

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: P252974

Luminaire Tested: **PRS415D010-S4M12-41SWDMB-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252974
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1805-776-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-41SWDMB-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 722.8 lumens
Efficiency: N/A
Efficacy: 60.2 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.1 / 1.15
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

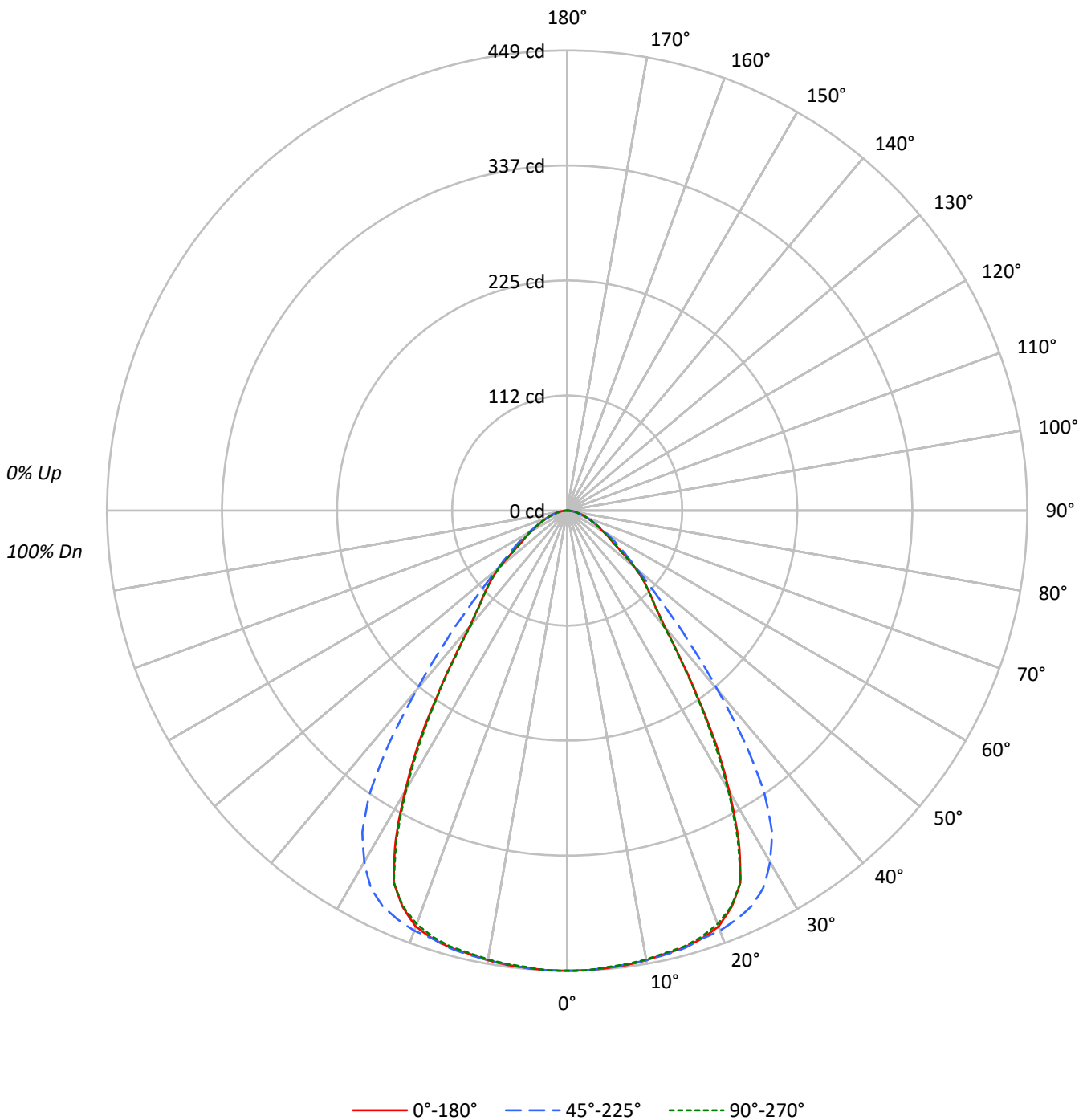
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90					90			
2	104	98	93	88	102	96	91	87	93	89	86	90	86	84	87	84	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72					72			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64					64			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60	58					58			
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53					53			
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48					48			
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44					44			
9	66	55	48	43	65	54	47	43	53	47	43	52	47	42	51	46	42	41					41			
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	34368	34368	34368
5°	34430	34430	34361
10°	34626	34626	34564
15°	34970	35034	34899
20°	35181	35523	34969
25°	33799	35970	33799
30°	27965	34992	27735
35°	20697	31322	20539
40°	14778	22812	14608
45°	12308	15176	12308
50°	10289	10586	10289
55°	7300	8447	7420
60°	6154	6675	6154
65°	5271	5415	5271
70°	4588	4588	4588
75°	4052	4052	4052
80°	3394	3394	3394
85°	2986	2986	2986



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.7	5.9
10°-20°	124.7	17.2
20°-30°	186.3	25.8
30°-40°	165.8	22.9
40°-50°	98.7	13.7
50°-60°	55.9	7.7
60°-70°	30.0	4.1
70°-80°	14.7	2.0
80°-90°	4.1	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°	353.6	48.9
0°-40°	519.5	71.9
0°-60°	674.1	93.3
0°-90°	722.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	722.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	449	449	449	449	449	
5°	448	448	448	448	447	43
15°	441	441	442	440	440	125
25°	400	411	426	410	400	179
35°	222	259	335	258	220	140
45°	114	122	140	121	114	88
55°	55	61	63	61	56	52
65°	29	30	30	30	29	29
75°	14	14	14	14	14	15
85°	3	3	3	3	3	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	449.0	449.0	449.0	449.0	449.0
2.5°	449.0	449.0	449.0	449.0	449.0
5°	448.1	448.1	448.1	448.1	447.2
7.5°	447.2	446.4	446.4	446.4	446.4
10°	445.5	445.5	445.5	444.7	444.7
12.5°	443.0	443.0	443.8	443.0	442.1
15°	441.3	441.3	442.1	440.4	440.4
17.5°	437.8	438.7	437.8	437.8	436.1
20°	431.9	434.4	436.1	433.6	429.3
22.5°	419.0	425.9	431.9	425.0	418.2
25°	400.2	411.3	425.9	410.5	400.2
27.5°	362.6	390.8	414.8	388.2	360.0
30°	316.4	350.6	395.9	348.0	313.8
32.5°	270.2	304.4	372.0	302.7	266.0
35°	221.5	259.1	335.2	258.3	219.8
37.5°	180.4	214.6	283.9	212.9	178.7
40°	147.9	174.5	228.3	173.6	146.2
42.5°	127.4	142.0	180.4	141.1	127.4
45°	113.7	122.3	140.2	121.4	113.7
47.5°	100.9	107.7	110.3	106.9	100.9
50°	86.4	94.1	88.9	94.1	86.4
52.5°	68.4	77.8	74.4	78.7	67.6
55°	54.7	60.7	63.3	60.7	55.6
57.5°	47.9	49.6	53.0	49.6	47.9
60°	40.2	41.9	43.6	41.9	40.2
62.5°	34.2	35.9	35.9	35.9	35.1
65°	29.1	29.9	29.9	29.9	29.1
67.5°	24.8	24.8	24.8	24.8	24.8
70°	20.5	20.5	20.5	20.5	20.5
72.5°	17.1	17.1	17.1	17.1	17.1
75°	13.7	13.7	13.7	13.7	13.7
77.5°	11.1	11.1	10.3	11.1	10.3
80°	7.7	7.7	7.7	7.7	7.7
82.5°	6.0	6.0	6.0	6.0	6.0
85°	3.4	3.4	3.4	3.4	3.4
87.5°	1.7	1.7	1.7	1.7	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)