

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: P309788

Luminaire Tested: **24FCZ2-75HE-UNV-L82765-HRP-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: P309788  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-20)  
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-L82765-HRP-CP125-W2A-U-2700K  
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 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**

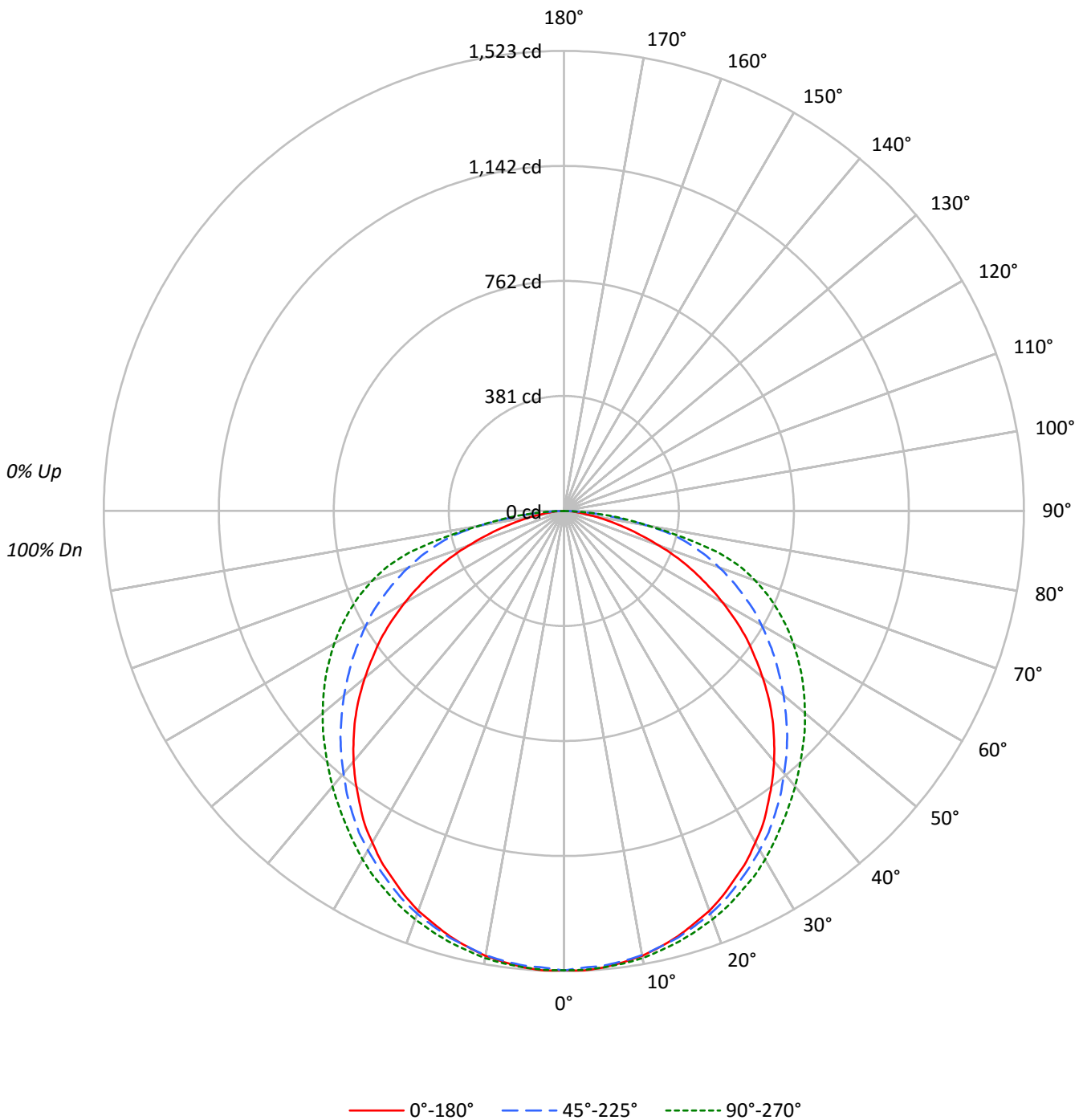
Lumens per Lamp: N/A  
Luminaire Lumens: 4687.0 lumens  
Efficiency: N/A  
Efficacy: 74.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 62.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	42	38	36
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	24	35	29	24	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2046	2046	2046
5°	2049	2041	2049
10°	2043	2040	2053
15°	2031	2036	2055
20°	2017	2031	2059
25°	1992	2022	2062
30°	1969	2015	2070
35°	1937	2005	2072
40°	1902	1992	2092
45°	1859	1990	2124
50°	1799	1988	2181
55°	1735	2002	2260
60°	1637	2033	2360
65°	1512	2080	2493
70°	1320	2154	2655
75°	1071	2264	2744
80°	790	2220	2220
85°	605	1636	1848



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.1	3.1
10°-20°	413.7	8.8
20°-30°	629.8	13.4
30°-40°	764.7	16.3
40°-50°	807.9	17.2
50°-60°	762.3	16.3
60°-70°	633.9	13.5
70°-80°	417.0	8.9
80°-90°	113.7	2.4
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°	1187.5	25.3
0°-40°	1952.2	41.7
0°-60°	3522.4	75.2
0°-90°	4687.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4687.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1521	1521	1521	1521	1521	
5°	1517	1517	1511	1517	1517	144
15°	1458	1460	1462	1476	1476	411
25°	1342	1350	1362	1385	1389	619
35°	1179	1193	1220	1252	1262	738
45°	977	997	1046	1097	1116	753
55°	740	771	854	934	963	659
65°	475	530	653	750	783	469
75°	206	300	436	516	528	222
85°	39	86	106	118	120	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1520.7	1520.7	1520.7	1520.7	1520.7
2.5°	1522.7	1520.7	1512.9	1520.7	1520.7
5°	1516.8	1516.8	1510.9	1516.8	1516.8
7.5°	1507.0	1507.0	1503.0	1510.9	1510.9
10°	1495.2	1495.2	1493.2	1503.0	1503.0
12.5°	1477.5	1479.5	1477.5	1489.3	1489.3
15°	1457.9	1459.9	1461.8	1475.6	1475.6
17.5°	1432.4	1436.3	1440.3	1455.9	1457.9
20°	1408.9	1410.8	1418.7	1436.3	1438.3
22.5°	1377.5	1383.3	1393.2	1410.8	1416.7
25°	1342.1	1350.0	1361.8	1385.3	1389.2
27.5°	1308.8	1314.7	1330.4	1355.9	1363.7
30°	1267.6	1277.4	1297.0	1322.5	1332.3
32.5°	1228.3	1238.1	1261.7	1289.2	1297.0
35°	1179.3	1193.0	1220.5	1251.9	1261.7
37.5°	1132.2	1145.9	1179.3	1214.6	1226.4
40°	1083.1	1098.8	1134.1	1175.4	1191.1
42.5°	1030.2	1051.7	1091.0	1136.1	1153.8
45°	977.2	996.8	1045.8	1096.9	1116.5
47.5°	920.3	943.8	996.8	1057.6	1081.2
50°	859.4	888.9	949.7	1016.4	1041.9
52.5°	798.6	832.0	900.6	975.2	1002.7
55°	739.7	771.1	853.6	934.0	963.4
57.5°	675.0	714.2	804.5	890.8	920.3
60°	608.3	651.4	755.4	845.7	877.1
62.5°	541.6	590.6	708.4	798.6	832.0
65°	474.9	529.8	653.4	749.6	782.9
67.5°	410.1	470.9	602.4	698.5	731.9
70°	335.5	412.1	547.5	641.6	675.0
72.5°	266.9	355.2	494.5	582.8	612.2
75°	206.0	300.2	435.6	516.1	527.8
77.5°	151.1	245.3	374.8	402.2	404.2
80°	102.0	196.2	286.5	282.6	286.5
82.5°	66.7	147.2	180.5	202.1	204.1
85°	39.2	86.3	106.0	117.7	119.7
87.5°	19.6	29.4	37.3	39.2	43.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)