

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: P34504

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

Test Date: 10/05/15

**Test Information**

Test Method: LM-79-08  
Report Number: P34504  
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-24-2-LD4-2-HI-CA125-FA  
Description: FAILSAFE SGI LED 2X2 FIXTURE  
Light Source: (84) NICHIA ELM 3500K LED  
2UT217042A8404A  
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER  
OT50W/PRG1400C/UNV/DIM/L

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3681.1 lumens  
Efficiency: N/A  
Efficacy: 81.8 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.25 / 1.33  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

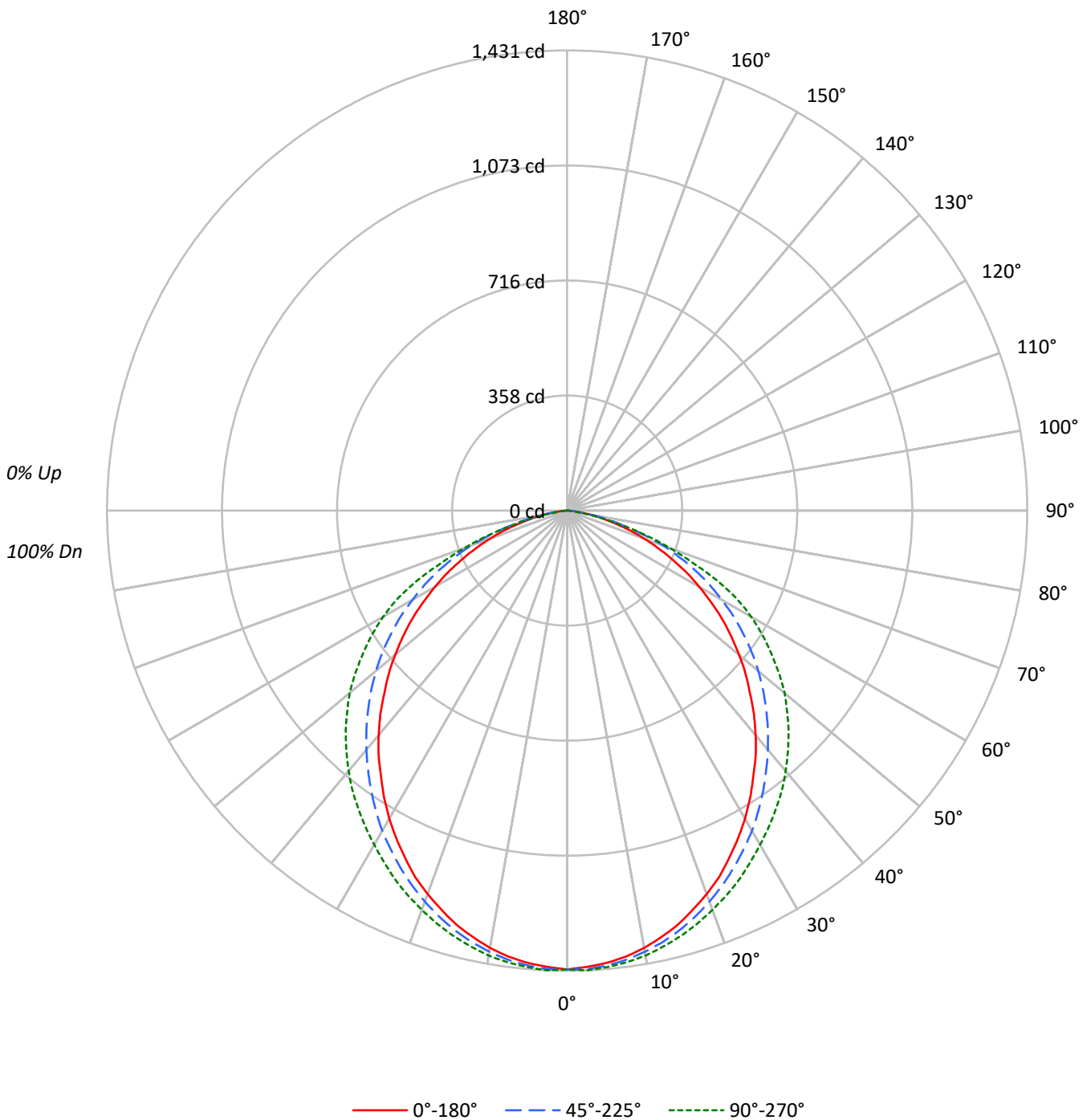
Input Watts (W): 45  
Input Voltage (V): 120.0  
Input Current (Ain): 0.377  
Voltage Rise (V): NR  
Power Factor: 0.9993  
Total Harmonic Distortion (THDi): 7.44%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: 5 HR  
Ambient Temperature (°C): 25.0  
Test Distance: 25 FT



TEST NUMBER: P34504

CATALOG NUMBER: SGI-G-24-2-LD4-2-HI-CA125-FA

### Luminous Intensity Polar Plot





TEST NUMBER: P34504

CATALOG NUMBER: SGI-G-24-2-LD4-2-HI-CA125-FA

**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		58	52	47	45
6	71	58	49	43	69	57	49	43	55	48	43		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	48	40	34	46	39	34		45	38	34		44	38	33	31
9	58	44	36	31	56	44	36	31	43	35	30		41	35	30		40	35	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°	4570	4570	4570
5°	4539	4565	4581
10°	4491	4530	4569
15°	4420	4479	4539
20°	4325	4410	4502
25°	4212	4332	4473
30°	4090	4253	4437
35°	3945	4156	4426
40°	3813	4059	4419
45°	3641	3963	4411
50°	3478	3866	4399
55°	3289	3735	4327
60°	3042	3555	4234
65°	2751	3327	3895
70°	2388	2987	3184
75°	1906	2252	2252
80°	1309	1420	1088
85°	735	588	404



TEST NUMBER: P34504

CATALOG NUMBER: SGI-G-24-2-LD4-2-HI-CA125-FA

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.7	3.7
10°-20°	380.7	10.3
20°-30°	565.3	15.4
30°-40°	667.3	18.1
40°-50°	680.4	18.5
50°-60°	604.2	16.4
60°-70°	432.8	11.8
70°-80°	190.0	5.2
80°-90°	25.8	0.7
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°	1080.6	29.4
0°-40°	1747.9	47.5
0°-60°	3032.5	82.4
0°-90°	3681.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3681.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1427	1427	1427	1427	1427	
5°	1412	1415	1420	1424	1425	134
15°	1333	1337	1351	1364	1369	375
25°	1192	1202	1226	1253	1266	549
35°	1009	1025	1063	1107	1132	632
45°	804	821	875	941	974	622
55°	589	617	669	739	775	525
65°	363	392	439	497	514	360
75°	154	167	182	184	182	166
85°	20	21	16	13	11	28
90°	0	0	0	0	0	



TEST NUMBER: P34504

CATALOG NUMBER: SGI-G-24-2-LD4-2-HI-CA125-FA

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1427	1427	1427	1427	1427
2.5°	1420	1422	1427	1430	1431
5°	1412	1415	1420	1424	1425
7.5°	1399	1402	1409	1415	1417
10°	1381	1385	1393	1401	1405
12.5°	1358	1362	1374	1384	1388
15°	1333	1337	1351	1364	1369
17.5°	1301	1308	1324	1340	1347
20°	1269	1275	1294	1314	1321
22.5°	1234	1239	1261	1285	1295
25°	1192	1202	1226	1253	1266
27.5°	1150	1159	1188	1219	1233
30°	1106	1117	1150	1182	1200
32.5°	1059	1072	1107	1145	1167
35°	1009	1025	1063	1107	1132
37.5°	963	975	1017	1069	1097
40°	912	927	971	1028	1057
42.5°	860	875	924	986	1016
45°	804	821	875	941	974
47.5°	753	769	826	895	928
50°	698	717	776	845	883
52.5°	644	672	724	794	830
55°	589	617	669	739	775
57.5°	531	562	614	684	720
60°	475	504	555	624	661
62.5°	420	448	499	562	596
65°	363	392	439	497	514
67.5°	307	332	377	412	420
70°	255	273	319	330	340
72.5°	203	218	249	259	258
75°	154	167	182	184	182
77.5°	112	120	127	118	113
80°	71	78	77	65	59
82.5°	41	46	39	29	21
85°	20	21	16	13	11
87.5°	7	8	7	6	5
90°	0	0	0	0	0

(END OF REPORT)