

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: P252890

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252890
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
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: 2061.2 lumens
Efficiency: N/A
Efficacy: 103.1 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

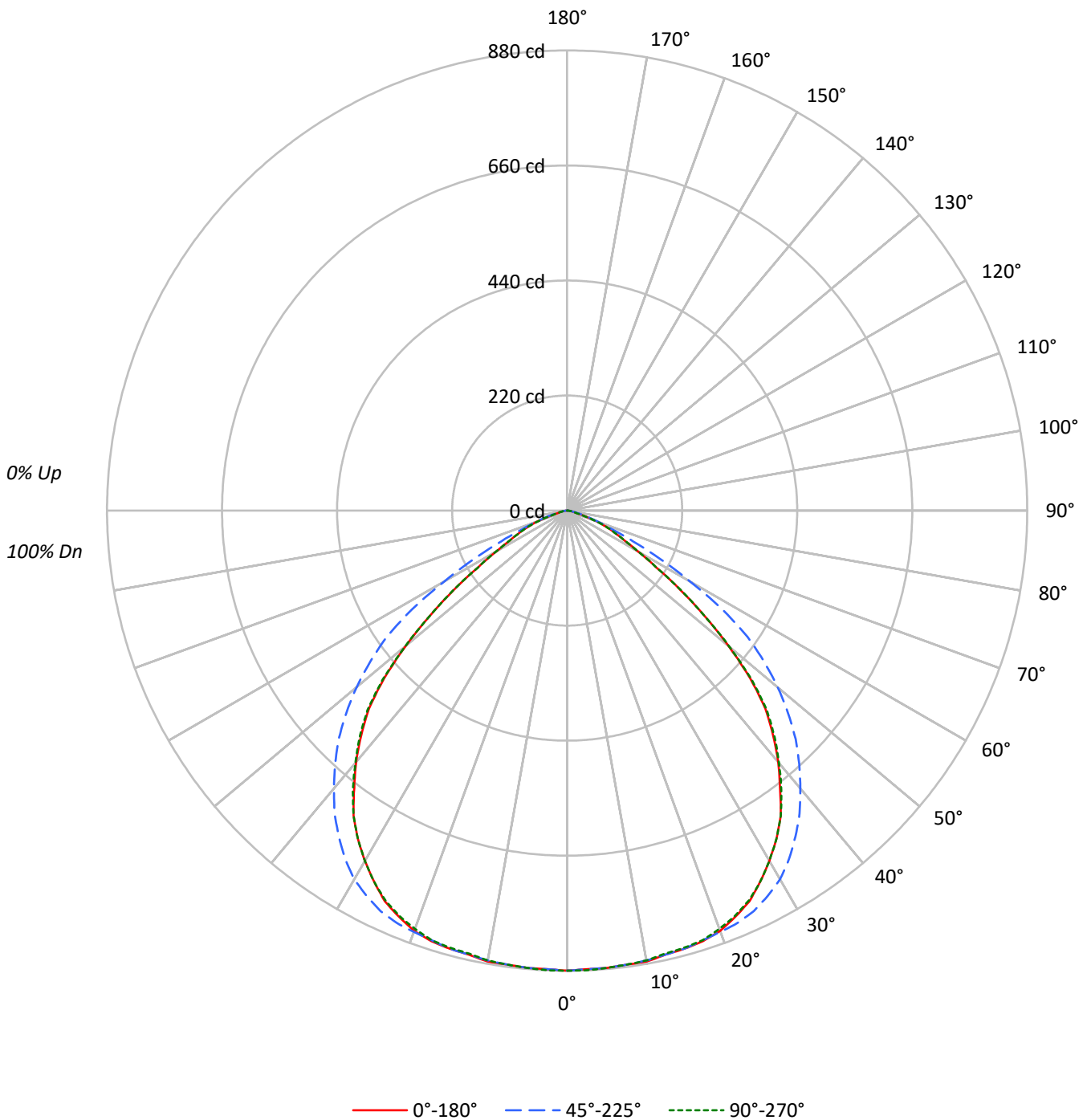
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	67343	67343	67343
5°	67439	67439	67439
10°	68063	67900	67900
15°	68744	68744	68585
20°	69661	69832	69327
25°	69634	71366	69465
30°	68357	71972	68357
35°	66531	71119	66531
40°	62760	69305	62970
45°	58032	66887	58465
50°	48001	62612	48239
55°	35217	56249	35498
60°	23805	41655	24111
65°	18166	25193	18166
70°	13271	14189	12824
75°	5442	7867	5442
80°	4496	4496	4496
85°	3601	3601	3601



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.6	4.1
10°-20°	245.2	11.9
20°-30°	382.9	18.6
30°-40°	458.0	22.2
40°-50°	440.2	21.4
50°-60°	295.7	14.3
60°-70°	120.7	5.9
70°-80°	30.0	1.5
80°-90°	4.7	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°	711.8	34.5
0°-40°	1169.8	56.8
0°-60°	1905.7	92.5
0°-90°	2061.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2061.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	880	880	880	880	880	
5°	878	878	878	878	878	84
15°	868	868	868	866	866	245
25°	824	833	845	831	822	378
35°	712	732	761	734	712	442
45°	536	575	618	577	540	406
55°	264	319	422	321	266	239
65°	100	112	139	112	100	101
75°	18	20	27	20	18	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°	879.8	879.8	879.8	879.8	879.8
2.5°	877.7	877.7	877.7	879.8	879.8
5°	877.7	877.7	877.7	877.7	877.7
7.5°	875.7	875.7	875.7	875.7	875.7
10°	875.7	873.6	873.6	873.6	873.6
12.5°	869.6	869.6	869.6	869.6	867.5
15°	867.5	867.5	867.5	865.5	865.5
17.5°	863.4	863.4	861.4	861.4	861.4
20°	855.2	857.3	857.3	855.2	851.1
22.5°	840.9	847.0	853.2	845.0	838.9
25°	824.5	832.7	845.0	830.7	822.5
27.5°	800.0	812.3	830.7	812.3	800.0
30°	773.4	789.8	814.3	789.8	773.4
32.5°	744.7	763.2	789.8	763.2	744.7
35°	712.0	732.5	761.1	734.5	712.0
37.5°	669.0	697.7	730.4	701.8	673.1
40°	628.1	658.8	693.6	660.9	630.2
42.5°	583.1	617.9	656.8	619.9	587.2
45°	536.1	574.9	617.9	577.0	540.1
47.5°	474.7	521.7	572.9	527.9	478.8
50°	403.1	462.4	525.8	466.5	405.1
52.5°	331.5	388.7	474.7	392.8	331.5
55°	263.9	319.2	421.5	321.2	266.0
57.5°	202.6	251.7	351.9	255.8	202.6
60°	155.5	192.3	272.1	194.4	157.5
62.5°	122.8	145.3	200.5	143.2	122.8
65°	100.3	112.5	139.1	112.5	100.3
67.5°	79.8	88.0	92.1	88.0	79.8
70°	59.3	67.5	63.4	67.5	57.3
72.5°	34.8	43.0	43.0	43.0	32.7
75°	18.4	20.5	26.6	20.5	18.4
77.5°	14.3	14.3	16.4	14.3	14.3
80°	10.2	10.2	10.2	10.2	10.2
82.5°	6.1	6.1	6.1	6.1	6.1
85°	4.1	4.1	4.1	4.1	4.1
87.5°	2.0	2.0	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)