

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: P241640

Luminaire Tested: **PRS420D010-S4M12-44SNDMB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241640
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-37)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS420D010-S4M12-44SNDMB
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

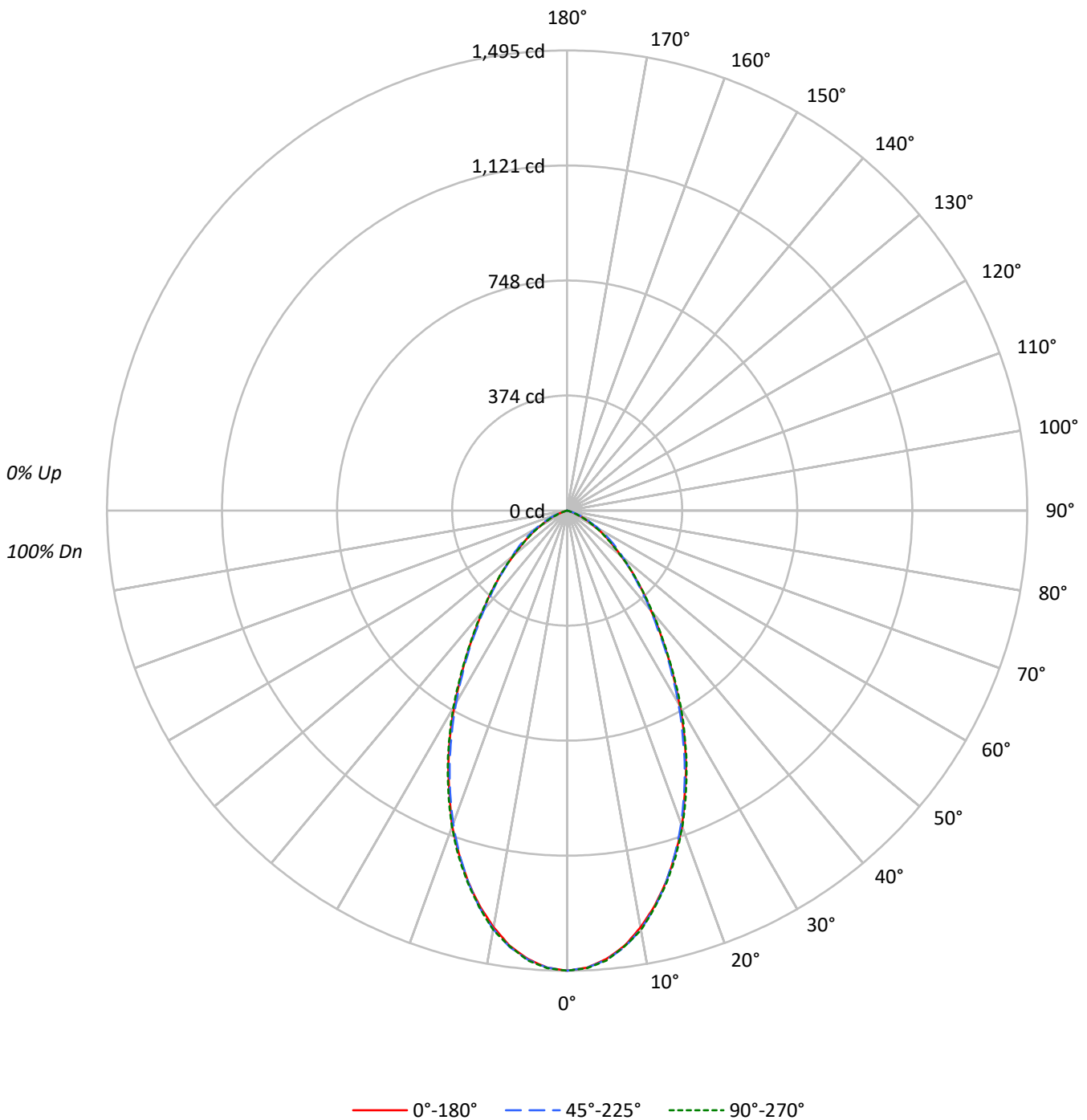
Lumens per Lamp: N/A
Luminaire Lumens: 1724.2 lumens
Efficiency: N/A
Efficacy: 86.2 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.87 / 0.91
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91					91			
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82					82			
3	98	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	75	74					74			
4	92	83	76	71	90	82	76	71	80	74	70	78	73	69	76	72	68	67					67			
5	86	76	70	64	85	75	69	64	74	68	63	72	67	63	70	66	62	61					61			
6	81	71	64	58	80	70	63	58	68	62	58	67	61	57	65	61	57	55					55			
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51					51			
8	72	61	54	49	71	60	54	49	59	53	49	58	53	49	57	52	48	47					47			
9	68	57	50	46	67	56	50	45	55	49	45	54	49	45	54	49	45	43					43			
10	64	53	47	42	63	53	47	42	52	46	42	51	46	42	50	45	42	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	114409	114409	114409
5°	112372	112541	112703
10°	106840	107337	107508
15°	98730	98730	99070
20°	88909	88217	89088
25°	77159	76247	77514
30°	64636	63876	65387
35°	52701	52103	53103
40°	42426	41997	43066
45°	34585	33893	34824
50°	27067	28091	27067
55°	21459	23460	21178
60°	15753	18049	15753
65°	10867	12823	10487
70°	5282	7206	5282
75°	0	1893	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.1	8.0
10°-20°	347.9	20.2
20°-30°	415.7	24.1
30°-40°	352.7	20.5
40°-50°	247.2	14.3
50°-60°	149.1	8.6
60°-70°	66.2	3.8
70°-80°	8.2	0.5
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°	900.7	52.2
0°-40°	1253.4	72.7
0°-60°	1649.7	95.7
0°-90°	1724.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1724.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1495	1495	1495	1495	1495	
5°	1462	1465	1465	1465	1467	137
15°	1246	1246	1246	1252	1250	348
25°	914	909	903	911	918	417
35°	564	562	558	566	568	354
45°	320	317	313	320	322	247
55°	161	163	176	163	159	144
65°	60	66	71	66	58	60
75°	0	2	6	2	0	6
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°	1494.7	1494.7	1494.7	1494.7	1494.7
2.5°	1486.1	1486.1	1486.1	1486.1	1488.3
5°	1462.5	1464.7	1464.7	1464.7	1466.8
7.5°	1426.1	1426.1	1430.4	1430.4	1428.2
10°	1374.6	1374.6	1381.0	1383.2	1383.2
12.5°	1314.6	1314.6	1318.9	1321.0	1318.9
15°	1245.9	1245.9	1245.9	1252.4	1250.2
17.5°	1168.7	1168.7	1166.6	1173.0	1175.2
20°	1091.5	1087.3	1083.0	1087.3	1093.7
22.5°	997.2	997.2	992.9	1001.5	1005.8
25°	913.6	909.3	902.8	911.4	917.8
27.5°	823.5	819.2	810.6	817.0	827.8
30°	731.3	729.1	722.7	729.1	739.8
32.5°	643.3	641.2	634.8	643.3	649.8
35°	564.0	561.9	557.6	566.1	568.3
37.5°	491.1	486.8	482.5	491.1	495.4
40°	424.6	424.6	420.3	424.6	431.0
42.5°	371.0	368.9	362.4	368.9	373.1
45°	319.5	317.4	313.1	319.5	321.7
47.5°	272.3	274.5	270.2	274.5	274.5
50°	227.3	233.7	235.9	233.7	227.3
52.5°	190.9	195.1	203.7	195.1	188.7
55°	160.8	163.0	175.8	163.0	158.7
57.5°	130.8	135.1	145.8	135.1	128.7
60°	102.9	111.5	117.9	109.4	102.9
62.5°	81.5	87.9	92.2	85.8	79.3
65°	60.0	66.5	70.8	66.5	57.9
67.5°	40.7	49.3	51.5	47.2	38.6
70°	23.6	30.0	32.2	30.0	23.6
72.5°	10.7	15.0	17.2	15.0	10.7
75°	0.0	2.1	6.4	2.1	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)