

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: P31418

Luminaire Tested: **PD8H142E-82HC_26TTT**

Issue Date: 03/03/2020



Test Information

Test Method: LM-79-08
Report Number: P31418
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PD8H142E-82HC_26TTT
Description: HALO 8-INCH APERTURE OPEN DOWNLIGHT, HORIZONTAL LAMP,
SPECULAR CLEAR TRIM.
Light Source: (1) SYLVANIA GX24Q-3 SINGLE END FOUR PIN BASE TTT CFL LAMP
3500K
CF26DT/E/IN/835 26 WATTS
Ballast/Driver: (1) SYLVANIA ELECTRONIC BALLAST
SYLVANIA QTP2x26CF/UNV DM

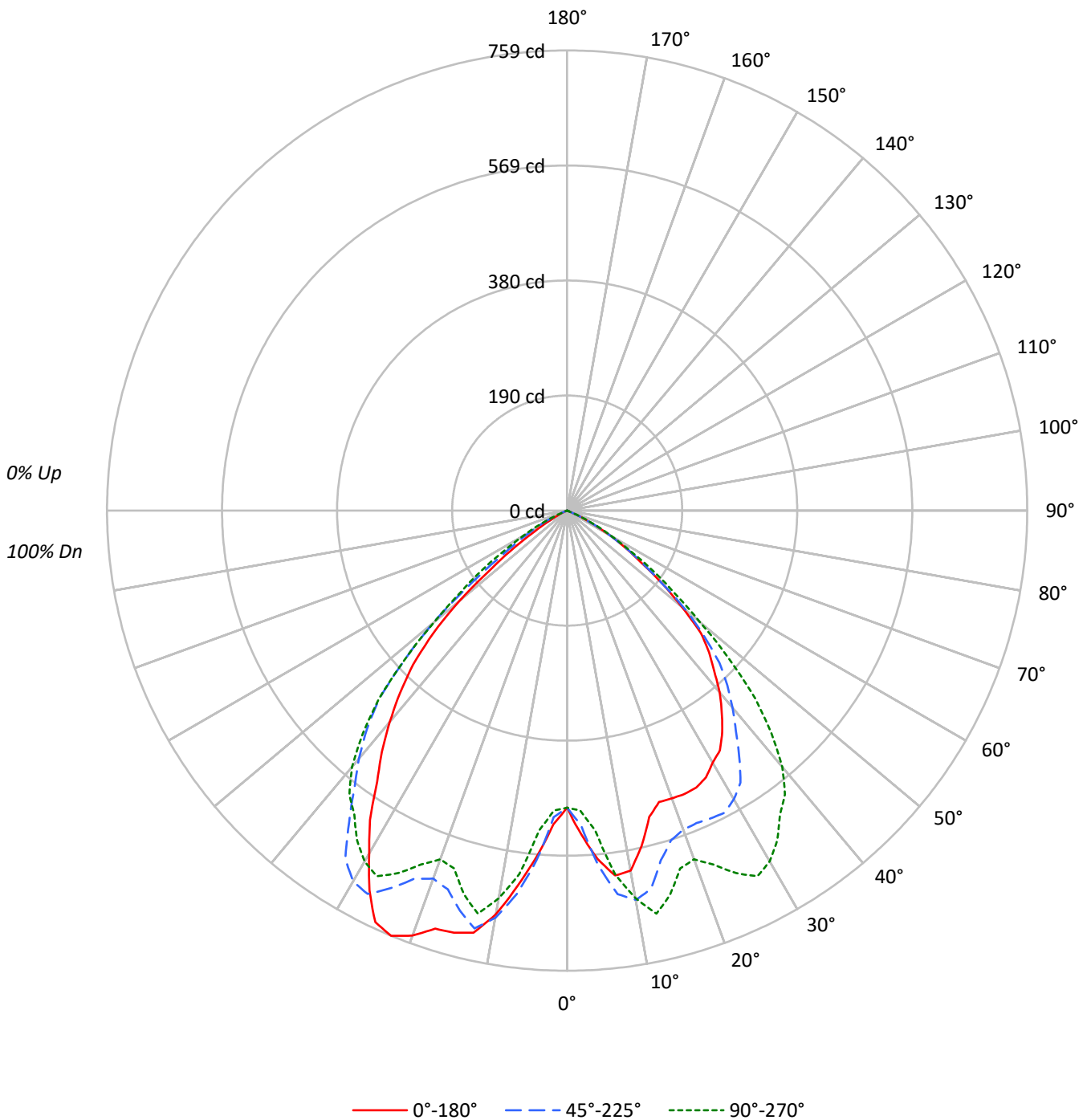
Summary

Lumens per Lamp: 1800 (1 lamp)
Luminaire Lumens: 1341.1 lumens
Efficiency: 74.5%
Efficacy: 48.4 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 1.69 / 1.47
Luminous Opening: Vertical Cylinder (Dia: 0.7' x H: 0.1')
CIE Type: Direct

Input Watts (W): 27.7
Input Voltage (V): 120.06
Input Current (A_{in}): 0.2314
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	89	89	89	89	87	87	87	87	83	83	83	79	79	79	76	76	76	75					75			
1	83	81	79	77	82	79	77	75	76	75	73	73	72	71	71	70	69					67				
2	78	73	69	66	76	72	68	65	69	66	64	67	65	63	65	63	61					60				
3	72	66	61	58	71	65	61	57	63	59	56	61	58	55	59	57	54					53				
4	67	60	55	51	66	59	54	50	57	53	50	56	52	49	54	51	48					47				
5	62	54	49	45	61	54	48	45	52	48	44	51	47	44	50	46	43					42				
6	58	50	44	40	57	49	44	40	48	43	39	47	42	39	45	42	39					37				
7	54	45	40	36	53	45	39	36	44	39	35	43	38	35	42	38	35					34				
8	51	42	36	32	50	41	36	32	40	35	32	39	35	32	39	35	32					30				
9	47	38	33	29	46	38	33	29	37	32	29	36	32	29	36	32	29					28				
10	44	36	30	27	44	35	30	27	35	30	27	34	29	26	33	29	26					25				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	13787	13787	13787
5°	16041	14706	15902
10°	16691	17965	18712
15°	14525	18218	20023
20°	14179	17184	20946
25°	14420	18884	21430
30°	14109	19635	19194
35°	13584	18640	16630
40°	12455	17583	14493
45°	11139	14773	12081
50°	8881	10283	8342
55°	5721	6693	4086
60°	3421	3635	1454
65°	1053	1244	431
70°	110	110	110
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°	57.1	4.3	3.2	0°	490	490	490	490	490	
10°-20°	180.7	13.5	10.0	5°	577	587	529	579	572	56
20°-30°	292.2	21.8	16.2	15°	523	597	656	683	721	151
30°-40°	349.6	26.1	19.4	25°	504	560	660	687	749	231
40°-50°	296.4	22.1	16.5	35°	446	495	612	627	546	277
50°-60°	137.9	10.3	7.7	45°	331	355	439	437	359	252
60°-70°	26.4	2.0	1.5	55°	147	153	172	140	105	138
70°-80°	0.8	0.1	0.0	65°	22	22	26	23	9	28
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°	530.0	39.5	29.4							
0°-40°	879.6	65.6	48.9							
0°-60°	1313.9	98.0	73.0							
0°-90°	1341.1	100.0	74.5							
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°	1341.1	100.0	74.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	490	490	490	490	490	490	490	490	490
2.5°	535	533	519	504	495	502	506	515	518
5°	577	585	587	559	529	553	579	581	572
7.5°	607	609	638	616	605	617	638	636	624
10°	603	619	652	654	649	664	682	687	676
12.5°	567	600	639	667	681	692	706	720	713
15°	523	557	597	633	656	666	683	725	721
17.5°	504	534	570	601	619	632	655	720	723
20°	505	530	560	593	612	622	646	718	746
22.5°	506	531	558	607	632	644	657	726	759
25°	504	532	560	620	660	678	687	732	749
27.5°	496	527	562	630	680	714	713	714	706
30°	480	515	550	615	668	708	706	678	653
32.5°	469	498	532	589	645	677	681	634	605
35°	446	470	495	558	612	634	627	583	546
37.5°	419	437	457	528	590	603	576	533	502
40°	391	405	424	496	552	576	534	479	455
42.5°	359	372	391	443	499	524	489	432	408
45°	331	341	355	392	439	453	437	383	359
47.5°	299	301	306	328	363	375	362	325	300
50°	247	248	256	266	286	287	289	250	232
52.5°	198	193	197	208	222	216	208	178	157
55°	147	146	153	159	172	166	140	117	105
57.5°	113	112	114	120	123	119	98	73	62
60°	80	79	80	81	85	86	68	46	34
62.5°	47	47	48	50	56	57	47	30	19
65°	22	21	22	24	26	26	23	17	9
67.5°	4	3	3	3	4	3	3	3	3
70°	2	2	2	2	2	2	2	2	2
72.5°	1	1	1	1	1	1	1	1	1
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)