

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: P313770

Luminaire Tested: **24FCZ2-75HE-UNV-L83050-RDP-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: P313770
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: 24FCZ2-75HE-UNV-L83050-RDP-CA125-W2A-U-3000K
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 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: 4365.0 lumens
Efficiency: N/A
Efficacy: 69.6 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

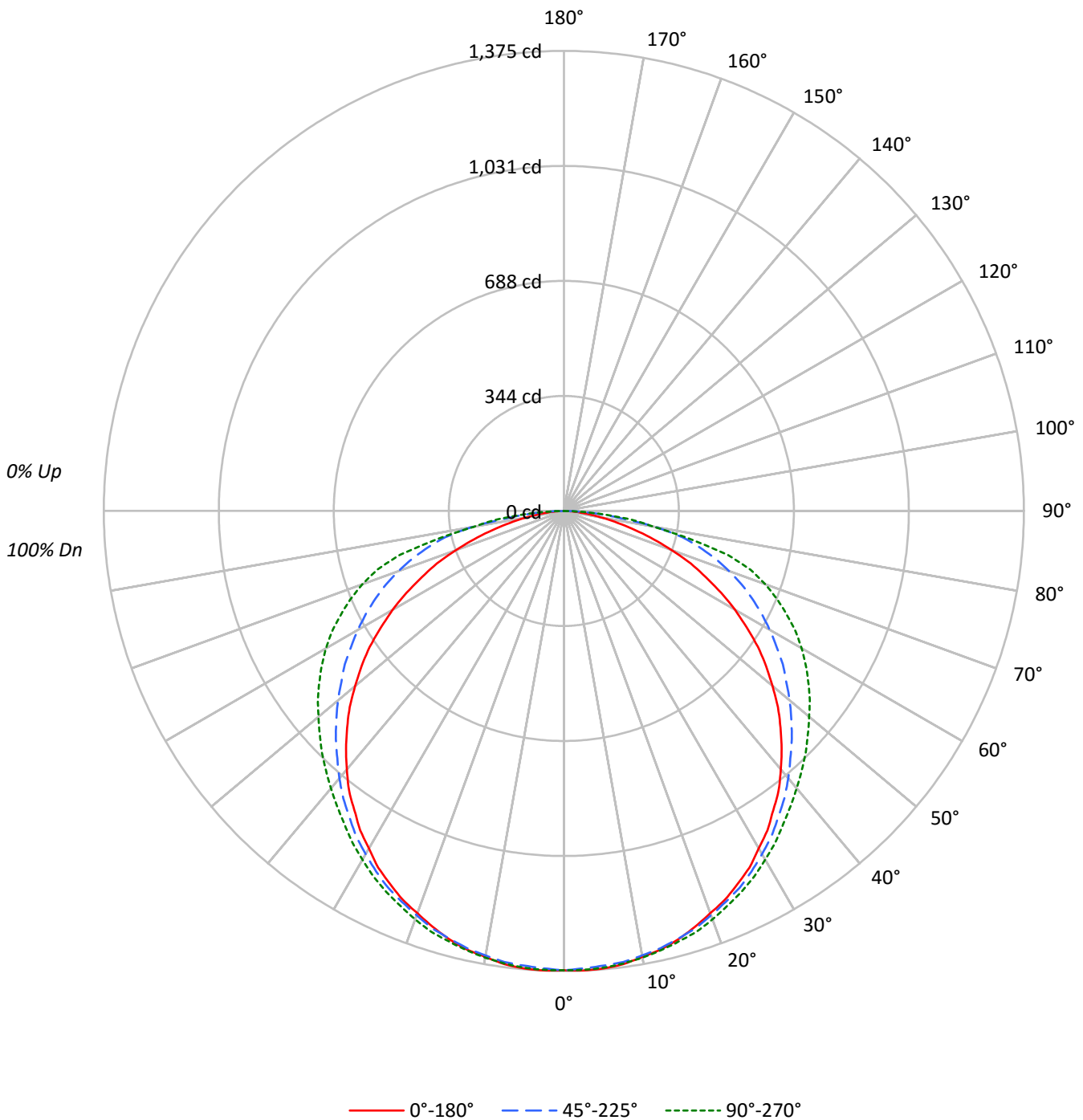
Input Watts (W): 62.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	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°	1847	1847	1847
5°	1854	1842	1851
10°	1849	1843	1852
15°	1846	1843	1855
20°	1832	1841	1860
25°	1826	1845	1864
30°	1810	1840	1870
35°	1792	1835	1878
40°	1772	1833	1901
45°	1743	1833	1944
50°	1704	1845	2003
55°	1661	1874	2092
60°	1591	1911	2208
65°	1489	1978	2344
70°	1354	2070	2521
75°	1148	2183	2634
80°	906	2197	2131
85°	668	1672	1871



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	3.0
10°-20°	374.7	8.6
20°-30°	573.1	13.1
30°-40°	700.6	16.0
40°-50°	746.7	17.1
50°-60°	713.9	16.4
60°-70°	604.8	13.9
70°-80°	406.4	9.3
80°-90°	114.7	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°	1078.0	24.7
0°-40°	1778.6	40.7
0°-60°	3239.1	74.2
0°-90°	4365.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4365.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1373	1373	1373	1373	1373	
5°	1373	1370	1364	1370	1370	130
15°	1325	1325	1323	1334	1332	374
25°	1230	1234	1243	1254	1256	567
35°	1091	1100	1117	1139	1143	684
45°	916	931	964	1005	1022	706
55°	708	734	799	862	892	631
65°	468	515	621	704	736	464
75°	221	301	420	492	507	236
85°	43	89	108	117	121	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1372.7	1372.7	1372.7	1372.7	1372.7
2.5°	1374.8	1374.8	1368.3	1372.7	1372.7
5°	1372.7	1370.5	1364.0	1370.5	1370.5
7.5°	1366.2	1364.0	1359.7	1366.2	1364.0
10°	1353.2	1353.2	1348.9	1355.3	1355.3
12.5°	1342.4	1340.2	1338.0	1346.7	1344.5
15°	1325.0	1325.0	1322.9	1333.7	1331.5
17.5°	1303.4	1305.6	1307.7	1316.4	1318.5
20°	1279.6	1283.9	1286.1	1299.1	1299.1
22.5°	1257.9	1260.1	1264.4	1277.4	1277.4
25°	1229.8	1234.1	1242.8	1253.6	1255.8
27.5°	1201.6	1203.8	1214.6	1229.8	1231.9
30°	1164.8	1171.3	1184.3	1201.6	1203.8
32.5°	1132.3	1138.8	1154.0	1171.3	1175.6
35°	1091.2	1099.9	1117.2	1138.8	1143.2
37.5°	1054.4	1060.9	1082.5	1106.4	1112.9
40°	1008.9	1021.9	1043.6	1071.7	1082.5
42.5°	963.5	976.5	1002.4	1039.2	1052.2
45°	915.8	931.0	963.5	1004.6	1021.9
47.5°	868.2	885.5	922.3	970.0	989.4
50°	814.1	835.7	881.2	935.3	957.0
52.5°	762.1	788.1	837.9	898.5	926.7
55°	708.0	734.0	798.9	861.7	892.0
57.5°	647.4	682.0	753.5	824.9	857.4
60°	591.1	623.5	710.1	788.1	820.6
62.5°	530.4	573.7	666.8	749.1	781.6
65°	467.7	515.3	621.4	703.7	736.1
67.5°	411.4	463.3	575.9	658.2	690.7
70°	344.2	409.2	526.1	608.4	640.9
72.5°	281.5	352.9	474.2	554.3	584.6
75°	220.8	300.9	420.0	491.5	506.6
77.5°	164.5	249.0	363.7	394.0	383.2
80°	116.9	199.2	283.6	268.5	275.0
82.5°	75.8	151.6	175.4	199.2	205.7
85°	43.3	88.8	108.3	116.9	121.2
87.5°	19.5	32.5	43.3	43.3	41.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)