

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: P263112

Luminaire Tested: **24CZ-LD5-70-SQP-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P263112
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-70-SQP-UNV-L83050-W2A1-U-3000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS
Light Source: (336) 80 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4411.0 lumens
Efficiency: N/A
Efficacy: 82.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

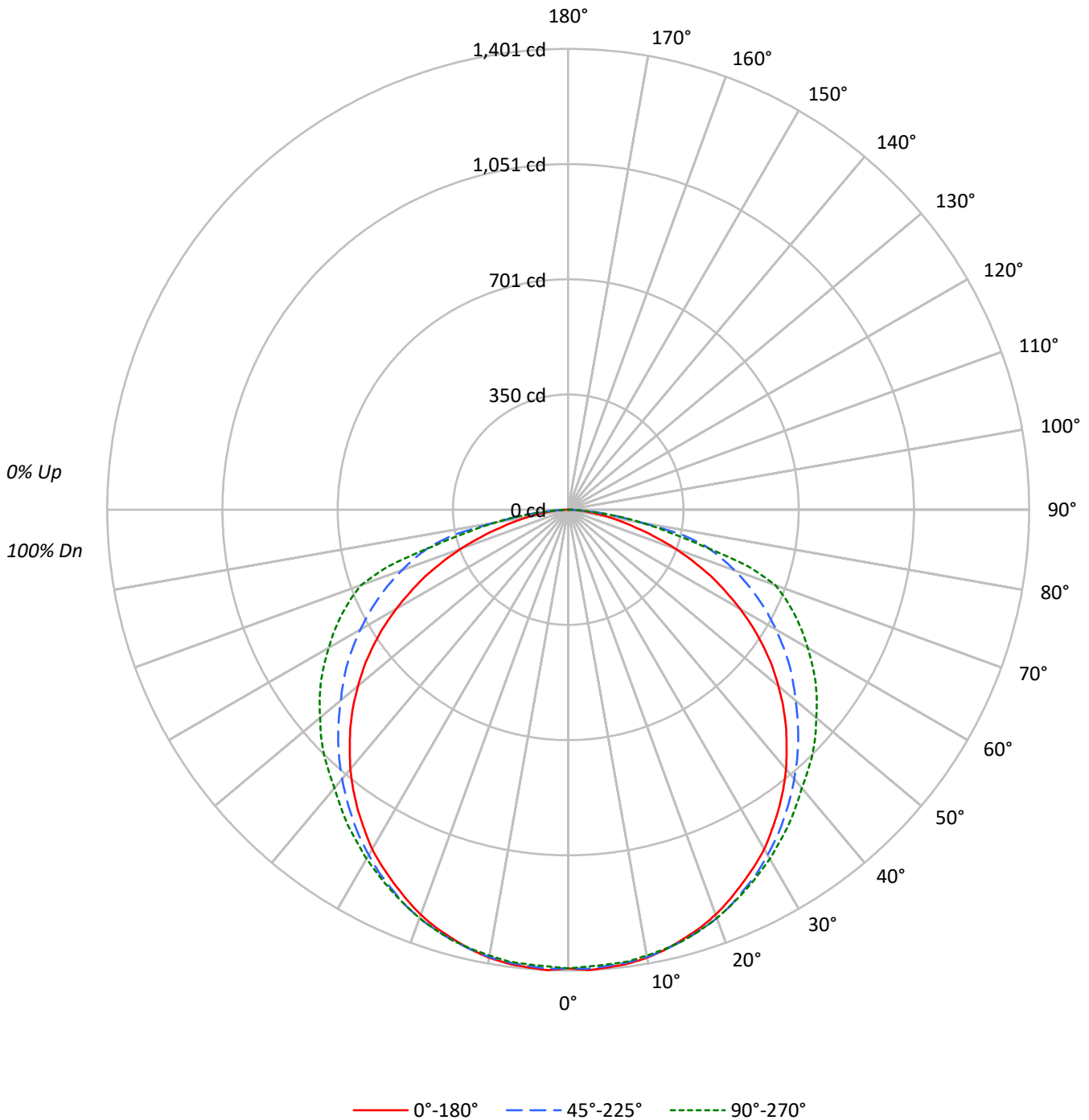
Input Watts (W): 53.553678
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1876	1876	1876
5°	1886	1880	1874
10°	1890	1886	1880
15°	1882	1888	1888
20°	1876	1892	1892
25°	1860	1887	1894
30°	1851	1883	1904
35°	1830	1879	1920
40°	1809	1877	1941
45°	1782	1881	1999
50°	1746	1889	2060
55°	1700	1924	2154
60°	1625	1962	2262
65°	1523	2024	2423
70°	1362	2115	2635
75°	1125	2262	2179
80°	918	1748	1765
85°	738	1161	1090



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.4	3.0
10°-20°	382.1	8.7
20°-30°	584.0	13.2
30°-40°	714.3	16.2
40°-50°	764.3	17.3
50°-60°	731.9	16.6
60°-70°	619.1	14.0
70°-80°	392.5	8.9
80°-90°	90.3	2.0
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°	1098.6	24.9
0°-40°	1812.9	41.1
0°-60°	3309.1	75.0
0°-90°	4411.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4411.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1394	1394	1394	1394	1394	
5°	1397	1390	1392	1390	1388	133
15°	1351	1349	1356	1356	1356	382
25°	1253	1253	1271	1276	1276	578
35°	1114	1121	1144	1160	1169	697
45°	936	952	989	1030	1050	721
55°	724	747	820	889	918	646
65°	478	524	636	722	761	471
75°	216	305	435	433	419	235
85°	48	73	75	68	71	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1394.4	1394.4	1394.4	1394.4	1394.4
2.5°	1401.2	1394.4	1396.7	1394.4	1389.8
5°	1396.7	1389.8	1392.1	1389.8	1387.6
7.5°	1392.1	1385.3	1387.6	1385.3	1385.3
10°	1383.0	1376.2	1380.7	1378.5	1376.2
12.5°	1369.3	1364.8	1369.3	1367.1	1367.1
15°	1351.1	1348.8	1355.7	1355.7	1355.7
17.5°	1332.9	1330.6	1339.7	1339.7	1339.7
20°	1310.1	1307.8	1321.5	1321.5	1321.5
22.5°	1282.8	1280.5	1298.7	1298.7	1298.7
25°	1253.1	1253.1	1271.4	1275.9	1275.9
27.5°	1223.5	1223.5	1244.0	1250.9	1250.9
30°	1191.6	1191.6	1212.1	1221.2	1225.8
32.5°	1152.9	1157.4	1180.2	1191.6	1196.2
35°	1114.2	1121.0	1143.8	1159.7	1168.8
37.5°	1073.1	1080.0	1107.3	1125.5	1136.9
40°	1029.9	1039.0	1068.6	1091.4	1105.0
42.5°	982.0	995.7	1029.9	1059.5	1077.7
45°	936.4	952.4	988.8	1029.9	1050.4
47.5°	886.3	904.5	945.5	998.0	1018.5
50°	833.9	852.1	902.3	961.5	984.3
52.5°	781.5	802.0	861.2	925.0	952.4
55°	724.5	747.3	820.2	888.6	918.2
57.5°	665.3	692.6	774.7	847.6	879.5
60°	603.8	638.0	729.1	806.6	840.7
62.5°	540.0	581.0	683.5	765.6	802.0
65°	478.5	524.0	635.7	722.3	761.0
67.5°	412.4	469.4	587.8	681.3	717.7
70°	346.3	412.4	537.7	633.4	669.9
72.5°	280.2	360.0	487.6	574.2	574.2
75°	216.5	305.3	435.2	432.9	419.2
77.5°	164.0	255.2	357.7	305.3	307.6
80°	118.5	205.1	225.6	225.6	227.8
82.5°	79.7	157.2	145.8	143.5	148.1
85°	47.8	72.9	75.2	68.4	70.6
87.5°	22.8	25.1	20.5	13.7	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)