

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: P259429

Luminaire Tested: **22CZ-LD5-39-S-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259429
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-39-S-UNV-L93050-W2A1-U-4500K
Description: CRUZE 2x2 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: 3752.0 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

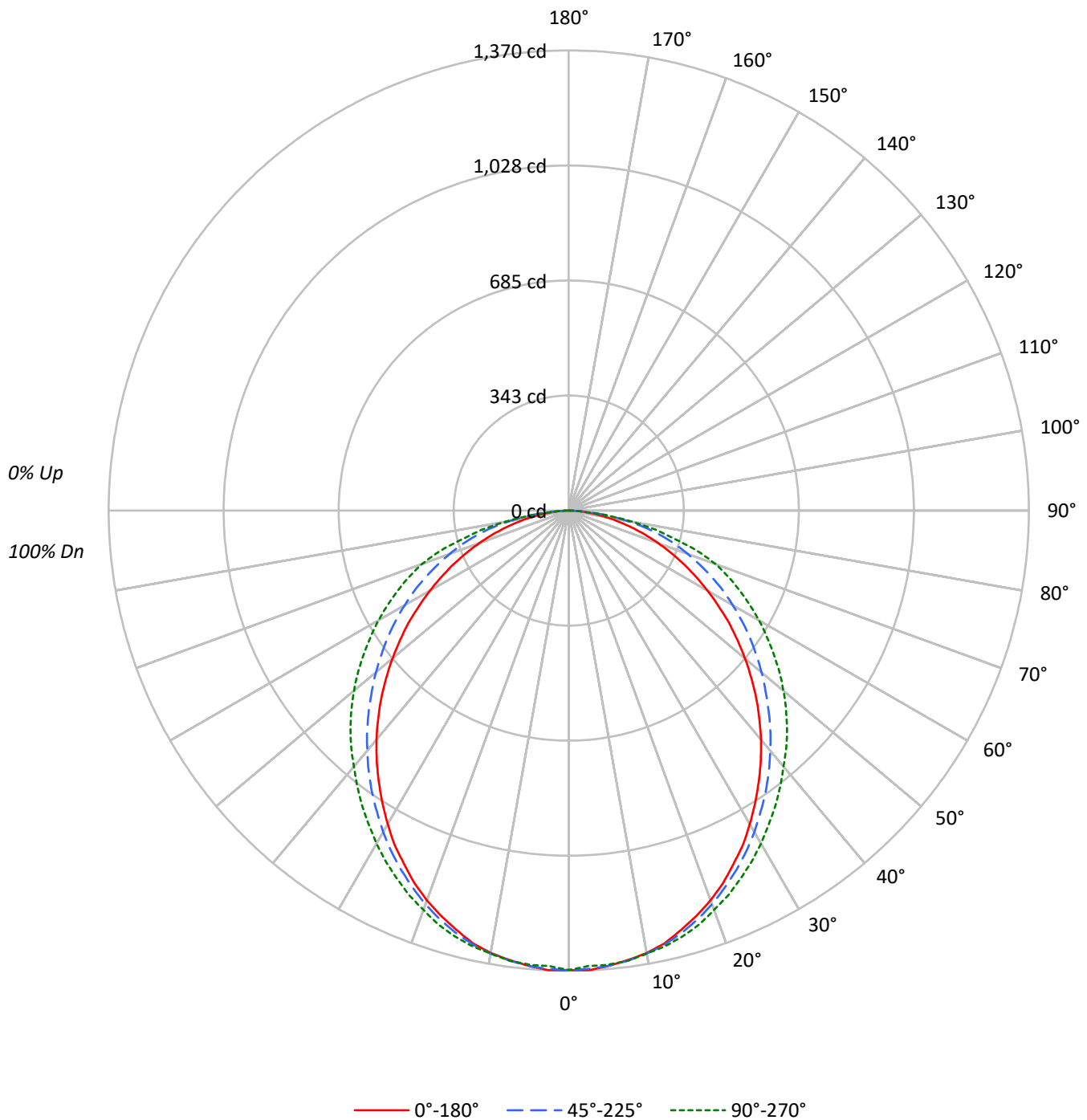
Input Watts (W): 31.397544
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	99	95	106	101	97	94		97	94	91		93	91	88		90	87	85
2	99	90	83	77	96	88	82	77		85	79	75		81	77	73		78	75	71
3	90	79	71	64	87	78	70	64		75	68	63		72	66	62		69	64	60
4	82	70	61	54	80	69	61	54		66	59	53		64	58	53		62	56	52
5	76	63	54	47	74	62	53	47		59	52	46		57	51	46		56	50	45
6	70	56	47	41	68	56	47	41		54	46	40		52	45	40		50	44	40
7	65	51	42	36	63	50	42	36		49	41	36		47	41	36		46	40	35
8	60	47	38	32	59	46	38	32		45	37	32		43	37	32		42	36	32
9	56	43	35	29	55	42	34	29		41	34	29		40	34	29		39	33	29
10	53	40	32	26	52	39	32	26		38	31	26		37	31	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3681	3681	3681
5°	3675	3675	3666
10°	3654	3659	3659
15°	3600	3625	3655
20°	3535	3571	3623
25°	3446	3505	3590
30°	3349	3433	3556
35°	3238	3357	3523
40°	3127	3279	3495
45°	3004	3203	3498
50°	2867	3139	3493
55°	2731	3086	3492
60°	2570	3036	3521
65°	2409	2995	3569
70°	2226	2963	3659
75°	2005	2941	3392
80°	1759	2737	2960
85°	1448	2059	1837



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.2	3.4
10°-20°	366.9	9.8
20°-30°	545.0	14.5
30°-40°	641.5	17.1
40°-50°	654.0	17.4
50°-60°	589.8	15.7
60°-70°	464.6	12.4
70°-80°	286.6	7.6
80°-90°	74.4	2.0
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°	1041.1	27.7
0°-40°	1682.6	44.8
0°-60°	2926.4	78.0
0°-90°	3752.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3752.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1368	1368	1368	1368	1368	
5°	1361	1362	1361	1359	1357	129
15°	1292	1298	1301	1308	1312	364
25°	1161	1168	1180	1200	1209	535
35°	986	997	1022	1054	1072	617
45°	789	802	842	892	919	608
55°	582	602	658	717	744	519
65°	378	406	470	530	560	375
75°	193	225	283	315	326	206
85°	47	60	67	63	60	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1367.8	1367.8	1367.8	1367.8	1367.8
2.5°	1369.6	1369.6	1366.0	1362.4	1357.0
5°	1360.6	1362.4	1360.6	1358.8	1357.0
7.5°	1349.8	1351.6	1351.6	1351.6	1351.6
10°	1337.2	1339.0	1339.0	1339.0	1339.0
12.5°	1319.2	1321.0	1322.8	1324.6	1328.2
15°	1292.1	1297.5	1301.1	1308.4	1312.0
17.5°	1265.1	1270.5	1275.9	1284.9	1292.1
20°	1234.5	1238.1	1247.1	1257.9	1265.1
22.5°	1200.2	1205.6	1214.6	1229.1	1239.9
25°	1160.6	1167.8	1180.4	1200.2	1209.2
27.5°	1122.7	1128.1	1144.4	1166.0	1178.6
30°	1077.7	1084.9	1104.7	1131.7	1144.4
32.5°	1032.6	1041.6	1063.3	1093.9	1108.3
35°	985.8	996.6	1021.8	1054.3	1072.3
37.5°	938.9	949.7	978.6	1014.6	1034.4
40°	890.3	901.1	933.5	973.2	994.8
42.5°	839.8	852.4	888.5	933.5	958.7
45°	789.3	802.0	841.6	892.1	919.1
47.5°	737.1	751.5	794.7	850.6	877.6
50°	684.8	701.0	749.7	807.4	834.4
52.5°	632.6	650.6	702.8	762.3	791.1
55°	582.1	601.9	657.8	717.3	744.3
57.5°	528.0	551.5	610.9	668.6	699.2
60°	477.6	502.8	564.1	621.7	654.2
62.5°	427.1	454.1	519.0	576.7	607.3
65°	378.4	405.5	470.4	529.8	560.5
67.5°	329.8	360.4	423.5	483.0	513.6
70°	282.9	315.4	376.6	434.3	465.0
72.5°	237.9	270.3	331.6	385.7	403.7
75°	192.8	225.3	282.9	315.4	326.2
77.5°	151.4	182.0	232.5	252.3	266.7
80°	113.5	140.6	176.6	189.2	191.0
82.5°	77.5	100.9	122.5	124.3	122.5
85°	46.9	59.5	66.7	63.1	59.5
87.5°	21.6	23.4	21.6	14.4	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)