

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: P219657

Luminaire Tested: **MRZ-1-REC-X-3-L40-97-NFL-UNV-X-STD-SFL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P219657
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-3-L40-97-NFL-UNV-X-STD-SFL
Description: MRZ INTEGRAL LED DOWNLIGHT
25 DEGREE NARROW FLOOD OPTIC WITH SOFT FOCUS LENS, LIGHT LEVEL 3
Light Source: (1) 4000K CCT, 97 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 996.6 lumens
Efficiency: N/A
Efficacy: 82.4 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

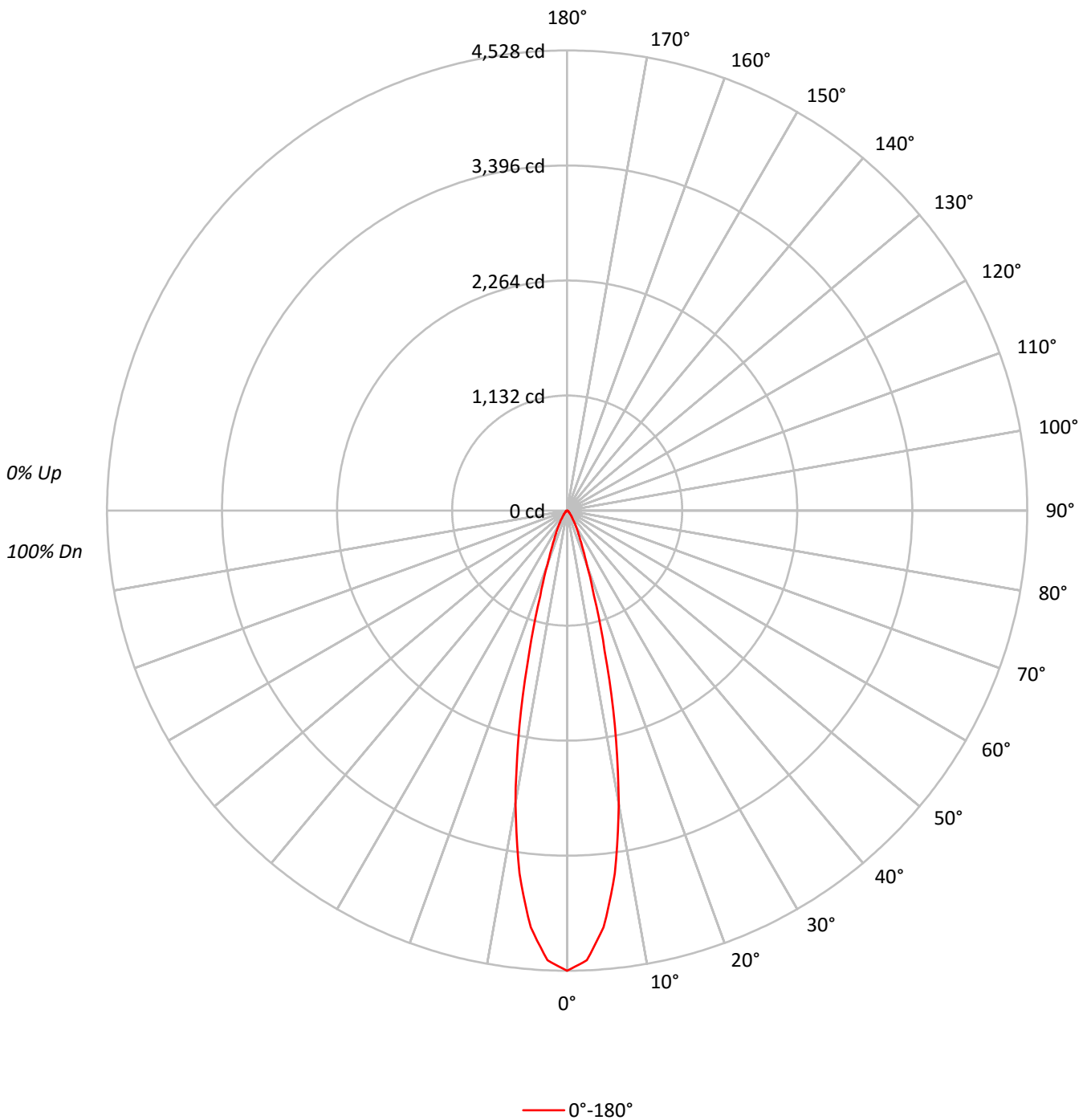
Input Watts (W): 12.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2234269
5°	2038161
10°	1466300
15°	728378
20°	296755
25°	153190
30°	89957
35°	52220
40°	32912
45°	22398
50°	14584
55°	9204
60°	5822
65°	5487
70°	3462
75°	2288
80°	3410
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	354.6	35.6
10°-20°	405.3	40.7
20°-30°	137.9	13.8
30°-40°	57.4	5.8
40°-50°	25.1	2.5
50°-60°	10.1	1.0
60°-70°	4.2	0.4
70°-80°	1.7	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°	897.8	90.1
0°-40°	955.2	95.9
0°-60°	990.4	99.4
0°-90°	996.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	996.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	4528	
5°	4115	355
15°	1426	405
25°	281	138
35°	87	57
45°	32	25
55°	11	10
65°	5	4
75°	1	2
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	4528.5
2.5°	4428.7
5°	4115.3
7.5°	3601.2
10°	2926.8
12.5°	2163.3
15°	1426.0
17.5°	881.0
20°	565.2
22.5°	383.5
25°	281.4
27.5°	210.2
30°	157.9
32.5°	117.5
35°	86.7
37.5°	65.3
40°	51.1
42.5°	39.2
45°	32.1
47.5°	24.9
50°	19.0
52.5°	14.2
55°	10.7
57.5°	8.3
60°	5.9
62.5°	4.7
65°	4.7
67.5°	3.6
70°	2.4
72.5°	2.4
75°	1.2
77.5°	1.2
80°	1.2
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)