

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: H35031

Luminaire Tested: **H870-870C**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: H35031
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H870-870C
Description: HALO PL RECESSED OPEN DOWNLIGHT
CLEAR SPECULAR REFLECTOR #870-C
HIGH (VERTICAL) LAMP POSITION
Light Source: 28W/QT4 28 WATTS 1600 LUMENS
15mm QUAD TUBE COMPACT FLUORESCENT
GX32 D-3 BASE
Ballast/Driver: -

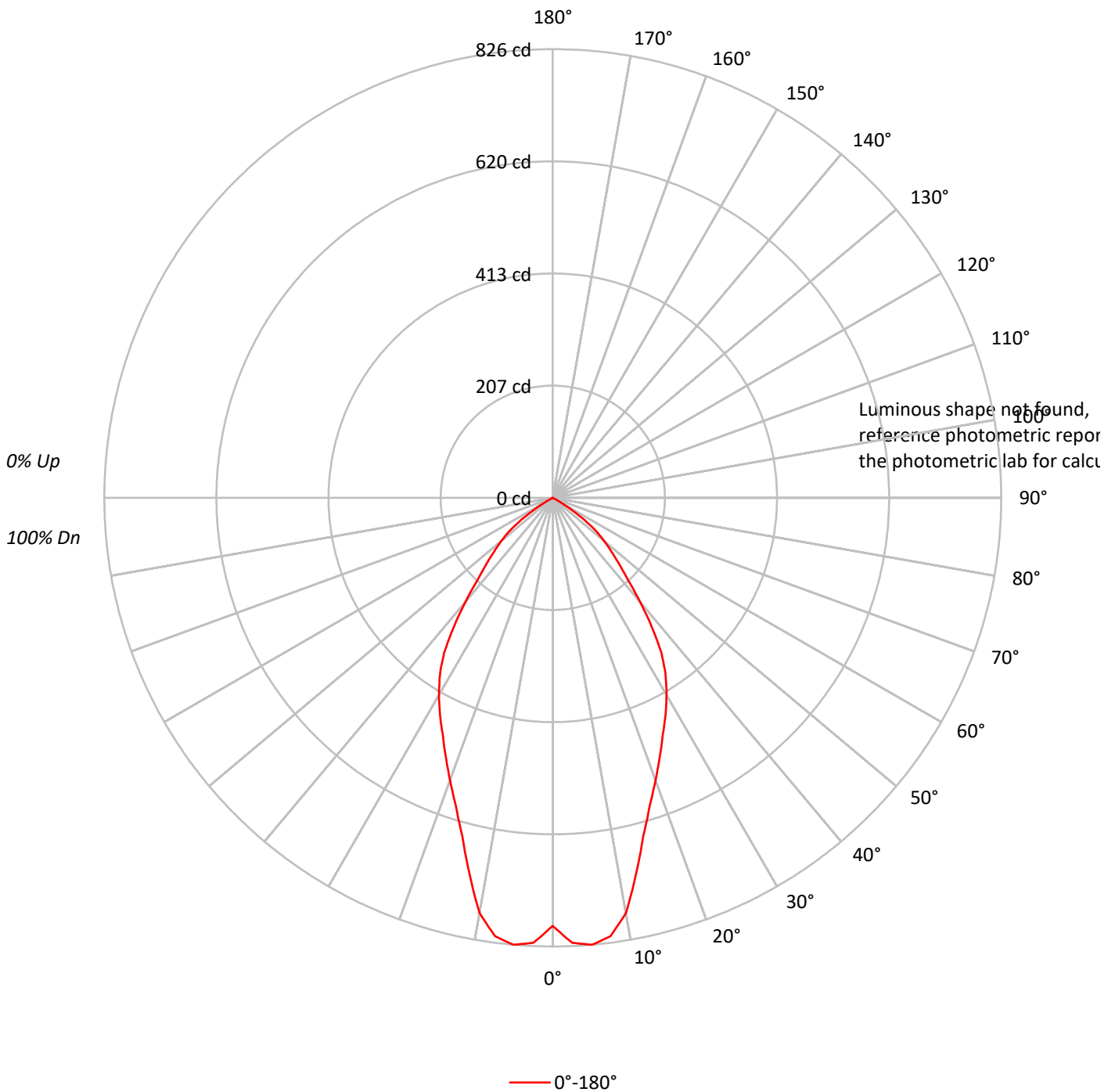
Summary

Lumens per Lamp: 1600 (1 lamp)
Luminaire Lumens: 894.0 lumens
Efficiency: 55.9%
Efficacy: 22.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.85 / 0.98
Luminous Opening: (L: 0 ' x W: -0.58 ' x H: 0 '
CIE Type: Direct

Input Watts (W): 39
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



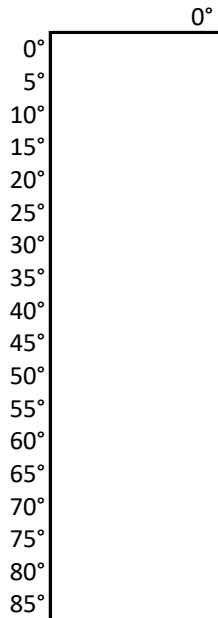


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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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	67	67	67	67	65	65	65	65	62	62	62		59	59	59		57	57	57	56
1	63	61	60	58	62	60	59	57	58	57	56		56	55	54		54	53	52	51
2	59	56	54	52	58	55	53	51	53	52	50		52	50	49		50	49	48	47
3	56	52	49	46	55	51	48	46	49	47	45		48	46	44		47	45	44	43
4	52	48	44	41	51	47	44	41	46	43	41		45	42	40		43	41	40	39
5	49	44	40	37	48	43	40	37	42	39	37		41	39	37		40	38	36	35
6	46	41	37	34	45	40	37	34	39	36	34		38	36	34		38	35	33	32
7	44	38	34	31	43	37	34	31	37	33	31		36	33	31		35	33	31	30
8	41	35	31	29	40	35	31	29	34	31	29		34	31	28		33	30	28	27
9	39	33	29	27	38	33	29	27	32	29	27		31	29	26		31	28	26	25
10	37	31	27	25	36	31	27	25	30	27	25		30	27	25		29	26	25	24

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	77.2	8.6	4.8
10°-20°	181.8	20.3	11.4
20°-30°	221.7	24.8	13.9
30°-40°	213.0	23.8	13.3
40°-50°	136.4	15.3	8.5
50°-60°	61.6	6.9	3.8
60°-70°	2.4	0.3	0.2
70°-80°	0.0	0.0	0.0
80°-90°	0.0	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°	480.7	53.8	30.0
0°-40°	693.6	77.6	43.4
0°-60°	891.6	99.7	55.7
0°-90°	894.0	100.0	55.9
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°	894.0	100.0	55.9

CANDELA DISTRIBUTION:

	0°	Flux
0°	788	
5°	826	77
15°	644	182
25°	480	222
35°	349	213
45°	173	136
55°	71	62
65°	1	2
75°	0	0
85°	0	0
90°	0	0
95°	0	0
105°	0	0
115°	0	0
125°	0	0
135°	0	0
145°	0	0
155°	0	0
165°	0	0
175°	0	0
180°	0	0



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CANDELA DISTRIBUTION (FULL):

	0°
0°	788
2.5°	820
5°	826
7.5°	814
10°	776
12.5°	709
15°	644
17.5°	594
20°	553
22.5°	515
25°	480
27.5°	450
30°	419
32.5°	387
35°	349
37.5°	299
40°	250
42.5°	205
45°	173
47.5°	146
50°	124
52.5°	101
55°	71
57.5°	38
60°	14
62.5°	1
65°	1
67.5°	1
70°	0
72.5°	0
75°	0
77.5°	0
80°	0
82.5°	0
85°	0
87.5°	0
90°	0
92.5°	0
95°	0
97.5°	0
100°	0
102.5°	0
105°	0
107.5°	0
110°	0



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CANDELA DISTRIBUTION (continued):

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

(END OF REPORT)