

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: P219642

Luminaire Tested: **MRZ-1-REC-X-1H-L40-97-NFL-UNV-X-STD-SFL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P219642  
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-L40-97-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) 4000K CCT, 97 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 533.2 lumens  
Efficiency: N/A  
Efficacy: 78.4 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

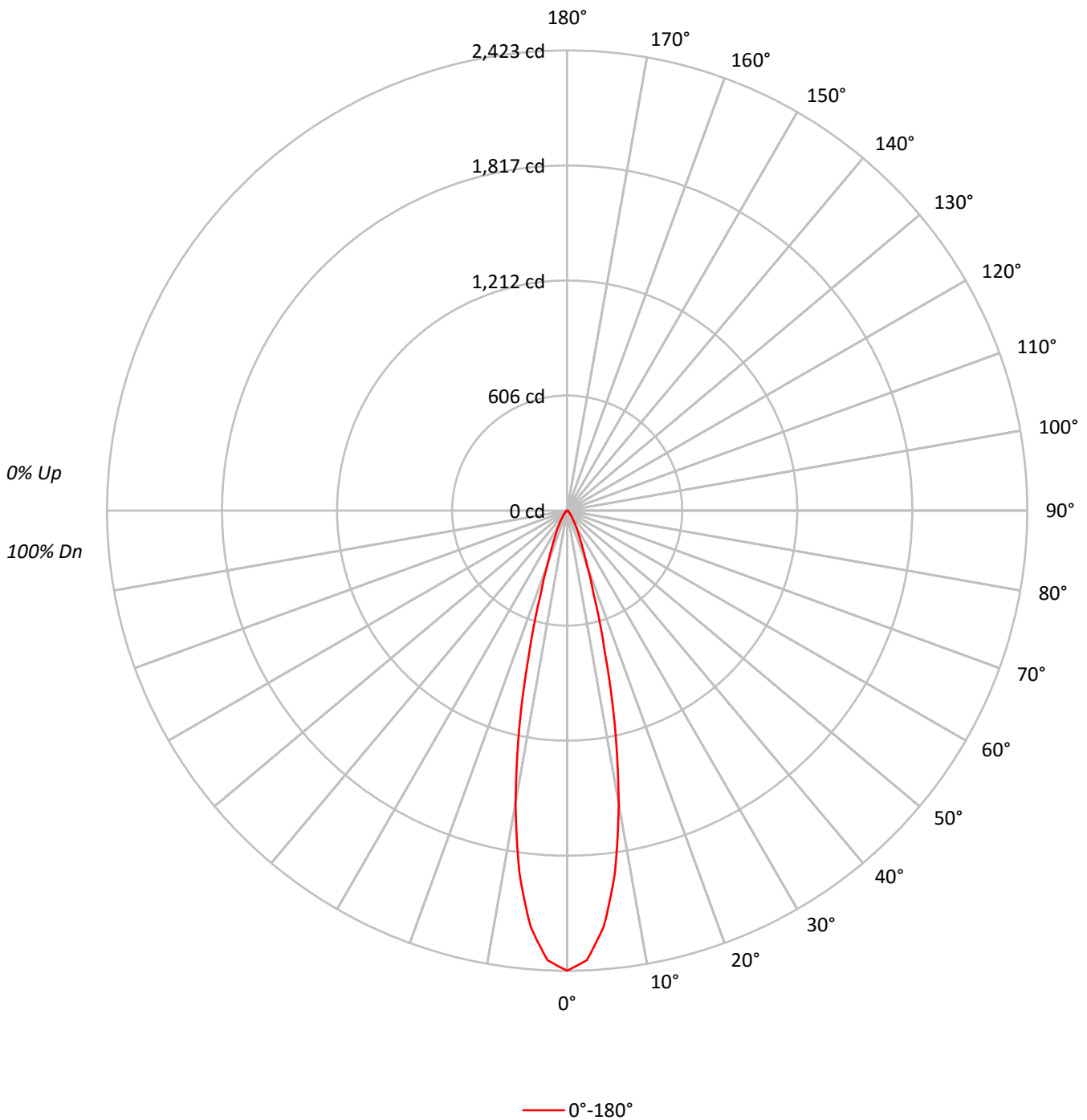
Input Watts (W): 6.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1195508
5°	1090572
10°	784602
15°	389728
20°	158773
25°	81984
30°	48140
35°	27947
40°	17583
45°	12001
50°	7829
55°	4903
60°	3158
65°	2919
70°	1875
75°	1144
80°	1705
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.8	35.6
10°-20°	216.8	40.7
20°-30°	73.8	13.8
30°-40°	30.7	5.8
40°-50°	13.4	2.5
50°-60°	5.4	1.0
60°-70°	2.3	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°	480.4	90.1
0°-40°	511.1	95.9
0°-60°	530.0	99.4
0°-90°	533.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	533.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2423	
5°	2202	190
15°	763	217
25°	151	74
35°	46	31
45°	17	13
55°	6	5
65°	2	2
75°	1	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2423.1
2.5°	2369.8
5°	2202.0
7.5°	1926.9
10°	1566.1
12.5°	1157.6
15°	763.0
17.5°	471.4
20°	302.4
22.5°	205.2
25°	150.6
27.5°	112.5
30°	84.5
32.5°	62.9
35°	46.4
37.5°	34.9
40°	27.3
42.5°	21.0
45°	17.2
47.5°	13.3
50°	10.2
52.5°	7.6
55°	5.7
57.5°	4.4
60°	3.2
62.5°	2.5
65°	2.5
67.5°	1.9
70°	1.3
72.5°	1.3
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)