

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: P258760

Luminaire Tested: **14CZ-LD5-44-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258760
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-LD5-44-S-UNV-L93050-W2A1-U-3500K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3781.0 lumens
Efficiency: N/A
Efficacy: 104.2 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

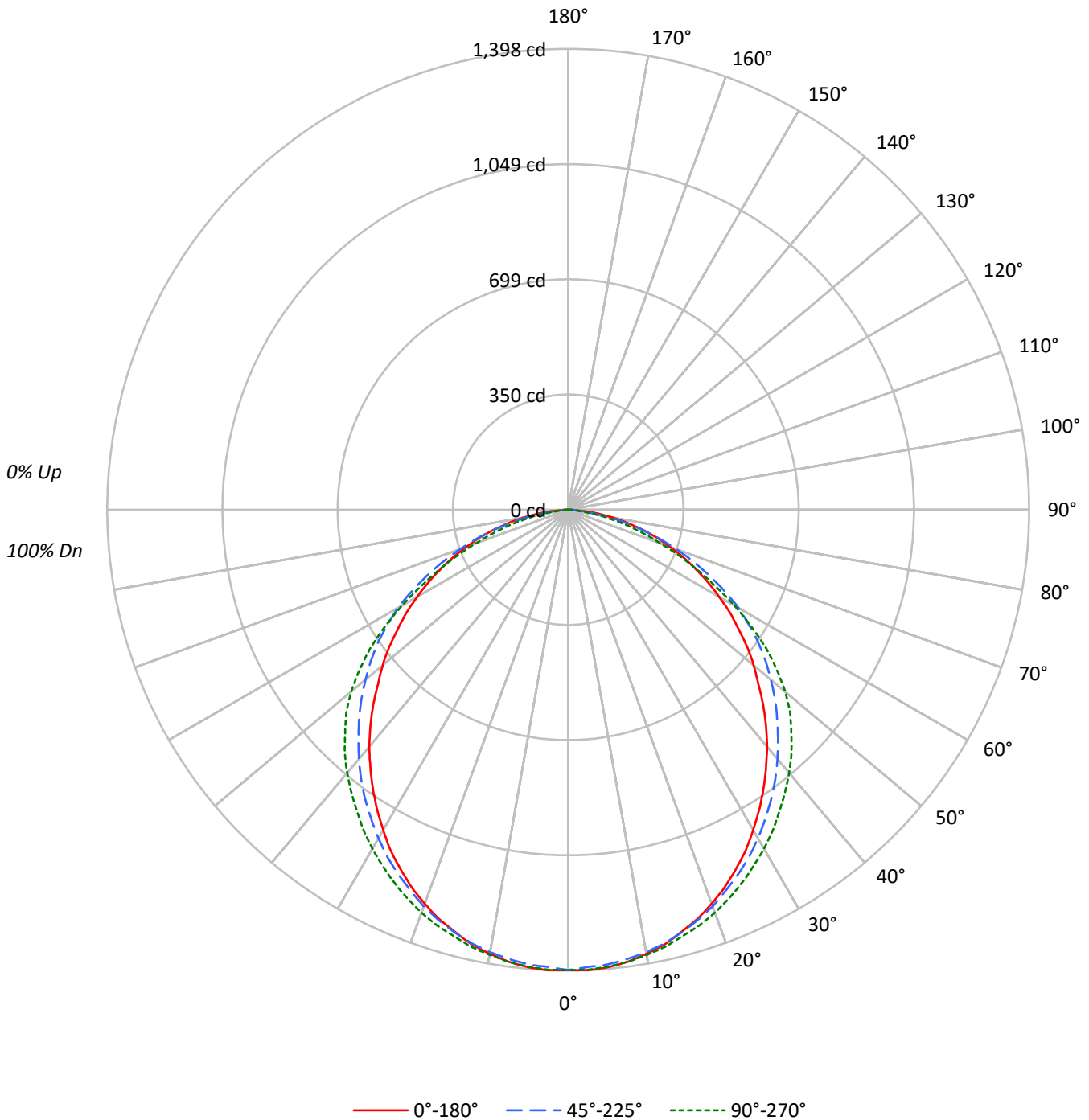
Input Watts (W): 36.27
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P258760

CATALOG NUMBER: 14CZ-LD5-44-S-UNV-L93050-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P258760

CATALOG NUMBER: 14CZ-LD5-44-S-UNV-L93050-W2A1-U-3500K

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°	3758	3758	3758
5°	3764	3741	3759
10°	3738	3724	3747
15°	3694	3699	3731
20°	3643	3667	3725
25°	3572	3622	3707
30°	3487	3576	3691
35°	3393	3526	3669
40°	3296	3468	3664
45°	3180	3411	3642
50°	3075	3358	3597
55°	2956	3304	3438
60°	2847	3210	3137
65°	2725	3004	2757
70°	2572	2731	2333
75°	2400	2364	1927
80°	2115	1827	1410
85°	1664	883	781



TEST NUMBER: P258760

CATALOG NUMBER: 14CZ-LD5-44-S-UNV-L93050-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.0	3.5
10°-20°	376.0	9.9
20°-30°	564.2	14.9
30°-40°	672.7	17.8
40°-50°	692.9	18.3
50°-60°	617.5	16.3
60°-70°	444.9	11.8
70°-80°	232.7	6.2
80°-90°	48.1	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°	1072.2	28.4
0°-40°	1744.9	46.1
0°-60°	3055.3	80.8
0°-90°	3781.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3781.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1397	1397	1397	1397	1397	
5°	1393	1390	1385	1393	1392	132
15°	1326	1328	1328	1341	1339	374
25°	1203	1210	1220	1243	1248	554
35°	1033	1046	1073	1109	1117	646
45°	836	854	896	947	957	645
55°	630	650	704	736	733	565
65°	428	443	472	450	433	424
75°	231	243	227	197	185	245
85°	54	47	29	25	25	63
90°	0	0	0	0	0	



TEST NUMBER: P258760

CATALOG NUMBER: 14CZ-LD5-44-S-UNV-L93050-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1396.7	1396.7	1396.7	1396.7	1396.7
2.5°	1398.4	1395.0	1388.3	1396.7	1396.7
5°	1393.3	1390.0	1384.9	1393.3	1391.6
7.5°	1383.2	1379.9	1374.8	1384.9	1383.2
10°	1368.1	1366.4	1363.0	1373.1	1371.4
12.5°	1351.2	1349.5	1347.8	1358.0	1358.0
15°	1325.9	1327.6	1327.6	1341.1	1339.4
17.5°	1302.4	1304.0	1305.7	1322.6	1322.6
20°	1272.0	1273.7	1280.5	1299.0	1300.7
22.5°	1240.0	1241.7	1250.1	1272.0	1275.4
25°	1203.0	1209.7	1219.8	1243.4	1248.4
27.5°	1165.9	1170.9	1187.8	1214.7	1218.1
30°	1122.1	1132.2	1150.7	1181.0	1187.8
32.5°	1078.3	1090.1	1112.0	1145.7	1154.1
35°	1032.8	1046.3	1073.2	1108.6	1117.0
37.5°	985.6	997.4	1031.1	1068.2	1080.0
40°	938.4	950.2	987.3	1029.4	1042.9
42.5°	887.9	904.7	941.8	989.0	1002.5
45°	835.7	854.2	896.3	946.9	957.0
47.5°	781.7	802.0	850.8	901.4	913.2
50°	734.6	753.1	802.0	850.8	859.3
52.5°	684.0	700.9	754.8	795.2	796.9
55°	630.1	650.3	704.2	736.3	732.9
57.5°	581.3	598.1	650.3	667.2	657.1
60°	529.0	544.2	596.4	598.1	582.9
62.5°	478.5	493.6	534.1	522.3	503.8
65°	427.9	443.1	471.7	449.8	433.0
67.5°	379.1	392.6	409.4	380.8	363.9
70°	326.9	345.4	347.1	313.4	296.5
72.5°	281.4	291.5	288.1	256.1	240.9
75°	230.8	242.6	227.4	197.1	185.3
77.5°	183.6	192.1	171.9	143.2	134.8
80°	136.5	141.5	117.9	96.0	91.0
82.5°	92.7	92.7	67.4	52.2	47.2
85°	53.9	47.2	28.6	25.3	25.3
87.5°	18.5	11.8	11.8	11.8	11.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)