

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: H23307

Luminaire Tested: **H802HP-810BA**

Issue Date: 3/3/2020



Test Information

Test Method: LM-46-04
Report Number: H23307
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H802HP-810BA
Description: HALO 8" DIA RECESSED DOWNLIGHT
SPECULAR REFLECTOR WITH BLACK BAFFLE
0 DEG AXIS IS PARALLEL TO LAMPS
Light Source: (2) F18DTT 18 WATTS 1250 LUMENS EACH
DOUBLE TWIN TUBE COMPACT FLUORESCENT
Ballast/Driver: -

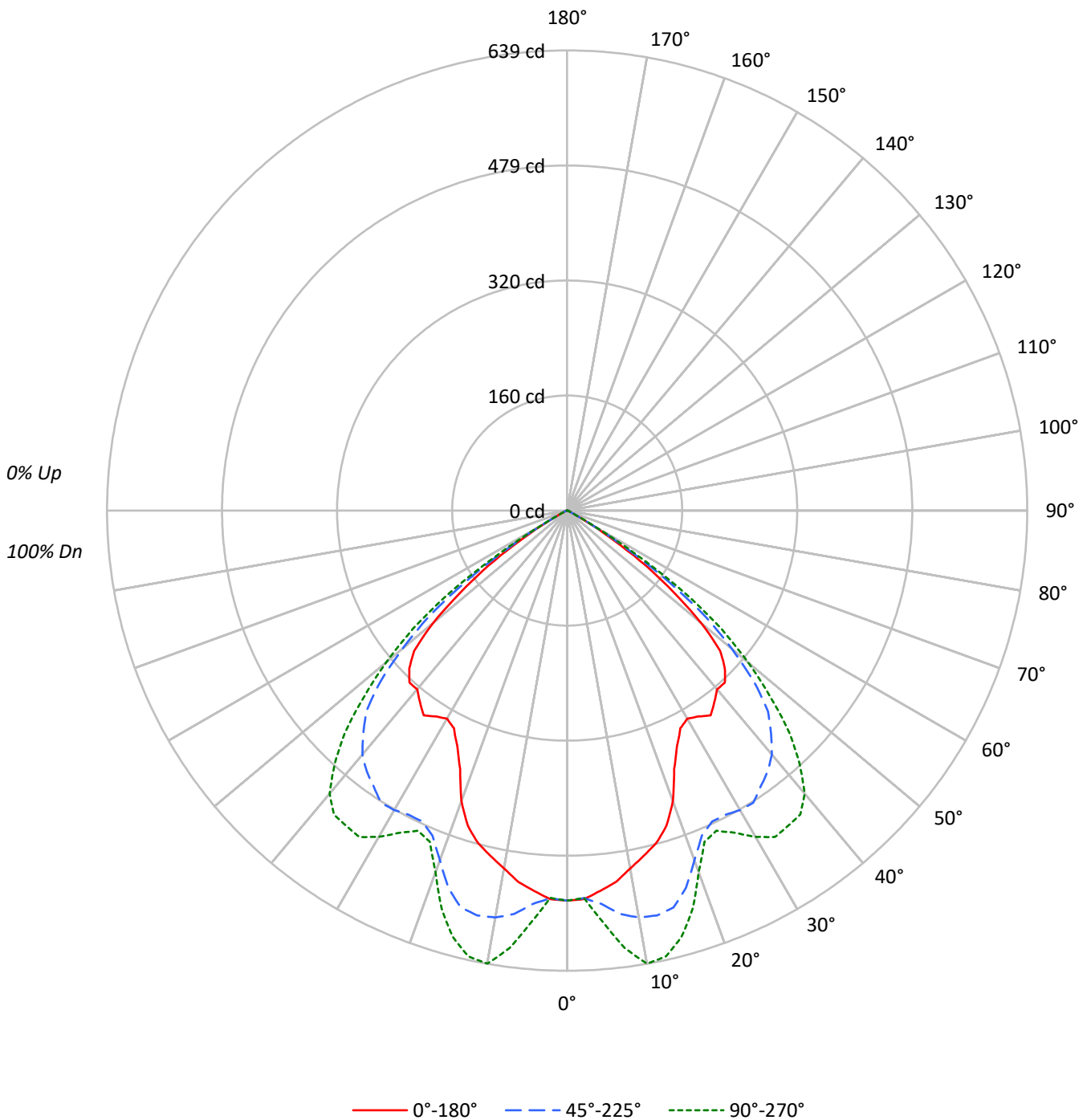
Summary

Lumens per Lamp: 1250 (2 lamps)
Luminaire Lumens: 1154.6 lumens
Efficiency: 46.2%
Efficacy: 22.2 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.51 / 1.43
Luminous Opening: (L: 0 ' x W: -0.58 ' x H: 0 '
CIE Type: Direct

Input Watts (W): 52
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	55	55	55	55	54	54	54	54	51	51	51		49	49	49		47	47	47	46
1	52	50	49	47	50	49	48	47	47	46	45		45	45	44		44	43	42	42
2	48	45	43	41	47	44	42	40	43	41	39		41	40	39		40	39	38	37
3	45	41	38	35	44	40	37	35	39	36	35		38	36	34		36	35	33	33
4	41	37	33	31	40	36	33	31	35	32	30		34	32	30		33	31	30	29
5	38	33	30	27	38	33	30	27	32	29	27		31	29	27		30	28	26	25
6	36	30	27	24	35	30	27	24	29	26	24		28	26	24		28	25	24	23
7	33	28	24	22	32	27	24	22	27	24	21		26	23	21		25	23	21	20
8	31	25	22	19	30	25	22	19	25	21	19		24	21	19		23	21	19	18
9	29	23	20	18	28	23	20	18	23	20	17		22	19	17		22	19	17	17
10	27	22	18	16	27	21	18	16	21	18	16		21	18	16		20	18	16	15

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°	53.3	4.6	2.1
10°-20°	154.6	13.4	6.2
20°-30°	213.5	18.5	8.5
30°-40°	284.1	24.6	11.4
40°-50°	288.1	25.0	11.5
50°-60°	147.1	12.7	5.9
60°-70°	11.0	1.0	0.4
70°-80°	2.3	0.2	0.1
80°-90°	0.6	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°	421.5	36.5	16.9
0°-40°	705.5	61.1	28.2
0°-60°	1140.7	98.8	45.6
0°-90°	1154.6	100.0	46.2
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°	1154.6	100.0	46.2

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	542	542	542	542	542	
5°	530	532	548	567	574	50
15°	478	518	570	597	613	133
25°	361	415	476	496	490	169
35°	347	416	468	508	535	212
45°	310	350	394	413	437	233
55°	133	153	172	185	201	118
65°	5	6	6	8	7	10
75°	2	2	2	2	2	2
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°	541.6	541.6	541.6	541.6	541.6
2.5°	540.1	537.9	538.7	541.0	538.3
5°	529.9	532.4	548.2	567.0	574.0
7.5°	520.1	527.3	565.0	601.4	612.8
10°	504.5	523.9	573.7	618.7	638.8
12.5°	491.2	521.2	575.8	613.1	634.0
15°	478.1	517.5	570.5	596.6	613.3
17.5°	458.7	498.3	549.1	570.9	579.6
20°	429.2	466.7	516.5	533.0	534.1
22.5°	388.3	434.6	488.6	506.3	497.9
25°	360.9	414.8	476.3	495.5	490.5
27.5°	340.7	403.6	476.2	500.4	504.3
30°	333.6	402.5	480.2	516.7	523.1
32.5°	338.9	412.9	480.9	517.2	537.4
35°	347.3	416.5	468.3	508.1	534.6
37.5°	335.6	400.9	457.1	496.6	531.8
40°	324.0	382.4	442.3	473.8	513.1
42.5°	324.2	368.4	418.9	442.1	478.2
45°	309.8	349.7	394.3	412.7	436.8
47.5°	288.1	319.2	352.1	370.9	382.7
50°	244.0	273.4	298.3	310.7	328.1
52.5°	186.8	217.5	243.0	252.3	269.9
55°	133.4	153.4	172.4	184.9	200.7
57.5°	76.5	88.0	97.5	99.4	113.7
60°	33.7	37.7	40.5	42.8	44.8
62.5°	11.7	12.7	12.6	13.5	11.5
65°	5.4	5.7	5.8	8.1	7.0
67.5°	3.8	4.1	4.2	4.5	4.8
70°	3.1	3.2	3.4	3.6	3.7
72.5°	2.6	2.7	2.8	3.0	3.1
75°	2.1	2.1	2.1	2.3	2.3
77.5°	1.6	1.5	1.5	1.6	1.5
80°	1.2	1.2	1.2	1.2	1.2
82.5°	0.8	0.9	0.8	0.8	0.8
85°	0.5	0.5	0.5	0.5	0.5
87.5°	0.3	0.3	0.2	0.3	0.2
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)