

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: P358704

Luminaire Tested: **HL36SAR13WFLD2WED010TLS3R2GMW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P358704
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1908-462-27)
Test Lab: INNOVATION CENTER (G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HL36SAR13WFLD2WED010TLS3R2GMW
Description: HL3 13W Square, Wide Flood optic with reflector trim, Lensed, Matte White
Light Source: (1) 3100K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1021.0 lumens
Efficiency: N/A
Efficacy: 70.9 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 0.84 / 0.81
Luminous Opening: Rectangular (W 0.27' x L: 0.27' x H: 0')
CIE Type: Direct

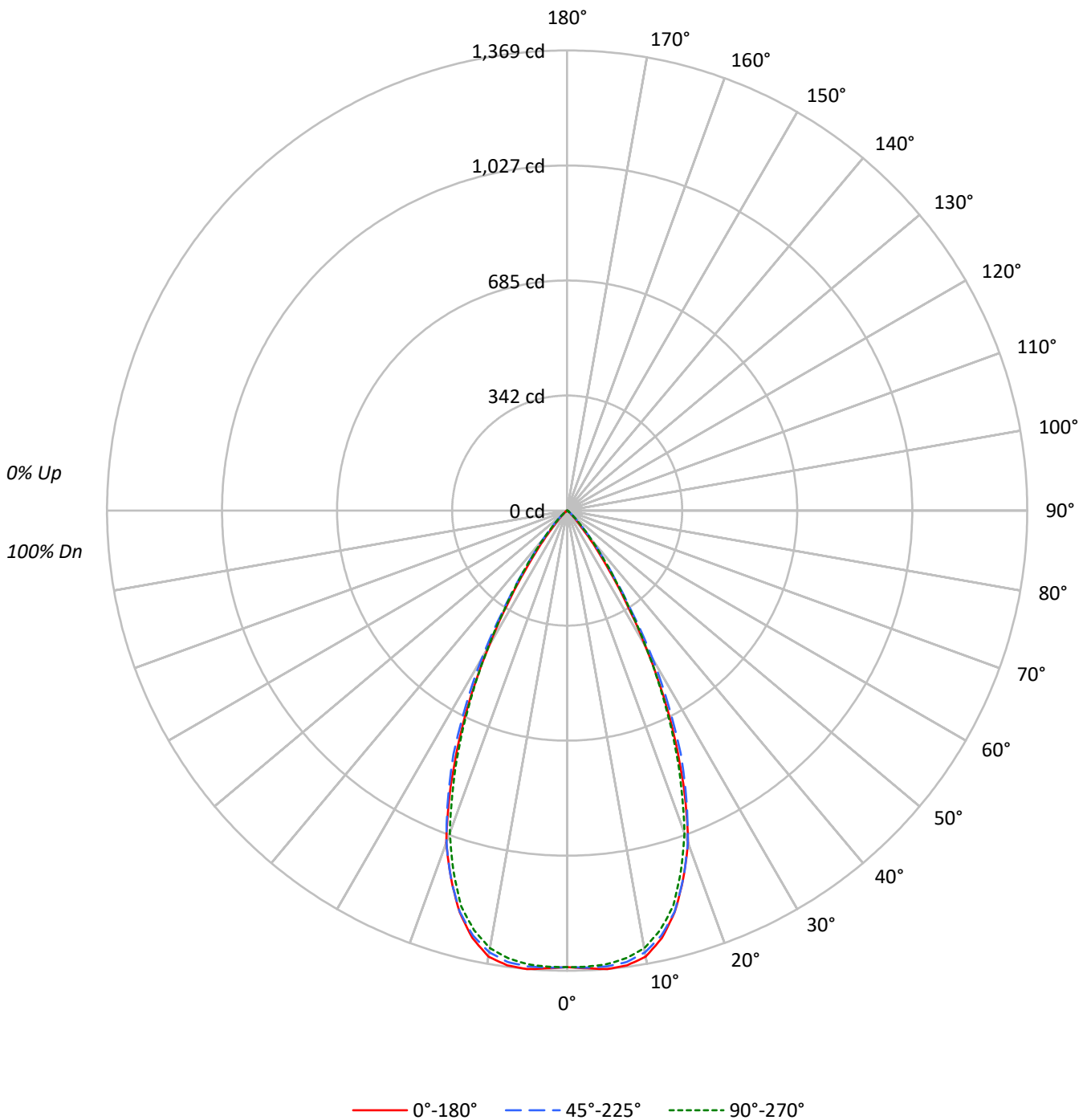
Input Watts (W): 14.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	92	90	88
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	85	83
4	99	92	87	83	97	91	86	82	89	85	81	87	83	80	85	82	79	78
5	94	87	81	77	93	86	81	77	84	79	76	82	78	75	81	77	75	73
6	90	82	76	72	89	81	76	72	79	75	71	78	74	71	77	73	70	69
7	86	77	72	68	85	77	71	68	75	71	67	74	70	67	73	69	67	65
8	82	73	68	64	81	73	67	64	72	67	63	71	66	63	70	66	63	62
9	79	70	64	60	78	69	64	60	68	63	60	67	63	60	67	63	60	58
10	75	66	61	57	74	66	61	57	65	60	57	64	60	57	64	59	57	55

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	199311	199311	199311
5°	201707	200485	199527
10°	200731	198794	196991
15°	187898	187625	185088
20°	164207	163925	159428
25°	123899	129452	121502
30°	78963	85876	79742
35°	39000	44643	43156
40°	15268	21110	20402
45°	5001	9609	8654
50°	1689	4018	3584
55°	947	1893	1663
60°	822	1350	1086
65°	660	972	972
70°	815	815	815
75°	510	510	510
80°	761	761	761
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.1	12.6
10°-20°	339.8	33.3
20°-30°	349.0	34.2
30°-40°	158.2	15.5
40°-50°	34.5	3.4
50°-60°	6.4	0.6
60°-70°	2.6	0.3
70°-80°	1.3	0.1
80°-90°	0.1	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°	818.0	80.1
0°-40°	976.2	95.6
0°-60°	1017.0	99.6
0°-90°	1021.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1021.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1358	1358	1358	1358	1358	
5°	1369	1366	1361	1356	1354	130
15°	1237	1240	1235	1218	1218	342
25°	765	783	800	767	750	346
35°	218	232	249	248	241	146
45°	24	32	46	44	42	24
55°	4	5	7	7	6	4
65°	2	2	3	3	3	2
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°	1358.2	1358.2	1358.2	1358.2	1358.2
2.5°	1362.8	1362.8	1361.0	1359.1	1358.2
5°	1369.3	1366.5	1361.0	1356.3	1354.5
7.5°	1364.7	1361.9	1354.5	1346.1	1343.4
10°	1347.1	1344.3	1334.1	1325.7	1322.0
12.5°	1302.6	1305.4	1295.2	1285.0	1278.5
15°	1236.8	1239.6	1235.0	1218.3	1218.3
17.5°	1148.8	1152.5	1148.8	1135.8	1124.7
20°	1051.5	1050.6	1049.7	1029.3	1020.9
22.5°	914.4	924.6	926.4	908.8	886.6
25°	765.2	782.8	799.5	767.1	750.4
27.5°	617.9	626.3	651.3	624.4	606.8
30°	466.0	473.4	506.8	479.0	470.6
32.5°	330.7	340.0	362.2	355.8	345.6
35°	217.7	231.6	249.2	248.3	240.9
37.5°	137.1	144.5	166.8	166.8	163.1
40°	79.7	91.7	110.2	109.3	106.5
42.5°	44.5	54.7	72.3	71.3	65.8
45°	24.1	31.5	46.3	44.5	41.7
47.5°	13.0	16.7	28.7	26.9	25.9
50°	7.4	10.2	17.6	17.6	15.7
52.5°	4.6	6.5	11.1	11.1	10.2
55°	3.7	4.6	7.4	7.4	6.5
57.5°	2.8	3.7	5.6	5.6	4.6
60°	2.8	2.8	4.6	3.7	3.7
62.5°	2.8	2.8	3.7	2.8	2.8
65°	1.9	1.9	2.8	2.8	2.8
67.5°	1.9	1.9	2.8	1.9	1.9
70°	1.9	1.9	1.9	1.9	1.9
72.5°	1.9	1.9	1.9	1.9	1.9
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°	0.0	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)