

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: P241745

Luminaire Tested: **PRS420D010-S4M12-44SMDH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241745
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: PRS420D010-S4M12-44SMDH
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2156.9 lumens
Efficiency: N/A
Efficacy: 107.8 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

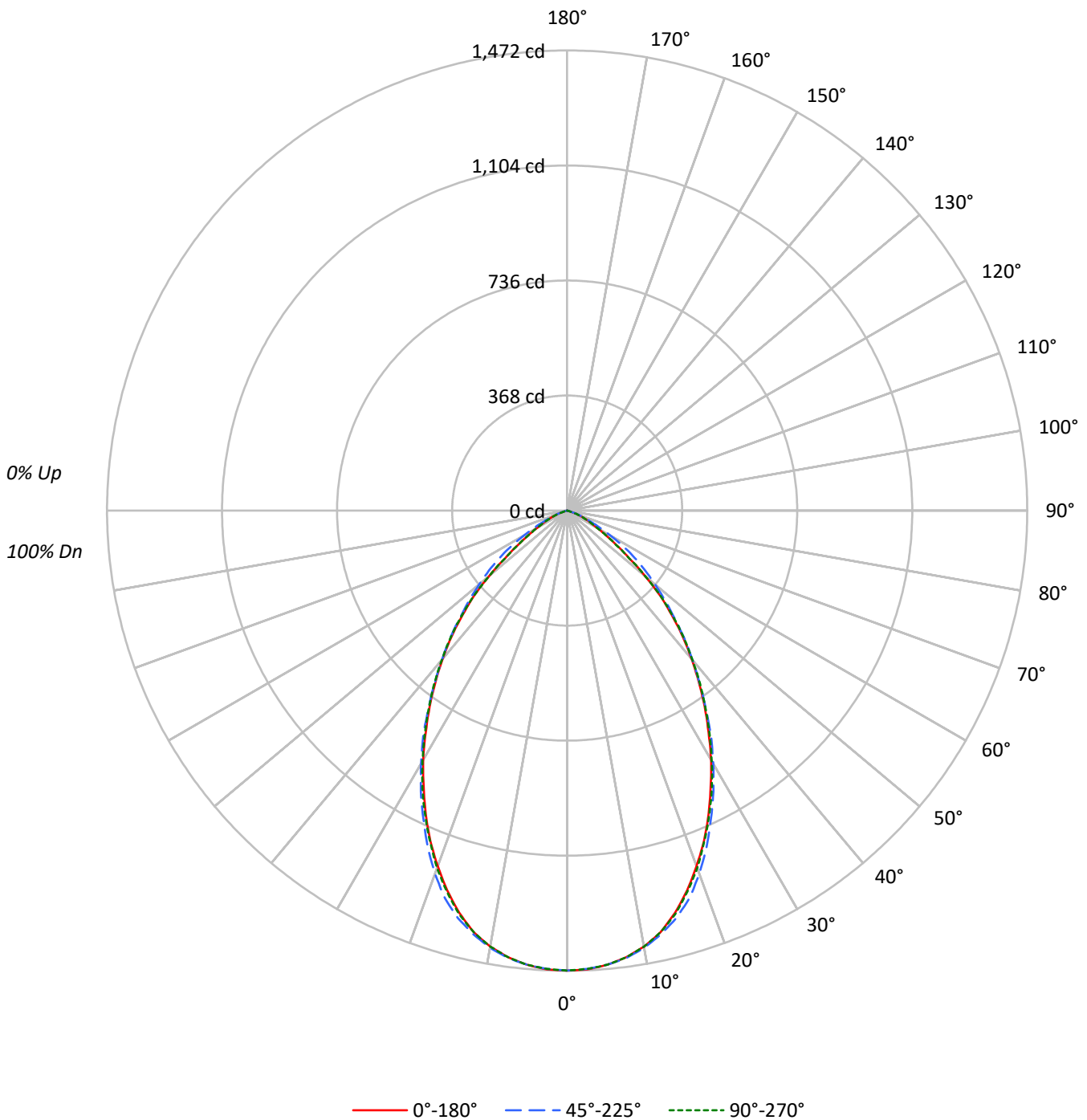
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	106	103	110	107	104	101	102	100	98	99	97	95	95	94	92	91					91			
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81					81			
3	98	90	83	79	96	88	83	78	85	81	77	83	79	75	81	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65					65			
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	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	50	60	54	50	59	54	50	48					48			
8	70	59	51	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44					44			
9	66	55	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	41					41			
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	112641	112641	112641
5°	112080	112080	112080
10°	110050	110384	110050
15°	105576	106939	105917
20°	98578	100679	99107
25°	90453	91905	90816
30°	81411	82542	81791
35°	71652	72259	72053
40°	61851	62280	62280
45°	51245	52403	51938
50°	38773	43619	38773
55°	25729	35164	25435
60°	17054	24601	17054
65°	12026	14743	11646
70°	6714	7676	6714
75°	621	2543	621
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.0	6.4
10°-20°	375.4	17.4
20°-30°	496.6	23.0
30°-40°	483.9	22.4
40°-50°	372.9	17.3
50°-60°	203.8	9.4
60°-70°	75.4	3.5
70°-80°	11.0	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°	1009.9	46.8
0°-40°	1493.8	69.3
0°-60°	2070.5	96.0
0°-90°	2156.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2156.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1472	1472	1472	1472	1472	
5°	1459	1459	1459	1459	1459	138
15°	1332	1341	1350	1343	1337	373
25°	1071	1084	1088	1088	1075	491
35°	767	775	773	782	771	479
45°	473	486	484	488	480	365
55°	193	216	264	218	191	179
65°	66	73	81	73	64	66
75°	2	4	9	4	2	8
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1471.6	1471.6	1471.6	1471.6	1471.6
2.5°	1469.4	1467.3	1467.3	1467.3	1467.3
5°	1458.7	1458.7	1458.7	1458.7	1458.7
7.5°	1441.6	1441.6	1443.7	1441.6	1441.6
10°	1415.9	1418.0	1420.2	1420.2	1415.9
12.5°	1381.6	1385.9	1388.0	1385.9	1381.6
15°	1332.3	1340.9	1349.5	1343.1	1336.6
17.5°	1274.5	1285.2	1300.2	1287.4	1278.8
20°	1210.2	1223.1	1236.0	1227.4	1216.7
22.5°	1143.8	1154.6	1165.3	1161.0	1146.0
25°	1071.0	1083.9	1088.2	1088.2	1075.3
27.5°	993.9	1008.9	1013.2	1011.0	1002.5
30°	921.1	931.8	933.9	936.1	925.4
32.5°	841.8	852.5	856.8	859.0	848.2
35°	766.8	775.4	773.3	781.8	771.1
37.5°	691.9	700.4	696.2	704.7	698.3
40°	619.0	623.3	623.3	629.8	623.3
42.5°	548.4	552.6	554.8	556.9	552.6
45°	473.4	486.2	484.1	488.4	479.8
47.5°	404.8	415.6	424.1	419.8	407.0
50°	325.6	351.3	366.3	355.6	325.6
52.5°	250.6	280.6	314.9	282.7	250.6
55°	192.8	216.3	263.5	218.5	190.6
57.5°	145.7	164.9	212.1	164.9	145.7
60°	111.4	126.4	160.7	126.4	111.4
62.5°	85.7	96.4	115.7	96.4	85.7
65°	66.4	72.8	81.4	72.8	64.3
67.5°	47.1	53.6	53.6	53.6	47.1
70°	30.0	36.4	34.3	36.4	30.0
72.5°	12.9	19.3	21.4	19.3	12.9
75°	2.1	4.3	8.6	4.3	2.1
77.5°	0.0	2.1	2.1	2.1	2.1
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)