



Report of Test

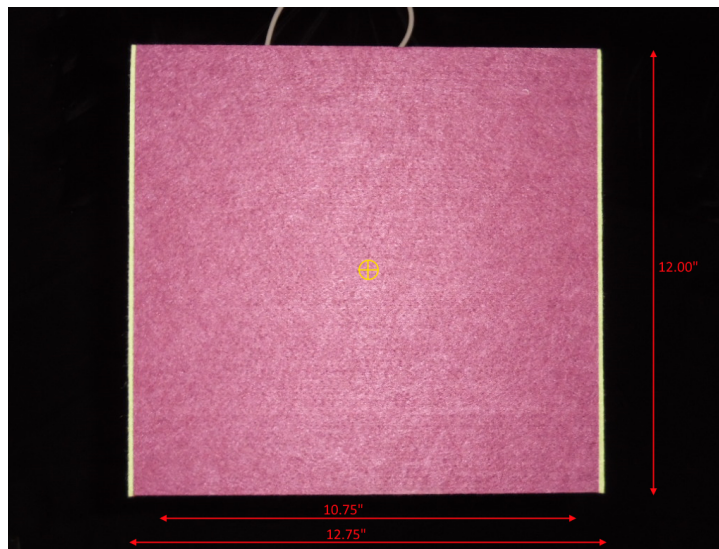
LLIA001208-005

Indoor Distribution Photometry Test Report

Catalog Number: P1260A

Pendant mounted, formed steel and aluminum housing, solid fabric outer enclosures with white plastic inner lining, translucent white plastic top and bottom enclosures.

192 white LEDs, four Samsung Electronics SI-B8V172560WW LT-562C-G2 boards with 48 LEDs each.
One Advance Xitanium XI075C200V054BST1 LED driver



Prepared For:
Lumetta, Inc
33 Minnesota Avenue
Warwick, RI 02888, USA

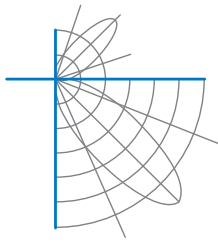
Performance Summary			
Input Voltage	120.0 V	Luminous Flux	5331.5 Lumens
Input Current	0.6232 A	Total Efficacy	71.5 Lm/W
Input Power	74.55 W	Downward Flux	3681.7 Lumens
Frequency	60.00 Hz	Downward Flux	69.1 % of Total
Power Factor	0.997		
Current THD	6.8 %		

This test report was issued by LightLab International Allentown, LLC without alterations or erasures.

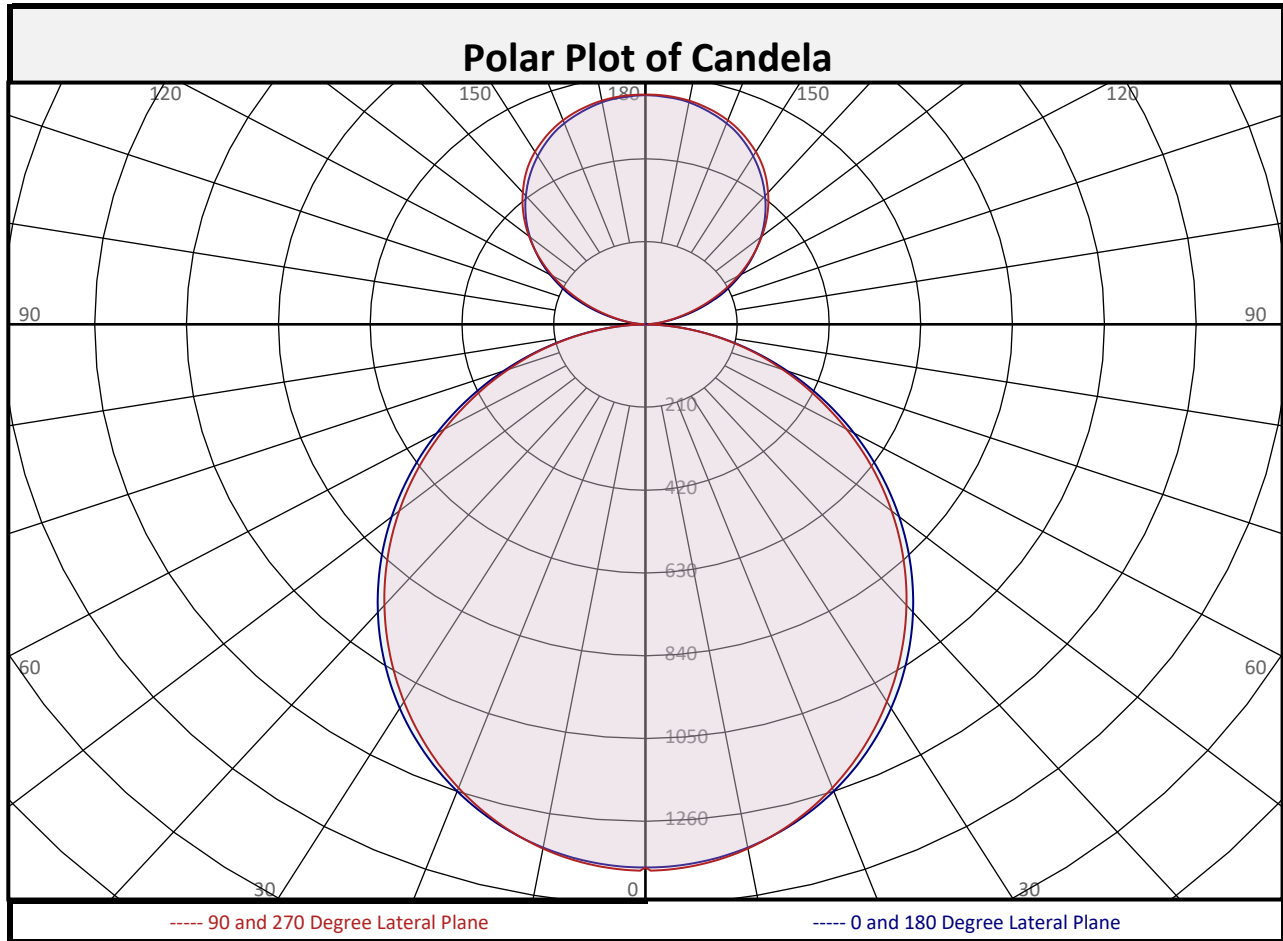
Test date: 01/06/2020

Report date: 01/08/2020

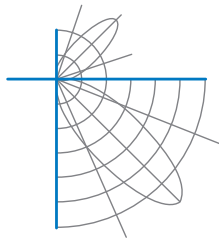
Signed: _____



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Zonal Flux Summary										
Zone (Deg Vert)	Flux (Lumens)	Percent of Total		Zone (Deg Vert)	Flux (Lumens)	Percent of Total		Zone (Deg Vert)	Flux (Lumens)	Percent of Total
0-10	130.2	2.4%		90-100	24.1	0.5%		0-20	498.8	9.4%
10-20	368.6	6.9%		100-110	103.0	1.9%		0-30	1046	19.6%
20-30	547.4	10.3%		110-120	199.2	3.7%		0-40	1690	31.7%
30-40	643.8	12.1%		120-130	270.7	5.1%		0-60	2916	54.7%
40-50	651.1	12.2%		130-140	303.4	5.7%		0-80	3608	67.7%
50-60	575.3	10.8%		140-150	293.3	5.5%		10-90	3551	66.6%
60-70	434.0	8.1%		150-160	242.3	4.5%		20-50	1842	34.5%
70-80	257.2	4.8%		160-170	158.8	3.0%		40-90	1992	37.4%
80-90	74.0	1.4%		170-180	55.2	1.0%		60-90	765.2	14.4%
0-90	3682	69.1%		90-180	1650	30.9%		0-180	5331	100.0%

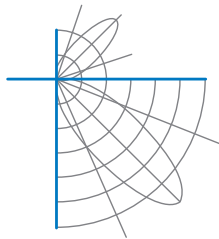


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Luminous Intensity (Candela) Table

		Lateral (C-Plane) Angles								
		0	22.5	45	67.5	90	112.5	135	157.5	180
Vertical (Gamma) Angles	0	1377	1377	1377	1377	1377	1377	1377	1377	1377
	2.5	1375	1375	1375	1381	1383	1381	1375	1375	1375
	5	1370	1370	1371	1374	1376	1374	1371	1370	1370
	7.5	1360	1360	1361	1363	1365	1363	1361	1360	1360
	10	1347	1347	1347	1348	1350	1348	1347	1347	1347
	12.5	1330	1330	1328	1329	1330	1329	1328	1330	1330
	15	1310	1309	1307	1306	1307	1306	1307	1309	1310
	17.5	1286	1285	1282	1280	1280	1280	1282	1285	1286
	20	1260	1258	1253	1250	1251	1250	1253	1258	1260
	22.5	1230	1227	1222	1218	1218	1218	1222	1227	1230
	25	1197	1194	1188	1183	1182	1183	1188	1194	1197
	27.5	1162	1159	1152	1145	1145	1145	1152	1159	1162
	30	1124	1120	1113	1106	1105	1106	1113	1120	1124
	32.5	1084	1080	1072	1064	1063	1064	1072	1080	1084
	35	1042	1038	1029	1021	1019	1021	1029	1038	1042
	37.5	998	994	985	976	975	976	985	994	998
	40	952	948	939	930	929	930	939	948	952
	42.5	905	901	892	883	882	883	892	901	905
	45	857	853	844	835	833	835	844	853	857
	47.5	808	804	795	786	784	786	795	804	808
50	758	754	745	737	735	737	745	754	758	
52.5	706	703	694	686	684	686	694	703	706	
55	655	651	643	636	633	636	643	651	655	
57.5	603	599	592	585	582	585	592	599	603	
60	551	548	541	534	531	534	541	548	551	
62.5	499	496	489	482	479	482	489	496	499	
65	447	444	438	432	430	432	438	444	447	
67.5	395	393	387	383	381	383	387	393	395	
70	345	343	337	334	333	334	337	343	345	
72.5	295	293	289	288	287	288	289	293	295	
75	246	245	242	242	241	242	242	245	246	
77.5	199	198	198	196	195	196	198	198	199	
80	153	152	153	151	150	151	153	152	153	
82.5	108	108	109	107	107	107	109	108	108	
85	65	66	66	66	65	66	66	66	65	
87.5	23	24	25	26	26	26	25	24	23	
90	2	4	6	7	8	7	6	4	2	

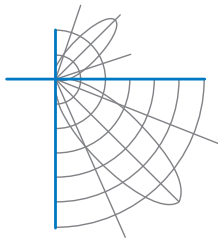


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Luminous Intensity (Candela) Table

		Lateral (C-Plane) Angles								
		0	22.5	45	67.5	90	112.5	135	157.5	180
Vertical (Gamma) Angles	90	2	4	6	7	8	7	6	4	2
	92.5	6	8	8	9	8	9	8	8	6
	95	17	17	22	23	22	23	22	17	17
	97.5	32	32	33	37	37	37	33	32	32
	100	52	52	51	50	49	50	51	52	52
	102.5	75	76	73	70	68	70	73	76	75
	105	99	102	98	93	89	93	98	102	99
	107.5	124	129	124	118	114	118	124	129	124
	110	150	156	150	143	139	143	150	156	150
	112.5	178	182	177	170	165	170	177	182	178
	115	203	208	204	197	192	197	204	208	203
	117.5	227	233	231	224	218	224	231	233	227
	120	252	258	257	250	245	250	257	258	252
	122.5	276	282	283	277	272	277	283	282	276
	125	300	305	307	302	298	302	307	305	300
	127.5	322	327	331	327	323	327	331	327	322
	130	345	349	353	352	348	352	353	349	345
	132.5	367	370	375	375	372	375	375	370	367
	135	387	390	397	397	395	397	397	390	387
	137.5	407	409	417	418	416	418	417	409	407
140	426	429	436	438	436	438	436	429	426	
142.5	444	447	454	457	456	457	454	447	444	
145	461	464	470	475	474	475	470	464	461	
147.5	477	480	486	490	491	490	486	480	477	
150	493	495	501	504	505	504	501	495	493	
152.5	507	509	514	518	518	518	514	509	507	
155	520	523	526	530	530	530	526	523	520	
157.5	533	535	537	540	541	540	537	535	533	
160	543	544	547	550	551	550	547	544	543	
162.5	551	552	555	557	559	557	555	552	551	
165	559	560	563	564	565	564	563	560	559	
167.5	566	567	569	570	571	570	569	567	566	
170	572	572	574	574	576	574	574	572	572	
172.5	576	576	576	578	579	578	576	576	576	
175	578	578	579	580	581	580	579	578	578	
177.5	580	580	581	582	582	582	581	580	580	
180	582	582	582	582	582	582	582	582	582	



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Coefficients of Utilization/Room Utilization - Zonal Cavity Method																						
Effective Floor Cavity Reflectance 0.20																						
RC	80					70					50				30				10			0
RW	70	50	30	10		70	50	30	10		50	30	10		50	30	10		50	30	10	0
RCR																						
0	112	112	112	112		105	105	105	105		94	94	94		83	83	83		74	74	74	69
1	102	97	93	90		96	92	89	85		82	79	77		73	71	69		65	63	62	58
2	93	85	78	73		87	80	75	70		72	67	64		64	61	58		57	54	52	48
3	85	75	67	61		79	71	64	58		63	58	53		57	52	49		50	47	44	41
4	77	66	58	51		73	63	55	49		56	50	45		50	46	42		45	41	38	35
5	71	59	50	44		67	56	48	43		50	44	39		45	40	36		40	36	33	30
6	66	53	44	38		62	50	43	37		46	39	34		41	36	32		37	32	29	26
7	61	48	40	34		57	46	38	33		41	35	30		37	32	28		34	29	26	23
8	56	44	36	30		53	42	34	29		38	32	27		34	29	25		31	26	23	21
9	53	40	32	27		50	38	31	26		35	29	24		31	26	23		28	24	21	19
10	49	37	29	24		46	35	28	23		32	26	22		29	24	20		26	22	19	17

For absolute test reports, RUs are expressed as a percentage of total lumen output. For relative test reports, CUs are expressed as a percentage of total lamp output. Calculations were based on published IES procedures, and are based on the zonal cavity method. Basic assumptions: 1) Room surfaces are lambertian reflectors. 2) Incident flux on each surface is uniformly distributed. 3) The room is spectrally neutral. When luminaires are not evenly distributed throughout the room, or do not exhibit lateral symmetry, CU values may differ from actual performance.

Circle of Light Plot				
Height(ft)	Illuminance at Nadir (fc)	Ground-level distance to half-of-nadir illuminance (ft)		
		0-180 deg	90-270 deg	
6.0	38.2	7.29	7.18	
8.0	21.5	9.73	9.58	
10.0	13.8	12.16	11.97	
12.0	9.6	14.59	14.36	
14.0	7.0	17.02	16.76	
16.0	5.4	19.45	19.15	

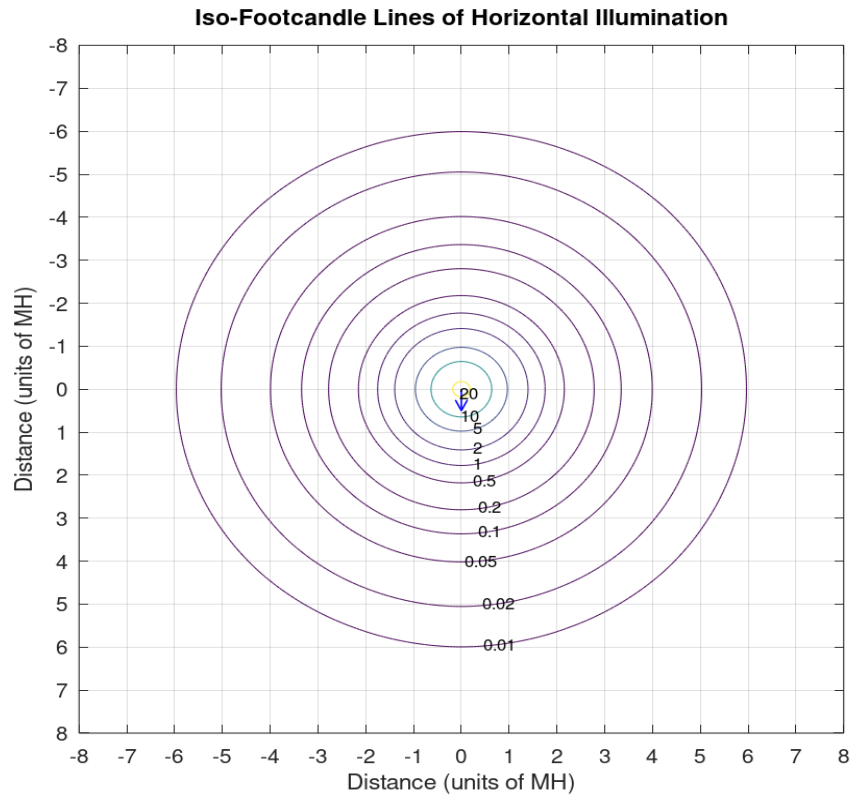
Average Luminance (cd/m ²)			
	0 deg Plane	45 deg Plane	90 deg Plane
0	3379	3379	3379
45	2975	2928	2893
55	2802	2753	2710
65	2595	2544	2495
75	2337	2299	2285
85	1829	1855	1837

Spacing Criterion	
0 degree plane:	1.2
90 degree plane:	1.2
180 degree plane:	1.2
270 degree plane:	1.2

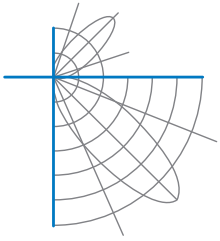


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Iso-Illuminance Plot

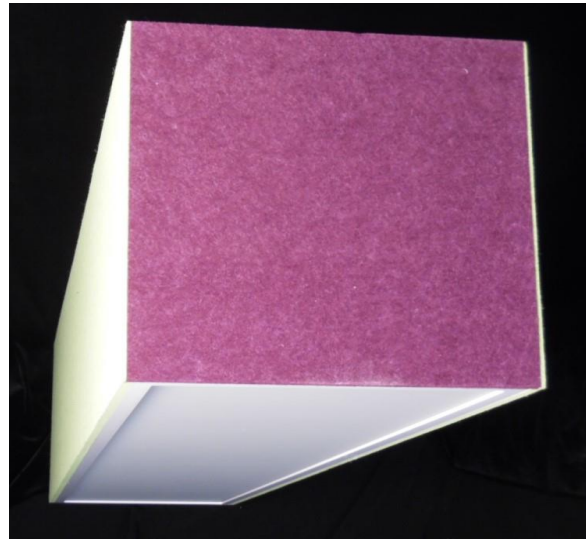


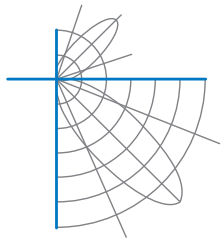
The isofootcandle values shown in the plot above are based on a mounting height of $h = 8.0$ feet. Grid values show multiples of mounting height. The isoilluminance contour lines are expressed in units of footcandles. The values expressed are based on the direct light from a single unit without the contribution of room reflections.



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Additional Pictures of Test Subject





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Test Distance 9.5 m
Ambient Temperature 25.0 °C

Notes

The laboratory has not participated in the selection of samples to be tested. All testing is performed on the understanding that the significance of the report is limited to the extent that the test sample is representative of production units.

Tested in accordance with the applicable sections of publications: IES LM-79-19 and ANSI C82.77-10:2014. Format of reports and angular increments based on IES LM-41-14 and LM-46-04.

The luminous intensity values, and other derived quantities, contained in this report are based on the absolute data, as measured.

Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

This report is free of erasures and corrections.

Photometric intensity values are reported using the CIE C-Gamma coordinate system as defined in CIE publication number 121.

This report may contain data that are not covered by the NVLAP accreditation. Quantities marked with ‡ are not covered.

This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the Federal Government.