

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: P252888

Luminaire Tested: **PRS410D010-S4M12-44SWDH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252888
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: PRS410D010-S4M12-44SWDH
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE 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: 962.4 lumens
Efficiency: N/A
Efficacy: 96.2 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

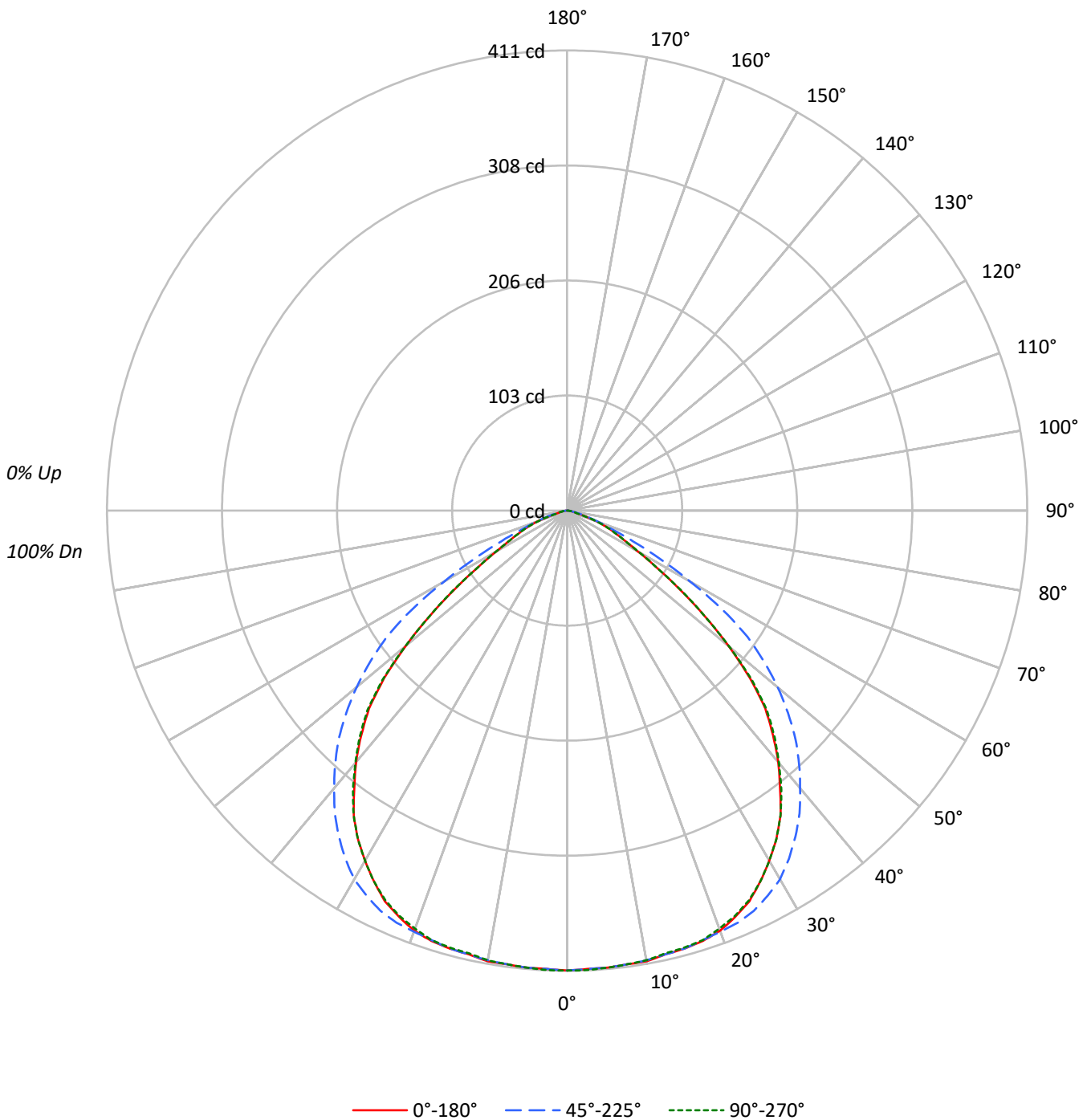
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	85	82	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	61	59
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	52
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	46
7	70	57	49	44	68	57	49	43	55	48	43	54	47	43	52	47	43	41
8	65	52	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31444	31444	31444
5°	31487	31487	31487
10°	31774	31704	31704
15°	32094	32094	32022
20°	32525	32599	32371
25°	32516	33318	32431
30°	31916	33604	31916
35°	31060	33209	31060
40°	29307	32354	29397
45°	27095	31230	27300
50°	22411	29234	22518
55°	16441	26263	16574
60°	11114	19442	11267
65°	8476	11773	8476
70°	6199	6624	5975
75°	2543	3667	2543
80°	2116	2116	2116
85°	1669	1669	1669



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.1	4.1
10°-20°	114.5	11.9
20°-30°	178.8	18.6
30°-40°	213.8	22.2
40°-50°	205.5	21.4
50°-60°	138.1	14.3
60°-70°	56.4	5.9
70°-80°	14.0	1.5
80°-90°	2.2	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°	332.3	34.5
0°-40°	546.1	56.8
0°-60°	889.7	92.5
0°-90°	962.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	962.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	411	411	411	411	411	
5°	410	410	410	410	410	39
15°	405	405	405	404	404	115
25°	385	389	394	388	384	177
35°	332	342	355	343	332	206
45°	250	268	288	269	252	190
55°	123	149	197	150	124	112
65°	47	52	65	52	47	47
75°	9	10	12	10	9	13
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	410.8	410.8	410.8	410.8	410.8
2.5°	409.8	409.8	409.8	410.8	410.8
5°	409.8	409.8	409.8	409.8	409.8
7.5°	408.8	408.8	408.8	408.8	408.8
10°	408.8	407.9	407.9	407.9	407.9
12.5°	406.0	406.0	406.0	406.0	405.0
15°	405.0	405.0	405.0	404.1	404.1
17.5°	403.1	403.1	402.2	402.2	402.2
20°	399.3	400.2	400.2	399.3	397.4
22.5°	392.6	395.5	398.3	394.5	391.6
25°	385.0	388.8	394.5	387.8	384.0
27.5°	373.5	379.2	387.8	379.2	373.5
30°	361.1	368.7	380.2	368.7	361.1
32.5°	347.7	356.3	368.7	356.3	347.7
35°	332.4	342.0	355.4	342.9	332.4
37.5°	312.4	325.7	341.0	327.6	314.3
40°	293.3	307.6	323.8	308.5	294.2
42.5°	272.2	288.5	306.6	289.4	274.2
45°	250.3	268.4	288.5	269.4	252.2
47.5°	221.6	243.6	267.5	246.5	223.5
50°	188.2	215.9	245.5	217.8	189.1
52.5°	154.7	181.5	221.6	183.4	154.7
55°	123.2	149.0	196.8	150.0	124.2
57.5°	94.6	117.5	164.3	119.4	94.6
60°	72.6	89.8	127.0	90.7	73.6
62.5°	57.3	67.8	93.6	66.9	57.3
65°	46.8	52.5	65.0	52.5	46.8
67.5°	37.3	41.1	43.0	41.1	37.3
70°	27.7	31.5	29.6	31.5	26.7
72.5°	16.2	20.1	20.1	20.1	15.3
75°	8.6	9.6	12.4	9.6	8.6
77.5°	6.7	6.7	7.6	6.7	6.7
80°	4.8	4.8	4.8	4.8	4.8
82.5°	2.9	2.9	2.9	2.9	2.9
85°	1.9	1.9	1.9	1.9	1.9
87.5°	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)