

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: 766671

Luminaire Tested: **INEC-75xxxx**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 766671
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: INEC-75xxxx
Description: FAIL-SAFE CLEAR 9 x 9
Light Source: #042 - 75W A-19 INSIDE FROSTED 1190 LUMENS
Ballast/Driver: -

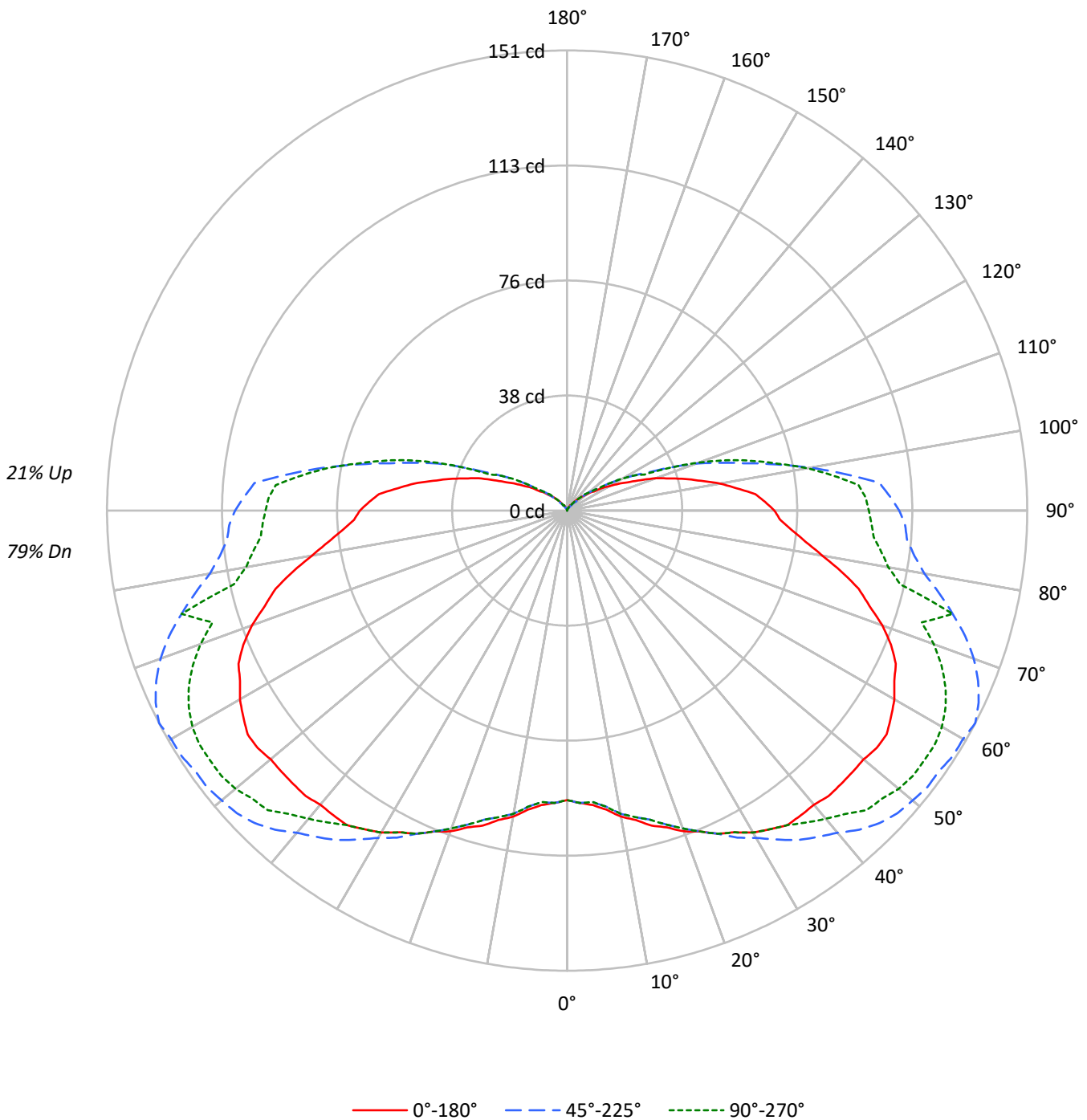
Summary

Lumens per Lamp: 1190 (1 lamp)
Luminaire Lumens: 998.6 lumens
Efficiency: 83.9%
Efficacy: 13.3 lumens/watt
Spacing Criteria (0/90/45): 1.92 / 2.05 / 2.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Semi-Direct

Input Watts (W): 75
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	96	96	96	96	92	92	92	92	84	84	84	76	76	76	70	70	70	67
1	83	77	71	67	78	73	68	64	66	62	59	60	56	54	54	51	49	46
2	73	64	56	50	69	61	54	48	55	49	44	49	45	41	44	40	37	34
3	65	54	46	39	62	52	44	38	47	40	35	42	36	32	37	33	29	26
4	59	47	38	32	56	45	37	31	40	34	28	36	30	26	32	28	24	21
5	54	41	33	26	51	39	31	25	35	29	23	32	26	21	28	24	20	17
6	49	37	28	22	46	35	27	21	31	25	20	28	23	18	25	20	17	14
7	45	33	25	19	43	31	24	18	28	22	17	25	20	16	23	18	14	12
8	42	30	22	16	40	28	21	16	26	19	15	23	18	14	21	16	12	10
9	39	27	19	14	37	26	19	14	23	17	13	21	16	12	19	14	11	9
10	36	25	17	13	34	23	17	12	21	16	11	19	14	11	18	13	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	9.3	0.9	0.8	0°	95	95	95	95	95	
10°-20°	30.0	3.0	2.5	5°	97	96	96	96	97	9
20°-30°	54.2	5.4	4.6	15°	107	105	105	105	107	30
30°-40°	80.7	8.1	6.8	25°	117	117	117	117	117	54
40°-50°	106.7	10.7	9.0	35°	126	132	126	132	126	79
50°-60°	127.6	12.8	10.7	45°	127	145	139	145	127	98
60°-70°	138.6	13.9	11.6	55°	128	149	143	149	128	114
70°-80°	130.7	13.1	11.0	65°	119	149	137	149	119	117
80°-90°	113.7	11.4	9.6	75°	99	131	131	131	99	104
90°-100°	98.5	9.9	8.3	85°	74	112	101	112	74	63
100°-110°	61.1	6.1	5.1	90°	68	109	99	109	68	37
110°-120°	29.1	2.9	2.4	95°	62	103	96	103	62	48
120°-130°	11.9	1.2	1.0	105°	40	60	63	60	40	43
130°-140°	4.5	0.4	0.4	115°	22	30	28	30	22	23
140°-150°	1.4	0.1	0.1	125°	11	13	13	13	11	11
150°-160°	0.5	0.0	0.0	135°	6	4	6	4	6	5
160°-170°	0.1	0.0	0.0	145°	2	2	2	2	2	2
170°-180°	0.0	0.0	0.0	155°	1	1	1	1	1	1
0°-30°	93.6	9.4	7.9	165°	0	0	0	0	0	0
0°-40°	174.3	17.5	14.6	175°	0	0	0	0	0	0
0°-60°	408.6	40.9	34.3	180°	0	0	0	0	0	0
0°-90°	791.5	79.3	66.5							
90°-120°	188.7	18.9	15.9							
90°-150°	206.5	20.7	17.4							
90°-180°	207.0	20.7	17.4							
0°-180°	998.6	100.0	83.9							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	95	95	95	95	95	95	95	95	95
2.5°	96	96	96	96	96	96	96	96	96
5°	97	96	96	96	96	96	96	96	97
7.5°	99	98	98	98	98	98	98	98	99
10°	102	101	101	100	101	100	101	101	102
12.5°	104	103	103	102	103	102	103	103	104
15°	107	105	105	104	105	104	105	105	107
17.5°	109	108	108	107	108	107	108	108	109
20°	112	111	111	110	111	110	111	111	112
22.5°	114	114	114	113	114	113	114	114	114
25°	117	118	117	116	117	116	117	118	117
27.5°	119	120	121	119	119	119	121	120	119
30°	122	123	124	122	122	122	124	123	122
32.5°	124	126	128	124	124	124	128	126	124
35°	126	129	132	127	126	127	132	129	126
37.5°	126	130	135	131	129	131	135	130	126
40°	126	131	138	135	132	135	138	131	126
42.5°	127	132	142	138	135	138	142	132	127
45°	127	133	145	142	139	142	145	133	127
47.5°	127	133	147	145	140	145	147	133	127
50°	127	134	148	147	142	147	148	134	127
52.5°	128	136	149	147	143	147	149	136	128
55°	128	138	149	147	143	147	149	138	128
57.5°	126	140	150	147	143	147	150	140	126
60°	124	142	150	146	142	146	150	142	124
62.5°	121	143	151	144	140	144	151	143	121
65°	119	142	149	143	137	143	149	142	119
67.5°	115	140	146	141	133	141	146	140	115
70°	110	136	142	138	128	138	142	136	110
72.5°	104	131	137	135	122	135	137	131	104
75°	99	125	131	130	131	130	131	125	99
77.5°	92	118	125	125	112	125	125	118	92
80°	85	111	119	120	107	120	119	111	85
82.5°	79	105	115	116	104	116	115	105	79
85°	74	100	112	113	101	113	112	100	74
87.5°	70	97	111	112	100	112	111	97	70
90°	68	95	109	111	99	111	109	95	68
92.5°	65	91	106	107	98	107	106	91	65
95°	62	88	103	103	96	103	103	88	62
97.5°	56	79	92	93	88	93	92	79	56
100°	51	71	81	83	80	83	81	71	51
102.5°	45	62	70	72	71	72	70	62	45
105°	40	54	60	62	63	62	60	54	40
107.5°	35	47	52	54	55	54	52	47	35
110°	31	40	45	45	46	45	45	40	31



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	26	33	37	37	37	37	37	33	26
115°	22	26	30	29	28	29	30	26	22
117.5°	19	23	25	25	25	25	25	23	19
120°	16	19	21	20	21	20	21	19	16
122.5°	14	15	17	16	17	16	17	15	14
125°	11	11	13	12	13	12	13	11	11
127.5°	10	10	11	11	11	11	11	10	10
130°	8	8	9	9	9	9	9	8	8
132.5°	7	7	7	7	8	7	7	7	7
135°	6	5	4	5	6	5	4	5	6
137.5°	5	4	4	5	5	5	4	4	5
140°	4	4	3	4	4	4	3	4	4
142.5°	3	3	2	3	3	3	2	3	3
145°	2	2	2	2	2	2	2	2	2
147.5°	2	2	1	2	2	2	1	2	2
150°	2	1	1	1	2	1	1	1	2
152.5°	1	1	1	1	1	1	1	1	1
155°	1	1	1	1	1	1	1	1	1
157.5°	1	1	1	1	1	1	1	1	1
160°	1	1	1	1	1	1	1	1	1
162.5°	1	0	0	0	0	0	0	0	1
165°	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)