

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: P13461

Luminaire Tested: **AXS132511D4W20**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P13461
Test Lab: PEACHTREE CITY
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: RSA
Catalog Number: AXS132511D4W20
Description: RSA RECESSED LED SQUARE FIXTURE WITH 15 DEGREE FIXED BRACKET,
3000K LED LIGHT ENGINE, 25 DEGREE REFLECTOR, WHITE TRIM WITH
CLEAR LENS.
Light Source: (1) PHILIPS FORTIMO SLM 3000K LED
87182911 8708000
Ballast/Driver: (1) PHILIPS ADVANCE ELECTRONIC DRIVER
XR025C100V036XPM1

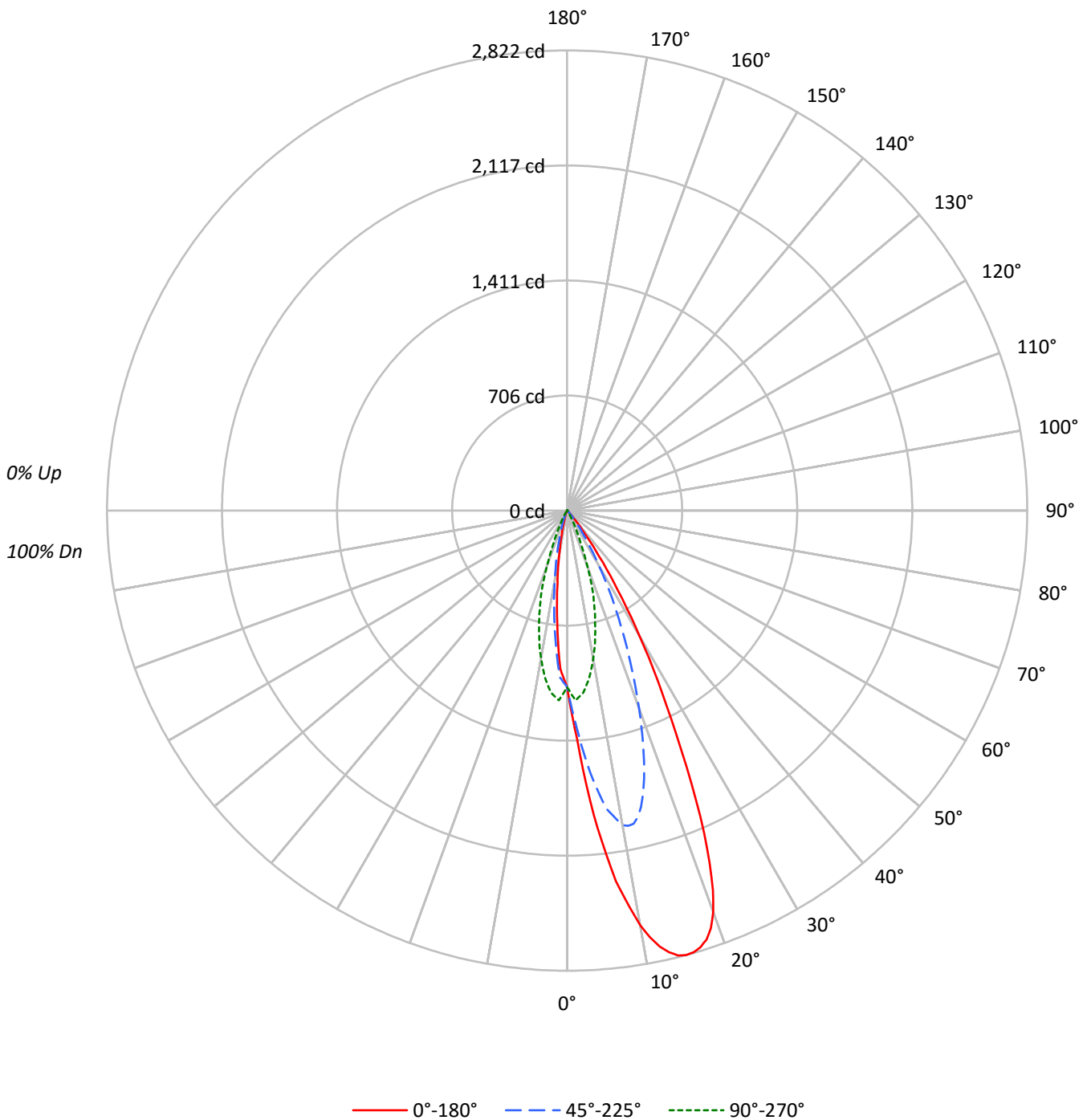
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 680.0 lumens
Efficiency: N/A
Efficacy: 32.2 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 0.57 / 0.68
Luminous Opening: Rectangular (W 0.31' x L: 0.31' x H: 0')
CIE Type: Direct

Input Watts (W): 21.1
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

TEST NUMBER: P13461
CATALOG NUMBER: AXS132511D4W20

Luminous Intensity Polar Plot





TEST NUMBER: P13461

CATALOG NUMBER: AXS132511D4W20

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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95					95			
2	110	105	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90					90			
3	105	100	96	92	103	98	95	91	96	93	90	94	91	89	91	89	87	86					86			
4	101	95	90	86	99	94	89	86	91	88	85	90	86	84	88	85	83	82					82			
5	97	90	85	81	96	89	84	81	87	83	80	86	82	80	84	81	79	78					78			
6	93	86	81	77	92	85	80	77	84	79	76	82	79	76	81	78	75	74					74			
7	90	82	77	73	88	81	76	73	80	76	73	79	75	72	78	74	72	71					71			
8	86	78	73	70	85	78	73	69	77	72	69	76	72	69	75	71	69	67					67			
9	83	75	70	66	82	74	70	66	73	69	66	73	69	66	72	68	66	65					65			
10	80	72	67	63	79	71	67	63	70	66	63	70	66	63	69	66	63	62					62			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	119261	119261	119261
5°	207235	124142	76565
10°	289097	103081	31786
15°	322020	75085	10156
20°	307199	42344	3284
25°	210519	16540	1095
30°	113019	5091	382
35°	45749	1346	0
40°	12086	432	0
45°	3273	468	0
50°	686	0	0
55°	192	192	192
60°	0	0	0
65°	261	0	0
70°	0	0	322
75°	0	0	0
80°	1269	0	0
85°	0	0	0



TEST NUMBER: P13461

CATALOG NUMBER: AXS132511D4W20

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.7	16.9
10°-20°	282.6	41.6
20°-30°	212.9	31.3
30°-40°	61.4	9.0
40°-50°	6.4	0.9
50°-60°	0.9	0.1
60°-70°	0.5	0.1
70°-80°	0.2	0.0
80°-90°	0.5	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°	610.1	89.7
0°-40°	671.6	98.8
0°-60°	678.8	99.8
0°-90°	680.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	680.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1082	1082	1082	1082	1082	
5°	1873	1611	1122	811	692	201
15°	2822	1798	658	192	89	780
25°	1731	779	136	23	9	784
35°	340	153	10	1	0	237
45°	21	13	3	1	0	21
55°	1	2	1	1	1	2
65°	1	0	0	0	0	0
75°	0	0	0	0	0	1
85°	0	0	0	0	0	1
90°	0	0	0	0	0	



TEST NUMBER: P13461

CATALOG NUMBER: AXS132511D4W20

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
0°	1082	1082	1082	1082	1082	1082	1082	1082	1082	1082	1082
2.5°	1400	1400	1395	1397	1395	1393	1389	1386	1387	1380	1379
5°	1873	1871	1867	1860	1857	1851	1840	1824	1816	1801	1787
7.5°	2291	2288	2281	2276	2271	2257	2242	2225	2203	2179	2153
10°	2583	2575	2570	2559	2544	2527	2504	2482	2450	2419	2382
11°	2666	2661	2654	2641	2623	2603	2581	2554	2522	2484	2443
12°	2733	2727	2718	2706	2689	2669	2641	2608	2577	2534	2491
13°	2779	2777	2767	2753	2734	2710	2681	2647	2611	2565	2514
14°	2812	2808	2798	2781	2761	2736	2708	2672	2627	2574	2520
15°	2822	2818	2809	2792	2773	2746	2716	2675	2624	2567	2504
16°	2817	2814	2801	2786	2765	2734	2698	2653	2597	2534	2465
17°	2799	2796	2782	2767	2740	2709	2665	2615	2553	2487	2407
18°	2766	2759	2750	2731	2699	2661	2613	2557	2492	2418	2327
19°	2708	2703	2687	2668	2632	2591	2538	2475	2404	2324	2226
20°	2619	2613	2596	2575	2539	2492	2439	2370	2295	2211	2109
21°	2494	2492	2472	2452	2419	2368	2313	2244	2166	2079	1979
22°	2332	2330	2324	2300	2262	2216	2163	2094	2015	1922	1833
23°	2151	2146	2135	2111	2082	2046	1993	1929	1847	1770	1685
24°	1943	1935	1930	1910	1886	1855	1806	1748	1682	1603	1529
25°	1731	1726	1720	1704	1685	1658	1618	1569	1511	1445	1381
26°	1525	1521	1523	1510	1493	1468	1433	1393	1350	1294	1237
27°	1346	1343	1338	1336	1320	1299	1270	1239	1200	1152	1103
28°	1185	1181	1178	1174	1160	1146	1121	1092	1065	1025	984
29°	1038	1033	1031	1024	1014	1001	983	961	932	904	867
30°	888	893	890	887	883	870	857	839	817	792	757
32.5°	574	574	571	570	568	566	565	559	545	527	502
35°	340	331	330	329	330	331	328	329	328	313	297
37.5°	169	168	168	168	169	168	171	171	171	164	159
40°	84	83	84	85	83	86	87	87	86	85	81
42.5°	39	41	40	41	41	42	42	43	43	42	41
45°	21	22	21	22	22	22	22	23	24	22	21
47.5°	8	7	7	8	9	10	9	9	8	8	8
50°	4	5	4	3	4	4	4	4	5	6	4
52.5°	2	1	1	2	3	1	1	3	1	2	2
55°	1	2	2	1	2	2	1	1	1	2	1
57.5°	6	0	1	0	0	2	1	0	0	1	2
60°	0	0	0	0	0	0	0	0	0	0	0
62.5°	1	1	0	0	1	0	0	0	0	0	0
65°	1	1	1	0	0	0	0	0	1	0	1
67.5°	0	0	0	0	0	0	0	0	0	0	0
70°	0	0	0	0	0	0	0	0	0	0	0
72.5°	0	0	0	0	0	0	0	0	0	0	0
75°	0	0	1	0	0	0	1	0	0	0	0
77.5°	1	2	0	1	1	1	1	1	1	1	1
80°	2	0	0	1	0	1	0	0	0	0	0



TEST NUMBER: P13461

CATALOG NUMBER: AXS132511D4W20

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
82.5°	1	1	1	0	1	0	0	0	1	1	1
85°	0	0	1	0	0	0	0	0	0	0	0
87.5°	1	1	0	0	1	0	1	1	0	1	0
90°	0	0	0	0	0	0	0	0	0	0	0



TEST NUMBER: P13461

CATALOG NUMBER: AXS132511D4W20

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1082	1082	1082	1082	1082	1082	1082	1082	1082	1082
2.5°	1376	1368	1361	1330	1253	1165	1089	1023	986	970
5°	1768	1748	1729	1611	1362	1122	939	811	723	692
7.5°	2119	2086	2051	1843	1409	1037	788	613	495	458
10°	2339	2295	2248	1959	1361	921	643	441	319	284
11°	2399	2347	2295	1969	1317	875	588	376	263	229
12°	2439	2382	2326	1963	1266	821	535	326	215	186
13°	2457	2394	2328	1928	1204	764	480	273	172	146
14°	2453	2383	2312	1873	1132	710	432	228	136	112
15°	2433	2352	2275	1798	1058	658	388	192	111	89
16°	2385	2301	2218	1711	978	603	341	157	86	67
17°	2319	2228	2136	1614	901	550	298	133	71	53
18°	2234	2140	2039	1506	825	490	256	111	55	42
19°	2132	2027	1925	1396	748	428	218	90	43	34
20°	2012	1907	1804	1286	669	361	182	71	33	28
21°	1881	1778	1676	1175	585	301	150	58	26	19
22°	1743	1646	1553	1070	506	251	121	46	20	14
23°	1599	1508	1419	970	431	205	97	38	15	10
24°	1454	1371	1291	872	364	167	80	29	11	8
25°	1310	1238	1166	779	303	136	66	23	9	9
26°	1176	1112	1044	693	251	107	51	18	6	4
27°	1049	992	932	611	207	85	42	15	5	4
28°	933	883	825	536	167	68	32	16	5	3
29°	821	774	724	459	132	52	25	10	3	2
30°	718	674	633	394	107	40	19	6	5	3
32.5°	472	444	420	249	60	21	11	3	1	0
35°	283	268	250	153	33	10	6	1	0	0
37.5°	153	146	135	86	18	4	2	1	0	0
40°	78	76	73	48	10	3	1	1	2	0
42.5°	40	38	36	24	5	1	0	0	0	0
45°	21	20	19	13	4	3	1	1	0	0
47.5°	8	7	6	5	2	0	0	0	0	1
50°	5	3	4	4	1	0	1	1	1	0
52.5°	3	3	2	1	0	0	0	3	1	0
55°	1	2	2	2	1	1	1	1	1	1
57.5°	0	2	1	2	0	0	3	0	0	0
60°	0	0	0	0	0	0	0	0	0	0
62.5°	0	2	4	3	0	0	0	4	3	0
65°	0	0	0	0	0	0	2	0	0	0
67.5°	0	0	2	1	0	0	0	0	0	0
70°	0	0	0	0	0	0	0	0	1	1
72.5°	0	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	1	0	0	0
77.5°	1	1	0	0	1	1	1	0	0	0
80°	0	2	0	0	0	0	0	0	0	0



TEST NUMBER: P13461

CATALOG NUMBER: AXS132511D4W20

CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
82.5°	1	1	1	2	1	1	1	1	1	0
85°	0	2	1	0	0	0	0	0	0	0
87.5°	0	1	0	1	0	1	1	0	1	1
90°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)