

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: P31435

Luminaire Tested: **PD8H242E-82HWWC_42TTT**

Issue Date: 03/03/2020



Test Information

Test Method: LM-79-08
Report Number: P31435
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PD8H242E-82HWWC_42TTT
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
CF42DT/E/IN/835 42 WATTS
Ballast/Driver: (1) SYLVANIA ELECTRONIC BALLAST
SYLVANIA QTP 2x26/32/42CF/UNV/DM

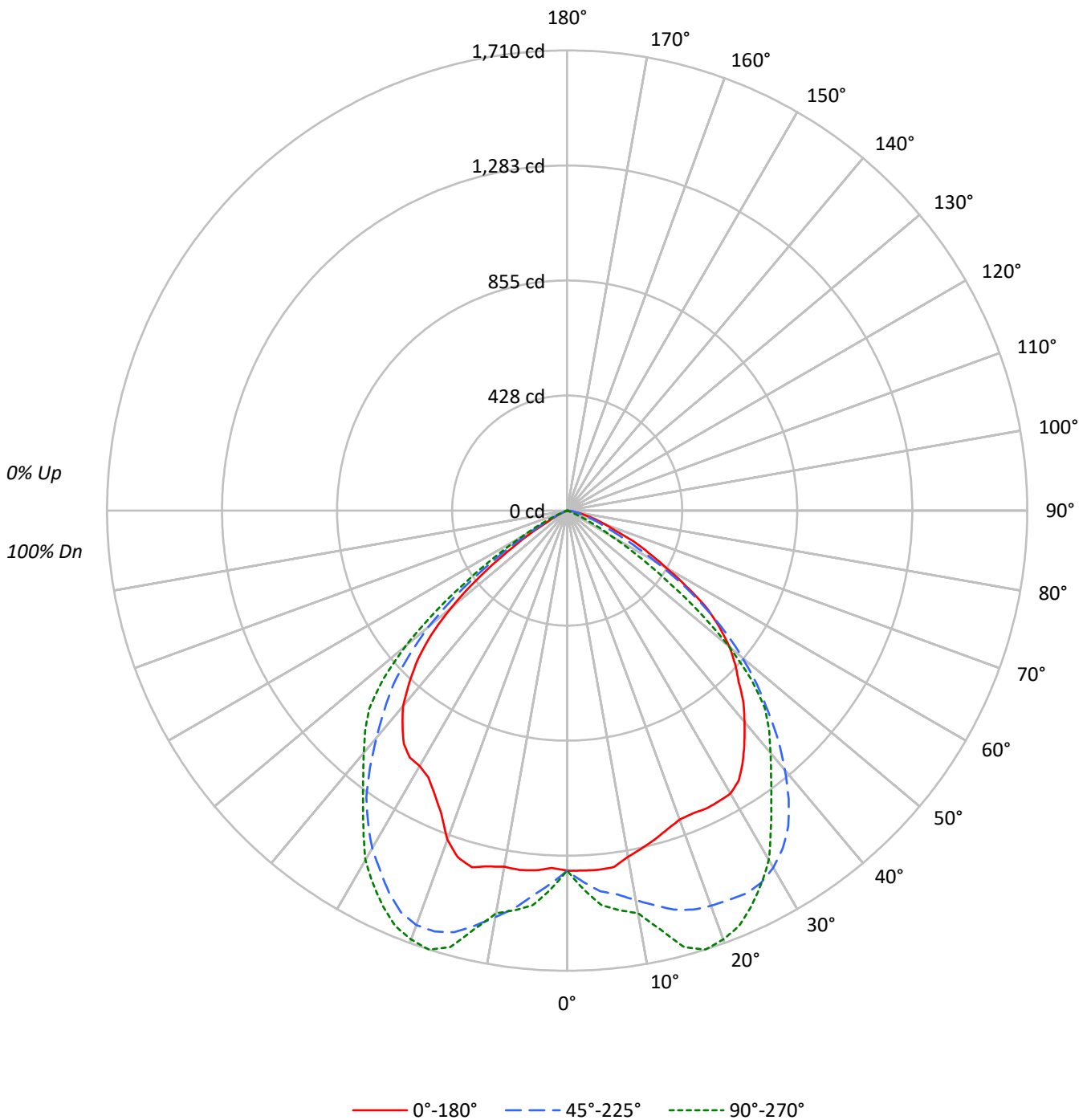
Summary

Lumens per Lamp: 3200 (2 lamps)
Luminaire Lumens: 3391.9 lumens
Efficiency: 53.0%
Efficacy: 36.8 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.47 / 1.44
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
CIE Type: Direct

Input Watts (W): 92.1
Input Voltage (V): 120.01
Input Current (Ain): 0.7686
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	50	30	10	50	30	10	0		
RCR																										
0	63	63	63	63	62	62	62	62	59	59	59	56	56	56	54	54	54	53					53			
1	59	57	55	54	58	56	54	53	54	53	51	52	51	50	50	49	48					47				
2	55	51	49	46	54	50	48	46	49	46	45	47	45	44	45	44	43					42				
3	51	46	43	40	50	45	42	40	44	41	39	43	40	38	41	39	38					37				
4	47	42	38	35	46	41	37	35	40	37	34	39	36	34	38	35	33					32				
5	44	38	34	31	43	37	33	30	36	33	30	35	32	30	34	32	30					29				
6	41	34	30	27	40	34	30	27	33	29	27	32	29	27	31	29	26					25				
7	38	31	27	24	37	31	27	24	30	27	24	29	26	24	29	26	24					23				
8	35	29	25	22	34	28	24	22	28	24	22	27	24	22	26	24	21					20				
9	33	26	22	20	32	26	22	20	26	22	20	25	22	20	24	22	19					19				
10	31	24	21	18	30	24	20	18	24	20	18	23	20	18	23	20	18					17				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	36548	36548	36548
5°	36173	39737	36227
10°	35111	40838	36133
15°	34102	45298	37016
20°	33340	46272	35496
25°	33982	45077	32369
30°	34691	42835	31319
35°	33705	39155	31336
40°	31759	36406	29404
45°	29535	34021	25737
50°	27543	27403	19704
55°	24101	16863	10989
60°	17706	8082	3791
65°	12782	2659	1213
70°	8126	481	214
75°	5053	253	126
80°	2415	78	0
85°	410	0	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	136.4	4.0	2.1	0°	1338	1338	1338	1338	1338	
10°-20°	434.8	12.8	6.8	5°	1340	1420	1472	1435	1342	127
20°-30°	689.9	20.3	10.8	15°	1264	1535	1679	1622	1372	357
30°-40°	807.2	23.8	12.6	25°	1222	1571	1621	1566	1164	564
40°-50°	737.2	21.7	11.5	35°	1138	1433	1322	1301	1058	709
50°-60°	430.7	12.7	6.7	45°	902	1056	1039	912	786	699
60°-70°	121.8	3.6	1.9	55°	636	622	445	372	290	554
70°-80°	30.3	0.9	0.5	65°	274	195	57	36	26	271
80°-90°	3.8	0.1	0.1	75°	80	62	4	2	2	90
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°	1261.1	37.2	19.7							
0°-40°	2068.3	61.0	32.3							
0°-60°	3236.1	95.4	50.6							
0°-90°	3391.9	100.0	53.0							
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°	3391.9	100.0	53.0							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1338	1338	1338	1338	1338	1338	1338	1338	1338
2.5°	1339	1353	1382	1397	1409	1403	1387	1356	1329
5°	1340	1370	1420	1456	1472	1467	1435	1376	1342
7.5°	1336	1368	1439	1478	1498	1503	1489	1400	1347
10°	1306	1371	1470	1509	1519	1539	1534	1451	1344
12.5°	1285	1378	1502	1574	1593	1603	1579	1494	1354
15°	1264	1389	1535	1637	1679	1672	1622	1520	1372
17.5°	1241	1392	1555	1659	1710	1698	1640	1518	1351
20°	1222	1397	1563	1651	1696	1691	1639	1485	1301
22.5°	1218	1415	1566	1623	1670	1666	1615	1439	1220
25°	1222	1440	1571	1594	1621	1628	1566	1386	1164
27.5°	1219	1443	1560	1555	1563	1576	1506	1343	1117
30°	1214	1424	1532	1513	1499	1513	1449	1310	1096
32.5°	1188	1376	1490	1454	1409	1430	1377	1258	1088
35°	1138	1317	1433	1378	1322	1339	1301	1190	1058
37.5°	1082	1251	1352	1290	1245	1250	1203	1108	1005
40°	1025	1173	1259	1216	1175	1164	1101	1023	949
42.5°	970	1086	1163	1153	1111	1083	1006	929	868
45°	902	994	1056	1064	1039	992	912	833	786
47.5°	847	904	956	958	928	877	796	722	687
50°	787	805	850	843	783	748	673	598	563
52.5°	714	709	740	699	617	590	529	462	428
55°	636	631	622	539	445	419	372	317	290
57.5°	527	539	504	398	306	276	245	204	178
60°	425	433	380	278	194	169	139	109	91
62.5°	343	340	278	185	118	104	76	55	51
65°	274	260	195	115	57	45	36	25	26
67.5°	192	191	145	64	15	9	8	9	9
70°	152	156	116	44	9	5	4	4	4
72.5°	115	117	89	28	6	3	3	3	3
75°	80	85	62	17	4	2	2	2	2
77.5°	54	58	42	12	3	1	1	1	0
80°	31	35	29	8	1	0	0	0	0
82.5°	15	19	20	5	0	0	0	0	0
85°	4	4	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)