

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: P21910-R2

Luminaire Tested: **CSHRW30MED11**

Issue Date: 3/3/2020

**Test Information**

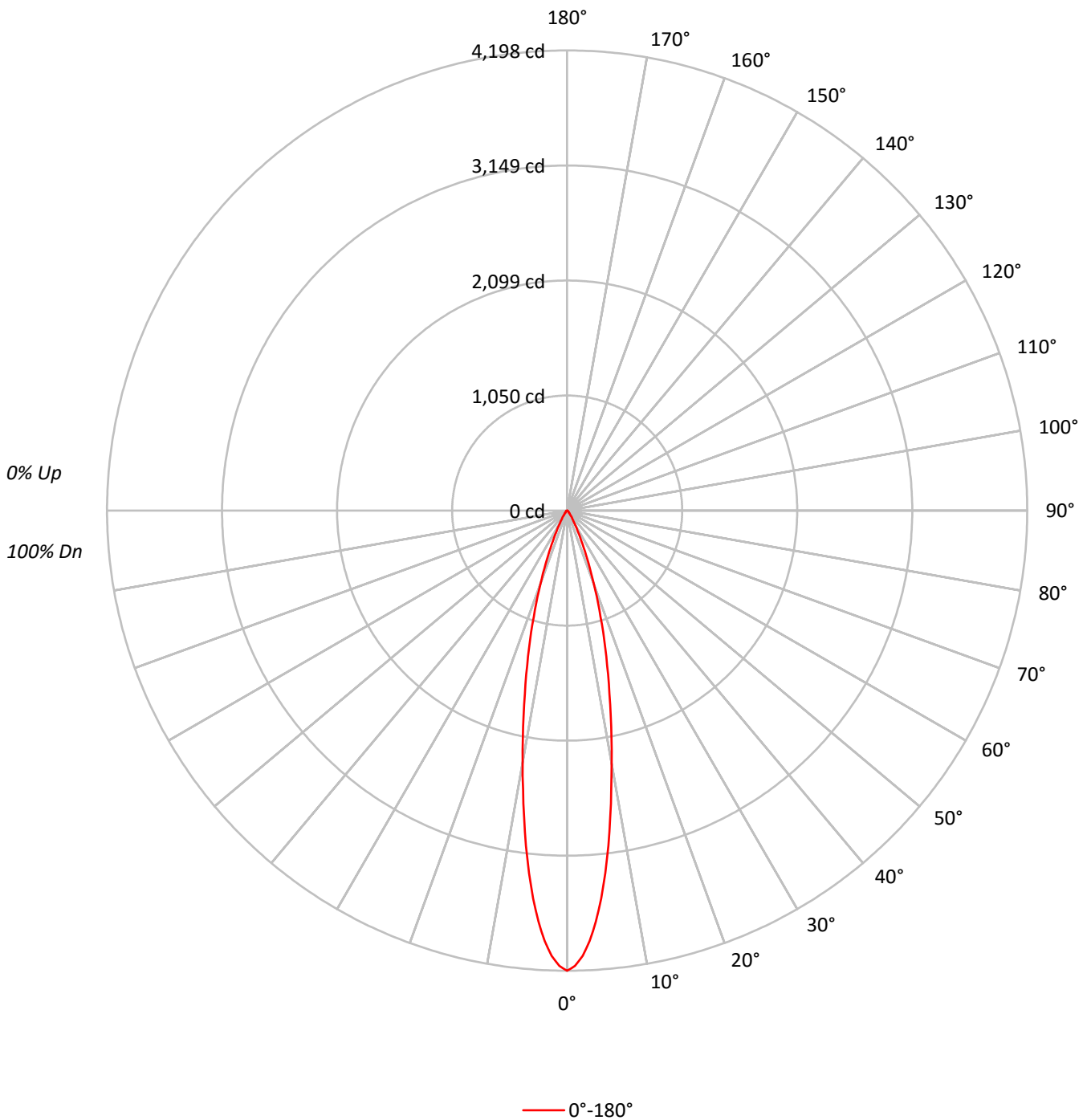
Test Method: LM-79-08  
Report Number: P21910-R2  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: RSA  
Catalog Number: CSHRW30MED11  
Description: \*\*\*THIS IS A REVISION OF P21910 TO UPDATE CATALOG  
NUMBER\*\*\*COMBOLIGHT ONE 18W LED HEAD, 7 LED UNIT FLOOD  
DISTRIBUTION, 3000K  
.---ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS  
CREATED USING A 500 WATT, NIST TRACEABLE, AND  
OMNI-DIRECTIONAL LAB LUMEN STANDARD IN THE GONIOPHOTOMETER  
WITH TEST DISTANCE OF 28.75 FEET---  
Light Source: (7) SMT LEDS  
XPG  
Ballast/Driver: (1) MAGTECH ELECTRONIC DRIVER  
LPT-1020-24-C0700

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 902.7 lumens  
Efficiency: N/A  
Efficacy: 51.6 lumens/watt  
Spacing Criteria (0/90/45): 0.37 / 0.37 / 0.41  
Luminous Opening: Circular (Dia: 0.35' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.5  
Input Voltage (V): NR  
Input Current (Ain): 0.1471  
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

TEST NUMBER: P21910-R2  
CATALOG NUMBER: CSHRW30MED11

### Luminous Intensity Polar Plot





TEST NUMBER: P21910-R2

CATALOG NUMBER: CSHRW30MED11

**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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96
2	111	107	104	101	109	105	103	100	102	100	98	99	98	96	97	95	94	92
3	107	102	98	95	105	101	97	95	98	95	93	96	94	92	94	92	90	89
4	103	98	94	91	102	97	93	90	95	92	89	93	90	88	91	89	87	86
5	100	94	90	86	99	93	89	86	91	88	85	90	87	85	89	86	84	83
6	97	91	86	83	96	90	86	83	88	85	82	87	84	82	86	83	81	80
7	94	87	83	80	93	87	83	80	86	82	79	85	81	79	84	81	79	78
8	91	84	80	77	90	84	80	77	83	79	77	82	79	76	81	78	76	75
9	89	82	78	75	88	81	77	75	81	77	74	80	77	74	79	76	74	73
10	86	79	75	72	86	79	75	72	78	75	72	78	74	72	77	74	72	71

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	458677
5°	389796
10°	259392
15°	155873
20°	82437
25°	37011
30°	16527
35°	8136
40°	4564
45°	2781
50°	2040
55°	1524
60°	1311
65°	1034
70°	639
75°	422
80°	0
85°	0



TEST NUMBER: P21910-R2  
 CATALOG NUMBER: CSHRW30MED11

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	298.6	33.1
10°-20°	380.8	42.2
20°-30°	154.3	17.1
30°-40°	41.8	4.6
40°-50°	14.9	1.6
50°-60°	7.6	0.8
60°-70°	3.9	0.4
70°-80°	0.8	0.1
80°-90°	0.0	0.0
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°	833.8	92.4
0°-40°	875.5	97.0
0°-60°	898.0	99.5
0°-90°	902.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	902.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4198	
5°	3554	299
15°	1378	381
25°	307	154
35°	61	42
45°	18	15
55°	8	8
65°	4	4
75°	1	1
85°	0	0
90°	0	



TEST NUMBER: P21910-R2

CATALOG NUMBER: CSHRW30MED11

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	4198
1°	4155
2°	4064
3°	3931
4°	3759
5°	3554
6°	3326
7°	3083
8°	2827
9°	2576
10°	2338
11°	2115
12°	1908
13°	1716
14°	1541
15°	1378
17.5°	1013
20°	709
22.5°	473
25°	307
27.5°	200
30°	131
32.5°	88
35°	61
37.5°	43
40°	32
42.5°	24
45°	18
47.5°	14
50°	12
52.5°	10
55°	8
57.5°	7
60°	6
62.5°	5
65°	4
67.5°	3
70°	2
72.5°	1
75°	1
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0



TEST NUMBER: P21910-R2  
CATALOG NUMBER: CSHRW30MED11

CANDELA DISTRIBUTION (continued):

90° |  $\frac{0^\circ}{0}$

(END OF REPORT)