

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: P31440

Luminaire Tested: **PD6H218E-62H1GC\_18DTT**

Issue Date: 03/03/2020



**Test Information**

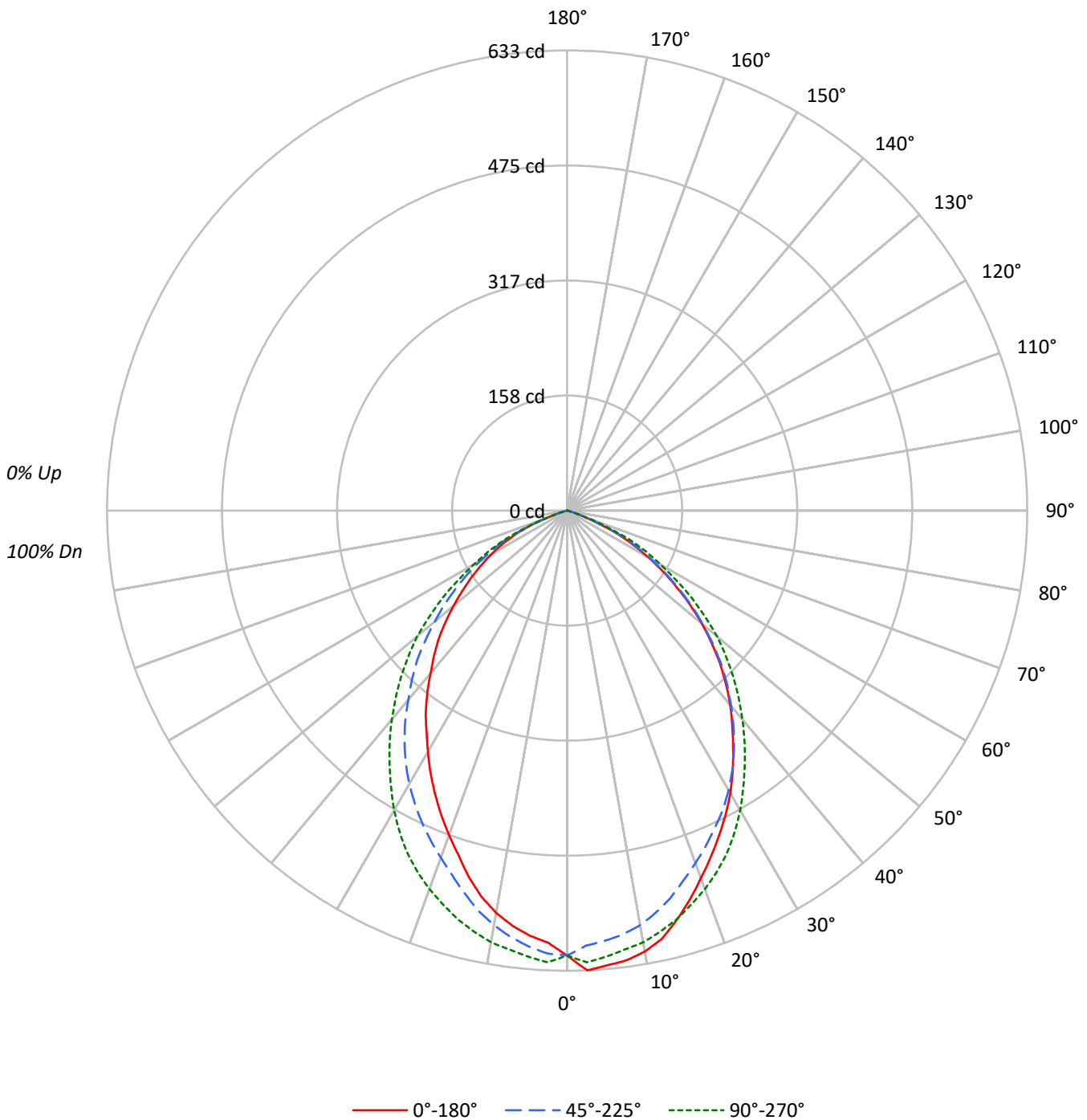
Test Method: LM-79-08  
Report Number: P31440  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PD6H218E-62H1GC\_18DTT  
Description: HALO 6-INCH APERTURE LENSED DOWNLIGHT, HORIZONTAL LAMP.  
PRISMATIC GLASS LENS WITH SPECULAR CLEAR TRIM, SLOTS COVERED.  
Light Source: (2) GE G24Q-2 SINGLE END FOUR PIN BASE DTT CFL LAMP 3000K  
F18DBX/SPX30/4P 18 WATTS  
Ballast/Driver: (1) SYLVANIA ELECTRONIC BALLAST  
Sylvania QTP 1/2x18CF/UNV/DM

**Summary**

Lumens per Lamp: 1200 (2 lamps)  
Luminaire Lumens: 1168.5 lumens  
Efficiency: 48.7%  
Efficacy: 30.8 lumens/watt  
Spacing Criteria (0/90/45): 1.04 / 1.16 / 1.2  
Luminous Opening: Vertical Cylinder (Dia: 0.53' x H: 0.1')  
CIE Type: Direct  
  
Input Watts (W): 37.9  
Input Voltage (V): 120.04  
Input Current (A<sub>in</sub>): 0.3147  
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	58	58	58	58	57	57	57	57	54	54	54		52	52	52		50	50	50	49
1	54	52	51	49	53	51	50	49	49	48	47		47	46	46		46	45	44	43
2	50	47	44	42	49	46	44	41	44	42	41		43	41	40		41	40	39	38
3	46	42	39	36	45	41	38	36	40	37	35		39	36	35		37	36	34	33
4	43	38	34	31	42	37	34	31	36	33	31		35	32	30		34	32	30	29
5	40	34	30	27	39	34	30	27	33	30	27		32	29	27		31	28	27	26
6	37	31	27	24	36	31	27	24	30	27	24		29	26	24		28	26	24	23
7	34	28	25	22	34	28	24	22	27	24	22		27	24	21		26	23	21	20
8	32	26	22	20	31	26	22	20	25	22	20		25	22	19		24	21	19	18
9	30	24	20	18	29	24	20	18	23	20	18		23	20	18		22	20	18	17
10	28	22	19	16	28	22	19	16	22	18	16		21	18	16		21	18	16	15

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	29719	29719	29719
5°	29984	29411	28026
10°	29143	28528	26588
15°	27541	27494	24659
20°	25572	26332	22577
25°	23808	25061	20724
30°	22116	23446	18865
35°	20203	21625	17208
40°	18419	19791	15411
45°	16453	17893	13849
50°	14221	15807	11988
55°	11606	13182	10155
60°	8853	10157	8236
65°	5920	7134	6072
70°	1969	2654	2483
75°	198	297	297
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°	57.0	4.9	2.4	0°	612	612	612	612	612	
10°-20°	156.2	13.4	6.5	5°	628	594	616	602	587	60
20°-30°	222.0	19.0	9.2	15°	583	551	582	545	522	164
30°-40°	246.6	21.1	10.3	25°	494	481	520	473	430	227
40°-50°	227.9	19.5	9.5	35°	398	400	426	390	339	249
50°-60°	168.7	14.4	7.0	45°	297	300	323	292	250	228
60°-70°	82.1	7.0	3.4	55°	184	188	209	187	161	165
70°-80°	7.8	0.7	0.3	65°	78	82	94	90	80	75
80°-90°	0.1	0.0	0.0	75°	2	2	3	3	3	7
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°	435.2	37.2	18.1							
0°-40°	681.8	58.4	28.4							
0°-60°	1078.5	92.3	44.9							
0°-90°	1168.5	100.0	48.7							
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°	1168.5	100.0	48.7							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	612	612	612	612	612	612	612	612	612
2.5°	633	610	599	622	622	601	610	599	595
5°	628	605	594	616	616	595	602	589	587
7.5°	624	600	588	608	609	587	592	576	576
10°	616	592	579	601	603	579	579	563	562
12.5°	603	578	566	590	593	568	564	545	544
15°	583	560	551	577	582	557	545	524	522
17.5°	561	540	533	561	568	542	526	501	497
20°	538	518	516	545	554	529	508	480	475
22.5°	516	498	499	528	538	514	491	460	453
25°	494	478	481	509	520	499	473	440	430
27.5°	472	457	464	489	499	480	454	420	407
30°	449	436	444	466	476	460	434	397	383
32.5°	424	413	423	443	451	437	413	376	360
35°	398	389	400	418	426	414	390	353	339
37.5°	373	365	376	393	401	389	366	331	316
40°	349	341	351	367	375	364	340	310	292
42.5°	323	317	326	341	349	338	316	287	271
45°	297	291	300	315	323	314	292	265	250
47.5°	269	265	272	286	296	286	265	241	227
50°	242	237	244	258	269	259	238	219	204
52.5°	213	210	216	229	238	232	213	195	182
55°	184	182	188	199	209	203	187	172	161
57.5°	157	154	160	169	177	174	162	149	140
60°	129	126	133	141	148	147	137	127	120
62.5°	103	101	107	114	122	121	113	105	101
65°	78	77	82	88	94	95	90	83	80
67.5°	47	46	51	55	60	62	60	56	57
70°	23	23	25	27	31	32	32	29	29
72.5°	10	9	10	11	12	13	13	13	13
75°	2	2	2	2	3	3	3	3	3
77.5°	1	1	1	1	1	1	1	1	1
80°	1	1	1	1	1	1	1	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)