

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: P307681

Luminaire Tested: **14FCZ2-35-UNV-L82765-CP125-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: P307681
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-35-UNV-L82765-CP125-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.125" POLYCARB 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: 3440.0 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

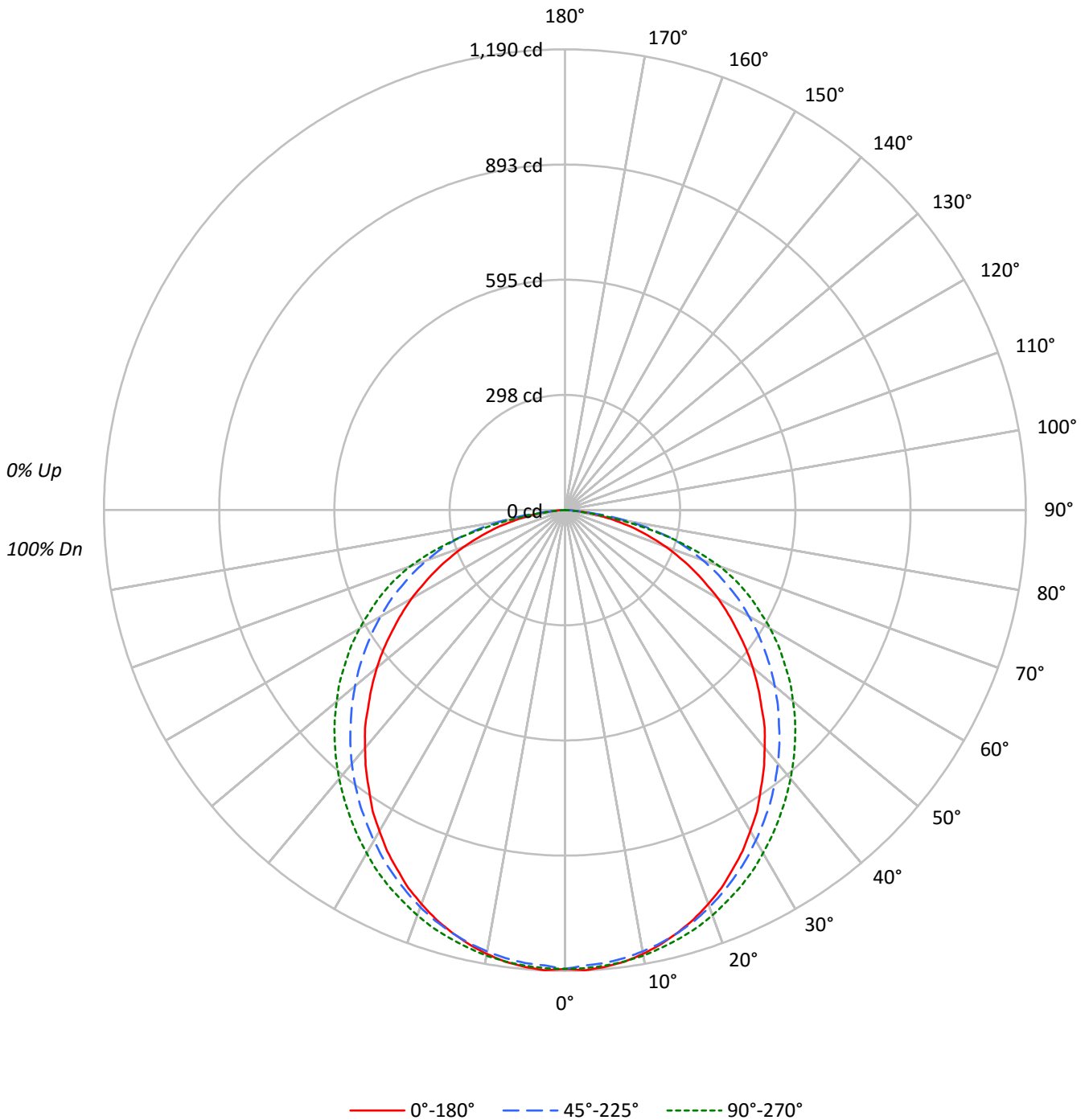
Input Watts (W): 30.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	100	100	100	100	100		
	1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83	83	83	83	83	83		
	2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69	69	69	69	69	69		
	3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58	58	58	58	58	58		
	4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49	49	49	49	49	49		
	5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42	42	42	42	42	42		
	6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37	37	37	37	37	37		
	7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32	32	32	32	32	32		
	8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29	29	29	29	29	29		
	9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26	26	26	26	26	26		
	10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24	24	24	24	24	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3189	3189	3189
5°	3199	3172	3191
10°	3180	3163	3192
15°	3146	3148	3190
20°	3099	3126	3190
25°	3040	3095	3186
30°	2975	3063	3179
35°	2895	3036	3177
40°	2818	3007	3182
45°	2732	2974	3199
50°	2653	2961	3221
55°	2551	2951	3249
60°	2461	2956	3294
65°	2334	2965	3345
70°	2190	2987	3343
75°	1986	3014	3022
80°	1629	2603	2151
85°	1207	1232	497



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.1	3.3
10°-20°	320.3	9.3
20°-30°	482.6	14.0
30°-40°	579.1	16.8
40°-50°	603.6	17.5
50°-60°	558.8	16.2
60°-70°	451.5	13.1
70°-80°	275.2	8.0
80°-90°	56.8	1.7
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°	915.0	26.6
0°-40°	1494.1	43.4
0°-60°	2656.4	77.2
0°-90°	3440.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3440.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1185	1185	1185	1185	1185	
5°	1184	1181	1174	1183	1181	112
15°	1129	1130	1130	1145	1145	318
25°	1024	1030	1042	1068	1073	472
35°	881	895	924	958	967	552
45°	718	739	782	825	841	555
55°	544	572	629	678	693	487
65°	367	403	466	512	525	363
75°	191	233	290	294	291	201
85°	39	58	40	22	16	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1185.1	1185.1	1185.1	1185.1	1185.1
2.5°	1189.7	1185.9	1177.4	1185.9	1184.3
5°	1184.3	1181.3	1174.4	1182.8	1181.3
7.5°	1176.7	1173.6	1167.4	1177.4	1175.9
10°	1163.6	1162.1	1157.5	1169.0	1168.2
12.5°	1148.3	1147.5	1145.2	1158.2	1157.5
15°	1129.1	1129.9	1129.9	1145.2	1145.2
17.5°	1107.6	1109.2	1112.2	1129.1	1131.4
20°	1082.3	1085.4	1091.5	1110.7	1113.8
22.5°	1056.2	1058.5	1067.7	1090.7	1093.8
25°	1024.0	1030.1	1042.4	1068.5	1073.1
27.5°	993.3	998.7	1015.6	1042.4	1050.1
30°	957.3	965.7	985.7	1014.8	1023.2
32.5°	922.8	932.0	955.0	988.7	996.4
35°	881.3	895.1	924.3	958.0	967.2
37.5°	843.8	856.8	889.8	926.6	937.3
40°	802.3	818.4	856.0	895.1	905.9
42.5°	764.0	779.3	820.0	859.9	874.4
45°	718.0	739.4	781.6	825.3	840.7
47.5°	675.8	697.2	745.6	792.4	806.2
50°	633.6	656.6	707.2	755.5	769.4
52.5°	589.9	614.4	668.9	717.2	733.3
55°	543.8	572.2	629.0	678.1	692.6
57.5°	500.1	529.3	589.9	639.7	654.3
60°	457.2	487.1	549.2	596.8	612.1
62.5°	409.6	444.9	509.3	556.1	567.6
65°	366.6	402.7	465.6	512.4	525.4
67.5°	321.4	360.5	423.4	466.4	478.6
70°	278.4	319.1	379.7	419.6	424.9
72.5°	232.4	273.8	335.2	360.5	360.5
75°	191.0	233.2	289.9	294.5	290.7
77.5°	145.7	192.5	229.3	220.1	210.9
80°	105.1	151.1	168.0	151.1	138.8
82.5°	70.6	109.7	101.3	80.5	71.3
85°	39.1	58.3	39.9	22.2	16.1
87.5°	14.6	13.0	3.8	3.8	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)