

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: P31417

Luminaire Tested: **PD8H142E-82HC_26DTT**

Issue Date: 03/03/2020



Test Information

Test Method: LM-79-08
Report Number: P31417
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PD8H142E-82HC_26DTT
Description: HALO 8-INCH APERTURE OPEN DOWNLIGHT, HORIZONTAL LAMP,
SPECULAR CLEAR TRIM.
Light Source: (1) SYLVANIA G24Q-3 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

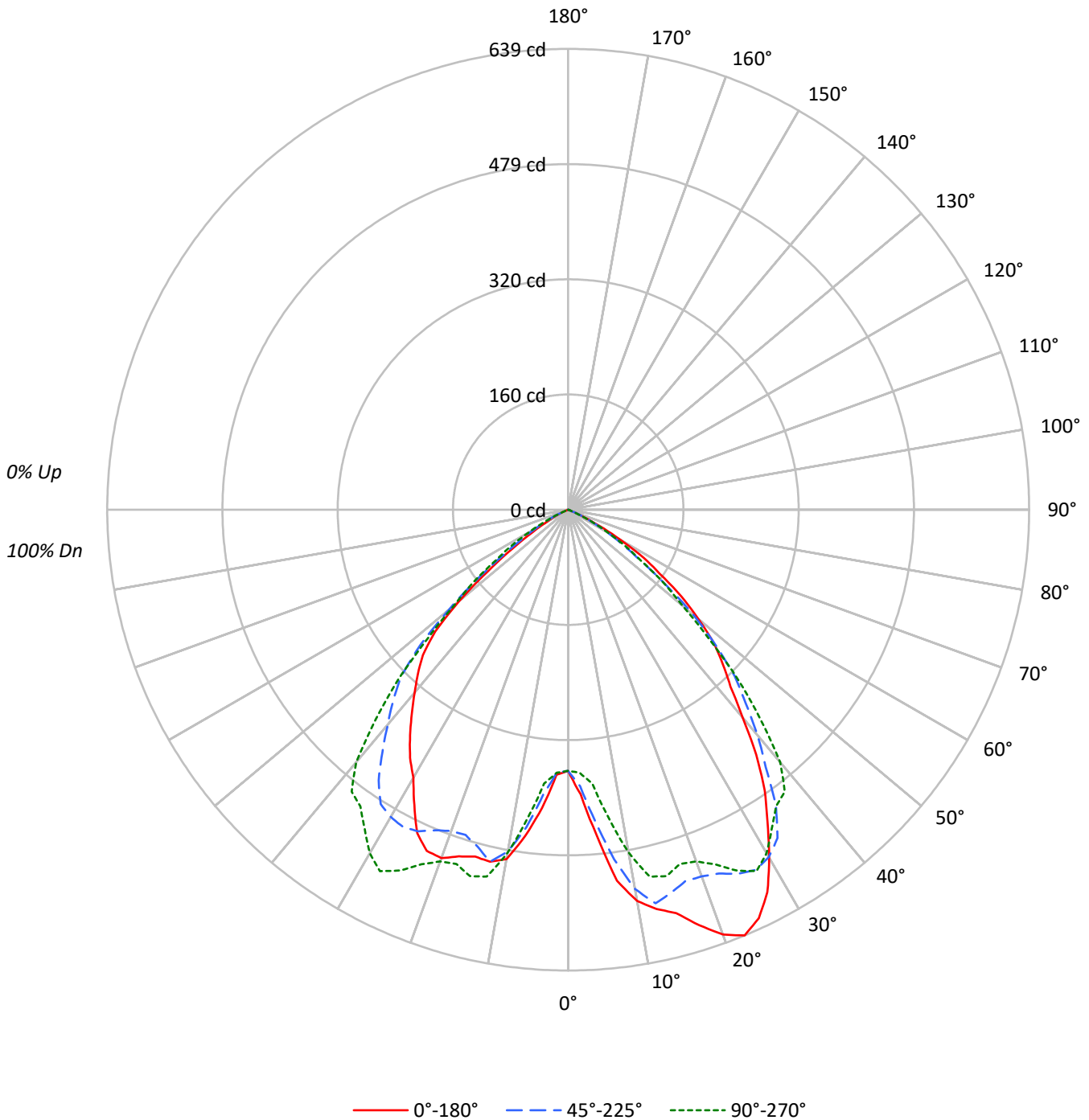
Summary

Lumens per Lamp: 1710 (1 lamp)
Luminaire Lumens: 1109.1 lumens
Efficiency: 64.9%
Efficacy: 45.1 lumens/watt
Spacing Criteria (0/90/45): 1.59 / 1.75 / 1.52
Luminous Opening: Vertical Cylinder (Dia: 0.7' x H: 0.1')
CIE Type: Direct

Input Watts (W): 24.6
Input Voltage (V): 120.06
Input Current (A_{in}): 0.20568
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	77	77	77	77	75	75	75	75	72	72	72		69	69	69		66	66	66	65
1	73	70	68	67	71	69	67	66	66	65	64		64	63	62		62	61	60	59
2	68	64	60	58	66	63	59	57	60	58	56		58	56	54		56	55	53	52
3	63	58	53	50	62	57	53	50	55	52	49		53	50	48		52	49	47	46
4	58	52	48	44	57	51	47	44	50	46	43		48	45	43		47	44	42	41
5	54	47	43	39	53	47	42	39	45	41	38		44	41	38		43	40	38	36
6	51	43	38	35	49	43	38	35	42	37	34		40	37	34		40	36	34	33
7	47	39	35	31	46	39	34	31	38	34	31		37	33	31		36	33	30	29
8	44	36	31	28	43	36	31	28	35	31	28		34	30	28		34	30	27	26
9	41	33	29	25	40	33	28	25	32	28	25		32	28	25		31	28	25	24
10	39	31	26	23	38	31	26	23	30	26	23		29	26	23		29	25	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	10185	10185	10185
5°	12594	10592	11537
10°	15252	13370	13619
15°	16080	14608	13830
20°	17605	14572	14432
25°	17882	15793	14163
30°	16372	16166	12610
35°	14467	15290	11635
40°	11977	14557	10544
45°	10197	11206	9591
50°	8450	7407	7083
55°	6032	4787	3697
60°	3549	2737	1582
65°	909	909	670
70°	55	110	55
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°	42.5	3.8	2.5	0°	362	362	362	362	362	
10°-20°	148.4	13.4	8.7	5°	453	434	381	396	415	47
20°-30°	246.7	22.2	14.4	15°	579	550	526	484	498	167
30°-40°	293.2	26.4	17.1	25°	625	557	552	492	495	283
40°-50°	242.6	21.9	14.2	35°	475	502	502	458	382	294
50°-60°	113.1	10.2	6.6	45°	303	326	333	328	285	234
60°-70°	21.8	2.0	1.3	55°	155	120	123	109	95	141
70°-80°	0.7	0.1	0.0	65°	19	19	19	18	14	27
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°	437.6	39.5	25.6							
0°-40°	730.9	65.9	42.7							
0°-60°	1086.6	98.0	63.5							
0°-90°	1109.1	100.0	64.9							
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°	1109.1	100.0	64.9							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	362	362	362	362	362	362	362	362	362
2.5°	395	391	384	373	365	363	365	370	368
5°	453	452	434	398	381	378	396	415	415
7.5°	519	511	489	455	432	430	444	458	456
10°	551	563	534	504	483	471	481	500	492
12.5°	567	581	559	539	521	506	500	511	500
15°	579	578	550	538	526	507	484	498	498
17.5°	604	576	540	523	515	498	473	485	504
20°	627	575	541	525	519	502	474	480	514
22.5°	639	581	546	536	532	514	481	483	512
25°	625	585	557	555	552	529	492	480	495
27.5°	598	574	563	571	565	540	496	465	462
30°	557	551	556	564	550	534	492	445	429
32.5°	514	526	540	538	525	516	484	431	408
35°	475	485	502	503	502	491	458	406	382
37.5°	428	442	450	472	493	462	423	377	356
40°	376	397	408	441	457	435	389	347	331
42.5°	333	347	364	398	395	389	359	324	308
45°	303	314	326	338	333	334	328	300	285
47.5°	274	280	276	270	264	275	278	262	250
50°	235	234	225	212	206	211	216	204	197
52.5°	198	184	169	160	166	160	161	147	140
55°	155	144	120	122	123	122	109	100	95
57.5°	124	107	87	90	94	90	75	63	60
60°	83	76	61	64	64	61	52	42	37
62.5°	49	46	38	39	39	42	35	28	25
65°	19	19	19	18	19	19	18	15	14
67.5°	3	2	3	3	4	3	3	2	3
70°	1	1	1	2	2	2	2	1	1
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)