

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: P241780

Luminaire Tested: **PRS420D010-S4M12-44SNDC-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241780
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-46)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS420D010-S4M12-44SNDC-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1944.5 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Spacing Criteria (0/90/45): 0.9 / 0.9 / 0.95
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

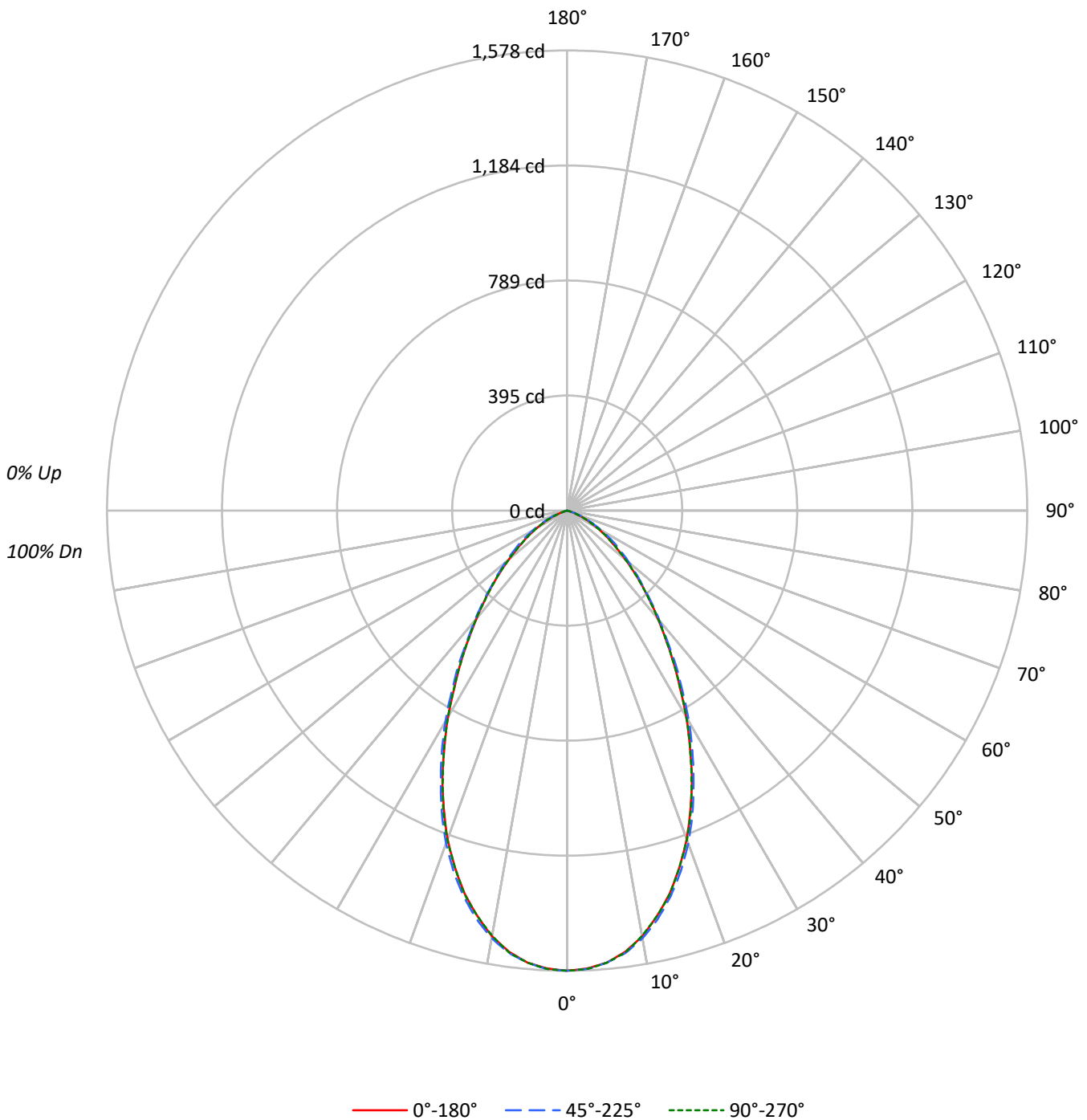
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	102	103	100	98	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	81	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	53	63	57	52	62	56	52	60	55	52	50					50			
8	72	60	53	49	70	60	53	48	59	53	48	57	52	48	56	51	48	46					46			
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43					43			
10	64	53	46	42	63	52	46	42	51	45	41	51	45	41	50	45	41	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	120778	120778	120778
5°	119572	119572	119572
10°	115226	115731	115063
15°	107692	108548	107866
20°	97633	98871	97812
25°	85487	86585	85123
30°	72219	73757	72219
35°	59345	60756	59345
40°	48291	49161	48511
45°	39186	39890	39186
50°	30973	32783	30973
55°	24301	26903	24301
60°	18585	20575	18585
65°	12570	14526	12570
70°	6311	8236	6311
75°	0	1922	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.3	7.5
10°-20°	380.9	19.6
20°-30°	466.5	24.0
30°-40°	404.1	20.8
40°-50°	286.6	14.7
50°-60°	173.3	8.9
60°-70°	77.3	4.0
70°-80°	9.5	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°	993.8	51.1
0°-40°	1397.8	71.9
0°-60°	1857.7	95.5
0°-90°	1944.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1944.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1578	1578	1578	1578	1578	
5°	1556	1556	1556	1556	1556	146
15°	1359	1366	1370	1368	1361	379
25°	1012	1025	1025	1023	1008	462
35°	635	648	650	646	635	398
45°	362	371	368	373	362	281
55°	182	191	202	193	182	165
65°	69	78	80	78	69	70
75°	0	2	6	2	0	6
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°	1577.9	1577.9	1577.9	1577.9	1577.9
2.5°	1571.4	1571.4	1573.6	1573.6	1573.6
5°	1556.2	1556.2	1556.2	1556.2	1556.2
7.5°	1525.9	1525.9	1530.2	1528.1	1528.1
10°	1482.5	1482.5	1489.0	1484.7	1480.4
12.5°	1424.0	1430.5	1434.9	1430.5	1424.0
15°	1359.0	1365.5	1369.8	1367.7	1361.2
17.5°	1281.0	1291.8	1296.1	1291.8	1281.0
20°	1198.6	1207.3	1213.8	1207.3	1200.8
22.5°	1105.4	1116.2	1122.7	1116.2	1109.7
25°	1012.2	1025.2	1025.2	1023.0	1007.9
27.5°	910.3	925.5	929.8	925.5	912.5
30°	817.1	828.0	834.5	828.0	817.1
32.5°	719.6	734.8	736.9	734.8	721.8
35°	635.1	648.1	650.2	645.9	635.1
37.5°	554.9	567.9	563.5	567.9	554.9
40°	483.3	494.2	492.0	494.2	485.5
42.5°	420.5	429.2	427.0	429.2	418.3
45°	362.0	370.6	368.5	372.8	362.0
47.5°	309.9	318.6	320.8	318.6	309.9
50°	260.1	273.1	275.3	273.1	260.1
52.5°	216.7	227.6	236.3	229.8	216.7
55°	182.1	190.7	201.6	192.9	182.1
57.5°	149.6	158.2	166.9	160.4	149.6
60°	121.4	130.0	134.4	130.0	121.4
62.5°	93.2	104.0	106.2	104.0	93.2
65°	69.4	78.0	80.2	78.0	69.4
67.5°	47.7	56.4	56.4	56.4	47.7
70°	28.2	34.7	36.8	36.8	28.2
72.5°	10.8	17.3	19.5	17.3	13.0
75°	0.0	2.2	6.5	2.2	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
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)