

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: P259261

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259261
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-4500K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3678.0 lumens
Efficiency: N/A
Efficacy: 117.1 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

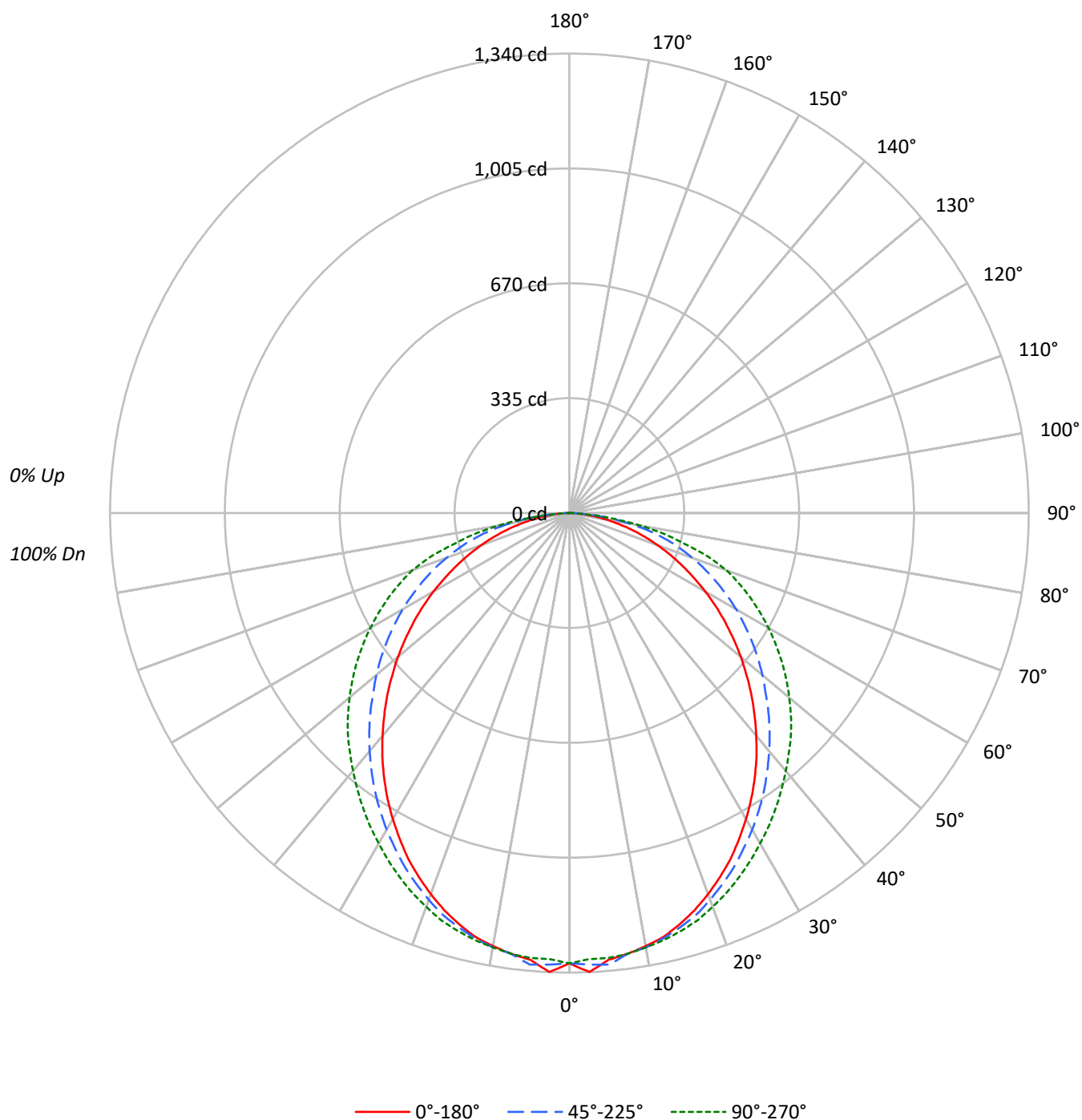
Input Watts (W): 31.397544
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	3533	3533	3533
5°	3532	3570	3517
10°	3504	3514	3514
15°	3458	3483	3513
20°	3385	3437	3498
25°	3303	3377	3478
30°	3201	3312	3457
35°	3097	3249	3449
40°	2978	3185	3449
45°	2859	3124	3478
50°	2733	3077	3504
55°	2601	3046	3550
60°	2464	3023	3610
65°	2312	3007	3701
70°	2153	2998	3828
75°	1953	2994	3627
80°	1691	2772	3216
85°	1436	2100	2044



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.5	3.4
10°-20°	352.7	9.6
20°-30°	524.7	14.3
30°-40°	620.5	16.9
40°-50°	637.8	17.3
50°-60°	582.8	15.8
60°-70°	466.2	12.7
70°-80°	292.6	8.0
80°-90°	76.2	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°	1001.9	27.2
0°-40°	1622.4	44.1
0°-60°	2843.0	77.3
0°-90°	3678.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3678.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1313	1313	1313	1313	1313	
5°	1307	1307	1322	1313	1302	124
15°	1241	1243	1250	1257	1261	350
25°	1112	1120	1138	1157	1172	512
35°	943	955	989	1027	1050	589
45°	751	771	821	882	914	579
55°	554	581	649	721	757	496
65°	363	395	472	544	581	360
75°	188	224	288	331	349	199
85°	46	59	68	66	66	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1312.8	1312.8	1312.8	1312.8	1312.8
2.5°	1339.6	1334.3	1318.2	1307.4	1302.1
5°	1307.4	1307.4	1321.7	1312.8	1302.1
7.5°	1296.7	1296.7	1296.7	1323.5	1296.7
10°	1282.4	1284.2	1286.0	1296.7	1286.0
12.5°	1266.3	1266.3	1269.9	1273.5	1275.2
15°	1241.3	1243.0	1250.2	1257.4	1260.9
17.5°	1214.4	1219.8	1228.7	1237.7	1244.8
20°	1182.2	1189.4	1200.1	1214.4	1221.6
22.5°	1148.3	1155.4	1169.7	1185.8	1198.3
25°	1112.5	1119.6	1137.5	1157.2	1171.5
27.5°	1071.3	1080.3	1101.8	1128.6	1142.9
30°	1030.2	1040.9	1066.0	1096.4	1112.5
32.5°	987.3	999.8	1028.4	1062.4	1082.1
35°	942.6	955.1	989.1	1026.6	1049.9
37.5°	896.1	910.4	947.9	990.9	1015.9
40°	847.8	863.9	906.8	953.3	981.9
42.5°	799.5	817.4	863.9	919.3	947.9
45°	751.2	770.9	820.9	881.8	914.0
47.5°	701.1	724.4	776.2	844.2	876.4
50°	652.8	676.1	735.1	804.9	837.0
52.5°	602.7	629.6	692.2	763.7	797.7
55°	554.5	581.3	649.2	720.8	756.6
57.5°	506.2	533.0	604.5	677.9	713.6
60°	457.9	486.5	561.6	633.1	670.7
62.5°	409.6	440.0	516.9	590.2	626.0
65°	363.1	395.3	472.2	543.7	581.3
67.5°	318.4	352.3	427.5	497.2	534.8
70°	273.6	307.6	381.0	448.9	486.5
72.5°	230.7	264.7	336.2	397.1	425.7
75°	187.8	223.6	288.0	330.9	348.8
77.5°	146.7	182.4	237.9	266.5	286.2
80°	109.1	139.5	178.9	200.3	207.5
82.5°	75.1	100.2	125.2	130.6	134.1
85°	46.5	59.0	68.0	66.2	66.2
87.5°	21.5	23.3	19.7	14.3	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)