

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: P252977

Luminaire Tested: **PRS440D010-S4M24-41SWDMB-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252977
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: PRS440D010-S4M24-41SWDMB-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1983.9 lumens
Efficiency: N/A
Efficacy: 52.2 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

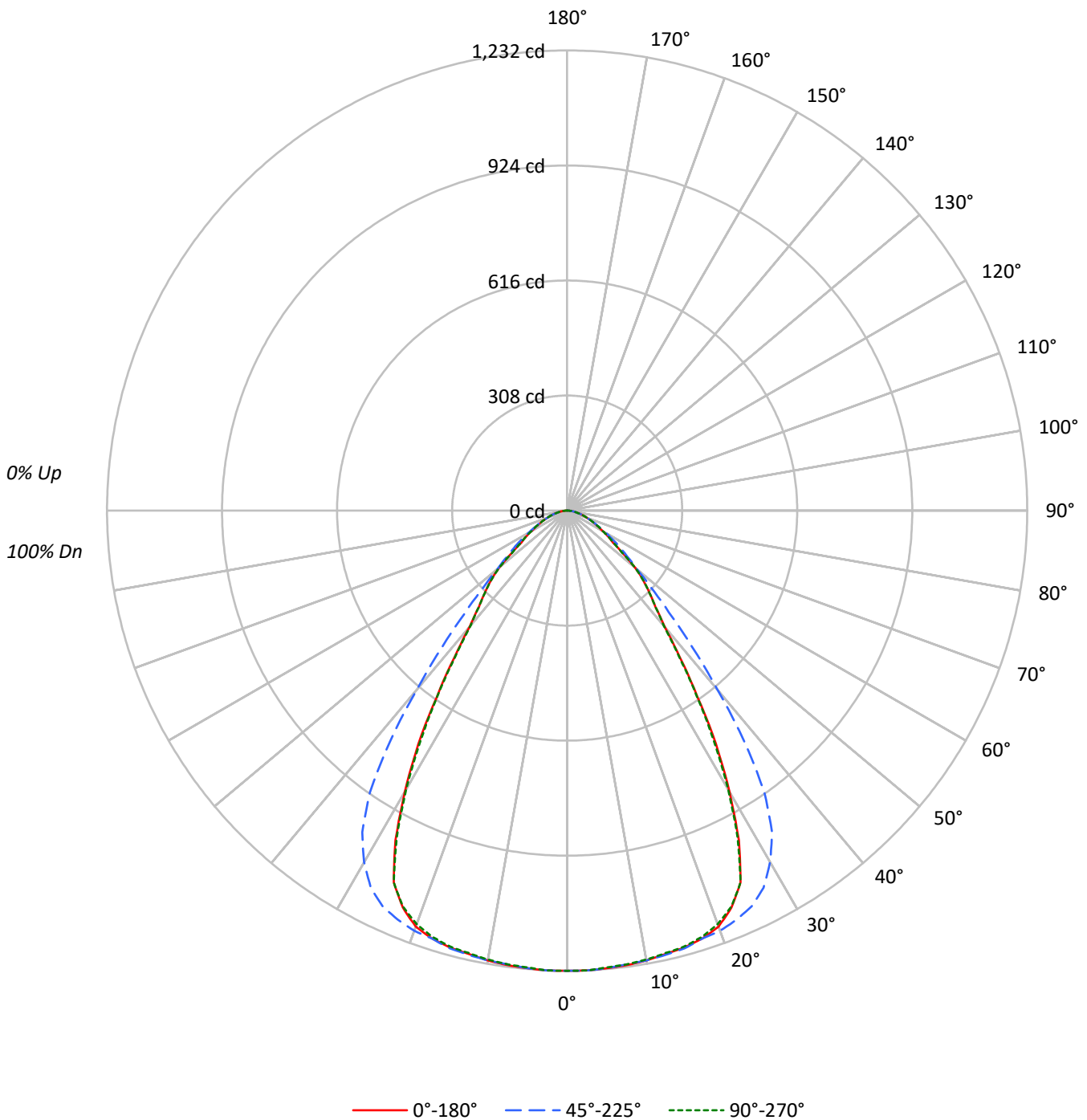
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	94324	94324	94324
5°	94500	94500	94324
10°	95049	95049	94870
15°	95980	96162	95790
20°	96550	97511	95979
25°	92775	98721	92775
30°	76762	96056	76135
35°	56804	85976	56364
40°	40578	62620	40108
45°	33795	41665	33795
50°	28234	29068	28234
55°	20044	23180	20364
60°	16885	18324	16885
65°	14453	14888	14453
70°	12600	12600	12600
75°	11120	11120	11120
80°	9301	9301	9301
85°	8255	8255	8255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.1	5.9
10°-20°	342.2	17.2
20°-30°	511.4	25.8
30°-40°	455.2	22.9
40°-50°	270.9	13.7
50°-60°	153.4	7.7
60°-70°	82.3	4.1
70°-80°	40.3	2.0
80°-90°	11.2	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°	970.7	48.9
0°-40°	1425.9	71.9
0°-60°	1850.2	93.3
0°-90°	1983.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1983.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1230	1230	1230	1230	1228	117
15°	1211	1211	1214	1209	1209	342
25°	1098	1129	1169	1127	1098	490
35°	608	711	920	709	603	384
45°	312	336	385	333	312	242
55°	150	167	174	167	153	143
65°	80	82	82	82	80	80
75°	38	38	38	38	38	41
85°	9	9	9	9	9	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1232.3	1232.3	1232.3	1232.3	1232.3
2.5°	1232.3	1232.3	1232.3	1232.3	1232.3
5°	1229.9	1229.9	1229.9	1229.9	1227.6
7.5°	1227.6	1225.2	1225.2	1225.2	1225.2
10°	1222.9	1222.9	1222.9	1220.6	1220.6
12.5°	1215.9	1215.9	1218.2	1215.9	1213.5
15°	1211.2	1211.2	1213.5	1208.8	1208.8
17.5°	1201.8	1204.1	1201.8	1201.8	1197.1
20°	1185.3	1192.4	1197.1	1190.0	1178.3
22.5°	1150.1	1168.9	1185.3	1166.6	1147.8
25°	1098.5	1129.0	1168.9	1126.7	1098.5
27.5°	995.2	1072.7	1138.4	1065.6	988.2
30°	868.5	962.4	1086.8	955.3	861.4
32.5°	741.7	835.6	1021.0	830.9	730.0
35°	607.9	711.2	920.1	708.9	603.2
37.5°	495.3	589.2	779.3	584.5	490.6
40°	406.1	478.8	626.7	476.5	401.4
42.5°	349.7	389.6	495.3	387.3	349.7
45°	312.2	335.7	384.9	333.3	312.2
47.5°	277.0	295.7	302.8	293.4	277.0
50°	237.1	258.2	244.1	258.2	237.1
52.5°	187.8	213.6	204.2	215.9	185.4
55°	150.2	166.7	173.7	166.7	152.6
57.5°	131.4	136.1	145.5	136.1	131.4
60°	110.3	115.0	119.7	115.0	110.3
62.5°	93.9	98.6	98.6	98.6	96.2
65°	79.8	82.2	82.2	82.2	79.8
67.5°	68.1	68.1	68.1	68.1	68.1
70°	56.3	56.3	56.3	56.3	56.3
72.5°	46.9	46.9	46.9	46.9	46.9
75°	37.6	37.6	37.6	37.6	37.6
77.5°	30.5	30.5	28.2	30.5	28.2
80°	21.1	21.1	21.1	21.1	21.1
82.5°	16.4	16.4	16.4	16.4	16.4
85°	9.4	9.4	9.4	9.4	9.4
87.5°	4.7	4.7	4.7	4.7	4.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)