

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: P309337

Luminaire Tested: **24FCZ2-40HE-UNV-L82765-HRP-CA125-W2A-U-6500K**

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: P309337
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: 24FCZ2-40HE-UNV-L82765-HRP-CA125-W2A-U-6500K
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125"
ACRYLIC SHEET
Light Source: (336) 6500K 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: 2942.0 lumens
Efficiency: N/A
Efficacy: 92.5 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

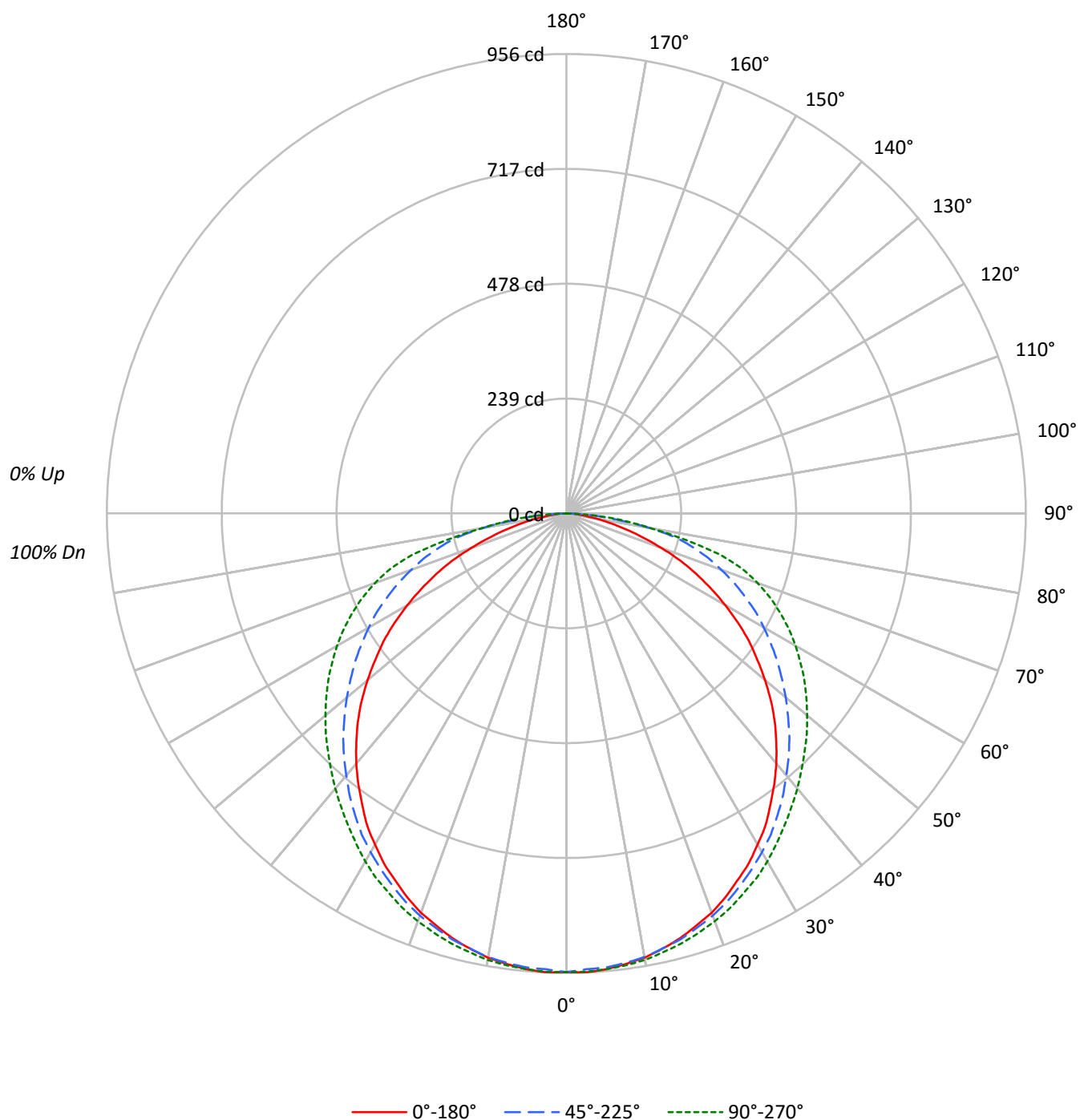
Input Watts (W): 31.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90		92	90	87		82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	59		56
4	81	68	59	52	79	67	59	52	65	57	51		62	56	50		48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		41
6	69	55	46	39	67	54	45	39	52	44	38		50	43	38		36
7	63	50	41	34	62	49	40	34	47	39	34		46	39	34		31
8	59	45	36	30	57	44	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	24		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1284	1284	1284
5°	1286	1281	1286
10°	1282	1281	1289
15°	1275	1278	1290
20°	1266	1275	1293
25°	1251	1269	1295
30°	1236	1265	1299
35°	1216	1258	1301
40°	1194	1250	1313
45°	1167	1249	1333
50°	1129	1248	1369
55°	1089	1257	1418
60°	1027	1276	1482
65°	949	1306	1564
70°	828	1352	1667
75°	672	1421	1722
80°	496	1393	1393
85°	380	1027	1159



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.4	3.1
10°-20°	259.7	8.8
20°-30°	395.3	13.4
30°-40°	480.0	16.3
40°-50°	507.1	17.2
50°-60°	478.5	16.3
60°-70°	397.9	13.5
70°-80°	261.7	8.9
80°-90°	71.4	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°	745.4	25.3
0°-40°	1225.4	41.7
0°-60°	2211.0	75.2
0°-90°	2942.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2942.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	954	954	954	954	954	
5°	952	952	948	952	952	90
15°	915	916	918	926	926	258
25°	842	847	855	870	872	389
35°	740	749	766	786	792	463
45°	613	626	656	688	701	472
55°	464	484	536	586	605	414
65°	298	332	410	470	491	295
75°	129	188	273	324	331	139
85°	25	54	66	74	75	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	954.5	954.5	954.5	954.5	954.5
2.5°	955.8	954.5	949.6	954.5	954.5
5°	952.1	952.1	948.4	952.1	952.1
7.5°	945.9	945.9	943.4	948.4	948.4
10°	938.5	938.5	937.3	943.4	943.4
12.5°	927.4	928.7	927.4	934.8	934.8
15°	915.1	916.4	917.6	926.2	926.2
17.5°	899.1	901.6	904.0	913.9	915.1
20°	884.3	885.6	890.5	901.6	902.8
22.5°	864.6	868.3	874.5	885.6	889.3
25°	842.5	847.4	854.8	869.5	872.0
27.5°	821.5	825.2	835.1	851.1	856.0
30°	795.7	801.8	814.1	830.1	836.3
32.5°	771.0	777.2	792.0	809.2	814.1
35°	740.2	748.8	766.1	785.8	792.0
37.5°	710.7	719.3	740.2	762.4	769.8
40°	679.9	689.7	711.9	737.8	747.6
42.5°	646.6	660.2	684.8	713.1	724.2
45°	613.4	625.7	656.5	688.5	700.8
47.5°	577.6	592.4	625.7	663.9	678.6
50°	539.5	557.9	596.1	638.0	654.0
52.5°	501.3	522.2	565.3	612.1	629.4
55°	464.3	484.0	535.8	586.3	604.7
57.5°	423.7	448.3	505.0	559.2	577.6
60°	381.8	408.9	474.2	530.8	550.6
62.5°	339.9	370.7	444.6	501.3	522.2
65°	298.1	332.5	410.1	470.5	491.4
67.5°	257.4	295.6	378.1	438.5	459.4
70°	210.6	258.6	343.6	402.8	423.7
72.5°	167.5	222.9	310.4	365.8	384.3
75°	129.3	188.4	273.4	323.9	331.3
77.5°	94.8	154.0	235.2	252.5	253.7
80°	64.0	123.2	179.8	177.4	179.8
82.5°	41.9	92.4	113.3	126.9	128.1
85°	24.6	54.2	66.5	73.9	75.1
87.5°	12.3	18.5	23.4	24.6	27.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)