

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: P241732

Luminaire Tested: **PRS440D010-S4M24-44SNDH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241732
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-43)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-44SNDH
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3505.6 lumens
Efficiency: N/A
Efficacy: 92.3 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.92
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

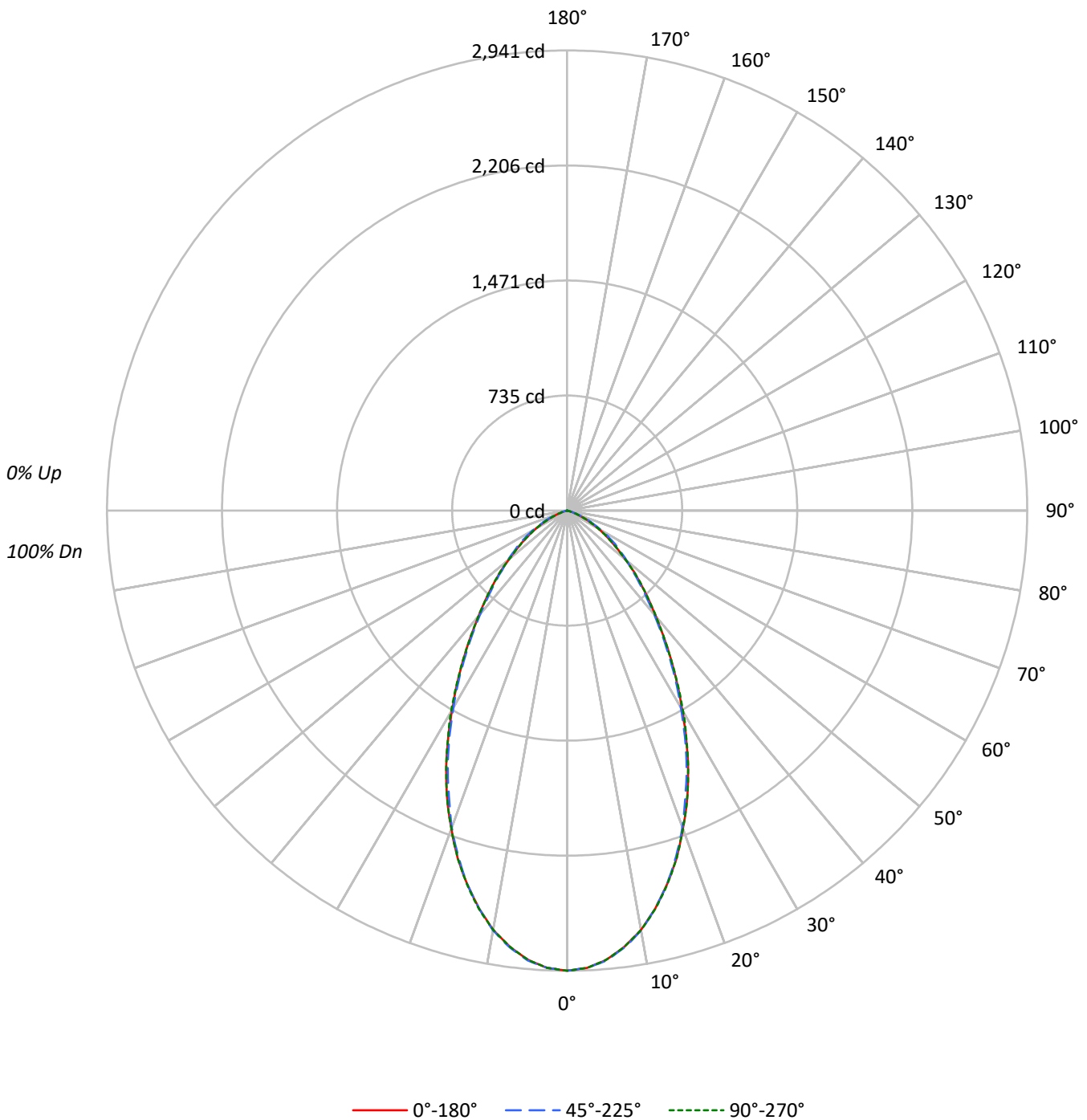
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	98	99	97	95	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81					81			
3	98	90	84	79	96	89	83	79	86	81	77	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	53	63	57	52	62	56	52	60	55	52	50					50			
8	72	60	53	49	70	60	53	48	59	52	48	57	52	48	56	51	48	46					46			
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43					43			
10	64	53	46	42	63	52	46	42	51	46	41	51	45	41	50	45	41	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	225091	225091	225091
5°	221425	221725	221425
10°	211472	211783	211472
15°	195700	195700	196009
20°	176213	175578	176213
25°	154521	152528	154521
30°	129784	128396	131172
35°	107860	106029	107860
40°	87880	86311	88270
45°	72245	70546	72678
50°	57968	58909	57504
55°	45586	49777	45586
60°	34858	38471	34858
65°	24179	27729	23473
70°	12309	15823	12309
75°	1153	4643	1153
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.0	7.7
10°-20°	689.1	19.7
20°-30°	830.9	23.7
30°-40°	718.2	20.5
40°-50°	514.1	14.7
50°-60°	318.0	9.1
60°-70°	144.9	4.1
70°-80°	20.2	0.6
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°	1790.0	51.1
0°-40°	2508.2	71.6
0°-60°	3340.4	95.3
0°-90°	3505.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3505.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2941	2941	2941	2941	2941	
5°	2882	2882	2886	2882	2882	270
15°	2470	2470	2470	2474	2474	690
25°	1830	1818	1806	1822	1830	835
35°	1154	1142	1135	1150	1154	722
45°	667	660	652	664	671	518
55°	342	349	373	349	342	310
65°	134	145	153	145	130	133
75°	4	8	16	8	4	15
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°	2940.7	2940.7	2940.7	2940.7	2940.7
2.5°	2925.0	2925.0	2925.0	2925.0	2925.0
5°	2881.8	2881.8	2885.7	2881.8	2881.8
7.5°	2811.1	2815.1	2815.1	2815.1	2811.1
10°	2720.8	2720.8	2724.8	2720.8	2720.8
12.5°	2603.0	2603.0	2603.0	2607.0	2607.0
15°	2469.6	2469.6	2469.6	2473.5	2473.5
17.5°	2328.2	2324.3	2316.4	2320.4	2328.2
20°	2163.3	2159.4	2155.5	2159.4	2163.3
22.5°	2002.3	1986.6	1974.9	1994.5	2002.3
25°	1829.6	1817.8	1806.0	1821.7	1829.6
27.5°	1649.0	1641.1	1629.4	1641.1	1652.9
30°	1468.4	1468.4	1452.7	1468.4	1484.1
32.5°	1307.4	1303.5	1291.7	1299.6	1311.3
35°	1154.3	1142.5	1134.7	1150.4	1154.3
37.5°	1009.0	1005.1	993.3	1005.1	1009.0
40°	879.5	871.6	863.8	875.5	883.4
42.5°	769.5	761.7	749.9	761.7	769.5
45°	667.4	659.6	651.7	663.5	671.4
47.5°	577.1	573.2	565.4	573.2	577.1
50°	486.8	494.7	494.7	490.8	482.9
52.5°	408.3	412.2	428.0	412.2	408.3
55°	341.6	349.4	373.0	349.4	341.6
57.5°	282.7	290.5	310.2	290.5	282.7
60°	227.7	239.5	251.3	239.5	227.7
62.5°	176.7	192.4	196.3	188.5	176.7
65°	133.5	145.3	153.1	145.3	129.6
67.5°	90.3	106.0	109.9	106.0	90.3
70°	55.0	70.7	70.7	70.7	55.0
72.5°	27.5	35.3	39.3	35.3	27.5
75°	3.9	7.9	15.7	7.9	3.9
77.5°	0.0	0.0	3.9	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)