

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: P358655

Luminaire Tested: **HL36AR13FLD2WED010TL3PINMWWB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P358655
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1908-462-21)
Test Lab: INNOVATION CENTER (G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HL36AR13FLD2WED010TL3PINMWWB
Description: HL3 13W Round, Flood optic with pin-hole trim, No Lens, Matte White
Light Source: (1) 3100K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 974.9 lumens
Efficiency: N/A
Efficacy: 67.7 lumens/watt
Spacing Criteria (0/90/45): 0.58 / 0.6 / 0.57
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

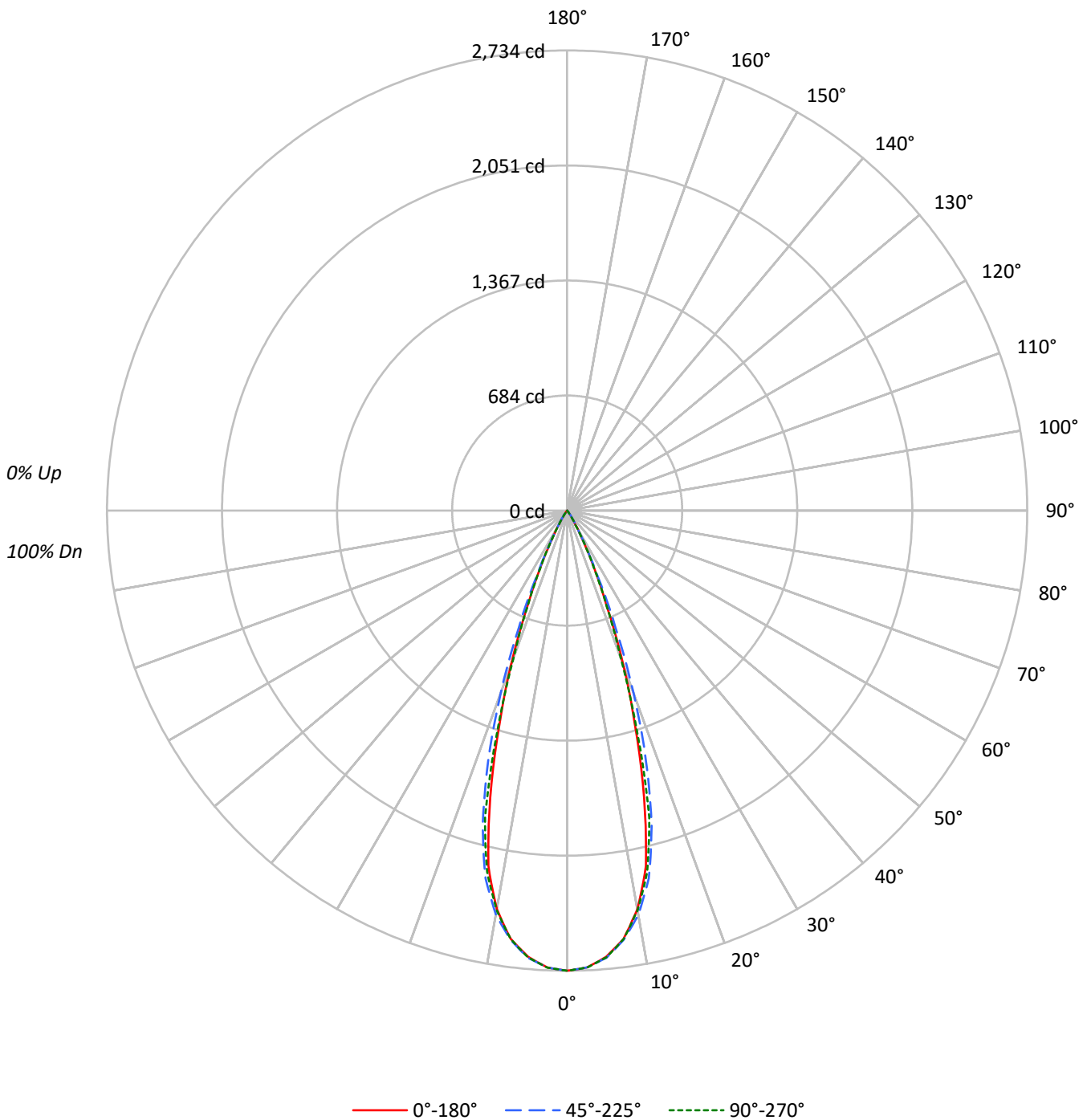
Input Watts (W): 14.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96					96			
2	111	107	104	101	109	105	103	100	102	100	98	99	98	96	97	95	94	93					93			
3	107	102	98	95	105	101	97	95	98	96	93	96	94	92	94	92	90	89					89			
4	103	98	94	91	102	97	93	90	95	92	89	93	90	88	91	89	87	86					86			
5	100	94	90	86	99	93	89	86	91	88	85	90	87	85	88	86	84	83					83			
6	97	90	86	83	96	90	86	83	88	85	82	87	84	81	86	83	81	80					80			
7	94	87	83	80	93	86	82	79	85	82	79	84	81	79	83	80	78	77					77			
8	91	84	80	77	90	84	79	76	83	79	76	82	78	76	81	78	76	75					75			
9	88	81	77	74	87	81	77	74	80	76	74	79	76	73	78	75	73	72					72			
10	86	79	74	71	85	78	74	71	77	74	71	77	73	71	76	73	71	70					70			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1059307	1059307	1059307
5°	1035269	1037447	1036358
10°	945998	958747	948201
15°	708705	778147	756243
20°	402595	475502	383915
25°	167774	180045	163413
30°	49264	52575	48861
35°	11826	16651	11400
40°	1416	4704	961
45°	493	493	493
50°	543	543	543
55°	608	608	608
60°	697	697	697
65°	825	825	825
70°	1020	1020	1020
75°	1347	1347	1347
80°	2008	2008	2008
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.8	25.3
10°-20°	495.5	50.8
20°-30°	203.7	20.9
30°-40°	24.7	2.5
40°-50°	1.2	0.1
50°-60°	0.8	0.1
60°-70°	0.9	0.1
70°-80°	1.0	0.1
80°-90°	0.4	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	945.9	97.0
0°-40°	970.6	99.6
0°-60°	972.7	99.8
0°-90°	974.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	974.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2734	2734	2734	2734	2734	
5°	2662	2668	2667	2668	2664	246
15°	1767	1844	1940	1918	1885	471
25°	392	400	421	393	382	193
35°	25	30	35	33	24	22
45°	1	1	1	1	1	1
55°	1	1	1	1	1	1
65°	1	1	1	1	1	1
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2733.7	2733.7	2733.7	2733.7	2733.7
2.5°	2717.0	2718.0	2717.0	2717.0	2718.0
5°	2661.5	2668.0	2667.1	2668.0	2664.3
7.5°	2566.2	2568.0	2572.7	2571.7	2568.0
10°	2404.2	2413.5	2436.6	2424.6	2409.8
12.5°	2162.7	2198.8	2238.6	2216.4	2197.9
15°	1766.6	1844.4	1939.7	1917.5	1885.1
17.5°	1340.9	1420.5	1558.4	1507.5	1389.1
20°	976.3	1027.2	1153.1	1018.9	931.0
22.5°	618.2	667.2	749.6	653.3	608.0
25°	392.4	399.8	421.1	393.3	382.2
27.5°	211.9	223.0	224.0	216.5	219.3
30°	110.1	115.7	117.5	114.8	109.2
32.5°	54.6	61.1	64.8	63.9	56.5
35°	25.0	30.5	35.2	33.3	24.1
37.5°	10.2	14.8	19.4	12.0	5.6
40°	2.8	5.6	9.3	2.8	1.9
42.5°	0.9	1.9	3.7	0.9	0.9
45°	0.9	0.9	0.9	0.9	0.9
47.5°	0.9	0.9	0.9	0.9	0.9
50°	0.9	0.9	0.9	0.9	0.9
52.5°	0.9	0.9	0.9	0.9	0.9
55°	0.9	0.9	0.9	0.9	0.9
57.5°	0.9	0.9	0.9	0.9	0.9
60°	0.9	0.9	0.9	0.9	0.9
62.5°	0.9	0.9	0.9	0.9	0.9
65°	0.9	0.9	0.9	0.9	0.9
67.5°	0.9	0.9	0.9	0.9	0.9
70°	0.9	0.9	0.9	0.9	0.9
72.5°	0.9	0.9	0.9	0.9	0.9
75°	0.9	0.9	0.9	0.9	0.9
77.5°	0.9	0.9	0.9	0.9	0.9
80°	0.9	0.9	0.9	0.9	0.9
82.5°	0.9	0.9	0.9	0.9	0.9
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)