

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: P307290

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CP250-W2A-U-4500K**

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: P307290
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: 14FCZ2-20-UNV-L82765-RDP-CP250-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET
Light Source: (168) 4500K 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: 1215.0 lumens
Efficiency: N/A
Efficacy: 72.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

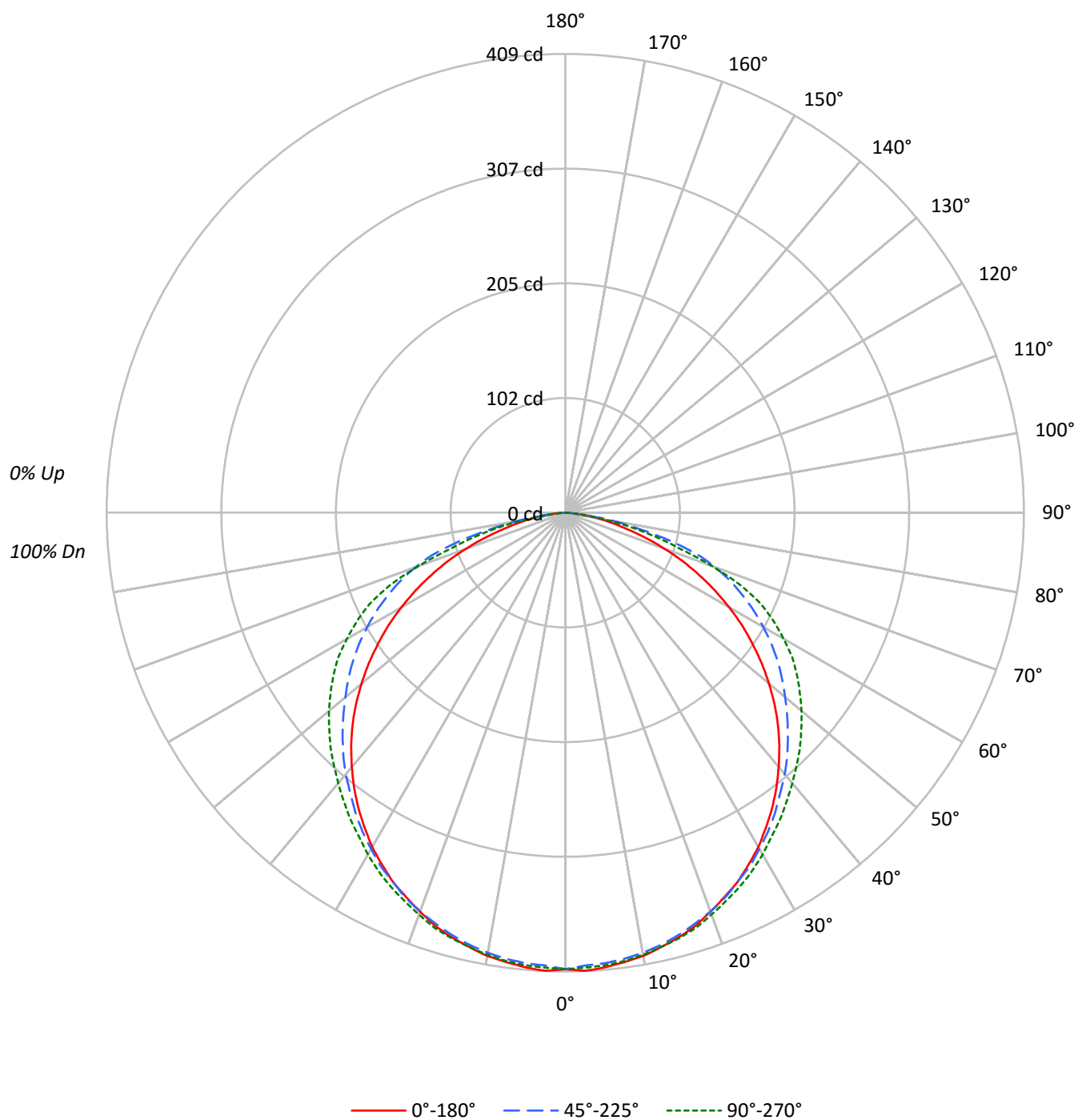
Input Watts (W): 16.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1095	1095	1095
5°	1099	1089	1094
10°	1096	1089	1094
15°	1092	1086	1094
20°	1084	1084	1092
25°	1079	1079	1093
30°	1070	1076	1093
35°	1056	1072	1097
40°	1040	1070	1106
45°	1021	1069	1126
50°	993	1072	1152
55°	957	1086	1184
60°	908	1097	1210
65°	840	1111	1226
70°	747	1120	1097
75°	602	1006	878
80°	471	705	573
85°	321	204	145



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.5	3.2
10°-20°	110.5	9.1
20°-30°	168.3	13.8
30°-40°	204.9	16.9
40°-50°	217.4	17.9
50°-60°	205.2	16.9
60°-70°	165.7	13.6
70°-80°	89.9	7.4
80°-90°	14.5	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°	317.3	26.1
0°-40°	522.2	43.0
0°-60°	944.9	77.8
0°-90°	1215.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1215.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	407	407	407	407	407	
5°	407	406	403	406	405	39
15°	392	391	390	393	393	111
25°	363	362	363	367	368	167
35°	322	324	326	333	334	201
45°	268	272	281	291	296	207
55°	204	212	231	247	252	182
65°	132	148	174	189	193	131
75°	58	84	97	87	84	63
85°	10	11	7	6	5	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	406.9	406.9	406.9	406.9	406.9
2.5°	408.8	406.9	404.1	406.9	406.0
5°	406.9	406.0	403.1	406.0	405.0
7.5°	404.1	404.1	401.2	403.1	403.1
10°	401.2	400.3	398.4	401.2	400.3
12.5°	396.5	395.6	394.6	397.4	396.5
15°	391.8	390.8	389.9	392.7	392.7
17.5°	386.1	385.1	384.2	388.0	388.0
20°	378.5	378.5	378.5	382.3	381.3
22.5°	370.9	370.9	371.8	375.6	374.7
25°	363.3	362.4	363.3	367.1	368.0
27.5°	353.8	354.8	355.7	359.5	360.5
30°	344.3	345.3	346.2	351.0	351.9
32.5°	332.9	334.8	336.7	342.4	342.4
35°	321.6	323.5	326.3	332.9	333.9
37.5°	309.2	311.1	314.9	322.5	324.4
40°	296.0	298.8	304.5	312.1	314.9
42.5°	282.7	286.5	293.1	301.6	305.4
45°	268.4	272.2	280.8	291.2	296.0
47.5°	253.3	258.0	268.4	281.7	285.5
50°	237.1	243.8	256.1	270.3	275.1
52.5°	221.0	228.6	243.8	259.0	263.7
55°	203.9	212.5	231.4	246.6	252.3
57.5°	186.9	196.4	218.2	234.3	240.0
60°	168.8	180.2	203.9	220.1	224.8
62.5°	150.8	164.1	189.7	205.8	209.6
65°	131.9	148.0	174.5	188.8	192.6
67.5°	113.8	132.8	159.4	169.8	169.8
70°	94.9	115.7	142.3	145.1	139.4
72.5°	75.9	99.6	123.3	112.9	108.1
75°	57.9	84.4	96.8	87.3	84.4
77.5°	43.6	68.3	68.3	62.6	60.7
80°	30.4	52.2	45.5	39.8	37.0
82.5°	19.9	29.4	23.7	19.0	16.1
85°	10.4	11.4	6.6	5.7	4.7
87.5°	3.8	1.9	0.9	1.9	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)