

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: P31411

Luminaire Tested: **PD6H142E-62H1GC_42TTT**

Issue Date: 03/03/2020



Test Information

Test Method: LM-79-08
Report Number: P31411
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PD6H142E-62H1GC_42TTT
Description: HALO 6-INCH APERTURE LENSED DOWNLIGHT, HORIZONTAL LAMP,
PRISMATIC GLASS LENS WITH SPECULAR CLEAR TRIM.
Light Source: (1) SYLVANIA GX24Q-4 SINGLE END FOUR PIN BASE TTT CFL LAMP
3500K
CF42DT/E/IN/835 42 WATTS
Ballast/Driver: (1) SYLVANIA ELECTRONIC BALLAST
SYLVANIA QTP2x26CF/UNV DM

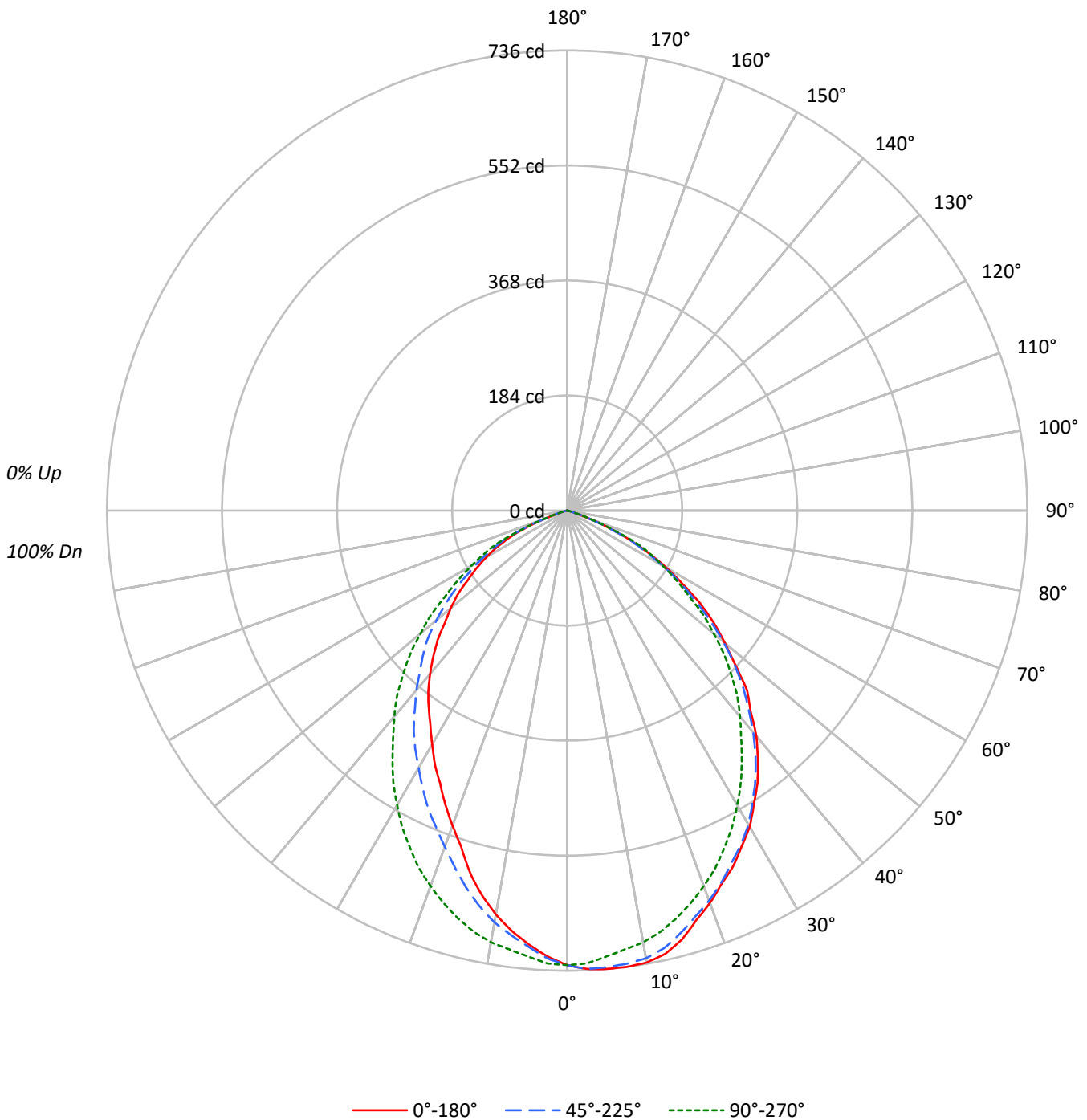
Summary

Lumens per Lamp: 3200 (1 lamp)
Luminaire Lumens: 1415.4 lumens
Efficiency: 44.2%
Efficacy: 31.7 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.13 / 1.21
Luminous Opening: Vertical Cylinder (Dia: 0.54' x H: 0.1')
CIE Type: Direct

Input Watts (W): 44.7
Input Voltage (V): 120.04
Input Current (A_{in}): 0.3724
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	0																
RCR																																					
0	53	53	53	53	51	51	51	51	49	49	49	47	47	47	45	45	45	44																			
1	49	48	46	45	48	47	45	44	45	44	43	43	42	41	41	41	40	39																			
2	46	43	40	38	44	42	39	38	40	38	37	39	37	36	38	36	35	34																			
3	42	38	35	33	41	37	35	32	36	34	32	35	33	31	34	32	31	30																			
4	39	34	31	28	38	34	30	28	33	30	28	32	29	27	31	29	27	26																			
5	36	31	27	25	35	30	27	25	30	27	24	29	26	24	28	26	24	23																			
6	33	28	25	22	33	28	24	22	27	24	22	26	24	22	26	23	21	21																			
7	31	26	22	20	30	25	22	20	25	22	19	24	21	19	23	21	19	18																			
8	29	24	20	18	28	23	20	18	23	20	18	22	19	17	22	19	17	17																			
9	27	22	18	16	27	21	18	16	21	18	16	21	18	16	20	18	16	15																			
10	26	20	17	15	25	20	17	15	19	17	15	19	16	15	19	16	14	14																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	33959	33959	33959
5°	33815	32896	32023
10°	33429	31926	29877
15°	32300	30708	27296
20°	30588	29260	24544
25°	29170	27637	22342
30°	27735	25835	20516
35°	26000	23846	18900
40°	23988	21900	17367
45°	21769	19843	15671
50°	18676	17371	13794
55°	15913	14450	11828
60°	12216	11751	9892
65°	8083	8892	7422
70°	3070	3402	2821
75°	288	385	385
80°	115	115	115
85°	0	0	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	67.8	4.8	2.1	0°	727	727	727	727	727	
10°-20°	186.4	13.2	5.8	5°	736	733	716	701	697	70
20°-30°	264.3	18.7	8.3	15°	710	700	675	624	600	199
30°-40°	295.4	20.9	9.2	25°	628	622	595	526	481	289
40°-50°	276.9	19.6	8.7	35°	531	525	487	428	386	331
50°-60°	208.4	14.7	6.5	45°	407	397	371	326	293	309
60°-70°	105.1	7.4	3.3	55°	261	249	237	217	194	230
70°-80°	10.6	0.8	0.3	65°	110	110	121	112	101	108
80°-90°	0.4	0.0	0.0	75°	3	4	4	4	4	10
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°	518.6	36.6	16.2							
0°-40°	814.0	57.5	25.4							
0°-60°	1299.2	91.8	40.6							
0°-90°	1415.4	100.0	44.2							
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°	1415.4	100.0	44.2							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	727	727	727	727	727	727	727	727	727
2.5°	734	737	734	730	725	720	717	715	714
5°	736	738	733	726	716	708	701	695	697
7.5°	736	737	731	721	708	695	685	677	678
10°	734	734	727	716	701	684	669	657	656
12.5°	726	726	717	706	690	670	648	633	630
15°	710	708	700	691	675	651	624	606	600
17.5°	687	689	681	674	658	629	598	574	564
20°	668	669	664	656	639	607	572	546	536
22.5°	646	647	644	636	619	585	548	519	509
25°	628	627	622	616	595	564	526	491	481
27.5°	605	605	602	592	571	541	500	466	458
30°	584	580	580	566	544	513	475	440	432
32.5°	556	553	552	539	517	484	452	418	407
35°	531	527	525	512	487	455	428	395	386
37.5°	501	496	495	480	457	430	400	369	365
40°	471	467	463	449	430	402	375	348	341
42.5°	434	434	429	417	403	376	348	325	317
45°	407	403	397	386	371	351	326	301	293
47.5°	364	366	362	351	341	322	302	279	265
50°	329	331	326	315	306	294	273	253	243
52.5°	296	295	287	278	275	261	245	228	221
55°	261	257	249	245	237	229	217	203	194
57.5°	219	219	213	208	207	200	188	178	172
60°	184	181	177	171	177	171	162	154	149
62.5°	146	144	139	141	150	144	137	128	127
65°	110	113	110	113	121	117	112	103	101
67.5°	72	69	67	73	74	75	75	71	69
70°	37	33	36	38	41	38	37	35	34
72.5°	14	14	16	16	18	16	17	16	16
75°	3	3	4	4	4	4	4	4	4
77.5°	2	2	2	2	2	2	2	2	2
80°	1	1	1	1	1	1	1	1	1
82.5°	1	1	1	1	1	1	1	1	1
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)