

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: P252923

Luminaire Tested: **PRS410D010-S4M12-44SWDMB-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252923
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: PRS410D010-S4M12-44SWDMB-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 881.6 lumens
Efficiency: N/A
Efficacy: 88.2 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

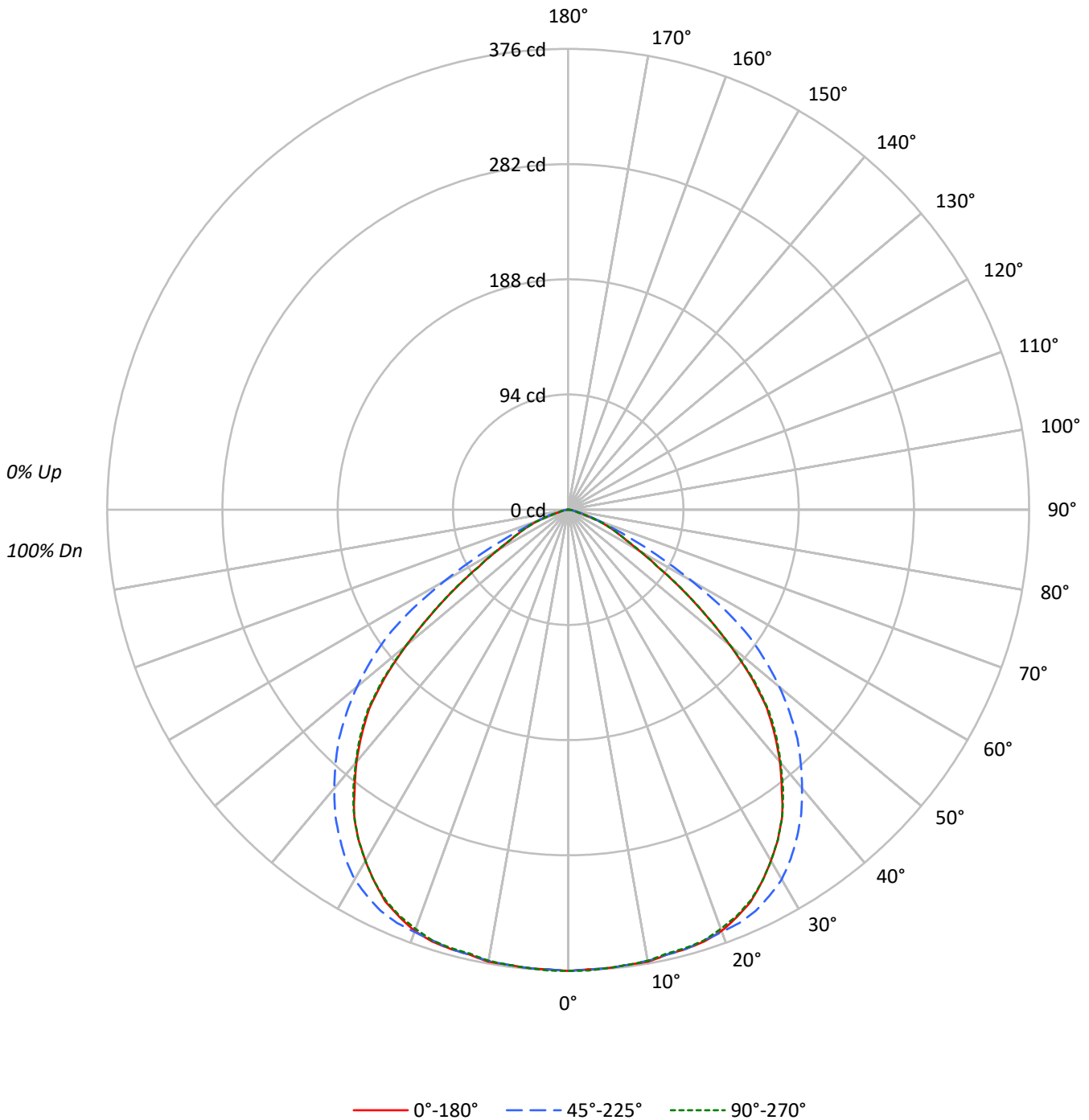
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28803	28803	28803
5°	28844	28844	28844
10°	29108	29046	29046
15°	29399	29399	29336
20°	29797	29870	29650
25°	29788	30523	29712
30°	29238	30784	29238
35°	28453	30415	28453
40°	26849	29646	26929
45°	24821	28610	25005
50°	20529	26781	20637
55°	15066	24061	15187
60°	10180	17819	10318
65°	7770	10776	7770
70°	5684	6065	5483
75°	2336	3371	2336
80°	1940	1940	1940
85°	1581	1581	1581



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.8	4.1
10°-20°	104.9	11.9
20°-30°	163.8	18.6
30°-40°	195.9	22.2
40°-50°	188.3	21.4
50°-60°	126.5	14.3
60°-70°	51.6	5.9
70°-80°	12.8	1.5
80°-90°	2.0	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°	304.4	34.5
0°-40°	500.3	56.8
0°-60°	815.1	92.5
0°-90°	881.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	881.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	376	376	376	376	376	
5°	375	375	375	375	375	36
15°	371	371	371	370	370	105
25°	353	356	361	355	352	162
35°	304	313	326	314	304	189
45°	229	246	264	247	231	174
55°	113	136	180	137	114	102
65°	43	48	60	48	43	43
75°	8	9	11	9	8	12
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	376.3	376.3	376.3	376.3	376.3
2.5°	375.4	375.4	375.4	376.3	376.3
5°	375.4	375.4	375.4	375.4	375.4
7.5°	374.5	374.5	374.5	374.5	374.5
10°	374.5	373.7	373.7	373.7	373.7
12.5°	371.9	371.9	371.9	371.9	371.0
15°	371.0	371.0	371.0	370.2	370.2
17.5°	369.3	369.3	368.4	368.4	368.4
20°	365.8	366.7	366.7	365.8	364.0
22.5°	359.7	362.3	364.9	361.4	358.8
25°	352.7	356.2	361.4	355.3	351.8
27.5°	342.2	347.4	355.3	347.4	342.2
30°	330.8	337.8	348.3	337.8	330.8
32.5°	318.5	326.4	337.8	326.4	318.5
35°	304.5	313.3	325.5	314.2	304.5
37.5°	286.2	298.4	312.4	300.2	287.9
40°	268.7	281.8	296.7	282.7	269.5
42.5°	249.4	264.3	280.9	265.2	251.2
45°	229.3	245.9	264.3	246.8	231.0
47.5°	203.0	223.2	245.0	225.8	204.8
50°	172.4	197.8	224.9	199.5	173.3
52.5°	141.8	166.3	203.0	168.0	141.8
55°	112.9	136.5	180.3	137.4	113.8
57.5°	86.6	107.6	150.5	109.4	86.6
60°	66.5	82.3	116.4	83.1	67.4
62.5°	52.5	62.1	85.8	61.3	52.5
65°	42.9	48.1	59.5	48.1	42.9
67.5°	34.1	37.6	39.4	37.6	34.1
70°	25.4	28.9	27.1	28.9	24.5
72.5°	14.9	18.4	18.4	18.4	14.0
75°	7.9	8.8	11.4	8.8	7.9
77.5°	6.1	6.1	7.0	6.1	6.1
80°	4.4	4.4	4.4	4.4	4.4
82.5°	2.6	2.6	2.6	2.6	2.6
85°	1.8	1.8	1.8	1.8	1.8
87.5°	0.9	0.9	0.9	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)