

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: P307859

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CP125-W2A-U-5500K**

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: P307859
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-CP125-W2A-U-5500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.125" POLYCARB SHEET
Light Source: (168) 5500K 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: 2407.0 lumens
Efficiency: N/A
Efficacy: 119.2 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

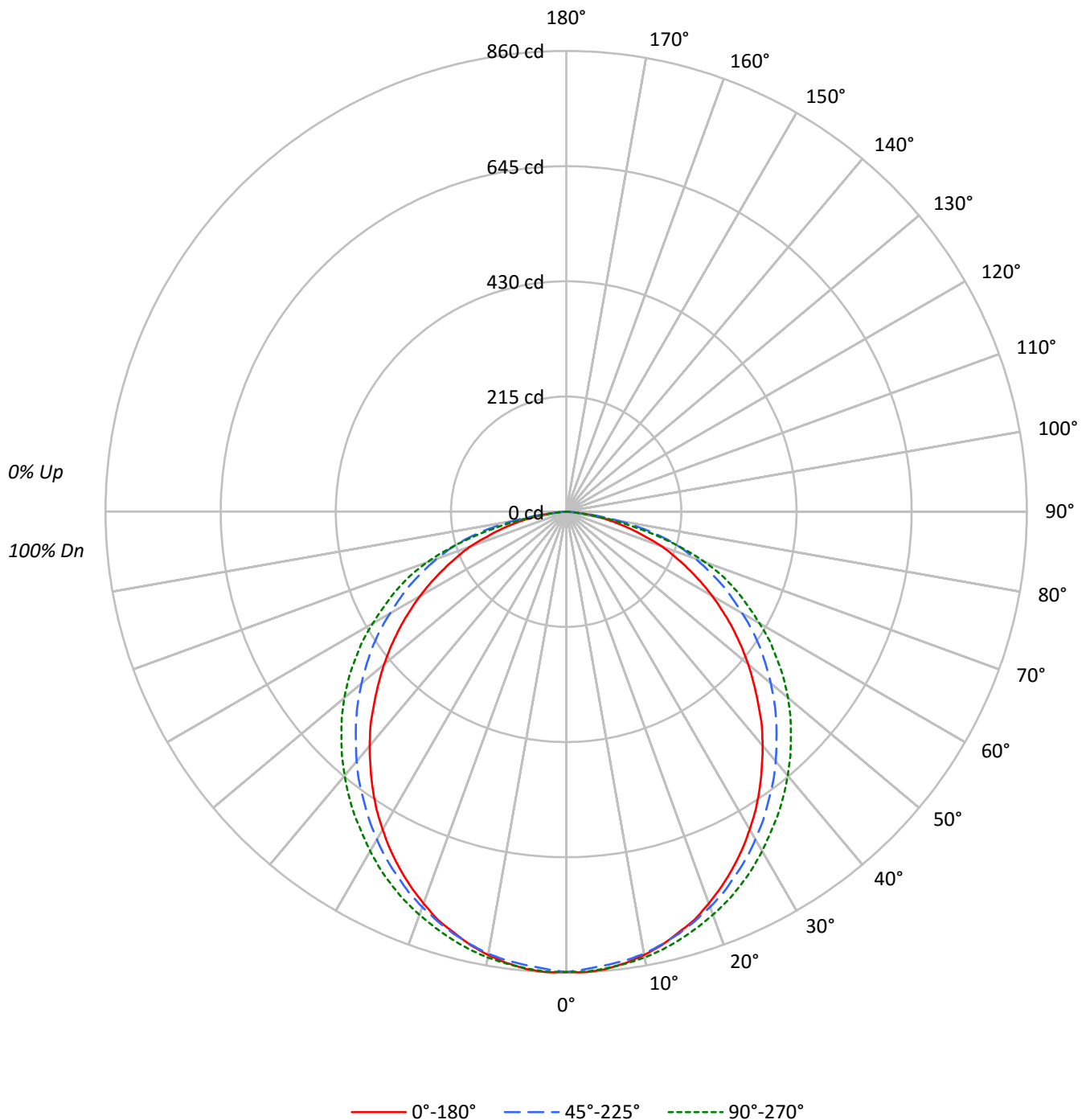
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2312	2312	2312
5°	2315	2295	2311
10°	2296	2289	2309
15°	2264	2271	2301
20°	2228	2249	2293
25°	2183	2222	2286
30°	2128	2195	2273
35°	2070	2164	2266
40°	2004	2138	2260
45°	1930	2112	2257
50°	1859	2088	2263
55°	1780	2072	2256
60°	1696	2042	2242
65°	1596	2036	2242
70°	1502	2019	2179
75°	1303	1973	1861
80°	1054	1590	1240
85°	701	553	367



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.1	3.4
10°-20°	230.9	9.6
20°-30°	346.3	14.4
30°-40°	413.1	17.2
40°-50°	427.1	17.7
50°-60°	390.0	16.2
60°-70°	306.9	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°	658.4	27.4
0°-40°	1071.5	44.5
0°-60°	1888.6	78.5
0°-90°	2407.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2407.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	859	859	859	859	859	
5°	857	854	850	857	856	81
15°	813	814	815	826	826	229
25°	735	739	748	766	770	338
35°	630	638	659	684	690	394
45°	507	524	555	586	593	392
55°	380	400	442	474	481	339
65°	251	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°	859.3	859.3	859.3	859.3	859.3
2.5°	860.5	858.1	854.5	860.5	859.3
5°	856.9	854.5	849.7	856.9	855.7
7.5°	849.7	847.3	844.9	852.1	850.9
10°	840.2	839.0	837.8	846.1	844.9
12.5°	828.2	828.2	827.0	836.6	836.6
15°	812.7	813.9	815.1	825.8	825.8
17.5°	798.4	797.2	800.8	812.7	813.9
20°	778.1	780.5	785.3	799.6	800.8
22.5°	757.8	760.2	768.6	782.9	786.5
25°	735.1	738.7	748.3	766.2	769.8
27.5°	711.3	716.0	729.2	748.3	751.9
30°	685.0	692.2	706.5	728.0	731.6
32.5°	658.8	665.9	683.8	705.3	710.1
35°	630.1	638.5	658.8	683.8	689.8
37.5°	600.3	611.0	634.9	660.0	667.1
40°	570.5	582.4	608.6	634.9	643.3
42.5°	540.6	552.6	581.2	611.0	619.4
45°	507.2	523.9	554.9	586.0	593.1
47.5°	475.0	492.9	527.5	558.5	568.1
50°	444.0	461.9	498.8	531.1	540.6
52.5°	411.7	430.8	470.2	503.6	512.0
55°	379.5	399.8	441.6	473.8	480.9
57.5°	347.3	368.8	411.7	442.8	451.1
60°	315.1	337.7	379.5	410.5	416.5
62.5°	282.8	306.7	349.7	377.1	383.1
65°	250.6	276.9	319.8	344.9	352.1
67.5°	219.6	245.8	287.6	311.5	317.4
70°	190.9	214.8	256.6	274.5	276.9
72.5°	155.1	185.0	225.6	235.1	229.1
75°	125.3	155.1	189.8	186.2	179.0
77.5°	95.5	125.3	148.0	136.0	126.5
80°	68.0	97.9	102.6	84.7	80.0
82.5°	44.2	68.0	57.3	44.2	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)