

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: P31194

Luminaire Tested: **PD6H113E-62HC\_13DTT**

Issue Date: 03/03/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P31194  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PD6H113E-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**

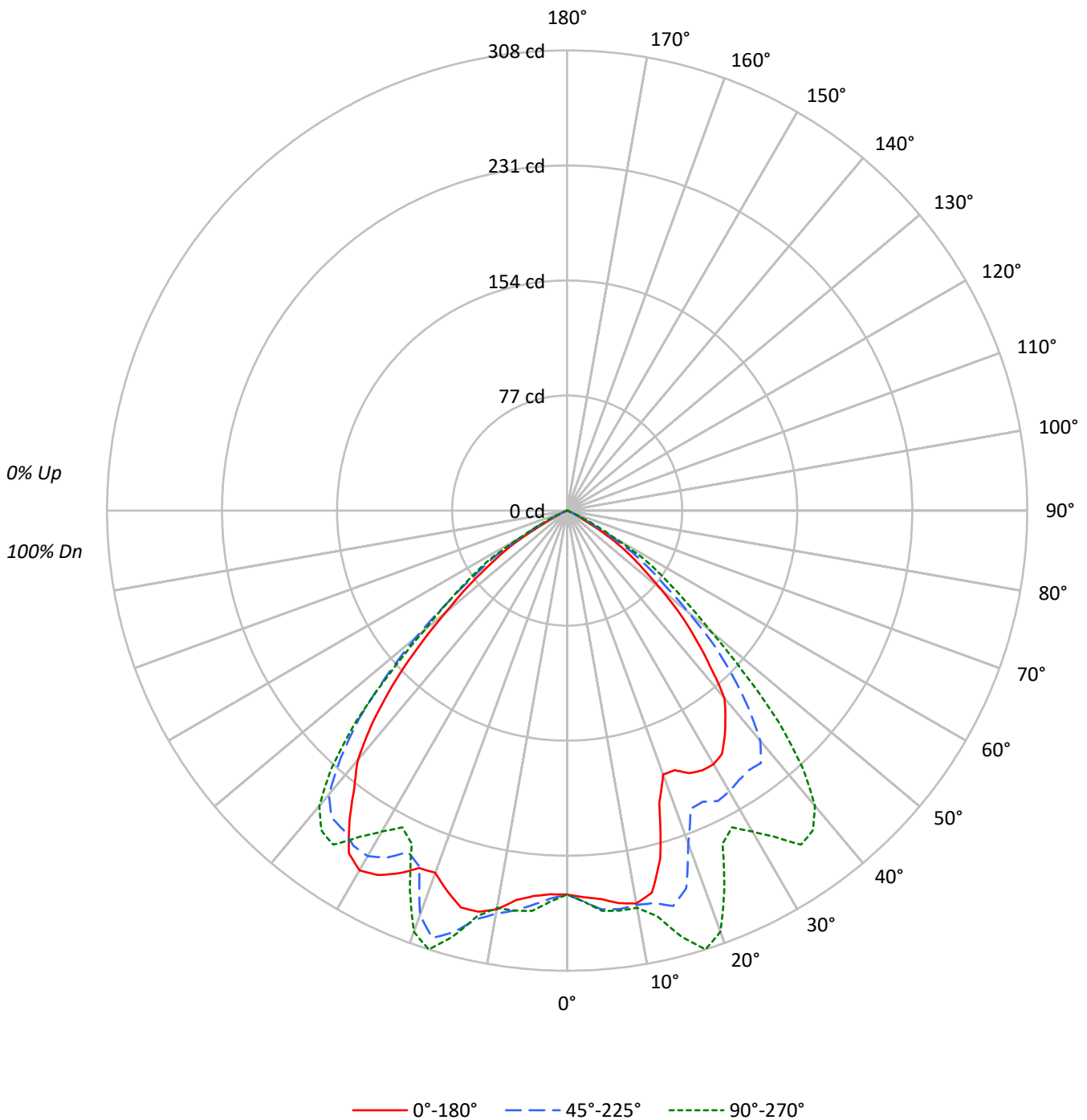
Lumens per Lamp: 900 (1 lamp)  
Luminaire Lumens: 569.2 lumens  
Efficiency: 63.2%  
Efficacy: 35.6 lumens/watt  
Spacing Criteria (0/90/45): 1.34 / 1.58 / 1.41  
Luminous Opening: Vertical Cylinder (Dia: 0.53' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 16  
Input Voltage (V): 120.03  
Input Current (A<sub>in</sub>): 0.1344  
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	75	75	75	75	74	74	74	74	70	70	70		67	67	67		65	65	65	63
1	71	69	67	65	69	67	65	64	65	63	62		62	61	60		60	59	58	57
2	66	62	59	56	64	61	58	55	59	56	54		57	55	53		55	53	52	51
3	61	56	52	49	60	55	51	48	53	50	48		52	49	47		50	48	46	45
4	57	51	46	43	56	50	46	42	48	45	42		47	44	41		46	43	41	40
5	53	46	41	38	52	45	41	38	44	40	37		43	40	37		42	39	37	35
6	49	42	37	34	48	41	37	33	40	36	33		39	36	33		38	35	33	32
7	46	38	33	30	45	38	33	30	37	33	30		36	32	30		35	32	29	28
8	43	35	30	27	42	35	30	27	34	30	27		33	30	27		33	29	27	26
9	40	32	28	25	39	32	28	25	31	27	24		31	27	24		30	27	24	23
10	38	30	25	22	37	30	25	22	29	25	22		29	25	22		28	25	22	21

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

	0°	90°	180°
0°	12480	12480	12480
5°	12461	12843	12366
10°	12632	12774	12821
15°	11385	13936	12991
20°	8936	14259	12263
25°	9350	11856	12916
30°	9654	12216	13693
35°	9340	13858	12894
40°	8655	13617	11505
45°	6759	11080	9141
50°	4819	7345	6229
55°	3154	5046	3974
60°	1167	2471	1716
65°	379	683	379
70°	86	86	86
75°	0	0	99
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°	25.5	4.5	2.8	0°	257	257	257	257	257	
10°-20°	78.0	13.7	8.7	5°	261	268	269	265	259	25
20°-30°	112.3	19.7	12.5	15°	241	274	295	292	275	65
30°-40°	148.8	26.1	16.5	25°	194	215	246	252	268	89
40°-50°	131.6	23.1	14.6	35°	184	212	273	261	254	114
50°-60°	62.8	11.0	7.0	45°	122	157	200	197	165	94
60°-70°	9.7	1.7	1.1	55°	50	66	80	75	63	44
70°-80°	0.4	0.1	0.0	65°	5	6	9	9	5	6
80°-90°	0.0	0.0	0.0	75°	0	0	0	0	1	0
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°	215.8	37.9	24.0							
0°-40°	364.6	64.1	40.5							
0°-60°	559.0	98.2	62.1							
0°-90°	569.2	100.0	63.2							
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°	569.2	100.0	63.2							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	257	257	257	257	257	257	257	257	257
2.5°	259	260	262	262	262	261	260	258	257
5°	261	267	268	269	269	268	265	262	259
7.5°	265	269	269	269	270	271	270	267	263
10°	267	273	268	270	270	272	274	272	271
12.5°	262	268	269	277	278	279	280	282	275
15°	241	252	274	290	295	295	292	291	275
17.5°	205	225	265	294	308	309	300	284	267
20°	188	210	237	277	300	305	288	268	258
22.5°	188	203	216	251	275	280	258	267	259
25°	194	201	215	229	246	252	252	270	268
27.5°	196	196	219	229	239	251	262	270	275
30°	196	189	217	236	248	263	267	267	278
32.5°	193	181	214	243	259	270	266	263	272
35°	184	175	212	250	273	272	261	256	254
37.5°	174	173	213	249	270	275	259	242	234
40°	164	162	201	236	258	267	248	224	218
42.5°	142	145	180	211	233	240	224	199	193
45°	122	128	157	180	200	207	197	174	165
47.5°	103	110	133	149	160	169	164	147	135
50°	82	88	106	119	125	130	132	118	106
52.5°	64	69	83	93	100	100	100	92	84
55°	50	54	66	75	80	80	75	70	63
57.5°	35	38	50	59	63	63	58	52	47
60°	17	19	27	33	36	38	34	28	25
62.5°	9	10	15	18	20	21	20	14	12
65°	5	4	6	7	9	10	9	7	5
67.5°	1	1	1	1	2	2	2	2	2
70°	1	1	1	1	1	1	1	1	1
72.5°	1	1	1	1	1	1	1	1	1
75°	0	0	0	0	0	0	0	0	1
77.5°	0	0	0	0	0	0	0	0	0
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)