

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: P358657

Luminaire Tested: **HL36AR13FLD2WED010TL3RMW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P358657
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1908-462-17)
Test Lab: INNOVATION CENTER (G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HL36AR13FLD2WED010TL3RMW
Description: HL3 13W Round, Flood optic with conical 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: 1097.0 lumens
Efficiency: N/A
Efficacy: 76.2 lumens/watt
Spacing Criteria (0/90/45): 0.64 / 0.65 / 0.59
Luminous Opening: Rectangular (W 0.27' x L: 0.27' x H: 0')
CIE Type: Direct

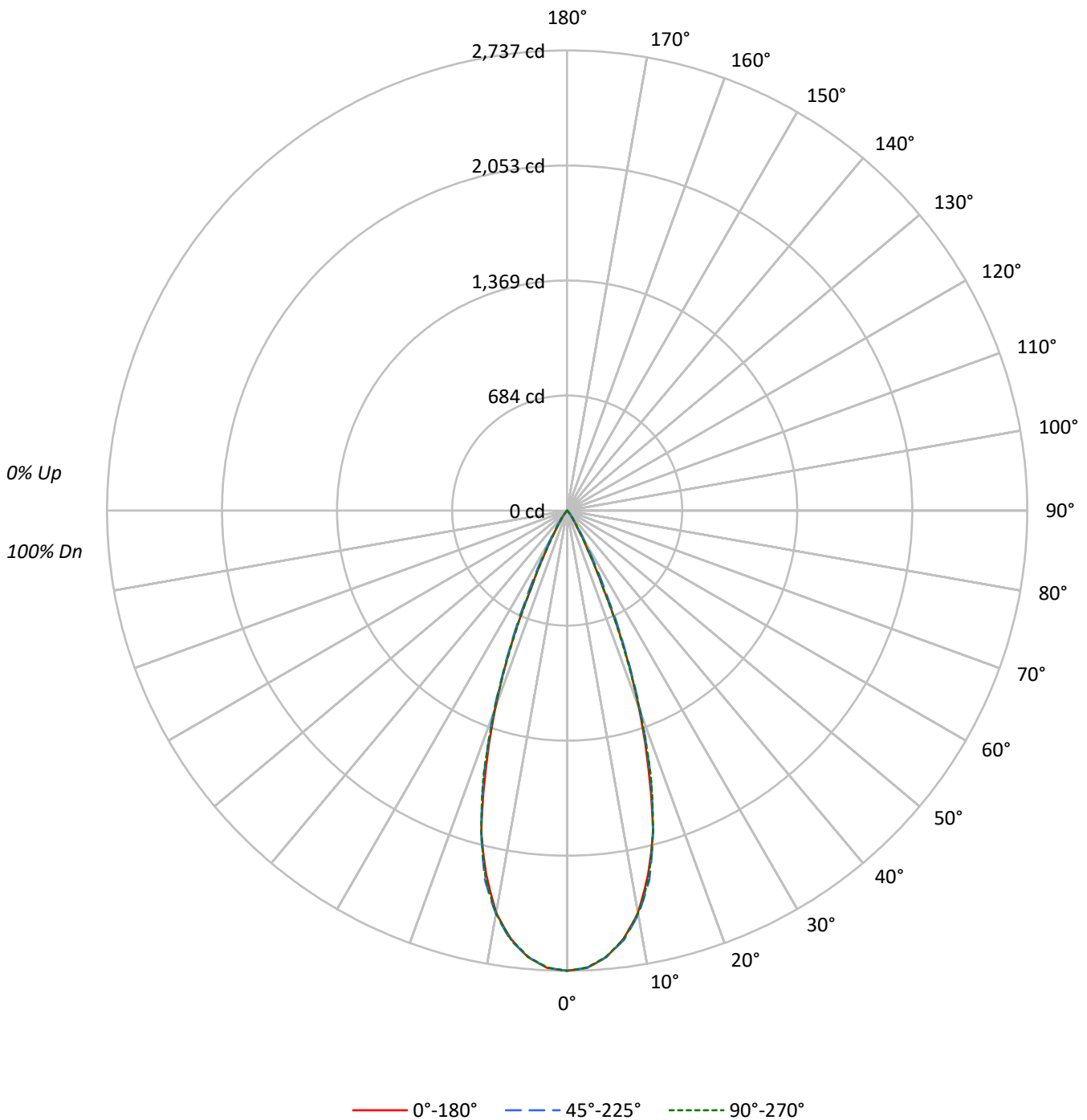
Input Watts (W): 14.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P358657

CATALOG NUMBER: HL36AR13FLD2WED010TL3RMW

Luminous Intensity Polar Plot





TEST NUMBER: P358657

CATALOG NUMBER: HL36AR13FLD2WED010TL3RMW

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	112	110	109	112	110	108	107	106	105	104	103	102	101	99	98	98	96					96			
2	111	107	103	101	108	105	102	100	102	99	97	99	97	95	96	95	93	92					92			
3	107	102	98	95	105	100	97	94	98	95	92	95	93	91	93	91	90	88					88			
4	103	97	93	89	101	96	92	89	94	91	88	92	89	87	90	88	86	85					85			
5	99	93	88	85	98	92	88	85	90	87	84	89	86	83	87	85	83	81					81			
6	96	89	84	81	95	88	84	81	87	83	80	86	82	80	84	82	79	78					78			
7	93	86	81	78	92	85	81	78	84	80	77	83	79	77	82	79	76	75					75			
8	90	82	78	75	89	82	77	74	81	77	74	80	76	74	79	76	74	73					73			
9	87	79	75	72	86	79	75	72	78	74	71	77	74	71	77	73	71	70					70			
10	84	77	72	69	83	76	72	69	75	72	69	75	71	69	74	71	69	68					68			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	401674	401674	401674
5°	392838	392558	392425
10°	361901	363152	362452
15°	299881	300169	299744
20°	195143	199765	197157
25°	80084	92989	81897
30°	25739	33432	26061
35°	9620	12773	9799
40°	3372	4961	3372
45°	187	1930	394
50°	205	434	205
55°	230	230	230
60°	264	264	264
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P358657

CATALOG NUMBER: HL36AR13FLD2WED010TL3RMW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.2	22.5
10°-20°	529.0	48.2
20°-30°	269.5	24.6
30°-40°	44.6	4.1
40°-50°	5.5	0.5
50°-60°	0.8	0.1
60°-70°	0.3	0.0
70°-80°	0.0	0.0
80°-90°	0.0	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°	1045.7	95.3
0°-40°	1090.4	99.4
0°-60°	1096.7	100.0
0°-90°	1097.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1097.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2737	2737	2737	2737	2737	
5°	2667	2668	2665	2668	2664	247
15°	1974	1970	1976	1975	1973	524
25°	495	547	574	545	506	257
35°	54	58	71	60	55	39
45°	1	4	9	5	2	3
55°	1	1	1	1	1	1
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P358657

CATALOG NUMBER: HL36AR13FLD2WED010TL3RMW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2737.2	2737.2	2737.2	2737.2	2737.2
2.5°	2722.3	2722.3	2721.4	2719.6	2719.6
5°	2666.8	2667.7	2664.9	2667.7	2664.0
7.5°	2568.6	2576.0	2576.9	2574.1	2570.4
10°	2428.7	2435.2	2437.1	2434.3	2432.4
12.5°	2221.2	2245.3	2254.6	2248.1	2238.8
15°	1973.9	1970.2	1975.8	1974.8	1973.0
17.5°	1609.0	1633.0	1643.2	1638.6	1654.3
20°	1249.6	1276.4	1279.2	1261.6	1262.5
22.5°	885.5	906.8	905.0	899.4	864.2
25°	494.6	547.4	574.3	544.7	505.8
27.5°	277.9	300.1	339.9	298.3	278.8
30°	151.9	165.8	197.3	164.9	153.8
32.5°	88.9	98.2	118.6	99.1	91.7
35°	53.7	58.4	71.3	60.2	54.7
37.5°	31.5	35.2	43.5	36.1	32.4
40°	17.6	21.3	25.9	22.2	17.6
42.5°	6.5	11.1	16.7	12.0	6.5
45°	0.9	3.7	9.3	4.6	1.9
47.5°	0.9	0.9	4.6	0.9	0.9
50°	0.9	0.9	1.9	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	0.0	0.9	0.9	0.9
62.5°	0.9	0.9	0.9	0.9	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
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)