

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: P307513

Luminaire Tested: **14FCZ2-44-UNV-L82765-RDP-CP250-W2A-U-3500K**

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: P307513
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-44-UNV-L82765-RDP-CP250-W2A-U-3500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET
Light Source: (168) 3500K 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: 2417.0 lumens
Efficiency: N/A
Efficacy: 62.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

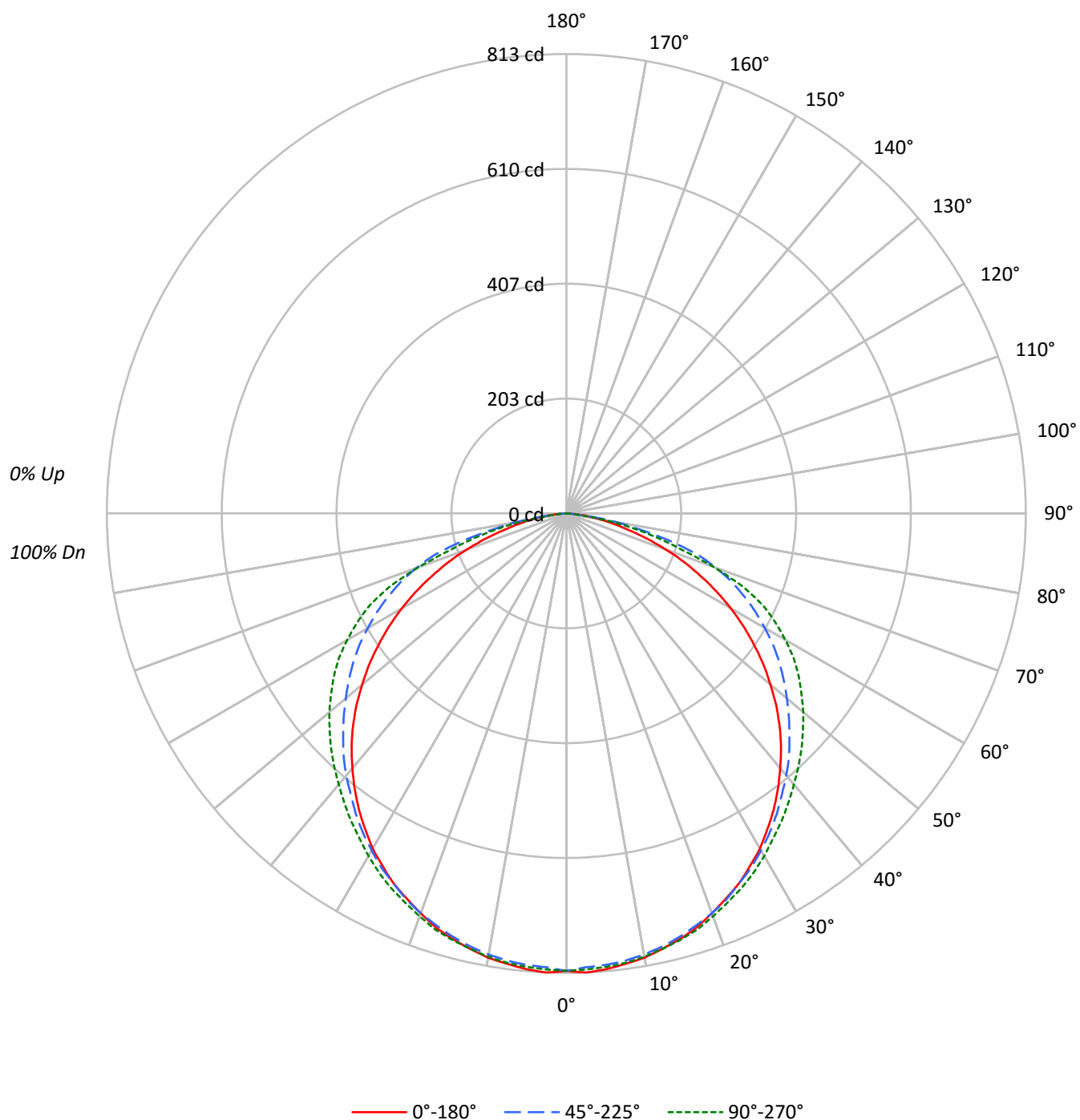
Input Watts (W): 38.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307513

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-RDP-CP250-W2A-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P307513

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-RDP-CP250-W2A-U-3500K

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		93	91	88		84
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		58
4	82	70	61	54	80	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2178	2178	2178
5°	2187	2166	2176
10°	2181	2165	2176
15°	2171	2160	2176
20°	2156	2156	2172
25°	2146	2146	2174
30°	2128	2140	2175
35°	2101	2132	2182
40°	2068	2128	2201
45°	2032	2125	2240
50°	1975	2133	2291
55°	1903	2160	2355
60°	1808	2183	2407
65°	1670	2211	2439
70°	1485	2227	2183
75°	1197	2001	1746
80°	936	1404	1141
85°	642	408	290



TEST NUMBER: P307513

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-RDP-CP250-W2A-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.6	3.2
10°-20°	219.8	9.1
20°-30°	334.7	13.8
30°-40°	407.7	16.9
40°-50°	432.5	17.9
50°-60°	408.2	16.9
60°-70°	329.6	13.6
70°-80°	178.8	7.4
80°-90°	28.9	1.2
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°	631.2	26.1
0°-40°	1038.9	43.0
0°-60°	1879.7	77.8
0°-90°	2417.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2417.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	810	808	802	808	806	77
15°	779	777	776	781	781	220
25°	723	721	723	730	732	333
35°	640	644	649	662	664	400
45°	534	542	558	579	589	411
55°	406	423	460	491	502	362
65°	262	294	347	376	383	260
75°	115	168	192	174	168	126
85°	21	23	13	11	9	27
90°	0	0	0	0	0	



TEST NUMBER: P307513

CATALOG NUMBER: 14FCZ2-44-UNV-L82765-RDP-CP250-W2A-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	809.5	809.5	809.5	809.5	809.5
2.5°	813.3	809.5	803.9	809.5	807.6
5°	809.5	807.6	802.0	807.6	805.7
7.5°	803.9	803.9	798.2	802.0	802.0
10°	798.2	796.3	792.5	798.2	796.3
12.5°	788.8	786.9	785.0	790.6	788.8
15°	779.3	777.4	775.5	781.2	781.2
17.5°	768.0	766.1	764.2	771.8	771.8
20°	752.9	752.9	752.9	760.5	758.6
22.5°	737.8	737.8	739.7	747.2	745.4
25°	722.7	720.8	722.7	730.3	732.1
27.5°	703.8	705.7	707.6	715.2	717.1
30°	685.0	686.9	688.7	698.2	700.1
32.5°	662.3	666.1	669.9	681.2	681.2
35°	639.7	643.5	649.1	662.3	664.2
37.5°	615.2	618.9	626.5	641.6	645.3
40°	588.7	594.4	605.7	620.8	626.5
42.5°	562.3	569.9	583.1	600.1	607.6
45°	534.0	541.6	558.5	579.3	588.7
47.5°	503.8	513.3	534.0	560.4	568.0
50°	471.7	485.0	509.5	537.8	547.2
52.5°	439.7	454.8	485.0	515.1	524.6
55°	405.7	422.7	460.4	490.6	501.9
57.5°	371.7	390.6	434.0	466.1	477.4
60°	335.9	358.5	405.7	437.8	447.2
62.5°	300.0	326.4	377.4	409.5	417.0
65°	262.3	294.4	347.2	375.5	383.1
67.5°	226.4	264.2	317.0	337.8	337.8
70°	188.7	230.2	283.0	288.7	277.4
72.5°	151.0	198.1	245.3	224.6	215.1
75°	115.1	167.9	192.5	173.6	167.9
77.5°	86.8	135.9	135.9	124.5	120.8
80°	60.4	103.8	90.6	79.3	73.6
82.5°	39.6	58.5	47.2	37.7	32.1
85°	20.8	22.6	13.2	11.3	9.4
87.5°	7.5	3.8	1.9	3.8	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)