

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: P252971

Luminaire Tested: **PRS430D010-S4M24-41SWDMW-4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P252971  
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: PRS430D010-S4M24-41SWDMW-4000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM MATTE WHITE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2218.9 lumens  
Efficiency: N/A  
Efficacy: 88.8 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

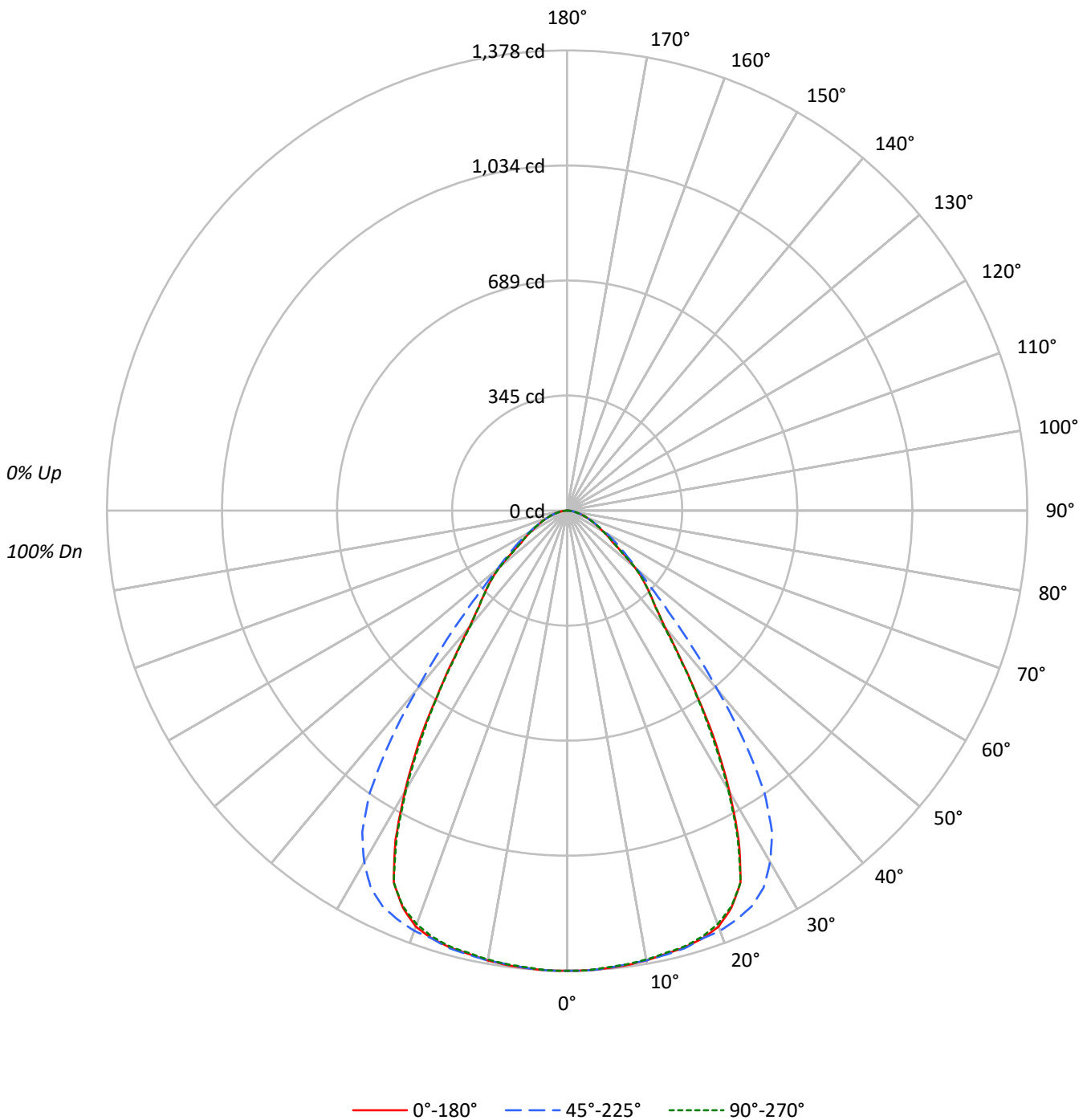
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90					90			
2	104	98	93	88	102	96	91	87	93	89	86	90	86	84	87	84	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72					72			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64					64			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60	58					58			
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53					53			
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48					48			
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44					44			
9	66	55	48	43	65	54	47	43	53	47	43	52	47	42	51	46	42	41					41			
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38					38			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	105492	105492	105492
5°	105695	105695	105496
10°	106303	106303	106101
15°	107343	107549	107137
20°	107986	109061	107351
25°	103763	110418	103763
30°	85848	107432	85150
35°	63531	96161	63045
40°	45384	70034	44854
45°	37800	46601	37800
50°	31568	32509	31568
55°	22419	25929	22766
60°	18891	20498	18891
65°	16174	16645	16174
70°	14099	14099	14099
75°	12421	12421	12421
80°	10403	10403	10403
85°	9221	9221	9221



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.0	5.9
10°-20°	382.7	17.2
20°-30°	571.9	25.8
30°-40°	509.1	22.9
40°-50°	303.0	13.7
50°-60°	171.6	7.7
60°-70°	92.0	4.1
70°-80°	45.1	2.0
80°-90°	12.5	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°	1085.6	48.9
0°-40°	1594.7	71.9
0°-60°	2069.3	93.3
0°-90°	2218.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2218.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1378	1378	1378	1378	1378	
5°	1376	1376	1376	1376	1373	131
15°	1355	1355	1357	1352	1352	383
25°	1229	1263	1307	1260	1229	548
35°	680	795	1029	793	675	429
45°	349	375	430	373	349	271
55°	168	186	194	186	171	160
65°	89	92	92	92	89	90
75°	42	42	42	42	42	45
85°	10	10	10	10	10	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1378.2	1378.2	1378.2	1378.2	1378.2
2.5°	1378.2	1378.2	1378.2	1378.2	1378.2
5°	1375.6	1375.6	1375.6	1375.6	1373.0
7.5°	1373.0	1370.4	1370.4	1370.4	1370.4
10°	1367.7	1367.7	1367.7	1365.1	1365.1
12.5°	1359.9	1359.9	1362.5	1359.9	1357.2
15°	1354.6	1354.6	1357.2	1352.0	1352.0
17.5°	1344.1	1346.7	1344.1	1344.1	1338.9
20°	1325.7	1333.6	1338.9	1331.0	1317.9
22.5°	1286.3	1307.4	1325.7	1304.7	1283.7
25°	1228.6	1262.7	1307.4	1260.1	1228.6
27.5°	1113.1	1199.7	1273.2	1191.8	1105.2
30°	971.3	1076.3	1215.5	1068.5	963.4
32.5°	829.6	934.6	1142.0	929.3	816.4
35°	679.9	795.4	1029.1	792.8	674.7
37.5°	553.9	658.9	871.6	653.7	548.7
40°	454.2	535.5	700.9	532.9	448.9
42.5°	391.2	435.8	553.9	433.2	391.2
45°	349.2	375.4	430.5	372.8	349.2
47.5°	309.8	330.8	338.7	328.2	309.8
50°	265.1	288.8	273.0	288.8	265.1
52.5°	210.0	238.9	228.4	241.5	207.4
55°	168.0	186.4	194.3	186.4	170.6
57.5°	147.0	152.3	162.8	152.3	147.0
60°	123.4	128.6	133.9	128.6	123.4
62.5°	105.0	110.3	110.3	110.3	107.6
65°	89.3	91.9	91.9	91.9	89.3
67.5°	76.1	76.1	76.1	76.1	76.1
70°	63.0	63.0	63.0	63.0	63.0
72.5°	52.5	52.5	52.5	52.5	52.5
75°	42.0	42.0	42.0	42.0	42.0
77.5°	34.1	34.1	31.5	34.1	31.5
80°	23.6	23.6	23.6	23.6	23.6
82.5°	18.4	18.4	18.4	18.4	18.4
85°	10.5	10.5	10.5	10.5	10.5
87.5°	5.3	5.3	5.3	5.3	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)