

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: P260698

Luminaire Tested: **24CZ-LD5-50SE-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260698
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-LD5-50SE-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4251.7 lumens
Efficiency: N/A
Efficacy: 105.1 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

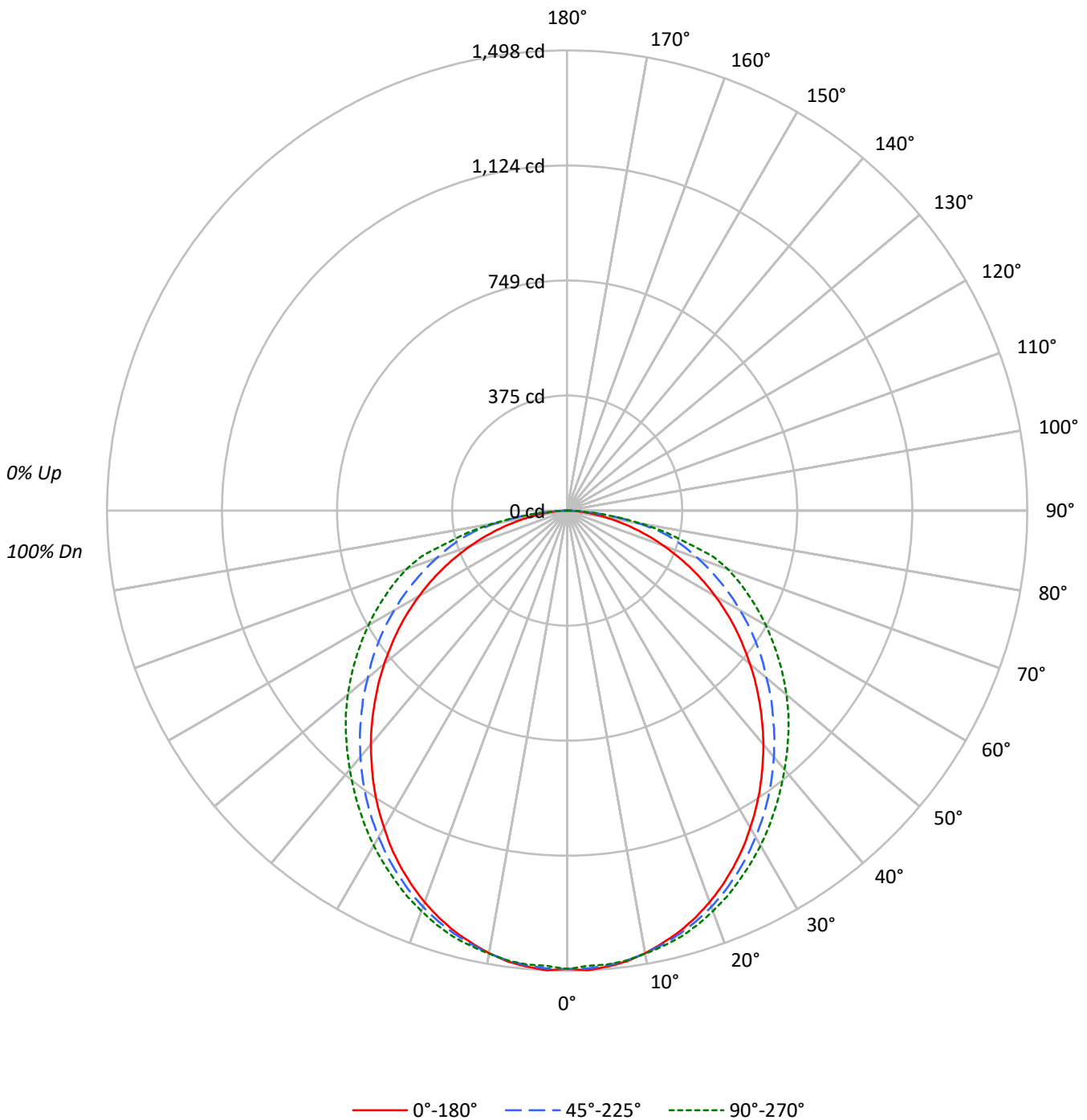
Input Watts (W): 40.465509
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2008	2008	2008
5°	2013	2007	2004
10°	1999	1999	2001
15°	1975	1985	1999
20°	1943	1966	1986
25°	1902	1939	1971
30°	1852	1907	1956
35°	1801	1875	1942
40°	1746	1838	1933
45°	1687	1803	1939
50°	1627	1773	1950
55°	1567	1762	1970
60°	1496	1751	2010
65°	1418	1752	2076
70°	1312	1781	2188
75°	1173	1862	2081
80°	981	1782	1906
85°	741	1371	1303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.0	3.3
10°-20°	401.3	9.4
20°-30°	599.9	14.1
30°-40°	711.7	16.7
40°-50°	732.5	17.2
50°-60°	672.0	15.8
60°-70°	543.4	12.8
70°-80°	352.6	8.3
80°-90°	97.2	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°	1142.2	26.9
0°-40°	1854.0	43.6
0°-60°	3258.5	76.6
0°-90°	4251.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4251.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1492	1492	1492	1492	1492	
5°	1491	1480	1486	1485	1483	141
15°	1418	1412	1425	1431	1435	399
25°	1281	1282	1306	1317	1328	590
35°	1096	1105	1141	1166	1182	685
45°	886	901	948	993	1019	684
55°	668	689	751	812	840	597
65°	446	472	550	623	652	440
75°	226	268	358	400	400	240
85°	48	82	89	86	84	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1492.1	1492.1	1492.1	1492.1	1492.1
2.5°	1497.9	1486.3	1492.1	1490.7	1483.4
5°	1490.7	1480.5	1486.3	1484.8	1483.4
7.5°	1480.5	1470.3	1477.6	1476.1	1477.6
10°	1463.0	1454.3	1463.0	1464.5	1464.5
12.5°	1441.2	1433.9	1445.5	1448.5	1451.4
15°	1417.9	1412.1	1425.2	1431.0	1435.4
17.5°	1388.8	1384.4	1400.4	1407.7	1413.5
20°	1356.7	1355.3	1372.8	1380.0	1387.3
22.5°	1320.3	1320.3	1340.7	1349.5	1359.7
25°	1281.0	1282.5	1305.8	1317.4	1327.6
27.5°	1238.8	1240.3	1267.9	1282.5	1294.1
30°	1192.2	1198.1	1227.2	1246.1	1259.2
32.5°	1145.7	1152.9	1185.0	1206.8	1221.4
35°	1096.2	1104.9	1141.3	1166.0	1182.1
37.5°	1045.2	1055.4	1094.7	1122.4	1141.3
40°	994.3	1005.9	1046.7	1078.7	1100.5
42.5°	940.4	953.5	998.6	1036.5	1059.8
45°	886.5	901.1	947.7	992.8	1019.0
47.5°	832.7	850.1	899.6	949.1	976.8
50°	777.4	794.8	847.2	904.0	931.7
52.5°	722.0	742.4	800.7	858.9	886.5
55°	668.2	688.6	751.2	812.3	840.0
57.5°	612.9	633.2	701.7	765.7	793.4
60°	556.1	579.4	650.7	716.2	746.8
62.5°	500.8	525.5	601.2	671.1	700.2
65°	445.5	471.7	550.3	623.1	652.2
67.5°	388.7	419.3	500.8	575.0	605.6
70°	333.4	366.8	452.7	527.0	556.1
72.5°	279.5	315.9	404.7	480.4	497.9
75°	225.6	267.9	358.1	400.3	400.3
77.5°	174.7	221.3	305.7	321.7	330.5
80°	126.6	177.6	230.0	248.9	246.0
82.5°	84.4	135.4	164.5	164.5	160.1
85°	48.0	81.5	88.8	85.9	84.4
87.5°	20.4	30.6	27.7	21.8	18.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)