

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: P276953

Luminaire Tested: **24CZ2-65HE-RDP-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276953  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-65HE-RDP-UNV-L82765-W2A1-U-6500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4346.8 lumens  
Efficiency: N/A  
Efficacy: 85.1 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

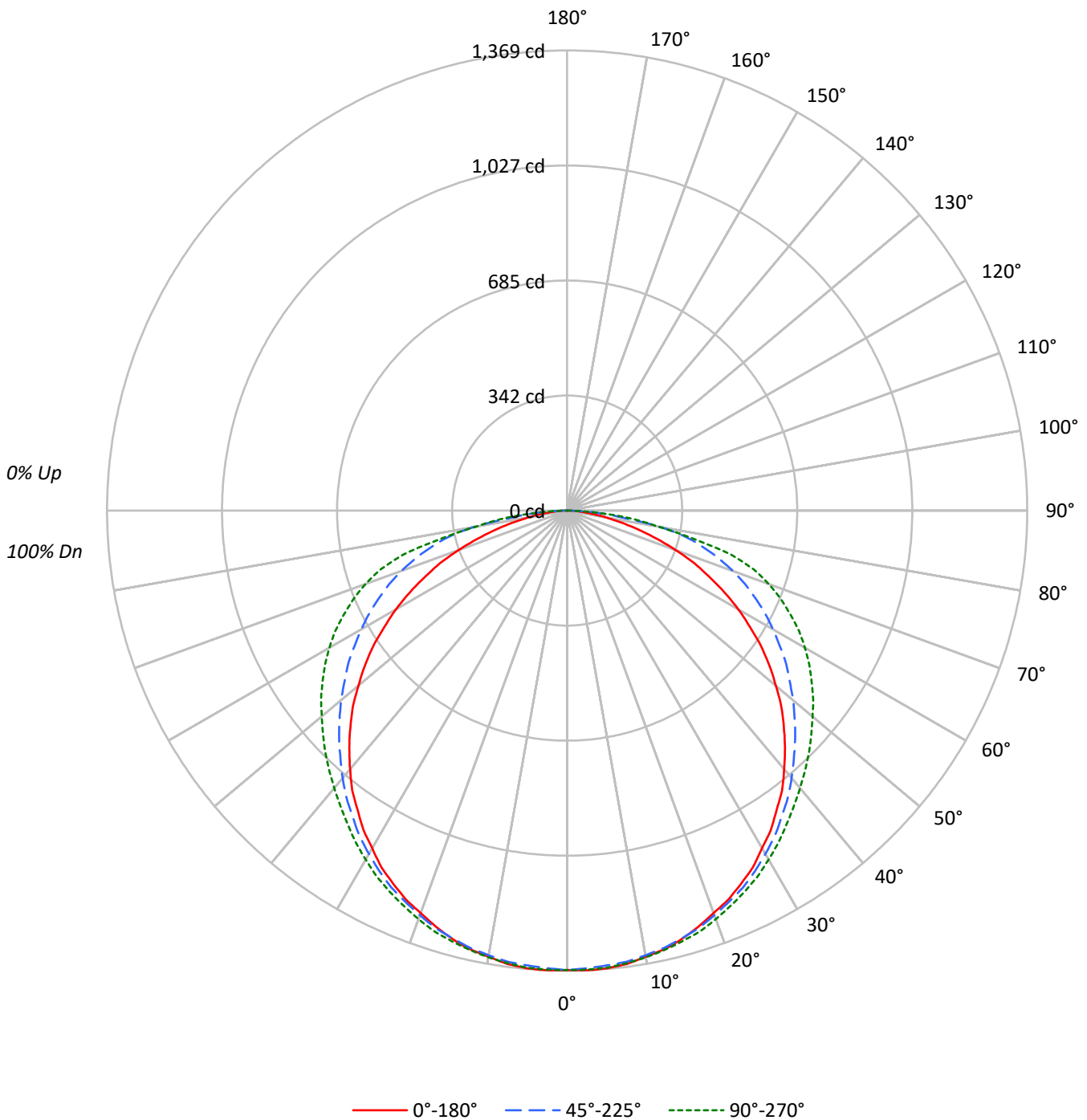
Input Watts (W): 51.057  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82					82			
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67					67			
3	88	77	68	62	86	76	68	61	72	66	60	70	64	59	67	62	58	56					56			
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35					35			
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31					31			
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27					27			
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1839	1839	1839
5°	1846	1835	1843
10°	1841	1835	1844
15°	1838	1835	1847
20°	1824	1834	1852
25°	1818	1837	1856
30°	1802	1832	1863
35°	1785	1827	1870
40°	1765	1825	1893
45°	1735	1826	1936
50°	1697	1837	1995
55°	1654	1866	2084
60°	1584	1903	2199
65°	1483	1970	2334
70°	1349	2061	2511
75°	1143	2175	2623
80°	902	2188	2122
85°	665	1664	1863



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.7	3.0
10°-20°	373.2	8.6
20°-30°	570.7	13.1
30°-40°	697.6	16.0
40°-50°	743.5	17.1
50°-60°	710.9	16.4
60°-70°	602.2	13.9
70°-80°	404.8	9.3
80°-90°	114.2	2.6
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°	1073.5	24.7
0°-40°	1771.2	40.7
0°-60°	3225.6	74.2
0°-90°	4346.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4346.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1367	1367	1367	1367	1367	
5°	1367	1365	1358	1365	1365	130
15°	1320	1320	1317	1328	1326	372
25°	1225	1229	1238	1248	1250	564
35°	1087	1095	1112	1134	1138	681
45°	912	927	960	1000	1018	703
55°	705	731	796	858	888	628
65°	466	513	619	701	733	462
75°	220	300	418	489	504	235
85°	43	88	108	116	121	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1367.0	1367.0	1367.0	1367.0	1367.0
2.5°	1369.1	1369.1	1362.6	1367.0	1367.0
5°	1367.0	1364.8	1358.3	1364.8	1364.8
7.5°	1360.5	1358.3	1354.0	1360.5	1358.3
10°	1347.5	1347.5	1343.2	1349.7	1349.7
12.5°	1336.8	1334.6	1332.5	1341.1	1338.9
15°	1319.5	1319.5	1317.4	1328.1	1326.0
17.5°	1298.0	1300.1	1302.3	1310.9	1313.0
20°	1274.2	1278.6	1280.7	1293.6	1293.6
22.5°	1252.7	1254.8	1259.1	1272.1	1272.1
25°	1224.7	1229.0	1237.6	1248.4	1250.5
27.5°	1196.6	1198.8	1209.6	1224.7	1226.8
30°	1160.0	1166.4	1179.4	1196.6	1198.8
32.5°	1127.6	1134.1	1149.2	1166.4	1170.7
35°	1086.7	1095.3	1112.5	1134.1	1138.4
37.5°	1050.0	1056.5	1078.0	1101.8	1108.2
40°	1004.7	1017.7	1039.2	1067.3	1078.0
42.5°	959.5	972.4	998.3	1034.9	1047.9
45°	912.0	927.1	959.5	1000.4	1017.7
47.5°	864.6	881.8	918.5	965.9	985.3
50°	810.7	832.2	877.5	931.4	953.0
52.5°	758.9	784.8	834.4	894.8	922.8
55°	705.0	730.9	795.6	858.1	888.3
57.5°	644.7	679.2	750.3	821.5	853.8
60°	588.6	620.9	707.2	784.8	817.2
62.5°	528.2	571.4	664.1	746.0	778.3
65°	465.7	513.1	618.8	700.7	733.1
67.5°	409.7	461.4	573.5	655.4	687.8
70°	342.8	407.5	523.9	605.9	638.2
72.5°	280.3	351.4	472.2	552.0	582.1
75°	219.9	299.7	418.3	489.4	504.5
77.5°	163.9	247.9	362.2	392.4	381.6
80°	116.4	198.4	282.4	267.4	273.8
82.5°	75.5	150.9	174.6	198.4	204.8
85°	43.1	88.4	107.8	116.4	120.7
87.5°	19.4	32.3	43.1	43.1	41.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)