

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: P31433

Luminaire Tested: **PD8H142E-82H1GC_32TTT**

Issue Date: 03/03/2020



Test Information

Test Method: LM-79-08
Report Number: P31433
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PD8H142E-82H1GC_32TTT
Description: HALO 8-INCH APERTURE LENSED DOWNLIGHT, HORIZONTAL LAMP.
PRISMATIC GLASS LENS WITH SPECULAR CLEAR TRIM.
Light Source: (1) SYLVANIA GX24Q-3 SINGLE END FOUR PIN BASE TTT CFL LAMP
3500K
CF32DT/E/IN/835 32 WATTS
Ballast/Driver: (1) SYLVANIA ELECTRONIC BALLAST
SYLVANIA QTP2x26CF/UNV DM

Summary

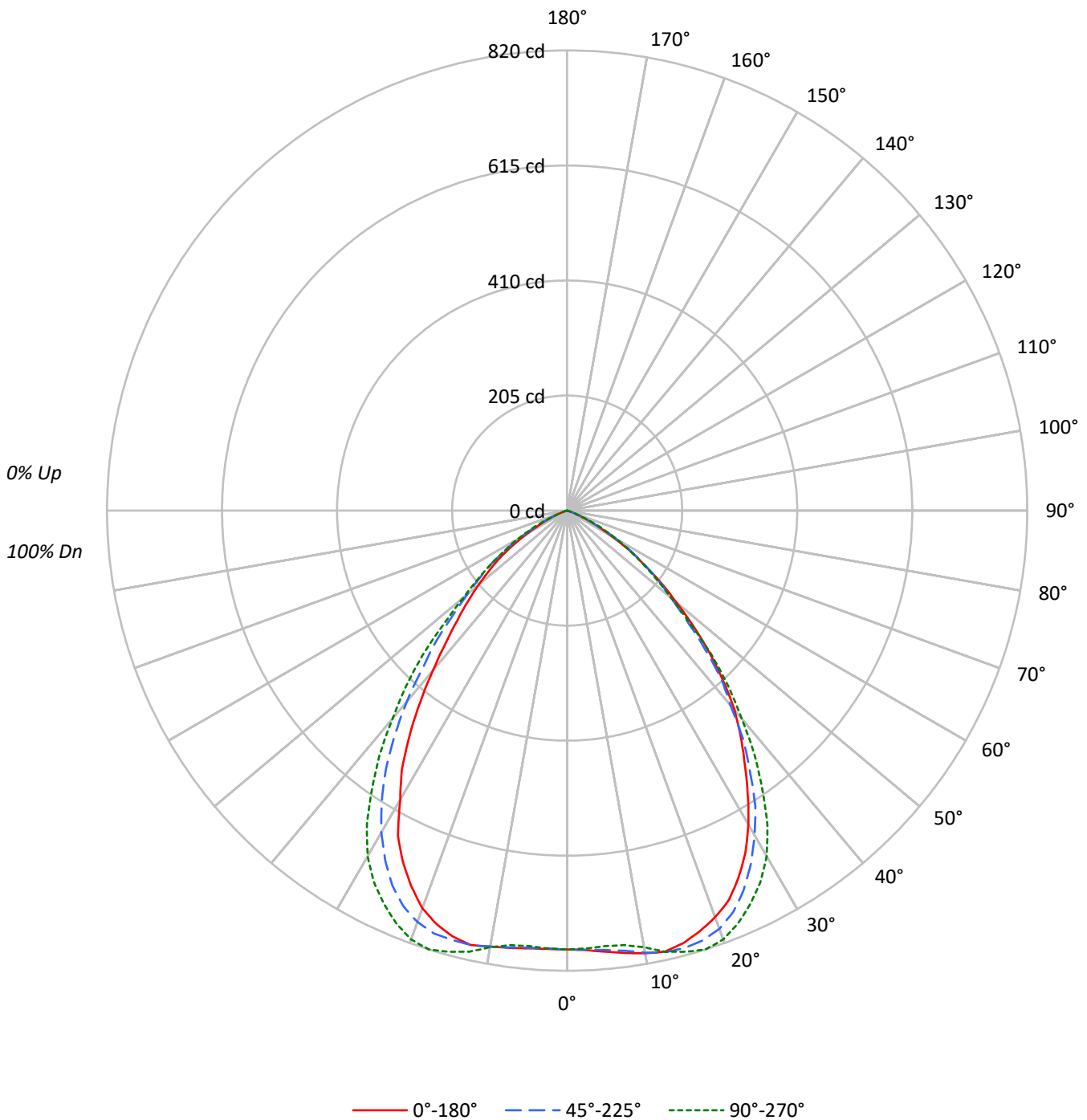
Lumens per Lamp: 2400 (1 lamp)
Luminaire Lumens: 1447.6 lumens
Efficiency: 60.3%
Efficacy: 44.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.29 / 1.2
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
CIE Type: Direct

Input Watts (W): 32.9
Input Voltage (V): 120.01
Input Current (A_{in}): 0.2742
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	72	72	72	72	70	70	70	70	67	67	67	64	64	64	62	62	62	60
1	68	66	64	62	66	64	63	61	62	60	59	59	58	57	57	56	56	55
2	63	59	56	54	62	58	56	53	56	54	52	54	53	51	53	51	50	49
3	59	54	50	47	57	53	49	47	51	48	46	50	47	45	48	46	44	43
4	55	49	45	42	53	48	44	41	47	43	41	46	43	40	44	42	40	39
5	51	45	40	37	50	44	40	37	43	39	36	42	39	36	41	38	36	35
6	48	41	36	33	47	40	36	33	39	36	33	38	35	33	38	35	32	31
7	45	38	33	30	44	37	33	30	36	32	30	35	32	29	35	32	29	28
8	42	35	30	27	41	34	30	27	34	30	27	33	29	27	32	29	27	26
9	39	32	28	25	38	32	28	25	31	27	25	31	27	25	30	27	24	24
10	37	30	26	23	36	30	26	23	29	25	23	28	25	23	28	25	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	21361	21361	21361
5°	21299	21029	21137
10°	21535	21239	21212
15°	21530	21961	21206
20°	21035	22181	20572
25°	20078	21496	19243
30°	18460	20317	17002
35°	16349	17948	14513
40°	14377	14996	11526
45°	11755	11919	9070
50°	8854	8469	7210
55°	6291	6177	5495
60°	3833	4291	3416
65°	1819	2286	1679
70°	642	695	642
75°	63	63	63
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°	75.1	5.2	3.1	0°	782	782	782	782	782	
10°-20°	226.3	15.6	9.4	5°	789	786	779	782	783	76
20°-30°	338.9	23.4	14.1	15°	798	807	814	792	786	225
30°-40°	350.6	24.2	14.6	25°	722	745	773	737	692	330
40°-50°	261.7	18.1	10.9	35°	552	568	606	563	490	345
50°-60°	145.8	10.1	6.1	45°	359	345	364	332	277	275
60°-70°	46.2	3.2	1.9	55°	166	169	163	164	145	151
70°-80°	3.2	0.2	0.1	65°	39	42	49	44	36	44
80°-90°	0.0	0.0	0.0	75°	1	1	1	1	1	3
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°	640.2	44.2	26.7							
0°-40°	990.8	68.4	41.3							
0°-60°	1398.2	96.6	58.3							
0°-90°	1447.6	100.0	60.3							
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°	1447.6	100.0	60.3							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	782	782	782	782	782	782	782	782	782
2.5°	784	784	783	781	781	781	781	781	782
5°	789	788	786	782	779	779	782	784	783
7.5°	795	793	791	786	781	781	785	786	786
10°	801	800	800	798	790	790	789	787	789
12.5°	805	805	806	810	805	801	793	792	793
15°	798	804	807	814	814	807	792	788	786
17.5°	786	796	803	817	820	810	790	779	773
20°	771	780	793	808	813	803	780	763	754
22.5°	752	760	774	790	796	786	763	739	725
25°	722	727	745	764	773	766	737	704	692
27.5°	688	695	709	735	746	736	702	666	653
30°	646	649	668	694	711	702	662	617	595
32.5°	599	601	624	649	664	656	615	560	548
35°	552	559	568	593	606	597	563	511	490
37.5°	508	508	516	532	549	538	504	455	430
40°	464	457	453	469	484	478	445	397	372
42.5°	412	404	406	415	425	414	381	344	320
45°	359	351	345	354	364	358	332	296	277
47.5°	305	300	287	297	295	303	276	252	240
50°	253	253	240	243	242	245	232	216	206
52.5°	210	215	206	200	200	201	195	181	174
55°	166	171	169	162	163	161	164	151	145
57.5°	131	132	135	130	130	127	128	120	112
60°	92	95	100	97	103	99	96	88	82
62.5°	65	64	66	70	74	70	68	61	57
65°	39	40	42	44	49	46	44	39	36
67.5°	23	22	24	27	27	27	26	22	22
70°	12	11	12	13	13	13	14	12	12
72.5°	4	4	4	5	6	6	5	4	5
75°	1	1	1	1	1	1	1	1	1
77.5°	0	1	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)