

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: H20056

Luminaire Tested: **L3218EP**

Issue Date: 3/3/2020



**Test Information**

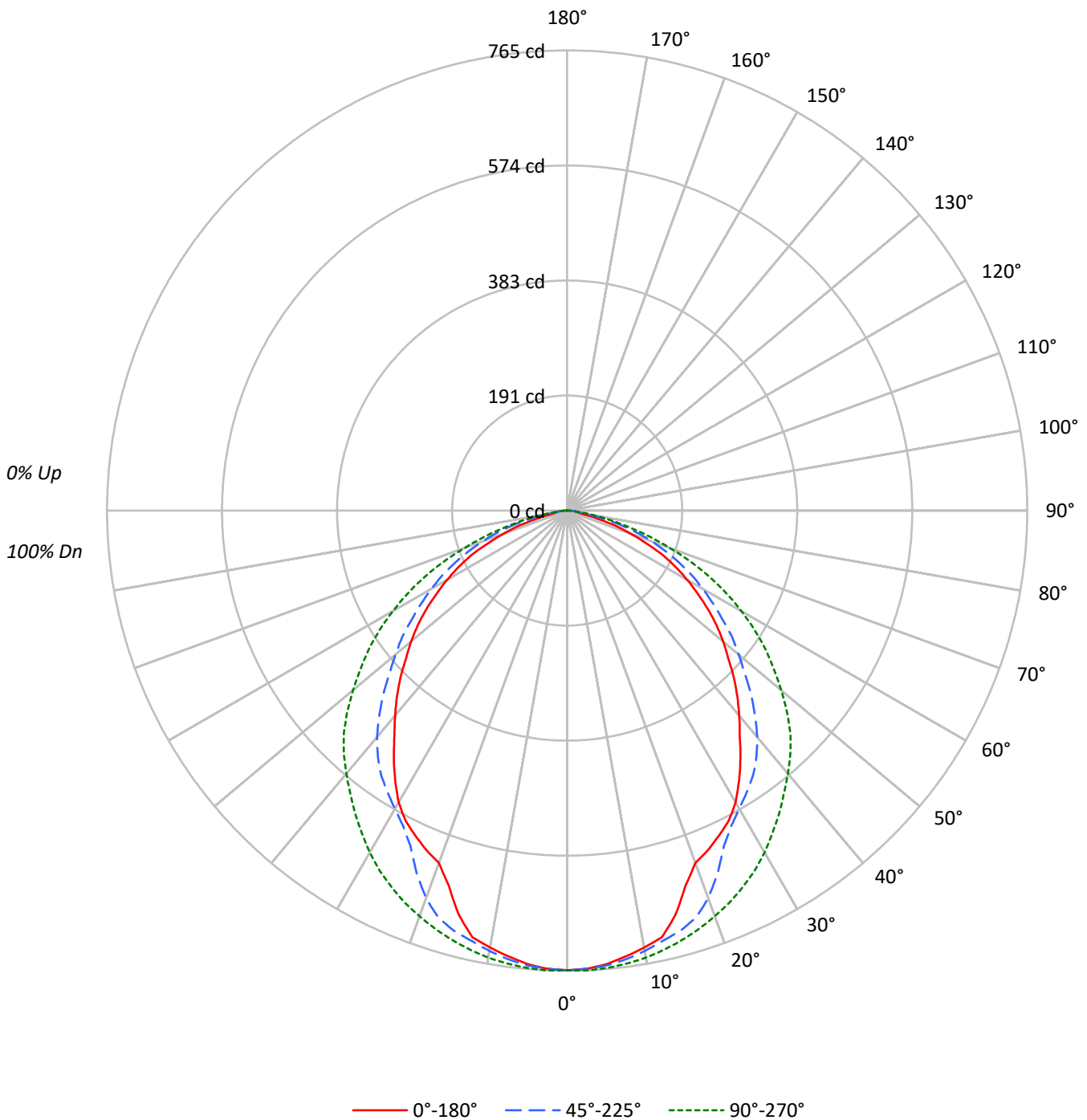
Test Method: LM-46-04  
Report Number: H20056  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: L3218EP  
Description: HALO 14" RECTANGULAR TRACK FIXTURE  
SPECULAR REFLECTOR  
Light Source: (2) 18W TT 18 WATTS 1250 LUMENS EACH  
TWIN TUBE COMPACT FLUORESCENT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 1250 (2 lamps)  
Luminaire Lumens: 1856.5 lumens  
Efficiency: 74.3%  
Efficacy: 59.9 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.27 / 1.28  
Luminous Opening: Rectangular (W 1.2' x L: 0.47' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 31  
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	50	30	10	0	
RCR																						
0	88	88	88	88	86	86	86	86	82	82	82	79	79	79	76	76	76	74				
1	81	78	75	73	79	76	74	71	73	71	69	70	69	67	68	66	65	64				
2	74	69	64	60	73	67	63	59	65	61	58	62	59	56	60	58	55	54				
3	68	61	55	50	66	59	54	50	57	53	49	55	51	48	53	50	47	46				
4	63	54	48	43	61	53	47	43	51	46	42	49	45	41	48	44	41	39				
5	58	48	42	37	56	48	42	37	46	41	37	45	40	36	43	39	36	34				
6	53	44	37	33	52	43	37	32	42	36	32	40	36	32	39	35	32	30				
7	49	40	33	29	48	39	33	29	38	33	29	37	32	28	36	32	28	27				
8	46	36	30	26	45	36	30	26	35	29	26	34	29	26	33	29	25	24				
9	43	33	27	23	42	33	27	23	32	27	23	31	27	23	31	26	23	22				
10	40	31	25	21	40	30	25	21	30	25	21	29	24	21	28	24	21	20				

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

	0°	45°	90°
0°	14583	14583	14583
5°	14499	14541	14621
10°	14298	14405	14628
15°	13746	14301	14603
20°	12659	13926	14576
25°	12561	12967	14543
30°	12345	12610	14463
35°	11703	12544	14315
40°	11089	12253	14231
45°	10567	11668	14170
50°	10056	11048	13791
55°	9496	10494	13406
60°	8802	9939	12779
65°	7948	9289	11832
70°	6266	8348	10089
75°	3849	6622	7802
80°	2044	3649	5056
85°	3416	2869	1971



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	72.0	3.9	2.9
10°-20°	201.8	10.9	8.1
20°-30°	292.8	15.8	11.7
30°-40°	343.3	18.5	13.7
40°-50°	339.0	18.3	13.6
50°-60°	292.9	15.8	11.7
60°-70°	206.5	11.1	8.3
70°-80°	91.4	4.9	3.7
80°-90°	16.1	0.9	0.6
90°-100°	0.3	0.0	0.0
100°-110°	0.1	0.0	0.0
110°-120°	0.1	0.0	0.0
120°-130°	0.1	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°	566.6	30.5	22.7
0°-40°	910.0	49.0	36.4
0°-60°	1541.9	83.1	61.7
0°-90°	1856.0	100.0	74.2
90°-120°	0.5	0.0	0.0
90°-150°	0.6	0.0	0.0
90°-180°	1.0	0.1	0.0
0°-180°	1856.5	100.0	74.3

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	764	764	764	764	764	
5°	757	758	759	761	763	72
15°	696	708	724	730	739	194
25°	596	599	616	678	691	275
35°	502	515	538	590	614	314
45°	392	402	432	466	525	302
55°	285	294	315	358	403	255
65°	176	184	206	229	262	171
75°	52	63	90	107	106	60
85°	16	15	13	12	9	13
90°	1	1	1	1	1	1
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°	764.1	764.1	764.1	764.1	764.1
2.5°	762.3	762.0	762.4	763.4	765.3
5°	756.8	757.5	759.0	760.9	763.2
7.5°	747.5	748.7	752.4	756.2	759.6
10°	737.8	738.7	743.3	749.8	754.8
12.5°	726.7	730.3	732.9	741.1	747.5
15°	695.7	707.9	723.8	730.4	739.1
17.5°	654.0	673.4	710.2	717.3	729.1
20°	623.3	633.4	685.7	704.0	717.7
22.5°	611.1	612.4	653.2	691.0	705.4
25°	596.5	599.2	615.8	677.5	690.6
27.5°	581.5	584.2	590.8	662.6	675.0
30°	560.2	567.0	572.2	642.0	656.3
32.5°	532.0	544.0	555.6	617.2	635.5
35°	502.3	515.4	538.4	589.5	614.4
37.5°	471.5	485.4	517.0	556.5	592.2
40°	445.1	455.1	491.8	523.7	571.2
42.5°	418.7	428.3	462.5	493.0	549.4
45°	391.5	402.1	432.3	465.5	525.0
47.5°	363.1	373.6	400.2	441.0	495.9
50°	338.7	346.0	372.1	416.9	464.5
52.5°	313.0	320.3	345.9	389.4	433.0
55°	285.4	294.3	315.4	358.1	402.9
57.5°	257.7	266.6	287.3	327.3	369.7
60°	230.6	238.6	260.4	294.2	334.8
62.5°	203.7	211.2	234.4	261.8	299.4
65°	176.0	184.0	205.7	228.9	262.0
67.5°	142.8	155.8	177.9	197.4	222.0
70°	112.3	123.2	149.6	167.1	180.8
72.5°	84.4	94.9	121.7	136.3	143.4
75°	52.2	62.8	89.8	107.2	105.8
77.5°	24.5	33.5	62.5	77.4	73.5
80°	18.6	18.2	33.2	53.1	46.0
82.5°	18.3	17.6	15.0	29.6	23.6
85°	15.6	15.3	13.1	12.3	9.0
87.5°	8.4	8.9	8.8	6.1	4.1
90°	1.0	1.1	1.3	1.2	0.8
92.5°	0.0	0.1	0.1	0.3	0.2
95°	0.0	0.1	0.1	0.2	0.2
97.5°	0.0	0.1	0.1	0.2	0.2
100°	0.0	0.1	0.1	0.2	0.2
102.5°	0.0	0.1	0.1	0.2	0.2
105°	0.0	0.1	0.1	0.2	0.2
107.5°	0.0	0.1	0.1	0.2	0.2
110°	0.0	0.1	0.1	0.2	0.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.1	0.1	0.1	0.1
115°	0.0	0.1	0.1	0.1	0.1
117.5°	0.1	0.1	0.1	0.1	0.1
120°	0.1	0.1	0.1	0.1	0.1
122.5°	0.1	0.1	0.1	0.1	0.0
125°	0.2	0.2	0.1	0.1	0.1
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)