

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: P310193

Luminaire Tested: **24FCZ2-50HE-UNV-L82765-RDP-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: P310193
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
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-RDP-CP125-W2A-U-2700K
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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: 2771.0 lumens
Efficiency: N/A
Efficacy: 72.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

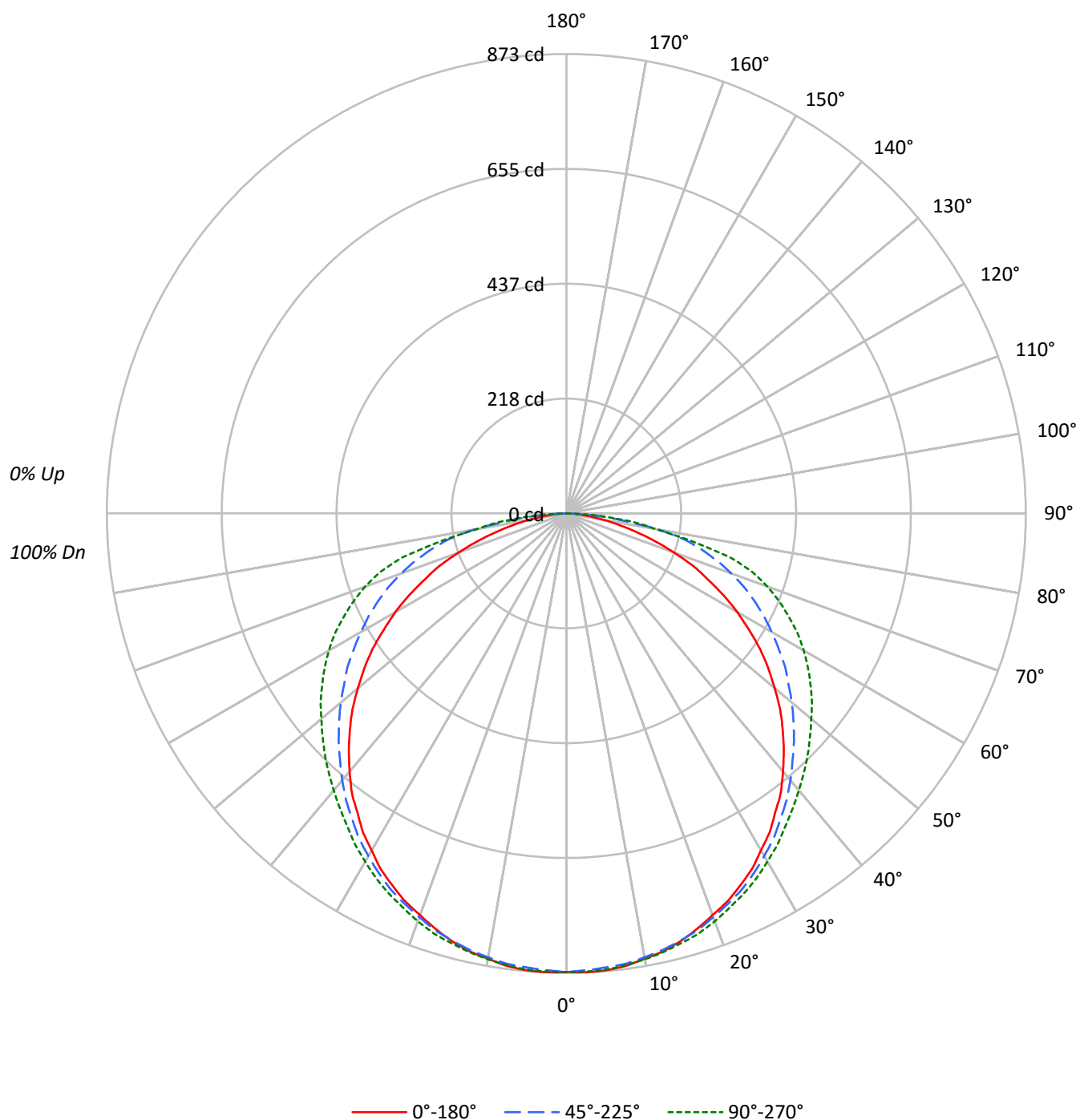
Input Watts (W): 38.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	108	103	98	94	105	100	96	92	96	93	89		92	89	87		82
2	97	89	81	75	95	87	80	74	83	77	72		80	75	71		67
3	88	77	68	62	86	76	68	61	72	66	60		70	64	59		56
4	81	68	59	52	78	67	58	51	64	57	51		62	55	50		47
5	74	60	51	44	72	59	51	44	57	49	43		55	48	43		40
6	68	54	45	38	66	53	45	38	51	44	38		50	43	37		35
7	63	49	40	34	61	48	40	34	47	39	33		45	38	33		31
8	59	45	36	30	57	44	36	30	43	35	30		41	34	29		27
9	55	41	33	27	53	40	32	27	39	32	27		38	31	26		24
10	51	38	30	24	50	37	29	24	36	29	24		35	29	24		22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1172	1172	1172
5°	1177	1170	1175
10°	1174	1170	1176
15°	1172	1170	1177
20°	1163	1169	1181
25°	1159	1171	1184
30°	1149	1168	1187
35°	1138	1165	1192
40°	1125	1164	1207
45°	1106	1164	1234
50°	1082	1171	1272
55°	1054	1190	1328
60°	1010	1213	1402
65°	945	1256	1488
70°	860	1314	1600
75°	729	1386	1672
80°	575	1395	1353
85°	425	1061	1189



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.7	3.0
10°-20°	237.9	8.6
20°-30°	363.8	13.1
30°-40°	444.7	16.0
40°-50°	474.0	17.1
50°-60°	453.2	16.4
60°-70°	383.9	13.9
70°-80°	258.0	9.3
80°-90°	72.8	2.6
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°	684.4	24.7
0°-40°	1129.1	40.7
0°-60°	2056.3	74.2
0°-90°	2771.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2771.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	871	871	871	871	871	
5°	871	870	866	870	870	83
15°	841	841	840	847	845	237
25°	781	783	789	796	797	360
35°	693	698	709	723	726	434
45°	581	591	612	638	649	448
55°	449	466	507	547	566	400
65°	297	327	394	447	467	295
75°	140	191	267	312	322	150
85°	28	56	69	74	77	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	871.4	871.4	871.4	871.4	871.4
2.5°	872.8	872.8	868.7	871.4	871.4
5°	871.4	870.0	865.9	870.0	870.0
7.5°	867.3	865.9	863.2	867.3	865.9
10°	859.0	859.0	856.3	860.4	860.4
12.5°	852.2	850.8	849.4	854.9	853.5
15°	841.2	841.2	839.8	846.7	845.3
17.5°	827.4	828.8	830.2	835.7	837.0
20°	812.3	815.0	816.4	824.7	824.7
22.5°	798.6	799.9	802.7	810.9	810.9
25°	780.7	783.4	788.9	795.8	797.2
27.5°	762.8	764.2	771.1	780.7	782.1
30°	739.5	743.6	751.8	762.8	764.2
32.5°	718.8	723.0	732.6	743.6	746.3
35°	692.7	698.2	709.2	723.0	725.7
37.5°	669.4	673.5	687.2	702.3	706.5
40°	640.5	648.7	662.5	680.4	687.2
42.5°	611.6	619.9	636.4	659.7	668.0
45°	581.4	591.0	611.6	637.7	648.7
47.5°	551.2	562.1	585.5	615.8	628.1
50°	516.8	530.5	559.4	593.8	607.5
52.5°	483.8	500.3	531.9	570.4	588.3
55°	449.4	465.9	507.2	547.0	566.3
57.5°	411.0	433.0	478.3	523.7	544.3
60°	375.2	395.8	450.8	500.3	520.9
62.5°	336.7	364.2	423.3	475.6	496.2
65°	296.9	327.1	394.5	446.7	467.3
67.5°	261.1	294.1	365.6	417.8	438.4
70°	218.5	259.8	334.0	386.2	406.8
72.5°	178.7	224.0	301.0	351.9	371.1
75°	140.2	191.0	266.6	312.0	321.6
77.5°	104.5	158.1	230.9	250.1	243.3
80°	74.2	126.4	180.1	170.4	174.6
82.5°	48.1	96.2	111.3	126.4	130.6
85°	27.5	56.4	68.7	74.2	77.0
87.5°	12.4	20.6	27.5	27.5	26.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)