



Report of Test

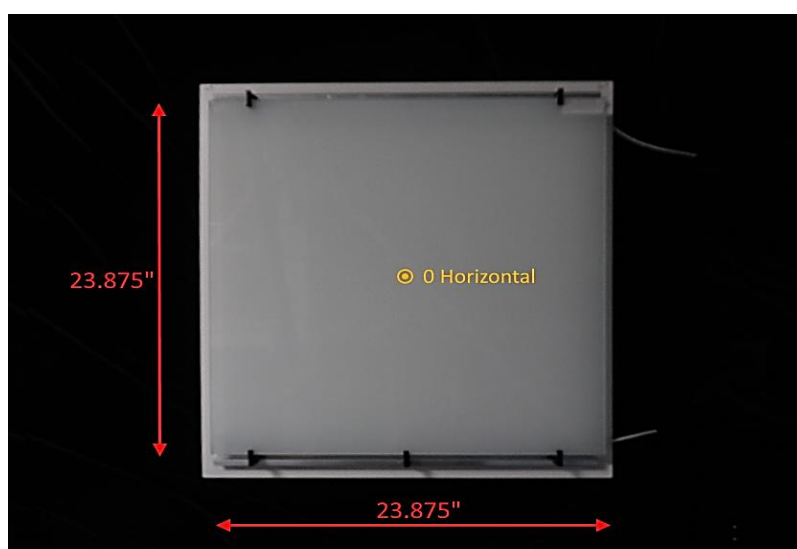
LLIA001721-001-R02*

Indoor Distribution Photometry Test Report

Catalog Number: Fusion Light Panel #FLP-24-SCW with Bendheim LED174399 glass
Wall mounted, edge-lit optical panel from top and bottom edges with "1/4" Low Iron Clear
Float Glass + Diffusing interlayer + 1/4" Low Iron Clear Float glass (all glass smooth sides)".

Unknown quantity of white LEDs mounted along top and bottom edges of panel.

One Magnitude Lighting CVN96L24DC LED driver.



Prepared For:
Evo-Lite, LLC
6240 W 54th Ave.
Arvada, CO 80002, USA

Performance Summary			
Input Voltage	120.0 Vac	Luminous Flux	1653.4 Lumens
Input Current	0.2517 A	Total Efficacy	55.6 Lm/W
Input Power	29.72 W	Downward Flux	824.7 Lumens
Frequency	60.00 Hz	Downward Flux	49.9 % of Total
Power Factor	0.984		
Current THD	5.7 %		

*This test report supersedes previous versions - see the end of this report for a list of revisions

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

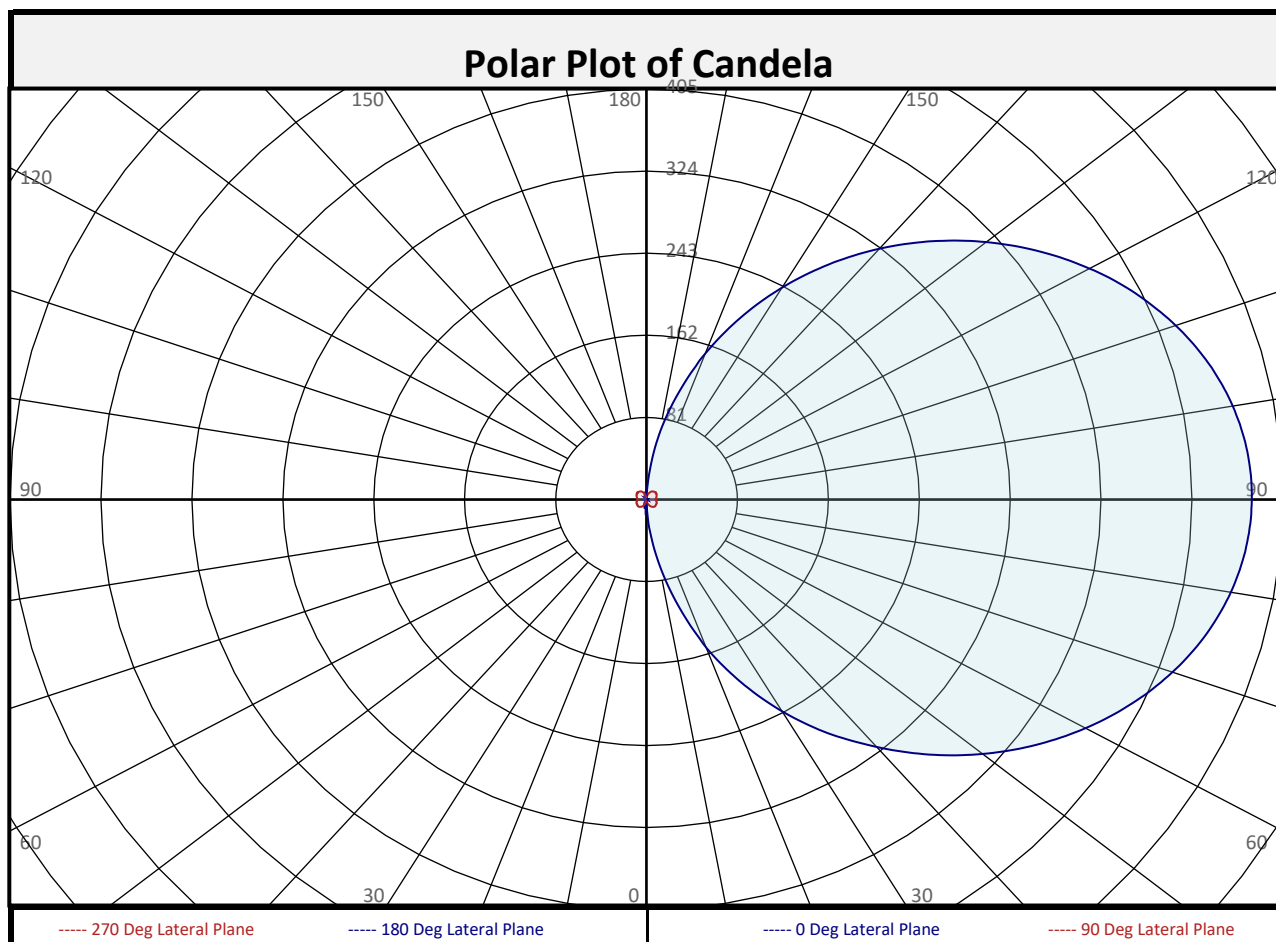
Test date: 05/09/2022
Report date: 05/16/2022

Signed: _____



Report of Test

LLIA001721-001-R02



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	1.5	0.1%		90-100	187.2	11.3%		0-20	12.1	0.7%	
10-20	10.7	0.6%		100-110	175.3	10.6%		0-30	42.6	2.6%	
20-30	30.4	1.8%		110-120	153.2	9.3%		0-40	100.4	6.1%	
30-40	57.8	3.5%		120-130	123.4	7.5%		0-60	311.7	18.9%	
40-50	89.3	5.4%		130-140	90.1	5.4%		0-80	637.9	38.6%	
50-60	122.0	7.4%		140-150	57.9	3.5%		10-90	823.2	49.8%	
60-70	151.8	9.2%		150-160	30.2	1.8%		20-50	177.6	10.7%	
70-80	174.3	10.5%		160-170	10.3	0.6%		40-90	724.3	43.8%	
80-90	186.8	11.3%		170-180	1.1	0.1%		60-90	513.0	31.0%	
0-90	824.7	49.9%		90-180	828.8	50.1%		0-180	1653	100.0%	



Report of Test

LLIA001721-001-R02

Luminous Intensity (Candela) Table

	Lateral (C-Plane) Angles									
	0	22.5	45	67.5	90	112.5	135	157.5	180	
Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.	0	2	2	2	2	2	2	2	2	
	2.5	10	9	11	9	2	5	9	7	6
	5	28	26	16	11	2	9	7	9	9
	7.5	45	40	30	13	3	6	9	8	7
	10	64	59	42	20	3	8	8	6	6
	12.5	86	78	57	28	4	10	7	6	5
	15	108	98	72	35	4	10	6	5	5
	17.5	131	119	87	42	5	10	5	5	5
	20	156	141	103	51	6	11	5	5	7
	22.5	177	164	120	58	6	11	6	6	6
	25	199	184	136	66	7	11	6	6	5
	27.5	221	204	153	75	8	11	7	5	5
	30	242	224	170	83	8	12	8	5	4
	32.5	262	243	185	91	8	12	7	4	4
	35	282	262	200	99	9	12	7	3	3
	37.5	300	279	214	106	9	13	7	3	2
	40	319	296	228	114	10	13	6	2	1
	42.5	338	313	241	121	10	13	6	1	1
	45	356	330	254	128	10	14	6	1	1
	47.5	374	347	265	135	10	14	5	1	1
	50	391	362	277	142	10	15	4	1	1
	52.5	407	378	289	148	10	15	5	1	1
	55	423	392	300	154	10	15	5	0	0
	57.5	438	405	310	160	10	16	5	0	0
	60	452	418	320	165	10	16	5	0	0
	62.5	465	430	329	171	10	17	5	0	0
	65	477	441	337	175	10	17	5	0	0
	67.5	488	452	344	179	10	17	5	0	0
	70	499	461	351	183	10	18	5	0	0
	72.5	508	469	357	186	9	18	5	0	0
	75	516	477	363	189	9	18	6	0	0
	77.5	523	483	368	192	9	18	6	0	0
	80	529	488	371	194	9	19	6	0	0
	82.5	533	493	374	195	8	19	6	0	0
	85	536	497	377	197	8	19	6	0	0
	87.5	539	501	378	197	8	19	6	0	0
	90	539	502	379	198	8	19	6	0	0

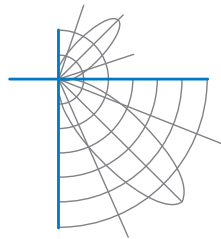


Report of Test

LLIA001721-001-R02

Luminous Intensity (Candela) Table

	Lateral (C-Plane) Angles									
		0	22.5	45	67.5	90	112.5	135	157.5	180
Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.	90	539	502	379	198	8	19	6	0	0
	92.5	539	501	378	198	8	19	6	0	0
	95	537	498	377	197	8	19	6	0	0
	97.5	534	494	376	196	8	19	6	0	0
	100	530	490	373	195	9	19	6	0	0
	102.5	525	485	369	193	9	19	6	0	0
	105	518	479	365	191	9	18	6	0	0
	107.5	511	472	360	188	9	18	6	0	0
	110	502	464	354	185	9	18	6	0	0
	112.5	492	455	347	181	10	18	5	0	0
	115	481	445	340	178	10	17	5	0	0
	117.5	469	434	332	173	10	17	5	0	1
	120	456	422	323	168	10	16	5	1	1
	122.5	442	410	314	162	10	15	5	1	1
	125	427	396	303	156	10	15	5	1	1
	127.5	412	382	292	150	10	15	5	1	1
	130	395	366	281	143	10	15	5	1	1
	132.5	378	351	268	136	10	14	5	1	1
	135	361	334	256	128	10	14	6	1	1
	137.5	342	317	242	121	10	13	6	1	1
	140	323	300	228	114	10	13	6	2	1
	142.5	303	281	214	106	10	12	6	2	2
	145	283	262	199	99	10	12	7	3	2
	147.5	263	243	184	91	9	12	7	3	3
	150	241	223	169	84	9	11	7	4	3
	152.5	220	203	153	76	8	11	5	4	4
	155	198	182	136	67	8	10	5	5	4
	157.5	176	162	119	58	7	10	5	5	5
	160	153	140	103	49	7	9	5	4	5
	162.5	130	119	87	40	6	8	5	4	4
	165	107	98	70	31	5	8	5	4	4
	167.5	86	78	53	24	4	6	5	5	4
	170	65	57	37	15	4	5	5	6	5
	172.5	43	35	22	9	3	4	5	5	6
	175	22	16	10	6	2	4	3	4	5
	177.5	6	5	5	6	2	1	2	5	5
	180	1	1	1	1	1	1	1	1	1



Report of Test

LLIA001721-001-R02

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	107	107	107	107		99	99	99	99		83	83	83		69	69	69		56	56	56	50
1	92	85	79	74		84	78	72	68		64	60	56		52	49	46		40	38	36	30
2	81	71	63	55		74	65	57	51		53	47	42		42	38	34		32	29	26	21
3	73	61	51	44		66	55	47	40		45	38	33		36	30	26		27	23	20	15
4	66	53	43	35		60	48	39	32		39	32	26		31	25	21		23	19	15	11
5	60	46	36	29		54	42	33	27		34	27	22		27	21	17		20	16	12	9
6	55	41	31	24		50	37	29	22		30	23	18		24	18	14		18	13	10	7
7	50	36	27	21		46	33	25	19		27	20	15		21	16	12		16	12	9	6
8	47	33	24	18		42	30	22	16		24	18	13		19	14	10		14	10	7	5
9	43	29	21	15		39	27	19	14		22	16	11		17	12	9		13	9	6	4
10	40	27	19	14		36	25	17	12		20	14	10		16	11	8		12	8	5	3

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.

Average Luminance (cd/m ²)			
	0 deg Plane	45 deg Plane	90 deg Plane
0	236	236	236
45	1342	1313	924
55	1384	1350	926
65	1417	1381	950
75	1445	1405	969
85	1461	1420	989



Report of Test

LLIA001721-001-R02

UGR Table - Corrected

Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	16.6	17.6	17.5	18.6	19.9	2.8	3.9	3.8	4.8	6.1
	3H	20.7	21.7	21.6	22.6	23.9	4.3	5.3	5.2	6.2	7.5
	4H	22.8	23.7	23.8	24.7	26.0	4.8	5.7	5.8	6.7	8.0
	6H	25.1	25.9	26.0	26.9	28.2	5.2	6.0	6.1	7.0	8.3
	8H	26.2	27.1	27.2	28.1	29.4	5.3	6.1	6.2	7.1	8.4
	12H	27.5	28.3	28.5	29.3	30.6	5.3	6.1	6.3	7.1	8.4
4H	2H	16.7	17.6	17.6	18.6	19.9	7.3	8.2	8.3	9.2	10.5
	3H	20.9	21.7	21.9	22.7	24.1	9.1	9.9	10.1	10.9	12.2
	4H	23.2	23.9	24.1	24.9	26.3	9.8	10.6	10.8	11.6	12.9
	6H	25.6	26.2	26.5	27.3	28.6	10.3	11.0	11.3	12.0	13.3
	8H	26.8	27.4	27.8	28.5	29.8	10.5	11.1	11.5	12.1	13.5
	12H	28.2	28.7	29.2	29.8	31.1	10.6	11.2	11.6	12.2	13.5
8H	4H	23.2	23.9	24.2	24.9	26.2	12.6	13.2	13.5	14.2	15.6
	6H	25.7	26.3	26.7	27.3	28.6	13.5	14.0	14.5	15.1	16.4
	8H	27.1	27.5	28.1	28.6	29.9	13.8	14.3	14.8	15.3	16.7
	12H	28.5	29.0	29.5	30.0	31.4	14.0	14.5	15.0	15.5	16.9
12H	4H	23.2	23.8	24.2	24.8	26.2	13.4	14.0	14.4	15.0	16.4
	6H	25.7	26.2	26.7	27.2	28.6	14.5	15.0	15.5	16.1	17.4
	8H	27.1	27.5	28.1	28.6	30.0	15.0	15.5	16.0	16.5	17.9

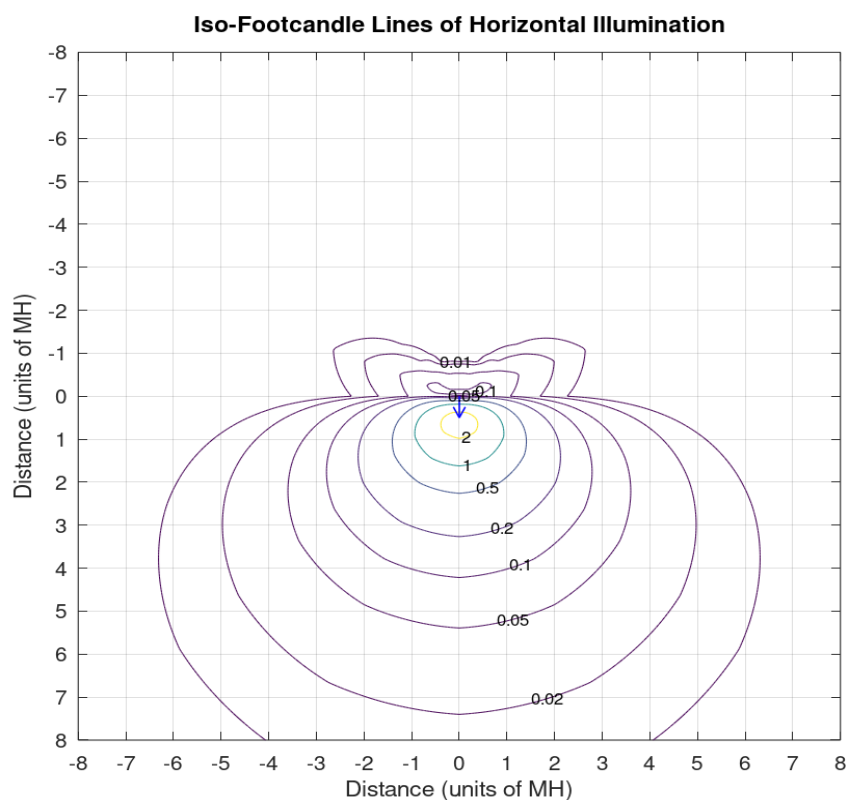
Maximum UGR = 31.4



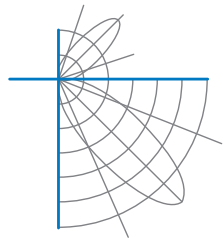
Report of Test

LLIA001721-001-R02

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.



Report of Test

LLIA001721-001-R02

Additional Pictures of Test Subject



Report of Test

LLIA001721-001-R02

Test Distance 9.5 m
Ambient Temperature 24.8 °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 IES LM-79-19. Format of reports and angular increments based on IES LM-41-20 and LM-46-20.

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.

Revision History: R01 - 05/12/2022 - Revised catalog number
 R02 - 05/16/2022 - Revised description