

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: SURE-LITES

Report Number: P926692

Luminaire Tested: **APC7RGSQ30**

Test Date: 2024-06-06

Tested By:

Approved By:



Cooper Lighting Solutions laboratories have been accredited by National Voluntary Laboratory Accreditation Program (NVLAP) that it adheres to the requirements of ISO/IEC 17025:2005 and appropriate IESNA test methods. This report must not be used to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government. Results contained in this report are valid for luminaire sample tested, as supplied by requestor. Information related to the luminaire tested has been supplied by requestor and can affect the validity of the test results. Report shall not be reproduced except in full without approval of Cooper Lighting Solutions Lighting Laboratory. Test performed at address noted above.

Test Information

Test Method: LM-79-08
 Report Number: P926692
 Test Lab: Cooper Lighting Solutions
 Test Date: 2024-06-06
 Issue Date: 6/6/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: SURE-LITES
 Catalog Number: APC7RGSQ30
 Description: Combo Square Head
 Light Source: -
 Ballast/Driver: @Current

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 85.1 lumens
 Efficiency: N/A
 Efficacy: 77.4 lumens/watt
 Spacing Criteria (0/90/45): 0.3 / 0.84 / 0.42
 Luminous Opening: Circular (Dia: 0.16' x H: 0')
 CIE Type: Direct

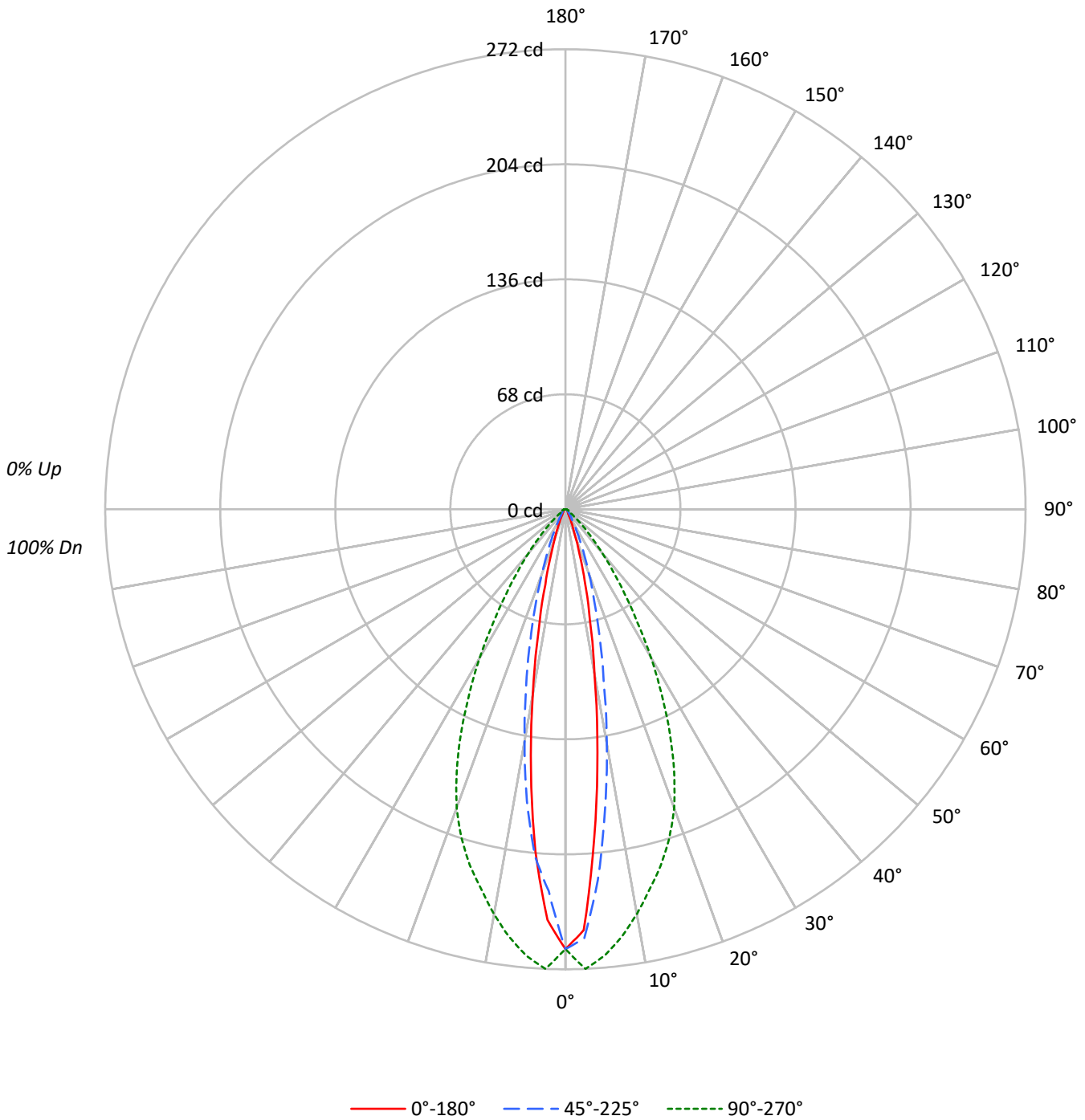
Input Watts (W): 1.1
 Input Voltage (V): NR
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 25 FT



Meas		Calibration Due Date	
Instrument	Identificatio		
Photometer	GONIO 1 11111111	4/22/2021	10/22/2021
Power Meter	XITRON 2801 IN0197	12/1/2020	12/1/2021
AC Power Source	CHROMA 61505 IN0196	12/1/2020	12/1/2021
DC Power Supply	AGILENT E3634A IN0198	11/30/2020	11/30/2021
Room Thermometer	ONSET IN0143	12/1/2020	12/1/2021

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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	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	96	96	96	94
2	109	104	100	97	107	102	99	96	99	96	94	96	94	92	94	92	90	94	92	90	89
3	104	98	93	90	102	97	92	89	94	91	88	92	89	86	89	87	85	89	87	85	83
4	99	93	87	84	98	91	87	83	89	85	82	87	84	81	86	83	80	86	83	80	79
5	95	88	82	79	94	87	82	78	85	81	78	83	80	77	82	79	76	82	79	76	75
6	91	83	78	74	90	83	78	74	81	77	73	80	76	73	79	75	72	79	75	72	71
7	88	79	74	70	86	79	74	70	78	73	70	76	72	69	75	72	69	75	72	69	68
8	84	76	71	67	83	75	70	67	74	70	67	73	69	66	73	69	66	73	69	66	65
9	81	73	68	64	80	72	67	64	71	67	64	71	66	64	70	66	63	70	66	63	62
10	78	70	65	61	77	69	65	61	69	64	61	68	64	61	67	63	61	67	63	61	60

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	139336	139336	139336
5°	104901	142558	109205
10°	53873	132235	60404
15°	24412	120949	25521
20°	9695	107217	10265
25°	4730	86331	4730
30°	2475	62500	2475
35°	1963	39908	1963
40°	1399	23786	1399
45°	1516	12884	1516
50°	1667	5836	1667
55°	1869	2803	1869
60°	2144	3215	1072
65°	1268	2536	1268
70°	1567	3134	1567
75°	2071	2071	0
80°	0	3086	0
85°	0	6149	0

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.1	22.4
10°-20°	28.8	33.8
20°-30°	19.8	23.2
30°-40°	9.7	11.4
40°-50°	4.0	4.7
50°-60°	1.8	2.2
60°-70°	1.2	1.4
70°-80°	0.7	0.8
80°-90°	0.1	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°	67.7	79.5
0°-40°	77.3	90.8
0°-60°	83.2	97.7
0°-90°	85.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	85.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	260	260	260	260	260	
5°	195	220	265	206	203	16
15°	44	78	218	80	46	13
25°	8	20	146	19	8	4
35°	3	6	61	5	3	2
45°	2	3	17	3	2	2
55°	2	2	3	1	2	2
65°	1	1	2	1	1	1
75°	1	0	1	1	0	1
85°	0	0	1	0	0	0
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	260	260	260	260	260	260	260	260	260	260	260
2.5°	249	247	247	241	245	244	250	242	252	252	254
5°	195	195	196	194	199	198	205	201	210	215	220
7.5°	145	141	144	141	147	147	154	152	164	170	179
10°	99	98	100	101	105	107	110	112	122	131	141
12.5°	67	66	66	67	72	73	77	80	89	97	105
15°	44	44	45	46	49	50	53	55	62	70	78
17.5°	28	27	29	29	32	33	35	37	44	50	56
20°	17	17	18	18	21	22	23	25	30	35	41
22.5°	11	11	11	12	13	14	15	17	20	24	29
25°	8	7	7	8	9	9	10	11	14	16	20
27.5°	5	5	5	6	6	6	7	8	10	11	14
30°	4	4	4	4	4	5	5	6	7	8	10
32.5°	3	3	3	3	4	4	4	4	5	6	7
35°	3	3	3	3	3	3	3	3	4	5	6
37.5°	3	3	3	3	3	3	3	3	3	4	5
40°	2	2	2	2	3	3	3	3	3	3	4
42.5°	2	2	2	2	2	2	3	2	3	3	3
45°	2	2	2	2	2	2	2	2	2	2	3
47.5°	2	2	2	2	2	2	2	2	2	2	2
50°	2	2	2	2	2	2	2	2	2	2	2
52.5°	2	2	2	2	2	2	2	2	2	2	2
55°	2	2	2	2	2	2	2	1	2	2	2
57.5°	2	2	2	1	1	1	2	1	1	1	2
60°	2	1	1	1	1	1	1	1	1	1	1
62.5°	1	1	1	1	1	1	1	1	1	1	1
65°	1	1	1	1	1	1	1	1	1	1	1
67.5°	1	1	1	1	1	1	1	1	1	1	1
70°	1	1	1	1	1	1	1	1	1	1	1
72.5°	1	1	0	1	1	1	1	1	1	1	1
75°	1	1	0	1	1	0	1	0	1	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
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	260	260	260	260	260	260	260	260	260	260	260
2.5°	256	262	259	266	262	261	267	269	269	272	266
5°	225	235	237	247	246	246	255	259	261	265	260
7.5°	189	199	207	222	222	226	238	245	249	255	250
10°	151	165	176	194	196	202	219	229	237	243	238
12.5°	117	131	145	165	170	178	198	213	224	230	225
15°	89	104	117	139	144	153	177	195	209	218	213
17.5°	66	79	92	113	121	131	155	177	193	204	198
20°	49	60	72	91	99	109	134	158	176	188	181
22.5°	35	45	55	72	79	88	112	136	156	168	160
25°	26	33	41	55	62	70	91	114	135	146	139
27.5°	18	24	31	42	47	55	73	92	112	123	117
30°	13	17	22	31	36	41	56	74	91	101	95
32.5°	9	12	17	23	27	31	43	57	71	79	75
35°	7	9	12	17	20	23	32	43	54	61	56
37.5°	5	7	9	13	14	17	24	32	41	46	43
40°	4	5	7	9	11	13	18	24	30	34	31
42.5°	4	4	5	7	8	9	13	17	21	24	22
45°	3	3	4	6	6	7	9	12	15	17	15
47.5°	3	3	3	4	5	5	7	8	10	11	10
50°	2	2	3	3	3	4	5	6	7	7	7
52.5°	2	2	2	2	3	3	4	4	4	5	4
55°	2	2	2	2	2	2	3	3	3	3	3
57.5°	1	2	2	2	2	2	2	2	3	3	2
60°	2	2	2	2	2	2	2	2	3	3	2
62.5°	1	1	1	1	1	1	2	2	2	2	2
65°	1	1	1	1	1	1	1	2	2	2	2
67.5°	1	1	1	1	1	1	1	2	2	2	2
70°	1	1	1	1	1	1	1	2	2	2	1
72.5°	1	1	1	1	1	1	1	1	1	2	1
75°	1	1	1	1	1	1	1	1	1	1	1
77.5°	0	0	0	0	0	1	1	1	1	1	1
80°	0	0	0	0	0	0	1	1	1	1	1
82.5°	0	0	0	0	0	0	0	1	1	1	1
85°	0	0	0	0	0	0	0	1	1	1	1
87.5°	0	0	0	0	0	0	0	0	1	0	1
90°	0	0	0	0	0	0	0	0	0	0	0

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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	260	260	260	260	260	260	260	260	260	260	260
2.5°	272	262	245	255	255	233	248	238	226	231	236
5°	265	255	235	244	243	220	231	219	206	207	209
7.5°	254	241	221	226	223	198	204	190	174	171	168
10°	240	224	202	205	200	172	172	155	139	133	128
12.5°	225	206	181	181	173	146	141	122	107	99	94
15°	209	188	159	157	148	119	112	94	80	73	65
17.5°	191	167	137	133	123	96	86	71	58	50	44
20°	172	146	114	110	100	75	65	51	40	34	30
22.5°	150	123	94	89	78	57	47	36	28	23	20
25°	126	101	75	69	60	42	34	25	19	16	13
27.5°	104	81	59	53	45	31	24	18	13	11	10
30°	82	62	44	40	34	22	17	12	9	8	7
32.5°	64	48	33	30	24	16	12	9	7	6	5
35°	48	36	24	21	17	11	9	7	5	5	4
37.5°	36	26	18	15	13	8	7	6	4	4	3
40°	26	19	13	11	9	6	5	4	4	3	3
42.5°	18	14	9	8	7	5	4	3	3	3	3
45°	13	10	7	6	5	4	4	3	3	2	2
47.5°	9	7	5	4	4	3	3	2	2	2	2
50°	6	5	4	3	3	3	2	2	2	2	2
52.5°	4	3	3	3	2	2	2	2	2	2	1
55°	3	2	2	2	2	2	2	2	1	1	1
57.5°	2	2	2	2	2	2	2	2	1	1	1
60°	2	2	2	2	2	1	1	1	1	1	1
62.5°	2	1	1	1	1	1	1	1	1	1	1
65°	2	1	1	1	1	1	1	1	1	1	1
67.5°	1	1	1	1	1	1	1	1	1	1	1
70°	1	1	1	1	1	1	1	1	1	1	1
72.5°	1	1	1	1	1	1	1	1	1	0	1
75°	1	1	1	1	1	1	0	0	1	0	0
77.5°	1	1	1	1	1	1	0	0	0	0	0
80°	1	0	0	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0	0	0	0
85°	1	0	0	0	0	0	0	0	0	0	0
87.5°	1	1	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):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	260	260	260	260	260	260	260	260
2.5°	232	243	238	233	249	230	219	243
5°	203	210	204	200	212	194	183	203
7.5°	161	163	159	154	160	147	139	156
10°	120	121	116	112	116	104	100	111
12.5°	86	85	81	77	78	70	65	73
15°	58	56	52	50	51	44	42	46
17.5°	38	36	34	32	32	28	26	28
20°	25	23	22	20	20	18	16	18
22.5°	17	16	14	13	13	12	11	12
25°	11	11	10	9	9	8	7	8
27.5°	8	8	7	6	6	6	5	6
30°	6	5	5	5	5	4	4	4
32.5°	5	4	4	4	4	3	3	3
35°	3	3	3	3	3	3	2	3
37.5°	3	3	3	3	3	2	2	2
40°	3	2	2	2	2	2	2	2
42.5°	2	3	3	2	2	2	2	2
45°	2	2	2	2	2	2	2	2
47.5°	2	2	2	2	2	2	2	2
50°	2	2	2	2	2	2	2	2
52.5°	1	2	2	2	2	2	1	2
55°	1	1	2	2	2	2	1	2
57.5°	1	1	1	1	2	1	2	2
60°	1	1	1	1	2	1	1	1
62.5°	1	1	1	1	1	1	1	1
65°	1	1	1	1	1	1	1	1
67.5°	1	1	1	1	1	1	1	1
70°	1	1	1	1	1	1	1	1
72.5°	1	1	1	1	1	1	1	1
75°	0	0	1	1	1	1	1	0
77.5°	0	0	0	0	1	0	0	0
80°	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0

(END OF REPORT)