

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: P219580

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P219580
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-1H-L40-97-NFL-UNV-X-STD-HEX
Description: MRZ INTEGRAL LED DOWNLIGHT
25 DEGREE NARROW FLOOD OPTIC WITH HEX LOUVER, LIGHT LEVEL 1
Light Source: (1) 4000K CCT, 97 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 384.8 lumens
Efficiency: N/A
Efficacy: 56.6 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

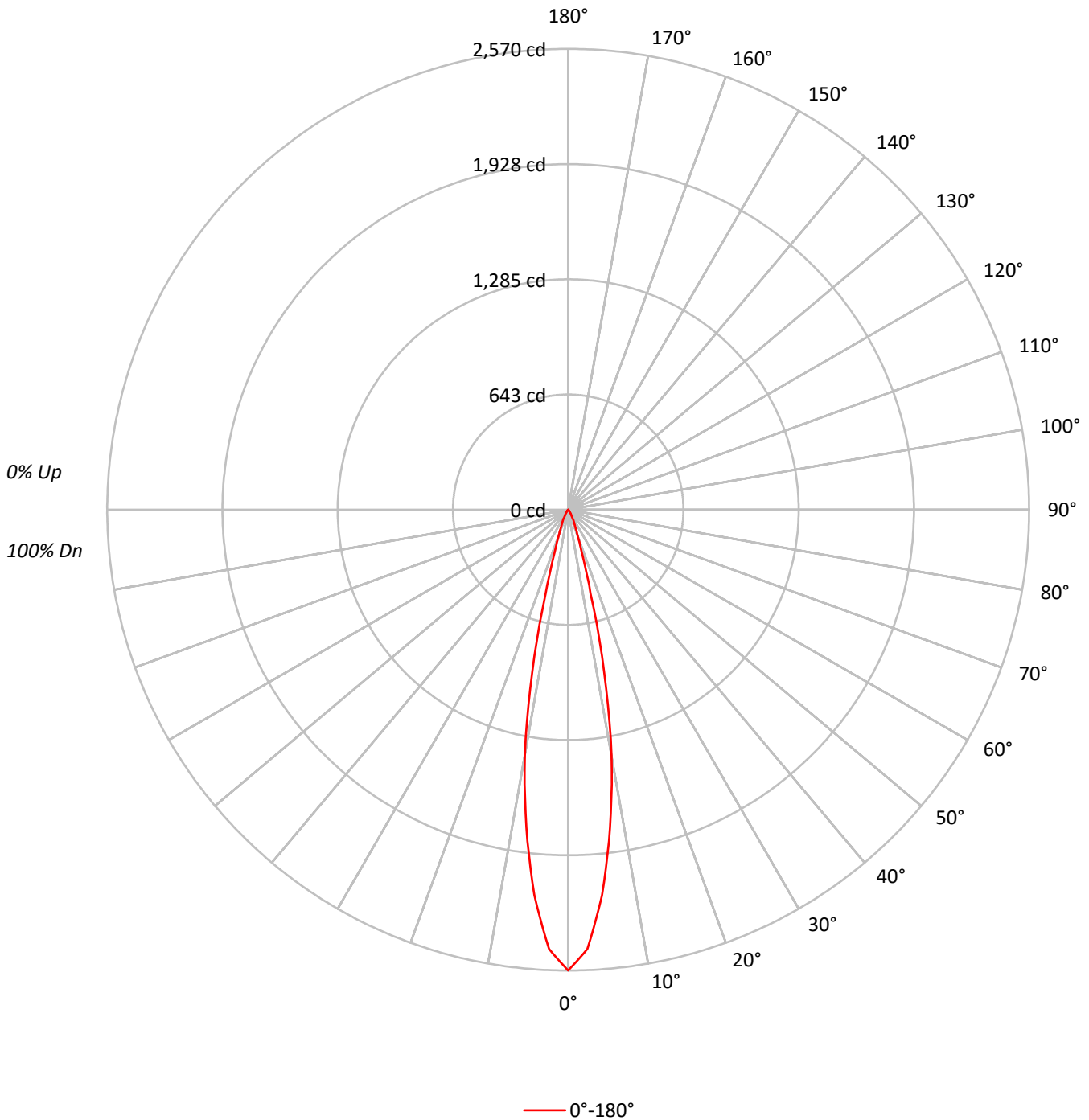
Input Watts (W): 6.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	1267936
5°	1068879
10°	698331
15°	246300
20°	79387
25°	41155
30°	19199
35°	8794
40°	4122
45°	2233
50°	998
55°	516
60°	592
65°	0
70°	0
75°	0
80°	0
85°	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	47.2
10°-20°	153.6	39.9
20°-30°	36.1	9.4
30°-40°	10.1	2.6
40°-50°	2.5	0.7
50°-60°	0.8	0.2
60°-70°	0.2	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°	371.2	96.5
0°-40°	381.3	99.1
0°-60°	384.6	99.9
0°-90°	384.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	384.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2570	
5°	2158	182
15°	482	154
25°	76	36
35°	15	10
45°	3	3
55°	1	1
65°	0	0
75°	0	0
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	2569.9
2.5°	2451.1
5°	2158.2
7.5°	1787.2
10°	1393.9
12.5°	926.3
15°	482.2
17.5°	249.0
20°	151.2
22.5°	104.8
25°	75.6
27.5°	52.1
30°	33.7
32.5°	22.2
35°	14.6
37.5°	9.5
40°	6.4
42.5°	4.4
45°	3.2
47.5°	1.9
50°	1.3
52.5°	1.3
55°	0.6
57.5°	0.6
60°	0.6
62.5°	0.6
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)