

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: P358705

Luminaire Tested: **HL36SAR13WFLD2WED010TLS3RMW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P358705
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1908-462-25)
Test Lab: INNOVATION CENTER (G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HL36SAR13WFLD2WED010TLS3RMW
Description: HL3 13W Square, Wide Flood optic with reflector 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: 1098.9 lumens
Efficiency: N/A
Efficacy: 76.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 0.88 / 0.83
Luminous Opening: Rectangular (W 0.27' x L: 0.27' x H: 0')
CIE Type: Direct

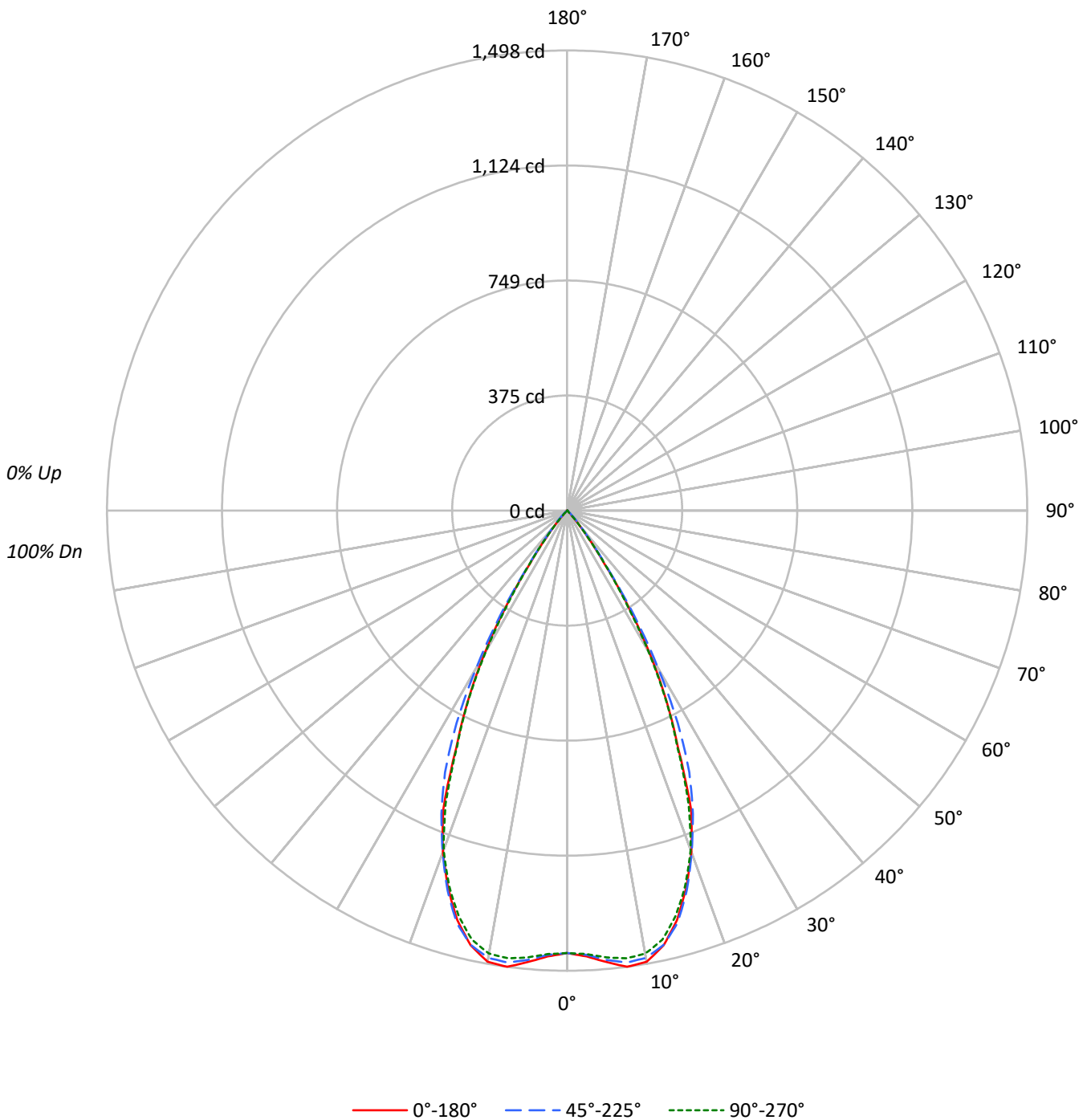
Input Watts (W): 14.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	112	109	107	105	105	104	102	102	100	99	98	97	96	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89
3	104	98	94	90	102	97	93	90	94	91	88	92	89	87	90	87	85	84
4	100	93	88	84	98	92	87	83	90	86	82	88	84	81	86	83	81	79
5	95	88	82	78	94	87	82	78	85	81	77	83	80	77	82	79	76	75
6	91	83	77	74	90	82	77	73	81	76	73	79	75	72	78	75	72	71
7	87	79	73	69	86	78	73	69	77	72	69	76	71	68	74	71	68	67
8	83	75	69	65	82	74	69	65	73	68	65	72	68	65	71	67	65	63
9	80	71	66	62	79	70	65	62	70	65	62	69	64	61	68	64	61	60
10	76	68	62	59	75	67	62	59	66	62	58	66	61	58	65	61	58	57

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	211359	211359	211359
5°	217351	216261	215039
10°	222219	220282	218210
15°	209669	211082	207420
20°	184570	185008	183555
25°	138584	152234	137386
30°	91502	100601	89299
35°	37996	41651	39000
40°	11187	13658	11187
45°	581	5375	768
50°	205	845	205
55°	230	230	230
60°	264	264	264
65°	313	313	313
70°	386	386	386
75°	510	510	510
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.6	12.8
10°-20°	381.5	34.7
20°-30°	403.7	36.7
30°-40°	155.4	14.1
40°-50°	15.4	1.4
50°-60°	0.9	0.1
60°-70°	0.9	0.1
70°-80°	0.6	0.1
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°	925.8	84.2
0°-40°	1081.1	98.4
0°-60°	1097.5	99.9
0°-90°	1098.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1098.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1440	1440	1440	1440	1440	
5°	1476	1473	1468	1461	1460	142
15°	1380	1387	1389	1371	1365	382
25°	856	909	940	904	848	393
35°	212	215	232	217	218	150
45°	3	10	26	10	4	10
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°	1440.3	1440.3	1440.3	1440.3	1440.3
2.5°	1452.4	1450.5	1447.7	1445.9	1445.0
5°	1475.5	1472.8	1468.1	1460.7	1459.8
7.5°	1497.8	1494.1	1483.9	1473.7	1470.0
10°	1491.3	1487.6	1478.3	1468.1	1464.4
12.5°	1449.6	1452.4	1448.7	1437.6	1431.1
15°	1380.1	1386.6	1389.4	1370.9	1365.3
17.5°	1288.4	1295.8	1295.8	1283.8	1279.2
20°	1181.9	1186.5	1184.7	1177.3	1175.4
22.5°	1055.0	1070.8	1068.9	1062.4	1033.7
25°	855.9	908.7	940.2	904.0	848.5
27.5°	701.2	727.1	779.9	718.8	698.4
30°	540.0	550.2	593.7	551.1	527.0
32.5°	371.4	371.4	404.8	376.1	356.6
35°	212.1	214.9	232.5	216.7	217.7
37.5°	113.9	115.8	126.9	118.6	113.0
40°	58.4	64.8	71.3	65.8	58.4
42.5°	19.5	34.3	44.5	33.3	19.5
45°	2.8	10.2	25.9	10.2	3.7
47.5°	0.9	1.9	13.0	1.9	0.9
50°	0.9	0.9	3.7	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°	0.0	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)