

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: P307848

Luminaire Tested: **14FCZ2-25-UNV-L82765-S-CA125-W2A-U-4500K**

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: P307848
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-CA125-W2A-U-4500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS,0.125" ACRYLIC SHEET
Light Source: (168) 4500K 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: 2398.0 lumens
Efficiency: N/A
Efficacy: 119.9 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

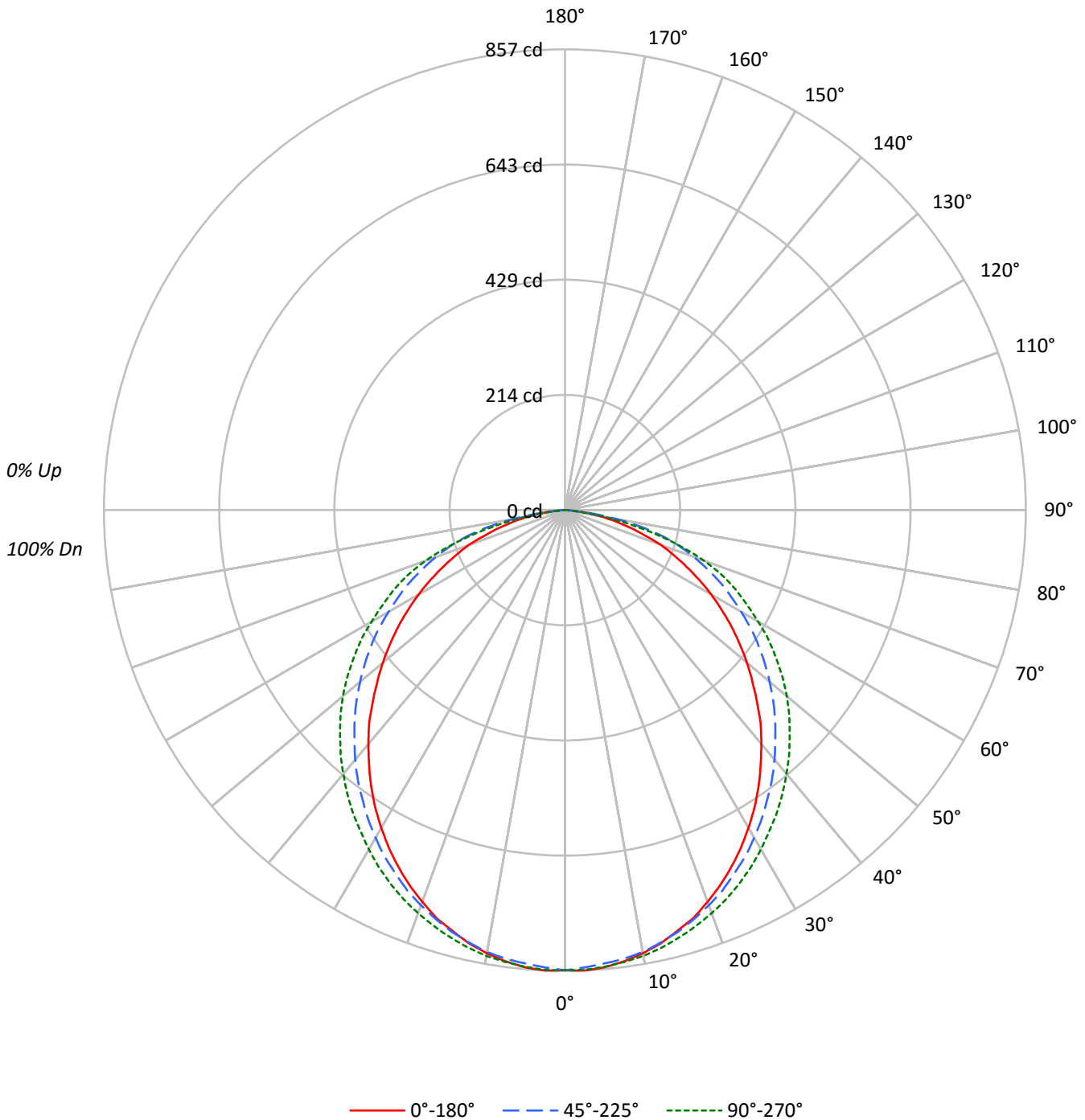
Input Watts (W): 20
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307848

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-S-CA125-W2A-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P307848

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-S-CA125-W2A-U-4500K

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	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2303	2303	2303
5°	2306	2287	2303
10°	2287	2281	2300
15°	2256	2262	2292
20°	2220	2240	2285
25°	2175	2214	2277
30°	2121	2187	2265
35°	2062	2156	2258
40°	1996	2130	2251
45°	1923	2104	2249
50°	1852	2081	2255
55°	1774	2064	2248
60°	1689	2035	2233
65°	1590	2029	2233
70°	1496	2011	2170
75°	1298	1965	1854
80°	1051	1584	1235
85°	698	550	367



TEST NUMBER: P307848

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-S-CA125-W2A-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	3.4
10°-20°	230.0	9.6
20°-30°	345.1	14.4
30°-40°	411.6	17.2
40°-50°	425.5	17.7
50°-60°	388.5	16.2
60°-70°	305.7	12.7
70°-80°	178.0	7.4
80°-90°	32.8	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°	655.9	27.4
0°-40°	1067.5	44.5
0°-60°	1881.5	78.5
0°-90°	2398.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2398.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	856	856	856	856	856	
5°	854	851	846	854	852	81
15°	810	811	812	823	823	228
25°	732	736	746	763	767	337
35°	628	636	656	681	687	392
45°	505	522	553	584	591	390
55°	378	398	440	472	479	338
65°	250	276	319	344	351	248
75°	125	155	189	186	178	133
85°	23	32	18	14	12	29
90°	0	0	0	0	0	



TEST NUMBER: P307848

CATALOG NUMBER: 14FCZ2-25-UNV-L82765-S-CA125-W2A-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	856.0	856.0	856.0	856.0	856.0
2.5°	857.2	854.9	851.3	857.2	856.0
5°	853.7	851.3	846.5	853.7	852.5
7.5°	846.5	844.2	841.8	848.9	847.7
10°	837.0	835.8	834.6	843.0	841.8
12.5°	825.1	825.1	823.9	833.5	833.5
15°	809.7	810.9	812.1	822.8	822.8
17.5°	795.4	794.2	797.8	809.7	810.9
20°	775.2	777.6	782.3	796.6	797.8
22.5°	755.0	757.4	765.7	780.0	783.5
25°	732.4	736.0	745.5	763.3	766.9
27.5°	708.6	713.4	726.5	745.5	749.0
30°	682.5	689.6	703.9	725.3	728.8
32.5°	656.3	663.4	681.3	702.7	707.4
35°	627.8	636.1	656.3	681.3	687.2
37.5°	598.0	608.7	632.5	657.5	664.6
40°	568.3	580.2	606.4	632.5	640.8
42.5°	538.6	550.5	579.0	608.7	617.1
45°	505.3	522.0	552.9	583.8	590.9
47.5°	473.2	491.0	525.5	556.4	565.9
50°	442.3	460.1	497.0	529.1	538.6
52.5°	410.2	429.2	468.4	501.7	510.1
55°	378.1	398.3	439.9	472.0	479.1
57.5°	346.0	367.4	410.2	441.1	449.4
60°	313.9	336.5	378.1	409.0	414.9
62.5°	281.8	305.6	348.4	375.7	381.7
65°	249.7	275.8	318.6	343.6	350.7
67.5°	218.8	244.9	286.5	310.3	316.3
70°	190.2	214.0	255.6	273.5	275.8
72.5°	154.6	184.3	224.7	234.2	228.3
75°	124.8	154.6	189.0	185.5	178.3
77.5°	95.1	124.8	147.4	135.5	126.0
80°	67.8	97.5	102.2	84.4	79.7
82.5°	44.0	67.8	57.1	44.0	35.7
85°	22.6	32.1	17.8	14.3	11.9
87.5°	7.1	4.8	2.4	2.4	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)