

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: P252920

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252920
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1804-748-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS420D010-S4M12-44SWDMB
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

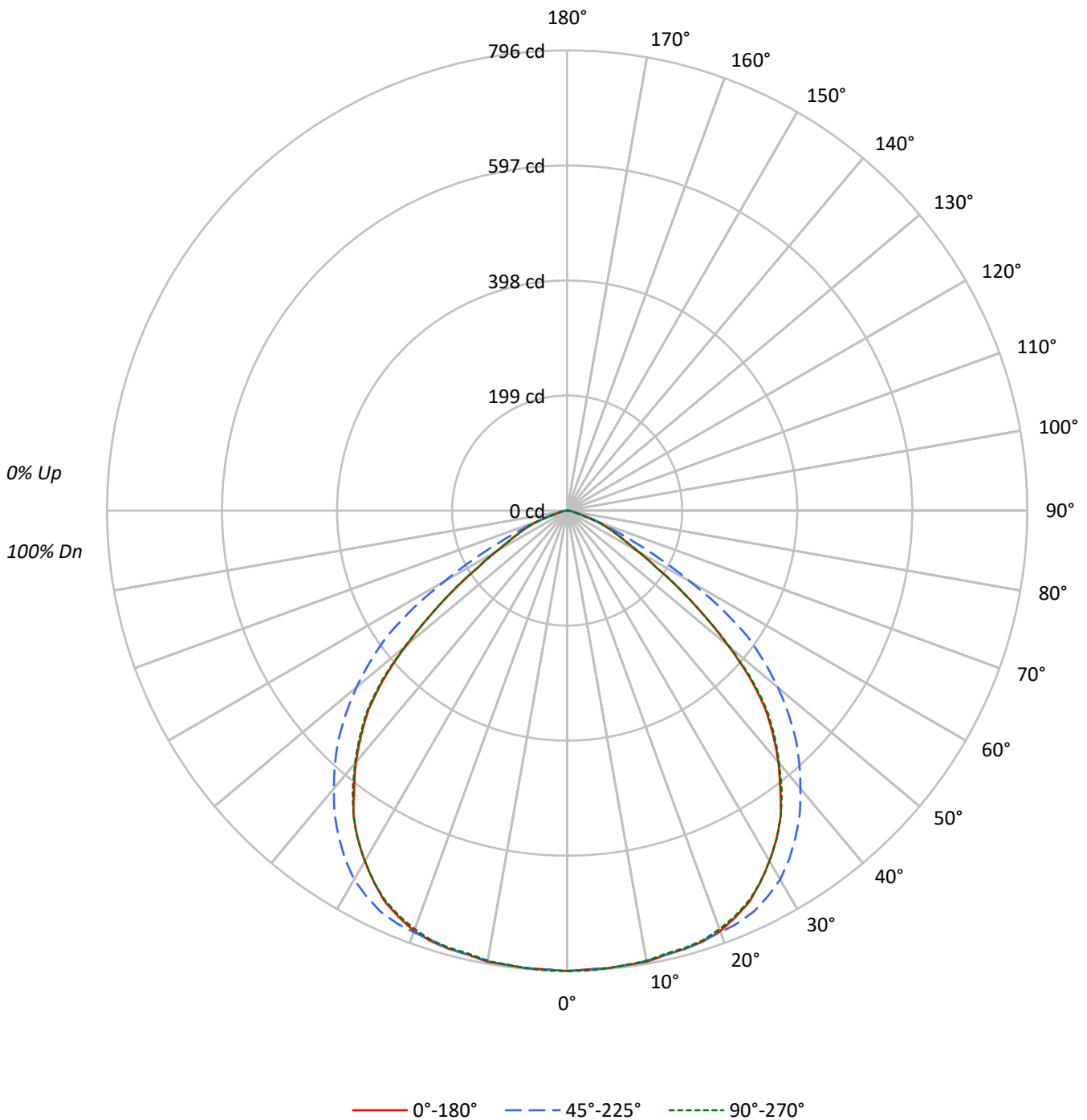
Lumens per Lamp: N/A
Luminaire Lumens: 1865.7 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.41
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88				88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	85	82	79	77				77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67				67
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	61	59				59
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	52				52
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	46				46
7	70	57	49	44	68	57	49	43	55	48	43	54	47	43	52	47	43	41				41
8	65	52	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37				37
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33				33
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30				30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	60952	60952	60952
5°	61046	61046	61046
10°	61604	61464	61464
15°	62222	62222	62079
20°	63055	63210	62754
25°	63030	64592	62878
30°	61869	65148	61869
35°	60224	64372	60224
40°	56805	62730	56995
45°	52522	60544	52923
50°	43441	56670	43667
55°	31881	50911	32135
60°	21539	37705	21830
65°	16427	22803	16427
70°	12018	12846	11615
75°	4939	7127	4939
80°	4099	4099	4099
85°	3249	3249	3249



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.7	4.1
10°-20°	221.9	11.9
20°-30°	346.6	18.6
30°-40°	414.6	22.2
40°-50°	398.5	21.4
50°-60°	267.6	14.3
60°-70°	109.3	5.9
70°-80°	27.2	1.5
80°-90°	4.3	0.2
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°	644.2	34.5
0°-40°	1058.8	56.8
0°-60°	1724.9	92.5
0°-90°	1865.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1865.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	796	796	796	796	796	
5°	794	794	794	794	794	76
15°	785	785	785	783	783	222
25°	746	754	765	752	744	343
35°	644	663	689	665	644	400
45°	485	520	559	522	489	368
55°	239	289	382	291	241	217
65°	91	102	126	102	91	92
75°	17	18	24	18	17	24
85°	4	4	4	4	4	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	796.3	796.3	796.3	796.3	796.3
2.5°	794.5	794.5	794.5	796.3	796.3
5°	794.5	794.5	794.5	794.5	794.5
7.5°	792.6	792.6	792.6	792.6	792.6
10°	792.6	790.8	790.8	790.8	790.8
12.5°	787.1	787.1	787.1	787.1	785.2
15°	785.2	785.2	785.2	783.4	783.4
17.5°	781.5	781.5	779.7	779.7	779.7
20°	774.1	776.0	776.0	774.1	770.4
22.5°	761.1	766.7	772.3	764.8	759.3
25°	746.3	753.7	764.8	751.9	744.5
27.5°	724.1	735.2	751.9	735.2	724.1
30°	700.0	714.8	737.1	714.8	700.0
32.5°	674.1	690.8	714.8	690.8	674.1
35°	644.5	663.0	688.9	664.8	644.5
37.5°	605.6	631.5	661.1	635.2	609.3
40°	568.5	596.3	627.8	598.2	570.4
42.5°	527.8	559.3	594.5	561.1	531.5
45°	485.2	520.4	559.3	522.2	488.9
47.5°	429.6	472.2	518.5	477.8	433.4
50°	364.8	418.5	475.9	422.2	366.7
52.5°	300.0	351.9	429.6	355.6	300.0
55°	238.9	288.9	381.5	290.8	240.8
57.5°	183.3	227.8	318.5	231.5	183.3
60°	140.7	174.1	246.3	175.9	142.6
62.5°	111.1	131.5	181.5	129.6	111.1
65°	90.7	101.9	125.9	101.9	90.7
67.5°	72.2	79.6	83.3	79.6	72.2
70°	53.7	61.1	57.4	61.1	51.9
72.5°	31.5	38.9	38.9	38.9	29.6
75°	16.7	18.5	24.1	18.5	16.7
77.5°	13.0	13.0	14.8	13.0	13.0
80°	9.3	9.3	9.3	9.3	9.3
82.5°	5.6	5.6	5.6	5.6	5.6
85°	3.7	3.7	3.7	3.7	3.7
87.5°	1.9	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)