

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: P261109

Luminaire Tested: **24CZ-LD5-40SE-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261109
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-LD5-40SE-S-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3790.4 lumens
Efficiency: N/A
Efficacy: 121.5 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

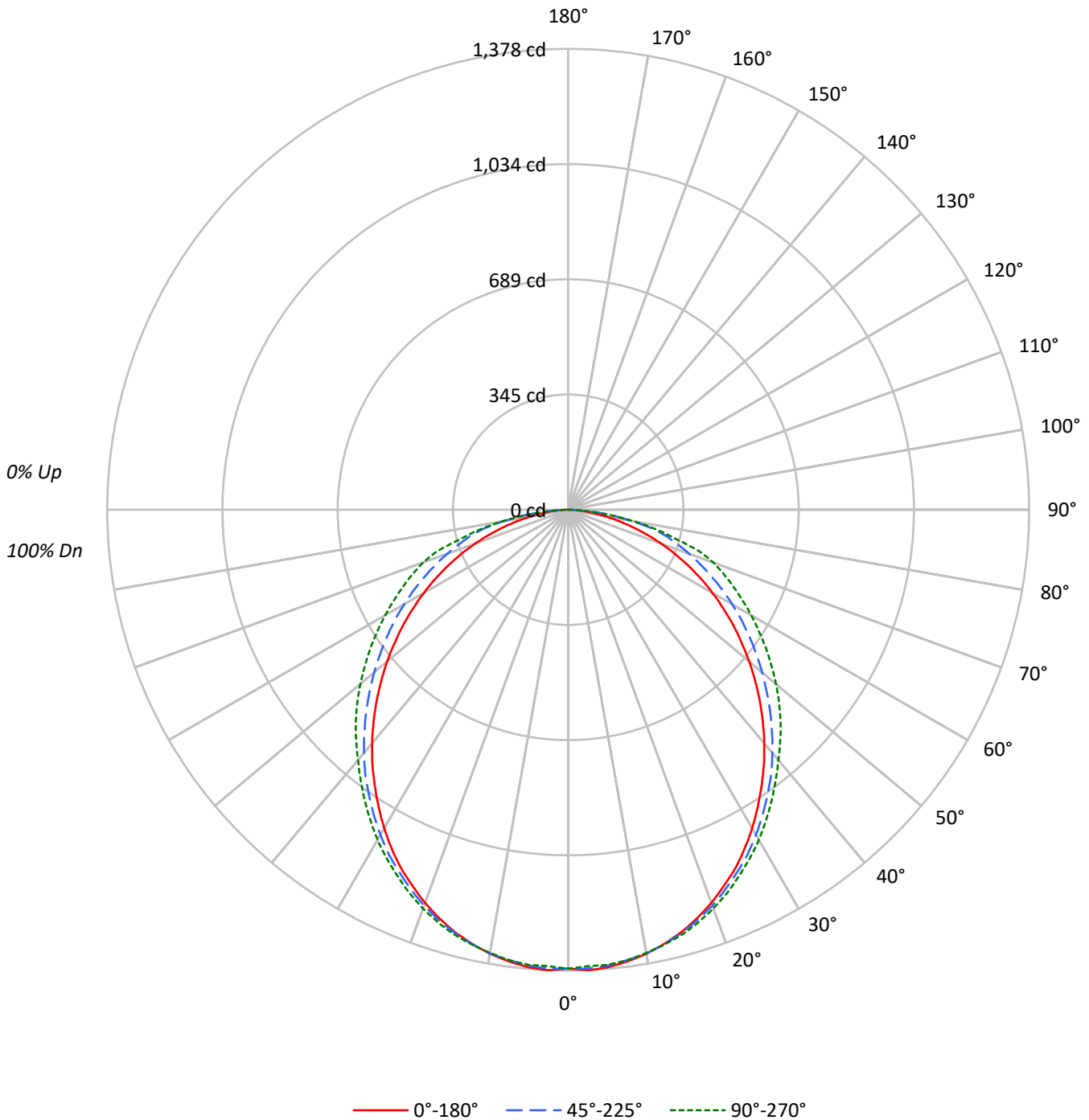
Input Watts (W): 31.201686
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1846	1846	1846
5°	1855	1848	1845
10°	1842	1840	1839
15°	1822	1825	1832
20°	1791	1804	1817
25°	1756	1775	1794
30°	1709	1744	1771
35°	1655	1707	1742
40°	1601	1668	1717
45°	1541	1625	1709
50°	1478	1584	1698
55°	1414	1550	1692
60°	1341	1524	1700
65°	1261	1506	1734
70°	1161	1513	1816
75°	1029	1567	1692
80°	860	1485	1524
85°	642	1187	1090



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.7	3.4
10°-20°	369.0	9.7
20°-30°	549.9	14.5
30°-40°	647.3	17.1
40°-50°	657.8	17.4
50°-60°	591.4	15.6
60°-70°	467.2	12.3
70°-80°	296.4	7.8
80°-90°	81.8	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°	1048.6	27.7
0°-40°	1695.8	44.7
0°-60°	2945.0	77.7
0°-90°	3790.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3790.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1372	1372	1372	1372	1372	
5°	1374	1362	1368	1366	1366	130
15°	1308	1302	1310	1314	1315	368
25°	1183	1182	1196	1203	1208	544
35°	1008	1014	1039	1051	1061	630
45°	810	821	854	879	898	625
55°	603	618	661	704	721	538
65°	396	416	473	525	545	392
75°	198	232	301	328	325	211
85°	42	72	77	71	71	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1372.2	1372.2	1372.2	1372.2	1372.2
2.5°	1378.5	1368.4	1373.5	1370.9	1365.9
5°	1373.5	1362.1	1368.4	1365.9	1365.9
7.5°	1362.1	1353.3	1358.3	1357.1	1358.3
10°	1348.2	1339.4	1347.0	1347.0	1345.7
12.5°	1329.3	1321.7	1330.6	1330.6	1331.8
15°	1307.9	1301.6	1310.4	1314.2	1315.4
17.5°	1281.4	1275.1	1286.4	1290.2	1294.0
20°	1251.1	1248.6	1259.9	1263.7	1268.8
22.5°	1217.1	1217.1	1228.4	1233.5	1241.0
25°	1183.0	1181.7	1195.6	1203.2	1208.2
27.5°	1142.7	1143.9	1161.6	1169.1	1175.4
30°	1099.8	1102.3	1122.5	1131.3	1140.1
32.5°	1054.4	1059.4	1082.1	1092.2	1101.0
35°	1007.7	1014.0	1039.2	1050.6	1060.7
37.5°	961.0	969.9	996.4	1007.7	1019.1
40°	911.8	919.4	949.7	963.6	977.4
42.5°	861.4	871.5	901.8	921.9	938.3
45°	809.7	821.0	853.8	879.1	898.0
47.5°	758.0	773.1	804.6	838.7	855.1
50°	706.3	721.4	756.7	794.6	811.0
52.5°	653.3	668.4	708.8	747.9	765.6
55°	602.9	618.0	660.9	703.8	721.4
57.5°	549.9	566.3	614.2	658.3	676.0
60°	498.2	514.6	566.3	612.9	631.9
62.5°	447.7	465.4	519.6	568.8	587.7
65°	396.0	416.2	473.0	524.7	544.8
67.5°	345.6	368.3	427.5	481.8	503.2
70°	295.1	321.6	384.7	440.2	461.6
72.5°	245.9	274.9	341.8	397.3	408.6
75°	198.0	232.1	301.4	327.9	325.4
77.5°	152.6	190.4	256.0	261.1	268.6
80°	111.0	152.6	191.7	201.8	196.7
82.5°	73.1	114.8	137.5	132.4	131.2
85°	41.6	71.9	76.9	70.6	70.6
87.5°	17.7	29.0	25.2	18.9	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)