

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: P276249

Luminaire Tested: **24CZ2-70HE-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276249
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: 24CZ2-70HE-UNV-L92765-W2A1-U-2700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5226.7 lumens
Efficiency: N/A
Efficacy: 97.6 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

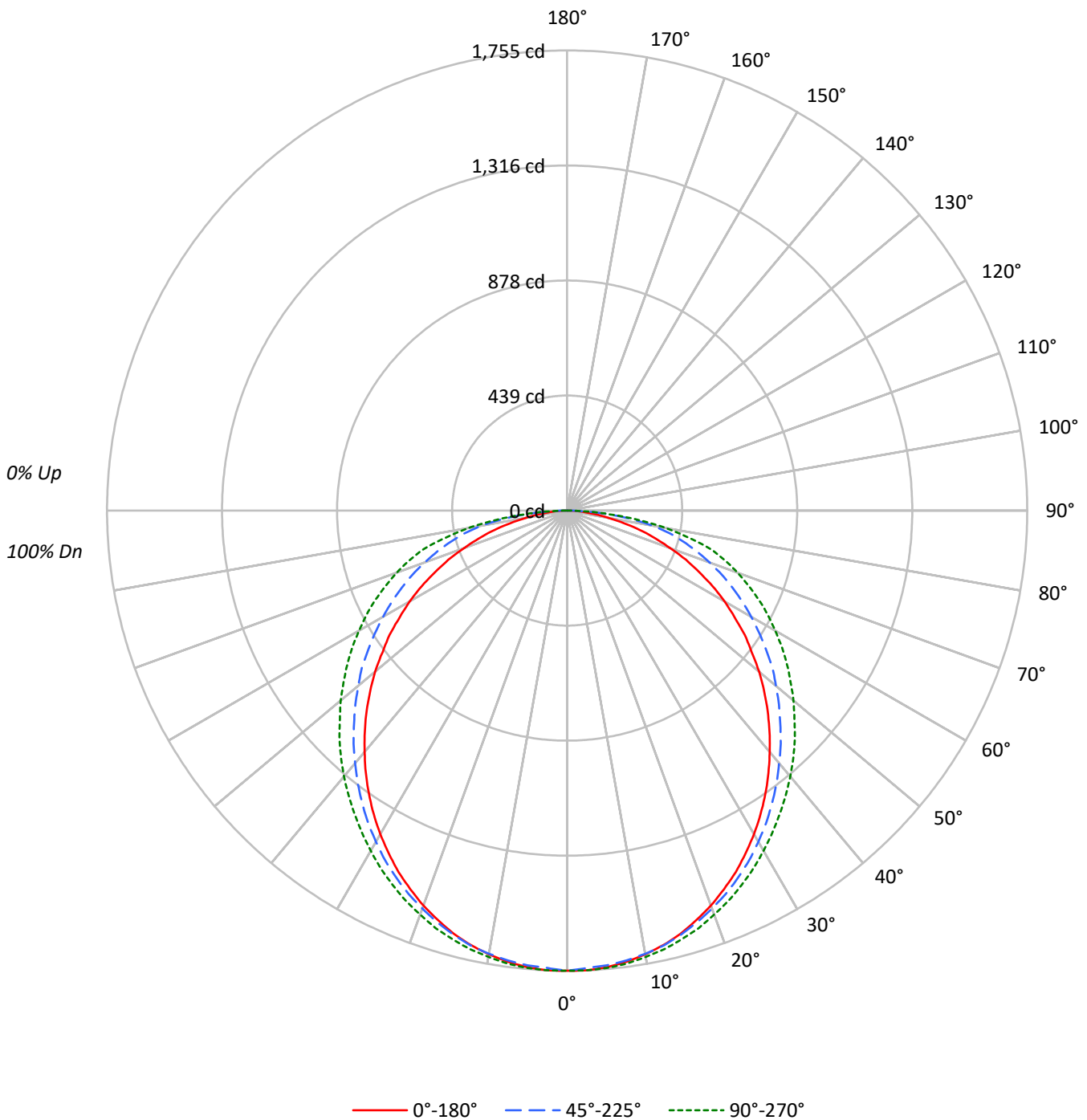
Input Watts (W): 53.568
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2361	2361	2361
5°	2361	2351	2365
10°	2347	2345	2362
15°	2328	2333	2357
20°	2295	2313	2348
25°	2258	2292	2339
30°	2214	2266	2328
35°	2166	2238	2321
40°	2111	2209	2325
45°	2058	2187	2337
50°	2001	2176	2359
55°	1939	2173	2402
60°	1864	2183	2464
65°	1766	2216	2571
70°	1640	2271	2718
75°	1496	2385	2947
80°	1230	2568	2947
85°	943	2370	2532



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.0	3.2
10°-20°	473.8	9.1
20°-30°	713.0	13.6
30°-40°	854.5	16.3
40°-50°	890.5	17.0
50°-60°	828.5	15.9
60°-70°	682.3	13.1
70°-80°	464.7	8.9
80°-90°	153.4	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°	1352.8	25.9
0°-40°	2207.3	42.2
0°-60°	3926.2	75.1
0°-90°	5226.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5226.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1755	1755	1755	1755	1755	
5°	1748	1748	1741	1750	1751	166
15°	1671	1673	1675	1690	1692	471
25°	1521	1528	1544	1570	1575	700
35°	1319	1334	1362	1399	1413	824
45°	1082	1104	1150	1207	1228	834
55°	827	855	926	1000	1024	737
65°	555	602	696	778	808	551
75°	288	352	459	541	567	303
85°	61	119	154	164	164	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1754.8	1754.8	1754.8	1754.8	1754.8
2.5°	1754.8	1754.8	1746.1	1754.8	1754.8
5°	1747.9	1747.9	1740.9	1749.6	1751.3
7.5°	1735.6	1737.4	1730.4	1740.9	1742.6
10°	1718.2	1719.9	1716.5	1726.9	1728.7
12.5°	1697.3	1699.0	1699.0	1711.2	1713.0
15°	1671.1	1672.8	1674.6	1690.3	1692.0
17.5°	1638.0	1643.2	1646.7	1665.9	1669.4
20°	1603.1	1608.3	1615.3	1636.2	1639.7
22.5°	1562.9	1569.9	1582.1	1604.8	1610.0
25°	1521.1	1528.1	1543.8	1569.9	1575.2
27.5°	1474.0	1484.5	1503.6	1531.6	1538.5
30°	1425.1	1435.6	1458.3	1487.9	1498.4
32.5°	1372.8	1386.8	1412.9	1446.1	1456.5
35°	1318.7	1334.4	1362.3	1399.0	1412.9
37.5°	1261.2	1278.6	1311.8	1351.9	1369.3
40°	1201.9	1222.8	1257.7	1304.8	1324.0
42.5°	1142.6	1161.7	1205.4	1255.9	1276.9
45°	1081.5	1104.2	1149.5	1207.1	1228.0
47.5°	1018.7	1041.4	1095.5	1156.5	1175.7
50°	955.9	978.6	1039.6	1104.2	1126.9
52.5°	887.9	917.5	987.3	1051.9	1074.5
55°	826.8	854.7	926.3	999.5	1023.9
57.5°	757.1	790.2	868.7	945.4	971.6
60°	692.5	727.4	811.1	889.6	915.8
62.5°	626.2	664.6	753.6	833.8	863.5
65°	554.7	601.8	696.0	778.0	807.6
67.5°	490.2	539.0	638.4	722.2	748.3
70°	416.9	476.2	577.4	661.1	690.8
72.5°	354.1	413.4	519.8	601.8	631.5
75°	287.8	352.4	458.8	540.8	566.9
77.5°	221.5	293.1	399.5	462.3	471.0
80°	158.7	233.7	331.4	368.1	380.3
82.5°	111.6	179.7	244.2	268.6	275.6
85°	61.1	118.6	153.5	164.0	164.0
87.5°	26.2	50.6	61.1	62.8	64.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)