

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: P276238

Luminaire Tested: **24CZ2-60HE-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276238
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-60HE-UNV-L92765-W2A1-U-5700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5379.9 lumens
Efficiency: N/A
Efficacy: 118.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

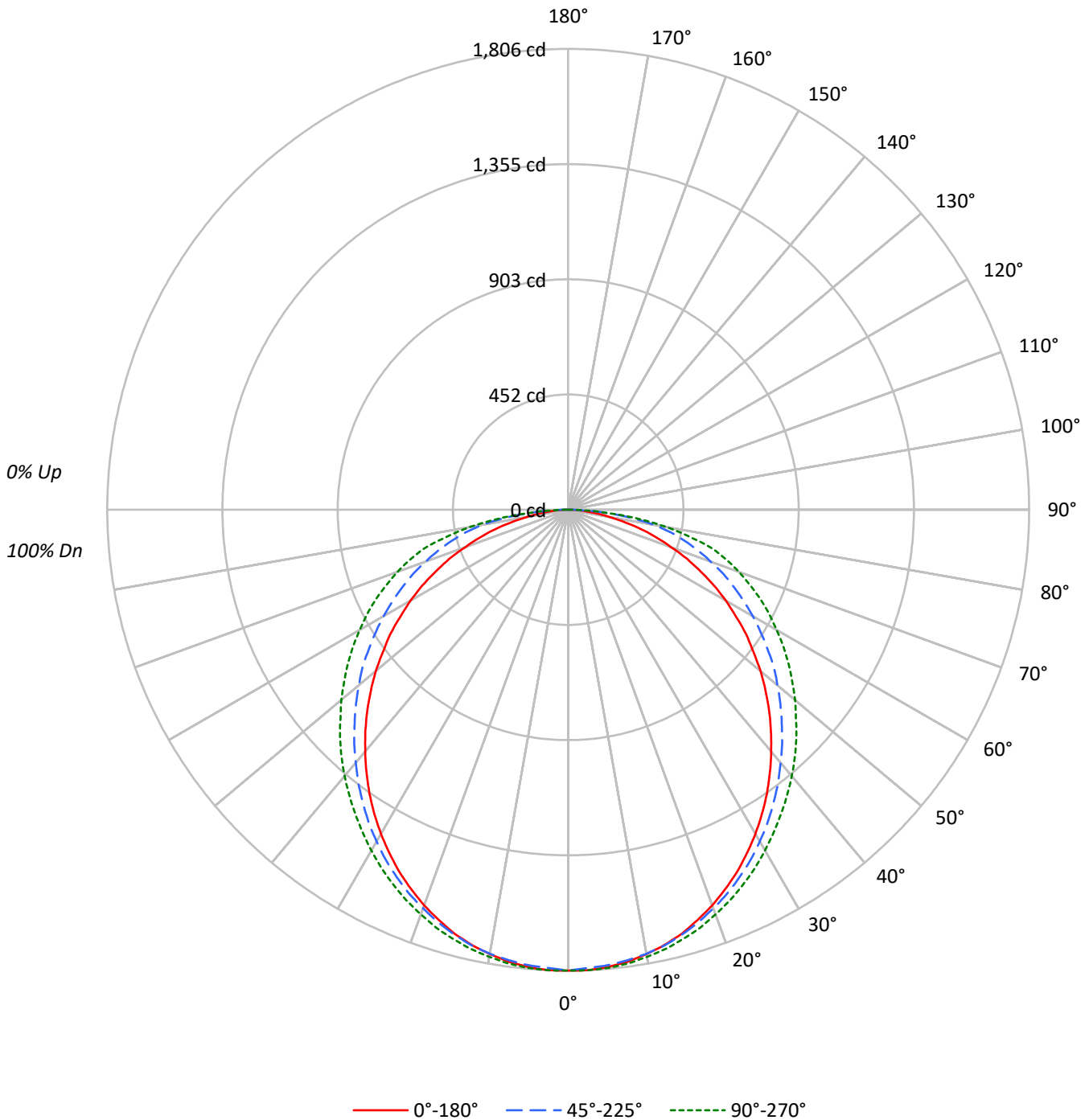
Input Watts (W): 45.57
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	89	86	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	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2430	2430	2430
5°	2430	2420	2435
10°	2416	2414	2431
15°	2396	2401	2426
20°	2363	2381	2417
25°	2324	2359	2407
30°	2279	2332	2396
35°	2230	2303	2389
40°	2173	2274	2394
45°	2118	2251	2405
50°	2060	2240	2428
55°	1997	2236	2472
60°	1918	2247	2537
65°	1818	2281	2647
70°	1688	2338	2797
75°	1540	2455	3033
80°	1266	2643	3033
85°	969	2439	2606



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.8	3.2
10°-20°	487.7	9.1
20°-30°	733.9	13.6
30°-40°	879.5	16.3
40°-50°	916.6	17.0
50°-60°	852.8	15.9
60°-70°	702.4	13.1
70°-80°	478.3	8.9
80°-90°	157.9	2.9
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°	1392.5	25.9
0°-40°	2272.0	42.2
0°-60°	4041.3	75.1
0°-90°	5379.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5379.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1806	1806	1806	1806	1806	
5°	1799	1799	1792	1801	1803	171
15°	1720	1722	1724	1740	1742	485
25°	1566	1573	1589	1616	1621	721
35°	1357	1374	1402	1440	1454	849
45°	1113	1137	1183	1242	1264	859
55°	851	880	953	1029	1054	759
65°	571	620	716	801	831	567
75°	296	363	472	557	584	312
85°	63	122	158	169	169	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1806.3	1806.3	1806.3	1806.3	1806.3
2.5°	1806.3	1806.3	1797.3	1806.3	1806.3
5°	1799.1	1799.1	1791.9	1800.9	1802.7
7.5°	1786.5	1788.3	1781.1	1791.9	1793.7
10°	1768.6	1770.4	1766.8	1777.6	1779.4
12.5°	1747.0	1748.8	1748.8	1761.4	1763.2
15°	1720.1	1721.9	1723.7	1739.8	1741.6
17.5°	1686.0	1691.4	1695.0	1714.7	1718.3
20°	1650.1	1655.5	1662.6	1684.2	1687.8
22.5°	1608.8	1616.0	1628.5	1651.9	1657.3
25°	1565.7	1572.9	1589.0	1616.0	1621.3
27.5°	1517.2	1528.0	1547.7	1576.5	1583.6
30°	1466.9	1477.7	1501.0	1531.6	1542.3
32.5°	1413.1	1427.4	1454.4	1488.5	1499.3
35°	1357.4	1373.6	1402.3	1440.0	1454.4
37.5°	1298.2	1316.1	1350.2	1391.5	1409.5
40°	1237.1	1258.7	1294.6	1343.0	1362.8
42.5°	1176.1	1195.8	1240.7	1292.8	1314.3
45°	1113.2	1136.6	1183.2	1242.5	1264.0
47.5°	1048.6	1071.9	1127.6	1190.4	1210.2
50°	983.9	1007.3	1070.1	1136.6	1159.9
52.5°	913.9	944.4	1016.3	1082.7	1106.0
55°	851.1	879.8	953.4	1028.8	1054.0
57.5°	779.3	813.4	894.2	973.2	1000.1
60°	712.8	748.7	834.9	915.7	942.6
62.5°	644.6	684.1	775.7	858.3	888.8
65°	571.0	619.5	716.4	800.8	831.3
67.5°	504.5	554.8	657.2	743.3	770.3
70°	429.1	490.2	594.3	680.5	711.0
72.5°	364.5	425.5	535.1	619.5	650.0
75°	296.3	362.7	472.2	556.6	583.5
77.5°	228.0	301.6	411.2	475.8	484.8
80°	163.4	240.6	341.1	378.9	391.4
82.5°	114.9	184.9	251.4	276.5	283.7
85°	62.8	122.1	158.0	168.8	168.8
87.5°	26.9	52.1	62.8	64.6	66.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)