

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: P276099

Luminaire Tested: **24CZ2-60HE-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276099
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-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5695.9 lumens
Efficiency: N/A
Efficacy: 127.1 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

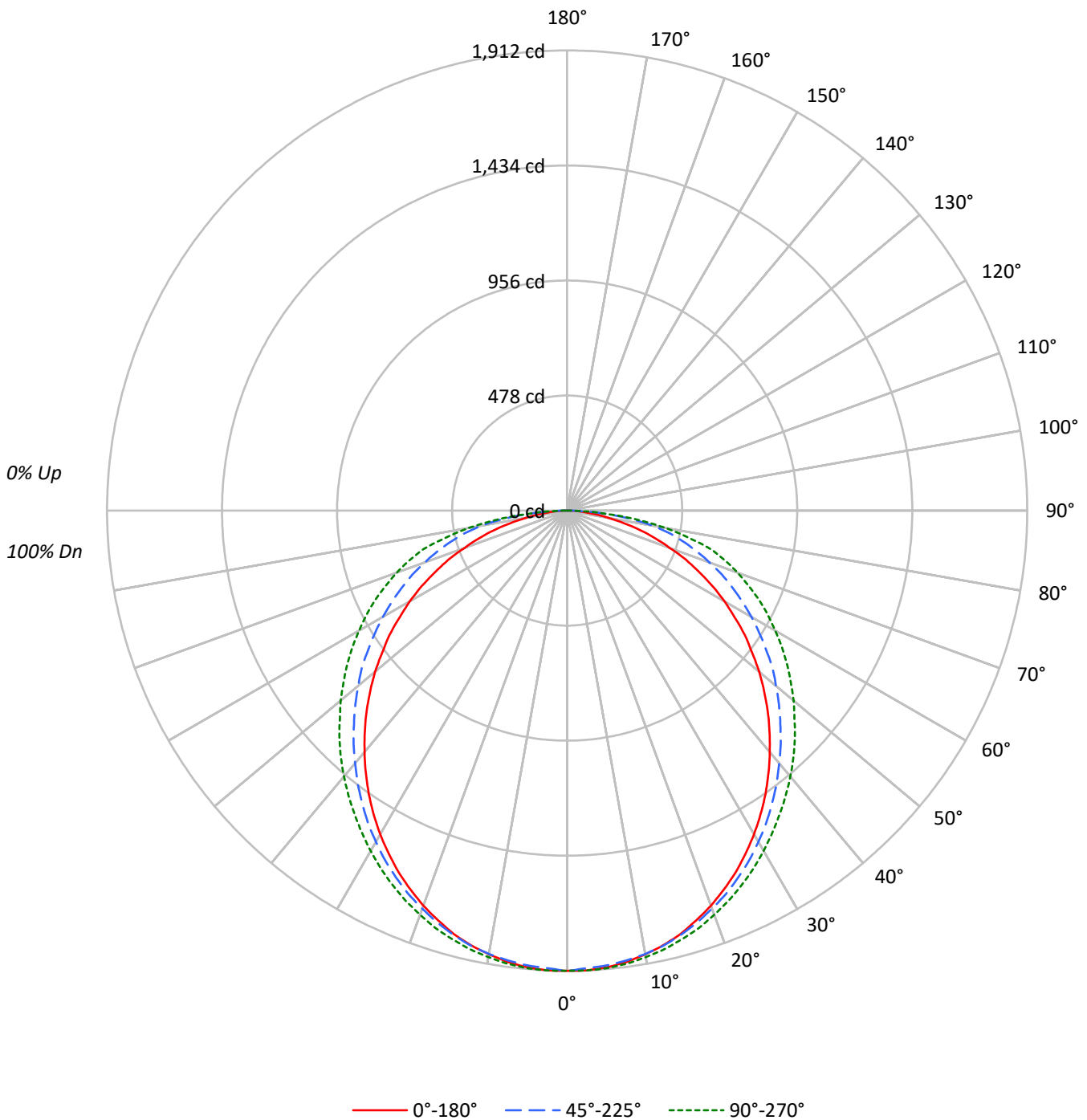
Input Watts (W): 44.826
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276099

CATALOG NUMBER: 24CZ2-60HE-UNV-L82765-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P276099

CATALOG NUMBER: 24CZ2-60HE-UNV-L82765-W2A1-U-4000K

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°	2573	2573	2573
5°	2573	2562	2578
10°	2558	2556	2574
15°	2537	2542	2568
20°	2501	2520	2559
25°	2461	2498	2548
30°	2413	2469	2537
35°	2360	2439	2529
40°	2301	2407	2534
45°	2243	2384	2547
50°	2180	2372	2570
55°	2114	2368	2618
60°	2031	2379	2686
65°	1925	2415	2802
70°	1787	2475	2961
75°	1631	2599	3212
80°	1340	2799	3211
85°	1027	2583	2759



TEST NUMBER: P276099

CATALOG NUMBER: 24CZ2-60HE-UNV-L82765-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.9	3.2
10°-20°	516.3	9.1
20°-30°	777.0	13.6
30°-40°	931.2	16.3
40°-50°	970.4	17.0
50°-60°	902.8	15.9
60°-70°	743.6	13.1
70°-80°	506.4	8.9
80°-90°	167.2	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°	1474.2	25.9
0°-40°	2405.4	42.2
0°-60°	4278.7	75.1
0°-90°	5695.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5695.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1912	1912	1912	1912	1912	
5°	1905	1905	1897	1907	1909	181
15°	1821	1823	1825	1842	1844	513
25°	1658	1665	1682	1711	1717	763
35°	1437	1454	1485	1525	1540	898
45°	1179	1203	1253	1316	1338	909
55°	901	932	1009	1089	1116	803
65°	604	656	758	848	880	600
75°	314	384	500	589	618	331
85°	66	129	167	179	179	82
90°	0	0	0	0	0	



TEST NUMBER: P276099

CATALOG NUMBER: 24CZ2-60HE-UNV-L82765-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1912.4	1912.4	1912.4	1912.4	1912.4
2.5°	1912.4	1912.4	1902.9	1912.4	1912.4
5°	1904.8	1904.8	1897.2	1906.7	1908.6
7.5°	1891.5	1893.4	1885.8	1897.2	1899.1
10°	1872.4	1874.3	1870.5	1882.0	1883.9
12.5°	1849.6	1851.5	1851.5	1864.8	1866.7
15°	1821.1	1823.0	1824.9	1842.0	1843.9
17.5°	1785.0	1790.7	1794.5	1815.4	1819.2
20°	1747.0	1752.7	1760.3	1783.1	1786.9
22.5°	1703.3	1710.9	1724.2	1748.9	1754.6
25°	1657.6	1665.2	1682.4	1710.9	1716.6
27.5°	1606.3	1617.7	1638.6	1669.0	1676.6
30°	1553.1	1564.5	1589.2	1621.5	1632.9
32.5°	1496.1	1511.3	1539.8	1575.9	1587.3
35°	1437.1	1454.2	1484.7	1524.6	1539.8
37.5°	1374.4	1393.4	1429.5	1473.2	1492.3
40°	1309.8	1332.6	1370.6	1421.9	1442.8
42.5°	1245.1	1266.0	1313.6	1368.7	1391.5
45°	1178.6	1203.3	1252.7	1315.5	1338.3
47.5°	1110.2	1134.9	1193.8	1260.3	1281.2
50°	1041.7	1066.4	1133.0	1203.3	1228.0
52.5°	967.6	999.9	1075.9	1146.3	1171.0
55°	901.1	931.5	1009.4	1089.3	1115.9
57.5°	825.0	861.1	946.7	1030.3	1058.8
60°	754.7	792.7	883.9	969.5	998.0
62.5°	682.4	724.3	821.2	908.7	941.0
65°	604.5	655.8	758.5	847.8	880.1
67.5°	534.2	587.4	695.8	787.0	815.5
70°	454.3	519.0	629.2	720.5	752.8
72.5°	385.9	450.5	566.5	655.8	688.1
75°	313.7	384.0	500.0	589.3	617.8
77.5°	241.4	319.4	435.3	503.8	513.3
80°	173.0	254.7	361.2	401.1	414.4
82.5°	121.7	195.8	266.1	292.7	300.4
85°	66.5	129.3	167.3	178.7	178.7
87.5°	28.5	55.1	66.5	68.4	70.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)