

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: P219640

Luminaire Tested: **MRZ-1-REC-X-1H-L30-97-NFL-UNV-X-STD-SFL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P219640  
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-1H-L30-97-NFL-UNV-X-STD-SFL  
Description: MRZ INTEGRAL LED DOWNLIGHT  
25 DEGREE NARROW FLOOD OPTIC WITH SOFT FOCUS LENS, LIGHT LEVEL 1  
Light Source: (1) 3000K CCT, 97 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 491.1 lumens  
Efficiency: N/A  
Efficacy: 72.2 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

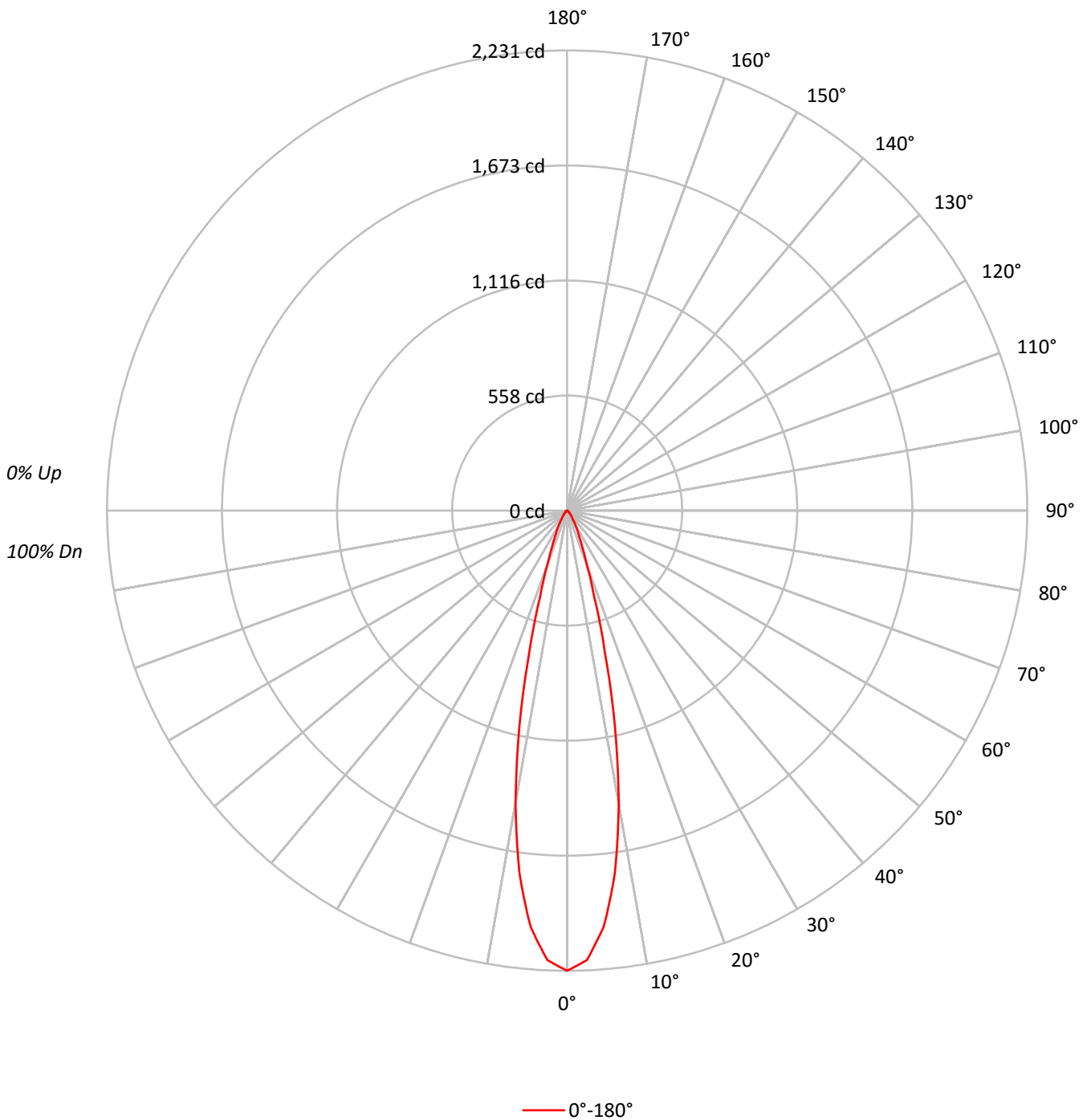
Input Watts (W): 6.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1100828
5°	1004198
10°	722429
15°	358877
20°	146225
25°	75452
30°	44323
35°	25718
40°	16230
45°	11024
50°	7215
55°	4559
60°	2862
65°	2685
70°	1731
75°	1144
80°	1705
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.7	35.6
10°-20°	199.7	40.7
20°-30°	67.9	13.8
30°-40°	28.3	5.8
40°-50°	12.4	2.5
50°-60°	5.0	1.0
60°-70°	2.1	0.4
70°-80°	0.9	0.2
80°-90°	0.1	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°	442.3	90.1
0°-40°	470.6	95.8
0°-60°	488.0	99.4
0°-90°	491.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	491.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2231	
5°	2028	175
15°	703	200
25°	139	68
35°	43	28
45°	16	12
55°	5	5
65°	2	2
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2231.2
2.5°	2182.0
5°	2027.6
7.5°	1774.3
10°	1442.0
12.5°	1065.9
15°	702.6
17.5°	434.1
20°	278.5
22.5°	189.0
25°	138.6
27.5°	103.5
30°	77.8
32.5°	57.9
35°	42.7
37.5°	32.2
40°	25.2
42.5°	19.3
45°	15.8
47.5°	12.3
50°	9.4
52.5°	7.0
55°	5.3
57.5°	4.1
60°	2.9
62.5°	2.3
65°	2.3
67.5°	1.8
70°	1.2
72.5°	1.2
75°	0.6
77.5°	0.6
80°	0.6
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)