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Indoor Distribution Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-2002

Prepared For
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United States

Catalog Number
4DR-L20/835-DIM-UNV-R-W-OF-WH

Order Number
12316380
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2018-06-11

Prepared By

Josh Mitchell, Technician

Approved By

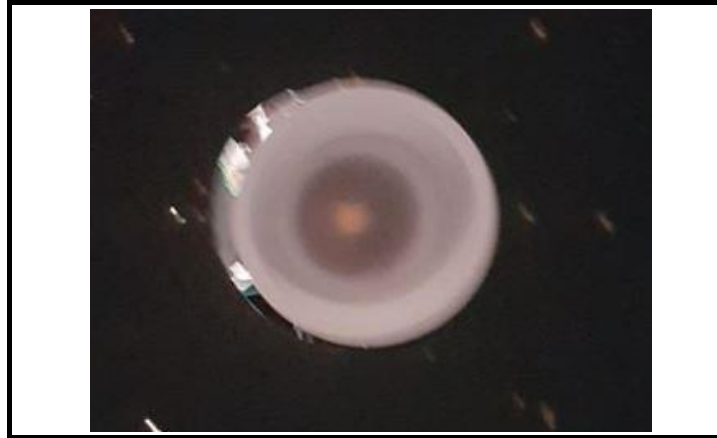
Alexa Lambert, Project Handler

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Black formed aluminum housing, white reflector, clear glass patterned lens enclosure
Lamp: One white LED
Mounting: Recessed
Ballast/Driver: Philips XI025C070V054DSM5

Luminaire



Luminaire Characteristics
Luminous Diameter: 4.50 in.

Summary of Results

Total Luminaire Output:	1323 Lumens
Luminaire Efficacy:	66.9 lm/w
Maximum Candela:	1063 Candela

Test Conditions

Test Temperature:	25.1 °C
Voltage:	120.1 VAC
Current:	0.1656 A
Power:	19.77 W
Power Factor:	0.995
Frequency:	60 Hz
Current THD:	9.21 %

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
25.1 °C	120.1 VAC	0.1656 A	19.77 W	0.995	60 Hz	9.21 %

Summary of Results

Spacing Criteria

0-180: 0.98
90-270: 0.98

Total Lumen Output:

1323 Lumens

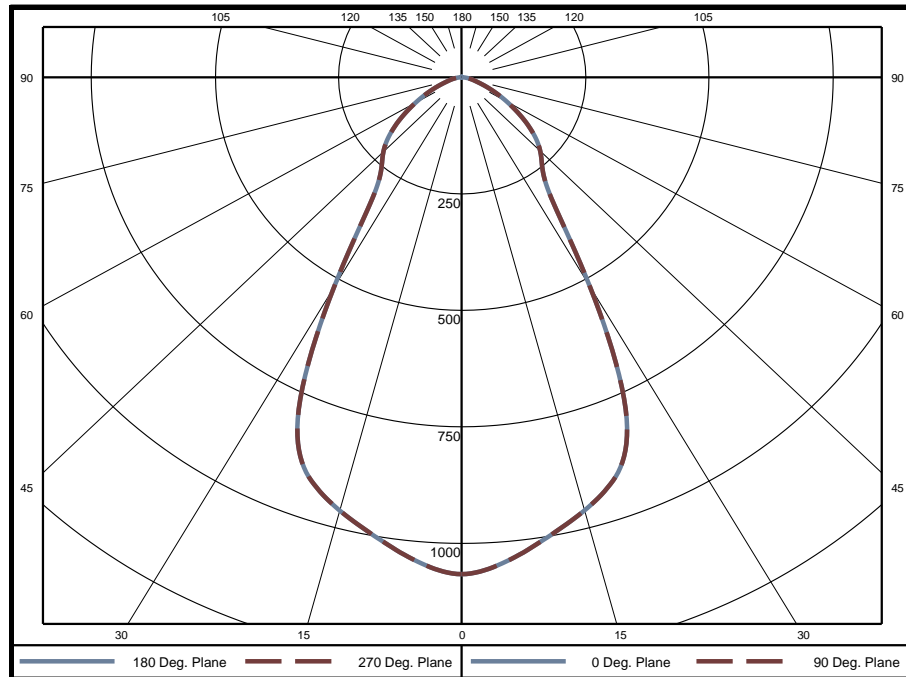
Luminaire Efficacy:

66.9 lm/w

Maximum Candela:

1063 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	25.1	1.9%	60-65	41.9	3.2%	120-125	0	0.0%
5-10	72.8	5.5%	65-70	27.6	2.1%	125-130	0	0.0%
10-15	116.0	8.8%	70-75	16.4	1.2%	130-135	0	0.0%
15-20	154.1	11.6%	75-80	9.7	0.7%	135-140	0	0.0%
20-25	179.5	13.6%	80-85	4.6	0.3%	140-145	0	0.0%
25-30	164.8	12.5%	85-90	0.8	0.1%	145-150	0	0.0%
30-35	117.6	8.9%	90-95	0	0.0%	150-155	0	0.0%
35-40	91.9	6.9%	95-100	0	0.0%	155-160	0	0.0%
40-45	87.5	6.6%	100-105	0	0.0%	160-165	0	0.0%
45-50	83.1	6.3%	105-110	0	0.0%	165-170	0	0.0%
50-55	72.5	5.5%	110-115	0	0.0%	170-175	0	0.0%
55-60	57.5	4.3%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	922	69.7%
0-60	1222	92.4%
0-90	1323	100.0%
90-180	0	0.0%



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	1063	1063	1063	1063	1063	1063	1063	1063	1063	1063	1063	1063	1063	1063	1063
	5	1040	1040	1040	1040	1040	1040	1040	1040	1040	1040	1040	1040	1040	1040	1040
	10	999	999	999	999	999	999	999	999	999	999	999	999	999	999	999
	15	959	959	959	959	959	959	959	959	959	959	959	959	959	959	959
	20	909	909	909	909	909	909	909	909	909	909	909	909	909	909	909
	25	782	782	782	782	782	782	782	782	782	782	782	782	782	782	782
	30	517	517	517	517	517	517	517	517	517	517	517	517	517	517	517
	35	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314
	40	251	251	251	251	251	251	251	251	251	251	251	251	251	251	251
	45	222	222	222	222	222	222	222	222	222	222	222	222	222	222	222
	50	188	188	188	188	188	188	188	188	188	188	188	188	188	188	188
	55	146	146	146	146	146	146	146	146	146	146	146	146	146	146	146
	60	104	104	104	104	104	104	104	104	104	104	104	104	104	104	104
	65	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69
	70	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41
	75	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
	80	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	85	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	160	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
	170	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
	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Average Luminance (cd/m²)

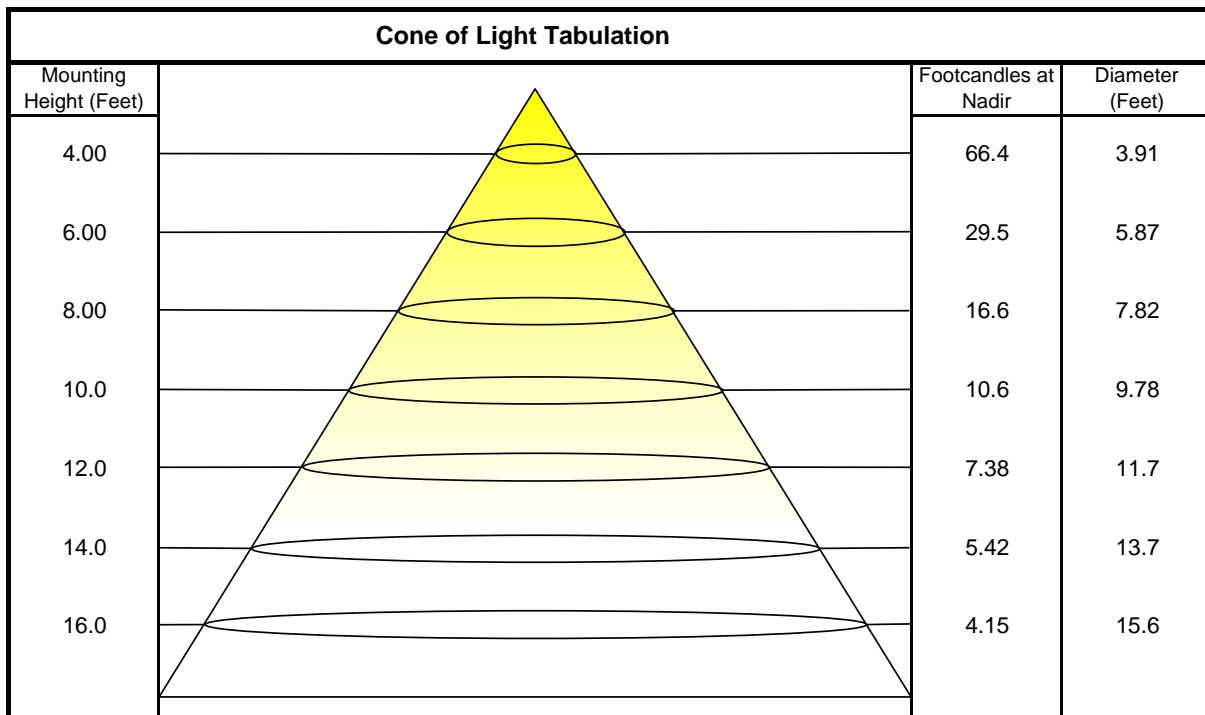
Vertical Angle (Degrees)	Horizontal Angle (Degrees)		
	0	45	90
	0	103600	103600
	45	30640	30640
	55	24740	24740
	65	16000	16000
	75	8923	8923
	85	4601	4601



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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72
4	91	82	75	70	89	80	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59
6	80	69	62	57	79	69	62	57	67	61	56	65	60	56	64	59	55	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

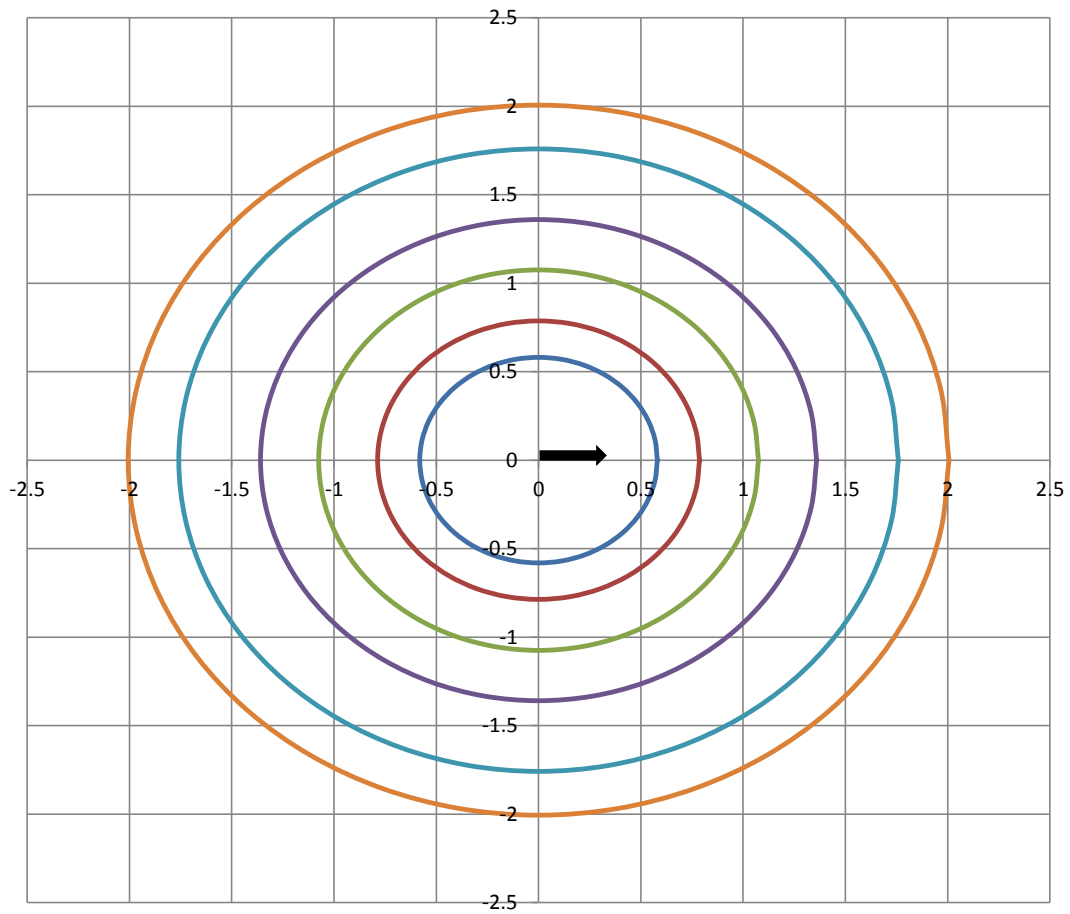
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1063 Candela
Central Cone Intensity:	1054 Candela
Beam Flux:	704.8 Lumens
Beam Angle (0-180):	59.5 Degrees
Beam Angle (90-270):	59.5 Degrees
Field Angle (0-180):	119.5 Degrees
Field Angle (90-270):	119.5 Degrees





ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

