

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: P307960

Luminaire Tested: **14FCZ2-35-UNV-L82765-S-CP187-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: P307960
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
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-S-CP187-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 0.187" 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: 3329.0 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

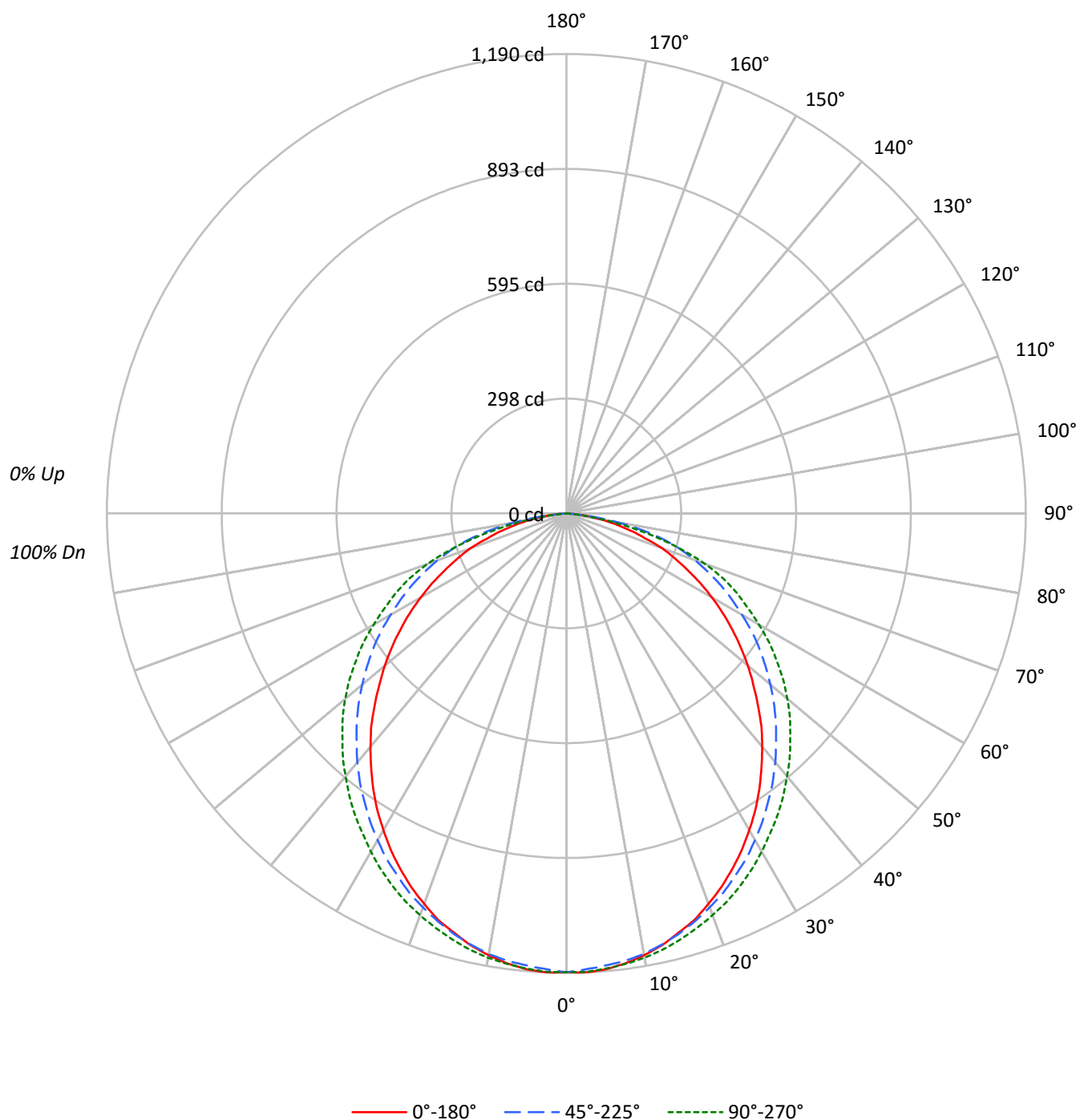
Input Watts (W): 30.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		94	91	89		84
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		70
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		58
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		50
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		43
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	35		33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3198	3198	3198
5°	3201	3175	3197
10°	3175	3166	3193
15°	3131	3141	3182
20°	3082	3110	3172
25°	3019	3073	3161
30°	2944	3036	3144
35°	2863	2993	3134
40°	2772	2957	3125
45°	2670	2921	3122
50°	2570	2888	3130
55°	2463	2865	3121
60°	2345	2825	3100
65°	2207	2816	3100
70°	2078	2792	3013
75°	1802	2728	2574
80°	1458	2199	1714
85°	969	766	509



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.2	3.4
10°-20°	319.3	9.6
20°-30°	479.0	14.4
30°-40°	571.4	17.2
40°-50°	590.7	17.7
50°-60°	539.3	16.2
60°-70°	424.4	12.7
70°-80°	247.1	7.4
80°-90°	45.5	1.4
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°	910.6	27.4
0°-40°	1482.0	44.5
0°-60°	2612.0	78.5
0°-90°	3329.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3329.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1188	1188	1188	1188	1188	
5°	1185	1182	1175	1185	1183	112
15°	1124	1126	1127	1142	1142	317
25°	1017	1022	1035	1060	1065	468
35°	872	883	911	946	954	545
45°	702	725	768	810	820	542
55°	525	553	611	655	665	469
65°	347	383	442	477	487	344
75°	173	215	262	258	248	184
85°	31	45	25	20	16	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1188.4	1188.4	1188.4	1188.4	1188.4
2.5°	1190.0	1186.7	1181.8	1190.0	1188.4
5°	1185.1	1181.8	1175.2	1185.1	1183.4
7.5°	1175.2	1171.9	1168.6	1178.5	1176.8
10°	1162.0	1160.3	1158.7	1170.2	1168.6
12.5°	1145.5	1145.5	1143.8	1157.0	1157.0
15°	1124.0	1125.7	1127.3	1142.2	1142.2
17.5°	1104.2	1102.6	1107.5	1124.0	1125.7
20°	1076.2	1079.5	1086.1	1105.9	1107.5
22.5°	1048.1	1051.4	1063.0	1082.8	1087.7
25°	1016.7	1021.7	1034.9	1059.7	1064.6
27.5°	983.7	990.3	1008.5	1034.9	1039.8
30°	947.4	957.3	977.1	1006.8	1011.8
32.5°	911.1	921.0	945.8	975.5	982.1
35°	871.5	883.0	911.1	945.8	954.0
37.5°	830.2	845.1	878.1	912.8	922.7
40°	789.0	805.5	841.8	878.1	889.6
42.5°	747.7	764.2	803.8	845.1	856.6
45°	701.5	724.6	767.5	810.4	820.3
47.5°	656.9	681.7	729.5	772.5	785.7
50°	614.0	638.8	689.9	734.5	747.7
52.5°	569.4	595.8	650.3	696.5	708.1
55°	524.9	552.9	610.7	655.3	665.2
57.5°	480.3	510.0	569.4	612.4	623.9
60°	435.7	467.1	524.9	567.8	576.0
62.5°	391.2	424.2	483.6	521.6	529.8
65°	346.6	382.9	442.3	477.0	486.9
67.5°	303.7	340.0	397.8	430.8	439.0
70°	264.1	297.1	354.9	379.6	382.9
72.5°	214.6	255.8	312.0	325.2	316.9
75°	173.3	214.6	262.4	257.5	247.6
77.5°	132.0	173.3	204.7	188.2	175.0
80°	94.1	135.3	141.9	117.2	110.6
82.5°	61.1	94.1	79.2	61.1	49.5
85°	31.4	44.6	24.8	19.8	16.5
87.5°	9.9	6.6	3.3	3.3	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)