

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: P230616

Luminaire Tested: **22CZ-LD5-44SE-S-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230616
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-LD5-44SE-S-UNV-L930-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SMOOTH LENS
Light Source: (56) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3697.0 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

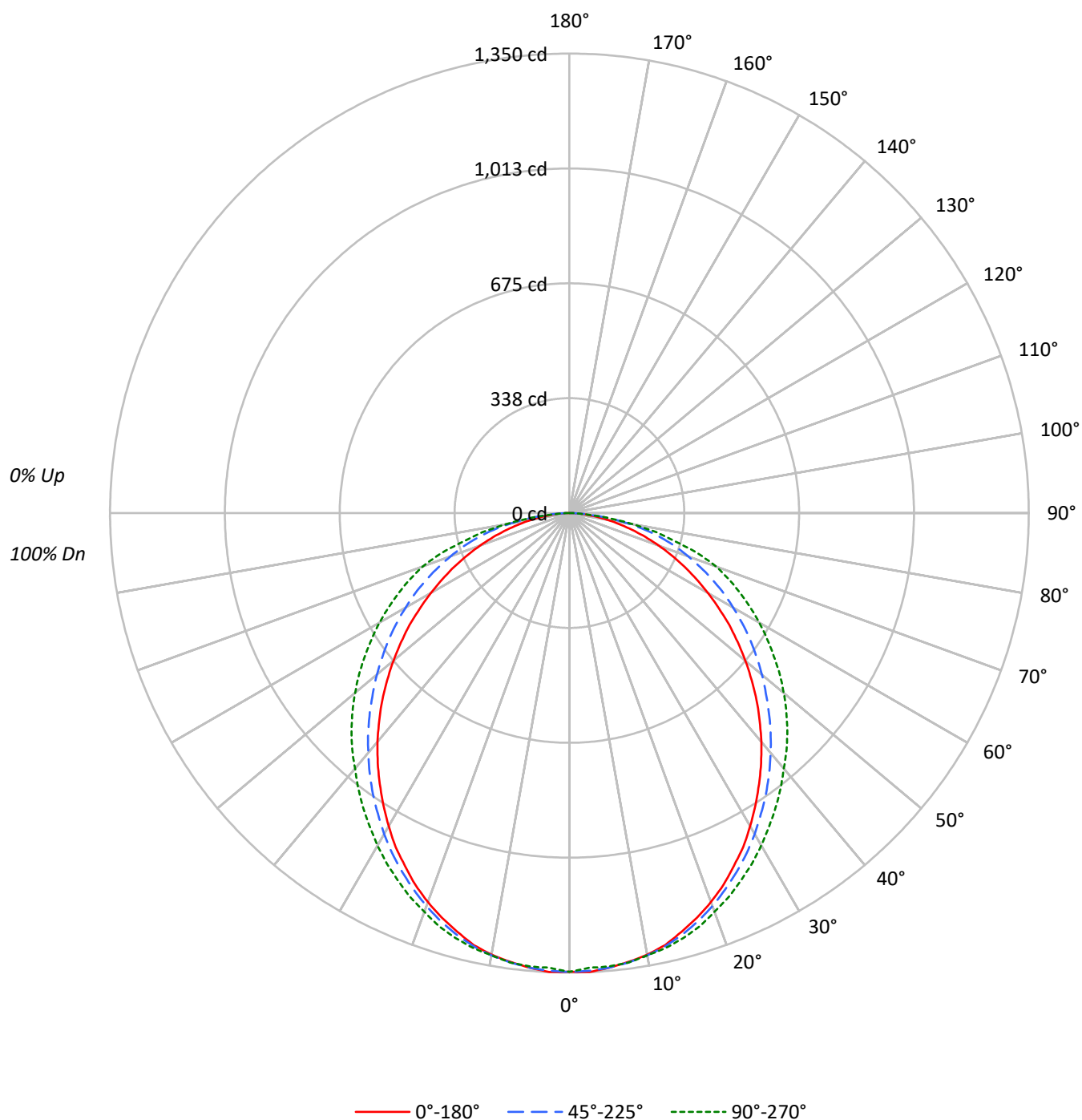
Input Watts (W): 40
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3627	3627	3627
5°	3622	3622	3612
10°	3600	3605	3605
15°	3547	3572	3601
20°	3483	3519	3570
25°	3396	3453	3538
30°	3300	3382	3504
35°	3191	3307	3471
40°	3081	3231	3443
45°	2960	3156	3446
50°	2825	3093	3442
55°	2691	3041	3441
60°	2533	2991	3469
65°	2374	2951	3517
70°	2194	2920	3604
75°	1975	2899	3342
80°	1734	2696	2916
85°	1426	2029	1809



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.3	3.4
10°-20°	361.6	9.8
20°-30°	537.0	14.5
30°-40°	632.1	17.1
40°-50°	644.4	17.4
50°-60°	581.2	15.7
60°-70°	457.8	12.4
70°-80°	282.4	7.6
80°-90°	73.3	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°	1025.8	27.7
0°-40°	1657.9	44.8
0°-60°	2883.5	78.0
0°-90°	3697.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3697.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1348	1348	1348	1348	1348	
5°	1341	1342	1341	1339	1337	127
15°	1273	1278	1282	1289	1293	359
25°	1144	1151	1163	1183	1192	527
35°	971	982	1007	1039	1057	608
45°	778	790	829	879	906	600
55°	574	593	648	707	733	512
65°	373	400	464	522	552	369
75°	190	222	279	311	321	203
85°	46	59	66	62	59	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1347.8	1347.8	1347.8	1347.8	1347.8
2.5°	1349.6	1349.6	1346.0	1342.4	1337.1
5°	1340.7	1342.4	1340.7	1338.9	1337.1
7.5°	1330.0	1331.8	1331.8	1331.8	1331.8
10°	1317.6	1319.4	1319.4	1319.4	1319.4
12.5°	1299.8	1301.6	1303.4	1305.2	1308.7
15°	1273.2	1278.5	1282.1	1289.2	1292.7
17.5°	1246.6	1251.9	1257.2	1266.1	1273.2
20°	1216.4	1219.9	1228.8	1239.5	1246.6
22.5°	1182.6	1188.0	1196.8	1211.0	1221.7
25°	1143.6	1150.7	1163.1	1182.6	1191.5
27.5°	1106.3	1111.6	1127.6	1148.9	1161.3
30°	1061.9	1069.0	1088.5	1115.2	1127.6
32.5°	1017.5	1026.4	1047.7	1077.9	1092.1
35°	971.3	982.0	1006.8	1038.8	1056.6
37.5°	925.2	935.8	964.2	999.7	1019.3
40°	877.2	887.9	919.8	958.9	980.2
42.5°	827.5	839.9	875.4	919.8	944.7
45°	777.8	790.2	829.3	879.0	905.6
47.5°	726.3	740.5	783.1	838.1	864.8
50°	674.8	690.8	738.7	795.5	822.2
52.5°	623.3	641.0	692.5	751.1	779.5
55°	573.6	593.1	648.1	706.7	733.4
57.5°	520.3	543.4	602.0	658.8	689.0
60°	470.6	495.4	555.8	612.6	644.6
62.5°	420.8	447.5	511.4	568.2	598.4
65°	372.9	399.5	463.5	522.1	552.3
67.5°	325.0	355.1	417.3	475.9	506.1
70°	278.8	310.8	371.1	427.9	458.1
72.5°	234.4	266.4	326.7	380.0	397.8
75°	190.0	222.0	278.8	310.8	321.4
77.5°	149.2	179.3	229.1	248.6	262.8
80°	111.9	138.5	174.0	186.5	188.2
82.5°	76.4	99.4	120.7	122.5	120.7
85°	46.2	58.6	65.7	62.2	58.6
87.5°	21.3	23.1	21.3	14.2	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)