

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: P307867

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CP187-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: P307867
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-CP187-W2A-U-5000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.187" POLYCARB 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: 2282.0 lumens
Efficiency: N/A
Efficacy: 113.5 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

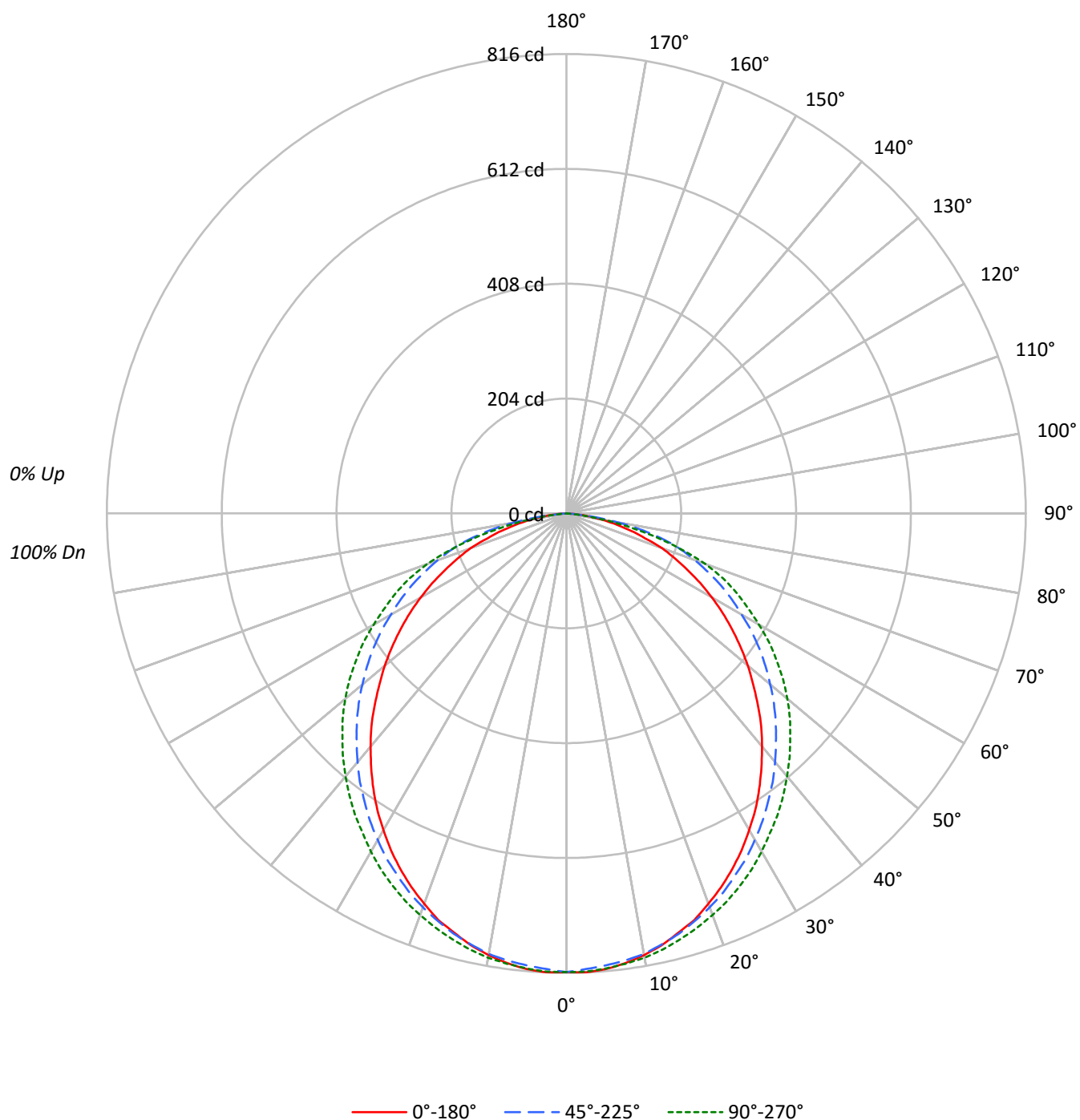
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2192	2192	2192
5°	2195	2176	2191
10°	2176	2170	2189
15°	2147	2153	2181
20°	2113	2132	2174
25°	2070	2106	2167
30°	2018	2081	2155
35°	1963	2052	2148
40°	1900	2027	2142
45°	1830	2002	2140
50°	1762	1980	2146
55°	1688	1964	2139
60°	1608	1936	2125
65°	1513	1931	2125
70°	1424	1914	2065
75°	1235	1870	1764
80°	1000	1508	1175
85°	664	525	349



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.9	3.4
10°-20°	218.9	9.6
20°-30°	328.4	14.4
30°-40°	391.7	17.2
40°-50°	404.9	17.7
50°-60°	369.7	16.2
60°-70°	290.9	12.7
70°-80°	169.4	7.4
80°-90°	31.2	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°	624.2	27.4
0°-40°	1015.9	44.5
0°-60°	1790.5	78.5
0°-90°	2282.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2282.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	815	815	815	815	815	
5°	812	810	806	812	811	77
15°	770	772	773	783	783	217
25°	697	700	709	726	730	321
35°	597	605	625	648	654	373
45°	481	497	526	556	562	371
55°	360	379	419	449	456	322
65°	238	262	303	327	334	236
75°	119	147	180	176	170	126
85°	22	30	17	14	11	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	814.6	814.6	814.6	814.6	814.6
2.5°	815.8	813.5	810.1	815.8	814.6
5°	812.4	810.1	805.6	812.4	811.2
7.5°	805.6	803.3	801.1	807.8	806.7
10°	796.5	795.4	794.3	802.2	801.1
12.5°	785.2	785.2	784.1	793.1	793.1
15°	770.5	771.6	772.8	783.0	783.0
17.5°	756.9	755.8	759.2	770.5	771.6
20°	737.7	740.0	744.5	758.1	759.2
22.5°	718.5	720.7	728.6	742.2	745.6
25°	697.0	700.4	709.4	726.4	729.8
27.5°	674.3	678.9	691.3	709.4	712.8
30°	649.4	656.2	669.8	690.2	693.6
32.5°	624.6	631.3	648.3	668.7	673.2
35°	597.4	605.3	624.6	648.3	654.0
37.5°	569.1	579.3	601.9	625.7	632.5
40°	540.8	552.1	577.0	601.9	609.8
42.5°	512.5	523.9	551.0	579.3	587.2
45°	480.9	496.7	526.1	555.5	562.3
47.5°	450.3	467.3	500.1	529.5	538.6
50°	420.9	437.9	472.9	503.5	512.5
52.5°	390.3	408.4	445.8	477.5	485.4
55°	359.8	379.0	418.6	449.2	456.0
57.5°	329.2	349.6	390.3	419.8	427.7
60°	298.7	320.2	359.8	389.2	394.9
62.5°	268.2	290.8	331.5	357.5	363.2
65°	237.6	262.5	303.2	327.0	333.8
67.5°	208.2	233.1	272.7	295.3	301.0
70°	181.0	203.7	243.3	260.2	262.5
72.5°	147.1	175.4	213.8	222.9	217.2
75°	118.8	147.1	179.9	176.5	169.7
77.5°	90.5	118.8	140.3	129.0	119.9
80°	64.5	92.8	97.3	80.3	75.8
82.5°	41.9	64.5	54.3	41.9	33.9
85°	21.5	30.5	17.0	13.6	11.3
87.5°	6.8	4.5	2.3	2.3	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)