

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: P13482

Luminaire Tested: **ASAS302511E4TW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P13482
Test Lab: PEACHTREE CITY
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: RSA
Catalog Number: ASAS302511E4TW
Description: RSA RECESSED LED SQUARE FIXTURE WITH ADJUSTABLE BRACKET AT 45 DEGREE, 3000K LED LIGHT ENGINE, 25 DEGREE REFLECTOR, WHITE TRIM WITH CLEAR GLASS LENS.
Light Source: (1) PHILIPS FORTIMO SLM 3000K LED
87182911 8708000
Ballast/Driver: (1) PHILIPS ADVANCE ELECTRONIC DRIVER
XR025C100V036XPM1

Summary

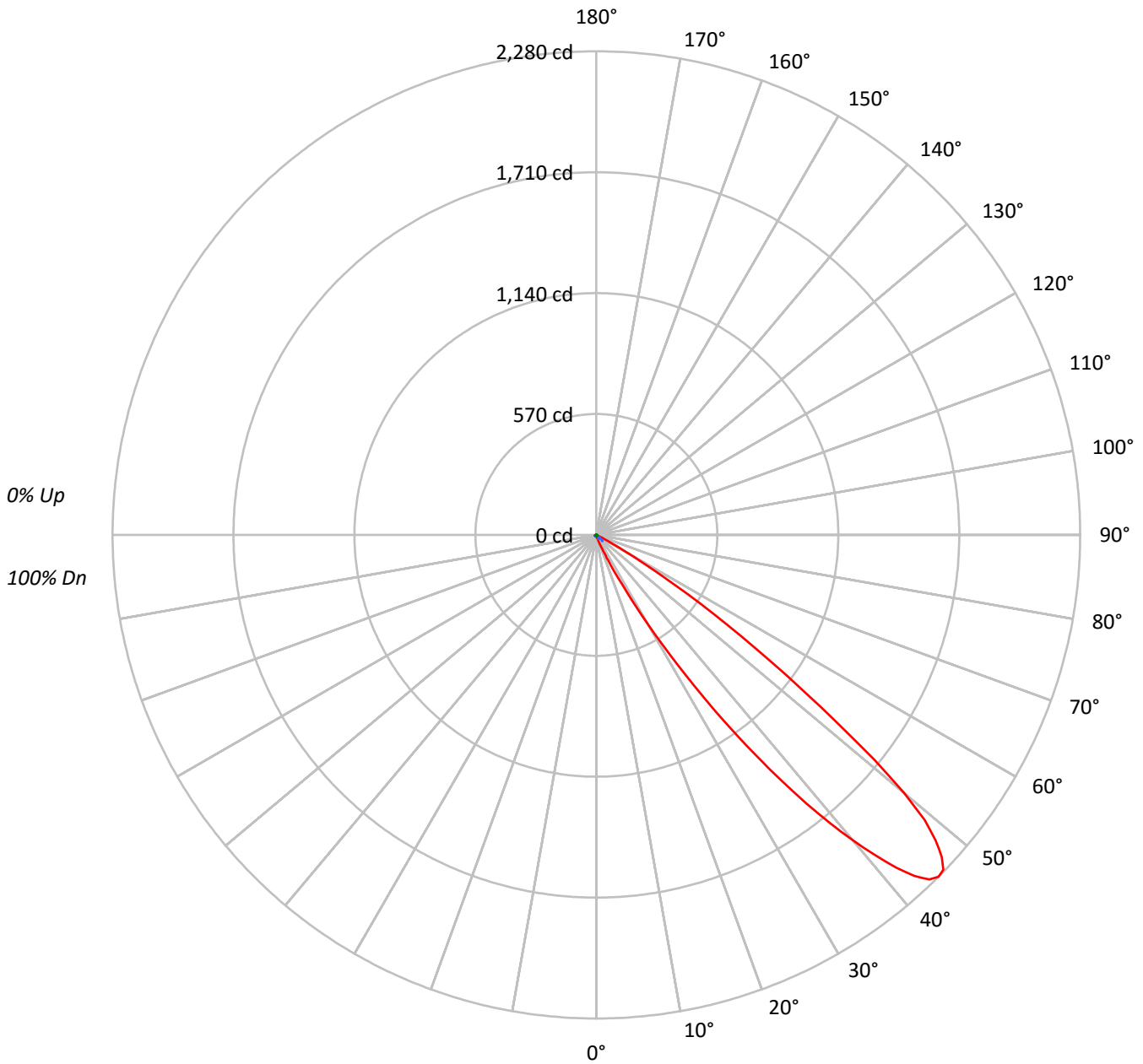
Lumens per Lamp: N/A
Luminaire Lumens: 414.0 lumens
Efficiency: N/A
Efficacy: 19.7 lumens/watt
Spacing Criteria (0/90/45): 3.73 / 0.96 / 1.8
Luminous Opening: Rectangular (W 0.31' x L: 0.31' x H: 0')
CIE Type: Direct

Input Watts (W): 21
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: HR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270°



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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	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89					87				
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75					73				
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63					60				
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	57	52					50				
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43					41				
6	67	53	44	37	65	52	44	37	51	43	37	49	42	36	47	41	36					34				
7	61	47	37	31	59	46	37	31	44	36	31	43	36	30	41	35	30					28				
8	56	41	32	26	54	40	32	26	39	31	25	38	31	25	37	30	25					23				
9	51	36	28	22	50	36	27	22	35	27	21	34	26	21	32	26	21					19				
10	47	33	24	18	46	32	24	18	31	23	18	30	23	18	29	22	18					16				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	882	882	882
5°	885	775	996
10°	1119	895	672
15°	1712	685	799
20°	4340	704	704
25°	16175	730	486
30°	61473	509	1018
35°	154471	673	673
40°	270216	719	1151
45°	355402	468	779
50°	324775	343	686
55°	159306	577	1153
60°	32846	220	1323
65°	2869	522	1565
70°	0	0	967
75°	0	0	852
80°	635	635	1904
85°	1265	2529	5059



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.7	0.2
10°-20°	2.5	0.6
20°-30°	14.5	3.5
30°-40°	98.0	23.7
40°-50°	193.8	46.8
50°-60°	95.0	22.9
60°-70°	7.6	1.8
70°-80°	0.9	0.2
80°-90°	1.0	0.3
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°	17.7	4.3
0°-40°	115.7	27.9
0°-60°	404.5	97.7
0°-90°	414.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	414.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8	8	8	8	8	
5°	8	8	7	7	9	1
15°	15	10	6	6	7	5
25°	133	21	6	5	4	89
35°	1148	40	5	4	5	748
45°	2280	39	3	4	5	1660
55°	829	9	3	5	6	793
65°	11	0	2	4	6	32
75°	0	0	0	0	2	0
85°	1	3	2	2	4	1
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°	8	8	8	8	8	8	8	8	8	8	8
2.5°	6	7	7	7	7	7	7	7	6	6	7
5°	8	8	9	8	9	10	8	10	12	9	8
7.5°	8	7	9	7	9	10	9	9	7	7	7
10°	10	10	10	9	9	10	9	9	9	9	8
12.5°	11	12	11	14	11	11	11	10	10	10	11
15°	15	15	15	14	15	15	14	15	14	13	10
17.5°	22	22	22	21	25	21	20	20	19	18	9
20°	37	37	38	36	35	34	32	29	29	26	11
22.5°	67	67	66	63	60	57	53	49	45	41	13
25°	133	131	125	122	116	108	100	89	81	73	21
27.5°	263	260	254	242	229	209	189	168	146	124	23
30°	483	478	466	442	411	378	341	297	258	217	28
32.5°	784	777	752	718	667	609	545	477	407	343	36
35°	1148	1135	1106	1054	979	897	798	694	583	480	40
36°	1297	1293	1262	1200	1121	1023	911	787	664	543	45
37°	1454	1447	1410	1347	1265	1152	1023	882	741	607	47
38°	1606	1596	1557	1488	1399	1273	1128	970	811	666	48
39°	1748	1737	1697	1622	1517	1379	1220	1044	868	712	47
40°	1878	1869	1826	1747	1630	1477	1298	1104	919	753	48
41°	1999	1986	1940	1856	1722	1552	1360	1150	949	778	45
42°	2111	2095	2042	1950	1802	1617	1405	1175	967	790	42
43°	2198	2181	2124	2020	1865	1659	1433	1194	978	797	42
44°	2258	2237	2175	2066	1899	1676	1439	1195	975	788	40
45°	2280	2257	2191	2079	1900	1667	1425	1177	958	770	39
46°	2273	2246	2175	2054	1866	1636	1388	1147	929	742	33
47°	2226	2205	2129	1998	1810	1583	1341	1099	890	708	30
48°	2151	2128	2051	1915	1727	1500	1267	1040	837	659	25
49°	2050	2028	1951	1816	1627	1410	1181	976	782	608	22
50°	1894	1872	1802	1686	1509	1308	1106	907	720	557	19
51°	1684	1667	1612	1517	1369	1195	1016	833	661	505	18
52°	1442	1435	1396	1321	1206	1066	917	756	593	450	13
53°	1220	1218	1184	1126	1037	935	812	673	522	390	8
54°	1024	1022	1002	955	888	814	712	588	457	334	10
55°	829	827	818	785	741	686	605	503	392	282	9
57.5°	425	420	413	400	382	363	327	280	226	164	4
60°	149	149	150	150	148	145	134	118	99	79	2
62.5°	41	42	45	43	44	43	43	45	40	33	1
65°	11	13	11	13	13	14	14	14	13	12	0
67.5°	7	6	7	6	7	6	6	6	5	6	2
70°	0	0	0	0	0	1	0	0	1	0	0
72.5°	0	0	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0	0	0
77.5°	0	0	0	1	1	1	0	0	0	0	2
80°	1	1	0	1	1	0	1	0	1	1	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	1	0	0	0	0	0	0	0	0
85°	1	1	2	1	1	2	1	2	1	2	3
87.5°	1	1	0	1	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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	8	8	8	8	8	8
2.5°	7	6	7	6	6	7
5°	11	7	8	7	9	9
7.5°	6	7	7	7	5	5
10°	7	8	6	6	6	6
12.5°	7	6	6	6	6	5
15°	8	6	6	6	6	7
17.5°	9	6	8	7	5	7
20°	6	6	5	6	5	6
22.5°	6	4	3	5	4	4
25°	6	6	4	5	5	4
27.5°	6	4	7	5	6	5
30°	5	4	4	8	5	8
32.5°	5	4	4	4	5	6
35°	3	5	2	4	3	5
36°	4	4	6	5	5	6
37°	5	4	4	7	5	6
38°	4	3	5	4	5	5
39°	4	3	3	3	3	7
40°	5	5	6	6	6	8
41°	3	1	2	4	6	4
42°	3	1	2	4	3	2
43°	3	3	3	3	4	5
44°	4	2	3	4	4	4
45°	3	3	3	4	4	5
46°	2	4	3	3	4	5
47°	4	4	5	6	6	6
48°	1	1	2	3	4	5
49°	2	2	3	4	4	4
50°	2	2	2	6	5	4
51°	5	3	5	6	6	6
52°	1	1	3	3	5	5
53°	0	0	1	2	3	6
54°	2	2	3	4	5	5
55°	2	3	4	5	6	6
57.5°	1	2	4	6	4	7
60°	1	1	2	5	5	6
62.5°	1	2	4	4	7	6
65°	0	2	3	4	5	6
67.5°	2	3	3	5	5	8
70°	0	0	0	0	1	3
72.5°	0	0	0	2	2	5
75°	0	0	0	0	1	2
77.5°	0	0	2	3	3	3
80°	1	1	1	2	3	3



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
82.5°	0	1	0	1	1	2
85°	2	2	2	2	3	4
87.5°	1	0	0	0	0	2
90°	0	0	0	0	0	0

(END OF REPORT)