

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: H23304

Luminaire Tested: **H800HP-804**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: H23304
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H800HP-804
Description: HALO 8" DIA RECESSED DOWNLIGHT
SPECULAR UPPER REFLECTOR
HAZE LOWER CROSS BLADE REFLECTOR
0 DEG AXIS IS PARALLEL TO LAMPS
Light Source: (2) F13TT 13 WATTS 900 LUMENS EACH
TWIN TUBE COMPACT FLUORESCENT
Ballast/Driver: -

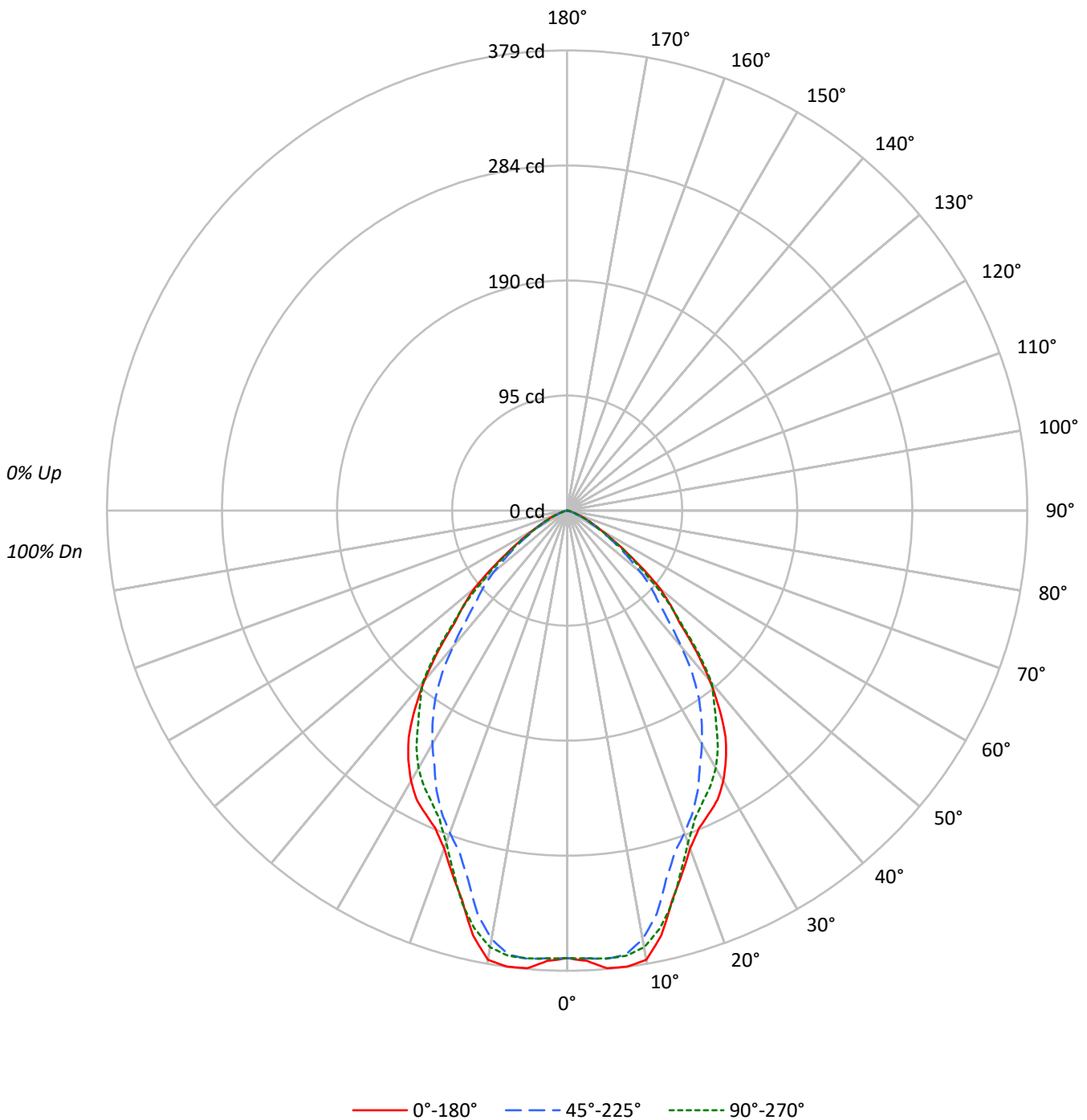
Summary

Lumens per Lamp: 900 (2 lamps)
Luminaire Lumens: 535.5 lumens
Efficiency: 29.8%
Efficacy: 16.7 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 1.01 / 1.05
Luminous Opening: (L: 0 ' x W: -0.56 ' x H: 0 '
CIE Type: Direct

Input Watts (W): 32
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			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	35	35	35	35	35	35	35	35	33	33	33	32	32	32	30	30	30	30	30	30
1	33	32	31	31	33	32	31	30	30	30	29	29	29	28	28	28	28	28	28	28
2	31	29	28	27	30	29	27	26	28	27	26	27	26	25	26	25	25	26	25	25
3	29	27	25	23	28	26	25	23	25	24	23	25	23	22	24	23	22	24	23	22
4	27	24	22	21	27	24	22	21	23	22	20	23	21	20	22	21	20	22	21	20
5	25	22	20	19	25	22	20	18	21	20	18	21	19	18	20	19	18	20	19	18
6	24	20	18	17	23	20	18	17	20	18	17	19	18	16	19	17	16	19	17	16
7	22	19	17	15	22	19	17	15	18	16	15	18	16	15	17	16	15	17	16	15
8	21	17	15	14	20	17	15	14	17	15	14	17	15	14	16	15	14	16	15	14
9	20	16	14	13	19	16	14	13	16	14	13	15	14	13	15	14	13	15	14	13
10	19	15	13	12	18	15	13	12	15	13	12	14	13	12	14	13	12	14	13	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	Luminous shape not found,		
5°	reference photometric report, or contact		
10°	the photometric lab for calculations.		
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	35.3	6.6	2.0
10°-20°	91.3	17.1	5.1
20°-30°	120.8	22.6	6.7
30°-40°	126.3	23.6	7.0
40°-50°	92.9	17.3	5.2
50°-60°	48.7	9.1	2.7
60°-70°	16.2	3.0	0.9
70°-80°	3.6	0.7	0.2
80°-90°	0.4	0.1	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°	247.4	46.2	13.7
0°-40°	373.7	69.8	20.8
0°-60°	515.3	96.2	28.6
0°-90°	535.5	100.0	29.8
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°	535.5	100.0	29.8

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	369	369	369	369	369	
5°	378	376	371	369	370	36
15°	333	331	315	326	334	94
25°	276	267	254	259	264	127
35°	228	209	189	200	214	140
45°	131	120	106	112	134	105
55°	59	53	50	52	56	55
65°	18	16	14	14	16	19
75°	4	3	3	3	3	4
85°	0	0	0	0	0	1
90°	0	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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	368.6	368.6	368.6	368.6	368.6
2.5°	371.2	369.5	369.1	369.2	369.2
5°	378.4	375.8	370.6	369.0	370.3
7.5°	378.8	374.2	368.9	367.4	369.9
10°	375.7	366.0	358.3	358.1	365.2
12.5°	358.2	350.9	340.4	346.5	352.6
15°	333.1	331.0	314.8	325.7	334.4
17.5°	314.0	309.8	294.9	301.5	311.6
20°	296.2	292.7	282.3	285.5	290.9
22.5°	283.3	281.0	269.8	273.0	274.8
25°	275.8	267.4	254.4	259.4	264.4
27.5°	268.4	252.5	236.7	245.5	255.7
30°	257.2	240.4	222.0	230.3	244.9
32.5°	243.4	226.8	206.1	217.1	231.0
35°	227.6	209.2	189.3	199.5	213.8
37.5°	206.0	187.0	169.3	179.2	198.7
40°	182.7	163.8	146.4	156.6	185.2
42.5°	157.6	140.1	123.9	132.7	161.2
45°	131.2	120.0	106.0	112.1	134.4
47.5°	115.7	104.6	93.4	98.9	114.3
50°	99.5	84.8	79.0	83.0	92.7
52.5°	78.0	67.7	63.6	67.3	73.3
55°	58.7	52.6	50.5	51.9	56.0
57.5°	43.9	39.6	38.6	38.5	41.6
60°	32.5	29.7	28.9	28.2	30.4
62.5°	24.4	22.1	20.6	20.6	22.4
65°	17.9	16.0	14.2	14.3	16.2
67.5°	12.7	11.3	9.6	9.9	11.1
70°	8.6	7.5	6.3	6.3	7.1
72.5°	5.7	5.0	4.2	4.1	4.5
75°	3.7	3.3	2.8	2.6	2.8
77.5°	2.4	2.1	1.8	1.7	1.8
80°	1.5	1.3	1.2	1.1	1.1
82.5°	0.9	0.8	0.7	0.6	0.6
85°	0.5	0.0	0.0	0.0	0.0
87.5°	0.2	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)