

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: HALO COMMERCIAL

Report Number: P345338

Luminaire Tested: **PR4FS12D010 PR4M12WD9FSMMS 2000Lm3500K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P345338
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1908-453-5)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PR4FS12D010 PR4M12WD9FSMMS 2000Lm3500K
Description: PR4 WIDE LENS WITH, MATTE METALLIC SILVER FINISH
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1704.0 lumens
Efficiency: N/A
Efficacy: 86.1 lumens/watt
Spacing Criteria (0/90/45): 1.65 / 1.65 / 1.6
Luminous Opening: Circular (Dia: 0.4' x H: 0')
CIE Type: Direct

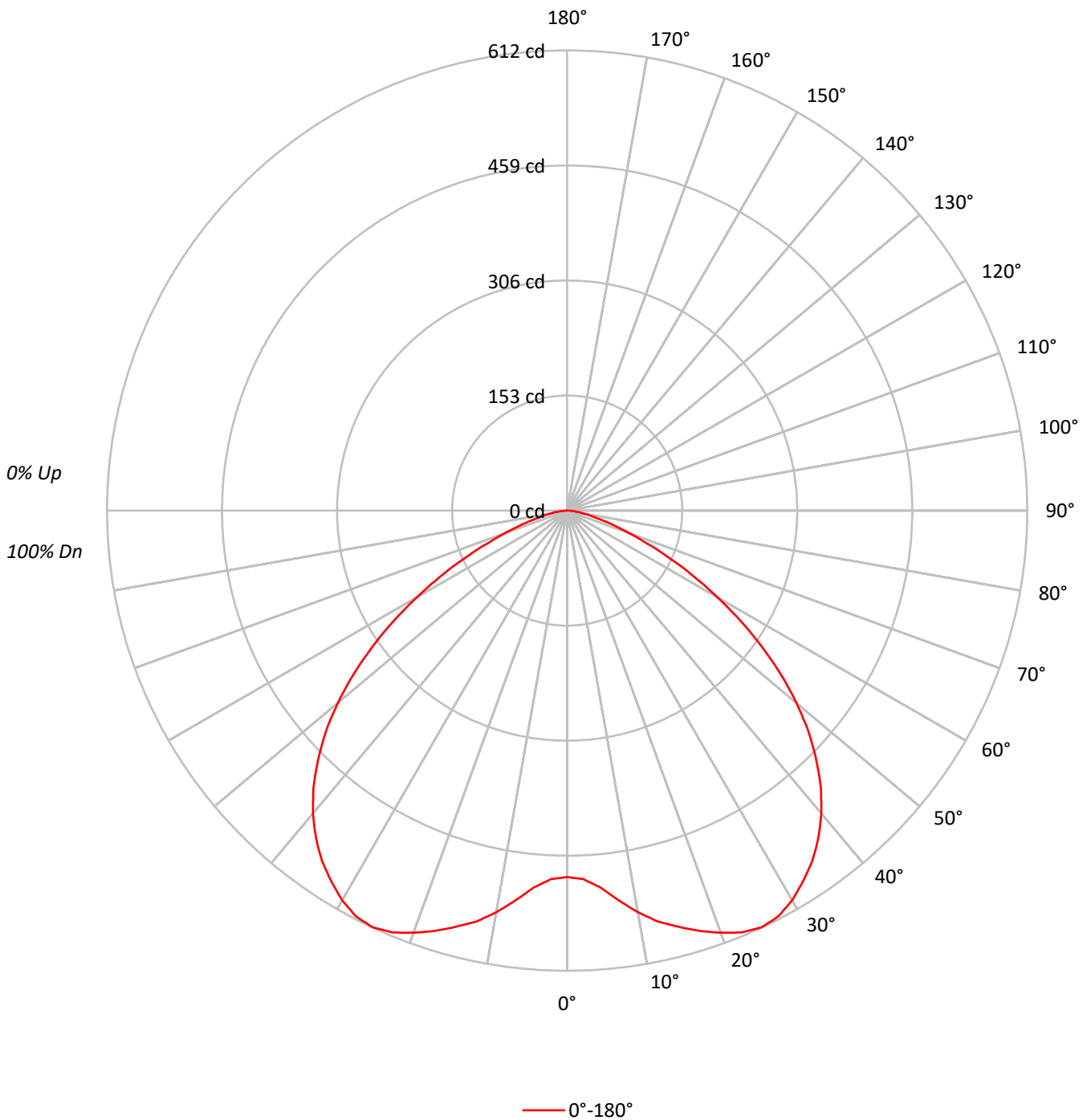
Input Watts (W): 19.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P345338

CATALOG NUMBER: PR4FS12D010 PR4M12WD9FSMMS 2000Lm3500K

Luminous Intensity Polar Plot





TEST NUMBER: P345338

CATALOG NUMBER: PR4FS12D010 PR4M12WD9FSMMS 2000Lm3500K

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	110	106	102	99	107	104	100	97	100	97	94		96	93	91		92	90	89	87
2	101	94	87	82	98	92	86	81	88	83	79		85	81	77		82	79	76	74
3	92	83	75	69	90	81	74	69	78	72	67		76	70	66		73	69	65	63
4	85	74	65	59	83	72	65	59	70	63	58		68	62	57		65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50		61	54	50		59	53	49	47
6	72	59	51	44	70	58	50	44	57	49	44		55	48	43		53	48	43	41
7	67	54	45	39	65	53	45	39	51	44	39		50	43	38		49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35		46	39	34		44	39	34	32
9	58	45	37	31	56	44	36	31	43	36	31		42	35	31		41	35	31	29
10	54	41	33	28	53	41	33	28	40	33	28		39	32	28		38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	42624
5°	44139
10°	48166
15°	51897
20°	55599
25°	59027
30°	60439
35°	60726
40°	60038
45°	57966
50°	54186
55°	48311
60°	40411
65°	31418
70°	22505
75°	15614
80°	11082
85°	7728



TEST NUMBER: P345338

CATALOG NUMBER: PR4FS12D010 PR4M12WD9FSMMS 2000Lm3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.3	2.9
10°-20°	163.0	9.6
20°-30°	280.6	16.5
30°-40°	354.7	20.8
40°-50°	359.9	21.1
50°-60°	282.0	16.6
60°-70°	152.5	8.9
70°-80°	52.1	3.1
80°-90°	9.9	0.6
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°	493.0	28.9
0°-40°	847.6	49.7
0°-60°	1489.5	87.4
0°-90°	1704.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1704.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	487	
5°	503	49
15°	573	163
25°	612	281
35°	569	355
45°	469	360
55°	317	282
65°	152	152
75°	46	52
85°	8	10
90°	0	



TEST NUMBER: P345338

CATALOG NUMBER: PR4FS12D010 PR4M12WD9FSMMS 2000Lm3500K

CANDELA DISTRIBUTION (FULL):

	0°
0°	487.3
2.5°	490.6
5°	502.7
7.5°	522.5
10°	542.3
12.5°	559.9
15°	573.1
17.5°	586.3
20°	597.3
22.5°	607.2
25°	611.6
27.5°	608.3
30°	598.4
32.5°	584.1
35°	568.7
37.5°	548.9
40°	525.8
42.5°	499.4
45°	468.6
47.5°	435.6
50°	398.2
52.5°	358.6
55°	316.8
57.5°	273.9
60°	231.0
62.5°	190.3
65°	151.8
67.5°	116.6
70°	88.0
72.5°	64.9
75°	46.2
77.5°	31.9
80°	22.0
82.5°	14.3
85°	7.7
87.5°	3.3
90°	0.0

(END OF REPORT)