

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: P219571

Luminaire Tested: **MRZ-1-REC-X-4-L35-97-NFL-UNV-X-STD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P219571  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14859)  
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-L35-97-NFL-UNV-X-STD  
Description: MRZ INTEGRAL LED DOWNLIGHT  
25 DEGREE NARROW FLOOD OPTIC, LIGHT LEVEL 4  
Light Source: (1) 3500K CCT, 97 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1276.0 lumens  
Efficiency: N/A  
Efficacy: 80.8 lumens/watt  
Spacing Criteria (0/90/45): 0.41 / 0.41 / 0.37  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

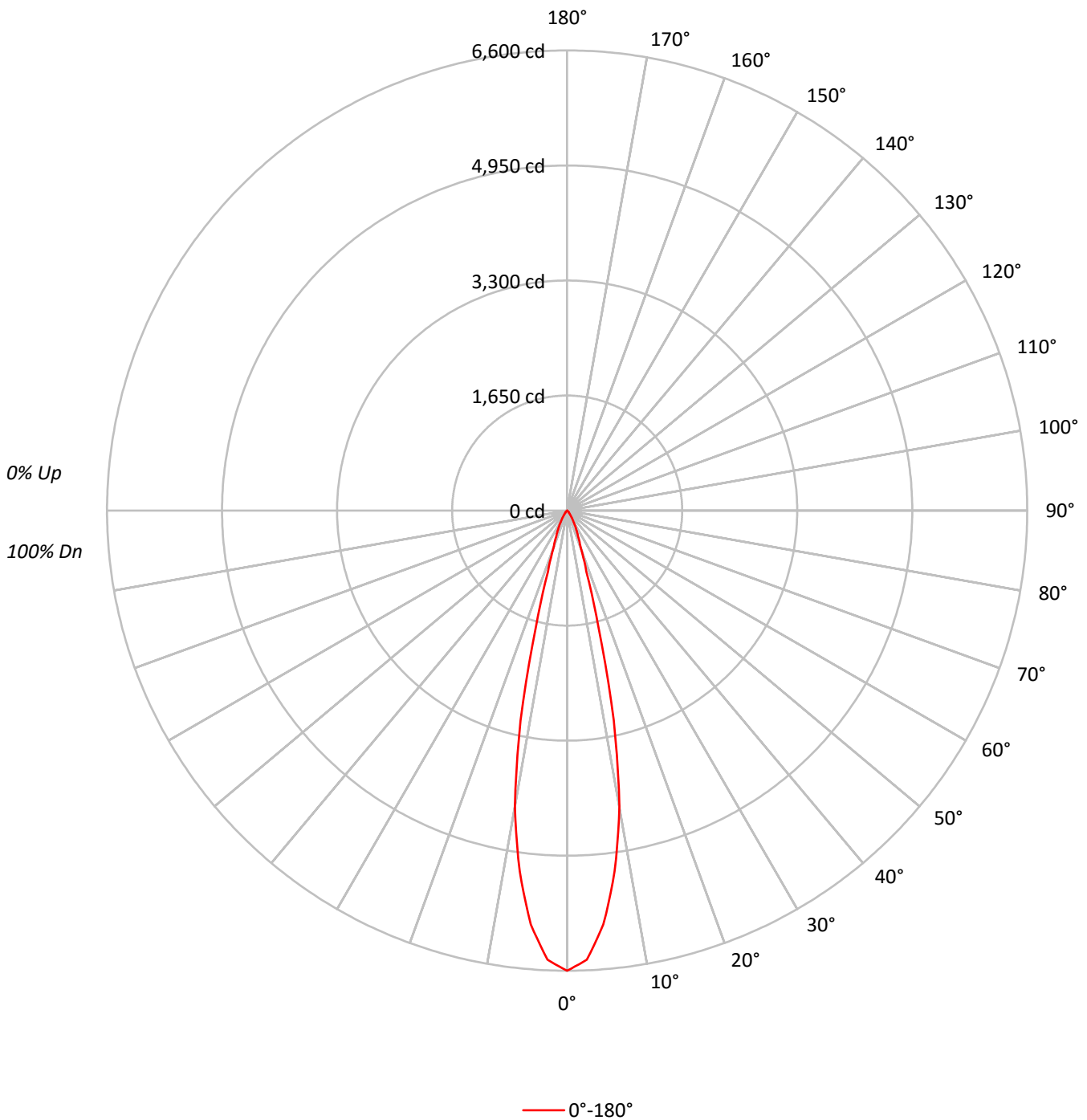
Input Watts (W): 15.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P219571

CATALOG NUMBER: MRZ-1-REC-X-4-L35-97-NFL-UNV-X-STD

### Luminous Intensity Polar Plot





TEST NUMBER: P219571

CATALOG NUMBER: MRZ-1-REC-X-4-L35-97-NFL-UNV-X-STD

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20							
RC	80				70				50				30				10							
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10				
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	111	106	106	106	106	102	102	102	102	100	100	100	100
1	115	113	111	109	113	111	109	108	107	106	104	104	103	102	101	101	100	99	98	98	97	96	95	95
2	111	108	105	102	109	106	104	101	103	101	99	99	100	99	97	97	98	96	95	95	94	93	92	92
3	108	103	100	97	106	102	99	96	100	97	95	95	97	95	93	93	95	93	92	92	91	90	89	89
4	105	99	96	93	103	98	95	92	96	93	91	91	95	92	90	90	93	91	89	89	88	87	86	86
5	102	96	92	89	100	95	91	89	94	90	88	88	92	89	87	87	91	88	86	86	85	84	83	83
6	99	93	89	86	98	92	88	86	91	88	85	85	90	87	85	85	88	86	84	84	83	82	81	81
7	96	90	86	83	95	89	86	83	88	85	83	83	87	84	82	82	86	84	82	82	81	80	79	79
8	94	87	83	81	93	87	83	81	86	83	80	80	85	82	80	80	84	82	80	80	79	78	77	77
9	91	85	81	78	91	85	81	78	84	80	78	78	83	80	78	78	82	80	78	78	77	76	75	75
10	89	83	79	76	89	83	79	76	82	78	76	76	81	78	76	76	81	78	76	76	75	74	73	73

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

	0°
0°	3256206
5°	2952319
10°	2162076
15°	881562
20°	300797
25°	175836
30°	98217
35°	52822
40°	28210
45°	18351
50°	7829
55°	4989
60°	2862
65°	1751
70°	2164
75°	2859
80°	0
85°	0



TEST NUMBER: P219571

CATALOG NUMBER: MRZ-1-REC-X-4-L35-97-NFL-UNV-X-STD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	515.9	40.4
10°-20°	521.5	40.9
20°-30°	152.4	11.9
30°-40°	58.3	4.6
40°-50°	19.6	1.5
50°-60°	5.3	0.4
60°-70°	2.0	0.2
70°-80°	1.0	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°	1189.7	93.2
0°-40°	1248.1	97.8
0°-60°	1273.0	99.8
0°-90°	1276.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1276.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	6600	
5°	5961	516
15°	1726	522
25°	323	152
35°	88	58
45°	26	20
55°	6	5
65°	2	2
75°	2	1
85°	0	0
90°	0	

TEST NUMBER: P219571

CATALOG NUMBER: MRZ-1-REC-X-4-L35-97-NFL-UNV-X-STD

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	6599.8
2.5°	6447.8
5°	5961.1
7.5°	5218.7
10°	4315.6
12.5°	3083.6
15°	1725.9
17.5°	916.3
20°	572.9
22.5°	425.3
25°	323.0
27.5°	241.1
30°	172.4
32.5°	124.2
35°	87.7
37.5°	61.4
40°	43.8
42.5°	33.6
45°	26.3
47.5°	16.1
50°	10.2
52.5°	7.3
55°	5.8
57.5°	4.4
60°	2.9
62.5°	2.9
65°	1.5
67.5°	1.5
70°	1.5
72.5°	1.5
75°	1.5
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)