

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: P307590

Luminaire Tested: **14FCZ2-25-UNV-L82765-CP125-W2A-U-5700K**

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: P307590
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
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-CP125-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" POLYCARB SHEET
Light Source: (168) 5700K 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

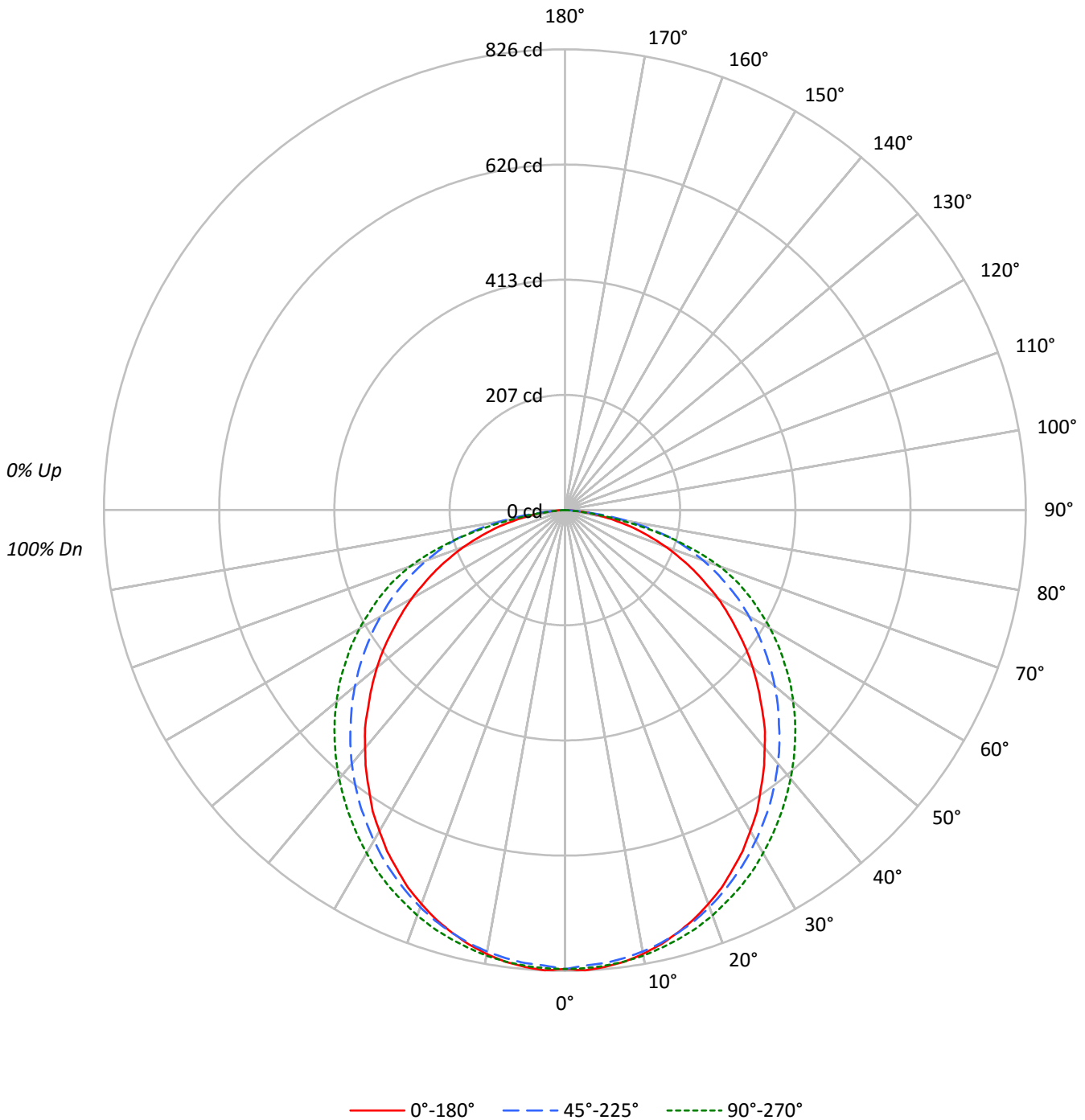
Lumens per Lamp: N/A
Luminaire Lumens: 2388.0 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (A_{in}): 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				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2214	2214	2214
5°	2221	2202	2215
10°	2207	2196	2216
15°	2184	2185	2215
20°	2151	2170	2214
25°	2111	2148	2212
30°	2065	2126	2207
35°	2010	2108	2206
40°	1957	2087	2209
45°	1897	2065	2221
50°	1841	2055	2236
55°	1771	2048	2256
60°	1708	2052	2287
65°	1621	2058	2322
70°	1521	2074	2321
75°	1379	2093	2098
80°	1130	1807	1494
85°	840	855	346



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.8	3.3
10°-20°	222.4	9.3
20°-30°	335.0	14.0
30°-40°	402.0	16.8
40°-50°	419.0	17.5
50°-60°	387.9	16.2
60°-70°	313.4	13.1
70°-80°	191.1	8.0
80°-90°	39.5	1.7
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°	635.2	26.6
0°-40°	1037.2	43.4
0°-60°	1844.1	77.2
0°-90°	2388.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2388.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	823	823	823	823	823	
5°	822	820	815	821	820	78
15°	784	784	784	795	795	221
25°	711	715	724	742	745	328
35°	612	621	642	665	672	383
45°	498	513	543	573	584	385
55°	378	397	437	471	481	338
65°	254	280	323	356	365	252
75°	133	162	201	204	202	139
85°	27	40	28	15	11	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	822.7	822.7	822.7	822.7	822.7
2.5°	825.9	823.2	817.3	823.2	822.1
5°	822.1	820.0	815.2	821.1	820.0
7.5°	816.8	814.7	810.4	817.3	816.3
10°	807.8	806.7	803.5	811.5	811.0
12.5°	797.1	796.6	795.0	804.0	803.5
15°	783.8	784.3	784.3	795.0	795.0
17.5°	768.9	770.0	772.1	783.8	785.4
20°	751.3	753.5	757.7	771.0	773.2
22.5°	733.2	734.8	741.2	757.2	759.3
25°	710.9	715.1	723.6	741.7	744.9
27.5°	689.6	693.3	705.0	723.6	729.0
30°	664.5	670.4	684.2	704.5	710.3
32.5°	640.6	647.0	662.9	686.4	691.7
35°	611.8	621.4	641.6	665.1	671.5
37.5°	585.7	594.8	617.7	643.2	650.7
40°	557.0	568.2	594.2	621.4	628.9
42.5°	530.3	541.0	569.2	596.9	607.0
45°	498.4	513.3	542.6	572.9	583.6
47.5°	469.1	484.0	517.6	550.0	559.6
50°	439.8	455.8	490.9	524.5	534.1
52.5°	409.5	426.5	464.3	497.9	509.0
55°	377.5	397.2	436.6	470.7	480.8
57.5°	347.2	367.4	409.5	444.1	454.2
60°	317.4	338.1	381.3	414.3	424.9
62.5°	284.3	308.8	353.6	386.0	394.0
65°	254.5	279.5	323.2	355.7	364.7
67.5°	223.1	250.3	293.9	323.7	332.3
70°	193.3	221.5	263.6	291.3	295.0
72.5°	161.3	190.1	232.7	250.3	250.3
75°	132.6	161.9	201.3	204.5	201.8
77.5°	101.2	133.7	159.2	152.8	146.4
80°	72.9	104.9	116.6	104.9	96.4
82.5°	49.0	76.1	70.3	55.9	49.5
85°	27.2	40.5	27.7	15.4	11.2
87.5°	10.1	9.1	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)