

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: P309948

Luminaire Tested: **24FCZ2-35HE-UNV-L82765-RDP-CP250-W2A-U-5700K**

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: P309948
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-CP250-W2A-U-5700K
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS WITH INSERT, 0.250" POLYCARB SHEET
Light Source: (336) 5700K 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: 2094.0 lumens
Efficiency: N/A
Efficacy: 78.4 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

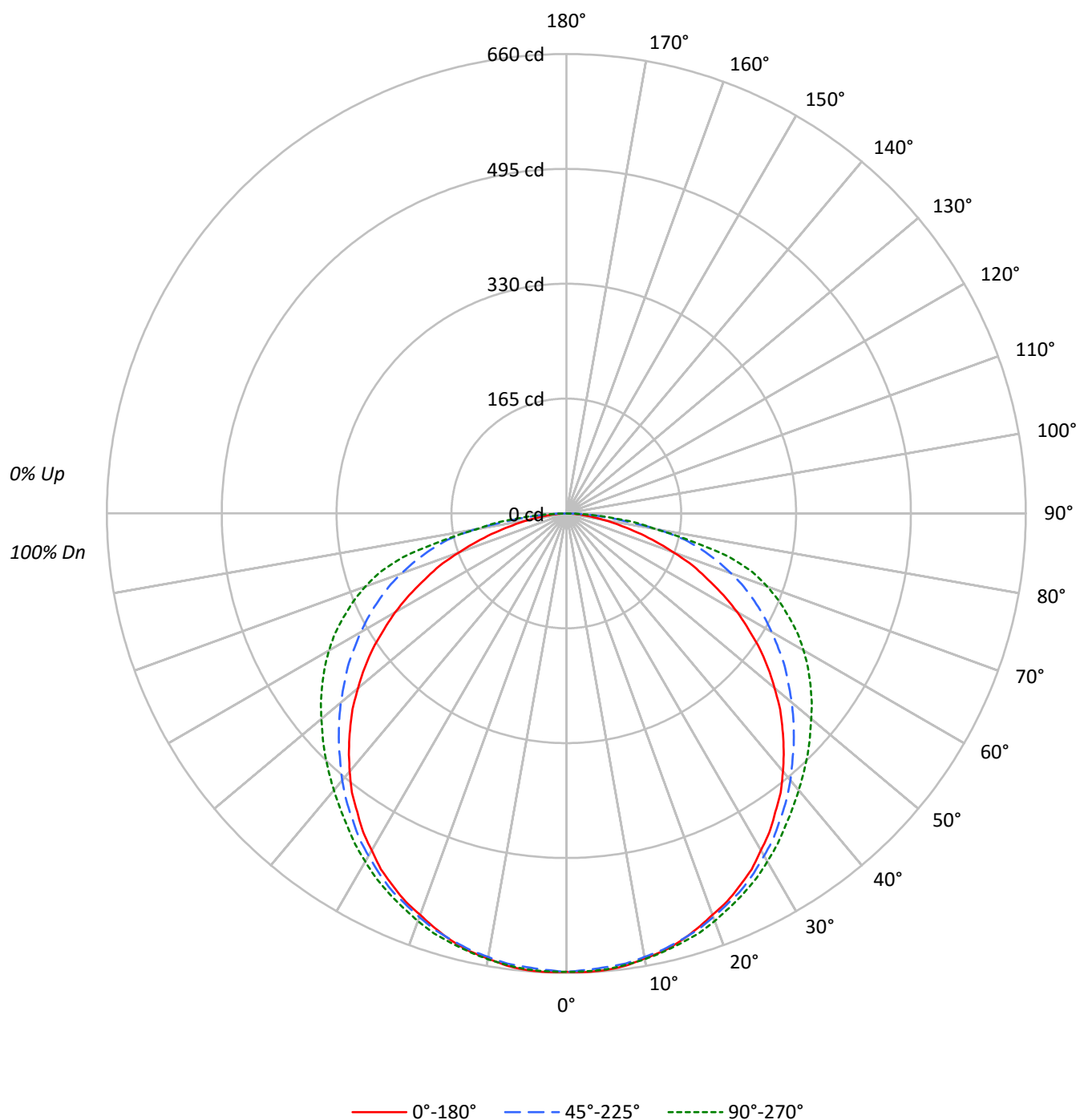
Input Watts (W): 26.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	67	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°	886	886	886
5°	889	884	888
10°	887	884	888
15°	886	884	890
20°	879	883	892
25°	876	885	894
30°	868	883	897
35°	860	880	901
40°	850	879	912
45°	836	879	933
50°	817	885	961
55°	797	899	1004
60°	763	917	1059
65°	714	949	1124
70°	649	993	1209
75°	551	1048	1263
80°	435	1055	1022
85°	321	801	898



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.5	3.0
10°-20°	179.8	8.6
20°-30°	274.9	13.1
30°-40°	336.1	16.0
40°-50°	358.2	17.1
50°-60°	342.5	16.4
60°-70°	290.1	13.9
70°-80°	195.0	9.3
80°-90°	55.0	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°	517.2	24.7
0°-40°	853.2	40.7
0°-60°	1553.9	74.2
0°-90°	2094.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2094.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	658	658	658	658	658	
5°	658	658	654	658	658	63
15°	636	636	635	640	639	179
25°	590	592	596	601	602	272
35°	524	528	536	546	548	328
45°	439	447	462	482	490	339
55°	340	352	383	413	428	303
65°	224	247	298	338	353	223
75°	106	144	202	236	243	113
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°	658.5	658.5	658.5	658.5	658.5
2.5°	659.5	659.5	656.4	658.5	658.5
5°	658.5	657.5	654.3	657.5	657.5
7.5°	655.4	654.3	652.3	655.4	654.3
10°	649.2	649.2	647.1	650.2	650.2
12.5°	644.0	642.9	641.9	646.0	645.0
15°	635.7	635.7	634.6	639.8	638.8
17.5°	625.3	626.3	627.3	631.5	632.5
20°	613.8	615.9	617.0	623.2	623.2
22.5°	603.5	604.5	606.6	612.8	612.8
25°	590.0	592.0	596.2	601.4	602.4
27.5°	576.4	577.5	582.7	590.0	591.0
30°	558.8	561.9	568.1	576.4	577.5
32.5°	543.2	546.3	553.6	561.9	564.0
35°	523.5	527.6	535.9	546.3	548.4
37.5°	505.8	508.9	519.3	530.7	533.9
40°	484.0	490.2	500.6	514.1	519.3
42.5°	462.2	468.4	480.9	498.6	504.8
45°	439.3	446.6	462.2	481.9	490.2
47.5°	416.5	424.8	442.5	465.3	474.7
50°	390.5	400.9	422.7	448.7	459.1
52.5°	365.6	378.1	402.0	431.0	444.5
55°	339.6	352.1	383.3	413.4	427.9
57.5°	310.6	327.2	361.4	395.7	411.3
60°	283.6	299.1	340.7	378.1	393.6
62.5°	254.5	275.2	319.9	359.4	375.0
65°	224.3	247.2	298.1	337.6	353.1
67.5°	197.3	222.3	276.3	315.7	331.3
70°	165.1	196.3	252.4	291.9	307.4
72.5°	135.0	169.3	227.5	265.9	280.4
75°	105.9	144.4	201.5	235.8	243.0
77.5°	78.9	119.4	174.5	189.0	183.8
80°	56.1	95.6	136.1	128.8	131.9
82.5°	36.4	72.7	84.1	95.6	98.7
85°	20.8	42.6	51.9	56.1	58.2
87.5°	9.3	15.6	20.8	20.8	19.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)