

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: P230618

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230618
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-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SMOOTH LENS
Light Source: (56) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3937.0 lumens
Efficiency: N/A
Efficacy: 98.4 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

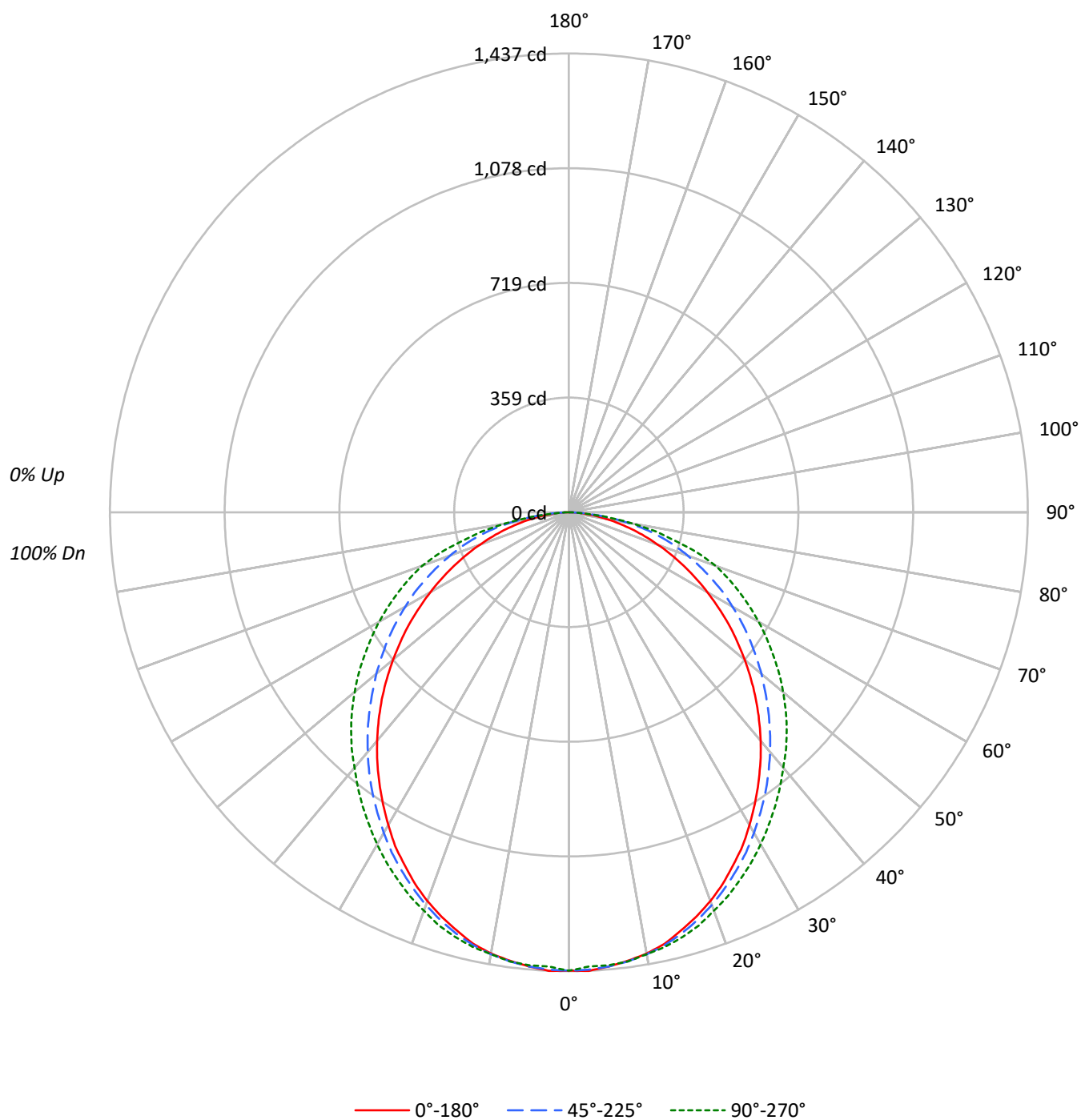
Input Watts (W): 40
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	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
1	109	104	99	95	106	101	97	94		97	94	91		93	91	88		90	87	85
2	99	90	83	77	96	88	82	77		85	79	75		81	77	73		78	75	71
3	90	79	71	64	87	78	70	64		75	68	63		72	66	62		69	64	60
4	82	70	61	54	80	69	61	54		66	59	53		64	58	53		62	56	52
5	76	63	54	47	74	62	53	47		59	52	46		57	51	46		56	50	45
6	70	56	47	41	68	56	47	41		54	46	40		52	45	40		50	44	40
7	65	51	42	36	63	50	42	36		49	41	36		47	41	36		46	40	35
8	60	47	38	32	59	46	38	32		45	37	32		43	37	32		42	36	32
9	56	43	35	29	55	42	34	29		41	34	29		40	34	29		39	33	29
10	53	40	32	26	52	39	32	26		38	31	26		37	31	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3862	3862	3862
5°	3857	3857	3846
10°	3834	3839	3839
15°	3777	3804	3835
20°	3709	3747	3802
25°	3616	3678	3768
30°	3514	3602	3731
35°	3398	3522	3696
40°	3282	3441	3667
45°	3152	3361	3670
50°	3008	3293	3665
55°	2866	3238	3664
60°	2697	3186	3694
65°	2528	3143	3745
70°	2336	3109	3839
75°	2103	3087	3559
80°	1846	2872	3106
85°	1519	2161	1927



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.5	3.4
10°-20°	385.0	9.8
20°-30°	571.9	14.5
30°-40°	673.1	17.1
40°-50°	686.2	17.4
50°-60°	618.9	15.7
60°-70°	487.5	12.4
70°-80°	300.7	7.6
80°-90°	78.1	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°	1092.4	27.7
0°-40°	1765.5	44.8
0°-60°	3070.7	78.0
0°-90°	3937.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3937.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1435	1435	1435	1435	1435	
5°	1428	1430	1428	1426	1424	136
15°	1356	1362	1365	1373	1377	382
25°	1218	1225	1239	1259	1269	561
35°	1034	1046	1072	1106	1125	647
45°	828	842	883	936	964	638
55°	611	632	690	753	781	545
65°	397	426	494	556	588	393
75°	202	236	297	331	342	216
85°	49	62	70	66	62	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1435.3	1435.3	1435.3	1435.3	1435.3
2.5°	1437.2	1437.2	1433.4	1429.6	1423.9
5°	1427.7	1429.6	1427.7	1425.8	1423.9
7.5°	1416.4	1418.3	1418.3	1418.3	1418.3
10°	1403.1	1405.0	1405.0	1405.0	1405.0
12.5°	1384.2	1386.1	1388.0	1389.9	1393.7
15°	1355.8	1361.5	1365.3	1372.9	1376.6
17.5°	1327.5	1333.2	1338.8	1348.3	1355.8
20°	1295.3	1299.1	1308.6	1319.9	1327.5
22.5°	1259.4	1265.1	1274.5	1289.7	1301.0
25°	1217.8	1225.4	1238.6	1259.4	1268.9
27.5°	1178.1	1183.8	1200.8	1223.5	1236.7
30°	1130.8	1138.4	1159.2	1187.5	1200.8
32.5°	1083.5	1093.0	1115.7	1147.8	1163.0
35°	1034.4	1045.7	1072.2	1106.2	1125.1
37.5°	985.2	996.6	1026.8	1064.6	1085.4
40°	934.2	945.5	979.5	1021.1	1043.8
42.5°	881.2	894.4	932.3	979.5	1006.0
45°	828.3	841.5	883.1	936.0	964.4
47.5°	773.4	788.5	833.9	892.6	920.9
50°	718.6	735.6	786.7	847.2	875.5
52.5°	663.7	682.7	737.5	799.9	830.1
55°	610.8	631.6	690.2	752.6	781.0
57.5°	554.1	578.6	641.0	701.6	733.7
60°	501.1	527.6	591.9	652.4	686.4
62.5°	448.2	476.5	544.6	605.1	637.3
65°	397.1	425.5	493.6	556.0	588.1
67.5°	346.1	378.2	444.4	506.8	538.9
70°	296.9	330.9	395.2	455.7	487.9
72.5°	249.6	283.7	347.9	404.7	423.6
75°	202.3	236.4	296.9	330.9	342.3
77.5°	158.8	191.0	243.9	264.7	279.9
80°	119.1	147.5	185.3	198.6	200.4
82.5°	81.3	105.9	128.6	130.5	128.6
85°	49.2	62.4	70.0	66.2	62.4
87.5°	22.7	24.6	22.7	15.1	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)