

NATA NATAI

LED . INDIRECT



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

PERFORMANCE SUMMARY at 4000K	LIGHT LEVEL L1
Lumens	15506
Wattage	128.6
Efficacy	121
Color Rendering (CRI) ¹	80+
L70 Estimate (h)	≥ 54,000 hrs

¹ For CRI 90, please refer to Lumen Adjustment Factor chart below.

FEATURES

- Efficacy up to 121 LPW
- 80+ CRI is standard with option of 90 CRI
- IP65

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

Example Part Number: NATAI-18L40K-NC-NW-L21-1-R-90

QTY	NATA I	1	2	NC	3	4	5	6	1	7	8	9	10	11	12
1. MODEL / SIZE		2. COLOR TEMP		3. OPTICS UP		4. OPTICS DOWN		5. FINISH			6. LIGHT LEVEL / DRIVER				
I Indirect Only		18L30K 3000K 18L35K 3500K 18L40K 4000K		NC Nata Clear Lens		— None (leave space empty)		NW Natatorium White NC Natatorium Custom Specify RAL:			L1 L2* See "Light Level Performance at 4000K" chart below				
		90 CRI is available under OPTIONS									* L2 is remote driver only				
7. CIRCUITRY		8. MOUNTING		9. VOLTAGE		10. CONTROLS		11. DRIVER LOCATION		12. OPTIONS					
1 1 Circuit		Select Mounting Kit in STEP 2.		1 120V 2 277V 3 347V 4 UNV (120 - 277V)		— None (leave space empty)		I Integral R Remote		90 90 CRI, High R9 RK Retrofit Kit ** _ None (leave space empty)					
										** Fixture includes mounting bracket to adapt NATAI to existing AW7 arms. See pages 4-7 for more info.					

Light Level Performance at 4000K

Light Level	NATAI		
	Lumens	Wattage	Efficacy (LPW)
L1	15506	128.6	121
L2	26265	242	109

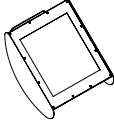
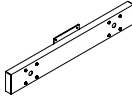
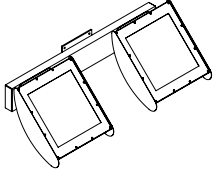
Lumen Adjustment Factor

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

2. MOUNTING KITS


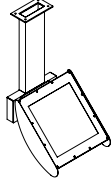
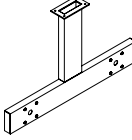
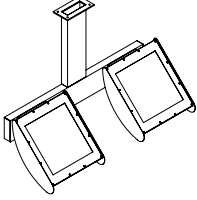
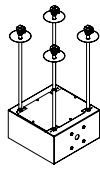
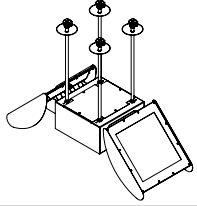
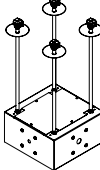
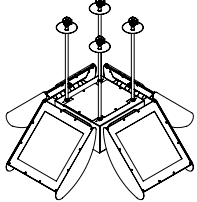
Wall Mount

	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	NATAI
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*

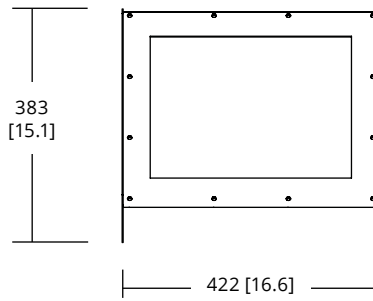
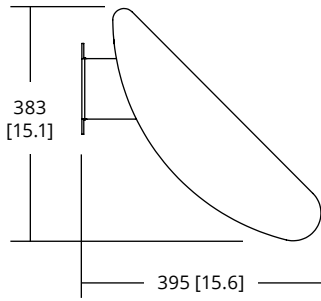
SA Single Arm Pendant		
DA Double Arm Pendant		
DP Double Pendant		
QP Quad Pendant		

* 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



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 35°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.

NATAI WEIGHTS

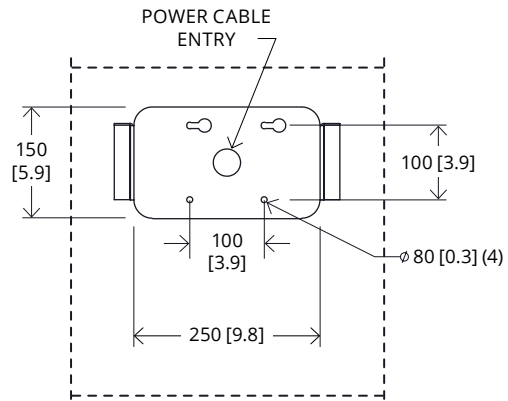
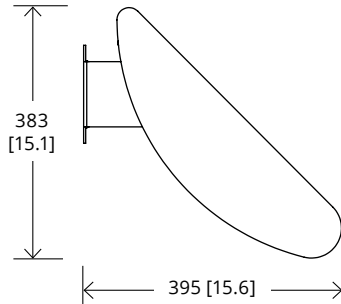
Fixture Type	Integral Fixture	Remote Fixture	Weight of brackets / hangers
Single Wall	6 kg [13.3lbs]	4 kg [8.8 lbs] (stand alone weight)	
Double Wall	16.8 kg [37.0 lbs]	12.8 kg [28.1 lbs]	4.8 kg [10.5 lbs]
Single Arm (max length 5 ft)	12.8 kg [28.2lbs]	10.8 kg [23.7 lbs]	6.75 kg [14.9 lbs]
Double Arm (max length 5 ft)	21.3kg [47.1 lbs]	17.3 kg [38.2 lbs]	9.3 kg [20.6 lbs]
Double Pendant (max length 5 ft)	22.2 kg [48.9 lbs]	18.2 kg [40.0 lbs]	10.2 kg [22.4 lbs]
Quad Pendant (max length 5 ft)	34.5 kg [76.2 lbs]	26.5 kg [58.4 lbs]	10.5 kg [23.1 lbs]

WARRANTY

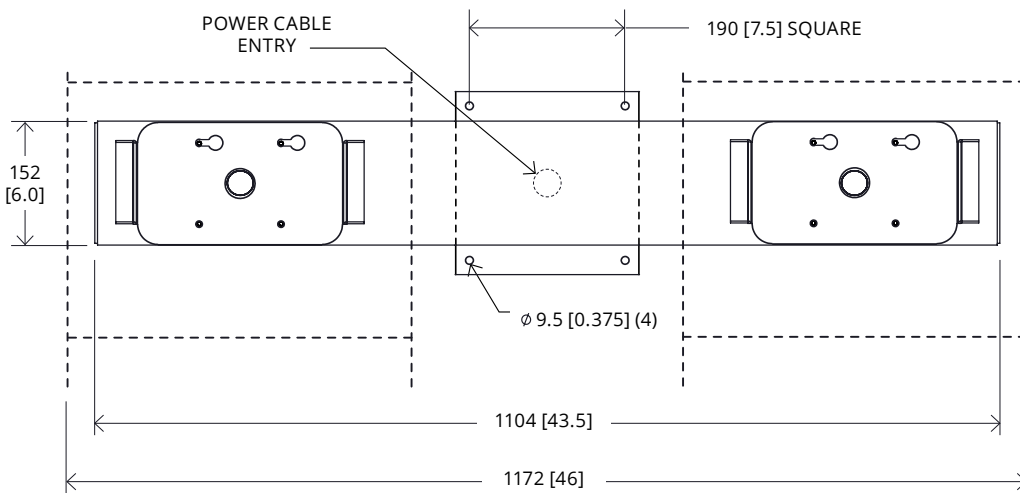
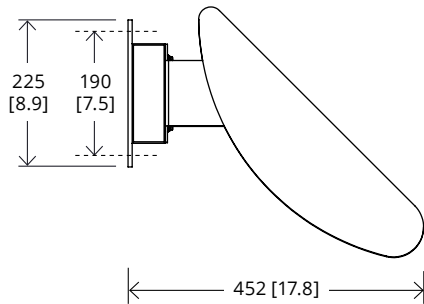
Metalumen will warrant defective luminaires for 5 years from date of purchase. Warranty is valid if luminaire is installed and used according to specification. If defective, Metalumen will send replacement boards or drivers at no cost along with detailed replacement instructions and instructions on how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

MOUNTING ARRANGEMENTS - WALL

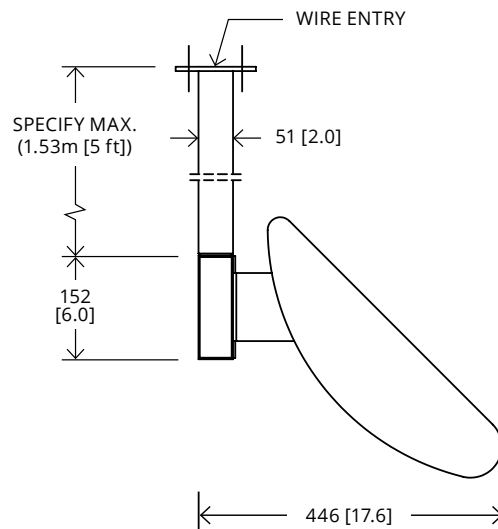
SW - Single Wall



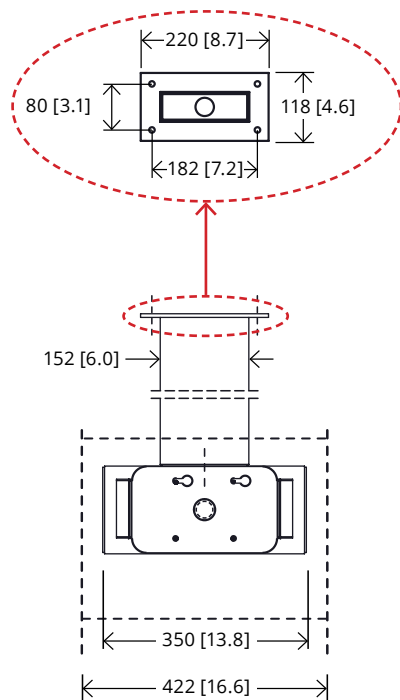
DW - Double Wall



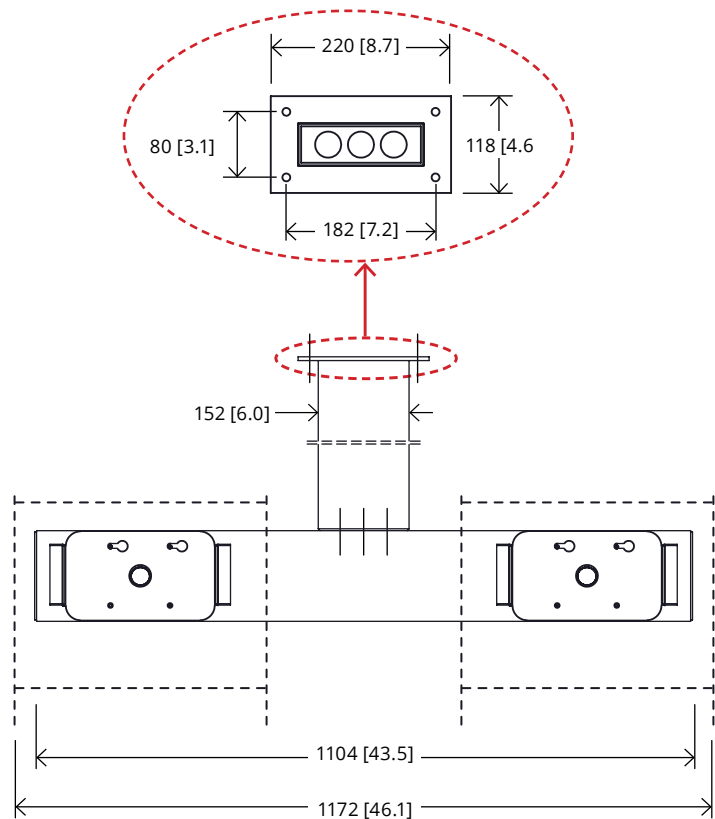
MOUNTING ARRANGEMENTS - PENDANT ARM



SA - Single Arm

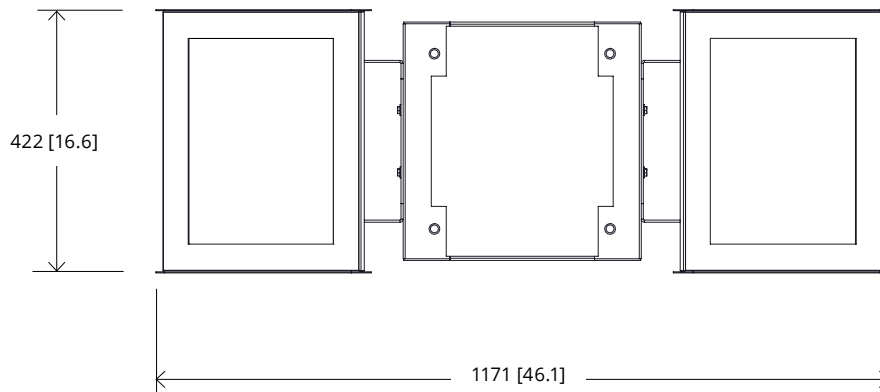
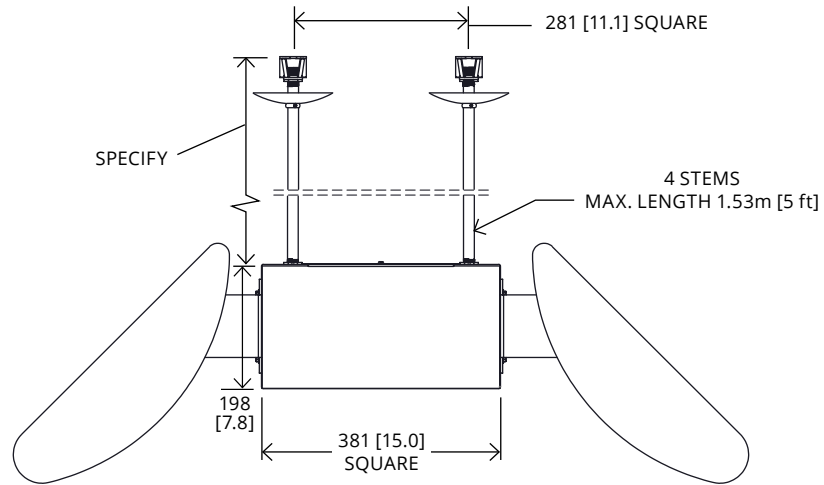


DA - Double Arm



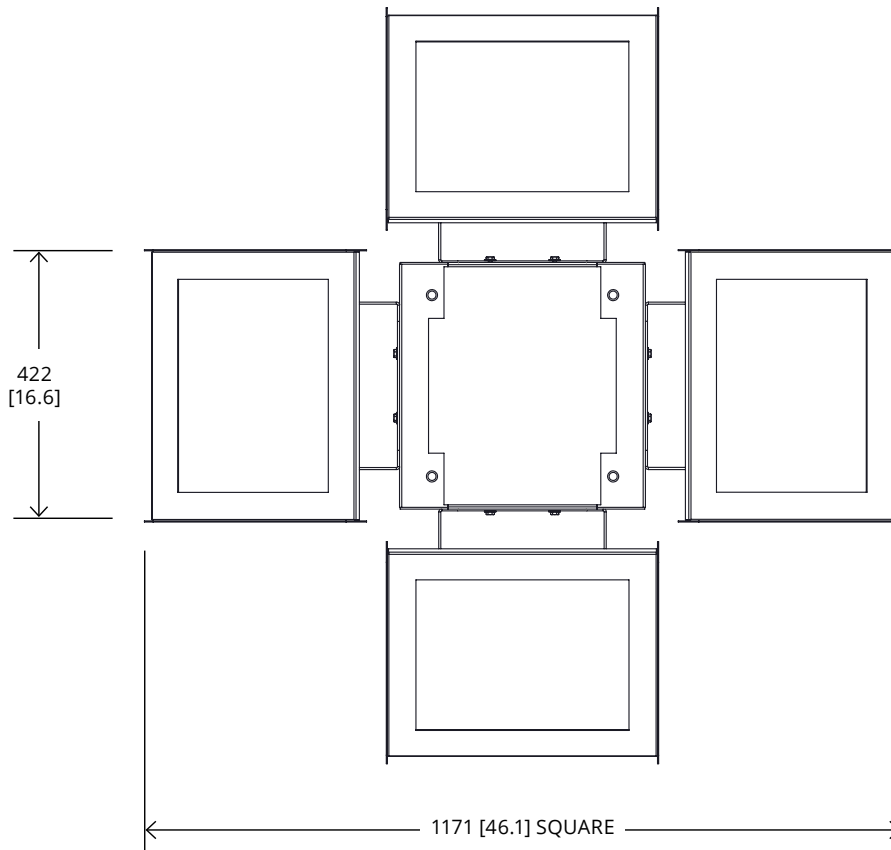
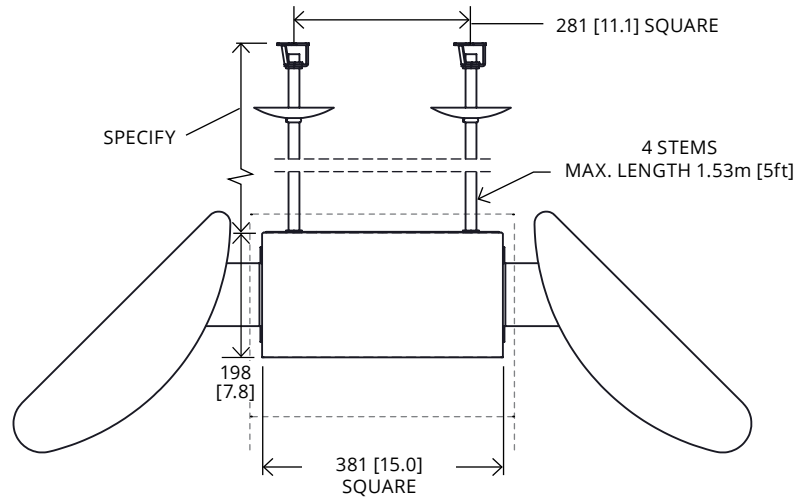
MOUNTING ARRANGEMENTS - PENDANT

DP - Double Pendant

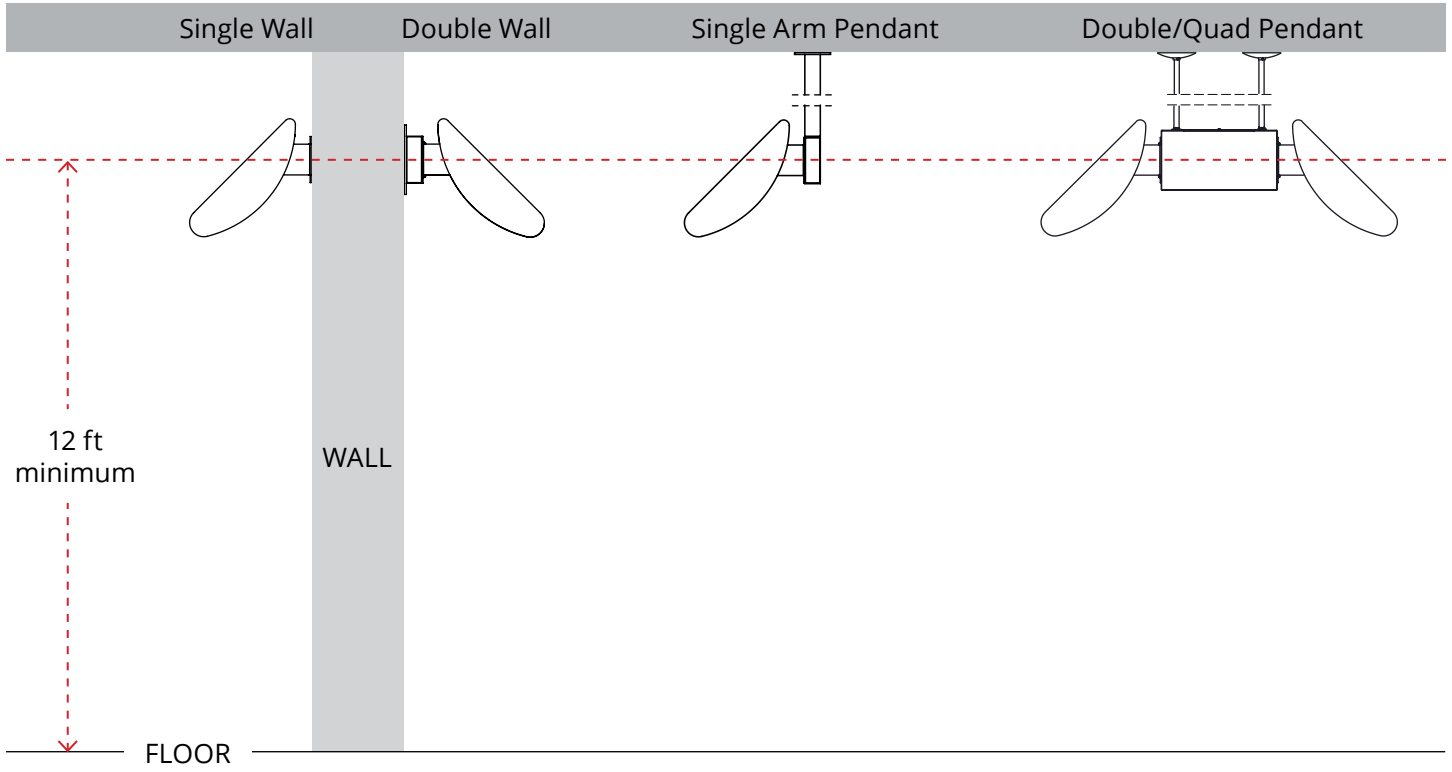


MOUNTING ARRANGEMENTS - PENDANT

QP - Quad Pendant



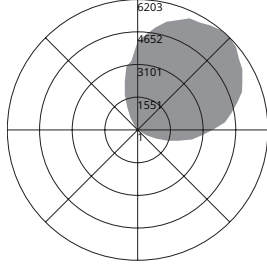
MOUNTING - MINIMUM DISTANCE FROM FLOOR



PHOTOMETRIC DATA - 4000K, CRI 80

Optics: **Nata Clear Lens**
 IES File: **NATAI-18L40K-NC-L1**
 Lumens: **15506** Wattage: **129**
 Efficacy: **121**

PHOTOMETRIC CURVE
 10% Down
 90% Up



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	0	0
0-30	0	0
0-40	0	0
0-60	32	0.2
0-80	685	4.4
0-90	1545	10
10-90	1544	10
20-40	0	0
20-50	1	0
40-70	212	1.4
60-80	653	4.2
70-80	473	3
80-90	859	5.5
90-110	2965	19.1
90-120	4894	31.5
90-130	6952	44.8
90-150	10899	70.2
90-180	13971	90
110-180	11007	70.9
0-180	15516	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	98	98	98	98	85	85	85	85	61	61	61	61
1	86	81	77	73	74	70	66	63	50	47	45	45
2	78	70	63	58	67	60	55	50	42	39	36	36
3	71	61	53	47	61	53	46	41	37	33	29	29
4	64	54	46	40	55	46	40	34	33	28	24	24
5	59	47	39	33	50	41	34	29	29	24	21	21
6	54	42	34	29	46	37	30	25	26	21	18	18
7	50	38	30	25	43	33	26	21	23	19	15	15
8	46	34	27	21	39	30	23	19	21	16	13	13
9	43	31	24	19	37	27	21	16	19	15	12	12
10	40	28	21	16	34	24	18	14	17	13	10	10

CANDELA DISTRIBUTION

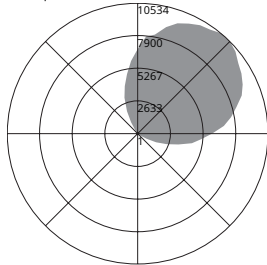
Vertical Angle	Horizontal Angle			
	0	22.5	45	67.5 90
0	0	0	0	0
5	0	0	0	0
10	0	0	0	0
15	0	0	0	0
20	0	0	0	0
25	0	0	0	0
30	0	0	0	0
35	0	0	0	0
40	0	0	0	0
45	1	0	0	0
50	57	26	0	0
55	182	100	9	0
60	513	315	56	0
65	979	702	186	2
70	1511	1163	436	22
75	2009	1651	765	77
80	2624	2207	1177	208
85	3050	2669	1638	434
90	3573	3146	2067	732
95	4171	3741	2603	1087
100	4532	4168	3015	1458
105	4895	4554	3429	1793
110	5274	4907	3785	2201
115	5489	5159	4091	2569
120	5746	5404	4396	2889
125	5872	5608	4653	3211
130	6106	5723	4927	3482
135	6203	5843	5029	3744
140	6165	5826	5135	4005
145	6045	5813	5203	4234
150	5881	5713	5224	4351
155	5843	5650	5234	4423
160	5535	5411	5018	4507
165	5314	5196	4881	4385
170	4933	4810	4730	4366
175	4528	4491	4580	4302
180	4188	4188	4188	4188

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle	
	0	45 90
45	3	0
55	798	34
65	4513	685
75	10079	2978
85	17364	6971

Optics: **Nata Clear Lens**
 IES File: **NATAI-18L40K-NC-L2**
 Lumens: **26265** Wattage: **242**
 Efficacy: **109**

PHOTOMETRIC CURVE
 10% Down
 90% Up



ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	0	0
0-30	0	0
0-40	0	0
0-60	55	0.2
0-80	1156	4.4
0-90	2608	9.9
10-90	2608	9.9
20-40	0	0
20-50	2	0
40-70	357	1.4
60-80	1101	4.2
70-80	799	3
80-90	1452	5.5
90-110	5020	19.1
90-120	8287	31.5
90-130	11773	44.8
90-150	18476	70.3
90-180	23672	90.1
110-180	18652	71
0-180	26281	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	98	98	98	98	85	85	85	85	61	61	61	61
1	86	81	77	73	74	70	66	63	50	47	45	45
2	78	70	63	58	67	60	55	50	42	39	36	36
3	71	61	53	47	61	53	46	41	37	33	29	29
4	64	54	46	40	55	46	40	34	33	28	24	24
5	59	47	39	33	51	41	34	29	29	24	21	21
6	54	42	34	29	46	37	30	25	26	21	18	18
7	50	38	30	25	43	33	26	21	23	19	15	15
8	46	34	27	21	39	30	23	19	21	16	13	13
9	43	31	24	19	37	27	21	16	19	15	12	12
10	40	28	21	16	34	24	18	14	17	13	10	10

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle			
	0	22.5	45	67.5 90
0	1	1	1	1
5	0	0	0	0
10	0	0	0	0
15	0	0	0	0
20	0	0	0	0
25	0	0	0	0
30	0	0	0	0
35	0	0	0	0
40	0	0	0	0
45	2	0	0	0
50	92	47	0	0
55	303	173	17	0
60	854	540	91	0
65	1668	1174	312	3
70	2517	1982	712	36
75	3416	2768	1278	139
80	4441	3719	2042	358
85	5172	4507	2735	724
90	6033	5339	3495	1231
95	6998	6432	4417	1855
100	7666	7054	5108	2485
105	8261	7645	5784	3084
110	8951	8238	6408	3713
115	9359	8747	6904	4358
120	9668	9130	7445	4929
125	9907	9424	7922	5437
130	10296	9748	8358	5918
135	10519	9908	8584	6335
140	10534	9929	8703	6803
145	10213	9791	8851	7166
150	10080	9766	8865	7368
155	9781	9555	8700	7508
160	9446	9198	8576	7638
165	8994	8788	8276	7430
170	8096	8277	7881	7397
175	7860	7726	7595	7315
180	6813	6813	6813	6813

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle	
	0	45 90
45	9	0
55	1327	63
65	7687	1151
75	17137	4975
85	29442	11640