

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: P241908

Luminaire Tested: **PRS410D010-S4M12-41SNDH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241908
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-55)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS410D010-S4M12-41SNDH
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, DEEP TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

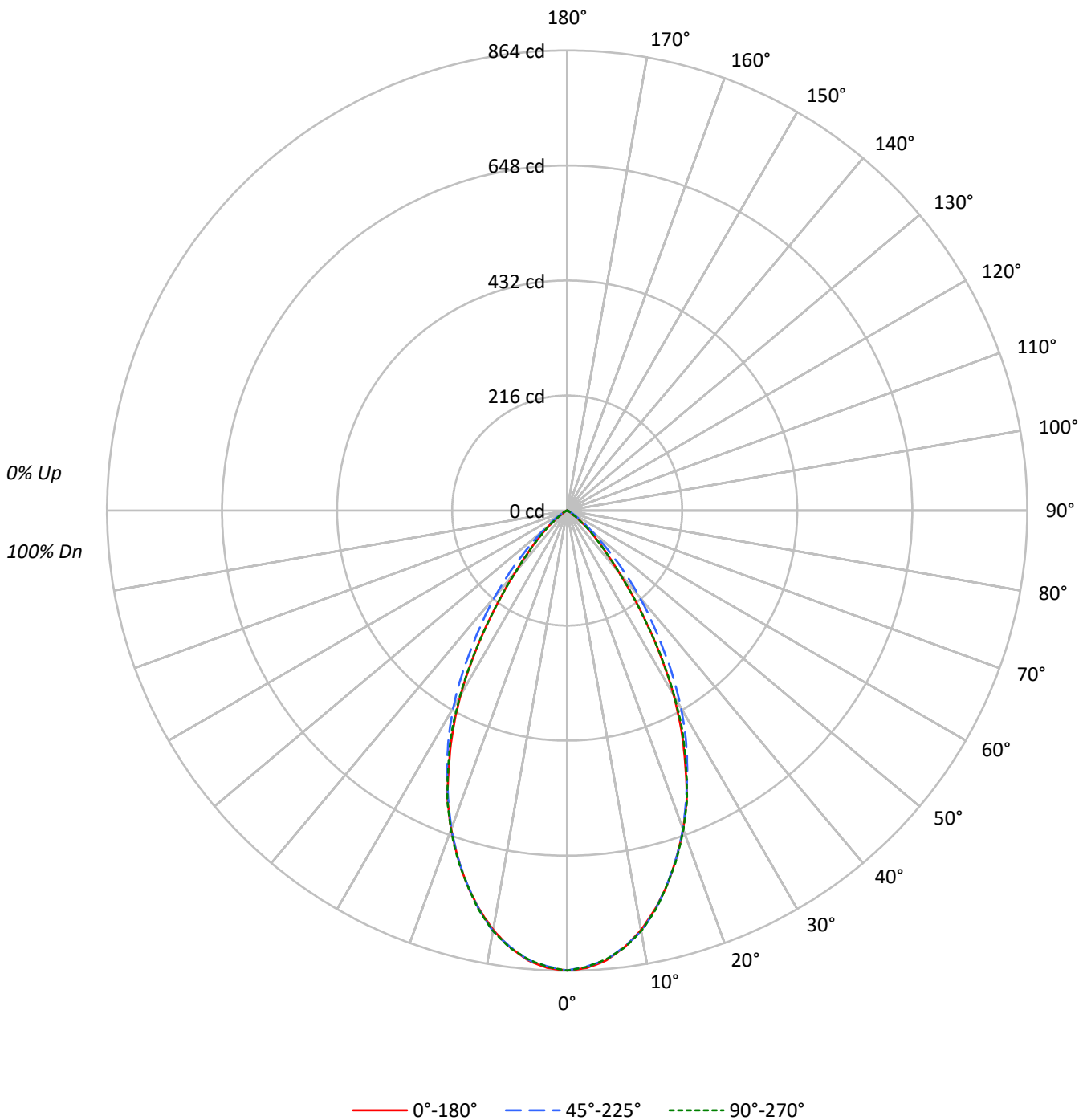
Lumens per Lamp: N/A
Luminaire Lumens: 814.0 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.87 / 0.91
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

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	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	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93					93			
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86					86			
3	101	95	89	85	99	93	88	84	91	86	83	88	85	82	86	83	81	79					79			
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	74	73					73			
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67					67			
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	63					63			
7	81	72	65	61	80	71	65	61	70	64	60	68	63	60	67	63	60	58					58			
8	77	67	61	57	76	67	61	56	65	60	56	64	59	56	63	59	56	54					54			
9	73	63	57	53	72	63	57	53	62	56	52	61	56	52	60	55	52	51					51			
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	48					48			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	66103	66103	66103
5°	65126	65049	64972
10°	62148	62304	62304
15°	57578	57499	57578
20°	51863	51781	51944
25°	44314	45074	44568
30°	35336	37811	35601
35°	24753	29042	24659
40°	15078	21073	14978
45°	9093	13196	8876
50°	5120	7145	5001
55°	1868	3737	1868
60°	1225	1837	1225
65°	724	1087	724
70°	448	671	448
75°	296	591	296
80°	441	441	441
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.3	9.7
10°-20°	202.8	24.9
20°-30°	241.8	29.7
30°-40°	180.1	22.1
40°-50°	80.7	9.9
50°-60°	22.0	2.7
60°-70°	5.3	0.7
70°-80°	1.7	0.2
80°-90°	0.3	0.0
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°	523.9	64.4
0°-40°	704.0	86.5
0°-60°	806.7	99.1
0°-90°	814.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	814.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	848	845	847	846	846	79
15°	727	726	726	728	727	203
25°	525	533	534	534	528	239
35°	265	289	311	289	264	166
45°	84	98	122	98	82	67
55°	14	22	28	22	14	17
65°	4	5	6	5	4	4
75°	1	2	2	2	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	863.6	863.6	863.6	863.6	863.6
2.5°	859.6	857.6	856.6	856.6	857.6
5°	847.6	844.6	846.6	845.6	845.6
7.5°	826.6	826.6	825.6	827.6	827.6
10°	799.6	800.6	801.6	800.6	801.6
12.5°	765.6	764.6	766.6	767.6	767.6
15°	726.6	725.6	725.6	727.6	726.6
17.5°	682.7	683.7	682.7	683.7	684.7
20°	636.7	636.7	635.7	636.7	637.7
22.5°	586.7	586.7	583.7	585.7	587.7
25°	524.7	532.7	533.7	533.7	527.7
27.5°	464.8	470.8	481.8	472.8	469.8
30°	399.8	411.8	427.8	413.8	402.8
32.5°	330.8	352.8	369.8	350.8	333.8
35°	264.9	288.9	310.8	288.9	263.9
37.5°	202.9	228.9	258.9	229.9	202.9
40°	150.9	175.9	210.9	174.9	149.9
42.5°	111.9	132.9	164.9	131.9	111.9
45°	84.0	98.0	121.9	98.0	82.0
47.5°	61.0	73.0	87.0	72.0	61.0
50°	43.0	52.0	60.0	52.0	42.0
52.5°	27.0	35.0	41.0	35.0	27.0
55°	14.0	22.0	28.0	22.0	14.0
57.5°	10.0	12.0	18.0	12.0	10.0
60°	8.0	9.0	12.0	9.0	8.0
62.5°	6.0	7.0	7.0	7.0	6.0
65°	4.0	5.0	6.0	5.0	4.0
67.5°	3.0	4.0	4.0	4.0	3.0
70°	2.0	3.0	3.0	3.0	2.0
72.5°	2.0	2.0	2.0	2.0	2.0
75°	1.0	2.0	2.0	2.0	1.0
77.5°	1.0	1.0	1.0	1.0	1.0
80°	1.0	1.0	1.0	1.0	1.0
82.5°	0.0	1.0	1.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)