

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: P252875

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252875
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-S4M12-44SWDC
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2079.9 lumens
Efficiency: N/A
Efficacy: 104.0 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

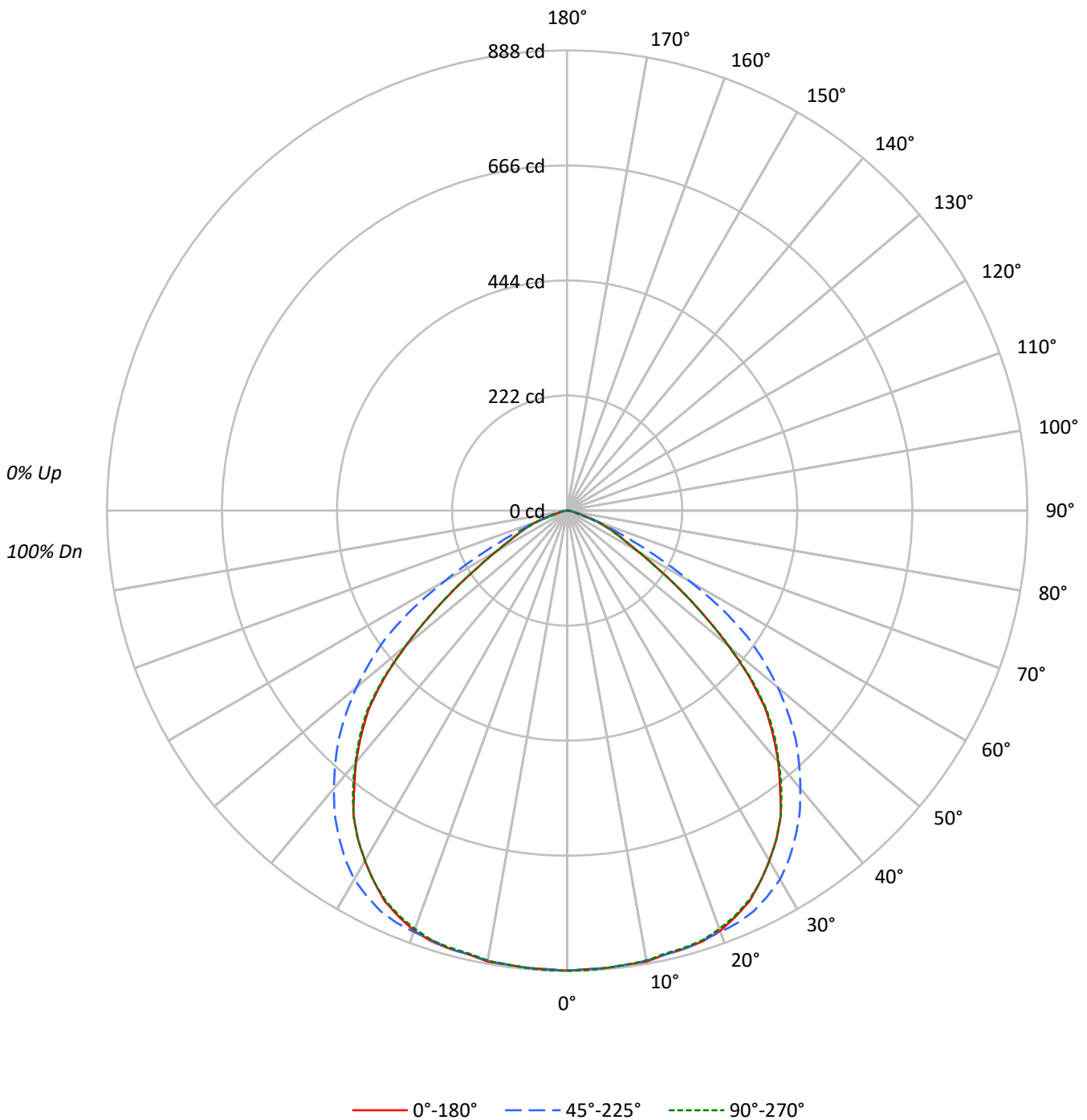
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	67955	67955	67955
5°	68053	68053	68053
10°	68677	68522	68522
15°	69370	69370	69203
20°	70296	70467	69962
25°	70268	72016	70099
30°	68975	72626	68975
35°	67138	71764	67138
40°	63329	69934	63539
45°	58552	67493	59006
50°	48430	63184	48680
55°	35538	56756	35818
60°	24019	42038	24341
65°	18329	25429	18329
70°	13405	14323	12936
75°	5501	7926	5501
80°	4540	4540	4540
85°	3601	3601	3601



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.4	4.1
10°-20°	247.4	11.9
20°-30°	386.4	18.6
30°-40°	462.2	22.2
40°-50°	444.2	21.4
50°-60°	298.4	14.3
60°-70°	121.8	5.9
70°-80°	30.3	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°	718.2	34.5
0°-40°	1180.4	56.8
0°-60°	1923.0	92.5
0°-90°	2079.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2079.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	888	888	888	888	888	
5°	886	886	886	886	886	84
15°	875	875	875	873	873	248
25°	832	840	853	838	830	382
35°	718	739	768	741	718	446
45°	541	580	624	582	545	410
55°	266	322	425	324	268	242
65°	101	114	140	114	101	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°	887.8	887.8	887.8	887.8	887.8
2.5°	885.7	885.7	885.7	887.8	887.8
5°	885.7	885.7	885.7	885.7	885.7
7.5°	883.6	883.6	883.6	883.6	883.6
10°	883.6	881.6	881.6	881.6	881.6
12.5°	877.4	877.4	877.4	877.4	875.4
15°	875.4	875.4	875.4	873.3	873.3
17.5°	871.3	871.3	869.2	869.2	869.2
20°	863.0	865.1	865.1	863.0	858.9
22.5°	848.5	854.7	860.9	852.7	846.5
25°	832.0	840.3	852.7	838.2	830.0
27.5°	807.3	819.6	838.2	819.6	807.3
30°	780.4	796.9	821.7	796.9	780.4
32.5°	751.5	770.1	796.9	770.1	751.5
35°	718.5	739.1	768.0	741.2	718.5
37.5°	675.1	704.0	737.1	708.2	679.2
40°	633.8	664.8	699.9	666.9	635.9
42.5°	588.4	623.5	662.7	625.6	592.5
45°	540.9	580.1	623.5	582.2	545.1
47.5°	479.0	526.5	578.1	532.7	483.1
50°	406.7	466.6	530.6	470.7	408.8
52.5°	334.5	392.3	479.0	396.4	334.5
55°	266.3	322.1	425.3	324.1	268.4
57.5°	204.4	253.9	355.1	258.1	204.4
60°	156.9	194.1	274.6	196.1	159.0
62.5°	123.9	146.6	202.3	144.5	123.9
65°	101.2	113.6	140.4	113.6	101.2
67.5°	80.5	88.8	92.9	88.8	80.5
70°	59.9	68.1	64.0	68.1	57.8
72.5°	35.1	43.4	43.4	43.4	33.0
75°	18.6	20.6	26.8	20.6	18.6
77.5°	14.5	14.5	16.5	14.5	14.5
80°	10.3	10.3	10.3	10.3	10.3
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)