

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: P307136

Luminaire Tested: **14FCZ2-35-UNV-L82765-HRP-CP125-W2A-U-4000K**

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: P307136
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
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-HRP-CP125-W2A-U-4000K
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY RND PERF. LENS, 0.125"
POLYCARB SHEET
Light Source: (168) 4000K 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: 2493.0 lumens
Efficiency: N/A
Efficacy: 83.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

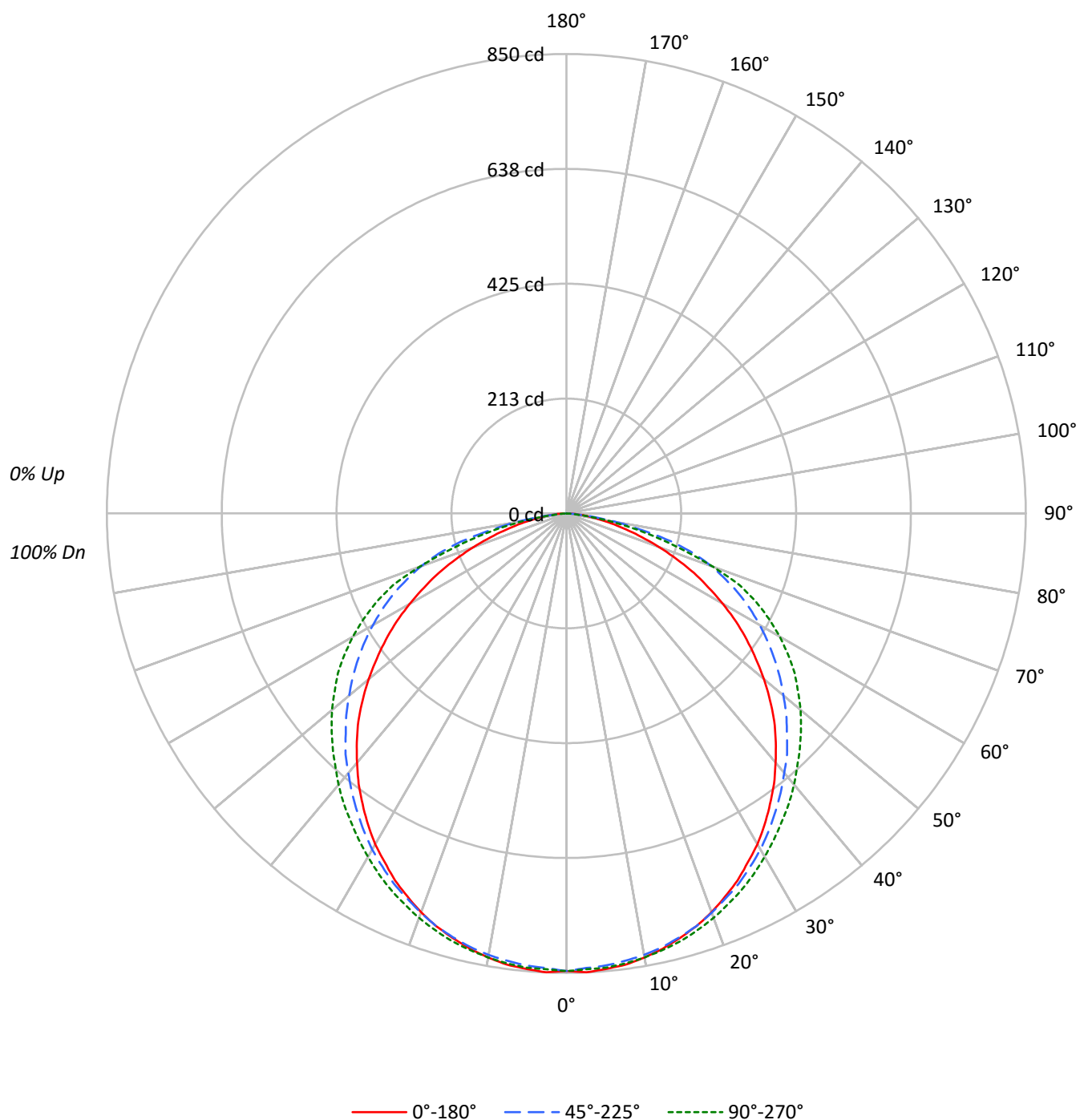
Input Watts (W): 29.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	97	94	91		93	91	88		84
2	99	90	83	78	96	88	82	77	85	79	75		82	77	73		69
3	90	79	71	64	87	77	70	64	74	68	62		72	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		42
6	69	56	47	40	68	55	46	40	53	45	40		51	45	39		37
7	64	51	42	36	63	50	41	35	48	41	35		47	40	35		33
8	60	46	38	32	58	45	37	32	44	37	31		43	36	31		29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		26
10	52	39	31	26	51	38	31	26	37	30	26		37	30	25		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2278	2278	2278
5°	2285	2268	2279
10°	2279	2266	2279
15°	2265	2260	2282
20°	2249	2252	2281
25°	2225	2244	2281
30°	2197	2231	2280
35°	2158	2215	2284
40°	2115	2203	2302
45°	2070	2196	2327
50°	1999	2195	2370
55°	1912	2207	2420
60°	1798	2223	2451
65°	1657	2246	2466
70°	1443	2251	2270
75°	1190	2095	1834
80°	936	1506	1227
85°	726	580	290



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.2	3.2
10°-20°	230.0	9.2
20°-30°	349.3	14.0
30°-40°	423.2	17.0
40°-50°	445.9	17.9
50°-60°	416.3	16.7
60°-70°	332.7	13.3
70°-80°	183.1	7.3
80°-90°	32.3	1.3
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°	659.4	26.5
0°-40°	1082.6	43.4
0°-60°	1944.9	78.0
0°-90°	2493.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2493.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	847	847	847	847	847	
5°	846	844	840	845	844	80
15°	813	813	811	819	819	229
25°	749	751	756	767	768	345
35°	657	663	674	691	695	411
45°	544	554	577	603	612	419
55°	408	428	470	503	516	364
65°	260	293	353	382	387	256
75°	114	164	202	181	176	123
85°	24	30	19	12	9	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	846.6	846.6	846.6	846.6	846.6
2.5°	849.8	847.4	841.9	846.6	844.3
5°	845.9	843.5	839.6	845.1	843.5
7.5°	841.9	838.8	834.9	841.1	839.6
10°	834.1	831.7	829.4	834.9	834.1
12.5°	824.7	823.9	821.5	827.8	827.0
15°	812.9	812.9	811.4	819.2	819.2
17.5°	800.4	799.6	800.4	809.0	808.2
20°	785.5	785.5	786.3	796.5	796.5
22.5°	767.5	768.2	770.6	783.1	782.4
25°	749.4	751.0	755.7	766.7	768.2
27.5°	727.5	731.4	736.9	750.2	751.8
30°	707.1	709.4	718.1	730.6	733.8
32.5°	682.8	687.5	696.9	711.0	714.9
35°	656.9	663.2	674.2	691.4	695.3
37.5°	631.1	636.5	651.4	669.5	676.5
40°	602.1	611.5	627.1	647.5	655.4
42.5°	573.8	583.2	604.4	625.6	632.6
45°	544.0	554.2	577.0	602.8	611.5
47.5°	511.1	522.9	551.9	579.3	588.7
50°	477.4	492.3	524.4	555.0	566.0
52.5°	442.1	460.9	497.8	529.9	540.1
55°	407.6	428.0	470.4	503.3	515.8
57.5°	372.4	394.3	442.1	479.8	486.8
60°	334.0	360.6	413.1	446.1	455.5
62.5°	296.3	326.9	383.3	414.7	422.5
65°	260.3	293.2	352.8	381.8	387.3
67.5°	221.1	260.3	319.1	345.7	347.3
70°	183.4	228.9	286.1	298.7	288.5
72.5°	146.6	195.2	247.7	237.5	228.9
75°	114.5	163.8	201.5	181.1	176.4
77.5°	84.7	134.1	144.2	133.3	124.6
80°	60.4	105.8	97.2	83.1	79.2
82.5°	41.5	66.6	53.3	41.5	36.1
85°	23.5	29.8	18.8	11.8	9.4
87.5°	10.2	7.1	3.9	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)