

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: P241748

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241748
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: PRS410D010-S4M12-44SMDH-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1019.2 lumens
Efficiency: N/A
Efficacy: 101.9 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

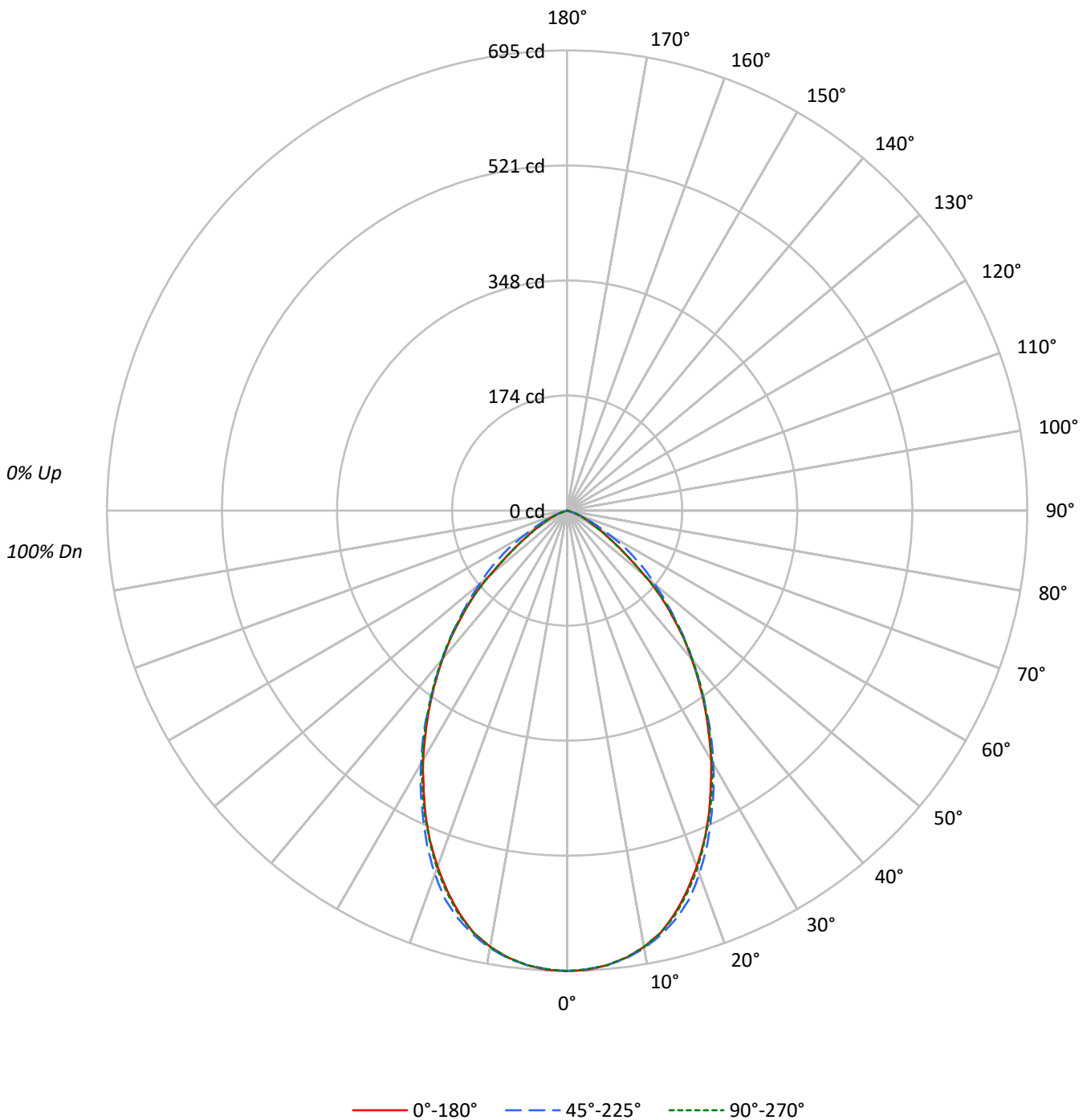
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P241748

CATALOG NUMBER: PRS410D010-S4M12-44SMDH-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P241748

CATALOG NUMBER: PRS410D010-S4M12-44SMDH-4000K

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°	53228	53228	53228
5°	52963	52963	52963
10°	52005	52161	52005
15°	49892	50534	50050
20°	46585	47570	46829
25°	42743	43427	42912
30°	38465	39004	38651
35°	33863	34144	34050
40°	29227	29427	29427
45°	24215	24767	24540
50°	18326	20613	18326
55°	12157	16614	12024
60°	8052	11619	8052
65°	5687	6973	5506
70°	3178	3626	3178
75°	296	1183	296
80°	0	0	0
85°	0	0	0



TEST NUMBER: P241748

CATALOG NUMBER: PRS410D010-S4M12-44SMDH-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.2	6.4
10°-20°	177.4	17.4
20°-30°	234.6	23.0
30°-40°	228.7	22.4
40°-50°	176.2	17.3
50°-60°	96.3	9.4
60°-70°	35.6	3.5
70°-80°	5.2	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°	477.2	46.8
0°-40°	705.9	69.3
0°-60°	978.4	96.0
0°-90°	1019.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1019.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	689	689	689	689	689	65
15°	630	634	638	635	632	176
25°	506	512	514	514	508	232
35°	362	366	365	369	364	226
45°	224	230	229	231	227	172
55°	91	102	124	103	90	85
65°	31	34	38	34	30	31
75°	1	2	4	2	1	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P241748

CATALOG NUMBER: PRS410D010-S4M12-44SMDH-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	695.4	695.4	695.4	695.4	695.4
2.5°	694.4	693.3	693.3	693.3	693.3
5°	689.3	689.3	689.3	689.3	689.3
7.5°	681.2	681.2	682.2	681.2	681.2
10°	669.1	670.1	671.1	671.1	669.1
12.5°	652.9	654.9	655.9	654.9	652.9
15°	629.6	633.6	637.7	634.6	631.6
17.5°	602.3	607.3	614.4	608.3	604.3
20°	571.9	578.0	584.0	580.0	574.9
22.5°	540.5	545.6	550.6	548.6	541.5
25°	506.1	512.2	514.2	514.2	508.1
27.5°	469.7	476.7	478.8	477.8	473.7
30°	435.2	440.3	441.3	442.3	437.3
32.5°	397.8	402.9	404.9	405.9	400.8
35°	362.4	366.4	365.4	369.4	364.4
37.5°	326.9	331.0	329.0	333.0	330.0
40°	292.5	294.5	294.5	297.6	294.5
42.5°	259.1	261.1	262.2	263.2	261.1
45°	223.7	229.8	228.8	230.8	226.7
47.5°	191.3	196.4	200.4	198.4	192.3
50°	153.9	166.0	173.1	168.0	153.9
52.5°	118.4	132.6	148.8	133.6	118.4
55°	91.1	102.2	124.5	103.2	90.1
57.5°	68.8	77.9	100.2	77.9	68.8
60°	52.6	59.7	75.9	59.7	52.6
62.5°	40.5	45.5	54.7	45.5	40.5
65°	31.4	34.4	38.5	34.4	30.4
67.5°	22.3	25.3	25.3	25.3	22.3
70°	14.2	17.2	16.2	17.2	14.2
72.5°	6.1	9.1	10.1	9.1	6.1
75°	1.0	2.0	4.0	2.0	1.0
77.5°	0.0	1.0	1.0	1.0	1.0
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)