

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: H22006

Luminaire Tested: **H47T-498**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: H22006
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H47T-498
Description: HALO 6" RECESSED OPEN DOWNLIGHT
SLOPE CEILING UNIT - BAFFLE
LOW SOCKET SETTING
Light Source: 150PAR38SP 150W 1740 LUMENS
PAR38 SPOT
GAIN 302
Ballast/Driver: -

Summary

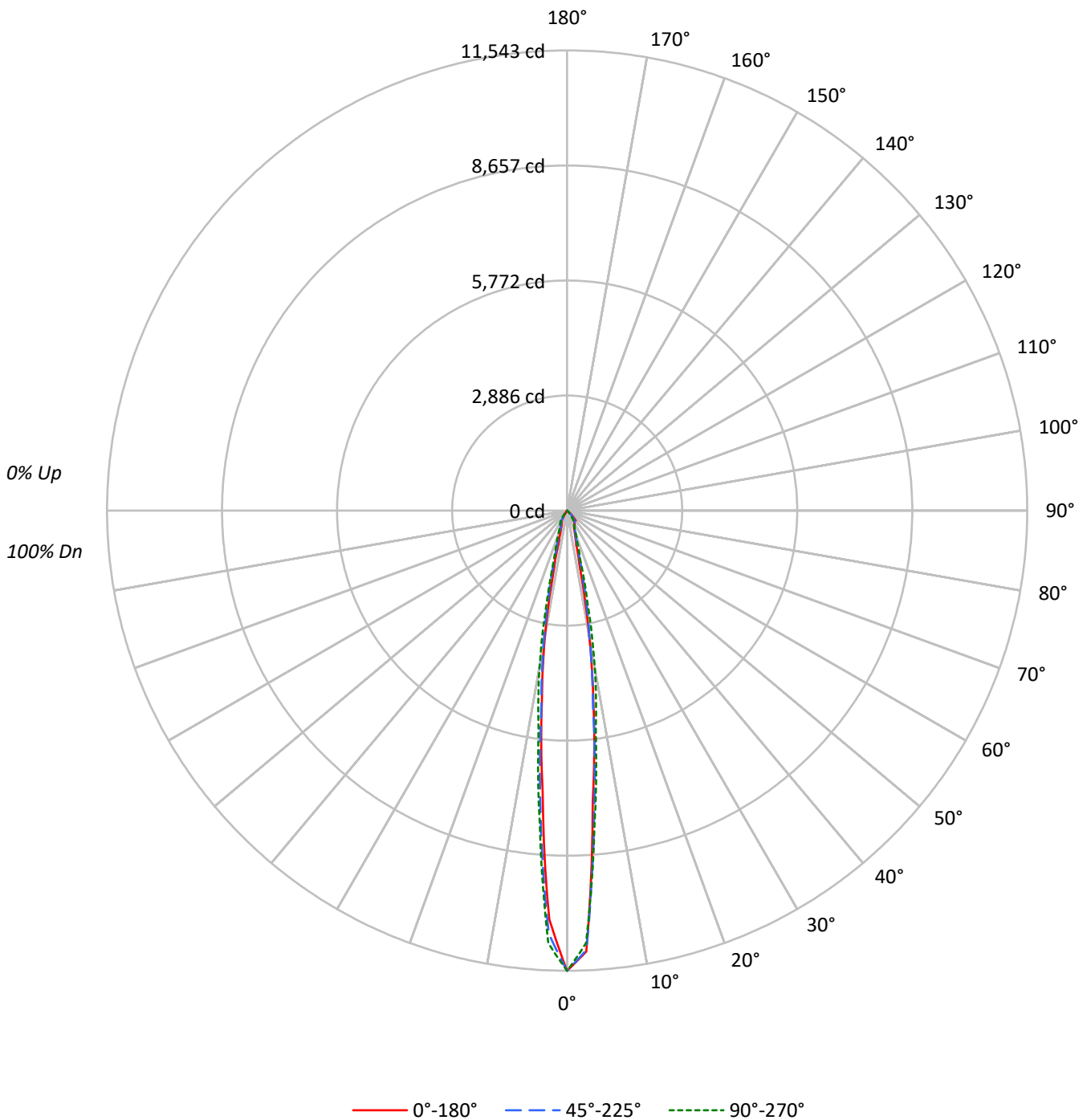
Lumens per Lamp: 1740 (1 lamp)
Luminaire Lumens: 1343.1 lumens
Efficiency: 77.2%
Efficacy: 9.0 lumens/watt
Spacing Criteria (0/90/45): 0.23 / 0.25 / 0.26
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

Input Watts (W): 150
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



TEST NUMBER: H22006
CATALOG NUMBER: H47T-498

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	50	30	10	0														
RCR																																						
0	92	92	92	92	90	90	90	90	86	86	86	82	82	82	79	79	79	77	77	77	77	77	77	77														
1	89	87	86	84	87	85	84	83	82	81	80	80	79	78	77	76	76	74	74	74	74	74	74	74														
2	86	83	81	79	84	82	80	78	79	78	76	77	76	74	75	74	73	72	72	72	72	72	72	72														
3	83	79	76	74	82	78	76	74	76	74	72	75	73	71	73	72	70	69	69	69	69	69	69	69														
4	80	76	73	71	79	75	72	70	74	71	69	72	70	69	71	69	68	67	67	67	67	67	67	67														
5	78	73	70	68	77	73	70	67	71	69	67	70	68	66	69	67	66	65	65	65	65	65	65	65														
6	76	71	67	65	75	70	67	65	69	66	64	68	66	64	67	65	64	63	63	63	63	63	63	63														
7	73	68	65	63	73	68	65	63	67	64	62	66	64	62	66	63	62	61	61	61	61	61	61	61														
8	71	66	63	61	71	66	63	61	65	62	61	65	62	60	64	62	60	59	59	59	59	59	59	59														
9	70	64	61	59	69	64	61	59	64	61	59	63	60	59	62	60	59	58	58	58	58	58	58	58														
10	68	63	60	58	67	62	59	58	62	59	57	61	59	57	61	59	57	56	56	56	56	56	56	56														

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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 CATALOG NUMBER: H47T-498

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	601.3	44.8	34.6
10°-20°	372.8	27.8	21.4
20°-30°	192.6	14.3	11.1
30°-40°	127.8	9.5	7.3
40°-50°	42.8	3.2	2.5
50°-60°	3.6	0.3	0.2
60°-70°	1.3	0.1	0.1
70°-80°	0.5	0.0	0.0
80°-90°	0.2	0.0	0.0
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°	1166.7	86.9	67.1
0°-40°	1294.5	96.4	74.4
0°-60°	1341.0	99.8	77.1
0°-90°	1343.0	100.0	77.2
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°	1343.1	100.0	77.2

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11543	11543	11543	11543	11543	
5°	7357	7738	7884	7648	7058	592
15°	871	1132	1270	1186	792	311
25°	412	469	418	380	333	198
35°	316	314	210	78	61	207
45°	184	84	10	6	4	139
55°	4	4	3	2	1	9
65°	3	2	1	0	0	3
75°	2	1	0	0	0	2
85°	1	0	0	0	0	1
90°	1	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



TEST NUMBER: H22006
 CATALOG NUMBER: H47T-498

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	11543	11543	11543	11543	11543	11543	11543	11543	11543
2.5°	11071	11052	11029	10865	10857	10851	10618	10412	10261
5°	7357	7530	7738	7690	7884	7970	7648	7296	7058
7.5°	5110	4956	4952	5338	5487	5537	4950	4860	4870
10°	3176	3187	3228	3717	4004	3709	3391	3240	3197
12.5°	1461	1783	2010	2205	2352	2489	2070	1673	1587
15°	871	944	1132	1187	1270	1310	1186	951	792
17.5°	652	703	732	789	871	741	671	576	514
20°	532	561	591	635	673	562	514	428	406
22.5°	460	463	517	553	512	454	437	363	355
25°	412	420	469	477	418	414	380	332	333
27.5°	406	386	438	421	379	380	330	316	306
30°	364	370	398	375	339	333	273	224	200
32.5°	349	329	353	350	294	220	136	93	79
35°	316	322	314	299	210	118	78	63	61
37.5°	310	291	284	239	127	68	50	35	29
40°	332	276	243	147	81	34	19	9	8
42.5°	272	263	166	86	37	11	7	6	6
45°	184	130	84	49	10	7	6	5	4
47.5°	88	69	41	11	6	5	4	4	4
50°	50	32	12	5	5	4	3	3	3
52.5°	8	7	5	4	4	3	3	2	2
55°	4	4	4	4	3	3	2	2	1
57.5°	4	4	4	3	3	2	1	1	1
60°	4	4	3	3	2	1	1	1	1
62.5°	3	3	3	2	2	1	0	0	1
65°	3	3	2	2	1	1	0	0	0
67.5°	2	2	2	1	1	0	0	0	0
70°	2	2	2	1	1	0	0	0	0
72.5°	2	2	1	1	0	0	0	0	0
75°	2	1	1	1	0	0	0	0	0
77.5°	1	1	1	0	0	0	0	0	0
80°	1	1	1	0	0	0	0	0	0
82.5°	1	1	1	0	0	0	0	0	0
85°	1	1	0	0	0	0	0	0	0
87.5°	1	1	0	0	0	0	0	0	0
90°	1	0	0	0	0	0	0	0	0
92.5°	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0
97.5°	0	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0	0
102.5°	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0
107.5°	0	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0



TEST NUMBER: H22006
 CATALOG NUMBER: H47T-498

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)