

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: H20061

Luminaire Tested: **L3239EP-LVR3239SC**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-46-04  
Report Number: H20061  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: L3239EP-LVR3239SC  
Description: HALO 18" RECTANGULAR TRACK FIXTURE  
SPECULAR REFLECTOR AND LOUVER  
Light Source: (2) 39W TT 39 WATTS 2850 LUMENS EACH  
TWIN TUBE COMPACT FLUORESCENT  
Ballast/Driver: -

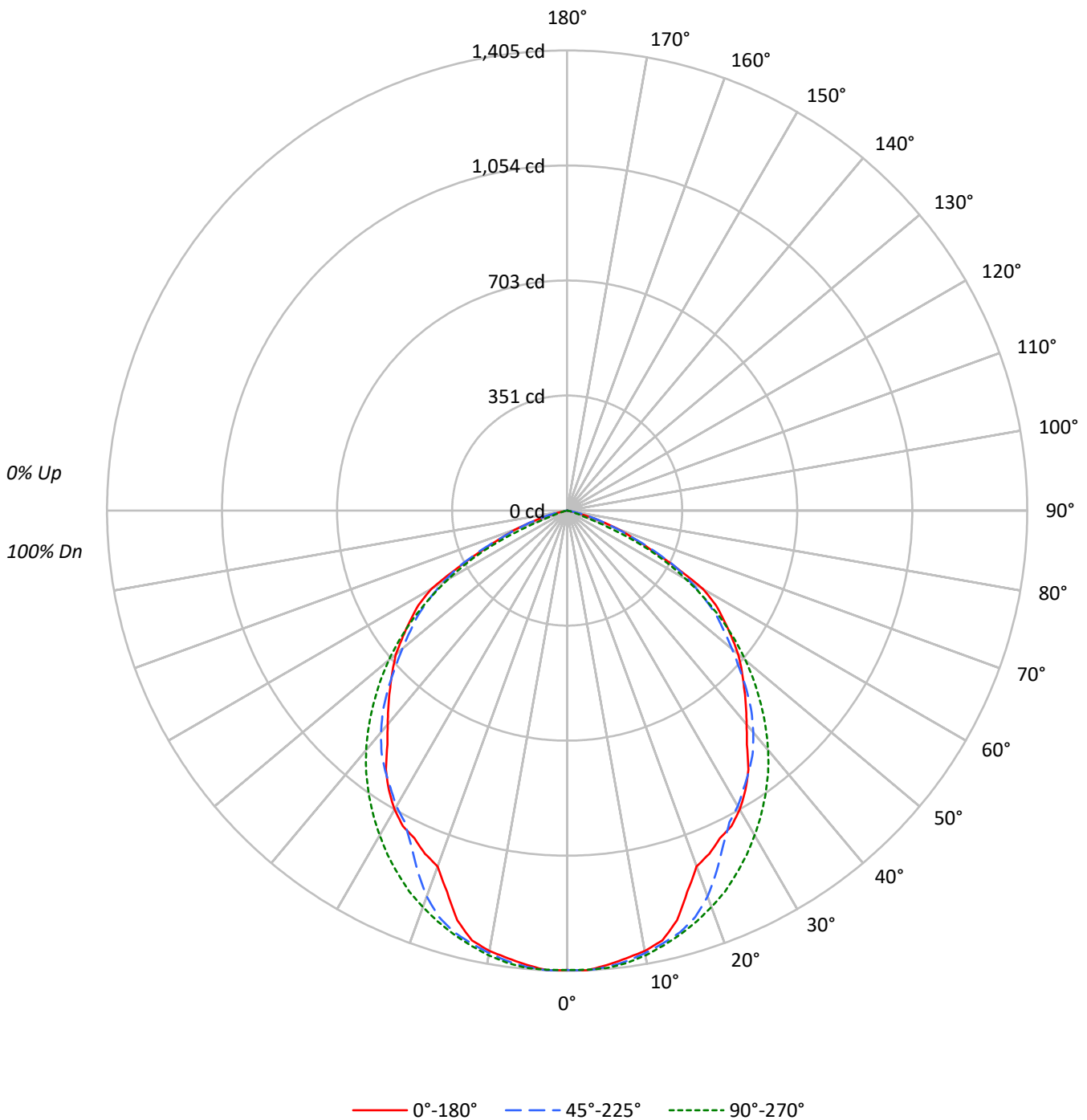
**Summary**

Lumens per Lamp: 2850 (2 lamps)  
Luminaire Lumens: 3105.4 lumens  
Efficiency: 54.5%  
Efficacy: 48.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.21 / 1.26  
Luminous Opening: Rectangular (W 1.52' x L: 0.47' x H: 0')  
CIE Type: Direct

Input Watts (W): 64  
Input Voltage (V): NR  
Input Current (Ain): 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				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	65	65	65	65	63	63	63	63	61	61	61	58	58	58	56	56	56	54
1	60	58	56	55	59	57	55	54	55	53	52	53	51	50	51	50	49	48
2	56	52	48	46	54	51	48	45	49	46	44	47	45	43	45	44	42	41
3	51	46	42	39	50	45	41	38	44	40	38	42	39	37	41	38	37	35
4	47	41	37	33	46	40	36	33	39	36	33	38	35	32	37	34	32	31
5	43	37	32	29	42	36	32	29	35	32	29	34	31	28	33	30	28	27
6	40	33	29	26	39	33	29	26	32	28	25	31	28	25	30	27	25	24
7	37	30	26	23	36	30	26	23	29	25	23	28	25	22	28	25	22	21
8	35	28	23	20	34	27	23	20	27	23	20	26	23	20	26	22	20	19
9	33	26	21	19	32	25	21	18	25	21	18	24	21	18	24	20	18	17
10	31	24	20	17	30	23	19	17	23	19	17	22	19	17	22	19	17	16

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	21139	21139	21139
5°	21069	21159	21205
10°	20884	20991	21098
15°	20200	20793	20886
20°	18535	20107	20652
25°	18354	18736	20332
30°	18337	18129	19921
35°	17750	17823	19424
40°	16758	17387	18784
45°	16279	16514	17835
50°	15986	15400	16666
55°	15367	14579	14999
60°	14434	13108	12656
65°	10054	10553	9127
70°	7313	7004	2555
75°	3202	4075	873
80°	260	781	87
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	132.6	4.3	2.3
10°-20°	371.1	12.0	6.5
20°-30°	533.2	17.2	9.4
30°-40°	619.5	19.9	10.9
40°-50°	600.5	19.3	10.5
50°-60°	503.3	16.2	8.8
60°-70°	283.1	9.1	5.0
70°-80°	61.2	2.0	1.1
80°-90°	0.9	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°	1037.0	33.4	18.2
0°-40°	1656.5	53.3	29.1
0°-60°	2760.2	88.9	48.4
0°-90°	3105.4	100.0	54.5
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°	3105.4	100.0	54.5

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1403	1403	1403	1403	1403	
5°	1393	1394	1399	1403	1402	132
15°	1295	1315	1333	1335	1339	360
25°	1104	1114	1127	1218	1223	511
35°	965	974	969	1023	1056	599
45°	764	766	775	771	837	591
55°	585	585	555	548	571	522
65°	282	299	296	269	256	293
75°	55	64	70	28	15	68
85°	0	0	0	0	0	1
90°	0	0	0	0	0	0
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1403	1403	1403	1403	1403
2.5°	1405	1404	1405	1403	1403
5°	1393	1394	1399	1403	1402
7.5°	1379	1382	1388	1393	1393
10°	1365	1368	1372	1378	1379
12.5°	1344	1353	1353	1358	1360
15°	1295	1315	1333	1335	1339
17.5°	1220	1254	1301	1309	1315
20°	1156	1183	1254	1280	1288
22.5°	1134	1138	1192	1251	1259
25°	1104	1114	1127	1218	1223
27.5°	1086	1081	1073	1179	1186
30°	1054	1056	1042	1134	1145
32.5°	1013	1017	1004	1082	1102
35°	965	974	969	1023	1056
37.5°	901	919	931	961	1008
40°	852	861	884	894	955
42.5°	808	811	833	828	897
45°	764	766	775	771	837
47.5°	723	720	713	715	775
50°	682	678	657	663	711
52.5°	632	634	604	607	643
55°	585	585	555	548	571
57.5°	539	531	496	484	496
60°	479	471	435	416	420
62.5°	371	391	374	344	341
65°	282	299	296	269	256
67.5°	215	228	217	198	152
70°	166	168	159	130	58
72.5°	111	117	111	72	28
75°	55	64	70	28	15
77.5°	10	20	35	11	4
80°	3	4	9	4	1
82.5°	1	1	1	1	0
85°	0	0	0	0	0
87.5°	0	0	0	0	0
90°	0	0	0	0	0
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0	0	0	0	0
115°	0	0	0	0	0
117.5°	0	0	0	0	0
120°	0	0	0	0	0
122.5°	0	0	0	0	0
125°	0	0	0	0	0
127.5°	0	0	0	0	0
130°	0	0	0	0	0
132.5°	0	0	0	0	0
135°	0	0	0	0	0
137.5°	0	0	0	0	0
140°	0	0	0	0	0
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)