

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: P259229

Luminaire Tested: **22CZ-LD5-39-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259229
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-L83050-W2A1-U-3500K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3938.0 lumens
Efficiency: N/A
Efficacy: 130.7 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

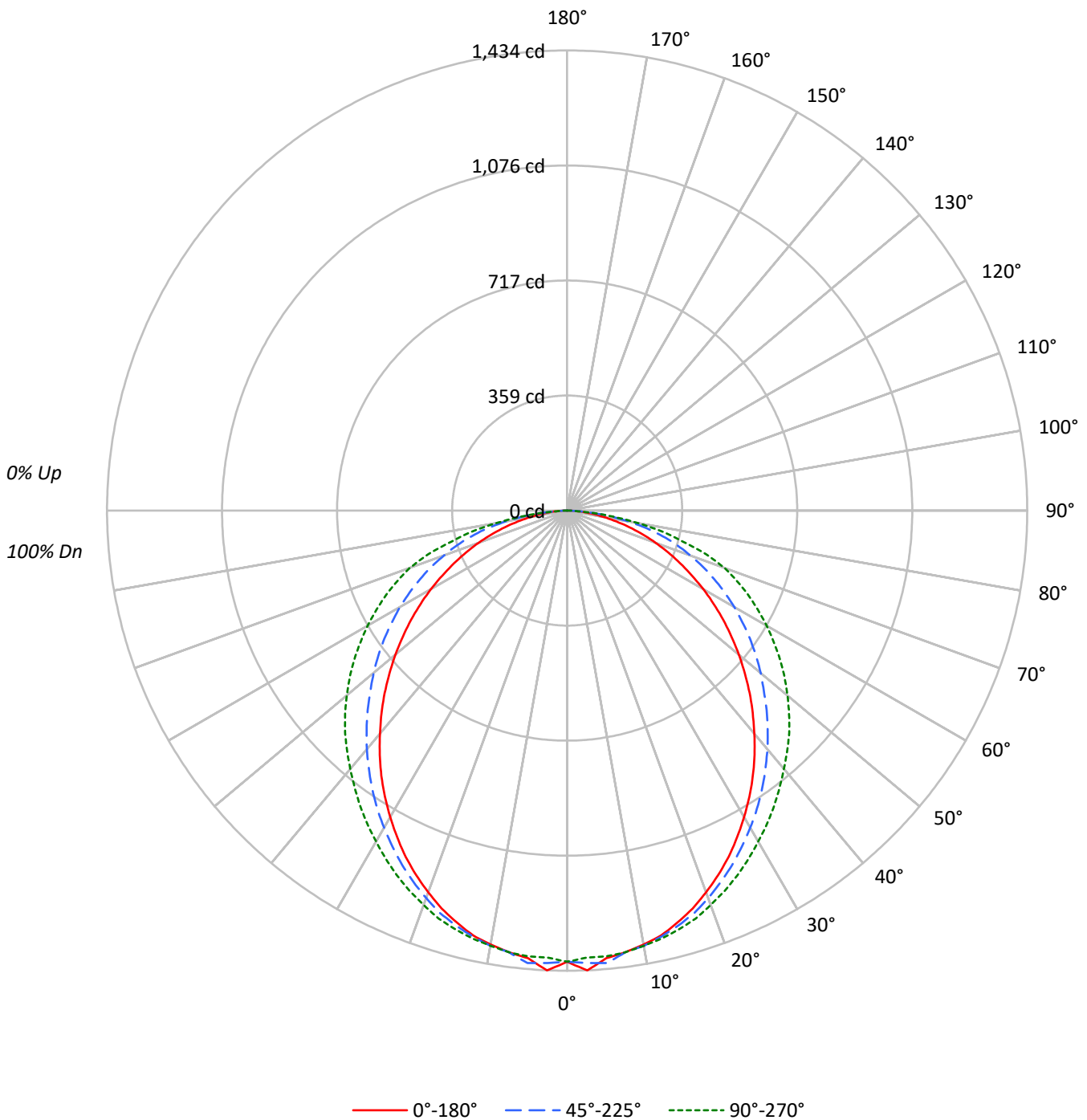
Input Watts (W): 30.132
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3782	3782	3782
5°	3781	3823	3766
10°	3752	3762	3762
15°	3702	3729	3761
20°	3625	3680	3745
25°	3537	3616	3724
30°	3427	3546	3701
35°	3315	3479	3693
40°	3189	3411	3693
45°	3061	3345	3724
50°	2926	3295	3752
55°	2785	3261	3800
60°	2638	3236	3865
65°	2475	3219	3963
70°	2305	3209	4098
75°	2091	3205	3882
80°	1810	2968	3442
85°	1538	2248	2189



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.3	3.4
10°-20°	377.6	9.6
20°-30°	561.8	14.3
30°-40°	664.4	16.9
40°-50°	682.9	17.3
50°-60°	624.0	15.8
60°-70°	499.2	12.7
70°-80°	313.3	8.0
80°-90°	81.6	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°	1072.7	27.2
0°-40°	1737.1	44.1
0°-60°	3044.0	77.3
0°-90°	3938.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3938.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1406	1406	1406	1406	1406	
5°	1400	1400	1415	1406	1394	133
15°	1329	1331	1339	1346	1350	374
25°	1191	1199	1218	1239	1254	548
35°	1009	1023	1059	1099	1124	631
45°	804	825	879	944	979	620
55°	594	622	695	772	810	531
65°	389	423	506	582	622	386
75°	201	239	308	354	373	214
85°	50	63	73	71	71	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1405.6	1405.6	1405.6	1405.6	1405.6
2.5°	1434.3	1428.6	1411.3	1399.9	1394.1
5°	1399.9	1399.9	1415.2	1405.6	1394.1
7.5°	1388.4	1388.4	1388.4	1417.1	1388.4
10°	1373.1	1375.0	1376.9	1388.4	1376.9
12.5°	1355.8	1355.8	1359.6	1363.5	1365.4
15°	1329.0	1330.9	1338.6	1346.2	1350.1
17.5°	1300.3	1306.0	1315.6	1325.2	1332.8
20°	1265.8	1273.5	1285.0	1300.3	1307.9
22.5°	1229.4	1237.1	1252.4	1269.6	1283.0
25°	1191.1	1198.8	1217.9	1239.0	1254.3
27.5°	1147.1	1156.7	1179.6	1208.4	1223.7
30°	1103.0	1114.5	1141.3	1173.9	1191.1
32.5°	1057.1	1070.5	1101.1	1137.5	1158.6
35°	1009.2	1022.6	1059.0	1099.2	1124.1
37.5°	959.4	974.7	1014.9	1060.9	1087.7
40°	907.7	924.9	970.9	1020.7	1051.3
42.5°	856.0	875.2	924.9	984.3	1014.9
45°	804.3	825.4	879.0	944.1	978.6
47.5°	750.7	775.6	831.1	903.9	938.3
50°	699.0	723.9	787.1	861.7	896.2
52.5°	645.4	674.1	741.1	817.7	854.1
55°	593.6	622.4	695.1	771.7	810.0
57.5°	541.9	570.7	647.3	725.8	764.1
60°	490.2	520.9	601.3	677.9	718.1
62.5°	438.5	471.1	553.4	631.9	670.2
65°	388.7	423.2	505.6	582.2	622.4
67.5°	340.9	377.3	457.7	532.4	572.6
70°	293.0	329.4	407.9	480.7	520.9
72.5°	247.0	283.4	360.0	425.1	455.8
75°	201.1	239.4	308.3	354.3	373.4
77.5°	157.0	195.3	254.7	285.3	306.4
80°	116.8	149.4	191.5	214.5	222.1
82.5°	80.4	107.2	134.0	139.8	143.6
85°	49.8	63.2	72.8	70.9	70.9
87.5°	23.0	24.9	21.1	15.3	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)