

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: P309916

Luminaire Tested: **24FCZ2-35HE-UNV-L82765-RDP-CA125-W2A-U-3500K**

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: P309916
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: 24FCZ2-35HE-UNV-L82765-RDP-CA125-W2A-U-3500K
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.125" ACRYLIC SHEET
Light Source: (336) 3500K 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: 2106.0 lumens
Efficiency: N/A
Efficacy: 80.7 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

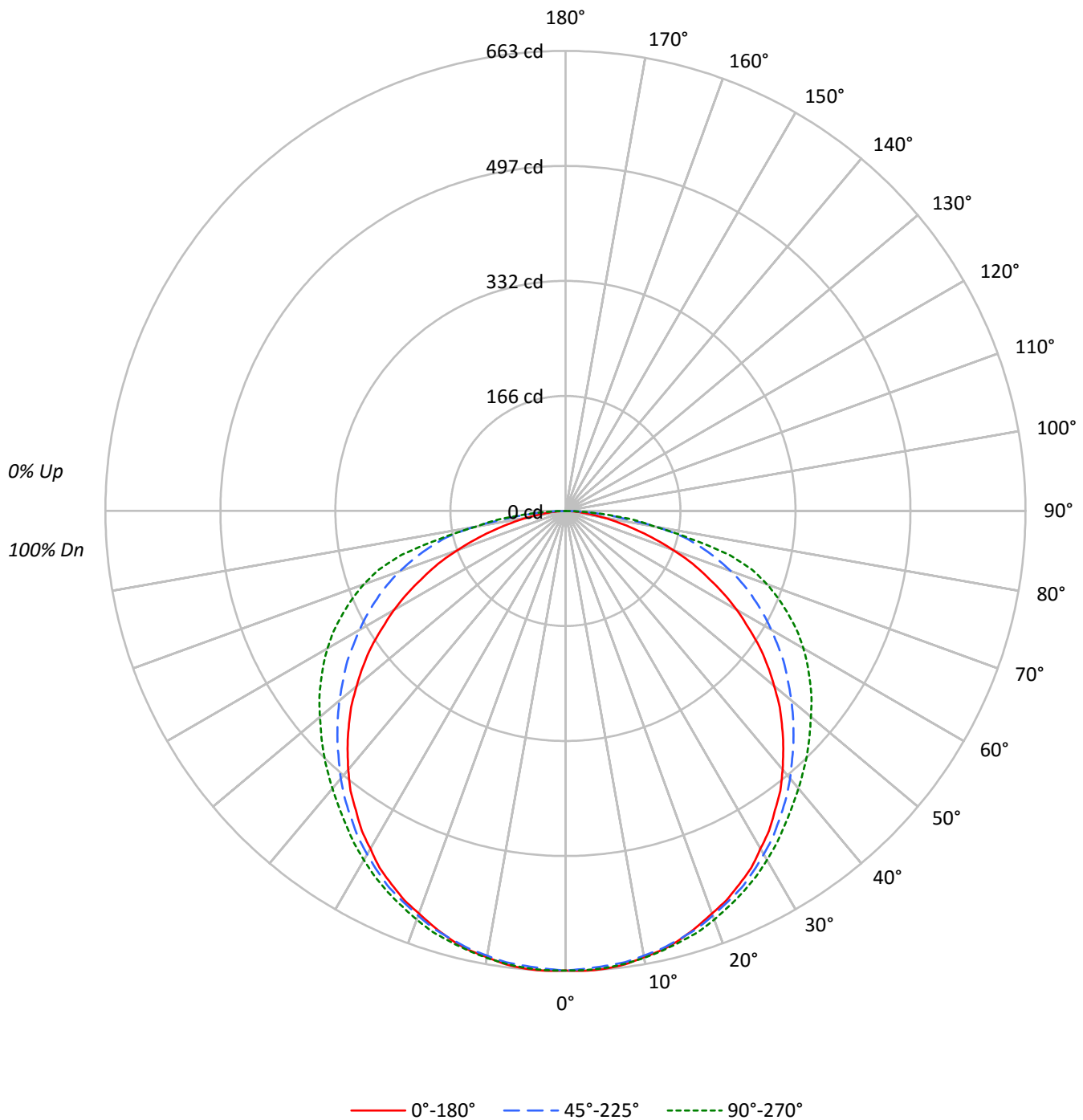
Input Watts (W): 26.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	93	89		92	89	87		82
2	97	89	81	75	95	87	80	74	83	77	72		80	75	71		67
3	88	77	68	62	86	76	68	61	72	66	60		70	64	59		56
4	81	68	59	52	78	67	58	51	64	57	51		62	55	50		47
5	74	60	51	44	72	59	51	44	57	49	43		55	48	43		40
6	68	54	45	38	66	53	45	38	51	44	38		50	43	37		35
7	63	49	40	34	61	48	40	34	47	39	33		45	38	33		31
8	59	45	36	30	57	44	36	30	43	35	30		41	34	29		27
9	55	41	33	27	53	40	32	27	39	32	27		38	31	26		24
10	51	38	30	24	50	37	29	24	36	29	24		35	29	24		22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	891	891	891
5°	895	889	893
10°	892	889	893
15°	891	889	895
20°	884	888	897
25°	881	890	900
30°	873	888	902
35°	865	885	906
40°	855	884	917
45°	841	884	938
50°	822	890	966
55°	801	904	1010
60°	767	922	1065
65°	718	954	1131
70°	653	998	1216
75°	554	1054	1271
80°	437	1060	1028
85°	323	806	903



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.8	3.0
10°-20°	180.8	8.6
20°-30°	276.5	13.1
30°-40°	338.0	16.0
40°-50°	360.2	17.1
50°-60°	344.4	16.4
60°-70°	291.8	13.9
70°-80°	196.1	9.3
80°-90°	55.3	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°	520.1	24.7
0°-40°	858.1	40.7
0°-60°	1562.8	74.2
0°-90°	2106.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2106.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	662	662	662	662	662	
5°	662	661	658	661	661	63
15°	639	639	638	644	642	180
25°	593	595	600	605	606	273
35°	526	531	539	550	552	330
45°	442	449	465	485	493	341
55°	342	354	386	416	430	304
65°	226	249	300	340	355	224
75°	106	145	203	237	244	114
85°	21	43	52	56	58	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	662.3	662.3	662.3	662.3	662.3
2.5°	663.3	663.3	660.2	662.3	662.3
5°	662.3	661.2	658.1	661.2	661.2
7.5°	659.1	658.1	656.0	659.1	658.1
10°	652.9	652.9	650.8	653.9	653.9
12.5°	647.7	646.6	645.6	649.7	648.7
15°	639.3	639.3	638.3	643.5	642.4
17.5°	628.8	629.9	630.9	635.1	636.2
20°	617.4	619.4	620.5	626.8	626.8
22.5°	606.9	608.0	610.0	616.3	616.3
25°	593.3	595.4	599.6	604.8	605.9
27.5°	579.8	580.8	586.0	593.3	594.4
30°	562.0	565.1	571.4	579.8	580.8
32.5°	546.3	549.5	556.8	565.1	567.2
35°	526.5	530.7	539.0	549.5	551.5
37.5°	508.7	511.9	522.3	533.8	536.9
40°	486.8	493.1	503.5	517.1	522.3
42.5°	464.8	471.1	483.7	501.4	507.7
45°	441.9	449.2	464.8	484.7	493.1
47.5°	418.9	427.2	445.0	468.0	477.4
50°	392.8	403.2	425.2	451.3	461.7
52.5°	367.7	380.2	404.3	433.5	447.1
55°	341.6	354.1	385.5	415.8	430.4
57.5°	312.3	329.0	363.5	398.0	413.7
60°	285.2	300.8	342.6	380.2	395.9
62.5°	255.9	276.8	321.7	361.4	377.1
65°	225.6	248.6	299.8	339.5	355.2
67.5°	198.5	223.5	277.9	317.6	333.2
70°	166.1	197.4	253.8	293.5	309.2
72.5°	135.8	170.3	228.8	267.4	282.0
75°	106.5	145.2	202.7	237.1	244.4
77.5°	79.4	120.1	175.5	190.1	184.9
80°	56.4	96.1	136.8	129.5	132.7
82.5°	36.6	73.1	84.6	96.1	99.2
85°	20.9	42.8	52.2	56.4	58.5
87.5°	9.4	15.7	20.9	20.9	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)