

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: 267P124

Luminaire Tested: **H1EF-18DTT-110P**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: 267P124
Test Lab: METALUX LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H1EF-18DTT-110P
Description: HALO 9" RECESSED SQUARE DOWNLIGHT, 2 18CF WITH ALBALITE GLASS
FROSTED DIFFUSE WITH WHITE TRIM
Light Source: TWO - F18DBX/SPX30/4P - 1200 LUMENS -18 WATTS
Ballast/Driver: RCF-2S18-M1-LS-QS

Summary

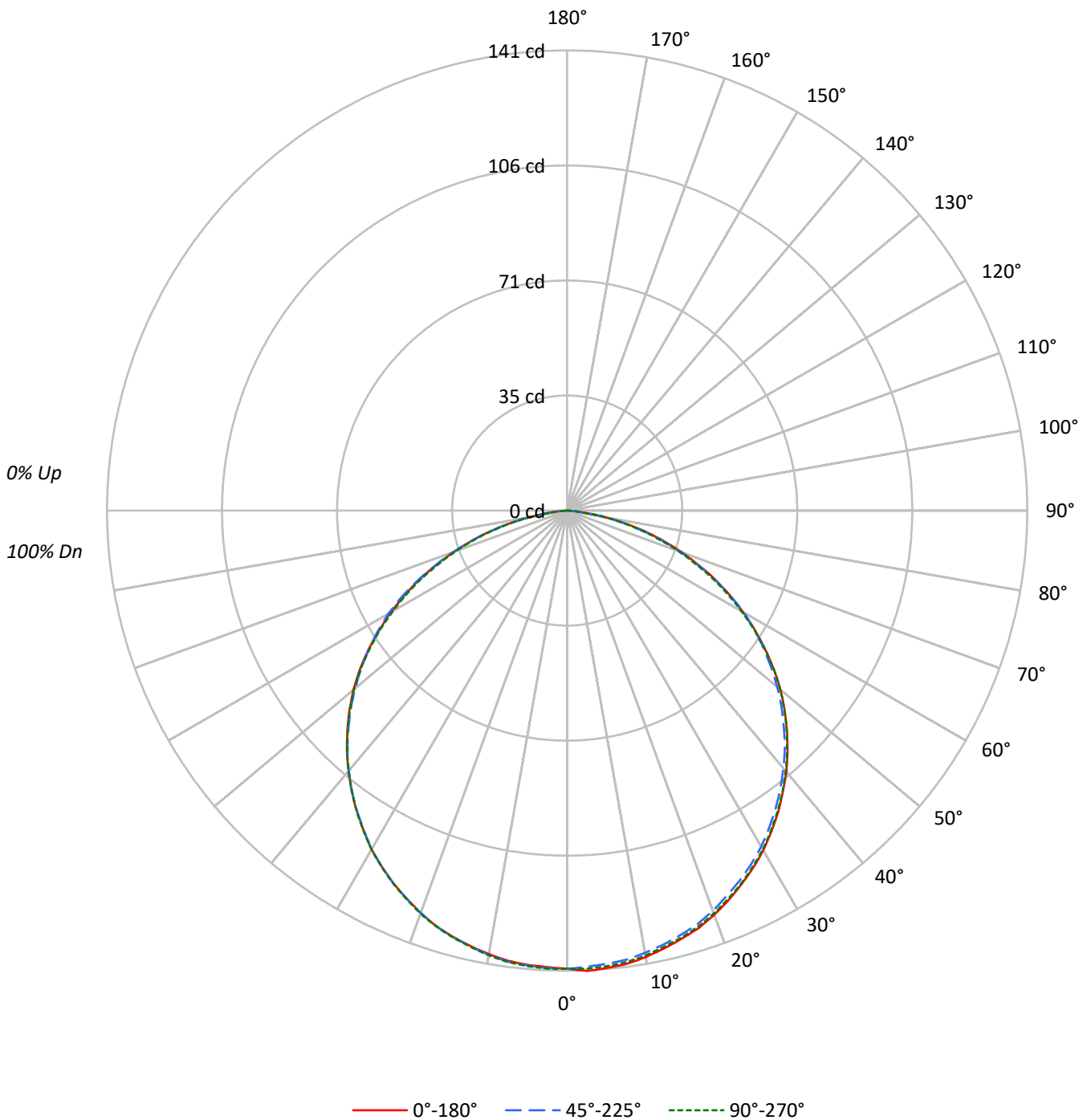
Lumens per Lamp: 1200 (2 lamps)
Luminaire Lumens: 397.3 lumens
Efficiency: 16.6%
Efficacy: 12.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 0.54' x L: 0.54' x H: 0')
CIE Type: Direct

Input Watts (W): 32
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	20	20	20	20	19	19	19	19	18	18	18	18	18	18	17	17	17	17
1	18	17	17	16	18	17	16	16	16	16	15	16	15	15	15	15	14	14
2	16	15	14	13	16	15	14	13	14	13	13	14	13	12	13	13	12	12
3	15	13	12	11	15	13	12	11	12	11	11	12	11	10	12	11	10	10
4	14	12	10	9	13	12	10	9	11	10	9	11	10	9	10	9	9	8
5	13	10	9	8	12	10	9	8	10	9	8	10	9	8	9	8	8	7
6	12	9	8	7	11	9	8	7	9	8	7	9	8	7	8	7	7	6
7	11	9	7	6	10	8	7	6	8	7	6	8	7	6	8	7	6	6
8	10	8	6	5	10	8	6	5	7	6	5	7	6	5	7	6	5	5
9	9	7	6	5	9	7	6	5	7	6	5	7	6	5	7	6	5	4
10	9	7	5	4	9	7	5	4	6	5	4	6	5	4	6	5	4	4

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	5151	5151	5151
5°	5181	5159	5145
10°	5174	5156	5141
15°	5158	5143	5135
20°	5146	5130	5122
25°	5117	5104	5100
30°	5092	5079	5079
35°	5047	5034	5034
40°	5005	4990	4990
45°	4939	4934	4939
50°	4868	4863	4880
55°	4739	4727	4752
60°	4564	4527	4571
65°	4349	4262	4323
70°	4012	3883	3947
75°	3501	3331	3416
80°	2577	2493	2472
85°	673	800	884



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	13.3	3.3	0.6
10°-20°	38.2	9.6	1.6
20°-30°	58.0	14.6	2.4
30°-40°	70.1	17.7	2.9
40°-50°	73.1	18.4	3.0
50°-60°	66.0	16.6	2.8
60°-70°	49.1	12.4	2.0
70°-80°	25.5	6.4	1.1
80°-90°	4.0	1.0	0.2
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°	109.5	27.5	4.6
0°-40°	179.6	45.2	7.5
0°-60°	318.7	80.2	13.3
0°-90°	397.3	100.0	16.6
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°	397.3	100.0	16.6

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	140	140	140	140	140	
5°	141	139	140	140	140	13
15°	136	135	135	135	135	38
25°	126	125	126	126	126	58
35°	113	111	112	112	112	71
45°	95	94	95	95	95	73
55°	74	73	74	74	74	66
65°	50	50	49	50	50	49
75°	25	24	24	24	24	26
85°	2	2	2	2	2	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	140.4	140.4	140.4	140.4	140.4	140.4	140.4	140.4	140.4
2.5°	141.2	139.7	139.9	140.4	140.5	140.5	140.3	140.4	140.0
5°	140.7	139.2	139.4	139.9	140.1	140.1	139.9	140.0	139.7
7.5°	140.1	138.7	138.8	139.3	139.5	139.5	139.4	139.5	139.1
10°	138.9	137.5	137.6	138.2	138.4	138.4	138.2	138.4	138.0
12.5°	137.4	136.0	136.2	136.7	136.9	137.0	136.8	137.0	136.7
15°	135.8	134.4	134.6	135.1	135.4	135.5	135.3	135.5	135.2
17.5°	134.1	132.6	132.8	133.3	133.6	133.7	133.5	133.7	133.5
20°	131.8	130.4	130.5	131.1	131.4	131.5	131.2	131.4	131.2
22.5°	129.2	127.8	127.8	128.4	128.8	128.9	128.7	128.9	128.6
25°	126.4	125.0	125.1	125.7	126.1	126.1	126.0	126.1	126.0
27.5°	123.4	122.0	122.1	122.7	123.1	123.2	123.0	123.2	123.0
30°	120.2	118.8	118.9	119.5	119.9	119.9	119.8	120.0	119.9
32.5°	116.5	115.1	115.2	115.8	116.2	116.2	116.0	116.3	116.1
35°	112.7	111.3	111.4	112.0	112.4	112.5	112.3	112.6	112.4
37.5°	108.6	107.3	107.3	107.9	108.4	108.5	108.3	108.5	108.4
40°	104.5	103.2	103.1	103.7	104.2	104.2	104.1	104.3	104.2
42.5°	100.0	98.7	98.7	99.3	99.7	99.8	99.6	99.8	99.9
45°	95.2	94.0	93.9	94.5	95.1	95.0	94.8	95.1	95.2
47.5°	90.4	89.2	89.1	89.7	90.3	90.2	89.9	90.3	90.5
50°	85.3	84.2	84.0	84.7	85.2	85.1	84.8	85.3	85.5
52.5°	79.8	79.0	78.7	79.4	79.8	79.8	79.5	80.0	80.1
55°	74.1	73.5	73.4	73.8	73.9	74.3	74.2	74.5	74.3
57.5°	68.3	67.6	68.0	67.9	67.9	68.3	68.8	68.6	68.3
60°	62.2	61.7	62.5	61.8	61.7	62.2	63.2	62.5	62.3
62.5°	56.2	55.7	56.2	55.5	55.4	56.0	57.0	56.3	56.1
65°	50.1	49.6	49.8	49.3	49.1	49.6	50.4	50.0	49.8
67.5°	43.6	43.3	43.2	42.7	42.5	43.0	43.6	43.6	43.2
70°	37.4	37.2	36.7	36.5	36.2	36.8	37.2	37.2	36.8
72.5°	31.0	31.0	30.3	30.2	29.8	30.6	30.6	30.9	30.5
75°	24.7	24.6	23.8	23.8	23.5	24.2	24.1	24.5	24.1
77.5°	18.3	18.3	17.7	17.5	17.5	17.9	17.7	17.9	17.8
80°	12.2	12.1	11.8	11.9	11.8	12.1	11.8	11.8	11.7
82.5°	6.1	6.2	6.3	6.5	6.5	6.7	6.3	6.1	6.1
85°	1.6	1.8	2.0	2.0	1.9	2.2	2.2	2.0	2.1
87.5°	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)