

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: P313675

Luminaire Tested: **24FCZ2-55HE-UNV-L83050-RDP-CP125-W2A-U-3000K**

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: P313675
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24FCZ2-55HE-UNV-L83050-RDP-CP125-W2A-U-3000K
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" POLYCARB SHEET
Light Source: (336) 3000K 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: 3151.0 lumens
Efficiency: N/A
Efficacy: 73.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

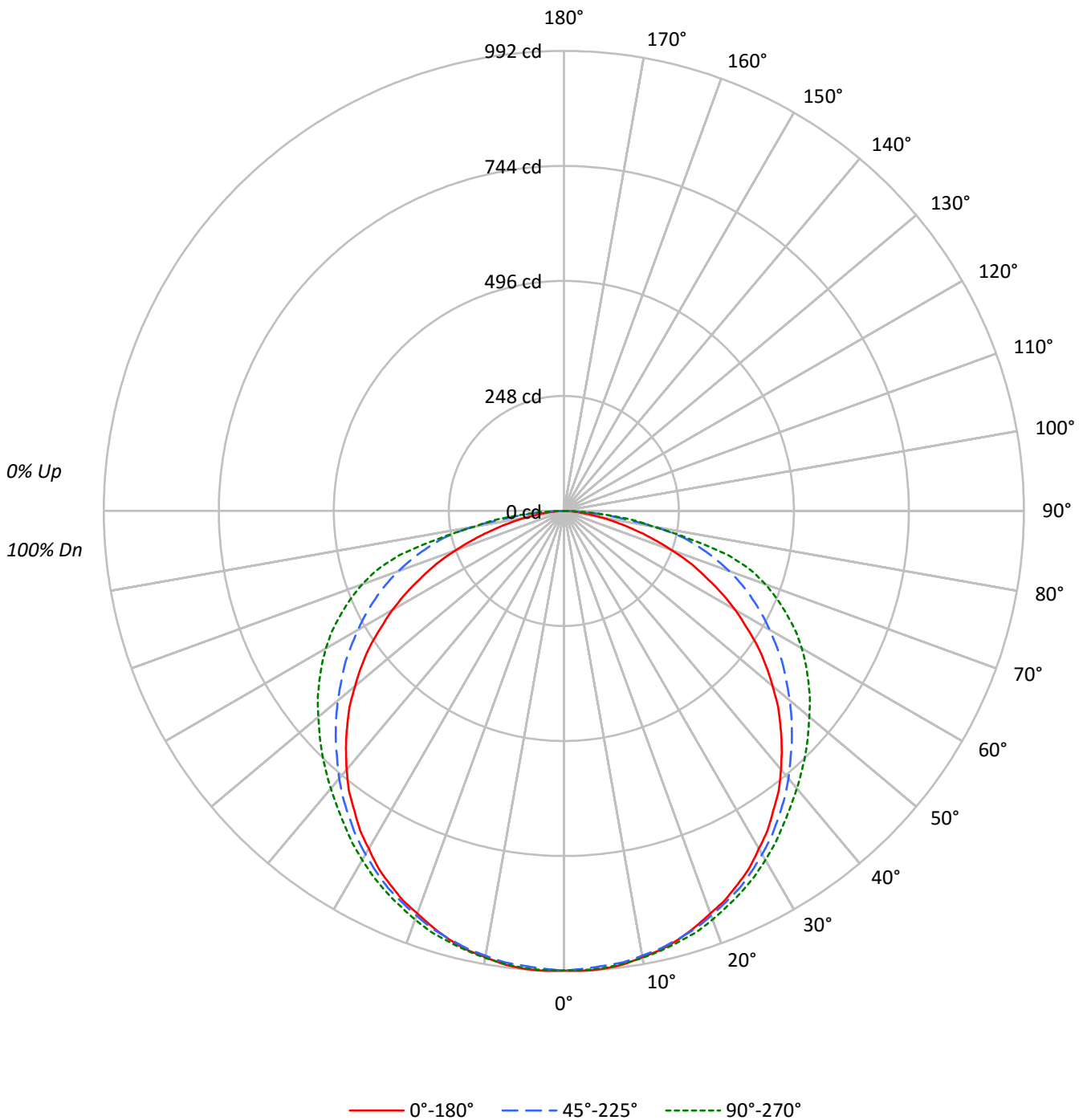
Input Watts (W): 43
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82				82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67				67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56				56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47				47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40				40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35				35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31				31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27				27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24				24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22				22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1333	1333	1333
5°	1338	1330	1336
10°	1335	1330	1337
15°	1332	1330	1339
20°	1323	1329	1343
25°	1318	1332	1346
30°	1306	1328	1350
35°	1294	1325	1355
40°	1279	1323	1373
45°	1258	1323	1404
50°	1230	1331	1446
55°	1199	1353	1510
60°	1148	1379	1594
65°	1075	1428	1692
70°	978	1494	1820
75°	829	1576	1901
80°	654	1586	1538
85°	483	1206	1351



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.0	3.0
10°-20°	270.5	8.6
20°-30°	413.7	13.1
30°-40°	505.7	16.0
40°-50°	539.0	17.1
50°-60°	515.3	16.4
60°-70°	436.6	13.9
70°-80°	293.4	9.3
80°-90°	82.8	2.6
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°	778.2	24.7
0°-40°	1283.9	40.7
0°-60°	2338.2	74.2
0°-90°	3151.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3151.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	991	991	991	991	991	
5°	991	989	985	989	989	94
15°	956	956	955	963	961	270
25°	888	891	897	905	906	409
35°	788	794	806	822	825	493
45°	661	672	696	725	738	510
55°	511	530	577	622	644	455
65°	338	372	449	508	531	335
75°	159	217	303	355	366	171
85°	31	64	78	84	88	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	990.9	990.9	990.9	990.9	990.9
2.5°	992.5	992.5	987.8	990.9	990.9
5°	990.9	989.3	984.6	989.3	989.3
7.5°	986.2	984.6	981.5	986.2	984.6
10°	976.8	976.8	973.7	978.4	978.4
12.5°	969.0	967.5	965.9	972.1	970.6
15°	956.5	956.5	955.0	962.8	961.2
17.5°	940.9	942.4	944.0	950.3	951.8
20°	923.7	926.8	928.4	937.8	937.8
22.5°	908.1	909.6	912.8	922.1	922.1
25°	887.7	890.9	897.1	904.9	906.5
27.5°	867.4	869.0	876.8	887.7	889.3
30°	840.9	845.5	854.9	867.4	869.0
32.5°	817.4	822.1	833.0	845.5	848.7
35°	787.7	794.0	806.5	822.1	825.2
37.5°	761.1	765.8	781.5	798.7	803.3
40°	728.3	737.7	753.3	773.7	781.5
42.5°	695.5	704.9	723.6	750.2	759.6
45°	661.1	672.1	695.5	725.2	737.7
47.5°	626.7	639.2	665.8	700.2	714.3
50°	587.7	603.3	636.1	675.2	690.8
52.5°	550.2	568.9	604.9	648.6	668.9
55°	511.1	529.8	576.7	622.0	643.9
57.5°	467.3	492.3	543.9	595.5	618.9
60°	426.7	450.1	512.6	568.9	592.4
62.5°	382.9	414.2	481.4	540.8	564.2
65°	337.6	372.0	448.6	508.0	531.4
67.5°	297.0	334.5	415.7	475.1	498.6
70°	248.5	295.4	379.8	439.2	462.6
72.5°	203.2	254.8	342.3	400.1	422.0
75°	159.4	217.2	303.2	354.8	365.7
77.5°	118.8	179.7	262.6	284.5	276.6
80°	84.4	143.8	204.7	193.8	198.5
82.5°	54.7	109.4	126.6	143.8	148.5
85°	31.3	64.1	78.1	84.4	87.5
87.5°	14.1	23.4	31.3	31.3	29.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)