

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: P219572

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P219572  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14859)  
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  
Description: MRZ INTEGRAL LED DOWNLIGHT  
25 DEGREE NARROW FLOOD OPTIC, LIGHT LEVEL 4  
Light Source: (1) 4000K CCT, 97 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1325.7 lumens  
Efficiency: N/A  
Efficacy: 83.9 lumens/watt  
Spacing Criteria (0/90/45): 0.41 / 0.41 / 0.37  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

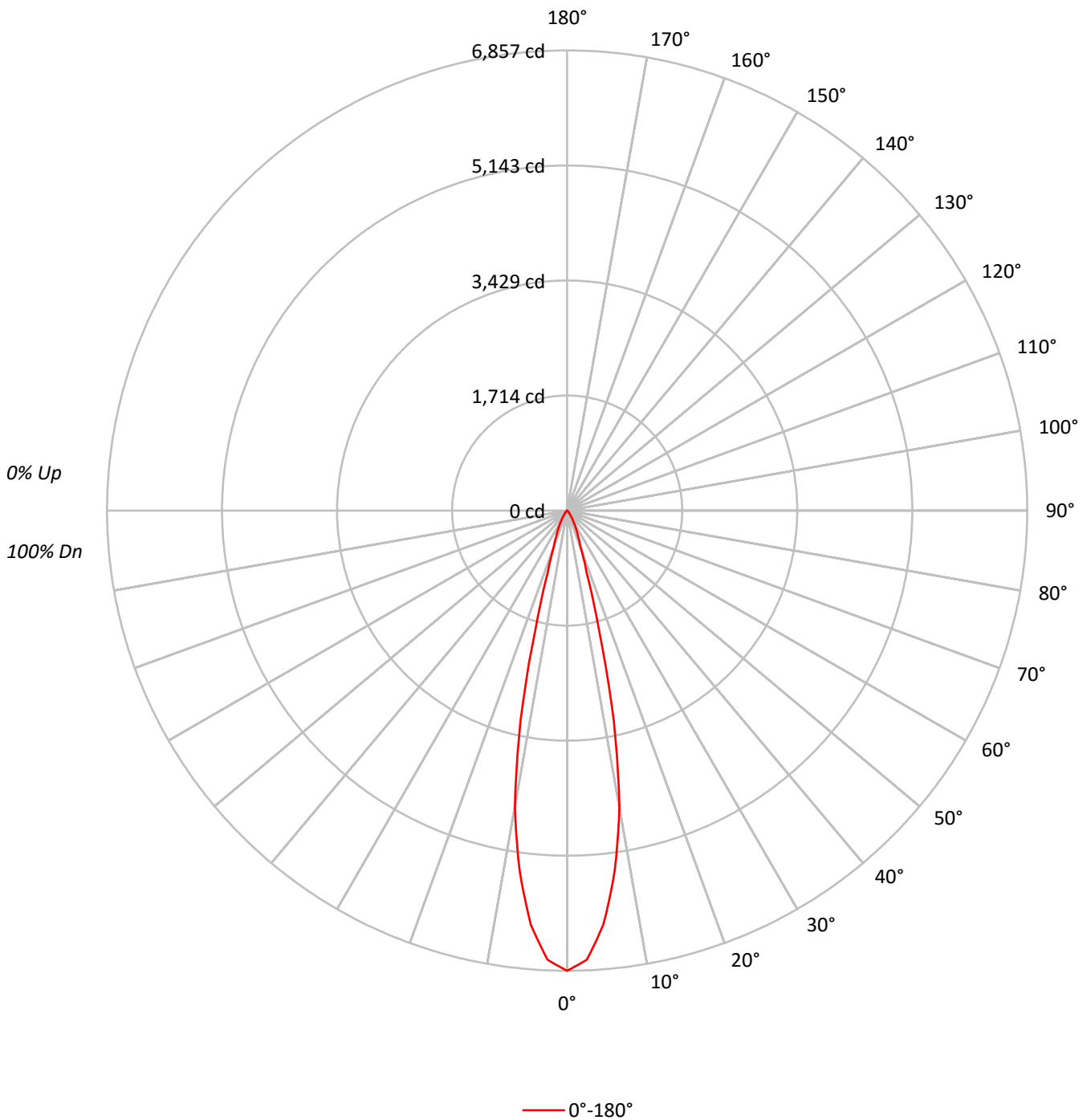
Input Watts (W): 15.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	111	109	108	107	106	104	103	102	101	100	99	98	97
2	111	108	105	102	109	106	104	101	103	101	99	100	99	97	98	96	95	94
3	108	103	100	97	106	102	99	96	100	97	95	97	95	93	95	93	92	91
4	105	99	96	93	103	98	95	92	96	93	91	95	92	90	93	91	89	88
5	102	96	92	89	100	95	91	89	94	90	88	92	89	87	91	88	86	85
6	99	93	89	86	98	92	88	86	91	88	85	90	87	85	88	86	84	83
7	96	90	86	83	95	89	86	83	88	85	83	87	84	82	86	84	82	81
8	94	87	83	81	93	87	83	81	86	83	80	85	82	80	84	82	80	79
9	91	85	81	78	91	85	81	78	84	80	78	83	80	78	82	80	78	77
10	89	83	79	76	89	83	79	76	82	78	76	81	78	76	81	78	76	75

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	3383252
5°	3067567
10°	2246442
15°	915989
20°	312506
25°	182695
30°	102091
35°	54870
40°	29369
45°	19048
50°	8136
55°	5247
60°	2960
65°	1751
70°	2164
75°	2859
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	536.0	40.4
10°-20°	541.9	40.9
20°-30°	158.3	11.9
30°-40°	60.6	4.6
40°-50°	20.3	1.5
50°-60°	5.6	0.4
60°-70°	2.0	0.2
70°-80°	1.0	0.1
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°	1236.2	93.2
0°-40°	1296.8	97.8
0°-60°	1322.7	99.8
0°-90°	1325.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1325.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	6857	
5°	6194	536
15°	1793	542
25°	336	158
35°	91	61
45°	27	20
55°	6	6
65°	2	2
75°	2	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	6857.3
2.5°	6699.4
5°	6193.8
7.5°	5422.4
10°	4484.0
12.5°	3203.9
15°	1793.3
17.5°	952.1
20°	595.2
22.5°	441.9
25°	335.6
27.5°	250.5
30°	179.2
32.5°	129.1
35°	91.1
37.5°	63.8
40°	45.6
42.5°	34.9
45°	27.3
47.5°	16.7
50°	10.6
52.5°	7.6
55°	6.1
57.5°	4.6
60°	3.0
62.5°	3.0
65°	1.5
67.5°	1.5
70°	1.5
72.5°	1.5
75°	1.5
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)