

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: P295442

Luminaire Tested: **HLB3S05930EMW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P295442
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: HLB3S05930EMW
Description: 3 IN SQUARE HALO BLADE - 3000K
Light Source: -
Ballast/Driver: -

Summary

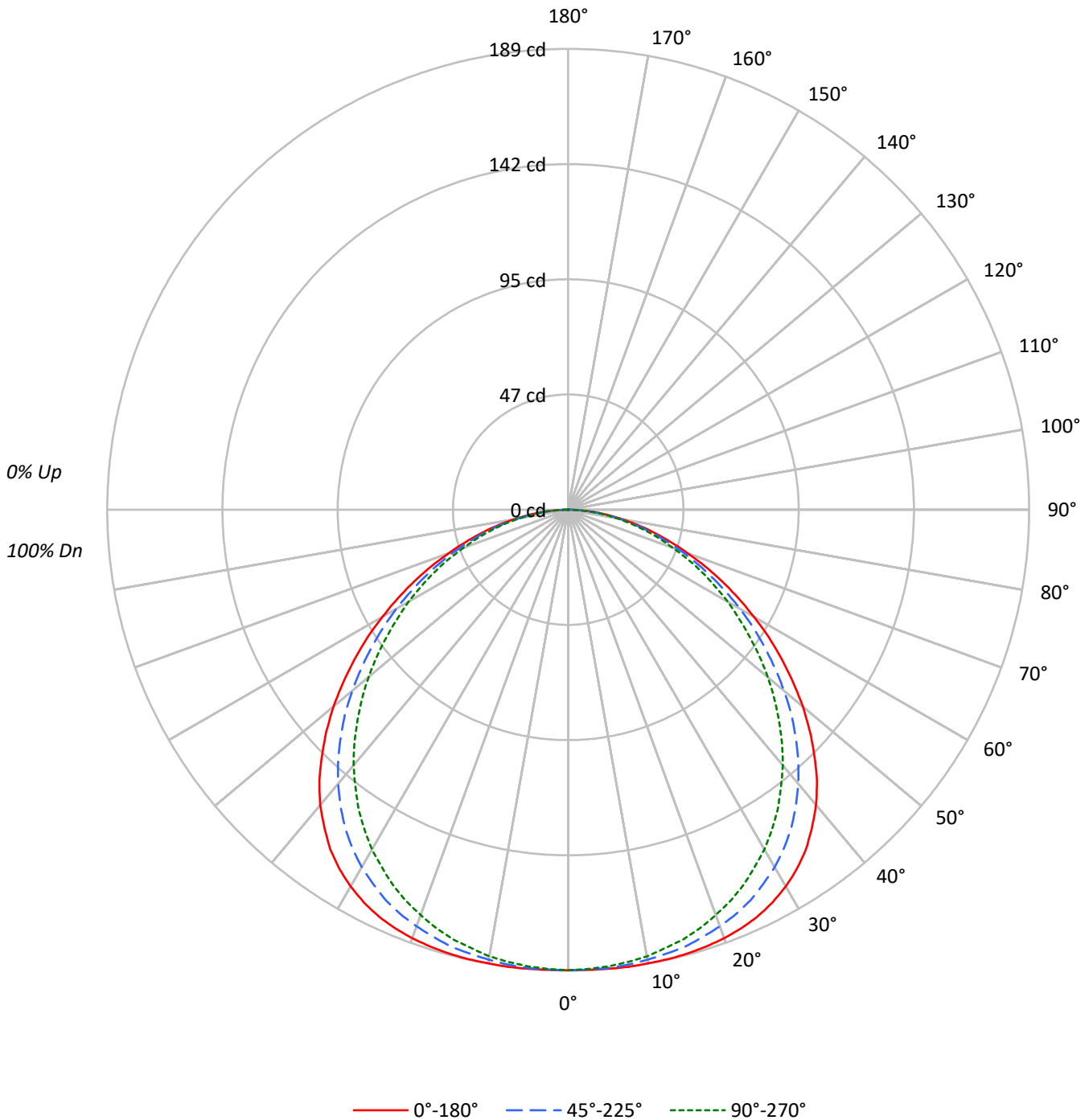
Lumens per Lamp: N/A
Luminaire Lumens: 553.0 lumens
Efficiency: N/A
Efficacy: 61.4 lumens/watt
Spacing Criteria (0/90/45): 1.39 / 1.26 / 1.4
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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°	41422	41422	41422
5°	41602	41536	41382
10°	42061	41727	41415
15°	42793	42111	41408
20°	43637	42424	41280
25°	44519	42777	41107
30°	45172	42867	40740
35°	45508	42670	40100
40°	45256	41993	39188
45°	44284	40903	37864
50°	42813	39402	36434
55°	40830	37581	34713
60°	38550	35699	33155
65°	36165	33519	31339
70°	33403	31351	29172
75°	31094	29314	27450
80°	28413	26771	25508
85°	25914	23902	22895



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.0	3.2
10°-20°	52.4	9.5
20°-30°	81.4	14.7
30°-40°	99.5	18.0
40°-50°	101.8	18.4
50°-60°	88.1	15.9
60°-70°	64.2	11.6
70°-80°	36.6	6.6
80°-90°	10.9	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°	151.7	27.4
0°-40°	251.2	45.4
0°-60°	441.1	79.8
0°-90°	552.8	100.0
90°-120°	0.2	0.0
90°-150°	0.2	0.0
90°-180°	0.0	0.0
0°-180°	553.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	189	189	189	189	189	
5°	189	189	189	188	188	18
15°	188	187	186	183	182	53
25°	184	182	177	171	170	85
35°	170	167	159	152	150	106
45°	143	139	132	124	122	110
55°	107	104	98	93	91	96
65°	70	68	65	61	60	69
75°	37	36	35	33	32	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°	188.9	188.9	188.9	188.9	188.9
2.5°	188.9	188.8	188.8	188.5	188.5
5°	189.0	188.8	188.7	188.1	188.0
7.5°	189.1	188.7	188.2	187.4	187.1
10°	188.9	188.4	187.4	186.2	186.0
12.5°	188.8	187.9	186.5	184.6	184.1
15°	188.5	187.4	185.5	183.0	182.4
17.5°	187.9	186.4	183.7	180.5	179.9
20°	187.0	185.2	181.8	178.0	176.9
22.5°	185.7	183.6	179.6	175.0	173.7
25°	184.0	181.6	176.8	171.3	169.9
27.5°	181.5	178.9	173.1	167.3	165.4
30°	178.4	175.4	169.3	162.7	160.9
32.5°	174.6	171.5	164.6	157.5	155.5
35°	170.0	166.7	159.4	151.9	149.8
37.5°	164.2	160.8	153.3	145.6	143.3
40°	158.1	154.5	146.7	138.9	136.9
42.5°	151.0	147.3	139.6	131.9	129.7
45°	142.8	139.3	131.9	124.5	122.1
47.5°	134.4	131.1	124.1	116.9	114.6
50°	125.5	122.3	115.5	109.0	106.8
52.5°	116.2	113.3	106.9	100.7	98.9
55°	106.8	103.9	98.3	92.9	90.8
57.5°	97.7	94.9	89.8	84.7	82.9
60°	87.9	85.7	81.4	77.0	75.6
62.5°	78.7	76.9	72.8	69.0	67.8
65°	69.7	68.1	64.6	61.3	60.4
67.5°	60.7	59.6	56.7	53.6	53.0
70°	52.1	51.4	48.9	46.6	45.5
72.5°	44.1	43.4	41.4	39.4	39.0
75°	36.7	35.9	34.6	32.7	32.4
77.5°	29.3	28.9	27.6	26.5	26.1
80°	22.5	22.2	21.2	20.5	20.2
82.5°	16.1	15.8	15.3	14.8	14.5
85°	10.3	10.0	9.5	9.1	9.1
87.5°	4.7	4.6	4.3	4.1	4.2
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)