

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: P276097

Luminaire Tested: **24CZ2-60HE-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276097
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-L82765-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5387.5 lumens
Efficiency: N/A
Efficacy: 122.5 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

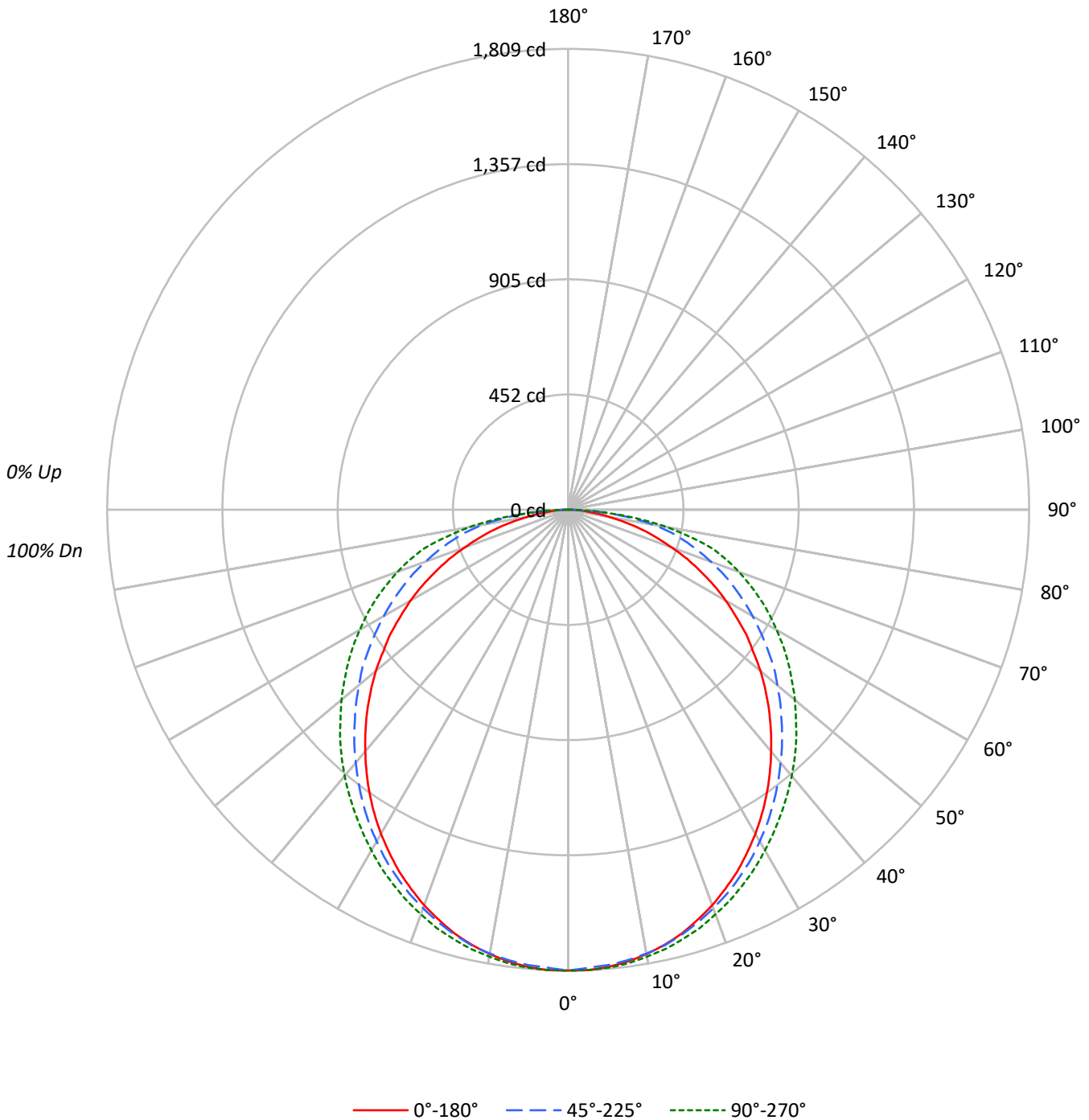
Input Watts (W): 43.989
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2434	2434	2434
5°	2433	2424	2438
10°	2420	2417	2435
15°	2399	2404	2429
20°	2366	2384	2420
25°	2328	2362	2410
30°	2282	2335	2400
35°	2233	2307	2392
40°	2176	2277	2397
45°	2121	2255	2409
50°	2062	2243	2431
55°	1999	2240	2476
60°	1921	2250	2540
65°	1820	2284	2650
70°	1690	2341	2801
75°	1542	2458	3038
80°	1268	2647	3037
85°	971	2442	2609



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.1	3.2
10°-20°	488.4	9.1
20°-30°	735.0	13.6
30°-40°	880.8	16.3
40°-50°	917.8	17.0
50°-60°	854.0	15.9
60°-70°	703.3	13.1
70°-80°	479.0	8.9
80°-90°	158.1	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°	1394.4	25.9
0°-40°	2275.2	42.2
0°-60°	4047.0	75.1
0°-90°	5387.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5387.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1809	1809	1809	1809	1809	
5°	1802	1802	1794	1803	1805	171
15°	1722	1724	1726	1742	1744	485
25°	1568	1575	1591	1618	1624	722
35°	1359	1376	1404	1442	1456	850
45°	1115	1138	1185	1244	1266	860
55°	852	881	955	1030	1055	760
65°	572	620	717	802	832	568
75°	297	363	473	557	584	313
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°	1808.8	1808.8	1808.8	1808.8	1808.8
2.5°	1808.8	1808.8	1799.8	1808.8	1808.8
5°	1801.6	1801.6	1794.4	1803.4	1805.2
7.5°	1789.0	1790.8	1783.7	1794.4	1796.2
10°	1771.1	1772.9	1769.3	1780.1	1781.9
12.5°	1749.5	1751.3	1751.3	1763.9	1765.7
15°	1722.5	1724.3	1726.1	1742.3	1744.1
17.5°	1688.4	1693.7	1697.3	1717.1	1720.7
20°	1652.4	1657.8	1665.0	1686.6	1690.2
22.5°	1611.0	1618.2	1630.8	1654.2	1659.6
25°	1567.9	1575.1	1591.3	1618.2	1623.6
27.5°	1519.3	1530.1	1549.9	1578.7	1585.9
30°	1469.0	1479.8	1503.2	1533.7	1544.5
32.5°	1415.1	1429.4	1456.4	1490.6	1501.4
35°	1359.3	1375.5	1404.3	1442.0	1456.4
37.5°	1300.0	1318.0	1352.1	1393.5	1411.5
40°	1238.8	1260.4	1296.4	1344.9	1364.7
42.5°	1177.7	1197.5	1242.4	1294.6	1316.2
45°	1114.8	1138.2	1184.9	1244.2	1265.8
47.5°	1050.1	1073.4	1129.2	1192.1	1211.9
50°	985.3	1008.7	1071.6	1138.2	1161.5
52.5°	915.2	945.8	1017.7	1084.2	1107.6
55°	852.3	881.0	954.8	1030.3	1055.4
57.5°	780.3	814.5	895.4	974.5	1001.5
60°	713.8	749.8	836.1	917.0	944.0
62.5°	645.5	685.1	776.8	859.5	890.0
65°	571.8	620.3	717.4	801.9	832.5
67.5°	505.2	555.6	658.1	744.4	771.4
70°	429.7	490.9	595.1	681.5	712.0
72.5°	365.0	426.1	535.8	620.3	650.9
75°	296.7	363.2	472.9	557.4	584.4
77.5°	228.4	302.1	411.8	476.5	485.5
80°	163.6	240.9	341.6	379.4	392.0
82.5°	115.1	185.2	251.7	276.9	284.1
85°	62.9	122.3	158.2	169.0	169.0
87.5°	27.0	52.1	62.9	64.7	66.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)