

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: P31439

Luminaire Tested: **PD6H213E-62H1GC\_13DTT**

Issue Date: 03/03/2020



**Test Information**

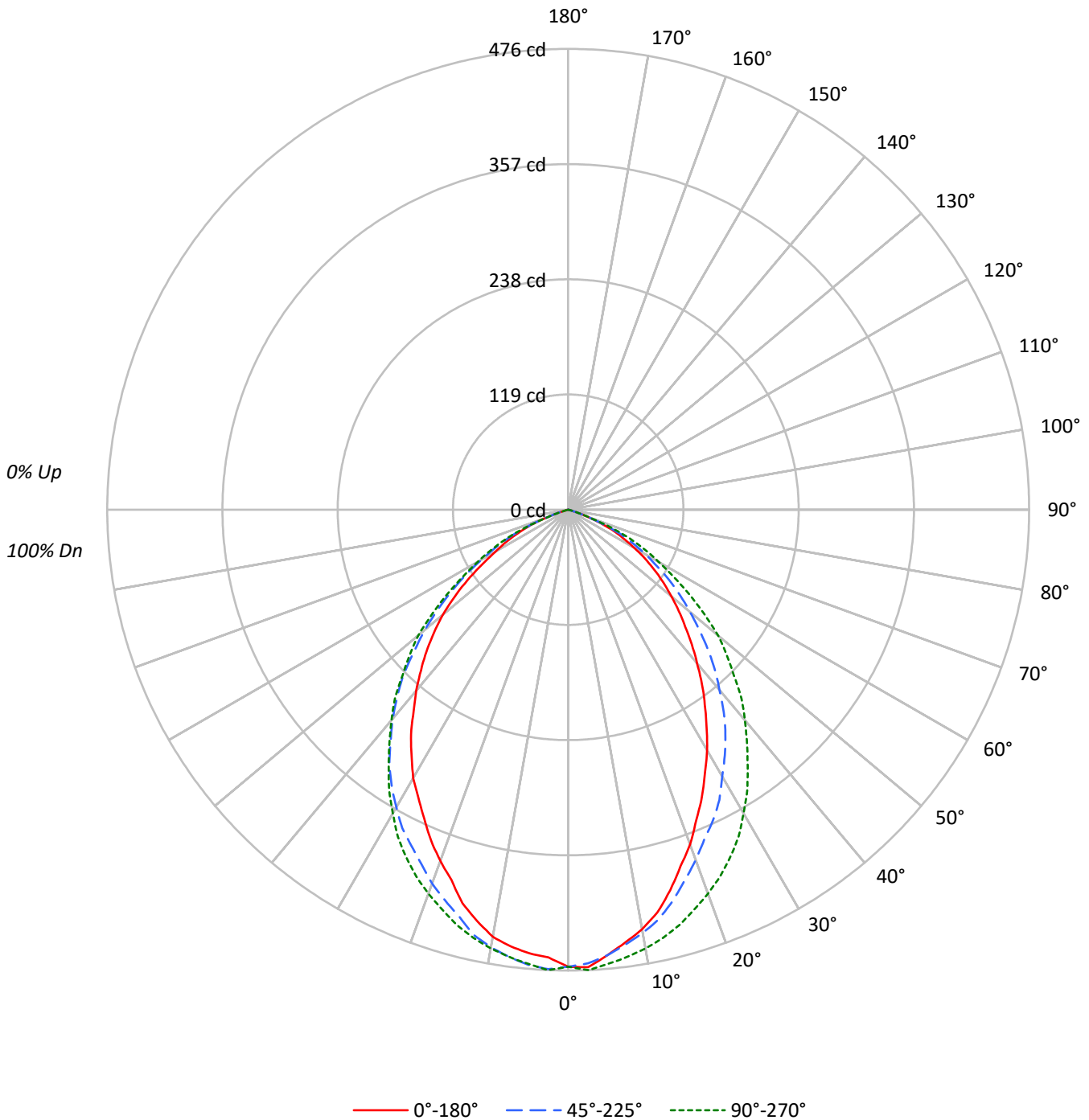
Test Method: LM-79-08  
Report Number: P31439  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PD6H213E-62H1GC\_13DTT  
Description: HALO 6-INCH APERTURE LENSED DOWNLIGHT, HORIZONTAL LAMP.  
PRISMATIC GLASS LENS WITH SPECULAR CLEAR TRIM, SLOTS COVERED.  
Light Source: (2) GE G24Q-1 SINGLE END FOUR PIN BASE DTT CFL LAMP 2700K  
F13DBX/SPX827/4P 13 WATTS  
Ballast/Driver: (1) SYLVANIA ELECTRONIC BALLAST  
Sylvania QTP 1/2x13CF/UNV/DM

**Summary**

Lumens per Lamp: 900 (2 lamps)  
Luminaire Lumens: 873.3 lumens  
Efficiency: 48.5%  
Efficacy: 31.9 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 1.15 / 1.19  
Luminous Opening: Vertical Cylinder (Dia: 0.53' x H: 0.1')  
CIE Type: Direct  
  
Input Watts (W): 27.4  
Input Voltage (V): 120.04  
Input Current (Ain): 0.22862  
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										
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	50	30	10	50	30	10	0														
RCR																																						
0	58	58	58	58	56	56	56	56	54	54	54	52	52	52	50	50	50	49						49														
1	54	52	51	49	53	51	50	48	49	48	47	47	46	45	46	45	44	43						43														
2	50	47	44	42	49	46	43	41	44	42	40	43	41	40	41	40	39	38						38														
3	46	42	39	36	45	41	38	36	40	37	35	39	36	35	37	36	34	33						33														
4	43	38	34	31	42	37	34	31	36	33	31	35	32	30	34	32	30	29						29														
5	40	34	30	28	39	34	30	27	33	30	27	32	29	27	31	29	27	26						26														
6	37	31	27	25	36	31	27	24	30	27	24	29	26	24	28	26	24	23						23														
7	34	29	25	22	34	28	24	22	27	24	22	27	24	22	26	23	21	21						21														
8	32	26	22	20	31	26	22	20	25	22	20	25	22	20	24	21	19	19						19														
9	30	24	21	18	30	24	20	18	23	20	18	23	20	18	22	20	18	17						17														
10	28	22	19	17	28	22	19	16	22	19	16	21	18	16	21	18	16	16						16														

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

	0°	90°	180°
0°	22921	22921	22921
5°	22058	22488	21963
10°	20816	21763	21195
15°	19227	20974	19888
20°	17491	20058	18347
25°	15760	19085	16964
30°	14137	17831	15762
35°	12488	16396	14366
40°	10925	14989	12878
45°	9473	13406	11467
50°	8168	11870	9931
55°	6875	9650	8010
60°	5422	7412	5971
65°	3947	5313	4326
70°	1627	1969	1969
75°	198	297	198
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°	43.9	5.0	2.4	0°	472	472	472	472	472	
10°-20°	119.8	13.7	6.7	5°	462	462	471	472	460	43
20°-30°	168.8	19.3	9.4	15°	407	418	444	435	421	114
30°-40°	185.2	21.2	10.3	25°	327	354	396	383	352	150
40°-50°	167.9	19.2	9.3	35°	246	283	323	322	283	154
50°-60°	121.4	13.9	6.7	45°	171	204	242	240	207	132
60°-70°	59.7	6.8	3.3	55°	109	128	153	147	127	97
70°-80°	6.5	0.7	0.4	65°	52	60	70	66	57	50
80°-90°	0.1	0.0	0.0	75°	2	3	3	3	2	6
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°	332.5	38.1	18.5							
0°-40°	517.7	59.3	28.8							
0°-60°	807.0	92.4	44.8							
0°-90°	873.3	100.0	48.5							
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°	873.3	100.0	48.5							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	472	472	472	472	472	472	472	472	472
2.5°	473	473	469	463	476	472	475	470	463
5°	462	462	462	458	471	469	472	467	460
7.5°	451	453	453	452	466	462	466	461	455
10°	440	442	444	445	460	456	459	454	448
12.5°	426	429	433	436	453	448	450	444	435
15°	407	411	418	424	444	437	435	428	421
17.5°	386	390	401	412	433	427	423	411	401
20°	368	372	385	399	422	417	411	396	386
22.5°	346	353	368	384	410	405	396	381	370
25°	327	335	354	370	396	392	383	367	352
27.5°	306	317	338	354	381	377	371	352	335
30°	287	297	318	339	362	362	355	335	320
32.5°	266	278	301	320	344	345	339	317	301
35°	246	258	283	299	323	326	322	299	283
37.5°	227	237	264	280	303	304	301	280	262
40°	207	218	243	262	284	284	282	261	244
42.5°	189	200	224	242	265	265	261	241	225
45°	171	182	204	223	242	243	240	220	207
47.5°	155	165	183	204	222	221	215	201	188
50°	139	147	164	180	202	201	193	182	169
52.5°	124	131	146	160	177	176	170	159	148
55°	109	113	128	138	153	151	147	137	127
57.5°	94	99	109	116	129	128	126	114	105
60°	79	82	92	99	108	107	103	95	87
62.5°	64	68	75	83	89	86	84	77	72
65°	52	54	60	66	70	70	66	61	57
67.5°	36	34	38	44	47	46	45	43	42
70°	19	19	20	21	23	23	24	23	23
72.5°	9	9	9	9	9	10	11	11	11
75°	2	2	3	2	3	3	3	3	2
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)