

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: P258554

Luminaire Tested: **14CZ-LD5-35-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258554  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-35-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3747.1 lumens  
Efficiency: N/A  
Efficacy: 130.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

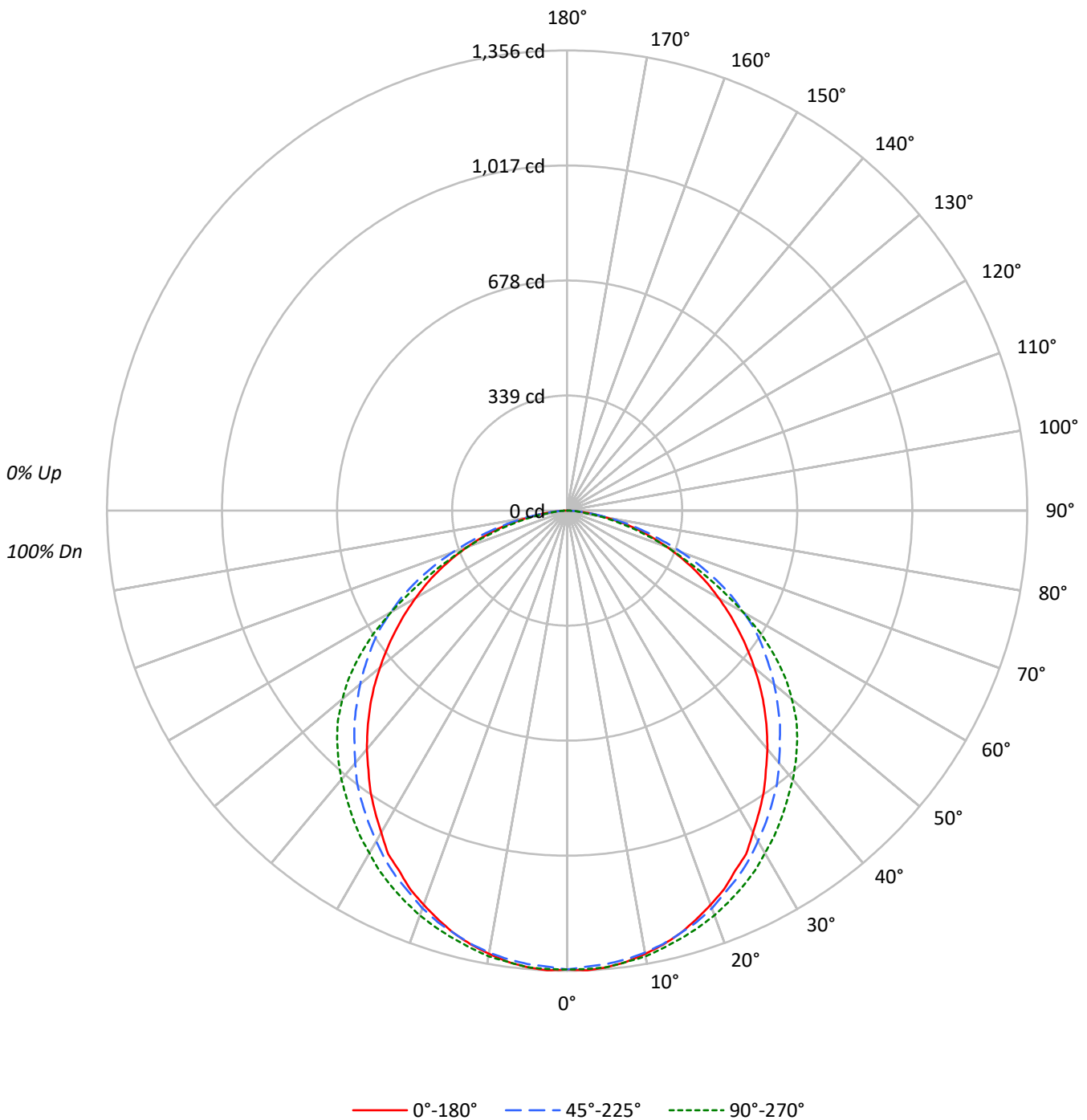
Input Watts (W): 28.737  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P258554

CATALOG NUMBER: 14CZ-LD5-35-UNV-L83050-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P258554

CATALOG NUMBER: 14CZ-LD5-35-UNV-L83050-W2A1-U-4500K

**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	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

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

	0°	45°	90°
0°	3639	3639	3639
5°	3648	3623	3648
10°	3624	3614	3644
15°	3592	3592	3633
20°	3539	3571	3634
25°	3477	3538	3631
30°	3404	3496	3622
35°	3320	3459	3623
40°	3225	3413	3634
45°	3128	3374	3648
50°	3016	3333	3619
55°	2895	3302	3501
60°	2774	3231	3221
65°	2646	3093	2823
70°	2456	2820	2441
75°	2228	2459	2017
80°	1774	1946	1489
85°	1254	1084	855



TEST NUMBER: P258554

CATALOG NUMBER: 14CZ-LD5-35-UNV-L83050-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.9	3.4
10°-20°	365.5	9.8
20°-30°	551.1	14.7
30°-40°	660.6	17.6
40°-50°	685.5	18.3
50°-60°	618.3	16.5
60°-70°	451.0	12.0
70°-80°	236.6	6.3
80°-90°	50.5	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°	1044.5	27.9
0°-40°	1705.1	45.5
0°-60°	3008.9	80.3
0°-90°	3747.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3747.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1352	1352	1352	1352	1352	
5°	1350	1347	1341	1350	1350	128
15°	1289	1289	1289	1304	1304	363
25°	1171	1177	1192	1217	1223	540
35°	1010	1022	1053	1092	1103	631
45°	822	839	887	940	959	634
55°	617	639	704	750	746	552
65°	416	440	486	467	443	411
75°	214	244	236	205	194	225
85°	41	50	35	30	28	52
90°	0	0	0	0	0	



TEST NUMBER: P258554

CATALOG NUMBER: 14CZ-LD5-35-UNV-L83050-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1352.2	1352.2	1352.2	1352.2	1352.2
2.5°	1355.9	1352.2	1344.8	1352.2	1352.2
5°	1350.4	1346.7	1341.1	1350.4	1350.4
7.5°	1341.1	1337.4	1333.7	1343.0	1341.1
10°	1326.4	1324.5	1322.7	1333.7	1333.7
12.5°	1309.7	1309.7	1307.9	1320.8	1319.0
15°	1289.4	1289.4	1289.4	1304.2	1304.2
17.5°	1263.6	1267.2	1270.9	1287.6	1287.6
20°	1235.8	1239.5	1246.9	1267.2	1269.1
22.5°	1208.1	1210.0	1217.4	1241.4	1246.9
25°	1171.2	1176.7	1191.5	1217.4	1222.9
27.5°	1141.6	1143.5	1160.1	1189.7	1197.0
30°	1095.4	1108.4	1125.0	1158.3	1165.6
32.5°	1053.0	1064.0	1089.9	1125.0	1136.1
35°	1010.5	1021.6	1053.0	1091.8	1102.8
37.5°	962.4	979.1	1016.0	1054.8	1067.7
40°	918.1	932.9	971.7	1019.7	1034.5
42.5°	870.1	884.9	927.3	980.9	997.5
45°	822.0	838.7	886.7	940.3	958.7
47.5°	772.2	790.6	840.5	899.6	916.3
50°	720.4	740.8	796.2	857.1	864.5
52.5°	668.7	690.9	750.0	803.6	811.0
55°	617.0	639.2	703.8	750.0	746.3
57.5°	567.1	591.1	657.6	681.7	678.0
60°	515.4	541.3	600.4	611.5	598.5
62.5°	467.4	491.4	546.8	537.6	520.9
65°	415.6	439.7	485.8	467.4	443.4
67.5°	363.9	393.5	423.0	391.6	373.2
70°	312.2	345.4	358.4	327.0	310.3
72.5°	262.3	297.4	293.7	262.3	251.2
75°	214.3	243.8	236.5	205.1	194.0
77.5°	162.6	195.8	179.2	153.3	144.1
80°	114.5	144.1	125.6	103.4	96.1
82.5°	75.7	96.1	77.6	61.0	55.4
85°	40.6	49.9	35.1	29.6	27.7
87.5°	16.6	14.8	12.9	12.9	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)