



UL Verification Services Inc.
7036 Snowdrift Road
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Indoor Distribution Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-10-2014

Prepared For
RBW Studio LLC

Reland Boyle
67 34th St, Mailbox 5, Unit 6A
Brooklyn, NY 11232

Catalog Number
MNT Series Sconce

Order Number
13172593
Test Number
13172593.01

Test Date

2019-12-19

Prepared By

Derek Smarr, Technician

Approved By

Kevin Rodriguez, Project Handler

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Black aluminum housing, frosted plastic lens enclosure
Lamp: 48 white LEDs
Mounting: Surface – Ceiling
Ballast/Driver: L.T.F. DA12W24VLIT24-0000 Dimmable LED Driver

Luminaire



Luminaire Characteristics

Luminous Diameter: 4.50 in.
Luminous Height: 0.250 in.

Summary of Results

Total Luminaire Output:	339.7 Lumens
Luminaire Efficacy:	38.2 lm/w
Maximum Candela:	104 Candela

Test Conditions

Test Temperature:	24.4 °C
Voltage:	120.0 VAC
Current:	0.07614 A
Power:	8.894 W
Power Factor:	0.973
Frequency:	60 Hz
Current THD:	7.32 %

Laboratory results may not be representative of field performance
Ballast factors have not been applied



Distribution - Goniophotometer

Distribution Test Conditions

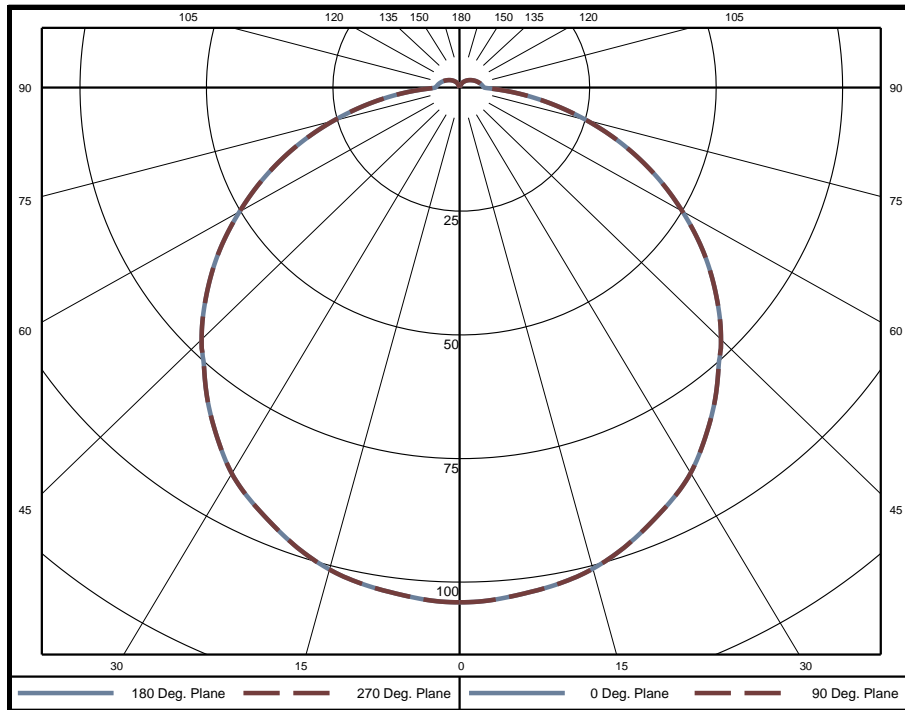
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.4 °C	120.0 VAC	0.07614 A	8.894 W	0.973	60 Hz	7.32 %

Summary of Results

Spacing Criteria
 0-180: 1.28
 90-270: 1.28

Total Lumen Output: 339.7 Lumens
Luminaire Efficacy: 38.2 lm/w
Maximum Candela: 104 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	2.48	0.7%	60-65	22.46	6.6%	120-125	1.30	0.4%
5-10	7.36	2.2%	65-70	19.31	5.7%	125-130	1.09	0.3%
10-15	12.05	3.5%	70-75	15.61	4.6%	130-135	0.89	0.3%
15-20	16.35	4.8%	75-80	11.57	3.4%	135-140	0.71	0.2%
20-25	20.10	5.9%	80-85	7.56	2.2%	140-145	0.55	0.2%
25-30	23.31	6.9%	85-90	3.90	1.1%	145-150	0.40	0.1%
30-35	25.67	7.6%	90-95	2.53	0.7%	150-155	0.27	0.1%
35-40	27.11	8.0%	95-100	2.36	0.7%	155-160	0.04	0.0%
40-45	27.74	8.2%	100-105	2.18	0.6%	160-165	0	0.0%
45-50	27.75	8.2%	105-110	1.97	0.6%	165-170	0	0.0%
50-55	26.81	7.9%	110-115	1.75	0.5%	170-175	0	0.0%
55-60	25.01	7.4%	115-120	1.52	0.4%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	134	39.6%
0-60	242	71.2%
0-90	322	94.8%
90-180	18	5.2%



Candela Tabulation

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
	0	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1	104.1
	5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5	103.5
	10	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4
	15	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6	100.6
	20	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
	25	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
	30	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
	35	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3
	40	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
	45	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
	50	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
	55	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0
	60	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2
	65	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2
	70	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1
	75	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7
	80	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7
	85	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
	90	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
	95	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
	100	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
	105	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
	110	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	115	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	120	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	125	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
	130	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	135	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
	140	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	145	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	150	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
	155	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
	160	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	170	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	175	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	180	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

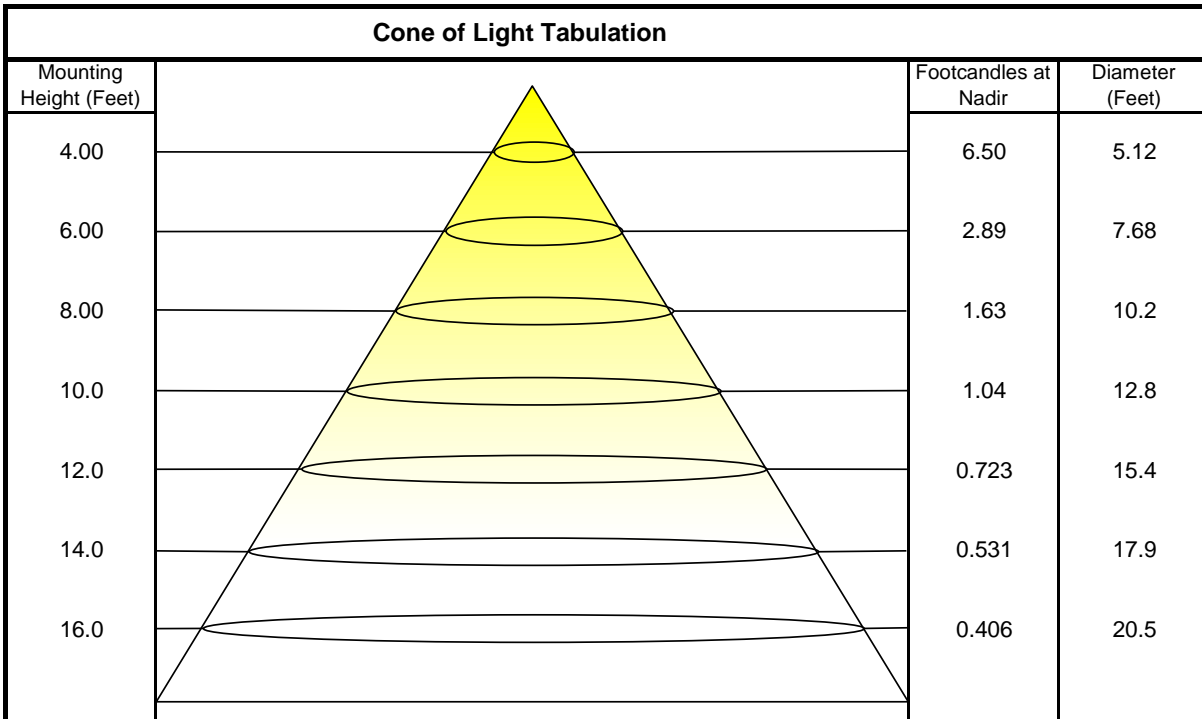
Vertical Angle (Degrees)	0	45	90
	0	10140	10140
	45	47300	47300
	55	46980	46980
	65	8823	8823
	75	4559	4559
	85	1640	1640



Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as percent of total lumen output delivered to the task surface **																	
0	118	118	118	118	114	114	114	114	108	108	108	103	103	103	97	97	97	95
1	107	101	97	93	103	99	94	91	93	90	87	89	86	83	84	82	80	77
2	97	88	81	75	93	85	79	73	81	76	71	77	72	68	73	69	66	64
3	88	77	68	61	85	75	67	61	71	64	59	67	62	57	64	60	56	53
4	80	68	59	52	77	66	58	51	63	56	50	60	54	49	57	52	47	45
5	74	60	51	44	71	59	50	44	56	49	43	54	47	42	51	46	41	39
6	68	54	45	38	66	53	44	38	51	43	37	48	42	37	46	40	36	34
7	63	49	40	34	61	48	40	34	46	38	33	44	37	32	42	36	32	30
8	58	45	36	30	57	44	36	30	42	35	29	40	34	29	39	33	28	26
9	55	41	33	27	53	40	32	27	39	31	26	37	31	26	36	30	26	24
10	51	38	30	24	50	37	29	24	36	29	24	34	28	24	33	27	23	21

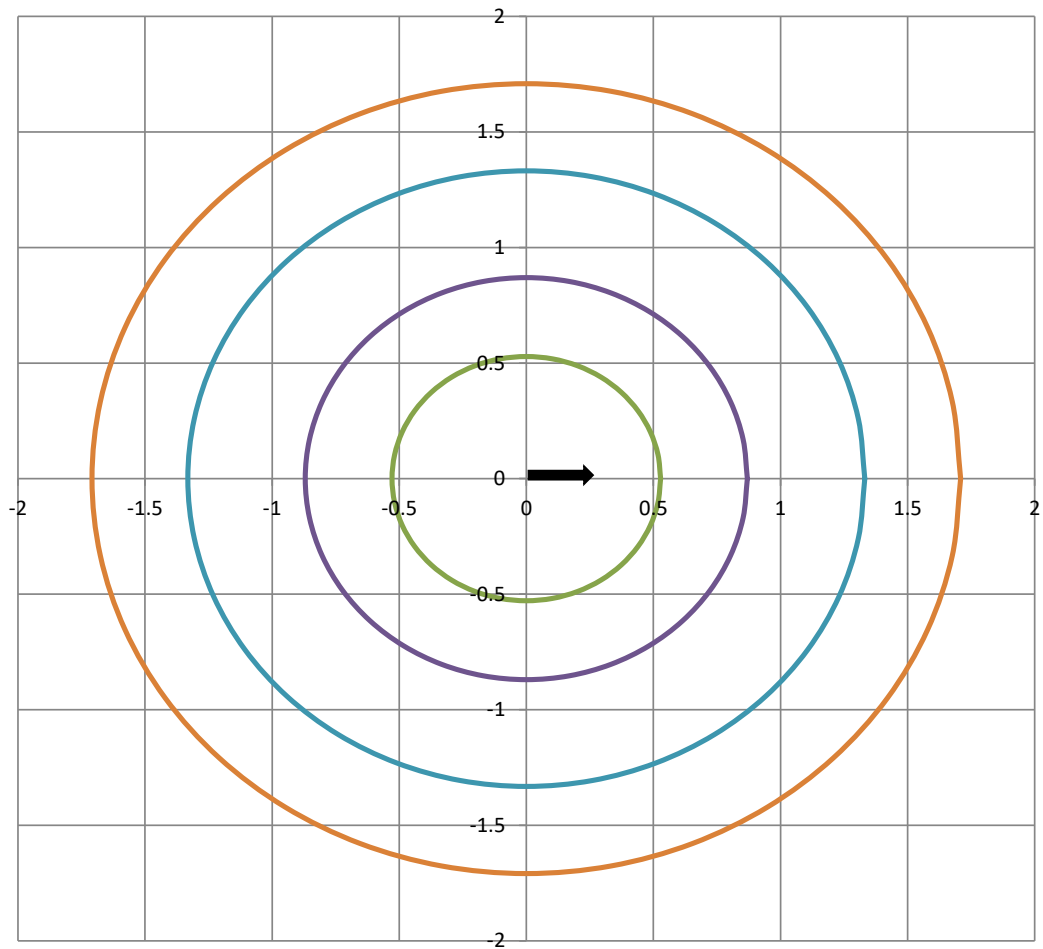
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	104.1 Candela
Central Cone Intensity:	104 Candela
Beam Flux:	236.2 Lumens
Beam Angle (0-180):	117.7 Degrees
Beam Angle (90-270):	117.7 Degrees
Field Angle (0-180):	169.8 Degrees
Field Angle (90-270):	169.8 Degrees





ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

1 fc

0.5 fc

0.2 fc

0.1 fc