

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: P31424

Luminaire Tested: **PD8H142E-82H1GC\_26DTT**

Issue Date: 03/03/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P31424  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PD8H142E-82H1GC\_26DTT  
Description: HALO 8-INCH APERTURE LENSED DOWNLIGHT, HORIZONTAL LAMP.  
PRISMATIC GLASS LENS WITH SPECULAR CLEAR TRIM.  
Light Source: (1) SYLVANIA G24Q- SINGLE END FOUR PIN BASE DTT CFL LAMP  
4100K  
CF26DD/E/IN/841 26 WATTS  
Ballast/Driver: (1) SYLVANIA ELECTRONIC BALLAST  
SYLVANIA QTP2x26CF/UNV DM

**Summary**

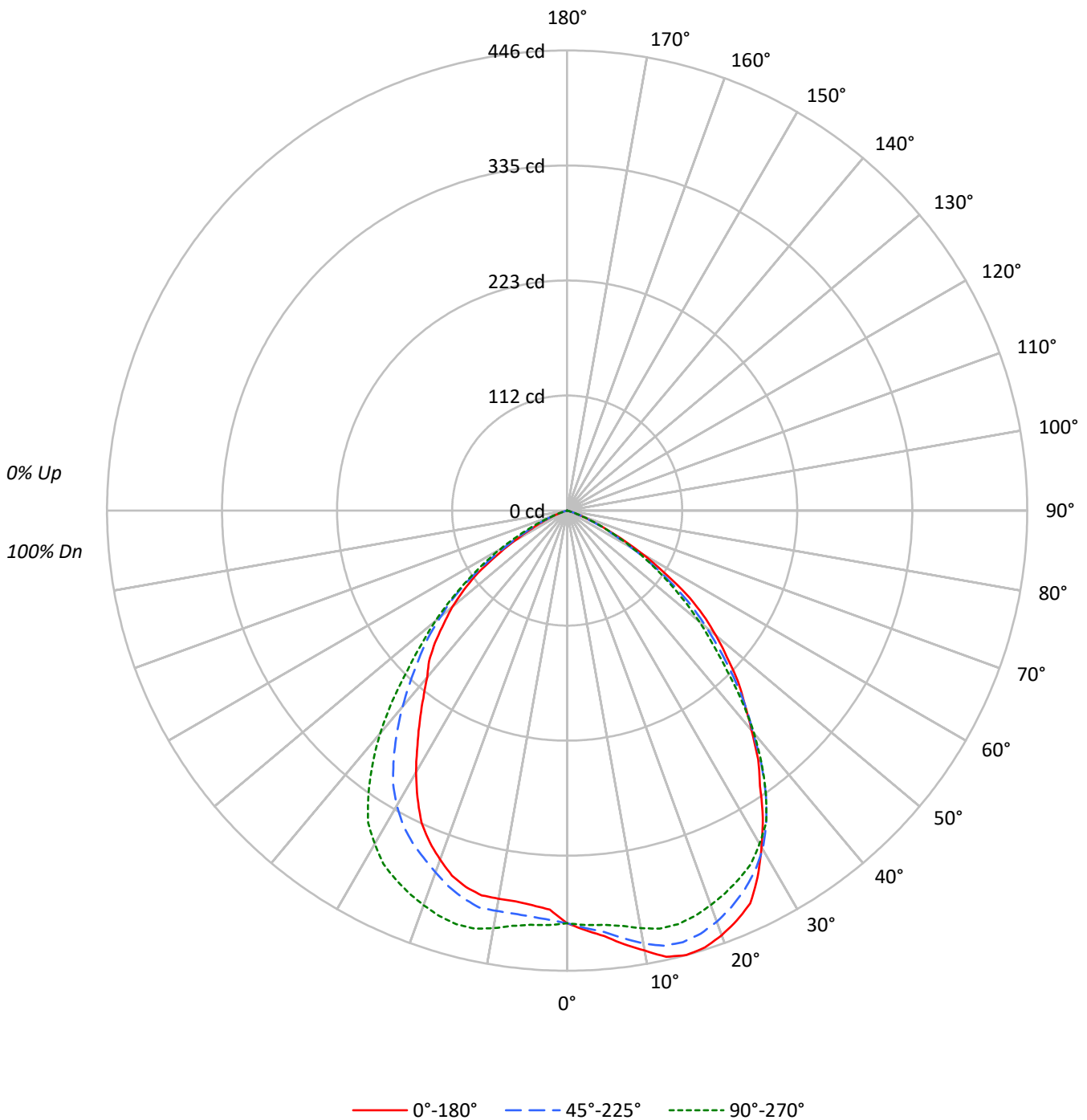
Lumens per Lamp: 1710 (1 lamp)  
Luminaire Lumens: 834.8 lumens  
Efficiency: 48.8%  
Efficacy: 36.3 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.34 / 1.28  
Luminous Opening: Vertical Cylinder (Dia: 0.7' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 23  
Input Voltage (V): 120.06  
Input Current (A<sub>in</sub>): 0.19227  
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: P31424

CATALOG NUMBER: PD8H142E-82H1GC\_26DTT

### Luminous Intensity Polar Plot





TEST NUMBER: P31424

CATALOG NUMBER: PD8H142E-82H1GC\_26DTT

**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	58	58	58	58	57	57	57	57	54	54	54	52	52	52	50	50	50	49
1	55	53	51	50	53	52	50	49	50	49	48	48	47	46	46	45	45	44
2	51	48	45	43	50	47	44	42	45	43	41	44	42	40	42	41	40	39
3	47	43	40	37	46	42	39	37	41	38	36	39	37	36	38	37	35	34
4	44	39	35	32	43	38	35	32	37	34	32	36	33	31	35	33	31	30
5	40	35	31	29	40	35	31	28	34	31	28	33	30	28	32	30	28	27
6	38	32	28	25	37	32	28	25	31	28	25	30	27	25	29	27	25	24
7	35	29	26	23	34	29	25	23	28	25	23	28	25	22	27	24	22	21
8	33	27	23	21	32	27	23	21	26	23	20	25	23	20	25	22	20	19
9	31	25	21	19	30	25	21	19	24	21	19	24	21	19	23	20	18	18
10	29	23	19	17	28	23	19	17	22	19	17	22	19	17	21	19	17	16

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

	0°	90°	180°
0°	11255	11255	11255
5°	11509	11204	10675
10°	11986	11377	10574
15°	12386	11525	10498
20°	12298	11428	10108
25°	12017	11273	9556
30°	11081	10964	8612
35°	9929	10234	7584
40°	8855	8983	6721
45°	7875	7370	6091
50°	6760	6005	5214
55°	5487	4592	4125
60°	3635	3207	2523
65°	1818	1818	1292
70°	548	658	548
75°	65	65	65
80°	0	0	0
85°	0	0	0



TEST NUMBER: P31424

CATALOG NUMBER: PD8H142E-82H1GC\_26DTT

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	38.6	4.6	2.3	0°	400	400	400	400	400	
10°-20°	116.0	13.9	6.8	5°	414	410	403	395	384	40
20°-30°	175.5	21.0	10.3	15°	446	433	415	389	378	125
30°-40°	194.5	23.3	11.4	25°	420	406	394	355	334	191
40°-50°	165.0	19.8	9.6	35°	326	336	336	293	249	205
50°-60°	106.5	12.8	6.2	45°	234	228	219	203	181	179
60°-70°	36.1	4.3	2.1	55°	141	125	118	114	106	123
70°-80°	2.6	0.3	0.1	65°	38	35	38	33	27	41
80°-90°	0.0	0.0	0.0	75°	1	1	1	1	1	2
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°	330.1	39.5	19.3							
0°-40°	524.6	62.8	30.7							
0°-60°	796.1	95.4	46.6							
0°-90°	834.8	100.0	48.8							
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°	834.8	100.0	48.8							



TEST NUMBER: P31424

CATALOG NUMBER: PD8H142E-82H1GC\_26DTT

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	400	400	400	400	400	400	400	400	400
2.5°	407	405	405	403	402	398	397	395	387
5°	414	412	410	406	403	397	395	392	384
7.5°	424	420	418	411	406	398	394	390	382
10°	433	430	426	418	411	401	394	389	382
12.5°	443	438	432	424	415	403	394	390	382
15°	446	440	433	423	415	400	389	385	378
17.5°	444	439	430	421	412	397	382	377	371
20°	438	433	424	416	407	390	373	367	360
22.5°	430	422	416	409	401	384	364	354	348
25°	420	409	406	401	394	376	355	340	334
27.5°	400	393	394	392	386	368	344	324	314
30°	377	376	379	380	373	357	330	305	293
32.5°	353	352	359	360	359	340	314	284	270
35°	326	328	336	340	336	319	293	263	249
37.5°	304	305	309	313	310	295	271	243	229
40°	278	276	280	283	282	266	248	224	211
42.5°	255	254	255	250	251	238	225	205	198
45°	234	229	228	225	219	213	203	187	181
47.5°	210	208	201	195	191	188	183	170	162
50°	188	183	176	169	167	166	160	152	145
52.5°	166	160	152	147	142	142	139	133	126
55°	141	135	125	120	118	115	114	109	106
57.5°	110	105	98	97	96	93	89	82	81
60°	85	77	72	75	75	71	65	60	59
62.5°	59	54	52	55	55	51	47	42	41
65°	38	36	35	37	38	36	33	27	27
67.5°	22	21	22	23	23	22	21	18	18
70°	10	9	10	12	12	11	12	10	10
72.5°	3	3	3	3	4	4	4	3	4
75°	1	1	1	1	1	1	1	1	1
77.5°	0	0	0	0	0	0	0	0	0
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)