

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: P260960

Luminaire Tested: **24CZ-LD5-45SE-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260960  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-45SE-UNV-L92765-W2A1-U-5500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4254.0 lumens  
Efficiency: N/A  
Efficacy: 118.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

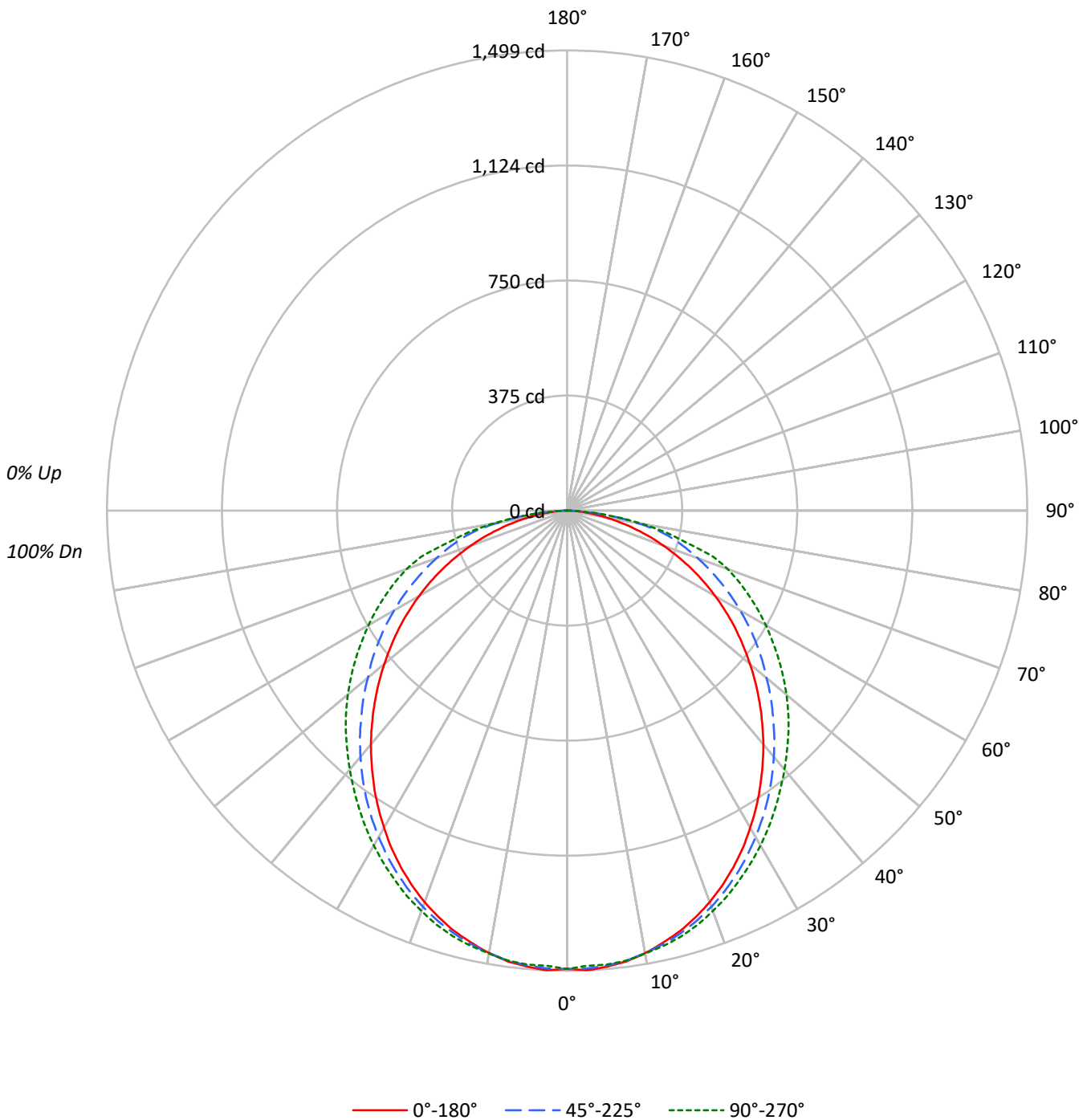
Input Watts (W): 35.991  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	2009	2009	2009
5°	2014	2009	2005
10°	2000	2000	2002
15°	1976	1986	2000
20°	1944	1967	1988
25°	1903	1940	1972
30°	1853	1908	1957
35°	1802	1876	1943
40°	1747	1839	1934
45°	1688	1804	1940
50°	1628	1774	1951
55°	1568	1763	1971
60°	1497	1752	2011
65°	1419	1753	2077
70°	1312	1782	2189
75°	1174	1863	2082
80°	982	1783	1908
85°	743	1371	1304



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.1	3.3
10°-20°	401.5	9.4
20°-30°	600.3	14.1
30°-40°	712.1	16.7
40°-50°	732.9	17.2
50°-60°	672.4	15.8
60°-70°	543.6	12.8
70°-80°	352.8	8.3
80°-90°	97.3	2.3
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°	1142.9	26.9
0°-40°	1855.0	43.6
0°-60°	3260.3	76.6
0°-90°	4254.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4254.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1493	1493	1493	1493	1493	
5°	1492	1481	1487	1486	1484	142
15°	1419	1413	1426	1432	1436	400
25°	1282	1283	1306	1318	1328	590
35°	1097	1106	1142	1167	1183	686
45°	887	902	948	993	1020	685
55°	668	689	752	813	840	597
65°	446	472	551	623	652	440
75°	226	268	358	400	400	240
85°	48	82	89	86	84	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1492.9	1492.9	1492.9	1492.9	1492.9
2.5°	1498.8	1487.1	1492.9	1491.5	1484.2
5°	1491.5	1481.3	1487.1	1485.7	1484.2
7.5°	1481.3	1471.1	1478.4	1476.9	1478.4
10°	1463.8	1455.1	1463.8	1465.3	1465.3
12.5°	1442.0	1434.7	1446.3	1449.2	1452.2
15°	1418.7	1412.8	1425.9	1431.8	1436.1
17.5°	1389.5	1385.2	1401.2	1408.5	1414.3
20°	1357.5	1356.0	1373.5	1380.8	1388.1
22.5°	1321.1	1321.1	1341.5	1350.2	1360.4
25°	1281.7	1283.2	1306.5	1318.2	1328.3
27.5°	1239.5	1241.0	1268.6	1283.2	1294.8
30°	1192.9	1198.7	1227.8	1246.8	1259.9
32.5°	1146.3	1153.6	1185.6	1207.5	1222.0
35°	1096.8	1105.5	1141.9	1166.7	1182.7
37.5°	1045.8	1056.0	1095.3	1123.0	1141.9
40°	994.8	1006.5	1047.2	1079.3	1101.1
42.5°	940.9	954.0	999.2	1037.0	1060.3
45°	887.0	901.6	948.2	993.3	1019.6
47.5°	833.1	850.6	900.1	949.7	977.3
50°	777.8	795.3	847.7	904.5	932.2
52.5°	722.4	742.8	801.1	859.3	887.0
55°	668.5	688.9	751.6	812.7	840.4
57.5°	613.2	633.6	702.0	766.1	793.8
60°	556.4	579.7	651.1	716.6	747.2
62.5°	501.0	525.8	601.5	671.5	700.6
65°	445.7	471.9	550.6	623.4	652.5
67.5°	388.9	419.5	501.0	575.3	605.9
70°	333.5	367.0	453.0	527.3	556.4
72.5°	279.7	316.1	404.9	480.7	498.1
75°	225.8	268.0	358.3	400.5	400.5
77.5°	174.8	221.4	305.9	321.9	330.6
80°	126.7	177.7	230.1	249.1	246.2
82.5°	84.5	135.5	164.6	164.6	160.2
85°	48.1	81.6	88.8	85.9	84.5
87.5°	20.4	30.6	27.7	21.8	18.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)