

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: P260652

Luminaire Tested: **24CZ-LD5-55-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260652
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-55-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4317.9 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

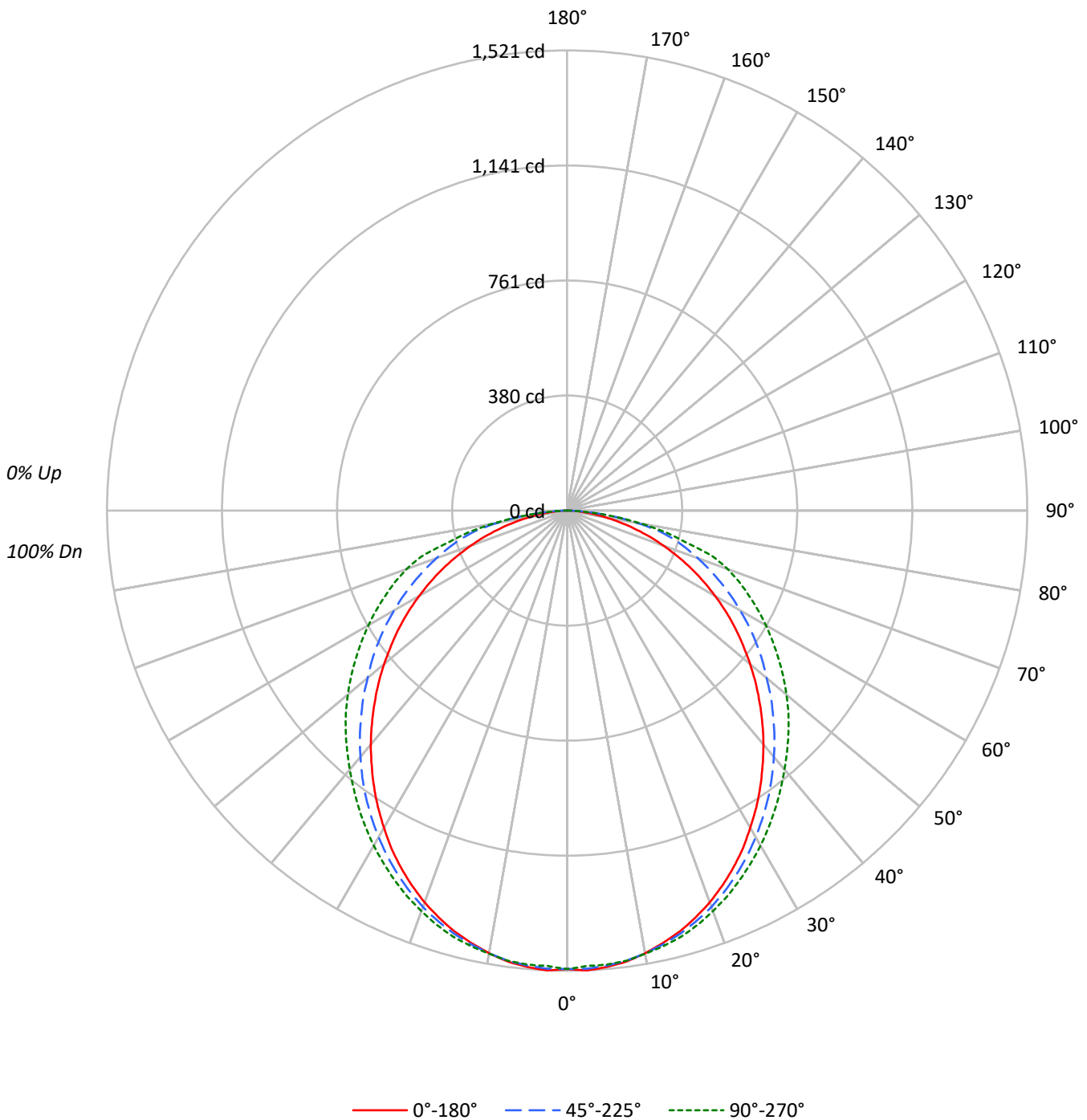
Input Watts (W): 41.004909
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2039	2039	2039
5°	2045	2039	2035
10°	2030	2030	2032
15°	2006	2016	2031
20°	1973	1996	2017
25°	1931	1969	2002
30°	1881	1936	1987
35°	1828	1904	1972
40°	1773	1867	1963
45°	1713	1831	1969
50°	1653	1801	1981
55°	1592	1790	2001
60°	1520	1778	2041
65°	1440	1779	2109
70°	1332	1809	2222
75°	1192	1891	2114
80°	996	1810	1936
85°	753	1392	1323



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.2	3.3
10°-20°	407.6	9.4
20°-30°	609.3	14.1
30°-40°	722.8	16.7
40°-50°	743.9	17.2
50°-60°	682.5	15.8
60°-70°	551.8	12.8
70°-80°	358.1	8.3
80°-90°	98.7	2.3
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°	1160.0	26.9
0°-40°	1882.8	43.6
0°-60°	3309.2	76.6
0°-90°	4317.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4317.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1515	1515	1515	1515	1515	
5°	1514	1504	1509	1508	1506	144
15°	1440	1434	1447	1453	1458	406
25°	1301	1302	1326	1338	1348	599
35°	1113	1122	1159	1184	1200	696
45°	900	915	962	1008	1035	695
55°	679	699	763	825	853	606
65°	452	479	559	633	662	447
75°	229	272	364	407	407	244
85°	49	83	90	87	86	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1515.4	1515.4	1515.4	1515.4	1515.4
2.5°	1521.3	1509.4	1515.4	1513.9	1506.5
5°	1513.9	1503.5	1509.4	1508.0	1506.5
7.5°	1503.5	1493.2	1500.6	1499.1	1500.6
10°	1485.8	1476.9	1485.8	1487.3	1487.3
12.5°	1463.6	1456.2	1468.0	1471.0	1474.0
15°	1440.0	1434.0	1447.4	1453.3	1457.7
17.5°	1410.4	1406.0	1422.2	1429.6	1435.5
20°	1377.9	1376.4	1394.1	1401.5	1408.9
22.5°	1340.9	1340.9	1361.6	1370.5	1380.8
25°	1301.0	1302.5	1326.1	1338.0	1348.3
27.5°	1258.1	1259.6	1287.7	1302.5	1314.3
30°	1210.8	1216.7	1246.3	1265.5	1278.8
32.5°	1163.5	1170.9	1203.4	1225.6	1240.4
35°	1113.2	1122.1	1159.1	1184.2	1200.5
37.5°	1061.5	1071.8	1111.8	1139.8	1159.1
40°	1009.7	1021.6	1063.0	1095.5	1117.7
42.5°	955.0	968.4	1014.2	1052.6	1076.3
45°	900.3	915.1	962.4	1008.3	1034.9
47.5°	845.6	863.4	913.7	963.9	992.0
50°	789.5	807.2	860.4	918.1	946.2
52.5°	733.3	754.0	813.1	872.3	900.3
55°	678.6	699.3	762.9	824.9	853.0
57.5°	622.4	643.1	712.6	777.6	805.7
60°	564.7	588.4	660.8	727.4	758.4
62.5°	508.6	533.7	610.6	681.5	711.1
65°	452.4	479.0	558.8	632.8	662.3
67.5°	394.7	425.8	508.6	584.0	615.0
70°	338.6	372.6	459.8	535.2	564.7
72.5°	283.9	320.8	411.0	487.9	505.6
75°	229.2	272.0	363.7	406.6	406.6
77.5°	177.4	224.7	310.5	326.7	335.6
80°	128.6	180.4	233.6	252.8	249.8
82.5°	85.7	137.5	167.1	167.1	162.6
85°	48.8	82.8	90.2	87.2	85.7
87.5°	20.7	31.0	28.1	22.2	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)