

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: P259435

Luminaire Tested: **22CZ-LD5-44-S-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259435
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-LD5-44-S-UNV-L93050-W2A1-U-5000K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4209.0 lumens
Efficiency: N/A
Efficacy: 116.8 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

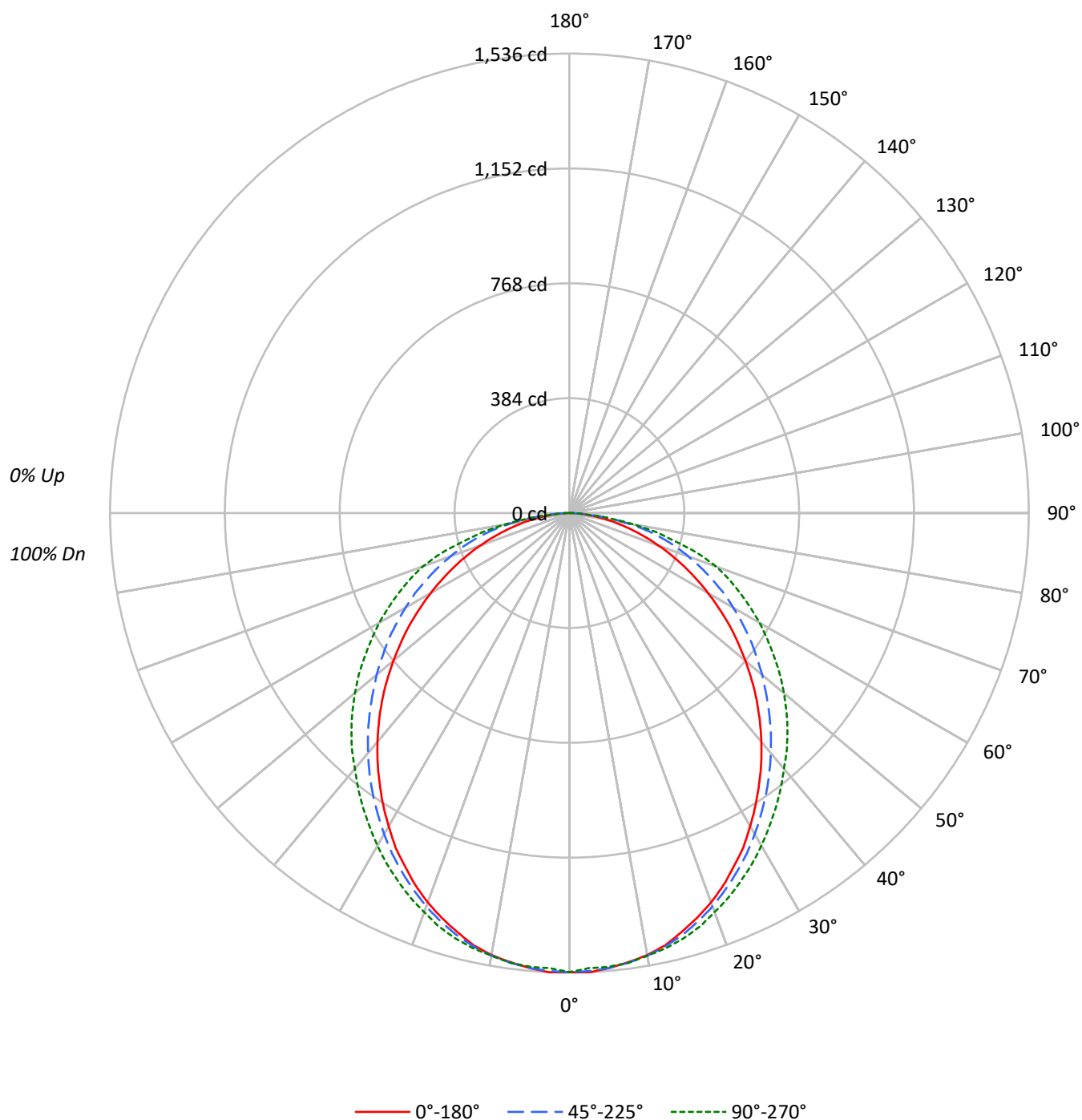
Input Watts (W): 36.049032
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4129	4129	4129
5°	4123	4123	4112
10°	4099	4104	4104
15°	4038	4066	4100
20°	3966	4006	4064
25°	3866	3932	4028
30°	3756	3851	3989
35°	3633	3766	3952
40°	3508	3679	3920
45°	3370	3593	3924
50°	3216	3521	3918
55°	3064	3462	3917
60°	2883	3406	3950
65°	2703	3359	4003
70°	2497	3324	4104
75°	2249	3300	3804
80°	1974	3070	3321
85°	1624	2309	2059



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.9	3.4
10°-20°	411.6	9.8
20°-30°	611.4	14.5
30°-40°	719.6	17.1
40°-50°	733.6	17.4
50°-60°	661.7	15.7
60°-70°	521.2	12.4
70°-80°	321.5	7.6
80°-90°	83.5	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°	1167.9	27.7
0°-40°	1887.5	44.8
0°-60°	3282.8	78.0
0°-90°	4209.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4209.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1534	1534	1534	1534	1534	
5°	1526	1528	1526	1524	1522	145
15°	1450	1456	1460	1468	1472	409
25°	1302	1310	1324	1346	1356	600
35°	1106	1118	1146	1183	1203	692
45°	886	900	944	1001	1031	683
55°	653	675	738	805	835	583
65°	424	455	528	594	629	421
75°	216	253	317	354	366	231
85°	53	67	75	71	67	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1534.4	1534.4	1534.4	1534.4	1534.4
2.5°	1536.5	1536.5	1532.4	1528.4	1522.3
5°	1526.3	1528.4	1526.3	1524.3	1522.3
7.5°	1514.2	1516.2	1516.2	1516.2	1516.2
10°	1500.1	1502.1	1502.1	1502.1	1502.1
12.5°	1479.8	1481.9	1483.9	1485.9	1490.0
15°	1449.5	1455.6	1459.6	1467.7	1471.8
17.5°	1419.2	1425.3	1431.3	1441.4	1449.5
20°	1384.8	1388.9	1399.0	1411.1	1419.2
22.5°	1346.4	1352.5	1362.6	1378.8	1390.9
25°	1301.9	1310.0	1324.2	1346.4	1356.5
27.5°	1259.5	1265.6	1283.7	1308.0	1322.2
30°	1208.9	1217.0	1239.3	1269.6	1283.7
32.5°	1158.4	1168.5	1192.8	1227.1	1243.3
35°	1105.8	1118.0	1146.3	1182.7	1202.9
37.5°	1053.3	1065.4	1097.8	1138.2	1160.4
40°	998.7	1010.8	1047.2	1091.7	1115.9
42.5°	942.1	956.2	996.7	1047.2	1075.5
45°	885.5	899.6	944.1	1000.7	1031.0
47.5°	826.9	843.0	891.5	954.2	984.5
50°	768.2	786.4	841.0	905.7	936.0
52.5°	709.6	729.8	788.4	855.2	887.5
55°	653.0	675.2	737.9	804.6	834.9
57.5°	592.3	618.6	685.3	750.0	784.4
60°	535.7	564.0	632.8	697.5	733.9
62.5°	479.1	509.5	582.2	646.9	681.3
65°	424.5	454.9	527.6	594.4	628.7
67.5°	370.0	404.3	475.1	541.8	576.2
70°	317.4	353.8	422.5	487.2	521.6
72.5°	266.9	303.2	372.0	432.6	452.8
75°	216.3	252.7	317.4	353.8	365.9
77.5°	169.8	204.2	260.8	283.0	299.2
80°	127.4	157.7	198.1	212.3	214.3
82.5°	86.9	113.2	137.5	139.5	137.5
85°	52.6	66.7	74.8	70.8	66.7
87.5°	24.3	26.3	24.3	16.2	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)