

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: P260570

Luminaire Tested: **24CZ-LD5-45-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260570
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-LD5-45-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: 4754.0 lumens
Efficiency: N/A
Efficacy: 144.2 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

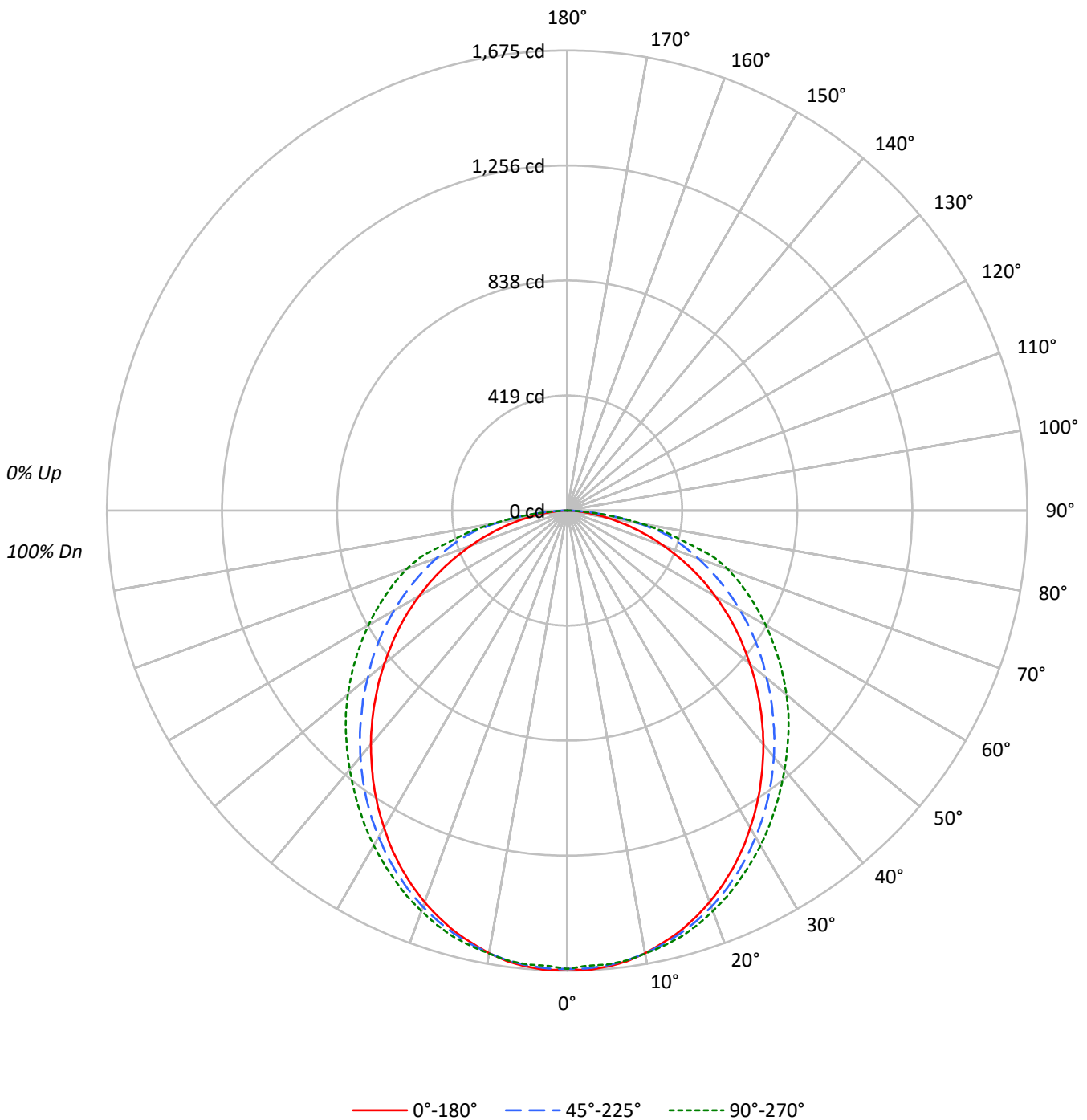
Input Watts (W): 32.974266
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2245	2245	2245
5°	2251	2245	2240
10°	2235	2235	2237
15°	2208	2220	2236
20°	2172	2198	2221
25°	2127	2168	2204
30°	2071	2132	2188
35°	2013	2096	2171
40°	1953	2056	2161
45°	1886	2016	2168
50°	1819	1983	2180
55°	1753	1970	2203
60°	1673	1958	2247
65°	1586	1959	2322
70°	1466	1991	2446
75°	1312	2082	2327
80°	1097	1993	2132
85°	829	1533	1457



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.7	3.3
10°-20°	448.7	9.4
20°-30°	670.8	14.1
30°-40°	795.8	16.7
40°-50°	819.1	17.2
50°-60°	751.4	15.8
60°-70°	607.5	12.8
70°-80°	394.3	8.3
80°-90°	108.7	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°	1277.2	26.9
0°-40°	2073.0	43.6
0°-60°	3643.4	76.6
0°-90°	4754.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4754.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1668	1668	1668	1668	1668	
5°	1667	1655	1662	1660	1659	158
15°	1585	1579	1594	1600	1605	447
25°	1432	1434	1460	1473	1484	659
35°	1226	1235	1276	1304	1322	766
45°	991	1008	1060	1110	1139	765
55°	747	770	840	908	939	667
65°	498	527	615	697	729	492
75°	252	300	400	448	448	268
85°	54	91	99	96	94	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1668.4	1668.4	1668.4	1668.4	1668.4
2.5°	1674.9	1661.9	1668.4	1666.8	1658.6
5°	1666.8	1655.4	1661.9	1660.3	1658.6
7.5°	1655.4	1644.0	1652.1	1650.5	1652.1
10°	1635.9	1626.1	1635.9	1637.5	1637.5
12.5°	1611.4	1603.3	1616.3	1619.6	1622.8
15°	1585.4	1578.9	1593.5	1600.0	1604.9
17.5°	1552.8	1548.0	1565.9	1574.0	1580.5
20°	1517.0	1515.4	1534.9	1543.1	1551.2
22.5°	1476.3	1476.3	1499.1	1508.9	1520.3
25°	1432.4	1434.0	1460.1	1473.1	1484.5
27.5°	1385.2	1386.8	1417.7	1434.0	1447.0
30°	1333.1	1339.6	1372.2	1393.3	1408.0
32.5°	1281.0	1289.1	1325.0	1349.4	1365.7
35°	1225.7	1235.4	1276.1	1303.8	1321.7
37.5°	1168.7	1180.1	1224.0	1255.0	1276.1
40°	1111.7	1124.8	1170.3	1206.1	1230.6
42.5°	1051.5	1066.2	1116.6	1158.9	1185.0
45°	991.3	1007.6	1059.6	1110.1	1139.4
47.5°	931.1	950.6	1005.9	1061.3	1092.2
50°	869.2	888.7	947.3	1010.8	1041.7
52.5°	807.3	830.1	895.2	960.4	991.3
55°	747.1	769.9	839.9	908.3	939.2
57.5°	685.3	708.1	784.6	856.2	887.1
60°	621.8	647.8	727.6	800.8	835.0
62.5°	559.9	587.6	672.2	750.4	782.9
65°	498.1	527.4	615.3	696.7	729.2
67.5°	434.6	468.8	559.9	642.9	677.1
70°	372.7	410.2	506.2	589.2	621.8
72.5°	312.5	353.2	452.5	537.1	556.7
75°	252.3	299.5	400.4	447.6	447.6
77.5°	195.3	247.4	341.8	359.7	369.5
80°	141.6	198.6	257.2	278.3	275.1
82.5°	94.4	151.4	183.9	183.9	179.0
85°	53.7	91.2	99.3	96.0	94.4
87.5°	22.8	34.2	30.9	24.4	21.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)