

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: P263170

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263170  
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-LD5-50-SQP-UNV-L93050-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3107.6 lumens  
Efficiency: N/A  
Efficacy: 83.5 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

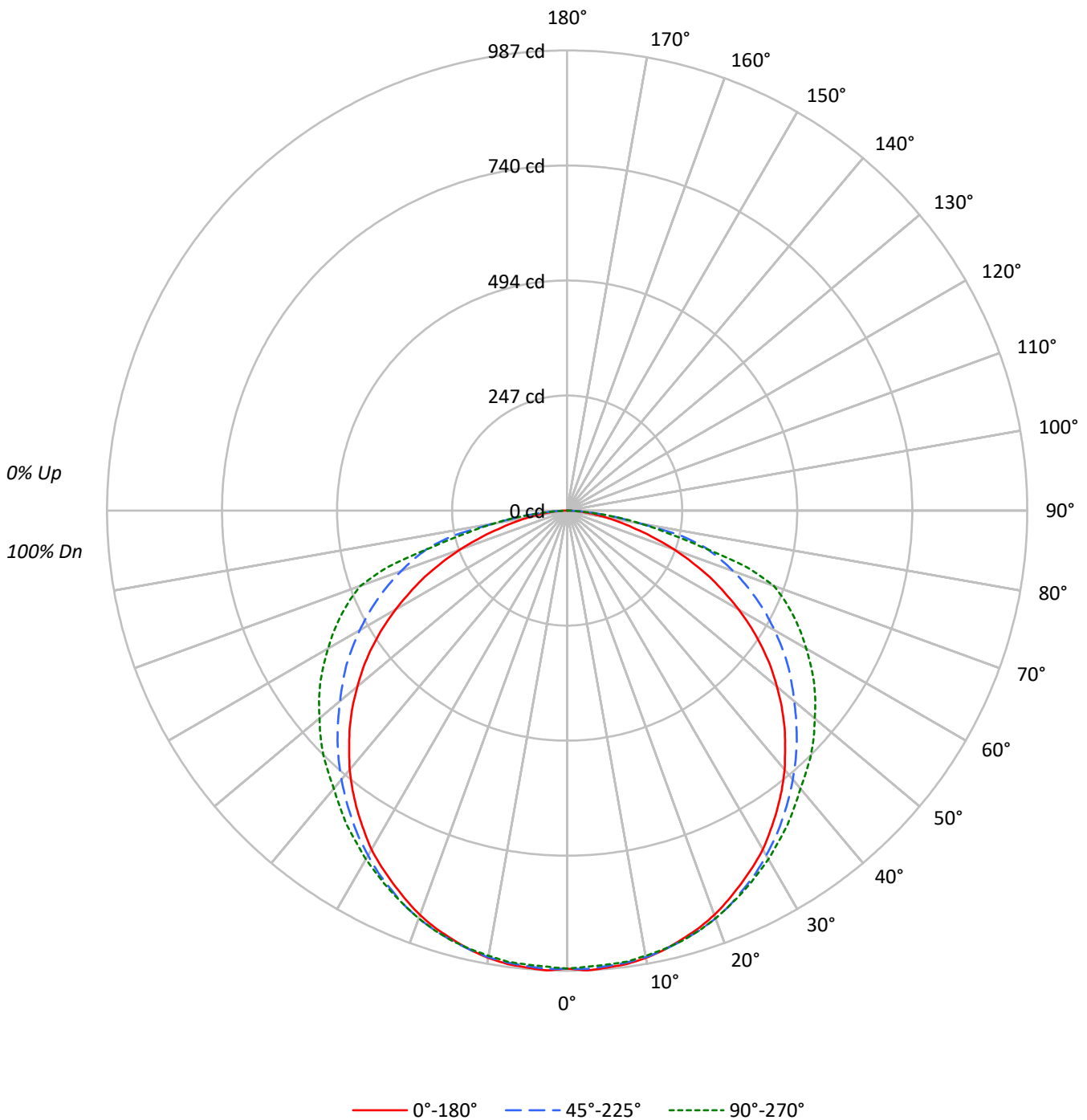
Input Watts (W): 37.211904  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	101	97	93	96	93	90	92	90	87	89	87	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	60	70	64	59	67	63	58	56					56			
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47					47			
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41					41			
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35					35			
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31					31			
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28					28			
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25					25			
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22					22			

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

	0°	45°	90°
0°	1322	1322	1322
5°	1329	1325	1320
10°	1331	1329	1325
15°	1326	1330	1330
20°	1322	1333	1333
25°	1311	1330	1334
30°	1304	1327	1342
35°	1289	1324	1353
40°	1274	1322	1367
45°	1255	1326	1408
50°	1230	1331	1451
55°	1198	1356	1517
60°	1145	1382	1594
65°	1073	1426	1707
70°	960	1490	1856
75°	793	1594	1536
80°	647	1231	1244
85°	520	818	769



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.3	3.0
10°-20°	269.2	8.7
20°-30°	411.5	13.2
30°-40°	503.2	16.2
40°-50°	538.5	17.3
50°-60°	515.6	16.6
60°-70°	436.2	14.0
70°-80°	276.5	8.9
80°-90°	63.6	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°	774.0	24.9
0°-40°	1277.2	41.1
0°-60°	2331.4	75.0
0°-90°	3107.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3107.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	982	982	982	982	982	
5°	984	979	981	979	978	94
15°	952	950	955	955	955	269
25°	883	883	896	899	899	407
35°	785	790	806	817	824	491
45°	660	671	697	726	740	508
55°	510	526	578	626	647	455
65°	337	369	448	509	536	332
75°	152	215	307	305	295	166
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°	982.4	982.4	982.4	982.4	982.4
2.5°	987.2	982.4	984.0	982.4	979.2
5°	984.0	979.2	980.8	979.2	977.6
7.5°	980.8	976.0	977.6	976.0	976.0
10°	974.3	969.5	972.7	971.1	969.5
12.5°	964.7	961.5	964.7	963.1	963.1
15°	951.9	950.3	955.1	955.1	955.1
17.5°	939.0	937.4	943.9	943.9	943.9
20°	923.0	921.4	931.0	931.0	931.0
22.5°	903.7	902.1	915.0	915.0	915.0
25°	882.9	882.9	895.7	898.9	898.9
27.5°	862.0	862.0	876.4	881.2	881.2
30°	839.5	839.5	854.0	860.4	863.6
32.5°	812.2	815.4	831.5	839.5	842.7
35°	784.9	789.8	805.8	817.0	823.5
37.5°	756.0	760.9	780.1	793.0	801.0
40°	725.5	732.0	752.8	768.9	778.5
42.5°	691.8	701.5	725.5	746.4	759.3
45°	659.7	671.0	696.7	725.5	740.0
47.5°	624.4	637.3	666.2	703.1	717.5
50°	587.5	600.3	635.7	677.4	693.4
52.5°	550.6	565.0	606.8	651.7	671.0
55°	510.5	526.5	577.9	626.0	646.9
57.5°	468.7	488.0	545.8	597.1	619.6
60°	425.4	449.5	513.7	568.2	592.3
62.5°	380.4	409.3	481.6	539.3	565.0
65°	337.1	369.2	447.8	508.8	536.1
67.5°	290.5	330.7	414.1	480.0	505.6
70°	244.0	290.5	378.8	446.2	471.9
72.5°	197.4	253.6	343.5	404.5	404.5
75°	152.5	215.1	306.6	305.0	295.4
77.5°	115.6	179.8	252.0	215.1	216.7
80°	83.5	144.5	158.9	158.9	160.5
82.5°	56.2	110.8	102.7	101.1	104.3
85°	33.7	51.4	53.0	48.2	49.8
87.5°	16.1	17.7	14.4	9.6	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)