

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: P31436

Luminaire Tested: **PD8H242E-82HWWC_32TTT**

Issue Date: 03/03/2020



Test Information

Test Method: LM-79-08
Report Number: P31436
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PD8H242E-82HWWC_32TTT
Description: HALO 8-INCH APERTURE OPEN WALL WASH DOWNLIGHT, HORIZONTAL
LAMP, SPECULAR CLEAR TRIM WITH SPECULAR KICKER
Light Source: (2) 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

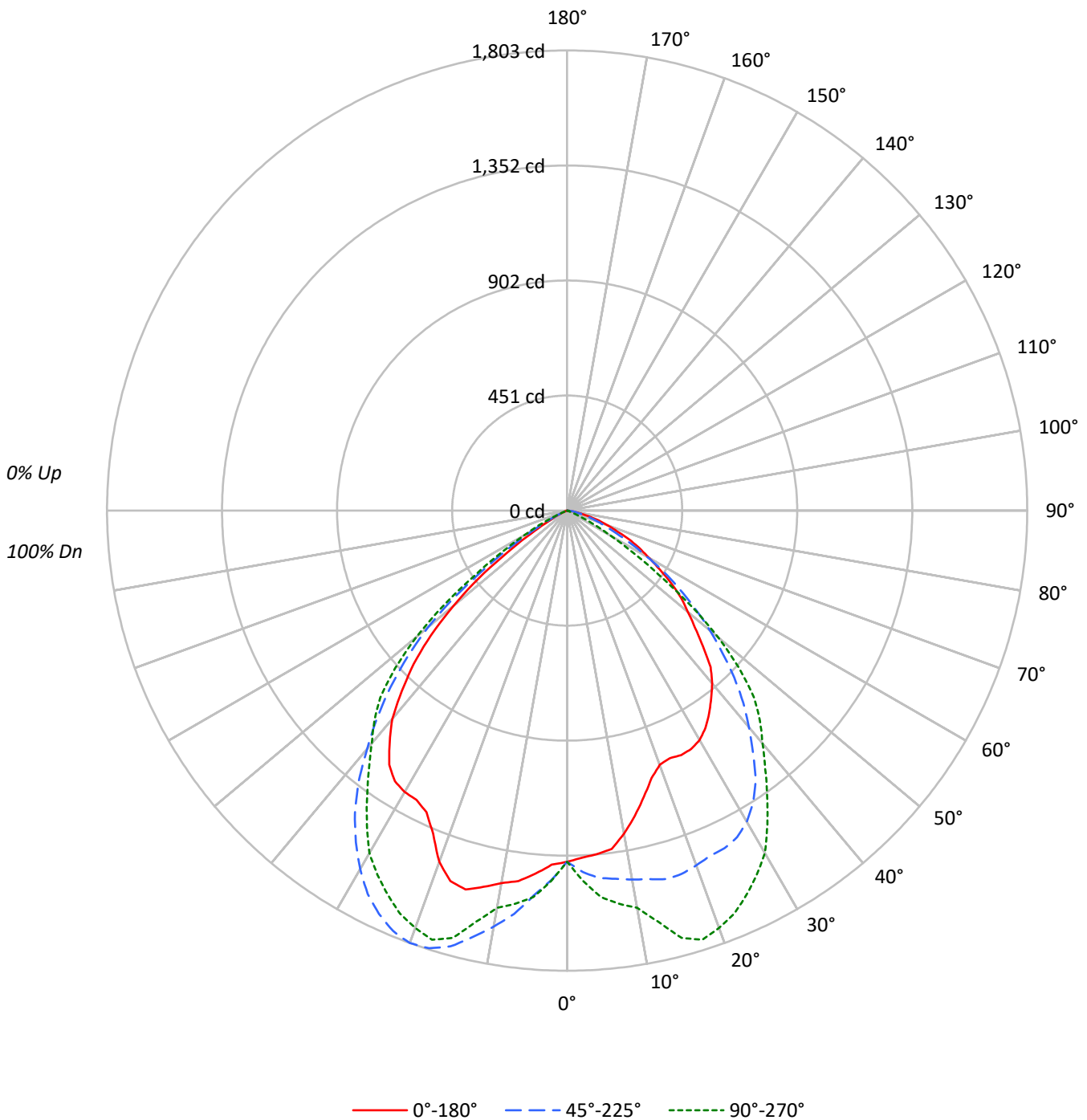
Summary

Lumens per Lamp: 2400 (2 lamps)
Luminaire Lumens: 3383.2 lumens
Efficiency: 70.5%
Efficacy: 50.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.47 / 1.41
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
CIE Type: Direct

Input Watts (W): 66.7
Input Voltage (V): 120.02
Input Current (Ain): 0.5556
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: P31436
CATALOG NUMBER: PD8H242E-82HWWC_32TTT

Luminous Intensity Polar Plot





TEST NUMBER: P31436

CATALOG NUMBER: PD8H242E-82HWWC_32TTT

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	50	30	10	50	30	10	0		
RCR																										
0	84	84	84	84	82	82	82	82	78	78	78	75	75	75	72	72	72	70					70			
1	79	76	74	72	77	75	72	71	72	70	68	69	68	66	66	65	64	63					63			
2	73	68	65	62	71	67	64	61	65	62	59	63	60	58	61	59	57	56					56			
3	68	62	57	53	66	61	56	53	59	55	52	57	54	51	55	52	50	49					49			
4	63	56	50	47	61	55	50	46	53	49	46	52	48	45	50	47	44	43					43			
5	58	50	45	41	57	50	45	41	48	44	40	47	43	40	46	42	40	38					38			
6	54	46	40	36	53	45	40	36	44	39	36	43	39	36	42	38	35	34					34			
7	50	42	36	33	49	41	36	33	40	36	32	39	35	32	39	35	32	31					31			
8	47	39	33	29	46	38	33	29	37	32	29	36	32	29	36	32	29	28					28			
9	44	35	30	27	43	35	30	27	34	30	26	34	29	26	33	29	26	25					25			
10	41	33	28	24	41	32	28	24	32	27	24	31	27	24	31	27	24	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	37586	37586	37586
5°	36470	41033	38549
10°	34547	42478	39843
15°	31323	46755	41467
20°	28920	47473	39970
25°	29393	46217	36262
30°	29661	44292	36376
35°	28729	40488	35986
40°	27390	36902	33029
45°	24623	33923	27832
50°	21594	27018	20334
55°	18947	16598	10762
60°	15373	8165	3541
65°	12549	2752	1306
70°	9088	481	267
75°	5685	316	189
80°	2648	78	78
85°	410	0	0



TEST NUMBER: P31436

CATALOG NUMBER: PD8H242E-82HWWC_32TTT

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	141.6	4.2	3.0	0°	1376	1376	1376	1376	1376	
10°-20°	447.8	13.2	9.3	5°	1351	1445	1520	1515	1428	127
20°-30°	701.7	20.7	14.6	15°	1161	1495	1733	1768	1537	327
30°-40°	811.6	24.0	16.9	25°	1057	1460	1662	1744	1304	487
40°-50°	717.6	21.2	14.9	35°	970	1289	1367	1450	1215	605
50°-60°	401.2	11.9	8.4	45°	752	926	1036	978	850	581
60°-70°	123.8	3.7	2.6	55°	500	539	438	378	284	443
70°-80°	33.7	1.0	0.7	65°	269	217	59	39	28	264
80°-90°	4.2	0.1	0.1	75°	90	70	5	3	3	100
90°-100°	0.0	0.0	0.0	85°	4	6	0	0	0	10
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°	1291.1	38.2	26.9							
0°-40°	2102.7	62.2	43.8							
0°-60°	3221.5	95.2	67.1							
0°-90°	3383.2	100.0	70.5							
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°	3383.2	100.0	70.5							



TEST NUMBER: P31436

CATALOG NUMBER: PD8H242E-82HWWC_32TTT

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1376	1376	1376	1376	1376	1376	1376	1376	1376
2.5°	1361	1383	1418	1443	1453	1460	1450	1420	1389
5°	1351	1393	1445	1489	1520	1531	1515	1467	1428
7.5°	1337	1374	1455	1514	1554	1588	1594	1515	1464
10°	1285	1350	1468	1534	1580	1631	1655	1584	1482
12.5°	1225	1332	1479	1590	1650	1694	1712	1644	1510
15°	1161	1316	1495	1642	1733	1767	1768	1682	1537
17.5°	1099	1294	1493	1650	1763	1801	1798	1695	1522
20°	1060	1272	1479	1618	1740	1802	1803	1668	1465
22.5°	1050	1259	1464	1576	1710	1783	1783	1617	1371
25°	1057	1259	1460	1552	1662	1753	1744	1567	1304
27.5°	1053	1243	1443	1528	1609	1709	1693	1542	1278
30°	1038	1207	1408	1489	1550	1643	1622	1516	1273
32.5°	1009	1147	1356	1424	1460	1555	1541	1457	1257
35°	970	1086	1289	1338	1367	1452	1450	1374	1215
37.5°	927	1026	1196	1244	1275	1333	1343	1267	1142
40°	884	969	1108	1169	1191	1238	1219	1155	1066
42.5°	832	905	1021	1106	1118	1144	1102	1029	959
45°	752	824	926	1018	1036	1041	978	909	850
47.5°	680	743	824	913	914	917	848	771	724
50°	617	663	730	796	772	771	711	629	581
52.5°	563	578	633	648	609	609	553	475	438
55°	500	500	539	508	438	420	378	317	284
57.5°	430	436	452	381	304	283	248	196	167
60°	369	377	359	277	196	175	140	106	85
62.5°	319	325	286	197	123	107	77	56	49
65°	269	260	217	128	59	47	39	27	28
67.5°	210	202	163	72	17	9	9	10	9
70°	170	164	130	49	9	5	5	5	5
72.5°	129	129	99	31	6	4	3	4	3
75°	90	95	70	19	5	3	3	3	3
77.5°	59	63	46	13	3	2	1	2	1
80°	34	39	32	9	1	1	0	1	1
82.5°	16	20	22	5	1	0	0	1	1
85°	4	5	6	1	0	0	0	0	0
87.5°	1	1	1	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0

(END OF REPORT)