

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: P307334

Luminaire Tested: **14FCZ2-25-UNV-L82765-RDP-CP250-W2A-U-4000K**

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: P307334
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: 14FCZ2-25-UNV-L82765-RDP-CP250-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT , 0.250" POLYCARB SHEET
Light Source: (168) 4000K 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: 1394.0 lumens
Efficiency: N/A
Efficacy: 70.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

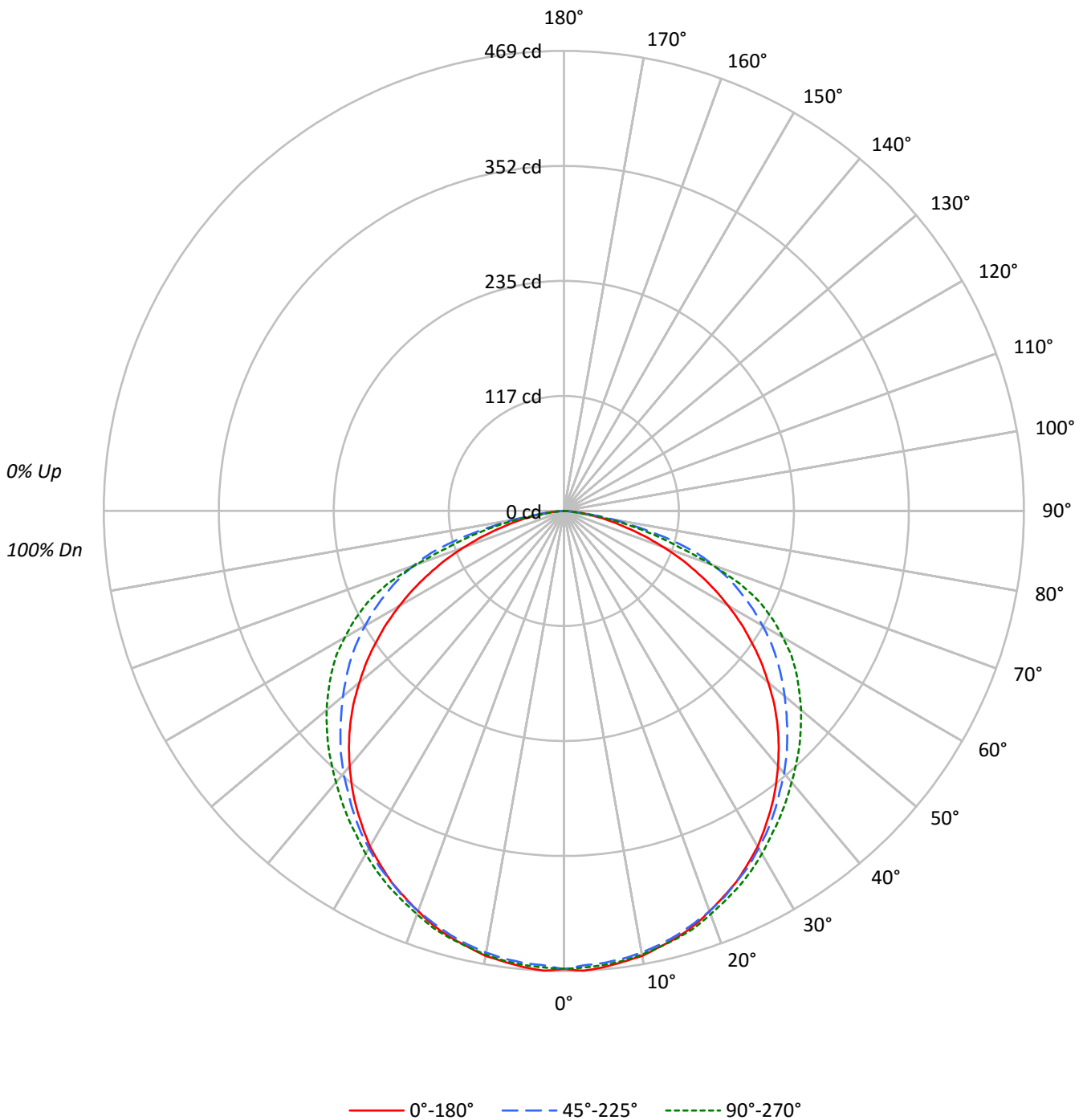
Input Watts (W): 19.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1256	1256	1256
5°	1261	1249	1255
10°	1258	1249	1255
15°	1252	1246	1255
20°	1243	1243	1253
25°	1238	1238	1254
30°	1228	1234	1255
35°	1212	1230	1259
40°	1193	1227	1269
45°	1172	1226	1292
50°	1139	1230	1321
55°	1098	1246	1358
60°	1042	1259	1388
65°	963	1275	1407
70°	856	1284	1259
75°	690	1154	1007
80°	539	809	657
85°	371	235	167



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.2	3.2
10°-20°	126.8	9.1
20°-30°	193.1	13.8
30°-40°	235.1	16.9
40°-50°	249.5	17.9
50°-60°	235.4	16.9
60°-70°	190.1	13.6
70°-80°	103.1	7.4
80°-90°	16.7	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°	364.0	26.1
0°-40°	599.2	43.0
0°-60°	1084.1	77.8
0°-90°	1394.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1394.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	467	467	467	467	467	
5°	467	466	462	466	465	44
15°	450	448	447	451	451	127
25°	417	416	417	421	422	192
35°	369	371	374	382	383	231
45°	308	312	322	334	340	237
55°	234	244	266	283	290	209
65°	151	170	200	217	221	150
75°	66	97	111	100	97	73
85°	12	13	8	6	5	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	466.9	466.9	466.9	466.9	466.9
2.5°	469.1	466.9	463.6	466.9	465.8
5°	466.9	465.8	462.5	465.8	464.7
7.5°	463.6	463.6	460.4	462.5	462.5
10°	460.4	459.3	457.1	460.4	459.3
12.5°	454.9	453.8	452.7	456.0	454.9
15°	449.5	448.4	447.3	450.6	450.6
17.5°	442.9	441.9	440.8	445.1	445.1
20°	434.2	434.2	434.2	438.6	437.5
22.5°	425.5	425.5	426.6	431.0	429.9
25°	416.8	415.7	416.8	421.2	422.3
27.5°	405.9	407.0	408.1	412.5	413.6
30°	395.1	396.1	397.2	402.7	403.8
32.5°	382.0	384.2	386.4	392.9	392.9
35°	368.9	371.1	374.4	382.0	383.1
37.5°	354.8	357.0	361.3	370.0	372.2
40°	339.6	342.8	349.3	358.1	361.3
42.5°	324.3	328.7	336.3	346.1	350.4
45°	308.0	312.3	322.1	334.1	339.6
47.5°	290.6	296.0	308.0	323.2	327.6
50°	272.1	279.7	293.8	310.2	315.6
52.5°	253.6	262.3	279.7	297.1	302.6
55°	234.0	243.8	265.5	283.0	289.5
57.5°	214.4	225.3	250.3	268.8	275.3
60°	193.7	206.8	234.0	252.5	257.9
62.5°	173.0	188.3	217.7	236.2	240.5
65°	151.3	169.8	200.2	216.6	220.9
67.5°	130.6	152.4	182.8	194.8	194.8
70°	108.8	132.8	163.2	166.5	160.0
72.5°	87.1	114.3	141.5	129.5	124.1
75°	66.4	96.9	111.0	100.1	96.9
77.5°	50.1	78.4	78.4	71.8	69.7
80°	34.8	59.9	52.2	45.7	42.4
82.5°	22.9	33.7	27.2	21.8	18.5
85°	12.0	13.1	7.6	6.5	5.4
87.5°	4.4	2.2	1.1	2.2	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)