

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: P241835

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241835
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-50)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS420D010-S4M12-41SMDMB
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, DEEP TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

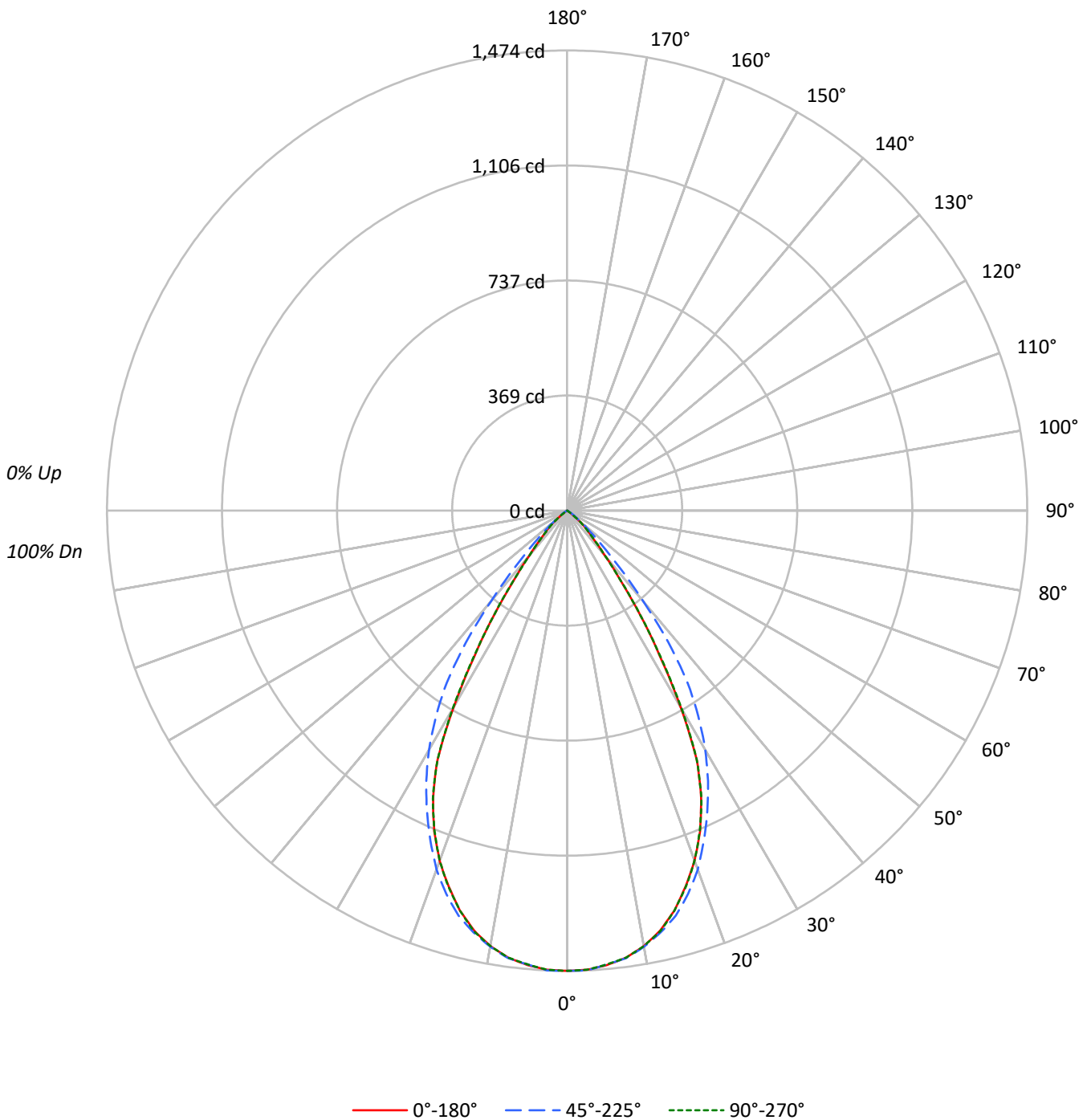
Lumens per Lamp: N/A
Luminaire Lumens: 1428.6 lumens
Efficiency: N/A
Efficacy: 71.4 lumens/watt
Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.98
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	113	111	108	106	111	109	106	104	104	103	101		101	99	98		97	96	95	93
2	108	103	99	95	106	101	97	94	98	95	92		95	92	90		92	90	88	87
3	102	96	91	87	100	94	90	86	92	88	85		89	86	83		87	84	82	80
4	97	89	84	79	95	88	83	79	86	81	78		84	80	77		82	79	76	75
5	92	83	77	73	90	82	77	73	81	76	72		79	75	71		77	74	71	69
6	87	78	72	68	86	77	72	67	76	71	67		74	70	66		73	69	66	65
7	83	73	67	63	81	73	67	63	71	66	62		70	65	62		69	65	62	60
8	78	69	63	59	77	68	62	58	67	62	58		66	61	58		65	61	58	56
9	75	65	59	55	74	64	59	55	63	58	54		62	58	54		62	57	54	53
10	71	61	55	51	70	61	55	51	60	55	51		59	54	51		58	54	51	49

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	112840	112840	112840
5°	112280	112119	112119
10°	110081	110252	110081
15°	105101	106464	105101
20°	97217	99661	97217
25°	85774	89760	85960
30°	64388	78212	64954
35°	37844	62868	38040
40°	18845	38110	18625
45°	10435	17168	10435
50°	5109	7145	5109
55°	280	3149	280
60°	321	658	321
65°	0	0	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°	138.1	9.7
10°-20°	372.7	26.1
20°-30°	472.2	33.1
30°-40°	323.8	22.7
40°-50°	104.4	7.3
50°-60°	17.0	1.2
60°-70°	0.4	0.0
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°	982.9	68.8
0°-40°	1306.8	91.5
0°-60°	1428.2	100.0
0°-90°	1428.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1428.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1474	1474	1474	1474	1474	
5°	1461	1464	1459	1464	1459	138
15°	1326	1335	1344	1335	1326	370
25°	1016	1046	1063	1044	1018	455
35°	405	499	673	504	407	259
45°	96	120	159	118	96	79
55°	2	13	24	13	2	10
65°	0	0	0	0	0	0
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°	1474.2	1474.2	1474.2	1474.2	1474.2
2.5°	1472.0	1472.0	1474.2	1472.0	1472.0
5°	1461.3	1463.5	1459.2	1463.5	1459.2
7.5°	1444.2	1442.0	1446.3	1442.0	1444.2
10°	1416.3	1414.2	1418.5	1414.2	1416.3
12.5°	1377.7	1379.9	1384.2	1382.0	1379.9
15°	1326.3	1334.9	1343.5	1334.9	1326.3
17.5°	1262.0	1272.8	1287.8	1272.8	1264.2
20°	1193.5	1204.2	1223.5	1206.3	1193.5
22.5°	1112.1	1133.5	1144.2	1131.3	1109.9
25°	1015.6	1045.6	1062.8	1043.5	1017.8
27.5°	899.9	947.1	977.1	947.1	899.9
30°	728.5	820.6	884.9	820.6	734.9
32.5°	552.8	659.9	782.1	655.7	559.2
35°	405.0	499.2	672.8	503.5	407.1
37.5°	276.4	360.0	531.4	355.7	278.5
40°	188.6	248.6	381.4	246.4	186.4
42.5°	132.8	169.3	252.8	169.3	130.7
45°	96.4	120.0	158.6	117.8	96.4
47.5°	70.7	87.9	98.6	85.7	68.6
50°	42.9	60.0	60.0	60.0	42.9
52.5°	19.3	34.3	36.4	34.3	19.3
55°	2.1	12.9	23.6	12.9	2.1
57.5°	2.1	2.1	12.9	2.1	2.1
60°	2.1	2.1	4.3	2.1	2.1
62.5°	0.0	0.0	2.1	0.0	0.0
65°	0.0	0.0	0.0	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)