

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: P258757

Luminaire Tested: **14CZ-LD5-39-S-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258757
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-LD5-39-S-UNV-L93050-W2A1-U-4500K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3716.0 lumens
Efficiency: N/A
Efficacy: 115.1 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

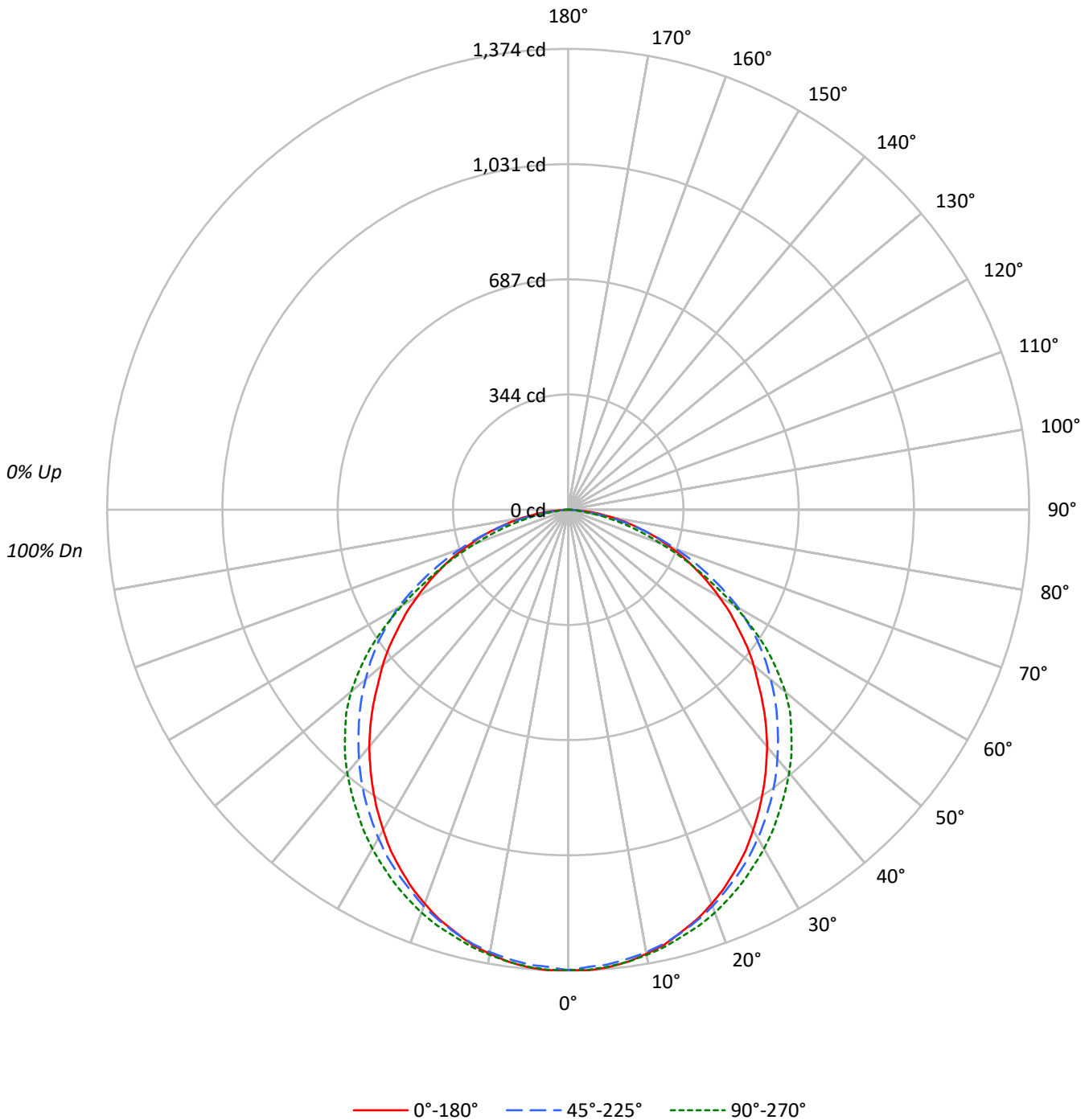
Input Watts (W): 32.271
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3694	3694	3694
5°	3699	3677	3695
10°	3674	3660	3683
15°	3630	3635	3667
20°	3580	3604	3661
25°	3510	3559	3643
30°	3427	3514	3627
35°	3334	3465	3606
40°	3240	3408	3601
45°	3126	3352	3579
50°	3022	3300	3535
55°	2905	3247	3379
60°	2798	3155	3083
65°	2678	2952	2710
70°	2527	2684	2293
75°	2359	2324	1893
80°	2078	1796	1385
85°	1636	868	766



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.7	3.5
10°-20°	369.5	9.9
20°-30°	554.5	14.9
30°-40°	661.1	17.8
40°-50°	681.0	18.3
50°-60°	606.9	16.3
60°-70°	437.3	11.8
70°-80°	228.7	6.2
80°-90°	47.3	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°	1053.8	28.4
0°-40°	1714.9	46.1
0°-60°	3002.7	80.8
0°-90°	3716.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3716.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1373	1373	1373	1373	1373	
5°	1369	1366	1361	1369	1368	130
15°	1303	1305	1305	1318	1316	368
25°	1182	1189	1199	1222	1227	545
35°	1015	1028	1055	1090	1098	635
45°	821	840	881	931	940	634
55°	619	639	692	724	720	555
65°	421	436	464	442	426	417
75°	227	238	224	194	182	240
85°	53	46	28	25	25	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1372.7	1372.7	1372.7	1372.7	1372.7
2.5°	1374.3	1371.0	1364.4	1372.7	1372.7
5°	1369.4	1366.1	1361.1	1369.4	1367.7
7.5°	1359.4	1356.1	1351.2	1361.1	1359.4
10°	1344.5	1342.9	1339.6	1349.5	1347.9
12.5°	1328.0	1326.3	1324.7	1334.6	1334.6
15°	1303.1	1304.8	1304.8	1318.0	1316.4
17.5°	1280.0	1281.6	1283.3	1299.8	1299.8
20°	1250.2	1251.8	1258.4	1276.7	1278.3
22.5°	1218.7	1220.4	1228.6	1250.2	1253.5
25°	1182.3	1188.9	1198.8	1222.0	1227.0
27.5°	1145.8	1150.8	1167.4	1193.9	1197.2
30°	1102.8	1112.7	1130.9	1160.7	1167.4
32.5°	1059.7	1071.3	1092.9	1126.0	1134.3
35°	1015.0	1028.3	1054.8	1089.5	1097.8
37.5°	968.7	980.3	1013.4	1049.8	1061.4
40°	922.3	933.9	970.3	1011.7	1025.0
42.5°	872.6	889.2	925.6	972.0	985.2
45°	821.3	839.5	880.9	930.6	940.5
47.5°	768.3	788.2	836.2	885.9	897.5
50°	721.9	740.2	788.2	836.2	844.5
52.5°	672.3	688.8	741.8	781.6	783.2
55°	619.3	639.2	692.1	723.6	720.3
57.5°	571.3	587.8	639.2	655.7	645.8
60°	519.9	534.8	586.2	587.8	572.9
62.5°	470.3	485.2	524.9	513.3	495.1
65°	420.6	435.5	463.6	442.1	425.6
67.5°	372.6	385.8	402.4	374.2	357.7
70°	321.2	339.4	341.1	308.0	291.4
72.5°	276.5	286.5	283.1	251.7	236.8
75°	226.9	238.4	223.5	193.7	182.1
77.5°	180.5	188.8	168.9	140.7	132.5
80°	134.1	139.1	115.9	94.4	89.4
82.5°	91.1	91.1	66.2	51.3	46.4
85°	53.0	46.4	28.1	24.8	24.8
87.5°	18.2	11.6	11.6	11.6	11.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)