

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: P263296

Luminaire Tested: **24CZ-LD5-70-SQP-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263296  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-70-SQP-UNV-L82765-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4559.0 lumens  
Efficiency: N/A  
Efficacy: 84.5 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

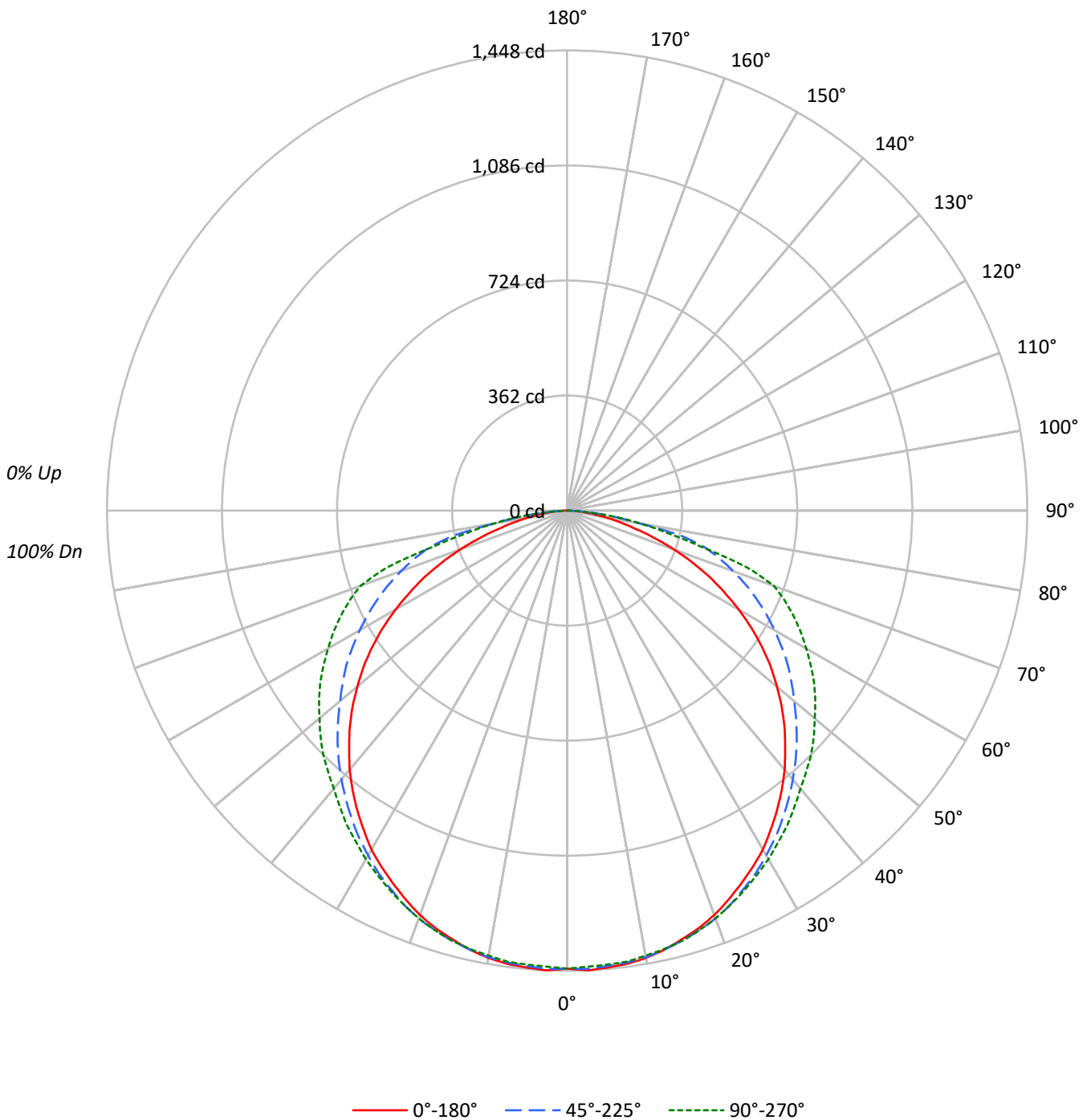
Input Watts (W): 53.94  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

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

	0°	45°	90°
0°	1939	1939	1939
5°	1950	1943	1937
10°	1953	1950	1943
15°	1945	1952	1952
20°	1939	1956	1956
25°	1923	1951	1958
30°	1913	1946	1968
35°	1891	1942	1984
40°	1870	1940	2006
45°	1842	1945	2066
50°	1804	1952	2129
55°	1757	1989	2226
60°	1679	2028	2338
65°	1574	2092	2504
70°	1408	2186	2723
75°	1163	2338	2253
80°	949	1806	1825
85°	764	1200	1127



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.9	3.0
10°-20°	395.0	8.7
20°-30°	603.6	13.2
30°-40°	738.3	16.2
40°-50°	790.0	17.3
50°-60°	756.4	16.6
60°-70°	639.9	14.0
70°-80°	405.6	8.9
80°-90°	93.3	2.0
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°	1135.5	24.9
0°-40°	1873.8	41.1
0°-60°	3420.2	75.0
0°-90°	4559.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4559.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1441	1441	1441	1441	1441	
5°	1444	1436	1439	1436	1434	137
15°	1396	1394	1401	1401	1401	394
25°	1295	1295	1314	1319	1319	598
35°	1152	1159	1182	1199	1208	720
45°	968	984	1022	1064	1086	746
55°	749	772	848	918	949	668
65°	494	542	657	746	786	487
75°	224	316	450	447	433	243
85°	50	75	78	71	73	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1441.2	1441.2	1441.2	1441.2	1441.2
2.5°	1448.2	1441.2	1443.5	1441.2	1436.5
5°	1443.5	1436.5	1438.8	1436.5	1434.1
7.5°	1438.8	1431.8	1434.1	1431.8	1431.8
10°	1429.4	1422.3	1427.1	1424.7	1422.3
12.5°	1415.3	1410.6	1415.3	1412.9	1412.9
15°	1396.4	1394.1	1401.2	1401.2	1401.2
17.5°	1377.6	1375.2	1384.7	1384.7	1384.7
20°	1354.1	1351.7	1365.8	1365.8	1365.8
22.5°	1325.8	1323.4	1342.3	1342.3	1342.3
25°	1295.2	1295.2	1314.0	1318.7	1318.7
27.5°	1264.6	1264.6	1285.8	1292.8	1292.8
30°	1231.6	1231.6	1252.8	1262.2	1266.9
32.5°	1191.6	1196.3	1219.8	1231.6	1236.3
35°	1151.5	1158.6	1182.1	1198.6	1208.1
37.5°	1109.1	1116.2	1144.5	1163.3	1175.1
40°	1064.4	1073.8	1104.4	1128.0	1142.1
42.5°	1015.0	1029.1	1064.4	1095.0	1113.9
45°	967.9	984.3	1022.0	1064.4	1085.6
47.5°	916.0	934.9	977.3	1031.4	1052.6
50°	861.9	880.7	932.5	993.8	1017.3
52.5°	807.7	828.9	890.1	956.1	984.3
55°	748.9	772.4	847.8	918.4	949.0
57.5°	687.6	715.9	800.7	876.0	909.0
60°	624.0	659.4	753.6	833.6	868.9
62.5°	558.1	600.5	706.5	791.2	828.9
65°	494.5	541.6	657.0	746.5	786.5
67.5°	426.2	485.1	607.6	704.1	741.8
70°	357.9	426.2	555.8	654.7	692.3
72.5°	289.6	372.1	503.9	593.4	593.4
75°	223.7	315.6	449.8	447.4	433.3
77.5°	169.6	263.7	369.7	315.6	317.9
80°	122.5	211.9	233.1	233.1	235.5
82.5°	82.4	162.5	150.7	148.4	153.1
85°	49.5	75.4	77.7	70.6	73.0
87.5°	23.5	25.9	21.2	14.1	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)