

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: RSA

Report Number: P22066

Luminaire Tested: **ARAC302511E1TW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P22066
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: RSA
Catalog Number: ARAC302511E1TW
Description: RSA 130 MILLIMETER LED ROUND ADJUSTABLE ACCENT FIXTURE WITH
SPECULAR CLEAR ANGLE CUT REFLECTOR, CLEAR GLASS LENS AND 25 DEGREE
Light Source: (1) SMT 3000K LED
SLM-1100
Ballast/Driver: (1) PHILIPS ELECTRONIC DRIVER
NV2I5AE40205

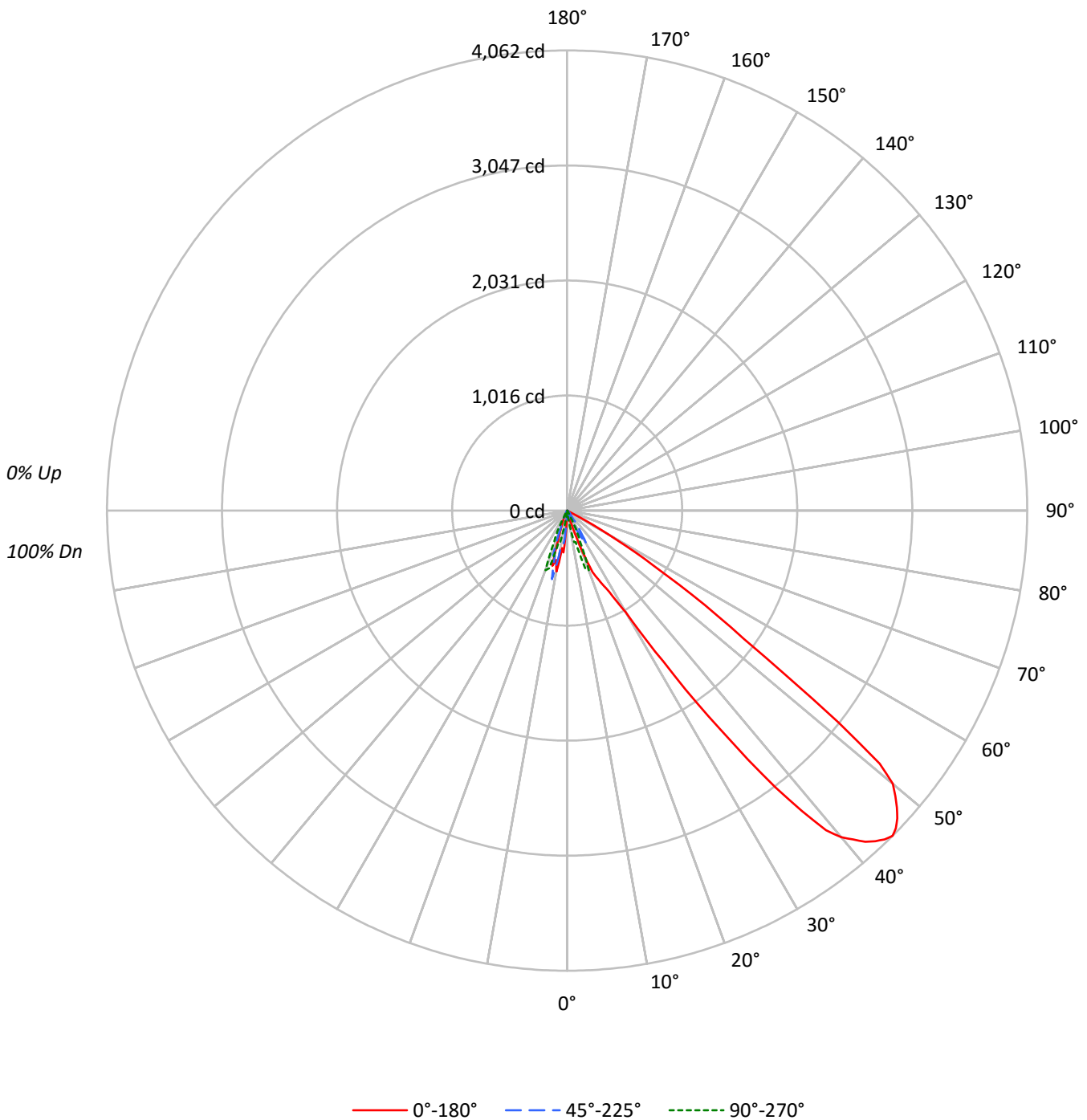
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 865.5 lumens
Efficiency: N/A
Efficacy: 44.8 lumens/watt
Spacing Criteria (0/90/45): 3.69 / 1.24 / 1.42
Luminous Opening: Vertical Cylinder (Dia: 0.29' x H: 0.1')
CIE Type: Direct

Input Watts (W): 19.3
Input Voltage (V): NR
Input Current (Ain): 0.1630
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: P22066
CATALOG NUMBER: ARAC302511E1TW

Luminous Intensity Polar Plot





TEST NUMBER: P22066

CATALOG NUMBER: ARAC302511E1TW

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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	89				89
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78	76				76
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				66
4	86	75	67	61	84	74	66	61	71	65	60	69	64	59	67	62	58	56				56
5	79	67	58	52	77	66	58	52	64	57	51	62	56	51	60	55	50	48				48
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42				42
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36				36
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31				31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	29	40	34	29	27				27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24				24

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	3061	3061	3061
5°	2337	3738	57946
10°	2582	22785	82784
15°	7167	43303	75258
20°	50003	82845	21007
25°	102647	30277	6794
30°	153631	3863	1040
35°	355334	1506	904
40°	579062	770	308
45°	644234	476	159
50°	618567	330	165
55°	280107	346	0
60°	78162	183	0
65°	1969	197	0
70°	1071	214	0
75°	0	473	0
80°	0	534	0
85°	0	617	0



TEST NUMBER: P22066

CATALOG NUMBER: ARAC302511E1TW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.2	1.5
10°-20°	71.9	8.3
20°-30°	102.6	11.9
30°-40°	188.5	21.8
40°-50°	321.9	37.2
50°-60°	159.3	18.4
60°-70°	6.0	0.7
70°-80°	1.1	0.1
80°-90°	1.0	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	187.8	21.7
0°-40°	376.2	43.5
0°-60°	857.4	99.1
0°-90°	865.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	865.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	19	19	19	19	19	
5°	15	16	24	250	372	2
15°	48	18	290	413	504	30
25°	695	104	205	57	46	329
35°	2359	115	10	6	6	1546
45°	4062	25	3	3	1	3052
55°	1619	9	2	1	0	1622
65°	10	2	1	1	0	61
75°	0	1	2	1	0	2
85°	0	1	2	1	0	0
90°	0	0	0	0	0	



TEST NUMBER: P22066

CATALOG NUMBER: ARAC302511E1TW

CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	19	19	19	19	19	19	19	19	19	19	19
2.5°	16	16	15	16	16	16	16	16	16	16	16
5°	15	15	15	15	16	15	15	16	15	16	15
7.5°	16	16	16	16	16	16	16	16	16	16	16
10°	17	17	17	17	17	17	17	17	17	17	17
12.5°	22	22	22	22	22	22	22	22	22	21	21
15°	48	48	48	47	46	46	42	41	40	39	38
17.5°	124	123	123	122	121	116	115	113	111	108	106
20°	338	337	336	332	327	310	306	300	292	282	273
22.5°	586	584	583	579	574	557	553	546	537	525	516
25°	695	694	693	690	688	680	677	674	670	665	659
27.5°	810	806	791	786	794	782	779	773	765	757	749
30°	1034	1030	994	998	999	969	958	942	924	903	885
32.5°	1576	1529	1478	1486	1491	1421	1388	1345	1293	1239	1191
35°	2359	2394	2338	2340	2290	2226	2167	2088	2000	1891	1797
36°	2719	2752	2695	2699	2644	2576	2512	2425	2324	2194	2079
37°	3060	3091	3035	3032	3015	2907	2840	2744	2628	2486	2359
38°	3365	3391	3342	3329	3304	3199	3125	3027	2908	2757	2617
39°	3631	3608	3571	3552	3520	3432	3358	3261	3150	3008	2864
40°	3762	3743	3715	3695	3661	3579	3512	3431	3336	3213	3073
41°	3848	3854	3827	3798	3747	3687	3626	3554	3471	3359	3235
42°	3934	3931	3901	3870	3825	3766	3707	3640	3569	3468	3357
43°	3990	3987	3967	3943	3896	3837	3779	3718	3651	3552	3442
44°	4035	4030	4012	3985	3946	3890	3838	3777	3708	3612	3492
45°	4062	4049	4022	3990	3953	3905	3860	3798	3732	3635	3521
46°	4035	4022	4005	3968	3930	3883	3844	3789	3723	3628	3520
47°	3985	3970	3961	3925	3886	3837	3799	3749	3695	3601	3489
48°	3918	3904	3889	3847	3815	3772	3730	3678	3625	3535	3419
49°	3840	3822	3804	3760	3725	3678	3634	3580	3518	3422	3295
50°	3752	3730	3720	3682	3630	3572	3513	3440	3358	3240	3095
51°	3550	3496	3535	3493	3403	3329	3241	3136	3030	2895	2732
52°	3040	2965	3023	2998	2886	2812	2721	2611	2500	2371	2225
53°	2417	2344	2397	2295	2256	2199	2129	2051	1973	1879	1779
54°	1931	1888	1914	1848	1820	1778	1730	1670	1614	1550	1482
55°	1619	1590	1609	1559	1538	1505	1471	1426	1384	1335	1283
57.5°	900	865	895	885	834	846	813	741	705	666	624
60°	426	408	424	417	390	393	360	344	326	306	285
62.5°	20	19	20	19	17	17	16	14	14	13	12
65°	10	10	10	10	10	10	9	9	9	9	8
67.5°	7	7	7	7	6	6	6	6	6	6	6
70°	5	5	5	5	5	5	5	5	5	5	5
72.5°	5	4	4	4	4	4	4	4	4	3	3
75°	0	0	0	0	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0	0	0



TEST NUMBER: P22066

CATALOG NUMBER: ARAC302511E1TW

CANDELA DISTRIBUTION (continued):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
82.5°	0	0	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0	0	0



TEST NUMBER: P22066

CATALOG NUMBER: ARAC302511E1TW

CANDELA DISTRIBUTION (continued):

	12.5°	15°	17.5°	20°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°
0°	19	19	19	19	19	19	19	19	19	19	19
2.5°	16	16	16	16	16	17	17	20	26	36	49
5°	15	16	16	16	16	16	17	24	67	250	360
7.5°	16	16	16	16	16	16	18	42	303	347	337
10°	17	17	17	17	17	16	20	150	345	357	510
12.5°	21	21	20	20	19	16	29	285	349	620	487
15°	36	33	30	27	25	18	84	290	656	413	508
17.5°	100	92	81	71	60	20	176	535	379	413	246
20°	244	213	178	147	122	26	206	560	386	170	146
22.5°	482	445	395	337	278	68	468	300	151	101	86
25°	641	618	584	538	471	104	469	205	71	57	45
27.5°	726	702	676	649	610	251	235	63	35	20	12
30°	838	799	762	730	699	341	96	26	16	13	9
32.5°	1063	967	903	868	849	219	30	12	12	11	12
35°	1539	1321	1153	1039	949	115	14	10	8	6	6
36°	1767	1469	1217	1060	954	87	12	9	6	4	5
37°	1988	1620	1297	1093	962	69	11	9	5	4	3
38°	2204	1790	1390	1128	968	57	10	8	4	3	3
39°	2405	1949	1492	1170	978	50	9	7	4	3	2
40°	2597	2088	1586	1216	990	45	9	5	3	3	2
41°	2768	2219	1671	1254	995	41	8	5	3	3	2
42°	2904	2337	1735	1283	994	37	7	4	3	3	2
43°	2990	2418	1784	1295	982	33	6	3	3	3	2
44°	3035	2459	1808	1292	964	28	5	3	3	3	2
45°	3050	2468	1808	1283	955	25	5	3	3	3	1
46°	3049	2448	1794	1269	938	22	4	3	3	2	1
47°	3010	2402	1754	1234	913	19	4	3	3	2	1
48°	2926	2324	1681	1184	885	16	3	2	3	2	1
49°	2787	2201	1569	1109	850	14	3	2	3	2	1
50°	2564	1984	1395	1009	811	12	3	2	3	2	1
51°	2214	1685	1207	926	775	10	2	2	2	2	1
52°	1795	1400	1077	870	746	10	2	2	2	2	1
53°	1486	1233	990	820	692	9	2	2	2	2	0
54°	1286	1098	900	726	549	9	2	2	2	1	0
55°	1138	935	727	549	380	9	2	2	2	1	0
57.5°	514	418	328	255	183	7	1	2	2	1	0
60°	213	127	55	22	17	6	1	1	2	1	0
62.5°	11	10	11	12	12	5	1	1	2	1	0
65°	8	8	9	9	10	2	1	1	2	1	0
67.5°	6	6	7	7	8	1	1	1	2	1	0
70°	5	5	6	6	5	1	1	1	2	1	0
72.5°	2	1	1	1	1	1	1	1	2	1	0
75°	0	0	0	0	0	1	1	2	2	1	0
77.5°	0	0	0	0	0	1	1	2	2	1	0
80°	0	0	0	0	0	1	2	2	2	1	0



TEST NUMBER: P22066

CATALOG NUMBER: ARAC302511E1TW

CANDELA DISTRIBUTION (continued):

	12.5°	15°	17.5°	20°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°
82.5°	0	0	0	0	0	1	2	2	2	1	0
85°	0	0	0	0	0	1	2	2	2	1	0
87.5°	0	0	0	0	0	1	2	2	2	1	0
90°	0	0	0	0	0	0	0	0	0	0	0



TEST NUMBER: P22066

CATALOG NUMBER: ARAC302511E1TW

CANDELA DISTRIBUTION (continued):

	180°
0°	19
2.5°	57
5°	372
7.5°	334
10°	545
12.5°	447
15°	504
17.5°	212
20°	142
22.5°	83
25°	46
27.5°	11
30°	7
32.5°	15
35°	6
36°	5
37°	4
38°	3
39°	2
40°	2
41°	2
42°	2
43°	1
44°	1
45°	1
46°	1
47°	1
48°	1
49°	1
50°	1
51°	1
52°	1
53°	0
54°	0
55°	0
57.5°	0
60°	0
62.5°	0
65°	0
67.5°	0
70°	0
72.5°	0
75°	0
77.5°	0
80°	0



TEST NUMBER: P22066

CATALOG NUMBER: ARAC302511E1TW

CANDELA DISTRIBUTION (continued):

	180°
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)