

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0	45	90
45	24019	15678	9198
55	24615	14069	6975
65	25473	13316	4723
75	23155	11221	2497
85	18648	9012	829