

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: P309119

Luminaire Tested: **22FCZ2-44HE-UNV-L82765-S-CP125-W2A-U-5500K**

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: P309119
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22FCZ2-44HE-UNV-L82765-S-CP125-W2A-U-5500K
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS, 0.125" POLYCARB SHEET
Light Source: (168) 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: 4264.0 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

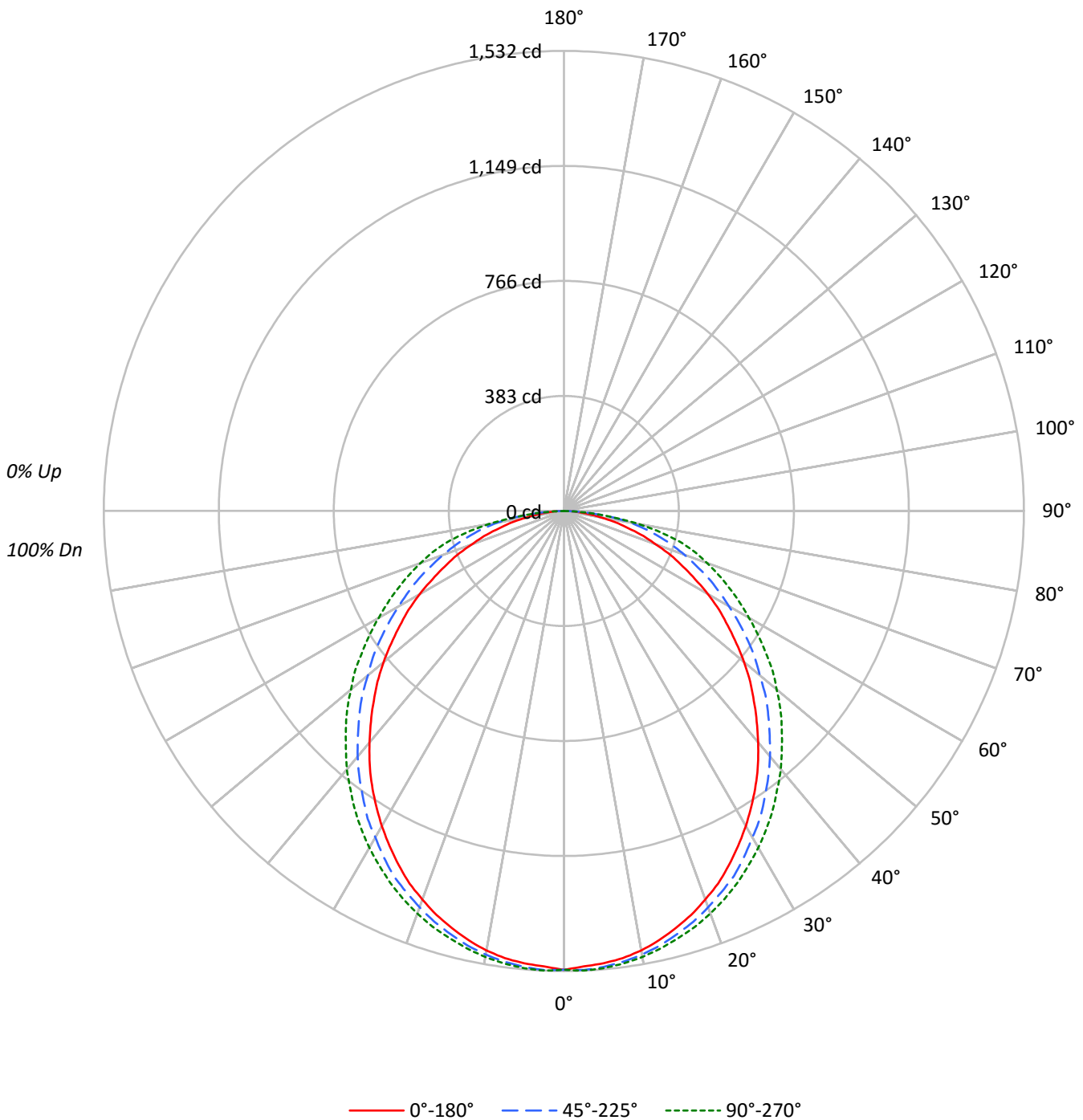
Input Watts (W): 38.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4112	4112	4112
5°	4084	4116	4127
10°	4061	4099	4121
15°	4007	4063	4101
20°	3942	4022	4085
25°	3863	3981	4058
30°	3765	3901	4025
35°	3660	3830	3987
40°	3536	3753	3949
45°	3407	3664	3907
50°	3282	3565	3873
55°	3127	3500	3846
60°	2988	3415	3833
65°	2787	3395	3876
70°	2567	3365	3991
75°	2316	3413	4199
80°	2004	3515	3947
85°	1658	2949	2949



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.5	3.4
10°-20°	411.2	9.6
20°-30°	615.3	14.4
30°-40°	728.6	17.1
40°-50°	742.6	17.4
50°-60°	665.6	15.6
60°-70°	521.1	12.2
70°-80°	336.0	7.9
80°-90°	99.2	2.3
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°	1171.0	27.5
0°-40°	1899.6	44.5
0°-60°	3307.7	77.6
0°-90°	4264.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4264.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1528	1528	1528	1528	1528	
5°	1512	1516	1524	1526	1528	144
15°	1438	1446	1458	1470	1472	406
25°	1301	1313	1341	1359	1367	599
35°	1114	1128	1166	1202	1214	696
45°	895	915	963	1013	1027	691
55°	666	688	746	798	820	598
65°	438	464	533	585	609	435
75°	223	257	328	384	404	239
85°	54	74	96	96	96	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1527.9	1527.9	1527.9	1527.9	1527.9
2.5°	1518.0	1522.0	1529.9	1531.9	1531.9
5°	1512.0	1516.0	1523.9	1525.9	1527.9
7.5°	1502.1	1504.1	1514.0	1518.0	1520.0
10°	1486.1	1490.1	1500.1	1506.0	1508.0
12.5°	1464.3	1470.2	1482.2	1490.1	1492.1
15°	1438.4	1446.4	1458.3	1470.2	1472.2
17.5°	1410.5	1418.5	1434.4	1448.3	1452.3
20°	1376.7	1386.7	1404.6	1420.5	1426.5
22.5°	1342.9	1350.9	1372.7	1392.6	1398.6
25°	1301.1	1313.1	1340.9	1358.8	1366.8
27.5°	1257.4	1271.3	1299.1	1323.0	1331.0
30°	1211.6	1225.5	1255.4	1285.2	1295.2
32.5°	1163.8	1179.8	1215.6	1245.4	1255.4
35°	1114.1	1128.0	1165.8	1201.6	1213.6
37.5°	1062.4	1074.3	1118.1	1155.9	1167.8
40°	1006.7	1022.6	1068.4	1112.1	1124.1
42.5°	951.0	968.9	1014.6	1062.4	1074.3
45°	895.3	915.2	962.9	1012.6	1026.6
47.5°	841.6	857.5	911.2	958.9	978.8
50°	783.9	799.8	851.5	905.2	925.1
52.5°	724.2	746.1	801.8	853.5	877.4
55°	666.5	688.4	746.1	797.8	819.7
57.5°	612.8	630.7	690.4	744.1	766.0
60°	555.1	571.0	634.6	692.3	712.2
62.5°	493.4	517.3	582.9	636.6	660.5
65°	437.7	463.5	533.2	584.9	608.8
67.5°	386.0	409.8	477.5	533.2	559.0
70°	326.3	358.1	427.7	483.4	507.3
72.5°	278.5	306.4	378.0	433.7	459.6
75°	222.8	256.6	328.3	384.0	403.9
77.5°	177.1	210.9	278.5	322.3	332.2
80°	129.3	163.1	226.8	248.7	254.7
82.5°	87.5	119.4	163.1	169.1	171.1
85°	53.7	73.6	95.5	95.5	95.5
87.5°	25.9	29.8	33.8	31.8	31.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)