

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: P310283

Luminaire Tested: **24FCZ2-55HE-UNV-L82765-RDP-CP125-W2A-U-2700K**

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: P310283
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-L82765-RDP-CP125-W2A-U-2700K
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" POLYCARB SHEET
Light Source: (336) 2700K 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: 3060.0 lumens
Efficiency: N/A
Efficacy: 71.0 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

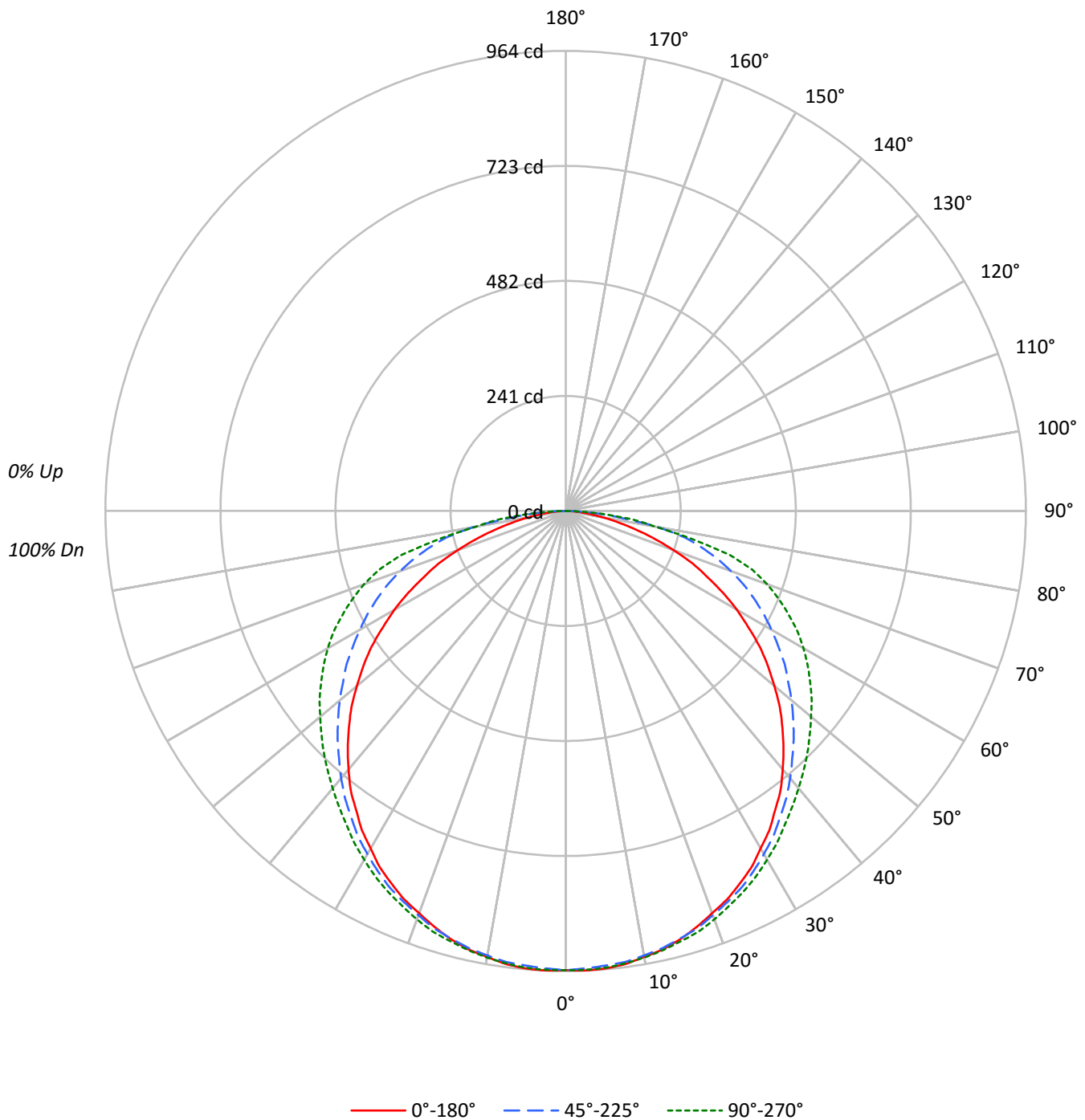
Input Watts (W): 43.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1295	1295	1295
5°	1300	1291	1298
10°	1296	1292	1298
15°	1294	1292	1300
20°	1284	1291	1304
25°	1280	1293	1307
30°	1269	1290	1311
35°	1257	1286	1316
40°	1242	1285	1333
45°	1222	1285	1363
50°	1195	1293	1404
55°	1164	1314	1467
60°	1115	1340	1548
65°	1044	1387	1643
70°	949	1451	1768
75°	805	1531	1847
80°	635	1540	1494
85°	469	1172	1312



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.3	3.0
10°-20°	262.7	8.6
20°-30°	401.7	13.1
30°-40°	491.1	16.0
40°-50°	523.4	17.1
50°-60°	500.5	16.4
60°-70°	424.0	13.9
70°-80°	284.9	9.3
80°-90°	80.4	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°	755.7	24.7
0°-40°	1246.8	40.7
0°-60°	2270.7	74.2
0°-90°	3060.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3060.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	962	962	962	962	962	
5°	962	961	956	961	961	91
15°	929	929	927	935	933	262
25°	862	865	871	879	880	397
35°	765	771	783	798	801	479
45°	642	653	675	704	716	495
55°	496	514	560	604	625	442
65°	328	361	436	493	516	325
75°	155	211	294	344	355	166
85°	30	62	76	82	85	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	962.3	962.3	962.3	962.3	962.3
2.5°	963.8	963.8	959.2	962.3	962.3
5°	962.3	960.8	956.2	960.8	960.8
7.5°	957.7	956.2	953.2	957.7	956.2
10°	948.6	948.6	945.6	950.1	950.1
12.5°	941.0	939.5	938.0	944.1	942.6
15°	928.9	928.9	927.4	935.0	933.4
17.5°	913.7	915.2	916.7	922.8	924.3
20°	897.0	900.1	901.6	910.7	910.7
22.5°	881.8	883.4	886.4	895.5	895.5
25°	862.1	865.1	871.2	878.8	880.3
27.5°	842.4	843.9	851.5	862.1	863.6
30°	816.6	821.1	830.2	842.4	843.9
32.5°	793.8	798.4	809.0	821.1	824.2
35°	765.0	771.0	783.2	798.4	801.4
37.5°	739.2	743.7	758.9	775.6	780.1
40°	707.3	716.4	731.6	751.3	758.9
42.5°	675.4	684.5	702.7	728.5	737.6
45°	642.0	652.7	675.4	704.3	716.4
47.5°	608.6	620.8	646.6	680.0	693.6
50°	570.7	585.9	617.7	655.7	670.9
52.5°	534.3	552.5	587.4	629.9	649.6
55°	496.3	514.5	560.1	604.1	625.3
57.5°	453.8	478.1	528.2	578.3	601.0
60°	414.4	437.1	497.8	552.5	575.2
62.5°	371.9	402.2	467.5	525.2	547.9
65°	327.8	361.2	435.6	493.3	516.1
67.5°	288.4	324.8	403.7	461.4	484.2
70°	241.3	286.9	368.8	426.5	449.3
72.5°	197.3	247.4	332.4	388.6	409.8
75°	154.8	211.0	294.5	344.5	355.2
77.5°	115.4	174.5	255.0	276.2	268.6
80°	82.0	139.6	198.8	188.2	192.8
82.5°	53.1	106.2	122.9	139.6	144.2
85°	30.4	62.2	75.9	82.0	85.0
87.5°	13.7	22.8	30.4	30.4	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)