

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: P307568

Luminaire Tested: **14FCZ2-25-UNV-L82765-CA08-W2A-U-4000K**

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: P307568
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-CA08-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 4000K 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: 2340.0 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

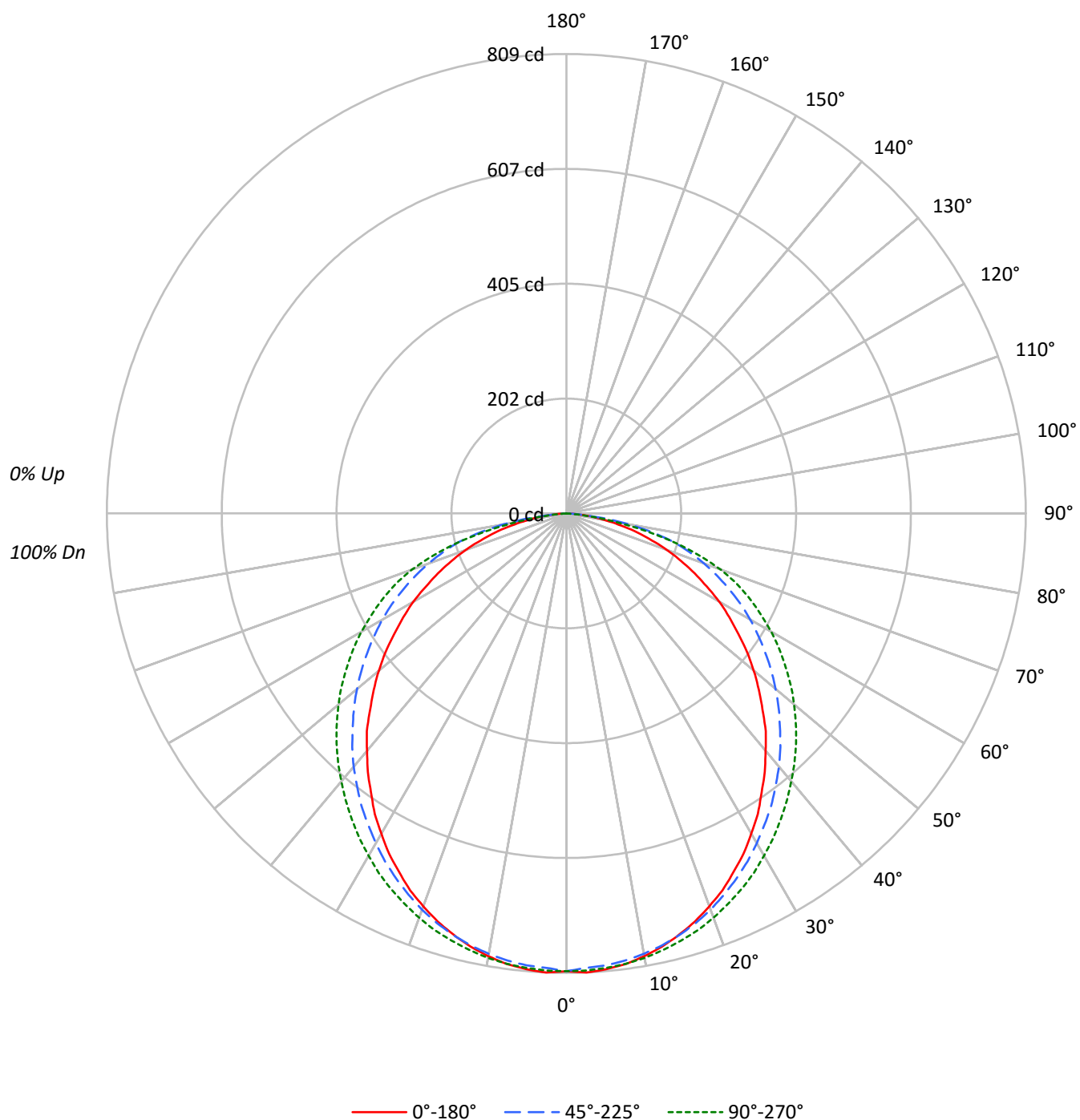
Input Watts (W): 19.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	89	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35		47	40	35		32
8	60	46	37	32	58	45	37	31	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	39	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2169	2169	2169
5°	2176	2158	2170
10°	2163	2152	2172
15°	2140	2141	2170
20°	2108	2126	2170
25°	2068	2105	2167
30°	2023	2083	2163
35°	1969	2065	2162
40°	1917	2046	2165
45°	1859	2023	2176
50°	1804	2014	2191
55°	1735	2008	2211
60°	1674	2011	2241
65°	1588	2017	2276
70°	1490	2032	2275
75°	1351	2050	2057
80°	1108	1771	1463
85°	821	837	340



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.3	3.3
10°-20°	217.9	9.3
20°-30°	328.3	14.0
30°-40°	393.9	16.8
40°-50°	410.6	17.5
50°-60°	380.1	16.2
60°-70°	307.1	13.1
70°-80°	187.2	8.0
80°-90°	38.7	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°	622.4	26.6
0°-40°	1016.4	43.4
0°-60°	1807.0	77.2
0°-90°	2340.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2340.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	806	806	806	806	806	
5°	806	804	799	805	804	76
15°	768	769	769	779	779	217
25°	697	701	709	727	730	321
35°	600	609	629	652	658	376
45°	488	503	532	561	572	378
55°	370	389	428	461	471	331
65°	249	274	317	348	357	247
75°	130	159	197	200	198	136
85°	27	40	27	15	11	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	806.1	806.1	806.1	806.1	806.1
2.5°	809.3	806.7	800.9	806.7	805.6
5°	805.6	803.5	798.8	804.6	803.5
7.5°	800.4	798.3	794.1	800.9	799.9
10°	791.5	790.5	787.4	795.2	794.7
12.5°	781.1	780.6	779.0	787.9	787.4
15°	768.0	768.6	768.6	779.0	779.0
17.5°	753.4	754.5	756.6	768.0	769.6
20°	736.2	738.3	742.5	755.5	757.6
22.5°	718.5	720.0	726.3	742.0	744.0
25°	696.6	700.7	709.1	726.8	730.0
27.5°	675.7	679.3	690.8	709.1	714.3
30°	651.2	656.9	670.5	690.3	696.0
32.5°	627.7	634.0	649.6	672.6	677.8
35°	599.5	608.9	628.7	651.7	658.0
37.5°	573.9	582.8	605.3	630.3	637.6
40°	545.8	556.7	582.3	608.9	616.2
42.5°	519.7	530.1	557.8	584.9	594.8
45°	488.4	503.0	531.7	561.4	571.9
47.5°	459.7	474.3	507.2	539.0	548.4
50°	431.0	446.6	481.1	513.9	523.3
52.5°	401.2	417.9	455.0	487.9	498.8
55°	369.9	389.2	427.9	461.2	471.2
57.5°	340.2	360.0	401.2	435.2	445.1
60°	311.0	331.3	373.6	405.9	416.4
62.5°	278.6	302.6	346.5	378.3	386.1
65°	249.4	273.9	316.7	348.5	357.4
67.5°	218.6	245.2	288.0	317.2	325.6
70°	189.4	217.1	258.3	285.4	289.1
72.5°	158.1	186.3	228.0	245.2	245.2
75°	129.9	158.6	197.2	200.4	197.8
77.5°	99.1	131.0	156.0	149.7	143.5
80°	71.5	102.8	114.3	102.8	94.4
82.5°	48.0	74.6	68.9	54.8	48.5
85°	26.6	39.7	27.1	15.1	11.0
87.5°	9.9	8.9	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)