

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: P276769

Luminaire Tested: **24CZ2-65HE-RDP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276769  
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-L83050-W2A1-U-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4366.0 lumens  
Efficiency: N/A  
Efficacy: 87.2 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

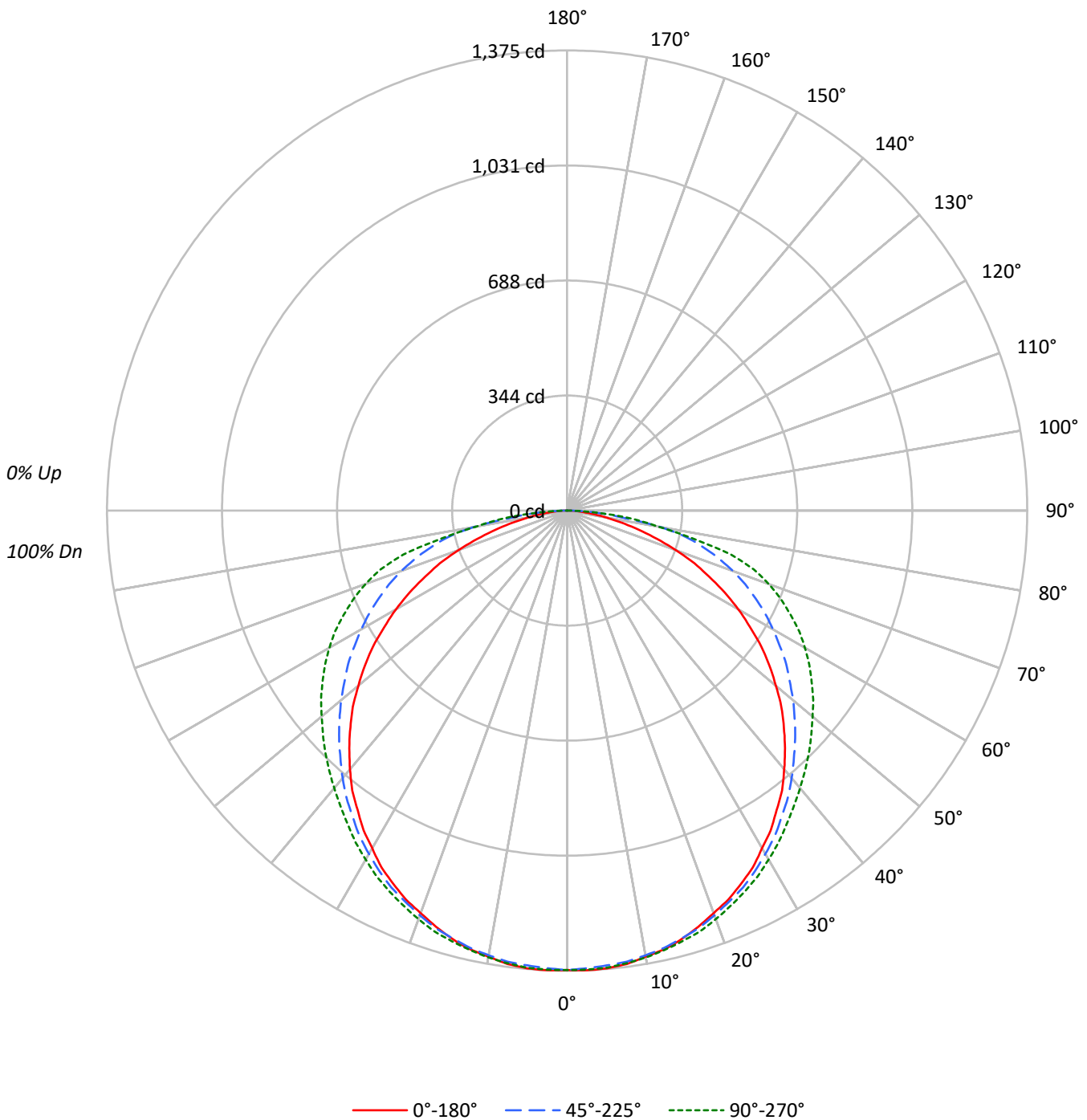
Input Watts (W): 50.043114  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	1847	1847	1847
5°	1854	1843	1851
10°	1849	1843	1852
15°	1846	1843	1855
20°	1833	1842	1861
25°	1826	1845	1865
30°	1810	1840	1871
35°	1793	1835	1878
40°	1773	1833	1902
45°	1743	1834	1945
50°	1705	1845	2004
55°	1661	1875	2093
60°	1591	1911	2209
65°	1489	1979	2344
70°	1354	2070	2522
75°	1148	2184	2634
80°	906	2198	2131
85°	668	1672	1873



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.2	3.0
10°-20°	374.8	8.6
20°-30°	573.2	13.1
30°-40°	700.7	16.0
40°-50°	746.8	17.1
50°-60°	714.1	16.4
60°-70°	604.9	13.9
70°-80°	406.5	9.3
80°-90°	114.7	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°	1078.3	24.7
0°-40°	1779.0	40.7
0°-60°	3239.9	74.2
0°-90°	4366.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4366.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1373	1373	1373	1373	1373	
5°	1373	1371	1364	1371	1371	130
15°	1325	1325	1323	1334	1332	374
25°	1230	1234	1243	1254	1256	567
35°	1092	1100	1117	1139	1143	684
45°	916	931	964	1005	1022	707
55°	708	734	799	862	892	631
65°	468	515	622	704	736	464
75°	221	301	420	492	507	237
85°	43	89	108	117	121	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1373.0	1373.0	1373.0	1373.0	1373.0
2.5°	1375.1	1375.1	1368.7	1373.0	1373.0
5°	1373.0	1370.8	1364.3	1370.8	1370.8
7.5°	1366.5	1364.3	1360.0	1366.5	1364.3
10°	1353.5	1353.5	1349.2	1355.7	1355.7
12.5°	1342.7	1340.5	1338.3	1347.0	1344.8
15°	1325.3	1325.3	1323.2	1334.0	1331.8
17.5°	1303.7	1305.8	1308.0	1316.7	1318.8
20°	1279.9	1284.2	1286.4	1299.4	1299.4
22.5°	1258.2	1260.4	1264.7	1277.7	1277.7
25°	1230.1	1234.4	1243.0	1253.9	1256.0
27.5°	1201.9	1204.1	1214.9	1230.1	1232.2
30°	1165.1	1171.6	1184.6	1201.9	1204.1
32.5°	1132.6	1139.1	1154.3	1171.6	1175.9
35°	1091.5	1100.1	1117.4	1139.1	1143.4
37.5°	1054.6	1061.1	1082.8	1106.6	1113.1
40°	1009.2	1022.2	1043.8	1072.0	1082.8
42.5°	963.7	976.7	1002.7	1039.5	1052.5
45°	916.0	931.2	963.7	1004.8	1022.2
47.5°	868.4	885.7	922.5	970.2	989.7
50°	814.3	835.9	881.4	935.5	957.2
52.5°	762.3	788.3	838.1	898.7	926.9
55°	708.1	734.1	799.1	861.9	892.2
57.5°	647.5	682.2	753.6	825.1	857.6
60°	591.2	623.7	710.3	788.3	820.8
62.5°	530.6	573.9	667.0	749.3	781.8
65°	467.8	515.4	621.5	703.8	736.3
67.5°	411.5	463.4	576.0	658.3	690.8
70°	344.3	409.3	526.2	608.5	641.0
72.5°	281.5	353.0	474.3	554.4	584.7
75°	220.9	301.0	420.1	491.6	506.7
77.5°	164.6	249.0	363.8	394.1	383.3
80°	116.9	199.2	283.7	268.5	275.0
82.5°	75.8	151.6	175.4	199.2	205.7
85°	43.3	88.8	108.3	116.9	121.3
87.5°	19.5	32.5	43.3	43.3	41.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)