

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: P307570

Luminaire Tested: **14FCZ2-25-UNV-L82765-CA08-W2A-U-5000K**

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: P307570
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-5000K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 5000K 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: 2414.0 lumens
Efficiency: N/A
Efficacy: 120.1 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

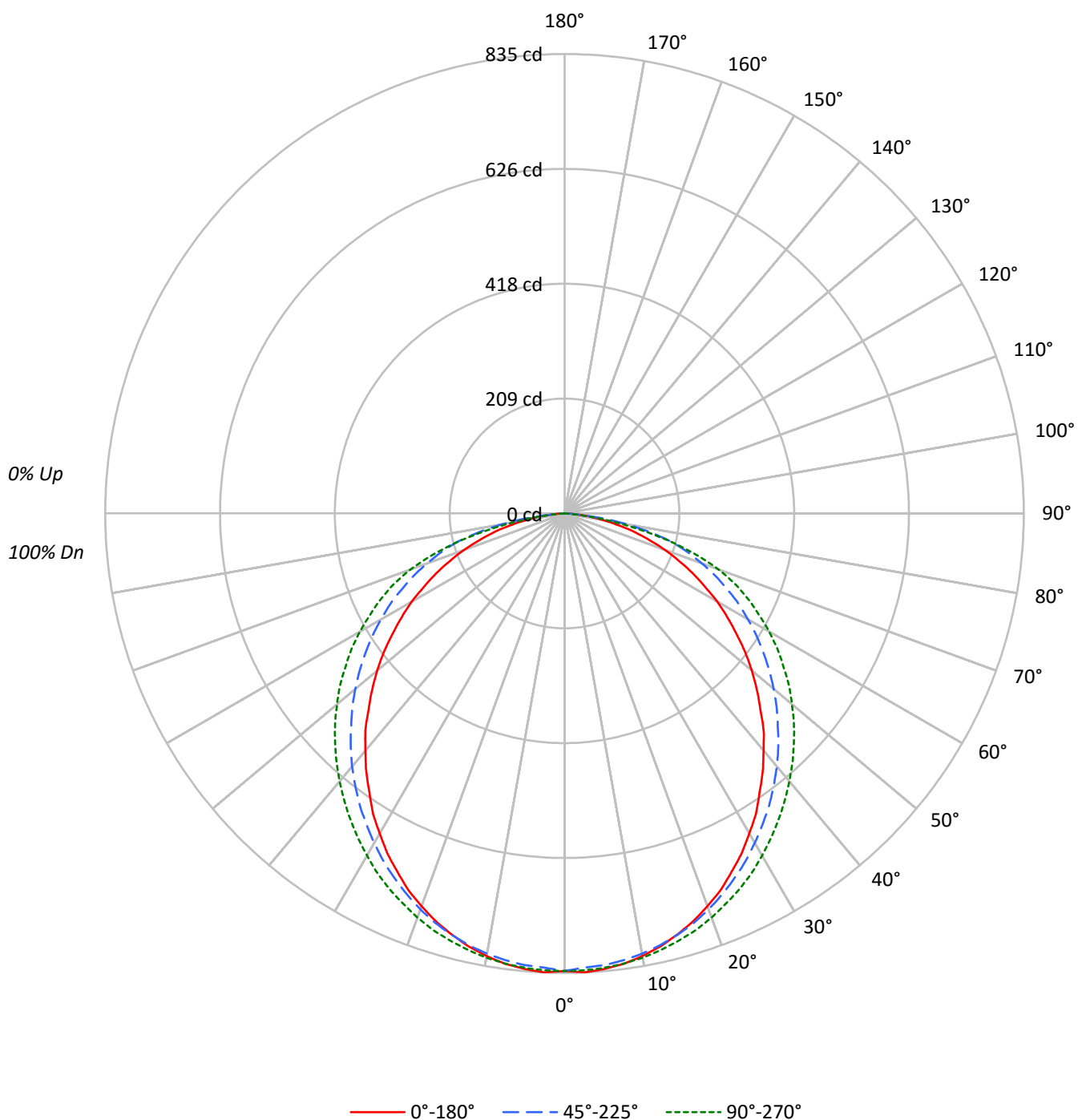
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2238	2238	2238
5°	2245	2226	2239
10°	2231	2220	2240
15°	2207	2209	2239
20°	2175	2194	2238
25°	2134	2172	2236
30°	2087	2149	2231
35°	2032	2131	2230
40°	1978	2110	2233
45°	1917	2087	2245
50°	1861	2078	2260
55°	1790	2071	2281
60°	1727	2074	2312
65°	1638	2080	2348
70°	1537	2096	2346
75°	1393	2116	2121
80°	1142	1827	1509
85°	849	865	349



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.7	3.3
10°-20°	224.8	9.3
20°-30°	338.6	14.0
30°-40°	406.4	16.8
40°-50°	423.5	17.5
50°-60°	392.1	16.2
60°-70°	316.8	13.1
70°-80°	193.2	8.0
80°-90°	39.9	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°	642.1	26.6
0°-40°	1048.5	43.4
0°-60°	1864.1	77.2
0°-90°	2414.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2414.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	832	832	832	832	832	
5°	831	829	824	830	829	79
15°	792	793	793	804	804	223
25°	719	723	732	750	753	331
35°	618	628	649	672	679	387
45°	504	519	548	579	590	389
55°	382	402	441	476	486	342
65°	257	283	327	360	369	254
75°	134	164	204	207	204	141
85°	28	41	28	16	11	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	831.6	831.6	831.6	831.6	831.6
2.5°	834.9	832.2	826.2	832.2	831.1
5°	831.1	828.9	824.1	830.0	828.9
7.5°	825.7	823.6	819.3	826.2	825.2
10°	816.6	815.5	812.3	820.3	819.8
12.5°	805.8	805.3	803.6	812.8	812.3
15°	792.3	792.9	792.9	803.6	803.6
17.5°	777.3	778.3	780.5	792.3	794.0
20°	759.5	761.7	766.0	779.4	781.6
22.5°	741.2	742.8	749.3	765.4	767.6
25°	718.6	722.9	731.5	749.8	753.0
27.5°	697.1	700.8	712.7	731.5	736.9
30°	671.8	677.7	691.7	712.1	718.1
32.5°	647.5	654.0	670.1	693.8	699.2
35°	618.5	628.2	648.6	672.3	678.8
37.5°	592.1	601.3	624.4	650.2	657.8
40°	563.0	574.3	600.7	628.2	635.7
42.5°	536.1	546.9	575.4	603.4	613.6
45°	503.8	518.9	548.5	579.2	589.9
47.5°	474.2	489.3	523.2	556.0	565.7
50°	444.6	460.8	496.3	530.2	539.9
52.5°	413.9	431.2	469.4	503.3	514.6
55°	381.6	401.6	441.4	475.8	486.1
57.5°	351.0	371.4	413.9	448.9	459.1
60°	320.8	341.8	385.4	418.8	429.5
62.5°	287.4	312.2	357.4	390.2	398.3
65°	257.3	282.6	326.7	359.6	368.7
67.5°	225.5	253.0	297.1	327.3	335.9
70°	195.4	223.9	266.4	294.4	298.2
72.5°	163.1	192.2	235.2	253.0	253.0
75°	134.0	163.6	203.5	206.7	204.0
77.5°	102.3	135.1	160.9	154.5	148.0
80°	73.7	106.0	117.9	106.0	97.4
82.5°	49.5	77.0	71.1	56.5	50.1
85°	27.5	40.9	28.0	15.6	11.3
87.5°	10.2	9.2	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)