

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: P#

Luminaire Tested: **22CZ-LD5-39SE-S-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
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-LD5-39SE-S-UNV-L830-CD1-U
Description: CRUZE 2x2 LED TROFFER

Light Source: -
Ballast/Driver: -

Summary

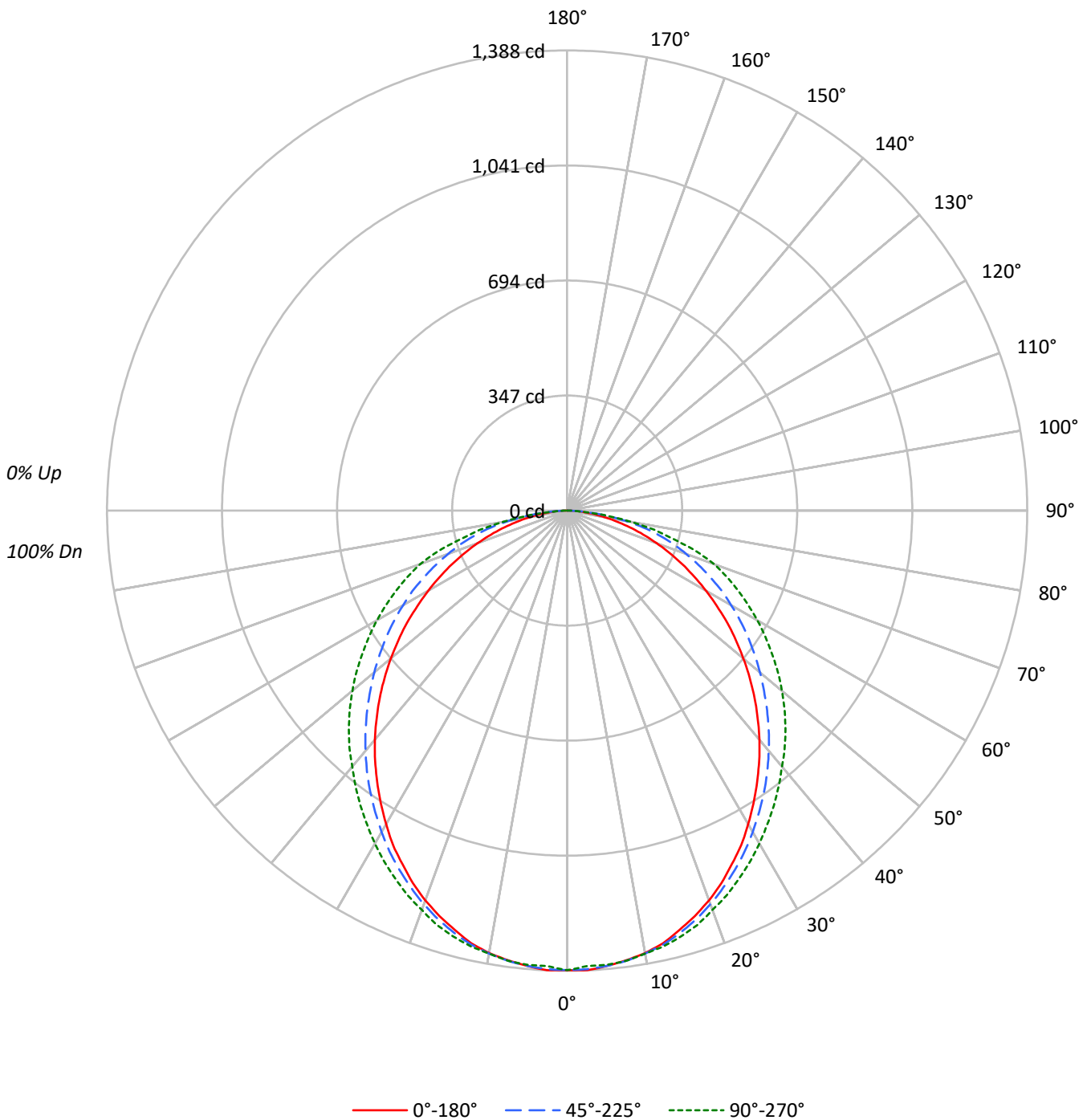
Lumens per Lamp: N/A
Luminaire Lumens: 3802.2 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.1')
CIE Type: Direct

Input Watts (W): 34.88
Input Voltage (V): NR
Input Current (A_{in}): 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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58					58			
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50					50			
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43					43			
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3730	3730	3730
5°	3708	3702	3699
10°	3670	3662	3675
15°	3600	3605	3655
20°	3518	3528	3606
25°	3412	3438	3556
30°	3298	3342	3502
35°	3171	3241	3449
40°	3042	3137	3399
45°	2899	3031	3376
50°	2742	2933	3341
55°	2583	2841	3303
60°	2397	2741	3283
65°	2205	2635	3266
70°	1983	2515	3260
75°	1712	2358	2897
80°	1388	1980	2337
85°	933	1153	1183



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.9	3.4
10°-20°	371.8	9.8
20°-30°	552.3	14.5
30°-40°	650.1	17.1
40°-50°	662.7	17.4
50°-60°	597.7	15.7
60°-70°	470.8	12.4
70°-80°	290.4	7.6
80°-90°	75.4	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°	1055.0	27.7
0°-40°	1705.1	44.8
0°-60°	2965.6	78.0
0°-90°	3802.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3802.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1386	1386	1386	1386	1386	
5°	1379	1381	1379	1377	1375	131
15°	1310	1315	1319	1326	1330	369
25°	1176	1183	1196	1216	1225	542
35°	999	1010	1036	1068	1087	625
45°	800	813	853	904	931	617
55°	590	610	667	727	754	526
65°	384	411	477	537	568	380
75°	195	228	287	320	331	208
85°	48	60	68	64	60	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1386.1	1386.1	1386.1	1386.1	1386.1
2.5°	1388.0	1388.0	1384.3	1380.6	1375.2
5°	1378.8	1380.6	1378.8	1377.0	1375.2
7.5°	1367.9	1369.7	1369.7	1369.7	1369.7
10°	1355.1	1356.9	1356.9	1356.9	1356.9
12.5°	1336.8	1338.6	1340.4	1342.4	1346.0
15°	1309.5	1314.9	1318.6	1325.9	1329.5
17.5°	1282.0	1287.5	1293.0	1302.2	1309.5
20°	1251.0	1254.7	1263.8	1274.7	1282.0
22.5°	1216.3	1221.8	1230.9	1245.5	1256.5
25°	1176.1	1183.4	1196.2	1216.3	1225.4
27.5°	1137.8	1143.2	1159.7	1181.6	1194.3
30°	1092.1	1099.4	1119.5	1146.9	1159.7
32.5°	1046.4	1055.5	1077.5	1108.6	1123.2
35°	999.0	1009.9	1035.5	1068.4	1086.6
37.5°	951.5	962.4	991.7	1028.2	1048.3
40°	902.2	913.1	946.0	986.2	1008.1
42.5°	851.0	863.8	900.3	946.0	971.6
45°	799.9	812.7	852.9	904.0	931.4
47.5°	747.0	761.5	805.4	862.0	889.4
50°	694.0	710.4	759.7	818.1	845.6
52.5°	641.1	659.3	712.2	772.5	801.7
55°	589.9	610.0	666.6	726.8	754.3
57.5°	535.1	558.9	619.1	677.5	708.6
60°	483.9	509.5	571.6	630.0	662.9
62.5°	432.8	460.2	526.0	584.4	615.4
65°	383.5	410.9	476.6	536.9	568.0
67.5°	334.2	365.3	429.2	489.4	520.5
70°	286.7	319.6	381.7	440.1	471.2
72.5°	241.1	274.0	336.0	390.8	409.1
75°	195.4	228.3	286.7	319.6	330.6
77.5°	153.4	184.5	235.6	255.6	270.3
80°	115.0	142.4	179.0	191.8	193.6
82.5°	78.6	102.3	124.2	126.0	124.2
85°	47.5	60.2	67.5	63.9	60.2
87.5°	21.9	23.8	21.9	14.6	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)