

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: P31193

Luminaire Tested: **PD6H118E-62HC_18DTT**

Issue Date: 03/03/2020



Test Information

Test Method: LM-79-08
Report Number: P31193
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PD6H118E-62HC_18DTT
Description: HALO 6 INCH APERTURE RECESSED CFL OPEN DOWNLIGHT FIXTURE,
HORIZONTAL LAMP, SPECULAR CLEAR REFLECTOR
Light Source: (1) GE G24Q-2 FOUR PIN QUAD CFL LAMP
F18DBX/830/4P 18 WATTS
Ballast/Driver: (1) UNIVERSAL ELECTRONIC BALLAST
C218UNVBE

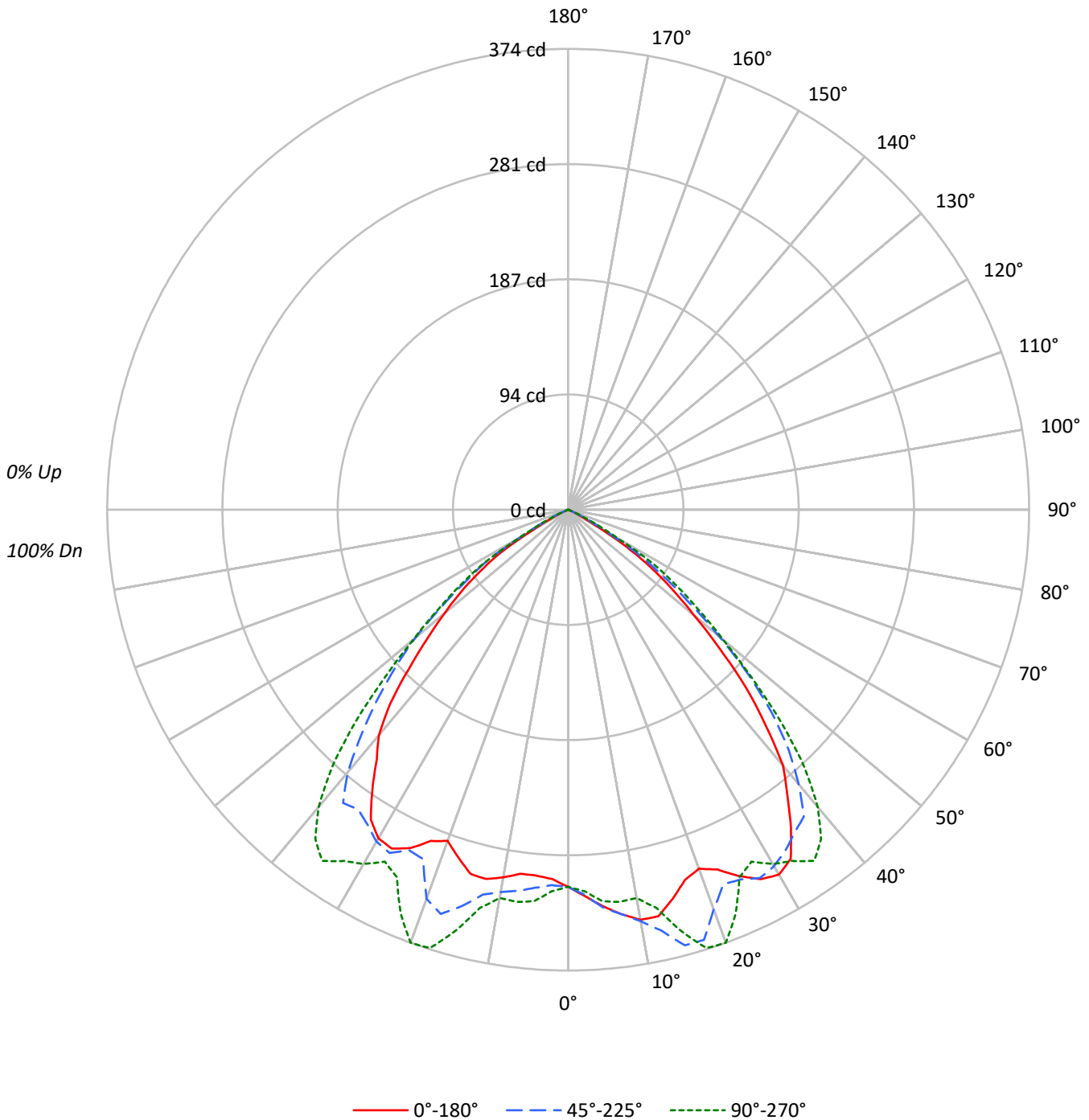
Summary

Lumens per Lamp: 1200 (1 lamp)
Luminaire Lumens: 742.9 lumens
Efficiency: 61.9%
Efficacy: 35.0 lumens/watt
Spacing Criteria (0/90/45): 1.45 / 1.61 / 1.44
Luminous Opening: Vertical Cylinder (Dia: 0.56' x H: 0.1')
CIE Type: Direct

Input Watts (W): 21.2
Input Voltage (V): 120.03
Input Current (Ain): 0.1773
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: P31193
CATALOG NUMBER: PD6H118E-62HC_18DTT

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	74	74	74	74	72	72	72	72	69	69	69	66	66	66	63	63	63	62
1	69	67	65	63	68	66	64	62	63	62	61	61	60	59	59	58	57	56
2	65	61	57	55	63	60	57	54	57	55	53	56	53	52	54	52	51	49
3	60	55	51	48	59	54	50	47	52	49	46	50	48	46	49	47	45	44
4	56	49	45	42	54	49	45	41	47	44	41	46	43	40	45	42	40	39
5	52	45	40	37	50	44	40	36	43	39	36	42	38	36	41	38	35	34
6	48	41	36	33	47	40	36	32	39	35	32	38	35	32	37	34	32	31
7	45	37	32	29	44	37	32	29	36	32	29	35	31	29	34	31	28	27
8	42	34	29	26	41	34	29	26	33	29	26	32	29	26	32	28	26	25
9	39	31	27	24	38	31	27	24	30	26	24	30	26	23	29	26	23	22
10	37	29	25	22	36	29	24	22	28	24	21	28	24	21	27	24	21	20

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	13254	13254	13254
5°	13771	13601	12705
10°	14296	13534	12815
15°	13825	14967	12937
20°	13202	15927	12180
25°	14179	14223	13099
30°	15128	14686	13624
35°	14378	15884	12643
40°	12877	14968	11357
45°	10190	12238	9141
50°	7058	8703	6952
55°	4680	6106	4965
60°	1618	2925	2054
65°	345	759	483
70°	78	78	78
75°	91	91	91
80°	0	0	0
85°	0	0	0



TEST NUMBER: P31193

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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	30.4	4.1	2.5	0°	306	306	306	306	306	
10°-20°	96.4	13.0	8.0	5°	323	324	319	308	298	31
20°-30°	150.2	20.2	12.5	15°	327	366	354	333	306	92
30°-40°	195.2	26.3	16.3	25°	328	331	329	305	303	152
40°-50°	170.3	22.9	14.2	35°	315	320	348	297	277	195
50°-60°	86.8	11.7	7.2	45°	204	234	245	220	183	155
60°-70°	12.9	1.7	1.1	55°	82	94	107	101	87	72
70°-80°	0.7	0.1	0.1	65°	5	8	11	12	7	8
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°	277.0	37.3	23.1							
0°-40°	472.2	63.6	39.3							
0°-60°	729.4	98.2	60.8							
0°-90°	742.9	100.0	61.9							
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°	742.9	100.0	61.9							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	306	306	306	306	306	306	306	306	306
2.5°	314	314	313	313	310	307	305	302	300
5°	323	326	324	324	319	314	308	303	298
7.5°	331	332	331	328	321	317	312	304	298
10°	338	342	339	332	320	315	315	307	303
12.5°	338	353	350	343	331	324	320	316	307
15°	327	353	366	363	354	344	333	328	306
17.5°	315	335	366	376	373	362	344	319	296
20°	310	326	345	369	374	364	336	302	286
22.5°	316	329	329	349	355	344	307	298	291
25°	328	333	331	330	329	320	305	299	303
27.5°	338	334	337	328	322	318	314	296	310
30°	342	331	334	335	332	327	311	291	308
32.5°	336	327	328	332	338	330	303	287	298
35°	315	316	320	331	348	329	297	278	277
37.5°	292	300	314	331	337	329	300	266	255
40°	271	274	291	315	315	307	278	249	239
42.5°	237	243	265	283	284	273	249	220	214
45°	204	212	234	246	245	237	220	193	183
47.5°	166	179	199	207	202	202	191	170	155
50°	133	146	160	166	164	164	162	146	131
52.5°	107	115	123	127	133	133	130	121	110
55°	82	89	94	100	107	107	101	94	87
57.5°	56	62	68	76	82	84	80	70	66
60°	26	30	38	44	47	50	46	38	33
62.5°	11	14	20	23	26	27	25	18	17
65°	5	6	8	9	11	12	12	9	7
67.5°	2	2	2	2	2	2	3	3	2
70°	1	1	1	1	1	1	1	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	1
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)