

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: P276234

Luminaire Tested: **24CZ2-60HE-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276234
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-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5039.4 lumens
Efficiency: N/A
Efficacy: 112.4 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

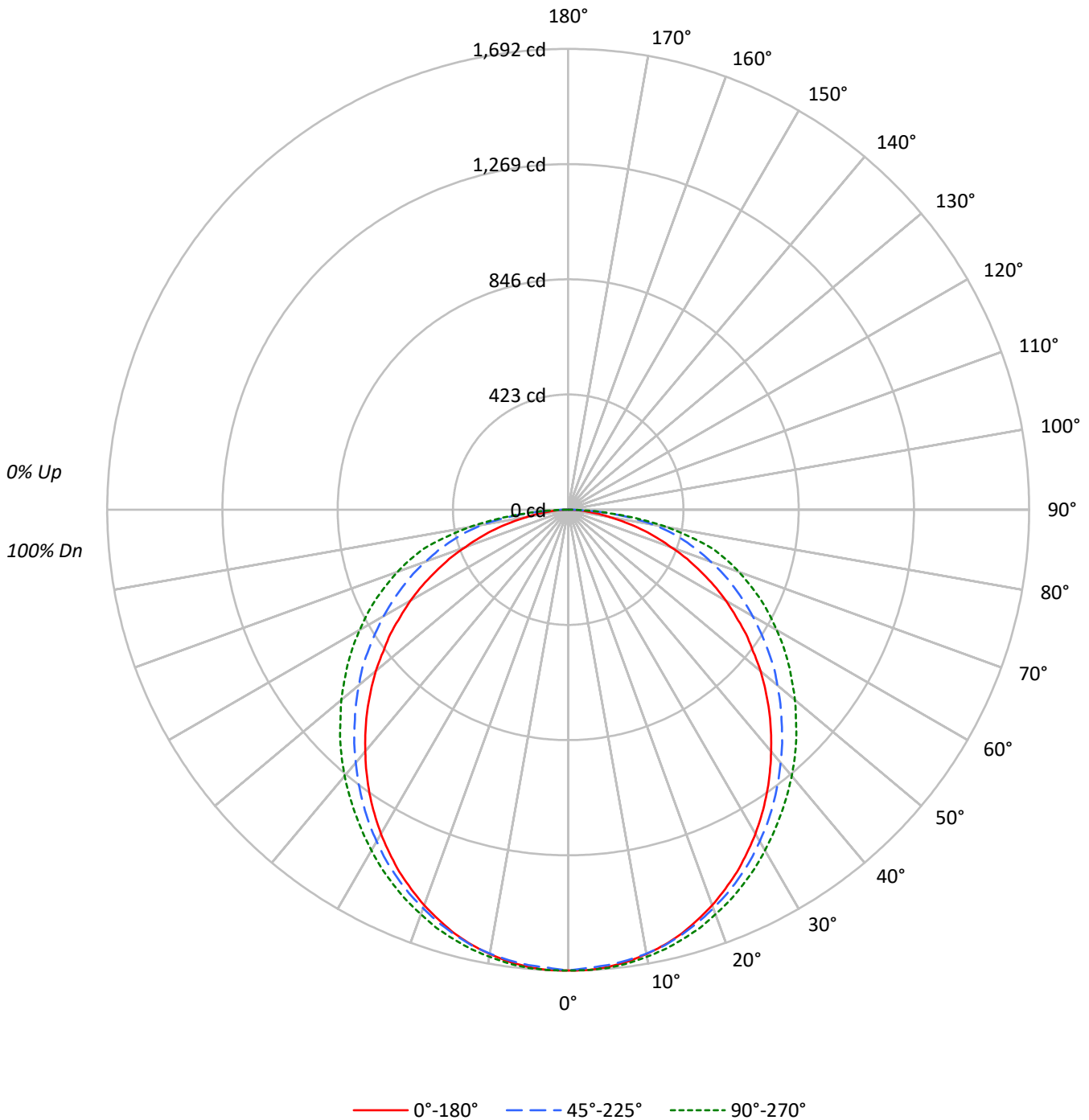
Input Watts (W): 44.826
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2276	2276	2276
5°	2276	2267	2281
10°	2263	2261	2277
15°	2244	2249	2272
20°	2213	2230	2264
25°	2177	2210	2255
30°	2135	2184	2245
35°	2088	2157	2238
40°	2035	2130	2242
45°	1984	2109	2253
50°	1929	2098	2274
55°	1870	2095	2316
60°	1797	2105	2376
65°	1703	2137	2479
70°	1581	2190	2620
75°	1443	2299	2842
80°	1185	2476	2841
85°	909	2285	2441



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.0	3.2
10°-20°	456.8	9.1
20°-30°	687.5	13.6
30°-40°	823.9	16.3
40°-50°	858.5	17.0
50°-60°	798.8	15.9
60°-70°	657.9	13.1
70°-80°	448.0	8.9
80°-90°	147.9	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°	1304.3	25.9
0°-40°	2128.2	42.2
0°-60°	3785.5	75.1
0°-90°	5039.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5039.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1692	1692	1692	1692	1692	
5°	1685	1685	1678	1687	1689	160
15°	1611	1613	1615	1630	1631	454
25°	1467	1473	1488	1514	1519	675
35°	1272	1287	1314	1349	1362	795
45°	1043	1065	1108	1164	1184	804
55°	797	824	893	964	987	711
65°	535	580	671	750	779	531
75°	278	340	442	521	547	293
85°	59	114	148	158	158	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1691.9	1691.9	1691.9	1691.9	1691.9
2.5°	1691.9	1691.9	1683.5	1691.9	1691.9
5°	1685.2	1685.2	1678.5	1686.9	1688.6
7.5°	1673.4	1675.1	1668.4	1678.5	1680.2
10°	1656.6	1658.3	1654.9	1665.0	1666.7
12.5°	1636.4	1638.1	1638.1	1649.9	1651.6
15°	1611.2	1612.9	1614.6	1629.7	1631.4
17.5°	1579.3	1584.3	1587.7	1606.2	1609.5
20°	1545.6	1550.7	1557.4	1577.6	1580.9
22.5°	1506.9	1513.7	1525.4	1547.3	1552.3
25°	1466.6	1473.3	1488.4	1513.7	1518.7
27.5°	1421.2	1431.3	1449.8	1476.7	1483.4
30°	1374.1	1384.2	1406.0	1434.6	1444.7
32.5°	1323.6	1337.1	1362.3	1394.3	1404.3
35°	1271.5	1286.6	1313.5	1348.8	1362.3
37.5°	1216.0	1232.8	1264.8	1303.4	1320.3
40°	1158.8	1179.0	1212.6	1258.0	1276.5
42.5°	1101.6	1120.1	1162.2	1210.9	1231.1
45°	1042.7	1064.6	1108.3	1163.8	1184.0
47.5°	982.2	1004.1	1056.2	1115.1	1133.6
50°	921.7	943.5	1002.4	1064.6	1086.5
52.5°	856.1	884.7	951.9	1014.2	1036.0
55°	797.2	824.1	893.1	963.7	987.2
57.5°	729.9	761.9	837.6	911.6	936.8
60°	667.7	701.3	782.1	857.7	883.0
62.5°	603.8	640.8	726.6	803.9	832.5
65°	534.8	580.2	671.1	750.1	778.7
67.5°	472.6	519.7	615.6	696.3	721.5
70°	402.0	459.1	556.7	637.4	666.0
72.5°	341.4	398.6	501.2	580.2	608.8
75°	277.5	339.7	442.3	521.4	546.6
77.5°	213.6	282.6	385.1	445.7	454.1
80°	153.0	225.4	319.6	354.9	366.6
82.5°	107.6	173.2	235.5	259.0	265.7
85°	58.9	114.4	148.0	158.1	158.1
87.5°	25.2	48.8	58.9	60.5	62.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)