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Indoor Distribution Test Report

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

Prepared For
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United States

Catalog Number
2DS-L15/835-DIM-UNV-OM-OF-CS-x-xx
Order Number
13257153
Test Number
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Test Date

2020-03-12

Prepared By

Jesse Litchfield, Technician

Approved By

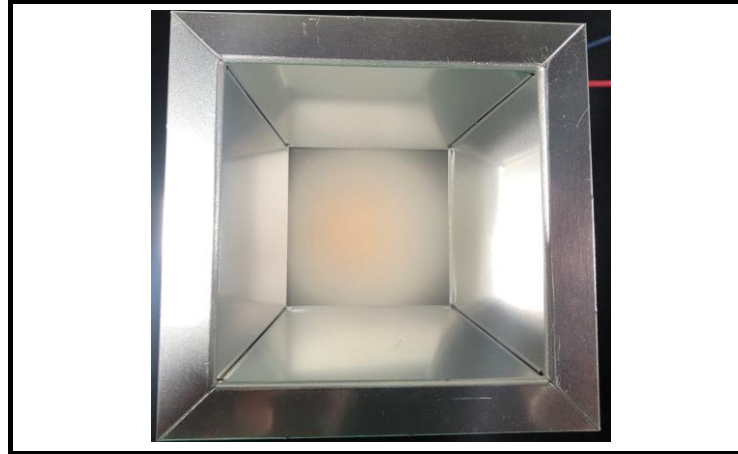
Alexa Lambert, Project Handler

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Luminaire Description: Aluminum housing, optics, and trim enclosure
Lamp: One white LED
Mounting: Recessed
Ballast/Driver: One Philips Advance XI025C070V054DSM1 Driver

Luminaire



Luminaire Characteristics

Luminous Length: 2.50 in.
Luminous Width: 2.500 in.

Summary of Results

Total Luminaire Output:	1099 Lumens
Luminaire Efficacy:	63.5 lm/w
Maximum Candela:	1386 Candela

Test Conditions

Test Temperature:	25.6 °C
Voltage:	120.1 VAC
Current:	0.1452 A
Power:	17.30 W
Power Factor:	0.992
Frequency:	60 Hz
Current THD:	10.9 %

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



Distribution - Goniophotometer

Distribution Test Conditions

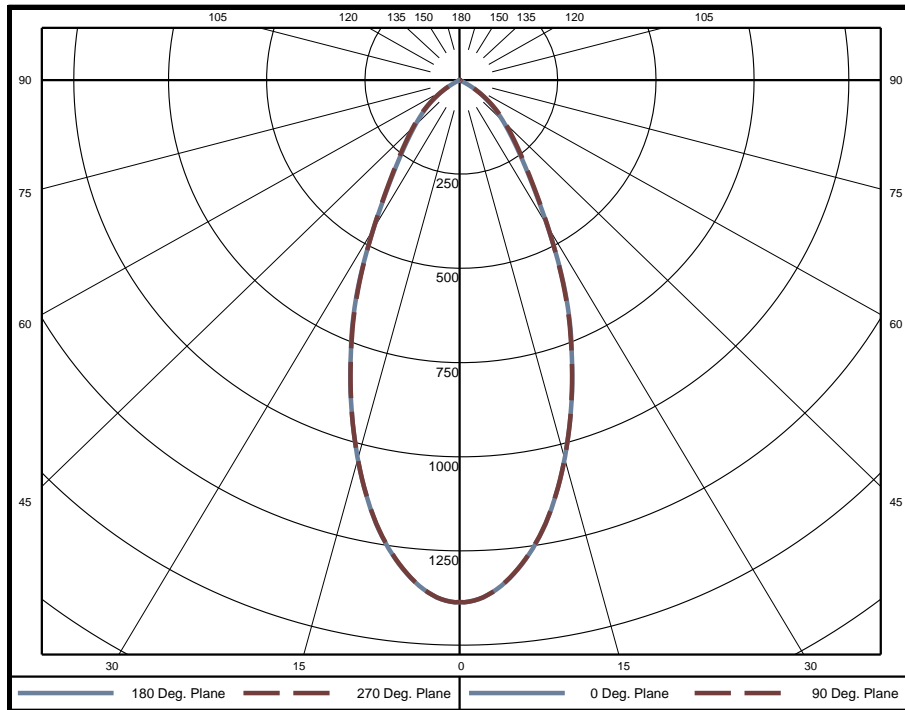
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.6 °C	120.1 VAC	0.1452 A	17.30 W	0.992	60 Hz	10.9 %

Summary of Results

Spacing Criteria
 0-180: 0.73
 90-270: 0.73

Total Lumen Output: 1099 Lumens
Luminaire Efficacy: 63.5 lm/w
Maximum Candela: 1386 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	32.6	3.0%	60-65	9.3	0.8%	120-125	0	0.0%
5-10	91.1	8.3%	65-70	1.1	0.1%	125-130	0	0.0%
10-15	133.4	12.1%	70-75	0.3	0.0%	130-135	0	0.0%
15-20	154.4	14.0%	75-80	0.2	0.0%	135-140	0	0.0%
20-25	155.5	14.1%	80-85	0.1	0.0%	140-145	0	0.0%
25-30	139.2	12.7%	85-90	0.0	0.0%	145-150	0	0.0%
30-35	112.1	10.2%	90-95	0	0.0%	150-155	0	0.0%
35-40	87.0	7.9%	95-100	0	0.0%	155-160	0	0.0%
40-45	67.3	6.1%	100-105	0	0.0%	160-165	0	0.0%
45-50	52.4	4.8%	105-110	0	0.0%	165-170	0	0.0%
50-55	38.6	3.5%	110-115	0	0.0%	170-175	0	0.0%
55-60	24.4	2.2%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	905	82.4%
0-60	1088	99.0%
0-90	1099	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	1386	1386	1386	1386	1386	1386	1386	1386	1386	1386	1386	1386	1386	1386	1386
	5	1337	1338	1336	1336	1337	1336	1336	1338	1337	1338	1336	1336	1337	1336	1338
	10	1213	1214	1213	1213	1212	1213	1213	1214	1213	1214	1213	1213	1212	1213	1214
	15	1034	1039	1046	1039	1033	1039	1046	1039	1034	1039	1046	1039	1033	1039	1046
	20	835	843	848	843	834	843	848	843	835	843	848	843	834	843	848
	25	641	651	653	648	637	648	653	651	641	651	653	648	637	648	653
	30	443	462	476	460	445	460	476	462	443	462	476	460	445	460	476
	35	302	310	327	313	308	313	327	310	302	310	327	313	308	313	327
	40	216	213	213	219	224	219	213	213	216	213	213	219	224	219	213
	45	158	151	143	157	166	157	143	151	158	151	143	157	166	157	143
	50	113	106	100	111	117	111	100	106	113	106	100	111	117	111	100
	55	69	70	67	74	72	74	67	70	69	70	67	74	72	74	67
	60	30	37	37	39	30	39	37	37	30	37	37	39	30	39	37
	65	2	5	12	5	2	5	12	5	2	5	12	5	2	5	12
	70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	75	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	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)

Horizontal Angle (Degrees)

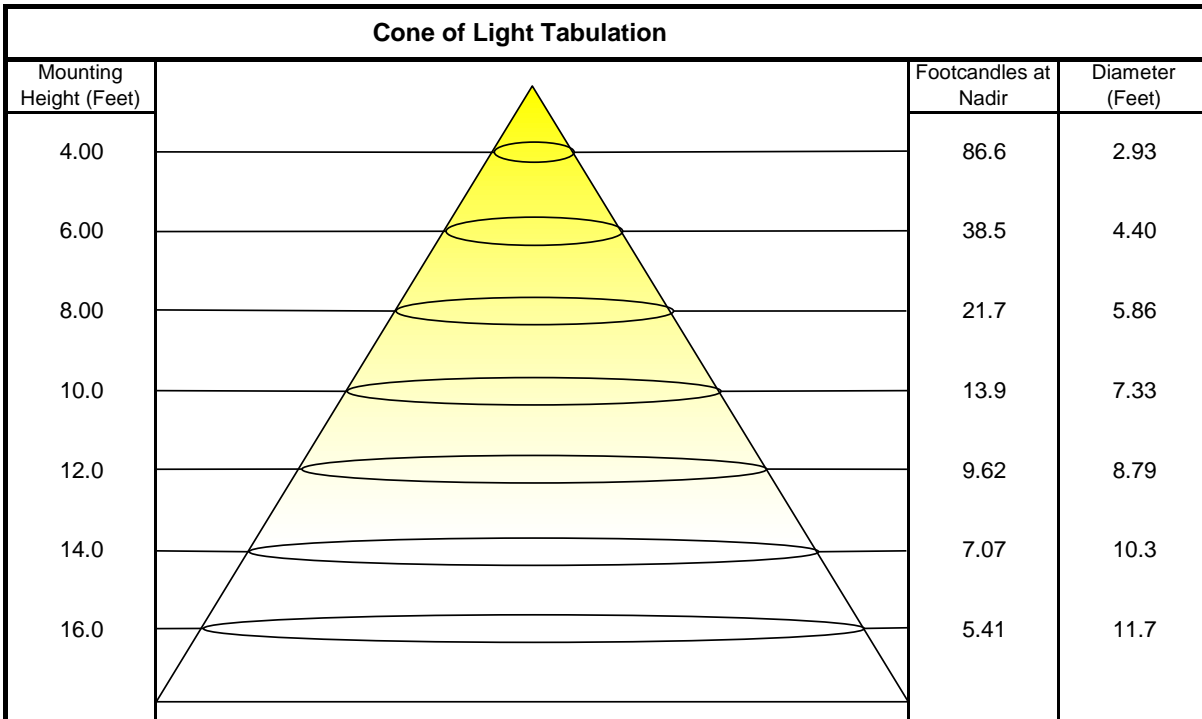
Vertical Angle (Degrees)	0	45	90
	0	343700	343700
	45	55500	58230
	55	29900	31180
	65	963	1024
	75	454	479
	85	321	325



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	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85
3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78
4	96	88	82	77	94	86	81	77	84	79	76	82	78	75	80	77	74	72
5	90	81	75	71	89	81	75	70	79	74	70	77	73	69	75	72	68	67
6	86	76	70	65	84	75	69	65	74	68	65	72	68	64	71	67	64	62
7	81	71	65	61	80	71	65	60	69	64	60	68	63	60	67	63	59	58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54
9	73	63	57	53	72	63	57	53	62	56	53	61	56	52	60	55	52	51
10	70	60	54	50	69	59	53	50	58	53	49	58	53	49	57	52	49	48

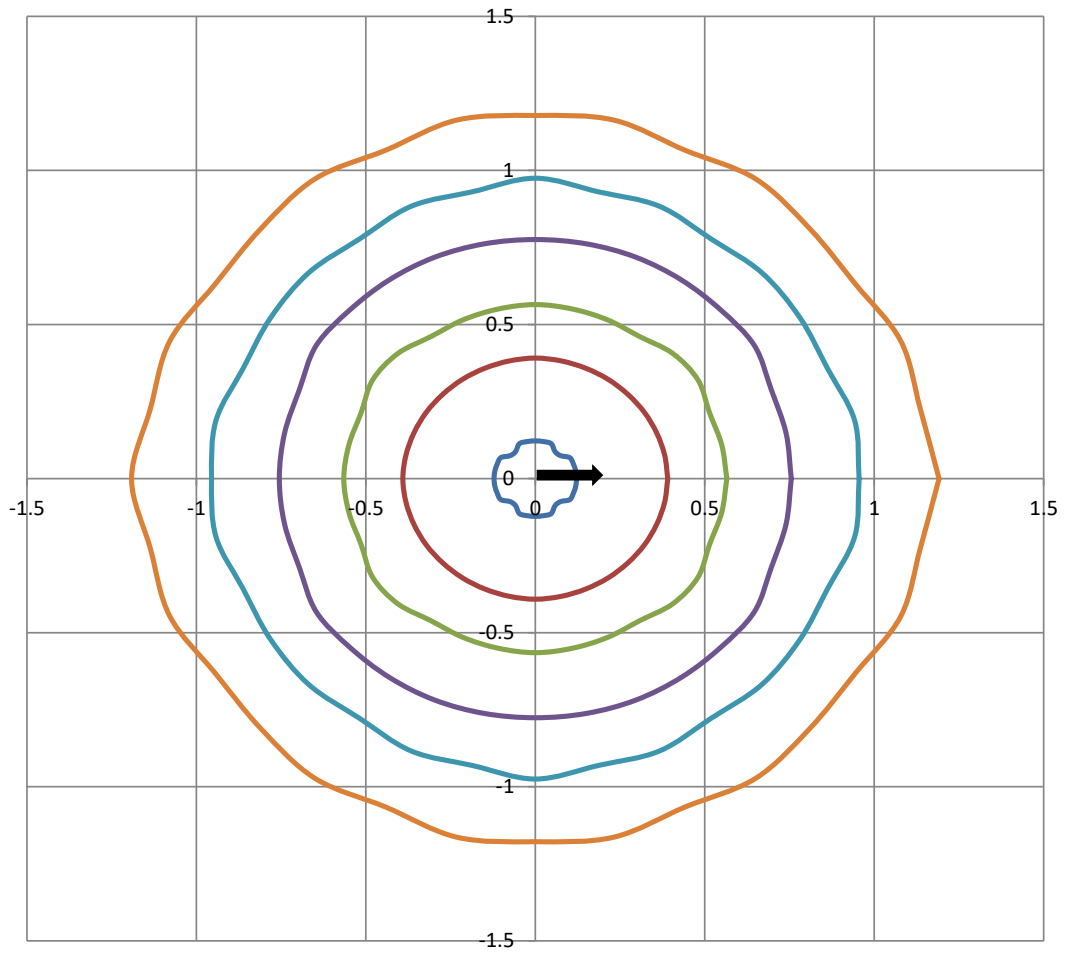
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1386 Candela
Central Cone Intensity:	1369 Candela
Beam Flux:	531.9 Lumens
Beam Angle (0-180):	47.4 Degrees
Beam Angle (90-270):	47.2 Degrees
Field Angle (0-180):	94.2 Degrees
Field Angle (90-270):	95.6 Degrees





ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

20 fc 10 fc 5 fc 2 fc 1 fc 0.5 fc