

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: P31413

Luminaire Tested: **PD6H142E-62HC_42TTT**

Issue Date: 03/03/2020



Test Information

Test Method: LM-79-08
Report Number: P31413
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PD6H142E-62HC_42TTT
Description: HALO 6-INCH APERTURE OPEN DOWNLIGHT, HORIZONTAL LAMP,
SPECULAR CLEAR TRIM, AND SLOTS COVERED.
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

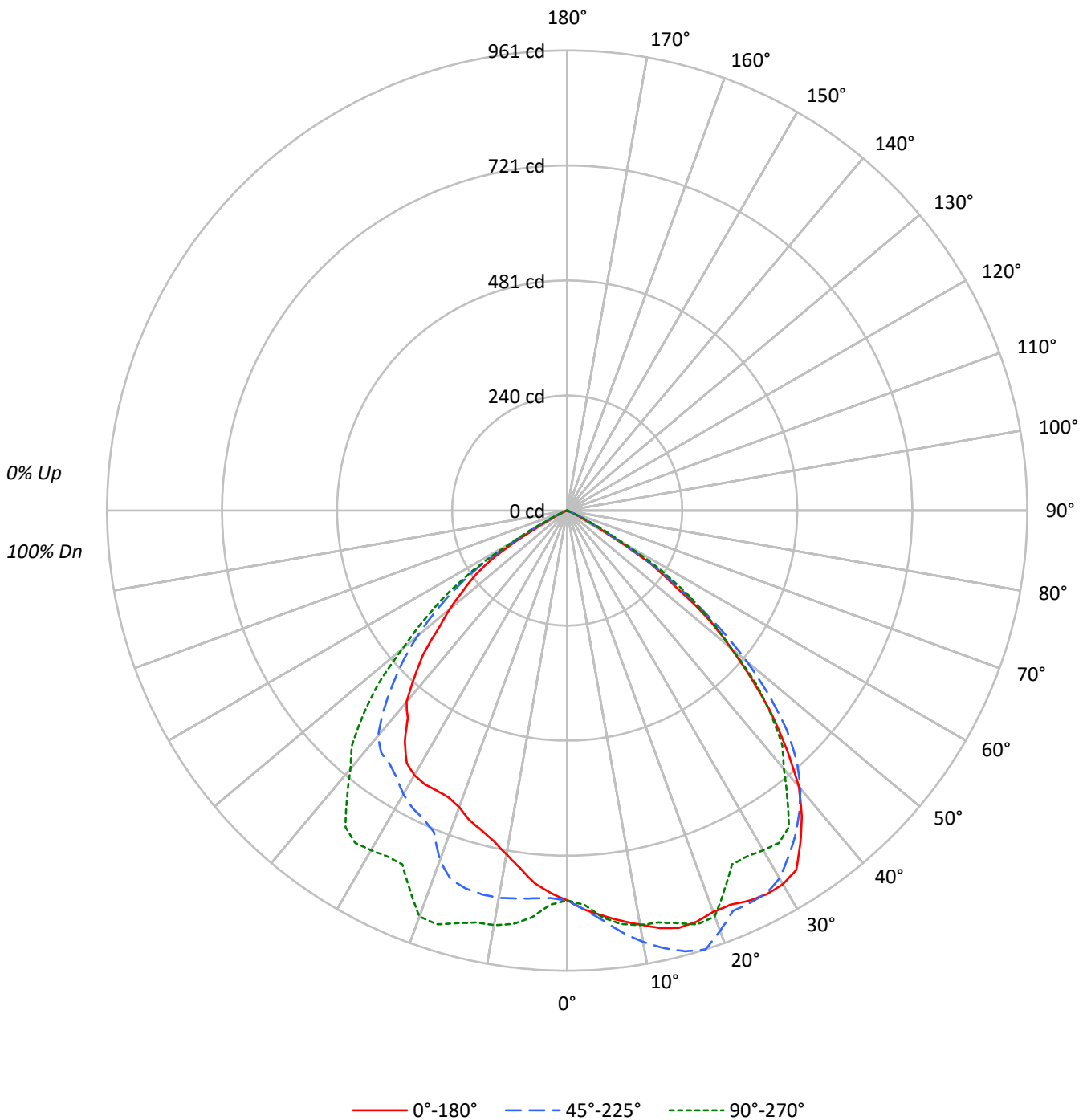
Summary

Lumens per Lamp: 3200 (1 lamp)
Luminaire Lumens: 1890.2 lumens
Efficiency: 59.1%
Efficacy: 41.5 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.47 / 1.43
Luminous Opening: Vertical Cylinder (Dia: 0.53' x H: 0.1')
CIE Type: Direct

Input Watts (W): 45.5
Input Voltage (V): 120.04
Input Current (A_{in}): 0.37933
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	70	70	70	70	69	69	69	69	66	66	66	63	63	63	60	60	60	59
1	66	64	62	60	65	63	61	59	60	59	58	58	57	56	56	55	54	53
2	61	58	55	52	60	57	54	51	55	52	50	53	51	49	51	50	48	47
3	57	52	48	45	56	51	48	45	49	46	44	48	45	43	47	44	42	41
4	53	47	43	39	52	46	42	39	45	41	39	44	41	38	42	40	38	37
5	49	42	38	35	48	42	38	34	41	37	34	40	36	34	39	36	33	32
6	45	39	34	31	44	38	34	31	37	33	30	36	33	30	35	32	30	29
7	42	35	31	27	41	35	30	27	34	30	27	33	30	27	32	29	27	26
8	39	32	28	25	39	32	28	25	31	27	24	30	27	24	30	27	24	23
9	37	30	25	22	36	29	25	22	29	25	22	28	25	22	28	24	22	21
10	35	27	23	20	34	27	23	20	27	23	20	26	23	20	26	22	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	39528	39528	39528
5°	40535	40726	37289
10°	41538	41586	34489
15°	42610	42138	32643
20°	42397	42873	31323
25°	43327	39278	31085
30°	44380	40341	31426
35°	43097	40965	30001
40°	39741	37155	27550
45°	33626	33349	23544
50°	26208	26384	18804
55°	17345	19553	14633
60°	6657	9197	5971
65°	1366	1973	1138
70°	257	257	342
75°	198	198	198
80°	119	119	119
85°	0	0	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	80.3	4.2	2.5	0°	814	814	814	814	814	
10°-20°	244.2	12.9	7.6	5°	849	859	853	813	781	82
20°-30°	374.6	19.8	11.7	15°	902	953	892	817	691	254
30°-40°	465.8	24.6	14.6	25°	899	904	815	710	645	416
40°-50°	434.1	23.0	13.6	35°	849	830	807	646	591	527
50°-60°	252.8	13.4	7.9	45°	607	649	602	516	425	464
60°-70°	36.2	1.9	1.1	55°	275	299	310	285	232	250
70°-80°	2.0	0.1	0.1	65°	18	22	26	29	15	28
80°-90°	0.2	0.0	0.0	75°	2	2	2	2	2	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°	699.1	37.0	21.8							
0°-40°	1164.9	61.6	36.4							
0°-60°	1851.8	98.0	57.9							
0°-90°	1890.2	100.0	59.1							
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°	1890.2	100.0	59.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	814	814	814	814	814	814	814	814	814
2.5°	834	830	834	830	824	818	810	803	799
5°	849	852	859	860	853	834	813	792	781
7.5°	864	870	889	888	871	849	817	777	753
10°	878	891	915	907	879	857	821	763	729
12.5°	893	915	936	916	881	856	821	750	707
15°	902	937	953	927	892	862	817	739	691
17.5°	900	943	961	940	906	864	808	726	678
20°	892	936	934	934	902	854	777	705	659
22.5°	891	937	905	891	858	804	727	690	648
25°	899	933	904	859	815	762	710	677	645
27.5°	903	925	901	853	814	750	700	659	644
30°	901	906	887	855	819	748	684	638	638
32.5°	890	878	859	856	823	755	662	611	624
35°	849	843	830	833	807	739	646	585	591
37.5°	805	803	796	793	755	712	638	561	547
40°	753	754	758	751	704	667	614	531	522
42.5°	680	688	710	707	665	629	568	486	472
45°	607	620	649	635	602	569	516	440	425
47.5°	525	548	573	562	534	506	465	395	364
50°	446	470	489	472	449	441	409	350	320
52.5°	372	384	398	382	379	366	347	299	273
55°	275	297	299	299	310	306	285	254	232
57.5°	207	212	212	224	235	241	219	191	178
60°	97	113	115	125	134	141	123	101	87
62.5°	44	50	58	68	70	70	63	48	37
65°	18	17	22	25	26	31	29	22	15
67.5°	5	5	5	5	5	7	8	7	6
70°	3	3	3	3	3	4	4	4	4
72.5°	2	2	2	2	2	2	3	3	3
75°	2	2	2	2	2	2	2	2	2
77.5°	1	1	1	1	1	1	1	1	2
80°	1	1	1	1	1	1	1	1	1
82.5°	0	0	0	0	0	0	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)