

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: P261241

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261241
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-LD5-45SE-S-UNV-L82765-W2A1-U-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4515.0 lumens
Efficiency: N/A
Efficacy: 128.4 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

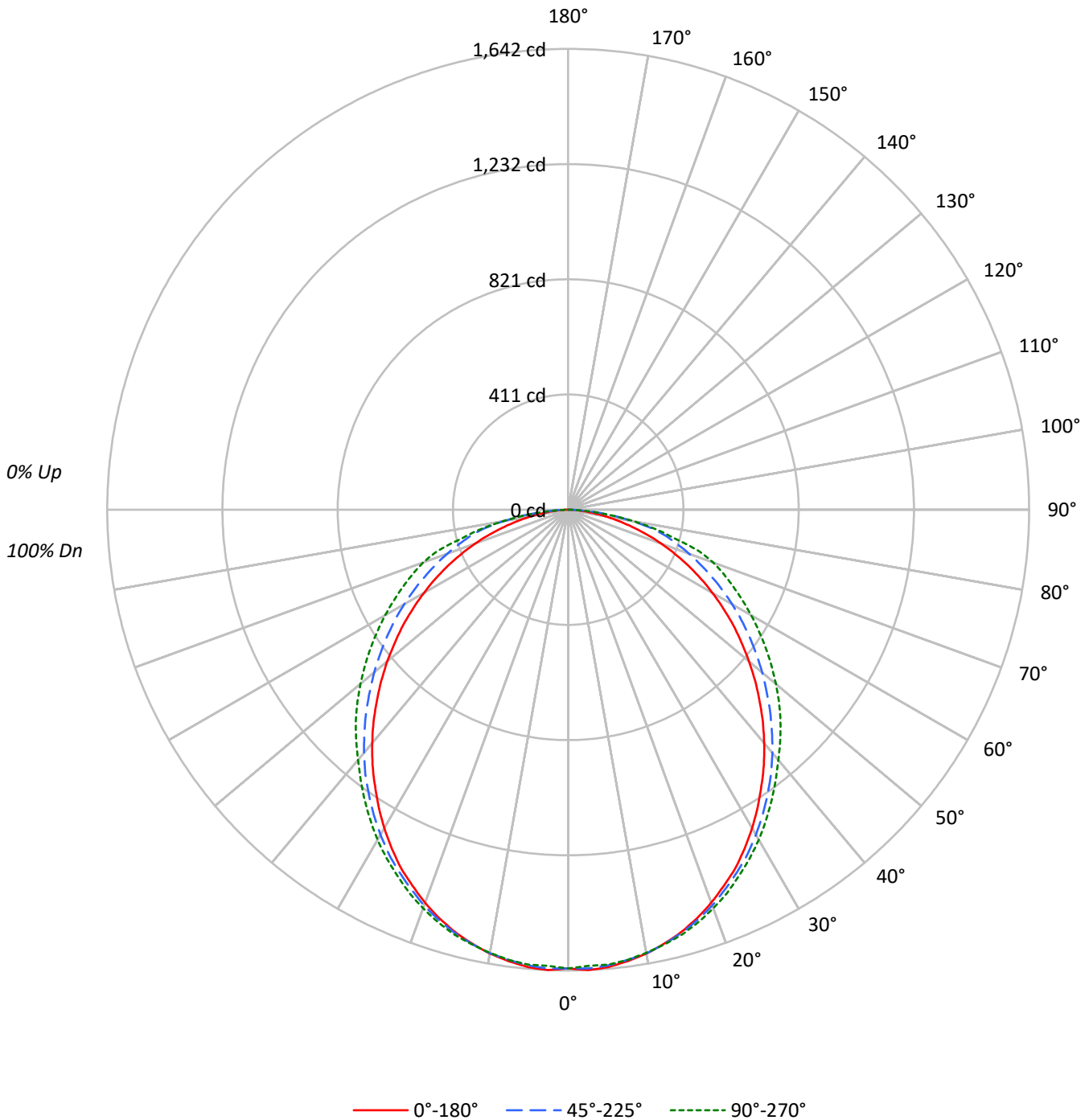
Input Watts (W): 35.154
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2199	2199	2199
5°	2210	2202	2197
10°	2194	2192	2190
15°	2170	2174	2183
20°	2134	2149	2164
25°	2092	2114	2137
30°	2035	2077	2110
35°	1972	2033	2075
40°	1908	1987	2045
45°	1835	1935	2035
50°	1761	1887	2022
55°	1685	1847	2016
60°	1597	1815	2025
65°	1502	1794	2066
70°	1383	1803	2163
75°	1226	1867	2015
80°	1024	1770	1816
85°	766	1414	1298



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.5	3.4
10°-20°	439.5	9.7
20°-30°	655.0	14.5
30°-40°	771.0	17.1
40°-50°	783.5	17.4
50°-60°	704.4	15.6
60°-70°	556.5	12.3
70°-80°	353.1	7.8
80°-90°	97.4	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°	1249.0	27.7
0°-40°	2020.0	44.7
0°-60°	3508.0	77.7
0°-90°	4515.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4515.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1634	1634	1634	1634	1634	
5°	1636	1622	1630	1627	1627	155
15°	1558	1550	1561	1565	1567	439
25°	1409	1408	1424	1433	1439	648
35°	1200	1208	1238	1251	1263	751
45°	964	978	1017	1047	1070	744
55°	718	736	787	838	859	641
65°	472	496	563	625	649	467
75°	236	276	359	391	388	251
85°	50	86	92	84	84	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1634.5	1634.5	1634.5	1634.5	1634.5
2.5°	1642.0	1630.0	1636.0	1633.0	1627.0
5°	1636.0	1622.5	1630.0	1627.0	1627.0
7.5°	1622.5	1612.0	1618.0	1616.5	1618.0
10°	1606.0	1595.5	1604.5	1604.5	1603.0
12.5°	1583.4	1574.4	1584.9	1584.9	1586.4
15°	1557.9	1550.4	1560.9	1565.4	1566.9
17.5°	1526.3	1518.8	1532.4	1536.9	1541.4
20°	1490.3	1487.3	1500.8	1505.3	1511.3
22.5°	1449.7	1449.7	1463.2	1469.3	1478.3
25°	1409.2	1407.7	1424.2	1433.2	1439.2
27.5°	1361.1	1362.6	1383.6	1392.6	1400.2
30°	1310.0	1313.0	1337.1	1347.6	1358.1
32.5°	1255.9	1261.9	1289.0	1301.0	1311.5
35°	1200.3	1207.9	1237.9	1251.4	1263.4
37.5°	1144.8	1155.3	1186.8	1200.3	1213.9
40°	1086.2	1095.2	1131.2	1147.8	1164.3
42.5°	1026.1	1038.1	1074.2	1098.2	1117.7
45°	964.5	978.0	1017.1	1047.1	1069.6
47.5°	902.9	920.9	958.5	999.0	1018.6
50°	841.3	859.3	901.4	946.5	966.0
52.5°	778.2	796.2	844.3	890.9	911.9
55°	718.1	736.1	787.2	838.3	859.3
57.5°	655.0	674.5	731.6	784.2	805.2
60°	593.4	612.9	674.5	730.1	752.7
62.5°	533.3	554.4	619.0	677.5	700.1
65°	471.7	495.8	563.4	625.0	649.0
67.5°	411.6	438.7	509.3	573.9	599.4
70°	351.5	383.1	458.2	524.3	549.8
72.5°	293.0	327.5	407.1	473.2	486.7
75°	235.9	276.4	359.1	390.6	387.6
77.5°	181.8	226.8	305.0	311.0	320.0
80°	132.2	181.8	228.4	240.4	234.4
82.5°	87.1	136.7	163.8	157.7	156.2
85°	49.6	85.6	91.6	84.1	84.1
87.5°	21.0	34.6	30.0	22.5	21.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)