

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: P219549

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P219549  
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-1H-L40-97-NFL-UNV-X-STD  
Description: MRZ INTEGRAL LED DOWNLIGHT  
25 DEGREE NARROW FLOOD OPTIC, LIGHT LEVEL 1  
Light Source: (1) 4000K CCT, 97 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 554.6 lumens  
Efficiency: N/A  
Efficacy: 81.6 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

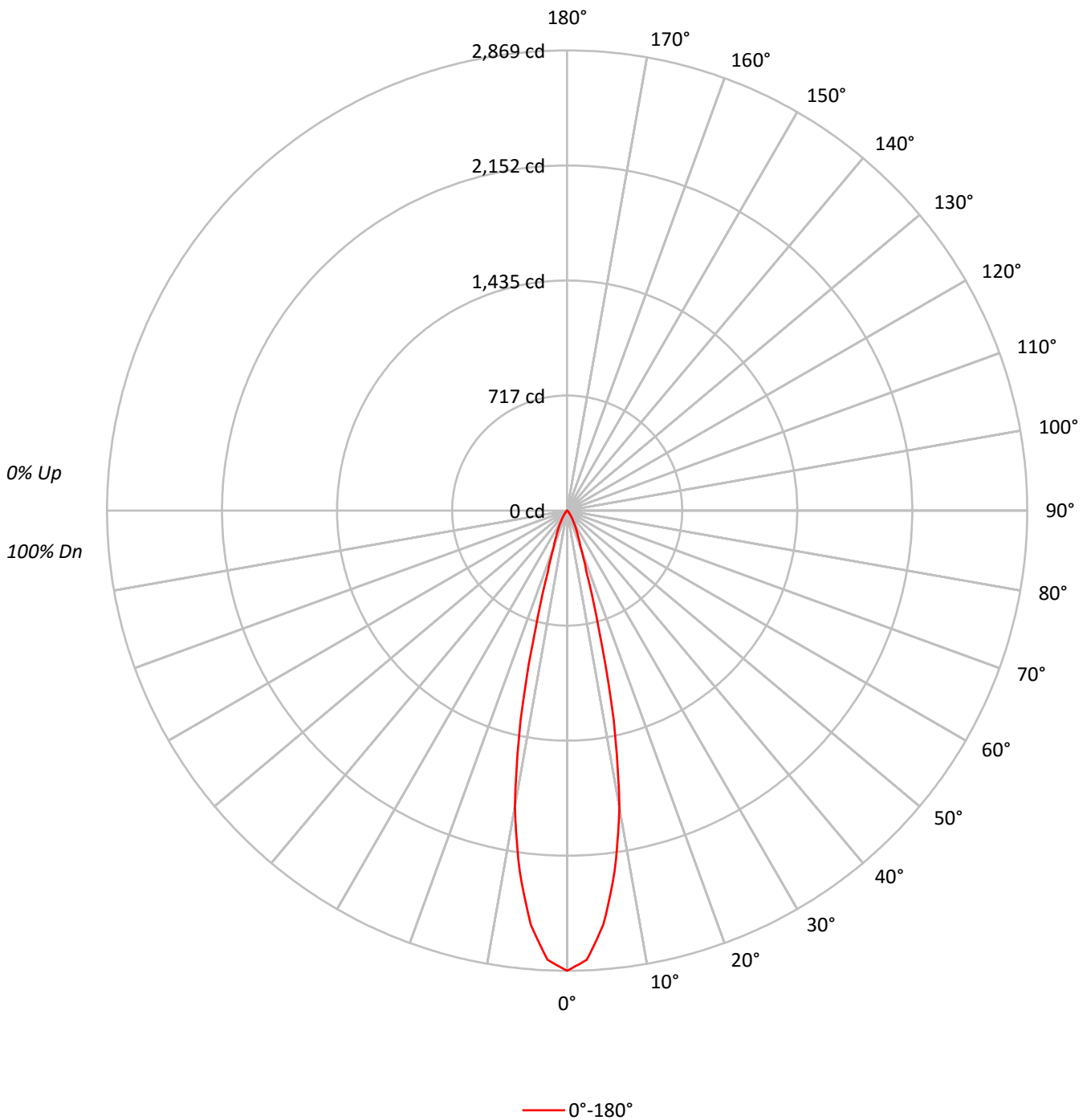
Input Watts (W): 6.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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							
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10				
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	111	106	106	106	106	102	102	102	102	100	100	100	100
1	115	113	111	109	113	111	109	108	107	106	104	104	103	102	101	101	100	99	98	98	97	97	97	97
2	111	108	105	102	109	106	104	101	103	101	99	99	100	99	97	97	98	96	95	95	94	94	94	94
3	108	103	100	97	106	102	99	96	100	97	95	95	97	95	93	93	95	93	92	92	91	91	91	91
4	105	99	96	93	103	98	95	92	96	93	91	91	95	92	90	90	93	91	89	89	88	88	88	88
5	102	96	92	89	100	95	91	89	94	90	88	88	92	89	87	87	91	88	86	86	85	85	85	85
6	99	93	89	86	98	92	88	86	91	88	85	85	90	87	85	85	88	86	84	84	83	83	83	83
7	96	90	86	83	95	89	86	83	88	85	83	83	87	84	82	82	86	84	82	82	81	81	81	81
8	94	87	83	81	93	87	83	81	86	83	80	80	85	82	80	80	84	82	80	80	79	79	79	79
9	91	85	81	78	91	85	81	78	84	80	78	78	83	80	78	78	82	80	78	78	77	77	77	77
10	89	83	79	76	89	83	79	76	82	78	76	76	81	78	76	76	81	78	76	76	75	75	75	75

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

	0°
0°	1415555
5°	1283477
10°	939909
15°	383241
20°	130736
25°	76432
30°	42728
35°	22948
40°	12302
45°	7954
50°	3377
55°	2150
60°	1283
65°	700
70°	866
75°	1144
80°	0
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	224.3	40.4
10°-20°	226.7	40.9
20°-30°	66.2	11.9
30°-40°	25.4	4.6
40°-50°	8.5	1.5
50°-60°	2.3	0.4
60°-70°	0.8	0.2
70°-80°	0.4	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°	517.2	93.3
0°-40°	542.6	97.8
0°-60°	553.4	99.8
0°-90°	554.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	554.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2869	
5°	2592	224
15°	750	227
25°	140	66
35°	38	25
45°	11	9
55°	2	2
65°	1	1
75°	1	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2869.1
2.5°	2803.1
5°	2591.5
7.5°	2268.7
10°	1876.1
12.5°	1340.5
15°	750.3
17.5°	398.3
20°	249.0
22.5°	184.9
25°	140.4
27.5°	104.8
30°	75.0
32.5°	54.0
35°	38.1
37.5°	26.7
40°	19.1
42.5°	14.6
45°	11.4
47.5°	7.0
50°	4.4
52.5°	3.2
55°	2.5
57.5°	1.9
60°	1.3
62.5°	1.3
65°	0.6
67.5°	0.6
70°	0.6
72.5°	0.6
75°	0.6
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)