

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: P219595

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P219595
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14871)
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-HEX
Description: MRZ INTEGRAL LED DOWNLIGHT
25 DEGREE NARROW FLOOD OPTIC WITH HEX LOUVER, LIGHT LEVEL 3
Light Source: (1) 4000K CCT, 97 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 719.3 lumens
Efficiency: N/A
Efficacy: 59.4 lumens/watt
Spacing Criteria (0/90/45): 0.36 / 0.36 / 0.35
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

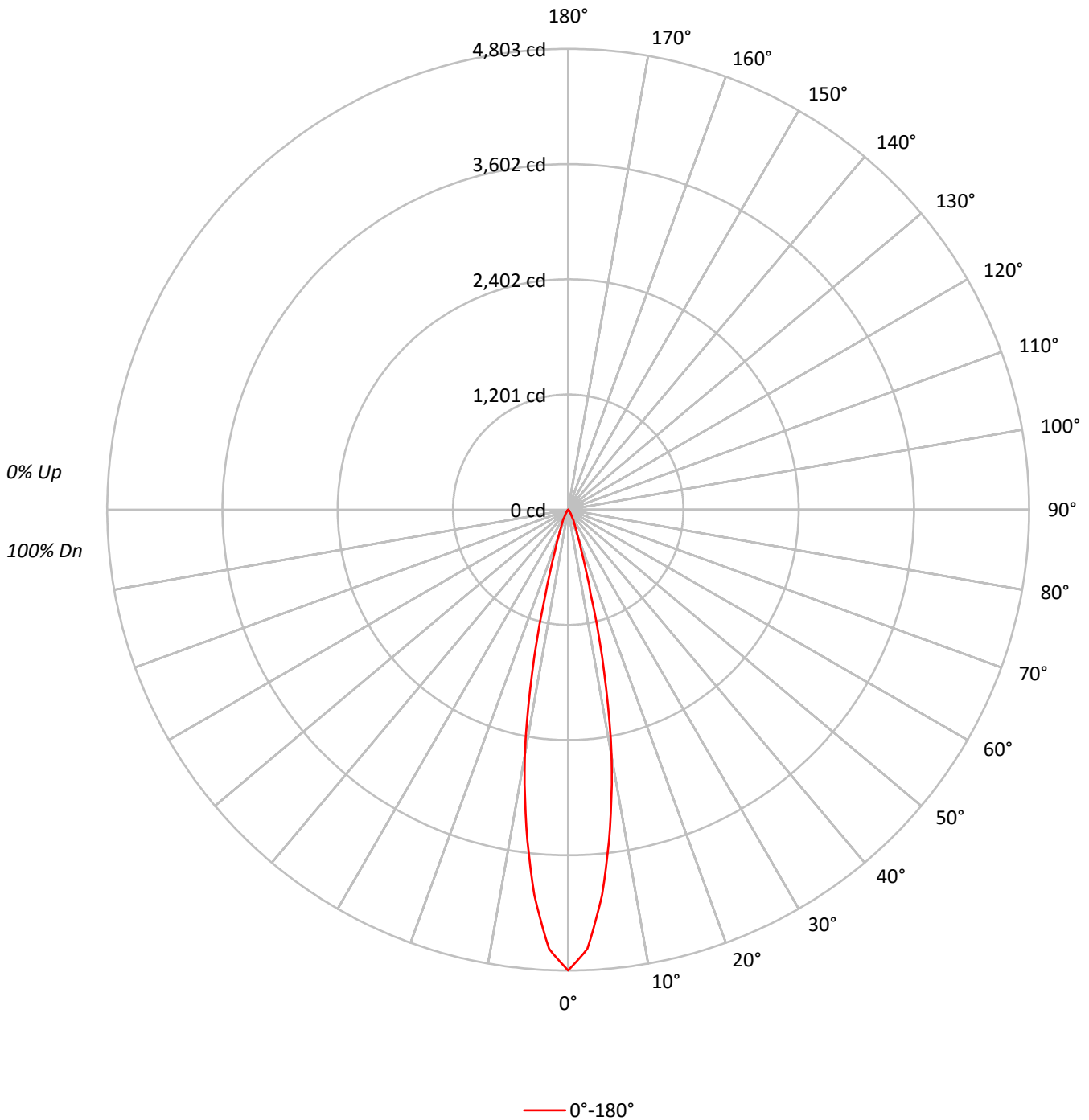
Input Watts (W): 12.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97
2	112	109	106	104	110	107	105	103	104	102	100	101	100	98	99	97	96	95
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92
4	106	101	98	95	105	100	97	94	98	95	93	96	94	92	95	93	91	90
5	103	98	94	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88
6	101	95	92	89	100	95	91	89	93	90	88	92	90	88	91	89	87	86
7	99	93	89	87	98	92	89	86	91	88	86	90	88	86	89	87	85	84
8	96	91	87	84	95	90	87	84	89	86	84	88	86	84	88	85	83	82
9	94	88	85	82	94	88	85	82	87	84	82	87	84	82	86	83	82	81
10	92	86	83	81	92	86	83	81	86	82	80	85	82	80	84	82	80	79

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2369603
5°	1997599
10°	1305081
15°	460319
20°	148377
25°	76921
30°	35834
35°	16443
40°	7664
45°	4117
50°	1842
55°	1032
60°	1184
65°	0
70°	0
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	339.3	47.2
10°-20°	287.1	39.9
20°-30°	67.4	9.4
30°-40°	18.9	2.6
40°-50°	4.7	0.7
50°-60°	1.5	0.2
60°-70°	0.4	0.1
70°-80°	0.0	0.0
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°	693.8	96.5
0°-40°	712.6	99.1
0°-60°	718.8	99.9
0°-90°	719.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	719.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	4803	
5°	4033	339
15°	901	287
25°	141	67
35°	27	19
45°	6	5
55°	1	1
65°	0	0
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	4802.8
2.5°	4580.7
5°	4033.4
7.5°	3340.0
10°	2605.0
12.5°	1731.1
15°	901.2
17.5°	465.4
20°	282.6
22.5°	195.9
25°	141.3
27.5°	97.4
30°	62.9
32.5°	41.6
35°	27.3
37.5°	17.8
40°	11.9
42.5°	8.3
45°	5.9
47.5°	3.6
50°	2.4
52.5°	2.4
55°	1.2
57.5°	1.2
60°	1.2
62.5°	1.2
65°	0.0
67.5°	0.0
70°	0.0
72.5°	0.0
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)