

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: P307663

Luminaire Tested: **14FCZ2-35-UNV-L82765-CA08-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: P307663
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-CA08-W2A-U-6500K
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 0.08" ACRYLIC 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: 3521.0 lumens
Efficiency: N/A
Efficacy: 114.3 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

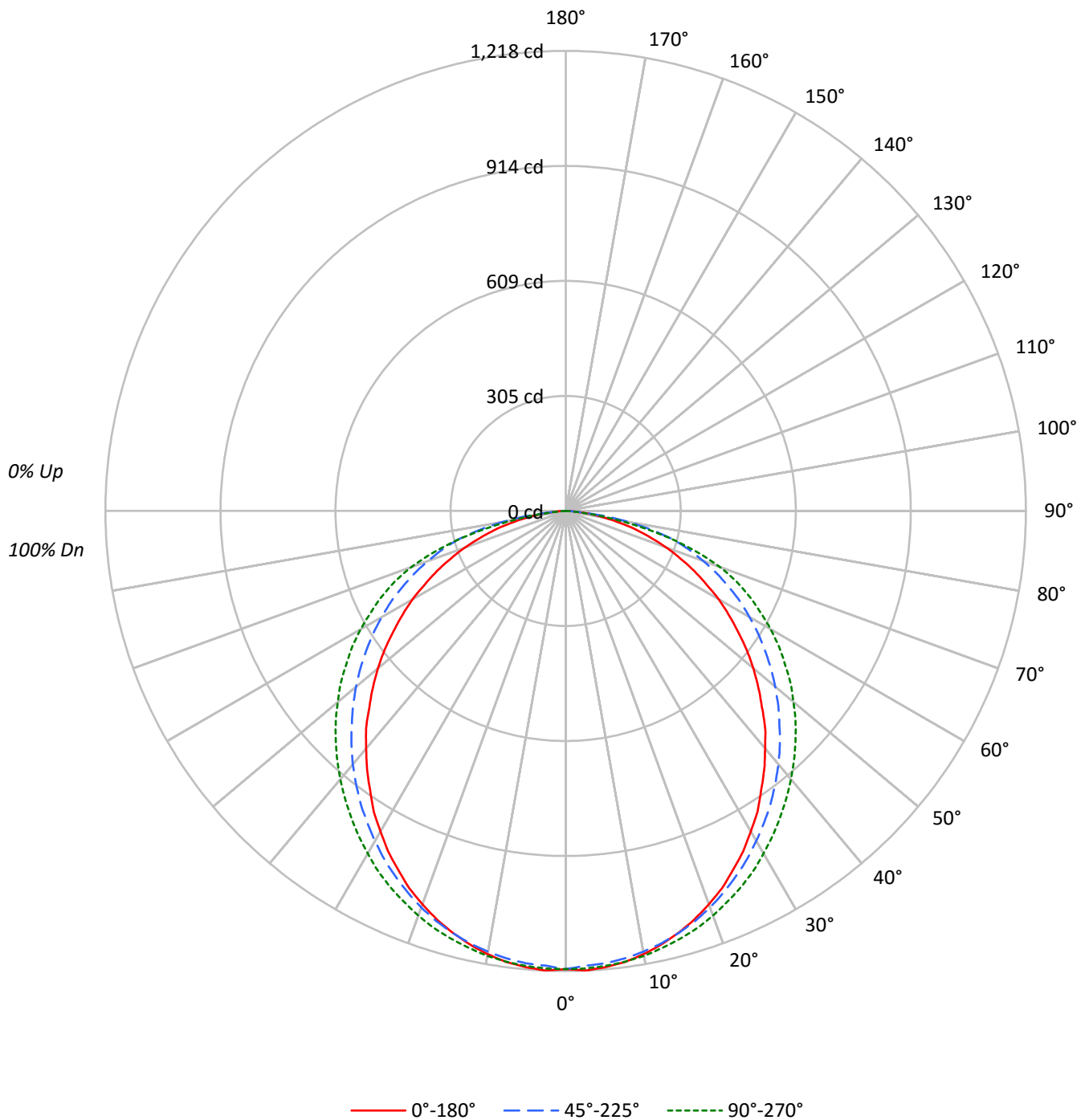
Input Watts (W): 30.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3264	3264	3264
5°	3274	3247	3266
10°	3254	3237	3267
15°	3220	3222	3266
20°	3172	3199	3265
25°	3112	3168	3261
30°	3045	3135	3254
35°	2963	3108	3252
40°	2885	3078	3257
45°	2797	3044	3275
50°	2715	3031	3297
55°	2611	3020	3326
60°	2518	3025	3372
65°	2390	3035	3424
70°	2242	3057	3423
75°	2033	3086	3094
80°	1667	2664	2202
85°	1235	1260	509



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	3.3
10°-20°	327.9	9.3
20°-30°	493.9	14.0
30°-40°	592.7	16.8
40°-50°	617.8	17.5
50°-60°	571.9	16.2
60°-70°	462.1	13.1
70°-80°	281.8	8.0
80°-90°	58.2	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°	936.6	26.6
0°-40°	1529.3	43.4
0°-60°	2719.0	77.2
0°-90°	3521.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3521.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1213	1213	1213	1213	1213	
5°	1212	1209	1202	1211	1209	115
15°	1156	1156	1156	1172	1172	326
25°	1048	1054	1067	1094	1098	483
35°	902	916	946	981	990	565
45°	735	757	800	845	860	568
55°	557	586	644	694	709	499
65°	375	412	477	524	538	371
75°	196	239	297	302	298	205
85°	40	60	41	23	16	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1213.0	1213.0	1213.0	1213.0	1213.0
2.5°	1217.7	1213.8	1205.1	1213.8	1212.2
5°	1212.2	1209.1	1202.0	1210.6	1209.1
7.5°	1204.4	1201.2	1194.9	1205.1	1203.6
10°	1191.0	1189.4	1184.7	1196.5	1195.7
12.5°	1175.3	1174.5	1172.2	1185.5	1184.7
15°	1155.7	1156.5	1156.5	1172.2	1172.2
17.5°	1133.7	1135.3	1138.4	1155.7	1158.0
20°	1107.8	1110.9	1117.2	1136.8	1140.0
22.5°	1081.1	1083.5	1092.9	1116.4	1119.6
25°	1048.1	1054.4	1067.0	1093.7	1098.4
27.5°	1016.7	1022.2	1039.5	1067.0	1074.8
30°	979.8	988.5	1008.9	1038.7	1047.3
32.5°	944.5	953.9	977.5	1012.0	1019.9
35°	902.1	916.2	946.1	980.6	990.0
37.5°	863.6	877.0	910.7	948.4	959.4
40°	821.2	837.7	876.2	916.2	927.2
42.5°	782.0	797.7	839.3	880.1	895.0
45°	734.9	756.8	800.0	844.8	860.5
47.5°	691.7	713.7	763.1	811.0	825.2
50°	648.5	672.1	723.9	773.3	787.5
52.5°	603.8	628.9	684.6	734.1	750.6
55°	556.6	585.7	643.8	694.0	709.0
57.5°	511.9	541.7	603.8	654.8	669.7
60°	467.9	498.5	562.1	610.8	626.5
62.5°	419.2	455.4	521.3	569.2	581.0
65°	375.3	412.2	476.6	524.5	537.8
67.5°	329.0	369.0	433.4	477.3	489.9
70°	285.0	326.6	388.6	429.5	435.0
72.5°	237.9	280.3	343.1	369.0	369.0
75°	195.5	238.7	296.8	301.5	297.6
77.5°	149.2	197.1	234.7	225.3	215.9
80°	107.6	154.7	171.9	154.7	142.1
82.5°	72.2	112.3	103.6	82.4	73.0
85°	40.0	59.7	40.8	22.8	16.5
87.5°	14.9	13.3	3.9	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)