

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: P226188

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226188
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-L40-97-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) 4000K CCT, 97 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 476.0 lumens
Efficiency: N/A
Efficacy: 88.1 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

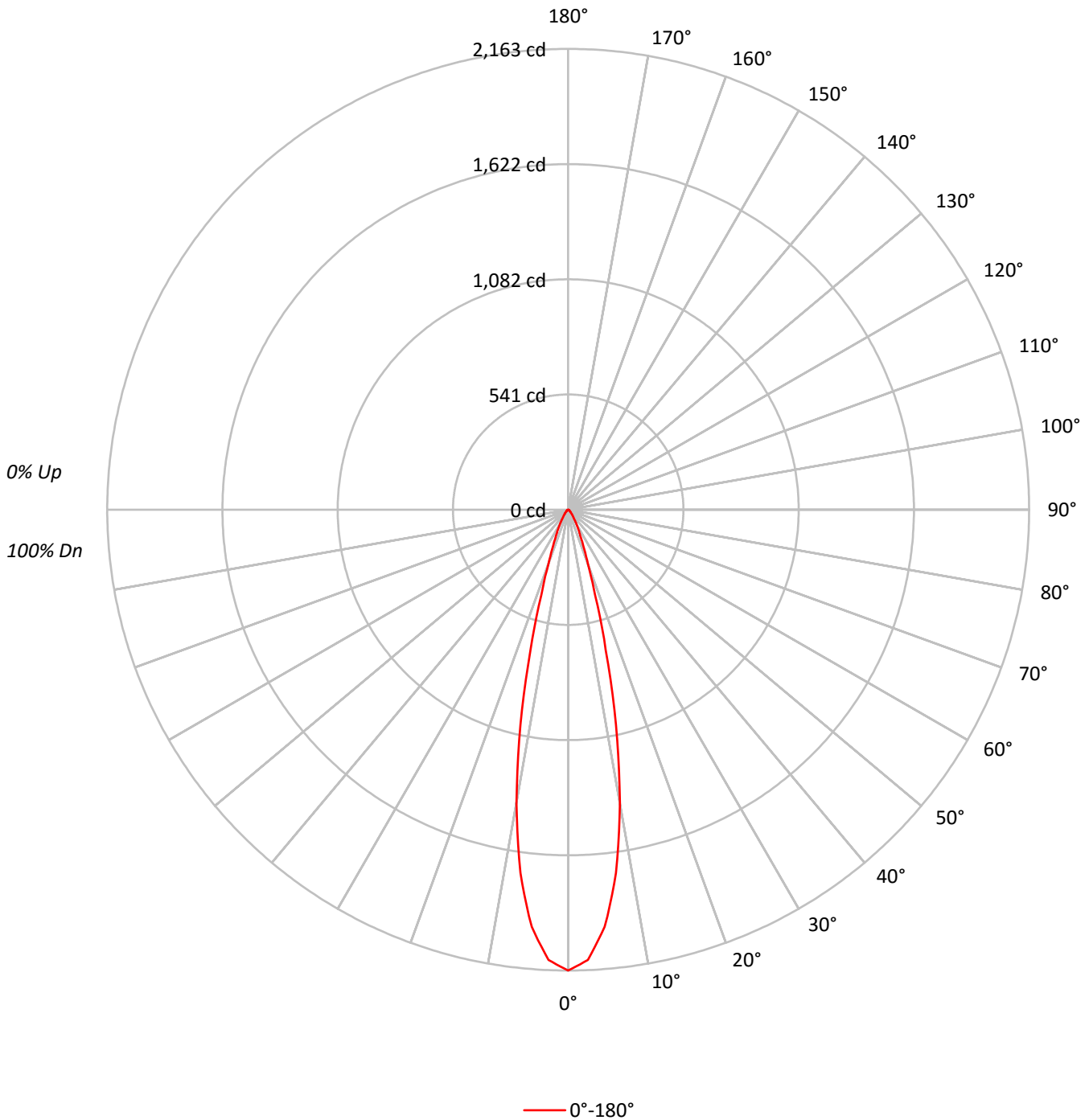
Input Watts (W): 5.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1067229
5°	973541
10°	700385
15°	347895
20°	141709
25°	73165
30°	42956
35°	24935
40°	15715
45°	10745
50°	6985
55°	4387
60°	2862
65°	2568
70°	1731
75°	953
80°	1421
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.4	35.6
10°-20°	193.6	40.7
20°-30°	65.9	13.8
30°-40°	27.4	5.8
40°-50°	12.0	2.5
50°-60°	4.8	1.0
60°-70°	2.0	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°	428.8	90.1
0°-40°	456.3	95.9
0°-60°	473.1	99.4
0°-90°	476.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	476.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2163	
5°	1966	169
15°	681	194
25°	134	66
35°	41	27
45°	15	12
55°	5	5
65°	2	2
75°	0	1
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	2163.1
2.5°	2115.5
5°	1965.7
7.5°	1720.1
10°	1398.0
12.5°	1033.4
15°	681.1
17.5°	420.8
20°	269.9
22.5°	183.2
25°	134.4
27.5°	100.4
30°	75.4
32.5°	56.1
35°	41.4
37.5°	31.2
40°	24.4
42.5°	18.7
45°	15.4
47.5°	11.9
50°	9.1
52.5°	6.8
55°	5.1
57.5°	3.9
60°	2.9
62.5°	2.2
65°	2.2
67.5°	1.7
70°	1.2
72.5°	1.2
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)