

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: P31128

Luminaire Tested: **PD8V142E-80VC_42TTT**

Issue Date: 03/03/2020



Test Information

Test Method: LM-79-08
Report Number: P31128
Test Lab: INNOVATION CENTER P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PD8V142E-80VC_42TTT
Description: HALO 8-INCH RECESSED CFL OPEN DOWNLIGHT FIXTURE IN "B"
POSITION, VERTICAL LAMP, SPECULAR CLEAR REFLECTOR
Light Source: (1) FOUR PIN GX24Q_4 BASE HEX TTT CFL LAMP 2700K
SYLVANIA CF42DT/E/IN/827 42 W
Ballast/Driver: (1) SYLVANIA ELECTRONIC BALLAST
QTP2X26CF/UNV BS

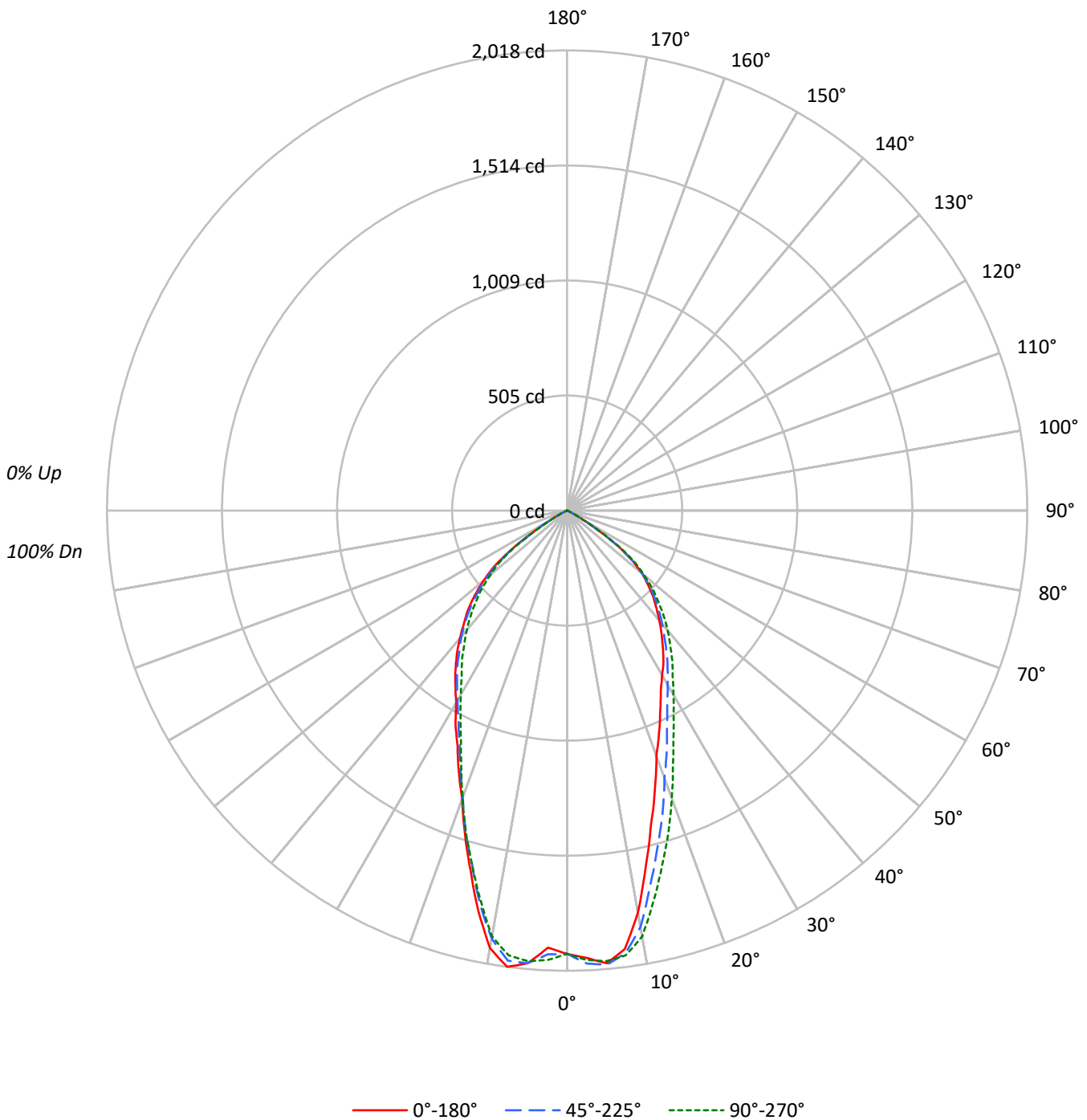
Summary

Lumens per Lamp: 3200 (1 lamp)
Luminaire Lumens: 2335.3 lumens
Efficiency: 73.0%
Efficacy: 53.8 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.82 / 0.93
Luminous Opening: Vertical Cylinder (Dia: 0.5' x H: 0.1')
CIE Type: Direct

Input Watts (W): 43.4
Input Voltage (V): 120.03
Input Current (A_{in}): 0.3618
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: P31128
CATALOG NUMBER: PD8V142E-80VC_42TTT

Luminous Intensity Polar Plot





TEST NUMBER: P31128

CATALOG NUMBER: PD8V142E-80VC_42TTT

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	87	87	87	87	85	85	85	85	81	81	81		78	78	78		74	74	74	73
1	82	80	78	76	80	78	76	74	75	74	72		72	71	70		70	69	68	67
2	77	73	69	66	75	71	68	65	69	66	64		67	64	63		65	63	61	60
3	72	66	62	58	70	65	61	58	63	60	57		61	58	56		60	57	55	54
4	67	61	56	52	66	60	55	52	58	54	51		57	53	50		55	52	50	49
5	63	56	50	47	62	55	50	46	53	49	46		52	48	46		51	48	45	44
6	59	51	46	42	58	51	46	42	49	45	42		48	44	41		47	44	41	40
7	55	47	42	38	54	47	42	38	46	41	38		45	41	38		44	40	38	36
8	52	44	39	35	51	43	39	35	43	38	35		42	38	35		41	37	35	33
9	49	41	36	32	48	41	36	32	40	35	32		39	35	32		38	35	32	31
10	46	38	33	30	46	38	33	30	37	33	30		37	33	30		36	32	30	29

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	106570	106570	106570
5°	107284	106745	107284
10°	95307	101007	103777
15°	75602	85538	86919
20°	61078	71596	71863
25°	52229	59582	61528
30°	45971	51434	53697
35°	41575	45664	48504
40°	37029	40390	43161
45°	32935	34974	38002
50°	28134	28854	31340
55°	19204	20115	21096
60°	5934	6239	6847
65°	1342	1342	1258
70°	377	283	377
75°	217	217	217
80°	129	129	129
85°	0	0	0



TEST NUMBER: P31128

CATALOG NUMBER: PD8V142E-80VC_42TTT

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	186.3	8.0	5.8	0°	1944	1944	1944	1944	1944	
10°-20°	440.1	18.8	13.8	5°	1993	1999	1983	1993	1993	184
20°-30°	501.8	21.5	15.7	15°	1423	1529	1610	1610	1636	399
30°-40°	499.9	21.4	15.6	25°	966	1035	1102	1116	1138	447
40°-50°	437.0	18.7	13.7	35°	732	761	804	841	854	457
50°-60°	241.6	10.3	7.6	45°	533	545	566	598	615	409
60°-70°	26.4	1.1	0.8	55°	274	273	287	290	301	233
70°-80°	2.0	0.1	0.1	65°	16	18	16	16	15	26
80°-90°	0.1	0.0	0.0	75°	2	2	2	2	2	2
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°	1128.2	48.3	35.3							
0°-40°	1628.1	69.7	50.9							
0°-60°	2306.8	98.8	72.1							
0°-90°	2335.3	100.0	73.0							
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°	2335.3	100.0	73.0							



TEST NUMBER: P31128

CATALOG NUMBER: PD8V142E-80VC_42TTT

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1944	1944	1944	1944	1944	1944	1944	1944	1944
2.5°	1963	1975	1988	1982	1973	1964	1948	1926	1918
5°	1993	1982	1999	1988	1983	1988	1993	1972	1993
7.5°	1939	1947	1957	1945	1967	1976	1991	1983	2018
10°	1789	1848	1854	1832	1896	1885	1906	1940	1948
12.5°	1594	1660	1684	1684	1752	1747	1766	1829	1799
15°	1423	1501	1529	1529	1610	1609	1610	1678	1636
17.5°	1281	1349	1391	1381	1477	1475	1478	1562	1489
20°	1144	1212	1248	1242	1341	1342	1338	1426	1346
22.5°	1054	1099	1140	1140	1213	1233	1223	1320	1242
25°	966	992	1035	1048	1102	1122	1116	1202	1138
27.5°	889	910	951	956	1012	1029	1033	1108	1059
30°	833	839	881	891	932	956	961	1024	973
32.5°	786	784	820	836	861	883	899	941	912
35°	732	729	761	781	804	824	841	870	854
37.5°	680	676	701	727	742	761	777	794	794
40°	628	623	647	672	685	705	722	729	732
42.5°	579	575	597	619	627	645	660	659	669
45°	533	527	545	573	566	586	598	592	615
47.5°	480	472	489	512	508	523	532	522	549
50°	430	415	430	453	441	455	469	459	479
52.5°	358	352	363	380	377	380	387	384	405
55°	274	270	273	287	287	288	290	287	301
57.5°	167	151	160	175	172	175	166	166	184
60°	78	72	83	88	82	84	87	86	90
62.5°	45	41	42	45	43	45	46	43	53
65°	16	14	18	17	16	16	16	15	15
67.5°	5	5	5	5	5	5	5	5	6
70°	4	4	3	3	3	3	3	4	4
72.5°	3	2	2	2	2	2	2	3	3
75°	2	2	2	2	2	2	2	2	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)