

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: P307839

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CA08-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: P307839
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: 14FCZ2-25-UNV-L82765-S-CA08-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC 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: 2406.0 lumens
Efficiency: N/A
Efficacy: 120.3 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

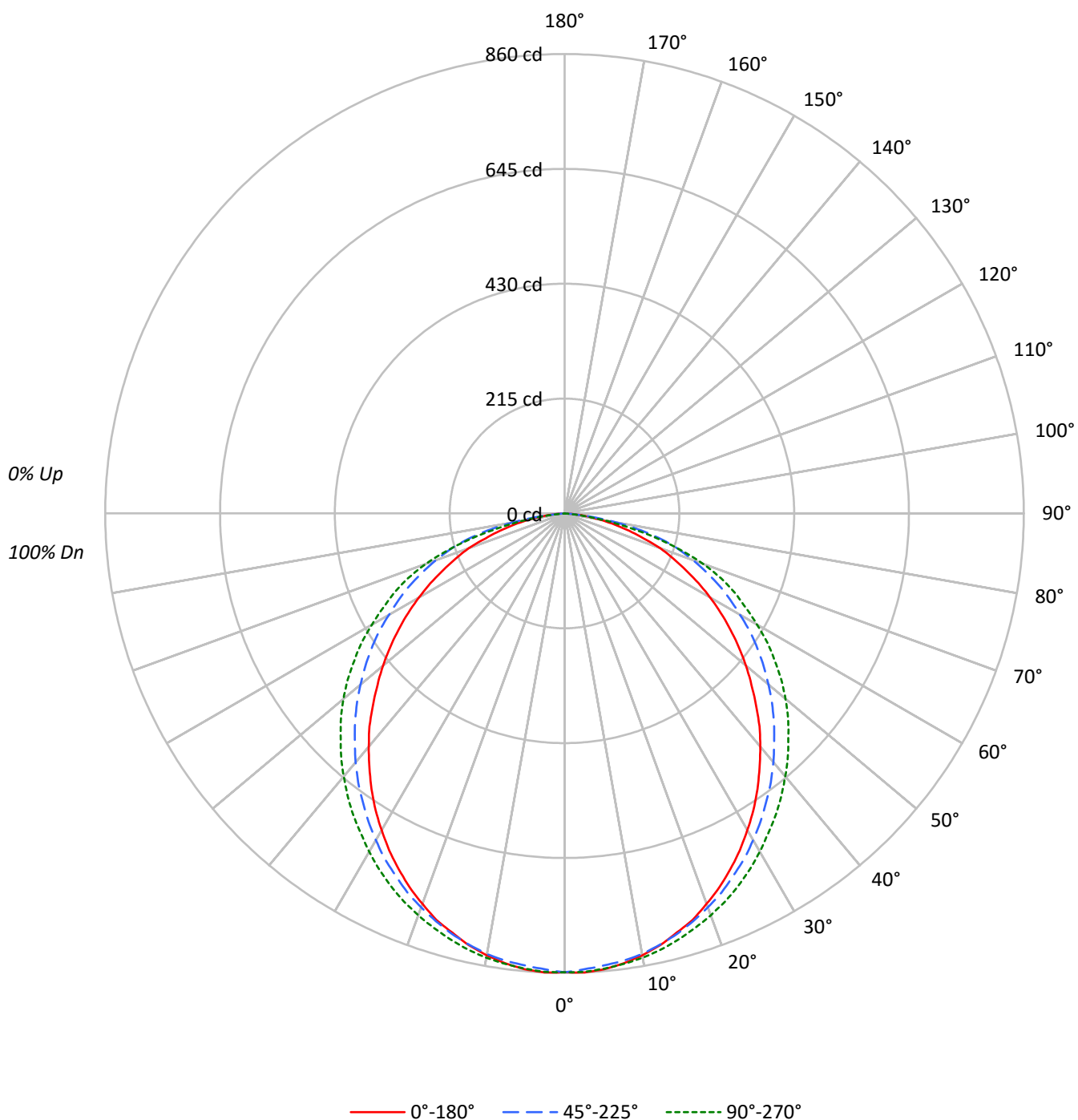
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2311	2311	2311
5°	2314	2294	2310
10°	2295	2288	2308
15°	2263	2270	2300
20°	2227	2248	2292
25°	2182	2221	2284
30°	2128	2194	2272
35°	2069	2163	2265
40°	2003	2137	2259
45°	1929	2111	2256
50°	1858	2087	2262
55°	1780	2071	2255
60°	1695	2041	2241
65°	1595	2036	2241
70°	1502	2018	2178
75°	1303	1972	1860
80°	1054	1590	1238
85°	701	553	367



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.1	3.4
10°-20°	230.8	9.6
20°-30°	346.2	14.4
30°-40°	413.0	17.2
40°-50°	426.9	17.7
50°-60°	389.8	16.2
60°-70°	306.8	12.7
70°-80°	178.6	7.4
80°-90°	32.9	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°	658.1	27.4
0°-40°	1071.1	44.5
0°-60°	1887.8	78.5
0°-90°	2406.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2406.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	859	859	859	859	859	
5°	856	854	849	856	855	81
15°	812	814	815	826	826	229
25°	735	738	748	766	769	338
35°	630	638	658	684	690	394
45°	507	524	555	586	593	392
55°	379	400	441	474	481	339
65°	250	277	320	345	352	249
75°	125	155	190	186	179	133
85°	23	32	18	14	12	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	858.9	858.9	858.9	858.9	858.9
2.5°	860.1	857.7	854.1	860.1	858.9
5°	856.5	854.1	849.4	856.5	855.3
7.5°	849.4	847.0	844.6	851.7	850.6
10°	839.8	838.6	837.4	845.8	844.6
12.5°	827.9	827.9	826.7	836.2	836.2
15°	812.4	813.6	814.8	825.5	825.5
17.5°	798.1	796.9	800.4	812.4	813.6
20°	777.8	780.2	784.9	799.3	800.4
22.5°	757.5	759.9	768.2	782.6	786.1
25°	734.8	738.4	748.0	765.9	769.4
27.5°	711.0	715.8	728.9	748.0	751.5
30°	684.7	691.9	706.2	727.7	731.3
32.5°	658.5	665.6	683.5	705.0	709.8
35°	629.9	638.2	658.5	683.5	689.5
37.5°	600.0	610.8	634.6	659.7	666.8
40°	570.2	582.1	608.4	634.6	643.0
42.5°	540.4	552.3	581.0	610.8	619.1
45°	507.0	523.7	554.7	585.7	592.9
47.5°	474.8	492.7	527.3	558.3	567.8
50°	443.8	461.7	498.6	530.8	540.4
52.5°	411.6	430.6	470.0	503.4	511.8
55°	379.3	399.6	441.4	473.6	480.7
57.5°	347.1	368.6	411.6	442.6	450.9
60°	314.9	337.6	379.3	410.4	416.3
62.5°	282.7	306.6	349.5	377.0	382.9
65°	250.5	276.8	319.7	344.8	351.9
67.5°	219.5	245.7	287.5	311.4	317.3
70°	190.9	214.7	256.5	274.4	276.8
72.5°	155.1	184.9	225.5	235.0	229.0
75°	125.3	155.1	189.7	186.1	178.9
77.5°	95.4	125.3	147.9	136.0	126.4
80°	68.0	97.8	102.6	84.7	79.9
82.5°	44.1	68.0	57.3	44.1	35.8
85°	22.7	32.2	17.9	14.3	11.9
87.5°	7.2	4.8	2.4	2.4	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)