

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: P307582

Luminaire Tested: **14FCZ2-25-UNV-L82765-CA125-W2A-U-6500K**

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: P307582
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-CA125-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 6500K 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

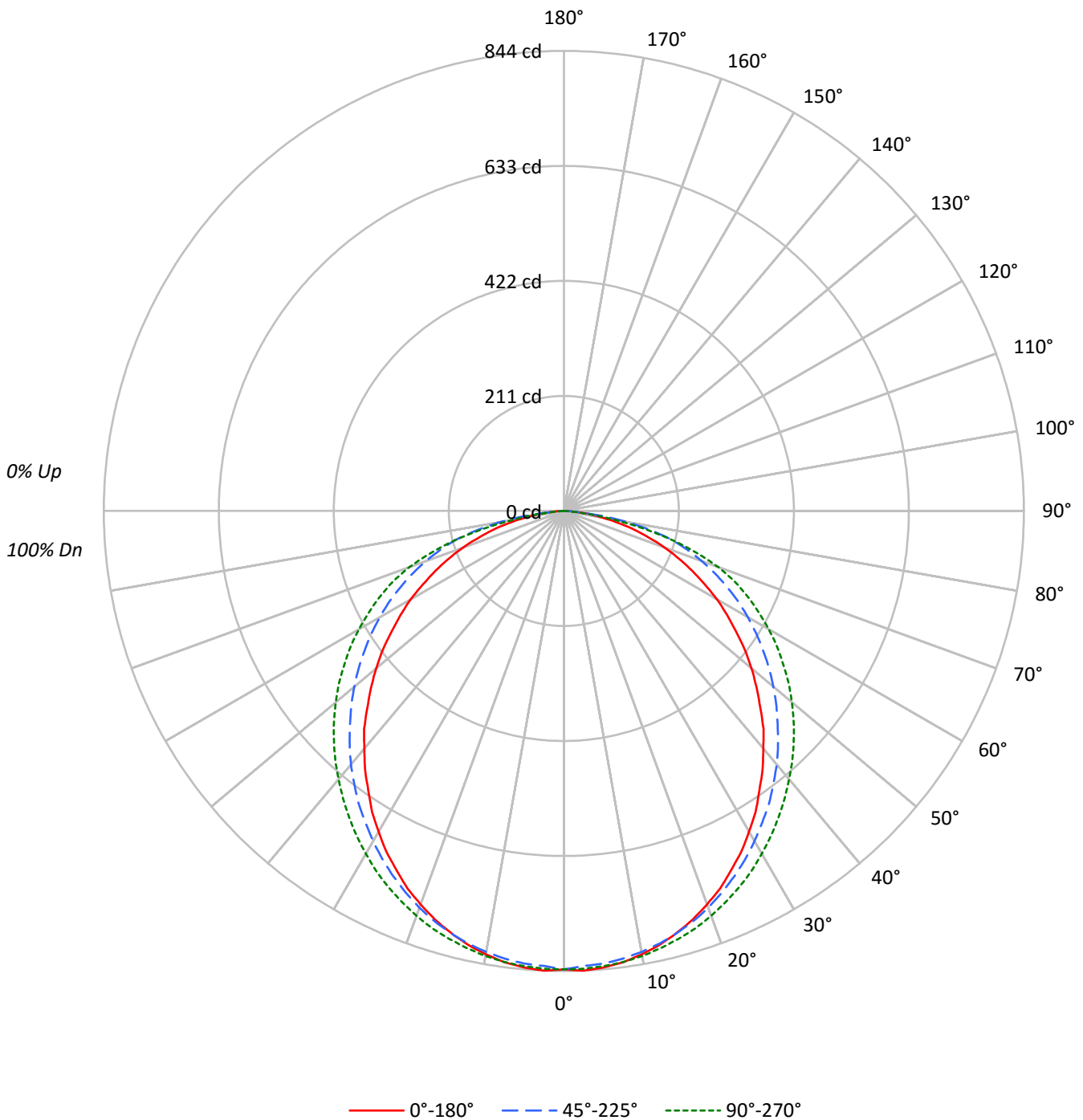
Lumens per Lamp: N/A
Luminaire Lumens: 2441.0 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 20.5
Input Voltage (V): NR
Input Current (A_{in}): 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				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2263	2263	2263
5°	2270	2251	2264
10°	2256	2244	2265
15°	2232	2233	2264
20°	2199	2218	2263
25°	2157	2196	2261
30°	2111	2173	2256
35°	2054	2155	2255
40°	2000	2134	2258
45°	1939	2111	2270
50°	1882	2101	2285
55°	1810	2094	2306
60°	1746	2097	2337
65°	1657	2104	2374
70°	1555	2120	2372
75°	1409	2139	2145
80°	1156	1847	1526
85°	858	874	352



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.6	3.3
10°-20°	227.3	9.3
20°-30°	342.4	14.0
30°-40°	410.9	16.8
40°-50°	428.3	17.5
50°-60°	396.5	16.2
60°-70°	320.3	13.1
70°-80°	195.3	8.0
80°-90°	40.3	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°	649.3	26.6
0°-40°	1060.2	43.4
0°-60°	1885.0	77.2
0°-90°	2441.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2441.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	841	841	841	841	841	
5°	840	838	833	839	838	80
15°	801	802	802	813	813	226
25°	727	731	740	758	762	335
35°	625	635	656	680	686	392
45°	510	525	555	586	596	394
55°	386	406	446	481	492	346
65°	260	286	330	364	373	257
75°	136	166	206	209	206	142
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°	840.9	840.9	840.9	840.9	840.9
2.5°	844.2	841.5	835.5	841.5	840.4
5°	840.4	838.2	833.3	839.3	838.2
7.5°	834.9	832.8	828.4	835.5	834.4
10°	825.7	824.6	821.3	829.5	829.0
12.5°	814.8	814.3	812.6	821.9	821.3
15°	801.2	801.7	801.7	812.6	812.6
17.5°	786.0	787.0	789.2	801.2	802.8
20°	768.0	770.2	774.5	788.1	790.3
22.5°	749.5	751.1	757.7	774.0	776.2
25°	726.6	731.0	739.7	758.2	761.5
27.5°	704.9	708.7	720.6	739.7	745.1
30°	679.3	685.3	699.4	720.1	726.1
32.5°	654.8	661.3	677.6	701.6	707.0
35°	625.4	635.2	655.9	679.8	686.4
37.5°	598.7	608.0	631.4	657.5	665.1
40°	569.3	580.8	607.4	635.2	642.8
42.5°	542.1	553.0	581.8	610.2	620.5
45°	509.5	524.7	554.6	585.7	596.5
47.5°	479.5	494.8	529.1	562.3	572.1
50°	449.6	465.9	501.8	536.1	545.9
52.5°	418.6	436.0	474.6	508.9	520.3
55°	385.9	406.0	446.3	481.2	491.5
57.5°	354.9	375.6	418.6	453.9	464.3
60°	324.4	345.6	389.7	423.5	434.3
62.5°	290.7	315.7	361.4	394.6	402.8
65°	260.2	285.8	330.4	363.6	372.8
67.5°	228.1	255.8	300.4	330.9	339.6
70°	197.6	226.4	269.4	297.7	301.5
72.5°	164.9	194.3	237.9	255.8	255.8
75°	135.5	165.5	205.7	209.0	206.3
77.5°	103.4	136.6	162.7	156.2	149.7
80°	74.6	107.2	119.2	107.2	98.5
82.5°	50.1	77.8	71.8	57.2	50.6
85°	27.8	41.4	28.3	15.8	11.4
87.5°	10.3	9.3	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)