

Nata

NATAI Indirect

NATADI Direct/Indirect



CAT #:

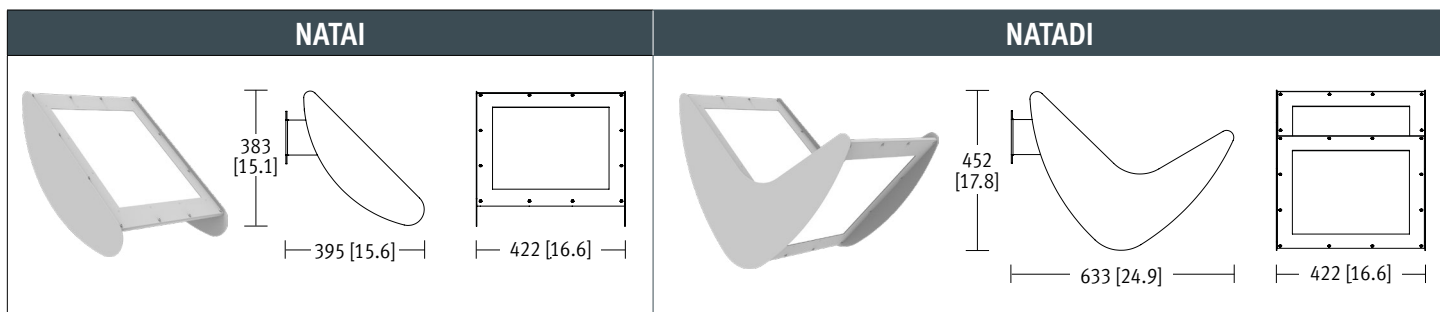
PREP BY:

DATE:

PROJECT:

TYPE:

NOTES:



ORDERING STEPS:

1. Complete **ORDERING LOGIC**

2. Complete **MOUNTING KITS** selection

1. ORDERING LOGIC

NATAI (Indirect)

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

Optics											
QTY	NATA	I		NC				1			
Model/Size	Series	Model/Size	Color Temp	Up	Down	Finish	LL/Driver	Circuitry	Voltage	Controls	Driver Loc.
I = Indirect Only		_ = None (leave space empty)		Light Level (LL) / Driver				Circuitry		Driver Location	
Color Temp		Finish		Performance at 4000K				Voltage		Options	
18L30K = 3000K		NW = Natatorium White		Light Level	Wattage	Lumens	Efficacy	1 = 1 Circuit		I = Integral	
18L35K = 3500K		NC = Natatorium Custom		L1	128.6	15506	121	1 = 120 V		R = Remote	
18L40K = 4000K		Specify RAL#:		L2*	242	26265	109	2 = 277 V		Options	
Optics Up				* L2 is remote only				3 = 347 V		90 = 90 CRI	
NC = Nata Clear Lens				Lumen Adjustment Factor				4 = UNV (120 - 277 V)		_ = None (leave space empty)	
				Color Temp	80 CRI	90 CRI		Controls			
				3000K	0.953	0.846		_ = None (leave space empty)			
				3500K	0.969	0.848					
				4000K	1.000	0.852					

NATADI (Direct/Indirect)

Example Part Number: NATADI-22L40K-NCM-NW-L21-1-I-90

Optics											
QTY	NATA	DI		NC	M						
Model/Size	Series	Model/Size	Color Temp	Up	Down	Finish	LL/Driver	Circuitry	Voltage	Controls	Driver Loc.
DI = Direct/Indirect		M = Meta Ice		Light Level (LL) / Driver				Circuitry		Controls	
Color Temp		Finish		Performance at 4000K				UD = Up / Down Switching		Driver Location	
22L30K = 3000K		NW = Natatorium White		Light Level	Wattage	Lumens	Efficacy	1 = 1 Circuit		_ = None (leave space empty)	
22L35K = 3500K		NC = Natatorium Custom		L1	128	15611	122	UD = Up / Down Switching		I = Integral	
22L40K = 4000K		Specify RAL#:		L2	236	26843	114	(Consult factory)		R = Remote ¹	
Optics Up				Lumen Adjustment Factor				Voltage		Options	
NC = Nata Clear Lens				Color Temp	80 CRI	90 CRI		1 = 120 V		90 = 90 CRI	
				3000K	0.953	0.846		2 = 277 V		_ = None (leave space empty)	
				3500K	0.969	0.848		3 = 347 V			
				4000K	1.000	0.852		4 = UNV (120 - 277 V)			

1. Not available with Quad Pendant Mounting.

APPROVALS

Signature

Date

FILE NAME: NATA_SPEC_SHEET_20180426

570 Southgate Drive, Guelph, Ontario N1G 4P6
Mailing Address: P.O. Box 1779 Guelph, Ontario, N1H 6Z9

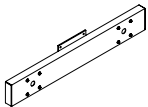
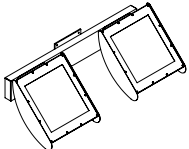
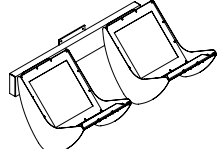
1.800.621.6785 | T 519.822.4381 | F 519.822.4589
www.metalumen.com

Metalumen

2. MOUNTING KITS

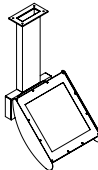
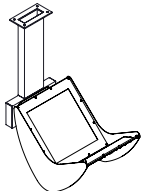
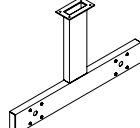
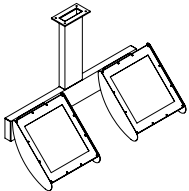
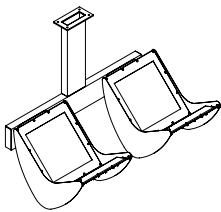
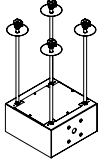
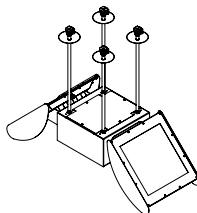
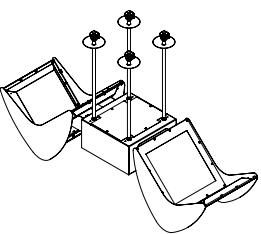
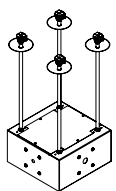
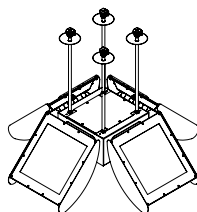
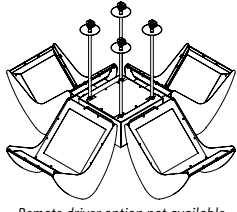
WALL MOUNT

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

	MOUNTING KIT	INDIRECT	DIRECT/INDIRECT
SW Single Wall	Single wall mount included. Specify appropriate mounting kit for all other applications.		
DW Double Wall			

PENDANT MOUNT

	NATASA-I		
QTY	Pendant Mount (Integral Driver)	Indicate arm length (Max. 5 ft**)	FINISH*
	NATASA-R		
QTY	Pendant Mount (Remote Driver)	Indicate arm length (Max. 5 ft**)	FINISH*
	NATADA-I		
QTY	Pendant Mount (Integral Driver)	Indicate arm length (Max. 5 ft**)	FINISH*
	NATADA-R		
QTY	Pendant Mount (Remote Driver)	Indicate arm length (Max. 5 ft**)	FINISH*
	NATADP-I		
QTY	Pendant Mount (Integral Driver)	Indicate arm length (Max. 5 ft**)	FINISH*
	NATADP-R		
QTY	Pendant Mount (Remote Driver)	Indicate arm length (Max. 5 ft**)	FINISH*
	NATAQP-I		
QTY	Pendant Mount (Integral Driver)	Indicate arm length (Max. 5 ft**)	FINISH*
	NATAQP-R		
QTY	Pendant Mount (Remote Driver)	Indicate arm length (Max. 5 ft**)	FINISH*

SA Single (Arm) Pendant			
DA Double (Arm) Pendant			
DP Double Pendant			
QP Quad Pendant			 Remote driver option not available with Quad Pendant NATADI.

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

AW7 ADAPTER BRACKET

				AB
QTY	Fill as per above Mount selection	Indicate arm length (Max. 5 ft**) (For Pendant)	FINISH*	AW7 Adapter Bracket

*FINISH

NW = Natatorium White

NC = Natatorium Custom Specify RAL#

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: MetaLED 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 > 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 mount
- double arm pendant mount
- double pendant mount
- quad pendant mount

Wall mounting is available in two options:

- single wall mount
- double wall mount

Electrical: 120V or 277V/347 V prewired. Standard drivers feature electronic universal voltage (120-277V, 347V/ 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). 0-10V dimming standard with DALI option available for 120-277V. Max amp draw @120V is 2.03Amps, @277V is 0.88Amps, @347 is 0.7Amps.

Approvals: This product is cULus listed.

Environment: Suitable for wet locations. IP65 rated.

WEIGHT

FIXTURE TYPE	NATADI (Direct-Indirect)		NATAI (Indirect)		Weight of brackets / hangers
	Integral Fixture	Remote Fixture	Integral Fixture	Remote Fixture	
Single Wall	10 kg [22.2 lbs]	7.5 kg [16.5 lbs] <i>(stand alone weight)</i>	6 kg [13.3 lbs]	4 kg [8.8 lbs] <i>(stand alone weight)</i>	
Double Wall	24.8 kg [54.6 lbs]	19.8 kg [43.6 lbs]	16.8 kg [37.0 lbs]	12.8 kg [28.1 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]	12.8 kg [28.2 lbs]	10.8 kg [23.7 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]	21.3 kg [47.1 lbs]	17.3 kg [38.2 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]	22.2 kg [48.9 lbs]	18.2 kg [40.0 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]	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.

FEATURES

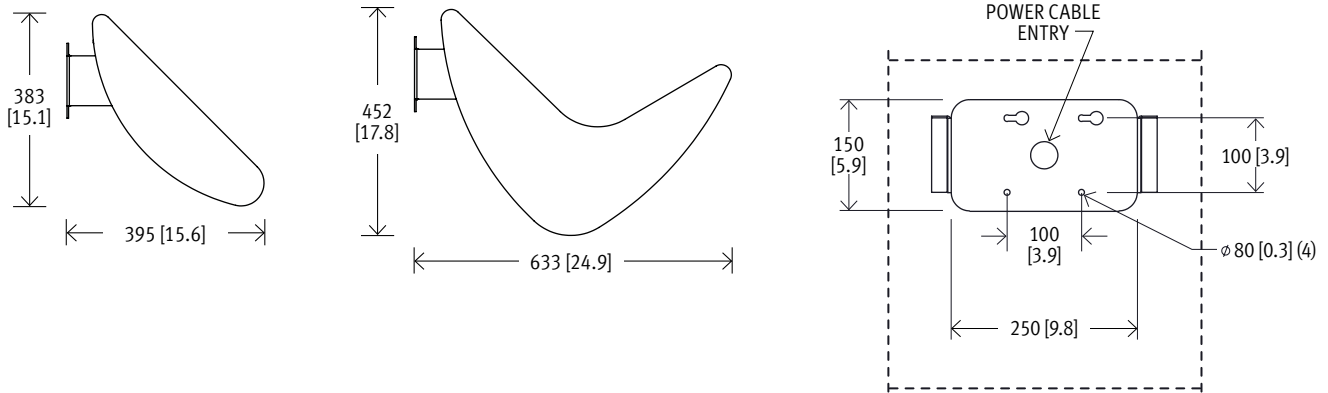


EDULUMEN // Educational Lighting

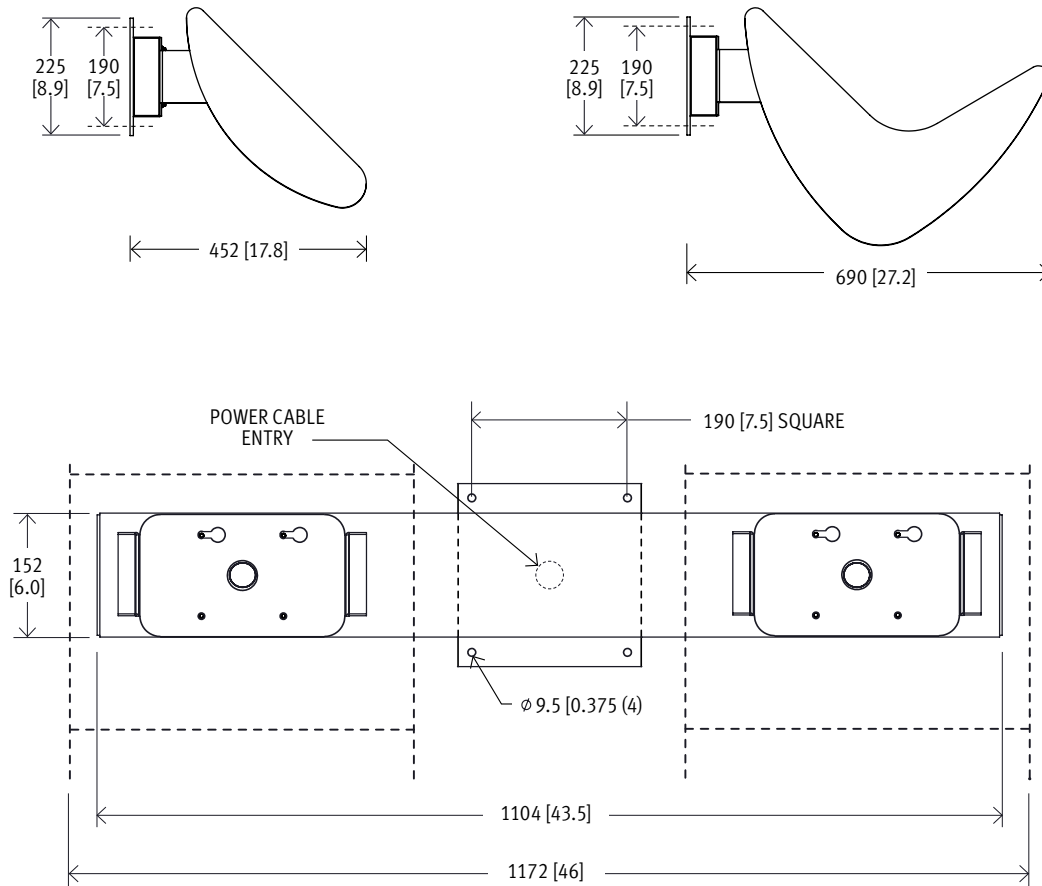
Edulumen is a collection of premium luminaires that maximize both the functionality and performance of any educational facility. Based on maximum efficiency, integration of controls and exceptional design, Edulumen will earn high marks for meeting your requirements. Metalumen is dedicated to creating sustainable environments that foster enhanced educational experiences.

MOUNTING ARRANGEMENTS - WALL

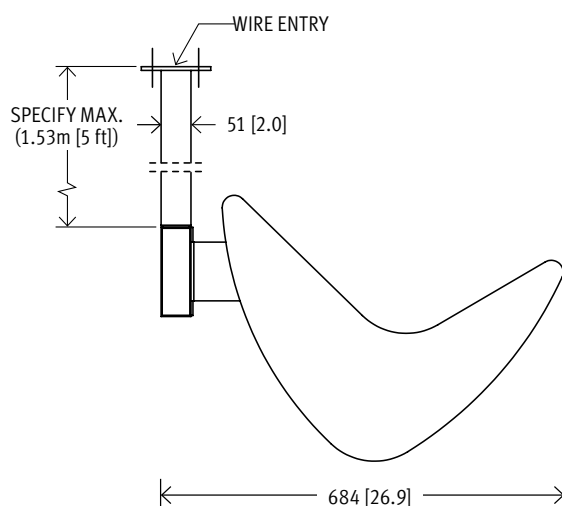
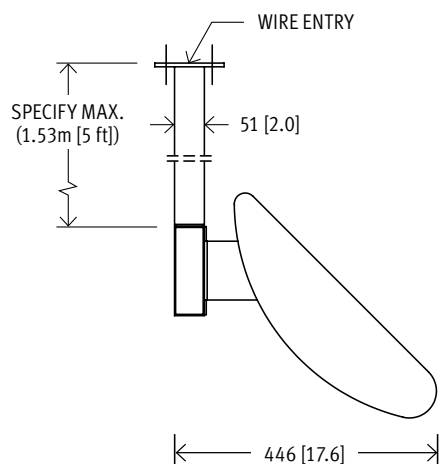
SW - SINGLE WALL



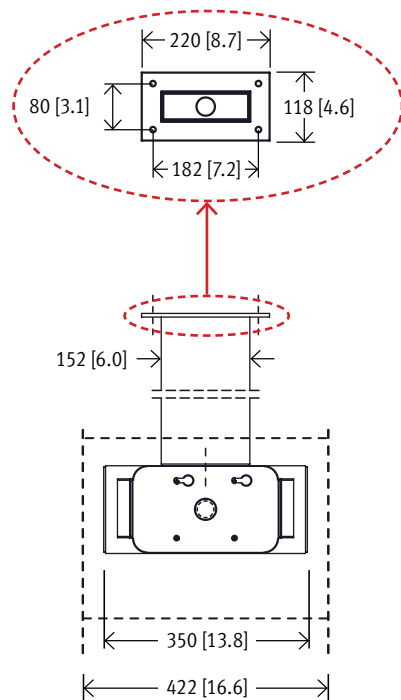
DW - DOUBLE WALL



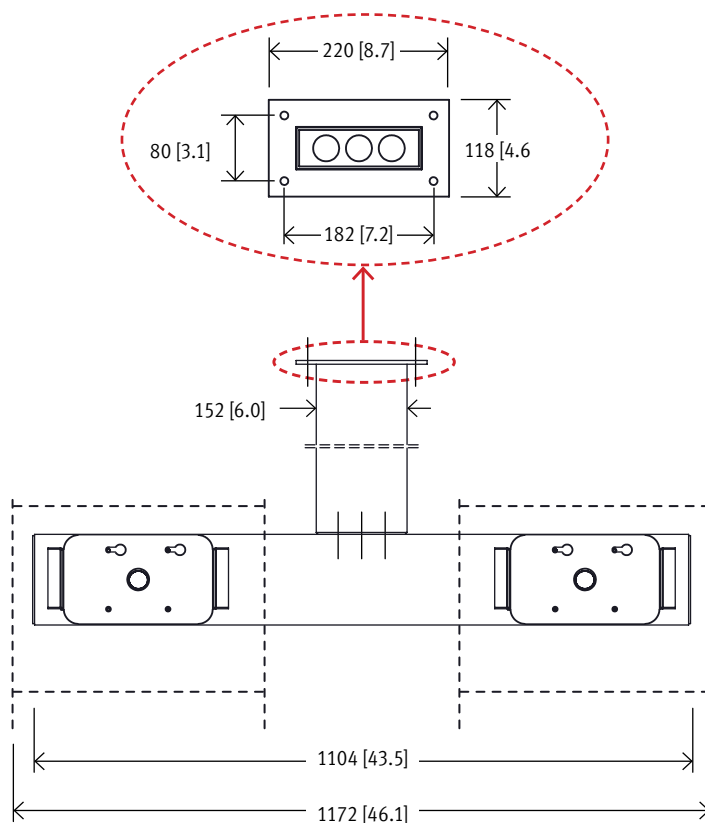
MOUNTING ARRANGEMENTS - PENDANT ARM



SA - SINGLE ARM

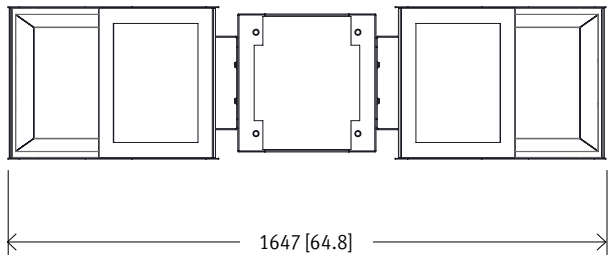
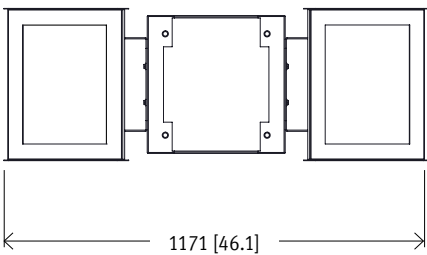
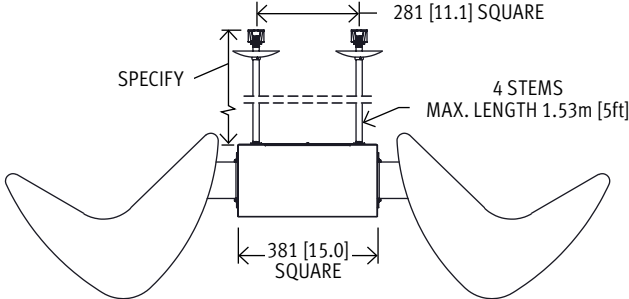
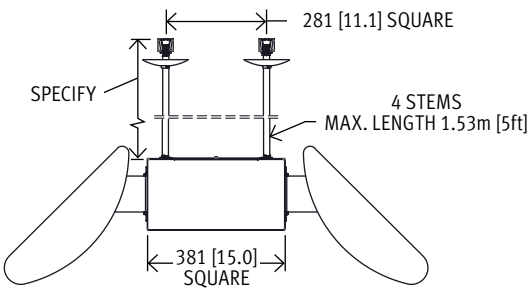


DA - DOUBLE ARM



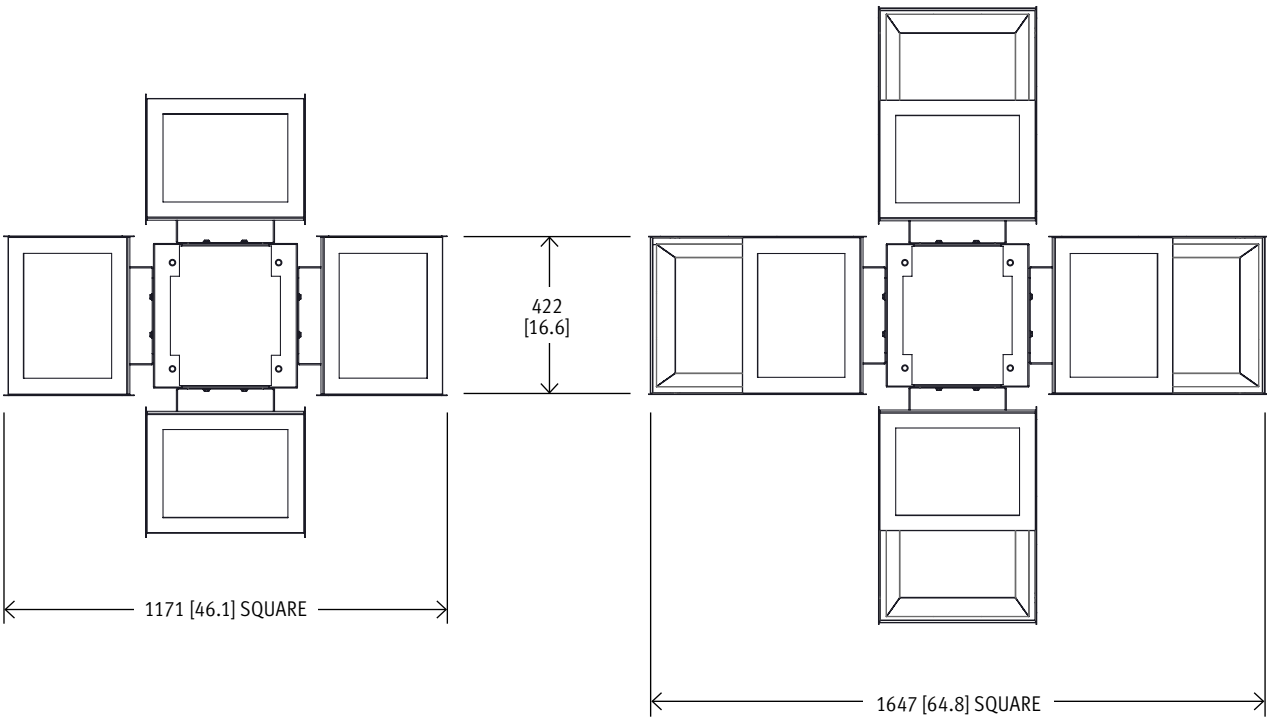
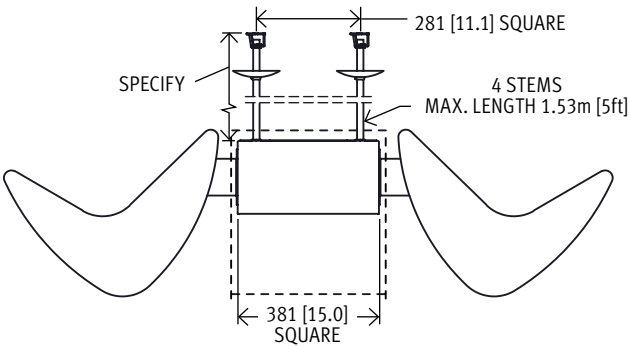
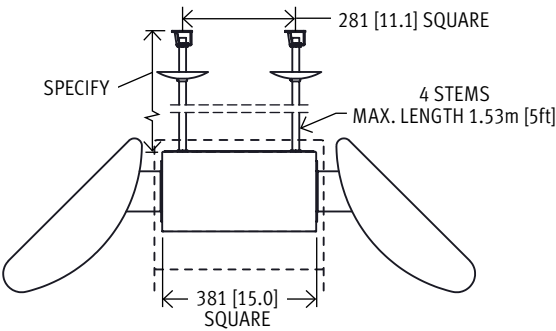
MOUNTING ARRANGEMENTS - PENDANT

DP - DOUBLE PENDANT



MOUNTING ARRANGEMENTS

QP - Quad Pendant



PHOTOMETRIC DATA - 4000K - NATAI

L1

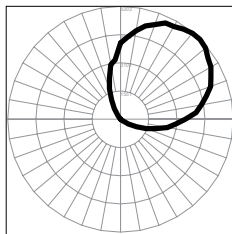
File Name: NATAI-18L40K-NC-L1
Luminaire Lumens: 15506
Total Watts: 129
Efficacy: 121 lms/W
Optics Up: Nata Clear Lens

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	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

PHOTOMETRIC CURVE



LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0	45	90
45	3	0	0
55	798	34	0
65	4513	685	0
75	10079	2978	0
85	17364	6971	19

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	0	0	0	0	0
5	0	0	0	0	0
10	0	0	0	0	0
15	0	0	0	0	0
20	0	0	0	0	.12
25	0	0	0	0	.14
30	0	0	0	0	.14
35	0	0	.03	0	0
40	0	0	0	.05	0
45	.72	0	0	.09	0
50	56.94	26.44	0	0	0
55	181.91	99.73	9.42	.02	0
60	512.57	314.88	55.77	0	0
65	979.28	701.56	185.58	2.24	0
70	1511.1	1163.37	436.37	21.63	0
75	2009.4	1651.45	764.9	76.93	0
80	2623.77	2206.5	1176.99	207.81	0
85	3050.32	2668.65	1638.04	434.07	3.15
90	3573.36	3145.83	2066.61	731.57	22.83
95	4170.68	3740.89	2603.13	1086.87	82.16
100	4531.98	4167.76	3015.45	1458.18	188.5
105	4894.74	4554	3429.2	1792.83	377.82
110	5274.33	4907.39	3785.11	2201.24	641.74
115	5489.01	5158.83	4091.07	2569.09	936.34
120	5745.52	5403.99	4395.57	2888.55	1255.5
125	5871.69	5607.73	4652.74	3210.94	1598.24
130	6106.22	5723.22	4926.93	3481.95	1963.91
135	6202.86	5842.6	5028.56	3744.32	2308.82
140	6165.3	5826.46	5134.73	4004.56	2634.73
145	6044.57	5813.46	5202.76	4233.86	2925.64
150	5880.89	5713.17	5224.16	4350.93	3235.5
155	5842.9	5650.13	5234.32	4422.63	3508.35
160	5534.62	5410.6	5017.82	4507.24	3671.57
165	5314.35	5196.49	4880.7	4384.54	3871.43
170	4933.25	4810.38	4729.91	4366.15	4022.51
175	4528.09	4491.43	4579.86	4302.3	4121.39
180	4187.8	4187.8	4187.8	4187.8	4187.8

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	0.00	0.00
0-30	0.01	0.00
0-40	0.02	0.00
0-60	32.27	0.20
0-80	685.08	4.40
0-90	1544.5	10.00
10-90	1544.49	10.00
20-40	0.02	0.00
20-50	1.44	0.00
40-70	212.10	1.40
60-80	652.80	4.20
70-80	472.95	3.00
80-90	859.42	5.50
90-110	2964.66	19.10
90-120	4894.46	31.50
90-130	6951.75	44.80
90-150	10899.37	70.20
90-180	13971.33	90.00
0-180	15515.83	100.00

L2

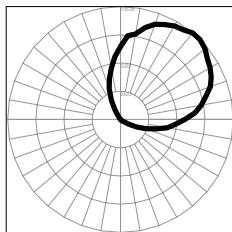
File Name: NATAI-18L40K-NC-L2
Luminaire Lumens: 26265
Total Watts: 242
Efficacy: 109 lms/W
Optics Up: Nata Clear Lens

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	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

PHOTOMETRIC CURVE



LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angle		
	0	45	90
45	9	0	0
55	1327	63	0
65	7687	1151	0
75	17137	4975	0
85	29442	11640	33

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	.68	.68	.68	.68	.68
5	0	0	0	0	0
10	0	0	0	0	0
15	0	0	0	0	0
20	0	.37	0	0	0
25	0	0	0	0	0
30	0	0	.17	.12	0
35	0	0	0	0	0
40	0	0	0	0	0
45	2.11	0	0	0	0
50	92.05	46.93	.15	0	0
55	302.51	173.32	17.43	0	0
60	853.72	539.96	90.84	0	0
65	1667.99	1174.15	311.97	3.39	0
70	2517.07	1981.92	712.45	35.74	0
75	3416.45	2768.14	1277.96	139.48	0
80	4440.78	3718.55	2041.71	357.96	0
85	5172.17	4507.28	2735.16	724.29	5.52
90	6033	5338.61	3495.07	1231.02	39.21
95	6997.77	6432.24	4416.92	1855.06	136.88
100	7666.03	7054.35	5108.36	2484.6	323.04
105	8260.8	7644.95	5783.68	3083.79	633.37
110	8951.43	8238.32	6407.58	3712.93	1084.58
115	9359.31	8746.69	6904.36	4358.29	1581.12
120	9667.57	9130.04	7444.69	4928.62	2156.74
125	9906.69	9424.46	7921.67	5437.15	2731.18
130	10296.05	9747.83	8358.34	5917.81	3312.82
135	10519.01	9908.26	8583.58	6334.75	3904.86
140	10533.64	9928.69	8702.93	6803.22	4504.84
145	10213.21	9791.37	8850.5	7166.09	4947.3
150	10079.53	9765.64	8865.26	7368.14	5500.75
155	9780.68	9555.19	8699.79	7508.06	5956.96
160	9445.52	9198.13	8576.24	7637.82	6243.03
165	8893.57	8788.29	8275.55	7430.35	6492.7
170	8096.25	8276.75	7880.95	7396.81	6731.41
175	7860.17	7726.05	7595.33	7314.91	7089.63
180	6813.16	6813.16	6813.16	6813.16	6813.16

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	0.01	0.00
0-30	0.03	0.00
0-40	0.05	0.00
0-60	54.74	0.20
0-80	1156.18	4.40
0-90	2608.47	9.90
10-90	2608.46	9.90
20-40	0.04	0.00
20-50	2.45	0.00
40-70	357.22	1.40
60-80	1101.45	4.20
70-80	798.91	3.00
80-90	1452.28	5.50
90-110	5020.00	19.10
90-120	8287.44	31.50
90-130	11772.98	44.80
90-150	18475.7	70.30
90-180	23672.43	90.10
0-180	18652.43	71.00
0-180	26280.9	100.00

PHOTOMETRIC DATA - 4000K - NATADI

L1

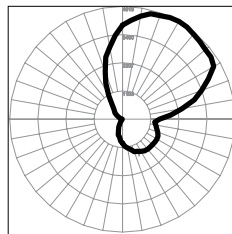
File Name: NATADI-22L40K-NCM-L1
 Luminaire Lumens: 15611
 Total Watts: 128
 Efficacy: 122 lms/W
 Optics Up: Nata Clear Lens
 Optics Down: Meta Ice

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

RC RW	80				70				50			
	70	50	30	10	70	50	30	10	50	30	10	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

PHOTOMETRIC CURVE



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

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	977.54	977.54	977.54	977.54	977.54
5	1111.83	1033.9	1113.83	1067.71	999.02
10	1182.81	1230.62	1133.61	1058.03	1036.73
15	1281.48	1270.2	1238.7	1072.41	975.82
20	1409.47	1353.11	1232.08	1112.49	918
25	1444.82	1432	1297.74	1104.86	905.73
30	1511.57	1483.15	1320.15	1088.54	844.92
35	1574.36	1506.83	1346.53	1081.78	776.8
40	1606.74	1509.71	1351.11	1061.15	708.1
45	1605.97	1563.84	1344.56	1017.14	613.25
50	1610.54	1569.83	1304.2	970.32	520.57
55	1621.61	1534.58	1295.51	906.57	436.99
60	1628.9	1526.91	1250.57	828.47	359.59
65	1607.66	1496.63	1210.08	729.84	278.31
70	1535.1	1454.51	1159.38	645.14	204.35
75	1449.54	1428.12	1154.47	552.71	121.58
80	1382.93	1431.6	1221.33	519.72	67.7
85	1323.72	1449.38	1331.67	546.13	33.35
90	1598.13	1598.13	1482.95	164.99	32.25
95	1984.01	2010.09	1724.55	842.48	86.85
100	2469.05	2427.81	1989.39	1084.44	211.31
105	3041.26	2880.82	2323.87	1414.5	395.08
110	3447.07	3313.62	2704.24	1715.67	649.67
115	3878.04	3733.49	3053.26	2024	947.82
120	4315.53	4048.15	3311.46	2302.29	1217.14
125	4419.24	4185.86	3439.05	2568.59	1550.16
130	4430.11	4192.7	3693.24	2813.47	1820.46
135	4485.59	4321.72	3857.54	3054.73	2174.59
140	4530.1	4424.77	4044.15	3311.69	2451.79
145	4600.67	4433.54	4103.54	3549.77	2714.6
150	4613.44	4488.42	4196.94	3705.22	3003.98
155	4590.19	4546.85	4298.9	3814.91	3291.54
160	4504.65	4465.8	4285.34	3912.28	3460.4
165	4464	4370.62	4304.14	3987.59	3576.37
170	4274.76	4293.85	4172.92	3901.95	3746.05
175	4058.08	4104.5	4127.25	3960.84	3791.17
180	3840.65	3840.65	3840.65	3840.65	3840.65

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	366.43	2.30
0-30	783.00	5.00
0-40	1292.8	8.30
0-60	2425.17	15.50
0-80	3527.47	22.60
0-90	4100.64	26.20
10-90	4006.11	25.60
20-50	926.38	5.90
20-50	1483.36	9.50
40-70	1698.33	10.90
60-80	1102.3	7.10
70-80	536.34	3.40
80-90	573.17	3.70
90-110	1981.76	12.70
90-120	3521.33	22.50
90-130	5252.32	33.60
90-150	8701.46	55.70
90-180	11524.03	73.80
0-180	15624.66	100.00

L2

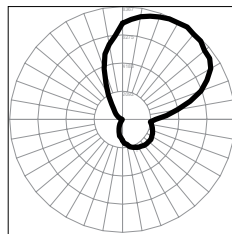
File Name: NATADI-22L40K-NCM-L2
 Luminaire Lumens: 26843
 Total Watts: 236
 Efficacy: 114 lms/W
 Optics Up: Nata Clear Lens
 Optics Down: Meta Ice

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

RC RW	80				70				50			
	70	50	30	10	70	50	30	10	50	30	10	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

PHOTOMETRIC CURVE



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

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	1550.13	1550.13	1550.13	1550.13	1550.13
5	1795.59	1849.92	1702.14	1598.04	1510.82
10	1877.07	1889.28	1870.74	1687.61	1499.03
15	2082.67	2005.3	1892.88	1703.9	1500.5
20	2193.72	2098.25	2012.24	1722.36	1454.73
25	2274.74	2174.15	2041.17	1723.74	1419.47
30	2379.37	2273.86	2074.92	1725.95	1314.61
35	2421.87	2364.49	2089.41	1693.95	1246.6
40	2513.28	2418.09	2103.56	1651.45	1113.18
45	2545.38	2431.98	2104.53	1595.04	983.48
50	2562.42	2394.55	2091.89	1509.7	838.49
55	2571.41	2436.48	2030	1397.38	690.03
60	2523.43	2392.58	1978.31	1275.42	566.75
65	2472.56	2343.49	1884.4	1169.08	448.66
70	2378.75	2295.3	1826.97	1017.71	329.79
75	2295.23	2234.8	1824.99	899.52	206.84
80	2186.08	2269.59	1943.23	818.26	124.1
85	2083.23	2319.27	2140.12	927.78	66.92
90	2455.08	2628.36	2465.37	1111.73	68.23
95	3279.66	3405.75	2943.08	1440.48	168.88
100	4152.47	4170.96	3408.77	1886.17	386.42
105	5206.3	5017.22	4104.6	2466.32	711.66
110	6198.93	5854.09	4774.65	3020.09	1143.72
115	6913.33	6684.32	5463.63	3484.75	1620.22
120	7568.65	7247.24	5838.62	4040.86	2107.83
125	7897.48	7419.92	6223.71	4497.51	2675.82
130	7959.74	7632.38	6571.5	4949	3151.54
135	8229.36	7765.18	6891.3	5449.39	3715.05
140	8240.53	7847.99	7226.99	5836.07	4281.37
145	8366.69	7924.61	7483.95	6206.33	4743.49
150	8272.13	8100.45	7441	6533.71	5242.52
155	8234.05	8120.86	7603.24	6794.82	5819.22
160	8079.9	7960.69	7612.97	6927.28	6240.32
165	7935.91	7911.36	7519.12	7006.24	6490.2
170	7729.69	7766.06	7364.98	7123.89	6814.25
175	7442.79	7316.78	7498.4	7403.66	7111.02
180	7136.53	7136.53	7136.53	7136.53	7136.53

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-20	572.68	2.10
0-30	1222.8	4.60
0-40	2019.51	7.50
0-60	3797.55	14.10
0-80	5534.38	20.60
0-90	6462.06	24.00
10-90	6314.33	23.50
20-40	1446.84	5.40
20-50	2320.73	8.60
40-70	2665.53	9.90
60-80	1736.83	6.50
70-80	849.34	3.20
80-90	927.67	3.50
90-110	3411.64	12.70
90-120	6124.43	22.80
90-130	9175.03	34.10
90-150	15311.37	57.00
90-180	20407.26	76.00
0-180	26869.32	100.00