

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: P260733

Luminaire Tested: **24CZ-LD5-45-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260733
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-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: 4556.0 lumens
Efficiency: N/A
Efficacy: 142.4 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

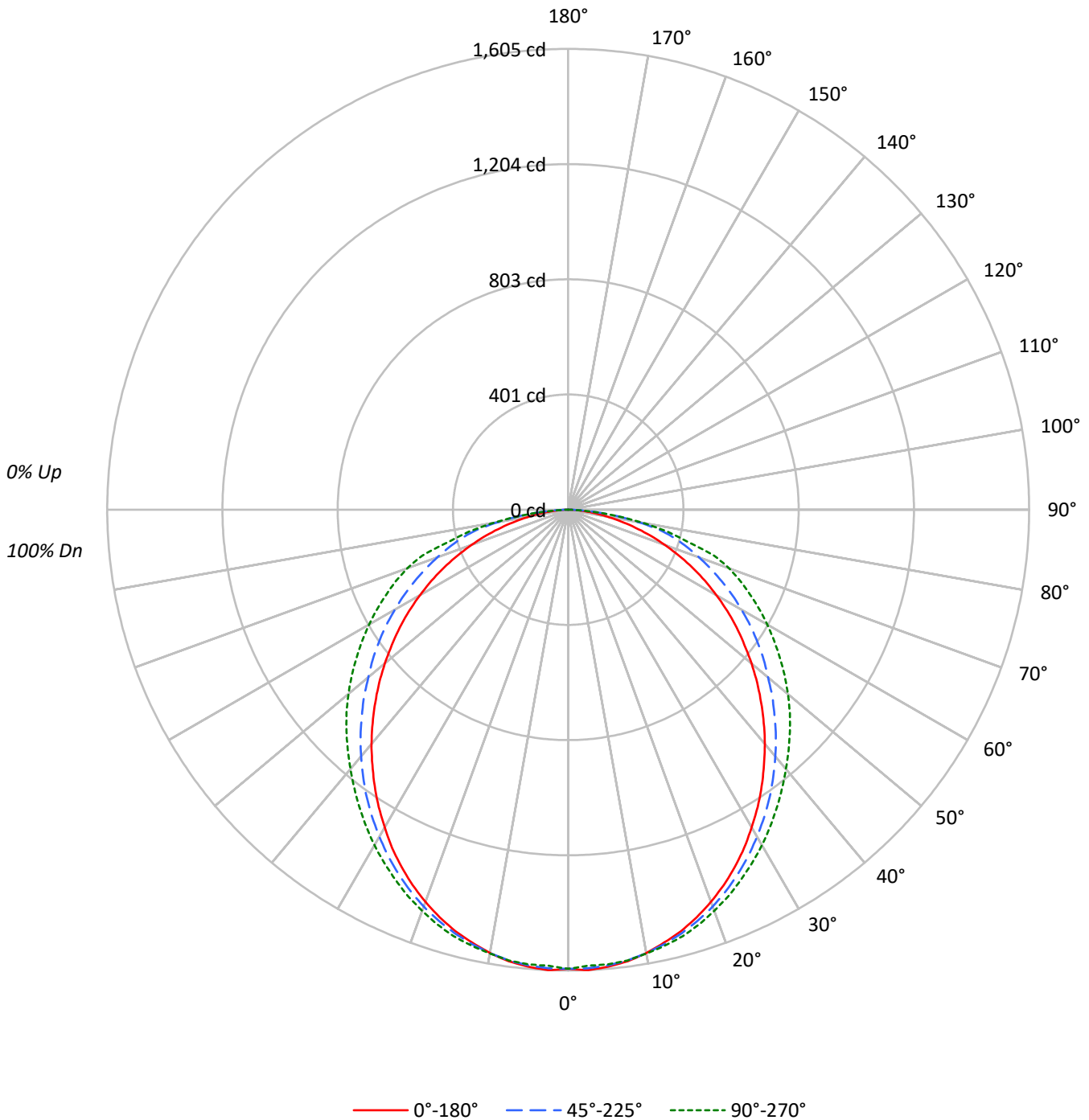
Input Watts (W): 31.992
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2151	2151	2151
5°	2157	2151	2147
10°	2142	2142	2144
15°	2116	2127	2143
20°	2082	2106	2129
25°	2038	2077	2112
30°	1985	2043	2096
35°	1929	2009	2081
40°	1871	1970	2071
45°	1808	1932	2078
50°	1744	1900	2090
55°	1680	1888	2111
60°	1604	1876	2153
65°	1520	1877	2225
70°	1405	1908	2344
75°	1257	1995	2230
80°	1051	1910	2042
85°	795	1470	1397



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.1	3.3
10°-20°	430.0	9.4
20°-30°	642.9	14.1
30°-40°	762.7	16.7
40°-50°	785.0	17.2
50°-60°	720.1	15.8
60°-70°	582.2	12.8
70°-80°	377.9	8.3
80°-90°	104.2	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°	1224.0	26.9
0°-40°	1986.6	43.6
0°-60°	3491.7	76.6
0°-90°	4556.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4556.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1599	1599	1599	1599	1599	
5°	1597	1586	1593	1591	1590	152
15°	1519	1513	1527	1533	1538	428
25°	1373	1374	1399	1412	1423	632
35°	1175	1184	1223	1250	1267	735
45°	950	966	1016	1064	1092	733
55°	716	738	805	870	900	640
65°	477	505	590	668	699	472
75°	242	287	384	429	429	257
85°	52	87	95	92	90	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1598.9	1598.9	1598.9	1598.9	1598.9
2.5°	1605.2	1592.7	1598.9	1597.4	1589.6
5°	1597.4	1586.4	1592.7	1591.1	1589.6
7.5°	1586.4	1575.5	1583.3	1581.8	1583.3
10°	1567.7	1558.4	1567.7	1569.3	1569.3
12.5°	1544.3	1536.5	1549.0	1552.1	1555.2
15°	1519.4	1513.1	1527.2	1533.4	1538.1
17.5°	1488.2	1483.5	1500.6	1508.4	1514.7
20°	1453.8	1452.3	1471.0	1478.8	1486.6
22.5°	1414.8	1414.8	1436.7	1446.0	1457.0
25°	1372.7	1374.3	1399.2	1411.7	1422.6
27.5°	1327.5	1329.1	1358.7	1374.3	1386.8
30°	1277.6	1283.8	1315.0	1335.3	1349.3
32.5°	1227.7	1235.5	1269.8	1293.2	1308.8
35°	1174.6	1184.0	1223.0	1249.5	1266.7
37.5°	1120.0	1130.9	1173.1	1202.7	1223.0
40°	1065.4	1077.9	1121.6	1155.9	1179.3
42.5°	1007.7	1021.7	1070.1	1110.7	1135.6
45°	950.0	965.6	1015.5	1063.9	1091.9
47.5°	892.3	911.0	964.0	1017.1	1046.7
50°	833.0	851.7	907.9	968.7	998.3
52.5°	773.7	795.6	858.0	920.4	950.0
55°	716.0	737.8	804.9	870.4	900.1
57.5°	656.7	678.6	751.9	820.5	850.2
60°	595.9	620.8	697.3	767.5	800.2
62.5°	536.6	563.1	644.2	719.1	750.3
65°	477.3	505.4	589.7	667.6	698.8
67.5°	416.5	449.3	536.6	616.2	648.9
70°	357.2	393.1	485.1	564.7	595.9
72.5°	299.5	338.5	433.7	514.8	533.5
75°	241.8	287.0	383.7	429.0	429.0
77.5°	187.2	237.1	327.6	344.7	354.1
80°	135.7	190.3	246.5	266.7	263.6
82.5°	90.5	145.1	176.3	176.3	171.6
85°	51.5	87.4	95.2	92.0	90.5
87.5°	21.8	32.8	29.6	23.4	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)