

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: P31432

Luminaire Tested: **PD8H142E-82HC_32TTT**

Issue Date: 03/03/2020



Test Information

Test Method: LM-79-08
Report Number: P31432
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PD8H142E-82HC_32TTT
Description: HALO 8 INCH APERTURE OPEN DOWNLIGHT, HORIZONTAL LAMP.
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

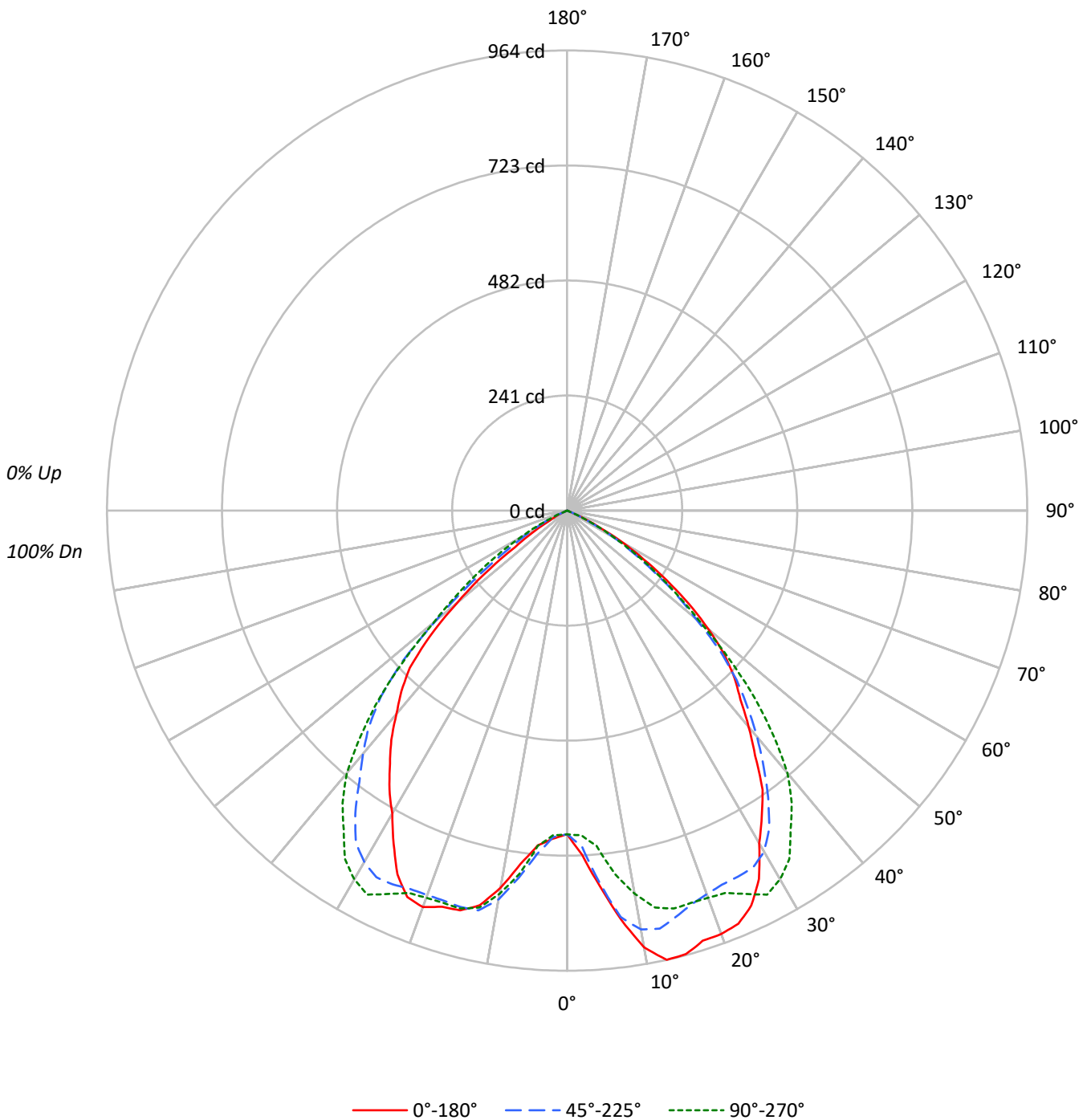
Summary

Lumens per Lamp: 2400 (1 lamp)
Luminaire Lumens: 1812.1 lumens
Efficiency: 75.5%
Efficacy: 54.9 lumens/watt
Spacing Criteria (0/90/45): 1.47 / 1.64 / 1.46
Luminous Opening: Vertical Cylinder (Dia: 0.7' x H: 0.1')
CIE Type: Direct

Input Watts (W): 33
Input Voltage (V): 120.01
Input Current (Ain): 0.27549
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	90	90	90	90	88	88	88	88	84	84	84		80	80	80		77	77	77	76
1	85	82	80	78	83	80	78	76	77	75	74		74	73	72		72	71	70	68
2	79	74	70	67	77	73	69	66	70	67	65		68	65	63		66	64	62	61
3	73	67	62	58	72	66	61	58	64	60	57		62	59	56		60	57	55	54
4	68	61	55	51	67	60	55	51	58	54	50		56	53	50		55	52	49	48
5	63	55	50	45	62	54	49	45	53	48	45		52	47	44		50	47	44	42
6	59	50	45	40	58	50	44	40	48	44	40		47	43	40		46	42	39	38
7	55	46	40	36	54	45	40	36	44	39	36		43	39	36		42	38	35	34
8	51	42	37	33	50	42	36	33	41	36	32		40	35	32		39	35	32	31
9	48	39	33	30	47	39	33	30	38	33	29		37	32	29		36	32	29	28
10	45	36	31	27	44	36	30	27	35	30	27		34	30	27		34	30	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	19077	19077	19077
5°	21962	19599	19572
10°	25715	22559	22200
15°	26716	23967	24078
20°	26506	24231	24821
25°	26122	25350	24062
30°	23662	26219	21545
35°	21747	24854	19706
40°	18857	22871	17711
45°	16691	18744	15682
50°	13879	13160	10859
55°	9923	8873	5215
60°	5816	4960	1967
65°	1675	1579	622
70°	110	164	110
75°	65	65	65
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°	74.3	4.1	3.1	0°	678	678	678	678	678	
10°-20°	248.1	13.7	10.3	5°	790	783	705	722	704	80
20°-30°	399.5	22.0	16.6	15°	962	881	863	860	867	270
30°-40°	466.4	25.7	19.4	25°	913	846	886	864	841	414
40°-50°	394.4	21.8	16.4	35°	714	734	816	774	647	440
50°-60°	191.7	10.6	8.0	45°	496	502	557	552	466	379
60°-70°	36.5	2.0	1.5	55°	255	218	228	190	134	228
70°-80°	1.2	0.1	0.1	65°	35	30	33	32	13	46
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°	721.9	39.8	30.1							
0°-40°	1188.3	65.6	49.5							
0°-60°	1774.4	97.9	73.9							
0°-90°	1812.1	100.0	75.5							
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°	1812.1	100.0	75.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	678	678	678	678	678	678	678	678	678
2.5°	722	711	704	693	681	681	685	688	688
5°	790	786	783	756	705	707	722	711	704
7.5°	864	850	859	820	768	772	775	755	746
10°	929	907	891	843	815	821	827	805	802
12.5°	964	939	897	865	852	855	858	855	847
15°	962	936	881	869	863	860	860	874	867
17.5°	945	923	865	863	862	859	857	878	870
20°	944	904	855	861	863	863	857	877	884
22.5°	937	890	848	861	867	867	858	868	876
25°	913	875	846	868	886	885	864	851	841
27.5°	870	842	843	882	907	905	866	823	787
30°	805	798	825	868	892	895	850	780	733
32.5°	759	756	788	836	866	865	824	741	693
35°	714	698	734	787	816	815	774	690	647
37.5°	647	639	676	731	773	769	715	641	605
40°	592	588	619	673	718	718	665	595	556
42.5°	537	531	560	609	640	651	615	548	514
45°	496	486	502	533	557	574	552	495	466
47.5°	447	434	433	445	461	478	469	425	391
50°	386	372	350	357	366	372	360	323	302
52.5°	322	298	288	288	292	288	269	237	220
55°	255	231	218	217	228	216	190	153	134
57.5°	190	177	161	167	171	161	130	99	87
60°	136	116	114	115	116	115	90	63	46
62.5°	80	71	65	71	72	70	58	39	28
65°	35	29	30	34	33	38	32	22	13
67.5°	6	3	5	4	5	7	5	4	3
70°	2	2	2	3	3	3	2	2	2
72.5°	2	1	1	2	2	2	2	1	1
75°	1	1	1	1	1	1	1	1	1
77.5°	1	1	1	1	1	1	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)