

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: P252980

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252980
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-S4M12-41SWDMB
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1202.2 lumens
Efficiency: N/A
Efficacy: 60.1 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

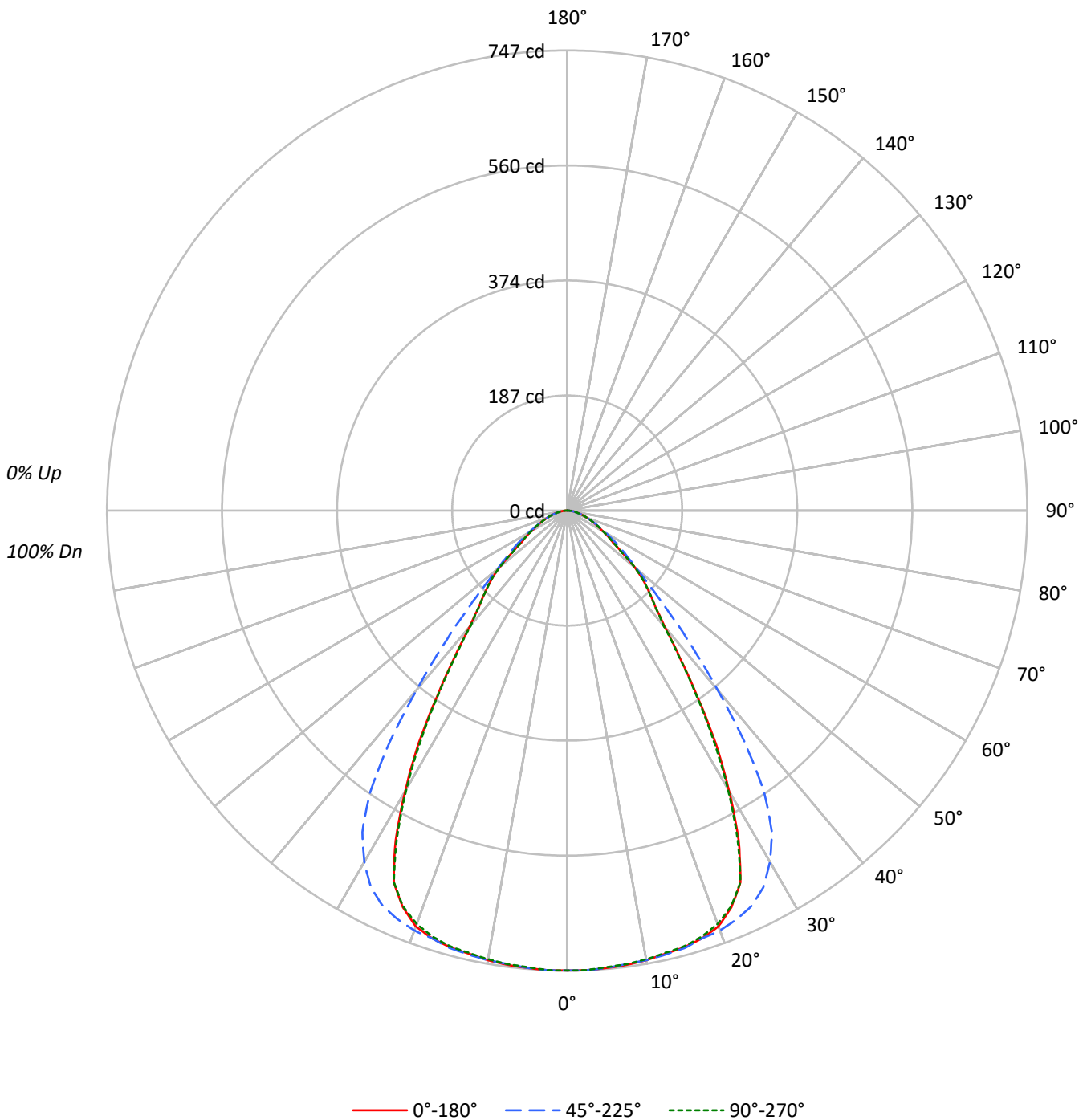
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252980

CATALOG NUMBER: PRS420D010-S4M12-41SWDMB

Luminous Intensity Polar Plot





TEST NUMBER: P252980

CATALOG NUMBER: PRS420D010-S4M12-41SWDMB

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	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°	57155	57155	57155
5°	57266	57266	57158
10°	57594	57594	57485
15°	58157	58276	58046
20°	58510	59088	58159
25°	56223	59820	56223
30°	46517	58201	46137
35°	34424	52103	34153
40°	24590	37950	24301
45°	20481	25254	20481
50°	17112	17612	17112
55°	12144	14052	12344
60°	10242	11099	10242
65°	8766	9020	8766
70°	7632	7632	7632
75°	6743	6743	6743
80°	5642	5642	5642
85°	5006	5006	5006



TEST NUMBER: P252980

CATALOG NUMBER: PRS420D010-S4M12-41SWDMB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.0	5.9
10°-20°	207.4	17.2
20°-30°	309.9	25.8
30°-40°	275.8	22.9
40°-50°	164.1	13.7
50°-60°	93.0	7.7
60°-70°	49.8	4.1
70°-80°	24.4	2.0
80°-90°	6.8	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°	588.2	48.9
0°-40°	864.0	71.9
0°-60°	1121.2	93.3
0°-90°	1202.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1202.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	747	747	747	747	747	
5°	745	745	745	745	744	71
15°	734	734	735	732	732	207
25°	666	684	708	683	666	297
35°	368	431	558	430	366	233
45°	189	203	233	202	189	147
55°	91	101	105	101	92	87
65°	48	50	50	50	48	49
75°	23	23	23	23	23	25
85°	6	6	6	6	6	7
90°	0	0	0	0	0	



TEST NUMBER: P252980

CATALOG NUMBER: PRS420D010-S4M12-41SWDMB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	746.7	746.7	746.7	746.7	746.7
2.5°	746.7	746.7	746.7	746.7	746.7
5°	745.3	745.3	745.3	745.3	743.9
7.5°	743.9	742.5	742.5	742.5	742.5
10°	741.0	741.0	741.0	739.6	739.6
12.5°	736.8	736.8	738.2	736.8	735.4
15°	733.9	733.9	735.4	732.5	732.5
17.5°	728.2	729.7	728.2	728.2	725.4
20°	718.3	722.6	725.4	721.1	714.0
22.5°	696.9	708.3	718.3	706.9	695.5
25°	665.7	684.1	708.3	682.7	665.7
27.5°	603.1	650.0	689.8	645.7	598.8
30°	526.3	583.2	658.5	578.9	522.0
32.5°	449.5	506.4	618.7	503.5	442.3
35°	368.4	431.0	557.6	429.5	365.5
37.5°	300.1	357.0	472.2	354.2	297.3
40°	246.1	290.2	379.8	288.7	243.2
42.5°	211.9	236.1	300.1	234.7	211.9
45°	189.2	203.4	233.3	202.0	189.2
47.5°	167.8	179.2	183.5	177.8	167.8
50°	143.7	156.5	147.9	156.5	143.7
52.5°	113.8	129.4	123.7	130.9	112.4
55°	91.0	101.0	105.3	101.0	92.5
57.5°	79.7	82.5	88.2	82.5	79.7
60°	66.9	69.7	72.5	69.7	66.9
62.5°	56.9	59.7	59.7	59.7	58.3
65°	48.4	49.8	49.8	49.8	48.4
67.5°	41.2	41.2	41.2	41.2	41.2
70°	34.1	34.1	34.1	34.1	34.1
72.5°	28.4	28.4	28.4	28.4	28.4
75°	22.8	22.8	22.8	22.8	22.8
77.5°	18.5	18.5	17.1	18.5	17.1
80°	12.8	12.8	12.8	12.8	12.8
82.5°	10.0	10.0	10.0	10.0	10.0
85°	5.7	5.7	5.7	5.7	5.7
87.5°	2.8	2.8	2.8	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)