

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: H24062

Luminaire Tested: **H-2-F 120**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: H24062
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H-2-F 120
Description: HALO 10" SQUARE RECESSED DOWNLIGHT
WHITE REFLECTOR
PLASTIC LENS FRAME ALBALITE LENS
Light Source: (2) F26DBXT4 26 WATTS 1800 LUMENS
QUAD TUBE COMPACT FLUORESCENT
Ballast/Driver: -

Summary

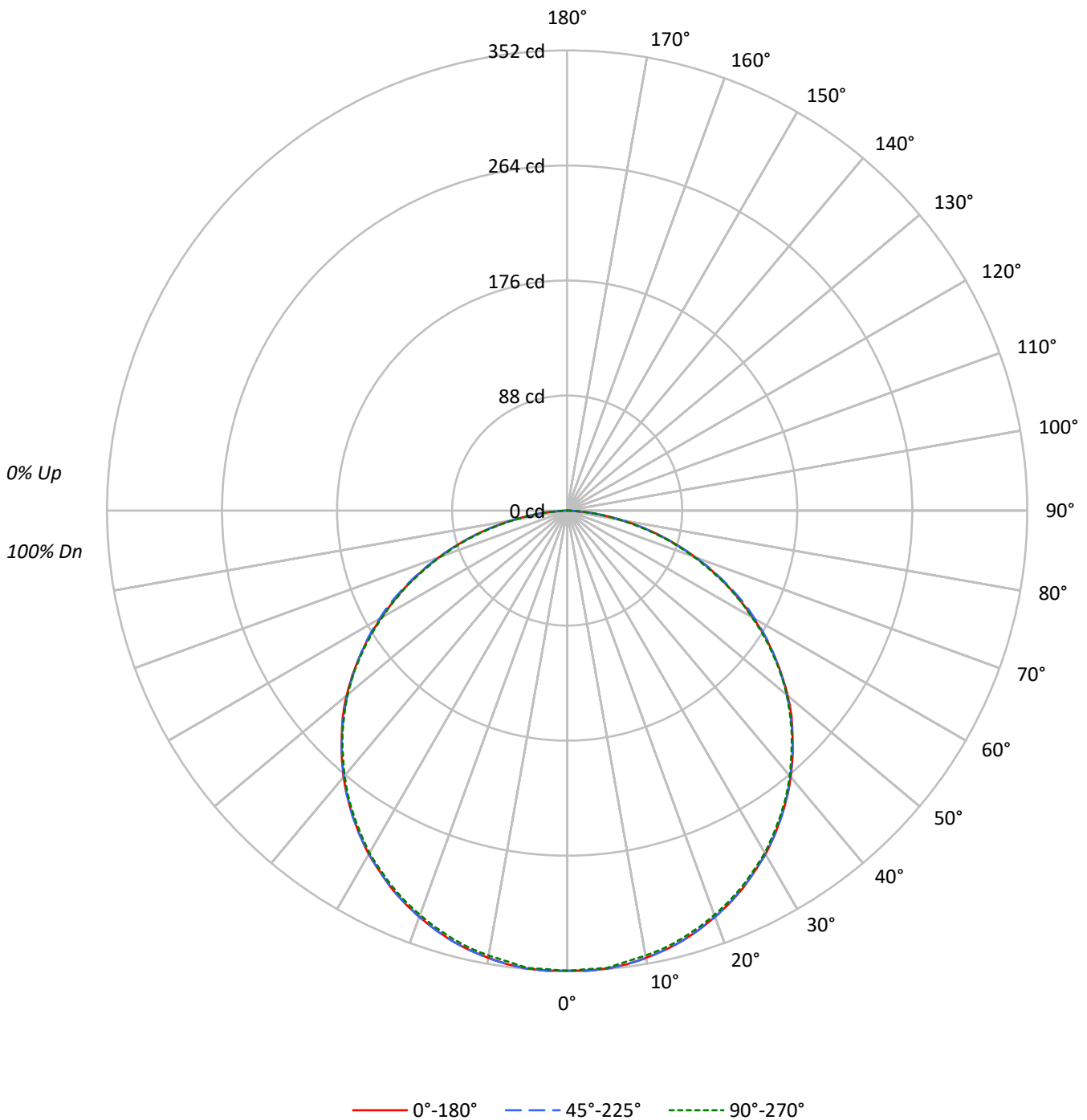
Lumens per Lamp: 1800 (2 lamps)
Luminaire Lumens: 1043.6 lumens
Efficiency: 29.0%
Efficacy: 19.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4
Luminous Opening: Rectangular (W 0.8' x L: 0.8' x H: 0')
CIE Type: Direct

Input Watts (W): 55
Input Voltage (V): NR
Input Current (A_{in}): 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	35	35	35	35	34	34	34	34	32	32	32	31	31	31	30	30	30	29
1	31	30	29	28	31	29	28	27	28	27	26	27	26	26	26	25	25	24
2	29	26	24	22	28	26	24	22	25	23	22	24	22	21	23	22	21	20
3	26	23	20	19	25	22	20	18	22	20	18	21	19	18	20	19	17	17
4	24	20	18	16	23	20	17	16	19	17	15	18	17	15	18	16	15	14
5	22	18	15	13	21	18	15	13	17	15	13	17	15	13	16	14	13	12
6	20	16	14	12	20	16	13	12	15	13	12	15	13	11	14	13	11	11
7	19	15	12	10	18	14	12	10	14	12	10	14	12	10	13	11	10	9
8	17	13	11	9	17	13	11	9	13	11	9	12	10	9	12	10	9	8
9	16	12	10	8	16	12	10	8	12	10	8	11	10	8	11	9	8	8
10	15	11	9	7	15	11	9	7	11	9	7	11	9	7	10	9	7	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5920	5920	5920
5°	5938	5934	5929
10°	5933	5936	5902
15°	5932	5934	5901
20°	5919	5921	5892
25°	5910	5905	5883
30°	5894	5890	5871
35°	5868	5870	5843
40°	5842	5833	5816
45°	5799	5799	5780
50°	5764	5738	5735
55°	5674	5674	5642
60°	5530	5587	5496
65°	5357	5424	5337
70°	5114	5149	5050
75°	4763	4750	4666
80°	4116	4126	3990
85°	2779	2895	2991



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	33.4	3.2	0.9
10°-20°	96.0	9.2	2.7
20°-30°	146.5	14.0	4.1
30°-40°	178.5	17.1	5.0
40°-50°	187.7	18.0	5.2
50°-60°	172.5	16.5	4.8
60°-70°	133.4	12.8	3.7
70°-80°	77.0	7.4	2.1
80°-90°	18.6	1.8	0.5
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°	275.9	26.4	7.7
0°-40°	454.3	43.5	12.6
0°-60°	814.6	78.1	22.6
0°-90°	1043.6	100.0	29.0
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°	1043.6	100.0	29.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	352	352	352	352	352	
5°	352	351	352	350	351	33
15°	341	340	341	339	339	96
25°	318	318	318	317	317	147
35°	286	286	286	284	285	179
45°	244	244	244	243	243	188
55°	194	194	194	193	192	173
65°	135	135	136	134	134	133
75°	73	74	73	72	72	77
85°	14	15	15	16	16	18
90°	0	0	0	0	0	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°	352.0	352.0	352.0	352.0	352.0
2.5°	352.2	352.3	352.5	350.6	351.1
5°	351.7	351.4	351.5	349.8	351.2
7.5°	350.0	350.0	350.1	348.3	347.9
10°	347.4	347.5	347.6	345.8	345.6
12.5°	344.4	344.3	344.4	342.7	342.9
15°	340.7	340.5	340.8	338.8	338.9
17.5°	336.0	336.2	336.1	334.4	334.4
20°	330.7	330.7	330.8	329.3	329.2
22.5°	325.0	324.9	324.9	323.4	323.5
25°	318.5	318.4	318.2	316.8	317.0
27.5°	310.9	311.2	311.1	309.7	309.8
30°	303.5	303.3	303.3	301.9	302.3
32.5°	294.9	294.9	295.0	293.4	293.6
35°	285.8	285.9	285.9	284.5	284.6
37.5°	276.3	276.0	276.1	274.5	275.1
40°	266.1	265.9	265.7	264.7	264.9
42.5°	255.3	255.0	255.0	253.6	253.9
45°	243.8	244.0	243.8	242.6	243.0
47.5°	232.8	231.7	231.8	230.9	231.2
50°	220.3	219.9	219.3	218.7	219.2
52.5°	207.1	207.0	206.5	206.1	206.3
55°	193.5	193.7	193.5	192.7	192.4
57.5°	179.6	179.5	180.2	178.6	178.2
60°	164.4	165.1	166.1	163.8	163.4
62.5°	149.7	150.3	151.7	149.2	148.7
65°	134.6	135.4	136.3	134.1	134.1
67.5°	119.7	120.3	120.7	118.7	118.1
70°	104.0	104.7	104.7	103.1	102.7
72.5°	88.7	89.5	88.9	87.6	87.3
75°	73.3	73.8	73.1	72.2	71.8
77.5°	57.6	58.2	57.5	56.6	56.0
80°	42.5	43.0	42.6	42.1	41.2
82.5°	27.7	28.2	28.1	27.8	27.9
85°	14.4	14.6	15.0	15.6	15.5
87.5°	4.3	4.2	4.5	4.6	4.1
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)