

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: P307836

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CA08-W2A-U-3000K**

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: P307836
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-CA08-W2A-U-3000K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.08" ACRYLIC SHEET
Light Source: (168) 3000K 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: 2236.0 lumens
Efficiency: N/A
Efficacy: 114.7 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

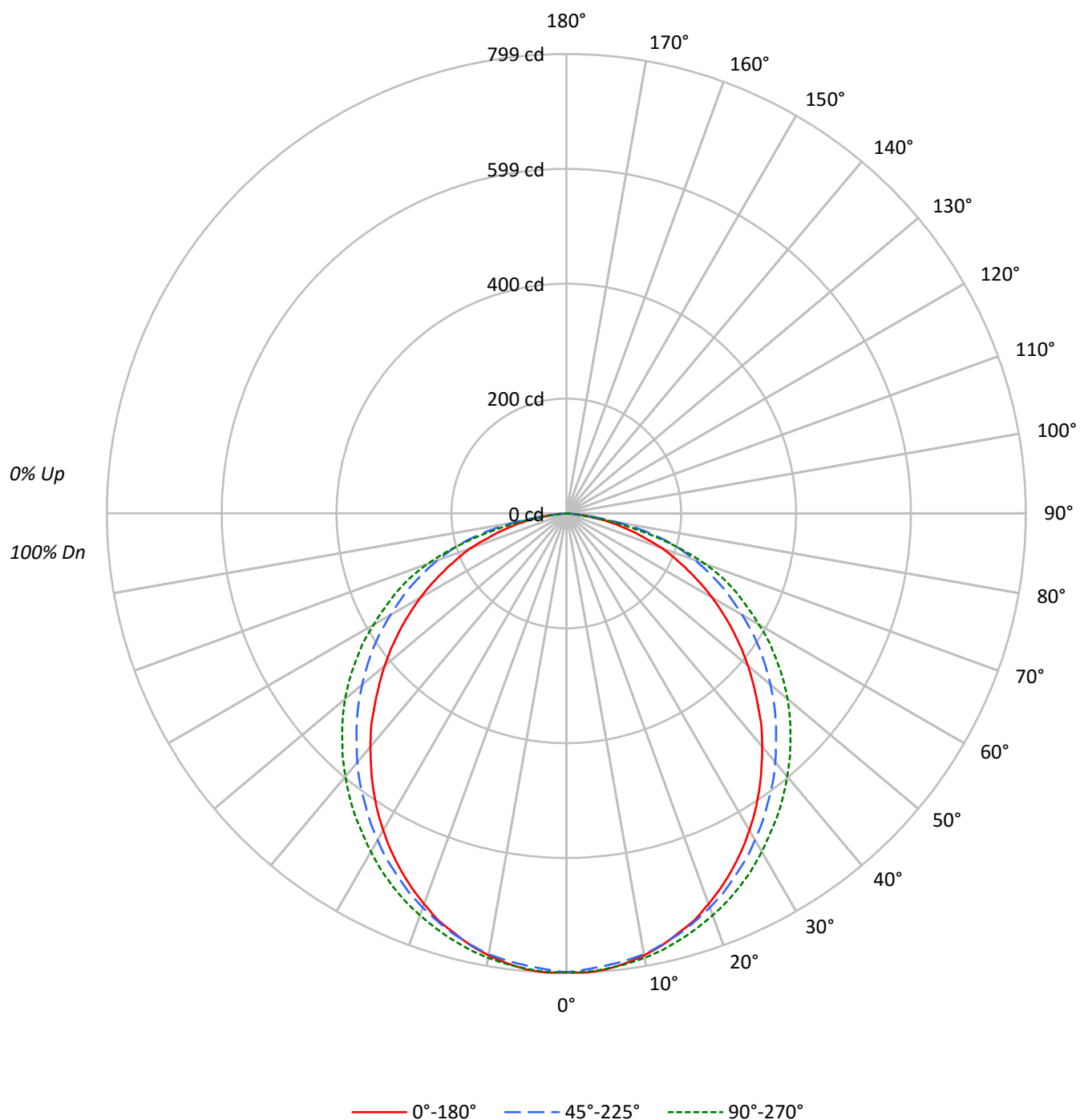
Input Watts (W): 19.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307836

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-S-CA08-W2A-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P307836

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-S-CA08-W2A-U-3000K

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°	2148	2148	2148
5°	2150	2132	2147
10°	2133	2127	2145
15°	2103	2109	2137
20°	2070	2089	2130
25°	2028	2064	2123
30°	1977	2039	2112
35°	1923	2010	2105
40°	1861	1986	2099
45°	1793	1962	2097
50°	1726	1940	2102
55°	1654	1924	2096
60°	1575	1897	2082
65°	1482	1892	2082
70°	1396	1876	2024
75°	1210	1833	1729
80°	979	1477	1151
85°	651	513	343



TEST NUMBER: P307836

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-S-CA08-W2A-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.4	3.4
10°-20°	214.5	9.6
20°-30°	321.7	14.4
30°-40°	383.8	17.2
40°-50°	396.8	17.7
50°-60°	362.2	16.2
60°-70°	285.1	12.7
70°-80°	165.9	7.4
80°-90°	30.6	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°	611.6	27.4
0°-40°	995.4	44.5
0°-60°	1754.4	78.5
0°-90°	2236.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2236.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	798	798	798	798	798	
5°	796	794	789	796	795	75
15°	755	756	757	767	767	213
25°	683	686	695	712	715	314
35°	585	593	612	635	641	366
45°	471	487	516	544	551	364
55°	352	371	410	440	447	315
65°	233	257	297	320	327	231
75°	116	144	176	173	166	124
85°	21	30	17	13	11	27
90°	0	0	0	0	0	



TEST NUMBER: P307836

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-S-CA08-W2A-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	798.2	798.2	798.2	798.2	798.2
2.5°	799.3	797.1	793.8	799.3	798.2
5°	796.0	793.8	789.3	796.0	794.9
7.5°	789.3	787.1	784.9	791.6	790.5
10°	780.5	779.4	778.3	786.0	784.9
12.5°	769.4	769.4	768.3	777.2	777.2
15°	755.0	756.1	757.2	767.2	767.2
17.5°	741.7	740.6	743.9	755.0	756.1
20°	722.8	725.0	729.5	742.8	743.9
22.5°	704.0	706.2	714.0	727.3	730.6
25°	682.9	686.2	695.1	711.7	715.1
27.5°	660.7	665.2	677.4	695.1	698.4
30°	636.4	643.0	656.3	676.3	679.6
32.5°	612.0	618.6	635.2	655.2	659.6
35°	585.4	593.1	612.0	635.2	640.8
37.5°	557.6	567.6	589.8	613.1	619.7
40°	529.9	541.0	565.4	589.8	597.6
42.5°	502.2	513.3	539.9	567.6	575.4
45°	471.2	486.7	515.5	544.3	551.0
47.5°	441.2	457.9	490.0	518.8	527.7
50°	412.4	429.0	463.4	493.3	502.2
52.5°	382.5	400.2	436.8	467.8	475.6
55°	352.5	371.4	410.2	440.1	446.8
57.5°	322.6	342.6	382.5	411.3	419.1
60°	292.7	313.7	352.5	381.4	386.9
62.5°	262.7	284.9	324.8	350.3	355.9
65°	232.8	257.2	297.1	320.4	327.0
67.5°	204.0	228.4	267.2	289.4	294.9
70°	177.4	199.6	238.4	255.0	257.2
72.5°	144.1	171.8	209.5	218.4	212.9
75°	116.4	144.1	176.3	172.9	166.3
77.5°	88.7	116.4	137.5	126.4	117.5
80°	63.2	90.9	95.3	78.7	74.3
82.5°	41.0	63.2	53.2	41.0	33.3
85°	21.1	29.9	16.6	13.3	11.1
87.5°	6.7	4.4	2.2	2.2	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)