

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: P276239

Luminaire Tested: **24CZ2-60HE-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276239
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-6500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5415.8 lumens
Efficiency: N/A
Efficacy: 116.9 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

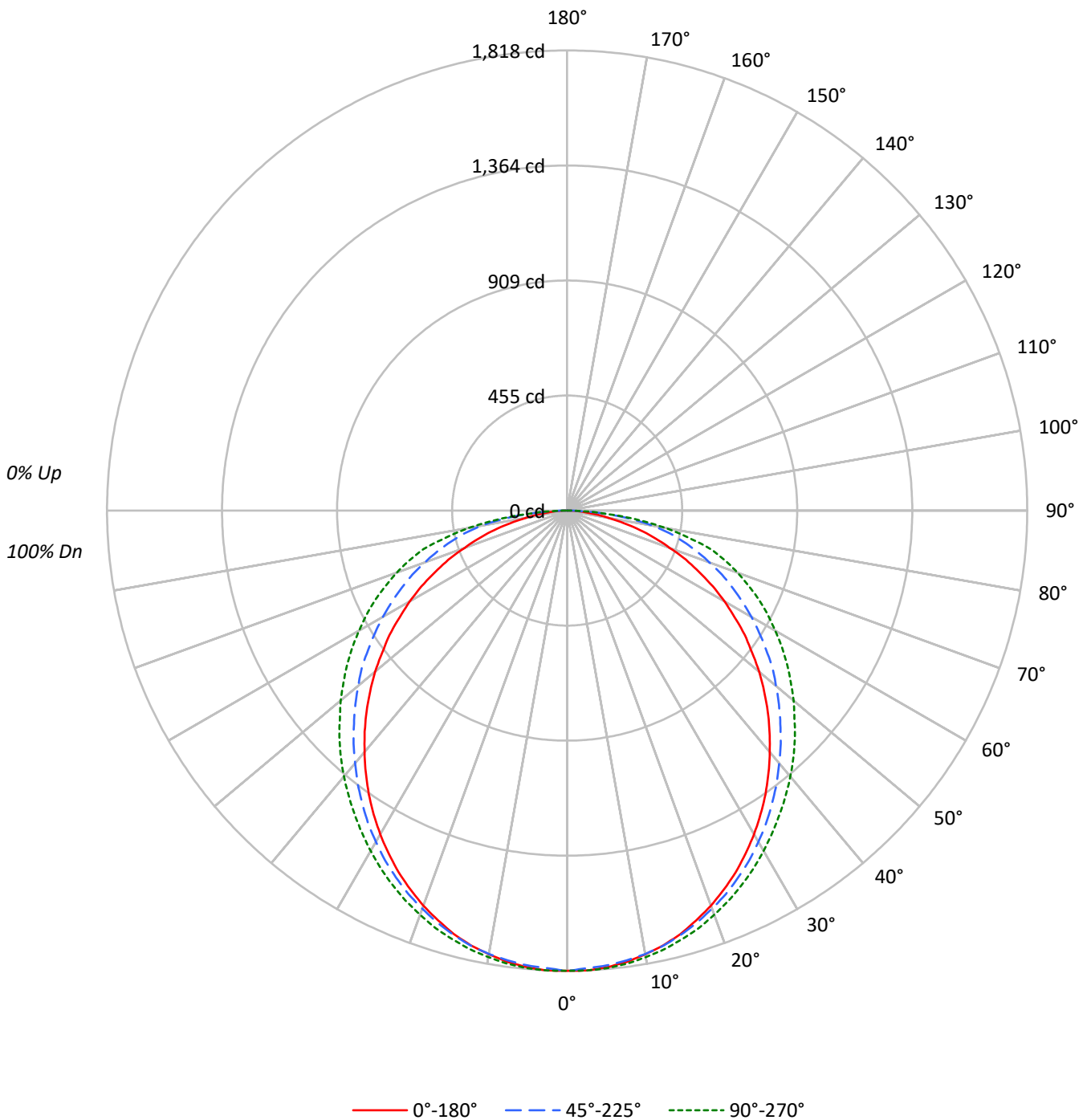
Input Watts (W): 46.314
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276239

CATALOG NUMBER: 24CZ2-60HE-UNV-L92765-W2A1-U-6500K

Luminous Intensity Polar Plot





TEST NUMBER: P276239

CATALOG NUMBER: 24CZ2-60HE-UNV-L92765-W2A1-U-6500K

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°	2447	2447	2447
5°	2446	2436	2451
10°	2432	2430	2447
15°	2412	2417	2442
20°	2378	2397	2433
25°	2340	2375	2423
30°	2294	2348	2412
35°	2245	2319	2405
40°	2187	2289	2410
45°	2132	2266	2421
50°	2073	2255	2444
55°	2010	2251	2489
60°	1931	2262	2553
65°	1830	2296	2664
70°	1699	2354	2816
75°	1550	2471	3054
80°	1275	2661	3053
85°	977	2456	2623



TEST NUMBER: P276239

CATALOG NUMBER: 24CZ2-60HE-UNV-L92765-W2A1-U-6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.0	3.2
10°-20°	491.0	9.1
20°-30°	738.8	13.6
30°-40°	885.4	16.3
40°-50°	922.7	17.0
50°-60°	858.4	15.9
60°-70°	707.0	13.1
70°-80°	481.5	8.9
80°-90°	159.0	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°	1401.8	25.9
0°-40°	2287.2	42.2
0°-60°	4068.3	75.1
0°-90°	5415.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5415.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1818	1818	1818	1818	1818	
5°	1811	1811	1804	1813	1815	172
15°	1732	1733	1735	1752	1753	488
25°	1576	1583	1600	1627	1632	726
35°	1366	1383	1412	1450	1464	854
45°	1121	1144	1191	1251	1272	864
55°	857	886	960	1036	1061	764
65°	575	624	721	806	837	571
75°	298	365	475	560	587	314
85°	63	123	159	170	170	78
90°	0	0	0	0	0	



TEST NUMBER: P276239

CATALOG NUMBER: 24CZ2-60HE-UNV-L92765-W2A1-U-6500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1818.4	1818.4	1818.4	1818.4	1818.4
2.5°	1818.4	1818.4	1809.3	1818.4	1818.4
5°	1811.1	1811.1	1803.9	1812.9	1814.7
7.5°	1798.5	1800.3	1793.0	1803.9	1805.7
10°	1780.4	1782.2	1778.6	1789.4	1791.2
12.5°	1758.7	1760.5	1760.5	1773.2	1775.0
15°	1731.6	1733.4	1735.2	1751.5	1753.3
17.5°	1697.2	1702.7	1706.3	1726.2	1729.8
20°	1661.1	1666.5	1673.8	1695.4	1699.1
22.5°	1619.5	1626.8	1639.4	1662.9	1668.3
25°	1576.1	1583.4	1599.6	1626.8	1632.2
27.5°	1527.3	1538.2	1558.1	1587.0	1594.2
30°	1476.7	1487.6	1511.1	1541.8	1552.6
32.5°	1422.5	1437.0	1464.1	1498.4	1509.3
35°	1366.5	1382.7	1411.7	1449.6	1464.1
37.5°	1306.8	1324.9	1359.2	1400.8	1418.9
40°	1245.4	1267.1	1303.2	1352.0	1371.9
42.5°	1183.9	1203.8	1249.0	1301.4	1323.1
45°	1120.7	1144.2	1191.1	1250.8	1272.5
47.5°	1055.6	1079.1	1135.1	1198.4	1218.3
50°	990.5	1014.0	1077.3	1144.2	1167.6
52.5°	920.0	950.7	1023.0	1089.9	1113.4
55°	856.8	885.7	959.8	1035.7	1061.0
57.5°	784.5	818.8	900.1	979.7	1006.8
60°	717.6	753.7	840.5	921.8	948.9
62.5°	648.9	688.7	780.8	864.0	894.7
65°	574.8	623.6	721.2	806.1	836.9
67.5°	507.9	558.5	661.5	748.3	775.4
70°	432.0	493.4	598.3	685.0	715.8
72.5°	366.9	428.4	538.6	623.6	654.3
75°	298.2	365.1	475.4	560.3	587.4
77.5°	229.6	303.7	413.9	479.0	488.0
80°	164.5	242.2	343.4	381.4	394.0
82.5°	115.7	186.2	253.1	278.4	285.6
85°	63.3	122.9	159.1	169.9	169.9
87.5°	27.1	52.4	63.3	65.1	66.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)