

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: P241649

Luminaire Tested: **PRS415D010-S4M12-44SMDMB-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241649
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-38)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-44SMDMB-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1192.5 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1 / 1 / 1.06
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

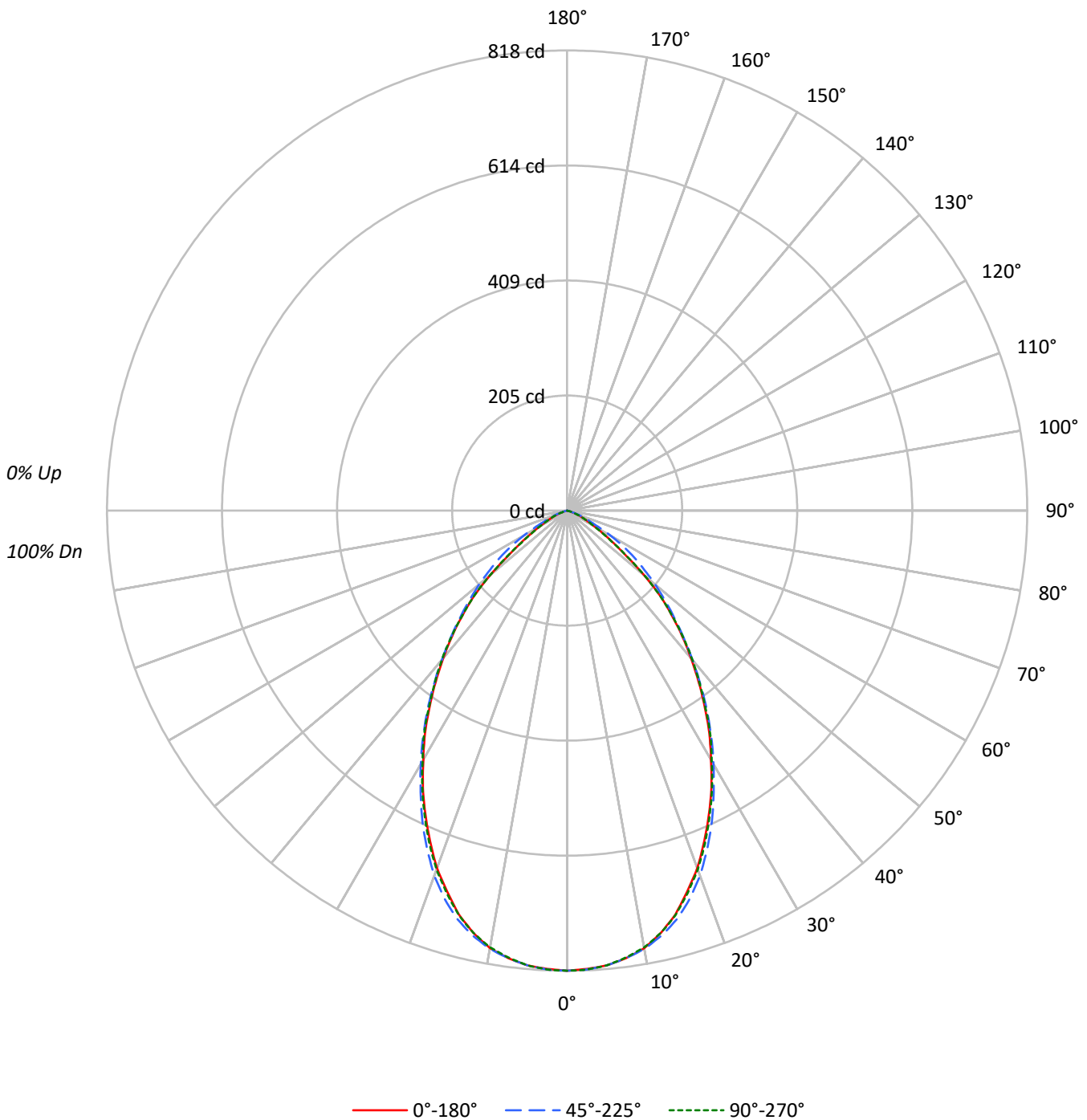
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	109	106	103	110	107	104	101	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	91	82	75	70	89	81	74	70	78	73	69	76	72	68	74	70	67	65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59
6	80	69	62	56	78	68	61	56	66	60	56	65	60	55	64	59	55	53
7	75	64	56	51	73	63	56	51	62	55	51	60	55	50	59	54	50	48
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	42	41
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	62612	62612	62612
5°	62360	62360	62360
10°	61379	61480	61278
15°	58902	59615	59005
20°	55089	56245	55300
25°	50370	51459	50589
30°	45200	45995	45430
35°	39844	40442	40087
40°	34243	34622	34622
45°	28448	29141	28588
50°	21172	24233	21327
55°	13412	19430	13238
60°	8481	13609	8282
65°	5597	7697	5597
70°	3178	4028	3178
75°	0	1153	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.8	6.4
10°-20°	209.2	17.5
20°-30°	276.9	23.2
30°-40°	269.7	22.6
40°-50°	206.5	17.3
50°-60°	110.1	9.2
60°-70°	38.3	3.2
70°-80°	4.9	0.4
80°-90°	0.0	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°	562.9	47.2
0°-40°	832.6	69.8
0°-60°	1149.2	96.4
0°-90°	1192.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1192.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	812	812	812	812	812	77
15°	743	748	752	748	745	208
25°	596	606	609	606	599	273
35°	426	433	433	435	429	266
45°	263	268	269	270	264	202
55°	100	116	146	117	99	94
65°	31	37	42	36	31	32
75°	0	1	4	1	0	4
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°	818.0	818.0	818.0	818.0	818.0
2.5°	815.4	815.4	816.7	815.4	816.7
5°	811.6	811.6	811.6	811.6	811.6
7.5°	802.5	802.5	802.5	802.5	801.3
10°	789.7	789.7	791.0	789.7	788.4
12.5°	769.1	771.6	774.2	772.9	769.1
15°	743.3	748.4	752.3	748.4	744.6
17.5°	709.8	716.2	724.0	717.5	712.4
20°	676.3	681.5	690.5	684.0	678.9
22.5°	636.4	644.1	650.5	646.7	640.2
25°	596.4	605.5	609.3	605.5	599.0
27.5°	555.2	561.7	564.2	565.5	557.8
30°	511.4	519.1	520.4	521.7	514.0
32.5°	470.2	476.6	476.6	480.5	474.1
35°	426.4	432.8	432.8	435.4	429.0
37.5°	383.9	390.3	389.0	392.9	386.5
40°	342.7	347.8	346.5	349.1	346.5
42.5°	302.7	307.9	306.6	309.2	305.3
45°	262.8	267.9	269.2	270.5	264.1
47.5°	224.1	230.6	234.5	233.2	224.1
50°	177.8	193.2	203.5	195.8	179.1
52.5°	132.7	154.6	172.6	155.9	135.3
55°	100.5	115.9	145.6	117.2	99.2
57.5°	74.7	87.6	117.2	86.3	73.4
60°	55.4	65.7	88.9	64.4	54.1
62.5°	41.2	49.0	61.8	47.7	41.2
65°	30.9	37.4	42.5	36.1	30.9
67.5°	23.2	27.1	28.3	27.1	21.9
70°	14.2	18.0	18.0	18.0	14.2
72.5°	6.4	9.0	10.3	9.0	6.4
75°	0.0	1.3	3.9	1.3	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	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)