

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: P260822

Luminaire Tested: **24CZ-LD5-45SE-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260822
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-LD5-45SE-UNV-L82765-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4524.0 lumens
Efficiency: N/A
Efficacy: 128.0 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

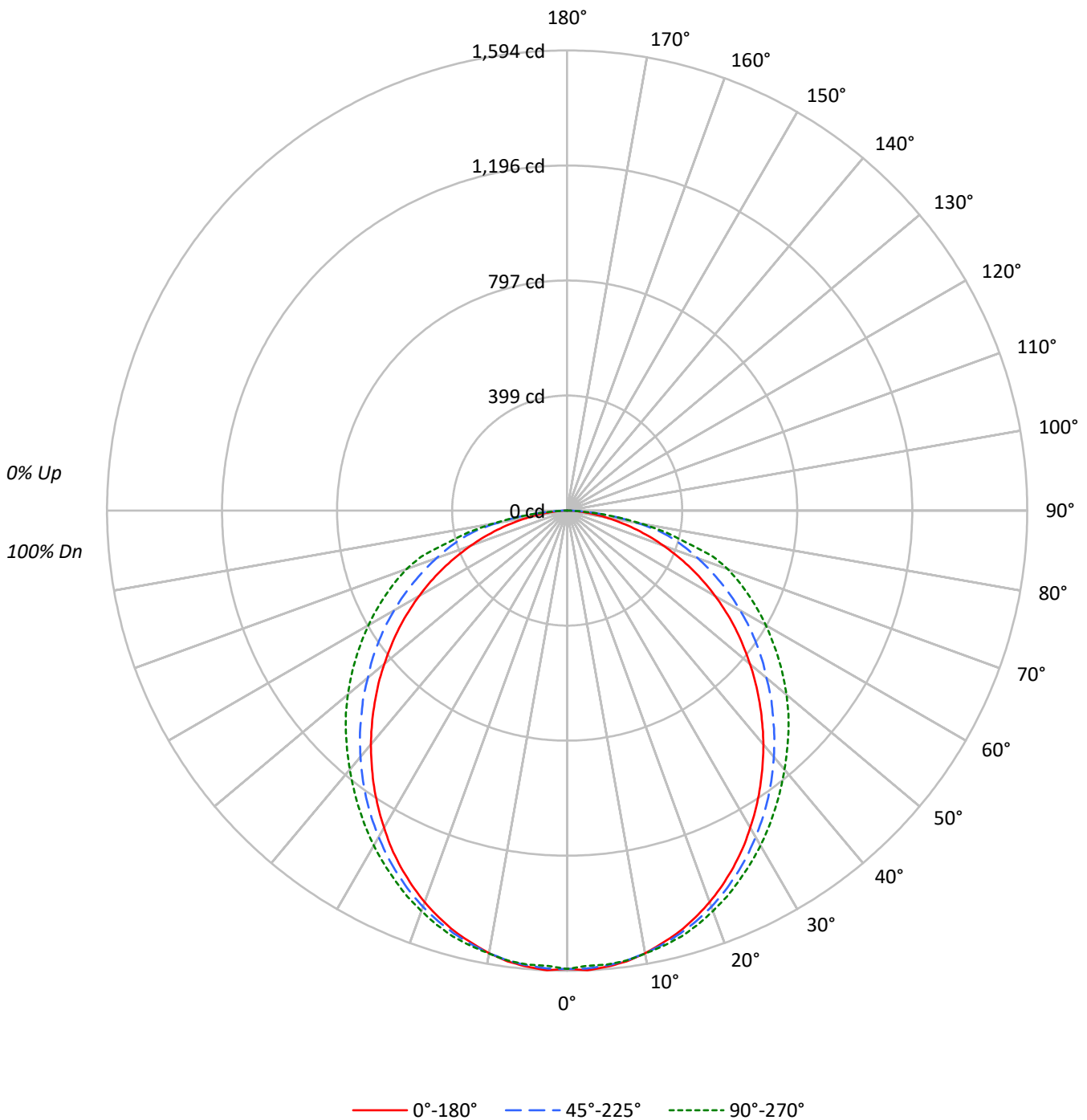
Input Watts (W): 35.34
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P260822

CATALOG NUMBER: 24CZ-LD5-45SE-UNV-L82765-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P260822

CATALOG NUMBER: 24CZ-LD5-45SE-UNV-L82765-W2A1-U-4000K

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°	2136	2136	2136
5°	2142	2136	2132
10°	2127	2127	2129
15°	2102	2112	2127
20°	2067	2091	2114
25°	2024	2063	2097
30°	1971	2029	2082
35°	1916	1995	2066
40°	1858	1956	2057
45°	1795	1919	2063
50°	1731	1887	2075
55°	1668	1875	2097
60°	1592	1863	2138
65°	1509	1864	2209
70°	1395	1895	2328
75°	1248	1981	2215
80°	1044	1896	2029
85°	789	1459	1386



TEST NUMBER: P260822

CATALOG NUMBER: 24CZ-LD5-45SE-UNV-L82765-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.0	3.3
10°-20°	427.0	9.4
20°-30°	638.4	14.1
30°-40°	757.3	16.7
40°-50°	779.4	17.2
50°-60°	715.0	15.8
60°-70°	578.1	12.8
70°-80°	375.2	8.3
80°-90°	103.4	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°	1215.4	26.9
0°-40°	1972.7	43.6
0°-60°	3467.2	76.6
0°-90°	4524.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4524.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1588	1588	1588	1588	1588	
5°	1586	1575	1582	1580	1578	151
15°	1509	1502	1516	1523	1527	425
25°	1363	1365	1389	1402	1413	627
35°	1166	1176	1214	1241	1258	729
45°	943	959	1008	1056	1084	728
55°	711	733	799	864	894	635
65°	474	502	586	663	694	468
75°	240	285	381	426	426	255
85°	51	87	94	91	90	63
90°	0	0	0	0	0	



TEST NUMBER: P260822

CATALOG NUMBER: 24CZ-LD5-45SE-UNV-L82765-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1587.7	1587.7	1587.7	1587.7	1587.7
2.5°	1593.9	1581.5	1587.7	1586.1	1578.4
5°	1586.1	1575.3	1581.5	1579.9	1578.4
7.5°	1575.3	1564.5	1572.2	1570.7	1572.2
10°	1556.7	1547.4	1556.7	1558.3	1558.3
12.5°	1533.5	1525.7	1538.1	1541.2	1544.3
15°	1508.7	1502.5	1516.4	1522.6	1527.3
17.5°	1477.7	1473.1	1490.1	1497.8	1504.0
20°	1443.6	1442.1	1460.7	1468.4	1476.2
22.5°	1404.9	1404.9	1426.6	1435.9	1446.7
25°	1363.1	1364.6	1389.4	1401.8	1412.7
27.5°	1318.2	1319.7	1349.1	1364.6	1377.0
30°	1268.6	1274.8	1305.8	1325.9	1339.9
32.5°	1219.0	1226.8	1260.9	1284.1	1299.6
35°	1166.4	1175.7	1214.4	1240.7	1257.8
37.5°	1112.2	1123.0	1164.8	1194.3	1214.4
40°	1057.9	1070.3	1113.7	1147.8	1171.0
42.5°	1000.6	1014.6	1062.6	1102.9	1127.6
45°	943.3	958.8	1008.4	1056.4	1084.3
47.5°	886.0	904.6	957.3	1009.9	1039.4
50°	827.1	845.7	901.5	961.9	991.3
52.5°	768.3	790.0	851.9	913.9	943.3
55°	711.0	732.7	799.3	864.3	893.8
57.5°	652.1	673.8	746.6	814.8	844.2
60°	591.7	616.5	692.4	762.1	794.6
62.5°	532.8	559.2	639.7	714.1	745.1
65°	474.0	501.9	585.5	663.0	693.9
67.5°	413.6	446.1	532.8	611.8	644.4
70°	354.7	390.3	481.7	560.7	591.7
72.5°	297.4	336.1	430.6	511.2	529.7
75°	240.1	285.0	381.0	426.0	426.0
77.5°	185.9	235.4	325.3	342.3	351.6
80°	134.8	189.0	244.7	264.9	261.8
82.5°	89.8	144.1	175.0	175.0	170.4
85°	51.1	86.7	94.5	91.4	89.8
87.5°	21.7	32.5	29.4	23.2	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)