

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: P295443

Luminaire Tested: **HLB3S05935EMW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P295443
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1901-077-10)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: HLB3S05935EMW
Description: 3 IN SQUARE HALO BLADE - 3500K
Light Source: -
Ballast/Driver: -

Summary

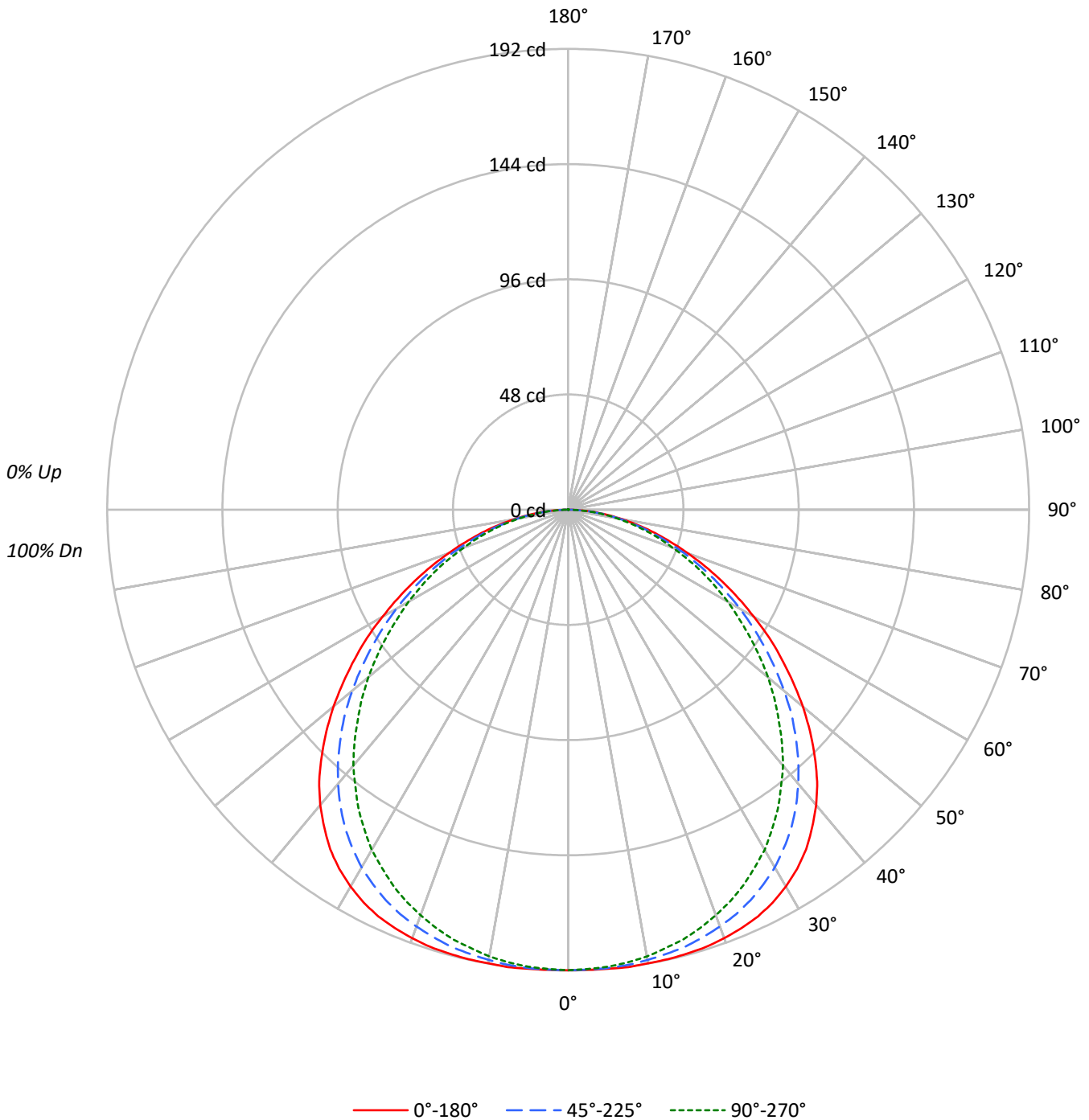
Lumens per Lamp: N/A
Luminaire Lumens: 562.0 lumens
Efficiency: N/A
Efficacy: 62.4 lumens/watt
Spacing Criteria (0/90/45): 1.39 / 1.26 / 1.4
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 9
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	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	75	82	78	74	79	75	72	70
3	90	80	72	65	88	78	71	64	75	69	63	72	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	50
5	76	63	54	47	74	62	54	47	60	52	47	58	51	46	56	50	46	44
6	70	57	48	41	68	56	47	41	54	46	41	52	46	40	51	45	40	38
7	65	51	43	37	63	51	42	36	49	42	36	48	41	36	46	40	36	34
8	61	47	38	33	59	46	38	32	45	38	32	44	37	32	43	36	32	30
9	57	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	42080	42080	42080
5°	42263	42197	42065
10°	42729	42417	42083
15°	43474	42793	42066
20°	44337	43124	41957
25°	45245	43454	41785
30°	45906	43576	41424
35°	46257	43366	40743
40°	46000	42680	39846
45°	45028	41555	38454
50°	43495	40050	37048
55°	41518	38192	35287
60°	39164	36269	33682
65°	36735	34089	31858
70°	33980	31864	29684
75°	31602	29823	27874
80°	28918	27276	25887
85°	26418	24405	23398



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.3	3.2
10°-20°	53.2	9.5
20°-30°	82.7	14.7
30°-40°	101.2	18.0
40°-50°	103.4	18.4
50°-60°	89.5	15.9
60°-70°	65.3	11.6
70°-80°	37.2	6.6
80°-90°	11.0	2.0
90°-100°	0.0	0.0
100°-110°	0.1	0.0
110°-120°	0.1	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°	154.2	27.4
0°-40°	255.3	45.4
0°-60°	448.3	79.8
0°-90°	561.8	100.0
90°-120°	0.2	0.0
90°-150°	0.2	0.0
90°-180°	0.0	0.0
0°-180°	562.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	192	192	192	192	192	
5°	192	192	192	191	191	18
15°	192	190	188	186	185	54
25°	187	185	180	174	173	86
35°	173	169	162	154	152	108
45°	145	142	134	127	124	112
55°	109	106	100	94	92	97
65°	71	69	66	62	61	70
75°	37	36	35	33	33	39
85°	10	10	10	9	9	11
90°	0	0	0	0	0	1
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°	191.9	191.9	191.9	191.9	191.9
2.5°	191.9	191.8	191.8	191.5	191.5
5°	192.0	191.8	191.7	191.2	191.1
7.5°	192.2	191.7	191.3	190.5	190.2
10°	191.9	191.4	190.5	189.2	189.0
12.5°	191.8	191.0	189.5	187.6	187.1
15°	191.5	190.5	188.5	185.9	185.3
17.5°	191.0	189.4	186.7	183.4	182.8
20°	190.0	188.3	184.8	180.9	179.8
22.5°	188.7	186.6	182.5	177.9	176.5
25°	187.0	184.6	179.6	174.1	172.7
27.5°	184.5	181.9	176.0	170.0	168.1
30°	181.3	178.3	172.1	165.3	163.6
32.5°	177.4	174.3	167.2	160.1	158.0
35°	172.8	169.4	162.0	154.4	152.2
37.5°	166.9	163.5	155.8	148.0	145.6
40°	160.7	157.0	149.1	141.2	139.2
42.5°	153.5	149.7	141.9	134.0	131.8
45°	145.2	141.6	134.0	126.6	124.0
47.5°	136.6	133.2	126.1	118.8	116.5
50°	127.5	124.2	117.4	110.8	108.6
52.5°	118.0	115.1	108.7	102.4	100.5
55°	108.6	105.6	99.9	94.4	92.3
57.5°	99.3	96.5	91.2	86.1	84.2
60°	89.3	87.1	82.7	78.2	76.8
62.5°	80.0	78.1	74.0	70.1	68.9
65°	70.8	69.2	65.7	62.3	61.4
67.5°	61.7	60.6	57.6	54.5	53.8
70°	53.0	52.2	49.7	47.4	46.3
72.5°	44.8	44.1	42.1	40.0	39.6
75°	37.3	36.5	35.2	33.2	32.9
77.5°	29.7	29.3	28.1	26.9	26.5
80°	22.9	22.6	21.6	20.8	20.5
82.5°	16.4	16.1	15.6	15.0	14.7
85°	10.5	10.2	9.7	9.3	9.3
87.5°	4.7	4.6	4.4	4.2	4.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.1	0.0	0.1	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	0.1
100°	0.0	0.0	0.1	0.1	0.1
102.5°	0.0	0.0	0.1	0.1	0.1
105°	0.0	0.1	0.1	0.1	0.1
107.5°	0.0	0.0	0.0	0.1	0.1
110°	0.0	0.1	0.1	0.1	0.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.1	0.1	0.1
115°	0.0	0.0	0.0	0.1	0.1
117.5°	0.0	0.1	0.1	0.1	0.1
120°	0.0	0.0	0.1	0.1	0.1
122.5°	0.0	0.0	0.1	0.0	0.1
125°	0.0	0.0	0.1	0.0	0.1
127.5°	0.0	0.0	0.1	0.0	0.1
130°	0.0	0.0	0.1	0.0	0.1
132.5°	0.0	0.0	0.1	0.0	0.1
135°	0.0	0.0	0.0	0.0	0.1
137.5°	0.0	0.0	0.0	0.0	0.1
140°	0.0	0.0	0.0	0.1	0.1
142.5°	0.0	0.0	0.0	0.0	0.1
145°	0.0	0.0	0.0	0.1	0.1
147.5°	0.0	0.0	0.0	0.1	0.1
150°	0.0	0.0	0.0	0.1	0.1
152.5°	0.0	0.0	0.0	0.1	0.1
155°	0.0	0.0	0.0	0.1	0.1
157.5°	0.0	0.0	0.0	0.1	0.1
160°	0.0	0.0	0.0	0.1	0.1
162.5°	0.0	0.0	0.0	0.1	0.1
165°	0.0	0.0	0.0	0.1	0.1
167.5°	0.0	0.0	0.0	0.1	0.0
170°	0.0	0.0	0.0	0.0	0.1
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	0.1	0.1
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)