

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: P314520

Luminaire Tested: **24FCZ2-75HE-UNV-L83050-S-CA125-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: P314520
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24FCZ2-75HE-UNV-L83050-S-CA125-W2A-U-3000K
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS, 0.125" ACRYLIC 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

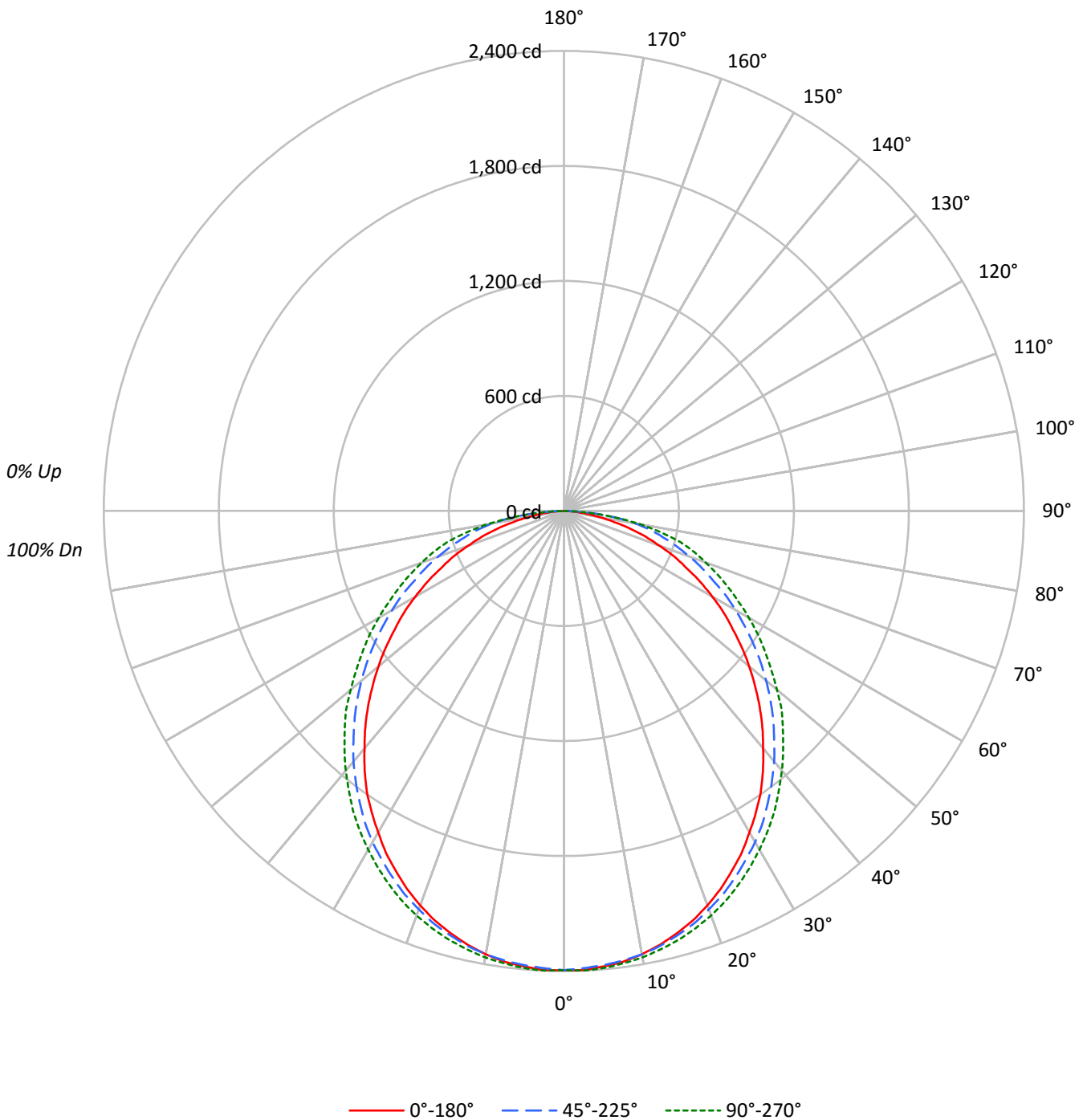
Lumens per Lamp: N/A
Luminaire Lumens: 6819.0 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 62.7
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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CATALOG NUMBER: 24FC22-75HE-UNV-L83050-S-CA125-W2A-U-3000K

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	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3223	3223	3223
5°	3221	3212	3233
10°	3208	3208	3231
15°	3177	3192	3225
20°	3135	3167	3216
25°	3077	3135	3196
30°	3008	3099	3170
35°	2942	3049	3145
40°	2842	2998	3108
45°	2749	2939	3075
50°	2643	2884	3038
55°	2525	2830	3008
60°	2407	2786	3002
65°	2255	2738	3020
70°	2088	2752	3102
75°	1869	2804	3277
80°	1510	2971	3205
85°	1136	2607	2541



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.8	3.3
10°-20°	648.0	9.5
20°-30°	974.1	14.3
30°-40°	1160.3	17.0
40°-50°	1187.5	17.4
50°-60°	1069.1	15.7
60°-70°	839.6	12.3
70°-80°	544.9	8.0
80°-90°	168.5	2.5
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°	1848.9	27.1
0°-40°	3009.3	44.1
0°-60°	5265.9	77.2
0°-90°	6819.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6819.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2396	2396	2396	2396	2396	
5°	2385	2389	2378	2391	2393	227
15°	2281	2287	2292	2311	2315	643
25°	2073	2090	2112	2146	2153	955
35°	1791	1813	1856	1902	1915	1117
45°	1445	1479	1544	1603	1616	1114
55°	1076	1124	1206	1269	1282	965
65°	708	762	860	931	949	705
75°	360	429	539	613	630	381
85°	74	136	169	165	165	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2395.6	2395.6	2395.6	2395.6	2395.6
2.5°	2397.7	2397.7	2386.9	2397.7	2399.9
5°	2384.7	2389.1	2378.2	2391.2	2393.4
7.5°	2371.7	2371.7	2365.2	2378.2	2380.4
10°	2347.9	2350.1	2347.9	2363.1	2365.2
12.5°	2317.6	2321.9	2324.1	2339.2	2341.4
15°	2280.8	2287.3	2291.6	2311.1	2315.4
17.5°	2239.6	2246.1	2256.9	2278.6	2282.9
20°	2189.8	2198.5	2211.5	2239.6	2246.1
22.5°	2135.6	2144.3	2166.0	2192.0	2202.8
25°	2072.8	2090.2	2111.8	2146.5	2153.0
27.5°	2010.0	2025.2	2053.3	2090.2	2098.8
30°	1936.4	1960.2	1994.9	2031.7	2040.3
32.5°	1864.9	1888.7	1929.9	1968.9	1979.7
35°	1791.3	1812.9	1856.2	1901.7	1914.7
37.5°	1706.8	1734.9	1782.6	1828.1	1841.1
40°	1618.0	1652.6	1706.8	1754.4	1769.6
42.5°	1533.5	1570.3	1624.5	1676.5	1693.8
45°	1444.7	1479.4	1544.3	1602.8	1615.8
47.5°	1353.7	1392.7	1462.0	1520.5	1542.2
50°	1262.8	1303.9	1377.6	1438.2	1451.2
52.5°	1171.8	1215.1	1293.1	1358.1	1364.6
55°	1076.5	1124.1	1206.4	1269.3	1282.3
57.5°	989.8	1031.0	1119.8	1184.8	1199.9
60°	894.5	940.0	1035.3	1096.0	1115.5
62.5°	803.6	851.2	950.9	1011.5	1028.8
65°	708.3	762.4	859.9	931.4	948.7
67.5°	626.0	677.9	781.9	851.2	868.6
70°	530.7	589.1	699.6	771.1	788.4
72.5°	448.4	509.0	619.5	688.8	714.8
75°	359.6	428.9	539.3	613.0	630.3
77.5°	272.9	353.1	465.7	522.0	522.0
80°	194.9	279.4	383.4	409.4	413.7
82.5°	127.8	210.1	283.7	281.6	281.6
85°	73.6	136.5	168.9	164.6	164.6
87.5°	28.2	56.3	60.6	60.6	58.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)