

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: P308010

Luminaire Tested: **14FCZ2-39-UNV-L82765-S-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: P308010
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-39-UNV-L82765-S-CP250-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 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: 3542.0 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

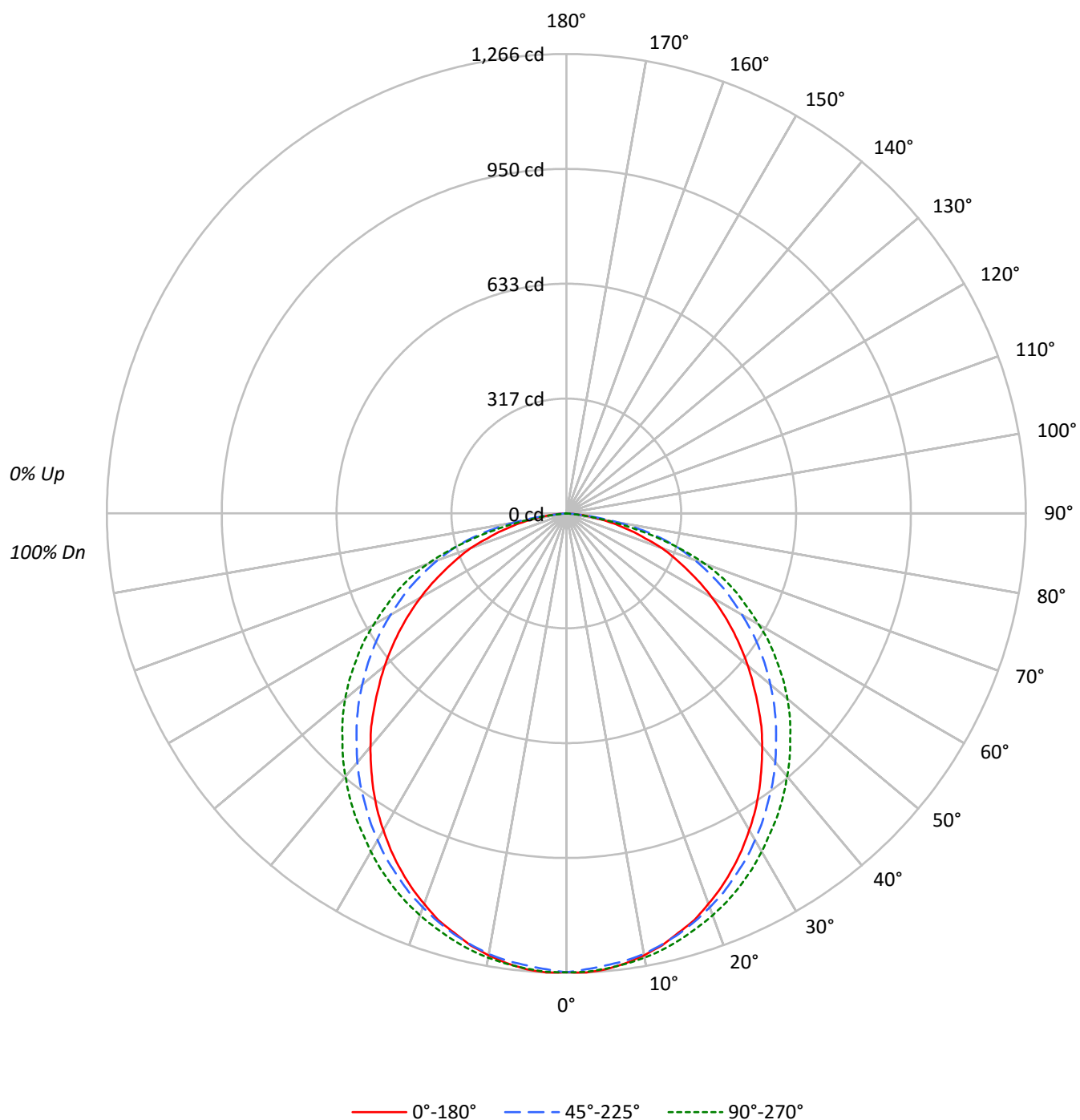
Input Watts (W): 33.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3402	3402	3402
5°	3406	3378	3401
10°	3378	3369	3398
15°	3332	3342	3386
20°	3279	3309	3375
25°	3212	3269	3363
30°	3132	3230	3345
35°	3046	3185	3335
40°	2949	3146	3325
45°	2841	3108	3322
50°	2735	3073	3330
55°	2620	3049	3320
60°	2495	3006	3299
65°	2348	2997	3299
70°	2211	2971	3205
75°	1917	2903	2739
80°	1551	2340	1824
85°	1031	812	543



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.4	3.4
10°-20°	339.8	9.6
20°-30°	509.7	14.4
30°-40°	608.0	17.2
40°-50°	628.5	17.7
50°-60°	573.8	16.2
60°-70°	451.6	12.7
70°-80°	262.9	7.4
80°-90°	48.4	1.4
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°	968.8	27.4
0°-40°	1576.8	44.5
0°-60°	2779.1	78.5
0°-90°	3542.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3542.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1264	1264	1264	1264	1264	
5°	1261	1257	1250	1261	1259	120
15°	1196	1198	1200	1215	1215	337
25°	1082	1087	1101	1128	1133	498
35°	927	940	969	1006	1015	580
45°	746	771	817	862	873	576
55°	558	588	650	697	708	499
65°	369	407	471	508	518	366
75°	184	228	279	274	263	196
85°	33	47	26	21	18	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1264.4	1264.4	1264.4	1264.4	1264.4
2.5°	1266.2	1262.7	1257.4	1266.2	1264.4
5°	1260.9	1257.4	1250.4	1260.9	1259.2
7.5°	1250.4	1246.9	1243.4	1253.9	1252.1
10°	1236.3	1234.6	1232.8	1245.1	1243.4
12.5°	1218.8	1218.8	1217.0	1231.1	1231.1
15°	1195.9	1197.7	1199.5	1215.3	1215.3
17.5°	1174.9	1173.1	1178.4	1195.9	1197.7
20°	1145.0	1148.5	1155.6	1176.6	1178.4
22.5°	1115.2	1118.7	1131.0	1152.0	1157.3
25°	1081.8	1087.1	1101.1	1127.5	1132.7
27.5°	1046.7	1053.7	1073.0	1101.1	1106.4
30°	1008.0	1018.6	1039.6	1071.3	1076.5
32.5°	969.4	979.9	1006.3	1037.9	1044.9
35°	927.3	939.5	969.4	1006.3	1015.1
37.5°	883.3	899.2	934.3	971.2	981.7
40°	839.4	857.0	895.6	934.3	946.6
42.5°	795.5	813.1	855.2	899.2	911.4
45°	746.4	771.0	816.6	862.3	872.8
47.5°	699.0	725.3	776.2	821.9	835.9
50°	653.3	679.6	734.1	781.5	795.5
52.5°	605.9	634.0	691.9	741.1	753.4
55°	558.5	588.3	649.8	697.2	707.7
57.5°	511.0	542.7	605.9	651.5	663.8
60°	463.6	497.0	558.5	604.1	612.9
62.5°	416.2	451.3	514.6	554.9	563.7
65°	368.8	407.4	470.7	507.5	518.1
67.5°	323.1	361.8	423.2	458.4	467.1
70°	281.0	316.1	377.6	403.9	407.4
72.5°	228.3	272.2	331.9	346.0	337.2
75°	184.4	228.3	279.2	274.0	263.4
77.5°	140.5	184.4	217.8	200.2	186.2
80°	100.1	144.0	151.0	124.7	117.7
82.5°	65.0	100.1	84.3	65.0	52.7
85°	33.4	47.4	26.3	21.1	17.6
87.5°	10.5	7.0	3.5	3.5	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)