

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: METALUX

Report Number: P275439

Luminaire Tested: **14CZ2-39-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275439
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: METALUX
Catalog Number: 14CZ2-39-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3269.0 lumens
Efficiency: N/A
Efficacy: 103.7 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

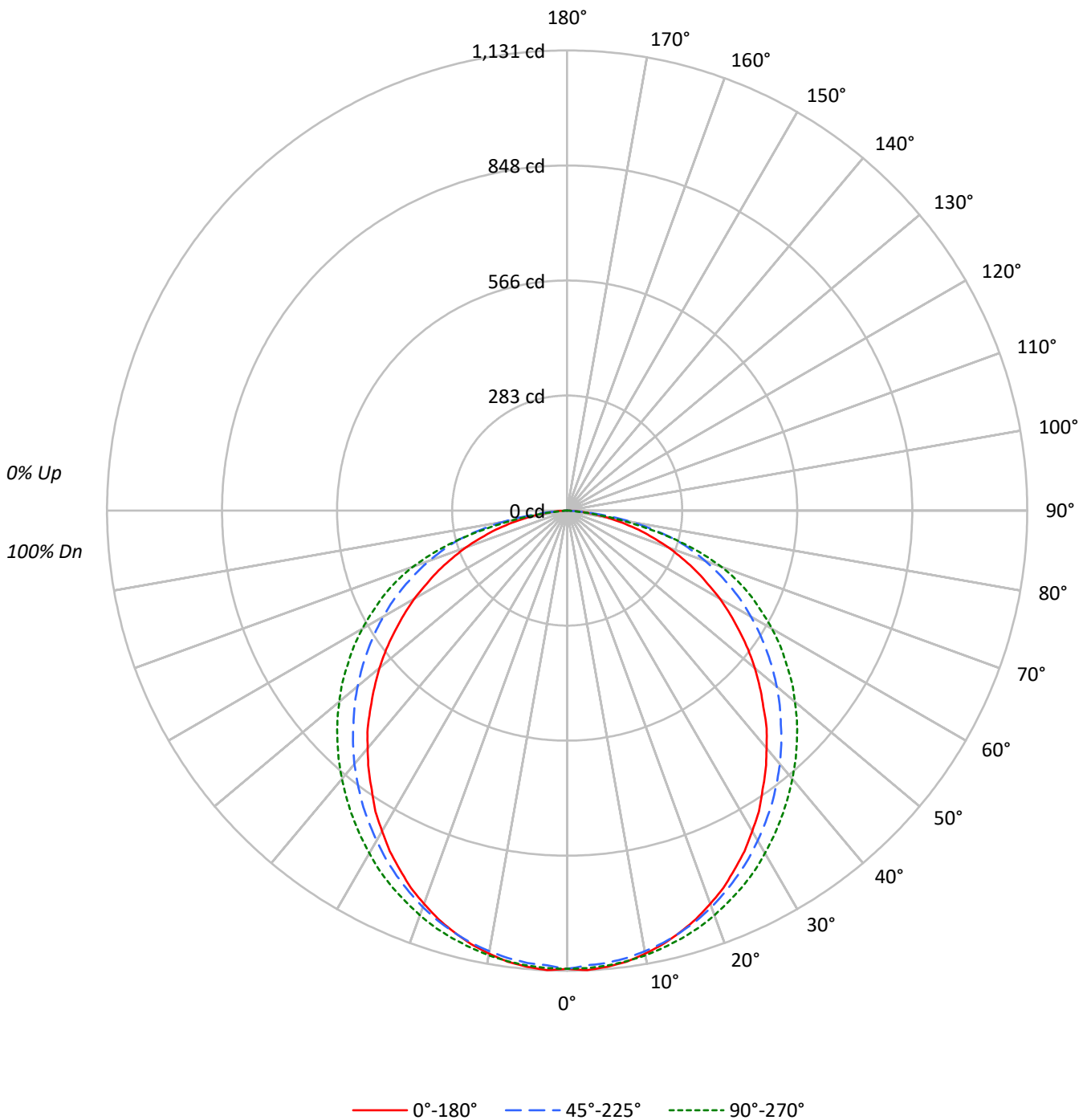
Input Watts (W): 31.527
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3031	3031	3031
5°	3040	3015	3032
10°	3022	3005	3033
15°	2989	2991	3032
20°	2945	2970	3031
25°	2889	2941	3028
30°	2827	2911	3022
35°	2751	2885	3020
40°	2679	2858	3024
45°	2597	2827	3040
50°	2521	2814	3061
55°	2425	2804	3088
60°	2338	2809	3131
65°	2218	2818	3179
70°	2082	2839	3177
75°	1887	2864	2873
80°	1548	2473	2044
85°	1149	1170	472



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.6	3.3
10°-20°	304.4	9.3
20°-30°	458.6	14.0
30°-40°	550.3	16.8
40°-50°	573.6	17.5
50°-60°	531.0	16.2
60°-70°	429.0	13.1
70°-80°	261.6	8.0
80°-90°	54.0	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°	869.6	26.6
0°-40°	1419.9	43.4
0°-60°	2524.4	77.2
0°-90°	3269.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3269.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1126	1126	1126	1126	1126	
5°	1126	1122	1116	1124	1122	107
15°	1073	1074	1074	1088	1088	302
25°	973	979	991	1015	1020	449
35°	838	851	878	910	919	525
45°	682	703	743	784	799	527
55°	517	544	598	644	658	463
65°	348	383	442	487	499	344
75°	182	222	276	280	276	191
85°	37	55	38	21	15	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1126.2	1126.2	1126.2	1126.2	1126.2
2.5°	1130.6	1126.9	1118.9	1126.9	1125.5
5°	1125.5	1122.5	1116.0	1124.0	1122.5
7.5°	1118.2	1115.2	1109.4	1118.9	1117.4
10°	1105.8	1104.3	1099.9	1110.9	1110.1
12.5°	1091.2	1090.5	1088.3	1100.7	1099.9
15°	1073.0	1073.7	1073.7	1088.3	1088.3
17.5°	1052.6	1054.0	1056.9	1073.0	1075.2
20°	1028.5	1031.4	1037.3	1055.5	1058.4
22.5°	1003.7	1005.9	1014.7	1036.5	1039.4
25°	973.1	978.9	990.6	1015.4	1019.8
27.5°	944.0	949.1	965.1	990.6	997.9
30°	909.7	917.7	936.7	964.4	972.4
32.5°	876.9	885.6	907.5	939.6	946.9
35°	837.5	850.6	878.3	910.4	919.2
37.5°	801.8	814.2	845.5	880.5	890.7
40°	762.5	777.8	813.5	850.6	860.9
42.5°	726.0	740.6	779.2	817.1	831.0
45°	682.3	702.7	742.8	784.3	798.9
47.5°	642.2	662.6	708.5	753.0	766.1
50°	602.1	624.0	672.1	718.0	731.1
52.5°	560.5	583.9	635.6	681.5	696.8
55°	516.8	543.8	597.7	644.4	658.2
57.5°	475.3	503.0	560.5	607.9	621.8
60°	434.4	462.9	521.9	567.1	581.7
62.5°	389.2	422.8	484.0	528.5	539.4
65°	348.4	382.7	442.5	486.9	499.3
67.5°	305.4	342.6	402.4	443.2	454.8
70°	264.6	303.2	360.8	398.7	403.8
72.5°	220.9	260.2	318.5	342.6	342.6
75°	181.5	221.6	275.5	279.9	276.3
77.5°	138.5	183.0	217.9	209.2	200.5
80°	99.9	143.6	159.6	143.6	131.9
82.5°	67.1	104.2	96.2	76.5	67.8
85°	37.2	55.4	37.9	21.1	15.3
87.5°	13.8	12.4	3.6	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)