

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: P307878

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CP250-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: P307878
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-CP250-W2A-U-5700K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.250" 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: 2292.0 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

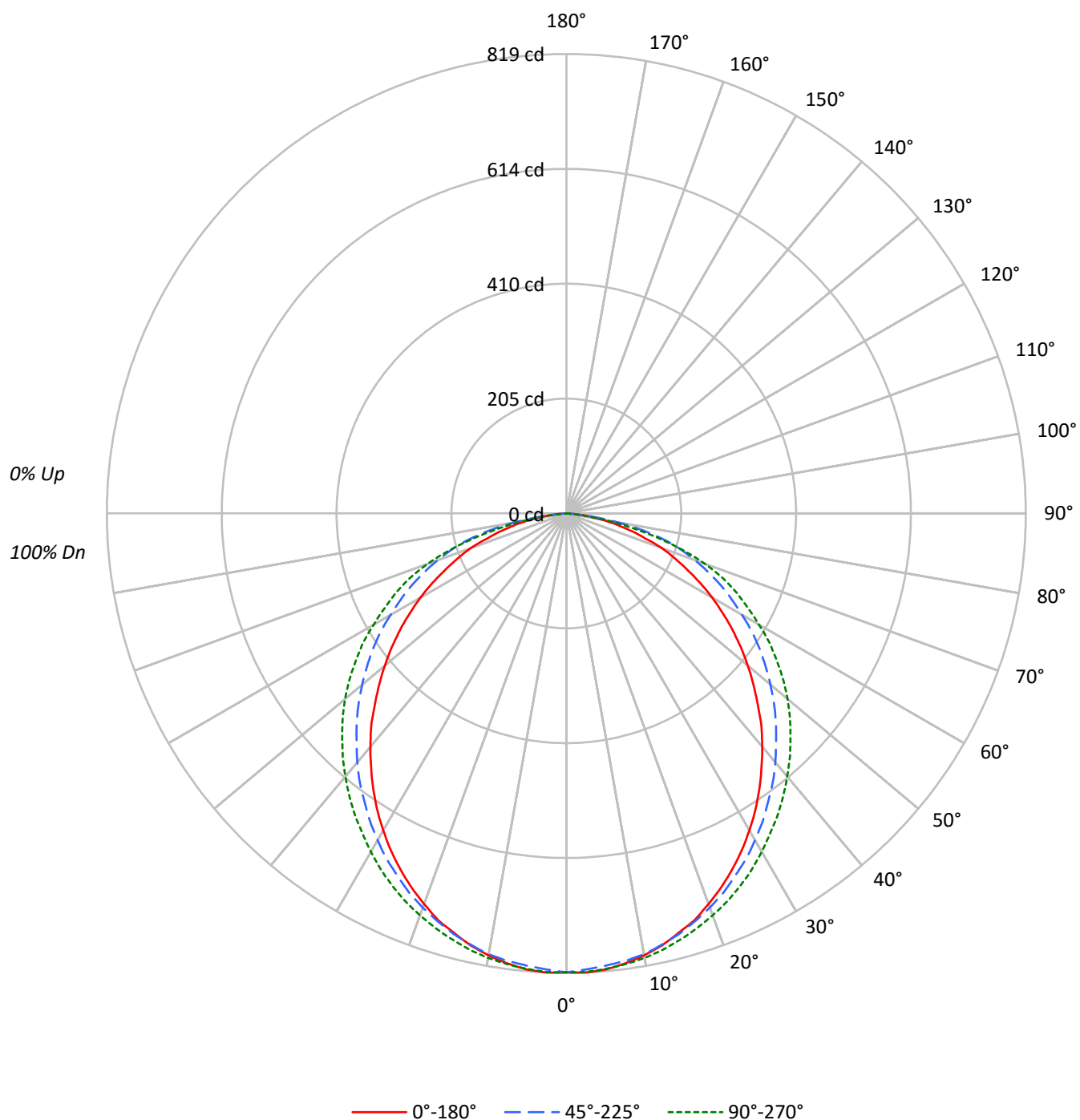
Input Watts (W): 20.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2202	2202	2202
5°	2204	2186	2201
10°	2186	2180	2199
15°	2156	2162	2191
20°	2122	2141	2184
25°	2078	2116	2176
30°	2027	2090	2165
35°	1971	2061	2158
40°	1908	2036	2152
45°	1838	2011	2149
50°	1770	1989	2155
55°	1696	1973	2149
60°	1615	1945	2134
65°	1519	1940	2134
70°	1430	1922	2074
75°	1240	1879	1773
80°	1004	1514	1179
85°	667	525	352



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.3	3.4
10°-20°	219.9	9.6
20°-30°	329.8	14.4
30°-40°	393.4	17.2
40°-50°	406.7	17.7
50°-60°	371.3	16.2
60°-70°	292.2	12.7
70°-80°	170.1	7.4
80°-90°	31.3	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°	626.9	27.4
0°-40°	1020.3	44.5
0°-60°	1798.3	78.5
0°-90°	2292.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2292.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	816	814	809	816	815	77
15°	774	775	776	786	786	218
25°	700	703	712	730	733	322
35°	600	608	627	651	657	375
45°	483	499	528	558	565	373
55°	361	381	420	451	458	323
65°	239	264	305	328	335	237
75°	119	148	181	177	170	127
85°	22	31	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°	818.2	818.2	818.2	818.2	818.2
2.5°	819.3	817.1	813.7	819.3	818.2
5°	815.9	813.7	809.1	815.9	814.8
7.5°	809.1	806.8	804.6	811.4	810.3
10°	800.0	798.9	797.8	805.7	804.6
12.5°	788.7	788.7	787.5	796.6	796.6
15°	773.9	775.0	776.2	786.4	786.4
17.5°	760.2	759.1	762.5	773.9	775.0
20°	740.9	743.2	747.7	761.4	762.5
22.5°	721.6	723.9	731.8	745.5	748.9
25°	700.0	703.4	712.5	729.6	733.0
27.5°	677.3	681.8	694.3	712.5	715.9
30°	652.3	659.1	672.7	693.2	696.6
32.5°	627.3	634.1	651.2	671.6	676.2
35°	600.0	608.0	627.3	651.2	656.8
37.5°	571.6	581.8	604.6	628.4	635.2
40°	543.2	554.6	579.6	604.6	612.5
42.5°	514.8	526.2	553.4	581.8	589.8
45°	483.0	498.9	528.4	558.0	564.8
47.5°	452.3	469.3	502.3	531.8	540.9
50°	422.7	439.8	475.0	505.7	514.8
52.5°	392.1	410.2	447.7	479.6	487.5
55°	361.4	380.7	420.5	451.1	458.0
57.5°	330.7	351.1	392.1	421.6	429.6
60°	300.0	321.6	361.4	390.9	396.6
62.5°	269.3	292.1	333.0	359.1	364.8
65°	238.6	263.6	304.6	328.4	335.2
67.5°	209.1	234.1	273.9	296.6	302.3
70°	181.8	204.6	244.3	261.4	263.6
72.5°	147.7	176.1	214.8	223.9	218.2
75°	119.3	147.7	180.7	177.3	170.5
77.5°	90.9	119.3	140.9	129.5	120.5
80°	64.8	93.2	97.7	80.7	76.1
82.5°	42.0	64.8	54.5	42.0	34.1
85°	21.6	30.7	17.0	13.6	11.4
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)