

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: 267P145

Luminaire Tested: **H278ICAT- 172PS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: 267P145  
Test Lab: METALUX RESEARCH LABS  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H278ICAT- 172PS  
Description: HALO RECESSED WITH WHITE TRIM AND FROSTED GLASS DOME IN H27 HOUSING  
Light Source: ONE COMPACT FLUORESCENT ECO TWIST LAMP  
CF28T/827 28 WATTS  
Ballast/Driver: -

**Summary**

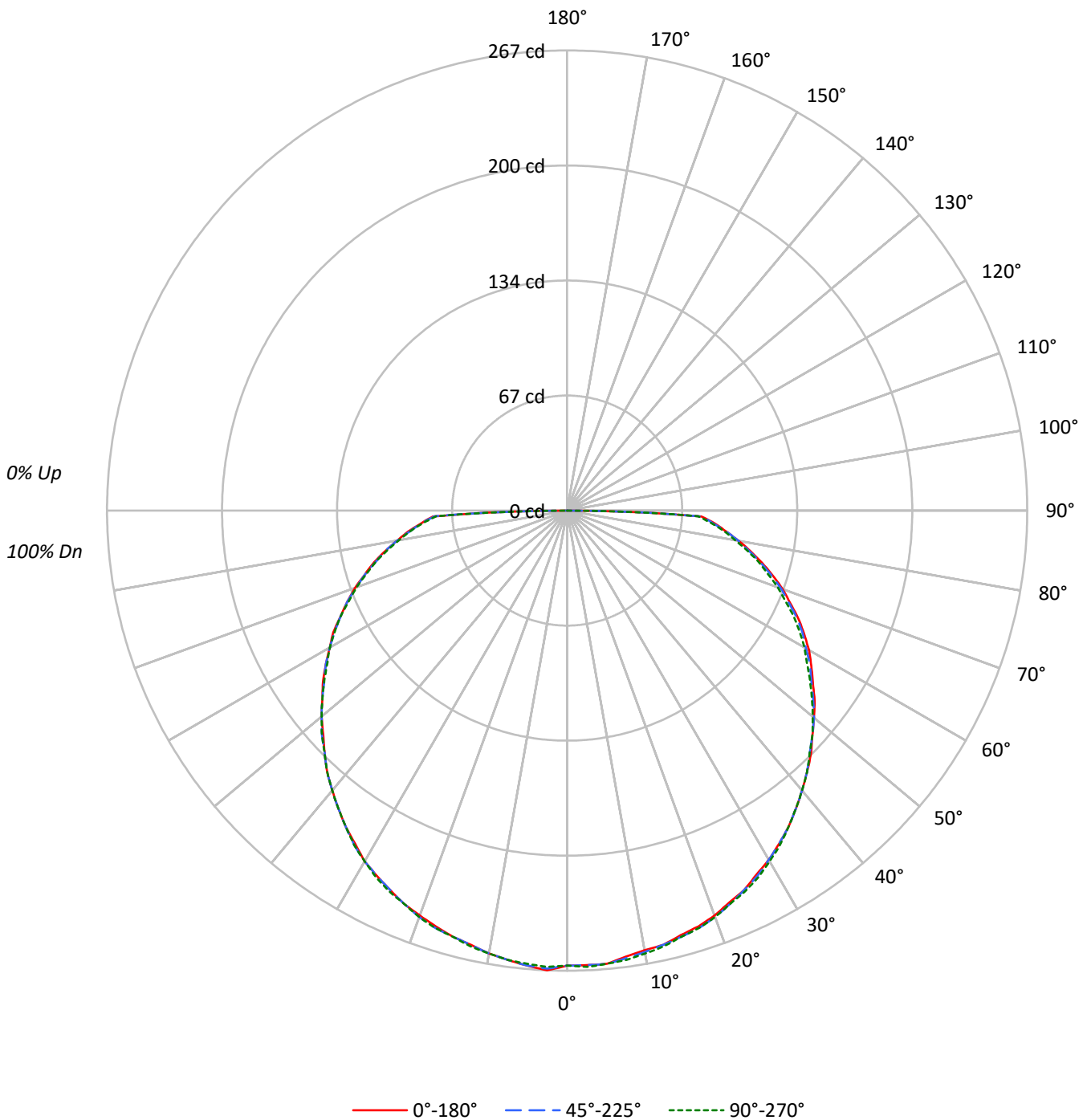
Lumens per Lamp: 1675 (1 lamp)  
Luminaire Lumens: 1008.3 lumens  
Efficiency: 60.2%  
Efficacy: 36.0 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 1.32 / 1.46  
Luminous Opening: Circular (Dia: 0.44' x H: 0')  
CIE Type: Direct

Input Watts (W): 28  
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	72	72	72	72	70	70	70	70	67	67	67	64	64	64	61	61	61	60
1	63	59	56	53	61	58	55	52	55	53	50	53	51	49	51	49	47	46
2	57	51	46	41	55	49	45	41	47	43	40	45	42	39	43	40	38	36
3	51	44	38	33	50	43	37	33	41	36	32	39	35	32	37	34	31	30
4	47	38	32	28	45	37	32	28	36	31	27	34	30	27	33	29	26	25
5	43	34	28	24	41	33	28	23	32	27	23	31	26	23	30	26	23	21
6	39	30	25	20	38	30	24	20	29	24	20	28	23	20	27	23	20	18
7	36	27	22	18	35	27	22	18	26	21	18	25	21	17	24	20	17	16
8	34	25	20	16	33	25	19	16	24	19	16	23	19	15	22	18	15	14
9	32	23	18	14	31	23	17	14	22	17	14	21	17	14	20	17	14	13
10	30	21	16	13	29	21	16	13	20	16	13	20	15	13	19	15	12	11

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	18903	18903	18903
5°	18975	18975	19047
10°	18831	18976	18976
15°	18903	18977	18977
20°	19049	19125	19049
25°	19198	19277	19198
30°	19347	19429	19429
35°	19580	19580	19580
40°	19816	19816	19816
45°	20252	20151	20151
50°	20830	20719	20719
55°	21721	21471	21596
60°	23199	22769	22769
65°	25075	24567	24567
70°	27844	27215	27425
75°	32368	31815	32091
80°	41646	40822	41234
85°	70652	69009	69831



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	25.1	2.5	1.5
10°-20°	72.4	7.2	4.3
20°-30°	112.3	11.1	6.7
30°-40°	140.2	13.9	8.4
40°-50°	154.0	15.3	9.2
50°-60°	154.9	15.4	9.2
60°-70°	144.2	14.3	8.6
70°-80°	122.2	12.1	7.3
80°-90°	82.9	8.2	5.0
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°	209.8	20.8	12.5
0°-40°	350.0	34.7	20.9
0°-60°	658.9	65.4	39.3
0°-90°	1008.3	100.0	60.2
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°	1008.3	100.0	60.2

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	264	264	264	264	264	
5°	264	264	264	265	265	25
15°	255	256	256	256	256	72
25°	243	243	244	243	243	112
35°	224	224	224	224	224	140
45°	200	199	199	199	199	154
55°	174	173	172	172	173	156
65°	148	147	145	145	145	146
75°	117	116	115	115	116	124
85°	86	85	84	85	85	84
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°	264	264	264	264	264	264	264	264	264
2.5°	264	264	264	265	265	266	266	266	267
5°	264	263	264	264	264	265	265	265	265
7.5°	261	261	262	262	263	263	263	263	263
10°	259	260	260	261	261	261	261	261	261
12.5°	258	258	258	258	259	258	258	258	258
15°	255	256	256	256	256	256	256	256	256
17.5°	253	253	254	254	254	254	254	253	253
20°	250	250	251	251	251	251	251	251	250
22.5°	246	247	247	247	247	247	247	247	247
25°	243	243	243	244	244	244	243	243	243
27.5°	238	239	239	239	240	240	239	239	239
30°	234	234	234	235	235	235	235	235	235
32.5°	229	229	229	229	230	230	230	229	229
35°	224	224	224	224	224	224	224	224	224
37.5°	218	218	218	218	218	218	218	218	218
40°	212	212	212	212	212	212	212	212	212
42.5°	206	206	206	205	206	206	206	205	206
45°	200	200	199	199	199	199	199	199	199
47.5°	193	193	193	193	193	193	193	193	192
50°	187	187	187	186	186	186	186	186	186
52.5°	181	181	180	179	179	179	179	179	179
55°	174	174	173	173	172	172	172	173	173
57.5°	168	168	167	166	165	165	166	166	166
60°	162	161	160	159	159	159	159	159	159
62.5°	155	154	154	152	152	152	152	152	153
65°	148	147	147	145	145	145	145	145	145
67.5°	140	140	139	138	137	137	138	138	138
70°	133	132	132	131	130	130	130	131	131
72.5°	125	125	124	123	122	122	123	123	123
75°	117	117	116	115	115	115	115	116	116
77.5°	109	109	108	108	107	107	108	108	108
80°	101	101	101	100	99	99	100	100	100
82.5°	93	93	93	92	92	91	92	93	93
85°	86	86	85	84	84	84	85	85	85
87.5°	78	78	78	76	76	76	77	78	78
90°	0	0	0	0	0	0	0	0	0

(END OF REPORT)