

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: P307276

Luminaire Tested: **14FCZ2-20-UNV-L82765-RDP-CP125-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: P307276
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: 14FCZ2-20-UNV-L82765-RDP-CP125-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.125" POLYCARB 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: 1316.0 lumens
Efficiency: N/A
Efficacy: 76.5 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

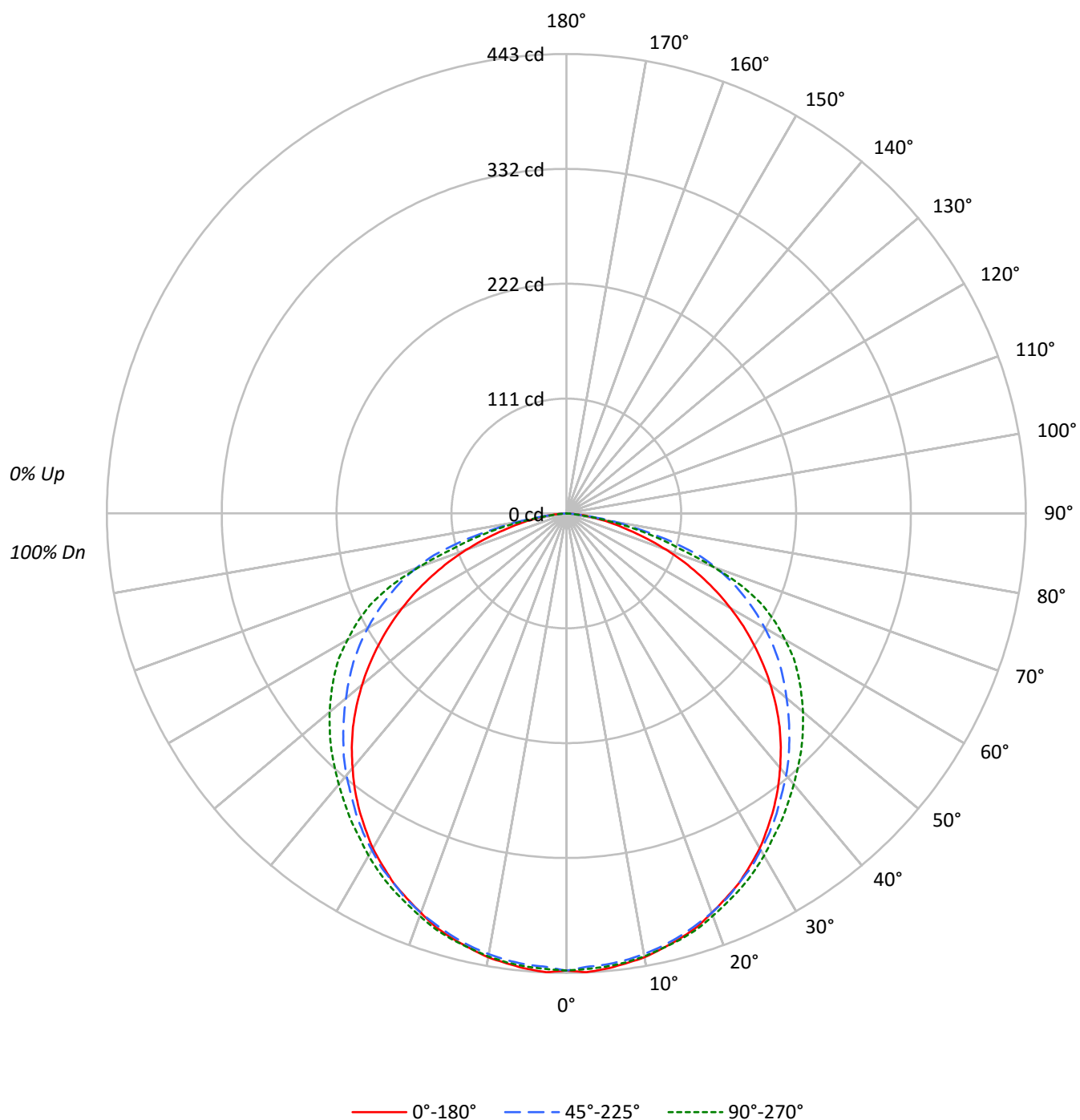
Input Watts (W): 17.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P307276

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-RDP-CP125-W2A-U-6500K

Luminous Intensity Polar Plot





TEST NUMBER: P307276

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-RDP-CP125-W2A-U-6500K

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°	1186	1186	1186
5°	1191	1180	1185
10°	1188	1179	1185
15°	1182	1176	1185
20°	1174	1174	1183
25°	1168	1168	1184
30°	1159	1165	1184
35°	1144	1161	1188
40°	1126	1159	1198
45°	1107	1157	1220
50°	1075	1161	1248
55°	1036	1176	1282
60°	984	1189	1311
65°	909	1203	1328
70°	808	1212	1188
75°	652	1090	950
80°	510	764	621
85°	349	222	157



TEST NUMBER: P307276

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-RDP-CP125-W2A-U-6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.7	3.2
10°-20°	119.7	9.1
20°-30°	182.3	13.8
30°-40°	222.0	16.9
40°-50°	235.5	17.9
50°-60°	222.3	16.9
60°-70°	179.5	13.6
70°-80°	97.4	7.4
80°-90°	15.8	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°	343.7	26.1
0°-40°	565.6	43.0
0°-60°	1023.4	77.8
0°-90°	1316.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1316.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	441	441	441	441	441	
5°	441	440	437	440	439	42
15°	424	423	422	425	425	120
25°	394	392	394	398	399	181
35°	348	350	353	361	362	218
45°	291	295	304	315	321	224
55°	221	230	251	267	273	197
65°	143	160	189	204	209	142
75°	63	91	105	94	91	68
85°	11	12	7	6	5	15
90°	0	0	0	0	0	



TEST NUMBER: P307276

CATALOG NUMBER: 14FCZ2-20-UNV-L82765-RDP-CP125-W2A-U-6500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	440.8	440.8	440.8	440.8	440.8
2.5°	442.8	440.8	437.7	440.8	439.7
5°	440.8	439.7	436.7	439.7	438.7
7.5°	437.7	437.7	434.6	436.7	436.7
10°	434.6	433.6	431.5	434.6	433.6
12.5°	429.5	428.4	427.4	430.5	429.5
15°	424.3	423.3	422.3	425.4	425.4
17.5°	418.2	417.1	416.1	420.2	420.2
20°	409.9	409.9	409.9	414.0	413.0
22.5°	401.7	401.7	402.7	406.9	405.8
25°	393.5	392.5	393.5	397.6	398.6
27.5°	383.2	384.3	385.3	389.4	390.4
30°	373.0	374.0	375.0	380.1	381.2
32.5°	360.6	362.7	364.7	370.9	370.9
35°	348.3	350.3	353.4	360.6	361.7
37.5°	334.9	337.0	341.1	349.3	351.4
40°	320.6	323.6	329.8	338.0	341.1
42.5°	306.2	310.3	317.5	326.7	330.8
45°	290.8	294.9	304.1	315.4	320.6
47.5°	274.3	279.5	290.8	305.1	309.3
50°	256.9	264.0	277.4	292.8	298.0
52.5°	239.4	247.6	264.0	280.5	285.6
55°	220.9	230.1	250.7	267.1	273.3
57.5°	202.4	212.7	236.3	253.8	259.9
60°	182.9	195.2	220.9	238.4	243.5
62.5°	163.4	177.7	205.5	222.9	227.1
65°	142.8	160.3	189.0	204.5	208.6
67.5°	123.3	143.8	172.6	183.9	183.9
70°	102.7	125.3	154.1	157.2	151.0
72.5°	82.2	107.9	133.6	122.3	117.1
75°	62.7	91.4	104.8	94.5	91.4
77.5°	47.3	74.0	74.0	67.8	65.8
80°	32.9	56.5	49.3	43.2	40.1
82.5°	21.6	31.8	25.7	20.5	17.5
85°	11.3	12.3	7.2	6.2	5.1
87.5°	4.1	2.1	1.0	2.1	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)