

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: P241863

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241863
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-52)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS410D010-S4M12-41SNDMW
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, DEEP TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 844.0 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.93
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

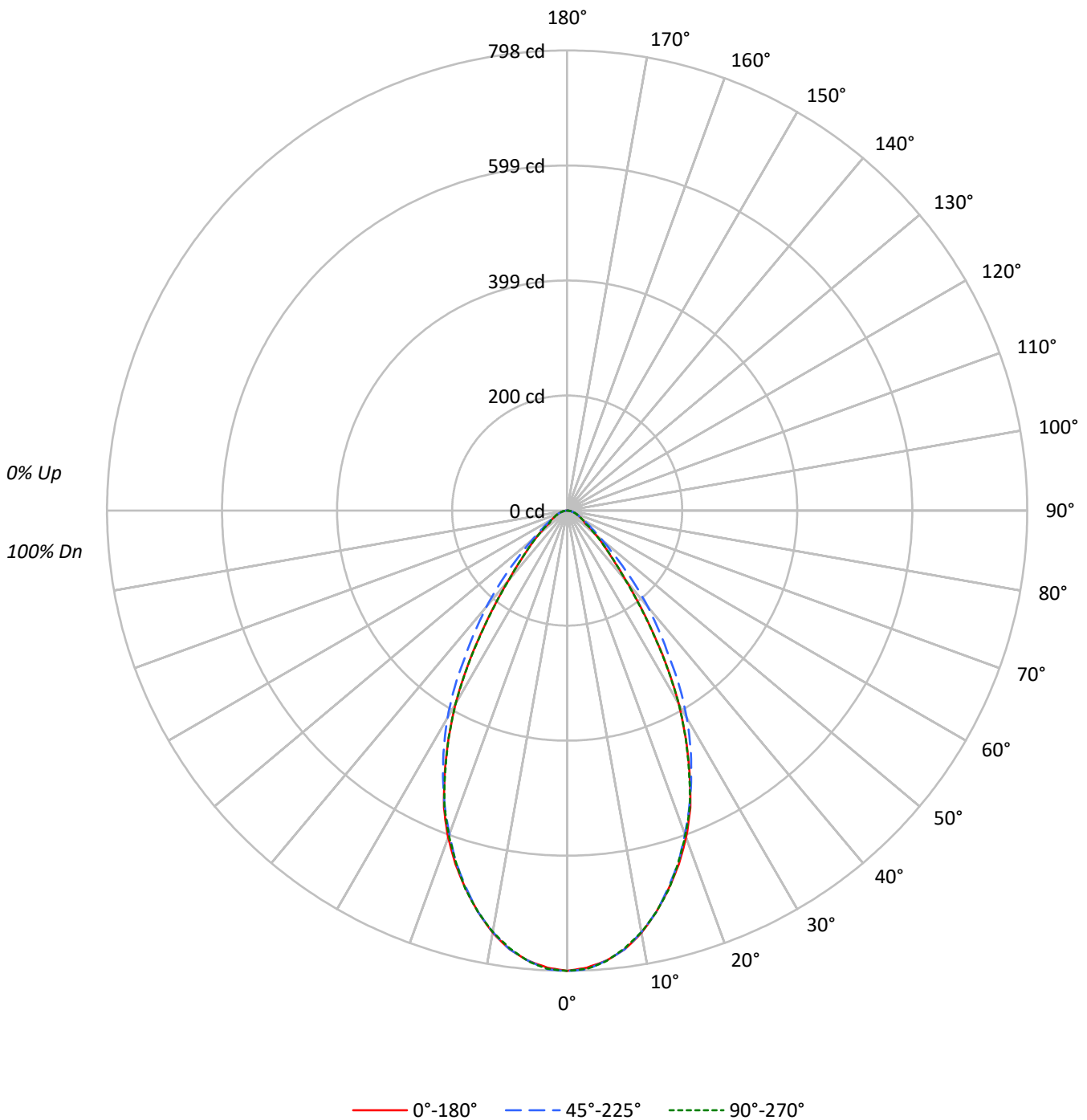
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91				91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	85	83				83
3	99	92	86	82	97	91	85	81	88	83	80	85	82	78	83	80	77	75				75
4	94	85	79	74	92	84	78	73	81	76	72	79	75	71	77	74	71	69				69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	66	72	68	65	63				63
6	83	73	66	62	82	72	66	61	71	65	61	69	64	60	68	63	60	58				58
7	79	68	61	57	77	67	61	57	66	60	56	65	60	56	64	59	56	54				54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50				50
9	70	60	53	49	69	59	53	49	58	53	49	57	52	48	56	52	48	47				47
10	67	56	50	46	66	56	50	46	55	49	45	54	49	45	53	49	45	44				44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	61105	61105	61105
5°	60178	60178	60255
10°	57765	57687	57687
15°	53822	53664	53901
20°	49134	48645	48808
25°	42414	43005	42245
30°	34214	36688	34214
35°	24398	28696	24211
40°	15897	21693	15687
45°	10608	14614	10717
50°	7621	9288	7502
55°	5071	6539	5071
60°	4593	4899	4593
65°	4166	4166	4166
70°	3805	3805	3805
75°	3253	3253	3253
80°	3086	3086	3086
85°	2635	2635	2635



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.5	8.7
10°-20°	189.5	22.5
20°-30°	230.4	27.3
30°-40°	178.4	21.1
40°-50°	91.8	10.9
50°-60°	41.6	4.9
60°-70°	23.1	2.7
70°-80°	12.1	1.4
80°-90°	3.5	0.4
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°	493.5	58.5
0°-40°	671.9	79.6
0°-60°	805.3	95.4
0°-90°	844.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	844.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	798	798	798	798	798	
5°	783	785	783	784	784	74
15°	679	679	677	678	680	190
25°	502	508	509	507	500	229
35°	261	287	307	286	259	164
45°	98	113	135	113	99	79
55°	38	44	49	44	38	38
65°	23	23	23	23	23	23
75°	11	11	11	11	11	12
85°	3	3	3	3	3	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	798.3	798.3	798.3	798.3	798.3
2.5°	793.3	794.3	796.3	795.3	795.3
5°	783.2	785.2	783.2	784.2	784.2
7.5°	767.2	767.2	767.2	765.2	765.2
10°	743.2	742.2	742.2	742.2	742.2
12.5°	713.2	714.2	713.2	714.2	713.2
15°	679.2	679.2	677.2	678.2	680.2
17.5°	643.2	642.2	640.2	639.2	640.2
20°	603.2	600.2	597.2	599.2	599.2
22.5°	558.2	557.2	554.2	555.2	556.2
25°	502.2	508.2	509.2	507.2	500.2
27.5°	445.1	452.1	463.1	452.1	445.1
30°	387.1	398.1	415.1	398.1	387.1
32.5°	324.1	344.1	363.1	345.1	323.1
35°	261.1	287.1	307.1	286.1	259.1
37.5°	205.1	230.1	260.1	231.1	204.1
40°	159.1	182.1	217.1	182.1	157.0
42.5°	124.0	144.0	175.1	143.0	124.0
45°	98.0	113.0	135.0	113.0	99.0
47.5°	80.0	91.0	102.0	91.0	80.0
50°	64.0	72.0	78.0	72.0	63.0
52.5°	50.0	57.0	61.0	57.0	50.0
55°	38.0	44.0	49.0	44.0	38.0
57.5°	34.0	35.0	40.0	35.0	34.0
60°	30.0	30.0	32.0	30.0	30.0
62.5°	26.0	27.0	27.0	27.0	26.0
65°	23.0	23.0	23.0	23.0	23.0
67.5°	19.0	20.0	20.0	20.0	19.0
70°	17.0	17.0	17.0	17.0	17.0
72.5°	14.0	14.0	14.0	14.0	14.0
75°	11.0	11.0	11.0	11.0	11.0
77.5°	9.0	9.0	9.0	9.0	9.0
80°	7.0	7.0	7.0	7.0	7.0
82.5°	5.0	5.0	5.0	5.0	5.0
85°	3.0	3.0	3.0	3.0	3.0
87.5°	1.0	1.0	1.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)