

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: P252965

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252965
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1805-776-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS420D010-S4M12-41SWDMW
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1830.3 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.1 / 1.15
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

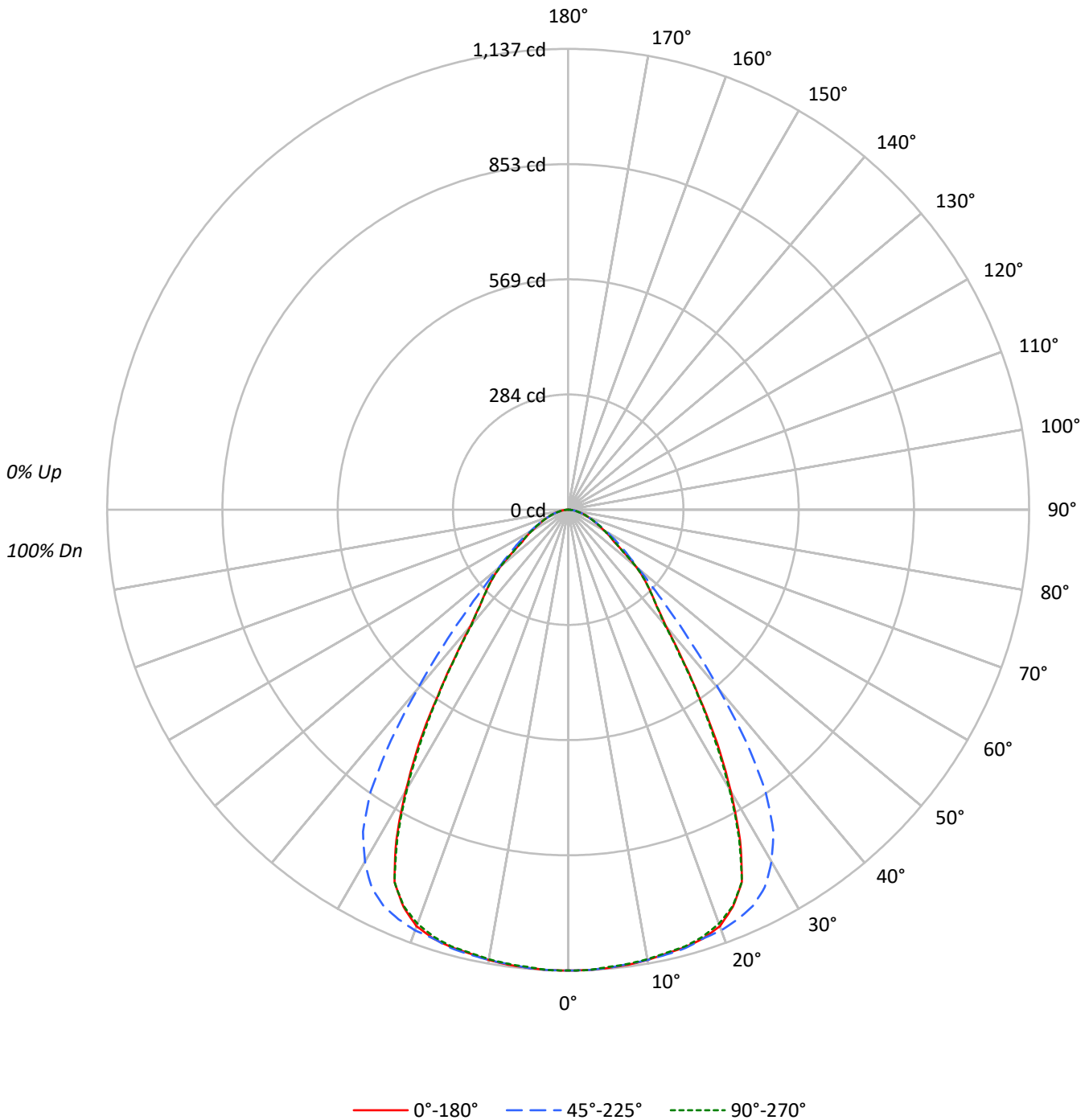
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92				90	
2	104	98	93	88	102	96	91	87	93	89	86	90	86	84	87	84	82				80	
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73				72	
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66				64	
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	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	51	60	54	50	59	54	50				48	
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46				44	
9	66	55	48	43	65	54	47	43	53	47	43	52	47	42	51	46	42				41	
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39				38	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	87022	87022	87022
5°	87186	87186	87024
10°	87688	87688	87525
15°	88547	88721	88372
20°	89080	89960	88551
25°	85596	91078	85596
30°	70814	88615	70239
35°	52412	79323	52001
40°	37430	57774	37000
45°	31176	38439	31176
50°	26043	26817	26043
55°	18496	21379	18790
60°	15584	16901	15584
65°	13330	13729	13330
70°	11637	11637	11637
75°	10233	10233	10233
80°	8596	8596	8596
85°	7641	7641	7641



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.0	5.9
10°-20°	315.7	17.2
20°-30°	471.8	25.8
30°-40°	419.9	22.9
40°-50°	249.9	13.7
50°-60°	141.6	7.7
60°-70°	75.9	4.1
70°-80°	37.2	2.0
80°-90°	10.3	0.6
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°	895.5	48.9
0°-40°	1315.5	71.9
0°-60°	1706.9	93.3
0°-90°	1830.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1830.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1137	1137	1137	1137	1137	
5°	1135	1135	1135	1135	1133	108
15°	1117	1117	1120	1115	1115	316
25°	1014	1042	1078	1039	1014	452
35°	561	656	849	654	556	354
45°	288	310	355	308	288	224
55°	139	154	160	154	141	132
65°	74	76	76	76	74	74
75°	35	35	35	35	35	37
85°	9	9	9	9	9	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1136.9	1136.9	1136.9	1136.9	1136.9
2.5°	1136.9	1136.9	1136.9	1136.9	1136.9
5°	1134.7	1134.7	1134.7	1134.7	1132.6
7.5°	1132.6	1130.4	1130.4	1130.4	1130.4
10°	1128.2	1128.2	1128.2	1126.1	1126.1
12.5°	1121.7	1121.7	1123.9	1121.7	1119.6
15°	1117.4	1117.4	1119.6	1115.2	1115.2
17.5°	1108.7	1110.9	1108.7	1108.7	1104.4
20°	1093.6	1100.1	1104.4	1097.9	1087.1
22.5°	1061.1	1078.4	1093.6	1076.3	1058.9
25°	1013.5	1041.6	1078.4	1039.4	1013.5
27.5°	918.2	989.6	1050.3	983.1	911.7
30°	801.2	887.9	1002.6	881.4	794.7
32.5°	684.3	770.9	942.0	766.6	673.5
35°	560.9	656.1	848.9	654.0	556.5
37.5°	456.9	543.5	718.9	539.2	452.6
40°	374.6	441.8	578.2	439.6	370.3
42.5°	322.7	359.5	456.9	357.3	322.7
45°	288.0	309.7	355.1	307.5	288.0
47.5°	255.5	272.9	279.4	270.7	255.5
50°	218.7	238.2	225.2	238.2	218.7
52.5°	173.2	197.1	188.4	199.2	171.1
55°	138.6	153.8	160.2	153.8	140.8
57.5°	121.3	125.6	134.3	125.6	121.3
60°	101.8	106.1	110.4	106.1	101.8
62.5°	86.6	91.0	91.0	91.0	88.8
65°	73.6	75.8	75.8	75.8	73.6
67.5°	62.8	62.8	62.8	62.8	62.8
70°	52.0	52.0	52.0	52.0	52.0
72.5°	43.3	43.3	43.3	43.3	43.3
75°	34.6	34.6	34.6	34.6	34.6
77.5°	28.2	28.2	26.0	28.2	26.0
80°	19.5	19.5	19.5	19.5	19.5
82.5°	15.2	15.2	15.2	15.2	15.2
85°	8.7	8.7	8.7	8.7	8.7
87.5°	4.3	4.3	4.3	4.3	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)