

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: P241643

Luminaire Tested: **PRS410D010-S4M12-44SNDMB-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241643
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-37)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS410D010-S4M12-44SNDMB-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 814.7 lumens
Efficiency: N/A
Efficacy: 81.5 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.87 / 0.91
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

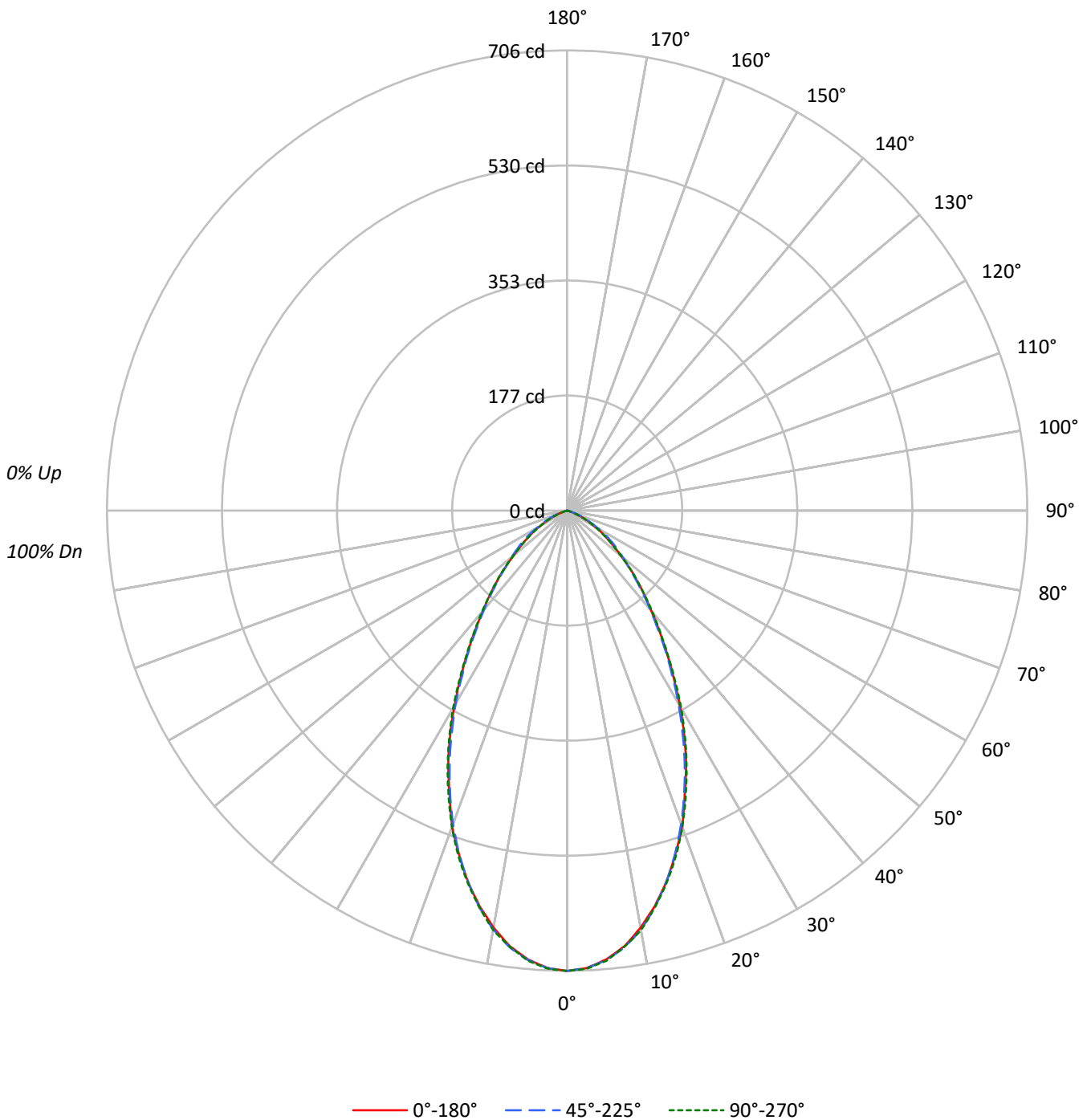
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
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	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					100			
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91					91			
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82					82			
3	98	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	75	74					74			
4	92	83	76	71	90	82	76	71	80	74	70	78	73	69	76	72	68	67					67			
5	86	76	70	64	85	75	69	64	74	68	63	72	67	63	70	66	62	61					61			
6	81	71	64	58	80	70	63	58	68	62	58	67	61	57	65	61	57	55					55			
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51					51			
8	72	61	54	49	71	60	54	49	59	53	49	58	53	49	57	52	48	47					47			
9	68	57	50	46	67	56	50	45	55	49	45	54	49	45	54	49	45	43					43			
10	64	53	47	42	63	53	47	42	52	46	42	51	46	42	50	45	42	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	54063	54063	54063
5°	53101	53178	53255
10°	50490	50723	50801
15°	46659	46659	46817
20°	42015	41681	42096
25°	36460	36029	36629
30°	30546	30183	30899
35°	24902	24622	25089
40°	20044	19844	20354
45°	16346	16010	16454
50°	12789	13277	12789
55°	10142	11090	10009
60°	7440	8527	7440
65°	5144	6049	4963
70°	2484	3402	2484
75°	0	887	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.8	8.0
10°-20°	164.4	20.2
20°-30°	196.4	24.1
30°-40°	166.7	20.5
40°-50°	116.8	14.3
50°-60°	70.4	8.6
60°-70°	31.3	3.8
70°-80°	3.9	0.5
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°	425.6	52.2
0°-40°	592.3	72.7
0°-60°	779.6	95.7
0°-90°	814.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	814.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	706	706	706	706	706	
5°	691	692	692	692	693	65
15°	589	589	589	592	591	164
25°	432	430	427	431	434	197
35°	266	266	264	268	268	167
45°	151	150	148	151	152	117
55°	76	77	83	77	75	68
65°	28	31	33	31	27	29
75°	0	1	3	1	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	706.3	706.3	706.3	706.3	706.3
2.5°	702.3	702.3	702.3	702.3	703.3
5°	691.1	692.1	692.1	692.1	693.1
7.5°	673.9	673.9	675.9	675.9	674.9
10°	649.6	649.6	652.6	653.6	653.6
12.5°	621.2	621.2	623.2	624.2	623.2
15°	588.8	588.8	588.8	591.8	590.8
17.5°	552.3	552.3	551.3	554.3	555.3
20°	515.8	513.8	511.7	513.8	516.8
22.5°	471.2	471.2	469.2	473.2	475.3
25°	431.7	429.7	426.6	430.7	433.7
27.5°	389.1	387.1	383.0	386.1	391.2
30°	345.6	344.5	341.5	344.5	349.6
32.5°	304.0	303.0	300.0	304.0	307.0
35°	266.5	265.5	263.5	267.5	268.5
37.5°	232.1	230.0	228.0	232.1	234.1
40°	200.6	200.6	198.6	200.6	203.7
42.5°	175.3	174.3	171.3	174.3	176.3
45°	151.0	150.0	147.9	151.0	152.0
47.5°	128.7	129.7	127.7	129.7	129.7
50°	107.4	110.5	111.5	110.5	107.4
52.5°	90.2	92.2	96.3	92.2	89.2
55°	76.0	77.0	83.1	77.0	75.0
57.5°	61.8	63.8	68.9	63.8	60.8
60°	48.6	52.7	55.7	51.7	48.6
62.5°	38.5	41.5	43.6	40.5	37.5
65°	28.4	31.4	33.4	31.4	27.4
67.5°	19.3	23.3	24.3	22.3	18.2
70°	11.1	14.2	15.2	14.2	11.1
72.5°	5.1	7.1	8.1	7.1	5.1
75°	0.0	1.0	3.0	1.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)