

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: P307332

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CP250-W2A-U-3000K**

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: P307332
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-25-UNV-L82765-RDP-CP250-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET
Light Source: (168) 3000K 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: 1318.0 lumens
Efficiency: N/A
Efficacy: 67.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

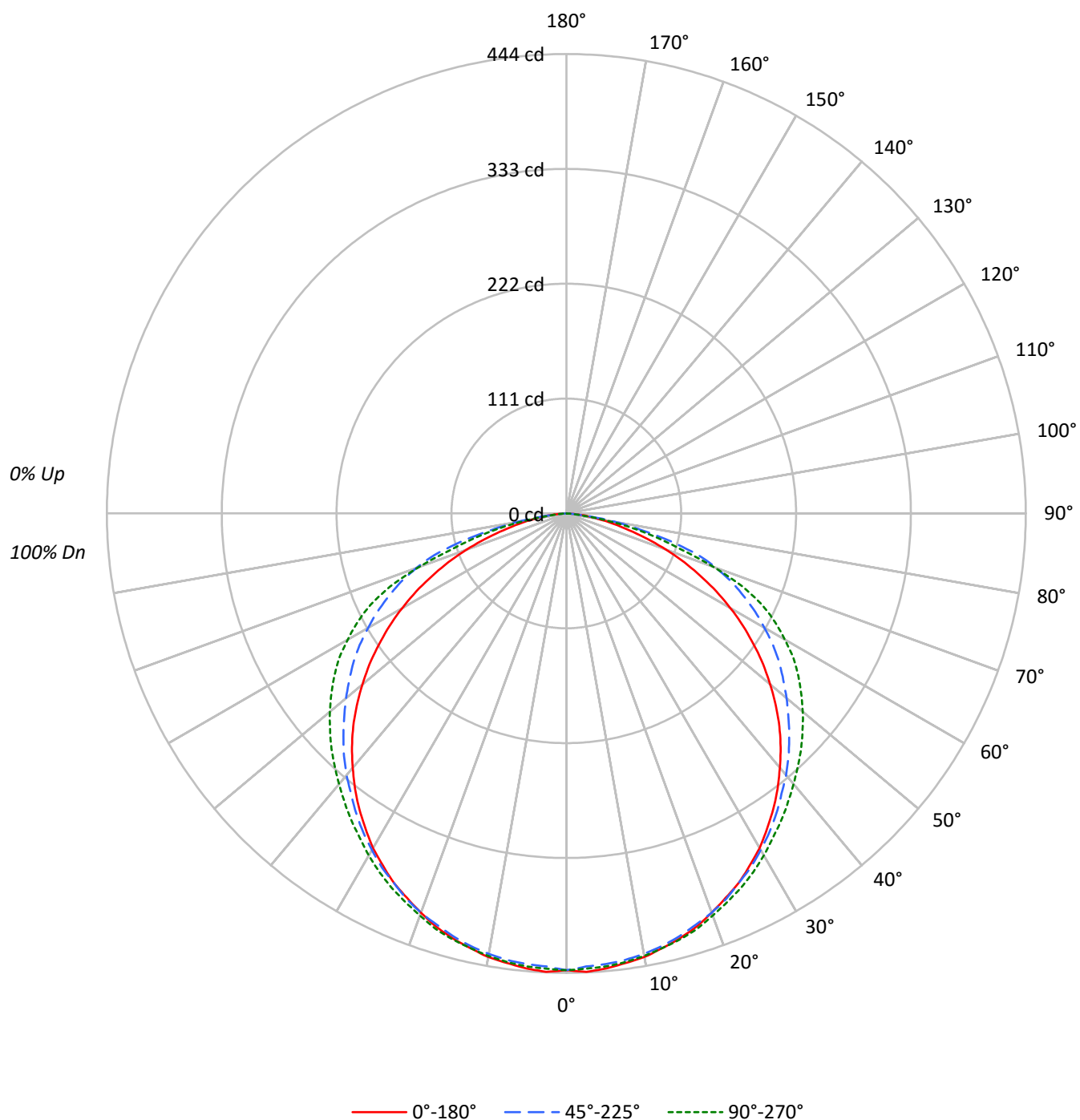
Input Watts (W): 19.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		58
4	82	70	61	54	80	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1188	1188	1188
5°	1192	1181	1187
10°	1189	1181	1186
15°	1184	1178	1187
20°	1176	1176	1184
25°	1170	1170	1185
30°	1161	1167	1186
35°	1146	1163	1190
40°	1128	1160	1200
45°	1108	1159	1222
50°	1077	1163	1249
55°	1038	1178	1284
60°	986	1190	1313
65°	911	1205	1330
70°	810	1214	1190
75°	653	1092	952
80°	510	766	621
85°	349	222	157



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.8	3.2
10°-20°	119.9	9.1
20°-30°	182.5	13.8
30°-40°	222.3	16.9
40°-50°	235.9	17.9
50°-60°	222.6	16.9
60°-70°	179.7	13.6
70°-80°	97.5	7.4
80°-90°	15.8	1.2
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°	344.2	26.1
0°-40°	566.5	43.0
0°-60°	1025.0	77.8
0°-90°	1318.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1318.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	441	441	441	441	441	
5°	441	440	437	440	439	42
15°	425	424	423	426	426	120
25°	394	393	394	398	399	181
35°	349	351	354	361	362	218
45°	291	295	305	316	321	224
55°	221	230	251	268	274	198
65°	143	160	189	205	209	142
75°	63	92	105	95	92	69
85°	11	12	7	6	5	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	441.4	441.4	441.4	441.4	441.4
2.5°	443.5	441.4	438.3	441.4	440.4
5°	441.4	440.4	437.3	440.4	439.4
7.5°	438.3	438.3	435.3	437.3	437.3
10°	435.3	434.2	432.2	435.3	434.2
12.5°	430.1	429.1	428.1	431.1	430.1
15°	425.0	423.9	422.9	426.0	426.0
17.5°	418.8	417.8	416.7	420.9	420.9
20°	410.6	410.6	410.6	414.7	413.6
22.5°	402.3	402.3	403.4	407.5	406.4
25°	394.1	393.1	394.1	398.2	399.2
27.5°	383.8	384.8	385.9	390.0	391.0
30°	373.5	374.5	375.6	380.7	381.8
32.5°	361.2	363.2	365.3	371.5	371.5
35°	348.8	350.9	354.0	361.2	362.2
37.5°	335.4	337.5	341.6	349.9	351.9
40°	321.0	324.1	330.3	338.5	341.6
42.5°	306.6	310.8	318.0	327.2	331.3
45°	291.2	295.3	304.6	315.9	321.0
47.5°	274.7	279.9	291.2	305.6	309.7
50°	257.2	264.4	277.8	293.3	298.4
52.5°	239.8	248.0	264.4	280.9	286.1
55°	221.2	230.5	251.1	267.5	273.7
57.5°	202.7	213.0	236.7	254.2	260.3
60°	183.2	195.5	221.2	238.7	243.9
62.5°	163.6	178.0	205.8	223.3	227.4
65°	143.0	160.5	189.3	204.8	208.9
67.5°	123.5	144.1	172.9	184.2	184.2
70°	102.9	125.5	154.3	157.4	151.3
72.5°	82.3	108.0	133.8	122.4	117.3
75°	62.8	91.6	105.0	94.7	91.6
77.5°	47.3	74.1	74.1	67.9	65.9
80°	32.9	56.6	49.4	43.2	40.1
82.5°	21.6	31.9	25.7	20.6	17.5
85°	11.3	12.3	7.2	6.2	5.1
87.5°	4.1	2.1	1.0	2.1	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)