

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: P219820

Luminaire Tested: **MRZ-1-REC-X-4-L40-97-FL-UNV-X-STD-SFL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P219820  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14878)  
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-L40-97-FL-UNV-X-STD-SFL  
Description: MRZ INTEGRAL LED DOWNLIGHT  
40 DEGREE FLOOD OPTIC WITH SOFT FOCUS LENS, LIGHT LEVEL 4  
Light Source: (1) 4000K CCT, 97 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1262.9 lumens  
Efficiency: N/A  
Efficacy: 79.9 lumens/watt  
Spacing Criteria (0/90/45): 0.7 / 0.7 / 0.66  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

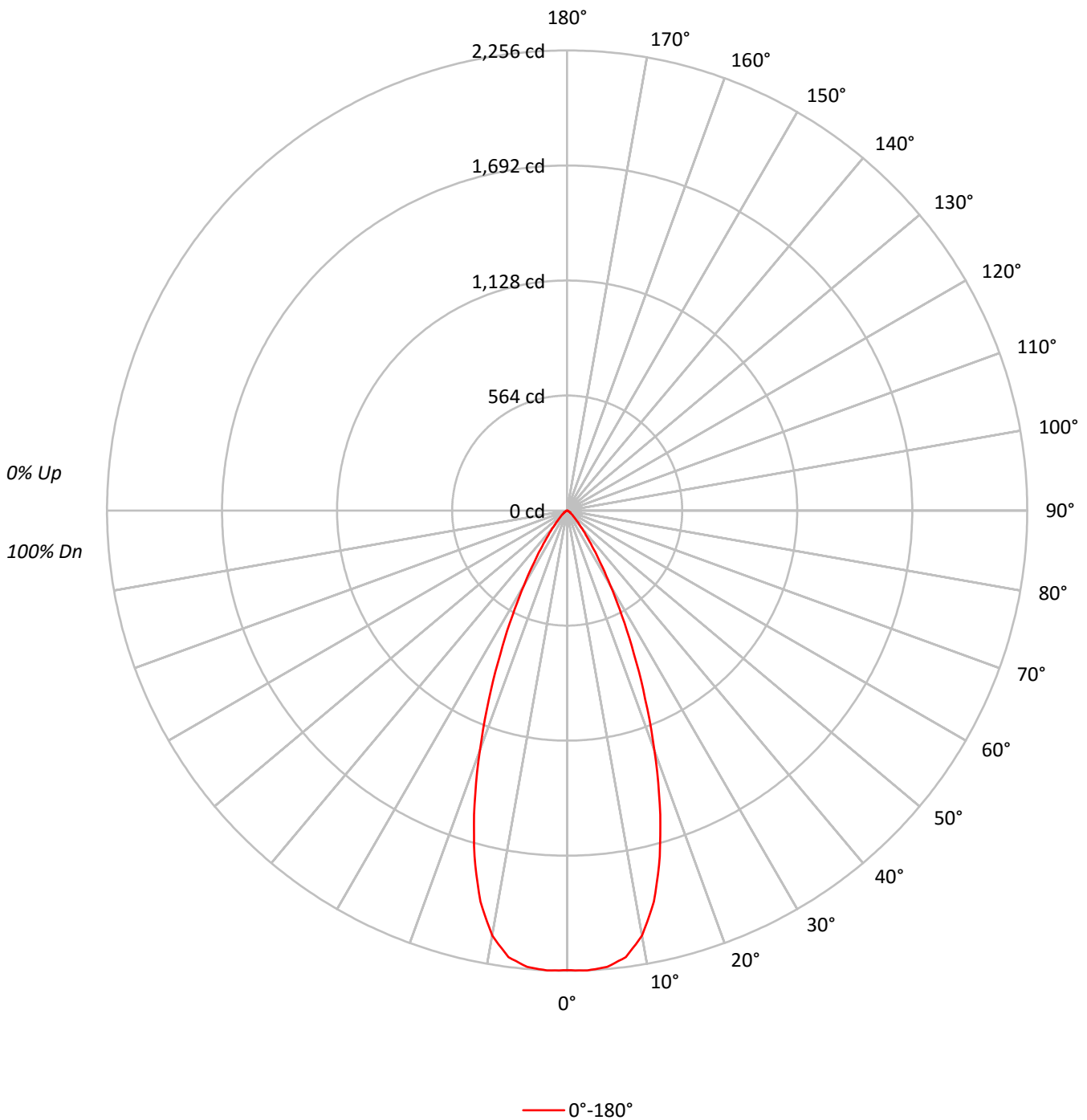
Input Watts (W): 15.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P219820

CATALOG NUMBER: MRZ-1-REC-X-4-L40-97-FL-UNV-X-STD-SFL

### Luminous Intensity Polar Plot





TEST NUMBER: P219820

CATALOG NUMBER: MRZ-1-REC-X-4-L40-97-FL-UNV-X-STD-SFL

**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	114	111	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	94
2	109	105	101	98	107	103	99	97	100	97	95	97	94	93	94	92	91	89
3	104	98	94	90	102	97	93	90	94	91	88	92	89	87	90	88	85	84
4	100	93	88	84	98	92	87	84	90	86	83	88	84	82	86	83	81	79
5	95	88	83	79	94	87	82	78	85	81	78	84	80	77	82	79	76	75
6	91	83	78	74	90	83	78	74	81	77	73	80	76	73	79	75	73	71
7	88	79	74	70	86	79	74	70	77	73	70	76	72	69	75	72	69	68
8	84	76	70	67	83	75	70	66	74	69	66	73	69	66	72	68	66	64
9	81	72	67	63	80	72	67	63	71	66	63	70	66	63	69	65	63	61
10	78	69	64	60	77	69	64	60	68	63	60	67	63	60	66	63	60	59

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

	0°
0°	1111781
5°	1112264
10°	1059696
15°	896579
20°	656934
25°	421571
30°	240473
35°	128050
40°	68464
45°	39213
50°	24485
55°	16946
60°	11940
65°	8873
70°	6636
75°	5719
80°	4262
85°	0



TEST NUMBER: P219820

CATALOG NUMBER: MRZ-1-REC-X-4-L40-97-FL-UNV-X-STD-SFL

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	210.4	16.7
10°-20°	477.2	37.8
20°-30°	358.0	28.4
30°-40°	142.1	11.3
40°-50°	46.4	3.7
50°-60°	18.0	1.4
60°-70°	7.7	0.6
70°-80°	2.8	0.2
80°-90°	0.2	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°	1045.7	82.8
0°-40°	1187.8	94.1
0°-60°	1252.3	99.2
0°-90°	1262.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1262.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2253	
5°	2246	210
15°	1755	477
25°	774	358
35°	213	142
45°	56	46
55°	20	18
65°	8	8
75°	3	3
85°	0	0
90°	0	



TEST NUMBER: P219820

CATALOG NUMBER: MRZ-1-REC-X-4-L40-97-FL-UNV-X-STD-SFL

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2253.4
2.5°	2256.4
5°	2245.8
7.5°	2207.8
10°	2115.2
12.5°	1963.4
15°	1755.3
17.5°	1510.9
20°	1251.2
22.5°	1000.7
25°	774.4
27.5°	580.1
30°	422.1
32.5°	302.2
35°	212.6
37.5°	150.3
40°	106.3
42.5°	77.4
45°	56.2
47.5°	41.0
50°	31.9
52.5°	24.3
55°	19.7
57.5°	15.2
60°	12.1
62.5°	9.1
65°	7.6
67.5°	6.1
70°	4.6
72.5°	3.0
75°	3.0
77.5°	1.5
80°	1.5
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)