

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: P259060

Luminaire Tested: **14CZ-LD5-39-SQP-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259060  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35908)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-39-SQP-UNV-L83050-W2A1-U-3000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2378.0 lumens  
Efficiency: N/A  
Efficacy: 77.0 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

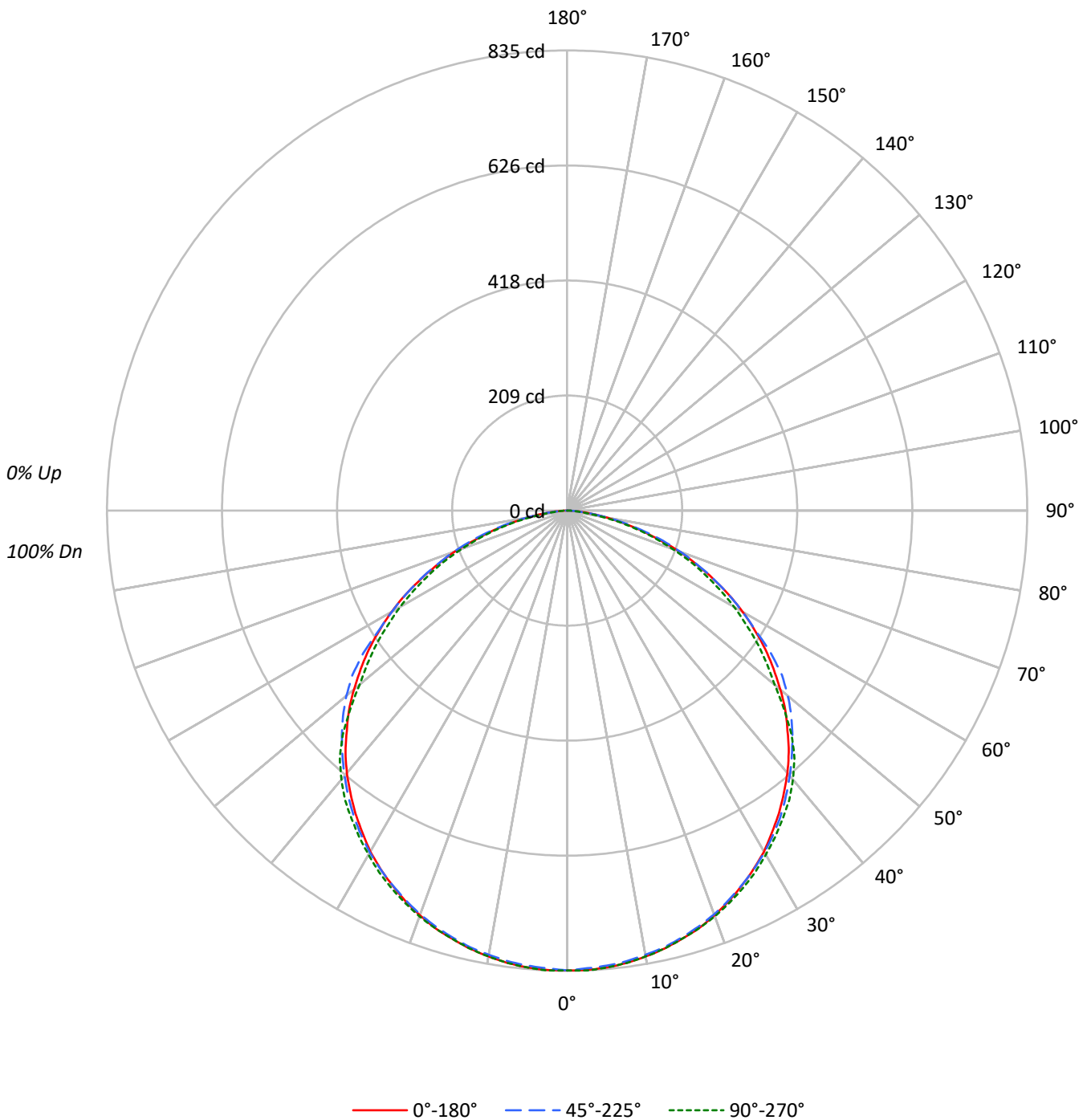
Input Watts (W): 30.876  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	62	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	63	51	42	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2246	2246	2246
5°	2248	2239	2248
10°	2245	2236	2245
15°	2242	2235	2242
20°	2237	2233	2244
25°	2229	2227	2243
30°	2220	2225	2240
35°	2202	2220	2241
40°	2184	2207	2238
45°	2152	2201	2192
50°	2114	2189	2057
55°	2060	2120	1980
60°	1981	1977	1886
65°	1857	1867	1764
70°	1705	1724	1597
75°	1432	1499	1365
80°	1136	1161	961
85°	747	645	546



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.0	3.3
10°-20°	227.1	9.6
20°-30°	346.8	14.6
30°-40°	423.2	17.8
40°-50°	442.5	18.6
50°-60°	391.8	16.5
60°-70°	288.5	12.1
70°-80°	149.3	6.3
80°-90°	29.8	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°	653.0	27.5
0°-40°	1076.1	45.3
0°-60°	1910.4	80.3
0°-90°	2378.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2378.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	834	834	834	834	834	
5°	832	832	829	832	832	79
15°	805	805	802	806	805	227
25°	751	751	750	755	756	346
35°	670	672	676	682	682	419
45°	566	570	578	583	576	437
55°	439	448	452	428	422	392
65°	292	309	293	282	277	289
75°	138	147	144	135	131	147
85°	24	26	21	18	18	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	834.5	834.5	834.5	834.5	834.5
2.5°	834.5	834.5	831.3	834.5	835.3
5°	832.1	832.1	828.8	832.1	832.1
7.5°	828.0	827.2	824.8	828.0	828.0
10°	821.6	821.6	818.4	822.4	821.6
12.5°	814.3	813.5	811.9	815.2	814.3
15°	804.7	804.7	802.3	805.5	804.7
17.5°	795.0	794.2	791.8	795.0	795.0
20°	781.3	780.5	779.7	782.9	783.7
22.5°	766.8	766.0	765.2	770.0	770.0
25°	750.7	750.7	749.9	754.7	755.5
27.5°	733.0	733.0	733.8	740.2	739.4
30°	714.5	714.5	716.1	720.9	720.9
32.5°	691.9	693.5	696.7	702.4	702.4
35°	670.2	671.8	675.8	682.2	682.2
37.5°	646.0	648.4	652.4	660.5	662.1
40°	621.8	623.4	628.3	637.1	637.1
42.5°	595.3	596.9	603.3	612.2	610.6
45°	565.5	570.3	578.3	583.2	575.9
47.5°	537.3	540.5	551.8	546.1	534.0
50°	505.0	511.5	522.8	502.6	491.3
52.5°	472.0	479.3	491.3	463.2	456.7
55°	439.0	447.8	451.9	428.5	422.1
57.5°	403.5	413.2	405.2	391.5	385.0
60°	368.1	379.4	367.3	354.4	350.4
62.5°	331.1	343.9	330.2	319.0	313.3
65°	291.6	309.3	293.2	281.9	277.1
67.5°	252.9	271.4	254.5	244.9	241.6
70°	216.7	227.1	219.1	209.4	203.0
72.5°	173.2	183.7	182.0	171.6	167.5
75°	137.7	147.4	144.2	135.3	131.3
77.5°	102.3	112.8	109.5	99.1	97.5
80°	73.3	80.5	74.9	65.2	62.0
82.5°	45.9	51.6	44.3	37.1	35.4
85°	24.2	25.8	20.9	18.5	17.7
87.5°	8.1	8.9	8.9	8.1	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)