

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: P31219

Luminaire Tested: **PD6H213E-62HC\_13DTT**

Issue Date: 03/03/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P31219  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PD6H213E-62HC\_13DTT  
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  
F13DBX/SPX827/4P 13 WATTS  
Ballast/Driver: (1) ADVANCE ELECTRONIC BALLAST  
ICF-2S13-H1-LD

**Summary**

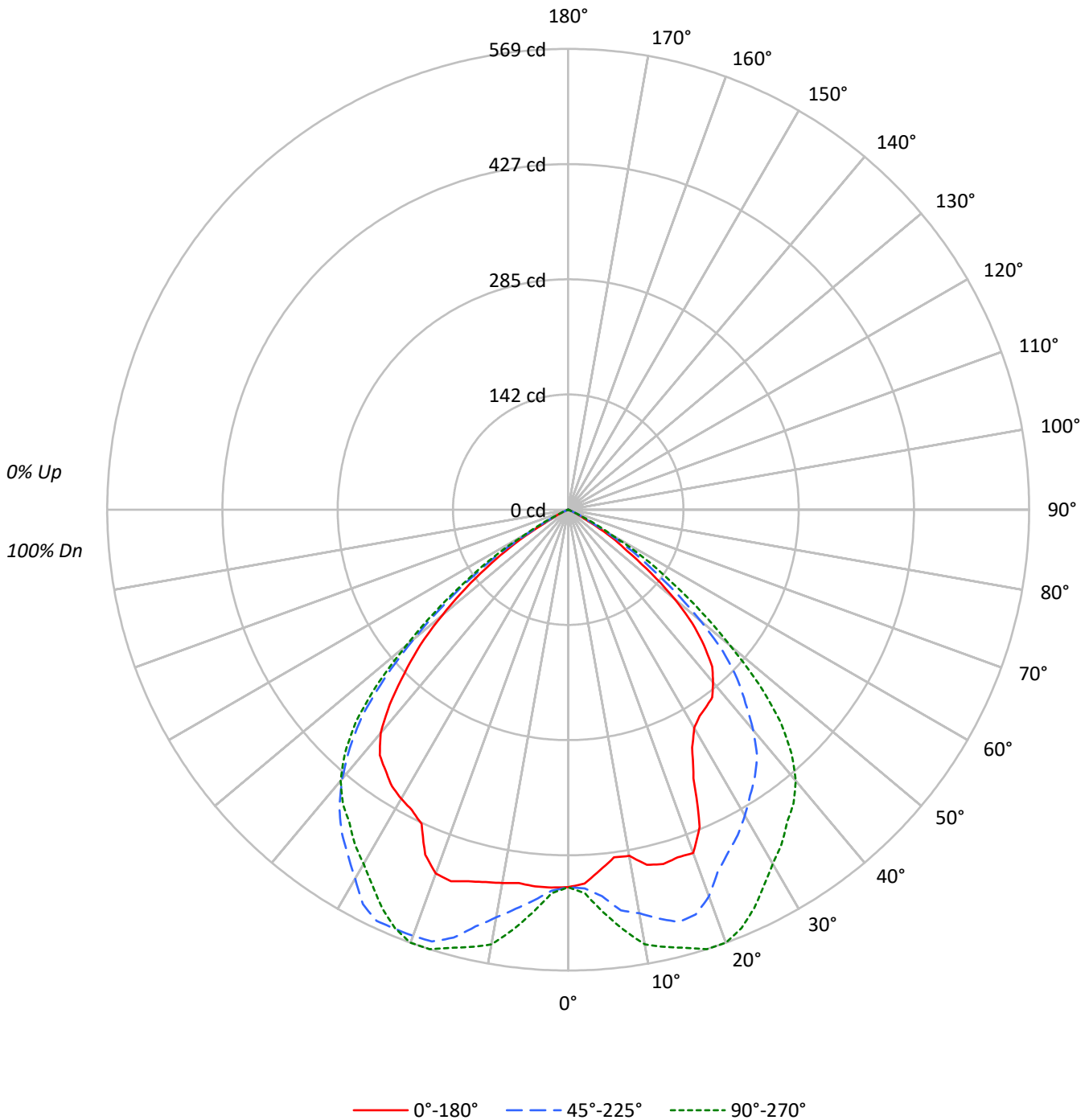
Lumens per Lamp: 900 (2 lamps)  
Luminaire Lumens: 1067.1 lumens  
Efficiency: 59.3%  
Efficacy: 35.5 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.51 / 1.41  
Luminous Opening: Vertical Cylinder (Dia: 0.52' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 30.1  
Input Voltage (V): 120.03  
Input Current (Ain): 0.2499  
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	71	71	71	71	69	69	69	69	66	66	66		63	63	63		60	60	60	59
1	66	64	63	61	65	63	61	60	61	59	58		58	57	56		56	55	55	54
2	62	58	55	53	60	57	54	52	55	53	51		53	51	50		52	50	49	48
3	58	53	49	46	56	52	48	45	50	47	45		49	46	44		47	45	43	42
4	53	48	43	40	52	47	43	40	46	42	40		44	41	39		43	41	39	37
5	50	43	39	36	49	43	39	35	42	38	35		40	37	35		39	37	34	33
6	46	39	35	32	45	39	35	32	38	34	31		37	34	31		36	33	31	30
7	43	36	32	28	42	36	31	28	35	31	28		34	31	28		33	30	28	27
8	40	33	29	26	39	33	29	26	32	28	25		31	28	25		31	28	25	24
9	38	31	26	23	37	30	26	23	30	26	23		29	26	23		28	25	23	22
10	35	28	24	21	35	28	24	21	27	24	21		27	23	21		26	23	21	20

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

	0°	90°	180°
0°	23543	23543	23543
5°	22195	24777	23188
10°	21345	26804	23017
15°	22237	27490	23317
20°	22267	28093	23600
25°	18315	27172	21417
30°	15899	25817	21063
35°	15641	24804	20696
40°	15214	23915	19701
45°	13607	21301	16420
50°	10469	15886	12356
55°	5811	10120	7574
60°	2272	4401	2627
65°	627	941	627
70°	177	177	177
75°	102	102	102
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	46.5	4.4	2.6	0°	466	466	466	466	466	
10°-20°	148.4	13.9	8.2	5°	447	479	499	484	467	42
20°-30°	227.8	21.4	12.7	15°	453	527	560	547	475	127
30°-40°	266.2	24.9	14.8	25°	366	467	543	560	428	172
40°-50°	242.6	22.7	13.5	35°	297	402	471	487	393	186
50°-60°	119.1	11.2	6.6	45°	237	295	371	359	286	180
60°-70°	15.4	1.4	0.9	55°	89	122	155	143	116	85
70°-80°	1.0	0.1	0.1	65°	8	10	12	12	8	11
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°	422.8	39.6	23.5							
0°-40°	689.0	64.6	38.3							
0°-60°	1050.7	98.5	58.4							
0°-90°	1067.1	100.0	59.3							
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°	1067.1	100.0	59.3							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	466	466	466	466	466	466	466	466	466
2.5°	462	462	468	472	474	474	471	468	467
5°	447	456	479	496	499	496	484	472	467
7.5°	433	455	499	518	523	515	497	477	465
10°	434	457	506	535	545	533	511	489	468
12.5°	449	467	517	540	553	542	527	506	471
15°	453	481	527	551	560	560	547	520	475
17.5°	450	487	524	554	569	576	559	529	481
20°	451	474	508	541	569	574	560	526	478
22.5°	424	446	483	524	559	569	560	518	461
25°	366	420	467	507	543	556	560	506	428
27.5°	331	395	453	493	523	538	549	489	418
30°	311	372	436	481	505	519	526	473	412
32.5°	302	359	418	461	490	493	506	462	405
35°	297	345	402	441	471	474	487	443	393
37.5°	292	327	383	425	457	464	464	419	382
40°	278	304	355	402	437	445	434	389	360
42.5°	263	280	324	369	408	412	399	358	326
45°	237	255	295	334	371	376	359	318	286
47.5°	208	224	259	292	320	321	306	273	248
50°	172	186	213	240	261	263	249	223	203
52.5°	129	140	165	189	207	208	195	171	160
55°	89	99	122	143	155	154	143	124	116
57.5°	64	71	88	106	111	108	98	82	78
60°	32	36	48	60	62	61	50	39	37
62.5°	16	18	24	30	32	31	26	19	19
65°	8	9	10	11	12	12	12	10	8
67.5°	3	3	2	2	2	3	3	3	3
70°	2	2	2	2	2	2	2	2	2
72.5°	1	1	1	1	1	1	1	1	1
75°	1	1	1	1	1	1	1	1	1
77.5°	1	1	1	0	0	0	1	1	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)