

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: P241970

Luminaire Tested: **PRS420D010-S4M12-41SMDC**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241970
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-59)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS420D010-S4M12-41SMDC
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, DEEP TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2013.3 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.82 / 0.85
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

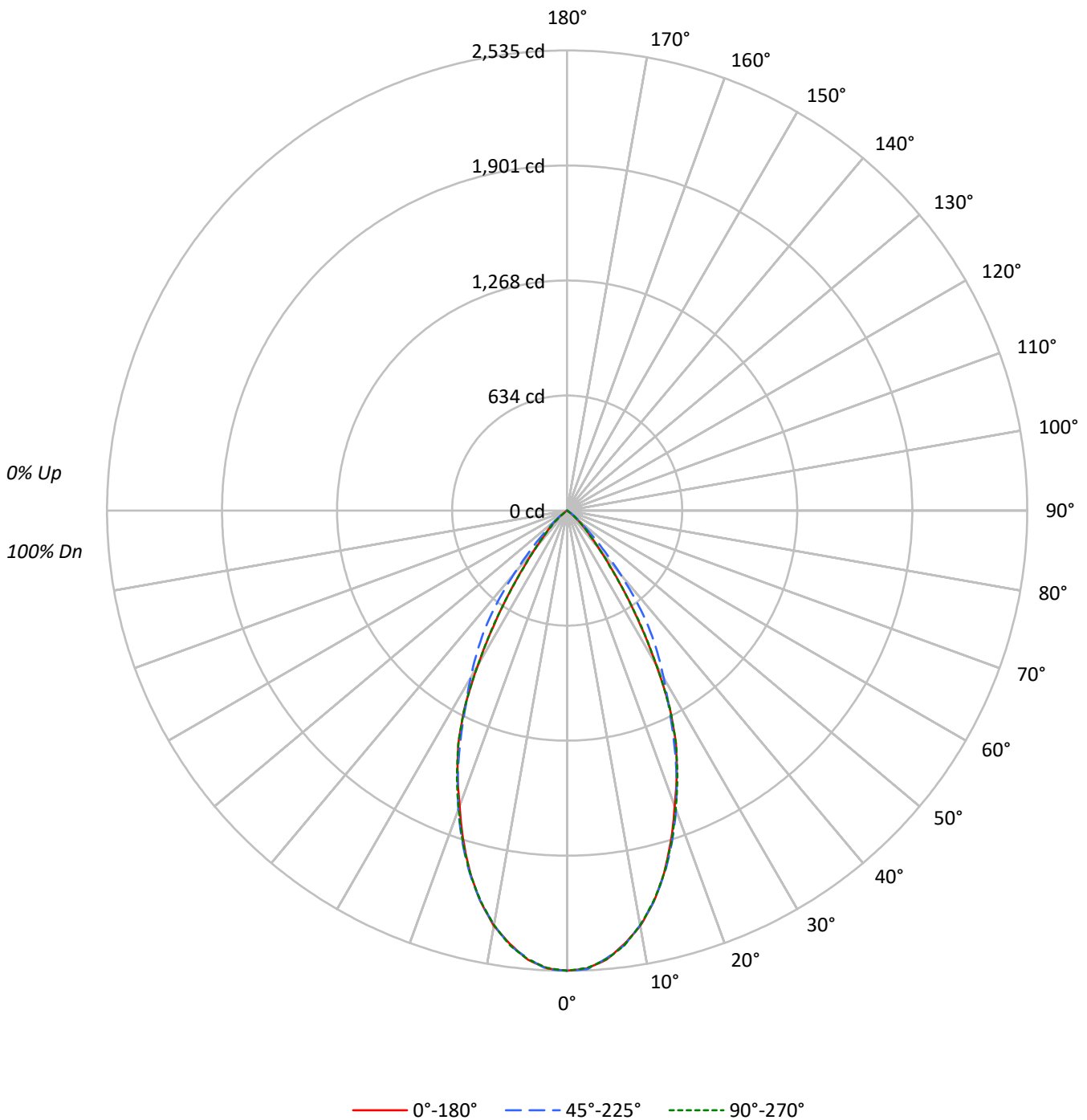
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95	94				94
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89	87				87
3	103	96	92	88	101	95	91	87	92	89	86	90	87	84	88	85	83	81				81
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77	76				76
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	79	75	72	71				71
6	88	79	73	69	87	79	73	69	77	72	69	76	71	68	74	71	68	66				66
7	84	75	69	65	83	74	68	64	73	68	64	72	67	64	70	66	63	62				62
8	80	70	65	61	79	70	64	60	69	64	60	68	63	60	67	63	60	58				58
9	76	67	61	57	75	66	61	57	65	60	57	64	60	56	63	59	56	55				55
10	73	63	57	54	72	63	57	53	62	57	53	61	56	53	60	56	53	52				52

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	194022	194022	194022
5°	190814	190322	190653
10°	180538	180204	180204
15°	163709	164050	163709
20°	141081	142825	142295
25°	119691	117166	119691
30°	87041	93856	86856
35°	52216	73016	52010
40°	27168	44924	26949
45°	14830	21325	14365
50°	6633	8919	6371
55°	574	3710	280
60°	321	980	321
65°	0	380	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.7	11.5
10°-20°	573.9	28.5
20°-30°	639.7	31.8
30°-40°	411.8	20.5
40°-50°	134.3	6.7
50°-60°	21.0	1.0
60°-70°	1.0	0.1
70°-80°	0.0	0.0
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°	1445.3	71.8
0°-40°	1857.0	92.2
0°-60°	2012.3	99.9
0°-90°	2013.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2013.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2535	2535	2535	2535	2535	
5°	2483	2483	2477	2486	2481	232
15°	2066	2066	2070	2070	2066	573
25°	1417	1415	1387	1415	1417	635
35°	559	644	781	642	557	357
45°	137	156	197	152	133	111
55°	4	17	28	17	2	13
65°	0	0	2	0	0	1
75°	0	0	0	0	0	0
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°	2534.8	2534.8	2534.8	2534.8	2534.8
2.5°	2524.1	2526.2	2528.4	2526.2	2521.9
5°	2483.4	2483.4	2477.0	2485.5	2481.3
7.5°	2408.5	2410.6	2414.9	2410.6	2414.9
10°	2322.8	2318.5	2318.5	2318.5	2318.5
12.5°	2205.1	2202.9	2205.1	2202.9	2202.9
15°	2065.9	2065.9	2070.2	2070.2	2065.9
17.5°	1903.2	1907.5	1918.2	1916.1	1911.8
20°	1732.0	1740.5	1753.4	1742.7	1746.9
22.5°	1577.8	1569.2	1573.5	1569.2	1586.4
25°	1417.2	1415.1	1387.3	1415.1	1417.2
27.5°	1220.3	1250.3	1209.6	1252.4	1220.3
30°	984.8	1059.7	1061.9	1068.3	982.7
32.5°	755.7	843.5	922.7	847.8	764.3
35°	558.8	644.4	781.4	642.3	556.6
37.5°	389.6	466.7	618.7	464.6	385.4
40°	271.9	323.3	449.6	325.4	269.7
42.5°	190.5	224.8	306.1	218.4	188.4
45°	137.0	156.3	197.0	152.0	132.7
47.5°	94.2	109.2	122.0	107.0	92.1
50°	55.7	72.8	74.9	72.8	53.5
52.5°	25.7	40.7	47.1	40.7	25.7
55°	4.3	17.1	27.8	17.1	2.1
57.5°	2.1	2.1	15.0	2.1	2.1
60°	2.1	2.1	6.4	2.1	2.1
62.5°	2.1	2.1	2.1	2.1	2.1
65°	0.0	0.0	2.1	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	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)