

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: P230573

Luminaire Tested: **22CZ-LD5-44SE-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230573
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-LD5-44SE-UNV-L935-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RIBBED LENS
Light Source: (56) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3767.0 lumens
Efficiency: N/A
Efficacy: 94.2 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

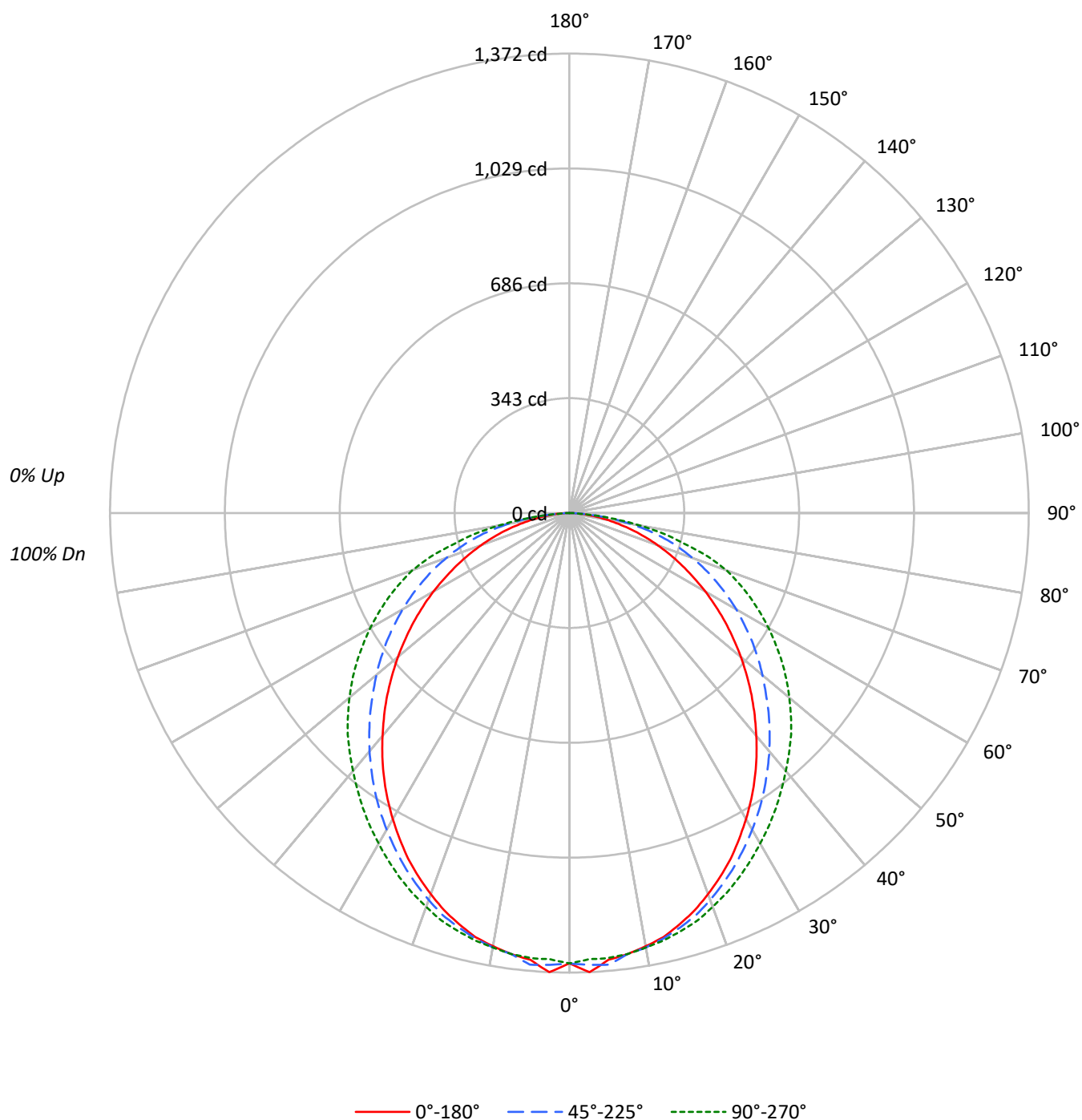
Input Watts (W): 40
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10	50	30	10
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°	3618	3618	3618
5°	3617	3657	3602
10°	3589	3599	3599
15°	3542	3567	3598
20°	3467	3520	3583
25°	3383	3459	3563
30°	3278	3393	3540
35°	3171	3328	3532
40°	3050	3262	3533
45°	2928	3200	3562
50°	2799	3152	3589
55°	2664	3120	3636
60°	2524	3096	3697
65°	2368	3079	3791
70°	2205	3070	3921
75°	1999	3066	3714
80°	1731	2839	3293
85°	1470	2149	2093



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.5	3.4
10°-20°	361.2	9.6
20°-30°	537.4	14.3
30°-40°	635.5	16.9
40°-50°	653.2	17.3
50°-60°	596.9	15.8
60°-70°	477.5	12.7
70°-80°	299.7	8.0
80°-90°	78.1	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°	1026.1	27.2
0°-40°	1661.7	44.1
0°-60°	2911.8	77.3
0°-90°	3767.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3767.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1345	1345	1345	1345	1345	
5°	1339	1339	1354	1345	1334	127
15°	1271	1273	1280	1288	1291	358
25°	1139	1147	1165	1185	1200	524
35°	965	978	1013	1052	1075	603
45°	769	790	841	903	936	593
55°	568	595	665	738	775	508
65°	372	405	484	557	595	369
75°	192	229	295	339	357	204
85°	48	60	70	68	68	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1344.6	1344.6	1344.6	1344.6	1344.6
2.5°	1372.0	1366.6	1350.1	1339.1	1333.6
5°	1339.1	1339.1	1353.7	1344.6	1333.6
7.5°	1328.1	1328.1	1328.1	1355.6	1328.1
10°	1313.4	1315.3	1317.1	1328.1	1317.1
12.5°	1296.9	1296.9	1300.6	1304.3	1306.1
15°	1271.3	1273.1	1280.5	1287.8	1291.4
17.5°	1243.8	1249.3	1258.5	1267.6	1275.0
20°	1210.8	1218.2	1229.2	1243.8	1251.1
22.5°	1176.0	1183.4	1198.0	1214.5	1227.3
25°	1139.4	1146.7	1165.0	1185.2	1199.9
27.5°	1097.3	1106.4	1128.4	1155.9	1170.5
30°	1055.1	1066.1	1091.8	1122.9	1139.4
32.5°	1011.2	1024.0	1053.3	1088.1	1108.3
35°	965.4	978.2	1013.0	1051.5	1075.3
37.5°	917.8	932.4	970.9	1014.8	1040.5
40°	868.3	884.8	928.7	976.4	1005.7
42.5°	818.8	837.2	884.8	941.6	970.9
45°	769.4	789.5	840.8	903.1	936.1
47.5°	718.1	741.9	795.0	864.6	897.6
50°	668.6	692.4	752.9	824.3	857.3
52.5°	617.3	644.8	708.9	782.2	817.0
55°	567.9	595.3	665.0	738.2	774.9
57.5°	518.4	545.9	619.2	694.3	730.9
60°	469.0	498.3	575.2	648.5	686.9
62.5°	419.5	450.6	529.4	604.5	641.1
65°	371.9	404.8	483.6	556.9	595.3
67.5°	326.1	360.9	437.8	509.3	547.7
70°	280.3	315.1	390.2	459.8	498.3
72.5°	236.3	271.1	344.4	406.7	436.0
75°	192.3	229.0	294.9	338.9	357.2
77.5°	150.2	186.8	243.6	272.9	293.1
80°	111.7	142.9	183.2	205.2	212.5
82.5°	76.9	102.6	128.2	133.7	137.4
85°	47.6	60.5	69.6	67.8	67.8
87.5°	22.0	23.8	20.2	14.7	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)