

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: P258706

Luminaire Tested: **14CZ-LD5-20-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258706
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-20-S-UNV-L83050-W2A1-U-4000K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2257.6 lumens
Efficiency: N/A
Efficacy: 143.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

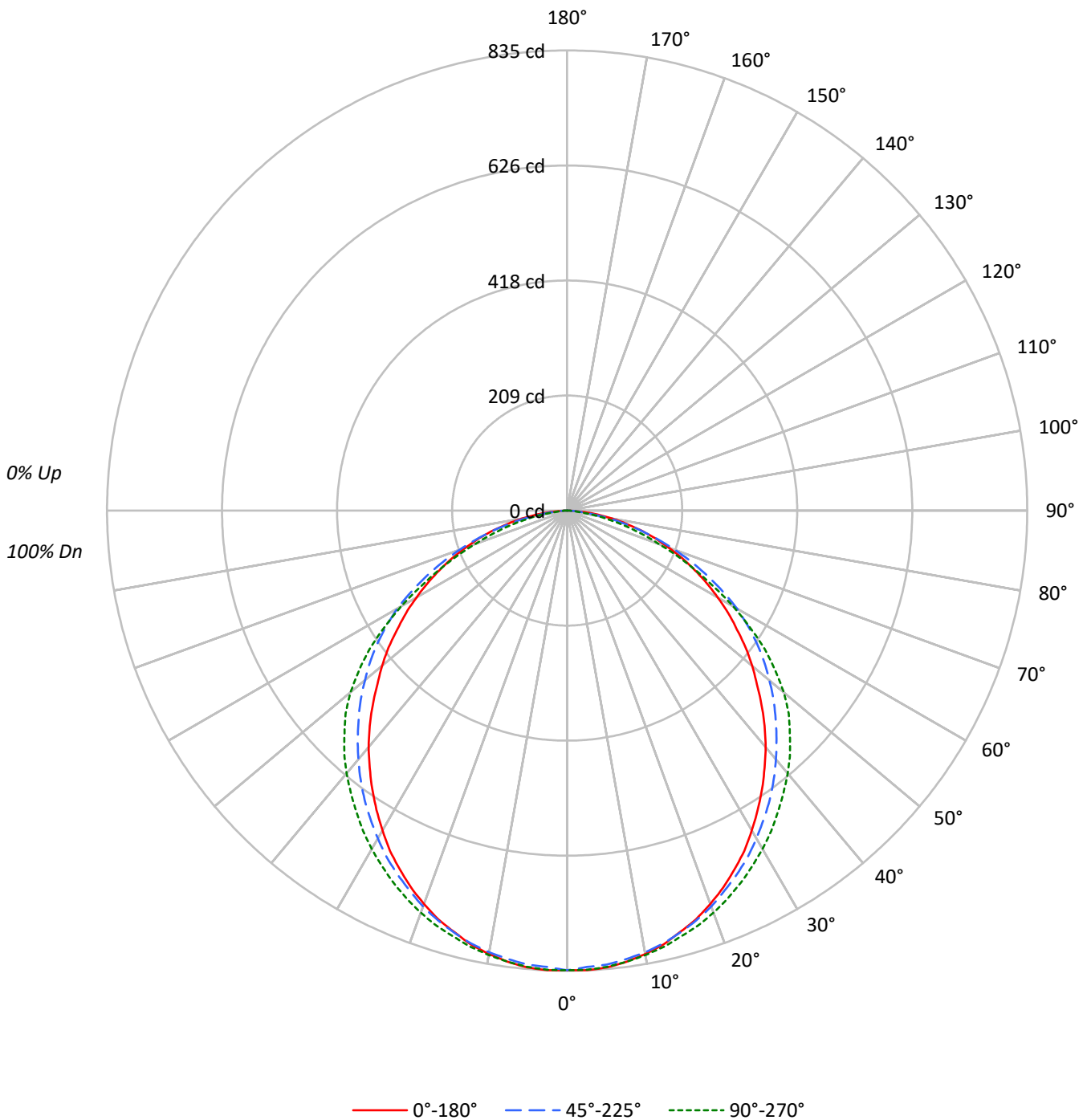
Input Watts (W): 15.717
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2244	2244	2244
5°	2247	2234	2245
10°	2232	2224	2238
15°	2206	2208	2228
20°	2175	2190	2224
25°	2133	2163	2214
30°	2082	2135	2204
35°	2026	2105	2191
40°	1968	2071	2187
45°	1899	2037	2175
50°	1836	2005	2148
55°	1765	1973	2053
60°	1700	1917	1873
65°	1627	1794	1646
70°	1536	1630	1393
75°	1433	1412	1151
80°	1263	1091	841
85°	994	528	466



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.8	3.5
10°-20°	224.5	9.9
20°-30°	336.9	14.9
30°-40°	401.7	17.8
40°-50°	413.7	18.3
50°-60°	368.7	16.3
60°-70°	265.7	11.8
70°-80°	138.9	6.2
80°-90°	28.7	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°	640.2	28.4
0°-40°	1041.9	46.1
0°-60°	1824.3	80.8
0°-90°	2257.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2257.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	834	834	834	834	834	
5°	832	830	827	832	831	79
15°	792	793	793	801	800	223
25°	718	722	728	742	746	331
35°	617	625	641	662	667	386
45°	499	510	535	565	571	385
55°	376	388	420	440	438	337
65°	256	265	282	269	258	253
75°	138	145	136	118	111	146
85°	32	28	17	15	15	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	834.0	834.0	834.0	834.0	834.0
2.5°	835.0	833.0	829.0	834.0	834.0
5°	832.0	830.0	826.9	832.0	831.0
7.5°	825.9	823.9	820.9	826.9	825.9
10°	816.9	815.9	813.9	819.9	818.9
12.5°	806.8	805.8	804.8	810.8	810.8
15°	791.7	792.7	792.7	800.8	799.8
17.5°	777.6	778.7	779.7	789.7	789.7
20°	759.5	760.5	764.6	775.6	776.6
22.5°	740.4	741.4	746.5	759.5	761.6
25°	718.3	722.3	728.4	742.4	745.5
27.5°	696.2	699.2	709.2	725.3	727.3
30°	670.0	676.0	687.1	705.2	709.2
32.5°	643.8	650.9	664.0	684.1	689.1
35°	616.7	624.7	640.8	662.0	667.0
37.5°	588.5	595.6	615.7	637.8	644.9
40°	560.3	567.4	589.5	614.7	622.7
42.5°	530.2	540.2	562.4	590.5	598.6
45°	499.0	510.0	535.2	565.4	571.4
47.5°	466.8	478.9	508.0	538.2	545.3
50°	438.6	449.7	478.9	508.0	513.1
52.5°	408.4	418.5	450.7	474.8	475.8
55°	376.2	388.3	420.5	439.6	437.6
57.5°	347.1	357.1	388.3	398.4	392.3
60°	315.9	324.9	356.1	357.1	348.1
62.5°	285.7	294.8	318.9	311.9	300.8
65°	255.5	264.6	281.7	268.6	258.5
67.5°	226.4	234.4	244.5	227.4	217.3
70°	195.2	206.2	207.2	187.1	177.1
72.5°	168.0	174.0	172.0	152.9	143.9
75°	137.8	144.9	135.8	117.7	110.7
77.5°	109.7	114.7	102.6	85.5	80.5
80°	81.5	84.5	70.4	57.3	54.3
82.5°	55.3	55.3	40.2	31.2	28.2
85°	32.2	28.2	17.1	15.1	15.1
87.5°	11.1	7.0	7.0	7.0	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)