

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: P22056

Luminaire Tested: **ARAC301011E1TW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P22056
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: RSA
Catalog Number: ARAC301011E1TW
Description: RSA 130 MILLIMETER LED ROUND ADJUSTABLE ACCENT FIXTURE WITH
SPECULAR CLEARANGLE CUT REFLECTOR, CLEAR GLASS LENS AND 10 DEGREE
Light Source: (1) SMT 3000K LED
SLM-1100
Ballast/Driver: (1) PHILIPS ELECTRONIC DRIVER
NV2I5AE40205

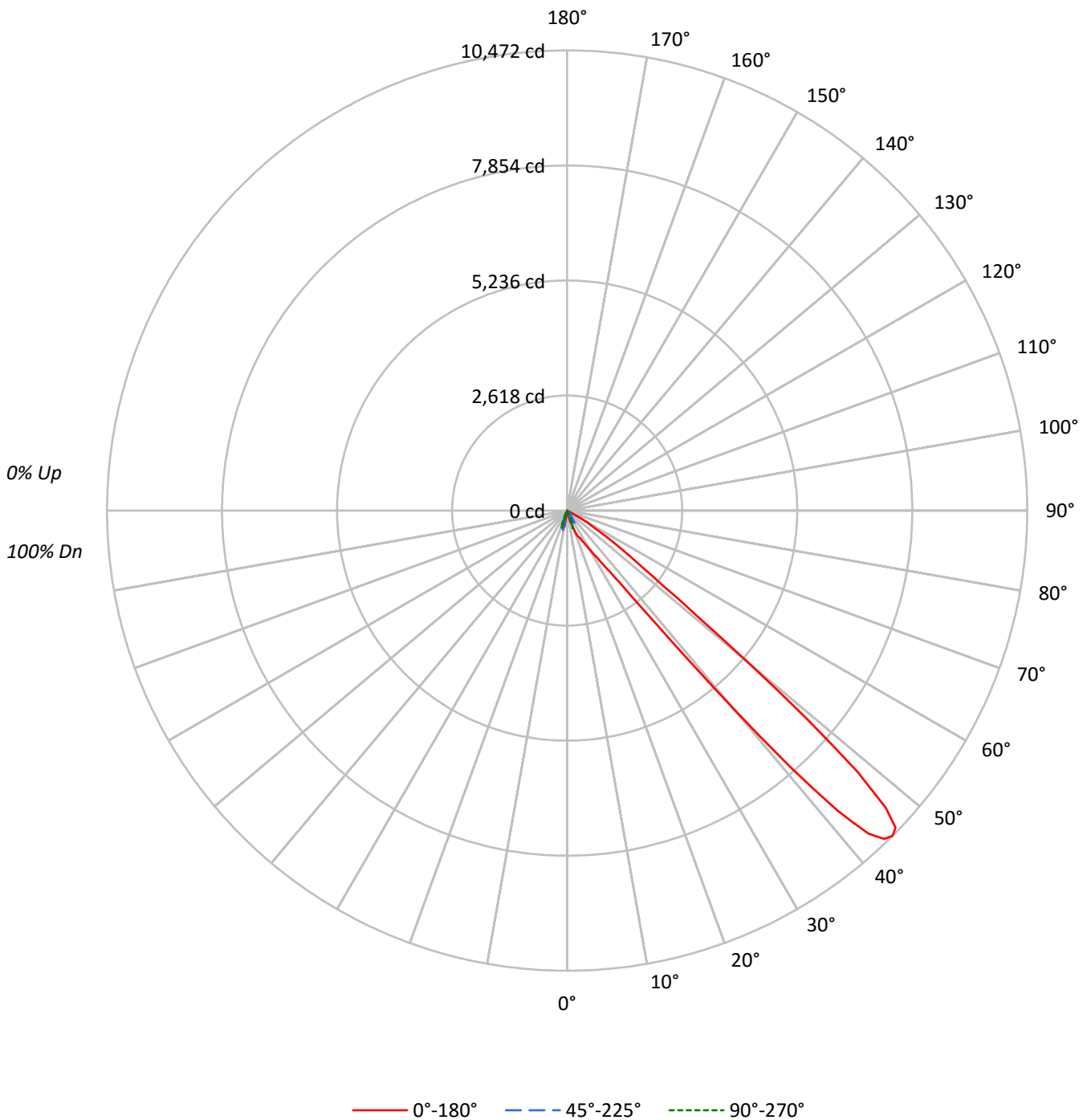
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 923.8 lumens
Efficiency: N/A
Efficacy: 48.1 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 1.15 / 1.59
Luminous Opening: Vertical Cylinder (Dia: 0.29' x H: 0.1')
CIE Type: Direct

Input Watts (W): 19.2
Input Voltage (V): NR
Input Current (Ain): 0.1622
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

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Luminous Intensity Polar Plot





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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	93	92	90	88				88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				76
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65				65
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55				55
5	78	66	57	51	76	65	57	51	63	56	50	61	54	50	59	53	49	47				47
6	71	58	50	43	70	57	49	43	56	48	43	54	47	42	52	47	42	40				40
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34				34
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	29				29
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25				25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	34	28	24	22				22

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	4350	4350	4350
5°	4985	3583	3427
10°	5772	3646	58480
15°	22398	10303	62117
20°	72785	51186	22339
25°	103090	29686	8862
30°	149322	2823	594
35°	257274	1054	151
40°	900916	462	0
45°	1660860	317	159
50°	876084	330	0
55°	250003	346	0
60°	84950	367	0
65°	1378	394	0
70°	428	428	0
75°	0	473	0
80°	0	534	0
85°	0	617	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.4	0.5
10°-20°	57.0	6.2
20°-30°	107.8	11.7
30°-40°	181.3	19.6
40°-50°	420.2	45.5
50°-60°	145.0	15.7
60°-70°	5.9	0.6
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°	169.3	18.3
0°-40°	350.6	37.9
0°-60°	915.8	99.1
0°-90°	923.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	923.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	27	27	27	27	27	
5°	32	30	23	20	22	3
15°	150	27	69	261	416	61
25°	698	189	201	61	60	341
35°	1708	182	7	3	1	1445
45°	10472	90	2	2	1	6950
55°	1445	5	2	1	0	1582
65°	7	1	2	1	0	66
75°	0	1	2	1	0	1
85°	0	1	2	1	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	27	27	27	27	27	27	27	27	27	27	27
2.5°	31	31	31	31	31	31	31	31	31	31	31
5°	32	32	32	32	33	32	33	33	33	33	33
7.5°	35	35	35	35	35	34	34	34	34	34	34
10°	38	38	37	37	37	35	35	35	34	34	34
12.5°	103	102	102	101	103	102	102	102	100	97	96
15°	150	152	150	149	150	149	148	148	147	145	143
17.5°	263	261	262	259	267	263	259	254	246	237	230
20°	492	499	490	486	492	489	485	479	471	461	453
22.5°	624	623	623	622	623	622	621	618	615	612	610
25°	698	697	697	695	697	694	691	688	684	680	675
27.5°	820	818	816	813	816	805	800	801	795	786	779
30°	1005	1003	1001	995	999	990	971	971	959	944	930
32.5°	1285	1280	1276	1268	1257	1245	1232	1231	1214	1194	1174
35°	1708	1697	1687	1675	1657	1635	1616	1605	1577	1538	1505
36°	2020	2004	1986	1958	1920	1879	1837	1805	1753	1689	1634
37°	2468	2437	2407	2353	2284	2202	2119	2052	1964	1865	1783
38°	3133	3081	3027	2933	2810	2659	2514	2384	2240	2085	1962
39°	4226	4134	4022	3839	3611	3339	3099	2863	2628	2381	2191
40°	5853	5709	5500	5172	4778	4308	3907	3507	3139	2761	2477
41°	7692	7529	7244	6774	6200	5502	4880	4273	3743	3210	2807
42°	9185	9039	8741	8235	7589	6731	5912	5079	4358	3657	3132
43°	10053	9928	9665	9202	8582	7678	6749	5748	4871	4025	3386
44°	10389	10278	10018	9582	9024	8171	7214	6115	5160	4226	3529
45°	10472	10353	10058	9624	9102	8258	7286	6145	5180	4229	3525
46°	10390	10281	9985	9516	8928	8037	7057	5882	4942	4034	3377
47°	9920	9831	9546	9019	8359	7405	6435	5341	4495	3687	3104
48°	8891	8839	8553	7974	7263	6351	5506	4580	3881	3240	2769
49°	7223	7199	6920	6372	5760	5051	4417	3729	3217	2747	2407
50°	5314	5320	5117	4725	4297	3837	3440	2980	2631	2309	2079
51°	3747	3765	3651	3431	3196	2944	2707	2422	2202	1989	1831
52°	2760	2778	2721	2598	2469	2327	2192	2013	1872	1736	1628
53°	2153	2166	2140	2074	2011	1927	1846	1736	1648	1551	1477
54°	1735	1749	1747	1722	1688	1638	1592	1524	1466	1399	1337
55°	1445	1460	1464	1450	1425	1397	1370	1299	1250	1189	1135
57.5°	752	759	759	757	750	742	729	711	677	663	625
60°	463	471	469	460	448	436	425	407	367	359	314
62.5°	32	32	32	31	29	28	27	25	22	21	18
65°	7	7	6	6	6	6	6	5	5	5	4
67.5°	3	3	3	3	2	2	2	2	2	2	2
70°	2	2	2	2	1	1	1	1	1	1	1
72.5°	1	1	1	1	1	1	1	1	1	1	1
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



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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



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CANDELA DISTRIBUTION (continued):

	12.5°	15°	17.5°	20°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°
0°	27	27	27	27	27	27	27	27	27	27	27
2.5°	31	31	31	31	31	30	28	25	20	17	15
5°	33	33	32	32	32	30	27	23	16	20	22
7.5°	34	34	34	33	33	29	27	23	21	31	52
10°	33	33	33	32	33	28	26	24	34	167	353
12.5°	90	85	77	67	57	27	27	32	191	455	308
15°	140	137	131	124	117	27	30	69	479	261	340
17.5°	215	199	182	170	159	32	37	428	252	414	350
20°	426	394	356	311	261	60	94	346	333	191	152
22.5°	600	578	541	496	442	107	433	242	152	100	88
25°	662	648	630	614	589	189	334	201	63	61	58
27.5°	756	735	706	681	658	402	186	50	37	27	12
30°	890	851	810	775	753	401	87	19	13	6	4
32.5°	1119	1065	1018	980	949	259	35	10	7	4	3
35°	1407	1301	1189	1083	996	182	20	7	5	3	2
36°	1491	1363	1231	1110	1008	164	18	6	4	2	1
37°	1583	1421	1269	1134	1014	154	17	5	3	2	1
38°	1686	1479	1306	1154	1017	145	16	5	3	2	1
39°	1801	1537	1334	1164	1015	138	16	4	3	2	0
40°	1931	1595	1353	1167	1008	132	16	3	3	2	1
41°	2067	1643	1366	1169	1001	126	15	3	3	1	0
42°	2185	1688	1378	1168	992	120	14	3	3	2	1
43°	2264	1715	1375	1157	975	113	12	2	3	2	1
44°	2304	1712	1360	1139	960	104	11	2	3	2	0
45°	2301	1698	1340	1120	949	90	9	2	3	2	1
46°	2225	1659	1311	1099	936	76	8	2	3	2	1
47°	2087	1593	1280	1082	919	60	6	2	3	2	1
48°	1928	1517	1248	1063	904	47	4	2	3	2	1
49°	1784	1447	1212	1034	881	34	3	2	3	2	1
50°	1646	1375	1168	993	852	21	3	2	3	2	1
51°	1516	1294	1112	948	816	13	2	2	2	1	0
52°	1386	1199	1041	893	746	11	2	2	2	1	0
53°	1289	1127	971	800	620	8	2	2	2	1	0
54°	1181	1017	818	629	470	6	2	2	2	1	0
55°	978	814	627	474	359	5	2	2	2	1	0
57.5°	547	452	347	270	182	3	2	2	2	1	0
60°	235	153	73	29	12	2	2	2	2	1	0
62.5°	14	10	7	6	5	2	2	2	2	1	0
65°	4	4	3	3	2	1	2	2	2	1	0
67.5°	2	2	2	1	1	1	1	2	2	1	0
70°	1	1	1	1	1	1	1	2	2	1	0
72.5°	0	0	0	0	0	1	2	2	2	1	0
75°	0	0	0	0	0	1	2	2	2	1	0
77.5°	0	0	0	0	0	1	2	2	2	1	0
80°	0	0	0	0	0	1	2	2	2	1	0



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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	3	1	0
87.5°	0	0	0	0	0	1	2	2	3	1	0
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	180°
0°	27
2.5°	14
5°	22
7.5°	63
10°	385
12.5°	276
15°	416
17.5°	310
20°	151
22.5°	90
25°	60
27.5°	10
30°	4
32.5°	3
35°	1
36°	1
37°	1
38°	1
39°	0
40°	0
41°	0
42°	0
43°	0
44°	0
45°	1
46°	1
47°	0
48°	0
49°	0
50°	0
51°	0
52°	0
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



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CANDELA DISTRIBUTION (continued):

	180°
82.5°	0
85°	0
87.5°	0
90°	0

(END OF REPORT)