

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: P309518

Luminaire Tested: **24FCZ2-50HE-UNV-L82765-HRP-CP125-W2A-U-2700K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P309518  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-20)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 24FCZ2-50HE-UNV-L82765-HRP-CP125-W2A-U-2700K  
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" POLYCARB SHEET  
Light Source: (336) 2700K TUNABLE CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: 

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
AS-5443-2	Good	REFLECTOR
AS-5443-3	Good	DRIVER
AS-5443-4	Good	UPPER MODULE
AS-5443-5	Good	LENS
AS-5443-6	Good	DRIVER 2
AS-5443-7	Good	TRIM RING

**Summary**

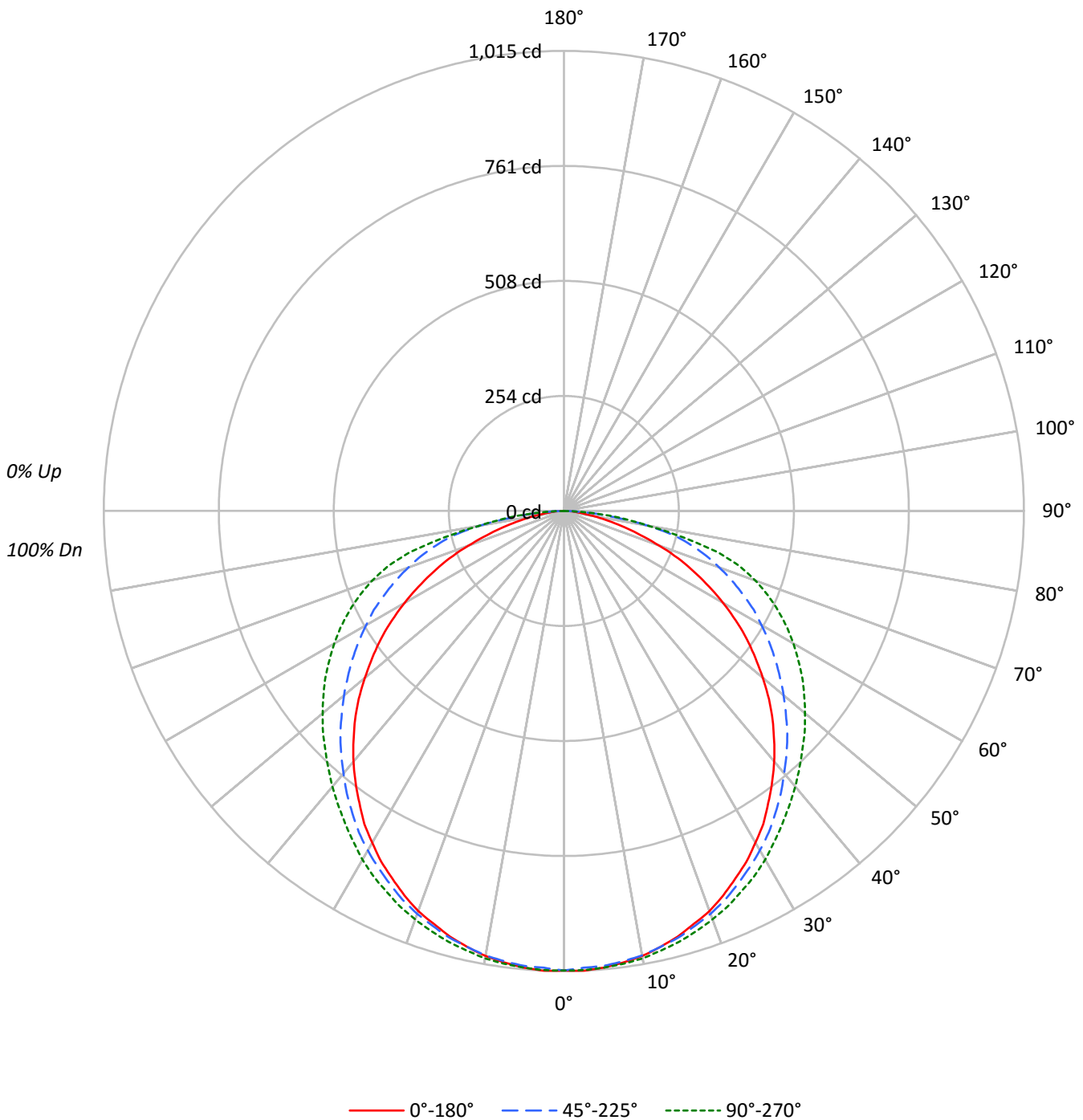
Lumens per Lamp: N/A  
Luminaire Lumens: 3125.0 lumens  
Efficiency: N/A  
Efficacy: 81.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	42	38	36
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	24	35	29	24	23

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

	0°	45°	90°
0°	1364	1364	1364
5°	1366	1361	1366
10°	1362	1360	1369
15°	1354	1358	1370
20°	1345	1354	1373
25°	1329	1348	1375
30°	1313	1344	1380
35°	1292	1337	1382
40°	1268	1328	1395
45°	1240	1327	1416
50°	1199	1325	1454
55°	1157	1335	1507
60°	1091	1355	1574
65°	1008	1387	1662
70°	880	1436	1770
75°	714	1510	1829
80°	527	1480	1480
85°	404	1090	1232



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.0	3.1
10°-20°	275.8	8.8
20°-30°	419.9	13.4
30°-40°	509.9	16.3
40°-50°	538.7	17.2
50°-60°	508.3	16.3
60°-70°	422.6	13.5
70°-80°	278.0	8.9
80°-90°	75.8	2.4
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°	791.8	25.3
0°-40°	1301.6	41.7
0°-60°	2348.6	75.2
0°-90°	3125.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3125.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1014	1014	1014	1014	1014	
5°	1011	1011	1007	1011	1011	96
15°	972	973	975	984	984	274
25°	895	900	908	924	926	413
35°	786	795	814	835	841	492
45°	652	665	697	731	744	502
55°	493	514	569	623	642	439
65°	317	353	436	500	522	313
75°	137	200	290	344	352	148
85°	26	58	71	78	80	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1013.9	1013.9	1013.9	1013.9	1013.9
2.5°	1015.2	1013.9	1008.7	1013.9	1013.9
5°	1011.3	1011.3	1007.4	1011.3	1011.3
7.5°	1004.8	1004.8	1002.1	1007.4	1007.4
10°	996.9	996.9	995.6	1002.1	1002.1
12.5°	985.1	986.4	985.1	993.0	993.0
15°	972.0	973.4	974.7	983.8	983.8
17.5°	955.0	957.7	960.3	970.7	972.0
20°	939.3	940.6	945.9	957.7	959.0
22.5°	918.4	922.3	928.9	940.6	944.6
25°	894.9	900.1	907.9	923.6	926.3
27.5°	872.6	876.5	887.0	904.0	909.2
30°	845.1	851.7	864.8	881.8	888.3
32.5°	819.0	825.5	841.2	859.5	864.8
35°	786.3	795.4	813.7	834.7	841.2
37.5°	754.9	764.0	786.3	809.8	817.7
40°	722.2	732.6	756.2	783.7	794.1
42.5°	686.8	701.2	727.4	757.5	769.3
45°	651.5	664.6	697.3	731.3	744.4
47.5°	613.6	629.3	664.6	705.2	720.9
50°	573.0	592.6	633.2	677.7	694.7
52.5°	532.5	554.7	600.5	650.2	668.5
55°	493.2	514.1	569.1	622.7	642.4
57.5°	450.0	476.2	536.4	594.0	613.6
60°	405.6	434.3	503.7	563.9	584.8
62.5°	361.1	393.8	472.3	532.5	554.7
65°	316.6	353.2	435.7	499.8	522.0
67.5°	273.4	314.0	401.6	465.7	488.0
70°	223.7	274.7	365.0	427.8	450.0
72.5°	177.9	236.8	329.7	388.6	408.2
75°	137.4	200.2	290.4	344.1	351.9
77.5°	100.7	163.5	249.9	268.2	269.5
80°	68.0	130.8	191.0	188.4	191.0
82.5°	44.5	98.1	120.4	134.8	136.1
85°	26.2	57.6	70.6	78.5	79.8
87.5°	13.1	19.6	24.9	26.2	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)