

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: H20059

Luminaire Tested: **L3218EP-LVR3218P**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: H20059
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: L3218EP-LVR3218P
Description: HALO 14" RECTANGULAR TRACK FIXTURE
SPECULAR REFLECTOR WITH WHITE LOUVER
Light Source: (2) 18W TT 18 WATTS 1250 LUMENS EACH
TWIN TUBE COMPACT FLUORESCENT
Ballast/Driver: -

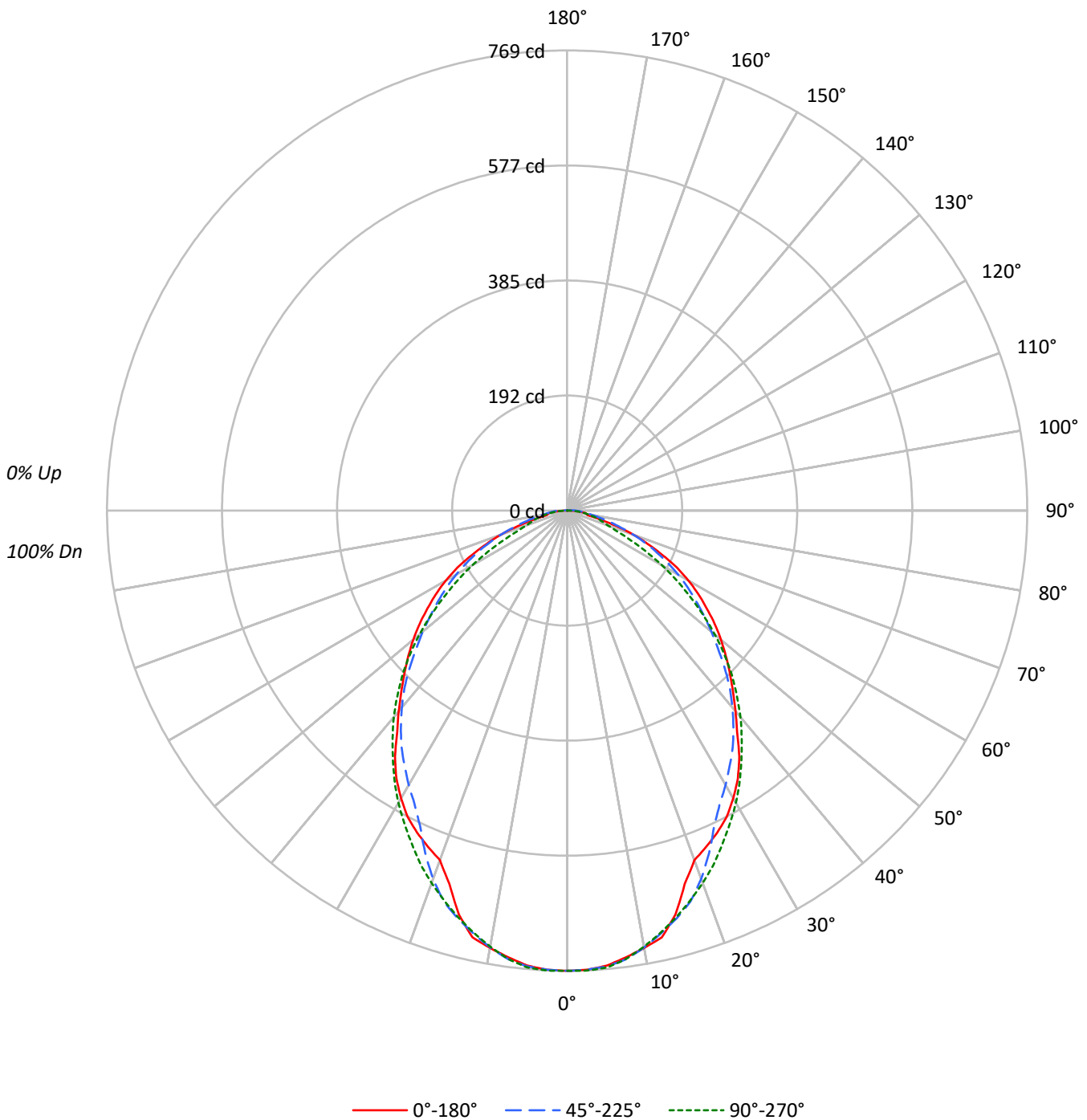
Summary

Lumens per Lamp: 1250 (2 lamps)
Luminaire Lumens: 1638.0 lumens
Efficiency: 65.5%
Efficacy: 52.8 lumens/watt
Spacing Criteria (0/90/45): 1.09 / 1.11 / 1.19
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	78	78	78	78	76	76	76	76	73	73	73	70	70	70	67	67	67	65				
1	72	69	66	64	70	68	65	63	65	63	61	62	61	59	60	59	57	56				
2	66	61	57	53	64	60	56	53	57	54	52	55	53	50	53	51	49	48				
3	61	54	49	45	59	53	49	45	51	47	44	49	46	43	48	45	43	41				
4	56	48	43	39	54	48	43	39	46	42	38	44	41	38	43	40	37	36				
5	52	44	38	34	50	43	38	34	42	37	33	40	36	33	39	36	33	31				
6	48	40	34	30	47	39	34	30	38	33	30	37	33	29	36	32	29	28				
7	44	36	31	27	43	36	30	27	35	30	26	34	29	26	33	29	26	25				
8	42	33	28	24	41	33	28	24	32	27	24	31	27	24	30	26	24	22				
9	39	30	25	22	38	30	25	22	29	25	22	29	25	22	28	24	21	20				
10	37	28	23	20	36	28	23	20	27	23	20	27	23	20	26	22	20	19				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14678	14678	14678
5°	14621	14648	14684
10°	14381	14364	14341
15°	13807	13943	13900
20°	12623	13305	13453
25°	12498	12239	12936
30°	12235	11664	12431
35°	11686	11246	11826
40°	10905	10708	11229
45°	10375	10057	10510
50°	9964	9344	9558
55°	9470	8738	8328
60°	8943	8180	6997
65°	7925	7465	5306
70°	6624	6579	4051
75°	4144	5420	3938
80°	3572	4627	3858
85°	4533	5628	3810



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	72.2	4.4	2.9
10°-20°	196.9	12.0	7.9
20°-30°	275.0	16.8	11.0
30°-40°	309.1	18.9	12.4
40°-50°	291.1	17.8	11.6
50°-60°	238.5	14.6	9.5
60°-70°	155.8	9.5	6.2
70°-80°	69.8	4.3	2.8
80°-90°	25.0	1.5	1.0
90°-100°	4.1	0.3	0.2
100°-110°	0.2	0.0	0.0
110°-120°	0.1	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°	544.2	33.2	21.8
0°-40°	853.3	52.1	34.1
0°-60°	1382.8	84.4	55.3
0°-90°	1633.5	99.7	65.3
90°-120°	4.5	0.3	0.2
90°-150°	4.5	0.3	0.2
90°-180°	4.0	0.2	0.2
0°-180°	1638.0	100.0	65.5

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	769	769	769	769	769	
5°	763	763	765	766	766	72
15°	699	708	706	701	704	194
25°	594	585	581	614	614	273
35°	502	499	483	498	508	312
45°	384	382	373	366	389	297
55°	285	283	263	253	250	255
65°	176	180	165	137	118	174
75°	56	68	74	56	53	67
85°	21	26	26	20	17	20
90°	2	14	14	8	1	2
95°	0	6	6	1	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°	769.1	769.1	769.1	769.1	769.1
2.5°	768.1	766.8	767.8	769.3	769.3
5°	763.2	762.7	764.6	765.7	766.5
7.5°	753.0	754.1	756.3	755.2	755.7
10°	742.1	743.1	741.2	740.0	740.0
12.5°	730.7	732.2	723.8	721.5	722.3
15°	698.8	707.5	705.7	701.1	703.5
17.5°	654.0	669.3	685.3	679.2	683.3
20°	621.5	626.8	655.1	658.8	662.4
22.5°	608.1	601.9	619.6	637.1	640.0
25°	593.5	585.1	581.2	614.0	614.3
27.5°	577.4	568.3	552.3	589.4	589.4
30°	555.2	547.8	529.3	561.4	564.1
32.5°	530.9	524.1	505.6	531.2	536.6
35°	501.6	499.4	482.7	498.4	507.6
37.5°	466.6	469.3	456.4	462.4	479.2
40°	437.7	437.5	429.8	427.0	450.7
42.5°	410.0	409.4	402.4	395.0	419.9
45°	384.4	382.4	372.6	366.2	389.4
47.5°	359.9	356.9	342.0	337.6	356.9
50°	335.6	332.6	314.7	312.4	321.9
52.5°	310.6	308.6	287.4	283.5	286.6
55°	284.6	282.9	262.6	253.4	250.3
57.5°	260.1	257.3	238.4	222.8	217.2
60°	234.3	232.3	214.3	192.5	183.3
62.5°	206.9	206.1	189.6	163.9	149.2
65°	175.5	180.2	165.3	136.8	117.5
67.5°	145.7	150.5	141.1	111.4	89.0
70°	118.7	122.3	117.9	87.3	72.6
72.5°	86.3	97.7	93.9	68.5	61.8
75°	56.2	68.3	73.5	55.6	53.4
77.5°	35.0	46.5	56.2	45.6	44.4
80°	32.5	36.7	42.1	36.3	35.1
82.5°	30.4	33.2	32.9	27.7	26.1
85°	20.7	26.3	25.7	19.9	17.4
87.5°	10.5	19.0	19.5	13.1	8.9
90°	1.8	13.6	14.2	7.7	1.3
92.5°	0.0	9.3	9.6	3.7	0.1
95°	0.1	5.7	5.7	0.9	0.1
97.5°	0.1	2.9	2.6	0.2	0.1
100°	0.2	1.1	0.5	0.1	0.1
102.5°	0.2	0.1	0.2	0.1	0.1
105°	0.2	0.2	0.2	0.1	0.1
107.5°	0.2	0.2	0.2	0.1	0.1
110°	0.2	0.2	0.2	0.1	0.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.2	0.2	0.2	0.1	0.1
115°	0.2	0.2	0.2	0.1	0.1
117.5°	0.1	0.2	0.1	0.1	0.1
120°	0.1	0.1	0.1	0.1	0.0
122.5°	0.1	0.1	0.1	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
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)