

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: P260565

Luminaire Tested: **24CZ-LD5-40-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260565
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-LD5-40-UNV-L83050-W2A1-U-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4317.0 lumens
Efficiency: N/A
Efficacy: 145.6 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

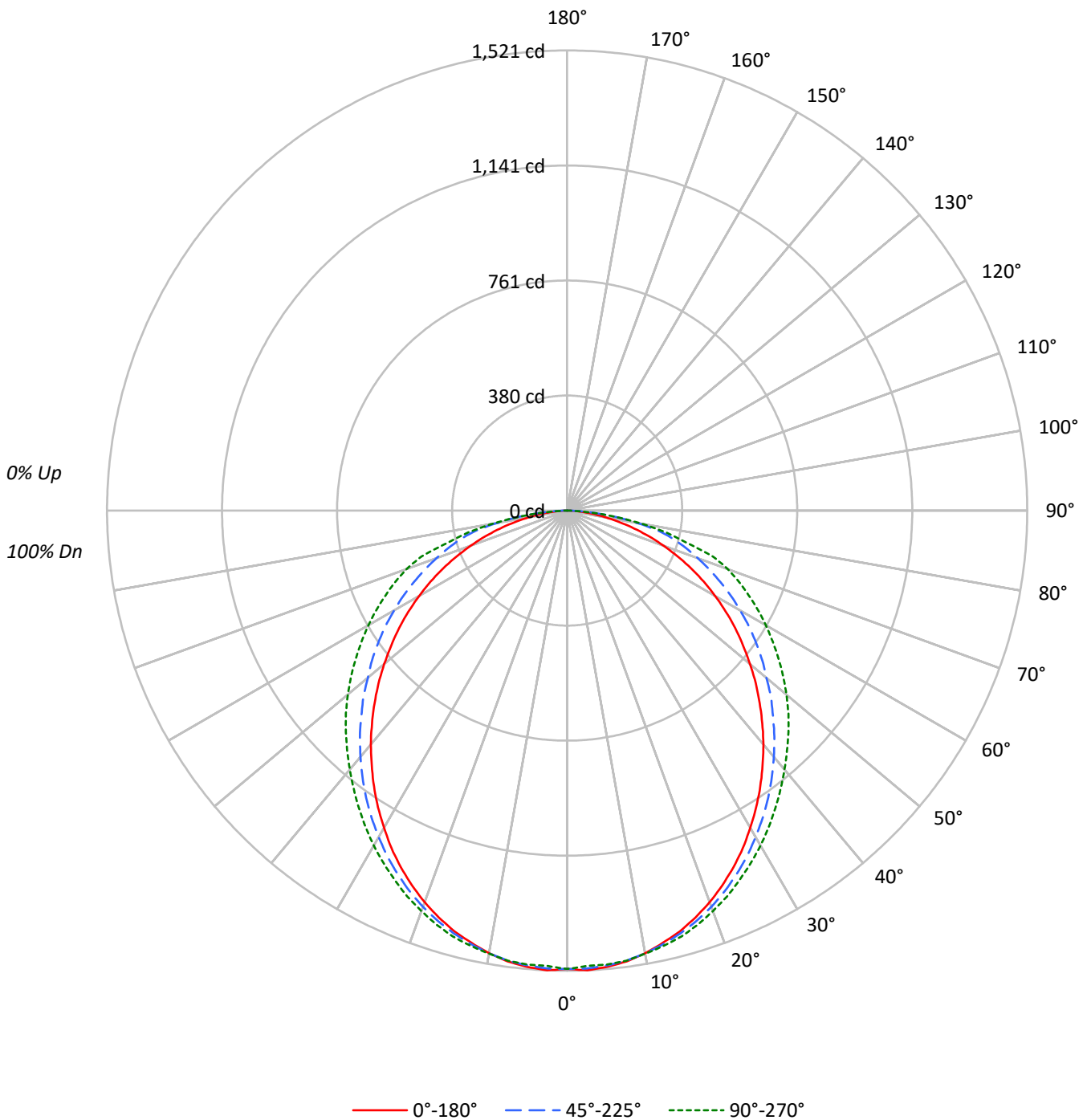
Input Watts (W): 29.657328
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2038	2038	2038
5°	2044	2038	2034
10°	2030	2030	2032
15°	2005	2016	2030
20°	1973	1996	2017
25°	1931	1968	2001
30°	1881	1936	1986
35°	1828	1903	1971
40°	1773	1867	1963
45°	1713	1831	1969
50°	1652	1801	1980
55°	1591	1789	2001
60°	1519	1778	2041
65°	1440	1779	2108
70°	1332	1808	2221
75°	1191	1890	2113
80°	996	1809	1936
85°	753	1392	1323



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.2	3.3
10°-20°	407.5	9.4
20°-30°	609.1	14.1
30°-40°	722.6	16.7
40°-50°	743.8	17.2
50°-60°	682.3	15.8
60°-70°	551.7	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°	1159.8	26.9
0°-40°	1882.4	43.6
0°-60°	3308.5	76.6
0°-90°	4317.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4317.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1515	1515	1515	1515	1515	
5°	1514	1503	1509	1508	1506	144
15°	1440	1434	1447	1453	1457	406
25°	1301	1302	1326	1338	1348	599
35°	1113	1122	1159	1184	1200	696
45°	900	915	962	1008	1035	695
55°	678	699	763	825	853	606
65°	452	479	559	633	662	447
75°	229	272	364	406	406	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°	1515.0	1515.0	1515.0	1515.0	1515.0
2.5°	1521.0	1509.1	1515.0	1513.6	1506.2
5°	1513.6	1503.2	1509.1	1507.7	1506.2
7.5°	1503.2	1492.9	1500.3	1498.8	1500.3
10°	1485.5	1476.6	1485.5	1487.0	1487.0
12.5°	1463.3	1455.9	1467.7	1470.7	1473.7
15°	1439.7	1433.7	1447.1	1453.0	1457.4
17.5°	1410.1	1405.7	1421.9	1429.3	1435.2
20°	1377.6	1376.1	1393.8	1401.2	1408.6
22.5°	1340.6	1340.6	1361.3	1370.2	1380.5
25°	1300.7	1302.2	1325.8	1337.7	1348.0
27.5°	1257.9	1259.3	1287.4	1302.2	1314.0
30°	1210.6	1216.5	1246.0	1265.2	1278.5
32.5°	1163.3	1170.6	1203.2	1225.3	1240.1
35°	1113.0	1121.9	1158.8	1184.0	1200.2
37.5°	1061.3	1071.6	1111.5	1139.6	1158.8
40°	1009.5	1021.4	1062.7	1095.3	1117.4
42.5°	954.8	968.1	1014.0	1052.4	1076.0
45°	900.2	914.9	962.2	1008.1	1034.7
47.5°	845.5	863.2	913.5	963.7	991.8
50°	789.3	807.0	860.2	917.9	946.0
52.5°	733.1	753.8	812.9	872.1	900.2
55°	678.4	699.1	762.7	824.8	852.9
57.5°	622.3	643.0	712.4	777.5	805.6
60°	564.6	588.3	660.7	727.2	758.3
62.5°	508.5	533.6	610.5	681.4	711.0
65°	452.3	478.9	558.7	632.6	662.2
67.5°	394.7	425.7	508.5	583.8	614.9
70°	338.5	372.5	459.7	535.1	564.6
72.5°	283.8	320.7	410.9	487.8	505.5
75°	229.1	272.0	363.6	406.5	406.5
77.5°	177.4	224.7	310.4	326.7	335.5
80°	128.6	180.3	233.5	252.8	249.8
82.5°	85.7	137.5	167.0	167.0	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)