

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: P219661

Luminaire Tested: **MRZ-1-REC-X-4-L40-80-NFL-UNV-X-STD-SFL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P219661  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14873)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: RSA  
Catalog Number: MRZ-1-REC-X-4-L40-80-NFL-UNV-X-STD-SFL  
Description: MRZ INTEGRAL LED DOWNLIGHT  
25 DEGREE NARROW FLOOD OPTIC WITH SOFT FOCUS LENS, LIGHT LEVEL 4  
Light Source: (1) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1634.3 lumens  
Efficiency: N/A  
Efficacy: 103.4 lumens/watt  
Spacing Criteria (0/90/45): 0.41 / 0.41 / 0.4  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

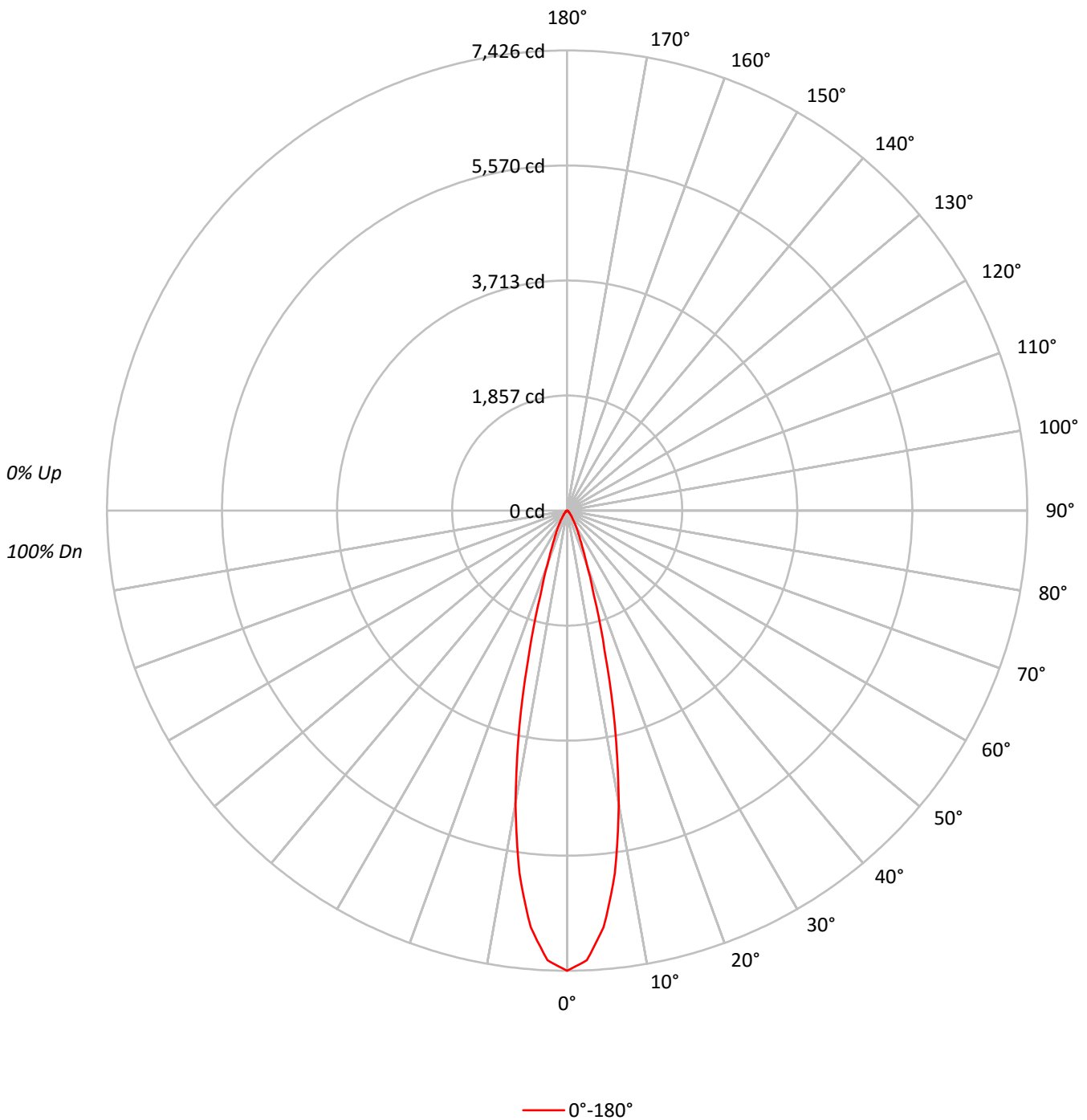
Input Watts (W): 15.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	102	100	102	100	98	99	97	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	87	99	93	89	86	92	88	85	90	87	85	89	86	84	83
6	97	91	86	83	96	90	86	83	89	85	82	87	84	82	86	83	81	80
7	94	88	83	80	93	87	83	80	86	82	80	85	82	79	84	81	79	78
8	92	85	80	77	91	84	80	77	83	80	77	82	79	77	82	79	76	75
9	89	82	78	75	88	82	78	75	81	77	75	80	77	74	79	76	74	73
10	87	80	76	73	86	79	75	73	79	75	73	78	75	72	77	74	72	71

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

	0°
0°	3664083
5°	3342488
10°	2404655
15°	1194520
20°	486663
25°	251233
30°	147554
35°	85588
40°	53908
45°	36701
50°	23948
55°	15053
60°	9572
65°	9106
70°	5626
75°	3622
80°	5398
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	581.6	35.6
10°-20°	664.6	40.7
20°-30°	226.2	13.8
30°-40°	94.2	5.8
40°-50°	41.1	2.5
50°-60°	16.6	1.0
60°-70°	7.0	0.4
70°-80°	2.8	0.2
80°-90°	0.3	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°	1472.3	90.1
0°-40°	1566.5	95.9
0°-60°	1624.3	99.4
0°-90°	1634.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1634.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	7426	
5°	6749	582
15°	2339	665
25°	462	226
35°	142	94
45°	53	41
55°	18	17
65°	8	7
75°	2	3
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	7426.5
2.5°	7263.0
5°	6748.9
7.5°	5905.8
10°	4799.8
12.5°	3547.8
15°	2338.6
17.5°	1444.8
20°	926.9
22.5°	628.9
25°	461.5
27.5°	344.7
30°	259.0
32.5°	192.8
35°	142.1
37.5°	107.1
40°	83.7
42.5°	64.3
45°	52.6
47.5°	40.9
50°	31.2
52.5°	23.4
55°	17.5
57.5°	13.6
60°	9.7
62.5°	7.8
65°	7.8
67.5°	5.8
70°	3.9
72.5°	3.9
75°	1.9
77.5°	1.9
80°	1.9
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)