

Scaled data based on original data using
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge or
Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: E395774

Luminaire Tested: **H42-338**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: E395774
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H42-338
Description: HALO RECESSED INC - H42 HOUSING, BAFFLE, MAX TILT
Light Source: 300R40FL, 3650 LUMENS
Ballast/Driver: -

Summary

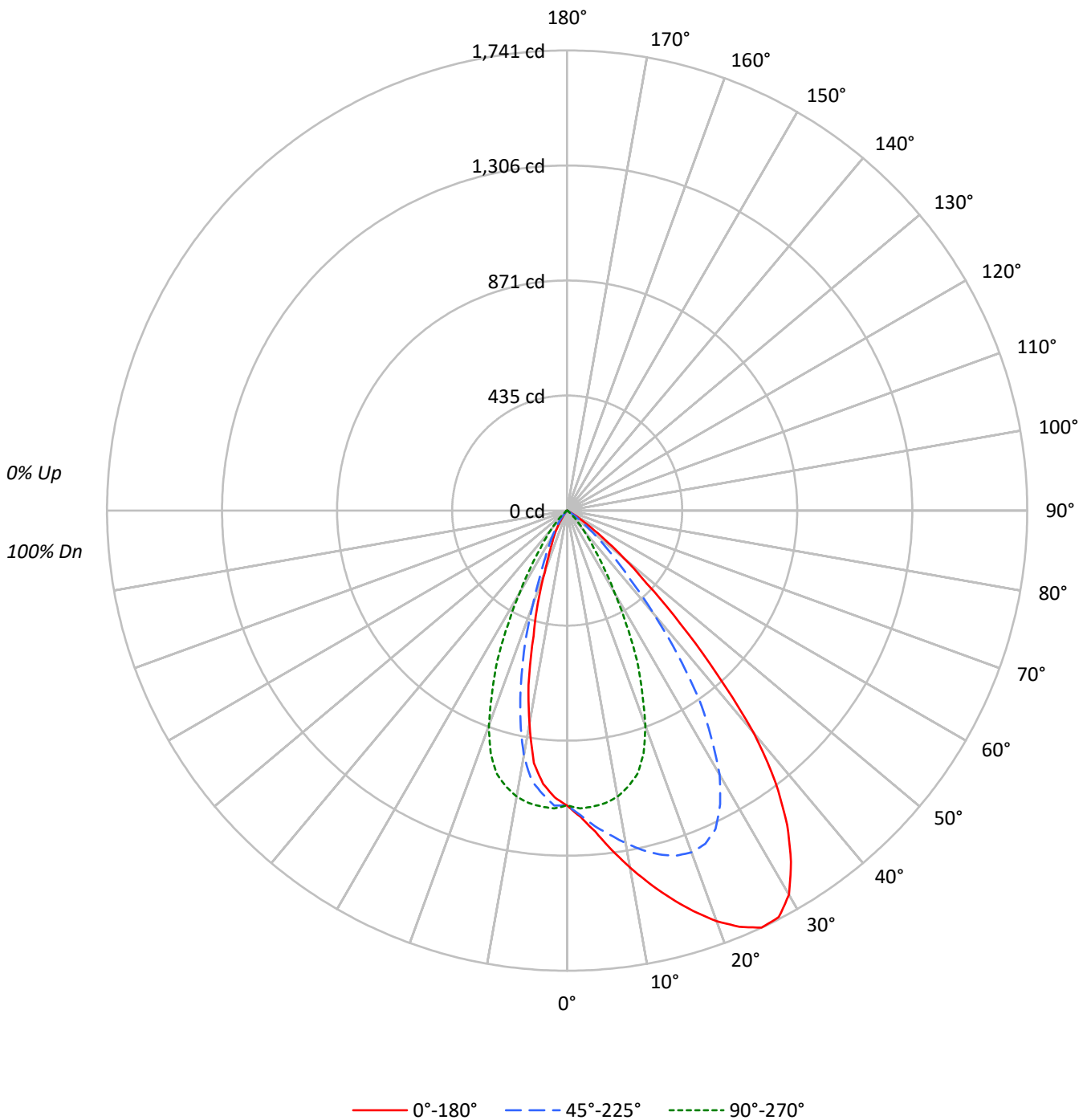
Lumens per Lamp: 3650 (1 lamp)
Luminaire Lumens: 1179.1 lumens
Efficiency: 32.3%
Efficacy: 3.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.85 / 0.96
Luminous Opening: (L: 0 ' x W: -0.6 ' x H: 0 '
CIE Type: Direct

Input Watts (W): 300
Input Voltage (V): NR
Input Current (A_{in}): NR
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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	38	38	38	38	38	38	38	38	38	36	36	36	34	34	34	33	33	33	32	32
1	37	36	35	34	36	35	34	34	34	34	33	32	32	32	31	31	31	30	30	30
2	35	33	32	30	34	32	31	30	31	30	29	30	30	29	30	29	28	28	28	28
3	33	31	29	28	32	30	29	27	29	28	27	28	27	26	28	27	26	26	26	26
4	31	28	27	25	30	28	26	25	27	26	25	27	25	24	26	25	24	24	24	24
5	29	26	24	23	29	26	24	23	26	24	23	25	24	22	24	23	22	22	22	22
6	28	25	23	21	27	24	22	21	24	22	21	23	22	21	23	22	21	20	20	20
7	26	23	21	20	26	23	21	19	22	21	19	22	20	19	22	20	19	19	19	19
8	25	22	20	18	24	21	19	18	21	19	18	21	19	18	20	19	18	17	17	17
9	24	20	18	17	23	20	18	17	20	18	17	19	18	17	19	18	17	16	16	16
10	22	19	17	16	22	19	17	16	19	17	16	18	17	16	18	17	16	15	15	15

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminous shape not found, reference photometric report, or contact the photometric lab for calculations.		
5°			
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	107.3	9.1	2.9
10°-20°	283.2	24.0	7.8
20°-30°	352.0	29.9	9.6
30°-40°	286.8	24.3	7.9
40°-50°	122.2	10.4	3.3
50°-60°	24.9	2.1	0.7
60°-70°	2.5	0.2	0.1
70°-80°	0.2	0.0	0.0
80°-90°	0.0	0.0	0.0
90°-100°	0.0	0.0	0.0
100°-110°	0.0	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°	742.4	63.0	20.3
0°-40°	1029.2	87.3	28.2
0°-60°	1176.3	99.8	32.2
0°-90°	1179.1	100.0	32.3
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°	1179.1	100.0	32.3

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1116	1116	1116	1116	1116	
5°	1219	1198	1124	1075	1038	121
15°	1519	1347	1030	674	491	434
25°	1741	1329	624	195	134	793
35°	1452	869	181	56	30	890
45°	607	253	43	4	3	484
55°	97	36	3	4	4	105
65°	1	2	3	3	3	3
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	20°	22.5°	25°	30°
0°	1116	1116	1116	1116	1116	1116	1116	1116	1116	1116	1116
2.5°	1160	1160	1160	1161	1160	1160	1161	1160	1154	1157	1156
5°	1219	1227	1228	1225	1223	1227	1223	1220	1217	1218	1208
7.5°	1295	1304	1298	1299	1292	1297	1293	1285	1280	1275	1270
10°	1371	1373	1368	1366	1367	1363	1358	1355	1345	1340	1328
12.5°	1446	1452	1443	1441	1436	1431	1431	1421	1412	1407	1386
15°	1519	1518	1518	1515	1509	1503	1496	1476	1473	1460	1432
17.5°	1589	1583	1587	1579	1571	1569	1559	1537	1524	1515	1483
20°	1653	1649	1643	1641	1632	1625	1619	1593	1578	1559	1521
22.5°	1704	1698	1694	1696	1682	1676	1660	1634	1614	1589	1542
25°	1741	1739	1733	1724	1715	1698	1684	1645	1625	1597	1538
27.5°	1734	1722	1717	1706	1692	1676	1659	1617	1594	1558	1490
30°	1678	1659	1652	1644	1632	1614	1595	1543	1518	1481	1411
32.5°	1576	1567	1551	1538	1529	1510	1490	1432	1404	1371	1297
35°	1452	1435	1429	1411	1397	1370	1367	1302	1274	1237	1150
37.5°	1295	1269	1263	1247	1228	1198	1176	1121	1092	1057	961
40°	1099	1046	1058	1027	1036	1009	974	900	876	838	754
42.5°	840	805	783	791	777	759	743	688	649	610	580
45°	607	568	571	533	543	530	522	477	446	421	398
47.5°	410	385	388	378	365	363	348	330	320	306	270
50°	283	256	251	258	245	228	232	219	204	192	178
52.5°	176	161	162	159	156	153	149	139	127	118	105
55°	97	99	96	95	91	89	86	82	75	72	64
57.5°	53	51	49	48	42	42	41	38	36	34	28
60°	18	14	15	14	12	12	11	10	9	9	8
62.5°	2	2	2	2	2	2	2	2	2	2	2
65°	1	1	1	1	1	2	2	2	2	2	2
67.5°	1	1	1	1	1	1	2	1	1	1	1
70°	1	1	1	1	1	1	1	1	1	1	1
72.5°	0	0	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	35°	40°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1116	1116	1116	1116	1116	1116	1116	1116	1116
2.5°	1157	1152	1153	1142	1128	1131	1117	1086	1086
5°	1210	1201	1198	1160	1124	1106	1075	1043	1038
7.5°	1262	1250	1237	1177	1116	1075	1030	971	964
10°	1312	1293	1278	1187	1099	1033	941	859	819
12.5°	1365	1338	1315	1192	1069	961	817	706	676
15°	1410	1379	1347	1183	1030	858	674	535	491
17.5°	1447	1412	1369	1166	962	725	531	383	369
20°	1478	1428	1376	1131	866	594	379	275	247
22.5°	1486	1430	1365	1071	740	460	268	198	178
25°	1475	1402	1329	975	624	329	195	144	134
27.5°	1417	1336	1253	860	484	236	146	113	104
30°	1327	1234	1154	731	359	177	110	84	75
32.5°	1208	1125	1013	579	264	129	79	59	50
35°	1051	972	869	444	181	95	56	37	30
37.5°	882	780	684	322	135	69	37	20	16
40°	679	598	509	227	98	44	20	8	5
42.5°	487	425	354	159	67	28	8	3	3
45°	332	296	253	111	43	15	4	3	3
47.5°	242	206	177	78	27	6	3	4	3
50°	160	131	116	45	12	3	3	4	4
52.5°	98	81	69	27	7	3	4	4	4
55°	54	47	36	12	3	3	4	4	4
57.5°	24	19	17	5	3	3	4	4	4
60°	7	5	5	3	3	3	4	4	4
62.5°	2	2	2	3	3	3	3	3	3
65°	2	2	2	3	3	3	3	3	3
67.5°	2	1	2	2	2	2	2	2	2
70°	1	1	1	1	1	1	2	2	2
72.5°	0	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0

(END OF REPORT)