

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: 267p122

Luminaire Tested: **H1EF-18DTT-16P**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: 267p122
Test Lab: METALUX LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H1EF-18DTT-16P
Description: HALO 9" RECESSED SQUARE DOWNLIGHT, 2 18CF WITH REGRESSED GLASS DIFFUSER WITH BLACK BAFFLE
Light Source: TWO - F18DBX/SPX30/4P - 1200 LUMENS -18 WATTS
Ballast/Driver: RCF-2S18-M1-LS-QS

Summary

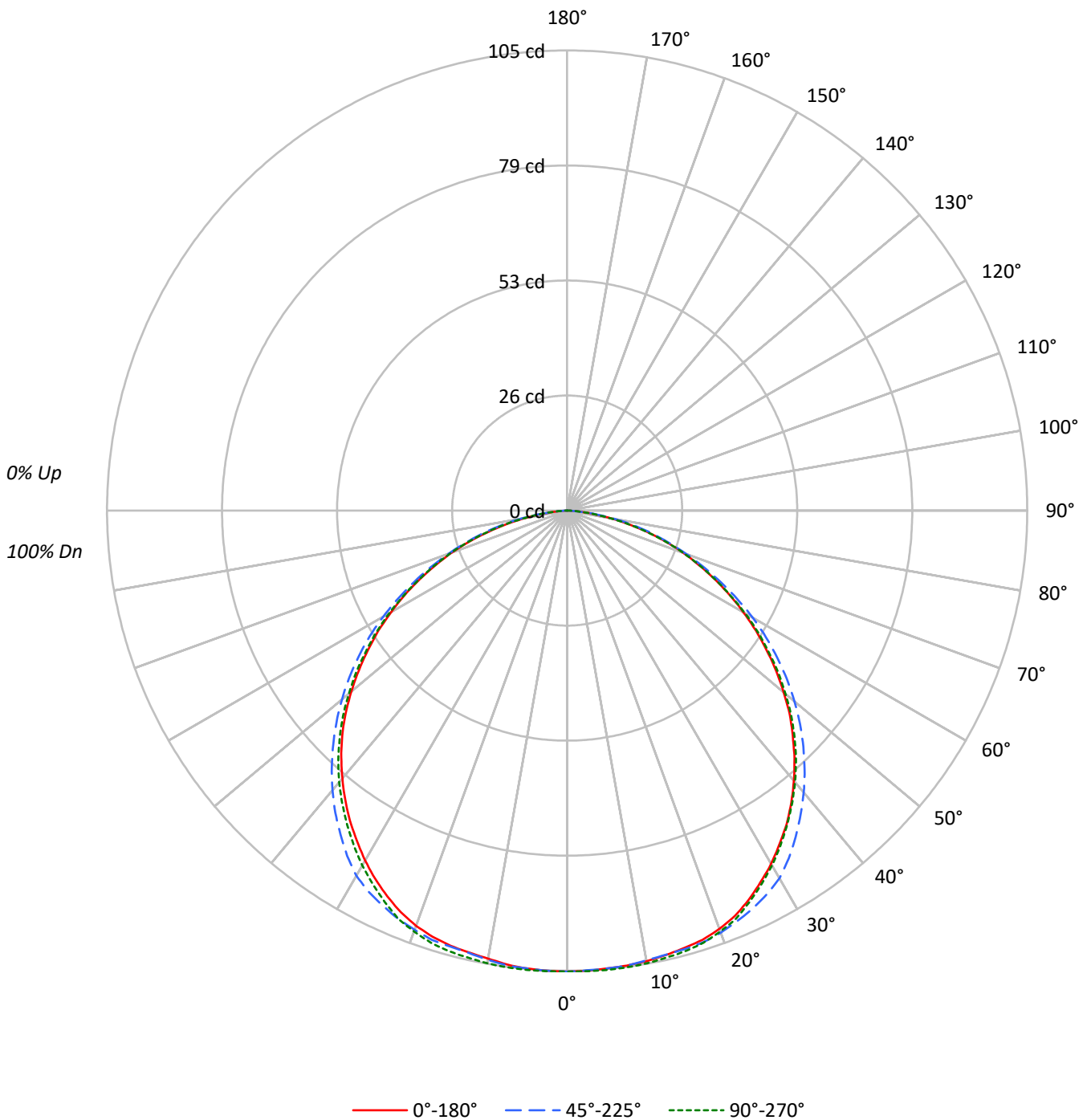
Lumens per Lamp: 1200 (2 lamps)
Luminaire Lumens: 312.5 lumens
Efficiency: 13.0%
Efficacy: 9.8 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 1.31 / 1.43
Luminous Opening: Rectangular (W 0.6' x L: 0.6' x H: 0')
CIE Type: Direct

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	15	15	15	15	15	15	15	15	14	14	14	14	14	14	13	13	13	13
1	14	14	13	13	14	13	13	12	13	12	12	12	12	12	12	11	11	11
2	13	12	11	10	13	12	11	10	11	10	10	11	10	10	10	10	9	9
3	12	10	9	8	11	10	9	8	10	9	8	9	9	8	9	8	8	8
4	11	9	8	7	10	9	8	7	9	8	7	8	8	7	8	7	7	7
5	10	8	7	6	10	8	7	6	8	7	6	8	7	6	7	7	6	6
6	9	7	6	5	9	7	6	5	7	6	5	7	6	5	7	6	5	5
7	8	7	6	5	8	7	5	5	6	5	5	6	5	5	6	5	5	4
8	8	6	5	4	8	6	5	4	6	5	4	6	5	4	6	5	4	4
9	7	6	5	4	7	6	4	4	5	4	4	5	4	4	5	4	4	3
10	7	5	4	3	7	5	4	3	5	4	3	5	4	3	5	4	3	3

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	3102	3102	3102
5°	3105	3114	3105
10°	3126	3141	3108
15°	3154	3178	3138
20°	3188	3207	3163
25°	3189	3205	3159
30°	3170	3184	3139
35°	3143	3150	3110
40°	3099	3114	3072
45°	3036	3061	3028
50°	2959	2982	2950
55°	2859	2884	2853
60°	2742	2766	2737
65°	2596	2610	2589
70°	2431	2431	2414
75°	2165	2142	2108
80°	1715	1664	1613
85°	1015	947	880



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	10.0	3.2	0.4
10°-20°	29.2	9.4	1.2
20°-30°	45.6	14.6	1.9
30°-40°	55.6	17.8	2.3
40°-50°	57.9	18.5	2.4
50°-60°	51.5	16.5	2.1
60°-70°	38.0	12.2	1.6
70°-80°	20.5	6.6	0.9
80°-90°	4.1	1.3	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°	84.8	27.1	3.5
0°-40°	140.4	44.9	5.9
0°-60°	249.8	79.9	10.4
0°-90°	312.5	100.0	13.0
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°	312.5	100.0	13.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	105	105	105	105	105	
5°	105	105	105	105	105	10
15°	103	104	104	103	103	29
25°	98	100	98	100	97	45
35°	87	91	88	90	86	55
45°	73	76	73	76	73	56
55°	56	58	56	58	56	50
65°	37	39	37	38	37	37
75°	19	20	19	20	18	20
85°	3	3	3	3	3	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°	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2
2.5°	105.1	104.8	105.0	105.4	105.2	105.0	105.1	105.2	105.1
5°	104.9	104.6	104.9	105.3	105.2	104.9	104.9	105.0	104.9
7.5°	104.7	104.4	104.7	105.3	105.1	104.8	104.7	104.7	104.5
10°	104.4	104.0	104.2	104.9	104.9	104.4	104.1	104.0	103.8
12.5°	103.9	103.6	103.8	104.5	104.5	104.0	103.4	103.4	103.3
15°	103.3	103.1	103.6	104.1	104.1	103.6	103.0	102.9	102.8
17.5°	102.7	102.5	103.3	103.4	103.4	102.8	102.7	102.3	102.0
20°	101.6	101.5	102.5	102.4	102.2	101.6	101.8	101.2	100.8
22.5°	100.1	100.3	101.4	101.2	100.8	100.4	100.8	100.0	99.2
25°	98.0	98.7	100.2	99.6	98.5	98.6	99.5	98.3	97.1
27.5°	95.6	96.6	98.7	97.4	96.1	96.4	98.1	96.3	94.8
30°	93.1	94.4	96.9	95.0	93.5	94.1	96.2	94.1	92.2
32.5°	90.2	91.8	94.1	92.3	90.6	91.4	93.4	91.4	89.3
35°	87.3	89.1	90.9	89.5	87.5	88.6	90.2	88.7	86.4
37.5°	84.0	86.2	87.5	86.4	84.3	85.5	86.9	85.8	83.2
40°	80.5	83.0	84.0	83.2	80.9	82.4	83.3	82.6	79.8
42.5°	76.8	79.5	80.2	79.8	77.3	79.0	79.5	79.2	76.3
45°	72.8	75.9	76.2	76.1	73.4	75.3	75.5	75.6	72.6
47.5°	68.9	71.9	72.1	72.2	69.4	71.4	71.4	71.8	68.6
50°	64.5	67.5	67.7	67.9	65.0	67.1	67.1	67.5	64.3
52.5°	60.1	62.9	63.2	63.4	60.7	62.5	62.7	62.9	59.9
55°	55.6	58.2	58.5	58.7	56.1	58.0	58.1	58.3	55.5
57.5°	51.1	53.5	53.8	54.0	51.6	53.4	53.4	53.6	51.1
60°	46.5	48.6	48.9	49.1	46.9	48.4	48.5	48.7	46.4
62.5°	41.9	43.6	43.8	44.0	42.1	43.5	43.5	43.7	41.8
65°	37.2	38.7	38.7	39.2	37.4	38.6	38.5	38.8	37.1
67.5°	32.6	33.8	33.7	34.2	32.7	33.7	33.6	33.8	32.4
70°	28.2	29.1	28.9	29.4	28.2	28.9	28.8	29.0	28.0
72.5°	23.6	24.4	24.2	24.6	23.6	24.2	24.1	24.3	23.2
75°	19.0	19.6	19.9	19.6	18.8	19.4	19.7	19.4	18.5
77.5°	14.4	15.1	15.5	15.0	14.3	14.8	15.2	14.8	13.9
80°	10.1	10.6	10.9	10.5	9.8	10.4	10.6	10.3	9.5
82.5°	6.2	6.7	6.7	6.5	6.0	6.4	6.4	6.3	5.7
85°	3.0	3.2	3.1	3.0	2.8	3.0	2.8	2.8	2.6
87.5°	0.7	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)