

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: P276243

Luminaire Tested: **24CZ2-65HE-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276243  
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-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: 5461.2 lumens  
Efficiency: N/A  
Efficacy: 110.4 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

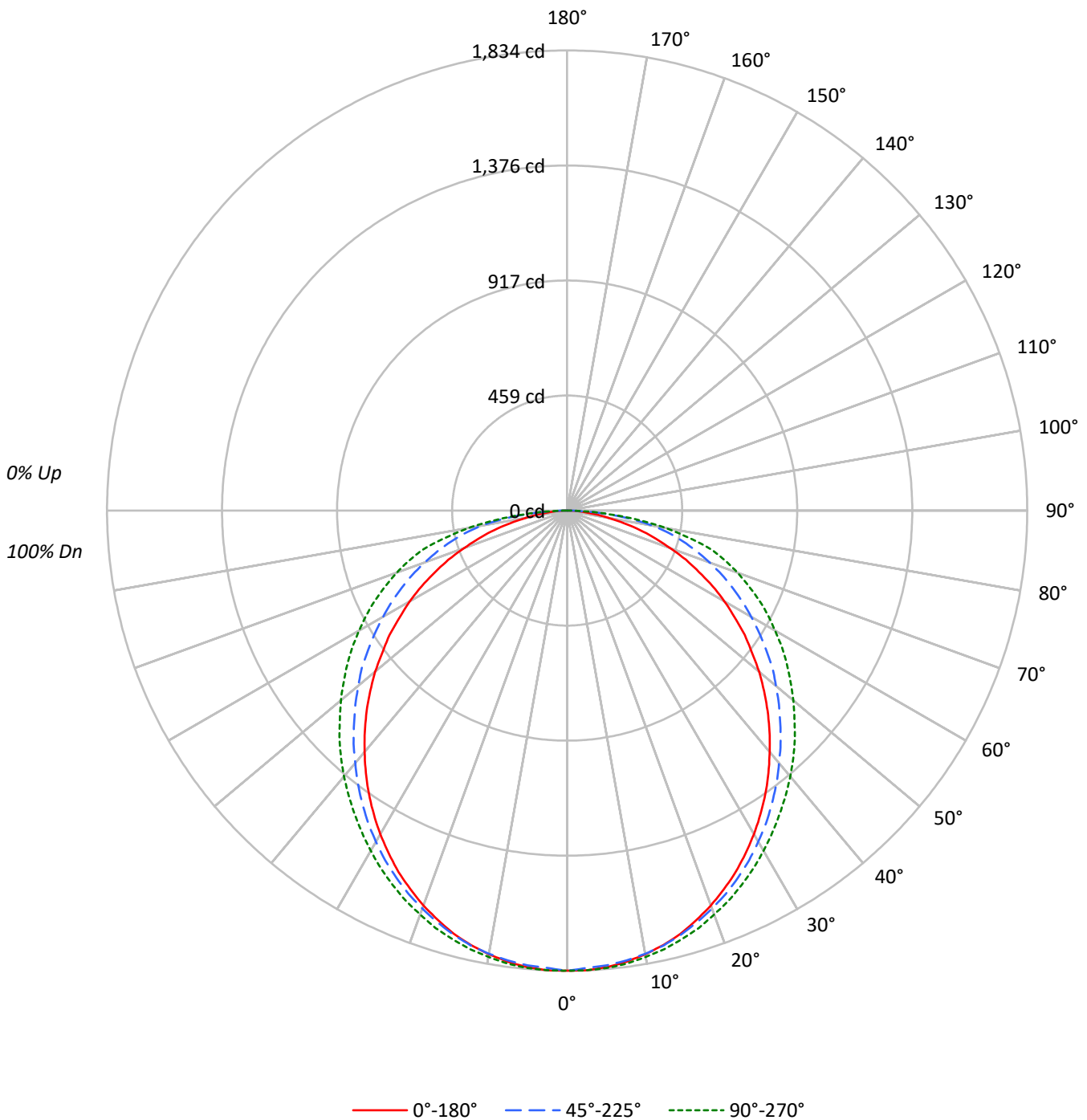
Input Watts (W): 49.476  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2467	2467	2467
5°	2467	2457	2472
10°	2453	2450	2468
15°	2432	2437	2463
20°	2398	2417	2453
25°	2360	2395	2443
30°	2314	2367	2433
35°	2263	2338	2425
40°	2206	2308	2430
45°	2150	2285	2442
50°	2091	2274	2465
55°	2027	2270	2510
60°	1947	2281	2575
65°	1845	2315	2687
70°	1714	2373	2840
75°	1563	2492	3080
80°	1285	2683	3078
85°	985	2476	2644



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	173.4	3.2
10°-20°	495.1	9.1
20°-30°	745.0	13.6
30°-40°	892.8	16.3
40°-50°	930.4	17.0
50°-60°	865.6	15.9
60°-70°	713.0	13.1
70°-80°	485.6	8.9
80°-90°	160.3	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°	1413.5	25.9
0°-40°	2306.4	42.2
0°-60°	4102.4	75.1
0°-90°	5461.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5461.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1834	1834	1834	1834	1834	
5°	1826	1826	1819	1828	1830	173
15°	1746	1748	1750	1766	1768	492
25°	1589	1597	1613	1640	1646	732
35°	1378	1394	1424	1462	1476	861
45°	1130	1154	1201	1261	1283	872
55°	864	893	968	1044	1070	770
65°	580	629	727	813	844	575
75°	301	368	479	565	592	317
85°	64	124	160	171	171	79
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1833.6	1833.6	1833.6	1833.6	1833.6
2.5°	1833.6	1833.6	1824.5	1833.6	1833.6
5°	1826.3	1826.3	1819.0	1828.1	1830.0
7.5°	1813.5	1815.4	1808.1	1819.0	1820.8
10°	1795.3	1797.1	1793.5	1804.4	1806.3
12.5°	1773.5	1775.3	1775.3	1788.0	1789.9
15°	1746.1	1747.9	1749.8	1766.2	1768.0
17.5°	1711.5	1716.9	1720.6	1740.6	1744.3
20°	1675.0	1680.5	1687.8	1709.7	1713.3
22.5°	1633.1	1640.4	1653.2	1676.8	1682.3
25°	1589.4	1596.7	1613.1	1640.4	1645.9
27.5°	1540.1	1551.1	1571.1	1600.3	1607.6
30°	1489.1	1500.1	1523.7	1554.7	1565.7
32.5°	1434.4	1449.0	1476.4	1511.0	1521.9
35°	1377.9	1394.3	1423.5	1461.8	1476.4
37.5°	1317.8	1336.0	1370.6	1412.6	1430.8
40°	1255.8	1277.7	1314.1	1363.4	1383.4
42.5°	1193.8	1213.9	1259.5	1312.3	1334.2
45°	1130.1	1153.7	1201.1	1261.3	1283.2
47.5°	1064.4	1088.1	1144.6	1208.4	1228.5
50°	998.8	1022.5	1086.3	1153.7	1177.4
52.5°	927.7	958.7	1031.6	1099.1	1122.8
55°	863.9	893.1	967.8	1044.4	1069.9
57.5°	791.0	825.7	907.7	987.9	1015.2
60°	723.6	760.1	847.5	929.6	956.9
62.5°	654.3	694.4	787.4	871.2	902.2
65°	579.6	628.8	727.2	812.9	843.9
67.5°	512.2	563.2	667.1	754.6	781.9
70°	435.6	497.6	603.3	690.8	721.8
72.5°	370.0	432.0	543.2	628.8	659.8
75°	300.7	368.2	479.4	565.0	592.4
77.5°	231.5	306.2	417.4	483.0	492.1
80°	165.9	244.2	346.3	384.6	397.3
82.5°	116.7	187.7	255.2	280.7	288.0
85°	63.8	123.9	160.4	171.3	171.3
87.5°	27.3	52.9	63.8	65.6	67.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)