

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: P31220

Luminaire Tested: **PD6H218E-62HC_18DTT**

Issue Date: 03/03/2020



Test Information

Test Method: LM-79-08
Report Number: P31220
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PD6H218E-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

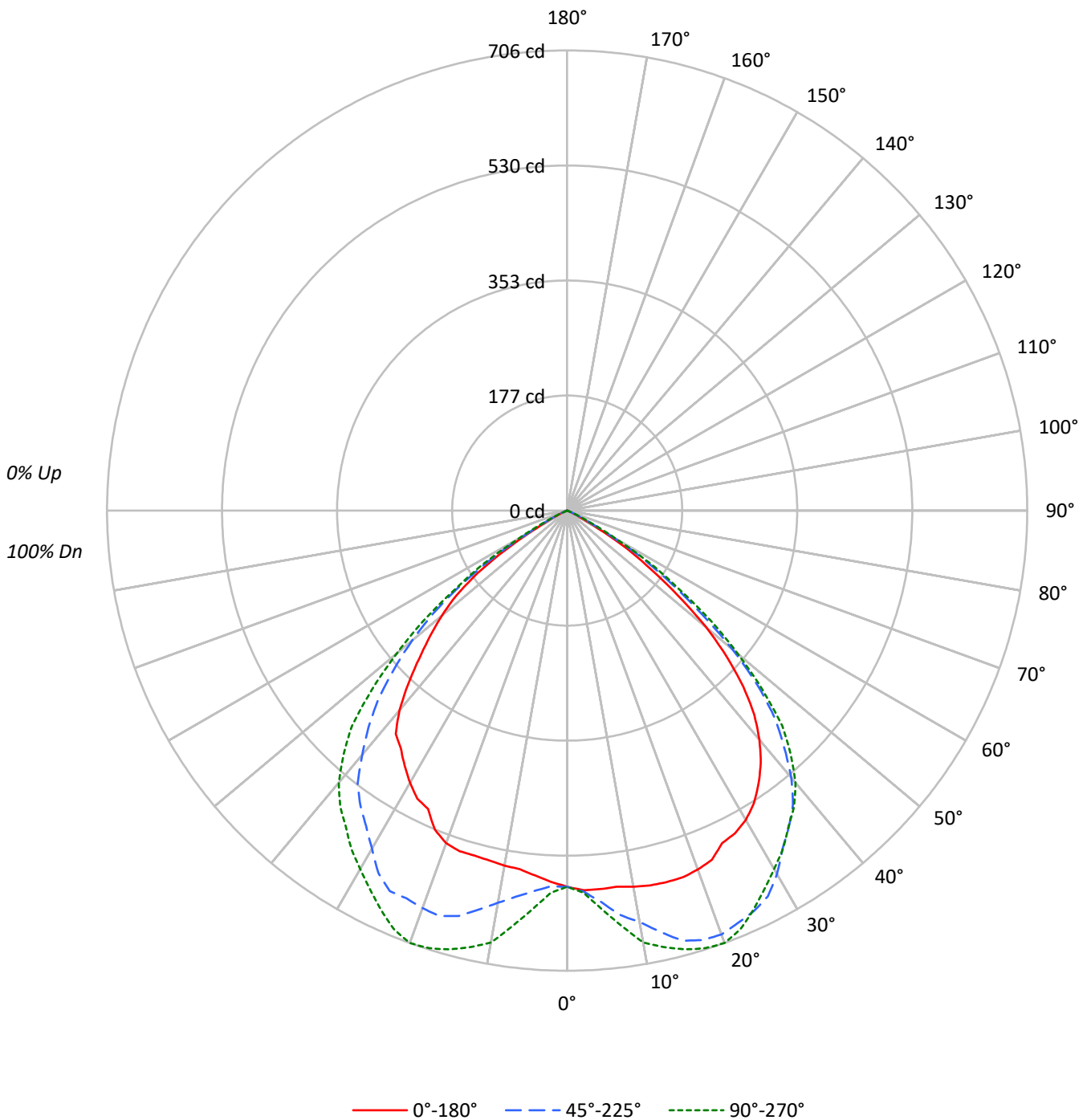
Lumens per Lamp: 1200 (2 lamps)
Luminaire Lumens: 1393.7 lumens
Efficiency: 58.1%
Efficacy: 34.6 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.52 / 1.44
Luminous Opening: Vertical Cylinder (Dia: 0.52' x H: 0.1')
CIE Type: Direct

Input Watts (W): 40.3
Input Voltage (V): 120.03
Input Current (Ain): 0.3369
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	69	69	69	69	68	68	68	68	65	65	65		62	62	62		59	59	59	58
1	65	63	61	60	63	62	60	59	59	58	57		57	56	55		55	54	53	52
2	61	57	54	51	59	56	53	51	54	52	50		52	50	49		50	49	47	46
3	56	51	48	45	55	50	47	44	49	46	43		47	45	43		46	44	42	41
4	52	46	42	39	51	46	42	39	44	41	38		43	40	38		42	39	37	36
5	48	42	38	34	47	41	37	34	40	37	34		39	36	34		38	36	33	32
6	45	38	34	31	44	38	34	30	37	33	30		36	33	30		35	32	30	29
7	42	35	31	27	41	35	30	27	34	30	27		33	29	27		32	29	27	26
8	39	32	28	25	38	32	27	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		27	24	22	21
10	34	27	23	20	34	27	23	20	26	23	20		26	23	20		25	22	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	29151	29151	29151
5°	28948	30487	27905
10°	28820	33099	27197
15°	28963	34215	26901
20°	28932	34856	26809
25°	28173	33828	25271
30°	28015	32463	24641
35°	26963	31176	23435
40°	25119	29826	21891
45°	21932	26812	18430
50°	16921	20816	15277
55°	10185	13580	10969
60°	3904	6105	3762
65°	784	1333	863
70°	177	177	265
75°	102	102	102
80°	0	0	122
85°	0	0	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	57.7	4.1	2.4	0°	577	577	577	577	577	
10°-20°	183.9	13.2	7.7	5°	583	603	614	586	562	56
20°-30°	291.7	20.9	12.2	15°	590	683	697	644	548	167
30°-40°	347.1	24.9	14.5	25°	563	678	676	644	505	262
40°-50°	319.0	22.9	13.3	35°	512	593	592	553	445	319
50°-60°	171.2	12.3	7.1	45°	382	451	467	410	321	290
60°-70°	21.7	1.6	0.9	55°	156	195	208	199	168	143
70°-80°	1.4	0.1	0.1	65°	10	14	17	15	11	16
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°	533.3	38.3	22.2							
0°-40°	880.4	63.2	36.7							
0°-60°	1370.6	98.3	57.1							
0°-90°	1393.7	100.0	58.1							
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°	1393.7	100.0	58.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	577	577	577	577	577	577	577	577	577
2.5°	583	583	585	588	587	583	577	572	570
5°	583	589	603	615	614	604	586	569	562
7.5°	582	598	626	642	643	625	597	570	555
10°	586	612	641	669	673	647	611	578	553
12.5°	589	627	662	683	686	657	627	592	550
15°	590	641	683	698	697	671	644	603	548
17.5°	590	652	691	709	704	684	652	608	548
20°	586	653	692	710	706	680	649	600	543
22.5°	580	649	685	701	695	667	644	586	530
25°	563	639	678	683	676	649	644	569	505
27.5°	558	624	667	661	655	632	627	551	498
30°	548	604	644	642	635	615	599	536	482
32.5°	533	592	615	618	616	588	574	523	464
35°	512	573	593	590	592	565	553	501	445
37.5°	488	546	569	573	572	552	528	473	432
40°	459	503	535	546	545	519	489	435	400
42.5°	425	462	493	507	508	479	451	398	361
45°	382	418	451	463	467	443	410	360	321
47.5°	333	366	396	410	406	388	360	320	285
50°	278	307	330	343	342	332	311	278	251
52.5°	214	241	259	273	278	273	258	231	215
55°	156	175	195	206	208	209	199	177	168
57.5°	110	125	141	148	152	150	135	117	112
60°	55	65	77	86	86	82	70	56	53
62.5°	22	27	37	42	42	42	35	27	26
65°	10	10	14	16	17	16	15	13	11
67.5°	4	3	3	4	4	4	4	4	4
70°	2	2	2	2	2	2	2	3	3
72.5°	2	2	2	2	2	2	2	2	2
75°	1	1	1	1	1	1	1	1	1
77.5°	1	1	1	1	1	1	1	1	1
80°	0	0	0	0	0	0	0	1	1
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)