

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: SHAPER

Report Number: P368742

Luminaire Tested: **674-W-43-L4/840**

Issue Date: 11/13/2019

Test Information

Test Method: LM-79-08
Report Number: P368742
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 11/13/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 674-W-43-L4/840
Description: 43" 674 SERIES LUMINOUS WALL SCONCE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

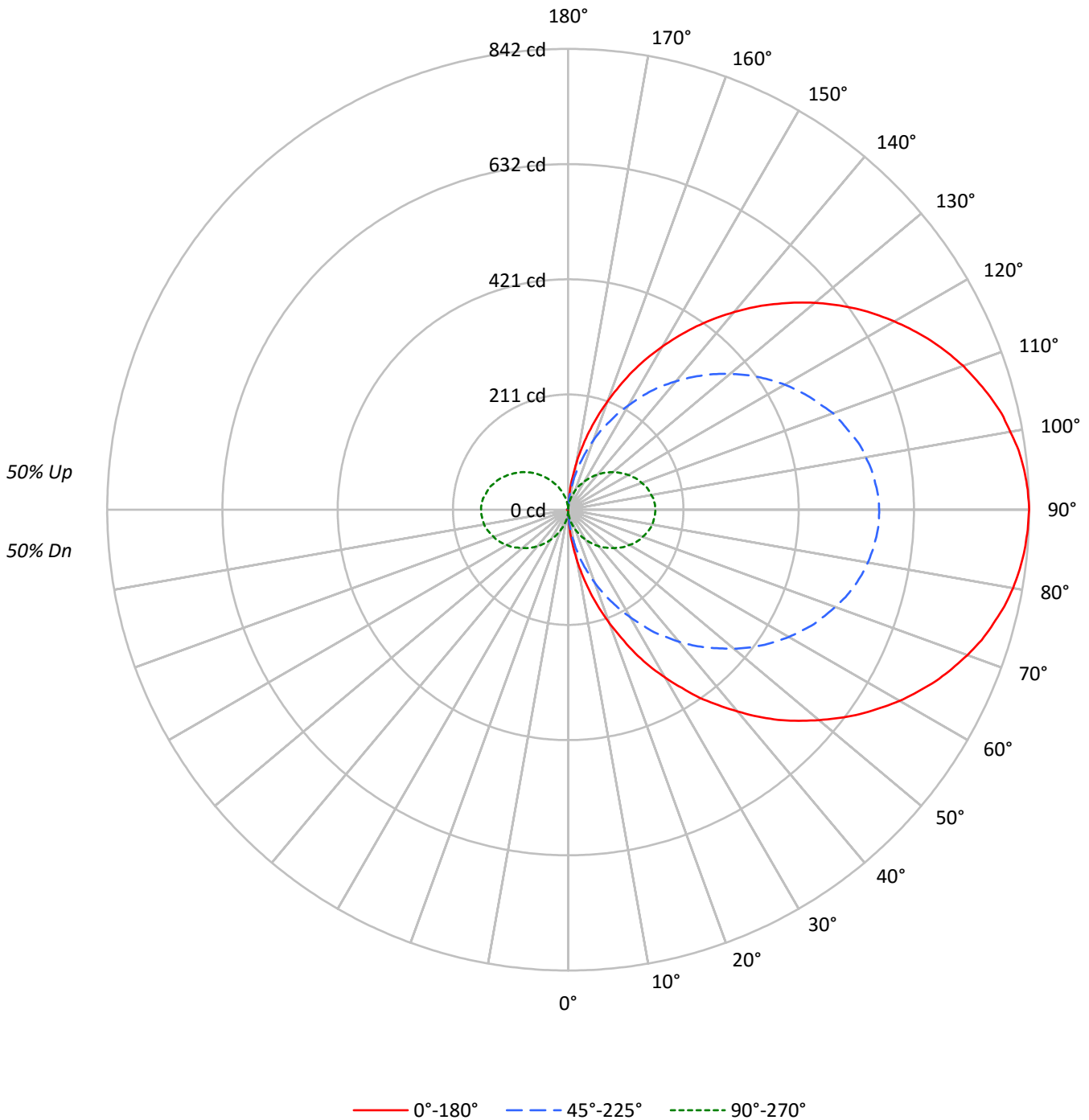
Lumens per Lamp: N/A
Luminaire Lumens: 2635.9 lumens
Efficiency: N/A
Efficacy: 75.3 lumens/watt
Spacing Criteria (0/90/45): 14.79 / 10.56 / 11.61
Luminous Opening: Rectangular w/ Sides (W: 0.71' x L: 0.21' x H: 3.58')
CIE Type: General Diffuse

Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P368742
CATALOG NUMBER: 674-W-43-L4/840

Luminous Intensity Polar Plot





TEST NUMBER: P368742

CATALOG NUMBER: 674-W-43-L4/840

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	84	84	84	69	69	69	56	56	56	50
1	92	85	79	73	84	78	72	67	64	60	56	52	49	46	40	38	36	30
2	81	71	62	55	74	65	57	50	53	47	42	42	37	33	32	29	26	20
3	73	60	51	43	66	55	46	39	45	38	32	35	30	26	27	23	19	15
4	66	52	42	35	59	47	39	32	39	32	26	30	25	20	23	18	15	11
5	60	46	36	29	54	42	33	26	34	27	21	27	21	17	20	15	12	8
6	55	40	31	24	49	37	28	22	30	23	18	24	18	14	18	13	10	7
7	50	36	27	20	45	33	25	19	27	20	15	21	16	12	16	12	8	5
8	46	32	24	18	42	30	22	16	24	18	13	19	14	10	14	10	7	4
9	43	29	21	15	39	27	19	14	22	16	11	17	12	9	13	9	6	4
10	40	27	19	13	36	24	17	12	20	14	10	16	11	8	12	8	5	3

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	146	146	146
5°	1228	457	0
10°	1763	705	0
15°	2114	898	0
20°	2363	1065	0
25°	2578	1222	0
30°	2728	1353	0
35°	2867	1470	0
40°	2968	1579	0
45°	3078	1669	0
50°	3157	1760	0
55°	3238	1855	0
60°	3312	1928	5
65°	3376	2010	5
70°	3429	2076	4
75°	3476	2141	9
80°	3517	2207	9
85°	3545	2248	8



TEST NUMBER: P368742

CATALOG NUMBER: 674-W-43-L4/840

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.9	0.1
10°-20°	15.3	0.6
20°-30°	44.3	1.7
30°-40°	87.1	3.3
40°-50°	139.5	5.3
50°-60°	195.2	7.4
60°-70°	246.9	9.4
70°-80°	287.3	10.9
80°-90°	309.3	11.7
90°-100°	308.4	11.7
100°-110°	284.8	10.8
110°-120°	243.6	9.2
120°-130°	191.9	7.3
130°-140°	136.6	5.2
140°-150°	84.9	3.2
150°-160°	42.7	1.6
160°-170°	14.4	0.5
170°-180°	1.7	0.1
0°-30°	61.5	2.3
0°-40°	148.7	5.6
0°-60°	483.4	18.3
0°-90°	1326.8	50.3
90°-120°	836.9	31.7
90°-150°	1250.3	47.4
90°-180°	1309.0	49.7
0°-180°	2635.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2	2	2	2	2	
5°	42	27	9	2	0	6
15°	157	101	28	2	0	46
25°	289	184	51	2	0	135
35°	420	273	75	1	0	264
45°	543	356	98	1	0	421
55°	651	432	120	2	0	584
65°	741	495	138	2	1	734
75°	804	541	151	2	2	850
85°	837	565	158	2	2	681
90°	842	568	159	2	2	461
95°	836	563	158	2	2	680
105°	798	535	150	2	2	843
115°	731	487	136	2	1	725
125°	641	423	117	2	0	575
135°	531	347	96	2	0	412
145°	409	265	72	2	0	258
155°	279	177	49	2	0	131
165°	147	93	26	2	0	44
175°	34	21	7	2	0	5
180°	2	2	2	2	2	



TEST NUMBER: P368742

CATALOG NUMBER: 674-W-43-L4/840

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2	2	2	2	2	2	2	2	2	2	2
2.5°	18	15	16	15	13	11	9	8	6	5	5
5°	42	40	39	36	32	27	22	18	14	10	9
7.5°	67	65	63	59	51	43	35	28	22	16	13
10°	96	93	90	83	73	61	49	39	30	22	18
12.5°	125	123	118	109	95	81	64	50	39	28	23
15°	157	154	148	136	119	101	80	63	49	35	28
17.5°	189	186	178	164	143	121	97	76	59	42	34
20°	221	218	209	192	168	142	113	89	69	49	39
22.5°	253	250	239	220	192	163	130	102	79	56	45
25°	289	285	273	248	219	184	147	115	90	64	51
27.5°	323	318	303	279	244	205	164	128	100	71	57
30°	354	350	336	306	272	227	182	142	111	79	63
32.5°	386	383	365	335	297	248	199	156	122	86	69
35°	420	416	396	363	322	273	216	169	132	94	75
37.5°	450	446	424	391	347	293	233	183	143	101	81
40°	481	478	456	418	372	315	250	196	153	109	87
42.5°	513	508	483	445	396	336	269	209	163	116	93
45°	543	537	512	472	419	356	286	222	174	123	98
47.5°	571	566	538	497	442	375	301	235	183	130	104
50°	598	594	565	522	464	395	318	247	193	137	109
52.5°	625	620	590	546	487	414	332	260	202	144	114
55°	651	646	615	569	507	432	347	273	211	150	120
57.5°	675	670	639	591	527	449	361	284	220	157	125
60°	699	693	661	612	547	465	375	294	228	162	129
62.5°	720	714	681	631	564	480	387	304	236	168	134
65°	741	735	701	650	581	495	398	314	243	173	138
67.5°	759	753	719	667	596	507	409	322	250	178	142
70°	776	769	736	683	610	519	419	330	257	182	145
72.5°	792	785	750	697	624	531	429	337	263	186	148
75°	804	797	763	709	635	541	436	343	269	189	151
77.5°	816	808	774	720	644	549	443	349	273	192	154
80°	825	818	783	729	652	556	449	353	277	195	156
82.5°	832	825	790	735	658	561	453	357	279	197	157
85°	837	830	796	740	663	565	456	359	282	198	158
87.5°	840	833	798	743	665	568	458	360	283	199	159
89°	841	834	799	743	666	568	459	361	283	199	159
90°	842	835	800	744	666	568	458	361	283	199	159
92.5°	840	833	798	742	664	567	457	361	282	199	159
95°	836	828	794	738	660	563	455	358	281	198	158
97.5°	830	822	788	732	655	559	451	356	279	196	157
100°	820	814	779	724	647	552	445	351	275	193	154
102.5°	811	803	769	715	639	546	440	347	271	191	152
105°	798	791	757	703	628	535	432	341	267	187	150
107.5°	783	777	743	690	617	525	424	334	261	184	147



TEST NUMBER: P368742

CATALOG NUMBER: 674-W-43-L4/840

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	768	762	728	676	603	515	415	327	254	180	143
112.5°	750	744	712	659	588	500	404	318	247	175	140
115°	731	725	693	642	573	487	393	309	240	170	136
117.5°	710	705	674	623	556	472	381	300	232	165	131
120°	688	683	652	603	537	457	368	290	225	159	127
122.5°	665	659	630	582	518	440	355	279	216	153	122
125°	641	636	607	560	499	423	341	268	208	147	117
127.5°	615	610	582	537	478	405	326	255	199	140	112
130°	588	584	557	513	455	386	311	242	189	134	107
132.5°	560	556	530	488	434	367	295	230	180	127	101
135°	531	527	503	462	409	347	279	217	170	120	96
137.5°	502	499	475	436	386	327	263	204	160	113	90
140°	471	468	446	409	362	306	244	191	149	105	84
142.5°	441	437	416	382	338	286	227	178	138	98	78
145°	409	407	387	356	313	265	210	164	128	91	72
147.5°	377	375	356	328	288	242	192	151	118	83	66
150°	344	343	326	299	263	220	175	137	107	76	60
152.5°	312	310	294	270	236	199	159	124	97	68	54
155°	279	278	264	240	210	177	141	111	86	61	49
157.5°	244	243	230	211	185	157	124	98	76	54	43
160°	211	210	199	183	161	135	107	85	66	46	37
162.5°	179	178	168	155	136	114	91	72	56	39	31
165°	147	146	138	126	111	93	75	59	46	32	26
167.5°	116	116	110	102	88	74	59	47	36	26	21
170°	87	87	82	75	66	55	45	35	28	20	16
172.5°	59	59	55	50	45	38	31	25	19	14	11
175°	34	34	31	29	25	21	18	15	11	8	7
177.5°	11	11	10	9	9	7	6	5	4	4	4
180°	2	2	2	2	2	2	2	2	2	2	2



TEST NUMBER: P368742

CATALOG NUMBER: 674-W-43-L4/840

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2	2	2	2	2	2	2	2	2	2
2.5°	4	4	3	3	2	2	1	1	0	0
5°	7	4	4	3	2	2	1	1	0	0
7.5°	10	6	4	3	2	2	1	1	0	0
10°	14	8	4	3	2	2	1	1	0	0
12.5°	18	10	5	3	2	2	1	1	0	0
15°	22	12	6	3	2	1	1	1	0	0
17.5°	26	14	6	3	2	1	1	0	0	0
20°	30	16	7	3	2	1	1	0	0	0
22.5°	34	18	8	3	2	1	1	0	0	0
25°	39	20	9	3	2	1	1	0	0	0
27.5°	43	22	9	3	2	1	1	0	0	0
30°	48	24	10	3	1	1	1	0	0	0
32.5°	52	26	11	3	1	1	1	0	0	0
35°	57	29	12	4	1	1	1	0	0	0
37.5°	61	31	13	4	1	1	1	0	0	0
40°	66	33	14	4	1	1	1	0	0	0
42.5°	70	35	14	4	1	1	1	0	0	0
45°	75	37	15	5	1	1	1	0	0	0
47.5°	79	40	16	5	2	1	1	0	0	0
50°	83	41	17	5	2	1	1	1	0	0
52.5°	87	43	18	5	2	1	1	1	0	0
55°	91	45	19	6	2	1	1	1	0	0
57.5°	94	47	19	6	2	1	1	1	1	1
60°	98	49	20	6	2	1	1	1	1	1
62.5°	101	51	21	6	2	1	1	1	1	1
65°	104	52	21	7	2	2	1	1	1	1
67.5°	107	54	22	7	2	2	1	1	1	1
70°	110	55	22	7	2	2	1	1	1	1
72.5°	112	56	23	7	2	2	2	2	2	2
75°	114	57	23	8	2	2	2	2	2	2
77.5°	116	58	24	8	2	2	2	2	2	2
80°	118	59	24	8	2	2	2	2	2	2
82.5°	119	60	24	8	2	2	2	2	2	2
85°	120	60	25	8	2	2	2	2	2	2
87.5°	120	61	25	8	2	2	2	2	2	2
89°	120	61	25	8	2	2	2	2	2	2
90°	120	60	25	8	2	2	2	2	2	2
92.5°	120	60	25	8	2	2	2	2	2	2
95°	119	60	24	8	2	2	2	2	2	2
97.5°	118	60	24	8	2	2	2	2	2	2
100°	117	59	24	8	2	2	2	2	2	2
102.5°	115	58	24	8	2	2	2	2	2	2
105°	113	57	23	7	2	2	2	2	2	2
107.5°	111	55	23	7	2	2	2	2	1	1



TEST NUMBER: P368742

CATALOG NUMBER: 674-W-43-L4/840

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	108	54	22	7	2	2	1	1	1	1
112.5°	105	53	21	7	2	2	1	1	1	1
115°	102	51	21	7	2	2	1	1	1	1
117.5°	99	49	20	6	2	2	1	1	1	1
120°	96	48	19	6	2	1	1	1	1	1
122.5°	92	46	19	6	2	1	1	1	1	1
125°	88	44	18	6	2	1	1	1	0	0
127.5°	84	42	17	5	2	1	1	1	0	0
130°	80	40	17	5	2	1	1	1	0	0
132.5°	76	38	16	5	2	1	1	1	0	0
135°	72	36	15	5	2	1	1	1	0	0
137.5°	68	34	14	4	2	1	1	1	0	0
140°	63	32	13	4	2	1	1	0	0	0
142.5°	59	30	12	4	2	1	1	0	0	0
145°	55	27	11	4	2	1	1	0	0	0
147.5°	50	25	10	3	2	1	1	0	0	0
150°	45	23	10	3	2	1	1	0	0	0
152.5°	41	21	9	3	2	1	1	0	0	0
155°	37	19	8	3	2	1	1	0	0	0
157.5°	32	17	7	3	2	1	1	0	0	0
160°	28	15	6	3	2	1	1	1	0	0
162.5°	24	13	6	3	2	1	1	0	0	0
165°	20	11	5	3	2	1	1	1	0	0
167.5°	16	9	4	3	2	2	1	1	0	0
170°	12	7	4	3	2	2	1	1	0	0
172.5°	9	5	4	3	2	2	1	1	0	0
175°	5	4	3	3	2	2	1	1	0	0
177.5°	4	4	3	3	2	2	1	1	0	0
180°	2	2	2	2	2	2	2	2	2	2

(END OF REPORT)