

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: H24031

Luminaire Tested: **H2-F-124**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: H24031
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H2-F-124
Description: HALO 10" SQ. RECESSED DOWNLIGHT
WHITE REFLECTOR - 4 CELL SPECULAR LOUVER
Light Source: (2) 26WQT 26 WATTS 1800 LUMENS EACH
13mm QUAD TUBE COMPACT FLUORESCENT
Ballast/Driver: -

Summary

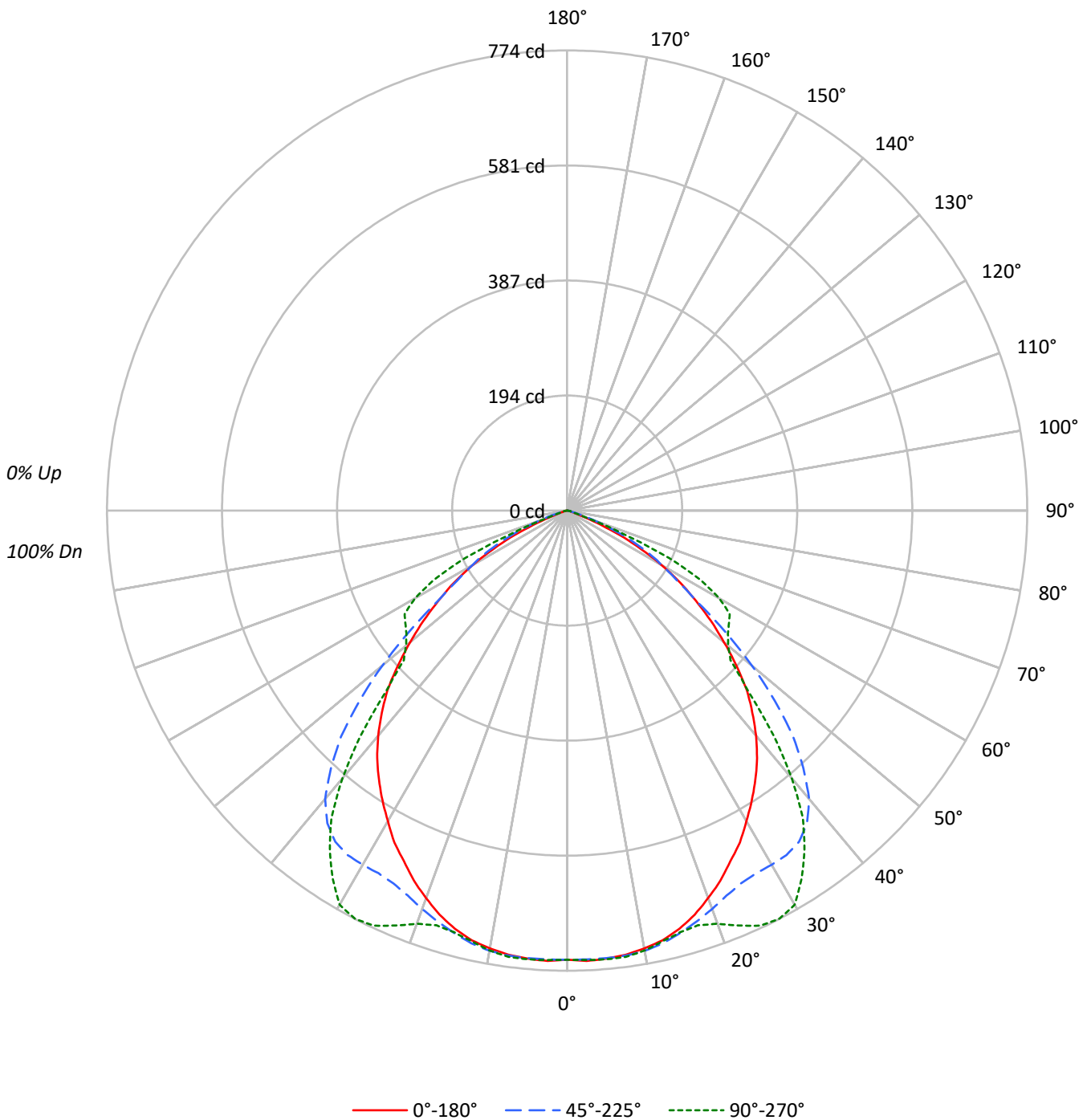
Lumens per Lamp: 1800 (2 lamps)
Luminaire Lumens: 1788.0 lumens
Efficiency: 49.7%
Efficacy: 31.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.41 / 1.41
Luminous Opening: Rectangular (W 0.65' x L: 0.65' x H: 0')
CIE Type: Direct

Input Watts (W): 56
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	59	59	59	59	58	58	58	58	55	55	55	53	53	53	51	51	51	50
1	55	53	52	50	54	52	51	49	50	49	48	48	47	46	46	46	45	44
2	51	48	45	42	50	47	44	42	45	43	41	43	42	40	42	40	39	38
3	47	42	39	36	46	42	38	36	40	38	35	39	37	35	38	36	34	33
4	43	38	34	31	42	37	34	31	36	33	31	35	32	30	34	32	30	29
5	40	34	30	27	39	34	30	27	33	29	27	32	29	27	31	28	26	25
6	37	31	27	24	36	31	27	24	30	26	24	29	26	24	28	25	23	22
7	34	28	24	21	34	28	24	21	27	24	21	26	23	21	26	23	21	20
8	32	26	22	19	31	26	22	19	25	21	19	24	21	19	24	21	19	18
9	30	24	20	17	29	23	20	17	23	20	17	22	19	17	22	19	17	16
10	28	22	18	16	28	22	18	16	21	18	16	21	18	16	20	18	16	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19245	19245	19245
5°	19344	19329	19375
10°	19348	19449	19439
15°	19215	19402	19370
20°	18807	19333	20049
25°	18277	19447	21651
30°	17745	20237	22517
35°	17171	21149	21643
40°	16443	21062	19552
45°	15403	19377	15550
50°	13662	16084	14019
55°	11731	11833	14747
60°	9381	9426	15067
65°	5866	7107	11418
70°	1527	3665	2503
75°	620	1004	847
80°	528	572	646
85°	468	526	555



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	72.0	4.0	2.0
10°-20°	207.3	11.6	5.8
20°-30°	325.2	18.2	9.0
30°-40°	402.1	22.5	11.2
40°-50°	368.7	20.6	10.2
50°-60°	266.5	14.9	7.4
60°-70°	131.1	7.3	3.6
70°-80°	13.0	0.7	0.4
80°-90°	2.1	0.1	0.1
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°	604.4	33.8	16.8
0°-40°	1006.6	56.3	28.0
0°-60°	1641.8	91.8	45.6
0°-90°	1788.0	100.0	49.7
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°	1788.0	100.0	49.7

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	755	755	755	755	755	
5°	756	753	756	756	758	72
15°	728	732	736	734	734	205
25°	650	664	692	751	770	300
35°	552	578	680	705	696	345
45°	428	486	538	468	432	326
55°	264	324	266	294	332	236
65°	97	110	118	171	189	97
75°	6	7	10	9	9	8
85°	2	2	2	2	2	2
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°	755.4	755.4	755.4	755.4	755.4
2.5°	758.3	754.6	755.5	755.3	756.8
5°	756.4	753.4	755.8	756.4	757.6
7.5°	753.5	751.3	755.0	755.2	757.1
10°	747.9	747.6	751.8	750.8	751.4
12.5°	740.4	742.4	745.3	742.9	741.9
15°	728.5	732.0	735.6	733.6	734.4
17.5°	712.9	719.9	724.6	726.8	731.4
20°	693.7	703.6	713.1	726.9	739.5
22.5°	673.6	684.4	700.9	737.7	755.4
25°	650.2	664.0	691.8	751.1	770.2
27.5°	629.3	643.2	687.7	760.8	773.7
30°	603.2	621.4	687.9	757.5	765.4
32.5°	578.1	600.2	686.9	741.1	734.2
35°	552.1	577.8	680.0	704.8	695.9
37.5°	524.8	555.9	662.7	662.8	651.3
40°	494.4	534.8	633.3	610.7	587.9
42.5°	461.2	512.0	588.0	546.0	515.3
45°	427.5	486.5	537.8	467.6	431.6
47.5°	386.0	453.8	474.1	387.4	372.5
50°	344.7	413.7	405.8	336.1	353.7
52.5°	304.6	370.1	335.3	312.4	340.8
55°	264.1	324.0	266.4	294.1	332.0
57.5°	225.1	274.6	218.9	279.9	324.1
60°	184.1	221.8	185.0	258.8	295.7
62.5°	140.2	166.3	153.7	220.8	253.5
65°	97.3	109.6	117.9	171.2	189.4
67.5°	53.6	62.5	81.2	105.9	100.2
70°	20.5	26.2	49.2	46.5	33.6
72.5°	9.1	10.8	25.1	14.6	12.9
75°	6.3	6.8	10.2	8.6	8.6
77.5°	4.7	5.0	5.4	5.9	6.1
80°	3.6	3.8	3.9	4.4	4.4
82.5°	2.5	2.7	2.8	3.0	3.0
85°	1.6	1.8	1.8	1.9	1.9
87.5°	0.8	0.9	1.0	1.0	0.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

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