

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: P263220

Luminaire Tested: **24CZ-LD5-50SE-SQP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263220  
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-LD5-50SE-SQP-UNV-L93050-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3092.8 lumens  
Efficiency: N/A  
Efficacy: 74.7 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

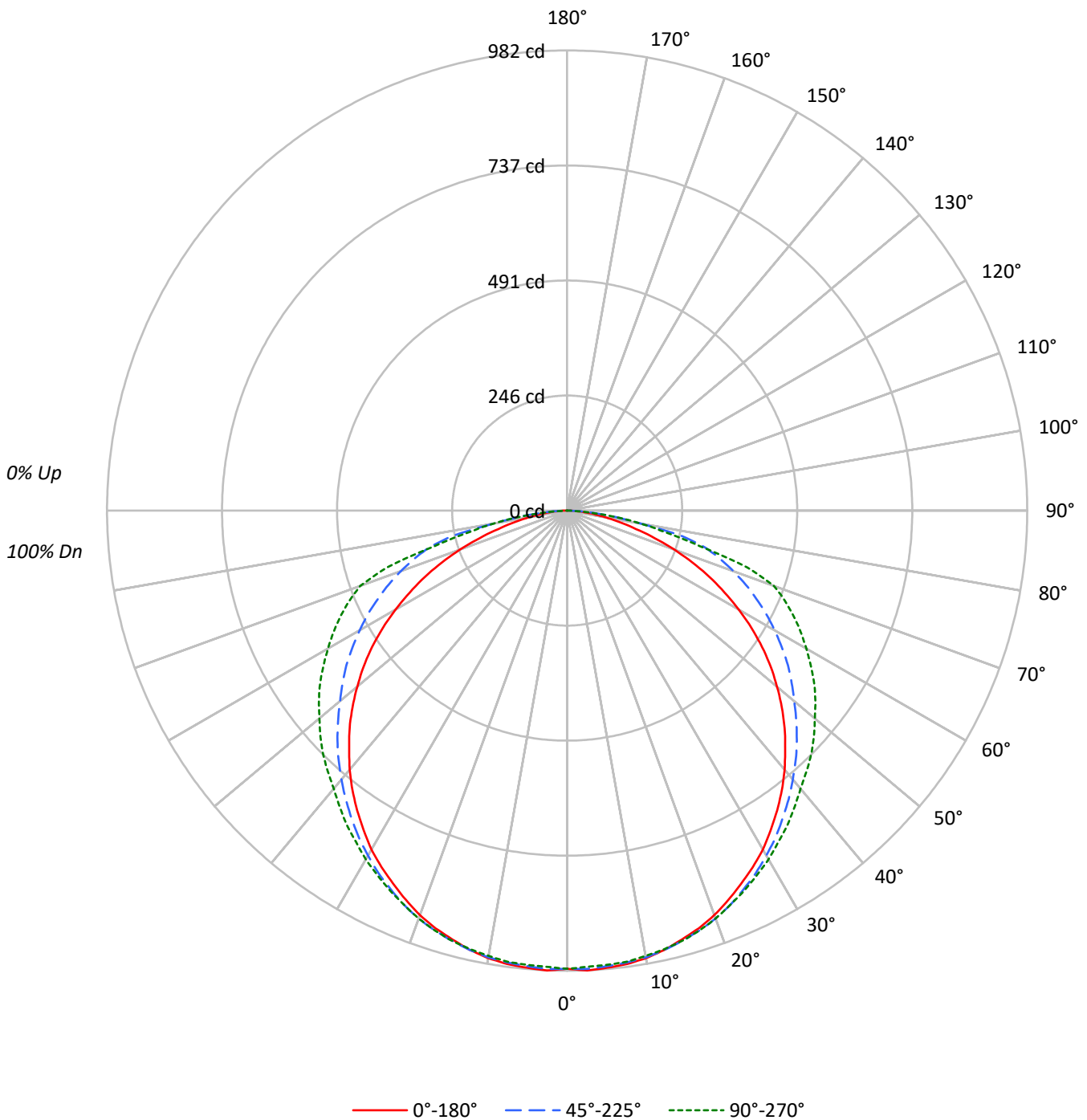
Input Watts (W): 41.378862  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1315	1315	1315
5°	1323	1318	1314
10°	1325	1323	1318
15°	1320	1324	1324
20°	1315	1327	1327
25°	1304	1323	1328
30°	1298	1320	1335
35°	1283	1317	1346
40°	1268	1316	1361
45°	1249	1319	1401
50°	1224	1324	1445
55°	1192	1349	1510
60°	1139	1376	1586
65°	1068	1419	1699
70°	955	1483	1848
75°	789	1586	1528
80°	644	1226	1238
85°	517	814	764



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.9	3.0
10°-20°	267.9	8.7
20°-30°	409.5	13.2
30°-40°	500.8	16.2
40°-50°	535.9	17.3
50°-60°	513.2	16.6
60°-70°	434.1	14.0
70°-80°	275.2	8.9
80°-90°	63.3	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°	770.3	24.9
0°-40°	1271.1	41.1
0°-60°	2320.2	75.0
0°-90°	3092.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3092.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	978	978	978	978	978	
5°	979	974	976	974	973	93
15°	947	946	950	950	950	268
25°	879	879	891	895	895	405
35°	781	786	802	813	820	489
45°	657	668	693	722	736	506
55°	508	524	575	623	644	453
65°	336	367	446	506	534	330
75°	152	214	305	304	294	165
85°	34	51	53	48	50	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	977.7	977.7	977.7	977.7	977.7
2.5°	982.5	977.7	979.3	977.7	974.5
5°	979.3	974.5	976.1	974.5	972.9
7.5°	976.1	971.3	972.9	971.3	971.3
10°	969.7	964.9	968.1	966.5	964.9
12.5°	960.1	956.9	960.1	958.5	958.5
15°	947.3	945.7	950.5	950.5	950.5
17.5°	934.6	933.0	939.3	939.3	939.3
20°	918.6	917.0	926.6	926.6	926.6
22.5°	899.4	897.8	910.6	910.6	910.6
25°	878.6	878.6	891.4	894.6	894.6
27.5°	857.9	857.9	872.2	877.0	877.0
30°	835.5	835.5	849.9	856.3	859.5
32.5°	808.3	811.5	827.5	835.5	838.7
35°	781.2	786.0	802.0	813.1	819.5
37.5°	752.4	757.2	776.4	789.2	797.2
40°	722.1	728.5	749.2	765.2	774.8
42.5°	688.5	698.1	722.1	742.8	755.6
45°	656.6	667.8	693.3	722.1	736.5
47.5°	621.4	634.2	663.0	699.7	714.1
50°	584.7	597.5	632.6	674.2	690.1
52.5°	548.0	562.3	603.9	648.6	667.8
55°	508.0	524.0	575.1	623.0	643.8
57.5°	466.5	485.6	543.2	594.3	616.6
60°	423.3	447.3	511.2	565.5	589.5
62.5°	378.6	407.4	479.3	536.8	562.3
65°	335.5	367.4	445.7	506.4	533.6
67.5°	289.2	329.1	412.2	477.7	503.2
70°	242.8	289.2	377.0	444.1	469.7
72.5°	196.5	252.4	341.9	402.6	402.6
75°	151.8	214.1	305.1	303.5	293.9
77.5°	115.0	178.9	250.8	214.1	215.7
80°	83.1	143.8	158.2	158.2	159.8
82.5°	55.9	110.2	102.2	100.6	103.8
85°	33.5	51.1	52.7	47.9	49.5
87.5°	16.0	17.6	14.4	9.6	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)