

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: P230554

Luminaire Tested: **22CZ-LD5-44-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230554
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-LD5-44-UNV-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3911.0 lumens
Efficiency: N/A
Efficacy: 93.6 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

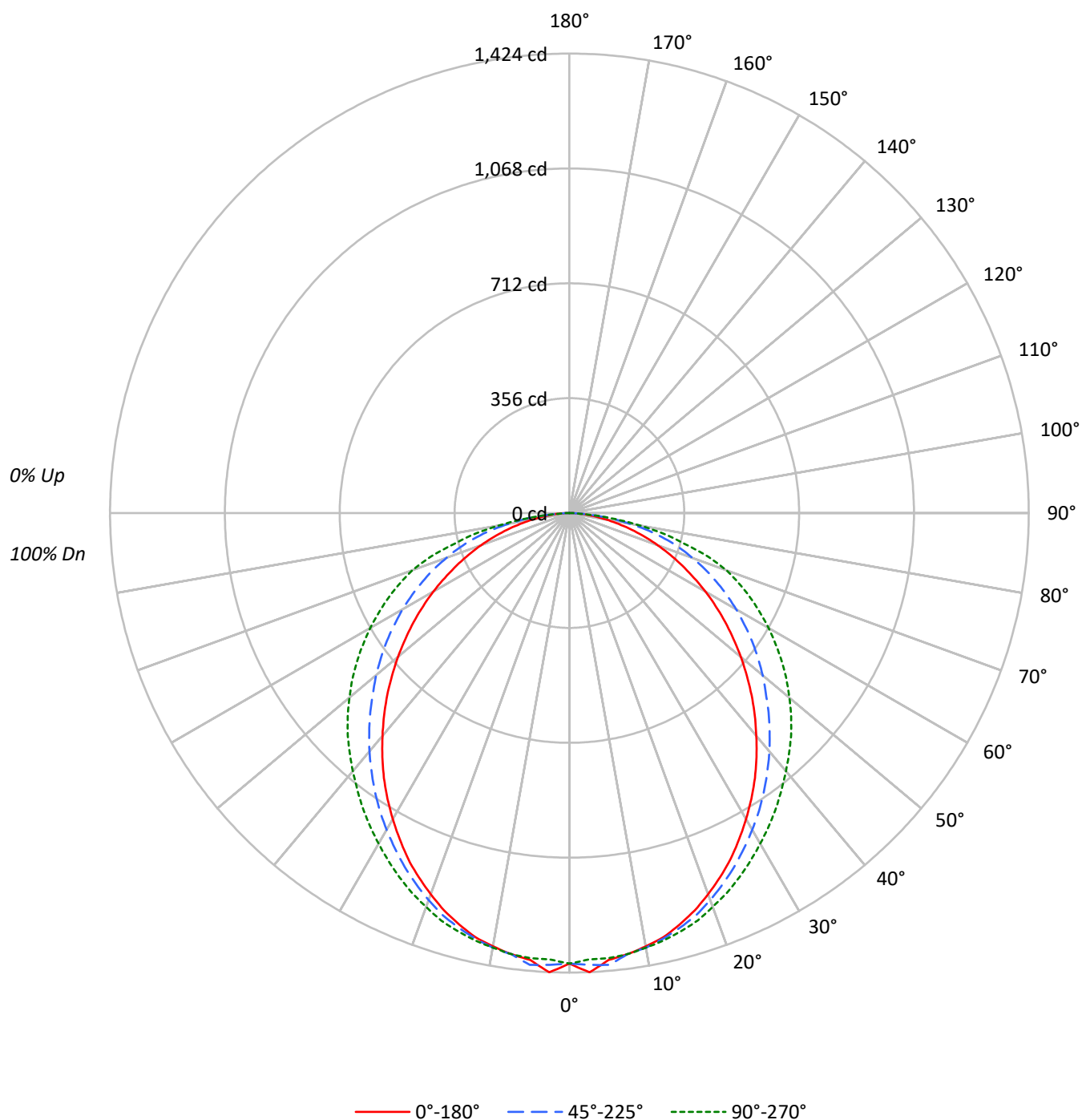
Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	108	104	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	90	79	70	64	87	77	69	63	74	68	62		71	66	61		58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		43
6	70	56	47	41	68	55	47	40	53	46	40		52	45	40		37
7	65	51	42	36	63	50	42	36	48	41	35		47	40	35		33
8	60	46	38	32	58	46	38	32	44	37	32		43	36	31		29
9	56	43	34	29	55	42	34	29	41	34	29		40	33	28		26
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3757	3757	3757
5°	3756	3797	3740
10°	3726	3736	3736
15°	3677	3704	3735
20°	3600	3655	3720
25°	3513	3592	3699
30°	3404	3522	3676
35°	3293	3455	3667
40°	3167	3387	3668
45°	3040	3322	3699
50°	2906	3273	3726
55°	2766	3239	3774
60°	2620	3214	3838
65°	2458	3197	3936
70°	2290	3187	4070
75°	2076	3184	3856
80°	1798	2947	3419
85°	1525	2232	2174



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.4	3.4
10°-20°	375.0	9.6
20°-30°	557.9	14.3
30°-40°	659.8	16.9
40°-50°	678.2	17.3
50°-60°	619.7	15.8
60°-70°	495.8	12.7
70°-80°	311.1	8.0
80°-90°	81.0	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°	1065.3	27.2
0°-40°	1725.2	44.1
0°-60°	3023.1	77.3
0°-90°	3911.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3911.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1396	1396	1396	1396	1396	
5°	1390	1390	1406	1396	1385	132
15°	1320	1322	1329	1337	1341	372
25°	1183	1191	1210	1230	1246	544
35°	1002	1016	1052	1092	1116	626
45°	799	820	873	938	972	616
55°	590	618	690	766	804	527
65°	386	420	502	578	618	383
75°	200	238	306	352	371	212
85°	49	63	72	70	70	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1396.0	1396.0	1396.0	1396.0	1396.0
2.5°	1424.5	1418.8	1401.7	1390.3	1384.6
5°	1390.3	1390.3	1405.5	1396.0	1384.6
7.5°	1378.9	1378.9	1378.9	1407.4	1378.9
10°	1363.6	1365.5	1367.4	1378.9	1367.4
12.5°	1346.5	1346.5	1350.3	1354.1	1356.0
15°	1319.9	1321.8	1329.4	1337.0	1340.8
17.5°	1291.4	1297.1	1306.6	1316.1	1323.7
20°	1257.1	1264.7	1276.2	1291.4	1299.0
22.5°	1221.0	1228.6	1243.8	1260.9	1274.2
25°	1183.0	1190.6	1209.6	1230.5	1245.7
27.5°	1139.2	1148.7	1171.5	1200.1	1215.3
30°	1095.5	1106.9	1133.5	1165.8	1183.0
32.5°	1049.8	1063.1	1093.6	1129.7	1150.6
35°	1002.3	1015.6	1051.7	1091.7	1116.4
37.5°	952.8	968.0	1008.0	1053.6	1080.3
40°	901.5	918.6	964.2	1013.7	1044.1
42.5°	850.1	869.2	918.6	977.6	1008.0
45°	798.8	819.7	873.0	937.6	971.9
47.5°	745.5	770.3	825.4	897.7	931.9
50°	694.2	718.9	781.7	855.8	890.1
52.5°	640.9	669.5	736.0	812.1	848.2
55°	589.6	618.1	690.4	766.5	804.5
57.5°	538.2	566.8	642.8	720.8	758.8
60°	486.9	517.3	597.2	673.3	713.2
62.5°	435.5	467.9	549.6	627.6	665.7
65°	386.1	420.3	502.1	578.2	618.1
67.5°	338.5	374.7	454.5	528.7	568.7
70°	291.0	327.1	405.1	477.4	517.3
72.5°	245.3	281.5	357.6	422.2	452.6
75°	199.7	237.7	306.2	351.8	370.9
77.5°	156.0	194.0	252.9	283.4	304.3
80°	116.0	148.3	190.2	213.0	220.6
82.5°	79.9	106.5	133.1	138.8	142.6
85°	49.4	62.8	72.3	70.4	70.4
87.5°	22.8	24.7	20.9	15.2	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)