

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: P252902

Luminaire Tested: **PRS440D010-S4M24-44SWDMW-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252902
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1804-748-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-44SWDMW-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3559.3 lumens
Efficiency: N/A
Efficacy: 93.7 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.41
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

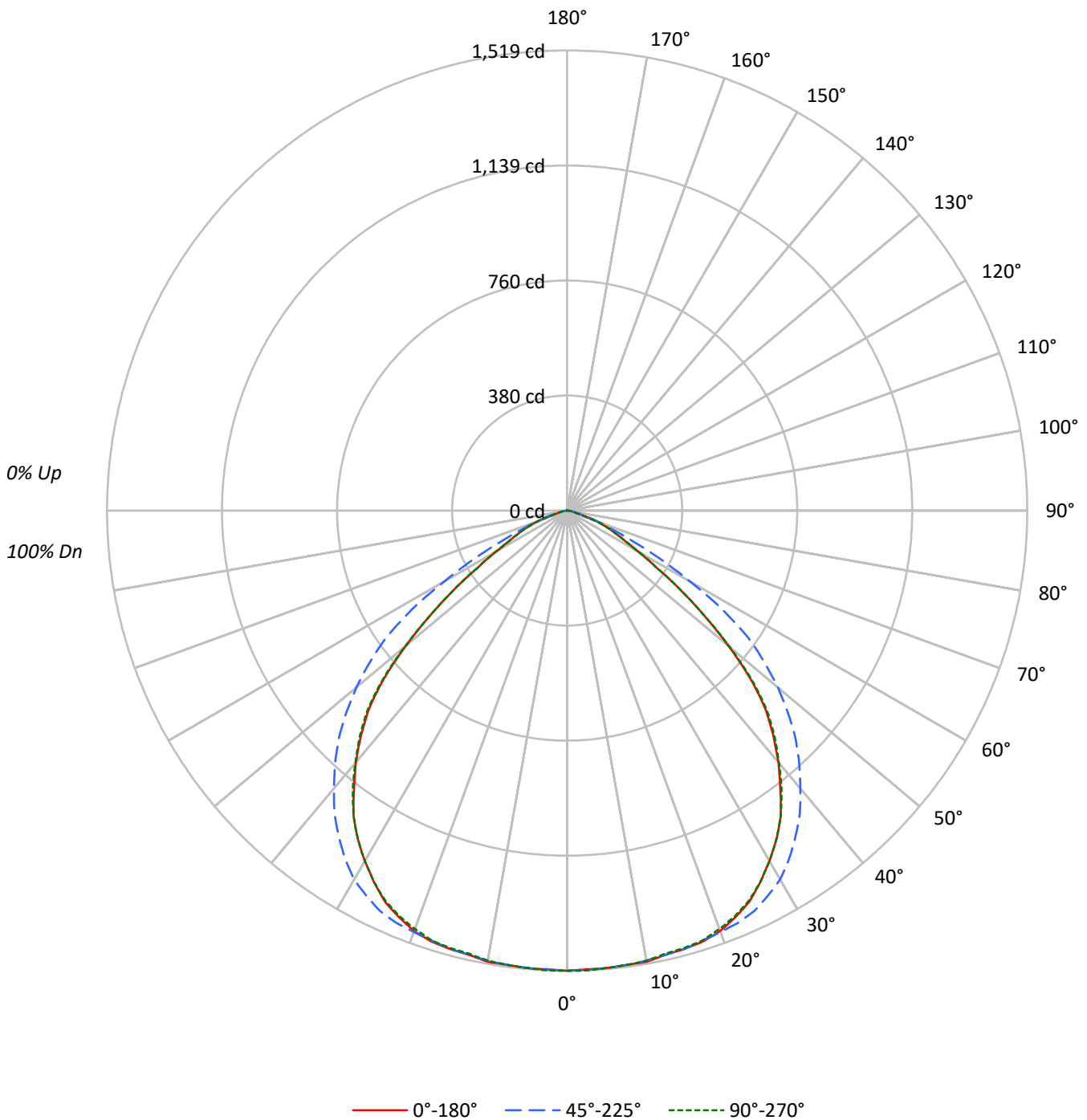
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88					88			
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	85	82	79	77					77			
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67					67			
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	61	59					59			
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	52					52			
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	46					46			
7	70	57	49	44	68	57	49	43	55	48	43	54	47	43	52	47	43	41					41			
8	65	52	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37					37			
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33					33			
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30					30			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	116285	116285	116285
5°	116460	116460	116460
10°	117535	117255	117255
15°	118707	118707	118429
20°	120294	120587	119724
25°	120257	123239	119953
30°	118038	124287	118038
35°	114887	122811	114887
40°	108384	119675	108733
45°	100206	115501	100964
50°	82880	108125	83309
55°	60826	97124	61293
60°	41104	71935	41655
65°	31351	43522	31351
70°	22939	24506	22134
75°	9405	13575	9405
80°	7802	7802	7802
85°	6235	6235	6235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.4	4.1
10°-20°	423.4	11.9
20°-30°	661.3	18.6
30°-40°	791.0	22.2
40°-50°	760.2	21.4
50°-60°	510.6	14.3
60°-70°	208.5	5.9
70°-80°	51.8	1.5
80°-90°	8.2	0.2
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°	1229.1	34.5
0°-40°	2020.1	56.8
0°-60°	3290.9	92.5
0°-90°	3559.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3559.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1519	1519	1519	1519	1519	
5°	1516	1516	1516	1516	1516	144
15°	1498	1498	1498	1494	1494	424
25°	1424	1438	1459	1434	1420	653
35°	1230	1265	1314	1268	1230	763
45°	926	993	1067	996	933	701
55°	456	551	728	555	459	414
65°	173	194	240	194	173	175
75°	32	35	46	35	32	46
85°	7	7	7	7	7	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1519.2	1519.2	1519.2	1519.2	1519.2
2.5°	1515.7	1515.7	1515.7	1519.2	1519.2
5°	1515.7	1515.7	1515.7	1515.7	1515.7
7.5°	1512.2	1512.2	1512.2	1512.2	1512.2
10°	1512.2	1508.6	1508.6	1508.6	1508.6
12.5°	1501.6	1501.6	1501.6	1501.6	1498.0
15°	1498.0	1498.0	1498.0	1494.5	1494.5
17.5°	1491.0	1491.0	1487.4	1487.4	1487.4
20°	1476.8	1480.4	1480.4	1476.8	1469.8
22.5°	1452.1	1462.7	1473.3	1459.2	1448.6
25°	1423.9	1438.0	1459.2	1434.5	1420.3
27.5°	1381.5	1402.7	1434.5	1402.7	1381.5
30°	1335.5	1363.8	1406.2	1363.8	1335.5
32.5°	1286.1	1317.9	1363.8	1317.9	1286.1
35°	1229.5	1264.9	1314.3	1268.4	1229.5
37.5°	1155.3	1204.8	1261.3	1211.9	1162.4
40°	1084.7	1137.7	1197.7	1141.2	1088.2
42.5°	1006.9	1067.0	1134.1	1070.5	1014.0
45°	925.7	992.8	1067.0	996.3	932.7
47.5°	819.7	900.9	989.3	911.5	826.8
50°	696.0	798.5	908.0	805.6	699.6
52.5°	572.4	671.3	819.7	678.4	572.4
55°	455.8	551.2	727.8	554.7	459.3
57.5°	349.8	434.6	607.7	441.6	349.8
60°	268.5	332.1	469.9	335.6	272.1
62.5°	212.0	250.9	346.2	247.3	212.0
65°	173.1	194.3	240.3	194.3	173.1
67.5°	137.8	151.9	159.0	151.9	137.8
70°	102.5	116.6	109.5	116.6	98.9
72.5°	60.1	74.2	74.2	74.2	56.5
75°	31.8	35.3	45.9	35.3	31.8
77.5°	24.7	24.7	28.3	24.7	24.7
80°	17.7	17.7	17.7	17.7	17.7
82.5°	10.6	10.6	10.6	10.6	10.6
85°	7.1	7.1	7.1	7.1	7.1
87.5°	3.5	3.5	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)