

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: P276240

Luminaire Tested: **24CZ2-65HE-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276240  
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: 24CZ2-65HE-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: 4845.4 lumens  
Efficiency: N/A  
Efficacy: 99.2 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

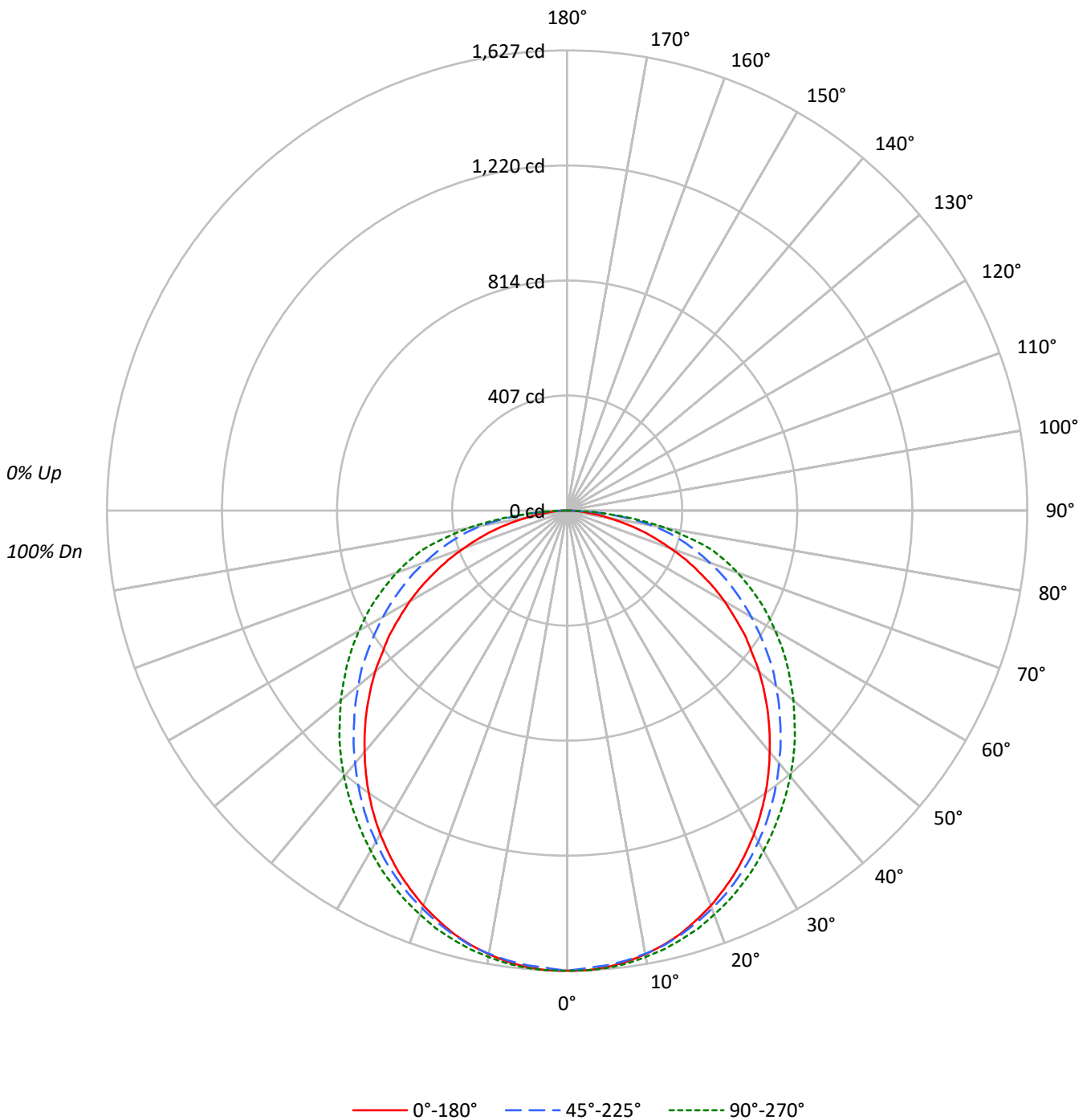
Input Watts (W): 48.825  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2189	2189	2189
5°	2189	2180	2193
10°	2176	2174	2190
15°	2158	2162	2185
20°	2128	2144	2177
25°	2093	2125	2168
30°	2053	2100	2158
35°	2008	2075	2152
40°	1957	2048	2156
45°	1908	2028	2166
50°	1855	2017	2187
55°	1798	2014	2227
60°	1728	2024	2285
65°	1637	2054	2384
70°	1520	2106	2519
75°	1387	2211	2732
80°	1141	2381	2731
85°	874	2197	2347



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.9	3.2
10°-20°	439.3	9.1
20°-30°	661.0	13.6
30°-40°	792.1	16.3
40°-50°	825.5	17.0
50°-60°	768.0	15.9
60°-70°	632.6	13.1
70°-80°	430.8	8.9
80°-90°	142.2	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°	1254.1	25.9
0°-40°	2046.3	42.2
0°-60°	3639.8	75.1
0°-90°	4845.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4845.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1627	1627	1627	1627	1627	
5°	1620	1620	1614	1622	1624	154
15°	1549	1551	1552	1567	1569	436
25°	1410	1417	1431	1455	1460	649
35°	1222	1237	1263	1297	1310	764
45°	1003	1024	1066	1119	1138	773
55°	766	792	859	927	949	683
65°	514	558	645	721	749	510
75°	267	327	425	501	526	281
85°	57	110	142	152	152	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1626.8	1626.8	1626.8	1626.8	1626.8
2.5°	1626.8	1626.8	1618.7	1626.8	1626.8
5°	1620.4	1620.4	1613.9	1622.0	1623.6
7.5°	1609.0	1610.7	1604.2	1613.9	1615.5
10°	1592.9	1594.5	1591.3	1601.0	1602.6
12.5°	1573.5	1575.1	1575.1	1586.4	1588.0
15°	1549.2	1550.8	1552.4	1567.0	1568.6
17.5°	1518.5	1523.3	1526.6	1544.4	1547.6
20°	1486.1	1491.0	1497.5	1516.9	1520.1
22.5°	1448.9	1455.4	1466.7	1487.8	1492.6
25°	1410.1	1416.6	1431.2	1455.4	1460.3
27.5°	1366.5	1376.2	1394.0	1419.8	1426.3
30°	1321.2	1330.9	1351.9	1379.4	1389.1
32.5°	1272.7	1285.6	1309.9	1340.6	1350.3
35°	1222.5	1237.1	1263.0	1296.9	1309.9
37.5°	1169.2	1185.4	1216.1	1253.3	1269.4
40°	1114.2	1133.6	1165.9	1209.6	1227.4
42.5°	1059.2	1077.0	1117.4	1164.3	1183.7
45°	1002.6	1023.6	1065.7	1119.1	1138.5
47.5°	944.4	965.4	1015.6	1072.2	1089.9
50°	886.2	907.2	963.8	1023.6	1044.7
52.5°	823.1	850.6	915.3	975.1	996.2
55°	766.5	792.4	858.7	926.6	949.3
57.5°	701.8	732.6	805.3	876.5	900.7
60°	642.0	674.3	752.0	824.7	849.0
62.5°	580.5	616.1	698.6	773.0	800.5
65°	514.2	557.9	645.2	721.2	748.7
67.5°	454.4	499.7	591.9	669.5	693.7
70°	386.5	441.5	535.3	612.9	640.4
72.5°	328.3	383.3	481.9	557.9	585.4
75°	266.8	326.7	425.3	501.3	525.6
77.5°	205.4	271.7	370.3	428.5	436.6
80°	147.2	216.7	307.3	341.2	352.5
82.5°	103.5	166.6	226.4	249.0	255.5
85°	56.6	110.0	142.3	152.0	152.0
87.5°	24.3	46.9	56.6	58.2	59.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)