

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: 267P142

Luminaire Tested: **H278ICAT-430W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: 267P142
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H278ICAT-430W
Description: HALO RECESSED WITH WHITE TRIM AND WHITE EYELID BAFFLE IN H27 HOUSING, WITH WALLWASH INSERT
Light Source: ONE COMPACT FLUORESCENT ECO TWIST LAMP
CF28T/827 28 WATTS
Ballast/Driver: -

Summary

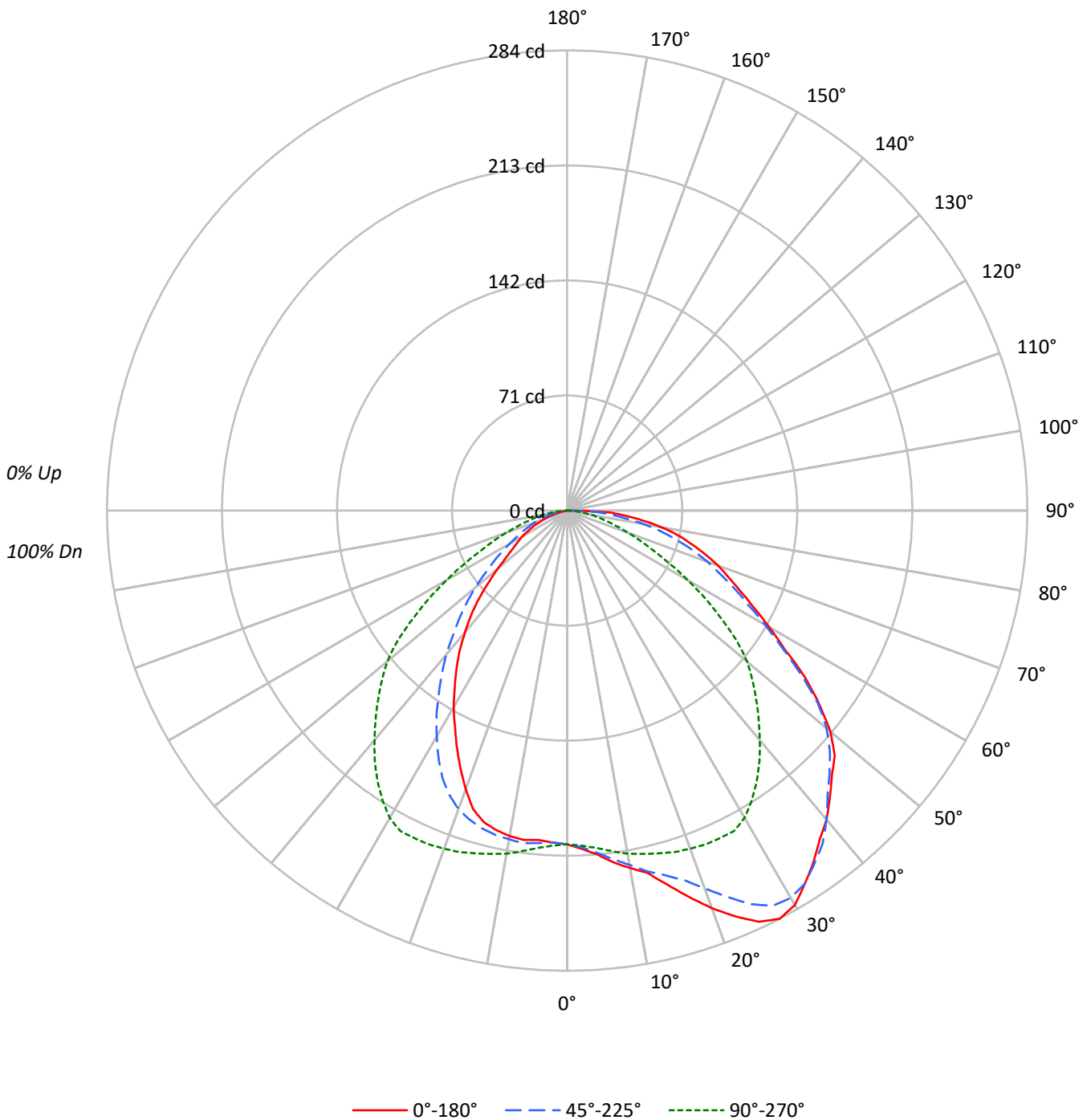
Lumens per Lamp: 1675 (1 lamp)
Luminaire Lumens: 660.9 lumens
Efficiency: 39.5%
Efficacy: 22.8 lumens/watt
Spacing Criteria (0/90/45): 1.42 / 1.48 / 1.5
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 29
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									
RC	80									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	47	47	47	47	46	46	46	46	44	44	44	42	42	42	40	40	40	40	40	40	40	40	40	39													
1	43	41	39	38	42	40	39	37	39	37	36	37	36	35	36	35	34	36	35	34	36	35	34	33													
2	39	36	33	31	38	35	33	31	34	32	30	33	31	29	31	30	29	31	30	29	31	30	29	28													
3	36	32	28	26	35	31	28	26	30	27	25	29	27	25	28	26	24	28	26	24	28	26	24	24													
4	33	28	25	22	32	28	24	22	27	24	22	26	23	21	25	23	21	25	23	21	25	23	21	20													
5	30	25	22	19	29	25	21	19	24	21	19	23	21	19	22	20	18	22	20	18	22	20	18	17													
6	28	23	19	17	27	22	19	17	22	19	16	21	18	16	20	18	16	20	18	16	20	18	16	15													
7	26	21	17	15	25	20	17	15	20	17	15	19	16	14	18	16	14	18	16	14	18	16	14	14													
8	24	19	15	13	23	18	15	13	18	15	13	17	15	13	17	15	13	17	15	13	17	15	13	12													
9	22	17	14	12	22	17	14	12	16	14	12	16	13	12	16	13	12	16	13	12	16	13	12	11													
10	21	16	13	11	21	16	13	11	15	12	11	15	12	10	14	12	10	14	12	10	14	12	10	10													

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	45172	45172	45172
5°	46885	46005	44904
10°	49877	47873	45423
15°	54257	49717	45176
20°	60905	51805	42704
25°	67746	53955	38954
30°	71150	55452	35448
35°	70938	54609	31855
40°	71276	52956	28053
45°	71635	51168	23878
50°	72322	49465	19104
55°	68432	44347	15674
60°	63153	37716	14034
65°	61226	30613	11934
70°	63472	25645	8976
75°	66932	21181	5083
80°	74504	18942	1263
85°	90575	15096	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	20.1	3.0	1.2
10°-20°	62.0	9.4	3.7
20°-30°	102.5	15.5	6.1
30°-40°	125.1	18.9	7.5
40°-50°	124.5	18.8	7.4
50°-60°	102.7	15.5	6.1
60°-70°	68.8	10.4	4.1
70°-80°	40.8	6.2	2.4
80°-90°	14.4	2.2	0.9
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	184.6	27.9	11.0
0°-40°	309.7	46.9	18.5
0°-60°	536.9	81.2	32.1
0°-90°	660.9	100.0	39.5
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	660.9	100.0	39.5

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	206	206	206	206	206	
5°	213	212	209	206	204	21
15°	239	233	219	203	199	69
25°	280	268	223	182	161	128
35°	265	266	204	138	119	166
45°	231	229	165	94	77	179
55°	179	176	116	56	41	159
65°	118	114	59	30	23	118
75°	79	70	25	13	6	84
85°	36	26	6	2	0	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	206	206	206	206	206	206	206	206	206
2.5°	209	209	208	208	207	206	205	205	205
5°	213	213	212	210	209	207	206	205	204
7.5°	219	218	217	215	212	209	207	205	205
10°	224	223	222	219	215	210	206	204	204
12.5°	229	228	228	224	217	210	205	202	202
15°	239	237	233	228	219	210	203	200	199
17.5°	250	247	239	233	221	209	200	196	193
20°	261	258	248	236	222	207	196	188	183
22.5°	271	268	258	241	223	204	190	177	172
25°	280	278	268	247	223	200	182	166	161
27.5°	284	283	275	249	223	195	172	155	150
30°	281	282	276	247	219	190	161	144	140
32.5°	273	276	273	242	212	184	150	134	129
35°	265	268	266	235	204	176	138	123	119
37.5°	256	258	259	229	195	167	127	113	109
40°	249	248	249	221	185	156	116	102	98
42.5°	240	239	238	212	175	143	104	92	88
45°	231	231	229	204	165	131	94	81	77
47.5°	224	224	220	197	155	118	84	71	66
50°	212	213	209	188	145	105	74	61	56
52.5°	196	199	195	175	132	92	64	52	47
55°	179	180	176	156	116	80	56	44	41
57.5°	159	162	157	138	101	69	48	38	36
60°	144	146	141	120	86	59	41	34	32
62.5°	130	131	126	104	72	50	35	29	27
65°	118	119	114	90	59	42	30	25	23
67.5°	108	108	102	79	49	35	25	20	18
70°	99	98	92	69	40	29	21	16	14
72.5°	89	88	81	60	32	24	17	12	10
75°	79	78	70	51	25	19	13	8	6
77.5°	70	67	59	42	20	15	10	5	3
80°	59	56	48	33	15	11	7	3	1
82.5°	47	45	36	23	10	8	4	1	0
85°	36	34	26	14	6	5	2	1	0
87.5°	26	23	17	7	2	2	1	0	0
90°	0	0	0	0	0	0	0	0	0

(END OF REPORT)