

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: P276007

Luminaire Tested: **24CZ2-70HE-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276007
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-L93050-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5189.5 lumens
Efficiency: N/A
Efficacy: 94.5 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

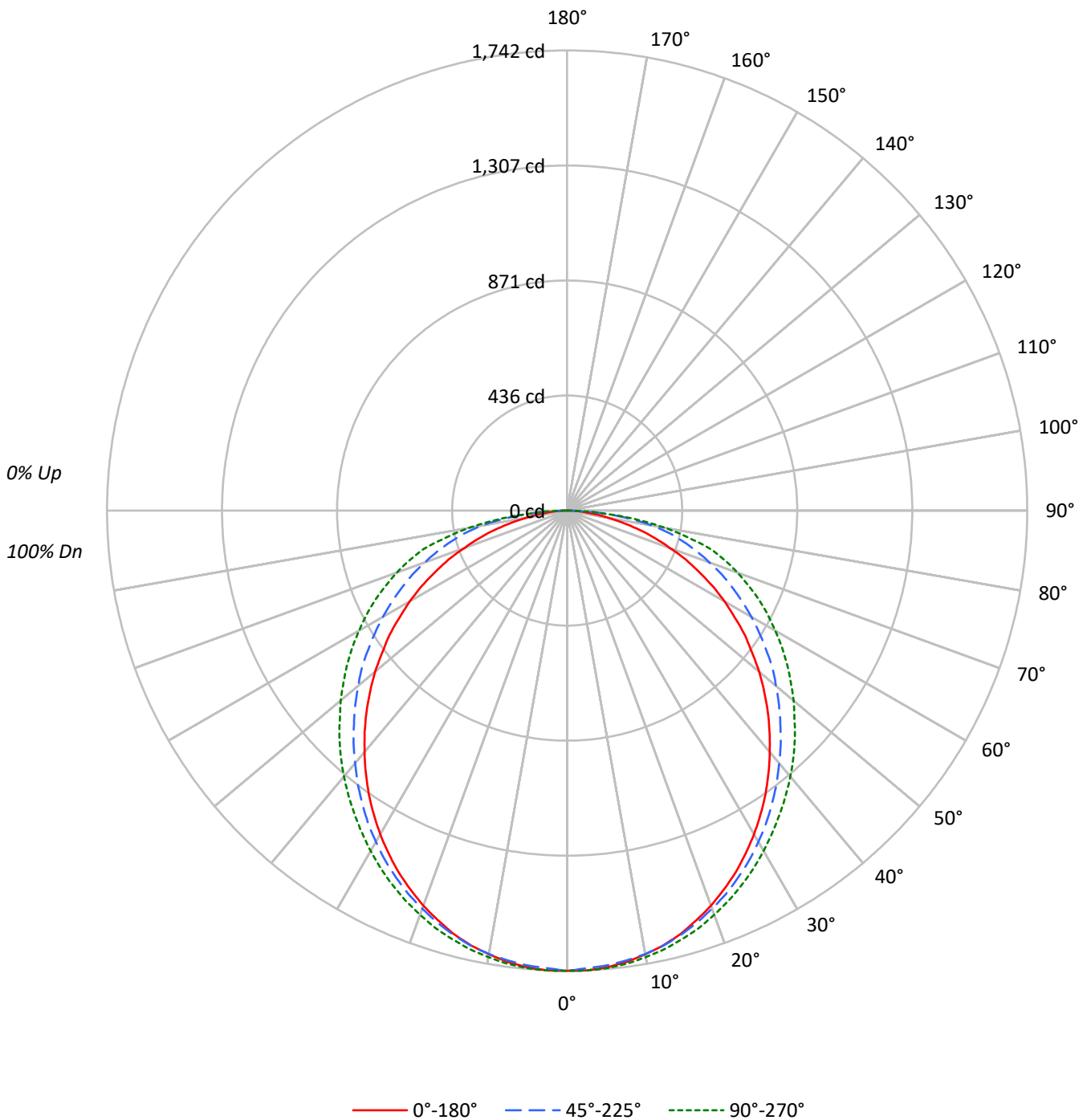
Input Watts (W): 54.895203
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2344	2344	2344
5°	2344	2335	2349
10°	2331	2328	2345
15°	2311	2316	2340
20°	2279	2296	2331
25°	2242	2276	2322
30°	2198	2250	2311
35°	2151	2222	2304
40°	2096	2193	2309
45°	2043	2172	2320
50°	1987	2161	2342
55°	1926	2157	2385
60°	1850	2167	2447
65°	1754	2200	2553
70°	1628	2255	2698
75°	1486	2368	2926
80°	1221	2550	2926
85°	936	2353	2513



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.8	3.2
10°-20°	470.4	9.1
20°-30°	707.9	13.6
30°-40°	848.4	16.3
40°-50°	884.1	17.0
50°-60°	822.6	15.9
60°-70°	677.5	13.1
70°-80°	461.4	8.9
80°-90°	152.3	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°	1343.2	25.9
0°-40°	2191.6	42.2
0°-60°	3898.3	75.1
0°-90°	5189.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5189.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1742	1742	1742	1742	1742	
5°	1735	1735	1728	1737	1739	165
15°	1659	1661	1663	1678	1680	467
25°	1510	1517	1533	1559	1564	695
35°	1309	1325	1353	1389	1403	818
45°	1074	1096	1141	1198	1219	828
55°	821	849	920	992	1017	732
65°	551	598	691	772	802	547
75°	286	350	456	537	563	301
85°	61	118	152	163	163	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1742.3	1742.3	1742.3	1742.3	1742.3
2.5°	1742.3	1742.3	1733.7	1742.3	1742.3
5°	1735.4	1735.4	1728.5	1737.1	1738.9
7.5°	1723.3	1725.0	1718.1	1728.5	1730.2
10°	1706.0	1707.7	1704.2	1714.6	1716.4
12.5°	1685.2	1686.9	1686.9	1699.0	1700.8
15°	1659.2	1660.9	1662.7	1678.3	1680.0
17.5°	1626.3	1631.5	1635.0	1654.0	1657.5
20°	1591.7	1596.9	1603.8	1624.6	1628.0
22.5°	1551.8	1558.8	1570.9	1593.4	1598.6
25°	1510.3	1517.2	1532.8	1558.8	1563.9
27.5°	1463.5	1473.9	1492.9	1520.7	1527.6
30°	1415.0	1425.4	1447.9	1477.4	1487.7
32.5°	1363.0	1376.9	1402.9	1435.8	1446.2
35°	1309.4	1324.9	1352.7	1389.0	1402.9
37.5°	1252.2	1269.5	1302.4	1342.3	1359.6
40°	1193.3	1214.1	1248.7	1295.5	1314.5
42.5°	1134.4	1153.5	1196.8	1247.0	1267.8
45°	1073.8	1096.3	1141.4	1198.5	1219.3
47.5°	1011.5	1034.0	1087.7	1148.3	1167.3
50°	949.1	971.6	1032.2	1096.3	1118.8
52.5°	881.6	911.0	980.3	1044.4	1066.9
55°	820.9	848.7	919.7	992.4	1016.7
57.5°	751.7	784.6	862.5	938.7	964.7
60°	687.6	722.2	805.4	883.3	909.3
62.5°	621.8	659.9	748.2	827.9	857.3
65°	550.8	597.5	691.0	772.4	801.9
67.5°	486.7	535.2	633.9	717.0	743.0
70°	413.9	472.8	573.3	656.4	685.9
72.5°	351.6	410.5	516.1	597.5	627.0
75°	285.8	349.9	455.5	536.9	562.9
77.5°	220.0	291.0	396.6	459.0	467.6
80°	157.6	232.1	329.1	365.4	377.6
82.5°	110.8	178.4	242.5	266.7	273.6
85°	60.6	117.8	152.4	162.8	162.8
87.5°	26.0	50.2	60.6	62.4	64.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)