

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: H20060

Luminaire Tested: **L3239EP**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: H20060
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: L3239EP
Description: HALO 18" RECTANGULAR TRACK FIXTURE
SPECULAR REFLECTOR
Light Source: (2) 39W TT 39 WATTS 2850 LUMENS EACH
TWIN TUBE COMPACT FLUORESCENT
Ballast/Driver: -

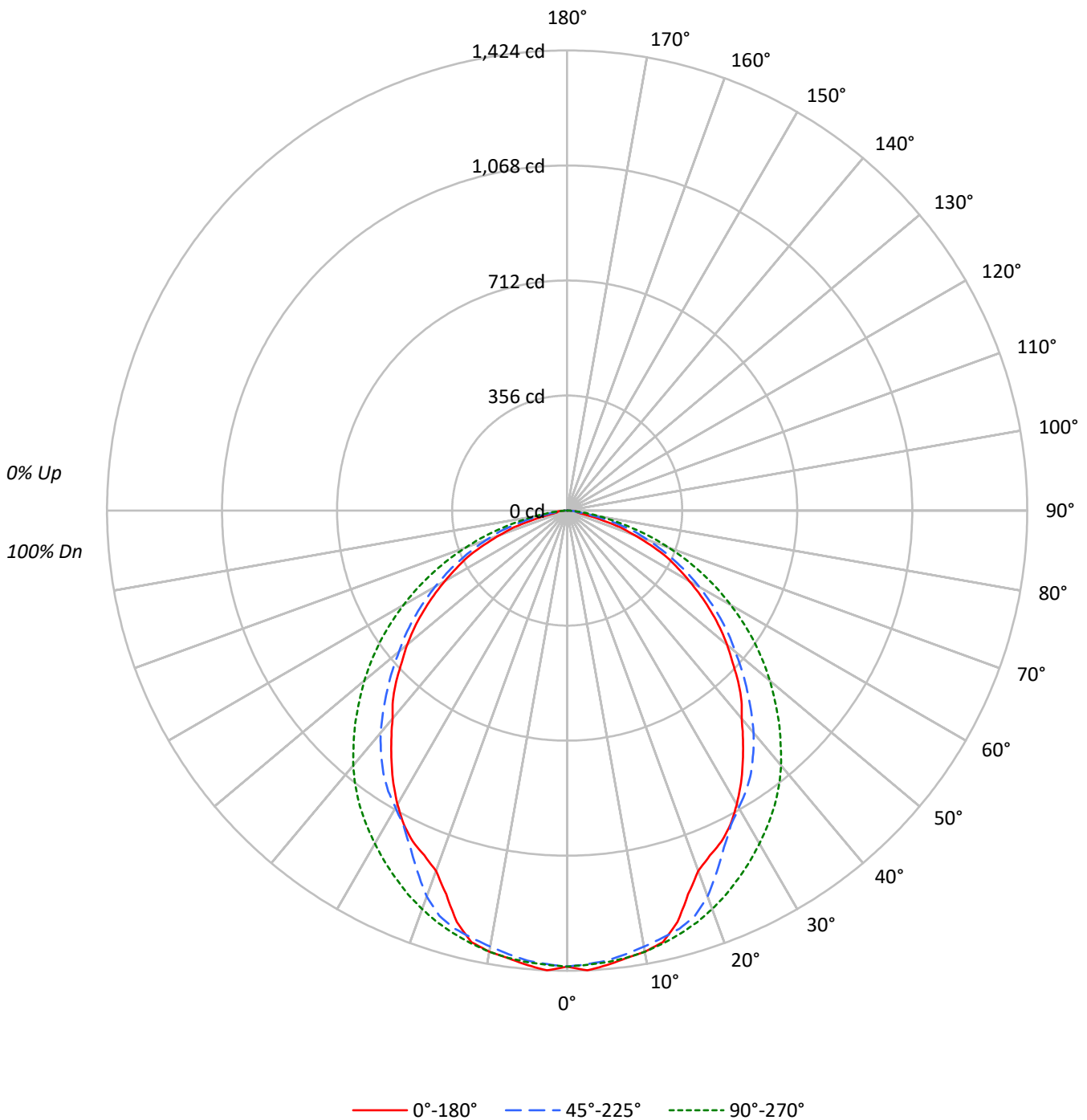
Summary

Lumens per Lamp: 2850 (2 lamps)
Luminaire Lumens: 3412.2 lumens
Efficiency: 59.9%
Efficacy: 53.3 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.25 / 1.27
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

TEST NUMBER: H20060
CATALOG NUMBER: L3239EP

Luminous Intensity Polar Plot





TEST NUMBER: H20060
 CATALOG NUMBER: L3239EP

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	71	71	71	71	70	70	70	70	67	67	67	64	64	64	61	61	61	60
1	66	63	61	59	64	62	60	58	59	57	56	57	55	54	55	54	52	51
2	60	55	52	48	58	54	51	48	52	49	47	50	48	46	48	46	45	43
3	55	49	44	41	53	48	44	40	46	43	40	45	41	39	43	40	38	37
4	50	44	39	35	49	43	38	34	41	37	34	40	36	34	39	36	33	32
5	47	39	34	30	45	38	34	30	37	33	30	36	32	29	35	32	29	28
6	43	35	30	26	42	35	30	26	34	29	26	33	29	26	32	28	26	24
7	40	32	27	23	39	32	27	23	31	26	23	30	26	23	29	26	23	22
8	37	29	24	21	36	29	24	21	28	24	21	27	24	21	27	23	21	19
9	35	27	22	19	34	27	22	19	26	22	19	25	21	19	25	21	19	18
10	33	25	20	17	32	25	20	17	24	20	17	24	20	17	23	20	17	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21260	21260	21260
5°	21356	21144	21220
10°	21205	20960	21205
15°	20559	20902	21136
20°	19016	20379	21037
25°	18786	19102	20864
30°	18268	18477	20704
35°	17437	18246	20564
40°	16522	17662	20259
45°	15938	16791	19753
50°	15142	15916	19198
55°	14264	15183	18546
60°	13169	14223	17598
65°	12122	13120	16435
70°	9736	11718	14714
75°	6054	9547	12109
80°	2777	5380	8677
85°	4668	3803	4668



TEST NUMBER: H20060
 CATALOG NUMBER: L3239EP

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	133.0	3.9	2.3
10°-20°	374.5	11.0	6.6
20°-30°	543.1	15.9	9.5
30°-40°	633.4	18.6	11.1
40°-50°	620.4	18.2	10.9
50°-60°	531.7	15.6	9.3
60°-70°	374.0	11.0	6.6
70°-80°	170.9	5.0	3.0
80°-90°	30.8	0.9	0.5
90°-100°	0.3	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°	1050.6	30.8	18.4
0°-40°	1683.9	49.4	29.5
0°-60°	2836.1	83.1	49.8
0°-90°	3411.8	100.0	59.9
90°-120°	0.3	0.0	0.0
90°-150°	0.3	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	3412.2	100.0	59.9

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1411	1411	1411	1411	1411	
5°	1412	1400	1398	1400	1403	134
15°	1318	1324	1340	1344	1355	367
25°	1130	1123	1149	1246	1255	519
35°	948	957	992	1081	1118	592
45°	748	753	788	839	927	576
55°	543	549	578	631	706	485
65°	340	346	368	399	461	330
75°	104	126	164	192	208	119
85°	27	26	22	26	27	22
90°	2	2	3	3	2	3
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



TEST NUMBER: H20060
 CATALOG NUMBER: L3239EP

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1411	1411	1411	1411	1411
2.5°	1424	1410	1405	1406	1407
5°	1412	1400	1398	1400	1403
7.5°	1397	1385	1385	1392	1396
10°	1386	1373	1370	1380	1386
12.5°	1368	1359	1355	1363	1372
15°	1318	1324	1340	1344	1355
17.5°	1245	1261	1315	1323	1336
20°	1186	1194	1271	1299	1312
22.5°	1155	1149	1210	1274	1286
25°	1130	1123	1149	1246	1255
27.5°	1095	1092	1097	1216	1224
30°	1050	1054	1062	1179	1190
32.5°	1001	1008	1030	1134	1155
35°	948	957	992	1081	1118
37.5°	894	903	946	1020	1076
40°	840	848	898	955	1030
42.5°	799	795	843	893	978
45°	748	753	788	839	927
47.5°	694	701	734	790	872
50°	646	649	679	741	819
52.5°	596	600	630	687	763
55°	543	549	578	631	706
57.5°	490	498	524	574	646
60°	437	446	472	515	584
62.5°	387	393	421	457	524
65°	340	346	368	399	461
67.5°	279	299	317	346	399
70°	221	237	266	294	334
72.5°	173	183	222	242	272
75°	104	126	164	192	208
77.5°	49	66	114	143	151
80°	32	32	62	100	100
82.5°	32	30	27	61	58
85°	27	26	22	26	27
87.5°	15	16	15	11	9
90°	2	2	3	3	2
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



TEST NUMBER: H20060
CATALOG NUMBER: L3239EP

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)