

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: P259259

Luminaire Tested: **22CZ-LD5-39-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259259
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25706)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-39-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3347.0 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

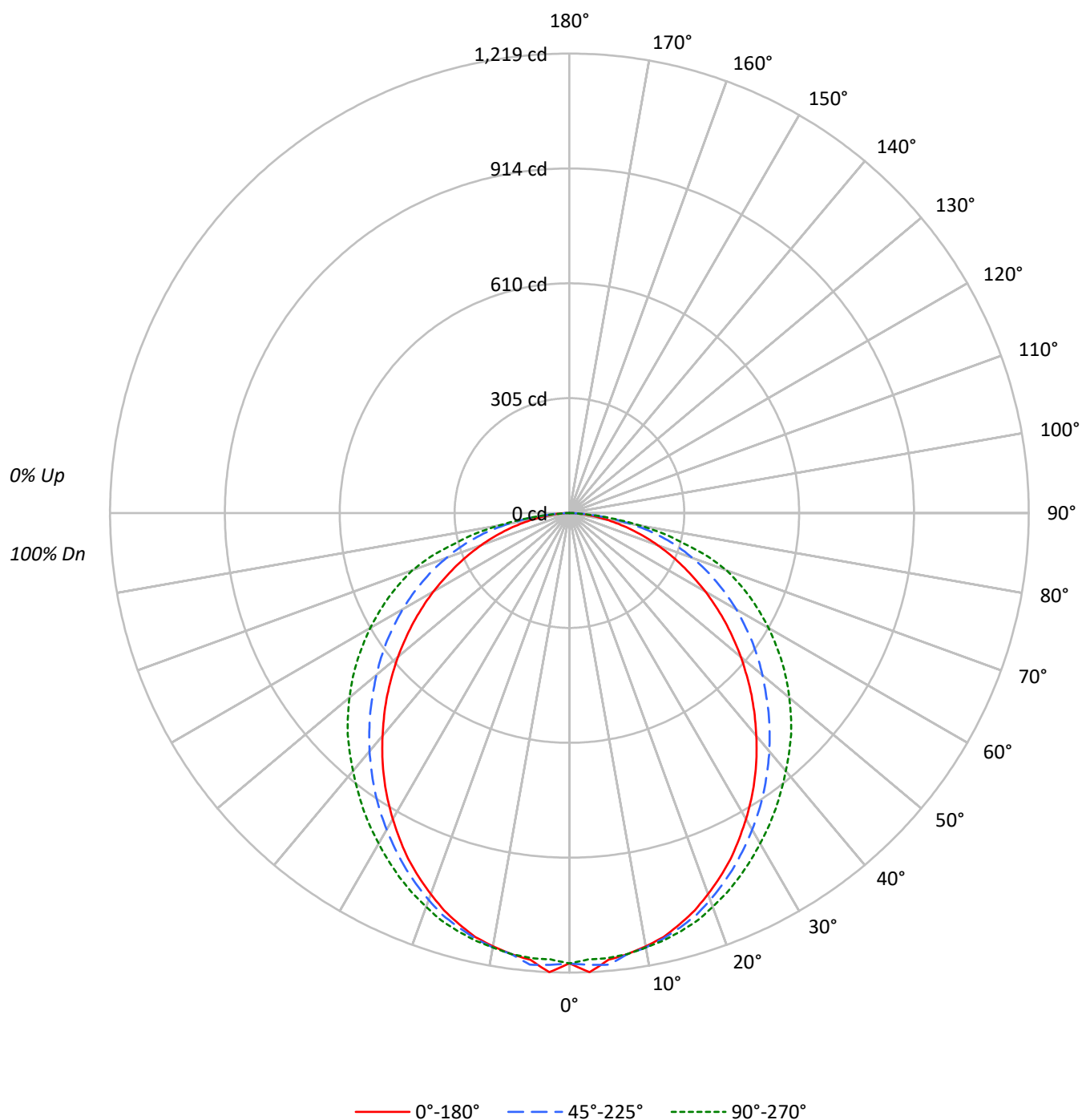
Input Watts (W): 30.704508
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	104	99	95	106	101	97	94	97	94	91		93	90	88		89
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		78
3	90	79	70	64	87	77	69	63	74	68	62		71	66	61		69
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		61
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		55
6	70	56	47	41	68	55	47	40	53	46	40		52	45	40		50
7	65	51	42	36	63	50	42	36	48	41	35		47	40	35		46
8	60	46	38	32	58	46	38	32	44	37	32		43	36	31		42
9	56	43	34	29	55	42	34	29	41	34	29		40	33	28		39
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3215	3215	3215
5°	3214	3249	3201
10°	3189	3198	3198
15°	3147	3170	3197
20°	3081	3127	3183
25°	3006	3074	3165
30°	2913	3014	3146
35°	2818	2957	3139
40°	2710	2899	3139
45°	2602	2843	3165
50°	2487	2800	3189
55°	2367	2772	3230
60°	2243	2751	3285
65°	2104	2736	3368
70°	1959	2728	3483
75°	1777	2724	3300
80°	1539	2523	2926
85°	1306	1908	1859



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	3.4
10°-20°	321.0	9.6
20°-30°	477.5	14.3
30°-40°	564.7	16.9
40°-50°	580.4	17.3
50°-60°	530.3	15.8
60°-70°	424.3	12.7
70°-80°	266.3	8.0
80°-90°	69.3	2.1
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°	911.7	27.2
0°-40°	1476.4	44.1
0°-60°	2587.1	77.3
0°-90°	3347.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3347.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1195	1195	1195	1195	1195	
5°	1190	1190	1203	1195	1185	113
15°	1130	1131	1138	1144	1148	318
25°	1012	1019	1035	1053	1066	465
35°	858	869	900	934	955	536
45°	684	702	747	802	832	527
55°	505	529	591	656	688	451
65°	330	360	430	495	529	328
75°	171	203	262	301	317	182
85°	42	54	62	60	60	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1194.7	1194.7	1194.7	1194.7	1194.7
2.5°	1219.1	1214.2	1199.5	1189.8	1184.9
5°	1189.8	1189.8	1202.8	1194.7	1184.9
7.5°	1180.0	1180.0	1180.0	1204.4	1180.0
10°	1167.0	1168.6	1170.2	1180.0	1170.2
12.5°	1152.3	1152.3	1155.6	1158.8	1160.5
15°	1129.6	1131.2	1137.7	1144.2	1147.5
17.5°	1105.1	1110.0	1118.2	1126.3	1132.8
20°	1075.8	1082.4	1092.1	1105.1	1111.6
22.5°	1044.9	1051.4	1064.4	1079.1	1090.5
25°	1012.4	1018.9	1035.2	1053.1	1066.1
27.5°	974.9	983.1	1002.6	1027.0	1040.0
30°	937.5	947.3	970.0	997.7	1012.4
32.5°	898.4	909.8	935.9	966.8	984.7
35°	857.7	869.1	900.1	934.2	955.4
37.5°	815.4	828.4	862.6	901.7	924.5
40°	771.5	786.1	825.2	867.5	893.6
42.5°	727.5	743.8	786.1	836.6	862.6
45°	683.6	701.5	747.1	802.4	831.7
47.5°	638.0	659.2	706.4	768.2	797.5
50°	594.1	615.2	668.9	732.4	761.7
52.5°	548.5	572.9	629.9	695.0	725.9
55°	504.6	529.0	590.8	655.9	688.5
57.5°	460.6	485.0	550.1	616.9	649.4
60°	416.7	442.7	511.1	576.2	610.3
62.5°	372.7	400.4	470.4	537.1	569.7
65°	330.4	359.7	429.7	494.8	529.0
67.5°	289.7	320.6	389.0	452.5	486.7
70°	249.0	279.9	346.7	408.5	442.7
72.5°	210.0	240.9	306.0	361.3	387.4
75°	170.9	203.4	262.0	301.1	317.4
77.5°	133.5	166.0	216.5	242.5	260.4
80°	99.3	127.0	162.8	182.3	188.8
82.5°	68.4	91.1	113.9	118.8	122.1
85°	42.3	53.7	61.8	60.2	60.2
87.5°	19.5	21.2	17.9	13.0	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)