

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: P31215

Luminaire Tested: **PD8H242E-82H1GC\_26DTT**

Issue Date: 03/03/2020



**Test Information**

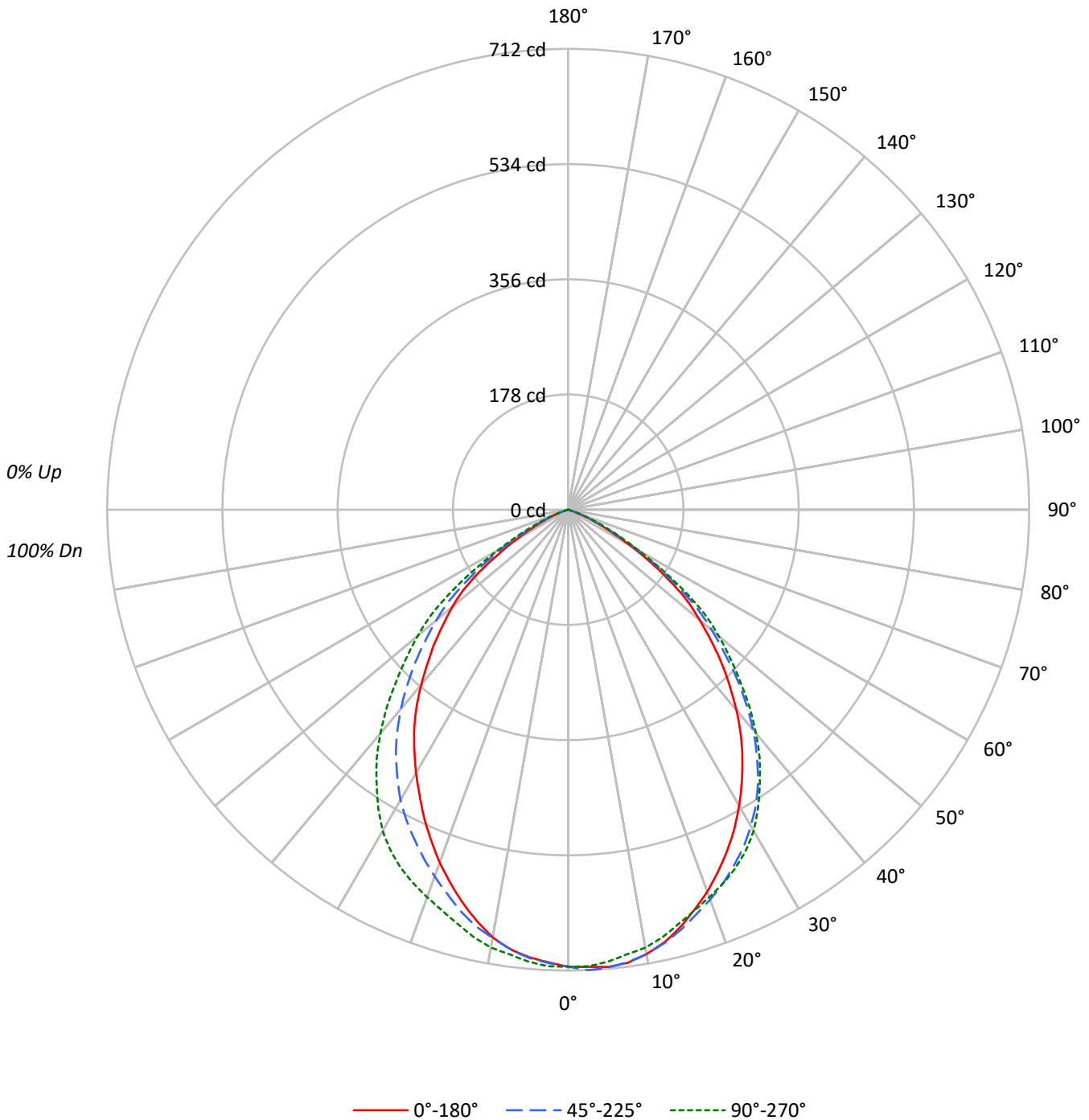
Test Method: LM-79-08  
Report Number: P31215  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PD8H242E-82H1GC\_26DTT  
Description: HALO 8-INCH APERTURE OPEN DOWNLIGHT, HORIZONTAL LAMP,  
PRISMATIC GLASS LENS 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: 1323.6 lumens  
Efficiency: 38.7%  
Efficacy: 30.7 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.2 / 1.23  
Luminous Opening: Vertical Cylinder (Dia: 0.7' x H: 0.1')  
CIE Type: Direct  
  
Input Watts (W): 43.1  
Input Voltage (V): 120.03  
Input Current (Ain): 0.3598  
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									
RC	80									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	46	46	46	46	45	45	45	45	43	43	43	41	41	41	39	39	39	39	39	39	39	39	39	39													
1	43	42	41	40	42	41	40	39	39	38	38	38	37	37	37	37	36	35	35	35	35	35	35	35													
2	40	38	36	34	39	37	35	34	36	34	33	34	33	32	33	32	31	31	31	31	31	31	31	31													
3	37	34	31	29	36	33	31	29	32	30	29	31	30	28	30	29	28	28	28	28	28	28	28	28													
4	35	31	28	26	34	30	28	26	29	27	25	28	26	25	28	26	25	25	25	25	25	25	25	25													
5	32	28	25	23	31	27	25	23	27	24	22	26	24	22	25	23	22	22	22	22	22	22	22	22													
6	30	25	22	20	29	25	22	20	24	22	20	24	21	20	23	21	20	20	20	20	20	20	20	20													
7	28	23	20	18	27	23	20	18	22	20	18	22	20	18	21	19	18	18	18	18	18	18	18	18													
8	26	21	18	16	25	21	18	16	21	18	16	20	18	16	20	18	16	16	16	16	16	16	16	16													
9	24	20	17	15	24	19	17	15	19	17	15	19	16	15	18	16	15	15	15	15	15	15	15	15													
10	23	18	15	14	22	18	15	14	18	15	14	17	15	13	17	15	13	13	13	13	13	13	13	13													

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	19864	19864	19864
5°	19711	19488	19294
10°	19293	19016	18573
15°	18551	18385	17468
20°	17633	17886	16285
25°	16623	17482	15050
30°	15520	16842	13815
35°	14285	15716	12640
40°	12869	14366	11244
45°	11273	12653	9826
50°	9528	10930	8414
55°	7433	8523	6499
60°	4704	5345	3977
65°	2345	2871	2058
70°	712	986	877
75°	65	65	65
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°	66.5	5.0	1.9	0°	706	706	706	706	706	
10°-20°	184.7	14.0	5.4	5°	709	710	701	695	694	67
20°-30°	268.1	20.3	7.8	15°	668	672	662	642	629	188
30°-40°	300.6	22.7	8.8	25°	581	606	611	562	526	267
40°-50°	267.3	20.2	7.8	35°	469	511	516	464	415	292
50°-60°	175.9	13.3	5.1	45°	335	368	376	334	292	257
60°-70°	56.8	4.3	1.7	55°	191	206	219	190	167	169
70°-80°	3.7	0.3	0.1	65°	49	55	60	51	43	53
80°-90°	0.0	0.0	0.0	75°	1	1	1	1	1	3
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°	519.3	39.2	15.2							
0°-40°	819.9	61.9	24.0							
0°-60°	1263.1	95.4	36.9							
0°-90°	1323.6	100.0	38.7							
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°	1323.6	100.0	38.7							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	706	706	706	706	706	706	706	706	706
2.5°	707	711	712	708	706	704	701	702	700
5°	709	712	710	704	701	698	695	695	694
7.5°	706	708	705	697	693	688	685	686	685
10°	697	699	697	692	687	679	672	672	671
12.5°	685	686	686	681	676	668	659	654	651
15°	668	671	672	668	662	653	642	634	629
17.5°	648	653	656	654	649	636	622	611	605
20°	628	633	641	642	637	622	603	586	580
22.5°	605	610	625	629	625	608	583	560	553
25°	581	588	606	615	611	592	562	533	526
27.5°	556	565	587	598	594	575	541	508	497
30°	528	540	564	577	573	553	518	482	470
32.5°	499	511	540	552	546	525	491	455	442
35°	469	482	511	523	516	497	464	425	415
37.5°	438	449	479	491	486	466	434	397	385
40°	404	415	444	455	451	432	402	366	353
42.5°	369	381	407	417	415	397	368	336	321
45°	335	344	368	378	376	359	334	304	292
47.5°	299	309	327	337	339	322	299	273	261
50°	265	274	290	301	304	287	266	243	234
52.5°	233	238	252	263	267	251	233	212	204
55°	191	196	206	215	219	207	190	174	167
57.5°	150	154	163	169	169	162	149	134	127
60°	110	114	121	125	125	120	110	98	93
62.5°	76	79	86	88	89	85	78	68	64
65°	49	52	55	58	60	57	51	45	43
67.5°	29	30	33	36	38	37	32	28	28
70°	13	13	15	17	18	18	17	16	16
72.5°	3	3	4	4	5	5	5	5	4
75°	1	1	1	1	1	1	1	1	1
77.5°	1	1	1	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)