

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: P34506

Luminaire Tested: **SGI-G-24-4-LD4-2-HI-CA125-FA**

Test Date: 10/05/15

**Test Information**

Test Method: LM-79-08  
Report Number: P34506  
Test Lab: INNOVATION CENTER-P3  
Test Date: 10/05/15  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: SGI-G-24-4-LD4-2-HI-CA125-FA  
Description: FAILSAFE SGI LED 2X4 FIXTURE.  
Light Source: (168) NICHIA ELM 3500K LED  
2UT217042A8404A  
Ballast/Driver: (2) OSRAM ELECTRONIC DRIVER  
OT50W/PRG1400C/UNV/DIM/L

**Summary**

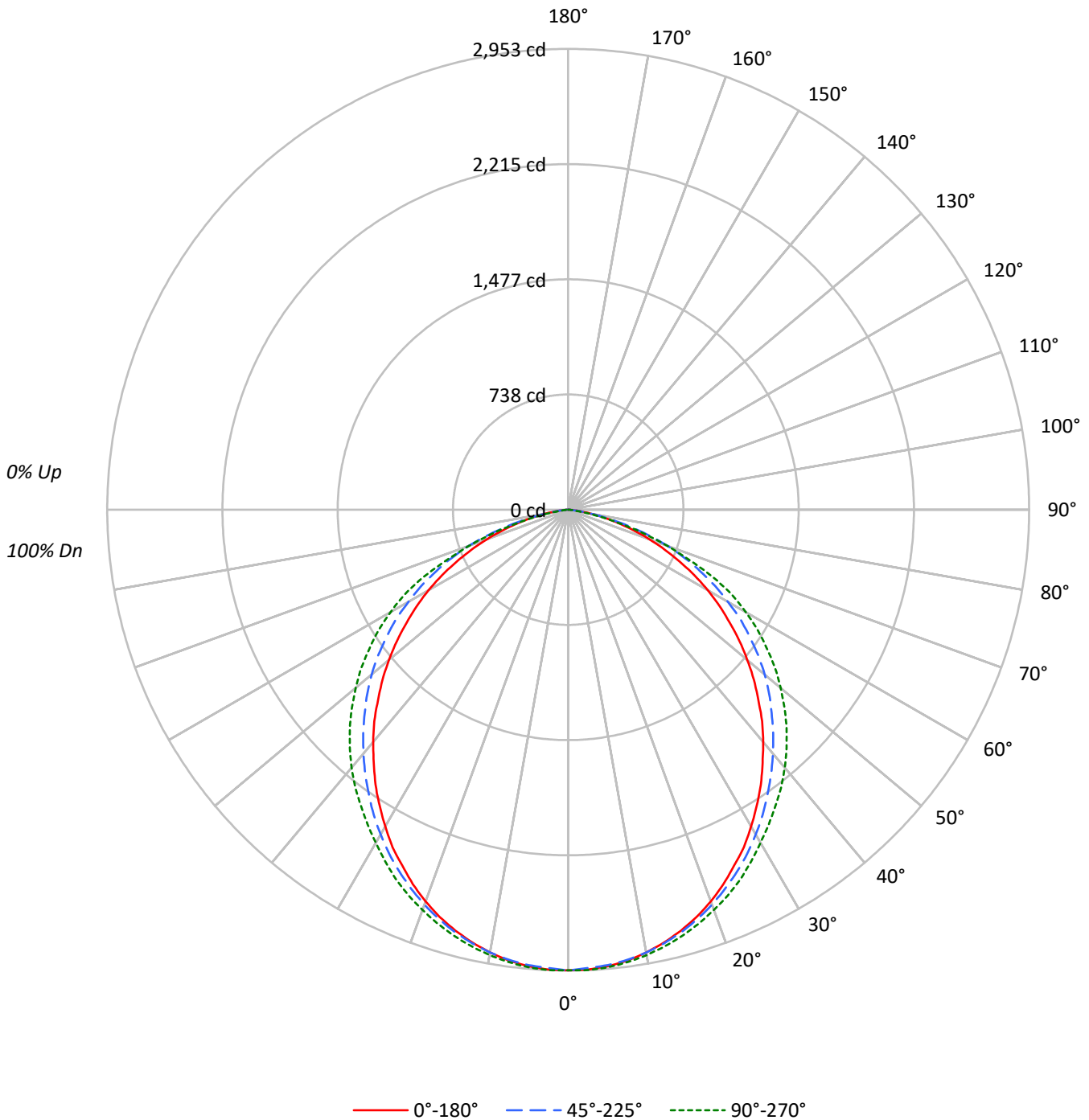
Lumens per Lamp: N/A  
Luminaire Lumens: 7689.2 lumens  
Efficiency: N/A  
Efficacy: 85.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.34  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 90.2  
Input Voltage (V): 120.0  
Input Current (Ain): 0.753  
Voltage Rise (V): NR  
Power Factor: 0.9993  
Total Harmonic Distortion (THDi): 7.51%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: 5 HR  
Ambient Temperature (°C): 25.0  
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	110	105	101	98	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77		84	79	76		81	77	74	72
3	91	81	73	67	89	80	72	66	77	70	65		74	69	64		71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56		66	60	55		64	59	54	52
5	77	65	56	49	75	63	55	49	61	54	48		59	53	48		57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42		54	47	42		52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38		49	42	37		48	42	37	35
8	62	48	40	34	60	47	39	34	46	39	34		45	38	33		44	38	33	31
9	57	44	36	31	56	44	36	31	43	35	30		41	35	30		40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28		38	32	28		38	32	27	26

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

	0°	45°	90°
0°	4521	4521	4521
5°	4514	4503	4525
10°	4481	4481	4507
15°	4427	4443	4483
20°	4354	4391	4448
25°	4252	4325	4414
30°	4144	4250	4358
35°	4024	4164	4329
40°	3885	4079	4315
45°	3728	3992	4284
50°	3569	3917	4232
55°	3373	3789	4152
60°	3170	3621	4028
65°	2856	3381	3718
70°	2481	3027	3023
75°	1965	2308	2048
80°	1314	1332	935
85°	650	439	387



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	278.7	3.6
10°-20°	791.6	10.3
20°-30°	1180.9	15.4
30°-40°	1396.7	18.2
40°-50°	1426.5	18.6
50°-60°	1262.5	16.4
60°-70°	906.5	11.8
70°-80°	396.7	5.2
80°-90°	49.0	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	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°	2251.2	29.3
0°-40°	3648.0	47.4
0°-60°	6337.0	82.4
0°-90°	7689.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7689.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2952	2952	2952	2952	2952	
5°	2936	2937	2929	2941	2943	279
15°	2792	2797	2802	2822	2827	787
25°	2516	2532	2559	2599	2612	1160
35°	2152	2177	2227	2291	2315	1344
45°	1721	1760	1843	1946	1978	1330
55°	1263	1304	1419	1516	1555	1132
65°	788	836	933	1016	1026	782
75°	332	363	390	370	346	357
85°	37	36	25	24	22	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2952	2952	2952	2952	2952
2.5°	2949	2950	2940	2951	2953
5°	2936	2937	2929	2941	2943
7.5°	2914	2915	2909	2922	2924
10°	2881	2883	2881	2897	2898
12.5°	2840	2843	2845	2863	2865
15°	2792	2797	2802	2822	2827
17.5°	2736	2742	2751	2776	2781
20°	2671	2677	2694	2723	2729
22.5°	2598	2609	2628	2665	2675
25°	2516	2532	2559	2599	2612
27.5°	2438	2451	2485	2529	2539
30°	2343	2368	2403	2452	2464
32.5°	2249	2273	2319	2371	2391
35°	2152	2177	2227	2291	2315
37.5°	2045	2077	2135	2211	2242
40°	1943	1973	2040	2127	2158
42.5°	1839	1865	1943	2039	2070
45°	1721	1760	1843	1946	1978
47.5°	1614	1649	1746	1845	1879
50°	1498	1535	1644	1742	1776
52.5°	1384	1421	1534	1631	1673
55°	1263	1304	1419	1516	1555
57.5°	1150	1191	1308	1397	1442
60°	1035	1071	1182	1277	1315
62.5°	912	955	1062	1151	1185
65°	788	836	933	1016	1026
67.5°	671	714	808	850	837
70°	554	595	676	674	675
72.5°	439	476	532	532	509
75°	332	363	390	370	346
77.5°	232	264	267	232	217
80°	149	171	151	124	106
82.5°	80	93	69	50	41
85°	37	36	25	24	22
87.5°	12	12	12	12	11
90°	0	0	0	0	0

(END OF REPORT)