

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: P275960

Luminaire Tested: **24CZ2-45-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275960  
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: 24CZ2-45-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4545.0 lumens  
Efficiency: N/A  
Efficacy: 124.0 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

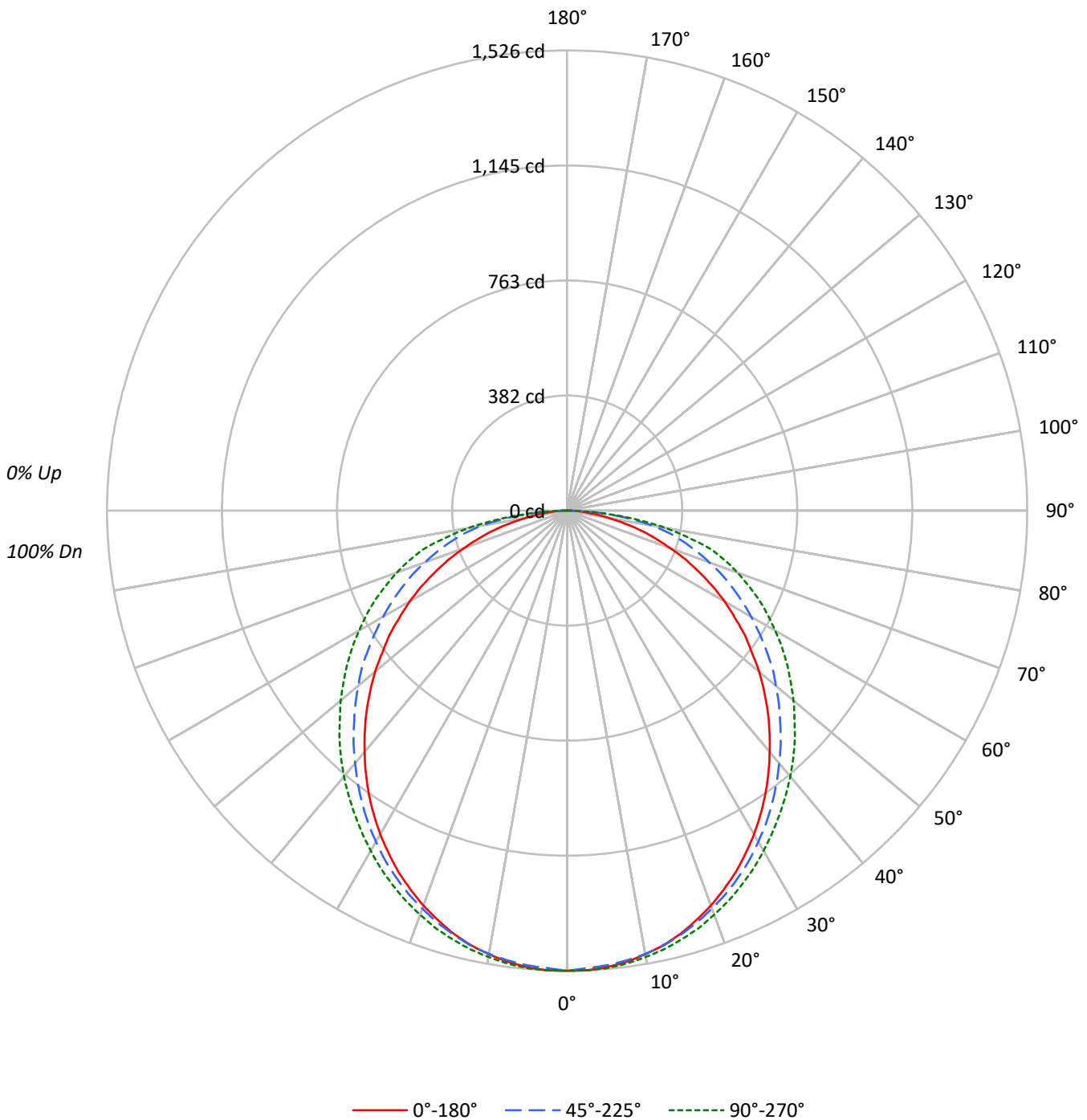
Input Watts (W): 36.642  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									70									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	89	86	84	82						82													
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67						67													
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56						56													
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48						48													
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41						41													
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36						36													
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32						32													
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28						28													
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25						25													
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23						23													

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

	0°	45°	90°
0°	2053	2053	2053
5°	2053	2045	2057
10°	2041	2039	2054
15°	2024	2028	2050
20°	1996	2011	2042
25°	1964	1993	2033
30°	1925	1970	2024
35°	1884	1946	2018
40°	1836	1921	2022
45°	1790	1902	2032
50°	1740	1892	2051
55°	1687	1890	2089
60°	1621	1898	2143
65°	1536	1927	2236
70°	1426	1975	2363
75°	1301	2074	2563
80°	1069	2233	2562
85°	820	2061	2201



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.3	3.2
10°-20°	412.0	9.1
20°-30°	620.0	13.6
30°-40°	743.0	16.3
40°-50°	774.3	17.0
50°-60°	720.4	15.9
60°-70°	593.3	13.1
70°-80°	404.1	8.9
80°-90°	133.4	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°	1176.4	25.9
0°-40°	1919.4	42.2
0°-60°	3414.2	75.1
0°-90°	4545.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4545.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1526	1526	1526	1526	1526	
5°	1520	1520	1514	1521	1523	144
15°	1453	1455	1456	1470	1471	409
25°	1323	1329	1342	1365	1370	609
35°	1147	1160	1185	1216	1229	717
45°	940	960	1000	1050	1068	725
55°	719	743	806	869	890	641
65°	482	523	605	676	702	479
75°	250	306	399	470	493	264
85°	53	103	134	143	143	66
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1526.0	1526.0	1526.0	1526.0	1526.0
2.5°	1526.0	1526.0	1518.4	1526.0	1526.0
5°	1519.9	1519.9	1513.8	1521.4	1522.9
7.5°	1509.3	1510.8	1504.7	1513.8	1515.3
10°	1494.1	1495.6	1492.6	1501.7	1503.2
12.5°	1475.9	1477.4	1477.4	1488.0	1489.6
15°	1453.2	1454.7	1456.2	1469.8	1471.4
17.5°	1424.3	1428.9	1431.9	1448.6	1451.6
20°	1394.0	1398.6	1404.6	1422.8	1425.9
22.5°	1359.1	1365.2	1375.8	1395.5	1400.1
25°	1322.7	1328.8	1342.4	1365.2	1369.7
27.5°	1281.8	1290.9	1307.5	1331.8	1337.9
30°	1239.3	1248.4	1268.1	1293.9	1303.0
32.5°	1193.8	1205.9	1228.7	1257.5	1266.6
35°	1146.8	1160.4	1184.7	1216.5	1228.7
37.5°	1096.7	1111.9	1140.7	1175.6	1190.7
40°	1045.1	1063.3	1093.7	1134.6	1151.3
42.5°	993.5	1010.2	1048.2	1092.1	1110.3
45°	940.5	960.2	999.6	1049.7	1067.9
47.5°	885.9	905.6	952.6	1005.7	1022.4
50°	831.2	851.0	904.1	960.2	979.9
52.5°	772.1	797.9	858.5	914.7	934.4
55°	719.0	743.3	805.5	869.2	890.4
57.5°	658.3	687.1	755.4	822.1	844.9
60°	602.2	632.5	705.3	773.6	796.4
62.5°	544.6	577.9	655.3	725.1	750.8
65°	482.4	523.3	605.2	676.5	702.3
67.5°	426.2	468.7	555.2	628.0	650.7
70°	362.5	414.1	502.1	574.9	600.7
72.5°	307.9	359.5	452.0	523.3	549.1
75°	250.3	306.4	398.9	470.2	493.0
77.5°	192.6	254.8	347.4	402.0	409.6
80°	138.0	203.3	288.2	320.1	330.7
82.5°	97.1	156.2	212.4	233.6	239.7
85°	53.1	103.1	133.5	142.6	142.6
87.5°	22.8	44.0	53.1	54.6	56.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)