

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: P31210

Luminaire Tested: **PD8H242E-82HC_26DTT**

Issue Date: 03/03/2020



Test Information

Test Method: LM-79-08
Report Number: P31210
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PD8H242E-82HC_26DTT
Description: HALO 8-INCH APERTURE OPEN DOWNLIGHT, HORIZONTAL LAMP WITH SPECULAR CLEAR TRIM.
Light Source: (2) SYLVANIA FOUR PIN G24Q-3 BASE QUAD DTT CFL LAMP 4100K CF26DD/E/841 26 WATTS
Ballast/Driver: (1) PHILIPS ADVANCE ELECTRONIC BALLAST ICF-2S42-90C-M2-LD

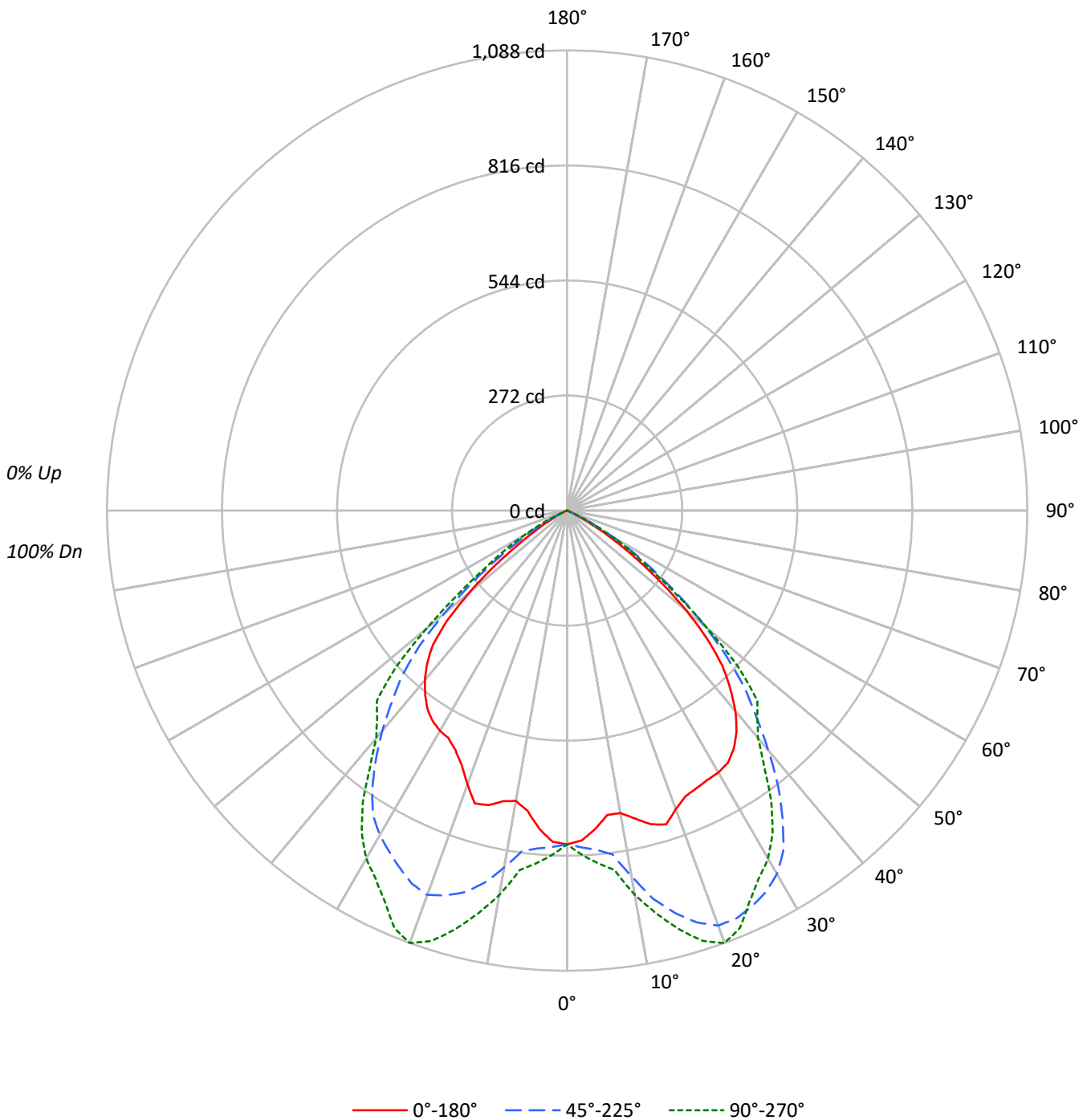
Summary

Lumens per Lamp: 1710 (2 lamps)
Luminaire Lumens: 1911.9 lumens
Efficiency: 55.9%
Efficacy: 40.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.51 / 1.43
Luminous Opening: Vertical Cylinder (Dia: 0.69' x H: 0.1')
CIE Type: Direct

Input Watts (W): 47.1
Input Voltage (V): 120.03
Input Current (A_{in}): 0.3931
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	67	67	67	67	65	65	65	65	62	62	62	59	59	59	57	57	57	56
1	63	61	59	57	61	59	58	57	57	56	55	55	54	53	53	52	52	51
2	58	55	52	50	57	54	51	49	52	50	48	50	49	47	49	47	46	45
3	54	50	46	43	53	49	46	43	47	44	42	46	43	41	45	43	41	40
4	50	45	41	38	49	44	41	38	43	40	37	42	39	37	41	38	36	35
5	47	41	37	34	46	40	36	33	39	36	33	38	35	33	37	35	32	31
6	44	37	33	30	43	37	33	30	36	32	30	35	32	29	34	31	29	28
7	41	34	30	27	40	34	30	27	33	29	27	32	29	26	31	28	26	25
8	38	31	27	24	37	31	27	24	30	27	24	30	26	24	29	26	24	23
9	36	29	25	22	35	28	25	22	28	24	22	27	24	22	27	24	22	21
10	33	27	23	20	33	26	23	20	26	22	20	25	22	20	25	22	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	22878	22878	22878
5°	21654	23974	21625
10°	20700	26317	19873
15°	21964	29314	20620
20°	21710	31452	19918
25°	21322	30039	18406
30°	21627	28735	18179
35°	21526	26383	18017
40°	20279	22998	17134
45°	17957	22005	15535
50°	13599	16001	11123
55°	8156	9435	5797
60°	3600	5313	2327
65°	884	1473	835
70°	112	169	112
75°	66	66	66
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	77.2	4.0	2.3	0°	789	789	789	789	789	
10°-20°	260.1	13.6	7.6	5°	756	805	837	802	755	71
20°-30°	422.1	22.1	12.3	15°	768	985	1025	934	721	215
30°-40°	490.6	25.7	14.3	25°	724	1033	1020	934	625	336
40°-50°	423.6	22.2	12.4	35°	687	888	842	803	575	426
50°-60°	203.7	10.7	6.0	45°	519	593	636	551	449	391
60°-70°	33.4	1.7	1.0	55°	204	257	236	210	145	187
70°-80°	1.1	0.1	0.0	65°	18	24	30	26	17	26
80°-90°	0.0	0.0	0.0	75°	1	1	1	1	1	1
90°-100°	0.0	0.0	0.0	85°	0	0	0	0	0	0
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	759.5	39.7	22.2							
0°-40°	1250.0	65.4	36.6							
0°-60°	1877.4	98.2	54.9							
0°-90°	1911.9	100.0	55.9							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	1911.9	100.0	55.9							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	789	789	789	789	789	789	789	789	789
2.5°	781	781	797	808	815	808	796	783	784
5°	756	772	805	829	837	827	802	772	755
7.5°	726	760	820	854	857	846	811	753	716
10°	726	775	878	919	923	901	857	749	697
12.5°	746	811	940	974	976	951	901	771	704
15°	768	846	985	1029	1025	998	934	798	721
17.5°	778	864	1021	1079	1067	1032	954	811	726
20°	751	864	1044	1107	1088	1050	967	799	689
22.5°	731	851	1044	1098	1068	1033	956	766	651
25°	724	848	1033	1065	1020	995	934	746	625
27.5°	718	851	1017	1024	981	958	910	736	607
30°	715	847	992	988	950	923	886	725	601
32.5°	707	828	952	944	904	881	854	709	591
35°	687	788	888	878	842	824	803	678	575
37.5°	658	739	819	806	766	764	743	639	551
40°	619	679	740	730	702	696	680	595	523
42.5°	571	616	662	662	665	637	613	546	490
45°	519	548	593	608	636	595	551	493	449
47.5°	449	475	512	534	552	522	473	422	384
50°	368	391	426	441	433	421	380	331	301
52.5°	282	303	340	331	325	320	291	241	221
55°	204	228	257	244	236	229	210	167	145
57.5°	135	162	186	175	176	164	140	112	90
60°	82	102	123	119	121	113	90	69	53
62.5°	45	55	65	69	71	70	53	41	33
65°	18	20	24	28	30	30	26	19	17
67.5°	3	3	4	4	4	4	4	4	4
70°	2	2	2	2	3	3	2	2	2
72.5°	1	1	1	2	2	2	2	1	1
75°	1	1	1	1	1	1	1	1	1
77.5°	0	0	0	1	1	1	1	1	1
80°	0	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0

(END OF REPORT)