

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: P226136

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P226136  
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-1-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: 438.4 lumens  
Efficiency: N/A  
Efficacy: 81.2 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

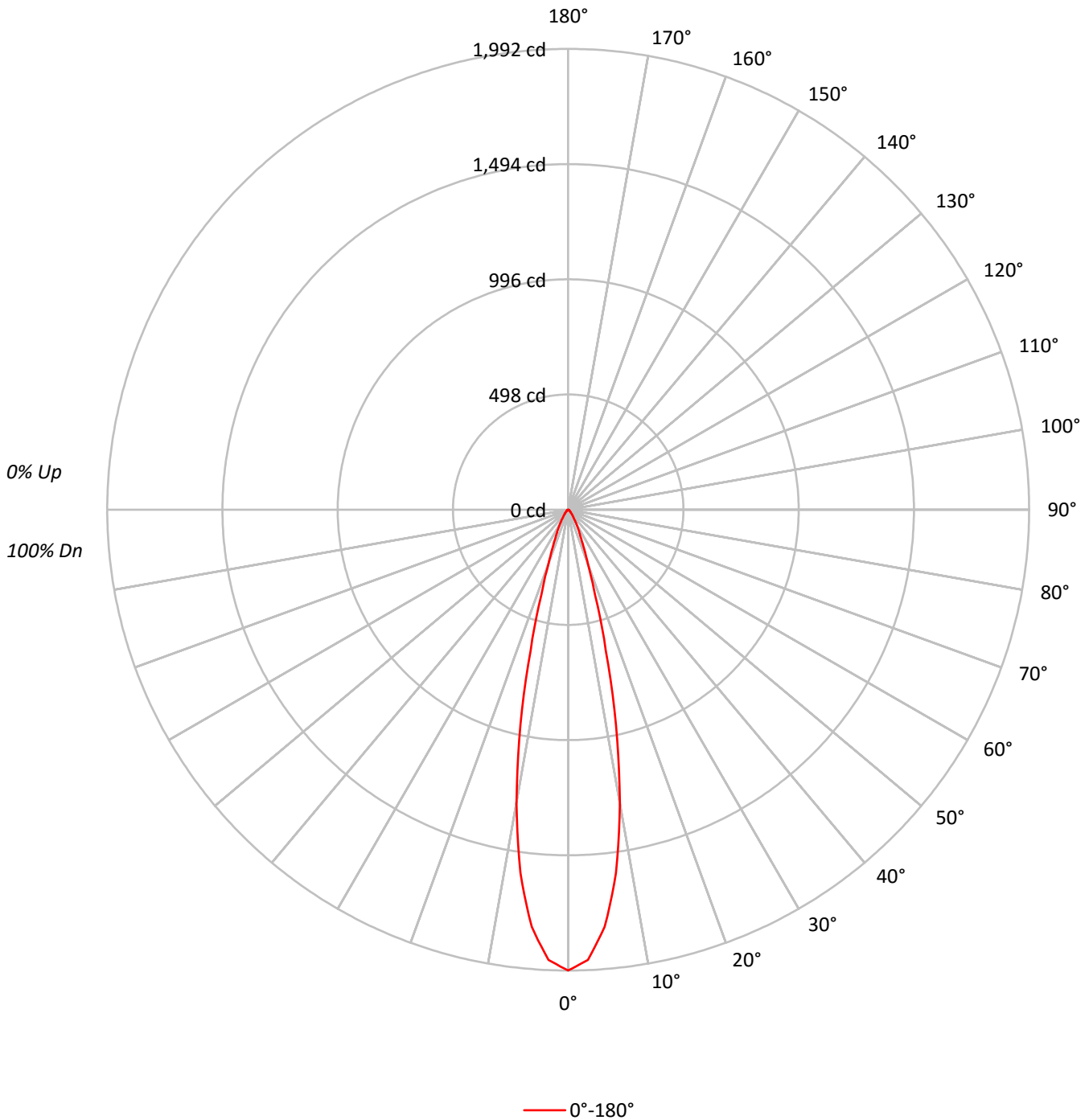
Input Watts (W): 5.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	982713
5°	896428
10°	644925
15°	320364
20°	130526
25°	67340
30°	39595
35°	22948
40°	14491
45°	9838
50°	6448
55°	4043
60°	2566
65°	2452
70°	1587
75°	953
80°	1421
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.0	35.6
10°-20°	178.2	40.7
20°-30°	60.6	13.8
30°-40°	25.3	5.8
40°-50°	11.0	2.5
50°-60°	4.5	1.0
60°-70°	1.9	0.4
70°-80°	0.8	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°	394.9	90.1
0°-40°	420.1	95.8
0°-60°	435.6	99.4
0°-90°	438.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	438.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1992	
5°	1810	156
15°	627	178
25°	124	61
35°	38	25
45°	14	11
55°	5	4
65°	2	2
75°	0	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1991.8
2.5°	1947.8
5°	1810.0
7.5°	1583.9
10°	1287.3
12.5°	951.5
15°	627.2
17.5°	387.5
20°	248.6
22.5°	168.7
25°	123.7
27.5°	92.4
30°	69.5
32.5°	51.7
35°	38.1
37.5°	28.7
40°	22.5
42.5°	17.2
45°	14.1
47.5°	11.0
50°	8.4
52.5°	6.2
55°	4.7
57.5°	3.7
60°	2.6
62.5°	2.1
65°	2.1
67.5°	1.6
70°	1.1
72.5°	1.1
75°	0.5
77.5°	0.5
80°	0.5
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)