

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: P260731

Luminaire Tested: **24CZ-LD5-45-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260731
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-L82765-W2A1-U-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4380.0 lumens
Efficiency: N/A
Efficacy: 138.5 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

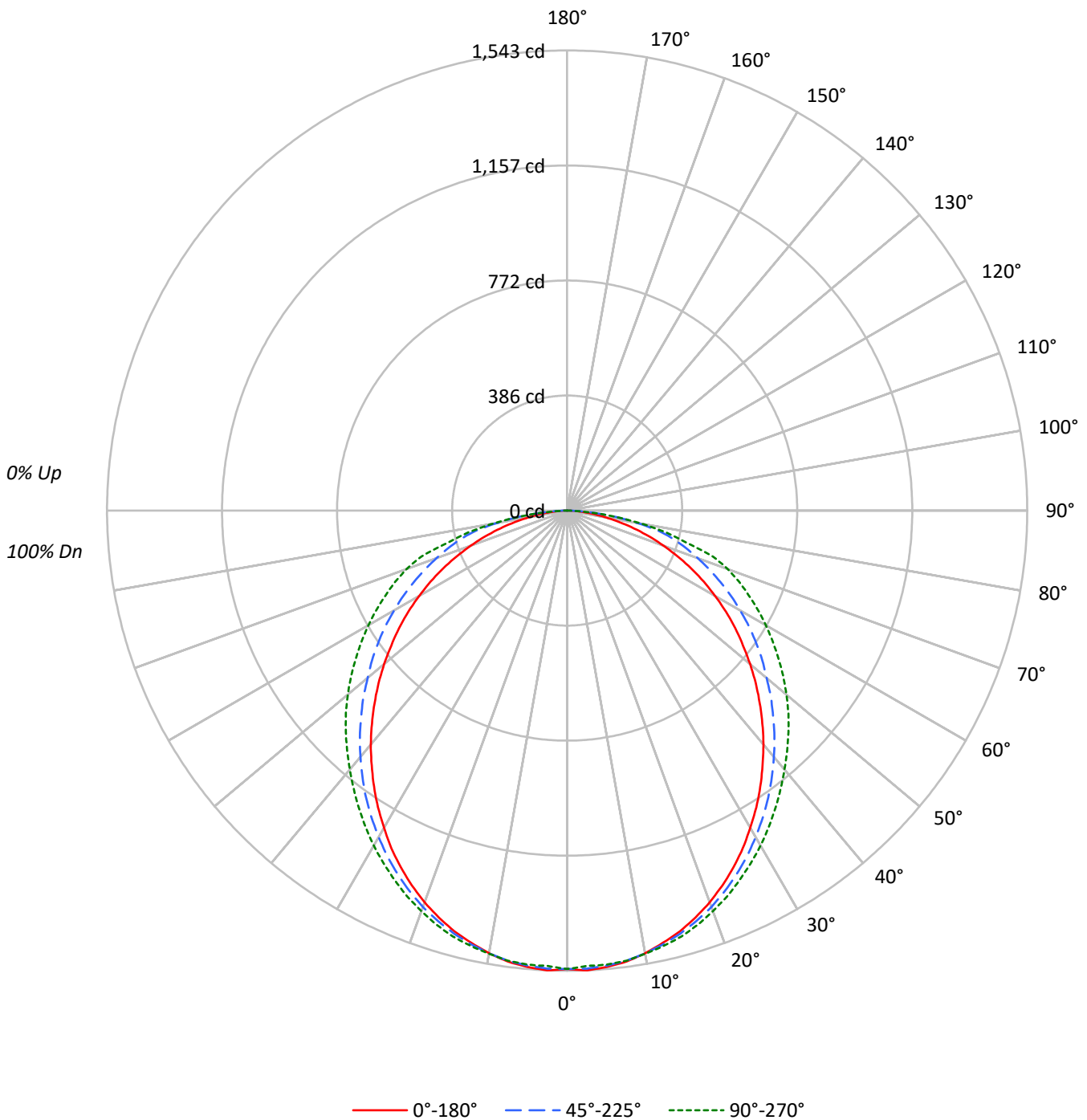
Input Watts (W): 31.62
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2068	2068	2068
5°	2074	2068	2064
10°	2059	2059	2061
15°	2035	2045	2060
20°	2001	2025	2046
25°	1959	1997	2030
30°	1908	1964	2015
35°	1855	1931	2000
40°	1799	1894	1991
45°	1738	1858	1998
50°	1676	1827	2009
55°	1615	1815	2030
60°	1542	1804	2070
65°	1461	1805	2139
70°	1351	1835	2254
75°	1208	1918	2144
80°	1011	1836	1963
85°	764	1413	1343



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.3	3.3
10°-20°	413.4	9.4
20°-30°	618.0	14.1
30°-40°	733.2	16.7
40°-50°	754.7	17.2
50°-60°	692.3	15.8
60°-70°	559.8	12.8
70°-80°	363.3	8.3
80°-90°	100.2	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°	1176.7	26.9
0°-40°	1909.9	43.6
0°-60°	3356.8	76.6
0°-90°	4380.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4380.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1537	1537	1537	1537	1537	
5°	1536	1525	1531	1530	1528	146
15°	1461	1455	1468	1474	1479	411
25°	1320	1321	1345	1357	1368	607
35°	1129	1138	1176	1201	1218	706
45°	913	928	976	1023	1050	705
55°	688	709	774	837	865	615
65°	459	486	567	642	672	454
75°	232	276	369	412	412	247
85°	50	84	92	88	87	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1537.2	1537.2	1537.2	1537.2	1537.2
2.5°	1543.2	1531.2	1537.2	1535.7	1528.2
5°	1535.7	1525.2	1531.2	1529.7	1528.2
7.5°	1525.2	1514.7	1522.2	1520.7	1522.2
10°	1507.2	1498.2	1507.2	1508.7	1508.7
12.5°	1484.7	1477.2	1489.2	1492.2	1495.2
15°	1460.7	1454.7	1468.2	1474.2	1478.7
17.5°	1430.7	1426.2	1442.7	1450.2	1456.2
20°	1397.7	1396.2	1414.2	1421.7	1429.2
22.5°	1360.2	1360.2	1381.2	1390.2	1400.7
25°	1319.7	1321.2	1345.2	1357.2	1367.7
27.5°	1276.2	1277.7	1306.2	1321.2	1333.2
30°	1228.2	1234.2	1264.2	1283.7	1297.2
32.5°	1180.2	1187.7	1220.7	1243.2	1258.2
35°	1129.2	1138.2	1175.7	1201.2	1217.7
37.5°	1076.8	1087.3	1127.7	1156.2	1175.7
40°	1024.3	1036.3	1078.3	1111.2	1133.7
42.5°	968.8	982.3	1028.8	1067.8	1091.8
45°	913.3	928.3	976.3	1022.8	1049.8
47.5°	857.8	875.8	926.8	977.8	1006.3
50°	800.8	818.8	872.8	931.3	959.8
52.5°	743.8	764.8	824.8	884.8	913.3
55°	688.3	709.3	773.8	836.8	865.3
57.5°	631.4	652.4	722.8	788.8	817.3
60°	572.9	596.9	670.3	737.8	769.3
62.5°	515.9	541.4	619.4	691.3	721.3
65°	458.9	485.9	566.9	641.9	671.8
67.5°	400.4	431.9	515.9	592.4	623.9
70°	343.4	377.9	466.4	542.9	572.9
72.5°	287.9	325.4	416.9	494.9	512.9
75°	232.4	275.9	368.9	412.4	412.4
77.5°	180.0	227.9	314.9	331.4	340.4
80°	130.5	183.0	236.9	256.4	253.4
82.5°	87.0	139.5	169.5	169.5	165.0
85°	49.5	84.0	91.5	88.5	87.0
87.5°	21.0	31.5	28.5	22.5	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)