

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: P309292

Luminaire Tested: **24FCZ2-35-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: P309292
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: 24FCZ2-35-UNV-L82765-HRP-CA125-W2A-U-6500K
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125" ACRYLIC SHEET
Light Source: (168) 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: 2569.0 lumens
Efficiency: N/A
Efficacy: 88.0 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

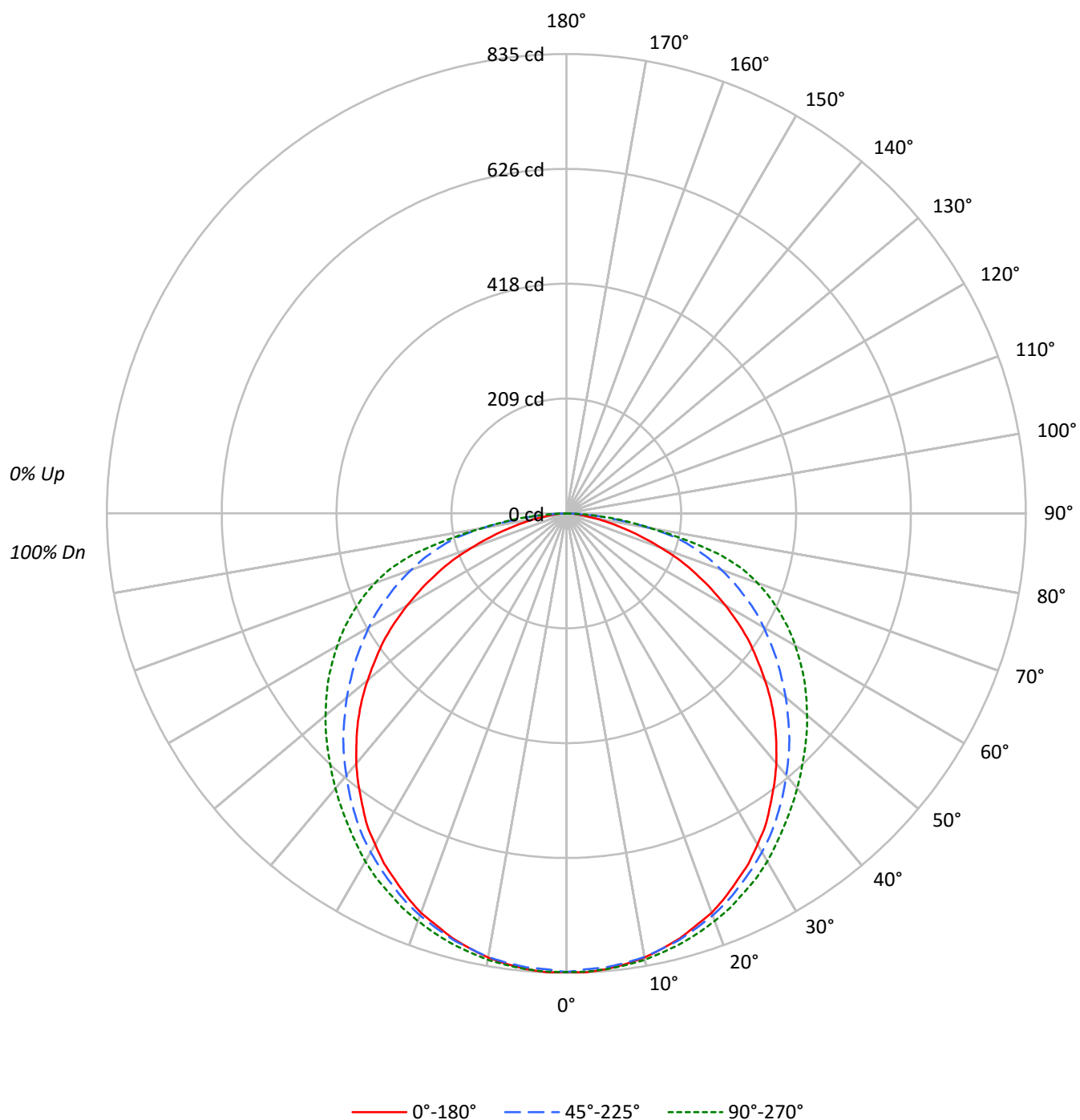
Input Watts (W): 29.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1121	1121	1121
5°	1123	1118	1123
10°	1120	1118	1126
15°	1113	1116	1127
20°	1106	1113	1129
25°	1092	1108	1131
30°	1079	1104	1135
35°	1062	1099	1136
40°	1043	1092	1147
45°	1019	1091	1165
50°	986	1090	1195
55°	951	1097	1239
60°	897	1114	1294
65°	829	1140	1366
70°	723	1181	1456
75°	587	1241	1504
80°	433	1216	1216
85°	332	897	1013



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.0	3.1
10°-20°	226.7	8.8
20°-30°	345.2	13.4
30°-40°	419.1	16.3
40°-50°	442.8	17.2
50°-60°	417.9	16.3
60°-70°	347.4	13.5
70°-80°	228.6	8.9
80°-90°	62.3	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°	650.9	25.3
0°-40°	1070.0	41.7
0°-60°	1930.7	75.2
0°-90°	2569.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2569.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	834	834	834	834	834	
5°	831	831	828	831	831	79
15°	799	800	801	809	809	225
25°	736	740	746	759	762	339
35°	646	654	669	686	692	405
45°	536	546	573	601	612	412
55°	406	423	468	512	528	361
65°	260	290	358	411	429	257
75°	113	165	239	283	289	122
85°	22	47	58	64	66	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	833.5	833.5	833.5	833.5	833.5
2.5°	834.6	833.5	829.2	833.5	833.5
5°	831.4	831.4	828.1	831.4	831.4
7.5°	826.0	826.0	823.8	828.1	828.1
10°	819.5	819.5	818.5	823.8	823.8
12.5°	809.9	810.9	809.9	816.3	816.3
15°	799.1	800.2	801.2	808.8	808.8
17.5°	785.1	787.3	789.4	798.0	799.1
20°	772.2	773.3	777.6	787.3	788.3
22.5°	755.0	758.2	763.6	773.3	776.5
25°	735.6	739.9	746.4	759.3	761.5
27.5°	717.4	720.6	729.2	743.2	747.5
30°	694.8	700.2	710.9	724.9	730.3
32.5°	673.3	678.6	691.5	706.6	710.9
35°	646.4	653.9	669.0	686.2	691.5
37.5°	620.6	628.1	646.4	665.7	672.2
40°	593.7	602.3	621.6	644.2	652.8
42.5°	564.6	576.5	598.0	622.7	632.4
45°	535.6	546.4	573.2	601.2	612.0
47.5°	504.4	517.3	546.4	579.7	592.6
50°	471.1	487.2	520.5	557.1	571.1
52.5°	437.7	456.0	493.7	534.5	549.6
55°	405.5	422.7	467.8	511.9	528.1
57.5°	370.0	391.5	441.0	488.3	504.4
60°	333.4	357.1	414.1	463.5	480.7
62.5°	296.8	323.7	388.3	437.7	456.0
65°	260.3	290.4	358.1	410.8	429.1
67.5°	224.8	258.1	330.2	382.9	401.2
70°	183.9	225.9	300.1	351.7	370.0
72.5°	146.3	194.7	271.0	319.4	335.6
75°	112.9	164.6	238.8	282.9	289.3
77.5°	82.8	134.4	205.4	220.5	221.6
80°	55.9	107.6	157.0	154.9	157.0
82.5°	36.6	80.7	98.9	110.8	111.9
85°	21.5	47.3	58.1	64.5	65.6
87.5°	10.8	16.1	20.4	21.5	23.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)