

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: P21964

Luminaire Tested: **ARAC304011E1TW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P21964
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: RSA
Catalog Number: ARAC304011E1TW
Description: RSA 130 MILLIMETER LED ADJUSTABLE ROUND ACCENT FIXTURE WITH SPECULAR CLEAR ANGLE CUT REFLECTOR, CLEAR GLASS LENS AND 40 DEGREE LED
Light Source: (1) SMT 3000K LED
SLM-1100
Ballast/Driver: (1) PHILIPS ELECTRONIC DRIVER
NV2I5AE40205

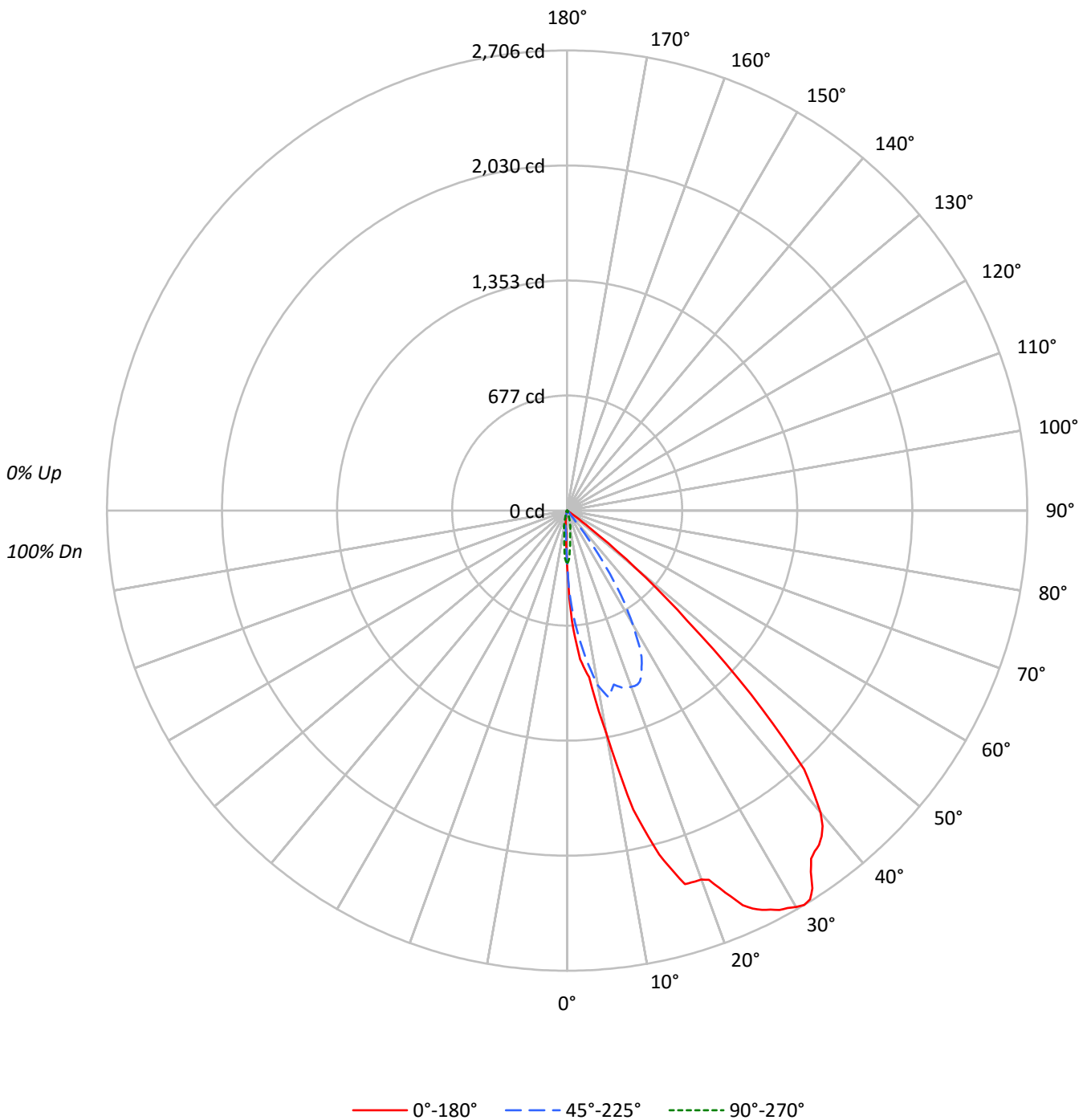
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 927.7 lumens
Efficiency: N/A
Efficacy: 48.3 lumens/watt
Spacing Criteria (0/90/45): 2.16 / 0.22 / 1.02
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 (A_{in}): 0.16227
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	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	113	110	107	104	110	107	105	103	103	101	99	100	98	97	96	95	94	92					92			
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84					84			
3	100	92	87	82	98	91	86	81	88	84	80	86	82	79	83	80	78	76					76			
4	94	85	78	74	92	84	78	73	81	76	72	79	75	71	77	74	71	69					69			
5	88	78	71	66	86	77	71	66	75	70	65	73	69	65	72	68	64	63					63			
6	82	72	65	60	81	71	65	60	69	64	59	68	63	59	67	62	59	57					57			
7	77	66	59	55	76	66	59	54	64	58	54	63	58	54	62	57	53	52					52			
8	72	61	55	50	71	61	54	50	60	54	49	59	53	49	57	53	49	47					47			
9	68	57	50	46	67	56	50	45	55	49	45	54	49	45	54	49	45	43					43			
10	64	53	46	42	63	52	46	42	52	46	42	51	45	41	50	45	41	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	51070	51070	51070
5°	136766	30531	14487
10°	202783	16101	5164
15°	312827	6271	597
20°	341588	2959	740
25°	381493	1182	443
30°	399976	446	0
35°	376573	452	0
40°	356949	462	0
45°	242341	317	0
50°	86388	330	0
55°	4844	346	0
60°	1101	367	0
65°	0	394	0
70°	0	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°	38.3	4.1
10°-20°	157.7	17.0
20°-30°	272.7	29.4
30°-40°	293.8	31.7
40°-50°	152.8	16.5
50°-60°	9.3	1.0
60°-70°	1.0	0.1
70°-80°	1.0	0.1
80°-90°	1.1	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°	468.7	50.5
0°-40°	762.5	82.2
0°-60°	924.7	99.7
0°-90°	927.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	927.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	317	317	317	317	317	
5°	878	730	196	105	93	93
15°	2095	1059	42	7	4	583
25°	2583	1034	8	3	3	1181
35°	2500	361	3	1	0	1589
45°	1528	12	2	1	0	1135
55°	28	4	2	1	0	101
65°	0	1	2	1	0	2
75°	0	1	2	1	0	0
85°	0	1	2	1	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	317	317	317	317	317	317	317	317	317	317	317
2.5°	647	656	654	664	662	661	660	654	647	641	556
5°	878	879	878	880	878	876	874	870	865	859	730
7.5°	988	991	994	1007	1005	1002	997	990	984	981	894
10°	1335	1341	1333	1339	1326	1311	1288	1256	1228	1211	1044
12.5°	1801	1806	1787	1783	1759	1724	1684	1635	1593	1549	1125
15°	2095	2100	2092	2083	2062	2033	2003	1967	1925	1890	1059
17.5°	2304	2296	2277	2264	2248	2237	2230	2248	2288	2353	1094
20°	2309	2313	2323	2358	2406	2465	2523	2580	2602	2569	1103
21°	2326	2338	2357	2401	2444	2507	2561	2585	2568	2511	1105
22°	2396	2403	2414	2439	2469	2502	2515	2521	2504	2452	1103
23°	2466	2473	2474	2473	2469	2474	2477	2474	2452	2401	1093
24°	2540	2532	2512	2493	2476	2468	2456	2430	2397	2350	1070
25°	2583	2576	2553	2524	2496	2468	2441	2408	2367	2324	1034
26°	2613	2610	2588	2546	2506	2466	2436	2400	2360	2307	1000
27°	2634	2635	2620	2576	2517	2472	2435	2401	2358	2295	965
28°	2660	2659	2651	2604	2534	2477	2442	2401	2355	2279	905
29°	2673	2679	2673	2625	2545	2485	2450	2406	2350	2267	834
30°	2692	2699	2684	2627	2546	2487	2456	2405	2337	2251	768
31°	2706	2704	2675	2611	2527	2472	2443	2393	2323	2232	698
32°	2696	2684	2642	2573	2495	2449	2420	2374	2306	2213	633
33°	2649	2629	2578	2513	2456	2423	2396	2347	2279	2178	546
34°	2563	2548	2503	2456	2418	2393	2360	2312	2244	2134	449
35°	2500	2483	2450	2416	2391	2367	2330	2276	2198	2090	361
36°	2477	2461	2435	2402	2375	2343	2304	2242	2154	2036	270
37°	2461	2447	2428	2396	2357	2318	2275	2199	2098	1981	171
38°	2431	2423	2404	2376	2334	2286	2229	2134	2024	1905	73
39°	2387	2380	2364	2334	2291	2229	2157	2041	1931	1806	40
40°	2319	2316	2298	2266	2214	2139	2058	1929	1817	1694	29
42.5°	2063	2054	2031	1982	1916	1825	1743	1627	1486	1271	14
45°	1528	1496	1459	1393	1311	1211	1125	950	788	597	12
47.5°	957	924	910	865	801	731	629	478	336	199	11
50°	524	466	471	429	353	289	228	138	91	46	11
52.5°	166	165	141	132	93	73	55	31	21	13	8
55°	28	29	23	22	17	15	11	10	8	8	4
57.5°	8	8	7	8	8	8	8	8	7	8	2
60°	6	7	7	7	8	8	7	7	8	7	1
62.5°	4	3	3	3	2	1	1	0	0	0	1
65°	0	0	0	0	0	0	0	0	0	0	1
67.5°	0	0	0	0	0	0	0	0	0	0	1
70°	0	0	0	0	0	0	0	0	0	0	1
72.5°	0	0	0	0	0	0	0	0	0	0	1
75°	0	0	0	0	0	0	0	0	0	1	1
77.5°	0	0	0	0	0	0	0	0	0	0	1
80°	0	0	0	0	0	0	0	0	0	0	1



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
82.5°	0	0	0	0	0	0	0	0	0	0	1
85°	0	0	0	0	0	0	0	0	0	1	1
87.5°	0	0	0	0	0	0	0	0	0	0	1
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	317	317	317	317	317	317
2.5°	436	281	177	147	134	129
5°	481	196	124	105	98	93
7.5°	456	132	96	83	73	67
10°	382	106	82	54	38	34
12.5°	338	82	37	15	9	8
15°	272	42	14	7	5	4
17.5°	173	29	8	5	4	3
20°	95	20	6	5	6	5
21°	70	16	6	5	8	9
22°	51	13	5	5	5	5
23°	40	11	5	4	4	4
24°	36	9	4	4	4	3
25°	32	8	4	3	3	3
26°	29	6	3	3	3	3
27°	28	5	3	2	2	3
28°	26	4	2	1	1	1
29°	24	4	2	1	1	0
30°	22	3	2	1	0	0
31°	20	3	2	1	0	0
32°	18	3	2	1	0	0
33°	17	3	2	1	0	0
34°	16	3	2	1	0	0
35°	13	3	2	1	0	0
36°	11	2	2	1	0	0
37°	9	2	2	1	0	0
38°	8	2	2	1	0	0
39°	7	3	2	1	0	0
40°	7	3	1	1	0	0
42.5°	4	3	1	1	0	0
45°	2	2	1	1	0	0
47.5°	2	2	1	1	0	0
50°	2	2	1	1	0	0
52.5°	2	2	1	1	0	0
55°	2	2	1	1	0	0
57.5°	2	2	1	1	0	0
60°	2	2	1	1	0	0
62.5°	2	2	1	1	0	0
65°	1	2	1	1	0	0
67.5°	1	2	1	1	0	0
70°	1	2	1	1	0	0
72.5°	1	2	2	1	0	0
75°	2	2	2	1	0	0
77.5°	2	2	2	1	0	0
80°	2	2	2	1	0	0



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
82.5°	2	2	2	1	1	0
85°	2	2	2	1	1	0
87.5°	2	2	2	1	1	0
90°	0	0	0	0	0	0

(END OF REPORT)