

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: P241740

Luminaire Tested: **PRS420D010-S4M12-44SMDH-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241740
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-44)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS420D010-S4M12-44SMDH-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2082.2 lumens
Efficiency: N/A
Efficacy: 104.1 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

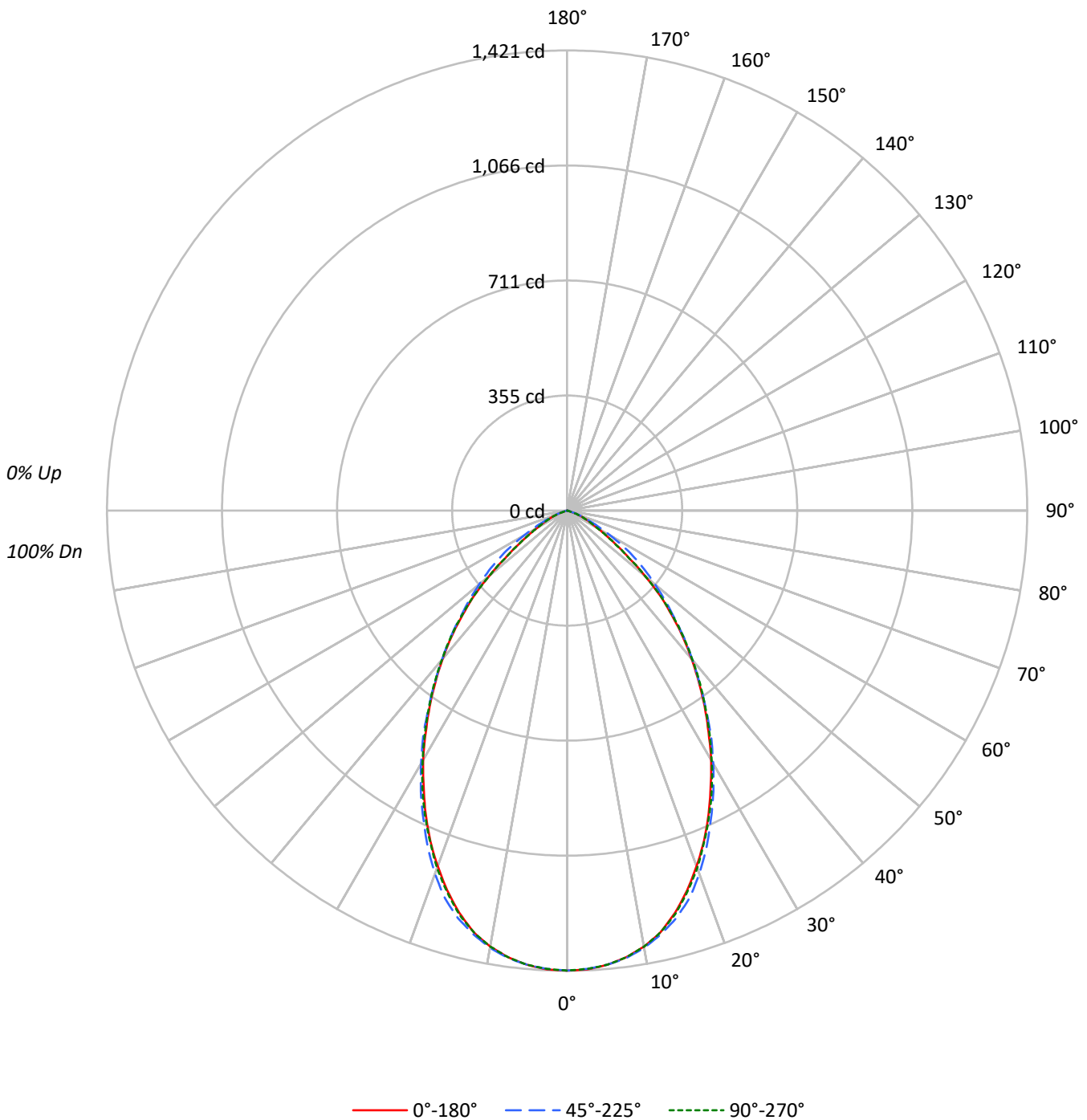
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	109	106	103	110	107	104	101	102	100	98	99	97	95	95	94	92	91
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81
3	98	90	83	79	96	88	83	78	85	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48
8	70	59	51	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44
9	66	55	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	41
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	108745	108745	108745
5°	108200	108200	108200
10°	106241	106560	106241
15°	101923	103239	102256
20°	95173	97193	95678
25°	87328	88721	87674
30°	78592	79688	78954
35°	69175	69755	69558
40°	59712	60132	60132
45°	49470	50585	50141
50°	37427	42107	37427
55°	24835	33950	24555
60°	16457	23744	16457
65°	11610	14236	11229
70°	6490	7408	6490
75°	621	2455	621
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.2	6.4
10°-20°	362.4	17.4
20°-30°	479.4	23.0
30°-40°	467.2	22.4
40°-50°	360.0	17.3
50°-60°	196.7	9.4
60°-70°	72.8	3.5
70°-80°	10.6	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°	974.9	46.8
0°-40°	1442.1	69.3
0°-60°	1998.8	96.0
0°-90°	2082.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2082.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1421	1421	1421	1421	1421	
5°	1408	1408	1408	1408	1408	133
15°	1286	1294	1303	1297	1290	360
25°	1034	1046	1050	1050	1038	474
35°	740	749	746	755	744	462
45°	457	469	467	472	463	352
55°	186	209	254	211	184	173
65°	64	70	79	70	62	64
75°	2	4	8	4	2	8
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°	1420.7	1420.7	1420.7	1420.7	1420.7
2.5°	1418.6	1416.5	1416.5	1416.5	1416.5
5°	1408.2	1408.2	1408.2	1408.2	1408.2
7.5°	1391.7	1391.7	1393.8	1391.7	1391.7
10°	1366.9	1369.0	1371.0	1371.0	1366.9
12.5°	1333.8	1337.9	1340.0	1337.9	1333.8
15°	1286.2	1294.5	1302.8	1296.6	1290.4
17.5°	1230.4	1240.7	1255.2	1242.8	1234.5
20°	1168.4	1180.8	1193.2	1184.9	1174.6
22.5°	1104.3	1114.6	1124.9	1120.8	1106.3
25°	1034.0	1046.4	1050.5	1050.5	1038.1
27.5°	959.5	974.0	978.1	976.1	967.8
30°	889.2	899.5	901.6	903.7	893.3
32.5°	812.7	823.0	827.2	829.2	818.9
35°	740.3	748.6	746.5	754.8	744.4
37.5°	667.9	676.2	672.1	680.3	674.1
40°	597.6	601.8	601.8	608.0	601.8
42.5°	529.4	533.5	535.6	537.7	533.5
45°	457.0	469.4	467.3	471.5	463.2
47.5°	390.8	401.2	409.4	405.3	392.9
50°	314.3	339.1	353.6	343.3	314.3
52.5°	241.9	270.9	304.0	273.0	241.9
55°	186.1	208.9	254.4	210.9	184.0
57.5°	140.6	159.2	204.7	159.2	140.6
60°	107.5	122.0	155.1	122.0	107.5
62.5°	82.7	93.1	111.7	93.1	82.7
65°	64.1	70.3	78.6	70.3	62.0
67.5°	45.5	51.7	51.7	51.7	45.5
70°	29.0	35.2	33.1	35.2	29.0
72.5°	12.4	18.6	20.7	18.6	12.4
75°	2.1	4.1	8.3	4.1	2.1
77.5°	0.0	2.1	2.1	2.1	2.1
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)