

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: P275916

Luminaire Tested: **24CZ2-50HE-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275916  
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: 24CZ2-50HE-UNV-L83050-W2A1-U-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5040.0 lumens  
Efficiency: N/A  
Efficacy: 134.5 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

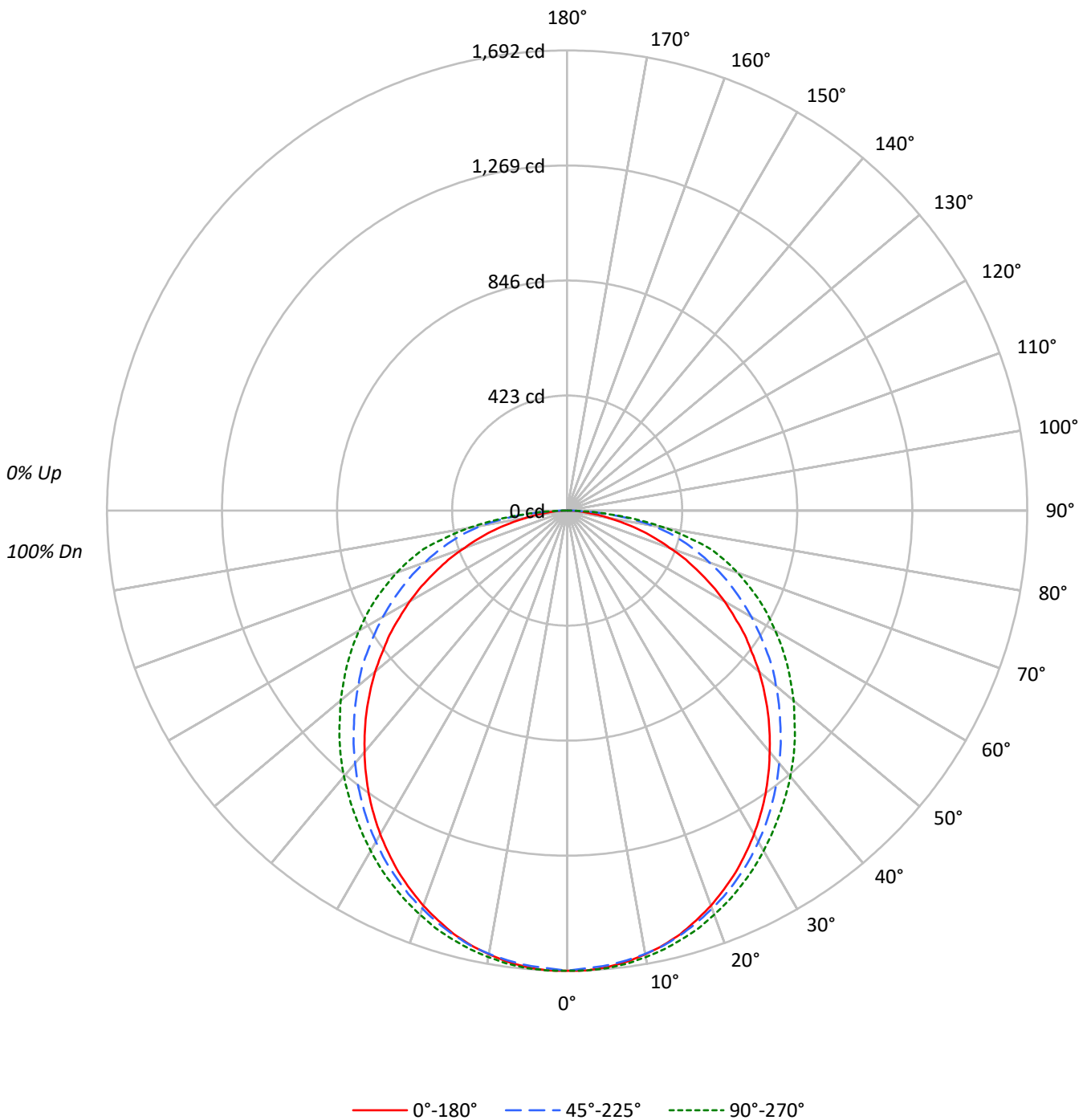
Input Watts (W): 37.479  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2277	2277	2277
5°	2276	2267	2281
10°	2264	2261	2277
15°	2245	2249	2273
20°	2213	2230	2264
25°	2178	2210	2255
30°	2135	2185	2245
35°	2089	2158	2238
40°	2036	2130	2242
45°	1984	2109	2253
50°	1930	2098	2274
55°	1870	2095	2316
60°	1797	2105	2376
65°	1703	2137	2479
70°	1581	2190	2620
75°	1443	2300	2842
80°	1186	2476	2841
85°	909	2285	2441



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	160.0	3.2
10°-20°	456.9	9.1
20°-30°	687.6	13.6
30°-40°	824.0	16.3
40°-50°	858.7	17.0
50°-60°	798.9	15.9
60°-70°	658.0	13.1
70°-80°	448.1	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°	1304.5	25.9
0°-40°	2128.4	42.2
0°-60°	3786.0	75.1
0°-90°	5040.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5040.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1692	1692	1692	1692	1692	
5°	1685	1685	1679	1687	1689	160
15°	1611	1613	1615	1630	1632	454
25°	1467	1474	1489	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°	1692.2	1692.2	1692.2	1692.2	1692.2
2.5°	1692.2	1692.2	1683.8	1692.2	1692.2
5°	1685.4	1685.4	1678.7	1687.1	1688.8
7.5°	1673.7	1675.3	1668.6	1678.7	1680.4
10°	1656.8	1658.5	1655.2	1665.2	1666.9
12.5°	1636.7	1638.3	1638.3	1650.1	1651.8
15°	1611.4	1613.1	1614.8	1629.9	1631.6
17.5°	1579.5	1584.5	1587.9	1606.4	1609.7
20°	1545.8	1550.9	1557.6	1577.8	1581.1
22.5°	1507.1	1513.9	1525.6	1547.5	1552.6
25°	1466.8	1473.5	1488.6	1513.9	1518.9
27.5°	1421.3	1431.4	1449.9	1476.9	1483.6
30°	1374.3	1384.3	1406.2	1434.8	1444.9
32.5°	1323.8	1337.2	1362.5	1394.4	1404.5
35°	1271.6	1286.8	1313.7	1349.0	1362.5
37.5°	1216.1	1233.0	1264.9	1303.6	1320.4
40°	1158.9	1179.1	1212.8	1258.2	1276.7
42.5°	1101.8	1120.3	1162.3	1211.1	1231.3
45°	1042.9	1064.8	1108.5	1164.0	1184.2
47.5°	982.3	1004.2	1056.3	1115.2	1133.7
50°	921.8	943.6	1002.5	1064.8	1086.6
52.5°	856.2	884.8	952.1	1014.3	1036.2
55°	797.3	824.2	893.2	963.8	987.4
57.5°	730.0	762.0	837.7	911.7	936.9
60°	667.8	701.4	782.2	857.9	883.1
62.5°	603.9	640.9	726.7	804.0	832.6
65°	534.9	580.3	671.1	750.2	778.8
67.5°	472.7	519.8	615.6	696.4	721.6
70°	402.0	459.2	556.8	637.5	666.1
72.5°	341.5	398.7	501.3	580.3	608.9
75°	277.5	339.8	442.4	521.4	546.7
77.5°	213.6	282.6	385.2	445.7	454.2
80°	153.1	225.4	319.6	354.9	366.7
82.5°	107.7	173.3	235.5	259.0	265.8
85°	58.9	114.4	148.0	158.1	158.1
87.5°	25.2	48.8	58.9	60.6	62.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)