

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: H35033

Luminaire Tested: **H870-870BA**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: H35033
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H870-870BA
Description: HALO PL RECESSED OPEN DOWNLIGHT
CLEAR SPECULAR REFLECTOR W/BAFFLE #870-BA
HIGH (VERTICAL) LAMP POSITION
Light Source: (1) 28W/QT4 28 WATTS 1600 LUMENS
15mm QUAD TUBE COMPACT FLUORESCENT
GX32 D-3 BASE
Ballast/Driver: -

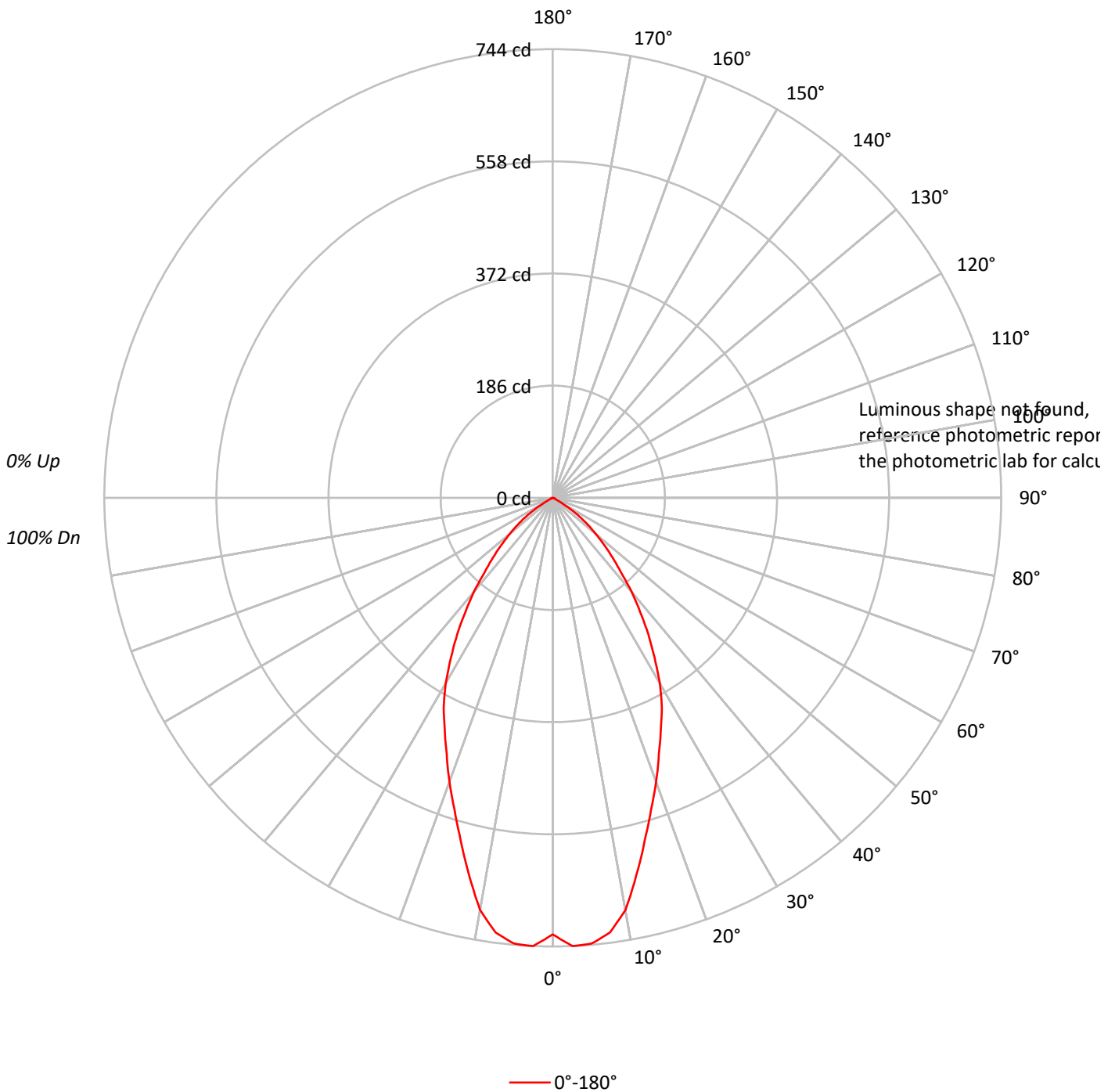
Summary

Lumens per Lamp: 1600 (1 lamp)
Luminaire Lumens: 764.2 lumens
Efficiency: 47.8%
Efficacy: 19.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.83 / 0.92
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	57	57	57	57	56	56	56	56	53	53	53		51	51	51		49	49	49	48
1	54	52	51	50	53	51	50	49	49	49	48		48	47	46		46	45	45	44
2	51	48	46	44	50	47	45	44	46	44	43		44	43	42		43	42	41	40
3	48	44	42	40	47	44	41	39	42	40	39		41	39	38		40	39	37	37
4	45	41	38	36	44	40	38	35	39	37	35		38	36	35		37	36	34	33
5	42	38	35	32	41	37	34	32	36	34	32		36	33	32		35	33	31	31
6	40	35	32	30	39	35	32	29	34	31	29		33	31	29		33	30	29	28
7	38	33	29	27	37	32	29	27	32	29	27		31	29	27		31	28	27	26
8	36	30	27	25	35	30	27	25	30	27	25		29	27	25		29	26	25	24
9	34	29	25	23	33	28	25	23	28	25	23		27	25	23		27	25	23	22
10	32	27	24	22	31	27	24	22	26	23	22		26	23	22		25	23	21	21

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	69.3	9.1	4.3
10°-20°	165.1	21.6	10.3
20°-30°	195.3	25.5	12.2
30°-40°	172.0	22.5	10.7
40°-50°	109.2	14.3	6.8
50°-60°	47.7	6.2	3.0
60°-70°	4.4	0.6	0.3
70°-80°	1.3	0.2	0.1
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°	429.6	56.2	26.9
0°-40°	601.6	78.7	37.6
0°-60°	758.5	99.3	47.4
0°-90°	764.2	100.0	47.8
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°	764.2	100.0	47.8

CANDELA DISTRIBUTION:

	0°	Flux
0°	724	
5°	742	69
15°	589	165
25°	424	195
35°	276	172
45°	140	109
55°	54	48
65°	3	4
75°	1	1
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°	724
2.5°	744
5°	742
7.5°	727
10°	694
12.5°	641
15°	589
17.5°	542
20°	501
22.5°	460
25°	424
27.5°	392
30°	355
32.5°	314
35°	276
37.5°	238
40°	203
42.5°	167
45°	140
47.5°	115
50°	93
52.5°	73
55°	54
57.5°	34
60°	16
62.5°	4
65°	3
67.5°	2
70°	2
72.5°	3
75°	1
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)