

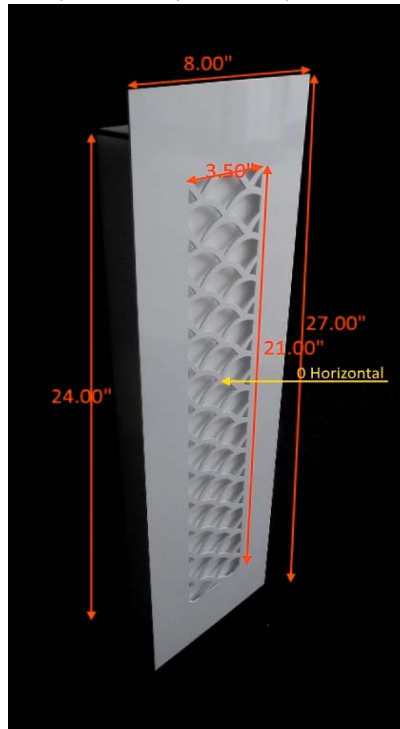


Report of Test

LLIA000901-041

Catalog Number: W160003/F11/D61/L406

Wall mounted, formed white enamel aluminum housing, formed white enamel steel enclosure with translucent white plastic side and front enclosure.
96 LEDs, two Samsung Electronics LT-M562C G2 3000K-S49 LED boards with 48 LEDs each.
One Philips Advance Xitanium XI054C150V054BST1 LED driver
120.0Vac, 60.00Hz, 0.3353A, 39.30W, 0.977PF, 7.9%THD(i)



Performance Summary

Total Light Output	3257 lm
Luminaire Power	39.3 W
Luminous Efficacy	82.9 lm/W

PREPARED FOR : Lumetta, Inc, 33 Minnesota Avenue, Warwick, RI 02888, USA



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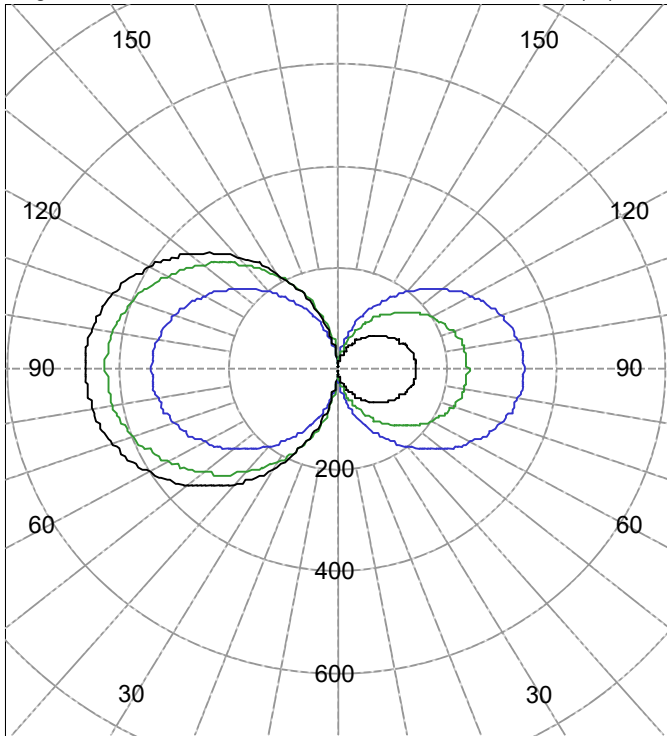
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Legend: C0/C180-Black, C45/C225-Green, C90/C270-Blue (cd)



C180-C270 (Symmetric about C0/C180) C0-C90

AVERAGE LUMINANCE (cd/m²)

Gamma	C0	C45	C90
45.0	962	1758	6093
55.0	1021	1853	6766
65.0	1073	1928	7369
75.0	1116	1991	7928
85.0	1150	2039	8446

INTENSITY SUMMARY (cd)

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
0.0	4	4	4	4	4	
5.0	6	8	15	22	24	3
10.0	15	17	31	46	49	
15.0	25	26	49	71	74	23
20.0	37	39	67	97	101	
25.0	49	51	87	121	126	62
30.0	61	63	106	148	152	
35.0	73	75	125	174	177	116
40.0	83	86	143	199	201	
45.0	93	96	159	226	224	179
50.0	103	106	175	247	247	
55.0	111	114	189	267	267	243
60.0	119	122	201	284	285	
65.0	126	129	212	301	301	300
70.0	132	135	221	315	315	
75.0	137	140	228	326	326	343
80.0	141	144	233	334	334	
85.0	143	146	236	339	338	366
90.0	144	146	237	340	340	

ZONAL FLUX AND PERCENTAGES

Zone	Flux (lm)	% Lamp	% Luminaire
0-30	88	N / A	2.7
0-40	204	N / A	6.3
0-60	625	N / A	19.2
0-90	1634	N / A	50.2
40-90	1430	N / A	43.9
60-90	1009	N / A	31.0
90-180	1623	N / A	49.8
0-180	3257	N / A	100.0

Total Light Output = 3,257 lm

Signed:

Authorized Signatory

Date of test 14-Feb-2018

Date of report 19-Feb-2018



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Intensity data (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
0.0	4	4	4	4	4
2.5	4	5	8	11	12
5.0	6	8	15	22	24
7.5	10	12	23	34	37
10.0	15	17	31	46	49
12.5	19	21	41	58	62
15.0	25	26	49	71	74
17.5	31	32	58	84	88
20.0	37	39	67	97	101
22.5	43	45	77	110	114
25.0	49	51	87	121	126
27.5	55	57	96	135	139
30.0	61	63	106	148	152
32.5	67	69	116	161	164
35.0	73	75	125	174	177
37.5	78	80	134	187	189
40.0	83	86	143	199	201
42.5	88	91	151	214	213
45.0	93	96	159	226	224
47.5	98	101	167	234	236
50.0	103	106	175	247	247
52.5	107	110	182	260	257
55.0	111	114	189	267	267
57.5	115	118	195	275	276
60.0	119	122	201	284	285
62.5	123	126	207	293	294
65.0	126	129	212	301	301
67.5	130	132	217	308	308
70.0	132	135	221	315	315
72.5	135	138	225	321	321
75.0	137	140	228	326	326
77.5	139	142	231	330	330
80.0	141	144	233	334	334
82.5	142	145	235	337	336
85.0	143	146	236	339	338
87.5	144	146	237	340	339
90.0	144	146	237	340	340



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Intensity data (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	144	146	237	340	340
92.5	144	146	237	340	339
95.0	143	146	236	339	338
97.5	142	145	235	337	336
100.0	141	144	233	334	333
102.5	139	142	231	330	330
105.0	137	140	228	326	325
107.5	135	138	224	320	320
110.0	132	135	220	314	314
112.5	129	132	216	307	307
115.0	126	129	211	300	300
117.5	123	126	206	292	292
120.0	119	122	200	283	284
122.5	115	118	194	278	275
125.0	111	114	188	268	265
127.5	107	110	181	254	256
130.0	102	105	174	244	245
132.5	98	101	167	237	234
135.0	93	96	159	224	223
137.5	88	91	150	210	211
140.0	83	85	142	200	199
142.5	77	80	133	186	187
145.0	72	74	124	174	175
147.5	66	69	115	161	162
150.0	60	63	105	146	149
152.5	54	57	95	133	136
155.0	48	50	85	119	123
157.5	42	44	75	107	110
160.0	36	38	66	94	97
162.5	30	32	57	81	84
165.0	23	26	49	68	70
167.5	18	21	39	56	58
170.0	14	17	31	44	47
172.5	10	12	22	32	35
175.0	6	8	15	21	23
177.5	5	5	8	10	11
180.0	4	4	4	4	4



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Intensity data (cd)

Gamma	C-Plane				
	C90	C112.5	C135	C157.5	C180
0.0	4	4	4	4	4
2.5	12	13	13	12	11
5.0	24	28	32	29	23
7.5	37	42	54	51	38
10.0	49	57	74	78	56
12.5	62	73	93	113	75
15.0	74	87	112	145	95
17.5	88	101	130	174	117
20.0	101	116	146	198	138
22.5	114	130	163	221	160
25.0	126	143	178	242	181
27.5	139	157	194	262	202
30.0	152	171	209	281	223
32.5	164	185	224	299	242
35.0	177	198	239	317	262
37.5	189	211	252	334	279
40.0	201	225	266	351	296
42.5	213	238	280	368	313
45.0	224	250	294	384	328
47.5	236	262	306	400	342
50.0	247	274	319	415	356
52.5	257	284	331	429	369
55.0	267	295	341	443	381
57.5	276	305	352	455	392
60.0	285	315	362	468	402
62.5	294	323	371	479	411
65.0	301	332	380	490	420
67.5	308	339	387	499	427
70.0	315	347	395	508	434
72.5	321	352	401	516	441
75.0	326	358	407	523	447
77.5	330	363	412	528	452
80.0	334	366	416	531	454
82.5	336	369	418	533	455
85.0	338	371	420	535	457
87.5	339	372	421	536	459
90.0	340	373	423	537	460



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Intensity data (cd)

Gamma	C-Plane				
	C90	C112.5	C135	C157.5	C180
90.0	340	373	423	537	460
92.5	339	373	422	536	460
95.0	338	372	421	535	459
97.5	336	370	419	532	457
100.0	333	366	416	528	454
102.5	330	363	412	523	450
105.0	325	358	407	517	446
107.5	320	352	402	510	440
110.0	314	346	395	502	434
112.5	307	339	388	493	427
115.0	300	331	380	483	418
117.5	292	324	372	472	409
120.0	284	314	362	460	399
122.5	275	304	352	448	388
125.0	265	294	342	434	376
127.5	256	284	331	420	364
130.0	245	273	319	406	350
132.5	234	261	308	390	336
135.0	223	249	294	374	321
137.5	211	237	281	356	305
140.0	199	224	268	338	288
142.5	187	211	254	319	271
145.0	175	198	239	298	252
147.5	162	184	225	278	233
150.0	149	170	208	257	214
152.5	136	156	192	235	194
155.0	123	142	175	212	176
157.5	110	127	157	189	155
160.0	97	112	140	167	134
162.5	84	98	123	151	113
165.0	70	84	106	131	93
167.5	58	69	88	105	73
170.0	47	55	70	73	53
172.5	35	40	51	48	35
175.0	23	26	30	27	21
177.5	11	12	12	11	10
180.0	4	4	4	4	4



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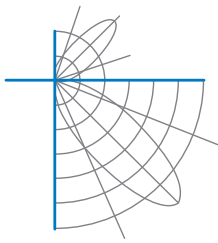
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Coefficients Of Utilization - Zonal Cavity Method																		
Effective Floor Cavity Reflectance 0.20																		
RC	80				70				50			30			10			0
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	92	85	79	74	84	78	73	68	65	60	57	52	49	46	41	38	36	30
2	82	71	63	56	74	65	57	51	53	47	42	42	38	34	32	29	26	21
3	73	61	51	44	66	55	47	40	45	39	33	36	31	26	27	23	20	15
4	66	53	43	35	60	48	39	32	39	32	27	31	25	21	23	19	16	12
5	60	46	36	29	54	42	33	27	34	27	22	27	21	17	20	16	13	9
6	55	41	31	24	50	37	29	22	30	23	18	24	18	14	18	14	10	7
7	50	36	27	21	46	33	25	19	27	20	16	21	16	12	16	12	9	6
8	47	33	24	18	42	30	22	16	24	18	13	19	14	10	15	10	7	5
9	43	30	21	16	39	27	19	14	22	16	12	18	13	9	13	9	6	4
10	40	27	19	14	37	25	17	12	20	14	10	16	11	8	12	8	6	3

For absolute test reports, CUs are expressed as a percentage of total lumen 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.



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Test Distance 9.5 m
Test Temperature 25.1 °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-79-08 (Sec. 12), IES LM-16-93, IES LM-58-13, CIE 13.3:1995, CIE 15:2004, ANSI C78.377:2015, ANSI C82.77-10:2014.

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 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.

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