

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: P261375

Luminaire Tested: **24CZ-LD5-45SE-S-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261375  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-45SE-S-UNV-L92765-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3767.0 lumens  
Efficiency: N/A  
Efficacy: 108.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

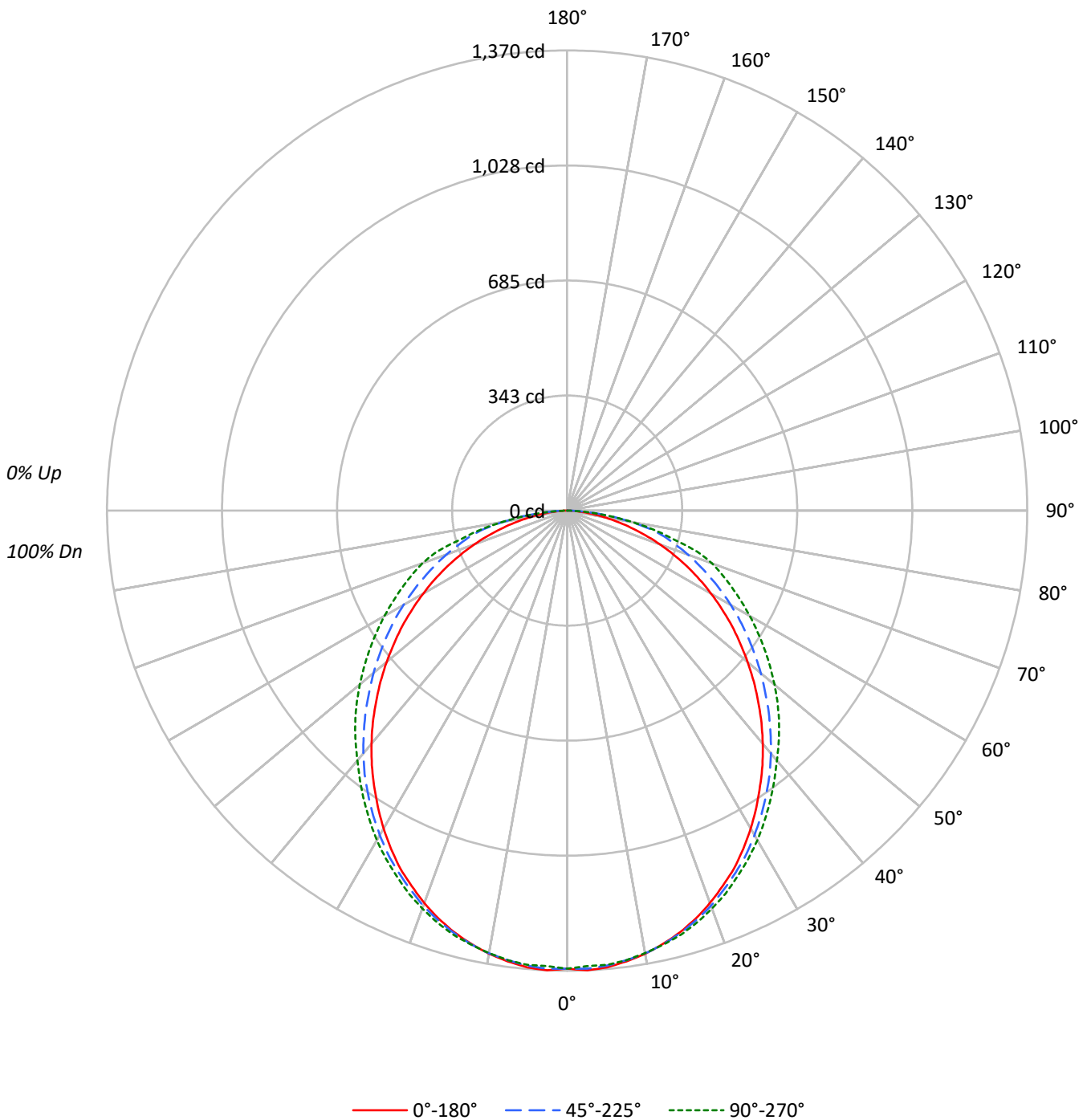
Input Watts (W): 34.596  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	1835	1835	1835
5°	1844	1837	1833
10°	1831	1829	1827
15°	1811	1814	1821
20°	1780	1793	1805
25°	1745	1764	1783
30°	1698	1733	1760
35°	1645	1696	1731
40°	1592	1658	1706
45°	1531	1615	1698
50°	1469	1574	1687
55°	1405	1541	1682
60°	1332	1514	1690
65°	1253	1496	1724
70°	1154	1504	1805
75°	1023	1557	1681
80°	855	1476	1515
85°	639	1181	1084



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.9	3.4
10°-20°	366.7	9.7
20°-30°	546.5	14.5
30°-40°	643.3	17.1
40°-50°	653.7	17.4
50°-60°	587.7	15.6
60°-70°	464.3	12.3
70°-80°	294.6	7.8
80°-90°	81.3	2.2
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°	1042.1	27.7
0°-40°	1685.4	44.7
0°-60°	2926.8	77.7
0°-90°	3767.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3767.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1364	1364	1364	1364	1364	
5°	1365	1354	1360	1358	1358	129
15°	1300	1294	1302	1306	1307	366
25°	1176	1174	1188	1196	1201	541
35°	1002	1008	1033	1044	1054	627
45°	805	816	849	874	892	621
55°	599	614	657	699	717	535
65°	394	414	470	521	542	390
75°	197	231	300	326	323	209
85°	41	71	76	70	70	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1363.7	1363.7	1363.7	1363.7	1363.7
2.5°	1370.0	1360.0	1365.0	1362.5	1357.5
5°	1365.0	1353.7	1360.0	1357.5	1357.5
7.5°	1353.7	1344.9	1349.9	1348.7	1349.9
10°	1339.9	1331.1	1338.7	1338.7	1337.4
12.5°	1321.1	1313.6	1322.4	1322.4	1323.6
15°	1299.8	1293.5	1302.3	1306.1	1307.3
17.5°	1273.5	1267.2	1278.5	1282.3	1286.0
20°	1243.4	1240.9	1252.2	1255.9	1260.9
22.5°	1209.6	1209.6	1220.8	1225.8	1233.4
25°	1175.7	1174.5	1188.2	1195.8	1200.8
27.5°	1135.6	1136.9	1154.4	1161.9	1168.2
30°	1093.0	1095.5	1115.5	1124.3	1133.1
32.5°	1047.9	1052.9	1075.4	1085.5	1094.2
35°	1001.5	1007.8	1032.8	1044.1	1054.1
37.5°	955.1	963.9	990.2	1001.5	1012.8
40°	906.2	913.7	943.8	957.6	971.4
42.5°	856.1	866.1	896.2	916.3	932.5
45°	804.7	816.0	848.6	873.6	892.4
47.5°	753.3	768.3	799.7	833.5	849.8
50°	701.9	717.0	752.1	789.7	806.0
52.5°	649.3	664.3	704.4	743.3	760.8
55°	599.1	614.2	656.8	699.4	717.0
57.5°	546.5	562.8	610.4	654.3	671.8
60°	495.1	511.4	562.8	609.2	628.0
62.5°	445.0	462.5	516.4	565.3	584.1
65°	393.6	413.6	470.0	521.4	541.5
67.5°	343.4	366.0	424.9	478.8	500.1
70°	293.3	319.6	382.3	437.4	458.8
72.5°	244.4	273.2	339.7	394.8	406.1
75°	196.8	230.6	299.6	325.9	323.4
77.5°	151.7	189.3	254.4	259.5	267.0
80°	110.3	151.7	190.5	200.5	195.5
82.5°	72.7	114.1	136.6	131.6	130.4
85°	41.4	71.4	76.5	70.2	70.2
87.5°	17.5	28.8	25.1	18.8	17.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)