

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: P219547

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P219547  
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-1H-L30-97-NFL-UNV-X-STD  
Description: MRZ INTEGRAL LED DOWNLIGHT  
25 DEGREE NARROW FLOOD OPTIC, LIGHT LEVEL 1  
Light Source: (1) 3000K CCT, 97 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 510.8 lumens  
Efficiency: N/A  
Efficacy: 75.1 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

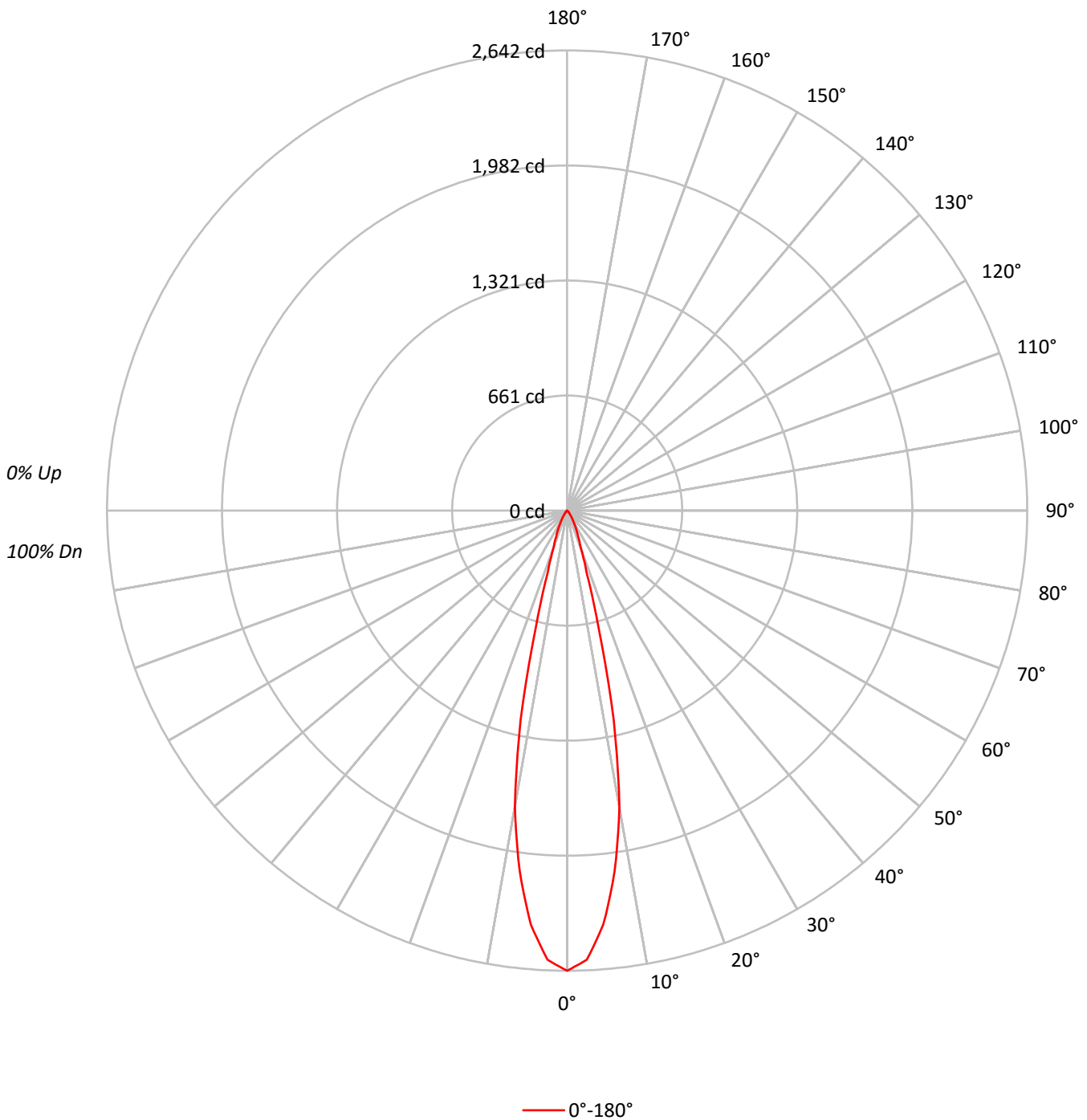
Input Watts (W): 6.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P219547

CATALOG NUMBER: MRZ-1-REC-X-1H-L30-97-NFL-UNV-X-STD

### Luminous Intensity Polar Plot





TEST NUMBER: P219547

CATALOG NUMBER: MRZ-1-REC-X-1H-L30-97-NFL-UNV-X-STD

**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	113	111	109	108	107	106	104	103	102	101	100	99	98	97
2	111	108	105	102	109	106	104	101	103	101	99	100	99	97	98	96	95	94
3	108	103	100	97	106	102	99	96	100	97	95	97	95	93	95	93	92	91
4	105	99	96	93	103	98	95	92	96	93	91	95	92	90	93	91	89	88
5	102	96	92	89	100	95	91	89	94	90	88	92	89	87	91	88	86	85
6	99	93	89	86	98	92	88	86	91	88	85	90	87	85	88	86	84	83
7	96	90	86	83	95	89	86	83	88	85	83	87	84	82	86	84	82	81
8	94	87	83	81	93	87	83	81	86	83	80	85	82	80	84	82	80	79
9	91	85	81	78	91	85	81	78	84	80	78	83	80	78	82	80	78	77
10	89	83	79	76	89	83	79	76	82	78	76	81	78	76	81	78	76	75

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

	0°
0°	1303410
5°	1181799
10°	865461
15°	352901
20°	120392
25°	70389
30°	39310
35°	21141
40°	11271
45°	7326
50°	3147
55°	1978
60°	1184
65°	700
70°	866
75°	1144
80°	0
85°	0



TEST NUMBER: P219547

CATALOG NUMBER: MRZ-1-REC-X-1H-L30-97-NFL-UNV-X-STD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	206.5	40.4
10°-20°	208.8	40.9
20°-30°	61.0	11.9
30°-40°	23.3	4.6
40°-50°	7.8	1.5
50°-60°	2.1	0.4
60°-70°	0.8	0.2
70°-80°	0.4	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°	476.2	93.2
0°-40°	499.6	97.8
0°-60°	509.6	99.8
0°-90°	510.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	510.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2642	
5°	2386	207
15°	691	209
25°	129	61
35°	35	23
45°	10	8
55°	2	2
65°	1	1
75°	1	0
85°	0	0
90°	0	



TEST NUMBER: P219547

CATALOG NUMBER: MRZ-1-REC-X-1H-L30-97-NFL-UNV-X-STD

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2641.8
2.5°	2581.0
5°	2386.2
7.5°	2089.0
10°	1727.5
12.5°	1234.3
15°	690.9
17.5°	366.8
20°	229.3
22.5°	170.2
25°	129.3
27.5°	96.5
30°	69.0
32.5°	49.7
35°	35.1
37.5°	24.6
40°	17.5
42.5°	13.5
45°	10.5
47.5°	6.4
50°	4.1
52.5°	2.9
55°	2.3
57.5°	1.8
60°	1.2
62.5°	1.2
65°	0.6
67.5°	0.6
70°	0.6
72.5°	0.6
75°	0.6
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)