

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: P31213

Luminaire Tested: **PD8H242E-82HC_26TTT**

Issue Date: 03/03/2020



Test Information

Test Method: LM-79-08
Report Number: P31213
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PD8H242E-82HC_26TTT
Description: HALO 8-INCH APERTURE OPEN DOWNLIGHT, HORIZONTAL LAMP.
SPECULAR CLEAR TRIM.
Light Source: (2) SYLVANIA GX24Q-3 FOUR PIN BIAX HEX CFL LAMP
CF26DT/E/IN/835 26WATTS
Ballast/Driver: (1) UNIVERSAL ELECTRONIC BALLAST
C2642UNVME

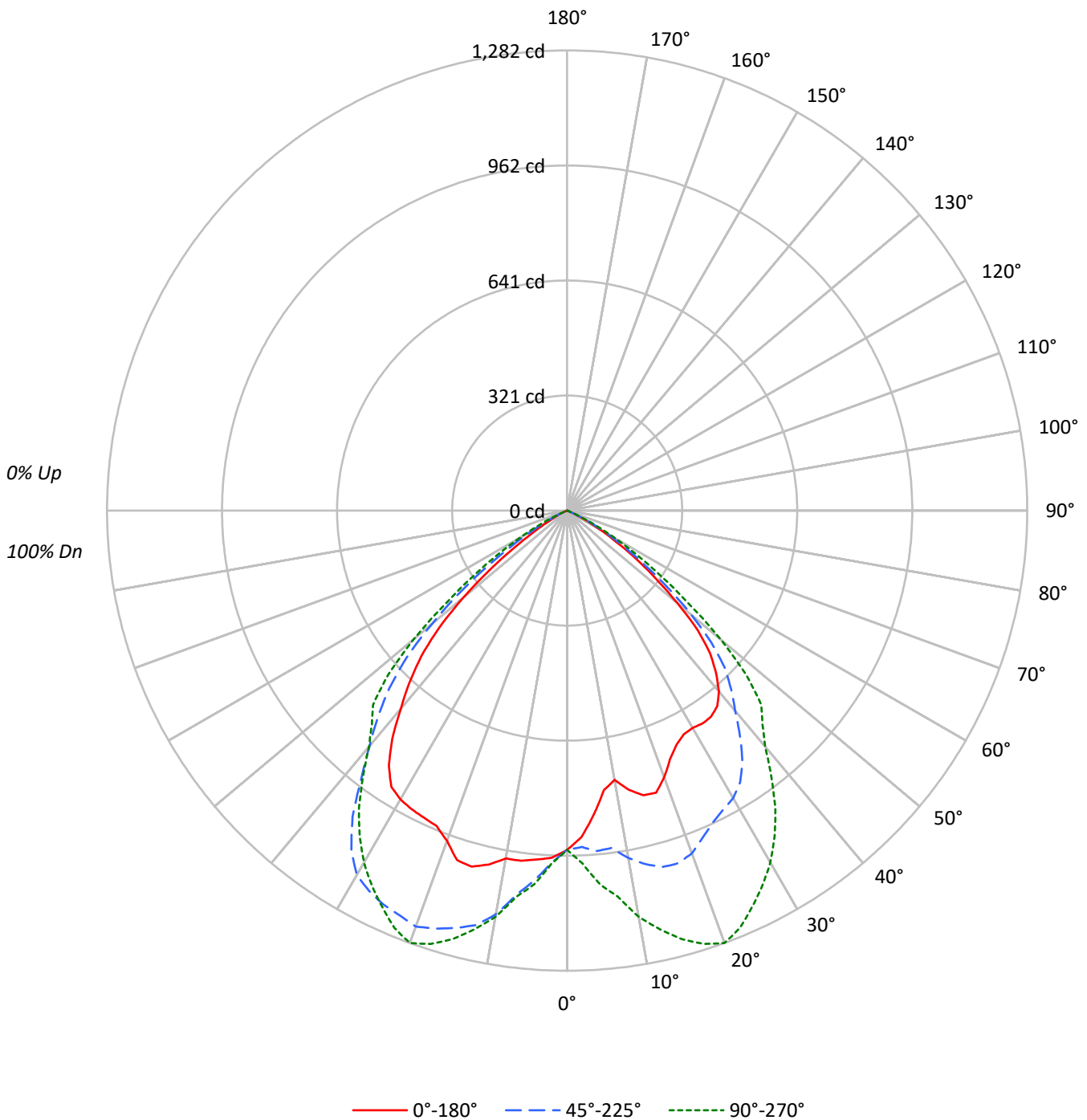
Summary

Lumens per Lamp: 1800 (2 lamps)
Luminaire Lumens: 2257.9 lumens
Efficiency: 62.7%
Efficacy: 40.7 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.52 / 1.41
Luminous Opening: Vertical Cylinder (Dia: 0.7' x H: 0.1')
CIE Type: Direct

Input Watts (W): 55.5
Input Voltage (V): 120.03
Input Current (A_{in}): 0.4629
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

TEST NUMBER: P31213
CATALOG NUMBER: PD8H242E-82HC_26TTT

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	73	73	73	73	70	70	70		67	67	67		64	64	64	63
1	70	68	66	64	69	67	65	63	64	63	61		62	61	60		60	59	58	57
2	65	62	58	56	64	60	58	55	58	56	54		56	54	53		55	53	52	50
3	61	56	52	49	59	55	51	48	53	50	47		51	49	47		50	48	46	45
4	57	50	46	43	55	50	46	42	48	45	42		47	44	41		46	43	41	40
5	53	46	41	38	51	45	41	37	44	40	37		43	39	37		42	39	36	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	29	27		32	29	27	26
9	40	32	28	25	39	32	28	25	31	27	24		31	27	24		30	27	24	23
10	37	30	25	22	37	30	25	22	29	25	22		28	25	22		28	25	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	26589	26589	26589
5°	23630	29051	27133
10°	21092	31805	27237
15°	22801	34326	28522
20°	22210	35996	27488
25°	20600	34877	27009
30°	20546	33273	27307
35°	21320	30793	26376
40°	20960	27330	22966
45°	18946	25744	19350
50°	14382	20063	13591
55°	9145	12570	6810
60°	4533	6671	2437
65°	1149	1962	909
70°	164	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°	95.3	4.2	2.6	0°	945	945	945	945	945	
10°-20°	310.3	13.7	8.6	5°	850	952	1045	1033	976	78
20°-30°	491.1	21.8	13.6	15°	821	1028	1236	1204	1027	229
30°-40°	573.2	25.4	15.9	25°	720	960	1219	1211	944	336
40°-50°	500.2	22.2	13.9	35°	700	851	1011	1042	866	434
50°-60°	245.8	10.9	6.8	45°	563	622	765	701	575	423
60°-70°	40.5	1.8	1.1	55°	235	263	323	272	175	213
70°-80°	1.4	0.1	0.0	65°	24	32	41	31	19	35
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°	896.7	39.7	24.9							
0°-40°	1469.9	65.1	40.8							
0°-60°	2216.0	98.1	61.6							
0°-90°	2257.9	100.0	62.7							
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°	2257.9	100.0	62.7							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	945	945	945	945	945	945	945	945	945
2.5°	911	917	938	965	984	990	981	973	968
5°	850	885	952	1015	1045	1055	1033	1003	976
7.5°	785	839	948	1044	1085	1100	1079	1025	984
10°	762	828	983	1098	1149	1154	1142	1062	984
12.5°	797	860	1009	1140	1195	1192	1183	1101	1010
15°	821	894	1028	1172	1236	1224	1204	1128	1027
17.5°	824	903	1030	1182	1266	1255	1221	1135	1021
20°	791	885	1016	1185	1282	1281	1233	1124	979
22.5°	749	849	986	1167	1258	1270	1220	1097	951
25°	720	818	960	1132	1219	1240	1211	1088	944
27.5°	703	796	940	1098	1178	1210	1195	1091	938
30°	699	787	925	1062	1132	1176	1172	1073	929
32.5°	703	777	897	1005	1076	1119	1119	1036	912
35°	700	758	851	949	1011	1045	1042	972	866
37.5°	687	726	791	882	934	962	942	891	800
40°	658	682	728	810	858	881	857	807	721
42.5°	614	636	676	753	805	808	780	715	651
45°	563	578	622	695	765	755	701	631	575
47.5°	494	502	545	612	675	677	607	529	485
50°	400	413	452	502	558	558	492	411	378
52.5°	311	324	354	393	430	433	382	306	273
55°	235	241	263	296	323	321	272	208	175
57.5°	162	173	189	211	231	222	181	130	103
60°	106	112	130	140	156	150	110	75	57
62.5°	61	65	76	82	91	91	64	40	34
65°	24	27	32	33	41	41	31	19	19
67.5°	4	5	5	5	6	5	5	5	5
70°	3	3	3	3	3	3	3	3	2
72.5°	2	2	2	2	2	2	2	2	2
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)