Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P431531

Luminaire Tested: **LAMR4B312R209040DE01021MMS**

Issue Date: 11/23/2020

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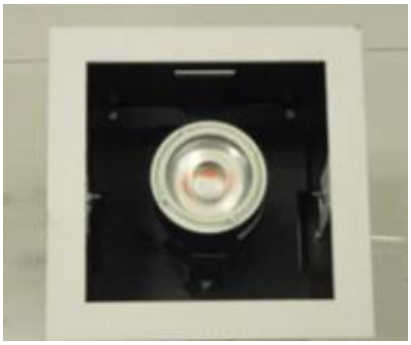
Test Information

Test Method:	LM-41-14
Report Number:	P431531
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2007-857-3)
Test Lab:	INNOVATION CENTER (G1)
Issue Date:	11/23/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	PORTFOLIO
Catalog Number:	LAMR4B312R209040DE01021MMS
Description:	PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 20 DEG TIR OPTIC
Light Source:	HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	3880.3 lumens
Efficiency:	N/A
Efficacy:	94.9 lumens/watt
Spacing Criteria (0/90/45):	0.34 / 0.34 / 0.33
Luminous Opening:	Circular (Dia: 0.17' x H: 0')
CIE Type:	Direct

Input Watts (W):	40.9
Input Voltage (V):	NR
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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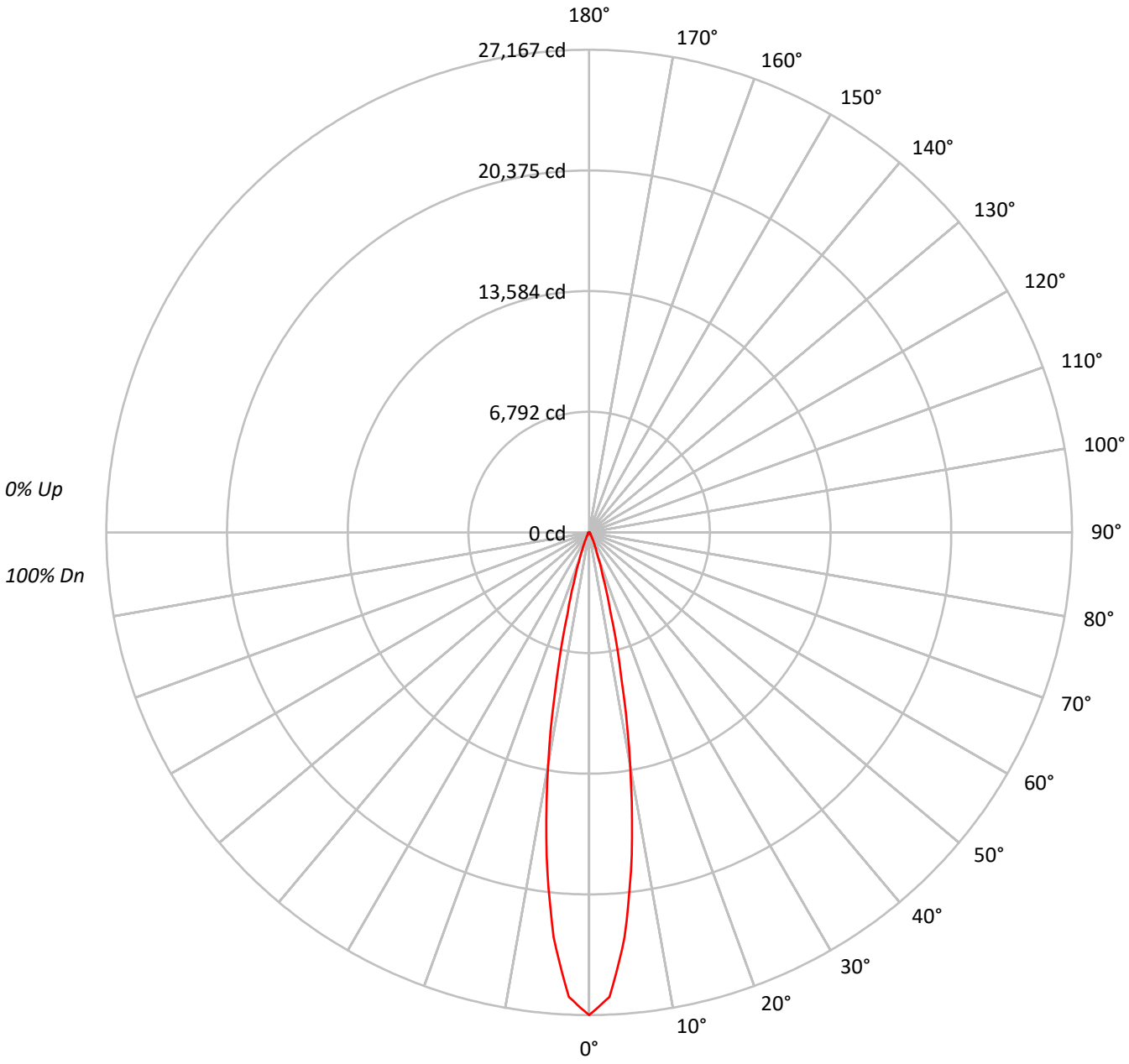
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	110	113	111	109	108	107	106	105	103	102	101	100	99	99	97
2	112	108	105	103	110	106	104	102	103	101	100	101	99	97	98	97	95	94
3	108	104	100	98	107	103	100	97	100	98	96	98	96	94	96	94	93	91
4	105	100	97	94	104	99	96	93	97	94	92	96	93	91	94	92	90	89
5	103	97	93	90	101	96	93	90	95	92	89	93	91	89	92	90	88	87
6	100	94	90	88	99	94	90	87	92	89	87	91	88	86	90	88	86	85
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81
9	94	88	84	81	93	87	84	81	86	83	81	86	83	81	85	82	81	80
10	92	86	82	80	91	85	82	80	85	82	79	84	81	79	83	81	79	78

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	13403741
5°	11329614
10°	6654610
15°	2382757
20°	788405
25°	313783
30°	150003
35°	85708
40°	61894
45°	52121
50°	60100
55°	48944
60°	24570
65°	20780
70°	25677
75°	27069
80°	20173
85°	20379

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1873.2	48.3
10°-20°	1460.8	37.6
20°-30°	303.2	7.8
30°-40°	95.6	2.5
40°-50°	61.5	1.6
50°-60°	49.3	1.3
60°-70°	19.4	0.5
70°-80°	14.5	0.4
80°-90°	2.9	0.1
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°	3637.1	93.7
0°-40°	3732.7	96.2
0°-60°	3843.5	99.1
0°-90°	3880.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3880.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	27167	
5°	22876	###
15°	4665	1461
25°	576	303
35°	142	96
45°	75	61
55°	57	49
65°	18	19
75°	14	15
85°	4	3
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	27167.2
2.5°	26170.9
5°	22875.9
7.5°	18328.5
10°	13282.9
12.5°	8379.7
15°	4664.9
17.5°	2565.5
20°	1501.6
22.5°	918.0
25°	576.4
27.5°	380.7
30°	263.3
32.5°	185.0
35°	142.3
37.5°	113.9
40°	96.1
42.5°	81.8
45°	74.7
47.5°	74.7
50°	78.3
52.5°	74.7
55°	56.9
57.5°	39.1
60°	24.9
62.5°	21.3
65°	17.8
67.5°	17.8
70°	17.8
72.5°	17.8
75°	14.2
77.5°	10.7
80°	7.1
82.5°	3.6
85°	3.6
87.5°	0.0
90°	0.0

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0°-180°

(END OF REPORT)