

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: P261154

Luminaire Tested: **24CZ-LD5-45-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261154
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-45-S-UNV-L82765-W2A1-U-5000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED AT 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4710.0 lumens
Efficiency: N/A
Efficacy: 146.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

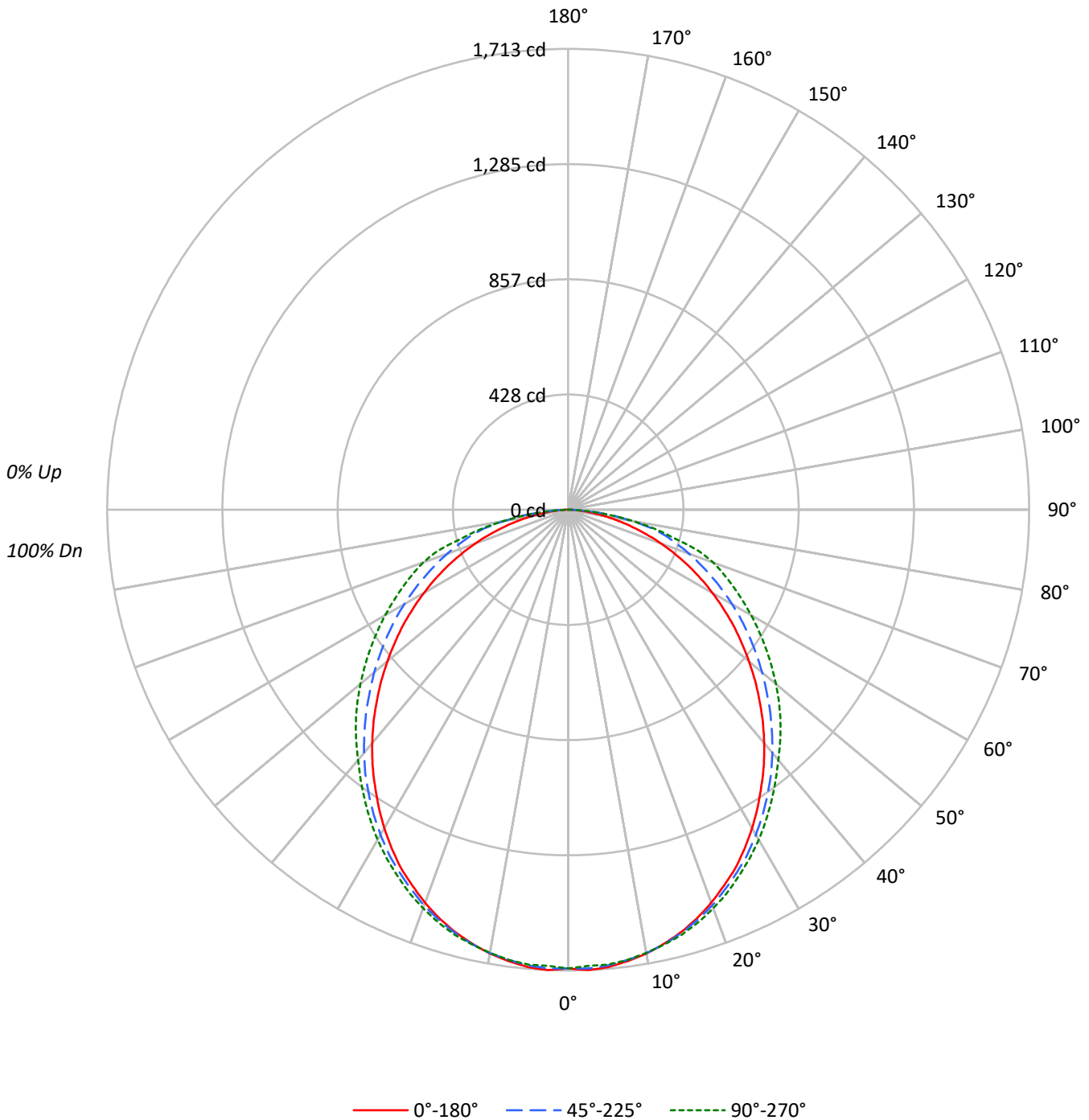
Input Watts (W): 32.178
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2294	2294	2294
5°	2305	2297	2292
10°	2289	2287	2285
15°	2264	2268	2277
20°	2226	2242	2257
25°	2182	2206	2229
30°	2123	2167	2201
35°	2057	2121	2165
40°	1990	2073	2133
45°	1914	2019	2123
50°	1837	1968	2109
55°	1757	1926	2103
60°	1666	1894	2113
65°	1567	1871	2155
70°	1443	1880	2257
75°	1279	1947	2102
80°	1068	1846	1894
85°	798	1476	1355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.2	3.4
10°-20°	458.5	9.7
20°-30°	683.3	14.5
30°-40°	804.3	17.1
40°-50°	817.3	17.4
50°-60°	734.9	15.6
60°-70°	580.6	12.3
70°-80°	368.3	7.8
80°-90°	101.6	2.2
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°	1303.0	27.7
0°-40°	2107.3	44.7
0°-60°	3659.5	77.7
0°-90°	4710.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4710.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1705	1705	1705	1705	1705	
5°	1707	1693	1700	1697	1697	162
15°	1625	1617	1628	1633	1635	458
25°	1470	1468	1486	1495	1501	676
35°	1252	1260	1291	1306	1318	783
45°	1006	1020	1061	1092	1116	776
55°	749	768	821	874	896	669
65°	492	517	588	652	677	487
75°	246	288	375	408	404	262
85°	52	89	96	88	88	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1705.1	1705.1	1705.1	1705.1	1705.1
2.5°	1712.9	1700.4	1706.7	1703.5	1697.3
5°	1706.7	1692.6	1700.4	1697.3	1697.3
7.5°	1692.6	1681.6	1687.9	1686.3	1687.9
10°	1675.3	1664.4	1673.8	1673.8	1672.2
12.5°	1651.8	1642.4	1653.4	1653.4	1655.0
15°	1625.2	1617.3	1628.3	1633.0	1634.6
17.5°	1592.3	1584.4	1598.5	1603.2	1607.9
20°	1554.7	1551.5	1565.6	1570.3	1576.6
22.5°	1512.3	1512.3	1526.4	1532.7	1542.1
25°	1470.0	1468.5	1485.7	1495.1	1501.4
27.5°	1419.9	1421.4	1443.4	1452.8	1460.6
30°	1366.6	1369.7	1394.8	1405.8	1416.7
32.5°	1310.2	1316.4	1344.7	1357.2	1368.2
35°	1252.2	1260.0	1291.4	1305.5	1318.0
37.5°	1194.2	1205.2	1238.1	1252.2	1266.3
40°	1133.1	1142.5	1180.1	1197.3	1214.6
42.5°	1070.4	1082.9	1120.5	1145.6	1166.0
45°	1006.1	1020.2	1061.0	1092.3	1115.8
47.5°	941.9	960.7	999.9	1042.2	1062.6
50°	877.6	896.4	940.3	987.3	1007.7
52.5°	811.8	830.6	880.8	929.3	951.3
55°	749.1	767.9	821.2	874.5	896.4
57.5°	683.3	703.7	763.2	818.1	840.0
60°	619.0	639.4	703.7	761.7	785.2
62.5°	556.4	578.3	645.7	706.8	730.3
65°	492.1	517.2	587.7	652.0	677.0
67.5°	429.4	457.6	531.3	598.7	625.3
70°	366.7	399.6	478.0	547.0	573.6
72.5°	305.6	341.6	424.7	493.7	507.8
75°	246.0	288.4	374.6	407.5	404.3
77.5°	189.6	236.6	318.1	324.4	333.8
80°	137.9	189.6	238.2	250.8	244.5
82.5°	90.9	142.6	170.8	164.6	163.0
85°	51.7	89.3	95.6	87.8	87.8
87.5°	21.9	36.0	31.3	23.5	21.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)