

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: P259398

Luminaire Tested: **22CZ-LD5-39-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259398
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-LD5-39-S-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4218.0 lumens
Efficiency: N/A
Efficacy: 137.0 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

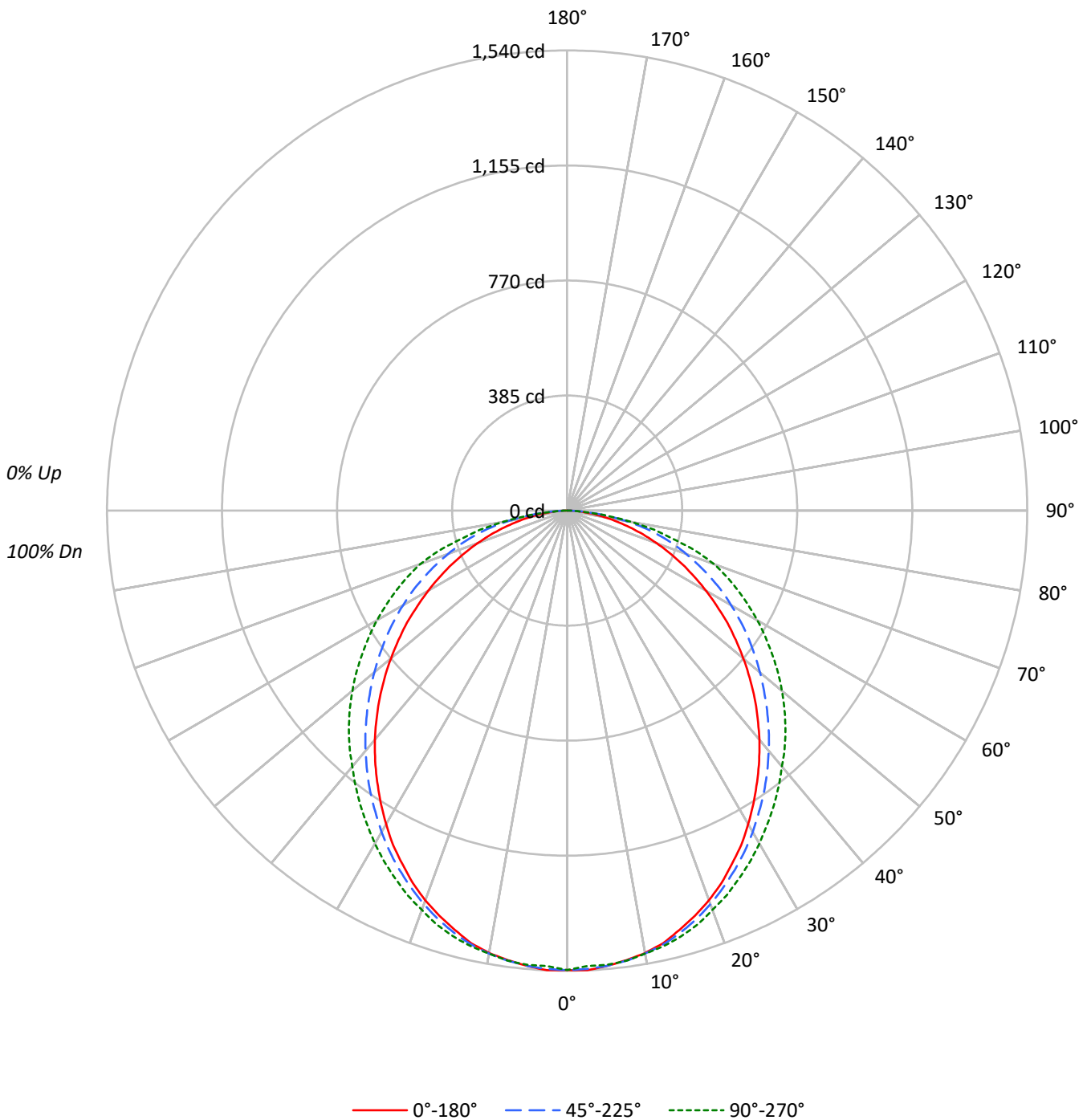
Input Watts (W): 30.783
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	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	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°	4138	4138	4138
5°	4132	4132	4121
10°	4108	4113	4113
15°	4047	4075	4109
20°	3974	4015	4073
25°	3874	3940	4036
30°	3764	3859	3998
35°	3641	3774	3960
40°	3516	3687	3928
45°	3377	3600	3932
50°	3223	3528	3927
55°	3070	3469	3925
60°	2890	3413	3958
65°	2709	3367	4012
70°	2503	3331	4113
75°	2254	3307	3813
80°	1977	3076	3329
85°	1627	2316	2066



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.2	3.4
10°-20°	412.5	9.8
20°-30°	612.7	14.5
30°-40°	721.2	17.1
40°-50°	735.2	17.4
50°-60°	663.1	15.7
60°-70°	522.3	12.4
70°-80°	322.2	7.6
80°-90°	83.6	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°	1170.4	27.7
0°-40°	1891.6	44.8
0°-60°	3289.9	78.0
0°-90°	4218.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4218.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1538	1538	1538	1538	1538	
5°	1530	1532	1530	1528	1526	145
15°	1453	1459	1463	1471	1475	410
25°	1305	1313	1327	1349	1359	601
35°	1108	1120	1149	1185	1206	693
45°	887	902	946	1003	1033	684
55°	654	677	740	806	837	584
65°	426	456	529	596	630	421
75°	217	253	318	354	367	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°	1537.7	1537.7	1537.7	1537.7	1537.7
2.5°	1539.7	1539.7	1535.7	1531.6	1525.6
5°	1529.6	1531.6	1529.6	1527.6	1525.6
7.5°	1517.5	1519.5	1519.5	1519.5	1519.5
10°	1503.3	1505.3	1505.3	1505.3	1505.3
12.5°	1483.0	1485.0	1487.1	1489.1	1493.1
15°	1452.6	1458.7	1462.7	1470.9	1474.9
17.5°	1422.2	1428.3	1434.4	1444.5	1452.6
20°	1387.8	1391.8	1402.0	1414.1	1422.2
22.5°	1349.3	1355.4	1365.5	1381.7	1393.9
25°	1304.7	1312.8	1327.0	1349.3	1359.4
27.5°	1262.2	1268.3	1286.5	1310.8	1325.0
30°	1211.5	1219.6	1241.9	1272.3	1286.5
32.5°	1160.9	1171.0	1195.3	1229.8	1246.0
35°	1108.2	1120.4	1148.7	1185.2	1205.5
37.5°	1055.5	1067.7	1100.1	1140.6	1162.9
40°	1000.8	1013.0	1049.5	1094.0	1118.3
42.5°	944.1	958.3	998.8	1049.5	1077.8
45°	887.4	901.6	946.1	1002.9	1033.2
47.5°	828.6	844.8	893.5	956.3	986.6
50°	769.9	788.1	842.8	907.6	938.0
52.5°	711.1	731.4	790.1	857.0	889.4
55°	654.4	676.7	739.5	806.3	836.7
57.5°	593.6	619.9	686.8	751.6	786.1
60°	536.9	565.2	634.1	699.0	735.4
62.5°	480.2	510.5	583.5	648.3	682.8
65°	425.5	455.8	528.8	595.6	630.1
67.5°	370.8	405.2	476.1	543.0	577.4
70°	318.1	354.5	423.4	488.3	522.7
72.5°	267.4	303.9	372.8	433.6	453.8
75°	216.8	253.2	318.1	354.5	366.7
77.5°	170.2	204.6	261.4	283.6	299.8
80°	127.6	158.0	198.5	212.7	214.8
82.5°	87.1	113.5	137.8	139.8	137.8
85°	52.7	66.9	75.0	70.9	66.9
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)