

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: P310954

Luminaire Tested: **24FCZ2-55HE-UNV-L82765-CA125-W2A-U-5000K**

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: P310954
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-15)
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-CA125-W2A-U-5000K
Description: 2'X4' TROFFER LED MODULE, RIBBED LENS, 0.125" ACRYLIC SHEET
Light Source: (336) 5000K 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: 5206.0 lumens
Efficiency: N/A
Efficacy: 118.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

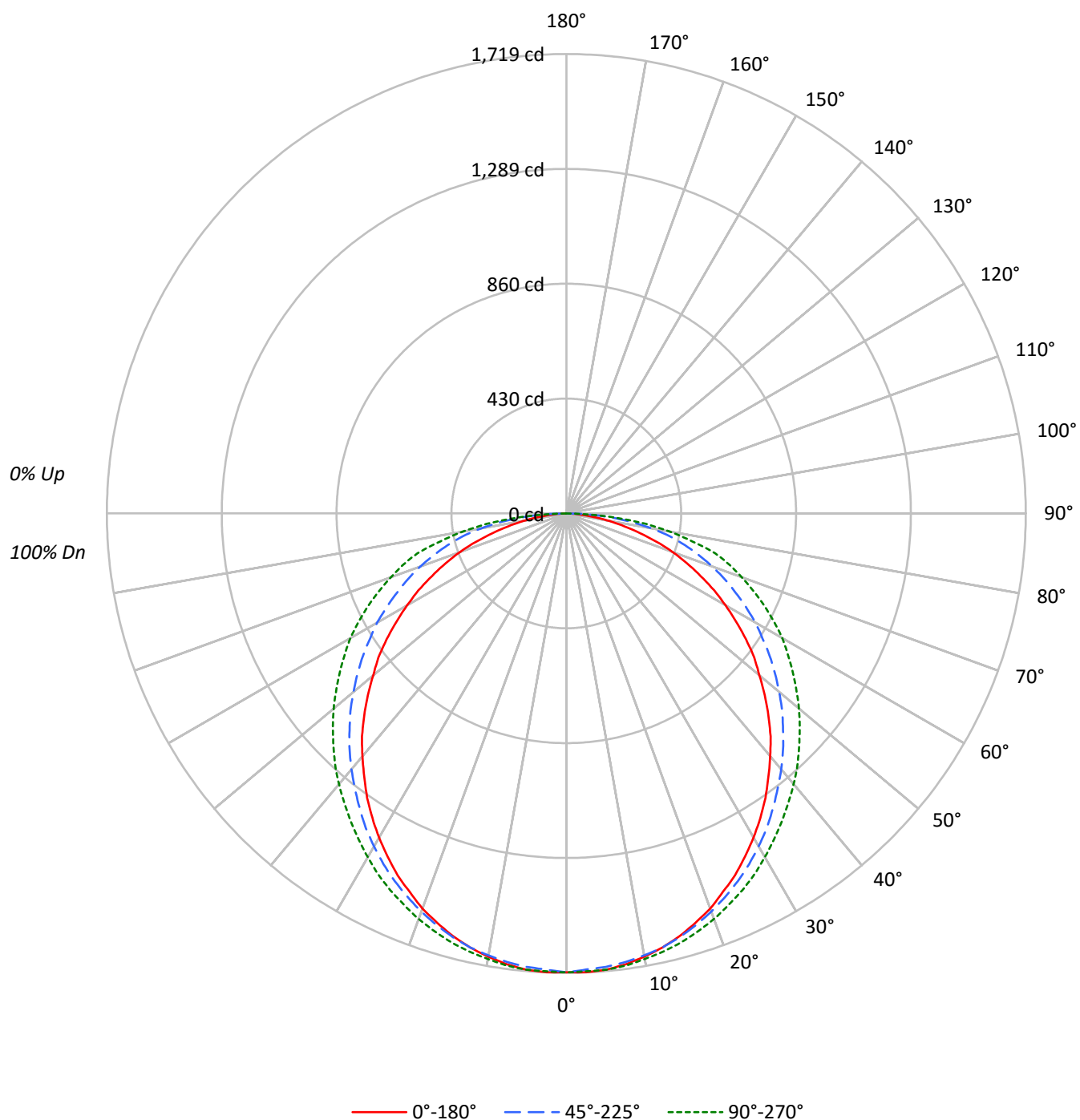
Input Watts (W): 44.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	108	103	98	94	105	100	96	92	96	92	89		92	89	87		82
2	98	89	81	75	95	87	80	74	83	78	73		80	75	71		67
3	89	77	69	62	86	76	68	61	73	66	60		70	64	59		56
4	81	68	59	52	79	67	58	52	64	57	51		62	56	50		47
5	74	61	52	45	72	60	51	44	58	50	44		56	49	43		41
6	69	55	46	39	67	54	45	39	52	44	38		50	43	38		36
7	64	50	41	34	62	49	40	34	47	39	34		46	39	34		31
8	59	45	37	31	57	45	36	30	43	36	30		42	35	30		28
9	55	41	33	27	54	41	33	27	40	32	27		39	32	27		25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2310	2310	2310
5°	2314	2300	2314
10°	2301	2294	2313
15°	2281	2286	2315
20°	2253	2270	2312
25°	2218	2254	2310
30°	2176	2235	2308
35°	2133	2213	2309
40°	2084	2196	2324
45°	2034	2182	2343
50°	1974	2177	2379
55°	1924	2180	2427
60°	1850	2199	2510
65°	1765	2222	2601
70°	1672	2290	2745
75°	1490	2389	2999
80°	1272	2530	3064
85°	906	2507	2933



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.5	3.1
10°-20°	464.6	8.9
20°-30°	701.7	13.5
30°-40°	845.8	16.2
40°-50°	887.9	17.1
50°-60°	830.7	16.0
60°-70°	686.0	13.2
70°-80°	467.5	9.0
80°-90°	159.4	3.1
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°	1328.8	25.5
0°-40°	2174.6	41.8
0°-60°	3893.1	74.8
0°-90°	5206.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5206.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1717	1717	1717	1717	1717	
5°	1713	1712	1703	1713	1713	163
15°	1637	1639	1641	1658	1662	462
25°	1494	1501	1518	1548	1556	687
35°	1299	1313	1347	1392	1406	812
45°	1069	1092	1147	1209	1232	825
55°	820	853	929	1005	1035	732
65°	554	601	698	786	817	550
75°	287	352	460	546	577	306
85°	59	116	162	183	190	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1716.9	1716.9	1716.9	1716.9	1716.9
2.5°	1718.6	1716.9	1708.3	1716.9	1715.2
5°	1713.4	1711.7	1703.1	1713.4	1713.4
7.5°	1701.3	1701.3	1692.7	1704.8	1706.5
10°	1684.1	1684.1	1678.9	1692.7	1692.7
12.5°	1663.3	1663.3	1663.3	1677.2	1678.9
15°	1637.4	1639.2	1640.9	1658.2	1661.6
17.5°	1606.3	1609.8	1615.0	1635.7	1639.2
20°	1573.5	1577.0	1585.6	1609.8	1615.0
22.5°	1532.1	1540.7	1552.8	1580.4	1585.6
25°	1494.1	1501.0	1518.3	1547.6	1556.3
27.5°	1447.4	1457.8	1480.3	1511.3	1523.4
30°	1400.8	1411.2	1438.8	1475.1	1485.4
32.5°	1350.7	1366.3	1395.6	1433.6	1445.7
35°	1298.9	1312.7	1347.3	1392.2	1406.0
37.5°	1241.9	1260.9	1298.9	1347.3	1364.5
40°	1186.6	1207.4	1250.5	1302.4	1323.1
42.5°	1131.4	1152.1	1200.4	1259.2	1279.9
45°	1069.2	1091.6	1146.9	1209.1	1231.5
47.5°	1007.0	1034.6	1095.1	1160.7	1184.9
50°	943.1	974.2	1039.8	1108.9	1136.5
52.5°	886.1	915.4	984.5	1058.8	1084.7
55°	820.4	853.3	929.3	1005.3	1034.6
57.5°	753.1	789.4	870.5	953.4	982.8
60°	687.4	727.2	817.0	899.9	932.7
62.5°	623.5	663.3	756.5	842.9	875.7
65°	554.4	601.1	697.8	785.9	817.0
67.5°	488.8	538.9	640.8	727.2	758.3
70°	424.9	473.3	582.1	666.7	697.8
72.5°	355.8	411.1	519.9	608.0	640.8
75°	286.7	352.4	459.5	545.8	576.9
77.5°	222.8	290.2	397.3	468.1	483.6
80°	164.1	233.2	326.5	376.5	395.5
82.5°	105.4	174.5	248.7	285.0	300.5
85°	58.7	115.7	162.4	183.1	190.0
87.5°	24.2	50.1	65.6	74.3	74.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)