

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: P219665

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P219665
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-4-L40-97-NFL-UNV-X-STD-SFL
Description: MRZ INTEGRAL LED DOWNLIGHT
25 DEGREE NARROW 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: 1274.5 lumens
Efficiency: N/A
Efficacy: 80.7 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

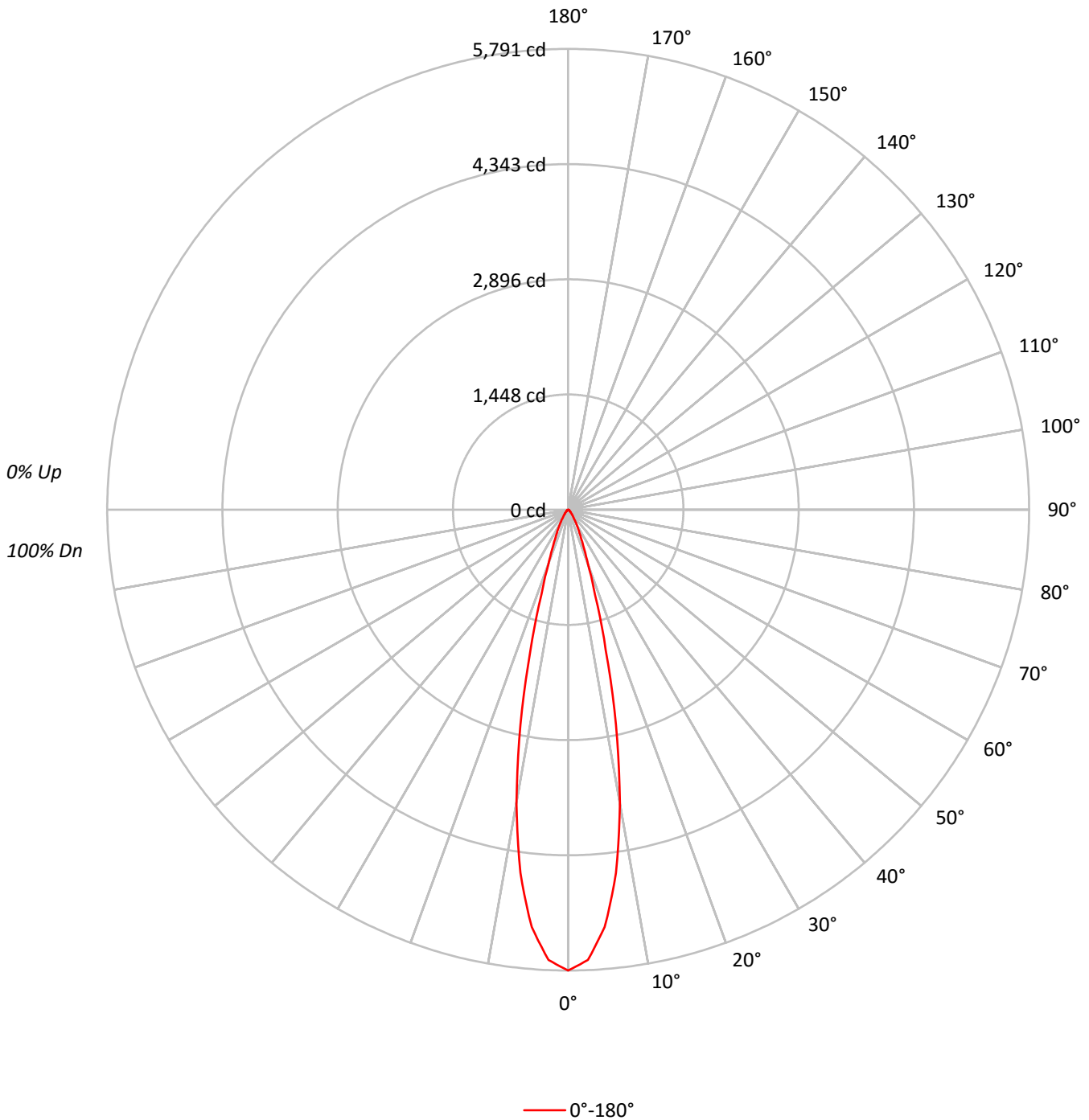
Input Watts (W): 15.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2857358
5°	2606575
10°	1875208
15°	931517
20°	379501
25°	195924
30°	115081
35°	66735
40°	42057
45°	28608
50°	18652
55°	11784
60°	7499
65°	7121
70°	4328
75°	2859
80°	4262
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	453.5	35.6
10°-20°	518.3	40.7
20°-30°	176.4	13.8
30°-40°	73.4	5.8
40°-50°	32.1	2.5
50°-60°	13.0	1.0
60°-70°	5.5	0.4
70°-80°	2.2	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°	1148.2	90.1
0°-40°	1221.6	95.9
0°-60°	1266.7	99.4
0°-90°	1274.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1274.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	5791	
5°	5263	454
15°	1824	518
25°	360	176
35°	111	73
45°	41	32
55°	14	13
65°	6	5
75°	2	2
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	5791.4
2.5°	5663.8
5°	5263.0
7.5°	4605.5
10°	3743.0
12.5°	2766.6
15°	1823.7
17.5°	1126.7
20°	722.8
22.5°	490.5
25°	359.9
27.5°	268.8
30°	202.0
32.5°	150.3
35°	110.8
37.5°	83.5
40°	65.3
42.5°	50.1
45°	41.0
47.5°	31.9
50°	24.3
52.5°	18.2
55°	13.7
57.5°	10.6
60°	7.6
62.5°	6.1
65°	6.1
67.5°	4.6
70°	3.0
72.5°	3.0
75°	1.5
77.5°	1.5
80°	1.5
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)