

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: H20055

Luminaire Tested: **L3232EP**

Issue Date: 3/3/2020



**Test Information**

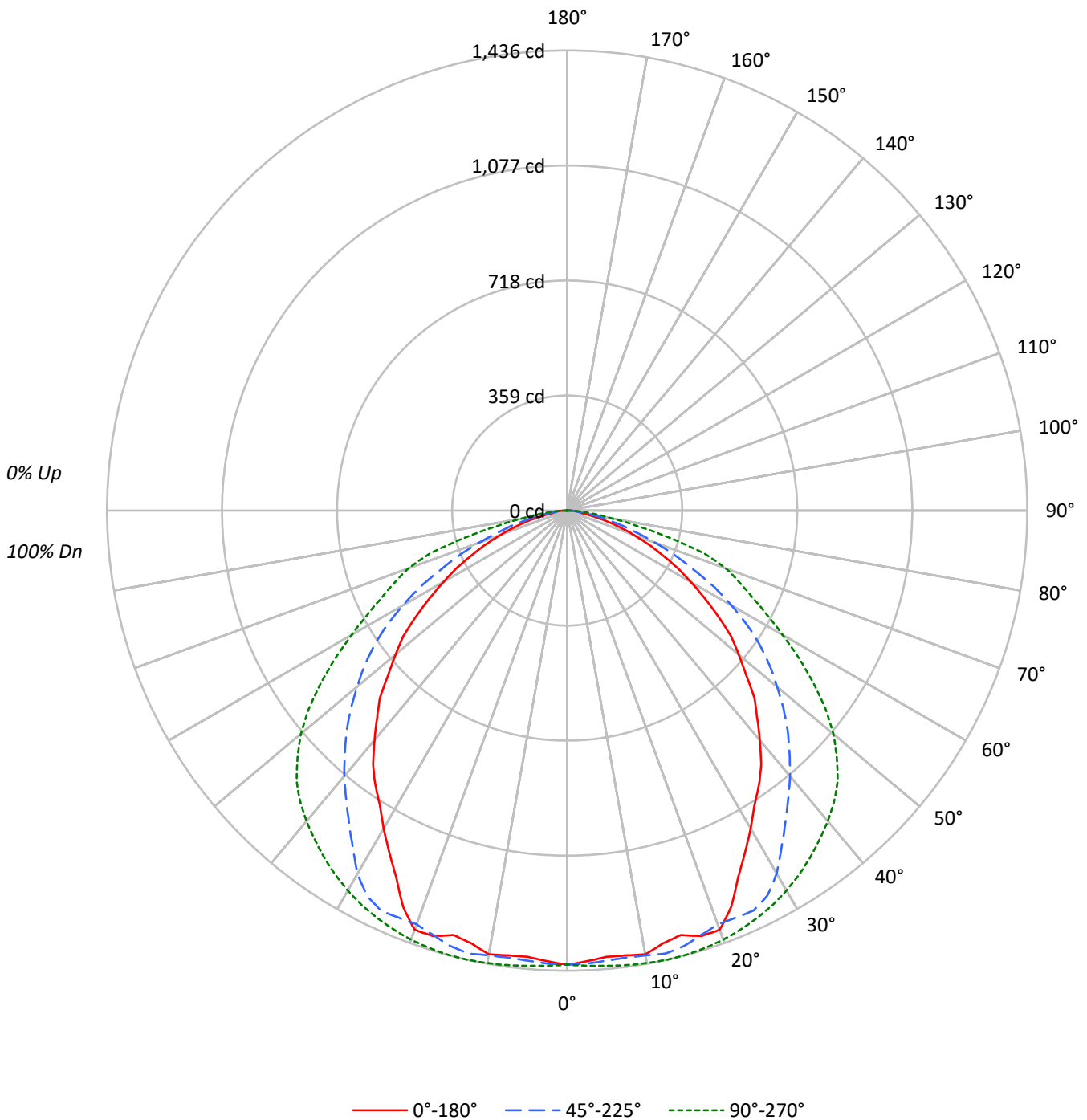
Test Method: LM-46-04  
Report Number: H20055  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: L3232EP  
Description: HALO 16" RECTANGULAR TRACK FIXTURE  
SPECULAR REFLECTOR  
Light Source: (2) 32W PLT 32 WATTS 2400 LUMENS EACH  
HEX TUBE COMPACT FLUORESCENT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 2400 (2 lamps)  
Luminaire Lumens: 4052.8 lumens  
Efficiency: 84.4%  
Efficacy: 57.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.43 / 1.41  
Luminous Opening: Rectangular (W 1.36' x L: 0.47' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 70  
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	101	101	101	101	98	98	98	98	94	94	94		90	90	90		86	86	86	84
1	92	89	85	82	90	87	84	81	83	81	78		80	78	76		77	75	74	72
2	84	78	72	67	82	76	71	67	73	69	65		70	67	64		68	65	62	60
3	77	68	62	56	75	67	61	56	64	59	55		62	58	54		60	56	53	51
4	70	61	53	48	69	59	53	47	57	51	47		55	50	46		54	49	46	44
5	65	54	47	41	63	53	46	41	51	45	41		50	44	40		48	43	40	38
6	60	49	41	36	58	48	41	36	46	40	36		45	39	35		44	39	35	33
7	56	44	37	32	54	44	37	32	42	36	31		41	35	31		40	35	31	29
8	52	40	33	28	50	40	33	28	39	32	28		38	32	28		37	32	28	26
9	48	37	30	25	47	36	30	25	36	29	25		35	29	25		34	29	25	23
10	45	34	27	23	44	34	27	23	33	27	23		32	27	23		31	26	23	21

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

	0°	45°	90°
0°	23862	23862	23862
5°	23632	23835	24105
10°	24042	24093	24521
15°	23902	24529	25017
20°	24945	24623	25537
25°	23449	25585	26068
30°	22264	25434	26620
35°	21462	24402	27177
40°	20554	23785	27808
45°	19671	23172	28435
50°	18312	22399	28425
55°	16881	21608	27539
60°	15021	19938	26135
65°	13070	17293	25342
70°	10832	14328	25947
75°	8133	11126	21991
80°	4461	8049	13868
85°	6956	5410	10047



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	134.8	3.3	2.8
10°-20°	397.4	9.8	8.3
20°-30°	622.1	15.3	13.0
30°-40°	746.6	18.4	15.6
40°-50°	769.2	19.0	16.0
50°-60°	664.4	16.4	13.8
60°-70°	458.4	11.3	9.5
70°-80°	216.8	5.3	4.5
80°-90°	42.7	1.1	0.9
90°-100°	0.4	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°	1154.4	28.5	24.0
0°-40°	1900.9	46.9	39.6
0°-60°	3334.6	82.3	69.5
0°-90°	4052.4	100.0	84.4
90°-120°	0.4	0.0	0.0
90°-150°	0.4	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	4052.8	100.0	84.4

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1417	1417	1417	1417	1417	
5°	1398	1402	1410	1419	1426	134
15°	1371	1377	1407	1412	1435	393
25°	1262	1317	1377	1388	1403	583
35°	1044	1084	1187	1309	1322	652
45°	826	873	973	1129	1194	632
55°	575	625	736	870	938	514
65°	328	350	434	573	636	327
75°	125	136	171	266	338	135
85°	36	35	28	35	52	30
90°	3	3	3	3	1	4
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	1	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°	1417	1417	1417	1417	1417
2.5°	1408	1410	1415	1419	1422
5°	1398	1402	1410	1419	1426
7.5°	1400	1404	1407	1419	1431
10°	1406	1412	1409	1418	1434
12.5°	1383	1397	1416	1414	1436
15°	1371	1377	1407	1412	1435
17.5°	1392	1384	1389	1407	1431
20°	1392	1401	1374	1401	1425
22.5°	1338	1379	1375	1397	1415
25°	1262	1317	1377	1388	1403
27.5°	1202	1249	1354	1374	1388
30°	1145	1191	1308	1354	1369
32.5°	1088	1139	1245	1332	1347
35°	1044	1084	1187	1309	1322
37.5°	995	1038	1133	1286	1294
40°	935	987	1082	1261	1265
42.5°	878	929	1027	1229	1233
45°	826	873	973	1129	1194
47.5°	756	819	916	1068	1141
50°	699	750	855	1005	1085
52.5°	645	686	798	937	1016
55°	575	625	736	870	938
57.5°	508	548	667	801	858
60°	446	477	592	725	776
62.5°	388	413	518	650	702
65°	328	350	434	573	636
67.5°	273	289	364	504	580
70°	220	234	291	431	527
72.5°	171	185	224	350	452
75°	125	136	171	266	338
77.5°	84	96	121	198	228
80°	46	53	83	135	143
82.5°	40	39	40	81	89
85°	36	35	28	35	52
87.5°	20	21	20	14	16
90°	3	3	3	3	1
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°	1	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)