

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: P252895

Luminaire Tested: **PRS420D010-S4M12-44SWDH-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252895
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: PRS420D010-S4M12-44SWDH-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2086.1 lumens
Efficiency: N/A
Efficacy: 104.3 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

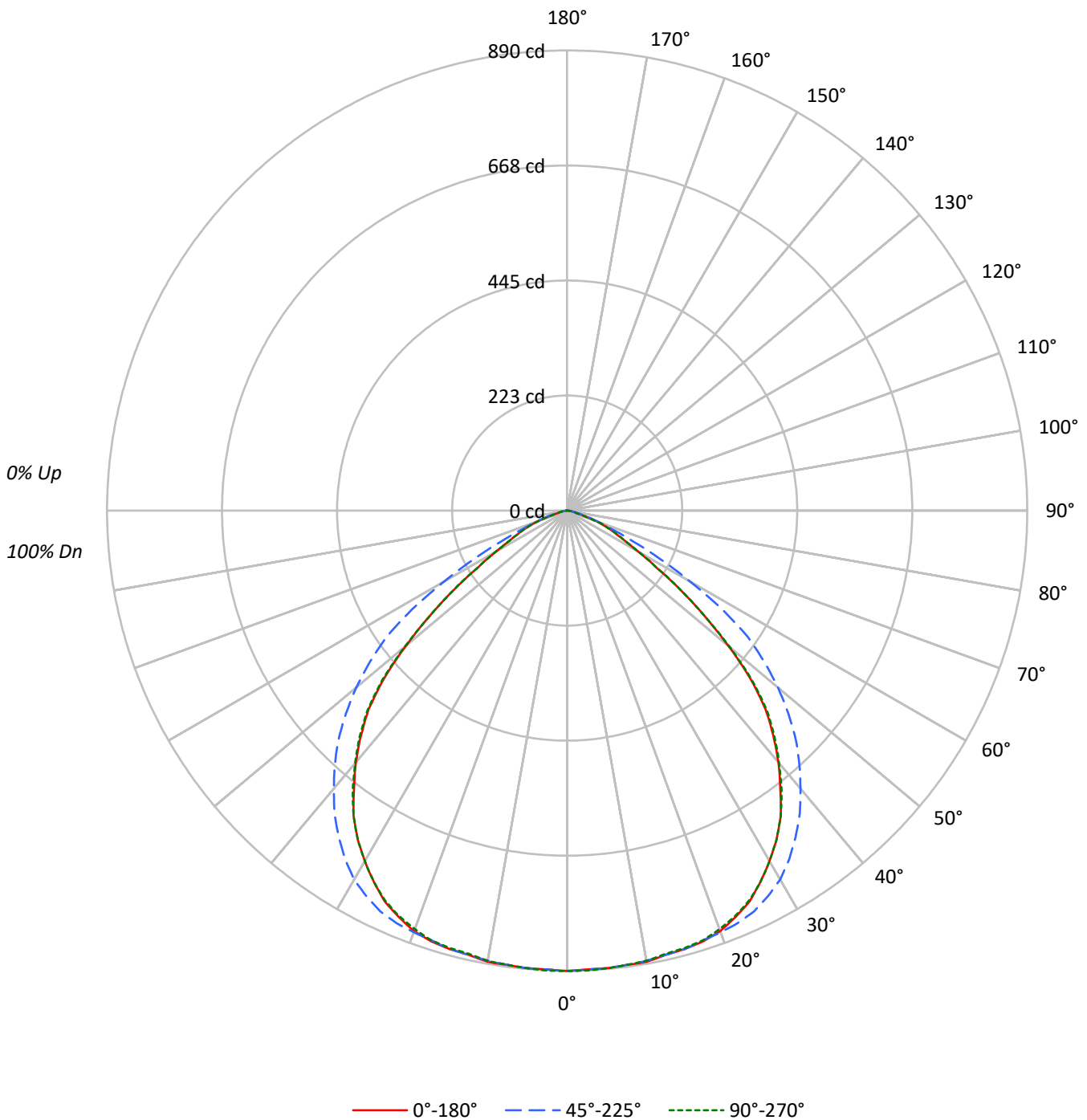
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	68154	68154	68154
5°	68261	68261	68261
10°	68887	68724	68724
15°	69576	69576	69409
20°	70508	70679	70166
25°	70479	72227	70310
30°	69188	72847	69188
35°	67334	71979	67334
40°	63519	70144	63729
45°	58725	67699	59180
50°	48573	63375	48823
55°	35644	56929	35925
60°	24096	42160	24417
65°	18383	25501	18383
70°	13450	14368	12980
75°	5501	7955	5501
80°	4584	4584	4584
85°	3601	3601	3601



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.7	4.1
10°-20°	248.1	11.9
20°-30°	387.6	18.6
30°-40°	463.6	22.2
40°-50°	445.6	21.4
50°-60°	299.3	14.3
60°-70°	122.2	5.9
70°-80°	30.4	1.5
80°-90°	4.8	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°	720.4	34.5
0°-40°	1184.0	56.8
0°-60°	1928.8	92.5
0°-90°	2086.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2086.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	890	890	890	890	890	
5°	888	888	888	888	888	85
15°	878	878	878	876	876	248
25°	834	843	855	841	832	383
35°	721	741	770	743	721	447
45°	542	582	625	584	547	411
55°	267	323	427	325	269	242
65°	102	114	141	114	102	102
75°	19	21	27	21	19	27
85°	4	4	4	4	4	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	890.4	890.4	890.4	890.4	890.4
2.5°	888.4	888.4	888.4	890.4	890.4
5°	888.4	888.4	888.4	888.4	888.4
7.5°	886.3	886.3	886.3	886.3	886.3
10°	886.3	884.2	884.2	884.2	884.2
12.5°	880.1	880.1	880.1	880.1	878.0
15°	878.0	878.0	878.0	875.9	875.9
17.5°	873.9	873.9	871.8	871.8	871.8
20°	865.6	867.7	867.7	865.6	861.4
22.5°	851.1	857.3	863.5	855.2	849.0
25°	834.5	842.8	855.2	840.7	832.5
27.5°	809.7	822.1	840.7	822.1	809.7
30°	782.8	799.3	824.2	799.3	782.8
32.5°	753.8	772.4	799.3	772.4	753.8
35°	720.6	741.3	770.3	743.4	720.6
37.5°	677.1	706.1	739.3	710.3	681.3
40°	635.7	666.8	702.0	668.9	637.8
42.5°	590.2	625.4	664.7	627.4	594.3
45°	542.5	581.9	625.4	584.0	546.7
47.5°	480.4	528.1	579.8	534.3	484.6
50°	407.9	468.0	532.2	472.1	410.0
52.5°	335.5	393.4	480.4	397.6	335.5
55°	267.1	323.0	426.6	325.1	269.2
57.5°	205.0	254.7	356.2	258.8	205.0
60°	157.4	194.7	275.4	196.7	159.5
62.5°	124.2	147.0	202.9	145.0	124.2
65°	101.5	113.9	140.8	113.9	101.5
67.5°	80.8	89.0	93.2	89.0	80.8
70°	60.1	68.3	64.2	68.3	58.0
72.5°	35.2	43.5	43.5	43.5	33.1
75°	18.6	20.7	26.9	20.7	18.6
77.5°	14.5	14.5	16.6	14.5	14.5
80°	10.4	10.4	10.4	10.4	10.4
82.5°	6.2	6.2	6.2	6.2	6.2
85°	4.1	4.1	4.1	4.1	4.1
87.5°	2.1	2.1	2.1	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)